1939 ALFA ROMEO 8C-2900B TOURING SUPERLEGGERA CABRIOLET

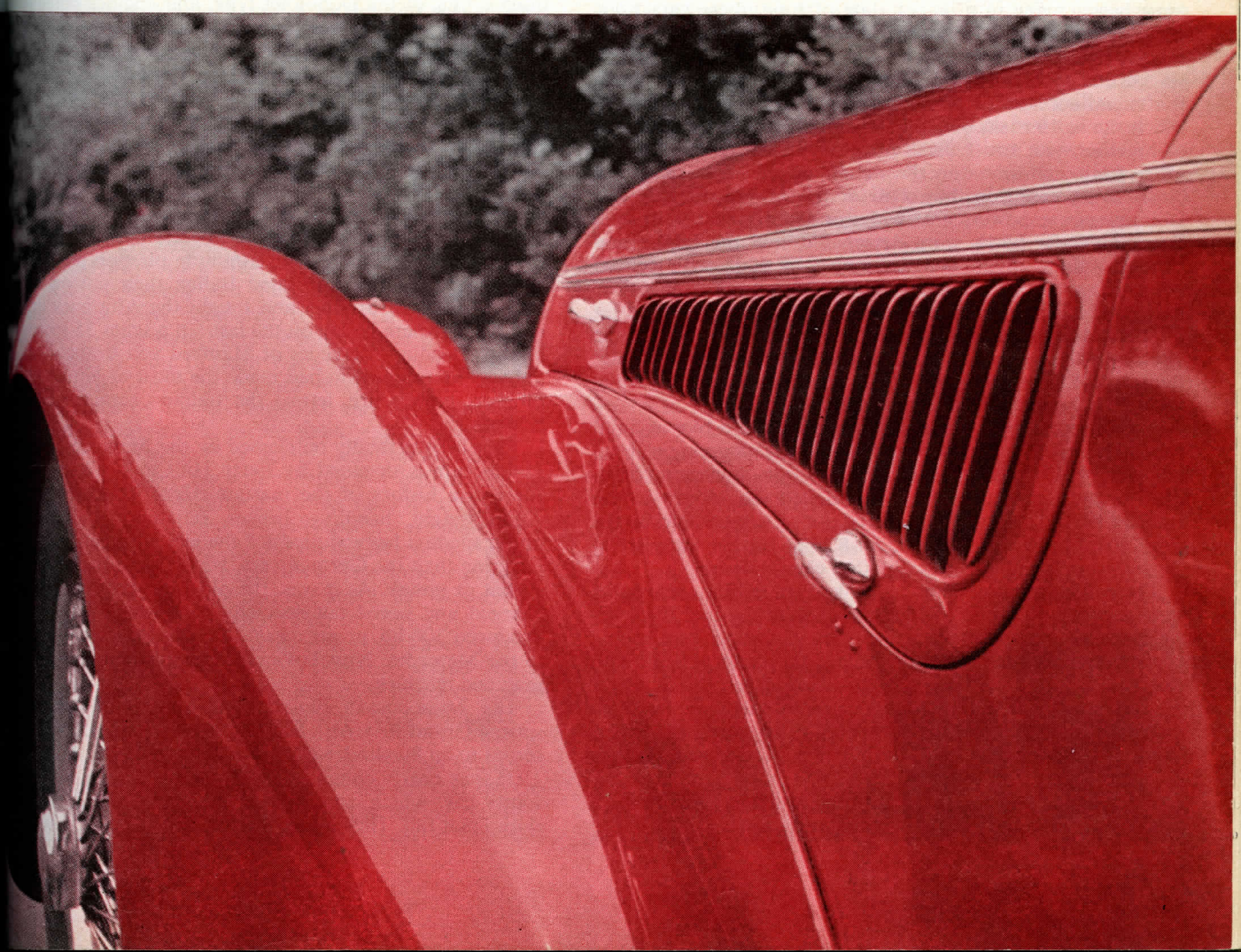
A car to quicken the pulse

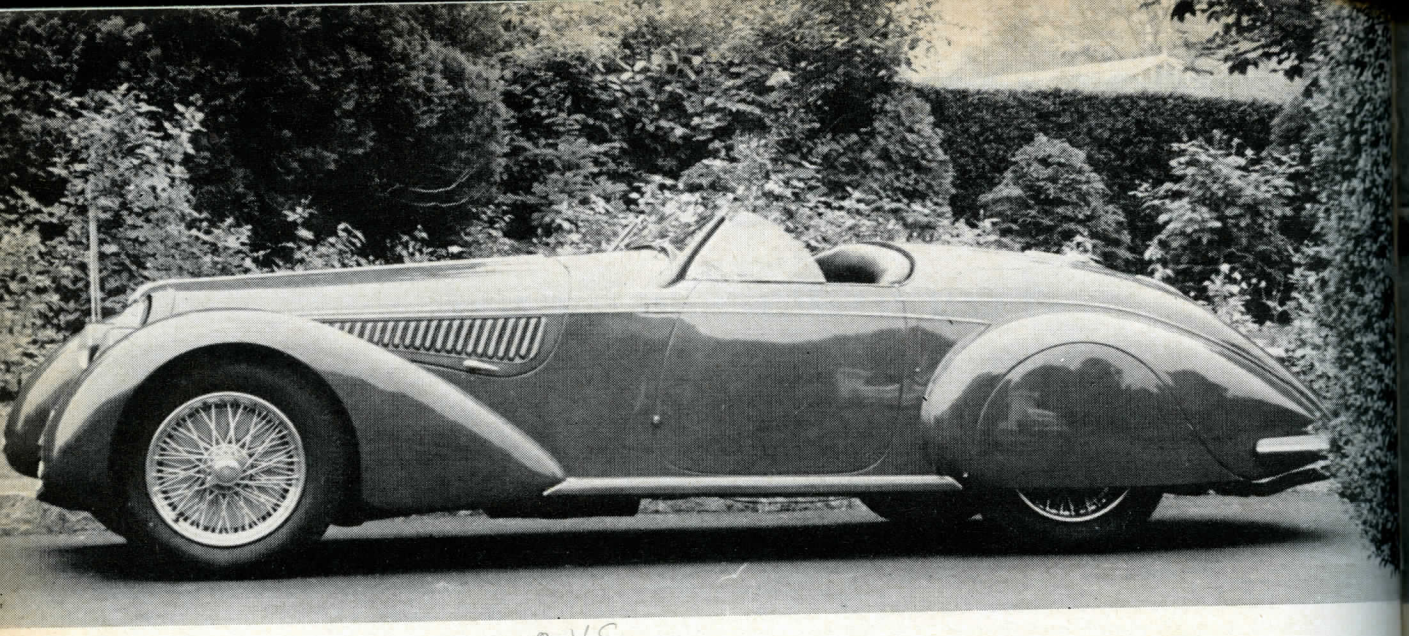
BY WARREN W. FITZGERALD PHOTOS BY WARREN BALLARD

THE DEBUT OF what we can certainly call one of the great racing engines of all time occurred in the Coppa Mille Miglia in April of 1931 when Luigi Arcangeli and Tazio Nuvolari hurled their new 2.3-liter straight-8 Alfa Romeo sports cars along the thousand miles of road from Brescia to Rome and back. Arcangeli, whose slam-bang style of driving wore out tires at a prodigious rate, crashed into a wall at Verona and failed to finish. Nuvolari, suffering from tire troubles as well, lost his clutch and limped into 9th overall, taking 2nd in class to the 3rd overall O.M. driven by Miranda and Rosa. The following month, Nuvolari, driving a stark racing-bodied car prudently equipped with English Dunlop tires, beat out the Italian champion, Achille Varzi, over the 363 mud-spattered miles of the Targa Florio. This was the first in a long series of victories for Ing. Vittorio Jano's free-breathing twin-cam straight-8 engines.

Between 1931 and 1939, Alfa Romeos powered by variants of this engine won 110 1sts in competitions ranging from full Grand Prix events to hill climbs. The 2nd and 3rd placings were too numerous to count. Exemplifying their position in sports car racing was the Alfa domination of Le Mans for four consecutive years with the initial 8C-2300 version of this engine. It was nearly as complete as the current Ferrari position.

In 1931 Lord Howe and Sir Henry "Tim" Birkin won driving a long chassis model at the record average speed of 78.13 mph. In 1932 the 2.3 Alfas of Raymond Sommer partnered with Luigi Chinetti, and Franco Cortese with Gianbattista Guidotti taking 1st and 2nd. Sommer, who drove most of the race because Chinetti was ill, averaged 76.4 mph. Likewise, 1933 was an Alfa parade, for all through the 24 hours the 2.3s held the first three or four positions. Raymond Sommer teamed with Tazio Nuvolari to win in a close finish which saw the Flying Mantuan squeak by Chinetti in the last lap, leading him across the line by a mere 10 seconds. Brian Lewis and Tim Rose-Richards were 3rd in a long-chassis Alfa, and each of these cars bettered Lord Howe's record. The Sommer/Nuvolari car was the first ever to lap Le Mans at over 90 mph. The last Alfa win at Le Mans came in 1934, when the 2.3 of Phi-Phi Etancelin and Luigi Chinetti outlast-





1939 ALFA ROMEO 8C-2900B

ed a trio of other Alfas and a pair of Bugattis. Though the pace was far from rapid, the Etancelin/Chinetti car finished 112 miles ahead of the 2nd-place Riley. In 1935 the Alfa challenge was blunted by a series of retirements, and the 2.3 of Heldé (Pierre Louis Dreyfus) and Henri Stoffel finished 2nd to the well-driven 4.5-liter unblown Lagonda of John Hindmarsh and Luis Fontes.

Even as the 8C-2300 sports car was being firmly established as the machine to beat, Alfa Romeo fielded pure racing versions known as the 2300 Monza. Powered by the same basic engine in a higher state of tune, these cars were campaigned successfully through 1931, 1932 and 1933. Jano's straight-8 was essentially two 4-cylinder engines placed end to end with a tower of gears driving the camshafts and accessories placed between them. The crankshaft, which ran in 10 main bearings, was made in two pieces, bolted together with two helical cut gears between, one for the valve train and one for the supercharger. The early 2.3 blocks were cast iron, but most of the Monza engines and later sports car powerplants had aluminum blocks with steel liners. Cylinder heads were detachable, and the intake and exhaust valves, at an included angle of 100° with central spark plugs, formed a hemispherical combustion chamber. The engines, with their overhead cam covers, presented an impressive appearance from the outside. Adding to the effect was the whole induction system, which was cast in aluminum and liberally finned, from the twin manifolds down the delivery pipe to the blower casing.

In its Monza form, the engine developed 178 bhp at 5400 rpm. This was achieved running 6.2:1 compression ratio with 10 psi of boost from the twin-lobe roots-type supercharger. The "Monoposto," which superseded the Monza in the summer of 1932, established the layout of what would be the final direction for Jano's straight-8, and further versions of it were simply enlargements of that classic design.

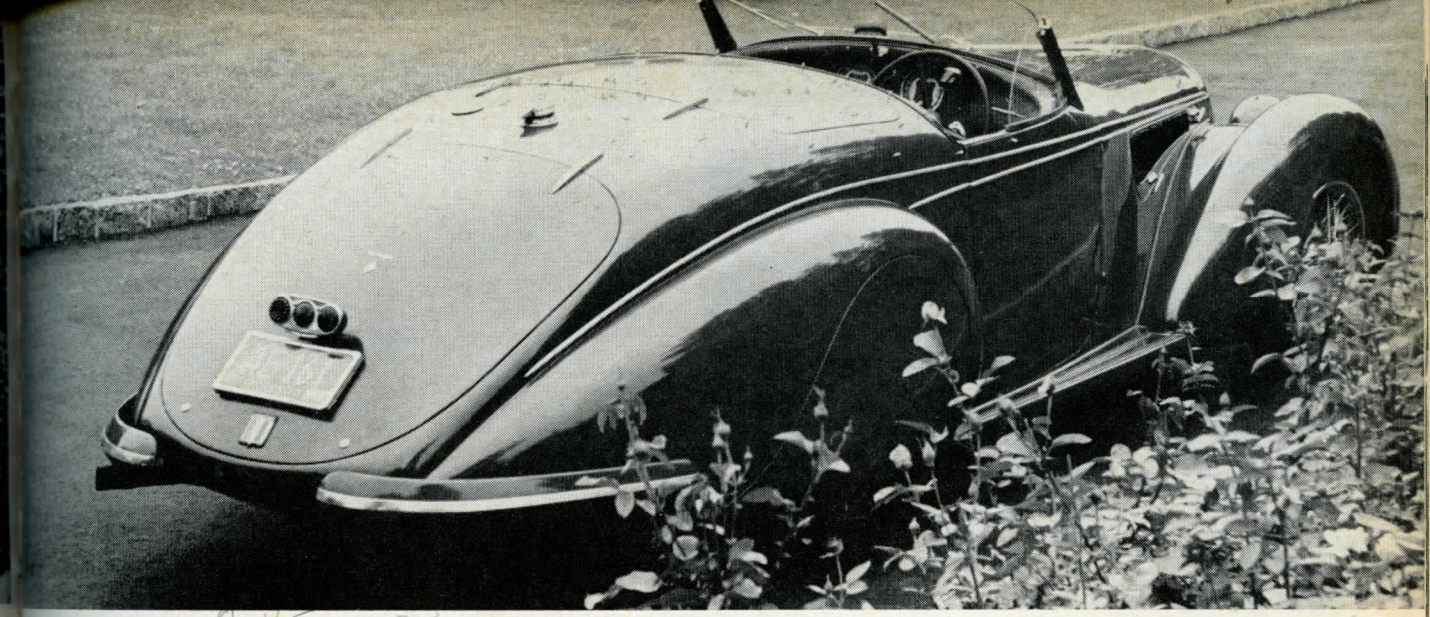
These Monopostos, later to be known as P3s, enjoyed a very successful year in 1932, running with 2.6-liter displacement. After seven 1st place victories in Grand Prix racing clearly demonstrated their supremacy, the factory, beset with financial troubles, withdrew from racing. Even the Scuderia Ferrari could not obtain Monopostos to carry on the Alfa colors and reverted to Monza models, often bored out to 2.6 liters. By mid-August 1933, the 2.9-liter Monoposto Maseratis were giving the older Alfas such a hard time that the works relented and released 2.6 Monopostos to Enzo Ferrari, whose team promptly began winning races again.

For 1934 the new formula called for a maximum dry weight of 1650 lb and a minimum body width of 33.5 in. The Alfas fielded by Ferrari were enlarged in bore, giving 2905-cc capacity, and increased in wheelbase, tread and weight. These cars, known as B2900 Monopostos, started the year with gratifying results. It became obvious, however, that the W-25 Mercedes cars which moved into competition in June of 1934, with independent suspension and 3.36-liter capacity, would outclass the Alfas. The Auto-Unions and the bigger engined Bugattis and Maseratis could be expected to give them trouble as well.

Thus for 1935, Alfa again modified the B-type Monopostos for what became the fourth time, giving them hydraulic brakes, i.f.s. of the Dubonnet type, and engines bored out to 3.2 and 3.5 liters. In this form they were able to stave off the Bugatti and Maserati challenge, if not that from Mercedes and Auto Union. And they were materially assisted by the driving prowess of Tazio Nuvolari. Truly, 1935 was a Nuvolari year, and his most spectacular triumph was his legendary win in the German Grand Prix at the Nurburgring on July 28. The story has been often told, how he was leading the race against the potent Mercedes and Auto-Union cars, only to be frustrated when the handle broke off the refueling pump in the Scuderia Ferrari pit, necessitating filling the car with churns. This more than 2-minute pit stop put him back into 5th place. The infuriated Italian then put on a rarely equaled show of driving, and fought the Alfa back into second place, where he lay on the last lap a scant 35 seconds behind the leading Mercedes of Manfred von Brauchitsch. The unlucky German, who had made the most of Nuvolari's long pit stop, blew a tire, letting the Italian champion back into first place.

That he was totally outclassed by the Mercedes and Auto-Union cars is disputed by Peter Hull in his excellent *Alfa Romeo*, a history of the marque. Here it is noted that the Alfa's weight, handling, brakes, reliability and new-found power made it better suited for the wet pavement of the Nurburgring than the German cars, which were tricky with their surfeit of power. As it was, the old Jano engine, twin supercharged and bored out specially for Nuvolari to 3.8 liters produced 300 hp, giving away 75 to the Auto-Union and 120 to the Mercedes. Nuvolari's epic drive was a tribute to both man and machine.

The Monoposto's replacement by the all-independently sprung Grand Prix Alfa 8C-35 (the new style designation referred to an 8-cylinder car introduced in 1935) in September 1935 was nearly coincident with the debut of a new 2.9-liter sports car, which appeared at the Paris and London auto shows that fall. Thus it was that the Jano engine, having been



troduced as a sports car powerplant in the spring of 1931, turned full cycle for the production of a limited series of superb sports and grand touring cars.

Alfa Romeo had contemplated the offering of the 2.9 sports cars as early as 1934, for in a brochure printed in September of that year, they advertised a series of 3 "8C-2900S" models. There was to be a "Racing" version, a 2-seater of 84.25-in. wheelbase and 53.25-in. tread. Its speed was stated to be 150 mph. The 2nd type was called "Le Mans," and it carried a 4-seat tourer body on a 118-in. wheelbase and 53.25-in. tread. It was to be capable of about 112 mph. The 3rd version was the "Grand Sport," a 2-seat spyder on an 84-in. wheelbase, with a claimed top speed in the vicinity of 118 mph. This last type was the car introduced a year later at the Paris Auto Show as the 8C-2900A. It carried a lightweight roadster body with gracefully arched and flowing fenders. The grille which covered the radiator was similar in contour to the old Monzas, but derived its pattern from the 8C-35 and subsequent 12C racing cars. It did not have the slots around the periphery of the radiator which, introduced with the Monza shell, had become a frequent Alfa characteristic.

The 8C-2900A sports car entered European competition on April 5, 1936 in the 10th Coppa Mille Miglia. Scuderia Ferrari sponsored three of these new cars, driven by Brivio/Pongaro, Farina/Meazza and Pintacuda/Stefani. The cars appeared rather high compared to the familiar 8C-2300 models but this may have been the influence of their vertical oval body cross section. In many ways they resembled the 8C-35 GP car introduced the previous year. They had an oval grille surrounded by the cooling slots and there were freestanding headlamps which, in the photographs of the race, appeared to be reversed to lower wind resistance and prevent stone damage. Their independent front suspension members lacked the streamlined fairings used on the 8C-35s and the wheels were covered by cycle fenders. A single spare tire was cowl-mounted and located on the left, or navigator's side, as the cars were right hand drive. The upper surface of the cowl was slightly upswept and two small, flat windscreens were provided. The three Scuderia Ferrari entries placed 1st, 2nd and 3rd, drivers finishing in the order listed above. These 8C-2900A cars had a good season, winning 1st and 2nd at the Sao Paulo, Brazil GP, and 1st in the 24 hours of Spa in Belgium. Only eleven 8C-2900A models were built, six in 1935 and five in 1936.

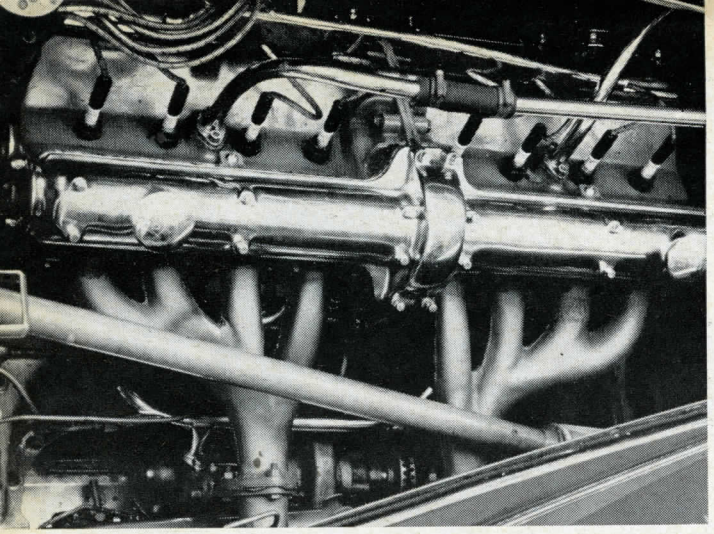
The Autocar announced in the fall of 1936 an improved version of the 2.9, the 8C-2900B. They claimed that the car had been completely redone, with only the engine retained. A comparison of chassis photos does not seem to bear this out, however, and Peter Hull's book proposes the idea that the engines were in fact improved. At any rate, the models were very similar and Alfa Romeo used illustrations of the prototype 8C-2900A Grand Sport roadster in their 8C-2900B brochures printed in 1936-37.

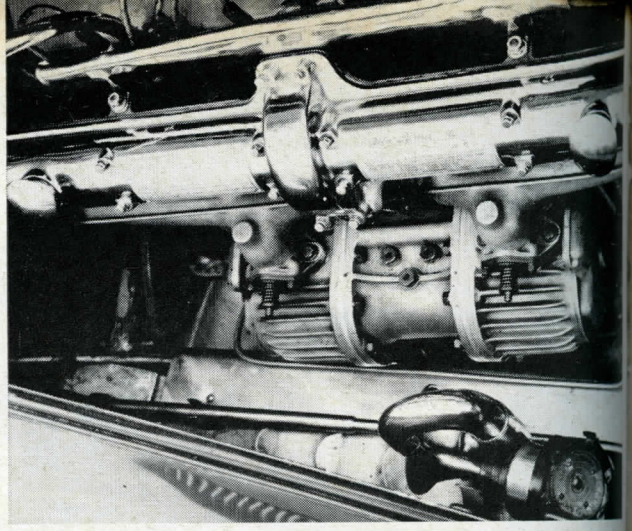
The new 2.9B model saw less competition than its predecessors, for the use of superchargers in sports car racing was on the wane and the new 6C-2300 model was being used in such events to quite an extent. In the 1938 Mille Miglia, three 2.9B spyders carrying Touring superleggera coachwork dominated the run. Biondetti/Stefani, Pintacuda/Mambelli and Dusio/Boninsegni comprised the team which finished in that order. At the Parma-Berceto hillclimb, Gigi Villoresi and Clemente Biondetti won 1st and 2nd. At Le Mans, Raymond Sommer teamed with Biondetti in a very potent streamlined coupe. They led for 23 of the 24 hours when a tire blew on the Mulsanne straight at 130 mph, tearing up the front fender. Sommer handed over to Biondetti, who had the misfortune to lose a valve, causing the retirement of the car. They were leading by 100 miles at the time. Pintacuda and Severi won the 24 hours at Spa a month later. After the war, Biondetti again won the Mille Miglia, this time in 1947, driving a 2.9B Touring coupe which had been converted to normal aspiration. Here in America, Frank Griswold won the first running of Watkins Glen in his 2.9B coupe.

The engine, detuned from the Monoposto B2900 for touring use, was nominally rated at 180 bhp at 5000 rpm. Bore and stroke were 68 x 100 mm, resulting in a displacement of 2905 cc. The twin roots-type superchargers, mounted to the left side of the engine and driven from the center gear train, produced about 10 psi of boost. Weber carburetors fed the blowers from underneath. Compression ratios could be varied by the use of differently domed pistons, and 5.75:1 and 6.65:1 were among those available. Unlike the 2.3 engines used in the Monza racing and sports cars, the Monoposto engines had integral cylinder heads.

That the engines used in the 8C-2900A and B sports cars were actually built for Monoposto installation can be seen from the machined faces found on the rear of the crankcase for mounting the central steering gear box used on the GP cars. Lubrication was by dry sump, with a tank in the rear, and circulation was provided by two gear pumps driven from the gear train on the right center of the engine.

Performance varied with state of tune, and Alfa Romeo had rated it as producing 215 bhp at 5400 rpm in GP form. Obviously, it would not be hard to return the engines to this state and the 1938 Mille Miglia car driven by Biondetti would probably touch somewhere near 130 mph if the recommended maximum 5400 rpm were exceeded. Incidentally, →





Twin 4-branch exhaust manifolds emphasize double-four nature of 2900B unit; Roots-type superchargers dominate left side of engine.

1939 ALFA ROMEO 8C-2900B

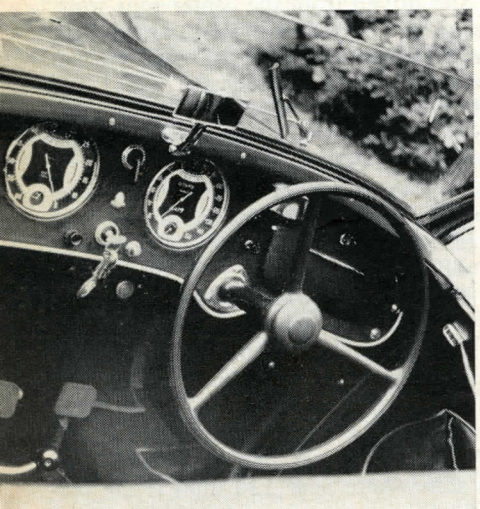
this car was equipped with a synchromesh 4-speed gearbox while some of the earlier cars had crash boxes. The 2.9 transmissions were mounted in transaxle form at the rear.

Rear suspension was by swing axle with a transverse leaf spring. The front suspension was also independent, and consisted of two trailing links acting upon a horizontal coil spring encased in an oil-filled cylinder. Brakes were huge 17 x 2.5-in. hydraulics and filled the 19-in. wheel rims completely. Two wheelbase lengths were offered, the shorter being frequently referred to as the "Mille Miglia" by the British, though the factory called them merely the "Corto" (short) or "Lungo" (long). The brochures listed them as 110.2 and 118.1 in. respectively, but in fact the short chassis versions have been seen to vary between 106 and 110 in.

Coachwork varied but all cars were essentially 2-passenger gran turismo coupes, cabriolets—and our Salon car would seem to be such when compared to the prototype Grand Sport roadster, and of course, stark competition spyders like the one Phil Hill drove at Pebble Beach years ago. That car was identical to the team cars fielded by Scuderia Ferrari for the 1938 Mille Miglia, and was in all likelihood one of them. A number of coachbuilders supplied bodies for the 11 8C-2900A and 30 8C-2900B chassis which were built between 1935 and 1939. The car featured on the cover of R&T for October 1951 and now in the Harrah collection, was a Stabilimenti Farina cabriolet. Pinin Farina built some and one especially attractive was a streamlined roadster. Ramsiers of Switzerland built at least one. However, the majority of the 2.9 Alfa bodies seen were built by Carrozzeria Touring of Milano, using their patented "superleggera" method of construction. Alfa Romeo had a very close relationship with Touring just before and after the war and in fact the current 2600 Spyder bodies are built by this firm.

A. E. Goldschmidt, New York insurance executive and remembered as a fierce competitor in Eastern SCCA events in the 1950s, spotted our Salon car being driven down the Strand in London some years ago. He purchased the car through Bartlett, a London Alfa dealer, and the car was entrusted to Guilio Ramponi for a complete mechanical rebuild. Ramponi, who was an Alfa driver and contemporary of Enzo Ferrari in the 1920s, emigrated to England where he became associated with Thompson & Taylor, *the* Alfa people in pre-War London. Today he is one of the great Alfa specialists anywhere. The car remained in his Lancaster Mews shop for a year, after which the repainting and reupholstery was done. The car passed through a couple of owners and our last report it was at Luigi Chinetti's New York Ferrari distributorship.

The 2.9 Alfas, race bred and handsome, are in the words of one writer, an "assured rarity." Built up around leftover Grand Prix powerplants, they number only two score, and undoubtedly some have been broken up, never to be found. But they are among the big league classics that quicken the pulse. They are quite probably the most desirable vintage Alfas, unless one remembers the two or three uncataloged 412 Sports, once owned by Felice Bonetto and W. Daetwyler . . . but that's a tale for another time.



SPECIFICATIONS

List price	$9457
Engine type	8-cyl in-line dohc
Bore x stroke, mm	68 x 100
Displacement, cc	2905
Bhp @ rpm	180 @ 5000
Torque @ rpm, lb-ft	n.a.
Carburetion:	2 Webers, twin roots-type superchargers @ 10 psi boost
Clutch type	multiple dry-plate
Transmission type & no. speeds:	4-speed in unit with differential
Synchromesh	none
Final drive ratio	4.54:1
Optional ratios	4.16:1
Brake type	hydraulic
Drum size	17 x 2.5
Brake swept area, sq in	53
Tire size	5.50 x 19
Top speed, mph	12
Frame type:	welded light-gauge box section
Front suspension:	independent by trailing arms, coil springs, tube shocks
Rear suspension:	independent, swing axles, radius arms, transverse leaf springs, tube shocks
Curb weight, lb	240
Wheelbase, in	110.2
Track, front/rear	53.1/53
Fuel tank capacity, gal	2
Engine oil capacity, gal	4
Fuel consumption, mpg	approx. 1