

DON GROTHEER GIVES A PREVIEW OF PLYMOUTH'S NEWEST PERFORMANCE CAR! CAN IT MATCH THE HEMI ROAD RUNNER?

By George Elliott

What a shock the 'Cuda will be for the performance car industry! In the past the 383-cubic-inch V-8 engine was the most popular power combination for the Barracuda line; the exceptions to that were a few 440-powered cars which seemed to be more under-powered than the 383's. Furthermore, Barracuda styling has been basically the same for the last three years. But 1970 is the year of change!

We got a glimpse of the '70 'Cuda as we pulled through the pit gate of Orange County Raceway during the shooting of some '70 new car commercials. We weren't to be at the strip at that time but somebody forgot to close the gates.

At first we thought Chevy was shooting their new Camaro — not really knowing what any '70 was to look like at that time. Closer examination, however, revealed the car to be the new Plymouth styling concept of the 'Cuda.

Admiring the car led us to obtaining one of these for a test, quickly. Plymouth answered our request with a Hemi 'Cuda and Don Grotheer, Plymouth's newest member of the drag and performance clinic team.

A set of Goodyear slicks was added to the car for traction as one would expect a sleek, low sports coupe like the new 'Cuda, fitted with a brute Hemi engine, to have a tough time getting traction on the ground. Again we have a surprise for you! Our cameras were ready and so was Don Grotheer, so the test began.

We walked around the car as Grotheer and Plymouth personnel pointed out the new features. This car is loaded with goodies.

What really makes the 'Cuda impressive is the power combinations that the car can be purchased with. Not only is the Hemi engine available for the performance buff but so is the 440 six-barrel (three carbs) and the 340 performance engines. Actually, the Barracuda line comes with any engine that Plymouth produces.

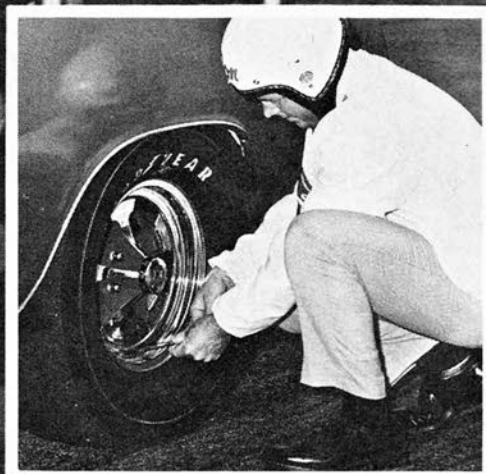
As Don pulled the hood pins (stock on the Hemi 'Cuda) and lifted the hood (the air cleaner protrudes through) we checked over the engine compartment. The Hemi engine looked the same as ever, but a few changes have been made. The most obvious is the "shaker" air cleaner which pro-

trudes through the hood. This racing concept of a scoop through the hood really looks wild and does not obstruct any vision like the larger scoop on the '69 Road Runner six-barrel did. It also moves as the engine does, especially at idle when the Hemi cam lope, hence the name "Shaker."

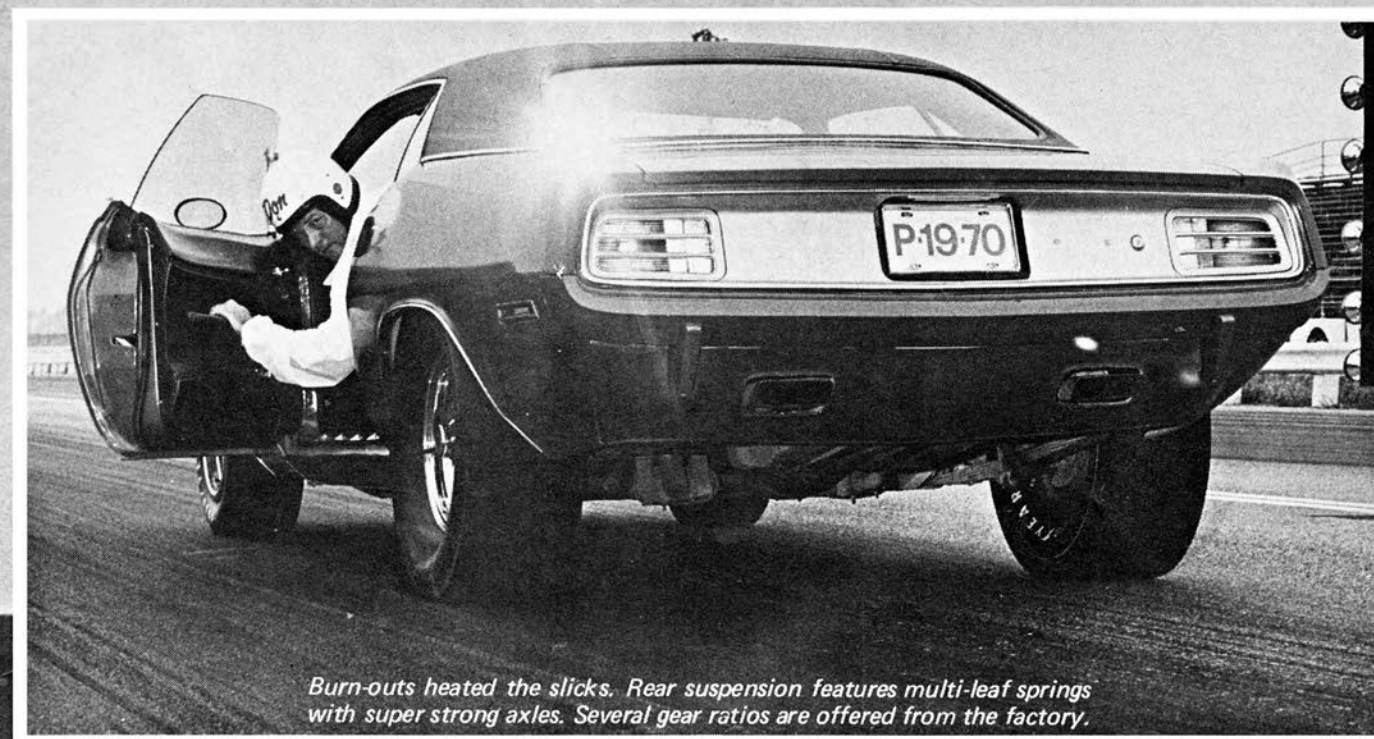
Inside the street Hemi engine hy-

draulic lifters have been added. Cam timing has intake valves open at 36 degrees BTC and closed at 68 degrees ABC. Exhaust timing draws the valves open at 80 degrees BBC and closed 24 degrees ATC. Duration is 284 degrees and lift .490-inch. Engineers claim the addition of the lifters will not affect the 425 hp rating given the engine. It

THE WILD HEMI 'CUDA-'70 STYLE!



Goodyear slicks were used at 10 psi pressure. Traction was too good with the big tires and they also contacted the fender wells.



Burn-outs heated the slicks. Rear suspension features multi-leaf springs with super strong axles. Several gear ratios are offered from the factory.



will, however, make the powerplant quieter and easier to maintain for street driving.

Atop the Hemi engine are the dual Carter four-barrel carbs that have made the engine so wild for street use for several years now.

Behind the engine of our test car was the popular TorqueFlite auto-

matic transmission which was not changed for the new model year. For rear end suspension a heavy-duty four-and-a-half leaf spring is used along with heavy 9-3/4-inch Dana axles. Stock gear ratio for the automatic trans car is 3.23 with optional ratios of 3.55 and 4.10. The 3.23 was in our test car and we sure don't suggest this

for strip use. If some city and highway driving is the need for a 'Cuda, then the 3.55 should be the first consideration, with the 4.10 for limited highway use.

Grotheer slid in behind the wheel of the Hemi 'Cuda. The interior was like that of an airplane, well laid-out and finally equipped with a large tach right



Hood pins are standard on the new 'Cuda along with the "Shaker" hood scoop with Hemi engine versions.

Drag team star Don Grotheer gives hemi engine the once over before starting our tests. Hemi has hydraulic lifters for '70, but performance is not affected by the change.

in front of the driver. The instruments are outlined with a walnut custom wood-type panel. A center console fills the gap between the new wild design high-back bucket seats. Above the console in the headliner console are three red lights which indicate low gas, door ajar and unbuckled seat belts. Stereo FM radio is another of the luxuries the 'Cuda offers.

Grotheer started the engine and staged on the line. A few burn-outs were made to heat the slicks, but really this wasn't all necessary. As it was the Hemi engine wasn't going to break-loose the slicks severely, mainly because of high rear end gears.

A few passes were made and we then discovered that the slicks hit the fender wells pretty bad. This eliminated any high speed runs that day.

At a later date we again drove the car, this time with street tires. Traction was not a big problem as we had previously anticipated. Light application of the throttle got the car off the line in a quick manner. Going through the gears we could feel the hard acceleration of the car but noticed it flattened out after 6000 rpm. This was probably because of the hydraulic lifters. Still, performance wasn't too bad. We clipped speeds of 105 mph with mid-13-second ETs. This performance is way off what the car can actually do, or so say the engineers.

We have to go along with them as we were driving prototypes which were not generally in the best tune for dragging and were heavier than production models.

The handling of the car is different than other hemi-powered cars. This model obviously has the feel of heaviness on the front end. Turning is not affected by this situation, but on ice one might quickly discover how light the rear end is!

Stopping is very good. Disc brakes are used on the front end and 11-inch drum units on the rear.

We were also impressed with the new 'Cuda styling. Obviously the styling department had performance in mind as the front grille is simple with recessed parking lights. The hood pins are another aspect of performance as is the shaker hood. Long hood, short deck and steeply raked windshield with hidden wipers are other popular trends of the performance buff. Flush door handles have been utilized both for looks and safety.

Overall, Plymouth has filled a gap in the performance market by offering a model with so many performance options available. Now if the performance can get to be around 110 mph with ETs in the very low 13-second area right from the showroom floor, then the car will be what it should be, a wild street machine!

