

CAR LIFE ROAD TEST



COMET CALIENTE

RALPH POOLE PHOTOS

the rocker rail and rocker rail extension. All underbody structural pieces, incidentally, are galvanized steel to resist rust. Since these and other underbody strengthening details were thoroughly discussed in our test of the Sportster 260, there is little need to go into them further.

The lightweight 289 engine more than doubles the power output over what had been available with the 6-cyl. Comets and it produces a decided—almost startling—increase in performance over the 260 V-8. It has a 9.0:1 compression ratio, a single 4-barrel carburetor with 1.562-in. venturis and intake valves of 1.74 in. diameter (over the 260's 1.64 in. intakes). Exhaust valves are 1.42 in., as on the 260, and self-adjusting hydraulic lifters are used. Camshaft duration for intake is a mild 266° with 256° for exhaust, and lift is 0.38 in. In such tune, the Caliente is motivated quite briskly amidst the traffic flow.

But if that isn't enough, it is possible to special order the Comet with the HP version of the thinwall 289, which develops 271 bhp at 6000 rpm by utilizing mechanical lifters, 10.5:1 compression ratio, single 4-barrel carburetor and wilder valve timing. The HP has 306° intake and exhaust durations and 0.477-in. valve lifts, using heavier springs with auxiliary damping springs. This engine, however, comes only with the 3- or 4-speed manual transmission.

A 3-element torque converter couples the 3-speed automatic transmission to the engine. This transmission, identical to Ford's Cruise-O-Matic, uses two planetary gear sets for the

forward and reverse ratios. Two clutches and two bands, along with a roller type one-way clutch, are used to hold or to drive the planetary elements as necessary for gear changes. Shift control is maintained by a vacuum servo unit actuating the manual valve in the control assembly. Pattern on the column-mounted lever is P-R-N-D2-D1-L. The torque converter's maximum ratio at stall is 2.02:1 and gear ratios are 2.46 first, 1.46 second, and 1.00 third, with an overall torque multiplication of 5.04:1.

Final drive, with a ratio of 3.25:1 (optional; 3.00:1 is standard with automatic), is taken through the Meteor differential which uses a straddle-mounted pinion gear with semi-floating axle shafts. Track has been widened at the rear by 1.5 in. to 56 in., adding a slight bit of stability. Tires on the test car(s) were 7.00-14s, the optional larger size which are fitted when air conditioning is specified.

The air conditioner, slung under the center of the dashboard even in the factory installation, proved a boon on one occasion. At Riverside Raceway for the *Times* Grand Prix, where cars with our Comet's engine swept the field (Carroll Shelby's AC-Ford Cobra and his Cooper-Ford "King Cobra"), the

A Finer Filly For Track Or Touring Is Posted For Mid-Range Sweepstakes

BECAUSE THE METEOR burned out before it could set fire to the car-buying world, Lincoln-Mercury Division has turned to the Comet to brighten the automotive sky. It is a curious area, one in which GM has fielded four lines for 1964 even though Ford Motor Co. has found sales for the Fairlane/Meteor size car anything but stimulating. Economics and internecine competition being what they are, FoMoCo product planners determined that an upgraded Comet could best fill the Meteor void at less cost in dollars and inter-divisional sales.

The move is like a basketballer's shift from man-to-man to zone defense. It was accomplished basically by giving a new personality to the Comet with the installation of the 289-cu. in.

V-8. This Mercury is called the Caliente, to conjure up images of hot Latin blood, race tracks and thoroughbreds. That this would be the direction of Comet evolution was obvious last year when the mid-year Sportster was introduced with the 260-cu. in. engine (CL, July 1963).

Our test Caliente, finished in screaming scarlet inside and out, was equipped with a 289-cu. in. engine rated at 210 bhp at 4400 rpm, the newly available 3-speed Merc-O-Matic transmission, power brakes, power steering and air conditioning. In addition, we sampled several other similarly equipped Calientes at Daytona Beach (see p. 13) to further check the characteristics of the car.

When L-M engineers started install-

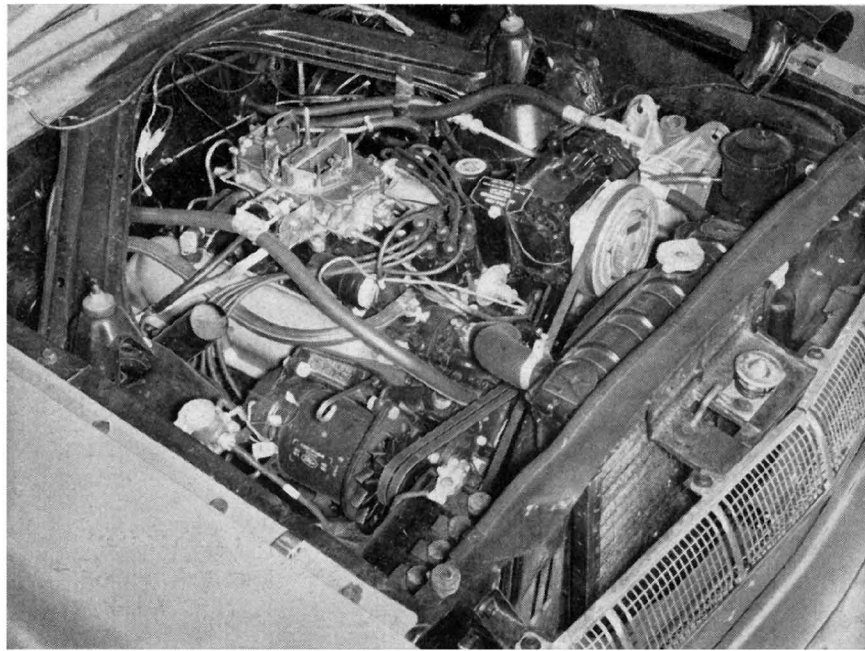
ing the V-8 in the Comet, several significant changes were made in the body/chassis structure for additional strength. These changes have been incorporated throughout the line for 1964, regardless of what engine, V-8 or 6-cyl., is ordered. Most important is the addition of integral torque boxes, welded up to tie together the front side rails and the body side members for additional rigidity and strength in the underbody and to help absorb body twist.

Other structural beefing up includes box-section reinforcements running from dash to spring towers, sturdier fender aprons, additional reinforcements between the front end structure and rocker panels, reinforced radiator support, and heavier gauge steel for





ALL-VINYL interior is long-wearing, comfortable with textured panels in an oblong design.



COMPRESSOR FOR air conditioner atop 289 engine with 4-barrel carburetor makes for an overflowing engine compartment.

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heat and dust became much more bearable with our Caliente's fast-chilled interior as a refuge. But this creature comfort had a discomforting price. A great many of the performance ills which the test car suffered were chargeable directly to that air conditioner.

Automatic gear changes, in particular, were an uncertain thing. The necessity to increase idle rpm settings with the cooler installation in turn made it necessary to alter the vacuum servo shift mechanism; the result was anything but happy. It took a fairly long interval, once shifting speed was reached, for the transmission control to decide to change gears. It was the same with all the other Calientes we drove at Daytona, also equipped with the 3-speed automatics and air conditioners; because of that our observation in the 260 road test that the 3-speed automatic would be a better transmission than the 2-speed might not stand up. Without the cooler, however, we believe this problem with the 3-speed would not exist—since our test Ford in this issue, with the same transmission, proved a great deal smoother with a flexibility that would please all but the most discriminating enthusiast.

As it was, we had two choices: either drive around with the engine roaring away while the little black box decided to shift gears, or forcefully take over the shift function by manually overriding the shift control. The latter course, although frowned upon by the

factory, was the one we took and, indeed, had to be used to secure optimum acceleration figures for our data panel. Why bother with a manual transmission when an automatic can be worked the same way? Still, in all fairness, this problem existed only because the air conditioner was installed (and which, by the way, isn't available with the 4-speed manual transmissions).

Full fuel tank (now 20 gal. instead of 14) notwithstanding, the rear end was lightly loaded enough to make wheelspin off the line a problem. This was largely overcome by a throttle

feathering technique during maximum acceleration tests. But once mastered, the Caliente turned in surprising times. It performs almost as well as the 383-cu. in. Dodge tested last month and right with the F-85 Cutlass, both heavier cars with stronger engines. The 260 Sportster returned a 5-sec. 0-30, 14.5-sec. 0-60, and a 19.3-sec. standing quarter, making the improvement with the 289 engine substantial.

As improved as the straight line performance is with the 289, it still is only a minor part of the Caliente story. More important, in our estimation, is the improved handling and roadability of the car over Comets which have gone before. This is all the more unexpected because of the great number of changes made by L-M chassis en-

NEW GRILLE has unmistakable Lincoln Continental stamp, an aid in upgrading the image of the more powerful Caliente.

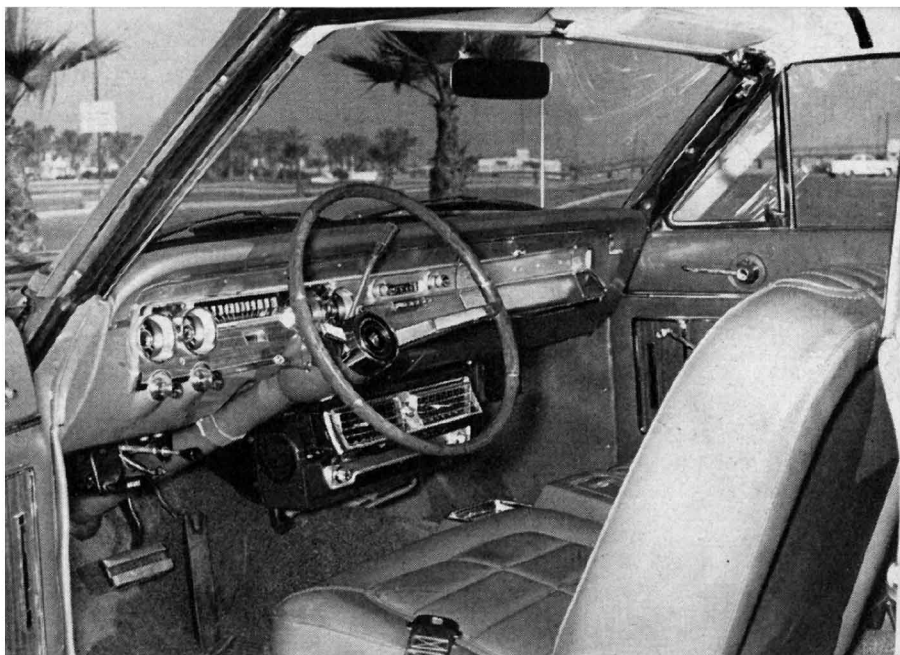


gineers to give a softer ride and reduce harshness.

The Hotchkiss drive rear suspension, common to Ford products, uses 4-leaf semi-elliptic springs 55 in. long and 2.5 in. wide. Rate at the wheel is a nominal 93 lb./in., although heavy-duty springs are available with rates up to 117 lb./in. Full length butyl liners between leaves reduce friction and harshness is reduced by the use of rubber iso-clamp insulators at the axle attachment. Front eye bushings for the spring hanger are high resilient rubber of 2-in. diameter with a wider shackles to accommodate the wider spring. Rubber has also been lavished on the front suspension, where lower shock absorber insulators have doubled in thickness, larger bushings have been installed at the strut mounting, a new rubber bushing is used at the spring seat pivot and idler arm bushings now have rubber sliding within a steel shell. Combined with a more tilted arrangement for the ball joint and altered pivot bushings, the changes add up to less friction and more precise handling. The Autolite telescopic shock absorbers using a new constant viscosity fluid also add significantly to the ride and handling.

Under normal driving conditions, the Caliente is basically a somewhat nose-heavy understeerer, tracking quite truly down the pike. When pushed hard, there is enough power and the balance is just about right for the car to take on a neutral inclination. There is enough power to break loose the rear wheels, promoting a fleeting oversteer condition when conditions warrant. It will plow off the outside of a corner, when entered too fast and the throttle is backed off, but judicious use of the throttle will get the Comet around that same corner at speed once the proper slip angles have been set

REAR SECTION, though still overly busy, shows more restraint than Comet stylists formerly used.



WOOD GRAIN effect is carried on plastic wheel, across dashboard and in door inserts. Driver's position has been slightly altered.

up. This we found out at Daytona, on the varied-radius east turn of the infield road course. Flinging the car about with more abandon, we came to the conclusion that here indeed was a car with excellent handling characteristics, ranking closely behind the Dodge Dart in this respect.

The power steering, a linkage assist type of unit, has virtually no effect on directional control other than to reduce effort. Turns remain at 4.6 between locks and the overall ratio is still 27:1. It is, however, a much improved installation over that which was fitted to our 260 Sportster and the problems then encountered have been eliminated.

Although available only with the automatic transmission, the power as-

sisted brakes proved adequate for normal use. With the 289 engine, drums are 10-in. dia., fully cast on front and composite steel disc and cast at the rear. Gross lining area is 154.2 sq. in. with the 2.25-in. wide front drums, 1.50-in. wide rear drums, but use of 2.25-in. drums and shoes on the rear (as on the station wagons and convertibles) would increase that to 193.6 with a total swept area of 314.2 sq. in.

We are not sure whether the bigger rear brakes would have corrected the problem we encountered in making our usual pair of crash stops from 80 mph, however. During both of these tests, a terrific shudder set up in the car as the brakes on all four wheels alternately locked and released, slewing the car first one direction, then the other.

LARGE TRUNK would be more than adequate for most touring, despite space-robbing spare location.



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This was such an old-fashioned phenomenon that we were fascinated and tried a few more such stops after the brakes cooled—with the same result. Hopefully, the situation might be corrected by better brake adjustment and better balancing of the wheels, which proved badly in need of it. Despite all the hop-skipping about, the brakes recorded a notable 22 ft./sec./sec. deceleration rate.

Our test car was one of the first off the production line and as such was afflicted with a couple of bodywork bothers (poor panel fit, balky door latch) that should be sorted out once the assembly line crews get the routine mastered. Exterior sheet metal—hood, rear deck, front and rear quarter panels, door panels, bumpers and grille—are all new for 1964 and the result is

fairly pleasing. Though there remains a faint trace of Falcon ancestry, the Caliente's appearance now more strongly suggests a Lincoln Continental lineage, particularly in the grille and front fender line. Somewhat surprisingly, however, Comet stylists still believe that gingerbread is in vogue at a time when other car makers are on a clean-up kick.

There has been some juggling of space in the driver's position, pedals and steering wheel and seat relationships altered an inch here and there, and the result is a more comfortable command post. The backs of the bucket seats, however, still should be adjustable for rake (via a pair of stop screws at the bottom) to suit the individual driver. One good feature was the stiff foam cover for the 'tween

seats knick-knack bin, which would be less lethal than the sharp-edged metal plates used in other cars. The instrument panel, with a dash-wide strip of plastic simulating wood veneer trim, shows real improvement where improvement was due.

Though the Comet's dimensions remain unchanged with the new sheet metal, the diet of beans it has been fed moves it as smartly away from the intermediate class image as it does from the traffic signals. Perhaps, like good wine, it was necessary to spend some time as grape juice.

There's just one further step to take, and L-M engineers undoubtedly will take it. That is to take Ford's 427, de-stroked to something like 396 cu. in. for the new NASCAR limit, and stuff it into the Caliente. With a wheelbase right at NASCAR's new minimum, Dearborn could have something even more potent for Daytona, Darlington, and other points south. ■

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1964 COMET Caliente Hardtop

SPECIFICATIONS

List price\$2472
Price, as tested3377
Curb weight, lb.	.....3170
Test weight	.....3500
distribution, %	.....56.6/43.4
Tire size	.....7.00-14
Tire capacity, lb.	.....3900
Brake swept area	.....251.3
Engine type	.....V-8, ohv
Bore & stroke	.....4.00 x 2.87
Displacement, cu in.	.....289
Compression ratio	.....9.0:1
Carburetion	.....1 x 4
Bhp @ rpm	.....210 @ 4400
equivalent mph	.....109
Torque, lb-ft.	.....300 @ 2800
equivalent mph	.....69.5

EXTRA-COST OPTIONS

Auto. trans., 289 engine, power steering, power brakes, wsw tires, air conditioner, radio, tinted glass, seat belts, remote-control outside mirror.

DIMENSIONS

Wheelbase, in.	.....114.0
Tread, f and r	.....55.6/56.0
Over-all length, in.	.....195.1
width	.....71.4
height	.....53.6
equivalent vol, cu ft.	.....432
Frontal area, sq ft.	.....21.3
Ground clearance, in.	.....5.5
Steering ratio, o/a (power)	.....27.0
turns, lock to lock	.....4.6
turning circle, ft.	.....40.0
Hip room, front	.....2 x 22
Hip room, rear	.....56.5
Pedal to seat back, max.	.....43
Floor to ground	.....11.5
Luggage vol, cu ft.	.....15.5
Fuel tank capacity, gal.	.....20.0

GEAR RATIOS

3rd (1.00), overall	.....3.25
2nd (1.46)	.....4.74
1st (2.46)	.....7.99
1st (2.46 x 2.02)	.....16.15

PERFORMANCE

Top speed (4400), mph	.....109
Shifts, @ mph (auto., forced)	.....
3rd ( )	.....
2nd (4300)	.....73
1st (4300)	.....43

ACCELERATION

0-30 mph, sec.	.....3.8
0-40	.....6.5
0-50	.....9.1
0-60	.....11.8
0-70	.....15.0
0-80	.....19.7
0-100	.....41.6
Standing 1/4 mile, sec.16.5
speed at end, mph73.8

FUEL CONSUMPTION

Normal range, mpg12-15
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SPEEDOMETER ERROR

30 mph, actual28.5
60 mph58.0
90 mph88.2

CALCULATED DATA

Lb/hp (test wt)16.6
Cu ft/ton mile	.....115
Mph/1000 rpm	.....24.8
Engine revs/mile	.....2420
Piston travel, ft/mile	.....1158
Car Life wear index	.....28.0

PULLING POWER

70 mph, (3rd) max. gradient, %	.....10.8
50	.....18.4
30	.....31.2
Total drag at 60 mph, lb.	.....155

