been greatly improved with a 4.3 or 4.56 rear end gear or conversely, with a 3.54 gear and the optional TorqueFlite transmission. This statement may seem like treason to high performance lovers but it isn't if one considers the facts. When the Fury engine is wound up at the start then bogged down to 1000 or 1200 rpm by engaging the clutch, it packs all the punch of a wet sponge. With the automatic transmission, the engine speed at full throttle never falls below the stall speed of the torque converter which, in this case, is 1750 engine rpm. At this speed, the torque output of the power pack 301 engine is probably twice that of the Fury engine at 1200 rpm. The natural result is that the standard Plymouth with the same rear end gearing and very nearly the same low gear ratio, plus the converter ratio at stall speed, is rapidly disappearing while the stick-shift Fury is struggling to get out of its own tracks. Further up in the range, the situation reverses itself as the Fury engine speed picks up. The point is that the engine would reach its most effective speed range quicker with a lower (higher numerical) rear end gear, the optional automatic transmission or both. The "active" range of the Fury engine seems to be from 2800 to 5500 rpm so, for best performance, the engine speed should be kept within these limits.

The TorqueFlite transmission of our standard test car performed nobly under the most severe treatment. The shifts could either be quite firm or very gentle, depending upon throttle position. In drive range, full throttle upshifts occured at about 35 mph and again at about 70 mph. Full throttle downshifts from high to second occur between 25 and 50 mph. Full throttle downshifts to low occur from zero to about 25 mph. Punching the low gear button at speeds below about 25 mph will lock the transmission in low gear until another button is punched. Starting with the second gear button punched produces a shift from low to second at about 35 mph and another shift from second to high at about 75 mph. Decelerating with the second gear button punched is accompanied by a downshift from high to second as the speed falls below about 50 mph and another downshift into low at about 10 mph. The TorqueFlite is thus a flexible and versatile unit but it isn't the best we have tested primarily because of the "spread" in ratios between second and high. It is nevertheless an effective transmission and one that is hard to abuse.

The standard gearbox is also plagued by a poor choice of ratios. The low and second gear ratios are quite close together, perhaps too close, and the "spread" from second to high is too much. The clutch pedal was quite soft but the total clutch spring pressure wasn't nearly enough to prevent severe slippage during our acceleration runs. The column shift linkage had a long swing from low to second with a shorter swing from second to high. Attempts at fast shifts brought with them the feeling that the shifting linkage was made of rubber but everything felt better if the lazy "Sunday shift" method was used.

ENGINE MODIFICATIONS—EQUIPMENT

The engines of both test cars were smooth, flexible and dependable. Some carburetion discrepancies were obvious in both cars when the power was applied in turns, but this could be worked out with some time and tinkering. The air fuel mixture was about right for the standard car but was slightly rich at low speeds with the Fury in order to cover up some "flat spots" that occured with the double four-barrel carburetors and the "double log" manifold. In both cases, the rate of spark advance was good but the initial advance was set up from four crank degrees before top center to nine degrees, giving a maximum advance of 28 crank degrees for the standard Plymouth. The Fury initial advance was set up from eight crank degrees before top center to 12 degrees, giving a total of 31 crank degrees. Additional advance brought about a loss of performance due to the occurance of detonation but engine operation under all load and speed conditions was free of detonation or pre-ignition with the above settings.

Valve timing for the 301 engine is as follows: Intake opens 8 degrees before top center, closes 52 degrees after bottom center, duration 240 degrees, lift at valve .387 of an inch. Exhaust opens 52 degrees before bottom center, closes 8 degrees after top center, duration 240 degrees, lift at valve .387 of an inch. The Fury valve timing is quite a bit "wilder" and goes like this: Intake opens 17 degrees before top center, closes 59 degrees after bottom center, duration 256 degrees, lift at valve .405 of an inch. Exhaust opens 55 degrees before bottom center, closes 21 degrees after top center, duration 256 degrees, lift at valve .405 of an inch. At first glance, the Fury cam looks like an inexpensive way out for improved performance with a standard Plymouth. However, because of the fairly long duration, engine performance is very apt to be a bit dull up to about 3000 rpm or so. A better solution would be a cam with about 245 degrees duration with a fast action and slightly higher lift. Such a cam would also make a noticeable improvement in the low- and mid-range performance of the Fury.

The valve diameters for all Plymouth V8 engines are the same, being 1.84 inches for the intakes and 1.56 inches for the exhausts. The intake and exhaust port areas for these engines are quite generous and are compatible with the relatively large valves. They are also quite short

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Interior layout of standard Plymouth cab. Ease of access, fairly good comfort, excellent forward visibility were noticed.

Short forward section of rear spring is a sort of built-in anti-spring-wrap device, absorbing accelerative and brake torques.

View of ball joint and torsion bar front end; upper control arm, steering linkage, lower control arm and an anti-dive strut.