

## Toyota Previa 2.4 (Automatic)



**A**LTHOUGH THE RENAULT ESPACE HAS been undisputed top-dog in the multi-purpose vehicle market for several years, its supremacy has come under increasing fire lately, first from the Mark 2 Nissan Prairie and, most recently, from Toyota's radically new, purpose-built MPV – the egg-shaped Previa.

Its clean sheet approach to transporting up to eight people and their luggage represents a major advance over its van-derived Space Cruiser predecessor.

For a start, the Previa is roomier, it seats one more and costs less than an equivalent Espace. Also, its innovative, mid-engined layout – with a 2.4-litre, fuel-injected 16-valve power unit laid on its side under the front seats – not only provides car-like performance and handling, it also creates a large, flat-floored cabin in which passengers can sit in comfort in a 2-3-3 pattern.

Unlike the Espace, there's still room for some suitcases at the back, even with a full complement on board and, with a stoop and squeeze, you can get from the cab to the 'lounge'. The front seats don't swivel, though, and the one-piece, middle-row bench seat lacks the clever versatility of the Espace's individual, aircraft-style seats. The large sliding rear door on the nearside helps when it comes to getting everyone on board, though.

Standard equipment includes power steering, central locking and electric front windows and door mirrors; there's also an impressive six-speaker stereo radio/cassette unit and two glass sunroofs, each with its own built-in sun blind. A five-speed manual gearbox is also standard, but we tested the Previa with the optional four-speed, electronically controlled automatic transmission, which is a £1000 option. Its steering column-mounted selector shows the transatlantic design influence – the manual

# Living with the Previa . . .

gearbox has a conventional floor-mounted gear lever.

At nearly 1<sup>3</sup>/<sub>4</sub> tons, the all-steel Previa is no lightweight compared with the plastic-clad Espace. Nevertheless, the 133bhp twin-cam engine and smooth, rounded nose do their best to overcome this penalty, providing surprisingly lively performance and a maximum speed of 100mph. Its weight *and* an automatic gearbox inevitably make it rather thirsty, though, but all things considered, 22 to 25mpg overall is pretty good. The fuel must be unleaded because the Previa is fitted with a catalytic converter.

So impressive is the sound-proofing that, except on full throttle acceleration, it's sometimes hard to tell that the Previa's got an engine at all, let alone one positioned just under the front seats. Road roar and wind noise at higher speeds are rather more obvious.

Although the huge 'clap-hands' windscreen wipers take some getting used to, driving the Previa isn't much different from handling a car. And there's the bonus of everyone having a good view of things, thanks to the raised, more-upright seating.

Toyota has also overcome many of the accessibility problems associated with an under-floor engine location. The power steering pump, alternator, battery, air filter and all the fluid reservoirs live up-front under a conventional bonnet. There's also a hatch under the front passenger's seat, to gain access to the engine and automatic transmission dipsticks.

Like all Toyotas, the Previa comes with a 3-year/60,000-mile warranty but, as it attracts a typically Group 7 rating, insurance could prove expensive.

Judged objectively, the Previa has managed to nip in and steal the Espace's 'King-of-the-MPVs'

crown, in that it offers extra seats, more room and automatic transmission, too, if you want it, yet still costs less than the pricey Renault.

But the Previa's not perfect: it's heavier, thirstier, less fun to drive and, ultimately, neither as practical nor as versatile inside as the Espace. And although relatively inexpensive, it looks far from cheap alongside the capable, but admittedly less roomy, Nissan Prairie.

---

## At the Wheel

---

### Driving position

Once you've negotiated the step-up into the cabin, the Previa's lofty seating gives you excellent all-round vision – prominent B-pillars apart. The upright driving position has a car-like feel, but the front seats lack height adjustment and the ability to swivel round for indoor picnics. The steering wheel adjusts, although only for tilt.

### Controls and displays

Despite no less than four column stalks on the Automatic (the gear selector, wipers and steering wheel tilt-release are all grouped busily on the left), the Previa should hold few anxieties for the first-time driver. The unusual elliptical dials look a little odd at first, as does the buxum facia, but this works well enough and brings the heater and radio controls within easy reach.

### Vision

Over-the-shoulder vision is hampered by those stout side-pillars, but the huge overlapping wipers do well to cover most of the vast expanse of windscreen. The electrically operated door mirrors are fine as far as they go; in addition, electric headlamp beam-trimming is provided from the facia, with an intermittent setting for the tailgate

wiper – much appreciated when it's wet.

---

## Space & Comfort

---

### Seating and comfort

The driver and co-pilot fare best in the Previa, with the individual front seats (each with an inboard armrest) proving reasonably comfortable and supportive, even on longer trips. The middle and rear-row benches are flatter and a little less comfortable, but the Previa's cavernous cabin provides ample room all round. The centre row of seats slides on its own set of runners, providing an extra 4in or so of kneeroom for third-row passengers.

Give or take the occasional thump or bottoming-out sensation, the Previa provides untroubled passage over most surfaces. However, its ample kerbweight tends to handicap handling and it's neither as fluid nor as fun to drive as the Espace. The interior is well-insulated from engine noise, but wind and road noise can be quite prominent on a motorway.

### Getting in and out

Although you have to sort of throw yourself up and into the front seat, the large sliding door and built-in step beneath provide easy walk-in access to the rear. There's only one side door, and passengers step in and out from the safety of the kerbside. There's reasonably easy access to the rear row past a flip-down section of the centre seat.

### Luggage and oddments stowage

One of the Previa's biggest advantages is that it seats up to eight people – one more than its rivals – and still has room for some luggage behind. The 50/50 split rear row of seats folds flat, stowing vertically to the cabin side when only five passengers need to be carried. The middle row bench is

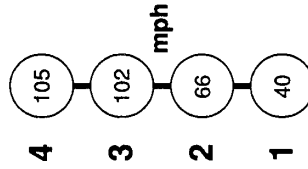
## PERFORMANCE

### Acceleration time in seconds

<b>STANDING START</b>	0-30mph	4.0	0-60mph	12.1	1/4 mile	18.8
-----------------------	---------	-----	---------	------	----------	------

<b>THROUGH THE GEARS</b>	30	40	50	60	70
		2.1	4.8	8.1	12.8

<b>20 mph</b>	30	40	50	60	70
<b>SPEED RANGES USING KICKDOWN</b>		3.8	4.8	6.3	7.9



### Maximum speeds

using accelerator kickdown

<b>REVS PER MINUTE</b>	1st/2nd	3rd	4th
	5600/5500	5850*	4390

\* rev limiter operating

## FUEL CONSUMPTION

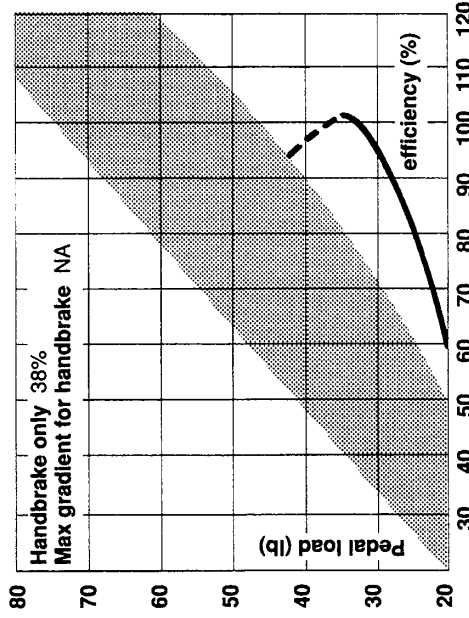
Fuel grade for tests: 95 octane unleaded

<b>Normal range</b>	<b>mpg</b>
Hard driving, heavy traffic	17-18
Brisk driving - mixed roads	22-23
Gentle driving - rural roads	24-26
<b>Typical mpg overall</b>	<b>22 1/2</b>
Realistic tank range*	67 litres/330 miles

\* based on gauge/warning lamp and filling station experience

## SAFETY

### Brakes How pedal loads affect braking



Braking efficiency shown as a percentage of gravity (ie 100% = 1.0g). Ideally the braking curve should fall within the shaded zone of this graph. If it's above, the brakes are too heavy; if it's below, they are too light. When the curve becomes broken, the wheels are skidding.

### Fade test

How hard use or water affects braking. (Ideal brakes show no change.)

### Pedal load needed for 75% stop (lb)

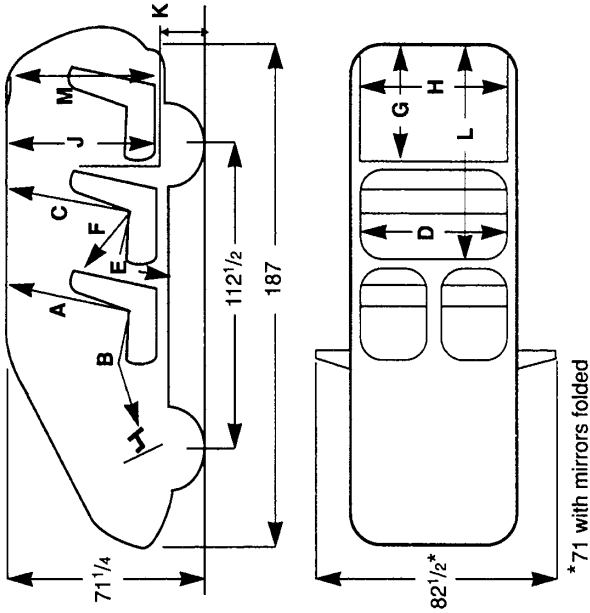
27	At start of test
23	After constant use
24	After severe use
NA	After watersplash
NA	Number of stops to recover

### Safety check list

<b>Steering</b>	true 'feel' of the road?	<input checked="" type="checkbox"/>
<b>Brakes</b>	powerful?	<input checked="" type="checkbox"/>
	sensible effort?	<input checked="" type="checkbox"/>
	fade resistant?	<input checked="" type="checkbox"/>
<b>Seatbelts</b>	front - effective?	<input checked="" type="checkbox"/>
	convenient?	<input checked="" type="checkbox"/>
	rears - effective?	<input checked="" type="checkbox"/>
	convenient?	<input checked="" type="checkbox"/>
<b>Head restraints</b>	front - effective?	<input checked="" type="checkbox"/>
	rear - effective?	<input checked="" type="checkbox"/>
<b>Interior</b>	thoroughly padded?	<input checked="" type="checkbox"/>
<b>Fuel</b>	shielded filler?	<input checked="" type="checkbox"/>
	protected tank?	<input checked="" type="checkbox"/>

## MEASUREMENTS

### Dimensions (inches)



### Inside (inches)

<b>A</b> Front headroom	39 1/2	<b>G</b> Load length	22 1/2
<b>B</b> Front legroom (min - max)	34 3/4-41 1/2	<b>H</b> Load floor width (min - max)	36 1/2-57 3/4
<b>C</b> Rear headroom †	39 3/4/35 3/4	<b>J</b> Load height	43
<b>D</b> Back seat width † (between armrests)	60/57	<b>K</b> Sill height (inner/outer)	21 1/4/27
<b>E</b> Typical rear * legroom	†	<b>L</b> Load length (with/without middle row)	59 1/2/96
<b>F</b> Typical rear * kneeroom	†	<b>M</b> Load height (to tailgate hinge)	43

\* 'Typical' represents the mean measurement behind the driver's seat set at 39in legroom and the passenger's seat set at 41in (measurements taken with centre row set to mid position).  
† For middle/back rows of seats

fixed, so calling for some nifty spannerwork to turn the Previa into a van.

Oddments' space is disappointing, comprising a glovebox with a spring-loaded, jack-in-the-box lid, a small compartment under the ashtray, shallow door pockets and a box to the right of the middle row of seats, handily equipped with a couple of drinks holders. There's nowhere to rest your G-and-Ts in the front, though, and although the contoured fascia top provides a neat home for the front speakers and impressive fuse panel, its hard, curved surfaces discourage placing any objects there; nothing stays put very long when you're on the move.

### Heating and ventilation

The Previa's large cabin places heavy demands on heating and ventilation, but both cope pretty well. There's a good selection of outlets up front and middle row passengers get some warmth via outlets ducted through the front doors. There are twin glass sunroofs (a large electrically operated sliding panel, plus a tilt-only one at the front) and the side windows can all be hinged open to maximise the through-flow of air. Inevitably, those right at the back do least well.

Air-conditioning doesn't come as standard, though – it's a £2000 dealer-fitted option; more's the pity, as the handbook shows a neat little cooler box that plumbs into it and makes ice on the move.

---

## Money Matters

---

### Value for money

The Previa looks expensive alongside its predecessor or, say, a seven-seater Prairie – even more so compared with what Americans can buy one for. But it's bigger and roomier than the Espace, and because it sells for a couple of thousand pounds less, it must count as reasonable value for money.

### Servicing and warranty

Although the engine is buried under the floor, the routine maintenance items, fluid levels and fan belt are all accessible from under the front bonnet. Access to the valve gear, spark plugs and so on is a little more involved, although it's still comparatively easy once you know how.

The Previa has a three-year paintwork guarantee, a three-year/60,000-mile mechanical warranty, plus six years' rust-through protection. There's also the option to extend the mechanical warranty for up to six years/100,000 miles.

### Fuel economy

With a kerb weight of 1<sup>3</sup>/<sub>4</sub> tons, a standard-fit catalytic converter and the automatic transmission, we weren't expecting any great fuel economy from the Previa. By typical saloon car standards it's thirsty, but its low-to-mid 20s overall consumption would still turn most Jaguar and Range-Rover drivers green with envy. Driven hard or solely around town, the upper teens is a more realistic expectation, but the large tank allows a fairly generous 300-350 miles between refuelling stops.

---

## Safety

---

### Accident avoidance

While the mid-engined configuration means that the Previa is quite nimble and car-like when it has a light load, it becomes more unwieldy and 'nautical' when fully laden. The high cabin and ultra-light, feel-less power steering tend to discourage over-ambitious bend swinging, but we were disappointed with the crosswind instability on motorways when emerging from the 'bow waves' of trucks, for example.

The brakes provide light, powerful and fade-free retardation,

but at the test track, we found a worrying tendency for the rear wheels to lock during panic stops when the Previa was unladen.

### Injury prevention

Although seatback reinforcement is lacking, the roof is well padded and there are head restraints and inertia-reel seatbelts (height-adjustable at the front) for all 'window' occupants. The fuel-filler cap lives safely behind a flap (with a remote-control release trigger down under the driver's seat), but the easy-gliding side door needs watching on slopes or with young fingers about.

### Security

The Previa comes with a built-in alarm system as standard, complete with a prominent flashing LED to confirm that it's armed. Key-operated central locking looks after the doors and tailgate, but UK versions don't have a roller-blind security cover for the load area; this leaves the lockable glovebox as the only place to hide valuables when leaving the vehicle unattended.

---

## Durability

---

### Build quality

With such large side panels, the Previa is almost bound to sound a bit tinny. Nevertheless, it's assembled with customary Japanese attention to detail, although the rather plain trim and hard, plasticky fascia trail a distant second behind the stylish, up-market interior of the new (even more expensive) Espace.

### Reliability

Toyotas have an enviable reputation for reliability; despite its unorthodox mechanical layout, the Previa should prove no exception to the rule. Japanese parts' prices tend to be more expensive but, routine replacements apart, you shouldn't need to buy many of them.

<b>HOW IT COMPARES</b> (maximum seating capacity in brackets)	Engine cap/power (cc/bhp)	Max speed (mph)	30-70mph through gears (sec)	30-70mph in 5th/4th gears (sec)	Fuel overall (mpg)	Brakes best stop (%g/lb)	Maximum legroom – front (in)	Typical leg/ kneeroom – rear (in)	Steering † turns/ circle (ft)	Overall length (in)
Toyota Previa 2.4 (automatic) (8)	2438/133	105	12.8	Automatic	22½	101/35	41½	36/32½	3.5/39½	187
Land Rover Discovery 2.4 Tdi (7)	2495/111	86	23.5	38.1/25.2	28	85/50	41¼	39/29½	3.8/39¼	178
Mitsubishi Space Wagon 1.8GLX (7)	1755/89	95	15.2	36.0/24.4	31½	95/35	40	40/27	3.1/36¾	169
Nissan Prairie 2.0SLX* (7)	1974/98	98	13.7	31.1/20.3	27	100/38	40	39¾/431	3.1/36¼	171¾
Renault Espace 2000-1* (7)	1995/120	106	12.5	27.9/20.7	27½	103/48	39	43½/33¾	2.7/35¾	171¾
Renault 21 Savanna 2.0TXE (7)	1995/120	120	9.9	24.4/18.0	31½	102/45*	42¼	39½/30	3.3/35¾	184¾
* tested in 4WD form						* with ABS		† all power assisted		



## TECHNICAL SPECIFICATION

### ENGINE

**Type and size** mid-mounted at 75°, longitudinal 4 in line; water-cooled. 95.0mm bore x 86.0mm stroke = 2438cc. Iron block and aluminium alloy head; 5 main bearings

**Compression ratio** 9.3:1

**Valve gear** double overhead camshafts (chain-driven inlet, skew gear-driven exhaust) actuating four valves per cylinder via shim-adjusted bucket tappets

**Fuel system** Toyota/Nippon Denso electronic multi-point fuel injection with three-way catalytic converter. 75-litre (16.5-gallon) tank, with low-fuel warning lamp. Fuel required: 95 octane minimum, unleaded only

**Ignition system** fully mapped electronic, with knock sensing (integral with fuel injection) via distributor and coil

**Maximum power (DIN-net)** 133bhp at 5000rpm

**Maximum torque (DIN-net)** 151 lb ft at 4000rpm

### TRANSMISSION

**Gearbox** five-speed manual (standard); electronically

controlled four-speed automatic with lock-up torque converter (optional extra – fitted to test car).

Ratios: first 2.45, second 1.45, third 1.00, fourth 0.73 and reverse 2.21:1

**Final drive** 4.30:1, to rear wheels

**Mph per 1000rpm** 23.93 in top, 17.47 in 3rd

**Rpm at 70mph** 2920 in top gear

### CHASSIS

**Suspension** front: independent by MacPherson damper/struts with coil springs and anti-roll bar. Rear: independent by double wishbones with coil springs. Dampers: telescopic all round

**Steering** power-assisted rack and pinion with 3.5 turns between full locks. Turning circles average 39½ft between kerbs, with 65¼ft for one turn of the wheel

**Wheels** 6JJ alloy (standard) with 215/65R15 96H tyres (Dunlop D8 on test car). Spare: T145/80D16 105M Dunlop Space Miser III compact emergency type

**Brakes** 10.7in ventilated discs front, 11.5in plain discs rear with vacuum servo

