# PARKER'S FaxCheck Guide

# **VOLVO 400 SERIES**(440, 460 & 480)

PARKER'S FaxCheck gives you an expert assessment of most popular used cars on the British market. It leads you through a series of checks to see whether a second-hand car is in sound condition or if it's been neglected and is likely to need expensive work in the near future. For details of how to get information on other cars covered by Parker's FaxCheck, see the box below.

olvo launched the 440 in the UK in 1989, marketing alongside the 340 for a couple of years before killing off the older model. A front-wheel drive design with a transversely mounted engine, the 440 was originally powered by a 1.7 engine with either carburettor, injection or turbo options. Later engines included 1.8, 1.9 turbo diesel and 2.0 units. Transmissions were originally 5-speed manual transmission or 4-speed auto; there are also cars fitted with continuously variable automatic transmission from late 1994 – these are rare.

The five-door hatchback-bodied 440 was joined by the four-door 460 saloon in 1990. Both ranges got a big facelift in late 1993 to bring them closer to the successful

850; these face-lifted cars from L-reg onwards are undoubtedly the best choices.

The forerunner in the 400 series, the unusual 480 coupe, was launched back in 1987. Looking a bit like a wedge-shaped mini estate, it's a dramatically different concept to rather the conservative 440 and 460, but it shares many mechanical features. Volvo only built around 80,000 480s, fitting them with 1.7. 1.7 turbo and 2.0 engines.

#### **Minor faults**

400 Series models bear little relation to Swedish-built Volvos; they were built in Holland and used many Renault components, including all five engines. The first thing to say about them is that, in spite of their basic reliability, they tend to suffer from a lot of minor faults.

This became clear shortly after the launch of the 480 coupe, when problems with the fuel injection system surfaced. And when the 440 and 460 came out a couple of years later Volvo still hadn't ironed out all the problems.

However Volvo did not ignore the problems. As well as making improvements at the manufacturing stage, Volvo made sure that all 400s already on the road underwent a series of modifications when they were serviced at a Volvo dealer. It's for this reason that we recommend that you only buy a 400 Series if it has been serviced by a main dealer for the first three years of its life. If not, it may not have received all the post-production improvements.

## **Engine faults**

Even if the service history shows that the car was serviced a Volvo dealer, there are still tests that you should carry out. We've listed the tests to identify any major problems first, followed by checks for common minor faults. The most likely reason for rejecting a 400 Series is most likely to be an accumulation of lesser faults.

# FaxCheck — for expert advice

For a FaxCheck on any of the models below, call 0991 991 995 and listen to the instructions. You will need the code for the model you are interested in and the number of the fax machine receiving the report.

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|--|--------|---|------------|--|-----|
| BMW 3-Series (1991-98)   | 331    | Ford Sierra / Sapphire (1.6, 1.8 & 2.0) | 957        | Rover 800 Series                       | 223 |
| BMW 5-Series (520 & 525, 1988-95)  | 333    | Land Rover Discovery TDi                | 463        | Rover Montego                          | 225 |
| Citroen AX   | 770    | Peugeot 106                             | 543        | Saab 900 (to 1993)                     | 469 |
| Citroen BX   | 775    | Peugeot 205                             | 545        | Saab 9000                              | 471 |
| Citroen Xantia (diesel only)   | 891    | Peugeot 306                             | 429        | Vauxhall Astra (petrol only)           | 435 |
| Citroen XM   | 780    | Peugeot 309                             | 547        | Vauxhall Carlton                       | 437 |
| Citroen ZX   | 785    | Peugeot 405                             | 549        | Vauxhall Cavalier (1989-95)            | 817 |
| Fiat Uno (petrol only)   | 237    | Renault 5                               | 465        | Vauxhall Corsa                         | 693 |
| Fiat Punto (petrol only)   | 239    | Renault Clio                            | 467        | Vauxhall Vectra                        | 439 |
| Ford Fiesta (petrol only, 1989-96)   | 645    | Rover Metro / 100 Series (petrol only)  | 217        | Volkswagen Golf (1992-98; petrol only) | 699 |
| Ford Escort / Orion (petrol only, 1990-95)   | 139    | Rover 200 / 400 Series (1989-96)        | 219        | Volkswagen Polo (to 1994)              | 702 |
| Ford Mondeo (petrol only)  | 953    | Rover 600 Series                        | 221        | Velve 440 / 460 / 480                  | 706 |
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Calls to 0991 numbers are charged at £1.50 per minute. Parker's will bear the cost of sending you the fax.

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Make sure the engine is cold, then start it. It should fire almost immediately and idle steadily almost as soon as it gets going. You might notice a slight shudder as the engine fires, but that's normal. If there is a lot of smoke, it indicates engine wear consistent with high mileage.

Accelerate away before the engine warms up. Moving off should be easy – there should be no sign of the engine giving up or requiring an unusual amount of throttle. If you have any problems starting or driving away, reject the car – faults here suggest that it hasn't received the necessary modifications or that general servicing has been neglected.

All 400 Series engines are pretty robust and should last well over 100,000 miles. If you're looking at a car that's done a high mileage, you need to establish that the engine's got plenty of life left in it. Do this by checking for camshaft wear. While the engine is still cold, take off the oil filler cap and look inside the metal casing on top of the engine. You should be able to see a couple of dull egg-shaped lobes on a shaft — that's one end of the camshaft. These lobes should be smooth and polished in appearance. The check is to run your fingertip over the surface of the lobes. If there are any signs of wear like scratches, rough areas or ridges, reject the car.

If the lobes are smooth, do the second test after your test drive when the engine is hot. Rev the engine up and look for any blue or grey smoke in the exhaust. If you see any, reject the car.

Leave the engine running for a while to make sure it doesn't overheat. Look for oil and coolant leaks.

Most 400s have got catalytic exhausts — which are easily damaged and expensive to replace. During the road test, listen out for rattling sounds under the car, which are probably caused by broken bits of ceramic moving around inside the exhaust casing. Two other signs which together point to catalytic exhaust failure: first, the engine revs going up and down when idling; second, pops and bangs when driving, particularly downhill when the accelerator is not in use.

If you think that the 'cat' has failed, only buy the car if the seller is prepared to drop the price by the amount you'll have to pay for a new unit.

## **Checking Turbo models**

If you are looking at a 1.7 Turbo model, let it idle for five minutes. If the exhaust remains clear, all's well. But if a noticeable plume of blue or grey smoke builds up, the turbo needs replacing — you're best advised to reject the car. Service history is vital with Turbos.

# Summary of models

440 hatchbacks, 460 saloons, and 480 coupes. The engine variants are 1.6, 1.7, 1.8. 2.0 and 1.9 turbo-diesel: turboequipped 1.7 models also available, Equipment packs included Standard. Li. Si. SE. GL/GLE, GLT and CD; GLE, ES-Series. CVT continously-variable transmission available on 1.8i models. Power steering - available on most of the range from 1994 onwards - is a desirable bonus.

#### **Anti-Lock Brakes**

The ABS braking system can be expensive to repair. If the 400 you are testing has ABS, the ABS light on the dashboard should come on when you turn the ignition on, and go off again almost immediately. You may have to switch the ignition on a few times to locate the orange-yellow light, because the on/off sequence only takes a couple of seconds. If the light doesn't behave correctly, get the seller to fix the ABS brakes first or reject the car.

## **Bodywork**

Bodywork on 400 models is actually pretty good. Any sign of rust, or of paintwork that doesn't match exactly from one panel to the next, is grounds for instant rejection – the car has probably been in an accident. Go all round the car in good daylight, examining it closely and comparing the various panels. Look out for rust in body seams on very early cars.

#### Interiors

Unlike the exterior, the build quality inside is below average and a major cause of complaints. Apart from badly fitting trim, most complaints are to do with noise. 400s tend to suffer from rattling dashboards, squeaking back seats, and so on. During your test drive, take the car along a stretch of rough road to find out if it makes more noise than you're prepared to put up with. But generally, if you want a Volvo 400, a certain amount of racket comes with the territory — unless you go for a face-lifted 1994 model.

Make sure the roof lining is correctly fitted, particularly round the sunroof opening. One extra point on up-market

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models: check that all the functions work on the 'information centre,' which shows you things like the outside temperature. This unit costs a lot to put right.

#### **Mechanical Problems**

If the car has fuel injection – rather than a carburettor – check that it idles smoothly. If it doesn't, this can usually be cured by careful tuning on the diagnostic computer at a main dealer.

Carburettor models can be difficult to start and hard to drive smoothly in traffic. There are modifications to counter these problems, but Volvo state that water in the petrol is the main culprit. You can minimise the problem by filling up at large modern petrol stations where the storage tanks are usually in better order.

The clutch cable often makes a graunching noise, but there is a modification to shut it up. Again, this is the sort of problem you should get a dealer to fix before buying.

There are reports that the handbrake and gear linkages can get damaged; in the case of the gear linkage, this shows up as awkward gear changes. On the test drive, make sure you can select the gears cleanly and that the handbrake holds the car on a steep hill.

It may be tempting to buy a cheap 400 with a few minor faults; however, it's wiser to reject any car with four or more minor faults. Fewer than four, and if you're buying from a main dealer, insist on everything being put right before taking delivery. If you're buying privately, check with the dealer who has been servicing the car to make sure that the modifications specified by Volvo have been done. If they have, then use these minor faults to negotiate the price down. If they haven't, don't buy the car.

## Which model to go for?

If you're going to buy an early model, it's worth looking for a non-catalyst car — to avoid the cost of replacing the catalytic exhaust at some point in the future. The catalyst may need to be replaced every 30,000 miles. And if you're looking at an early 480 coupe — 1987/88 E- or F-reg — check starting and driveability very carefully.

PARKER'S FaxCheck is designed to help YOU pick out a sound and reliable car. We recommend that once you have found one that passes all these tests, you get it checked by a professional engineer. We also recommend that you check ownership and history with Equifax-HPI (01722 422422) or AA Used Car Data Check (0800 234999).

#### **400 SERIES TIPS**

- On high-mileage engines check the camshaft isn't worn and that there is no blue-grey exhaust smoke.
- Catalytic exhausts are expensive to replace, so listen for rattles and watch out for poor running.
- Inside the car, listen for squeaks and rattles, and make a judgement about whether you can put up with them.
- Finally, bear in mind that newer 400s are much better built and more reliable than old ones. Go for the newest car you can afford.

## Checklist

#### Reject any 400 Series if:

- It has not been serviced by a main dealer for the first three years of its life
- Olt's an early car fitted with catalytic converter. Or if the 'cat' has failed
- O There are any problems starting and driving the car
- O It has poorly matched paintwork
- O It has more than four minor faults
- O ABS light doesn't go off after a couple of seconds
- O Any sign of blue or grey exhaust smoke
- O Camshaft is worn

#### Also worth a look

- ○CITROEN ZX Closely related to Peugeot 306, so handlng and roadholding are highly rated; good value, particularly the lively turbo-diesels; economical and fairly reliable; turbo diesels are particularly good.
- <u>FORD ESCORT/ORION</u> Cheap to buy and run, with loads of choice, but cars up to the mid-'90s really are not the best in this class; reliability is only so-so on older cars; later 16-valve 1.6 and 1.8 cars are best.
- <u>PEUGEOT 306</u> Classier and more modern than Citroen ZX cousin, but also more expensive to buy; excellent ride and handling, reasonable reliability, good fuel economy particularly from lively turbo-diesels; not as well built as VW Golf, but at least as good in most respects.
- ROVER 200/400 Rover's version of the Honda Concerto, with lively but loud Rover engines or Peugeot diesels; reliable, nice to drive and generally lasting well; best with power steering (lacking on many early cars).
- OVAUXHALL ASTRA Huge range with body styles and engines to suit all; comfortable, well built, good value but looking dated now; some reliability issues and engines get noisy with high mileages.
- ○<u>VW GOLF/JETTA/VENTO</u> Golf (Mk 2 or Mk 3) is a sound used car choice; better built than rivals; best with power steering; smaller engined versions have limp performance but 16-valve and VR6 versions are very sporty; saloons have less street cred than hatchbacks but are cheaper and equally durable.