



SWEDE BASHER

The Volvo 850 was the company's first large front-wheel drive car and also pioneered a new five-cylinder engine but for bags of big car fun the money has to go on the limited production 'hot' 250bhp T-5R

WORDS IAIN WAKEFIELD

The development of the Volvo 850 was the result of a pilot study to create a new series of fuel-efficient models that got underway in 1978 under the umbrella of the Galaxy Project. The first prototype to be produced in 1981 under the new study was the G1, a transverse engine 1.8 litre saloon that eventually led to the development of the Volvo 400 series.

The larger G2 was another prototype developed under the Galaxy Project and designer Jan Wilsgaard further enhanced the concepts while working in Turin at Carrozzeria Coggiola. Quite a few features from the earlier G2 concept eventually found their way onto the 700 series but the main difference was that Wilsgaard's B3 premium sized prototype was designed from the start to take a transversally mounted five-cylinder engine driving the car's front wheels.

Volvo's design team were also busy producing a new series of drivetrains as part of the Galaxy Project and by the time the B3 prototype had been signed off by the board, Hans Carlstedt was now responsible for the technical aspects of the new model. The

new large Volvo would feature all the company's latest safety features, including anti-lock brakes and provision was made to add a new side impact protection system (SIPS) when all the ongoing development work was finally completed.

A stipulation of the design for the what would become the 850 was that it should have a 20-year lifespan and the new engines be capable of running for up to a quarter of a million kilometres without giving too much trouble. By the end of 1987, the prototype had been renamed GE and the decision taken to also assemble the new 850 at Volvo's Ghent factory in Belgium.

The final 850 concept featured softer lines and at the end of 1990 Volvo's new six-cylinder engine made its debut in the 960. On April 11, 1991, the initial five-cylinder powered Volvo 850 GLT rolled off the Ghent production line and the first front-wheel drive big Volvo made its public appearance at that year's Frankfurt Motor Show. Volvo introduced the estate version in 1991 prior to the 850 range receiving a mild facelift for the 1993 model year.

The popular 225bhp 850 T-5

was powered by a turbocharged 2.3 litre five cylinder engine driving the front wheels through a five-speed manual gearbox. Volvo upped the ante in 1994 when it unveiled the 250bhp 850 Plus 5 at the Geneva Motor Show but the name proved too much of a mouthful and was quickly changed to 850 T-5R.

Originally, the T-5R was only going to be a 2500 limited edition, with just 50 right-hand drive versions earmarked for the UK. Developed with help from Porsche, the new big 155mph Volvo was identified by its distinctive creamy yellow, green or black paintwork and contrasting 17-inch gunmetal grey alloy wheels. The interior featured black leather seats and wooden inlays of dark-tinted burr walnut to provide what Volvo called 'an impression of sporty elegance'. Not surprising, demand quickly outstripped supply and this inspired Volvo to produce another 5500 T-5R specified 850s.

The revamped 850R came next and built on the success of the limited edition. Although the creamy yellow paintwork had been dropped, several new colour choices comprising of blue,

red, grey and white were introduced. Volvo also changed the interior slightly and the 850R's 2.3 litre engine was now equipped with a larger turbo and a bigger intercooler.

Despite the name change, the 850R was certainly no slouch and even the heavier 155mph estate could accelerate from naught to 60mph in a very impressive 7.6 seconds. Other changes included fitting a modified suspension set up (see levelling on the estates) and a Torsen limited slip differential. The four-wheel drive 2.5 litre 850AWD came on the scene in 1996 and the game changing big Volvo finally bowed out in 1997 with the introduction of the S70 saloon and V70 estate.

WHAT CAN GO WRONG?

Although the Volvo 850 is a very well built car, even the youngest examples are now over 21 years old and rust will be an issue on neglected examples. While washing the bodywork, regularly check for any ominous bubbling around the wheel arches and door bottoms, as well as signs of corrosion breaking out from any poorly carried out accident repairs. Rear exhaust



A genuine T-5R will have 58 for a manual or 59 for an auto after the letters 'LS' or 'LW' on the VIN plate.

hangers can rust but these are easy to replace and rear bumper mounts can corrode, a more time consuming job to sort out.

The T5-R and 850R both feature lowered suspension and this can make the underside of the bodywork, as well as low hanging suspension and exhaust components vulnerable to damage whilst negotiating speed humps and tall kerbs.

ENGINE & TRANSMISSION

These engines can soak up the miles and if properly serviced, the 850's five-cylinder engine can motor on for well over 200,000 miles without any major issues.

However, having said that one problem these engine can suffer from is bent con rods. This will make itself heard by an expensive clanking noise and is caused by the engine running on a very high peak boost pressure caused by a failed boost control solenoid (BCS) or an incorrectly fitted bleed valve.

The cambelt should be changed every 70 or 80 thousand miles or six years and the cost for a new belt and associated tensioners starts at around £100 plus fitting. Also, don't forget to regularly check the condition of the serpentine belt that drives the alternator and all the various fluid pumps.

Another issue these engines can suffer from is a leaking rear oil seal. Oil can also leak from the return feed from the turbo, but the latter is a relatively easy and inexpensive issue to fix.

The 850's Positive Crankcase Ventilation (PCV) system can get blocked, leading to an increase in crankcase pressure. To check the system, take the dipstick out and see if any smoke puffs up the tube while the engine is running. If it does, the system will need cleaning out before the excess pressure leads to the rear oil seal failing prematurely.

Don't worry if you find a small amount of white gloop at the end of the dipstick, this is quite normal on engines that only do short journeys. Finding similar gloop under the oil filler cap is a different kettle of fish and this could indicate a failed head gasket or a split in the oil cooler pipe near the radiator.

Manual gearboxes on these cars are reasonable strong but the optional auto 'box will require a regular fluid and filter change to keep it in tip-top condition. Rear axles are bullet proof but drive shafts can wear and become noisy.

SUSPENSION & BRAKES

The 850R sits 30mm closer to the ground than its T5 cousin and was fitted with thinner anti-rolls bars when compared to the T-5R. The majority of the suspension components on these cars are the same across the range, with the exception of the estates. The five-door models feature a self-levelling rear suspension set-up but for some reason not all 850 load luggers were fitted with this handy option.

All sporting 850s will eat tyres if driven too

enthusiastically and it's not uncommon for a T-5R or an 850R to wear out a set of fronts in under 8000 miles. Always fit quality tyres to the 850, as these are ultra fast cars and your life depends on four very small patches of rubber keeping contact with the road in all conditions.

There were two sizes of front discs available for the performance 850s. Early models were fitted with 280mm diameter discs, while later versions used 302mm rotors. The bigger discs provide excellent stopping power and to fit the larger brakes, you will need to fit the later caliper carriers and longer flexible brake hoses. Brake calipers and pads are the same, but if considering this swap, braking performance can be upgraded even further by fitting different grade pads.

INTERIOR

Volvo 850 T-5R's produced between 1995-6 should have half leather, half suede seats with the leather in the centre of the electrically heated seats. 850Rs built between 1996-7 have the same combination, but the other way round (the leather is on the bolsters). This helps to identify whether an earlier car has been fitted with a later interior or visa versa.

The T-5R and later 850R were very well specified and standard equipment included climate control, adjustable power seats with memory, electric sunroof, Volvo radio

and tape deck, four air bags, cruise control and a body kit comprising of a front lip or splitter, side skirts and rear spoiler. This is only a fraction of the standard equipment fitted to the T-5R and 805R and an enthusiastic owner will obviously want to keep on top of things and ensure everything operates as it should.

If buying a 850, pay careful attention to the dashboard warning lights as some unscrupulous vendors can often remove a bulb so a particular warning lamp fails to illuminate when the ignition is turned on. If the ABS/TRACS light comes on while driving, it's probably due to dry soldered joints in the anti-lock braking control unit and details of how to fix this problem, along with many more useful tips are described on the various Volvo owners' forums.

CONCLUSION

A well cared for Volvo 850 T-5R or one of the more numerous 850Rs is a great car to drive and own. The performance these cars offer can only be described as phenomenal and it's easy to see why a fully loaded 'hot' 850R attracted a £28,000 plus price tag when new.

The 850 T-5R was a pioneering sporty Volvo and the car totally changed the company's image. Volvo even enjoyed a reasonable amount of success on the track with a TWR prepared 850 estate in the 1994 British Touring Car Championship.

Even with the rear seats still in place, a 850 estate will still provide a decent amount of luggage capacity, which makes a five-door performance 850 a particularly good choice as a pampered weekend driver the whole family can enjoy using for an extended break.

Decent 850 T-5Rs are currently bursting through the £11,000 mark – plus an extra £500 for the estate version. The 850R was produced in far larger numbers and as performance and equipment is virtually identical, a 850R will be easier to find, cheaper to buy and offer just as many bangs for the buck. Failing that, a well cared for 850GLT should fit the bill very nicely. **CM**