



Road Test

CHRYSLER'S 235-HP V-8!

By DON WERNER

CHRYSLER hit a new postwar high in its horsepower development when it announced the New Yorker DeLuxe model for 1954. Last year the FirePower V-8 attracted wide attention from the public, including hot rodders and sports car builders, when it was rated at 180 hp. But the latest version, boosted by 55 hp to a peak of 235, promises something new.

As soon as Chrysler brought out the car, it was given a high priority on MOTOR LIFE'S road testing schedule. The basic question: How well does a big, family-sized sedan perform when powered by a stock engine of such potency?

The answers were provided during 10 days of careful inspection, severe performance tests and more than a thousand miles of city and highway driving accompanied by heavy rains, hot sun and high winds.

Chosen for the experimenting was a four-door sedan that was equipped with practically every item of equipment except air conditioning. The most important accessories were the PowerFlite transmission, power steering and power brakes.

Four drivers, ranging from an ordinary motorist to an experienced competition professional, participated in the tests. In addition, an average housewife checked the handling in traffic for the woman's reaction. The analysis that follows is a summary of their opinions. If the report sounds too good, it is only because the New Yorker DeLuxe is an exceptional car with few faults.

SPEED TESTS

Chief interest of the road crew centered, naturally, on the acceleration and top speeds runs, since this was the highest powered stock car tested to date. Weather conditions were nearly ideal, being warm and dry with a nine mph sidewind. The site, too, was excellent—a private course with a 7,000-foot straightaway that could be entered at near maximum speed.

Exceptional acceleration figures, given in detail in the accompanying tabulated data, were recorded. At the time of the tests not all '54 models had been introduced. But the New Yorker DeLuxe may very well be the car of the year in this department. Only 11.1 brief seconds were required from 0 to 60 mph. With so much power under foot, spinning the tires was easy, but once accelerating, the car handled perfectly.

The speeds clocked during the flying quarter-mile were remarkable. Peak time registered was 114.6 mph. No faults were noted during the run other than a tendency for the vehicle to float, while the windshield wipers, evidently not mounted with such high speeds in mind, fluttered on the glass, causing driver distraction.

MILEAGE

With engines of high horsepower, automobile buyers have a tendency to suspect that the performance is obtained at the expense of economy. In the case of the New Yorker DeLuxe, these fears are groundless.

On the open highway, at steady speeds, the Chrysler recorded very respectable mileage for a car of its frontal area and weight. The figures ranged from 20 mpg, at 30 mph, down to 16.2 at 60. It is worth noting that this is only slightly below what the New Yorker DeLuxe was capable of last year, with 55 hp less.

THE ENGINE

Since the biggest change in the New Yorker DeLuxe is in the engine department, an examination of its modifications, arrangement and operating characteristics was made with more than customary care.

Boosting the output by 55 hp and jacking up the torque from 312 to 330 pounds-feet has been achieved, by Chrysler engineers, through six major modifications, all of which add up to better breathing. They are:

(1) Use of a four-barrel carburetor which enables the engine to inhale a greater charge of air at wide-open throttle conditions; (2) enlarging the air cleaner by three inches in diameter for more filter area; (3) dividing the intake manifold into two isolated distribution systems, increasing the cross-sectional areas of the branches and adding a secondary pair of risers; (4) enlarging intake valve and port diameter by one-eighth of an inch and the exhaust valve and port diameter by one-quarter of an inch; (5) increasing diameter of the exhaust manifold outlets by one-eighth of an inch to two inches; (6) incorporating a dual exhaust system for reduction of back pressure.

The engine, with most of its weight aft of the front axle, is set up well considering the number of accessories. The six-volt battery is in a handy spot, but the distributor is tucked under the massive air cleaner while the oil dip stick is inconveniently situated on the opposite side of the cylinder banks from the oil funnel.

Operation of the engine is very smooth and, even at high speeds, quiet despite the absence of undercoating on the hood.

TRANSMISSION

The PowerFlite transmission is not new for 1954, having appeared on the Imperial models last year, but it is now standard on all Chrysler V-8's. It is a torque converter and two-speed planetary with overall torque multiplication ratio of 4.47:1 for improved performance.

Effect of the unit is to reduce neck-snapping jerks when the 235 horses suddenly punch the pistons in a rapid start. Acceleration, as may be expected in this type of transmission, is a smooth, evenly paced forward rush. Gear changes, depending upon throttle pressure, come between 15 and 65 mph, while the downshift point is 11 mph.

Two notable improvements should be mentioned. One is location of transmission fluid check which is a dip stick located under the hood at the rear of the engine. The other is the shift pattern on the selector lever which reads, from left: reverse, neutral, drive and low. This permits the quick forward and reverse change often needed for rocking in deep snow or sand.

HANDLING

Power steering gives the New Yorker DeLuxe virtually finger-tip control. Movement is so easy, in fact, that it takes some time for drivers to become accustomed to it and reduce overcontrol, especially at peak speeds with the high-riding car on the open highway. The turning ease, however, was strongly advocated by the woman test driver. New anti-roll front suspension helps in this respect. The steering wheel needed only 3¼ turns from lock-to-lock, while the big car had a measured turning circle of 36 feet.

The 12-inch power brakes were a notable feature, requiring only moderate pressure to bring the two-ton machine to a quick stop in a straight line. Pedal location, in relation to the throttle, was high and pedal surface could be widened.

RIDING QUALITIES

For riding comfort, the New Yorker DeLuxe is unsurpassed. The characteristic "chair-high" seating gives a good view of the road. Cushioning is of just the right tension. In short, the Chrysler is a car in which long distance travel can be accomplished with a minimum amount of fatigue.

"After driving the Chrysler, my own car feels like a truck," said one test driver. *(continued on next page)*

SPECIFICATIONS

MAKE & MODEL: 1954 Chrysler New Yorker Deluxe sedan.
ENGINE TYPE: FirePower V-8.
HORSEPOWER: 235 @ 4400 rpm.
DISPLACEMENT: 331 cubic inches or 5,420 cc.
COMPRESSION RATIO: 7.5 to 1.
BORE & STROKE: 3 1/16 x 3 5/8.
VALVES: Overhead.
MAXIMUM TORQUE: 330 ft. lbs. @ 2600 rpm.
CARBURETOR: four barrel downdraft.
FUEL TANK CAPACITY: 20 gallons.
TRANSMISSION: PowerFlite automatic torque converter with planetary gear set. Up-shift, 15 to 65 mph; downshift, 11 mph.
REAR AXLE RATIOS: 3.36.
WHEELBASE: 125 1/2 inches.
TREAD: front 56 5/16 inches; rear 59 5/8 inches.
OVERALL LENGTH: 215 3/8 inches.
OVERALL WIDTH: 77 1/2 inches.
OVERALL HEIGHT: 62 3/4 inches.
ELECTRICAL SYSTEM: 6 volt.
SUSPENSION: front, independent with coil springs; rear, semi-elliptic springs.
BRAKES: 12-inch, power, hydraulic.
TIRES & PRESSURE: 8.00 x 15, 30 lbs.
WEIGHT: 4,020 lbs.
POWER/WEIGHT RATIO: 17.02.

TEST CONDITIONS

WEATHER: Clear (during speed runs).
TEMPERATURE: 73 degrees.
WIND: West, 9 mph.
DIRECTION OF SPEED RUNS: north & south.
ALTITUDE: 450 feet above sea level.
PAVEMENT: concrete and asphalt.
MILEAGE AT START: 1,879.
MILES COVERED: 1,021.
GASOLINE USED: 91 octane.
OIL USED: 20 weight.
EQUIPMENT: fifth wheel, Perfometer, fuel-flow meter, calibrated clocks.

SPEEDOMETER CORRECTIONS

Indicated	Actual
30 mph	28.9 mph
45 mph	43.6 mph
60 mph	57.5 mph

ACCELERATION AND TOP SPEED

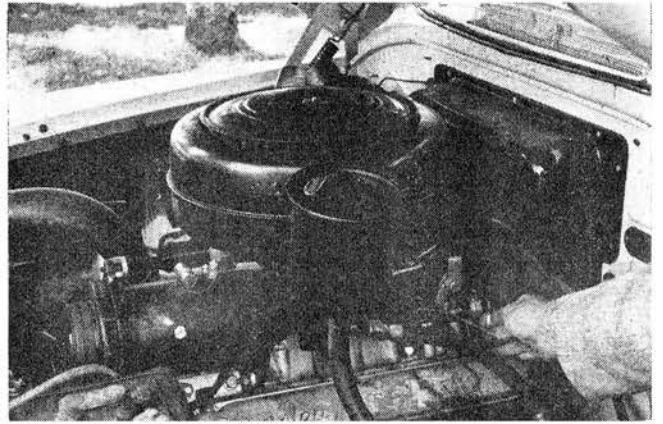
STANDING START:
QUARTER MILE: 18.25 seconds.
0-30 MPH: 4.3 seconds.
0-45 MPH: 8.1 seconds.
0-60 MPH: 11.1 seconds.
FLYING MILE: 114.6 mph.

FUEL CONSUMPTION

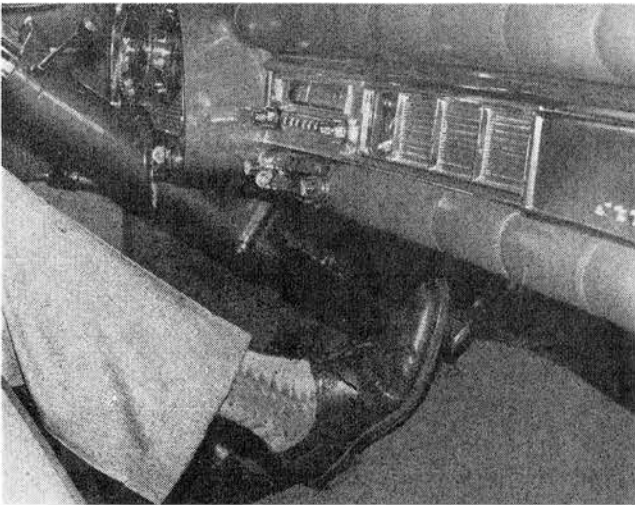
STEADY 30 MPH: 20 mpg.
STEADY 45 MPH: 18.5 mpg.
STEADY 60 MPH: 16.2 mpg.



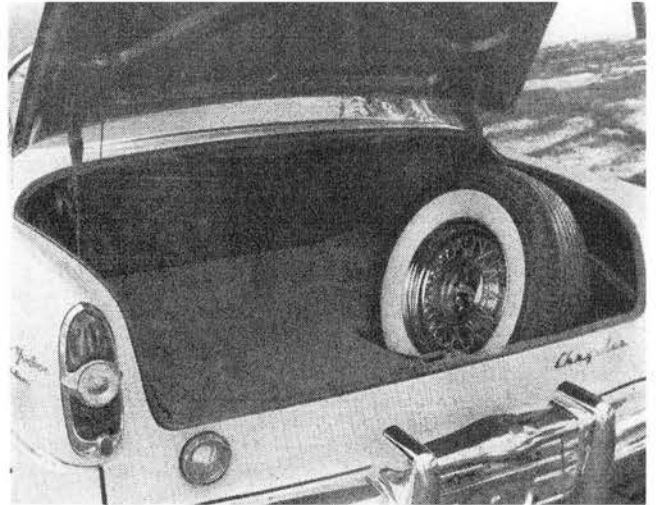
The New Yorker DeLuxe, with characteristic Chrysler styling, is a good-looking car. Glass area is considerable and the chromed wire wheels, at additional cost of \$282, are worth the money for the improvement in external appearance



Dip stick for checking the fluid level in the fully automatic PowerFlite transmission is in a handy spot. It can be easily reached at the rear of engine, an improvement over frequent under-the-floorboard locations found on other cars



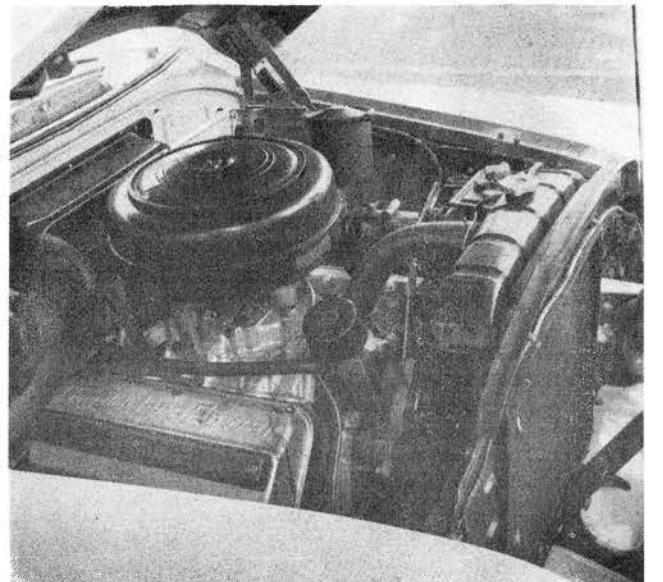
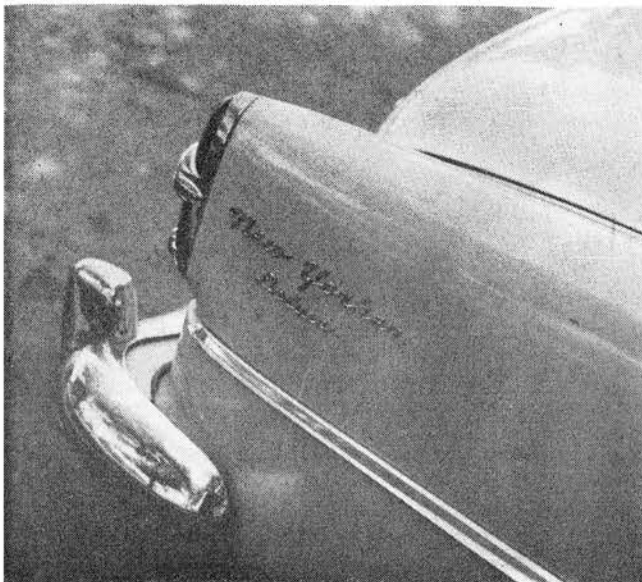
Dash treatment shows that Chrysler engineers are safety-minded. Except for recessed controls and hooded instruments, surfaces are padded and covered with non-reflecting leather. Note that cowl ventilator can be opened by foot action



Spacious trunk area provides ample luggage room in the New Yorker DeLuxe, while spare tire is mounted upright with plenty of clearance under counter-balanced trunk lid. The fuel intake funnel, however, has not been centered

Overall length of Chryslers is now greater by four inches. Body dimensions have not been increased. Instead, front and rear bumpers have been extended two inches each for better protection of body and grille from bumps

Outstanding feature of the New Yorker DeLuxe is the 235-hp engine. Arrangement of equipment is good except for distributor (under air cleaner) and oil dip stick (on the opposite side of the engine from the oil intake funnel)



EXTERIOR

Chrysler has continued its traditional styling for the 1954 models, with a number of refinements. The overall length of the car has been increased by four inches, but this is obtained by extending front and rear bumpers rather than in-between alterations.

For a production vehicle, the finish rates high. Fewer errors were noted than is found with comparable automobiles. Paint was good, bumpers were designed for maximum protection, while headlights were slightly Frenched.

The chrome work on unpainted surfaces was without serious defect. This particular model was equipped with optional wire wheels which also were chromed.

INTERIOR

Since Chrysler designers apparently are comfort-minded, the interior appointments rate nothing but cheers. This is particularly true in connection with the dash which has been improved with an eye to safety. Most of the area is padded for possible bumps and leather-covered to eliminate reflections.

The instruments and controls are within easy reach of the driver. The glassed surfaces are under a hood and side-lighted for fewer reflections. Metal around the faces is non-reflecting burnished aluminum. The two main circular dials are placed slightly off center from the steering column for better visibility. Knobs and other controls are recessed for greater safety. The single imperfection noted on the dash was the opening in the glass covering the clock face for regulating the slow and fast movement. The plastic button covering the hole could easily drop out, admitting dust and dirt.

The wide, 58-inch front seat had seven adjustable positions. Vision was excellent from either side through the considerable glass area and the rear-view mirror was without distortion. A handy device was the cowl ventilator which could be opened with a foot movement, rather than by hand. Doors were well fitted and swung shut solidly, while window cranks did not protrude.

Both front and rear seats had large center arm rests, comfortable, handy as seats for children and even usable for lunching at a drive-in. The outside arm rests in the rear, however, were too narrow and not shaped to fit. Seat fabric was well tailored and serviceable, but, like all automobile coverings, unsuitable for easy sliding in and out during winter weather while wearing heavy overcoats. The rear doors had button locks so handles are inoperative from the inside for safety of children.

A conspicuous feature of the big New Yorker DeLuxe is the spacious trunk. Capable of handling a large amount of luggage, it also houses the spare tire in the favored upright position, while the emergency jack is fixed into position through a spring arrangement that reduces rattling.

GENERAL

The Chrysler New Yorker DeLuxe has much to recommend it as a high-performing family automobile. In the engine department, it is hard to beat. Test data shows that it is efficient by competitive standards and its record is well known as the result of experience both in and out of competition. For those who wish to use it stock, it will give dependable service; and for those who seek to modify it further, it has a wide range of possibilities.

In comfort and interior design, the New Yorker DeLuxe also rates extremely high. The styling, which is a matter of individual taste, is conservative and probably has wide appeal among motorists. As far as price is concerned, it is in the upper bracket—although within that bracket it is under the range of several other makes.

To sum up, the New Yorker DeLuxe can be considered a good representative of most features which are widely accepted as best in an American automobile: it is big, powerful, fast, comfortable, dependable, economical, easy to steer and safe. What more could you ask?



Both front and rear seats of the Chrysler New Yorker DeLuxe offer maximum comfort with plenty of legroom. Level is chair high with good four-way vision thru ample glass area

Test crew member makes adjustment of fifth wheel prior to speedometer calibrations and acceleration runs. Speedometer was exceptionally accurate at most speeds, errors being slight

