CAR and DRIVER

FEBRUARY 1967 • 60 CENTS

Super Mustang!

Shelby 428 cu. in. GT 500

Road Tests: BMW 1600 *The World's Best $2500 Automobile*
Pontiac Le Mans Sprint

Salon: MG's Immortal TC

Racing: Riverside · Laguna Seca
Las Vegas · Mexican GP

C/D TAKES A RIDE IN A CHAPARRAL

CAR and DRIVER ROAD TEST

SHELBY GT500

Carroll Shelby's Mustangs have come a long way since bib overalls. But then, so have we.

Seven liters! Four hundred and twenty-eight cubic inches in a *Mustang!* We were expecting a cataclysm on wheels, the automotive equivalent of the end of the earth. We were pleasantly surprised to discover that the GT 500 isn't anything like that.

The old corollary to that old adage, "There's no substitute for cubic inches," is "except rectangular money"—and who would know better than Carroll Shelby. When the Cobra 289 peaked out on the race track, there were several ways of making it go faster—most expensive, one cheap. One of the more expensive ways was the Daytona coupe body. The late Ken Miles found a better way. At Sebring in 1964, he shoehorned a Ford 427 NASCARized engine into a Cobra roadster. The experiment came to rest, sorely bent, against a palm tree, but Miles persisted. By the end of the season, at Nassau, he had another one bolted together. It blew up, but the die was cast. Early in 1965, Shelby announced the Cobra II with a 427 cu. in. V-8 replacing the 289. That June, at Le Mans, two of Ford's rear-engined GT prototypes appeared with the big 427 instead of the 289. The Europeans hooted and jeered at the bulky, heavy, unsophisticated V-8 with its pushrods and single four-barrel carburetor. A year later, Ford 427s swept the first three places at the French classic, with Shelby's two entries dead-heating the final lap. What the 427s had beaten was a team of 270 cu. in. Ferrari V-12s with multiple carburetion and four overhead camshafts. The Italian engine developed almost as much horsepower as the Ford—425 hp vs. 485—but it was much more tautly stressed and, therefore, fragile. Which is the whole point of 7-liter Fords, Cobras, and now, Shelby Mustangs.

For '67, Ford offered the Mustang with their tried-and-true 390 V-8, which has a bore and stroke of 4.05 x 3.78 inches. Ford also builds a 428 V-8 on the same block with a bore and stroke of 4.13 x 3.98 inches. Why not, reasoned Shelby, use this engine in the '67 Shelby Mustang? Why not indeed. The car is called the GT 500 and its engine is called the Cobra Le Mans.

Somebody is telling a little white half-truth.

Please note that the Cobra Le Mans engine displaces 428 cubic inches. That sounds like a hair better than the 427. In fact, they are two entirely different engines. Both have the same external dimensions, but the 427 is more oversquare, with a bore and stroke of 4.23 x 3.78. The 427 is a racing engine, full of the kind of intestinal fortitude that makes it capable of enduring 500 miles at Daytona and 24 hours at Le Mans. The 428 is a passenger-car engine, and nearly $1000 cheaper than the 427. Few people would be happy with the 427 unless they were racing it. It's noisy, balky, and an oil-burner at normal highway speeds.

The GT 500 is not a racing car, although but for a few subtle differences its engine is the same as the one that propelled Shelby's Fords to victory at Le Mans. Seven liters in a Mustang! The early GT 500 engineering prototype was the fastest car ever to lap Ford's twisty handling loop, except for the GT 40s, of course. And the same car cut a quarter-mile in 13.6 seconds at 106 mph. Super car!

So we braced ourselves when we stuck our editorial foot into the first production GT 500. And when it only turned 15.0 at 95, we were a bit disappointed. That's only 2/10ths of a second quicker than the Mustang 390 automatic (*C/D*, November '65) and last year's GT 350H automatic (*C/D*, May '66), and not quite as fast as the original GT 350 4-speed (*C/D*, May '65). But then we thought back on the earlier GT 350s and realized that what the old Shelby Mustang does with difficulty, the GT 500 does easily.

The GT 500 is an adult sports car. Shelby's Mustangs have come a long way in three years—from adolescence to maturity. The '65 GT 350 was a hot-rodder's idea of a sports car—a rough-riding bronco that was as exciting to drive as a Maserati 300S, and about as marketable a proposition. The traction bars clanked, the side exhausts were deafening, the clutch was better than an advanced Charles Atlas program, and when the ratcheting-type limited-slip differential unlocked, it sounded like the rear axle had cracked in half. It rode like a Conestoga wagon and steered like a 1936 Reo chain-drive, solid-tire coal

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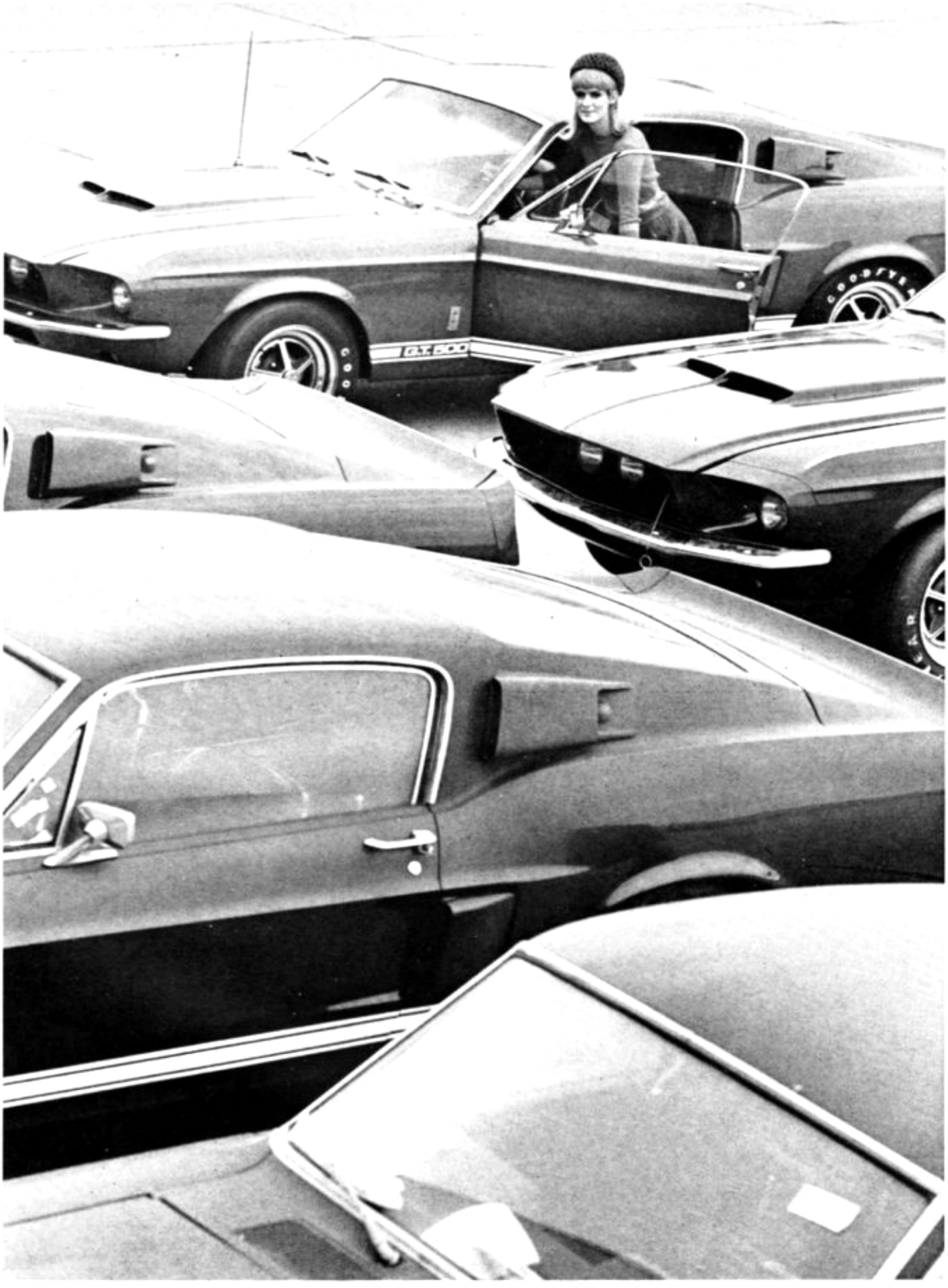
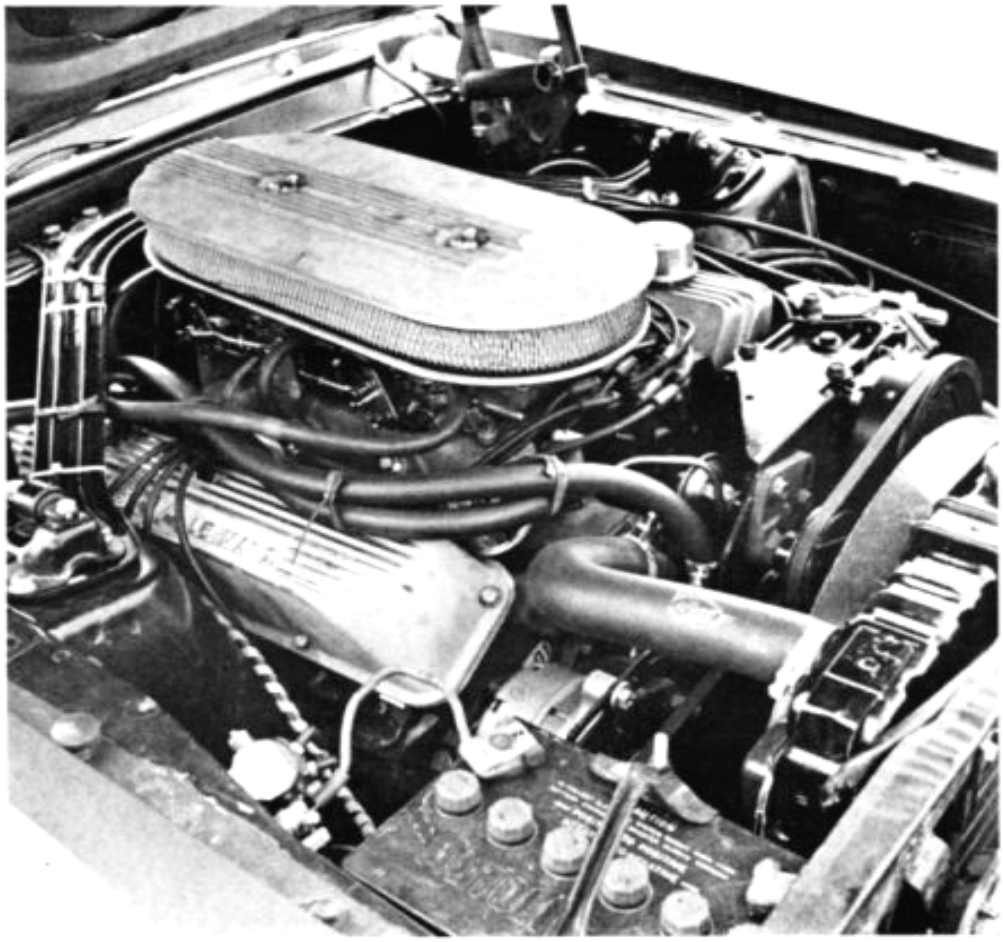


PHOTOGRAPHY PETE RIDD

Hairy air scoops are a Shelby trademark, as on the GT 40 (left). The GT 500's upper scoop exhausts interior air, while the lower one cools the brakes. The 428 engine isn't the Le Mans winner, but it does the job in the GT 500.



truck . . . and we loved it. It was a man's car in a world of increasingly effeminate ladies' carriages. You drove it brutally and it reacted brutally. Every minute at speed was like the chariot-racing scene in "Ben Hur."

Unfortunately for Shelby, the market for a car as hairy as this was limited. One state's motor vehicle bureau complained that the brakes, although virtually fade-proof, required too much pedal pressure. Apparently, the inspectors' leg muscles had atrophied from years of dainty stabs at over-boosted power brakes.

For 1966, Shelby toned the GT 350 down from a wild mustang to a merely high-strung thoroughbred. It was barely tame enough for the Hertz Corporation, which bought 1000 of them and put them into service as the hottest rent-a-cars the business has ever seen.

The GT 350 still wasn't acceptable to a large enough body of potential buyers, so, in 1967, an abrupt change in policy has transformed the Shelby Mustang. The $1000-or-so above the price of a comparable Mustang that used to go into expensive, unseen mechanical improvements is now lavished instead on exterior styling changes. The back lot at Shelby American's remanufacturing plant is littered with stock Mustang front and rear sheet metal, and engine and trunk lids. In their stead go fiberglass panels stylized by Ford's Chuck McHose, working in close co-operation with Shelby American.

The new nose piece arches tautly forward, forming a deep cowling for the headlights (changed from duals to quads, with the high-beams centered in the grille, driving-lamp style). The hood features an air-scoop even larger than last year's, now divided by an air-splitter, and it's still functional. At the rear, the new trunk lid and tail piece combine to form a racy-looking aerodynamic spoiler lip. No one would say for sure if high-speed tests had proved the efficiency of this styling gimmick or not—but it looks right. Finally, the

(Text continued on page 65; Specifications overleaf)

The Shelby Mustang conversion includes a new nose and a big, fat, Kamm-type rear deck treatment. The GT 500 isn't quite as fast as we expected, but it does with ease what the old 350 took brute force to accomplish.

SHELBY GT 500

Manufacturer: Shelby American, Inc.
6501 West Imperial Hwy.
Los Angeles, California

Number of dealers in U.S.: 90

Vehicle type: Front-engine, rear-wheel-drive, 2+2-passenger GT/sports sedan, all-steel integral body/chassis, fiberglass front and rear panels

Price as tested: $5043.60
(Manufacturer's suggested retail price, plus Federal excise tax, dealer preparation and delivery charges; does not include state and local taxes, license or freight charges)

Options on test car: Air conditioning ($356.09), Mag Star wheels ($185.00 for five), AM radio ($57.51), power steering ($84.47), power front disc brakes ($64.77), retractable shoulder harnesses ($50.76)

ENGINE

Type: Water-cooled V-8, cast iron block and heads, 5 main bearings
Bore x stroke 4.13 x 3.98 in, 104.8 x 101.2 mm
Displacement 428 cu in, 7016 cc
Compression ratio 10.5 to one
Carburetion 2 x 4-bbl Holley
Valve gear Pushrod-operated overhead valves, hydraulic lifters
Power (SAE) 355 bhp @ 5400 rpm
Torque (SAE) 420 lbs/ft @ 3200 rpm
Specific power output 0.83 bhp/cu in, 50.6 bhp/liter
Max. recommended engine speed 6000 rpm

DRIVE TRAIN

Transmission 3-speed automatic, plus torque converter
Max. torque converter ratio 2.10 to one
Final drive ratio 3.25 to one

Gear	Ratio	Mph/1000 rpm	Max. test speed
I	2.46	9.6	49 mph (5100 rpm)
II	1.46	16.2	83 mph (5100 rpm)
III	1.00	23.6	128 mph (5400 rpm)

DIMENSIONS AND CAPACITIES

Wheelbase 108.0 in
Track F: 58.0 in R: 58.0 in
Length 186.6 in
Width 70.9 in
Height 51.6 in
Ground clearance 4.3 in
Curb weight 3370 lbs
Test weight 3825 lbs
Weight distribution, F R 60.0/40.0%
Lbs/bhp (test weight) 10.8
Battery capacity 12 volts, 55 amp/hr
Alternator capacity 540 watts
Fuel capacity 17.0 gal
Oil capacity 5.0 qts
Water capacity 23.5 qts

SUSPENSION

F: Ind., upper wishbones, lower control arm with drag strut, coil spring, 0.94-in anti-sway bar, Gabriel adjustable shocks
R: Rigid axle, semi-elliptic leaf springs, rubber chatter dampeners, Gabriel adjustable shocks

STEERING

Type Power-assisted recirculating ball
Turns lock-to-lock 4.0
Turning circle 37 ft

BRAKES

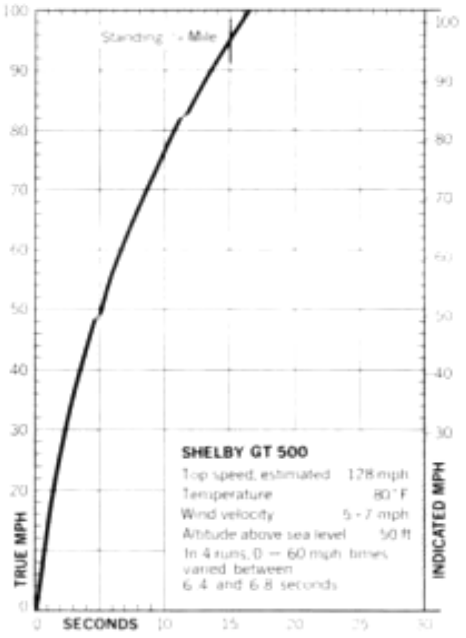
F: Kelsey-Hayes 11.3-in vented discs
R: 10.0 x 2.5-in cast iron drums
Swept area 376.0 sq in

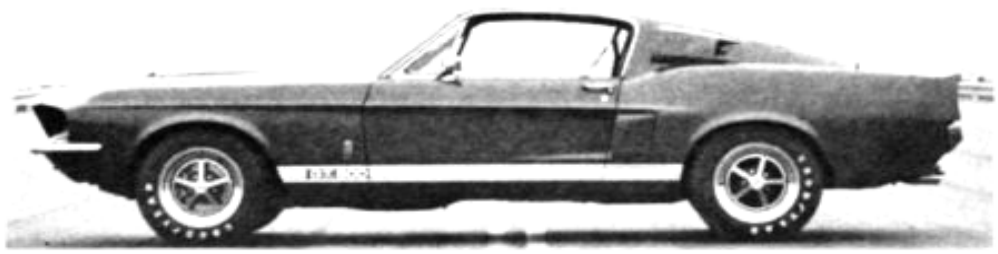
WHEELS AND TIRES

Wheel size and type: 7.0 x 15-in, Kelsey-Hayes "Mag Star," aluminum spider with steel rims, 5-bolt
Tire make, size and type: Goodyear E70-15 Speedway, 4-ply nylon tubeless
Test inflation pressures: F: 40 psi, R: 40 psi
Tire load rating: 1190 lbs per tire @ 24 psi

PERFORMANCE

Zero to	Seconds
30 mph	2.3
40 mph	3.4
50 mph	5.0
60 mph	6.5
70 mph	7.5
80 mph	10.7
90 mph	13.6
100 mph	16.6
Standing ¼-mile	15.0 sec @ 95 mph
80-0 mph	287 ft (0.74 G)
Fuel mileage	9-12 mpg on premium fuel
Cruising range	153-204 mi





CHECK LIST

ENGINE

Starting	Very Good
Response	Excellent
Vibration	Very Good
Noise	Good

DRIVE TRAIN

Shift linkage	Very Good
Shift smoothness	Fair
Drive train noise	Good

STEERING

Effort	Excellent
Response	Very Good
Road feel	Very Good
Kickback	Very Good

SUSPENSION

Ride comfort	Good
Roll Resistance	Very Good
Pitch control	Very Good
Harshness control	Fair

HANDLING

Directional control	Very Good
Predictability	Very Good
Evasive maneuverability	Very Good
Resistance to sidewinds	Very Good

BRAKES

Pedal pressure	Fair
Response	Very Good
Fade resistance	Good
Directional stability	Very Good

CONTROLS

Wheel position	Excellent
Pedal position	Very Good
Gearshift position	Good
Relationship	Excellent
Small controls	Good

INTERIOR

Ease of entry/exit	Fair
Noise level (cruising)	Good
Front seating comfort	Very Good
Front leg room	Very Good
Front head room	Very Good
Front hip/shoulder room	Good
Rear seating comfort	Fair
Rear leg room	Poor
Rear head room	Poor
Rear hip/shoulder room	Fair
Instrument comprehensiveness	Very Good
Instrument legibility	Good

VISION

Forward	Very Good
Front quarter	Very Good
Side	Excellent
Rear quarter	Poor
Rear	Good

WEATHER PROTECTION

Heater/defroster	Excellent
Ventilation	Very Good
Air conditioner	Good
Weather sealing	Very Good

CONSTRUCTION QUALITY

Sheet metal	Fair
Paint	Good
Chrome	Very Good
Upholstery	Very Good
Padding	Very Good
Hardware	Fair

GENERAL

Headlight illumination	Very Good
Parking and signal lights	Very Good
Wiper effectiveness	Very Good
Service accessibility	Poor
Trunk space	Poor
Interior storage space	Fair
Bumper protection	Good