CORVETTE V8: HEATING UP THE HOT ONE

PORIS CARS ILLUSTRATED

FEBRUARY 1957

35

First Full Tests!
ALFA VELOCE COUPE
AUSTIN HEALEY 100-6



TECH REPORT-THE FASTEST PORSCHE page 32

NOAD TEST:

the amazing

Alfa Veloce Coupe



Resemblance of the Sprint Veloce to the Alfa Romeo Giulietta is limited to exterior appearance. Terrific weight savings have been achieved through extensive use of aluminum in hood, trunk and door panels, and bumpers

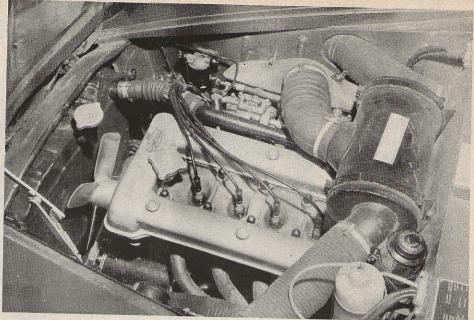
TALIAN manufacturers know that as soon as they build a car that it's going to be raced in the Mille Miglia; because of this, they are forced to build an automobile that will handle reasonably well, and to design an engine that won't fly apart when an imitator of Tazio Nuvolari goofs and misses a shift.

All this applies in particular to the small Fiats and, more recently, to the positively amazing Giulietta Sprint Veloce, the competition version of the normal 1300 cc Giulietta Sprint. The Sprint is a fine, high speed, touring-sports car, relatively quiet, with roll up windows, and a top speed of just under 100 miles per hour. But the Sprint Veloce is considerably more than this. The car was literally born in the mountains of Italy—on the Radicofani, the Futa and the Raticosa mountain passes which make up the most rugged part of the Mille Miglia.

When the normal Giulietta first came out, it had its baptism in the 1955 Mille Miglia, but was badly beaten by several well driven 1300 Porsches. Alfa was already designing a competition version for the next year. Thus was born the

Sprint Veloce, a 1300 cc sports car which is a real Italian racing car with dual Weber double choke 40DC03 carburetors, a centrally mounted four speed gearbox, and a hotrodded 1300 cc mill which conservatively produces 90 bhp at 6000 rpm. The car's maximum speed was increased to an honest 110 mph which resulted in a car that swept the 1300 cc Gran Tourismo class in victory after victory. One indication of the car's capabilities is the fact that it immediately broke all previous 1300 Porsche records on the Nürburgring; the Giulietta Sprint Veloce is, in short, the most sensational competition car to come out of Italy in 1956.

Veloces are scarce and it was only through the generosity of Bob Tappan, owner of this car, that we were able to make the test. It was immediately taken over one of the roughest stretches of mountain road in all of Italy—the bit of highway between Florence and Bologna which twists up and over mountain passes, the Futa and the Raticosa. This is the kind of road which shows up the merits and demerits of any car that is driven hard over it. When you first get into the Veloce, you find the seats are extremely soft, so soft in fact that if you're short, you find yourself looking through



Air intake hides second Weber carburetor. Plugs are accessible for easy changing. Fuel filter and brake master cylinder are handy for servicing.



Under hard cornering conditions, normal understeer characteristic can be neutralized by playing with gas pedal and steering wheel. Car is literally steered by provoking rear-end breakaway.

the upper half of the steering wheel, but a little padding in the right places takes care of this. Lateral support is good and the rugged, centrally mounted gear shift lever fits into the palm of your hand-exactly the way a competition shift would. In fact, the more you look at this baby Alfa, the more you realize that it was expressly designed for competition. Plastic windows, lightweight aluminum doors, the bucket seats, and under the hood the dual Webers and the extractor-tuned exhaust manifold, are visible signs of the Veloce's role in life. But it's not until you get the car out onto the road that you fully appreciate what Alfa has created. The tach is red-lined at 6700 rpm and with this limit even in normal driving, the needle hardly ever sees six. If you're used to driving a car where you have to keep more than one eye on the rev counter, the Veloce will be a revelation. At 5000-6000, all 1290 cc's sing in harmonious contentment and the driver gets the impression of almost unlimited rpm, let alone unlimited acceleration. Power comes in fully at 4500 rpm on the Veloce and in second gear, the short space of time that it takes to go from 4500 to 6500 rpm is quick



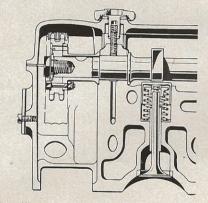
Gear shift lever is centrally located, as in more civilized version. Bucket seats are on the soft side, but give good back and lateral support to driver. Steering is only 21/2 turns lock to lock.

enough to pull out of any demanding situation. On the road, the car gives the driver a feeling of complete security. The quick, extremely light steering, the extraordinary braking ability and the car's compact size all make for fantastic maneuverability and allows the driver to put the Veloce through slots where even 300 SL's fear to tread. This is what a real Gran Turismo machine should be able to do and this Alfa never lets the driver down.

The Veloce has a steering characteristic that is difficult to find among high performance machinery. Under normal driving conditions, the car has a decided understeer. However, under hard cornering conditions, a transition from understeer to neutral steer can easily be effected by playing with the gas pedal and the steering wheel. This, of course, results in an extremely flexible automobile in which the driver is at home in a minute. The steering box is of ZF manufacture which accounts for its lightness. What is interesting is that it takes the same amount of effort to hold the Veloce on full lock as it does when on half lock. Steering return is not vicious and has this constant feel to it which



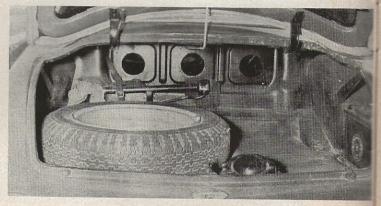
Entry and exit are considered very good for a sports car. Use of plexiglass windows eliminates window mechanism in doors, results in added elbow room inside car. Although rear quarter windows open, ventilation is not tops. Sprint Veloce body is built by Bertone.



Details of overhead cam system. Chain drive sprocket is at left. Double valve springs are counter-wound. Valve adjustment is through use of shim caps over valve stem, under lifter cup.

makes for really pleasant driving. Two and a half turns from lock to lock is just about right, and with no play in the wheel nor shock from the road, the Veloce is undoubtedly one of the easiest cars to maneuver that we've ever experienced. But that's getting ahead of the logical procession of things, so let's take a close look at how the car is put together.

Overall quality of workmanship on the Veloce is not as good as on competitive German cars nor is it as good as the production normal Sprints. The plexiglass window slides have a tendency to stick shut and are not the most convenient things to open and shut. One big advantage to the sliding windows is that the area in the doors where the roll ups on the Sprint fit, is completely cut out and allows for an extra amount of elbow and storage room. This, and the huge amount of space behind the seats make up for the small trunk and practically useless glove compartment. The dash is laid out well, but the instruments, especially the tach, are difficult to read. The hand brake is probably the poorest item on the car—being stiff and awkward to release. But defects like this can be excused when one realizes that the hand brake and the glove compartment just aren't meant



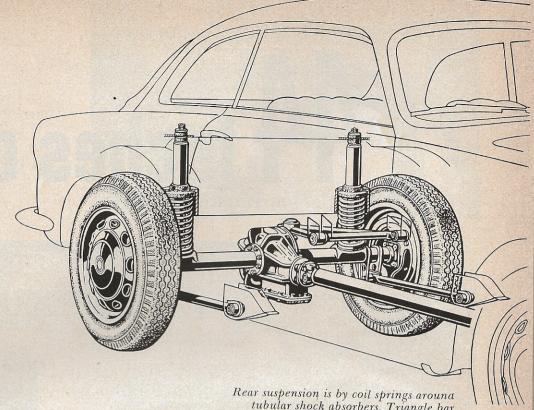
Trunk compartment carries spare, jack and lug wrench, plus filler cap for 21-gallon fuel tank. Luggage space is at a premium compared to barn-like interiors in current Detroit cars.

to be used on the Veloce since the car is a competition machine pure and simple.

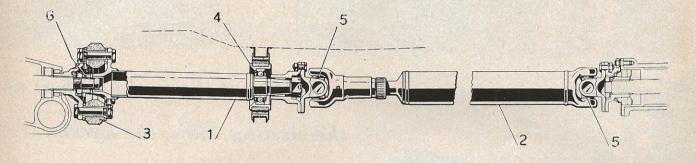
For a sports car, entry and exit is very good. The seats, despite the fact that they're too soft, offer good lateral and vertical support and the offset driving position is hardly noticeable until pointed out by an observant passenger. The car is equipped with a heater and defroster unit that could not be put through a test in the hot Italian summer but would probably prove to be adequate enough for a harsh New England winter. Wind noise is quite noticeable over 90 miles an hour. At that speed, a loud whistle emanates from around the windshield pillars. Ventilation also leaves a bit to be desired on the Veloce coupe despite the presence of fresh air ducts under the dash and plexiglass rear quarter windows that crack open.

Engine accessibility is really terrific. The plugs can be changed in a flash and the dip stick does not hover close to the exhaust manifold as is standard practice on many cars. Fuel filter, master cylinder, and carburetor intake air filter are close at hand as soon as the aluminum, forward hinged, hood is lifted. The trunk contains the gas filler for the 21 gallon tank which is special on all Veloces, as well as the





Rear suspension is by coil springs around tubular shock absorbers. Triangle bar arrangement to the right of the differential acts as a lateral stabilizer.



Two section drive shaft is used in the Sprint Veloce. 1-front section; 2-rear section; 3-rubber bushing point at transmission; 4-intermediate support; 5-universal joints; 6-grease seal at end of transmission main shaft.

battery, spare tire, and tools. The bumpers are of aluminum—another difference between the Veloce and the normal Sprint. Alfa has let no item go unseen to cut the weight factor.

But let's take the Veloce out onto the road and see how she goes. The engine is almost instantaneous in its response to the key starter. A rough idle makes you note that the tach does not read under 2000 rpm—the double overhead cam engine is meant to be kept at 5000. Getting away from rest and jabbing the gas pedal you feel the surge of the throttle response. With the windows open, and when passing through a tunnel or down a street ringed by tall buildings, you can hear the singular exhaust noise that is pecular to the Veloces; it's sort of a high pitched rasp that only the Veloce owns and when you get a bunch of them together on a circuit, you get buzzing not unlike a bunch of angry hornets.

Maximum speeds in gears are as follows: 1st, 37 mph; 2nd, 55; 3rd, 80 plus; 4th, a good 111 mph. In fierce acceleration the tach is taken right up to the red line at 6700, and if really pressed, on up to 7000 rpm. The gear shift is sheer pleasure, being very solid and rugged to the touch and very definite. There is never any question as to which gear is doing the pulling. Rapid down shifts can be made with or without

double clutching and first is completely synchronized giving the driver excellent control in hard and fast mountain driving. The clutch seems stiff at first but this is due to the relatively high low gear.

When accelerating, you are overwhelmed by the fact that this is only 1290 tiny cc's, every one of which is really doing more than its maximum bit of work. The acceleration of the car is fantastic. Zero to sixty mph in 10.5 seconds; zero to one hundred in 26.5 seconds. The standing quarter was covered in 18.1 seconds—very fine going for a small displacement machine. Cruising speed is limited only by the driver's adversity to noise since over 90 mph the wind noise begins to become more than noticeable. Tracking on the straight was found to be anything but good above 90. At that speed the car developed a slight wander tendency. Safe all day cruising could be held at 85 with complete security and ease.

In hard cornering, the Veloce, as does the normal Sprint, exhibits marked roll habit, but this roll is noticeable only to outsiders—passenger and driver being completely oblivious to it. The aforementioned characteristic of understeer on the Veloce is good in that while holding the car on neutral steer

(Continued on page 55)

Veloce

(Continued from page 17)

around corners, the driver is allowed to safely meet any sudden emergency. Under certain circumstances, to take the power off in the corner would invite disaster for the car is literally steered by provoking rear end breakaway and then controlled by proper use of the throttle and steering wheel. The brakes have three inch wide drums, and are heavily ribbed in front and finned at the rear. Little pressure was required to bring the car to a quick stop, even though the car had just completed a race at Monza. Under sudden acceleration on rough surfaces, a certain amount of rear axle bounce is noticeable, but this does not seem to upset the handling qualities of the car at all. This is due undoubtedly to the location of the A-frame which is mounted on the upper left of the rigid axle. Shocks and springs on the Veloce are considerably stiffer than on the normal Sprint version. Thus the overall ride is considerably harsher. Tire noise was found to be excessive but this may have been due to the 15 inch Pirellis and the hot pavements encountered.

In summing up the Veloce, the most outstanding characteristic of the car is the flexibility factor. Second gear can

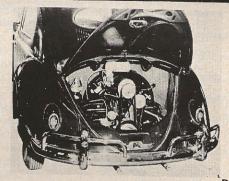


be used almost continuously on short choppy race courses, and in normal driving is a wonderful gear for maneuvering in traffic Secondly, the flexibility in handling makes for complete security when driving hard and the driver of a Sprint Veloce will almost immediately have complete confidence in his car. Amazing things can be done with it and it's probably the most forgiving car on the road. A fast driver can make all kinds of mistakes in a corner and still come out ahead. A relatively large amount of luggage and child space is available, thus making the Veloce a really practical sports car which can be used on shopping expeditions the day before going off to a weekend race meeting where the car will take on all comers. In short, here is a true Italian competition machine with just enough comfort and flexibility left in the design to make it a really outstanding piece of equipment.

Jesse Alexander

Volkswagen Owners! NOW get Both

THE RELIABILITY YOU WANT THE PERFORMANCE YOU NEED



with a

JUDSON SUPERCHARGER

Fifty percent more horsepower
Cuts acceleration time in half
Eliminates loss of power on hills
Better control for safer driving
Doubles passing ability at any speed

BRINGING COMPLETE SATISFACTION TO THOUSANDS OF VOLKSWAGEN OWNERS

Experience a new thrill in driving. Imagine cutting your acceleration time in half . . . having 50% more horsepower at your command . . . taking hills in high . . . cruising along at a higher speed with less engine effort . . shifting gears half as much in city driving . . . the engine responding immediately to the touch of your foot on the accelerator. You can pass when you want to and have extra power when you need it. A Judson Supercharger on your Volkswagen will give you this improved performance and surging power smoothly, dependably and without sacrificing engine life in any way. Only Judson gives you a complete supercharger installation designed specifically for the Volkswagen.

IT'S AMAZING say grateful owners

"The increase in acceleration is positively amazing. I would never have believed it possible"

"I never knew what I was missing until I installed one of your superchargers on my Volkswagen"

"I now have over fifty thousand miles on my Judson Supercharged VW and it is the best investment I ever made"

Please send me the Judson VW	complete information Supercharger.	on SC.
Name		
Address		
City	States	

JUDSON RESEARCH AND MFG. CO.

CONSHOHOCKEN 7, PENNA.

SOLE WHOLESALE DISTRIBUTOR OF JUDSON SUPERCHARGERS FOR CALIFORNIA, OREGON & WASHINGTON

BILL COREY ENGINEERING CO.

110 East Holly St., Pasadena, Calif. SY camore 5-6743

Dealer Inquiries Invited

IMMEDIATE DELIVERY FROM STOCK • Retail Sales and Installation Dept. open all day Saturdays. Bank terms and 5 day trial-return plan offered.