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1990 - 2002 R129 MERCEDES SL500 HISTORICAL SUMMARY

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1997 Mercedes SL500 with brown soft top

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INTRODUCTION

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This R129 body style SL500 was made from 1990 through 2002. It was called the 500 SL from 1990 - 1993.

They all have just about the same suspension regardless of year or package. The "sport" packages are just trim and tires, not suspension, engine or drivetrain. Some packages were called "AMG," but lack the engines and real hardware of the 2003 and newer AMG model cars.

From 1990 - 1995 the SL500 used a boring hydraulic 4-speed transmission. It was boring because it didn't usually downshift when punched. A much improved 5-speed electronic transmission was introduced in 1996 and used through today. The 5-speed automatic greatly improves the driving experience because it downshifts instantly, as well as adding a fuel saving overdrive.

The original 1990 - 1995 models also had a remote memory controlled *interior* rear view mirror and locking side door pockets. These features were skipped as of 1996 in favor of adding side airbags.

The high performance 4-valve quad-cam engine was made from 1990 - 1998. The 1999 - 2006 V8s are only three valve, single overhead cam versions with less power and torque. The simpler, lower performance 1999 - 2006 SL500 engines have two spark plugs per cylinder and have the identical EPA MPG.

Thus the best years for drivers are 1996, 1997 and 1998, which have both the quad-cam engine and the 5-speed transmission. They are the best SL500s ever made and are real Mercedes, not watered down Daimler-Chryslers.

The 1996 is the least expensive as a driver's car. It's only vices are an ugly wart hanging from the rear view mirror for the remote control and it's missing the garage door opener and automatic wipers. The 1997 and newer models fix that but cost more for the same engine and driveline.

The 1997 is just about perfect, which is why I choose it for myself.

The 1998 adds an alphanumeric display to the dashboard and a remote control with more buttons. The 1998 also introduced computer prediction of service intervals. In the 1998 and newer you can go about 12,000 miles between services depending on how the computer thinks you are driving. Many people don't trust the computer and service more often. 1997 and older were on 7,500 mile or 12 month intervals.

Newer SL500s after 1998 just cost more, may be more cheaply made and have the lower performance engine.

Of course every SL ever made is worth owning if you find one in stellar condition, and if you have the choice look for the 1997 or 1998.

DETAILS YEAR BY YEAR

There are three major versions of the SL500, the first from 1990 - 1995, the best version from 1996 - 1998 and the final cost-reduced version from 1999 through 2002. The new body style introduced in 2003 through today uses the same lower-tech cost-reduced V-8 engine introduced in 1999. Each version of the R107 looks almost identical, however there are many differences in the mechanical details inside each of the three versions.

6 cylinder versions, the 300SL and SL320, were available through 1997.

They're great cars, but why stop at 6 when you can get 8 or even 12 cylinders? They lost one of the best things about the SL: the smooth unlimited power of the V8. They used a little less fuel than the first four speed automatic SL500s. By 1996 the new 5 speed transmission increased the fuel economy of the V8 SL500 to within 1 or 2 MPG of the SL320, thus the SL320s went away in 1998. Today you can get a beater early 1990's 300SL for about \$10,000. You can look up EPA fuel economy back to 1985 [here](#). The SL320 would be a world-class car if it weren't for the SL500. The SL320 goes surprisingly well for a six. Unless you race the six is plenty for normal driving. Its transmission keeps it spinning faster than the V8, so around town it feels pretty similar if you don't get on it. These excellent straight sixes have four valves per cylinder and dual overhead cams and have more power than the anemic 3-valve V6s made about 1998 - 2005. Redline is about 6,200 RPM and, unlike the SL500, you can hear the engine working as you drive.

12 cylinder versions, the [600SL](#) and [SL600](#), were introduced in 1993 and are still available in the new body style today. They don't offer much more power but do add a lot of weight and torque. The SL600 weighs an additional 330 pounds, or the equivalent of having two people sitting on your hood compared to an SL500. Handling is iffier with the SL600's added weight. Straight-line performance likewise is the same as the SL500 due to the weight. For instance, in 2001 the SL500 was specified as 6.1 seconds for 0 - 60 MPH, and the SL600 was 5.9 seconds, and each has the same 155 MPH top speed limiter. The SL600 has lots of torque just like the SL500, and it goes great even with part throttle. The SL600s mostly add standard luxury features that cost extra on the SL500, like the CD changer. The SL600s have the dash and doors in leather, too, so they smell like cows. I'm discussing the V-8 SL500 below.

All the SL500s look about the same on paper for 0-60 and 1/4 mile performance. Actual driving is another story based on transmissions.

1990 - 1995

The first version was sold as model years 1990 through 1995. It had the highest price of any of the versions, even in 1990 dollars. OK, it probably is the most expensive car ever that's also practical enough to drive every day for hundreds of thousands of miles. It had some crazy features that went away in 1996, like remote control and memory of the *inside* rear view mirror and automatic locking of the door map pockets. The steering wheel automatically moved out of the way when you opened the door, a boon for fat people.

Spotters Guide: You can identify this version from across the street by the three rectangular slotted vents in each front fender.

As the signature ride of the WASP elite you can see a 1993 SL500 featured in the cop movie "[Another Stakeout](#)." That's it flying past an explosion on the cover, which is why I had to get this DVD out of curiosity. A gorgeous new red 1993 is loaned to undercover cops to help them blend into a nice area. The SL does the usual on-screen burnouts with overdone engine foley and drives through buildings. It's even used as a four-seater: a big girl and her dog get to ride in the back with the trunk

used as a roll-over protection device (ROPS) and not to get to the back with the trunk held open from too much luggage on a trip. (Bad idea if the rollbar deploys!) Like all these movies the cop's boss told them not to damage the loaned car and I won't tell you what happens. It's a funny movie even without the SL500.



(click to get DVD)

In 1994, another SL500 was used in "Ace Ventura: Pet Detective" as a visual clue that its driver was a star with unlimited cash to blow on toys. It's seen about 35 minutes into the DVD.





(click to get DVD)

Unfortunately the first SL500s had ordinary hydraulic 4 speed automatic transmission that were slow to kick down, if at all. It was great from a standing stop and on paper, but dull to drive since you miss most of the power from a lack of kick-down if you're already moving. Even when it did kick down it wouldn't always kick all the way down to redline. Ratios were 3.87, 2.25, 1.44 and 1.00 with a 2.65 rear for shift points of 44, 76, 119 MPH and 2,170 RPM at 60 MPH. You can identify this transmission by the "P R N D 3 2" indication on the transmission selector. The newer 5 speed says "P R N D 4 3 2 1"

The engine is the same M119 DOHC 32 valve VVT plant with a teeny bit less torque (332 vs. 345 foot-pounds) and a teeny bit more horsepower (322 vs. 315 HP) than the 1996 - 1998 models, however the dull transmission makes this much duller to drive than anything newer.

These model years are also an inch shorter; the front bumper is flush with the grille. The other way to recognize these models is that they have three rectangular vent holes at the rear of each front fender and the odometers are traditional mechanical reels.

In about 1995 the odometer was updated to a backlit LCD and the speedometer is electronic, meaning they all read correctly while driving in reverse, too.

The very first models didn't have the excellent Bose Hi-Fi system. By about 1994 all models have come with the same excellent Bose stereo system, standard, even if the radio head was changed in different years. There are two round speaker holes, woofer and tweeter, in each door panel in the versions with the Bose system.





The door locks were weird little paddle switches. You can see it to the right of the metal door release, on the top of the grab handle. There were no lock stalks that came from the top of the inside door panels. The door panels look a little silly compared to newer models, since they have separate sections devoted to the locks and seat controls and speakers. The 1996 - 2002 models integrate everything to look more consolidated in my opinion.



The 1990 - 1995 models have the first version climate controls which consist of big, easy to read buttons and just one small LCD displaying your desired interior temperature. The rear window defroster is a button on the dash below the radio to the left of the other hazard flasher, seat heater and other buttons.

These models have fog lights with a primarily refractive design.

The 1990 - 1995 SL500s have a two-way opening lower center console designed to hold cassette tapes. This is in addition to the upper center console with adjustable arm rest and all the other storage areas. All these areas lock with the central locking system.

Braking wasn't as good as newer years; R&T reported 145 feet from 60MPH and 256 feet from 80MPH.

Would someone please send me a good photo of the very first radio if it's different than the 1997 I show below? Thanks!

1996 - 1998

The second version from 1996 through 1998 is the most desirable. The superior electronic 5 speed transmission and side airbags were added in 1996 and continued through 2002. The much improved 5-speed transmission, 54 pounds lighter with 40% fewer parts than the earlier 4 speed, kicks down immediately and lets you hit redline from any speed. You can recognize it by the "4" position on the transmission selector, which is lacking on their earlier 4 speed versions. (Top gear is marked "D" on both.)

Spotters Guide: You can identify this version by the two long rounded vents in each front fender and the classic square stepped tail lights.

The 5 speed is the main reason that these and newer cars are so much more drivable and fun than earlier cars, and also why they give better fuel economy. Even at part throttle these downshift expertly, unlike the older transmission which rarely would downshift for anything, cheating you out of much of the engine's performance for real-world driving. The added fifth gear is an overdrive which boosts the EPA highway MPG rating from 20 to 23 MPG. The transmission learns what you're doing, so if you're racing it stays downshifted for a while before upshifting. For instance, in a 100MPH acceleration run uphill it stays in 3rd gear for quite a while even after lifting off the gas, in anticipation of being hammered again. Caution: unlike the latest electronic transmissions it's not quite smart enough to prevent you from doing something stupid like shifting into reverse at 100MPH, or so I'm told. Many ordinary cars today, like Dodge minivans, are smart enough not to do this even if you move the shift lever.

If you get sluggish response be sure to have the new transmission mode selector set to "S" for Summer or Sport. The "W" position, for Winter or Wet, deliberately starts in 2nd gear. In 2005 models Mercedes renamed the "W" Wet selection to "C" for Comfort.

The interior door panels were redesigned for 1996 through 2002. They integrate everything to a more uniform look, hiding the separate garish woofer and tweeter grills and odd switches of the earlier models. They add an airbag and replace the weird lock switch with a lock stem on the rear top of the door panel. To lock the doors use either the center console switch or press down a stem on the door. To unlock just pull the lever on the door panel.

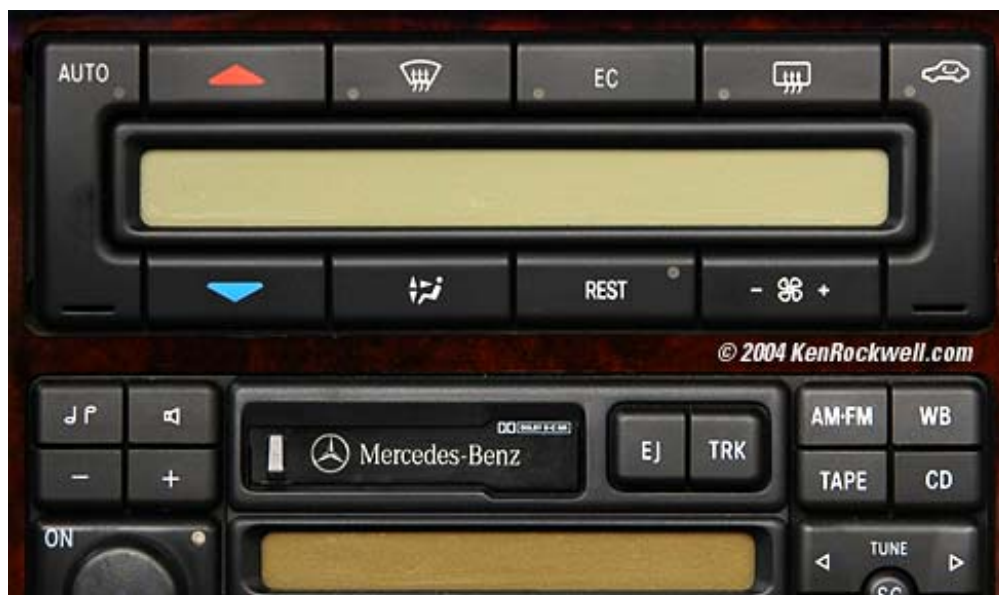
The fog lights are now conventional reflector and lens assemblies with a 55W H1 bulb.

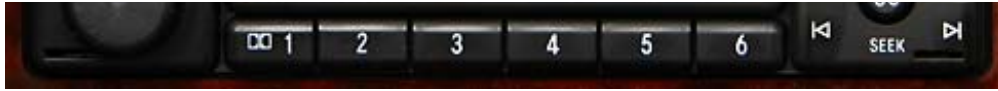
In 1996 the SL500 grew an inch or two in length and improved a point or two in aerodynamics (Cd). You can see this since the bumper now pokes out a little from the grille. There are two rounded vent holes on each side of the front fenders replacing the three previous rectangular ones

replacing the three previous rectangular ones.

In the 1996 model only the receiver for the infrared remote control was an ugly growth dangling from the bottom of the rear view mirror. In other years the infrared receivers returned are hidden in each door handle and the trunk lock instead, and later went to radio control. (Oddly the similar 2005 BMW 645 convertible still uses this hideous carbuncle hanging from the mirror.) The remote controls had only one button through 1997, and in 1998 they became more difficult to use without looking right at them with three separate buttons. I prefer one big button.

The 1996 versions and newer saved a little expense by forgoing the remote control internal rear view mirror and eliminating the automatic locks on the door map pockets. Of course all models continue automatically to lock the central dash storage compartment, both center console storage compartments and both rear internal storage. They lock automatically along with the trunk and fuel door with the rest of the SL500. The 1996 - 2002 SL500 replaced the earlier climate control panel with one with a much larger LCD. The radio of this version includes a weather band radio and six presets.





1997 Mercedes SL500 Climate Control and Radio. Same radio was used at least as far back as 1993 and through 1998. This climate control was used from 1996 to 2002.

In 1997 and newer all the SLs have three-way programmable garage door opener transmitters built into the rear-view mirror. 1996 and earlier versions still need you to clip your transmitter to the visor or ditch it in a console. The three channels are the three buttons you see on the bottom of the rear view mirror. Each can be programmed to a different house or door, also eliminating having to have multiple transmitters for your different homes. The 1997 model's opener can't program to the very latest rolling code door openers. The 1999 models can.

Also as of 1997 all the SLs have automatic rain-sensing windshield wipers. Set it to intermittent and it runs automatically when wet; a big help in misty conditions. If you are very lazy you could just leave the wiper set to intermittent all the time, in which case it stays off and turns on by magic if it starts to rain. The downfall to this silliness is that you get a single wipe every time you turn on the car, even if dry. 1996 and earlier had no automation and a single intermittent setting.

The optional Panorama hard top was introduced in 1997. All SLs have come with hard tops standard. The Panorama option has a glass top and a more rounded look compared to the standard aluminum hard top.

1997 was the last year for the 6 cylinder SL320. No one missed it; it was a model for the less fortunate. There was only a 1 or 2 MPG benefit in rated fuel economy with the six after the V8's big boost in fuel economy from the 5 speed transmission. Half of the reason to get an SL is the incredibly powerful, smooth and efficient V8, so it's silly to get the six.

A "Sport" package became an option in 1997. It just adds different trim and different wheels and tires. The four standard 225/55VR16 tires on 16 x 8.0" rims are replaced by 245/40ZR18 tires on 18 x 8.0" rims front and 275/35Zr18 on 18 x 9.0" wheels rear. They have the same engine and gearing as the regular versions.

In 1998 Mercedes added a dashboard computer which calculates how hard you're driving and computes when you need to change the oil. Also 1998 and newer models have much more information that may be displayed on the central LCD, including warnings like "oil level too HIGH."

1999 - 2002

First announced at a news conference in London on May 7, 1998, Daimler-Benz bought Chrysler in 1999. Daimler-Benz, called that since 1926, renamed itself to Daimler-Chrysler. It's important to note that Daimler-Benz, the maker of Mercedes and many aerospace products, bought Chrysler outright. There was no merger and, no, Chrysler did not buy Mercedes.

Mercedes replaced the original quad-cam SL500 V8 with a lower performance version in 1999. The 1999 - 2002 models are less desirable. The newer engine was the simpler three-valve version with less power and less torque. Thank goodness for 2007 Mercedes has brought back the four-valve, quad-cam high-performance V8 for the [S-Klasse sedan](#).

For 1999 Mercedes added:

Soft Nappa leather seats. This replaces the ventilated, perforated leather of earlier models.

Two great new tan colors for the interior: Java and Shell. Both of these also have optional chestnut wood trim. I'd love either color with the light chestnut wood.

Fiber-Optic digital audio links to the CD player instead of analog copper. You never see this; it's all hidden as part of the internal wiring inside the SL500.

Wheels are now 8.25 x 17" with 245/45ZR17 tires. Sport package is 8" (front) or 9" (rear) x 18" with 245/40 (f) and 275/35 (r) tires.

Remote control uses dual infra-red (IR) and radio (RF) control. My 1997 is IR only. I think this remote debuted in 1998.

Magic one-touch starter. Just twist it for an instant and the engine cranks itself over until it starts.

Heated windshield wiper park. I forget if they all have this from 1990; I just thought this was cool overkill. They all have heated washer nozzles and outside mirrors.

For 1999 Mercedes took away:

Removed eight valves and two camshafts and 13 horsepower from the V8 engine.

Removed the automatic lock on the left rear storage compartment which houses the Bose subwoofer. The three center console doors and the right rear storage area still lock automatically with the rest of the SL500.

Spotters Guide: Look for body-color door pulls. This version also has slightly dumbed-down tail lights with sinuously curved faces instead of the classic square steps. Owners of older models sometimes will swap the tail lights to mimic the newer models, but rarely will they replace the door handles.

All Mercedes made from about the 1960s through 1990s have the patented square-stepped lenses that help keep mud and dirt and snow off the lenses in bad weather for your safety. They do this due to differential air velocity and pressure across the two levels as you drive. These newer lights instead have a slightly sinuous (curvy) profile. You can swap back to the older, better lights on the newer cars, and likewise wimps can retrofit the newer versions to older cars to make them look the same as

wimps can return the newer versions to older cars to make them look the same as the 2002 model. The cosmetic changes hurt the aerodynamics, these models' Cd are down to 0.32 / 0.34 from the earlier version's 0.31 / 0.32 (hard top / soft top.)

The new body color door handles are probably just plastic like ordinary cars. They were black fiberglass reinforced epoxy from 1990 - 1998 and were strong enough to pull an SL500 out of a lake or ditch. I suspect the newer ones are just cheaper.

A review of the 1999 model written by someone who doesn't understand the car is [here](#).

The 1999 and newer is slightly less desirable because of the cost reduced lower performance engine. Mercedes makes up for the lower power by using a cheaper exhaust system that makes more noise to impress the innocent instead. It has less power and less torque and does not give the same EPA MPG. It only has single, not dual, cams and only three, instead of four, valves per cylinder. This gives it only 24 valves instead of the full 32 as the 1990 - 1998 models. It has only 302 HP and only 339 foot-pounds of torque. It has a prettier plastic vanity cover and adds an extra spark plug in each cylinder and slightly lowered emissions. On paper and actual driving it feels about the same and is still quite beastly, smooth, efficient and perfect, it's just not as technically impressive as the earlier engines. It retains Variable Valve Timing and the same EPA MPG and acceleration numbers, so it's not that big a deal. I point this out since the older cars are better and certainly less expensive to buy. After buying Chrysler, Daimler started getting really cheap and looking for fast bucks instead of making cars mostly as engineering tour-de-forces to promote the Daimler name to encourage sales of their far more expensive aerospace products.



2002 Mercedes SL500 Engine Vanity Cover (same as 1999 - 2006)

All Mercedes V8s are just about bullet proof; drive them as hard as you dare and

they'll run forever unless you run it dry. This same plant is used in the 2003 - 2006 SL500s today.

The transmission and climate control is identical to the 1996 - 1998 versions.



1999 - 2002 Mercedes SL500 Climate Control and Radio

The radio now has 10 presets and can be integrated to control the optional telephone remotely. You just dial it from the dashboard and it can answer automatically with the built-in hands free set up. Of course the expensive optional phone is obsolete today and you usually have to pay someone to remove it to recover the storage space it takes up. The radio offers most of the same features of earlier models, except that it adds 10 presets instead of 6 and returns to offering direct numeric entry of radio stations. For instance, if you want to type in 93.7 you just press "# 9 3 7." The LCD folds down to expose the cassette tape slot. If you don't close it back up it will start beeping loudly with no indication of the problem. This can lead to a dangerous accident due to the loud distraction that implies something major like a door open or no oil pressure but with no indication of the problem. The four buttons below the LCD change function depending on what you're doing, so it's unsafe because you have to squint at it while trying to drive in order to read it. The earlier radios can be adjusted with your eyes on the road since every button always does the same thing. Likewise this newer radio only offers Dolby B tape noise reduction; the earlier models also offered Dolby C noise reduction if you make your own very high quality tapes, not an issue today with CDs. None of the radios offer Dolby noise reduction for FM. The radio communicates with the optional 6 disk CD player optically instead of electrically as in earlier SL500s, thus it takes a different CD changer.

The still excellent gauges now have silver painted rings around them as of 1999.





1999 - 2002 Mercedes SL500 Gauges, taking styling cues from 1960s American cars.

The oil pressure gauge has been replaced with a more useful oil temperature gauge. This is more helpful because you should let your oil warm up before you hammer on the engine and this takes longer than the water takes to warm, which is what is indicated on the other temperature gauge. I only used my oil pressure gauge to know when my oil was warm, which you read convolutedly by waiting until the idle oil pressure drops to around 1 - 2 bar from the 3 bars it pegged while cold due to the higher viscosity. 50 years ago oil pressure was a concern, but for the past 10 - 20 years it's been so reliable in all cars that this gauge is a throwback to the early days of motoring. Today it's called out by a warning light in case of a problem.

An odd advantage of the 1999 - 2002 models is a larger steering wheel. It's just big enough to allow you to see the fuel gauge on the left and clock on the right without them being hidden partially behind the smaller wheel of earlier models. On earlier models it helps to adjust the wheel closer to you, however this is less safe in case you crash.

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