



Peugeot 106

Featuring 1.1XT and 1.4XT



PEUGEOT'S PINT-SIZED SUPERMINI – the 106 – was intended directly to replace the slightly larger 205. But the outstanding success story of the 1980s is still a firm favourite; so initially, Peugeot has chosen to sell the new 106 alongside the 205.

Understandably, then, the 106 comes in three-door form only to start with (though five-door versions are bound to follow), with a few 205 models dropped to avoid too much overlap between the two ranges.

In fact, the 106's design has more in common with the Citroën AX. The power unit options are the same, for example, and range from a 45bhp, 954cc unit mated to a four-speed transmission in the basic XN model, right up to a fuel-injected, 100bhp, 1360cc engine for the sporty XSi version. In between these, a 1.1-litre engine produces 60bhp (with or without a catalyser) and comes in XN, XR or top

XT trim levels. The 1360cc engine offers 75bhp in the 1.4XT.

The 205 is 6in longer than the new 106 – this ought to make the newer car easier to park, but its turning circles and manoeuvring effort don't help at such times.

Inside, legroom and especially kneeroom aren't as good as in even the AX, but the 106 has more than ample width. Headroom behind is not so good, but up front, the low-set seat favours lankier types more than shorter ones in this respect. Generally speaking, the 106 lags behind the Fiesta and Clio when it comes to accommodating all the family.

This 1.1-litre power unit in both the 106 and AX has good manners around town, but becomes loud and intrusive when its legs are stretched on the open road. The 1.4 remains quieter for longer as speeds rise, and its expected added urge came with unexpected better economy in our tests.

Living with the 106 . . .

Both prove entertaining to drive, cornering with alertness and well-restrained roll. Although the steering is not as light as a Metro's, it shares a similar feeling of precision and poise. The ride can jib at pot-holes around the lanes but, again, out on the open road, it proves comfortable and especially well-damped, irrespective of the load being carried.

Peugeot's space-saving rear suspension permits a decent-sized load area at the back, with no wheelarch intrusion and only a low, wide sill to load over. So there's plenty of room for the shopping, although the 106 lacks the AX's clever reversible load cover.

Cheaper models offer quite keen value, but the 106 begins to look fairly expensive as you move up the range, with items such as electric windows and a sunroof still costing extra, on top of a price tag that makes no concessions to rivals that are bigger and roomier.

With just two people and their luggage, the new 106 is, with the Metro, arguably the best driver's car in the small hatchback sector. In 1.4 form it's reasonably quiet, acceptably frugal and is capable of coping with agile rear passengers if they're not too lanky. However, its prices are high and none-too-generous equipment levels mean that one is tempted to stretch to the top XT versions, as well.

It seems that there's no cut-price way of getting complete satisfaction from the 106 line-up, and even then, those behind will be less impressed than the one behind the wheel.

At the Wheel

Driving position

The relationship between the seat, steering wheel and pedals is typically Peugeot, with a prominent high-set wheel and a

lot of weight tilted on to the driver's small of the back. Fortunately the seat is well shaped, but the left foot has more working space than the right one. Shorter drivers felt that they would be happier with a slightly loftier perch, yet none of the 106s stretches to seat-height or lumbar-support adjustments. The backrest has the coarser, lever-operated variety, too, and doesn't allow the seat to recline fully.

Controls and displays

The "fruit gum" switches all have their tell-tales built in and as they are low down, you don't see them. The speedometer's over-prominent metric markings remain a perennial Peugeot annoyance, but instrumentation includes a rev counter and water temperature gauge on the higher grade XT and sporty XSi versions; the latter gets an oil temperature gauge, as well. All models are equipped with a low-fuel warning lamp, but supplementary gauges on cheaper 106s are sparse.

The gearchange – feeling a little vague and notchy into first and reverse – provides fast, fumble-free selection on the move, while the light, progressive clutch keeps things easy around town.

Vision

The 106 has few blind spots, although the screen pillars are quite prominent. The wipers are much better than the AX's single blade, but they still leave an unswept strip alongside the driver's pillar. The small door mirrors provide a reasonable view and the rear wiper sweeps a generous semi-circle of the glass. An intermittent setting would be nice, though. All 106s come with headlamp beam-trimming finger screws under the bonnet, but the interior roof lamps concentrate their favours on those up front.

Driver satisfaction

In 1.1XT form, the 106 is a mixed bag: impressive in some areas, yet

curiously disappointing in others. From the first turn of the key, it feels smooth, refined and lively – largely aided by the adoption of low overall gearing. Driven gently (with the engine turning below about 3000rpm/55mph), this would be the lasting impression, too, but a modern supermini must be able to handle long hauls as well as the school run. Once the car is opened up out of town, the low gearing leaves the engine sounding increasingly busy, and road roar proves disappointingly prominent over some surfaces. Worst of all, though, the cabin is afflicted by a pervasive, boomy resonance. Unfortunately, this intrusion peaks at around 4000rpm – right about the legal limit – leaving either slower progress or illegal speeds as the only options for a quieter journey.

The 1.4 is significantly quieter, even though it has to turn over almost as quickly at 70mph, but our car had a nasty body rattle. Wind noises are well suppressed, though.

Steering is light and reasonably responsive about the straight ahead, but it firms up as more lock is applied, making parking and street corners harder work than in a Metro. Drivers like the eager response to the accelerator and the steering wheel when pressing on – the 106 is a game little car on cross-country roads.

Space & Comfort

Seating and ride comfort

The modestly sized back seats lack good shaping, but, given the 106's compact dimensions, passenger room – front and rear – is adequate. Back seat width is generous, though headroom is a little tight. Most of the time, the 106 provides the accomplished, absorbent ride you'd expect of a Peugeot, but the XT's wide, squat tyres fidget and fret over sunken pot-holes around town.

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PERFORMANCE: 1.1XT

Acceleration time in seconds

STANDING START	0-30mph	3.7	0-60mph	12.6	1/4 mile	18.5
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THROUGH THE GEARS	30	40	50	60	70
	2.3	5.1	8.9	13.8	18.5
IN 5TH GEAR	6.8	13.6	21.0	28.6	
IN 4TH GEAR	4.8	9.6	14.7	20.0	

20 mph	30	40	50	60	70
5TH/4TH SPEED RANGES	15.0/10.5	14.2/9.9	13.6/9.6	15.0/10.4	

Maximum speeds

REVS PER MINUTE	1st	2nd	3rd	4th	5th	100
	6700*	6750	5500	6750	5500	100
	30	30	76	30	76	100
	53	99	53	99	53	99

*for best acceleration

FUEL CONSUMPTION

Fuel grade for tests: unleaded Premium/95 octane

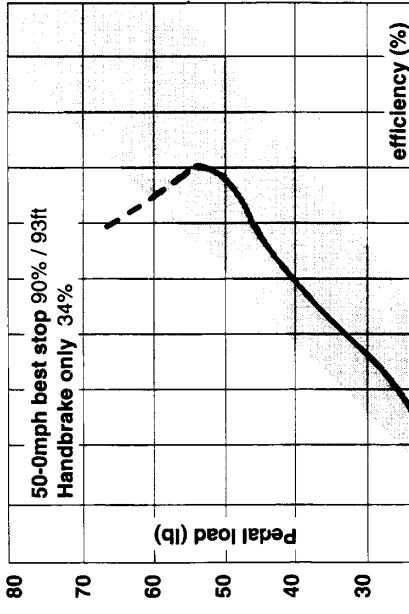
Normal range	mpg	34 1/2
Hard driving, heavy traffic		34
Short journeys in the suburbs		41
Motorway - 70mph cruising		41
Brisk driving, mixed roads		50
Gentle driving - rural roads		41 1/2
Typical mpg overall		40 litres/365 miles
Realistic tank range*		40 litres/365 miles

* 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)

At start of test	38
After constant use	42
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: 1.4XT

Acceleration time in seconds

STANDING START	0-30mph	3.6	0-60mph	11.2	1/4 mile	18.3
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THROUGH THE GEARS	30	40	50	60	70
	2.0	4.3	7.6	11.6	18.3
IN 5TH GEAR	6.4	12.8	19.5	26.5	
IN 4TH GEAR	4.7	9.2	13.7	18.2	

20 mph	30	40	50	60	70
5TH/4TH SPEED RANGES	13.0/9.6	13.1/9.0	12.8/9.2	13.7/9.0	

Maximum speeds

REVS PER MINUTE	1st	2nd	3rd	4th	5th	109
	6250*	6250*	5725	6250*	5725	109
	30	30	75	30	75	109
	52	97	52	97	52	97

*for best acceleration

FUEL CONSUMPTION

Fuel grade for tests: unleaded Premium/95 octane

Normal range	mpg	33 1/2
Hard driving, heavy traffic		34
Short journeys in the suburbs		43 1/2
Motorway - 70mph cruising		42
Brisk driving, mixed roads		49
Gentle driving - rural roads		42
Typical mpg overall		40 litres/370 miles
Realistic tank range*		40 litres/370 miles

* based on gauge/warning lamp and filling station experience

Getting in and out

For the time being, the 106 comes in three-door form only. However, getting to and from the back is better than with most such models, thanks to large, wide-opening doors and a one-handed seat tilting arrangement that slides the front cushions well forward and "remembers" the settings.

As a further convenience, XT and XSi models come with a particularly powerful, positive-action remote-control on the key fob for the central locking of the doors and tailgate. Unfortunately, all models also have the awkward, semi-concealed door release levers, borrowed from the closely related three-door Citroën AX.

Heating and ventilation

Unusually, these days, the 106 retains sliders for the heat setting and distribution controls, although the set-up works quite well and is easy to fathom. The facia vents stay cool at lower floor-heat settings and the screen vents do the same, giving better stratified flow than you get on the 205 and AX, in fact. The mid-summer vent output is disappointing, however, and the blower fan can be quite noisy.

A tilt and slide glass sunroof remains an extra-cost option on XR, XT and XSi models. Opening rear quarter windows are standard on the last two, and help the flow but add to the noise.

Luggage and oddments stowage

The 106's boot isn't especially large, but Peugeot's space-saving rear suspension layout (which minimises wheelarch intrusion) produces a neat, rectangular load area with all of the space useable. The wide, flat (and illuminated) load space is protected by a durable looking floor mat, while a full-width, low-silled aperture eases loading. There's a good depth under the self-lifting load cover, and all models come with folding back seats, split 60/40 for backrest and cushion, from XR trim level upwards.

Inside, generous door bins (plus an extended centre console

on the XT and XSi) supplement the glovebox and facia-top recess, with an additional small cubby box in the right-hand rear quarter panel.

Money Matters

Value for money

Peugeot has adopted big jumps in price towards the upper end of the 106 range, so at first glance the 1.0XN looks far better value than our test cars at about £3000 more. Even then, these XTs still lack alloy wheels, fog lamps, electric windows and door mirrors, and even a sunroof.

In service

Peugeot's Lioncare package provides unlimited-mileage mechanical warranty plus "Assured Mobility" for the first year of service, with the option to purchase extended cover beyond that. This and the six-year anti-rust warranty require dealer servicing to keep them valid, though.

Servicing needs aren't too onerous: a 1/2 hour short service at 6000-mile intervals, and the bigger 12,000-mile service averaging 2 1/2 hours a time. Parts prices are very competitive – this applies to all Peugeot-Citroën cars, in fact. There are 400 UK dealers.

Fuel economy

The 1.1-litre version revealed profligate thirst in the warm-up period, though mpg figures bucked up considerably on longer trips. The weather was admittedly colder than for the 1.4 test session – the latter version did much better in the warm-up phase, which largely accounts for its better returns. That 2 1/2mpg-better motorway figure nevertheless shows that the increased fuel efficiency of the bigger engine is sustained even after the warm-up period.

Frankly, there seems little incentive not to prefer it, especially considering that it's both quicker

and quieter, as well. The fuel gauge has sunk into the red before the low-level lamp comes on; wait until it's on more or less permanently and our generous realistic range will result. The tank refills easily to within three litres of brim full.

Safety

Accident avoidance

The 106's compact size and safe, nimble handling give it a firm head start in avoiding the accident in the first place. If pressed too hard into a wet roundabout, the tail will step out of line if you cut the power abruptly; normally, however, generous grip is afforded by the XT's comparatively wide 165/65 tyres.

The brakes are beyond reproach, providing a firm, well-weighted response with reasonably powerful stops at the limit. There's a refreshing freedom from the all-too-frequently overdone servo assistance (calling for excessively delicate footwork to maintain skid-free emergency stops), so the restriction of the two-sensor ABS system to 1.4-litre models is probably no real hardship.

Injury prevention

Safety padding is fine as far as it goes, although the front seatbacks offer little protection from behind. It's disappointing to find that the front seatbelt shoulder-mounts aren't adjustable; extension arms are used to offset this problem, however. We noticed that the seat fittings could foul the lower webbing and cause the belt to be worn slack, so be warned.

Security

Apart from an integrated, security-coded radio/cassette unit (with terrible AM radio reception, incidentally), security receives comparatively little attention on the 106, although the XT and XSi's central locking is an asset. All models come with a

load area cover to keep the contents from prying eyes, but the boot area is accessible once entry has been effected into the passenger compartment. At present, there are no anti-theft alarms or immobilisers on the options list.

Durability

Build quality

Clever swaging is used to obscure the flimsiness of some of the sheet metal, but pulling on the inner front wing flanges under the bonnet shows how thin it is. There's no sealing there against salt and moisture, either. Watch out for the small-print exclusions in the six-year anti-perforation warranty.

Notwithstanding these details, the 106 looks great, we think, and its paintwork and shut lines are impeccable. Unfortunately, our 1.4XT's bumpers were shedding their paint; have a cheaper version and you won't get the problem - they're sensible matt plastic.

Reliability

This current engine, first seen in the AX, is much less fraught to work on than the one earlier 205s used to have. Its more reliable, too, but some underbonnet wiring looks haphazard on the 106 and there are accessibility problems, too, when certain ancillaries need to be reached. The cooling fan has no guard, either.

MEASUREMENTS

Dimensions (inches)

* with mirrors folded

Inside (inches)	Kerb weight in lb (full of fuel)
A Front headroom	1.1: 1810 1.4: 1890
B Front legroom (min - max)	23 1/2
C Rear headroom	42 1/4-42 1/2
D Back seat width (between armrests)	16 1/2
E Typical rear * legroom	7/25
F Typical rear * kneeroom	46
G Load length	31
H Load floor width (min - max)	
J Load height	
K Sill height (inner/outer)	
L Load length	
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

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)
Peugeot 106 1.1XT	1124/60	100	13.8	28.6/20.0	41 1/2	90/55	40 3/4	36/25 1/4	3.7/35	140 1/4
Peugeot 106 1.4XT	1360/75	109	11.6	26.5/18.2	42	90/55	40 3/4	36/25 1/4	3.7/35	140 1/4
Citroën AX 1.1TZi	1124/60	99	12.9	29.4/19.3	45 1/2	90/50	41 1/2	36 1/2/26 3/4	3.2/33	139
Renault Clio 1.2RN	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	1120/60	95	16.6	38.7/26.0	41 1/2	87/50	41	37 1/2/24 3/4	3.6/32	138 3/4
Rover Metro 1.4GTa 16v	1396/90	107	10.5	23.8/16.8	39	97/70	41	37 3/4/25 1/4	3.4/35	138 3/4
Vauxhall Nova 1.4i L	1389/60	97	14.4	35.2/23.0	44 1/2	104/75	40 1/2	37 1/2/25 3/4	3.8/31	143 3/4
Peugeot 205 1.1XR (non-cat)	1124/55	95	15.1	39.0/24.5	43	96/40	41	36 1/2/27	3.7/33 1/4	146

All catalyser equipped, except Peugeot 205 1.1XR

TECHNICAL SPECIFICATION

Peugeot 106 1.1XT

1.4 differences

ENGINE

Type and size front-mounted, transverse 4 in line; water-cooled. 72mm bore x 69mm stroke = 1124cc. Aluminium alloy block and head; 5 main bearings

75mm bore x 77mm stroke = 1360cc

Compression ratio 9.4:1

9.3:1

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

Fuel system Bosch electronic Monopoint fuel injection, three-way regulated catalyser – lambda sensor. 45-litre (10-gallon) tank, with low-fuel warning lamp. Fuel required: unleaded only, 95 octane minimum

Ignition system coil and breakerless distributor with mechanical advance

Maximum power 59bhp at 6200rpm

74bhp at 6200rpm

Maximum torque 66 lb ft at 3800rpm

80 lb ft at 4000rpm

TRANSMISSION

Clutch 6.3in dry plate, diaphragm-spring; cable-operated. Pedal load/travel: 19 lb/5¹/₂in

Gearbox 5-speed (all synchromesh) and reverse. Ratios: first 3.42, second 1.95, third 1.36, fourth 1.05, top 0.85 and reverse 3.58:1. (4-speed on 1.0 and 1.1XN; no automatic available)

Final drive 3.94:1, to front wheels

3.75:1

Mph per 1000rpm 18.4 in top, 14.9 in 4th

19.0 in top, 15.4 in 4th

Rpm at 70mph 3840 in top gear (observed)

3670 in top gear (observed)

CHASSIS

Suspension front: independent by MacPherson damper/struts, coil springs, lower wishbones and an anti-roll bar. Rear: independent by trailing arms with transverse torsion bars. Dampers: telescopic all round (horizontally mounted at rear)

Steering unassisted rack and pinion with 3.7 turns between full locks. Turning circles average 35ft between kerbs, with 60³/₄ft circle for one turn of the wheel

Wheels 5.00Bx13 steel with 165/65R13 76T tyres (Dunlop SP9 on test car)

(Pirelli P2000 on test car)

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

Bendix two-channel ABS option on 1.4-litre versions – not fitted to test car

