

CAR LIFE
ROAD TEST

CHRYSLER 300



CHAN BUSH PHOTOS

A Package of TNT for the Big-Car Fan

IN THE Douglas fir country of the Pacific Northwest, when caulk-booted loggers require a device to extract gigantic logs from the bottoms of steep-sided canyons, they anchor a huge engine—steam or Diesel—with appropriate winches, to a massive sled. On first view of the completed donkey power unit, those loggers are wont to state with great satisfaction, “She ain’t much for pretty, but she’s hail for stout.” This statement of pure admiration for sheer strength and sheer power could well apply to the Chrysler 300 and its optional high-performance 440-cu. in. engine.

Tastes in styling may vary, but it seems to *CAR LIFE* that the main idea of the Chrysler stylists who carried out exterior design for the 300 was to allow no single body line to be carried through to visual completion. Knife-edge trouser creases of the front fenders bulge at bumper level where a stroke of the drafting pen could just as well have created smoothness. Chromium strips at top and bottom of outward curving side panels induce an impression of a speedboat turning into a Nike-Zeus anti-missile missile, though the metamorphosis seems incomplete. This chromium trim, which

could end in clean lines, terminates at the rear fenders in a melange of striped taillights. The trunk deck is humped, *à la* the Lincoln Continental hood, called this year a “power dome,” and thus it is that the 300 in reverse resembles a Continental in forward. On each side of the automobile, just aft of front wheel cutouts, are pairs of accent marks that seem to announce the car’s delight in just having been promoted to corporal. Remember that Russian lady shotputter dressed and made up for her appearance on television? “Not much for pretty, but hail for stout.”

300

The stout—the 300's strength—comes from the high-performance 440 engine, the largest displacement engine Chrysler Corp. installs in a passenger vehicle. This 440 also is offered in Newports, New Yorkers, Dodge Polaras and Monacos, and the Plymouth Fury.

MAJOR DIMENSIONS of the high-performance 440-cu. in. 90° V-8 engine are bore and stroke of 4.32 in. and 3.75 in., respectively, and a compression ratio of 10.1:1. With single 4-barrel carburetion, this so-called "TNT package" produces 365 bhp at 4600 rpm and reaches its torque peak of 480 lb.-ft. at 3200 rpm. (The "other" 440, standard in the New Yorker line, delivers 350 bhp at 4400 rpm and torque of 480 lb.-ft. at 2800 rpm.)

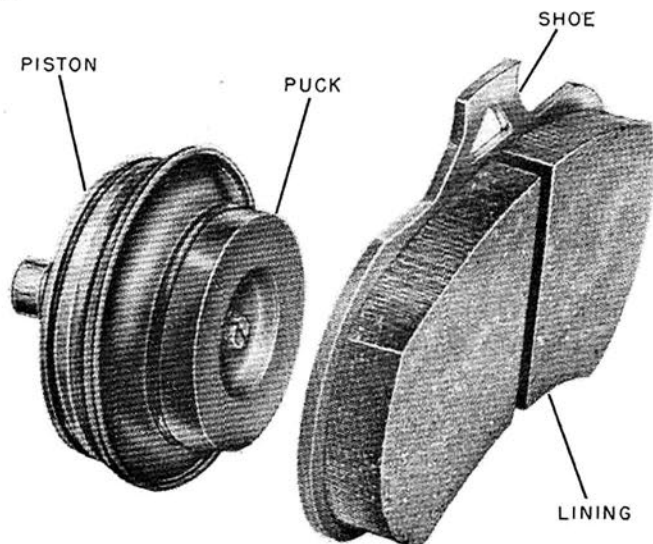
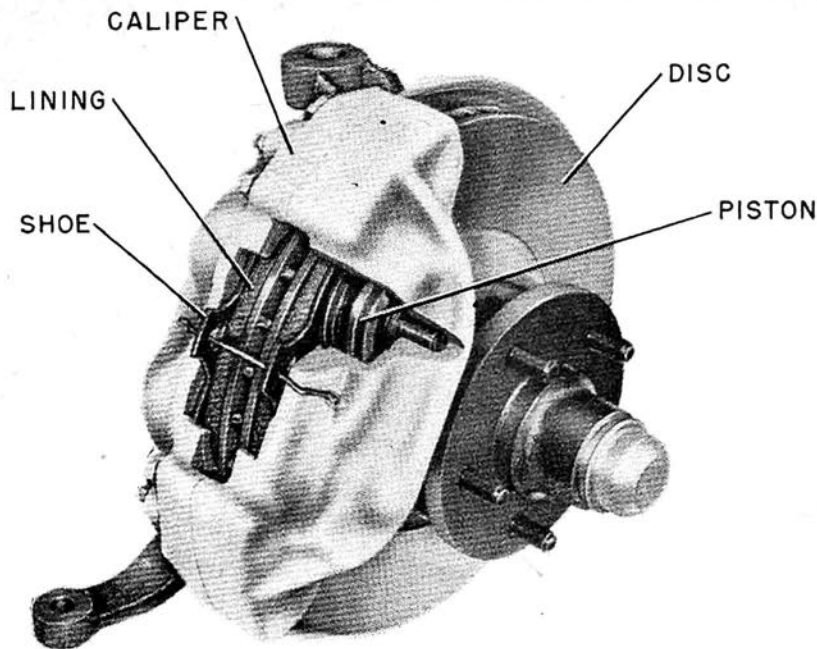
The 440 was developed from the earlier 413-426-cu. in. block and, in the stretching process, Chrysler engineers adopted the new furan resin sand core technique for casting. The manufacturer believes use of acid-resin-heat-treated sand cores for casting produces greater accuracy in the finished product. Though the advanced casting process was employed for the 440, the 413-426 bore centers of 4.8 in. were retained to facilitate use of already established machining operations.

The larger bore, of course, requires a larger piston. The 440's pistons are slipper type, cast of aluminum alloy and carry steel struts in their skirts to control heat expansion.

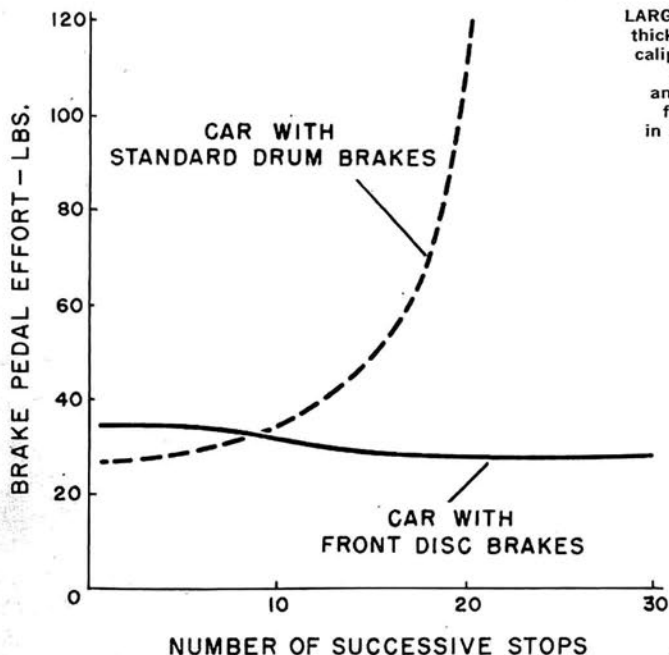
Though the 440's cylinder heads are interchangeable with those of the 413 (but not the Hemi 426), a 0.022-in. thick steel gasket is specified to provide for the enlarged cylinder bore diameter. The in-line valve arrangement and size are identical, except that the 440 carries stiffer valve springs than were in the 413.

The "moderate" 440 employs a single-line exhaust system. The HP model uses a dual exhaust system, thus reducing back pressure and helping along that boost from 350 to 365 bhp.

This 365-bhp muscle, in the case of the *CAR LIFE* test car, was installed in the 2-door hardtop unit body which the 300 shares, minor variations in dimension excepted, with other automobiles from Chrysler, Dodge and Plymouth lines. Very long at 221.9 in. overall, the body is on the 124-in. wheelbase common to all Chrysler-line cars. A goodly portion of the



LARGE ventilated rotors, thick pads and boosted calipers stop the 5000-lb.-plus 300 quickly and smoothly without fade—as illustrated in the repeated stops graph, below.



total length seems to be in rear overhang. While this length supplies 17.4 cu. ft. of luggage space, it also makes a rear departure angle which can permit the twin tailpipes to scrape the ground as the car is backed from gently sloped driveways.

Overall width is 79.5 in., but door thickness and side curvature give front seat shoulder room of only 60 in. Though overall height of the 300 is 54.6 in., elevation of the floorpan to 11 in. above ground level compresses vertical passenger space. In the latter respect, *CL*'s tallest driver chose to elevate the power adjusted seat to its highest level for leg comfort—only to find his crewcut pressed tightly against the 300's headliner. Thus the conclusion must be drawn that the 300, although vast in exterior dimension, is somewhat average in interior proportion.

If large, the 300 also is heavy. *CAR LIFE* recorded a test weight—including two test crewmen, better than a half-tank of gasoline and test equipment—at 5060 lb. In a normal touring situation with five passengers and luggage, the total weight could be pushed well over 5500 lb.

To cope with more than 2.5 tons and a 57% forward weight bias, the front suspension employs longitudinal torsion bars of 0.96 in. diameter and 47 in. in length. These could be flexed to their fullest—bottomed out—at 25 mph over a moderate bump. At the rear, drive and suspension are of the Hotchkiss system with parallel longitudinal leaf springs.

Of course, the torsion bar/leaf spring combination is standard among Chrysler products. Surprisingly, the suspension on the 300 permitted much less body lean in cornering than had been anticipated by *CL* drivers in view of recent test driving of the plushy, mechanically similar Plymouth VIP (*CL*, Jan. '66). The heavy-duty torsion bars and springs provided an almost firm ride, with only a slight tendency



HORIZONTAL LINES forward, massive bumper, bold headlamp mounting and lavish use of chromium plating contribute to the really big car theme.

for the car to pitch when roadway irregularities were encountered and allowed no untoward rear axle relocation when the full surge of the 440-cu. in. engine was applied.

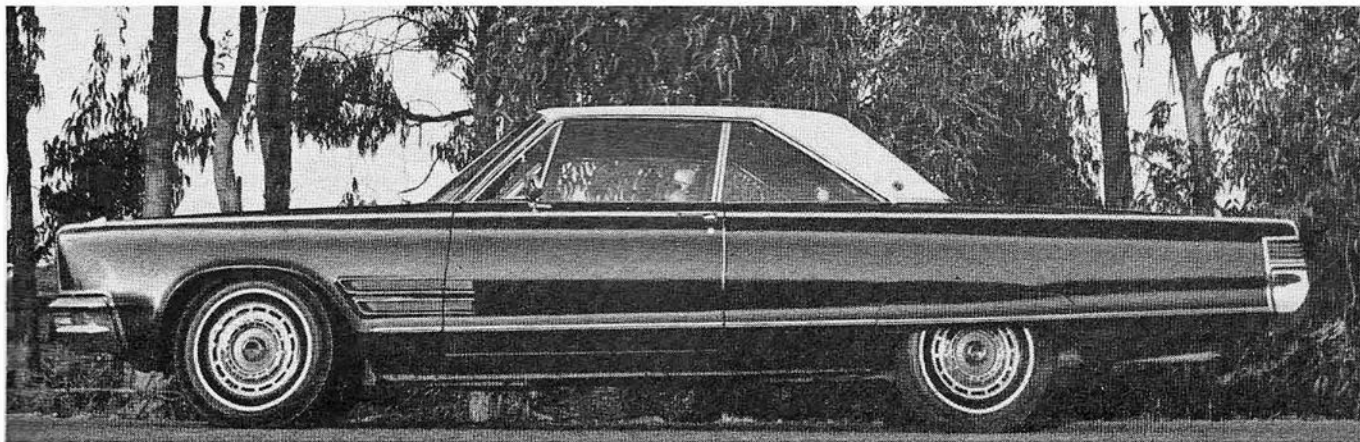
THOUGH THERE is strength with stability in suspension and unit body construction, the degree of the 300's silence does not match the other two inherent features. The Chrysler 300's engine is quiet—a whisper only. The unit body is secure and tight—with only slight thrummings here and there at speed over seamed concrete. Detracting from this design and production engineering effort toward silence were such things as a jingling shift detent mechanism, a ring-a-ding-ding caused by the lid of a meter coin box within the front compartment ashtray unit, a zinging loose bushing in a bucket seat headrest mounting and an intermittent knocking somewhere inside the right hand door.

In other respects, the automobile's interior was adequately done to current standards. Gray vinyl upholstery,

black nylon carpeting and a black cloth headliner were fitted with care, with a higher degree of tailoring than is apparent among most other cars *CL* has tested recently. The 300's instrument layout is spread across a semi-circle span directly before the driver. The speedometer arc is most prominent, with total odometer and trip odometer indicators to the left and right of the speedometer needle pivot point. Such things as fuel and alternator current are metered, but warnings such as "Cold" and "Brake" are presented in illuminated rectangular readouts which go blank when, respectively, the engine warms up, or the parking brake is released. The things a driver must know immediately are presented clearly, white on black, to be easily read. Air conditioner and am/fm radio pushbutton controls are located to the right of the driver, convenient to both driver and passenger.

DRIVING THE 300 with the 440 engine is an experience in what a really big engine in a really big car

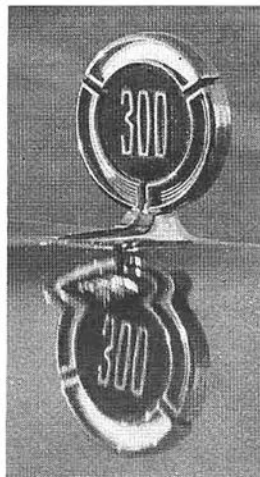
OVERALL LENGTH of the Chrysler 300 hardtop is 221.9 in. However, door thickness, low roof and high floor pan compress passenger space. Rear overhang permits large cargo capacity, but induces tailpipe scrapes in driveways.



300

can do. The more than 5000 lb. can be accelerated to 88 mph in a quarter-mile in just over 16 sec. From rest, a jab at the accelerator will leave a pair of black streaks on the pavement for 60 ft. But these things the 300 was not designed to do. Through congested city streets, the 300 conveys its passengers in ease and comfort, with very little effort being expended by the driver. On the freeway, where, for example, the speed limit may be 65 mph, driver effort increases because he must pay close attention to the speedometer else the 440 will work its way toward a traffic citation. On clear roadway it is dreadfully simple to unwittingly accelerate to 90 mph—a condition ideal for Nevada where no speed limit exists. Fortunately, Chrysler offers as options both speed warning and speed control devices.

Of course, with 440 cu. in., hills are no problem. Curving roadway, though, is something else. The 300's power-assisted steering provides no road feel



EMBLEM reflects a powerful car.



POWER ADJUSTED bucket seats, headrests and console are optional for sports/touring look.

whatsoever. The car's inherent forward weight bias induces a pronounced understeer that sometimes is difficult to manage in the tighter turnings. The wise driver slows the 300, even gears it down with the TorqueFlite transmission, as he approaches the curve, then uses some of the 440's acceleration capability to thunder out of the bend.

CAR LIFE long has reiterated that

big cars require the best brakes available to safely and quickly dissipate all the energy created by such huge masses in motion. CL also believes disc brakes are, at present, the best system and this belief is borne out by the discs fitted to the front of the Chrysler 300.

Rotors are of almost 12 in. diameter and of sandwich construction with ribs between contact surfaces to radiate

1966 CHRYSLER 300 HARDTOP COUPE



DIMENSIONS

Wheelbase, in.....	124.0
Track, f/r, in.....	62.0/60.7
Overall length, in.....	221.9
width.....	79.5
height.....	54.6
Front seat hip room, in.....	2 x 24.0
shoulder room.....	60.0
head room.....	37.9
pedal-seatback, max.....	44.0
Rear seat hip room, in.....	61.8
shoulder room.....	60.0
leg room.....	34.8
head room.....	38.1
Door opening width, in.....	42.8
Floor to ground height, in.....	11.0
Ground clearance, in.....	7.2

PRICES

List, fob factory.....	\$3398
Equipped as tested.....	5594
Options included: 440/365 V-8, auto, trans., l.s. diff., air cond., am/fm, rear-seat speaker, power antenna, steering, bucket seats, windows and brakes; smog-control system, console, vacuum gauge, tinted glass, headrests, remote-control mirror.	

CAPACITIES

No. of passengers.....	5
Luggage space, cu. ft.....	17.4
Fuel tank, gal.....	25.0
Crankcase, qt.....	4.0
Transmission/diff., pt.....	18.5/4.0
Radiator coolant, qt.....	18.0

CHASSIS/SUSPENSION

Frame type.....	unit
Front suspension type: Independent with lateral, non-parallel control arms with torsion bars; tubular shock absorbers.	
ride rate at wheel, lb./in.....	128
anti-roll bar dia., in.....	0.98
Rear suspension type: Live axle with longitudinal, asymmetric leaf springs; tubular shock absorbers.	
ride rate at wheel, lb./in.....	155
Steering system: Power assisted rack and sector; trailing, parallel idler arms, equal length tie-rods.	
gear ratio.....	15.7
overall ratio.....	19.4
turns, lock to lock.....	3.8
turning circle, ft. curb-curb.....	44.0
Curb weight, lb.....	4720
Test weight.....	5060
Weight distribution, % f/r.....	57/43

BRAKES

Type: Single-line hydraulic; front—ventilated cast-iron discs, fixed callipers. Rear—duo-servo shoes in composite drums.	
Front disc, dia. x width, in.....	11.875 x 0.875
Rear drum, dia. x width.....	11.00 x 2.50
total swept area, sq. in.....	509.3
Power assist.....	Integral, vacuum
line psi @ 100 lb. pedal.....	930

WHEELS/TIRES

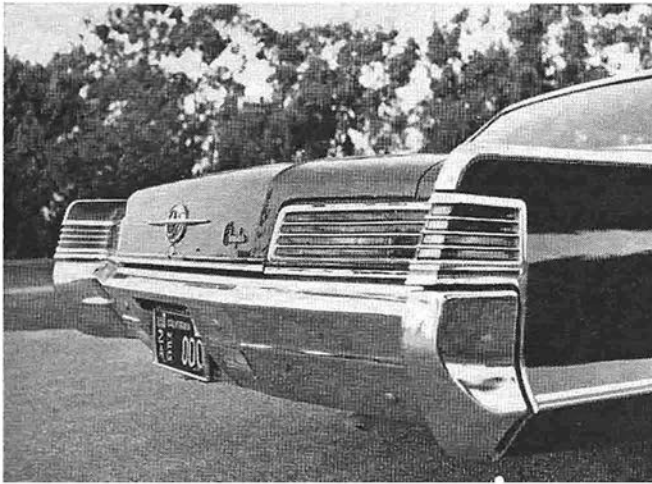
Wheel size.....	15 x 5.5JK
optional size available.....	15 x 6.0JK
bolt no./circle dia., in.....	5/4.5
Tires: Goodyear Power Cushion	
size.....	8.45-15
recommended inflation, psi.....	24
capacity rating, total lb.....	5120

ENGINE

Type, no. cyl.....	V-8, dhv
Bore x stroke, in.....	4.32 x 3.75
Displacement, cu. in.....	440
Compression ratio.....	10.1
Rated bhp @ rpm.....	365 @ 4600
equivalent mph.....	116
Rated torque @ rpm.....	480 @ 3200
equivalent mph.....	81
Carburetion.....	1 x 4 barrel dia., pri./sec..... 1.44/1.56
Valve operation: Hydraulic lifters, pushrods and rocker arms.	
valve dia., int./exh.....	2.08/1.60
lift, int./exh.....	0.425/0.437
timing, deg.....	14-62, 62-18
duration, int./exh.....	256/260
opening overlap.....	32
Exhaust system: Dual, reverse-flow mufflers, resonators.	
pipe dia., exh./tall.....	2.25/2.00
Lubrication pump type.....	rotary
normal press. @ rpm.....	.45 @ 2000
Electrical supply.....	alternator
ampere rating.....	46
Battery, plates/amp. rating.....	78/70

DRIVE-TRAIN

Clutch type.....	
dia., in.....	
Transmission type: Automatic with torque converter and 3-speed planetary gearset.	
Gear ratio 4th () overall.....	
3rd (1.00).....	3.23
2nd (1.45).....	4.68
1st (2.45).....	7.90
1st x t.c. stall (2.20).....	17.38
synchronous meshing.....	planetary
Shift lever location.....	console
Differential type: Hypoid, limited slip.	
axle ratio.....	3.23



WIDE BUMPER, extended taillight striping and a Continental-hood-like hump emphasize sheer bulk.



THE 300's luggage compartment, 17.4 cu. ft. in size, is adequate for long-distance touring.

heat and permit internal circulation of cooling air. The fixed calipers each carry a pair of 0.5-in. thick pads. At the rear are 11-in. conventional composite drums with duo-servo shoes.

In two brake test runs, *CL* drivers produced deceleration rates of 22 ft./sec./sec. with little fade evident and with complete controllability. However, the rear drums locked up somewhat too easily, and noisily, which

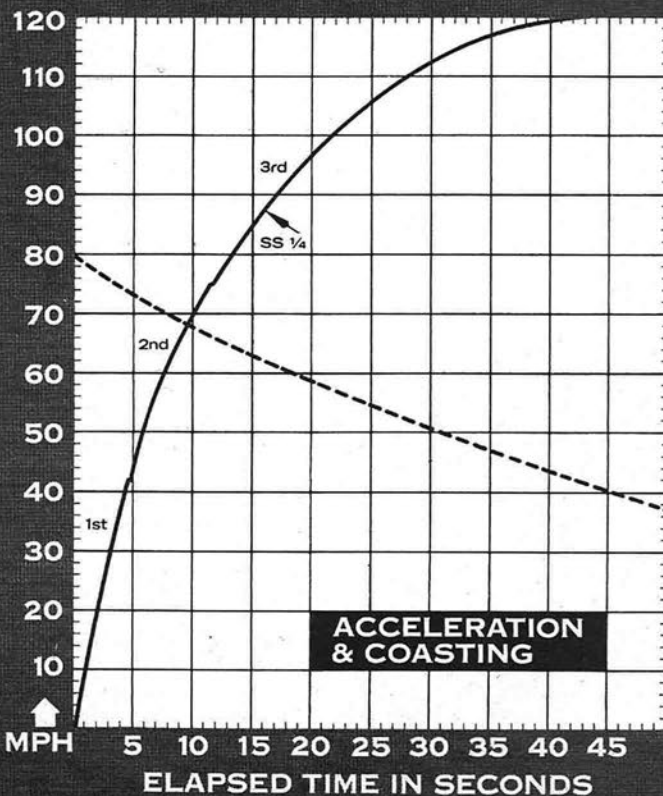
would indicate lack of balance between front disc and rear drum braking action, and would seem to call for a limiting device to prevent such lockup.

Engine, unit body construction and, especially, brakes then are of sufficient sturdiness to provide the Chrysler 300 owner comfortable cross-town or cross-country service for years. The outward appearance of such things as neatly applied paint or, as was the case

with the test 300, a white vinyl top covering will attract a number of buyers who can afford cars in the \$5000 category.

That *CAR LIFE* doesn't consider the 300 a visually attractive car can be summed up in another observation made by those aforementioned loggers: "If ever 'body liked the same thing, we'd all be married to the same woman."

CAR LIFE ROAD TEST



CALCULATED DATA

Lb./bhp (test weight)	13.8
Cu. ft./ton mile	119
Mph/1000 rpm (high gear)	25.2
Engine revs./mile (60 mph)	2380
Piston travel, ft./mile	1490
Car Life wear index	35.4
Frontal area, sq. ft.	24.1
Box volume, cu. ft.	556.5

SPEEDOMETER ERROR

30 mph, actual	28.4
40 mph	38.3
50 mph	47.9
60 mph	57.2
70 mph	66.5
80 mph	75.6
90 mph	84.9

MAINTENANCE INTERVALS

Oil change, engine, miles	4000
transmission/differential	as req.
Oil filter change	8000
Air cleaner service, mo.	24
Chassis lubrication	32,000
Wheelbearing re-packing	20,000
Universal joint service	as req.
Coolant change, mo.	24

TUNE-UP DATA

Spark plugs	MoPar P-3-5P
gap, in.	0.035
Spark setting, deg./idle rpm	0/620
cent. max. adv., deg./rpm	18/4800
vac. max. adv., deg./in. Hg.	22/15
Breaker gap, in.	0.014-0.019
cam dwell angle	28-32
arm tension, oz.	17-20
Tappet clr., int./exh.	0
Fuel pump pressure, psi	4-5.5
Radiator cap relief press., psi	16

PERFORMANCE

Top speed (4700), mph	120
Shifts (rpm) @ mph	
3rd to 4th ()	
2nd to 3rd (4100)	75
1st to 2nd (4200)	42

ACCELERATION

0-30 mph, sec.	3.0
0-40 mph	4.3
0-50 mph	5.8
0-60 mph	7.7
0-70 mph	10.1
0-80 mph	13.3
0-90 mph	17.0
0-100 mph	21.9
Standing 1/4-mile, sec.	16.1
speed at end, mpg	88
Passing, 30-70 mph, sec.	10.3

BRAKING

(Maximum deceleration rate achieved from 80 mph)	
1st stop, ft./sec./sec.	22
fade evident?	slight
2nd stop, ft./sec./sec.	22
fade evident?	slight

FUEL CONSUMPTION

Test conditions, mpg	11.6
Normal cond., mpg	11-14
Cruising range, miles	275-350

GRADABILITY

4th, % grade @ mph	
3rd	17 @ 73
2nd	24 @ 62
1st	34 @ 40

DRAG FACTOR

Total drag @ 60 mph, lb.	253
--------------------------	-----