

Powering the all-new factory Super/Stock Barracuda is a dual quad 426 Hemi with 12.5-to-1 pistons, solid lifter cam and steel heads and ram manifold. Car can be had with four-speed or Torqueflite. Up front there are fiberglass body components and a super light steel bumper. Car looks almost streetable. Hood scoop is functional. Gear chokes are 4.88 with stick and 4.86 with auto shifter.

The man who has had his fingers in every Chrysler Corporation performance pie (Hyper-Pak Six to the FX Hemi) has done it again. Head Ramcharger Tom Hoover has managed to slow down the Mopar assembly line long enough to sneak in a short run of Hemi Barracuda screamers

SUPER STOCK/BLASTER

IT WAS A DRIZZLY February afternoon at southern California's Irwindale Raceway. The rainfall, though light, had slickened the asphalt and prevented any high-speed runs. But Plymouth engineers Tom Hoover and Dick Maxwell couldn't let the weather deter them from the task at hand. They were working out the final details of an exciting new car that had to be ready for production in March, a vehicle that may well be the hottest super stock Detroit has yet produced.

BY SAMMY GLICK

Hoover has played a major role in the development of recent Plymouth high-performance hardware, from the "Hyper Pak" slant six in 1961 to the latest hemi. Maxwell is responsible for coordinating performance engineering efforts with the rules of various racing associations, to assure that Plymouth super stock cars are just that—stock.

And the car? It's a sensational, hemi-powered Plymouth Barracuda

that threatens to shatter existing NHRA and AHRA super stock records. According to Maxwell, the vehicle was designed to the letter of the NHRA rules. "The NHRA is the strictest of the drag racing associations," he says. "If you build a car that meets their requirements, you can easily modify it to fit the more lenient rules of other associations."

The car weighs just over 3,000 pounds and its 426-cubic-inch engine has an estimated output of 500 horsepower. That puts it into the



Plymouth

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'they are not built for highway or general passenger car use'

NHRA's new SS/B and SS/BA categories, which require between 6.00 and 6.99 pounds per horsepower.

How, then, can it be called potentially the hottest super stock? What about the cars running in SS/A?

The answer to that is simple—there aren't any. When the NHRA split last year's SS/A class to create 1968's SS/A and SS/B, it established a category at the top of the super stock list for which nothing yet qualifies.

As it stands, the new 'Cuda is too light to meet the AHRA super stock requirements of eight pounds per cubic inch. But ballast can bring it up to that specification, an example of the type of modification to meet differing rules that Maxwell describes.

The engine has been developed under Tom Hoover's skilled supervision and has the same basic block and heads as the 425-horsepower street hemi, though there are important differences in carburetion and compression.

The new SS powerplant has two four-barrel Holley carburetors, with 1.69-inch barrels all the way through, on a cross ram manifold. The setup is virtually the same as the one introduced by Plymouth on its 1965 Belvedere super stock. In contrast, the street hemi has two four-barrel Carbers, with 1.44-inch primaries and 1.69-inch secondaries, on a conventional inline manifold.

The racing engine has special pis-

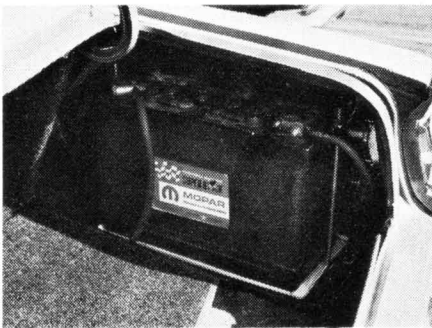
tons that increase the compression ratio to 12.5-to-1 from the street unit's 10.25-to-1. Another notable refinement is a complete Hooker exhaust system, including headers, pipes and mufflers.

Both manual and automatic transmissions are available, the only real option on the car. The manual is a four-speed and the automatic a heavy-duty Torqueflite. With either one, a Hurst floor shift is standard. The automatic's torque converter is a high stall speed B&M unit.

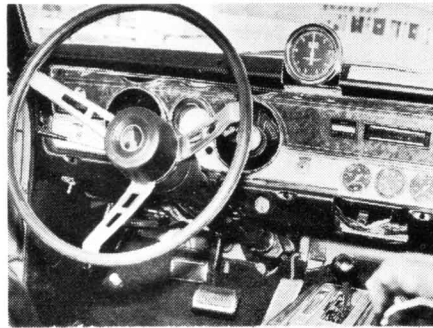
A Dana 9.75-inch rear axle is supplied with the manual gearbox and Plymouth's own Belvedere 8.75-inch axle with torqueflite. Both have Chrysler Sure-Grip limited slip differentials. Ratios are 4.88-to-1 with the manual and 4.86-to-1 with the automatic.

The front brakes are discs and the rear drums. The front tires are D70 x 14 wide ovals and the rear 7.75 x 15's on special offset wheels. Bolt circles are 4.5 inches, front and rear, rather than the standard Barracuda's four inches, to accommodate the greater variety of light-weight racing wheels available with the larger diameter pattern.

The forward part of the car has
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New battery mounting location cuts down trunk space, but that shouldn't hinder sales.



Super lux dash is adorned with Jones tach and full Stewart-Warner instrumentation.



With scooped front end, narrow front tires on mag wheels and gigonda Goodyear ripple wall slicks, Plymouth's factory entry looks super mean.

the engine before he sets off on the quarter-mile search for gold and he will want to add his own preferences in camshaft and racing slicks. Also, he will probably want to install a higher capacity oil pan. The factory would supply one but the severely reduced ground clearance creates shipping problems.

Beyond those details and, of course, a paint job, the car is ready for the green light.

The proof of this particular pudding will be in the clocking. Hoover and Maxwell weren't able to come up with final quarter-mile figures during their tests at Irwindale because of the wet weather. Fortunately, the major part of their work, up to and including publicity photographs, had been completed before the sky fell. But it's the little, last minute details that add the fine edge to any car's performance.

The current NHRA records in SS/B are held by 1965 Plymouth Belvedere super stocks, with an elapsed time of 11.05 seconds and top speed of 127.29 miles per hour.

BLASTER continued

been lightened with fiberglass fenders and hood and a special bumper formed of steel only half the gauge used on the regular 'Cuda. The steel door panels have been acid dipped to reduce weight. The windows are Chemcor glass, which is only .080 inch thick but is reputed to be just as strong as thicker, heavier conventional glass.

Inside, there are two bucket front seats but no rear seat. The interior is finished in black.

An interesting sidelight is that the car is shipped in primer. Most drag racers buying a new super stock prefer to have their own special paint jobs, so there seemed little point in offering arbitrary factory colors. Besides, it's far easier to match the fiberglass and steel panels in a custom paint shop than it is on an assembly line.

Plymouth plans to build a minimum of 50 'Cuda super stocks, all of them with the popular fastback body.

They will be as close to race ready as anything that ever rolled out of a Detroit factory. Plymouth makes it clear that "they are not for highway or general passenger car use." And, because they are built solely for drag racing, "Warranty coverages do not apply to them."

The buyer will have to blueprint