

Pontiac's Rolling Showcase for  
Their Super Duty Engine Program By John Baechtel

# SUPERBIRD

Look again, friend; that was no Trans Am that just blew by you on the backstretch. It was Pontiac's new Super Duty Firebird—a screaming, four-cylinder-powered Firebird constructed to IMSA Kelly Girl specifications by Pontiac Engineering. It was built to demonstrate the potential of Pontiac's four-cylinder Super Duty engine in a variety of racing applications, and although the car is still a little too heavy for the Kelly Girl series, its performance is nevertheless impressive. It has a top speed of better than 150 mph and does the quarter-mile in 13.2 seconds at more than 100 mph.

That's rather impressive for a 165-cid four-banger in a 2700-pound car, but this is no ordinary engine. It develops 272 hp at 7600 rpm, and it's packed full of the same high-performance Super Duty hardware already available to everyone—not just selected racers. The engine is based on Pontiac's Super Duty cylinder block, crankshaft and cylinder head. To this potent combination the engineers added a carefully selected blend of aftermarket speed equipment designed with Pontiac's blessing and manufactured expressly for Super Duty applications.

Naturally these pieces work best in conjunction with factory Super Duty engine components, but many of them are also applicable to the 151-cid base Firebird engine for

street use. Most of these parts have already been detailed in our Super Duke story (HOT ROD, December '82), but more are being developed all the time and Pontiac will soon make available a Super Duty engine book describing all the Super Duty engine pieces and their specific applications in step-by-step form.

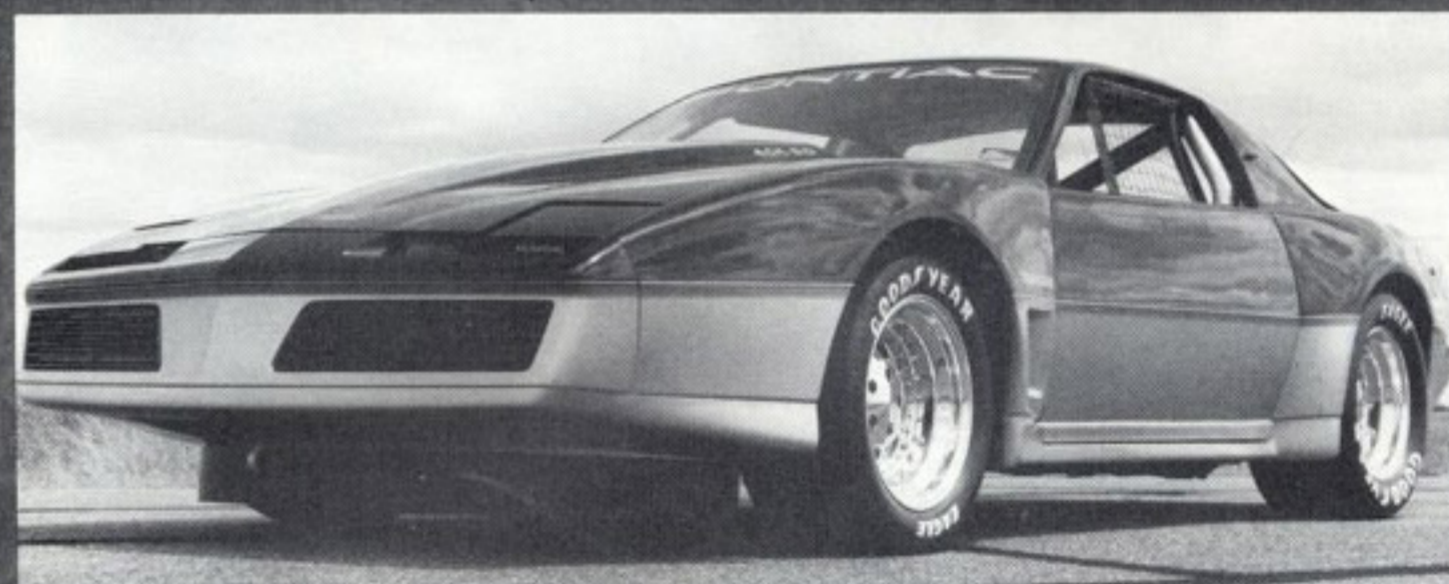
The chassis was constructed by Pontiac with the application of as many standard production components as possible. It features a full rollcage tied in at all the suspension mounting points and fully welded body seams throughout the unibody structure. Production disc brakes are used at all four corners, and they're fitted with semi-metallic linings normally reserved for use on front brakes only. The transmission is a standard '83 Borg-Warner T-5 five-speed, and the rear axle is a standard '83 unit fitted with 4.11s.

Center Line tooled up the special 16-inch wheels that are available in different widths so they can be applied to street cars as well as race cars. Their use on a street car depends on whether or not you have modified the bodywork with the stylish fiberglass body panels from Diversified Glass (313/373-7575.) As shown in the accompanying chart, a stock Firebird will accept the 16x8-inch wheels with no modifications other than the addition of 16-inch tires that are now available (Goodyear's Corvette tires). If a guy wants to

build a street machine with the swoopy bodywork by Diversified, he can use the 16x10 race wheel on the rear and a special 16x9-inch front wheel designed to provide more tire clearance for street driving. Race cars, of course, will use the 16x10-inch wheels.

The 9-inch front wheel gets you around a steering arm interference problem encountered with the 16x10-inch racing wheel. With the 10-inch wheel you have to relocate the front steering knuckles, something you want to avoid in a street application. If you simply want to add these trick-looking wheels to your street Firebird, they are available from Center Line under two different part numbers because the offset is different on the front and rear wheels.

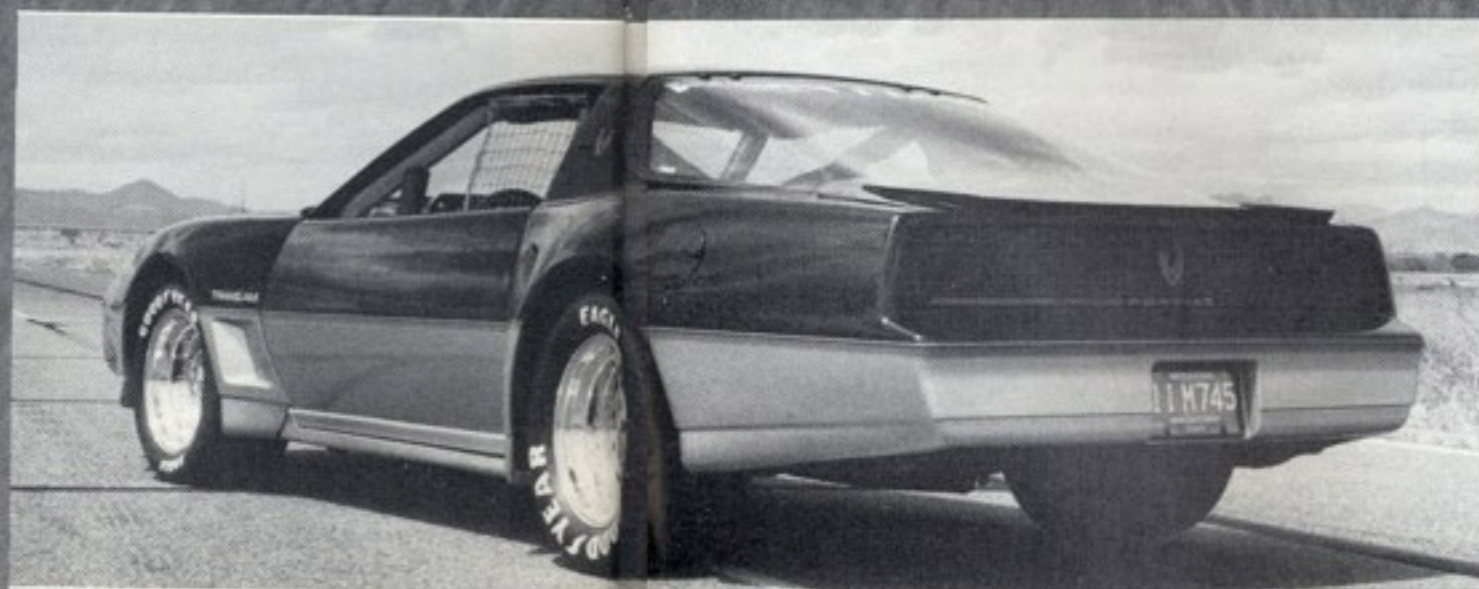
Other interesting aspects of the car include the specially formed Lexan rear window from Cope



The car's rugged good looks convey its sinister purpose, and that aesthetic image is easily available from Diversified Glass Products. The whole 13-piece kit goes for about \$1400—probably less than the body shop price for fenders alone.

The full rollcage was constructed to IMSA specifications and designed to tie the structure of the car together with hard points corresponding to all suspension attachment points. Padded fiberglass racing seats are used with harnesses.

Center Line's new 16-inch wheels are available in the proper sizes for racing or street applications, and Goodyear already has 16-inch Eagle GT tires to suit your combination. See the accompanying chart for exact applications.

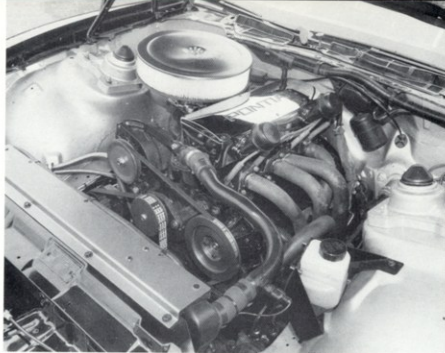


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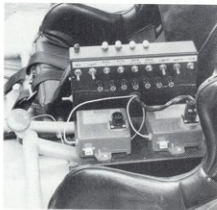
Plastics (309/691-0905); fiberglass racing seats; weight jacks in all four corners; a fire system with four separate outlets that cover the engine, driver, and fuel cell; engine, transmission, and rear axle oil coolers; and special provisions to retain the standard production fuel filler cap on the new rear quarter panel.

It's all part of a carefully orchestrated plan to place Pontiac performance cars in the limelight. Every effort has been made to ensure that first-class, dependable components are made available to Pontiac enthusiasts at every level.

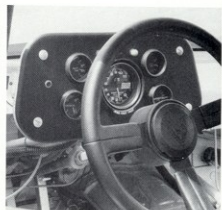
The Super Duty Firebird represents the level of sophistication you can achieve by applying everything in one package, and the beauty of the program is that selected pieces are easily applied to street machines, and that's a credit to Pontiac's foresight. You see, Pontiac is the GM division responsible for four-cylinder engine development even though the 151-cid four-cylinder engine (formerly termed the "Iron Duke") is used in a variety of GM cars. That means four-cylinder Camaro owners and other GM four-cylinder owners can benefit from Pontiac's performance awareness. In the years to come, when four-cylinder engines really become the rage, the Pontiac Super Duty engine will undoubtedly be one of the largest and most powerful of the breed. **HR**



Hooker Industries competition header and Edelbrock's Pro Flow racing air cleaner are evident here, and you have a better view of the valve cover which would be an outstanding addition to any four-cylinder-powered street machine. Note also the upper strut mount extensions incorporated to lower the front of the car.



An MSD Extra Duty Ignition System from Autotronic Controls Corporation keeps the potent little four-cylinder humming smoothly. A spare ignition module provides backup for the one in use (rear), and a fully fused switch panel places control of the car's electrical systems in one convenient location.



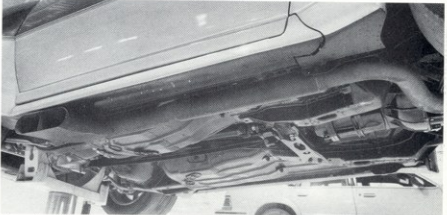
The starkly functional instrument panel contains Stewart-Warner gauges to monitor the car's vital signs and MSD's Fast Tach with the electronic fellole feature to indicate maximum rpm reached during engine operation.

## PONTIAC SUPER DUTY PARTS

SD Engine Block	10027633
SD Cylinder Head	10027776
SD Crankshaft	10027778 (3.00-inch stroke)
SD Crankshaft	10027779 (3.25-inch stroke)

The following manufacturers produce parts for Super Duty engines

	Head Gaskets	Local	Outlets
Fel-Pro			
Mr. Gasket Co.	Gaskets	(216)	398-8300
B.H.J. Products	Torque Plates	(419)	797-6780
A.R.E.	Dry Sumps	(916)	929-0496
Moroso Performance	Oil Pans, Bolt Kits	(800)	243-6536
Hamburger Oil Pans	Oil Pans	(201)	240-3888
Melling Tool Co.	Oil Pumps	(517)	787-8172
Quartermaster Ind.	Clutch and Drive Systems	(312)	593-8999
Edelbrock Corp.	Manifolds	(213)	323-7310
Red Line, Inc.	Weber Carbs	(213)	538-3233
Brooks Racing Co.	Pistons	(714)	893-0595
Arias Racing Pistons	Pistons	(213)	532-9737
Crane Cams, Inc.	Cams and Valve Gear	(305)	457-8888
Hooker Industries	Headers	(714)	983-5871
E.V.M. Injectors	Fuel Injection	(414)	793-4467
Autotronic Controls	MSD Ignitions	(915)	772-7431
Speed Pro	Piston Rings	(616)	724-5011



The exhaust system features a single competition muffler with 3-inch-diameter tubing from the header to the expanded dual outlet. The bottom of the car doesn't look altered at first glance, but a closer inspection will show that all body seams in the unibody structure have been welded to increase the structural integrity of the chassis.