R9978A
See also R9551
November 1999

TEST EXTRA

Citroën Synergie 2.0HDi

What's different?
New, up-to-the-minute direct-injection diesel engine for Citroën's people carrier

THE MOVE FROM INDIRECT TO DIRECT injection for passenger-car diesel engines has been measured but inexorable. VW led the way, but with the development of "common-rail" fuelling – a sort of liquified, high-pressure ring-main – Peugeot-Citroën has finally taken the plunge.

There are inherent problems with Di engines, as well as clear advantages. The biggest challenge is NVH – the industry jargon for noise, vibration and harshness. No wonder this French manufacturing group has been slow to forsake its former indirect-injection units, which have been the international standard by which all other four-cylinder diesels have been judged.

In fact, you can still choose between the two types in the current Peugeot 806/Citroën Synergie line-up – at least, for the time being. Make no mistake, however – the £800 more expensive 2.0 Hdi is the engine of the future.

Sampling it in the Synergie (middle trim level) SX produces our most favourable test impression to date of this larger MPV contender. It's very nicely trimmed, offers a generous standard of equipment and even before this new engine transplant is taken into account, there are improvements in other areas, as well, since our first test of the model four years ago. The unusual gear lever is much more precise, the sliding doors work very smoothly and the security arrangements are the better for the abandonment of the keypad, in favour of a key-located immobiliser.

However, it's the new engine that makes the best impression. Our comparison table summarises the all-round improvements statistically, but equally impressive is the demure behaviour of this installation.

It isn't unusual to discover exceptionally lusty lower-speed pulling power from any direct-injection diesel, but the pleasure is often sullied by the tremerous vibration that accompanies below-1500rpm acceleration. With a diesel's maximum revs restricted, as well, this can be a real impediment, but in this case, its low-speed manners as well as motorway progress, are impeccable. In fact, it felt much better at low revs than the 406 we tested recently.

PERFORMANCE

Acceleration time in seconds

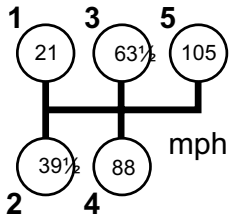
mph	30	40	50	60	70
THROUGH THE GEARS	2.2	5.4	9.1	14.4	
IN 5TH GEAR	7.0	12.4	18.2	25.0	
IN 4TH GEAR	3.8	7.6	12.0	17.4	

20 mph	30	40	50	60	70
5TH/4TH SPEED RANGES	No/9.3	11.2/8.2	12.4/7.6	12.6/9.8	

Maximum speeds

REVS PER MINUTE	1st 2nd 3rd	4th	5th
	4250*	4250*	3875

** for best acceleration*



FUEL CONSUMPTION

Fuel grade: low sulphur diesel	
Type of use - air conditioning off*	**mpg**
Hard driving/heavy traffic	33
In the country - quiet driving	50
Typical mpg overall	**42**
Realistic tank range † miles	76 litres/700

**with air conditioning switched on, consumption will increase by 2–4% in winter and 4–8% in summer*

However, the 406 comparison emphasises the old adage that you don't get owt for nowt – neither performance nor economy can match the identically powered 406, even though they're both superior to those of the older diesel version of the Synergie.

VERDICT

As long as you can really use the Synergie's passenger-carrying potential, or really need its van-like cargo-swallowing capacity to the full, you shouldn't mind its staid (if composed) road manners or its generally higher price and running costs, compared with a 406 Estate.

The fact that it fulfils both passenger and cargo-carrying roles so effectively could mean that some self-employed buyers can get by with one vehicle instead of two. Now that could be the route to real motoring economy.

FOR THE TECHNICAL

ENGINE

Type transverse four cylinder with iron block and alloy head; five main bearings

Size 85 x 88mm = 1997cc

Power 110bhp at 4000rpm

Torque 184 lb ft at 1750rpm

Valves belt-driven overhead camshaft actuating two valves per cylinder via hydraulic tappets

Fuel/ignition direct-injection diesel with electronically controlled mechanical injection pump and high-pressure common-rail delivery; turbocharged with intercooler and exhaust catalyser. 80-litre tank, with low-level warning lamp

TRANSMISSION

Type five-speed manual, front-wheel drive

Mph per 1000rpm 27.1 in 5th; 20.7 in 4th

LIKES AND GRIPES

Reversible front seats with lofty view out	...	but 30in (76cm) cushion height from ground a struggle for some
Novel oddments accommodation (trays, bottle holders, satchel)	...	but little real luggage space in seven seater mode
Good filler with enormous range	...	but don't do up the cap too tight
Commanding driving position easy on the spine	...	but nowhere to rest left foot and poor slip mats

HOW THE SYNERGIE HDi COMPARES	Engine Cap/power (cyl/cc/bhp)	Revs at 70mph (rpm)	30-70mph through gears (sec)	30-70mph in 5th/4th gears (sec)	Fuel economy (mpg)	Brakes best stop (m/kg)	Maximum Legroom - front (cm)	Typical leg/ kneeroom - †rear (cm)	Steering turns/ (p) circle (m)	Overall length (cm)
CITROEN SYNERGIE 2.0HDi	**4/1997/110**	**2580**	**14.4**	**25.0/17.4**	**42**	**27/25***	**102**	**97/78**	**3.0/11.8**	**445**
Seat Alhambra 1.9TDi 90	4/1896/90	2790	19.2	32.0/22.4	41½	26/25*	108	104/84	3.3/11.3	462
Peugeot 406 2.0HDi (Saloon)	4/1997/110	2400	12.0	23.1/15.6	48½	29/16*	113	98/75	3.1/11.2	460
Peugeot 806 1.9SRDT	4/1905/90	2900	17.9	32.4/20.8	34½	27½/19	102	97/78	3.0/11.8	445

© The Automobile Association 1999