

JERE STAHL DRAG TESTS the DODGE 440 RT

The second stage of our series of tests on Dodge's 440 cu. in. wedge head street screamer proves that tires, headers, and the right gear does make a difference.



IF YOU MISSED THE first stage of our drag test on the 1967 Dodge R/T that appeared in the January issue of Super Stock, let us fill you in on just what happened.

Our staff, with the help of Wild Bill Shrewsbury, took a 1967 R/T equipped with the 440 cubic inch wedge engine and Torque-flite transmission to nearby Capitol Raceway drag strip. The car was in absolute stock street trim with less than

500 miles on it. The only changes or modifications were the addition of a set of Cragar wheels, a 6000 rpm tachometer, and the removal of the air cleaner. Our five best runs netted a low of 14.35 seconds et to a high of 14.52 with speeds from 99.00 to 100.11. This is considered extremely strong for any show-room stock automobile.

The next stage of our test went as follows:

The car was delivered into the capable hands of Jere Stahl and Bill Stiles, who, with their 1966 Plymouth A/S street hemi, captured the Top Stock Eliminator title at three of NHRA's "Big Four." They won at Bristol, Indy, and Tulsa. An impressive and unprecedented accomplishment. We naturally assumed these boys could get the maximum out of the R/T.

First job fell to Stahl and his crew at Stahl Engineering, one of the nation's leading header manufacturers. Stahl built, from scratch, a wild set of his "Total Tuned" pipes that feature equal length individual header pipes

feeding into one large and rather lengthy collector on each side. This not only improves the breathing considerably but also relieves the front end of over 50 pounds of undesirable weight.

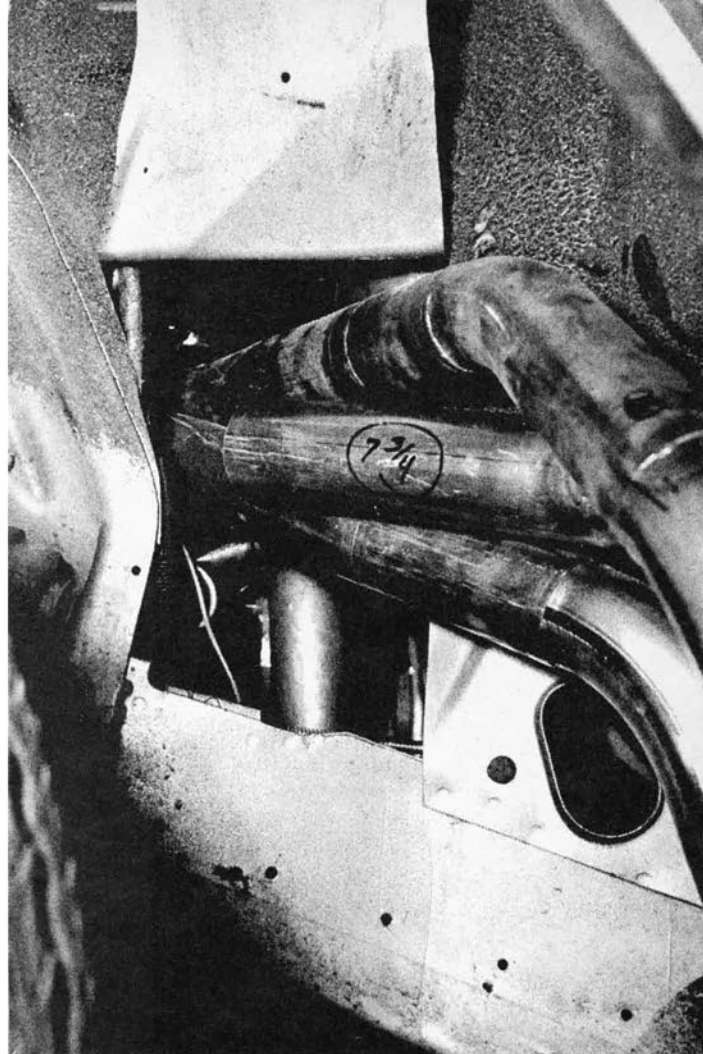
Then the car was moved over to Stiles Performance to receive additional modifications. The stock 3.23:1 ratio rear was removed and a 4.56:1 ring and pinion was substituted. This is a simple job that only requires switching the third member unit of the MoPar rear. A pair of M&H 9.20 x 15 7-inch wide tires were mounted and replaced the Goodyear red lines originally on the car. This particular set of tires was made of M&H's A-140 compound.

Other changes included the addition of a Stewart-Warner electric fuel pump mounted in the rear close to the fuel tank. If you recall, we had vapor lock-



LEFT — Top Stock Champion, Jere Stahl, tries the wheel on our Dodge 440 R/T test car. BELOW — Bill Stiles guides machine off trailer at Capitol Raceway park. Second test provided excellent speeds and et's.





TOP—Jere works with torch and welding rod during construction of headers for the R/T. ABOVE—Heli-arc is used by Stahl for welding header tubes to flange plates. ABOVE RIGHT—Headers pass through inner fender panel. Note how flap has been bent up out of way, may be bent back into position.

ing problems on our initial test using the stock fuel pump. The electric job solved that one neatly.

Minor changes were made under the hood. A 1965 MoPar Super Stock distributor was substituted for the stock unit. The points in this distributor (which are designed for use with a transistor system) were removed and replaced with regular Dodge points. This must be done to prevent burning and pitting. The advance curve was speeded up to provide full advance at 1000 rpm. The timing was set to provide 32° total advance. The original plugs were removed and replaced with new J10-Y Champions. The oil was also changed. At this junction the carburetor was left stock.

Now the car was ready for its second trip to Capitol Raceway. But other problems developed. "Old Man Weather" decided to lay a nice 12-inch blanket of snow on the area and this delayed action for a few weeks until all the snow had melted and the track had dried.

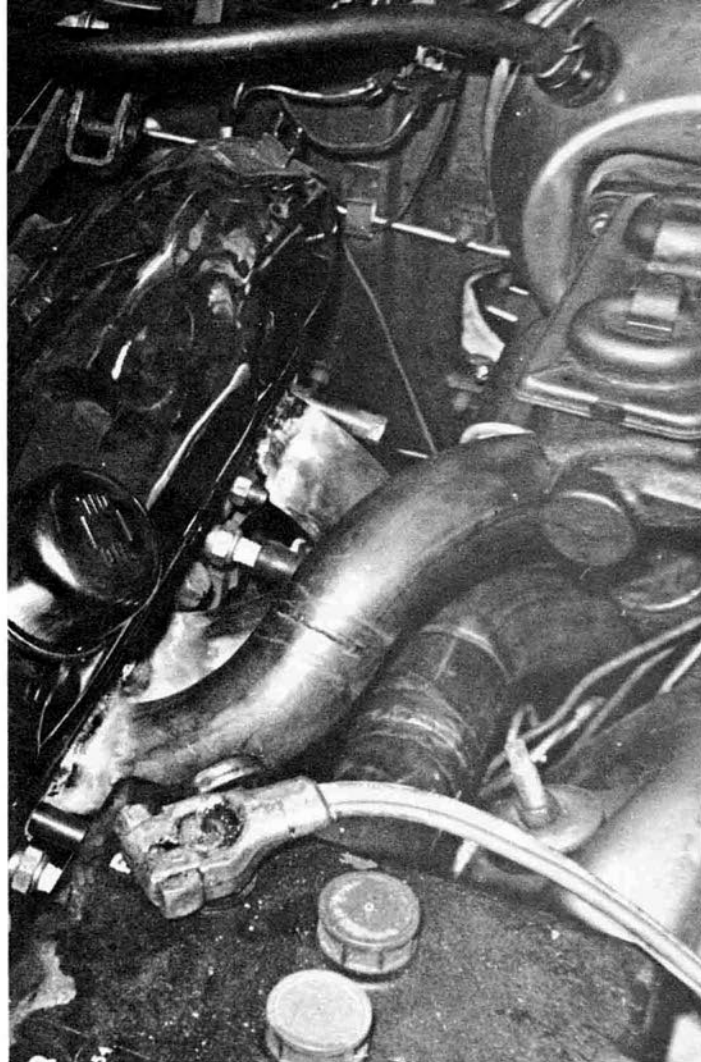
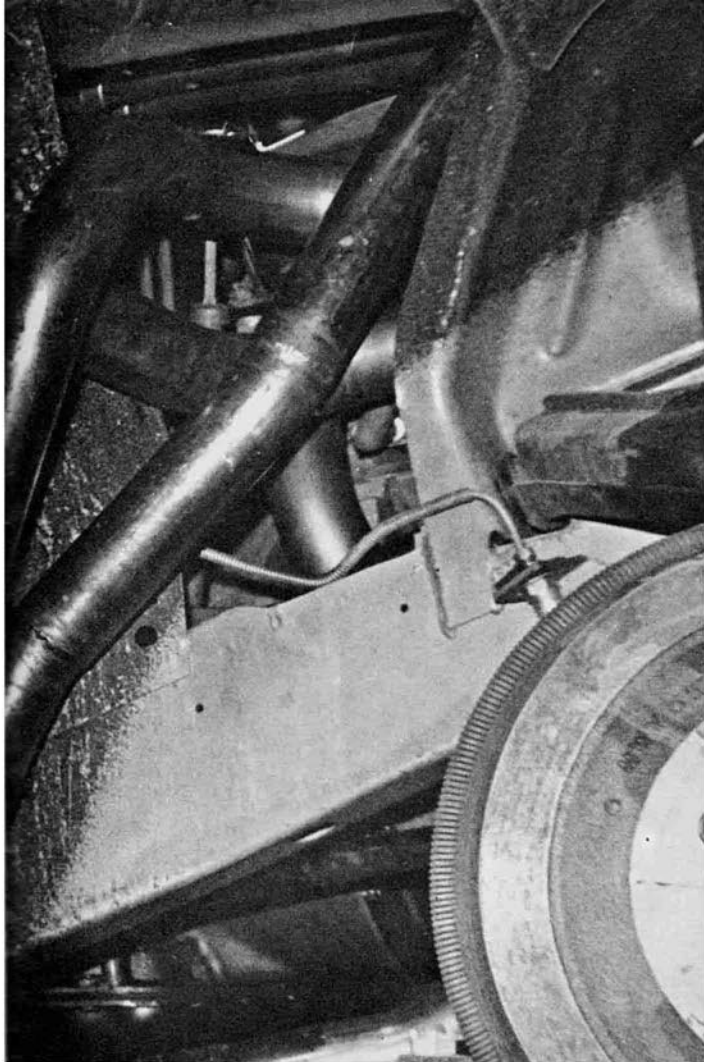
When we were finally able to get everyone together and get the car to the track we were fortunate to get a day that was clear and not too cold. The temperature was in the high forties but this wasn't really cold enough to foul things up.

Initial runs were impressive, with the car registering times in the high 13's with speeds over 103, but we were positive that this could be vastly improved with some fine tuning. It was obvious from the light gray deposit inside the exhaust collector that the carburetor could stand to be considerably richer. The stock .098-inch primary main metering jets were removed and replaced with jets

measuring .101-inch; this made an immediate improvement. Then the distributor was advanced from 32° to 34°. This also helped so we bumped it up once more, this time to 35°. This setting, with the richer jets and a tire pressure of 40 psi provided us with our best time; 13.55 et, and a speed of 105.88.

This car is equipped with a Torque-flite transmission and doesn't really respond well to being shifted manually. As a result we were generally forced to rely on just placing the lever in "drive" and letting the transmission shift itself. This resulted in the trans coming out of low too soon. By playing around with the lever it was determined that the optimum shift point was about 5800 rpm but we couldn't get consistent shifts. This can be solved easily by a slight modification in the valve body or by altering the governor so the automatic shift takes place at a higher rpm. We'll go into this in some detail

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on our next test.

It was also felt by Stahl that performance off the line could be improved considerably by using M&H tires made of A-150 compound. He also wanted to enrich the carburetor even more but, unfortunately, we ran out of daylight on this particular testing session.

Our five best runs break down as follows:

13.55	105.88
13.58	105.60
13.64	103.91
13.65	104.54
13.70	103.91

Because of time limitations we were not able to make as many runs as we would have liked. However, on our next test in this series, we plan to spend several days at the strip and hope to be able to present a more complete breakdown for you.

In our next test we will make several modifications to the transmission, beef up the rear suspension, change the shocks, and play around with different

tires. As you may know, this car falls into NHRA's C/SA class. The national record in this class is held by a 1962 Dodge. It will be interesting to see just how close we can get to that mark and still maintain a reasonable amount of "streetability" with our R/T. The speed record is 110.97. At this writing that mark seems to be beyond our reach, mainly because of the limitation of the single four-barrel that is on our car. Time will tell. ■

ABOVE LEFT—Headers on opposite side also have three pipes through inner fender panel, one under frame, with section of panel bent up out of way. ABOVE—Underhood view of left side pipe. Reasonable access to plugs is still available. Large diameter tubing is used throughout header design. BELOW—Bill Stiles tries his hand at the wheel of the powerful 440 cubic inch.

