



RAV4 D-4D Diesel

14 September 2001

Toyota Launches New Contender for SUV Diesel Market

Key Points

- On sale in the UK now
- Major new market for trend-setting RAV4
- Available in three and five-door bodystyles
- Diesel engine available on all full time four-wheel drive versions
- Latest technology, common rail, 2.0-litre D-4D diesel
- Complies with Euro Step III regulations
- Exceptional fuel economy, low noise, low emissions
- Available in the same four trim levels as RAV4 petrol (NV, NRG, GX and VX)
- Excellent combined fuel consumption of 39.8mpg
- 0-62mph in 12.1 seconds, maximum speed of 106mph
- WIL (Whiplash Injury Lessening) front seats, ABS with EBD (Electronic Brakeforce Distribution) and twin front airbags standard on all grades
- MPV-style versatility with rear seats designed to slide, fold, tumble and be removed
- Air conditioning standard on all grades
- Remote alarm and Thatcham Category One immobiliser fitted as standard
- Roof rails standard on all grades
- Offered with three-year/60,000 mile warranty as standard
- Priced from £15,995 (NV three-door), £1000 premium over petrol version

On 1 September 2001 Toyota launched a new contender in the fast-growing Sport Utility Vehicle diesel market with the diesel-engined versions of its top-selling RAV4, now available for the first time.

The RAV4 D-4D exploits the very latest Toyota high pressure, common rail diesel technology and is available in both three and five door. The new RAV4 diesel offers customers excellent performance, smooth power and outstanding fuel economy.

The introduction of diesel engines enables Toyota to build on the current success of the RAV4 by taking it into a new, rapidly growing market. Total diesel sales across Europe are forecast to reach five million units a year by 2003, while in the UK sales are predicted at 3,000 units for the RAV4 diesel in 2002. A restricted supply of RAV4 makes these sales figures lag behind true demand for the car.

The RAV4 diesel is the latest in a rapidly introduced line of diesel-engined cars by Toyota. Corolla, Avensis, Previa (and soon Yaris) have all seen the addition of diesel to the range.

Excellent Performance

The new versions of the RAV4 will be fitted with the latest generation 2.0-litre, Toyota D-4D common rail diesel engine. This develops 114bhp (85kW) at 4,000rpm and offers constant torque of 250Nm across the power band from 1,800rpm to 3,000rpm.

Power has been increased by five bhp over the previous 2.0-litre D-4D engine used on Avensis saloon with the fitment of a variable nozzle turbocharger. Meanwhile, harmful emissions have been decreased ensuring the new RAV4 D-4D complies with European Step III emissions limits.

Fuel consumption is outstanding - 39.8mpg for both the three and five door models on the combined European cycle. Yet performance is still excellent - top speed of 106mph and acceleration from rest to 62mph in 12.1 seconds. The new diesel-engined versions of RAV4 will be available on all full-time four-wheel drive versions with a five speed manual gearbox only.

The New RAV4

Since launch across Europe last summer, RAV4 has proved again to be one of the most popular vehicles in the small SUV market - comfortably beating Toyota sales targets.

The RAV4 offers customers more space, better performance, better ride and better economy than other vehicles in the market. Until now it has been available with a choice of 1.8-litre engine with two-wheel drive or 2.0-litre petrol engine four-wheel drive.

Growing Demand for Diesels in the SUV Market

The Sports Utility Vehicle market has always had a high diesel penetration, with more than 50 per cent of all SUVs. However, the small Sport Utility Vehicle market has been less diesel biased, with around 30 per cent of the 250,000 vehicles sold last year in Europe being diesel powered. This is largely due to the more sporting nature of the small SUV market - and the fact that one of its best sellers, the RAV4, has not been available with a diesel engine, until now.

In the UK, the new company car tax parameters based on CO2 emissions effective from April 2002, will certainly contribute to a boost in diesel sales over the next few years. The latest common rail diesel technology has resulted in a dramatic improvement in emission figures not only when compared with previous diesel technology, but compared to petrol engines as well.

RAV4 D-4D in the Fleet Market

Throughout 2001 Toyota has widened the appeal for diesel buyers in the fleet sector with the introduction of its new D-4D engines across the Toyota range.

As Government calls for companies to be more environmentally responsible fleet managers can be reassured that the RAV4 D-4D offers better performance than comparable vehicles with the same engine size; uses less fuel and emits less emissions.

The RAV4 diesel brings desirability to the user chooser market offering versatility and style while also proving cost-effective for company car drivers with a smaller tax

bill than its rivals. The 2.0-litre D-4D diesel in RAV4 boasts just 190g/km, which will prove highly competitive when the new company car taxation becomes effective in April 2002.

High Technology, Clean Diesel

The diesel engine that powers the new additions to the Toyota RAV4 line-up is the latest version of the company's highly successful D-4D, high pressure, common rail unit.

Originally introduced in Europe in the top selling Avensis range, D-4D is widely recognised as one of the most highly advanced diesel technologies on the market today. Toyota engines using D-4D now power Avensis, Avensis Verso, Corolla, Land Cruiser and Previa models. Further applications of D-4D technology will be announced shortly.

More Power

The 2.0-litre D-4D common rail diesel engine in RAV4 offers class leading performance along with the widest torque band in the market.

The 2.0-litre D-4D engine delivers 114bhp (85kW) of power at 4,000rpm and maximum torque of 250Nm across the 1,800rpm to 3,000rpm rev range.

Low Emissions

The new RAV4 diesel engine meets all European Step III emission legislation with potentially harmful gases and particulates reduced, thanks to the improved fuel consumption and more efficient combustion of the direct injection engine. Emissions of the main greenhouse gas, CO₂, are cut by around 20 per cent.

Improvements to the exhaust gas recirculation unit (EGR) further cut NO_x emissions, while twin catalytic converters help the diesel-engined RAV4 meet Step III emissions.

Reduced Noise and Vibration

Toyota engineers used advanced computer analysis to study noise and vibration throughout the car, which has been reduced to a minimum.

How Common Rail Works

Toyota's common rail system makes use of a high pressure pump and intelligent, computer controlled injectors to deliver precisely the right amount of fuel, at precisely the right time, directly into the centre of the combustion chamber.

The precise timing and measurement of fuel promotes better ignition, cleaner burning, better fuel economy and less emissions.

Pricing and Specification

RAV4 D-4D is available in the same four high specification levels as the petrol engined version. Even the NV level model offers air conditioning, driver and front passenger airbags, roof rails, ABS with EBD (Electronic Brakeforce Distribution), remote control, alarm system, double locking and Thatcham Category One immobiliser.

Pricing for the new RAV4 diesel model starts at £15,995 for the NV three-door including a £1,000 premium over the petrol engine car. The five-door GX starts at £18,695.

RAV4 D-4D PART PRICES VERSUS COMPETITORS

Part	RAV4 D-4D	Freelander TD4	Suzuki Vitara 2.0TD	Vauxhall Frontera
Bonnet	£ 185.31	£ 133.55	£ 213.18	£ 252.00
Radiator grille	£ 54.72	£ 34.83	£ 79.18	£ 74.50
Front bumper cover	£ 99.27	£ 145.00	£ 249.32	£ 157.00
Front wing	£ 100.70	£ 175.69	£ 108.65	£ 79.50
Headlamp (excl. bulb)	£ 107.52	£ 81.80	£ 95.27	£ 60.50
Front indicator (excl. bulb)	£ 20.19	n/a	n/a	£ 14.40
Total Front	£ 567.71	£ 570.87	£ 745.60	£ 637.90
<i>% Difference</i>		+ 0.6%	+ 31.3%	+ 12.4%
Rear bumper cover	£ 55.32	£ 105.68	£ 292.67	£ 63.50
Tailgate / Bootlid	£ 301.46	£ 156.78	£ 245.68	£ 246.00

Rear quarter panel (RH)	£ 178.11	£ 190.04	£ 151.61	£ 280.00
Combination light	£ 50.54	£ 21.92	£ 34.43	£ 29.45
Total Rear	£ 585.43	£ 474.42	£ 724.39	£ 618.95
<i>% Difference</i>		(19.0%)	+ 23.7%	+ 5.7%
Oil filter	£ 16.32	£ 6.97	£ 21.62	£ 7.85
Air filter	£ 20.67	£ 9.57	£ 14.24	£ 23.55
Front brake pads	£ 44.51	£ 51.45	£ 48.28	£ 17.60
Rear brake shoes / pads	£ 29.99	£ 45.50	£ 51.57	£ 74.50
Total Maintenance	£ 111.49	£ 113.49	£ 135.71	£ 123.50
<i>% Difference</i>		+ 1.8%	+ 21.7%	+ 10.8%
Grand Total - All Parts	£ 1,264.63	£ 1,158.78	£ 1,605.70	£ 1,380.35
<i>Overall % difference</i>		(8.4%)	+ 27.0%	+ 9.2%

NB All Prices exclude VAT and are correct at time of going to press 13/09/01. Although we have made every effort to ensure this information is correct some changes may have occurred.

As with the petrol version RAV4, service and crash repair parts prices on the RAV4 D-4D remain low to improve Toyota's running cost advantage.

The table above shows that prices for crash repair parts for RAV4 D-4D are cheaper than its closest competitors all bar the Land Rover Freelander TD4. For routine service parts the new RAV4 is significantly cheaper (between 1.8 per cent and 21.7 per cent) than all three of its main rivals. These low service parts help keep leasing and maintenance costs low for company and private buyers alike.

The low cost of crash repair parts, by as much as 31.3% cheaper on front crash parts than the Suzuki Vitara, keeps insurance premiums down for RAV4, awarded groups 9E-11E by Thatcham.

NEW RAV4 D-4D TECHNICAL SPECIFICATIONS

ENGINE (2.0L D-4D)

1CD-FTV

Valve Mechanism Variable valve timing, 16 valve, DOHC, Chain Drive

Bore x Stroke (mm) 82.2 x 94.0

Displacement (cc) 1995

Compression ratio 18.6:1

Max. Powerbhp/rpm (kW) 114 @ 4,000 (85)

Max. Torque (Nm/rpm) 250 @ 1,800-3,000

PERFORMANCE

0-62mph	12.1 secs
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Max speed	106mph
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FUEL ECONOMY AND EMISSIONS

Urbanmpg	31.7
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Extra-Urbanmpg	46.3
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Combinedmpg	39.8
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CO _{2g/km}	190
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WEIGHTS

3 DOOR

5 DOOR

Kerb weight (kg)	1315-1425	1370-1485
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Gross vehicle weight (kg)	1785	1925
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Towing capacity-u/braked (kg)	640	640
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Towing capacity-braked (kg)	1500	1500
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GEARBOX RATIOS

1 st	3.833
2 nd	2.045
3 rd	1.333
4 th	0.972
5 th	0.731
Reverse	3.583

DIMENSIONS (exterior)

3 DOOR

5 DOOR

Overall length	3805 - NV	4200 - NV
	3865 - NRG	4250 - GX
		4260 - VX
Overall width (mm)	1735	1735
	1785 (wide pack)	1785 (wide pack)

Overall height - 4WD (mm)	1695 (215 tyre)	1705 (215 tyre)
	1700 (235 tyre)	1710 (235 tyre)

Wheelbase (mm)	2280	2490
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Min. turning radius (m)	5.0	5.3
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Tread width - 4WD (mm) front	1505 (215 tyre)	
	1525 (235 tyre)	

Tread width - 4WD (mm) rear	1495 (215 tyre)	
	1520 (235 tyre)	

Fuel Tank capacity (L / gal)	57 / 12.5	
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Coefficient of Drag	0.35	
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LUGGAGE CAPACITY (L)	3 DOOR	5 DOOR
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Rear seats in position	150	410
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Rear seats folded	230	520
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Rear seats removed	690	970
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SUSPENSION

Front	MacPherson struts with L-shaped arms
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Rear	Double Wishbone with trailing arms
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BRAKES

Front (diameter)	Ventilated disc (302mm)
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Rear (diameter)	Solid disc (298mm)
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STEERING

Type	Rack and Pinion
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Ratio	16
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Turns lock to lock	2.9
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TYRES AND WHEELS

Wheel size 16" Aluminium / Steel

Tyre size (NV & GX) 215/70 R 16

(NRG & VX) 235/60 R 16

ENDS