

CAR LIFE ROAD TEST



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DRIVER AND ENGINE try to sustain a steady 40 mph through our test corner, while understeer grinds off speed and increases curve radius. LTD was worst handling of the group, though not as bad as other cars we have tested in this general size range. Factory installed radial tires gave Ford grace in street driving not forthcoming on handling circuit.

FORD NAMED IT 'LTD'

... and 'limited' it is. Ever drive a 429-cid, full-size, over-gadged Powercar?

PHOTOS BY DARRYL NOREBERG



CHALLENGING is the best way to sum up the test of Ford's LTD with 429-cid engine. The car met all the specifications of the Powercar group, but it performed like the family cars it's supposed to overpower, and there were enough maddening details to put the testers off completely.

Our relationship with the car began to disintegrate from the moment any tester climbed into it in the parking lot—days before we finally took it to Orange County Raceway to gather performance data.

For instance, one tester would hop in and have to search for the ignition switch (it's buried up under the dash). Another search for the headlights (they're buried somewhere else under the dash and the steering wheel blocks the view). The seat belts defied efficient snapping. The whole dash panel seemed to be designed to frustrate the new driver (we found, after driving the car rather extensively, that it's not true that you can get used to any-

thing). Once underway, frustrations seemed to pile on frustrations. First block. Adjust the windows. Power window control panel around here someplace. Aha! There it is, peering out from below the left armrest. Can't reach it. Adjust the shoulder belt. Wrist won't go into proper position. Slide over. Try again.

Meanwhile the passenger has a long cigarette ash that's just begging to burn a hole in his trouser leg. No ash tray. (It's camouflaged against the wraparound driver cockpit.) Unfortunately, all he can find is an unlabeled button (out of the driver's view completely) that electrically locks the doors.

Just to be precise about some of the details inside the car, we measured from the driver's shoulder to the push-button on the glove box (where else would he store a map or a bar of candy?). It was 40 in. The longest arm among the testers was 28 in. He could never reach it while driving, or without unfastening his seat belt. From

the passenger's point of view, the interior is just as unreasonable. From his shoulder to the nearest radio control knob is the same 40 in. He has to slide over at least 16 in. to reach it—and reach through the steering wheel (across won't work) to change a station or adjust volume.

The Ford LTD made the individual testers feel sabotaged with the sheer mechanics of operating the vehicle. Pity, too. Because it has some strong points, although among the four Powercars tested it would rank in the bottom half.

First, among its virtues, we felt was the quietness of the interior. Engine noise simply doesn't exist, and wind noise is deceptively low. Only a whisper of the road rumble creeps through all of the computer-calculated acoustics. Interior-born sounds are kept low, too. The heater and air conditioner are almost silent, and the AM/FM stereo has no competition in turning the interior into a concert hall.

Ford's reputation as a builder of

good power disc brake systems continued to grow with the testers. The brakes on the LTD were extremely good. Deceleration rate, ease of modulation, proportioning, and resistance to fade all got high scores. Together, they produced a maximum deceleration rate of 28 ft./sec./sec., and a low after eight stops from 80 mph of 26 ft./sec./sec. That's right at the head of the domestic sedan class—and up there with some fine sports cars.

A major factor in good brake performance is tire adhesion. Good adhesion not only gives the obvious advantage of higher deceleration rates, but the average driver can modulate the action of tires that hold all the better. The LTD was equipped with B.F. Goodrich radials and the increase in adhesion was great enough to be noticed right off by testers who through experience have learned to disregard a lot of the feel that is sometimes misleading.

Traction was so good, in fact, that we were able to induce slight rear axle

judder, something we have never done with this Ford chassis before. The tires, too, account for the decent crooked-road adhesion on a car with such soft suspension. If nothing else, this builds a good case for radial tires even on large, softly sprung cars.

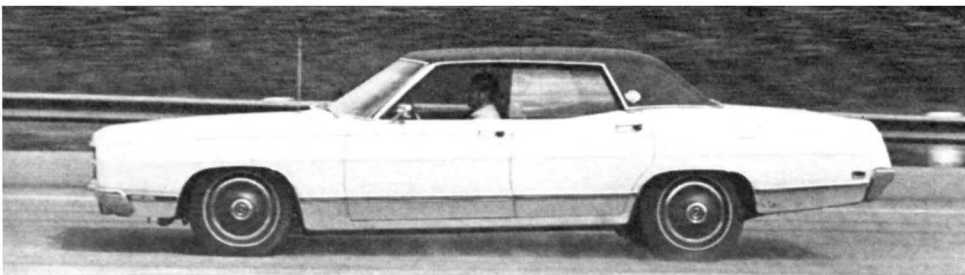
The Ford was second slowest of the Powercar group (the 383 Plymouth predictably was much weaker). The 429-cid, thin-wall, low emission Thunderbird engine is the top power option for the LTD. Its 360 bhp, after being delivered through the Cruise-O-Matic and 2.80:1 rear axle, was not impressive, weighed against the other cars in the test.

The transmission tried to suit both the enthusiast image of the big engine and the soft ride. Some shifts would be quick—so quick that it would lurch the car, other times it would exhibit a great amount of slip. Starting from a stop proved to be tricky. We suspect some of its early miles had been rough ones, even though the car only had 7000 on it

when we turned it back in.

Besides the significant limitations of the drive train, the LTD had others. Its handling put it at the bottom of our Powercar group, despite its radial tires. Still, it handled better than two previous Mercurys (the Marauder X-100 in April and the big Marquis in May). In fact, it reminded us rather much of the somewhat criticized 350-cid Fairlane ("Five Intermediates for the Family," March, page 44). It had the usual Ford Motor Co. handling characteristics—heavy front, large camber change in the curves, and lots of lean. The result is understeer, initial and final.

All CAR LIFE test cars are put through a standard, constant-radius curve at 40 mph (see photo, page 60). It took nerve, though, to take this car into the curve much faster; however, nerve up, we could fling it into the corner early with the right touch to the throttle, and it would assume a rather pleasant neutral steer attitude. But the balance with the throttle was



PROVERBIALLY GOOD Ford brakes came through once again. Consistent deceleration rates at 28 ft./sec./sec. were recorded with no fade evident.

FORD LTD

continued

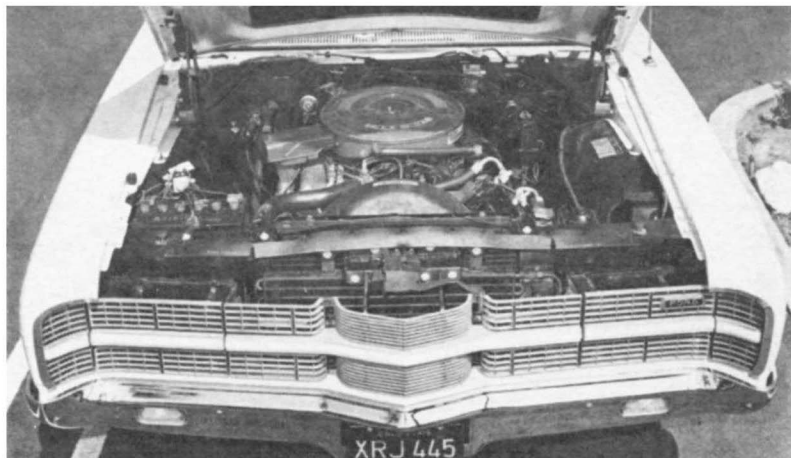
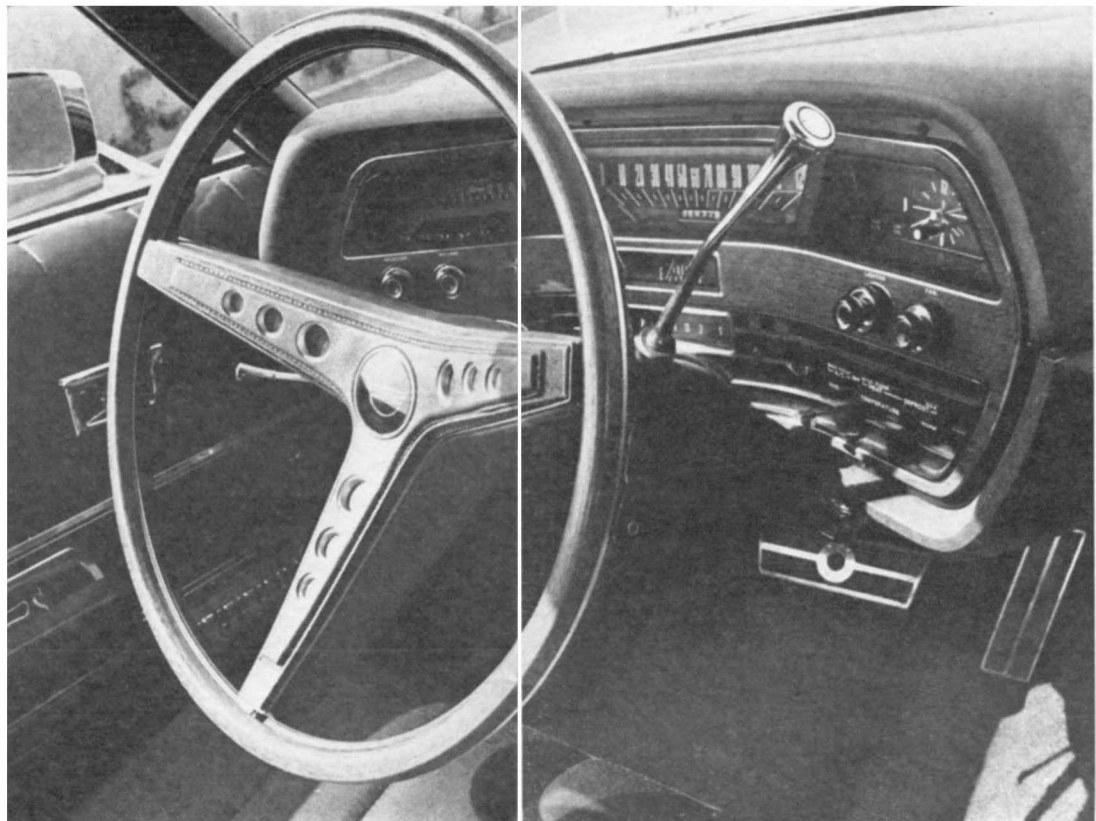
critical, otherwise it would degenerate into understeer again. With the big engine, big output option, one could only assume that the LTD is being sold (and bought) for its performance potential. On that basis, our test car was severely old-maidish. It had none of the available handling options.

The Ford LTD has a 121-in. wheelbase, certainly qualifying it as a big car. And *it is* on the outside. The interior, though, of our four-door hardtop was not cavernous. With 58-in.

hip room front and rear it was certainly adequate, but small enough that one wondered where the apparent room from outside had gone.

There's something else strange about this new body by Ford. Side windows are tightly curved inward. The doors do not have a very wide opening; and when there's a car parked alongside, it is nigh impossible to get into the back seat. The first impression is that the window is placed there to catch the bottom of an unsuspecting chin. More than once, we had to roll the back windows down just to get in or out of the car.

So much for the LTD. Ford said it. In capitals. **LIMITED.**



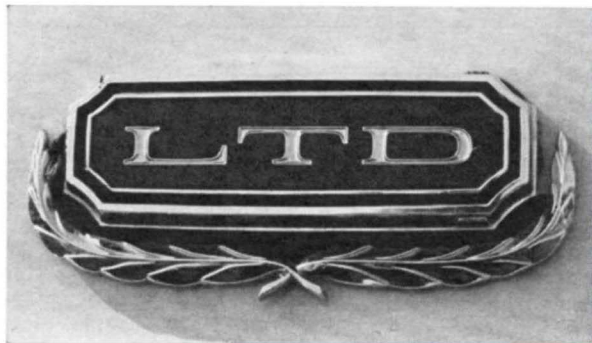
THUNDER OF 429 Thunderbird engine is effectively subdued by 2.8:1 rear axle ratio and accessories. Quietness is impressive.

ADEQUATE trunk is deep, with low liftover, has spackle paint instead of mats.



RIDICULOUS instrument panel has radio out of reach of passenger, window controls in awkward spot and two most-used switches—ignition and lights—hidden underneath.

1969 FORD



CHASSIS/SUSPENSION

Frame type: Perimeter.
Front suspension type: Short and long arms, coil springs.
ride rate at wheel, lb./in.96
antiroll bar dia., in.0.84
Rear suspension type: Live axle, coil springs, three torque control arms and track bar.
ride rate at wheel, lb./in.123
Steering system: Recirculating ball with integral assist.
overall ratio22:1
turns, lock to lock4
turning circle, ft. curb-curb42
Curb weight, lb.4565
Test weight4880
Distribution (driver),
% f/r.58.4/41.6

ENGINE

Type, no. of cyl.V-8
Bore x stroke, in.4.36 x 3.59
Displacement, cu. in.429
Compression ratio10.5:1
Fuel requiredpremium
Rated bhp @ rpm.360 @ 4600
equivalent mph123
Rated torque @ rpm.480 @ 2800
equivalent mph75
Carburetion: Autolite 1x4, C8SF-H.
throttle dia., pri./sec.1.57/1.69
Valve train: Hydraulic lifters, push- rods and overhead rocker arms.
cam timing
deg., int./exh.16-60/70-20
duration, int./exh.256/270
Exhaust system: Dual with reverse- flow mufflers.
pipe dia., exh./tail.2.5/2.0
Normal oil press. @ rpm.45 @ 2000
Electrical supply, V./amp.12
Battery, plates/amp. hr.78/80

BRAKES

Type: Power assisted disc front/ drum rear.
Front rotor, dia. in.11.7
Rear drum, dia. x width.11.0 x 2.25
total swept area, sq. in.373
Power assist
line psi at 100 lb. pedal.1174

DRIVE TRAIN

Transmission type: Three-speed au- tomatic with torque converter "Cruise-O-Matic."
Gear ratio 3rd (1.00:1) overall.2.80
2nd (1.46:1)4.09
1st (2.46:1)6.89
1st x t. c. stall (2.05 x 2.46)14.11
Shift lever location: Column.
Differential type: Hypoid.
axle ratio.2.80:1

WHEELS/TIRES

Wheel rim size.15 x 6JJ
optional size15 x 6JJ
bolt no./circle dia. in.5/4.5
Tires: B. F. Goodrich radials.
sizeZ15R-15

DIMENSIONS

Wheelbase, in.121
Track, f/r, in.63/64
Overall length, in.214
width80
height54
Front seat hip room, in.58
shoulder room62
head room38
pedal-seat back, max.43
Rear seat hip room, in.58
shoulder room62
leg room38
head room37
Door opening width, in.36
Trunk liftover height, in.28

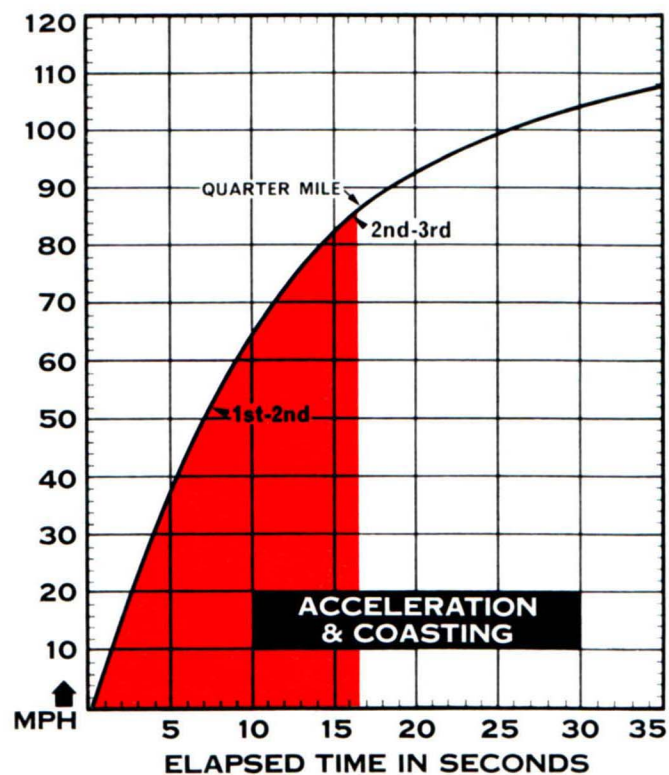
PRICES

List, FOB factory\$3261
Equipped as tested\$5362
Options included: 429-cid V-8, \$237;
Select-shift Cruise-O-Matic, \$222;
power steering, \$100; power disc brakes, \$65; air conditioning, \$389;
AM/stereo tape, \$195.

CAPACITIES

No. of passengers6
Luggage space, cu. ft.18
Fuel tank, gal.25
Crankcase, qt.5
Transmission/dif., pt.26/5
Radiator coolant, qt.21

CAR LIFE ROAD TEST



CALCULATED DATA

Lb./bhp (test weight)13.5
Cu. ft./ton mile109.0
Mph/1000 rpm (high gear)26.8
Engine revs./mile (60 mph)2140
Piston travel, ft./mile1280
CAR LIFE wear index.27.4

PERFORMANCE

Top speed (4600), mph123
Test shift points (rpm) @ mph
2nd to 3rd (4800)83
1st to 2nd (4800)52

ACCELERATION

0-30 mph, sec.4.0
0-40 mph5.5
0-50 mph7.2
0-60 mph9.1
0-70 mph11.4
0-80 mph14.4
0-90 mph18.7
0-100 mph25.8
Standing 1/4-mile, sec.16.7
speed at end, mph86.2
Passing, 30-70 mph, sec.7.4

SPEEDOMETER ERROR

30 mph, IndicatedActual 29.6
40 mph39.2
50 mph48.8
60 mph58.2
70 mph67.8
80 mph77.5
90 mph87.0

MAINTENANCE

Engine oil, miles/days6000/120
oil filter, miles/days12,000/240
Chassis lubrication, miles6000
Antismog servicing, type/miles tune, check PCV valve/12,000
Air cleaner, milesreplace/24,000
Spark plugs: Autolite BF-42.
gap, (in.)0.034
Basic timing, deg./rpm6 BTC/600
max. cent. adv., deg./rpm.20/4000
max. vac. adv., deg./in. Hg.22/24
Ignition point gap, in.10/7
cam dwell angle, deg.28
arm tension, oz.19
Tappet clearance, int./exh.0/0
Fuel pressure at idle, psi.4
Radiator cap relief press., psi.15

BRAKING

Max. deceleration rate from 80 mph ft./sec./sec.28
No. of stops from 80 mph (60-sec. intervals) before 20% loss in deceleration rate.8-14% loss
Control loss? Little.
Overall brake performance.excellent

FUEL CONSUMPTION

Test conditions, mpg.10.1
Normal cond., mpg.10-12
Cruising range, miles.250-300