

SC1 ROAD TEST:

# ABARTH'S-Convertible and Coupe





## Proof positive that good things come in small packages.

ELSEWHERE ON THESE PAGES, Karl Ludvigsen, SCI's roving technical correspondent, has covered the present work and future plans of Carlo Abarth. The Austrian-born engineer, who worked with Dr. Porsche on the ill-fated Cisitalia GP car, has in the past been known as a purveyor of speed equipment. But, with the advent of the Fiat 600, Abarth in recent years has become better known for a series of small Porsche-like cars of exquisite demeanor based on Fiat's next-smallest product. We have elsewhere dissected the inner workings of these tiny tornadoes and now the only question remaining is — "wot'll she do?"

For the answer to this, we went to Mr. Franklin D. Roosevelt Jr. and asked just that. For answer, the ever-obliging Mr. Roosevelt handed over two examples of Mr. Abarth's work with the suggestion that we find out for ourselves. The two cars were the very rare Allemano Spyder and the more common (if such a gem can be called by that term) Zagato coupe.

Since both cars were almost identical in handling and performance (with the aerodynamics of the coupe giving it an edge here) we'll treat both alike until we reach the points of difference. As with any small car, entry into the Abarth takes getting used to, especially on the driver's side, but once the technique of right leg first, hip pockets second, left leg last is mastered it's all very simple and easy. That is unless you're over six feet, in which case we can only suggest surgery or a larger car. This last comment is inspired by the sight of Hank Rudkin, six-foot-plus Bandini pilot, attempting to sample the merchandise. It was reminiscent of a plump woman trying on a tight girdle — hopeless but interesting to watch.

However, so neat are Mr. Zagato's and Mr. Allemano's packaging efforts that once inside things get quite roomy indeed for the man of average height and weight. There is leg room and hip room aplenty although the typical Italian steering wheel position — well forward and down low — requires a sort of mental adjustment. This wheel is a Nardi instrument with dural spokes and a finely polished wooden rim that makes one wonder why anybody ever designed any other kind of steering device.

Just ahead of it, directly in front of the driver is a hooded instrument panel with three awesomely large Jaeger dials. Dead center is a 6800 rpm tachometer flanked on the right

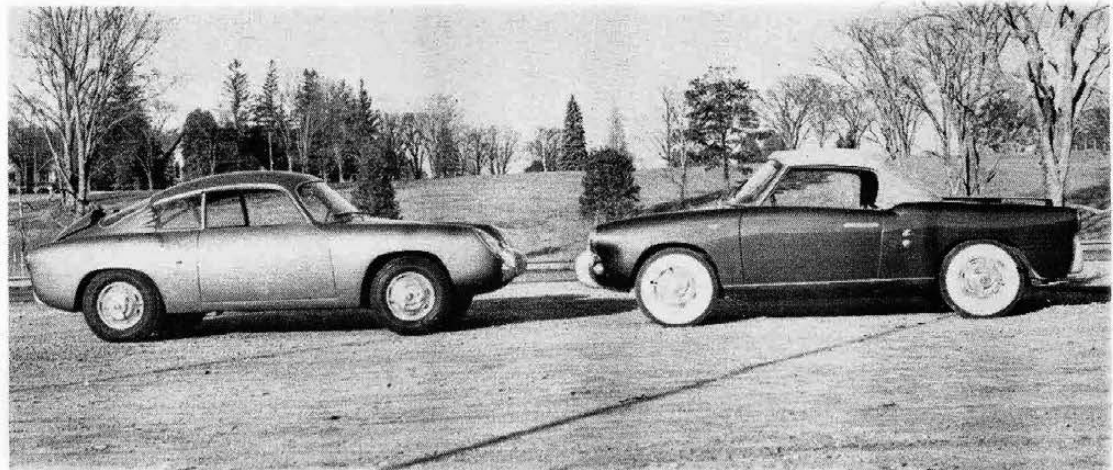
by an equally large speedometer optimistically calibrated to 120 mph. To the left is a triple duty unit of the same size and shape which tells oil pressure, fuel level and coolant temperature. To the right of this group in the center of the matte-black dash are the ignition switch, a generator light, toggle-switches for instrument lights and wipers, and three indicator lights, red for turn indicator, green for parking lights and blue for headlights. These last items are controlled, as in most Fiats, by two levers on the steering column.

To the right of the driver, at about mid-thigh between the seats are the short, upright gear lever and two large toggles, the one nearest the driver being fuel mixture and the mate to it on the left a starter-pull — a very neat set-up since choking and starter operation can be handled simultaneously with one hand. To the rear of all this is the pull-up handbrake.

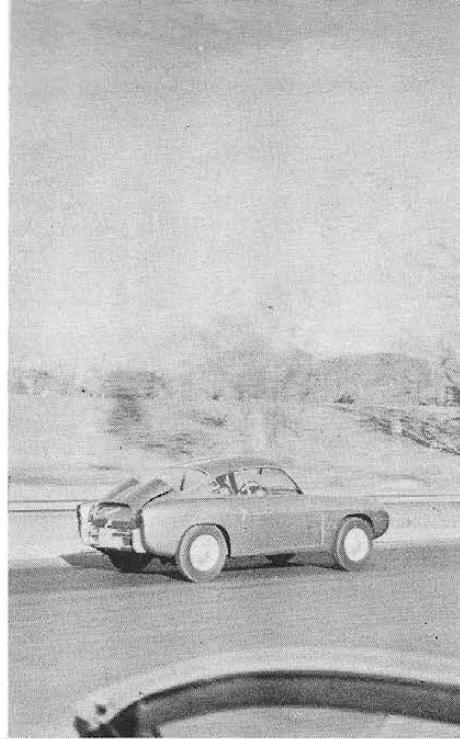
A slight adjustment of the mixture control and a single flip of the starter toggle puts the engine into an almost instantaneous 1500 rpm idle which settles down to 1100 rpm when the choke control is returned to normal position after a moment. A slight poke at the throttle pedal evokes a blip to 3000 with no hesitation when the engine is warm. Low-gear starts are smooth but quick and require reasonably accurate clutch and throttle synchronization. The clutch, thanks to stronger springs, engages with a smooth, hard and rather sudden bite that can be very satisfying when one is in a hurry to get through a hole in traffic or take off from a stop light ahead of the surrounding behemoths (even such things as Volkswagens look monstrous from the driver's seat of an Abarth).

Once under way, which is done with no lost motion or hesitation, the impression is one of seemingly endless revs in any gear. In low gear it is an excellent habit to keep an eye on the tach since it is extremely easy to let the revs slip past the safe point of 6000 rpm without noticing otherwise. In spite of all this tolerance, nay, eagerness, for high revving, the torque is amazing for a 750 cc machine. If one feels cruel enough the car can be lugged down to 15 miles an hour in top gear and still accelerate smoothly without bucking or otherwise protesting. However, we found that it was more satisfactory to drop into third gear at any speed under 30 mph; with anything less than 2000 rpm it just doesn't feel quite happy. At 3000 rpm it begins to turn up power and

*A nose-to-nose profile shot serves to compare the lines of the two body styles. The closed model has a somewhat sleeker look due to the faired roof lines, while open car offers fresh-air fun.*







*Tail on convertible could be controlled by flick of wheel. Coupe proved faster of two.*

as the 4000 point is passed there begins an insistent push at the shoulder blades that is entirely unexpected from such a small machine.

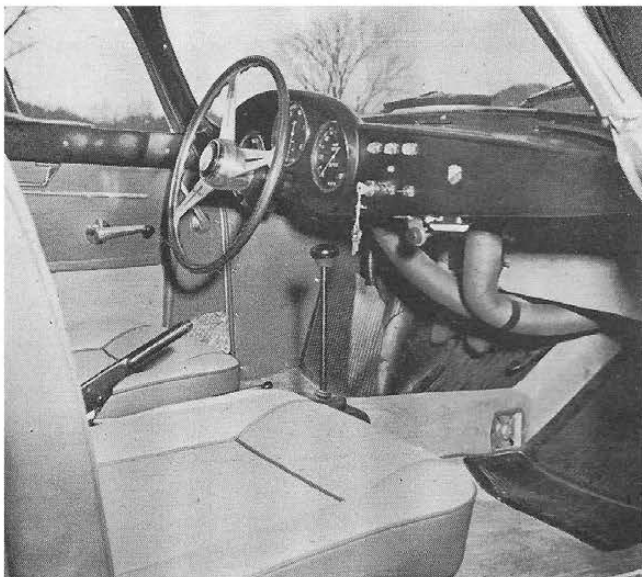
Incidentally, be it noted that the engines in our test cars were the mildest of the four available in special-bodied Abarths, the so-called Grand Touring engine. This one is listed as giving 43 bhp at 6000 rpm. Next up the line is the Mille Miglia engine rated at 44 bhp at 6000, the main difference being the polishing and selective assembly methods used in bolting it together. Then there is the Mille Miglia, specially prepared unit with large valves which puts out 46 horses at 6000 rpm. The hairiest of all the rocker-box units is the Sprint version which has a wild cam and compression raised to 10.5 to 1 or thereabouts. This churns up 6200 rpm and develops 47 horsepower at that speed. In these days when anything under 100 horsepower is considered fit only for powermowers and quarter-midgets this doesn't seem like a very large stable but believe us, these are very willing horses indeed and since they're only pulling a shade over

1300 lbs., they don't have to work very hard getting up a goodly handful of knots in a very short time.

This factor, coupled with an outstanding gearbox, gives the car lizard-like quickness when dealing with traffic or twisting roads, especially when the intermediate gears are used fully. Low gear is the only non-synchro cog and even that is easy enough to get into by double-clutching at anything under about 15 mph. Stick movement is extremely slight, especially from side to side. At first there is a rather disconcerting feeling when going from second to third — it seems as if you're going right back into the low gear gate. The nice thing is, you never do.

Handling, too, is impeccable though sensitive. In fact the sensitivity seems to be just a bit too much at first but it is pretty much a psychological phenomenon brought about by the fact that the steering is light and produces a reaction almost immediately. However, the reaction is never violent, merely fast and predictable. Steering is quick but not sudden with three turns lock to lock.

*Hooded instruments and upright wood-rimmed steering wheel are typically Italian. Dished seats offer good support.*

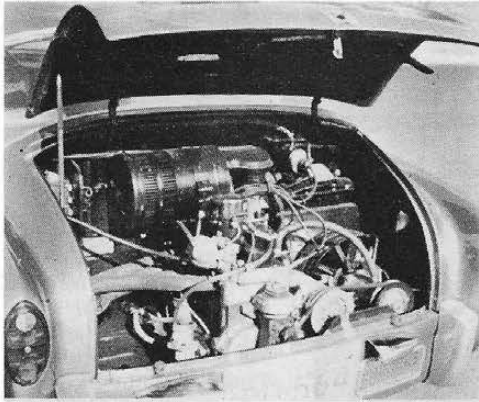


*Rimless door glass helps give airy look to Allemano-bodied convertible. Rear-mounted engine poses styling problem.*





"Writhing serpents" exhaust manifold mark engine as non-stock Abarth fire breather.



## SPORTS CAR ILLUSTRATED ROAD TEST

Price; Zagato Coupe ..... \$3640  
 Price; Allemano Convertible ..... \$3700  
 U. S. Importer:..... Roosevelt Automobile Co., Inc.  
 2825 V St., N. E.  
 Washington 18, D. C.

### PERFORMANCE

#### TOP SPEED:

	Coupe
Two-way average.....	88 mph
Fastest one-way run.....	90 mph

#### ACCELERATION:

From zero to	Coupe Seconds	Convertible Seconds
30 mph.....	5.3	5.0
40 mph.....	8.2	7.8
50 mph.....	12.7	12.8
60 mph.....	18.2	18.5
70 mph.....	27.1	28.0
Standing ¼ mile.....	21.2	21.9
Speed at end of quarter.....	63 mph	63 mph

#### SPEED RANGES IN GEARS:

	1000-6000 revs
I.....	0-24
II.....	7-40
III.....	10-61
IV.....	15-top

#### SPEEDOMETER CORRECTION:

Indicated Speed	Timed Speeds: Coupe	Convertible
30.....	29	27
40.....	37	35
50.....	45	46
60.....	52	57
70.....	60	67

#### FUEL CONSUMPTION:

Hard driving.....	43 mpg
Turnpike driving.....	50 mpg

### SPECIFICATIONS

#### POWER UNIT:

Abarth "Grand Touring 750"..... Four cylinders in-line, water cooled  
 Valve Operation..... Pushrod overhead valves, in-line  
 Bore & Stroke..... 2.40 x 2.52 in (61 x 64 mm)  
 Stroke/Bore Ratio..... 1.05/1  
 Displacement..... 45.6 cu in (747 cc)  
 Compression Ratio..... 9.8/1  
 Carburetion by..... One Weber 32  
 Max. Power..... 43 bhp @ 6000 rpm  
 Idle Speed..... 1000 rpm

#### DRIVE TRAIN:

Transmission ratios	(overall)	optional ratios
I.....	3.38 (15.40)	(—)
II.....	2.06 ( 9.38)	(1.75)
III.....	1.33 ( 6.07)	(1.20)
IV.....	0.896 ( 4.08)	(1.04, 0.87, 0.83)
Final drive ratio.....	4.55	(5.37, 5.12, 5.00, 4.87, 4.33)

Axle torque taken by gearbox case

#### CHASSIS:

Frame..... Standard Fiat 600 pressed steel frame  
 Wheelbase..... 78¾ in  
 Tread, front and rear..... 45½ in  
 Front Suspension..... Transverse leaf spring, wishbones  
 Rear Suspension..... "Diagonal" swing axle with trailing arm, coil springs  
 Steering wheel turns L to L..... 3  
 Turning diameter, curb to curb..... 30 ft  
 Brakes..... Fiat-Baldwin hydraulics  
 Brake lining area..... 70 sq in  
 Tire size..... 5.20 x 12  
 Rim size..... 3½ x 12

#### GENERAL:

Length..... 136½ in  
 Width..... 53 in  
 Height..... 47 in  
 Weight, curb..... 1260 lbs  
 Weight, as tested..... 1540 lbs  
 Weight distribution,  
 F/R as tested..... 40/60  
 Fuel capacity..... 7½ U. S. gallons  
 (10 gallon tank optional)

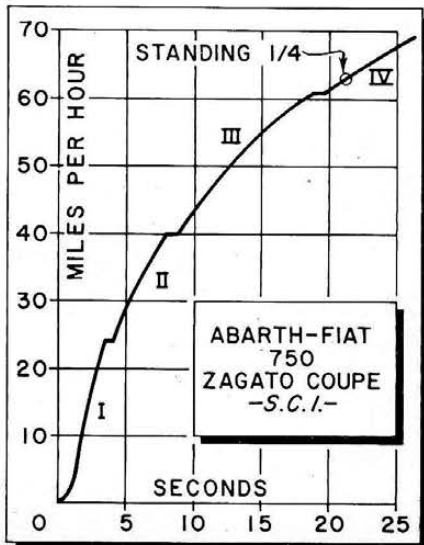
#### RATING FACTORS:

Specific Power Output..... 0.945 bhp/cu in  
 Power to Weight Ratio, as tested..... 35.8 lbs/hp  
 Piston speed @ 60 mph..... 1660 ft/min  
 Braking Area, laden..... 91 sq in/ton  
 Speed @ 1000 rpm in top gear..... 15.2 mph

This was brought out when we took both cars to Lime Rock Park for full-bore testing operations. The first few laps were taken with some caution but then the smoothness of the course and the predictability of the cars begat enthusiasm and faster circuitry. Lime Rock is known as a fast course, at least for this country and these little cars could be driven almost flat out with an amazing feeling of utter safety. These cars can be classified as having a mild understeer up to the limit of adhesion for a given corner and speed which changes at the top end to a condition of neutrality in which the tail starts moving out, albeit very gently unless one hits a severe bump. In this case conditions change violently. Lap times were on the order of 1 minute, 25 seconds which is not at all bad for a 750 GT with full touring equipment on a one-and-a-half mile road course.

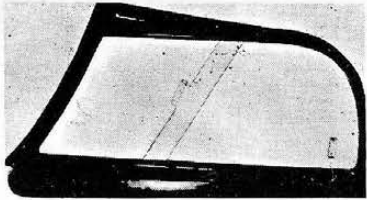
On the road the best cruising speed is in the neighborhood between 60 and 70 mph and tracking is excellent except for some wind sensitivity which is most evident with low tire

(Continued on page 60)





AVAILABLE FOR THE FIRST TIME



**RIGID GLASSFIBER  
SLIDING SIDECURTAINS**

Custom Built For:

AUSTIN HEALEY .....\$44.00  
M.G.A. ....\$46.00

Moulded self color glass fiber frame. Polished perspex panels. Available in all colours. Controls ventilation. Eliminates misting.

**Also REMOVABLE PLASTIC HARDTOPS  
AUSTIN HEALEY SPRITE**

&

Austin Healey \$178.00 or \$112.50,  
Austin Healey 100-6 \$210.75 or  
\$112.50. M.G.A. \$178.00.

Shipping Charges Extra

Trade orders invited. Made from glass fiber, trimmed inside and out with best quality plastic fabric, or self color glass fiber. Complete and genuine saloon comfort. Our tops are of the highest quality workmanship and have been seen at all the motor shows in Europe.

**UNIVERSAL LAMINATIONS**  
(Denis Ferranti Laminations Ltd.)

58, HOLLAND PARK MEWS  
LONDON W.11 ENGLAND



**AROUND THE WORLD**

European car owners agree, its "Goodbye, Mr. Chips!" with MATCH, the touch-up paint produced exclusively to meet the needs of discriminating car owners. Your imported car dealer or auto accessories store has a MATCH for A-H, VW, RENAULT, TRIUMPH, HILLMAN, ETC... at \$1.25. For name of your nearest dealer, please write:

PHILIP-SANFORD AND COMPANY  
BOX 68, BROOKLYN 12, NEW YORK, U.S.A.

**SPECIALIST BUILT  
SUPERB 950 cc SPORTS CAR  
(FIBREGLASS SHELL)**

£750 (pounds sterling) inc. freight

Brochure from

**CONVAIR DEVELOPMENTS**  
177, Cathall Road, London, E. 11, England.

**POWER, SMOOTHNESS & PUNCH**

Downton Speed equipment gives you that extra lead over the rest. For Sprite, Minor 1000, A 35 and new A 40 our bolt-on kits are now being acclaimed in U.S.A. as in England. Genuine hand manufactured British parts for British cars.

Write today for prices & performance figures.

**DOWNTON ENGINEERING WORKS LTD.**  
DOWNTON, SALISBURY, WILTSHIRE, ENGLAND.

**Abarth Test**

(Continued from page 27)

pressures. Raising the pressure stiffens the ride, particularly where small sharp bumps are encountered, but it minimizes sensitivity to side winds. Larger bumps are taken with almost no sign of pitching or bottoming — the feeling, as might be expected is quite Porsche-like, soft but not wallowing or loose. Braking on the road is more than adequate for the power developed. On the race course the same thing applied, however, there was a definite feeling that some attention could be paid to this department if real competition were contemplated.

Now we come to the differences between the two cars. We've already pointed out the fact that a tall man will find the Zagato coupe a tight fit. The Allemano Spyder is a bit more tolerant toward unusual height. While the coupe accepted John Fitch, who is by no means a short man. It must be remembered, however, that Fitch is a fairly lanky specimen and is also used to folding his frame into tight machinery. The spyder on the other hand presents less of a problem due to a shade more head room with the top up and unlimited space with it down. The seats in both cars rack far enough to the rear so that leg room is no problem.

The major difference between the two cars however, is one of performance. The shape of the coupe is far more slippery than that of the spyder with the result that the two are about equal up to some 60 mph but at that point wind resistance cuts the spyder down noticeably. Where the coupe runs right on up to 85 mph with no hesitation, the convertible must be nursed up to 80 and wind buffeting is a definite factor. Fuel economy also suffers at higher speeds in the roadster, although a consumption rate of 40 mpg can hardly be called high. The coupe gets 43 to 50 mpg.

Weather sealing is another case in point. The coupe is completely dry in just about any form of downpour at any reasonable speed. Small plexiglas wind deflectors around the leading edges of the doors prevent any leakage even with the windows slightly lowered. The spyder, on the other hand, is beset with little cross-currents of wind that seem to seek out openings in clothing, cuffs and the back of the driver's neck with unerring accuracy. The car is reasonably dry in wet weather, the little breezes mentioned not being hefty enough to carry water.

Luggage room is also a point of difference. The coupe has a roomy platform behind the seats that is large enough for two large suitcases and is fitted with luggage straps to tie them down. Behind this space is another curtained area that can carry small equipment and soft baggage. The Allemano body has only a small space behind the seats and much of that is used up by the top when it is folded. It will take a small suit case or a two-suitner and very little else.

We found one other point of difference although this probably only concerned these individual cars. The large Jaeger

**get more  
enjoyment  
out of your HI-FI  
for only \$1.00!**

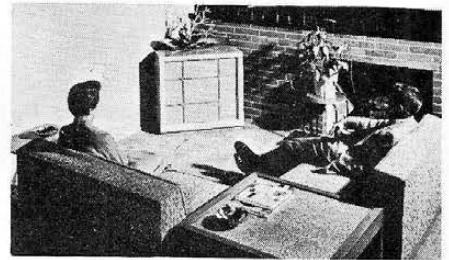


PHOTO courtesy Electro-Voice, Inc.

Now—just \$1 can show you how to get more listening pleasure from your hi-fi set! That's the cost of the new 1959 edition of the HI-FI GUIDE & YEARBOOK—the authoritative Ziff-Davis Annual that covers every facet of high fidelity enjoyment. Besides telling you how to use your equipment for the best possible reproduction, the 1959 HI-FI GUIDE & YEARBOOK presents a round-up of the trends in the hi-fi fields... tells you how to save on repairs... guides you in the selection of records... gives you tips on tapes. It's actually like getting two big books for the price of one!

**GUIDE**

Section 1: IMPROVING YOUR HI-FI—Strange Allergies of hi-fi. Square Waves Check Tone Controls. Give Your Pickup a Chance. Getting the Most from Your Tweeters. MS means Multiplex. Your Stereo Listening Area.

Section 2: INSTALLING YOUR HI-FI SYSTEM—Hi-ing the Fi to the Suburbs. Index Your Music. Ceiling Mounted Speaker.

Section 3: TAPE RECORDING—Getting the Most From Your Tape Records. Tips and Techniques. Don't Let Your Tapes Hiss at You. Make Your Own Stereo Tape Recordings.

**YEARBOOK SECTION**

TRENDS IN HI-FI: developments in 1958 and what the future holds.

CRITICS' CHOICE OF RECORDINGS: a conductor, a music critic, and a sound engineer tell what records (classical and jazz) they would select—and why.

THE ULTIMATE IN FM STATIONS: here's how an FM station in Chicago really caters to its hi-fi listeners—in what could be a nationwide trend in programming! Also gives you a listing of FM stations throughout the country.

STEREO: the latest report on what is happening in this big, exciting field. PLUS a photo story showing what can be done to fit more equipment into less space.

All told, the HI-FI GUIDE & YEARBOOK brings you a wealth of information to help you get the most out of your hi-fi listening hours. Only \$1.00 (\$1.25 outside U.S.A.), it's a fabulous buy! Make sure you reserve your copy now at your newsstand. On sale March 24.



**ZIFF-DAVIS PUBLISHING COMPANY**

434 South Wabash Avenue, Chicago 5, Illinois



speedometer in the coupe was extremely optimistic, getting more so up the range until the discrepancy was nearly 15 mph at the top end, reading 105 mph at a true 90. The unit in the Allemano was only slightly optimistic, showing a mere five to seven mph difference at the top end. This large difference could and undoubtedly should be pegged to gearing. There are five different ring and pinion ratios and two different sets of third and fourth speed gear available. Further, the coupe was fitted with Michelin X tires while the spyder was equipped with the more standard Pirelli tires. The lower profile of the Michelins undoubtedly made for more tire revolutions per mile with a consequent effect on the speedometer readings.

There is little doubt that both cars are as delightful to drive as any little car can be. Both are gemlike in quality and both hang to the road like the proverbial painted center line. Finally there is the continuing amazement that such consistently good performance can be coaxed from so few cubic centimeters worth of displacement and still maintain such docility.

—John Christy

## Der Englander

(Continued from page 51)

into the making of a personality, an ego, they seemed to me completely different. The backgrounds to their lives, moreover, were in total contrast.

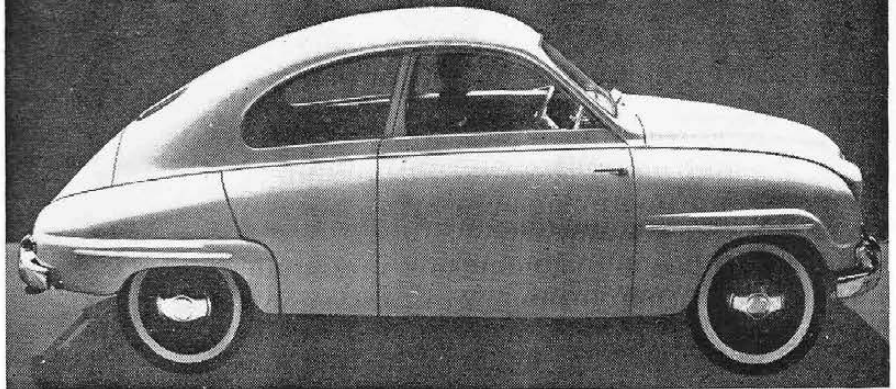
Collins, the son of an automobile engineer, practically weaned on methanol, encouraged by his father from teenage in his racing aspirations, hadn't an obstacle in his way. Seaman's parents, on the other hand, were all along utterly opposed to Dick's speed craze and did everything in their power to turn him from his chosen profession. Gentle, cultured, steeped in a tradition that had its roots in the late Victorian era, they had set their hearts on a diplomatic career for their son, and his bent for this dangerous and violent sport grieved and disappointed them bitterly. In turn, his realization of their feelings reacted on Dick, who, because a racing driver's life was irresistible to him, was constantly forced into positions he knew must increase their anxiety and hurt.

Above all, they abhorred the idea of his becoming a professional. In their world, the only time one came within bargepole range of a professional sportsman was when somebody organized one of those Gentlemen vs. Players cricket matches. Players weren't Gentlemen and Gentlemen never became Players.

Although Mr. William John Beattie-Seaman had been a semi-invalid for years, his death in 1935 was almost certainly accelerated by the losing fight he waged against Dick's besetting allurements. In widowhood his mother used pressure, stratagems and stalling tactics to dissuade Dick from marrying the girl of his choice, Erica Popp, daughter of BMW president Franz Popp. She did so primarily on the grounds that, in the prevailing state of international tension, an Anglo-German marriage was virtually foredoomed; and secondly because Erica, pretty and per-

(Continued on page 62)

# EVEN MORE TERRIFIC FOR '59!



Important new features\*

at no extra cost

in the 1959

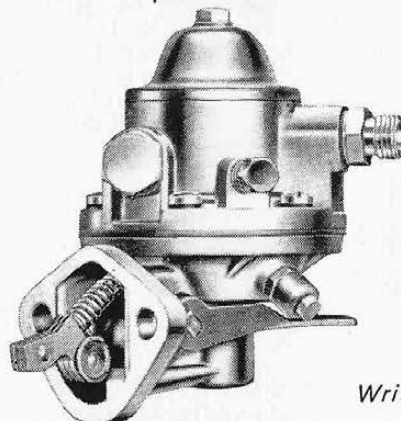
# SAAB

from Sweden  
the economy car

\* LARGER, DEEPER FRONT SEATS WITH NEW ADJUSTABLE 7-POSITION BACKS. NEW EXTRA LARGE BRAKES. BIG CAPACITY COOLING SYSTEM. NEW AIR CLEANER FOR LONG MOTOR LIFE. WINDSHIELD WASHERS. STILL \$1895, P.O.E.

For directory of dealers and full information write Saab Motors, Inc. Executive Offices, 405 Park Avenue, New York 22, N. Y. • PLaza 1-7115

**NOW!**  
**DVG**  
**FUEL PUMP**  
Replacement Assemblies  
and factory packaged  
repair kits



BMW  
Porsche  
Volkswagen  
Opal  
Mercedes-Benz  
Lloyd  
Goliath  
Ford-Taunus  
Borgward

Available — direct from the plant — DVG Fuel Pump replacement assemblies. Original equipment on all foreign automobiles as listed above. For top performance with your vehicle, use the fuel pump engineered to manufacturer's specifications!

Write today!

Exclusive Solex distributor in U. S. A.

# ARNOLT

CORPORATION, Warsaw, Indiana

