

*Completely New, the 1955 Plymouth  
Rides Better, Looks Better and  
Promises to Be One of the Hottest  
Cars on the Market*

# 1955 Plymouth ROAD TEST

MOTOR Life Test Staff Report

**R**UMORS about next year's models begin leaking out of Detroit styling departments long before the models are presented to the public. Most of the stories are based on equal parts of wishful thinking and fantasy and the Detroit sharpies discount 90% of what they hear. This year it was a different story. News began leaking out of Chrysler's styling division about "radical" and "interesting" designs which were being created for the '55 lines and the sharpies were not calling the news "fantasy."

With little more than word-of-mouth to go on, stock market brains suddenly began gravitating to what sounded like a very good thing. Because of the strength of the Chrysler Corporation and the exciting promise of the unseen '55 models, the stock began climbing. In less than a month it had jumped 5 points—an amazing action for the usually conservative stock market.

Now that the '55 models have been unveiled it is easy to see why the smart money boys were eager to climb on the Chrysler bandwagon. The new Plymouth, the "bread and butter" car of the Chrysler line, looks more like a car for the caviar set. Topped off with a new engine and excellent styling, the '55 promises to be a sales leader.

This was the car that MOTOR Life wanted to see and drive early in its schedule of '55 road tests. To test the car, a special MOTOR Life test staff left Los Angeles by

plane to drive the car two months before it appeared in the dealer's showrooms. Their destination: The new Chrysler Proving Grounds in Chelsea, Michigan.

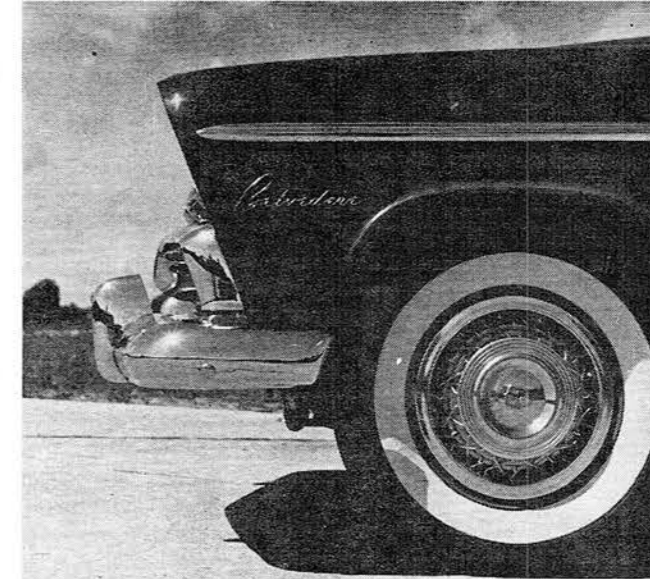
There are several reasons for our choice of location. First, our tests were conducted long before Detroit knew exactly what the '55 Plymouth would look like and therefore, secrecy was important. The car could not be allowed on public highways. Second, since our tests were conducted early, the plant was not yet in full production. 1955 cars were weeks away and only five prototype models were available. These were centered around Detroit and Chelsea.

We wanted to conduct these tests as early as possible because we felt there would be a great amount of interest in the new Plymouth. We wanted to be able to report the facts to our readers when the cars were introduced. While the actual testing was conducted in Chrysler territory, MOTOR Life's test staff had full command. There was to be no "kibitzing" by the Chrysler staff. Those were our terms and Chrysler enthusiastically agreed.

The car is really good. It accelerates with a feeling of power throughout the range. We tested two cars: a manual shift model and one with an automatic transmission. Both were hot. Cornering is good. There is a tendency toward body roll at speeds over 50 mph but part of this was due to the new tubeless tires. At the time we tested the cars exact tire pressure had not been established. Even so, our test staff clocked the Plymouth at a tremendous 99.2 mph top speed.

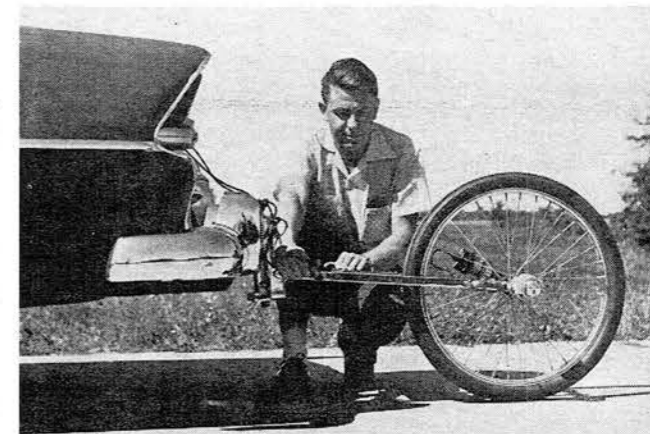
Steering has been quickened—not as much as it could have been, but it is now five turns lock to lock and because of this, in conjunction with Plymouth's new steering geometry, response is sure and positive. Generally, the car has anticipated the demands of motorists.

Our first impression was one of a lower, longer car. From the angular front and "frenched" headlights to the modern, reverse-curve tail lights the car is new and about as complete as an Einstein theory. The design is also a fullhouse of surprises. At Plymouth, they refer to the new body lines as the "long, fleeting" look. Undeniably, the car has a new slimmness which gives it the appearance of being in motion even when stationary.



*Plymouth styling is based on "aircraft" influence. Most noticeable touches are angular front lines and large wheel cut-outs.*

*Plymouth project engineer adjusts fifth wheel at proving grounds for MOTOR Life test staff. Rear light repeats angular headlights.*



## Plymouth Belvedere Hardtop Performance and Specifications

### SPEEDOMETER ERROR

Indicated 30 mph.....	28.9 mph actual
Indicated 40 mph.....	38.4 mph actual
Indicated 50 mph.....	47.8 mph actual
Indicated 60 mph.....	57.0 mph actual
Indicated 70 mph.....	66.9 mph actual
Indicated 80 mph.....	76.5 mph actual
Indicated 90 mph.....	85.0 mph actual
Indicated 100 mph.....	93.0 mph actual
Indicated 110 mph.....	99.2 mph actual

### ACCELERATION

0-30 mph.....	.5 seconds
0-60 mph.....	14.5 seconds

### TOP SPEED

Fastest one way.....	99.2 mph
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(Test was conducted on oval track. There is no two-way run.)

### FUEL CONSUMPTION

At steady 30 mph.....	21.8 mpg
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**ENGINE**—Ohv, V-8 engine; bore and stroke approx. 3.50 x 3.25. Displacement, between 250 and 260 cu. inches. Compression ratio, between 7.5 to 1 and 7.9 to 1. Horsepower, 160 to 168. (Subject to last minute changes.)

**REAR AXLE RATIOS**—Hy-Fire V-8: 3-speed transmission (standard), 3.73; 3-speed with overdrive (optional), 4.1; PowerFlite



(optional), 3.54. Power Flow Six: 3-speed transmission (standard), 3.73; 3-speed with overdrive (optional), 4.1; PowerFlite (optional), 3.73.

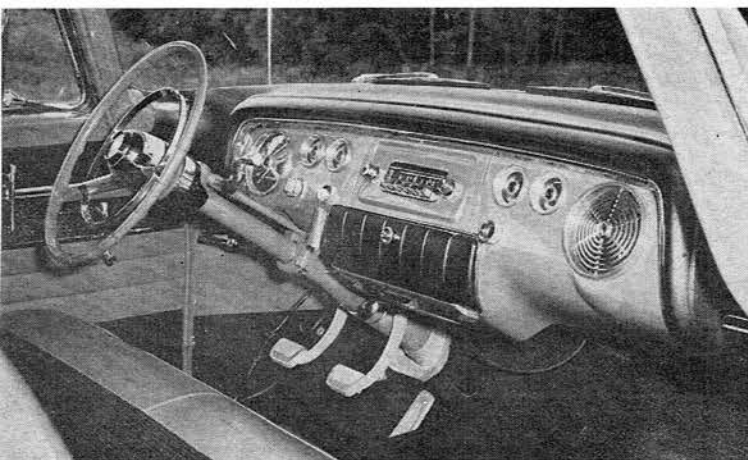
### DIMENSIONS

Wheelbase.....	115 inches
Tread.....	58.44 inches, front; 58.50 inches, rear
Length, overall.....	203.8 inches
Width, overall.....	74.6 inches
Height, overall.....	60.1 inches
Steering, turns lock-to-lock.....	5
Weight (shipping), approx.	
	3,200 lbs. with PowerFlite and 6 cyl. engine)
	3,340 lbs. (with PowerFlite and V-8 engine)
	Weight is 55 lbs. less with standard trans.





*Belvedere is most expensive Plymouth model but indicates style of entire line. Wire wheels and chrome on Belvedere are extras.*



*Dash treatment on 1955 Plymouth combines aircraft and sports car treatments, roomy center storage compartment, and round dials.*

*Body styling is based on look called "tumble home" design. Slant of top section helps concentrate weight in lower areas.*



You can't argue with design. You either like it or you don't and to the stylists who, under Styling Chief Virgil Exner, have created the new lines, the car represents the fulfillment of three years of planning. While small advances have appeared on each new Plymouth during that period, it seems as if the major advances were held until they could be incorporated into this one car.

Many of the features are adapted from the highly publicized "dream cars" of past years. These advances were shown to the public long before the '55s were lines on the drawing boards. During this period, 25 million motorists viewed the "dream cars." Plymouth engineers tabulated public response and picked the best and most popular features to be included on the '55 Plymouth.

These features add up to Plymouth's new styling concept. The design is called "tumble home" by engineers. While this cute phrase has little meaning, *MOTOR Life* feels the idea does have merit. Its effect slopes the sides of the car inward from the belt line to the roof. This concentrates a high percentage of body weight in the lower portion of the car without sacrificing roominess. Two of the test staff are husky six-footers and were comfortable, front or rear. The lines cut resistance. We found this out during a series of high-speed "U" turns. Even here, roll was at a minimum because the weight was better distributed than in previous designs.

Because the wrap-around windshield has proven so popular Plymouth felt it necessary to incorporate this idea. Unfortunately, theirs just doesn't look like a wrap-around from the outside. They've been extremely subtle about it—which pleased the test staff but may not please all customers. The reason is simple: The "A" posts still manage to retain their traditionally pleasing rearward slant. To the conservative motorist, at least, this has always signified grace and speed.

But from the inside, the test staff found it to be a true wrap-around. Visibility is excellent. Texans should find this windshield tremendous for it will open new vistas of the "wide open spaces." City dwellers too will be pleased for much of the distortion found in early wrap-arounds has been eliminated. Buildings, when seen through the edges, still have a slight tendency to "lean" but the entire panorama is much better than with previous types.

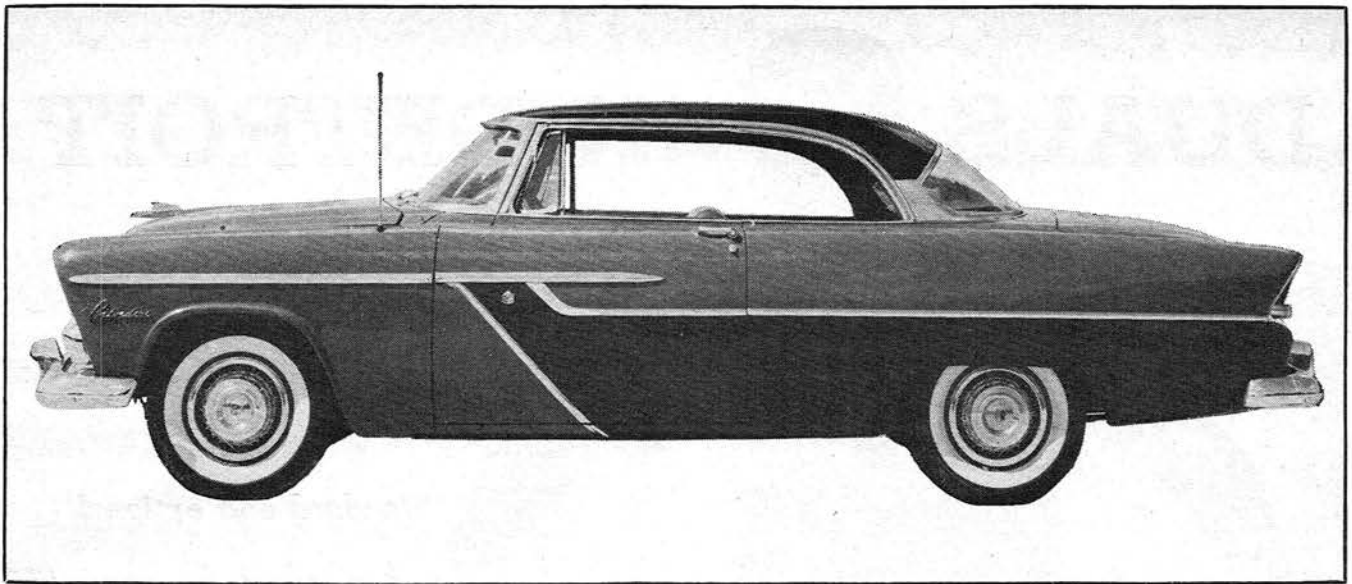
For the technically minded, the glass area of the new Plymouth has been increased considerably over 1954 models. It has 16% more glass area. The total size was increased from 919 square inches in 1954 to 1063 this year.

When the test staff first sat in the car, the softer-than-ever foam rubber seats gave the impression that we were in outer space, comfortably seated in a rocket waiting for the order to blast off for Mars. The feeling was still there when we looked at the aircraft-styled instrument panel. The panel crown on all models is richly coated with a textured paint to eliminate glare—a feature which proved extremely popular in 1954. It works fine but, since there are "valleys" and "high spots," dust seemed prone to collect in the low spots and an ordinary dust cloth could not pick it up.

The panel crown is simple and functional. In the test car, a Belvedere hardtop model, the panel lines are continued around to the sides by square vinyl pleats on the front doors.

Upholstery, this year, is modern with a large selection of material. Plymouth has everything from rather plain woolens to metallic and fabric combinations. The Hardtop was tastefully upholstered in a dramatic combination of black fabric with a metallic gold ribbon through it and red leather. While the combination was as dramatic as the finale of "Romeo and Juliet" the metallic thread tended to produce a definitely undramatic scratch after prolonged association between back and fabric. Other fabrics seemed more sympathetic to our tender test staff.

*MOTOR Life* found instrument design to stem from a surprisingly good combination of aircraft and sports car. Instead of being cluttered as has been the design of many current dashboards, the instruments are circular and spread out



Highlights of Chrysler "dream cars" are used on Plymouth. Two-tone painting and chrome are from K-310 experimental cars.

across the dash panel. A glare-preventing brow line which forms the base of the textured crown and the top of the vertical instrument section removes all possibility of reflection, but at times places the instruments in such deep shade they are difficult to see when driving into the sun.

The instrument panel, which is the center of interest in the front cockpit, is also the home of a new development which should cause quite a lot of comment between consumer and dealer. While it may never divide the nation into a civil war as did the slavery question, Plymouth's idea to "free the driver" should cause more than a ripple.

Since the introduction of the automatic transmission, there has been a continued effort to divorce the shift mechanism from the steering wheel. Chrysler has grabbed the bull by the horns, thrown it to the ground, and redistributed the pieces. They've moved the shift selector lever from the steering column to the instrument panel where it functions as merely another control.

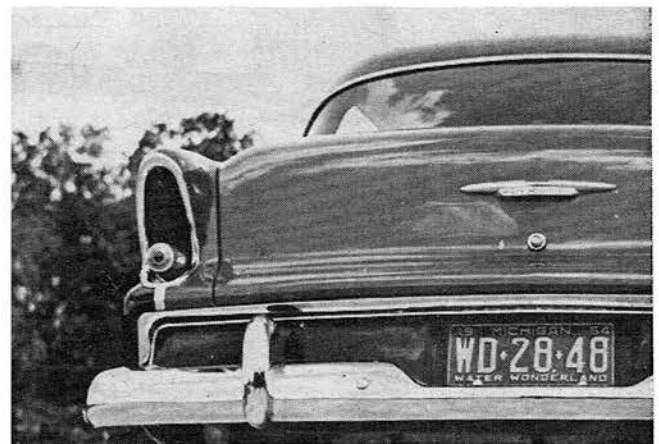
MOTOR Life was very much interested in driver reaction to this change. While it is an extremely logical move it makes a sharp break with traditional driver habits. We feared we might miss the advantages of finger-tip control, but this was not the case. We inserted the key in the ignition switch, easily moved the short selector lever beside it to "N" and started the engine. The ohv bubbled enthusiastically ahead of this year's silent muffler system. We moved the lever downward one notch to "D," pressed down on the foot throttle and the car took off.

Because of automatic transmission characteristics, the selector lever is seldom used except for starting or reversing direction. Not once during our test period did we find it necessary to regret the change in lever position—we simply forgot about shifting. There was enough power in the automatic transmission-ohv V-8 combination to meet virtually any power demand. For drag racing, the shift would get a real workout, but under normal driving conditions it was somewhat of a relief to find ourselves free of jutting encumbrances upon which to catch a sleeve when negotiating a sharp turn.

It took the test staff but five minutes to become accustomed to the new selector lever position. This should be par for the course. The new lever position will be stock on all Chrysler products equipped with PowerFlite transmissions. It is easy enough to use. The "gating," that is the notched plate which surrounds the lever and directs the shift pattern, insures an

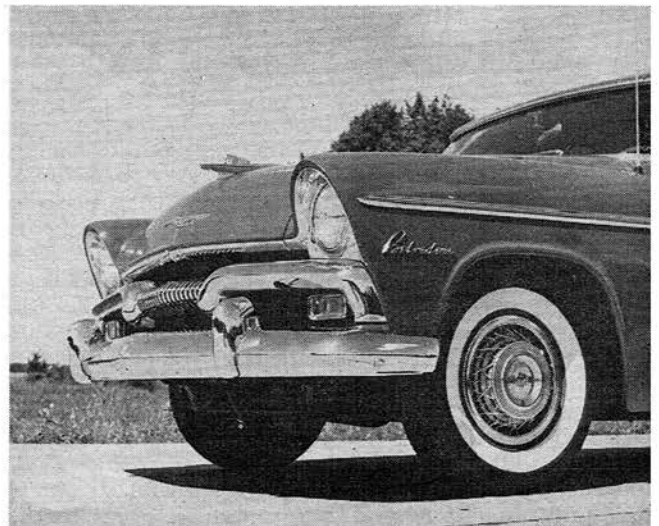
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Photos by MOTOR Life staff and Hubert Wyeth



Rear retains square trunk design of '54 cars but is accented by chromed, bigger tail lights which complete "aircraft" design.

Headlight overhang provides natural shield, has "frenched" effect and gives an angular feeling of constant motion to car.





## PLYMOUTH ROAD TEST

(Continued from page 31)

easy up and down shift pattern from neutral through reverse. It can be handled easily at night, too, but the test staff felt that a small viewing light beside the lever could give a bit more assurance.

As we indicated at the beginning of the report, the new Plymouth ohv V-8 is impressive with its feeling of plenty of power. It is every bit as good as the pre-release publicity touted it to be. Though news had leaked out early on this one (See *MOTOR Life*, November, 1954), the changes which the factory made in a last minute effort to overwhelm the opposition, made it an even hotter engine than our preliminary report indicated. The HyFire V-8 is based on a design which has been incorporated into a basic block design for the three engines Chrysler will introduce this year. These, one each for Plymouth, Dodge and the Chrysler Windsor, are similar.

The Plymouth version is a hot bomb that really puts out hp. Because the Plymouth is comparatively light (3,200 lbs. shipping weight) the car performed well for our test staff. We drove it over all types of roads from the super-smooth high speed concrete oval to the rocky "Belgian Road."

Plymouth is playing it extremely cool in the speed and power department. Though the engine is a potential "powerhouse," it was not designed for the purpose of blowing less potent buggies off the highways said J. C. Zeder, Director of Engineering and Research for the Chrysler Corporation. His words to the test staff were, "We are not seeking to develop higher speeds and greater power than anyone else. The increased horsepower and torque in the 1955 Plymouth, when combined with the PowerLite transmission, results in improved performance in low and middle ranges plus greater economy."

Our test staff took Mr. Zeder at his word. Since he spoke highly of increased performance in the low and middle ranges that could mean but one thing—acceleration, and the test staff proceeded to have a field day at the test track. They challenged every car on the track to a drag race. The car didn't let them down. While it was hard put to stay close to last year's bigger displacement wagons it was capable of laying a line of rubber around the oval at full throttle from a standing start. Zero to thirty mph time was a fleet 5 seconds, and during the process the engine, starting with a low potent rumble, wound up fast to a highly pleasing roar. Between thirty and thirty-three a tiny flat spot was noticed, but upon checking, the test staff decided it was due to a used experimental carburetor and not the new manifold. Fuel flow to each cylinder seemed extremely well controlled.

When testing on the high speed oval, for top speed runs, the car was given four

warm-up laps, each progressively faster than the previous one. During that time the handling characteristics were examined carefully. The car is well put together. At 75 mph, the steering was such that the driver could remove both hands from the wheel and apply the brakes without a noticeable tendency toward tracking. At the same time there was no tendency for the car to wander even at top speed, 99.2 mph. This was due, in part at least, to Plymouth's new steering geometry. It manages to combine features of center-point steering with the best of the Ackerman type. Called "symmetrical Idler Arm Steering Linkage" by factory engineers, the steering arm is designed with Idler and Pitman arms at diametrically opposed angles which provide identical movement. The new tie rods are longer than last year's and connect to the center link, near the center. This type of design, plus the longer tie rods, allows more tie rod travel with less transfer of movement.

Coupled with  $\frac{1}{2}$  inch longer rear springs, the car handles well. The test staff found good characteristics with especially good rear-end road holding. This is due, in considerable extent, to suspension changes which Plymouth made on the '55 models. The Oriflow shock absorbers, on the front, are now mounted inside the coil springs. This has the effect of raising the roll center slightly. While rear spring mounting remain substantially the same as the mounting Plymouth used in 1954, changes in rear shock absorber mounting improves the ride. The shocks are mounted with the lower end tied to the rear of the axle housing, rather than in the front as with previous models. This mounting, plus a longer piston travel results in better control while braking with better than ever smoothness during stopping. In addition, the width of rear springs has been increased from 2 inches in 1954 to 2 $\frac{1}{2}$  inches this year. It adds up to a better handling car.

The staff tested Plymouth's brakes after a full day of high speed runs, and they remained solid and reliable. Plymouth, in the past, has always had a "good" to "excellent" rating in this department. This year they are tops. The test staff, after four "panic stops" still felt the car braked as if nailed to the concrete.

### CAR QUIZ

## ANSWERS

- |                    |             |
|--------------------|-------------|
| 1. Lagonda         | 5. Maserati |
| 2. Bugatti         | 6. Squire   |
| 3. Mercedes 300 SL | 7. MG-TC    |
| 4. Nash-Healey     | 8. Ferrari  |
| 9. Mercedes 540 K  |             |

To achieve greater braking power, front drum size was increased over last year. In '54, drums were of 10 inch diameter all around. This year the front drums are 11 inches in diameter though the rear drums remain 10. Bonded linings will be standard equipment and the test staff found them to be reasonably free of squeal and fairly free of tendency to develop fade. Power brakes are now optional equipment on all Plymouth models.

During the testing period, the staff checked constantly for possible frame rack and poor body construction but there were no signs. When taken over sections of the rough road at high speeds, movements were unitized rather than localized—a sure sign of strong construction. Part of this strength is due to the new structural details incorporated in this year's model. The roof rails, for example, are now sturdily boxed. This was done to compensate for the loss in rigidity caused by moving the forward windshield posts aft to accommodate the wrap-around windshield. At the same time, stiffeners were added to the underside of the floor section to give the lower portion greater rigidity also.

A new frame was designed and built for the '55 cars. Sedan frames are made in a boxed design, using "U" beams of a heavier-than-normal gauge. Convertibles, this year, will have frames made of even sturdier "I" beam material.

One of the two cars which *MOTOR Life* tested was equipped with power steering. Though it has been changed little over the models supplied last year with other Chrysler products, there seemed to be little need for a design change. The steering handled well under all conditions. It provided a constant "feel" of steering removing only the effort of turning. It required only a slight pressure to negotiate turns at speeds from 3 to 99. In fact, it seemed to the test staff as if the turning, lock to lock, were shortened with power steering although this was not true. The twelve models which Plymouth is producing are available in 6 or 8 cylinder engines plus a complete line of extras including wire wheels, the power extras, steering and brakes, automatic transmission, and special protective chrome trim.

The in-line 6 cylinder engine, which has been the economy and mileage backbone of the Plymouth line for many years, will be retained in '55. And, though power has been upped slightly, from 110 in '54 to 112 this year, its main appeal will be to fleet owners, salesmen and economy-minded car owners who do not demand the most in performance, but are willing to sacrifice performance for mileage.

For others, the combination of modern styling, good interior design, and a hot ohv V-8 should prove very appealing. Plymouth may prove to be the most "changed" car of '55. Could be the stock market boys were right. ●