## Replacing rear struts on a 1991 LS400

Raise rear of car and place securely on stands Remove rear wheels

## **Inside of Car**

Remove rear seat cushion. Pull up on the two tabs located at the bottom front of the seat cushion

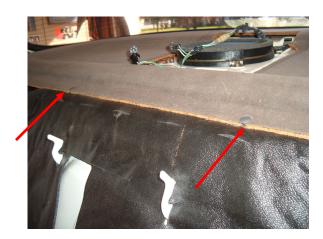


Remove rear seat back.

- 1. Remove both center seat belt buckles
- 2. Remove all four retaining bolts (hidden under flap of upholstery.)
- 3. Lift up then pull forward. Seat back will now be free of mounting tabs.



Move black liner/sound deadener away from upper strut mount area. It may be necessary to remove the two plastic retainers that secure the package tray in place.

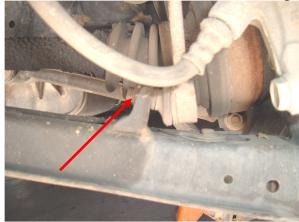


By gently lifting up on the package tray there will be enough room to access the upper mount.

- 1. Remove the three nuts holding the cover in place and then remove the cover.
- 2. Remove the three nuts holding the upper strut mount in place. The strut assembly will drop only an inch or two.

## **Outside of Car**

Remove lower sway bar joint nut. The shaft is machined to accept an Allen wrench to hold it while the nut is being removed.



Remove lower strut retaining bolt and nut. Lift <u>UP</u> on the suspension to gain enough clearance to remove the strut assembly.

Place strut assembly securely in a vise and install spring compressor tool. Compress spring just until there is no tension on the upper mount.



Remove shaft retaining nut and upper mount.



Carefully remove spring from strut. Place new strut assembly securely in vise and install spring and upper mount. Make sure that bottom of spring is seated correctly (there is an obvious indent in the bottom support to accept the end of the spring.)



Make sure that the top of the spring is aligned with the mark on the upper mount. Release the spring compression tool.



NOTE: Use the utmost caution and care while working with the spring compression tool. Severe injury and or death could result in its improper use. If you are not comfortable with this procedure, take the assembly to your local tire shop and have them swap the cartridges for you!

Re-install strut assembly in vehicle. If the spring is lined up properly with the marks on the upper mounting plate and seated correctly on the lower plate, the lower strut eyelet will be very close in alignment with its mounting bracket. I found it easiest to loosely install the upper three mounting nuts with the help of a second person inside the car then afterwards manipulating

the lower mount into place. Reinstall lower mount bolt and nut then reinstall lower sway bar link nut. Tighten upper mount nuts then reinstall covers. Inspect your work to make sure all bolts and nuts are tight. Install sound deadener mat as well as the package tray retainers. Install seat back and secure with the four bolts. Install both seat belt buckles. Install seat cushion making sure that the loops at the rear of the cushion catch in their respective retainers.

Install wheels. Remove vehicle from stands. Test drive vehicle.