1961 LANCER

ROAD TEST

COMPACT AND POWERFUL

Answering the public's demand for a smaller package, Dodge's Lancer offers ride, handling, economy, and plenty of horsepower.

Photos by Eric Rickman, Dodge News Bureau

Testing the latest offerings from this country's automobile manufacturers is, despite what many of you might think, not always an easy job. There is no broad quality scale with good cars at one end and bad cars at the other; it's just the opposite. All of the cars produced in this country are good buys in terms of engineering value received for dollars spent. The big difference is the type of job they are going to be required to perform and the buyer's preference in styling, size and price.

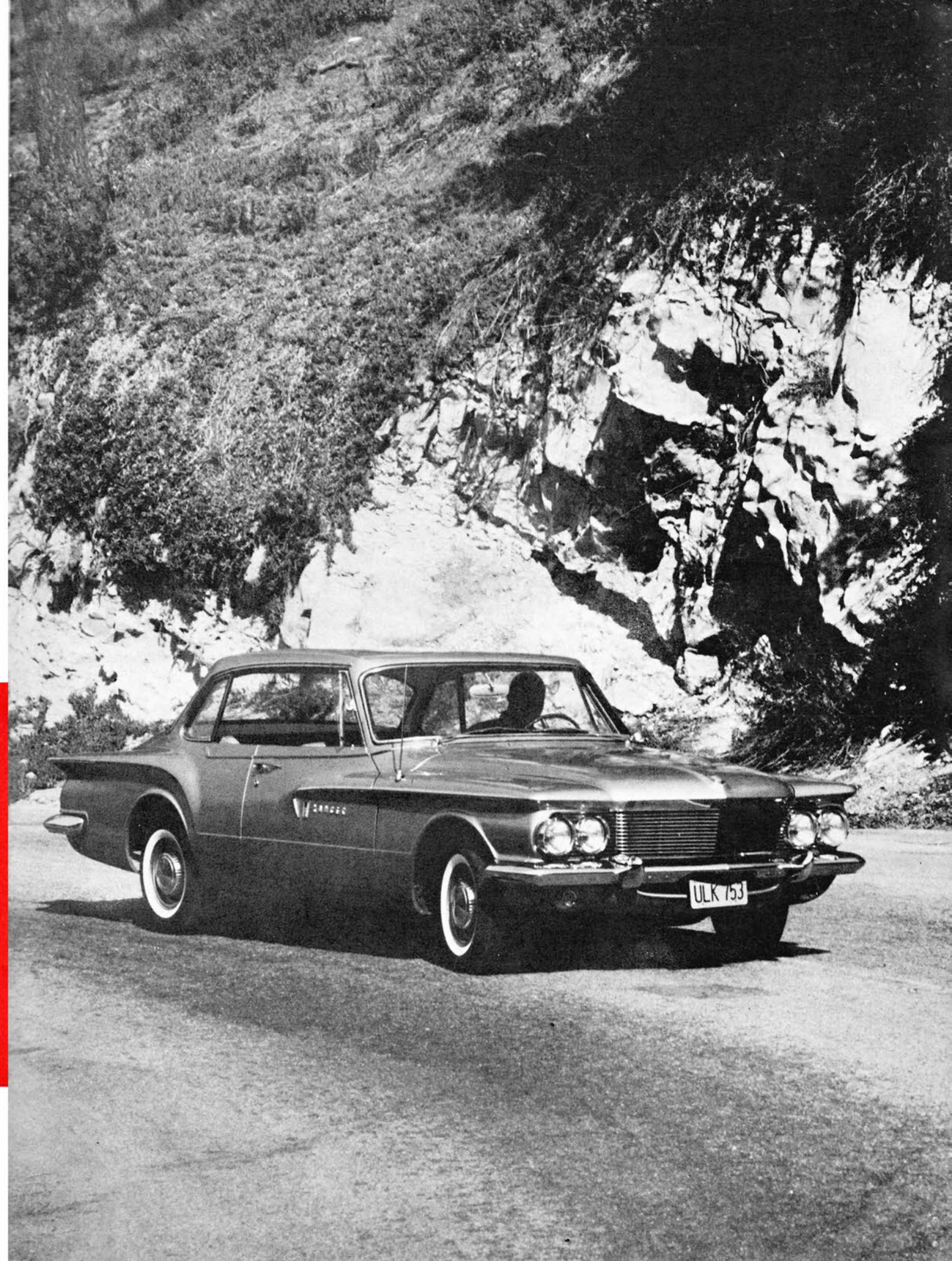
What makes a car easy or hard for us to evaluate then? If it is a good all-around automobile that looks different than last year's model and will run well over 50,000 miles with nothing more than fuel, oil, tires and an occasional tune-up, then it's pretty old hat because most of our cars have been in that category for years now. Such a car, although an excellent transportation buy, does not often do much to excite the imagination of somebody in the testing business. The recent introduction of compact models has

continued



ABOVE — Available in two displacements, 170 and 255 cubic inches, Lancer engines are identical in exterior appearance. An a.c. alternator is used in place of the generator; accessibility of engine and accessories is good.

RIGHT — Lancer two-door hardtop full of fuel but less passengers tips the scales at just over 2700 pounds. Weight distribution and suspension combine to give the Lancer excellent handling qualities.



brought forth many unusual and therefore interesting cars and our job is presently easier to perform. The new engineering features do not always impress us as being better than the proven methods of the past but it is interesting for us to drive the cars and then stick our neck out with printed opinions.

The car we tested for this issue is the Lancer, Dodge's entry in the compact field. The Lancer is quite similar to the Plymouth Valiant but utilizes a different styling approach, improved interior trim and has a couple of extra engine options. This last item mentioned is actually the principle difference between the Valiant and Lancer with much more performance available in the latter.

The model we tested was the deluxe 770 two-door hardtop sedan. This hardtop model actually uses the same basic body as the four-door sedan so there is no difference between the two as far as interior room is concerned. The doors are of course wider in the two-door model to facilitate entry to the rear seat. Beside the two-door and four-door models, a four-door station wagon is also available in the Lancer 770 deluxe series. In the standard trim 170 series, a two-door sedan (not hardtop) and four-door wagon join the four-door sedan to fill out the Lancer lineup to six models.

Lancer's wheelbase of 106.5 inches is the same as Valiant but shorter than all other U.S. compacts except the Rambler American. Tread is 56 inches at the front, 55.5 inches at the rear, slightly narrower than most full sized cars. Overall length is just under 189 inches or 15 feet, 9 inches. Maximum width across the tips of the front bumper is just a fraction over 6 feet at 72.3 inches. The width and length measurements of the Lancer indicate that it will fit in the older garages that have almost been relegated to obsolescence by the expanding American sedan of recent years.

The Dodge Lancer is not a completely new design over Chrysler Corporation cars of the past. It, and of course Valiant too, is merely a scaled down version of the larger cars in most ways. There is no radical new suspension system; it is simply a smaller version of Chrysler's proven torsion bar front with unequal length control arms and semielliptical leaf rear with a Spicer type rear axle housing. The driveshaft is a one-piece open type just like that Chrysler has been using for years. Transmissions, both standard and automatic are scaled down from units used in the larger cars. Even the basic engine, although a new design in 1960, is simply a smaller displacement model of that used in Dodge pickups, Plymouths and Darts. About the only thing unusual in the Lancer as compared to past Chrysler cars is the brakes; they are of Bendix design instead of Chrysler and the parking brake operates on the rear wheels instead of on the output shaft of the transmission.

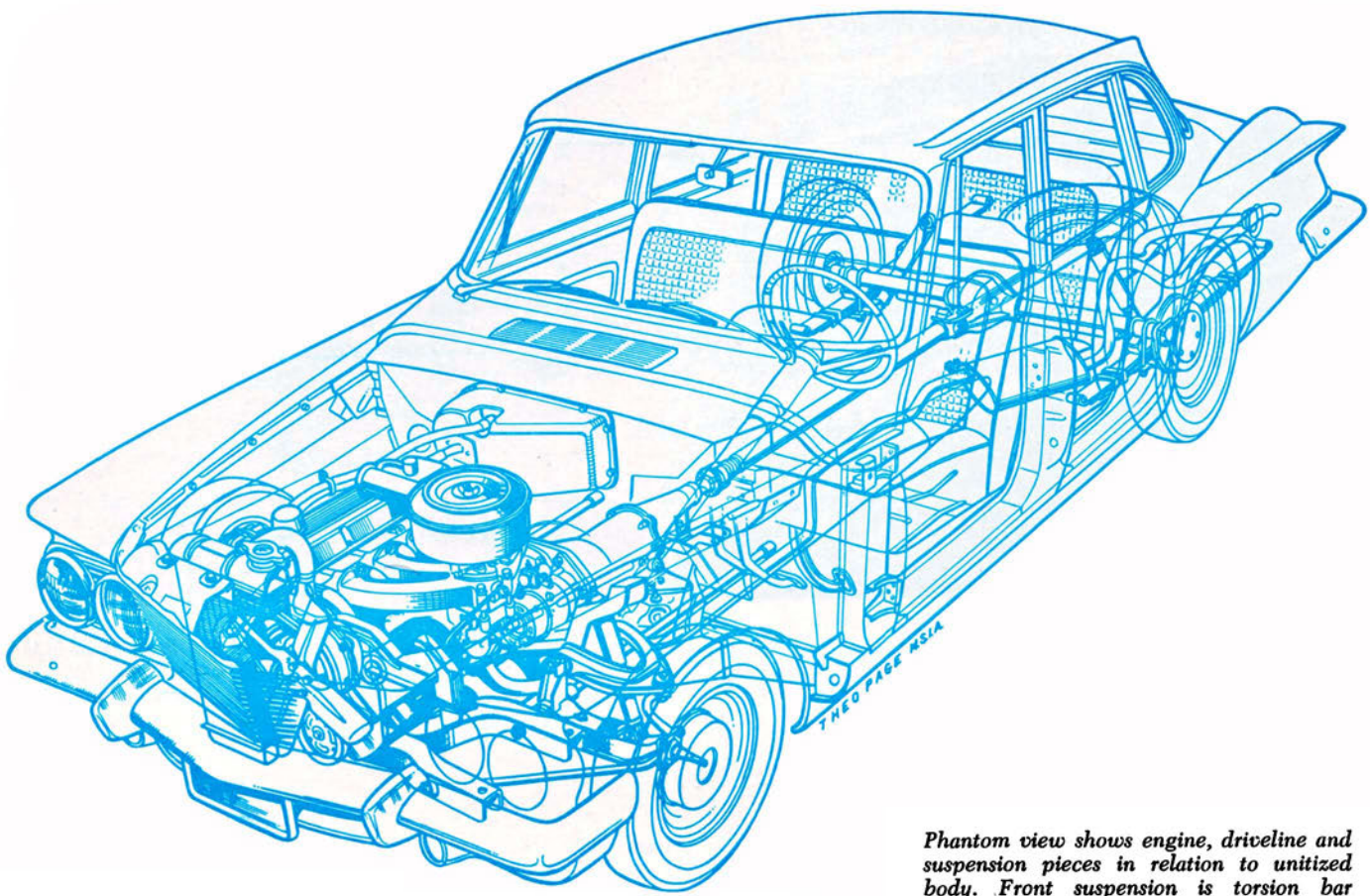
Now since the Lancer is just a scaled down model of the same methods Chrysler has been using for years, you might expect us to call it a slightly boring car to test. Wrong! It is a very interesting car for the simple reason that all of those old ideas fit together in such harmony that they are actually better than ever. Ride, handling, brakes, and economy are all excellent and the only place it can't match or beat its bigger brothers is in the horsepower department. A little later, we'll show you how this hasn't been overlooked entirely.

All of Lancer's models, two-doors, four-doors and wagons are listed as six passenger automobiles. We won't argue this point because we had six men in the test car a couple of times when going out to lunch and there were actually no complaints, but for a long trip some of the passengers would have to be children to give true comfort. The first thing you will notice when you slip behind the wheel of a Lancer is the seating comfort. We mention this not just because we noticed it but because everybody we let drive the car commented on the ideal seating position without prompting. Seat height is very good both front and rear and leg room in the rear is actually better than in our personal popular make hardtop coupe of 1959 vintage. Interior fabrics and workmanship in our deluxe model test car were very good and the only faults we discovered were the glove compartment and water leaks around the left door. The glove compartment has a cheap fiberboard box and on our test car at least would not pop open when the button was pressed but had to be pried out with the fingernails. The water leak showed up when the Lancer was run through a car wash but was due to a misplaced strip of weather seal by an assembly line worker rather than a design fault.

Steering on our test car was very good with a Saginaw standard unit used and an overall ratio of 24:1 requiring 4½ turns from lock to lock. Lancer offers a power steering option and although the car is fairly easy to maneuver without power assist, it is of course much easier with. The power steering unit is made

All models use a 106½-inch wheelbase and are 189 inches in overall length. Width is 72.3 inches and loaded height is 53 inches. Extras which are available include power steering, power brakes, automatic transmission, larger engine and air conditioning.





Phantom view shows engine, driveline and suspension pieces in relation to unitized body. Front suspension is torsion bar arrangement similar to that used on other Chrysler cars; rear, leaf spring.

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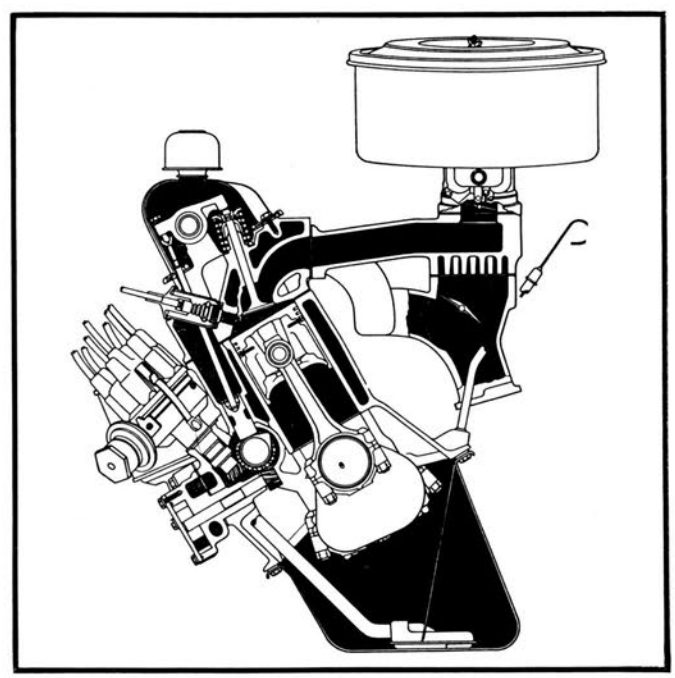
by Chrysler and is the full-time type with very little pressure needed to turn the wheel. Steering ratio with power is 18.7:1, and 3½ turns are required to turn the wheel from lock to lock. Both standard and power equipped Lancers turn around in just under a 38-foot circle. We had occasion to drive a Lancer wagon with power steering for a couple of days and must admit that we preferred it over the standard steering unit mainly because of the 25% faster ratio. A prospective customer would have to weigh the quicker steering advantage against the extra cost of the power option.

In testing all of the recent compacts, one particular item has been outstanding as compared to most of our larger American makes; the brakes are excellent. The Lancer is no exception, its brakes were superb under all conditions. A power brake option is also offered but this is truly a luxury item because Lancer's brakes do not require a lot of pedal pressure, they actually have a power-like feel to them. The drums are 9 inches in diameter front and rear with 2½-inch wide lining used at the front and 2-inch at the rear. Total effective lining area is 129 square inches.

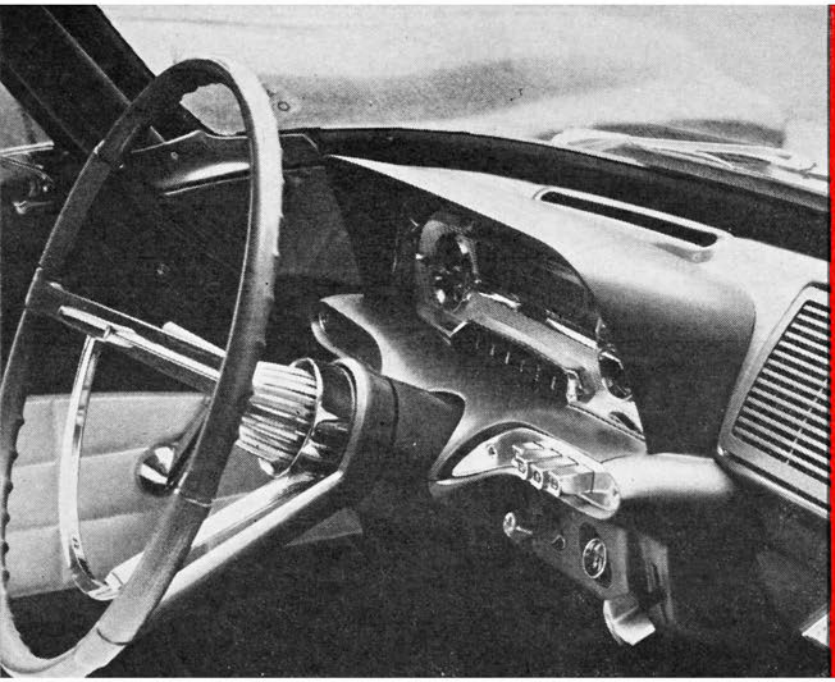
We have found over the past few years that the acceleration runs we put our test cars through show up brake deficiencies faster than any other type of driving. Several zero to 60 mph checks in succession with fast stops in between will reveal fade and erratic brake action readily. The Lancer showed absolutely no fade or "pull" after a lengthy acceleration session.

The engine department is where the Lancer has a big advantage over cousin Valiant. Whereas the Valiant has only a 170 cubic inch engine available, Lancer also offers a 225-inch engine as an

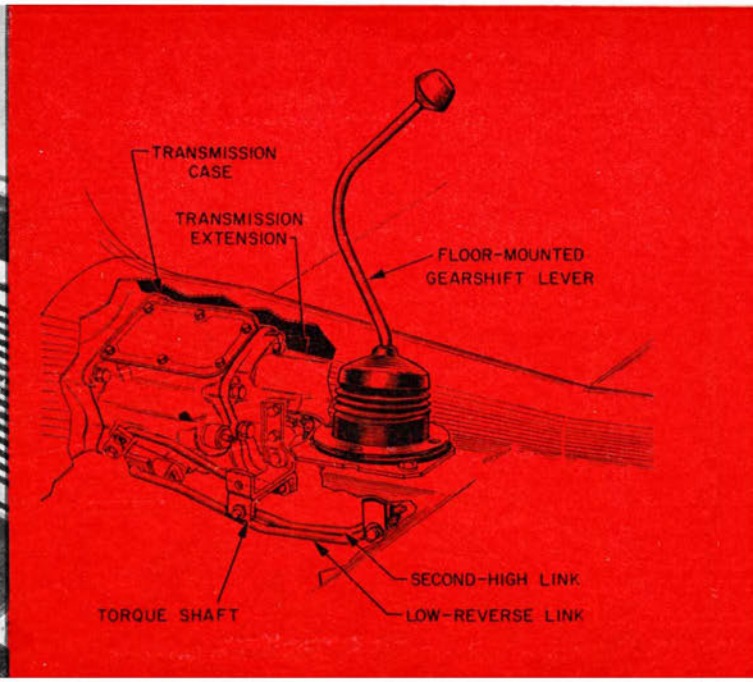
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170- and 225-inch Lancer engines differ only in length of stroke, block height and a few related pieces. The engine tilts 30° to the right side of the car. Cutaway discloses short, direct port design with a wedge shaped combustion chamber. Compression ratio, 8.2:1; valve lifters are mechanically operated.



Instrument panel is recessed in a hood-like magnesium casting. Pushbutton controls on the right side are for heater, similar space on left side is used for automatic transmission buttons. Steering response is good through dished wheel.



Shift lever for standard transmission models is floor mounted with a torque (idler) shaft in the second-high gear link. Transmission is rotated 30° to the left to minimize floor hump. Gear ratios vary for engine size.

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option. These engines are identical in design but the larger 225-inch version has a one-inch longer stroke. Both are of the late slant six design with the cylinder block angled 30 degrees to the right side of the car. The 170-inch version uses a cast iron cylinder block while the 225-inch engine uses either cast iron or aluminum blocks. Exact weights of the entire engines were unobtainable but the difference between them is as follows: The 225-inch cast iron six weighs 25 pounds more than the cast iron 170-inch engine; the 225-inch aluminum engine weighs 66 pounds less than the 225 cast iron engine; so the 225 aluminum engine weighs 41 pounds less than the cast iron 170 engine.

As we go to press, not too much has been said about the aluminum blocks by Dodge because initial production has just started and it will take a little time to get volume. The only announcement was that some Lancers ordered with the 225-inch engine option would be produced with cast iron blocks, some with aluminum. The only difference between the two engines is the material in the block and, of course, 66 pounds.

When we made arrangements to obtain a Lancer for testing, we requested a 225-inch aluminum engine so that we would have the hottest model available. We were told that no production aluminum blocks were yet ready but soon would be. Dodge's public relations department offered to cooperate in any way possible to give us what we wanted and we actually came up with a better test than originally planned, doing a comparison between the 170-inch engine and the 225. Our test car was delivered with the 170-inch engine, standard transmission, radio and heater. We drove it for nearly two weeks, made acceleration tests and found out just how it handled. While we were testing the 170 engine, the first production aluminum 225-inch engine was shipped directly to J. E. Waters, Los Angeles Dodge-Lancer dealer. Waters installed the new engine and transmission in place of the 170 engine and we were ready for an ideal comparison test using the same chassis but different engines.

The 170-inch slant six has a 3.4-inch bore, 3.125-inch stroke, 8.2:1 compression ratio and is rated 101 horsepower at 4400 rpm. The torque rating is 155 foot/pounds at 2400 rpm. The 225-inch slant six has the same 3.4-inch bore, a one-inch longer stroke of 4.125 inches, same 8.2:1 compression and is rated 145 horsepower at 4000 rpm with 215 foot/pounds of torque at 2800 rpm. The only major differences between the two engines are in the longer stroke crankshaft, longer connecting rods, a taller block and a carburetor with different calibration for the 225. The cast iron cylinder head, valves, camshaft, manifolds and all other parts are identical. The aluminum blocks are cast around iron cylinder sleeves that are ridged on their outer diameter to lock them in place. All machining operations on these blocks are the same as for the cast iron blocks.

The two different displacement engines use slightly different transmissions too, but we didn't discover this until later; here's what happened. When the engine change was made, the new transmission that had been shipped with the 225 aluminum engine was also installed. While still on the break-in runs, we noticed that the high gear synchronizer did not operate smoothly so we went back to Waters for repairs. To speed up work so that we wouldn't be without the car, we suggested using the original transmission that had been removed with the 170 engine. This was done and we resumed our testing. Everything worked fine and we didn't notice anything unusual until we made acceleration tests several days later. The engine seemed to run out of rpm's early as compared to our first impressions with the 225 so we checked specifications and found the 170 transmission, although the same size externally, used different gear ratios inside.

The 170 transmission has 2.71 first gear and 1.83 second while the 225 transmission uses a 2.50 first and a 1.68 second gear ratio. The higher (lower numerically) ratios for the 225 engine take advantage of its much greater torque so we actually hurt acceleration with the lower 170 transmission ratios. Lancer's optional three-speed automatic transmission has the same ratios for both engines but a torque converter change gives a higher stall ratio for the 225 engine. Ratios are 2.45 in first, 1.45 in second and direct in drive. This transmission is, in our opinion, the snappiest available in a compact. We drove a Lancer wagon with one and it would jump right with a stick shift model on starts. A 3.55 axle



Luggage compartment is more than ample for a compact with the spare tire located in a well beneath the floor level. Gasoline filler neck in left rear fender panel splashes back as tank nears full level and unless cleaned off, will stain the fender. Nine-inch brake drums nestle inside the 13-inch wheels and do an excellent job of stopping the car even when severely abused. The rear axle ratio that is used for the standard transmission is 3.54; while with the Torqueflite automatic, 3.23.

ratio is used for standard transmissions, either size engine, and a 3.23 ratio is production for the automatic-equipped cars.

When we made acceleration tests with the Lancer, we changed tactics slightly over our usual pattern so that the major difference between the two engines could be shown to full advantage. The big difference with a 55 cubic inch increase is, of course, in the low speed torque department, so we stressed high gear acceleration. Incidentally, the 170 engine in our test car was a very good running engine and certainly no slouch considering displacement.

With the 170 engine, the Lancer needed 9.0 seconds to go from 0 to 45 mph. 0 to 60 mph took 13.5 seconds and the standing ¼-mile was covered in 19.0 seconds with a speed of 69.3 mph at the end of the quarter. Simulated passing from 30 to 60 mph in high gear only took 13 seconds and 50 to 80 mph took 17.5 seconds. All speeds were true and times were averaged.

With the 225-inch aluminum engine and 41 pounds less weight (also the wrong transmission ratios), the Lancer needed 8.2 seconds to accelerate from 0 to 45 mph. 0 to 60 mph required 12.2 seconds, 30 to 60 in high gear required 8.2 seconds and the 50-80 mph high gear sprint took only 11.8 seconds, better than many full sized cars with V8 engines. The standing ¼-mile was covered in 18.0 seconds at a speed of 77.6 mph. The times and speeds clearly show that the 170 engine does quite well against the larger engine when winding through the gears but the 225 has the brute torque that makes it much more versatile.

With the 225-inch engine, there is no need to shift down for sharp corners or any but the steepest hills. We found that the Lancer could be lugged down to 15 miles per hour on 10-15% grades in high gear and would not only chug right on up the hill but would pick up speed in the process. Thanks to the mild camshaft timing, small carburetor and light weight, the 225 Lancer is one of the best hill climbing cars we've tested.

Speaking of hills, the Lancer is right at home on the mountain curves, too. We stated a year ago when testing the Valiant, "This scaled down Chrysler is the best handling American stock car on the road regardless of size." The Lancer of course gets the same rating since it is identical to the Valiant except for sheet metal and engine options. We noticed no difference whatsoever in the handling characteristics of our test car after the lighter 225 engine was installed although the extra power did shorten the time required to cover a given stretch of road.

We registered only one mile per gallon difference in fuel economy between the two engine sizes. The 170 produced an average of 20.4 in city traffic; the 225 would deliver just a shade over 19 mpg in the same situation. Out on the open road, the 170 would clock off 22-plus mpg at a cruising speed of 65 mph. The 225 engine was again just about 1 mpg behind at 21. The small difference in fuel economy is, in our estimation, more than compensated for by the increased power at the driver's command. Passing cars on two-lane roads did not require the long openings usually associated with compact cars. Speaking of economy, it was surprising for us to learn that the retail price for the 225 engine option is only $43.75. This engine is definitely a recommended extra.

We had the Lancer at our disposal for nearly a month and got to know it real well. The complaints we had were few and mostly of a minor nature. The floor mounted shift lever for the standard transmission was a little awkward when reaching for second gear, especially since we drive with the seat all the way back. It also makes life miserable for the middle passenger when there are three in the front seat. A column mounting would have been much better. The gasoline filler neck in the left rear fender panel is poorly designed and vented, so sloshes gasoline all over the lower half of the fender when the tank level nears the top. A small item, true, but with the additives in today's gasolines, it's guaranteed to stain the paint unless wiped off immediately.

Compacts have proven in a very short space of time that they are going to be around for a while. In this second year of the great revolution, manufacturers are starting to branch out a little in their efforts to please the customer and a respectable amount of horsepower may now be purchased in a small package. The Lancer not only has the power but it also has excellent handling, good ride, top-notch brakes and 20 mpg economy at highway speeds. What more could you ask for?