THE TWO-NINES

Twenty years ago Frank Griswold won the first Watkins Glen Grand Prix in an Alfa Romeo 8C 2900B—one of the most fabulous road cars of all time

BY JONATHAN THOMPSON

THE ALFA ROMEO 8C 2900B can only be described as the most technically advanced and soul-stirring sports car produced before the Second World War, yet its full history is difficult to trace. Already well known are its origins in Vittorio Jano's superlative P3, its construction in limited series from a batch of "left-over" eight cylinder engines, and its triumphs in the Mille Miglia. Despite this the car was not an important part of the factory's production plans (during 1937-39 only 30 examples of the 2900B were built in contrast to some 1154 of the more docile 6C 2300B and 6C 2500 models). These 2.9s emerged from Milano in a confusing variety of models, with two cataloged wheelbases and diverse *carrozzerie;* except for a small group of superlight spyders built for the Mille Miglia, no two 2900Bs were identical. In addition, the 2.9's racing career, while eminently successful, depended almost entirely on private owners, and must be followed on the circuits of three continents over a period of 15 years.

The romance of the 2.9 begins, of course, with the engine. The original 8C 2300 Monza unit (65 x 88 mm, 2336 cc) was developed in 1931 and was characterized by its construction in two blocks of four cylinders with central gear drive to the supercharger and the twin overhead camshafts. Light alloy was used for the cylinder blocks, crankcase, and valve covers, with steel liners in the bores; the cylinder head was not detachable. This engine produced 178 bhp at 5400 rpm. In 1932 and 1933 the same basic design brought almost unbeatable results in the Monoposto (single-seat) chassis as the P3, to use the popular but unofficial designation for the car. Major changes were the reversing of the inlet and exhaust systems, with two smaller superchargers now located on the left side of the engine, and an increase in stroke to 100 mm, giving a total displacement of 2653 cc and a claimed output of 215 bhp at the same engine speed. The revised engine was known officially as the 8C 2600, the car by the designation Monoposto 2600.

In 1934 the bore was increased to 68 mm, resulting in a 2905 cc displacement and power optimistically quoted as 255 bhp at 5400 rpm, running with a 6.0:1 compression ratio. Detailed analysis of the engine and the practical experience of later private owners suggest that the actual output was nearer 220-225 bhp. Although the engine was in two blocks of four, a normal 2-4-2 eight-cylinder crankshaft was employed, giving in effect one four-cylinder unit in the middle with the two halves of another four ahead and behind. Thus the intake arrangement, with one supercharger feeding the front half and the other the rear, was tidy but not ideal in terms of distribution and power impulses.

Many chassis modifications were made the same year, including increases in wheelbase, track, and body width to comply with the new 750-kg formula, and the new designation Monoposto B 2900 was applied, B referring to the new chassis. Meeting the challenge of the radical Mercedes-Benz

STANLEY ROSENTHAL COLOR PHOTOGRAPHY OF WATKINS GLEN—WINNING 8C 2900B BERLINETTA

and Auto Union cars, the Tipo B achieved considerable success in 1934, with victories in the French, Tripoli, and Monte Carlo Grands Prix, as well as the Coppa Ciano and Avusrennen. Further boosts in capacity to 3.2 and finally 3.8 liters, which gave Tazio Nuvolari his famous victory in the 1935 German Grand Prix, are not significant with respect to the 8C 2900B sports car, although the chassis and independent suspension of the 8C and 12C Grand Prix cars of 1935-37 were adapted to the sports model. Up to 1938, all official Alfa Romeo racing was in the hands of Scuderia Ferrari.

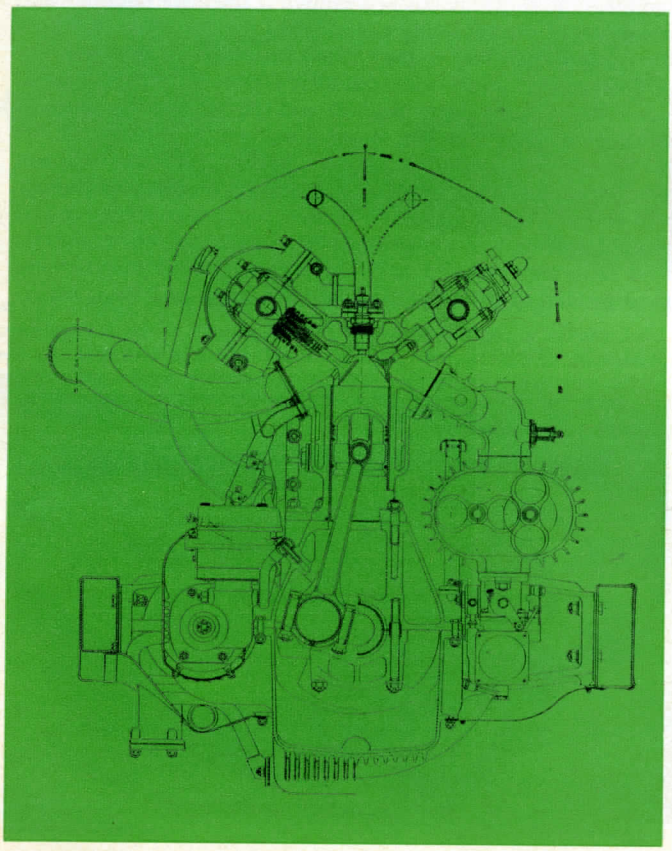
The immediate predecessor of the 2900B was, logically enough, the 2900A, but this machine, essentially a two-seat sports version of the 8C 35 Grand Prix machine with battery, lights, cycle fenders, and a spare wheel mounted on the left side of the cowl, is not widely known. Fortunately, the 2900A has been well documented in the superb book *Le Vetture Alfa Romeo dal 1910,* by Luigi Fusi, who also contributed considerable information on the 2900B. Eleven 8C 2900As were built for racing during 1935-36, and may be regarded as development prototypes for the more comfortable detuned 2900B, despite the fact that the 2900A was catalogued for sale in both racing and road-equipped sports form. Offered in England at £2725 (about $14,000 at that time), the car found no buyers.

The channel-section frame and all-around independent suspension of the Grand Prix cars were used, suitably modified, with the same 108.2-in. wheelbase. The engine was slightly tamed with respect to the Monoposto unit; 220 bhp at 5400 rpm on "home brew" was claimed for the 2900As entered by Scuderia Ferrari in the 1936 Mille Miglia, but again this was probably 10-15 per cent high. A humorous situation regarding fuel developed out of the shortage of aviation gasoline during the Italian conquest of Ethiopia. Alcohol-producing home stills were actually encouraged by the government at that time, and such a blend powered the Alfas. Three 2900As made a clean sweep of the Mille Miglia, with Antonio Brivio the victor ahead of teammates Giuseppe Farina and Carlo Pintacuda. Clemente Biondetti had made an early challenge with a converted Monoposto enlarged to 3.2 liters and eventually finished 4th. Brivio's win was truly earned, complicated by heavy rains and smashed headlights which forced him to drive the last 25 miles from Verona to Brescia in total darkness at a speed sufficient to stave off Farina. The winning average was a record 75.57 mph.

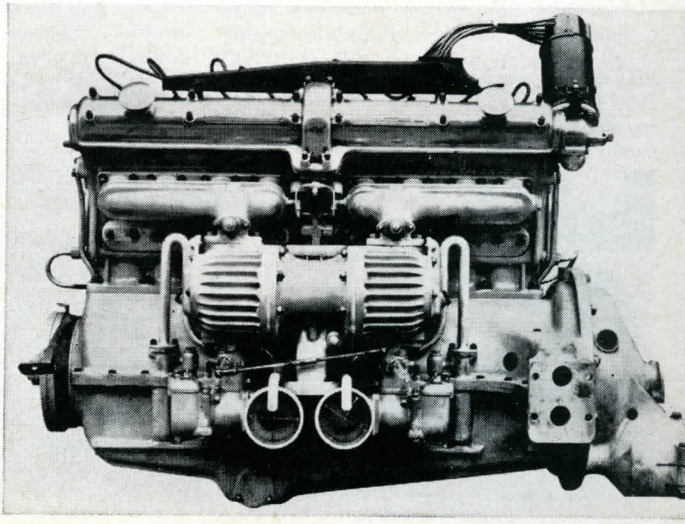
ART CONNELL PHOTO

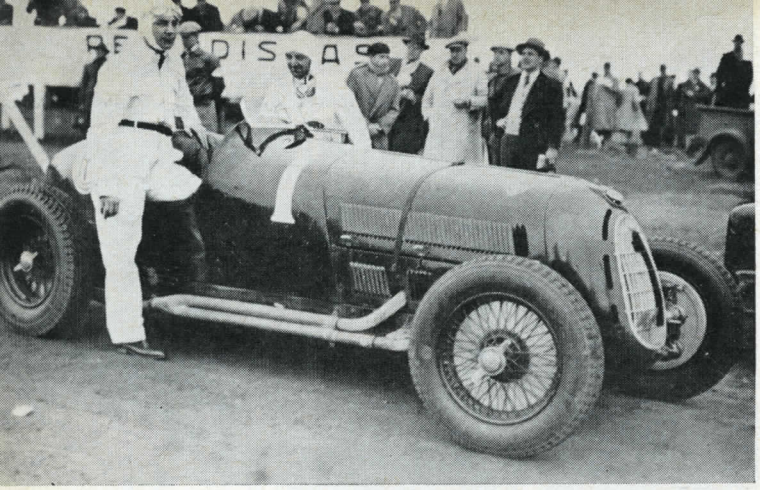
Suspension and running gear of the 2900A and B were based on those of GP cars (Antonio Brivio shown in a 12C 36).

Two 2900As went to Brazil that year to compete in the Rio de Janeiro Grand Prix, run over a tortuous mountain-and-seaside circuit called the *Trampolin do Diablo* (Devil's Springboard) by the Argentine drivers who dominated the entry. The Alfa drivers, Pintacuda and Aldo Marinoni, were accompanied by Ferrari mechanics, while the cars were stripped of

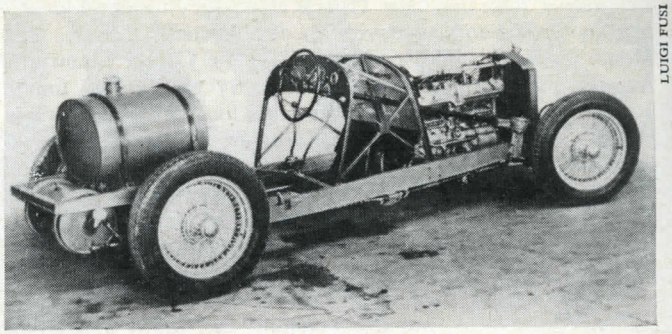


Front view and left side of the 2900B engine. For racing, the integral cylinder head was no great problem, but owners of street 2.9s often had reason to regret this feature.



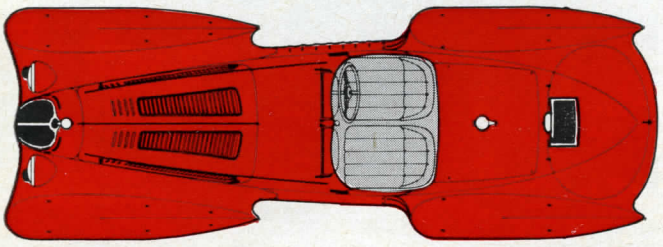


VICENTE ALVAREZ



LUIGI FUSI

The 2900A was strictly a racing machine; with fenders, lights and spare it won the Mille Miglia. Stripped of road equipment, this example was raced in South America by Carlos Arzani. Note huge oil tank on chassis, right.



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their road equipment as there was no such thing as "sports car" racing in South America at that time. Although Pintacuda led easily at half distance, he was put out by differential failure. Marinoni had already retired with engine trouble on the first lap, so the race went to a venerable Type 35C Bugatti, well-handled by Argentine driver Victor Coppoli. The Italians made up for this showing at São Paulo, where Pintacuda won comfortably, even taking time to restart his stalled teammate with a nudge from behind, allowing Marinoni to finish 2nd.

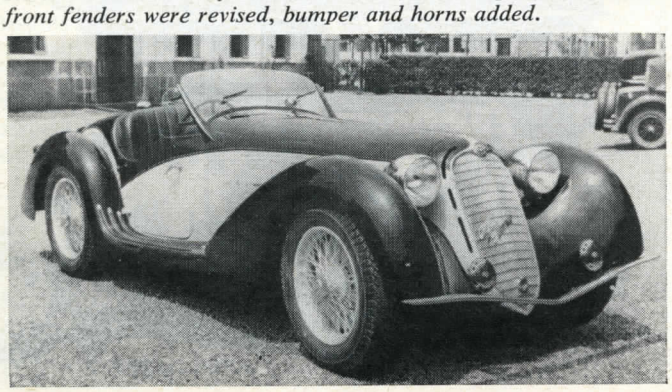
A young and wealthy Argentine enthusiast named Carlos Arzani bought one of the two cars and raced it unsuccessfully in a number of rugged dirt track events where the Alfa proved somewhat fragile. He did win the first Grand Prix of Buenos Aires, however, this event being held on a true road course in 1936. Back in Europe a Ferrari-entered 2900A won the Belgian 24-hour race at Spa, driven by Raymond Sommer and Francisco Severi. A second car entrusted to Farina and Eugenio Siena went out with a broken valve after nine hours.

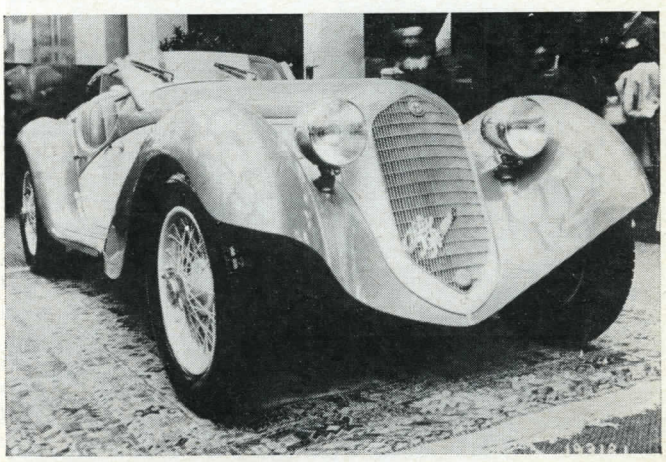
Aside from the Spa race and the brief sojourn in South America, Scuderia Ferrari did not campaign the 2.9s outside of Italy (in the Thirties sports car racing was not the international circus it is today), but the cars won such minor events as the 1937 Susa-Moncensio hillclimb in the expert hands of Mario Tadini, and the Pontedecimo-Giovi climb the same year with Pietro Ghersi the winner. It might be noted here that these events, *gare in salita,* were not strictly hillclimbs, but rather point-to-point races against the clock, with varying gradients (mostly up, not to give gravity *too* dangerous an influence!) along the way. Many Italian national events are still held on such courses, as distinguished from closed circuits.

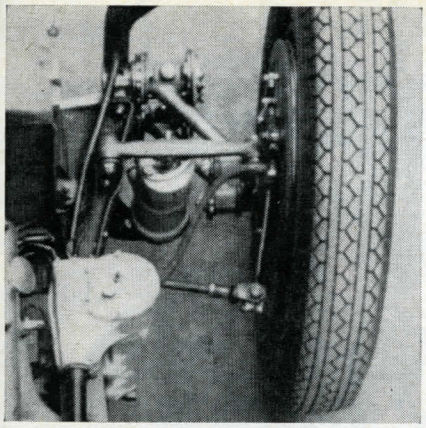
The 8C 2900B was introduced in 1937. Catalogued and shown in the major salons with eye-catching custom bodywork, the car was primarily a special-order model which enticed most of its 30 lucky customers directly to the factory during the next two years. Two wheelbases were listed, the Lungo (long) for touring, at 3000 mm (118.1 in.), and the Corto (short) for competition, at 2799 mm (110.2 in.), although these dimensions have been found to vary somewhat on individual cars. Track was 53.1 inches front and rear on all models. The short chassis proved by far the most popular, and nearly all of the surviving examples of the 2.9, most of which have found their way to the United States, are of this type.

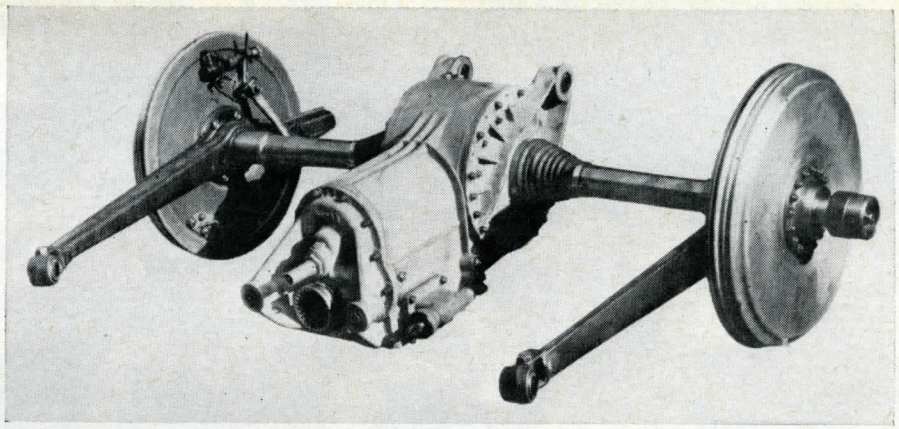
The engine had the identical 68 x 100 mm, 2905-cc dimensions of the Monoposto B 2900 and the 8C 2900A, but was still further detuned. The major drawback of this engine for the private owner was the non-detachable head, which was not a boon to easy maintenance. Still, Italian sporting machinery was expected to return to the factory for proper servicing and rebuilding, much as a pilgrim to the Holy Land. The compression ratio was reduced to 5.75:1, bronze valve inserts were used instead of direct seating into the head, and each super-

Alfa did its own bodywork on these two spyders. Right, a 2900A at the 1935 Paris Show; below, the same basic design stretched 2 inches to fit the B chassis. Radiator grille and front fenders were revised, bumper and horns added.





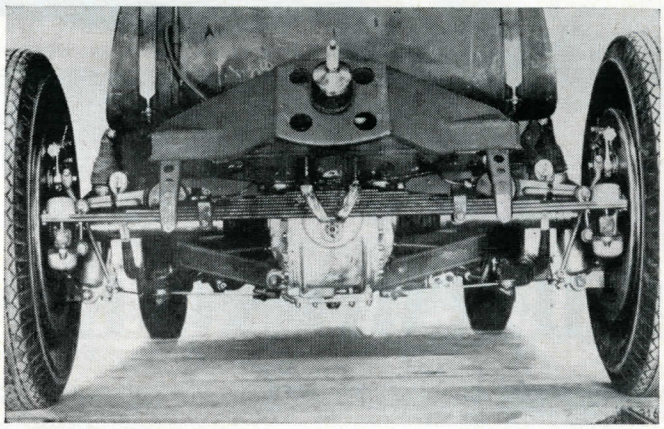


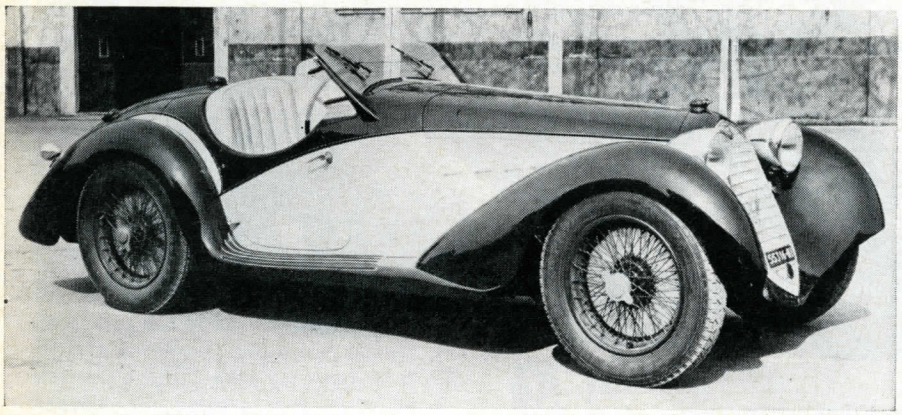


All-independent suspension of the Alfa Romeo 2900B was the most advanced of any road car in its day. Front had coil springs and trailing arms, transaxle at rear had swing axles, radius arms and transverse leaf spring.

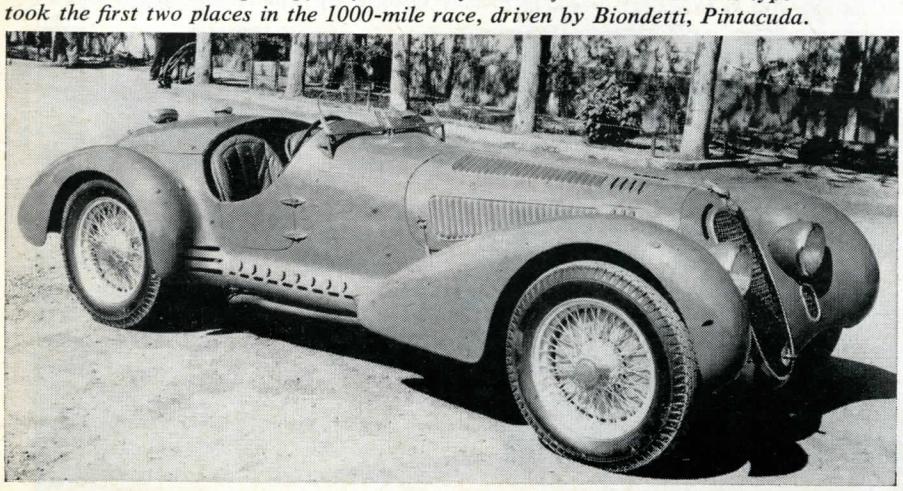
charger, with its own Weber carburetor, served a block of four cylinders at a boost pressure of 10 lb, omitting the balance pipe of the 2900A which connected the front and back four cylinders. The quoted output for the engine in this form was 180 bhp at 5400 rpm, and this figure can be believed. An engine speed of 5700 rpm was attainable without undue danger.

A Scintilla Vertex magneto driven from the left camshaft and a single plug per cylinder comprised the ignition system (the 2900A had a Bosch polar inductor magneto in place of a generator). Another change was the fitting of a vibration damper to the front of the crankshaft, a refinement not considered worthwhile on the earlier competition car. Lubrication was by dry sump with two gear-driven pumps located on the lower right side of the engine, circulating 4.5 gallons of oil from the rear-mounted tank, which by itself held 4.2 gallons.





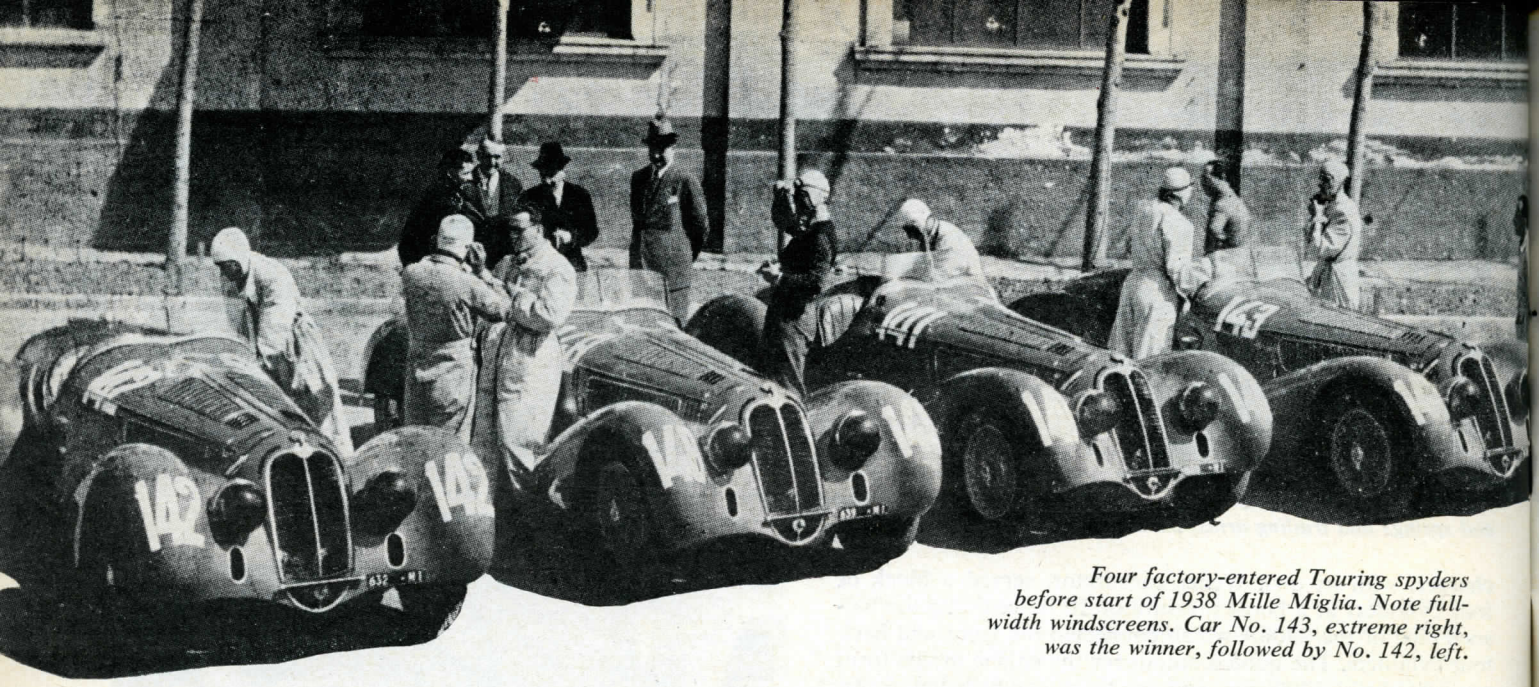
Factory-bodied 1935 2900A spyder, above, compared with the 1938 Touring-bodied Superleggera Mille Miglia spyder, the most famous of all the 2.9s. This type took the first two places in the 1000-mile race, driven by Biondetti, Pintacuda.



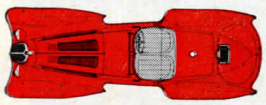
Fuel, also carried in the tail, was 22-38 gallons depending on the model.

A welded-up light gauge box-section frame helped keep the chassis weight to approximately 1600 lb on the short model and 1700 lb on the long. The multiple dry-plate clutch and 4-speed gearbox, employing straight-toothed (and therefore noisy) gears, were located together with the final drive in an alloy case at the rear. Swing axles, located by radius arms, telescopic shock absorbers and a transverse leaf spring, transmitted the power to the road. The front suspension was likewise independent, comprising trailing arms with coil springs and telescopic shock absorbers enclosed in oil-filled cylinders. The resulting handling and road-holding were well in advance of anything in their day, and respectable by more recent standards. Huge 19-in knock-off wire wheels permitted the use of powerful 17-in, 2.5-in wide, hydraulic drum brakes; 5.50-19 Pirelli Corsa tires were the standard wear. Depending on the wheelbase and bodywork, complete 2900Bs were supposed to weigh from 2000-2400 lb, but these figures seem low. The standard short-chassis cars with 4.54:1 rear-axle ratios claimed (and certainly reached) 120 mph at 5400 rpm.

At the London show in October 1937 a very fierce-looking two-seat spyder ⟶



Four factory-entered Touring spyders before start of 1938 Mille Miglia. Note full-width windscreens. Car No. 143, extreme right, was the winner, followed by No. 142, left.



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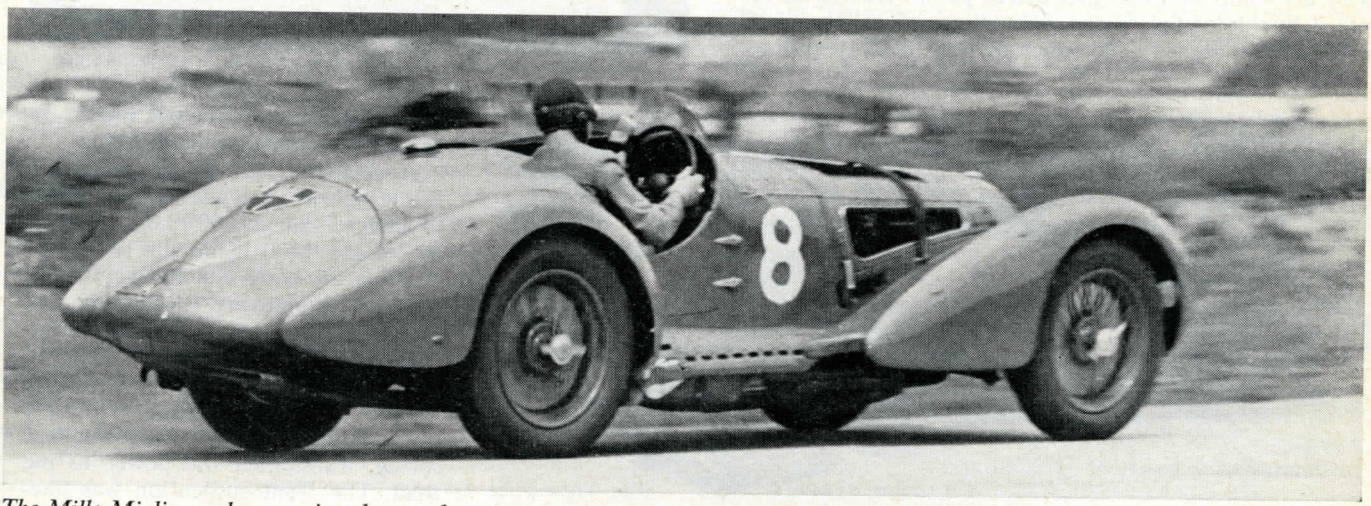
with Alfa Romeo bodywork was exhibited by Thomson & Taylor, the English concessionaires for Alfa. Listing for £1995, roughly equivalent to $10,000 at the prevailing rate of exchange (and more like 25,000 of today's anemic dollars), the car can be considered the performance and prestige counterpart of the present-day Ferrari 275 GTB/4 or Lamborghini Miura. This Alfa was given a short run by



LOUIS KLEMANTASKI

The Mille Miglia spyders continued to perform impressively after being sold to private owners. Englishman Hugh Hunter is shown driving his well known JML 1 at Brooklands in 1939; car competed in AUTOCAR's "Fastest Road Car in England" controversy. Below is Phil Hill in his 2900B MM at Palm Springs in 1951; car is now in Brooks Stevens Museum in Milwaukee.

JACK CAMPBELL

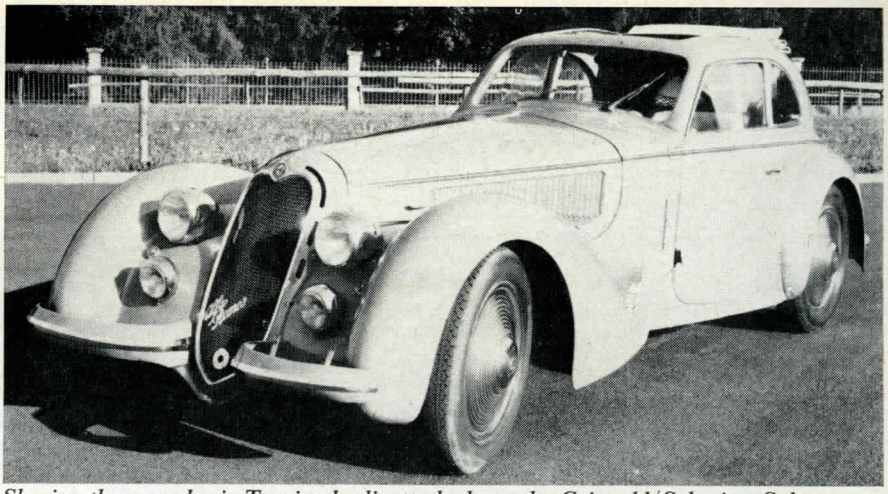
Autocar magazine, during which trial 0-60 mph was reached in 9.4 sec and a speed of 111.8 mph achieved over a half mile. Alfa enthusiast Robert Arbuthnot bought one of the short-chassis spyders, later selling it and his part-time mechanical skills to Anthony Crook. The car has since come to the United States.

In 1938 four lightweight Touring-bodied spyders were entered in the XII° Mille Miglia by Alfa Corse, the new factory racing team (with Enzo Ferrari nevertheless at the helm). Biondetti and Pintacuda brought their mounts into the first two positions; Biondetti's average speed was another record at 84.13 mph. The winning car was displayed in the 1938 London show, specifically "not for sale," to stimulate action on several long-chassis touring models next to it, but Hugh Hunter wheedled the Superleggera machine away from T & T with an insistent checkbook. Since prices on the standard models went to £2250 (then about $12,000), it is interesting to speculate on the sum which finally caused the Mille Miglia car to change hands.

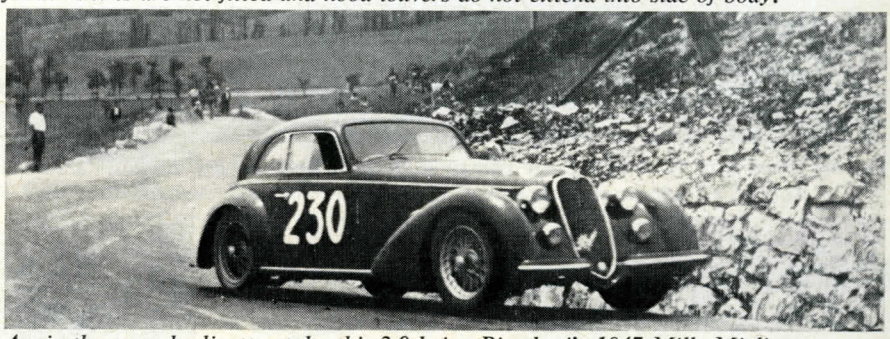
The Hunter car had optional 6.65:1 domed pistons, as well as a 4.16:1 high-speed rear axle (giving 140 mph at 5400 rpm) to supplement the standard 4.54 ratio in the car. With the special pistons Hunter ran a 50-50 mixture of Discol gasoline and pure benzole, getting less than 11 miles per Imperial gallon. The transmission was synchronized, unlike the earlier crash boxes. This machine became one of the contestants in an *Autocar* controversy over the identity of the "fastest road car" in England, a question not completely resolved after several speed events involving, among other aspirants, an 8-liter Bentley, a 4-liter Talbot-Darracq, a 3.2-liter Delahaye and a 2-liter Frazer-Nash-BMW. The Italian press simply described the Mille Miglia Alfa Romeo as *la più veloce vettura del mondo*. If the word *sport* were inserted, and all aspects of performance considered, they were probably right—it *was* the fastest car in the world for everyday use.

Mille Miglia 2.9s also won the Parma-Berceto run (Emilio Villoresi and Biondetti first and second) and the Colli Torinese ascent (Tadini) in 1938. The only 2900B to run at Le Mans was a 1938 coupe with well-streamlined, fully-enveloping Touring bodywork, entered by Alfa Corse for Sommer and Biondetti. Quite the fastest car in the race, it led convincingly for 18 hours, but was first delayed by a burst tire (cooling was hindered by the enclosed rear wheels) and then forced out shortly afterward with a broken valve, although still 100 miles ahead. The Alfa also set the fastest lap at 96.18 mph.

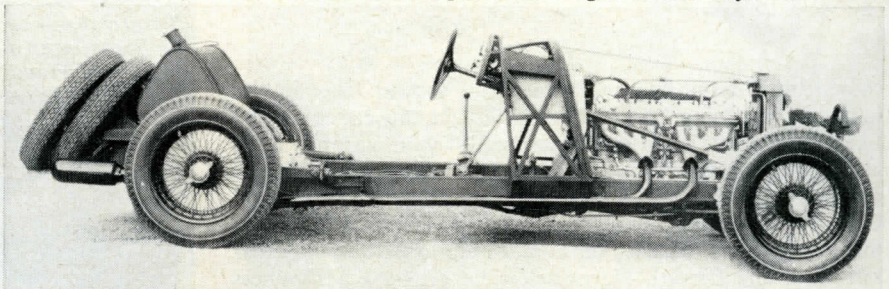
An identical car to Hunter's was pur-



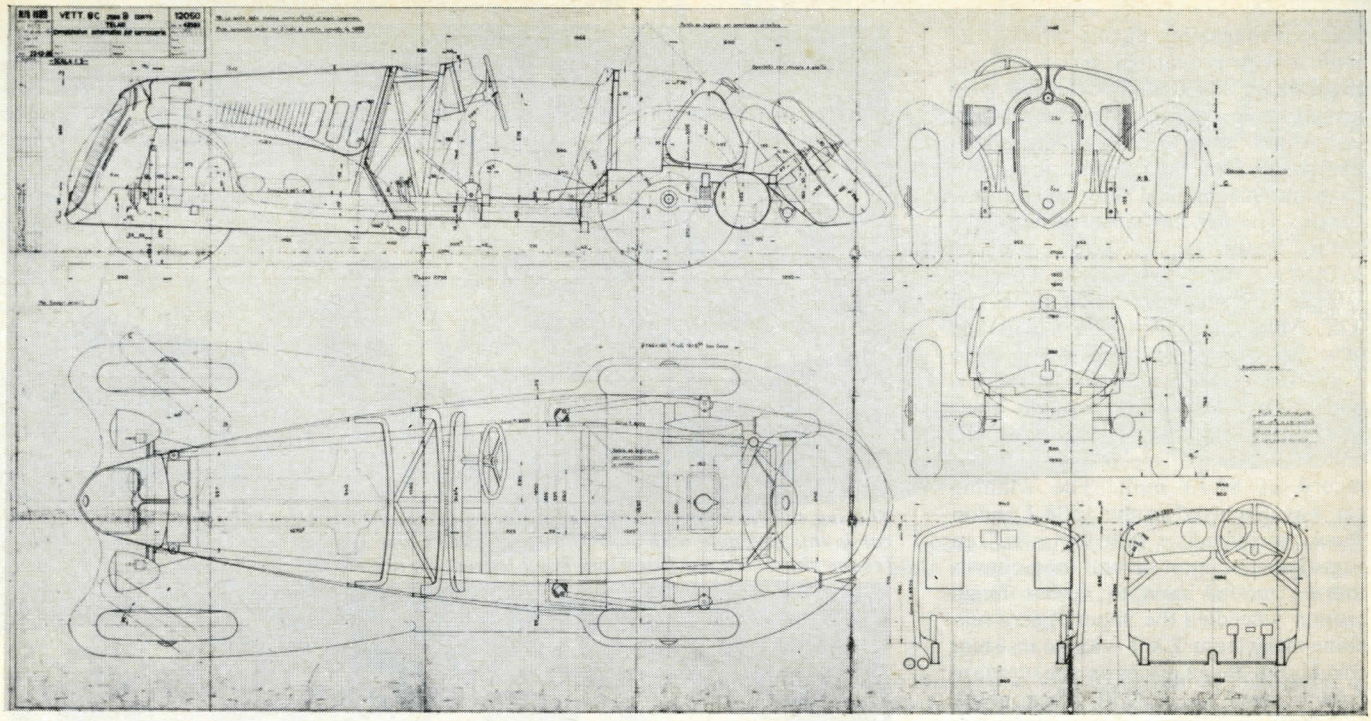
Sharing the same basic Touring berlinetta body as the Griswold/Schreiter Salon car is this example with sunroof, wheel covers and extra driving lights. Rear fender skirts are not fitted and hood louvers do not extend into side of body.



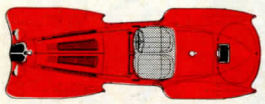
Again the same berlinetta style, this 2.9 being Biondetti's 1947 Mille Miglia-winning car, running without superchargers. Below is the Lungo 118-inch wheelbase chassis used for the berlinettas. Twin spares and 22-gal. tank were fitted.



Only one 2900B, the fully-streamlined Touring berlinetta below, ran at Le Mans. Entered by Alfa Corse in the 1938 race for Raymond Sommer and Biondetti, it led convincingly for 18 hours but retired with broken valve while 100 miles ahead.



Factory drawing of 8C 2900B Corto chassis supplied to bodymakers. Radiator shell and hood were standard, rest was left to stylist.



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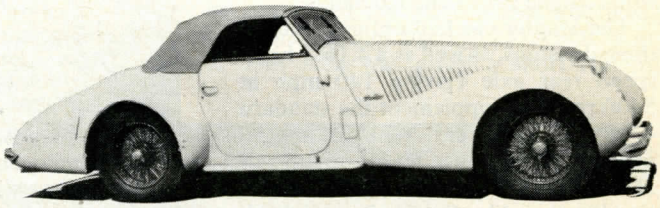
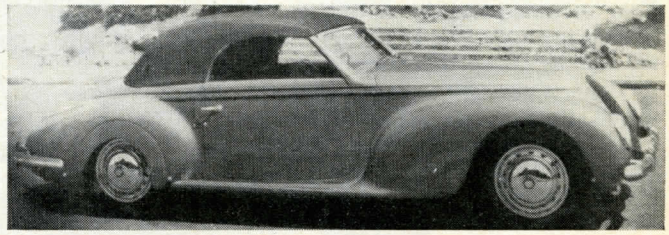
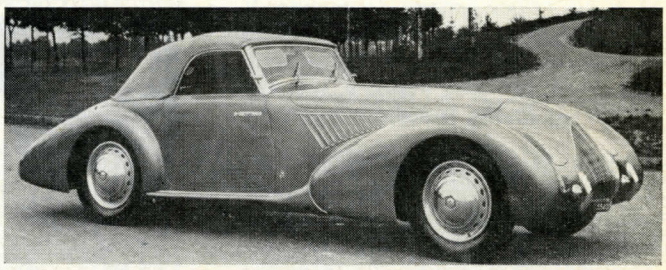
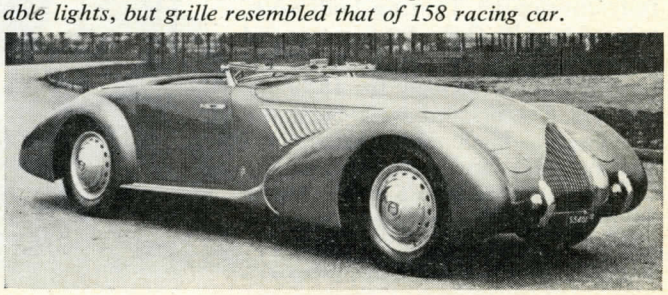


Two relatively sedate 2900Bs are these cabriolets built by Stabilimenti Farina (above, now in the Harrah Museum in Reno, Nevada) and Pinin Farina. Both had Corto chassis.





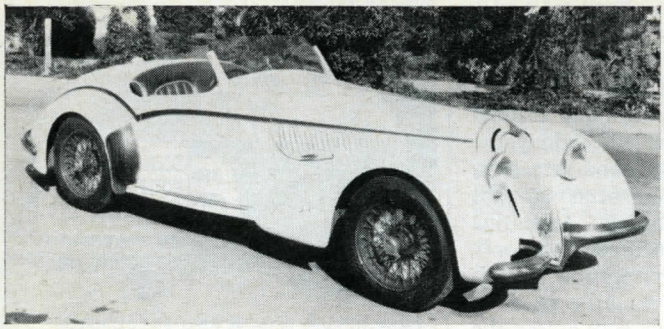
Another Pinin Farina cabriolet, a Corto built in 1939, was more rakish in character. Cordlike design had retractable lights, but grille resembled that of 158 racing car.

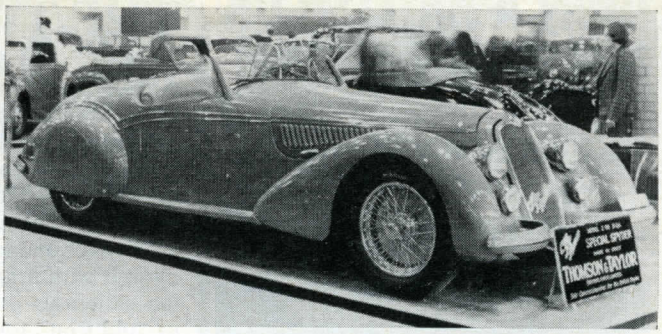


chased by Tommy Lee and achieved a second fame in the hands of the rising Phil Hill, who bought the car from the Lee estate in 1951 and went racing. Hill won a trophy dash at Carrell Speedway and later the Del Monte Handicap at Pebble Beach, in addition to a 4th place in the Pebble Beach Cup, but it was not long before he was wooed away from the Alfa by the charms of a more up-to-date Italian car known as the Ferrari. Nevertheless he retained a fondness for the Mille Miglia Alfa, which now reposes in the Brooks Stevens Automotive Museum in Milwaukee, Wisconsin. Hill's Alfa was a July 1951 R&T cover car; the same issue credited its driver with being "the fastest man in the turns" in the Pebble Beach Cup, although a couple of Cadillac-Allards and a Jaguar managed to finish ahead of him. Another 2.9 from Lee's collection, a Stabilimenti Farina cabriolet, also graced an R&T cover (October 1951); this car is now a part of the Harrah museum in Reno.

The 2.9 had other postwar victories, notably the 1947 Mille Miglia. That rain-soaked event has long been celebrated for the stirring 2nd-place performance of Nuvolari's little 1100-cc Cisitalia, but Biondetti's winning 8C 2900B Touring-bodied Lungo berlinetta must be given credit. Basically a 15-year-old design at the time and not as agile as the lighter postwar cars, it had to endure the additional handicap of running without its superchargers (*compressori* being forbidden in the 1947 event) and only developing 137 bhp in this form. Frank Griswold, a Pennsylvania Alfa Romeo dealer, won the first Watkins Glen Grand Prix in 1948 with an externally similar but supercharged berlinetta, the car featured in our Salon.

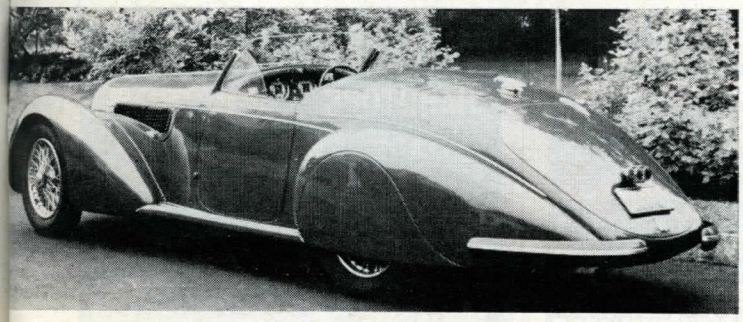
The Glen-winning car, now owned by F. R. Schreiter of Bolton, Mass., carries serial No. 412035 and engine No. 422030 and was originally sold to Ing. Donegani, president of the Montecatini Co., in August 1938. The following year



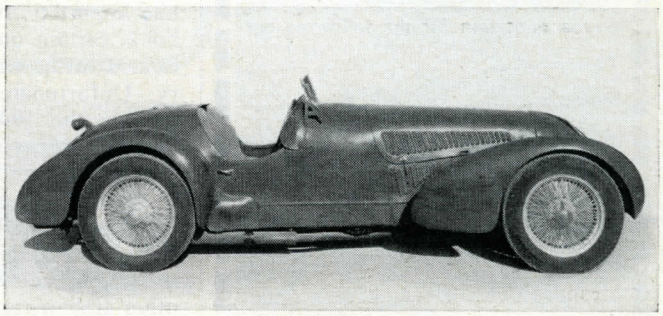


WARREN FITZGERALD

Most of the thirty 8C 2900Bs built had Carrozzeria Touring spyder bodywork. The two cars above and that at left below had similar lines with numerous detail differences. Below right is the 412 sports car, a widened 2.9 with 4.5-liter V-12.

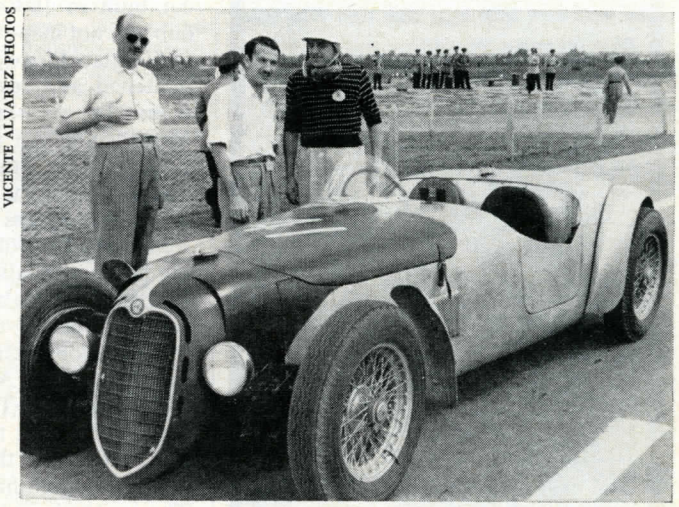


WARREN BALLARD



Below left, the "Whale," as raced by Perez de Villa in Argentina; right; German Pesce's lightened, unsuccessful 2.9 special.

VICENTE ALVAREZ PHOTOS



Donegani had a serious accident but fortunately was not killed; the car was repaired and brought to the United States after World War II by an American officer. Number 412035 was originally painted cobalt blue and was still this color when Griswold won at Watkins Glen. It had four other owners before Schreiter purchased it in May 1962. It had swallowed a valve in the number seven cylinder and had a broken piston. The task of machining the integral head for a new valve insert seemed insurmountable to most of the experts Schreiter consulted, but he finally found an antique gunsmith who made a special cutter, threaded on a shaft, which went into the valve stem hole, cut the head, made a seat and pressed it into place. Yankee ingenuity is not dead. Schreiter spent another five years bringing the rest of the car up to new or better-than-new standards.

First shown in the 1938 Paris show (R&T, January 1964), this berlinetta style was probably the most admired of the many beautiful Touring designs for the 2.9 chassis. A foretaste of postwar Italian styling, the body was characterized by an extremely long hood and a tight close-coupling of the cab and rear deck. At least six variations on this body were built, with and without wheel covers and rear-fender skirts, and one with a folding sun roof. To the writer the most appealing of all is a silver-grey berlinetta with louvered fender skirts first owned by Englishman J. H. Bartlett and more recently by Viscount Ridley, who is fortunate enough to have an open 2.9 as well.

Close on the heels of the berlinetta for sheer animalism is the Touring roadster brought into the United States in 1939 (and thus the first 2.9 in the country) by McClure Halley of New York. Although open, this car has similar contours and proportions to those of the berlinettas. One notable feature is a polished aluminum "sweep-spear" running along the belt line and up over the rear fender; successfully integrated with the lines of the car, this accent may have inspired the later woefully unsuccessful spears adopted by Buick, Ford and others. The Halley car originally had separate chrome-plated headlight housings, but these were later replaced, neatly if irreverently, by faired-in housings à la XK-120.

Meanwhile, back in the Pampas, Arzani's 2900A had been bought by another Argentine driver, Domingo Ochoteco, in 1938. Ochoteco rebuilt the car as a single-seater and raced it until the war came. After the war the car found a new owner, Italo Bizio, one of the best racing mechanics in Buenos ⟶

THE TWO-NINES

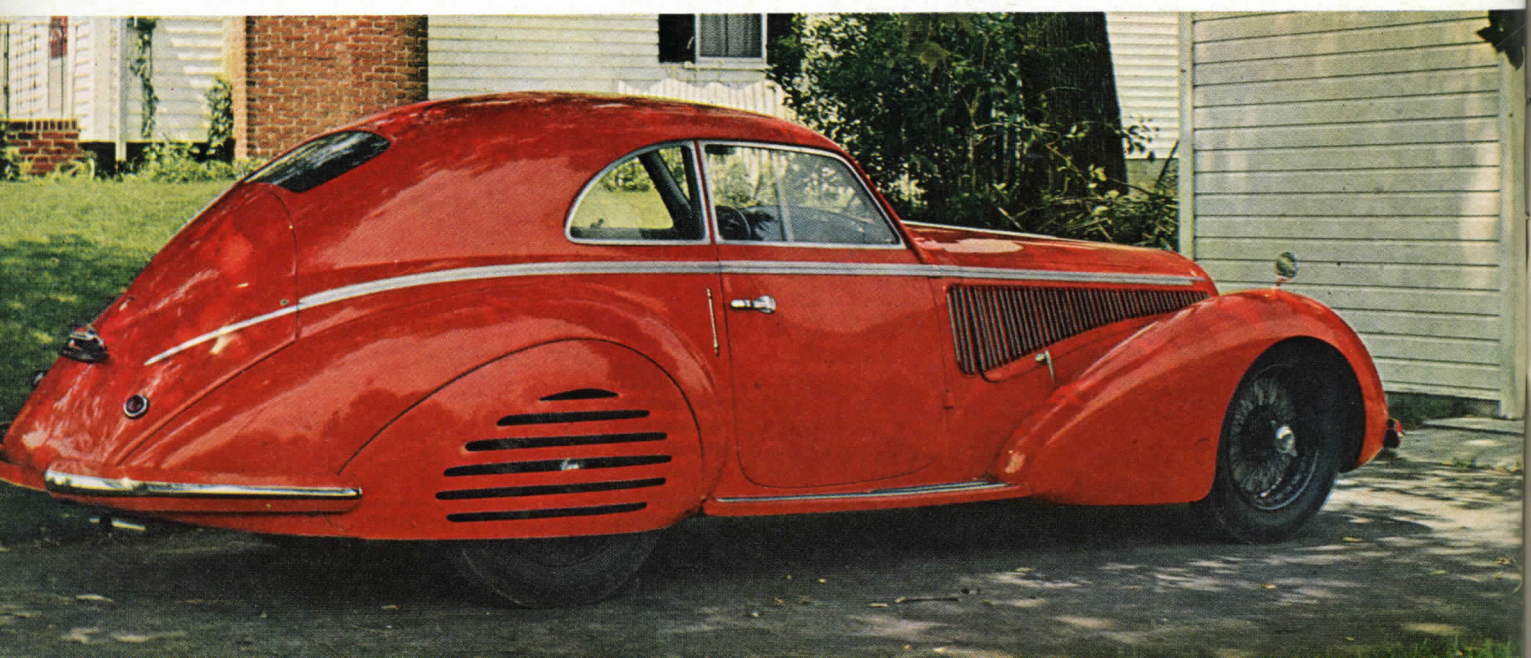
Aires. He rebored the engine to 3.1 liters, lowered the chassis, and clothed it in a new single-seat body along the lines of the Tipo 308 Grand Prix cars, several of which had been brought into Argentina on the sly. Argentine affinity for Italian machinery was only natural with a high proportion of Italian emigrants in the country, so a lot of "old iron" found its way across the Atlantic, in most cases quite unofficially. During the Peron regime automobile importation was officially banned, but a certain under-the-table leniency existed in the case of racing machinery. Unfortunately, Bizio crashed fatally in the 1949 Argentine 500; although the car was later repaired, it soon faded from the racing scene.

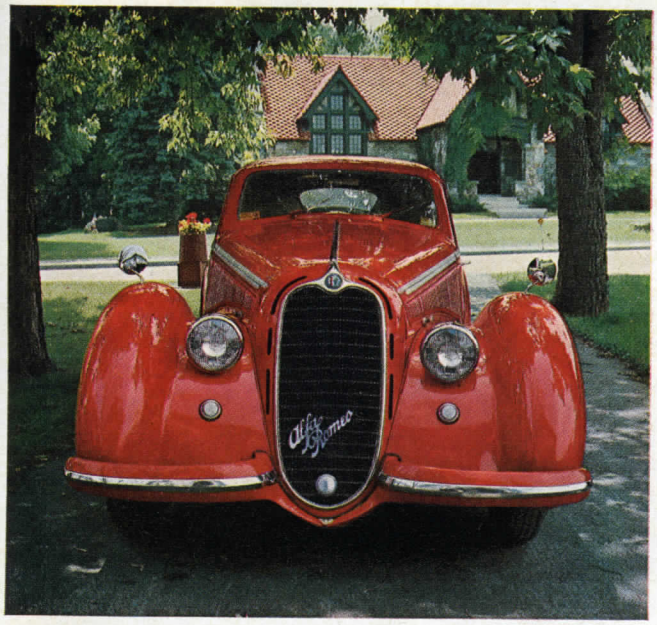
Another Argentine 2.9 was an ugly fully-streamlined roadster raced by Carlos Perez de Villa, who smuggled it into the country—so to speak—with other Italian cars entered in the 1950 Temporada. An experimental factory car built in 1940, De Villa's 2.9 was dubbed, not inappropriately, the Whale.

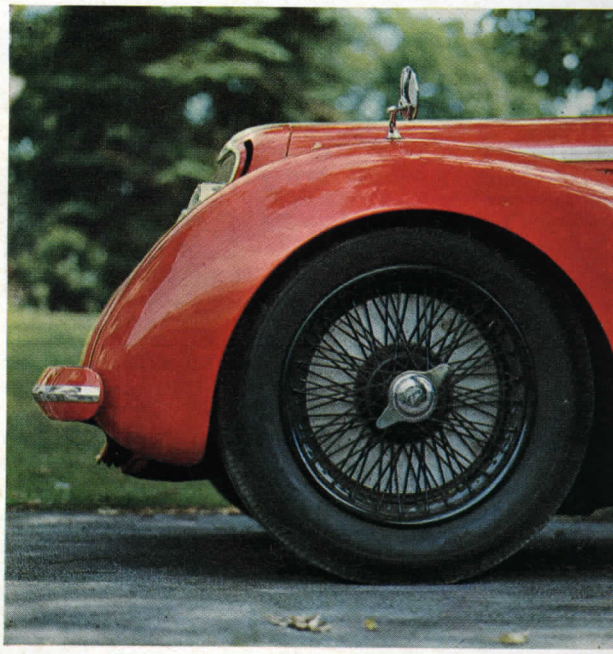
German Pesce raced an extensively lightened and revamped 2.9 obtained from the well-known driver Carlos Menditeguy. All that remained of the original Alfa body—probably once a Touring—was the radiator grille, and the car, perhaps embarrassed, never went well. One of the attractive Touring berlinettas, allegedly the one driven by Biondetti in the 1947 Mille Miglia, was "imported" in 1949 by Victorio Barra, a top racing official and board member of the Argentine Automobile Club. Ernesto Tornquist, a wealthy banker, brought a factory-bodied spyder similar to the Arbuthnot/Crook car into Argentina in the same fashion. The writer is indebted to Dr. Vicente Alvarez for his research on all of the 2900A and B cars in South America.

Of the forty-one 8C 2900A and 2900B cars built by Alfa Romeo, at least nineteen are known to exist today —an excellent average which speaks well for the covetable nature of the type. Some of the Superleggera Mille Miglia cars were repowered by the factory for 1939 and 1940 events; both 6C 2500 and 412 (1937 4.5-liter V-12) engines were fitted to A and B chassis, the V-12 unit necessitating some widening of the frame and bodywork. Almost all of the 2.9s in the United States have appeared at one time or another in the classified advertising columns of R&T; hopefully, some of them will circulate in the future, although no red-blooded Alfa Romeo enthusiast could be blamed for salting away a 2.9 with miserly glee, sneaking it out on occasion for a fast run down a deserted, winding tree-lined road.

ALFA ROMEO 8C 2900B BERLINETTA --Watkins Glen Winner Twenty Years Ago




Alfa Romeo

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