51010
<u>Rear Anti-Sway Bar</u>
84-92 BMW E30 3-Series, all models
& 93 Convertible

Thank you! You were selective enough to choose a ST Suspensions product. We have spent many hours developing our line of products so that you will receive maximum performance with minimum difficulty during installation.

Note: Confirm that all of the hardware listed in the parts list is in the kit. **Do not** begin installation if any part is missing. Read the instructions thoroughly before beginning this installation.

Warning: **DO NOT** work under a vehicle supported by only a jack. Place support stands securely under the vehicle in the manufacturer's specified locations unless otherwise instructed.

W**arning**: **DO NOT** drive vehicle until all work has been completed and checked. Torque all hardware to values specified.

Reminder: Proper use of safety equipment and eye/face/hand protection is absolutely necessary when using these tools to perform procedures!

Note: It is very helpful to have an assistant available during installation.

RECOMMENDED TOOLS:
- Properly rated floor jack, support stands, and wheel chocks
- Combination wrench set
- Ratcheting socket wrench and socket sets
- Safety Glasses
- Drill & drill bits

<u>**KIT INSTALLATION**</u>

1. Open the hardware kit and remove all of the contents. Refer to the part list (Page 3) to verify that all parts are present.

2. Park the vehicle on a smooth, level concrete or seasoned asphalt surface and activate the parking brake. Block the FRONT wheels of the vehicle with appropriate wheel chocks; making sure the vehicle's transmission is in 1st gear (manual) or "Park" (automatic).

3. Using a properly rated floor jack, lift the REAR wheels of the vehicle off the ground. Place support stands, rated for the vehicle's weight, and in the factory specified locations. Refer to the vehicle Owner's Manual. Prior to lowering the vehicle onto the stands, make sure the supports will securely contact the chassis.

! It is very important that the vehicle is properly supported during this installation to prevent personal injury and chassis damage! Make sure that the supports stands are properly placed prior to performing the following procedures. We **DO NOT RECOMMEND** using wheel ramps while performing this installation.

4. Slowly lower the vehicle onto the stands and, before placing the vehicle's entire weight on them, again check that they properly and securely contact the chassis as described above. Check for possible interference with any lines, wires, cables, or other easily damaged components.

5. Remove the original end links, U-bracket and pivot bushings. Remove the original equipment Anti-Sway Bar from the vehicle; this is done the easiest by moving it out the drivers side, in front of the lower control arm.

6. Remove the small parking brake cable brackets from the original U-brackets on the bottom of the end link of the original end link, this will be reused on the new supplied U-bracket. Drill out the parking brake cable brackets and holes in the lower control arm with a 3/8" drill bit.

7. Position the ST anti-sway bar in the same location as the original equipment anti-sway bar. Thoroughly lubricate the inside of your new bushings using the supplied grease. Place the bushings on the anti-sway bar just inside the 90° bend. Fasten the cente r portion of the Anti-Sway Bar to the chassis with the flat washers, bushing brackets and 8mm x 20mm bolts. Tighten the bolts to approximately 18 ft/lbs of torque.

8. Assemble the end links as shown in Photo 1. Make sure the spherical bearings are parallel to each other and the holes are approximately 4 inches apart. Tighten the jam nuts against the spherical bearings to approximately 23 ft/lbs of torque.

9. Place a 3/8" x 1 ¼" bolt through the center hole on the U-bracket. Fasten the U-bracket to the bearing assembly using a 3/8" x 1 ¾" bolt, 3/16" bearing spacers, and the original parking brake cable bracket from step 6. Tighten the assembly to approximately 23 ft/lbs. Refer to photo 1 & 2.

10. Use the 3/8" x 1 ¾" bolts, 3/8" nuts, 3/8" washers and 3/16 inch bearing spacers to fasten the end link assembly to the end holes on the inside of the anti-sway bar. Tighten the entire assembly to approximately 23 ft/lbs of torque.

11. Remove the brake line from the plastic holder located at the rear edge of the control arm just under the U-bracket attachment point. Flip it upside down, pull the brake lines down, and re-install them into the holder.

12. Fasten the U-brackets to the tabs on the lower control arms, sandwich 2 of the supplied end link reinforcement plates on each side of the mounting point. Use the supplied lock nut and large 3/8" washers. Tighten the nuts to approximately 23 ft/lbs of torque. See photo 2.

13. Check that all components and fasteners have been properly installed, tightened and torqued.

14. Check brake hoses, cable, wiring and other components for any possible interference.

15. Lift vehicle and remove support stands. Carefully lower vehicle to ground.

16. Test-drive the vehicle in a remote location so that you can become accustomed to the revised driving characteristics and handling. Be aware that the vehicle will handle substantially different now that it has been modified.

17. Installation is complete. Check all of the hardware and re-torque at intervals for the first 10, 100, 1000 miles.

PARTS LIST, Anti-Sway Bar 51010

PART NUMBER	DESCRIPTION	QTY.
51010-300	REAR ANTI-SWAYBAR	1
51010-020	PIVOT BUSHING 3/4"	2
51010-005	PIVOT BUSHING BRACKET	2
114041	3/4" U BRACKET	2
112242	FEMALE SPHERICAL BEARING	4
51010-003	ENDLINK REINFORCEMENT PLATE	4
112094	3/8" - 16 x 1 1/4" HEX HEAD CAP SCREW	2
112316	3/8" - 24 SPHERICAL BEARING JAM NUT	4
112100	3/8" - 16 x 1 3/4" HEX HEAD CAP SCREW	4
110255	3/8" - 16 NYLON LOCK NUT	6
110204	5/16" SAE WASHER	2
112002	8mm - 1.25 x 20mm HEX HEAD CAP SCREW	2
112174	3/8" - 24 x 2" ALL THREAD STUD	2
112518	3/8" USS WASHER	2
112412	3/16" BEARING SPACER	8
55000-10	GREASE PACK	1