

PININFARINA AZZURRA BERTONE X1/9

*Two carrozzerie-turned-manufacturers
provide familiar driving pleasure at a
higher level of refinement*

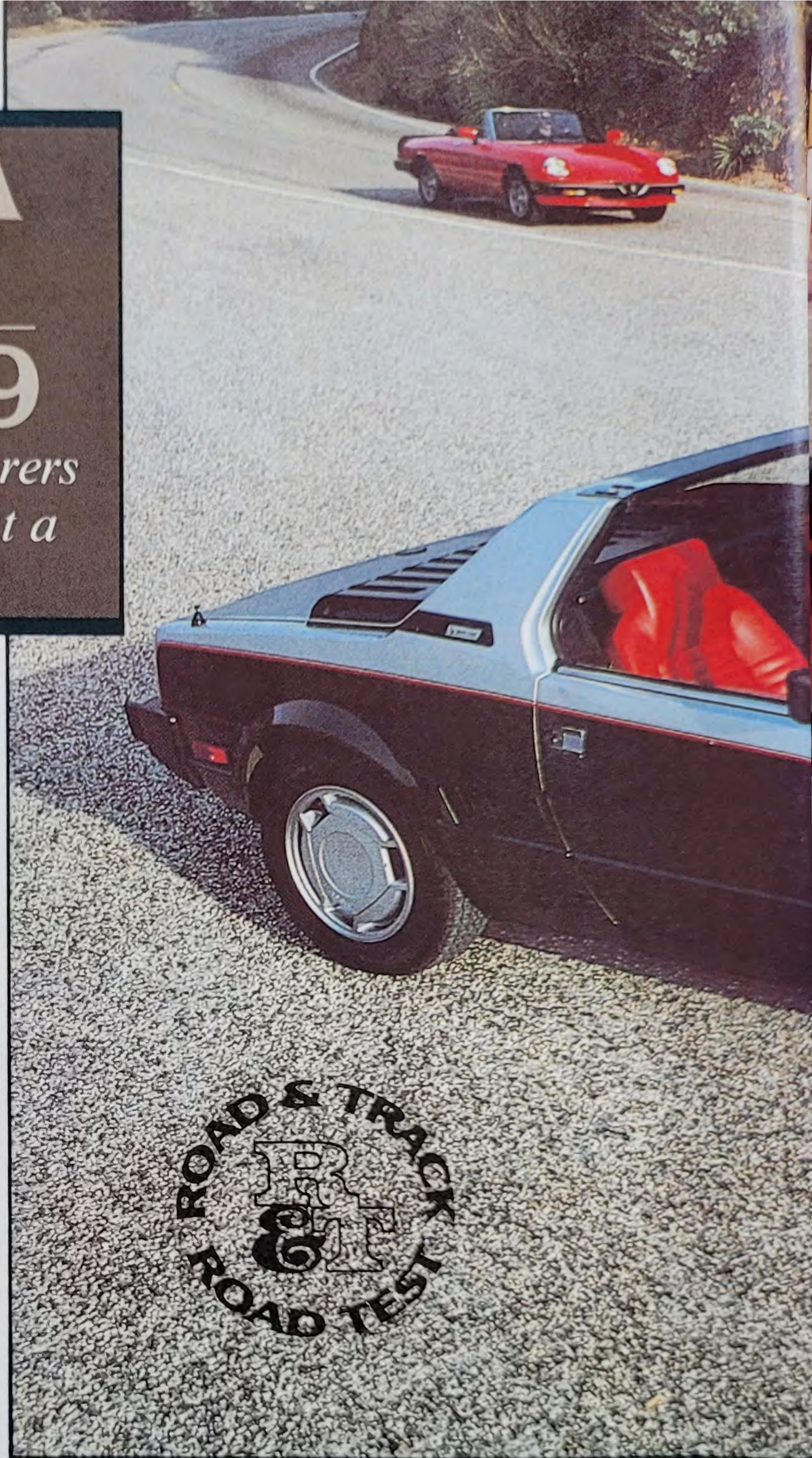
INTERNATIONAL AUTOMOBILE IMPORTERS has a pretty tough marketing problem. Despite having two well established and reasonably popular cars to sell in the United States, IAI must deal with the fact that the public sees the original manufacturer Fiat as having scurried off, tail between its legs, leaving the name in disrepute. After years of vacillation over the kind of importation, distribution and dealer effort that was required for this country (and never having had the kind of sedan that was needed for a high-volume dollar market), Fiat is gone from North America.

In Italy, the production of its two sports models, the 2000 Spider and X1/9, was turned completely over to Pininfarina and Bertone, the *carrozzerie* that designed and have been building the bodies since they made their debuts, in 1966 and 1972 respectively. Off came the old badges, on went the new. Pininfarina and Bertone were now fully fledged manufacturers, and IAI became their U.S. representative. In a sincere effort to rebuild the cars' images on a firmer basis, great attention has been paid to quality control, reliability and luxury equipment. Consequently the increased prices reflect significantly improved products, but the problem remains: Handsome though they are, the cars still look like the less-expensive Fiats they used to be.

Pininfarina Azzurra

THIS FRONT-ENGINE/rear-drive 2-seater is in its 19th year; originally the 124 Sport Spider and later the 2000 Spider, it now carries the name Azzurra (literally, Blue), after the Italian 12-Meter yacht in the 1983 America's Cup competition. The Spider received a decent amount of development when still a Fiat (performance was actually improved while the required emissions and crashworthy modifications were carried out) and IAI listed an impressive number of detail changes when it started selling the car in 1983, and even more are added for 1984. Many of these were invisible structural improvements, but the interior was made generally more efficient and luxurious, with leather upholstery, air conditioning, stereo sound system and electric window lifts as standard. The latest changes (beyond the Azzurra badge) include a modification to the Bosch L-Jetronic fuel injection for automatic high-altitude compensation, halogen headlights (later this year) and improvements to the already excellent folding top and its boot.

The Spider is an old friend, one that proves you don't have to throw away an earlier configuration just for the sake of change. It's a basically simple design with a friendly personality, brisk performance and great attention to detail. In comparison with the Alfa Romeo Spider we tested in the March 1983 issue, it's a much better updating of the classic concept. As the Editor wrote in his notes, the Azzurra is "much nicer in every way—better controlled suspension, the nicest gearbox I've shifted in months, and, overall, a crisp, tight, well put-together feel to the chassis."

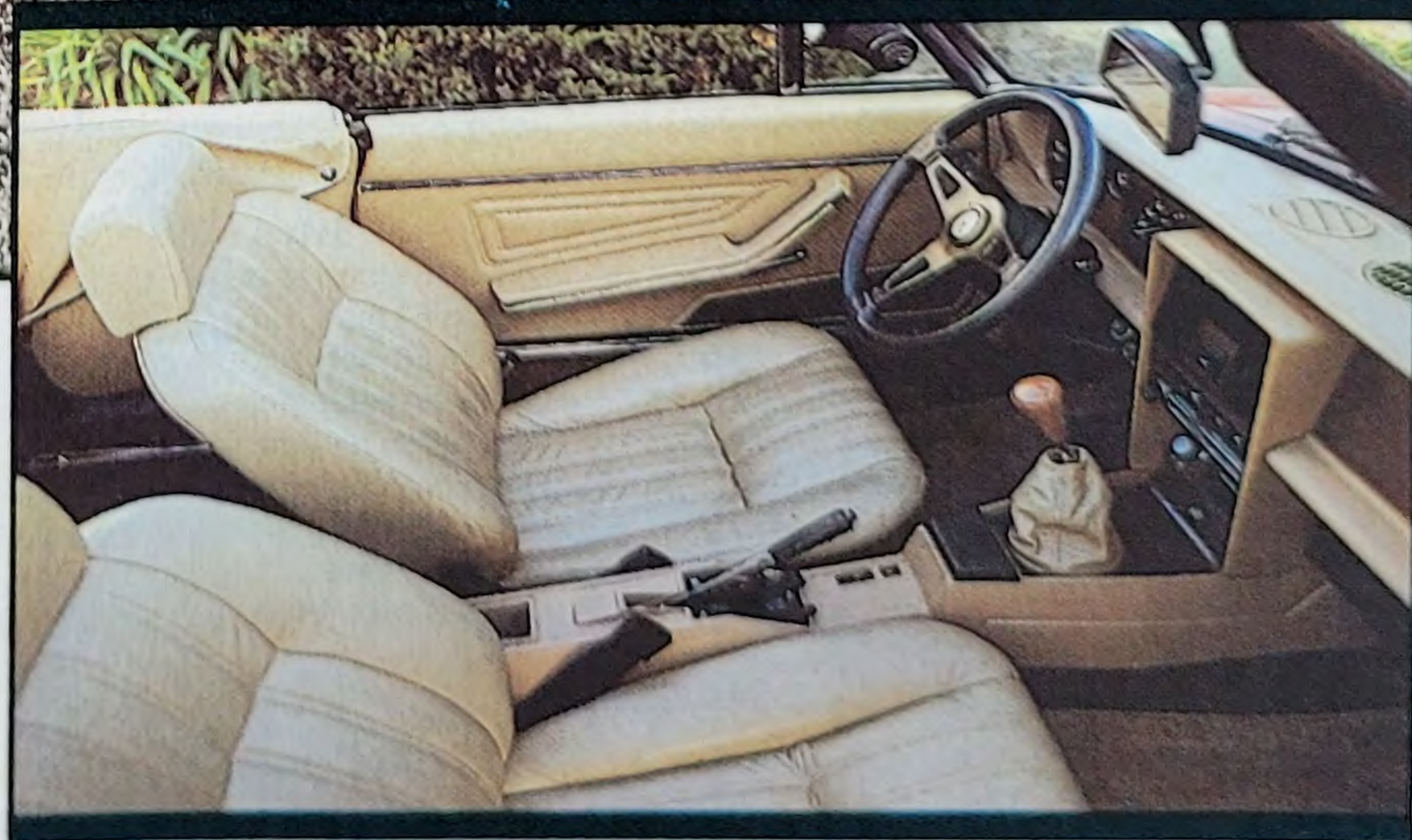


The typically Italian steering wheel/pedal relationship (the former requiring outstretched arms, the latter too close for those with long legs) isn't as extreme as on the Alfa and one can adjust to it fairly easily.

The engine has a crisp, tight sound and doesn't feel strained until about 5000 rpm, by which speed you're well underway; in any case there is usable torque and you don't have to buzz your ears off to get on down the road. Acceleration to 60 mph takes just over 11 seconds and the engine will go to its maximum of 6000 rpm in 5th, which means 106 mph.

With the fatter steering wheel rim and lots of grip from the Pirelli P6 tires, the Spider doesn't *feel* quite as nimble and maneuverable as the earlier models did, but that's only subjective and the numbers show a great improvement, including a really good slalom speed of 61.1 mph. There's a bit of tug required at slow speeds (as in parking lots) and initial understeer, but once you throw it you get quick, controllable response. Previous Spiders had excessive brake boost; now the braking is nicely balanced although there is a bit of pedal take-up before you feel it.

We also drove an Azzurra with an automatic transmission,



PHOTOS BY JOHN LAMM

one of the best that we've tried. With plenty of torque (and torque multiplication), it was an easy car to drive, ideal for commuting, yet responsive enough that it retained most of its sporting character. Definitely an alternative worth considering. The Pininfarina 1-man top remains a joy and model to the industry (not that the industry is even building soft tops in any numbers). It simply goes up and down (rear quarter windows, too) like anything, as easily as the balloon in Eeyore's jar. Materials

and fit are excellent throughout the interior, which has the same semi-classic appearance as the rest of the car. In order to incorporate more equipment than it was designed for in the Sixties, the instrument panel employs several modular, add-on units that are less than ideal but at least neatly fitted.

It says a lot for the original concept that the Spider is still a satisfactory automobile today. Considering the improvements, the \$17,000 price tag is not out of line, yet it places the car right

in the middle of sports car and GT competitors with more recent technology. On the other hand, you can't get a proper, fully open sports car for less.

Bertone X1/9

OF MUCH more recent concept, with transverse mid-engine layout and more modern ride and suspension technology, the Bertone X1/9's only direct link to the Azzurra is that it is also a 2-seater formerly manufactured by Fiat. Originally created by moving the 128 front-drive package to the rear, the X1/9 was later enlarged from a 1.3-liter with minimal power and only a 4-speed gearbox to an energetic 1.5-liter with five better-spaced ratios. In 1981 Bosch L-Jetronic fuel injection was added to make the engine fully worthy of the excellent chassis.

While the Azzurra suggests a relaxed ambience, the X1/9 has a more purposeful, technically oriented character, one that, with

its \$14,000 price, places it directly in competition with Japanese sports and GT cars. Now America's transverse mid-engine 2-seater, the Fiero, has entered the scene at a price substantially below the X1/9's. While the two cars have been compared directly, the only similarity is in the basic layout; the Pontiac is a wide 2.5-liter car with good torque and an emphasis (so far in its career) on GT cruising, while the Bertone is a narrow, hard-working 1.5-liter with maneuverability its long suit.

The same kinds of functional and quality improvements made by Pininfarina on the Azzurra have been employed by Bertone to bring the X1/9 up to snuff. In general they work well, the exterior finish (particularly the attractive 2-tone paint scheme) being of definitely higher quality and the interior leather and equipment being distinctly luxurious. The problem with the X1/9 is that it is still a very small car, physically too restricting for some people, and the semi-luxury configuration departs from the car's original concept as a low-cost plaything.

The X1/9's ride and roadholding are still very good, although not the state-of-the-art wonders that impressed us when new (it was exactly 10 years ago that we first tested one). The lack of self-centering on the steering makes the X1/9 feel a bit strange around town, although this isn't noticed when you are really



PRICE

List price, all POE	\$16,995
Price as tested	\$16,995
Price as tested includes std equip. (air cond, elect. window lifts, AM/FM stereo/cassette, leather upholstery)	

GENERAL

Curb weight, lb/kg	2385	1083
Test weight	2560	1162
Weight dist (with driver), f/r, %		54/46
Wheelbase, in./mm	89.8	2281
Track, front/rear	53.3/53.3	1354/1354
Length	162.9	4138
Width	63.5	1613
Height	50.0	1270
Trunk space, cu ft/liters	6.0	23
Fuel capacity, U.S. gal./liters	10.6	40

ENGINE

Type	dohc inline-4	
Bore x stroke, in./mm	3.31 x 3.54	84.0 x 90.0
Displacement, cu in./cc	121	1995
Compression ratio	8.2:1	
Bhp @ rpm, SAE net/kW	102/76 @ 5500	
Torque @ rpm, lb-ft/Nm	110/149 @ 3000	
Fuel injection	Bosch L-Jetronic	
Fuel requirement	unleaded, 91-oct	

DRIVETRAIN

Transmission	5-sp manual
Gear ratios: 5th (0.88)	3.43:1
4th (1.00)	3.90:1
3rd (1.36)	5.30:1
2nd (2.10)	8.19:1
1st (3.67)	14.31:1
Final drive ratio	3.90:1

CHASSIS & BODY

Layout	front engine/rear drive
Body/frame	unit steel
Brake system	8.9-in. (226-mm) vented discs front, 8.9-in. (226-mm) discs rear; vacuum assisted
Wheels	cast alloy, 14 x 5 1/2
Tires	Pirelli P6, 185/60HR-14
Steering type	worm & roller
Turns, lock-to-lock	2.7
Suspension, front/rear	unequal-length A-arms, coil springs, tube shocks, anti-roll bar/live axle on trailing arms, Panhard rod, coil springs, tube shocks

CALCULATED DATA

Lb/bhp (test weight)	25.1
Mph/1000 rpm (5th gear)	17.6
Engine revs/mi (60 mph)	3400
R&T steering index	0.92
Brake swept area, sq in./ton	243

ROAD TEST RESULTS

ACCELERATION

Time to distance, sec:	
0-100 ft	3.3
0-500 ft	9.5
0-1320 ft (1/4 mi)	18.1
Speed at end of 1/4 mi, mph	76.0
Time to speed, sec:	
0-30 mph	3.3
0-50 mph	8.1
0-60 mph	11.2
0-70 mph	15.1
0-80 mph	20.6

SPEEDS IN GEARS

5th gear (6000 rpm)	106
4th (6000)	93
3rd (6000)	70
2nd (6000)	46
1st (6000)	26

FUEL ECONOMY

Normal driving, mpg	24.0
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BRAKES

Minimum stopping distances, ft:	
From 60 mph	153
From 80 mph	286
Control in panic stop	very good
Pedal effort for 0.5g stop, lb	21
Fade: percent increase in pedal effort to maintain 0.5g deceleration in 6 stops from 60 mph	nil
Overall brake rating	very good

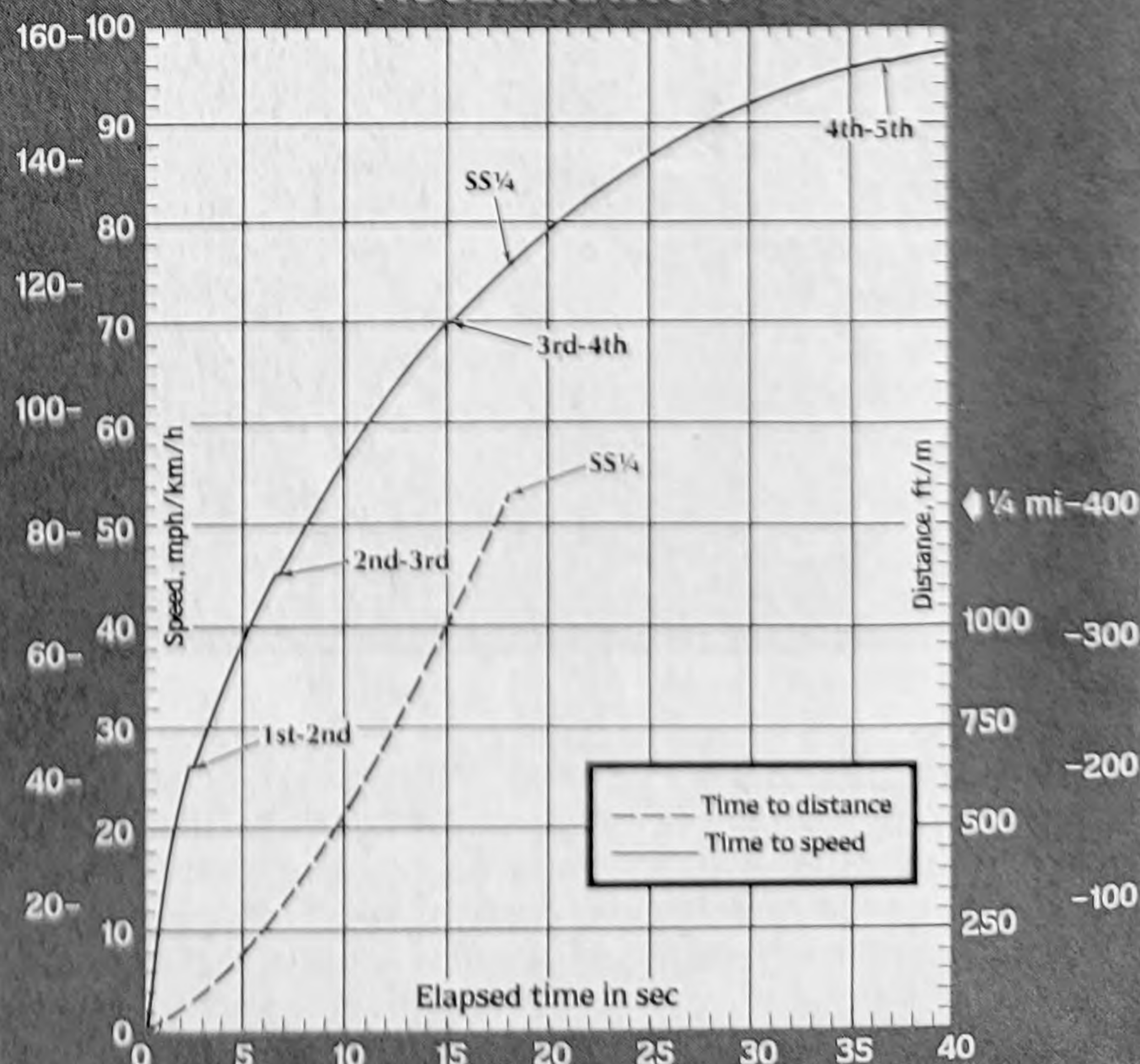
HANDLING

Lateral accel, 100-ft radius, g	0.760
Speed thru 700-ft slalom, mph	61.1

INTERIOR NOISE

Constant 30 mph, dBA	71
50 mph	76
70 mph	83

ACCELERATION



charging on a winding road. The lateral acceleration (0.804g) is better than the Pininfarina's but we were surprised not to be able to get through the cones as quickly in the slalom runs. The brakes performed well but a better pedal feel and less lag would enhance the driver's confidence in them.

The engine runs very well from cold starting, with no drivability problems. It's a smooth and easy revver and (like the Pininfarina's 2.0-liter four) only gets rough above 5000 rpm. The X1/9 will go on up to 6900 but nothing much is added above 6200 and this is just about where the engine runs out of power in 5th (at 108 mph). It's a pleasure (and a requirement) to use the gearbox a lot, although the remote feeling of the lever can sometimes make a gear hard to find.

The leather seats are extremely handsome (although one of the interior color choices, a lipstick red, is a bit loud) and their lowering by an inch adds to the head room. Despite the quality

of materials and fit the ergonomics are still marginal; the (backward-spinning) tachometer is blocked by the steering wheel rim and the shift knob is an esthetic horror that can spin around into awkward positions on the lever. IAI says a knob like the Ferrari 308's is on the way.

Conclusions

WE ARE certainly glad that IAI is keeping these two very pleasurable 2-seaters on the market. We regret the elevated prices but can't really say they are inflated. In the case of the Azzurra the emphasis on luxury equipment seems in keeping with the car's use, while on the X1/9 it takes it further from its basic purpose.

Given the original limitations of the existing cars, we cannot fault Pininfarina's and Bertone's sincere efforts to update and upgrade their products, nor IAI's to keep them alive in a difficult, fast-changing market. (In this connection, the IAI warranties—two years unlimited mileage, three years on paint and seven years against rust perforation—are laudable.) Both cars are attractive, with individuality and pleasure their main purposes, and those are qualities hard to come by in a day of efficient but look-alike GTs.



PRICE

List price, all POE	\$13,990
Price as tested	\$13,990
Price as tested includes std equip. (air cond, elect. window lifts, AM/FM stereo/cassette, leather upholstery, metallic paint, fitted luggage)	

GENERAL

Curb weight, lb/kg	2230	1012
Test weight	2380	1081
Weight dist (with driver), f/r, %	41/59	
Wheelbase, in./mm	86.7	2202
Track, front/rear	53.3/53.6	1354/1361
Length	156.3	3970
Width	61.8	1570
Height	46.8	1189
Trunk space, cu ft/liters	7.0	198
Fuel capacity, U.S. gal./liters	12.2	46

ENGINE

Type.....	sohc inline-4	
Bore x stroke, in./mm.....	3.40 x 2.52	86.4 x 63.9
Displacement, cu in./cc.....	91.4	1498
Compression ratio	8.5:1	
Bhp @ rpm, SAE net/kW	75/56 @ 5500	
Torque @ rpm, lb-ft/Nm	80/108 @ 3000	
Fuel injection.....	Bosch L-Jetronic	
Fuel requirement	unleaded, 91-oct	

DRIVETRAIN

Transmission	5-sp manual
Gear ratios: 5th (0.86)	3.51:1
4th (1.03)	4.20:1
3rd (1.46)	5.96:1
2nd (2.24)	9.14:1
1st (3.58)	14.61:1
Final drive ratio	4.08:1

CHASSIS & BODY

Layout	transverse mid engine/rear drive
Body/frame	unit steel
Brake system	8.9-in. (226-mm) discs front & rear; vacuum assisted
Wheels	cast alloy, 13 x 5J
Tires	Pirelli P3, 165/70SR-13
Steering type	rack & pinion
Turns, lock-to-lock	3.1
Suspension, front/rear	MacPherson struts, lower lateral links, compliance struts, coil springs, tube shocks/Chapman struts, lower A-arms with toe links, coil springs, tube shocks

CALCULATED DATA

Lb/bhp (test weight)	31.7
Mph/1000 rpm (5th gear)	17.6
Engine revs/mi (60 mph)	3400
R&T steering index	1.02
Brake swept area, sq in./ton	231

ROAD TEST RESULTS

ACCELERATION

Time to distance, sec:	
0-100 ft	3.6
0-500 ft	9.9
0-1320 ft (1/4 mi)	18.5
Speed at end of 1/4 mi, mph	73.0
Time to speed, sec:	
0-30 mph	3.6
0-50 mph	8.8
0-60 mph	12.3
0-70 mph	16.8
0-80 mph	23.6

SPEEDS IN GEARS

5th gear (6150 rpm)	108
4th (6900)	103
3rd (6900)	73
2nd (6900)	48
1st (6900)	27

FUEL ECONOMY

Normal driving, mpg	27.0
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BRAKES

Minimum stopping distances, ft:	
From 60 mph	154
From 80 mph	277
Control in panic stop	very good
Pedal effort for 0.5g stop, lb	33
Fade: percent increase in pedal effort to maintain 0.5g deceleration in 6 stops from 60 mph	nil
Overall brake rating	very good

HANDLING

Lateral accel, 100-ft radius, g	0.804
Speed thru 700-ft slalom, mph	58.4

INTERIOR NOISE

Constant 30 mph, dBA	66
50 mph	72
70 mph	77

ACCELERATION

