

Mercedes SL 500 Four wheel conversion kit 2002-2012



THE SUSPENSION EXPERTS

STRUTMASTERS LLC.

Quick Start Guide

MERCEDES -SL 500 FOUR WHEEL CONVERSION KIT

Parts Included In This Kit

- 2) Front Strut Assemblies
- 2) Rear Strut Assemblies
- 4) Brass Line Caps



Tools Needed For Installation

Metric Socket Set
Floor Jack or Vehicle Lift
Jack Stands
Ball Joint Fork
Basic Tools

- 1) Read general service precautions
- 2) Wear eye protection
- 3) Make sure vehicle is well supported
- 4) Remove factory suspension
- 5) Install conversion kit
- 6) Disable dash message

Mbenz SL 500 Front Strut Removal & Front Strut Installation Guide

Vehicle Must be raised to perform this conversion!
Use proper lifting equipment only!

Front Strut Removal Guide

(Removal procedures are For both sides of vehicle)

- 1) Place vehicle on hoist or jack stands
- 2) Remove wheels
- 3) Locate the hydraulic bleeder valve in the wheel well, above the valance panel. Fig 1
- 4) With a catch container , open valve to release hydraulic fluid pressure . Close valve.
- 5) Locate the hydraulic line quick release fitting. Fig 2
- 6) Pull back collar and remove the rubber line from the fitting.
- 7) Remove the lower strut mounting nut. Fig 3
- 8) Using a ball joint fork separate the strut from the lower control arm. Fig 3

Fig 1

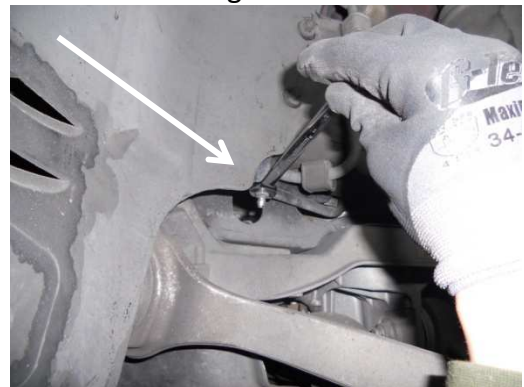


Fig 2



Fig 3



Mbenz SL 500 Front strut removal continued

9) Moving to the top of the strut remove the electrical connector by squeezing the two black tab and lifting up. Fig 4

Fig 4



10) While holding the strut in the wheel well, remove the three mounting nuts from the top strut studs. Fig 5

Fig 5



11) Remove strut.

Repeat steps #4 thru #11 for opposite side of car.

12) After removal of the struts you will need to remove the black rubber hydraulic line from each strut and install the supplied brass caps (tightly). Fig 6 & 7 & 8

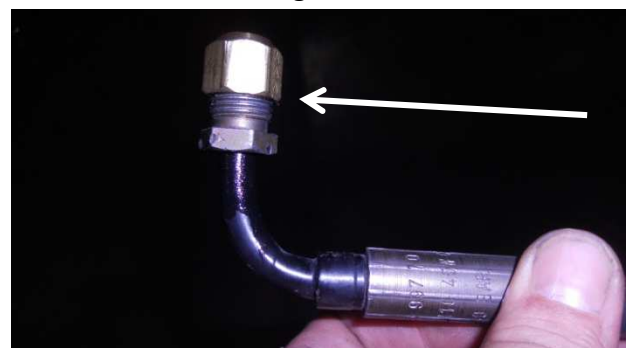
Fig 6



Fig 7



Fig 8



Mbenz SL 500 Front strut removal continued

13) With the line caps installed tightly. Place the line back in the cars quick disconnect. Try to keep the line from interfering with the installation of your new strut. Fig 9

CAUTION: The Hydraulic lines must be reinstalled to prevent your power steering from failing

Fig 9



Front strut removal complete

Mercedes Benz SL 500 New Front Strut Installation Guide

- 1) Remove the new conversion strut from the box and check for any shipping damage.
- 2) Remove the three nuts and washers from the top studs. Also remove the opposite ends ball joint nut and sleeve and save.
- 3) With a helper make sure the ball joint stud faces toward the front of the car, lift the strut up in through the upper control arm. Align the studs with the holes and push up. Install upper stud washers and nuts finger tight. Fig 1



Fig 1



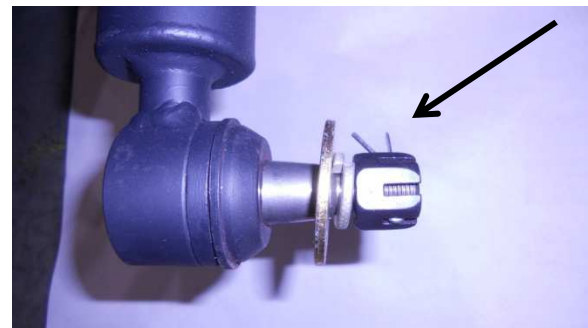
Mercedes Benz New Front Strut Installation Guide Continued

4) Place lower struts ball joint stud into lower control arm hole, then install washers onto stud followed by the nut and tighten. Fig 2



5) Install cotter key and bend end over. Fig 3

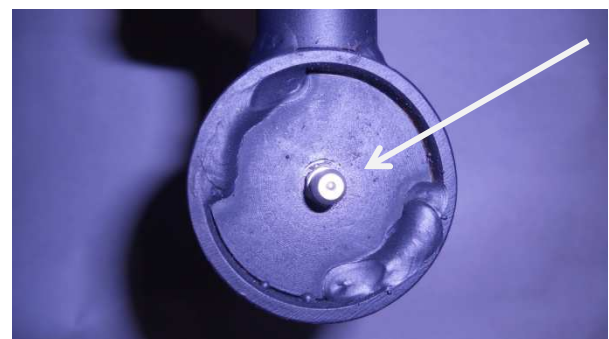
6) Grease the ball joint with a grease gun until grease is forced out of the rubber. Fig 4



7) Tighten the three upper mounting nuts at the top of the strut.

8) Make sure all nuts are tight and reinstall wheel.

9) Torque wheel to factory spec.



Repeat steps 1 thru 9 on opposite side of vehicle.

Your Front Installation is Complete



MERCEDES SL 500 (Rear) Removal And Installation Guide

STRUT REMOVAL

- 1) Before raising the vehicle, Remove interior trim panels in trunk to access top of factory struts. Fig 1
- 2) Remove the electrical connector from the top of the strut, and the two retaining nuts. Fig 2
- 3) Raise and support vehicle and remove the rear tires.
- 4) Find the hydraulic bleed screw and loosen to drain and release pressure from strut. Fig 2
- 5) Remove the rear track bar bolt. Fig 4

Fig 1

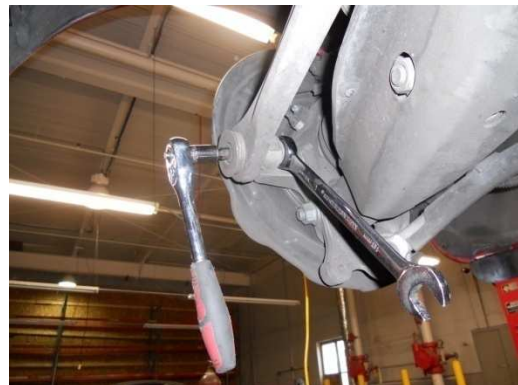


Fig 2



Fig 4

Fig 3



MERCEDES SL 500 Rear Removal Continued

6) Remove the height sensor from the lower control arm. fig 5

Fig 5



7) Loosen the inner control arm bolt, (loosen only!) Fig 6

Fig 6



8) Remove the lower strut mounting nut from the lower control arm. (Leave bolt in!) Fig 7

Fig 7



9) Remove the front track bar bolt. Fig 8

Fig 8

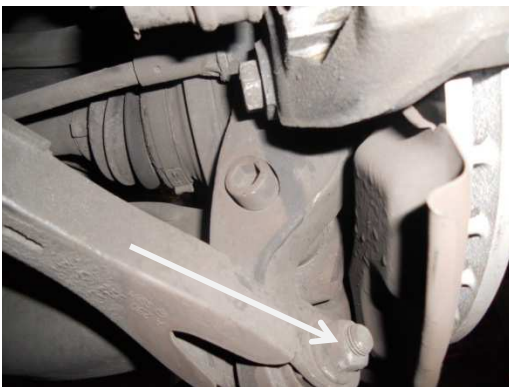


Fig 9



MERCEDES SL 500 Rear removal continued

11) Remove the allen bolt that holds the control arm to the hub. Fig 10-11

12) Pry the hub away from the lower control arm. Hub should raise up over the control arm, and the arm should drop down along with the strut. Fig 12

13) Locate the hydraulic quick disconnect fitting on the side of the strut and disconnect this fitting. (Caution wear eye protection)as there may be some fluid pressure in the line.) Fig 13

14) While holding the strut remove the lower strut bolt. Push down on control arm and remove the strut.

15) Follow steps 1-14 to remove other side.

Fig 10



Fig 11

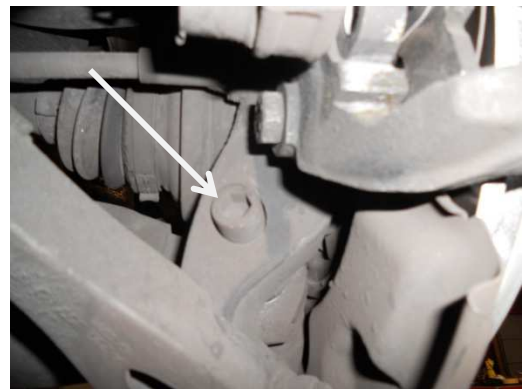


Fig 12



Fig 13



MERCEDES SL 500 NEW STRUT INSTALLATION GUIDE

1) Before installing your new strut you need to remove the steel line from the original strut. Fig 1

2) Now install the brass cap supplied in the kit on the threaded end of the line and tighten. Fig 2

3) Reinstall the line into the quick disconnect in the car and tuck the line in behind the wheel well liner.

4) Remove your new strutmaster conversion strut from the box and remove the top nuts and washers from the studs.

5) With help from another person install the strut up into the car. Fig 3

6) Align the top studs to fit into the mounting holes and push the strut up so the studs protrude through the holes. Now install the washers and nuts and tighten.

7) Align the lower strut mount into the lower control arm and replace the original bolt and nut. (Finger tighten only).

8) With a jack raise the control arm up so it is horizontal and reinstall the hub onto the control arm. Install the allen bolt with nut and tighten. Also tighten the lower strut mounting bolt along with the inner control arm bolt. Fig 4

Fig 1



Fig 2

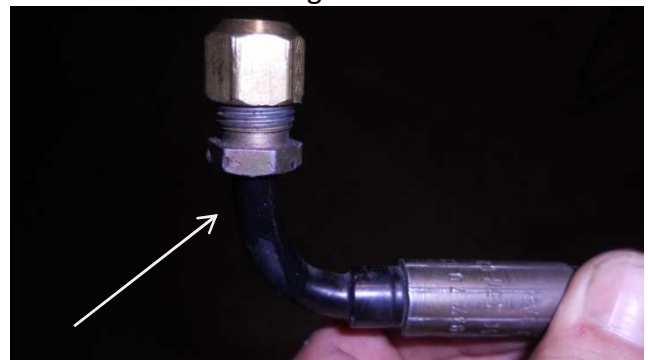


Fig 3

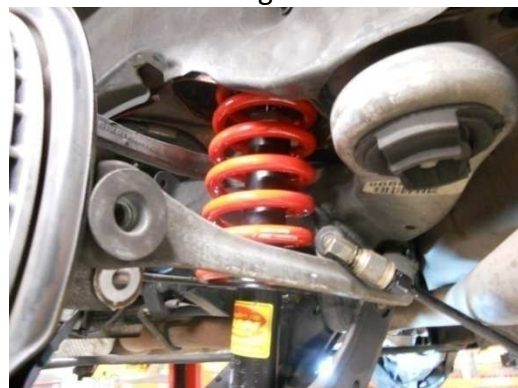


Fig 4



MERCEDES SL 500 NEW STRUT INSTALLATION CONTINUED

9) Install brake caliper pin and tighten. Fig 5

10) Install front and rear track bars on to the hub and tighten bolts. Fig 6

11) Install height sensor back onto control arm. Fig 7

12) Make sure all bolts are tight then remove the jack.

13) Install rear wheel.

14) Follow steps 1-13 for installation on the opposite side.

15) Lower vehicle and replace the truck interior panels.

Installation complete

Strutmasters (Highly recommends) that you have a four wheel alignment performed on your vehicle prior to any on road driving.



Fig 5



Fig 6

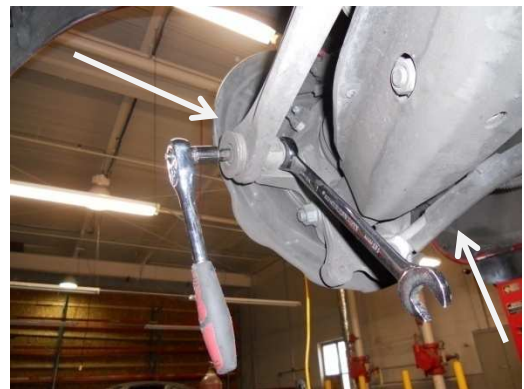


Fig 7

