

Peugeot 405 1.8GR



What's new ...

From November 1992, Peugeot's family-sized contender acquired:

- a stronger, stiffer bodyshell
- a heavily revised engine line-up
- a restyled fascia and interior
- an easier-to-load boot
- improved security

ALTHOUGH LITTLE DIFFERENT TO LOOK AT, the latest 405 boasts over 2000 changed components. These provide a strengthened, more rigid body, a new interior with a softer, better-looking fascia, and a new 309-style rear-end treatment for the saloon. This features restyled rear lamps and a boot lid which now extends down to bumper level.

There are significant changes under the bonnet, too, with a new 1.4-litre power unit, and 1.8- and 2-litre petrol engines in place of the previous 1.9-litre unit. Peugeot's impressive diesels aren't neglected, either, with improvements to the normally aspirated 1.9-litre engine, while the intercooled turbo-diesel is now also based on the larger 1905cc version, which has improved mid-range driveability and reduced cold-start emissions.

The new 405 offers saloon and estate body styles, six trim levels and no fewer than seven different engines, comprising five petrol units, ranging from 1360cc/75bhp to the Mi16's 1998cc/155bhp, along with the brace of diesels. Security protection is enhanced on the latest models, too, with remote-controlled alarms and engine immobilisers, and window etching of the VIN number on all except entry-level Style models. An extra steering column stalk now provides fingertip control of the radio/cassette unit, but the 405 still lacks a folding back seat.

Under the bonnet

The new 1.8-litre power unit, available in both saloon and estate with GL or GR trim, is a strengthened, long-stroke version of the continuing 1.6-litre engine, topped by the 205/309GTi cylinder head.

It's fuelled by multi-point injection and produces 102bhp and 113 lb ft of torque, peaking at a reasonably early 3000rpm, compared with 90bhp/98 lb ft for the catalysed, single-point injection 1.6 version.

We're impressed with the results, too. The all-alloy unit still delivers a rather clattery alarm call on start-up, but once under way, its presence remains impressively unapparent from within the cabin. A smooth, willing mid-range delivery nicely complements

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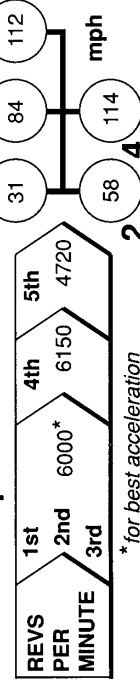
PERFORMANCE

Acceleration time in seconds

STANDING START	0-30mph	3.4	0-60mph	10.7	1/4 mile	17.9
mph	30	40	50	60	70	
THROUGH THE GEARS		1.9	4.2	7.3	11.1	
IN 5TH GEAR		6.8	13.8	21.3	29.2	
IN 4TH GEAR		4.6	9.2	13.7	18.5	

20 mph	30	40	50	60	70
5TH/4TH SPEED RANGES	13.5/9.5		14.5/9.1		
			13.8/9.2		15.4/9.3

Maximum speeds



FUEL CONSUMPTION

Fuel grade for tests: unleaded Premium, 95 octane

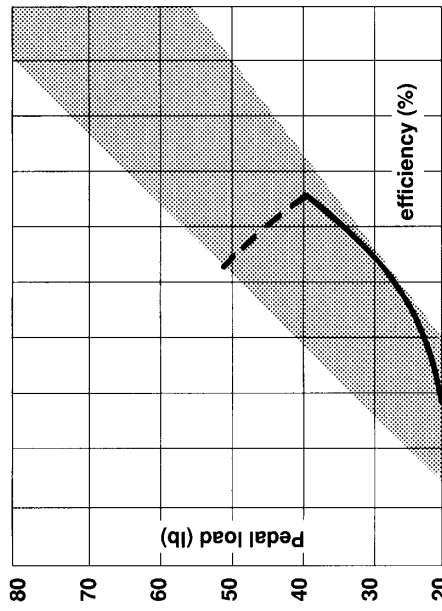
Normal range	mpg
Hard driving, heavy traffic	29
Short journeys in the suburbs	30
Motorway – 70mph cruising	38½
Brisk driving, mixed roads	36½
Gentle driving, rural roads	41
Typical mpg overall	36½
Realistic tank range*	62 litres/500 miles

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

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SAFETY

Brakes



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

Safety check list

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 tank?	☒ ☒

Fade test

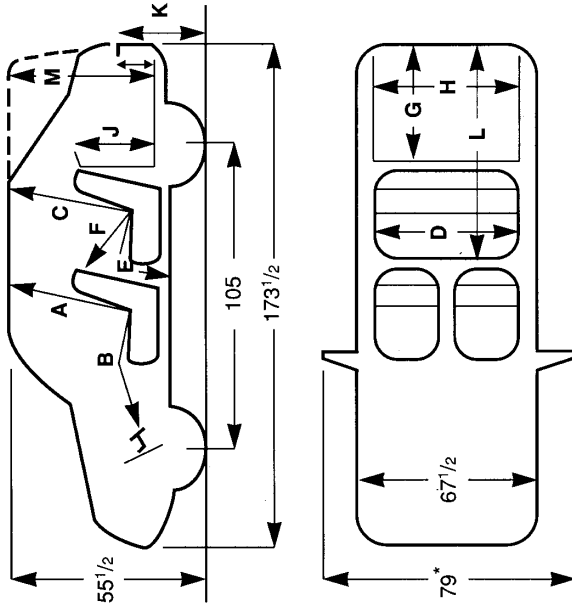
How hard use affects braking
(Ideal brakes show no change)

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

At start of test	After constant use	After severe use
38	28	28

MEASUREMENTS

Dimensions (inches)



* 72¹/₂ with mirrors folded

Inside (inches)

A Front headroom (with sunroof)	35 ¹ / ₂ -36 ³ / ₄	G Load length	38
B Front legroom (min - max)	34 ¹ / ₂ -42 ¹ / ₂	H Load floor width (min - max)	44 ¹ / ₂ -53 ¹ / ₄
C Rear headroom	36 ¹ / ₂	J Load height	18 ¹ / ₂
D Back seat width (between armrests)	51 ¹ / ₂	K Sill height (inner/outer)	8 ¹ / ₂ /29 ¹ / ₄
E Typical rear * legroom	39 ¹ / ₂	L Load length	-
F Typical rear * kneeroom	28 ¹ / ₂	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

(though can't entirely disguise) this 405's higher gearing, but the lofty overdrive fifth gear delivers superbly relaxed – and economical – cruising on a motorway.

Despite the taller gearing and a shade more weight, the 1.8's increased output knocks two or three seconds off 30–70mph acceleration, whether you use the gear lever or not. Maximum speed rises to 114mph (compared with 106mph for the 1.6) and is attained in fourth gear as a result of the sensible, non-sporty gearing.

Although it feels rather "clonky", the gearchange provides fast, easy navigation around the cogs, although it pays to exploit the engine's sweet, solid mid-range pull, because it becomes quite noisy as the tachometer needle approaches the red-line.

At the wheel

The 405's unaltered driving position still results in a slightly hunched up, rounded back posture at the wheel, but taller front seat occupants will appreciate the new compact electric sunroof, which liberates a little – though only a little – more headroom. This remains on the tight side (only shorter drivers will really benefit from the seat-height adjuster, for example), but all versions now come with tilt-adjustable steering.

By far the biggest improvement inside is the new one-piece, soft-touch facia, which brings an air of creak-free quality and solidity previously lacking in the 405's cabin. There's a new Peugeot 605-style instrument cluster and revised steering column stalks and door trims, but the reversion to sliding heating and ventilation levers, in place of easier-to-use rotary dials, is a retrograde step.

The latest 405's tauter, more rigid body has allowed Peugeot to tweak the suspension settings (softening the dampers in compression and increasing rear axle transverse stiffness, for the technically minded), to improve the 405's already legendary ride and handling qualities.

We're not convinced that the changes are completely successful, though. While the superb, class-beating ride remains largely intact, it feels a little underdamped at times. There's a hint more low-speed fidgetiness and thump over pock-marked surfaces and the chassis seems to have lost a fraction of its former crispness.

However, its combination of unflurried handling and cossetting ride remains a target few have yet hit. Power steering – now standard on most models – retains a degree of the unassisted set-up's weighting, while its fluid feel and responses allow plenty of the excellent chassis to be enjoyed by the driver.

The 1.8 delivers impressive refinement (unless the red-line region is regularly explored), but although aerodynamically smoother, bonded-in front and rear screens have been adopted, there's still some disappointing wind noise from around the door seals and mirrors. The relocated roof aerial adds further

contributions by playing a few unwelcome tunes of its own.

Living with the 405

The 405 may not be the most spacious car in this class, but it's still a fine way to travel, pampering passengers with its superb ride, excellent back seat comfort and plush new interior. Also – in 1.8GR form, at least – Peugeot's freshen-up brings improved levels of refinement to the cabin.

The new 1.8 engine represents major progress, too, introducing livelier, more refined performance, particularly in the most often used mid-range. In addition, the higher gearing not only boosts cruising refinement, but also preserves the 1.6's fuel economy. We obtained a creditable, if not class-leading, 36¹/2mpg overall in our searching mpg tests (matching the 1.6's economy), while that loping fifth gear contributes to a mile-stretching 38¹/2mpg in motorway cruising.

The 1.8 engine option is keenly priced, too, costing only about £300 over the 1.6, whereas there's a far heavier £1300 penalty to swallow in opting for GR instead of GL trim.

The changes at the back ease the task of loading the boot and tidy up the rear-end styling, but there's still a small sill to negotiate, while the rear lamps restrict width a little. That said, the boot offers generous, well-proportioned load space with minimal wheelarch intrusion and, thanks to the bigger loading aperture, the space is now a lot easier to get to.

VERDICT

There's never been much wrong with the way the Peugeot 405 goes down the road, but its cheap and cheerful interior, indifferent build quality and compromised boot loading did the rest of the car a disservice.

Now, however, the new interior looks, feels and sounds much more impressive, while this new 1.8-litre version lifts performance and boosts mid-range driveability and refinement for no increase in thirst – at least for those unfettered by company-car engine-size restraints.

It's disappointing that the body and suspension revisions have ever-so-slightly blunted the chassis' excellent road manners and, by steadfastly refusing to offer folding back seats, the 405 finds itself in a rapidly dwindling minority.

With Ford's Mondeo and a new Honda Accord/Rover 600 just around the corner, plus stiff, home-grown competition from both Nissan and Toyota, there's virtually undeclared warfare in the high-volume, family-sized sector. But Peugeot hasn't just sat back on its hands. Although the 405 looks little different, these latest changes make it much more the car it should have been from the outset, giving it a significantly stronger corner to defend.

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 405 1.8GR	1761/102	114	11.1	29.2/18.5	36 ¹ / ₂	86/40	42 ¹ / ₂	39 ¹ / ₂ /28 ¹ / ₂	3.2/35 ¹ / ₂ (p)	173 ¹ / ₂
Peugeot 405 1.6i GR	1580/89	106	13.3	31.3/21.5	36 ¹ / ₂	93/85	42 ¹ / ₂	39 ¹ / ₂ /28 ¹ / ₂	3.2/35 ¹ / ₂ (p)	173 ¹ / ₂
Honda Concerto 1.6i	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
Nissan Primera 2.0SLX	1998/114	123	9.6	24.4/16.9	33	91/55*	42	38 ³ / ₄ /29	3.1/36 ³ / ₄ (p)	173 ¹ / ₄
Toyota Carina E 1.6GLi	1587/106	115	11.0	30.4/22.0	40	100/27	43	42 ¹ / ₂ /30	3.2/35 ¹ / ₂ (p)	178 ¹ / ₄
Vauxhall Cavalier 1.8i GLS	1796/90	112	12.3	31.9/21.7	37	107/90	42 ¹ / ₂	39 ¹ / ₂ /28 ¹ / ₄	3.4/34 (p)	174 ¹ / ₂
Volkswagen Passat 1.8L	1781/90	111	12.6	25.1/19.0	35 ¹ / ₂	95/37	42	42/31 ¹ / ₄	3.3/33 (p)	180
						* with ABS	(p) power-assisted			



TECHNICAL SPECIFICATION

ENGINE

Type and size front-mounted, transverse 4 in line; water-cooled. 83.0mm bore x 81.4mm stroke = 1761cc. Aluminium alloy block and head; 5 main bearings

Compression ratio 9.25:1

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

Fuel system Bosch Motronic MP 5.1 multi-point fuel injection; three-way regulated catalyser and lambda sensor. 70-litre (15.4-gallon) tank, with low-fuel warning lamp. Fuel required: unleaded only, 95 octane minimum

Ignition system distributorless, fully programmed electronic, integral with fuel injection

Maximum power 102bhp at 6000rpm

Maximum torque 113 lb ft at 3000rpm

TRANSMISSION

Clutch 7.9in dry plate, diaphragm spring; cable operated. Pedal load/travel: 22 lb/5in

Gearbox 5-speed (all synchromesh) and reverse.

Ratios: first 3.46, second 1.85, third 1.28, fourth 0.97, fifth 0.76 and reverse 3.33:1

Final drive 3.81:1, to front wheels

Mph per 1000rpm 23.7 in top, 18.5 in 4th

Rpm at 70mph 2950 in top gear

CHASSIS

Suspension front: independent by MacPherson damper/struts, coil springs 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 (standard on all except 1.4-litre and Style) rack and pinion with 3.2 turns between full locks. Turning circles average 35¹/₂ft between kerbs, with 54¹/₂ft circle for one turn of the wheel

Wheels 5¹/₂J x 14 alloy with 175/70R14 84T tyres (Michelin MXT on test car)

Brakes 10.5in ventilated discs front, 9.0in drums rear, with vacuum servo. Bendix three-channel ABS standard on 2.0SRi/STi, Mi16, SDTD and GRx4; optional on all other models except 1.4 litre and Style