



25mm [1"] ADJUSTABLE REAR ANTI-ROLL BAR – NM.258847 [F56] MINI Cooper, Cooper S & JCW 2014-UP

PARTS INCLUDED:

[1] 25mm Adjustable Rear Bar
[4] M8x25mm Hex Cap Bolts

[2] Billet Clamp w/ Bushing

[1] Synthetic Grease

TOOLS & SUPPLIES REQUIRED:

[1] Vehicle Jack

[2] Jack Stands

[1] Ratchet Handle

[1] 12" Extension

[1] 17mm Wheel Lug Wrench

[1] E10 Torx or 5/16" Socket

[1] E12 Torx or 3/8" Socket

[1] E14 Torx or 7/16" Socket

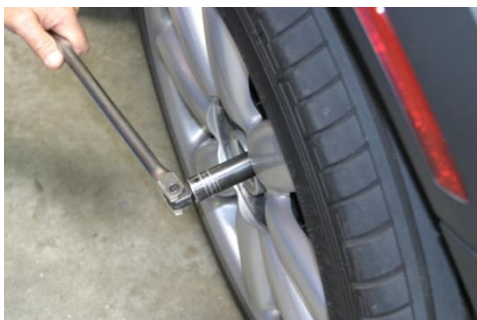
[1] T30 Torx or 4mm Hex Key

[1] E20 Torx or 5/8" Socket

[1] Torque Wrench

[1] 6mm Hex Key Wrench

1. Park vehicle on a flat, level surface capable of supporting the vehicle's weight on jack and jack stands.



2. Loosen rear wheel lug bolts.

3. Using the manufacturer's recommended lifting points, raise rear of vehicle and support with jack stands. Remove rear wheels. **WARNING: NEVER WORK UNDER A VEHICLE SUPPORTED ONLY WITH A JACK – SERIOUS INJURY OR DEATH CAN OCCUR!**



4. Remove upper end-link nut from anti-roll bar by securing stud with T30 Torx or 4mm hex key wrench and loosening nut with 16mm wrench. Repeat for other side.



5. Back out lower end-link mounting bolt about a 1/2" using an E10 Torx or 5/16" wrench or socket. Pull down on anti-roll bar arm due to bushing pre-load and then pull out upper end-link stud from bar. Repeat for other side.



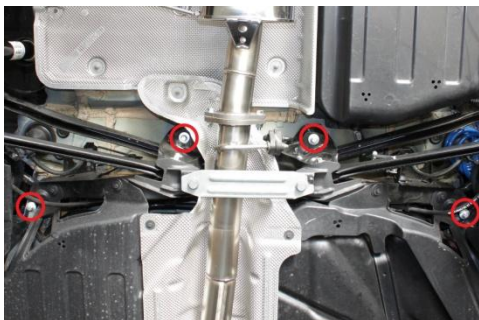
6. Support with jack under trailing arm and remove lower shock absorber bolt using E20 Torx or 5/8" socket. Lower jack to release spring pre-load.



7. Pull down on trailing arm then pull out suspension spring. Repeat steps #6 and 7 for other side.



8. Unbolt [1] 10mm hex nut from exhaust heat shield that connects from sub-frame to uni-body.



9. Remove the (4) sub-frame mounting bolts using E14 Torx or 7/16" socket. Supporting sub-frame not required.

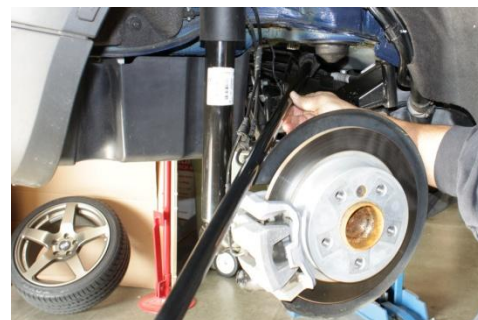


10. **NOTE:** Brake lines will unclip from their support mounts on the uni-body.



11. Remove the [2] bushing clamp mounting bolts using an E12 Torx or 3/8" socket. Remove clamp. Repeat for other side.

12. From left side of vehicle, push out original anti-roll bar towards right side of vehicle between uni-body and sub-frame until bar arm clears around left side brake line.



13. Now from right side of vehicle completely remove original bar.



14. Install NM anti-roll bar in reverse of removal of original bar being careful getting around brake lines. **HINT:** Leave plastic wrap on bar to protect finish of bar during installation through sub-frame then remove.



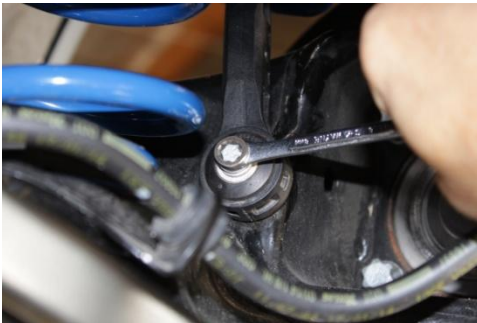
15. Apply supplied grease to inside of supplied urethane bushings and install on NM anti-roll bar.



16. Install NM Billet Bushing Clamps (grease fitting facing rearward) and supplied bolts. Torque to 34 Nm (25 ft-lbs).

17. Re-mount sub-frame to uni-body with the [4] original bolts and torque to 100Nm (74 ft-lbs). **NOTE:** Make sure brake lines re-attach to their support mounts on the uni-body.

18. Re-install rear springs in reverse of disassembly. Torque lower shock mount bolt to 100Nm (74 ft-lbs).



19. Attach upper end-links to NM anti-roll bar using original nuts. Torque to 48Nm (35 ft-lbs). Then tighten lower end-link bolt. Torque to 34Nm (25 ft-lbs.). See adjustment chart for hole position information. **NOTE:** NM Eng. Rear Sway Bar Link Kit recommended.

20. Mount rear wheels. For factory wheels ONLY, torque lug bolts to 140Nm (103 ft-lbs). For aftermarket wheels, contact wheel manufacturer for proper torque specifications.

21. Double-check complete installation and test drive carefully.

©2015 NM Engineering, a division of Automotive Performance Systems, Inc.
All rights reserved. Reproduction in whole or in part is prohibited.
DOC. NM.258847 Rev. 08.08.15

Anti-Roll Bar Adjustment Chart

	LEFT-SIDE END-LINK POSITION		RIGHT-SIDE END-LINK POSITION	
	Rear Hole	Front Hole	Rear Hole	Front Hole
Setting 1 [Softest]	X		X	
Setting 2	X			X
Setting 3 [Stiffest]		X		X

Recommended adjustment procedure:

Start with softest setting and drive car on familiar road. Adjust bar to next stiffer setting if further reduction of understeer is needed. Continue to adjust until proper balance suited to your motoring style is achieved.