

Subaru shape up

One can't help but feel a little sorry for Subaru. It was they, not Audi, who pioneered four-wheel-drive motoring for the masses, yet in the welter of publicity the German quattro cars have managed to generate that fact has slipped from the minds of many.

It also tends to be conveniently forgotten that the small-volume Japanese manufacturer is also a producer of conventional two-wheel-drive machines for the family buyer with no need for the complexities of 4WD. However, Subaru are now in a position to ram the point home, thanks to a new range of saloons and estates – the L-Series.

True, there are four-wheel-drive versions at the top of the L-Series range, but at the bottom end are front-driven variants which should do much to boost the little firm's market share where it really counts. Cheapest is the £6000 1.6-litre pushrod-engined DL saloon, with the 2WD range headed by the quick 1.8 GTi model at £7500. For this test, however, we concentrate on the version most likely to appeal to the family buyer, the 1.8 GLSE at £6899.

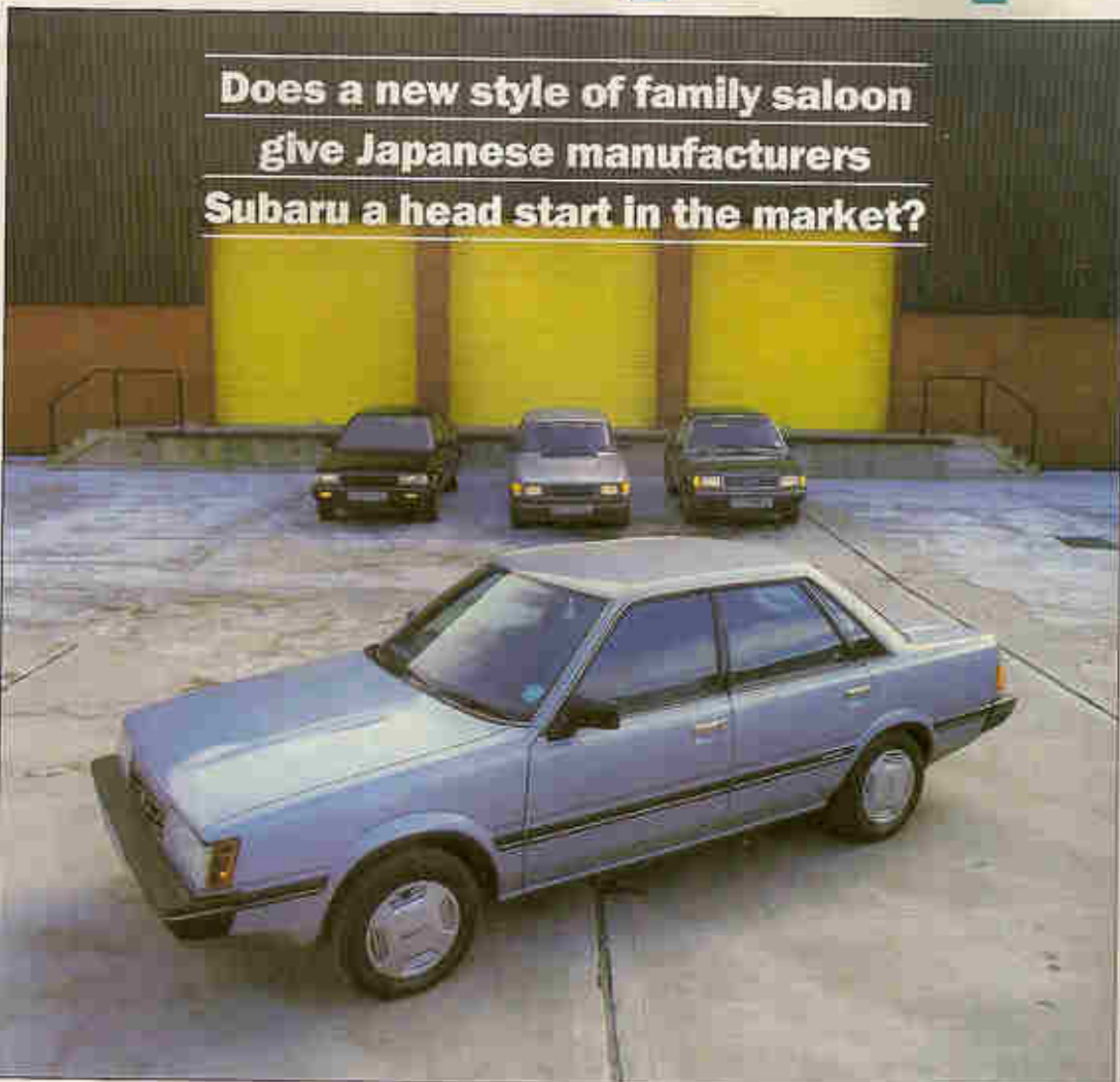
It's an utterly straightforward front-drive family saloon, powered by Subaru's familiar flat-four 1781cc engine – a unit that neatly undercuts the 1800cc tax break point for company cars.

Although conforming to conventional principles is in many ways a benefit in the market place, in this case it presents Subaru with a good few problems, most notably a fistful of similarly-priced rivals. There are the new Ford Sierra 1800s, the Vauxhall Cavalier, VW Jetta, Fiat Regata, Rover 213, and many more.

Choosing rivals for the 1.8 GLSE was, then, a relatively simple task, so we tried to concentrate on cars that were either new themselves or had been substantially revised.

One of the closest rivals on price to the Subaru is the new Saab 90 at £6995. Nominally a new car, the 90 is in fact a hybrid concoction of two Saab models rolled into one. The front end belongs to the now-deleted 99, while the rear section of a two-door 900 model has been grafted on – an odd idea, perhaps, but one that has given the new car valuable extra inches in the rear compartment.

Fellow Scandinavians Volvo have been trying hard of late to answer criticisms of their 360 saloon range. The most notable problem with the cars was a lack of engine refinement and poor fuel economy, so late last year a new two-litre 'low friction'



**Does a new style of family saloon
give Japanese manufacturers
Subaru a head start in the market?**

engine was developed for more frugal fuel returns and the added benefits of better power and torque. Here we test the cheaper of the two saloons, the carburettor 360 GLE model at £7210.

Although on the face of it our choice for the fourth test contender, the £7596 Nissan Bluebird 2.0 SGL, may seem a little overpriced for the company it's worth remembering that the 2.0 GL, mechanically similar but less well trimmed, is available at £6776. The cheaper car was unavailable to us for testing.

The Bluebird is relatively new itself, having made the transition from rear to front-wheel-drive last year. Externally, however, it looks little different to its predecessors.

Though its rivals here are all of two litres capacity, the Subaru is in no way disadvantaged by its 1781cc

engine, as we were later to find out on the test track. The flat-four 'boxer' engine, as used in previous Subaru models, is mounted in line over the front driving wheels. Its maximum 89 bhp at 5600 rpm is pumped through a five-speed gearbox. An auto 'box is available.

One of the benefits of this type of engine configuration is good torque, and Subaru quote a figure of 101 lb ft at 3600 revs – very impressive for an engine this size.

If the engine is of an unusual design, then the rest of the car's mechanical layout is strictly conventional, with MacPherson strut front suspension and a semi-trailing arm layout at the rear. Steering is by a rack and pinion system, with power assistance as standard. Ventilated front disc brakes help haul the Subaru to a stop.

Outwardly the car looks all-new, with a long, angular nose and sleek lines that belie the Subaru's country of origin. It's bigger than its predecessor, too, at 172 inches in length – the same as a Vauxhall Cavalier – and with a wheelbase of 97.2 ins.

Attention to aerodynamics has allowed a reduction in the saloon's drag factor to 0.35, roughly average for its class. It's also the lightest car in this test at 19.3 cwt.

Saab's newcomer is, by contrast, the longest and heaviest of the four cars. It weighs in at 22.4 cwt and measures up at 180 inches long, though its wheelbase is less than the Subaru's at 96.9 ins.

The 90 is assembled at Saab's factory in Finland and, as we've already mentioned, is an amalgam of the 99 and 900 models. From the 'B' posts back the car is pure 900 and, aside

from improving rear passenger space, it makes for a bigger boot and allows a larger (13.9 gallon) fuel tank.

Mechanically it follows the well-trodden Saab path of a 1985cc overhead camshaft engine (fuelled by a single-choke carburettor) mounted atop the front driving wheels. It develops 100 bhp at 5200 rpm, with a healthy 119 lb ft of torque available at 3500 revs.

Standard transmission is five-speed manual (automatic not being available) while a rack and pinion system is utilised for the steering. Power assistance is unavailable. The front suspension is formed by wishbones and coil springs, while behind is a dead axle with twin leading and trailing arms, and a Panhard rod. All-round disc brakes are a feature.

Volvo's modifications to the 1986cc overhead camshaft engine that powers the 360 GLE centre on revised crankshafts to reduce internal friction and offer better efficiency. On paper it seems a worthwhile exercise, with maximum power up to 102 bhp at 5700 rpm (from 92 bhp at 5400) and with torque of 116 lb ft on tap at 3000 revs (a similar amount was previously available at 3600 rpm.) Fuel economy is between 4.4 and 7.4 per cent improved, according to official figures.

Fed by a twin-choke carburettor, the unit is mounted north-south in the engine bay and drives the rear wheels through a rear-mounted five-speed gearbox (no automatic is available.) The common MacPherson strut system is utilised in the front suspension while at the rear there is the less-usual de Dion axle and coil spring arrangement. Braking is by discs and drums and steering by unassisted rack and pinion.

People could be forgiven for mistaking the new Nissan Bluebird for the old, so little has it changed externally. Yet under the skin very much is different, most notable being the switch of transmission from rear to front-wheel-drive.

Now the overhead camshaft 1973cc engine is mounted transversely over the driving wheels, pushing out a highly respectable power figure of 105 bhp at 5200 rpm, and torque of 142 lb ft at 4000 revs - the best of the four cars on test.

Our manual test car was fitted with a five-speed transmission, but a four-speed auto 'box is available for an extra £500. Power assistance of the rack and pinion steering system is a standard feature; braking is by disc and drums. The all-independent suspension features MacPherson struts at the front end and trailing arms at the rear. Anti-roll bars are fitted.

The bulky-looking Bluebird is, in fact, marginally shorter than the Subaru at 171.7 inches.

On paper at least, the re-engineered Volvo should offer the best fuel economy.

SUBARU 1.8 GLSE



NISSAN BLUEBIRD 2.0 SGL



VOLVO 360 GLE



SAAB 90



80 mph coming up in just 19.4 secs. Through the gears from 30 to 80 it also outpouts the others.

Normally such prowess would lead us to award a full five marks in this section, but unfortunately the Subaru has a major flaw: a lack of engine refinement that is all too evident at most points in the rev range. It's a problem we've commented on before in older Subaru models.

The flat-four configuration of the engine, while useful for promoting torque, is hardly conducive to relaxed driving, giving an odd, deeply growling sort of tone that, while not harsh, is very loud and throaty. Even modest acceleration provokes a lot of noise, though throttling back to cruise at 70 on the motorway settles things down to something approaching normality.

It is the Volvo that runs the Subaru closest on the test track and, like the Japanese car, it is by no means refined. While the Subaru's engine noise is simply a characteristic of design, the Volvo's new engine sounds harsh and strained when revving highly. 'Low friction' engine or not, the unit could still do with some attention to refinement.

There's no doubt that the Swedes work on the unit has paid off in one respect at least, however. Performance over the old model is improved.

Most benefit is felt lower down the speed scale, where the new, lower-down torque is evident. When we tested the previous model in March of last year it managed 30 mph from standstill in 3.5 seconds, 40 mph in 6.6 secs, and 50 mph in 7.9. The new engine propels the 360 GLE forward in corresponding times of 3.0, 4.9, and 7.1 secs. However, from 60 mph on there's little to choose.

Nonetheless, a 0-60 mph time of 10.5 secs is not to be sneezed at, though the rattly nature of the engine will probably deter most owners from trying to match our figures. Motorway cruising is a relaxed affair, little engine noise being prevalent at 70 mph, though there is some intrusion from other directions.

The Volvo's gearchange is for the most part helpful for quick progress through the 'box, though we sometimes had difficulty persuading it to select second on the way down.

Close behind the Volvo in acceleration terms comes the Nissan Bluebird, though that car seems to lack the urgency of the leading pair, while sharing their tendency towards unrefinement. In the Nissan's case this takes the form of a harsh vibratory engine note that is almost felt more than it is heard. Present at all times, not merely when accelerating hard, it spoils what is an otherwise excellent car for cruising - though legal motorway speeds reduce the unrefinement to the minimum, and could be maintained all day with little worry.

omy. At a steady 56 mph it chucks up 51.4 mpg, dipping to 27.2 in the urban cycle. The Subaru comes close at 46.3 mpg/56 mph and 28.9 mpg around town, while the Saab takes the wooden spoon with 39.8 mpg/56 mph and 23.3 mpg in the urban cycle.

PERFORMANCE

SUBARU	●●●●●
VOLVO	●●●●●
BLUEBIRD	●●●●●
SAAB	●●●●●

Our fears that the 1.8-litre Subaru would be overwhelmed by its bigger-engined rivals were quickly proved unfounded once the Japanese challenger had been given its head at our test track. For, despite giving away

between 11 and 16 bhp and 200cc to the others, the Subaru proved itself comprehensively quicker under most circumstances.

It was the only one of the four, for example, to scrape under the 10-second barrier to 60 mph, and was more than a second ahead of its closest rival by the time 80 mph had been chalked up. For its size, the Subaru is a very quick car, and its advantage is emphasised by the Volvo, Nissan, and Saab, which are by no means engineered with performance in mind.

Power is delivered to the wheels cleanly and smoothly, and the car is able to sprint from the line with far less drama than do the others. Sixty mph is reached in 9.9 seconds, with

GROUP TEST: £7000 SALOONS

Part of the reason for this is the ultra-high fifth gear, which has the dual effect of sapping acceleration when in that gear. Motorway acceleration will thus require constant down-changing to fourth to ensure rapid forward progress—leave it in fifth from 60 to 80 mph and you'll have to wait an agonising 23.8 secs to get there. Not good for overtaking.

The Bluebird sprints to 60 mph in 10.6 seconds, and has the highest top speed of the four at 108 mph (achieved in fourth). The rest can attain around the 100 mph mark.

High gearing is also the Saab's problem, though in the Swedish car's case it is not merely restricted to fifth. We know that the 1985cc engine is capable of good performance from tests of the 90's bigger brothers, the 900s. But the single choke carburettor and high gearing of the 90 combine to sap power and make forward progress hard work: maximum use of the gearbox has to be made to ensure the Saab doesn't get left behind by the flow of traffic. And the notchy gearchange isn't always willing to help, either.

The best 0-60 mph time we could coax from the car was an uninspiring 12.5 seconds, with 80 mph taking nearly 25 seconds to reach.

The engine also seems less refined in this installation. It's not easy to see why, but above 4000 revs it gets noticeably more harsh and thrashy. Regular drivers should not find this too much of a problem, though: the benefits in revving the car beyond this figure to the 5500 rpm limit in terms of improved acceleration are negligible.

Like the Nissan, fourth gear is an often-needed resource to maintain steady progress on the motorway, increasing engine noise and leading to poor economy. If 70 mph is maintained in fifth, however, the Saab can be quite refined mechanically.

The four test cars were with us during the depths of winter, so easy starting became a noticeable virtue. None gave us much cause for concern, though the Nissan's automatic choke seemed to take an age to cut out again. Not surprisingly, the two Scandinavian cars were the most willing to fire up, and required a minimum of choke to help them.

HANDLING AND RIDE

VOLVO	●●●●
BLUEBIRD	●●●●
SAAB	●●●●
SUBARU	●●●●

The Volvo finds itself at the top of this section more by default than anything else: it can be seen from our low scores for all the cars that none provided an acceptable ride/handling compromise.

The 360 GLE came closest, however. Let down only by its old-



SUBARU 1.8 GLSE

Now Subaru has pleasing, finely chiselled lines that look more European than Japanese. Flat-four 1781 cc engine offers good torque but lacks refinement under acceleration—it's still the quickest of the four cars. Interior is comfortable and most refined, with neat fascia layout. Heater controls are nicely placed close to driver's fingertips (far right picture) though sting of wiper knob is bad.



fashioned rear suspension and rather ragged cornering ability, the Volvo nonetheless has the best ride on offer. It's a better ride than that found in its hatchback counterparts, the suspension taking care of most road irregularities without too much trouble or discomfort for the passengers. The de Dion rear suspension can be caught out, however, by a succession of potholes: by the third or fourth bump the lurching caused by the system as it fights to cope becomes clearly felt in the cabin.

A bump mid-corner can seriously unsettle the car, too. Drive can be momentarily lost as one side of the car fights for grip. On the whole the Volvo has a 'soggy' feel, amply demonstrated by the prodigious

amounts of body roll that fast cornering provokes.

For all that, the Volvo is definitely the 'driver's car' of the group, thanks to its lively rear-drive characteristics. The tall can be made to respond to the throttle pleasingly, and though it becomes unsettled under extreme conditions it is generally very safe and predictable.

The steering of the 360 GLE could benefit from power assistance, being heavy for parking manoeuvres. It lightens up at speed to provide reassuring feel, but at 4.2 turns from lock to lock there's a lot of arm-twirling necessary for tight turns.

If the Volvo has 'soggy' handling, then the Nissan Bluebird has road behaviour that can only be described

as being wet through. The car has no sporting pretensions whatsoever, and is happiest when cruising on the all-too-rare smooth A-road.

Cumbersome to power quickly through corners, the Bluebird is unsettled over poor surfaces and dislikes being hustled. There's little body roll evident, but the power steering is a little too light at speed for reassuring feedback from the front wheels. Power steering became a standard feature only recently—the previous, non-assisted steering was very heavy, so perhaps this is the lesser of two evils. It's certainly a boon for parking.

Safe enough when being treated badly, like stepping off the throttle in mid-corner, the Bluebird is nonethe-



NISSAN BLUEBIRD 2.0 SGL

Nissan is more Japanese-looking than the Subaru, with tussy styling points both outside and in. Engine refinement is better, but still lacking in comparison to modern rivals. Bluebird's seats are the most comfortable, offering good side and thigh support. Less pleasing is the fascia. SGL model is very well equipped.





interior accommodation, even if access to the rear is more difficult.

Grafting on the back end of a 900 model has done wonders for legroom in the back, and improved boot size. Rear seat space is now truly generous, with ample legroom even if a six-foot driver is behind the wheel and the driver's seat is as far back as it can go. Headroom, too, is generous in the back.

If there's any complaint at all, it's that the low-set nature of the rear seats and the high backs of the front pair combine to hem the rear passengers in, though the effect is less claustrophobic than was the case in the old 99 model.

The driver and front-seat passenger are well catered for also, with plenty of head and legroom. The driving position is a little awkward in that the pedals are offset to the left slightly, which means sitting in a slightly 'crooked' position—this is quickly forgotten, though, as one becomes used to it. A great improvement is the less steeply-angled and nicely trimmed steering wheel.

The driver's seat offers good side support for cornering, though more high support would be welcomed for long journeys. It is adjustable for height as well as fore/aft movement. The rear seat is well shaped but lacks the necessary width to carry more than two adults in comfort for any length of time. Two inertia-seat belts are provided in the back, plus a centre static lap belt.

The glove box is quite small, but deep door pockets go some way towards compensating for this.

The rear seats fold down neatly to provide a long, flat, and obstruction-free load space, nearly 53 cu ft in total volume. However, the loading sill is on the high side, and the height of articles slotted in to the boot is restricted by the low bulkhead beneath the rear screen.

The spare wheel is inconveniently housed beneath the boot floor.

The longer, wider Subaru saloon is much more generous in interior space than was its predecessor. In the front, a six-foot driver has no problems accommodating himself behind the wheel, with more than adequate headroom and fore/aft adjustment of the seat. Side and thigh support offered by the seat is no more than adequate, but it is at least easy to adjust for the perfect driving position, there being a height adjustment control. The steering column is adjustable up and down, in addition. A convenient rest for the left foot is provided for when the clutch is not being operated.

In the rear, passengers find ample head and legroom, and a comfortable seat that is plenty wide enough for two adults and a child. A light, airy feel that is lacking in the Saab 90 is evident: there's plenty of glass: all



VOLVO 360 GLE



A new engine gives the small Volvo better performance, but economy and refinement are unchanged. A poor ride coupled to enjoyable rear-drive handling are the car's other main characteristics. Well trimmed, with headlamp washers, a heated driver's seat, and luxury seat cloth as standard. Facia is dull looking but well thought out, with much attention to detail. 'Ski slot' opening is of little use.

less unenjoyable in such circumstances as it scrabbles for grip.

The Saab's worst feature is undoubtedly its heavy steering: power assistance would be a worthwhile option, as town manoeuvres require much arm effort to perform. Like the Volvo, 4.2 turns from lock to lock makes for an undesirable amount of arm-twirling. Once speed has built up, the steering lightens to provide just the right amount of road feel.

Cornering ability is the 90's forte: safe and sporting in feel despite the car's weight, the Saab can be made to corner spiritedly and without drama, though there is a little body roll present to spoil the picture slightly for the driver.

The ride could be better: though

sportingly firm, poorly made-up roads often mean jolting and jarring for the occupants, particularly at high speeds, when the suspension seems less well able to cope satisfactorily.

The Subaru also has its problems in providing a decent ride. Though the suspension is good (if noisy) in ironing out minor ripples in the road, anything larger can catch it out quite seriously—and unpleasantly for the passengers. The ever-worsening state of Britain's roads means the car is never even-keeled for long, so the driver and passengers forever have to brace themselves against the shock that they know will probably be just around the next corner.

Cornering ability is well up to par, with no drama resulting from snap-

ping the throttle shut mid-corner. Understeer is the Subaru's natural attitude, and it is one that is difficult to upset. The steering, power assisted again, is pleasingly light for parking.

All the cars' braking systems performed adequately during our test, the Subaru proving the best balanced in feel.

ACCOMMODATION

SAAB	●●●●
SUBARU	●●●●
VOLVO	●●●●
BLUEBIRD	●●●●

Though the Saab might on the face of it suffer a handicap in having only two doors instead of four, the truth is that the 90 has the most convenient



SAAB 90



Saab's dumpy looks have been improved greatly by grafting on the rear end of 900 model, bettering rear and boot space in addition. Worst feature is the plastic mock-wood dashboard, which has many hidden controls and lacks the usual Saab style. Headlamp washers are also standard, as is a heated driver's seat. Engine refinement is lacking.

ground and none of that 'hemmed-in' feeling so noticeable in the Scandinavian car.

The boot isn't quite as large as the Saab's, and is again hampered by a high loading sill. Subaru quote a cubic capacity of 14.9 cu ft, and it is neither as wide nor as deep as the Volvo's. The rear seat backrests fold down, but not quite flat, so the versatility of the extra space is limited.

Rear seat belts are a standard fitment in the Japanese car.

The Volvo's comparative lack of glass area leads to a rather gloomy feel in the car, not helped by the imposing black dashboard and dark-coloured trim of our test car.

Though our measurements reveal a shortfall in head or legroom compared to the others, there's still a claustrophobic feeling—largely illusory, we concede. In fact, a six-foot driver has little difficulty slipping behind the wheel, though achieving a perfect driving position is made trickier by the lack of a height adjustable seat or tilting steering column.

The seat is a comfortable, well-padded affair with good thigh support. More lateral padding would be welcomed for support during cornering, however.

Unlike the Saab, Subaru, or Nissan, the driver sits high in the Volvo 360 GLE, providing a commanding view of the road in front and behind. In the rear there's room enough for three adults at a push, and they are afforded adequate comfort. Kneeroom is slightly less generous than in the other cars, though headroom is ample, even for someone around six foot tall.

The boot has a high loading sill, but could be worse, while the load space itself is wide and flat, if lacking in height. The rear seat backrests don't fold, but there is a 'ski slot' from the boot through to the passenger compartment that's just about big enough for... well, a pair of skis. Volvo quote a capacity of 12.8 cu ft.

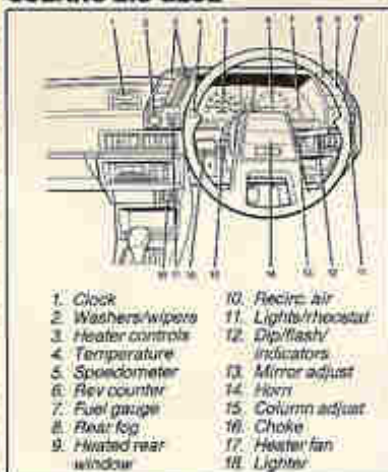
The Bluebird's front seats offer the best support of any of the four cars on test, with excellent lateral and thigh protection. Head and legroom are also generous for a six-foot driver, with an adjustable seat height and steering column tilt to help find a good driving position. In the rear, the picture is much the same, though the seats aren't so well contoured and lack thigh support. In all, the new front-drive Bluebird disappoints, as little cabin space seems to have been gained as a result of the changeover from rear-drive.

The boot is a little larger, and Nissan tell us it has grown to 17.7 cu ft, a useful family size. There's still a very high loading sill, however, which severely hampers the fitting-in of bulkier items.

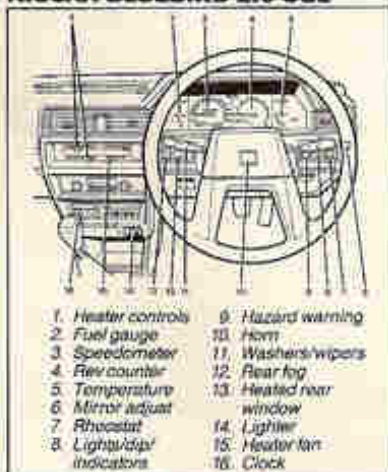
The rear seat backrest, unlike that of the Saab, folds down in three



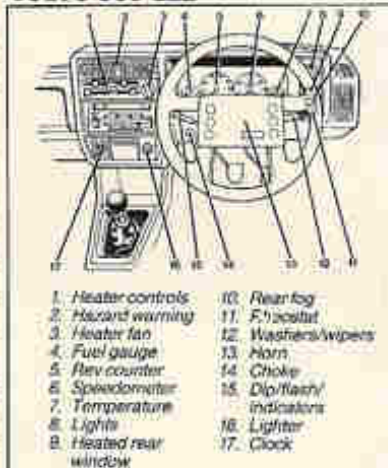
SUBARU 1.8 GLSE



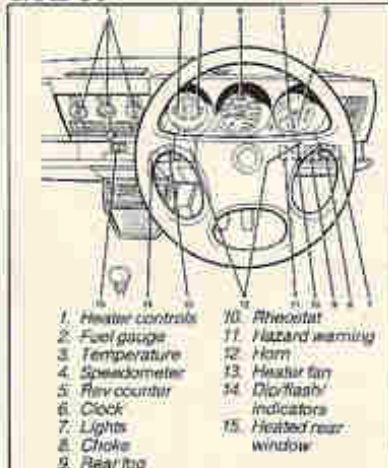
NISSAN BLUEBIRD 2.0 SGL



VOLVO 360 GLE



SAAB 90



separate sections, allowing one or two passengers to sit in comfort even if a long load is being carried. The rear seat base doesn't move, however, which makes the load floor quite uneven and restricts its versatility more than somewhat.

LIVING WITH THE CARS

BLUEBIRD	●●●●
VOLVO	●●●●
SUBARU	●●●●
SAAB	●●

As is so often the case with Japanese cars, while the Bluebird may not present itself to its regular driver in quite the most attractive ways, it is above

all a practical car to live with, with only a few minor irritations likely to spoil the picture.

One is the already mentioned lack of engine refinement, which is at least hardly noticeable where it counts most—on the motorway. However, there is quite a lot of road noise at such speeds, and much above 70 wind noise around the windscreen pillars builds up to an annoying degree, and it can be tiring.

The dashboard is sensibly laid out, with minor and major controls close to hand and easily visible: it's not so pleasing aesthetically, though, being a plastic moulding obviously designed to look like leather, com-

plete with mock stitching. Ventilation from the facia-mounted vents could be better: we were hard pressed to elicit any more than meagre airflow from them when the heater was in even modest operation.

Standard equipment on this, the SGL model, is quite generous: twin electrically-controlled door mirrors, electric windows, and a stereo radio/cassette unit all feature. We would quibble with the lack of rear seat belts; however, and also question the central locking system, which locks all the doors at the turn of the key, but which will unlock only the driver's. An odd idea.

An interior floor-mounted lever controls the unlocking of the bootlid and fuel filler flap.

A facia-mounted battery of warning lights is a useful feature—particularly the little light that warns of a low level in the windscreen washer reservoir. We were less happy with the windscreen wipers, which disappear with a mighty 'clonk' beneath the bonnet line (for better aerodynamics) at the end of each cycle.

The trim of our test car was plush and looked hard wearing, though the little chrome strips so beloved of the Japanese motor industry have found their way inside the car as well and came as a tacky reminder of the car's country of origin.

No less sensible in design and layout is the Volvo, which has a particularly good dashboard. Though better-looking than the Nissan's, it is rather sombre and finished in black; controls are grouped conveniently to hand (though one or two buttons are hidden from view) and the whole lot is set off by an attractive new-look steering wheel.

As befits a car from Sweden, the ventilation and particularly the heating systems are very good indeed. A cool flow of fresh air is always on tap for the face, even if the heater is working overtime to keep the feet warm on a cold day.

Seat trim is luxurious corduroy-type cloth, which should go on looking good for a considerable period of time. Head restraints are provided front and rear, those at the back restricting the otherwise excellent rearwards vision.

Central locking, a headlamp wash/wipe system, and rear seat belts are all standard features, though there's no radio equipment other than an aerial. Our test car was fitted with a Volvo-badged accessory radio/cassette which performed rather inadequately, requiring constant retuning to hold a channel.

The lack of engine refinement is a drawback we have already dealt with, but at least the problem is not added to by wind or road noise, both of which are admirably well subdued.

The Subaru would rate a lot higher in our estimation were it not for the

HOW THE CARS COMPARE

MAKE MODEL	NISSAN BLUEBIRD 2.0 SGL	SAAB 90	SUBARU 1.8 GLSE	VOLVO 340 GLE
PRICE	£7595	£6995	£6699	£7210
Other models	3 saloons 2 estates	none	4 saloons 4 estates	1 saloon 8 hatchbacks
Price span	£6189-£8115	—	£6600-£10,000	£5180-£7995

PERFORMANCE

Max in 5th (mph)	106	86	100	100
Max in 4th (mph)	118	98	100	101
Max in 3rd (mph)	91	81	86	81
Max in 2nd (mph)	59	56	58	55
Max in 1st (mph)	38	33	34	32
0-30 (sec)	3.1	3.6	3.3	3.0
0-40 (sec)	5.4	5.9	4.2	4.9
0-50 (sec)	7.7	8.5	6.5	7.1
0-60 (sec)	10.6	12.5	8.8	10.5
0-70 (sec)	15.1	17.2	13.8	14.7
0-80 (sec)	21.2	24.7	19.4	20.6
0-100 metres (sec)	27.7	35.5	17.8	17.8
Terminal speed (mph)	77	72	76	75
30-50 in 3rd (4th/5th) (sec)	8.0/11.0/16.4	5.5/9.1/11.7	5.9/8.5/11.6	6.0/9.6/14.3
40-60 in 3rd (4th/5th) (sec)	8.0/11.7/18.2	7.7/9.8/12.7	6.2/8.9/12.5	6.5/9.7/14.5
50-70 in 3rd (4th/5th) (sec)	7.0/11.8/19.8	8.8/11.1/15.2	7.3/9.6/14.6	7.0/10.1/15.2
60-80 in 3rd (4th/5th) (sec)	7.5/12.0/22.8	12.0/14.2/21.4	8.2/11.1/17.4	8.5/11.5/18.3

SPECIFICATIONS

Cylinders/capacity (cc)	4/1973	4/1986	4/1701	4/1986
Bore x stroke (mm)	84 x 88	90 x 78	97 x 67	89 x 90
Valve gear	ohc	ohc	ohc	ohc
Compression ratio	9.4:1	9.5:1	9.0:1	10.0:1
Carburation	2-in 1 choke	Herzli choke	2-in choke	3-in choke
Power (rpm) (bhp)	105/5200	100/5200	88/5500	102/5700
Torque (rpm) (lb/ft)	142/4000	139/3500	101/3500	118/3000
Steering	PA/Rack/ps	Rack/ps	VA/Rack/ps	Rack/ps
Turning circle (ft) Turns	32.6/3.7	34.4/4.2	31.5/3.5	30.7/4.2
Brakes	SD/Dr	SD/Dr	SD/Dr/Dr	SD/Dr
Suspension front	MACP	VW/C	MACP	MACP
Suspension rear	HT/C	DA/Ts/C	STA/C	di/D/C

COSTS

Year mpg	25.4-32.4	22.5-29.1	22.5-34.5	22.5-23.9
Govt mpg City/56/75	28.0/44.1/54.0	23.3/38.0/28.8	24.5/48.0/35.8	27.2/51.4/29.8
Tank galls (grade)	13.2(4)	13.9(4)	11.0(4)	12.5(4)
Major service miles (hrs)	12,000(3)	12,000(2.5)	12,000(2)	12,000(2.5)
Parts costs (fitting hours)				
Front wing	£118.18(1.2)	£78.00(—)	191.50(—)	£96.73(1.8)
Front bumper	155.30(0.7)	£175.00(1.1)	882.80(—)	£53.51(0.9)
Headlamp unit	£48.54(0.4)	£25.90(0.2)	£77.20(—)	£43.21(0.9)
Rear light lens	£44.87(0.3)	£50.01(0.3)	£88.94(—)	n/a
Front brake pads	£28.49(0.6)	£56.50(0.3)	£25.02(—)	£19.86(0.5)
Shock absorber	£47.34(1.5)	£23.90(0.3)	£38.97(—)	£33.00(1.7)
Windscreen	£78.02(2.5)	£79.94(1.1)	£159.50(—)	£49.50(1.8)
Exhaust system	£174.15(1.8)	£92.25(0.7)	£128.92(—)	£118.27(0.8)
Clutch unit	£71.10(3.2)	£78.25(2.1)	£77.19(—)	£85.00(2.7)
Alternator	£142.28(5.6)	£90.00(0.8)	£204.04(—)	£193.04(0.8)
Insurance group	6	11	8	6
Warranty	30/100	12/1A	18/18	12/1A
Anti-rust	5 yrs	6 yrs	none	none

EQUIPMENT

Automatic transmission	£497	n/a	£400	n/a
Petrol cap lock	yes	no	yes	yes
Heated driver's seat	no	yes	no	yes
Headlamp wash/wipe	no	yes	no	yes
Rear seat belts	no	yes	yes	yes
Adjustable steering col	yes	no	yes	no
Folding rear seats	yes	yes	yes	no
Sunroof	no	£435	no	£400
Central locking system	yes	no	yes	yes
Electric windows	yes	no	no	no
Sound system	£1740/cass	none	£775/50	none

DIMENSIONS

Front headroom (ins)	38-37	37	35-37	36
Front legroom (ins)	23-42	34-42	35-42	35-42
Steering-wheel-seat (ins)	18.5-20	13-20	13-20	15-21
Rear headroom (ins)	34	35	34	34
Rear knee room (ins)	35-35	24-31	24-30	35-32
Length (ins)	171.7	180.0	173.0	173.8
Wheelbase (ins)	100.4	96.0	97.2	94.6
Height (ins)	55.1	56.0	54.5	54.8
Boot inlet height (ins)	34	32	32	29.5
Overall width (ins)	66.5	66.4	66.3	65.4
Int. width (ins)	54	55	54.5	56
Weight (cwt)	21.5	22.4	19.5	21.1
Seat capacity (cwt)	17.7	21.7/52.7	14.9	17.6

KEY. Valve gear: ohc, overhead camshaft; ohv, overhead valve. Steering: rack/ps, rack and pinion; PA, power assistance. Brakes: D/V, ventilated discs; D, disc; D-drum; S, servo assistance. Suspension: I, independent; C, coil springs; DA, dual beam axle; d/d, de Dion axle; M/P, MacPherson strut; S/A, semi-trailing arm location; TA, trailing arm location; W/W, wishbones.

pool engine refinement brought about by the flat-four layout though cruising is relatively relaxed, with little road or mechanical noise at around 70 mph. There is, however, a certain amount of wind noise caused by the frameless door windows, which unstick from their seals at around this speed.

The Subaru's dashboard succeeds in some respects but fails quite badly in others. Almost all the controls are grouped very close to hand indeed, and the overall visual effect is pleasing. The heater controls are supremely easy to reach.

There's only one column-mounted stalk (indicators/flash/dip) which is mounted on the right. The windscreen wipers and washers have been removed to the dashboard with a large knob annoyingly just out of reach of the driver's left hand. Just why Japanese manufacturers seem keen to follow this vogue for out-of-reach wiper controls defeats us but, just like sheep, they are all adopting the idea in their drives.

Whether a decent flow of fresh air is available from the driver's air vent or not we are unable to say: as it is situated somewhere down by the knees we certainly did not get any benefit from it.

Less well equipped than the more expensive Nissan, the Subaru nonetheless offers central locking, a stereo radio (but no cassette), electrically-controlled door mirrors, and rear seat belts as standard fittings.

Unfortunately the Saab's very worst feature confronts the driver every time he sits behind the wheel. It is the fact, an unpleasant and old-fashioned affair with very little to recommend it.

It is poles apart from the attractive facia fitted to the 900 models, held up by *What Car?* among others as a paragon of ergonomic design. The 90's is altogether less effective, with unilluminated minor controls scattered around haphazardly, most out of the driver's vision behind the steering wheel. There's a mock wood strip across the facia's length, while the rest is finished in cheap-looking plastic.

It's a pity, for Saab have shown what they are capable of, and the chunky new steering wheel is delightful to use and feel.

Just like the Volvo, the Saab's heater is fearsomely efficient, more used to having to cope with arctic conditions in Scandinavia. The 90 also has a heated driver's seat (which automatically cuts in) and it is quicker and more effective than the Volvo's. Ventilation is excellent.

The Saab 90 is the only one of the four cars on test not to have central locking, and there's no sound system fitted, either. Rear seat belts and headlamp washers are included in the price. Trimming is less plush than

SUBARU



NISSAN BLUEBIRD



VOLVO



SAAB

