

MITSUBISHI PAJERO

V6 3000 GLS

Off the beaten track, this luxury 4x4 has the ground clearance and suspension to cope well. It's also a good long distance cruiser, though it could do with a little more power...

A VEHICLE very much in the luxury off-roader class, the Mitsubishi Pajero V6 3000 semi-high roof wagon featured in this test competes head on with the likes of the Range Rover.

And like the Range Rover series, it is often bought as an indulgence for use as a town station wagon. Even in the high density metropolis of Tokyo the short-wheel base Pajero, not sold here, is a popular city runabout. Certainly, from the point of view of town driving requirements, this doesn't make much sense... but then neither does a powerful sports car.

Both categories of vehicle have their own brand of driving pleasure, regardless of whether they are used to their full potential or not. With large 4x4 luxury wagons such as this, the attraction seems largely to revolve around the spaciousness and comfort, coupled with a high altitude stance and compounded by an impression of monolithic invincibility.

Currently the V6 3000 semi-high roof is imported in small batches by Samcor - and most vehicles are usually pre-sold before arrival, when the word gets around that a new shipment is on the way. Though imports are restricted to the semi-high roof petrol-engined long-wheel base version, on other markets there is the alternative of 2,5-litre turbo-intercooled diesel power as well as short-wheelbase metal- and canvas-top variants. The same vehicles are also sold under an alternative model name, Shogun, on some overseas markets.

Our last test of a Pajero was for our April 1985 edition, when we featured the previous model which had squarer styling and was powered by Mitsubishi's 2,6-litre counter-balanced four-cylinder motor. This was the same unit that had been used in the Colt Galant sold on the local market.

Though the 1985 Pajero was virtually the same in concept, the latest is altogether superior in terms of ride, performance and off-road capability. For

KEY FIGURES

Maximum speed	165 km/h
1 km sprint	35,41 sec
Fuel tank capacity	92 litres
Litres/100 km at 100	12,88
Estimated fuel range	510 km
*Fuel index	18,03
Engine revs per km	1 750
Odometer error	2,72 per cent
National list price	R198 190
(* Consumption at 100 plus 40%)	over

starters, it's equipped with a new 3-litre V6 which delivers over 200 N.m of torque from 1 000 r/min, eventually peaking at 236 N.m and 4 000 r/min. Standard fitment tyres are now fat 265/70 SR 15s as opposed to 215 SR 15s fitted to the previous test vehicle.

IMPROVEMENT

Another significant improvement is the change to a three-link coil sprung live-axle instead of the previous live-axle and leaf spring set up. Up front the Pajero retains a double wishbone torsion bar set-up, and as before there are anti-roll bars front and rear.

Whereas the previous Pajero looked a trifle boxy, the test vehicle has Californian lifestyle good looks. The smooth metal skin is supplemented by plastic side mouldings and extension wheel arches as well as integrated plastic and metal bumpers. The spare wheel, fixed to the side-hinged rear door, is easy to get at, and suits the Pajero's looks. Polished 15-inch alloy wheels fitted with the 265/70 tyres are standard.

Patently intended as an all-terrain vehicle rather than just an off-roader, the test vehicle was plushly upholstered in grey leather matched by an equivalent level of luxury accessories.

The equipment level included electric door mirrors, airconditioning, tilt adjustable power steering, sprung front seats with heaters, a leather covered steering

wheel, central locking, power windows, a chromed tool kit with penlight torch and plug in light, rear screen heater and wipe/wash and front and rear arm-rests and headrests. In keeping with its off-road capability, passengers are provided with strong grab-handles as an aid to climbing in and out of the vehicle, as well as for support during rough road travel.

Including its two occasional fold down seats at the rear, the Pajero semi-high roof wagon provides seating for seven, but the ideal complement for maximum comfort is four. To provide wagon loading capability, the second row of seats can be folded flat to give a huge 1360 dm³ load volume (ISO blocks).

As might be expected, the overall design and finish of the Pajero looked very good. With typical Japanese commercial flair and technical competence, Mitsubishi have produced a rugged 4x4 vehicle with lots of state of the art automotive hardware on board. But how many off-roaders would approve of the electronically managed fuel injection V6 for use in the bundu is open to question, since most would no doubt be happier with a simpler carburettor-fed engine which can be worked on with a minimum of specialised knowledge or equipment.

Mitsubishi's "Super Select" four-wheel drive system has a synchronised front freewheel differential which has the advantage of allowing on the move shifts from two-wheel drive to four-wheel drive at speeds under 100 km/h. Drive to the front axle is taken off the gearbox via a Morse chain instead of gears, and the lockable centre diff is positioned between the front and rear wheel take-offs.

On other markets the Pajero/Shogun can also be ordered with 4x4 adapted ABS braking, variable rate shock absorbers and a differential lock at the rear.

To make 4x4 life a little easier, the test vehicle had automatic locking hubs.





Above left and right: The Pajero is equipped with an extra cigarette lighter socket and this handy lead light is standard equipment.

The Pajero's driver console allows good instrument visibility and the fascia is strong and well finished though design is a mite fussy.

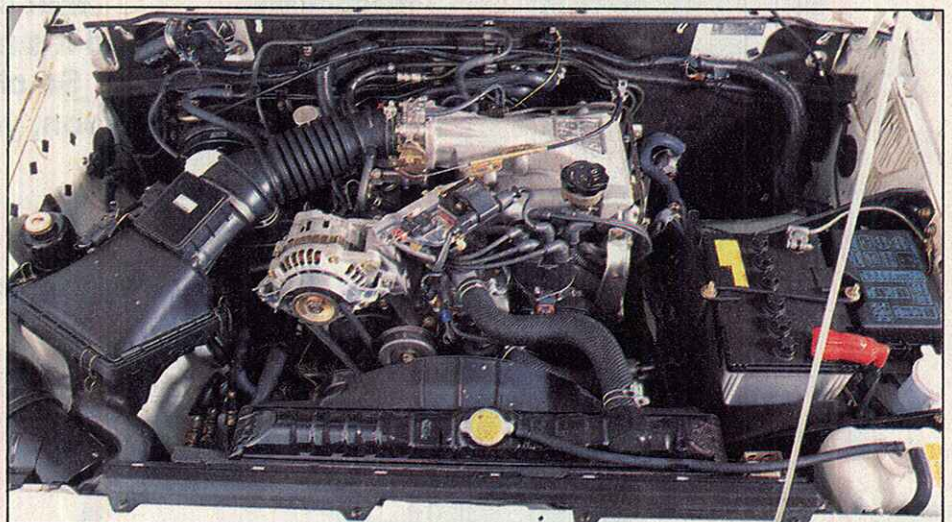


Ventilated discs up front and a drum-in-disc set up at the rear were further refinements.

With seats folded, the Pajero offers a luggage-eating 1 360 dm³ load volume (above left) while the fold down rear seats are for occasional use (above). The V6 motor is fuel injected and has a peak power of 110 kW at 5 000 r/min (below).

A scrutiny of the Pajero's underside revealed a rugged conventional ladder frame chassis and, barring an exposed fuel filter connection sticking out from the crossmember behind the gearbox, it looked much better protected than most. Minimum ground clearance is a confidence inspiring 215 mm. In addition, the front suspension members were in a horizontal line with a strong sled-shaped underguard plate and no sharp projections for a smooth angle of attack on off-road obstacles.

Besides normal coatings, the underside was also sprayed with a softish wax which would no doubt need replacing from time to time if the vehicle were used for serious off-road work.



CONVENTIONAL

Four-wheel drive is engaged in the conventional fashion via a second gear lever and, because of the incorporation of a centre differential and a viscous coupling unit, the Pajero driveline operates like a full time four-wheel drive system when it is engaged without centre differential lock. Mitsubishi claims that four-wheel drive high ratio provides "high speed driving abilities on a par

with passenger cars" and "provides enhanced safety on wet roads". But the diff lock may be engaged in either high- or low-range for low traction surfaces only.

Other practical features include a strong tow hook at the rear and a mounting place for a winch behind the front bumper.

The stubby front end with short

front overhang allows an approach angle of 40,5° and the departure angle of 26,5° is good by wagon standards.

In the interior, the second and third seats can be folded down to form a bed and there is a separate 12-volt power socket for accessories. The front seats are especially comfortable and have their own "suspension" in the form of an adjustable gas spring. No



Pajeros are imported with either cloth or leather upholstery. Front seats are gas sprung.



The centre bench seat is moulded and has an armrest and handy fold-down food holders.



The centre backrest folds forward to allow access to the occasional seats at the rear.

doubt these seats are designed to make things more comfortable over rough terrain, but they also make for a very smooth ride on tarred roads – much smoother than most cars in fact.

As we intimated earlier, the Pajero is a pleasant vehicle to drive in normal city conditions. It has extra large glass areas, a high stance and due to its size and weight, a feeling of security.

By off-road vehicle standards it also proved a comfortable cruiser with a top speed of 165 km/h and good straight-line stability. Considering the class that it slots into, we felt that a larger capacity engine with more power and torque would make it more competitive. With a weight of 2000 kg and an engine developing 110 kW, the Pajero lags behind direct rivals such as the Jeep Cherokee, Isuzu Trooper, Land Rover Discovery, Nissan Patrol and Toyota

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Landcruiser in the power-to-weight ratio stakes. The positive side of the equation is that fuel consumption was good for a 4x4 wagon, with a fully laden long distance cruising figure of 15,36 £/100 km. In urban driving conditions we recorded an overall figure of 18,29 £/100 km which is very close to our fuel index figure of 18,03 £/100 km.

GRUNT NEEDED

The same disadvantage of relatively small engine size shows up in off-road conditions. The shortfall is highlighted by the Pajero's very capable suspension, which allows plenty of wheel travel for keeping all four wheels in contact with the ground when travelling over uneven terrain. The 215/65 Bridgestone Desert Duellers also had notably good flotation over soft sand. It was in soft sandy conditions and using four-wheel drive in high range that we noted that a higher torque output could have been used to good advantage. More grunt would have saved the need to eventually grind along in low ratio which made driving more awkward and probably lowered fuel consumption.

Nevertheless the Pajero is an extremely refined vehicle to negotiate rough terrain in, regardless of whether it's hot outside or not. With its powerful air-conditioner distributing cool air throughout the interior via front and rear fan systems, driver and passengers can travel in a high degree of comfort. Thanks to the gas-sprung front seats, those in front are made even more comfortable. Power steering and relatively low pedal effort also contributed to making life easier for the driver.

Despite a slightly fussy look the Pajero's fascia is essentially functional and business-like. The only really superfluous indicators were housed in a small centre nacelle and comprised an inside and outside temperature gauge, inclinometer and altimeter. Sun shining on the top of the nacelle seemed to affect the temperature indicator, since when this happened it would indicate a higher temperature for the inside than the outside, even when the air-conditioner had chilled the interior. While the altimeter (if accurate) might be considered of marginal use, the inclinometer on the other hand would seem to be a gimmick to give the impression of extra value.

Once adjusted to our requirements, we found the driving position particularly pleasant. The Pajero's controls are man-sized but easy to operate and all round visibility, including the view of the instruments, was good. Thanks to the extra large electrically adjustable door mirrors, the partial obscuring of the rear screen by the spare tyre was not a problem.

TEST SUMMARY

As we remarked earlier, the Pajero is a good long distance cruiser, but where

it will probably really come into its own is for commuting in the country over dirt roads, since it has the ground clearance and suspension to do this with ease while suffering much less wear and tear than an ordinary vehicle would.

And, when off-road travel becomes necessary the Pajero may be a mite low on power and torque, but it's still in the big doggy class.

(Graphs overleaf) ●

SPECIFICATIONS

ENGINE:	
Cylinders	V6
Fuel supply	electronic fuel injection
Bore/stroke	91,1/76 mm
Cubic capacity	2 972 cm ³
Compression ratio	8,9 to 1
Valve gear	
Ignition	electronic
Main bearings	
Fuel requirement	97-octane Coast 93-octane Reef
Cooling	water

ENGINE OUTPUT:	
Max power I.S.O. (kW)	110
Power peak (r/min)	5 000
Max usable r/min	6 000
Max torque (N.m)	236
Torque peak (r/min)	4 000

TRANSMISSION:	
Forward speeds	five plus transfer gear
Gearshift	floor
Low gear	3,918 to 1
2nd gear	2,261 to 1
3rd gear	1,395 to 1
4th gear	1,000 to 1
Top gear	0,829 to 1
Reverse gear	3,925 to 1
Low range	1,925 to 1
Final drive	4,875 to 1
Drive wheels	rear

WHEELS AND TYRES:	
Road wheels	alloy
Rim width	7 JJ
Tyre make ..	Bridgestone Desert Dueller
Tyre size	265/70 SR 15
Tyre pressures (front)	180 kPa
Tyre pressures (rear)	200 kPa

BRAKES:	
Front	ventilated discs
Rear	discs
Hydraulics	dual circuit
Boosting	vacuum
Handbrake position	between seats

STEERING:	
Type	ball and nut, power assisted
Lock to lock	3,6 turns
Turning circle	11,8 metres

MEASUREMENTS:	
Length overall	4 725 mm
Width overall	1 785 mm
Height overall	1 870 mm
Wheelbase	2 725 mm
Front track	1 465 mm
Rear track	1 480 mm
Ground clearance	215 mm
Licensing mass	1 890 kg
Mass as tested	2 000 kg

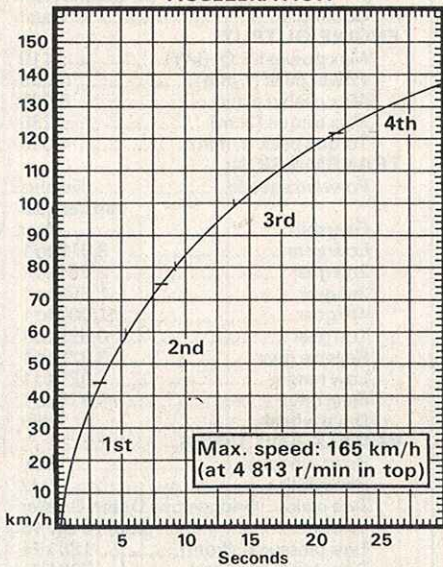
SUSPENSION:	
Front	independent
Type	coils, double wishbone and torsion bar
Rear	live axle
Type	coils, 3-link

CAPACITIES:	
Seating	4/5
Fuel tank	92 litres
Luggage trunk	720 dm ³
Utility space	1 360 dm ³

WARRANTY:	
TEST CAR FROM:	
Samcor	



ACCELERATION



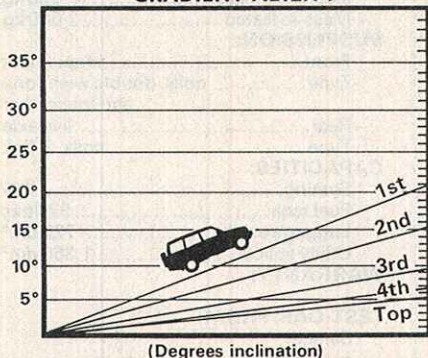
PERFORMANCE FACTORS:

Power/mass (W/kg) net 55
 Frontal area (m²) 3,34
 km/h per 1 000 r/min (top) ... 34,28
 (Calculated on "mass as tested", gross frontal area, gearing and I.S.O. power output.)

TEST CONDITIONS:

Altitude at sea level
 Weather hot, light wind
 Fuel used 97 octane
 Test car's odometer 2 266

GRADIENT ABILITY



MAXIMUM SPEED (km/h):

True speed 165
 Speedometer reading 173
 (Average of runs both ways on a level road.)
 Calibration:
 Indicated: 60 80 100 120
 True speed: 54 75 93 113

ACCELERATION (seconds):

0-60 5,35
 0-80 9,29
 0-100 13,75
 0-120 21,53
 1 km sprint 35,41
 Terminal speed 143,8 km/h

OVERTAKING ACCELERATION:

	3rd	4th	Top
40-60	3,94	5,94	7,81
60-80	4,15	5,95	8,20
80-100	4,67	6,63	9,05
100-120	7,50	7,76	10,86

FUEL CONSUMPTION (litres/100 km):

60 8,69
 80 10,78
 100 12,88
 120 16,38

BRAKING TEST:

From 100 km/h

Best stop 3,4
 Worst stop 3,6
 Average 3,51

(Measured in seconds with stops from true speeds at 30-second intervals on a good bitumenised surface.)

GRADIENTS IN GEARS:

Low gear 1 in 2,6
 2nd gear 1 in 3,7
 3rd gear 1 in 5,9
 4th gear 1 in 12,5
 Top gear 1 in 11,1

(Tabulated from Tapley (x gravity) readings, car carrying test crew of two and standard test equipment.)

GEARED SPEEDS (km/h):

Low gear	36*	44
2nd gear	63*	75
3rd gear	102*	122
4th gear	142*	171
Top gear	171*	206

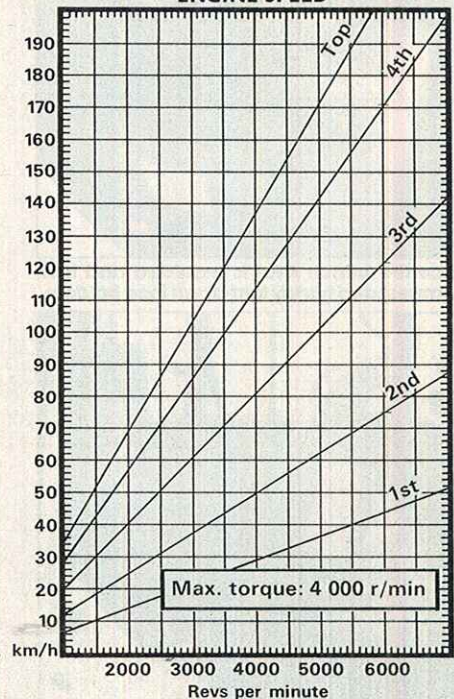
(Calculated at engine power peak* - 5 000 r/min and at max. usable r/min - 6 000 r/min.)

INTERIOR NOISE LEVELS:

	Mech.	Wind	Road
Idling	-	-	-
60	59	-	-
80	64	76	67
100	68	79	71

(Measured in decibels, "A" weighting, averaging runs both ways on a level road: "mechanical" with car closed; "wind" with one window fully open; "road" on a coarse road surface.)

ENGINE SPEED



BRAKING DISTANCES

