

MERCEDES CONTROLL ROAD TEST

by Bob McVay, Assistant Technical Editor

SEVENTY-SEVEN YEARS of automobile production plus participation in international racing and rallies have resulted in a truly outstanding product — the Mercedes-Benz 300-SE. Our test car, a convertible, was quite a car — whisper-quiet at high cruising speeds, silk-smooth over the roughest roads, and almost perfectly flat on the fastest corners. Its automatic transmission shifted quickly and solidly and provided instant kickdown when needed. Although not quite so smooth as some of our domestic units, it was among the best we've driven. Derived from a long line of racing thoroughbreds, the detuned 300-SL engine provided well balanced power, while stopping and handling were the finest available in a touring four-seater. Finish and detail were excellent.

When we picked up the car, we were immediately impressed with its luxury and comfort. The entire interior is upholstered in black leather. The very comfortable front buckets and rear bench are designed to breathe, so that even Southern California's hot weather didn't require our usual "cool cushion" to keep our backs dry. The Mercedes' front buckets are the best offered, in our opinion. They offer fine support to legs, hips, and back, while a plastic knob on each seat makes the seat back infinitely adjustable — from bolt upright to fully reclining.

A big, white steering wheel is well located in relation to the driver's seat — not too high to see over, nor too low to sit under. Coupled to Mercedes' servo steering, control is excellent, with only three turns from lock to lock. This fine power-steering unit is progressive in action, and increased steering resistance brings increased help from the power unit. We always had a good road feel under all driving conditions. Parking was a snap.

Our test car came with Mercedes-Benz' automatic transmission, a four-speed unit that uses a hydraulic clutch with a four-speed solenoid drive lined up behind. It has three forward positions. In Number 2 position, at full throttle, the unit shifted into second at exactly 6000 rpm (the engine red line). A flick of the column-mounted lever into Number 3 position brought a quick, solid shift into third gear, and Number 4 provided a positive shift into top gear.

Our top-speed run saw the accurate tachometer showing 6400 rpm, which figured out at a shade less than 106 mph. Mercedes engineers say the 300-SE will do an honest 109 mph – and if they say so, it will. With 6000 as our red line, shifts were made at 25, 42, and 65 mph. Our best accelera-

tion figures were 4.6, 8.3, and 13.4 seconds to 30, 45, and 60 mph respectively. Performance was adequate, if not quite up to that of domestic luxury cars.

As in most luxury cars, economy wasn't a strong point of the Mercedes. As a matter of fact, mileage was almost a constant – from 12.4 to 12.8 mpg under varying conditions.

The 300-SE comes with a fuel-injected, 182.8-cubic-inch, aluminum-alloy engine, similar to the 300-SL's. The Straight Six features an overhead camshaft and 9-to-1 compression. Premium gasoline is required. The engine is designed to run smoothly right up to 6000 rpm and to cruise at that speed all day. There's not a doubt in our minds that it'll do just that – for quite a few years, too. The engine in our test car was as smooth as any we've ever driven and pulled strongly from 3000 rpm to its red line. Our only complaint was that, for a car in this price class, the engine was a little noisy in the intermediate gears. There was no padding under the hood, and the engine was quite audible, especially during hard acceleration.

Once the Mercedes reached cruising speed, it felt as if it would cruise forever at speeds of 70-80 mph. We felt relaxed even after a long drive over twisting mountain roads, and now we understand how Mercedes drivers can win so many grueling international rallies. The ride and handling of our test car can only be evaluated as superb.

Many years of building air-suspension systems for buses are behind the suspension system on the M-B. Large air bags on all four corners are the main suspension units of the car. In front, they're between the lower control arms and the axle. At the rear, they're between the longitudinal thrust brace rods, pivoted to the axles, and the body. This suspension gives softer spring action than steel springs, yet retains the same amount of spring deflection. Additional rubber

(ABOVE) Our Mercedes was right at home on winding roads and tight switchbacks. Its excellent stability and powerful brakes gave it a safety margin that very few other cars can approach.

(RIGHT) Even while screaming through Riverside's Turn Nine at

(RIGHT) Even while screaming through Riverside's Turn Nine at high speed, the 300-SE was stable and controllable. Combination of Mercedes air suspension, Dunlop Sport tires, and a strong, willing engine is hard to beat. The test car flatly refused to lean much, even when pushed to the utmost through the fast bends.

Excellent
workmanship
handling
braking
and
comfort
uphold
Mercedes
tradition.









springs enable the car to be driven, should the air suspension fail.

An air compressor maintains a constant pressure that leads the compressed air over three regulating valves - two up front and one at the rear. These valves correct any side sway around the vehicle's longitudinal or transverse axis. Over the roughest roads, ruts and dips failed to bottom the suspension. Hard cornering at speeds dangerous in conventionally suspended cars required little effort. The 300-SE was almost perfectly neutral and showed little body lean even when pushed very hard. When we went too fast, the rear end would drift out, but it was perfectly controllable, and the car could be drifted through a turn under perfect control at speeds that would find other cars sliding off the road or all out of shape. It always felt well balanced and under control.

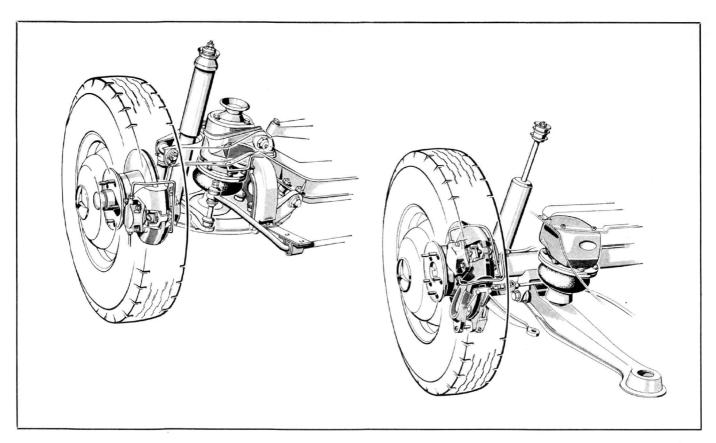
Oil-pressure disc brakes, 10 inches in diameter, were used on all four wheels, with servo assist by suction-tube vacuum. They were the best we've ever tested, giving quick, straight-line stops under all conditions. Our braking tests found the convertible stopping from 30 mph in just 27 feet, while our 60-mph panic stop required only 1421/2 feet truly excellent stopping distances for a car of this type. There was no swerving or wheel lock-up, and no pedal pumping was needed. Stop after stop produced no fade. Here was a car with plenty of stopping power to match its high cruising speed.

No car is perfect, but the Mercedes comes as close as any car can. Even the 300-SE has room for improvement, and our suggestions are just that - suggestions. For our money, we feel the car should have power seats and windows. The windows were extremely hard to roll down, and the seat was almost impossible to adjust when the doors were closed. More rear seat leg room would be another welcome improvement, although it's adequate unless the front seats are all the way back. Our test car had a beautifully tailored, fitted, and headlined top, but again, for a car of this price, we feel the top should be power operated. It was a real struggle for one man to put the top up, and a woman shouldn't even try it alone. Also, we'd like a wider brake pedal - one that can be operated with the left foot as well as the right.

Mercedes-Benz 300-SEs come in three models: a twodoor hardtop coupe, similar to our test convertible, and a four-door sedan. Prices range from a base of \$8810 for the sedan to \$12,721 for the convertible. Our test car was equipped with servo steering and brakes, a Becker AM-FM radio, whitewall Dunlop Sport tires, and safety belts. In Los Angeles, it goes out the door for \$13,006.75. Additional accessories include air conditioning (\$475), fitted luggage, rear bucket seats, head rests, an underpan, and a sliding roof for the coupe. For men who like to shift for themselves, a four-speed, floormounted gearbox is available.

No automobile can be all things to all men, but Mercedes tries, and comes very close. Now, if they could only get the price down a bit . . .

1) The test car's six-cylinder ohc engine is similar to the 300-SL sports car's, except for the intermittent fuel injection system used on 220-SE models. Technical editor points to air compressor that maintains pressure for car's suspension system. 2) Luxurious, spacious interior has a hand-finished appearance. 3) The luggage space seems adequate, but Mercedes' high lip, small lid opening make loading of big pieces a chore. Complete handy tool kit includes various wrenches, screwdriver, and pliers.







(TOP) At left is 300-SE's front suspension, with its trapezoidal wishbones and air bag. At right, rear suspension with its singlejoint swing axle, thrust arms, and lever for absorbing nose dive during braking. All of these give a high degree of comfort. (ABOVE) Car took this deep rut at 40 mph with nothing more than subdued jolt and a muffled thump from sturdy suspension.

MERCEDES-BENZ 300-SE

2-door, 5-passenger convertible

OPTIONS ON CAR TESTED: Becker AM-FM radio, whitewalls, seat belts. BASIC PRICE: \$12,671 (p.o.e.)

PRICE AS TESTED: \$13,006.75 (plus tax and license) **ODOMETER READING AT START OF TEST: 6850 miles** RECOMMENDED ENGINE RED LINE: 6000 rpm

PERFORMANCE

ACCELERATION (2 aboard)					
0-30 mph		4.6 secs	S.		
0-45 mph		8.3			
0-60 mph		13.4			
Standing start 1/4-mile 19.4 secs, and 73 mph					
Speeds in gears @ 6000 rpm					
1st	3rd			65	mnh
2nd	4th	*****		105.6	mph
				@ 6400	
Speedometer Error on Test Car				e	e alleani
Car's speedometer reading 28	42	46	55	65	75
Weston electric speedometer30	45	50	60	70	80
Observed miles per hour per 1000 rpm in to	p gea	r		16.5	mph
Stopping Distances — from 30 mph, 27.0 ft.;	from 6	60 mph.	142.5 f	t.	

SPECIFICATIONS FROM MANUFACTURER

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kine Aluminum-alloy in-line 6
Bore: 3.34 ins.
Stroke: 3.47 ins.
Displacement: 182.8 cu, ins.
Compression ratio: 9.0:1
Horsepower: 185 @ 5200 rpm
Torque: 204.7 lbs.-ft. @ 4000 rpm Horsepower per cubic inch: 1.01 Carburetion: Bosch fuel injection Ignition: 12-volt coil

Differential
Swing axle; single-joint with low pivot
Standard ratio: 4.1:1

Suspension
Front: Independent, with
trapezoidal wishbones, rollermounted air cushions and
rubber helper springs, tubular
shocks, and torsion-bar
stabilizar stabilizer Rear: Single-joint swing axle, with low pivot point and thrust arms, roller-mounted air cushions, rubber helper springs, tubular shocks, and torsion-bar stabilizer

Gearbox

4-speed automatic; column-mounted selector

Driveshaft

2-piece, open tube

Steering Mercedes-Benz power steering Turning diameter: 38.4 ft. Turns lock to lock: 3.0

Wheels and Tires
5-lug, steel disc wheels
7.50 x 13 Dunlop Sport nylon

Brakes
Dunlop oil-pressure disc brakes
Front and rear: 10-in. dia.
Effective braking area:
402.0 sq. ins.

Body and Frame
Unitized — welded steel framefloor unit
Wheelbase: 108.3 ins.
Track: front, 58.35 ins.,
rear, 58.66 ins.
Overall length: 192.0 ins.
Curb weight: 3440 lbs.