COLLECTOR'S EDITION

PURE PERFORMANCE



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WELCOME

here are few motoring enthusiasts out there that are more passionate about their cars than MINI enthusiasts. And when it comes to modifying and personalising their cars the MINI community goes above and beyond, building incredible examples, and that's what we're celebrating here in this special magazine.

Naturally, we start with the R53, and we've picked three dazzling builds that showcase everything great about this marvellous MINI machine. Each car is decidedly different, and they're as individual as the owners that built them. From a full-on performance build to a truly show-stopping ICE machine, these R53s are simply sensational.

For the turbocharged R56 family, we bring you one of the wildest show builds the UK scene has ever seen, and this Lambodoor'd machine is simply mind-blowing and a true one-off. We've also got a stunning Cooper S that effortlessly blends looks with performance, and it's an awesome piece of kit, and then we mix things up with an R58 Coupé JCW, and this full-on hardcore machine has been built for maximum track attack, and it takes no prisoners. Finally, we bring you a trio of F56s that will blow you away. There's a 340hp performance monster that's been built with speed in mind, and it delivers in a big way. We've also got a gorgeous JCW that goes all-out on every level, and it's the perfect MINI package, plus a Challenge 210 Edition that really stands out from the crowd thanks to its Group B-inspired Martini livery wrap, and it's loaded with countless personal touches and amazing attention to detail.

We also bring you the in-depth story of the development of the hardcore JCW GP, packed with fascinating insights and detailed specs on each generation. On top of all that, we have extensive buying and tuning guides for the R53, R56 and F56, that will ensure you know exactly what to look for when shopping for any of these thrilling hot hatches.

It's impossible not to love MINIs, and whichever generation is your favourite, and whether you prefer your builds subtle, all about style, or committed to absolute performance, Ultimate Performance MINIs has something for everyone

ELIZABETH DE LATOUR EDITOR











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COLLECTOR'S EDITION

A PURE PERFORMANCE



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y dad used to do grass track racing in classic Minis back in the day," says 24-year-old MINI maniac Pete Marsland (@marzy_r53). "I remember watching him tuning them up and rebuilding them between race meetings, and I'd help out by handing him spanners and other tools." It's memories like this that can have a huge effect on a young boy, indelibly printing these images of man and machine into his evolving cerebral cortex and influencing his motoring future.

"I guess being around them all the time, it was inevitable that I'd become obsessed with Minis too," he laughs. "But for me, it's always been less about the racing and more about the style. In fact, I used to have a poster on my bedroom wall of an R53 MINI Cooper S in Hyper blue, and that was always my dream car, it just looked so cool!"

Of course, he's still got a soft spot for the classics, but unfortunately, the rising prices of these increasingly rare machines have put the chance for Pete to own one squarely outside his budget. So, back when he was 18 and passed his driving test, it was a MINI that he had set in his crosshairs. "Being my first car, I couldn't really afford to jump straight into a supercharged or turbocharged Cooper S, so I started looking at

aker.

naturally aspirated R50 Coopers," explains Pete. "I'd actually started my search well before I'd passed my test, as I knew I wanted one, but it took around two weeks after I got my licence until I found one that fitted the bill."

The car in question was a high-mileage but good-condition Astro black R50 that was up for £1200 in a private sale. And after a thorough inspection and test drive, trying with all his might not to let his heart overrule his head, Pete was smitten, and the MINI was soon winging its way to its new home on the Marsland driveway. "I had the R50 for a while and just loved it!" Pete beams. "I ended up putting a spoiler on the

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POSIER CHIER

Most young boys grow up with posters of supercars splashed across their bedroom walls. Not Pete Marsland, he had an R53 MINI, and he's set about making his dream ride become a reality

Words and photos DAN SHERWOOD

"I USED TO HAVE A POSTER ON MY BEDROOM WALL OF AN R53 MINI COOPER S IN HYPER BLUE, AND THAT WAS ALWAYS MY DREAM CAR, IT JUST LOOKED SO COOL!"



Under the bonnet, there's a GTT strut brace, while the engine upgrades include a GRS Motorsport

rear and just tidying it up a bit as I wasn't in a position with my insurance to really go to town with any engine mods – a year's premium on the standard car set me back nearly three times the value of the car!" Now that's what you call dedication to the cause!

An unfortunate accident put a dent in Pete's plans for the R50, and after having the car repaired, it just wasn't quite the same, so combined with a few more years of no claims under his belt, he reasoned that now was the time to make the jump to the supercharged model of his dreams. "I'd wanted a supercharged R53 Cooper S ever since I heard one that was owned by my mate," recalls Pete. "That whine from the 'charger and burble from the exhaust just sounded so good! A lot of people prefer the turbocharged cars due to the higher performance, but for me, it's all about that supercharger whine!"

To help him in his quest to find a suitable steed Pete enlisted the help of Kris Keen, who is one of the owners of the popular R53 Owners Club. "Kris was a massive help and assisted me in finding a good car for the right price and has really inspired me in the build as a whole," Pete says. After some searching, a candidate was found in the shape of a standard Hyper blue R53 that was for sale in Luton.

"It was the exact same colour and spec as the car that was on the poster in my room," grins Pete. "But I nearly didn't buy it. The area of Luton where it was wasn't the best, and I had my reservations about it, but then a nice-looking house stood out from the rest, and the MINI was there gleaming on the drive. It was a sign!" So with his new blue motor, complete with trademark whine and plenty of shove, Pete was in MINI heaven. But this automotive Nirvana was only the start of what was to come...

"I waited a full month before I started

R53 MINI COOPER S

ENGINE 1.6-litre supercharged Tritec, Milltek non-resonated cat-back stainless steel exhaust system, GRS Motorsport top-mount intercooler, Ramair induction kit, blue and red Pro Hoses silicone hoses, NGK colder grade spark plugs, Mr Retro 8mm blue HT leads

POWER Approx. 210hp

TRANSMISSION Standard six-speed manual gearbox, clutch and differential

SUSPENSION D2 Platinum air suspension with four presets for height adjustment and individual wheel options, wireless remote, GTT front strut brace, R52 Cabriolet strut-braces

BRAKES Standard discs and pads all-round

WHEELS AND TYRES 7.5x17" ET40 Rota Recce wheels painted silver with 205/40 Kumho Ecsta PS71 tyres

EXTERIOR Custom John Cooper Works smoothed front bumper, John Cooper Works aero grille and side skirts, tinted side indicators and LED rear lights, GP rear bumper trim, removable number plates

INTERIOR Carbon-fibre wrapped inserts on the steering wheel, John Cooper Works gear knob and handbrake, Alcantara gaiters, Cobra Imola Pro Series bucket seats, false floor for air suspension system, custom speed and rev counter dials, standard Harman Kardon speakers, JVC head-unit

modifying it," he chuckles. "The first mod I did was to fit a Milltek stainless steel non-resonated cat-back exhaust system to the car." Consisting of lighter, freer-flowing pipework, and no centre silencers to dull the audible assault from the 1.6-litre engine, the new 'zorst added a deeper and more meaty burble to the fun.

"The new exhaust was soon followed up with a set of 17" Rota Recce wheels," says —





R53 MINI COOPER S

Pete. "They had just been refurbished by their previous owner who was due to put them on his car, but then he crashed it and put them up for sale. Lucky for me, as I was able to snap them up while they were still mint and even had new tyres too!"

These fresh rims were then graced a closer encounter with the arches thanks to a set of AP coilovers which Pete also secured secondhand from a mate who was breaking his car. "The coilovers were only about six months old and were like new!" he says. "They made such a difference to the look of the car once it was slammed and the horrible wheel gap reduced, and they also make an already brilliant handling car even better in the bends – it's like a go-kart!"

A few interior accoutrements followed, with a genuine John Cooper Works gear knob and handbrake handle finished off with tactile Alcantara gaiters, while the rear seats were removed and a MINI GP rear-seat delete panel was installed. "I removed the rear seats to reduce weight for extra performance, but the noise from the exhaust became a bit overwhelming," remembers Pete. "The answer was the GP rear seat delete, as this foam panel is super-light but provides just enough muffling to tone down the exhaust to a reasonable level."

A pair of Cobra Imola Pro Series seats soon joined the stripped-out rear courtesy of Aaron Pidgeon from Holbeach-based MINI specialist Hyper Works Garage. Aaron has been instrumental in the build of Pete's project both in terms of modified inspiration and also parts supply and spannering when the needs arise. A task that came when Pete was keen to up the power of his prize possession.

"I'd already fitted a Ramair induction kit which had released the full whine from the supercharger and helped induce hilarious pops and bangs from the exhaust system, but I wanted more power, so I spoke to Aaron about my options." Aaron recommended and









"A FEW INTERIOR ACCOUTREMENTS FOLLOWED, WITH A GENUINE JOHN COOPER WORKS GEAR KNOB AND HANDBRAKE HANDLE FINISHED OFF WITH TACTILE ALCANTARA GAITERS, WHILE THE REAR SEATS WERE REMOVED AND A MINI GP REAR-SEAT DELETE PANEL WAS INSTALLED"







installed a smaller supercharger pulley, along with an uprated GRS Motorsport intercooler and a colder-grade of spark plug. This little lot released around 30-40hp, taking the Cooper's power output from the standard 170hp to around 210hp. "I could have the ECU mapped for even more gains, but it's safe to run this level of upgrades without a remap, so I'll wait until the next round of engine mods until I get it done," explains Pete. "That way, I'm only paying out once to get it mapped once rather than twice." Smart thinking!

Bodywork-wise, Pete has kept things fairly subtle, with a smoothed JCW front bumper and side skirts and the larger rear bumper trim from a GP model, as it looks more aggressive. These work perfectly with the smoked LCD rear lights, especially as they contrast so well with the dazzling Hyper blue paint. "The bodywork is looking pretty much how I want it now, with just a few minor paint defects that I'd like to rectify at some point in the near future, probably by way of a full respray," says Pete. "I wouldn't change the colour, though, as I love the way it looks, but for shows, I really want it to be perfect!"

And it's shows where Pete's plans are really taking this build, which is a route that was made even clearer when he traded in his coilover setup for D2 Platinum air-ride suspension. "The air-ride weighs more than the coilovers and ultimately doesn't feel as sorted in the twisties



when on the limit, but it's just so practical for everyday use and means I'm not smashing splitters or scraping the exhaust on every speed bump," he shrugs. "And when it looks this good when it's fully aired out, who cares if you lose a tiny bit of performance? I certainly don't!"

And that's what we love about modified cars. Just like each owner, each car is unique. It's been built to please the needs of one person, and one person alone. If it's not your cup of tea, that's fine. You don't own it, or drive it, so just appreciate it for what it is and how it makes its owner feel. If they're happy, then that's all there is to it! As MINI fans, we can all understand Pete's passion and maybe even his choice of bedroom décor, so if his show-stopping modified MINI is his own slice of automotive perfection, then surely that's something that we all can appreciate

THANKS Thanks to Aaron Pidgeon at Hyper Works Garage, Holbeach for sorting my seats, air suspension, intercooler and pulley. Thanks to Kris Keen for giving me the inspiration to buy an R53 Cooper S, and to the Peterborough Minis and Modded Mini communities for supporting the build

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t's fair to say that the modding bug is not something you can easily shake. If you're into it, you're likely to be into it forever, long past the point where your friends might have 'grown up' and moved on to more sensible machinery. If petrol flows through your veins and you love making every car your own, you'll never be able to escape the lure of putting together something truly individual that no one else has. Mike Frost (@mikef_r53) is one of those people – by his own admission, he has modded every car he's owned, but his R53 is when he really took things to the next level. "I had a Corsa that ended up with a wide-body kit that never got finished as I got the bug for a Fiat Punto, so I got a Turbo. I did a few bits to that, then carried on with other cars until I got the MINI. That's when I went crazy and threw money at it," he laughs, but it only takes one look at this R53 build for you to know that he's got no regrets about that.

"I've always liked MINIs due to a friend of mine always having a MINI from when we all passed our driving tests," Mike tells us. "This is my first MINI. I got it due to liking them and really fancied a supercharged one," he says. "I ended up with this particular car due to the colour. Hyper blue has always been my favourite. I found the car about 40 minutes from

JDH

where I live at a little dealership. The dealer had no idea about the car, as he took it in as a part-ex. When I saw it I knew it was the one," grins Mike. "The bodywork wasn't bad but not perfect. It already had a few modifications on it like a GP intercooler, a 17% smaller pulley and an exhaust. I took it for a test drive and loved it, so I bought it," and with that, his MINI adventure began. Except it wasn't meant to be that much of an adventure...

HYPER DRIVE

With its dazzling Hyper blue bodywork and awesome selection of performance upgrades, this R53 has been built to be driven and enjoyed, and it's a full-on machine

Words ELIZABETH DE LATOUR / Photos JASON DODD

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"WHEN I GOT THE CAR, ALL I HAD IN MIND WAS A FEW MORE MODIFICATIONS AND TIDYING IT UP. AS YOU CAN SEE, I DIDN'T DO THAT, I DID MORE!"

"When I got the car, all I had in mind was a few more modifications and tidying it up. As you can see, I didn't do that, I did more!" Mike laughs, and the engine, in particular, has had a lot of attention paid to it. "It's now highly modified to the point where the engine could be forged for a TVS 900 supercharger or I could do a 1320 MINI turbo kit," and that tells you how serious this build is. "Engine-wise, I've had most of these parts done due to recommendations from other MINI owners and from my research. So it has the 17% pulley, colder spark plugs, a 1320 MINI ported big-valve head, 550cc injectors, a Cat cam, Alta induction kit, air con delete, King Racing con rod bearings and ARP bolts for wherever I could get them. I've also added an AEM water-meth injection kit, the GP intercooler, a lightened single-mass flywheel with a Helix clutch, and a Quaife LSD. There's a Milltek resonated exhaust with a TomCat and Janspeed manifold, plus an ATI 0% crank pulley and a TPE enlarged charger pipe," and that is a mighty impressive array of under-bonnet mods. The result is a heady 268hp, and that's a lot to be getting on with in the lightweight R53 chassis, and it's turned this hatchback into a serious pocket rocket that delivers some serious driving thrills.





















AEM AFR g







R53 COOPER S

ENGINE 1.6-litre supercharged Tritec, 17% smaller supercharger pulley, cooler spark plugs, air con delete, ATI 0% crank pulley, Cat Cams 469 camshaft, 550cc injectors, TPE enlarged charge pipe, GP intercooler, AEM water-meth kit, Alta induction kit, 1320 ported big-valve head, ARP cam bolt and con rods, King Racing con rod bearings, Milltek exhaust, TomCat, Janspeed manifold, Canton header tank, Vibra-Technics engine mounts, 1320 tune, engine bay painted red and Hyper blue

POWER 268hp

TRANSMISSION Standard six-speed manual gearbox, lightened flywheel, Helix clutch, Quaife LSD

SUSPENSION ST XTA coilovers, Hardrace adjustable rear control arms, R56 rear arms

BRAKES K-Sport BBK with eight-piston calipers and 330mm discs (front), JDH Customs brake ducts, R56 JCW setup (rear)

WHEELS AND TYRES 17" Sparco Trofeo 4 wheels with 205/45 Yokohama AD08R tyres

EXTERIOR Full respray in standard Hyper blue with custom red roof and mirror covers, Leap Omicron bonnet scoop, Orciari vents, black Joey headlights, Aero front grille, GP front bumper, Aero JCW side skirts, GP rear wing and bumper, LED rear lights

INTERIOR Colour-coded dash trims and door cards, Cobra Imola bucket seats, Luke harnesses, OMP steering wheel, GP2 rear seat delete, JP half-cage, custom centre console, AEM AFR gauge, UltraGauge, GP3-style gauge dials, Coolerworx shifter











"THE RESULT IS A HEADY 268HP, AND THAT'S A LOT TO BE GETTING ON WITH IN THE LIGHTWEIGHT R53 CHASSIS, AND IT'S TURNED THIS HATCHBACK INTO A SERIOUS POCKET ROCKET"

With so much power now making its way to the Tarmac, the chassis wanted some attention, and Mike has definitely given it that. "I have a lower OMP strut brace, which was on the car when I got it. I swapped out the OMP upper strut brace for a GTT strut brace due to liking the look of it," he explains. "I have fitted ST XTA coilovers, Hardrace adjustable rear control arms, R56 rear arms, and a Whiteline rear ARB," all of which combine to offer even sharper handling than the R53 was already blessed with from the factory. This setup has done away with any slop and resulted in a wonderfully taught and tight chassis that makes this R53 an absolute riot to hurl down the road, and it lets Mike really make the most of all that power he's got on tap. The brakes haven't been forgotten about either because more power means you need more stopping power. Here you will find an absolutely

massive K-Sport BBK up front, boasting 330mm discs clamped by eight-pot calipers, cooled by JDH Customs brake ducts, while at the back sits an R56 JCW setup, and that combo ensures Mike's MINI is never short on braking power.

In terms of styling, Mike's MINI is subtle but still packs plenty of punch, and he's really let that stunning Hyper blue shade stand out, with just a handful of contrasting details to catch the eye. "The paintwork wasn't great when I got the car," he says, "so I had it fully resprayed, and they did a seriously bad job. After that, I wanted to make some changes, so I got a GP front bumper along with the rear bumper trims, and I also got a Leap bonnet scoop and the Orciari vents, then the GP wing," Mike tells us. "I then found another paint shop, Ace Body & Paint Specialist, so I took the MINI there, and it spent three months with them, going back to

"IN TERMS OF STYLING, MIKE'S MINI IS SUBTLE BUT STILL PACKS PLENTY OF PUNCH"

bare metal, being completely repainted in the standard Hyper blue with all the trims colourcoded," and it's no wonder this R53 looks so incredibly clean.

AINI

"The roof and mirrors were done in a custom red," he continues, "and when the car was in the paint shop, I got all new arch trims and all the other trims as most were broken from the other paint shop. I also did the Joey mod on the headlights in black, and I also managed to find a brand new Aero grille on Facebook cheap, so I grabbed that quick before someone else had it," Mike grins. While it's fair to say it wasn't all plain sailing, it was all worth the effort.

We just love that full-on blue that flows across the car, and all that colour coding really makes sure that nothing takes away from the dazzling shade, and we love the red roof and mirrors too. The finishing touch, as far as the styling goes, is those wheels. "I hadn't seen these wheels on another R53 and thought they were different," says Mike, and not only that, they look great, too. They are 17" Sparco Trofeo 4s, finished in matt gold which looks fantastic against the blue bodywork, and they really suit this MINI's hardcore performance aesthetic perfectly.

With a focus on performance throughout this

build, it's no surprise to see that the interior has been given a suitably hardcore overhaul, and it works so well on this R53. "With the interior, I got the idea from my dad as he put a half-cage and bucket seats in his car, so I had to do the same," Mike laughs. "I had the trims painted to match the outside, the centre console I wanted to be different but have seen it on a few R53s now, and the Coolerworx shifter was a big mod that I really wanted," he adds. The bucket seats that grab your attention are Cobra Imolas, in blue, naturally, and they are joined by Luke harnesses, and there's a suede-rimmed OMP steering wheel. The centre console and door armrests have been finished in Alcantara, while the custom centre console has been modded to remove the down tubes, and it looks very cool as a result. The gauges feature GP3style dials, there's an AEM AFR gauge, and an Ultra Gauge has also been added to allow Mike to keep an eye on his MINI's vitals. It's a very impressive interior setup, and one that goes perfectly with the whole vision for this build, and it really drives the point home that this car is built for driving.

Mike has been working on his R53 for eight years, and you can see just how much passion

he's put into it. It might be his first MINI, but all that previous modding experience armed him with the knowledge he needed, along with the unbridled passion, to create this MINI masterpiece. With such a complete build, it's no surprise that trying to pick one favourite mod proves to be an impossible task when we pitch the question to him. "I don't have a favourite modification as it's the whole car I love, I love how it's all turned out just how I wanted it," he grins, and there's no better feeling than that.

Despite the massive spec this MINI already boasts, when you're a passionate modder, nothing is ever truly finished... "I will probably keep doing more and changing bits," Mike muses, but we know there's no probably about it. He's built a car to drive, and he's got the drive to keep modding, always pushing further to achieve pure performance perfection

THANKS David Curtis getting me into the MINI scene, Tom and Scott from 1320 MINI for the hours they have put in and advice, my dad, Clive Frost for working on the MINI with me, Paul Acland at Ace Body & Paint Specialist for all the hard work on the bodywork, James Hurley for advice, and Jon Thompson at JTD Developments

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S 600PUR

Bought new in 2005 and worked on as a father-son project, this Cooper S is so much more than just a car, it's a member of the family and a very special one at that

Words ELIZABETH DE LATOUR / Photos ROYCE VAN NIEKERK

t's rare that we feature a car that's been owned by its builder from new, but it's lovely when you find a story like that. It immediately indicates that the owner and car have a very strong bond, and it's more like family than a mere machine. That's the case with Lewis Lattuca (@r53_mini_jcw) and his R53 Cooper S, and beyond being a stunning build packed with seriously tasty upgrades, it's a MINI that's also packed with memories and holds a lot of sentimental value for Lewis.

The R53 project was not undertaken solo, Lewis and his dad tackled the build, and it's clear where his passion for MINIs came from. "We bought the R53 from Dick Lovett BMW Swindon brand new in 2005," Lewis tells us as we chat. "My dad always liked MINIs, and it was a new challenge," he adds, and it's obvious that there was never any intention of keeping this car stock. "My dad and I built a highly modified VW Polo back in 1999, which was featured in *Fast Car* and *Max Power*. To be fair, we have modified most things we have owned," Lewis grins, and this R53 definitely now belongs on that list.

"When we bought the car, it came with some nice factory options, like the Aero body kit and 18" wheels," says Lewis, and that was a good starting point, but the car is very different to how it looked back then. Every area of this R53 has been treated to some seriously tasty mods, not least of



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all the engine, which now boasts a fine selection of performance upgrades. Under the bonnet, the supercharged 1.6 is now equipped with a performance air filter, a bigger intercooler from Airtec, a smaller supercharger pulley, uprated spark plugs and coil plugs, and it's all finished off with a Longlife straight-through exhaust with no centre resonator. Those mods ensure that not only does this MINI sound the part, but it goes well too, and Lewis says it's now making a very healthy 232hp, which means it's a lot of fun to drive.

The chassis has not been forgotten about, with the R53 now sitting on Stance+ coilovers, and the suspension has been fully poly-bushed throughout. The coilovers not only offer a major improvement over the standard suspension in terms of handling, aided by the bushes, as well as offering plenty of adjustment, but they also deliver a purposeful drop, and they delete all that ugly arch gap to get this MINI sitting perfectly. Naturally, lows require some tasty wheels to accompany them, and this MINI

"IT HAS HAD OVER FIVE SETS OF WHEELS, FROM DIAMOND CUT, WHITE AND SILVER, AND 17S AND 18S, BUT WE DECIDED ON THE TEAM DYNAMICS 17S IN THE END"

R53 COOPER S

ENGINE 1.6-litre supercharged Tritec, remapped, performance air filter, Airtec intercooler, smaller supercharger pulley, uprated spark plugs, uprated coil packs, Longlife straight-through exhaust with no centre silencer

POWER 232hp

TRANSMISSION Six-speed manual gearbox

SUSPENSION Stance+ coilovers, full poly bushed throughout

BRAKES JCW four-piston BBK (front), drilled and grooved discs (rear)

WHEELS AND TYRES 17" Team Dynamics Pro Race 1.2 with Pirelli P Zero tyres

EXTERIOR Hyper blue, colour-coded arches, black roof, carbon fibre front wings, JCW bumpers and side skirts, Maxton Design front splitter, side blades and roof spoiler extension, de-chromed trim including headlights, door handles and fuel cap, painted bonnet stripes and pinstriped John Cooper lettering, larger colour-coded bonnet scoop and scuttle vents, tinted windows and Chameleon windscreen tint, tinted full LED lights front/rear, stubby aerial, PPF'd front bumper, wings and bonnet

INTERIOR Retrimmed Gen 1 JCW Sparco bucket seats, JCW carbon gear lever and handbrake handle, red seatbelts, footwell LEDs, custom Ar, B- and C-pillars, custom dash with built-in iPod, custom door panels, black headlining, custom dials and full SMD conversion, custom steering wheel, custom boot build and rear inner quarters, custom tailgate panel with 2x speakers and disco ball, TV in rear with 2x 10" subs, rear seats taken out and amp installed in false floor with lights and custom leather, 12x 6.5" speakers, 10x tweeters







"WHEN IT CAME TO AESTHETICS, LEWIS AND HIS DAD HAD A KEEN EYE FOR STYLE AND DETAILS BECAUSE THIS MINI IS PACKED WITH THEM"

has had its fair share during the time with the Lattuca family. "It has had over five sets of wheels," Lewis chuckles, "from diamond cut, white and silver, and 17s and 18s, but we decided on the Team Dynamics 17s in the end," he says, and it was a fine choice. The lightweight gloss black 17s really suit the R53 shape, the motorsport style gives the car a sense of purpose, and it's a good-looking wheel on top of all that. Peer behind the spokes, and you'll spot the bright red calipers of the JCW BBK with its fourpot front setup, which delivers some serious stopping power.

When it came to aesthetics, Lewis and his dad had a keen eye for style and details because this MINI is packed with them. "Well, we didn't want to go too crazy," Lewis says, "we wanted something subtle, and it's changed so many times over the years. Most of the work was done by Peel's Motorkraft and Brin Jones, both based in Bristol, and it's taken a very long time, years, to get the car looking how it does today." Subtle it might be, but you can see where all that effort over the years has gone because this is a seriously tasty MINI.

Hyper blue is a great colour and it offers the perfect contrast to the various black styling elements that have been added. Up front, you'll find a Maxton Design splitter, and then you've got the tinted headlights, fogs and indicators, and those striking black and orange bonnet stripes aren't vinyl, they're painted on and feature pinstriped John Cooper lettering. There's a larger bonnet scoop and scuttle vents that have been colour-coded, while some seriously sexy carbon fibre wing panels have been added, and then you've got the Maxton side blades, there's a black roof and a Maxton Design roof spoiler extension. The windows have been tinted, the windscreen has been treated to a chameleon tint, and all the exterior trim has been dechromed. The arches have been colour coded, and the LED rear lights have also been tinted, and we love that fat single black exhaust tip, which looks really menacing. It's an incredibly extensive array of styling upgrades, nothing over the top, but they add so much to this MINI, enhancing the looks perfectly and giving it some serious presence.

Finally, we come to the interior, and it's truly spectacular here. "It was full blue leather from the factory with the body-coloured dash and the Chrono pack," Lewis tells us, "and we went crazy on the interior," he adds with a grin. "It has a mega ICE install with subs, screens, iPod etc. We have really focused on the inside: all the ICE is in custom painted fibreglass, the whole car was rewired, there's an uprated battery, and we have rare Gen 1 JCW Sparco buckets seats, which have been retrimmed," and this is only just scratching the surface of what's going on in here.

The dash is custom and features a built-in iPod, there are custom dials and a full SMD conversion, there's a custom flat-bottom steering wheel with red stitching, custom A-, B- and C-pillars, black headlining, and then you've got the boot build, which is just incredible. The rear seats have been removed and two custom leather-trimmed panels house a pair of amps, and when you open the boot, you're faced with two 10" subs and an amp housed in a custom panel. There are also custom-mounted











tweeters in the C-pillars, a TV, a custom tailgate panel with two speakers, and the finishing touch is the disco ball, and we don't think we've ever seen that in any car we've ever come across before. It's simply astonishing, and it's all been done so well and to such a high standard – it's a real show-stopper.

You might have noticed the numbers on the boot panel, and they commemorate Lewis's dad, who sadly passed away in 2020, and that makes this project even more meaningful. "The car has been in build for around 15 years, but in the last two years since my dad passed away, I have finally got it all finished and ready for the show season in 2023 in memory of him," smiles Lewis. A lot of time and a lot of money have gone into this R53, but the result is something truly special, it's an absolutely eye-popping build packed with some incredible mods and truly individual touches. It's a real passion project and one that's taken on special meaning to Lewis now. "The car will never be sold," he smiles, "it's going to stay with me and be driven to shows and meets. This was something dad and I did together over the years, we had a passion for MINIs, and now he's passed, I will continue with MINIs with my son," he says. There's no better way to honour his late dad than to carry on that passion and pass it on, and there's no better way to do that than with this stunning MINI, a real member of the Lattuca family

THANKS Peel's Motorkraft, ICE Design, Dick Lovett MINI, Avon Tuning, Express Signs, Wrapped Up, Brin Jones, Jordan Blammon, Craig Norris, Nick Bush, Mark Thomas, John Schembri, @band_be_unique



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The R53 Cooper S is a superb used hot hatch

BUYING AND TUNING GUIDE R53 COOPER S

The original fast new MINI, the R53 Cooper S, is an exceptional hot hatch and prices are on the up. We tell you how to buy the best

Words MARTYN COLLINS Photos JASON DODD, MINI

or hot hatch enthusiasts, there was much to like about the 'New' R50 MINI Cooper, which was launched alongside the One, back in July 2001. Highlights were the sharp steering and playful chassis, but with just 120hp, this MINI offered 'warm' rather than 'hot' performance. However, a faster version was always on the cards, and, sure enough, the performance headliner with one of the most iconic Classic Mini performance badges on the boot, Cooper S, was launched in July 2002.

Outside, BMW deliberately didn't change Frank Stephenson's attractive, 2000s redesign. The big giveaways were the letterbox vent on the bonnet, feeding air directly to the intercooler, and the Classic Mini-style centre twin exhaust, with its two smaller Coke-can finishers. The only other style changes were the chunkier, more aggressive bumpers missing their chrome, plus different side skirts and a larger rear spoiler. Inside, the changes over an R50 Cooper were harder to spot, although there were welcome, more supportive standard sports seats. Where the Cooper S gets most interesting is under the scooped bonnet. The addition of an Eaton supercharger and stronger Getrag six-speed manual gearbox to the 1.6-litre Tritec engine meant the Cooper S's performance more than lived up to the pre-launch hype.

T888 JDR

A BRIEF HISTORY

In May 2002, the performance range-topper, the R53 Cooper S was launched. It had 163hp, 0-62mph acceleration in 7.4 seconds and a top speed of 133mph. The JCW tuning kit for the R53 Cooper S was released in March 2003 and took power up to 200hp. Costing just over £3000, the JCW kit consisted of a revised supercharger pulley, a gas-flowed and ported cylinder head, uprated spark plugs, a freer-flowing exhaust system and a remapped ECU. The result was a 136mph top speed and 0-62mph acceleration in just 6.8 seconds. This kit came from the East Preston home of the fast MINI and was officially sanctioned, meaning the warranty remained intact. Plus, it could be fitted to new or nearly new models at John Cooper Works or, more conveniently, a local MINI dealer. Towards the end of first-generation MINI production, the JCW kit was offered as a factory-fit option.

That wasn't the end of the power upgrades, as in July 2004, along with a mid-life or LCI (Life Cycle Impulse in BMW language) facelift for the rest of the range, power for Cooper S models jumped to 170hp, with 0-62mph acceleration dropping to just 6.4 seconds and a top speed of 143mph. This power increase for the standard S also meant an increase to the JCW kit, which now boasted 210hp thanks to 380 injectors and a different airbox. R52 Convertible models were launched, and the sought-after limited-slip differential and Recaro front sports seats that debuted on the GP were also available on the options list.

A proper, six-speed automatic torque converter gearbox was released in 2005, mainly to satisfy American market demand. Fitted with steering-wheel-mounted paddles, this auto can be fitted with the JCW tuning kit, although this is rare.

The R53's final hurrah, the sold-out, 218hp, limited-edition, hardcore two-seater GP was revealed in July 2006.

OUR PICK

The final development of the R53 Cooper —







BUYING AND TUNING GUIDE R53 COOPER S



S was the most hardcore – the two-seater GP in 2006. Outside, the GP got a unique body kit, with real ground-effect aerodynamics, plus a proper carbon fibre rear Challenge-style wing, and lightweight four-spoke alloy wheels, all were individually numbered and finished in unique Thunder blue and Pure silver paint finish. Inside there are one-off grey instruments and leathertrimmed Recaro seats. Under the bonnet, the GP received an uprated intercooler, plus revisions to the engine management system. All of this adds up to an extra 8hp taking power to 218bhp, with 62mph acceleration in just 6.5 seconds and a 150mph top speed.

WHAT TO PAY

The earliest 2002 Cooper Ss might be turning 20 this year, and the R53, in general, is getting more sought after, but at £2000, the R53 is still affordable privately. Want a Works? Prices for the earliest 2003 converted cars start at £4000 privately, and around £500 extra for a dealer sale, both with around 100,000 miles. Facelift cars benefit from trim improvements and the better Teflon-coated supercharger, but despite these additions, 2004/2005 cars are worth no more than earlier ones. Budget around £1700, for a well-equipped 2005 car, with around 122,000 on the clock. The automatic R53 Cooper S models are rare and, as such, are harder to find, so prices start at £2500 privately for the lowest 2006 cars. The highest-priced R53 Cooper S is the GP; the cheapest we could find was a 75,000-mile car at an independent dealer, priced at £17,995.

WHAT TO LOOK FOR

The fitment of the supercharger adds welcome charisma to the durable and generally reliable Tritec engine, but there are still some areas to be aware of. Firstly, is there enough oil in it? The addition of that supercharger means this 1.6 will tend to drink a little more than usual, as much as 250ml per 1000 miles. So, make sure you pull the dipstick and check there's plenty of the black stuff. Then, start the engine and listen for a low-down rumbling – if you can hear this, it could mean the engine has been run low on oil at some point.

Elsewhere, oil leaks from the sump and oil filter are another sign of engine trouble. On top of the low-down rumble, with the engine running, listen for rattles at the top of the engine, which could be the result of the hydraulic tappets or the timing chain tensioner. Other engine concerns are just about keeping it cool. Overheating is a common issue with the R53, as the main cooling fan's thermostat can fail, stopping it from cutting in and ultimately leading to cracked cylinder heads.

The Cooper S's Eaton M45 supercharger isn't known to give trouble either, although check the condition of the drive belt, which can fail. Also, most R53 Cooper S's have now covered over 100,000 miles, and if the supercharger hasn't received a rebuild, it's worth allowing for a rebuild from a specialist such as GT Tuning, when negotiating a price.

Outside, check the overall condition of the paintwork. At the front, the more upright nose is vulnerable to stone chips. The front bumper is also a stone chip hot spot; also check to see if it's loose and for grounding damage. At the side, check for parking dents and kerbing on the alloy wheels. If the wheels are too kerbed, it might be worth factoring in some laser alignment. Inside, expect some wear and scuffing to the sports seats, some of the plastics are also easily marked, and finally make sure all the electrics work.





You're spoilt for choice when it comes to wheels, and there are also plenty of brake upgrade options available







Many R53s have already been modified, so check you're happy with the modifications made and the standard of work done.

MODDING

One of the easiest ways to increase the R53 Cooper S's performance is to make the Eaton M45 supercharger spin faster. To do this, you will need to reduce the size of the supercharger pulley. Prices start at around £115 for a quality Alta or CravenSpeed supercharger pulley. Power gains range from 15-21hp by increasing boost by 3-5 psi depending on the size of the pulley installed.

Next up, if you're increasing the power of an R53 Cooper S, it's also worth thinking of how you're going to reduce intake and supercharger temperatures, especially after fitting a smaller supercharger pulley, as this will be important for power delivery. To do this, you'll need to fit an uprated intercooler, which costs £419 for the Airtec item for example.

Next up, research has shown that significant performance increases come from improving the flow of exhaust gases with the R53 Cooper S, and this also improves the sound. This can be achieved by fitting a performance exhaust, and there are several options available from cat-back exhausts, or you can go further with a manifold too. £652 will buy you a Milltek cat-back system, and on top of the deeper exhaust note, average performance gains are up to 5hp. Adding a manifold and even a de-cat pipe will give more horses but add to the noise and are only recommended for track work. Even as standard. the R53's brakes are a bit on the weak side. so if you're increasing the power, you should increase the stopping power, too. Upgraded brake pads are a good starting point however if you want to go further, a set of front R56 JCW Brembo calipers will fit and cost around £300 second-hand or £1500 new. A big brake kit is the ultimate, but you'll need deep pockets, as the full AP Racing kit costs around £1300!

The oldest 2002 cars are now 20 years old, and, as such, the bushes will have aged and started to go slack and crack. Changing these bushes for aftermarket items from manufacturers such as Powerflex will tighten up the handling and steering, with the bushes themselves starting at £74 for those for the front wishbones.

Outside, even a wheel and tyre upgrade can make a big difference to the looks. There are plenty of options, whether OEM or aftermarket – the only limit is your budget. R53 Aero body kits toughen up the looks but aren't available to buy new anymore, and second-hand kits are still very pricey. There are cheaper alternatives but buy with caution. A rear wing, such as the GP-like Orranje G-Wing works very well with these kits, too.

Inside, the Cooper S's standard sports seats are both comfortable and supportive but can be easily upgraded if you want to, with a set of OEM Recaro or Sparco JCW seats. But, again, these are costly. A more affordable solution is a set of buckets, the cheapest costing from around £200.

VERDICT

Like the earliest R50s, R53 prices are on the up. Collectors are searching out the earliest and best original examples, and we can't imagine the best R53 MINIs will stay as cheap as they are at the moment. So, if you want a car to modify, there's never been a better time to buy. Keep in mind the problems listed above, but most are easily repaired and are not too costly to fix. There is also a plentiful supply of new and second-hand parts to keep your Cooper S running, or for upgrading, as even the smallest changes can make a difference to the drive. Still stylish, great to drive, modified or not, the R53 Cooper S is a hot hatch legend





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THE HISTORY OF THE JOHN COOPER VORKS GP Join us as we take a look at what makes these limited-edition JCWs so special...

Words MARTYN COLLINS Photos MINI

he original GP concept was MINI's answer to the aftermarket tuners, who were quick to offer performance packages and parts for the R53 Cooper S right from launch in 2002. The basic GP concept is based on the 'more power, less weight' ethos - almost like a baby BMW M-car - and these same principles can clearly be seen running throughout the GP range. From the first 'MINI Cooper S With John Cooper Works GP Kit' (which we shall refer to as GP1 to save on paper!) in 2006, right through to the very latest third-generation models. Built in limited numbers, with special weight-saving and power-increasing upgrades, not to mention bags full of performance, these GP models are among the most sought-after and highly-desired of all MINI models. Let's look at the full story of the John Cooper Works GP...

MINI COOPER S WITH JOHN COOPER WORKS GP KIT (GP1)

Back in the early 2000s, the R53 Cooper S's giant-killing performance made headlines right from launch – none more so than the 210hp, factory-approved John Cooper Works tuning kit. However, rumours were rife throughout the later years of the first-generation modern MINI production of a faster, lighter, more focused version of the much-loved supercharged MINI. Yet, it wasn't until the 2006 MINI United event in


Misano in Italy that production of such a MINI was confirmed... and the result was the £22,000 MINI Cooper S with John Cooper Works GP kit.

To conform to the GP concept, more power from the supercharged 1.6-litre Tritec engine comes thanks to an uprated intercooler and revisions to the engine management system. All of this is on top of the already rapid JCW tuning kit for the Cooper S, which adds up to an extra 8hp taking power to 218hp, with 0-62mph acceleration in just 6.5 seconds and a 150mph top speed to boot.

The power gains might be small, but standard limited-slip differential and Dynamic Stability Control mean you can make the most of all the extra performance in the corners. 50kg lighter than a standard R53 Cooper S, one of the unique weight-saving features of the GP is the lightweight aluminium control arms for the rear suspension. Other GP-specific suspension parts include lower, stiffer springs and different dampers. There's also some ground-effect aerodynamics going on underneath too. With the extra power, thankfully, the brakes at the front of the GP were uprated to JCW spec; they're identified by the bigger calipers finished in red.

Another GP weight-saving measure is that it is just a two-seater, with the area where the back seat used to be replaced by a simple lidded stowage box.

Standard equipment includes heated, leather-trimmed Recaro front seats, airconditioning, a three-spoke multi-function steering wheel, unique grey instruments and the car's individual number on the dashboard. Outside, you won't mistake the Cooper S GP for any other fast MINI. A new aerodynamic package including unique front and rear aprons, chunky side skirts and the MINI Challenge-style rear wing were fitted. There's also the one-off Thunder Blue exterior colour with a Pure Silver roof, which displays the car's unique number on the right-hand side. Finally, you can't miss the

"RUMOURS WERE RIFE THROUGHOUT THE LATER YEARS OF FIRST-GEN PRODUCTION, OF A FASTER, LIGHTER, MORE FOCUSED VERSION OF THE MUCH-LOVED SUPERCHARGED MINI"

GP1 TECH SPEC

ENGINE 1.6 litre four-cylinder Tritec supercharged petrol engine, producing 218hp
TRANSMISSION Six-speed manual gearbox
SUSPENSION Lightweight aluminium rear control arms, lower, stiffer springs and different dampers
WHEELS Lightweight 18" four-spoke wheels
HOW MANY MADE 2000 worldwide
PRICE £22,000

lightened four-spoke 18" alloy wheels.

Assembled by Bertone, the legendary Italian coachbuilding and manufacturing company, such was the interest in this special MINI, all the original 444 cars sold out before the owner of GP0001 took delivery of his car at the British Motor Show, in July 2006. This was also the UK debut of this car. MINI UK managed to secure a further 16 cars from the total allocation of 2000, which sold equally quickly, mostly to speculators.

MINI GP 2013 (GP2)

The last MINI United event may have been a gift for Mini and MINI owners, but the most exciting present from the event held in 2012 at the Circuit Paul Ricard in the South of France was the \longrightarrow







...a unique rear spoiler influenced by the Challenge race cars





GP2 TECH SPEC

public reveal of another GP, this time based on the second-generation R56 hatch.

Turbocharged rather than supercharged, power for the N18 engine is up from 208hp in the standard JCW hatch, to 215hp thanks to an ECU tweak. Acceleration to 62mph now takes 6.3 seconds, and the top speed is the same as the JCW GP at 150mph.

If the performance tweaks don't impress, more radical mods have been made to this GP's suspension, with a clear focus on track driving. Bilstein adjustable coilover suspension is fitted as standard – with inverted dampers at the front, equalling increased camber and reduced front toe-in, that result in impressive agility. Like the first GP, the brakes are uprated, this

The first sketches of the GP3 concept got MINI fans all over the world excited time with six-piston calipers and 330mm front discs. Completing the GP's handling upgrades were a set of Kumho super-sticky, semi-slick tyres and reconfigured stability control built at

functions – now including a specific 'GP Mode' and a more aggressive Electronic Differential Lock Control. Still a two-seater to save weight, again, you can't miss what looks like a rear strut brace over

can't miss what looks like a rear strut brace over the back suspension, painted red in the secondgeneration version.

Talking about the interior and it's more obvious why this car cost £28,790; items such as the red-stitched leather dash top are more luxurious than the last, and there's also the latest set of Recaro seats. The exterior is more conventional, compared to the GP1, with just the standard Aero body kit and no individual roof number. This GP was built at Plant Oxford, alongside more standard models. What marks this out as a GP is the unique Thunder grey paint, again paired with a Pure silver roof, GP graphics on the bonnet, roof and sides, rear splitter, Challenge-style rear wing and reworked four-spoke alloy wheels.

O A12 JCW

The original GP was a sell-out, but the GP2, as many call it took longer to find MINI enthusiast owners. Although these days, like the GP1, this GP2 is becoming more sought after by fast MINI fans.

MINI GP 2020 (GP3)

The first indication that there was a third GP on the way was back in 2017 when a stripped-out, track-focussed GP Concept with unique flared arches appeared at the Frankfurt Motor Show. The most powerful GP yet, under the bonnet, there's a modified version of BMW's 2.0-litre, B48 four-cylinder TwinPower Turbo engine. The modifications match the Clubman and





<image>















Countryman JCW and include a reinforced crankshaft with enlarged main bearing diameter, specific pistons, bushless connecting rods, a new torsional vibration damper with optimised cooling and a new turbo. The result is a top speed of 164mph, with 0-62mph acceleration in just 5.2 seconds. Gone is the six-speed manual transmission of the last two GPs, instead, the GP3 is mated with a modelspecific eight-speed Steptronic transmission as standard, complete with an integrated differential lock to get the power down.

With 306hp underfoot, you'll be pleased to know the GP3, is fitted with a sports brake system similar to that we've seen on the JCW Clubman; with four-piston fixed-caliper disc brakes at the front, single-piston floating

GP3 TECH SPEC

ENGINE 2.0 litre four-cylinder B48 turbocharged petrol engine, producing 306hp

TRANSMISSION Eight-speed Steptronic automatic gearbox

SUSPENSION Specially-tuned stiffened springs, dampers and stabilisers

WHEELS Lightweight 18" four-spoke wheels

HOW MANY MADE 3000 worldwide

PRICE £34,995

"TO HELP GP3 OWNERS REALLY ATTACK THE CORNERS, THERE ARE CLEVER SWIVEL BEARINGS, WHICH ENABLE INCREASED CAMBER FOR THE FRONT AND REAR WHEELS..."

caliper brakes at the back, all finished in Chili red.

To go with the uprated brakes there are specially tuned stiffened springs, dampers and stabilisers. To help GP3 owners really attack the corners there are clever swivel bearings, which enable increased camber for the front and rear wheels. There's also a wider track, plus DSG with a specific GP mode.

As you'd expect of a GP, there are still only two seats, but more unique interior features include metal 'GP' shift paddles and a metal centre marking the 12 o'clock position on the Nappa leather-trimmed JCW steering wheel. Another MINI first is the GP3's digital instrument cluster.

The GP concept might be all about lightness, but a first for the GP is the optional Touring Pack, which includes dual-zone air-conditioning, heated front seats and Navigation Plus – which has Satellite Navigation and wireless charging. Outside, the third GP has a unique look, harking back to the first. The flared arches, although toned down from the concept, are still there. Made from carbon fibre, they look awesome and they are also where the unique build number now goes.

Elsewhere, the front apron, called the 'Blackband', has particularly large air intakes and is designed to reduce lift with a unique hexagonal designed grille. At the back, GPs are known for their rear wings, and this one is unmissable as it's huge. Then comes the design, with its GP logo and double wing contours, which are there to help aero. This MINI also gets its own rear bumper, diffuser and new fourspoke alloys, too.

First was Thunder blue, then Thunder grey, and now we have another GP exclusive colour in the form of Racing grey – which looks quite similar to the GP1's blue. Pure silver has also given way to Melting silver for the roof and mirror caps. The opinion-dividing Chili red mirror covers have gone too, but instead, there are other red highlights all over this fast MINI's body.

The GP3 was priced at £34,995 when it launched, and production was limited to 3000 – 1000 more than the last two GPs

WHAHGOESGOESAROUNDCOMESAROUND

ar modifying trends exist in tranches of style that are clearly, anchored in their respective historic periods. It's been this way

KONI

from time immemorial, and it's always been led by a combination of fashion trends and, quite simply, what's available at the time. If you see a picture of a show car with a large aluminium boot spoiler, Lexus lights and full-length anime graphics, you can take a pretty decent guess at it dating back to the early 2000s. A car with shagpile carpets, metal flake paint, porthole windows and a jacked-up rear will be pure late-1970s. Lambo-style doors and a full-custom interior will point you towards the late-1990s.

WO8 ONG

Thought Lambo doors have had their day? Wrong – Vince Wong's highly detailed build is here to show that eye-catching mods are timeless. And this build's about far more than a set of fancy doors...

Words DANIEL BEVIS Photos MATT RICHARDSON

And yet... the whole point of the modding scene is that the most intriguing builds fuse styles and themes to create something unique, and that's where Vince Wong (@vw08ong) exists within his own happy little niche. Here's a man who knows a thing or two about putting together a classy show car. What's particularly noteworthy about Vince's own methods is that he's always keen to create the full package – show and go in one. Cars that are eye-catching and pristine enough to win trophies with their beguiling looks, but are also re-engineered with quality parts to be phenomenal to drive. Take his E39 BMW 525i, for example. This features a pukka carbon fibre roof and all manner of

RECARO

racy carbon embellishments as well as a VF supercharger, water-meth injection, Koni and Eibach suspension and massive brakes. He likes his cars to look good, but they've got to be awesome to drive, or what's the point?

So anyone who sees this MINI at a show spots the Lambo doors and sidelines it as a late-1990s pastiche is making a grave error. This stellar Cooper S is one of the most comprehensively modified R56s we've seen, and Vince hasn't cut a single corner. Cast an eye over the spec list, and you'll see that every \longrightarrow

1 marchar Car









"AS IT WAS BECOMING A SHOW CAR, THE WHOLE INTERIOR WAS UPGRADED WITH CARBON FIBRE PARTS..."

single aftermarket upgrade is a top-spec quality item chosen for function as well as form.

"I've always been a big enthusiast of cars ever since I was born, aspiring to own unique and individual vehicles," he assures us. "My first car when I was 17 was a Mk3 Ford Escort in Diamond White, which I immediately started aesthetically modifying to look like the iconic RS Turbo and RS1600i. My second car was a new BMW E30 318is in 1990, again upgraded with lowered suspension, free-flowing custom exhaust, remapped, and BBS alloy wheels." That all-out custom E39 followed in 2001, and the current daily driver is a 2015 Audi RS4 4.2 V8 featuring a bespoke remap, Tarox brakes and a full Akrapovic titanium exhaust system with carbon tips, putting out 500hp. So where does this MINI enter the scene?

"I was looking for something to replace the E30," Vince explains. "It had to be fun, unique and high-performance, and after weighing up the options, I decided that the R56 Cooper S was the perfect choice! I searched for six or seven months to find just the right example when, eventually, I came across this one: low mileage, with every option added, immaculate in special Dark silver from a performance car specialist. I went to see it the next day, and the deal was done."

As you'd no doubt expect, the modifications came thick and fast from day one. The Cooper S is a formidable and hugely capable machine in stock form, but for Vince, this was always going to be a blank canvas for his own custom aspirations. Lohen was the first port of call to take advantage of their Stage 2 upgrade,

















PURE PERFORMANCE **ULTIMATE PERFORMANCE MINIS**





"...I ALSO ADDED A NEW HYBRID TURBO, AND SCHRICK HIGH-LIFT CAMS, AND WITH A MANIC STAGE 3 REMAP IT'S MAKING 300HP"

comprising a larger Forge intercooler, ITG panel filter and Akrapovic downpipe. The suspension was the next thing to be tackled, opting for Koni Frequency Selective dampers (which cunningly use all-mechanical means to change damping force in relation to the frequency of movement, meaning they're stiff when you're on it and supple when you're not) combined with Eibach Pro-Kit springs. That boosted N14 motor was helped to find its voice by virtue of a valved Street Race stainless exhaust from Remus, while the aesthetics were massaged into something racier thanks to the addition of a complete JCW body kit from MStyle.

"The biggest turning point of the build was piston failure in the N14 engine," he continues. "This was a big deal, but I knew I wanted to keep the car, so I decided that if I was going to fix it, I might as well do it properly – and that involved maxing out the engine build by going fully forged. I also added a new hybrid Owen Developments turbo and Schrick high-lift cams from Lohen, and with a custom Manic Stage 3 remap it's making 300hp."

No messing about here, then – when Vince does something, he does it properly. The chassis was beefed up with a mighty six-pot big brake kit from K-Sport, and the paddleshift transmission was artfully remapped by JR Tuning to help it deal effectively with all of those extra horses. And, given the enormous heart-over-head investment that was going into the R56, it naturally started to gravitate toward being more of a show car than a daily driver. After all, it makes sense to protect your investment by not subjecting it to pothole terror and car park dings on a day-to-day basis.

"As it was becoming a show car, the whole interior was upgraded with carbon fibre parts," Vince grins, and you can see why he's smiling – it's positively swimming with carbon in there. The innards' crowning glory is the front seats, a pair of limited edition Recaro Sportster CS with carbon shells, tastefully retrimmed in carboneffect leather and Alcantara, and retaining the OE airbag functionality as well as being heated. The steering wheel is also worthy of mention, being custom-made in the States out of carbon fibre and boasting full multi-functionality and a nifty flat bottom. You'll also find lightweight facsimiles in the exotic weave replacing the door cards, gear lever and handbrake handle, air vents, speaker surrounds and centre console, plus pretty much anywhere else your eyes dare to rove. Out back, you'll note the Mini Works carbon GP rear strut and seat delete infill. It's an outstanding fusion of form and function – and knowing how effective the function is now, Vince can go all out on the form to an almost cartoonish degree... hence the addition of the Lambo doors, a setup from LSD Germany fitted by MStyle. It's an offbeat and surprising move, not something you'd expect to see on a MINI, and it shows off that incredible interior in fine style on the showground.

"For quite some time, the R56 was my daily driver," says Vince, "even travelling down through the south of France, Italy and Spain – and I participated in the Pure Rally trip to Paris and Amsterdam. But now it's a full-on show car it's been professionally detailed with IGL Kenzo ceramic coating throughout, ready for all manner of events such as the Castle Combe \longrightarrow

R56 COOPER S

ENGINE 1.6-litre turbo N14, forged pistons and rods, Schrick 252 cams, Owen Developments hybrid turbo, Mahle big end and main bearings, black nitride intake valves, Inconel exhaust valves, custom Manic Stage 3 remap, ITG panel filter, Forge intercooler, GTT heat shield, carbon fibre fusebox and trims, Remus Street Race valve-control stainless exhaust with 80mm carbon tails, Akrapovic downpipe, 200-cell sport cat

POWER & TORQUE 300hp and 294lb ft

TRANSMISSION Six-speed paddle-shift auto, JR Tuning remap

SUSPENSION Koni Frequency Selective dampers, Eibach Pro-Kit springs, aluminium front strut brace

BRAKES K-Sport six-piston front calipers with 315mm slotted two-piece discs, Ferodo DS2500 pads, EBC drilled and slotted rear discs

WHEELS & TYRES 8x18" BBS wheels, 215/35 Yokohama Advan V701 tyres

INTERIOR Limited-edition Recaro Sportster CS heated front seats with airbags – carbonshelled with carbon-effect leather and Alcantara trim, custom flat-bottom multi-function carbon steering wheel, P3 Multi-Gauge, NvD carbon door cards, NvD carbon gear lever and handbrake handle, NvD carbon centre console footwell, NvD carbon air vents, speaker surrounds and centre console, LED MINI logo puddle lights, Mini Works carbon GP rear strut, Mini Works seat delete infill, Mini Works speedo/rev counter fascia

EXTERIOR DuelL AG carbon fibre twin rear spoiler, MD carbon front splitter, carbon intake scoop, carbon MINI badges, DuelL AG carbon side splitters, NvD carbon boot handle, LSD Germany Lamborghini-style door hinges, 3M carbon-effect vinyl (roof and front wings), full IGL Kenzo ceramic coating, NvD carbon GP rear diffuser, gloss black shadowline pack, carbon centre brake light surround





Summer Action Festival, Mini in the Park, Mini at Home Oxford, London Cartel Show, Players Show and many others."

Yes, the R56 certainly gets about a bit, as you'll probably know if you've been to any MINIthemed outings around the UK. And as you'd imagine, it's been drawing a crowd wherever it goes: "Everyone, in and out of the shows, is drawn to the car by its unique appearance," he beams. "The extensive carbon fibre detailing inside and out, the BBS wheels, and above all, the Lambo-style doors! People's comments have been very positive, including telling me that it's got to be the 'best-looking MINI ever', and the epic sound with all its pops and bangs always catches people's attention."

This car's raising eyebrows for all the right reasons; taking ideas and cues from across the ages, and combining it all with a thoroughly modern approach to materials and engineering, this R56 represents the perfect fusion of showcar looks and race-car performance. Perhaps, then, this is the pinnacle of show builds for the UK MINI scene? It's certainly setting the bar extremely high

THANKS All the guys at Lohen; MStyle; Dan Lewin at Surrey Detailing, Chobham; Andy at Miller Auto Care in Epsom; SV Wraps, Chessington; London.carspots









SNOW WON'T BE THE ONLY THING FLUTTERING THIS WINTER



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that'll all change when people see how

serious Jon Wilson's JCW is...

Words DAN BEVIS Photos CHRIS FROSIN

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NPL STATE DIVE

ne of the more intrusive sticking points of capitalism is that we're raised to believe bigger is better. Supersize your fries, buy-one-getone-free, deluxe special editions with exclusive extras; greed is good. Everything has to be turned up to 11 – 'Well, it's one louder, isn't it', as Spinal Tap's Nigel Tufnel explained. This is no more apparent than in the US, where the 'ain't no substitute for cubes' mindset ensures that if you're not rocking a minimum of seven litres of swept volume, you're not trying hard enough. Naturally, this has all been anathema to

EOI

the cult of the MINI, stretching way back to its original Mini roots in the 1950s. Good things come in small packages, and it's not the size but what you do with it that counts. This is a point keenly proven by retro motorsport photography showing Mini touring cars making fun of Ford Galaxies through the corners, and a baton enthusiastically picked up when the MINI brand pushed this ethos into the modern era.

All that being said, the arrival of the Coupé variant in 2011 did cause a little bit of headscratching in certain quarters. The MINI was a superb hatchback, and in Cooper S and JCW variants, it proved to be a fabulously capable hot hatch. But does it really make sense to remove the rear seats and make it a bit less practical, chopping a bit of headroom out of the roofline and raking the windscreen back? Is it actually a good idea to take a competent hatchback and try to turn it into a fully-fledged (and noticeably smaller) sports car?

In hindsight, of course, it's obvious that the answer is a resounding yes. It may have been jarring to the traditionalists at the time, but those who took the plunge and signed on the line for the R58 Coupé were rewarded with —







"BEFORE I EVEN PICKED UP THE CAR, I'D BOUGHT A SMALL PILE OF PARTS TO BEEF IT UP... I HAD THE AIM THAT I WOULD BUILD A TRACK MINI JUST HOW I WANTED, AND DO IT COST-EFFECTIVELY"

wonderfully chuckable and focused fast-road hero. It's a much-underrated car that, now it has a few years under its belt, is markedly cheaper in JCW form than its R56 JCW stablemates on the used market. And it's this line of thinking that led to Jon Wilson acquiring the Coupé JCW you see here: with his heart set on an R56 for some track day thrills, a quick ride in a modded Coupé was enough to seal the deal.

"I actually started out with an F56 Cooper S; after watching a few exhaust videos of them on YouTube, I'd decided this was the car for me," he grins. "I went to my local MINI dealer in Sheffield and fell in love with the demonstrator, so a deal was done. I didn't do much to the car, to begin with, but I always wanted it louder, so after a few months, I fitted a Milltek de-cat. Next came a set of wheels and grippy rubber, then some KW V2 coilovers. This car is where my passion for track days started and is how I met the close friends I have now, so it meant a lot to me," he tells us.

"Sadly, after around two years of owning the car, it started to go wrong, and with it being an automatic I felt I was missing out on learning important basic skills on track." Jon's enthusiasm for track-based playtime meant he was keen to own something truly decent on the circuit, and while the F56 was in for repairs, he made the decision to replace it with a Gen 2 MINI – ideally an R56 Cooper S or JCW. As this thought process was shuffling itself to order in his mind, he went off on a trip to the Nürburgring with his track-day mates and was suddenly struck by a moment of clarity.

"While we were out there, we met a local guy called Sepp – you can find him at @sepp_under8 on Instagram," says Jon. "I went out for a lap in his track-spec R58 JCW, and I instantly knew that was the car I had to have."

As soon as he returned home, Jon's search for the right project base began... although













"THE MANIC MOTORSPORT REMAP TAKES THE PEAK FIGURES UP TO 270HP AND 288LB FT, AND THAT'S MORE THAN ENOUGH TO ENSURE A CHESHIRE CAT SMILE ON THE TRACK"

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it immediately proved to be harder than he thought. Given the low sales volumes of these cars, finding the one you want in the classifieds isn't as easy as you might hope – particularly in desirable JCW spec.

But finally, after some protracted scouring, the right car presented itself at a MINI dealer just outside London – a low-mileage car, with strong options and decent history. So the F56 was traded in, and the track toy fun could begin. "Before I even picked up the car, I'd bought a small pile of parts to change it visually to beef it up slightly – hard, I know," he smiles. "From there, it's been my project; I had the aim that I would build a track MINI just how I wanted and do it cost-effectively."

So there's been a lot of research into the specs and upgrades, to ensure every move has been judged on being effective and fit for purpose, rather than simply buying up all the 'correct' bits that forums may tell you to.

The engine spec is a case in point: the N18 turbo four-pot now runs an Airtec frontmounted intercooler, ITG panel filter, and Scorpion de-cat downpipe, along with a variety of upgraded pipes and a Powerflex Black Series lower engine mount. Not the most complex engine build we've seen, but one that's just right for this car; the Manic Motorsport remap takes the peak figures up to 270hp and 288lb ft, and that's more than enough to ensure a Cheshire cat smile on the track.

The transmission has been upgraded



R58 COUPÉ JCW

ENGINE 1.6-litre turbo N18, Airtec front-mount intercooler, Scorpion de-cat downpipe, ITG panel filter, red Flofet Performance turbo-toairbox pipe, Krumm Performance turbo-tointercooler pipe, Manic Motorsport remap, NGK iridium plugs, GFB diverter valve, Powerflex Black Series lower engine mount

POWER & TORQUE 270hp and 288lb ft

TRANSMISSION Wavetrac LSD, Helix fourpaddle clutch kit and lightened flywheel, Motul 75W 140 gearbox oil

SUSPENSION MeisterR CRD coilovers, SuperPro front wishbone bushes

BRAKES Red K-Sport floating BBK with 330x32mm front discs, K-Sport (front) and Hel (rear) braided lines, PBS Pro Race pads, ATE Type 200 race fluid

WHEELS & TYRES 7x17" ET35 Braid Fullrace wheels, 215/45 Toyo R888R tyres (road wheels not pictured: 7x17" ET38 Team Dynamics Pro Race 3 in Pepper White, 215/45 Goodyear Eagle F1 tyres)

INTERIOR Mirco RTS bucket seats with red stitching, TRS Magnum four-point harnesses, 330mm OMP Targa limited-edition red steering wheel, OMP R53 boss, Coolerworx shifter with red cable, Ultragauge; factory options: Harman Kardon audio, Chrome Line interior, nav, heated screen

EXTERIOR Challenge-style rear diffuser, MINI LED fog lights, MINI Black Line tail lights, MINI gloss black light surrounds front and rear, STB Motorsport sunstrip, MINI stubby aerial



with a Wavetrac LSD, and this is a seriously hardcore item that's been receiving heaps of praise from MINI owners of various generations. The design features a clever cam device inside that prevents a loss of drive when the inside wheel is suddenly unloaded, which quite simply adds an extra dimension of relentlessness to how the car performs on track.

To augment this super-seriousness, Jon's added MeisterR CRD coilovers into the mix, along with a mighty K-Sport floating BBK, which packs PBS Pro Race pads and 330mm front discs. The little Coupé has grown a serious set of teeth here, and the bite is far scarier than the bark. But the aesthetics haven't been ignored - you could argue that the Challenge-style diffuser provides aero benefits, although the simple fact that it looks awesome more than justifies its inclusion, and the red accents throughout the car, serve to highlight the statement of sporting intent. "99% of the work on the car has been carried out by me, barring the few parts I couldn't do or just didn't have time for," Jon assures us, reinforcing the point that this is very much his own handson project. "It's been a big learning process for me, as I work in a vehicle body shop, but I don't have any mechanical training, nor do I do it on a regular basis. I've always upgraded parts as

the car needed them, so when the clutch started to slip, I ordered a clutch kit and diff straight away. The same goes for the brakes; when I had a problem with the rear calipers I decided all new parts would be the best solution."

It's a car that wants for nothing, with every decision being focused on making it more entertaining, dependable, and capable on the track. You'll spot in the interior that Jon's already fitted a pair of huggy Mirco RTS bucket seats and TRS Magnum four-point harnesses, along with that tallboy Coolerworx shifter and the Ultra Gauge for those all-important readouts. The next step is to fit a roll-cage, at which point he'll be really levelling up.

This JCW is proof positive that great things can come in small packages. The R58 Coupé wasn't just a saleable idea on the marketing department's flip charts, it was a genuinely excellent car. And with the right upgrades today, it can become a devastatingly effective giant killer on track

THANKS I'd like to thank my workplace for letting me carry out most of the work, Orranje and Shift Co for supplying and offering advice on the correct parts, and all my close friends at STB Motorsport for advice and humour









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Craig Wilcock's R56 features a scenefriendly stance and aspirational upgrades, but he's certainly not following the herd...

Words DAN BEVIS Photos JASON DODD

lot of significance is placed on the notion of building your own car. To many of us, it's a real badge of honour – our cars are uniquely our own, thanks to the blood, sweat and swearing we've poured into them over the years. But this segregation can alienate the people who enjoy the modified car scene but don't possess the skills or inclination to roll up their sleeves and tackle the job themselves. Although it's

REEAL

thanks to these people that the aftermarket parts world and tuning garage culture exists.

Either side of the coin is equally respectable; some are skilled car builders, and some aren't, but both groups have much to be proud of, and it's fascinating to see the results from these two diverse approaches.

Sitting firmly in the former camp is Craig Wilcock (@craig_r56), owner of this R56 Cooper S. By his own admission, the project escalated

CORBE

quickly, and one or two jobs have been farmed out to specialists, but by and large, everything you see here is all his own work. It's a testament to his commitment and tenacity, as well as his ability to learn as he goes, that the finished product is so magnificent to behold and so devastatingly rapid.

Craig earns his bread and butter as a mechanic, which certainly helps matters, although any professional spanner-jockey









PURE PERFORMANCE **ULTIMATE PERFORMANCE MINIS**





for money and working on your own car for the sheer unfettered passion of it can be two very different things...

"This is my second car, and I've owned it for about three-and-a-half years," explains Craig. "I'd always wanted one of these since before I could drive, but it didn't really work out as a first car, so I started out with a Toyota Yaris for a couple of years."

The Yaris received the usual mods – wheels, suspension, exhaust, body kit – but before long the craving for more power became increasingly real, and Craig was eager to scratch that longterm R56 itch.

He says, "I bought the car from a small dealer in Kent. I'm its second owner, and it was in decent condition when I got it – just under

"THE R56 LOOKS THE BEST, AND I DON'T MIND IT HAVING THE N14 ENGINE, DESPITE THE HATE THEY GET FROM SOME PEOPLE – WHEN LOOKED AFTER WELL, THEY PERFORM GREAT"

17,000 miles on the clock, well-specced with good options, and the JCW body kit fitted. The R56 looks the best, and I don't mind it having the N14 engine, despite the hate they get from some people – when looked after well, they perform great. I started slowly with basic mods, although I knew what I wanted to achieve, so the pace of the project picked up pretty quickly..."

The two jobs that were carried out by external hands are a good place to start here, as together they highlight the inherent duality of this build: that it's a car built for performance as well as to look show-stoppingly excellent.

The first of these was the roll-cage, which was fitted by Sussex Road & Race – a team keenly attuned to the nature of race- and track-prepped MINIs. You'll note that the monkey bars are also beautifully finished, which leads us to the question of colouration: the Astro black R56 follows a distinct orange-accented theme, and all of the paintwork was carried out by Simon at SD Customs. It's the archetypal fusion of show and go, proving just what a considered and cohesive project this is. And given that Craig's carried out everything else with his own two hands, and the beating heart of the machine is that N14 engine, this is the area that requires our attention next.

R56 COOPER S

ENGINE 1.6-litre turbo N14, AEM air intake, Airtec intercooler, Forge Motorsport orange boost pipes (resonator delete and noise-maker delete), Forge Motorsport orange coolant pipes, alloy expansion tank, Forge turbo heatshield, GFB diverter valve, Saikou Michi dual oil catch cans (custom silicone piping using factory fittings), custom 2.5" exhaust system by EMP Performance, Cobra de-cat downpipe, Manic Stage 2 map, Aquamist HSF4 methanol injection, DevilsOwn meth tank with custom bracket, Cravenspeed dipstick, NGK ILKR8E6 spark plugs, Hel braided turbo oil feed, RCZ valve cover heat-shield, Funk Motorsports heat management products

POWER & TORQUE 270.1hp and 317.5lb ft

TRANSMISSION Quaife ATB diff, TTV clutch and lightened single-mass flywheel, ARP bolts for diff, flywheel and pressure plate

SUSPENSION BC Racing BR Series coilovers, Hardrace rear control arms, Powerflex bushes throughout, AEM front strut brace, rear strut brace, JCW anti-roll bars, Ultra Racing rear chassis brace

BRAKES K-Sport BBK with eight-piston callipers, 330mm discs and EBC Yellowstuff pads (front), JCW brakes (280mm) colour-matched to front (rear), Hel braided lines, ATE Type 200 fluid

WHEELS & TYRES 7.5x17" ET32 ATS DTC wheels with 215/40 Yokohama AD08RS tyres

INTERIOR Corbeau Sprint X seats with orange stitching, orange Luke harnesses, Coolerworx carbon shifter with orange cable, Safety Devices roll cage. GP2 rear seat delete panel, carbon dash trims, carbon door handles and pulls, Innovate Motorsport boost gauge, Innovate Motorsport air/fuel gauge, Cravenspeed gauge pods, Ultragauge with 3D-printed mount by Project Airifix, Aquamist pod in centre air vent and Coolerworx trim by Project Airifix, custom flat-bottom steering wheel with orange stitching by Royal Steering Wheels, leather lower dash trims with orange stitching, suede headlining with black trims, LCI black heater controls, JCW carbon handbrake, JCW carbon steering wheel trims, Luxewerx black and orange gauge faces, Pioneer head unit, Rockford Fosgate sub in custom enclosure, Rockford Fosgate fivechannel amp, Focal front and rear speakers

EXTERIOR Astro black, JCW body kit, Orranje carbon G-Wing, custom vented A-panels, ETS Challenge front lip, ETS Challenge rear diffuser, de-chromed exterior, custom-painted S side scuttles, RSI c6 big carbon scoop, RSI c6 carbon fuel cap, MINI carbon mirror caps and boot handle, Maxton Design rear lower spats, GP2 undertray, blacked-out headlights, LCI Blackline tail light retro-fit, MINI DRL kit Impressively, Craig's managed to eke out a solid 270hp, as reliable as it is hair-raising. The stock turbo is mated to a Cobra de-cat downpipe and a custom 2.5" exhaust system by EMP Performance, working with an Airtec intercooler and orange Forge boost pipes. An AEM intake takes care of the breathing (which is a brilliantly designed setup – it actually makes use of the usually-redundant bonnet scoop), and all of the vital digits are rounded up and effectively deployed by a Manic Stage 2 map.

Aquamist HSF4 methanol injection is the secret weapon here, and neat touches such as the Saikou Michi dual oil catch cans and Forge turbo blanket demonstrate that this is a project built properly for reliable thrust rather than merely pub-bragging numbers.

Naturally, all of this howling power requires a certain beefing-up of the transmission and chassis to suit. For the former, Craig's added a Quaife ATB diff, TTV clutch and lightened singlemass flywheel.

When it comes to the chassis, it's been a comprehensive makeover to ensure the trademark R56 handling characteristics are retained and amplified to exploit the extra horses. Powerflex bushes feature throughout, and BC Racing BR Series coilovers work alongside Hardrace rear control arms, JCW antiroll bars, an Ultra Racing rear chassis brace, and strut braces at each end.

It's a mouth-watering setup, with eight-pot K-Sport brakes lurking mischievously behind those lightweight motorsport-spec ATS DTC wheels, and there's absolutely no question of its purity when you peer through the windows to the track-biased cabin.

In addition to the Safety Devices cage, Craig's bolted in a pair of Corbeau Sprint X seats with Luke harnesses – all with orange accents, naturally – and the Coolerworx carbon shifter is a must for a build like this. Airifix has been tapped up for the Coolerworx trim and gauge mounts; indeed, gauge-based cleverness figures heavily here, with an Ultra Gauge meeting all sorts of other readouts for various vital signs – Aquamist status, air/fuel, boost, you name it.

Slick and glossy carbon fibre covers every available surface (including the neatly

"METHANOL INJECTION IS THE SECRET WEAPON HERE.... THIS IS A PROJECT BUILT PROPERLY FOR RELIABLE THRUST RATHER THAN MERELY PUB-BRAGGING NUMBERS"

















customised steering wheel), but this isn't a creation aimed squarely at the track: it's streetdriven, and the sounds are important. Craig's fitted a Pioneer head unit, Focal speakers in the front and rear, and a Rockford Fosgate sub and amp to keep him entertained when he tires of the exhaust pops and swishing turbo symphony.

It's the way the car's exterior announces itself that really sets it apart, looking supremely menacing in that deep Astro black. The fact that the wheels, lights and chrome trim are all blacked out makes it look like the sort of thing



Darth Vader would pop out in for a pint of evil milk, and the more you look, the more detail unveils itself: the ETS Challenge front lip and rear diffuser, the vented A-panels, the Orranje G-Wing, it all works beautifully together to create a truly imposing profile, and the myriad carbon accents tie in the vibe to the sense of purpose inside.

"I like going to shows in it, but the car is also my daily driver," Craig adds, and that is definitely the most impressive part of the build. With a spec this forthright, it must be a palm-



sweating thrill ride even to nip to the shops, and the commitment it takes to strap yourself into a bucket seat for every journey highlights what Craig wants from a car.

It's made for performance as well as for looks; it's the car he always wanted, and he's built it up to a truly awe-inspiring spec. And the thing he can take particular pride in is that he did it all by himself

THANKS Simon at SD Customs for all the paintwork and custom paint

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BUYING AND TUNING GUIDE **R56 COOPERS** Want a fast MINI that's still affordable with batter build quality, plus a powerful

Want a fast MINI that's still affordable, with better build quality, plus a powerful and more tuneable engine? The R56 Cooper S could be the answer

Words MARTYN COLLINS Photos BMW, MATT ANDREWS

ollowing the success of the first-generation R53 Cooper S, which went on sale a year after the One and Cooper in 2002, MINI thankfully didn't make buyers wait as long for its replacement, as it was one of the first models available from November 2006 UK launch. As with the standard R56, the fastest secondgeneration MINI (well, until the John Cooper Works came along later), was more of a clever rework than a new model. Outside, legislation dictated an 18mm taller shoulder line, but this MINI is also 60mm longer, equalling an extra 10 litres of boot space. The biggest change was under the bonnet, as the supercharged Tritec 1.6-litre petrol was replaced by a turbocharged version of the Peugeot/Citroen(PSA)-supplied

'Prince' N14 1.6-litre engine. At launch, the Cooper S boasted 175hp and up to 192lb ft of torque, thanks to the clever 'overboost' function, where for a short period the turbo boosts above normal pressure. The result was acceleration to 62mph that took just 7.1 seconds. Yet, despite the performance, features such as the BMW VANOS system resulted in a combined consumption figure of 40.9mpg, broadening this MINI's appeal to hot hatch buyers that hadn't considered it before.

A BRIEF HISTORY

With over 170hp, the R56 Cooper was fast out of the box, but it wasn't long before John Cooper Works (JCW), now under MINI control, had a performance kit available for the new car.

Launched in 2007, like the R53 it included an exhaust, airbox and ECU, resulting in a power hike to 192hp and 199lb ft of torque. A rare kit, this was maybe because of the high £2000 price and the incoming full-production JCW model. Like the standard R56, the Cooper S received its mid-life or LCI (Life Cycle Impulse) facelift in 2010. Outside there were minor exterior tweaks, such as new lights and wheels. More significant were the changes made to the Prince petrol engine. Renamed the N18, this engine benefited from infinitely variable double-VANOS, a map-controlled oil pump, composite camshaft construction, a new piston design, plus fully variable valve control. The latter is BMW's proven VALVETRONIC system, which adjusts valve lift and opening times in direct

relationship to the throttle pedal. There were mechanical issues that necessitated these upgrades, more on that later, but, on the positive side, these engine changes equalled nine more horses, top speed rose to 142mph, with 0-62 acceleration in exactly seven seconds. The Cooper S was eventually retired, along with the rest of the second-generation MINI range in 2013, to be replaced by the current-generation F56 model.

OUR PICK

If you must go for a pre-facelift R56 Cooper S, the Sport Pack introduced in April 2008 is desirable. The choice of exterior colours was better, and it also included a body kit and 17" cross-spoke alloy wheels that make it look like the more powerful, range-topping JCW. However, due to the mechanical upgrades made to the engine from the 2010 facelift, we'd go for one of those cars if your budget allows.

WHAT TO PAY

Around £800 is where R56 Cooper S prices start, but these are for the earliest 2006 cars, mostly with engine issues. The cheapest roadworthy cars without issues we could find start at £2000 for a late 2007 model with 80,000 miles. You'll need at least £4000 to get into one of the earliest LCI facelift R56 Cooper S's, with over 100,000 miles. Around £7000 is where you'll find facelift cars with more modest mileage between 50-80,000 miles. £8500 is where the best, lowestmileage cars are found, in this case, a 2011, 29,000-mile example. As with all MINIs, buy on condition, specification and colour. There are also plenty of limited edition models, and the Camden and Bayswater, in particular, are worth searching out.

WHAT TO LOOK FOR

The biggest elephant in the room with pre-LCI R56 Cooper S models is the Prince N14 turbocharged engine that powers it. Based on the PSA TU unit, BMW added more sophistication to this engine by way of clever features such as VANOS and variable valve timing. The problems start with carbon buildup around the valves and intake ports, which is caused by the direct injection that is used for both performance and economy. The only solution is to have the engine de-coked, whereby crushed walnut shells are blasted at the inlet manifold and the tops of the valves. On the test drive, watch for the engine warning light illuminating on the speedo, acceleration will also be hesitant, and performance won't be up to the levels you'd expect. Specialists will charge around £240 for this service.

The most serious fault with the N14 engine is most widely known as the 'death rattle.' Why? Well, because that's the noise you will hear on startup when cold. Caused by the timing











chain tensioner breaking up and the chain stretching, the only solution is to change the major timing kit components, which can also be done at a specialist, and costs over £600. If left, the tensioner will break and destroy the top of the engine. Another R56 Cooper S mechanical woe is the high-pressure fuel pump, which again is a known failure point. Poor starting and idling are the biggest giveaways and this affects both N14 and N18 engines. Again, this is another expensive part, so budget £600 for a replacement. It is also worth mentioning that it's not just the N14 that's affected by the 'death rattle,' there have been isolated cases with the later engine, too. Whether an N14 or N18 engine, both like a drink - as much as a litre of oil per 1000 miles - and that's for an engine in good order! Finally, check older models for oil leaks.

Most R56 Cooper Ss are fitted with the slick six-speed manual transmission, but there was also the rarer and less popular six-speed automatic transmission with steering-wheelmounted paddles. Problems with either gearbox are rare but watch for sloppy changes with the manual. This can be easily fixed by replacing a worn cup in the linkage. Like the R53 before it, the R56 Cooper S is a great drive, which is the result of the MacPherson struts, coil springs and of course that Z-axle at the back. Make sure you check the wear and tear parts, such as anti-roll bar links, bushes and shock absorbers.

Apart from the mechanical changes, the other biggest upgrade from Gen 1 to Gen 2 MINIs is the higher quality, more stylish interior. Air-conditioning is a popular feature, but make sure it's working on the test drive. If not, the evaporator might have failed, and the repair is costly at £500. A giveaway is white dust coming through the air vents. A sunroof is another popular option, but like the electric windows, make sure that it works smoothly, as jammed sunroofs are not unheard of. Leather trim looks good and lasts well, but watch for dirt and bolster wear. Early Cooper S Salt models have basic specifications, lacking both air-conditioning and a sunroof and are not sought after. The earliest R56 Cooper S models are 15 years old, so expect age-related marks, such as stone chips. Doors and rear quarters are vulnerable to parking damage, so check those carefully. Also, the paint seems to last better on the R56 MINI, as lacquer peel is rarer on these cars.

MODDING

Despite the R56 Cooper S's engine failings that have been listed above, it does respond very well to tuning. The simplest way to release more power is via a remap. Prices start from £360 at specialists and can equal up to 40hp more from Stage 1, depending on the other modifications fitted. Although, if you go as far as a Stage 3 tune, you'll have to fit an uprated intercooler, turbo, de-cat and/or high-flow sports exhaust and induction kit – but the result could be up to 300hp. If your thirst is for this level of power from your R56 Cooper S, it's worth considering forging your MINI's engine internals, although this is expensive, with kits costing around the £5k-mark. If you go to Stage





3 you'll need a hybrid turbo, which, again, is an expensive modification at over £2000. A cheaper alternative for a lesser tune is to fit a JCW turbo, but this is still costly at over £1000 new, although second-hand they are half that price.

If you're not keen on going so far or spending so much, more affordable bolt-on items such as induction systems will still see power gains. Even just a panel filter can give a few more horses, or if you're looking for an OEM solution, an airbox from a JCW will fit, with prices starting at £120 second-hand. The extra performance will create more heat, especially for mapped cars, so an aftermarket frontmounted intercooler will cool the boosted air from the turbo, equalling more power and torque, with prices at specialists starting at £350. No less important is the exhaust, which can be easily improved with the better system from a JCW. This is quite cost-effective, with prices starting at around £250. You can go further, with a simple resonator delete, that increases the pops and bangs from the exhaust, so loved by owners, or more seriously a Sports cat, although at over £800, you'll need deep pockets.

A set of decent brake pads will improve \longrightarrow





the stopping power, but an easy and costeffective upgrade is a set of Brembo JCW calipers, with used prices starting at £500 for a second-hand set. Suspension is another key area of improvement – lowering springs start from around £200 and will sort the stance. Or, if you want to go further, a decent set of coilovers costs about £500. A wheel and tyre upgrade can make a big difference to the looks, either OEM or aftermarket depending on budget. Elsewhere, MINI's OEM Aero kit, which was fitted to the ICW and GP still looks good, especially when combined with a rear wing, such as the GP-like Orranje G-Wing. Inside, the Cooper S's sports seats are both comfortable and supportive but can be easily upgraded with a set of buckets, the cheapest costing from around £200.

VERDICT

With prices for the first-generation R53 Cooper S's on the increase due to their almost classic status, the R56 Cooper S now seems great value, as long as you're aware of the N14 turbo engine's issues, while its tuning potential makes it very appealing. Despite its faults, the engine is easily repairable, and with a plentiful supply of second-hand performance parts and upgrades, you can increase the power reasonably cost-effectively. The R56 still looks stylish, is fun to drive, even as standard, and yet is more affordable to run. No wonder it remains so popular











CERAMIC MADE EASY



After cutting his teeth on a MINI Roadster, Morgan Gray managed to get his dream car – a fully loaded Gen 3 John Cooper Works, and he uses it properly, too...

Words and photos DAVY LEWIS
he performance MINI scene is a rich and varied place to be a part of, with lots of colourful characters doing their own thing. This iconic British brand still inspires incredible loyalty and brings together lots of like-minded people to clubs, meets and Facebook groups.

It doesn't matter whether it's a stock daily, a stunning show car or a full-on racer; there's always respect from fellow MINI fans. However, people do tend to stick to their chosen thing. For example, if you're into buffing the life out of your car and presenting it in show and shine competitions, you won't be taking it on track. Similarly, if you spend every spare moment thrashing your car to within an inch of its life on a circuit, chances are you don't spend the rest of your free time polishing it furiously; horses for courses and all that.

But, there's always an exception to the rule

and Morgan Gray, owner of this stunning JCW, is proof. You see, not only is it one of the finestlooking and impeccably maintained examples but it also gets driven hard on track, which has prompted more than the odd raised eyebrow.

"It gets a good reaction," says Morgan, "people say, 'glad to see you using it for the purpose intended' – some modify the brakes, suspension and engine, then don't use them hard, which seems a waste," he confirms. While some



State Bar







"THEN I DID THE JB4 BURGER MOTORSPORT TUNING BOX – WHICH TRANSFORMED THE CAR; IT WAS LIKE A LOADED WEAPON!"

may baulk at the idea of chucking their pristine, modified MINI around a circuit, we say good on you for enjoying it.

And Morgan is no stranger to track days. "I've been to Spa, Silverstone, Goodwood and Castle Combe – the car's great fun to drive," he laughs. He's also taken it on long road trips, to the south of France including Monaco, racking up a lot of miles and even more smiles along the way.

So, what made him decide to choose a MINI? "I had a Roadster before this, but it only had two seats and I wanted something bigger," he explains. "I'd always wanted a JCW as the reviews were so good, so when I had the money, I went to the showroom for a look. I was going to get manual but the sales girl suggested I try an auto with paddle shift, and I thought it was really good." So with that, a deal was done, and the Chili red JCW took pride of place on the driveway.

As an ex-demo car, it came fully loaded, including the XL media pack, sunroof and half leather/Alcantara Recaros. It was a very nice place to be and, with the larger 2.0-litre engine, offered decent performance. "Compared to my Roadster, the power delivery was much better; jumping from 1.6 to a 2.0-litre felt totally different; not so much turbo lag and a very linear delivery." And that's how it stayed, 100% stock, until four months later when Morgan began to get some ideas.

"I decided to do a few subtle bits, so I dechromed it and added carbon white rings (hydro-dipped). A little later, he changed his mind and decided to go for the matt black that you see today, which contrasts really nicely with the Chili red paint.

Now that he'd got a taste for the mods, Morgan jumped straight in with a tuning upgrade. "The stock exhaust was too quiet, so I went for a Remus cat back," he says. The high-quality valved system came with titanium tailpipes and carbon tips, which add some real class to the rear end of the F56.

"The Remus cat-back was the first real mod, and I went all the way up from south Wales to Demon Tweeks in Wrexham to have it fitted," he says. "I had the valve open all the way home \longrightarrow



ENGINE 2.0-litre B48 turbo, Remus cat-back exhaust with titanium tailpipes and carbon tips, JB4 Burger Motorsport tuner, Airtec intercooler, Eventuri carbon intake

POWER 320-340hp (est)

TRANSMISSION Auto with paddle shift

SUSPENSION KW V3 coilovers, strut brace

BRAKES Tarox F2000 discs, Carbotech pads

WHEELS & TYRES OZ Formula HLT with Michelin tyres

INTERIOR Alcantara dash panels, red rings around clocks etc., flat-bottom wheel, carbon fibre additions to doors and centre console, Recaro seats, Harmon Kardon audio

EXTERIOR Custom carbon splitter, fully dechromed and finished in matt black, matt black viper stripes with inverted red on roof, custom vented A panels, smoked front lights, Union Jack rear lights, smoked rears, Chili red paint, DuelL AG spoiler, carbon badge surrounds, fuel filler and door handles on some great Welsh roads," he smiles.

Now that the MINI had found its voice, thoughts turned to other upgrades. "Next I did the wheels; I didn't like the stock JCWs, so looked at Sparcos," says Morgan "But then I went for a set of OZ Formula HLTs – I thought 'I've got to have them' as I hadn't seen a set on a MINI before."

Next, there followed some more subtle changes, with the dash panels being removed and trimmed in Alcantara, with a neat embroidered JCW logo. "I did the interior rings around the dials to match the outside," Morgan tells us.

With a track day planned at the legendary Spa Circuit, the MINI was treated to some sensible brake and suspension upgrades. "I got some Tarox F2000 discs with Carbotech fast road/ track pads," says Morgan "and some KW Variant 3 coilovers." The three-way adjustable setup was installed and dialled in by SWSS Mini Cardiff in preparation for Spa. So how did it fair on its first foray onto the testing Belgian circuit? "It was really good fun on track, especially when I overtook a Focus RS!" laughs Morgan.

Following a successful Euro road trip and \longrightarrow

"I WENT FOR A SET OF OZ FORMULA HLTS – I THOUGHT 'I'VE GOT TO HAVE THEM' AS I HADN'T SEEN A SET ON A MINI BEFORE"















track hammering, the next step was to upgrade the heat management. When Oli from Orranje got the first Airtec intercoolers, I bought one, and it made a hell of a difference," says Morgan. "Then I did the JB4 Burger Motorsport tuning box – which transformed the car; it was like a loaded weapon!"

Having got used to 231hp in stock trim, the upgrades – which included an Eventuri carbon intake – delivered an estimated 320-340hp and healthy 369lb ft of torque. "The power is available right the way through the engine range, and it's really controllable."

But this JCW is about more than speed work. The rest of the car has been immaculately presented, allowing it to bridge the gap between track and show car. From the tasty carbon additions on the exterior to the sumptuous interior, this really is the perfect all-rounder. And with the auto box, it's effortless to drive day-to-day, but once banged into manual mode, allows some spirited driving controlled by the paddle shifters.

So, what are Morgan's future plans? "I want to do a carbon fibre wide arch body kit; I've found a company that custom-makes them, so I'm hoping to do that. I'm also going for a custom map from Performance Engineering in Cardiff."

There we have it; a MINI that delivers thrilling performance when you want it, but it is refined and comfortable to live with day-today – it really does deliver the full works

THANKS Thanks to Will Kingcross from Up to Scratch for all the custom/bodywork, and SWSS Mini Cardiff for the servicing and fitting the brake and suspension upgrades













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POVER DRVEN

RIN

11

James Ridout has taken third-generation MINI tuning to another level with his 340hp+ Cooper S...

Words MARTYN COLLINS Photos MATT RICHARDSON



sk many modified modern MINI owners why they've bought their cars, and we reckon the answer will, more likely than not, be the

same as James Ridout (@mnwlkmini), the owner of this feisty F56. "I had never owned a MINI before, but when I was younger I always liked the idea of getting a Classic Mini and putting my own stamp on it," he recalls.

That didn't happen, which is a shame because

James admits he never found the right one. On the flip side, this was probably a good thing, as this aggressive 340hp Cooper S might not have existed otherwise.

The Moonwalk grey F56 was bought new by James in September 2017. Totally standard, the only factory extra was the John Cooper Works (JCW) rear spoiler. From the start, the plan was always to increase the power, although James felt that the standard 192hp wasn't bad. "I knew the B48 engine was massively de-tuned by MINI from the factory, so I thought I could increase it to where I wanted it to be," he smiles.

Standard for just a month, James did what most people do first and fitted an induction kit, his one coming from Forge Motorsport. "It didn't seem to add much more in the way of performance, really, but it did add some nice induction noise and a little more turbo flutter", James explains. But that wasn't the end of





the first round of mods, as he also added a Stage One tune. "The tuner had to open up the ECU, as tuning through the OBDII port wasn't available at the time." That decision would come back to bite him in the wallet later on, but we'll come to that part of the story in a bit...

Despite 265hp and 295lb ft to play with, James now had a taste for performance and wanted more for his MINI. So, six months later, he decided to go for a Stage 2 tune plus some extra hardware upgrades, equalling 290hp and 347lb ft of torque, and to sort the stance. "A Forge Motorsport intercooler and full Milltek exhaust with sports cat were added," James recalls, "I also fitted some Eibach lowering springs as the arch gap as standard on these is really extreme."

Stance sorted, three months later, it was time for James' Cooper S to get new shoes, which came in the form of these 18" Bola CSR wheels, with Toyo Proxes Sport tyres. "The standard wheels were nice, but just didn't do the job for me. The Bola wheels are actually almost as light as the Team Dynamic wheels, but in my opinion, they look so much better," he explains.

Springs and wheels on, James decided he needed more negative camber to get the back sitting right, so a set of adjustable camber arms from Forge Motorsport went on next.

Then, 10 months into Cooper S ownership James discovered Lohen, the popular Staffordshire-based MINI tuner, well known on the MINI scene. "We started talking, and I gave them quite a shopping list. It was a combination of parts they supplied and ones I had sourced elsewhere. But all the work would be done by them." However, disaster struck as someone drove into the back of his parked MINI one

WHAT IS A JB4 TUNER?

Basically a tuning box, it piggybacks on the standard ECU and taps into the sensors on the car, particularly the engine. The JB4 can then be programmed or remapped to optimise any hardware upgrades fitted.

"AT THE START, I NEVER DREAMED OF GOING AS FAR AS I HAVE, BUT IT GOT TO A POINT WHERE I THOUGHT I MIGHT AS WELL GO FOR IT AND DO EVERYTHING I COULD"

F56 COOPER S

ENGINE 2.0-litre turbo B48, Pure Turbos B48 Stage 2 hybrid turbo, JB4 Tuner with EWG harness, Eventuri intake, Forge Motorsport intercooler, Supertech forged pistons and rods, ARP bolts, King Racing bearings, Forge Motorsport boost hard pipe, NGK performance spark plugs, DevilsOwn water/methanol injection kit, Milltek exhaust system including sports cat

POWER 340hp with 369lb ft torque (hoping for 360hp+ with water/meth)

TRANSMISSION Standard six-speed manual, Helix organic clutch and flywheel kit, Quaife Automatic Torque Biasing (ATB) differential, Forge Motorsport short shifter

SUSPENSION Ultra Racing front strut brace, plus Ultra Racing front lower braces, both mid-lower braces and rear lower brace, Bilstein B14 coilovers, Eibach front and rear anti-roll bar kits, Forge Motorsport adjustable camber arms, Powerflex bushes, Silver Project adjustable top mounts and a full fast road tracking set up

BRAKES JCW brake upgrade, Goodridge braided hoses all-round, Mintex M1155 track pads (front), EBC Yellowstuff pads (rear)

WHEELS & TYRES 8x18" Bola CSR wheels, with Toyo Proxes Sport tyres

INTERIOR Custom flat-bottom steering wheel, Gen 2 JCW gear stick and carbon interior trim

EXTERIOR Maxton Design rear spoiler extensions, AC Schnitzer front splitter, colour-coded arches and sills, blackout kit from Mini Bitz























"THIS MINI MADE 340HP AND 369LB FT OF TORQUE - AND THAT FIGURE WAS ACHIEVED WITHOUT THE ADDITION OF THE METHANOL INJECTION"

night. "It was outside my house and took over three long months to get sorted!" he exclaims.

So, with the MINI fixed and now a year into ownership, James' Cooper S was finally despatched to Lohen for its performance upgrades. A Lohen B48 crate engine – with a delicious spec including Supertech forged pistons and rods, ARP bolts, and King Racing bearings was slotted in. In addition to that, a Helix organic clutch and flywheel kit, Quaife Automatic Torque Biasing (ATB) differential, a Forge Motorsport boost hard pipe kit and some colder-range NGK performance spark plugs were also added.

That wasn't the end of this comprehensive list of parts to be fitted, with more changes for the brakes and suspension. These included a JCW big brake kit, Mintex M1155 track pads at the front, EBC Yellowstuff pads at the rear, Bilstein B14 coilovers, and Eibach front and rear anti-roll bar kits. A Forge Motorsport short shifter, Powerflex bushes, Goodridge braided hoses all-round, and Silver Project adjustable top mounts were also fitted, along with a full fast road tracking setup to make the most of them all.

The next round of improvements concentrated on exterior and interior changes, in the form of a custom flat-bottom steering wheel, Gen 2 JCW gear stick, Maxton Design rear spoiler extensions and an AC Schnitzer front splitter. James tells us that all the work was for different reasons: "Individually, the forged engine was because I wanted more power in the future, and this was to ensure the engine could take it. The same for the clutch and diff too, the coilovers for looks, and better handling, and big brakes so I can stop!" Sensible thinking, and laying the foundations for future power increases, which, let's face it, is kind of inevitable with a tuned MINI.

Despite having one of the most sorted allrounder third-generation MINIs on the road, James wasn't going to stop until this MINI was exactly the way he wanted it. "The next step was adding an Eventuri intake; it looks great, sounds great, and the functional carbon bonnet scoop definitely adds more airflow. I also decided to go with a blackout kit from Mini Bitz too, remove all the chrome, along with carbon interior trim." To finish this round of mods off, James had the side skirts and arches colour coded to match the bodywork, along with the engine cover, thanks to local Essex company, Platinum Bodyworks.

However, the urge to get past the 300hp power mark was still strong for James. "I looked to add a little more power, a stage 2.5, so to speak, but wasn't able to get what I wanted. The main restriction was the stock turbo." So, while the engine build was going on, Lohen had spoken to some companies producing hybrid development turbos, but there weren't many that had been tested fully. That didn't stop James, and two months after the engine work, he bought a B48 Stage 2 hybrid turbo from Peter at Pure Turbos in Belgium. "There wasn't any data for this on a MINI at the time, but I'd seen and heard a lot of good things about Pure Turbos, so I went for it and installed this myself," James remembers.

Evolve Automotive was initially responsible for tuning James' MINI after the turbo install and added a JB4 along with an EWG harness, which gives data logging and offers control \longrightarrow

F56 COOPER S









for water/methanol injection, particularly useful as James had bought the kit and was waiting to fit it. "The next step was Wrench Studios, as recommended by Pure Turbos. At Wrench, I had the meth injection fitted and linked up to the JB4, but the tuning would have to wait..." James says.

Feeling like there was still a restriction from the sports cat, James' temporarily added a Milltek de-cat downpipe to ensure maximum flow. "Over the next few months, I was using the JB4 with the tune already on the car to see what I could get out of it. Terry at Burger tuning has always looked at my logs and data, and then advised what I should and shouldn't do. And he was always honest about what I was going to get with the JB4," James explains.

A silencer into the mid-pipe came next so that his MINI would pass sound checks, so he could get on track at events throughout the summer. Sadly, just as it seemed like everything was coming together, it suffered a total ECU failure! "I had to replace the ECU entirely," James cries, "MStyle in Essex believe it was down to the initial bench tuning carried out first. I was gutted." So, James came up with two different options; replace the standard ECU, or wait and install a standalone ECU that a local company in Essex was developing. "I ended up going with a standard one – the cost and waiting time was just too much for the standalone," James explains.

While at MStyle having the ECU replaced, they put James in touch with Simon at SA tuning. This turned out to be a blessing, as he ended up sorting out everything! "He took the car on and finished the Stage 3 tuning. He was honest from the start, blunt and to the point – he told me he would push it to what he deemed to be safe," James smiles.

After Simon worked his magic, this MINI made 340hp and 369lb ft of torque – and that figure was achieved without the addition of the methanol injection. It's not the end of the power mods for this car either, as they are currently doing some testing with the JB4 and the methanol turned on. "It's in the early stages, but it feels like I've picked up some power. I've not got any dyno results yet but hope to have some results soon," smiles James.

More recent changes to James' Cooper S include vinyl stickers around the side indicators, having the centre section of the rear bumper sprayed gloss black, and fitting a colour-coded Ultra Racing front strut brace. He's also added Ultra Racing front lower braces, both midlower braces, and the rear lower brace, all in preparation for track use.

So, performance mods aside, is this MINI finished? "As the modifications went on, I thought I'd do just a little bit more, but I was never satisfied, so ended up where I am now! At the start, I never dreamed of going as far as I have, but it got to a point where I thought I might as well go for it and do everything I could," explains James.

Originally starting out as a fast-road build, James readily admits it's got more of a track focus now. "At the minute it can dip its toes in both areas, but eventually I want to make it more track orientated. While I still use it regularly on the road, I'd like to keep it a little bit practical!" We get the feeling the story of this third-generation Cooper S is not over yet, and it's one to watch in the future

THANKS The team at Lohen, Peter at Pure Turbos, Paul, Imran, and Hash at Evolve automotive, Chris at Demon Tweeks, Charlie and Darren at Platinum Bodyworks, Terry at Burger Tuning, and huge thanks to Simon at SA Tuning



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SHAKEN 8 STIRRED

Saving for a house and supercar means some sacrifices, but that hasn't stopped Dan Ruiz transforming his Challenge 210 into a homage to 1980s Group B rallying glory

Words MARTYN COLLINS Photos 24SEVEN PHOTOGRAPHY

he sounds of turbos, pops, bangs and even flames from the exhaust – they're all highlights of the exciting Group B era of rallying. They're also key features of the latest modified modern MINIs – something owner and rally fan Dan Ruiz (@curlytopdan) was keen to exploit.

Considering the distinctive look and comprehensive list of mods fitted to this F56 Cooper S Challenge 210, you might be surprised to know that Dan wasn't a fan of MINIs when they came out. As such, he has no MINI history at all – this is his first. Dan admits, "I really didn't like MINIs, classic Minis aside. The interior layout didn't appeal to me, especially as everyone within a mile could read your speedo.

"However, when they stuck a supercharger on the Cooper S, it got my attention more – how can you hate a supercharger? But I still never considered one."

In fact, before this MINI, Dan was a Mercedes fan, owning an AMG A45 and C63 S before this

Cooper S. But it wasn't until he was searching for the A45's replacement that he came across the MINI again, this time in sought-after Challenge 210 form.

"I went to a garage-organised event, where you could test-drive numerous cars from several different brands. They had the 210 there, and I heard it pull away, popping and banging from its John Cooper Works Bluetooth exhaust. It sounded like my Merc but a mini MINI version, so it got my attention," he smiles.









PURE PERFORMANCE **ULTIMATE PERFORMANCE MINIS**







"I REMEMBERED WHEN I DROVE THE MINI – IT WAS UNHINGED FUN! MAYBE THAT WAS THE ANSWER"

So he test-drove it and immediately fell in love. "The noise, both from the engine and exhaust, along with the handling, was kind of intoxicating. Even at the time, it felt like a little rally car."

The fact that Dan is such a massive fan of the Group B era of rally cars has played a key role in this MINI build. In the end, Dan went for a Mercedes instead of the MINI, as he went on to drive an AMG C63 S with a bi-turbo V8, which he admits besotted him. "I didn't get the MINI because I needed to scratch the V8 itch at least once in my life," he explains.

A couple of years down the line and Dan started to realise that owning and running a V8 is quite costly. "I knew keeping it would mean I'd never save for a house or a Porsche 991 GT3. So, I thought to myself, what cheap-ish fun car could I get that holds its value? Then I remembered when I drove the MINI – it was unhinged fun! Maybe that was the answer."

Dan set his sights on obtaining a Challenge 210 because it had everything he wanted as standard. And in September 2018 he replaced the Merc with this Challenge 210 – totally standard, right down to the kerbed wheels. "The plan was always to modify it, but maybe not as much as I have," he says.

F56 COOPER S CHALLENGE 210

ENGINE 2.0-litre turbo B48, Mulgari+ Stage 2 Performance Pack including uprated intercooler, stiffer engine mounts, new tune, Eventuri intake, race spark plugs, custom exhaust

POWER & TORQUE Approx. 340 hp & 310lb ft

TRANSMISSION Standard six-speed manual gearbox

SUSPENSION KW V1 coilovers with Active Dampers

BRAKES JCW Pro brakes all-round with braided lines

WHEELS & TYRES OZ Superturismo GT wheels, Toyo R888R tyres

INTERIOR Custom carbon-fibre flat-bottomed steering wheel with Alcantara and matching Martini stripe, custom-trimmed B Road Hunting Club Corbeau Boss Evo 2 bucket seats, matching and bespoke interior parts

EXTERIOR Unique Tauro Design body wrap, JCW front splitter and JCW rear diffuser, tinted lights, extra spotlights, LCI facelift Union Jack rear lights

Despite the Challenge 210 limited edition's power upgrade to 210hp, plus the clever, fruity John Cooper Works (JCW) Bluetooth exhaust, Dan wanted to make further changes under the bonnet, with a de-cat downpipe, tune and uprated air filter for even more noise and power.

He then turned his attention to the exterior of this Cooper S, first with the LCI facelift Union Jack rear lights. Then to his MINI's



stance, fitting 10mm Eibach spacers and OZ Superturismo GT wheels with Toyo R888R tyres –mainly because Dan felt he needed wider and sticky tyres, along with more rally carlooking wheels.

The downpipe, tune, and air filter changes weren't enough, and almost a year into ownership, Dan wanted extra performance. This time, the 210 was despatched to bespoke performance MINI specialist Mulgari. A Mulgari+ Stage 2 Performance Pack was installed, including an uprated intercooler, stiffer engine mounts and a new software tune.

At the same time, JCW brakes with braided lines, plus a JCW front splitter and JCW rear diffuser were added. "It needed more supporting mods for the Mulgari pack, and I figured a custom tune was better to go with it. Plus it needed a lot more work on the brakes," Dan recalls. "Finally, the JCW body parts filled out the bumpers."

Next was one of the key modifications to this MINI: that dirty Martini wrap. But what was the inspiration for the weathered look? "There are many rusty-look Porsche GT3s and even GT4s out there, and I just thought they look like abused rally cars. I fell in love with the idea of this livery on the MINI."

Dan continues: "After speaking to Tauro Designs, the company that had done the previous wraps for my C63 S, it wasn't hard getting the team on board. We got another company to help with the design of the wrap and print it. The design ended up looking even dirtier and more burnt, which was awesome."

But it wasn't the final design, as the overall look was not what Dan had in his head, so he made more amendments on his phone and, after another try from the designer, he got it pretty much spot-on. "With all this effort, I needed to add tints to the headlights and more spotlights, but they had to be in more of a rally position, hence them being staggered," he explains. The Dirty Martini F56 was born.

The Bluetooth JCW exhaust might have been loud, but it wasn't loud enough, and Dan wanted flames. So, a custom exhaust was fitted, consisting of a 3" straight pipe leading to a Y-pipe and two 100mm carbon tips. Plus, despite a comprehensive mechanical makeover, Dan wasn't finished with the 2.0-litre B18 engine just yet – a beautiful carbon Eventuri intake and race spark plugs were soon added. He laughs, "I needed more airflow and carbon. The spark plugs were fitted because I kept getting misfires, but that's just because the standard ones were dying."

With the exterior of his MINI looking the part and the performance to match, Dan turned his attention to the well-equipped but very standard interior. A custom carbon-fibre flat-bottomed steering wheel with Alcantara and matching Martini stripe was added, and then the biggest interior change came, with him binning the standard leather-trimmed sports seats, replaced by custom tartan-trimmed B Road Hunting Clubsupplied Corbeau Boss Evo 2 bucket seats.

"I fitted the steering wheel for better grip. I

wanted the seats to hold me in better, and the other bits were just to do something a little different inside and match it to the exterior. Changing bits of the interior was never really on my radar, but after time and meeting new people within the MINI community, I kept getting more ideas," Dan explains.

More recently, Dan fitted KW V1 coilovers with Active Dampers to further improve the handling and get the car even lower. Other smaller changes also quench his appetite for carbon fibre, with a petrol cap cover and stubby aerial, plus a set of neat LED side repeaters. So, with the Challenge 210 being a sought-after third-generation limited-edition MINI, we ask Dan if he felt any guilt when modifying this car...

"No guilt, shockingly. Although I have had one person that was super surprised that I have done it to this model. However, all the mods are reversible," he confirms.

"I am pretty much finished with the mods now, but when I take it onto tracks I suspect an LSD will be needed to get the power down better and improve the traction," admits Dan. "Then it will be a case of upgrading the bits that break or show up as lacking as and when I do." Wherever Dan goes with the F56, you can bet MINI enthusiasts will be stirred...

THANKS Tauro Design, Mulgari, Prestige Wheel Centre, SMPS2012, B Road Hunting Club, Eventuri, Rich's Fabrication Shop, MiniWorksUK, DMS Automotive









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F56 MINING GUIDE

The styling might be similar, but underneath, the F56 is an all-new MINI – we tell you how to buy the best third-generation hatch

Words MARTYN COLLINS Photos MINI, DAVY LEWIS, 24SEVEN PHOTOGRAPHY, MATT RICHARDSON

he second-generation R56 was an evolution of the R50/R53, fixing many of the first-generation MINI faults and making key improvements. The current, third-generation F56 MINI hatch was all-new and probably represented the biggest change for the brand in the 13 years since MINI was relaunched in the UK.

Firstly under the bonnet where, following American-Brazilian then French-supplied power, these MINIs were the first to receive BMW's own Twinpower turbocharged threeand four-cylinder petrol and diesel engines. Then there was the UKL1 chassis that was also all-new, more rigid and has since gone on to underpin BMW models such as the 2 Series MPV. However, BMW stuck to its already proven suspension design but made it stronger and lighter, maintaining the fun-to-drive package that the MINI has always been since its BMW rebirth.

Outside, MINI couldn't move too far away from the design language established by the Frank Stephenson original. However, that didn't stop the tweaking, with the large bug-eyed headlights and chrome-edged grille and the sizeable rear light clusters at the back. The third-gen MINI is also longer and wider than its predecessors; if you park an F56 next to a first or second-generation, you'll see how it dwarfs them in size. In profile, you'll also notice it has a much longer overhang at the front, the result of new crash regulations, and as such, it's not such a well-proportioned design as the first two.

Inside, the soft-touch plastics and interior trim are more than a match for any you'll find in a BMW. Gone is the almost laughably large central speedo of the R56, replaced by a central colour infotainment screen – sat-nav or not. Instead, the speedo moves to the rev counter on the steering column. Elsewhere, space in the front is fine, but, despite more foot and shoulder room in the back, rear space is still tight. At 211 litres, the boot is up 61 litres over the R56.

A BRIEF HISTORY

The first models available at launch in March 2014 were the performance Cooper and Cooper S versions, plus the frugal Cooper D. The Cooper boasted 136hp and a 0-62mph time of 7.9 seconds, yet, despite the performance, the lukewarm hatch was still capable of a 62.8mpg combined consumption figure. Go for the Cooper S, and the power was boosted to 192hp, with torque up to 206lb ft and 0-62mph acceleration in just 6.8 seconds. However, like the Cooper, the F56's performance wouldn't hit too hard at the pumps, with a 49.6mpg combined figure. Later on, the Cooper SD, plus performance range-topper John Cooper Works were added. The One was powered by a 1.2-litre version of the TwinPower engine with 102hp and a top speed of 121mph. The diesel version of the One was fitted with the same three-cylinder 1.5-litre as the Cooper D, here detuned to 95hp. The Cooper SD offered the best performance and efficiency mix; power was up to 170hp, 0-62mph acceleration took just 7.3 seconds, and it was still capable of 70.6mpg. The F56 JCW hatch definitely lived up to its hot hatch tag, with 231hp, 0-62 acceleration in just 6.1 seconds even in auto form, and a top speed of 153mph.

In 2018, the F56 hatch received its LCI facelift with trim changes, new colour options, brighter front headlights with circular 'halo' DRLs and Union Jack-style rear lights. Spring 2021 equalled another more significant facelift with new bumpers, grille, colours and trims.

OUR PICK

Many will say the 2020 306hp two-seater GP3 is the ultimate F56, but our pick would be the UK-only Challenge edition, which was released in 2016. Designed to show the potential of the current F56 JCW hatch, the Challenge edition was developed with MINI and journalists from *evo* magazine. As the name suggests, the Challenge was produced to celebrate the





Cabin feels modern and well built









MINI-supported racing series. It was also fitted with a few of its unique parts, including the fully-adjustable Nitron suspension, Mintex brake pads, Team Dynamics alloys fitted with super sticky Michelin tyres, and a proper Quaife limited-slip differential, all of which go together to make the perfect track MINI. It is more exclusive than the GP, with just 50 produced.

WHAT TO PAY

Around £8000 is where F56 Cooper prices start. Add another £2000 for the swifter Cooper S, but these are for the earliest 2014 cars, so watch for engine issues. Diesels might be out of fashion, but the fastest still starts at £11,000 for a 2016 car with 42,000 miles. The JCW is harder to find, and the cheapest we found was a 2016 car with 70,000 miles, priced at £13,000, which was available from a specialist. You'll need at least £8000 to get into one of the earliest LCI Cooper models, with around 90,000 miles. Around £10,000 is where you'll find facelift cars with more modest mileage between 30-40,000 miles. MINI JCW Challenge editions are rare because so few were produced, and prices start at around the £20,000 mark, with £36,000 seeming to be the entry point for GP ownership. As with all MINIs, buy on condition, specification and colour. There are also plenty of limited edition models: the 1499GT and the One, Cooper and Cooper S Seven, in particular, are worth searching out.

WHAT TO LOOK FOR

The MINI's TwinPower engines have proved, in general, to be reliable, but there was a problem on early Cooper and Cooper S engines with the crank bearing. We were told that with some of the engines they managed to change the bearing – others involved a complete engine swap! Other than that there were some recalls for the oil solenoid early on, again for Cooper and Cooper S models.

The F56 JCW is powered by a 2.0-litre B48 turbocharged in-line four from the same engine family. Thankfully, the B48 doesn't appear to be affected by problematic crank bearing or oil solenoid issues on early F56 Cooper and Cooper S models. In fact, the only mechanical issues we've heard of with the B48 were some problems with the injectors and some odd air leaks. Engine mounts can fail, so listen for odd noises on startup.

All F56 JCW hatches were fitted with six-speed automatic transmission for the first three months of production, the same gearbox that's fitted to standard models. However, the fastest MINI auto has JCW-specific software. Problems are rare but watch for any modded automatic models, as we have heard of failures on poorly remapped cars. On manual cars, clutches are strong but are known to squeak, which will go with adjustment, only to reappear annoyingly later on.

Outside, check the door shuts for signs of rubbing, as there's been a known issue with the door seals taking the paint off. Black grille and bumper bar plastics also fade noticeably on some cars, so see if you're happy to accept this. The lower black plastic trim quickly loses its colour too, although it does respond well to plastic cleaning and protecting products.

Inside, check for wear on the bolsters of the sports seats that's not in line with the claimed mileage and that the steering wheel horn push is







working, as this is a common failure point!

MODDING

There is no standard limited-slip differential fitted to the third-generation F56 MINI, even on the Cooper S or JCW. Instead, there's a clever torque-vectoring traction control system that's supposed to stop the front wheels spinning. However, in slippery road conditions or when pushing on, the JCW, in particular, can struggle. So, if you're adding more performance, or going on track, fitting a proper Quaife limited-slip differential is a better option, as the Challenge limited edition proved. For around £800, the Quaife works by progressively locking as the torque increases and doesn't have any plates or clutches that will eventually wear out.

Engines that breathe better make more horsepower – fact! There are many intakes out there for the F56 MINI, but one of the most highly regarded by owners is the CravenSpeed one. Purpose-built for the third-generation MINI, the CravenSpeed Induction Kit replaces the original plastic induction pipes and air box with billet machined aluminium pipes, and a K&N cone filter to maximise surface area and improve airflow, on top of offering more horsepower and increased induction noise. This kit isn't just reserved for the Cooper S and JCW and can be fitted to the Cooper, too.

Another bolt-on part that can improve the MINI's breathing is the exhaust. Pre-LCI JCWs sound the part, plus pop and bang more. Another option available before emissions changes for the MINI Cooper S and JCW was the JCW Pro exhaust. Still available for £1600 from specialists, this exhaust's party piece was that it had a Bluetooth-operated valve to make it louder. However, you can buy cheaper valved systems which work in the same way, like the Remus one for around £1300.

With an induction kit and exhaust, the next part to be upgraded on a Cooper S and JCW to see big power is the front-mounted intercooler, which sits behind the front grille, and doing \longrightarrow









so will give you cooler charge temperatures and more power and torque. Prices start at under £400. With the bolt-on parts we've already mentioned fitted, the best way to make the most of them and release the extra power is via a remap. For example, even a Cooper could have an extra 55hp thanks to a Stage 1 tune priced at around £500 from specialists. Or, a Stage 3 tune for Cooper S or JCW models equalling 285hp, priced at just over £400.

Standard F56 brakes are decent, but upgraded brake pads are a good starting point. If you're adding performance mods, a set of JCW Brembo calipers is a sensible OEM+ upgrade at around £600 secondhand or £1500 new. Finally, a set of coilovers will not only sharpen the handling, by lowering the centre of gravity, as well as reducing the F56's lofty stance.

VERDICT

The F56's styling might not appeal in the same way as the first and second-generation MINIs did, but if you can get past that, it is the best and most sophisticated MINI yet. Still as good to drive, with a little more space and better made, and faults and failures are few. And, with some performance mods, it can be turned into a real giant killer









COLLECTOR'S EDITION

PURE PERFORMANCE

FORMA



HARDCORE MACHINES



PERFORMANCE ICONS



FULL-ON BUILDS





BUYING AND TUNING GUIDES

When the new MINI launched, it started a motoring phenomenon, one that has a dedicated following of fans around the world, fans who love nothing more than making these MINIs their own, and this special collector's edition magazine is dedicated to these ultimate modified creations.

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