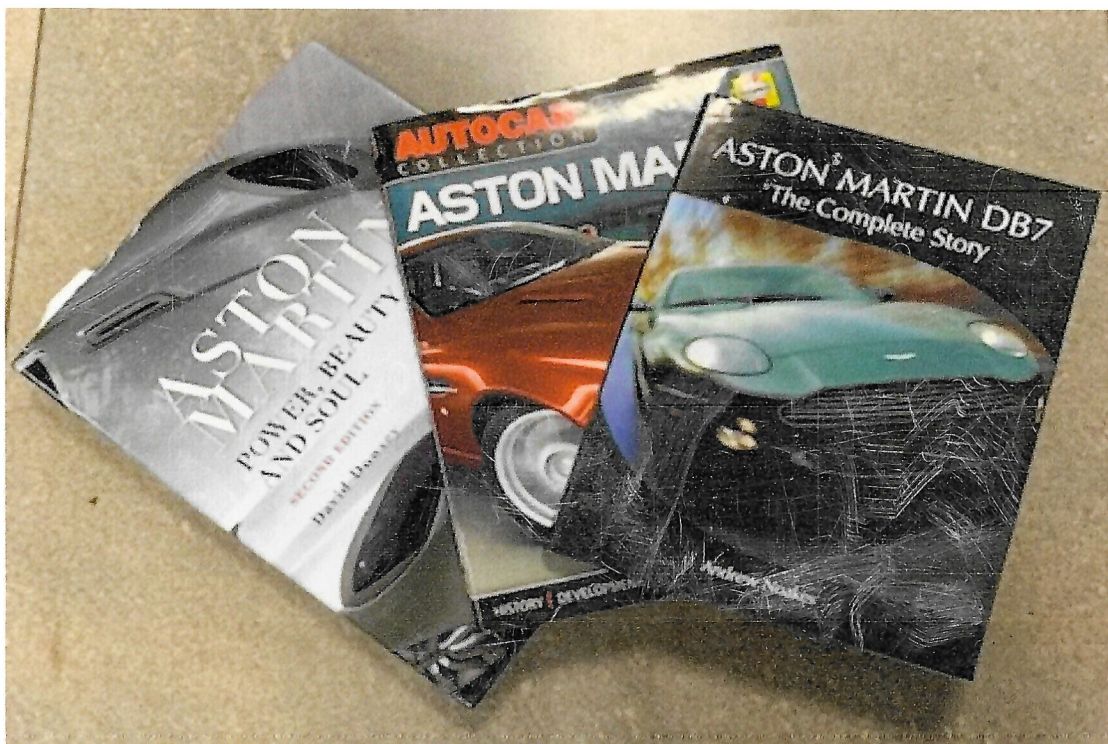
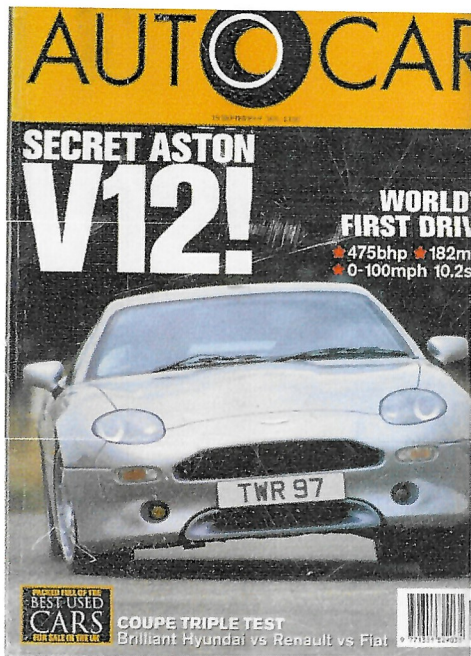
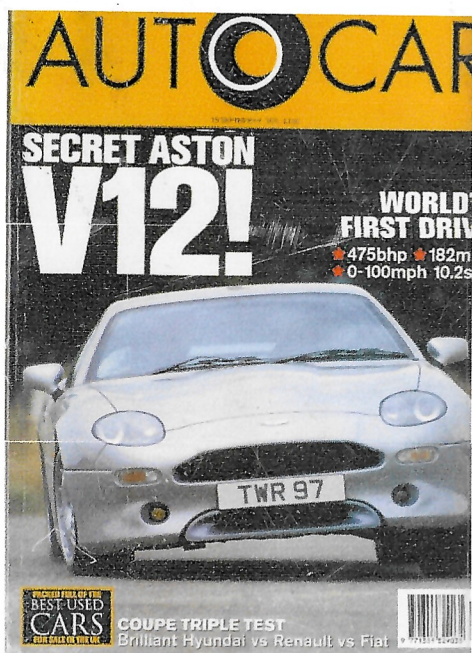


*Let's see what the writers,  
press and Jeremy Clarkson had  
to say....*





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# WILDCAT

Long before the V12 Vantage, even before the DB7 Vantage, TWR created this wild, V12 Jaguar-engined DB7. We drive it

WORDS JOHN SIMISTER

PHOTOGRAPHY CHARLIE MAGEE







**T**wo years ago, *Vantage* ran a story on the genesis and development of the Aston Martin DB7. In it, we wrote of how Tom Walkinshaw, the man who made the DB7 happen at a time when Aston Martin needed a new direction and Jaguar had canned Walkinshaw's pitch to make an XJS replacement, assumed that the new 'affordable' Aston would be powered by Jaguar's V12.

Walkinshaw knew the engine intimately, having raced it in various guises, modified it, championed it. But it didn't happen because Ford, then owner of Aston Martin, favoured a supercharged version of Jaguar's still-young AJ6 straight-six. Tom Walkinshaw, however, was never a man to be rebuffed. Partly because he could, and partly because he wanted to show why he was right, he built a Jaguar V12-powered DB7 anyway in the hope that Aston Martin would ask for more of them.

The press loved it, judging by Steve Croypley's story in *Autocar* of September 18, 1996. Croypley's tale tells how Walkinshaw craved the effortlessly blistering pace of a V12 engine, how the DB7 (by then well-established in production) wasn't quite enough, and how he found himself drawn to a Ferrari 456. Who could blame him? The 456 is a fabulous Ferrari, a handsome and characterful machine oddly undervalued today (it can't last).

But... the boss of Aston Martin (Oxford) Ltd driving a Ferrari? That couldn't be right. What happened next is the car you see here.

Both car and engine are one-offs, and nothing to do with the V12-engined DB7 Vantage that arrived three years later. Other than making the point that a DB7 V12 might be a good thing, of course. The Vantage's Ford Duratec-

derived engine made 420bhp initially, 435bhp later, from its 5.9 litres. This machine is altogether fiercer, even on paper: 6.4 litres, nominally 475bhp (the truth could be well over 500) with 470lb ft of torque, a Jaguar V12 engine like no other. Here, surely, is the proper spirit-guide for today's differently shaped V12 Vantage S.

It takes little time to reach that conclusion. Just the few seconds needed to cannon your way through all the throttle travel and all six gears. Have I ever driven a car with such a broad spread of monstrous torque? Amble along at 1000rpm in fourth, press the accelerator and *whoomph!* The DB7 lunges forward as though carrying half its mass, engine note building from dirty thrum to the open-mouthed *waaaaap* typical of a free-breathing V12 as it passes through its rev-range's halfway point. The pull goes a little way past the 6000rpm peak-power speed, but there's no point in using it. Not when there are enough muscle fibres here to give vigorous momentum gain even in a sixth gear so long-striding that 70mph represents just 2000rpm.

You'd think that would help contain the fuel thirst, but doing that is an uphill battle. The fuel gauge functions almost like a reverse accelerometer, with an ever-present whiff of part-burnt hydrocarbons to amplify this notion, despite the notional presence of a pair of catalytic converters. But it's worth it, just to hear and feel a throttle response of stunning explosiveness and a build-up of g-forces guaranteed to scramble your inner ear's balancing mechanisms if you unleash all the forces through the lower gears. There are no independent performance figures recorded, but I'd estimate 60mph in usefully under five seconds. Theoretical top speed, given the gearing and the power curve, was calculated by TWR at 182mph.

Above and right: Tom Walkinshaw's prototype DB7 V12 not only had a unique engine, but unique bodywork too, shaped by Ian Callum. Interior too is clearly DB7 but with a number of twists, such as the instruments being set into wood veneer.



**Right and below**  
Jaguar-engined Aston stretches  
its legs for the first time since it  
was recommissioned by Oselli.  
Below: body was created in clay  
by DB7 designer Ian Callum

## DB7 Take Two

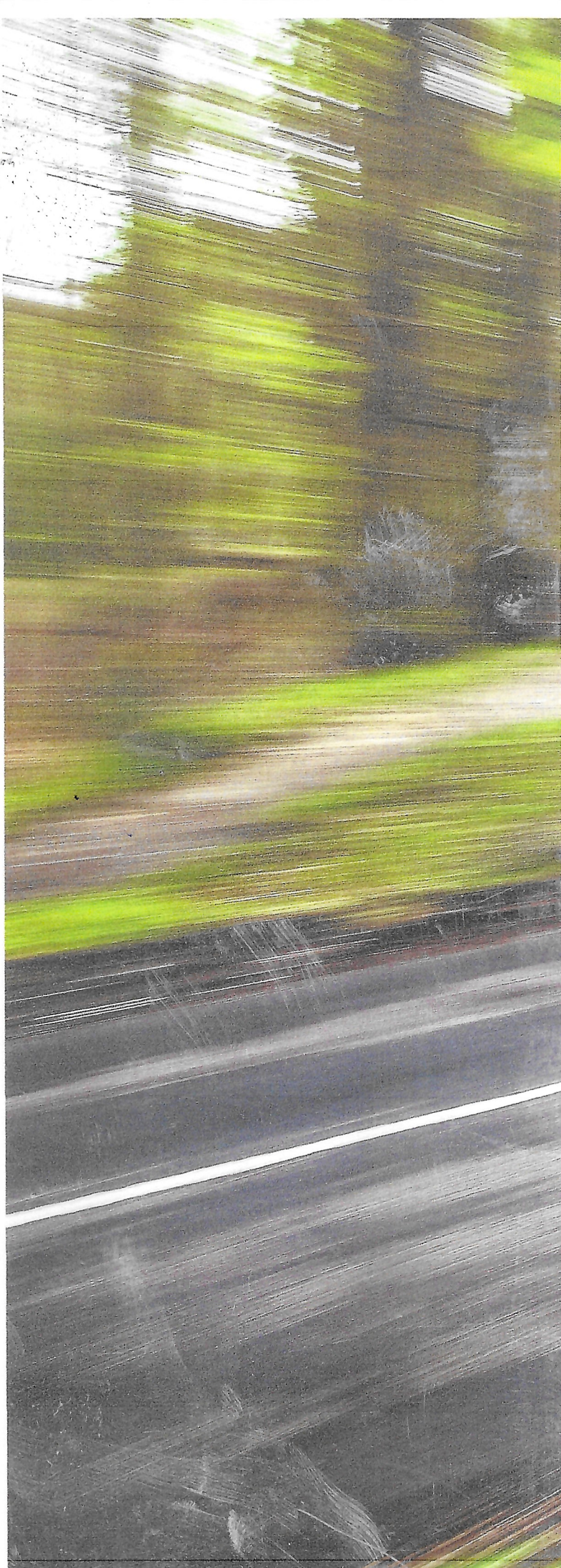
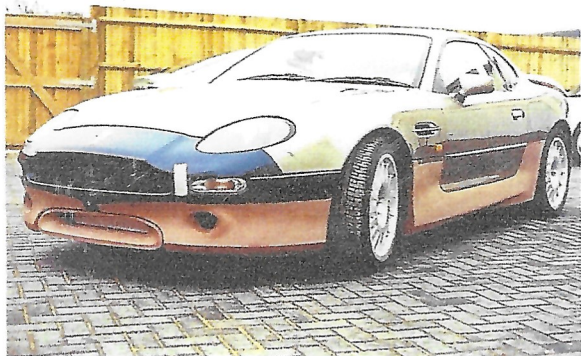
Ian Callum was finding life at TWR's design division full of freedom and excitement after the strictures of Ford. The DB7 was the first design project he could truly call his own, so he was ideally placed to shape the up-muscled, Jaguar V12-powered version that existed as a glint in Tom Walkinshaw's eye.

'It was a good bit of fun,' Ian says now. 'I thought it had around 600bhp and it didn't weigh very much. The first time we test-drove it, we ripped the rear axle right out of the floorpan, so the engineers had to strengthen it a bit. We made this prototype and the plan was to make more, but with changes going on at Aston maybe Tom lost his intent a bit too quickly.'

'Remember we did put a V12 in the first prototype

DB7, but [Aston chief] Walter Hayes said it was the baby Aston and should have a straight-six, which was taller so we had to drop the subframe. With this car, Tom wanted to sell the idea to Aston Martin but they had other things in mind.' As we later saw, with the DB7 Vantage.

Ian shaped the TWR V12's new lower panels and rear spoiler to generate some downforce, improve cooling, cover the wider rear wheels and add muscularity without making the car look like the recipient of an aftermarket bodykit. The sheet metal was unchanged. 'We just clayed it up [as seen in the photos below] and took a mould, then made a set of glassfibre panels and a second set to be on the safe side.' One set is on the car. Where, we wonder, is the other?











Now, 20 years later, that tally has got no further than 13,700 miles, because the Aston Martin spent much of that time residing in a Dutch collection until it was acquired by Aston specialist Oselli in June 2013. The opportunity came, and given Oselli boss David Eales's insatiable curiosity for all things Aston (he used to run Works Service), he just had to seize it.

As a very early car, L5 AML is an intriguing study in TWR's efforts to get to grips with the DB7's mix of steel and composite panels. To be frank, the panel gaps between bonnet, front wings, front bumper and the doors' front edges are appalling in their width and variability, thanks to the rather mobile integrity of those early composites. They did look better in those *Autocar* shots two decades ago, though.

Inside, too, things were clearly still fluid in the journey from prototype to production car. Unlike a standard DB7, this machine has a wood-veneer setting for its instruments, but it neither aligns with nor matches its neighbour on the main dashboard. And the warning lights glow hopelessly dimly behind their dark-tinted cover strip. If you were the new, and first, owner of this DB7 you would be very unimpressed by these solecisms of quality and integrity. Thing is, it doesn't really matter in 2016: this car is what it is, a unique piece of Aston Martin history, and its superficial imprecisions help tell its story.

And now, quality critique completed, I'm blaring through the Buckinghamshire backroads again, marvelling at this magnificent engine's omnipresent thrust. I've also

noticed that the Cromodoras are wearing a long-obsolete and well-worn model of Yokohama tyre, almost certainly the footwear that's been fitted since 1995. This may be why, on the slightest hint of a damp road, there's much scope for comical wheelspin in third gear and, on occasion, even fourth.

So it's just as well that, despite its potency, this feline hybrid is a big pussycat to handle. It steers accurately, albeit with an exaggerated and anaesthetised lightness more 1990s Jaguar-like than expected of an Aston, and its balance in a bend is impeccable provided you don't twitch your right foot too much. It feels much like a normal DB7 with the added frisson of a firecracker under its wheels. Bumps are smothered smoothly enough, and those ample brakes feel indefatigably strong and progressive.

It all works rather well, given that the car is as early a DB7 as you'll find and the engine is a unique installation, and you even find yourself warming to the cabin's mid-90s obsession with curves and ellipses, almost naïvely dated now and curiously unsettling in the way they deprive your eye of a dimensional reference point.

Would an Aston Martin DB7 V12 have worked as part of an upwardly extended DB7 range? Of course it would – and of course it did, in Ford-friendlier form. But having driven this one, the original and the inspiration. I think the world would have been richer for its replication. That throttle response. I can't get it out of my head. 🐾

*Thanks to Oselli Ltd, where the TWR DB7 V12 might be for sale.*

## Aston Martin TWR DB7 V12

**ENGINE** 60-degree V12, 6400cc, aluminium block and heads, dohc per bank, 48 valves, Zytex engine management  
**POWER** 475bhp @ 6000rpm (officially, probably more)  
**TORQUE** 470lb ft @ 4500rpm  
**TRANSMISSION** Six-speed Borg-Warner T56 manual gearbox, rear-wheel drive  
**SUSPENSION** Front: double wishbones, coil springs, telescopic dampers, anti-roll bar  
Rear: double wishbone geometry with driveshaft as upper link, trailing arms, four co-axial coil springs and telescopic dampers  
**STEERING** Rack and pinion, power-assisted  
**BRAKES** Vented discs all-round  
**TYRES** Yokohama AV1, 245/40 ZR18 front, 275/35 ZR18 rear  
**0-60MPH** sub-5sec (estimated)  
**0-100MPH** 10.2sec (claimed)  
**TOP SPEED** 182mph (claimed)



'The engine feels more like that of a Le Mans racer than a continent-shrinking grand tourer'

At first, the engine feels more like that of a Le Mans racer than a continent-shrinking grand tourer. A terrible idle, all burbles and dyspepsia and shuddering, sometimes stopping altogether unless it's just a good thrash to clear the passages. As it approaches the 'ap zone', it's the antithesis of the silken V12 and feels like a tetchy straight-six with a disintegrating front damper. But at high revs it's a sonic triumph, sharp and joyful. And quite unlike any other V12 that has taken to the road.

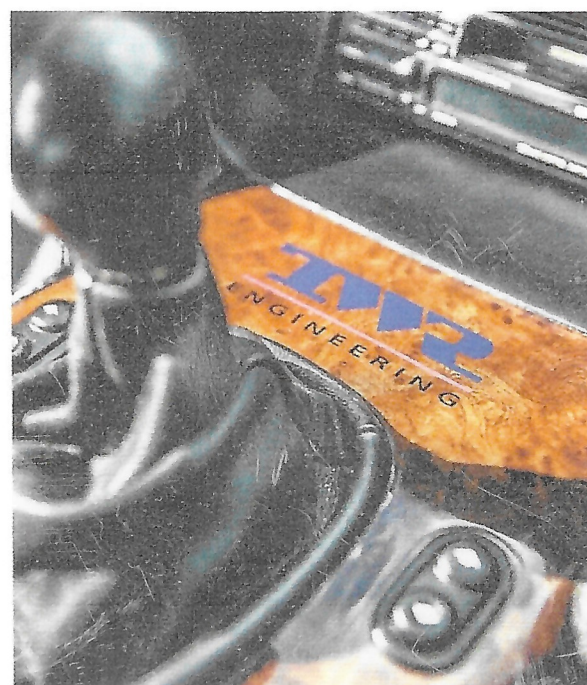
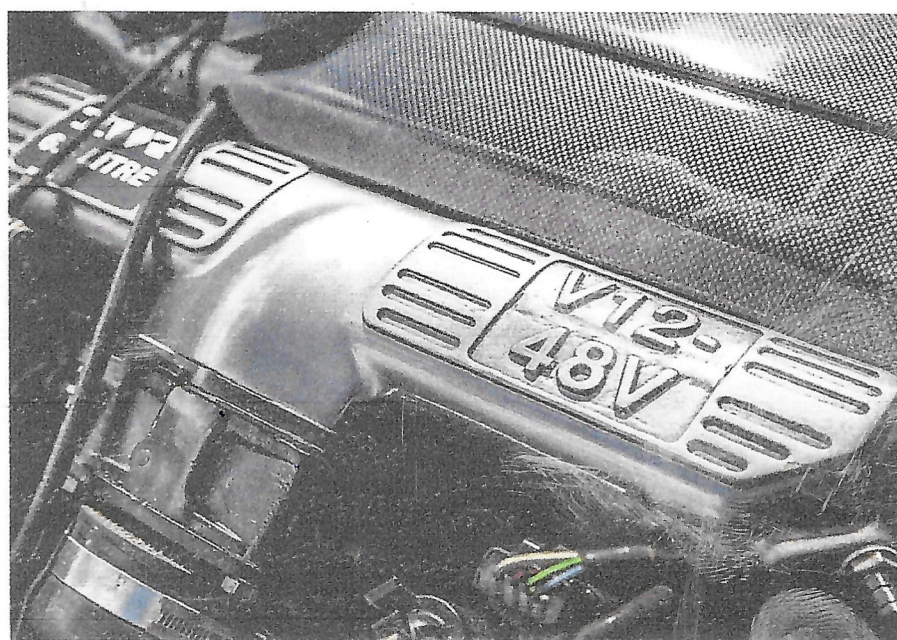
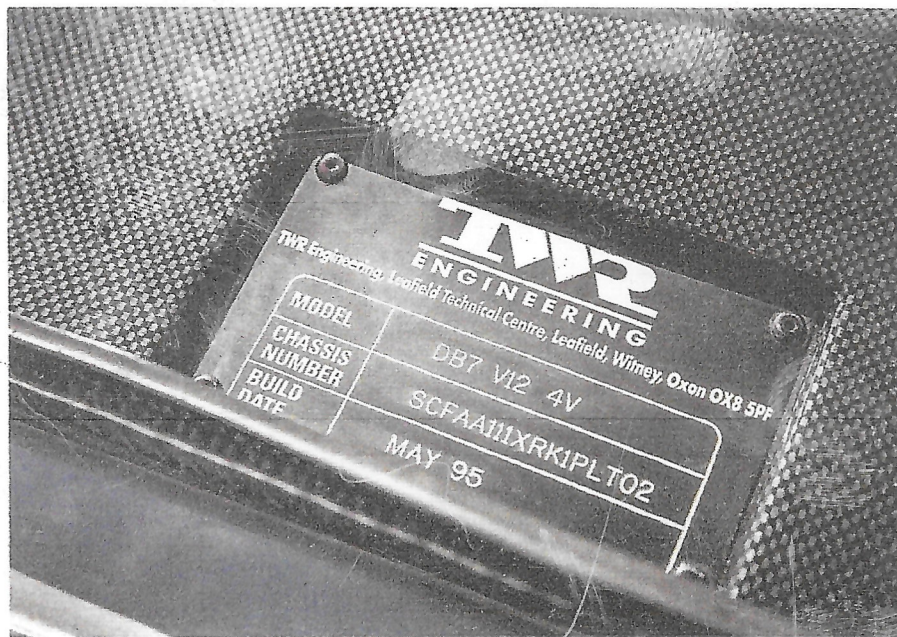
Why so? Because it has twin overhead camshafts per cylinder actuating four valves in each cylinder. Sounds familiar today, but Jaguar never built its road V12 in that way because there was never a market for it. So this is a unique experience gained from TWR's Jaguar Le Mans racing programme before that switched to the more modest V6s – although this isn't quite a Le Mans story, as the adjacent story explains.

Power outputs are sent not through a regular DB7's five-speed gearbox but, via an AP twin-plate clutch of meaty torque, into a Borg-Warner T56 gearbox used in the Virage, the Virage-shaped Aston Martin Vantage and the Dodge Viper. Its shift is easy enough given the lightness of the gearwheels and its synchromesh has to rein in, rather than release, the cunningly hidden next to the fifth-gear slot, which is available only if the drop-down handbrake is engaged, thus releasing an electric blocking system. It's a safety feature to prevent a noisy, unproductive and expensive attempt to go from fourth to backwards.

The changes from standard DB7 fare are the huge AP brakes, with four-piston calipers on the front and rear, and on revised uprights and hubs, some rear-end stiffening, and a light recalibration of springs, dampers, anti-roll bar and steering effort. This is more to do with speed potential and Walkinshaw's tastes than a desire for an engine-induced change in weight distribution, because the entire V12 weighs under 5kg compared to the standard supercharged six.

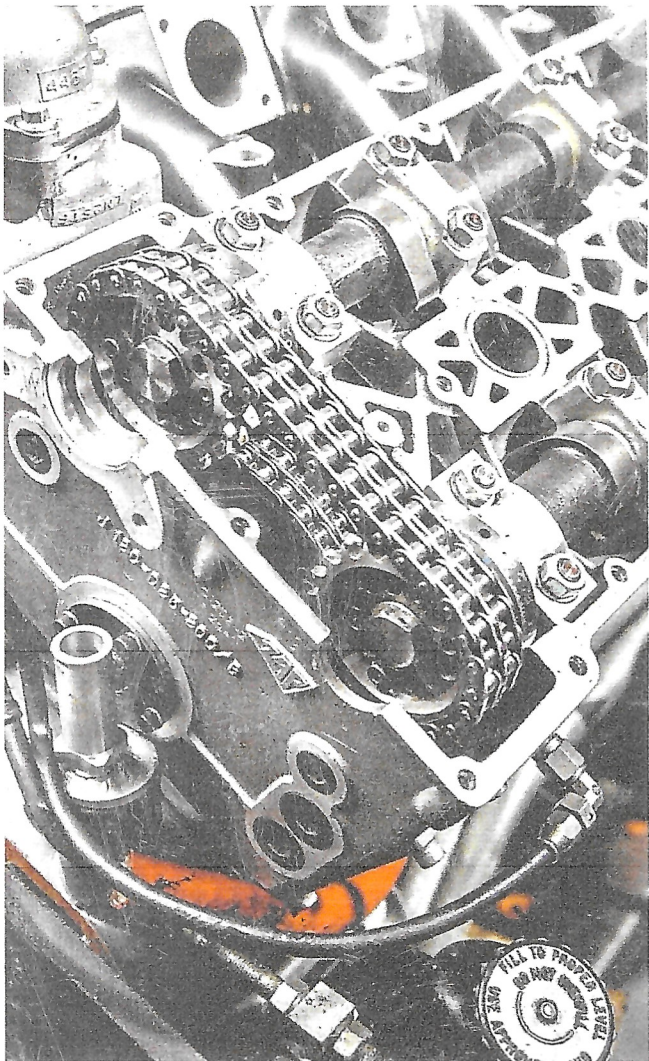
Then there's the way it looks. Ian Callum designed the original DB7, and he also designed this evolutionary reinterpretation with its flared-out lower body, its low front end with added gulpability, and its flamboyant rear. The Cromodora wheels are unique, too, specially designed to this car's required offsets and wider than a standard DB7's.

Look at the number plate. L5 AML is the number it bore when first registered in July 1994 as the second pilot-production car, as revealed by the PLT02 that was on the VIN, but some time after its TWR reinvention in 1995 it was re-registered as TWR 97. The TWR Group took over ownership in September 1995, and by the time of the car's test a year later it had covered just 10,000 miles, of which around 8000 were driven by Tom himself.



From the top 'PLT02' on the end of the VIN reveals this car started life as the second DB7 pilot-production car. Four valves per cylinder were usually unique to Jaguar's racing V12s, so this is one special engine. The Borg-Warner six-speed gearbox was the same type later seen in the Virage-shaped Vantage.





## Twelve into a Seven will go

ut only just. 'One of the head gaskets had gone when we got it,' says Oselli's Paul Sales, son of boss David. 'When we saw what a fiddle would be to get the exhaust manifolds off, we reckoned it would be easier to pull out the entire engine.' Which is what they did. In replacing the gasket, they could wonder at the cylinder head (and its twin on the opposite bank) and see that, despite sharing a four-valves-per-cylinder, twin-cam design, it's a different casting from those of TWR's V12 race engines. The ports and valve sizes are those needed for a tractable road engine, as are the camshaft profiles. All are unique to this car. Spares don't exist; if needed, they would have to be specially cast, forged, machined, whatever was required. With cam covers and inlet plenums removed, castings of mind-boggling complexity are revealed. So are twin

thermostats and a pair of indestructible-looking, duplex-chain camshaft drives. Below is an overbored version of Jaguar's aluminium cylinder block and a steel crankshaft machined for a longer stroke; above it, once the engine is back together, is an injection and ignition system controlled by Zytec engine management as used in the XJR-series race cars. With, to a degree, some refinements for cold starts and low-speed manners. TWR's Jaguar-based V12s weren't the first with four camshafts, though. That honour goes to the engine of the never-raced XJ13 racing car, which pre-dated the two-cam production engines, though the XJ13 had but two valves per cylinder. As for the TWR 48-valve V12 as used in the Jaguar XJR-8 and XJR-9 Group C racers, it typically made a rousing 720bhp from its seven litres. Now that really *is* fierce.

