MERCEDES 190-SL

A deluxe touring car for the quasi-sporting

TO EVALUATE the Mercedes-Benz 190-SL properly, one must first put the car into its proper category. First, this is not a sports car—as far as we know, no one has entered a 190-SL in a sports car race in several years.

Second, the factory calls it a roadster, and with wind-up windows this is very obviously a true convertible coupe, with the folding cloth top; and a perfectly normal, standard hard-top coupe body style as tested.

Third, for a 2-liter car, the 190-SL is certainly not particularly light—it weighs 2550 lb and, while that's not bad for a very deluxe convertible coupe, it's not light, let alone *super* light.

So, what is the 190-SL? With some considerable experience with it during the period of 5 years since its introduction, we can state unequivocally that this machine is one of the finest 2-seater coupes on the market today. The first production cars came into this country during the summer of 1955 and our first road test appeared in October of that year. A technical description of the car was carried as far back as the April 1954 R&T. As a tribute to the excellent all-around, well-balanced design, no really large changes have been made since our first test of the car. Minor changes in the rather complex carburetion system give slightly more torque lower down and the 3rd gear ratio was revised some time ago so that it would be more useful in traffic. Beginning in 1960 the optional hardtop was given a new shape—more in conformance with that of its larger running mate, the 300-SL. Other than that there have been no changes, nor will there be any changes for 1961.

Having put the 190-SL in its place, the question arises as to whether 5 years has made it any different to drive, or is there any difference in performance? For a quick answer, there is no difference in driving impressions or in performance.

Though we have driven several different 190-SL models since the original test, getting behind the wheel is always impressive. The steep price tag seems a little more plausible when one looks over the details and sees the

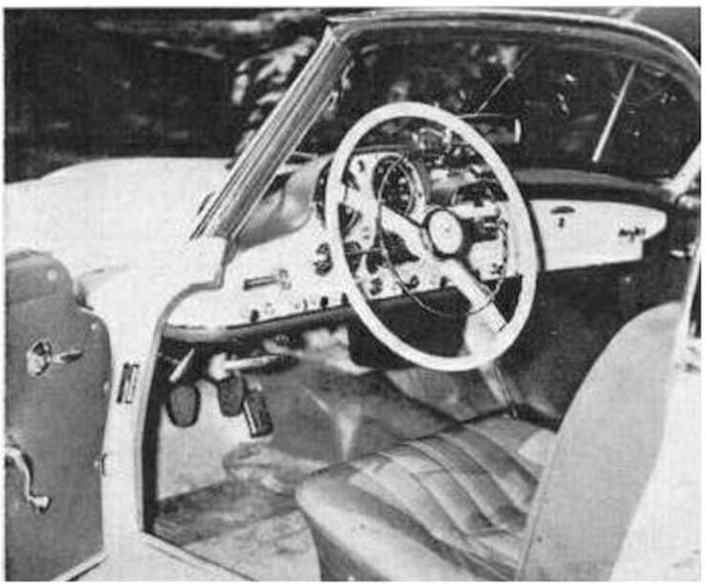
quality of this car's interior. The seats are quite firm, but very beautiful and well designed to give the best possible comfort on long runs. The instrument panel layout is somewhat unique and best described as typical of the marque—neither American-flamboyant nor sports-car-stark. A pair of large dials give road speed and engine rpm. They are well located and cowled to avoid reflections. Two small instruments are for engine temperature and fuel level while warning lights indicate such things as low oil pressure, generator not charging, choke on, direction signals on, and high beam. Two special controls merit attention; a hot-start knob which can be pulled out if the engine shows signs of being flooded, and a manual spark adjustment. This latter is not normally used, but it can be useful on those occasions when a tankful of low grade fuel is encountered (premium grade is recommended but the engine will run on regular in an emergency because of this control).

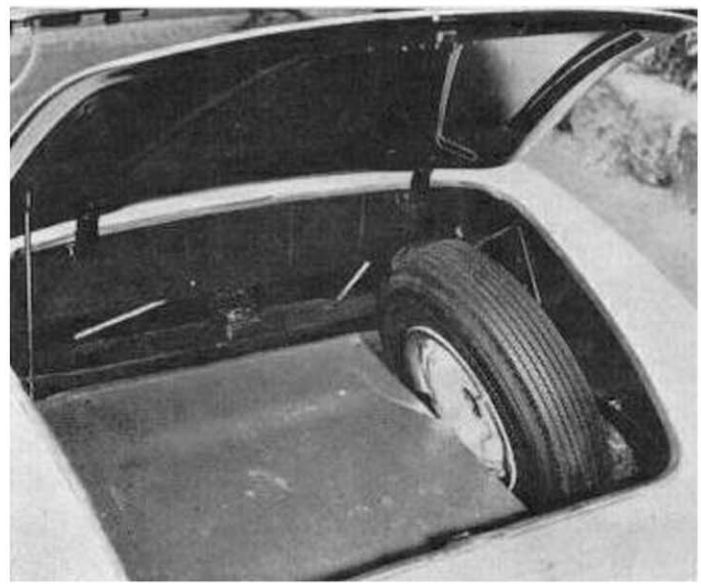
Our test car was still a little tight (1650 miles on the odometer) and while the steering felt natural for the make, the shift lever worked very stiffly. The lever is correctly placed and the synchromesh on all 4 gears could not be beaten, no matter how quickly the lever was moved. First is a very low gear and starts could be effected in 2nd gear if the car was barely rolling. However, 2nd gear starts from a dead stop are not recommended and, actually, are not too comfortable because this rather high output 4-cyl engine wasn't meant to lug at low rpm. Nevertheless, it will pull in high gear remarkably well; as a test we dropped down to 12 mph (only 650 rpm) and were able to move off smoothly by not using full throttle. This test also produces a fair amount of torque reaction or shake and, between 20 and 25 mph, a strange acoustical disturbance. The point is that this is, after all, a fairly large high performance 4, and driven properly, 3rd gear is always engaged at below 30 mph.

Likewise the performance of the 190-SL is a function of intelligent use of the gearbox. Driven vigorously through the gears it gets out and moves. A 0 to 60 acceleration time of 13.5 sec is not slow, even today. During the acceleration tests we used 6000 rpm as an absolute rev limit though the unit will go higher. Again, driven properly through the gears, it is difficult to tell that this is a 4, but there is some engine noise (but no vibration) at 4000 rpm and up. For most driving conditions a 4000 rpm limit gives more than enough performance, this corresponding to 32 mph in 2nd, 48 mph in 3rd and 74 mph in high.

On the highway an 80 mph cruising speed is extremely comfortable and well within the car's capabilities, both as to engine durability and roadability. (Note that the theoretical safe cruising speed is 84.5 mph at a piston speed of 2500 ft/min.) As a matter of fact, the Mercedes line of single overhead camshaft engines is designed for, and capable of, a continuous 6000 rpm—if one wanted to push that hard and had the Indianapolis track to use for the purpose. At any rate, the power peak and the true top speed very nearly coincide (5700 rpm and 105.5 mph). This indicates a well chosen compromise in gear ratio and one which, combined with the product's well known reputation for stamina, insures the car a long life—when driven as fast as the law allows.

The steering ratio requires 3.5 turns lock to lock and this is an excellent compromise for parking effort, quick control and easy high-speed cruising. The steering characteristic is moderate understeer and this feature makes for one of the best, and safest, high speed touring cars we know. Really vigorous corners at lower speeds produce fairly loud protests from the tires and the normal understeer changes to a neutral characteristic. There is some roll, but the angle is not excessive for a machine such as this, designed for safe high speed travel in comfort, and not for road-racing. In short, the riding and





handling qualities are excellent for the uses to which this car is suited.

The braking system is excellent, with a vacuum booster which is completely innocuous, yet gives a light pedal with a progressive action or feel that is readily controlled by the driver without conscious effort or special techniques. The drums are Al-fin and of small diameter (9.05 in., because of 13-in. wheels), but very wide linings give an ample 165 sq in. of lining surface. The parking brake is nearly concealed under the left hand side of the cowl, but is effective and convenient.

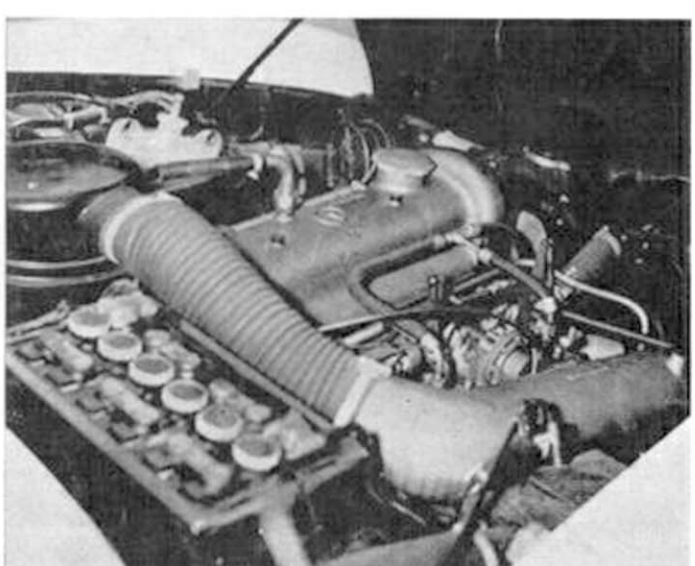
Fuel economy varies a great deal and exactly in accordance with driving methods. A low of 15 mpg was recorded during our performance tests and our best figure was 20 mpg, obtained at a steady cruising speed of 60-65 mph.

A fair criticism, we feel, can be made regarding the very large speedometer error quoted in the data panel. This latest car is definitely faster than our original test car and while it may be impressive to see the needle at 120 mph it seems to us that such optimism is hardly necessary in a car of this type and category. This error may possibly not be typical, as other published tests we have seen noted very little optimism in the instrument and one example even read slow.

Another criticism, which several 190-SL owner-friends specifically asked us to make, concerns the rubber boots which surround each rear universal joint (on each side of the differential). The Germans were the first to synthesize rubber but still seem reluctant to use one of the oil and ozone-proof materials such as Neoprene, Thiokol, or the like. The boots supplied fail in less than 2 years and if not noticed the differential runs dry—a very expensive failure which doesn't make for owner loyalty. The factory supplied boots should be replaced at least once a year to be on the safe side.

The list price of $5129 quoted in the data panel is a bare car; local taxes and license are extra, of course. Our test car had the expensive Becker Mexico radio, genuine leather upholstery and both tops. It lists for $5758, so equipped. This seems like, and certainly is, a lot of money. We could dwell at great length over the really superb quality that goes into the products of Mercedes-Benz and it would be true, but boring. The best way to determine value is to look the car over carefully, both inside and out, give it a good test drive, and form your own opinion.

We say it's well worth the money.



ROAD & TRACK ROAD TEST 267

MERCEDES-BENZ 190-SL

SPECIFICATIONS

List price	$5129
Curb weight	2550
Test weight	2875
distribution, %	50/50
Dimensions, length	169
width	68.5
height	52.0
Wheelbase	94.5
Tread, f and r	56.2/58
Tire size	6.40-13
Brake lining area	165
Steering, turns	3.5
turning circle, ft	36.1
Engine type	4 cyl, sohc
Bore & stroke	3.35 x 3.29
Displacement, cu in	115.7
cc	1897
Compression ratio	8.50
Bhp @ rpm	120 @ 5700
equivalent mph	105.5
Torque, lb-ft	105 @ 3200
equivalent mph	59.2

PERFORMANCE

Top speed (4th), mph	106
best timed run	108
3rd (6200)	75
2nd (6250)	50
1st (6300)	33

FUEL CONSUMPTION

Normal range, mpg	16/20

ACCELERATION

0-30 mph, sec	4.6
0-40 mph	7.1
0-50 mph	10.3
0-60 mph	13.5
0-70 mph	17.4
0-80 mph	24.0
0-90 mph	33.5
0-100 mph	
Standing ¼ mile	18.9
speed at end, mph	72

GEAR RATIOS

O/d ( ), overall	n.a.
4th (1.00)	3.89
3rd (1.52)	5.92
2nd (2.32)	9.02
1st (3.52)	13.7

TAPLEY DATA

4th, lb/ton @ mph	170 @ 58
3rd	255 @ 42
2nd	380 @ 30
1st	500 @ 20
Total drag at 60 mph, lb	112

CALCULATED DATA

Lb/hp (test wt)	24.0
Cu ft/ton mile	75.3
Mph/1000 rpm (4th)	18.5
Engine revs/mile	3240
Piston travel, ft/mile	1780
Rpm @ 2500 ft/min	4560
equivalent mph	84.5
R&T wear index	57.6

SPEEDOMETER ERROR

30 mph	actual 29.8
40 mph	37.2
50 mph	46.0
60 mph	54.5
70 mph	63.1
80 mph	71.5
90 mph	80.4
100 mph