

The alternative to these overdrive transmissions is a five-speed Ford Type 9 gearbox. It's a recognized conversion that's pretty straightforward; specialists such as Amazon Cars keep the bits in stock. Ford's first five-speed manual gearbox for rear-wheel drive cars, the Type 9 was fitted to models such as the Capri and Sierra, including 2.8-litre V6 variants. With a safe torque limit of around 200lb ft, the Type 9 is plenty strong enough to cope with the torque of an Amazon engine, even if it's been uprated.

Another alternative to all of these transmissions is the four-speed close-ratio M40 gearbox that Volvo offered in period. You're unlikely to find one, however, as they've been unavailable for so long; and if you do manage to find one, it'll cost you plenty. Volvo also offered a limited-slip differential, but as with the close-ratio gearbox, these are now very scarce and valuable. There is an alternative, though: in place of the factory-supplied axle it's possible to slot in a Quaife ATB unit, which works brilliantly for road use.

If acceleration is key, Volvo offered lower-ratio rear axles (4.88:1 or 5.38:1), and these are still readily available. The 4.88:1 axle is the perfect motorsport choice, or for road use with overdrive; the 5.38:1 can also be sourced easily enough.

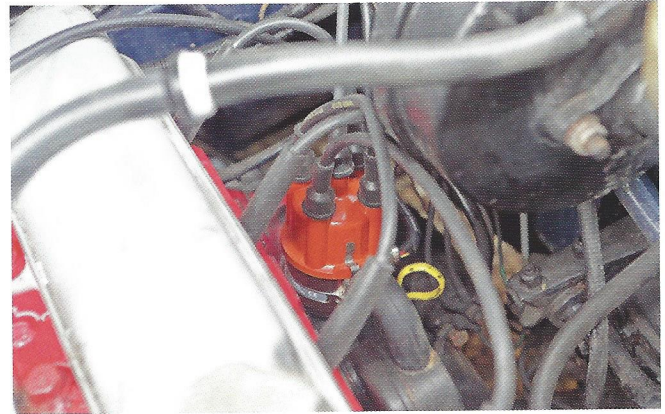
## IGNITION AND FUELLING

Next step is the ignition system, which benefits from being converted to an electronic set-up in place of the standard points and condenser. There are various routes to this, the first being the fitment of an aftermarket set-up – there are plenty available and they're incredibly easy to fit while usually being completely reliable. But these will only give a strong spark in the wrong place, as they depend upon perfect mechanical advance and the use of leaded fuel. Use unleaded petrol instead, and everything is thrown out.

The 123 by Albertronic ([www.123ignition.nl](http://www.123ignition.nl)) has ECU-based advance curves to match all the originals. Get a unit that's correctly supplied with an unleaded fuel curve (only available from Amazon Cars), and you'll see a big difference in the bottom and mid ranges.

For the ultimate in ignition systems you could instead invest in a unit that's PC programmable, which allows you to create the curve that precisely suits your engine. You'll have to invest some time in setting things up, though, as there's an element of trial and error in getting the best out of such systems.

If you don't want to take any of these routes, the alterna-



**Dispensing with the original points and condenser, and fitting an electronic ignition instead, is one of the easiest ways of improving reliability.**

tive is to fit the Bosch system from a post-1975 240, complete with distributor, control box, coil, ballast resistor and wiring harness. Fitting this set-up is easy and, as with the aftermarket systems, if you do it properly you should be able to expect complete reliability. The biggest problem will be finding a suitable set of parts, as they're all now very scarce.

When it comes to fuelling, if reliability is paramount it's worth fitting a 1¾-inch SU in place of the normally preferred twin SUs. This means you don't have to worry about keeping the carburettors balanced but it doesn't sacrifice too much power and it'll boost torque into the bargain.

Choosing which carbs to fit can be a pain as there are so many factors to juggle. If you want to keep things simple, a pair of SU HS6s is suitable for anything up to a 300-degree cam, while HIFs are also a good choice. Amazon Cars have found that Strombergs have a nasty failure mode as the bimetallic goes haywire, causing you to stop without warning, so they're best avoided.

If you're going for a spicier cam (such as a 310-degree item), sticking with SUs will probably lead to problems with the carbs throwing out fuel at idle, which is why you're better off going for a single 45DCOE or pair of 40DCOEs. Below 160bhp the latter is the preferable option as the mid-range is so much stronger, although the red line power is identical.

If you want the ultimate, though, you could always go for the full-blown fuel injection option, complete with throttle bodies and distributorless ignition – it's a superb set-up. Amazon Cars uses an Emerald ECU because of its user-friendly front-end programming.