The idling speeds associated with these engines are around 1,000 rpm and can quite easily vary by ±100 rpm due to inaccuracies in the tachometer and other factors. The most important point is that they stay constant. They are set mechanically, using an idle adjustment screw in the plenum chamber assembly. This is one of the big differences between the Wedge V8s and the Griffith and Chimaera V8 cars. The Wedge engines virtually all used the mechanical idle speed but the Griffith and Chimaera use an electronic valve known as the stepper motor to set and control idle speed. I say 'virtually' as there was some overlap in production — so it is *just possible* that the last of the Wedges may have the stepper motor control.

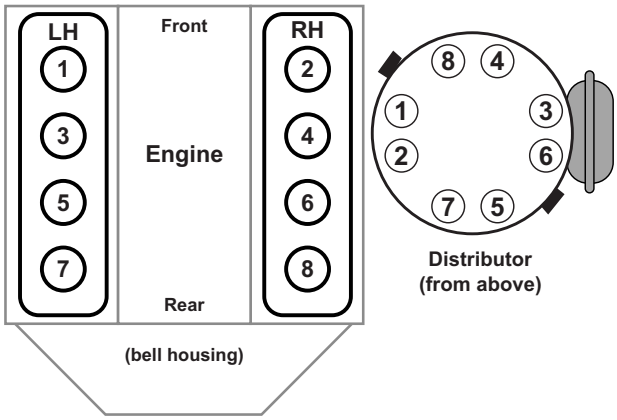
The engine itself is fairly straightforward. It has a large one-piece aluminium alloy inlet manifold, called a plenum chamber, which is mounted between the cylinder heads. This is the aluminium block which may have the engine type engraved on it: '400' for a 4 litre, and so on. These engraved plates are normally used for engine identification. However, with the premium prices paid for the bigger engines and the ease in getting replacement plates, it has been known for a plate to be replaced with one that exaggerates the engine's size and power output — and hence the potential price. This scope for change does make checking the provenance of these engines a little harder, especially as there appear to be two or three times the number of SEACs around today compared with the actual factory figures.... To be absolutely fair, many cars were subsequently modified by TVR Power and are not fakes — but it is worth checking the provenance carefully before parting with any additional cash. This is good advice for any V8 powered TVR. There are already several 4 litre Griffiths and Chimaeras that have been passed off as either big valve 'BV' or 'HC' variants.

The camshaft is mounted centrally at the bottom of the vee of the engine and driven by a chain from the crankshaft. It can wear, especially if the engine has been subject to oil starvation or infrequent oil changes. It is also a good idea to let the engine get warm before revving it too high. I typically keep the revs below 3,000 for 10-15 minutes after starting to ensure that the oil is warm and circulating.

The choice of camshafts has varied a lot: not only between engine types but also with engine builds. Camshafts have also been changed to provide either more power or a smoother power delivery.

The valves are operated by pushrods and hydraulic tappets, which are self-adjusting to ensure quiet engine operation. The 390 has solid lifters that allow the engine to rev higher, compared to the 350i version of the engine. This was carried on in some of the more esoteric engines but it is difficult to make any real statement about what constituted a standard engine at this time. The more performant versions of the engine have bigger valves and the cylinder head is modified to accept these. The larger valves contribute considerably to the power increase. The crankshaft runs in five main bearings and is fitted with a torsional vibration damper.

When talking about the Rover V8 engines, the term 'serpentine' will often be mentioned. This version of the engine was introduced in August 1994 — *after* Wedge production had finished. This is very different at the front end of the block, with a single poly-vee belt driving a new alternator, the power steering pump and the water pump. The engine also has a new oil pump and distributor drive and, on TVRs, the engine has some new plumbing which makes the offside spark plugs very difficult to get at — but reduces the possibility of inaccessible hoses springing leaks. These engines were never fitted to a Wedge as standard — so if you see one it means that the engine has been replaced.




*The cylinder and distributor lead layout for the V8 engine. (Based on information from the Haynes workshop manual for the Range Rover.)*

# Oil type and pressure

When it comes to oil, there are two golden rules: use a good synthetic oil and change it and the filter regularly. The mainstay oil currently recommended by TVR is Mobil 1 synthetic. Although this is a little bit more expensive it has gained a reputation for being one of the best oils currently available.

Many Wedges were fitted with a thermostatically controlled oil cooler that uses a small radiator in the front of the car to help keep the oil within its