## Car test

June 1997



# Citroën Saxo 1.6 Auto



### What's different?

Automatic Saxo with new (electro-hydraulic) powered steering and a 1.6-litre engine. Five doors this time, as well.

OT MUCH HAS PROGRESSED IN THE PSA transmission department since we last sampled a Peugeot/Citroën small automatic. It was a 205 1.6/80bhp five door and suffered both loss of urge and fuel economy because its four-speed transmission used a power-sapping torque converter. Seven years on, the new Saxo/106 five door offers similar accommodation and 10bhp more, but the 'box is now down to three gears and uses a converter that no longer even offers a "lock-up" facility when cruising.

Don't get us wrong – from the driver's point of view this transmission is very user-friendly, and electronics ensure intelligent part-throttle and full-throttle gearchanging to suit most conditions. A double-width brake pedal and a left footrest make for easy control – we found that two-foot driving came easily. There's nothing complicated about the selector, although the markings are on the "French" side of the lever.

The torque converter allows a significant degree of slip, so the tachometer reading rises by nearly 1000rpm when the engine's pulling, compared with a feathered gas pedal at the same road speed. The numerical results don't stand up to close scrutiny, however. Our consumption tests and acceleration times reveal the underlying mechanical inefficiency of the transmission. We've sampled this engine in a 306 manual, recording 38mpg overall and 30–70mph in 11.6sec in what is a larger model that weighs 90kg more. We would expect the Saxo 1.6 five-speed to better 40mpg, and putting it another way, a 1.1 manual will be almost as accelerative as this auto version, yet is 37 percent more fuel efficient. It's a lot cheaper to buy, as well.

The test car came with one Peugeot/Citroën technical innovation: power assistance for the steering that's provided by an electric motor rather than the usual servo-pump driven by the crankshaft pulley drive-belt. It reduces power losses and makes it much easier to add on as an optional extra. because the motor can be placed anywhere under the bonnet, so long as its hydraulic pipework can reach the steering rack. Feel isn't quite as deft as the best we've sampled on a Peugeot, but there's nothing serious to complain about and the reduction in wheel turns is accompanied

by a much better turn in the road on right lock, compared with the Saxo 1.4.

Having a five-door Saxo does more than merely make it easier for rear passengers to reach their (cramped) rear accommodation. You get proper door handles on the outside of the five door and inside, the front seatbelts have height adjusters added. The Saxo's other silly features we complained of are still in evidence, however – amazing when the sister car 106 has them sussed out, including gas-struts for its bonnet opening.

Rover 114 1.4 Auto

Nissan Micra 1.3 Auto

Renault Clio 1.2 Easy †

† (clutchless manual)

Daihatsu Charade 1.3 Auto

Honda Civic 1.6 (3 door) Auto

#### VERDICT

The Saxo (and 106) Automatic is likeable enough on initial acquaintance; even the absence of Sport and Winter settings may be a comfort to nontechnical, non-enthusiast users who just want a small auto car to eliminate all the hassle. However, be warned that even computer control can't transform yesterday's technology to match the best small automatics using CVT (continuously variable transmission). It's no longer necessary to tolerate the performance of a 1.1-litre small car with the fuel thirst of a 406 or a Xantia, simply because your preference is for automatic.

#### **PERFORMANCE** FOR THE TECHNICAL Acceleration time in seconds - using kickdown in D Specification similar to Saxo 1.4 (see R9657) except for: mph 40 50 60 70 THROUGH THE 47 2.3 8.8 13.4 **GEARS Engine** 1587cc/90bhp with multi-point injection 30 20 mph 4 0 50 60 70 SPEED 4.3 6.5 RANGES **Transmission** three-speed automatic with USING hydrokinetic torque converter and 4.7 8.7 **KICKDOWN** epicyclic gear train Maximum speeds Mph per 1000rpm 23.7 in top 3 108 using accelerator kickdown (theoretical) **REVS** 1st/2nd 3rd 2 PER 5400/5800 89 mph 5000 **MINUTE** Rpm at 70mph 3180 equivalent to 22.0mph per (observed at steady 1000rpm 50 1 speed/level road) **FUEL CONSUMPTION** Steering rack and pinion with electro-hydraulic Fuel grade for tests: unleaded Premium, 95 octane power assistance; 3.1 turns between Normal range full locks. Turning circles average 281/2 10.45m between kerbs, with 15.55m Hard driving, heavy traffic 261/2 circle for one turn of the wheel Short journeys in the suburbs Motorway - 70mph cruising 36 Wheels 331/2 165/65R14H Michelin MXV3A tyres Brisk driving, mixed roads Gentle driving, rural roads 37 331/2 Typical mpg overall Realistic tank range\* 41 litres/300 miles \*based on fuel gauge/warning lamp and filling station experience 30-70mph Overall HOW THE SAXO AUTO Engine Revs at Fuel **Brakes** Maximum Typical leg/ Steering cap/power (cc/bhp) есопоту 70mph through best stop legroom kneeroom turns/ length COMPARES circle (m) gears (sec) (rpm) (mpg) (m/kg) front (cm) rear (cm) (cm) CITROËN SAXO 1.6 AUTO 1587/90 3180 13.4 $33^{1/2}$ 29/27 105 91/65 3.1/10.55 (p) 372

39

38

 $42^{1/2}$ 

 $45^{1/2}$ 

 $35^{1/2}$ 

104

102

111

103

105

93/61

94/66

96/68

94/68

98/66

3.7/9.8

3.7/9.7 (p)

3.5/10.55 (p)

3.4/10.3 (p)

3.2/9.5 (p)

(p) power-assisted

281/2/26

241/2/18\*

281/2/12

\* with ABS

30/15

29/27

357

370

419

371

375

3020

3000

2860

3440

3080

13.1

12.3

9.9

16.6

15.0

1396/75

1275/75

1590/115

1149/60

1296/84