

4WD BUYERS GUIDE

NISSAN PATHFINDER

MEDIUM WAGON



The current Nissan Pathfinder was released in June 2010, with increased performance from its 2.5-litre diesel engine. This revamp that included the demise of the V6 petrol engine was the first major change to the model since its 2005 launch. That release was followed six months later by a V6 diesel version.

The 2010 Pathfinder's 2.5-litre diesel engine capacity was unchanged, but peak power output rose to a claimed 140kW, up 14kW in the new YDK3 engine and peak torque went up to a stated 450Nm, up from 403Nm.

This engine was standard on the three model grades - ST, ST-L and Ti – and contributed to a tow-rating increase up to 3000kg. Nissan also claimed that fuel consumption and emission levels had declined, while overall refinement improved.

The Nissan Pathfinder had a new face, thanks to a revised bonnet, grille and a new bumper assembly that added 80mm to overall length.

Further enhancements included a new headlight design and Ti models featured Xenon headlights, with auto levelling and headlight washers.

Pathfinder ST-L and Ti models scored electric folding door mirrors.

Nissan Pathfinder ST-L picked up features previously restricted to Ti models: electrically adjustable and heated front seats, leather seat trim, driver seat and door mirror memory settings, and rear parking sensors.

Pathfinder Ti got revised dials and all-wheel-drive switchgear controls, and the wood grain trim was replaced by metallic panels.

All 2010 Pathfinder models were equipped with Bluetooth® hands-free phone system with steering wheel controls and illuminated steering wheel audio controls and an auxiliary MP3 player input jack. Pathfinder Ti came with a reversing camera, hard-drive-based Satellite Navigation system, with touch 7-inch screen control and 9.3GB “Music Box” hard drive that could also read DVDs. The rear seat DVD entertainment unit remained as part of the Ti model specification.

The Pathfinder already had standard Vehicle Dynamic Control (VDC) and front and side airbags, and the 2010 upgrade added curtain airbags to the ST-L models.

RRPs of the Pathfinder ST model remained unchanged, starting from \$48,490. RRP of the ST-L models rose by \$3500 to start at \$56,490 and the Ti model started at \$65,990.

The revamped Pathfinders drove more smoothly than the previous models, but Nissan’s claimed 2005 torque figures weren’t borne out by our tow-testing, so the upgrade was welcome.

Some 2.5-litre engines have a serious smoking problem that Nissan refuses to acknowledge, despite at least one court case brought by emissions authorities. If you’re buying a used Pathfinder make sure you check it out with a heavy foot from a standing start. Fines for making black smoke are no joke.

V6 Diesel Power



The Pathfinder Ti 550 was additional to the four-cylinder models, powered by a new Renault-Nissan Alliance V6 turbo-diesel.

Nissan claimed the 3.0-litre engine produced a class-leading 170kW of power and 550Nm of torque from a low 1750 rpm, with 9.5-litres per 100km on the combined cycle, while meeting stringent Euro 5 emissions levels.

The V9X engine was released at the Geneva Motor Show in March 2010, after a four-year development program. It had an untypical 65-degree vee angle, which allowed enough space for the single turbocharger to be mounted within the vee.

Aluminium was considered, but rejected on the basis of necessary reinforcement, in favour of compacted graphite iron (CGI). Although heavier than a pure alloy block, CGI meant there was no need to add stiffening ribs or extra sound deadening material.



The compression ratio was lowered to 16:1 to benefit not just economy and emissions but also noise, vibration and harshness (NVH), while internal engine friction was reduced by the use of ultra-smooth components such as a micro-finished forged steel crankshaft.

The V9X employed a large turbocharger, an intercooler and the latest generation Bosch common-rail fuel injection system that used piezo injectors at up to 1800 bar.

To achieve Euro 5 compliance, the engineers opted for cooled Exhaust Gas Recirculation (EGR), in conjunction with a catalytic converter and a diesel particulate filter (DPF) in the same container.

To clean the DPF a seventh fuel injector was positioned in the exhaust system and operated automatically when soot builds up in the filter, to burn it off.

Oil change intervals can stretch to as much as 20,000 km for most customers.

The new top-specification Pathfinder had additional features, including a seven-speed automatic gearbox, privacy glass, upgraded DVD player, auto headlights, sunroof wind deflector, rain-sensing wipers, smoked bonnet protector, side moulding and V6 badges, rear fog lamps and body coloured heated door mirrors, nine-speaker Bose audio system and an anti-theft alarm. RRP was \$75,990.

The new powertrain lifted the Pathfinder's towing capability to 3500kg and when we checked it with only 1500kg behind we hardly knew the trailer was there.

Off road the low-speed torque meant most obstacles could be conquered at idle revs and sand driving was a blast.

The only downside of the engine was an irritating 'lag' between accelerator movement and engine response. The use of a big, single turbo involves compromise, we know, but we didn't expect such an old-fashioned response time from a brand new engine design.



Previous Models

The December 1986 Pathfinder took a leaf out of the HiLux/4Runner book, using what were basically Navara ute panels and chassis in a 4WD wagon. The styling was unlike other Japanese vehicles, because it was designed at Nissan's California studios

In February 1988, the range was expanded, to include DX and ST specification levels.

In January 1990, the DX equipment level was raised to almost ST level, while the ST was equipped with power windows and central locking.

The next upgrade was in October 1992, when a four-door body was released, with 3.0-litre V6 power and an automatic transmission option. Variable damping shock absorbers were standard on the Ti.

1994 models are distinguished by a new interior, with a curved dashboard.

The Ti version scored aluminium wheels, with optional CD stacker and leather upholstery. The original Pathfinder's on road performance was awful, thanks to Nissan's carburettored Z24 four-cylinder petrol engine, which put out 74kW at 4800 rpm and 177Nm at 2800 rpm. The engine was a good bush slogger, but a slug on the highway. Only the ST came with a limited slip rear differential.

The 3.0-litre V6 introduction was timely and transformed the Pathfinder. The engine had better on and off road characteristics than the V6 in the 4Runner, while the Pathie's handling was also better than the Toyota's.



In November 1995, a completely new Pathfinder was released: the first monocoque (unit construction) large 4x4 wagon out of Japan. Two models were available: the RX and the Ti, with both having the same 3.3-litre petrol V6/automatic transmission powertrain.

The previous Pathfinder had a tough row to hoe, because it started off with lacklustre performance and came up against the marketing might of Toyota which was pushing the 4Runner. When it did get the right engine, it then had to compete with a V6 Toyota offering, plus the four-litre, bargain-priced Jeep Cherokee.

On top of that, the Pathfinder was stuck with a part-time 4WD system while others were benefiting from full-time or on-demand systems.

Nissan corrected the 4WD drivetrain situation in February 1999, with the introduction of All-Mode 4WD. This drive system is still used in the current Pathfinder and uses a multi-plate wet clutch in the transfer case, to distribute torque automatically in the 'Auto' setting to as much as 50:50, front:rear.



At the same time as All-Mode was introduced Nissan upgraded the Pathfinder by introducing a CD player.

The next upgrade came in 2002, with a facelift that included roof rails and cross bars on the Ti and cruise control. That package was enhanced further in 2003 by the addition of leather upholstery to the Ti model.

On and Off Road (pre 2005)



Compared with the previous Pathfinder, the 1996 model's V6 power of 125kW at 4800 rpm was a 12kW improvement, thanks to a displacement increase up to 3.3 litres, from 3.0 L. Peak torque was 266Nm - up only 18Nm - but produced at a very useful 2800rpm, compared with a previous 4000rpm.

Matched to a new electronically-controlled four-speed automatic transmission, the modest outputs translated into rapid progress.

What made the Pathfinder such a pleasant vehicle to steer on all road surfaces was its balanced handling and sharp steering. The Pathie was the first 4WD wagon to have the benefits of McPherson strut front suspension in conjunction with a coil-sprung live axle at the back.

Unfortunately - like GM-Isuzu did with the Jackaroo and the Frontera - Nissan cut back on powertrain sophistication with the Pathfinder, to keep costs down, so a pre-1999 Pathfinder could be in limbo on ground that was too firm for 4WD engagement, but giving marginal grip in 2WD - such as tight, winding dirt roads, or bitumen that had random ice patches.

In such conditions, most of its opposition machines could be in full-time 4WD or have automatic or manual selection of it.

Since the pre-1999 Pathfinder had no central differential or viscous coupling, it could be put into 4WD only in true off-road conditions, or transmission damage would occur.

In low-range driving conditions, Pathfinders were surprisingly agile, with much better front suspension travel than the equivalent Pajero, for example.

Despite their old-fashioned disc/drum braking arrangement, Pathfinders pulled up well - with or without the ABS option - but were badly affected by water crossings, which doused the rear drums.

Fuel consumption when new varied from around 13L/100km for bitumen cruising, up to around 30L/100km, for off-road slogging.

The Pathfinder's driving ergonomics were very good, with an excellent driver's position and well-placed instruments and controls. The V6 models had quiet interiors, with little mechanical or road noise intrusion.

Of the early models, the ST is the preferred used-vehicle buy, because standard equipment included a tachometer, tilt steering column, a height-adjustable driver's seat and an external spare wheel carrier.

An infuriating cost-cut saw manual door locking on the 1996-model RX, but without pop-up door buttons. You needed long arms to reach inside the front door openings to lift the rocker switches, halfway down the rear doors. This situation was rectified in October 1997, when central locking was incorporated.

Pathfinders always had funny tailgates, but the original model's was easier to live with than post-1996 models', which had insufficient travel on the lift-up tailgate, putting the sharp edge of the door right at temple level for the 1.8-metre-tall brigade.

Nissan Pathfinders don't have serious in-service problems and many have never been off road, making them ideal used-4WD buys. A consistent service history is the best guide to vehicle condition. The 1995-2005 Pathie range was one of the better 4x4-wagon efforts.

In July 2005 a completely new, European-built Pathfinder was released.

The 2005 Pathfinder came with a choice of two powertrains: a 4.0-litre DOHC V6 petrol engine that produced 198kW @ 5600rpm and 385Nm @ 4000rpm, mated to a five-speed automatic transmission; and a 2.5-litre common-rail turbo diesel engine that produced 128kW @ 4000rpm and 403Nm of torque @ 2000rpm, with a six-speed manual or five-speed automatic transmission.

The 2005 Pathfinder reversed Nissan's trend into monocoque bodywork, coming with body-on-frame construction, but All Mode 4WD control with low range continued. The previous live rear axle with drum brakes was replaced by multi-link independent suspension and discs.

Short front and rear overhangs provided an approach angle of 33 degrees and departure angle of 26 degrees, but ground clearance of 211mm was marginal for serious off-road driving.



Three-row seating was flexible and allowed 64 different seating/cargo configurations.

Entry-level ST was available with either diesel or petrol powerplants, 16-inch aluminium wheels, ABS brakes, dual airbags, air-conditioning, remote central locking, electric mirrors and windows, cruise control and CD/tuner.

Mid-level ST-L was available with both engines and 17-inch aluminium wheels, Vehicle Dynamic Control (VDC), luxury cloth seat trim, leather trim on steering wheel and gear shift, dual zone automatic air-conditioning, roof rails, side steps, fog lamps and a six-stacker CD/tuner with steering wheel mounted audio controls.

The Ti model was available with the petrol engine, side and curtain airbags, a tilt-slide sunroof, rear air-conditioning, rear seat DVD/MP3 player, wood grain trim, leather heated power seats and rear parking sensors.

Pricing on the 2005 Pathfinder started at \$44,990 for the manual Pathfinder ST turbo-diesel and the automatic was a \$3000 option on all diesels. The Pathfinder ST V6 was priced from \$47,990; the higher specified ST-L diesel was priced from \$48,990 and the V6 petrol, \$51,990. The Ti V6 petrol was priced from \$58,990*.

On and Off Road (post 2005)

The Pathfinder's fit and finish was way off the pace, with ill-fitting dashboard and steering wheel trim pieces, and varying gaps between panels. We liked the bottle-sized door bins, but found the other storage compartments too small. Second and third row seats folded completely flat, allowing ample sleeping or cargo space, but the downside was the poor quality and fit of the cargo floor panels.



The ventilation controls felt flimsy and worked with an unsatisfying spring-back action and the steering wheel controls lacked a logical layout and clear markings.

The Pathfinder had no space for a second battery and the crowded engine bay didn't allow easy access to the belts and hoses. However, the fuel and air filters were easy enough to get to.

The coil-sprung, all-independent-suspension Pathfinder felt fine on-road, cornering with a flat attitude unless pressed hard, but it wasn't at home on rough roads. Its very firm suspension settings were OK on smooth surfaces, but on typical secondary and dirt roads it rode harshly.

However, if you could live with the firm ride, the steering and handling were precise. Historically, the Pathfinder hadn't been at the cutting edge of off-road ability and the new model didn't change that situation. The Pathfinder hung up where other wagons stroll comfortably: a combination of limited ground clearance and limited wheel travel. The Pathfinder was quite economical, averaging 11.3L/100km in on and off road driving.

The 2005 Pathfinder seemed best suited to touring on formed surfaces that weren't too rough. It could handle bush trails, but lacked the ground clearance and wheel travel for severe off-road work. It came with plenty of 'fruit' for the money, but wasn't nearly as well finished as its competitors.

Bush Modifications

The Pathfinder's principal bush limitation is its poor ground clearance and it's essential to improve that before venturing far off-road. Lift kits are available for all models.



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