

America's
Hottest
New
Sportscar...
**IS A
TRUCK!**

**THE 1991
GMC SYCLONE**

By Dick DeLoach

Figures don't lie. And figures like zero-60 in 4.9 seconds and 13.1 second quarter miles at over 100 mph would be impressive for a 300ZX, Stealth or Corvette ZR1. But in this case, the figures belong to a compact pick-up truck.

In January 1991, the high-performance GMC Syclone will be available at GMC Truck dealerships nationwide. It is based on the GMC Sonoma compact pick-up, which made its debut as a concept vehicle at Detroit's North American International Auto Show in 1989, where it received tremendous attention.

The real story of the Syclone began over three years ago when a handful of highly motivated young GMC engineers conceived the project. As GMC Truck director of Marketing Rick M. Lee noted, the project was fueled by the fact that increasing numbers of "former car owners" are coming over to trucks. At that time, research indicated that over a million buyers annually switch to trucks. This meant there was a real market for an OE perfor-

mance truck.

So the small GMC team set about to create a "total performance" sport compact pick-up. Certain criteria were first established. It had to make a statement. It had to be the best in its class. And in this case, the best meant: safety, ride handling and traction, fit and finish, and

all with a full factory warranty and financing available.

What the Syclone team came up with is a two-door, two-passenger sports car with a pick-up bed on the back! Standard equipment includes: air conditioning, power windows and door locks, AM/FM stereo cassette, tilt wheel, intermittent wipers, analog gauges (including a 140 mph speedo), cruise control and tinted glass. On the bed is a Lexxus TruxCover tonneau cover, also standard. The tonneau cover snaps to an aluminum frame attached to the truck bed without drilled holes.

The interior is replete with contoured



sport bucket seats, a floor-mounted shifter, center console with cup holders, a storage compartment, leather wrapped steering wheel and a Syclone insignia.

The truck is Lamp Black with subtle red accents. Aerodynamically styled body panels not only enhance the visual effect of the truck, but aid in freeway handling, and cover the fat Firestone 245/50VR-16 rubber on 8x16 aluminum wheels.

The Syclone's visual impact pales somewhat when your attention turns to the mechanical aspects of this Porsche hunter. All the right ingredients have been added to create one of the fastest, best handling, and most exciting vehicles ever produced in this country.

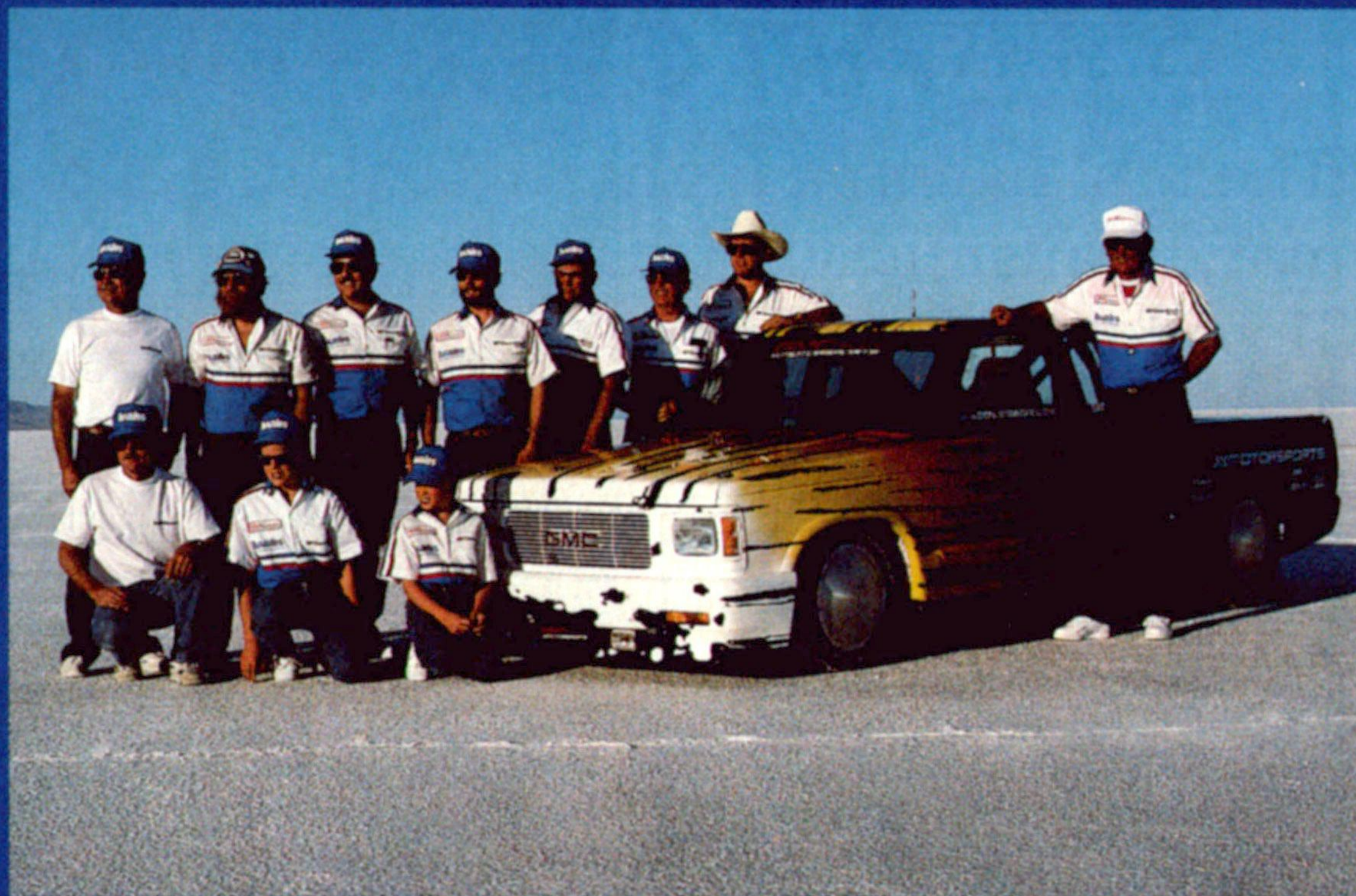
Leading edge technology is employed in every area of the truck's engine, suspension and drive train. Starting with the strong 4.3-liter Vortech V-6, a complete makeover begins at GM's Romulas, Michigan, plant. There it receives new alloy pistons (8.35:1 instead of the 8.5:1 standard cast pistons) and a left hand/right hand split manifold before being hot tested.

Next, the engines are shipped to one of GMC's partners in the Syclone project, PAS, Inc., at their Shreveport, Louisiana, plant. PAS, a Troy, Michigan, based engineering firm, specializes in small-volume automobile manufacturing. They add the "pow" to the Syclone's power, including: electronic multiport fuel injection, iron exhaust manifolds with front-mounted exhaust crossover tube and a Corvette L98 throttle body.

All this hardware results in a powerplant that creates 280 horsepower at 4,400 rpm, with torque reaching 360 lbs/ft at 3,600 rpm. GMC engineers indicate that the Syclone will get better gas mileage than the stock 4.3 because of the port fuel injection used instead of the standard throttle body injection on other GMC models.

To transmit all that power to the ground efficiently, the Syclone receives full-time all wheel drive. Don't confuse this with traditional four wheel drive for trucks. This system is similar to that used on the 1991 GMC Safari L-van, and consists of a single-speed viscous-coupler transfer case from Borg-Warner. Plus a four speed 700R4 automatic transmission from Corvette. The torque split is set at 35 percent to the front and 65 percent to the rear, with special transmission gearing for the Syclone. The complete powertrain is then shipped over to the GM assembly plant in Shreveport where it is mated to the chassis.

Using the same front differential and axles as those on the all wheel drive GMC



GMC Makes another assault on the salt

In 1989, GMC set a new world record when the Gale Banks-managed S-15 pick-up, powered with a 5.0-liter V-6 engine, attained 194.770 mph at Bonneville Salt Flats. The team returned again in 1990 with the same pick-up to try and break the 200 mph barrier.

For the 1990 assault, GMC Truck commissioned Vehicle Research and Development to prepare the Syclone LSR. Based upon the 1991 GMC Sonoma Club Coupe, the extended cab compact pick-up is equipped with a Katech race-ready, gasoline-fueled, naturally aspirated 90 degree V-6 engine, enlarged from 4.3 liters to 5.0 liters to meet FIA displacement limits in class.

"The reason we are going back to Bonneville is simple," says Mike Kramer, Manager-Compact Pick-up and Variants Product Line. "We want to validate work being done on the 4.3-liter V-6 as well as perform aerodynamic studies (on the ground effects and suspension) as we look forward to the January 1991 introduction of the high-performance GMC Syclone street machine."

This year, the BFGoodrich Comp T/A, a street legal radial tire shaved for the special conditions of the Salt Flats, was used for all record attempts. New technology

from Delco Electronics, including a new ECM and a Head-Up Display (HUD) that projects information optically on the windshield at the driver's sight line, also aided the attempts.

They achieved success. The truck went over 200 mph. Then GMC hit on a great idea. Why not invite a small number of the automotive press to a special, second attempt? To that end, the team gathered in the salt to watch as history was made—again.

With the familiar timing truck from the International Motor Sports Association (IMSA) on hand to make it official, several two-way runs were made, but they didn't break the 200 mph barrier for the two-way average. Finally, with direction from Gale Banks, a rear gear change of only three percent was performed.

There was just enough time for one more two-way pass. Could they do it? Could driver Don Stringfellow overcome the failing light and increasing wind? The truck was off. The one-way time. . . 198 and change. The final mile (and final chance) began. The truck buzzed past the anxious onlookers like a bullet. Then came the cheers. He did it: 210.069 on the second leg, making a two-way average of 204.145 mph for the flying mile. It was awesome!

Safari van, the chassis is assembled with a limited slip rear differential with a 3.42:1 ratio, the same gear ratio as up front. A four wheel, anti-lock brake system (a first for trucks) completes the package, with front discs and rear drums.

To make sure the truck handles as well as it moves, the stock ride height was dropped about 2.5 inches. Torsion bars up front and leaf springs in the rear are complemented with Bilstein shocks and a 32 mm anti-sway bar on the front end.

We recently had an opportunity to get some "hands on" time with the Syclone at Willow Springs Raceway. The esthetic appeal of the truck is immediate. But the real thrill comes when you get behind the wheel of the "E-ticket" truck and press down on the pedal.

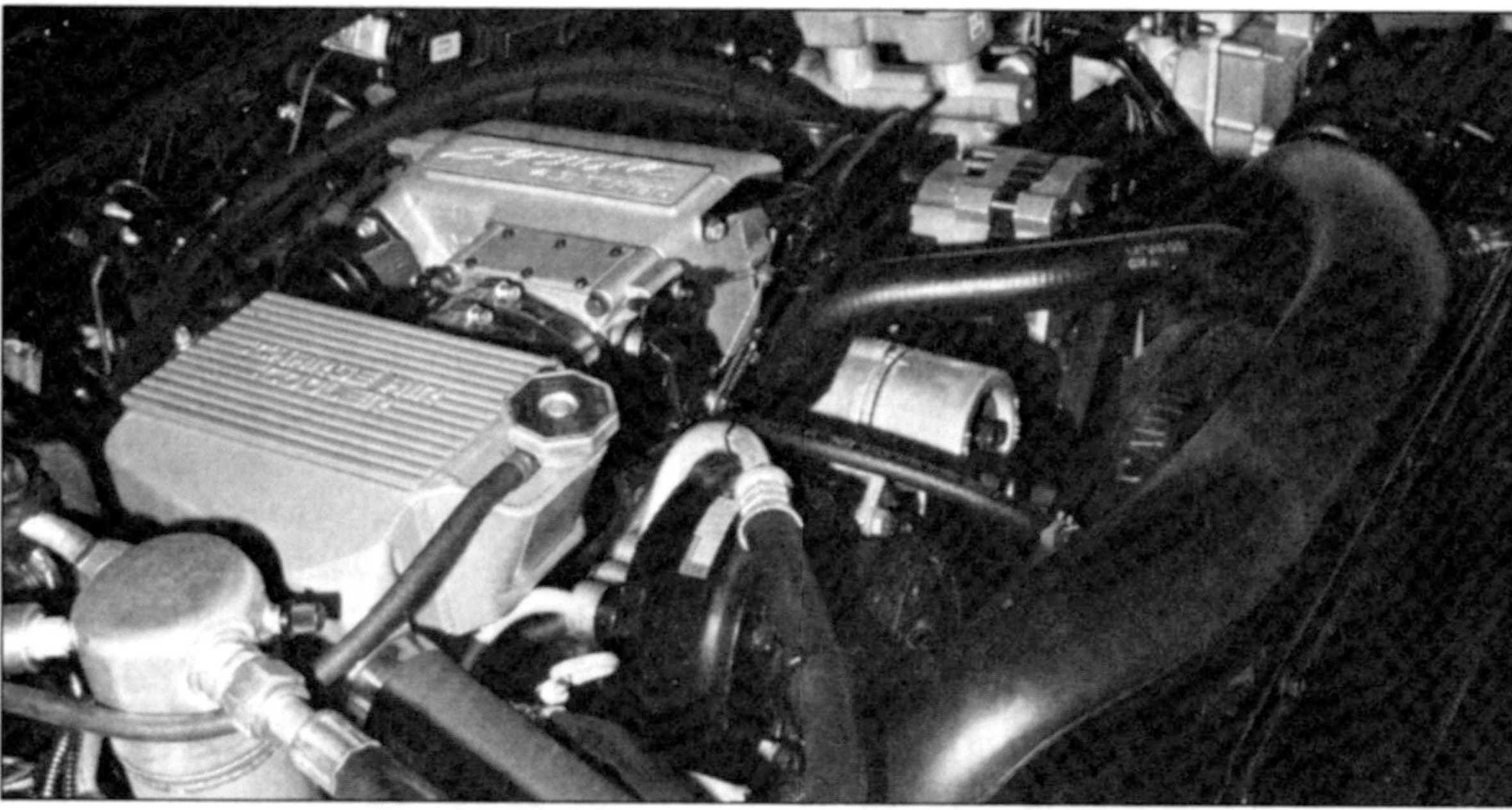
Though the raceway didn't offer the advantage of a standing quarter-mile run for acceleration, there was no doubt that the records previously set at the strip in Detroit could be equaled by this unit. The advantage here, however, was the chance to see how the truck worked under pressure.

Into the first turn, the natural reflex was to let off on the gas a little, tap on the brake just so, and punch it through the turn. With this truck, that was unnecessary. The all wheel drive split is near perfect for the power; the Syclone seems to follow the curves and corners the best when driven fast and faster. With the revs kept up, the turbo boost is maintained, and the same theory that pulls front wheel drive vehicles around corners comes into play—with a rather large "push" from the rear. This very trackable stance would give one greater confidence and control under rain and snow conditions. And of course the ABS brakes will insure that you can stop as well as you can go.

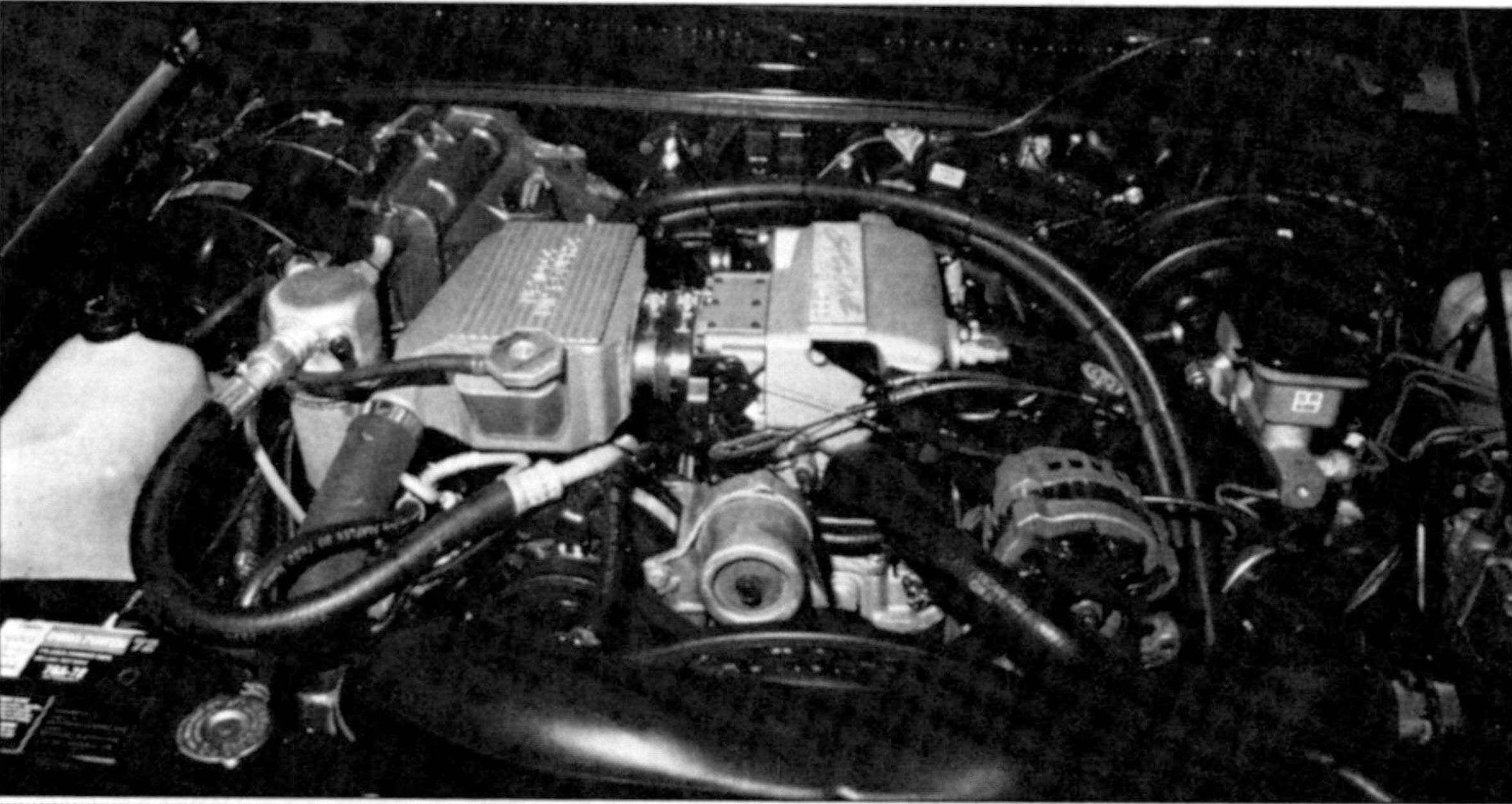
There are a couple of areas where the Syclone may not compare to many high-priced sports cars, but it is a truck. Considering the fact that the truck as a curb weight of 3,526 pounds, with an extremely poor weight distribution figure of 64 percent front and 36 percent rear, it still handles better than any other truck.

Another area that needs improvement is the ECM. The factory shift point is around 4,200 rpm, with a fuel cutoff at about 4,400 rpm. This area will no doubt be addressed by the aftermarket with new PROM chips. Higher boost pressures can be attained with some reworking of the engine management systems that could result in quarter mile times that would threaten even some of the hot Grand Nationals.

So what's the price for all this fun and excitement? At press time, GMC officials are saying \$25,500 "and we don't want the dealers to gouge the buyer." The first year's production will be 2,000 to 2,500 units, with nationwide availability.



Utilizing direct port injection and a large 350 TPI throttle body the Syclone boasts 280 horsepower in stock form. The sizing of the air/water intercooler below is slightly questionable at this time, but we have valid reports that just about every one of our current Buick performance advertisers have Syclones on order and our guess would be that 10-second Syclones could happen as early as October.



GMC and PASS Engineering did a serious amount of homework getting the Syclone to this performance level, which will blow the doors off just about everything on the market today. From some of the data we have looked at this block should be able to take at least as much as the Buick, and perhaps a little more. It looks like the drive train is going to be the limiting factor, but at what point ?



Helping with traction 245/50 VR 16 Firestone rubber all around transmits the power to the ground from the 700R4 transmission coupled to a Borg Warner transfer box. The 3.42 ratio should prove ideal for both cruising and acceleration testing with any reasonable increases in performance.