

ROAD TESTS: DATSUN 280ZX TURBO, JAGUAR XJ-S  
HONDA CIVIC 4-DOOR, FUEL INJECTED FIAT BRAVA

# ROAD & TRACK

MAY 1981

UK 85p

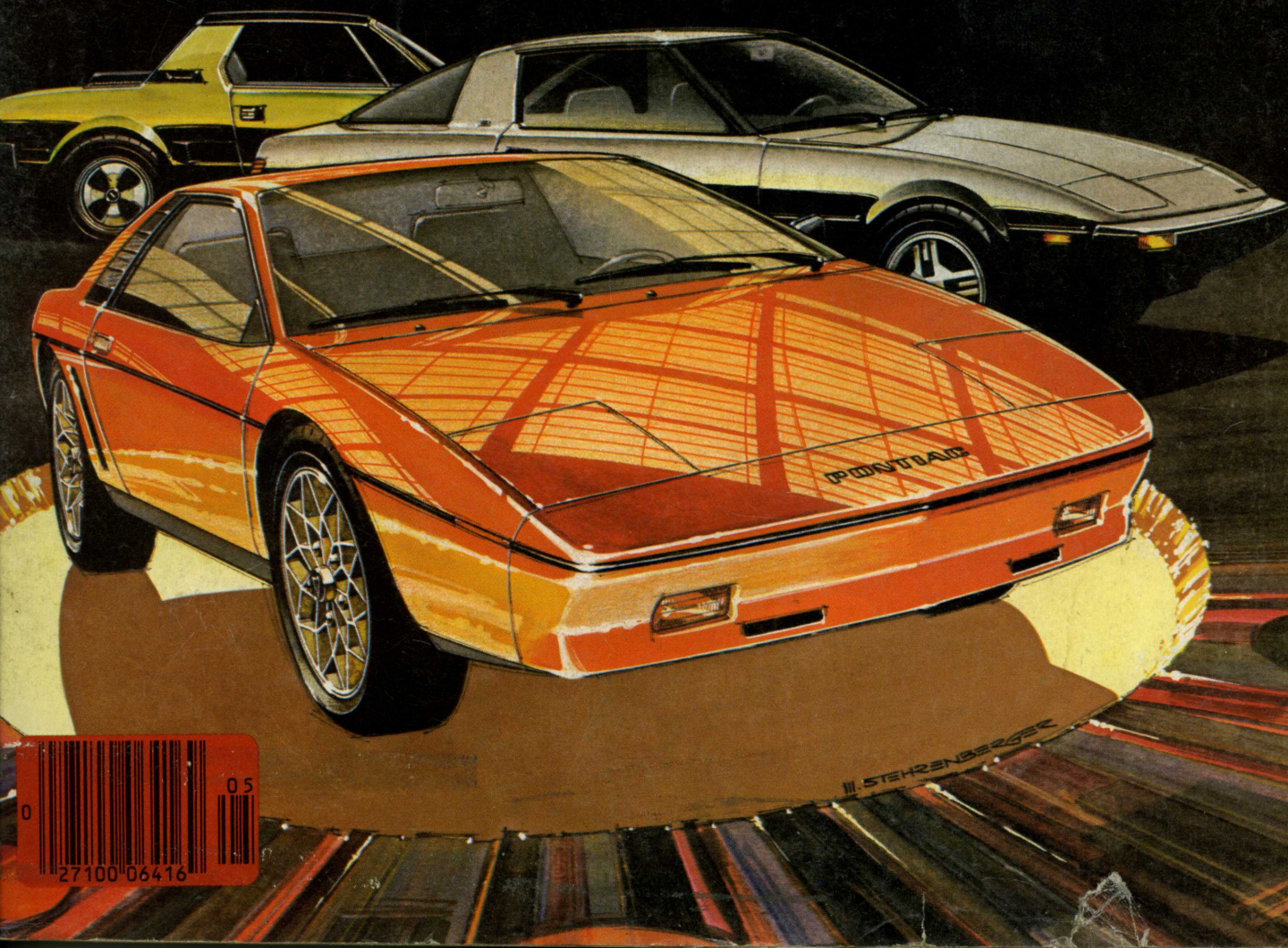
\$1.75

**Pontiac's  
breakthrough:  
mid-engine, 2-seat,  
plastic body, 2000-lb  
sports car**

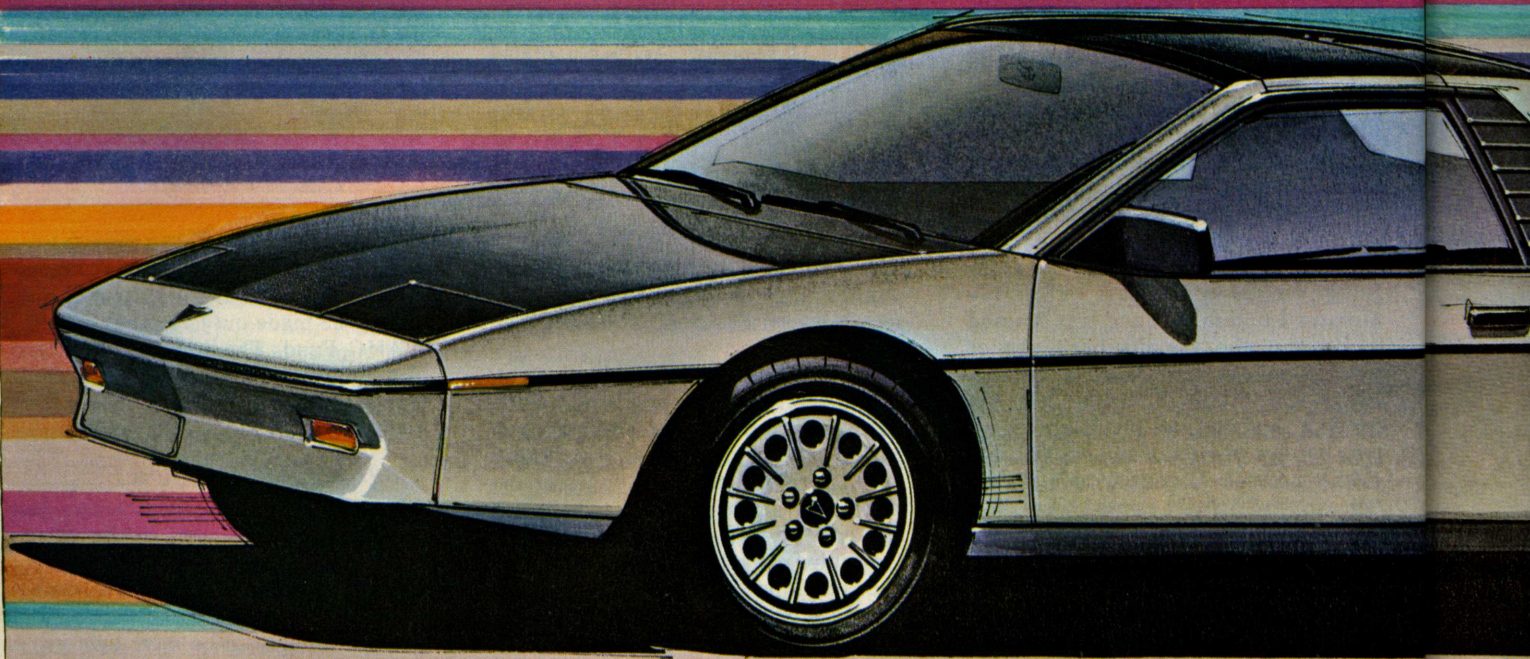
**RADAR:  
LEGAL TENDER TRAP?**

**Action photography:  
Super-8 and video tape**

**Competition for Fiat's X1/9 and Mazda's RX-7?**



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# PONTIAC P-CAR

*2000-lb, 2-seat, mid-engine commuter car (read sports car)*

BY TONY HOGG

**A**T A TIME when Detroit's Big Three are concentrating most of their resources on downsizing their family sedans and, in fact, are also concentrating all their resources on merely staying alive, one might think that an entirely new 2-seat sports car would be definitely on the back burner with the burner unlit. However, that is not the case at all and we are looking forward shortly to a new entry from General Motors to compete directly with the Fiat X1/9, the Mazda RX-7 and the Triumph TR7.

Currently code-named the P-car, it will probably be called the Sunfire and it will be introduced by the Pontiac Division of GM in the spring of 1982, which is not very far away. Although it will be a 2-seater with definite sporty pretensions, it will be sold as a commuter car not only to attract fuel-conscious drivers but also to placate the brass at General Motors, to whom the term sports car conjures up visions of racing and bad things like that. The decision to sell the car through Pontiac was presumably made to dust off Pontiac's somewhat stuffy image, and the new model's introduction will just about coincide with the dropping of the full-size Catalinas and Bonnevilles.

In appearance the P-car strongly resembles the Fiat X1/9, with which it shares a very similar layout, and it also has some of the

wedge styling of the Triumph TR7. Although it bears no resemblance to the Mazda RX-7 other than in its 2-seat configuration, it will undoubtedly compete with it in the market place. If the P-car were introduced today, it would be priced under \$8000, although no one knows what inflation will have done to prices a year from now.

The engine in the P-car is located transversely behind the seats in the manner of the X1/9. At the moment two throttle-body injected (TBI) engines are listed for the car: the 2.5-liter 4-cylinder Iron Duke and a Brazilian-built 1.8-liter overhead camshaft 4-cylinder. Although Pontiac is listing the 1.8-liter as the base engine, there's a strong possibility that only the 2.5-liter will be available at the start of production. Another possibility further down the road is a Chevrolet-designed 60-degree V-6, also with TBI, which we're told is currently pumping out approximately 180 bhp in a P-car weighing around 2100 lb. That combination has the makings of a road burner the likes of which we haven't seen in ages and also the potential for a GM inter-divisional squabble of monumental proportions. Chevrolet may be more than a little reticent to release such an engine to Pontiac because it would give the P-car Corvette performance at half the

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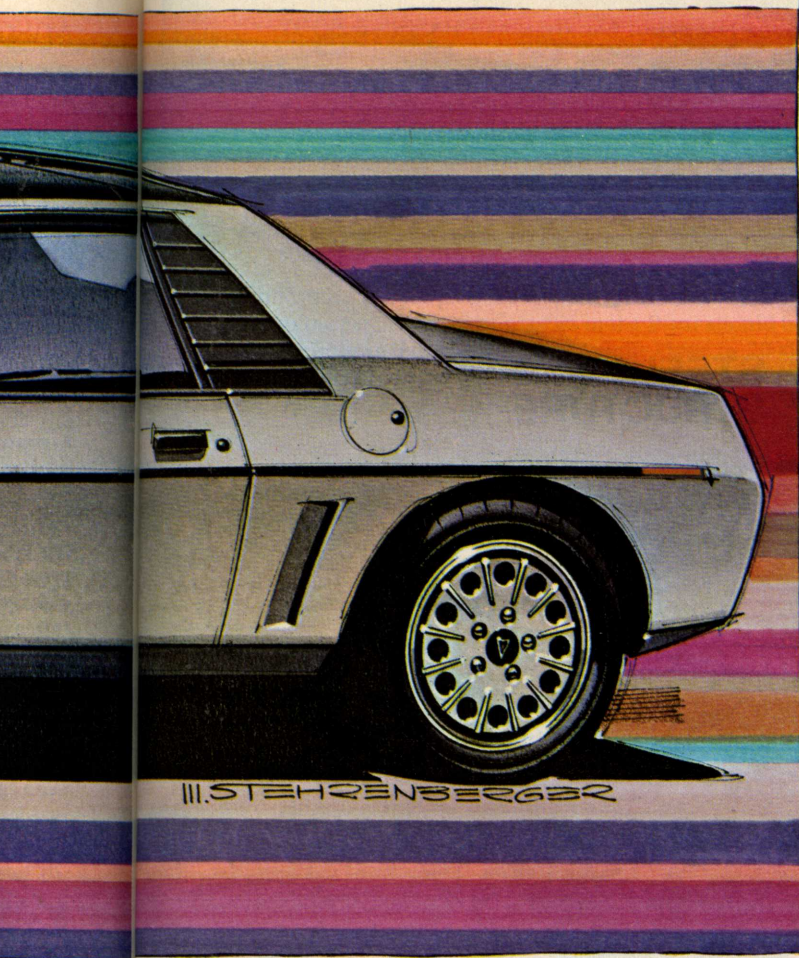


ILLUSTRATION BY MARK STEHRENBARGER

noise and vibration to a minimum, and this is important in a mid-engine car with the engine located immediately behind the driver. It is expected that the 4- and 5-speed manual transmissions will be offered, and also an automatic.

Dimensionally, a comparison of the P-car to the Fiat X1/9 and the Mazda RX-7 shows the P-car to be in between the two in each dimension with the exception of width and track, where it is wider than the RX-7.

	P-car	Fiat X1/9	Mazda RX-7
Wheelbase, in. ....	93.4	86.7	95.3
Length .....	160.3	156.2	170.1
Width .....	69.5	61.8	65.7
Height .....	46.7	46.5	49.6
Track, f/r .....	57.8/58.7	53.3/53.6	55.9/55.1

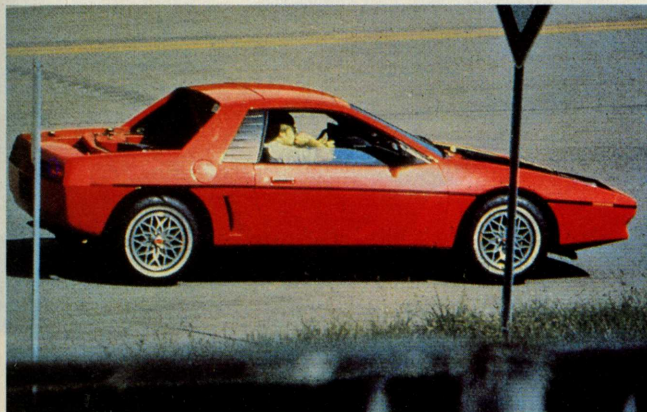
The curb weight of the Fiat is 2130 lb, the RX-7 is 2455 lb and the target weight for the P-car is 2000 lb. The P-car is strictly a 2-seater, with no accommodation for a third person. It will be offered only as a notchback with a removable targa top offered later as an option. As in the Fiat and Mazda, the headlights will be of the pop-up variety.

By using the engine cradle from the X-car in the rear of the P-car, it is also possible to use the suspension and brakes, so the car will have independent suspension and a disc brake at each corner. The rear suspension consists of Chapman struts with lower arms attached to the engine cradle, and this arrangement leaves plenty of room for a transverse engine layout. In front, the suspension is a rather conventional unequal-length A-arm design with coil springs, tube shocks and an anti-roll bar. Steering will be by rack and pinion.

Obviously, the small, mid-engine P-car is pretty radical for General Motors and particularly for its Pontiac Division. But, if the concept is radical, some of the materials used are even more so. GM has been using fiberglass for years in the Corvette, but the P-car takes the extensive use of various plastic body materials a step further. The car will be built on a steel skeletal frame with a

price. If the Chevrolet V-6 falls through, then an alternative is a turbocharged (maybe supercharged?) version of the Iron Duke.

With the V-6 or turbo 4-cylinder, the P-car should be a strong performer and the word is that GM will involve itself in some sort of a competition program, either overtly or covertly. Partly for this reason and partly because of availability, a number of components from the bigger and heavier X-car will be used in the P-car. For instance, it is anticipated that the cradle used to support the transverse engine and transmission in the front of the X-car will be used for the same purpose in the rear of the P-car. However, the cradle will not be turned around, so the output shaft of the transmission will be behind the engine in the P-car. This arrangement brings the engine closer to the center of the car to give better weight distribution. The use of a cradle, or subframe, to support the engine is an effective method of reducing engine



Long-lens spy photos capture Pontiac's exciting new P-car at the General Motors Proving Grounds in Milford, Michigan. Pontiac has labeled the P-car a commuter car, but it's a sports car through and through.



PHOTOS BY JIM DUNNE

**PONTIAC P-CAR SPECIFICATIONS**  
1.8-liter 4-cylinder

**GENERAL**

Curb weight, lb/kg	2000	908
Wheelbase, in./mm	93.4	2373
Track, front/rear	57.8/58.7	1468/1492
Length	160.3	4072
Width	69.5	1766
Height	46.7	1185
Overhang, f/r	36.1/30.8	916/783

**ENGINE**

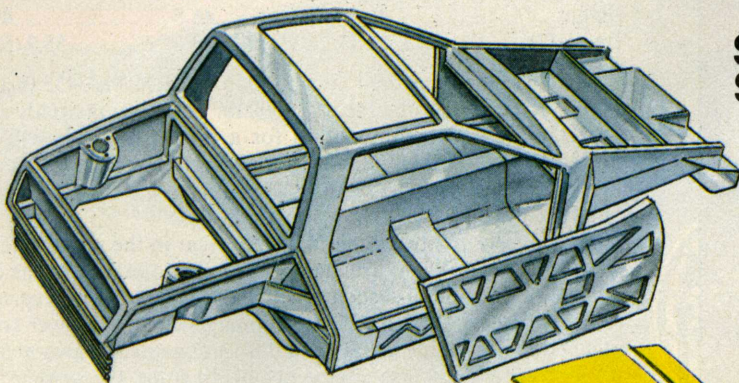
Type	sohc inline-4
Displacement, cu in./cc	110/1800
Compression ratio	9.0:1
Bhp @ rpm, SAE net/kW	est 90/67 @ 5000
Torque @ rpm, lb-ft/Nm	est 110/149 @ 2600
Fuel injection	Throttle-body injection

**DRIVETRAIN**

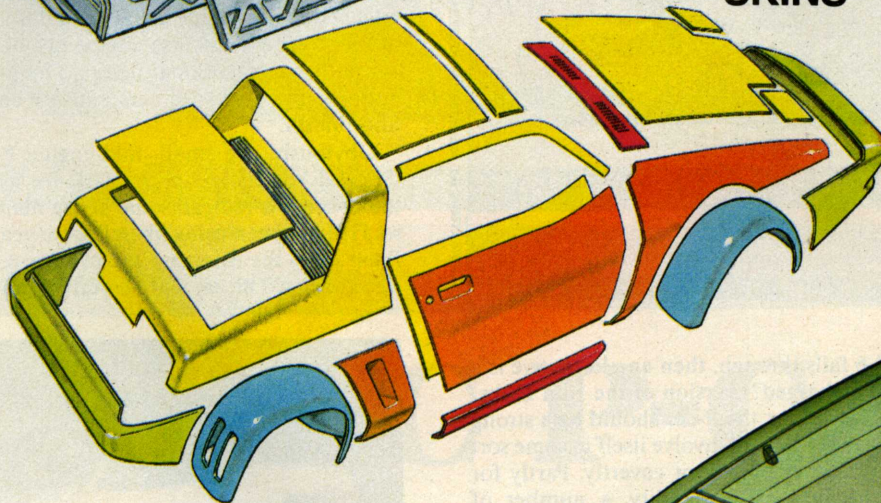
Transmissions	4-sp manual, 5-sp manual, 3-sp automatic
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**CHASSIS & BODY**






Layout	mid engine/rear drive
Brake system	9.7-in. (247-mm) vented discs front, 9.7-in. (247-mm) discs rear; vacuum assisted
Wheels	cast alloy, 13 x 5½
Tires	radial, 195/70R-13
Steering type	rack & pinion
Suspension, front/rear	unequal-length A-arms, coil springs, tube shocks, anti-roll bar/Chapman struts, lower arms, coil springs, tube shocks

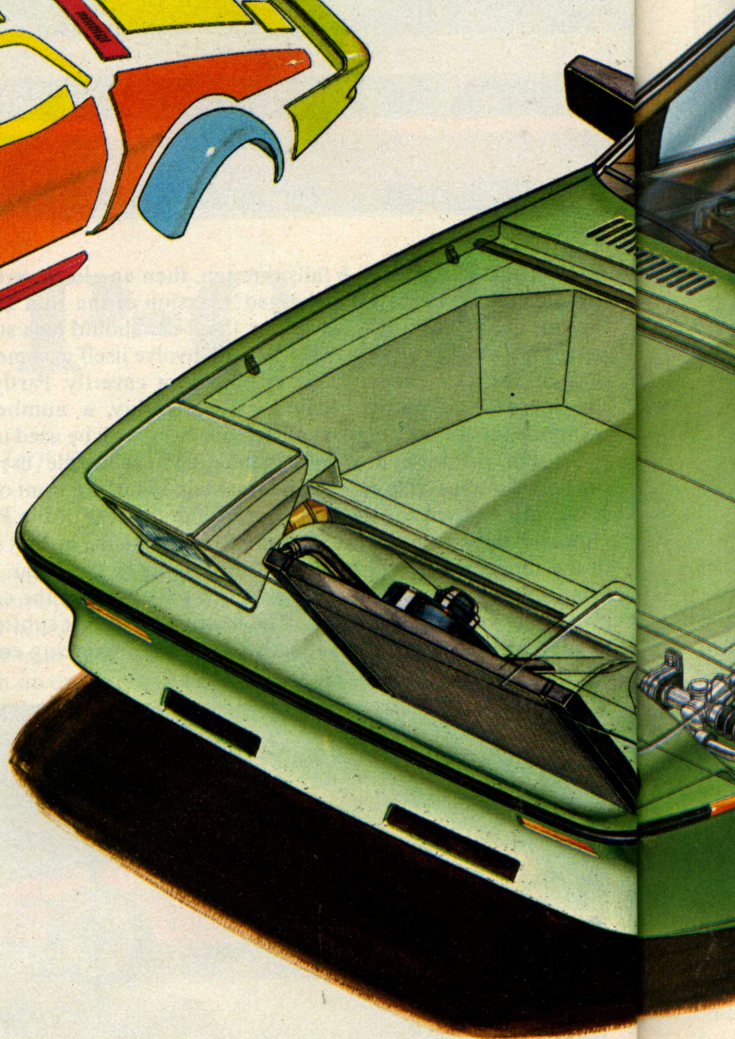


**STEEL  
STRUCTURE**



**PLASTIC  
SKINS**

-  SMC (MOLD COATED)
-  RRIM
-  INJECTION MOLDED TPR
-  RIM
-  INJECTION MOLDED FILLED POLYPROPYLENE



ILLUSTRATIONS BY TOM FORNANDER

ear drive  
scs front,  
sted  
13 x 5½  
5/70R-13  
& pinion  
rms, coil  
an struts,

welded steel underbody. The actual body panels will be made out of reinforced polyester, commonly referred to as sheet molding compounds (SMC), which have a considerable degree of resiliency to make them resistant to dents and tears. The finish is applied to the molds and Pontiac expects the result to be equal to the best steel body skins. It is possible some of the body panels, either from the start or at a later date, will be made from reinforced reaction-injection-molded (RRIM) urethane, because it is easier to obtain a good surface using injection molding.

Anyway, apart from the Corvette, the P-car will be the only high-volume car with a plastic body built in the U.S. For most body applications (although not all), plastic materials are lighter than steel so the extensive use of plastics in the P-car should be of considerable help in attaining a curb weight close to 2000 lb. With its light weight and good aerodynamics, GM is hoping for

50 mpg at a steady 50 mph.

So far there has been no mention of a Chevrolet version of the P-car, and it probably won't happen until supply catches up with demand at the Pontiac Division. However, with a new Corvette coming in 1983 priced around the \$20,000 mark, Chevrolet would certainly like an advanced 2-seater sports car to sell at less than \$10,000. Production of the P-car will be in the region of 75,000 the first year, ultimately rising to 100,000.

In electing to enter the 2-seat sports car market with a mass-produced low-price car, one might think GM is going out on a limb at a time when it has a multitude of other problems to deal with. However, the P-car fulfills all the requirements of an automobile for the Eighties: It is small, fuel-efficient, reasonably priced and, last but not least, it should put a lot of the fun back into driving.

