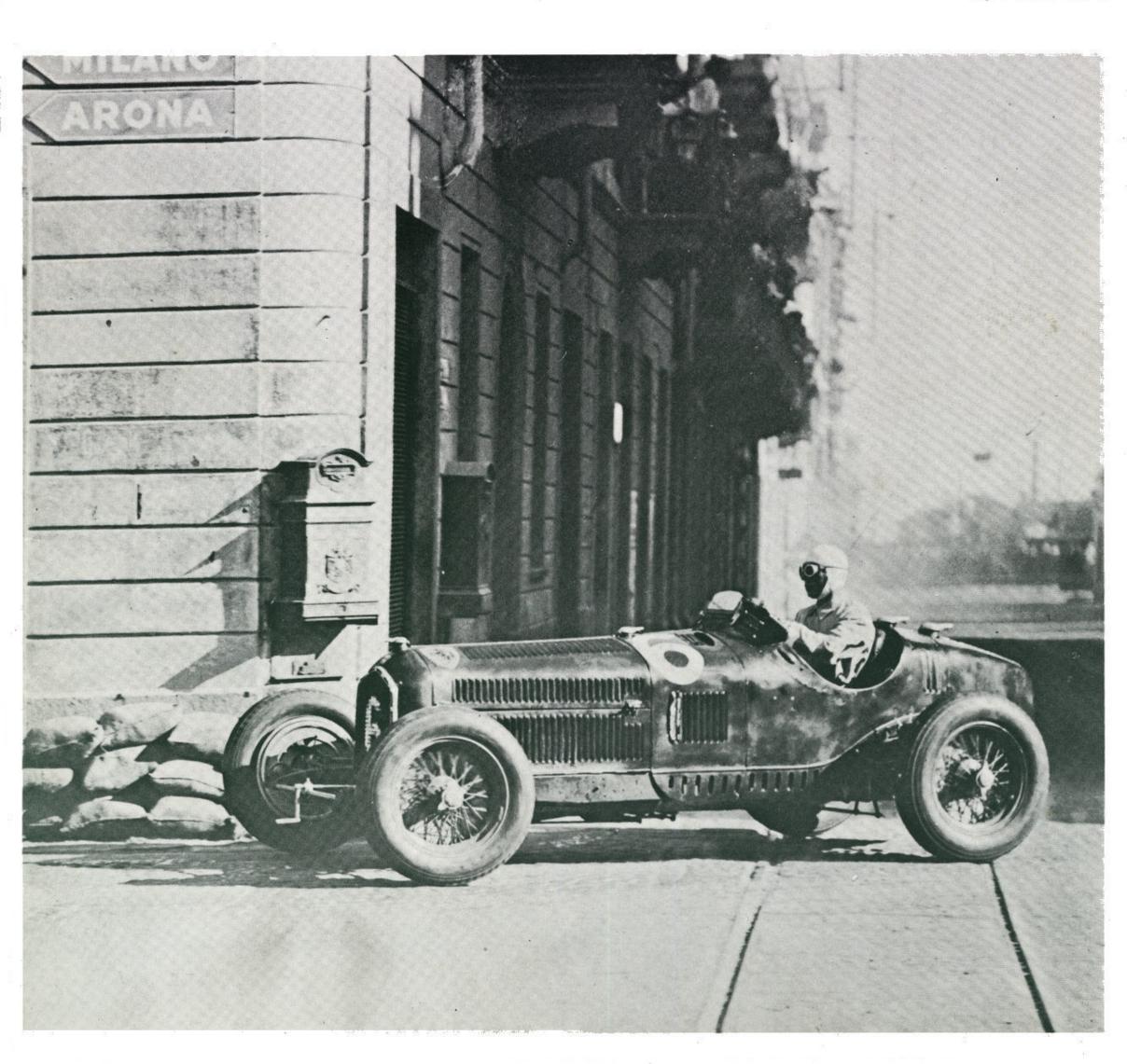
CARSINPROFILE NO6

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Alfa Romeo Monoposto Type B P3

by Peter Hull



About the Author

Peter Hull was a regular officer in the R.A.F. and Chief Flying Instructor to the Cambridge University Air Squadron, and is now the Secretary of the Vintage Sports Car Club. He has on occasion raced a pre-war motor-cycle a Vintage aeroplane, a Vintage sports car and an Historic Racing Car (E.R.A.). His publications include Racing an Historic Car, Alfa Romeo – A History, The History of the V.S.C.C. and The Vintage Alvis. His outstanding achievement, he claims – entering the King's Cup Air Race the year it was cancelled.

Front Cover Illustration: Achille Varzi in the 1934 Circuit of Biella race.

Back Cover Illustration: The Hon. Brian Lewis, 2·6-litre Monoposto, winning the 1934

Mannin Moar race. (Autocar).

A note to our US readers

from the publisher

As from 1 April 1973 we have established a Sales Office in the US. This means that you will be able to obtain your Profile requirements without the problems of overseas mailing. Ralph M Neil (formerly Continental Air Lines), has joined the company as Manager, North America and is based in the Los Angeles area. If you have any problems or enquiries please contact Ralph at Profile Publications Limited, P.O. Box 2368, Culver City, California 90230. Telephone: 213 398 2500. We would also welcome all dealer inquiries.

Conversion tables

1 litre = 1,000 cc. = 61.0253 cu. ins. = 0.2199 Imperial gallon = 0.2642 U.S. gallon

1 Imperial gallon = 8 pints = 1.16 U.S. gallon = 277.420 cu. in. = 4.5459 litres

1 U.S. gallon = 4 quarts = 231 cu. in. = 3.785 litres

1 inch = 25·40 millimetres

1 mile = 1.609 kilometres

1 kilometre = 0.6214 mile

Horse Power

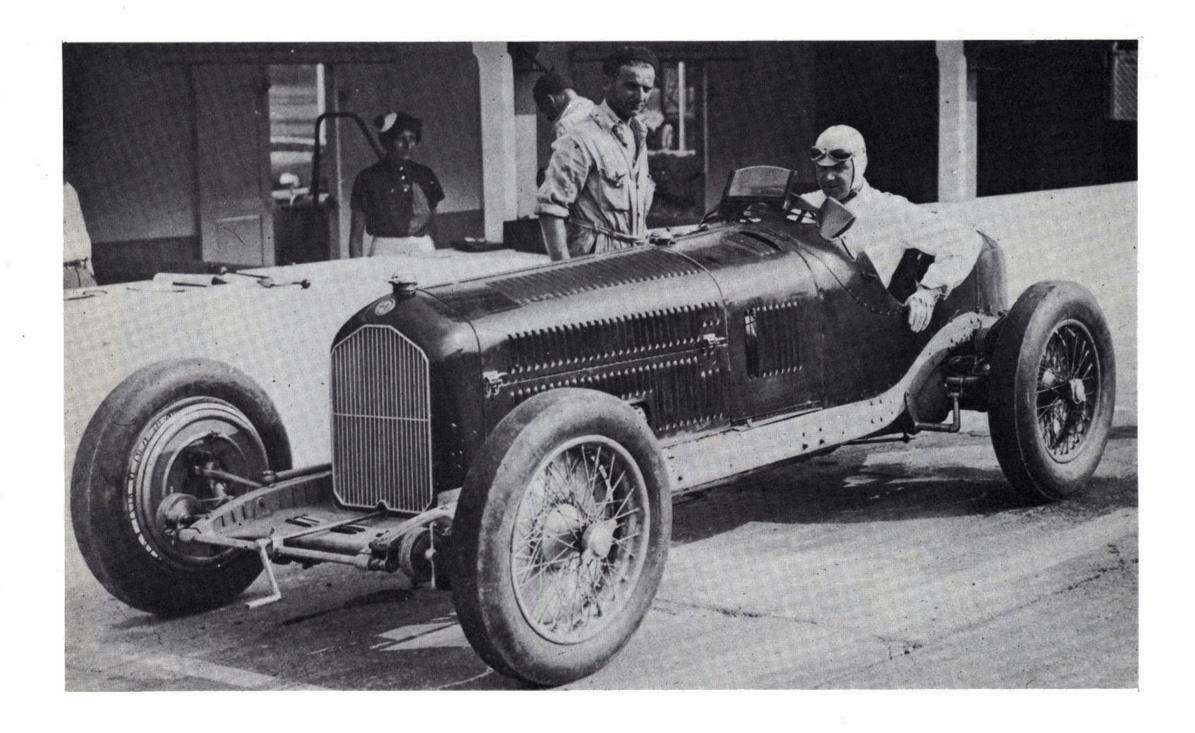
In the English-speaking countries (British Commonwealth and U.S.A.) horse-power represents a slightly higher power than metric horse-power expressed as the German PS (*Pferde Staerke*), or the French CV (*Cheval vapeur*), in the ratio of 1.0139:1.

Power Outputs

If a brake horse-power (b.h.p.) figure is quoted net in German D.I.N. (Deutsche Industrie Norm) or British B.S.Au., then this net power is delivered by the engine to the transmission. If, however, power is quoted gross, or American S.A.E. (Society of Automotive Engineers), this power is delivered by the engine, out of the car, and tested under ideal conditions, being devoid of such power-consuming accessories as fan, water pump, dynamo, exhaust system etc.

Glossary of Anglo/American Motoring Terminology

English American English American Paraffin Bonnet Hood Kerosene Gasolene/Fuel Boot Rear Trunk Petrol Displacement Petrol tank Gas tank Capacity Carburetor Carburetter Side-valve L-head Coupé de ville Muffler Town car Silencer Dickey Rumble seat Sparking plug Spark plug Dip switch Beam switch Three-light Three-window Drophead Convertible Tourer Phaeton/touring Track Dynamo Generator Tread Two-cycle Fixed head Hardtop Two-stroke Four-seater Four-passenger Tyre Tire Windshield Hood Windscreen Top Kerb Curb Wings Fenders



Alfa Romeo Monoposto Type B (P3)

by Peter Hull

1932-The first Season with 2.6-litre Cars The new 2.6-litre Monoposto Alfa Romeo Grand Prix car, also known as the Type B or P3, made its debut in the five hour Italian GP at Monza on June 5th, 1932. Following the Alfa Romeo tradition of first appearance Grand Prix wins already instituted by the P2 in 1924 and the 'Monza' in 1931, the new Monoposto, driven by Tazio Nuvolari, duly won the race at an average speed of 104.13 mph. This was within an ace of the lap record by the 2-litre P2 in the 1924 GP at Monza of 104.24 mph and only slightly slower than the 1931 Italian GP lap record put up by the 2.3-litre 'Monza' model on the same circuit at 105 mph. The lap record in the 1932 race, however, was at 112.2 mph, put up by Luigi Fagioli's big 4.9-litre 16cylinder Maserati (which was powered by two 8-cylinder engines geared together) and this car, which finished 2½ minutes behind Nuvolari's, might have won the race but for inefficient refuelling stops. A second Monoposto Alfa in the race, driven by the veteran Campari, came in fourth behind Borzacchini's 'Monza', so the new cars did not have it all their own way.

On July 3rd the five hour French Grand Prix was held on the Rheims-Gueux circuit, a proper

road course which had formerly been used for the Grand Prix de la Marne, and here the new Alfa Romeos truly triumphed against 4.9- and 2.3-litre Bugatti and 2.3-litre 'Monza' Alfa Romeo opposition, for the complete Monoposto team finished in the first three places in the pre-arranged order of Nuvolari, Borzacchini and Caracciola.

It was the same story for the German Grosser Preis at the Nürburgring on July 15th, the Bugatti opposition, headed by the Type 51s, being completely outclassed by the three Monopostos of Caracciola, Nuvolari and Borzacchini, who finished in that order, the first two actually lapping fourth man Réné Dreyfus's Type 51 Bugatti twice.

Three Italian races of lesser importance then fell to Nuvolari's Monoposto, the Coppa Ciano at Montenero, the Coppa Acerbo at Pescara and the Coppa Principe di Piemonte at Avellino against Bugatti, 'Monza' Alfa Romeo and Maserati opposition.

Only two Monopostos contested the Czechoslovakian GP at Brno on September 4th, Tazio Nuvolari and Baconin Borzacchini being the drivers, and this was a race that the new Alfa Romeos actually did not win. Nuvolari at first led the race, which was held in pouring

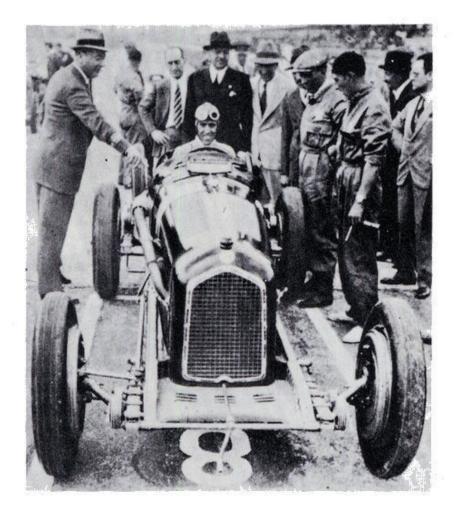
Caracciola testing a P3 with an unusual radiator cowl in early practice for the Monza GP, September 6th, 1932 rain, until he was held back by ignition trouble. Then Borzacchini, who had held second place, retired with a broken differential, and in the end Nuvolari finished third to Chiron's Bugatti and Fagioli's Maserati.

At the Monza GP meeting on September 11th Caracciola won the 20 lap final in his Monoposto at 110.8 mph, and Nuvolari, who was third behind Fagioli's big Maserati, after being delayed by loss of fuel pressure, put up identical record laps both in his heat and in the final of 112.7 mph.

The following week-end inefficient pit control caused another Monoposto defeat, this time at the hands of a privately-owned 'Monza' Alfa Romeo driven by the Frenchman Raymond Sommer. This was at the Miramas track in the Camargue (now used for tyre testing) on the occasion of the GP of Marseilles where Nuvolari drove the sole works-entered Monoposto and allowed the privately-entered 'Monza' to go into the lead due to a slow pit stop. As soon as the situation was realised he set off after the slower car, but then burst a tyre, and the 'Monza' won from him by some 40 secs at 109.80 mph after Nuvolari had been lapping at 125 mph.

The Design Analysed

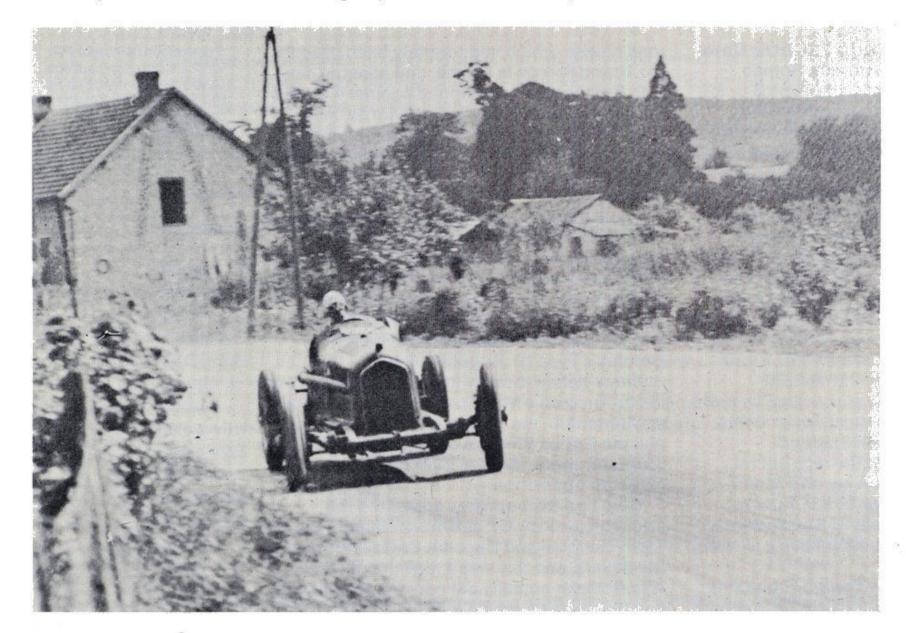
The Alfa Romeo which is the subject of this Profile is known by three names—the Monoposto, the Type B or the P3. *Monoposto* is simply the Italian word for the English 'single-seater' or the French *monoplace*, and it has come to be written with a capital letter in the case of the P3 because both the P1 and the P2 which preceded it had two-seater bodies, and the P3 was the first European car built to a GP formula, and which ran in a GP, with single-seater bodywork in which the driver was placed centrally in the chassis. There is a slight qualifi-



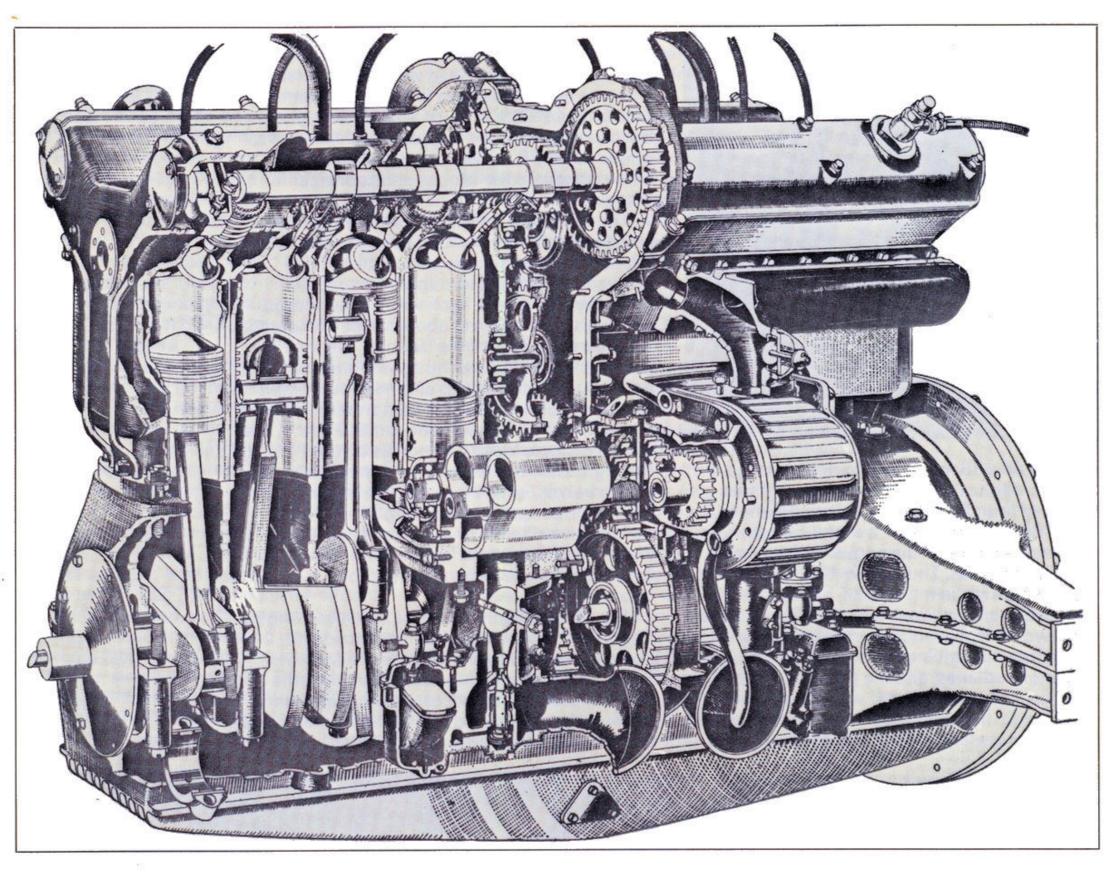
Nuvolari won the 1932 Italian GP at Monza on the P3's first appearance. (Alfa Romeo)

cation to this last statement, as this was also a feature of the Monoposto's immediate predecessor, the Alfa Romeo Type A, but the Type A was never seriously campaigned as a Grand Prix car.

Already we have seen that the 16-cylinder 4.9-litre Maserati of Luigi Fagioli, powered by two side-by-side 8-cylinder engines, was a force to be reckoned with, and in the early 'thirties Bugatti was also racing a car suitable for fast circuits, the 8-cylinder 4.9-litre Type 54. Previously Bugatti had also built the less-successful Type 45 of 3.8 litres, with two 8-cylinder blocks side by side with geared crankshafts in a common crankcase which was used for hill climbs in 1928–30. Alfa Romeo's reply to the 16-cylinder Maserati, which had first



Nuvolari on his way to winning the 1932 French GP at Rheims in a 2.6litre Monoposto. (Alfa Romeo)



Cut-away drawing by L.C. Cresswell of a 2.6litre engine. (IPC Ltd)

appeared in 1929 in 4 litre form, was the 3.5litre Type A of 1931. This had two developed versions of the supercharged 6-cylinder 1750 cc sports car engine side by side in the chassis, with the crankshafts geared together and, more remarkably, two gearboxes and two propeller shafts to the back axle, which was fitted with two differentials. There is evidence that the design of the Type A influenced that of the Type B, and although the early car was nothing like so successful as the Monoposto, it had a very definite moment of glory at Pescara in August, 1931, where Campari drove one to victory from Chiron's Type 51 Bugatti, with third place and fastest lap going to Nuvolari in a second Type A.

Vittorio Jano (1891–1965) could be termed Italy's greatest designer of high performance cars, for what other Italian could claim to have evolved so many classic designs, not only the P2, P3 and Type C 8C-35 and 12C-36 Alfa Romeos and D50 Lancia and Lancia/Ferrari Grand Prix cars, but also great road cars like the 1500, 1750 and 2.3-litre Alfa Romeos and the Lancia Aurelia?

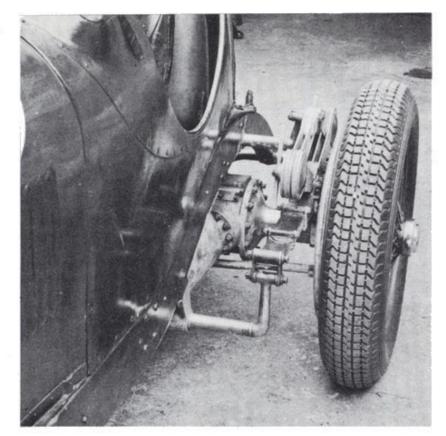
Back in 1923 Giuseppe Merosi, Jano's distinguished predecessor at Alfa Romeo, had brought out the GPR or Gran Premio Romeo Alfa Romeo which was called the P1 for short. Although never actually raced, the P1 in super-

charged form was used as a test bed in the development of Jano's first and favourite Grand Prix design, the immortal P2, which was victorious in its and its constructor's first appearance in GP racing in the French Grand Prix at Lyons in 1924, Giuseppe Campari being the driver.

Jano's next Grand Prix car, the 'Monza', was developed from his new 8C 2300 sports car and not from the old P2, whilst the Type A was also a breakaway from what had gone before. It was thus logical that the new Monoposto, following on from the 'Monza' and the Type A, with which it had definite links, should be called the Type B, but old traditions die hard, and by 1933 it was being referred to as the P3 in a race programme in Italy, and convenience and common usage soon conferred the name P3 upon it.

The heart of a car is its engine, and in the case of the P3 this was clearly a follow-on from that of the Monza, though apparently with a glance at a remarkable 1100 cc racing Salmson engine which had appeared in 1928 and which was the work of the French designer Emile Petit. An intriguing question that will never be answered is whether Jano was even aware of the existence of the Salmson engine, let alone influenced by its design.

The original twin overhead camshaft P3 engine of 2.6 litres had 8 cylinders in line, each measuring 65 x 100 mm (2654 cc) compared



with the 65 x 88 mm measurements of the 2336 cc 'Monza'. The cylinders were in two blocks of four, for a feature of the straighteight Alfa Romeo design was the camshaft drive in the centre of the engine to cut down torsional stresses. Thus the 2-4-2 layout crankshaft, which ran in ten bronze-backed white metalled bearings, was made up of two halves with two helical gears bolted between them in the centre, one driving the camshafts through two intermediaries, and the other the superchargers, magneto, oil and water pumps. On the 'Monza' the crankcase was of light alloy, on the P3 it was elektron, but a more important

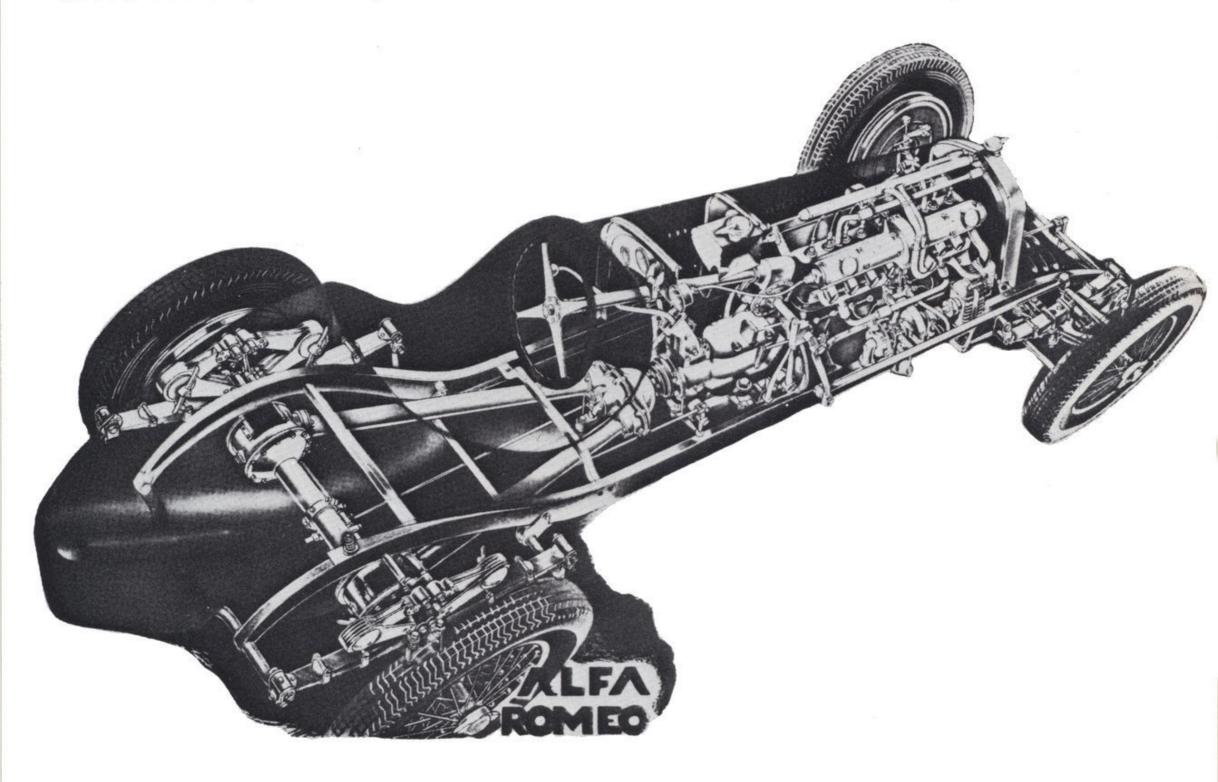
difference was that, though both engines had alloy blocks with steel cylinder liners, on the 'Monza' the cylinder head was detachable, whereas on the P3 it was fixed. At the same time on the P3 the exhaust was on the right hand or offside of the engine, and the inlet was on the nearside, which was opposite to the arrangement on the Monza and sports car engines.

The final main difference between the two engines was that instead of the large capacity supercharger and single carburettor of the 'Monza', the P3 had two smaller capacity Roots-type blowers, each with its own carburettor, giving a boost of about 10 lbs compared with the circa 8 lbs of the 'Monza'. On the P3 the ratio of the drive to the superchargers. normally about 1.1 times engine speed, could be altered fairly easily. The compression ratios on the two engines were the same, 6.5 to 1, but the valve angle was 104 degrees on the P3 and 90 degrees on the 'Monza', and the P3 had bigger valves, which were 34 mm in diameter for both inlet and exhaust as against 29 mm, running direct in the head, with no valve seat inserts. Official output figures were 165 bhp at 5,400 rpm for the Monza and 215 bhp at 5,600 rpm for the P3.

The 49.9 x 70 mm (1085 cc) Salmson engine design of 1927, though but little raced and never developed by the Société des Moteurs Salmson due to a change in policy, nevertheless achieved some successes in private hands in the early 'thirties and had the same method of drive to the twin overhead camshafts, and the

Detail of the ½-elliptic rear suspension showing the double friction type shock absorbers and the housing for the crownwheel and pinion of the nearside propellor shaft

Cut-away drawing by L.C. Cresswell of a 1932 car. (IPC Ltd)



same twin supercharger arrangement on the nearside with exhaust on the offside, as the P3. There the similarity ended, however, for the Salmson crankshaft was a 4-4 running in 5 roller and ball bearings, and the connecting rods were also roller bearing, unlike the plain bearing two bolt rods of the P3. The Salmson engine, which used Cozette vane-type superchargers, whereas Jano's Roots blowers were of his own design, also had desmodromic tappets, but the P3 used the well-known adjustable mushroom tappets which had first been introduced on the 1500 and 1750 sports cars. The Salmson engine gave a remarkable and reliable 140 bhp at 8,000 rpm, outstanding for an 1100 cc engine.

In all but one respect the chassis of the P3 was conventional for its day, though narrower, of course, than its contemporaries. The width was 2 ft 2 ins, and as the body was the same width as the chassis, large cutaways were provided for the driver's arms. The wheelbase of 8 ft 8 ins was the same as that of the 'Monza', as was the 4 ft 7 ins track of the front axle, but the Monoposto had a narrower track back axle of 4 ft 5 ins, the 'Monza' having the same 4 ft 7 ins track at the back as at the front.

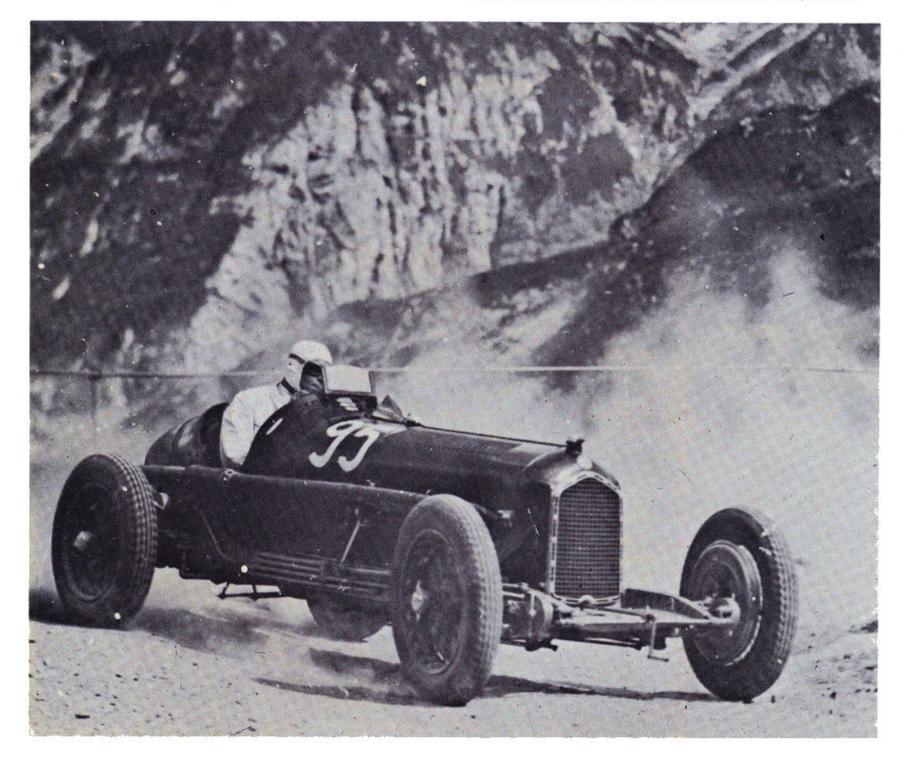
The early 1932/33 P3 had semi-elliptic springing all round, with two radius arms preventing the front axle twisting under braking, and there were double friction shock absorbers at the rear, single at the front. The unladen weight was down to 13 cwt 90 lbs (701 Kg) thanks to light alloys used in the engine and for brake drums and shoes, shock absorber arms

etc, and the P3 Alfa weighed no more, and probably less, than a smaller 2.3-litre Type 35 Bugatti or straight-8 $1\frac{1}{2}$ -litre Delage of the previous decade.

The 15\(^3\) inch diameter brake drums and the rod-operated braking system was the same as on the 8C 2300 sports cars, and another saving in manufacturing costs was made in the adoption of the four-speed gearbox from the sports cars. The clutch, too, was the sports car one, but with the linings omitted and extra plates and alloy rings substituted to deal with the higher torque.

It was, however, in the remainder of the transmission that the P3 Alfa Romeo differed from any other racing car, for the drive to the rear wheels was entirely novel. The differential, instead of being in the back axle, was attached to the rear of the gearbox and was thus virtually part of the unsprung weight of the car. Behind the differential two propeller shafts enclosed in torque tubes came out to form a V, and each of these led to a small bevel gear in a light alloy housing just inboard of each rear wheel.

Why this form of transmission was adopted is a puzzle, although there is no doubt that the clumsy double propeller shaft drive of the Type A must have prompted further and superior thoughts in this direction. The theoretical advantages of the Type B transmission are (a) a low seating position with the driver's seat set between the propeller shafts aft of the apex of the V, instead of on top of a single propeller shaft and (b) a light back axle due to the absence of a differential within it, and very short

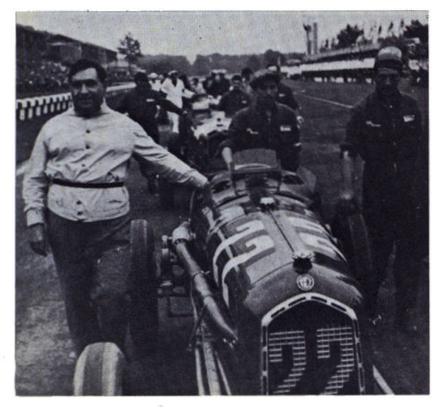


Caracciola hill climbing in the Alps in 1932. The four external oil pipes seen running along the offside frame member were reduced to two from 1934 onwards. (Alfa Romeo)

half-shafts that were almost stubs and therefore very light in comparison with conventional half-shafts. It must be remembered that the P3 Alfa Romeo was one of the last Grand Prix designs before the general adoption of independent rear suspension, and perhaps this rear axle should have been the ultimate in non-independent design. Experiments were later made with a B Type fitted with swing axles and a transverse leaf spring at the rear, but it is thought that no car was actually raced in this form.

The writer recently discussed the P3 rear axle design with Peter Waller, an engineer by profession, who has regularly raced an E.R.A. in Vintage Sports-Car Club events since 1958, or for most of his adult life, as well as having had a very successful season in 1971 with the P3 belonging to Neil Corner, which he prepared for racing as well as driving it. First of all, although the seat pan is set between the two torque tubes, no attempt is really made to give the driver a lower seating position than in a single propellor shaft monoposto such as a Maserati, so (a) can be dismissed. With regard to (b), Peter Waller feels that, with the addition of the two bevel gears and propeller shafts, the reduction in weight of the rear axle is not really very significant in comparison with a conventional type. The one positive advantage he brings out, not mentioned above, is that the design allows for much greater facility in changing the final drive ratio than with the normal arrangement: always a useful factor in a





racing car running on different circuits and in different events (including international hill climbs in the case of the P3 in its heyday) during a busy season.

The scuttle on the P3 was made detachable to give easy access to the gearbox and interchangeable final drive ratio, and some drivers ran with the detachable part removed on slow circuits in very hot weather. The gearbox was between the driver's legs, with the clutch pedal to the left of it, the brake pedal to the right, and the accelerator pedal to the right of the brake. The central gear lever was cranked to the left at the top, for changing gear with the left hand.

The wooden-rimmed steering wheel had very little spring in it, spring steering wheels never being favoured by Italian drivers it seems, whilst on the dashboard the driver was faced by no less than two rev counters. These were said to be provided because it was easy to over-rev the very smooth engine, so insurance against rev counter failure was considered vital, and two rev-counters had also been fitted to the 'Monzas'.

1933-Almost a Sabbatical Year

Due to economic conditions, Alfa Romeo announced at the beginning of 1933 that they were withdrawing from Grand Prix racing, and that they would not even allow the Scuderia Ferrari to carry on racing the P3s for them as independents. Previously Enzo Ferrari had been responsible for organising the Alfa Romeo works racing, but the cars had carried the famous Alfa Romeo 'quadrifoglio' or four-leafed clover.

With the works withdrawal, Ferrari now had to fall back upon the older 'Monza' models for 1933, which were to carry his own Scuderia Ferrari badge in place of the 'quadrifoglio'. However, development work was done on the 'Monzas', which the Scuderia increased in capacity from 2.3 litres to 2.6 litres and, more important, the engines were fitted with Weber carburettors, Daini of Weber being responsible for their considerably better performance over the original cars rather than the capacity in-

The Ferrari 'Monza' Alfa Romeos proved to be very competitive, particularly when Tazio Nuvolari was at the wheel, his talent being worth as much extra bhp as the increase in engine capacity or the re-working of the carburation. Perhaps it was the extra power available (178 bhp against the former 165 bhp) that caused a weakness in the back axle of the 'Monza' to show up, and this so aggravated Nuvolari, who had two victories snatched from his grasp as a result of it, that he left the Scuderia Ferrari and obtained a new 2.9-litre Maserati which he campaigned as an independent. After correcting an inherent weakness in the Maserati chassis design, the Maestro immediately showed that his monoposto Maserati was more than a match for the 2.6litre 'Monzas', beating the Ferrari 'Monza' of Antonio Brivio (who was no mean driver) in the Coppa Ciano at Montenero by no less than eight minutes.

It was almost certainly this Maserati superiority which persuaded Alfa Romeo to release

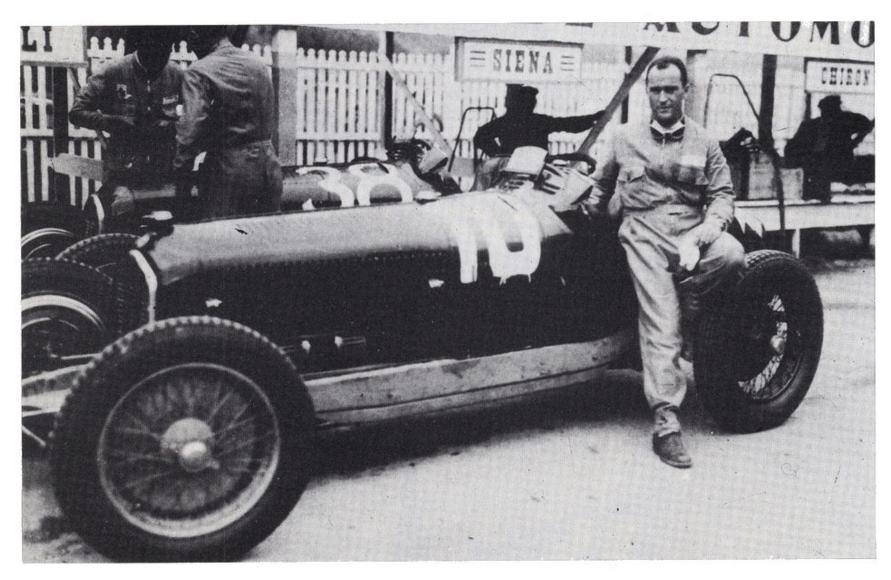
Marcel Lehoux in a 2.9litre car at Monaco in 1934. The flask behind the seat enabled the driver to take a drink through a rubber tube during a long race

Giuseppe Campari going to the start before his fatal accident in the 1933 Monza GP. His car carries the Ferrari shield on the scuttle. (Alfa Romeo)

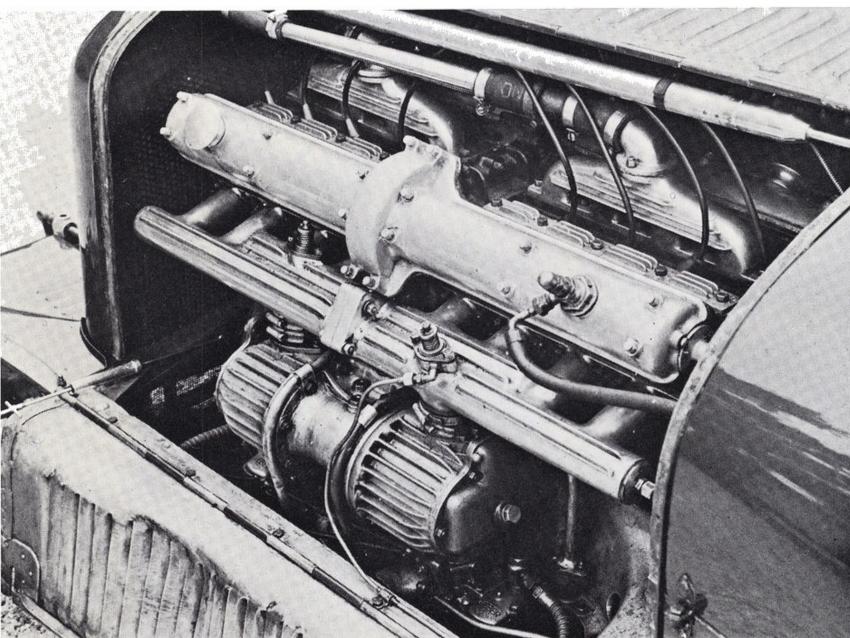
the Monopostos to Ferrari once again. Their first 1933 appearance was at Pescara in August, a single car being entered to be driven by Luigi Fagioli. The result was a victory for the Monoposto, but only by default, for Nuvolari's Maserati was delayed by a seized universal joint in the transmission when all set to win the race. At Comminges, in France, a week later Fagioli had a very easy victory, for no monoposto Maseratis were present, and at Miramas the P3s of Chiron and Fagioli finished first and

second, Nuvolari retiring his Maserati sixty miles from the end of the 300 mile race when he was almost certain of victory. Ironically, the reason for his retirement was back axle trouble.

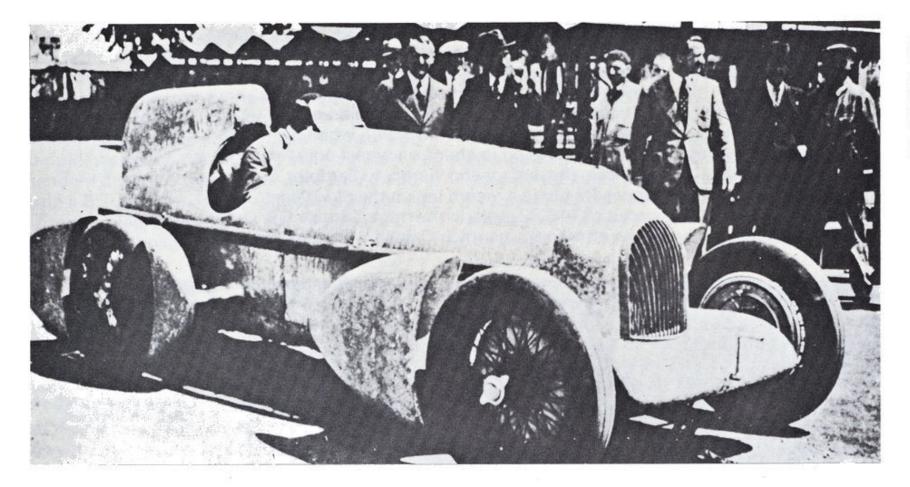
In the Italian GP at Monza, Nuvolari on the Maserati was again all set for a win when he had to go to his pit to change a wheel only two laps from the end, giving victory to Fagioli, whose P3 put in a record lap on the old 10 km circuit of 115.82 mph. In the tragic Monza GP in the afternoon, in which Campari, Borzacchini



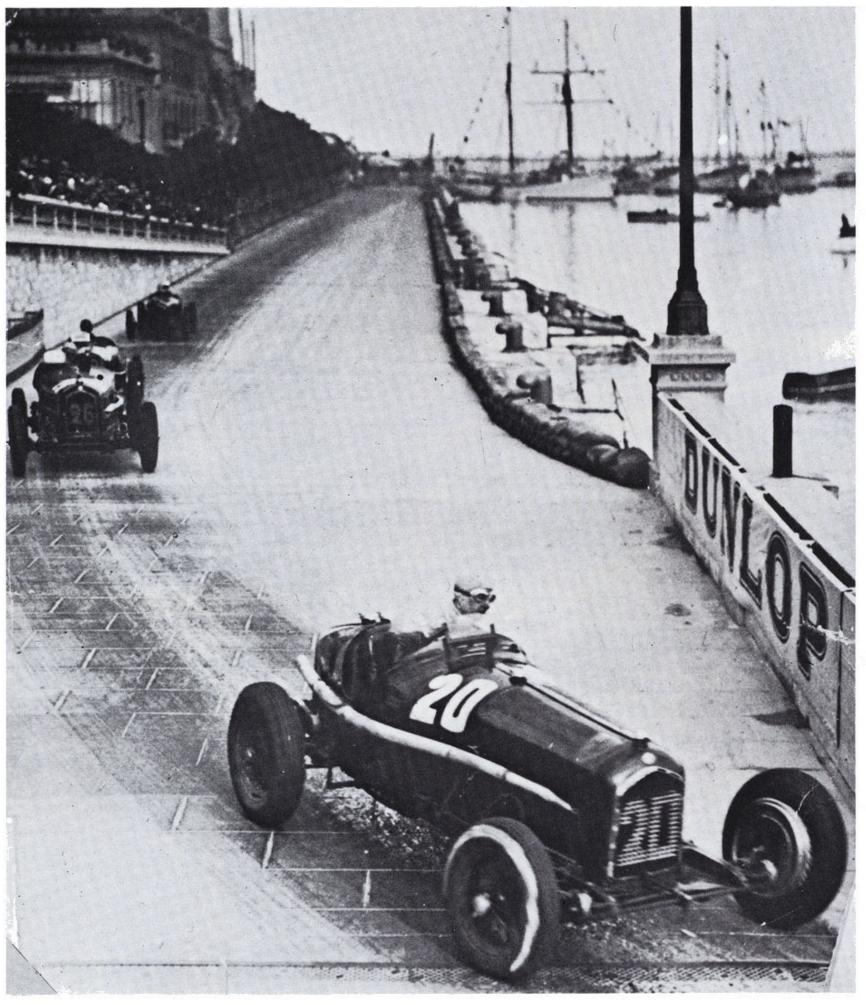
Luigi Fagioli at San Sebastian in 1933. The apertures in the bonnet side for the superchargers were a feature of the narrow-bodied 2.6-litre cars, but the very small rear brake drums used at San Sebastian were uncommon



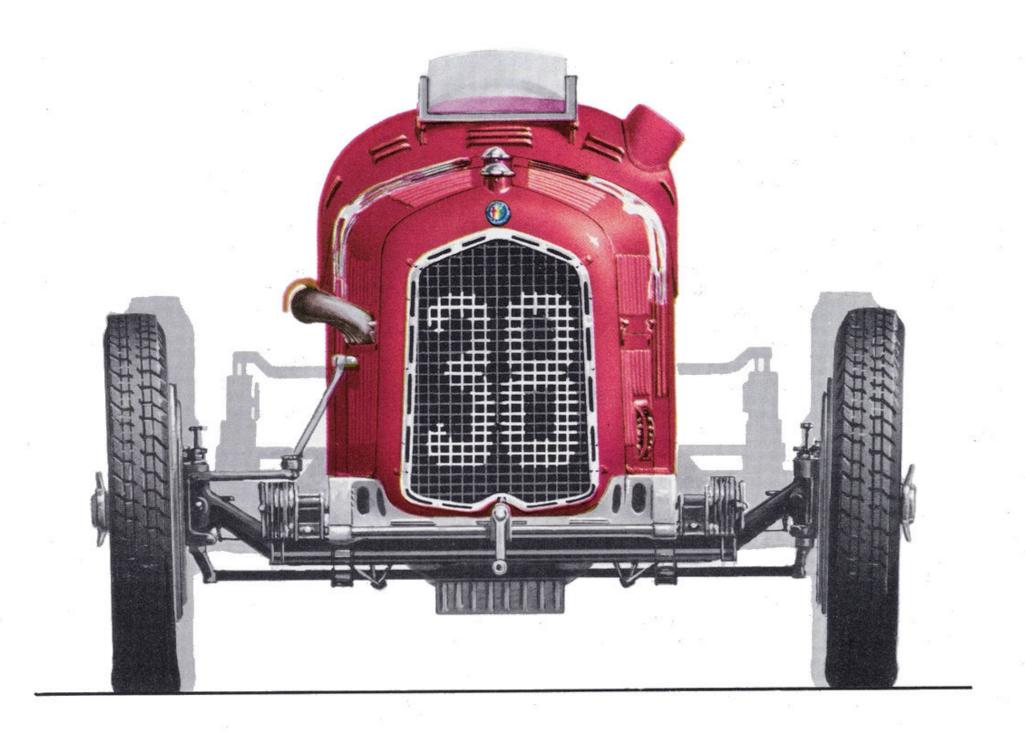
A 2.9-litre engine of 1934/5. The apertures in the bonnet sides for the superchargers were done away with when the wider bodies were fitted. (Geoffrey Goddard)



The special streamlined P3 with which Guy Moll won the Avus GP in 1934 had a 3.2-litre engine and the very small rear brake drums as used on the 1933 Spanish GP cars.
(Alfa Romeo)



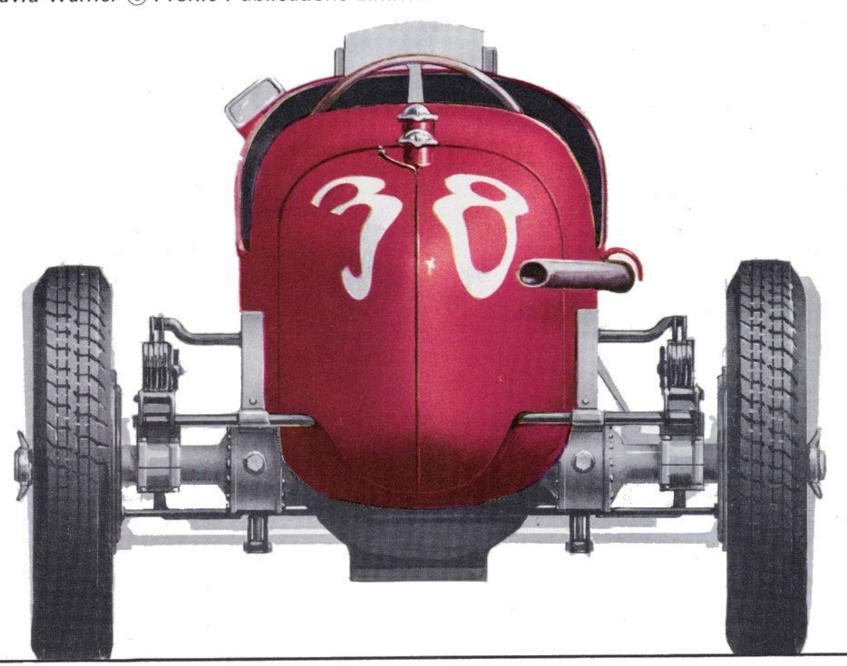
Guy Moll winning the Monaco GP in a 2.9-litre car in 1934. These 1934 Monaco cars were interim models having the wider cockpit but still retaining the low sides, whilst the apertures for the superchargers were still to be seen on the nearside



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The 1933 Spanish Grand Prix winner.

David Warner © Profile Publications Limited



and then Count Czaykowski were killed, it is of interest to record that for this track race the P3 in which Campari lost his life was running with the front brakes removed.

In the Spanish GP in September, Nuvolari once again led the P3s in his Maserati and made fastest lap, but after it began to rain he ran out of road, leaving Chiron to win in his P3 from the similar car of Fagioli.

There was some excitement amongst the leading amateur Grand Prix drivers in October, 1933, when Alfa Romeo let it be known that new P3s would be available to private owners for the 1934 season, and several of them sold their 'Monza' Alfa Romeos and Bugattis in anticipation. Before the end of the year, however, this offer was rescinded, and the net result was an increase in business for the Maserati brothers at Bologna.

1934-2.9 Litres

From 1934 new rules governed the Grand Prix Formula, under which there was no limit to the engine capacity but the weight of the car without driver, fuel, oil and tyres had to be less than 750 Kg (14.73 cwt) and the body width could not be under 33.5 inches. The pious intention behind all this was to prevent speeds escalating, yet it led to the introduction of the most powerful Grand Prix cars ever known, and thus a capacity limit was promptly imposed in the Formula which followed in 1938.

The new rules caused no particular problems to Alfa Romeo, or rather the Scuderia Ferrari, for the P3 cars were light in weight anyway, and the bodies of existing cars were widened by the introduction of gusset plates so that the sides of the cockpit bulged out, and big cutaways for the driver's arms, were no longer necessary.

Although the road-holding of the 2.6-litre Monopostos had not been beyond criticism, for they did not handle so well as the heavier 'Monzas', the chassis design was not altered for 1934, but it was obvious that something would have to be done about the engine. At the 1933 Spanish GP Bugatti had introduced his straight-eight Type 59, then fitted with a 2.8-litre engine with the P3 stroke of 100 mm, and with the 2.9-litre Maserati also being in existence, together with the threat of even biggerengined new cars coming from Mercedes-Benz and Auto Union, it was clear that a capacity of 2.6 litres would no longer suffice for the P3 Alfa Romeos.

Jano's answer to the problem was to increase the cylinder bore from 65 mm to 68 mm, so that the new 68 x 100 mm engine had a capacity of 2905 cc. Together with the increase in capacity went an increase in the compression ratio from 6.5 to 1 to 7 to 1, and a slight increase in blower pressure, so that the new engine gave 255 bhp at 5,400 rpm compared with the 215 bhp at 5,600 rpm of the 2.6 litre engine. On the debit side, the bodywork was now wider and heavier, so that the dry weight of the car had increased from 700 Kg to 720 Kg; in other words it had put on just over 44 lbs, or some 3 stone in human terms.

First-class drivers were engaged by the Scuderia Ferrari for 1934, including Achille

Varzi, Louis Chiron, the new star Guy Moll, Count Carlo Felice Trossi and Marcel Lehoux. Nuvolari remained faithful to Maserati, interspersed with the odd drive in a Type 59 for Bugatti.

At the beginning of the season the new 2.9-litre Monopostos proved to be more than a match for their rivals. At Monaco Guy Moll won from Chiron after the latter had made a last minute error of judgement and Trossi, the only P3 driver to retire, put up a record fastest lap. Dreyfus (Type 59 Bugatti) finished third in front of Lehoux's P3 with Nuvolari (Maserati) fifth and Varzi (P3) sixth.

Varzi won the final of the Bordino GP at Alessandria from Chiron, and an accident in this race to Nuvolari's Maserati proved a set-back to the Maestro's 1934 season, as he broke a leg.

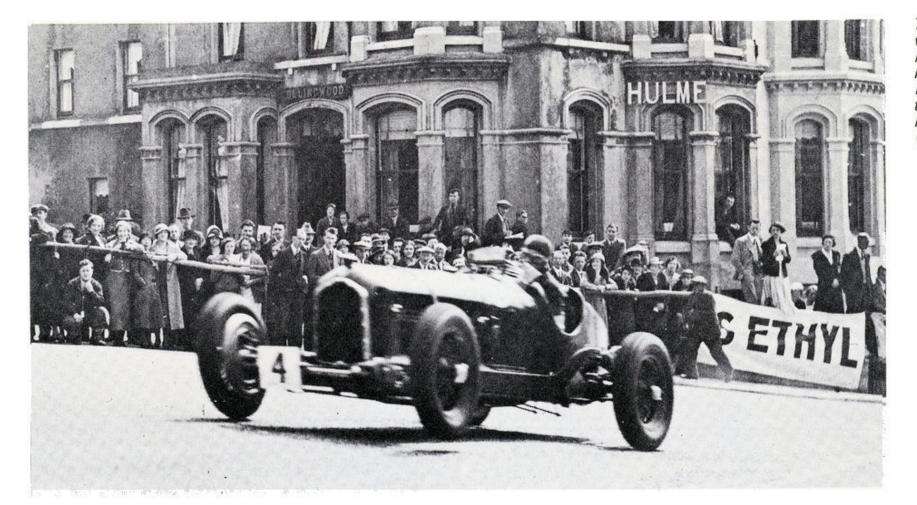
At Tripoli P3s finished in the first three places: Varzi, Moll and Chiron, with the latter making fastest lap at 124.52 mph. Against negligible opposition Varzi won the Targa Florio on a lone 2.9 P3 in drenching rain. At Casablanca the opposition again was not serious and, surprisingly, the Scuderia Ferrari fielded a team of the old 2.6-litre P3s for Chiron, Lehoux and Comotti. Chiron won fairly easily from Etancelin's private 2.9 Maserati, with Lehoux third, Whitney Straight's Maserati fourth and Comotti fifth.

At the flat-out Avus circuit in May, the challenge of both the new Mercedes and Auto Unions was threatened, but the Mercedes team withdrew on the eve of the race, leaving the A type, 16-cylinder rear-engined, 4.36-litre Auto Unions of Hans Stuck, Prince zu Leiningen and August Momberger to face the smaller capacity P3s. However, although Varzi and Chiron drove normal Alfa Romeos, Moll had a special car with ugly and bulbous aerodynamic bodywork, including fairings behind the wheels and a streamlined headrest ending in a fin on the tail, plus an engine with the cylinders bored out from 68 mm to 71 mm, the 71 x 100 mm dimensions giving 3,165 cc and another 10 bhp at 5,400 rpm. Ing Pallavicino of Aeronautica Breda was responsible for the body design, which was used only at Avus in 1934 and 1935.

The effort proved worthwhile, for Moll won the 182 mile race at 127.57 mph after 1½ hours racing from his team mate Varzi, 1½ minutes behind, followed by Momberger's Auto Union. The other Auto Unions and Chiron's P3 retired.

A week later, in the Eifelrennen on the Nürburgring, the P3s had their worst thrashing to date, Chiron finishing the 213 mile race in third place 5 min 44 secs behind the winning 3.36-litre W25B Mercedes of von Brauchitsch and 4 min 24 secs behind the Auto Union of Hans Stuck in second place, even though the German cars had had to stop to refuel whereas the Alfas had not.

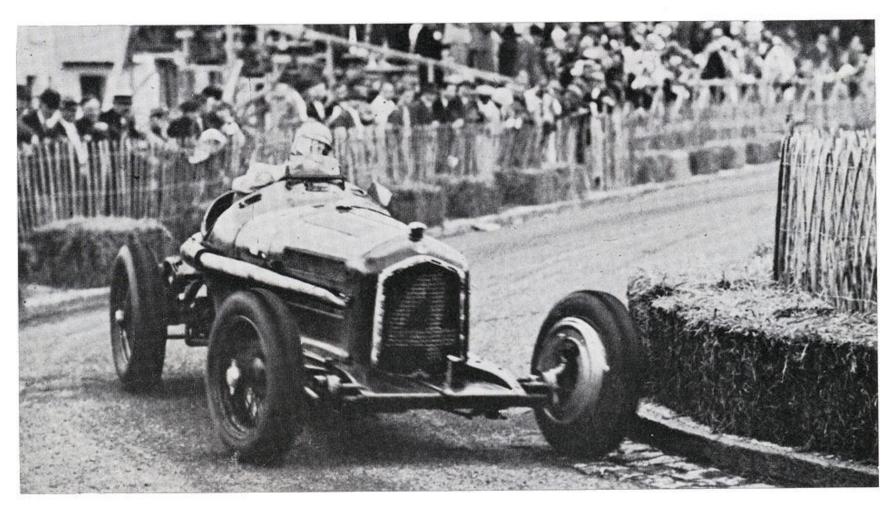
Nevertheless, the P3s continued their supremacy in races in which there were no Mercedes or Auto Unions, Trossi winning at Montreux and Varzi, Chiron and Lehoux were first, second and third at Penya Rhin in Spain after their main rival, Nuvolari (Maserati), dropped back because his leg was troubling him, and then he finally retired. In the Isle of Man, the Hon Brian Lewis won the Mannin



The Hon Brian Lewis winning the 1934
Mannin Moar race in the Isle of Man in a 2.6-litre Monoposto hired from the Scuderia Ferrari by Noel Rees.
(Autocar)

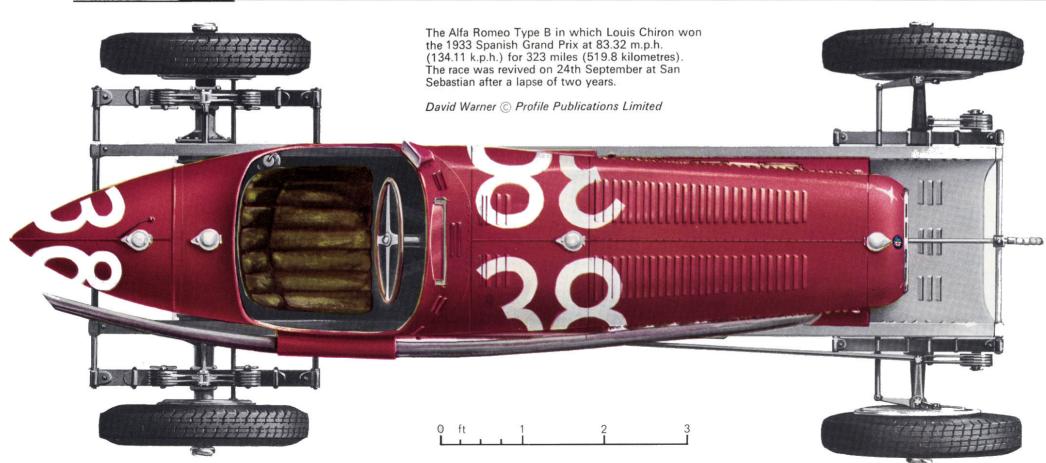


Varzi, whose P3 made fastest lap, leads Etancelin's 2.9-litre Maserati at the start of the 1934 GP de la Marne at Rheims in 1934



Count Trossi winning the Vichy GP, 1934





Moar race in a 2.6-litre P3 which was actually hired from the Scuderia Ferrari by Noel Rees and tended by two Italian mechanics.

The French GP at Montlhéry in July was a remarkable race, as the 2.9 P3s of Varzi, Chiron and Trossi had to face three Mercedes, with engines increased to 3.8 litres capacity, two Auto Unions and three Type 59 Bugattis in the expert hands of Nuvolari, Benoist and Dreyfus. The Bugattis, too, had been increased in capacity and now had 3.3-litre engines.

The race began with Chiron going into the lead, and apart from a short spell when Stuck's Auto Union got past, he held it to the end, furthermore he made fastest lap, which was a record for the course. At the finish the three P3s were the only cars left in the race, Varzi being second and Moll, sharing with Trossi, being third, after Benoist's Bugatti had been flagged off.

With only Maseratis as serious opposition, P3s were triumphant in the GP de la Marne (Chiron) and the Vichy GP (Trossi), but in the German GP at the Nürburgring the best P3 performance was by Chiron who was third behind Stuck's Auto Union and Fagioli's Mercedes, though ahead of Nuvolari's Maserati, which finished fourth. The P3s also beat Nuvolari in the Coppa Ciano over the Montenero circuit, Varzi winning from Moll with Nuvolari third and Trossi fourth.

The Dieppe GP finished up as a momentous struggle between Lehoux's P3 and Etancelin's monoposto 2.9 Maserati, victory going to the latter after Lehoux stopped to change plugs.

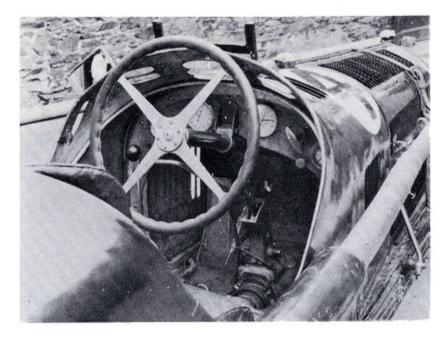
In the Belgian GP at Spa, the Type 59
Bugattis were competitive with the P3s of
Chiron and Varzi until they were delayed by the
plug bothers that had afflicted them in the
French GP. However, Chiron later crashed and
then Varzi retired, so Dreyfus on a Type 59 not
only won the race but Brivio's similar car, which
finished second, broke the lap record.

Phi-Phi Etancelin in his privately-owned 2.9 Maserati again proved competitive against the Scuderia Ferrari professional organisation in the Nice GP round-the-houses race, for he finished in second place between the P3s of Varzi and Trossi.

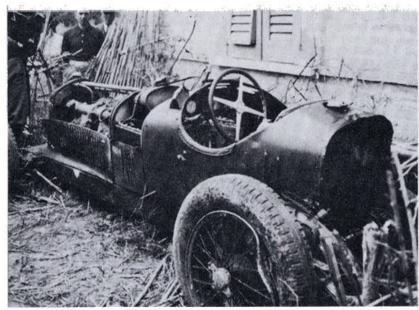
The P3s performed well in the Coppa Acerbo at Pescara in which both Moll and Varzi held the lead at different times against full Mercedes, Auto Union, Bugatti and Maserati opposition, and even Pietro Ghersi, as a new boy to the P3 team, was third at one period. This was the race in which 24-year-old Guy Moll was killed whilst passing Henne's Auto Union on the Montesilvano straight at over 160 mph whilst gaining on Fagioli's leading Mercedes. The race ended in a win for Fagioli, with Nuvolari's Maserati second, Brivio's Type 59 Bugatti third and a P3 shared by Varzi and Ghersi was fourth.

The speeds recorded by the fastest cars of each make over the flying kilometre in this race are illuminating, Caracciola's Mercedes recording 179.6 mph, Sebastian's Auto Union 171.1 mph, Chiron's P3 168.7 mph, Brivio's Type 59 Bugatti 159.3 mph, Nuvolari's Maserati 155.2 mph and the Englishman Clifton Penn-Hughes's 'Monza' Alfa Romeo 141.3 mph.

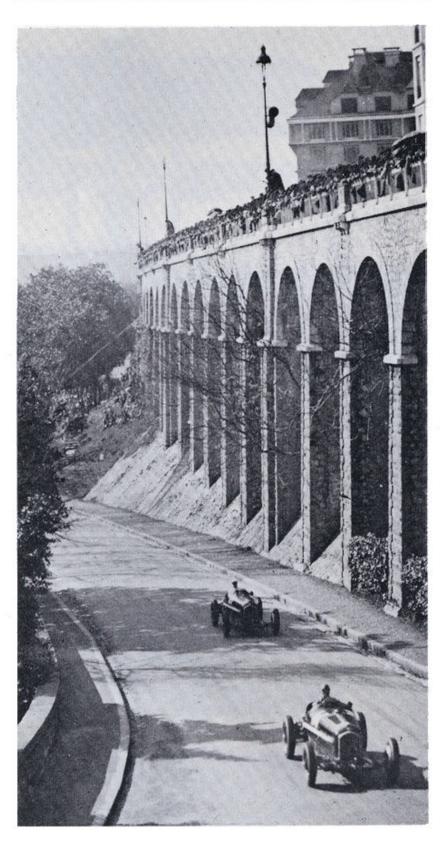
It was now August in this long and arduous



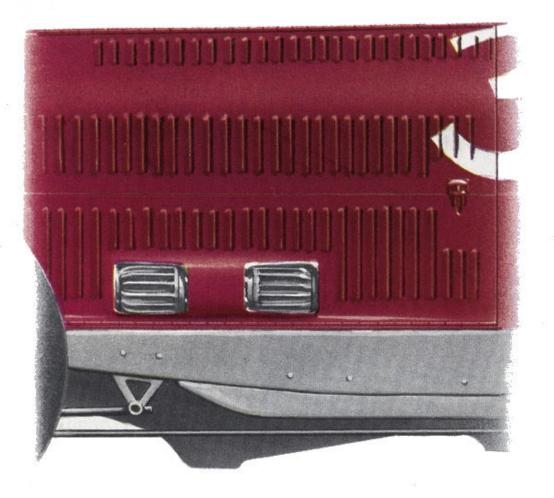
The cockpit of Brian Lewis's 2.6-litre Mannin Moar car, with the twin rev counters prominent on the dashboard



Rear view of Moll's car after the fatal crash at Pescara, 1934, showing the displaced auxiliary fuel tank in the scuttle, whilst the main fuel tank forming the tail is missing completely



The Pau GP on 25th
February, 1935, was a
victory for Nuvolari
driving the first P3 to be
fitted with reversed
\$\frac{1}{4}\$-elliptic rear springing





The near-side of Louis Chiron's 1933 Spanish Grand Prix-winning car, showing the superchargers protruding through the bonnet side and the refreshment flask behind the driver's seat.

Left Radiator badge. Right Shield worn by some Scuderia Ferrari cars in 1933 and generally adopted for the 1934 and 1935 seasons.

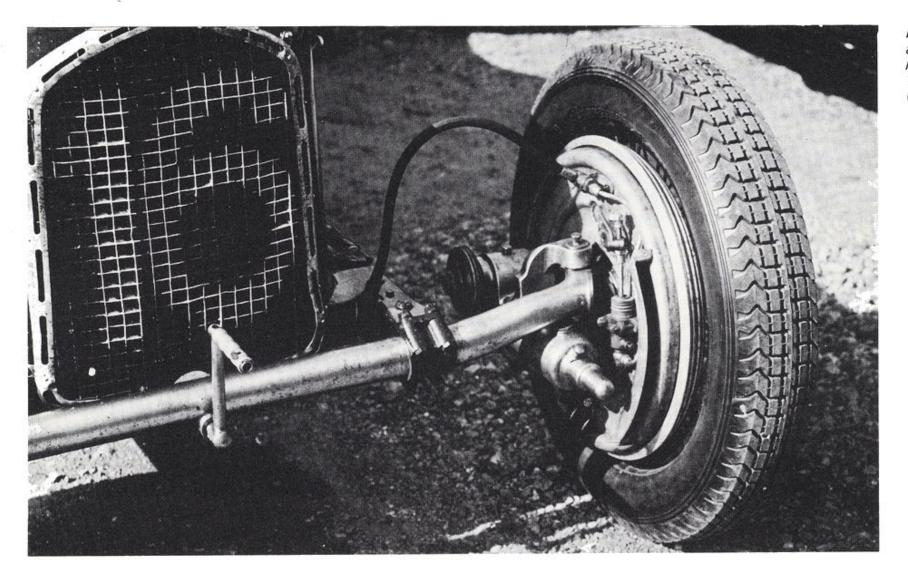
David Warner
© Profile Publications Limited



Pau in 1935.



The famous *quadrifoglio*, or four-leaf clover, badge carried by many Alfa Romeo racing cars was seldom, if ever, worn by P3s.



Detail of the new front axle with Dubonnet ifs introduced in time for the 1935 Monaco GP. (Motor)



Monaco, 1935, showing the Mercedes opposition against four P3s, two fitted with ifs and two without. (Daimler-Benz)

season for the P3 cars, and in the first Swiss GP over the new Bremgarten circuit at Berne they were never in the lead and had to give best not only to Auto Union, but also to Bugatti, the finishing order being Stuck (Auto Union), Momberger (Auto Union), Dreyfus (Type 59 Bugatti), Varzi (P3), Chiron (P3), Fagioli (Mercedes) and Ghersi (P3). Perhaps the only consolation was that Mercedes had an even worse day, due to weak brakes and fuel pump troubles.

Comotti saved the P3 fortunes at Comminges where there were no German cars, and Wimille's Type 59 Bugatti could do no better than fifth, whilst Trossi and Varzi dominated a similar state of affairs in the round-thehouses race at Biella.

The Italian GP was held over a very slow circuit full of chicanes at Monza, and the $4\frac{3}{4}$ hour race was very tiring and punishing for both cars and drivers, who shared the cars in many cases. Trossi in his P3 did manage to get into second place for a time when the German cars were being delayed by pit stops, and the final order was Caracciola/Fagioli (Mercedes), Stuck/Leiningen (Auto Union), Trossi/Comotti (P3), Chiron (P3), Nuvolari (6 cyl 3.3 Maserati), Comotti/Marinoni (P3), Momberger /Sebastian (Auto Union).

In the Spanish GP at San Sebastian, the P3s were simply too slow, and Varzi finished fifth to two Mercedes, a T59 Bugatti driven by Nuvolari and an Auto Union. Fifth was also the best Varzi could manage in the Czechoslovakian GP in which Nuvolari's new 6-cylinder Maserati was third to Stuck's Auto Union and Fagioli's Mercedes, whilst in the GP of Algiers Chiron's P3 finished second to Wimille's T59 Bugatti.

At the end of the season even victories in small Italian races were snatched from the P3s by Nuvolari's new 6-cylinder Maserati, this happening at Modena, where Nuvolari beat Varzi, and at Naples, where it was Brivio who came second in his first race for the Scuderia Ferrari since leaving the Bugatti team.

1935-The Ultimate P3

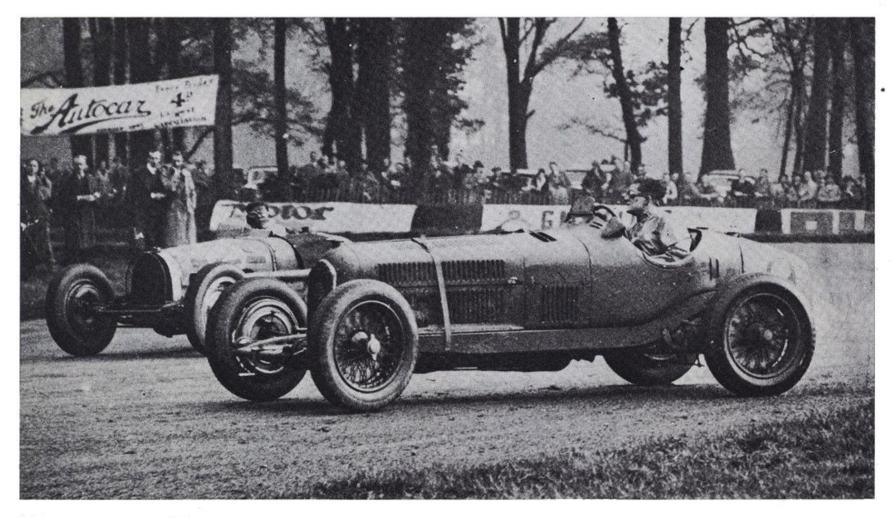
The outlook appeared to be bleak as regards the P3's chances of successes during the 1935 season. It would certainly need more power and better handling if it was to keep up with its rivals, but before even touching the car the Scuderia Ferrari went quite a long way towards solving its problems by signing up Tazio Nuvolari, who agreed to join them as Varzi was departing to Auto Union.

Nothing had been done to improve the chassis since its inception in 1932, and the car Nuvolari drove in the GP of Pau in February, 1935, was seen to be fitted with reversed quarter-elliptic springs at the rear. This was a hallmark of Bugatti design, and although the Type 59 may have been criticised for its lack of brakes and its poor acceleration during 1934, nobody seemed to fault its handling, and it is possible that the trio of erstwhile T59 drivers: Tazio Nuvolari, the Marquis 'Tonino' Brivio and Frenchman René Dreyfus, all Ferrari drivers in 1935, suggested this Bugatti feature might be beneficial if applied to the P3.

Certainly at Pau Nuvolari's car seemed to handle better than the unmodified car of Dreyfus, and it finished up as the winner of the race 16 seconds ahead of the Dreyfus car, which was second.

At the historic La Turbie hill climb, held near Nice on 18th April, Dreyfus appeared in a P3 with an additional major chassis improvement, the fitting of a tubular front axle with Dubonnet independent suspension, the design of engineer Chedru who was financed by André Dubonnet. At the Monaco GP four days later all the four Ferrari P3s entered had reversed quarter-elliptic rear springing with piston-type hydraulic shock absorbers. More changes were evident by the fact that, whilst Dreyfus and Brivio's cars had normal front suspension, those of Nuvolari and Chiron had the Dubonnet ifs with Ariston hydraulic braking; in addition Nuvolari and Dreyfus had cars with 265 bhp 71 x 100 mm, 3,165 cc engines.

In the race, Dreyfus, with his larger engine



R O Shuttleworth's P3 and C E C Martin's 3.3litre Type 59 Bugatti in the 1935 Donington GP, which Shuttleworth won

and normal front suspension came off best, for Nuvolari and Chiron were having trouble with irregularities in their hydraulic brakes. There were no Auto Unions entered and after the Mercedes of von Brauchitsch and Caracciola had retired, the similar car driven by Fagioli won at record speed with Dreyfus's P3 second half a lap behind and Brivio third another 400 yards in arrears. Etancelin (Maserati) was fourth, Chiron was fifth and Nuvolari retired.

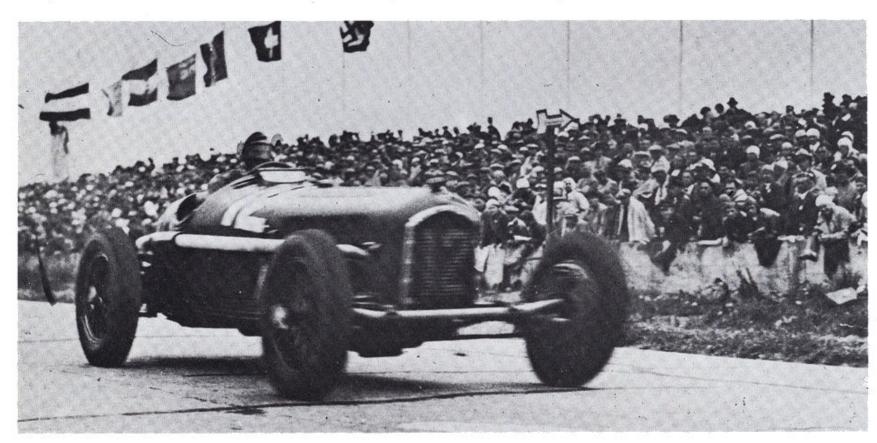
Brivio had the satisfaction of winning the $5\frac{1}{2}$ hour Targa Florio race in Sicily at record speed in a 2.9-litre P3 from his team mate Chiron. This was a week after Monaco, and another week later Varzi had his first victory for Auto Union at Tunis, where the P3s did not shine.

For very fast circuits like Tripoli and Avus the Scuderia Ferrari had produced the big *Bimotore* cars, which could have either a 2.9 or 3.2 litre engine both in front of, and behind, the driver in a lengthened Monoposto chassis, but they were prone to tyre bursting, and although outpacing their P3 progenitors in a straight line, they yet could not beat the German cars. Dreyfus drove the ex-Moll streamlined P3 at

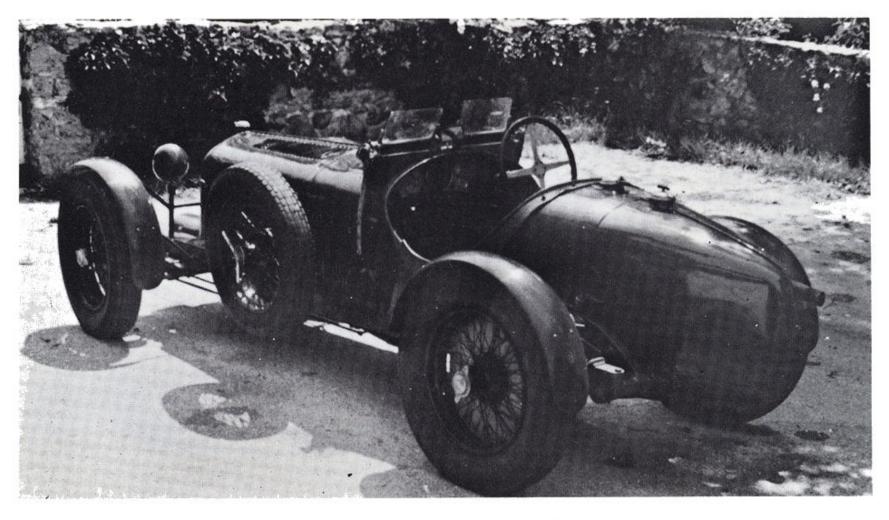
Avus but, though third in his heat, he finished last in the final, and although he was the best P3 performer at Tripoli in a 3.2-litre Monoposto he could do no better than finish sixth behind two Mercedes, an Auto Union and the *Bimotore* cars of Nuvolari and Chiron.

That the latest P3 was still not yet a complete back number was shown in the Eifelrennen on the Nürburgring where Chiron on a 3.2-litre car finished third and beat all the German cars except Caracciola's winning Mercedes and runner-up Rosemeyer's Auto Union, earning the praise of his German rivals.

More power was desperately needed by the P3s, and this was forthcoming on June 23rd, 1935, where we have it on the authority of the official Alfa Romeo historian, Luigi Fusi, that the P3s entered for Nuvolari and Chiron to drive in the French GP at Montlhéry were fitted with 3,822 cc (78 x 100 mm) engines developing 330 bhp. Certain papers at this time reported that the cars were fitted with 3.5-litre engines, but since the publication of Signor Fusi's book Le Vetture Alfa Romeo dal 1910, the writer has become very doubtful if a 3.5-litre version of



The greatest victory — Tazio Nuvolari winning the 1935 German GP at the Nürburgring with the help of a 3.8-litre engine



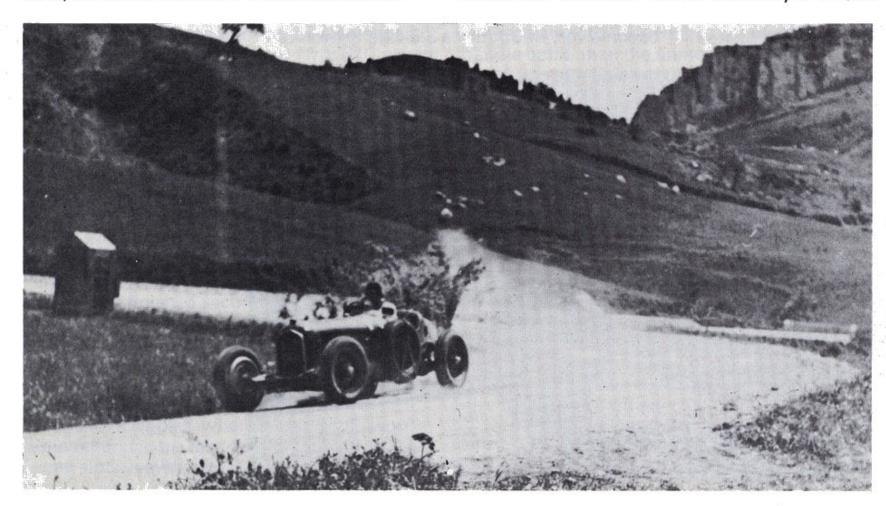
After the war Shuttleworth's car was converted in England into a road equipped two seater after the style of Pintacuda's 1935 Mille Miglia winning car. Here it is photographed in the USA, where it belongs to Henry Wessells. (Simon Moore)

the engine ever existed, to the extent that in the results at the end of this Profile he has substituted 3.8 for 3.5 litres with reference to the capacities of race-winning P3s hitherto thought to have had 3.5-litre engines. Although some private owners raced cars with 3.2-litre blocks in 1935, there is no evidence that 3.8-litre Monopostos were ever passed on to private-owners, these bigger engines presumably being retained by Ferrari to go into the P3's replacement, the 8C-35, and 2.9 engines substituted in P3s before sale.

Thus, driving the most powerful-ever version of the P3, Nuvolari led on the first lap of the French Grand Prix and actually drew away from the German cars, led by Caracciola, whilst Chiron lay third. Alas, Chiron's car only lasted 8 laps before the transmission gave out, and then Nuvolari retired with similar trouble after 14 laps of the 40 lap race, when he had a 9 seconds lead over Caracciola. Both Alfas had been much faster than their rivals through the chicanes, and Caracciola said that he did not see

Monoposto, now the front line Scuderia Ferrari car, with the current chassis improvements of ifs and reversed rear quarter-elliptic springs and he was aided by a damp track and a burst tyre on Manfred von Brauchitsch's Mercedes on the last lap. He was also hindered by the breakdown of the refuelling pump in his pit, costing him an abnormally long refuelling stop of 2 min 14 secs compared with the 47 secs taken by his main rival von Brauchitsch. Nuvolari won the race by 1 min 44 secs from Stuck's Auto Union and Caracciola's Mercedes, and set the seal of everlasting fame on the name of Nuvolari and the P3 Monoposto Alfa Romeo, Oddly enough, the fact that Nuvolari's car had a 3.8-litre engine did not become common knowledge for many years.

In the Coppa Acerbo at Pescara there were no Mercedes and Nuvolari in his 3.8-litre Monoposto held second place to Varzi's winning Auto Union until retiring after ten laps. Brivio in his P3 finished third to the Auto Unions of Varzi and Berndt Rosemeyer. In the



A P3 with a spare wheel

— Brivio winning the
1935 Targa Florio held a
week after Monaco.
(Alfa Romeo)

how Nuvolari could take such risks going through the chicanes and still hope to last the race. Nuvolari put up a record lap before he retired which was never beaten in subsequent laps. Only a week later Chiron scored the first win for the big-engined P3s in the Lorraine GP at Nancy, where Wimille's Type 59 Bugatti came second in front of Comotti's 3.8 litre P3. On the same day at Penya Rhin, Nuvolari and Brivio were third and fourth to two Mercedes.

Nuvolari did not drive in the Belgian GP at Spa, where Chiron and Dreyfus were entrusted to uphold the honours, and they finished third and fourth to the Mercedes of Caracciola and Fagioli. The extremely hot weather caused Chiron to collapse after the race, whilst Dreyfus had to hand his car over to Marinoni, the test driver, for the last few laps.

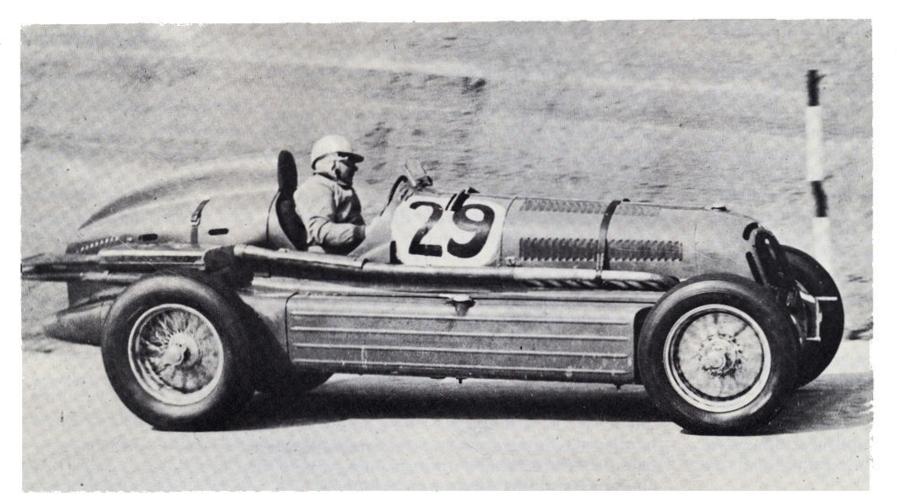
The P3's greatest hour was also one of the greatest hours in the history of motor racing, when Nuvolari won the 1935 German GP on the Nürburgring on July 28th against apparently impossible odds. His car was a 3.8-litre

Swiss GP at Bremgarten in the wet, Nuvolari finished fifth behind two Mercedes and two Auto Unions.

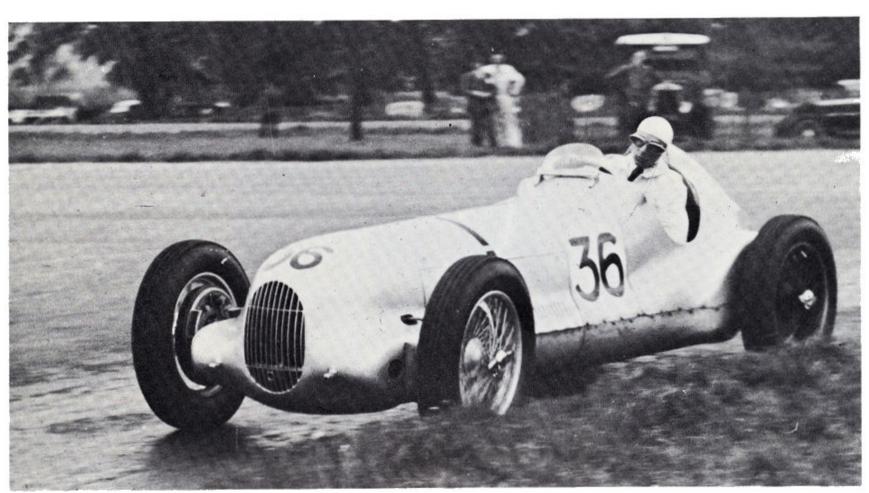
The replacement for the P3 appeared in the Italian GP at Monza in September for Nuvolari to drive. This was the all-independently sprung 8C-35, fitted with the familiar 3.8-litre P3 engine, but later destined to house the 12 cylinder unit for which it was designed. Although Nuvolari led at one time, and put up the record lap, he retired his car with a broken piston. Taking over Dreyfus's 3.8-litre Monoposto, he then finished second behind Stuck's Auto Union, though a broken valve caused the Monoposto to finish the race running on seven cylinders.

The season ended with Nuvolari in the 8C-35 and Chiron on a 3.8-litre Monoposto coming second and third to Rosemeyer's Auto Union in the Czechoslovakian GP at Brno.

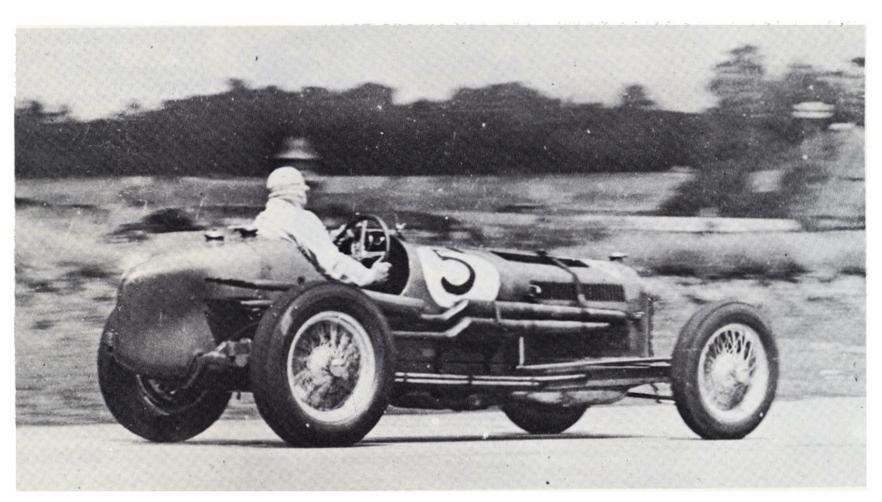
As will be seen from the table that follows, several minor races held later in the season went to the P3s in 1935 where there was no opposition from the Mercedes and Auto



The Bimotore had a lengthened P3 chassis with either a 2.9- or a 3.2-litre engine fore and aft of the driver. This 5.8-litre example is seen at Brooklands in 1935 being driven by Austin Dobson, complete with the compulsory Brooklands silencing equipment. (National Motor Museum)



The Multi-Union was a very special converted P3 driven by Chris Staniland which is seen here in its 1938 guise obviously modelled on Mercedes lines



Frank Ashby at
Brooklands in August,
1939, in the car he
converted with a special
cast iron block and nonstandard inlet and
exhaust systems, the
latter incorporating twin
exhaust pipes.
(Louis Klemantaski)

Unions, the 1935 P3 generally being superior to its Maserati and Bugatti rivals.

One classic win in 1935 that has not been mentioned is the peculiar case of a P3 winning the Mille Miglia race for sports cars back in April. This was a special car prepared by the Scuderia Ferrari which had been converted into a narrow two-seater, complete with lights, mudguards and even a tiny hood. The latest reversed quarter-elliptic rear suspension was featured and the driver was Carlo Pintacuda who had the Marquis Della Stufa as his passenger. They won easily by 42 minutes from Mario Tadini's 2.6-litre 'Monza' Alfa Romeo.

The Rest of the Story

Luigi Fusi tells us in his book that six Monoposto Alfa Romeos were made in 1932, with enough spares to make up another three cars. In 1934 seven cars were built, with spares for another four, and in 1935 modifications were made to six of the 1934 cars to bring them to 1935 specification.

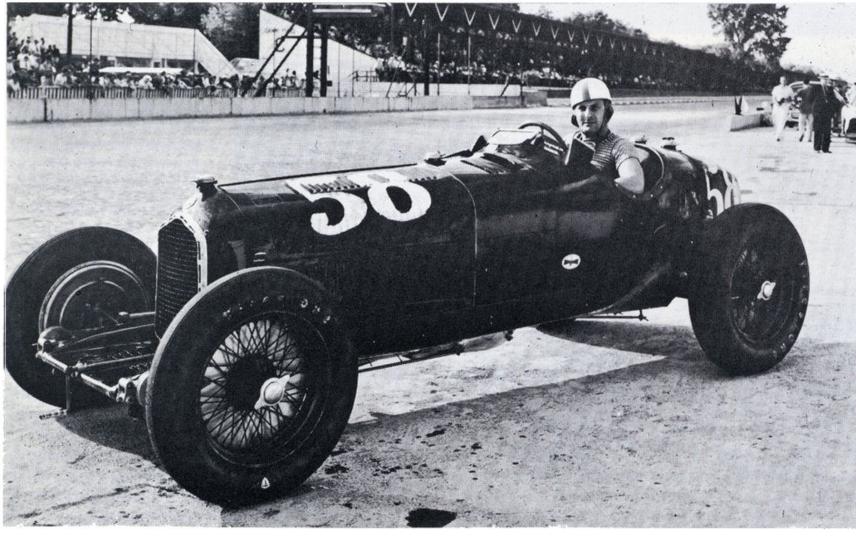
One modification not already mentioned which took place in the 1934/5 period was the strengthening of the gearbox, necessitating a reduction to three forward speeds instead of four. Fortunately the engine gave good torque at low revs; in fact when the Hon. Brian Lewis won the 1934 Mannin Moar race in a 2.6-litre Monoposto, third gear started slipping out after the first few laps and he used only second and top thereafter 'coasting round the corners in top gear like an American car' to use his own words.

The writer is indebted to Ken Stewart of Johannesburg and P3 owner John Clemetsen for supplying the following list of P3 chassis numbers together with their owners, where known, in 1972. Car Nos are given only where positively known. The writer's notes on each car help to carry the story on up to the present day when the Monoposto Alfa Romeo, with its handsome appearance and unmistakable deep exhaust note is looked upon as being one of the classic Grand Prix designs of all time.



Frank Ashby's car at the Dunlop Jubilee meeting at Brooklands in 1939, showing the narrow bodywork he fitted and the Dubonnet ifs with Ashby's own Lockheed brake conversion.

(Louis Klemantaski)



Louis Tomei in Frank Griswold's ex-Count Villapadierna car in which Tomei finished 12th at Indianapolis in 1939. (Indianapolis Motor Speedway)

SPECIFICATIONS

ENGINE

Cylinders 8, in line, in two blocks of 4.

Cooling System Centrifugal pump. Capacity 2.3 gallons.

Bore 65 mm (1932/3), 68 mm (1934/5), 71 mm and 78 mm (1935).

Stroke 100 mm.

Capacity 2,654 cc (1932/3), 2,905 cc (1934/5), 3,165 cc and 3,822 cc (1935).

Bearings Plain throughout – white metal, crankshaft running in 10 main bearings.

Lubrication Dry sump, tank at rear, capacity 4.4 Imp gallons (20 litres).

Valve gear Twin ohc with central drive, two valves per cylinder in fixed head at 104 degrees.

Compression ratio 6.5 to 1 (1932/3), 7.0 to 1 (1934), 7.1 to 1 and 8.0 to 1 (1935).

Carburettors Two Memini or Weber.

Fuel pump Air pump driven off nearside camshaft.

Superchargers Two Alfa Romeo Roots-type, visible through apertures in bonnet sides on early cars. Boost approx 10 lbs.

Ignition One Marelli magneto, 18 mm plugs, one per cylinder.

Max power 215 bhp at 5,600 rpm (1932/3), 255 bhp at 5,400 rpm (1934) 265 bhp at 5,400 rpm and 330 bhp at 5,400 rpm (1935).

TRANSMISSION

Clutch Dry, multiple disc, steel and alloy plates.

Gearbox As fitted to 8C 2300 sports cars, 4 forward speeds on 1932/3 cars, altered by 1935 to 3 forward speeds and reverse by cutting out the old bottom gear and slightly lowering the old second gear, other ratios remaining the same.

Gear ratios Top 3.52 (3.3 optional) Third 4.56 Second 6.54

First 11.8

Final drive Twin propeller shafts in torque tubes to separate bevels for each rear wheel, ratios 11/36, but first stage changeable final drive ratio housed between gearbox and differential.

CHASSIS AND BODY

5 ins deep side members, with tubular cross-members between extremities of dumb irons front and rear, plus two more between differential and back axle. Braced at front by 4-point mounted engine. Single-seater body, frame width of 26 ins 1932/3, widened outside frame width 1934/5. Colour – dark or cherry red, silver frame, black wheels in 1932/3; cherry red body and frame with black or silver wheels 1934/5.

SUSPENSION

Front Semi-elliptic springs with single friction dampers, or, in 1935, Dubonnet independent.

Rear Semi-elliptic springs outrigged from frame with double friction dampers, 1932/4. In 1935 reversed quarter-elliptic springs with double arm hydraulic dampers.

STEERING

Central, worm and sector. Wood-rimmed alloy-spoked steering wheel.

BRAKES

Rod operated as on 8C 2300 sports cars, $15\frac{3}{4}''$ dia drums 1932/4, Ariston hydraulic in 1935 with Dubonnet ifs, handbrake mechanical on the rear wheels only.

WHEELS

Wire, Rudge hubs, 6.00×19 tyres all round 1932/4, with rears only 6.50×18 in 1935.

FUEL TANK

In tail of car, capacity 30.8 Imp galls (140 litres).

DIMENSIONS

Wheelbase 8 ft 8 ins (Semi-elliptics), 8 ft 9½ ins (Rear quarter-elliptics).

Track Front: 4 ft 7 ins (1932/4), 4 ft 8 ins (1935) rear: 4 ft 5 ins height to driver's head: 4 ft 8 ins.

Dry Weight 13 cwt 90 lbs (700 Kg) in 1932/3 14 cwt 22 lbs (720 Kg) in 1934 14 cwt 33 lbs (725 Kg) in 1935

Maximum Speed 140-170 mph

RACE WINS IN CHRONOLOGICAL ORDER

(2.6-litre in 1932/3, 2.9-litre in 1934 and onwards, except where known and otherwise stated)

1932

Italian GP (Nuvolari); French GP (Nuvolari); German GP (Caracciola); Coppa Ciano (Nuvolari); Coppa Acerbo (Nuvolari); Coppa Principe di Piemonte (Nuvolari); Monza GP (Caracciola).

1933

Coppa Acerbo (Fagioli); Comminges GP (Fagioli); Marseilles GP (Chiron); Italian GP (Fagioli); Spanish GP (Chiron).

1934

Monaco GP (Moll); Bordino GP (Varzi); Tripoli GP (Varzi); Targa Florio (Varzi); Casablanca GP (Chiron) 2.6 litre; Avus GP (Moll) 3.2 litre; Montreux GP (Trossi); Penya Rhin GP (Varzi); Mannin Moar (Hon. B E Lewis) 2.6 litre; French GP (Chiron); GP de la Marne (Chiron); Vichy GP (Trossi); Coppa Ciano (Varzi); Nice GP (Varzi); Comminges GP (Comotti); Circuit of Biella (Trossi).

1935

Pau GP (Nuvolari); Mille Miglia (Pintacuda); Targa Florio (Brivio); Lorraine GP (Chiron) 3.8 litre; German GP (Nuvolari) 3.8 litre; Circuit of Bergamo (Nuvolari); GP of Picardy (Sommer); GP de France (Sommer); Circuit of Biella (Nuvolari) 3.2 litre; GP de la Marne (Dreyfus) 3.8 litre; Circuit of Turin (Nuvolari) 3.8 litre; Dieppe GP (Dreyfus) 3.8 litre; Comminges GP (Sommer) 3.2 litre; Coppa Ciano (Nuvolari) 3.8 litre; Circuit of Lucca (Tadini); Donington GP (R O Shuttleworth).

P3 CHASSIS Nos WITH 1972 OWNERS WHERE KNOWN

Chassis No 5001. Car No 35.

Owner: Ernesto Dillon Buenos Aires Argentina No details of this car are known.

Chassis No 5002. Car No 36.

Owner: Hon. Patrick Lindsay London England
Despite its early chassis number, this car has all the later modifications, including Dubonnet ifs. It went to Australia pre-war after its Ferrari days, owners including Snow, Saywell, Murray, Walmsley and Jarvis. Acquiring it engine-less in the late 'sixties, Patrick Lindsay has fitted it with the rear engine out of the ex-Austin Dobson 5.8-litre *Bimotore*, once driven by Chiron, but it has yet to show its true form in historic racing in England.

Chassis No 5003. Multi-Union

Owner: Hon. Patrick Lindsay London England
Chris Staniland raced this car in 1936 after acquiring it from
Sommer, then it was extensively modified into the Multi-Union.
The engine had special pistons and rods, modified manifolding
and ports and maximum revs were 6,500 rpm. A special 4speed gearbox was designed and made, Tecnauto ifs was fitted,
and the rear axle was suspended by coil springs and located by
a Panhard rod. GP Mercedes-like bodywork was fitted. In 1938
the car took the Class D 10 kilometre record at 139.6 mph won
a 100 mile Formule Libre race at Phoenix Park, and in 1939 it
lapped Brooklands at 142.30 mph running on only seven cylinders. The Fry cousins and G F Yates owned the car after the
war, and it is now being developed for historic car racing by
Patrick Lindsay.

Chassis No 5004.

Whereabouts unknown

This may have been the car in which Moll met his death at Pescara in 1934, or the special streamlined car he drove at Avus. The latter car is rumoured still to be in existence in France.

Chassis No 5005

Owner: Alfa Romeo Milano Italy

This car, in original 1932 form with narrow bodywork, is exhibited in the Alfa Romeo Museum and looked after by Luigi Fusi.

Chassis No 5006

Owner: Neil Corner Durham England

Georges Raph raced this car on the Continent. It has the 2.9litre engine with Weber carburettors, a 3-speed gearbox and semi-elliptics all round. After the war it was raced by A. Powys-Lybbe, who won the 1953 Frank O'Boyle Trophy at The Curragh in Eire, remarking on how the car liked the long straights. John Vessey drove it to second place to a 2.9 Maserati in the 1955 VSCC Seaman Trophy race at Silverstone, and in the 1966 Coupe de l'Age d'Or race on the fast Rouen-Les Essarts circuit W H (Bill) Summers built up an enormous lead before retiring with overheating. Summers and Neil Corner had minor successes with the car, but 1971 was its best season when Corner handed it over to Peter Waller who raced it extensively, cured the overheating, and came third in the Seaman Trophy at Oulton Park to a W125 Mercedes and the 2-litre ERA R11B. Waller remarks that 5006 is guite a large motor car to handle in comparison with an ERA, even if the P3s were referred to as the 'little Monopostos' when they first appeared.

Chassis No 50001

Owner: John Willock Connecticut USA

The extra '0' in the chassis number evidently denotes new cars made in 1934, as distinct from earlier cars brought up to date. 50001 has quarter-elliptics at the rear and was bought from Ferrari by the English driver Luis Fontes in 1936, but it was not raced, its engine seeing service in a boat, and it was imported into the USA by George Weaver in 1955. The car is now in good shape, whilst keeping its originality.

Chassis No 50002 Car No 42 Owner: Dave Uihlein Wisconsin USA

The Spaniard, Count de Villapadierna, raced this car in 3.2-litre form, painted yellow, in 1936. In 1939 it was acquired by the American Frank Griswold, who entered Louis Tomei to drive it in the 1939 Indianapolis '500'. It qualified at 118.425 mph and finished 12th in the race. It still bore the same racing number, 58, at the 1940 Indianapolis race, but there was a new fairing for the radiator and a streamlined headrest on the tail. Al Miller qualified the 2.9-litre car at 120.228 mph, but it retired on lap 41. In October, Griswold drove the car to win the New York World's Fair road race at Flushing, Long Island. As the Don Lee Spl the car retired in the 1946 and 1947 Indianapolis races driven by Hal Cole and Ken Fowler respectively, highest qualifying speed being 123.423 mph in 1947. Today the car is unrestored without engine or transmission, and it has a nonoriginal rear axle.

Chassis No 50003 Car No 43

Owner: Robert Cooper Wiltshire England

CEC (Charlie) Martin bought this car in 1936 and is said to have had the quarter-elliptics conversion done on it. He came 2nd to a V8 Maserati at Pau, 2nd to a T59 Bugatti at Deauville and 2nd to the Seaman/Ruesch 8C-35 Alfa Romeo in the Donington GP, Martin using a 3.2-litre block on this occasion. At some time the car was fitted with its present Ashby block (see No 50006 below) but with standard manifolding. It went to Australia post-war where it was raced by Lex Davison and Steve Ames, and then was extensively restored by Laurence G. Rofe, who sold it to D H Jarvis. Sir Ralph Millais, Patrick Wicks, Gary Woodhead and Robert Cooper all drove the car in English historic races in the late 'sixties and early 'seventies, when it had yet to find its old form.

Chassis No 50004 Car No 44

Owner: John Clemetsen Illinois USA

Another ex-Sommer car which stayed in the USA after being bought by Joel Thorne who drove it to 5th place in the 1937 Vanderbilt Cup. Other owners were Lee, Weaver, De Belle and Holman, the car at one time having a Ford and then a Jaguar engine. Clemetsen is a great Alfa enthusiast who has managed to find the correct engine for the car from an 8C 2900B sports car, whilst the missing gearbox has been replaced by that from an 8C 2300 Alfa Romeo.

Chassis No 50005 Car No 45

Owner: William Clark Christchurch New Zealand
This is the famous 1935 German GP winning car, now a 2.9
litre. It still has Dubonnet ifs and was raced in England pre-war
by Austin Dobson and Kenneth Evans, the latter also finishing
9th in the 1937 German GP. Post-war Roy Salvadori, then a
novice, bought it, and had some successes, though he drove it
with tyre pressures too high and shock absorbers badly
adjusted, so at anywhere near maximum speed it would weave
all over the road and terrify him. It then went to New Zealand
where Ron Roycroft drove it to win the 1953 Lady Wigram
Trophy race, and for some years it has been in the excellent

Chassis No 50006 Car No 46

hands of Bill Clark.

Owner: Leon Witte Lyttleton New Zealand

Another Dubonnet-suspended car, the engine was extensively modified pre-war by English owner Frank Ashby, who designed a cast-iron block for it, and altered the inlet manifolding so that one blower fed the central four cylinders and the other the four outside ones, instead of one blower to each separate block as standard. This particular car was given twin outside exhausts. Ken Hutchison used the car for sprints post-war, and the next owner, J H Goodhew, sold the car to Australasia, where John McMillan successfully raced it. It is now painstakingly restored by Leon Witte. Capacity is 2992 cc.

Chassis No 50007

Owner: Henry Wessells Pa. USA

Englishman Richard Shuttleworth is thought to have been the original owner of this car, which had quarter-elliptic rear springs and Memini carburettors. Shuttleworth won the Donington GP with the car in 1935, also the short Mountain Championship race at Brooklands and made ftd at Brighton Speed Trials. He did not race the car again after a crash in the South African GP in January, 1936. Post-war the car was made into a two-seater for road use in England for Geoffrey Barnard, and then it went to Henry Wessells, the American Alfa enthusiast. The body is now being altered into a replica of Pintacuda's 1935 Mille Miglia winning 2-seater P3.

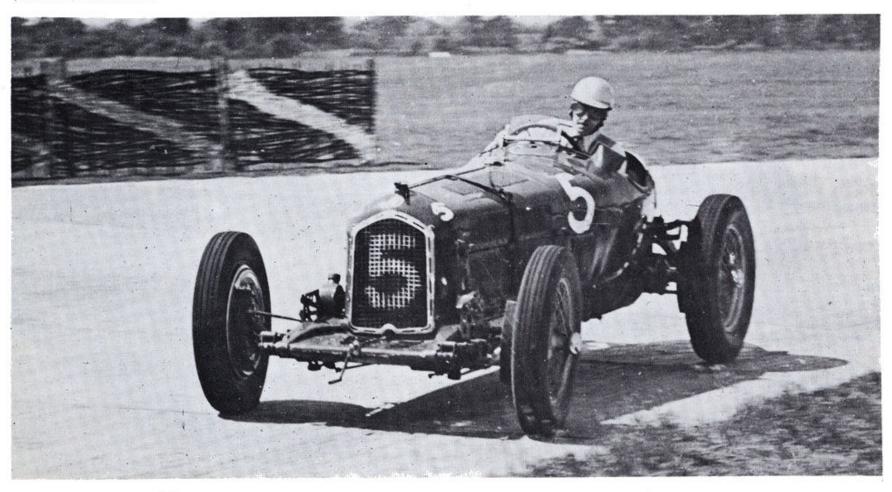
Chassis No 50008

It is not known if this car still exists.

Chassis No 50009 Car No 49

Owner: Ernesto Dillon Buenos Aires Argentina
Nothing is known of this car, except that it is being preserved by

Ernesto Dillon.



Jack Bartlett at Brooklands, Whitsun 1939, driving a P3 fitted with de Ram front shock absorbers. (Louis Klemantaski)

Cars in Profile

The publishers have been fortunate in once again having Anthony Harding to head up as Series Editor. Rightly he has a high reputation in the car world and helped to create the famous Classic Cars in Profile Series.

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4. Chaparral 2, 2D and 2F by Pete Lyons

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5. Porsche 917 by Paul Frère

Introduced in 1969, the 12-cylinder Porsche 917 must be counted as one of the most successful of racing sports-cars having won nearly all the classic long-distance races – Le Mans and Daytona 24-hours, Monza, Spa and B.O.A.C. 1000 kilometres – many of them more than once.

6. Alfa Romeo Type B by Peter Hull

Italy's classic Grand Prix car of the early 'thirties, which won many races in the hands of immortal drivers like Nuvolari, Varzi and Chiron, was the last winner in the vintage tradition before the new age of science and professionalism in GP racing took over, heralded by the all-conquering German Mercedes and Auto Unions.

7. Facel Vega by Michael Sedgwick

Between 1954 and 1964 Facel produced perhaps the last of the great French grand 'routiers in the tradition of Hispano-Suiza and Bugatti, Delage and Delahaye. With its outstanding performance, which was allied to beautiful and luxurious coachwork, the Facel Vega was summed up by *The Motor* as "motoring in the Dornford Yates manner". The Profile also deals with the smaller Facellia and the Facel 6 models.

8. McLaren M8 by David Hodges

The McLaren M8 sports-racing cars completely dominated CanAm racing for four years, from the introduction of the M8A in 1968 to the M8F which took the Championship in 1971. In these four seasons works M8s were defeated only three times, and from their first-time out victory won 21 consecutive races. The Profile tells the story of the development of the Orange Elephants, and their triumphant superiority on the circuits of North America.

9. 4½-litre Bentley by Darell Berthon & Anthony Stamer
The Le Mans victories of the sports Bentleys in the 1920s
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is the story of the design and development of one of their
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works competition form.

10. Matra MS80 by Gerard Crombac

The 1969 Driver's World Championship was dominated by Matra and Jackie Stewart. They won the South African, Spanish, Dutch, British, German and Italian Grands Prix, and a combination of an English team and engine, a French chassis and a Scottish driver set the seal on the renaissance of French motor-racing.

11. Jaguar D-type by John Appleton

One of the most attractive and successful of British sports cars, the D-type Jaguar won innumerable races in the 'fifties, in works teams as well as in the hands of private owners. Its outstanding achievement is a rare Le Mans hat trick won in 1955, 56 and 57.

12. Rolls-Royce Phantom II by George A. Oliver
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