

BUYING GUIDE

RENAULT 21

Torque-steering into oblivion with the French Cosworth.

Words Paul Wager
Photos Retro Cars

FOR

- + Power and mid-range
- + Tidy handling for a front-driver
- + Cheap to buy
- + Reliable
- + Can be hugely modified

AGAINST

- Some parts are tricky to find
- Can rust
- Many are thrashed

What Are They?

Take one typically French light-weight shell, one typically French front-drive chassis and direct a not-very-typically French 175 bhp and 199 lbf.ft though the front wheels. A recipe for Michelin-shredding disaster? Not quite. In fact, the Renault 21 Turbo quickly became a well-regarded '80s performance icon and deserved its 'French Cosworth' tag, with a 0-60 mph sprint just one second behind the fabled rear-drive Ford.

Launched in late 1987 in front-drive form, the 21 Turbo used the same basic engine spec until its demise in 1993. Renault's J7R engine was an all-alloy eight-valve unit with a Garrett T3 turbo running at 13.2 psi, using electronic fuel injection and engine management courtesy of Renix.

Helping the front-drive chassis cope were equal-length driveshafts and a suspension set-up essentially to Group N spec, running struts and wishbones at the front with torsion bar and trailing arms at the rear, with additional helper springs on the rear dampers.

In 1989 a four-wheel drive version joined the range, going by the name Quadra. Rather strangely it was slower to 60 mph than the front-drive car but was an even faster cross-country weapon without its torque steer. The Quadra's 4x4 set-up was based around a viscous coupling and used an independent rear suspension. All cars were highly specced in the UK, with the only options being velour as a no-cost alternative to leather, an



extended warranty and metallic paint. Standard kit included electric windows and roof, heated electric mirrors, stereo and full leather in a very French style.

So-called Phase 1 cars were sold on E, F and G-registrations, with Phase 2 facelift cars wearing G, H and J plates. Spot them by their revised dashboard

and rear styling, different boot spoilers, light cluster and wheels.

Phase 3 cars on J and K plates brought in a distributorless ignition system, catalytic converter and tilt 'n' slide roof, while the Quadra was sold on G, H, J and K-registrations. The last examples sold in the UK were registered in 1992, by which time

the French factory had churned out 13,788 in total (just 875 of which were Quodras), meaning the latest you'll find is likely to be wearing a K plate. Its replacement was the sadly humdrum Laguna, although with mad creations like the Clio V6 it's

good to see Renault hasn't lost the performance plot entirely.

How Do They Drive?

If you've never driven a 21 Turbo before you'll be expecting a torque-steering, turbo-lagged nightmare, but by the standards of the day the Renault was really pretty refined. In fact even by the standards of today the 21 Turbo delivers a nice flat torque curve and doesn't feel like the average all-or-nothing '80s turbo car. I drove my first one in 1988 when, as a fresh-faced young motoring journalist, I was amazed by

its grunt – and I drove one again last month and was amazed by how well the design had aged. In the intervening 18 years, I've driven more Ford Cosworths than I can remember and the Renault has the edge over the Sierra on refinement if not in outright power.

In standard form, they handle neatly too, especially when you consider that 199 lbf.ft is transmitted via two bicycle-style 195/55 tyres. They torque-steer and in the wet you'll need to have your wits about you, but in the dry they just grip and go without any smoking understeer. The Quadra is in a different league and feels like a lightweight Audi Quattro without the cumbersome initial understeer of the German car. Remember, these cars date from the days before traction control and so it was up to the chassis engineers to make things work without resorting to electronic nanny systems.

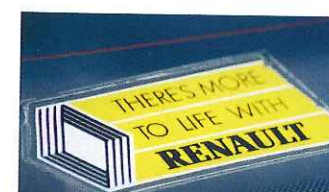


PUB AMMO

Produced	1988-1993
Top Speed	
Fwd	141 mph
Quadra	137 mph
0-62	
Fwd	7.1 secs
Quadra	7.2 secs
Economy	25-30 mpg average
Engine	
1995cc alloy four-cylinder with Garrett T3 turbocharger at 13.2 psi.	
Power	
175 bhp at 5200 rpm	
Torque	
199 lbf.ft at 4000 rpm	
Weight	
Fwd	1190 kg
Quadra	1430 kg
Price New In 1991	
Fwd	£16,500
Quadra	£20,000



Just some subtle badging to hint at the power on tap.



There's never a dull day with the silver diamond.

ENGINES

It goes without saying that you should be on the lookout for smoking and leaks. The 21 Turbo frequently suffers from oil leaks, but they're mostly easy to trace and fix: favourites are the sump plug washer, turbo oil feed pipes, distributor oil seal and the rear of the head gasket. The distributor wants fixing quickly, as it will eventually contaminate the clutch. Smoking indicates either a worn turbo, a worn engine or both.

Don't worry about a tappety-sounding engine; the valve adjustment is easy DIY, while the fuel injectors can also sound quite noisy. Unless, of course, the tapping noise is down to a leaking exhaust manifold.

On your test drive, if the engine stumbles under high boost, throwing you forward in the seat, suspect someone's been playing around with bleed valves and hasn't adjusted the overboost cut-off switch to suit. On the other hand, if it seems down on power then suspect air leaks in the induction pipework, or an incorrectly adjusted wastegate pushrod or sticking actuator. Use it to drive the price down: it's a simple fix.

Feel the water hoses after a drive, too – rock hard hoses, a pressurised cooling system and 'mayonnaise' in the oil filler could well mean head gasket problems and again could indicate too much boost.

Find out when the cam belt was changed too. Renault states 72,000 miles but we all know that's pushing it a bit too far. Change it when you buy the car and then again every 30,000 miles.

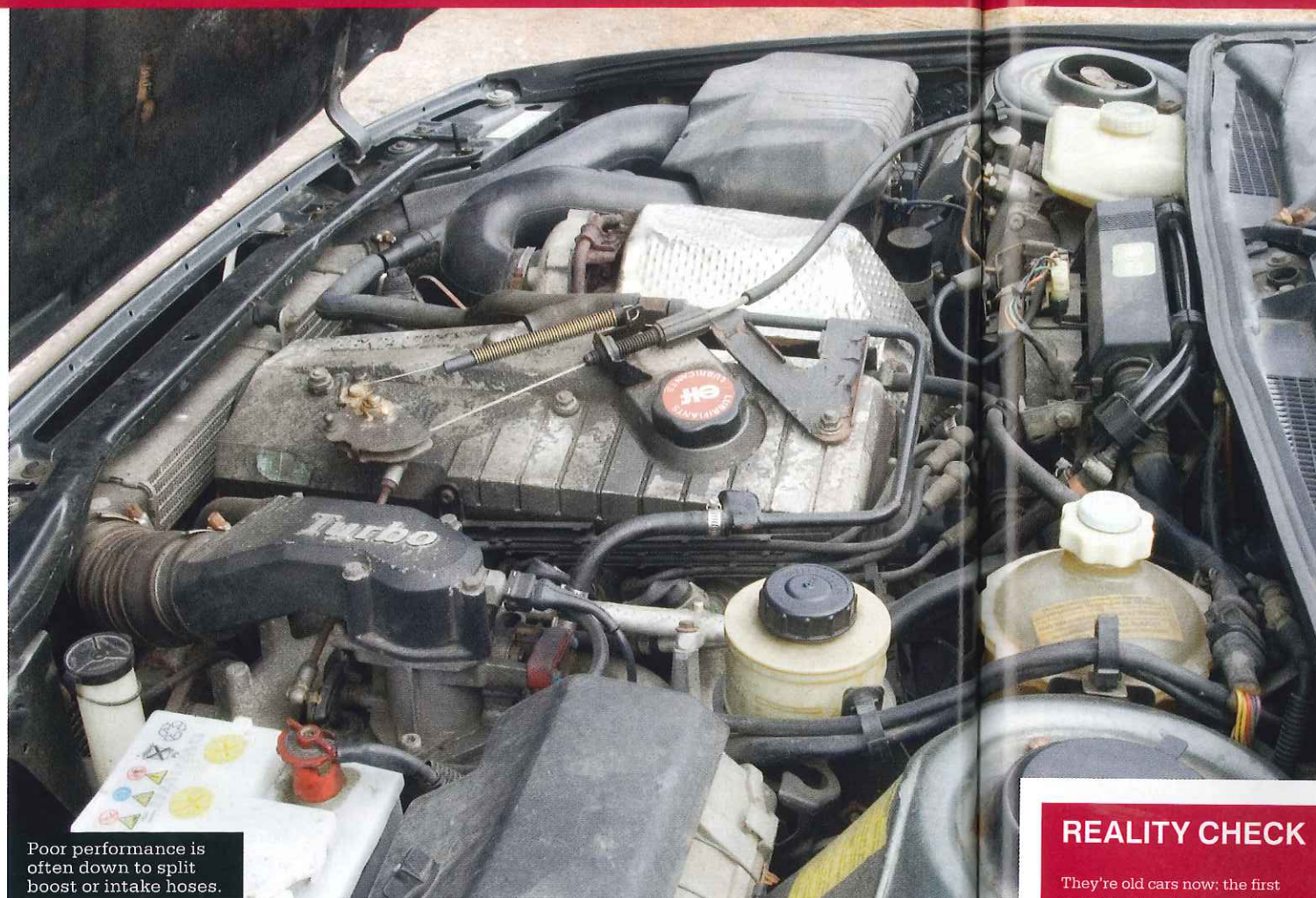
If the engine runs above the second mark on the temperature gauge, budget for a new radiator. Also check whether the electric cooling fans come on as they should – it's best to make up your own replacement loom with proper fuses as early cars didn't have fuses in the fan wiring and when the fans seized the car went up in flames. The all-alloy engine needs proper antifreeze to prevent internal corrosion, so peer in the expansion tank and check that it's not running on plain water.



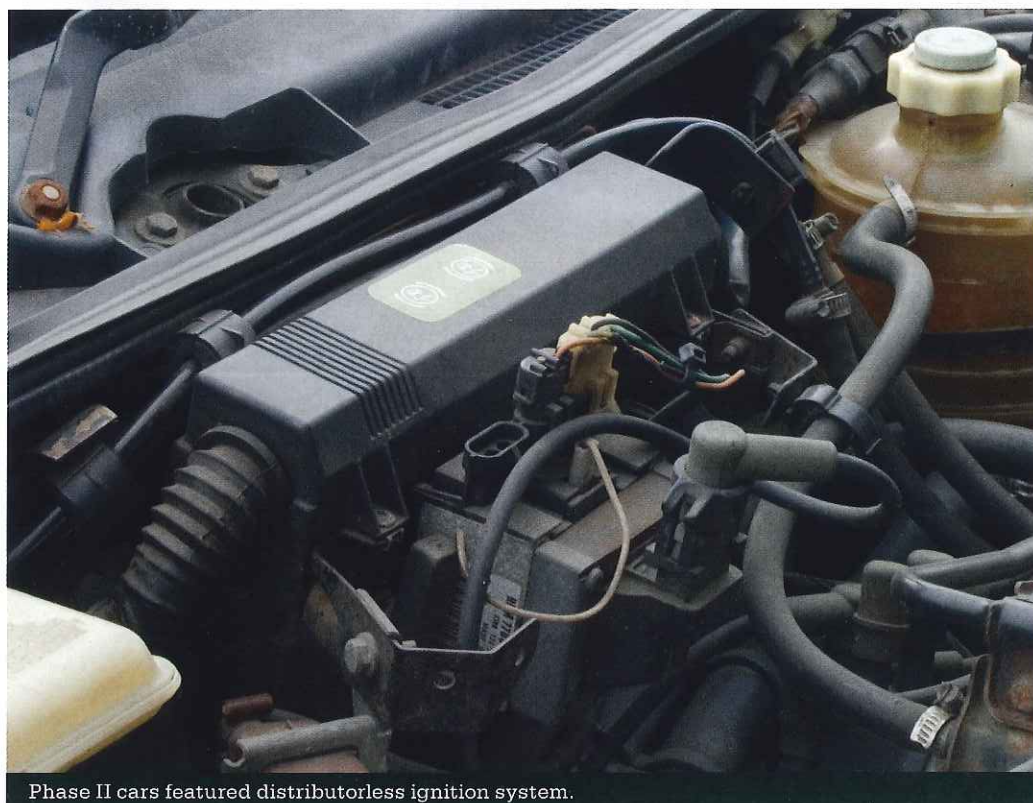
Check all the intake and boost hoses for splits.



As ever with turbo motors, decent oil is crucial.



Poor performance is often down to split boost or intake hoses.



Phase II cars featured distributorless ignition system.

REALITY CHECK

They're old cars now: the first examples have been smoking round the UK's roads for 19 years, so don't expect perfection.

They might be a strong engine design but you need to look after any turbo car properly. Change the oil regularly and let the turbo cool down after thrashing it.

They're a full five-seater. "Daddy, what does 'torque steer' mean...?"

Insurance is Group 14, so expect a hefty premium. It's actually cheaper than insuring a 5 GT Turbo or a 19 16V though.

These were high-tech cars back in the day but by today's standards they're pretty simple. Most DIY work is reasonably straightforward at home.

It's all too easy to wind up the boost using a crude bleed valve. It'll really make your 21 fly... until it gives up in a sea of melted pistons. Stick to a maximum of 18 psi on a standard engine.

BRAKES

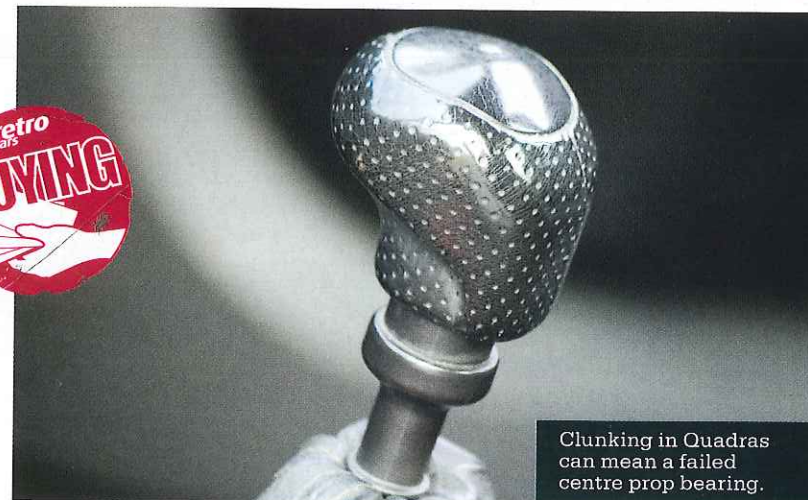


ABS issues are usually down to corroded sensor rings.

All these had standard ABS and to get an MoT you'll need the light to come on with the key and go out when the engine's started. A permanently lit ABS lamp is usually down to failed wheel sensors, which are pretty delicate, or the sensor rings on the hub, which can corrode and fill up with crud. Cleaning them with a wire brush usually does the trick. Brand new sensors are expensive and the rear sensor rings are only available as a complete hub. Warped discs are easy to replace although the Torx-headed set screws can round off easily.

TRANSMISSION

A favourite in the kit car world, Renault's UN1 box is a tough unit and works with a nice light hydraulic clutch. Any driveline judder can mean a clutch soaked in oil by a leaky distributor seal, while gear selection problems can mean worn bushes in the shift linkage. Watch out for garages simply cutting the gearbox rubber mounts when they can't get them off. Prop centre bearings on the Quadra can fail which means a complete shaft.



Clunking in Quadras can mean a failed centre prop bearing.

INTERIOR

Original spec includes electric windows all round and a sunroof too. If the rear windows don't work (check the safety cut-out switch first!) then they're probably just seized. Front motors can be used in the rear. If the sunroof won't lift, there's a rebuild kit to cure it and if the roof goes back just a couple of inches and jams, then Renault's factory-fit piece of cardboard inside the roof has fallen down and jammed it. Rip it out and discard it.



Don't run more than 18 psi on a standard engine.



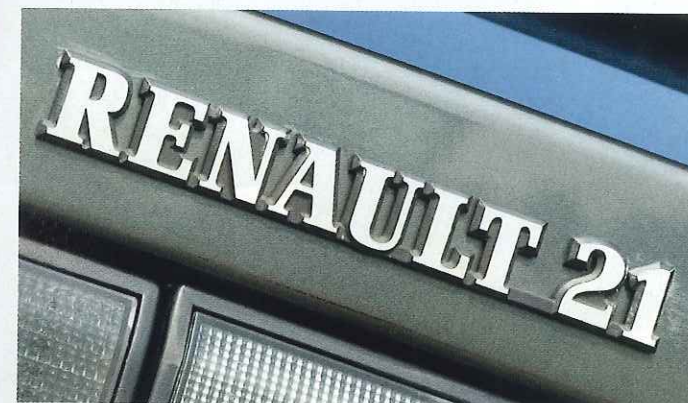
Dashboard could only be from a late '80s Renault. Check the funky orange lettering.



BODYWORK



It's an '80s French motor, so expect to find a bit of worm somewhere. The rear arches can rot badly and it's simply down to their design. The sills can rust under the plastic side trims too. Brake fluid spilled down the inner wing can strip the paint off in the steering rack mounting area and cause rust. Elsewhere, check things like strut tops and bumper mounts for obvious accident damage. Badly fitted wind-screens will leave bare metal exposed under the seal - with disastrous results.



PARTS AND SERVICE

Engine Oil And Filter

Every 6000 miles you want to be putting fresh 10W40 semi or full synthetic inside it. Don't use an oil flush agent and don't go thinner than 10W40 as it's too thin for the old-school engine and you'll just blow most of it out through the turbo seals. A larger filter from a Peugeot can be used as a replacement.

Plugs

Swap them every other service and stick to platinum-tipped items. NGK BP7EFVX are recommended, gapped to 0.55 mm. The gap is crucial on these so check them every service.

Ignition

The distributor and rotor arm are long-lived items and some 21 Turbos are even on their originals. Change them if they look knackered.

Cam Belt

Renault says it will last for 72,000 miles, but that's asking a lot for a rubber belt. Switch it when you buy the car and then every 30,000 miles. It's a 115 teeth by 3/4 inch belt and if you're feeling rich, treat it to a new tensioner too.

Transmission

Remember that the front-wheel drive cars use different oil from the Quads, but change the oil when you buy the car at the very least.

Everything Else

It's another all-alloy engine so remember to use antifreeze and not plain water to avoid internal corrosion. Every 30,000 miles change the fuel filters too.

"15 inch rims were pretty bling back in 1987"



WHEELS AND TYRES



Standard kit is on the small side: 15 inch rims were pretty bling in 1987 but they look a bit under-tyred today. Move up to 16s with a wider tyre and you'll notice a difference, but don't go too mad or you'll spoil the handling, especially on the front-drive cars. Stick to a maximum of a 16 inch wheel and you'll avoid clearance problems.



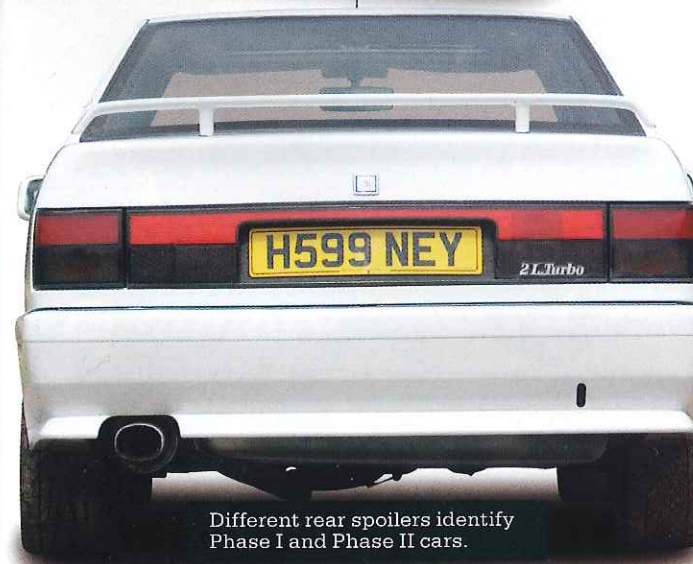
Don't go mad on wheel sizes: 16s are plenty big enough.

SUSPENSION

Most of these will have around 100,000 miles showing now, so the firm standard set-up will have taken its toll. Knocking noises at the front are usually down to an iffy front shock absorber top mount, but also on the list are subframe bushes, worn driveshafts or engine/gearbox mounts.

If the steering seems heavy and doesn't return properly, suspect the strut top mount, which can corrode. New bearings will cure the problem though.

A humming noise from the rear will be the rear wheel bearing.



Different rear spoilers identify Phase I and Phase II cars.

THIS ONE'S MINE

The cars in our photos are just a small part of Dave Sibley's massive collection of turbo'd Renaults, which includes more 21s, an 11 Turbo and even a 21 Turbo-powered GTA project. If the name sounds familiar, it's because Dave is part-owner with Andy Rabson of the drag racing Fuego which has appeared in these pages more than once. Power? 21 Turbo, of course. The white car is a Quadra, rescued by Dave in a sorry state and subject of a long-term rebuild, while the grey car is an impressively original Phase 1 front-drive Turbo. Having driven both examples, we can see why Dave has got sucked into the whole 21 Turbo experience: they really are a French Cosworth. Find Dave at DaveL485@aol.com if you want to talk Renault Turbos.



TECH SPEC

RENAULT 21 TURBO

ENGINE
1995cc all-alloy four-cylinder with Garrett T3 turbocharger at 13.2 psi.

POWER
175 bhp at 5200 rpm

TORQUE
199 lbf.ft at 4000 rpm

TRANSMISSION
Five-speed manual, Renault UN1 Type 13 gearbox. Front-wheel drive. Quadra: four-wheel drive through UN7 gearbox using viscous coupling differentials. Electronic boost limit in first gear on front-drive models.

SUSPENSION
Front MacPherson struts with wishbones, rear torsion bars and trailing arms. Independent rear suspension on Quadra.

BRAKES
Discs all round with Teves ABS.

STEERING
Rack-and-pinion with power assistance.

WHEELS AND TYRES
15 inch alloy wheels with 195/55 tyres.

WEBSITE

www.r21turbo.com
French site with superb video downloads

www.gtoengineering.co.uk
UN1 gearbox specialist

www.fastchip.nl
Remapped engine management ECUs

www.renaultpower.com
More videos and 21 info

www.renault21.de
German language site

PARTS

Renault dealers can still supply a lot of parts, although some Quadra bits are tricky to find. Up-rated bits are available from loads of places, including specialists like Prima Racing, home of the Eurocup 21 racer featured in our December 2005 issue, 21 Turbo enthusiast Lee Alison at Elite Car Concepts and Renault engine specialist BB Performance. www.bbperformance.co.uk www.primaracing.com www.elitecarconcepts.com

USEFUL BOOKS

Renault 21 Petrol (86-94)
Haynes Manual
(not Quadra)
ISBN 1 85960 275 4

CLUBS

Renault Turbo Owners' Club
www.rtoc.co.uk

Renault 21 Turbo Owners' Club
www.21turboownersclub.com

PRICE GUIDE

	Silver Diamond	Rough Diamond
Phase 1	£1000	£300
Phase 2	£1500	£500
Phase 3	£1800	£700
Quadra	£2000	£1000

Don't expect a bargain by nipping over the Channel: these cars are so sought after in France that the prices are much higher than over here.