

Classic Car Buyer's Guide



Practical advice, hints and tips on
over 40 of the nation's best loved classics

Owning a classic car is a dream for many enthusiasts. Often the dream machine is something that harks back to the owner's childhood, or to a time filled with fond memories – whatever the reason, driving a classic car down a country lane on a sunny day is a Utopia many of us aspire to. But as with any car purchase, buying your ideal classic is fraught with risk and responsibility. You need to keep your wits about you when viewing potential purchases, looking out for all the known trouble spots and ensuring that your heart doesn't rule your head. If you don't, the risk of buying something that will cause a lot of heartache, hassle and expense is high.

That's why the buying guides that have formed a staple part of our editorial in *Classic Car Weekly* in every issue have proven to be so popular: offering a wealth of specialist knowledge, including what are the common problems, what's the model's history, technical specification, and what's the market and availability like. All of this is crucial information to get up on before choosing your classic, hence why we've brought together just some of these guides to the nation's more popular classics in one handy reference book.

Hopefully it will provide some inspiration for choosing your next classic, and give some useful hints and tips on what to look for. That way your dream car should be just that – and not a nightmare. Happy motoring!

Phil Weeden

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Classic Buyer's Guide

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Classic Car Buyer's Guide



Practical advice, hints and tips on over 60 of the nation's best loved classics

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ASTON MARTIN DB4, DB5 AND DB6



Engines

On a car where everything can be expensive to put right, here's the thing that can cost the most of all. Rebuilding an Aston Martin straight-six can easily go beyond £20,000 if done by a specialist... and, to be honest, it's a job best left to an expert.

That said, if an engine has been maintained and serviced correctly, they're pretty tough old boots, albeit ones that don't take a lack of care lightly. Oil changes every 2500 miles are critical, and these engines take an enormous amount of oil, so they should never have been allowed to run low. The timing chain should have been replaced every 60,000 miles...its breaking will result in the usual wrecked engine too.

On DBs up to the Series 3 cars, you should expect around 70psi oil pressure when warm and cruising. That rises to 100psi for the later cars. Warning bells should start to sound if the gauge read below 45psi. Oil coolers are a positive boon on these cars...if the car you're looking at doesn't have one on, then think about fitting one if you decide to buy.

Something the engines can suffer from is overheating, thanks to blocked up waterways around the iron cylinder liners. It's most likely to be around the back of the engine, around the water pump. If, when the car is idling, the car heats up rapidly with the needle too far over towards the danger zone for comfort, this is the likely cause, although coolant leaking through the liner bleed apertures on the right side of the engine also produces this symptom. Look at this side of the engine, and if you see liquid escaping, then this is what's causing the overheating, and things need to be rectified. If you also notice oil here, then things are even worse: it means the lower O-ring isn't doing its sealing job properly, and the oil and water are mixing. And we all know that's never a good sign...

An electric fan is a good fitment, but if it's on all the time, you should be concerned about whether it is trying to cover up inherent overheating problems.

Fuel injection was an option on the final DB6s, but only 46 cars had it fitted...which is just as well, as the Brico system is known to be temperamental and tricky to set up properly. Most cars you find will have twin or triple SU carburettors, or replacement Weber units. It takes a person who knows what he's doing to balance the carbs properly – especially on the cars fitted with three – but once everything is in tune, it should stay that way for quite a while.



Parts prices

All parts from AstonParts.com, part of the Aston Martin Workshop

Reconditioned front brake calipers, DB5	£410.80
Front brake pads, DB5	£26.62
Front brake disc, DB5	£174.46
Master cylinder kit	£367.32
Door bottom, DB5	£45.50
Bottle tray, DB5	£78.65
Sill panel, complete, DB5	£125.00
Aston Martin bonnet badge	£74.15
Aluminium radiator, DB5	£595.00
Kenlow cooling fan kit	£595.00
Upgraded starter motor, DB5	£265.00
Alternator upgrade kit, DB5	£249.00
Aluminium oil cooler, DB5	£395.00
Primary timing chain, DB5	£31.67
Timing chain tensioner, DB5	£33.85
Decoke gasket set, DB5	£187.55
Exhaust system, DB5	£896.00
Reconditioned SU carburettor	£292.50
Halogen headlamps	from £94.99
Major service kit, DB5	£229.79
Lever arm shock absorbers, exchange, DB5	£135.00
Electronic power steering kit, DB5	£2610.00
Wire wheels, DB5	£206.00

Specification

Car	DB4	DB4GT Zagato	DB5	DB6
Year	1958-1963	1962	1963-1965	1965-1970
Engine size	3670cc 6-cyl DOHC	3670cc 6-cyl DOHC	3995cc 6-cyl DOHC	3995cc 6-cyl DOHC
BHP/RPM	240bhp @5500rpm	314bhp @6000rpm	280bhp @5500rpm	282bhp @5500rpm
Top speed	140mph	153.5mph	142.6mph	140mph
0-60mph	8.5secs	6.1secs	8.1secs	8.0secs
Gearbox	4-speed manual	4-speed manual	5-speed manual /3-speed automatic	5-speed manual /3-speed automatic
Consumption	16mpg	14mpg	15mpg	13mpg
Suspension	Front: Transverse wishbones, anti-roll bar, telescopic dampers, coil springs. Rear: Live axle, trailing arms, Watt linkage, lever arm dampers, coil springs			

Aston Martin is to England what Ferrari is to Italy and Porsche is to Germany...and within the hierarchy of its models, the DB4-6 series stand head and shoulders above the rest. **RICHARD GUNN** discusses buying into the dream

Bodywork

DB models can still look good even when they're hiding trouble, thanks to the aluminium skin laid over the steel skeleton. That said though, these cars were extremely well-built, and were extremely over-engineered, so one that has been looked after well - or restored expertly - shouldn't have too many lurking horrors.

Corrosion can strike at the foot of the bulkhead, where the jacking points, side members and trailing arm mounts (see the suspension section), as well as the bumper supports, pedal box, door hinge mountings, boot floor and the double-skinned bootlid. Want to know more? Well, there's the area around the washer bootle in the engine bay too, which is well-known for collecting grot.

Sills are an obvious place to look at, or rather the two box sections running between the wheels. Shrouded behind the aluminium cover sills, they'll be expensive to repair if needed. If you notice sagging around the jacking points, then the metal all around is weak. Look too at the upper assembly for the Watts linkage (which is behind the rear seat). Rot here is quite common and easily overlooked.

Convertibles should be scrutinised even more closely because

water can get inside and attack the floor. The most likely spot for this to happen is around the rear floor section, as there are swage lines here where moisture pools.

If you notice bubbles on the aluminium body panels, then be very concerned. For this to have happened, the alloy has started reacting with the steel underneath, and that means that the frame is going to be in even worse condition. The bottom edges of the doors are popular locations for this to occur.

Inside the boot - after you've checked the lid of course - do lift out the spare wheel to see what sort of condition its well is in. On some cars, it might not be that nice, as DBs do have something of a reputation for being vulnerable to rust here.

All over the body, look for signs of filler visually - rough areas or paintwork that's a little off-shade compared to what's around it - as magnets are of no use on aluminium, so won't tell you zilch! Seeing as Aston Martin didn't use filler when building these cars - unlike some other manufacturers - any that you do come across is a sign of repairs, and possibly not very good ones at that, as the natural flex of the body will cause it to fall out before too long.

Suspension

Corrosion can cause the front suspension trailing arms to become detached...something that needs to be checked from underneath. And while under there, keep an eye out for rusted sockets where the rear arms of the lower front wishbones attach, as well as the straps on the steering rack. They anchor it in place, so need to be in good order. Rubber mounting bushes also go, something that will signal itself as excess movement between the chassis and the rack. How to tell? Try a tyre lever in between the two...with the current owner's permission of course.

Steering could be sharp and direct, so if there's any sloppiness during your drive, worn bushes are the likely culprit. There's a good way to check for sure. Reverse the car quickly. If the tail lifts, then some of the bushes are worn or, even worse, the linkage to the axle is coming loose.

Expect a little bit of whine from the differential, it's part of the whole Aston soundtrack. However, it shouldn't be excessive.

Interior

Given the cost of redoing an interior - trim is expensive, and all that Connolly leather will put you back a pretty penny (well, a pretty £6000 or so) if it needs to be done - it's best to go for a car where the cabin is already in nice order. While you can pretty much get anything for these cars, some of the switches can be difficult to source, indicator switches and headlamp stalks in particular.

DB5s and 6s had electric windows, but Aston Martin hadn't quite mastered them yet, so they're not best-known for their trouble-free operation. The motors will slow down before failing completely, so check that the windows go up and down as they should, and at a reasonable pace. Air conditioning should also be investigated, especially on DB5s. It has some of its louvres under the rear window, where they're rather prone to being warped by the sun.



Brakes

It's disc brakes all around on these cars, although the earlier DB4s have Dunlop ones which generally require more attention than the subsequent cars with dual-circuit Girling systems. Because they wear out more quickly, the Dunlop-braked cars aren't that well-regarded, and conversions to a better system are quite common.

Gearbox

Given the David Brown Company's background in transmissions, it's not exactly a shock to find the first DBs have gearboxes made by the firm...and they're pretty good ones at that. The four-speed cars are pretty trouble-free, although synchromesh is likely to start vanishing, as it does with most classics after a while, and cone wear can result in difficult shifting...up to the point where it becomes impossible to select ratios. However, this will only become apparent after the oil is warm, so test the car long enough to make sure it has. It's a good excuse for a long drive, after all!

Five-speed ZF transmissions appeared from the DB5 onwards. These are generally considered to be even better than the David Brown-equipped cars, aside from their heavy clutches. However, they are expensive to put right if they go wrong (but, then again, what were you expecting with an Aston Martin?). Ones past their best can show a tendency to jump out of gear, and if that happens, a rebuild is on the cards, at a cost of around the two grand mark from a specialist who knows his stuff.

There are some automatic cars out there, but they're not very well-regarded, despite the self-shifters being pretty robust.

Expert Advice

Because of how expensive these cars are, we do recommend getting an expert in to look over any possible purchase before you commit. Even DBs that look - and behave - as they should can hide horrors, and it's wise to find out about these before you buy the car. A very good, extensive service history is a positive sign. The more money spent on a car in the past, the better!

You can check for the originality of a car by looking at the back of a trim panel, where the chassis number should be written in chalk or crayon. However, it's not exactly difficult to replicate crayon or chalk, so don't trust this completely!

HISTORY

1947 Aston Martin, up to this point just another struggling sports car builder, enters a new era when it is bought by gear and tractor manufacturer David Brown. The change of ownership is marked by all subsequent Aston Martin models (while the company was owned by David Brown) bearing the DB prefix.

1958 After the DB1 (a retrospective tag, from 1948 to 1950), the DB2 (1950 to 1957) and the DB Mk3 (1957-1959), the DB4 appears. It's quite an advancement when compared to previous Astons. Stylistically, the DB4 looks totally current and features Superleggera construction - thin alloy panels over a very strong steel cage - licensed from Touring of Milan. The build process isn't all that's new, as the car also features a new, all-alloy 3670cc engine designed by Tadek Marek. With twin SU carburetors fitted, power output is 240bhp.

1959 The 'high performance' DB4 - as if the standard model wasn't high performance enough - is launched with 267bhp and a shorter wheelbase.

1960 The Series 2 cars come out, packed with mechanical improvements, although the only real noticeable difference on the outside is that the bonnet is now hinged at the front. As the result of a collaboration with Zagato, the DB4 Zagato is constructed...or rather, a mere 19 of them are.

1961 Series 3 DB4s last only from April to September, and have a different rear light layout. The Series 4s that follow have bars in their front grille, as well as less pronounced bonnet scoops. Cowled headlamps also become an option...something that many customers opt for. There are new variations on the DB4 theme in the form of a convertible, and the Vantage, which features three convertibles rather than just two...

1962 The final Series 5 DB4s come with a longer body and a raised roofline.

1963 The DB5 comes out as a direct development of the DB4, mainly different for its 3995cc engine and cowled headlamps. One of the first examples is lent to a British film production company which just happens to be making the third of a certain spy thriller series at the time...

1964 "Ejector seat? You're joking!" I never joke about my work, 007." The Aston Martin DB5 ensures itself automotive immortality by finding itself, heavily gadget-modified, in the big cinema hit of the year, *Goldfinger*.

1965 There's an estate - sorry, shooting brake - conversion of the DB5 by coachbuilder Harold Radford, but Aston Martin itself is working on the DB6, a somewhat more obvious update of the DB5 than it was of the DB4. Its longer body provides 2+2 seating, and a Kamm tail and discreet spoiler at the rear improves the handling. Other changes are a new grille and split front bumpers. Meanwhile, the DB5 ups its stardom factor by appearing alongside 007 in *Thunderball*.

1966 The DB6 convertible is dubbed the Volante - the name that all subsequent open-top Aston Martins will go on to be known as.

1969 Although Newport Pagnell is now building the thoroughly different DB5 and V8, a Mk2 version of the DB6 appears, with wider wheels, flared arches and a new interior. There's also the option of fuel injection...although not a very good one.

1970 The final DB6 is built.

Contacts

Clubs

■ Aston Martin Owners Club Ltd, Drayton St Leonard, Wallingford, Oxfordshire, OX10 7BG or www.amoc.org

Specialists

- Runnymede Motor Services, Berks. Tel: 01753 644599 or www.runnymedemotorcompany.com
- Desmond J Small, Bucks. Tel: 01234 713083 or www.djsmail.co.uk
- Chiltern Aston Centre, Herts. Tel: 01442 833177 or www.db7centre.co.uk
- Oselli Engineering, Oxon. Tel: 01993 849610 or www.oselli.com
- Aston Martin Works Service, Bucks. Tel: 01908 619274 or www.astonmartin.com
- Aston Workshop, County Durham. Tel: 01207 574727 or www.aston.co.uk
- Ian Mason, Aston Martin Services, London. Tel: 020 7727 1944 or www.lanmason.co.uk
- HWM Limited, Surrey. Tel: 01932 240611 or www.hwm.co.uk
- RS Williams Ltd, Surrey. Tel: 01932 868377 or www.rswilliams.co.uk
- Stratton Motor Company (Norfolk) Ltd, Norfolk. Tel: 01508 530491 or www.strattonmotorcompany.com
- Aston Engineering, Derby. Tel: 01332 371566 or www.astonengineering.co.uk
- Brooklands Motors Company, Surrey. Tel: 01932 828545
- Bill Monk Classic Cars, Herefordshire. Tel: 01885 490827

How much?

These are just among the most desirable of all Aston Martins...they're among the most desirable of all classic sports cars, full stop. That means prices are incredibly, almost frighteningly high - even given the Aston Martin badge up front, a label that always means values well over the odds. And they're also cars where values are never likely to start plunging, so it's no use waiting for the bottom to drop out of the market either. It's not likely to happen soon.

If money is no object, then the DB4 GT is the car for you. At around £400,000 for the best examples, it's a fun way to blow almost half a million pounds. Next in line comes the DB5, its worth boosted up by the Bond factor...if you want a silver one - and, let's face it, who doesn't? - then you can find yourself paying around £150,000 (or £160,000 if you want the convertible). The bargain of the bunch - albeit that's 'bargain' in relative terms - is the DB6. They can come as 'cheaply' as £75,000 for ones in excellent condition. Buy privately, and you might get one for £20,000 less than that.

Fancy just being able to say you've owned an Aston Martin without actually being able to use it? Well, you might be able to get a DB6 for £20,000...but for that kind of money, it will be extremely rough and will cost you a fortune to put right. And that's as low as prices go for these cars. Even a basketcase DB4 GT is likely to be around £200,000...

Verdict

Some things never go out of style, never look tired or dated, never stop being anything less than gorgeous. The Aston Martin DB4, 5 and 6 series are a case in point. They're the elite of classic cars, and to own one, even to drive one briefly, puts you a cut above the rest of the world around you. Utterly aspirational...

These aren't cars you can run on the cheap. They demand the best, and they'll expect you to pay for it. Don't go into Aston Martin ownership thinking you'll come out of it a richer person. You won't.

But, unlike a lot of so-called supercars, these machines are worth every penny. They're glamorous and glorious, and project the same aura on whoever is with them. Performance is still impressive, even given the progression in vehicle technology since these cars were new, but really, it's not so much about what these cars do any more as how good they make you feel while they're doing it. And that's good...oh so very, very, good.

In terms of buying choice, the DB6 is probably the most divided of the bunch, but also the cheapest, by quite a long way. However, some people just won't be satisfied without a silver Aston Martin DB5...

Insurance quote

For a 1966 Aston Martin DB6 Mk1, valued at £50,000, based in Peterborough

- Fully comp, £725.55 for a 29-year-old, two years' NCB, 10,000-mile limit, only car, keep on driveway, club member
- Fully comp, £224.70 for a 50-year-old, full NCB, 3000-mile limit, second car, garaged, club member

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ASTON MARTIN DB7



Engines



DB7s came with six-cylinder and V12 engines; rather understandably, everybody stopped buying the six-pot cars when the 12-cylinder ones were launched. Well, you would, wouldn't you? It's an Aston with a V12 after all... However, whichever engine option you decide to go for, the units are well-built, tough, and have usually unstressed, as whoever gets a chance to take a DB7 to its full potential in this country? The V12 is generally recognised as the better of the two engines, having been specially developed in the Nineties rather than developed from an older Jaguar unit.

Six-cylinder: Generally regarded as a lazier GT engine rather than a true performance unit, the six-cylinder lump nevertheless gives the earlier DB7s a high level of performance, and is somewhat cheaper and easier to look after – a Jaguar specialist would know his way around one of these.

Problems that strike include cracked exhaust manifolds and engine mountings which can wear out quite easily – if there seems to be a lot of vibration from the front end, then this is a likely cause. The V12 engines can also suffer from this problem, as well as another shared six-cylinder foible of the throttle sticking shut at the throttle body, which, unfortunately, is buried away in a difficult area to access.

Listen for timing chain rattle – the tensioners can wear, and cause the engines to get very noisy. This will need to be resolved sooner rather than later, otherwise the chain might slip, with disastrous and expensive repercussions for the engine. If chain rattle is especially noticeable on start-up, it's likely to be because the plastic backing has fallen off the tensioners, allowing the chain to rub the metal behind. Later cars had a hydraulic rather than mechanical tensioner fitted...these are domed rather than flat, if you're wondering how to tell the difference.

V12: The V12 is too new – and also too resilient – for major problems to have surfaced yet, aside from the harmonic dampers going out of balance. The result is vibration, and the result of that is that most owners will already have had these replaced anyway.

Whatever happens, don't use 'normal' anti-freeze in a V12 DB7. It uses synthetic OAT anti-freeze, and mixing the conventional stuff will cause a gel to form...which could lead to the radiator splitting.

Specification

Car	Aston Martin DB7	Aston Martin DB7 Vantage
Year	1994-1999	1999-2004
Engine	3239cc 6-cyl DOHC	5935cc V12 QOHC
BHP	348bhp@5500rpm	420bhp@6000rpm
Top Speed	157mph	184mph
0-60mph	5.8secs	5.0 secs
Gearbox	Five-speed manual or four-speed automatic	Six-speed manual or five-speed automatic
Consumption	22mpg	19mpg
Suspension	All models: Front: Independent by double wishbones with anti-dive geometry, coil springs, monotube dampers and anti-roll bar. Rear: Independent by double wishbone incorporating longitudinal control arms, coil springs, monotube dampers, anti-roll bar	

Parts prices

All prices from Chiltern Aston Martin

Front Wing	£437.71
Front brake pads, 6-cyl	£55.48
Front brake pads, V12	£162.53
Front brake discs, 6-cyl, pair	£145.00
Front brake discs, V12, pair	£345.24
Clutch kit, 6-cyl	£817.88
Clutch kit, V12	£1109.69
Complete exhaust, 6-cyl	£4000.00
Complete exhaust, V12	£3800.00
Radiator, 6-cyl	£649.00
Radiator, V12	£328.25

The Ford-designed DB7 of 1994 revitalised Aston Martin and ended its reliance on the V8 engine it had been using for almost quarter of a century. An instant classic from its launch, **RICHARD GUNN** reviews the recently demised British supercar and considers buying one...if only he had the money!

Wheels

The alloy wheels are reinforced at their outer edges, where they're liable to come into contact with kerbs etc. Less thought was paid to their inner edges, and, over time, these rims can become distorted. Vibrations through the steering will hint at this, but don't confuse that with wheels out of balance.

It's advisable to check the tyre pressures. Certain alloys can allow air to escape, and these cars are very sensitive to correct pressures.



Interior

The hard-wearing and well-trimmed interiors should have stood up well to the test of time...after all, the oldest DB7 is a mere 14 years old. But check the leather and the wood, for putting right any imperfections will be pricy, although the veneer on these cars is kept to a minimum. Sun can cause the leather on the dash to shrink though. The plastic seat catches which allow the seat to tip aren't of the greatest quality, and consequently can break.

Do check the air conditioning, and feel the carpets for leaks. It needs recharging regularly. The gaskets and seals can fail, especially if not used very often, which is often the case with DB7. The biggest problem of all will be if the evaporator unit has given up the ghost...as that means practically the whole interior has to come out, and that's a job that takes at least a day. And then you need to put it all back in again...

Play with all the electrical bits and pieces. Electrical gremlins can strike, with the biggest culprit likely to be the electric windows, which seem good at going down but not always going back up again. The switchgear is Ford-derived, and therefore slightly flimsier than one might expect from a luxury sports car...although it is rather continuing the Aston Martin tradition of borrowing from lesser manufacturers' parts bins.

Very tall drivers may find the earlier DB7s easier to fit into than the later ones equipped with airbags. The front seats were changed when the inflatable safety features were added, and seemed to make things a little more compact inside. Try before you buy.



Bodywork/underneath

Rust in these cars is, in general, unlikely, and if you do come across it, it's probably more of a sign of badly repaired accident damage...which should make you wary of what else you're going to come across with the vehicle. Construction is by a steel underframe with steel body panels, although the front wings, sills, boot lid and front and rear bumpers and aprons are composite. On the first DB7s, the bonnet was composite as well, but was swapped for a steel one on later models.

That said though, some corrosion has started to show up in the older cars...yes, it may be an Aston Martin, it may be only a decade or so old, but that doesn't make it immune. The jacking points, radius arm mountings and front bulkhead are all spots which have proved somewhat prone to tinworm. If there are problems with the bulkhead, you will probably find evidence of leaks around the windscreen. Advanced trouble will ultimately lead to an MoT failure...and a bill of about £3000 to £4000 to rectify.

Something else you may notice are bubbles on the front wings...but these aren't corrosion, merely repair work that hasn't been carried out to a proper standard. Either live with them or replace the front wings. The same can happen with bonnets on the earlier composite-panelled examples.

Likely to be of more concern than rust is accident damage. These are fast, powerful cars, and fast, powerful cars sometimes outstrip their drivers' competence. Thus repaired collision damage is not unusual...but how well has it been done? If the chassis rails under the engine are kinked or the front subframe is distorted, you'll get poor handling. Uneven tyre wear is another symptom of this...and easier to check than getting underneath and checking the chassis rails and subframe, although these should both be looked at.

Volante hoods require scrutiny...as the rear three quarters can wear. One of the problems comes from the hood irons, with have rubber covers on them. However, if these are lost, the resultant sharp edges can rub holes in the hood. New material can be put in...but it's still a specialist job if you want it done right. Do check that the hood cover hasn't vanished...as it keeps the headlining clean when the hood is folded.

Transmission

Six-cylinder cars have a Getrag five-speed manual or a GM four-speed auto. The V12s add an extra ratio to this (with the manual made by Tremec and the auto by ZF). The option of steering wheel shift was available from 2000. And that's all you really need to know...for there are no major problems with any of the gearboxes, and if you do have trouble with the gears, it's best just to go and find another car.

Suspension

Aside from any collision damage - which will reflect in the sort of tricky handling unexpected of an Aston - something else to consider is that the suspension bushes are not known for their longevity, almost being items that need replacing at every service on hard-driven cars. Creaks and groans from underneath will signal bushes past their best, as well as flag up shock absorbers - there are six on the 7, by the way - that could also do with replacement.

With no upper wishbones at the rear, the driveshaft joints take a lot of weight and can thus wear out within 10,000 miles.

General

These are specialist machines and don't respond well to not being cared for properly. Thus, a full service history is practically a must – and from a proper specialist or, best of all, Works Service at Newport Pagnell. The factory recommendation is for a service every 7500 miles or every six months. Be wary of buying a car which is coming up to its 30,000 mile service, if it's a six-cylinder, or 45,000 miles, if it's a V12. Because these are the big ones, and won't be at all cheap...around £1000 is a ballpark figure. Best to purchase after somebody else has taken the wallet-thumping. We'd also advise having a car professionally inspected – by somebody who knows what they're looking for – before any money changes hands. Any independent Aston Martin specialist should be up to the task.

HISTORY

1987 At the Mille Miglia race retrospective, Victor Gauntlett, chairman of Aston Martin, meets with Ford of Europe vice chairman Walter Hayes. Hayes, in turn, meets with Henry Ford II and suggests buying Aston Martin. By July, a deal has been thrashed out, and in September, Ford buys a majority share holding in Aston Martin. The marque becomes part of Ford's Premier Automotive Group, closely followed by Jaguar soon afterwards...something that is to be rather significant in the near future.

1988 Work starts on a new Aston Martin, under the name – for the moment – of DP1999.

1991 Victor Gauntlett retires from Aston Martin, and is replaced by Walter Hayes, who is able to better command the ear of Ford management. He gets given a million pound development budget to create a prototype for the now-dubbed NPX project, using a Jaguar XJS chassis and a supercharged 24-valve 3.2-litre alloy twin-cam straight-six of XJ40 parentage. TWR designer Ian Callum comes up with a body style reflecting the lines of the classic DB4-6 range, and the decision is taken to name the car the DB7 after David Brown – Aston Martin's most celebrated owner – who is asked back to become life president.

1993 The 335bhp DB7 is unveiled at the Geneva Motor Show in March, to great aplomb for its looks and performance, plus the fact that it represents something completely new from Aston Martin. Even if it is somewhat Jaguar-flavoured...

1994 The Wykham Mill factory in Bloxham, Oxfordshire, which had previously built the Jaguar XJ220 supercar, is taken over to build the DB7. Production gets underway in September.

1996 At the North American International Auto Show in Detroit, a convertible version of the DB7 is unveiled, named the Volante in traditional form.

1999 The DB7 has been such a success that a Vantage version is unleashed, with a 6-litre V12 engine producing 420bhp. Originally intended to be sold alongside the six-cylinder DB7, demand for the more powerful V12 version is so great that the original model is soon dropped. The Vantage coupe has a top speed of 184mph, but the convertible is limited to a less barnet-threatening 165mph.

2002 As if the Vantage wasn't enough, the V12 GT comes out with a 435bhp engine, mesh grille, bonnet vents, a boot spoiler, special alloys and other carbon fibre and aluminium touches. The GTA is the automatic version. Even more special is the Aston Martin DB7 Vantage Zagato, built on a shortened chassis. Only 100 are built...one of which is for Aston Martin's own museum.

2003 A variation on the DB7 theme is the DB AR1, the AR standing for American Roadster. And it really is a roadster too, with no convertible top at all. Still, what do you expect for \$226,000?

2003 The DB7 line comes to an end after around 7000 have been built. Its replacement, from 2004, is the slightly illogically-named DB9, DB8 having been skipped over because it would have suggested an Aston Martin with only had eight cylinders...

Contacts

Clubs

■ Aston Martin Owners Club. Tel 01865 400400 or www.amoc.org

Specialists

■ Chiltern Aston Centre Ltd, Herts. Tel: 01442 833177 or www.db7centre.co.uk

■ Aston Sales of Kensington, London. Tel: 020 7985 0111 or www.astonsaleskensington.co.uk

■ Runnymede Motor Company, Bucks. Tel: 01753 644599 or www.runnymedemotorcompany.com

■ Aston Martin, County Durham. Tel: 01207 233525 or www.aston.co.uk

■ Rikki Cann, Essex. Tel: 01702 291818 or www.rikkicann.com

How much?

Prices have fallen quite substantially for DB7s. When the cars were new, £78,000 was the asking price for just basic admission to the exclusive Aston Martin club...and you could spend a lot more than that adding the assorted options. Now, you should be able to get a six-cylinder model for around the £20,000 mark, although the prices obviously rise the newer a model is. Expect around the £35,000 mark for one of the last examples. Vantages, of course, cost more for their extra cylinders and potency, and you'll need between £30,000 and £52,000 for the coupe. As usual with convertibles, you'll pay a premium for going topless, so expect to add 10 percent or more onto coupe prices for the pleasure of being able to peel the roof back.

As for the Zagato models, if you can find one, then at least £100,000 is the likely loss to your wallet or bank account. And if you really want to splash out, then you can always go for the AR1...and pay quite a fair whack over the Zagato figure.

All of these may sound like expensive prices, but they're not really. Remember, these are Aston Martins...and nothing with that name on it is ever likely to come cheap. Prices may have a little way still to fall, but we don't reckon by too much now...and you'll always have to spend multiple grants to buy even the humblest and oldest example of the DB7.

Verdict

Whichever model you go for, above all it's an Aston Martin. And that means a lot in the car world. And in the real world too. The V12 Vantage is undoubtedly the most desirable of the engine options, but you pay extra for the extra cylinders, cubic capacity and performance, both in purchase price and running costs. When you're talking about cars that cost as much to run as an Aston, little savings here and there can mean a lot, and the six is definitely a cheaper proposition than the 12, thanks in part to sharing some of its mechanical items with Jaguar. And that's probably the first time we've ever referred to Jaguar parts as inexpensive...but, in this context, they are.

So, yes, while the Vantage will always be a more rewarding car to drive, and that V12 engine is gloriously smooth and lusty, and sounds extraordinary when given its head, it's the earlier six-cylinder cars we'd recommend for starters. They have more than adequate performance, share the same gorgeous looks as all DB7s – in fact, all Astons – and are now at the sort of prices where you can consider buying one as an alternative to something much more mundane. Once you've become hooked on being behind a long bonnet with the legendary Aston Martin badge up at the front, you can explore the rest of the marque at later date...

Insurance quote

Based on a 1998 Aston Martin DB7, valued at £24,000

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■ Fully comp, 50-year-old, less than 3000 miles per annum, parked in a garage: £616.80 with a £250 excess

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AUDI QUATTRO



Engine

You don't see many five-cylinder engines yet Audi made a real success of this layout and the distinctive warble – more noticeable on the 10v engines – is something you soon learn to love.

Three engines were fitted to the quattro – the 10v WR, later 10v MB and the 20v which crams four valves into each cylinder. Before you get stuck in however, get checking the service history. Buying a car with no history could prove costly in the long or even short-term so it pays to hold on for a well documented example.

Cambelts ideally need changing every 45,000 miles so you need to see recent evidence of this. If the vendor claims that they have changed it themselves or a non-Audi specialist has carried out the work, be wary. The front crank pulley needs 450Nm of torque when being tightened – any less and it may well work its way loose, destroying the engine in the process.

"Exhaust manifolds are another issue," adds Roger Galvin. "When you start the engine, be very wary of a ticking sound which indicates a failure." Again, a recent bill for replacement should put your mind at ease. Welding one up is not a long-term solution and if the internals of the manifold fail, they'll be sucked into the turbocharger adding considerably to your woes. When you go to check the car, make sure it is actually cold and that it hasn't already been started or you'll not get the tick and could end up with an expensive fix before you've even started to enjoy the quattro experience.

Avoiding tuned engines is also wise – you really have to know what you are doing with these units and they don't respond well to amateurish attempts to release more horses. With 220bhp and a 0-60 time of less than six seconds with the 20v engine, one wonders why people aren't satisfied with the car in standard trim?

All quattros are turbo-charged, intercooled and fuel-injected. The turbocharger is water-cooled on the MB and 20v engine cars and as such, has a much longer life – being good for over

250,000 miles as long as the engine hasn't been thrashed continuously.

Conversely, a WR turbocharger with air-cooling may only last 70,000 miles. It will last longer if the car has been allowed to cool down before being turned off. With any engine, blue exhaust smoke suggests something amiss and while it could be the turbocharger, there is a chance that it could be the valve guides.

The engine itself is robust and long-lived although the slanting of the engine can lead to the bores going oval which will eventually lead to a loss of compression and the need for an engine rebuild – and a bill for more than £5000.

The oil cooler pipes can corrode. Failure of these will lead to a sudden loss of oil and more big bills. Check their condition, especially around the ferrules.

Injectors should last 80,000 miles easily. Symptoms of failure are the need to crank the engine for a long time before it catches, especially from cold. On that front, you shouldn't need to touch the

throttle when starting one of these engines. They should just start as soon as you turn the key.



Parts prices

Prices are courtesy of Quattro Corner, Birmingham

Brake discs front, pair	£60
Brake pads, front	£25
Clutch kit,	£160
Turbocharger, exchange,	£625
Outer CV joint,	£125
Ball joints, front, pair	£75
Wheel bearing kits,	£30
Wish bone bushes, each	£5
Wishbones c/w bushes, each	£50
Stainless steel exhaust,	£400
Engine mount,	£40
Gearbox mount,	£15
Diff mount from,	£15
Front wings, each, genuine Audi,	£613
Outer sill,	£250
Boot slam panel, inc tail light aperture,	£384
Quarter panel,	£150
HT lead set, inc tube,	£75
Shock absorbers, gas, each,	£60
Boot struts, each	£22

Specification

Car	Audi quattro WR	Audi quattro MB	Audi quattro 20v
Year	1980-1987	1987-1989	1989-1991
Engine	2144cc 5-cyl OHC	2226cc 5-cyl OHC	2226cc 5-cyl DOHC
BHP/RPM	200@5500rpm	200@5500rpm	220bhp@5900rpm
Torque/RPM	210lb/ft@3500rpm	199lb/ft@3000rpm	228lb/ft@1950rpm
Top Speed	137mph	137mph	142mph
0-60mph	7.1secs	6.7secs	5.9secs
Consumption	22-28mpg	23-30mpg	18-25mpg
Gearbox	All models: 5-speed manual		
Suspension	All models: Independent by wishbones and MacPherson struts, front and rear		

The quattro was the car that changed the face of sportscars and rallying forever. Success in the competition world was translated into success in the commercial world, and the original quattro enjoyed an 11-year production run.

However, these cars can seem fiendishly complicated for the home mechanic so **IAN SEABROOK** gives you the lowdown on this ground-breaking coupé. Roger Galvin of the Quattro Workshop is our on-hand expert

Bodywork

First of all, let's dispel a myth - quattros were never fully galvanised and even the panels that were coated were not always consistent between vehicles. You really do need to check a potential purchase out for rot as they are depressingly able to corrode - although factory rust-proofing went a long way to combating it.

A quick walk around the vehicle can say a lot for its condition. Front wings rot all too easily above the front bumper and at their base although rot along their top edge within the engine bay is harder to spot. On early cars, the base of the bootlid may corrode and when you open it, you may find rust around where the hinges attach to the body. Audi, in its wisdom, attached the hinges before the cars were painted, so there is bare metal behind the hinge! Incidentally, from the 1987 model year onwards, the bootlid was glassfibre.

The door bottoms can corrode and it is a good idea to have a look around the sunroof. This is a tilt or remove item in steel. Drains for this run down the windscreens surround. Lift the lower edge, and skim along it with your nail. Can you feel any bubbling? It could suggest hidden horrors and even worse, can allow water to leak onto the ECU.

Moving underneath, first of all, check the crossmembers and chassis rails. They don't usually rot but foolish chimps may have tried to jack the car up on these - which needless to say, is not a good idea.

The back edge of the floor can rot - although the main floorpans don't tend to suffer. Do check the boot floor however, especially around the rear towing eye and definitely before you put any load on this eye! Rear arches are susceptible but were rolled on later cars which offers better protection. This was done to allow larger wheels to be fitted.

In terms of parts availability, Audi seem to have little regard for its heritage - despite what the marketing men may say. Some parts are now hard, or next to impossible, to locate. In terms of bodywork, checking the following makes sense or you'll be searching for parts for a long time. Black rear light lenses are no longer available while headlamps are tricky and the rear bumper beam and bonnets simply unavailable. Front wings have been remade but Audi threw out the original moulds and the newer ones don't fit that well. Don't necessarily write off a car with iffy panel gaps as being accident damaged - it may just be that the replacement front wings didn't go on that well. However, these cars are powerful and people may get carried away - thinking that four-wheel-drive makes it impossible to skid off the road. The flanks and inner front wings should be checked for accident damage.

One last Audi trait is for failed door handles. "The casting in them breaks with time and replacement is the only option," advises Roger Galvin. "It is relatively easy to swap lock barrels so if the car comes with several keys, someone has been lazy."

Interior and Electrics

The earliest cars came with a lurid zebra-striped interior which isn't for the faint-hearted. All interiors can show signs of wear and tear. "Seat

bolsters tend to suffer with age and the only option is to strip the seat down and replace the innards - usually by finding a suitable Audi in a scrapyards and salvaging the components from the less-used passenger seat," suggests Roger. Leather seats (optional) can suffer if not looked after and replacing with a complete cloth interior will be cheaper than re-trimming the seats.

The electronic dashboard fitted from 1984 needs to be checked to make sure that everything is working. "It is essential that you never attempt to jump-start a quattro as the power surge when connecting up can blow every single capacitor in the dashboard," advises Roger. You'll be looking to spend at least £250 to replace them all. The only option if the battery does go flat is to remove it and charge it away from the vehicle.

WR-engined cars even get a voice synthesizer although this tends to not work if an after-market stereo has been fitted - commonplace now as the tape decks wear out eventually.

The electric window mechanism is no longer available and it can give trouble. The relays break which then causes the motor to over-wind the window, breaking the securing lugs. Replacement of the entire mechanism is the only option which'll mean another scrapyards visit. Make sure you check that they operate properly.

The heater controls, as with many Audis of this vintage, can go slack and stop working properly. In addition, the heater tap can seize, making warm days even toaster as you can't turn the heater off. Replacement of the cables is not much fun.

Finally, the electric aerial can fail and you won't be able to find a new one.



Transmission

The 016 gearbox is a robust box of cogs although it has a typically Audi notchy gearchange - which can often be improved by adjustment of the linkage. Second gear synchronism is often the first to go, so check it on the test drive.

The clutch can get some hammer as this certainly isn't a car which can spin away its power on a hard start. Still, they are often good for 150,000 miles although if it has been replaced recently, enquire as to the make as the proper Sachs one is the only one to fit. At around £170, it is more than reasonably priced for a car of this performance.

MB and 20v quattros have a Torsen (Torque Sensing) centre differential which automatically sends power to the end of the car with most grip. The worm drives in this unit can be a little noisy but this isn't a serious problem. "All quattros have the ability to lock the centre and rear differential but in reality, there are few situations where this is required and the mechanisms often seize," explains Roger Galvin. A rattle under heavy acceleration suggests that the propshaft carrier bearing is in need of renewal whereas a bang on a quick pull-away is probably the rear differential knocking on the floor as the mountings fail with time. It is an easy job to replace them so don't fear the worst.

Rear differentials can see a little but any oil drips signify that work is needed. Wheel bearings last around 80,000 miles and should be replaced in axle pairs.

Brakes

The quattro attracted criticism for its soft, progressive brake pedal when new – a far cry from the over-serve systems fitted to cars these days. At the heart of the system is an accumulator sphere, as found on any hydraulic Citroën. It is a good idea to check that this isn't in need of replacement if there is nothing to suggest that it has been replaced in the service history. To do this, run the engine for a short while and then turn it off. Now, press the brake pedal until it goes hard. "A new sphere should manage around 30 pumps. Less than ten is not good news while less than five means that you should refuse the test drive," warns Roger Galvin. The effects of complete brake failure on the move are not pleasant to consider.

ABS was fitted from December 1983 (therefore on most British cars) although it automatically turns itself off when the diffs are locked – the ABS light should illuminate when this happens. After the test drive, jump out of the car and immediately check each wheel for temperature. The master cylinder return spring can fail with the result that the brakes first bind and eventually can seize on. A hard pedal also suggests something amiss.

Finally on brakes, the handbrake mechanism can seize up which you'll soon learn about if you park on a hill! Reconditioned callipers at the back are around £80 per side.

HISTORY

1977 Volkswagen is in the process of developing the Iltis, released the following year. This military vehicle features a longitudinal engine and four-wheel-drive. An Audi 80 prototype appears with the same running gear and soon proves its ability in secret test sessions.

1979 Hannu Mikkola has a test drive in a prototype quattro and is willing to drive the car in rallying as he is certain that it would be a success.

1980 The Audi quattro makes its first public appearance at the Geneva Motor Show. Audi announces that it will only make 400, which is more than enough to ensure homologation for rallying. However, the demand takes it by surprise, and it resolves to build more.

1981 Sales commence in the UK, albeit in lefthand-drive form at first. However, once more, demand exceeds expectation and in November 1982, Audi announces that a righthand-drive version is on its way.

1983 RHD sales begin and the cars feature new single-piece headlamps.

1984 ABS becomes a standard fitment the following year, in addition to a digital dashboard. The wiper sweep pattern is finally changed for RHD cars and the 'zebra stripe' interior trim is replaced with a more tasteful checked pattern.

1987 Towards the end of the year, the MB engine is fitted. This is larger and has a higher compression ratio allied to a smaller turbocharger making it less laggy and more responsive, although the overall power levels remain unchanged. There are also revisions to the digital dash and a sunroof became standard fitment, as does a Torsen centre differential.

1989 The 20v is unleashed with power now up to 220bhp and a vast improvement in torque delivery. The revised engine has Bosch Motronic fuel injection and a catalytic converter is fitted.

1991 Production of the new S2 coupé commences in 1990 but the ur-quattro lives on until mid-1991. The new car rather lacks the character of its predecessor however.



Suspension and Steering

You'll find MacPherson struts at each corner of a quattro and they rarely give much in the way of trouble. Worn wishbone bushes will make themselves known through wayward handling although it cannot be stressed enough that wheel alignment is absolutely critical to making these cars "feel" as they should and specialist attention is recommended, especially as camber and toe-in/out can be changed at each corner as the rear subframe is just a front one turned through 180 degrees, with a couple of carrier brackets for the differential welded on.

The rack and pinion, power-assisted steering rarely gives problems although tie-rod ends may need replacing at 100,000 mile intervals.

Contacts

Clubs

- Quattro Owners Club. Tel: 01886 880777 or www.quattroownersclub.com

Specialists

- Quattro Workshop (servicing and repairs), Leics. Tel: 01455 208037 or www.thequattroworkshop.co.uk
- AM Cars (servicing and repairs), Somerset. Tel: 01460 55001 or www.amcarsquattro.co.uk
- Quattro Corner (parts), Birmingham. Tel: 0121 476 0034 or www.quattrocorner.com

How much?

The priciest propositions are the very earliest cars – as is often the case – and the end of the line 20v. Prices could reach £20,000 for the very best, low mileage examples of each. The middle cars have the lowest values – although you are still looking at paying over £8000 for good examples of each, with minters topping £10,000. The MB-engined example seen here is for sale at £10,000 which represents top money for quattros of this era. Contact Roger Galvin for further details.

Even complete wrecks rarely descend below £1000 although restoration costs can be prohibitively expensive so we'd have to recommend that saving up for a good one is the way to go. A few grand might get you a runner with MoT but you could easily end up spending much more to keep the thing roadworthy. These are not cars that respond well to a lack of care and attention.

Verdict

Driving a quattro is an addictive experience. The bountiful power, plentiful grip and five-cylinder warble give you an encounter that few cars can match. Sure, inside is about as exciting as German interiors ever get – which isn't very – and they are not the cheapest cars to run – but they do deliver supercar performance with everyday practicality and reliability. Parts are certainly getting hard to find as the car is in that tricky period where factory supplies are drying up, yet re-manufactured items are not yet being made. But the dedicated owners club will certainly help make quattro ownership as painless as possible.

Early cars are getting rare now and are starting to attract a premium so the pick of the litter for us are the MB-engined cars which offer plenty of go, lots of practicality, surprisingly good economy and a more affordable price. The 20v quattros offer the most power but on our crowded roads, the MB offers more than enough for most.

Insurance quote

For a 1989 Audi Quattro 20v valued at £10,000, based in Peterborough

- **£413.70** for a 29-year-old, two years' no claims bonus, 10,000 miles a year limit, club member, kept on driveway.
- **£202.65** for a 50-year-old, full no claims bonus, 3000 miles a year limit, club member, kept in a garage.

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AUSTIN-HEALEY 3000

As classic traditional British sports cars go, they don't come much more highly regarded than the Austin-Healey 3000. **RICHARD GUNN** looks at buying the best of the Healey bruisers.



Parts prices

All parts from AH Spares - see www.ahspares.co.uk

Brake master cylinder,	from £42.50
	to £164.50
Brake shoes, front, exchange,	£37.70
Front bumper,	from £139.50
Clutch plate,	from £47.50
Exhaust, complete, mild steel,	from £86.50
Exhaust, complete, stainless steel,	from £168.50
Front wing, steel,	£417.50
Front wing, aluminium,	£475.00
Hood,	£109.50
Shock absorber, recon,	£55.00
Oil pump,	£174.50
Fuel pump,	£72.50
Timing chain,	£8.25
Timing chain tensioner,	£9.25

Engines

The engine is hardly hi-tech. It's just a good, old-fashioned lump of British six-cylinder iron from the Fifties, and therefore inherently robust and capable of reaching 200,000 miles without too many problems, assuming a modicum of care and attention. They do like to drink or leak oil though, so this should have been kept topped up throughout the car's life...and will need to continue to be so. Look for 50psi on a warm engine while cruising, expect it to drop to around 10 to 15psi at idle. If the engine meets these criteria, then it's probably pretty sound. More of an issue than oil is likely to be overheating - after all, these are big engines, and 40 odd years of water pumping around their insides are likely to lead to some silting up and less than efficient radiators. Dodgy ignition timing also leads to the cars running hotter than they should. Worst case scenario is that the pistons can melt. Many wise owners will have fitted electric fans, but this might be an excuse to try and cover up overheating problems. Make sure any electric fan doesn't stay on the whole time - under usual circumstances, a 3000 shouldn't run too warm. Ah, those triple carburettors on the Mk2. They really are very tricky to set up properly, so if the car you're looking at is one of these and it's not running very well, suspect these before anything else.

Transmission

Don't look for synchromesh on first and reverse. You won't find it, it was never there. It may also be starting to disappear around second on well-used examples too. First can get tricky to engage too - probably best found by going via second. Gear whine is usual on most cars, but shouldn't be over the top! Overdrive was a standard fitment, and should engage on third and fourth gears. Check that it goes in and out smoothly, but don't be too bothered if it doesn't seem to work, as most faults are usually electrical.

Oil leaks from the back axle are pretty common, but if the black stuff gets on the rear brakes, it won't do them any good whatsoever, and you won't appreciate the car's much reduced stopping potential either. Obviously, it's better to buy a car that isn't leaking from here, but if you do find one that is, keep in mind that it isn't that difficult to change the seal.

Specification

Car	Austin-Healey 3000 Mk1	Austin-Healey 3000 Mk2	Austin-Healey 3000 Mk3
Year	1959-1961	1961-1964	1964-1968
Engine size	All models: 2912cc six-cylinder OHV		
BHP/RPM	124@4600	130@4750	148@5250
Top speed	116mph	120mph	122mph
0-60mph	11.4secs	10.4secs	9.8secs
Gearbox	All models: Four-speed manual with overdrive		
Consumption	20mpg	17.1mpg	20.3mpg
Suspension	All models: Front: Independent by coil springs, wishbones, anti-roll bar and lever-arm dampers. Rear: Live (beam) axle by half elliptical springs, Panhard rod and lever arm dampers. Mk3s had twin radius arms instead of Panhard rod.		

General

Almost 90 percent of Austin-Healeys – the majority of them 3000s – went over to the States. Many of them have since been repatriated, but that doesn't mean they've all come from the dry states over there. Much of America can be as wet – if not wetter – than Britain, so rust can still be an issue. Something else to take into consideration is if the car has been converted to righthand-drive, and if so, how well has it been carried out?

Brakes and wheels

Best of the breed when it comes to stopping are the Mk3s – not only do they have front discs, but there's a servo as well. This was only an option on Mk2s, and not available at all on Mk1 versions. Obviously, it's a desirable thing to have.

Oil from the rear axle will affect the back brakes – as mentioned earlier – if allowed to spray on them while the car is in motion. And that's about the worst malady that can affect a 3000's brakes, apart from sticky calipers on cars that don't get used very much.

Wire wheels are found on most Healeys these days, even though they weren't standard. They should be painted, not chromed – the latter treatment makes them heavier and affects handling. Clonks from the wheels – especially when reversing – signal a worn spinner. You should also look for these visually too. Test the spinners for integrity too – sometimes, over-conscientious owners don't always do them up properly because they don't want to spoil the chrome!

Chassis

Accident damage is always a possibility with these cars...and there's a good way of checking. Underneath are the two main box section rails, which run the length of the car, and should be straight. If they're bent or wavy, then it suggests that there's been a crunch in the past, something that may be backed up by the car pulling to one side.

These main rails can also rust, as can their outriggers. The place to check most of all is underneath the sills, as with any old car.

There are other places that need to be checked too, while you're down there. The bulkhead and floorpan are welded to the chassis and both can get attacked by corrosion because of the car's convertible nature. When it gets caught in a shower without time to put its roof up, water gets inside and can't escape, so starts to work its corrosive horrors on what is around it. Have a look from both inside and underneath.

Those usual suspects of the rear spring hangers should also be investigated – look for signs of rot in their mountings.

You'll probably need to jack the car up to get the best view of these areas, and while the jacks are out, there's another thing you should scrutinise. With the car up at the rear, look at the door gaps. They shouldn't have closed up any more than when the car was resting on its wheels. If they have, then the 3000 has lost some of its structural integrity and the chassis strength has been compromised. You can get a whole new chassis...but it will be expensive!

Look at the exhaust. It's oh so easily whacked, especially during these modern days of speed humps and poor road maintenance. It's not just the obvious signs you should look for, such as scraped metal or holes, but investigate the mountings for damage and listen for blowing. There was better clearance on the Mk3 cars, but even so, these cars are still low to the ground and can suffer. Listen for blowing as well – assuming you can hear over the natural timbre of a Big Healey.

Interior

As well as checking that floorpan from inside, just check the condition of the trim, and how much of it is still there, although you can get practically everything new. However, interiors were fairly Spartan, even on Mk3s with their wood veneer. Leather was confined to just the seat facings – but it will still cost a fair bit to put right if it's shoddy.

Don't forget to see if there's a heater – it was only an option on these cars, and may not have been fitted on those vehicles bound for the warm parts of the USA.



Bodywork

First things first, stand back from the car to see if it looks right. There's a swooping and curvaceous swage line that runs the whole length of the car, and should line up all the way along. If it doesn't – and you'll really notice it on a two-tone car, especially around the doors – then you need to ask why. It could be accident damage or a previous restoration that perhaps wasn't done very well. Either way – ask the vendor about it.

It's unlikely you'll find a 3000 that hasn't had some sort of restoration work done – unless it's just come back from California. The unfortunate fact about these Healeys is that practically anywhere in the bottom nine inches of bodywork is liable to tinworm. Just look everywhere.

Rust obviously is a prime problem area, but you can't really see the condition of the inner ones unless you unstuck the carpets. Which a seller might not be too keen on, obviously. Best thing in such circumstances is to try and feel through the material for any crinkles. A- and B-posts are vulnerable too.

The front shroud – around the grille and the bonnet – is aluminium. Which means it won't rust, but it can suffer from electrolytic action where it meets the steel of the front wings. And, because of its construction, it's also prone to dents, and can even get hurt just by being leaned on when people are looking in the engine bay. Filler is often the cheap solution, so look out for it. The back one is also prone to the same problems, although obviously, it doesn't suffer from road dirt and doesn't get leaned on quite so much.

Both the front and rear wings corrode as a result of road muck – within the usual nine inch area particularly – but at least they can be unbolted if they need to be replaced.

Rust in the boot floor might not just mean that this alone is affected. It could also mean that the fuel tank is also affected too.

Last but not least, look at the rear bumper. It can corrode easily thanks to the exhaust coming out underneath it.

PRICE GUIDE – AUSTIN-HEALEY 3000

(VALUES IN £1000S)

	YEARS	MECHANICAL	BODY	C			1			2			3		
				1	2	3	1	2	3	1	2	3	1	2	3
Austin-Healey 3000 Mk1	1959-1961	*****	*****	£25,000	£19,000	£13,000	£8,000								
Austin-Healey 3000 Mk2	1961-1964	*****	*****	£28,000	£23,000	£15,000	£8,500								
Austin-Healey 3000 Mk3	1964-1968	*****	*****	£31,000	£26,000	£16,500	£9,000								

CONDITION GUIDE: C-top driven, dealer car 1-late car, top condition, high spec 2-average example, reasonable spec 3-might be low spec. High miles, undesirable colour, but still driveable condition

Suspension

Everything is Austin underneath, so easily available and not exactly complicated. You can check for wear in the kingpins – which you might spot anyway if the steering wanders a bit – by jacking the front of the car up and seeing if the wheels can be rocked from top to bottom. If there is significant play, then these need refoam – and then remember to keep them greased to prolong their life a bit more.

On the final Mk3 cars, twin radius arms replaced the Panhard rod of the earlier models. The bushes on this will start to creak if they're worn out while the car is moving. However, all the bushes can be replaced by tougher urethane ones – so this is actually quite a good excuse to do so! Many 3000s sit a bit low at the rear, courtesy of tired springs. But in other will sit a bit high, thanks to new ones that haven't settled yet. They will be, but if you find an Austin-Healey that sits square all around, then bonus! Lever arm dampers occasionally leak and front damper mountings can also work loose too on well-used cars.

HISTORY

1898 Cornwall is the location for the birth of Donald Healey, a man who will go on to become one of the most important and influential names in the sportscar world.

1952 With a number of low volume 'specialist' cars under his belt, Donald Healey pops up at the London Motor Show with his new four-cylinder 100 Roadster to reveal. Most of those who see it are impressed, particularly Leonard Lord of the British Motor Corporation, who immediately strikes a deal with Healey for BMC to build the car. Before the end of the event, Austin-Healey badges have been created and affixed to the show car.

1956 The 100 becomes a six-cylinder car, thanks to the fitment of a BMC C-series engine as previously modelled by the Austin Westminster and Wolseley 6/90.

1959 The 'Big Healey' becomes reality, when the 3000 is created by enlarging the engine from 2693cc to 2912cc, although this only results in around an eight horsepower increase. Disc brakes make an appearance at the front, but apart from these non-cosmetic tweaks, changes to the overall look of the Austin-Healey when are few and far between.

1961 A Mk2 version of the 3000 is born, but is regarded by most as an evolutionary leap backwards. Three SU carburetors are fitted (for homologation purposes), but manage to add a grand total of only one bhp to the eventual power of the Mk1. However, because the whole thing is more complex, the cars often go out of tune and are much less reliable. Plus, they ultimately prove slower in use and get through more fuel. The cars can be distinguished by their vertically-slatted grille and bonnet scoop, as opposed to horizontal ones on the previous incarnation.

1962 The front and rear of the car get left alone, but the centre gets a revamp, with a curved windscreen, wind up windows (practically heresy!) and a more effective hood. Previously known as a tourer, the car is now known as a convertible...not that there's any real difference. However, one thing that Austin-Healey enthusiasts do appreciate is that the triple carb system gets the push, replaced instead by more robust twin SUs.

1964 The Mk3 is the final genesis of the 3000, and by far the most civilised of all the Big Healeys. There's a new dashboard – in wood – plus improved suspension, better ground clearance and a bit more power thanks to twin choke carburetors and a new camshaft.

1967 In the BMC battle between the old Austin-Healey and the new MGC, it's the Healey that loses and the MGC is chosen as the Corporation's six-cylinder sportscar flagship. However, it never manages to provoke anything like the affection the outgoing Healey did.

1968 A final Austin-Healey 3000 is built at Abingdon in March. In total, production stands at 42,926 for all three variations.

Contacts

Clubs

■ Austin-Healey Club, tel 0116 254 4111 or www.austin-healey-club.com

Specialists:

Just a few of the many. For more, see: www.austin-healey-club.com

■ AH Spares, Warwickshire. Tel: 01926 817181 or www.ahspares.co.uk

■ Bell Classics, Bedfordshire. Tel: 01582 488370 or www.bellclassics.co.uk

■ Murray Scott Nelson, North Yorkshire. Tel: 01723 361227 or

www.murray-scott-nelson.com

■ Orchard Restorations, East Sussex. Tel: 01435-812374 or

www.orchardrestorations.co.uk

■ North Street Garage, Somerset. Tel: 01984 624140 or www.northstreetgarage.co.uk

■ Classic Touring, Kent. Tel: 01892 891505 or www.classic-touring.co.uk

■ Rawles Engineering, Hants. Tel: 01420 23212 or www.austinhealeyspecialists.co.uk

■ Enigma Restorations, Lancs. Tel: 01706 817468

■ Dennis Welch Motorsport, Staffs. Tel: 01543 472214 or www.bighealey.co.uk

■ JME Healeys, Warks. Tel: 01926 425038 or www.jmehealeys.co.uk

■ Trevor Hirst Restoration, Dorset. Tel: 01425 614177 or www.trevorhirst.co.uk

■ SC Parts Group, West Sussex. Tel: 01293 547841 or www.scparts.co.uk

Market Trends

You're never, ever going to find an Austin-Healey 3000 going cheap. Whatever the mark or condition, these are among the top flight of classic British sportscars, and prices are fantastically high for what, let's not beat around the bush here, is quite a basic roadster with the engine of a BMC saloon. Such a statement isn't taking into consideration the sheer charisma and personality of the cars of course – that's what costs all the cash!

For a Mk3 (the most desirable of the breed) in excellent order bought from a dealer, you are looking at upwards of £30,000 these days. The Mk1s are the cheapest of the bunch, but even they're up to close on £25,000. Think you can save some money by getting a basketcase? Think again! Even a very rough, barely running Mk1 will set you back £6000, and will probably require a full and very expensive restoration before you can start to enjoy it. If you want to put that into perspective, you could get a fairly decent MGC for that kind of money. And that's the car that was meant to supersede the Austin-Healey as well...

These classics are one of the few historic cars that can genuinely be regarded as investments – of a sort. Look after your car, keep on top of the maintenance and all the other extra jobs, and you certainly won't lose any money when the time comes to part with it. In fact, you may even make some...

Verdict

You don't need us to sing the praises of an Austin-Healey 3000 to you. Thousands of enthusiasts have done it before, and probably far more eloquently than we can. It is one of the all-time British greats, loved and lusted after all over the world.

The best one to go for is undoubtedly the Mk3 version – which is why they cost more than all the others. It's got the most power, the most finesse – okay, not too much more of it, but it is there – and is generally a bit easier to live with. Not that these cars should be simple ownership propositions – fans wouldn't truly appreciate them if they were that easy – but the good times generally outweigh the bad to a very large extent with one of these ultimate Healeys.

Insurance quote

For a £25,000 Austin-Healey 3000 Mk3, based in Peterborough

■ Fully comp, £100 excess: £362.25 for a 29-year old, two years' NCB, clean licence, 10,000 miles, only car, kept on driveway, club member

■ Fully comp, £100 excess: £97.65 for a 50-year old, full NCB, clean licence, 3000 miles, second car, garaged, club member

Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

AUSTIN-HEALEY FROGEYE SPRITE



Engines

If there's mayo on the oil filler cap... only joking, but how many times have you heard that before? In case you haven't, the Sprite that you are looking at will need a new head gasket – pronto. A-series engines are also prone to bleeding some oil.

Gordon Elwell, of Frogeye specialist, Classic Revival, informs us that the original scroll-type rear crank seal will always leak, but is most effective. The problem is mainly because the aftermarket lip type seal tends to be oil tight, but when they let go, the oil is emptied in an instant.

The trick is to fit the scroll type true, at a constant distance and as close to the crankshaft as possible. Classic Revival uses a home-made steel shim that works much like a feeler gauge. This will offer the best solution – basically, it's better to have a minuscule oil leak that won't burst its banks, than an aftermarket seal that could vacate the engine of its bodily fluids in a blink.

If the rubber seals that live under steel 'top hats' on the rocker cover bolts look the worse for wear, then the remnants could be floating around the rocker gear. This is down to poor quality rubber and, because of this, they should be replaced at set intervals.

Originally, the Frogeye was equipped with brass-topped 11/8in carbs, which are a pain to set up and take a lot longer to tune. So don't go into cardiac arrest if the one you are looking at is fitted with the black plastic topped 11/4 carbs sourced from a later Sprite or Midget. Although not in keeping, they are easier to maintain and setup.

The same goes for the Simplex (single) timing chains which are noisy and tend to slacken off. Although it won't be visible when glancing at the engine, if the owner informs you of a changeover to the Duplex timing gear, don't fret. The Duplex setup is less noisy, more durable, and won't slacken off as quickly as the Simplex chain. Classic Revival goes for this option every time, unless a customer specifies otherwise.

Specification

Car	Sprite	Sprite hardtop	Sebring Sprite	Sprite Supercharged
Year	1958	1959	1960	1960
Engine size	948cc 4-cyl OHV	948cc 4-cyl OHV	948cc 4-cyl OHV	948cc 4-cyl OHV supercharged
BHP/RPM	50bhp@5500rpm	42.5bhp@5500rpm	55bhp@5800rpm	68bhp@5700rpm
Top speed	81mph	86mph	87.4mph	90mph
0-60mph	20.9 secs	23.7 secs	14.2 secs	15.3 secs
Gearbox	All models: 4-speed manual			
Consumption	34mpg	40.3mpg	N/A	28.3mpg
Suspension	All models: Front: Independent by wishbones, coil springs, lever arm shock absorbers. Rear: Live axle, quarter-elliptic springs, radius arms, lever arm shock absorbers			

Parts prices

All parts from Austin-Healey Spares	
Floor pan	£79.31 per side
Front Inner wing	£79.90
Spring hanger box	£ 37.01
A-post inner pillar	£ 21.74
B-post	£12.04
Bonnet assembly, steel	£2261.88
Front brake shoes	£16.22
Rear brake shoes	£22.91
Radiator (new)	£163.91
Clutch plate	£34.66
Stainless steel exhaust	£105.16
Hard top (works style)	£381.88
Disc brake conversion	please ask

Interior trim and electrics



Electric windows? You must be joking. Actually, you don't even get a winder on the door card of a Frogeye. The windows are of the clip-on variety – simplicity at its best!

Originally, rubber flooring was supplied by Austin-Healey, but this is hard to come by as many were converted to carpet at a later stage. If this is shot, a new carpet set will cost a fraction under £90.00, or £135.00 for the more luxurious Hessian-backed option. Don't expect to find the original two-spoke steering wheel either. A Mota-Lita, Mountney or period wood-rimmed one could be nesting there, which isn't a bad thing, but if you are a purist, then the original versions aren't too hard to get hold of.

Incredibly simple cars tend to come with incredibly simple electrics, and the Frogeye has exactly that. For example, if a headlight doesn't work, the trouble shooting will consist of changing the bulb, and if that fails, the bullet connector will probably be corroded.

The fuel gauge can be temperamental – the sender sticks and gives a false reading. This is usually down to a Frogeye that hasn't been used regularly. And if the garage gets damp, the feed from the sender to the gauge will deteriorate.

If you suspect the dynamo has gone, the most probable cause is the control box, which can get damp and the contacts corrode. Examine and replace if necessary before shelling out for a dynamo.

Wiring diagrams don't boggle the mind either. Fully colour-coded looms are still available, making installation simple.

The Frogeye Sprite offers a quirky alternative to the Midget and **ADAM TAIT** is here to tell you how to bag a peach. Expert help comes from Frogeye guru and owner of Classic Revival, Gordon Elwell

Suspension and brakes

Drum brakes are more than adequate for a Frogeye in standard form. For road use they are faultless, so long as they have been properly maintained and adjusted. A Frogeye running a 1275cc engine should have been fitted with disc brakes: if it hasn't, then tell loved ones how much you think of them before going out on a road test.

Ask the vendor what brake shoes have been fitted. Reproduction items tend to employ friction material that would be better suited to brake pads, or hardened impact sockets and, as a result, certain sets have been known to have covered 5000 miles without even bedding in.

If a mound of spares is thrown in with the sale, have a quick rummage to see if there's any NOS (new old stock, not nitrous oxide) Ferodo or Mintex shoes. These will have a Frogeye stopping like Road Runner.

In the suspension department, Frogeyes run on lever-arm dampers and leaf springs. If it has a monster truck-esque ride height then ask if it has been treated to a replacement set of springs. As with the brakes, these reproductions aren't of great quality and the increase in height is due to an inaccurate length/height of spring at the front and rear respectively.

Give yourself a pat on the back if you find a set at an autojumble because they are rare to stumble upon.

If the original springs are included in the sale, then refit these (so long as they aren't deformed) because the manufacture items are very durable.

The lever-arm dampers are prone to leaking and serve up a dire ride, so give each corner the infamous bounce test. Some reconditioned dampers have been given a makeover so many times that it has been known for them to leak as soon as the car is lowered on to the floor. If the prospective buyer needs a new set, and they are original, then try and get that specific set refurbished.

When the Frogeye was being chucked out in the Fifties and early-Sixties, there was also an export batch. Cars that were destined for Africa were offered with heavy-duty rear leaf springs in order to stand up to the poor quality roads.

Today, standard leafs are hard to come by, and it's only the heavy-duty ones that are being reproduced. Over the years, these remakes have increased in size with thicker gauge metal, so it's not unheard of for the top of the tyre to be six inches away from the arch.

The same rules apply with the rear leaf springs as it does with the coils at the front. So long as they aren't bulged and distorted, treat the originals to a wire brush and a coat of paint. The U-bolts that locate the leafs may have been on there for half a century; an impact wrench won't touch them, it will take the work of a huge breaker bar and a hardened socket to loosen the nuts – or shear them off.

Another area of concern is the front swivel/kingspins. There are three grease nipples per side, and if they haven't received regular attention, it could lead to an MoT failure. There will be play evident when the car is jacked up. Simply rock the tyre from top to bottom, excessive play could indicate neglect.

Gearbox

Shared with the humble A35, original Frogeyes will be fitted with a gearbox that has a smooth casing. Being three-synchro, a clumsy owner of the past may have tried selecting first without double declutching. If this was regular practice then expect the gearbox to sing. Jumping out of gear on the test drive will also indicate that it's rebuild time.

If you see a reconditioned smooth-cased 'box for sale, don't take too much notice because new internals aren't available, so all that can be replaced are the gaskets and bearings.

The later ribbed version is a common conversion because it is marginally stronger and parts are still available. For the purists out there not wanting to ruin an authentic appearance, Classic Revival can give you the best of both worlds, by machining the original smooth casing to accept the ribbed internals.

Halfshafts will cope just fine with anything up to about 90bhp, so long as you don't dump the clutch at any given opportunity. For anything beyond that, plump for either 1275 versions or beefed-up competition items.

Bodywork

Like just about every other classic British car, time is a harsh companion and our interesting climate spurs on corrosion. Although oil leaks are an inconvenience, they do actually help protect the underside in the engine and gearbox vicinity.

The usual sills and A-posts are prone, so check the gap on these and the door. Should it be confined at the top, you could be looking at a sagged shell, or for those who talk technical lingo, a shagged shell. This is bad news, so either prepare to dig deep or turn around and walk in the opposite direction.

"We try and repair what we can, rather than tear out the existing panels. Original panels are the correct shape and the reproduction items aren't always a great fit," says Gordon.

Another shocker is the bonnet on a Frogeye, because it incorporates the front wing and valance – both items that tinworm loves. In case you haven't already collapsed and knocked yourself out on the corner of the worktop because of some of the other things we've mentioned, a steel Frogeye bonnet won't give you much change from two thousand pounds.

The fun still isn't over; weighing in at around 35kg (bare), trying to manoeuvre and then align the panel gaps is difficult to master. There is adjustment on the hinges and some give on the wings, but to have a flush fitting front end will be very time-consuming.

Seeing as many Sprites are 50 years old, most front ends would have changed shape since they left the factory. Where they have been raised and closed umpteen times since the Fifties, many flatten out across the back and become victims of fatigue.

If your potential purchase is in need of a new front end but you can't afford a steel bonnet, glassfibre ones are available for around £300. They are around 15kg lighter and a professional paintjob and correct (discreet) fixings will make this cheaper alternative indistinguishable from a genuine steel version. Until you give it a tap of course. Classic Revival offers a bespoke hinge to keep it in place because the glassfibre bonnets hinge from the front.



HISTORY

Designed as an economical, low cost sports car, the Sprite, or 'Frogeye' as it was soon nicknamed, proved to be great timing for BMC and Healey. With the resurrection of fuel rationing due to the 1956 Suez Crisis, a door had been opened for manufacturers to produce small cars.

After a chat between BMC's Leonard Lord and Donald Healey, this new sports car project commenced. Nabbing the famous A-series engine in its 948cc form, and calling upon the assistance of Healey's designer, Bill Billbie, the 'Sprite' as Donald Healey officially named it, was a recipe for success. Launching a car to the Press will always be a nerve-wracking experience, and with the bigwigs from BMC and Austin-Healey, rally driver Tommy Wisdom, a host of journalists, and six press cars in tow, this was make-or-break time.

Luckily, the Frogeye received praise from everyone.

One criticism was made of the headlight arrangement, saying it looked like an afterthought. Healey design chief, Gerry Coker, did come up with the idea of recessing the lights into the bonnet, à la future Porsche 928. But the Frogeye was a low-budget sports car, so the ingenious idea was canned. But maybe this was a good thing, because it would have detracted from back-to-basics motoring and its cheeky front end, which in turn received the 'Frogeye' moniker.

Who could argue with the price either? At £669, it was a sports car for those on a budget. But it was common for this price to be exceeded, because the options list had some essentials on there.

For example, if you wanted a heater, rev counter, front bumper, windscreen washer, laminated front screen, and a locking fuel cap, it would then bump the price up to around £700...

1957 BMC approves the Frogeye prototype, and Austin-Healey makes the move from its Longbridge factory to MG's base at Abingdon.

1958 Production kicks off at Abingdon in March, with the big Frogeye unveiling in May. Parts come from all over the BMC empire. By July, the new Sprite had competed in its first rally, the Alpine Rally.

1959 A Frogeye is included on the Targa Florio and Sebring plays host to the first major race appearance. Production of Completely Knocked Down (CKD) kits begins in Australia. By now though, work has begun on the Sprite Mk2, after complaints about the lack of boot access and, yes, even those distinctive headlamps.

1960 A Sprite competes in the Le Mans 24 hour race, and wins its class, coming 20th overall. However, in December, not long after the Innocenti factory in Milan has started building its own examples, production comes to an end. In total, 48,987 examples have been built.



Contacts

Clubs

- Austin-Healey Club, c/o Peter Holland, National Membership Secretary, Chimney Cottage, Beacon Hill, Woodhouse Eaves, Leicestershire, LE12 8RN or www.austin-healey-club.com

Specialists

- Austin-Healey Spares, Warks. Tel: 01926 817181 or www.ahspares.co.uk
- Classic Revival, Nottinghamshire. Tel: 0115 9663762 or www.frogeyesprite.co.uk
- Moss Europe, nationwide. Tel: 020 8867 2020 or www.moss-europe.co.uk

Websites

- Austin-Healey Sebring Sprite website: www.sebringssprite.com

How much?

The original £669 asking price won't even buy a restoration project in today's market. In the classifieds of CCW, we've seen prize winning cars for nearly £10,000 and lesser examples, with MOT, but still needing work mind you, for around the £5000 upwards mark. It is possible to bag ratty projects for a good two grand less, but before you do, book some welding classes and consult your financial advisor because you may be in for an expensive one.

Verdict

The Sprite was designed with economy in mind, in relation to both construction and miles per gallon. A standard Frogeye that is kept in tune shouldn't dip below 34mpg.

As with any car of this age, just be wary of the bodywork issues that we have highlighted, and the financially crippling price of that front end. Thanks to the well catered for A-series engine and the Frogeye's race pedigree, there is a good base for tuning - that's if you can bear to ruin an original example. Reversible period Speedwell and Downton accessories would be perfect though...

Insurance quote

- Fully comp, £212.40 for a 21-year-old, two years' NCB on another car, 3,000 mile limit, garaged
- Fully comp, £168 for a 29-year-old, two years' NCB, 10,000 mile limit, only car, kept on driveway, club member
- Fully-comp, £78.00 for a 50-year-old, full NCB, 3,000 mile limit, second car, garaged, club member

Thanks to: Frogeye Sprite specialist, Classic Revival, who has been specialising in this quirky classic since 1987, so knows a thing or two about what to look out for. Whether it's a part that you need, ground-up restoration or race preparation, this Nottinghamshire establishment will be happy to help. Go to www.frogeyesprite.co.uk or call 0115 966 3762.

BENTLEY MULSANNE/TURBO

During the era of the Silver Spirit/Mulsanne, Bentley became the dominant force in the marriage with Rolls-Royce. Thus **RICHARD GUNN's** guide concentrates on buying the Winged B variants of these 1980-1998 era models.

Parts prices

All parts from Flying Spares

Turbo R decoke kit,	£550.00
Head gasket,	£55.00
Hydraulic tappets, set of 16,	£225.00
Front screen, used,	from £250.00
Sill moulding,	£159.00
Radiator, used, from	£120.00
Top hose,	from £39.00
Bentley hubcaps, used,	£75.00
Headlamp, used,	£125.00
Twin headlamp conversion, used,	£500.00
GM 3-speed gearbox and torque converter, secondhand,	£350.00
Differential assembly,	from £250.00
Rear outer wheel arch,	£130.00
Fuel pump,	£185.00
Rear exhaust silencer, stainless steel,	£160.00
Rear damper, used,	£250.00
Top ball joint,	£160.00
Bottom ball joint,	£130.00
Height control valve,	from £109.00
Steering rack,	from £295.00
Front vented disc,	£100.00
Front pads, axle set,	£68.00

Specification

Car	Bentley Mulsanne	Bentley Mulsanne Turbo	Bentley Turbo R
Year	1980-1987	1982-1985	1985-1998
Engine size	All models: 6750cc V8, turbocharged on Turbo models		
BHP/RPM	200@4000	298@3800	328@4300
Top speed	119mph	135mph	146mph
0-60mph	10.0secs	7.0secs	7.0secs
Gearbox	All models: GM three-speed automatic up until 1992, GM four-speed automatic thereafter		
Consumption	14mpg	21.1mpg	14.2mpg
Suspension	All models: Front: Independent by torsion bars, wishbones, anti-roll bar, telescopic dampers. Rear: Live axle, leaf springs, telescopic dampers.		

Engine

Because these cars use a lot of the same mechanics as the previous Shadow – which had been around for 25 years, so most of its bugs had been ironed out – the cars are extremely reliable. However, they're not really a proposition for the home mechanic, as by this era, even Rolls-Royce/Bentley had discovered modern technology, with the result that a lot of jobs are best left to experts. Who will charge accordingly. You have been warned.

So, it's important therefore that you try to find a car that is healthy as possible. Suffice to say, the more bulging a service history file is, the better, and even if the car has fallen out of the Rolls-Royce/Bentley dealership chain, at least see that it has been maintained by a reputable independent specialist. The service interval is every 6000 miles, but with major – and therefore very expensive – services due at 48,000 miles and 96,000 miles.

The ubiquitous V8 engine is a well-proven and tough unit, for which upwards of 100,000 miles is likely to be no problem whatsoever. However, the proper coolant changes are quite vital, otherwise, internal corrosion will occur, and pistons can start to knock, the result of being squeezed by the surrounding liners. Head gasket failure can strike too – so keep an eye on that temperature gauge, although a high needle could just be a result of a blocked radiator matrix (caused by lack of use), and the air-conditioning matrix can also cause similar maladies, although leaks around this area will possibly be accompanied by corrosion in the bulkhead and footwells too.

Tappets are hydraulic, so if the ones on the car you're looking at are

getting noisy, replacement of them is the only real option. Touches of exhaust smoke when gently accelerating also point to potential problems.

Fuel injection arrived on these cars for the 1986 model year, bringing with it better starting and improved MPG, although the earlier cars – with a Solex carburettor as used on the Camargue – do have greater simplicity on their side. On turbocharged carburettor cars, hot starting can be a problem, with some experts saying that it can take up to eight turns of the key to get the car to fire properly, thanks to the temperatures generated under the bonnet. Sometimes they can get so high that the carburettor faces can actually warp, which will cause even more running idiosyncrasies. Something to consider when you're buying...bearing in mind that there are a lot more fuel-injected cars out there than there are carburettor-fed models.

The turbocharger itself is tough enough, but eventually, it will wear out, just as all mechanical items do in time. Oily hose connections will give the game away. If you come across these, remove the inlet pipe – not when the engine is hot – and look for oil inside. If there's a lot of it, then things are getting past their 'best by' date. A further check you can do is to try and spin the turbocharger by hand, with the engine off. You should be able to quite easily, and if you can't, it means it has seized.



Bodywork

Stand back and look at the panel gaps. Suffice to say, on a hand-built, finely-fettled car such as a Mulsanne, they should be superb. If they're not, it points to previous repair work, and if the inconsistencies are around the front of the car, it all points suspiciously towards accident damage.

Rust isn't that common on these cars, and you won't find it on the doors, bonnet or boot as these are aluminium (although oxidation can set in where steel meets alloy). But most problems are generally purely cosmetic where they can be easily seen. Front wings, around the trailing edges and rear wheelarches are vulnerable, plus the back valance also suffers as well. Trouble here often goes unnoticed, due to the area being tucked away under the bumper. Sills are vulnerable where the front wings meet the panel, thanks to there being a spot-welded join here.

Boot seals can fail, letting water inside, which will then proceed to try and rust out the floor under the carpets. You should check this area from both inside the boot and below,

as corrosion can develop underneath as well.

Oh, and don't forget to check the radiator shell – on many of the Bentleys, it's chrome-plated steel, so more vulnerable than the stainless steel items to be found on Rolls-Royces. It's the bit that everybody looks at first on a Bentley (just to make sure it isn't a Roller), so you want it to be as good as possible.

It's underneath where more serious problems can set in. The rear crossmember can actually split, around the area where the propshaft is, and the floor itself suffers similar problems where the exhaust mounts. Often plates are fitted here to 'repair' problems. At the back are spring mounting 'pots' which can suffer from tinworm, while towards the front is the forward body outrigger, a prime sufferer from tinworm on cars that have seen a lot of use. While you're at the front, look for creases around the front longeron – a sure sign of previous accident damage. Also keep an eye out for careless placing of jacks having damaged the underbody.

Suspension

Check all the various hydraulic pipes for signs of leaks, although because these cars use a mineral oil in place of the brake fluid employed in the Shadow, problems due to corrosion are less likely. Fluid should have been changed every four years – look for paper evidence of this. However, you should look for leaks underneath, more likely to appear once the car has been parked after a drive and the engine is still running. If you see liquid from the front, then it's likely to be the accumulators that are at fault. If it's at the back, then suspect the height control valves. Other possible problems are spheres, which will wear out in time, as can the height-correctors. With the engine running, check that the car rises up and levels itself when anybody climbs into the back, while during a test drive, listen for a knocking from the rear under braking. This is a major signal of tired self-levelling. Noise from the hydraulic pump signals this is on its way out too.

Pre-1984 cars have bearing pins at the front, which wear out easily, but cars built after this date had modifications carried out to stop this. Any creaks or groans from the wheels are symptoms worn suspension bushes, mountings or bearings – these cars have a lot of such things – although upper and lower balljoints are the most likely things to be playing up. Uneven tyre wear evidences this.

Steering racks can develop gaiter leaks, so look for signs of fluid here. Give them a good squeeze just to check that there isn't any trapped liquid pooling around inside.

Wheels

Don't forget to check those alloys for scratches. They can cost a hell of a lot to replace if they're been kerbed or scratched a lot. On the more powerful cars, be prepared to spend quite a bit on rear tyres – these cars do have a habit of consuming them every couple of years or so, and they're far from cheap to replace.

Brakes

Brakes need to be replaced quite often on all the models, simply because they have such a tough job to do. A Bentley is a big car for a few metal discs and some pads to have to try and stop. Seized brakes can be a problem on cars that don't see a lot of use... which can mean a lot of these cars, often used more as occasional treats rather than everyday cars.

Interior

See that cabin? Do you know how many cows and trees died to make that? You don't want any more to be sacrificed, even if just for the sake of your bank balance, so buy an example with the best interior you can. Any work that needs to be done falls into true craftsmen territory. That said, what was put in these cars in the first place was of the highest possible quality, and it should all wear extremely well.

Don't forget to check the air-conditioning. While the actual machinery itself is usually fine, hoses can be the weak spot, and any system will have needed to have been regularly maintained to give its best. The very thick carpets can often do a good job of hiding rotten floorboards caused by dodgy air con, thanks to the drain holes for the system becoming blocked.

Are all the warning lights working as they should? These cars have a lot of them, and one that is on – or alternatively, one that doesn't light up when the ignition is turned on – needs further investigation. From 1990, an electronic 'active memory suspension' was fitted, and occasionally, the warning light for this will come on, and stay on. It's not actually anything to be too worried about if you do see it – the car just needs to go to a specialist for the memory to be reset.

Transmission

These cars have GM three-speed and four-speed automatic transmissions, both are which are generally fine, although the more powerful of the Bentleys can put a strain on the input shaft, causing it to fail and result in a new transmission and torque converter. Not good news at all.

Noisy differentials can be quite common – a whine from the rear at about 35mph means a big bill ahead for a new differential to be fitted. Best to walk away and look elsewhere if the noise is too loud. And if you can notice it in one of these well-insulated cars, then it probably is.

PRICE GUIDE – BENTLEY MULSANNE

MINES AVAILABILITY

	YEARS	MECHANICAL	BODY	C	1	2	3
Bentley Mulsanne	1980-1987	*****	*****	£16,000	£13,000	£7,500	£4,500
Bentley Mulsanne Turbo	1982-1985	*****	*****	£17,250	£14,000	£8,250	£5,000
Bentley Mulsanne Turbo R	1985-1992	*****	*****	£18,000	£15,000	£9,500	£5,500

CONDITION GUIDE: C-top drives; dealer car 1: late car; top condition; high spec; 2: average example; reasonable spec; 3: might be low spec; 4: high miles, understore colous, but still good condition.

HISTORY

Mid-Seventies Work starts on the SZ generation of Bentleys and Rolls-Royces, the name given to the project to replace the T-series and Silver Shadow range. The floorpan and running gear of the existing model is recycled, but the very square-cut styling, by Fritz Feller, is completely new. Although it does bear a certain resemblance to what has gone before...

1980 The new Bentley Mulsanne – the name being taken from the infamous straight at Le Mans – and the Rolls-Royce Silver Spirit are launched. The two cars are completely identical, save for the trim details, and even come for the same price of £49,629.

1981 A total of 3014 Rolls-Royces have been sold... against a mere 151 Bentleys. The decision is taken to look at the Bentley brand to try and revitalise it, and a plan is formulated to make the Mulsanne distinctive from the Roller it is based on, with the emphasis on playing to the marque's sporting past.

1982 First fruit from the Bentley renaissance is the Mulsanne Turbo, unveiled at the Geneva Motor Show. Introducing the 6750cc V8 engine to a Garrett AIResearch T04 turbocharger boosts power to 'sufficient, plus 50 percent' according to the maker. In reality, that means about 300bhp on tap.

1984 An 'entry level' car – the Eight – is introduced with less equipment, to lure newcomers to the world of Bentley. The price is a mere £49,497... which was still £6000 less than the Mulsanne.

1985 This may be the year that Rolls-Royce finishes its 100,000 car, but it is Bentley that is getting all the attention with the new Turbo R. The final letter stands for 'Roadholding' and denotes a host of suspension improvements designed to make the car handle better. Across the board, there are a series of minor changes including a new dashboard arrangement.

1987 Fuel injection is standardised, and there's another new Bentley model in the form of the Mulsanne S, although it's actually little more than a standard car given the Turbo R interior.

1989 To further reinforce the growing differences between Rolls-Royces and Bentleys, the latter cars get four round headlamps in place of the previous two square ones.

1990 Series 2 cars have new interiors, alloy wheels and engine, suspension and handling changes. They now run on unleaded as well.

1993 The Eight and the Mulsanne S are merged together to become the Brooklands.

1994 Power goes up across the board with the advent of the Series 3 cars, plus there's the usual interior rethink.

1995 Another new Bentley comes along in the form of the Turbo S. Just 60 of these cars – with a 408bhp turbocharged V8 engine and Formula 1 management system – are constructed.

1996 Another slight revamp occurs – which means yet more changes to the interior. Plans to call these cars the Series 4 are dropped when it is found that the Roman numeral IV is a symbol of death in some Far Eastern countries. Which isn't great advertising.

1997 The final Bentley variant – the Turbo RT – uses the same 400bhp powerplant as in the Continental T, and gets a mesh grille as well as body colour-coded bumpers. It's capable of 150mph, but costs £148,990.

1998 The Mulsanne shape cars go out of production, to be replaced by the Arnage/Silver Seraph.

Insurance quote

For a £12,000 1987 Bentley Mulsanne Turbo, no modifications, based in Peterborough

■ Fully comp, £375 excess: £1500 for a 29-year-old, two years' NCB, clean licence, 10,000 miles, only car, kept on driveway, club member

■ Fully comp, £100 excess: £298.05 for a 50-year-old, full NCB, clean licence, 3000 miles, second car, garaged, club member
Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

Contacts

Clubs

■ Bentley Drivers Club, WO Bentley Memorial Building, 16 Chearsley Road, Long Crendon, Aylesbury, Bucks, HP18 9AW. Tel: 01844 208 233 or www.bcd.org

■ Rolls-Royce Enthusiasts Club, The Hunt House, Paulerspury, Northants, NN12 7NA. Tel: 01327 811788 or www.rrec.co.uk

Specialists

■ Montague & Company, Surrey. Tel: 01483 898595 or www.bentleyspecialists.com

■ Shadow Motor Cars, Kent. Tel: 01634 264425

■ Royce Service & Engineering, Surrey. Tel: 01737 844999 or www.royceservice.co.uk

■ Stewart Walker, Oxfordshire. Tel: 01634 866 833 or 07831 800727

■ Flying Spares, Leics. Tel: 01455 292949 or www.flyingspares.com

■ T & G Autospare, Yorks. Tel: 0113 255 9908

■ Paul Mackley, Notts. Tel: 0115 950 1063

■ Ghost Motor Works, Kent. Tel: 01732 886002 or www.ghostmotors.co.uk

■ Hanwell Car Centre, London. Tel: 020 8567 6557 or www.hanwells.com

■ Hillier Hill, Bucks. Tel: 01234 713871 or www.hillierhill.com

■ Balmoral, West Midlands. Tel: 01562 711114 or www.balmoral.com

■ English Automotive Services, London. Tel: 020 8487 3900 or www.englishautomotive.co.uk

■ Phantom Motor Cars, Surrey. Tel: 01525 850231 or www.pmcuk.com

■ Healey Brothers, Northants. Tel: 01933 650247 or www.healeybros.co.uk

■ Jack Barclay, London. Tel: 01270 653 653 or www.jackbarclay.co.uk

■ Rolls-Royce Owners Club UK, Unit 14/15 Riverside Business Park, Lyon Road, Merton, London, SW19 2RL. Tel: 020 8544 0600

Market Trends

Well, at least these aren't Rolls-Royces! The more overtly sporting nature of these Bentleys – especially the Turbo models – means that prices haven't fallen quite as far as they have for the more restrained variants boasting a Spirit of Ecstasy up front. However, at around £20,000 for even the best of these cars, the gulf between current values and original values is massive. So, as such, these Bentleys are terrific bargains. Comparatively...

However, the financial trend at the moment is still slightly downwards. These cars haven't quite dropped into the twilight world of Silver Shadow/T-Series price tags, and probably won't, thanks to most of the Bentley offshoots actually being genuinely different to their RR brethren. But, here on CCW, we still reckon values have a little way to go before they stabilise properly and start to creep back up again.

Verdict

Remember that, with cars such as these, it's not so much what you spend initially, as what you'll have to spend later on. Bentley ownership isn't a cheap proposition, which is why you should never jump in feet first and buy the first example you come across. Unless it really is very, very good indeed. It's vitally important that you can't just afford the initial purchase price, but can also stomach just general running costs and how much you'll have to pay if things do go wrong. Even simple things on one of these cars can be a bank breaker if you're trying to stick to a budget. In fact, budgets and Bentleys are two words that should never be found in the same sentence.

The standard Mulsanne doesn't offer too much over the equivalent Rolls-Royce, which is why our recommendation is for anything from a Turbo upwards. The combination of the Rolls-Royce V8 unit and a turbocharger does turn these superlative cars into Grand Tourers that are really rather special indeed.

One thing is very important though. And that's to make sure that the car will fit in your garage at home. These cars are enormous in every way, and you don't want to buy one, drive it proudly back home, and then discover you've got nowhere to put it!

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BMW 3-SERIES (1982-1991)



Engines

Four cylinder cars: The Bosch LE Jetronic causes few problems in daily running and the main point of concern will be the fuel pump relay. When this goes, your car will stop, and you'll need another one. However at £30, it won't break the bank, and the breaker's yards are a good source of parts, too. Like all the Bosch fuelled cars, simply leave it alone, and be prepared for signs of ageing.

The 316 and 318i power unit is rugged and long lived, and as long as it gets regular drinks of good quality oil, it will just about last forever.

Six cylinder cars: Famous for cracking cylinder heads, it's worth checking closely for the signs. Neglect is the enemy here, and if the anti-freeze looks old, or is low, the aluminium head will soon start to corrode through lack of protection. A good sign is to check the radiator, particles from the rusting head will silt up the bottom and top of the radiator and the engine then runs hot. Don't trust the temperature gauge, to give you the full story... If the car overheats, the head will crack, pressurising the cooling system, and causing water loss. Checking this couldn't be simpler (on a longer test drive) – take a ten minute drive, let it idle for five, then unscrew the coolant cap – if there's a hiss, you're okay, but if it tries to impersonate Vesuvius in steam, then walk away – the system's pressurising.

E30 cylinder heads are readily available both secondhand through BMW specialists, or via eBay, but you can pick up a new one from GSF Car Parts, for a not out-of-order amount of money. Other than that, these engines are also strong and durable. They can get clattery if neglected, but you'll be wanting to avoid one of these, anyway.

Distributors can play up on the earlier 320i and 323i – with inconsistent power delivery and wobbly idle speeds – but as they get worse before they die, you'll have plenty of advance warning of when it's time to buy a new one.

Motronic ignition systems are usually excellent, but pay close attention to the condition of all leads and plugs.

M3: Regular maintenance is a must – and make sure the timing chain and camshaft sprocket has been changed at 100,000 miles. If it has been performed by a specialist, the head gasket and tensioner will also have been done – and if that's the case your M3 will be good until 200,000 miles. Make sure all the oil changes have been done with good quality synthetic oil, such as Mobil 1, as the 16V engine is intolerant of anything less than the best.



Specification

Car	BMW 318i	BMW 320i	BMW 325i	BMW M3
Year	1983-1991	1982-1991	1985-1991	1986-1990
Engine size	1796cc, 4-cylinder OHC 8V	1991cc, 6-cylinder OHC 12V	2494cc, 6-cylinder OHC 12V	2302cc, 4-cylinder DOHC 16V
BHP/RPM	116@5800	123@5800	171@5800	197@6750
Top speed	115mph	124mph	131mph	146mph
0-60mph	10.3secs	9.5secs	7.2secs	6.5secs
Gearbox	All models: four-speed manual on early 316, standard five-speed on all models from 1985. Three- and four-speed automatic versions, and all models rear wheel drive, except for the Euro-only 325iX four-wheel drive version...			
Consumption	318i: 23-32mpg	320i: 21-28mpg	325i: 20-28mpg	M3: 18-26mpg
Suspension	All models: Front: Independent by MacPherson struts with coil springs, anti-roll bar and dampers. Rear: Independent by semi-trailing arms with coil springs and dampers.			

It was considered one of the greatest Yuppie status symbols of the Eighties – a powerful symbol of what you could achieve if you climbed off the Ford/Vauxhall rung of the company car ladder. However, look beyond the red braces image and you'll find a sweet compact classic you'll be able to enjoy for years to come. **KEITH ADAMS** explains.

Wheels

Most of the remaining 3-Series BMWs in circulation will be riding on alloy wheels – so make sure that they are in good condition, are not kerb damaged, and that the tyres are wearing in a consistent manner. M3 alloys are now very hard to find, so pay close attention to condition.

Interior

Generally hard wearing and tough, the major source of irritation for 3-Series owners is a worn out drivers' seat. However, if you're looking at an earlier car with worn bolsters, there is now a sufficient supply of later (tougher) spec interiors knocking around in the breakers yard – if you're not bothered about originality.

At high mileage, the seats can also begin to rattle and feel loose, so tightening the retaining bolts plus the various seat mechanism bolts hidden behind plastic trim is worthwhile. Finally, it's not a deal breaker or difficult to fix, but look for heaters that blow only cold air. It's down to a failed electronic valve found just inside the glovebox.



Parts prices

Common parts prices, supplied by GSF Car Parts (www.gsfcarparts.com)

Rear Brake Drum (316/316i/318i/non ABS),	£16.50
Front Brake Disc, Solid (316/316i/318i/318i),	£14.50
Front Brake Disc, Vented (325iX/320i/318is),	£17.95
Brake Master Cylinder (320i 82-86/non-ABS),	£57.00
Brake Master Cylinder (316i 88-91/ABS),	£62.50
Front Brake Caliper (318i 82-91/non ABS)	£41.00
Clutch kit (316 82-88 four-speed),	£84.00
Clutch kit (320i 82-91),	£97.50
Clutch kit (M3 86-91),	£142.00
Water pump (318i 82-87),	£21.50
Engine radiator (Manual transmission 318i 82-87),	£63.50
Driveshaft (all models),	£64.90
Rear wheel bearing (316i 88-91),	£11.74
Anthratic carpet set,	£26.50
Rear exhaust silencer (325i 88-91), Two-part system,	£108.00
Exhaust fitting kit, (316i),	£18.50
Bumper centre (front), all models to 1987,	£20.00
Front right wing, all models except cabriolet,	£25.00
Cylinder head and valves on exchange for 1989 318is,	£540.00
Camshaft, (316i 88-91),	£68.50

Bodywork

The E30 doesn't fall to pieces, as it harks from a time mass-produced cars were screwed together with the same attention to detail as a range topping executive, but they can end up looking very bad, very easily. Rusty arches and valances are an unsightly, if not structural reminder that BMW had yet to master the art of rustproofing in the Eighties.

Rust can also affect the inner front wings and battery tray, so pay close attention to these areas when examining any potential purchase.

Transmission

Gearboxes in three-speed automatic and manual form are tough and long lived. The four-speed auto can give problems such as lazy disengagement of first gear, and creeping in neutral. This indicates a blocked valve body or a governor, or even overheated fluid. Automatics have a gearbox oil cooler in the bottom of the radiator and if it silt up then the transmission fluid won't be cooled properly. Reconditioned four-speed automatic boxes are expensive so try and find a used one – that you know works well. Final drives can whine after 100,000 miles or so, but the breakers are full of them, so don't let this be a deal breaking barrier between you and your dream E30.

Suspension

Bushes are a bugbear, and check the condition all round – a sloppy 3-Series will soon reveal itself on the road. Those to pay particular attention to are at the rear of the front lower wishbones, which cause tram-lining on the road, and excessive tyre wear. Also check the anti-roll bar links. At the rear, inspect the subframe's mounting points – if it's resting down on its mounting plate, the bushes have failed.

Also look for broken springs and leaking dampers – neither of which are excessively expensive to source from the usual suppliers.

Brakes

Brake components are very simple to find, reasonably cheap and not too hard to fit. Sticking calipers can be a problem, as can neglected and rusty brake pipes around the final drive area. Fitting new pipes generally means new flexible hoses too. Steering racks are hardy but look for leaks on older power models. Clonking and slackness at the steering wheel could be a failing column rubber flexible joint – cheap and easy to fix.

PRICE GUIDE – BMW 3-SERIES (1982-1991)

(DASHES INDICATE UNAVAILABLE)

YEAR	MECHANICAL	BODY	C	1			2			3		
				1	2	3	1	2	3	1	2	3
BMW 318i	1983-1991	*****	*****	£1,500	£1,000	£500	£1,500	£1,000	£500	£1,500	£1,000	£500
BMW 320i/320i Cabrio	1981-1985	*****	*****	£4,000	£3,250	£1,800	£4,000	£3,250	£1,800	£4,000	£3,250	£1,800
BMW 325i/Sport	1985-1991	*****	*****	£6,000	£3,000	£1,400	£6,000	£3,000	£1,400	£6,000	£3,000	£1,400
BMW M3	1986-1990	*****	*****	£15,000	£12,000	£8,500	£15,000	£12,000	£8,500	£15,000	£12,000	£8,500

CONDITION GUIDE: C=Top driver, dealer car 1: late car top condition, high spec; 2: average example, reasonable spec; 3: might be low spec high miles, undesirable colour, but still drivable condition

HISTORY

1975 The legendary BMW 2002 is replaced by a new compact saloon, known as the 3-Series. Available in four- and six-cylinder form, the new car immediately earns a reputation for being a fun steer and lively performer – a legend is born.

1982 BMW launches the replacement for the much-loved E21 3-Series two-door saloon, after a production run of 1,364,039. Although the new car (codenamed E30) looks similar to the last one, it's virtually new from the ground up. As before, available in four-cylinder form (the 316), and as a straight-six (the 320i and 323i), the more expensive cars feature Bosch fuel injection.

1983 Automatic versions have their original three-speed ZF 'box replaced by a more efficient four-speed 4H 22 unit.

1984 The 318i joins the range, and immediately becomes the big seller in the range. A smart new four-door variant also joins the range, significantly widening the appeal in company car circles.

1985 The 323i name finally dies, as an uprated 325i joins the range. More grunt is available thanks to the larger capacity engine, improved cylinder head breathing, and full engine management, supplied by a Bosch Motronic system. The first M3 is shown at the Frankfurt Motor Show, and immediately wins plaudits on account of its advanced specification and exciting styling.

1986 SE 'Special Equipment' versions of the 320i and 325i are launched, featuring power steering, electric windows and sunroof, headlamp wash-wipe, alloy wheels and ABS on the 325i. A Sport version of the 325i also makes an appearance, featuring M-Tech bodykit, special wheels and lowered suspension. General specification upgrades are also included with the standard fitment of central locking across the range. The M3 is launched, featuring a 195bhp 2.3-litre 16V power unit developed by BMW's M Sport division.

1987 The E30 receives its first facelift, featuring more effectively integrated plastic bumpers, and larger rear light clusters.

1988 Five-door Touring model is announced, further expanding the appeal of the E30 range. Six-cylinder versions are initially made available, but the hold-all's range is expanded in subsequent years.

1990 BMW M3 Evolution is launched (again in LHD form only) and has an upgunned 2.5-litre 16V engine, now boasting 238bhp.

1991 Production of two- and four-door saloons ceases with the introduction of the new E36 version.

1993 Production of the convertible version finishes.

1994 Production of the Touring version ends, and the E30 scores a final production tally of 2,085,573 saloons and 247,129 Touring models.



Insurance quote

For a £10,000 1990 BMW M3, with no modifications, based in Peterborough.

■ Fully comp, £100 excess: £649 for a 29-year-old, two years' NCB, clean licence, 10,000 miles, only car, kept on driveway, club member, with Cat 2 immobiliser.

■ Fully comp, £100 excess: £387 for a 50-year-old, full NCB, clean licence, 3000 miles, second car, garaged, club member, with Cat 2 immobiliser.

Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

Contacts

Clubs

- BMW Car Club (GB), PO Box 328, Melksham, Wiltshire, SN12 6WJ. Tel: 01225 709009 or www.bmwcarclubgb.com.
- BMW Drivers Club International UK, c/o Peter Hicks, Norfolk. Tel: 01362 691144

Specialists:

- Munich Legends, East Sussex. Tel: 01825 740546 or www.munichlegends.co.uk.
- Fritz's Bits, Somerset. Tel: 01823 669425
- Jaymic, Norfolk. Tel: 01263 511710 or www.jaymic.com
- Hartlake Specialist Cars, Kent. Tel: 01474 326626
- Motormec, Suffolk. Tel: 01502 500590
- German, Swedish and French Car Parts, nationwide. Tel: 020 8917 3800/0870 606 0153 or www.gsfcarparts.com
- Motor Works BMW Car Parts, West Yorkshire. Tel: 0845 408 1640 or www.motorworks.co.uk/cars

Market Trends

The BMW 3-Series really can be picked up for a bargain basement price, and if you scan the classified ads or trawl the online auction sites, you'll be able to find tatty and uncared for 318s and 320s for well under £500. The question is, would you want one of these? For although they will provide plenty of entertainment if you're looking for a smoker, unless you get very lucky, you'll want to move up the scale to £1000 plus for the better saloons.

Although the four-cylinder cars are not yet listed in the classic price guides, you can expect to pay around £1000 for a tip top example – although there's a healthy premium on the Convertible and Touring models.

The six-cylinder 320s, 323s and 325i can start from as little as £300, but again, unless you're lucky, you're looking at landfill fodder at this level. Without doubt, the best model to go for is the 325i – and values bear this out. Realistically, you should pay around £1400 for a good 325i, and this can rise up to £3000 for the nicest, latest Sport models. Again, there's a premium for the Baur cabriolet version, but not as much as you would think – and don't bet against struggling to find a good six-cylinder Touring model, as these are particularly in demand at the moment.

As for the M3, this is in a different ball game altogether. Bank on paying £5000 for something 'needing work' and neglected. Between £8500 and £12,000, where the good, useable examples of M3 and Evo models will be found, but you can stray over £15,000 for Sport Evos and convertibles. A word of advice with the M3: buy from a specialist, such as Munich Legends or go via the BMW Car Club (GB).

And remember – any specialist, such as Munich Legends, will be able to identify any car you're looking at, so if you think it's a fake, or you just want to check, then don't be afraid to make that call.

Verdict

The BMW 3-Series is gaining classic appeal now, as the red-braces image of the Eighties, becomes a distant memory, and the car's positive qualities begin to shine through. There are still a lot of tatty, abused uncared for examples knocking around in the trade, but these are thinning out as the breakers yards beckon. That means the nicer examples are getting easier to find, as the wheat-vs-chaff proportions become more favourable.

With solid build quality and rugged componentry, the BMW 3-Series, has a lot going for it, but if you choose unwisely it can be an expensive experience. The six-cylinder 325i will follow the M3 into the realms of fully-fledged classics sooner rather than later, as combination of chuckable handling, powerful engines and tight build quality transcend any notion of the unfavourable image that is unjustifiably attached to these cars. So it seems like a good time to buy one for a reasonable price.

The M3 is already there – a fantastic sporting package with as much charisma as any of the late-Eighties homologation specials out there. The M3 is a perfect split personality performance car, though – it's a freeracer on the race track, but can be used as a commuter tool with equal aplomb. Some may question the price gulf between the M3 and the 325i – especially as the six-cylinder car is almost as fast, and handles almost as well.

But for some, only the ultimate will do – and for them, the M3 is the car. For the rest of us, a well priced 325i will make an excellent daily classic...



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CITROËN DS/ID



Parts prices

Suspension sphere	£45.00
Exhaust system, including mounting kit, late model, mild steel	£250.00
Front wing	£750.00
Door panel repair kit	£65.00
Brake pads	£48.00
Brake disc	£65.00
Clutch kit	£135.00
Rear gaiter	£17.50
Pressure regulator	£55.00
Accumulator	£50.00
Hydraulic pump	£150.00
Drive belt, set of four	£26.00
Fuel tank, exch	£175.00
Radiator	£147.00
Water pump	£65.00

Engines

The engine designs dates from the Traction Avant, so they're nowhere near as advanced as the rest of the DS, although they last well enough if looked after. The later ones - 1985cc, 2175cc and 2347cc - have five-bearing cranks, so are smoother and the most robust, but the original 1911cc unit isn't that far behind. Between 150,000 and 300,000 miles is a common enough figure to be expected. Cracks in the alloy cylinder head, between the combustion chambers, are quite widespread, and the result of incorrect anti-freeze being used or being allowed to run low. Believe it or not, a badly fitted oil filter can cause the engine to seize up. There's a triangle symbol on the casing, which needs to be lined up with the triangle on the sump. If it doesn't, then it can cut off the oil flow. Be wary of spark plugs with cross-threads, something that can happen because the holes aren't that easy to get to, unless you're using the correct tool.

A noisy timing chain signals an engine-out job - that's what you have to do to fit a new chain and tensioner, unless you mind cutting a hole in the inner bulkhead and doing it that way. However, a timing chain, if left, will wreck the engine if it goes.

Head gaskets can blow repeatedly, not necessarily because of a problem with the head - whether skimmed or not - but if the cylinder wet liners have started to sink into their block.

Camshaft seals can leak oil and tappets often go without adjustment for longer than they should, so listen out for these being noisy...and if they are, they can cause the engine to run on after it is switched off.

On righthand-drive cars, changing the starter motor is a real pig. Paul Harris, of DS World, told us that with everything that needs to be removed to get to the unit, it can take up to a day. So be wary of a car that seems a little lazy to start...

The electronic fuel injection on the EFI cars is courtesy of Bosch, and so is usually quite well-behaved, but fuel-line and wiring problems can occur. Do look at the flexible fuel pipes though. If they have cracked, they could leak, and fire could be a very real threat.

Gearbox

The gearboxes are tough enough to outlast most of the rest of the car, and because new and secondhand ones are available, most people simply opt for one of those rather than rebuild an original. The semi-automatic, hydraulically-assisted gearboxes on the earlier cars are complicated, and if one part of the system stops working, then it can make things difficult. They need to be set up properly to give their best though.

While out on a test drive, make sure you try fifth gear if in a later car. If there's a whine, then it signals a new differential is needed. Which can be expensive...it takes DS Classics two days to take a gearbox out and then put it back in again. Just so you know.

Steering

Split bellows on the steering rack can occur if the clutch is getting on, or if the adjuster isn't set properly. It can actually protrude so far that it rubs the bellows, and ultimately causes them to split.

Specification

Car	Citroën DS19	Citroën ID19	Citroën DS/ID20	Citroën DS21	Citroën DS23 EFI
Year	1955-1968	1959-1968	1968-1975	1966-1975	1973-1975
Engine	1911cc 4-cyl OHV	1911cc 4-cyl OHV	1985cc 4-cyl OHV	2175cc 4-cyl OHV	2347cc 4-cyl OHV
BHP/RPM	75@4500	66@4500	103@4500	115@4500	141@5250
Top speed	87mph	83mph	105mph	112mph	120mph
0-60mph	22.1secs	21.1secs	14.2secs	14.4secs	10.4secs
Gearbox	4-speed semi-automatic	4-speed semi-automatic	4-speed manual /4-speed automatic	5-speed manual /4-speed automatic	5-speed manual /4-speed automatic
Suspension					

All models: Front: Independent by twin transverse parallelograms, anti-roll bar, self-levelling hydropneumatics.
Rear: Independent by trailing arms, anti-roll bar, self-levelling hydropneumatics

The DS is one of the most beautiful and evocative classics of all time, fully deserving of its Goddess title. However, it's also a fiendishly complex machine, which is why RICHARD GUNN's guide is a wise read before you decide to buy...

Interior

You can pretty much get everything you need for a DS interior, and it is robust enough to stand up to a lot – although the sun does affect the top of the back seat – but prices can be high for replacement material, especially if you're looking at a Pallas with leather interior.

Wheels

DSs were designed to run on Michelin XAS 180 tyres, but these cost about £125 each (or £146 for the 185s used on the fuel-injected cars). While cheaper tyres are available, for about £50, many owners swear that the cars don't handle nearly as well on these. Our expert, Paul Harris, recommends at least fitting Michelins to the front wheels.

Bodywork

Like the Rover P6, the DS is a steel skeleton on which the outer panels are hung. Therefore, what the exterior looks like is far less important than the inner structure, as new panels simply bolt on if required. Check all the bits of the inner shell that you can, such as the side rails against which the doors close. Look at the underneath of each of them, to see if there's any corrosion starting to break out. Bubbles will give the game away, and repairs will eventually be required.

The rear wings can be checked from inside the boot – tinworm will be most likely in the gutters and look for holes in the boot floor too, prone to occur at the leading and trailing edges. The bootlid itself has a sponge-rubber seal, which actually traps water inside it, and thus causes the lower part of the lid to rot. Incidentally, because the lid isn't that strong, it can crack down each side, as well as its upper edge.

If you really want to have a thorough check, it's actually easy to remove the back wings on DSs...they're simply held on by one bolt, in order to make it easy to change the back wheel. Once off, you can look at the bumper mounts (a known grot spot), cylinder brackets and those all-important wings.

Look at the sills, which corrode as much as on any classic. The trouble usually starts at either end, but if you look at the panel and it is starting to bulge outwards rather than run flat, then there are likely to be problems inside.

Although the outer panels aren't structural, they are getting scarce and pricey these days, and to replace a lot of them and then have a respray could easily result in a four-figure sum expenditure. The front wings are rust-prone at their bottom rear corners as well as the wheelarches, and the post-1968 cars with fared-in headlamps do often have problems beneath these lamps. Repairing them can lead to the metal distorting, meaning that the glass headlamp cover then won't fit.

At the back, the rear wings also start to disappear, this time along their bottom edge, although it can also strike the top edge too, and the doors are quite well-known for going along their bottoms. However, no such worries about bonnet, which is aluminium. And the roof of the saloon is glassfibre, although Safaris and Breaks do have steel ones...hardly surprising, seeing how long they have to be. However, water getting under the glassfibre and attacking the metal underneath won't do any favours for the look of any DS.

Waist strips and the brightwork at the top of the door can also conceal rust, not something you have to worry about with the lower-spec ID cars.

Hydraulics/suspension

Yes. The scary bits. The parts of a DS that send enthusiasts more used to metal and springs into apoplexy. And, agreed, all the pipework, spheres and pumps of a DS can be worrying if the car hasn't been properly maintained, but on one that has been looked after, it should be (mainly) trouble-free.

Much less is worked by the hydropneumatics on an ID than on the DS, where it does practically everything except make the tea. Corroded pipework is the major thing to look out for, since the system is pressurised at 2400psi which means, if it gives way, it will do so quickly if on the move. Starting the engine and setting the suspension to high will give you the chance to look underneath easily and see if there is any fluid dripping...with the nearside rear wheelarch area a usual suspect. The rear gaiters can also let the vital fluid escape, especially if they haven't been secured properly with the proper ligarex straps. If corrosion has affected the pipes, a new set can be getting on for around £300 for the main part. Although the system does operate at high pressure, there's a low-pressure return...and the good news about that is that it's simply rubber piping, which will be far cheaper to replace if necessary. The suspension spheres can be an issue... either if they need recharging or because the inner diaphragms have gone. However, the good news is that sphere replacement isn't terribly difficult, or expensive.

Up until 1966, the cars used a red hydraulic fluid by the name of Liquide Hydraulique Synthétique. Fortunately, this Gallic mouthful can be handily shortened to LHS. Unfortunately, this fluid really isn't classic car-friendly. It's corrosive, which means it eats away at the pipes from inside, and it also absorbs moisture, which reduces its efficiency. Oh, and it can crystallise as well. Great stuff! It will need to have been changed regularly, along with its filter cleaned, to give its best. From 1966, LHM (Liquide Hydraulique Minerale) fluid was adopted – which is still used today, and is green in colour. You can tell if the car you're looking at uses this as the spheres and reservoir will be painted green in colour. Unfortunately, it's not easy to update an early car to the better LHM spec, as all the seals are different and won't stand up to the new stuff.

Listen to the pump to see how hard it is working – a more or less constant clicking means it's operating almost continuously, probably because the accumulator sphere is wearing out. Clicking every 20 seconds or so is the normal interval. Ultimately, the pump will wear out if it has too much work to do, and the accumulator sphere is quite an important piece of kit anyway, as it provides emergency braking power if the engine cuts out. As a matter of course, the accumulator should be renewed every three or four years.

With the conventional bits of the transmission, the driveshaft joints can wear out – listen for a knocking on full lock – and balljoints will start to seize up if not regularly greased. Clunks or clacks from the rear signal rear suspension pushrod wear.

Brakes

The brakes are one of the finest points of a DS. They're incredibly efficient, and their sharpness always catches non-Citroën drivers out when they try them for the first time. However, they're not easy to work on, because the front ones are inboard, which means that discs can take twelve hours to change, while the pads alone are a good couple of hours. It's quite a false economy if cheap brake pads are fitted, since they can wear out the discs quickly...which will mean you'll end up spending more effort and money than if the proper Ferodo ones had gone on in the first place.

Do test the efficiency of the parking brake. Access to it, to make adjustments, is difficult.

HISTORY

1938 Over at Citroën in Paris, thoughts turn towards replacing the Traction Avant, with the intended new big car planned for 1940... a year which, ultimately, would prove a little tricky for the French, as well as the rest of the world.

1939 Paul Mages, a Citroën engineer, begins his exploration of hydraulics, with ideas gradually turning towards powering key parts of the forthcoming car with hydropneumatics.

1946 Work restarts properly on the big Citroën, after the unfortunate interruption of World War 2. At this stage, the VGD – Voiture a Grande Diffusion – is being envisaged with a flat-six engine, although this proves very troublesome to perfect, and is eventually dropped in favour of an enlarged 1911cc Traction Avant unit. Naturally though, this being a Citroën, the drive will be transmitted through the front wheels. Meanwhile, the streamlined design is gradually evolving from a rather bulbous shape – dubbed the ‘Hippopotamus’ – towards the smooth wind-cheating look that would so characterise the eventual DS.

1955 The Citroën DS19 is launched at the Paris Salon on October 6, 1955. Well, it's not so much a launch as a revolution, as the car completely steals the show. By the end of the first day, 12,000 orders have been taken for the new, complex, hydropneumatic French car that automatically makes everything else seem old-fashioned by contrast.

1956 DS19s go into production in Citroën's UK factory in Slough, Berkshire. However, to appeal to the very traditional British market, there are several significant changes, including a lot more chrome and, later, wooden dashboards and leather interiors fitted...

1957 The ID19 is unveiled as, essentially, a low budget DS without the hydraulic steering, brakes or gearbox, plus a detuned engine and a less luxurious interior. Imagine a hydraulic 2CV almost...

1958 By contrast to the ID is the DS Prestige, practically a limousine, with a central partition between the front and the rear, and extra toys to play with inside. Meanwhile, an ID Break (estate) and cabriolet, built by Henri Chapron, make their debut at the Paris Motor Show.

1959 The frankly huge Safari – with accommodation for seven people when it isn't lugging large loads around – breaks cover.

1961 ID and DS cabriolets – courtesy of Henri Chapron again – become official Citroën models. For those buying the more mainstream tintop cars, the DS19 gets a new dashboard for the 1962 model year.

1962 There are tweaks to the front of the DS, which not only slightly improve the already impressive looks, but also allow maximum speed to rise by about 7-9mph. A fully manual version of the DS also becomes available: previously, the hydraulics operated an automatic clutch.

1964 The Pallas trim level is launched, as a luxury version of the DS, with far more splendour inside, as well as extra driving lamps and flashy bits outside.

1965 New five-bearing engines are introduced, in 1985cc and 2175cc form, the latter leading to the introduction of the DS21.

1966 Manufacture of the DS comes to an end in Slough.

1967 The biggest physical change in the DS's history occurs, when the nose is remodelled with self-levelling swivelling headlamps, operated by the steering. The move, orchestrated by Robert Opron, actually manages to make the Goddess look even better, a rare feat not often achieved by most mid-life facelifts.

1968 The DS19 and ID19 are superseded by the DS20 and ID20... and the DS21 gets 115bhp.

1969 Fuel injection arrives, resulting in the 139bhp DS21 EFI model. On all the models, there's a revised fascia.

1970 DS owners can now specify a five-speed transmission as an optional extra.

1972 The ultimate mainstream DS arrives in the form of the DS23 with a 2347cc engine. In its most powerful form – with fuel injection – it puts out 141bhp.

1975 Production of the DS comes to an end, to make way for the almost-as-glorious CX. In total, 1,455,746 have been built of all types.

PRICE GUIDE – CITROËN DS

(SHARE AVAILABILITY)

YEARS	MECHANICAL	BODY	C	1	2	3	
Citroën DS19/ID19	1955-1968	****0-0	****0-0	08000	04200	£3000	£900
Citroën DS20/21/23/Pallas	1968-1975	****0-0	****0-0	11,000	03000	04200	£1200
Citroën DS Decaptable	1960-1971	****0-0	****0-0	£37,500	£22,000	£20,000	£17,000

CONDITION GUIDE: C: top-holders, dealer car; 1: late car, top condition, high spec; 2: average example, reasonable spec; 3: might be low spec, high miles, undesirable colour, but still driveable condition.

Contacts

Clubs

- Citroën Car Club, PO Box 348, Steyning, BN44 3XN. Tel: 07000 248258 or www.citroëncarclub.org.uk

Specialists

- DS World, London. Tel: 020 7498 7111 or www.dsworldltd.com
- Brodie Engineering, North London. Tel: 020 8459 or www.brodie.co.uk
- Centreville Garage, Newcastle. Tel: 0191 276 3730 or <http://home.btconnect.com/centreville/html/service.html>
- Citronique DS Solutions, South London. Tel: 07860 308135 or 07941 216836
- French Classics, Kent. Tel: 01474 703125 or www.justfrenchclassics.com
- Peacock Engineering, Norfolk. Tel: 01953 605678
- Pfeleades, Cambs. Tel: 01487 831239 or www.citroën-hydraulics.com
- Vantage, South London. Tel: 020 8544 9998

How much?

Even though many classic enthusiasts are scared – actually, make that terrified – of the very complicated DS, its status as an acknowledged design classic means that prices are still quite high. Very nice examples regularly fetch over £10,000, and even quite nasty ones barely capable of lifting themselves off the deck are worth a couple of thousand. The values go really silly with the convertible Décapotables. It's usual that an open-top version of a classic will cost double the saloon variant, but in the case of the topless Goddess, you could be looking at almost £40,000 for the best ones. Still, they're both rare and beautiful... so such money is more than justified in our opinion. Of course, you could always make your own. Somewhere out there in Citroënworld, there's a saloon with the top cut off, and a Citroën SM powertrain under the bonnet. Now that's our kind of DS... but don't ask us how much it would fetch on the open market!

Verdict

These cars aren't for everybody. To truly appreciate a DS, you also have to appreciate a novel approach to engineering, the desire simply to be different and stand out from the rest of the crowd, and actually a rather stubborn attitude towards making things quirky just for the sheer hell of it. If traditional is your bag... then the DS won't be. On the other hand, you know you'll never get bored of single spoke steering wheels, random hydraulic wheezes and sighs while on the move, and the sheer pleasure that comes with watching – or experiencing from the driver's seat – a DS majestically rise into the air just as their engine has been started, then welcome to the big hydropneumatic Citroën club.

Any of these cars – whether DS or ID, early or late – is beautifully smooth and eccentric to drive, in a way no other car without a double chevron on it can match. But we do rather like the shark-nosed post 1968 models, a rare example of a front end restyle actually improving something that was gorgeous enough already. And, for the ultimate Goddess, a DS23 EFI in Pallas form takes some beating. It has the looks, it has the luxury, it has the lounge, but it also offers an extra dose of performance, above all the other models, to compliment these attributes.

Insurance quote

- For a 1970 Citroën DS21 EFI, valued at £8000, based in Peterborough
■ Fully comp, £184.80, 29-year-old, two years' NCB, 10,000 miles, only car, kept on driveway
- Fully comp, £73.50, 50-year-old, full NCB, 3000 miles, only car, kept on driveway

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Buyer's Datafile: Citroën Traction Avant

Before the DS, before the CX, before the SM, before the 2CV and all the other great classic Citroëns, there was the Traction Avant. **RICHARD GUNN** looks at the grandmother of all quirky French Double Chevroens

Citroën, before May 1934, was simply just another manufacturer of well-built, but ultimately, not particularly interesting cars, reliable and stylish enough in their own way, but with little to distinguish them from all the other well-built, not particularly interesting, reliable and quite stylish cars that so many other identikit car firms were also building.

And then came the Traction Avant. At a stroke, the firm of André Citroën transformed itself from follower to leader. Although the looks of the Traction Avant may appear old-fashioned now, particularly in retrospect to the company's radically-pioneered postwar products, for its era, it was a very modern-looking vehicle, styled by Flaminio Bertone. But that was just part of the appeal. More revolutionary was its monocoque construction and front-wheel-drive, engineered by the team of visionary

engineer Pierre Lefebvre. Despite the major advances in mainstream car design, the Traction Avant project took little more than a year to come to fruition, a Herculean task considering all the boundaries it was pushing back. In fact, it proved too much for both the Citroën company and its founder, as the massive investment required resulted in the company going into bankruptcy, and André Citroën died in 1935, just a year after the Traction Avant was launched. Most historians agree that the pressure of launching the car contributed to the early death of le patron, aged 57.

His legacy lived on, in both company (under Michelin) and car. Early cars had 1302cc engines (7CV) engines, but these underpowered models were soon replaced by the 7C cars, with 1628cc engines, and the range also expanded to the 11VC of 1911cc – the engine

you're most likely to find today. The 'executive' range, as it would probably have been called now, came out in 1938. Dubbed the 15CV, these models had 2866cc straight six engines...although with only around 77-80bhp.

For us picky Brits, Slough-built cars were fitted with wooden dashboards and leather trim, so we didn't have to lower ourselves to the standards of French peasants and make do with cloth and metal dashboards. Around 25,000 were constructed in Windsor's slightly less attractive neighbour....

As radical as it was at the time, the Traction Avant had dabbled by the Fifties, and was replaced by the even more amazing DS...but not before a few Traction had been built to trial out the hydro-magnetic system of the forthcoming car, with self-levelling suspension at the rear. Just 3079 were made from 1954 to 1955.



been converted by now.

WHEELS: Check the tyres for wear and petch - many Traction don't get used very much, and replacement rubber is expensive.

BRAKES: It's hydraulics all around on all cars, but brake pedals are likely to be hard. Nothing much goes wrong, save for occasional damage to brake drums.

Judder when braking is usually the Silentbloc bushes in front lower suspension arms, or on four-cylinder cars, the inner wishbone bushes.

INTERIOR: With their leather interiors, the Slough car cabins are likely to be more durable than their clothed Parisian counterparts, but will also cost more to retrim of course. If necessary, Bakelite steering wheels can crack.

SUSPENSION/STEERING: Look at the rubber collars linking the front and rear tension bars to the suspension - a lot has to be removed to replace them, if they're worn out. Lubrication is necessary every 1000 miles, so ask to see if this has been done. If you're lucky, things will start to stiffen up and creak or clatter. Rack-and-pinion steering was introduced from 1936. If it's heavy or there's play, it's another sign of lack of lubrication.

TRANSMISSION: Three-speed manuals were on all cars, and can suffer worn synchro mesh as well as failing clutches. And don't even think about trying to jump start one of these, because the gearboxes are known to be fragile and easily broken. Modern components have often been substituted for old with the front-wheel-drive system, to make the cars more usable. Ask to see if such work has been carried out on the example you're looking at. If the hub nut isn't done up to 250 lb-ft, it can break the driveshfts. They can even snap and destroy the hub and brake drum. On six-cylinder cars, a judder when the clutch is released (along with bunnying rubber) points to the rubber dampers on each driveshaft breaking up.

ENGINE: Engines aren't known for their durability, with the white metal bearings of the pre-1954 cars being somewhat less than robust. On post-1952 cars, head gasket leaks can be common, as bolts were used instead of studs for head retention. Some try to compensate by over-tightening the bolts...which can lead to them snapping. Engines which haven't been started in a while can snap a piston when roared again. Expect odd leaks from the front as per the cover. Clutch judder on take-up can be worn engine mountings, and a leaking water pump can cause the clutch to seize as it drips onto the bellhousing. Check it.

A rattle on six-cylinder cars when starting can point to the starter ring gear about to come loose. Not good news. And neither is a sound similar to big end rattle, as it denotes the crankshaft damper coming loose. Which will, ultimately, destroy the camshaft. Overheating affects all models, usually the radiator being blocked. If an electric fan is fitted, make sure it isn't just there to hide cooling problems.

Bodywork: Despite being an early monocoque, the cars are quite resilient to rust. Look at door bottoms and lower panels, plus sills (three piece items - be wary of cover sills), footwells and floorpans. Check door fit to see if the whole monocoque has weakened. Either side of the engine are extensions from the bulkhead called jibboomax, which can corrode. If they're ripped along with the bulkhead, it's likely caused damage. Look too at the tidy-to-repair front suspension mounts.

Slough cars usually came with a steel sunroof - great until the drain holes block, which will lead to a rusty floorpan and windscreen pillars. The air vent on all cars, in front of the windscreen, can lead to rotten footwells.

The aluminium trim on the front and rear wings may look all very nice, but they're great for hiding rot, and the wing mountings themselves also corrode. Boot lid, hinges and floor also corrode, especially on those cars with extended lids.

The parts situation

And another good reason for joining the relevant Club. Not only does the Traction Owners Club sell spares, but becoming a member will also provide access to a network of those in the know about how to go about preserving these vehicles. There are specialists around who cater for these cars, and cater for them very well. But, as with any foreign car that has achieved its first half century, you're hardly likely to be able to walk into your local Halfords and get bits off the shelf - which is why a little expert knowledge always comes in handy.

That some bits and pieces went on to be used in the DS means that engine parts for the 1911cc cars are easier to come by, but substituting more modern parts for some of the original items isn't frowned upon - anything to keep such evocative cars like these on the road.

Typical prices (from Traction Owners Club Spares)

Full engine gasket set, four-cylinder	£33.20
Full engine gasket set, six-cylinder	£144.89
Water pump	£106.75
Radiator, reconditioned	£176.47
Starter motor, reconditioned	from £117.64
Complete stainless steel exhaust	£323.75
Clutch pressure plate	£112.00
Brake drum, front, 13in	£248.39
£80.00	
24V Engine rebuild	£1350

Specialists

- Traction Raceless Services, Glos. Tel: 01452 77011
- CTA Services, Holland, Tel: +31(0)464 481818 or www.ctaservices.nl/index_uk.htm

- Traction Owners Club Spares, XXX. Tel: 01243 511 378 or www.tractionowners.co.uk/spares/index.htm
- Classic Restorations, London, Tel: 020 7358 9669

Clubs

Traction Owners Club, c/o Mr PD Riggs, 6 Newton Close, Rushden, Northants, NN10 9HR or website: www.ctaclub.org.uk
Citroën Car Club, tel: 07000 348 258 or www.citroencarclub.org.uk

What should I Pay?

French cars like these are, prices can be high for the rarer examples...how does around £40,000 for a Roadster grab you? That said, you will be extremely fortunate to come across one of these. It's much more likely you'll come across the £10,000 to £12,000 mark if you're after the very best, although private sales of these types should see you spending between £3000 and £8000. Bigger cars are much cheaper - under £2000 - but think carefully about how much you will have to spend to get the car back to good order.

Generally, the lower powered cars demand a higher premium, and so do the more powerful ones. The former models can demand extra because they're earlier, and therefore very desirable to collectors, while the six-cylinder cars have the biggest, smoother, more refined engines on their side, something which adds value.

Should I buy one?

Well, don't enter into ownership lightly. These are cars designed before the Second World War, and although they were years ahead of everything else at the time, they're still talking about the technology of the Thirties. But, these are very special classics, representing the point where Citroën first set off on its adventure into individualistic engineering and inventive engineering. Because they are monocoque construction and front-wheel-drive, they feel so much and easier to drive than their contemporaries of the same era, and a trip in one of these followed by getting behind the wheel of a typical size of British gear of the time will leave you astonished by the guill-in abilities.

However, if you have the time and money to look after one of these properly, then go for it. There's a lot more to love and get excited over here than with many vehicles of the same vintage.

SPECIFICATIONS

7CV: 1303cc, 32bhp, 60mp/h
 12hp: 1628cc, 36bhp, 63mp/h
 15hp: 1911cc, 56bhp, 76mp/h
 Six: 2866cc, 76bhp, 83mp/h
 Light 15: 1911cc, 56bhp, 76mp/h

Is it a classic?

Ask the French Resistance...if you can find them! Actually, this question doesn't really belong in an article about a car built from 1934 to 1935, especially when it's asked about something of the calibre of the Traction Avant. It is a legend, and not just among Citroën enthusiasts. Its landmark features demand respect amongst all classic car fans, and it's become iconic as one of those cars that just seemed to symbolise the country of its origin from the Thirties to the Fifties, and even beyond, into the Sixties. And, as hinted earlier in this paragraph, it's a vehicle much-associated with the French Resistance of World War Two, the image of shadowing Justice administering swift and surprising justice on occupying German forces and then melting away into the night being often permanently ingrained in the consciousness by so, many black-and-white war films. So, yes, in essence, the classic credentials of the Traction Avant are beyond all possible doubt.

What's out there?

Because the Traction Avant replaced all the other Citroëns, it came in a multitude of different colours, from convertibles to four-cabriolets (which looked like cabriolets but weren't - escape would perhaps have been a better term). Families like the Raux Pissier MPV of its day, with the ability to seat eight people! and the Commercial with a two-part cabin. Engines varied from the four-cylinder 1302cc cars through to the 2866cc six-cylinder cars. One car, but all types of customer catered for. Some have thrived significantly from the 806,793 of all types originally built, but significant amounts do remain, although joining the club is the best way of coming across one by design rather than accident.

What to look for?

ELECTRICS: Slough-built cars came with 12-volt systems as standard, those from France had six volts. The British-produced models are obviously more desirable because they're easier to start and more durable during winter, but many spark-challenged examples constructed in their homeland will have

CITROËN 2CV



Engines

The air-cooled flat-twin engine is a real delight. Free-revving and surprisingly tough, you can drive a 2CV hard and it'll soak it up with masochistic pleasure. However, it is important that regular oil changes have taken place – Geoff Archer at Northallerton Engineering Services recommends a 3000 mile interval between changes and the use of Purflux oil filters. As this advice comes from the man who built the engine used by the car that won the recent 24hr 2CV race, it is worth heeding. Such care should allow the engine to clock up well over 150,000 without the need for a rebuild. Check the oil for cleanliness and also check under the oil filler cap. Mayo here suggests that the car has done many short journeys and has probably never had the chance to warm up. "I always check the state of the oil cooler," says Geoff, "if it is caked in muck, it suggests that the car has not been well cared for."

Valve stem seals can leak with time, so look out for a spot of blue smoke on start up. If there are clouds of smoke when the engine is revved, then the engine is clearly in need of a rebuild and your best option will be to find another car. The 2CV engine could never be described as quiet, but it shouldn't have any rattles or whines.

The heating system is a little basic – heat is taken from around the exhaust and cylinder heads and is directed into the car via cardboard tubes. The problem here is that if the cylinder heads are leaking, fumes will get straight into the cabin – which is not good for your health. The heads may just need re-torquing but usually a skim is required, although some specialists sell copper gaskets to help improve the seal – the engine never had gaskets from the factory.

Electronic ignition is a popular accessory as it removes the need to keep removing the engine fan to meddle with the points box (there is no distributor) although Geoff is keen to dispel the myth that access to the points is horrendous: "Getting at the points isn't the black art that rumours say," states Geoff. "They are easier to change than those on an MGB!"

All genuine UK-market 2CVs have the 602cc engine and from 1981, all have front disc brakes. Many older cars have now been imported – the 425cc engine only had 12bhp, making the later 29bhp cars seem like real rockets.



Specification

Car	2CV	2CV6	Dyane 6
Year	1949-1954	1981-1990	1978-1983
Engine size	375cc, flat-twin, ohv	602cc, flat-twin, ohv	602cc, flat-twin, ohv
BHP/RPM	9bhp @ 3500rpm	29bhp @ 5750rpm	33bhp @ 5750rpm
Top speed	41mph	71mph	75mph
0-60mph	No chance!	27.3secs	25secs
Gearbox	4-speed manual	4-speed manual	4-speed manual
Consumption	55-65mpg	45-55mpg	45-55mpg
Suspension	Front: Leading arm, horizontal springing, independent but interconnected		
All models:	Rear: Trailing arm, horizontal springing, independent but interconnected		

Parts prices

Prices courtesy of ECAS 2CV Parts Ltd

Service kit	£16.90
Complete exhaust 3 part	£41.50,
4 part	£80.50
Brake Disc	£33.90 pair
Brake pads	£13.90 set
Alternator (new)	£65.00
Wheel	£46.00
Shock absorbers	£100.00 car set
Front wing	£79.00
Gearbox, reconditioned	£320.00
Steering rack, reconditioned	£149.00
Kingpin	£12.00
Set of seat covers	£110.00
Hood from	£110.00
Coil	£32.00
Tyres from	£35.00
Chassis	£490.00

The thinking hippy's motor, the famous Tin Snail, has been around for almost 60 years. Behind the jokes, flimsy panels and famous body roll is a car packed with clever engineering and wonderful simplicity. We let our resident 2CV anorak loose with the Buyer's Guide pen – IAN SEABROOK tells you what to look for

Bodywork

2CVs can rot pretty much anywhere but there are few places that you can't investigate with just a casual look. Obvious places include the bonnet hinge, bubbling around the fixed rear side windows, the rear valance (around the rear lights) and sills – both ends can rot but the front edge is hidden by the tail end of the front wing. It then pays to turn your attention inside, checking the C-post at the rear, especially around the seatbelt mounting point.

The boot floor is susceptible, as are the rear inner wheelarches. Checking the state of the floors is easy, as you just need to lift up the rubber mats. The front toeboard is a common rotting place and lifting the mats also allows you to inspect the top of the chassis – if you spot rot where it meets the lower bulkhead, then further chassis rot is almost guaranteed.

"Floor and sill rot is very common and as it is structural, can be expensive to repair," advises Darren Arthur of Frome 2CV Centre. "Typically, replacing the floors and sills is likely to cost at least £1000, but we take the body off the chassis to do this and discovering further rot is almost guaranteed." Luckily, repair sections are available – Darren and his 10 staff are currently flat out, keeping 2CVs on the road.

One area which is hidden is the seam at the top of the rear wings. This is where the upper body meets the inner wheelarch and it is a notorious rot trap. The first signs of trouble are small bubbles just above the rear wing but by this stage, rot is likely to be quite bad. Happily, repair sections are available for almost the entire bodyshell, so if the price is low and your welding skills are good, do not be put off.

Finally, open the hood and check the top edge of the windscreen panel. Some cars can rot badly here.

Of course, many 2CVs have now been through a chassis change – aftermarket, galvanised chassis have been available for many years now and buyers pay extra for the reassurance. Chassis on later cars, especially ones from the 1980s (i.e., the majority of survivors) were very poorly protected from rust by the factory, so if the chassis on the car you are looking at is original, you need to check it very carefully. Older cars were built out of better steel, and it is not unusual for a 1950s 2CV to still be on the original chassis.

If you are looking at a Dyane much of the above applies, but also remove the spare wheel – which hides under the bonnet – and check the bulkhead as it can rot where the wheel sits against it. The front panel and grille attach to a structure that is commonly referred to as the "goalposts." This should be checked for rot – if it falls while you are driving, the bonnet will slam back into the windscreen – which makes vision a bit of a problem...

Electrics

French electrics have never been that hardy, as any modern-day Peugeot owner will tell you. To make things more fun, almost the entire wiring loom on a 2CV has green wiring! Luckily, there isn't much to a 2CV loom, although the bullet connections can often be a source of angst when it comes to items not working. The headlamps are not fused and relays are a wise move if the car has halogen headlamps – the headlamp switch can get very warm without a relay – which at least keeps your fingers warm on a cold day.

The fuel gauge often stops working (the first 2CVs only had a fuel dipstick however!) but this is often just a faulty earth. Unfortunately, on later cars, you have to drop the fuel tank to remedy this. Earlier, pre-rear seatbelt cars had a lift-up panel under the rear seat to allow you to check the wires with the tank in-situ.

Incidentally, up until 1963, the 2CV didn't have electric windscreen wipers – they were instead driven via the speedometer – which means that they get faster the faster you go.

Suspension and steering

Ah, here's where things get really different. Suspension is via a horizontal spring canister, one each side, which sits under the floor. Tie-bars link to the suspension arms allowing fully independent, and very soft, springing. If the car groans while you rock it, the suspension caps could probably just do with a little vegetable oil – it is important to turn them after you have done this. The arms are connected to the tie bars using a knife edge which must be kept greased – look for evidence of this.

Shock absorbers must be in good condition, or the excellent ride and handling will suffer. Bounce the car – it should return to a level state after one or two bounces.

The front hubs use kingpins to allow them to swivel. Excessive play here is an MoT failure, although they never fail in a manner which could cause suspension collapse. They are easy to change if you have the right drifts – and a big hammer. Check also for excessive play in the track rod ends and the rack itself. A rattling when taking gentle corners at around 40mph suggests that the track rod ends need replacing – the balls often go oval through wear.

Interior

Interiors don't get much more basic than this. The grey, checked seat covers fitted to the Dolly and Charleston editions wear very badly and disintegrate in UV light. However, seat covers are available so don't be put off by scruffy seats. Refurb kits are available for the seats themselves as they are little more than sheets of canvas attached by rubber hooks to the steel frame. The foam covers then go over the top.

Hoods can shrink with time, which looks awful and makes them difficult to re-fit. Replacements are available in either the original material or in canvas to your own design. Roofs should not leak.

Brakes

Most mechanics are scared off by 2CV brakes, but that is a foolish response. The front brakes are inboard and granted, working on the front drums is a bit of a pain. However, front discs are much easier – show us another car where you can open the bonnet, flick a retaining clip and remove a brake pad in less time than it takes for the kettle to boil! You can inspect the pads without having to remove them, and while poking around in the engine bay, you can also check the discs for thickness. The handbrake activates on the front wheels and should not come out more than a few clicks – it often comes out much further as most mechanics don't know how to, or can't be bothered to adjust it up. We'd also recommend that you always leave a 2CV in gear.

The rear brakes are drum and brake linings last a very long time. A more likely problem is that the wheel cylinders can seize – the pedal will feel very hard if this has happened although most people only discover that there is a problem come MoT time. The state of the rear brake pipe may also upset the MoT man. "They are a swine to replace," says Darren, so make sure you check the condition of the pipe. It runs down the rear suspension arm, so checking it is quite easy.

All 2CVs stop very well, despite the lack of a servo. In fact, the brakes are impressive, even by modern standards. The fluid used on disc brake cars is LHM – the life-blood of hydro-pneumatic Citroëns. DOT4 fluid should never be used. Conversely, LHM should never be used in a drum-brake 2CV.

HISTORY

The 2CV is one of the most distinctive cars ever made, yet the vast majority of people know very little about them. The world of inboard brakes (just like a Jaguar E-Type), super-soft suspension (just like a Cadillac) and keen handling (just like a Mini – well, with a little more roll) are lost to most, yet thoroughly enjoyed by their enthusiastic owners.

1936 Citroën is now in the hands of Michelin after development costs for the Traction Avant bankrupted the company. The new MD, Pierre Boulanger, unveils his requirement for a simple, utilitarian machine for the masses.

1939 The final prototype is readied for approval. It has water-cooling, a single headlamp and torsion-bar suspension. Pre-production cars are readied for the Paris Salon, but apart from four examples, (three of which remained hidden in a barn until 1998) all were broken up following the declaration of war.

1948 Following further secret development during the Second World War, the 2CV is launched to the world with independent suspension by horizontal coil springs and an air-cooled engine. Production commences the following year and a large waiting list is soon building up.

1953 The 2CV commences production in Slough, complete with shiny chrome bumpers and hubcaps to seduce a wary British public. Sales were never strong and British production ends in 1964, but of the 1245 vehicles produced, 65 were pick-ups – used by the RAF aboard their aircraft carriers.

1954 The 375cc engine is joined by a larger 425cc version, offering an incredible 12bhp.

1958 The fabled 2CV Sahara is launched. It has two engines to give a very simple form of four-wheel drive. Over 1000 were sold.

1960 The 'ripple' bonnet is replaced by a fluted design that remains unchanged until the end of production. Slough unveils the Bijou – a 2CV based coupé designed by Peter Kirwan-Taylor, who also styled the Lotus Elite for Colin Chapman. With a top speed of around 40mph, it was not a success and only 211 were built.

1961 The 2CV-based Ami 6 is launched, with a 602cc engine. A sort of mini-DS, it quickly becomes France's best selling car, selling well over a million before the Ami 8 is launched in 1969 with watered-down styling – it will soon have such luxuries as winding windows!

1965 2CV doors become hinged on their leading edge and extra side windows are fitted to improve visibility.

1967 The Dyane is launched. A streamlined 2CV with a hatchback and slightly more performance. Citroën sells over 1.4 million, but it fails to replace the humble Tin Snail – if that was actually the intention. It has such luxuries as doors that don't flap at motorway speeds, a little more power and a practical tailgate.

1970 The 2CV becomes available with the 602cc engine for the first time, although a 435cc engine is still available.

1981 Front disc brakes are fitted to the 2CV and the decade sees the Charleston and Dolly special editions become regular production models.

1987 Production transfers from Levallois in Paris to Mangualde in Portugal. The British market is treated to the Bamboo special edition. All cars are a shade of green which can only be described as VERY green.

1990 Production of the 2CV ends. The last example is a grey Charleston – fitting, as when production started, you could buy a 2CV in any colour as long as it was grey.

Insurance quote

For a 1986 Citroën 2CV6, valued at £3000, based in Peterborough

- Fully comp, for a 29-year-old, two years' NCB, 10,000 mile limit, only car, kept on driveway, club member £116.15
- Fully comp, for a 50-year-old, full NCB, 3000 mile limit, second car, garaged, club member £59

Contacts

Clubs

- The Deux Chevaux Club of Great Britain (2CVGB). www.2cvgb.co.uk, enquiries@2cvgb.com
- Citroën Car Club, www.citroencarclub.org.uk, members@citroencarclub.org.uk, 07000 248 258

Specialists

- Sutton Cordier 2CV, Leics, 01509 881804
- Bourne Citroën, Lincs, www.bourne-citroen-centre.co.uk, 01778 394777
- Silly Cvs, Kent, www.sillycvs.co.uk, 01634 252987
- The 2CV Workshop, Cornwall, 01579 389181
- Classic Citroën Parts, West Yorks, 0113 2585791
- Citroën Classics, Middlesex, www.citroenclassics.co.uk, 07778 58 2522
- 2CV Workshop, Merseyside, www.2cvworkshop.org.uk, 01704 546260
- ECAS 2CV Parts, Staffs, www.ecas2cvparts.co.uk, 01785 282882
- Frome 2CV Centre (servicing and rebuilds), Somerset, www.frome2cv.co.uk, 01373 473695
- Northallerton Engineering Services (servicing and tuning), North Yorks, www.northallerton-engineering-services.co.uk, 01609 771313
- 2CV Stuff (accessories and parts), www.2cvstuff.co.uk
- Matt's Soft Tops, West Sussex, 01243 780132
- 2CV City (parts and servicing), Yorks, www.2cvcity.co.uk, 01422 316366
- German, Swedish and French Car parts www.gsfcarparts.com or 0208 917 3800

How much?

Prices for 2CVs have really climbed in recent years and you'll now be faced with having to shell out at least £3000 for one in top condition. Yet this is still less than you'd spend getting someone to restore one – as is proved by the £7000 plus examples frequently seen for sale at some of the specialists. Spend £1000 and you should be getting a solid if tatty car, while even rebuild projects tend to fetch a few hundred pounds these days, when they were hard to give away just a few years ago.

While 2CV prices are on the rise, Dyanes are still untouched by the latest increases in price, and even super-mint examples struggle to achieve £2000. Tatty examples can be had for £500 upwards and projects are almost completely devoid of value. It is now forty years since the Dyane was launched, so look out for celebrations this year.

2CV vans remain popular, as do examples of the Mehari – a Dyane but featuring a metal spaceframe, to which ABS plastic panels are attached. Expect to pay £4000 for the best examples of either.

The key thing to remember is that even though the 2CV is a simple machine, restoration costs can still run into very high figures – probably higher than you'll be able to sell the car for. Not that it is a problem, for the 2CV is very much a car you restore for love, not economics. The key thing is that all the panels are available, and 2CVGB sells repair sections which are not available on the open market.

Verdict

Okay, so there may be a hint of bias here, but trying a 2CV is definitely recommended. You'll probably hate it at first, but once you've got used to the body roll and the gearchange, this becomes a car you can only love. The handling is much better than you'd ever expect – and you soon learn how much fun it is to terrify people with increasing angles of lean.

Few classics are as hard-working, practical or as much fun to drive. Few also get quite so much attention from passers by. Some of it is the good kind of attention too! They are surprisingly tough and while you wouldn't want to have an accident in one, the mechanicals will keep going for a very long time if looked after. They are simple, albeit different to work on and while they can rot, you can still get everything you need to keep one going.

If you can live with the noise and occasional tendency to leak water into your shoes, there is no reason why a 2CV cannot be an everyday prospect and indeed, many people own one as their only form of transport. Friends will laugh mercilessly – until you take them out in the car and they'll realise that actually, they haven't smiled so much in a long time.

There is an A-Series Citroën for everyone, so you shouldn't have much trouble finding an example to suit you. With a friendly national club, several specialists and such low running costs, there really is a lot to recommend the Tin Snail.

Buyer's Datafile: Daimler 2.5-litre/V8 250

Often seen as the poor relation of the Mk2 family, the Daimler V8 doesn't deserve to be left in the doldrums while Jaguars steal all the limelight, believes RICHARD GUNN. So, he reckons, you should follow our guide and buy one

Poor old Jaguar. Off it rushes to buy up one of its main rivals in 1960, and then realises it has suddenly got a whole car company to play with and not that much idea of what to actually do with it. Except get rid of the models that are clashing with its own range, naturally.

One source of embarrassment to Jaguar was the Daimler engine lineup. Not because it wasn't any good. On the contrary, with the Edward Turner designed V8 engine that powered the Daimler SP250 and, in larger form, the Daimler Majestic Major, Jaguar found itself with something that could seriously humble its own mighty XK. Which helps to explain why, when the boys at Browns Lane finally came up with a big idea for Daimler, it was the lowlier 2.5-litre V8 that was utilised,

not its powerful but still compact 4561cc big brother that could have eaten a 3.8-litre XK unit for breakfast and still had room for a 2.4-litre as a light snack over coffee.

Still, the first Jaguarised Daimler, which appeared in 1962, was far from an inferior car. In fact, putting the Turner V8 inside the Mk2 bodyshell was actually an inspired move. It added an air of sophistication, flexibility and refinement that was somehow lacking from the more frantic and spivish XK-propelled models, and handling was improved by the firmness of the lighter, less sprawling, more balanced engine. Jaguar recognised this right from the start and pitched the new model directly at traditional Daimler-buying territory: the doctors, bankers and lawyers who regarded a Flying D

on the bonnet as somewhat more dignified and upper class than the Leaping Cat. The company even bestowed upon the Daimle a bit more luxury inside as well, just to reinforce the image that this wasn't just a Jaguar with a crinkle-cut grille and boot handle.

The Daimler stayed in production alongside the Mk2 until 1969, when the new XJ6 swept the entire old order away. It even fared better in the great cost-cutting cult of 1967, when Mk2s became just 240s and 340s, and lost their thick bumpers, fog lights and hide interiors. The Daimler got the lightweight bumpers, and a little bit of black vinyl in place of some of its cabin wood, but it managed to hang on to its extra lamps and didn't have to suffer the indignity of 'wannabe leather', aka Ambia, for passengers to sit on.

Is it a classic?

Frankly, such a question is an insult to the Daimler. Arguably, the V8 is even more of a classic than the Jaguar. After all, Daimler is a much older name – it was formed in 1896, while Jaguar as an actual entity only came into being after World War Two made its original SS name a little awkward – and saying you drive a Daimler these days actually has a little more cachet than admitting ownership of a Jag. Plus the V8 saloon had a higher specification than the Mk2, and was consequently sold at a top premium, and the engine itself is a simply glorious bit of precision engineering, wonderfully smooth and effortlessly charismatic in the way not even a XK unit can quite manage. It doesn't leak oil so much either – although that's possibly a cross against its classic credentials, come to think of it.

But luckily, that black, rather oily, mark is cancelled out by the car's appearance. It is one of the great British car designs, a style that is loved and admired all over the world, and which still informs the Jaguar look today. So, is it a classic? Absolutely, positively, resolutely so.

What to look for?

Owning a Mk2 Jaguar – and therefore, by extension, a Daimler – can be an expensive proposition even at the best of times. At the worst of times... well, trust us, you don't want to know. Your bank manager won't just go down to hate you, he'll probably come around and kill you with his bare hands.

The bodywork is the main thing to be worried about – all of those flowing but complex curves can that cost a fortune to put right properly – so you'll start with.

RUST: Front wings should be investigated in all the usual places, such as the rear edges, wheelarch lips and the headlamps. A particular failing happens two things along the way of the wing top where the joint with the splash panel goes. Look for bubbling here. The splash panel itself, which allows grot into the inner wings where it can attack the sills and floorpan, and have a look at the sideflights, from behind in particular. There should be a protective grommet for the wiring. Inevitably there won't be, and it will have been replaced by corrosion instead. Front aprons and, beneath, where the

cross-member connects to the wings are also vulnerable to tinworm, as are the bonnet hinges (which will put the bonnet out of alignment), door bottoms and centres (thanks to sound-proofing material), sills and rear wheelarches, the latter best persuaded from inside the boot. Oh, and the lid! That goes along its bottom edge. Plus the rear apron vanishes, too. Don't forget the underneath is also prone to disappearing, with collapsible spring boxes, rusty Panhard rod mountings, weak subframe bushes and corroded petrol tanks all possibilities.

ENGINE: Look for 35 to 45psi oil pressure on a warm V8 at about 40mph, with 25psi at idle. These are very good engines and should last to well over 100,000 miles, assuming due care and attention and oil that has been topped up regularly, as they like to consume at least a pint every 600 miles on average. So all you really need to look out for are the usual problems of worrying noises, excessive blue smoke and overheating, the latter often due to corroded waterways in the alloy cylinder head.

GEARBOXES: Borg Warner Type 35 'boxes were initially standard, with four-speed manuals becoming an option later on. Both are rugged enough, although listen out for noise, black axle whine and, inevitably, feel for the synchro mesh starting to disappear usually around second. Overdrive, if fitted, should engage/disengage quickly and smoothly.

INTERIOR: Possible floorpan rot should be investigated by lifting the carpets, and is most likely to be found at the point where the inner sill joins the pan, under the rear seat and in the footwells. Be wary of shoddy interiors. Daimlers had even more wood than Jaguars, and putting all that rust plus re-trimming any leather will cost a lot. Bear in mind that the post 1967 cars kept the leather upholstery even though after the 'socially inferior' Jags had gone down to mere Ambia, so you can't even get away with a late model being cheaper to do.

BRAKES: Lack of use doesn't do the brakes any good, with seized calipers and pistons a possibility. During a test drive, check the car stops cleanly and in a straight line.

What's out there?

The Daimler model didn't have anything like the same diversity as the Jaguar, with its

three different engine sizes and five types. Basically, you got the 2.5-litre V8 engine under the bonnet, either coupled to a manual transmission or, far more likely, an automatic, and that was it. Pity really... imagine what one of these cars would have been like with the 220bhp 4.6-litre V8 of the Daimler Majestic. In 1967, when Jaguar went through the Mk2 range with the accountants and started getting rid of things that cost too much to make or put on, the Daimler also received similar money-saving attention, but still managed to retain a lot of its special features, only the slimline bumpers really being the casualty of the change from 2.5-Litre to V8 250 model.

Being the exclusive model of the Mk 2 range, there are rather less Daimlers out there than there are Jaguars. 17,620 of the former were made, while over 100,000 of the latter appeared. But those that have survived are pretty much all in caring and considerate hands now. That's enough to allow you to find the one you're really want and not have to compromise.

Specialists

PARTS/SERVICES

Jaguar specialists obviously cater for these cars, and are plentiful enough – it seems there's pretty much at least one in every major town. Below are just a few of the very many around

PARTS

- Martin Robey, 024 7638 6903, www.martinrobey.co.uk
- David Manners, 0121 544 4040, www.davidmanners.co.uk
- SC Parts, 01 293 847200, www.scparts.co.uk
- Brian Purves, 01342 315065, www.brianpurves.co.uk
- Bryan Cates / Classic Car Trim, 01202 593 067
- Chris Morris Parts, 01525 381 063
- Jaguar Daimler Heritage Trust, 024 7640 2121

CLUBS

- Daimler Enthusiasts Club, 01202 481252 or www.daimlerclub.co.uk
- Daimler and Lancaster Owners Club, 07000 356285 or www.dloc.org.uk
- Jaguar Enthusiasts Club, 0117 969 8186 or www.jec.org.uk
- Jaguar Drivers Club, 01582 419332 or www.jaguardriversclub.com

MAGAZINE

■ Jaguar World Monthly, Kelsey Publishing, Tel: 01959 541444 or www.jaguar-world.co.uk

Contact

■ First Call Renault, Unit 10, Brunel Rd, Manor Trading Estate, South Benfleet, Essex, SS7 4PS, Tel: 01268 565 755

■ Andy Spares: www.andyspares.com, Tel: 01189 513153

■ Euro Car Parts: www.eurocarparts.com, Tel: 0208 956 5181

■ GSF Car Parts: www.gsfcarparts.co.uk, Tel: 020 8917 3800

The parts situation

As you'd expect with such a popular, glamorous and expensive classic as the Mk 2, parts manufacturers are almost falling over themselves to supply bits and pieces for these cars, and the Daimler version obviously benefits, too. Practically everything shared with the Jaguar variants is available, and you shouldn't have any problems finding V8 bits either. The only downside is that anything for these cars can be on the price side.

Typical parts prices from David Manners, and include VAT

Outer sill,	£85.30
Front wing assembly,	£1214.00
Rear valance, narrow bumper,	£119.15
Clutch master cylinder,	£116.33
Stainless steel exhaust system,	£349.00
Brake pad set,	£17.63
Brake disc set,	£24.03

What should I pay?

Here's the best bit. The Daimler comes much cheaper than a 'real' Mk 2. It's even less expensive than the 2.4-litre Jaguar car it surpasses in practically every department. Still, that doesn't mean the V8s are inexpensive to buy because you'll still need to shell out well over ten grand for a good one. But compared with what you'd pay for a 3.4 or 3.8 Mk 2, that's practically pocket money. They really are excellent value for money.

Should I buy one?

Yes. Definitely. Right now. In fact, sell that rusty Mk 2 you've got mouldering away in the garage and go out and buy the Daimler instead. You'll get a lot more for your money, and although it won't quite be as fast, you will appreciate the slickness and pull of the V8 smoothie under the bonnet. And you can spend the cash you've got left over from off-loading the Jag on maintaining the Daimler properly.

This is a car that has all the style and quality of one of Jaguar's most iconic creations, yet throws an extra two cylinders into the mix to create something truly memorable. It may lack the intense dramatics of the Mk 2 experience, but its presence and beauty is more important to you than sheer muscle, than the Daimler is the thinking person's choice of Mk 2 model.

CAR:	DAIMLER 2.5-LITRE/V8 250
ENGINE:	2548CC V8
POWER:	140BHP@5800RPM
TORQUE:	155LB FT@3600RPM
TOP SPEED:	115MPH
0-60MPH:	13.8SECS
FUEL CONSUMPTION:	17.3MPG
GEARBOX:	FOUR-SPEED MANUAL OR THREE-SPEED AUTO

DAIMLER 'DART' SP250



Engines



Edward Turner's V8 unit is a peach of an engine – David Manners is effusive in his praise of it as "Wonderful!" It's known for its ability to last. Assuming due diligence every 6000 miles (the service interval), 100,000 miles should be no problem before major work is needed. "My first one went up to 160,000 miles before I sold it," reports David Manners. "And it only broke down twice. The second time, the AA got it going again within 15 minutes."

However, these engines do like to drink their oil, so be prepared to keep topping up, and with good quality stuff as well. However, if you're getting oil pressure of around 35 to 45psi at 40mph in top gear when warm, then all is (probably) essentially well. That figure can drop to 25psi when idling...but anything less than these numbers, and you could be looking at a rebuild soon. So it's probably best to go and look for another car.

If engine work is required, it's essential that pistons of the correct weight – as stocked by David Manners – are used, otherwise work will also be needed to the crankshaft to accommodate the change in mass. Some blue smoke from the exhaust is acceptable – and inevitable – but there shouldn't be too much of it. If there is, it points to a worn valve guides, and will probably be accompanied by noisy tappets. Keep an eye on the temperature gauge, as overheating can occur thanks to coolant leaks or blocked or corroded waterways within the V8.

Under the bonnet, have a look at the fuel lines. Heat from the engine – it's a V8 remember, and they never run cool – can result in the fuel lines cracking, but many will have had more resilient modern items fitted by now.

Fortunately, pretty much everything is available for these cars, thanks to a fair amount of interchangeability with the Mk2-based Daimler saloon. The oil pump and the sump are different though.

It is possible to fit the 4.5-litre 220bhp version of the V8 inside a Dart...but, boy, it's hairy if you do! And you'll lose the excellent fuel consumption – well, for a V8 at least – too. "I could get 20mpg on the open road in mine and 30mpg around town!" says David.

Specification

Car	Daimler SP250
Year	1959-1964
Engine size	2549cc 4-cyl V8
BHP/RPM	140bhp@5800rpm
Top speed	127mph
0-60mph	9.1secs
Gearbox	4-speed manual/3-speed automatic
Consumption	29.1mpg

Suspension: All models: **Front:** Independent by wishbones, coil springs, hydraulic dampers.
Rear: Live axle, half-elliptic leaf springs, hydraulic dampers

Brakes

The brakes – all round discs incidentally – don't have too much of a task to do, thanks to the Dart's lightweight construction. That means they rarely cause problems. However, what can play up is the fly-off handbrake, which can either wear or seize up. Either way, it won't be effective enough to get through an MoT. Brake lines can be prone to corrosion too, most notably the one that runs from front to rear. However, almost as if jealous of all the attention this main trouble spot gets, the one running alongside the rear axle also rots too. Upgrading to copper items is the obvious fix – a full set for a car with a servo costs £51.05, while for one without is £47.18 – and at those sort of prices, likely to have been done already on many cars.

With little experience in sportscar production, it's small wonder that Daimler's SP250 turned out to be a little bit of an oddball... although a glorious one at that. **RICHARD GUNN** looks at buying the glassfibre creation with the great V8 engine, with advice from specialist David Manners

Suspension

The original suspension schedule is for greasing every thousand miles... which is why many owners have taken the polyurethane bush path, meaning that the interval can go to every 5000 or 6000 instead. If, when you're testing the car, there's a knocking from the front suspension, then the bottom trunnions are on their way out... and it points to the car's maintenance routine not having been adhered to in the past.

Underbody damage can be quite common, thanks to the low ride height of the Dart, coupled with the modern council obsession with speed humps. The car springs can flatten out, and the steering box is usually a prime spot for taking knocks from below. It's worth taking a ruler or tape measure along to see how much clearance there is between the chassis and the ground. It should be about six inches. Anything lower, and the car's underneath is at risk.

If the car has its original steel wheels on, remove the hubcaps and look at the metal by the wheel nuts. Over-tightening often results in metal fatigue, and if the cracks get too big, the whole wheel can fall off. This is another one of those things that you really don't want to have happen when you're on the move. Many owners just opt for wires (£184.48 including VAT from David Manners)... and the good news is that Triumph TR4, 5 and 6 items fit fine. However, the wire wheels are not without their problems, as worn splines and hubs cause play. Jack the car up and wiggle the wheels to see how much play there is... something that also works with steel wheels that have cracks around the bolt holes.

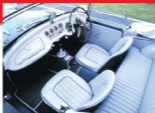
Expect heavy steering, but if it's too arduous, suspect the steering box is worn, especially if a real effort is needed at lower speeds. Check the oil level first though, just to make sure that it just hasn't been allowed to run low.

Trim

Pretty much everything is available trim-wise, whether inside or out. However, you may come across some cars without bumpers. Make sure you can live with that,

as replacements are very costly, at over £1100. They were only ever optional extras on A-spec cars, and because, when they do get rusty, there's such a lot of expense to put them right, owners may well have had them taken off altogether.

Interiors were leather, and although there may not be much to them, anything plush coming from a cow automatically costs a lot to put right properly. Tatty cockpit? Think about spending at least £2000 to have it re-trimmed. And then some... probably.



Parts prices

All parts from David Manners Ltd and include VAT

Front bumper, exchange	£1168.10
Rear bumper, exchange	£1327.46
Chassis sill	£77.90
Front wing	£149.00
Bulkhead assembly	£289.00
Tonneau cover	£178.67

Hood	£314.22
Master cylinder	£29.00
Radiator, exchange	£381.50
Starter motor, reconditioned	£135.13
Plug leads set	£52.93
Engine gasket set	£58.75
Cylinder head, exchange	£428.88
Timing chain	£13.99

Water pump, exchange	£151.11
Oil pump, exchange	£468.83
Stainless steel exhaust system	£398.99
Fuel pump	£141.72
Track rod end, pair	£21.15
Front hub, used	£59.93
Lower front trunnion assembly	£35.00

Gearbox/back axle

The four-speed gearbox is derived from the Triumph TR unit, albeit toughened up to cope with a V8 engine. Although some parts are getting scarce, fortunately, there's still quite a bit of Daimler/Triumph interchangeability. However, warns David Manners, "It does need an expert to do it though."

Common faults are a stripped first gear (something which can be put right with TR bits) and synchromesh that is getting well past its best, so check to see how the transmission behaves on any test drive.

You may find some cars have a Laycock overdrive fitted. It's not that difficult to do, and it does make them somewhat more relaxed on long trips. Something else you keep an eye - well, more of a feel really - out for is slipping clutches. They don't stand up quite so well to the V8 engine as the rest of the transmission...

From 1961, three-speed Borg Warner automatic gearboxes were fitted on some cars, but were never popular - this is a small two-seater sportscar after all - and so few remain today. However, if you do come across one, expect few problems, especially if the oil is clean and full to the correct level.

A major foe of A-spec cars was the weak back axle, with the crownwheel and pinion assembly prone to wearing out. However, there aren't likely to be many of these cars left over now with their original parts still in situ. You can tell an early differential by its two plugs... later variants have just one.

Look at the axle tubes. If these can work loose from their mountings, not something you want to have happen while the car is in motion.

Chassis

While the bodywork may be immune to conventional corrosion, the chassis isn't. So it's quite vital to get underneath and search for rust. While you should just look everywhere as a matter of course, start your quest with the front tubular crossmember and turrets for the front suspension. These handily fill up with water. As with most classics, the rear spring mountings are a vulnerable spot.

However, the problem is worse than with many other historic cars, as putting things right actually means cutting through the floor. Lower wishbone mounting brackets can crack, and the chassis members behind the rear axle also corrode, in common with the side members. If these are too far gone, the chassis will become very delicate... and this can lead to such body flexing that the doors actually fly open. Great if you're not wearing a seatbelt and leaning into a corner at the time...

On the B and C-spec cars, a reinforcing beam was added under the doors, and the B-post was made more robust. Sounds like good news? Well, actually, no, it isn't. Because these were just add-on parts, the metal wasn't as good a quality as the rest of the chassis, and thus corrosion is even more of a likelihood.



HISTORY

1958 Daimler – purveyor of fine carriages to the well-heeled – decides to go all radical and unleash its vision of a small two seater sports car upon the world. Slight problem though... money is tight, so the company decides to make the car out of glassfibre, with every intention of constructing metal versions later on if it becomes a success. Power comes from Edward Turner's new V8 engine, in 2548cc 140bhp form.

1959 With the Dart – as Daimler has named the car – rushed into production, the official launch comes at the New York Motor Show in April, where the new Daimler picks up the unofficial award for the ugliest car there. Which isn't exactly an auspicious start. And there's more to come. Chrysler – which naturally happens to be at the show – points out that Dart is one of its Dodge trademarks, and if Daimler doesn't drop it, it's going to get its lawyers in. Thus the name is changed to the SP250... although everybody just carries on calling it the Dart anyway.

1960 The SP250 having failed to stem Daimler's ailing finances, Jaguar takes over the marque. Lofty England, Jaguar's expert in all things sporty, takes one look at the car and presses for it to be dropped, but fortunately is ignored. Instead, effort is put into improving the somewhat flimsy construction.

1961 The B-spec Daimler SP250 emerges, with Jaguar's slightly better knowledge of sportscar production resulting in several improvements. For starters, there's a bulkier chassis to help counteract scuttle shake, and other alterations to the inside and outside are carried out. Jaguar also takes the unusual move of modifying unsold original cars. One thing that isn't at issue is the performance from the great V8 engine, with a top speed of 120mph and a 0-60 time of 9.1 seconds... something that impresses the Metropolitan Police so much that it takes some on as patrol cars around the Ace Café in London.

1962 The launch of Jaguar's E-type puts the future of the SP250 in serious doubt, as it's seen as direct competition. And Jaguar doesn't exactly want an internal rival for its swanky new sportscar...

1963 Time for the C-spec version of the SP250, complete with extra equipment in the form of – now, don't get too excited – a heater/demister and a cigarette lighter. Work starts on the replacement for the SP250, dubbed the SP252. But it fails to go anywhere, possibly because it looks rather a lot like an MGB...

1964 The SP250 goes out of production. The original idea was that the 2500 models would be sold a year... but after five years, a mere 2654 have been constructed. The 2½-litre V8 engine at least lives on until 1969 in the Daimler-badged version of the Mk2 saloon.



Contacts

Clubs

- Daimler SP250 Owners Club, tel: 01322 522958 or mysite.wanadoo-members.co.uk/Daimler_SP250_OC/index.jhtml
- Daimler Enthusiasts Club, tel: 01760 721658 or www.daimlerclub.co.uk
- Daimler & Lanchester Owners Club, tel: 07000 356285 or www.dloc.org.uk

Specialists

- David Manners, West Midlands. Tel: 0121 544 4040 or www.davidmanners.co.uk
- Chris Morris, Beds. Tel: 01525 381063.
- Barry Thorne, Surrey. Tel: 07885 882416
- Autotec, Berks. Tel: 01189 340927 or www.autotecsp250.co.uk
- Brian Purves, West Sussex. Tel: 01342 315065
- Hall & Clarke Insurance (DLOC recommended). Tel: 08709 906600

How much?

Forget the old days, when nobody much seemed to want a Daimler SP250. Time has been kind to the looks – they're actually rather handsome and distinctive beasts now – and the combination of a V8 engine with lightweight glassfibre bodywork results in a classic with superb performance that handles tremendously and won't rust. Well, at least where it is too noticeable to the outside world. Suffice to say, people do want these cars now. And they're prepared to pay for them as well. Don't be surprised to find the very best examples up around the £20,000 mark or beyond... which is quite a lot when you consider that the Daimler saloons which use the same engine fall £5000 to £6000 below this level. More realistically, good SP250s can be obtained in exchange for about £15,000 to £10,000 of your hard-earned cash. And if you fancy a challenge, then five grand should be enough to net you a basketcase Dart... although don't dismiss how much work you'll have to do. It'll be a lot. And it won't be cheap either, despite practically everything being available!

Verdict

Just in case it hasn't become apparent already, we really rather like the Daimler SP250. It's eccentric, it stands out from the crowd, it's got one of the all-time great V8s, it's quite an easy car to look after, and the handling and performance are very good for a sportscar of this era. In short, it's tremendous fun. Which is what a classic should be all about.

There's little price difference between the various specs of Dart, so our recommendation is to just go for the latest one you can find, as it's the C-spec model that had all the toys plus the extra strength in its chassis that had been engineered in from the B-spec incarnation. And when you've got quite a pricy glassfibre body that you'd prefer not to flex and crack as you enthusiastically attack corners, that extra robustness is quite important.

We'll leave the last word to our expert David Manners. "These are still my favourite cars. The essential thing is to just buy the best you can. Then get the top down, head off down the road, and enjoy yourself!"

Insurance quote

For a 1963 Daimler Dart SP250, valued at £14,000, based in Peterborough

- Fully comp, £309.75 for a 29-year-old, two years' NCB, 10,000 miles, only car, kept on driveway, club member
- Fully comp, £78.75 for a 50-year-old, full NCB, 3000 miles, second car, garaged, club member

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FERRARI 348



Engines

Despite their reputation for vulnerability, the V8 engines are hardy enough if they've been looked after. So check that the cambelts have been changed, every two years on pre-92 cars, and three years thereafter, to be on the safe side (despite Ferrari's advice that they should be fine for four). You don't want to contemplate the bill for an engine rebuild on one of these beauties. Bear in mind that 348s are due a major engine out service every 30,000 miles, something likely to cost around £5000, and therefore just as scary to think about if the car you're looking at is approaching such an occasion. Look at the fuel pipes where they connect up with things. Over-enthusiastic tightening of the pipe unions can result in cracking, and fuel sprayed around a hot Ferrari engine bay is far from desirable.

While a little bit of haze from the exhausts is normal, white or blue smoke with the engine running is something to be very concerned about. So concerned, in fact, that you should walk away and look elsewhere. White smoke points to a blown head gasket, blue smoke is something serious worn inside. Either way – the word 'no' springs immediately to mind.

The fuel injection system used on these cars is Bosch Motronic Injection. While it's okay in its own right (although earlier cars, with the M2.5 system, could be prone to fuelling problems, eradicated by the later M2.7 units), the sensors can be dodgy, resulting in warning lights on the dashboard. If there isn't any other evidence to suggest anything wrong, then suspect dirty or loose connections to be the culprit, or a sensor itself having given up the ghost.

Expert

"The 348 was handicapped by having to replace the 308 and 328, much-loved Ferraris that had been around for 14 years, and it also had the engine mounted longitudinally, which affected the handling. But the company was able to learn a lot from the car, and managed to improve it so that post-1993 cars were a lot better than the earlier ones... and led ultimately to the 355.

"However, the early cars, if well-maintained, are good value and a great option for those who don't want the classic shape of the 328,

but don't want to spend the extra money that a later car can command. People like it because of the Testa Rossa looks. £30k can get you a fantastic car, and no depreciation, just running costs.

"But, on average, those running costs will be about £4000 a year. People will disagree with that – and say you can just take the car down to your local corner garage to have the oil changed – but if you really want to look after one of these, that's what you need to spend."

Specification

Car	Ferrari 348 tb/ts	Ferrari 348 GTB/GTS	Ferrari 348 Spider
Year	1989-1993	1993-1994	1993-1995
Engine size	All models: 3405cc V8		
BHP/RPM	300bhp@7000rpm	320bhp@7000rpm	300bhp@7000rpm
Top speed	171mph	178mph	175mph
0-60mph	5.5secs	5.4secs	5.5secs
Gearbox:	Five-speed manual		
Consumption	19.2mpg	19mpg	19.8mpg
Suspension: All models:	Front: Independent by double wishbones, shock absorbers, coil springs and anti-roll bar. Rear: Independent by double wishbones, shock absorbers, coil springs and anti-roll bar		

Parts prices

Super Sports exhaust box, TB or TS	£1290.00
Cat replacement pipes	£340.00
Tyre, Bridgestone	£120.00
Front grille, new	£350.00
Rear grille	£350.00
Steering rack, recon, exch	£350.00
Battery tray	£145.00
Floor mats, pair	£155.00
Air conditioning/heater control panel	£275.00
Fuel filter	£27.50
Prices from QV	
6000-mile service	£522.00
Cambelt change	£968.00
Valve clearance	£462.00

What greater accolade could there be for a Ferrari than that it is often referred to as Maranello's own version of the Toyota MR2? The 348 may be more expensive than the Japanese car – and not quite as reliable – but it does represent a good way to start your own Ferrari party, believes RICHARD GUNN

Gearbox

Don't expect smooth changes until the oil has warmed up properly... something these cars have in common with an earlier great classic, the Austin Maxi. In fact, it best to have leave the car running for about five to 10 minutes before going for second, otherwise gearbox life can be shortened. However, once things are at a nice operating temperature, you should find the shifts slick and enjoyable. If they're not, then suspect problems with the transmission, although before assuming the worst, check that the cable gear linkage doesn't need adjusting. It goes out of true quite easily.

Bodywork

Rust shouldn't be an issue, although if you do find some, it points more to shoddy repair work, which is one of the things to be wary of with these cars. Because it costs a lot of money to put right anything on these cars, repairs from small crunches are sometimes done on the cheap. What you should really be looking out for is unevenly fitting panels or differences in paint shade or finish, all possible pointers towards bigger shunts in the past having been put right, but not necessarily that well.

You should keep an eye out for damaged air dams and rear valances, as these cars don't take kindly to things like speed bumps.

On the Spiders, don't forget the condition of the hood. They're durable enough, but lack of use can make the frame stiff, which can then place extra stresses on the material when the hood is finally used. Holes and splits aren't great, naturally. An option on the 348 Spider was a leather tonneau cover and it's a good bit of equipment to have.

On the Targa-roofed cars, look for evidence of leaks from the corners, something that is quite common as cars get older.

Suspension

As a Ferrari, these cars should offer pinpoint handling. If they don't then something is amiss somewhere – and it's probably down to bushes, usually the wishbone ones. Many of the moving parts in the suspension should be replaced around the 50,000 mile mark, so check paperwork for evidence that this has been done. Revised suspension and springs should have been fitted to 1989/1990 models, look for evidence of this have been carried out. After this, the modification was standard. Check the condition of the tyres – they're expensive to replace, and alignment problems will cause them to wear quickly.

Driving

It's little surprise that the 348 handles like the true sports car that it is. After all, it is a modern-ish Ferrari with a mid-mounted V8 engine doing the considerable honours. How could it not behave magnificently through corners?

Actually, push a 348 hard and it can be very twitchy on the limit. But bear in mind where that limit is – well over twice as fast as you're legally allowed to drive on British roads. To really upset a 348, you need to take it out on the track and explore and exploit it properly, something most owners will never do. For those of us content to enjoy the occasional blast on public tarmac, there will be little to fault about the way a 348 behaves.

That's so long as everything is warmed up of course, because Ferraris of the pre-Honda NSX era don't give their best until their temperatures have shot up. The chrome gearknob and stick, emerging from the famous silver gate, won't be easy to slide around until that happens... and trying to get second when cold might make you cry when you think of how much life you're slicing off the transmission. Fortunately, first to third will take care of most eventualities. But when things are finally on song, the experience is sublime. Shifts suddenly become smooth, the car becomes like a barely restrained beast, and the exhaust alternates between bellowing, howling and screaming, depending on the revs. Which you won't have to drop much for corners... although if you do, the brakes are more than up to the task of bleeding off the speed quickly and effectively.

Interior

Because these cars aren't that old, there should be few problems with the interior itself – suffice to say, having to replace anything will take rather a lot more out of your wallet than most other secondhand cars will. However, do peruse the rubberised material on the centre console, which deteriorates with age.

The electrical systems on these cars aren't best-known for their reliability. Yes, these may be expensive thoroughbreds, but they're still Italian after all. So check every bit of equipment you can, paying closest attention to the engine computer systems, which have a good reputation for... well, not being good. On the earliest cars, the electronic odometers fail quite easily, which will also affect the speed needle and cause it to jump around. Earlier cars also had Delco alternators, which were prone to failure. Later cars got around this problem by using a Nippondenso unit, so cars with these fitted are likely to be more reliable.

Having gone through the electrics, now try the air conditioning and heating – both of which have been known to fail.

The bonnet and boot are released by pulls in the cabin... which is all very well, until the cables stretch and both can be difficult to open. Try them to make sure.

Brakes

The brakes don't have any Achilles' heels aside from the usual seized calipers that are common on most cars of this type that don't get used very often. So when you're out on your test drive, brake sharply just to check the car doesn't go diving off to one side as you do so.

Underneath

The chassis is very strong, and more importantly, shouldn't be rusty thanks to the use of galvanised steel. However, check for any signs of kinks, especially towards the front of the car, that indicate previous accident damage. However, you won't be able to see that much, thanks to the flat composite panel mounted underneath to help with airflow – which can get easily damaged on rough roads.

Have a look around where the speedometer connects to the transaxle. Are there any scratches, or is the metal cleaner around here than the rest of the underneath? If it is, it could point to the drive having been disconnected to make the car appear as if it's done less miles than it actually has. It's unlikely...but you never know.

HISTORY

1979 According to popular myth, thoughts about the car that will eventually become the Ferrari 348 begin 10 years before it ultimately appears, after criticism of the then-current 308 model. Engineers set about making a car that will be wider, taller, shorter and heavier than the 308 and its almost identical 328 successor. Oh yes... and it will be faster too.

1989 The new Ferrari 348 emerges at the Frankfurt Motor Show, with the only traces of the old 328 being the V8 engine... which is longitudinally positioned but substantially modified so the gearbox can be mounted transversely with it to improve handling. Capacity rises to 3405cc, while power is a healthy 296bhp. Initial models are the 348 tb (transversale Berlinetta – the coupe) and the 348 ts (the Spider – a Targa-roofed version of the coupe). In looks, the 348 bears some resemblance to its bigger brother, the Testa Rossa, thanks to its side strakes.

1990 A new type of shock absorber, with different mounting points, is introduced to overcome high speed stability problems.

1991 The battery is moved from the engine bay to the front of the car and placed under a cover behind the left headlamp. Which is fascinating. Far more interesting is the Zagato Elaborazione, a reskinned 348 created by Carozzeria Zagato. It has a more rounded shape, sunken headlamps, a roof with two bulges in it for passengers, a transparent engine cover, ducts instead of side strakes, suede interior and rear view TV screens. Sounds simply divine, doesn't it? Zagato intends to build 22, but doesn't quite manage to achieve that...

1993 For the USA market, the tb and the ts are replaced by the limited edition Serie Speciale and the Spider. Only 100 are built of the former, with 12bhp more power, better handling and a few styling tweaks, while the latter is the first true two seater convertible Ferrari since the Seventies, with a manually-operated hood. Also this year, Ferrari introduces its one marquee Challenge racing series and offers a factory kit to help convert the 348 to racing spec – although there are no actual engine modifications. However, once the car has been modified, it's illegal to drive on the road again. And it has to wear a sticker to stay so, just in case anybody forgets... A more street-friendly version option is the Competizione, which is based on the Challenge. Only 50 are made, eight of which are right-hand-drive. Over in Europe, the tb and ts continue much as before, albeit now named the GTB and GTS and with 320bhp, but the Spider is also launched. The UK also gets its own version of the Serie Speciale, known as the Maranello Speciale. It turns out to be even faster than the American car.

1994 The GTS and GTB go out of production.

1995 The last remaining 348 variant – the Spider – is dropped, with the range superseded by the F355. Around 9000 have been built in total.



Insurance quote

For a £20,000 1990 Ferrari 348 tb, no modifications, based in Peterborough

- Fully comp, £100 excess: £769.00 for a 29-year-old, two year's NCB, clean licence, 10,000 miles, only cat, kept on driveway, club member
- Fully comp, £100 excess: £444.15 for a 50-year old, two year's NCB, clean licence, 3000 miles, second car, garaged, club member

Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

Contacts

Clubs

- The Ferrari Owners Club UK, c/o Membership Secretary, PO Box 111, Snettisham,
- King's Lynn, Norfolk PE31 7TF. Website: www.ferrariownersclub.co.uk

Specialists

- The Ferrari Centre, Kent. Tel: 07000 360355 or www.theferraricentre.co.uk
- QV, Berks. Tel: 01344 622011 or www.hamletcg.co.uk/qv
- Rardley Motors, Surrey, GU26 6LB. Tel: 01428 606606 or www.rardleymotors.com
- DK Engineering, Hertfordshire, WD18 7GL. Tel: 01932 255246 or www.dkeng.com
- Maranello Concessionaires, Surrey, TW20 8RJ. Tel: 01784 436222 or www.ferrariparts.co.uk
- Superperformance, Essex. Tel: 020 8500 7127 or www.superperformance.co.uk
- Ferrari Spares (new and secondhand), Essex. Tel: 01206 251475 or www.ferrarispare.com
- Rosso Corsa, London. Tel: 07005 980598
- Talacrest Limited, Surrey. Tel: 01784 439797 or www.talacrest.com
- Kent High Performance Cars, Kent. Tel: 01622 750246 or www.theferraricentre.co.uk
- DK Engineering, Herts. Tel: 01932 255246 or www.dkeng.com
- Forza 288, Hants. Tel: 01425 273682 or www.forza288.com
- Nick Cartright Specialist Car Restorations, Derbyshire. Tel: 01629 569999 or www.nickcartwright.co.uk
- Oakfields, Hants. Tel: 01256 760256 or www.oakfields.com

Market Trends

Nothing with the Italian prancing horse badge stuck on it ever comes cheap... unless, it's a keyring. If you want the car that gets started by the key that goes on that keyring... well, be prepared to pay!

Compared to how much they cost when new, these cars have come down a long way in price, but they have yet to inhabit the zone labelled affordable. And, frankly, they probably never will. The figures listed below are probably about as low as these cars are ever likely to get, now that they've been out of production for over 10 years, and soon, we suspect values will start to creep back up again as people realise how good these sports cars are, representing as they do the first of the modern 'small' Ferraris, with fewer of the usual issues you get with earlier pillars of the community...

Expect small variations based on age, type and whether they're right or left-hand-drive (for cars that have been re-imported). Naturally, those owners selling Targa or Spider open air types will expect a bit more of the folding stuff than if they were passing on something with a tin roof.

Verdict

It's tempting to just go out and buy the first shiny red Ferrari 348 you come across that looks half decent. Don't. Be wary. Make sure you're buying a good one, and if that means paying a specialist to check over what you're looking at, then so be it. It's better to pay now than pay later, when the sums have the potential to be a lot higher.

Just because these Ferraris are now around the same price as a brand new Golf GTI doesn't mean you can actually afford one. You have to dial in the running costs as well. These are not classics you can run on a budget, and if you try to do that, you'll only end up paying more in the long term.

Have we put you off yet? No. Well, in that case, one of these starter Ferraris could well be for you. Anything with a Prancing Horse badge on it is special, and the 348 offers more performance and handling prowess than most of us will ever be able to fully appreciate. Combined those factors with the sleek looks, and you'll never go unnoticed again in one of these.

Buyer's Datafile: Dino 206GT/246GT

The Dino was the first baby Ferrari, and, since its launch in 1967 has been regarded as one of the company's most beautiful cars. Despite it never having actually worn the prancing horse badge on its nose, **KEITH ADAMS** explains that it still has a Ferrari-like temperament – so take care when buying one

Named after Enzo Ferrari's late son, the Dino was created to move Ferrari into a different, more accessible, sector of the market. In the mid-Sixties, Ferrari was facing a lull in Formula 2 racing, which ensured that all racing engines needed to be built in volumes of over 500. As Ferrari wanted to carry on using its four-cam V6 'Dino' engine (Enzo's son played a small role in its development), the Commendatore planned a road car that used it. He also asked Fiat if it wanted to produce a car to be powered by the engine.

In 1965, the foundations for the 206GT were laid when Pininfarina showed its Dino Berlinetta Speciale Concept at the 1965 Paris Motor Show – whetting the appetite of Ferrari enthusiasts everywhere. Two years later, the road car duly appeared, and powered by the 1987cc V6 transverse mid-mounted engine, it was a highly desirable package. In many ways it set the template for the next generation of mid-engined Ferrari supercars, which had been left behind by the technically advanced new Lamborghini Miura.

Interestingly, it was badged as a Dino 206GT (and wore no Ferrari badges), and the idea was for the new marque name to be developed with the launch of the impending Fiat Dino. However, Fiat decided to put its own badges on its gorgeous sports car, and the Ferrari-produced car became the only Dino you could buy.

Between 1967 and 1974, the Dino 206GT, 246GT and 246GT/GTS established themselves as perfect baby Ferraris, and set the template for the upcoming generations of entry-level models for decades to come.

Is it a classic?

Now that's a silly question: Yes, the 206 and 246GT are the personification of the perfect classic sports car. Small, lithe, beautiful to look at, and sounding wonderful, there's no real weak links. Being built by Ferrari means there are the same issues you get with the bigger cars, but – again – that just adds to the all-round appeal of these cars.

Styled by Pininfarina, the GT and GTS started a styling theme that lasted into the 21st century, and only really ended when the F355. The current barometer to the car's classic status has to be its price at auction, and all Dinos have been consistently rising during the past five years. Strong demand and desirability count for a lot – and the Dino has it in spade loads.

What's out there?

Essentially, there are two body styles, and two engines to choose from, so you're not going to need an encyclopaedic knowledge of Ferrari production history to get on terms with the Dino range. The choice was simple – the 206 (2.0-litre) and 246 (2.4-litre), and you could choose from the gorgeous coupé version or its Target-topped cousin. Either way, you'll not go far wrong – although it's fair to say that you'll struggle to find one of the smaller-engined cars in the UK.

What to look for?

ENGINE AND GEARBOX: The engine block and bottom end are very tough, and the basic reliability is excellent as long as it receives regular specialist attention. However, if there's any sign of smoke, budget for a new set of pistons. Look for good oil pressure, and listen closely for top end noise – out-of-adjustment tappets can lead to camshaft failure. Inlet and exhaust valves need close monitoring, and a top-end rebuild will cost about £1900.

EXTERIOR: The original steel bodywork featured the

usual standard of Italian rust-proofing, so any un-restored cars will need close attention as they can corrode almost anywhere. All bodywork below the waistline is at risk, especially the sills, which are made up of an inner- and outer-pressing, with strengthening panel. That's an open invitation for tin worm. Wings are also a weak spot – especially the double-skinned rears. Aluminium panels can suffer from electrolytic corrosion where they meet steel, so – again – be very aware when checking over a potential car.

INTERIOR: The original plastic seat trim will probably be little more than a distant memory now, so don't worry if the leather-lined car you're looking at doesn't tally with the production date. Most owners upgraded...
CHASSIS: The Dino's strength comes from its steel chassis, so its condition is absolutely essential to the car's well-being. Although it seems a lot more rust resistant than the body, there are still known weak spots – most notably the oval sections which run alongside the sills. Because they're not completely sealed, and carry water pipes and electrical cables, they have probably let some water in at some point... Corrosion is the result, so look closely.

BRAKES: Handbrake ratchets frequently fail, and if the car is lightly used, the calipers may well have seized. If the pistons have corroded to nothing, there's a standard fix to replace them with stainless steel items.

TRANSMISSION: All Dinos are fitted with a strong and reliable five-speed gearbox, which is renowned for long life. If it feels sticky or balky when old, don't worry unduly, as they all do this – and only when the 'box is warm do you get a wheet change. Worn synchronesh rings are a sure sign of abuse, so if you can't change gear without crunching once the gearbox is warmed

through, factor in some specialist attention when making your bid.
SUSPENSION AND STEERING: Both are reasonably trouble-free, and your main area of concern will be worn-out dampers or wishbone bushes. Lightly used cars might not give their owners early warnings, so make sure all is well on the test drive.

The parts situation

Being a Ferrari, the parts are all readily available through specialists, and the owner's club. What isn't available can be rebuilt – at a price...

Typical prices	
Brake pads	£59 front or rear
Front discs	£172
Rear discs	£149
Clutch	£465
Water pump	£294
Damper	£114 each
Exhaust (stainless steel)	£1000-£1200

Specialists

- Hollingworth at Ombesley, 01905 622127, www.midland-ferrari.co.uk
- AE Performance Engineering, 01565 625612, www.aeperformance.co.uk/
- Damax, near Silverstone, 01280 851004, www.damax.co.uk
- Nick Cartwright Specialist Cars, 01629 569999, www.nickcartwright.com
- JMH Automotive, Cheshire, www.jm-h.co.uk
- DK Engineering, Watford, 01923 255246, www.dkeng.co.uk
- VERDI, Italian Performance Cars, Heathrow, 020 8756 0066, www.verdiferrari.biz

Clubs

Ferrari Owners Club, Membership Secretary, PO Box 111, Snettisham, King's Lynn, Norfolk, PE31 7TF, www.ferrariownersclub.co.uk

What should I pay?

Surprisingly, the more exclusive 206GT isn't as sought after as the 246, and that means that you'll pay less for one of these. Put it this way: none of these cars are cheap, though, and the roughest cars are still selling for over £16,000 – and obviously, all the earlier cars are left-hand drive only.

The later 246s are much more expensive, and although the lowest cars still cost upwards of £20,000. The top cars are now selling in excess of £65,000 – and that can easily be beaten for the truly mint cars (of which there are a few). The bottom line is that once you get northwards of £35,000 then you'll be in the pound seats.

Of course, you could go for a 308GTB or 308GT4 if that's too rich for your blood – especially at current favourable prices.

Should I buy one?

Of course: There's no way that you're not going to buy one if you have your heart set on one, and you have the means. Obviously, being of the same stock as the bigger Ferraris, these cars will demand plenty of attention – so the purchase cost is going to be just the beginning.

The bottom line is this: if you can afford to buy – and run – one of these cars, and you choose carefully, the benefits of supercar ownership may well outweigh the financial burden. After all, if it costs £1000 a year to service it, that's still a small price to pay for all the pleasures that will be coming your way.



FORD CORTINA MK3



Engines



Pintos and Kents were the original fitment, although all manner of engines have been fitted since – the engine bay is very capacious, allowing the fitment of V6 and even V8 engines for those with a penchant for performance. For the purists, the Kent unit was used in 1.3 and 1.6 forms while the Pinto was used in the sportier 1600GT and GXL and in the larger 2000 capacity for the range-toppers. From 1974, all 1600s used Pinto power.

Key things to check for are blue smoke from the exhaust and noisy valvegear which could be worn rockers, cam followers or the camshaft itself. Slack timing chains can rattle when they are worn, signalling that their replacement should rise to the top of the priority list.

With Pintos, a slight knock from the top of the engine suggests that the overhead camshaft is worn. There is a timing belt on this engine of course, which ideally should be changed every 25,000 miles. On low-mileage cars, changing it every five years is wise, as time can degrade the rubber belt too.

Both engines are well known amongst the tuning society, so upgrades are commonplace and there's no guarantee that a 1300L will still have a 1.3 Kent unit under the bonnet. Make sure that you know what you are getting.

Specification

Car	1300L	1600XL	2000E
Year	1970-1977	1970-1977	1973-1977
Engine	1296cc 4-cylinder OHV	1599cc 4-cylinder OHV	1993cc 4-cylinder OHC
BHP/RPM	57@5500	68@5200	98@5700
Top Speed	87mph	93mph	105mph
Gearbox	4-speed manual	4-speed manual	4-speed manual/ 3-speed automatic
Consumption	24-28mpg	24-28mpg	24-28mpg

Suspension

All models: Front: Double-wishbone, coil springs, telescopic shock absorbers.

Rear: Trailing arm independent, coil springs, telescopic shock absorbers.

Parts prices

Parts prices are courtesy of Speedy Spares and do not include VAT.

Brake disc, each	£10.75
Brake pads, set	£4.25
Brake shoes, set	£8.30
Wheel cylinder, each	£4.85
Clutch kit, exchange	£33.65
Water pump	£16.95
Thermostat, from	£3.50
Top hose	£5.00
Distributor cap	£5.00
Wheel bearing, front, each	£8.50
Bottom swivel joint, each	£11.55

The generation that put the kink into the Cortina, the coke-bottle-hipped Mk3 Cortina remains a firm favourite today. **IAN SEABROOK** tells you how to avoid the pitfalls when buying one

Bodywork

Dagenham's dustbins were made of cheap steel but that doesn't make them rubbish; it just means you have to keep an eye out for nasty corrosion. You won't be surprised to hear that sills are crucial to the strength of the monocoque so check them with care as well as the jacking points, seatbelt mounting points and floors. Rear wheel arches often get crumbly. A key area is where the bulkhead and A-posts meet. Repair here can be tricky but rust is common. Check not only for signs of bubbling but also signs of filler being used to cover up a nasty mess. Moving up, the scuttle panel can rust at its extremities, especially around the base of the windscreen and around the wiper mounting points.

The bulkhead can also corrode further up and the slam panel at the front of the engine bay can also go. The crossmember beneath the radiator is also well worth closer examination. The front wings can suffer on their inner and outer surfaces. Obvious spots are the leading edge of the wing and along the top mounting, but have a good look inside the wheelarch and down the sides of the inner wings for signs of trouble.

Door bottom trouble is easily spotted and the inner and outer rear quarter panels are susceptible. Don't forget to get the boot open and check the spare wheel well also, especially around the fuel filler neck. Keep an eye out for bodged repairs and questionable modifications.

Trim and body panels are getting harder to find now so if considering a project, don't expect to be able to nip out to a motor factors for new chrome wheelarches on your 2000E.

Many Cortinas had a vinyl roof so check this for signs of cracking or discoloration.



Transmission

Gearboxes and rear axles tend to be fairly hardy but do check for excessive noise which is an indication that all is not well. You may also find issue with changing gear, especially when cold. Best not to let the owner drive first as it may be a ploy to get the gearbox warmed up before you have a go. Jumping out of gear can also be an issue but at least obtaining another gearbox is unlikely to be a challenge, and fitting isn't too taxing either. Half-shafts can go – 85,000 miles seems to be the time that they start playing up.

Suspension and steering

Ford waved goodbye to MacPherson struts for the first time since 1950 on a new model. Double-wishbones were fitted instead although handling was never quite up to the level that perhaps it should have been. At least it wasn't as appalling as the MkIV Zephyr/Zodiac... Check for clonks suggesting wear in the various bushes, although any noise should be investigated as it might be caused by the subframe mounting holes being worn – a complicated and expensive repair.

If the rear end feels loose, it could well be the void bushes – the bane of some Cortina owners' lives. It's an easy repair but especially prevalent in examples that have been lowered which can cause short bush life. Worn shock absorbers won't help the handling situation either however, so a quick bounce test is useful.

Rack-and-pinion steering means that twirling the wheel (sometimes trimmed in delicious fake wood) should result in an accurate change of direction. Any vagueness suggests free play somewhere in the system so if you find any, ask an assistant to wiggle the steering wheel while you try to find where that play is.

Interior & Electrics

Pre-1974, the interior has an unusual "double-hoop" design to the dashboard, not unlike a Chevrolet Corvette – albeit using cheap plastic and hideous Formica on 'posher' models. Early low-spec cars even had non-remote gearchanges and bench seats but these are now very rare. Trim levels are baffling but even if you do know your GXL from your L, the disparate nature of so many different variants make finding missing bits a real challenge, so condition is important.

There's lots of space inside a Cortina though, one of the reasons why they're so popular with families.



Brakes

All have disc/drum brakes but the 1300 does without a servo. Brakes are perfectly adequate although obviously you'll need to prod the pedal a bit harder on the 1300. Check that the car pulls up straight and watch out for seized callipers or wheel cylinders from a lack of use. Again, the performance crowd have engineered many improvements, but make sure that you are happy with any modifications.

HISTORY

1962 The world is introduced to the Cortina, Ford's funky family saloon. Previous Fords always felt a little humdrum but with those cheeky tail fins and 'ban the bomb' rear lights, the Cortina appealed to many more people, the later Lotus only increasing the desire for the Corty. Sales are immediately strong with the car a firm favourite amongst fleet managers and family folk.

1966 The Cortina is updated to Mk2 specification. Changes are pretty much confined to appearances, albeit all now rather plainer. The Ford-built Lotus lacks the appeal of the earlier model, leaving the plush 1600E to be the one that purists prefer. This has tweaked handling and a luxurious interior, a very pleasant mix.

1970 Sales are already running at 2.25 million for the Cortina family so far; in other words, it's been a huge success selling half as many Cortinas in eight years as the Mini managed in 41. The Cortina now gets its first major make-over. The Mk3 owes very little to earlier incarnations. The body is all-new with those raised hips, already a feature of Vauxhalls. Suspension is double-wishbone at the front and coil springs at the rear. However, the press are left a little cold by the unsettled ride, lazy handling and rough engines. The unusual dashboard layout comes in for criticism too, with the dials sunk behind the steering wheel.

1973 It's facelift time with plastic grilles now fitted. Inside, the dashboard is comprehensively updated and is much improved. The 1600 was now of the overhead-camshaft type and anti-roll bars are finally fitted which tame the somewhat wild handling. The 2000E was an attempt to resurrect the success of the Mk2 1600E, but it fell a little way short of the mark. While there was no arguing that it was luxurious, it lacked the sporty edge which ensured that the original was a success in terms of sales. There was soon even a 2000E estate – for posh builders perhaps?

1977 Time is called on the Mk3. It's taken seven years to sell a similar number to the Mk1 and Mk2 but it got there in the end during a troubling decade – it wasn't just BL that was suffering with workforce disputes. The Mk4 is effectively a more plainly restyled Mk3, just as the Mk2 was the same as to the Mk1.

1980 The Mk5 Cortina is the final flowering for the line yet, remarkably, it still owes a very large amount to the Mk3 which went before it. The Mk5 tag is an unofficial one, Ford preferring to call it the Cortina 80. Production of the family favourite ends with the launch of the vastly different Sierra of 1982, which marks a return to MacPherson struts as well as the brave introduction of super-sleek bodywork on Ford's controversial new hatchback.



Contacts

Clubs

- Mark Three Owners Club, c/o Helena Rae, 71 Ayr Drive, Airdrie, North Lanarkshire, Scotland, ML6 Tel: 01236 754431 or 07876 252472 www.markthreeownersclub.com
- Old Skool Ford, www.oldschoolford.co.uk

Specialists

- Affordable Classics, sales, Essex, 01787 237887 www.classicfordcars.co.uk
- Speedy Spares, Sussex, 01273 417889 www.speedyspares.co.uk
- Or visit www.fordcortina.co.uk/parts.htm

How much?

The TV programme *Life on Mars* certainly gave prices a kick but prices have settled a little now. The 2000E is still the most popular of the standard-bodied cars and prices are knocking on the door of £3000. A GXL lacks the exclusivity and some of the plush fittings but is otherwise identical and good value at a couple of hundred pounds less. However, be aware that the market will pay stronger money for exceptionally tidy, low mileage cars, especially if they're a metallic bronze colour, aping the TV star car.

Poverty spec 'tinas still fetch £2200 but £1000 should nab you a ratty runner with MoT. Crayford convertibles are rare and desirable and you might need £5000 if you want to make the most of the summer. Estates are also rare and often overlooked. They are supremely practical but many have led a hard life and they are getting increasingly rare.

Verdict

The Mk3 Cortina might have been a disappointment in sales terms with styling which seemed to date quickly but like that other 'of-its-time' Ford, the Anglia 105E, this is what gives the car huge appeal these days, and not just because it's become a TV star. A Mk2 or Mk4 Cortina just looks a bit plain in comparison as Ford played it much safer with the styling. Ford was very much like this. A few years of bland and then they'd lob in a wild card such as the aforementioned Anglia, Mk3 Cortina and of course, the Sierra.

They make sense as regular transport too. Sure, you'll have to keep on top of the rust but, lob a five-speed Sierra gearbox in and you've got a capable, if not that refined, cruiser which is more than capable of holding its own in modern traffic, especially if you opt for a 2000 which had very strong performance for its day – the 0-60 dash took a mere 10 seconds, leaving it more than able to hack it in modern traffic. You don't pay much of a penalty at the pumps either, although no Cortina is that thrifty with the juice. Do look out for cars which have had their identities changed or where the numbers don't match. The lure of free road tax is just too tempting for some people, but no facelifted Cortina Mk3 should qualify for historic tax.

Mechanical parts are no issue to source either making the Mk3 Cortina the ideal daily classic if protected from the elements with a decent coating of anti-rust potion. With values still realistic, it's a great way to enjoy classic motoring on a regular basis.

Insurance quote

Based on a 1972 Ford Cortina 2000GXL valued at £2500

- Fully comp, 29-year old, two-years NCB, parked on drive, non-club member **£126.45** with a £50 excess
- Fully comp, 50-year old, full NCB, garaged, second car, club member **£99.15** with a £50 excess

Cover includes 24hr breakdown recovery (UK and Europe) and motor legal expenses

Buyer's Datafile: FORD ZEPHYR/ZODIAC MK4

Bred by Ford, the Mk4 Zephyr/Zodiac is quite a rare sight today, but for those of you who know where one is, ADAM TAIT shows you the haggling points...

Unlike its be-ribboned predecessor, the Mk4 Zephyr/Zodiac is absolutely enormous. With a bonnet area vast enough to host a football match, and a face that frightened anyone who had the bottle to glance in their rear view mirror, the Mk4 wasn't a company hack for the Nancy boy. It was a brute for the exec. Sadly, Triumph and Rover had developed sleeker new cars to target young and thrusting executives, meaning the Ford seemed almost immediately dated.

Engine choice wasn't sympathetic at the pumps

either; customers could opt for a 1996cc V4 or 2495cc V6 on the Zephyr, while the Zodiac/Executive came with a larger capacity 17mpg 2994cc V6 unit.

More interestingly, in 1968, the Home Office threw an order at Ford for 22 Mk4 Zephyrs. "So what?" you may be thinking... but not when we tell you that the order form specified ABS and four-wheel-drive. This was based around the Jensen Interceptor's 4WD setup, and because of the added weight and need for front driveshafts, the suspension had to be totally redesigned. Although a highly rated piece of kit, the conversion cost proved

to be out of reach for the police. Bet they had fun testing them though.

Sadly, the standard suspension was rather flawed. It was fully independent at the back but, this being Ford, it was developed on a tight budget and not really tested enough before the public discovered the flaws for themselves. The main problem is wheel tack – something not unknown to owners of Triumph Herald's but exceedingly alarming when mated to a large-kerb car with V6 power. It wasn't until 1969 that things were improved, but it still pays to use your Mk4 to cruise rather than hurtle.

Is it a classic?

Despite being almost completely forgotten, these cars definitely deserve to be on the classic honours list. Just because the Mk4 hasn't jumped on the Seventies Ford bandwagon of ridiculous asking prices, it doesn't mean that the youngest of the Zephyr family can be regarded a worthy classic.

Its looks are instantly recognisable, and the Vee engines, more so the six-cylinder, go hand-in-hand with the fat cat executive image.

What's out there?

The Mk4 was unfortunate enough to pass through the sieve of desirability. This has resulted in a low amount of restorations, and projects only fetch a few hundred quid.

Zodiacs and Executives tend to be more in demand, while the V4 Zephyr, although not one to be avoided, isn't such a good catch when compared to its more powerful, and smoother, V6 brothers. Estates, converted by Farnham, are amazingly commodious and even rarer than the saloons.

What to look for?

BODYWORK: When you arrive at the vendor's address, keep the following

SPECIFICATIONS

FORD ZODIAC EXECUTIVE 3.0-LITRE

Engine: 2994cc V6 OHV

Power: 136bhp

Torque: 181lbft@3000rpm

Gearbox: three-speed automatic

Consumption: 17mpg

Top speed: 102mph

0-60mph: 13secs

in mind; the Zephyr or Zodiac sat in front of you will probably be fairly original, so running repairs, rather than a bare shell rebuild, will be more likely. It was built in the late-Sixties/early-Seventies, and England suffers from heavy rainfall.

It's more a case of what not to look for, rather than what to look for. There aren't a myriad of hidden crevices, but there is a good poke around. Hotspots include wheel arches, front wings, and the front edge of the bonnet. The top edge of the front wings can be a horrendous area in which to rectify damage while you also need to consider the strut tops, as on any car with MacPherson suspension. The sills are prone, especially at their rear edge where the crossmember bolts to them. A-post can suffer, but are tricky to check with the wings in place.

ENGINE AND TRANSMISSION: The V4 unit is also found in other Blue Ovals such as the Corsair and Transit, and although it tends to be reliable with regular maintenance, it's the smoother V6 engines that reign supreme.

The 2.5-litre version found in the Zephyr, and 3.0-litre that lives in the Zodiac/Executive, are essentially early editions of the Essex engine.

We doubt that it will be modified, but in standard form, there isn't much to go wrong, although low oil pressure can be a common trait, and the camshaft drive can go awry thanks to the fibre gears. These can give way, but thankfully, the valves tend to escape unscathed. It's worth finding out if this has been changed recently, if at all. Whichever the model, the spare wheel occupies the underbonnet area, so remove it if need be.

The Borg Warner three-speed automatic and four-speed manual gearboxes don't throw up any horrors, but do listen out for any suspect whining noises while on the test drive.

SUSPENSION, STEERING AND BRAKES: Innovative it was. The Mk4 came with servo assisted discs all round and independent rear suspension. This sounds great, but rear callipers can seize, and replacements are thin on the ground. Suspension bushes don't tend to wear at a heavy rate, but polyurethane replacements aren't advisable as it could make the soft ride a harsh one. Unless you are planning on doing track work of course, which is doubtful.

Power steering came as standard on the Zodiac but (we believe) it was an option on the Zephyr. Check the hydraulic ram isn't seeping fluid – because this is a frequent gripe.

INTERIOR AND ELECTRICS: The local trim refurbishment shop could be your only hope in reviving upholstery that has gone beyond the capabilities of cleaning products. A lucky autojumble find is another option, or an owner's club contact who has parts for sale. Electrics are relatively simple, and don't give too many problems; just ensure the universal checks are made by ensuring the battery leads are tight and corrosion free, and that a cowboy hasn't turned any wiring into spaghetti junction.

The parts situation

There aren't any big firms on hand to supply every nut and bolt for a Mk4. Our advice is to join the Ford Mk4 Zephyr & Zodiac Owners Club (www.communiqate.co.uk/london/)

because this will open the door to several membership benefits, including spares co-ordinator, Jeff Wills.

Parts prices are excluding postage costs, and are only available to club members due to insurance conditions:

Rear discs	£90.00
Front pads	£15.00
Rear pads	£20.00
Radiator	£85.00 (V6 exchange)
Radiator	£65.00 (V4 exchange)
Top hose	£5.00 (Late or Early)
Water pump (backplate)	£20.00 (without backplate)
Bottom hose	£6.50 (V6)
Bottom hose	£3.00 (V4)

What should I pay?

You'll be lucky to find an array of choice in the classifieds. Because of their undesirable status, many Mk4s are in automotive heaven, or future candidates at the next destruction derby meeting. Projects are worth no more than a few hundred quid, but a reasonably good Zodiac can demand £1500-£2000 (Zephyrs slightly less), while a rare-as-rocking-horse-maneau, exceptionally low mileage car, can change hands for over £4000.

Farnham estates are even trickier to put a price on, but we spotted one in the classifieds that needed 'minor' welding to pass the MOT for £1800.

Should I buy one?

If you enjoy the styling cues of British car manufacturers looking to the USA for ideas, then it doesn't come much better than the Mk4. At CCW, we especially rate the Farnham converted estate, which coincidentally proved to be a popular mule among the custom scene, and is one of few classic Fords that really suits the wagon format.

For those who yearn after luxury, then bag an Executive, but any of the lesser models, such as the Zephyr 4 (V4) will still impress. Restoration projects will ask for a lot of your time and money, as the Mk4 doesn't have a greatly accessible spares backup (especially when compared to something like a Triumph 2.5), so a road-legal project that needs little work, or a very low mileage concours (they do come up) example would be the more sensible ones to go for. That's not to say we don't encourage reviving deteriorating classics though.



FORD SIERRA XR4i, XR4x4 AND RS COSWORTH



Engines

Cologne V6: These power units are under-stressed and long lived, and they throw up few problems in daily use. If you can find one that has been carefully serviced on schedule, there's no reason why it won't sail through 200,000 miles without any problems.

The key to this long life is regular oil and filter changes with the good quality stuff – and later models benefit from updated hydraulic tappets that are as easy to adjust as standard items.

RS Cosworth: Like the V6 version, these engines are long-lives and have few foibles if maintained properly. In fact because it was built to a higher standard than the rest of the range, it should be even more so. The head gasket is an issue unsurprisingly in a car with so much power, and the RS500 accordingly suffers more – as do 'chip-tuned' versions. However, the head can only realistically be skimmed the once – and after that you're looking for a new one.

Engines that have suffered major mechanical failure may have had the block changed for a standard one – and you need to look closely at any invoices for serious bottom end work. If there are signs of bottom end wear such as blue smoke and grumbles, bear in mind that a guaranteed Cosworth rebuild is going to cost you something in the order of £3000. You have been warned.

Don't worry too much about the turbochargers – second hand units are readily available, and Garrett rebuild kits can be sources for under £50 if you shop around.

Finally, these cars are very tuneable, and it's a rare car that hasn't seen an ECU upgrade. With kits that offer anything up to 400bhp (and then some), we can see why they have appeal, but remember that extra power means extra wear, and if the rest of the components (such as the head gasket) haven't been suitably beefed up, you're looking at potential medium term issues.



Parts prices

Common parts prices, from Graham Goode including VAT

Cosworth (from Graham Goode including VAT):

Graham Goode 3-inch stainless steel exhaust system,	£558.13
Mintex fast road brake pads for AP Racing 4 pot brake calipers,	£65.89
Mintex trackday brake pads for AP Racing 4 pot brake calipers,	£97.32
2wd Sierra Cosworth Complete Clutch 3in1 Kit,	£167.08
Sierra RS500 replacement turbocharger,	£1298.80
YBO 611 Cosworth Head Gasket,	£88.13
Water pump,	£43.72
Cambelt,	£37.42

Standard parts:

Front wing (pattern),	£30
Front bumper,	£180
Clutch kit,	£50
Alternator,	£60
Starter motor,	£60 (exchange)

Transmission

The standard gearboxes can feel notchy when cold, although later post-1989 MTX75 models are much improved in this respect – but it's always worth bearing in mind that even when they start whining, they'll carry on going forever.

The four-wheel drive transmission system, inevitably, has more points worth bearing in mind, though. If it has been used with mismatched tyres or towed on a dolly rather than a trailer, you'll be facing serious damage in the viscous coupling in the transfer box – and you'll know instantly that's happening because of the noise coming from the transmission when underway. Replacement costs around £600 for a recon unit and £1500 for a new one.

Specification

Car	XR4i	XR4x4	XR4x4	RS Cosworth	RS500	Sapphire RS	Cosworth 4x4
Year	1982-1985	1985-1989	1985-1989	1989-1993	1985-1986	1987 only	1990-1992
Engine size	2792cc, V6, SOHC	2792cc, V6, SOHC	2933cc, V6, SOHC	1994cc, 4-cyl, DOHC	1994cc, 4-cyl, DOHC	1994cc, 4-cyl, DOHC	1994cc, 4-cyl, DOHC
BHP/RPM	160@5700	160@5700	150@5700	204@6000	224@6000	220@6250	220@6250
Top speed	130mph	122mph	129mph	149mph	154mph	143mph	143mph
0-60mph	7.7 secs	8.4 secs	8.6 secs	5.8 secs	6.1 secs	5.6 secs	5.6 secs
Gearbox	All models: five-speed manual.						
Consumption	22-26mpg	21-25mpg	22-27mpg	20-27mpg	18-26mpg	20-26mpg	20-26mpg
Suspension	All models: Front: Independent by MacPherson Struts, anti-roll bar. Rear: Independent by semi-trailing arms, coil springs, telescopic dampers, anti-roll bar.						

Race on Sunday, sell on Monday – that was always Ford's attitude to its family cars and competition, and never has this been truer than with the Sierra Cosworth and its XR-badged cousins. Designed for the track and tuned for the road, KEITH ADAMS gives you the low-down on buying these fast Fords...

Suspension

The main cause of concern for the Sierra's suspension system is its track control bushes, which are simply not up to the job in hand. They wear rapidly and are awkward to replace – and it's easily spotted on the test drive. Simply look for vague steering and vibration under braking, and you're already there. Many people replace the entire arm assembly (which is cheap at £17 per side), but an alternative is to fit long-life polyurethane bushes to the original arms, although bear in mind that these are unavailable for the V6 models.

Dampers are an ongoing wear-and-tear option, and are not exactly expensive to buy. However, many sporting Sierras have been modified in this department, so make sure that you know what you're getting into. Finally, the XR4x4 uses gas dampers at the rear, which are more expensive than the standard items, so make sure these are up to scratch.

Interior

Ford Sierra interiors are durable and long lasting, but do have a habit of looking tatty with even fairly light use – but don't be put off by a sad and grubby looking set of seats and door trims, as they respond very well to thorough cleaning.

The seats can also look sad with the passage of time, and if you can find one with a leather interior, your life will be made considerably easier.

Sun damage is a problem on dashboard tops, and the electric window motors are a known weakness. However, with so many cars built, and so many languishing in scrap yards across the country, you'll never struggle to find used parts. The rest of the electric system isn't of the highest quality, and the wiring loom is a known weakness.



Brakes

Warped discs and worn pads are easy to spot, and reasonably easy to replace on all Sierra models – although seized wheel cylinders can also be a problem, and replacement is the best course of action. The rear disc set-up has the inherent problem of seizing the handbrake if it's left on for too long, or not used regularly – often the only cure is the replacement of the entire caliper assembly.

Bodywork/underneath

Sierras are known rusters in the trade, so whatever car you look at, make sure you take a very close look. Start with the front wings, which are a usual weakness – the first signs of deterioration will be at the wing tops, closely followed by the trailing edges next to the door, and then the wheelarches themselves. Have a good prod, too, as bodykits can disguise problems if there has been water ingress.

Work your way along the car, and check the inner and outer sills followed by the door bottoms. Don't be shy to look closely underneath, too, as plastic sill covers can disguise many evils. It's the same with the tailgate and boot openings – well known water traps.

Then open the bonnet and take a good look at where the inner wings meet the bulkhead – as well as around the washer bottle, as these are troubled areas. Don't worry too much about the tops of the strut towers, as Ford seemed to get on top of that little issue.

Of course as all of these cars are fast and sometimes bought by over-enthusiastic drivers, you need to take a very good look for signs of badly-repaired accident damage. Poor panel fit and paint matches will tell their own sad story, and if you find a car thus afflicted, ask some searching questions.

Finally, don't worry about the fitment of a strut brace – these bring untold benefits to handling, and have probably been fitted for this reason. Of course, a well-used car could have one to disguise the effects of warped front wings ahead of the A-posts. Again, don't be shy to ask those searching questions...

Wheels

Most Sierra wheels are easily found on the secondhand market, as Ford alloys seem to last much longer than the cars they originally appeared on. The main one to watch out for is the RS500, although it's unlikely you're going to be looking at one of these riding on aftermarket alloys. If you are, then consider the fact that these wheels are like hen's teeth, and no longer available new.



PRICE GUIDE – FORD SIERRA

SIERRA AVAILABILITY	YEARS	MECHANICAL	BODY	C			
				1	2	3	3
XR4i	1983-1985	★★★★	★★★★	£1,800	£1,400	£750	£300
RS Cosworth	1985-1987	★★★★	★★★★	£9,500	£8,250	£5,800	£1,000
RS500	1987	★★★★	★★★★	£14,000	£12,500	£8,000	£1,500
Supersport Cosworth	1988-90	★★★★	★★★★	£7,750	£7,000	£4,250	£2,500

CONDITION GUIDE: C-top driver, dealer car 1; late car, top condition, high spec 2; average example, reasonable spec 3; might be low spec, high miles, undesirable colour, but still desirable condition.

HISTORY

1978: Project Toni kicks off – its brief to replace the strong-selling Ford Cortina. From an early stage in the programme management decides it needs to have a hatchback, aerodynamic styling and use the existing engines and gearboxes. Patrick Le Queument is placed in charge of styling, and soon devises a number of radical proposals.

1981: The Ford Probe III concept car appears at the Frankfurt Motor Show and immediately wins visitors. Ford management makes no secret of the fact that the concept car's styling is an advanced version of the following year's Cortina replacement. Traditionalist buyers are already up in arms...

1982: Ford unveils the Ford Sierra range, and immediately causes a sensation – the styling is overtly aerodynamic and out goes the option of a four-door saloon, as it's available only in four-door hatchback and estate versions. Although the rest of the industry is rapidly moving to front-wheel drive – most notably Vauxhall with the Cavalier – Ford sticks to its original plan, of leaving the Sierra driven by the rear wheels. Rear suspension is upgraded to a similar system to that of the Mk2 Granada. The engine range mirrors that of the Cortina, with 1.3-, 1.6, 2.0-litre four cylinder units, and the smooth 2.3-litre V6. Although the engines are unchanged, top speeds are up considerably, thanks to a drag co-efficient of 0.34 (compared with 0.44 of the Cortina). Trim options are comprehensive, and in true Ford custom, there are many visual differences to separate each model in the range.

1983: The first hot version of the Sierra appears – the XR4i. Visually arresting with a one-off three-door body and bi-plane rear spoiler, it's powered by the same V6 engine found in the Capri 2.8 Injection and Granada 2.8 (originally rated at 160bhp). Performance is excellent with a 0-60 time of 7.7 seconds and top speed of over 130mph.

1985: A very big year for the Sierra – with the XR4x4 and RS Cosworth making their debuts. The slow-selling XR4i is dropped in favour of the XR4x4, which uses the standard five-door body, mated to the 2.9-litre V6 engine and a brand new four-wheel drive transmission system. Priced aggressively to undercut the Audi 90 quattro, the XR4x4 soon becomes one of the year's hottest tickets. However, that's overshadowed by the Geneva launch of the RS Cosworth – a Homologation special that has been conceived to meet Group-A touring car production regulations. Powered by a Cosworth-developed version of the 2.0-litre Pinto engine, which now features a 204bhp DOHC 16V cylinder head and Garrett T03 turbocharger, the top speed is claimed to be 150mph. Like the XR4i, the RS Cosworth is a three-door hatchback, but this time, it features the standard 'four-light' body topped off with a huge whale-tail tailgate spoiler.

1986: Production of the original RS Cosworth ends – for the time being.

1987: A further development of the Cosworth appears, the Sierra RS500 (which stands for RennSport). Power is uprated to 224bhp, thanks to a much larger Garrett T31/T04 turbocharger, and has the capability to be boosted to 500bhp in competition form. The RS500 features two rear spoilers, and is assembled by Tickford Engineering Limited. The Sierra range finally receives a major facelift – and manages to put right a major 'wrong' committed by the original car: the availability of a four-door version. The XR4x4 continues as it was, although it now features the far more conventionally styled facelift front-end, which gives it a curiously Scorpio-aping look...

1988: The four-door Sapphire saloon Sierra body forms the basis of the productionised RS Cosworth – and the result is a far more understated-looking performance car. The engine specification is back to 1985 levels, but despite that, the RS Cosworth remains one of the few four-door cars with 150mph capability. The XR4x4 also receives the uprated 2.9-litre V6 engine (now rated at 150bhp), which debuted in the Scorpio model the previous year.

1990: At last – the RS Cosworth is mated to a four-wheel drive system closely related to that of the XR4x4 to create the 4x4 version. To many this is the car the 1988 model should always have been, as road manners are considerably improved by the added traction. All RS Cosworth 4x4s are fitted with a leather interior and luxury equipment and are priced accordingly, and are boosted to 220bhp. The XR4x4 model is expanded into a two-car range, with the addition of the 2.0-litre 16V powered version – and a two-wheel drive version of the car is also announced, bringing back the XR4i badge.

1992: Production of the Sierra-based Cosworth models comes to an end, and the model is replaced by the more compact Escort RS Cosworth.

1993: The XR4i and XR4x4 models are phased out, and the Sierra makes way for the completely new front-wheel drive Mondeo.

Contacts

Clubs

- Ford RS Owners Club, Berks, Tel: 0118 984 1583 or www.rslowersclub.co.uk
- Ford Sierra Club, www.fordsierraclub.co.uk
- XR Owners Club, www.xroc.co.uk

Specialists: tuning

- Graham Goode, Leicestershire, Tel: 0116 244 0080 or www.grahamgoode.com
- Automotive Unlimited, Essex, Tel: 01279 816049 or www.automotiveunlimited.co.uk
- PJ Motorsport, West Midlands, Tel: 01902 862880 or www.pjmotorsport.com
- BBR-GTI Limited (Tuning), Northants, Tel: 01280 700800 or www.bbrgti.demon.co.uk
- Garrett Turbo Services, Manchester, Tel: 0161 485 6244
- Newford Parts Centre, Lancs, Tel: 01254 830343 or www.btinternet.com/~newfordpartscentre
- Castle Performance Engineering, Staffordshire, Tel: 01782 715006 or www.castleperformance.co.uk

Specialists: parts Ford dealers

- Ford Parts UK, Salisbury, online only, www.fordpartsuk.com
- Mainly Fords, Glasgow, Tel: 0141 775 9146, or www.mainlyfords.co.uk
- Mitchell Dismantling, Cheltenham, Tel: 01424 672 811, or www.mitchelldismantling.co.uk/ford-parts/
- XR4i Spares Centre, Essex, 01375 672 641

Market Trends

Cosworths have been prized possessions since the moment they rolled off the production line. Once the cull of the early-Nineties was over, numbers had thinned out sufficiently to start talking in terms of reverence for an all-time classic, values were set far. Now the whole insurance issue is well and truly over now, and we can concentrate on the fact that these cars are fast and fun and pretty solid,

Verdict

For too long, the V6 Sierra XR4s have lived in the shadow of the more glamorous RS Cosworth models, and although they were sold in much larger numbers, the low survival rate may well mean that in a few years time, these are the rarest of all the fast Sierras. Ask yourself this – when did you last see an XR4i out in the wild? Exactly.

Prices remain encouragingly low at the moment, and for about £1000 you could end up with a very useable and cared-for XR4i or XR4x4. Okay, they're not the last word in refinement, and the styling is of the love-it-or-hate-it variety, but for your money you're getting an awful lot of ability, and head-turning looks.

As for the Cosworth engines cars, these are all classics in the truest sense of the word. Although the RS500 commands the greatest premium because of its rarity, we'd think twice about paying extra for 20bhp extra and all that additional lag. The best day-to-day classic would be the 4x4 version, although there are plenty of additional factors to take into account when it comes to servicing and running costs.

Overall, then, we'd go for the Sapphire Cosworth, and enjoy its fun handling and discreet looks. The main issue, of course, is price – and these seem to be the cheapest of the breed – and finding one that isn't modified. To do that, we'd always recommend joining the Ford RS Owners Club.

Insurance quote

For a £5000 1988 Sapphire Cosworth, with no modifications, based in Peterborough.

- Fully comp, £100 excess: £706.65 for a 29-year-old, two years' NCB, clean licence, 10,000 miles, only car kept on driveway, club member, with Cat 2 immobiliser.
 - Fully comp, £100 excess: £166.95 for a 50-year-old, full NCB, clean licence, 3000 miles, second car, garaged, club member, with Cat 2 immobiliser.
- Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)**

Buyer's Datafile: FORD SCORPIO COSWORTH (1991-1998)

We know what you're thinking – it's a minicab. Well, no actually, this one's rather special, and as **KEITH ADAMS** explains, well worth taking a closer look as your next future classic

Ford's Granada was a member of the establishment from almost the day of its launch in 1972. Ford could do no wrong back then, and if there was gap in the market, the company had an offering to fill it.

It's easy to see why Ford was so successful – its cars were stylish, and you could buy them in a myriad of versions to fit all budgets. The 1972 Granada was replaced by a sharper, more angular edition in 1977, and in 1985, a wholly-new hatchback 'Grandad' hit the market. Each generation met with a popular reception from buyers – and sales remained strong.

It's fair to say that when the third generation

Granada hit the market in 1985, it caused controversy. Styled by Patrick Le Quement (also responsible for the Sierra), and available exclusively as a hatchback, the new car was Europe's first to be offered with anti-lock brakes across the range as standard – and it looked cutting edge against new-age rivals from Saab, Audi and Renault.

In Europe, the entire range was referred to as the Scorpio, whereas in the UK, the Granada name remained – although the top of the range models were called the 'Granada Scorpio'. Available in 2- and 2.8-litre form, the range was treated to a continued range of upgrades during its production run, which culminated in the

launch of the 24V Scorpio Cosworth version in 1991.

Although this new 195bhp FBA engine was based on the venerable Cologne V6, new heads, and various other components developed by engine specialist Cosworth, ensured that the new car became a fitting flagship. Unlike the Sierra Cosworth, the Granada Scorpio was never pushed as an overtly sporting choice, more as a gentleman's express, which it did remarkably well.

In 1994, the Granada became the Scorpio and adopted bold new styling. The engine and chassis was mildly tweaked, but sales slid in the face of the rising popularity of the premium badged German opposition. The end came in 1998...

Is it a classic?

It will be. Although the Scorpio Cosworth hides its prodigious performance and dynamics under the bushel of a sober business suit, there are enough people out there wise to its abilities to ensure it will make the transition from 'old' to 'classic' without too many problems (unlike some of its rivals, which may not escape the clutches of the crusher in their twilight years).

With 195bhp on tap, it's a terrific drive, and unlike the standard V6 versions, which can start to feel breathless when extended, the Cosworth-tuned engine delivers power and revs, and somehow manages to feel a little bit special. That alone lifts the car into the ranks of the classics – add in that Q-car factor, and appreciate the fact that only the true cognoscenti will know what you're driving, and the ownership proposition becomes a satisfying experience.

The post-1994 Scorpios were a slightly different kettle of fish though – mainly because the 24V version became a more mainstream member of the range, losing some of that all-important wow factor.

What's out there?

Concentrating on the Cosworth means that you don't need to concern yourself with the almost baffling range of engines powering the entire range. The 24V power unit came in two versions, FBA and FBC – and two transmission choices, manual and automatic. The FBC engine boasted more power (204bhp), and as the years passed, equipment levels became increasingly generous.

The 1991-1994 models were marketed as Scorpio Cosworths, and sat atop the range, but once the entire range lost its Granada tag, these cars became known as 24V Ultras or Executives.

What to look for?

The general consensus of opinion regarding the Scorpio Cosworth is that it shares a number of weaknesses with the rest of the Granada range, but the engine is pretty strong and trouble free given proper maintenance.

ENGINE: Some Cosworth-specific engine parts are, expensive, as expected, though the engines themselves are strong and reliable if

properly maintained. There have been cases of heads cracking – though this is as much down to abuse/neglect as any weakness in the car. A bit of top-end tapping on a car that has been standing about a while may be down to a sticking valve; in which case it will probably clear after a good blast down the motorway.

TIMING CHAIN: The timing chain of Cosworth 24v stretches and only lasts 3-4 years or 60,000 miles. Replacement of the timing chain and associated tensioners every 3-4 years or 60,000 miles is essential, so examine the service history very closely indeed. Listen for rattle at start-up – if it goes quiet within a second, you're okay.

BRAKES: The ABS system is known to fail, and dull sensors are the prime suspect. Rectifying faults and repairing them can be expensive, although parts availability is not a problem. The extra performance of the Cosworth engine places additional strain on the running gear, and brake pad and disc wear is higher than average – so pay close attention.

ELECTRICS: ECU failure is a possibility, so if the engine management light is on, look under the bonnet at the ECU and check for signs of dampness. The battery should have a cover on it – is it there? Fusebox failure is another perennial problem – again down to dampness or blocked drain holes in the engine bay – so pay close attention to random electrical issues. Also check the TCS and ABS lights illuminate when the ignition is switched on – and then smartly go out, indicating all is well.

BODYWORK: Granadas are not averse to picking up a bit of rust, so make sure you look closely for all the signs. Vulnerable areas are the rear wheelarches, and all four corners, due to the car's size and lack of extreme visibility. Accident damage is far from uncommon, so check the sills for sub-standard repairs. Bizarrely, later Scorpios are more susceptible to tinworm than the early cars.

EXHAUST: Failure of the catalytic converter can be costly, and a full exhaust system is – as expected – not cheap. So listen and look closely.

GEARBOXES: Manual transmissions are reasonably rugged, but the automatic gearbox can last as little as 60,000-80,000 miles, so take care, and check for lazy gear selection, missing ratios or clunks.

SUSPENSION: The extra power can't/does put extra strain on the front



MODEL BREAKDOWN

Year	Specifications	Performance (automatic)
1991-1994	2935cc, 195bhp, V6, 24V	0-60 in 8.5secs, max speed 140mph
1994-1998	2935cc, 204bhp, V6, 24V	0-60 in 9.0secs, max speed 138mph

suspension, too, especially if the car is driven hard. Compliance bushes, which are a Granada/Cosworth weak spot, need to be closely checked. You'll know pretty much straight away, because the front end will wander. **DRIVETRAIN:** Does it vibrate when running? Low speed rumbles could mean a worn centre propshaft bearing – and droning noises denote worn wheel bearings. CV joints are also susceptible, so listen for clicking noises on full lock.

The parts situation

It's a Ford, so parts should be a doddle to find? Generally yes, but as we stated before, bits special to the 24V version can be pretty expensive.

Typical prices, 1992 Ford Scorpio Cosworth

(Ford main dealer)	
Repair front suspension	£200
Exhaust	£200
Rear brakes	£150
Rear brakes	£150
Alternator	£180
A/C pump	£200
Power Steering Pump	£300
Gearbox	£750 rebuild
Catalysts	£300 each

Specialists

- Ford Parts UK, internet only, www.fordpartsuk.com
- Mainly Fords, Glasgow, Tel: 0141 775 9146, or www.mainlyfords.co.uk
- Mitchell Dismantling, Cheltenham, Tel: 01424 672 811
- Website: www.fordscorpio.co.uk

What should I pay?

Classic car rules are really only

applying to the earliest cars at the moment, with the 91-94 cars selling more on condition and history rather than age. These earlier cars also have a more bespoke nature, which makes them more amenable to classic Ford enthusiasts. That being the case, £1500 will buy you an original car with low miles and an impeccable – probably specialist – history. Once condition deteriorates, the values seem to drop to around £300-£400, and that's because alone, the Cosworth lump is worth £250 second hand.

The newer cars are still very much secondhand (as opposed to classic) cars, although if you want a Fregoye, you can pick one up for £500 upwards. The best examples will fetch £2500 through a dealer, and these will be estate versions from 1999 on an S-plate.

Should I buy one?

If you're after a big saloon or hatchback with plenty of performance and space, then there aren't too many cars to touch the Cosworth at this price level. The 200bhp engine delivers plenty of punch, and the rear-wheel-drive chassis is very capable indeed, and can deliver fun when you want it.

There are plenty of pitfalls to look out for, but we reckon if you pick the right one, at a good price, there's enough charm and charisma to put a smile on the face of any big car fan. Comparable offerings from BMW and Jaguar (the rear-wheel-drive choices) will cost more money – especially when they go wrong. Choose a nice one now, treasure it, and reap the rewards in future years...

FORD 100/107E ANGLIA/PREFECT/POPULAR



Engines



Contrary to popular belief, the 1172cc sidevalve engine used in all these cars is NOT the same as the engine from the 'upright' Anglia/Popular range – even though it's the same capacity! The 100E unit featured an oil filter, water pump, adjustable tappets and strengthened connecting rods and crankcase – the rods suitable for fitting shell bearings. It's not the fastest thing in the world and tends to smoke and fume from the

filler cap as it gets old due to crankcase pressure (usually caused by worn bores/pistons), but it will probably run like that for ages. Overhaul is straightforward, and while some parts are getting scarce, the club and specialists can usually help... Engine condition is certainly less important than bodywork/underneath.

The 107E, of course, had the 997cc Ford Kent engine as found in the Anglia. These, too, get smoky as they get older and again, a 'fumer' will often run long after it shouldn't. Parts for these are available, as are complete engines.

Driving

Despite being an all-new car in 1953, the 100E was in many respects dated at the time of its launch – it may have been a new sidevalve engine but it was still a sidevalve and it still powered the car through a three-speed gearbox. The 100E's chief rivals were both from the BMC stable (Austin A30 and Morris Minor) and both were four-speed OHV models. By 1961 the 100E was totally outclassed – the Mini had been in production two years – and for most buyers the Popular was a price-driven purchase only.

Behind the wheel, the first thing you have to get used to is the gearbox. It's a three-speed floor change, with reverse where you expect first to be, and you'll probably forget this when you're about to move off in traffic with another car close behind you...

Speed isn't, of course, the standard 100E's strongest point, and the three-speed box means you are in top sooner than you expect – from under 20mph in fact. Theoretical top speed is just over 70mph, but at this rate a standard 100E is screaming – a realistic cruising speed is just under 50. You won't be going out of the slow lane on the motorway then, but the 100E wasn't exactly designed with motorway use in mind...

Don't, though, imagine that driving a 100E is a wholly unpleasant and uninspiring business – far from it. For starters, the handling is actually surprisingly good – one can imagine those used to the old-style Populars thinking the 100E was a huge step forwards in this regard. I also find them great fun to drive. You've got to work in order to maintain half-decent progress, but that's actually rather pleasant – and certainly a lot more involving for the driver than a later car...

Oh, and if you want a 100E but want a bit more go and would rather achieve that in a period way, a lot of the old 'Aquaplane' tuning gear is now available again – including improved Aquaplane cylinder heads!

Parts prices

All parts from the Ford Sidevalve Owners Club (which only sells to members) and Ex-pressed Steel Panels. Prices include VAT.	
Oil filter element	£5.00
Piston set (010-040 oversize available)	£150.00
Brake/Clutch master cylinder	£72 (overhaul kit £7)
Clutch plate	£30 (exchange - £10 surcharge)
Clutch cover	£42 (exchange - £10 surcharge)
Exhaust system (stainless steel)	£125.00
Suspension top mounts	£40 each, £75 a pair
Outer sills	£91.65
Inner sills	£27.80
Rear wing/arch repair section	£90.94
Front wing (complete)	£410.52
Front wing (bottom half only)	£218.83
Front wing front lower corner only	£40.42
Front wing rear lower corner repair section	£60.63
Rear spring hangers	£73.26
Boot floor	£285.46

Thanks to an over-engineered bodyshell, Ford's small saloon survives in surprisingly high numbers, says **PETER SIMPSON**

Specification

Car	Ford 100E	Ford 107E
Year	1953-1961	1959-1961
Engine size	1172cc 4-cyl sidevalve	997cc 4-cyl ohv
BHP/RPM	36@4500	39@5000
Top speed	71.5mph	76mph
0-60mph	36.7secs	27secs
Gearbox	3-speed manual	3-speed manual
Consumption	30-35mpg	30-35mpg
Suspension:	All models: Front: independent by MacPherson struts. Rear: Live axle, leaf springs, telescopic dampers	

Running gear

There's nothing unconventional here at all – drum brakes all round (7in to 1955, 8in thereafter), leaf springs at the back and the then almost universal box-based steering system. None of it is really any more or less problem-prone than anything else of the age. Some parts are scarce from conventional sources – rear brake cylinders for 1955-57 cars with 8in brakes for example – but the Ford Sidevalve Owners Club runs an excellent spare parts service offering most of the normal wear and tear items – often on an exchange basis. Prices are very realistic, but availability is strictly members-only...

Please note too, that although the 107E running gear is pure 105E, many ancillary items such as hoses, engine mounts and so on, are unique to the 107E. Some of these, too, are scarce, but again the club has sourced/made a lot.

Interior

Not much to worry about here – because there isn't exactly a lot in the first place! Painted metal dash and door tops are far easier to restore than wood or fabric, and it's relatively easy to make new carpets – though most of these cars started life with rubber mats on the floor and if you're a stickler for originality you'll search out a good set of these. Seats need to be good – don't worry if they are dirty as all but the most stubborn of marks can be removed given time and effort, but rips, cigarette burns etc, are a different matter...



Bodywork

As usual with classics, body rot is the major problem with these cars – but that's basically because we're talking about cars that have already survived for four or five times as long as Ford intended! The usual problem areas are the door bottoms, lower edge of the rear wings and the front wings which tend to go at the front where they meet the front panel and in the rear lower corner that sits over the sill, forming an extremely convenient rot-spot. New old stock panels are of course rare – and consequently expensive – and while secondhand doors, bonnets and bootlids do sometimes turn up, good secondhand wings are pretty unusual. Fortunately, though, because the rot usually affects only a relatively small part of the overall panel, it's usually possible to repair what you have by letting in repair sections – or renewing only the bottom half. Remanufactured panels are also now available – but the price of these does reflect the amount of work involved in making them in small production runs.

As 100Es are fairly basic cars – even in Deluxe form – there isn't an enormous amount of brightwork to worry about, though we understand that some of the early stuff is a little hard to find as is anything that was exclusive to the estates or vans. Some small fittings were made from chromed Mazak – a soft alloy which pits with age – but remanufactured replacements are available.

Chassis

First the good news – despite having MacPherson strut front suspension, inner wing rot isn't a particular problem on these cars – that all began when Ford started going for lightweight construction with the Mk1 Cortina! The 100E was an early example of this set-up and basically it was over-engineered because it was still new technology.

The bad news, though, is that there are plenty of possible problem-areas elsewhere and although the cars were built strongly, it's underbody rot that's killed most 100Es in the half century since. Principle places to check are sills (inner and outer), along with the adjoining box-sections. The other favourite problem-area is the rear spring hangers and the 'chassis' sections that curve up and over the rear axle. Any rot within 900mm of a load bearing member is an MoT failure item – and that means basically the whole underbody is structural...

Transmission

Three-speed gearboxes are okay, though some spares are getting scarce and most owners live with weak/non-existent synchromesh on second once it's there – double declutching is a useful skill to have when driving these cars anyway, as first never had synchro. Unusually for a car of the era, the gearboxes in these require EP80 gear oil, not engine oil.

The four-speed 105E type gearbox is generally good – though there's still no synchro on first – and there's no shortage of good used boxes as 997cc Anglias are still being 'upgraded.' Rear axles are generally okay – as usual with cars of the era, a bit of oil leakage and a bit of whine go with the territory. Unless it sounds absolutely horrid it'll probably run like it for ages and with luck the oil that's come out will help protect the back end of the chassis. Unusually, the rear hub bearings run directly in the differential housing – a bit of typical Ford cost-cutting – and this can occasionally lead to wear problems, though unaffected replacements are relatively easy to find.

Contacts

Clubs

- Ford Sidevalve Owners Club, Membership Secretary, FSOCLtd, PO Box 8095 Bishop's Stortford, Herts, CM23 4XZ. Website: www.FSOCLtd.co.uk
- Ford Anglia 105E Owners Club (caters for the 107E), c/o 30 Langwith Road, Bolsover, Derbyshire, S44 6HQ. Website: www.fordanglia105eownersclub.co.uk

Specialists

- Classic Ford parts, Berks. Tel: 01344 304064
- Collectors' Car Parts, London. Tel: 020 8997 3774

- Affordable Classics, Essex. Tel: 01787 237887 or www.affordableclassics.co.uk
- Guldendays, Norfolk. Tel: 01603 881155
- Newford Parts Centre, Lancs. Tel: 01254 830343 or www.newfordparts.co.uk
- Ex-pressed Steel Panels Ltd, West Yorkshire. Tel: 01535 632721 or www.steelpanels.co.uk
- Ford Spares (Tending), Essex. Tel: 01225 830244
- Classic Components, Yorks. Tel: 01535 635829
- LMC Hadrian, Wilts. Tel: 01373 865684 or www.perfectpanels.co.uk
- Small Ford Spares, Vintage Supplies Ltd, Norfolk. Tel: 01692 650455

HISTORY

1953: 100E range introduced, with an all-new integral bodyshell and MacPherson strut front suspension, mainly as replacement for 'sit up and beg' models (though one of these continued as a low-cost Popular model until 1959). Anglia was the two-door model, Prefect the four. The Anglia had a three-bar radiator grille, while the Prefect was recognisable by its vertical bar arrangement.

1954: The Thames 5cwt van is introduced. On other models, chrome-plated surrounds to front and rear screens, and chromium plated wiper arms make an appearance, and there are detail changes to the interior.

1955: Escort and Squire Estate cars appear in October, plus the tougher Thames 7cwt van introduced. The Squire has wooden trims on its side to make it stand out as the 'luxury' version. Deluxe saloons introduced, with modified instrumentation, chrome headlight surrounds, chrome side trims. At same time the chrome windscreen surrounds were deleted from the standard models.

1957: All cars received a major facelift with a larger rear window, modified rear lights (saloons) and chrome-plated bumpers on all cars. There's a new mesh pattern radiator grille for Anglia instead of three-bar, which is chrome-plated on the Deluxe model. The Prefect retains the same grille, but here too it was chrome-plated on the Deluxe version. Other changes are a modified instrument panel, new upholstery colour schemes, plastic headlining instead of cloth, which is described by Ford as 'washable'. Deluxe models now feature – shock horror – a lockable glovebox and clothes hanger.

1959: The 100E Popular is introduced as replacement for the 'sit up and beg' Popular – essentially a basic car – with a price, including tax, of £494. That's £2 less than the Mini, and makes the Pop the cheapest 'real' car available in Britain. Identification points are its separate round rear lights, and Anglia-type grille. The Popular Deluxe (£515) features the following goodies NOT found on the standard Popular: opening quarterlights, boot locking handle, ashtrays front and rear, two sunvisors, door pulls and interior light. Gosh, the luxury... Later in the year, in October, the Anglia and 100E Prefect are discontinued, along with Squire estate car. The Anglia is replaced by 'reverse rake back window' 105E overhead valve model and the 100E Prefect is superseded by the 107E Prefect (using the 100E bodyshell but with the 105E's 997cc engine, gearbox and axle). The latter is available in Deluxe form only. Most 107Es had two-tone paintwork and a 'dogleg' chrome trim on the front wing phased in after the first two months.

1961: The 7cwt Thames van discontinued in January, followed by the 100E Popular, Escort estate car and Scwt Thames van manufacture in April. The end for the 100E bodyshell finally comes in May 1961, when the 107E Prefect goes out of production.

Insurance quote

For a £1500 1957 Ford Prefect 100E, based in Peterborough

- Fully comp. £124.50 for a 29-year-old, two years' NCB, clean licence, 10,000 miles, only car, kept on drive, club member
- Fully comp. £62.50 for a 50-year-old, full NCB, clean licence, 3,000 miles, second car, garaged, club member

Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

How much?

On paper, you'll pay around £1500 for a good 100E saloon, £1700 for a 107E and perhaps £2000 for a van or an Escort/Squire estate. Restoration projects start at under £250, but unless you want to do a restoration as a labour of love we'd recommend saving up for a good one – restoration will cost five or six times as much! Really rough examples still turn up surprisingly often for a car that left production 46 years ago – at the time of writing there are two on eBay for around £100 – but cars like this are usually seen only as a good source of spares.

That, though, is only half the story. For starters, it's really only the 100E saloons that appear on the open market with any regularity. The 107E Prefects are desirable because they're more useable (cruise at 65...) but scarce; partly because they were available only for about 18 months. More importantly, some 107E-only parts – most notably the front axle beam/subframe assembly – have for many years been very sought-after by people wanting to upgrade a 100E. Bolt a 107E beam onto a 100E and you can basically fit any Ford Kent engine – or a Pinto with a bit of modification. Any complete 107E is therefore likely to be worth at least £3-400, and will probably find a new home without the owner needing to advertise it.

The Holy Grail of the 100E world is, we understand, a 'woody' Squire and these do attract a significant price premium over the theoretical top price for an estate. Any estate car is, though, pretty rare and, in the real world, a good estate will sell for more than book price. More significantly, they tend to sell quickly by word of mouth and are rarely advertised...

These rare models are the one case where a full restoration might be justified; if you want a Woody but the only one you can find needs a rebuild you'll do it! Having said that, though, no-one we have spoken to in preparing this knows of any estate restoration project that is currently on the market! Projects exist – but they are with enthusiasts already!

Sadly, many 100Es have now lost their original registration numbers – all-too-common with older, low-value cars. Most buyers will prefer a car that hasn't been re-registered and will down-value one that has by 15-20 percent, though this is usually less than the number was worth!

These values are all for cars that are substantially original. Many 100Es have been modified – bigger/later engines are very common. These cars should be assessed on their merits – especially how well the conversion work has been carried out...

Verdict

One thing we need to get straight immediately – unless all your driving is on roads where you don't ever want to exceed 50mph, a standard 100E is not really ideal for everyday motoring in 2007. That, of course, is probably also true of most other cars of the era – though arguably it's more so here.

But that's not really what owning a 100E is all about. Rather, it's all about having fun with something that's old and different. So if you're going a longish way forget motorways and fast A roads, and plan your journeys to cover some of Britain's lesser-known byways. You'll take longer of course. But you'll arrive a lot more relaxed and I bet you'll have seen a lot more of Britain in the process!

There is, though, one semi-everyday use to which these cars can be put – some people have one as a second family car instead of the boring modern Nissan Micra or Peugeot 206. You'll use more fuel of course, and a car used in this way will need looking after (though DIY servicing and repair is, in the main, dead-easy) but I'd suggest that will be more than offset by the total lack of depreciation!

The other good thing about these cars is that they aren't exactly expensive to buy – as we've seen, £2000 will buy you a condition one car, and around half that a slightly scruffy but perfectly worthy and worthwhile running car.

The overall message, though, if your ultimate aim is a good car, is to buy the very best car you can find/afford to start with!

Ford Capri Mk1 and 2



Parts prices

All parts from ASJ

For Capri Mk1...

New front bumper	£125.00
New bodyside mouldings	£500.00
New rearlight unit	£150.00
New chrome roof mouldings, pair	£100.00
New rearchrome hockey sticks, pair	£150.00

For Capri Mk2...

New front panel	£295.00
New bonnet	£215.00
New nearside front wing	£175.00

Engines

Engines were carried over from the Mk1 to the Mk2, although the original 1600 unit was dropped in 1972 for a Pinto type, and the 2-litre V4 went the same way with the advent of the Mk2, its Pinto replacement being of approximately the same capacity. So, the types you'll find are Kent engines (1300 and 1600), a 1600 Pinto, the 2000 V4 or Pinto, and at the top of the tree, the three-litre V6.

KENT: The engines are always generally a little on the noisy side, but a lot of it from the valve gear points to worn cam followers, especially if there's quite a noticeable clicking involved. It's not just a case of new followers but also a new camshaft as well. Timing chains tend to rattle - but are at the front of the engine, so easily replaced if necessary.

Do the usual check for blue smoke from the exhaust, signs of worn valve guides and/or piston rings. Wear is most likely on the 1300 engines, simply because they need to work harder than the more powerful 1600. Don't be surprised to find any Kent engine has been tuned...they're one of Ford's most tuneable classic units.

V4: For a V-unit, these engines are quite rough, and not the best-liked of Blue Oval powerhouses. Try to see how the V4 starts from cold. Difficult starting points to an engine past its best. Head gaskets can be a problem, so check the dipstick and underneath the oil filler cap for signs of the two fluids mixing, and also look for oil and water leaks around the gasket.

During your test drive, keep an eye on the temperature gauge. These engines can overheat...one of the main reasons why the head gasket problems occur. Top end noise and bearing rumbles are other things to be somewhat concerned over...in fact, if you hear them, it's probably best to go looking elsewhere, as parts are harder to source for one of these than any of the other Mk1 or Mk2 engines, and consequently expensive because of that.

PINTO: The Achilles' heel of early Pinto engines is that the oil spray bar could get clogged up with old oil, meaning that the camshaft didn't get enough lubrication. A lot of top end noise is a sign of this. However, most have been modified by now...check with the owner to see if he or she knows if this has been done. Even if a better spray bar has been fitted, regular oil changes are still vital.

Look in the history to see if the cam belt has been changed at the mileage it should have been, and look for over-tightening of the cam cover, which can result in distortion and subsequently oil leaks. As the Pinto doesn't generally leak the black stuff, if there are signs of oil escaping, look at the cam cover first as the likely suspect.

V6: This is a tough old warhorse that doesn't have a difficult job carting a Capri around, so shouldn't suffer from too many problems. However, if it hasn't been looked after as per the service schedule, then overheating can set in, leading to a blown head gasket and even a cracked cylinder head. So monitor that temperature gauge, and do the same oil/water mixing observations as for the V4 type above.



Specification

Car	Capri 1 1300GT	Capri 1 1600GT	Capri 1 3000GT	Capri 1 RS3100	Capri 2 2000S GT	Capri 2 3000S
Year	1968-1974	1968-1974	1968-1974	1973-1974	1974-1978	1973-1976
Engine size	1298cc 4-cyl OHV	1599cc 4-cyl OHV	2994cc V6	3091cc V6	1993cc 4-cyl OHC	2994cc V6
BHP/RPM	72@6000	86@5000	128@4750	148@5000	98@5200	138@5000
Top speed	99mph	105mph	120mph	125mph	108mph	121mph
0-60mph	16secs	13secs	9.2secs	8.0secs	11.1secs	9.5secs
Gearbox	All models: 4-speed manual or 3-speed automatic					
Consumption	25mpg	25mpg	21mpg	20mpg	23mpg	

The Capri was the Ford's European realisation of the Mustang concept, and, in its own smaller way, just as successful as its US cousin. **RICHARD GUNN** cuts to the chase on buying the first two generations of Ford's classic sporty coupe, with advice from classic Ford specialist Roger Chinery of Affordable Classics

Transmission

Both the manual and automatic gearboxes are pretty "bullet-proof"...in fact, that's Roger's assessment of most of the mechanicals of the Mk1 and 2 Capris. Changes on the manual ones should be smooth, and the synchromesh shouldn't protest. Accelerate hard in each gear, then lift off...to see if the lever jumps out of gear. If it does, then either a new gearbox or a rebuild isn't far away. Automatic Capris are fewer and further between than their manual counterparts. Aside from checking the level and the cleanliness of the oil, look for the car hanging onto gears for too long. If the one you're testing does this, walk away...it's an expensive fix.

Roger does point out that on a test drive, you should listen for a noisy differential - either whining or clunks. "You will need to take the rear axle off to replace. It's quite an involved job as specialist tools are needed. But so long as the oil in the diff has been kept topped up, all should generally be fine."

A clonking while pulling away and/or changing gear is likely to be worn UJs on the propshaft.

Interior

"Mk1s are fairly easy to put right inside," says Roger, "as most of them are just black vinyl. Tan vinyl is a bit more difficult, but you can always colour the material. Mk2s are more of a problem because most of them had a cloth interior...and the older the car, the more unlikely it is you'll find a good match for the pattern."

"The top of the back seats often goes where they get the sun on them, and dashboards can crack...it's more likely on a darker interior because they attract the heat more."

In general, trim is not that resilient, and seats do have a tendency to split along their seams with age and use.

Further advice? "Always buy a car with the best interior you can find - the interior is actually more important than the bodywork, as you can always buy replacement bits for the body."

Try to lift the mats and carpets to check the floorpan "especially under the pedals and the equivalent area on the passenger side," according to Roger. "Yet more grit and dirt thrown up by the road wheels attacks here, plus there's also a seam as well that corrodes of its own accord." Also look at the area where the floorpan meets the sills. Advanced corrosion in the sills can spread to here. Carpets can suffer from damp, thanks to leaking door seals, and that can cause further corrosion in the metal underneath.



Bodywork

Fords of this era weren't known for the longevity of their bodywork, and the Capri conforms to all the usual Blue Oval corrosion rules. Says our expert Roger Chinery, "The Mk1 Capri goes rusty virtually everywhere, and the Mk2 isn't far behind it." He flagged up the front wings as the area to check first. "Look at the fronts of them, especially around the headlamps. There's also the front valance and behind it...and you can't get replacement panels too easily anymore." While you're around this spot, look at the anti-roll bar and bumper mountings as well. The panel under the windscreen also goes, and in serious cases, it can weaken the surrounding pillars too.

Another grot spot is the "lower rear quarter, behind the back wheels," a prime spot for stuff thrown up by the back wheels to attack. The front and rear of the sills are similarly affected for the same reason. "Look in from the wheelarch to see if there's any corrosion in this area." The wheelarches themselves - especially at the rear - have been known to suffer. It's worth taking a torch along to check underneath the arches for more concealed foibles.

The top of the A-post is known to rust, "something they have in common with the Mk3," comments Roger. Open the doors and try to move them up and down, while an assistant looks for play in the hinge pins or hinge mounts. The pins aren't too much of an issue, but if the mounts are at fault, it points to problems with the A-posts. Not easy to put right...and not cheap either.

Under the bonnet is quite a crucial area too, in a famous Ford rot zone. "Look at the strut tops. They rust...and are generally worse on the V6 cars because they have a reinforcing panel here. The four-cylinder models - which don't have this - are usually better." Take a look at the wing mounting rail too.

Doors should be checked along their bottom edges for rust and filler, both inside and out. Don't forget the sunroof, assuming one is fitted, although Roger's opinion is that Mk1 and Mk2 items are much less prone to corrosion than their Mk3 counterparts. "However," believes Roger, "if a Mk1 has a sunroof that doesn't work, it probably never will. They're a hell of a job to sort out if this is the case, as they weren't a factory fit. Still...you can always fit a Webasto instead. They look great on Capris!"

Something to be checked specifically on the Mk2 is the hatchback... because the Mk1 doesn't have one of course. Says Roger, "Check the gas struts on the tailgate are working. If it hits you on the head...it hurts!" With the booted Mk1, you should open the boot and check for rust around the rear window and the panel below it. On both types, look under the carpet at the wheelarches, boot floor and spare wheel well.

Roger's summary is that "basically, you have to look pretty much everywhere. But if a car looks well cared for, then it probably is." However, he did warn us that body parts for the Mk2 are more difficult to source than those for the Mk1, and headlamps are now getting difficult to find for both types.

Suspension

Before anything else, just stand back and look at the car from a little way away. A car that is sagging down at the back is in need of new leaf springs...and will make handling somewhat on the tricky side to say the least.

You can check for play in the steering rack by moving the steering wheel from side to side, while somebody holds the road wheel. If there's a lot of play, then it's likely a new rack is needed. Not much play probably just means worn trackrod ends.

"Capri suspension bushes don't cause too many problems. However, one area you should definitely check on the suspension is the front mountings of the rear springs...they can go very rusty."

It's simple enough here. "If the brakes work as they should, then they're probably okay. But even if they're not, everything is very cheap and simple to put right," says Roger. However, just give whatever pipes and hoses you can see a good perusal, and look for leaks as well as a low fluid level in the master cylinder.

HISTORY

1964 Ford of America launches the Mustang, to instant and very financially satisfying success. Within six months of the 'Stang's appearance, plans are put into motion to try and repeat the trick for the European market, with the idea dubbed Project Colt.

1965 Styling models of the Colt are built by Ford's three main studios in America, Britain and Germany. It's the US concept that eventually wins the day. Little surprise then that, in looks, it owes a lot to the Mustang that inspires its conception.

1966 The first working prototypes are built, after the Colt has been refined following customer clinics. Already in place are obvious future reference points such as the 'hockey stick' side moulding and the dummy louvres just in front of the rear wheels.

1967 A couple of last minute changes are instigated to make the new sporty Ford the car we know and love today. In response to comments about claustrophobia, the C-shaped rear window – one of the trademarks of the production car – is incorporated, and the name changes from Colt (already used on a Mitsubishi... ah, those heady days when the USA and Europe were completely unfamiliar with Japanese auto imports) to the already-used but now defunct Capri.

1969 The Capri is unveiled in a ceremony in Bonn – then the capital of West Germany – on January 21. Initial models in Britain are the 1300/1300GT (1298cc 4-cylinder) and 1600/1600GT (1599cc 4-cylinder), with the 1996cc V4 engine from the Corsair joining the line-up in March. European cars use entirely German V-configuration engines: three V4s of 1305cc, 1498cc and 1698cc, and two V6s of 1998cc and 2293cc. The really hot Capri – well, for this year at least – arrives in September in the form of the 3000GT featuring a 3-litre V6 'Essex' engine of 128bhp.

1970 Ford's obsession with the letter 'E' results in the 3000E, the top-of-the-range Capri with such joyous luxuries as... drum roll please... a vinyl roof, push-button radio, heated rear window, cloth seat inserts and even rear quarter windows that open! Power goes up on the 1300 and 1600 engines.

1972 The range receives a facelift with 152 modifications carried out. The old 1600 Kent engine is replaced by a 1600 Pinto unit.

1973 The millionth Capri is built, a little ahead of production of the RS3100 beginning. The Essex V6 is stretched to 3091cc to give 148bhp for this homologation special.

1974 The Mk1 Capri is superseded by the Mk2. Slightly larger in size and with a smoother body, the most significant change is the hatchback at the rear. Engines remain much the same as before, albeit with the 1996cc V4 of the 2-litre car changed to a 1993cc Pinto.

1975 The limited edition Capri S, based on the 1600GT, debuts, complete with all-black paintwork and darkened brightwork, with gold trim, gold badges and gold alloys. It soon becomes known as the 'Midnight' Capri. Lush...

1977 Time for ultimate flamboyant Capri 2, in the form of the Series X, with the 175bhp version of the 3000S V6 engine, improved suspension and brakes, and an extremely in-ye-face bodykit.

1978 The Capri 2 goes out of production, to make way for the Mk3 range.

Contacts

Clubs

- Capri Club International. Tel: 01386 860860 or www.capriclub.co.uk
- Capri Mk1 Register. Tel: 01676 541355 or www.caprimk1register.co.uk
- Capri Mk2 Register. Tel: 01707 336343 or www.freenetpages.co.uk/hp/capri2register/index.htm
- Ford Capri Enthusiasts Register. Tel: 0161 762 9952
- Independent Capri Enthusiasts. Tel: 01259 753203 or www.icecapris.co.uk
- The Ford Halewood Capri Register. Tel: 0151 495 3855
- Capri Club Scotland. Tel: 01555 894133, 07741 – 056308 or www.capriclubscotland.co.uk
- Scottish Capri Club. Tel: 01324 626162 or www.scottish-capri.co.uk
- Classic Ford Owners Club. Website: www.classicfordownersclub.com

Specialists

- Capri Care, Bucks. Tel: 01908 365560
- ASJ, East Midlands. Tel: 0115 9705 693, 07799 32354 or www.asj-enterprises.com

How much?

Fords generally aren't pricey classics – there were always too many of them around for values to ever sky-rocket. However, one particular type of Mk1 Capri does actually scale the heights marked 'expensive', and that's the RS3100. Potent and in production for just a year, very good examples can easily reach £8000 or more. However, with just 200 made, it's hardly surprising that these Rallye Sport cars are way above their counterparts in value terms.

Back in the real world though, Capris don't demand a lot of money. The Mk2 is something of an unloved sandwich filling between the Mk1 and the Mk3 Capri – think of it as supermarket budget crab paste – and so examples of it are the cheapest of the lot. You can be up and running in a reasonable Capri 2 for just less than a thousand, although at that kind of price, you're looking at a 1300 or 1600. Add £500 to a grand more for a 3-litre V6. Mk1s are more expensive...not so much for the lower-powered cars, but a very decent 3000GT, E or GXL can cost £3200 to £4000.

Verdict

The Capri is a love/hate car...and there's little point in us trying to convince those who believe a proper classic needs an upright chrome grille, lots of wood and leather inside and a five figure price tag, that they'll ever enjoy a tacky, tinny old Ford coupé.

But these days, as the Seventies becomes a much cooler decade than it actually was at the time, those on the side of the Capri far outweigh those who don't appreciate it. Its slightly tawdry image is all part of the fun now. It is an icon of its era, with the Mk1 and 2 models running almost the full length of the Seventies, and it's pretty much impossible not to find any Capri entertaining...although sometimes it can be a little tricky in one of the horribly underpowered 1300s.

We like the Mk1s because they are the Capri as Ford always intended, and the fussy bits like the 'hockey stick' side swathe and fake louvres are all part of what makes the Mk1 so great. However, we like the Mk2 because of its price...and, whichever way you look at it, that hatchback is very useful, especially if you've ever tried to manoeuvre anything remotely sizeable into the boot of a Mk1.

However, one thing we really like, whether it is installed in a Mk1 or a Mk2, is the 3-litre V6 engine. The Capri is a natural home for the Essex V6, and it does its job well. Perfect for getting the tail out...in the right conditions of course.

E-TYPE



Engines



THE engines need to be looked after, with regular and professional services, to give their best, so check for evidence of this in the paperwork. They're all pretty tough units – the V12 in particular – but if they've been abused, it can lead to very expensive repairs being necessary.

If the usual signs of wear – blue smoke, worrying noises, overheating – aren't there, then check the oil pressure gauge on the dashboard. If it is showing something like 40psi at 3000rpm, then all should be okay, although given the notoriety of E-type clocks to give slightly false readings, it's not a cast-iron guarantee.

Don't expect any XK engine to be oil-tight. Some of the whole old Jaguar thing is that you'll never have a spotless driveway again if you own one...but you won't actually mind too much. Part of the problem is due to overfilling – the original dipsticks actually read three pints too much at their maximum point, so

when the engine runs, the overfill makes a break for freedom. However, even if you top the car up properly, small leaks are still likely. The main one to worry about though is the rear 'rope' seal... if this is letting oil out badly, then the engine needs to come out!

We mentioned overheating previously, but we'll talk about it again because this is a vital point. After your test drive, leave the car idling and listen for the electric fans (or fan – as there is only one on the S1). It should cut in at degrees, and then go off again at 72 degrees. Be wary of an electric fan that stays on all the time...because it means that something is wrong with the cooling system and the car is running very hot.

The Series 3, with its alloy V12, needs regular coolant changes to protect the aluminium head from corroding. You may even be able to see the head 'sweating' liquid if things are too far gone inside. A good pointer to the state of the engine internals is to check the colour of the anti-freeze. If it's a rusty, muddy colour, then there's a lot of muck inside.

It would be nice to check oil pressure using a mechanical gauge, but if the dashboard one reads 60psi at 3500rpm, it's a good sign.

Specification

Car	S1 3.8 coupe/roadster	S2 4.2 2+2 coupe	S3 V12 2+2 coupe
Year	1961-64	1968-70	1971-74
Engine size	3781cc 6cyl DOHC	4235cc 6cyl DOHC	5343cc V12
BHP/RPM	265@5500	265@5400	272@5850
Top speed	150mph	136mph	143mph
0-60mph	7.2 secs	7.4 secs	6.8 secs
Gearbox	4 spd man	4spd man/3 spd auto	4spd man/3spd auto
Consumption	18mpg	17mpg	15mpg

Suspension. All models. Front: independent via lower and upper wishbones, torsion bars, telescopic dampers, anti-roll bar. Rear: independent via lower wishbone, radius arm, twin coil over shocks, anti-roll bar.

Parts prices

From David Manners, all include VAT

Exhaust system, stainless steel, S1 and 2	from £365.00
Exhaust system, stainless steel, V12	from £349.00
Timing chain, V12	£16.00
Timing chain tensioner, V12	£110.00
Oil pump, V12	£715.30
Front brake pad set, Series 2 & 3	£12.93
Front brake disc	£24.09
Clutch kit, V12	£155.10
Water hose kit, Series 1	£38.78
Steering rack, 4.2	£205.63
Bonnet assembly, Series 2	£4,123.08
Radiator assembly	£327.83

A legend in its own lifetime, RICHARD GUNN looks at buying the Jaguar that everybody wants, but few are brave or rich enough to actually get. This may help you with the former...

Suspension

MOST self-respecting E-types will be on wire wheels...all very nice to look at, but do check the condition of the splines by running your fingers over them, feeling for loose ones. And bear in mind how much of a nightmare it will be to look after chrome ones and keep them clean.

The steering should feel tight and direct, with little play apparent. If there is, then the likely cause is the Metallistic rack mounts. Use a good quality replacement, as some cheaper ones just aren't up to the job.

Power steering isn't plus on these cars...in common with a lot of Jaguars, its very light and makes an E-type very prone to oversteer. The cars feel just right with the wheels unassisted.

Vendor permitting (and he should if you're buying such an expensive car), jack up each wheel in turn to check for play in the wheel bearings and suspension bushes. Grasp diagonally and try to rock. The rear ones are the most important, as putting matters right here involves dropping the rear axle again...

The front wheels can suffer from play in the lower and upper wishbones (something else that will show up from rocking), which can ultimately lead to the suspension collapsing. However, this should be picked up at an MOT well before this stage.

If the back squirms when accelerating out of a corner, then suspect that the axle cage mounts are past their best, follow up any suspicions by looking for soft or broken mounts after taking the back wheels off.

Interior

ALTHOUGH practically everything is available for an E-type inside, prices can be high, especially if you're having to consider re-doing the leather upholstery. At least there's no wood to worry about as in other Jags of this era. Check around the sills for signs of water damage to the trim and carpeting. If there is some, then un-clip the door panel and look for a polythene sheet between this and the door frame. This should stop water getting into the car...and if it's missing or not fitted properly, then water will run in over the sill. Sadly, too few cars can have them now. Of course, it could also be down to a leaking hood on a roadster or a leaking heater pipe behind the bulkhead – an engine-out job to fix. The floorplan in general should be examined all over.

Check the vertical panel behind the rear seats. It's got trim over it, but give it a good poke to feel for crunchiness, especially around the bottom end where the inner seals are. Back up any assessment of this area by looking for rot at the front of rear wheelarches, too.



Bodywork

THE bodywork is the most significant aspect you need to check on an E-type. As beautiful as the cars look, they are also a nightmare to restore properly, and because doing the job properly can cost a fortune, many just skimp on the task and do a quick makeover. Welcome to the world of filler! A great guide to the general condition of a car is also to look under the filler cap – if a car has been cared for under here (and the paint is the same colour as the rest of the car) then you've probably got quite a good one. Unless the seller has also read this article...

Before anything else, stand back and look at the panel gaps. They should be fairly uniform all the way around. Any large gaps should be investigated thoroughly, and major opening panels such as the doors or the bonnet should sit straight all the way round. That's for restored cars of course...original cars can be forgiven the odd sign of slippage after 40 years, assuming there are no other major problems.

The outer bodywork can rot quite easily, unfortunately, so check it everywhere, such as the doors, bootlid and the very expensive bonnet, which isn't something you want to have to replace (or realign!). Rust can set in around the seams, and the bonnet should also open and close easily without you having to struggle. The front valance is a prime area for tinworm, thanks to its exposed location. Look in the bonnet too, for trouble under the interior boards and where the spare wheel sits. While coupe tailgates usually last a long time, boots on the roadster can prove less hardy.

Under the bonnet, look at the tubular frame that the engine and suspension are mounted to. It's a sort of subframe – but not quite. These tubes can rust from the inside, which will eventually lead to them cracking, so examine them from very close up, using a torch and one of those handy little mirrors that dentists are so fond of, to see the less accessible areas. This frame bolts to the bulkhead and the mounting points can occasionally suffer problems, especially the one under the battery tray which is attacked by acid.

Gearbox

THE Moss gearbox – found on 3.8 cars – has no synchromesh on first, and isn't a widely-liked transmission. They can get noisy as they age and also display a tendency to jump out of gear...and parts aren't that easy to come by either if a rebuild is necessary.

From the advent of the 4.2 litre, the cars were fitted with all-synchromesh Jaguar-built gearboxes, which were altogether much better and for which parts are more easily available if things go wrong. Automatic gearboxes – Borg Warners – are pretty robust, and so long as the unit is moving up and down smoothly, all should be well...although you could always check the oil to see if it is a healthy red colour and not burnt brown or smelly.

Clutches will probably feel heavy, but that's just how they are. Do feel for clutch judder or slippage though, and bear in mind that replacing the clutch is another engine-out job.

Underneath

GET underneath to check for structural problems, paying particular attention to where the radius arms connect to the floorplan. Corrosion here is dangerous, and if repairs have been carried out, they should have been done to a high standard, not just plated over. To only real solution to rust here is to strip the body down and then put anything right – not exactly cheap.

Brakes

It is very advisable to check the rear brake discs and pads. These are inboard and can easily become contaminated by oil from a leaky differential, resulting in an almost complete lack of assistance from the rear anchors.

Handbrakes rarely work that well. Often it's just poor adjustment of the complicated linkage, but more of an issue could be worn handbrake pads. If this is the case, then it's something you need to drop the rear axle for. Not fun at home – or cheap if farmed out.

The car should pull up straight and quickly when out on the road (although Series 1 cars don't have the best of brakes). If there's a pull to one side, suspect a seized calliper, especially if the vehicle hasn't been used much. Don't be surprised (in fact be very happy) to find that an E-type's brakes have been uprated. The price of a new bonnet can lead this to become a pre-occupation with E-type owners.

To check the servo unit on 3.8 cars, with the engine running, press the lever that is on the front of the device under the bonnet. It should concertina and the brakes will come on. That's if it is working obviously.

HISTORY

1956 Under the direction of Jaguar chief engineer William Heynes, Malcolm Sayer begins work in December on the first E-type prototype. Dubbed E1A (standing for E-type, 1, Aluminium), the car shows clear D-type influences, but is a larger creation. At the moment, it only has a 2.4 litre XK engine.

1958 A second E-type is completed, looking more akin to what will eventually be unveiled by Coventry. This one is known as the Pop-River Special, thanks to its steel shell being held together by rivets.

1960 A racing version of the E-type – the E2A – is completed, and used to race in Le Mans, driven by Briggs Cunningham

1961 The E-type – in coupe and roadster form – is launched at the Geneva Motor Show, to the general amazement of all those who witness the birth of this extraordinary new British sports car in the metal. Even more wonderful than the looks are the handling and performance thanks to the independent suspension and the 3.8 litre 265bhp XK engine capable of propelling it up to 150mph...or at least, so long as the press cars have been suitably tweaked by Jaguar first. A little under that level is more feasible for everyday cars, but the qualities of the E-type is still amazing for something costing only just over £2000.

1964 Engine capacity goes up from 3.8 to 4.2 litres, although horsepower stays the same. Torque does, however, go up, the brakes are improved and an all synchromesh Jaguar gearbox – in place of the previous, rather ponderous Moss unit – is fitted. Inside, adjustable seats make an appearance.

1966 A long wheelbase 2+2 model becomes available – although the back is best left to small children or adults of diminished height. This 'family' E-type also has the option of an automatic gearbox, to help boost US sales.

1967 New American regulations start to rob the E-type of some of its beauty, with the headlamp cowls being removed to allow better lighting. These cars retrospectively become dubbed Series 1 ½ versions.

1968 The final E-type has raised, one-piece bumpers, a bigger front air intake, larger indicators (now below the bumper instead of above them) and redesigned back lights. And those headlamps are still uncowed...

1971 The Series 3 E-type has rather more radical changes, in the form of a Jaguar's new V12 engine of 272bhp. This results in an even bigger, chrome-barred air intake and flared wheelarches, giving the E something of a middle age spread. In order to accommodate the hotter engine, the 2+2 chassis is used, with only the roadster and the 2+2 coupe now available. The roadster now also has an automatic transmission option.

1974 The final E-types roll off the production line at Browns Lane, with the last car completed in September. The last 50 cars are finished in black – except for one green one – and have a numbered dashboard plaque with William Lyon's signature on it. Replacement for the E-type is the XJ-S, which, in the opinion of many, isn't actually a replacement at all...

Contacts

Clubs

- Jaguar Enthusiasts Club 0117 969 8186 or www.jec-org.uk
- Jaguar Drivers Club 01582 419332 or www.jaguardriver.co.uk
- Jaguar E-type Club 01584 781588 or www.etyeclub.co.uk

Magazine

- Jaguar World Monthly, Kelsey Publishing 01959 541444
- www.jaguar-world.com

Specialists

- David Manners, West Midlands 0121 544 4040 or www.davidmanners.co.uk
- CF Autos, Kent 01322 387929
- SC Parts, West Sussex 01293 847200 or www.scparts.co.uk
- M&C Wilkinson Ltd, S Yorks 01777 818061 or www.jaguar-spares-uk.co.uk
- Classic Motor Cars Ltd, Shropshire 01746 765804
- Marcus Barclay, Bucks 01753 885582
- SNG Barratt, Shropshire 01746 765432 or www.sngbarratt.com
- Classic Jaguar Racing Ltd, Sussex 01797 22455
- Flying Cat Engineering, Herts 01767 631731
- West Riding Jaguar, W Yorks 01924 494400
- Fullbridge, Essex 01621 852320
- Haywood & Scott, Essex 01268 727256
- Classic Touring (rental), Kent 01892 529152

Marketing Trends

£55,000 - £44,000 – AS a classic with one of the best claims to the title of the world's sexiest car, no E-type comes cheap. There are just varying levels of expense, with the roadster the most financially demanding of all the cars, the coupes occupying the middle ground, and the 2+2s the cheapest of the bunch...although don't confuse 'cheap' with 'bargain'. They're still pretty pricey cars to purchase. The biggest money goes on the earlier cars, too...if you want a pure E-type, with cowed headlamps, it will cost you quite a bit more than one without these.

An E-type is one of those classics that is – almost – an investment, so long as you stay on top of its care and maintenance. There will always be a demand for these cars, and it's never likely to go away. The E-type price trend has more or less always been upwards, and it's only likely to continue that way, despite some of the underpriced examples that occasionally pass through auctions. There's usually a good reason...

Verdict

Whichever model you choose is going to be an utterly exhilarating classic. Even if you get a complete wreck and just have it on your driveway looking pretty, you can sit in it at weekends and make 'brmmmmmm' noises, an E-type is still likely to be more exciting than a lot of other, fully-functioning classics. They're that sort of car...they look like they're travelling at 100mph even when they're standing still.

The 2+2 is the cheapest entry ticket into this most exclusive of clubs, but if you've really got your heart set on an E-type, then you'll already have your own, very set ideas on what you want already. So our best recommendation is simply to buy the best example you can – look for great bodywork and, in the case of the S3 cars, a healthy V12 engine too. Otherwise your big cat dream will all too rapidly become a very cataclysmic financial nightmare instead.

Insurance quote

For an £11,000 1968 Jaguar E-type 51 ½ 2+2 based in Peterborough

- Fully comp, £100 excess: £448 for 29 year old, two years' NCB, clean license, 10,000 miles, only car, kept on drive, club member.
- Fully comp, £100 excess: £81.90 for 50 year old, full NCB, clean license, 3,000 miles, second car, garaged, club member

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JAGUAR XK8



Engines

Available from launch with a 4.0-litre, 32-valve V8 engine, this unit was a departure from the silky smooth straight sixes used by its predecessor. The supercharged version, introduced two years later, is even more sporting, with an engine note that's accompanied by a distinctive supercharger whine. The supercharger employed on these V8s is pretty basic but well engineered and we've yet to hear of one break. One issue to be concerned with is the upper timing chain tensioners - comprising a small plastic retainer, they can occasionally break leaving the chain running unsupported, which could very quickly result in it skipping a tooth and, in the worst case scenario, break and therefore destroy the engine. The timing chain tensioner design was changed progressively throughout the years (ones designed for the later 4.2 V8 engine are best), and most Jaguar specialists change them as a matter of course before selling on an XK but it's worth asking the question nonetheless. Water pump plastic impellers have been known to disintegrate leaving the engine effectively aircooled, something that won't work very well for long with an XK8. Later, 4.2 V8 style water pumps can be fitted to earlier cars. Finally, an issue that's been burning in the Jaguar press for years - Nikasil-lined engines. This low friction material is supposed to replace piston liners and produce a lighter engine with better power. But around the early to mid Nineties our petrol contained more sulphur than it does now, an ingredient that seemed to enjoy eating Nikasil for lunch. Couple this to the V8's tendency to run extremely rich when cold (sometimes too rich) and for those owners who merely poodled a couple of miles to the golf club and back would have been, unbeknown to them, slowly destroying this cylinder lining, ultimately leading to the engine's loss of compression. A brand new replacement engine was at one point the only option but specialists are slowly sourcing good secondhand units or in some cases rebuilding the old unit with a sleeved block etc. It appears that any V8 built from summer 2000 is completely in the clear but that does not mean that early ones should be shunned. Insist on a blow-by compression test, or ask when/if the engine has ever been changed. There's a green tag down the back of the engine near the bulkhead that denotes a replacement, and there's nothing to worry about if it has been changed. Finally, air conditioning condensers can pack up and, on early cars, this can prove a little pricey. The condenser's design was changed from 2000 model year, and the original version is no longer available. This means replacing it with a newer unit, which therefore also requires additional pipework. The bill for this is a chilling £1,000. On the whole, these engines have been known to be very sturdy with the correct maintenance, so a service history is essential; we know of one example that's passed 200,000 miles and is still going strong on its original engine.



Specification

Car	4.0 coupe/conv	4.0 supercharged coupe/conv	4.2 coupe/conv	4.2 supercharged coupe/conv
Year	1996-2002	1998-2002	2002-2005	2002-2005
Engine size	3996cc, DOHC	3996cc, DOHC	4196, DOHC	4196, DOHC
BHP/RPM	290@6100rpm	370@6150	300@6000	400@6100
Top speed	155mph (ltd)	155mph (ltd)	155mph (ltd)	155mph (ltd)
Gearbox	five-speed auto	five-speed auto	six-speed auto	six-speed auto
Consumption	24.1mpg	22.5mpg	24.9mpg	22.9mpg
Suspension:	<p>Front: Fully independent with unequal length double wishbones mounted to fully isolated front cross beam, coil springs, telescopic dampers and anti-roll bar</p> <p>Rear: Full independent double wishbone incorporating driveshafts acting as upper links, concentric coil springs, dampers and anti-roll bar</p>			

It's barely reached its tenth birthday and yet there's no doubt that Jaguar's XK8 has already developed a following fitting for a classic car, with growing club representation and specialists who look after them.

PHIL WEEDEN shows what to look for when buying one of these emerging icons

Wheels

The XK8 came on standard 17in rims, while the XKR sported 18in alloys. However, a vast majority were upgraded, with most normally aspirated cars upgrading to 18in rims (the car looks much better for it) while some R models went up to split rim BBS alloys of 20in diameter. All are often susceptible to kerbing so take a closer look and budget for a refurb all-round if necessary (between £60-180 per corner). The standard fit Pirelli tyres produce plenty of grip and seem hard wearing enough, but they do generate quite a bit of road noise and these XK8s are known to tramline on motorways. They're also expensive to replace - between £150-200 per corner.



Gearbox

The XK8 came with only one transmission, a dual mode ZF automatic 'box - five speeds up to 2003MY, six-speeds beyond that. The early box was subject to a couple of recalls regarding it losing forward gears and one, rather worryingly, where it appeared that there was a danger the car could lurch into reverse! This recall was preventative, as there were no cases of this actually happening, we believe. Check that the gearchange is smooth, that kickdown is employed effortlessly (it should be more immediate when Sport mode is selected) and that reverse engages smoothly and swiftly. Any disconcerting clonking or smell of gearbox oil should be treated with concern. On supercharged models, transmission fluid has been known to leak through an O-seal in the side of box, so when nosing around underneath be sure to check for any signs of fluid escaping.

Brakes

This is a car that tips the scales at around 1700kg (3700lbs to you if!) so if an XK8's been driven hard, it's probably had to brake hard as well on occasion. Consequently these sporting Jaguars can eat brake pads. Pedal feel is always progressive rather than sharp but they should pull the car up nice and square with no vibrations or loss of fade. A lot of people upgrade the brakes. Brembo was the favoured make direct from the factory but the likes of AP Performance and Hi-Spec are also worth considering. If there is one upgrade we'd recommend on the XK8, it would be the brakes.

Bodywork

While the XK resists rust far better than the XK-J5 ever did, there are now a few cases of floorpans requiring replacement sections. There's a double-skinned section up by the footwell, which traps water and ultimately starts to corrode. It's relatively minor and easy to repair, but it's worth keeping an eye out for it. One area that isn't affected by rust but is by stone chips is that exposed nose cone. Some specialists we know of have this resprayed before sale. Keep a lookout for any dodgy accident damage. Check colour match on the bodywork, see if all the glass is original, assess the door shutlines and run your eye down those curvy flanks to look for any ripples or imperfections. The only other thing worth looking for while you're inspecting is the door glass. It's meant to drop as you open the door and then slide up again when you close it; however, sometimes the second half of this function fails and you have the amusing scenario of being able to open the window just by opening and closing the door a few times.

Suspension

The rear suspension is derived from the X300-style XJ saloon, while the front was an all-new setup for Jaguar with self contained spring/damper assemblies. Typical of the marque, though, the trouble often boils down to the amount of rubber used beneath to give it the supple ride these cars are renowned for. A-frame bushes at the back, lower shock absorber mounts, front wishbone bushes and ball joints are areas that are susceptible to wear and tear. They dry and perish over time and the ride and handling therefore subtly diminishes. Parts are easily available and therefore replacing all of this is not too tricky nor expensive, but make it part of your inspection and budget for any replacement. It'll be worth it, as it will transform the driving experience from a wallowly old barge to the much tauter, sporting GT it was always meant to be. Finally, front wheel bearings can wear out from as low as 40,000 miles. They're not that hard to replace but a special tool is required.

Interior

Despite externally being a large car, the XK8 is rather cosy inside, with hardly any space for back passengers despite there being a provision for them. The interiors are a simple design and generally hard wearing. There were different choices of wood finish - burr walnut, grey maple and elm depending on model, while some had split wood/leather steering wheels, too. Aluminium packs comprising of trim for the gauges, J-gait surround and pedals were available from various aftermarket providers pretty much from when the car was new and available from the factory from 2003MY. The three centre auxiliary gauges are replaced by a satellite navigation system when specified. Generally the interior wears well and the gadgets inside are pretty reliable. Sometimes the digital display in the centre console can give up the ghost, you might get erroneous warnings up on the driver's digital display in the speedo, while the remote central locking can be temperamental. The front seats were made more substantial from 2001MY and are infinitely more comfortable than the early versions.



Parts prices

Prices courtesy of David Manners Ltd, Tel: 0121 544 4040

Front wheel bearings	£19.50
Front brake disc	£33.00
Timing chain tensioner	£9.25
Timing chain	£25.00
Wishbone bushes	£4.50
Shock absorbers (non CATS)	£105.00
K&N Filter element	£46.77

Contacts

Clubs

- Jaguar Enthusiasts' Club, tel: 0117 969 8186, www.jec.org.uk
- Jaguar Drivers' Club, tel: 01582 419332, www.jaguardriver.co.uk
- XK8/XKR Enthusiasts Club, tel: 01474 354623, www.xkec.co.uk

Magazine

- Jaguar World Monthly, tel: 01959 541444, www.jaguar-world.com

Specialists

- Paramount Performance (Service/Upgrades/Worldwide Shipping)
Tel: 01494 681363 www.paramount-performance.com
- SNG Barratt (parts), tel: 01746 765432
- Kings Road Garage (sales/service), tel: 01442 863851
- Paramount Performance (service/upgrades), tel: 01494 681363, www.paramount-performance.com
- Paragon Design UK Ltd (upgrades), tel: 01603 279027, www.paragondesignuk.com
- Classic Additions Tel 01938 561717 www.classicadditions.co.uk

- Racing Green Cars, (sales/service/upgrades), tel:01252 894773, www.racinggreencars.com

- Les Pauls Jaguar Specialists (sales/service), tel: 020 8505 5055, www.lespaulsmotors.co.uk
- David Manner (parts), tel: 0121 544 4040, www.davidmanners.co.uk
- Elite & Performance Jags Ltd (service/upgrades), 01332 265826, www.eapj.com
- Millennium Jag (service), 020 8688 8899
- Chilren of Bovingdon (sales/service), 01442 833311, www.chilrenltd.co.uk
- West Riding Jag Ltd (service), 01924 494400
- Marcus Barclay Tel: 01753 885582 www.marcusbarclay.co.uk
- S&P Auto Services Tel:01626 369 551 www.thejaguarspecialists.co.uk
- Jagutek Tel:01353 667147 www.jagutek.co.uk
- Nene Specialist Cars Ltd Tel: 01733 349042 www.nenesjags.co.uk
- The Jag Centre Tel:01603 893838 www.thejagcentre.co.uk
- Dorset Jag Centre Tel: 01258 858541 www.dorsetjagcentre.co.uk
- West Riding Jaguar Tel 01924 494400

HISTORY

1989: After much stalled development work (the project was first pitched in 1979), test mules of XJ41 are available for management to drive. The project has evolved enormously and the original styling has had to adapt, so it no longer looked as svelte as originally intended. It has also gained weight. Around the same time, Ford acquires Jaguar Cars and one of its first decisions is to scrap the XJ41 project for being too expensive, too heavy and not desirable enough.

1991: A facelift XJS is launched as a stopgap, while a new replacement project gets underway, dubbed X100.

1996: In a move that mimics the historic unveil of the E-type 35 years previously, the XK8 is revealed from a wooden crate at the Geneva Motor Show in March. The convertible is unveiled a month later at the New York Auto Show. Further details are revealed throughout the summer with the official onsale date scheduled for the October. It's available with an all new 4.0-litre V8 engine mated to a five-speed ZF automatic gearbox – just one model in two bodystyles is available from launch.

1998: The XKR is unveiled. Featuring a supercharged version of the 4.0-litre V8 engine, it's available in coupe and convertible and comes with Jaguar's CATS adaptive damping system as standard.

1999: Adaptive cruise control, which helps vary cruising speed in order to maintain a safe distance to the car in front is available for the first time as part of a minor range review.

2000: To mark Jaguar's ill-fated entry into Formula One, the XKR Silverstone is launched in the spring, available only in Platinum Silver paint work in coupe and convertible forms. Comes with bespoke badging, uprated brakes and a high level of equipment. Later in the year, the 2001 model year cars are unveiled, featuring a revised rear end with chrome trim on the tail lights and a similarly finished number plate plinth. Revised nose now has faired in fog lights. Inside gets bigger seats while new colours and new alloy wheel designs are also available.

2001: Celebrating 100 years since the birth of Jaguar's co-founder, William Lyons, the XKR 100 is unveiled. In Anthracite paint work and wearing bespoke badges just 1000 were made, split between coupe and convertible. Featuring a special interior with aluminium trim around the gauges and gear lever surround – it's the most exclusive XK yet.

2002: The 2003 model year cars are announced in the September, featuring a new 4.2-litre V8 engine and six-speed automatic gearbox. The normally aspirated car now boasts 300bhp (up 10bhp) and the supercharged car a staggering 400bhp (up 30bhp). New look Xenon headlights are optional to give it an even more menacing face. More equipment, more interior trim and alloy wheel choices are now available.

2004: Eight years since the launch of the XK8, a final facelift is unveiled. Featuring a revised nose with new lower spoiler design and matching rear and side fairs.

2005: Celebrating another triumphant season of Trans-AM racing in the USA, the XK Victory Limited edition is launched Stateside. This translates to the 4.2 S models this side of the Atlantic, available in both standard and supercharged guise, coupe and convertible, this is very much the runaway model in the same way as the Celebration models were for the XJS. Production of the XK ends in the May, after over 90,000 models were produced, making it the most successful Jaguar sports car of all time.

2006: The all-new aluminium XK goes on sale

Market Trends

Now it's out of production, the XK8/R is passing into that phase where prices will vary enormously. From a real down-at-heel example worth £8000 to a fully specced out last of the line worth £55,000. Prices will inevitably tumble for the time being, while the market becomes flooded with XKs that have been traded in for the all new model. But slowly but surely, as happened with the XJ-S before it, the really good ones will start to firm up in price, while the real dog rough examples will collapse into obscurity. That's why now's the time to buy – there are loads around and prices are still keen, so you can afford to be ultra choosy.

Driving

The XK8 and XKR are no Porsche chasers, so do not expect a hard, sharp edged sports car. What you have is a finely honed sporting grand tourer. Well set up, these heavyweight coupes can still hustle along at a surprising rate of knots, with good composure through corners, reasonably weighted power-assisted steering, excellent grip and a compliant ride. Refinement is excellent and comfort is beyond reproach. This is a car that can handle thousands of miles with consummate ease. Convertibles suffer from scuttle shake, so we prefer the coupe for the driving experience even if the soft top nabs it for pure desirability. The XKR is fiendishly fast, so beware of your clean licence, which might not stay that clean for long with perpetual exploring of the R's upper limits. The instant acceleration and thrill of kickdown is an addiction that can be hard to shake. Standard on XKR8s and optional on the normally aspirated was Jaguar's CATS active damping, which firmed up the suspension at speed. Some people find this makes the ride too firm; too firm for a Jaguar at any rate. Another factor which influences that legendary 'magic carpet ride' is fitting larger wheels. The XK's high ride height means that many people opt for lowered suspension and bigger, 19- or 20-inch alloys, which affect the ride noticeably. It's still a great car to drive, though – a brilliant boulevard posemable, or stylish cross-continental cruiser, the XK8/R has driver appeal in spades.

Verdict

A Jaguar which doesn't rust and is generally reliable – it will never catch on! The good thing that, despite this newfound longevity, the XK is still truly desirable, great to drive – fast or slow – and there are plenty about so you can afford to be picky. There's a wealth of specialist support for these vehicles and they're already proving to be a classic in waiting, so we reckon you should get in there now while there's still a flood of good ones. Choose a 2001MY on for the better cars, convertibles obviously fetch more money and, for true collectors status, pick a limited edition model such as an XKR 100, Silverstone or 'S' runaway model.

Insurance quote

For a £12,000 1996 XK8 4.0 coupe, no modifications, based in Peterborough

- * Fully comp. £100 excess: £1039 for a 29-year-old, two year's NCB, clean licence, 10,000 miles, only car, kept on drive, club member
- Fully comp. £100 excess: £162 for a 50-year-old, full NCB, clean licence, 3000 miles, second car, garaged, club member

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JAGUAR XK150

Driving



By the time the 150 came along, the XK range had grown up – matured, even – into more of a GT car than an out-and-out sports car. But never mind, because these are still thoroughly entertaining and enjoyable cars to bask around in, even if they are a little on the heavy side. There's still a big element of chuckability to them, coupled with the slightly tall happy characteristics that give just a touch of uncertainty on fast corners or in wet weather. But that's all part of the fun in a way... just the sense of unpredictability. What is predictable though is how they behave in a straight line. With that classic 3.8-litre warhorse tucked away beneath the bonnet, the power and torque is considerable, so one of these will still be capable of surprising and embarrassing many a newer, supposedly sportier car, while also being perfectly at home burbling around town at a sedate manner. Whatever your velocity though, one thing you can be sure of is that, thanks to the all-round disc brakes, an XK150 will have tremendous stopping capabilities to help keep you out of trouble!

Engines

The engine is the XK of course, but it does come in varying levels of intensity. There's the standard 3.4, the 'S' version with a few nips and tweaks, the Special Equipment model with a lightened flywheel and cylinder head changes, and then it moves up to the 3.8, in standard and 'S' specification. But basically, most potential maladies are applicable to all the engine types

On these big-engined cars, overheating can be a problem, so monitor that needle on any test drive. One reason for this could be rusty core plugs, something these cars can be afflicted by quite easily. So look for rust streaks around them in the engine bay or, if the trouble is really quite bad, actual weeping. On some cars you'll view, you may find an electric fan has been fitted. It's actually quite a sensible modification – so long as it has been done properly, and isn't being used to simply mass inherent temperature problems. Because these cars are so low to the ground, the exhausts can be easily damaged, and a leaking system will sap power as well as be very noisy. If you hear a whistle though, it's a leaking manifold... so long as you're not hearing the dynamo or water pump complaining of lack of lubrication. The water pump is quite a tricky one to change.

If you hear some tappet noise, great. If you hear a lot of tappet noise, not so great, but be wary of no noise at all, as it implies the clearances have closed up and there's valve seat recession.

Rattling timing chains are quite common, but if it is coming from the bottom chain, then be prepared to have this done soon. Otherwise the tensioner block can drop out, allowing the chain to come off, and result in a major engine rebuild.

A misfiring engine may be simpler than you think – because of its position in the engine, the distributor cap can come off, and it's not easy to reach and put back on. Have a look... just in case. A potential cause of an uneven tickover is more likely to be badly adjusted carbs – they can be difficult to balance – or worn spindles, which cost a lot to replace.

Don't expect any XK engine to be oil tight. It won't be, and in a way, that's all part of the charm. So long as it's not gushing out and oil pressure is around 45psi at 70mph, then all is probably quite well. Rear crankshaft oil seals can develop leaks (which will make the clutch take up less than smooth) and to put it right means taking the engine out.



Specification

Car	Jaguar XK150 3.4	Jaguar XK150 3.4S	Jaguar XK150 3.8S
Year	1957-1960	1958-1960	1959-1960
Engine size	3442cc 6-cyl DOHC	3442cc 6-cyl DOHC	3781 cc 6-cyl DOHC
BHP/RPM	190@5500	250@5500	265@5500
Top speed	121mph	132mph	136mph
0-60mph	9.5secs	8.9secs	7.6secs
Gearbox	All models: 4-speed manual plus overdrive		
Consumption	20.5mpg	17mpg	13mpg
Suspension:	All models: Front: Independent by torsion bars, wishbones, anti-roll bar, telescopic dampers. Rear: Live axle, leaf springs, telescopic dampers.		

Parts prices

All prices from David Manners and include VAT

Brake servo, reconditioned,	£352.50
Front brake pad set,	£51.70
Brake pad disc,	£41.99
Lumination electronic ignition conversion kit,	£146.88
Kenlowe electric cooling fan kit,	£138.42
Three-piece clutch kit,	£158.63
Fuel pump repair kit,	£33.38
Fuel pump, positive earth,	£178.95
Top ball joint,	£41.95
Top wishbone bush,	£5.29
Track rod end,	£15.22
Koni front shock absorber,	£78.73
Rear road spring,	£58.16
Chrome wire wheel,	£205.00

Ultimate expression of the Jaguar XK sports car theme was the XK150 of 1957 to 1960.
RICHARD GUNN looks at buying the most sophisticated member of a legendary bunch.

Gearbox

The Moss manual gearbox isn't the best-loved of Jaguar items, but it's tough enough. However, you should expect tired synchromesh – around second most of all – as well as a ponderous gear change. Whining from first and reverse is quite normal, but if the gearbox is very noisy throughout the gears, then the transmission is on its way out.

Overdrive problems are usually just oil starvation or the electrical solenoid playing up. It's usually the latter, and it's not difficult or expensive to replace if necessary.

Suspension/steering

Because the 150 was a heavier car than previous XK incarnations, the rear springs can sag or even break. There is a way of checking that the ride height is as it should be, assuming the car still has its original 17-inch wheels on, and not the 16-inch ones that are a popular fitting because their radial tyres are cheaper. Anyway, you should be able to get two fingers in between the tyres and the rear wheelchairs. Anything less, and things are going a bit floppy underneath.

Other things to look out for include worn Metalastik bushes – listen for clonks from the front end. Worn balljoints also make similar noises. Front wishbone bushes also go in time, and are hard work to replace.

Sloppy steering can be down to worn steering rack rubber mountings – you can try waggling each track rod end to see if the bushes at either end are slack. Alternatively, if you've got a friend handy, have him wobble the steering wheel, while you look at the rack and see if any of the wheel movement is getting lost.

If you hear a clonk from the rear, then expect loose shackles or U-bolts securing the springs.

Hub splines on the wire wheels can wear, likely to be more at the front than at the rear. Check by hand, and also lift off the throttle at about 30mph, then quickly apply power again. If there's a clonk from a relevant area, then expect all is not well. The security of the splines is quite important, as if they are too worn, the wheel can fall off under heavy braking. Which isn't a nice thing to happen.

After the hubs, check the spokes by tapping them with a screwdriver. Yes, it will take a long time to do all the wheels, but it's worth it, as a dull thud means looseness.

Brakes

Disc brakes on all four wheels was quite a radical innovation on a car of this era, especially with servo assistance too. It means that the XK150 should be very, very good at stopping. If it isn't, then things need to be investigated. One possible suspect is the air filter for the servo (above the battery in the front wing), which can get clogged up. Cleaning it can do wonders sometimes. The car diving off to one side though, when the brakes are applied suddenly, points to a seized caliper thanks to too much standing around doing nothing for too long. The caliper on the rear discs that is controlled by the handbrake isn't great at all. Be prepared for some battles with the MoT man, and constant adjustment. Try the handbrake before you buy, just to see how much of a struggle you're going to have come test time.

Bodywork

There's a mixture of materials on these cars: steel, aluminium (bonnet and bootlid) and even plywood (front floor). Obviously, the aluminium won't rust, but it can have a reaction where it meets steel, so look around such areas for signs of the metal going powdery.

Before going in close, step away from the car to see that everything is hanging together as it should. The bottom of the wings and the doors should like up well, and the top curve of the sides should be elegant and smooth too. A restored car where this isn't the case points to either a job not done as well as it could have been, or even subsequent accident damage.

Now it's time to go in and look for rust. Start around the battery boxes – there is one in each wing. These get attacked by battery acid and can get seriously corroded as a result. Turn the wheel on full lock each way so you can really have a good nose around underneath.

Because the doors are heavy and the hinges not that strong, check for sagging doors and attempts to repair by cutting into the front wings. Rotten

A-posts can add to this – they tend to start rusting at the bottom, and then gradually start to disappear up towards the top. A lot of lift at the hinge will indicate this.

B-posts too join their A-post counterparts by starting to go crinkly from the bottom upwards, but there is at least a cover panel that allows you to look for any problems. Oh, and doors. Those things in between. The bottom four inches can start to go rusty, and frames can suffer problems on earlier XK150s that had wood at the top.

Rear wings where they attach to the B-posts can go nasty, and tinworm can also strike where they meet with the rear tub.

Suffice to say, sills should be thoroughly checked out, as should the neighbouring floorpan, the bit that is steel, not wood of course. The metal section is under the seats.

Interior

As basic as these cars are compared to other, bigger Jaguars, with all the leather inside, they will cost a lot to retrim if necessary. Upwards of £3500 is a realistic figure for a good job on a fixed-head coupe. The leather can get damaged by objects in people's pockets, and because the dash has leather on it too, this can end up looking a little scruffy after a number of years. But there are no serious flaws to look out for, and even if gauges do go on the swanny, then you can buy almost anything new for one of these cars.



Chassis

The chassis are strong enough, thanks to them being based on the Mk V/VII frame. However, there are some weak points. The anti-roll bar mountings at the front go, as do the rails behind the rear axle. You might be able to see any trouble without even getting under the car – look for twisted bodywork from the front and bank, sure sign of a frame that isn't nearly as tough as it once was.

HISTORY

1948 It's the dawn of a new era at the London Motor Show, with the launch of an astounding new car. But enough of the Morris Minor, for the Earl's Court venue also sees the debut of Jaguar's 120mph-capable XK120 sports car. Originally intended as a concept car to showcase the firm's new XK six-cylinder engine, such is the interest in the sexy, sleek new Roadster, that the decision is made to put it into production.

1954 The XK120 is updated into the XK140, although unlike the 120mph the previous car was capable of, the new XK can't actually manage to achieve 140mph. The looks remain pretty much the same, although there is more room for both passengers and luggage.

1957 It's time for the XK150 (and, no, it can't do 150mph, it would take its successor to achieve this magic figure), available in fixed-head coupe and drophead coupe form. The design changes are more obvious than they were with the previous metamorphosis, with a single windscreen and a less curvaceous wing line the main indications of something fresh going on. Under the skin though, other changes have been carried out, with disc brakes appearing all around, meaning the XK150 can stop just as well as it goes.

1958 A Roadster joins the team, and becomes very popular abroad, especially in places with much less rain than Britain. It's quite a primitive machine, but one bonus is that it comes in 'S' trim – which means a tweaked cylinder head, triple SU carburetors, a lightened flywheel and new manifolds.

1959 'S' specification becomes available to the whole range, meaning that power now hovers around the 250bhp mark. However, that isn't impressive for long, when the XK engine is enlarged to 3.8-litres and made available as an option. 265bhp is the figure now banded about for that. There are a few brake changes as well to accommodate these changes, and, cosmetically, the bumper overriders at the back are moved more closely together and the rear lamp clusters are enlarged.

1960 The XK line comes to an end, to be superseded by the E-type Jaguar. Well, if you have to replace a great car, you might as well do it with something even more spectacular... A total of 9398 examples have been built overall, with the grand XK total being 30,504.



Insurance quote

For a £22,000 1958 Jaguar XK150 fixed-head coupe, based in Peterborough

- Fully comp, £100 excess: £519.00 for a 29-year old, two years' NCB, clean licence, 10,000 miles, only car, kept on driveway, club member
- Fully comp, £100 excess: £80.85 for a 50-year old, full NCB, clean licence, 3000 miles, second car, garaged, club member

Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

Contacts

Clubs

- Jaguar Drivers Club, Jaguar House, 18 Stuart Street, Luton, Bedfordshire, LU1 2SL. Tel: 01582 419332 or www.jaguardriver.co.uk
- Jaguar Enthusiasts Club, Abbeywood Office Park, Emma Chris Way, Filton, Bristol, BS34 7JU. Tel: 01179 698186 or www.jec.org.uk

Specialists

- Guy Broad, Coventry. Tel: 01676 541980 or www.guybroad.co.uk
- SNG Barratt, Shrops. Tel: 01746 765432 or www.sngbarratt.com
- David Manners, West Midlands. Tel: 0121 544 4040 or www.davidmanners.co.uk
- Flying Cat Engineering, Cambs. Tel: 01767 631731
- Marcus Barclay, Berks. Tel: 01753 885582 or www.marcusbarclay.co.uk
- Worcester Classic Spares. Tel: 01905 821569 or www.worcesterclassicspares.co.uk
- Rectory Racing Classics, Surrey. Tel: 01737 643027
- Coventry Auto Components, West Midlands. Tel: 02476 471217 or www.xk-parts.co.uk
- Classic Touring, Kent. Tel: 01892 529152 or www.classic-touring.co.uk
- Camberley Marine and Sports cars, Hants. Tel: 01252 612245 or www.cms-gb.com
- XK Engineering, Coventry. Tel: 02476 622288 or www.xkengineering.com
- Contour Autocraft, Cambs. Tel: 01406 330504 or www.contourautocraft.co.uk
- Leaping Cats, Coventry. Tel: 02476 313139
- VSE: The Jaguar Engine Specialist, Powys. Tel: 01597 840308 or www.vse-engineering.com

Magazine

- Jaguar World Monthly, Kelsey Publishing, Kent. Tel: 01959 541444 or www.jaguar-world.com

Market Trends

The Jaguar XK150 is the cheapest variant of original XK sports car. But it's all relative, because none of these cars are exactly cheap in the conventional sense. Go for a really nice Roadster, and you'll find yourself spending the best part of £50,000 to get one of the best. The tin top cars are a more financially reasonable proposition, but you'll still find yourself parting with at least half of that 50-grand. The entry cost is cheaper if you go for a basket case, but do you really fancy spending around £10,000 for something in a real state that might not be able to do anything except sit around staining your driveway with oil and looking sorry for itself?

Add more to these prices if you're considering an 'S' specification model – just that bit of extra power can raise prices quite a bit. For the 3.85 Roadster, you could spend up to £60,000, believe it or not.

Still, once you have got a good XK, so long as you look after it, there shouldn't be any worries about losing money. Prices have been either constant or on the rise for years, and show no signs of stopping soon. One of these Jaguars isn't exactly an investment...but it is at least something you can enjoy while having to worry too much about how much money is disappearing off its ultimate value.

Verdict

If you've got the money to buy one of these cars in the first place, and enough to look after it while you are its custodian, then it's difficult not to recommend one of these cars? They're the thinking man's alternative to an E-type, less obvious, and, in the eyes of many, just as beautiful to look at, if not more so. The 150 represents the ultimate expression of the XK sports car line, with many improvements carried out that make it nicer to drive, easier on the occupants and certainly better-performing. Most of the remaining examples are now well-cared for, so finding a prime example of whichever type you want shouldn't be that much of a tricky proposition.

And what would we recommend? Well, we rather like the fixed-head coupe because the curve of that tin-top is just so lovely. But that's just aesthetics, and most people won't be satisfied with an early Jaguar sports car unless it's open to the elements. The drophead coupe has rather more sophistication than the Roadster, but whichever type takes your fancy, the important thing is to buy the best you can, and make sure you avoid a quickly made over mess. Because one of those will cause a lot more heartache than the fun that these cars usually offer.

GET YOUR FILL!

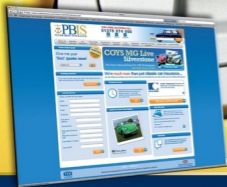
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Buyer's Datafile: Jaguar S-type/420

THE Jaguar S-type/420 took the finer parts from its siblings, such as independent rear suspension donated by the Mk X and the legendary six-cylinder twin cam engine from the Mk2, but for some reason it never got the same credit. **ADAM TAIT** tells us what to look for and why you should buy one

JAGUAR was on a roll in the Sixties, with the introduction of the Mk2, sporty E-type and larger than life Mk X. So what was it going to offer the public next? Well, William Lyons put the best ingredients of all three in an automotive food blender, waited until September 1963 and announced his new flavour - the S-type.

Given this car's moderate success, Jaguar looked towards another area of the luxury market

a few years later. Using the S-type as a base, the 3.8-litre engine was binned in favour of a 4.2, the interior was spruced up and a new front end was grafted on. And by October 1966 Britain had a more compact version of the sprawling Mk X, the 420. Visually it was a shrunken version that had the looks but could fit in a single garage and cope with country roads without occupying the oncoming lane as well.

Daimler also got in on the act, renamed it the

Sovereign and subtly changed exterior features and adorned it in Daimler badges - further enhancing the 420's luxurious image.

If you are put off by the larger than life Mk X and prefer the Mk2's more elegant front end, opt for an S-type. Alternatively, for those that yearn for the masculine looks of the MKX without its huge dimensions, buy the 420. In the meantime we'd recommend reading this guide because it applies to both cars.

Is it a classic?

INDEED: Any Sixties Jaguar is considered a classic and although passers-by won't know it, the S-type/420 does everything better than the Mk2 barring straight line performance, so a smug expression can be on display when at the wheel.

To back up its classic status is the modern day remake of the S-type. Okay it may have a Lincoln LS saloon floorpan, but Jaguar hasn't brought out a new model and named it the Mk2, has it?

What's out there?

THERE are only four variants to choose from. The 3.4 and 3.8 S-type in manual or automatic, the 4.2-litre 420 and Daimler Sovereign - the only difference being a fluted radiator grille with centre strip, and several Daimler badges. 420s are cheaper than the more sought-after S-type so from a buyer's point of view they suddenly become attractive.

What to look for?

LIKE most cars from the Sixties, don't expect your new purchase to be trouble free. Rust is the Achilles' heel of any car this age that hasn't been dry stored and wrapped in cotton wool from new. The S-type/420 suffers from sagging suspension, petrol tanks that dribble fuel, oil leaks and corrosion. So pay attention, class!

1) ENGINE: XK engines are renowned for starting first time. A rattle at the front of the engine will be timing chains, the bottom is controlled by hydraulics and increased wear can lead to the adjuster letting go. While you're down there, crawl underneath and see if the front crank seal is leaking, this could be a number of things such as a blocked breather pipe or worn main bearings. Be wary of noisy tappets, it could be a case of poor valve clearance but a more prominent sound could hint at tired tappet guides. A £62 retainer kit from Rob Beere Racing will keep them in place until the time is found to repair them.

2) GEARBOX: Ensure the Borg Warner three-speed auto doesn't snatch from pull away and each gear can be selected with ease in the manual. A reluctant shift hints at a worn synchromesh.

3) BRAKES: Servos can fail resulting in a heavy brake pedal. Check for the universal faults such as warped discs, signified by a judder through the pedal.

4) SUSPENSION: Is it sitting square? Don't expect to find someone of a large disposition sitting in the car. Jagged 420/S-type are signs of droopy springs and dampers or collapsed suspension bushes. Rear UJs can often be faulty due to poor quality pattern parts. If the UJ doesn't have a nice recess in the casting to house the grease nipple then expect a short life expectancy and a lively rear end. Jack the car up and try and rock the rear wheels, if the camber angle changes then it's replacement time.

5) BODY: Jack the car up and put it on axle stands. Crawling underneath, inspect the petrol tank brackets for a wet substance - if it is petrol then rust has taken hold of the fuel tanks. A pint or so of water can accumulate over four years, which will rust the tank inside out so make sure they get drained out. Replace the fuel filters every 10,000 miles and clean the filler breather pipe using an airline.

Check the jacking points, silk, front cross member, and Y-mount on the rear subframe for corrosion. Examine the front valance, doors and rear arches for rust or signs of previous repair, such as filler. A magnet will give away what material is beneath the paintwork!

6) INTERIOR: Unsurprisingly, most of these cars equipped with leather or Ambia, which is a type of vinyl hide wannabe used on later cars as part of a wallet-clenching exercise. Cracked leather can usually be treated but ripped seams and more severe

cases are best left to a specialist. Sagging headlining can be replaced but be careful when replacing veneer items as it is hard to find a close match.

The parts situation

THE word Jaguar usually sends a shiver down the spine when a parts price is spoken of, but thanks to a number of specialists catering for the enthusiasts cars are never thin on the ground. We spoke to Independent Jaguar specialist Derek Watson to find out how much it costs to keep a 3.8 S-type in healthy condition:

Oil filter	£4.00
Air filter	£5.25
Fuel filter	£7.00
Rear UJ	£19.30
Rear spring	£20.00
Front spring	£35.00
Brake disc set	£90.00
Brake pad set	£59.00

Contact

PARTS

- Ken Jenkins Jaguar Specialist - 01629 640000.
 - Derek Watson Independent Jaguar Specialist - www.derek-watson.co.uk or 01629 640076.
 - Hollygrove Jaguar - 01425 477000
 - Flying Cat Engineering - 01767 631699
 - Marcus Barclay 01753 885582
 - West Riding Jaguar - 01924 494400
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- Jaguar Drivers Club - 01582 419332

■ Jaguar Enthusiasts Club - 017 969 8186

MAGAZINE

■ Jaguar World Monthly - 01959 541444 or www.jaguar-world.com

What should I pay?

PRICES kick off at around the grand mark for the 420, £1500 for the 3.4 S-type and add another £1000 for the desirable 3.8 model. For that money a restoration will be on the cards but scour the CCW classified sections for the occasional bargain. Our sister title, Jaguar World Monthly, has a rot free 3.8-litre Britch Racing Green example that needs finishing for just £1,500. Above that is a mint, 42,000 from new, 420 Daimler Sovereign. The asking price? £4995.

Should I buy one?

GLN for the manual 3.8 S-type in a luxurious shade like dark blue or the cheaper 420. It may not be a Mk2 and it isn't trying to be either. The S-type/420 offers more room and the boot can consume more cool boxes and collapsible chairs, so it's perfect for shows and you can invite all the family. Concerning won't be a chore either, the IRS makes it a joy. After all, these cars were the ultimate getaway motors in The Sweeney. I mean, who can forget the chase in Stoppo Driver with Regan's Granny and RBP 282E, an S-type on steel? It's hard not to be a fan of that twin-cam XK engine...



MODELS	VEHICLE	PRICE	DATE	PRODUCTION COUNT
	3.4-LITRE S-TYPE	£1669 NEW	1963-1968	9928 PRODUCED
	3.8-LITRE S-TYPE	£1758 NEW	1963-1968	15,065 PRODUCED
	420 SALOON	£1930 NEW	1966-1968	10,236 PRODUCED
	DAIMLER SOVEREIGN	£2121 NEW	1966-1969	5824 PRODUCED

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LOTUS ELISE SERIES 1



Engines

Ah yes, the Rover K-series engine. Legendary for its cooling abilities, or rather lack of them, and not, perhaps, ideally suited to a mid-engined car where air flow can be impeded. The big problem is, of course, a blown head gasket, but faulty header tank caps, worn-out radiators, air in the system, non-functioning fans, incorrect temperature readings can all cause the driver to get hot under the collar as well as the car. If the car you're contemplating does seem to be running warm, then it's vital that you investigate further. Overheating can easily prove deadly to the engine.

Back to those head gaskets, make sure you look for signs of water in the oil and vice versa, plus white smoke from the exhaust. Misfires and other smoke can be caused by the plastic intake manifolds leaking coolant from the o-rings (often mistaken for head gasket problems as the symptoms are the same), or cracked cylinder liners caused by constant over-revving. Either way, this is not the car for you, go and look elsewhere.

Oil leaks can strike between the gearbox and the engine, thanks to failed crankshaft sealing rings. Cam belts should be changed every 54,000 miles or six years, but most experts advise doing this before that limit is reached, especially if an Elise has been enjoyed 'properly' in the past. Check service history to see when the cam belt was last changed on the example you're looking at.

Throttles can sometimes stick open a tad between 2000 and 3000rpm, thanks to muck building up within the 'butterfly' or the body of the throttle itself becoming a little distorted – thanks to heat or the clip that holds the induction pipe on being replaced with an overtight jubilee clip as a result of a cone air filter being fitted. However, the ECU can also cause similar problems, although check out the mechanical faults first before blaming the expensive electronics. It can make a handy bargaining point though.

Fuel injection pump fuses on the older cars are only rated to 10amps (changed to 20amps for post 1998 cars). If this fuse blows – which it can do quite easily on pre-98 models – it will disable the car. Not so much something you need to know when buying, but handy to know so you can pop into a local motor factors before you drive home after buying an Elise.

Specification

Car	Elise	Elise 135 Sport	340R/Exige
Year	1995-2000	1998-2000	2000
Engine size	All Models: 1796cc 4-cyl DOHC		
BHP/RPM	118bhp@5500rpm	135bhp@6200rpm	177bhp@7800rpm
Top speed	126mph	129mph	136mph
0-60mph	5.8secs	5.4secs	4.4secs
Gearbox:	All models: Five-speed manual		
Consumption	39.8mpg	40.9mpg	40.9mpg

Suspension: All models: Front: Independent by double wishbones with single coil springs over monotube dampers, Lotus-patented extruded aluminium uprights, anti-roll bar.

Rear: Independent by double wishbones with single coil springs over monotube dampers, Lotus-patented extruded aluminium uprights, toe link

Parts prices

All prices from Paul Matty Sportscars and include VAT

Front clamshell including headlamp bezels,	£1166.45
Engine cover assembly, alloy,	£321.40
Door beam/hinge,	£369.28
Front bonnet release cable,	£14.41
Engine cover release cable,	£27.22
Ball joint, top and bottom,	£22.91
Lotus original shock absorbers,	£98.03
Head gasket,	£30.26
Gasket, inlet manifold, non VVC,	£9.46
Oil pump assembly,	£100.23
Timing belt, to Oct 1998,	£28.59
Steering rack,	£372.35
Steering rack gaiter,	£7.64
Brake discs, iron,	£106.83
Brake pads, front,	£93.49
Radiator, new,	£275.20
Clutch plate,	£71.95
Sports exhaust system, stainless steel,	£405.38

The original Elise was a fast and frantic small sports car harkening back to Lotus' fun and fancy free days of the Sixties. RICHARD GUNN delves into what's involved in buying one of these true driver's cars

Driving

It's fair to say that Lotus knows a thing or two about making cars handle. It's had a bit of practice over the years, with legends like the Elan, the Esprit and the Seven. The Elise fits in with such illustrious entries in the Hethel canon without hesitation - it is a car that combines all the best traditions of Lotus with modern, innovative advances in automotive engineering to create a pure driver's machine.

In these days of compromise, the Elise is something that simply doesn't make many concessions. That's clear from the moment you get inside the stripped-out, aluminium-trimmed interior, where even the radio and switches look like begrudging afterthoughts. It's all very Spartan, so if you're looking for luxury, look elsewhere. If you're looking for performance though, just turn the key.

It's from here that the technology plays a part - making this car almost as light as a feather. The Elise isn't prodigiously endowed with power, but that doesn't matter in a car this insubstantial. The K-series engine - particularly in VVC form - is enthusiastic and more than capable of pushing the Elise at an extreme rate of knots towards the horizon - the acceleration is little short of breathtaking in a car this compact. Few things are faster to 60, even now. But even better though is the way the Lotus treats corners. With no power assistance or driver aids, the Elise is incredibly agile, with a huge amount of grip and a chassis that feels almost magnetically attached to the tarmac. The cornering is almost totally bereft of understeer or oversteer; the Elise simply goes wherever you point it, however fierce the bend and at a speed far in advance of many of its rivals. It's a total revelation to drive. Who says that being a lightweight is a bad thing?

Interior

The all-aluminium interiors are noisy on the move, which is something that most Elise owners just learn to live with. But squeaking or sticking pedals can, and should be, resolved.

Don't ignore them. Spray the joints with WD40 or equivalent, otherwise the pedal bush can seize, leading to a lot more expense and time than if you'd just got the lubricating aerosol out.

On the electrical side, window winders are very prone to failure or going out of alignment, and expensive to put right if done by a specialist, as the task is quite involved. Be wary of cars where the windows seem reluctant. In rare cases, the illumination of the Stack instrument panel can fail, and will be pricey to rectify.

On earlier cars, the hoods can leak through the seals at the front - something more likely if the frame has been used as a support for people getting in and out. Look for signs of water ingress here and see if the seals have been torn. Up to VIN 3332, the side rails were prone to wear as well, so look to see if this area is a tight fit.

Boot and bonnet releases can be stubborn if they haven't been greased, and ultimately, if the situation is allowed to continue without lubrication, they can snap.



Bodywork

Because the Elise has an aluminium chassis and a fibreglass body, rust isn't something you'll have to worry about. Previous accident damage is more crucial, though, which should show up as bad panel fit. So look at the spaces, paying close attention to the doors and the 'clamshells' front and rear. Also keep an eye out for poorly matched or rough paintwork, both signs of localised and not very good repairs. Anything obviously wrong or uneven should be of concern. You should also get underneath and check out the chassis - because of the bonded construction, repairs are tricky, and shoddy work to put right crash damage should show up quite easily. Needless to say, as the chassis is so crucial to these cars, if you suspect problems, it's best to walk away and go and look at another car.

The fronts of these cars are very prone to stonechips. Driving lights in particular are prone to not just getting slightly damaged but broken as well. You should also look for signs of corrosion behind the lamp covers.

Door hinges are prone to breaking but, frankly, it should be pretty obvious to anyone if this has happened. If you open the door and it almost drops off then, trust us, it's not a good thing!

Underneath the car is a tray that helps protect the front and rear. This is prone to getting clogged on uneven roads or in urban areas with speed bumps (as the Elise is only 140mm off the ground), so check its integrity and that its bolts are still strong.

Actually, there is one point on an Elise that does rust quite well... and that's the tailpipes of the sports exhaust system, if fitted. It's only cosmetic, but still looks unsightly. You should also check that the pipes aren't moving around and touching the bodywork surrounding them; worn exhaust mountings are the main cause of this.

Suspension

Knocking suspension is likely in older cars, simply as a result of age, although the shock absorbers Lotus chose, by Koni, aren't the best and can start to go off around the 20,000 mile mark. Part of what makes an Elise so great is the way its suspension is set up - it's a Lotus after all, and handling is all important - and they're very susceptible to being fiddled with and having their delicate balance and poise affected. If this feels like the case with the car you're driving, or uneven tyre wear suggests all is not as it should be, then it's best to have an expert look at it and try to get things back to the way Hethel intended.

Rubber bushes wear quite quickly if the car has been driven enthusiastically, and top and bottom ball joints will cause the wheels to shake badly - although this isn't tricky to put right at least. The toe link at the back on early cars (up to VIN 3800) was dodgy, so much so that Lotus recalled cars to have this part replaced. If there is a painted-on red sign nearby, then this has been done. If not... then suspect it has been missed.

Steering racks are a known weak point, with the gaiters sometimes splitting after just a few thousand miles. That lets water and muck inside, which ultimately leads to a lot of play in the steering. There should be very little play in the steering, so if you notice something more substantial, all is not well.



What Lotus said at the time

"Not by chance has this lithe and agile sportscar been hailed as the best the world has to offer. The Elise blends light weight with electrifying responses to create a driving experience that's memorable, exhilarating and totally unique.

"Others may talk of man and machine in perfect harmony, but only the Elise makes you feel as if you're in partnership with your car; one drive in an Elise and you'll never settle for anything less. And the more you drive it, the better it feels. "Our chassis engineers and Ride and Handling team are the best in the business, and know precisely what enthusiastic drivers want from a sports car. So in the Elise they've created a pure sportscar, one without compromise, that puts the thrill of fast driving at the top of its list of priorities. Owning an Elise does have a drawback - you'll only ever want to take the long way home!"

HISTORY

1994 The Lotus Elise, a replacement for the outgoing Elan, is conceived as a mid-engined fibreglass roadster in the spirit of the firm's small sportscars of the Sixties. The idea for the name - which has to begin with an 'E' of course - is inspired by the granddaughter of Bugatti's (which owns Lotus) chairman Romano Artioli. Who happens to be called Elisa.

1995 Lotus officially launches the Elise, although sales don't actually begin until the middle of the following year. Beneath its stylish and rounded fibreglass/plastic shell is a lightweight bonded aluminium extrusion frame, resulting in a car that is incredibly lightweight at a mere 675kg (1488 lb). Power comes from Rover's K-series engine in 1796cc form, managing to produce 118bhp, enough to power the car to 126mph and allowing 60mph to be attainable from rest in just 5.8 seconds.

1998 The 135 Sport variant, um, sports 135bhp and is also fitted with a close ratio gearbox, sports exhaust and other goodies, plus detail differences like Quicksilver paint to make it stand out from the rest.

1999 Lotus celebrates its 50th birthday by making an Anniversary Elise in green with gold wheels. It is soon followed by the JPS, all in black with gold wheels, headlamps covers and back wheel spats, and the Type 49, in two-tone red and white with headlamp covers and rear wheelarch spats. An even more potent form of Elise also emerges in the form of the 1115, its name derived from the internal designation number of the model (M111). The extra oomph comes from the fitment of the VVC K-series engine, with variable valve timing. The result is an increase in power to 160bhp, although performance is only improved slightly. There's also a bit more luxury... with extra padding in the seats! As the year draws to a close, Lotus produces the Millennium model to cash in on the current obsession with the end of the century.

2000 Better performance is offered by way of the Sport 160 and 190, but even more spectacular is the limited edition model - not that Lotus are necessarily building mass production numbers of the model - known as the 340R. This is so named because only 340 will eventually be made, plus the original prototype provided 340bhp/ton power to weight ratio from its 1777bhp engine. The year also sees the debut of the Exige, the hardtop version of the Elise utilising the same engine as the R. However, the biggest news comes on October 9, when Lotus reveals the Series 2 Elise. The chassis is slightly modified, and a new ECU is fitted. The body is restyled - so much so that it allows the company to claim it is the first Lotus created on a computer. Production continues to this day, albeit with the original Rover K-series engine replaced by a Toyota 2ZZ-GE engine thanks to MG Rover's final bellyflop into history.

Contacts

Clubs

- Club Lotus, tel: 01362 694459 or www.clublotus.co.uk
- Lotus Drivers Club, tel: 01926 859918 or www.lotusdriversclub.org

Specialists

- Paul Matty Sportscars, Worcs. Tel: 01527 575172 or www.paulmattysportscars.co.uk
- Kelvendon Motors, Lincs. Tel: 01775 725457 or www.kelsport.net
- PNM Engineering, Merseyside. Tel: 0151 630 6101 or www.pnmengineering.com
- London Lotus Centre, Herts. Tel: 01727 866171 or www.hrown.co.uk
- Lyte and Wakefield, London. Tel: 020 8367 4192
- Bell & Colvill, Surrey. Tel: 01483 286450
- Chris Foulds, Yorks. Tel: 01484 666552
- Morland Jones, Lincs. Tel: 01775 725457
- Barry Ely Sportscars, East London. Tel: 020 8558 3221 or www.lotuscarsales.com
- Crossroads Garage, Yorks. Tel: 01909 773449

Market Trends

Because the Elise is still in production - albeit it in restyled form - the original series of cars can now be picked up quite cheaply compared with how much they cost when new... which, let's not forget, wasn't that long ago. Not, however, that cheaply. It's unlikely you'll ever see Elises being traded for just a few hundred pounds, or even a couple of thousand. The fun factor attached to these cars, plus their looks, scarcity and overall desirability, should ensure they never quite descend into the financial trough that other cars from this era are starting to plumb now.

Naturally, the hotter variants of Elise attract a bit more interest and therefore cost more to buy secondhand. The difference is quite pronounced, with, on average, around three grand separating the 1115 from the standard car.

The values listed below are subject to fluctuations, due to the Elise still being just a rather exciting secondhand car, not a true bonafide classic yet.

Verdict

Whatever your views on the classic credentials of the Elise, the fact is that this seemingly simple car is just incredibly great fun. It's a joy to drive, and the more winding and undulating the road, the more entertainment you'll get out of one. Models like the 1115 are the most sought after, but whatever type you go for, the enjoyment will be there right from the moment you fire up the ignition and push the fast pedal. Even in a standard Elise, you'll be relishing the driving experience so much that you won't even notice you're missing a little bit of power. So save yourself a few thousands and just go for the basic model. You won't regret it if you love pure, raw driving.

Insurance quote

For a £8500 1997 standard Lotus Elise, no modifications, based in Peterborough

- Fully comp, £100 excess, £673.00 (or £583.00 with cat 2 immobiliser fitted) for a 29-year old, two years' NCB, clean licence, 10,000 miles, only car, kept on driveway, club member
- Fully comp, £100 excess, £292.00 for a 50-year old, full NCB, clean licence, 3000 miles, second car, garaged, club member

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LOTUS ELAN



Engines



A little TLC will go an awful long way with the Lotus twin-cam engine. They need to be properly looked after and if you don't you'll regret it, sooner rather than later. Regular coolant changes are essential for a long and trouble-free life. Neglect this basic requirement and you'll end up with corrosion forming inside the alloy head. Ask the vendor when was the last time he changed or adjusted the timing chains, as this will give clues to how conscientious or otherwise they have been about their cars upkeep. Loud screaming from the engine is a sign the belt is too tight and a rattling when you come off the throttle means it's too slack.

Water pumps can cause problems too and you can check to see if one has been damaged by an over-tightened fan belt by trying to rock it back and forth. If the pump moves it's time to replace it and that means the cylinder head has to come off first.

Twin-cam engines are notorious oil burners, so expect to see some blue smoke from the exhaust, but not too much. Plumes in the back window when you back off and then onto the throttle again are a very bad sign.

As can be an overly fast idle. Once they're warmed up even highly tuned engines should tick-over happily enough at low rpm, but if it is running fast the vendor might be trying to hide low oil pressure by keeping the red warning light from flickering. Oil and filter changes should be carried out every 3000 miles or so and oil leaks shouldn't be an issue if the unit has been rebuilt. That said many Lotus books talk of these engines' propensity to weep oil, so that's a bit of a judgement call...

Parts prices

All parts from Christopher Neil, Cheshire, 01606 41481 and include VAT

Bumper (front/rear)	£81.08
Windscreen rubber	£49.22
Headlamp pod	£65.69
Brake master cylinder	£67.86
Clutch plate (4-speed)	£86.36
Timing chain	£15.04
Starter motor (exchange)	£29.26
Water pump kit	£37.01
Stainless steel silencer	£98.41
Window lift motor	£105.75
Dash	£175.08
Carpet set	£116.33
Headlining	£46.38
Seat trim kit	£108.10
Seat assembly	£387.69

Specification

Car	S1	S3 Coupé SE	Plus 2 S3	Sprint
Year	1962 - 1964	1966 - 1968	1966 - 1968	1971 - 1973
Engine	All models: 1558cc 4-cyl DOHC			
BHP/RPM	105@5500	115@6000	118@6000	126@6500
Top Speed	107mph	123mph	118mph	118mph
Gearbox	All models: 4-speed manual except last Sprint models which are 5-speed manual			
Consumption	28mpg	26mpg	27mpg	26mpg
Suspension	All models: Front: Independent, by coil springs, wishbones, hydraulic telescopic dampers and anti-roll bar. Rear: Independent, by coil springs, Chapman struts, wishbones, hydraulic telescopic dampers.			

Lots of Trouble, Usually Serious? Forget the dodgy play on words and boring old jokes, it doesn't have to be that way. JAMES PEENE takes a look at the Elan and tells you all you need to know to find a good one and avoid the duds.

Gearboxes

Four-speed boxes are Ford items so they're generally pretty strong, long-lived and not particularly expensive either.

Sorry to say - in more ways than one - that the five-speed gearbox found in later cars was purloined from the Austin Maxi of all things and they can be pretty poor. They have a woefully vague feel and wear is common as driver's fight to find the right ratio and lose patience with the BL shift in their parts-bin sports car.

The good news however, is that all the differentials are Ford items again. But, if you think you detect a grumbling from the back it could be the bearing where the driveshaft emerges from the diff housing. This is an expensive fix but if you're lucky it might just be a tired wheel bearing after all.

Interior

Lotus and electrics do not a happy partnership make. So electric windows are likely to fail, as is the rest of it unfortunately. Thankfully, most faults can be traced back to poor earths, but sorting them will invariably soak up time, if not money in sorting them.

Water will seep in through perished seals and this will rot the carpet and upholstery. It can also wreak havoc on headlinings, which are apt to tear easily whether they're damp or not, and the wood veneer.

Dashboards will crack or go milky over time and a tatty one can really make an otherwise okay-ish car look very tired indeed.

Radios were installed in the tiny space next to the heater box and aftermarket ones are too big, so can protrude and look unsightly if you're a bit of a perfectionist.

The seat frames can break and replacements are like hen's teeth, so you'll have to strip them right down if they need a welded repair.



Suspension and brakes

You'll find a mix of Triumph Herald parts keeping an Elan on the straight and narrow path, so it won't cost the earth to replace worn components. Everything should look well cared for and lubricated where appropriate. For example, there's a thread in the steering that needs to be coated with gear oil, not grease, from time to time - again, it's a sign of a caring and knowledgeable owner.

Stub axles can wear and there are four Rotoflex rubber doughnuts between the rear wheels and differential, which become soft over the years, especially if exposed to oil. They're not cheap to buy and replacing them means you also need expensive, special Lotus-thread bolts too.

Oh, and if you're going to do a 'bounce test' on the shocks then for Pete's sake do it with care - remember, the bodies are made from fibreglass!

Bodywork

They're made from glassfibre, which is brilliant because it won't rust. Unfortunately, the GRP cracks and is susceptible to damage from flying stones and light knocks and bangs, so you're opening an entirely different can of worms here.

You need to be particularly vigilant for stress cracks. They're apt to occur in points of stress funny enough, so look for starring around areas like door handles, locks and hinges. Problems of this nature aren't the end of the world, as they won't affect the car's structural integrity, but you'll need to factor any repairs into your budget first.

Micro-blisters are frustratingly commonplace on project vehicles and will need rubbing back to make good, but it's always worth looking very closely at any obviously freshly painted or shiny areas. They're likely to be covering some form of recent repair work, so probe the vendor mercilessly about them until he 'fesses up.

One thing worth bearing in mind however, is that not all amateur looking bodywork is a DIY bodge. It could well be factory 'workmanship' as some of the fit and finish on these cars can lean a bit to be desired. For example, the inside of the nose cone can look a little shoddy.

Whilst you're looking under the front it's crucial you check for cracks in the suspension turrets. Find damage here and it's a sure sign of a tired and weakened chassis. As it sags it begins to lean in on itself and those little cracks can lead to much bigger bills.

Open the doors and see if they drop at all. Droopy doors are a sign of worn hinges, and that means more expense.

Always check the condition of the rubber seals. Windscreen rubbers are apt to crack over time, and although this won't matter to the bodywork it will have major repercussions on the interior and chassis. Rainwater that gets inside has to go somewhere and if it can't find a ready-made escape route it will engineer one of its own.

British-built pop-up headlights are notoriously rubbish and on the Elan are apt to pop-up, but not pop-down again, so check everything works properly and there are no signs of force having been applied to them.

Chassis

Unfortunately, for a car that draws all its strength from its chassis it has a horrible propensity to rust. As such, go over them with a fine toothed comb. Most, however, will now be shod with a replacement item and new ones come galvanised for piece of mind.

Find one wearing its original or steel chassis though and you'll need to check around the front suspension mountings and especially where the chassis widens at the front.

Muck and filth builds up in the front suspension turrets and corrodes the metal where they attach to the front crossmember. Welded in patches are a common fix, but if the towers have shifted at all, then the geometry will be altered and your Lotus will never handle like it should.

Remember, these are sports cars, so if you find a rippled chassis, you know someone has had a prang at some point, so it might be worth walking away and finding another one instead.

One last thing to bear in mind is the condition of the crossmember in relation to the pop-up - or not - headlights.

It works as a vacuum tank, so if during the course of your investigations you find they've been bypassed with a separate pipe, it might not be as airtight, and therefore rust-free as it should be.

Driving

Mention the name Lotus to any car enthusiast and they'll immediately talk about the firm's legendary chassis nous – before mumbling something about financial turmoil and reliability issues, but that's not what we're concerned with here. No, the Elan is widely regarded as one of the best handling cars ever produced. Find a good one and you'll discover a machine that for once matches the myth, because underneath that attractive fibreglass body you'll also find a hugely competent steel backbone chassis, wearing independent suspension all round that was honed to perfection from years of motor racing. The result? A lively but forgiving and chuckable machine that lives for corners and soaks up bumps, kinks and undulations in the road with great aplomb. Keen amateur drivers will find they exceed their limits before reaching the Elan's and it won't bite the hand that feeds it in the process. Try it, you'll love it – we promise!

HISTORY

1957 Having produced its first 'proper' road car in the form of the Elite and made a loss, Lotus founder Colin Chapman turns to Ron Hickman and instructs him to come up with a more profitable replacement. The result, (hardly surprising given this guide) is the Elan. The all-new model features a 1500cc twin-cam engine developed from the Ford Kent unit, pop-up headlights and body moulded bumpers in the glass reinforced plastic shell.

1962 Lotus whips the cover off the Elan at the London Motor Show. The press and public adore it, but what they don't know is that the pop-up headlights have refused to pop up so, for the time being are prop-up headlights. A portent of things to come perhaps?

1964 Engine sizes have already been upped to 1558cc before the Elan S2 supplants the original model. It features a better dashboard and hood and boasts better brakes too. If you had the money you could have been one of the 43 customers who ordered 26R racing versions.

1965 A coupé model joins the convertible. Strange that it took so long though – it looks like a convertible with hard top permanently grafted into place. It's also the year Emma Peel aka Diana Rigg joins The Avengers at the wheel of a S2 Elan.

1966 The World Cup year sees the arrival of the SE and S3 models. SE stands for Special Equipment and means you get central locking, a brake servo and 115 rather than 105bhp to play with. S3 means it's a series three model of course.

1967 Longer wheelbase Elan Plus 2 is introduced. There's room in the back for a couple of small ones or contortionists now...

1968 Say hello to the series four (S4) model. You can spot the difference by its rocker switch equipped dashboard, flared wheel arches and bonnet bulge over the Stromberg carburetors in the engine bay. A 'luxury' model called the Plus 2 S goes on sale. It has better levels of trim and sports an alternator.

1971 The ultimate incarnation of the original Elan is born – the big-valve Sprint. It comes with two-tone paint, strengthened driveshafts and differential and the option of a five-speed gearbox is there if you want it.

1973 After an all too brief appearance, the Sprint is axed from the line up and is followed shortly after by the S4 coupé.

1975 Production of the Elan Plus 2 comes to an end.

1990 The Elan's spiritual successor – not to mention lookalike – the Mazda MX5 – goes on sale and breathes life back into the genre.



Contacts

Clubs

- Lotus Drivers Club (GB) www.lotusdriversclub.org
- Club Lotus, www.club-lotus.co.uk

Specialists

- Chris Foulds, tel: 01484 666552 or www.chrisfoulds.co.uk
- Boss Motors – Body Panels Specialist, tel: 01953 887471
- Morland Jones, tel: 020 8741 2303 or www.morlandjones.co.uk
- Kelvedon Lotus, tel 01775 725 457 or www.kelsport.net
- Mick Miller, tel: 01728 603 307

How much?

As with any thing, it's more a case of how much have you got? Scour the classified ads and you'll unearth the odd temptingly cheap base project, but don't expect to put it right for pocket money if you buy it. If you want a really pukka car then the best way forward is to buy one someone else has restored and let them absorb the costs – you'll never recoup the price of a full-on restoration, so this is the sensible thing to do. If, however, you really do insist on buying a fixer upper a Plus 2 is the cheapest option. An okay-ish example can be picked up for about £3000 but it will need your love and a cash injection to keep it going from time to time. Go for the more popular convertible option though and you'll need to spend a little more. Even a condition three example will lighten your wallet to the tune of about £3500 to £4000. Unusually in the world of cars, the earlier an Elan is, the less desirable and cheaper it becomes.

Verdict

We can think of precious few reasons why you shouldn't buy one. Find something that's had a bit of money spent on it and riding on a galvanised chassis and you won't go far wrong. The Elan is a much loved and well-regarded machine that's a pretty rare sight on the roads today. Drive one and you'll not only have the admiration and respect of your peers, you'll also have the smug smile of your face of someone driving one of the nimblest handling sports cars this country has ever produced.

Insurance quote

- 1971, Lotus Elan S2 valued at £10,000, based in Peterborough.**
- Fully comp, £250.95 29-year-old, 2 years NCB, clean licence, 10,000 miles, only car, kept on driveway, club member. (Or £120.75 for 3000 miles)
 - Fully comp, £73.50 50-year-old, full NCB, clean licence, 3000 miles, second car, garaged, club member.
- Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

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Mazda MX-5



Engines



Both the 1.6 and the 1.8 are variations on the same theme, although the 1.8 did have a few extra refinements. An oil change every 6000 miles, otherwise the tappets – which are hydraulic – can start to protest. Listen out for this on the car you're viewing, otherwise you could be facing having them replaced...although an engine flush sometimes works. However, don't be put off by an initial clatter when the engine is started. It's usual, and should go away after a couple of seconds. Check the service history to see when the cambelt was last changed. It should be every 54,000 miles.

As you'd expect from quite modern Japanese engines, overall these units are pretty reliable powerhouses, so there shouldn't be too much else to worry about, at least up until the 150,000-mile or so mark. CCW's former editor, Russ Smith, has a 1990 car that has just reached the 160,000-mile mark and shows no signs of going bang. "One of our customers has a 1993 car that has gone over 220,000 miles," says

Gary Thompson. "If these cars are well-maintained, they will do an astronomical mileage. However, they do need proper servicing and good oil though."

Don't expect any oil leaks, unless they're from the cam cover...and a new gasket should stop those. Misfires are generally little more than dodgy plug leads...which happens quite a lot with MX-5s. However, the exhaust manifolds can crack, something you'll spot if you check under the bonnet with the engine running. Turbocharged ones are especially expensive to replace.

If there's a rattle from underneath, it's likely to be either a loose heat shield – easy to put right – or a catalytic converter broadcasting its imminent death. The latter is more of an issue, just because you're looking at about £150 for a new one, going by Moss Europe prices.

Remember that the 1.6i post-1994 models only have 88bhp, rather than the 114bhp of their pre-1994 predecessors. Which might cause you to think twice about one of these.

Specification

Car	MX-5 1.6	MX-5 1.8i	MX-5 1.6i
Year	1989-1994	1994-1998	1995-1998
Engine size	1597cc 4-cyl DOHC	1839cc 4-cyl DOHC	1597cc 4-cyl DOHC
BHP/RPM	114@6500	131@6500	88@6000
Top speed	121mph	123mph	109mph
0-60mph	8.8secs	8.6secs	10.6secs
Gearbox	All models: 5-speed manual		
Consumption	34mpg	31mpg	31mpg

Suspension: All models: Front: Independent by double wishbones and coil springs, gas-filled shock absorbers. **Rear:** Independent by double wishbones and coil springs, gas-filled shock absorbers

Parts prices

All parts from Moss Europe

Front brake pads, 1.8	£59.95
Front brake disc, 1.8	£16.96
Clutch slave cylinder	£17.63
Clutch kit, 1.8	£99.9
Water pump	£67.95
Starter motor	£79.95
CV joint	£99.45
Wheel bearing kit	£199.95
Budget glassfibre hardtop	£499.95
Three window vinyl hood	£199.95
Wire wheel	£265.95

Just as everyone was getting used to there being no affordable small two-seater sports cars around at the beginning of the Nineties, Mazda went and kick-started the trend again with the MX-5. And they're still just as much fun today, says **RICHARD GUNN**, as he looks at buying one. Expert advice comes from Gary Thompson of MX-5 specialist Paul Sheard Auto Parts

Gearbox

Nothing much – usually – goes wrong with the gearboxes, although the earlier ones (pre-K-registration) may often feel a little stiff going from first to second, until the oil has had a chance to warm up. Don't worry about it...that's perfectly normal, thanks to the single cone synchromesh. "We get inundated with calls during the cold weather with owners suddenly complaining their gearbox has gone stiff," laughs Gary Thompson. "But it doesn't cause problems...and fully synthetic gearbox oil often helps."

However, if things stay like this, even after a long drive, or if there's a lot of noise, then suspect a 'box that is getting past its best, probably as a result of mistreatment.

Interior

"There aren't too many issues inside," asserts Gary Thompson. "Just the usual wear and tear on high mileage cars." Mazda stuck to the 'simple is best' philosophy with whole of the MX-5, and that's very apparent inside where everything is very basic. Good materials means the cabins are hard-wearing enough, although, as with any convertible, nature can cause problems if the car has got caught in the rain, with carpets the most likely to be damaged by moisture. The flip side of the coin is that dashboards can fade or crack as a result of exposure to the sun. So you can't win...

Don't forget to check the hood, as splits can strike and stitching can come loose. Quite a common fault is if the hood has been folded down without the rear window being unzipped, which will cause the plastic to crease or even tear.

Water from the roof collects in a gutter, before draining into pots on each side of the car. However, if these get blocked, it can result in the liquid getting into the car instead. However, poking through a drain hole won't be something you'll have to go to a specialist to have done...



Suspension

Rear springs can suffer from cracks, but that's about as low as it goes underneath. With suspension bushes that should last for 100,000 miles or so, there really isn't that much else to be concerned about. However, the earliest Mk1s do suffer premature suspension wear, according to Gary Thompson. "They get cracked and worn. At which point a lot of people just upgrade to Polyurethane ones."

So, just check the alloy wheels before you go for possible corrosion. It's quite likely on a 1992 SE, as the 10-spoke alloys on these limited edition cars didn't have the best lacquer coating.

Bodywork

Yep, you're right – pretty much no rust. Although these cars aren't completely corrosion-proof, as the oldest examples have started to throw up some delicate areas. The sills have proved themselves a little vulnerable, especially towards the rear, and add on such as kickplates and other bits of trim can promote rust behind them. "The key with the bodywork is the difference between UK and imported cars," says Gary Thompson. "Imported ones from Japan haven't been subject to treated roads during winter. UK cars are suffering as a result, especially the rear sill area. If the outer sills rot, then the inner wings do as well. The more people ignore it, the more it spreads. It can go up the inner rear wheelarch and across to the floor as well." He also flags up the bottom of the front windscreen pillar as a vulnerable spot on the earliest Mk1s.

The bonnet and boot are aluminium, so can suffer from a different sort of corrosion where any steel reacts with the alloy. Usually though, the most likely reason for rust on an MX-5 will be badly-repaired accident damage. "We've seen cars with rusty front wings where non-genuine Mazda items have been fitted after an accident," says Gary. Even if you can't see any hint of this, you should walk around the car looking for poor panel fit – apertures should be tight and even – as well as slightly different paint shades and overspray decoration.

Because they're made of aluminium, the pop-up headlamps can go out of shape if they've been lent on, and you should try to give the front and rear plastic panels a shake. Small knocks can break their mounting points.

It's quite common to see older MX-5s with windscreen wiper spotters having faded to grey. But, how much time and money does it take to replace a wiper arm? Not much...



Electrics

Surprise, surprise...nothing much goes wrong with the electrics either. If things aren't playing up, it's usually more down to amateur bodging than anything else...so look for signs of wiring having been badly interrupted using accessory connectors.

Electric windows however are usually on the slow side. "If they're working slowly, quite often the cables will snap if left," says Gary Thompson. "This will burn the motor out. We suggest that, if this is happening, both the cable and motor are changed at the same time."

Look for temperamental central locking, which happens on the post-1994 models. Mazda came up with an official fix for this, which should have been carried out. As a matter of course, you should try the pop-up headlamps...but you're not seriously expecting them to malfunction, are you?

One thing to look at which is often overlooked is the battery in the boot. It should be vented, using a rubber tube running from the top through the floor. If that isn't there, chemicals can build up inside the very small load area, causing possible corrosion as well as a not very nice atmosphere for anything stored in the boot for an extended period. "Sometimes, people don't re-clamp the batteries either," says Gary. "That will allow it to move around in the boot, and it can dent the rear quarter panel. You get it a lot on the import models because the batteries are a different size, so when they're replaced, the clamp doesn't fit properly."



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MGF



Engines

A FULL service history from either a dealer or a reputable specialist is a must...these are quite complicated mid-engined sportscars, and need to be looked after properly.

The K-series engine has something of a major foible in its ability to blow head gaskets, thanks in part to air locks - the coolant has a long way to travel from the radiator at the front to the engine (almost) at the back. It's the most important thing you have to watch out for with these engines, and if the oil on the dipstick looks rather milky, then water is getting into the oil and it's a blown gasket that is likely to be at fault. There is now a product now on the market to help prevent these problems, which must be worth investigating.

Misfiring is another possible symptom, as is tricky starting or an uneven idle, and also look for signs of a water leak from the head face around the alternator or staining down the side of the block. Keep an eye, too, on the temperature gauge, which should sit just below halfway. There are two fans on the car - one which cuts in to cool the engine, and another which comes on to cool the components around it. Leave the car running for a while to check that these do come on.

One possible fault of a car running too warm could be the cooling pipes that run from the radiator at the front underneath to the mid-mounted engine. They can corrode or suffer from leaks, so if you get a chance to scramble underneath, do so and investigate how sound they are.

Exhausts can get damaged because they're so low, but bearing in mind how short they are, you'll be unlucky if this is the case. Listen for blowing.

Look for documentary evidence that the cambelts have been changed - they need to be done every 60,000 miles or five years, whichever is sooner.

Pre-1999 cam bolts - which hold the cam wheel to the camshaft - can loosen, which then causes a pretty catastrophic engine failure. This was the subject of a recall, which should be noted in the service book, but it is recommended by many that, if you buy and MGF, the bolt is tightened up again, if it's not immediately apparent that this has been done.

Some cars might have starting problems, but this is often easily resolved by fitting new plugs and leads.



Specification

Car MGF	Mk 1 1.8 MPI	Mk 1 1.8 VVC
Year	1995-99	1995-99
Engine size	1796cc 4-cyl DOHC	1796cc 4-cyl DOHC
BHP/RPM	118@5500rpm	143@7000rpm
Top speed	123mph	131mph
0-60mph	8.7secs	7.6secs
Gearbox	5-speed manual	5-speed manual
Consumption	37mpg	35mpg
Suspension	All independent Hydragas, front and rear	

Brakes

THERE isn't much to worry about with brakes, but you can check the condition of the brake discs through the alloy wheel. When on your test drive, just check to see that the car pulls up straight and quickly.

Parts prices

Prices from Rimmer Bros and include VAT

Brake kit - includes front discs and brake pads	£100.00
Xpower Thruflow performance exhaust	£275.00
Service kit	£50.00
Radiator (original new)	£137.02
Head gasket (aftermarket)	£18.08
(original)	£25.98
WC head gasket kit (original)	£75.63
Front upper ball joint (original)	£14.60
Oil pump (original)	£78.18
Water pump (aftermarket)	£30.00
(original)	£43.58
Replacement hood (original black)	£315.15
Front wing (original)	£120.12
Front bumper In primer (original)	£187.69

The idea of a small two-seater MG roadster was revived by the MGF in 1995, much to the joy of MG enthusiasts everywhere. **RICHARD GUNN** delves into how to buy the best of the Mk 1 models

Gearbox

EXPECT the gearbox to be a little notchy until it is fully warm... but other than that, the transmission should be pretty reliable as the PG1 unit is based on a Honda box. However, the control cables can stretch or break, which causes selection problems - which unfortunately means taking out the centre console to replace them.

If you hear a whining from the gearbox in fourth of fifth, it's a sign of an impending gearbox failure, so walk away.



Interior

CHECK for signs of water - either present or past - inside the cabin. If you notice some, then it means that the hood is probably leaking, and this should be investigated. It's more likely on 1995-97 cars, where the hoods has visible seams and the hood doesn't fully cover the front edges of the frame at the windscreen. This was improved from 1997 onwards. However, water ingress could also be down to seal leaks, as detailed in the bodywork section. Look out too for bent hood frames (they're easy to put up, so any problems here denote careless usage), torn fabric on the hoods or creased plastic rear windows.

If you can smell petrol inside the car, then it's best to go and look elsewhere, as just diagnosing what the exact problem is can be tough enough. Putting it right on a mid-engined sports car is something else entirely!

Electrics can play up, so check that the electric windows work okay going up and down smoothly and quickly - and that central locking activates and de-activates as it should.



Bodywork

RUST shouldn't be an issue unless the car has been in an accident and not been properly repaired. Look for signs of bad panel fit as well, something else that suggests the car has taken an unscheduled scenic route in the past.

Stone chips will probably be the imperfections you come across most of all, although the plastic from means these won't ultimately lead to corrosion. Where trouble might occur is in the subframes and seams. A lack of proper sealing can allow water to drain from the windscreen, under the bonnet and into the footwells; and further leaks can come from the plastic door mirror surround. Also look in the (rear) boot too, as lid and lamp seals can let water into here.

Doors have been known to drop on earlier cars, which will require hinge adjustment. If it goes unadjusted, the door can ultimately end up rubbing the top of the sill, which you really don't want.

Phew! Isn't it nice to write about a Longbridge-built classic that doesn't rust too much...



Suspension

HYDRAGAS suspension - gas and fluid - usually gives less problems than conventional suspension, plus a far better ride into the bargain. Problems are usually confined to leaks in the system, or just gradual natural sinkage. In the latter case, all that will be needed is pump-up to restore pressure - about £20 or £30. However, some owners might have had their MGFs lowered by simply letting the suspension down a bit. This is not a good idea, as it means the car is driving with a somewhat depressurised system. If the MGF you're looking at is closer to the ground than standard, then investigate how this has been achieved. There are 'proper' ways to achieve the same thing. The correct measurement should be 368mm from the centre of the wheel to the wheel arch lip above it. If this setting is wrong, it can result in the tyres wearing disproportionately on their inner or outer edge, especially the front ones.

Some cars have power steering fitted...which is actually electrically operated. These have a 70amp fuse fitted on the right inner wing - so if it is there, check that it is working as it should. There should be a fault light on the dashboard if there isn't. But many owners just disconnect the electric PAS to improve the feel of the car...it really provides its maximum assistance at parking speeds only.

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Brake Pad Set	(MG Road)	GP16022	£14.10
Brake Pad Set	(MG Road)	GP16024M	£29.38
Brake Pad Set	(MG Front)	GP16022M	£14.10
Brake Pad Set G/Stuff	(MG Front)	GP1602026	£35.25
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Ignition Lead Set	(MG 1.8 non VVC)	GP1622	£23.50
Ignition Lead Set	(MG VVC non VVC)	GP1622	£38.78
Lambda Sensor	(MG H32275)	PG410066	£76.38
Clutch Kit QH	(MG R3 H)	PG2404F	£75.20
Clutch Master Cylinder	(MG/TF 2000 H)	GP16040	£76.38
Clutch Slave Cylinder	(MG/TF 2000 H)	GP16040	£41.15
Expansion Tank Cap	(MG)	GP2118	£2.95
Head Gasket Set	(MG VVC)	PG4050A	£59.99
Cam Cover Gasket	(MG/TF)	GP160302	£7.85
Timing Belt	(MG VVC ACT)	GP160345	£18.49
Timing Belt	(MG 1.8)	GP160345	£18.49
Belt Tensioner	(MG/TF)	GP160302	£23.50
Water Pump	(MG)	GP16032	£29.39
Alternator	(MG H32275)	GP16040	£94.00
Alternator Belt	(MG/TF non VVC)	GP160375	£5.89
Starter Motor H Torque	(MG)	GP160118	£117.50
Wheel Bearing Kit	(MG)	GP1636	£29.38
Bottom Ball Joint	(MG Front)	GP16462	£17.65
Lower Arm	(MG non singly Front)	GP16070	£117.50
Top Ball Joint	(MG Front)	GP16462	£9.78
Front Poly Bush Kit	(MG)	GP16070	£58.75
Radiator Assembly	(MG/TF)	GP16072	£88.15
Thermostat	(MG)	GP16061	£10.58
Workshop Manual	(MG)	PG198	£35.95
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Stop Lamp Hi Level	(MG - no armrest)	MG1193	£58.75
Indicator Lamp	(MG Front)	MG1601036	£47.00
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Buyer's Datafile: MG RV8, 1993-1995

Definitely one of the most evergreen classics ever made, the MGB lived a long and successful life between 1962 and 1980. But when the doors closed on Abingdon we hadn't seen the last of this quintessentially British sports car. KEITH ADAMS takes you through the pitfalls in buying an MG RV8 – the V8 powered version of the 'B', built during the Nineties, to help relaunch the MG marque.

ONE of the most desperately sad events in British motoring history was the closure of the MG factory at Abingdon in June 1980. Not only did it see the finale of the MGB and Midget, but also the end of a manufacturing plant that had suffered little of the industrial strife that affected the BL Empire during the Seventies.

At the time, the MG name was considered less important than Triumph, and that meant the TR7 was to become the new BL corporate sports car for world markets – yet, the sad irony was that Triumph sports cars would last only one more year themselves, dropping out when car production

at the Solihull factory stopped.

The MG marque remained alive during the Eighties thanks to the Metro, Maestro and Montego, but to many enthusiastic fans, these were not 'real' MGs. To be fair to Austin-Rover, the company MG now belonged to, the designers and planners there all wanted to introduce a new open-topped roadster; but management (and finances) wouldn't allow it.

The introduction of the seminal Mazda MX-5 in 1989 convinced Rover management that the time was right to re-launch MG with a roadster – and finally backed the designers' plans. Sadly, the new mid-sized roadster (what

would become the MGF) was still five or six years away from production, and the company wanted a new sports car far sooner than that in order to cash in on the MX-5 boom.

An ingenious plan was hatched involving Heritage MG's shells, the Land Rover V8 engine, and a purpose-built line at the Cowley factory in order to produce the new generation MG RV8. At the end of 1992, the RV8 was shown to the public, and demand for the new-era classic MG quickly stepped up – in short, a modern classic had been born. And more importantly, the new car saw MG make a welcome return to new car showrooms with a real sports car.

Is it a classic?

YES: It may well be a mid-Nineties car, but the RV8 most definitely has its roots in the Sixties. The styling is classically MGB, tidied up with a modern incarnation of the rubber bumpers, and the engine a fuel-injected and engine-managed version of the venerable Rover V8 engine – and for many enthusiasts, it's the ideal B, as it marries the roadster body with that impressive power unit. The classic car guides have been listing the RV8 for some time now, and few people would debate the worthiness of its inclusion. Having driven many examples, we can say – hand on heart – that there are few open topped roadsters that can offer a more classic experience. The RV8 isn't so much about when it was built, but what it does for its owner...

What's out there?

Essentially, the RV8 was a stand-alone model, and aside from a few equipment options, and a choice of colours, that was it. That was then, and this is now – and because the vast majority of RV8s were actually exported to Japan, there are a couple of interesting options you'll only see on the cars sent out there and later returned.

What to look for?

The best way of appraising an MG RV8 is to think of it as a Sixties roadster with Nineties resistance to rust. Many of the major electrical systems come from other models in the Rover Group, and it's the same with the fixtures and fittings. We're being controversial here, but a well cared for example of the RV8 should be an extremely reliable and dependable car that you could use on a daily basis, but there are still a number of factors to take into consideration before taking the plunge. 1) With so many RV8s being exported to Japan, it's worth taking the time to fully investigate the history of your car – if the seller is openly selling it as an ex-Japan car, then try and ensure it was serviced and maintained properly. Because 1600 of the 2000 cars went out there, it's a very good bet that the car you're looking at comes from far East. RV8s sold in Japan came with a standard distress flare – if you're really lucky it may well still work. 2) Air conditioning: Yes, it seems bizarre equipping a roadster with air con, but the Japanese market cars were fitted with this option. As is the case with all cars thus equipped, make sure it's blowing cold, the

condition of the belts is good, and the compressor isn't making any odd noises. 3) Body: Zinc plating of the body structure should have protected RV8s from noticeable rust, but the windscreen surround can suffer surface corrosion, especially at the base. Make sure that the boot support struts are still doing their job and insist on seeing the hood erected to check for tears as replacements currently cost £1800. 4) Bumpers: The fibreglass bumpers need to be checked for cracks and poor repairs as replacements are expensive and difficult to source. 5) Engine: With these Rover V8s, low mileage isn't always a guarantee of untroubled motoring – water pumps are a known weak link. Ensure that the car has received regular (fuel and oil) oil and filter changes, and listen out for tapping noises on idle, as camshaft wear is not unknown. Overall, these engines are sturdy and long-lived, but only with regular care. Overheating can have disastrous effects on an aluminium power unit, so make sure the electric cooling fans are working as they should.

6) Gearbox: Problems are seldom, so any untoward noises from the 'box are a guarantee of impending trouble. 7) Suspension: Damper condition is vital to these cars, so ensure they are tip top to avoid a 'lively' drive. Front suspension sag causes tyres to foul the inner wheelarches but is easily corrected by fitting reset coil springs. Retro-fit power-steering – previously not available on air-conditioned cars – can now be obtained. 8) Braking: Low mileage cars often suffer innovative rear brakes due to seized wheel cylinders, so check closely. 9) Interior and electrics: If the remote locking control battery fails the car will be immobilised, so carry a spare battery. Neglected leather that feels hard but can be revived but splits or faded stitching demand the attention of a quality trimmer. Wood veneer is extremely high quality, and will be free of cracks and discolouration if the car has been garaged and not exposed to too much sun.

10) Make sure that the leather-bound tool-kit is present and that the boot-mounted CD stacker operates

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The parts situation

It's fair to say that the parts situation on these cars is second to none, apart from certain unique-to-RV8 parts, such as bumpers and some interior components. The body panels are readily available from British Motor Heritage, the engine parts are off the shelf from Rimmer Bros, and servicing parts will be available from all good motor factors.

Typical prices (supplied by Brown and Gammons)	
Front brake discs	£125
Brake pad set (front)	£50.98
Front damper assembly	£123.38 (pair)
Rear dampers	£157.45 (pair)
Brake servo	£287.88
Radiator	£235.00

Specialists

PARTS

- Brown and Gammons, www.bg.mgcars.org.uk or 01462 49009
- Halls Garage, 01778 570286 www.hallsgarage.co.uk
- Jentree, 01323 767354
- Rimmer Bros, 01522 568000 www.rimmerbros.co.uk
- Lower Barn, 01473 833299 www.lowerbarnmgs.co.uk

CLUBS

- MG Car Club, www.mgccc.co.uk or 01235 55552
- MG Owners Club, www.mgownersclub.co.uk or 01954 231125

WEBSITE

- MGRV8.com, www.mgrv8.com

Clubs

- Jaguar Drivers Club: 01582 419332, www.jaguardriver.co.uk
- Jaguar Enthusiasts Club: 08708 452482, www.jec.org.uk

What should I pay?

Prices of the MG RV8 vary greatly. It's perfectly possible to

pick up an imported model from a dealer from around £7000 if you're not after a condition one car – and this should be a great introduction into open topped MG ownership, if you're not too keen on getting intimate with the Woxofy fun. As we've said, even buying an average condition car with high miles should present few of the traditional pitfalls, although there may be other issues to consider.

It is possible to spend over £13,000 on a concours condition RV8 with a cast iron history, and you'll be guaranteeing yourself an enjoyable ownership experience. As this was seen very much as a modern classic even when new, many owners cherish their RV8s, meaning that there's a plentiful supply of low-mileage cars out there, so don't get sucked into think that it is okay to pay way over the odds for that low-mileage hobby.

The bottom line is that these cars are scarce, but not that rare that buyers have to fight to buy the first one they see – so you can afford to pick and choose.

Should I buy one?

We suspect that if you're thinking of buying one, you've already made your mind up. The MG RV8 blends Nineties electronics and with Sixties style and engineering to produce an endearing and ultimately lovable roadster. For those who can't quite face the idea of an original MGB GTV8 or MGC, but who are turned on by the idea of a really fast MGB, this is an option that's almost too good to miss. Especially as we reckon there won't be a financial penalty when you come to sell, especially if you look after it, and keep the servicing up to date. There are many people who would say that the TVR Griffith offers more of the same for similar money, but the RV8 is a totally different proposition – and one that many classic car owners will relate to without any difficulty at all.

SPECIFICATION

MG RV8	
ENGINE:	3946CC V8
POWER:	190BHP@4750RPM
TORQUE:	234LB/FT@3200RPM
TOP SPEED:	136MPH
0-60MPH:	6.9SECS
FUEL CONSUMPTION:	22MPG
GEARBOX:	5-SPEED MANUAL



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MGB

Engines

The state of the engine bay is another prime indication of whether the car has been looked after, according to Mal Williams. "If the engine bay is good, and the rest of the car also looks nice, then it's been owned by somebody who cares, and has probably taken a lot of care elsewhere...and that's a positive sign."

"There are no real horrors with MGB engines, although go for a car with less than 100,000 miles on the clock if you can. Most people use these cars on high days and holidays. If an engine has done 40,000 to 50,000, then it's got an awful lot of life left in it. Modern oils are better than they ever used to be."

Expect oil leaks...it's an old British car after all. However, don't expect oil slicks. If there's a lot of the black stuff escaping from below, it's not a good sign. In general though, the B-series unit is a pretty good one, and, because it's in an MG, everything is available if needed.

Oil pressure of between 60-70psi on a warm engine at a reasonable speed points to a unit that is probably sound enough. At idle, look for 45psi. The lowest it should be is 25psi. "An oil cooler is always a bonus, especially if it's fitted with a thermostat," believes Mal.

You should do the usual checks for blue smoke from the exhaust (if it's on the overrun, it points to worn valve guides, while you can check for worn bearings by accelerating hard from 30mph in top gear and seeing if there's smoke) and listen for excessive noise too. Chattering from the top is likely to be just worn valve clearances – not really a problem – but it could also be a worn rocker shaft and arms, which is more complex to sort out.

If the engine hunts at idle or misfires, then it's likely the distributor is getting worn out, although it could also be the SU carbs going out of tune thanks to worn spindles allowing excess air in.

Keep an eye out for overheating...although it's usually little more than a radiator needing replacement or, according to Mal, "People often fit the wrong thermostat, thus meaning the cars run on the hot side, especially during summer. A 74 degree thermo is best." An electric fan is also a wise fitment for modern traffic.



Suspension and steering

On cars with wire wheels, feel for loose or broken spokes – something that can be a major safety hazard – and also look at the inner edge of the rear tyres and the neighbouring wheelarch, where chafing can occur if the tyre has come into contact with the body of the car, due to tired springs. Stand back and look at the car from afar, and if the top of the wheels are disappearing into the wheelarch, then expect to have to replace the springs.

Lever arm dampers can weep fluid – have a look at them – although don't be too surprised to find telescopic dampers fitted instead. It's a popular conversion, and does much to improve the car.

Wear in the front kingpins is quite likely on many examples and will result in a MoT failure as well as impaired handling. The usual check is to jack the car up and try to rock the wheel top to bottom, feeling for play in the top and bottom swivel joints. If it's excessive, the balljoints will need replacing. Back axes can get noisy...something most likely on those with a 'banjo' back axle, something that was dispensed with once the GT came on the scene and a Salisbury axle was adopted instead. Some of the later, rubber bumper cars are known to have weaker axles than their predecessors though. "Try to find a car with a good, quiet differential," says Mal Williams. "But, if you can't, it's not an expensive job to put right."

Suspension handling, for a reason other than that described above, is often down to wear in the steering universal joint, while excessive body roll can be prompted by worn top and bottom bushes. However, corroded anti-roll bar mountings can prompt the same behaviour.

Listen out for clonks from the drivetrain while driving. If you hear some and want to get a better idea of where they're originating, put the car in gear, get out, and try rocking it back and forth to replicate the noises.

Parts prices

Prices from British Motor Heritage, and include VAT

1967-1974 Roadster bodyshell, unpainted,	£4400.00
1967-1974 GT bodyshell, unpainted	£4750
Front wing	£325.08
Door skin	£58.34
Rear wing	£414.31

Prices from MGOC Spares

Water pump	£19.95 to £35.25
Kenlowe fan	£109.64 to £119.96
Oil cooler	£30.95 to £68.50
Complete engine, unleaded, exchange	from £935.95
Starter motor, inertia, reconditioned	£79.95
Alternator, high output	£46.94

Radiator	from £89.95
Brake discs, pair	from £12.26
Brake pads, set of four	£8.99
Front suspension kit	from £32.95
Kingpin kit	£58.75
Rear spring	from £38.95
Clutch kit	from £54.95

Specification

Car	MGB Roadster Mk1	MGB GT Mk1	MGB Roadster Mk2	MGB Roadster 'rubber bumper'	MGB GT 'rubber bumper'
Year	1962-1967	1965-1967	1967-1972	1975-1980	1975-1980
Engine size	All models: 1798cc 4-cyl OHV				
BHP/RPM	95bhp@5400rpm	98bhp@5400rpm	95bhp@5400rpm	84bhp@5200rpm	84bhp@5500rpm
Top speed	106mph	105mph	105mph	111mph	104mph
0-60mph	12.9secs	13.6secs	13.6secs	12.1secs	14.0secs
Gearbox	All models: 4-speed manual plus overdrive or 3-speed automatic				
Consumption	22mpg	23mpg	24mpg	26mpg	26mpg
Suspension	All models: Front: Independent by coil springs, anti-roll bar and lever arm dampers. Rear: Live rear axle, leaf springs and lever arm dampers				

If ever a classic car has really needed no introduction, it's the MGB. So we won't waste our time here telling you about it. Just jump straight in to **RICHARD GUNN's** buyer's guide on the British sportscar with the biggest following of 'em all. Expert opinion comes from marque specialist Mal Williams of Lower Barn Classics

Underneath

Underneath the centre of the car is the 'castle rail', the small channel section that runs by the sill. These corrode, as do the underfloor outriggers and the front of the rear spring hangers (but, then again, they do on most classics). A way of checking these, if you don't fancy crawling underneath, is to look for bulging sound-deadening material under the carpets in the rear footwell.

Interior

There isn't much that isn't available for the inside of an MGB...but just bear in mind that the more you need to put right, the more costly it will be, especially on the earlier cars with their leather interiors. On convertibles, don't forget to check the hood. Frames can become stiff through lack of use, the seams can split, and the rear window become cloudy...the latter being something that will fall the MoT! Such things happen because the hood is put away damp or the rear window creased...which is not something a truly caring or sympathetic owner would have done. Tears can often be found by the side fasteners.

Things to specifically check include the driver's seat frame and the rubber diaphragm supporting the seat cushion. Leather is the most hard-wearing of the materials, followed by vinyl and then the later cloth (brushed nylon) covers. Sagging of this is common. "Cloth seats in a convertible can also hold water," says Mal Williams.

Brakes

There's little of concern on the brakes, with all MGBs fitted with discs up front. "When you're driving it, does it brake straight and easily?" says Mal Williams.

From 1974, servos were fitted, and any servo-assisted MGB is worth having...especially if the servo has been retrofitted to an earlier example.

Gearbox

Manual gearboxes are tough enough to notch up big mileages. "Listen to the transmission though," asserts Mal Williams. If there's a chattering from the 'box which changes depending on the speed of the car and vanishes in top gear, then suspect a worn layshaft.

If overdrive is fitted, try it out. It should only work on third and fourth gears, and slip in and out easily. If it is engaged and there's no engine braking when you back off the accelerator, then there's something amiss. Synchronesh, when it starts to wear out, will disappear on second gear first, while the earliest three-synchro gearboxes can get noisy in first and reverse. Parts for the earlier 'boxes are getting trickier to get hold of, and unfortunately, substituting a later gearbox for an earlier one means modifying the tunnel.

Automatic gearboxes are rare, and not well-liked...not because they're bad, but because they just detract from the whole small sports car experience. However, assuming the auto transmission does its job well enough, all you really need to look at is the state of the fluid inside. It should be red, not brown, and shouldn't smell burnt. If it does then expect burnt bands and a subsequent rebuild or replacement gearbox.

Bodywork

Before going in close, just take a look at how the car appears from a distance. Does it, in general, look like a good car? Panel fit - or lack of it - says a lot about a prospective purchase. "A really good car will have been looked after well," says Mal Williams. "Just its overall appearance - door shuts etc - will tell you a lot about how well looked after an MGB has been. It's nice to buy a car from a true MG enthusiast."

Now it's time to get up close and personal. The sills are an obvious place to start, as they're the most likely place for tinworm to breed. It's likely to break out at the front, behind the base of the front wing, and at the rear end too, where road grot causes corrosion to start underneath. Inner sills can be checked from inside if you lift the carpets. Be slightly wary of cars with stainless steel covers fitted. Yes, they look nice and very pretty, but they could also be hiding problems...or actually helping rust along by trapping water.

Front scuttles are another well-known rust spot, and from here, trouble can spread to the windscreen pillars as well. Rectification is complicated...and therefore expensive.

Inside the front wing is a splash panel. Nice idea...except it rusts, and then allows water through to the inner wings and the doorpost. You can't really see anything at fault here until it's too late...so check inside that wheelarch for holes in the splash panel!

We're not finished with the inner wings yet. There's a stiffening box along the top, which can rust and thus cause corrosion to break out along the top of the wings. The box itself is part of a cavity viewable from under the bonnet, so scrutiny is best from here. While there, look around the headlamps, both back and front. Bonnets, by the way, were alloy prior to 1969. After that, they were steel...and can start to go in the top and bottom corners Mal also highlights the areas adjacent to the hinges as a probable area for rot, and therefore somewhere to be checked. But the alloy bonnets don't just get away totally as they can be easily dented through careless closing, usually in the centre. Front and rear valances, hidden away beneath the bumpers, are also vulnerable. As well as rust, "Are they damaged or rippled in any way?" says Mal. "If so, this indicates accident damage, or at least carelessness."

Doors go at the top and the bottom, and if you see a bulging skin, then corrosion is quite advanced underneath and replacement of the skin is the best solution. "If a panel looks ripply or bulging, it probably indicates there's a badly repaired rusty area underneath," according to Mal. "Look inside the door from the bottom. Filler applied to rust actually drags the moisture into the metal and makes things worse. Filler is excellent in good metal though."

Moving towards the back of the car, the tops of the rear wings rust, usually starting with bubbles around the beading. This is just the tip of the iceberg if you come across it, and the rot will be a lot worse underneath.

On GTs, look around the load area for signs of water getting in through the tailgate. And that tailgate itself can rust along its bottom edge. Some GTs have sunroofs, which can corrode at the front, usually the vinyl-covered metal section, so you'll need to run your hand over this to feel for bumps underneath.

Look at the battery - beneath a panel behind the seats - as acid from it often attacks what is around it, and as this area is out of sight, it can get quite advanced.

If the worst comes to the worst, there is always the option of a complete new bodyshell...but this is an extreme route. It's easier to replace the front wings than the rear ones...because the former bolt on, the latter are welded.

Contacts

Clubs

- MG Car Club. Tel: 01235 555552 or www.mgcc.co.uk
- MG Owners Club. Tel: 01954 231125 or www.mgownersclub.co.uk

Specialists

- So where do we start? Practically every town in Britain has an MGB specialist... plus most villages as well. And any garage will be able to work on these cars, so simple and familiar are they. Here are just some of the many out there...
- Lower Barn Classics, Suffolk. Tel: 01473 833299
 - British Motor Heritage, Oxon. Tel: 01993 707200 or www.bmh-ltd.com
 - MGCC Spares, Cambs. Tel: 01954 230928 or www.mgccspares.com
 - Beech Hill Garage, Berks. Tel: 0118 988 4474 or www.beechhillgarage.com
 - Brown & Garmons, Herts. Tel: 01462 490049 or www.ukmgparts.com
 - Bill Hewitt, Manchester. Tel: 0161 434 2731

- Colne Classics, Essex. Tel: 01255 432693
- Forest MGBs, Gloucs. Tel: 01594 826112
- Former Glory, Middlesex. Tel: 020 8991 1277
- Frontline Costello, Avon. Tel: 01225 852963 or www.mgcars.org.uk/frontline
- Hall's Garage, Lincs. Tel: 01778 570286 or www.hallsgarage.co.uk
- MGB Hive, Cambs. Tel: 01945 700500 or www.mgbhive.co.uk
- MG Mecca, Norfolk. Tel: 01953 717618
- Mike Rolls MG, Dorset. Tel: 01258 820337
- Moss Europe Ltd, nationwide. Tel: 020 8867 2020 or www.moss-europe.co.uk
- The Barn, Abingdon Sports Cars Ltd, Hants. Tel: 01329 835393
- Bristol MG Workshop, Avon. Tel: 01177 956 6231
- MG Bits, Surrey. Tel: 01483 223830

HISTORY

1959 With the MGA having dragged MG into the latter half of the 20th century, work starts on its successor. The car that will eventually be logically named the MGB is known as Project EX205/ADO23, and will feature monocoque construction – a first for a MG sports car – as well as a more powerful development of the B-series engine as used in the MGA.

1962 The new MGB is launched at where else but the Earl's Court London Motor Show in October. Initially, it is only available in roadster form, with a 1798cc engine providing enough power to propel it to over 100mph if needed. Both press and public reaction to the new BMC sports car is very favourable.

1963 Overdrive – courtesy of Laycock de Normanville – becomes available as an option.

1965 The MGB Roadster gets a sister in the shape of the GT coupé. Although putting a top on the MGB – a move inspired by the Aston Martin DB Mk3 – might not seem a major exercise, it has proved more tricky than anybody expected, and in the end, had to be finished off by Pininfarina. The oft-used reference to the car as 'the poor man's Aston Martin' starts from this time...

1967 The Mk2 version of the MGB appears. Changes include an alternator now in place of the dynamo plus synchronism on all gears. Away from the actual MGB story, but closely related, is the new MGC featuring the 2912cc engine from the Austin 3-litre. It's something of a failure, and only lasts until 1969.

1969 All MGBs get a new recessed grille, something that doesn't prove popular, especially when it emerges that the change has come from deep within British Leyland's headquarters at Longbridge. Other detrimental/beneficial (delete where applicable) changes include chrome wheels, vinyl inside instead of leather, a smaller steering wheel and diminutive British Leyland badges on each wing.

1971 The MGB moves along to its Mk3 incarnation, with more changes to the inside.

1972 Further changes dispense with the unpopular 1969 grille, so that the MG badge is more prominently displayed again.

1973 Another MG offshoot is the GT V8, using Rover's ubiquitous V8.

1974 American safety regulations result in the fitment of big black rubber bumpers, plus an increased ride height. Handling is compromised and so, frankly, are looks.

1977 The MGB falls deeper into the world of the Seventies with garish 'deckchair' upholstery inside. A slightly less noticeable change is the move of the overdrive switch from the dashboard to the gearstick knob.

1979 Monday, September 10 is the 50th anniversary of MG's move to Abingdon, a date that British Leyland chooses to mark by announcing the end of the MGB and, by extension, the end of Abingdon and the MG marque as well.

1980 The final MGB is completed on Thursday, October 23, despite efforts by Aston Martin to take over building the car. Abingdon is sold the following year. The MG marque will return however...

Insurance quote

For a 1971 MGB Roadster, valued at £6500, based in Peterborough

- Fully comp, £173.25 for a 29-year-old, two years' NCB, 10,000 mile limit, only car, kept on driveway, club member
- Fully comp, £87.15 for a 50-year-old, full NCB, 3000 miles, second car, garaged, club member

How much?

There may be a lot of MGBs about – just take a look at a typical CCW classified section if you don't believe us – but that doesn't seem to harm prices in the slightest. These are evergreen classics, and likely to remain so for as long as there is a British classic car movement. People know they're easy to look after and work on, have unparalleled specialist back-up and parts supply, enjoy amazing club support and, above all, are great fun to drive.

However, because there are so many to choose from, it's definitely a buyer's market...you can take your time and go for the car you really want, at the price you really want as well. It's truly a happy hunting ground for MGB enthusiasts.

No surprise that it's the earliest cars which attract the most money...and, of course, Roadsters are more expensive than GTs. Mk1 and Mk2 Roadsters can fetch over £10,000 in superb condition, with only slightly less money for the Mk3s. However, the comparatively unloved (by many) rubber bumper convertibles can be had for about £8000, and knock over half that off if you're buying privately and happy to settle for something in average condition that could do with some gradual improvement.

The bargains of the MGB range are the late model GTs of course. With their bulky Polyurethane bumpers and, um, Seventies styling tweaks (deckchair seats anybody?) they can be picked up for under two grand in reasonable condition. Don't expect to get a chrome bumper example for that kind of money though. If you want sparkle, you'll have to pay a lot more.

MGs are easily modifiable inside, outside and under the bonnet. Such cars can attract a premium, assuming everything has been done tastefully and properly. There are some pretty special MGs out there that are well beyond what Abingdon originally intended...

Verdict

Buy any MGB and you'll be joining a very big club...and that's before you actually join any of the actual very big clubs that exist to look after these cars. Thousands – possibly even millions by now – of owners over the years can't be too wrong, and although the MGB is very much the Ford Focus of the classic car world, the option you go for if you want an easy life and don't mind blending into the crowd, there is much to be said for the easy life. After all, you can actually drive MGBs all day and every day, safe in the knowledge that, if something breaks, you won't have to then spend the next few months trying to find a replacement part at autojumbles, only to pay through the nose if you actually manage to do so. Parts are cheap and so readily available that this could almost be...well, a Ford Focus!

The Roadsters are tremendous fun in summer, but not so great in winter when the disadvantages of (quite often) not having a completely draught and waterproof hood usually become very apparent. That's when the GT comes into its own...and the enclosed car is a very practical machine, with its rear hatch. You don't get that level of access in a lot of small sports cars.

And although purists and snobs may not be that enamoured of them, we've got a soft spot for the rubber bumper cars. They may not be the prettiest of the bunch, but with their often lairy interiors and exuberant colours, they are a great example of how a British icon transformed itself to match the fashions of two very different decades. They're cheaper to buy and when you're inside, you won't notice the Polyurethane protuberances anyway.

And think of all the money you'll save on chrome polish too!

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Mini-Cooper (1990-2000)



Parts prices

All parts from Minispare, and include VAT

Front wing	£54.19
Outer sill	£22.62
Clutch and flywheel kit, twin point fuel injection cars	£196.91
Brake master cylinder	£105.74
Clutch master cylinder	£38.23
Front electric fan, 1996 onwards	£143.74
Two-core radiator, 1992 onwards	£79.31
Radiator, twin point injection cars, 1996 onwards	£109.28
Adjustable suspension - SPAX dampers and Hilo suspension trumpets	£213.05
Fuel pump, single point injection	£238.90
Twin point cylinder head	£430.00

Engines

By the time of the Rover Coopers, the A-series engine had been developed about as far as it could be...and was about as tough and reliable as possible too. The 1275cc is that of the MG Metro, with carburettors up until 1991, then single point fuel injection up until 1996, then multi-point injection thereafter.

Engine stabilisers are quite well-known for wearing out, so grasp the engine and see if you can rock it back and forth. If you can, things are getting weak, and you'll probably find the car shuddering when the drive is taken up. While it's not too tricky to replace the stabilisers, other ancillaries can get knocked out of true as the engine moves around, and in extreme cases, even the top pipe on the radiator can be pulled out - not something you want to happen at high speeds when the temperature is likely to be pretty warm. In fact, that pipe is quite vulnerable anyway, especially on the pre-1996 cars with side radiators, thanks to internal corrosion. Radiator surrounds can also end up fouling the fan blades, something which is often caused by a rocking engine. You'll probably hear this though from inside the car...and a visual check on things should confirm, if the tips of the blade appear to be freshly scratched.

Misfires on the carburettor cars are often the old bugbear of a damp distributor...even with a protective shield fitted on the front, as these Rover versions had, it still happens. According to our expert owner Ian Nicholls, both types of fuel injection seem reliable enough, although they're not the most refined of systems, especially the single point injections. "I've never known of any complaints...in fact, I've known more modern cars to suffer a lot more problems with their complicated systems." Rough running can usually be traced to sensor problems.

However, Ian did point out that the fuel-injected models can be a pain if you want to tune the cars because Rover used a standard ECU that controls a lot of other functions other than just the engine.

Don't expect the A-series engine to be quiet...although post-1996 cars did go some way to addressing the usual chatter (at least what you hear from inside the car) thanks to a front radiator and extra soundproofing throughout. Tappet noise is to be expected, as is timing chain rattle, although the latter is pretty simple to rectify. It is rumbles from deep within and blue smoke from behind (and from under the oil filler cap) that presents more of an issue. Don't expect a completely oil-tight engine...they all leak oil, Sir. Just do...

Specification

Car	Mini-Cooper Carb	Mini-Cooper S Carb	Mini-Cooper 1.3i	Mini-Cooper Si	Mini Cooper S	Mini Cooper S Works
Year	1990-1991	1991	1991-1996	1991-1996	1996-2000	1996-2000
Engine	All models: 1275cc 4-cylinder OHV					
BHP/RPM	61bhp@5500rpm	78bhp@6000rpm	63bhp@5700rpm	77bhp@5800rpm	86bhp@5500rpm	90bhp@6000rpm
Top speed	87mph	97mph	87mph	97mph	97mph	102mph
0-60mph	12.2secs	11.0secs	12.2secs	11.0secs	9.65secs	8.9secs
Gearbox	Four-speed manual					
Consumption	33mpg	27mpg	32mpg	27mpg	35mpg	35mpg

It may have been an anachronism by the Nineties, but it wasn't half a fun one!

RICHARD GUNN looks at buying the reintroduced Mini-Coopers – or Mini Coopers, depending in your punctuation – of the Rover years

Gearbox

Expect a whining from the gearbox in first gear. They all do that and, frankly, it wouldn't be a proper Mini if it didn't. However, the noise shouldn't be too excessive. Signs of 'boxes that are getting past their best include disappearing synchromesh around second gear, plus a gear lever that tends to jump out of ratios under acceleration. If this is the case with the car you're interested in, then sadly a gearbox rebuild isn't likely to be too far away. However, it is only after about 100,000 miles that such problems will set in, assuming the car hasn't been too abused.

Post-1996 cars have transmissions that are essentially three gears plus an overdrive top, so lose some of their peppy enthusiasm in favour of more relaxed higher speeds, something to consider if you're looking for a Mini that primarily offers low speed fun.

Interior

The Mini may have started off as a very Spartan people's car, but by the time of the Rover Cooper, it was a lifestyle vehicle... with suitable interior to match. Some variants even featured full leather and a walnut dashboard, although cloth and common plastic was more usual. There's little to worry about with the interiors – mainly because there's very little actually in the interiors – and practically everything is still available either new or secondhand. However, leather and wood will obviously cost more to put right than the lower-spec appointments. Specific things to look at include sagging seats – replace or upgrade – plus the odd electrical problem, caused by poor connections around the bulkhead-mounted fusebox or a battery prone to jumping around because it isn't properly secured in place inside the boot.

Suspension

Because even the last Minis used, essentially, the same rubber cone suspension as the first examples from Sixties, you can't expect a particularly comfortable ride from any modern Cooper. They bounce and they jar over bumps...but that's the penalty for all that superb handling.

If the Mini you're looking at doesn't possess brilliant handling, then all is not well. Possible reasons are tyres past their best or damaged suspension as a result of having hit a kerb – the radius arms at the rear and the tie rods at the front can be affected by such violence. However, balljoint wear is another likely possibility – to check, you'll need to jack the car up and see how much you can rock the front wheels top to bottom. There's also the possibility of accident damage having twisted things. Measuring the wheelbase on each side may betray previous incidents, and the nearside one is often shorter from hitting kerbs.

If, when going around a tight corner, you hear a clicking from the front wheels, then it's likely that the CV joints are on their way out. It happens quite a lot on these cars...in fact, they're almost a service consumable!

Cars fitted with Rover's Sports Pack – which swapped 12-inch wheels for 13-inch ones – don't handle as well those with the smaller ones. They can be prone to tramlining on some road surfaces...just something to be aware of during your test drive. If you really want the early Mini experience though, you can even fit 10-inch wheels, assuming you 'downsize' the disc brakes as well.

Bodywork

Early Rover Cooper models don't have a great reputation for quality control...what rust-proofing there was wasn't great, and paintwork wasn't the best around. Our expert owner, Ian Nicholls, has also highlighted that even the later models have their flaws. "Some people have found they're not even painted under the wings," he told us.

We've probably all seen Minis barely a decade old displaying all the usual problems in all the usual places...the seams around the headlamps, doors, sills and guttering. And that's just the rust you can see on the surface!

It's the panel join under the headlamps that is most likely to show trouble, as it's where any water, mud or salt loves to collect. Other areas to look at include that little triangular panel just in front of the doors, where the A-post meets up with the scuttle. Even small bubbles on the surface point to larger problems underneath. Oh, that scuttle panel...it goes as well, behind the wheelarch where it joins to the inner wing. If a visual check doesn't show up anything, look for signs of water making its way into the cabin. Inner wheelarch liners were never fitted to Minis, but you can get them for these models from some specialists.

While you're at the front, look too at the valance, around the bottom of the windscreen pillars, and at the top of the bulkhead too. As for the windscreen rubber itself...if it starts to perish, it will let water start to attack the metal beneath, and ultimately start leaking inside the car when it rains.

And so to the sills. It's always entertaining looking for faults in this region on any Mini. The tinworm usually starts from either the front or rear of the panel – thanks to stuff being thrown up by the wheels, and then gradually spreads inwards. It can also affect the floorpan too, in extreme cases. While you're looking fore and aft at the sills, look at the subframe mountings close by as well. These are another notorious Mini grot spot, and the situation isn't helped by the stresses they have to put up with either.

Inside, have a look under the back seat – it's easy enough to lift out. The metal is often weak under here, and have a look too under the linings of the storage bins in the back. If you're unlucky, you may even be able to see the road through the bottom of these! In fact, you should really look at any of the metal inside the cabin...lifting the carpets especially, as later cars were quite luxurious inside, meaning that damp could easily get trapped underneath the thick material.

Shock absorber mounts go rusty...but they're pretty easy to see, especially the rear ones in the boot, although one is concealed behind the petrol tank. Oh, the boot...yes, look at the floor too, especially the corners, spare wheel and battery wells, plus where the boot hinge panel, valance and floor meet up. Water gets trapped here thanks to the rear bumper and the worst case scenario is that the lid itself can suddenly drop off.

Some of the Coopers had major wheelarch extensions to accommodate thicker wheels. They look mean, moody and magnificent, but what's going on underneath that plastic?

It's tempting to dismiss any absent or shoddy items of trim as nothing too much to be bothered about. After all, you can get almost anything for a Mini, can't you? Well, yes, that's true, but there are a lot of inferior items out there that aren't up to scratch, and while they may be cheap, they won't have the same Rover quality. Now there's two words you often don't find sitting together in the same sentence...

Transmission

With efficient discs up front and drums at the rear, brakes usually only give problems on neglected cars, usually as a result of seized cylinders, although the rear drums can start to corrode after a while, while pads at the front can wear out quite quickly. However, during your test drive, see that the car pulls up straight and true as a matter of course.

Accessories and Extras

Minis have been customised right from their birth, and Rover Coopers are certainly no exception. In fact, if anything, they're likely to be among the most modified of all Minis because Rover offered a lot of accessories through dealers...and there were John Cooper parts that could be purchased too. Bolt-on bits don't affect value, and in some instances can positively enhance a car, but make sure any changes have been carried out professionally, and if the car has been tuned to go faster, make sure that any necessary safety mods have been done too.

HISTORY

1959 And so it begins...the Suez Crisis-inspired Mini is launched as the Morris Mini-Minor and the Austin Seven. Intended as a very basic form of transport, the original models offer little in the way of performance (during development, engine size was actually reduced to 848cc because the prototype cars proved too fast) but can't help but handle superbly...which soon means they start finding themselves unofficially used for motorsport.

1961 Having been impressed by the potential of the Mini after seeing it being driven by several of his F1 drivers, including Bruce McLaren and Jack Brabham, John Cooper of the Cooper Grand Prix team suggests to Alec Issigonis that a performance version of the Mini could be built. Despite Issigonis' reluctance, BMC gives the go-ahead and what is essentially a Formula Junior-spec 997cc A-series engine is installed to create the first Mini-Cooper, available from September 1961.

1963 The first Mini-Cooper S appears, developed by Downton Engineering, and boasting a 1071cc variant of the A-series engine.

1964 Standard Coopers have a tiny rise in capacity up to 998cc, while the S models go up to 1275cc, although there is a 970cc version for homologation purposes.

1971 Only the 1275cc Cooper S is left in production by the dawn of the Seventies, and it only survives a year into the decade before a British Leyland rationalisation replaces it with the less sparkling Clubman-based 1275 GT...and also means that the company no longer has to pay a royalty of £2 to John Cooper for every Mini-Cooper sold.

1990 With the Mini having become a much-loved British icon, renewed interest in the car has been created thanks to Rover's various limited editions. Thus the decision is taken to bring back one of the most definitive of all Minis and resurrect the Cooper, available from July. Fitted with a catalytic-equipped 61bhp version of the MG Metro 1275cc engine, Minilite wheels, and contrasting bonnet stripes and roof colour, just a thousand are built. All sell out before the car even reaches the showrooms. Another 650 are built just for Japan, where the Mini is still immensely popular. So successful is the exercise that the Mini-Cooper becomes a regular production model from September, with some of the features of the limited edition model deleted.

1991 John Cooper develops a conversion kit to take power up to 78bhp. The new Cooper S is consequently born. Later in the year, single point fuel injection is adopted to comply with emissions laws. Cars so equipped become known as the Cooper 1.3i and the Cooper Si.

1994 The Mini-Cooper Monte Carlo is launched in January to celebrate the 30th anniversary of Paddy Hopkirk's win on the 1964 Monte Carlo Rally. Essentially, it's a standard Cooper dressed up with rally items such as spotlights, white patches on the doors and Rallye Monte Carlo stickers. A further batch of 200 follows in July with gunmetal alloy wheels.

1995 Interior improvements are carried out across the range.

1996 Mini Coopers - Rover has now forgotten about the hyphen despite it nestling seductively between the two words since 1961 - get multi-point injection and electronic engine management, plus electronic ignition...which means that wet distributors, the bane of many a Mini owner's life, become a thing of the past. This also allows the radiator to move to the front of the car. However, performance suffers slightly, thanks to extra weight and the fitment of a higher final drive to make the car more relaxed on motorways. Oh, and there's even an airbag too...something it was previously thought impossible to fit to something the size of a Mini. John Cooper offers S and S Works variants, the latter with 90bhp and a top speed of 102mph.

1997 A whole host of optional extras - such as the Sports Pack and retro-style Chrome Packs - allow owners to customise their Minis to the max.

Contacts

Clubs

Local Mini clubs are everywhere in Britain...it's one of those cars for which just one club just isn't enough. However, the national organisations include...

- British Mini Club. Tel: 01384 897779 or www.britishminiclub.co.uk
- National Mini Owners Club. Tel: 01534 257956 or www.miniownersclub.co.uk
- Mini-Cooper Register. Tel: 01580 763975 or www.minicooper.org
- Mini-Cooper Club. Tel: 020 7515 7173 or www.minicooperclub.com

Specialists

Just as there are many clubs catering for the Mini, so there are a hell of a lot of specialists too. Some of them are...

- Mini Spares, Herts. Tel: 01707 607700 or www.minispares.com
- British Motor Heritage Ltd, Oxon. Tel: 01993 707200 or www.bmh-ltd.com
- Henley Classic Mini, Oxon. Tel: 01189 722568 or www.henleyclassicsminis.com
- Minisport, Lancs. Tel: 01282 778731 or www.minisport.com
- Moss Europe, nationwide. Tel: 020 8867 2020/0800 281 182 or www.moss-europe.co.uk
- M&M's Mini & Metro Spares (secondhand parts), Warrington. Tel: 01925 444303 or www.mini-metro.co.uk
- Avonbar, Herts. Tel: 01279 873428 or www.avonbar.com
- Bank Garage, Norfolk. Tel: 07712 825138
- Midland Mini Centre, Birmingham. Tel: 0121 727 1961 or www.minicentre.com
- Newton Commercial, Suffolk. Tel: 01728 832880 or www.newtoncomm.co.uk
- Mini Parts Centre, Sunderland. Tel: 0191 567 5051 or www.minipartscentre.co.uk
- Miniman, East Midlands. Tel: 01564 770516 or www.miniman.com
- Huddersfield Mini Spares, Yorks. Tel: 01484 658524 or www.minispares-online.co.uk
- Somerford Mini, Wilts. Tel: 01249 721421 or www.somerford-mini.co.uk
- Mini Speed, Surrey. Tel: 01932 400567 or www.minispeed.co.uk

How much?

Because they're still regarded as comparatively new cars, especially within the Mini catalogue, prices are still prone to fluctuation with Rover Coopers. We won't, therefore, try to pin down values using one of our usual tables, but simply give some ballpark figures. Particularly nice, usually later, examples of Rover Mini Coopers have gone for up to £7000 in recent times, but around £4000 should be adequate to net you a reasonable example of any of the type. If you want a cheap example, then about £2000 should be enough...but be prepared to work on it. It's likely to be more than a little rusty at that price...

Verdict

The Mini's plusses - and minuses - are well known by most motoring enthusiasts. With the Rover Coopers, you are getting the final, definitive versions of the breed, more luxurious, refined and sophisticated than any previous Mini before them.

Our particular preference would be for one of the later multi-point fuel-injected ones, and we'd like it loaded with all the extras please - especially that wavy Austin-type grille that was available. But whatever your own choice, it's important to pick one where the body is as nice as you can find. It's corrosion that really lets these cars down, as for Nineties vehicles, the level of rot can be horrendous. That said though, keep that under check, and there are few other small cars from the same era (even though, really, the Mini is really from an era decades earlier) that will give you so much fun on the roads at quite low speeds, and instil the same level of enthusiasm and fanatical devotion in you as a driver and an owner.

Insurance quote

For a 1993 Rover Mini-Cooper, valued at £4500, based in Peterborough

- Fully comp, £165 for a 29-year-old, two years' NCB, 10,000 miles, only car, kept on driveway, club member
 - Fully comp, £82 for a 50-year-old, full NCB, 3000 miles, second car, garaged, club member
- Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)**



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MORRIS MINOR

Interior

Don't be too worried about a scruffy interior. Practically everything is available, either new or secondhand, especially for the later cars, with replacement trim done by companies like Newton Commercial. Headlining on the Series MM and 2 cars is difficult to find these days though, thanks to being made from now obsolete Rexine.



Engines



Two engine types were originally fitted to the Minor – although you might find that other types have subsequently been modified to fit, up to and including the Rover V8. Parts for the original sidevalve engine (1948-1953) are getting scarce, but no such worries centre around the venerable old A-series. On both engines, look for blue smoke on start up and under acceleration, and have a look for signs of water mixing with the oil and vice versa, suggesting a blown head gasket or, even worse, a cracked block.

Sidevalve: While the 918cc engines were good enough for their era, they're rather pedestrian and asthmatic these days, and a lot of higher speed use will take its toll. It's vital that the cooling system is well-maintained, as there's no water pump (things are operated by thermosyphon principle), and if sludge is allowed to build up, it will cause overheating. Thus, the coolant should have been changed regularly. It's tricky to adjust the tappets on these cars, which can lead to the

exhaust valves burning out, so if the top end sounds clattery, you have been warned!

A-series: These engines have a great reputation, and even if the worst comes to the worst, they are easily fixable, usually for peanuts. Because the 803cc unit has to work hard, it usually doesn't last as long as its 948cc or 1098cc siblings, but it's quite common for these earliest engines to have been replaced by later, more powerful units by now, after they've gone bang. Don't expect quiet operation, as the A-series doesn't do quiet. Noisy timing chains and worn valve gear are the likely suspects – but easily rectified – although be concerned if the noises are coming from deeper within.

Specification

Car	Morris Minor MM	Morris Minor Series 2	Morris Minor 1000	Morris Minor 1000
Year	1948-1953	1952-1956	1956-1962	1962-1971
Engine	918cc 4-cyl sidevalve	803cc 4-cyl OHV	948cc 4-cyl OHV	1098cc 4-cyl OHV
BHP/RPM	27.5bhp@4400rpm	30bhp@4800rpm	37bhp@4750rpm	48bhp@3000rpm
Top speed	60mph	62mph	75mph	77mph
0-60mph	Slowly, oh so slowly	52.5secs	30secs	24.2secs
Gearbox	All models: Four-speed manual			
Consumption	36-40mpg	36-40mpg	37-44mpg	36-42mpg

Suspension All models: Front: Independent by torsion bars and links. **Rear:** Half-elliptic leaf springs

The Minor has gone beyond being a mere classic car, and is now practically part of the fabric of Britain's consciousness. **RICHARD GUNN** looks at buying the world's most famous poached egg... without getting a broken one

Running gear

You can probably expect some axle whine. Yes, it does mean the differential is wearing out, but no, it doesn't mean that failure is imminent. Sometimes, they can go on like that for years! And even when replacement is called for, it's not exactly that difficult.

Trunnion and bush wear is common, especially if new trunnions have been fitted to old kingpins. Try to get evidence that both have been replaced at the same time. Assuming all the suspension grease nipples have been lubricated every thousand miles or so, problems should be few and far between...although if the greasing has been skipped, the threaded pin can pull out of the threaded trunnions and cause the front suspension to collapse. Nasty! With the car jacked up, you can get some idea of whether the trunnions and bushes are worn by seeing how much the wheels can be rocked, top to bottom. Anything excessive is...well, excessive.

Transmission

If the car jumps out of gear when lifting off after acceleration, the gearbox is on its way out. The same thing applies in the event of noise from first and reverse gears as well...although the 'boxes still have the ability to go on for ages. With the 803cc cars, the conical spring on the lever has been known to break easily, which means engagement of the ratios will become tricky and the synchromesh cones - which are made of brass - can wear out too. The 1098cc transmissions are known to be pretty tough and reliable, but second gear synchromesh is likely to wear out before the others on higher mileage cars. Clutch judder - if it's there - can usually be blamed on a worn or broken steady bar or a less than tight steady cable between the gearbox and the crossmember.

Chassis

It's the underneath where these cars are liable to deteriorate most, unseen by owners who polish the rest of the car to perfection every Sunday. Look at the two chassis rails either side of the engine. They rot, or are dodged, and although they can be put right, it's a complex operation that won't come cheap. As with many old classics, the forward rear spring mountings are often vulnerable to tinworm, and should be checked to see how strong they are, as should the flat panel underneath the boot catch, which often rots.

From inside the engine bay, look at the tops of the inner wings (where the nuts for the wing bolts are), plus the tie plates at the bottom of the bay, bulkhead corners and the crossmember down below the radiator.

Bodywork

Well, the good news is that all of the outer panels just bolt on and off again...which makes it easier to deal with the fact that, actually, Morris Minors do rust a fair bit. After all, they were cheap British cars aimed at the masses, and it was probably never envisaged that so many of them would be surviving into the 21st century. Fortunately though, the fact that so many have done means that practically everything is available, certainly for the later cars, to put right what has gone wrong on a Minor, if necessary.

Start your tinworm exploration at the front wings, which tend to go at their rear edge plus around the headlamps. Wings can easily be bought new - well, accept for lowlight ones - and don't cost too much. You should also check the rear ones carefully as well. These like to rust towards their bottom edges, as well as around the piping. Other areas to be checked for superficial corrosion include the bottoms of the doors, the bootlid edge and, from inside the boot, the inner wings and the flange where the rear wings bolt on.

Finished yet? Not by a long shot. If you open the door, and the hinge pillar seems to flex, then it points to corrosion at its base. It may not be easy to see, but it'll be there.

Onto the sills, which are surprisingly complicated constructions, given how simple the rest of the car is. That means that they're often just patched up with cover sills (or those shiny stainless steel trims) while corrosion continues unchallenged underneath. You can get some idea of this area's integrity by squeezing the carpet-covered box section at the base of each door shut...and if there's any give, it's not a good sign. Another check to do is to lift the carpets and have a look under the seats at the central crossmember. As this is structural, corrosion here will have to be put right eventually, and it's likely to be pricey to do so. Look at the rest of the floor too - especially in a convertible - with particular regard to how secure the metal is around the front seat mountings.

Open top cars have their own problems of course, because structural problems can cause the car to sag. If the doors are difficult to close, then this is likely to be the reason why. It's quite common for saloons to have been converted into, um, convertibles, which is all well and good, assuming that the proper strengthening has been carried out...although they will be worth 20 percent less than the real thing. Look for plates at the bottom of the B-post and double strength boxing plates as proof that an ex-saloon is tough enough. If you're wondering just how to tell if a Minor is a genuine convertible, then post-1962 cars have a MAT chassis prefix.

And finally, Travellers, where the state of the wood is vital, as it's not just there for display. Discolouration of the ash is something to be cautious of, as is soft, pitted or painted woodwork. To put wood right on one of these means practically dismantling the rear half of the car. Which isn't a task you want to take on lightly.

Parts prices

1098cc crankshaft	£155.99	1098cc clutch kit	£79.99	Front wing, heritage,	£84.99
plus £25.00 surcharge		Front brake drum	£24.99	Front wing, pattern,	£59.99
1098cc Duplex timing chain kit	£24.99	1098cc front brake shoe kit	£17.95	Upper trunnion kit,	£14.99
1098cc lead free cylinder head	£165.00	Exhaust system, stainless steel	£55.99	Swivel pin, reconditioned,	
plus £100.00 surcharge		Fuel tank	£165.00	with trunnion,	£69.99
Water pump, Unipart	£23.42	Fuel pump	£59.00	plus £25.00 surcharge	
Gearbox, reconditioned	£275.00	Carpet set, 1098cc saloon and convertible	£59.99	Rear leaf springs, five leaf,	£26.00
plus £85.00 surcharge					

Contacts

Clubs

- Morris Minor Owners' Club, PO Box 1098, Derby, Derbyshire, DE23 8ZX. Tel: 01332 291675 (8.30am – 3pm) or www.MorrisMinorOC.co.uk
- Morris Minor LCV Register. Tel: 0121 422 1334 or www.minorlcvreg.tk

Specialists

It's probably actually easier to list those classic car specialists that don't cater for the Morris Minor. But here goes...

- Morris Minor Centre (Bath) Ltd, Somerset. Tel: 01580 200203 or www.morris-minor.co.uk
- Mr Grumpy's Morris Minors, Oxfordshire. Tel: 0865 326828
- The Morris Minor Parts Centre of London, London. Tel: 020 8543 2264
- Morrie Spares, Essex. Tel: 01992 524429
- East Sussex Minors, East Sussex. Tel: 01580 200203
- Minor Developments, Worcs. Tel: 01562 747718

HISTORY

1943 Despite Britain still being at war, and there being an official ban on the development of new cars, a prototype new Morris is cobbled together at Cowley. Dubbed the Mosquito, the car features unitary construction, rack-and-pinion steering, and a flat-four 800cc engine. Development continues throughout the rest of the war and into peacetime, and is initially kept secret from Morris boss Lord Luffield...who would later refer to it as "a poached egg."

1948 The Mosquito has metamorphosed into the Minor, and is unveiled at the Earl's Court Motor Show as a two-door saloon and a tourer. Largely unchanged from its 1943 style, it has nevertheless lost the 800cc flat-four engine – which could never be made to work properly – but gained an extra four inches in width, added at a late stage and made noticeable by the split windscreen, ridge down the centre of the bonnet, and blanking plates in the middle of the bumpers. The all-new – well, except for the 918cc sidevalve Morris Eight engine – car immediately provokes interest.

1950 The headlamps, initially down by the side of the grille, are moved to the top of the wings to comply with American lighting regulations. And a four-door model is introduced too.

1952 The British Motor Corporation is formed by a merger between Austin and Morris. Austin finds itself at the top of the tree, and one of the first actions of the conglomerate is to fit the overhead valve Austin A-series engine into the Series 2 Morris Minor...something regarded as anathema by Morrisophiles, no doubt devastated at the intrusion of an engine from a bitter rival into the Minor's engine bay.

1953 The Minor range expands – literally – with the advent of the Traveller estate and, for commercial users, the van and the pick-up versions. The first vans supplied to the GPO come with rubber wings complete with separate headlamps mounted on the top.

1954 There's a small revamp, with the front grille adopting horizontal slats, plus a new interior with a centre speedometer.

1956 Engine size goes up to 948cc, prompting a change in name to Morris 1000, presumably because Morris 948 sounds less impressive. Other changes include a new windscreen, now all in one piece, plus restyled rear wings and a larger back window.

1960 The millionth Minor is completed on December 22. In celebration, 350 two-door models are finished with lilac paint, white trim and special badges.

1962 Top speed goes up to 77mph, thanks to an increase in A-series engine size to 1098cc, which gives 48bhp, rather more than the 27.5bhp the car originally started out with.

1964 Having to fit seatbelts to the range prompts BMC to go for another interior redesign, with better heating and – gosh – a glovebox lid!

1969 Convertibles disappear from the catalogue.

1970 With the replacement Morris Marina just around the corner, the saloon version is dropped.

1971 The final non-commercial Minor to be constructed is a Traveller. However, in December, a Minor van is built for the Post Office. After it has rolled down the production line, the final tally comes out at 1,619,857 of all types built.

- Leadbetters, Lancs. Tel: 01257 275314 or www.leadbettersoflancashire.co.uk
- Woodies, West Sussex. Tel: 01243 788660 or www.morriswoodwork.co.uk
- MGM Spares, Derbys. Tel: 01942 820181 or www.mgm-spares.co.uk
- Charles Ware's Morris Minor Centre, Bristol. Tel: 0117 300 3754 or www.morrisminor.org.uk
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- Moggy Factory, Shrops. Tel: 01952 619661 or 0802 718433
- Newton Commercial, Suffolk. Tel: 01728 832880 or www.newtoncomm.co.uk

How much?

These are very popular cars, and values reflect that. Not that they're particularly expensive to buy, but bearing in mind they were cheap family cars when new, the heady financial heights they can now reach are a little out of proportion to what they once were. Like Minis and Volkswagen Beetles, these are people's cars that have definitely improved their status and worth in life. Still, the good news is that, once you've bought one, practically everything else for it, such as parts, insurance and running costs will be delightfully cheap.

The earlier you go, the more expensive a Minor is likely to be...with the big money reserved for the first Series MM models, especially if they're open top and have their lights set down low. Getting on towards £7000 might be the dealer price for a good one. Go younger, and the more plentiful 1000s are considerably cheaper and, to be honest, even easier to look after.

Because the saloons are still everywhere, less numerous versions such as the estate (in particular), van and pick-up can demand an extra premium, but it's the open top cars that you'll really have to spend the cash to buy. In this case, less (roof) is most definitely more.

Verdict

There's little argument to be had against the Morris Minor. Okay, it may be the Ford Mondeo of classic cars – so numerous are they and so simple to look after – but it is historic vehicle ownership made easy. And it's been responsible for attracting thousands, probably even millions, to the movement. Along with cars like the Mini and the MGB – all the Ms, have you noticed? – the Morris Minor practically is the British classic car industry.

But which to buy? Well, you'll get great specialist support, spares back-up and club interest with any. But the first cars, with their pre-war-based engines, are a little too velocity-challenged by today's driving circumstances, as cute and cuddly in appearance as they undoubtedly are. For those going into Minor ownership for the first time, a 1098cc saloon is a great introduction to the breed. It will give you a taster of what to expect, and at the many and varied club events, you can work up an appetite for the other models within the range – the convertibles, Travellers and pick-ups, from the Forties to the Seventies – that can come afterwards. For, truly, owning a Morris Minor is more a way of life than simply having a classic car.

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MORRIS OXFORD/COWLEY



Engines

"Generally, the B-series is a very good engine," says Phil Green of Earlpark...and he's right, for the B-series was (and is) a tough old thing capable of standing up to a lot of abuse. Its later use in the MGB (albeit in larger form), means that parts availability is quite impressive for a humble car of this age.

So it's the usual things you should look out for most of all, such as blue smoke from the exhaust indicating worn bores (if there's smoke under acceleration) or valve stem seals past their best if it's on the overrun. Expect the engines to be noisy with tappets and some timing chain rattle – it's what they do – but any other unexplained noises should give cause for concern. Fortunately, there's an oil pressure gauge on all the cars...for which you should look for around 50 to 60psi when cruising. Expect it to go down to about 10-15psi at idle.

"Lead free running doesn't do these cars a lot of good," believes Phil. "Especially if you do a lot of miles. It's best to get a lead-free head for real peace of mind." Fortunately, Earlpark has these in stock, at £247.93 exchange, including VAT. Or, if you want to go the whole hog, a lead-free engine is £938.83 exchange, including VAT. He recommends fitting a lower temperature thermostat though.

Which brings us rather nicely to temperatures. These engines can run hot. "Overheating is often caused by radiators being gunked up or head gaskets going," says Phil's colleague, Kevin Eyre. "Of course, it's the overheating that causes the head gasket to go." His advice is to keep an eye on the temperature gauge during any test drive.

Oil leaks are pretty much an accepted part of ownership with these cars. "The front timing case seal is felt rather than rubber," says Kevin. "Which means they drop oil. It generally only tends to happen when they're standing though. They can be modified with later engine parts to accept rubber seals...assuming you can find the parts."

Specification

Car	Morris Oxford Series 2	Morris Cowley 1200	Morris Oxford Series 3	Morris Oxford Series 4 Traveller
Year	1954-1956	1956-1958	1956-1959	1957-1960
Engine size	1489cc 4-cyl OHV	1200cc 4-cyl OHV	1489cc 4-cyl OHV	1489cc 4-cyl OHV
BHP/RPM	50bhp@4800rpm	42bhp@4500rpm	55bhp@4400rpm	55bhp@4400rpm
Top speed	73mph	65mph	73mph	76mph
0-60mph	29.0secs	37.5secs	39.3secs	29.9secs
Gearbox	4-speed manual	4-speed manual	4-speed manual or Manumatic semi automatic	4-speed manual or Manumatic semi automatic
Consumption	26mpg	29mpg	29mpg	26mpg
Suspension	All models: Front: Independent by torsion bars, wishbones, telescopic shock absorbers. Rear: Live axle and half-elliptic leaf springs, telescopic shock absorbers.			

Holding the middle ground for Morris during the Fifties was the Oxford and Cowley range, the first mainstream use of the B-series engine. **RICHARD GUNN** looks at what might go wrong with that unit... as well as the rest of the car. Expert help comes from Kevin Eyre and Phil Green of Earlpark

Gearbox

On earlier cars, you'll find a column-mounted gearchange, while the later (Oct 1958) cars onwards sported conventional floor-mounted levers. The latter is far easier to use than the former, usually because of wear in the complicated linkage of the column system. However, that can be put right. Synchromesh tends to go with age.

However, Kevin Eyre sounds a note of caution about oil levels. "Look for leaks on the seals. The rear seal is felt, then a rubber item...and this can let oil past!" Other than that, the only other thing he flags up is split gearbox mountings, something that also strikes the engine mountings as well.

The two-pedal Manumatic semi-automatic system was a rare beast, and not that popular when new. Parts for the system are very difficult to get hold of...but it's quite unlikely you'll come across a car employing this system.

Differentials don't usually play up...although it is quite common to fit parts from an A60 Farina or MGB to make the car feel somewhat less strained at higher cruising speeds.

Interior

While wood is absent – these are just minor Morris after all – you will find leather in use on the upholstery in Oxfords. Cowley owners had to make do with just PVC. Seats are resilient enough, although you should expect some wear and tear after 50 or so years, with splits down the seams often quite common. Leather will obviously cost more to put right than just PVC if a retrim is required, and it's the sort of expenditure that you'll never get back if you sell the car, nice as it may look.

The painted dashboards can get chipped, and damage to the oval-shaped plastic that surrounds the instruments on Series 3 cars is quite common too.

There isn't much in the way of trim available, so buy a car with the best interior you can find or be prepared to spend your time hunting high and low at autojumbles. Don't forget to try all the electrical items out. Not that there are too many to play with, but dodgy earths, bad connections and previous amateur-ish attempts at rewiring can all cause things to stop working. Modern drivers don't notice semaphores at the best of times...even when they are working when they should!



Bodywork

These cars are very well-built...in fact, over-engineered is a reasonable way of describing them. Their metal was very thick which meant that they managed to resist rust rather well for years. However, given that many decades have passed since these cars were new, rust is inevitable, and it's probably highly unlikely that you'll find a completely original example that hasn't been restored in some way. Which is probably just as well, as factory panels are now extremely scarce for these cars...although thanks to the Hindustan Ambassador's continuing existence, it's possible to get Indian-built bits. They may need some fettling to get them to fit, and make sure you don't end up with ones featuring the modern MINI-ish front end. Unless you want your Oxford or Cowley to look really different...

Because of the integral strength of the monocoque, there aren't that many places that rust badly, although you should get down underneath to check out the chassis legs, especially where the front ones join the transverse crossmember. It's approximately under the front seat.

Cosmetic corrosion is likely in the front wings, where the leading panel and grille overlap, and scrutinise around the headlamp area as well and sills, inevitably, are vulnerable areas too. The A-post also breeds tinworm, and from here, it can spread to the neighbouring inner and outer sills, floorpan and front wing.

At the back, the rear wheelarches like to go, usually around the area close to the rear doors. Even if no problems are immediately apparent, check for signs of filler.

As for floorpans, apart from the afore mentioned spot around the sills, the rear seat pressing also suffers, thanks to the sloping floor which makes a handy water trap.

You should have a look in the boot, just to check that all is well, although you probably won't encounter too much of concern.

Look at the bottom of the doors...and then open the quarterlights. These often deteriorate underneath their frame, and, in extreme conditions, the glass can fall out completely. Thankfully, unlike on Morris Minor Travellers, the wood on early estates isn't that important to the structural integrity of the car...although, obviously, buy the best you can if you don't want the cost of renewing the timber.

Brakes

Simple drum brakes all around shouldn't display many faults... just check to see if they're working as they should. And if they're not, don't bother about it too much, as any rectification should be a pretty straightforward and inexpensive job.

Suspension & steering

The suspension is conventional enough, albeit dotted with nipples that need greasing every 1500 miles. If this isn't done, wear will soon set in, resulting in new trunnions and kingpins being required. According to our Earlpark experts, "Everything else is just routine maintenance."

You should expect quite sharp steering, as a rack and pinion system was employed to point the car. If the car wanders, then further investigation is needed, either for the above reasons or to check if the steering rack itself is worn.



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Shock absorber, front	£37.58
Torsion bars, pair	£348.98
Water pump, 1.9 GTI	£28.16
Wheel bearing kit, 1.9 GTI	£58.81



Engines

Usually, there's little difference between the 1.6 and the 1.9 engines, so if you want to make sure you're buying what you hope you are, look at the identity plate – which you'll find at the offside back of the engine. A 1.6 engine will begin with XUSJ, while the 1.9s start XU9JA. If you want further proof, look between the sump and the cylinder block. 1.9s have a half-inch thick alloy spacer here. 1.6s don't.

Keeping to the 6000-mile oil change schedule is recommended on these cars...it's the difference between the likelihood of 60,000 miles and 100,000-plus miles before major work is required. Camshaft wear and valve gear problems are likely to be the main problems encountered, with clattering from the top end and blue smoke from behind the respective signs of trouble. However, on any high mileage car, you should expect some valve noise...just because these aren't really high tech engines. 1.9 engines seem to be less long-lived than 1.6s.

Keep an eye on the temperature gauge. On high mileage examples, these can clog up, with the result that the car tends to overheat. Still, replacements are cheap enough.

Cambelts should be changed every 36,000 miles. If one snaps, it will wreck the engine, and it's a wise precaution to replace it upon buying a car unless it has been done very recently. You never know...and it's not very expensive to do.

Oil leaks are most common from failed crankshaft seals, at the side of the engine. Putting these right means taking the engine out. Oil exiting on the front left of the block, where it meets the head, means a failed head gasket around the main oil feed. Rectification means taking the head off.

And so to fuel injection. Which, being Bosch, doesn't suffer too much in the way of problems, but does need an expert to put it right if it does go wrong once in a blue moon. A faltering or missing engine points to trouble, but could also be down to just blocked breather hoses. Easily cured. Something else you should be on the lookout for is if a non-standard air filter has been fitted. If the airflow meter hasn't been recalibrated, this can cause running problems.

Want something simple? Okay, starting problems...which can be often resolved by just wiping away a small oil leak in the distributor housing. Yes, it really is that basic...occasionally!



Specification

Car	205 GTI 1.6	205 GTI 1.6	205 GTI 1.9	205 GTI 1.9
Year	1984-1986	1986-1991	1986-1991	1991-1994
Engine size	1580 4-cyl OHC	1580 4-cyl OHC	1905 4-cyl OHC	1905 4-cyl OHC
BHP/RPM	105@6250	115@6250	130@6000	122@6000
Top speed	120mph	122mph	123mph	122mph
0-60mph	8.6secs	8.6secs	7.8secs	8.0secs
Gearbox	All models: five-speed manual			
Consumption	30mpg	30mpg	28mpg	28mpg

Suspension All models: **Front:** Independent by MacPherson struts, coil springs, lower wishbones, telescopic dampers, anti-roll bar. **Rear:** Independent with trailing arms and transverse torsion bars, trailing arms, telescopic dampers, anti-roll bar.

Transmission

Is there a knocking that sounds like a worn CV joint? It might not be...and could be a bearing about to go in the differential. If that happens, it can actually split the gearbox casing, with the result that a new one is needed. Obviously, replacing the bearing before this happens is the best option.

Difficult gear changes are often little more than worn bushes in the linkage, most commonly found on cars that are used a lot around towns. Clutch cables can tend to get stiff with a lot of use, resulting in awkward changes and judders between ratios.

Where once there was the Volkswagen Golf GTI, by the mid-Eighties there was the Peugeot 205 GTI, ruling the roost of small European hot hatches. **RICHARD GUNN** goes through the catalogue of what to look for when you're Pug hunting

Electrics

French cars share something of their Italian counterparts' reputation for dodgy electrics, and although the 205 is pretty good in this respect, it does suffer from some foibles, most notably damp, which attacks the terminals and corrodes connections. Finding out just where the fault lies can be a time-consuming task, and it won't be helped if amateurs have been messing with the wiring to add in extra accessories... something that happens quite a lot on modified GTIs.

Look at the driving lights, set under the front bumper. These rarely survive intact, and once they're broken, the housings start to rust away. Headlamps often get affected by damp, resulting in the glass becoming unstuck. The result – albeit an extreme one – is that the glass can fall out completely.

If the engine idle fluctuates when a lot of electrical equipment is turned on, it's liable to be a faulty or overloaded alternator.

From 1990, convertibles had electrically operated hoods. These only work with the engine off and the ignition on. Rather bizarrely too, the oil warning light needs to be working. Any inactivity is usually down to just a faulty or dirty oil pressure sensor, but do make sure you check. You don't want to be saddled with a convertible where you can't put the hood down or, worst still, up again!

Interior

On the 1.6, cloth was used on the seats, while more affluent 1.9 owners were treated to half-leather trim. The cloth isn't that good a quality material and splits with a lot of use. It seems to be worse on pre-1988 models. Side bolsters tend to collapse as well, and the door bins are often damaged by careless use of feet.

If the car you're looking at has a sunroof, then check around it, and the area of the interior directly below. If the drainholes become blocked, it can result in damp getting inside the car, which will cause further problems with the trim, as well as introduce the likelihood of corrosion in the roof.

You should lift the rear seat to look at what's happening with the metal underneath. It's a prime spot for corrosion, and often goes unnoticed.

Windows can be difficult to wind down...but usually, all these will require is some grease on the mechanism to restore the ease of use.



Bodywork

Because these are cars that are often driven - shall we say - somewhat fruitily, accident damage can be a real issue. Thus stand back at first, just to see how the car looks in general. What are the panel gaps like? Are there any ripples? Is everything straight? You can back up any suspicions by looking at the rear hatch, back bumper and boot floor, as when these cars do go off the road, it's usually backwards. Cracks on the body above the rear side windows are also indications of possible crash damage...and they're often disguised by filler.

One way of telling whether or not a car has had any work done at the front is to look at the bonnet slam panel - that's the bit just above the grille. This was left unfinished by the factory, but if it has been replaced, it will probably now be body-coloured.

Being Eighties and Nineties cars, rust isn't as much of an issue as it would be with an older car, but seeing as the earliest cars are now in their Twenties, it does need to be checked for. Look around the rear screen, where corrosion often sets in after spreading out from behind the glasswork towards the bottom of the panel, as well as the sill where it meets the back wings. Although you should scrutinise the whole sill as a matter of course - especially where the fuel tank butts up against it, thus unintentionally creating a great little grot trap. Door bottoms (which should be protected by anti-chip paint if the car is original) and rear arches are also prime spots for tinworm, or filler used to hide such. Look around the headlamps too...as water often gets trapped behind these. The front wings are usually only vulnerable to corrosion if they have been replaced at some time - there should be sealer in the seam between the inner and outer front wings, which often gets omitted if work is carried out, thus allowing grot to collect here.

Bonnets are prone to stonechips - but they don't usually turn to rust unless there are a lot of them all clustered together - and boots can start to corrode inside, thanks to water getting in through the locks.

On convertibles, don't forget to check the condition of the hood, and pay close attention to the plastic rear window, as it often cracks.

Modifications

205 GTIs are popular cars for modifiers to wreak their own worst on. If things are done well...then great! It can enhance the driving experience and the value of a car, especially if something like a Peugeot Mi16 or Citroen BX GTI 16-valve engine has been fitted. But be wary of amateurish attempts to tart a car up. If it doesn't look good, it probably isn't.

Brakes

1.9 cars with handbrakes that don't work are often quite common, thanks to the cable operated cam seizing in place. It's quite a lengthy job to put right, as well as an MoT failure of course.



Suspension

For the last two years of the GTi's life, power steering was an option, but while it's a handy thing to have, cars that don't have it aren't exactly heavy-handed. GTi suspension can wear its bushes out if used enthusiastically, with clonking from the front pointing to worn wishbone bushes or bottom balljoints. Drop links on the anti-roll bar also cause the same symptom if they're past their best. Out of all of these, it's the balljoints that will be quite expensive to put right.

Bearings on the back axle are known to seize quite easily, and that will mean an entire new back axle if it happens. Try lifting the rear of the car to see if the suspension moves. If it doesn't, then it's likely that a bearing – or both of 'em – are about to expire. A car sitting down low on one side points to the same thing. A creaking noise can point to imminent problems...although it may also be a much-less scary shock absorber signalling it is getting near the end of its life.

We haven't finished with the back wheels yet. They should lean slightly inwards at the top. If a car has hit a kerb with some force though, they probably won't...and the stub axle pins will need replacing. Think that's it? Not a bit of it. The mounting blocks can also break, which will mean the handling goes to pot. Sadly, the only way to find this out is to jack the car up and check the area, something the current owner may not be too impressed about. Although, of course, if the car's handling is bad, this is something you should suspect.

And finally, is the spare wheel there? On 205s, it is carried underneath the boot...and easily stolen by thieves. Yes, it really does happen! Especially on cars with nice alloys.

HISTORY

1983 The Peugeot 104 – the French car firm's innovative supermini, around since the early Seventies and also badged as a Citroën and a Talbot at various times – is superseded by the even more enigmatic 205 model. This pertly handsome front-wheel-drive car features several different engine options, and there is an attempt at injecting some raciness with the 79bhp GT and the mid-engined T16 1.8 Turbo of 200bhp...although a mere 200 of these are built for rally homologation purposes.

1984 Finally, something to challenge the Golf GTi, with the launch of the GTi version of the 205 in February. Its 1580cc fuel-injected engine of 105bhp gives it a top speed of around 116mph, and extra handling prowess is afforded by its stiffer three-door shell. At this stage of the 205's life, all standard cars were five-door only.

1986 Peugeot and Pininfarina cut the roof off the GTi to recreate the CTL...my, what a witty name! Everything is the same as on a standard GTi except, obviously, there's a hood instead of a tin top, and thus a little less torsional rigidity during enthusiastic driving. Not that that seems to bother anybody too much. Later in the year comes the 1.9 GTi, with a 1905cc engine of 130bhp, thus giving it a top end velocity of 120mph. Other differences to the 1.6 are disc brakes all round and half-leather seats. The 1.6 does get a slight boost up to 115bhp, thanks to using the cylinder head and valves from the 1.9 engine.

1987 Dashboards are redesigned.

1989 The gearbox on the 1.6 – never one of the car world's best – is replaced by something a little slicker.

1990 The fitment of a catalytic converter results in power on the 1.9 dropping to 122bhp.

1991 The CTI gets the 1.9 GTi engine, when the 1.6 model is dropped in April. Among the options now available on the GTi are air-conditioning and anti-lock brakes.

1994 Manufacture of the 205 GTi ends in April, so that Peugeot can focus instead on its newer 106 and 306 GTi models. The total number built had reached 332,942. The standard 205 soldiers on until 1998, when it is replaced by, logically enough, the 206.

Contacts

Clubs

- Club Peugeot UK, tel: 01604 862369 or www.clubpeugeotuk.org
- Peugeot GTi Autosport Club, tel: 07079 356002 or www.peugeot-gti.net
- Peugeot Sport Official Owners Club, tel: 0845 644 3107

Specialists

- LAD Motorsport, Lancs. Tel: 01524 62748 or www.ladmotorsport.co.uk
- Peugeot Parts, Wimbledon, Tel: 020 8241 2056 or www.peugeotparts.org
- Pug Performance, Hants. Tel: 01420 587377 or www.pug-performance.com
- Pug Spares, online. See: www.pugspares.co.uk
- Autofive, Cheshire. Tel: 01606 782555 or www.autofive.co.uk
- Dean Hunter, Yorkshire. Tel: 01977 677887
- Neat Autos, Middlesex. Tel: 01895 907050 or www.parts4peugeot.com
- German, Swedish and French Car Parts, nationwide. Tel: 0870 6060153 or www.gsfcarparts.com

How much?

Ordinary 205s can be picked up for pennies these days. 10 years out of production has dropped them through the floor into bargain basement territory, and just a few hundred pounds can net you quite a good one.

However, the 205 GTi is still held in high regard today by many hot hatch aficionados, and that means that prices for it remain on the high side. We're not talking about mega money here, but around £3000 for a top example is quite good money for a 15 to 20-year-old small French car. If you don't want near perfection, then perfectly usable Pugs requiring some tidying and TLC can be had for around the grand mark.

The smaller-engined cars are worth a little less than their more potent 1.9 sisters of course, with the differential being around £500. As with so much in classic car life, if you want more power, than you have to pay more for it.

Verdict

There isn't that much difference between the 1.6 and the 1.9 GTi in terms of performance, but those who know 205s actually rave most about the lower-powered car. They cite it as having the best handling of the two types, and to be honest, it's hardly that lacking in speed ability when compared to the 1.9...and when are you ever going to make use of its extra five miles an hour or so above 100mph anyway? Save yourself some money, and go for an unmolested, cared for and fine-throughtout example of a 1.6, and leave the 1.9s to those who think that bigger engines mean everything. You'll be just as happy as they are...and you won't have spent so much either!



Insurance quote

For a 1990 Peugeot 205 1.6 GTi, valued at £2000, based in Peterborough

- Fully comp, £241.00 for a 29-year-old, two years' NCB, 10,000 miles, only car, kept in driveway, club member
- Fully comp, £121.00 for a 50-year-old, full NCB, 3000 miles, second car, garaged, club member

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205 GTI Carbon Fibre Front Wing
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106/205/206/309/306 Fibreglass Bonnet
106/205/306 Fibreglass Tailgate
106/205/306 Carbon Fibre Tailgate
205/309 Carbon Fibre Front Door Cards
106/Saxo Carbon Fibre Front Door Cards
106/Saxo/306 Carbon Mesh Covers
206 GTI Carbon Fibre Engine Cover
106 Gti Carbon Fibre Rear Spoiler

MOTORSPORT ACCESSORIES & OFFERS

Peugeot 205 PR2 Clear Indicator Units (NEW)
Spook Motorsport Competition Bonnet Pin Kit
106 SR Safety Devices Cage Mount Kit
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Qualife ATF LSD
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In Car 3 Way Adjustable Bleed Valve
106 Gti/Saxo VTS Silicone Oil Breather Hose Kit

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M16 Engine ECU's
M16 Airflow Meters
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Group 'N' Bottom Engine Mount Torque Bush
Shortened Aluminium Washer Bottle
Webber Twin 40 Carbs
Webber Twin 45 Carbs
Bike Carb Conversion Kits
Large Fuel Banjo Conversion kit
Spook Motorsport rev counter adapter
T16 Slimline Fan Kits
Silicone Oil Breather Hose Kit

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205/309 Alloy Interior Door Handles
106 Alloy Interior Door Handles
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206 Gti 180 Mintex M1144 Front Pads
206 Gti 180 EBC Greenstuff Front Pads
206 Gti 180 O/E std Replacement Front Pads
Peugeot 205 1600 GTI rear brake drum
Genuine Peugeot 205 180 big brake kit
206 Gti 180 O/E Standard Front Discs
306 GTI-6 Mintex M1144 Front Pads
306 GTI-6 EBC Greenstuff Front Pads
306 GTI-6 Tarox Grooved Front Brake Disc Set
306 GTI-6 EBC Greenstuff Rear Pads
306 GTI-6 Standard Front Pads
306 GTI-6 O/E Standard Front Discs
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PORSCHE 944



Engines



Porsche engines are usually renowned for their quality and ability to go on forever, and that's just the case with the 944. Assuming the right level of regular care, the engines should reach 200,000 miles with ease, with the Turbo and three-litre engines likely to easily sail past even this. Check to see how if the cam belt has been changed as it should. Every 35,000 miles is the usual period. You can check the oil pressure from the usually reliable gauge on the dashboard. On a warm engine, one

bar on tickover and three bar at about 2000rpm indicate an engine that is healthy enough. Look for smoke from the rear. If there is some, then suspect worn bores, and it's best to go and look elsewhere, as the cylinders are Nikasil-coated. These mean that they last a long time, but when they do go, the price tag to repair will be hefty. Is the car vibrating on tickover? It is? Then suspect a worn engine mount, the likely candidate being the one on the exhaust side. Is it vibrating at 3000rpm? Then suspect the balancer shaft being a little out of sorts, thanks to the timing not being done properly when new belts were fitted.

The 2.5-litre S cars had a 16-valve engine, and these do have a major Achilles' heel. One of the pads on the cam timing gear tensioner can become weak and, if it breaks, the engine will pretty much destroy itself. Replacement pads are cheap - just a few pounds. Replacement engines aren't!

Parts prices

All parts from Porscheshop.co.uk, and include VAT

Cam belt kit, 8v, includes all parts needed,	£197.64
Cam belt kit, 16v, includes all parts needed,	£245.58
Front pads, 1982-1989, 944S,	£33.84
Front discs, pair, 1982-1986,	£62.98
Brake master cylinder, 1987 onwards,	£185.86
Engine mounting, 8v,	£68.15
Full exhaust system, stainless steel, S2,	£581.63
Fuel injection airflow meter,	£352.27
Plug lead set, 16v,	£126.90
Engine rebuild, from	£2585.00 to £3231.25
Reconditioned gearbox, exch, 944S/Turbo	from £757.88
Starter motor, exch, from	£237.12 to £252.39
Wishbone & Ball Joint, exch,	£305.27
Power steering pump, exch,	£292.58
Rear shock absorber, to 1985,	£52.41
Clutch kit, S2,	£398.33
Radiator, manual,	£181.89
Front wheel bearing kit,	from £22.09

Specification

Car	Porsche 944 Lux	Porsche 944 Turbo	Porsche 944S	Porsche 944 Turbo S	Porsche 944S2
Year	1982-1989	1985-1989	1986-1992	1988-1992	1989-1992
Engine size	2479cc 4-cyl OHC (2688cc from 89)	2479cc 4-cyl OHC	2479cc 4-cyl OHC	2479cc 4-cyl OHC	2990cc 4-cyl OHC
BHP/RPM	163bhp@5800rpm (165bhp from '89)	220bhp@5800rpm	190bhp@6800rpm	250bhp@6000rpm	211bhp@5800rpm
Top speed	137mph	158mph	143mph	162mph	147mph
Gearbox	All models: 5-speed manual or 3-speed automatic				
Consumption	25mpg	22mpg	24mpg	22.2mpg	20/7mpg

Suspension: All models: Front: Independent by MacPherson struts, single wishbones and anti-roll bar. Rear: Independent by semi-trailing arms, transverse torsion bars, telescopic dampers.

Maybe it doesn't quite have the cult of a 911 or a 928, but the Porsche 944 still makes a great sub-supercar buy...and it comes cheaper than a lot of its siblings too. **RICHARD GUNN** looks into buying one.

Wheels

Don't underestimate how much it will cost to replace tyres if they're nearly worn out. The alloys fitted as standard on these cars were big – bigger still on the Turbo – and replacement rubber isn't cheap. The Porsche alloys themselves are lighter than most modern counterparts, so if aftermarket items have been fitted, it can make the steering heavy.



Interior

Things are tough enough inside to stand up to all manner of abuse, but some problems are likely to occur with more aging cars. The driver's seat is prone to its bolsters wearing out after lots of use, and the sun doesn't do the dashboard a lot of good, with cracks inevitable after a lot of solar exposure. However, much is available either new or secondhand – but for a price.

Check the electrics work as they should, although to be fair, they don't usually go wrong. More prone to failure is the air conditioning, which can develop leaks. Check to see that it is working as it should during your test drive.



Suspension

It's all pretty conventional up front, with MacPherson struts and, aside from ball joints on the lower wishbone arms that wear out frequently, nothing gives too much trouble. However, the joints make up for this – they are expensive to replace as they are an integral part of the arm. You might have thought that things would have got better by the time the Series 2 came along... but you'd be wrong! Because Porsche just started making them out of alloy for these cars, meaning they're even pricier.

You can check for wear by jacking the car up and trying to rock the wheel top to bottom – and try it with the steering on full lock both ways, as this will make the problem easier to spot. The rear suspension – transverse torsion bars and a transaxle – is much more complicated...but thankfully, it's pretty much impossible to break as well. About the worst you'll encounter is likely to be leaking shock absorbers.

Bodywork

With a galvanised body, don't expect rust to be an issue with these cars. They will stand up to a lot, and if you do come across one showing signs of corrosion, it's more likely to be a pointer towards poor repairs rather than original build quality. Which should start ringing alarm bells.

However, don't assume anything. So look all over for signs of inworm, paying particular attention to the underneath and looking for signs of welding as well as rust. Accident damage is the biggest concern though – these cars are often driven in ways that make unwanted trips into the scenery highly likely – so look at the panel gaps for all-round uniformity. Bear in mind that these are Porsches, and so gaps should be typically Teutonic tight and straight. Opening panels where the gap at one extreme is larger or smaller than it is at another are signs to be suspicious of.

Other pointers to be aware of are repairs to the floorpan and the inner wings – or crumpled and creased metal in these spots – if the area hasn't been attended to, and on metallic cars, it is hard to get good colour matches if areas have been resprayed.

However, if you really want to search for 'naturally occurring' rust, then look at the fuel and brake lines. Any corrosion on brake lines should be picked up at MoT time, but fuel lines can slip by. They're more likely to deteriorate near the tank.

Transmission

You'll find either a five-speed manual or three-speed automatic transmission on these cars, going through to a transaxle at the rear. This gives great balance, but also can cause problems with the torque tube that runs front to rear. A high pitched whine from under the car points to the bearings on these being worn...and soon, the whole rear subframe will have to be removed to sort things out. Don't expect this to come cheap.

Another cause of whining – both from the car and the owner – is the differential in the transaxle. While a lot of 944s have it, and it doesn't automatically signal an imminent rebuild as cars can soldier on for ages with this symptom, eventually you will have to face the prospect of a replacement gearbox, and that's about the £800 mark.

Another possible malady is a seized gear linkage, most likely to afflict post-1987 cars, with the culprit being a knuckle joint above the gearbox. It's not that difficult to have a garage fix though, but can be an annoyance.

If you're driving an automatic car and there is a clonking noise as the drive is taken up, it points to a dodgy drive plate – something like £400 to fix. Still, at least this is cheaper than a clutch on a manual car. These can be quite problematical. The friction plate wears out, and the centre plate has rubber instead of springs to take up the drive (except on the Turbo). There is an inspection plate on the bell which can be removed, and from there you can try to twist the input shaft. If things are okay, then there should be no play. But, if the rubber is past its best, then expect movement of up to 30 degrees!

CV joints on the driveshafts at the rear can wear out as they will on any car, but fortunately, these are quite cheap to put right.

Driving

From inside a Porsche 944, before you stir the car into life, it's difficult to appreciate you're in a high performance machine. The functional interior hardly smacks of svelte smoothness and sports car flash, although the long oval instrument panel does have a certain presence to it.

But once you rouse the Porsche engine into life - it may be just a four-cylinder, but it's based on premium slice off the side the 928's V8 unit so it's hardly a slouch - the real Porsche magic comes into play. Fuel injection and electronics mean that the engine is compliant when it needs to be, but delivers all the goods when required, and it does actually feel like more than just a four, thanks to the balance shaft damping down any roughness and its inherent free-revving abilities. The steering is very direct, and at whatever speed you are going, there's a lot of feedback passed back to the driver via the steering wheel. Handling is excellent, partly due to the sophisticated and effective suspension but mainly down to the almost 50:50 balance thanks to having the gearbox at the rear of the car. These are cars to drive enthusiastically - but thankfully, with the vented disc brakes, there's also the ability for the speed to quickly disappear when the driver needs it to.

HISTORY

1977 Having learnt a few valuable lessons about water-cooled, front-mounted engines from the 924 of 1976 and the soon-to-arrive 928, Porsche starts work on the 944. Although similar in looks to the 928, the new Porker is actually quite different underneath, with a new 2479cc four-cylinder engine (based on one half of the 928's V8) generating 163bhp. It's a definite step up from the Volkswagen van-engined 924, but not quite as storming as the very potent 928.

1981 The 944 is unveiled at the Frankfurt Motor Show, and neatly plugs the gap, both in power and performance, between the 924 and the 928. The impressive, purposeful looks impress right from the start.

1982 Deliveries of the 944 Lux - the base model car - begin.

1985 Just as it had done with the 924 a few years previously, Porsche introduces turbocharging to the four-cylinder engine of the 944. The changes push the price of the 944 Turbo up into 911 territory, although the car does offer similar performance thanks to its KKK K26 turbocharger, which boosts power up to 220bhp. Better suspension and brakes are fitted to handle the extra oomph, and visually, the variants can be identified from the norm by their integral polyurethane bumper plus a tailgate spoiler. The whole range gets a revamp, with oval-shaped dashboards fitted. These cars become retrospectively known as Series 2s.

1986 Another new offshoot comes along in the form of the 944S 16-valve model, slotting in between the Lux and the Turbo.

1988 The 944 Turbo S sees power up to 250bhp, with a limited slip differential as standard and ABS anti-lock brakes as an option.

1989 All 944 Turbos now feature the 'S' specification as standard. The 2.5-litre engine of the Lux is increased in size to 2688cc (with 165bhp on tap), although it doesn't last very long before it is superseded by the 944S2, which has gives 211bhp from its 2990cc unit. As well as the coupe, customers can also buy a cabriolet model.

1990 Behind the scenes, Porsche engineers are beaver away on an S3 version of the 944. However, although the eventual shape of this car bears a strong resemblance to what has gone before - albeit with the pop-up headlamps now unleashed from behind covers - so much is new that it is dubbed the 968 instead of the 944S3 when unveiled in 1992.

1995 The last of the 944 line - the 968 - goes out of production, along with the 924.

Contacts

Clubs

- Porsche Club Great Britain, Cornbury House, Cotswold Business Village, London Road, Moreton-in-Marsh, Gloucestershire, GL56 0JQ. Tel: 01208 652911 or www.porscheclubgb.com
- The Independent Porsche Enthusiasts Club, 6 St. Margaret's Drive, Chesterfield, Derbyshire, S40 45X. Website: www.tipec.net

Specialists

- TWG Motorsports, Cambs. Tel: 01733 332911
- Porschehop, West Midlands. Tel: 0870 0055 911 or www.porschehop.co.uk
- Carlians, Surrey. Tel: 01483 286000 or www.carlians.co.uk
- Hartech Automotive, Lancs. Tel: 07000 100944 or www.hartech.org.uk
- Hillcrest Specialist Cars, Berks. Tel: 01491 642911
- Camtune, Surrey and London. Tel: 08707 555911 or www.camtune.com
- Douglas Valley Breakers (secondhand parts), Lancs. Tel: 01257 472866, 424695 or www.douglasvalley.co.uk
- Barr-Tech Specialist Cars, Cambs. Tel: 01223 425300
- Porsche-Apart, Lancs. Tel: 01706 824053 or www.porsch-apat.co.uk

Market Trends

Cheap Porsches are few and far between - unless you're talking about the 924 - but these cars are more reasonably priced than most, thanks to that whole 'wrong position of engine and wrong type of cooling' thing that can so offend some Porsche enthusiasts. Naturally, there's a hierarchy, with the Turbos priced quite a bit higher than the normally aspirated cars. Granted, that premium does get you extra performance, but the 'S' models aren't that far behind yet the financial differential is quite marked.

Prices now seem to have reached a stable plateau, and should remain more or less where they are for some while to come. It's a good time to buy - look at the figures, then look at the performance. That isn't a lot to pay for such quality and quantity...especially considering there's a Porsche badge on the front!

Verdict

Buying an older sports car is always something of a risky proposition, but at least with a Porsche - and quite a modern one at that - you know you've got a head start on the rest when it comes to build quality and general reliability. With corrosion unlikely to be an issue and mechanical maladies something you'll have to deal with later rather than sooner, it's not so much if you should buy a 944, but when.

And, of course, what type as well. The Turbos are enormously entertaining, but much sought after as well, which puts their prices up above the normally aspirated examples of the breed. But for just starting out and getting the buzz of the 944, a S or S2 certainly won't be lacking in entertainment value, and will be cheaper to buy and cheaper to look after too. It's the Porker we'd plump for.



Insurance quote

For a £6500 1991 Porsche 944 S2 based in Peterborough

- Fully comp, £100 excess, £557 or £515 (with Cat 2 immobiliser) for a 29-year-old, two years' NCB, clean licence, 10,000 miles, only car, kept on drive, club member
 - Fully comp, £100 excess, £324 or £298 (with Cat 2 immobiliser) for a 50-year-old, full NCB, clean licence, 3000 miles, second car, garaged, club member
- Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

Buyer's Datafile: Porsche Boxster

Porsche's first attempt at a mid-engined road car since the 914 of 1969 – which wasn't the success that it had been hoping for – was the Boxster. IAN SEABROOK discovers whether it deserves classic status

Porsche has always had a bit of a problem. When the 928 was conceived, it was thought that it would eventually replace the already elderly 911, but it dated rapidly and fell out of favour with the public. Two attempts to create a budget Porsche – the 914 and the later, front-engined 924 – also failed to provide much in the way of success and the

968 was the last in that line. Yet, Porsche knew it couldn't maintain a viable company with just the 911 in production.

Hence, in the early Nineties, Porsche again revisited the roadster market – dominated by the Mazda MX-5 at this time. Was there a market place for a premium roadster? It would certainly fit in nicely below the 911. But whatever Porsche

did, it had to avoid making the car feel like a budget Porsche. It had to deliver in terms of driver appeal, quality and thrilling performance – the hallmarks of the famous Stuttgart company since the Fifties.

Launched in 1996, the Boxster proved to be exactly the right car for the job and sales immediately took off.

Is it a classic?

Let's be honest, no, it isn't a classic. Yet. But mark our words: this is one to keep an eye on. Sure, you could buy a decrepit 911 for less than £10,000, but why bother when you could own an early Boxster for that? You get a flat-six engine which sings gloriously right behind your ears, you also get a convertible with an electric roof, safe handling with none of the 'pendulum' issues of the 911, a comfortable cabin and modern safety equipment.

There's no denying that it is a bit modern – Porsche is still making the Boxster albeit following some fairly substantial revisions in 2003. They don't have the glamour of a 911 either but, unlike some earlier attempts at a cut-price Porsche, this is very definitely worthy of the badge.

What's out there?

Early cars all have the 2.5 engine in 201bhp tune. Variomatic valve timing means plenty of grunt while once revving, power is delivered very strongly indeed. However, the press at the time called for more power, being the bhp-obsessed junks that they are and Porsche duly delivered with the 5 in 1999 which developed a forceful 260bhp. At the same time, the 2.5 was replaced by a 2.7 with power up to 228bhp. There was a further facelift and more changes in 2003 and a new model designation in 2005, but that really is getting far too modern. We'll focus on the 1997-2003 cars.

Gearboxes are either a five-speed manual or five-speed Tiptronic (although the 5 had a six-speed manual from 1999) but otherwise, it's just a case of checking what options the car you are looking at was kitted out with at the time. Incidentally, a little known fact is that the Boxster rolls off two

production lines – one in Germany and one in Finland – where the vast majority have been produced.

What to look for?

This is where the car really betrays its lack of classic heritage. They don't rust, are generally reliable and don't even leak when it rains! However, repairing a Boxster isn't a cheap business so you need to make sure that the one you are looking at has been well cared for, and hasn't had any nasty accident damage hidden by filler.

BODYWORK: All cars are fully galvanised which makes things nice and tricky for the rust fairy – unless accident damage has been poorly repaired. Have a good look underneath and check for overspray where panels meet. There are two radiators – one ahead of each front wheel, which makes them vulnerable if a front impact has taken place.

A small spoiler between the rear lights lifts up automatically at 75mph to reduce lift – neatly advertising to the world whether you are speeding! Thus you'll need to book a private test track or go over to Germany to check if this is working, of course. However, there is a manual over-ride, so check that it operates properly.

Does the hood retract properly? It should disappear in 12 seconds, and make sure that the doors open smoothly with the hood up – alignment issues can make the doors a pain to open. Another thing to check with the hood up is the state of the rear window, as it is plastic and can go foggy.

ENGINE AND TRANSMISSION: This was the first flat-six from Porsche to feature water-cooling – mainly due to the complexities of keeping the new four-valve cylinder heads cool as well as better control of emissions. The heads are identical which means that there is a camshaft drive at each end of the engine. Thankfully, these

are driven by chains which should never need attention. The valve timing is varied by changing the pressure on the chains.

Getting to the engine can be troublesome as it is hidden by the hood, but all the important bits like the dipstick are accessed through the rear boot. An engine with a problem should be fairly obvious but check that history as the ancillary belt should be replaced every 120,000 miles – which is a bit of a mission given the tight access.

Some engines can develop oil leaks but the only way to really check this is to get the car up in the air so you can see underneath.

Gearboxes rarely give trouble, regardless of whether manual or Tiptronic although the gear linkage on the manual cars can go all wobbly in a very un-Porsche-like manner.

SUSPENSION, STEERING AND BRAKES: No real issues to check for here although you need to have a good look at all four tyres – are they wearing in an unusual manner? Wheel alignment is critical for the Boxster and tyre wear will become excessive if anything is amiss. Brakes are ventilated all around and the benefit of the large alloys fitted to most Boxsters is that you can easily check them for condition without having to whip the wheels off.

INTERIOR: Porsche interiors are legendary for their quality feel and hard-wearing nature, so make sure everything is in good condition and that no-one has felt the need to make tasteless modifications or drill holes in the dash to mount their mobile phone. Such people are underserving of your custom. You do need to check that everything works though, which leads us nicely into...

ELECTRICS: Ah-h! Perhaps it is a classic after all! Electrical gremlins can strike, so as well as making sure everything is functioning, make sure there are no warning lights showing – airbags did go through a phase of signalling that there was a fault although hopefully, such niggles will have been eradicated by now. By 2000, there had been recalls on the passenger airbag de-activation, Tiptronic gear selector and the ignition switch, so you may want to check that the car you are looking at has been back to have the rectification work done.

The parts situation

Main dealers will obviously still sell you everything you need, but there are also a number of Porsche specialists out there.

Parts prices courtesy of Porschehop (www.porschehop.co.uk) are excluding VAT

Brake pads	£38.80
Brake pads, S	£48.80
Brake disc, (front)	£48.00ea
Brake disc, S, (front)	£62.00ea
Clutch kit, (2.5)	£198.00
CV joint (inner)	£61.00ea
Radiator	£134.40ea
Water pump	£144.00

Specialists

■ Porschehop, West Midlands, www.porschehop.co.uk or 0121 585 6088

Clubs

■ Porsche Club of Great Britain, www.porscheclubgbg.com or 01608 652911

What should I pay?

You could spend less than £10,000 to get into a Boxster, but as with any 'bargain' you need to make sure that you aren't just buying a whole heap of trouble. We really would recommend buying from a trader with this one – purely because a warranty could pay for itself with a Boxster. Not that they are unreliable but any repair work that is required is going to be costly. Prices rise to around £18,000 for a 2002 S.

Should I buy one?

If you want two-seater, roof-down fun with a sing-song engine that delivers a healthy punch, handling that is entertaining (if not as exciting as a 911) and a degree of practicality, the Boxster is hard to beat. Yes, some people will hate you just because you are driving a Porsche, but at least you can revel in the knowledge that the Boxster is a very sound sports car.

SPECIFICATION

Engine:	2480cc flat-six DOHC per bank
Power:	201bhp@6000rpm
Torque:	181lb/ft@ 4500rpm
Top Speed:	139mph
0-60mph:	6.5secs
Consumption:	26-32mpg
Gearbox:	5-speed manual



ROVER P6



Engines

The tough old V8 lasts for ages, the 2000/2200s a little less so, but on all engines, check for blue smoke from the exhaust and listen out for disturbing noises from deep within that really shouldn't be there.

2000/2200s: The later 2200s are more refined than their earlier 2000 offshoots, and generally less noisy in operation. However, both are very fussy about the spark plugs fitted, and prefer Champion ones, the brand originally specified. The blocks have bolt-on metal sideplates. Rover was trying to be innovative by allowing access to the internals, but by now, all the plates really do is let coolant pour out as a result of rusting through. So check these for rust or signs of seepage...and if you find some, bear in mind that the only thing keeping the water in the engine might be coolant!

If the engine sounds on the tappety side, then suspect the valve clearances. These need to be set by shims, and the operation involves removing the camshaft. At least once they've been done, they should last for ages. Timing chains – for there are two – also contribute to noise, if getting past their best. You can tell the difference by the sounds they make. The upper one makes a noise rather like a hollow ringing sound at about 1100 to 1400 revs, while the lower just clatters like any old chain. Sometimes replacing or checking the tensioner can help solve things.

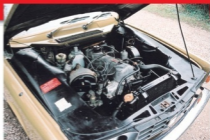
If you see leaks from below the cam cover, then such is the nature of the P6. Most owners just learn to live with things.

If a twin-carburettor car feels somewhat out of tune, then it's probably those two carburettors that are the problem – balancing them can be tricky.

V8: If you're seeing about 30psi from a warm engine, then all is well. However, if you see 15psi – well, things aren't as rosy as they could be, but engines can run on like this for ages. However, eventually, the block will get damaged due to worn bearings affecting the alloy around them. A flickering oil warning light at idle betrays this. Try to ascertain if 20W 50 oil has been used when changes have been carried out, with proper 'alloy friendly' coolant changes at the correct intervals also vital. Overheating can be a sign of internal corrosion.

Hydraulic tappets will probably be quite noisy at first, but should get quieter once the engine warms up and oil becomes thinner. However, if the tappets remain noisy, then suspect oil starvation. Your course of action is to replace them...SD1 items last longer.

Pre-1974 cars have a rear crankshaft seal made of rope – yes, really – and unsurprisingly, it leaks. To sort it out means taking the engine out... unless you can get hold of a tool called a 'Chinese Finger' – we know, we know, it's just getting more and more bizarre now, isn't it? – with which you can hook the seal once the sump has been taken off. After 1974, a more durable rubber seal was adopted for later cars.



Specification

Car	2000SC	2000TC	2200TC	3500	3500S
Year	1963-1973	1966-1973	1973-1977	1968-1976	1971-1976
Engine size	1978cc 4-cyl OHC	1978cc 4-cyl OHC	2205cc 4-cyl OHC	3528cc 4-cyl OHC	3528cc 4-cyl OHC
BHP/RPM	90@5000	109@5000	115@5000	144@5000	150@5000
Top speed	104.5mph	110mph	112mph	113mph	125mph
0-60mph	15.1secs	12.6secs	11.4secs	10.8secs	9.1secs
Gearbox	4-spd man /3-spd auto	4-spd man /3-spd auto	4-spd man /3-spd auto	3-spd auto	4-spd man
Consumption	24mpg	24mpg	21mpg	18mpg	20.1mpg
Suspension	All models: Front: Independent by transverse bottom links, leading upper links, coil springs, anti-roll bar, telescopic dampers. Rear: De Dion-type tube incorporating sliding joint, Watt linkages, coil springs, telescopic dampers				

It was European Car of the Year when new, and is now one of the great British classics of any year having reached old age. **RICHARD GUNN** looks at buying one of the best Rovers ever built

Suspension

Suspension is horizontally-mounted coil springs at the front – chosen to leave enough room for the gas turbine engine that was originally envisaged – plus a de Dion rear tube at the back. Rears tend to settle with age and use, and the hub ends of the tube elbows corrode from the inside, usually as a result of a split gaiter. Something else that can happen is that the rear suspension top link can pull away from the boot sidewall, something else that happens when the metal has seriously corroded. These are the main faults – but there are also the usual bushes, balljoints and clonking universal joints. Polyurethane bushes are available to replace standard items. If the front suspension is creaking, then it points to a rubber dome missing from between the top link and the front spring. Easy enough to replace, assuming the area isn't corroded enough that it makes it dangerous to compress the spring. Very heavy steering – obviously on non-power assisted cars – indicates a steering box and Idler that haven't been lubricated properly. If you find heavy steering on power-assisted cars, then suspect a leak...and look underneath to confirm. Don't forget to look at the tyres – if there is wear on one side of the rubber, it points to wheel alignment being out of true, something these cars are very sensitive to. It seems to especially affect cars with power steering.

Brakes

Ah, one of the more annoying things about P6...its brakes. Or rather the rear ones, which are onboard, either side of the differential. This makes them tricky to work on, and you won't appreciate changing the pads, so it's worth having a look underneath to see if you can find signs of scoring. One of the biggest problems is the differential leaking, and contaminating the discs, which makes them effectively useless.

Bodywork

Older cars are more generally robust than the newer ones – remember that Rover passed into the British Leyland era from 1968, and quality did suffer. One way it manifested itself was with the way the paint was applied on the doors, leading to corrosion in the inner frames.

The structure of the P6 is a monocoque shell, to which the outer panels are bolted. The good news is that this means everything can be taken off easily. And, as a bonus, the bootlid and bonnet are made of alloy, so they won't rust...although electrolytic degradation can happen where steel meets alloy. Plus they're more easily damaged.

However, what this does mean is that none of the panels are structural – no, not even the outer sills. It's what's inside that is more important. Even though a car looks stunning on the outside, it could easily be hiding structural problems underneath...so it's very difficult to tell if you're looking at a generally good car or an all-round shocker wearing a nice party dress. Tell-tale clues are corrosion at the bottom and trailing edge of the front wings, where it has come through from beneath, as well as at the edge of the rear wings. If the outer sills are rusty, it can point to corrosion coming through from underneath. You can get some idea of the inner sills – which are structural – by looking at the kickplates inside the car and seeing if rust is sprouting out from underneath. You can have a look under the carpets and under the rear seat for an even better idea. Look at the jacking points too, and see if there's any corrosion inside, as they project through the outer sills.

Interior

Interiors vary between cloth, vinyl or leather. The former sags, the latter cracks, and the one in the middle splits. Leather is obviously the more expensive option to retrim, as new interiors are rare now, although good secondhand stuff is still quite common at autojumbles.

The first 2000s had real wood on the doors, but as time went on, Formica became the norm...nice! Obviously, it's cheaper to replace though. You may even get away with MFI or Homebase... Warped dashboard tops are quite common, thanks to sunlight through the front screen. Replacements are scarce.

Transmission

If gearbox problems occur, then it's far more likely that it will happen with a V8 than a 2000/2200, as these transmissions do have to put up with a lot of power going through them, and the 3500 cars only have a modified version of the 2000 gearbox to play with. Gear teeth can be worn away, and if that happens, your best course of action is a replacement gearbox. You may find a five-speed gearbox in place... if so, this has probably come from an SD1 or Sherpa van. It's a good thing to have, because it does make the cars considerably more relaxed at speed.

If the gearbox is noisy in neutral, then suspect worn layshaft bearings. Oil leaks happen quite a lot, due to seals perishing. And if the gearstick itself feels very loose and wobbly, then the likely culprit is the bush at the bottom of the lever, which breaks or just wears out.

As for the automatic 'boxes, there are few issues, save for the internal corrosion caused by having been left standing around. However, the four-cylinder cars do suffer from some problems due to the driveplate which connects the torque converter to the engine crankshaft being made of thin metal. This can break – and, if it does, it's a sure sign of crank endfloat.

If the car you're testing has a slipping clutch, it's best to walk away. On the four-cylinder cars, the engine has to come out. On a V8, the engine AND the gearbox have to be removed...

But, whatever you do, don't ever try to jack up the car using these. The metal isn't likely to be nearly as strong as it used to be.

Look at the D-posts too, in front of the rear wheelarches. Rust – or filler, if it has been picked up on by a previous owner – here isn't a good sign about the integrity of the base unit. Amateur work around this area is often highlighted by the channel that hold the door rubber being missing. Feel underneath the wheelarch itself for indications of rust.

The ridges on the front wings, handsome as they may be, can collect water, which then leads to rust in the inner wings. This can also strike from underneath too, as a result of road muck. The stainless steel trim at top of the front A-post is another popular tinworm spot.

If panel fit looks a bit off, then don't be too concerned, as shims can be added or subtracted to make things better. However, very large gaps should be checked out, as it points to a panel having been put on recently. It could be down to accident damage, it could be to hide rust, or it could be because corrosion underneath is very bad and is allowing the bolts to move.

The battery lives in the boot – and its tray can suffer from acid attack. Other trouble spots nearby include the floor and suspension mounts.

Brightwork usually lasts okay, although you should be prepared for some pitting of the Mazak parts.

Parts prices

All prices from J R Wadhams Ltd	
Front disc brakes, V8,	£55.00
Master cylinder, all models,	£70.00
Front brake pads, V8, with sensor,	£24.00
Radiator, V8 three-core conversion,	£120.00
Water pump, all models,	£65.00
Front bottom ball joint,	£26.00
Front top ball joint,	£30.00
De Dion elbow, reconditioned,	£150.00
Bonnet, export (with air intake cut-outs),	£375.00
Reconditioned front wing, from	£135.00
Bootlid, with strengtheners for spare wheel mounting,	£100.00
Front bumper, 2000/2200,	£200.00
Starter motor, exchange, V8,	£75.00
Exhaust 2000/2200, complete system, stainless steel, from	£380.00
Exhaust, V8 manual, complete system, stainless steel,	£460.00
Fuel pump, exchange, £	65.00
Carpet set,	£250.00
Clutch plate, 2000/2200,	£30.00
Clutch plate, V8,	£50.00
Five-speed gearbox, secondhand, from	£400.00
V8 engine, secondhand, from	£300.00
Cylinder head, 2000SC,	£250.00
Oil pump, exchange, 2000/2200,	£150.00

HISTORY

1958 With the Rover P5 a year away from launch, Rover starts looking at a new saloon to replace the now rather elderly-looking P4. However, the planned successor is to be something very different, aimed at a younger, more thrusting market than the more mature bank managers and doctors who are the preserve of the P4. Rather a radical specification is the concept of a monocoque steel skeleton over which the exterior panels can be hung.

1959 Prototypes bearing some resemblance to the eventual P6 appear. However, they have streamlined fronts and the headlamps in little pods, a compact but very handsome saloon, with an interior that eschews the usual traditional wood veneer drawing room ambience and goes for a very up-to-date look, full of trendy plastic and even a strip speedometer. The 1978cc four-cylinder engine of 90bhp is all new too. For Rover, it's a radical creation, and justifiably wins the inaugural Car of the Year award.

1963 The new P6 – known to the world as the Rover 2000 – is unveiled at the London Motor Show. It's nothing like any Rover that has gone before, a compact but very handsome saloon, with an interior that eschews the usual traditional wood veneer drawing room ambience and goes for a very up-to-date look, full of trendy plastic and even a strip speedometer. The 1978cc four-cylinder engine of 90bhp is all new too. For Rover, it's a radical creation, and justifiably wins the inaugural Car of the Year award.

1966 What was the original Rover 2000 changes identity to become the 2000SC, thus making room for the 2000TC with twin carburettors and more performance as a result. There's also the 2000 Automatic... which has much less.

1967 The TC, originally just for export, is made available in the UK.

1968 Rover's new ex-Buick V8 engine, up until now just used in the P5B, finds one of its greatest ever homes under the bonnet of the P6. The Rover 3500 is little short of magnificent, a fast, competent and very smooth executive saloon. Initially, it is only available as an automatic.

1970 It's the British Leyland era, and thus the P6 gets a corporate facelift with a honeycomb grille at the front. Also appearing are a stainless steel trim down the side, black sills, and, seeing as it now is the Seventies, a splash of vinyl on the side roof pillars.

1971 At last, the manual 3500 arrives, with a four-speed manual gearbox. The main distinguishing feature is a full vinyl roof, either in black or brown, depending on the rest of the car. The police love 'em!

1973 The smaller-engined four-cylinder cars get a useful fillip in the form of a bore out to 2205cc.

1976 The writing is on the wall for the P6 range, with the launch of the equality as cool Rover SD1.

1977 All P6s cease manufacture once the smaller-engined SD1s come on stream. Total production is 439,135, split into 327,808 2000s, 32,270 2200s and 79,057 3500s.

Contacts

Clubs

- P6 Rover Owners Club, c/o 22, The Street, Moulton, Newmarket, Cambs, CB8 8RZ or www.p6roc.com
- Rover P6 Drivers Club, The Rover P6 Club, PO Box 1477, Wolverhampton, WV10 n 8WZ. Tel: 01902 689975 or www.p6club.com

Specialists

- Red Hat Rovers, Cambs. Tel: 01480 890224
- Rover Classics (Ray Weekley), Lincs. Tel: 01205 870805
- Turnpike Motor Company, Norfolk. Tel: 01379 897096
- John Wearing, Lancs. Tel: 01254 883603
- Ely Service, Cambs. Tel: 01353 662981
- JR Wadhams, West Midlands. Tel: 01384 393008 or www.jrwadhams.co.uk
- John Mann, Derbyshire. Tel: 01246 271036
- Kingsdown Classics, Oxon. Tel: 01367 244646
- DJE Rover V8 Specialist, Warks. Tel: 024 7635 2888 or www.djev8.com
- S & G Walker, Essex. Tel: 01245 460214

Market Trends

Although Rover P5 prices are now quite high, and interest in the P6's successor, the SD1, has been causing values to rise recently, the P6 itself has remained financially quite static over the last few years...and there's little likelihood of that changing in the near future. So you're buying these cars to enjoy them, not to make a quick buck.

No surprise that the V8s are the most expensive of the bunch. Prices of really nice examples are now hovering around the £4000 mark, especially for manual transmission ones. That's around a grand greater than the four-cylinder equivalent.

Fortunately, you can still pick up tidy examples for around £1000 if you're lucky and quick. At that sort of money, it will probably be a 2000 or 2200 rather than a 3500, but it's still a Rover P6. And still cheap for all that you get...

Verdict

In common with a great many British classic car enthusiasts, we adore these cars here on CCW...whatever their engine size or age. They're handsome and innovative, wonderful to drive and easy enough to maintain, thanks to good spares back-up, and the interiors are pleasant and stylish places to spend time in. They're one of those cars about which everything seems to be just right.

However, as good as the 2000 and 2200 cars are, you can't help but compare them to the V8 models, which are little short of seminal. It's actually a little bit of a problem, because the knowledge that the same car is available with an extra four cylinders and much more power does detract away from the less potent models. And it's really not their fault because they are great cars in their own right. But that Rover V8...is there anything it can't do? If you can find a 3500 with a manual gearbox (and the boot-mounted spare wheel), you'll probably be satisfied for life.

Insurance quote

For a £2750 1973 Rover P6 3500s, with no modifications, based in Peterborough

- Fully comp. £100 excess: £231.00 for a 29-year-old, two years' NCB, clean licence, 10,000 miles, only car, kept on driveway, club member, with Cat 2 immobiliser.
 - Fully comp. £100 excess: £73.50 for a 50-year-old, full NCB, clean licence, 3000 miles, second car, garaged, club member, with Cat 2 immobiliser.
- Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

Buyer's Datafile: Rover 800, 1986-1991

The Rover 800 turns 20 years old this month, so what better time to review the pitfalls in getting one? KEITH ADAMS takes us through the trials and tribulations in buying the first generation version of the Anglo-Japanese replacement for the much-loved SD1.

BACK in the late Seventies, the state-controlled car company, British Leyland, found itself in an awful mess. The Princess, Allegro and Rover SD1 all suffered from a reputation for terrible unreliability and customer confidence was at an all-time low. The SD1 especially had its once bright star tarnished by poor fit and finish, awful resale values and flaky paint – and the prime objective for the company was replacing it with a car that would restore customer confidence.

A deal with Honda, brokered by company chairman,

Sir Michael Edwardes, on Boxing Day in 1979 gave the company the opportunity to produce a new generation of cars bristling with Japanese technology – and hopefully with reliability to match.

The first cars – the Rover 213 and Triumph Acclaim – were essentially re-branded Hondas, but the new executive car, the 800, was an altogether more different proposition when it was finally launched in 1986. The car was a truly collaborative effort, featuring Honda V6 engines, gearboxes and suspension, but unique Rover Avenue styling and an all-new 16V 2-litre petrol engine.

The package was a sales success after a faltering start, and although the launch was overshadowed by that of the new Jaguar XJ40, the Rover 800 went on to become a market leader once the entire range of petrols, diesels, fastbacks and saloons was on sale at the turn of the Nineties.

Some may mourn the passing of the V8, but back in the Eighties, the crisply styled saloon was exactly what Rover needed to restore its executive pride. Here, we're focusing solely on the original series Rover 800 that was replaced by a facelifted Mk 2 model in 1991.

Is it a classic?

Maybe, but not quite. The Rover 800 was a very significant car for a company in the throes of leaving the protective bosom of government ownership – and re-joining the harsh world of commercial competition.

In its day, it certainly looked good, and possessed an interior ambition that the SD1 could only dream of. Today, things are a little different – the slightly anodyne styling, front-wheel-drive chassis and adequate rather than stunning engine choice mean it's still regarded by many as a secondhand, as opposed to, classic car.

However, the early Sterling and Vitesse models have picked up a cult following, and ask yourself this – when was the last time you saw one on the road? If classic status were defined purely by numbers remaining, then the 800 would already be there.

What's out there?

The great aspect of buying into the Rover 800 is that there are versions to suit every pocket and preference. The four-cylinder versions aren't exactly thirsty, and as they're available in three states of tune, you're almost guaranteed to get the power and performance you're looking for.

The V6 versions are smooth and silky, and as long as you're not afraid to use a few revs, are actually very quick on the road. As for the VM-powered turbo diesel version, it's certainly economical when driven gently and quick when not. Just don't expect smoothness to form a part of your daily life.

What to look for?

The Rover 800 was not the best-built car to emerge from Cowley, but the good news is it's fundamentally strong, and any problems you come across will be relatively easy to rectify with a little time and patience.

1) Four-cylinder engines: The O- and M16-Series engines have a tendency to leak oil around the distributor (head gaskets or camshaft oil seals) – so check that this is not too bad – and that oil levels are correct. These engines are critical for cambelts, so ensure that this has been done at the right intervals.

2) Honda V6 engines: These prove exceptionally reliable, although can develop noisy tappets in later life.

This is not serious and can usually be sorted with an adjustment and regular fluid changes to keep those narrow oilways clear. Cambelts need replacement every 46,000 miles (Rover recommended 90,000 later in life, but stick to the lower figure for piece of mind), and it is essential that this is adhered to. With careful maintenance, these engines will last over 350,000 miles without the need for a re-build.

3) Gearboxes (four-cylinder cars): The PG-1 'box found in the four cylinder versions is particularly sweet to use, but can chew differential bearings. Automatic gearboxes in M-Series versions, have proven particularly troublesome, with flexi-plate failures – not catastrophic, but very costly to repair.

4) Gearboxes (V6 cars): These are generally sound and the manual PG2 'box is particularly sweet in use. The automatic transmissions are smooth and responsive – selection problems indicate the correct Hondamatic fluid has not been used.

5) Diesel engines: These are rugged and powerful, but head gaskets are a known weakness, so make the usual checks.

6) Brakes: The 800 does not appear to suffer too much in this department, and brakes last well on their V6s. On ABS models, make sure the warning tell-tale lights up when the car is switched on, but then goes straight out. If this light stays on, you're looking at replacing the sensors – if it doesn't come on at all, check the dashboard bulb is still there.

7) Steering: The steering on the V6 is speed sensitive, and should weigh-up the faster you go. Ensure there are no groans or knocking when turning from lock to lock at rest. Four cylinder versions use an entirely different Positive Centre Feel system, which is also very light – leaky PCF racks are not uncommon, so check for the signs.

8) Electrics: A known 800 weak link. Electric windows and radio faults are more often than not caused by dry joints in fuseboxes. Electric seats are also an issue. Airflow meters are known to fail on the 820i. The 820E requires ECU reprogramming after a battery disconnect, so ensure that if you buy one of these cars, the battery is connected and good, and that the car is running sweetly.

9) Rust: The potential enemy of all Mark one 800s is rust. The main areas of attention should be rear

wheelarches, leading and trailing edge, sunroof aperture, outer sills, and the leading edge of the bonnet.

10) Interior and trim: The 800's interior looks wonderful, and the seating remains first class to this day. However, the build quality lags behind, so make sure you're not caught out by fragile switchgear (especially on the very earliest cars), faded wood and broken door handles (interior and exterior). The lifting dash problem that affects later cars should not trouble these ones.

The parts situation

Parts for the Rover 800 are still pretty plentiful, and despite tales of a shortage of parts at dealers, the older cars will not be affected by the meltdown of MG Rover. There are plenty of specialists, and donor cars are still plentiful in scrap yards. Remember also, that there is a massive carry-over of parts between the Mk1 and Mk2 800 – and that was in production until 1998.

Typical prices (For a 1990 B27 Vitesse, Best of British Rover):
Clutch kit, £85
Exhaust centre section, £58
Front pipe, £89, back box, £48
Brake pads, (front) £26.95, (rear) £19.95
Distributor cap, £16.95
Dampers, £35 front and rear

Specialists

PARTS/SERVICES

- Best of British Rover, 0121 526 5506 or www.sales.bestofbritishrover.com
- btinternet.co.uk
- XPART, 0870 242 4791 or www.xpart.com

Clubs

- Rover Torque, www.rovertorque.co.uk/
- Rover Sport Register, Cliff Evans, 8 Hilary Close, Great Bourton, Chester, CH3 5QP, or www.the800.co.uk

What should I pay?

The Rover 800 is in a strange place at the moment. There is a hardcore of fans out there that appreciates the rarity of the earliest Sterling and Vitesse models, and love the fact that they are quick on the road, have plenty of power and equipment, and offer a soothing drive. Prices seem to

be so up and down at the moment, it's almost impossible to set out a definitive guide. One rule of thumb is that the Sterling and Vitesse models are worth more than other V6s, and that the Honda powered models command a healthy premium over the four-cylinder versions, despite not being that much better to drive.

For a good Sterling or Vitesse, don't pay over £1200 – and that's the absolute maximum for a minter – £500 will get you a perfectly serviceable example with MoT and plenty of life left in it. Project cars can be had for the price of a pint of beer. The four cylinder cars are much cheaper, but also much more rare. If you can find one in good order, don't be surprised if you pick it up for a song. There's also the 820 16V Turbo – a limited production run out special, which featured a turbocharged M16 engine and a Tickford designed bodykit. Prices for these are low at the moment, but are already creeping up as word about their rarity gets out.

In conclusion, the 800 is a car that can still be picked up for an absolute song, but with numbers depleting rapidly, one wonders how long the situation will remain so.

Should I buy one?

It depends on what you're looking for. The Vitesse and Sterling models are powered by that wonderful Honda V6, and that provides them with lusty performance and refined reliability. However, even with this advantage, they lack the charisma and road presence of the Rover SD1 – a car still widely available for sensible money if you know where to look.

Having said that, the 800 is a very competent executive car and one which more than a splash of flair – especially inside. Compared with the opposition from Vauxhall and Ford, the Rover also has considerably more class. As a classic, though, it's always going to be harder to justify as there's nothing quirky or unique about the 800, and it's styling is just too anodyne to mark it out as a head turner.

If you enjoy Eighties nostalgia, and are a Rover fan, you'll already know you want one of these – in fact, you probably already own one. For the rest, though, we suspect the 800 will be denied classic status for a few years yet (the Mk2 Coupe aside), and by then, there will be few left – leaving plenty of people kicking themselves that they didn't buy one when they had the chance.

TRIUMPH TR7/TR8



Engines



The two engine types are very different of course, with the four-cylinder ones having far less to recommend them when compared to the V8s. So, we'll deal with the smaller capacity units first.

TR7: Head gaskets problems can occur rather too often, so look for signs of oil and water mixing. The problems occur because of the alloy head - which can warp or corrode inside - leading to these two vital fluids meeting inadvisably. Keep an eye on the temperature gauge too, as not a lot of air gets in from the front of the car. Overheating can also point to a dodgy head gasket, but could also be just a worn out water pump, and they're not exactly an easy fix, sometimes taking up to six hours to extract and replace in extreme circumstances.

As well as the usual worrying noises from deep inside to listen out for, the timing chains can get very rattly as they wear out, but aren't that difficult or expensive to replace, something that will probably have to be done every 25,000 miles or so.

TR8: The Rover V8 is well-known as one of the better British engines (even though, technically, it's American), and this standing is well-justified. They're reliable and long-lived, and can take all manner of abuse without protesting too much. Of course, with such a big engine, cooling is even more important, so look at the needle on the temperature gauge even more closely than you would in a TR7. Aside from noises that shouldn't be there, and scary blue smoke from the exhaust, there really isn't that much you have to worry about with the powerful heart of a TR8...although if the engine sounds tappety, keep in mind it won't just be a question of adjusting the clearances as these are hydraulic on the V8. But parts for these engines are very plentiful - you'll never have trouble getting bits and pieces!

If there are oil leaks, look at the breather for blockages, and if this seems okay, then look at the oil and water just to check that things aren't mixing due to a blown head gasket. Misfires under acceleration can signal a camshaft about to expire, something that will be accompanied by dreadful fuel consumption as well.

If you're looking at a TR7 that has been converted to V8 power, try to ascertain how well it has been done, by checking for evidence in the paperwork of one of the specialist-supplied kits - from a reputable firm such as Rimmer Bros, S&S or Robsport - having been used. You don't want to find out the limitations of a home-engineered job while enjoying your TR7 V8 at speed.

Parts prices

All prices from Rimmer Bros and include VAT	
Engine service kit,	£32.31
V8 conversion kit,	£1991.63
Full reconditioned TR7 engine, exchange,	£1125.00
Black hood and frame, exch.,	£464.98
Bonnet, early type,	£175.37
Bonnet, modified later type,	£411.25
Outer sill, original,	£82.19
Exchange radiator,	£117.44
Five-speed manual gearbox,	£411.25
Standard front brake disc,	£16.39
Brake pad kit, standard,	£13.51
TR7 complete sports exhaust system,	£293.75

Specification

Car	Triumph TR7 FHC	Triumph TR7 DHC	Triumph TR8
Year	1975-1981	1978-1981	1978-1981
Engine size	1998cc OHC 4-cyl	1998cc OHC 4-cyl	3528cc V8
BHP/RPM	105bhp@5500rpm	105bhp@5500rpm	155bhp@5000rpm
Top speed	109mph	114mph	120mph
Gearbox:	4-speed manual/5-speed manual/3-speed automatic		
Consumption	28mpg	28mpg	18mpg

Suspension: All models: Front: Independent by MacPherson struts, with coil springs, anti-roll bar and telescopic dampers. **Rear:** Live axle, trailing arms, coil springs, radius arms, anti-roll bar, telescopic dampers

The TR7 and TR8 were radical and controversial departures from the usual TR formula when new. **RICHARD GUNN** looks into buying British Leyland's go-faster wedges, and the pitfalls that await the unwary

Brakes

Discs up front and drums at the rear are adequate enough and don't usually cause too much trouble unless the car has been standing around a lot and components have started to deteriorate as a result.

Interior

The cabins tend to look a bit worn out quite easily, thanks to their design and the quality of the materials used. However, despite this, they can be quite hard-wearing, all told, and most bits are available if required. One weak point is the heater controls, which can break quite easily, and putting heater problems right generally involves having to remove the dashboard.

On all cars, but convertibles in particular, check the floorpans. These can rust as a matter of course, but obviously, any corrosion is likely to be worse on an open car which has been caught topless in sudden showers.

Pre-1979 cars don't have a great reputation for electrical integrity. Look at the fuse box - if it only has five fuses inside, then you're looking at one of these cars of dubious spark reputation. The faults lie with the loom - which, frankly, just wasn't up to the task in hand, and if you're looking at one of these cars, just try everything electrical. If it all works, then you're pretty lucky! British Leyland addressed the problems with later cars - you can tell these easily enough thanks to their having 12 fuses.

Don't forget to check the headlamps pop up as they should. The motors can fail with age, and if they aren't causing trouble, then dirty wiring connections can also strike.



Transmission

The earlier cars, with their four-speed gearboxes and Dolomite back axles, don't have a terrific reputation, with cumbersome shifts and a tendency for the axle to whine as it gets older. When five-speed 'boxes were introduced, they utilised the unit from a Rover SD1 - far nicer to use, and more relaxed at motorway cruising speeds.

The other option available was a Borg Warner automatic gearbox - which may not be the slickest of self-shifters, but it's reliable enough to cope with both the two-litre and the V8 engines.

Bodywork

This is where it all gets very serious...with bodywork likely to be the biggest cause of expenditure on any TR7/TR8. The front of the car seems a logical place to start, with a lot of any likely problems lurking under the bonnet. The inner wings are prone to tinworm and especially vulnerable around the strut towers. If you can make out spot welds around this region, then it's a good sign, as it implies either originality or a high quality repair. If you can't see these, then it might be because filler or plating has been applied... usually to hide something quite disturbing lurking underneath. The windscreen scuttle is another scary region. There's a black cover there that unfortunately does a great job of concealing rust underneath around the windscreen wiper spindles. Check it thoroughly, as grot here is difficult to put right, and not cheap either. Ultimately, it will start letting water into the footwells - so back up any investigation here by looking for damp inside.

The bonnets themselves can suffer thanks to rust in the seams, and if you find some while checking, it will only get worse. It seems to afflict the later bonnets - with a double hump - more than it does the earlier single hump ones. Because both are such big panels, they can be prone to flexing, which can cause the paint to crack - and will also show up any repairs from body filler having been used.

Because that bonnet snakes out of view of the driver, parking knocks are quite common on these wedges. Rust can easily set in even where a car has been only slightly dented, and will soon spread. Look at the general alignment of the bonnet - although bear in mind that these cars suffered from some of the worst British Leyland build quality, so don't expect precision miracles - and peruse the headlamps and front panel. Corrosion can naturally break out where the nose joins the front wings, so check those seams. And those headlamp pods are alloy. Which isn't as good as it sounds, because there can still be problems with the paint bubbling up or even flaking off completely.

Sills, naturally, are important, especially if you're looking at a convertible - if you get somebody to push down on the back of the car on one of these, and you notice body flex more than about an inch or so, then all is not well and the inner sills are past their best. Replacement of this three-part section isn't exactly simple. You'll need to remove the front wings and cut into the rear ones. Best perhaps to walk away at this point and not get involved.

Door bottoms will often show signs of starting to disappear, as will the wheelarches - all four of them. Feel underneath the lip as, often, the outer skin can look fine while the inner one is deteriorating. You can expect the lower rear wings to have suffered to some extent, thanks to grot being thrown up from the road. Thanks to blocked drainholes, the inside of the boot is also a prime location for rust...and it could be anywhere, frankly! Try the floor, the spare wheel well, the points where the floor meets the wings, the trailing edge of the bootlid, the back panel, underneath the rubber seals etc. So basically, just check everywhere really. Boot problems can be repaired, but at a cost!

Underneath, the chassis rails are prone to go around their fronts, plus where the front subframe mounts. Not a nice spot...because it's load-bearing, so somewhat critical. And guess what...similar things happen at the back too, where the rear suspension trailing arms mount to the floor. Repair isn't that complex, but must be done properly. So you should try to ascertain that these haven't been plated over.

Don't forget to look at the state of the hood on a convertible, as often, these cars are simply used on sunny days, meaning the soft top doesn't see a lot of use. So when it does get finally used in anger, the material can tear quite easily. Sill, you can easily buy a new one if necessary, and they're not difficult to fit.

Suspension

Up at the front, it's MacPherson struts - so no real problems there, although the inserts can leak and springs can break. At the back is a tried-and-tested live axle/coil springs/dampers/trailing arms arrangement, which is rugged enough. So, if you notice handling problems, it's probably little more than bushes wearing out naturally, although worn dampers can also cause a lack of feel on the road, plus the occasional knocking.

HISTORY

1970 Triumph's technical director, Spen King, along with Mike Carver of British Leyland's Central Product Planning office, travelled to the USA to investigate the possibility of introducing a new TR sports car primarily intended for the American market. One problem looming on the horizon is the possible banning of convertibles over there for safety reasons. So, right from the start, the car that would eventually become the TR7 is envisaged only as a fixed-head coupe. During the early years of the project, the proposed creation is known simply as 'Bullet'.

1971 Harris Mann, director of design at Austin-Morris in Longbridge, pens a very different interpretation of a TR sports-car theme. Featuring a wedge-shaped profile echoing then current trends in automotive styling around the world. In fact, the look of the 'Bullet', with a very low bonnet line and upright rear window, deliberately makes it appear mid-engined.

1974 The first TR7s are constructed at Speke on Merseyside during the summer, with four-cylinder engines donated by the Dolomite 1850 range, albeit enlarged to 1998cc to give 105bhp (or 92bhp if strangled by detoxing equipment for the USA). Four-speed Marina derived gearboxes are the chosen transmission.

1975 January sees the launch of the TR7, coming as quite a shock to the very traditional TR brigade brought up on a diet of conventionally-shaped, quite basic, macho machines. Rumour has it that Giorgio Giugiaro exclaims "I don't believe it, they've done it on the other side too!" when he first walks around a TR7... which isn't particularly fair from somebody who designed more than a few wedge-shaped things himself. The first cars are primarily for sale in America.

1976 European-spec cars become available, with an automatic gearbox and a five-speed manual as options...although British Leyland soon runs out of the latter because such a transmission has been standardised on US cars, meaning that this extra is promptly withdrawn and not re-instated until 1978!

1977 Sir Michael Edwardes becomes the new chairman of British Leyland, on the same day that the Speke factory goes on strike and paralyses the TR7 production line. Ultimately, as the strike lingers on, the decision is taken to close down Speke completely and transfer production to Canley in Coventry. Amid all this mayhem though, some cars have been appearing, including limited numbers of the pre-production Sprint model, using the 16-valve engine from the Dolomite Sprint, are also made before strikes bring proceedings to a halt. For lovers of Seventies fashion, tartan upholstery is also introduced, in red or green.

1978 With manufacture now shifted to Canley, the TR8 finally goes into proper production, albeit for the USA only. And, as it has now become clear that open-top cars aren't likely to be banned over in America, a convertible version of the TR7 is also launched.

1979 The roof gets sliced off the TR8 to make it also available as a drop top.

1980 The UK finally gets the chance to try out the convertible TR7...and it is actually cheaper than the tin top version, bizarrely.

1981 Having never made a profit and been beleaguered by quality and reliability problems throughout its life, the TR7 and TR8 range - and indeed the whole TR line - comes to an end. 115,000 wedges have been built, which actually makes the breed the best-selling TR of 'em all.

Contacts

Club

- Club Triumph, Tel: 01425 274193 or www.club.triumph.org.uk
- TR Drivers Club, Tel: 01452 614234 or www.trdrivers.com
- TR Register, Oxon, Tel: 01235 818866 or www.tr-register.co.uk
- Triumph Sports Six, Tel: 01858 431936 or www.tssc.org.uk

Specialists - just a few of the great many

- S&S Preparations, Lancs, Tel: 01706 874874 or www.ss-preparations.co.uk
- Rimmer Bros, Lincs, Tel: 01522 568000 or www.rimmerbros.co.uk
- Quiller Triumph, London, Tel: 020 8854 4777 or www.quillertriumph.co.uk
- Moss Europe, nationwide, Tel: 0800 281182 or www.moss-europe.co.uk
- Wins International Ltd, Surrey, Tel: 01342 836060
- Robsport, Herts, Tel: 01763 848673 or www.robsport.co.uk
- TRGB Ltd, Cambs, Tel: 0870 757 2441 or www.trgb.co.uk
- Clive Manvers, Suffolk, Tel: 01359 244417 or www.manvers-triumph.com
- TR Shop, London, Tel: 020 8995 6621 or www.trshop.co.uk
- TR Bitz, Cheshire, Tel: 01925 861861 or www.trbitz.com
- TR Workshops, Gloucester, Tel: 01285 659900
- TR Enterprises, Notts, Tel: 01623 793807 or www.trenterprises.com

Market Trends

It's the V8 cars that command the big money...and bear in mind, there are now far more of those in the UK than there ever were when the TR8 was actually current. Some are genuine cars which have come back from the USA, others are conversions of lowlier TR7s, but if the job has been done well, they seem to be easily accepted as almost the real thing by enthusiasts, with prices marked up accordingly.

So values for the four-pot cars remain in the doldrums somewhat, while everybody continues to go all goosey-eyed over the examples with an extra bank of cylinders. Simply a grand can see you in a reasonable example of a FHC TR7, but the same kind of car with a Rover V8 lurking under its bonnet would cost at least £2500 more!

Our prediction is that TR8 prices will continue to rise - there's a new cool surrounding these cars at the moment, thanks to the ongoing Seventies revival and the fact that, with V8 power, these cars are actually damn fine classics. Don't expect the same of the TR7 though. They'll always be the cheap option of the TR series, although that does make them perfect for bargain hunters.

Verdict

Whichever model you go for, it's more important to look for a car that is as rust-free as possible. Corrosion is the single biggest problem with these sporting wedges, so do your homework carefully, and make sure you end up with a solid one.

Our further recommendation is obvious really: choose a TR8 (or a V8-converted TR7) if you can find one. They're a completely different experience to the four-cylinder cars, and offer the performance and charisma that the TR7 should have had right from the start. The four-cylinder cars are fine if you're new to the world of sports cars, or simply want a cheap but distinctive classic runabout purely to enjoy yourself in. But true entertainment comes from the models with eight cylinders ordered in a V-arrangement. It does make a world of difference.

Insurance quote

For a £3000 1980 Triumph TR7 convertible, no modifications, based in Peterborough

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TRIUMPH GT6



Engines

Service history is a real boon. "The engines are very good," says Gary Bates, "They are capable of racking up a high-mileage with ease if they are well looked after." The engine itself is a free-revving delight thanks to the short-stroke design – compromised slightly on the bigger TR engine. Of course, you can upgrade to the larger TR engine if you somehow find a GT6 lacking in grunt, but it isn't an easy change and the transmission may then not be up to the job.

Of course, the condition of the engine should not be taken for granted, just because they can last so long. Check for rattles or blue smoke when accelerating and on the over-run. All the mechanical units on the GT6 are capable of losing a little oil, but it shouldn't be forming puddles on the ground.

Early cars often leak oil from the pushrod tubes but Mk2 and later cars have a revised cylinder head which solves the problem. In fact, the Mk2 uses the head from the TR5. It is always worth checking the end float on the crank – you can do this by levering the crank pulley using a pry bar or large screwdriver. More than 8 thou is considered poor and if you get an actual clonk, urgent attention is required. The thrust washers can be changed with the engine in situ but only just, and it isn't much fun.

Parts prices

Courtesy of Rimmer Brothers.

Prices include VAT

Reconditioned chassis frame	£810.00
	(£70.50 surcharge)
Chassis to body mounting kit	£23.44
Bonnet assembly	£790.00
Front wing (Mk1)	£76.38
Reconditioned door shell	£168.00
Floorpan repair panel	
(per side)	£109.85
Reconditioned Engine	
(unleaded)	£1430.00
Clutch kit	£88.50
Clutch master cylinder	£63.50
Water pump (Mk3)	£38.74
Exhaust – full system in	
stainless steel	£173.31
Reconditioned overdrive unit	£344.46
	(£176.25 surcharge)
Propshaft (Overdrive, new)	£185.00
Driveshaft (long)	£70.99
Rear hub bearing kit	£22.98
Front brake disc	£13.95ea
Rear spring (for Mk1 inc swing-spring	
conversion)	£193.88
Rear shock absorber	£17.50ea
Headlamp (sealed beam)	£7.50ea
Halogen headlamp	
upgrade kit (pair)	£46.94
Reconditioned starter motor	£32.95
	(£23.50 surcharge)

Specification

Car	GT6 Mk1	GT6 Mk2	GT6 Mk3
Year	1966-1968	1968-1970	1970-1973
Engine size	All models: 1998cc 4-cyl OHV		
BHP/RPM	95bhp@5000rpm	104bhp@5300rpm	98bhp@5300rpm
Top speed	108mph	107mph	104mph
0-60mph	12secs	10secs	10.1secs
Gearbox	All models: 4-speed manual (overdrive optional)		
Consumption	All models: 24-30mpg		

Suspension Mk1: Front: Independent by double-wishbones, coil springs, telescopic shock absorbers. Rear: Independent by transverse leaf springs, swing arms.

Mk2: Front: Independent by double-wishbones, coil springs, telescopic shock absorbers. Rear: double wishbones, transverse leaf springs, telescopic shock absorbers. Mk3: Front: Independent by double-wishbone, coil springs, telescopic shock absorbers. Rear: As Mk2 until 1973, then transverse leaf springs, swing arms with 'swing-springs'

Take a Spitfire, give it a sleek fastback body, lob a Vitesse six-cylinder engine up front and bingo! You have a very swift, gorgeous-sounding sports coupé that deserves more respect than it actually receives. **IAN SEABROOK** takes a closer look at this British pocket-rocket with expert opinion from Richard Sharp at Rimmer Brothers and Gary Bates at TRGB

Electrics

You may encounter slightly iffy electrics, as can be the case with Lucas-equipped cars of this vintage but generally, the electrical system tends to be reliable. Some switchgear is proving difficult to locate now but it is easy enough to find a similar replacement albeit this may be at the cost of originality if you are a real purist.

The Mk1 had a dynamo, later cars moved to AC. Conversion kits are available for DC GT6s if you want to upgrade – a wise move if you are likely to be driving at night or during the winter months. “We sell a conversion kit,” reports Richard Sharp at Rimmer Brothers. “But some parts are getting hard to get hold of now.”

Interior

Water ingress can be an issue so check all the carpets to ensure that they are dry. Upholstery tends to be hard wearing but with even the youngest car now well over 30 years old, some wear is to be expected but treat any damage as a possible haggling point. A Webasto roof was an option on later cars, and may have been retro-fitted to earlier cars. Again, this could be a source of water leaks if it is ill-fitting. Early cars are rather poor in terms of ventilation however so a Webasto may make things a lot more comfortable during summer months.



Gearbox

“No Triumph gearbox is particularly good,” advises Gary Bates, “It is an archaic design.” The first thing to check is for layshaft bearing grumble in first, second and third gears. If it goes quieter in top, it signals that the bearings may need replacing. Synchronmesh needs checking in each gear, especially when coming back down through the gears. Cars can jump out of gear so watch out for this on the test drive. Overdrive was an option on all but the earliest cars and is a desirable one, making long distance driving much more relaxing. It should work on the top two gears so again, make sure that it does.

The Mk2 has very tall gearing when equipped with overdrive, which helps to explain how it is only just the fastest car of the bunch, despite the Mk3 having less power due to emission restrictions.

Bodywork

There aren't many places that a GT6 doesn't rot so you need to check the car with care. First off, have a look around the entire vehicle. Does it look 'right'? Are panel gaps consistent, or are there any iffy-looking bulges hinting at bodged repairs?

You really need to get the car in the air, as the low nature of the GT6 makes crawling underneath a tricky prospect. Many think that the sills are not that important due to the separate chassis, but it is of a backbone design meaning that the sills are actually structural. While you are underneath, check the floors and the rear heel board. “The suspension tie-bar attaches to a reinforced panel here and it is a common rot spot,” says Gary Bates at TRGB.

Above ground level, check the bonnet for rot on the lower front corners and wheelarches. “All the wheelarches are double skinned,” explains Gary, “Moisture gets trapped between the skins and rust is very often found here.” You also need to check the front corner valances, below the front bumper.

Moving further back, check the front edge of the roof. “The windscreen pillars also need to be checked,” recommends Gary, “It is also worth checking the A-posts themselves as they can rot in extreme cases.” Door bottoms can go, for the usual reason of blocked drain holes. The tailgate can suffer corrosion on the bottom edge but at least replacement is easy enough.

Brakes

The GT6 has a disc/drum set up but only late Mk3s had a brake servo – a remote item. However, the brakes are plenty powerful and the car should pull up swiftly and in a straight line. Pedal pressures may be more than modern motorists are used to but once you get used to the need to press harder, you should have no issues. Should you wish to have more braking power, upgraded discs/pads are available off the shelf.

Transmission

The differential is being asked a lot by the torquy six-pot lump so make sure it isn't making any excessive noise or clonks when taking up the drive. Mk2 and Mk3s up to 1973 have Rotoflex joints on the driveshafts. “They stopped making them about five years ago,” explains Gary. “Modern reproductions just don't last long enough – generally two years tops.” Check them for cracking and be aware that replacement is tricky. Not something you want to tackle straight away on your new purchase.

Suspension

Mk1: Front: Independent by double-wishbones, coil springs, telescopic shock absorbers. Rear: Independent by transverse leaf springs, swing arms.

Mk2: Front: Independent by double-wishbones, coil springs, telescopic shock absorbers. Rear: double wishbones, transverse leaf springs, telescopic shock absorbers.

Mk3: Front: Independent by double-wishbone, coil springs, telescopic shock absorbers. Rear: As Mk2 until 1973, then transverse leaf springs, swing arms with 'swing-springs'

Suspension and steering

Accurate rack and pinion steering blesses the GT6 with the same incredible manoeuvring ability of the humble Herald. Front suspension is by double wishbones – a very good design copied by Lotus among others. There are trunnions however, so make sure they are free of play and well-greased. Polybushes are a wise upgrade for those who want to tighten things up a little and a coil-over-shock conversions are also available.

At the rear, things were not that advanced – to start with at least. The Herald back end, as fitted to Mk1s, is really being pushed beyond its limits. Wheel tuck is a problem if you push too hard into a sharp bend and it also causes consternation if you take a hump back bridge too quickly. Apparently, a press shot of a GT6 in such an airborne pose had a rather negative effect on sales. The Mk2 got the Rotoflex rear end mentioned under Transmission and had double wishbones to go with this – a very sophisticated and complicated set up but very efficient. The transverse leaf spring now effectively became the upper wishbone. However, as part of a cost cutting measure, from 1973, the Mk3 reverted to the simpler set up albeit now with a swing-spring to reduce wheel tuck. On non-Rotoflex cars, the wheel bearing acts directly onto the driveshaft so if the bearing fails, it can mean that the shaft also needs replacement.

HISTORY

1959 The Herald is launched, eschewing the new trend for monocoque construction. The simple chassis makes this an ideal car on which to base a new sports car and this proposal receives approval as early as 1957 – although it took five years and a Leyland takeover to make the car a reality.

1962 The new sports car, the Spitfire, is launched. Featuring the Herald chassis (albeit without the outriggers) and running gear, Triumph is easily able to create a loveable little roadster. Michelotti is brought in once more to deliver an attractive design – the distinctive low doors are insisted on by Harry Webster, who wanted to be able to touch the ground from the driver's seat. Michelotti actually delivered his work in 1960 but with money fast running out, Triumph were unable to put the car into production and it was mothballed. Later on in the year, the simple yet flexible Herald platform begets an altogether more exciting development for six-pot lovers – the Vitesse 1600. Triumph, er, triumphantly returns to pint-size sixes with this development. Slant-eye headlamps warn other road users of what is rapidly approaching.

1963 Triumph asks Michelotti to fashion a fastback Spitfire called the GT. The result is attractive but the extra weight badly affects performance and the concept is rejected.

1964 Someone puts two and two together and a Vitesse 1600 engine is fitted to the GT. The car only has 77bhp so performance isn't tyre-shredding as might have been expected but luckily, the two-litre engine from the 2000 saloon was about to be installed in the Vitesse and would prove ideal for the GT6.

1966 The GT6 is launched – to Spitfire Mk2 specification which means the same tricky handling on the limit. The car soon proves popular, especially in America.

1968 The Mk2 hits the showrooms with the same Rotoflex and double-wishbone rear end as the Vitesse Mk2. Styling changes are as per the Spitfire Mk3 and include a higher front bumper. The GT6 also receives many louvers for the bonnet in an attempt to reign in under-bonnet temperatures.

1970 The Mk3 is the final flowering of the GT6 and receives the same sawn-off rear end as the Spitfire Mk4.

1973 The Rotoflex rear suspension is dropped and the 'swing-spring' set-up from the Spitfire replaces it, demonstrating a vast improvement in handling over the early cars and saving BL a few pennies to boot. It wasn't enough to save sales however and production ends in November.

Contacts

Clubs

- Triumph Sports Six Club. Tel: 01858 434424 or www.tssc2.org.uk
- Club Triumph. Tel: 01784 465351 or www.club.triumph.org.uk

Specialists

- Rimmer Brothers, Lincs. Tel: 01522 567600 or www.rimmerbros.co.uk
- TRGB, Cambs. Tel: 01487 842168 or www.trgb.co.uk
- James Paddock, Cheshire. Tel: 01244 399899 or www.jamespaddock.co.uk
- Triumph Auto Classique, Wilts. Tel: 01793 853033
- Jigsaw Racing, Northants. Tel: 01536 763799 or www.jigsawracingsservices.co.uk

How much?

Not very much at all really. When you look at what you are getting, the £5500 top end for minters seems very reasonable indeed. Show-winning glamour may cost a little more but you'll be pleased to learn that road-going, tidy cars can be had for as little as £2500, which is frankly ridiculous. Where else are you going to get six-cylinders, sleek looks and a hint of practicality in such a bona fide classic? Suddenly, MGB GTs seem rather pricey...

Mk3s tend to be more fancied and as such, are a little pricier. Purists prefer the Mk2 with the earlier rear end treatment. For bargain-seekers, a Mk1 is the way to go. Overdrive can push the price of a car up – by quite a degree. If you are doing a lot of driving, it's worth paying extra for a car that has it but if you will only be using the car as a weekend tool, then the saving may prove worth it.

Incidentally, you may spot GT6 convertibles for sale but these were never factory produced – doesn't take an expert to see that making a Spitfire more fiery is a fairly simple task, but check that the work has been done well. Prices can be higher for these non-original cars, as us Brits do like a soft-top.

Verdict

Okay, let's not get carried away here. The GT6 is a little cramped, filled with good old Joe Lucas electrics, and later ones are perhaps a little tainted by the hand of BL. The engine may be refined but build quality falls a little way short of this. As Richard Sharp at Rimmer Brothers explains, "Those of you who believe that a classic Triumph like the GT6 will give you the same soft, comfortable, easy ride as a modern saloon or sports car, will be in for a shock. First time buyers are recommended to try it first. It can be a spine-jarring ride."

But with the unpleasantness out of the way, it seems very clear that the GT6 is an undervalued little cracker. That engine note will make you smile every time you hear it and performance is strong enough to be very entertaining. The handling may come in for criticism, but few are likely to push to the limits these days anyway and it beats resorting to an ancient live axle design like a certain competitor. Only the Mk1 is afflicted with any sort of issues anyway so if you are really concerned, buy a later one. Richard adds, "We have all been spoilt by modern cars, but just think, you will be able to open the bonnet and work on the engine rather than just look at the mass of electronics. Have fun and experience real old fashioned driving."

Whether to choose the Mk2 or the Mk3 is very much a matter of taste. Some like the earlier rear end treatment whereas others prefer the Mk3 with a tail reminiscent of the Stag. Whatever you choose, you'll get a little delight – the small car with a big-car soundtrack.

Insurance quote

For a 1970 Triumph GT6, valued at £3000, based in Peterborough

- Fully comp, £284.40 for a 29-year-old, two years' NCB, 10,000 mile limit, only car, kept on driveway, club member
- Fully comp, £105.00 for a 50-year-old, full NCB, 3000 mile limit, second car, garaged, club member

TRIUMPH STAG



Engines

Oooh, just listen to that burble. You could make an album of the gorgeous sound emanating from the twin-pipe exhaust. However, as lovely as the noise is, don't let it distract you from checking the engine carefully. After all, it is the cause of so many Stag-related horror stories.

Timing chains will rattle when worn and will be worse when cold – check the engine bay first when looking at a car and make sure that the engine is not already warm. It's always best to see how a potential purchase starts from cold anyway. Especially this time of year. Especially when replacing the battery involves removing the power steering pump...

If the timing chain rattles even when the engine is warm, it needs replacing as soon as possible. Failure will cause rather unpleasant meetings between engine components. In many ways, Winter is a good time of year to buy a classic as you'll easily be able to check things like heater output and whether the thermostat is working as it should. Take a good, long test drive and make sure the engine isn't trying to overheat. If coolant has not been replaced regularly or with the correct mixture, the alloy parts of the engine will corrode and clog up the waterways. This can cause head gasket to blow so do the usual 'oil in water' checks as well as checking the state of the dipstick. If the water pump is leaking, you'll see water between the two banks of the vee.

If the carb breather pipes are leaking, the engine will be almost impossible to tune. With the engine idling, remove the oil filler cap. If the engine slows or stalls, all is well. If it doesn't, the pipes require replacement.

When you raise the revs to 3500rpm, check for a harsh rumbling which might suggest that the main bearings are past their best.

Engines tend to last between 80,000 and 120,000 miles between rebuilds depending on how well they have been maintained. If an oil pressure gauge is fitted, look for 40-50psi at cruising speeds and 20-25psi at idle. Make sure that the oil pressure warning light comes on when you turn the ignition on – and that it doesn't remain lit with the engine running.

Electronic ignition is a good idea and is commonly fitted. The twin points set up of all but early cars can be fiddly to get right.



Specification

Car	Stag manual	Stag auto
Year	1970-1977	1970-1977
Engine	2997cc V8 ohv	2997cc V8 ohv
BHP/RPM	145@5500	145@5500
Top Speed	117mph	112mph
Gearbox	4-speed manual plus overdrive	3-speed automatic
Consumption	20-26mpg	20-26mpg
Suspension	All models: Front, independent by MacPherson struts, anti-roll bar Rear, Independent, coil springs and telescopic shock absorbers	

Parts prices

Parts prices are courtesy of Rimmer Brothers and do not include VAT. Rimmer Brothers currently have a sale on Stag parts until December 29, 2007.

Service kit (single points)	£39.95
Service kit (twin points)	£55.00
Engine cooling fans, Mk2	£49.95
Polyurethane rear subframe bushes, each	£37.50
Clutch kit, complete	£100.00
Radiator, 5-core upgrade, new, exchange	£234.04
Water pump, 12-vane	£154.45
Front wing	£170.17
Wheelarch repair panel, front	£31.06
Door bottom repair section	£28.59
Front strut overhaul kit, pair	£199.00
Hood, Mk2, exchange	£995.74

Unloved when new, the Stag is now one of the most popular classic cars. **IAN SEABROOK** tells you what to look for if you're interested in a real New Year treat

Brakes

As with any low mileage vehicle, calipers can seize while a pedal which progressively tries to meet the carpet suggests a master cylinder fault. If the servo is on the blink, pedal pressure will get steadily heavier while braking efficiency suffers. There is a five-way brake pipe junction on the nearside engine bulkhead. This can leak and the fluid is not particularly kind to metalwork.

Interior and electrics

There are worse places to be than in a Stag and those admittedly small rear seats can be very useful indeed, especially if you have younger family members. The vinyl seats can sag but replacement foam sections are now available to breath new life into your seats.

The floors should be checked for dampness and rust. Is the carpet discoloured or sodden? It may hint at trouble. Make sure that the hood fits snugly – at least it is unlikely to be stashed away this time of year although if a hardtop is fitted, you really need to make sure that you still get an opportunity to check the state of the hood. Replacements are not cheap.

Switchgear can play up – but that's Seventies British stuff for you. Replacements are at least easily found. Do check the wipers – the wheelboxes can seize which will make the movement laboured. The driver's wiper arm features a beautiful pantograph set up.



Transmission

Typical manual faults include the usual worn synchromesh or excessive noise suggesting that it's rebuild time. Any problems with the overdrive are usually electrical faults.

The automatic unit is the good old Borg Warner and they rarely give trouble being not particularly stressed in this application. Do check for smooth changes and explore the fun of kickdown to make sure that it actually does.

Noisy differentials suggest replacement/refurbishment is required – it's important to keep an eye on the oil level. Leaks are not exactly rare. The driveshafts should be regularly greased to keep them healthy.

Bodywork

Stags are actually pretty hardy but the youngest example is still over 30 years old now and, like any other 30 year old, time can take its toll. At least panels and repair sections are plentiful. That said, bodywork repairs are likely to cost much more than mechanical repairs so it is arguably the most important thing to check.

Starting at the front, the valance below the bumper can suffer, as can the headlamp panel and the metalwork between the bonnet and the very front of the car. There is a crossmember under the radiator, behind the valance, and this can suffer too. Wheelarch repair sections are available which tells you that this is a key area to check. The seam between the front wing and front panel is also worth a look as this'll tell you whether you'll get away with the wheelarch repair section or end up changing the entire wing.

The windscreen pillar and the top of the A-post also need to be checked. It's a common bodge spot so don't assume that all is well under the paint. A magnet is your friend. Hardtops can suffer along their front and rear edges. Rot is also commonly found at the base of the hood compartment. The rear shock-absorber mounts are located here so rust is not that desirable. The rear spring mounts are also susceptible and an equally undesirable rot spot.

As with any monocoque, sills are vital for the strength of the car so check with care. Examples fitted with sill covers are a pain to check – the best you may be able to do is to check the rearmost edge where it meets the wheelarch as well as where it meets the floorpan. Another common rot area is the base of the A-post and the surrounding floor and outriggers. The main chassis rails are also worthy of inspection as are the rear footwells.

Door bottoms can go but again, repair sections are available. Blocked drain holes are the usual culprit here. Again, it's a cheap bodge spot so check with care. The rear edge of the bootlid also suffers, as do the rear wings where they meet the sill as well as the usual wheelarch woes. The boot floor itself is prone, sometimes being attacked from above and below, so check for dampness.

Suspension and steering

Start with a look at the tyres. On low-mileage cars, you want to be sure that the tyres have not degraded with time but on any car, check that they are of good quality, that types match at least per axle and that there is no unusual wear.

If wear and knocking could suggest that the suspension bushes are in need of replacement. You might find woolly handling also.

If you can, jack the car up and check for play at all four corners. The wishbone bushes, anti-roll bar links, tracking arms and steering rack are all potential play points at the front, while trailing arm bushes and subframe mounts could cause looseness at the other end. Wheel bearings should also be listened out for.

With the car on the ground, check the rear wheels for negative camber which may hint at loose noseplate bolts on the differential. The cradle this is held in can rust, so getting under the car is useful.

All cars have power steering but if it is overly assisted, a spool valve may have failed in the rack which means replacement of the entire unit. Check for fluid leaks, especially if the assistance is lacking or intermittent.

Contacts

Clubs

- Stag Owners Club, 01379 677735 or www.stag.org.uk
- Triumph Stag Register, 01202 761051 or www.tristagreg.org
- Club Triumph, 01425 274193 or www.club.triumph.org.uk
- Triumph Sports Six Club (welcomes all Triumphs), 01858 434424 or www.tssc.org.uk

Specialists

- Rimmer Brothers, parts, Lincs, 01522 568000 or www.rimmerbros.co.uk
- Cherished Classics, sales and servicing, 0116 276 2121 or www.cherishedclassics.co.uk

- James Paddock Ltd, parts, Cheshire, 01244 399899 or www.jamespaddock.co.uk
- Spring Grange Classics, sales, servicing and parts, Leics, 0116 259 5464 or www.springgrangeclassics.co.uk
- Superflex, polyurethane bushes, 07000 200025, www.superflex.co.uk
- Wrightons, body repairs, Worcs, 01527 585 010 or www.wrightons-garage.co.uk
- Robsport International, sales, servicing and parts, Herts 01763 262263 or www.robsport.co.uk
- E J Ward, sales, servicing and parts, Leics, 0116 279 9060

HISTORY

1965 The relationship between Triumph and Italian designer Giovanni Michelotti goes from strength to strength, with the Herald and 2000 saloon just two of his designs. Michelotti asks for a 2000 saloon to build a motor show special, and Harry Webster, Triumph's MD, spots the creation on a trip to Italy. The new car is a full soft top with sliding headlamp covers and no roll-bar.

1966 Michelotti loses his show car as Triumph look to build it as a production model. The project is given the 'Stag' title – a name which lives on with the car once launched.

1967 A prototype is constructed with the 2-litre straight six engine installed. It looks the part but performance leaves testers cold. In parallel to this, work has been ongoing for a new four-cylinder engine – also to be used by Saab. It has been designed with the possibility of using it as a base for a V8 and so it is this new unit which is chosen to power the new flagship Stag. The first incarnation is 2.5-litres but this lacks low-down grunt, hence the move to 3-litres. Incidentally, while thought is given to using the new Rover V8, in reality, Rover is not able to produce enough units to power the Stag and the growing list of other applications. Triumph engineers state that the rival Rover unit will not fit anyway – which is not entirely accurate.

1969 The Mk2 2000/2500 range is launched – previewing the Stag snout. Obviously it looked so good on the Michelotti show design that he decided to employ it on the revised saloons also!

1970 The Stag is launched at the Earl's Court Motor Show and creates quite a stir. Here is Triumph aiming to take on giants such as Mercedes-Benz in the Grand Tourer stakes. It has a chunky roll-bar which gives essential strength to the structure as well as crash protection not offered by rivals.

1972 Two 4x4 Stags are built by GKN in an attempt to get Triumph in on the 4x4 act but BL isn't interested – perhaps wisely although it could have been an interesting forerunner to the Audi Quattro. The Stag is starting to look lame however. Rushed engine development and lackadaisical build quality have already started to tarnish the reputation of the new car. Overheating woes cause a redesign of the cooling system.

1973 The Mk2 Stag is launched – with little in the way of obvious changes. Clues are the black sills and rear panel plus a small coachline along the sides. Mechanical changes include the fitting of Laycock overdrive on manual Stags. Engine troubles are still not entirely overcome however.

1974 Stag production is scaled back as the effects of the fuel crisis begin to be felt. It's another nail in the coffin for the Stag.

1975 Aluminium sill covers are fitted and the tail panel reverts to body colour. Five-spoke alloys and tinted glass are not enough to halt the sales slide.

1977 With BL in crisis, the Stag is finally dropped – as are the aged Triumph saloons. Interestingly, there were plans to install the Stag engine in the saloons but that would have created a real threat to the Rover P6B – an in-house competitor. Only 26,000 Stags have been built – not the 12,000 a year that management had hoped for.

How much?

Three years ago, we reported how prices rarely went over £10,000 for the very best examples. How things have changed in that short time! £15,000 is now by no means unusual for the very best examples on a dealer's forecourt. For the car that at first appeared to be little more than a hopeless failure, that's quite incredible.

Of course, as the years have passed, the reputation worries have become ever-more irrelevant as cooling system upgrades and regular oil changes and timing gear replacement have blessed the Stag with the reliability it craved but was so cruelly denied when new. For some time now, the classic car world has been waking up to just what is on offer here – from the musical V8 to the practical seating, cruising ability and stylish looks.

Don't panic just yet though. While prices for the very best may be heading ever skyward, those for rougher examples have not gone quite so stratospheric. Examples equipped with either the Triumph six-cylinder or Rover V8 engines are still not fancied by purists and are therefore much cheaper – often struggling to beat £3000, so if you aren't an original freak, it could be a cheap way into Stag motoring. Just don't open the bonnet at shows.

It is still possible to get a good example for less than £10,000, but mark our words that these halcyon days will not be around forever. Good, original examples can be had from £5000 upwards if you don't mind doing a little work, while rough examples will fetch only one or two thousand. If you can weld, it could be an ideal project as parts support is excellent.

Verdict

The story of the Stag is tinged with tragedy but ignoring the horrors of the BL era, it remains a very capable and useable classic with a soundtrack that is darned near unbeatable. Performance is not pant-wettingly fast but that isn't what this car is about. It's about cruising along in effortless style and for that reason, the automatic option is the transmission of choice. Just select D and off you burble.

It's comfortable, classy and while you have to accept that these cars require a little fettling to keep them at the top of their game, they have much more character than the equivalent Mercedes-Benz SL – if not quite the glamour of the Pagoda predecessor.

With excellent support – both from the many clubs and specialists out there – you won't have any headaches trying to keep the thing on the road. As investments go and with prices still on the climb, there's a lot to recommend a Stag.

Insurance quote

Based on a 1972 Triumph Stag valued at £8000

- Fully comp, 29-year old, two-years NCB, parked on drive, unlimited mileage. If a member of the TSSC £154.80 (£50 excess). If a member of any other Triumph club **£168.45** (£50 excess)
- Fully comp, 50-year old, full NCB, garaged, 3000 mile limit, second car. If a member of any Triumph club **£104.40** (£100 excess)
Cover includes 24hr Breakdown Recovery (UK and Europe) and Motor Legal Expenses.

TRIUMPH TR5/6



Engines



WHILE the 2498cc six-cylinder engines are generally robust, wear can set in thanks to the positioning of the oil filter, which doesn't always allow enough oil to circulate initially. Look to see if the owner has upgraded to a spin-off filter. Many will have done, and it stops this happening.

Crankshaft end float is something these units can

be afflicted by. It can be checked by having somebody repeatedly depress the clutch when the car is switched off while you try to push the crankshaft pulley/fan backwards. There should be a little bit of forward movement from it, but if there's quite a bit, it points to a thrust washer possibly about to drop out. This will lead not just to the crank destroying itself, but also what's around it as well. Not good, not good at all. If oil pressure at 3000rpm when warm reads just about 10psi - or if it fluctuates a lot - then the crank is worn. Look for 75 to 80psi in a healthy engine at this figure (or around 50 psi at 2500rpm). A warm engine should also be relatively quiet - expect some noise, but obtrusive tappet sound shouldn't be part of it.

If a new engine has been fitted, then do check that it's a proper TR one, not one that has come out of a saloon. They will fit easily enough, and are naturally cheaper to buy, but they don't have the same crank or camshaft, and so don't offer the same level of performance.

Chassis

JUST as the bodywork can rust, so can the chassis. One prime spot is where the trailing arms mount. The arms themselves may be alloy, but tinworm sets in at the point where they mate up to the chassis. Repair means taking the body off - but it is something you'll have to do to get the car through an MOT and make it safe to drive. The chassis rails are nearby and can also develop holes, something else you don't really want either. A rusty floorpan can also spread its disease through to the chassis.

The differential mounting can suffer from stress cracks. If it's not obvious from underneath, than all might become more obvious during a test drive. A clonking when the clutch is released is an indicator of this, but could also simply be worn driveshafts or universal joints, which isn't such an involved job to put right.

You can check for possible accident damage - these are sports cars after all - by looking at the chassis rails behind the front wishbones, at the point where the chassis starts to bulge outwards. Any creases here are bad news.

Something else you should look for is 'hogging'. A chassis that has been badly repaired in the past can project from beneath the rear valance - and putting it right again requires an expert.

Specification

Car	TRIUMPH TR5 PI	TRIUMPH TR250	TRIUMPH TR6
Year	1967-1968	1967-1968	1968-1976
BHP/RPM	150bhp@5500rpm	104bhp@4500rpm	150bhp (124 from '73)@5000rpm
Top speed	121mph	107mph	121mph
0-60mph	8.8secs	10.6secs	8.2secs
Consumption	20mpg	22mpg	20mpg
Engine size	All models: 2498cc six-cylinder OHV		
Gearbox	All models: 4-speed manual plus overdrive		
Suspension	Front: Independent, by unequal length double wishbones, with coil springs and telescopic dampers. Rear: Independent, by semi-trailing arms, coil springs, lever arm dampers.		

Parts prices

Prices from Rimmer Bros, and include VAT	
Fuel Metering Unit	£258.44
Clutch Kit, Bosch and Beck	£116.33
Hood, black, original spec	£193.88
Carpet set	£135.13
Top ball joint	£15.22
Brake disc	£12.93
Brake pad set, to 1972	£11.69
Prices from Moss, and include VAT	
Front wing, TR5	£513.42
Front wing, TR6	£225.48
Bonnet, TR6	£372.60
Exhaust, stainless steel, complete	£189.95
Fuel pump, reconditioned, exchange	£343.45

The TR5 and Teutonically-revamped TR6 were the final incarnations of the traditional Triumph sportscars - albeit with six cylinders instead of four. **RICHARD GUNN** looks at buying one of the great British bruisers.

Gearbox

SOMEWHAT agricultural they may be with their heavy clutches, but the transmissions on these cars should be fairly quiet in operation. If they're not, suspect a worn layshaft. Oil leaks aren't exactly unknown from the gearboxes and the overdrives... and if the level has dropped too low, then you can expect wear to be more advanced than it would be on a car where the mileage is higher but the mechanicals more oil tight. How quickly the overdrive engages is a good signal of the level of the fluid - quickly and with a small jolt is just as it should be.

Synchromesh disappears with age as it does on most classics, with second gear likely to suffer demise first of all. Another possibility with an ageing 'box is that the stick can pop out on the overrun. Look for this all the gears to see if this is the case.

And now onto hissing. If there is this noise when the car is in neutral and the clutch is pushed down, this is likely to be a worn release bearing. But a hissing in first gear when moving slowly points to worn layshaft bearings. Replacement means taking out the gearbox.

Interior

Buy a car with the best interior you can find, bearing in mind that wooden dashboards can be expensive to replace. However, if the rest of the car is up to scratch, then don't get too worried about a scruffy cockpit, as practically everything you'll ever want or need is available new or secondhand. However, pay close attention to the hood, as one of these with tears in it will be costly to replace. And if you find a car with the optional hard top, then go for it. These are very sought-after.



Suspension

ASIDE from the usual balljoints and trunion wear, the front suspension is usually trustworthy enough. As is the rear as well, although special tools are needed to disassemble this if anything goes wrong. Do look to see that the car sits level all around, as any misalignment will affect handling.

Bodywork

DESPITE the two cars looking very different to each other, all Karmann really did with the TR6 was reskin the TR5. That does mean that what affects one model generally affects the other as well, although there are some grot spots that are individual to each model.

Rust is, primarily, your main enemy when it comes to buying one of these TRs, with the TR6's existence through to the worst years of British Leyland not having helped its build quality. However, the good news is that practically everything is available from the many specialists who cater for the TR. And, yes, you can almost build one of these cars from scratch, such is the healthy state of the parts situation.

There are all the usual suspects to check on one of these cars. The headlamps can suffer - both the outside metal surrounding them and behind the bowls - and the wing bottoms also tend to go crusty with age and dampness too. Doors can suffer from blocked drainholes, and if they do, the surrounding metal will start to be sacrificed to tinworm. Areas which can be overlooked include the front and rear valances, thanks to hiding away under the bumpers where they're not immediately noticeable.

Suffice to say, the sills should be scrutinised carefully, paying close attention to the A-post area. Putting new sills on means taking both front wings off...which will often reveal even more problems. Bulkheads are vulnerable to dirt being thrown up by the front wheels, with problems, usually setting in around where the splash panel meets the inner wing, while the battery tray also tends to go crumbly thanks to its addiction to acid. The rear inner wings also go around the B-post - and often, you'll just find that this area has just been filled to avoid a complicated and pricy repair. If this is so, then the seam where the rear wings meet with the body may have been covered over. It shouldn't have been - so if you don't see the seam here, you need to find out why.

Double-skinned bonnets promote rust in their leading edge, and replacements are expensive, particularly so for TR5s. Yes, a TR4/TR4A one will fit, but you won't have that distinctive bonnet bulge in front of you. Not that it really matters too much, because that bulge doesn't actually cover anything. It's just Triumph's equivalent of a rolled-up ball of socks on a Saturday night...

Just as bonnets like to go, so do bootlids, and is one of those areas where the TR5 and TR6 vary. On the former, it's the bottom two inches of the boot which go, again due to double-skinning trapping water. Over on the TR6, the rear lip overhang causes all the problems, thanks to - yes, you've guessed it - double-skinned steelwork, plus the effects of gasses from the exhaust. The inside of the boot can collect water in the spare wheel well. It's worth taking the tyre out to have an in-depth probe around here to see how solid the metal actually is. On the TR6, rust can also develop around the rear lamps, which will ultimately also let water into the boot.

Although the panel gaps are variable on these cars anyway - standard British workmanship from the Seventies - uneven spaces around the doors, bonnets or boots should be investigated further, as they could point to potential accident damage. Evidence here should be used as an excuse to delve further and check for kinks in the chassis (see separate section). You should also look for glassfibre panels too - at some point, most panels on a TR5 or TR6 have been offered in this material in the past, at a far cheaper cost than the genuine metal items.

Fuel Injection

THE TR5 may have been a UK pioneer with its fuel injection system, but as with most trendsetters, mistakes were made because there was little else to look back on and learn from. Rough running is often down to the petrol injection system. The fuel pump is what causes many of the problems, because it is in the boot right above the hot exhaust. Hence it suffers from fuel vapourisation on hot days. Solutions are either to mount the pump somewhere a little less warm, or swap it for a Bosch pump, which is less prone to playing up. Conscientious owners may have done one of these tricks already. A loud continuous sound indicates a healthy pump.

Fuel metering can be difficult as well, although there is a check that can be done to see how well the injectors are working before you dismiss the unit. Disconnect each one in turn and hold a jam jar underneath to catch any fuel. Then you can check to see if there is any hint of a blockage. Beware a car that has been run on unleaded without modification, as the lack of lead lubrication can result in the meter unit seizing up.

You should have a look at the short flexible pipe on the nearside of the engine. If it perishes, then petrol can spill out onto the hot engine. Not exactly desirable.

Carburettor cars - which will probably have been re-imported from the USA - don't suffer from these problems. But of course, they will have far less power and not be nearly so enjoyable to drive.

HISTORY

1952 It's the dawn of a new (and lengthy) sporting Triumph era, with the appearance of the TR2 at the London Motor Show.

1961 With the TR2 having passed through TR3 and TR3A incarnations, the range progresses to the TR4 as a result of a complete redesign by Triumph's Italian styling guru Giovanni Michelotti.

1965 With the six-cylinder Triumph 2000 model enjoying healthy sales, the company starts seriously looking at the idea of dropping the modified Standard Vanguard engine from the executive saloon into the TR, with the project being given the codename Wasp. However, its soon becomes apparent that the engine as it is lacks torque and power and so the unit is enlarged to 2498cc to give a bit more oomph. However, a spanner is thrown in the works by the USA, which, rather inconveniently, starts complaining about exhaust emissions. It soon becomes clear that the Wasp will have to be available in two forms: one for Europe, one for the UK.

1967 No longer known as the Wasp, the TR5 appears. Well, at least, that's what the car is called in the UK, with the addition of the letters 'PF' at the end to denote that the car has fuel injection, the first British production car to do so. Using the bodysheet of a TR4A with a few minor nips and tweeks, the 2498cc car develops 150bhp thanks to its Lucas fuel injection. This gives it a top speed of 120mph or thereabouts. However, over the other side of the Big Pond, the Americans have to put up with the TR250. This only has 104bhp, thanks to being fitted with Zenith-Stromberg carburettors to keep the new Triumph within Federal emissions regulations. However, perhaps mindful of how lacking the car is when compared to its European counterpart - it's not even as fast as the outgoing TR4 - Triumph chooses to jazz it up a bit by adding nice stripes on the bonnet and front wings.

1968 Now that the six-cylinder engine is in, it's time to look at what surrounds it. With cash for a revamp of the TR5 at a premium and Michelotti engaged elsewhere, Triumph approaches Karmann of West Germany with a request to do a budget makeover. To its credit, what Karmann comes up with is not only cheap, but manages to make the car look radically different. Nothing is done to the centre section, but new front and rear panels are fitted, with the lights now in the corners of the wings and the boot now featuring a Kamm tail. Different as it may look though, nothing much changes mechanically and the States still has to make do with a car seriously lacking in grunt. In recognition of the changes, the car becomes the TR6.

1971 The transmission from the Triumph Stag is fitted, which alters the gear ratios.

1973 A new camshaft profile is adopted, in order to make the engine more refined and robust. However, that power drops down to 124bhp.

1975 With the launch of the TR7 - back to four cylinders, but with a very different shape to previous TRs - the TR6 goes out of production for the European market in February. However, US - spec cars with carburettors continue.

1976 Manufacture of all TR6s comes to an end, after 94,619 examples have been built. Add on the TR5/TR250 production tallies, and 106,050 six-cylinder TRs have been made in total.

Contacts

Clubs

- Club Triumph. Tel: 01425 274193 or www.club.triumph.org.uk
- TR Drivers Club. Tel: 01452 614234 or www.trdrivers.com
- TR Register, Oxon. Tel: 01235 818866 or www.tr-register.co.uk

Specialists

- Rimmer Bros, Lincs. Tel: 01522 568000 or www.rimmerbros.co.uk
- Moss Europe, nationwide. Tel: 0800 281182 or www.moss-europe.co.uk
- TRGB Ltd, Cambs. Tel: 0870 757 2441 or www.trgb.co.uk
- Clive Marvers, Suffolk. Tel: 01359 244417 or www.marvers-triumph.com
- TR Shop, London. Tel: 020 8995 6621 or www.trshop.co.uk
- Southern Triumph Services, Dorset. Tel: 01202 427008
- Revington TR, Somerset. Tel: 01823 698437 or www.revingtontr.com
- TR Bitz, Cheshire. Tel: 01925 861861 or www.trbitz.com
- TR Workshops, Gloucester. Tel: 01285 659900
- TR Enterprises, Notts. Tel: 01623 793807 or www.trenterprises.com
- Classic Touring (TR Hire). Tel: 01892 891166
- TR Trader, Cheshire. Tel: 0161 485 5005
- Yorkshire TR Centre. Tel: 01924 365990

Market Trends

£2500 to £17,500 - EVERGREEN British classics that they are, the TR5 and TR6 are sports cars that should always hold their value well. That's generally been the case in the past, and is likely to be the way things remain for quite some time to come as well. If you buy one of these Triumphs, assuming you keep it in approximately the same condition as it was when it came to you, you shouldn't lose too much money when it comes to a parting of the ways. And you might even make something too...

Don't expect to pick up one of these cars cheaply, even in rough condition. You can find yourself having to spend quite a bit even for a basketcase, with a rolling wreck of TR5 worth more than some four-cylinder sports cars of the same era.

The rarity and old school good looks of the TR5 guarantee this breed a slightly higher price than the more mass-produced, up-to-date looking TR6, but whichever one you go for, don't expect to use your pocket money to buy one. Unless you have VERY deep pockets indeed.

Verdict

For many, it's the TR5 that represents the ultimate blooming of the TR flower. It has the traditional looks, but combines them with six-cylinders and fuel injection to create a cocktail that none of the other models looked or tasted like. But with so few TR5s made, finding one might be a problem. And don't be too tempted by a TR250 unless you're bothered more by style than actual substance. Under such circumstances, the TR6 still has much to recommend it. It's essentially the same car as the TR5, but just much easier to find, cheaper to buy and with more modern looks.

Insurance quote

For a £10,000 1873 Triumph TR6 based in Peterborough

- Fully comp, £100 excess: £219.45 for a 29-year-old, two year's NCB, clean licence, 10,000 miles, only cat kept on drive, club member.
- Fully comp, £100 excess: £81.90 for 50-year-old, full NCB, clean licence, 3000 miles, second car, garaged, club member.

Quotes from Firebond (0879 111 9464 or www.firebond.co.uk)

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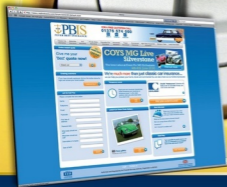
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TVR GRIFFITH



Parts prices

Common parts prices, supplied by TVR Car Parts	
Rear brake Caliper,	£186.82
Front Brake Caliper,	£182.30
Brake master cylinder and reservoir,	£116.21
Clutch cover,	£133.49
Clutch plate (500 and 450),	£123.83
Clutch plate (400),	£88.00
Clutch slave cylinder,	£52.78
Aluminium Radiator,	£395.00
Standard Radiator,	£212.40
Silicone Hose Kit (500),	£115.00
Bottom Hose,	£8.57
Full Service Kit,	£79.95
HT Lead Set,	£72.00
Nitron Shock absorber upgrade set,	£945.00
Lower front wishbone,	£90.36
Rose jointed drop link,	£69.99

Engines

THE Rover-derived V8 engines are a known quantity across the motor trade, and in general most service items are a doddle to get hold of. Regular services will be in the order of £200 for an interim check up, and £500 for the annual 12,000 miler – when you put that into context of the performance and exclusivity of these cars, that's ridiculously close to a bargain.

Camshaft wear is not uncommon, and usually occurs around the 70,000 mile mark – sometimes earlier on more lightly used engines. So pay attention for tapping or uneven running at idle. Don't be put off by low oil pressure readings – this is another Rover V8 foible, and not one to be worried about – as long as it's not excessively low.

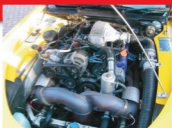
TVR gauges, tend to give a feel of 'what's sort of going on rather than what is actually happening and, it's worth remembering that they aren't quite up to today's standards

Heat in the engine bay can lead to problems such as short-lived starter motors and clutch slave and master cylinders – as well as other electrical niggles. Don't confuse a warm engine bay with a propensity to overheat – it can happen, but this is more likely to be caused by a lack of use and corroding fan switches than anything else (the fan switch known as the Otter switch is a standard Land Rover part and is an easy fix – many owners opt for a fan override switch which is simple to fit and takes the worry out of this failing), so check the system warms through – and doesn't get too hot – on your test drive. In short, make sure the cooling system is in good shape!

As expected with an engine that has been in production for so long, the major issues have long since been sorted, and prove pretty much bullet-proof in daily running. But that is the key with these all-aluminium engines – if they are used lightly, they tend to wear more quickly, as many owners make the mistake of going for mileage- rather than time-related oil changes. And this engine positively needs regular oil changes.

The only other area of potential trouble under the bonnet is the front end of the exhaust system. Manifolds have been known to crack, and their gaskets can fail, leading to horrendous sounding leaks. This principally occurs with 10-year plus cars and can occur on low mileage, low usage cars more

Post-1992 cars should be fitted with catalytic converters, and as would be expected at this age, are known to cause emissions problems at the MoT test. The main cause of concern is not the cat itself, which is mounted in a well-protected area, but the oxygen sensor, which fails, leading the engine management system to play hide and seek with its settings. In other words, MoT failure on emissions need not be catastrophic – although it's no surprise to learn that the earlier pre-cat cars are in such demand...



Specification

Car	TVR Griffith 4.0	TVR Griffith 4.3	TVR Griffith 500
Year	1992-1994	1992-1994	1994-2002
Engine size	3948cc, V8, ohv 16V	4380cc, V8, ohv 16V	4997cc, V8, ohv 16V
BHP/RPM	240@5300	280@5500	340@5500 (later 320@5500)
Top speed	160mph	161mph	167mph
0-60mph	4.8secs	4.4secs	4.1secs
Gearbox	All models: five-speed manual, rear-wheel drive		
Consumption	All models: 18-28mpg		

Suspension All models: Front: independent, by coil springs, wishbones, anti-roll bar and dampers. **Rear:** independent, by coil springs, wishbones and dampers.

'So close to greatness it hurts' was the description one weekly magazine applied to the TVR Griffith when it hit the roads back in 1992. Today, **KEITH ADAMS** reckons it's all the way there now, and it's a great time to buy, as long as you know what you're looking for...

Wheels

If you're looking at an early car with kerbed or damaged alloys, make allowances, because the multi-spoked items are incredibly difficult to recondition, and unobtainable new. Later cars with five- and seven-spoke designs are easier to get hold of or refurbish.

Earlier five spoke alloys for the pre-cat models require the more expensive diamond cut finish in order to bring them back to factory condition which can be around £100-plus a wheel, later 5000 'Estorial' wheels are easier to refurbish but are now becoming rarer by the year, especially the 15-inch front alloys that were fitted on Griffiths from 1994 to 2001.

You can smoke through a set of rear tyres very quickly indeed, so make sure there's some meat on the car you're checking out. Bear in mind that tyre specifications changed constantly throughout the life of the Griffith, so make sure the correct size has been fitted – if in doubt, check the TVR Car Club.

Interior

ALTHOUGH there's much that's bespoke in the Griffith's interior – and it's all the better for it – there are parts that your average Vauxhall Cavalier owner will recognise. This means that any failures on the stalks and steering column will be easy to sort. Anything else, though, and you're looking at TVR's own parts, and that adds to potential costs if there are any problems – so make sure the interior is in good order.

If you have low expectations about interior build quality thanks to all the tales of woe, the truth is that the Griffith is actually pretty tightly screwed together and looks pretty special. Damaged dashboards will be expensive to repair – as the earlier ones are now almost unobtainable from TVR as a replacement part.

Although the TVR factory may struggle to get replacement dashboard parts these days as none of the new TVR have wooden dashboards there are many specialists that provide excellent replacements, and most are of a better quality than the originals and they are around £300-400 – London carriage company for example.

However, these kinds of problems are rare – and the main area of concern is water damage as a result of leaks. The damage caused by leaking screens can be very difficult to sort out, and if the car you're looking at has lifting veneer, rusting screw heads, or simply smells musty, you're going to be looking at chasing out all the damage in the coming months. The main problem is that water collects under the seats – and in extreme cases, can rot the seat base.

So don't be scared to have a good poke and prod around the interior...

Transmission

THE Griffith comes with a choice of two gearboxes depending on age. If it's a pre-1994 car, it'll have an LT77 transmission, which has been widely used throughout the Rover range – and unusually for a mainstream production gearbox, it was not costed down in development, and as a result, is known to handle masses of power and torque with ease. Don't worry too much about the heavy feel and notchiness when cold – these are perfectly normal, and merely underlined the well-engineered feel of the system. The LT77 gearbox has a reputation for being weak in some quarters, but as long as it has been treated to regular fluid changes, it won't be broken by a standard Griffith.

Later cars use the Borg Warner T5 'box – and again, it's more than up to the task of handling the Griffith's prodigious power and torque.

Do check the differential bearings by listening for whining from the rear end at constant speed – not checking the oil levels there can lead to premature wear.

Bodywork

OBVIOUSLY being glassfibre, the TVR isn't going to suffer from rust in the conventional sense – but in a way that should mean that any potential owner should take even more care when looking at his or her next car.

The dangers lurk under the skin, and failing to check out the chassis now could leave you in hot water in years to come. Although it was powder-coated in the factory, this finish deteriorates and can suffer from surface rust. All reputable service agents should rust treat the chassis when the car is in for attention, so pay close attention to the service history.

It is advisable that the chassis is regularly waxoiled (to help the chassis fend off corrosion but also show any prospective owners that you are not trying to hide any problem areas use the clear type and be wary of black coated chassis).

The bodywork itself really only suffers from paint damage due to mileage. The noselcone will need regular resprays during the life of the car – not only will parking scrapes take their toll on this bumper less car, but stone chips will also play havoc. Luckily the Griffith design helps the paint spraying process due to its shape. A good body shop can match the front horseshoe section without the need to paint the bonnet and keep the car looking in tip top condition.

Firmer knocks can lead to crazing, and at the front, the eventual cure will be to replace the noselcone – and as TVR doesn't do the earlier spec version, that'll be a Griffith 500 item. If nothing else that means spotting a replaced front end will be easy – and not necessary the harbinger of previous disasters. Just make sure it has been fitted well.

The hood is a neat two-piece item that is most effective in use – the foldaway hood needs to be kept waterproofed, and the lift out targa panel can get scuffed and scraped if not stowed properly. The main point to watch is that it is leak free – so make sure the targa's rubbers are in good order.

The mohair roof is generally fairly waterproof although it needs annual treatment of waterproofing and the rear screen stitching can disintegrate with age. The centre roof section does have a tendency to mark against the fuel tank when it is inserted in the boot for storage. A new complete hood and rear screen is available for around £600-700 (including fitting).

Light units need watching for water ingress, and the door openers can fail – neither of which should pose problems for those looking to repair or replace. Back lights damaged? Take a trip to your local scrapie and find a Cavalier Mk3 hatch – they're the same...

Replacement of the chassis is usually the result of an accident, and not necessarily a sign of doom and gloom, if the job has been done properly. The entire chassis assembly costs a reasonable £2000, and that means any damage-repaired Griffith should be straight and true. If you're looking at a car that isn't, then serious questions need to be asked.

Brakes

THERE is nothing too scary here, as disc and calipers are common to a variety of cars in the Ford range, and therefore are very easy to come across in the service bay. As with all performance cars, you won't want to leave your Griffith standing too long, as rust can soon take a hold of the discs, accelerating the need for replacement.

Now there's a good excuse for not leaving your TVR in the garage...



Contacts

Clubs

■ TVR Car Club, Unit 5, Nova House, Audley Avenue Enterprise Park Newport, Shropshire TF10 7DW, United Kingdom. Tel: 01952 822126 or www.tvr-car-club.co.uk

Specialists:

- James Agger Autosport, 01509 881 516, 07970 530 890, www.jamesagger.com
- TVR Power, 339 Bedworth Road, Longford, Coventry, CV6 6BN, 024 7636 6177, www.tvrpower.co.uk
- Austec Racing, Unit 5, Forgewood Industrial Estate, Gatwick Road, Crawley, RH10 9PG, 01293 531080, www.austek.co.uk

- David Batty, The Garage Guildford, Surrey 01483 811995
- Tower View Racing, Blackpool House, Waterloo Road, London, NW2 7TS, 0208 452 6922, www.t-v-r-services.co.uk
- Offord Motor Company, Offord Davey, Cambridgeshire, 01480 811484, www.offords.com
- David Geraldts, The Inkberrow, Worcester, WR7 4JF, 01386 793237, www.davidgeraldtvr.com
- Sportmotive, 01782 333008 or 07976 0006
- Bell Hill Garage, 01373 834 25, www.bellhillgarage.co.uk
- T.E.T: 01253 892342
- TVR Car Parts, Cullompton, Devon, EX15 2BB, 01884 266755, www.tvrcarparts.com

Suspension

BEING a high performance car, it is imperative that suspension geometry settings and tyre pressures are absolutely spot on. Because there's so much power to play with, any inaccuracies can lead to seriously wayward handling. Not as much as if there's a structural failure, though. Don't think that just because the Griffith is a relatively modern car that you can skimp on checking out underneath – because it is vital to check out suspension wishbones. These are known to rust right through, and eventually collapse, and although they are relatively inexpensive to replace, it might get un-noticed on a car that's gone a long time between services. The Differential bushes at the rear are a quite common wear item and this can usually be picked up by a clunk behind the drivers/passenger seat on hard acceleration – these are

Market Trends

GIVEN the cult following the TVR Griffith enjoyed during its production run – and since – it's no surprise that values remain high for the best cars. Although there doesn't appear to be a major premium for low mileage, condition and history is exceptionally important when it comes to values.

The bottom line is that the best cars remain north of £20,000 and probably will do so for the foreseeable future, whereas abused examples continue to fall to the right side of £10,000 – assuming you're ready to take a gamble. Many people have been saying that the Griffith won't get any cheaper than it is now, and an increase in values of the best examples over the past three or four years certainly bears out this hypothesis.

Although as time goes on it is inevitable that the older cars have more non-standard parts and options, original unmolested, factory specification examples seem always to make the top money – originality in the used Griffith market is paramount for good used values.

Also note that pre-cat cars command a healthy premium.

Verdict

If you went by everything you read in the mainstream press, you'd be mad to consider a TVR when there are plenty of good Porsches out there. After all, they'll have you believe a TVR will fall apart rapidly, and will constantly break down.

Actually, the truth is some way away from this, and although a TVR Griffith does not enjoy German levels of build quality, you'll find a huge selection of tried and tested components.

It's clothed in an achingly beautiful package, proving once and for all that the sum of the parts is easily exceeded by the whole.

The truth is, for every unhappy Griffith owner out there, you'll find hundreds who have never regretted their purchase, and would gladly go back and buy another. As classics go, it's perfect, too – because although you'd struggle with the practicalities of day to day running (there's the roomier Chimera for that), you can enjoy it as a weekend toy.

Having said that, as long as you're not bringing the family along, and aren't stuck in town too much, why not use it daily? They can take the mileage with careful attention paid to servicing.

As with any car that can crack five seconds for the 0-60 run, you need to make sure the car you're considering hasn't been smacked up, and that it has a good, solid history with a reputable specialist or main agent, and you'll be fine. Just make sure you don't mind being the centre of attraction, and you're not looking for a relaxing drive – and if you don't mind all that, you'll be in great danger of falling in love...

Insurance quote

For a £14,000 1994 Griffith 4.3 with no modifications, based in Peterborough

- Fully comp, £100 excess: £680 for a 29-year-old, two years' NCB, clean licence, 10,000 miles, only car, kept on driveway, club member, (with cat 2 immobiliser) £745 without.
 - Fully comp, £100 excess: £426 for a 50-year-old, full NCB, clean licence, 3000 miles, second car, garaged, club member, (with cat 2 immobiliser) £444.15 without
- Quotes from Firebond (0870 111 0464 or www.firebond.co.uk)

HISTORY

1986: TVR launches its 'S' model, which is effectively an updated version of its 'M' series of cars dating back to the early Seventies. The Tasmir 'Wedge' retained V8 power in 350, 390, 400, 420 and 450 forms, leaving the curvaceous 'new' roadster as the entry-level Ford V6 powered option.

1989: Brisk sales of the TVR S encourage management to pursue a new design direction. TVR boss Peter Wheeler and stylist John Ravenscroft pen a swoopy design concept, which is based around the Rover V8 engine and the chassis of the S model. The intention is for the concept to become the cornerstone of the TVR range, ultimately replacing the increasingly outrageous 'Wedge' cars.

1990: The wraps come off the Griffith for the first time at the British Motor Show, held at the NEC in Birmingham. Although it is a tradition for TVR to show concept cars at the bi-annual show, with vague promises of production, there's a real buzz about this one. The massively favourable reaction to the car from showgoers confirms that TVR has a potential hit on its hands, and commits the car to future production.

1992: The first Griffiths go on sale, and unlike the Motor Show cars, these now sit on the strengthened chassis of the TVR Tuscan racer. Two variations of the tuned TVR Power engine based on the long-lived Rover V8 – in 4- and 4.3-litre form are available. The press loves the car, and TVR struggles to meet the demand from clamouring buyers. The Chimera is launched at the same time, using the same engines and much hardware from the Griffith – and for many buyers, proves to be a more practical alternative.

1994: The Griffith 500 is launched – a lot more power and performance for a little more money, and it proves a strong seller from the beginning.

1999: Power steering is added as standard although this has been a manufacturer special option for some time.

2002: Production ends, although a few cars remained unsold into 2003

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VW CAMPER/BUS



Engines

Air-cooled VWs have a reputation for reliability but none of them will last forever without regular maintenance. So, check the condition of the oil as it is the lifeblood of the flat-four, keeping it cool and running sweetly. Oil leaks are common, but not good, especially major ones coming from the gearbox end. This usually means the flywheel end seal is up the swanny and that's an engine out job to fix it – not the end of the world, but a pain in the neck all the same. Most campers are likely to have a 1600cc engine in the back now, but early splits can have something as meagre as a 1200cc unit pushing them uphill and down dale. Later bays have 2-litre suitcase style engines, which are more powerful but thirstier as a result. There's an entire industry devoted to making these things faster and if you have the money you don't have to spend life in the slow lane, even though most do. A good 1600cc is fine around town, but fully-laden, a camper will suffer on inclines and steep hills. So many are likely to have had their nuts revved off.

Watch for blue smoke and check the oil pressure. It's also a good idea to give the lower pulley a yank. If you detect any noticeable movement or hear a thunk it means there's end-float (play in the rear main bearing) and that means a rebuild. Look after them and well over 100,000 trouble free miles is a reasonable assumption.

Specification

Vehicle	21/23-Window Samba	11-Window Microbus	Late bay window
Year	1955	1967	1972
Engine	1192cc 4-cyl HO	1493cc 4-cyl HO	1700cc 4-cyl HO
BHP/RPM	30@3400	53@4200	74@5400
Top Speed	55mph	65mph	70mph
Gearbox	4-speed manual	4-speed manual	4-speed manual
Consumption	All models: Between 26-36mpg		
Suspension	Front: Independent by trailing arms, torsion bars, anti-roll bar, hydraulic shock absorbers. Rear: Independent by semi-trailing arms, torsion bars, hydraulic shock absorbers. Split screen models also feature reduction boxes on rear		



Parts prices

Split screen prices - Cool Air

Bay prices - Just Kampers

(Bay) Front nose panel	£79.00
(Bay) Complete front panel	£295.00
(Bay) Battery tray	£17.95
(Bay) Rear corner repair panel	£23.95
(Bay) Cab door skin	£29.50
(Bay) Cab door kit	
(Replacement door and seals)	£199.00
(Bay) Front wheelarch	£79.50
(Bay) Rear crossmember	£10.95
(Bay) Late model Taillight unit	£24.95
(Split) Complete front wheelarch	£49.95
(Split) Lower doorskin	£32.50
(Split) Outer front panel repair (7in high)	£47.50
(Split) Rear corner	£17.50
(Split) Rear wheelarch	£36.50
(Split) Jacking point	£23.50
(Split) Front chassis section	£37.50
(Split) Barndoor taillight	£149.95
(Split) 1960-72 taillight	£39.95

Volkswagen's box on wheels has been used for every task under the sun, but by far the most loved variant is the camper van. The archetypal hippy wagon is the four-wheeled embodiment of flower power so **JAMES PEENE** tunes in, drops out again, and sees what all the fuss is about. Expert advice comes courtesy of Jeff Culkin from Just Kampers

Brakes

All split screen vans left the factory with drum brakes whilst the later generation of bay windows came with discs on the front. Drums are usually okay if they're properly adjusted but if you plan on fitting a larger engine, or just want to know that you can stop in a hurry without locking up if you have to, then aftermarket discs are the way to go. If you're not bothered about originality you can fit a late bay beam to an earlier bus, but then you'll need adaptors to run your original wheels, as the stud patterns are different. Or, you can buy front and rear disc conversion kits in a variety of patterns, be it late or early VW, Porsche or other, that allows you to fit all manner of aftermarket wheels too.

Interior

There are many camper conversions out there, so it really is a matter of horses for courses. Danbury, Dormobile, Devon, Canterbury Pitt, Westfalia, all are different, so do your homework first so you know what kind you're looking at. Home-brewed interiors are all well and good for those on a budget, but do you really want someone else's old kitchen units nailed in your bus when a properly thought-out conversion is so readily available? By far the best original conversions are those found in Westfalias. They were the only ones approved by VW itself and have the best equipment, fit and finish, with sinks, cookers, folding beds and lovely wooden headliners. You'll need to be on the look out for wear and tear and missing fixings though.

Keep your eyes peeled for signs of water damage as pop-tops can leak (although all parts to fix them are available) and split screen vans with front Safari windscreens are the quickest way to rot your carpets and destroy the metal work underneath.

You can get pretty much anything you need these days although Westy parts can be a bit on the pricey side. Door cards, cushion fabrics, curtains and whatever else you need are available to return your camper to stock show room condition or you can go mad and create your own if that's what floats your boat.



Suspension

Standard ride height campers are great to drive. They soak up bumps and imperfections surprisingly well, but they do tend to wander on motorways and suffer from crosswinds. Many buses are lowered, more for looks than handling, but done well it will improve the ride no end. Taken to extremes however and it can be dangerous, wearing out components and creating a bumpy, jarring experience.

The preferred method of lowering a Type 2 is to weld adjusters into the front beam, so they are easy to raise back up again, although it's best to check the quality of any work that's been done. All of the components are fairly robust and most are easy to find and cheap to replace. Rear ends are simply turned on their spring plates to get them nearer to the ground.

Bodywork

It doesn't really matter whether you're looking at a split screen or bay window camper, they both rust just as horrendously and this advice will apply to either mode! The problem isn't down to VW build-quality - it's great - but the nature of these vehicles. In the winter they're generally too big to fit into most people's garages so are subjected to the worst the British climate can throw at them and in the summer they're parked up on the damp grass of campsites or taken to beach resorts where the salty air and sea spray gives them a good battering. Then you have to think about the human effect - the amount of moisture a couple of sleeping adults creates every night, not to mention the condensation caused by cooking in them - it all takes its toll. And that's before you've taken into account the age of the poor old things.

If you can find yourself a one owner from new bus then buy it immediately! VW campers might be the height of fashion at the moment, but it wasn't always the case. About 10 years ago you could pick them up for peanuts, which meant people didn't really care a great deal about them. Sadly, this means a lot of them have been through the hands of bodgers. A coat of paint can hide all manner of sins and take it from the voice of experience here, it's frustratingly common to find new panels welded over old and whole sections seemingly carved out of filler.

If you see a camper without the seams in the side of the arches you can guarantee Mr Bondo has paid it a visit, so start asking questions.

Take a look at the front panel on any camper, especially in the lower portion behind the bumper. They always go here and bubbling is the first indication something is amiss. They also rust under the windscreen rubbers so give any suspect areas a firm prod and check for crustiness.

If the vehicle you're looking at has a spare wheel mounted on the nose, look at the metalwork around that. It's often the first point of impact in a front-ender and you don't want to remove it at a later date and find the panel is dented.

Move along the side and look at how rippily the long panel is. This will provide clues to how well any paintwork has been done. Getting the huge panel straight is a mammoth job and will show up any sloppy prep work in an instant.

Then, look along the other side, the one with the door(s). Bay windows have a sliding door (or one on both side as an optional extra) whilst split screen buses have two opening doors (or very rarely a sliding door). Either will rust along the bottoms and if you have to track down a replacement it will mean looking for a secondhand item.

If the outer sills look a bit rosey, then it means there's worse to come underneath, but before diving underneath take a look at the rear end. Bubbling rear corners mean things like possibly grotty battery trays and if you have to replace the corner, it usually means the tray has to come out too and vice versa.

Tailgates, engine lids and front doors will rust along the bottoms and unless you're looking at a bay window, replacements will have to come from swap meets again.

If that's not enough to put you off take a peek at the underside. Some campers will have belly pans. Fresh ones can be hiding something nasty, so finding them can be a good or bad sign. Either way, inner sills, chassis rails, out-riggers, jacking-points, crossmembers and the floors above them can and do rot like you couldn't believe.

That said, everything is still available and if you're a dab hand with the welder you can take your time with a rolling restoration and save yourself a packet.

Anything is saveable but you have to ask if it's worth the effort and cost involved especially if you're looking at a late bay window... Obviously all but the very worst split screen campers are worth preservation, especially if it's very old, like a barndoor or has lots of windows, like a Samba.

Take your time and find yourself a good one. It will cost far less in the long run. Or, if you don't want any of the hassle of a resto, then you can still buy a brand new bay from Danbury Motor Caravans, see the specialist section for contact details.

HISTORY

How greedy can some people be? After all, some motoring manufacturers turn out car after car and never quite capture the public's imagination, and yet Volkswagen has produced two of the most iconic machines in automotive history – the Beetle and its big sister, the Type 2. In basic panel van and Kombi guise the Type 2 – or Transporter to use its official moniker – became a global phenomenon in its own right, but when given a camper conversion it opened a whole new can of worms, one that provided an affordable home from home that could be, and was, used by people from all walks of life to go anywhere and everywhere, from Torquay to Timbuktu.

1934 A certain moustachioed dictator lays the foundations of Volkswagen and gets Ferdinand Porsche to build him the People's Car – the Beetle.

1945 With both Him and World War Two out of the way a British army major by the name of Ivan Hirst fires up the production lines again and the Beetle (the car that VW will build its entire empire on) is reborn. It goes from strength to strength and business booms.

1947 A Dutch vehicle importer, Ben Pon, visits the Wolfsburg factory and sees some funny-looking home-brewed delivery platforms running around the place. Intrigued, he asks about the possibility of acquiring a few of these Plattenwagens to sell to the public. VW refuses, so Pon tries again and this time sketches a rough 'box on wheels' design. This doodle is given the green light and Pon's dream takes a step towards reality.

1949 The prototype Transporter breaks cover. Using the same rugged mechanicals as the Beetle, but with a simple boxy body strengthened by longitudinal box-sections and cross-members the split screen van is born.

1950 The first generation VW bus begins trundling off the Wolfsburg production line with a 25bhp air-cooled engine.

1955 The split screen's front end receives a peak over the windscreen with air vents to improve ventilation, whilst at the rear the engine cover shrinks and an opening tailgate is added. This signals the end of the road for the so-called early 'barndoor' models.

1956 Production switches to the new purpose-built Type 2 factory in Hanover.

1967 German production of the first generation VW bus comes to an end as the Hanover plant begins turning out the new bay window model. The mournful front end is replaced with a squarer profile and a panoramic windscreen. Sliding doors replace the spitty's twin opening cargo doors and the troublesome reduction boxes/swing Axles make way for independent rear suspension.

1971/2 Front indicators move up the front panel to a less damage-prone location, the split screen-style rear lights are replaced with larger and squarer items, bumpers become more box-like too and the rear air vents are tweaked so they are no longer as moon shaped – all a great shame...

1979 German production of the bay window comes to an end as the wedge-like Type 25 comes into being. The bay is not dead though, as it soldiers on to this day in Brazil, albeit fitted with a water-cooled 1.4-litre Polo/Fox engine.

Verdict

Take it from us, there really is nothing like driving an old VW bus, be it a spitty or bay window model. Every journey feels like a mini adventure, even just popping to the shops for a pint of milk! 'Drive' probably isn't the right word as you don't so much pilot it as sit, hunched over the massive, thin-rimmed steering-wheel, and direct it through curves and gentle bends with your elbows. Unless you're really hardcore you wouldn't want to drive a split screen bus on a regular basis. As charming as they are, they have poor ventilation, terrible wipers in the wet, almost no creature comforts and the ride and level of refinement will quickly wear you down. That said, plenty of people do, but even they have to admit a bay is better. From 1972 they got disc brakes on the front, had bigger, more usable engines as standard and are generally more comfortable and easier to live with. But, whatever model entices you in to the world of old VW buses it will gain you instant access into a strangely cultish world of knowing nods and waves from strangers in other Campers – and once you've converted, there really is no going back – it's a bus thing...

A Volkswagen camper is the perfect vintage MPV. It has soul, charisma and usability by the barrelful. You just need to be a bit of a masochist or have deep pockets/enjoy maintaining them. A good bus will be the perfect partner for weekends away, the school run, DIY, you name it. Kids love them, they're easy to fix and parts for bay windows are surprisingly affordable when you don't have to buy too many of them in one go. Driving one marks you out as someone who likes to be a bit different and they are still the symbol of counter-culture long after the hippies cut off their hair and got regular 'square' jobs. Find a good one and you'll love

Contacts

Clubs

You'll find local clubs all over the place for the camper...or rather for air-cooled Volkswagens, as, if it's Beetle-related, it's generally warmly welcomed by any Beetle club. Three of the main organisations though are:

- Volkswagen Owners Club, PO Box 7, Walsall, West Midlands, W57 2SB or www.vwocgb.com
- Split-screen Van Club. Tel: 01926 814860 or www.ssvoc.org.uk
- Volkswagen Type 2 Owners Club. Tel: 01527 872194 or www.vwt2oc.org

Specialists

- Just Kampers, Hampshire. Tel: 0845 120 4585 or www.justkampers.com
- Cool Air, Kent. Tel: 01322 335050 or www.coolairvw.co.uk
- Alan Schofield, Derbyshire, Tel: 01457 854267 or www.ahschofield.co.uk
- VW Heritage, West Sussex. Tel: 0845 873 8328 or www.vwheritage.com
- Karmann Konnection, Essex. Tel: 01702 601155 or www.karmannkonnection.com
- Danbury Motor Caravans Ltd, Bristol. Tel: 0870 1202356 or www.danburymotorcaravans.com

Check out

- www.thesamba.com (Invaluable US resource)
- VolksWorld Camper&Bus magazine, www.volksworld.com (Fabulous UK resource/vehicles for sale)
- www.volkszone.co.uk/VZI (UK website/vehicles for sale)

Insurance quote

For a 1971 Volkswagen bay window camper, valued at £5000, based in Peterborough

- Fully comp, £165, for a 29-year-old, two years' NCB, 10,000 miles, only car, kept on driveway, club member
- Fully comp, £81.90, for a 50-year-old, full NCB, 3000 miles, second car, garaged, club member

it – guaranteed – as long as you don't need to be anywhere in a hurry! The social scene is massive and if you just want to be left alone what better vehicle is there to go your own sweet way in? Home truly is where you park it.

But don't just take our word for it. Our expert, Jeff Culkin from Just Kampers, knows VW Type 2s like the back of his own hand. Here's what he has to say about them...

"Any vehicle that can trace its ancestry back nearly 60 years and has a strong and devoted following today has to be something special. It achieved iconic status and redefined commercial vehicles when it was unveiled in 1949 and spawned many derivatives, pre-dating people carriers and MPVs by decades. Camping conversions appeared in the early Fifties and these, and their descendants, are the ones most people readily associate with the breed. If their parents didn't own one, the chances are they knew someone who did and enjoyed weekends away in the country or at the beach.

"2007 is the 40th anniversary of the Summer of Love and if ever a vehicle was associated with an era, it is the VW camper van and 1967. Coincidentally, VW launched the Bay Window Type 2 in late-1967 and after much deliberation the consensus at Just Kampers is that the early bay (1967-1972) is the one to have because they are practical, stylish, easy to maintain and still affordable, although prices have risen rapidly. Yes, the spitty may be more charismatic and the late bay more readily available but the early bay is the one you can buy with your heart as well as your head."

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The Austin Seven was a revolutionary car for its time, offering a compact and affordable alternative to the larger cars of the day. Its success was due to its simple design and ease of maintenance, making it a popular choice for both city and country driving.

1952: BENTLEY R-TYPE CONTINENTAL



If you're new to the Bentley, there's nothing like a Bentley. But, perhaps the most of the most legendary roadster of the 1950s is the Bentley R-Type Continental.

The Bentley R-Type Continental is a car that has captured the hearts of classic car enthusiasts for decades. Its elegant design and exceptional performance make it a true masterpiece of automotive engineering.

1966: FORD GT40



It was the car that built the legend - and it did so. But had it not been for the Ford GT40, the 1966 Le Mans 24 Hours race would have been a different story.

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