



SwayLOC Installation

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SwayLOC System Contents

- 1 - Tubular Outer Torsion Bar
- 1 - Solid Inner Torsion Bar
- 2 - Urethane Frame Bushings
- 1 - Passenger Side Inner Short Arm
- 1 - Passenger Side Outer Arm
- 1 - Driver Side Outer Arm
- 2 - Link Assemblies (disassembled)
- 2 - Cap Bolts
- 4 - 3/8x2-1/2" Grade 8 Bolts
- 4 - 3/8 Grade 8 Nylock Nuts
- 1 - Large Aluminum Washer
- 1 - Small Aluminum Washer
- 1 - Large Nylon Washer
- 1 - Air Solenoid Assembly w/Hardware
- 1 - Intermediate Harness
- 1 - Bunch of Zip Ties
- 2 - 15' Lengths of Air Line
- 1 - 4' Length of Air Line w/1 End Melted
- 1 - Lighted Switch
- 1 - Air Tank w/Fittings & Schrader Valve
- 1 - Tube of Viper Lube

Additional Hardware Needed

- Red Lock-Tite
- Anti-Seize
- Teflon Tape
- Silicon Sealer RTV
- 4 - 5/16-18x1 Stainless Steel Bolts
- 4 - 5/16 Stainless Steel Washers
- 4 - 5/16 Stainless Steel Nyloc Nuts
- 1"x1/8" Steel Bar Stock

Tools You Will Need

- ORO SwayLOC Anti-Sway Bar System
- 10,13,15,17,18,19mm Socket/Wrench
- 1/4", 1/2", 5/8", 9/16", 11/16", 3/4"
- Socket/Wrench
- 1-1/4" Socket
- T-55 Torx Bit
- Ratchet
- Ratchet Extension
- Torque Wrench - 90 ft. lb. Capacity
- Flat Head Screwdriver
- Wire Cutters/Wire Strippers
- Pliers
- 1/4", 5/32", 3/8" Metal Drilling Bits
- 3/4" Unibit or Drill Bit
- Tape Measure or Ruler
- Rubber Mallet
- Hand Drill
- Dremel
- Grinding Bit
- Safety Goggles



Off-Road Only
ORO SwayLOC

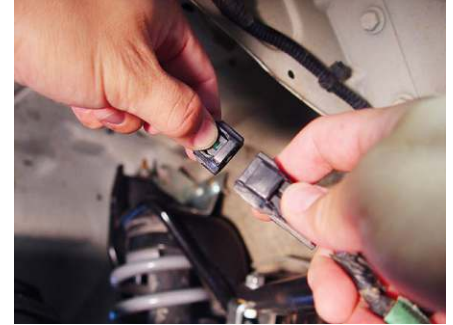
BEFORE YOU BEGIN

Thoroughly check the contents of your SwayLOC kit and verify that you have all the parts listed on the packing sheet.

If your Jeep has an aftermarket front bumper, you may need to do some trimming in order for the SwayLOC arms to rotate properly. To determine if there is enough clearance on your bumper, figure a 3" diameter cylinder, extending 2" outward from the cross member edge. If a cylinder of this size fits, then there should be enough room to install your SwayLOC, provided there are no aftermarket items mounted to the side of the frame from the cross member to the front spring mounts on the frame.



1. Park your Jeep on a level surface, put it in gear and engage the emergency brake. If you have a winch on your Jeep, open your hood and disconnect the 2 leads attached to your battery. The entire winch and mounting plate will need to be removed to complete the installation of your new Off Road Only SwayLOC Anti-Sway Bar System.



2. If your Jeep has a set of fog lights or other driving lights, disconnect them from their wiring harness.



3. If you do not have a winch, you will need to remove the front plastic cover with the Jeep logo on it. The cover is secured by 2 bolts on either side of your Jeep and you will need a 10mm socket to remove them.



4. Using a Torx T-55 Bit (or 3/4" socket if you've already replaced these bolts), remove the 4 bolts securing the top of your front bumper to your Jeep's frame, along with any two hooks you might have. If you have a winch, you will need to remove it and its mounting plate completely from your Jeep.



5. Again, using a Torx T-55 Bit, remove the 2 bolts (or 3/4" socket if you've already replaced these bolts) underneath your front bumper securing it to your Jeep's frame. Then, proceed to remove the front bumper off your Jeep and set it aside.



6. If you still have stock sway bar links on your Jeep, remove the bottom bolt and nut using an Torx T-55 Bit and 18mm wrench. If you have a set of aftermarket sway bar link disconnects, remove them using the tools specified by the manufacturer.



7. Using a 15mm socket and ratchet extension, remove the 4 bolts securing your Jeep's anti-sway bar to your frame. With the bolts removed, you should be able to just lift the anti-sway bar up and off your Jeep. With everything off, I would use this opportunity to clean up any mud build up or other debris that has built up in this area.



8. Carefully clean and inspect your front cross member tube on both sides of your Jeep making sure that the surface inside is smooth. On some Jeeps, you will find welding slag inside the tube and these will need to be ground off with a Dremel prior to installing your new SwayLOC System.



9. Take one of the urethane frame bushings that comes with your kit and apply some Viper Lube onto the inside surface of it. A small tube of Viper Lube should have been included with your kit.



10. Take the torsion tube that came with kit and insert it through the urethane frame bushing so that the splines protrude 3/4" through it.



11. From the driver side of your Jeep, carefully insert the torsion tube and urethane frame bushing through the front cross member tube. Make sure the urethane bushing is sitting completely inside the frame tube. If needed, place a 1-1/4" socket over the torsion tube and use it to tap the urethane frame bushing into place with a rubber mallet.



12. Apply some Viper Lube on the other urethane frame bushing that comes with your kit and install it on the passenger side of your Jeep's. Again, if needed, place a 1-1/4" socket over the torsion tube and use it to tap the urethane frame bushing into place with a rubber mallet.



13. Back on the passenger side of your Jeep, make sure the splines on the torsion tube are clear of any debris and then apply some Anti-Seize to it.



14. Carefully examine the splines on the short inner passenger side arm and clean out any debris you might find. Debris in the splines will make the installation of the arm onto the torsion tube quite difficult. Then, with the decals facing you and the notch on the end of the arm pointing towards the ground, slide it onto the splines of the torsion tube. If needed, use a rubber mallet to gently tap it into place.



15. Double check to make sure the torsion tube is still only protruding 3/4" out of the driver side urethane frame bushing. If it's off, make whatever corrections you need by tapping the torsion ends with a rubber mallet



16. Insert a 3/8 x 2-1/2" bolt through the cross-hole on the short passenger side arm and then attach a lock nut to the end of it. Using a 9/16" socket and wrench, fasten the nut to the bolt only to a snug fit at this time.



17. Go to the driver side of your Jeep, make sure the splines on the torsion tube are clear of any debris and then apply some Anti-Seize on it.



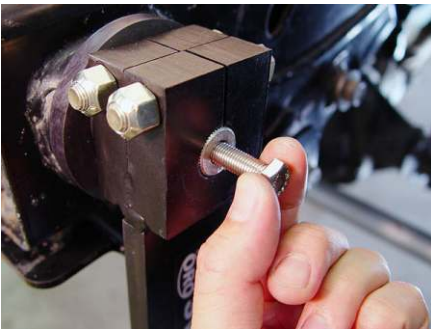
18. Carefully examine the splines on the driver side arm and clean out any debris you might find. Then, with the decals facing you and the end of the arm pointing down to the ground, slide it onto the splines of the torsion tube. If needed, use a rubber mallet to gently tap it into place.



19. Insert a 3/8 x 2-1/2" bolt through the cross-hole closest to the frame on the driver side arm and then attach a lock nut to the end of it. Using a 9/16" socket and wrench, fasten the nut to the bolt only to a snug fit at this time.



20. Apply a generous amount of Viper Lube to the torsion bar and then slide it into the torsion tube from the passenger side of your Jeep. Rotate the bar and continue to apply more Viper Lube to the torsion bar as its being fed in to insure good coverage.



21. When the torsion rod reaches the driver side arm, thread in one of the 5/16-24 end cap bolts supplied with the kit and use the bolt to gently pull the torsion bar into the splines. Remove the bolt once the torsion bar is in the arm.



22. Insert a 3/8 x 2-1/2" bolt through the remaining cross-hole on the driver side arm and then attach a lock nut to the end of it. Using a 9/16" socket and wrench, fasten the nut to the bolt only to a snug fit at this time.



23. Back on the passenger side of your Jeep, place the large black plastic washer on the torsion rod.



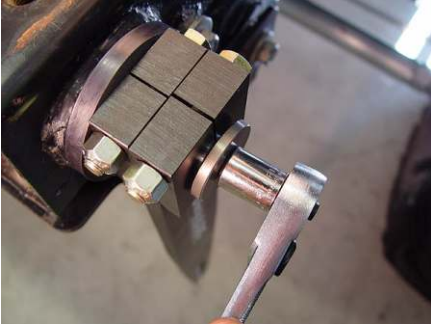
24. Hold the passenger side outer arm so that the air cylinder is facing you. Then, pull back the latch from the air cylinder and place one of the 1/2" nylock nuts that comes with the kit in between the two to hold it open.



25. Once again, make sure the splines on the torsion tube are clear of any debris and then apply some Anti-Seize on it.



26. Carefully examine the splines on the passenger side arm and clean out any debris. Then, with the air cylinder facing you and the end of the arm pointing down to the ground, slide it onto the splines of the torsion bar making sure that the latch is lining up with the notch on the short inner arm. Position the torsion bar so that it sit as equally as possible within both the outer passenger side and driver side arm. Insert a 3/8 x 2-1/2" bolt through the cross-hole and fasten a lock nut (snug fit only) to the end of it using a 9/16" socket and wrench. Remove the nylock nut from between the latch and air cylinder.



27. Place the larger of the two gray anodized aluminum washers onto one of the 5/16-24 end cap bolts and then secure it to the end of the torsion bar on the driver side arm using a 1/2" socket.



28. Place the smaller of the two gray anodized aluminum washers onto the other 5/16-24 end cap bolt followed by a 5/16 flat washer and then secure it to the end of the torsion bar on the passenger side arm using a 1/2" socket. Make sure that the bolt does not bottom out prematurely. If it does, add another 5/16 washer to make up the difference.



29. Once the end caps have been fitted properly, remove them, add a single drop of red Lock-Tite to each bolt and then re-install them onto their appropriate sides on your torsion bars. Then, go through and tighten each of the 3/8" nuts and bolts to 40 ft. lbs. of torque. Also, you can re-install your front bumper and winch at this time.



30. Back at your work bench, begin assembling your SwayLOC links by installing a jam nut on to each of the rod-ends.



31. Install the rod-ends onto the hex aluminum housings provided with the kit.



32. Adjust the overall length of each link so that the arms will not limit the front suspensions droop or make contact with the fender area when compressed. Measure the gap between your bump stops and lower spring perches to determine the approximate up travel your SwayLOC arms will make. Be sure to account for the compression of the rubber stop. Fasten your links using a 3/4" and 19mm wrench.



33. Using a 5/8" and 3/4" wrench, attach the assembled links on to the outside of the SwayLOC arms and secure them in place using the nylock nuts provided with the kit. If your jeep has wheels with more than 4" of backspacing, you may need to install the passenger side link on the inside of the SwayLOC arm.



34. Again, using a 5/8" and 3/4" wrench, attach the SwayLOC links to the inside of the sway bar mounts on your Jeep's axle and then secure them in place using the nylock nuts provided with the kit.



35. Back at your workbench, open the package containing the SwayLOC air solenoid and install the mounting bracket onto it using the self-tapping bolts provided. You will need a 1/4" socket for this job.



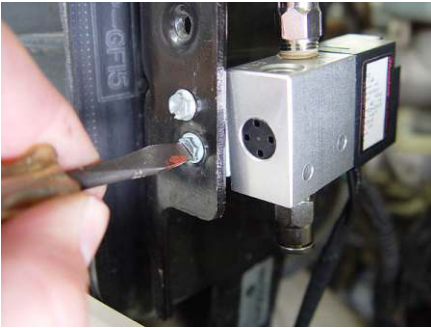
36. Using the air solenoid bracket as a template, locate and mark a place under the hood of your jeep where you will mount it. I decided to use the metal bracket on the driver side where a cruise control unit would normally be mounted. Since this location already has holes in it, I only needed to drill one new hole.



37. Mark the location of where your hole needs to be drilled using a center punch.



38. Drill your bracket mounting hole using a 5/32" metal drilling bit.



39. Install your air solenoid onto the bracket using the bolts and spoked nuts provided with the kit. You will need a small flat head screwdriver to secure the bolts in place.



40. If you look under the dash on the driver side of your Jeep, you should see a large rubber plug on the firewall above the gas pedal and towards the center console. Drill a small 1/4" hole through this plug. As you can see in this photo, I already have a cable for my hand throttle going through it.



41. The air solenoid should have come with a separate two prong connector that has a white and black wire with a ring on the end of it. Feed the white wire through the hole you just drilled in the rubber plug on your firewall. Then, inject the hole with a little silicon sealer to close it off.



42. Attach the black wire with the ring connector to your Jeep's frame or body. I attached mine to a rocker guard bolt on the body of my Jeep.



43. Plug the air solenoid wiring harness into the two prong connector and then zip-tie the wires up against the firewall.



44. Climb back into your Jeep and remove the rubber transmission shifter boot by carefully pushing in the sides and lifting up. With a little effort, it should pop out without the assistance of tools.



45. Route the white wire you fed into the cab of your Jeep under the center console. Then drill a 3/4" hole into your console or wherever you want to install the SwayLOC switch. I would recommend using a unibit for this job as it will drill a very clean and accurate hole.



46. Take the red activator switch and feed the red power and black ground wire through the hole you just drilled. Feed the white wire coming from the air solenoid up through the hole and plug it into the center prong on the switch.



47. Snap the red activator switch into place and then feed the power and ground wires through the center console towards the firewall. Reinstall the transmission shifter boot back onto the center console.



48. Remove your glove box to gain access to the fuse box. The SwayLOC kit should come with a fuse tap so that you can piggy back the fused side of a 10 amp fuse but if your Jeep comes equipped with an auxiliary switched power lead, you can attach your power wire directly to it. The SwayLOC air solenoid draws less than 300ma.



49. Lift up the carpeting on the passenger side of your Jeep and route the activator switch wires underneath it. Then, attach the ground wire to a bolt on your tub that will provide a good ground.



50. Take the longer 1/4" nylon air line and insert one end of it into the push-in fitting on your SwayLOC air cylinder closest to your front bumper.



51. Take the shorter 1/4" nylon air line that has one of the ends melted closed and insert the open end into the push-in fitting on your SwayLOC air cylinder closest to the latch. Keep the length of air line whole and Leave the melted end intact. This air line will allow the air cylinder to move but keep dirt, mud, moisture from getting into it.



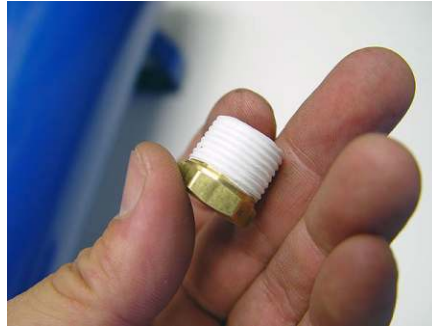
52. Make sure to leave a service loop on both air lines to allow for adequate movement and then secure them in place with a zip tie.



53. Route both air lines across your Jeep's front grill using zip ties to hold it in place. The shorter air line should stop here but continue to route the longer hose along your Jeep's frame rail and up into the engine compartment where your SwayLOC air solenoid is located.



54. Cut the 1/4" nylon air line and insert it into the push-in fitting labeled "OUT" on your SwayLOC air solenoid. This fitting should be located next to the wiring harness. If you have on-board air, insert the remaining air line into the push-in fitting labeled "IN" and then route it to an air manifold connected to your compressor.



55. If you do not have on-board air and purchased the optional air tank with your SwayLOC System, you will need to begin assembling it now. Go back to your workbench, apply some teflon tape to the brass reducers and install them onto the tank using an 11/16" wrench.



56. Install the 1/4" NPTs to the 1/4" tube fitting using a 9/16" wrench. The optional tank should only have one of these and your SwayLOC kit should have come with the other one you need.



57. Climb under your Jeep from the driver side and hold your air tank up to the tub, parallel to the length of the Jeep and just behind where the driver seat would be. Use the air tank as a template and mark off where you will be installing it and where you will need to drill the mounting holes.



58. Make sure the carpeting inside your Jeep has been pulled out of the way along with anything else that might be on the floor of your Jeep. Then proceed to drill the air tank mounting holes using a 3/8" metal drilling bit.



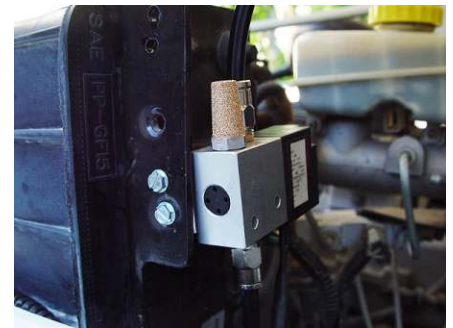
59. Inside the cab of your Jeep, take your 5/16-18x1 stainless steel bolts, slip a washer on them and insert them into the holes you just drilled. Place a pair of vice-grips and clamp it onto one of the bolt heads.



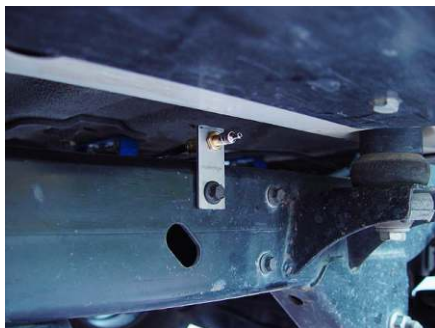
60. Back underneath your Jeep, secure the bolt that is clamped with a nylock nut. You will need a 1/2" wrench for this job.



61. Insert the remaining 1/4" nylon air line into the push-in fitting pointing towards the front of your Jeep and route it along the driver side frame rail toward the engine where the SwayLOC air solenoid is located.



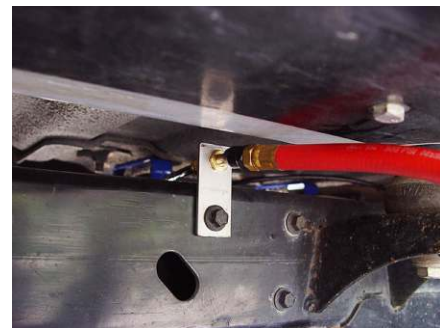
62. Cut the 1/4" nylon air line and insert it into the SwayLOC air solenoid push-in fitting labeled "IN". Also, be sure to install the muffler on to the exhaust port of the air solenoid.



63. Using a piece of 1"x1/8" stainless steel bar stock, I made a bracket that I could attach the schrader valve to and mount it to my Jeep's driver side frame rail using an existing bolt (previously used for a side step).



64. Take the remaining 1/4" nylon air line, insert it into the air tank's rear push-in fitting and then route it to your schrader valve's push-in fitting.



65. Air up your air tank using any air source and your Off Road Only SwayLOC Anti-Sway Bar System is ready to use. To operate it, simply turn on the activator switch you installed inside your Jeep and go.

That should be it. Please visit my Off Road Only SwayLOC write-up on-line to see larger versions of any photo you see here on this write-up. If you have any questions, send an e-mail to me at eddie@4x4explor.com or try contacting Off Road Only directly. They have great customer service and are always quick to respond to their e-mails.

DISCLAIMER:

The modification detailed in this write-up is not recommended by the manufacturer of this vehicle. Utmost care should be taken when modifying anything to your suspension. Injury to you, your Jeep, and/or others can result from improper suspension modifications or alterations. 4x4explor.com is not a certified mechanic and assumes no responsibility for damage or injury.

