

INSTALLATION INSTRUCTIONS ADJUSTABLE REAR ANTI-SWAY BAR NMS2002

Mini Mania's Adjustable Rear Anti-sway Bar is designed to improve the balance of the MINI allowing for less understeer, flatter turns, and improved turn-in response.

Removal of the factory bar requires removal of a rear shock and loosening of the rear suspension subframe. A lift is highly recommended, although this installation has been done using jack stands.

This kit includes:

- Rear anti-sway bar
- Two sway bar bushings
- Lubricant for bushing
- Two adjustable drop links
- Two collars

ALWAYS TAKE ALL NECESSARY PRECAUTIONS FOR WORKING UNDER THE CAR.

Tools required: Jack and jackstands, 21mm wrench or socket, 13mm socket, 16mm socket, 16mm wrench, 5mm allen, pry bar (not necessary, but helpful).

Step 1. Jack up the car and place jackstands under it, or use a lift. Remove the rear wheels.

Step 2. Use 16mm wrench and 5mm allen to remove the drop link from the sway bar. You can see that the bolt in the picture (part of the droplink) has an allen in the center of it. This is to prevent it from turning as you loosen the 16mm. Completely remove both drop links.



Step 3. Remove one of the rear shock. Start by taking the ABS sensor line and the brake line off of the strut mounts - they just wiggle on and off. Then remove the lower 21mm bolt that holds the strut to the rear hub carrier.



You can see the lower bolt here - it's the one with the triangular plate behind it. After you pull that, take the upper strut 13mm bolts out. There are two. They come out from under the car, so you don't have to even open the rear boot. Once those three bolts are removed, the strut just comes right out.

Step 4. Remove the 13mm swaybar mount bolts. There are two on each side that mount the swaybar to the rear subframe. Here, they have already been removed, but the bolt holes are visible to the left of the



Step 5. Remove the rear subframe mounting 16mm bolts. There are four bolts total, two on each side. Each side has one toward the center of the car, and one toward the outside of the car. The outside bolt is just forward of where the brake line and ABS sensor are mounted to the rear subframe. Once you get under the car, they become much more obvious. The inner bolt is shorter than the outer bolt. This is the inner bolt location:



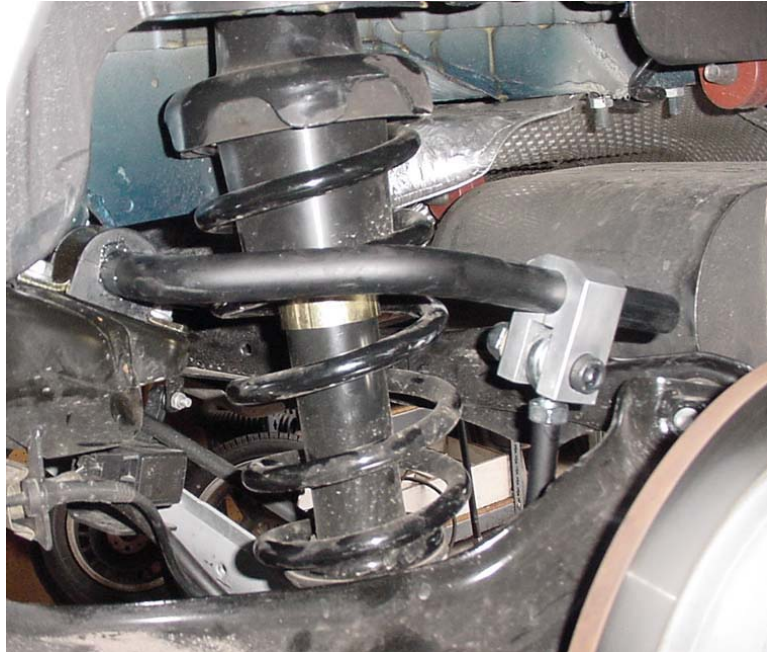


Here are the bolts once you have them removed:



Step 6. Remove the old swaybar. This is where two people and a prybar may come in handy. Fish the bar out one side as far as you can - you will end up hitting a wire bundle that is in the center of the car (you can see it when you are fishing). You will then need to pry the rear subframe down some - enough to slide the bar rearward and through the gap you created by moving the subframe down. Once you get the bar on the other side of the subframe, you will have enough room to clear the wiring harness, and it will slide out.

Step 7. Notice the orientation of the installed bar in the photo below. Reinstall the new bar by fishing and prying the same way you got the old bar out. You can then lube the new bushings (lube and bushings come with the new bar) and fit the bar. If you like, you can start the 13mm swaybar mount bolts as well. That will keep it in place when you reinstall the subframe.



Step 8. Have another person raise the rear subframe while you get the subframe bolt started. Start the inner bolt first. It will appear that the subframe has shifted to the rear of the car, but you will find that the geometry of it will cause it to be pretty close when you raise it back into position. Get all four bolts started first, then tighten them all. There are no slots, so you can't mess up the alignment.

Step 9. Reinstall the rear strut in reverse order of how you removed it.

Step 10. Snug the swaybar rear subframe-mount bolts. Make sure the sway bar is 'centered' right to left. Attach the collars onto the sway bar and tighten them up against the sway bar bushing. These collars will prevent the bar from moving side to side.

Step 11. Confirm the heim joints at both ends of the drop links have about the same amount of threads showing. No need to tighten them at this point.

Slide both drop links over the ends of the bar about 1 - 1.5 " from the ends. Secure the lower end of the drop links to the subframe.

The ideal setting for the drop link length is for the sway bar ends to be as close to horizontal as possible **WITH THE CAR ON THE GROUND**. Start with little or no thread showing on the heim joints and tighten them.



Now double check to make sure that all the nuts and bolts are tightened, then reinstall the wheels.

Try driving the car and see how the suspension feels. If on a track, take some tight turns to see how the car responds. If the car pushes, stiffen the bar. If the car oversteers, soften the bar.

Enjoy!