



911 Rear Spring Plate Bushing Set (69-89)

Suggested materials:

- JB Weld or similar epoxy (2) 2 oz. packs
 - 3M Flapper wheel (2" or 2.5" diameter)
 - Torch
 - Sharp putty knife
 - Angle finder
1. Optional: measure ride height of both rear fender lips.
 2. Raise / support car and remove rear wheels.
 3. Disconnect rear sway bar if attached to spring plates.
 4. Optional: mark the camber and toe eccentric adjustments so you can return to these settings after re-installing spring plates.
 5. Remove camber and toe eccentric bolts as well as the two bolts connecting the spring plate to the trailing arm. At this point the spring plate should not be connected to anything except where it mounts to the chassis via the cover plate and rubber bushings.
 6. Optional: using a digital angle finder or similar measure the downward angle of each spring plate.
 7. Remove rocker hole covers, cover plates, spring plates, and torsion bars. If possible, note the orientation of the torsion bars indexing (inner spline).
 8. Remove rubber bushings from spring plates. This is not an easy task! We have a few tips on the last page.
 9. Sand or grind the tube of the spring plate until both inner and outer stainless steel races fit over it. The races should slide all the way on until they are against the plate.

10. The bonding area should be clean and prepared bare metal. **IMPORTANT!** adjustable spring plates will need a small amount of grease put into the groove where the inner plates rotate on the tube for height adjustment. Apply JB Weld or similar epoxy to areas and slowly install races rotating them many times around as they are pushed on. Bond all (4) races to spring plate tubes.
11. Prepare inside of torsion tube on chassis by using a 3M flap wheel. Surface should be clean bare metal and appropriate for epoxy bonding.
12. Now the system will need to be test fit to determine shim configuration. Fit inner bushing into torsion tube and insert spring plates with outer cover. Using an even sequence tighten the four cover bolts until the spring plate binds and gets tight. Now loosen each bolt less than $\frac{1}{4}$ turn and check movement of spring plate. Continue until spring plate moves freely but has no in and out thrust movement. Measure gap between cover plate and bungs welded to chassis. This is the shim distance you will need. Do this for both sides.
13. Re-install torsion bars with correct inner spline index from step 7. If the torsion bar came out in step 7 then you will need to find this position by trial and error. Only one combination of inner and outer spline settings will give you the angle you measured in step 6. If off, rotate inner spline 1 tooth and re-check. Continue until your correct angle is measured.
14. Now that the torsion bars are installed with correct inner spline index, remove all bushing components. Leave torsion bars installed.
15. Evenly apply a generous amount of JB Weld to inside of the torsion tube of the chassis.
16. Insert inner bushing into torsion tube, rotating it as you push it in.
17. Install spring plate assembly at the correct angle and bolt on outer cover with the shims determined in step 12. Torque (4) cover bolts on each side to 32 ft/lbs.
18. Re-connect to trailing arm and sway bar, install camber and toe eccentric bolts to markings. Since the stock rubber bushings are often times worn or sagged, an alignment is strongly recommended after this modification.

Tips for removing rubber bushings:

These are only suggestions intended to help, not instructions for rubber bushing removal. They are bonded to the spring plate tube so the goal is to break the bond and remove bushings.

The inner bushings closer to the open end of the tube are the easiest of the four to remove. A sharp putty knife can be used under each bushing to cut the bond where the flat plate meets the rubber. A MAP gas torch or similar can heat the inner section of the tube right behind each inner bushing. With enough heat and some patience you can melt the bond and use a pair of large channel locks to grab the bushing and spin it off.

The outer bushings are often cut off. Or a flat head screwdriver can be repeatedly driven between the bushing and the tube around the entire circumference.

Alternately, if you have means of fabrication and a press, a tool can be made. A piece of thin walled tubing that just fits over the tubular sections can have its leading edge sharpened so that in a press it would cut down through the bonded areas.

Useful Torque Specs:

Camber eccentric bolts (towards rear of car)	43 lb.-ft.
Toe tracking eccentric bolts (in front of camber bolts)	36 lb.-ft.
Spring plate to trailing arm bolts	54 lb.-ft.