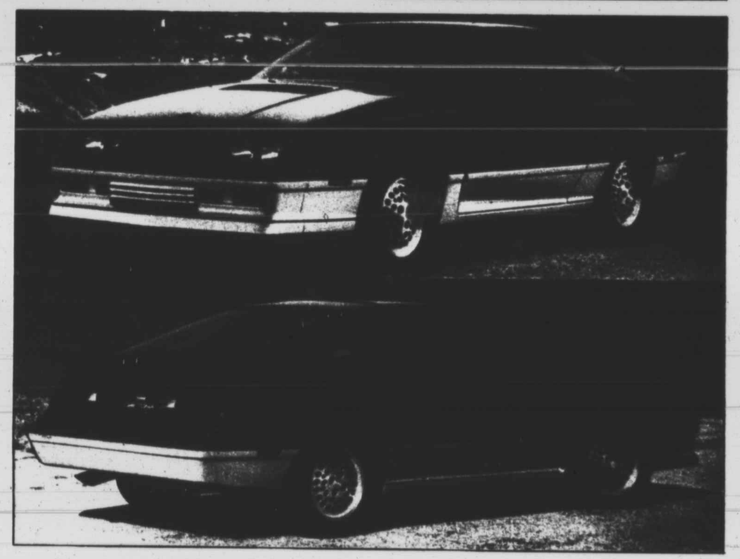
New Turbo Power For Dodge



Pack a lot of high performance technology into a new 2.2 liter four-cylinder engine. Equip it with a turbocharger, fuel injection, and electronic controls. Package it as the top-of-the-field front-wheel-drive sports car built in the USA. Call the car the Dodge Daytona.

The new 2.2 turbo-chared fuel-injected engine is featured in the Dodge Daytona Turbo and Turbo Z and is an option on the Dodge 600 and 600 ES.

Designed to put the Daytona at the top of the field in acceleration, "high performance was our primary objective in developing the turbo engine,"said Robert M. Sinclair, Director of Powertrain Engineering for Chrysler Corporation. "But we also wanted an economical engine, which may sound like a contradiction. We believe our approach. Let us achieve the right balance of power and economy to satisfy the demands of any driver, on any road."

Turbocharging allows the driver to get more power from the car's engine when the driver needs it, for example, entering an expressway or passing another vehicle. If the need for added power "boost" isn't there, the turbocharged engine behaves in normal fashion.

Turbochargers use waste exhaust gas energy to provide the extra power, according to Sinclair, who says the boost on the 2.2 engine brings it up to the power of a 6 or 8 cylinder engine. He cites a 45 percent increase in horsepower and a 35 percent increase in torque output, both achieved without increasing the engine size.

While several key parts of the turbo system are Chrysler-inspired, the basic turbocharger is a Garrett AiResearch unit called a T3. Consisting of a turbine and compressor connected by a shaft, pressure from the hot exhaust gases spins the turbine wheel which causes the compressor wheel at the shaft's other end to rotate. The compressor's spin forces about 50 percent more air into the engine cylinders allowing more fuel to be burned and resulting in increased power.

A water-cooled bearing housing for the turbo protects the precision bearings from high temperature oil problems, eliminating a need for a cooldown idling period before shutting off the engine.

A wastegate assembly on the turbo is a pressure control valve which limits the high pressures on the engine by bleeding off excess pressure.

NEW THIS YEAR

Improvements on the basic 2.2 liter engine include powdered metal inserts to reduce friction between camshaft and rocker arms, and enhance performance and increase component life. Changes in the thermostat module improvement heater performance and lengthen service intervals.

2.2 Liter Turbo

In its turbocharged electronic fuel injection version, the 2.2 delivers 142 hp. Despite this dramatic power upgrading, the turbocharged EFI 2.2 has a lower compression ration than the standard engine (8.1:1 versus 9:1), because of the use of deep-dished instead of flat-topped pistons. The turbocharged EFI 2.2 is available on Daytona and Dodge 600 and 600 ES.

Magnetic Instrument
Gauge Clusters

New precise magnetic gauge instrument clusters, available on all front-wheel drive cars in 1984, indicate oil pressure, coolant temperature, voltage and fuel level. The Rallye cluster includes a magnetically controlled tachometer. Magnetic instruments do not cause radio interference, and are not affected by temperature extremes.

Electronic Navigator

A computer travel information system is available on the Dodge Daytona and 600 models. It provides precise data on distance to destination, distance to empty fuel tank, estimated time of arrival at destination, elapsed driving time, average trip spee and fuel usage, and other important driver navigation aids--all at the touch of a button.

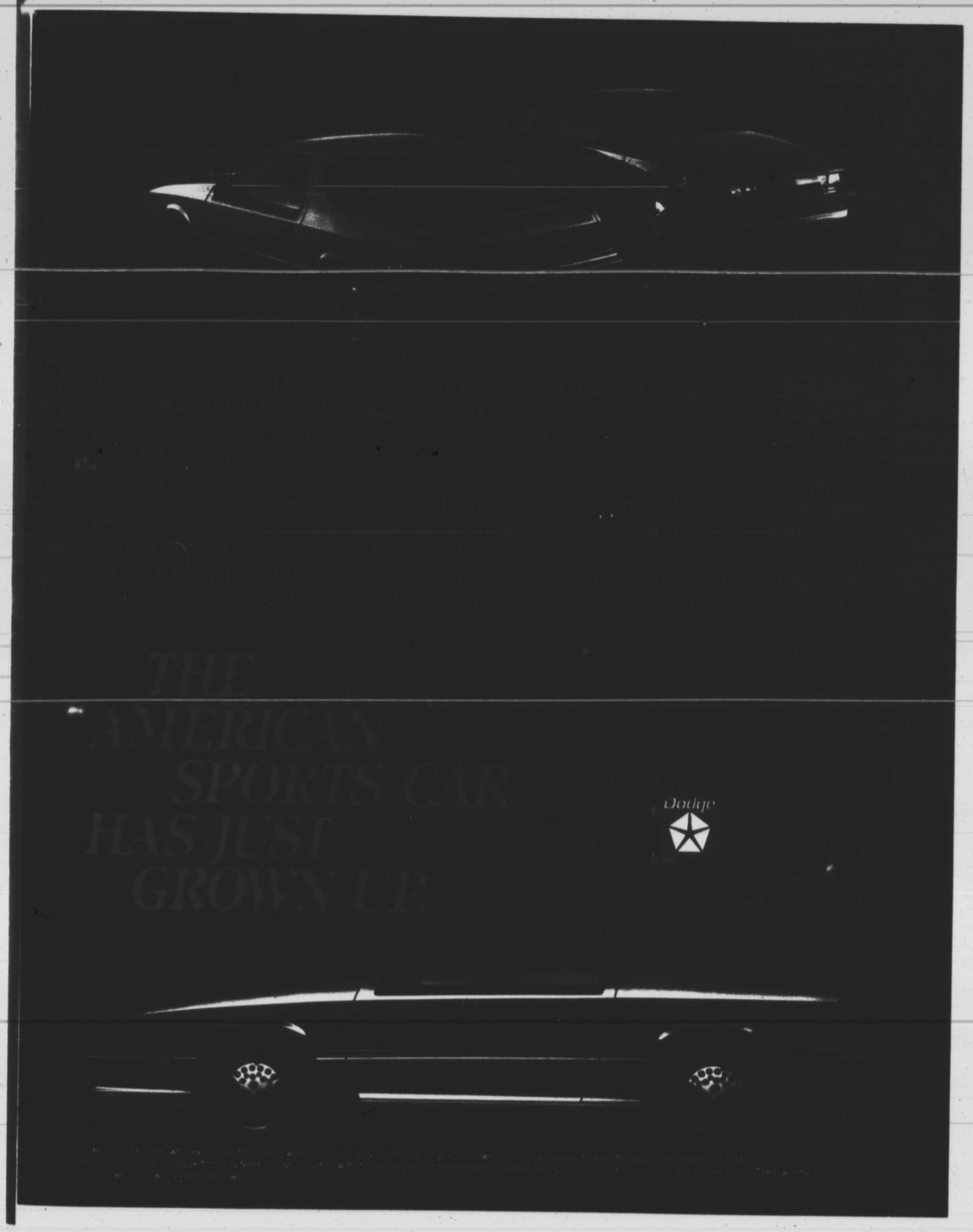
The navigation console also features digital electronic chronometer which gives hour, minute, day, month, and year reports.

Optical Horn

A unique "optical horn," available on all Chrysler-built cars, lets the driver pull back on the turn signal control lever and flash his bright headlamps even when the headlamp switch is in the "off" position.

This option lets the driver use lights instead of horn as a signaling device to pedestrians and other motorists.

New Tires And Wheel Offerings

All 1984 Dodge cars have steel-belted radial tires, ranging in size from P165/80 R13 to

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