Product:

aFe Control Sway Bars

Part Numbers:

440-503002-N, 440-503002FN, 440-503002RN

Applications:

BMW F30, 335I 2012-2015
BMW F32 435I 2014-2015

Contents in the box: 440-503002-N

Qty	Part #	Description
1	00P-0P2316-N	1.25" F30 Front Sway Bar
1	00P-0P2332-N	1.125" F30 Rear Sway Bar
2	00P-0P1064-B	Rear Bushing Bracket
2	00P-0P2329-B	1.25” Front Bushing
2	00P-0C1657-B	1.125” Rear Bushing
2	00P-0C1007-A	.05 oz Grease Packet
1	00P-0C1007-A	(0.5 oz) Grease Packet

Difficulty of Installation: Beginner |----------x---------| **Advanced**
Reason: This installation requires the lowering of the front and rear sub frame, and is best performed on a 2 post lift.
Expected Installation Time: 6 Hours

Recommended Tools:

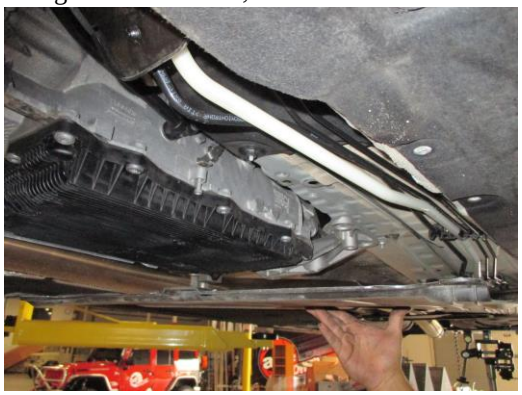
- 16mm box end
- 13mm thin wall socket
- 13 mm deep socket
- 8, 10, 13, 15, 16, 17, 18 mm sockets
- 3/8" drive ratchet
- 3/8" drive extension
- Allen Wrench Set
- Complete Male & Female Metric Torx Socket Set
- ¾ box end wrench
- 3/8" drive Torque Wrench
- 2 Post Lift and Screw Jack (preferred)
- Transmission Jack

This procedure is best performed on a vehicle lift by qualified mechanics, however it is possible to install these sway bars using a floor jack and jack stands however it is not recommended.

Front OEM Sway Bar Removal

1. Using proper jacking points and a 2 post lift, raise the vehicle in the air. It is a good idea to properly support both front and rear with screw jacks.
2. Using a 17mm socket remove the front wheels.
3. Remove the engine under tray, and the two front splash guards using a 16mm socket. .

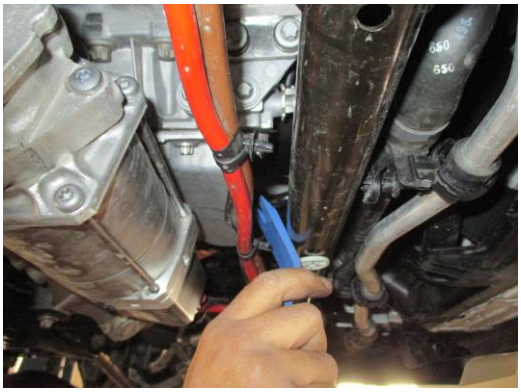

4. Using a 10 mm socket, remove the transmission under tray.



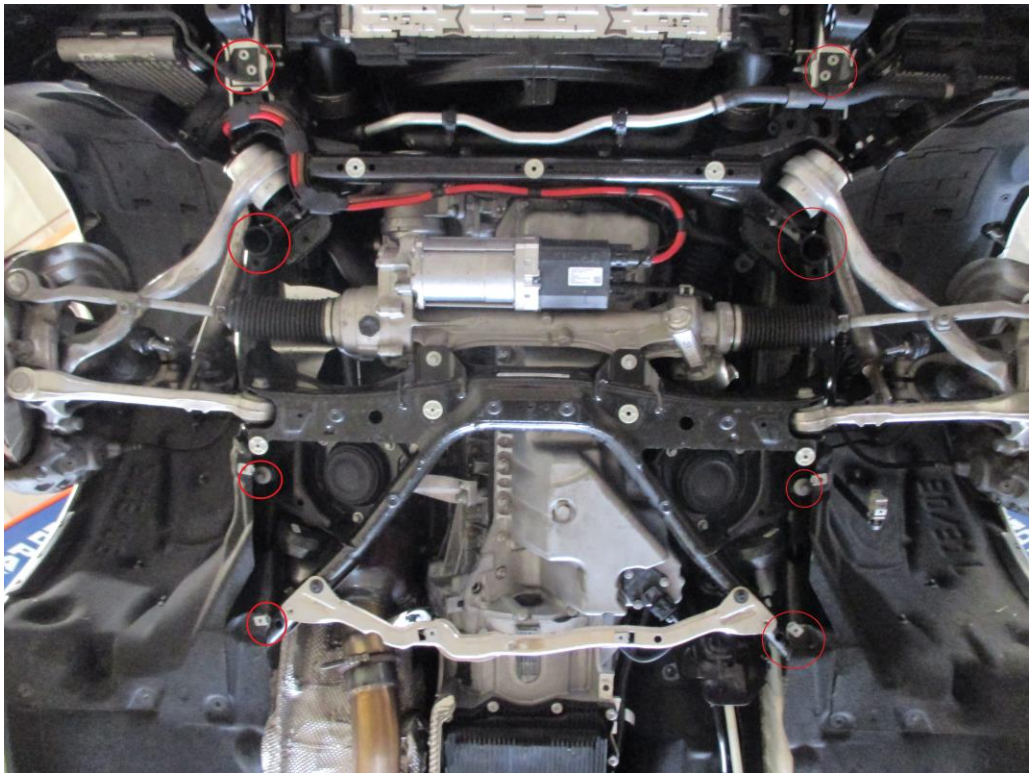
5. Loosen the felt splash guards located under the forward rockers. There are (2) T-30 bolts on the inner wheel wells, and (8) bolts on the underside.

6. Unbolt the sway bar end links from OEM sway bar using a 16mm wrench and T-30 torx socket. Disconnect the ride height sensors from the driver's side control arm and disconnect the wire at the senor.

7. Remove all the plastic clips that hold the Electric power steering wiring and any other looms and lines attached to the sub frame.



8. Support the sub frame using a transmission jack, and remove the sub frame bolts. There are (2) forward, 13 mm bolts, (2) rear 18 mm bolts (use 18 mm 12 point socket), and (4) bolts that require a E-14 socket.



9. You might need to pry the forward sub frame mount slightly to get the bolt out.

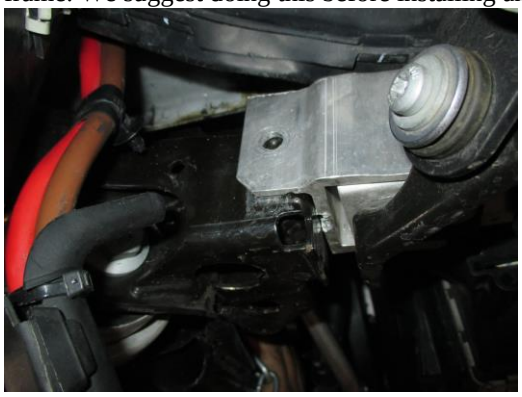
10. Lower the sub frame approximately 5".

11. Using a 13 mm thin wall socket remove the (4) nuts that attach the sway bar bushing brackets to the chassis, and remove. The sway bar can now be slid out through the front of the sub frame.

Front aFe Control Sway Bar Installation

1. In the same orientation as the OEM bar was removed, install the new sway bar by sliding in through the front of the sub frame.

2. Apply a generous amount of supplied grease on the supplied bushing and install on the bar. Install the OEM bushing bracket using the OEM nuts, and a 13mm thin wall socket. Torque nuts to 25 lb-ft
3. Raise the sub frame back into place and re-attach the the sub frame bolts. There are (2) forward, 13 mm bolts, (2) rear 18 mm bolts (use 18 mm 12 point socket), and (4) bolts that require a E-14 socket. Torque Sub frame bolts to 65 lb-ft. Be careful to properly alight the front of the sub frame into the bumper supports. This can be a trick process and will require some shifting of the sub frame. We suggest doing this before installing any of the other bolts.



4. Re-attach all wiring, clips, and hose moved during the drop of the sub frame.
5. Using a floor jack, or a screw jack, apply lift to the lower control arm, until the end link can be attached to sway bar.

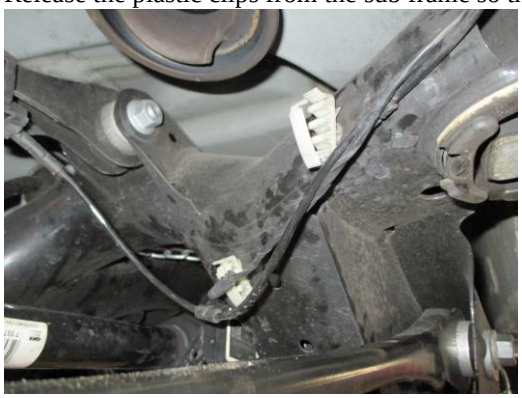
6. Reattach the sway bar end links to the sway bar using a 16mm wrench and T-30 torx socket. Torque nuts to 25 lb-ft
7. Re-attach ride height sensors and plug to the drivers side control arm.
8. Reinstall all the under carriage splash guards and shields.
9. Reinstall the front wheels using a 17mm socket and torque to 90 lb-ft

Rear OEM Sway Bar Removal

1. Using proper jacking points, lift and support the rear of the car on jack stands.
2. Using a 17mm socket remove the wheels.
3. Using a 13mm deep socket and a 15 mm standard socket, remove the rear section of the exhaust from the vehicle.
4. Remove the rear splash guards by removing plastic clips and T25 torx bolts.

5. Using a E14 torx socket, and a 14 mm 12 point socket, remove the bolts that hold the rear chassis reinforcement to the body.

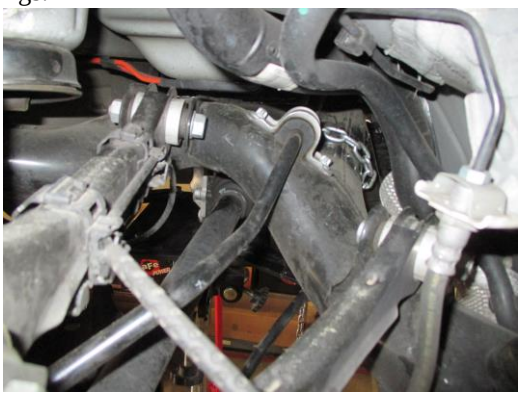
6. Release the plastic clips from the sub frame so the wire harness can have room to move freely.



7. Using a 18 mm socket, remove the rear brake calipers, and hang them out of the way. Be careful not to damage or kink any lines. Using a 16 mm wrench, remove the nuts, from the factory end links.

8. Using either a floor jack, or a trans jack, support the rear differential. Remove the rear shock mount bolts. Next remove the (2) remaining sub frame bolts using a 14 mm 12 point socket.

9. The next step will require the drop of the rear sub frame, it is important to make sure you have slack in both the ABS, and ride height sensor wires as the sub frame comes down. Slowly lower the sub frame just enough to get a E12 socket on the OEM bushing brackets. (approximately 2") Remove the (4) bolts attaching the sway bar bushings.



10. To remove the OEM Sway bar from the vehicle, disconnect the upper control arm on the driver side with a 18 mm socket. Now you can rotate the OEM sway bar out, and through the driver side of the vehicle.

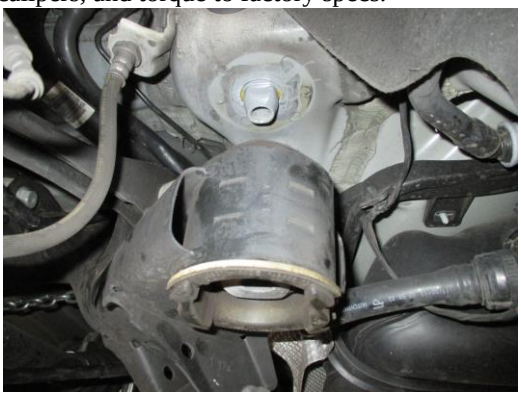
Rear aFe Control Sway Bar Installation

1. In the same orientation as the OEM bar was removed, install the new sway bar by sliding in through the drivers side of the sub frame.


2. It is important to make sure the sway bar is positioned under the upper control arm on the passenger side when sliding bar into place. The correct orientation would put the bar under both the drivers, and passenger upper control arms. When positioned, re-attach the upper control and torque 18 mm bolt to 42 lb-ft


3. Apply a generous amount of supplied grease on the bushing and install on the bar by separating the slit in the bushing. Install the CNC machined aluminum bushing bracket using the OEM E12 Torx bolts. Torque bolts to 25 lb-ft

4. Raise the sub-frame back into position. The front mounts have positioning pins, for alignment. Be careful not to pinch any lines, or wires. Torque the sub frame bolts to 65 lb-ft. Reattach the calipers, and torque to factory specs.



5. Reinstall the OEM reinforcement bar, and reinstall the splash guards.
6. Reattach the plastic clips and properly secure the wire harness.
7. Reinstall the OEM endlinks to the aFe sway bar. It might help to jack up the lower control arm to raise the end link. Connect the end link and torque to 25 lb-ft
8. Reinstall the exhaust system, and wheels. Be sure to properly torque wheels.
9. Re-check all your work, and lower vehicle from vehicle lift, and take for test drive.
10. **When all work is complete take the vehicle to alignment shop for a proper wheel alignment.**

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