

Two very different variations on the supersaloon theme: Lotus Carlton/Omega wears its performance heart on its sleeve; 500E is the classic iron fist in a velvet glove. Both were designed to cruise the autobahn at absurdly high speed



BAHNSTORMERS

The Lotus Carlton was the 180mph supersaloon that had *Daily Mail* readers spluttering into their cornflakes; the 500E was Mercedes' reply to the M5. Both are our sort of cars

These are not ordinary machines. With combined totals of 703bhp and 773lb ft of torque, between them these two motoring leviathans can carry ten adults and their luggage to the far side of 170mph and in comfort.

Massive numbers for massive cars, but one figure that's shrunk in the years since they were launched is the price tag. If you have £25,000 burning a hole in your pocket you could buy both

and still have some petrol money left over.

The aggressive, heavily muscled lines of the Lotus Carlton and the massive press coverage surrounding its launch back in the early '90s ensured fame and no little notoriety. With 377bhp from its twin-turbocharged 3.6-litre straight-six and a top speed said to be around 180mph, it could out-run many of the Italian supercars of the same era and at £48,000 it cost a fraction of the price. Shocked *Daily Mail* readers took exception to its top speed, calling Vauxhall irresponsible for producing a car that they claimed was anti-social

and a danger to society. The boys in the GM marketing office couldn't believe their luck.

The Mercedes 500E, by contrast, never made a single tabloid headline, though it packed a similar punch. A master of understatement, it could be mistaken by the uninitiated for a regular Stuttgart taxi. No wings, no spoilers, just gently flared wheelarches filled with 225/55 ZR16 Michelins. Under the bonnet sat a 5-litre V8 that originally found a home inside the 500SL. Here it made 326bhp, which easily powered the big saloon to its electronically restricted 155mph top speed. ➔

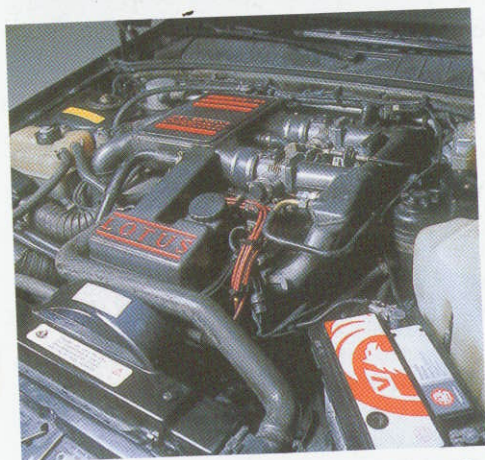
WHAT THEY SAID AT THE TIME

'Forget 176mph; just appreciate the contemptuous ease with which you can blow past the crawling trucks and dozing dolly-danglers' - *Performance Car*

Specification

Lotus Carlton

Layout	Front engine, rear-wheel drive
Engine	Longitudinal, 3615cc, in-line six
Max power	377bhp @ 5200rpm
Max torque	419lb ft @ 4200rpm
Transmission	Six-speed manual
Suspension	Front: MacPherson struts, lower wishbones, coil springs, ARB. Rear: Semi-trailing arms, coil springs, self-levelling, ARB
Steering	Recirculating ball, 2.6 turns lock to lock
Brakes	Front: 330mm diameter ventilated discs Rear: 300mm diameter solid discs
Wheels	17 x 8.5in front, 17 x 9.5in rear, forged alloy
Tyres	235/45 ZR17 front, 265/40 ZR17 rear
Power to weight	231bhp/ton
0-60mph	4.8secs
Max speed	176mph



Lotus's straight-six started life as the 3-litre Carlton GSi unit. Longer piston stroke made 3.6 litres; twin turbos did the rest

The 500E was Mercedes' answer to the 3.5-litre, 315bhp BMW M5 (see issues 5 and 32 for buying guide details). Inside, it could have been mistaken for a well-appointed 300E, although all the important optional extras, such as air-conditioning and electric everything, were fitted as standard. Get behind the wheel, mash the throttle and there was no doubt it was something special: 100mph came up in 14.7 seconds, which was remarkable for a car weighing over 1800kg.

A good Lotus Carlton can be bought now for as little as £12,000 in left-hand-drive form (this was the Continental version, known as the Lotus Omega). You have to pay considerably more for a rhd UK car - between £20,000 and £25,000. The 500E was only ever available as a left-hooker, with only a handful brought into the UK officially, and that has kept prices very low - £13,000 will bag you a good 'un.

So in terms of price and performance, these two supersaloons are pretty well matched, though their image and character are very different.

But let's face it, what matters most now is their real-world effectiveness. All that drama, power and class count for nothing if the cars are too expensive and unreliable to run. And the good news is that, despite being almost a decade old, both cars still come up to the mark. Of course you have to understand what you are taking on; both will cost substantially more to run than a new car of equal value, and you have to be able to separate the wheat from the chaff when you buy. Get it right though and, whichever you choose, you (and your four passengers) won't be disappointed.

Evolution

The part that Lotus played in the development of the Carlton has been well documented; it is a far less well-known fact that Mercedes also received outside help with the 500E, in this case from Porsche. Based on the 300E that Mercedes had been building since 1986, each car made several journeys between the Stuttgart factory and Porsche's Rossle-Bau plant in Zuffenhausen, recently vacated by the 959. Each was built by hand and took 18 days to complete; more than 7000 examples were produced in this way between 1992 and 1994. When you consider the amount of effort that went into producing each one, the £57,000 price tag was understandable.

All Lotus Carltons began life on the Opel production line in Russelheim before being shipped to Hethel, where they were disassembled and given an official Lotus type number - 104.

Below: this car is badged Lotus Omega, which means it's the Carlton's left-hand-drive Continental cousin. Mechanically and performance-wise, they were identical. Left-hand-drive cars are considerably cheaper



'I bought one'



James Waddington

- 'I bought this particular Lotus Omega on Christmas Eve in 1998, so you could say that it was the ultimate Christmas present! It wasn't the first one

I'd had, though - I'd sold my first some four months previously, having said that I wouldn't

buy another for at least two years. I just couldn't help myself; being without one of these monsters was just too hard to bear.

I'd wanted one since I was 18, though at that stage it seemed like an impossible dream, but I always kept my eye on *Exchange & Mart* just to see what the prices were doing and eventually saw one for £18,000 which was just inside my price range. I really am a Vauxhall man through and through and over the years I'd owned a Carlton GSi and three Senators; it was one of these Senators that I part-ex'ed for the Lotus.

It really is a fabulous machine, but there is

more to it than just the looks and the performance - it's one of those cars with huge historical importance. Vauxhall certainly won't build anything like it again, and I expect no-one else will either. It's also the fastest car that Lotus has ever made.

'You have to be aware of the potential problems - particularly the timing chain - but otherwise my advice for anyone thinking about getting a Lotus Carlton is to just go for it. I'm considering changing this one for a right-hand-drive version but, whatever happens, as long as it's possible to buy petrol, I'll always own a Lotus Carlton.'



[Buying Guide]

WHAT THEY SAID AT THE TIME

'On the smooth, fast and dry roads that frequent its native Germany the 500E is a force of tidal proportions' – *Autocar*

Specification

Mercedes 500E

Layout	Front engine, rear-wheel drive
Engine	Longitudinal, 4973cc, V8
Max power	326bhp @ 5700rpm
Max torque	354lb ft @ 3900rpm
Transmission	Four-speed automatic
Suspension	Front: Macpherson struts, coil springs, gas filled dampers, ARB Rear: multi-link, self-levelling, coil springs, ARB
Steering	Recirculating ball, 3.3 turns lock-to-lock
Brakes	Ventilated discs front and rear. ABS
Wheels	16 x 8in cast alloy front and rear
Tyres	225/55 ZR16 front and rear
Power to weight	192bhp/ton
0-60mph	5.9secs
Max speed	155mph (restricted)

Work began on 'the fastest Vauxhall ever' in 1988, when Lotus (which at that time was GM-owned) was given a brief to produce a Carlton capable of completing the dash to 60mph in less than six seconds. Chief engineer Simon Wood quickly realised this required at least 360bhp and the best way to achieve it would be to add a couple of Garrett T25 turbochargers. Of course, it wasn't quite as straightforward as that, especially as Lotus had identified the 'safe' specific output limit from an iron block as 100bhp/litre and the GSi engine was only 2969cc. Stroke was increased (there was no boring) to enlarge the displacement to 3.6 litres and the project was on.

Chassis development was left in the hands of Tony Shute and this was no small task. Front and rear geometry were altered, suspension components strengthened, and 17-inch wheels were fitted so that huge 13-inch ventilated brake discs with four-pot AP racing callipers could be bolted on to slow it all down again. The steering was also developed to improve feel – vital with this amount of power and no traction control. The six-speed ZF gearbox was chosen not because of the number of ratios, but because it was the only one available able to cope with the torque. The aerodynamic package achieved zero lift at both front and rear without increasing drag over the standard Carltons and, of course, endowed it with those brawny looks.

Despite the visual restraint, the 500E also had rather more work than just a large engine installation. Stiffer, shorter springs were fitted, lowering the car by about an inch when compared

with the 300E, and it was hydraulically self-levelling. Wider wheels and beefier brakes were fitted to keep everything in check and the track was increased by about 4cm at both the front and rear. The injection system was revised from that used in the SL500 to increase torque by 22lb ft, because obviously 332lb ft just wasn't enough.

The 500E was priced considerably higher than the BMW M5 (£57,220 as opposed to £45,750) and it was also left-hand drive only, so unsurprisingly sales were slow. In fact, fewer than 150 were sold through the official dealer network in the UK, although more than 7000 were produced for the rest of Europe. The Lotus totals are also quite low: only 950 were ever produced and, of them, only 282 were right-hand drive UK examples (these were all built between 1990 and 1994). During its short run there were no significant changes made to the Carlton, but the 500E received a gentle facelift in August 1993 with a new grille in line with the rest of E-class range, while its name changed to E500.

Wheelarches were slightly flared to cover the wider track and fatter rubber; with a slightly lower ride height too, the 500E exuded quiet menace



It was a bit of a squeeze, but the 5-litre V8 from the 500SL just fitted under the E-class's bonnet. Watch out for over-heating



'I bought one'



Guy Harman – 'I have only owned this car for a month, but it is one I have wanted since I read the old articles in *Car* magazine when Rowan Atkinson used to write about the 500E that he owned. I tend to buy and sell-on every six to eight months, purely because I'm a real

car nut and just want to try different cars, although I expect I'll be hanging on to this one for a little while longer.

'It is quite a first for me, in that it's both the first Mercedes and the first automatic I've ever owned and I have to say it's absolutely brilliant. It's discreet, hugely powerful, superbly well screwed together (probably better than the cars Mercedes are building now) and I have to admit I like the idea of it being the only four-door Porsche. In fact it'd be nice if there was a subtle, small Porsche badge on it somewhere.

'It is my everyday car. I bought it from MCP,

who acquired from a German company director who had a chauffeur whisk him up and down the autobahns, and it came with a full Mercedes service history. It has a few stone-chips on the nose, but they are just about the only blemish on the whole of the car.

'With the 500E you really do get a lot of car for the money. The only change I might make to it is to fit a new exhaust to release a little more power at the bottom end. Peter Ward from Racing Technologies has already informed me that he can make me a bespoke item that would do the job and it does sound quite tempting...'



DRIVING THEM TODAY

They were legends in their own lifetimes, but do they still hit the spot?

Despite the similarities in concept, these two are as different to drive as they are to look at. The Merc's impeccable build quality is obvious the moment you climb aboard. The odometer reads 108,000km, but it's hard to believe it's covered such a distance. The doors shut with bank-vault solidity, the leather armchairs appear barely broken-in and all the switchgear feels satisfyingly robust. Twist the key and the huge V8 wakes so quietly that a passing pedestrian would never suspect the power now available under your right foot.

Around town the 500E rides superbly – smooth and comfortable with not a single rattle or squeak. The long gearing (only four ratios in the auto 'box, remember) means that the 0-30 is nothing particularly special and around town the 500E feels more limousine than sports saloon. It's only when the derestriction sign appears that the car really shines. And not just on motorways; the chassis has enough dynamic fluidity to push on in a way that's at odds with the size of the car.



Inside the Lotus, there's no hiding the fact that underneath it's still a ten-year-old Carlton, albeit a decently appointed one. Actually, there's something strangely appealing about driving a Vauxhall that's been on a course of steroids. James Waddington's car is one of the best examples around and, with the benefit of a recent respray, looks absolutely stunning.

The engine fires with more volume than the Merc's and burbles with more eagerness and urgency. There are other sounds, too – the fuel pump zizzes behind you, while the self-levelling suspension whirrs itself into the attack position. The clutch is heavy, but that's the only awkward part of the driving experience, and from 3000rpm as the turbines begin to



spool up, you can hear the swell in power. We drove the car in the rain and in those conditions you're always aware of the torque passing through the rear wheels, but it's not intimidating – the feel through the wheel and seat leaves you in no doubt as to what's going on. The ride is firm, there are more rattles and the leather squeaks, but it's characterful. And when you do find somewhere to unleash the monumental performance, the rest of the world becomes nothing less than a blur.

Both of these cars felt as good as the day when they could still be bought new, which is why you'll probably find it absolutely impossible to prise them away from their very pleased-with-themselves owners.



Lotus looked every inch the 180mph rocketship it was; 500E retained the clean, understated lines of 300E



■ Finding one

Most of the cars that change hands in the UK do so privately; there are very few specialists or dealers. Both models can take time to find, the buying process often taking weeks or even months to complete, which requires a fair degree of tenacity and a healthy dollop of patience. Right-hand-drive Carltons are more common in the UK than the left-hand version, but don't rule out a left-hooker. A specialist company such as MCP Motorsport of Norfolk will scour the rest of Europe for the best examples of the breed. Obviously when using a specialist it should be one with a good reputation (the clubs should be able to help here – see below) and you should still spend just as much time checking the car over as you would with a private purchase.

Doing the hard work yourself and importing personally rarely proves worth the hassle. The professional importers have all the contacts and will always get to the best cars before you; they also tend to buy for less, so even including their commission it's unlikely you'll save much by doing it yourself.

● Join the club

The Autobahn Stormers club (www.autobahnstormers.co.uk) is for fast Vauxhalls in general but now has more than 70 Lotus Carltons/Omegas on its books. If you are looking for a Lotus, these are the people to speak to. They are also building a database of all 950 cars, so they may be able to help with knowledge of the specific car you are looking at. Also, www.lotus-carlton.co.uk has info and cars for sale.

The Mercedes-Benz Owners' Association (01892 860922) covers all Mercedes and should be able to put you in touch with 500E owners and help out if there is a specific problem with your car. Both clubs have magazines and regular activities and meets. Mercedes specialists include MCP Motorsport (01263 822481) and PCS Mercedes (0800 026 5201).



Before you reach for your chequebook, check out the parts prices

Parts prices

(Inclusive of VAT but not fitting)

	Lotus Carlton	Mercedes 500E
Clutch kit	£684	n/a
Starter motor	£101	£120
Headlight unit	£309	£212
Front brake pad set	£310	£65
Rear brake pad set	£229	£29
Front brake disc (pair)	£613	£118
Rear brake disc (pair)	£613	£103
Front damper	£90	£173
Rear damper	£174	£317
Windscreen	£189	£231
Oil filter	£22	£17
Air filter	£20	£14

Servicing costs

9000 miles (6000 miles)*	£407	£125
18,000 miles (12,000 miles)	£657	£500
27,000 miles (18,000 miles)	£467	£125
36,000 miles (24,000 miles)	£657	£500

* intervals for Merc in brackets

Insurance

Source: Privilege Insurance 0208 256 2178

Driver A: Marketing manager, 26, lives in Croydon, car garaged, 3 years' no claims bonus, three points for speeding Aug '96

Driver B: Solicitor, 36, Peterborough, car garaged, full NCB, clean record.

Lotus Driver A/B: £1792/£775 with a £250/£250 compulsory excess.

Merc Driver A/B: £1199/£519 with a £500/£250 compulsory excess.

Vehicles must have Thatcham cat 1 anti-theft system and tracking device.

What you'll pay

■ Sub-£10,000

High-mileage 500Es and Lotus Carltons with snapped timing chains

■ £10,000 - £13,000

Most 500Es sit in this price bracket. You will also find some lhd Lotus Omegas here, usually the medium- to high-mileage examples

■ £13,000 - £16,000

The very best of the imported Lotuses - expect low mileages, full histories and plenty of bills and receipts. Some of the well-used rhd UK cars can be had here

■ £16,000 - £20,000

UK rhd Lotus Carltons with average mileage in good condition

■ £20,000-plus

The very best, rarely used rhd Lotus show cars

! Checkpoints

The first thing to check with both these cars is that they actually are what they purport to be. In the case of the Lotus there are many replicas around, so check all paperwork thoroughly and ensure that the chassis number starts with SC000019. A full service history is vital - both can present you with very big bills if services are missed or the quality of workmanship is not up to scratch. There are 16 authorised Lotus Carlton service departments dotted around the country, but any Mercedes dealer should be able to mollycoddle a 500E. Try and buy a car from someone who has owned for quite some time; there is usually a reason why certain cars change hands regularly. Also, as the value of the cars slide, they fall into the clutches of people who can afford to buy them but struggle with the running costs, so corners get cut. These owners rarely have garages large enough for these monsters and they deteriorate faster when left exposed to the elements. Some parts are now becoming difficult to get hold of, particularly body panels.

○ Engine

The biggest worry here is the timing chains on the Lotus Carlton. There are two and, if either snaps, the damage will cost at least £5000 to put right (if your luck really deserts you, it could be more than twice that). There is also no way of knowing when it will happen. The good news is that the chains can be replaced with stronger versions, at a cost of about £1000. Ideally find a car that has already had this work, or build it into the buying costs and get it done after purchase.

Never buy either of these cars if they have been 'chipped'. With the Lotus's turbos it's easy and cheap to up the boost to 500bhp or more, but remember that Lotus itself discovered the engine could not safely deal with more than 100bhp/litre and head gaskets often fail.

The 500E has been known to suffer from overheating, mainly because the engine bay is so full it is difficult to dissipate the heat, so by attempting to extract more from it the problem is accentuated. Even with an unmolested engine, high temperatures can be an issue if the car is used to extremes (such as track days), so any oil leaks should be treated suspiciously. The firewall often looks like it has been overheated, but they all tend to do that and it's not necessarily a sign that the engine has a problem. Regular servicing and oil changes will help prevent overheating.

There have been some instances of the fuel tank cracking on Lotus Carltons and replacements are expensive. The reason for the failure is usually that the charcoal canister used to ventilate the tank fails. It's worth having this checked out because a new canister is only £40.

○ Brakes/Steering

Both of these big, heavy cars work their brakes hard, and you should expect to have to replace the front discs as well as the pads at regular intervals - a major factor in the running costs, particularly with the Carlton and especially if you're into track days.

The 500E has a tendency to wear out its steering pump by 100,000 miles - often it is just a seal that fails, but occasionally it's the whole unit.

○ Transmission

The Lotus Carlton's hydraulic clutch has been through a number of revisions, and there have been instances of failures with all of them. It's not common but some bell housings have cracked (and they cost £600 to replace); pivots and bolts have also been known to snap. There's little you can check for without taking things apart, but it's worth bearing in mind.

The two gearboxes are very different, but both the heavy-duty six-speed ZF manual of the Norfolk machine and the four-speed auto have stood the tests of torque and time well and faults are rare.

○ Suspension

Examine the inside edges of the rear tyres on both cars. Excessive wear here is usually attributed to the self-levelling system not functioning correctly, so there'll be more to replace than just a pair of tyres. Replacing components can be an expensive business. That said, both systems last well and often see 100,000 miles. Some specialists have also noted that the life of these units can be extended if the fluid is refreshed every 60,000 miles.

○ Bodywork

Both of these cars will rust if not properly cared for, although it will be much harder to spot on the Lotus because it usually begins underneath the body-kit, around the wheelarches and the doorsills. Also ensure that there is no damage to any of the skirts and spoilers, as these are expensive to replace and difficult to get hold of. A new front spoiler alone would cost you around £1500.

○ Wheels/tyres

A set of four new tyres for either car can cost as much as £750, so a check on the tread depth is time well spent and could help you negotiate on the price. The wheels should be the originals; after-market alloys devalue these cars.

○ Interior

The 500E's cabin is typically Mercedes and there will be little to worry about - neglect will be obvious. The Carlton, though not quite as tough, holds together well. Assembled in Germany - and it shows.