

## Vauxhall Astra 1.4i (80bhp) & 1.7 Turbo-diesel



### What's different?

The turbo-diesel Astra reported on in R9206 was a pre-production car and a subsequent test of a similarly engined Cavalier proved it was below par. Hence this retest. Also reviewed here is the 1.4 petrol-engined version in its higher-powered, higher-trimmed guise.

**T**HIS LATEST TURBO-DIESEL IS DERIVED from the successful 1.4 Isuzu power unit used in the Nova, but suitably enlarged to give the same 80bhp output claimed also for the multi-point injection 1.4 petrol engine. There's a £670 price difference in favour of the petrol engine at present.

Both our test cars came in GLS guise, which adds £600 to their price, compared with the more than

adequate LS trim. So, there's a painless way of buying the diesel – have the LS and start saving straight away.

Having driven the two cars back to back, we definitely prefer the diesel. It's not without its noisier, more vibrant periods, such as below 35mph in fourth or, again, just before the motorway legal limit. However, the petrol version shares the town-speed coarseness and it lacks the diesel's smooth surge of acceleration in third and fourth gears in the mid-range.

With the turbo's assistance, this Astra diesel has a friendly knack of working with the driver who is none-too-keen on gearchanging, as our in-gear acceleration times demonstrate. The 1.4 petrol version's ultimate 1<sup>1</sup>/<sub>2</sub>sec superiority in a dash through the gears shouldn't be overlooked, but it requires more driver input and a lot more busyness from under the bonnet to extract it. It's certainly much happier to rev than the Escort 1.4. However, the diesel does its best

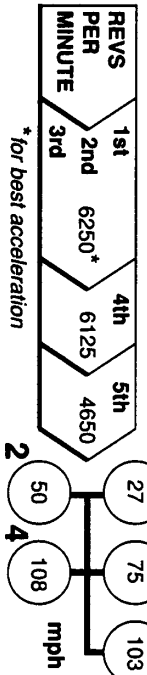
**PERFORMANCE**

Acceleration time in seconds

STANDING START	0-30mph	0-60mph	1/4 mile
	4.3	13.2	19.3

mph	30	40	50	60	70
THROUGH THE GEARS	2.3				
	4.8				
	8.9				
	13.2				
IN 5TH GEAR	8.8				
	18.0				
	27.7				
	37.4				
IN 4TH GEAR	6.1				
	12.0				
	17.7				
	24.7				
20 mph	30	40	50	60	70
5TH/4TH SPEED RANGES	18.4/12.7		18.9/11.6		19.4/12.7

**Maximum speeds**



**FUEL CONSUMPTION**

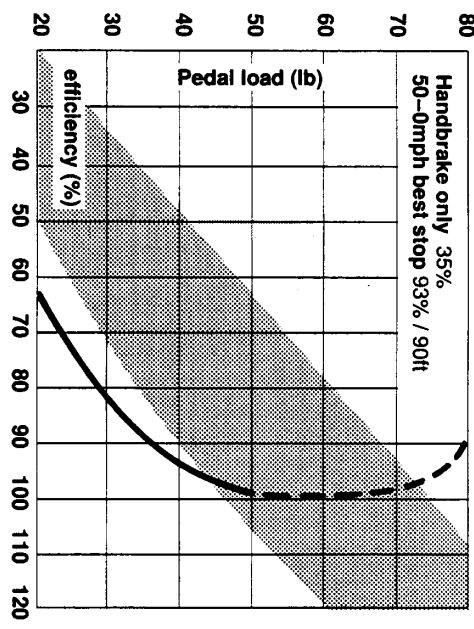
Fuel grade for tests: unleaded Premium, 95 octane

<b>Normal range</b>	mpg
Hard driving, heavy traffic	33 1/2
Short journeys in the suburbs	32
Motorway - 70mph cruising	42
Brisk driving, mixed roads	41 1/2
Gentle driving - rural roads	47
<b>Typical mpg overall</b>	<b>41</b>
Realistic tank range *	46 litres/415 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	25
After constant use	25
After severe use	45
After watersplash	-
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"/>

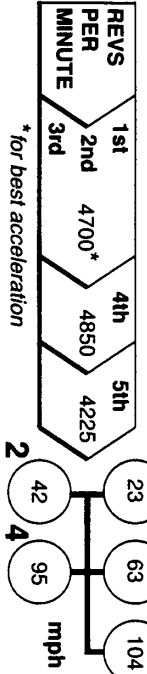
**PERFORMANCE**

Acceleration time in seconds

STANDING START	0-30mph	0-60mph	1/4 mile
	4.2	13.5	19.4

mph	30	40	50	60	70
THROUGH THE GEARS	2.2				
	5.4				
	9.3				
	14.6				
IN 5TH GEAR	9.5				
	17.8				
	24.5				
	31.7				
IN 4TH GEAR	6.0				
	10.7				
	15.5				
	21.0				
20 mph	30	40	50	60	70
5TH/4TH SPEED RANGES	19.1/12.6		15.0/9.5		13.9/10.3

**Maximum speeds**



**FUEL CONSUMPTION**

Fuel grade for tests: Diesel

<b>Normal range</b>	mpg
Hard driving, heavy traffic	36
Short journeys in the suburbs	43
Motorway - 70mph cruising	47
Brisk driving, mixed roads	51 1/2
Gentle driving - rural roads	62
<b>Typical mpg overall</b>	<b>50</b>
Realistic tank range *	44 litres/485 miles

\* based on gauge/warning lamp and filling station experience

between 2500 and 4500rpm – running any faster merely wastes time. The result is that most family motorists *feel* that it's the livelier performer. Incidentally, running the 1.4i on 98 octane fuel, with the ignition coding plug set accordingly, makes a negligible difference to acceleration times.

Perennial Vauxhall speedo optimism works against these Astras – in fact, it's perfectly legal to run between an indicated 75 and 80mph, where both models sound and feel really tranquil and effortless, whereas low down, there's a hint of uncouthness. Of course, start-up noise is more pronounced in the diesel, but its starting and warm-up are exemplary; the petrol version can stall and feel breathless until it's got under way.

Shunt is well controlled in traffic crawls on both, but like most diesels, this one hammers more prominently at tickover. However, it's almost impossible to stall in stop-start jams and its clutch is very light and progressive – just like the petrol version's. What a long way diesel cars have come in this area in the last 10 years.

The extra weight of the turbo-diesel does no harm to the ride and handling – in our car at least, the slightly lighter power steering and the steam-roller effect of the extra weight over bumps, gave it an edge over the 1.4 in terms of comfort and control. The GLS's driving seat again felt unconvincing (we certainly prefer the Merit/LS seat) and its cushion height adjuster spent most of its time on the highest setting – only our lankiest driver wanted it lower.

We found brake pedal response more progressive on these latest cars. The chart shows far less suddenness about the point of wheel lock and is much to be preferred, even though you do have to press harder on the pedal in an emergency. Perhaps this is

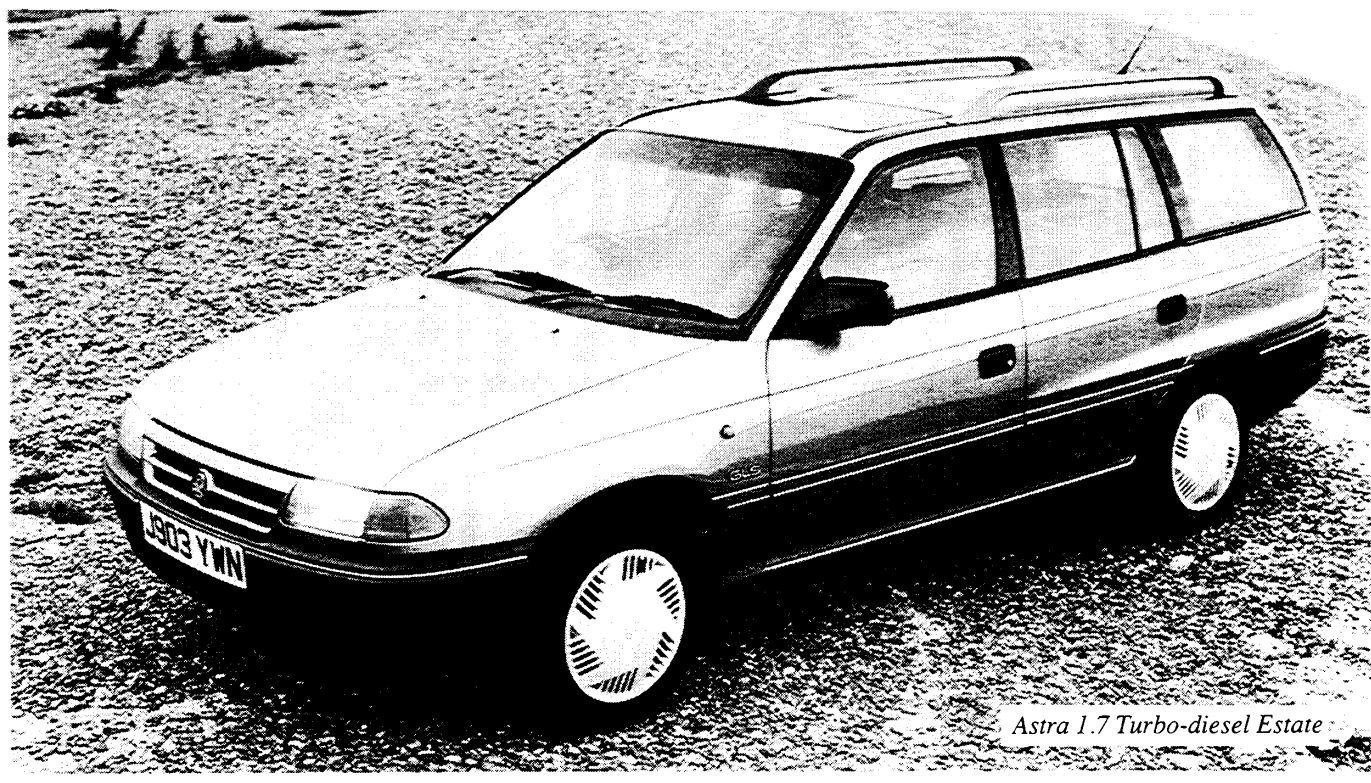
an unheralded running change since the model's launch. There's just a trace of fade, though.

A close look at the various fuel consumption test results is instructive. The different characteristics of petrol and diesel engines offering ostensibly similar power and performance, clearly emerge in "real-life" mpg tests, with cold starts and ordinary acceleration and traffic halts all built in. For example, the diesel's advantage is reduced to a mere 2½mpg in hard driving and 5mpg on a motorway, whereas this grows to 11mpg in short journey work and no less than 15mpg in gentle touring. This entirely different pattern of consumption is more or less true of all petrol/diesel alternatives – we wonder how many of the users of those light vans charging down the third lane of the motorway are aware of it!

### VERDICT

Our second look at the Astra confirmed our liking for its quality interior and careful safety considerations. It doesn't feel as composed on second-class roads as a Citroën ZX, however, and the 1.4i's performance isn't quite as smooth and scintillating as brochure promises might suggest – the old model in 1.4/75bhp form can outperform it, for example, and use less petrol, too. It's also interesting that in its identical top and fourth gears, the high-torque 60bhp Merit can match the acceleration of this 80bhp version.

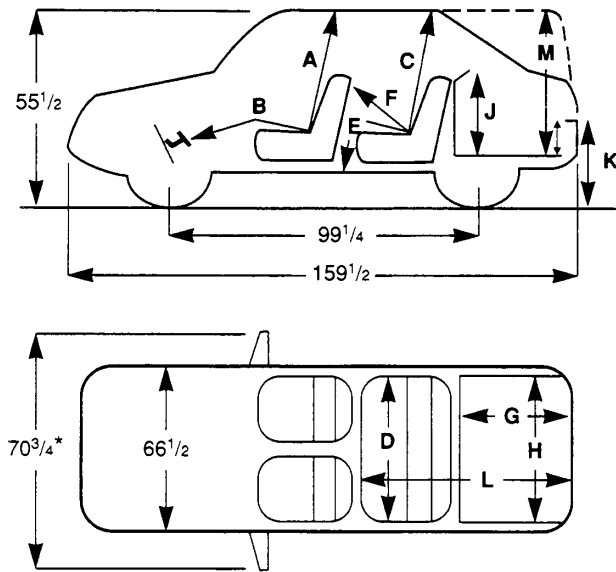
No, if you want to have your cake and eat it, it has to be the Turbo-diesel as number one choice. This lazy driver's delight goes well, goes longer between forecourt visits and, in all probability, will go on longer before needing major attention. For really committed driver-enthusiasts, maybe the 1.6 is a better bet.



Astra 1.7 Turbo-diesel Estate

## MEASUREMENTS

### Dimensions (inches)



\*mirrors don't fold easily

### Kerb weight in lb (full of fuel)

2300

### Inside (inches)

<b>A</b> Front headroom	36 <sup>1</sup> / <sub>2</sub> -38	<b>G</b> Load length	30
<b>B</b> Front legroom (min - max)	33 <sup>1</sup> / <sub>2</sub> -42 <sup>1</sup> / <sub>4</sub>	<b>H</b> Load floor width (min - max)	39-51
<b>C</b> Rear headroom	36 <sup>3</sup> / <sub>4</sub>	<b>J</b> Load height	20
<b>D</b> Back seat width (between armrests)	50	<b>K</b> Sill height (inner/outer)	10/25 <sup>1</sup> / <sub>2</sub>
<b>E</b> Typical rear * legroom	39 <sup>1</sup> / <sub>2</sub>	<b>L</b> Load length	54
<b>F</b> Typical rear * kneeroom	28	<b>M</b> Load height (to tailgate hinge)	34

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



## TECHNICAL SPECIFICATION FOR ASTRA 1.4i (80bhp)

### Differences compared with 1.4 Hi-torque Merit:

#### ENGINE

**Compression ratio** 9.8:1

**Fuel system** Rochester electronic multi-point fuel injection. Low-level warning lamp on GLS. Two-way coding plug for 95 or 98 octane fuel

**Maximum power** 80bhp at 5800rpm

**Maximum torque** 83 lb ft at 3400rpm

#### TRANSMISSION

no change

#### CHASSIS

**Suspension rear:** anti-roll bar fitted

**Steering power assistance** standard – as given for 1.7TD

**Wheels** 5<sup>1</sup>/<sub>2</sub>J with 175/65R14 tyres on GLS test car

All other details as given for 1.4i 60bhp Merit (see R9206)