

## Subaru Legacy 2.0GL 4WD



**A**NYONE WHO HAS VENTURED INTO the forests in the dead of night recently to watch rally cars in action, can't fail to have been impressed by the deep guttural bellowing and flame-spitting exhaust of Subaru's World Rally Championship-contending Legacy.

Ably conducted by a highly talented young Scot, Colin McRae – who's becoming the increasingly famous rallying son of his well-known rallying dad, Jimmy – the Legacy has been not-so-quietly taking the opposition to the cleaners.

The rally car is heavily modified compared with roadgoing versions, of course. Nevertheless, Subaru's impressive four-wheel drive heritage provides an appropriate launching pad for an assault on the international rallying scene, while its considerable successes to date are bound to have a spin-off on the sale of road cars. (This is, after all, one of the main reasons why manufacturers get involved with competition programmes.)

The rally car is based on the exciting 197bhp, 2-litre, 4 Cam Turbo version, but the Legacy's

unusual flat-four engine also comes in more "socially responsible" form – without the turbocharger – with either a 2.0- or a 2.2-litre engine in an attractive four-door saloon or a spacious five-door estate.

Having already warmed to the Legacy's cool, understated charm in a 2.2-litre GX Estate with automatic transmission (see report R9053), we return to see how it fares as a tax-beating 2-litre GL in the saloon – this time with do-it-yourself gearchanging.

### At the wheel

Thanks to its additional four-wheel drive running gear, the Legacy tips the scales at a hefty 25cwt. But its four-pot "boxer" power unit delivers a healthy 123bhp at full-chat; this compares with 134bhp for the 2.2-litre.

This endows it with a lively turn of speed, with 30–70mph acceleration in 10.7sec and a top speed of 116mph placing it only slightly below par for the medium-sized 2-litre class.

Its slightly notchy gearshift prefers not to be hurried and demands quite frequent use to get the

best from the engine – as hinted at by its quite lofty 4400rpm torque peak. But although the Legacy thrives on such enthusiastic use, it's perfectly amenable to trundle along quietly in top gear, albeit with rather less get-up-and-go.

Pedalled hard, the flat-four's deep, offbeat engine note can become quite intrusive towards the upper reaches of the rev counter; in more normal use it moderates to a distant, background hum. Think of the VW Beetle (or the old rear-engined Transporter), and you'll know the sort of sound we mean.

The Legacy driver is given an easy time at the wheel, thanks to neat displays, the customary light and easy Japanese controls and a generally pleasing driving position. The power steering is reasonably responsive and clear all-round vision further eases driving and parking.

Suspension settings err a shade on the soft side, compared with what the best of the opposition has to offer, yet the Legacy still handles bumps and undulations without too much fretting or float.

The Legacy's four-wheel drive is intended as much to provide limited off-road capability as it is for high performance or snow-mobility on the road, although it doesn't have sufficient daylight underneath to play at real Range Rover stuff. An Audi quattro and a Range Rover rolled into one would be a tall order, yet that's what the Legacy sets out to be.

There are, however, undoubted benefits on the tarmac: 4WD endows the Legacy with secure, sure-footed reassurance on wet, greasy surfaces, while wet or dry, it eliminates the risk of wheelspin and break-away. Having all four wheels interconnected (albeit via the differentials) also provides a limited degree of anti-lock control. Full ABS braking comes as standard on all 2.2GX or 2.0 4 Cam Turbo models, incidentally.

The all-wheel drive's extra drag and weight have to be paid for somewhere along the line, of course – usually at the fuel pumps. Even so, given the Legacy's heavy transmission, ample kerb weight and the need to drive it enthusiastically to get the best results, our 28mpg overall is quite impressive. This compares with 33 to 37mpg for the two-wheel drive rivals listed in our table, or 28 to 32mpg for 2-litre models in the next size/class up. The Legacy's permanent-reading fuel gauge and low-level warning lamp refrain from crying wolf too early, and we particularly like the neat integral holder for the filler cap when it's time to refuel.

### **Living with the Legacy**

Although it's the 2.2-litre GX and 4 Cam Turbo models that have a full set of bells and whistles, the cheapest Legacy still fares pretty well as far as equipment is concerned.

Power steering (with tilt-adjustable wheel), electric windows and mirrors, central locking and split-fold rear seat backrests (with ski flap and centre armrest) are all standard. Also provided are seat height and

lumbar support adjustments for the driver, internal releases for the boot lid and fuel flap, and a four-speaker stereo radio/cassette player. Pity its controls are quite so fiddly, though.

The only noteworthy absentee is a sunroof, although an electric tilt and slide unit is available, listed rather unusually as a dealer-fit £750 option. Air conditioning can be similarly provided for an additional £1200.

Also standard on the 2-litre GL with a manual gearbox is a novel "Hill-holder" device, which uses the clutch to maintain brake pressure when facing uphill (though not downhill). To move off, you just drive away as you would on the level; brake pressure is automatically released, saving all the jiggery-pokery of co-ordinating the handbrake with taking up the drive. As we said of the Estate, it's one of those nice little Legacy features that makes you think, "Why hasn't someone done that before?" Actually, they probably have!

The GL version's cabin isn't particularly opulent, but it's neat and immaculately presented. There's a couple of inches less headroom all round, because the saloon lacks the Estate car's raised "turret" roof. Front and rear legroom are much the same, however – comfortable for this size of car, though by no means class-leading.

Seat comfort is pretty good in the front, although more prominent lumbar support wouldn't go amiss (the driver's seat adjuster proving of limited effect). It's a shade better in the rear, thanks to ample thigh support from the nicely angled cushion. The backrest may be rather too reclined for some passengers.

Not surprisingly, the saloon is no match for the Estate in terms of luggage space, but there's still a reasonable amount of floor area under the boot lid. The well-lined boot has a conveniently low sill with a fair-sized opening to ease loading. An external handle is a glaringly obvious omission when the boot lid is wet or dirty, however, and opening a rainy boot lid deposits water over the contents.

The Legacy's engine looks higher under the bonnet than you might expect, but this, together with the flat-four configuration, gives excellent all-round access for maintenance. The only partially guarded pulleys and drive belts are a mite too accessible to unwary or inquisitive fingers for our liking, though.

Servicing requirements call for oil change/minor visits at six-monthly/7500-mile intervals, with major services scheduled annually or every 15,000 miles.

In addition to 12-months'/unlimited-mileage mechanical cover and a six-year anti-rust warranty (requiring chargeable inspections after the first, third and fifth years), the complete powertrain is covered for an additional year, without mileage limit.

This 2-litre GL attracts a Group 13 insurance rating under the ABI's new 20-group system, with Group 14 for the 2.2-litre; it's a costly Group 17 for the 4 Cam Turbo.

*Continued on page 4*

PERFORMANCE

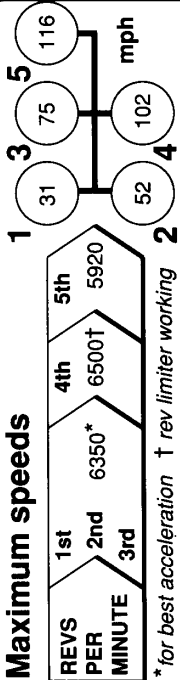
Acceleration time in seconds

STANDING START	0-30mph	3.5	0-60mph	10.7	1/4 mile	17.8
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mph	30	40	50	60	70
THROUGH THE GEARS		2.0	4.1	7.2	10.7
IN 5TH GEAR		6.3	12.6	18.9	25.9
IN 4TH GEAR		4.5	8.7	13.3	18.0

20 mph	30	40	50	60	70
5TH/4TH SPEED RANGES		13.0/9.2	12.6/8.7	12.6/8.8	13.3/9.3

Maximum speeds



FUEL CONSUMPTION

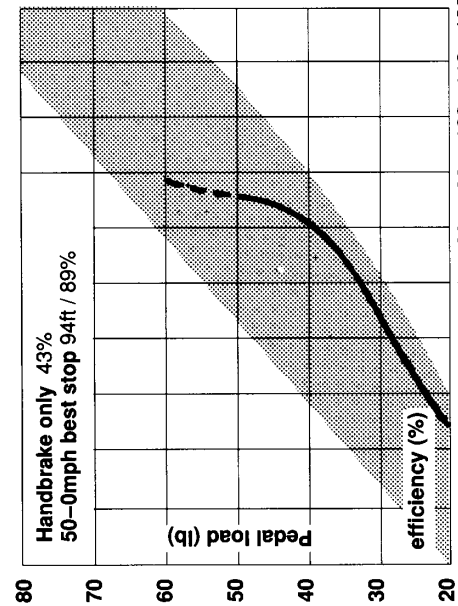
Fuel grade for tests: unleaded Premium, 95 octane

Normal range	mpg
Hard driving, heavy traffic	23 1/2
Short journeys in the suburbs	23 1/2
Motorway – 70mph cruising	29
Brisk driving, mixed roads	28
Gentle driving – rural roads	32 1/2
Typical mpg overall	28
Realistic tank range*	54 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 – 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)

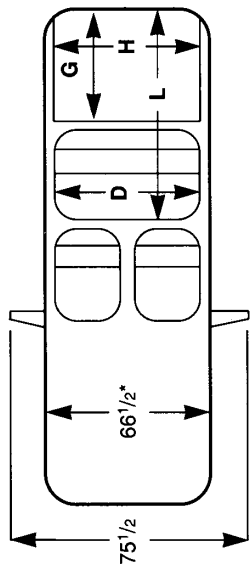
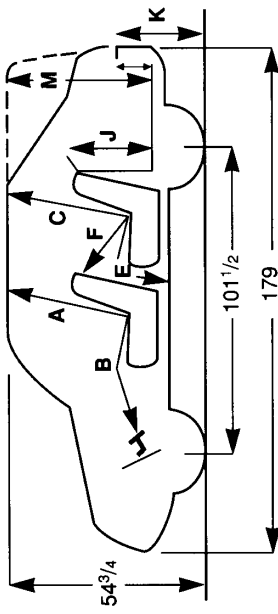
46	At start of test
35	After constant use
38	After severe use
-	After watersplash
-	Number of stops to recover

Safety check list

Steering	true 'feel' of the road?	X
Brakes	powerful?	✓
	sensible effort?	✓
	fade resistant?	✓
Seatbelts	front – effective?	✓
	convenient?	✓
	rears – effective?	✓
	convenient?	X
Head restraints	front – effective?	✓
	rear – effective?	X
Interior	thoroughly padded?	✓
Fuel	shielded filler?	✓
	protected tank?	✓

MEASUREMENTS

Dimensions (inches)



\* mirrors folded flush

Kerb weight in lb (full of fuel)

Inside (inches)

A Front headroom	37-38 3/4	G Load length	39
B Front legroom (min - max)	33 3/4-42	H Load floor width (min - max)	39-54 1/4
C Rear headroom	36 1/2	J Load height (under rear shelf)	17
D Back seat width (between armrests)	50 1/2	K Sill height (inner/outer)	9 1/2/29 3/4
E Typical rear * legroom	40 1/2	L Load length	74
F Typical rear * kneeroom	30 3/4	M Load height (to tailgate hinge)	-

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

## VERDICT

In case you hadn't already guessed, we're impressed with the Legacy. Its quiet, unassuming looks may not be the last word in automotive styling, but what's that old maxim about a book and its cover?

Although its accommodation, ride quality, performance and economy don't set any new standards, it's not seriously deficient in any of these aspects. What's more, the Legacy brings something different under the bonnet that adds

considerable character to what could otherwise be just another rather bland Japanese saloon.

On top of this, its all-wheel drive provides added all-weather security on the road, plus reasonable capability off it – and all at a keen price.

Its good value, no-nonsense approach is reflected throughout the range, too – even the top of the range 4 Cam Turbo Estate currently still falls within the sensitive 2-litre and £19,240 company car tax thresholds.

HOW IT COMPARES	Engine cap/power (cc/bhp)	Max speed (mph)	30-70mph through gears (sec)	30-70mph in 5th/4th gears (sec)	Fuel economy (mpg)	Brakes best stop (%g/lb)	Maximum legroom – front (in)	Typical leg/kneeroom – rear (in)	Steering turns/ circle (ft)	Overall length (in)
Subaru Legacy 2.0GL 4WD (c)	1994/123	116	10.7	25.9/18.0	28	87/50	42	40 <sup>1</sup> / <sub>2</sub> /30 <sup>3</sup> / <sub>4</sub>	3.4/34 <sup>1</sup> / <sub>4</sub> (p)	179
Ford Sierra Sapphire 2.0i LX	1998/125	117	9.7	21.0/15.2	32 <sup>1</sup> / <sub>2</sub>	105/30*	42	39/31	2.8/35 (p)	176
Peugeot 405 1.9GRi	1905/125	119	10.1	25.0/16.9	34 <sup>1</sup> / <sub>2</sub>	104/27*	42 <sup>1</sup> / <sub>4</sub>	39/30 <sup>1</sup> / <sub>2</sub>	3.1/34 <sup>1</sup> / <sub>2</sub> (p)	173 <sup>1</sup> / <sub>2</sub>
Vauxhall Cavalier 2.0i GL	1998/115	123	8.9	25.5/17.4	37 <sup>1</sup> / <sub>2</sub>	93/32	42	38 <sup>3</sup> / <sub>4</sub> /28 <sup>3</sup> / <sub>4</sub>	3.5/34 <sup>1</sup> / <sub>2</sub> (p)	174 <sup>1</sup> / <sub>2</sub>
VW Passat 2.0CL (c)	1984/115	121	10.7	24.3/17.7	35	95/37	43	43/32	3.3/33 (p)	180
(c) catalyser fitted						* ABS fitted			(p) power assisted	

## TECHNICAL SPECIFICATION

### ENGINE

**Type and size** front-mounted, longitudinal, horizontally opposed 4-cylinder; water-cooled. 92mm bore x 75mm stroke = 1994cc. Aluminium alloy block and head; 5 main bearings

**Compression ratio** 9.5:1

**Valve gear** single belt-driven overhead camshaft per bank, actuating four valves per cylinder via hydraulic tappets

**Fuel system** Hitachi/Subaru electronic multi-point fuel injection, three-way regulated catalyser with lambda sensor. 60-litre (13.2-gallon) tank, with low-fuel warning lamp. Fuel required: unleaded only, 90 octane minimum

**Ignition system** fully programmed electronic integral with fuel injection, via distributorless twin-coil HT system

**Maximum power** 123bhp at 5500rpm

**Maximum torque** 122 lb ft at 4400rpm

### TRANSMISSION

**Clutch** 8.9in dry plate, diaphragm spring; cable-operated. Pedal load/travel: 28 lb/4<sup>1</sup>/<sub>2</sub>in

**Gearbox** 5-speed (all synchromesh) and reverse. Ratios: first 3.55, second 2.11, third 1.45,

fourth 1.09, top 0.87 and reverse 3.42:1.

Electronically controlled 4-speed automatic optional

**Final drive** 4.11:1, to all four wheels. Full-time 4WD with viscous coupling centre differential

**Mph per 1000rpm** 19.7 in top; 15.7 in 4th

**Rpm at 70mph** 3560 in top gear

### CHASSIS

**Suspension** front: independent by MacPherson damper/struts, coil springs, lower wishbones and an anti-roll bar. Rear: independent by coil spring/damper struts, dual transverse links and trailing arms. Dampers: telescopic all round

**Steering** power assisted (speed-sensitive) rack and pinion with 3.4 turns between full locks. Turning circles average 34<sup>1</sup>/<sub>4</sub>ft between kerbs, with 53<sup>1</sup>/<sub>2</sub>ft circle for one turn of the wheel

**Wheels** 5J x 14 steel with 185/70R14 88H tyres (Michelin MXV2 on test car)

**Brakes** 10.2in ventilated discs front, 10.5in solid discs rear (with integral drum handbrake) and vacuum servo. Clutch pedal-operated "Hill-holder" device on manual transmission-equipped cars. Anti-lock brakes standard on 2.2 and 4 Cam Turbo, not available on 2 litre