



CAR LIFE
ROAD TEST

FORD GALAXIE 7-LITRE

***A 6-quart Package of Performance
With a 10-gallon Measure of Stopping Power***

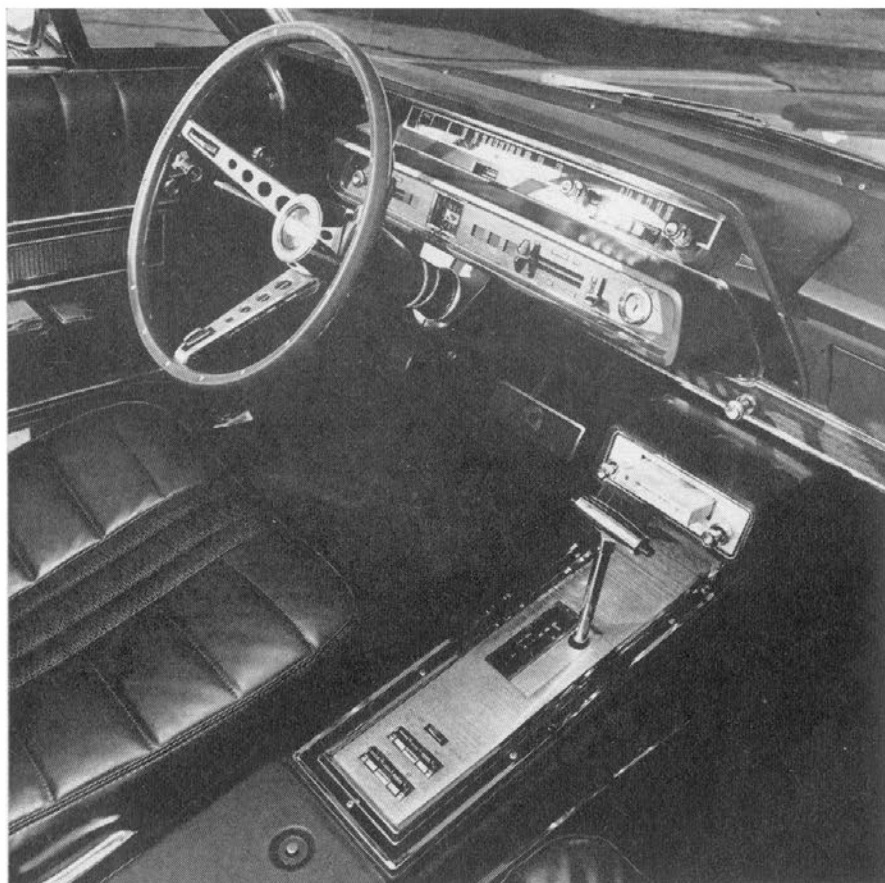
FIRST IMPRESSIONS are occasionally overwhelming, even when professional skepticism is employed to avoid the tender trap. Such was the case with Ford Division's newly-offered Galaxie 7-Litre. Pre-season observations of the car, combined with a rather quick judgment of what it was intended to represent, caused it to display somewhat more bravura than it actually possesses. Now that the car has been lived with a great deal longer, it is time for reapprais-

al—if not agonizing, at least clarifying.

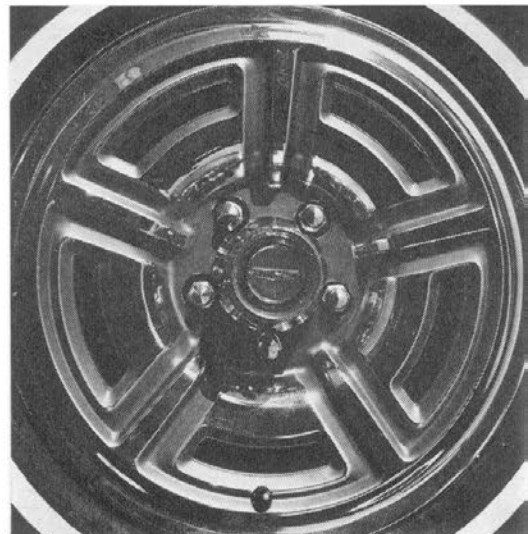
The 7-Litre, it will be recalled from last month's preliminary driver impressions, is the result of a newly developed Ford engine of approximately that displacement being installed in a specially trimmed Galaxie 2-door hardtop or convertible. It is a package which encompasses several interesting options, not the least of which is the front-wheel disc brakes. Its purpose is to give Ford's top-line cars more strength than has been

available in the past, in the form of a big engine eminently suitable for driving air conditioners and automatic transmissions and other creature comforts, as well as for smoking rear tires.

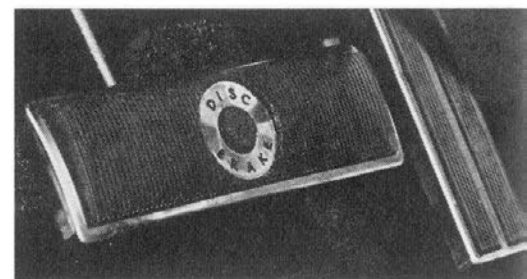
Our initial judgment of the car then tended to be colored by two factors: First, there is the anticipation of what the car should be, based upon easy deductions from the specifications in the light of past experience with Fords; and second, the initial example so brief-



IMITATION WOOD steering wheel is complete with phony rivets; stereo tape player perched atop console was poorly placed for reloading with gear lever in Park.



LATEST RAGE in wheel covers is the simulated steel stamping look.



JUST A tiny sign, but it signifies today's best passenger car brakes.

FORD GALAXIE 7-LITRE

ly tested suffered a transmission malfunction which begged for the benefit of a doubt. Since the earlier experience, two additional 7-Litres have been tried and the last is the subject of this report.

The test car proved, over and over, that a new standard for braking effectiveness must be applied to domestic passenger sedans. From now on, a passenger car's brakes have to be rated as either "as good as the 7-Litre" or inferior. It was only a matter of time until some domestic sedan finally was built with an ability to stop as well as go (even though that length of time did seem interminable). Though available last year on Continental and Thunderbird, it remained for the high-volume Ford line to extend this exemplary braking system into the mass market. Hopefully, the pressures of that market will force other makers to build their cars with brakes of comparable effectiveness, thereby making a significant contribution to traffic safety.

The car buyer who does not demand brakes such as these—even to the extent of paying the extra \$97 when listed only as an option—is clearly disinterested in safe driving no matter how many mirrors or backup lights he gets with the car.

Ironically, Ford Corporation lawyers advise the division not to refer to the discs as "safety" items. To do so, they reason, impugns the regular brakes which the company still sells to the public. To such reasoning, we can only say: Impugn away! The discs are safer (unless, of course, passengers are so lacking in judgment that they refuse to buckle on their seat belts).

Our pipe-smoking staffer managed to keep his briar clenched between his teeth, but tobacco ashes powdered the windshield by the time the braking tests were finished. Consistent deceleration readings between 27 and 29 ft./sec./sec. (0.8 G) were recorded, extremely impressive when it is recalled that the vast average of domestic cars range between 18 and 21 ft./sec./sec. (0.5-0.6 G). In the past, the occasional car capable of 24-25 readings was particularly praiseworthy, but no longer. Only the 4-wheel disc brake system of the Corvette Sting Ray has performed better, in our experience, than did this Kelsey-Hayes designed Ford set-up. Though the hardware is virtually identical to that of the Thunderbird, it seemed to do the job even better for the Galaxie.

Despite the excellence of the brakes,

the system was not without its faults. Rear wheel lockup could be induced too easily, partially as a result of the weight distribution and natural weight transfer during deceleration. But the real culprit in this case was the power booster, overly helpful as they all seem to be in anticipation of a dainty touch on the pedal.

AS A RESULT, line pressure to the rear drums received more poke than the built-in limiting valve could handle and shoes locked. Yet we found we adjusted rapidly to this foible and subsequently were rarely bothered. Indeed, the brakes inspired so much confidence that even panic situations could be met with restraint. There's just not much more you can ask of a brake, at least at the present state of the art.

Aside from the brakes, there was much that was interesting about the car although some features turned out to be disappointing. Chief among these was the engine, which would seem to be sufficiently large and potentially potent enough to satisfy most enthusiastic drivers for street use. It appears at a time when Chevrolet has produced a 427 cu. in./390 bhp and Plymouth/Dodge has available a 440/350. And, since Ford has been relatively honest in recent years with its horsepower ratings, it would seem that the 7-Litre is well within the competitive coliseum.



STYLISTS TAILORED the '66 lines with a great deal less severity, then capped the 2-door hardtop with a graceful new roofline. Relative absence of ornamental bric-a-brac was noted with pleasure by test crew.

But the 428 Ford doesn't seem to be playing in this arena. In acceleration figures, better performance than the 16.4 sec. quarter-mile should be expected in curbside trim, in view of the 14.9 sec. quarter achieved with last year's 427 Galaxie (CL, Feb. '65). While it isn't particularly quick, however, the 7-Litre is plenty fast enough to breech the 100-mph mark within an effortless 22 sec. The speed range between 80 and 100 mph is just about right for this car, though obviously it is a bit imprudent. Nevertheless, it is not until 80 mph is reached (at w.o.t.) that the 7-Litre's automatic shifts into high. As geared, the torque peak was not reached until an indicated 70 mph on the speedometer.

Part of the basis for such mediocre performance off the line lies in a camshaft of rather mild contours. Another contributory factor is a somewhat restrictive 4-barrel carburetor. It is interesting to note that Ford makes a police version of the engine, unavailable to the non-deputized general public, which is rated at 360 bhp at 5400 rpm and draws its strength from a 306° camshaft (and 0.516 in. valve lift) and 1.562-in. throttle bores (instead of 1.437) in the carburetor. There is a clue there somewhere, it would seem, which might shed some light on the production engine's performance.

The Thunderbird engine, as it is called,

is actually beginning to be slightly be-whiskered, despite its late appearance. It is a reworking of the 352-cu. in. "big block" which, with 4.63-in. bore centers and 21.6 overall length, has been a familiar fixture in Fords since the late '50s. This engine has never been noted for exceptional breathing characteristics and this latest configuration shows little departure from that norm. Ford engineers had turned some attention to intake passages in the cylinder heads for this family of engines this year, but what is needed is a great deal more—say, like that lavished on the 7000 rpm 427 ultra-high performance engine (also based on the same block).

AT ANY rate, what the 7-Litre has is the docility to be used with a variety of engine-driven convenience options such as the newly-reworked C-6 automatic transmission. So coupled, as was our test car, the Galaxie displays a great deal of effortlessness when driven hard. More important, perhaps, was its tractability in traffic and around town. Though the transmission had been modified to cope with larger displacement engines, some of the smoothness got lost in the process. Shifts were jerky regardless of the care exercised; exuberance on the throttle produced an uncertainty of shifting which was decidedly unpleasant. If, as it appears, the 7-Litre is proposed

as a luxury car with a high degree of performance, or a performing car with a high degree of luxury, it has so far fallen short of the mark.

There is no reason to alter our first impressions of the 7-Litre's handling and roadability. In this respect, it is much like last year's Galaxie with an almost imperceptible improvement owing to a minor relocation of the rear suspension track bar. Unfortunately, heavy-duty suspension components were not fitted to the test cars, although they are available. The 7-Litre might have carried itself with a bit more authority had it had the stiffer underpinnings. Nevertheless, it was suitable for the ordinary kinds of driving usually done on ordinary roads and it continues the excellent riding qualities which Ford has achieved in its recent models.

Over and above the pseudo-performance image which the car is supposed to convey, it is still a Galaxie 500-XL beneath it all. And that is to say it is right in keeping with the contemporary luxury level in appointments. The front bucket seats were the fairly recent thin shell design and were, except for our line backer-sized staffer, comfortable all out of proportion to the usual Ford seating. The inside suffered from an over-slaughtering of simulated walnut, but the great expanse of red vinyl managed to mute this to the level of tolerance.



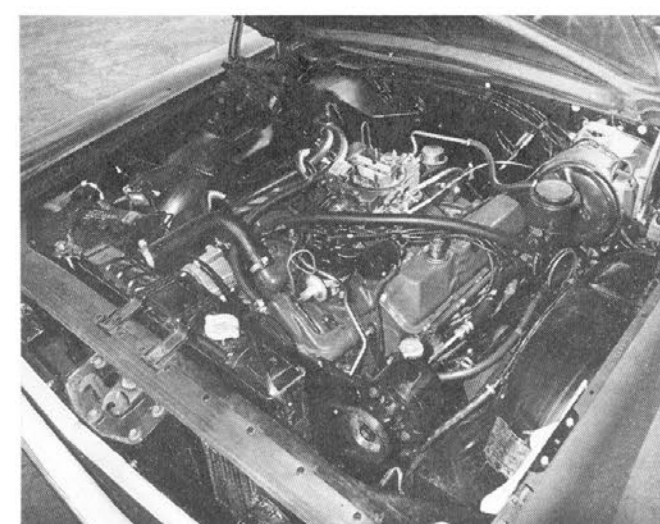
FROM ANY angle behind, Galaxie shows improvement this year. Handling of car also has improved slightly because of minor suspension change.



DOUBLE DECK paint stripes are novel, but showed effect of a palsied hand.



COAST-TO-COAST capacity is a feature of Galaxie's huge trunk. Spare tire robs it of some room, but is easier to reach.



LARGER VALVE covers and big 4-barrel carburetor distinguish 428 engine from others in its family.

FORD GALAXIE 7-LITRE

One evidence of luxury which the car displayed deserves comment, because it is a highly touted extra-cost option. This is the stereo tape player, located in a raised position atop the console. Eighty minutes of music may be played from each pre-packaged cartridge as the player automatically switches between the four sound tracks. From an audiophile point of view, it was hardly ac-

ceptable though it was possible to generate certain stereo qualities. But the speakers—tiny pod-enclosed ones under each side of the instrument panel and a more normal rear shelf type—weren't up to the reproducer task. Bass response was notable for its complete absence, and the piercing treble was enough to make one switch to the soothing static of an am radio broadcast. We suspect

the system may work somewhat better in 4-door hardtops, where large rear speakers can be concealed in both rear quarter pillars, thus enhancing the stereo effect, at least. One other bother we noted with the system was the need to pull the gear shift lever back to change cartridges, a design defect remedied with a column-mounted lever.

The test 7-Litre was equipped, as will

be most cars we test, with the California-required exhaust control system—in this case Ford's Thermactor. This basically is an air pump which injects fresh air into the exhaust manifold just outboard of the exhaust valves, thereby aiding more complete combustion of all fuel particles. Ford engineers maintain that the Thermactor does not detract from the engine's performance, and in view of

similarly dismal performance with all three 7-Litres (only the last of which was Thermactor-equipped) we are inclined to agree.

In the final analysis, the 7-Litre is not at all a bad car. It just isn't our type of car, despite the intentions (or pretensions) it may hold out. It is still much the luxury limousine on a 119-in. wheelbase, catering to a great and growing

public which tends to confuse bigger with better. The disc brakes, which can be ordered on any Galaxie, are what puts it head high above the competitors. However, if performance is desired, the 427 HP engine is still the better choice despite the absence of power steering and automatic transmission. That one, after all, is spelled "7 liters"—Yankee style. ■

1966 FORD GALAXIE 7-LITRE 2-DOOR HARDTOP



DIMENSIONS

Wheelbase, in.	119.0
Track, f/r, in.	62/62
Overall length, in.	210
width	79.0
height	54.7
Front seat hip room, in.	2 x 20.5
shoulder room	60
headroom	38.0
pedal-seatback, max.	45.5
Rear seat hip room, in.	61.7
shoulder room	58.7
leg room	33.4
head room	37.3
Door opening width, in.	46.3
Floor to ground height, in.	10.5
Ground clearance, in.	n.s.

PRICES

List, fob factory	\$3621
Equipped as tested	4139
Options included: Exhaust control system; smog valve, wsw tires, power windows, power steering, stereo tape system, am radio, deluxe seat belts, deluxe mirrors.	

CAPACITIES

No. of passengers	4/5
Luggage space, cu. ft.	19.1
Fuel tank, gal.	25
Crankcase, qt.	5
Transmission/diff., pt.	27
Coolant radiator qt.	20.5

CAR LIFE ROAD TEST

CHASSIS/SUSPENSION

Frame type	Perimeter
Front suspension type	Independent, short and long arm with ball joints and concentrically mounted coil springs and shock absorbers.
ride rate at wheel, lb./in.	82
anti-roll bar dia., in.	0.84
Rear suspension type	Live axle with coil springs and three control arms with lateral track bar.
ride rate at wheel, lb./in.	107
Steering system	Recirculating ball and nut with integral power unit; parallelogram linkage.
gear ratio	17:1
overall ratio	21.9:1
turns, lock to lock	4.0
turning circle, ft. curb-curb	41.0
Curb weight, lb.	4118
Test weight	4490
Weight distribution, % f/r	57/43

BRAKES

Type	Single-line hydraulic with front wheel caliper/discs and rear duo-servo shoes inside composite drums.
Front disc dia. x width, in.	11.87 x 1.25
Rear drum, dia. x width	11.03 x 2.25
total swept area, sq. in.	389.5
Power assist	Integral, vacuum line psi @ 100 lb. pedal
	1100

WHEELS/TIRES

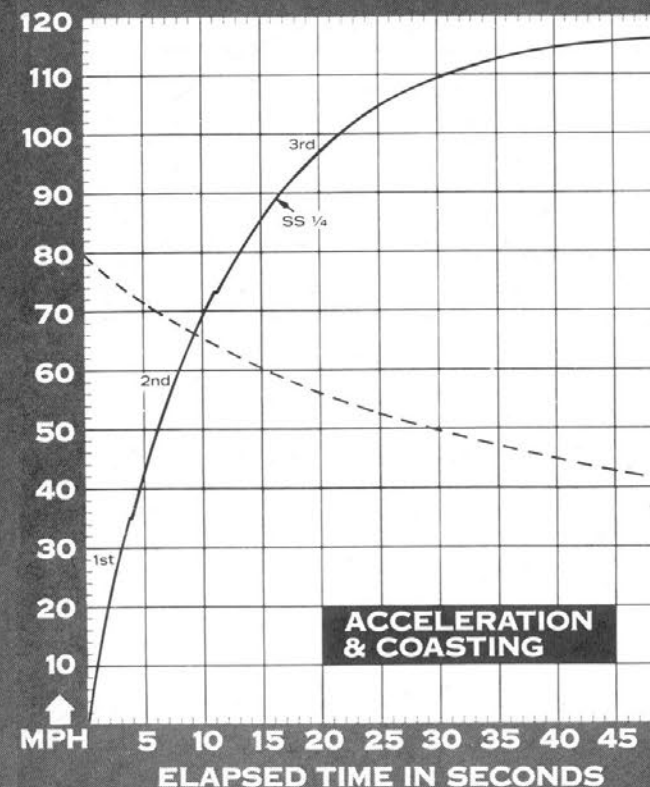
Wheel size	15 x 5.5 JK
optional size available	15 x 6 JK
bolt no./circle dia., in.	5/4.5
Tire make, brand	General
size	8.15-15
recommended inflation, psi	26
capacity rating, total lb.	5600

ENGINE

Type, no. cyl.	ohv, V-8
Bore x stroke, in.	4.13 x 3.98
Displacement, cu. in.	428
Compression ratio	10.5:1
Rated bhp @ rpm	345 @ 4600
equivalent mph	111
Rated torque @ rpm	462 @ 2800
equivalent mph	70
Carburetion	1 x 4 barrel dia., prt./sec.
	1.08/1.19
Valve operation	Hydraulic lifters, pushrods & rocker arms
valve dia., int./exh.	2.03/1.56
lift, int./exh.	0.437/0.437
timing, deg.	16-60, 55-21
duration, int./exh.	256/256
opening overlap	37
Exhaust system	Dual, low restriction tuned chamber pipe dia., exh./tail
	2.0/2.0
Lubrication pump type	rotary
normal press. @ rpm	52-62 @ 2000
Electrical supply	alternator
ampere rating	42
Battery, plates/amp. rating	78/80

DRIVE-TRAIN

Transmission type	Torque converter automatic with planetary gears
Gear ratio 4th () overall	
3rd (1.00)	3.25
2nd (1.46)	4.74
1st (2.46)	8.00
1st x t.c. stall (2.10)	16.8
synchronous meshing?	planetary
Shift lever location	console
Differential type	Straddle mounted pinion, banjo type housing
axle ratio	3.25:1



CALCULATED DATA

Lb./bhp (test weight)	13.0
Cu.ft./ton mile	138
Mph/1000 rpm (high gear)	24.1
Engine revs/mile (60 mph)	2490
Piston travel, ft./mile	1650
Car life wear index	41.2
Frontal area, sq. ft.	24.0
Box volume, cu. ft.	524

SPEEDOMETER ERROR

30 mph, actual	26.8
40 mph	36.3
50 mph	46.3
60 mph	57.7
70 mph	69.8
80 mph	80.3
90 mph	90.0

MAINTENANCE INTERVALS

Oil change, engine, miles	6000
transmission/differential	as req.
Oil filter change	6000
Air cleaner service, mo.	6
Chassis lubrication	36,000
Wheelbearing re-packing	30,000
Universal joint service	none
Coolant change, mo.	24

TUNE-UP DATA

Spark plugs	Autolite, BF-42
gap, in.	0.032-0.036
Spark setting, deg./idle rpm	0/750
cent. max. advance	
deg./rpm	20.5/4000
vac. max. adv., deg./in. Hg.	25/19
Breaker gap, in.	0.014-0.016
cam dwell angle	26-28.5
arm tension, oz.	17-20
Tappet clearance, int./exh.	0/0
Fuel pump pressure, psi	5-6
Radiator cap relief press., psi	12-15

PERFORMANCE

Top speed (4800), mph	116
Shifts (rpm) @ mph	
3rd to 4th ()	24.1
2nd to 3rd (4400)	73
1st to 2nd (3600)	35

ACCELERATION

0-30 mph, sec.	3.3
0-40 mph	4.7
0-50 mph	6.2
0-60 mph	8.0
0-70 mph	10.2
0-80 mph	13.3
0-90 mph	16.8
0-100 mph	21.4
Standing 1/4-mile, sec.	16.4
speed at end, mph	89
Passing, 30-70 mph, sec.	6.9

BRAKING

Maximum deceleration rate achieved from 80 mph:	
1st stop, ft./sec./sec.	29
fade evident?	slight
2nd stop, ft./sec./sec.	28
fade evident?	slight

FUEL CONSUMPTION

Test conditions, mpg	11.2
Normal conditions	11-13
Cruising range, miles	275-325

GRADABILITY

4th, % grade @ mph	
3rd	16 @ 60
2nd	20 @ 53
1st	38 @ 30

DRAG FACTOR

Total drag @ 60 mph, lb.	204
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