



SCI ROAD TEST: ABARTH 850

► Saucy, fresh, and with an exhaust note worthy of much more powerful cars, the Abarth 850 is typically Italian and, typically Abarth. Deliveries are just starting in the USA and with a price of \$3195, it seems assured of success.

The car is powered by the same pushrod engine found in the 750 cc Abarth Fiats, basically a Fiat 600 with a further growth in bore and stroke which increase the displacement to exactly 833 cc (50.8 cubic inches). Output is 52 bhp (DIN) at 6000 rpm, giving the little beast astonishing performance. It's not quite equal to the 750 cc *Bialbero* but nevertheless it's a startling machine to the unsuspecting.

Racing performance of the Roosevelt Automobile Company's Abarth-Fiat team last year was so successful that it would take a longish lecture on club politics to explain why the SCCA is not proclaiming Paul Richards as their 1959 National champion. He amassed the impressive total of 130 points, nearly twice as many as anyone else. Anyway, the team will be back again this year with both 750 and 850 cc engines to suit the various classes. For lightness, Zagato bodies will be worn and also as before, John Norwood will manage.

A word about Abarth's pushrod engines: they come directly from Fiat and are torn down completely; all moving parts are demounted, balanced, inspected and strengthened where necessary. The cylinder head gets extensive treatment, compression ratio is raised to 9.8/1 on the 750 and 9.0/1 on the 850. An alloy sump is fitted as well as a single Weber carburetor, which on the 850 is a Model 32 IMPE downdraft. The complete Abarth exhaust system is fitted, including headers, which explains the loud voices of these Torino masterpieces.

Driving position on the 850 Allemano coupe is like that of the Zagato-bodied *Bialbero* (SCI, Sept. '59); one seems to get down on hands and knees to get in. Overall height is only 47 inches, 5 less than a Porsche. Yet behind the wheel, one feels fully in command of things, except that there's no place for the left leg. Impossible to stretch out, it's got to be rested with bent knee against the left hand wheel well or on the clutch pedal. Grouped directly in front of the driver are the French-made Jaeger instruments. They are the epitome of simplicity and pure function. Switches are simple toggles. Seats provide adequate support both laterally and vertically and behind them is a large area reserved for luggage. This is the only place to put a suitcase, as the front compartment is taken up by spare tire and eight gallon fuel tank.

We found standard of finish to be high on the Allemano coupe, as it should be on a hand built car. Styling is straightforward, with the forward line diving a bit.

Interior ventilation is provided by twin ducts into the passenger compartment controlled by flaps. Vent windows are behind the doors. We found the heater adequate; it is the standard 600 Fiat device.

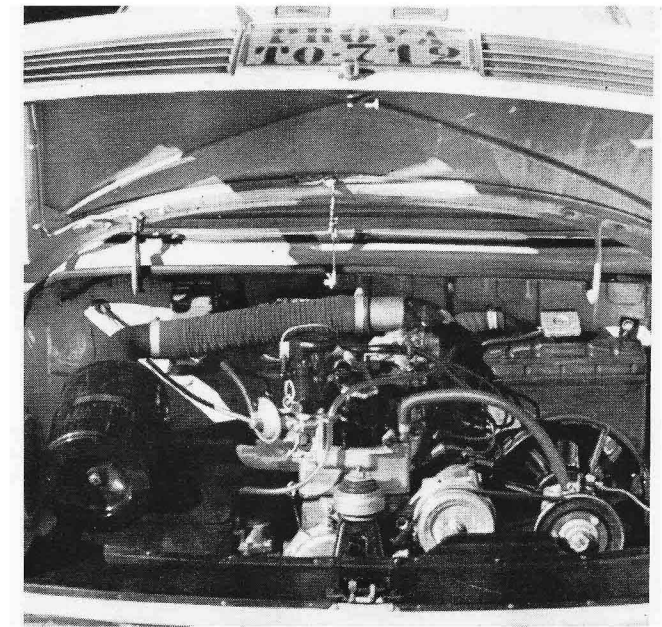
The entire chassis—frame, transmission, brakes, front and rear suspension—it's all Fiat 600. This has obvious advantages when it comes to service. The brakes are the only weak point on the car, being unequal to its increased performance. Abarth himself is fully aware of this and is currently in the midst of discussions with English brake manufacturers in an effort to obtain discs for the small, twelve-

inch wheels. Once these are made available, and provided the front suspension can stand the strains involved, Abarth will finally have stopping power worth shouting about. We attempted several stops from maximum speed and were not too pleased with the results, the car stopping in much too long a distance and with loud protestation from the drums.

On the open road, the Abarth 850 is sheer pleasure, with extremely light steering and a remote floor change that makes anyone an expert with the four-speed transmission. The clutch was outstanding in its sharpness and ability to take considerable punishment. Another outstanding feature of the car was the engine's terrific power curve. As low as 1000 rpm in any gear; then with slight throttle, pickup that's smooth and rapid right up to the maximum of 6500 rpm.

Engine noise is considerable at middle range speeds, from 65 mph to maximum, wind noise takes over and it's actually easier to converse with your partner at 80 than at 50. Ride is good, certainly firm but just the ticket for such a car. Engine accessibility couldn't be better as far as we're concerned.

Handling characteristics were explored on a narrow, winding mountain road. Equipped with Michelin X tires and stiffer springs and shock absorbers, there is considerable understeer initially. In tight turns, this changes to oversteer as the limit of adhesion is approached. The rear end breaks away quite rapidly but the fast, light steering makes it easy to control. Your arms become a blur as you correct and counter-correct and references to early Porsches are certainly proper. It may not be stable but it's lots of fun if you can stay on top of it. —jla



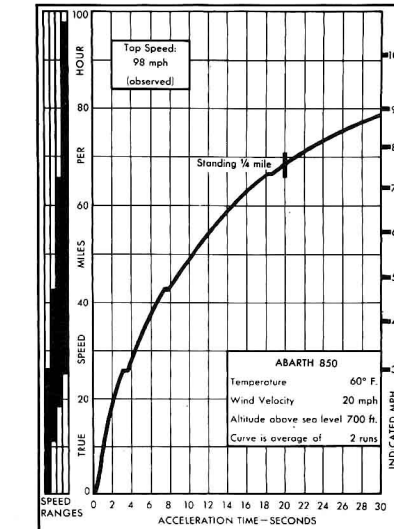
Externally the 850 Abarth engine looks just like its 750 cousin. Inside bigger bores and slightly decreased compression produce 52 horsepower.

Below: The cockpit of the 850 is typically Abarth. The huge dials are well hooded, near vertical wheel allows excellent control on twisty roads. Two levers behind gearshift are for starter and choke control.



ROAD TEST ABARTH 850

Price as tested: \$3195
Importer: Roosevelt Automobile Co., Inc.
2825 V Street, N.E.
Washington 18, D.C.



ENGINE:

Displacement.....50.8 cu in, 833 cc
Dimensions Four cyl, 2.44 x 2.72 in
Compression Ratio.....9.0 to one
Power (DIN).....52 bhp @ 6000 rpm
Torque51.3 lbs-ft @ 4500 rpm
Usable rpm Range.....1700-6500 rpm
Piston Speed $\sqrt{s/b}$
@ rated power.....2580 ft/min
Fuel Recommended.....Premium
Mileage.....34-38 mpg
Range.....270-300 miles

CHASSIS:

Wheelbase78 3/4 in
Tread, F,R45 1/4, 45 3/4 in
Length142 in
Suspension: F, ind, upper arm, trans. leaf
R, ind, swing axle, coil spring.
Turns to Full Lock1 3/8
Tire Size5.20 x 12
Swept Braking Area67 sq in
Curb Weight (full tank) (factory)1370 lbs
Percentage on Driving Wheels60%
Test Weight1700 lbs

DRIVE TRAIN:

Gear	Syn- chro?	Ratio	Step	Overall	Mph per 1000 rpm
Rev	No	4.28	n/a	19.5	3.2
1st	No	3.39	64%	15.4	4.0
2nd	Yes	2.06	54%	9.4	6.6
3rd	Yes	1.33	49%	6.1	10.1
4th	Yes	0.90		4.1	15.1

Final Drive Ratio: 4.55 to one.

