

Honey, I shrunk the 4x4

Mitsubishi Pajero

iO 1,8 5-dr

WITH the craze for sport-utilities showing no signs of waning – if anything, it's spreading – manufacturers are having to cover all the gaps to maximise their market coverage. One of the more popular areas is the mini-SUV, which provides a less daunting prospect than the full-on bundu bashers, for those who are more at home in the urban jungle.

Mitsubishi's baby Pajero, the iO, enters the fray with the benefit of a rally-raid heritage, courtesy of big brother. And there's the fillip of the full-size Pajero having dominated the SUV bracket in South Africa. But several other baby SUVs have stolen a march on the iO: Suzuki's Vitara was an early entrant, followed by Toyota's RAV4, the Honda CR-V, Land Rover Freelander and, later, the Grand Vitara.

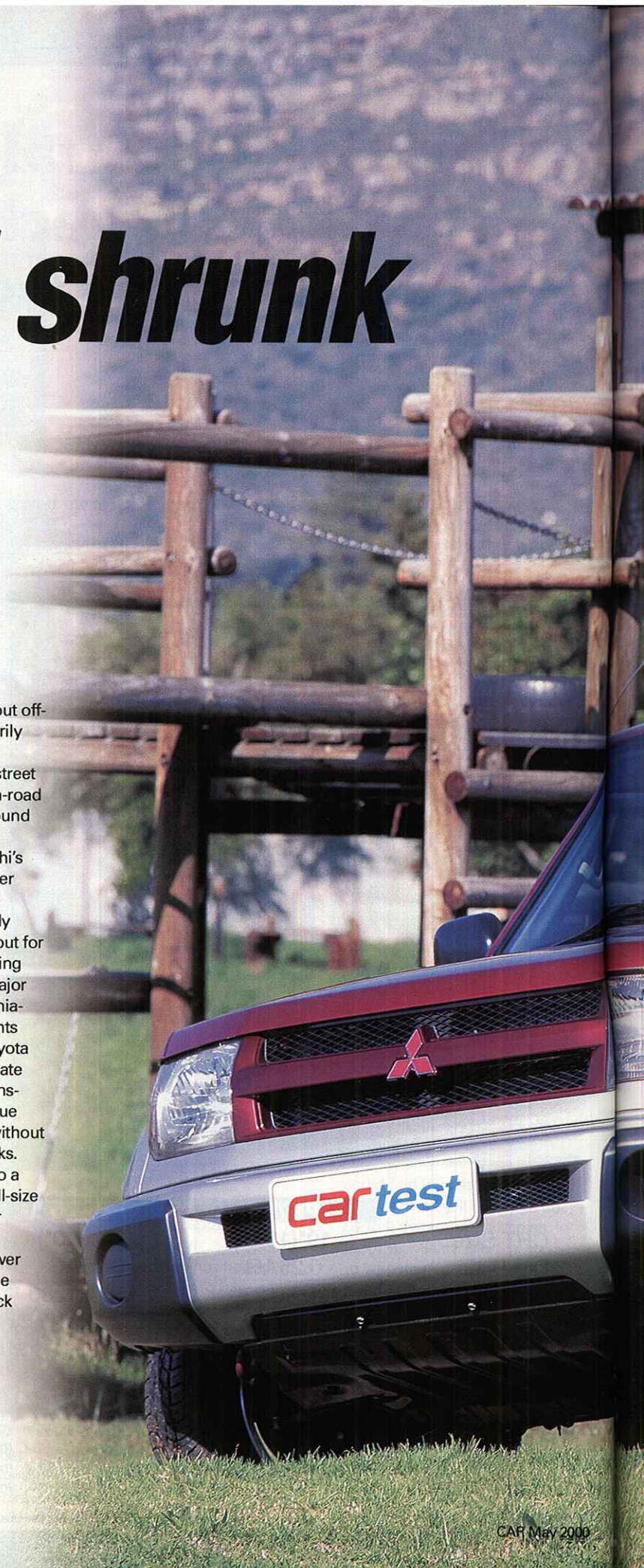
As the popularity of the RAV

and CR-V has shown, all-out off-road ability is not necessarily the deciding factor. Style certainly counts, as does street cred. Make no mistake, on-road ability and ease of use around town are vital.

So what does Mitsubishi's late arrival to market deliver that allows it to make up lost ground? We've already mentioned the pedigree, but for those who plan on venturing into the wilds there is a major plus point: the iO is, in miniature, what the heavyweights such as the Pajero and Toyota Land Cruiser are. Its separate chassis and low range transmission mark it out as a true off-roader, not just a toy without the ability to match its looks.

Speaking of looks, up to a point the iO echoes the full-size Pajero. Its two-tone colour scheme, with prominent wheelarch blisters and lower body plastic protection (the corners have practical black

"Holds the promise of superior performance off-road"







SPECIFICATIONS

ENGINE:
Cylinders four in-line
Fuel supply electronic multi-point injection
Bore/stroke 81/89
Cubic capacity 1 834 cm³
Compression ratio 9.5 to 1
Valve gear s-o-h-c
Ignition electronic
Main bearings five
Fuel requirement unleaded

ENGINE OUTPUT:
Max power ISO (kW) 86
Power peak (r/min) 5 500
Max usable r/min 6 500
Max torque (N.m) 165
Torque peak (r/min) 4 000

TRANSMISSION:
Forward speeds five plus low range
Low gear 3,97 to 1
2nd gear 2,14 to 1
3rd gear 1,36 to 1
4th gear 1,00 to 1
Top gear 0,82 to 1
Reverse gear 3,58 to 1
Final drive 4,86 to 1
Low range 1,55 to 1
Drive wheels rear or 4x4 with viscous coupling, lockable

WHEELS AND TYRES:
Road wheels 16 x6JJ alloy
Tyre make Bridgestone Dueler H/T
Tyre size 215/65 R 16
Tyre pressures (front) 180 kPa
Tyre pressures (rear) 180 kPa

BRAKES:
Front ventilated disc
Rear drum
Hydraulics ABS

STEERING:
Type rack and pinion, power-assisted
Lock to lock 3,0 turns
Turning circle 10,4 metres

SUSPENSION:
Front MacPherson strut
Rear rigid axle, five-link, coil spring

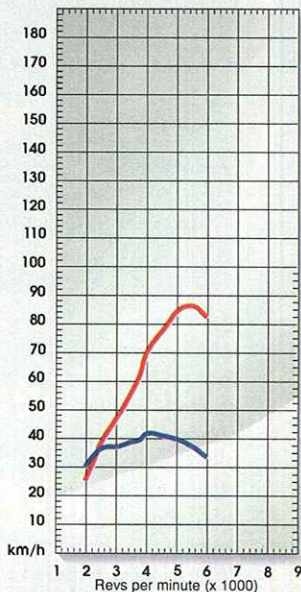
CAPACITIES:
Seating 4/5
Fuel tank 53 litres
Luggage trunk 232 dm³
Utility space 1 000 dm³

WARRANTY AND SERVICE INTERVALS:
3 years or 100 000 km
Service every 15 000 km

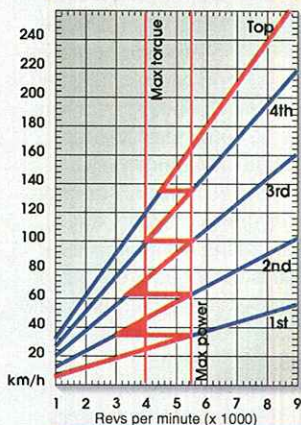
TEST CAR FROM:
Samcor, MMI division



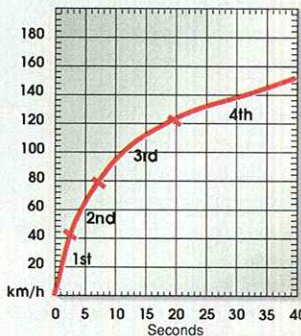
POWER AND TORQUE



ENGINE SPEED



ACCELERATION



TEST RESULTS

MAXIMUM SPEED (km/h):
True speed 162 at 5 161 r/min
Speedometer reading 167
(Average of runs both ways on a level road)
Calibration: 60 80 100 120
True speed: 58 78 97 118
Odometer error 0,28 per cent over

ACCELERATION (seconds):
0-60 4,50
0-80 7,59
0-100 11,97
0-120 18,62
1 km sprint 34,21
Terminal speed 143,7 km/h

OVERTAKING ACCELERATION (seconds):
3rd 3,86 4th 5,71 Top 8,18
60-80 4,08 5,89 8,20
80-100 4,53 6,53 9,93
100-120 6,83 7,77 11,78
120-140 - 11,62 n/a

FUEL CONSUMPTION (litres/100 km):
60 6,41
80 7,64
100 9,40
120 11,65
*Fuel index 13,16 litres/100 km
7,6 km/litre
403 km

Estimated tank range (*Calculated overall consumption)

BRAKING TEST:
From 100 km/h (seconds)
Best stop 3,3
Worst stop 3,5
Average 3,42
(Measured in seconds with stops from true speeds at 30-second intervals on a good bitumenised surface.)

RESERVE POWER (in top):

Speed	kW available	kW used	Total kW
80	23	15	38
100	23	24	47
120	23	39	62
140	15	60	75

GEARED SPEEDS

Low gear	34*	42
2nd gear	63*	78
3rd gear	99*	123
4th gear	135*	167
Top gear	164*	203

(Calculated at engine power peak* - 5 500 r/min and at max. usable r/min - 6 500 r/min)

INTERIOR NOISE LEVELS (db, A-weighted):

	Mech	Road
Idling	41	-
60	58	-
80	62	68
100	64	70
120	68	72

PERFORMANCE FACTORS:
Power/mass (W/kg) net 63,14
Frontal area (m²) 2,86
km/h per 1 000 r/min (top) 31,29
Mass as tested (kg) 1 362
(Calculated on "mass as tested", gross frontal area, gearing and ISO power output)

TEST CONDITIONS:
Altitude at sea level
Weather cloudy, cool, fresh breeze
Fuel used 95 octane unleaded
Test car's odometer 2 863

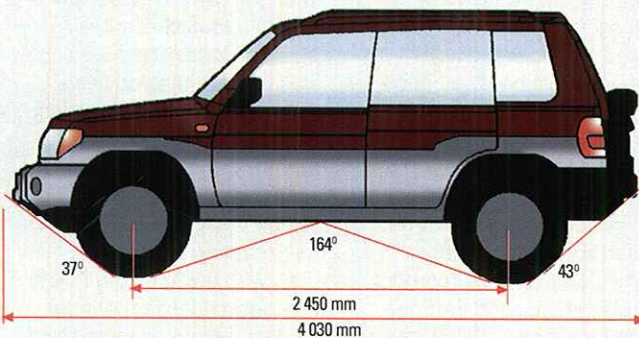
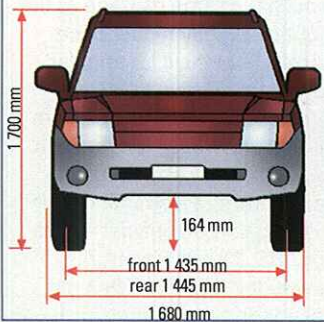
- ✗ **DESIGN**
Brash and a little dated
- ✓ **POWERTRAIN**
Smooth engine
On-the-fly shifts
- ✓ **COMFORT AND FEATURES**
Impressive spec
Stowage space
- ✗ **SEATS**
- ✓ **PERFORMANCE AND BRAKING**
Brisk
ABS
- ✗ **FUEL ECONOMY**
Below class average
- ✓ **RIDE AND HANDLING**
Generally refined
- ✗ **SOME BODY SHUDDER**
Limited ground clearance
- ✓ **VALUE FOR MONEY**
Well-priced package

bumper protectors), follows the tone of the bigger versions. The short overhangs give it a purposeful look. Not everything could be neatly shrunk, though, and the large window glass – albeit practical – isn't quite to scale, compared with big brother. Although the lines are neat and the overall shape suggestive of the RAV4, because of its angularity the Mitsubishi looks dated. Alloy 16-inch wheels are standard, and the spare is mounted on the rear door low enough so that it doesn't interfere with rearward vision.

The squared-off look continues on the interior, again in keeping with Pajero tradition. Unusually, cloth facing is used on the fascia, and this does seem impractical, even if the iO isn't going to be up to the window winders in mud. Dizzily patterned upholstery picks up the somewhat garish theme – and the seats themselves are not all that comfortable, either.

The iO is available in three-door or five-door bodyshells. The three-door gets the smaller 1,6-litre engine, whereas the model featured here has the 86 kW 1 834 cm³ four-cylinder. Technical high points include multipoint fuel injection, and maximum torque of 165 N.m at 4 000 r/min.

Standard convenience and luxury features on both models include power windows and mirrors, air-conditioner, central locking, and radio/cassette player. There is electric one-touch operation for all windows.





Facia finish in silvery plastic and carpet a touch bizarre. Five-door gets 86kW/165 N.m 1,8-litre.

Rivals

	OUR CHOICE		
	Mitsubishi Pajero iO	Land Rover Freelander	Suzuki Grand Vitara
price	R181 480	R195 500	R184 500
cyl/capac	4/1 834	4/1 796	4/1 995
power	86/5 500	88/5 500	94/6 000
torque	165/4 000	162/2 750	174/2 900
power/mass	63,14	60,48	84,0 est
engine revs/km	1 917	n/a	n/a
gears/drive	10/4	5/4	10/4
0-100	11,97	13,38	13,7 est
max speed	162	170	155 est
fuel index	13,16	10,20	11,0 est
boot	232-1 000	328-1 192	336-1 184

Despite its dinky dimensions, the iO provides plenty of stowage space. A dual cupholder between the front seats doubles as a holder for nine CDs, and those at the rear have cupholders too. There are door pockets all round, and two cubbies in the facia. The split rear seat folds flat to increase normal load space from 232 dm³ to 1 000. Practical touches at the rear include eight recessed hooks for the load area. And for those who have grumbled about vehicles being supplied with a sunvisor-mounted vanity mirror for the passenger side only, the iO breaks with tradition – it provides a mirror for the driver only...

Out on the test strip, the iO is a match for its class rivals. From standstill up to 100 km/h it surges along fairly briskly, reaching the marker in just under 12 seconds. But by the kilometre mark the effects of drag are being felt, suggesting it's better to drop down a cog or two than attempting to overtake in top gear.

Steady-speed petrol consumption of 9,4 litres/100 km at 100 km/h translates into a highish fuel index of 13,16 litres/100 km. Careful driving should allow the estimated 403 km tank

range to be comfortably exceeded.

The Super Select four-wheel drive system fitted to the iO is a redesigned, smaller version of the unit used in the Pajero proper. It allows "on the fly" switching between two-wheel drive and four-wheel drive in High range by means of the usual auxiliary shift lever.

Operation is the same as for the iO's big brother. It starts with the standard two-wheel drive high range mode, the next step being four-wheel drive, high range. The front wheel hubs lock automatically when 4wd is selected, and a viscous coupling controls the torque split to a maximum of 50/50 front to rear. However, for tougher going, 4wd lock-up can be engaged in high or low range to provide equal torque to front and rear.

Although it is quite likely that the iO will spend much of its life restricted to the wilds of suburbia, we had the opportunity during our test to look at the iO and a major competitor, the Land Rover Freelander, side by side off-road. In a pockmarked section that had both vehicles seesawing along, opposite corners alternating between plummeting earthwards and then heav-

ing skywards, the iO came out better despite the Freelander's supposedly superior wheel travel. When the terrain turned slushy, suddenly it became quite clear where the Mitsubishi's limitations lay: because of its poorer ground clearance it scuffed easily on *middelmannetjies*, and occasionally had a

hard time climbing out of ruts. Overall, because of its more versatile drivetrain, the iO holds the promise of superior performance off-road; but although the ramp breakover angle is fairly good, the actual ground clearance requires extra caution when approaching obstacles.

Mitsubishi's answer to the puzzle of combining true off-road competence without a bone-shaking ride around town is what it calls "semi-mono-coque construction". Engine bay, floor and cabin are welded into one unit mounted on a separate ladder frame. Logically, this should lead to greater rigidity and, consequently, greater ride refinement and safety.

The iO's otherwise refined ride is marred by a choppiness when the surface gets even slightly undulating. In the region of 120 km/h, this translates through the body as a distinct shuddering. However, roadholding is excellent for a mini-SUV and the steering provides good feel, even though it is light enough to make parking a pleasure.

As with the full-sized Pajero, the front suspension is independent. However, instead of

the bigger model's double wish-bones, the iO uses a set-up more noted for its compactness than for its wheel travel and ability to soak up punishment – the MacPherson strut. At the rear, the live axle is located by a complex five-link arrangement. It's a compromise biased towards on-road handling and ride comfort, without entirely neglecting the ruggedness and wheel articulation required off-road.

ABS braking is standard, and the cabin features the usual rigid saloon-car passenger safety cell surrounded by deformable body crumple zones to absorb impact. Other safety measures include a high-mounted stop light, and retractors that tension the front seat belts in the event of a collision.

Test summary

A competitively priced "proper" 4x4 with good accommodation for four people, the iO also offers acceptable road refinement.

Of the rival pair we have chosen, the Land Rover has the edge on off-road style and, despite being limited to just high ratio and some hill-tackling gadgetry, it is extremely capable off-road. Problem is, it costs much more.

Suzuki's Grand Vitara offers much the same package as the iO, at a slightly higher price. And where the iO is angular and a little dated, the Grand Vitara looks sleek and contemporary. However, the Suzuki's substantially better performance and size advantage have to be balanced against its lack of ABS. It's a close call, but in everyday running we would plump for the Mitsubishi. ●