# PORTS CARS ILLUSIVE: Tech Report-- 300SLR PORTS CARS ILLUSTRATE 300SLR

**APRIL 1956** 

Why Moss Chose Maserati . Special Section: Sports Car Fashions

# tests the sensational



"... a car that can take first place in a concourse and then clobber all comers in a tough race. On all critical counts it scores..."

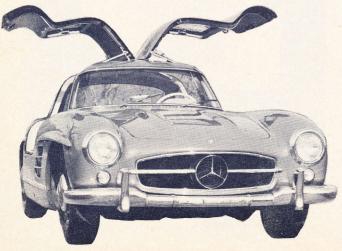
Mercedes-Benz

300 SL

By GRIFF BORGESON

O YOU can't climb Everest, you can't have Monroe, and you're not likely ever to ride a rocket to the moon. But you can, if you're properly heeled, achieve an experience that's in the same ultimate class — you can get yourself a Mercedes-Benz 300 SL. And if you really respond to machinery, the effect is the same.

After exhaustive road testing of a standard 300 SL, after driving impressions in a race-tuned version and interviews with several owners and specialist technicians, I'm ready to haul off and make a flat, unequivocal statement. This is the finest production sports car in the world. No exceptions, no qualifications. On all critical counts, it scores.



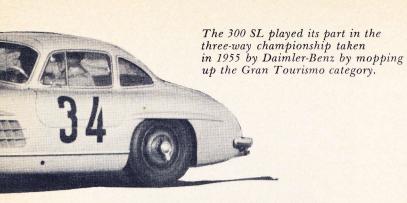
As a piece of automotive sculpture the 300 SL is a masterpiece. With its "gull wing" doors and its own Teutonic treatment of hippy, organic contours it stands spendidly apart from all the cliches of postwar styling, including the much-plagiarized Italian school.

The 300 SL is a car that can take first place in a *concours* d'elegance, then clobber all comers in a tough race. Manifestations of its might are victories won all over Europe and the U.S. from the world's best all-out competition sports cars.

At the same time it's a luxury carriage. Sports cars as a rule offer little in the way of comforts and nice refinements. In fact, starkness is part of the stock-in-trade of most sports car builders. But the 300 SL achieves the all-weather comfort and the rich finish of fine luxury cars without "engineering compromise" — that rarely-challenged excuse for typical sports car asceticism.

Beyond this, the 300 SL is prophecy incarnate. It's a pace-setter, a style-setter, a design conception that is bound to influence the world's automotive industry for many years to come. For example, a top Detroit stylist tells me that the 300 SL's roof doors are sure to be copied in the coming U.S. cars because they are the only means of getting in and out of the kind of ultra-low vehicles that the buying public craves. Several Detroit "idea cars" already have imitated this feature.

And styling is the least of the 300 SL's shock treatments to the industry. Gasoline fuel injection, first pioneered on the 300 SL, will give the internal combustion engine a new lease on life and probably delay the advent of gas turbines for years. Detroit, aware that FI means instant-

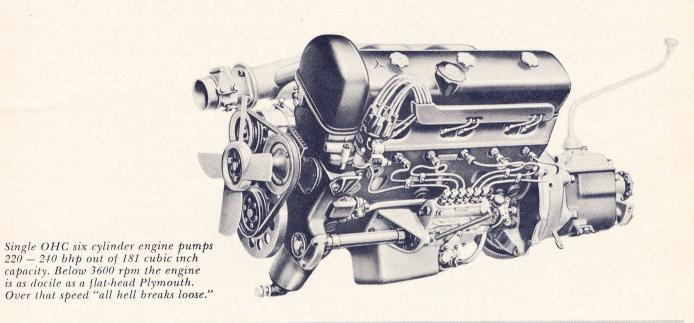




Author Griff Borgeson slide rules out some test figures. Note the seating position.

go with full fuel tank (34.5

gals.)



		SPECIFICA	ATIONS		
ENGINE:			Shock absorbers	Double-acting hydraulics,	
Type		In-line six		front & rear	
Horsepower	Std. cam Racing cam	220 bhp @ 6100 240 bhp @ 6100	Steering	Daimler-Benz recirculating ball type, hydraulically	
Torque, lbs-ft	Std. cam	202.5 @ 4600	Steering wheel turns	damped 1.7 from lock to lock	
n .	Racing cam	217 @ 4800	Turning diameter	38 feet	
Bore, stroke		3.35x3.46 ins. (85x88mm)	Brake drum dimensions		
Displacement		182.8 cu. ins. (2996 cc) one to 1.04	Diake tirum timensions	10.23 ins.	
Bore-stroke ratio			Brake lining area	258 sq. ins.	
		8.55 to one. (test car, 8.28)	Wheel studs	Five, .55 in. diameter	
Valve train		Parallel valves, single over- head camshaft, chain	Tires	6.50x15 Continental	
		driven		"Super Record"	
Fuel System		Robert Bosch direct, timed	Tire pressures to 110 mph – front, psi 28.4 rear, psi 5		
		fuel injection	over 110 mph—front, psi 31.3 rear, ps		
Ignition		Robert Bosch battery & coil		g — front, psi 42.7 rear, psi 49.8	
		ignition	Wheelbase 94.5 ins.		
Lubrication		Dry sump	Tread	54.5 ins. Front, 56.5 ins. Rear	
CHASSIS:			GENERAL:		
Front suspension		Independent with coil Length		16 ft. 10 ins. (178 ins.)	
1		springs, forged, unequal-	Width 5 ft. 10.5 ins. (70.5 ins.)		
		length wishbones	Height (no load)	4 ft. 3 ins. (51 ins.)	
Rear suspension	on Independent with two- Weight 2557 lbs., dry. 2855 l		2557 lbs., dry. 2855 lbs. ready to		

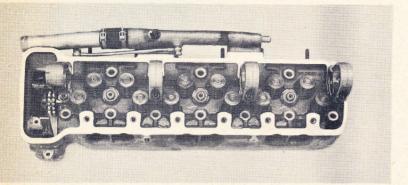
pivot swing axle, coil

springs, hypoid bevel

gears

### Feature Road Test:

### The Sensational Mercedes-Benz 300 SL



Cylinder head used on 300 SL is very similar in layout to that used on K-type M-B. Values are set vertically and are operated by single overhead cam through rocker arms.

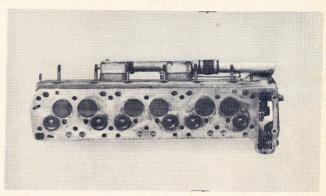
aneous throttle response, more horsepower and lower body lines, is already working all-out on injection. At the last count, there were 18 300 SL's in the possession of Detroit manufacturers who are boning up on FI's secrets.

Another feature that's bound to be copied is the position of the 300 SL's engine — mounted on its side to lower body lines and the center of gravity. The brakes are novel. While brake diameters in all cars have shrunk to conform to shrinking tire sizes, it took the designers of the 300 SL to think of widening the brakes to compensate for the lost friction area. The 300 SL has four-wheel independent suspension, a feature of M-B cars since the early thirties. This, too, is being readied on Detroit drawing boards. Even the intricate and expensive trapezoidal frame may be adapted to automation's techniques. Literally, the 300 SL is a car of the future that can be possessed today.

All 300 SL's are not necessarily alike. The standard package that you buy across the counter costs \$7,463 at U.S. port of entry. It's a magnificent performer, with dazzling acceleration and a top speed of nearly 140 mph. But there are many performance options. It's beautifully, finely finished, but there are many finish options. The result is that although you can get a 300 SL for under \$7500, few are sold for less than \$8,000 after licence fees, taxes and options have been added. And if you want a 160 mph, all-out competition 300 SL you can invest \$10,000 or \$11,000 with no difficulty. But don't get the idea that the pin-money 300 SL is anything less than a going bomb.

The fire engine red, strictly standard model that I first drove came to my door equipped with meister mechaniker Robert Leutge, an expert technician sent to the U.S. by the Mercedes factory to train agency mechanics. He tossed the door up, slid over to the passenger's side, and I entered.

With the 300 SL this is something of an art and it varies according to build, sex and dress. For the first or fiftieth time it's a thrill. Actually, the car is not a handy package to climb in and out of but the mild gymnastics involved are a small price to pay for what you get. The somewhat limited entry area provided by the roof doors is dictated not by the car's lowness alone, but also by the extreme depth of the light, rigid, "three-dimensional" tubular frame. When you sit in the car your elbow rests on the door sill, which is wrapped over the top frame members. To simplify entry and exit for the driver, all 300 SL's are equipped with a steering wheel that can be folded under the steering column. Also, although the steering column is



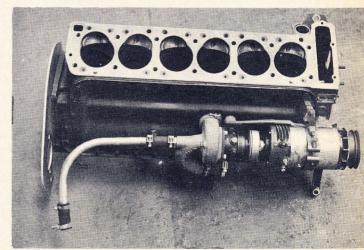
Underside of cylinder head shows that no combustion chamber as such is used. Mating surface is absolutely flat and the large valves set flush, similar to Howard GMC.

not adjustable, you can have your choice of two different column lengths.

The doors can be locked from the outside by the conventional method. To open them, you press a slightly-protruding cam which exposes the door-handle. Give this an easy outward and upward tug and the door floats up to its full-open position, aided by springs that give just the correct amount of counterbalance. The door must be slammed hard to be closed and this produces a loud, jarring thud. On the inside door handle of every new 300 SL is a somewhat disquieting notice urging that doors be locked from the inside to guard against their opening spontaneously at high speed.

When you're seated in a 300 SL you know you're in. You're practically encapsulated. You feel very much a part of the car, as you should be. Visibility is good. Straight ahead and just below eye level are a big tach and a big speedometer. There are plenty of other instruments and controls and they take some time to learn.

The first thing I noticed was the low mileage registered on the odometer — significantly below the 1,000-mile breakin period recommended by the factory. But Leutge put me at ease.

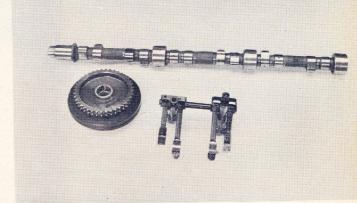


Block is a short, stiff six with a near-square stroke-bore ratio of 1.04 to 1. Combustion chambers are scooped out of cylinder bore instead of head. Note injector ports.



Connecting rods are short, sturdy H-section and are immensely stiff. Piston head is cut away to provide combustion space, quench area.

Long and short rockers are adjustable and paired off on individual stands. Chain driven camshaft has wide, wear resistant lobes.



Light, multitube space frame is a major reason for the fantastic roadability of the 300 SL.

Torsional rigidity is near-perfect.

COST OF CAR AND OPTIONS Standard model, FOB Stuttgart, Germany	\$6,000
Standard model, U.S. port of entry	
Color other than metallic silver	
Bumper guards (4)	40
Windshield washers	18
Becker radio	264
Leather upholstery	165
Fitted luggage	
If crated shipment from factory desired	
Competition springs (4)	
Competition front shock absorbers (2)	
Competition rear shock absorbers (2)	
Competition camshaft	
Rudge wheels (5)	350
Optional ring and pinion gears per set	80
Car with aluminum body, full competition equip-	
ment, including Rudge wheels and two complete	
axles with choice of gear ratios	9,300

Part of the reason for the low rpm docility and torque is the expensive and complicated Bosch injector.

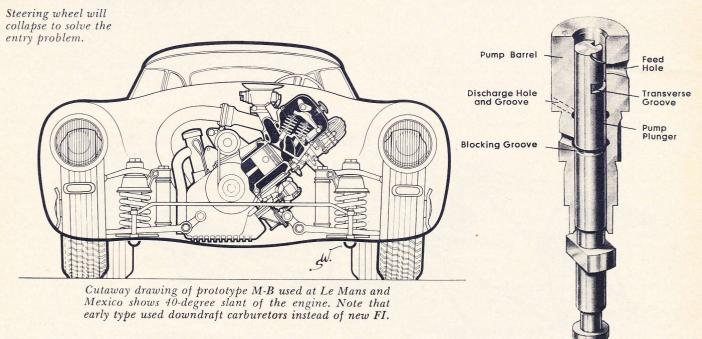
Fuel is delivered directly to the combustion chamber in the block.

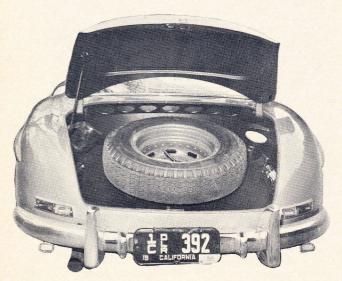
### Feature Road Test:

### The Sensational Mercedes-Benz 300 SL



RATING	FACTORS	
BHP PER CU. IN.	Std. cam	1.20
	Racing cam	1.31
BHP PER SQ. IN. PISTON	Std. cam	4.16
AREA	Racing cam	4.54
LBSFT. TORQUE PER	Std. cam	1.11
CU. IN.	Racing cam	1.19
LBS, PER BHP, DRY	Std. cam	11.6
	Racing cam	10.7
PISTON SPEED @ 60 MPH	(3.64 gears)	1520 ft. per min
PISTON SPEED @ 6400 RPM		3575 ft. per min
BRAKE LINING AREA PEI	R TON, DRY	202 sq. ins.





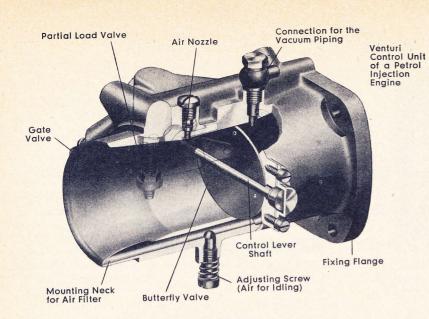
The car has a trunk but for anything except soft goods space is a bit cramped by spare wheel.

"You don't have to worry about winding up these engines," he said. "Before they're even dropped into a car they're run for 24 hours on a dynamometer, including six hours at peak output. Then they're torn down, checked, reassembled, and given another eight hours of running-in. Our times may be a shade slow, but don't be afraid to peak it in the gears."

The tricks of firing up a fuel-injection car are few and simple. For cold starts you pull out what corresponds to a choke and for hot starts you pull out a different button that causes a whining, high-speed pump to go to work in the fuel tank. It not only purges vapor pockets from the fuel system when hot, but also makes available a two-gallon reserve fuel supply. The factory recommends that the extra pump be used continuously during high-speed operation.

This is not one of those engines the existence of which its makers have spent millions to hide. It explodes into urgent, buzzing life, idling at a busy but smooth 750 rpm. and every fiber of the beast is ready to charge.

(Continued on page 58)





If you see this view of the 300 SL in your mirror, move over. It'll pass you anyway so you might as well give it room.

### PERFORMANCE

(Standard model with 3.64 to one final drive ratio. Odometer reading, 920 to 960 miles)

### TOP SPEED:

Two-way average	137.8 mph
Fastest one-way run	139.5 mph
ACCELERATION FROM	STANDSTILL TO:
30 mph	2.9 secs.
40 mph	4.3 secs.
50 mph	6.0 secs.
60 mph	7.7 secs.
70 mph	9.5 secs.
80 mph	11.9 secs.
90 mph	14.5 secs.
100 mph	17.7 secs.
Standing 1/4-mile	15.9 secs. (Competition- tuned, same gears, 14.0
	secs.)

### SPEEDS AVAILABLE ON GEARS:

OI ELDO AVAILA				
Transmission	Approximate Speeds With Optional Final Drive Ratios — MPH			
Gear Ratios				
I = 3.34 to 1	4.09 to 1	STD. 3.64 to 1	3.42 to 1	3.25 to 1
II - 1.97 to 1	34	39	42	44
III - 1.385 to 1	59	67	71	75
IV - 1.00 to 1	84	96	101	107
	127	145	155	161

(In IV gear the engine may be wound to 6400 rpm; in the other gears 6000 rpm should not be exceeded.) FUEL CONSUMPTION:

CLE GOITOCHT LIGHT	
At steady 50 mph	approx. 25 mpg
Medium-hard driving	approx. 15 to 20 mpg
Hard driving	approx. 11 to 15 mpg



On a sharp, decreasing radius turn the 300 SL sticks tight at more than 60 miles an hour. Note the complete lack of body sway or lean as the coupe bites into the hard bend.



On a long, fast downhill bend there is no perceptible slide at a steady mile-a-minute clip. One does NOT try to horse the 300 SL around in a corner by stomping on the throttle.

## SCI Test: Mercedes Benz 300SL

SCI Test: Me

(Continued from page 14)

The 300 SL has positive syncromesh on all four of its forward speeds. You thrust it into first, simultaneously punch the throttle and release the clutch and, in a number of seconds only and, in a number of seconds only slightly greater than your reaction time, peak at 40 mph. The sensation of catapulting acceleration is unforgettable. Second, again with tremendous G's, propels the car up to the high sixties in scant seconds more. Third is a wonderfully useful ratio with terrific dig from about 9 to 96 mph.

The torque of the little three-liter engine is fantastic and it's hard to see where it all comes from until you remember that the injection system is pumping fuel into the cylinders at a constant rate that carburetors cannot match. Fourth gear, with the standard rear axle ratio, gives smooth, continuous acceleration from 15 to 140 mph! It is thoroughly adequate for city traffic and even for pulling fairly stiff grades. For fierce acceleration and fast hill-climbing, third meets nearly all requirements. During our shakedown tests among the steep peaks and canyons of the Santa Monica mountain range, we had to resort to second cog only on the very steepest grades, and then we flew up to them. As for first gear, you should always use it when starting from a standstill. Beyond that you just keep it in reserve for pulling stumps and for competing in the Alpine Rally.

There are tricks to driving the car. I cannot see it as anything but a man's machine. It's too hairy a beast for a woman to drive unless she's a fairly brawny athlete. Its steering, with less than two turns from lock to lock, is definitely heavy and has a wonderful feel. The steering gear itself is of the no-backlash recirculating ball type with hydraulic centering. The brakes are magnificent and indestructible and they're vacuum assisted. But they don't lock the wheels at a touch, Detroit power-brake style. They demand some muscle power, and so do the clutch and the shift lever. In the 300 SL, driving is not the near spectator sport it has largely become in this age of robot-ized motoring

Actually, for the average male, minimum muscular endowment is required for the comfortable operation of the 300 SL. Caution and sound judgment, however, are essential to the continu-

ing enjoyment of this or any other high-performance car and even a small error can have very discouraging consequences. For example, I had read in both a British and an American road test that the car should be pushed through turns under power, actually steered with the throttle.

As we approached our first tight corner I mentioned this to Leutge. "No-No!" he cried. "Do that and the rear end comes swinging around. With these pendulum axles you have to be careful. The oversteer isn't much if you have competition springs, but with standard springs you must watch it all the time."

At this point I asked Leutge to demonstrate proper fast-cornering technique with the 300 SL and he took the wheel. He popped his gear changes with a smart, hard style and reached his desired speed of entry into the turn. All the way around the curve he maintained neutral acceleration, just patting the throttle lightly and occasionally to keep his velocity constant. As the curve began to straighten out he stomped the throttle to the floorboards, rocketing into the straight. Further checking with men who have driven 300 SL's in competition verified this as the one-and-only technique for keeping out of trouble during high speed cornering. With this car you do not horse around with throttle steering.

During the very hardest cornering there is no perciptible body roll and you feel an unusual sense of security. This is added to considerably by the car's phenomenal brakes which are fade-proof and provide uncanny stopping distances. The adjustable bucket seats give excellent support against sideways motion. There's a remarkable absence of wind noise in this car, even at 138 mph, but otherwise it is by no means a silent servant. The auxiliary fuel pump, used constantly at high speeds, emits a nervous whine at the driver's back. The indirect transmission gears have a loud, vintage buzz. These sounds are more or less musical to the enthusiastic ear. Less so is the peculiar, harmless klunking noise that originates in the rear axle mechanism of these cars when some, but not all, left turns are made.

The coil-spring four-wheel independent suspension gives a ride that is surprisingly soft. The cornering feel in particular is quite different from that of a fast, solid-axle machine and is hard to describe. In place of the sensation of unyielding chassis "bite" on the road there's a softness to the 300 SL's cornering grip. You do not feel as though you're on rails; you know damned well you're on rubber tires. The bite is tenacious all right, but not harsh. Barrelling full-bore down the straightaway the car never feels as though it's becoming lighter. At top speed it still squats like a stalking cat and its traction under all conditions is pretty unbeatable.

So far, we've been talking about the basic 300 SL "economy model" with touring-car camshaft. With this setup the output is 220 bhp, the engine idles at 750 rpm and the torque characteristics are quite uniform throughout the engine rpm range. This combination makes for one of the most thrilling rides of your life. That is, until you experience a 300 SL running the hot, competition cam.

With this one modification the car acquires an entirely new character. Now it peaks at 240 bhp — a figure incidentally, which other road tests have mistakenly associated with the standard model - and it idles at 1100 revs. In the lower engine-speed range it is slightly rougher and it neither adds to nor subtracts from the vehicle's performance. It's in the higher rpm's that it makes another car of the 300 SL.

Lance Reventlow of Hollywood is the devoted owner of a 300 SL with the racing cam and all the other performance options. His car has heavyduty springs and shock absorbers, Rudge wheels, an assortment of rearaxle ratios and special racing tires. It also has one of the all-aluminum bodies that the factory has available. The light body represents a weight saving of about 350 pounds and Reventlow's car represents an investment of well over \$10,000.

Lance introduced me to the delights of this rarified form of motoring with a demonstration of the effect of the racing cam. "Watch this," he said, as he dropped into Third at about 2,000 rpm and bore down on the throttle. The tach needle rapidly climbed past 3,000, then 3,500. I watched and waited. Then at 3,600 all hell broke loose. The car, already accelerating as few cars in the world can do, took off as though JATO units or a second engine had been cut in. Beyond 3,600 the acceleration was appalling. It was

like being pulled forward at fantastic speed at the end of a powerfully-drawn cable. Oddly enough, the last time I had experienced that precise sensation was at the wheel of a 7.1-liter, supercharged Type SS Mercedes-Benz built in 1930.

Reventlow stayed on the throttle until the tach hit 5,500 and the scenery was a blur. The inexorable torque stayed the same, according to the hard pressure on hips and shoulders, until he backed off. In the "mild" range again, he slowed to 15 mph, then pulled away strongly in top gear. "That's what I mean," he said. "It's really two cars in one. One is a lamb and the other is a raging lion. And you can turn them off and on with a touch on the throttle. You can putter around town for a year and never call on the fierce side of the car's dual personality. But the instant you want that real wild performance, it's there."

The competition springs and shocks give this car a far firmer ride and cornering bite. The Rudge disc wheels, which cost \$350 per set, add 25 pounds to the car's weight. But they're essential for long races in which tire-change stops are critical. This car has won both *concours* and races.

One of its recent race wins was at Torrey Pines, with Bruce Kessler at the wheel. Other cars in the full entry list at Torrey could be heard for miles as they blasted around the course. The fact that the obviously competent 300 SL ran a muffler and purred its way to the checkered flag without pyrotechnics impressed many spectators. M-B's West Coast sales manager tells me that during the week that followed, 11 300 SL's were delivered to individuals who said they were sold at Torrey Pines.

One of the main contributing factors to the long string of 300 SL racing victories is its frame, which is unlike that of any other M-B production car. The complex network of small-diameter tubes is erected in such a way that the tubes are subject to push-andpull stresses only, and not to twisting stresses. This torsional stiffness has an all-important effect on keeping suspension geometry, uniform and that, in turn, as a decisive effect on roadholding. The tubes are everywhere above the engine and in the passenger space. The frame is made mainly by hand and its appearance in large-scale production is not likely.

The real guts of 300 SL performance, of course, lie in its engine, which is a remarkable blend of radical and conservative design features. On the conservative side are the cast-iron block, the single overhead camshaft, the NOT vee-inclined valves, the far

from straight-through porting, the moderate compression ratio. This last, nominally 8.55 to one, varies with the individual engine and the actual ratio is stamped on the cylinder block, just under the name plate. The compression ratio of our standard test car was 8.28 to one.

On the radical side are the offset, inclined engine mounting position, and the unusual combustion chambers which do not extend into the head at all but are contained entirely within the cylinder block. The head has a perfectly flat lower surface and immense valves for a small engine; the intakes measure 1-5/8 inches and the

exhausts are 1-15/16. Most radical of all, of course, is the fuel injection system.

The 300 SL's crankshaft is cradled in seven main bearings. The short, H-section connecting rods are ground to a smooth finish. A passage up the center of the rod carries oil to the wrist pin. The heads of the full-skirted pistons are slightly wedge-shaped and they constitute an unusually functional part of the combustion chamber. Each piston carries three compression rings and one oil ring.

The single overhead camshaft rides in four bearings and has a large vibration damper at its forward, sprocket



end. According to my factory informant, the standard 300 SL-camshaft is identical to that used in the Type 300S touring machine. A number of people have wondered what effect fuel injection has on valve timing. Evidently it has none.

The lobes on the 300 SL's camshafts have a fast high lift and very sporting duration and overlap characteristics:

Standard Competition ns 11° 20° (Before top center)

Inlet closes 53° 58°

Inlet opens

(After bottom center) Exhaust opens 36° 30′ 56°

(Before bottom center) Exhaust closes 10° 30′ 18

(After top center)

Cold-engine tappet clearances are .002 ins. for the inlets and .008 for the exhausts. For an overhead-cam valve train, the 300 SL's is quite silent in its operation.

A point of considerable interest to the engineering fan is the more than slight resemblance between the 300 SL engine and the basic engine that powered the immortal Types K, S, SS and SSK Mercedes of the Twenties and early Thirties. Dr. Porsche designed the old single-cam six with its eerie-sounding Roots blower. The ultra-modern Mercedes six looks much the same under its cam cover. The staggered valve arrangement is the same and the cam-follower layout is almost identical. It's also interesting that the acceleration effect that Porsche obtained with a costly and complicated supercharger has now been duplicated and surpassed by means of the 300 SL's racing camshaft.

With the fuel injection system, an assembly of six small plunger pumps delivers atomized gasoline directly into the cylinders, at a pressure ranging from 568 to 682 pounds per square inch. Air alone is drawn through the inlet valves and the mixture of fuel and air takes place within the cylinders. The timing and the amount of each shot of fuel is regulated automatically and precisely. Filtration of both air and fuel is far more critical than in carburetor engines.

You might expect maintenance of the system to be extremely tricky, but it's not. The air filter requires cleaning every 2,500 miles, the fuel filter every 15,000. The fuel-feed system compensates automatically for changes in altitude and temperature. On the throttle body in the air-intake manifold there are a couple of adjusting screws for regulating idle speed and mixture richness. They can be adjusted with a small coin. And that's all there is to it.

One idiosyncracy of the system is described in the Owner's Manual. "It may happen with the injection engine that after stopping the engine will turn a few backward revolutions. This does not necessarily indicate a defect. Engage a gear in this case and stop the engine by clutching." And another precaution: to stop, "turn the ignition key to the left while idling. Do not on any account try to stop the engine at a higher speed than the idle running one." I assume that violating this rule results in de-lubrication of the cylinder walls by powerfully-injected raw fuel.

Checking with many 300 SL owners

(at this moment there are 171 who have bought cars through the West Coast distributor alone) I have been unable to find any complaints against the reliability of the injection system or, for that matter, of the car as a whole. A mechanic who specializes on 300 SL's assures me, "You just drive the car—it takes terrific abuse and gives no trouble. We used to have one chronic complaint and that was about spark plug failure. Now we recommend platinum-point plugs and have no more of that trouble."

When you consider what it must cost to produce each of these cars — all the handwork, expensive components, quality — it's hard to consider the 300 SL as anything but a bargain at the base price of \$7463. And this includes a splendid set of tools, power brakes, hinged steering wheel, optional steering columns, clock, heater, an exhaustive maintenance manual, a parts catalog, minutely detailed instructions for the servicing of the car for its first 62,500 miles, and many other bonus items

Actually, you can buy the basic 300 SL for \$6900 at the factory in Stuttgart, Germany. Transportation cost and import duty then become your responsibility. However, if you bring the car to the U.S. within six months of purchase, the factory refunds \$1300 to you, which offsets the freight and duty expenses and then some. With large parts inventories in several American cities and with an excellent, factory-supervised service organization, it's just about impossible to duplicate what the 300 SL has to offer at any price.

# Magnette

(Continued from page 55)

octagonal radiator cap. Instruments are lettered in radium paint and "black lighted." They are at their best in pitch dark driving and somewhat cloudy and hard to read at dusk when there's not enough natural light for easy visibility, nor enough "dark" for the luminous indicators and numerals to stand out clearly.

Engine accessibility too, rates high. The alligator-type hood, which is one rattleproof unit with the handsome MG grill, swings up out of the way on spring counter-balances and stays that way. The carburetors, distributor, valves, generator wiring, plugs, all are in the light of day and easily reached, as are drain cocks and oil filter, heater, blower ducts, hot water hoses, even the hose connections and slave cylinder of the hydraulically operated clutch. And,

of course, the combination brake and clutch master cylinder is way up on the fire wall and within reach. Only the voltage control and fuse block is a bit sticky to work on at the rear of the cylinder block. In short, the car is just what the Saturday afternoon "do-it-yourself" mechanic is looking for.

To sum it up; the Magnette offers the man who admires a well-designed, well-built automobile, and who above all loves to drive, a very solid package. The car is a remarkable compromise, providing exceedingly comfortable seating and ease of driving in a well-styled, extremely rugged body, powered for effortless, high-speed cruising by a lively, flexible and easy-to-maintain engine. Extra bonus features such as a smooth, efficient gear box, true sports car controlability and as stable and

comfortable a ride as can be found in any short wheelbase, light weight sedan, add to the evidence in favor of the Magnette as the answer to the Midget owners' dilemma . . . how to have a family car . . . and an MG too!

If all of the above sounds like a report on a new car the implication cannot be denied. The Magnette was almost like a new one. Other than the reading on the odometer about the only indication of hard use was in the softer, "broken-in" feeling of the seats and a freer running engine than would be the case with a new item. If we seem to be repeating ourselves, we apologize but it can't be helped — this car had more than 24,000 miles and hard miles at that, yet it still felt as if it had just rolled out of the dealer's door. Or even better.