



Ten steps
to buying a

Mercedes 190E 16v

Avoid a thrashed one and this capable sports saloon will colour you Cosworth

Words RICHARD MASON Photography JOHN COLLEY

When a 1700-mile Mercedes 190E Evo 2 achieved £292k at auction in 2016, its slipstream sucked values of lesser 2.3- and 2.5-16v models skywards. But with all but the very best non-Evo cars still available for less than 10% of that halo result, they're well worth a look. They boast free-revving Cosworth engines, sporty handling and motor sport credentials; Ayrton Senna famously won an F1 all-star 190E spec race in 1984.

Many 190E 16vs were bought for track day thrills, and to an extent that's still true today. Pushing any car to its limits requires commensurate maintenance, and there's the potential for crash damage repairs - so the Cosworth 190E is not your everyday modern classic.

This guide pools the knowledge of Edward Hall and Charles Ironside - both specialist dealers who have sold numerous 16vs in recent years - and Mark Plant of Mercedes Classic Parts, who restored the 2.5-16v seen here. Track use experience comes from Jeremy Lawton, who for 12 years has driven his on tracks across Europe.

[What to pay]

- ▶ **Minimal price** difference between 2.3-16vs and 2.5s-16vs.
- ▶ **Less than £5000** is a parts car. A bodykit in good condition can fetch £2000 alone.
- ▶ **£5k-£10k** Typically needing extensive body repairs, scruffy interiors, little history and 160,000-plus mileages. Competent DIY mechanics only.
- ▶ **£10k-£16k** Up to 160k miles in useable condition with some history, or a good sub-100k auto.
- ▶ **£16k-£26k** Best examples will be sub-100k miles, in mint condition with full history and spec.
- ▶ **£75k-£200k** Evo 1 & 2 if you can find one.

Which one to choose?

▶ **Evo 1 and 2** There's a world of difference between the Evos and their 16v ancestors. Evos were built for homologation purposes only - nearly all of the 502 of each made were sold in Germany, and they're rarely seen for sale in the UK. All are left-hand drive, with significant changes to the suspension and engine - as such they're outside the scope of this guide.

▶ **2.3-16v** Built from September 1984 to September 1988 with sales of 19,500. Purists prefer the 2.3 because it revs more freely, being over-square and producing 180bhp, with 0-60mph in 8.2sec and a top speed of 143mph. Bodykit features a modest rear wing and 15in, 15-hole alloy wheels. Colours restricted to Blue-Black and Smoked Silver; interior has checked cloth seats with leather inserts.

▶ **2.5-16v** Produced from 1988 to June 1993, with sales of 5700. Power upped to 205bhp, giving 0-60 in 7.2sec and 144mph. Two additional colours - Almandine (burgundy) and Astral Silver - but the bodykit, wheels and interior remained as before. New options were hydraulic self-levelling suspension and ASD, an electronically controlled, hydraulically locking

'They boast free-revving Cosworth engines, sporty handling and motor sport credentials'



differential that self-activates when required. There's little difference between the 2.3 and the 2.5 on the road

► **Japanese import 16v** These are invariably well-specced and normally less prone to rust because of the climate, but most are lhd. Finding a trusted supplier guaranteeing mileage and condition is vital.

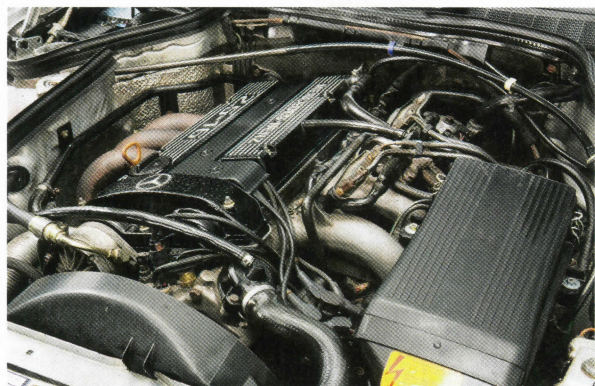
Engine The high-revving engines are reliable and will go huge distances with the right maintenance - ensure any prospective purchase has lots of invoices. The single-row timing chain on the 2.3-16v has a reputation for snapping (listen for a loose slapping noise on tickover as a warning), so need replacing every 60,000 miles. If there's no documentary evidence, negotiate a reduction of £1000 to replace the chain and guides.

Tappety sounds on tickover are indicative of bucket tappets that need reshimming, a normal maintenance item - budget £500 to remedy this, including other items like valve guides. The seals between the engine and gearbox can leak, which is an engine-out job at around £1500. If the car needs a full engine rebuild, it will cost £5000 or more because the cylinder heads, manifolds and exhaust are special Cosworth designs.

Gearbox The manual is regarded as bulletproof for an engine of this power, rarely needing a rebuild. But synchromesh on third gear can baulk, in which case a rebuild is the only solution, costing £1200 or more. Clutch replacement cost is £400. Gearshift linkages wear, making for difficult gear changes, but it's a simple fix for around £150. Auto 'boxes of this era are good for up to 200,000 miles if they've been maintained and not abused - look for records of fluid and filter changes. Clonking in the mid-section of the car means the propshaft bearing and support need replacing at £200.

Accident damage Many 190E 16vs were bought for track day thrills, so check carefully for signs of prangs. Panel gaps should be a consistent 4-5mm. Unusual dents on the inner wings in the engine bay and boot can be evidence of accident damage where the outer wing has been repaired but not the inner. Original paintwork is high quality without blemishes. Pronounced orange peel effect seen by looking at the panels from an oblique angle is a sign of repairs or a full respray. Other symptoms are paint on the rubber seals on the sunroof and windows.

Cosworth helped to develop the light-alloy 16-valve cylinder head; as a result the 2.3-16v made 72bhp and 41lb ft more than the basic 8v sohc engine



The 2.5 16v benefitted from 205bhp, compared to the 180bhp of the 2.3, but on the road there's little perceptible difference in performance

'Despite solid galvanised build quality, the bodykits can cause corrosion'



Rust Despite solid galvanised build quality, these are still thirty-odd-year-old cars and they rust. The bodykits also retain water and muck, leading to corrosion. Front wings rust on the wheelarches and behind lights; original replacements are £768 each. Check the inner wings from the engine bay, and under the washer bottle, battery tray and finally radiator overflow - all rust spots. Inner panels are available although restorers often fabricate their own repair sections. Rusted jacking points cost £150 each to mend but can indicate hidden rust in the sills, another £720 per side to rectify.

Check the boot well for puddles caused by poor seals or blocked drainage tubes. Remove the side plastic boot liners to reveal any signs of welding or rust. Still with the boot open, look at either side of the rear screen, because poor seals can lead to water build-up and corrosion. Boot well repairs will cost around £400.

Rear outer wheelarches rot, with repair and paint costing £500 per side. The inner rear arches are also vulnerable and costs can escalate if the rear interior needs to be removed to get at more extended rust.

Ensure the bodykit and wheels are correct by comparing with photos of an original car. Some cars have replica Evo bodykits, a giveaway is the massive Evo rear wing. Sometimes bodykits from the likes

of Zender have been used for repairs. Used original complete bodykits can cost £2000 - part numbers are stamped on the rear. Replica Evo panels abound, but no-one has produced copies of the ordinary Cosworth kit.

Suspension At the rear it's self-levelling hydraulic on all cars, with an option to extend that to the front on the 2.5-16v. Check for leaks from corroded pipes and under the reservoir in the engine bay. The pump can fail, and dirty fluid is a sign of poor maintenance. Rear spheres eventually fail, resulting in a hard ride. Check for differential leaks. The ASD automatic locking unit - if fitted to the 2.5-16v - can be temperamental, often caused by relays or the hydraulic pump or spheres failing. While the pump and spheres are a few hundred pounds, a replacement ASD from Mercedes-Benz costs around £1800. Steering rack leaks can only be seen properly on a ramp - a reconditioned rack costs £550. Bushes, if not already replaced, will transform the handling at £1200.

Brakes At this age the pipes will be beyond their sell by date. Look for evidence that pipes, calipers, discs and pads have been replaced, and how long ago. A rebuild is around £700, or £1250 if calipers need replacing.



Interior is less hard-wearing than you might expect from a Mercedes. It can be fixed – but at a price



Tyres Check for uneven wear, at worst a sign of a twisted chassis following accident damage, but more likely worn or poorly set up suspension geometry.

Interior Standard cloth/leather check interior and optional black leather isn't up to the usual Mercedes hard-wearing reputation. A worn driver's seat bolster, cracking and fading can all be treated for about £600. Lack of sunroof and aircon will be a bargaining chip. The 16v-specific instruments – oil temperature gauge, stop watch and volt meter – must be present below the stereo; missing or incorrectly sited gauges are a red flag. Doorcards expand and split at the top; used replacements £150 each, but double that to have one made. Central locking might not work on all doors, usually caused by a vacuum pump fault, but secondhand ones are available cheaply.

Originality All the Cosworth kit needs to be present and correct. Check the chassis numbers on the bulkhead and slam panel match. Some autos have been converted to manual – a VIN starting 20102 is an auto, 20103 a manual. Recreating a 'Cossie' out of an ordinary 190 is not unknown – they might be fine from an engineering perspective, but lack provenance and value.

Ensure all Cosworth 16v-specific parts are present and correct – both to ensure authenticity and avoid a tricky hunt for unobtainable spares

[Owning a Mercedes 190E 16v]



Jeremy Lawton, North London

'Mine is a 2.5-16v in Smoke Silver, registered on 31/12/1989. I bought it 12 years ago for £2000 including a boot full of spares, which meant I got it for nothing. Intended as a track car, it's been to many European circuits. Every year I link up with other UK enthusiasts and we jointly rent Hockenheim for a day with the German 16v club. And of course, I always drive the 'Ring.'

'For track use I take the rear seats out, replacing the front one with a race seat and harness. I've fitted harder springs with extra coils to prevent lean, and I changed the dampers.

'All of them have differential whine after 80k, which is road speed-related; my car has it with 178k on the clock and still on the same differential. Track days have made it worse, because now the differential is louder than the engine. Two years ago exchange units were available at £600 from Mercedes, which is cheaper than a rebuild. I've got a rebuild kit for £125, but I've heard stories of £1200 for a rebuild and still leaving a whine.

'The engines are reliable with scope for upgrading for very little money. I had the head off and skimmed plus all ancillaries for about £800, only needed every 100k. Otherwise I service it myself – dead easy to do. It's a smashing car for what I want.'



James Harrison, Lincolnshire

'My 2.5-16v has been my everything car for four years, travelling 50,000 miles. I love it most on fast A-roads, during forays onto race tracks and on high-speed autobahns. A 16v feels better the faster it goes. Admittedly, it has feeble straight-line pace in comparison with today's über-hatches, but I reckon the fact that mine can still nudge 150mph on an autobahn after 28 years is pretty cool. I also love attacking a deserted roundabout – I'd prefer a little less body roll, but I never feel the car is heading anywhere other than where I intend. It will soon be standing down as a 365-day-a-year conveyance. From then I hope to cherry-pick my missions for the W201. It will remain my car for out-of-county trips, European journeys and race tracks. In spite of this change in relationship with my 190, I have no doubt my obsession will endure – I have another in the pipeline...'



Terry Rockall, Sussex

'Owning a 190E 2.0 introduced me to the Cosworth. Five years ago I stumbled on a 2.5-16v online sporting full black leather interior, Blue Black paintwork, slightly lowered with 18in AMG wheels, Remus stainless steel exhaust and 140k on the clock. Although scruffy, I shook hands at the asking price without any hesitation.

'The ride home to Sussex from Manchester was acceptably firm, and I've thoroughly enjoyed the car. I've replaced the front struts, discs, calipers, pads, plugs, distributor cap, rotor arm and drive belt and all the engine air hoses. This vastly improved the engine, which now runs strong and sweetly.

'The proverbial 'Over Voltage' relay was replaced and cured the ASD light showing, which had been annoying. Old invoices showed the self-levelling rear suspension had been rebuilt, but the gearbox was my main problem with shifts up or down to third gear being very difficult. The only solution was a £1200 rebuild; it's a slick gearchange now. Rusty jacking points were my next biggest expense. I sourced aftermarket 190E sill sections from Germany for the required lengths to be cut to perfectly replace all four points – at €98.63, one of the best purchases I have ever made! At the Deutsche Festival at Brands Hatch last year, my car was one of the ten cars chosen by the MSV staff as their favourite German car.'

ClassicCarsForSale.co.uk



1986 MERCEDES-BENZ 190E 2.3-16V COSWORTH – £7500 OVNO

Automatic, right-hand-drive Mercedes-Benz 190E 2.3-16v with 178,000 miles. Used regularly. Repainted in Smoked

Silver two years ago; engine rebuilt three years ago. Central locking, electric aerial and roof light not working and two dashboard switches need fixing, but the car is otherwise in good condition and in normal working order. Private sale.