

Subaru Justy 1.2GLi



What's new . . .

This year sees a slightly more powerful Justy, with multi-point fuel injection and a catalytic converter. There are minor cosmetic changes and new model designations – and more sporty wheel covers.

SUBARU'S CHEEKY LITTLE 4x4 SUPERMINI, the Justy, is never seriously going to threaten the best-selling small hatchbacks, thanks largely to import quota restrictions.

But in the six years since the original version was launched, its lusty three-cylinder engine and endearing character, together with the rough-going versatility its part-time four-wheel drive bestows, have earned the Justy a loyal band of followers – ourselves included.

Apart from its all-wheel drive – a very rare commodity at this end of the market – the Justy can also offer automatic transmission. Not just any old self-

shifting gearbox, mind you. The Justy E-CVT, as it's known, uses the more efficient continuously variable ratio type, pioneered by Daf all those years ago, together with a mechanically fascinating electromagnetic powder clutch. This clever little device not only takes up the drive almost as smoothly as a conventional automatic's torque converter as you move off, but does so without suffering the converter's inherent fuel sapping losses.

Our previous Justy report (see R9056A) featured the automatic E-CVT model; this update concentrates on the Justy's most recent revision – the acquisition of a catalytic converter and power-boosting fuel injection.

Lustier still

Fitting multi-point fuel injection to the Justy's 1189cc power unit more than offsets the "cat" penalty, with peak power raised from 67 to 73bhp at the same 5600rpm. Maximum torque remains more or less unaltered, although it now peaks nearly 1000rpm earlier.

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PERFORMANCE

Acceleration time in seconds

STANDING START	0-30mph	0-60mph	1/4 mile
	3.7	12.1	18.7

mph	30	40	50	60	70
THROUGH THE GEARS		2.0	5.0	8.4	14.1
IN 5TH GEAR		6.0	11.9	19.2	28.2
IN 4TH GEAR		4.5	9.5	15.1	21.5

20 mph	30	40	50	60	70
5TH/4TH SPEED RANGES	12.3/9.4	13.2/10.6	11.9/9.5	16.3/12.0	

Maximum speeds

REVS PER MINUTE	1st	2nd	3rd	4th	5th
		6700 *	6450	5700	

* for best acceleration

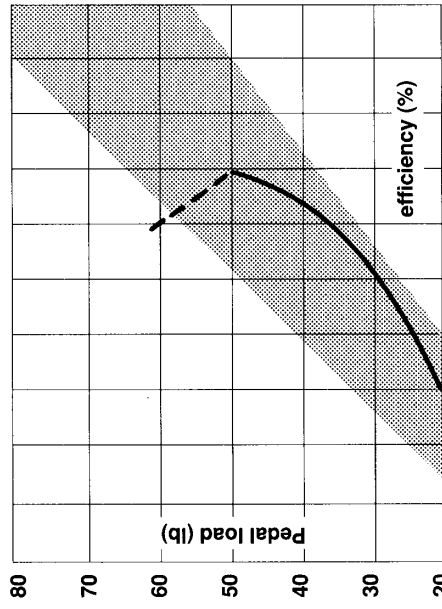
FUEL CONSUMPTION

Fuel grade for tests: unleaded Premium, 95 octane

Normal range	mpg
Hard driving, heavy traffic	28½
Short journeys in the suburbs	35
Motorway – 70mph cruising	34½
Brisk driving, mixed roads	40
Gentle driving, rural roads	47
Typical mpg overall	38½
Realistic tank range*	30 litres/250 miles

SAFETY

Brakes (without ABS)



Braking efficiency shown as a percentage of gravity (ie 100% = 1.0g)

Ideally the braking curve should be a gentle sweep and lie within the shaded zone of this graph. If it's above, the brakes are too heavy; if it's below, they are too light – although this is more acceptable on cars with ABS. When the curve becomes broken, the wheels are skidding.

Safety check list

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

Fade test

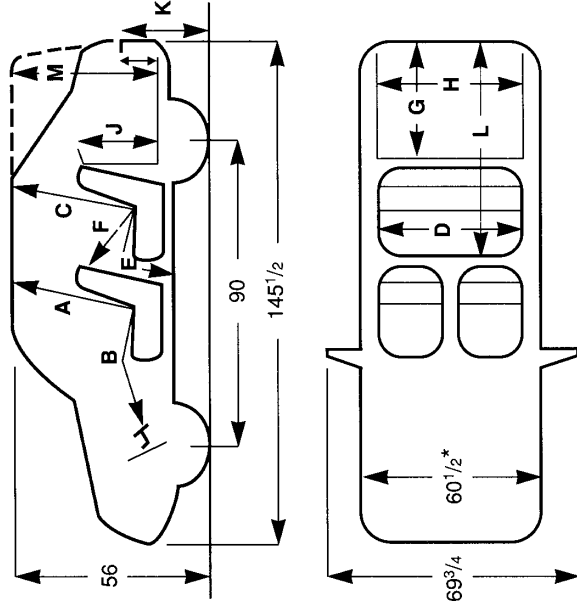
How hard use affects braking
(Ideal brakes show no change)

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

At start of test	After constant use	After severe use
27	27	35

MEASUREMENTS

Dimensions (inches)



* with mirrors folded

Inside (inches)

A Front headroom	37 ^{1/2}	G Load length	21 ^{1/2}
B Front legroom (min - max)	35 ^{1/4} -41 ^{1/2}	H Load floor width (min - max)	35 ^{1/2} -50 ^{3/4}
C Rear headroom	35 ^{3/4}	J Load height (under load cover)	12 ^{1/4}
D Back seat width (between armrests)	48 ^{1/2}	K Sill height (inner/outer)	1/24 ^{1/2}
E Typical rear * legroom	36	L Load length	48 ^{1/2}
F Typical rear * knee room	25 ^{1/2}	M Load height (to tailgate hinge)	28 ^{1/2}

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

This raises the somewhat academic top speed to a rather frantic-sounding 98mph (up 8mph on the previous carburettor model), while the more relevant 30–70mph sprint times show comparable reductions – a couple of seconds brisker through the gears, up to about 4½ seconds quicker in fifth gear.

It's not all good news, however. Although the Justy's deep, throbby three-cylinder engine note still grows on you, the boosted power output seems to have introduced a harsher, more intrusive edge to the underbonnet noises.

DIY or E-CVT

There's less need for gearchanging, but even so, a light, progressive clutch, taut driveline and smooth throttle take much of the hard work out of this chore. The gear lever is rather lanky, though. Of course, there's always the automatic for those who prefer the cog-swapping done for them. The CVT option costs about £700 extra and is available on both three- and five-door variants.

Controlled thirst

Quicker it may be, but the fuel-injected Justy proved no thirstier in our searching mpg tests. Its more-efficient fuel injection preserves the Justy's very acceptable, though by no means class-leading, 38½mpg overall economy, despite marginally lower gearing.

It's a shade thirstier if the increased performance is used to the full – now capable of dipping below 30mpg if you try hard enough – but approaching 40mpg is still a fair result, given the Justy's added four-wheel drive burden. The trouble is that the titchy fuel tank (the propshaft to the rear axle gets in the way) restricts the realistic range to a below-par 250 miles between refills, and there's no low-fuel warning lamp to help, either.

Go anywhere . . . well, almost

As covered in more detail in earlier reports, the Justy is now unique in offering four-wheel drive in the small hatchback sector. It's the simpler, driver-selected, "part-time" variety, of course – not the more sophisticated permanent four-wheel drive which needs an additional centre differential to avoid transmission wind-up when the car is used on the road.

Engaging four-wheel drive when the going gets squelchy couldn't be simpler – just press the big red switch set into the end of the gear knob (confirmed by illumination of a graphic symbol on the dash) and away you go. There are no diff locks, freewheeling hubs or extra levers to intimidate first-time four-wheel drivers. To be fair, though, the Justy's drive-at-each-corner is intended more for all-weather security on wintry roads or only limited excursions off it, rather than taking on serious off-roaders at their own game.

Space and comfort

Shoehorning additional running gear into this pint-sized supermini inevitably compromises the accommodation. The Justy's packaging looks a bit dated now, alongside recent and more successful space-stretching exponents such as the Vauxhall Corsa, Renault Clio and Nissan Micra. Boot space, for example, although adequate, is none too generous, while back seat space is more akin to that of the cosy Metro or ultra-compact Peugeot 106 than of those roomiest superminis – including the Fiesta.

Safety and security

The Justy is also showing its age a bit here, by lacking any of the latest safety features such as side-impact door beams, height-adjustable seatbelt mounts, seatbelt tensioners, an airbag option, and so on. Security receives hardly any attention, either; the radio/cassette unit is coded, but that's about it.

Equipment and value

With four-wheel drive included in the total price of about £8000, you can't expect too many creature comforts. Nevertheless, the Justy comes with a rev counter, split-fold back seats, adjustable front head restraints, mudflaps all round, and a hinged cover and illumination for the load area.

The only notable absentee is central locking, a much-missed convenience (even as an option), especially on the five-door. A sunroof would be nice, too, although you do get one on the £400-extra, special edition Justy Jem. This is available only in all-white, however, with matching bumpers, side-protection mouldings, door handles and mirrors, wheel covers – even white mudflaps.

Instead of the former badges that denoted the number of doors, three- and five-door Justys now wear simpler 1.2Si or 1.2GLi chromework, with the additional pair of doors adding about £300 to the price. The only option listed is metallic paint.

VERDICT

Despite some shortcomings in the amount of space it offers, the Justy possesses plenty of character. No other maker offers four-wheel drive (together with electronically controlled CVT automatic transmission, if you want it) at the smaller end of the spectrum, and buying one shouldn't break the bank.

Despite our admiration for the Justy, though, we have to concede that the sheer all-round competence of some of the latest arrivals on the small hatchback scene leave the Justy rather showing its age. But if you're looking for a small hatchback that will give you all-year-round mobility in remote areas, look no further.

Continued overleaf

HOW THEY COMPARE	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 Justy 1.2GLi 4WD (5 door)	1189/73	98	14.1	28.2/21.5	38 ¹ / ₂	89/50	41 ¹ / ₂	36/25 ¹ / ₂	4.4/30	145 ¹ / ₂
Ford Fiesta 1.3SX (5 door)	1297/60	94	15.9	33.9/23.1	40	102/35	40 ¹ / ₂	37 ³ / ₄ /26 ¹ / ₄	4.2/33 ¹ / ₂	147 ¹ / ₂
Nissan Micra 1.0LX (5 door)	998/55	92	16.5	35.4/26.0	43	88/33	40 ¹ / ₂	37/26	3.7/31 ³ / ₄	145 ¹ / ₂
Peugeot 106 1.1i XR (5 door)	1124/60	100	13.8	28.6/20.0	43	90/55	40 ³ / ₄	36/25 ¹ / ₄	3.7/35	140 ¹ / ₄
Renault Clio 1.2RN (5 door)	1171/60	98	15.4	31.5/23.0	43	82/45	40	37/26 ¹ / ₄	3.8/33 ¹ / ₂	146
Rover Metro 1.1S (5 door)	1120/60	95	16.6	38.7/26.0	41 ¹ / ₂	87/50	41	37 ¹ / ₂ /25 ¹ / ₄	3.6/32	138 ³ / ₄
Vauxhall Corsa 1.4i LS (3 door)	1196/60	96	14.3	30.3/21.1	42	101/28	41	39 ¹ / ₄ /26 ¹ / ₂	4.1/32	146 ³ / ₄



Justy 1.2GLi automatic

TECHNICAL SPECIFICATION

ENGINE

Type and size front-mounted, transverse 3 in line; water-cooled. 78.0mm bore x 83.0mm stroke = 1189cc. Iron block and alloy head; 4 main bearings

Compression ratio 9.1:1

Valve gear single belt-driven overhead camshaft actuating three valves per cylinder via rockers

Fuel system Subaru/Nippon Denso electronic multi-point fuel injection, three-way regulated catalyser and lambda sensor. 35-litre (7.7-gallon) tank, no low-fuel warning lamp. Fuel required: unleaded only, 90 octane minimum

Ignition system breakerless, via coil and distributor

Maximum power 73bhp at 5600rpm

Maximum torque 71 lb ft at 2800rpm

TRANSMISSION

Clutch 7.1in dry plate, diaphragm-spring, cable-operated. Pedal load/travel: 22 lb/5¹/₄in

Gearbox 5-speed (all synchromesh) and reverse with "on demand" four-wheel drive. Ratios: first 3.07,

second 1.69, third 1.14, fourth 0.79, fifth 0.67 and reverse 3.46:1

Subaru E-CVT continuously variable automatic transmission available as an optional extra

Final drive 5.28:1, to front or all four wheels

Mph per 1000rpm 17.2 in top, 14.6 in 4th

Rpm at 70mph 4090 (observed) in top gear

CHASSIS

Suspension front: independent by MacPherson damper/struts, coil springs, lower wishbones and an anti-roll bar. Rear: independent by coil springs, wishbones and an anti-roll bar. Dampers: telescopic all round

Steering unassisted (variable ratio) rack and pinion with 4.4 turns between full locks. Turning circles average 30ft between kerbs, with 60ft circle for one turn of the wheel

Wheels 5.00Bx13 steel, with 165/65R13 76T tyres (Michelin MXL on test car)

Brakes 9.4in ventilated discs front, 7.1in drums rear, with vacuum servo