

Citroën ZX 1.6i Aura



CITROËN'S COMPARATIVE NEWCOMER TO the popular lower-medium sector, the ZX, now offers something to suit virtually all tastes, with an estate car version waiting in the wings.

Much as we're itching to drive the new sporting versions and the highly promising turbo-diesel, though, we've chosen the mainstream 1.6i model for our second sampling of the ZX range, in top-level Aura trim and with the more practical five-door hatchback body.

At the wheel

As with the 1.4-litre model, the 1.6 produces favourable impressions from the first turn of the key. The engine proves smooth, feels surprisingly eager – particularly lower down – and is well-subdued at normal speeds, although it becomes harsher and more intrusive when used in anger.

Overall gearing on the 1.6 is quite low (slightly lower in 5th than even the 1.4), but this doesn't mar cruising refinement too badly. The gear lever slots around the ratios with almost contemptuous ease. Added to this, the light, well-cushioned clutch, smooth progressive throttle and taut, jerk-free driveline make the ZX a doddle to drive smoothly about town.

Power steering (now standard on the 1.6 Aura, but a £360 option otherwise) brings usefully quicker responses than the unassisted car's 4¼ turns between

locks. It's nicely weighted, too, but the steering wheel rim is smooth and rather slippery, so it demands a reasonably firm grip. This tends to make the steering feel heavier than it really is.

Compared with the 1.4 model, maximum speed rises by about 5mph to 107mph, while 30–70mph acceleration is dispatched in around 12sec – quicker than the 1.4, certainly, but not by as much as the 1.6's nearly 20 per cent power advantage might suggest. In-gear acceleration shows to rather better advantage, with about 8sec knocked off the 30–70mph increment in 5th gear.

When it comes to ride and handling, the ZX is virtually in a class of its own. Its ability simply to get on with it over bumps without disturbing the occupants, while still providing safe, surefooted and enjoyable prowess round the bends is impressive indeed. It's not that road imperfections are simply smothered by a soft, under-damped set-up, either; indeed, the driver is always kept fully informed as to the state of the road surface.

The fruits of Citroën's chassis engineers' labours impressed us no end, though this poses the question: if Citroën can do this well with conventional suspension, why has it persevered with the complexities of its hydropneumatic system for so long?

The answer is, of course, that the conventional set-up can't provide automatic self-levelling height control and a clever computer-controlled Hydractive

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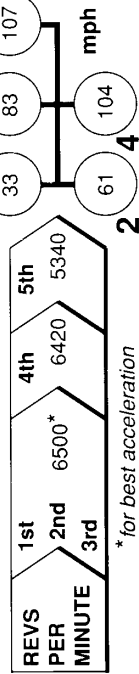
PERFORMANCE

Acceleration time in seconds

STANDING START	0-30mph 3.8	0-60mph 11.7	1/4 mile 18.5		
	30	40	50	60	70
THROUGH THE GEARS		2.1	4.6	7.9	12.2
IN 5TH GEAR		5.8	11.7	17.8	24.4
IN 4TH GEAR		4.3	8.5	12.9	18.0

20 mph	30	40	50	60	70
		11.9/8.8			
5TH/4TH SPEED RANGES				12.0/8.6	
			11.7/8.5		12.7/9.5

Maximum speeds



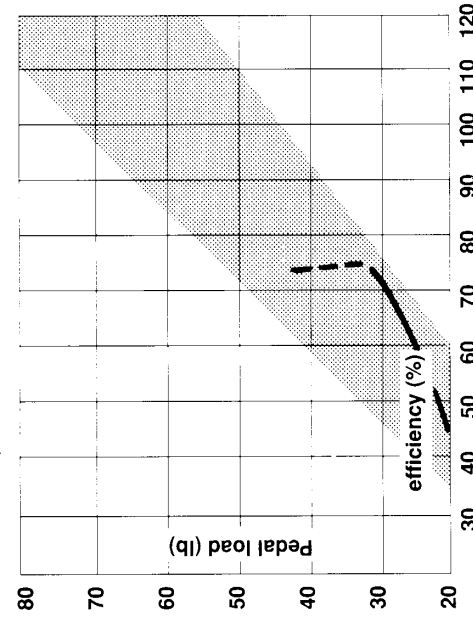
FUEL CONSUMPTION

Fuel grade for tests: unleaded Premium, 95 octane	
Normal range	mpg
Hard driving, heavy traffic	28 1/2
Short journeys in the suburbs	30
Motorway – 70mph cruising	36 1/2
Brisk driving, mixed roads	35 1/2
Gentle driving, rural roads	42
Typical mpg overall	35 1/2
Realistic tank range*	51 litres/400 miles

* based on fuel 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 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.

50-0mph best stop

79% / 106ft

Handbrake only

33%

Fade test

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

Pedal load needed for 75% stop (lb)

31

After constant use

28

After severe use

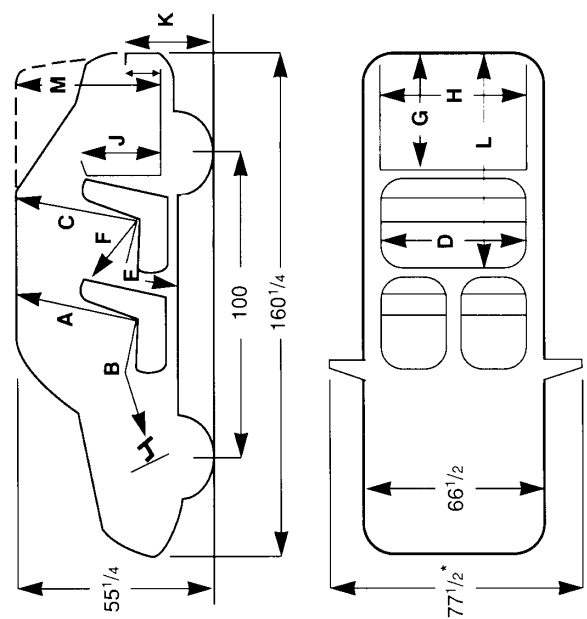
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Safety check list

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"/>

MEASUREMENTS

Dimensions (inches)



* 69 1/4 with mirrors folded

Inside (inches)

A Front headroom (with sunroof)	36 1/2
B Front legroom (min - max)	32 3/4-41 1/4
C Rear headroom	35
D Back seat width (between armrests)	52
E Typical rear * legroom	38 3/4
F Typical rear * kneeroom	27 1/2

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

ride (as on the XM), the way that the hydropneumatic suspension can. But unless you regularly load the car to the gunnels or need to pull a whopping great horsebox around the country, we think the ZX does exceedingly well.

Reservations? Well, the 1.6's performance is acceptably brisk rather than downright quick, and the brakes' servo assistance is rather too enthusiastic for our liking. While this gives easy, flatteringly light stops in normal use, it makes it tricky to avoid locking the front wheels in panic stops; poor all-out stopping power results. ABS – which would largely remedy this situation, of course – is available as a £740 option.

Inside story

Inside, the Aura's deep Omega velour trim, centre rear armrest and full set of creature comforts create a warm, inviting . . . well, aura. There's ample room for all occupants, although headroom can be a bit tight for taller passengers, especially in the back.

While cheaper Reflex models have only a simple, undivided folding back seat, all other versions come with Citroën's novel solution for maximising load-carrying versatility – a 60/40 split-folding back seat that slides fore-and-aft on its own set of runners, with individual backrest recline adjusters for each side, too.

Its 7in travel allows the cargo space to be increased to 15cu ft (compared with 12cu ft with the seat slid fully back), although the resulting legroom is really only suitable for smaller children. The Reflex's more conventional back seat provides greater ultimate volume when fully loaded, but this is still a neat, practical idea despite the minor limitations.

Elsewhere, the ZX's bright, airy cabin makes it feel roomier than it really is. As well as small door pockets all round and a couple of handy little trays in front of the gear lever, the Aura also comes with map-reading lamps up front, courtesy lamps at each end, operated by all four doors, and that Citroën hallmark – a roller sunblind built into the load-compartment cover. There's no delayed cut-off for the courtesy lights, though, and curiously our test car was missing a courtesy light switch for its nearside rear door.

Electric front windows, remote-controlled central locking, an electric tilt and slide sunroof and an electrically adjusted (passenger's side only) door mirror, already come with the generously appointed Advantage trim level. The Aura, in return for its £850-higher price tag, then adds power steering (except on 1.4 models), adjustable lumbar support for the driver (but not the front passenger), alloy wheels, a twin-tone horn and a multi-speaker set-up for the neat, integrated radio/cassette unit.

Living with the 1.6i Aura

Given its impressive performance in virtually all other areas, the 1.6's fuel economy is a little disappointing. The car's comparatively low gearing and willing, enjoyable manner netted 35¹/₂mpg overall in our

rigorous tests. This compares with 38¹/₂mpg for the carburettored 1.4 model – itself a little thirstier than average for its class. Nevertheless, over 40mpg economy is readily available on longer runs or with a little restraint. Refuelling is easy (so long as you resist shoe-horning the last few litres on board) and the generous tank capacity and faithful low-level warning lamp allow a 400-mile range between refills.

A commanding driving position and generous glazing provide excellent all round vision and add to the overall ease of driving. We're less impressed with the single front screenwiper, though. It leaves substantial unswept corners at the top of the screen, so causing problems for taller drivers, and its nearside parking position allows annoying dribbles to creep up the screen on the driver's side. The small door mirrors provide a rather restricted field of view, too.

ZX build quality is Citroën's best effort yet. True, there's plenty of plastic about, but it seems far more substantial than in the past. More importantly, it's creak-free, too. Despite surprisingly wide shut lines, the doors close with a solid and satisfying, VW-like "clunk".

The underbonnet layout isn't particularly neat, but everything looks reassuring, with the essentials all easy to get at. Parts prices and the annual/12,000-mile major servicing costs look competitive.

Citroën's six-year anti-rust warranty needs annual (chargeable) checks to keep it in force, and 12 months'/unlimited-mileage mechanical cover isn't over-generous these days. But the 1.6 Aura's Group 9 insurance rating isn't too steep, although the 1.6 Advantage is rated better still, with a Group 7 recommendation.

VERDICT

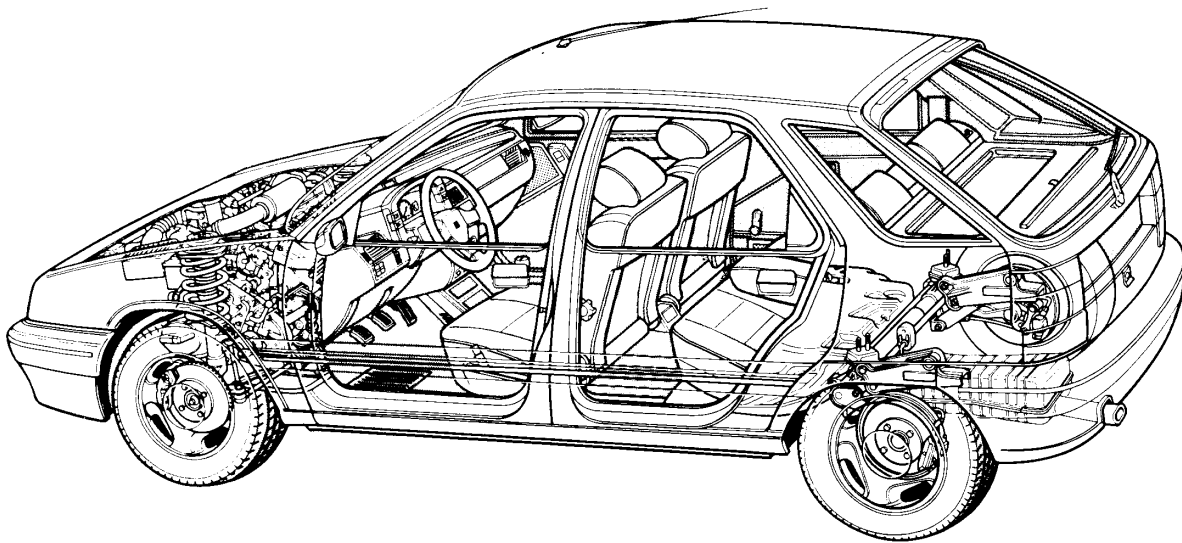
Citroëns may be getting more conventional by the minute, but as the ZX so ably demonstrates, the company's ability more closely to toe the line of convention these days, yet still provide the style and double-chevron "difference" that distinguishes its cars from the pack, has never been more impressive.

With the odd exception apart, the ZX's individual performances are merely good. But the sum of its parts (the "Bumps? What bumps?" ride, clever packaging and willing, easy-going manners), adds up to an all-round competence that's far greater than its performance in individual areas.

It doesn't have the solid, eternal feel of the Golf, or the Tardis-like accommodation of the Tipo, neither is the 1.6 ZX in any real danger of stealing the fuel-miser cup for its class. But, in the final analysis, you'll have to search far and wide to unearth a more accomplished all-rounder than the ZX, that's (just about) big enough for the family, yet won't make too big a hole in your pocket.

Impressed? Most definitely – and we've still got the diesels and sporting versions to come!

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)
Citroën ZX 1.6i Aura (c)	1580/88	107	12.2	24.4/18.0	35 ¹ / ₂	74/35	41 ¹ / ₄	38 ³ / ₄ /27 ¹ / ₂	3.3/34 ³ / ₄ (p)	160 ¹ / ₄
Citroën ZX 1.4i Aura	1360/75	102	13.4	32.2/21.3	38 ¹ / ₂	88/45	41 ¹ / ₄	38 ³ / ₄ /27 ¹ / ₂	4.3/34	160 ¹ / ₄
Honda Concerto 1.6i (c)	1590/110	113	9.5	25.3/18.5	31 ¹ / ₂	80/40*	42 ¹ / ₂	39 ¹ / ₄ /28 ¹ / ₄	3.4/34 ¹ / ₂ (p)	168
Hyundai Lantra 1.6 (c)	1596/112	114	10.6	27.0/19.1	32 ¹ / ₂	90/30	41	39 ¹ / ₂ /29 ¹ / ₄	3.4/34 ¹ / ₄ (p)	171 ¹ / ₂
Mazda 323 1.6i GLX (c)	1598/89	110	10.9	24.7/17.1	36 ¹ / ₂	86/60*	42	39 ¹ / ₄ /28 ¹ / ₂	3.2/33 ¹ / ₄ (p)	167 ³ / ₄
Renault 19 1.8 RT (c)	1794/94	110	11.6	23.1/16.5	35	79/45	41	38 ¹ / ₄ /29 ¹ / ₂	3.6/34 (p)	164
Seat Toledo 1.8 GLXi (c)	1781/90	111	12.4	22.3/17.4	37	81/40	40 ¹ / ₂	38 ¹ / ₂ /29 ¹ / ₂	3.3/33 (p)	170 ¹ / ₄
Vauxhall Astra 1.4i CD (c)	1389/80	108	13.2	37.4/24.7	41	100/60	42 ¹ / ₄	39 ¹ / ₂ /28	3.5/32 ¹ / ₂ (p)	159 ¹ / ₂
(c) with catalyser						* with ABS			(p) with power steering	



TECHNICAL SPECIFICATION

ENGINE

Type and size front-mounted, transverse 4 in line; water-cooled. 83mm bore x 73mm stroke = 1580cc. Aluminium alloy block and head; 5 main bearings

Compression ratio 8.95:1

Valve gear single belt-driven overhead camshaft actuating two valves per cylinder via shim-adjusted bucket tappets

Fuel system Solex electronic single-point fuel injection, three-way regulated catalyser and lambda sensor. 56-litre (12.3-gallon) tank, with low-fuel warning lamp. Fuel required: unleaded only, 95 octane minimum

Ignition system fully programmed electronic via distributorless twin-coil HT system

Maximum power 88bhp at 6400rpm

Maximum torque 98 lb ft at 3000rpm

TRANSMISSION

Clutch 7.9in dry plate, diaphragm spring; cable operated. Pedal load/travel: 21 lb/5¹/₂in

Gearbox 5-speed (all synchromesh) and reverse.

Ratios: first 3.46, second 1.85, third 1.36, fourth 1.07, fifth 0.87 and reverse 3.33:1.

4-speed automatic transmission optional

Final drive 3.81:1, to front wheels

Mph per 1000rpm 20.0 in top, 16.2 in 4th

Rpm at 70mph 3490 in top gear

CHASSIS

Suspension front: independent by MacPherson damper/struts lower wishbones and an anti-roll bar. Rear: independent by trailing arms, transverse torsion bars and an anti-roll bar. Dampers: telescopic all round

Steering power-assisted rack and pinion (PAS optional on 1.6i Avantage), with 3.3 turns between full locks. Turning circles average 34³/₄ft between kerbs, with 56¹/₄ft circle for one turn of the wheel

Wheels 5¹/₂J x 14 alloy with 175/65R14 82T tyres (Michelin MXT on test car)

Brakes 9.7in ventilated discs front, 7.1in drums rear, with vacuum servo. Bosch four-sensor ABS (includes rear discs) optional