

Renault 21 2L Turbo Quadra



RENAULT MAY NOT BE THE FIRST CAR-maker that springs to mind if you're considering an all-wheel drive sporting saloon – but Ford has had to tackle the same image problem with the Sierra Cosworth.

The Quadra is accompanied in the 21 line-up by a £2000-cheaper front-drive alternative; clearly, with 175bhp on tap, the Quadra's 65/35 per cent front/rear torque split promises greater cornering safety as well a grip. In fact, when trying to come to terms with its highish asking price, it's important to recognise that the Quadra has all the extras as standard. Whether you're looking at the technical specification or the fittings inside, everything from ABS to leather is there, so it's a very complete motor car.

Unfortunately, it's not a particularly roomy one, and we weren't enamoured of its vibrant mechanical manners and agitated ride when driving slowly. Even in performance terms, this is a turbo-powered car that suffers from 'top-endy' response – nothing

significant happens until the tachometer has got beyond 3000rpm. These may well seem prosaic considerations in a red-blooded sporting saloon that's purpose in life is to get the adrenalin flowing. However, the very best performance machines do show this versatility of appeal – whether it's the Alfa 164 or the latest Sierra Cosworth. This kind of money can offer you plenty at both ends of the spectrum.

Nevertheless, the Quadra is fast and it's also forgiving in its cornering manners; the steering is almost showmanship heavy when bend-swinging, however, and the he-man clutch puts the mockers on the gearshift, which is quite pleasant when you remember the power that's flowing.

For maximum traction, a pneumatic diff lock can be applied at the rear, at the touch of a button – it acts in first and reverse – and cuts out the ABS.

The brakes are very powerful and the Teves anti-lock control can't be bettered, so the Quadra is safe as well as swift.

Inside, the fittings and leather trim are nicely

Living with the Quadra . . .

done, but there are headroom and legroom limitations all round; the boot lacks load height, too. The seats are comfortable if you're not too tall. There are some pleasing control and fascia features, but the fact that the instruments are difficult to read, and the vague and inaccurate odometer spoils the otherwise useful trip computer, seems particularly inept on this sort of enthusiast's car.

The Quadra is an exciting car, but perhaps when the novelty has worn off, you begin to feel that you've a right to expect more everyday consideration as well – particularly at the price.

At the Wheel

Driving position

The Monotrace pedestal seats are leather-clad in the Quadra and prove supple enough to grip and hold the driver well. There's a lumbar-cum-girth width adjuster (the sides are more enveloping as the spinal push is backed off) as well as the seat rocking adjustment that's a Monotrace feature. This all feels fine, but legroom for the lanky is limited – as is headroom.

Controls and displays

The red on black instrument graphics aren't too clear and the digital 'fuel left' reads in gallons. Our speedo read 74 1/2 mph at 70 and both distance recorders were 2 1/4 per cent 'long'. The trip computer also under-read for ambient temperature but measured fuel quite accurately, except for the distance error, so the mpg was reading about 1 mpg optimistic.

The clutch is really heavy-going in traffic, and reverse gear is awkward. Otherwise, the gears are no real problem and the adjustable wheel and seat suit shorter people particularly well. Some of the rocker switches can be hard to

decipher quickly, but the satellite column control for the radio is greatly appreciated.

Vision

This is much better than in many cars in this class – even the boot spoiler doesn't spoil the view too much. The door mirrors are electric, yet fold flush with the body when tricky parking demands – excellent.

Driver satisfaction

When cutting a dash, the Quadra is a real thrill to rush up through the gears or hurl into bends. It's safe, too, thanks to stable cornering response which ultimately turns to nose drift – but at higher volocities than the front-wheel drive saloon from which it's derived. Lift off in a hurry and the Quadra merely responds by tightening its line – very surefooted and predictable. The power steering is a shade too heavy on the open road but fine when you're parking. It's probably a vain attempt to confer 'feel of the road'.

Where this car disappoints is in gentler mood: it lacks the versatile character of the Sierra Cosworth, moaning and vibrating about pulling from below 2000rpm – that's nearly 40mph in fourth gear.

We quote 0–30mph and 0–60mph figures – for what they're worth – but the clutch is so powerful and the tyre grip so tenacious that a tearaway take-off just isn't possible. Our speed range times confirm that it lacks low-speed response, too – the best 20mph speed range times occur late and turbo-lag is only too apparent when, say, you go to overtake in third; nothing really happens in response to a bootful of throttle until the tachometer swings past 3000rpm, then it all comes with a rush.

It's smooth and quiet at the top end, however, and it's absurdly difficult to stay at 70mph on a quiet motorway.

Space & Comfort

Seating and ride comfort

The Quadra has all the visual and equipment features to please passengers, but it lacks room and the ride becomes agitated at low speeds. The front seat pedestals impinge on foot space and kneeroom is restricted, too – it isn't possible on this car to stretch one's legs down the sides of the seat mounts, either. Headroom is also a complication for the tall.

The car is obviously destined to travel far and fast and the ride does improve as the pace quickens. Passengers could do with proper 'hockey stick' door armrest grips to steady themselves through the bends – they have to resort to the roof grab straps at present.

Getting in and out

Footroom is adequate, but there's a prominent centre hump. The remote-controlled central locking works superbly – the key fob never fails to do its job and you can lock the boot independently if you choose.

Luggage and oddments stowage

Despite resorting to a space-saver spare wheel, the rear axle robs the boot of valuable height and the floor presents a lumpy base on which to stow luggage. The sill is low, however, and the rear seat backrests tip forward to extend the carpeted but uneven load length in 60/40 fashion. Perhaps the hatchback would have made for a more sensible Quadra.

Interior oddments' spaces are sensible and the lined fascia-centre cubby with a 'mouth' is a particularly useful device.

Interior equipment

All upper-echelon 21s are well-endowed inside and the various features, such as electric windows, sunroof and the aforementioned locking, all work

PERFORMANCE

Acceleration time in seconds

STANDING START *	0-30mph	0-60mph	1/4 mile
	3.0	8.2	16.4

* see text

mph	30	40	50	60	70
THROUGH THE GEARS		1.3	2.8	5.2	7.4
IN 5TH GEAR		5.7	10.3	14.0	17.7
IN 4TH GEAR		4.0	6.9	9.5	12.4

20 mph	30	40	50	60	70
5TH/4TH SPEED RANGES		13.0/8.6	8.4/5.5		7.6/5.6
		10.3/6.9			

Maximum speeds

REVS PER MINUTE	1st	2nd	3rd	4th	5th
	35	6000 *	6000	5680	536
	57	114	85	136	

* for best acceleration

FUEL CONSUMPTION

Fuel grade for tests: unleaded Premium, 95 octane

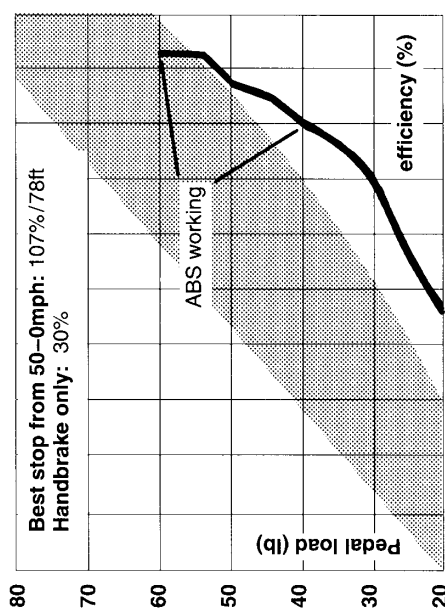
Normal range	mpg
Hard driving, heavy traffic	23
Short journeys in the suburbs	24
Motorway – 70mph cruising	33
Brisk driving, mixed roads	32
Gentle driving – rural roads	35
Typical mpg overall	31

Realistic tank range* 58 litres/395 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 – particularly on cars without ABS. 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)

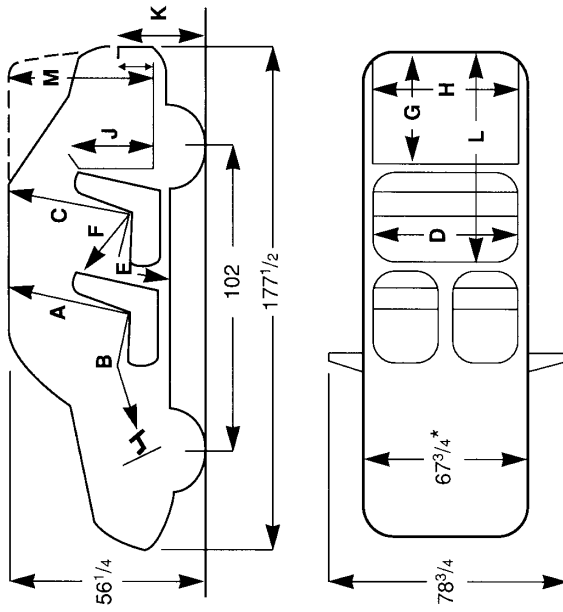
25	At start of test
28	After constant use
38	After severe use
NA	After watersplash
NA	Number of stops to recover

Safety check list

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

MEASUREMENTS

Dimensions (inches)



* with mirrors folded

Kerb weight in lb (full of fuel)

Inside (inches)

A Front headroom	34-36	G Load length	39 1/2
B Front legroom (min - max)	31-40 1/2	H Load floor width (min - max)	39-58
C Rear headroom	35	J Load height	14 1/2-16 1/2
D Back seat width (between armrests)	52 1/2	K Sill height (inner/outer)	5/27
E Typical rear * legroom	37 1/2	L Load length	65
F Typical rear * kneeroom	26 1/2	M Load height (to tailgate hinge)	NA

* 'Typical' represents the mean measurement behind the driver's seat set at 39in legroom and the passenger's seat set at 41in

offers good reception, though treble response is not so impressive.

Heating and ventilating

There are no serious complaints up front, except in those temperate times of the year when warmth to the feet and fresh air to the face are welcome together. No rear outlets are provided, however. The controls are easy to decipher.

Money Matters

Value for money

Well-equipped the Quadra may be, but the price is steep for a model that's basically the same at half the price. Depreciation is likely to be heavy, too, as a result of its specialist appeal.

In service

Despite the relatively untemperamental nature of fuel injection, the special cooling arrangements for the turbocharger (it 'goes on' for a quarter of an hour after removing the key) and reasonable parts' prices for the 21 range in general, the Quadra has a lot of additional mechanical bits and pieces that eventually all represent potential extra costs. If you want a sophisticated machine like this, you must eventually pay more to maintain it. The cost of insurance is also commensurate with the racy image.

Fuel economy

The Quadra does well here – but only if you curb the in-built temptation to rush all over the place, just for the fun of it. This is where our strictly regulated cycle tests show better mpg results than our enthusiastic testers managed for the rest of the time the car spent with us.

The tank capacity is reduced (down four litres) to find room for the rear drive components, but the range is still excellent, thanks to an accurate digital gauge. If you're not in a rush at the pumps, seven litres extra can be trickled in. This is definitely not the thing to do, however, unless you're immediately going straight on for a fair distance, otherwise spillage is likely to occur.

Safety

Accident avoidance

Although we experienced graunching noises and mild fade while conducting our track tests, the standard anti-lock brake set-up proves well up to this potent car's performance. The fact that pedal loads are light matters less with ABS, of course – you can't skid in any event – and that stop from 50mph in 78ft is one of the best we've recorded. The average is 8ft longer – halfway through the car in front! Cornering grip and

terminal stability are impeccably progressive and forgiving, too.

Injury prevention

There's no front seatback protection against knees behind, and the adjustable front seatbelt anchorages at shoulder level could be spiteful in a side impact because they can align with front occupants' heads. Otherwise, roof padding is good.

At the rear, the smaller fuel tank on the Quadra is still vulnerable in a tail smash.

Security

There's a separate lock on the boot lid but no way of securing the boot contents from the interior. The radio is coded, however.

Durability

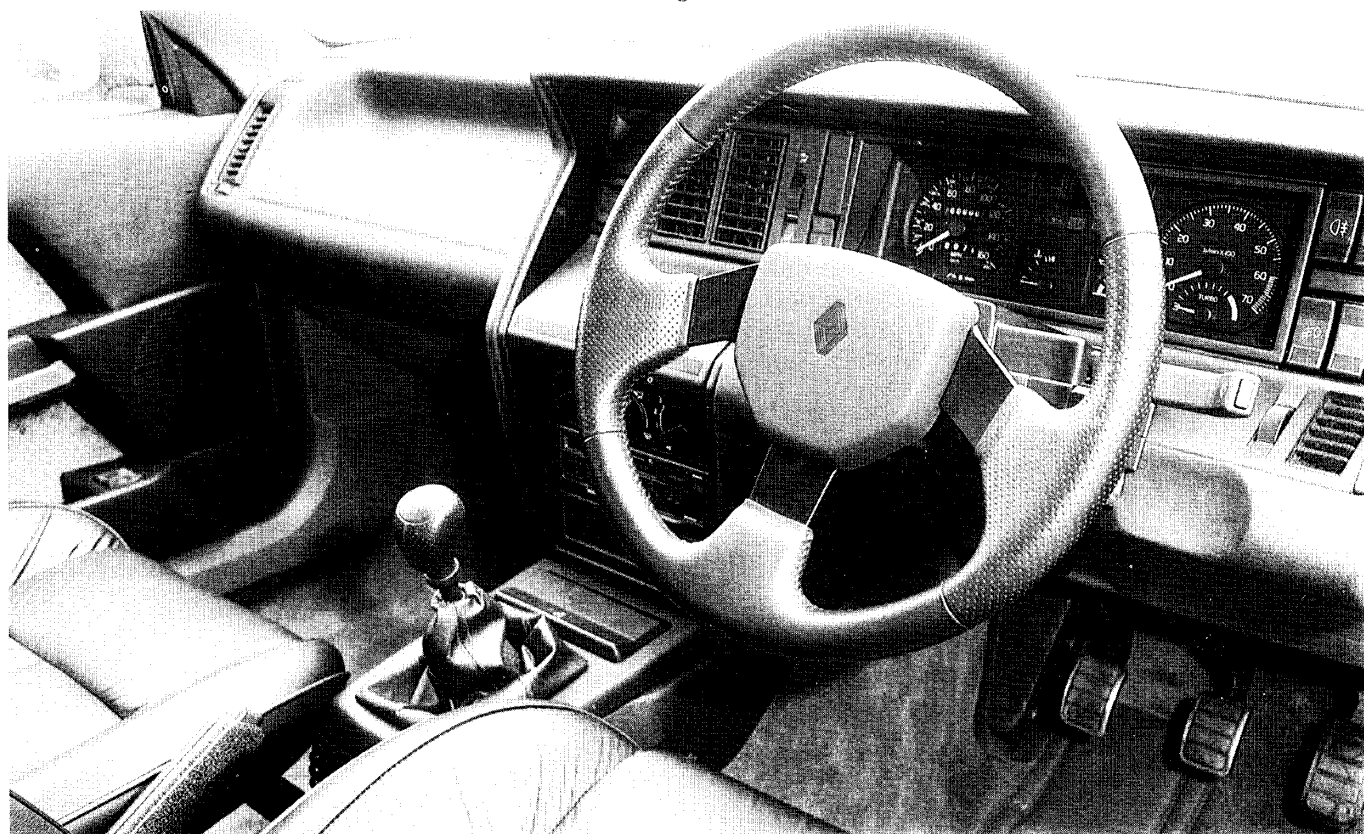
Build quality

Paint finish is a bit 'iffy' around the edges, but the revised 21 interiors, introduced in late 1989, have improved quality as well as appearance.

Rust prevention

There's an eight-year anti-rust perforation warranty on the 19 and the Clio, but Renault doesn't offer it on the 21 at present; in this case the cover is for six years. All are subject to periodic inspection procedures and there's no separate surface paint indemnity.





HOW IT COMPARES	Engine cap/power (cc/bhp)	Max speed (mph)	30-70mph through gears (sec)	30-70 mph 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)
Renault 21 2L Turbo Quadra	1995/175	136	7.4	17.7/12.4	31	112/55	40½	37½/26½	3.3/34¼	177½
Ford Sierra RS Cosworth 4WD	1993/220	144	6.0	17.5/11.5	26½	109/35	43	40/30¼	2.4/38¼	177
Saab 9000 Turbo 16	1985/175	137	7.2	21.1/13.5	30	98/40	42	41½/30½	3.3/37	182
Alfa Romeo 164 3.0	2959/192	141	7.2	20.6/15.6	28	92/60	43	40/32	3.2/34¾	179¼
* all with ABS									† all power assisted	

TECHNICAL SPECIFICATION

ENGINE

Type and size front-mounted, longitudinal 4 in line; water-cooled. 88mm bore x 82mm stroke = 1995cc. Aluminium alloy block and head; 5 main bearings

Compression ratio 8.0:1

Valve gear single overhead camshaft (belt-driven) operating four valves per cylinder via rockers

Fuel system Renix electronic multi-point electronic fuel injection and Garrett water-cooled turbocharger with intercooler. 62-litre (13.6-gallon) fuel tank, with low-fuel warning lamp. Fuel required: leaded or unleaded, 95 octane minimum

Ignition system fully programmed electronic, integrated with fuel computer

Maximum power (DIN-net) 175bhp at 5200rpm

Maximum torque (DIN-net) 199 lb ft at 3000rpm

TRANSMISSION

Clutch diaphragm spring, dry plate; cable-operated. Pedal load/travel 43 lb/6½in

Gearbox 5-speed (all synchromesh) and reverse.

Ratios: first 3.36, second 2.06, third 1.38, fourth 1.04, top 0.82 and reverse 3.55:1

Final drive front 3.44/rear 3.45:1 with full-time four-wheel drive (65/35% front to rear). Viscous-coupled centre differential and lockable rear differential

Mph per 1000rpm 23.9 in top, 18.9 in 4th

Rpm at 70mph (observed) 2925 in top gear

CHASSIS

Suspension front: independent by MacPherson damper/struts with integral coil springs and an anti-roll bar. Rear: clover-shaped semi-rigid axle, trailing arms and coil springs with a transverse single locating arm (Panhard rod) and an anti-roll bar. Dampers: telescopic all round

Steering power assisted rack and pinion with 3.3 turns between full locks. Turning circles average 34¼ft between kerbs, with 51½ft for one turn of the wheel

Wheels 6½J alloy with 195/55R15Z tyres (Michelin MXV2 on test car)

Brakes 11¼in ventilated discs front, 10in plain discs rear, with vacuum servo and Teves anti-lock control standard

