VW MQB 4Motion Adjustable Front Sway Bar Installation Instructions - ES4346263

Skill Level
2 - Moderate

Some Experience Recommended

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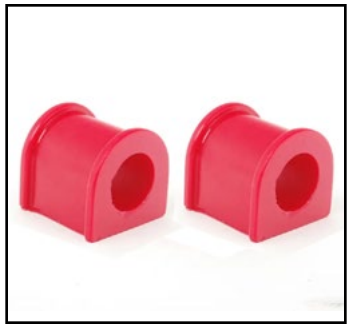
KIT CONTENTS

MQB 4Motion Adjustable Front Sway Bar
(QTY 1)



Sway Bar Bushings
(QTY 2)

Sway Bar Brackets
(QTY 2)

Sway Bar Bracket Bolts
(QTY 4)

REQUIRED TOOLS

Note: The tools required for each step will be listed by the step number throughout these instructions.

Standard Automotive Tools

Required For This Install

- **Protecta-Sockets (for lug nuts)** ES#2221243
- **⅜" Drive Ratchet** ES#2765902
- **⅜" Drive Torque Wrench** ES#2221245
- **⅜" Drive Deep and Shallow Sockets** ES#2763772
- **⅜" Drive Extensions** ES#2804822
- **Hydraulic Floor Jack** ES#240941
- **Torx Drivers and Sockets** ES#11417/8
- **½" Drive Deep and Shallow Sockets** ES#2839106
- **½" Drive Ratchet**
- **½" Drive Extensions**
- **½" Drive Torque Wrench** ES#2221244
- **½" Drive Breaker Bar** ES#2776653
- Bench Mounted Vise
- Crows Foot Wrenches
- Hook and Pick Tool Set ES#2778980

Available On Our Website

- **¼" Drive Ratchet** ES#2823235
- **¼" Drive Deep and Shallow Sockets** ES#2823235
- **¼" Drive Extensions** ES#2823235
- Plier and Cutter Set ES#2804496
- Flat and Phillips Screwdrivers ES#2225921
- **Jack Stands** ES#2763355
- Ball Pein Hammers
- Pry Bar Set ES#1899378
- Electric/Cordless Drill
- Wire Strippers/Crimpers
- Drill Bits
- Punch and Chisel Set
- **Hex Bit (Allen) Wrenches and Sockets** ES#11420
- Thread Repair Tools ES#1306824
- **Open/Boxed End Wrench Set** ES#2765907

INSTALLATION NOTES

- **RH** refers to the ***passenger side*** of the vehicle.
- **LH** refers to the ***driver side*** of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process **BEFORE** you begin.

GENERAL PREPARATION AND SAFETY INFORMATION

ECS Tuning cares about your health and safety, please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- **ALWAYS** wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- If using an automotive lift, be sure and utilize the factory specified lift points.
- Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- When lifting a vehicle using a jack, always utilize the factory specified lift points.
- Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- **ALWAYS** support the vehicle with jack stands.
- Always read and follow all safety information and warnings for the equipment you are using.

NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.

REMOVING THE ORIGINAL SWAY BAR

Step 1: 17mm Protecta Socket, Breaker Bar

Safely raise and support the vehicle, then remove the front wheels.

Step 2: T25 & T30 Torx

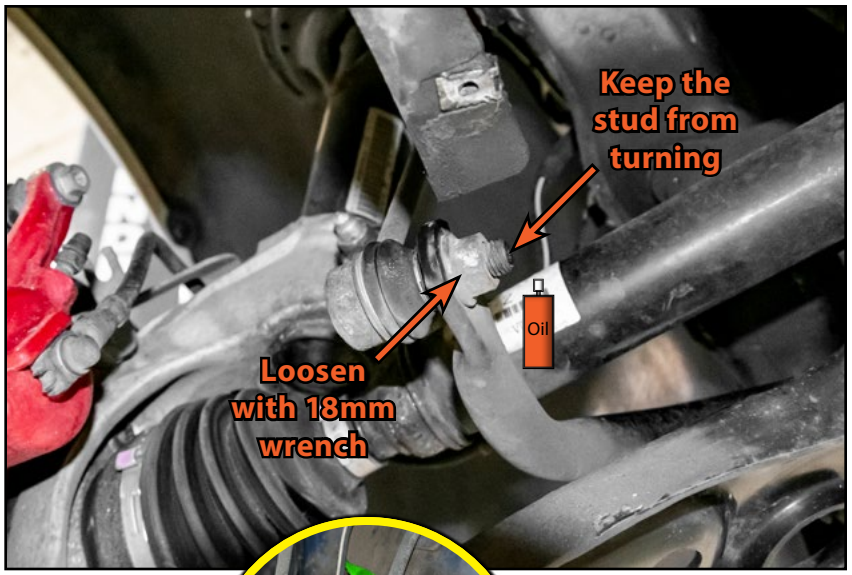
Remove the skid plate or insulation panel.

18mm Wrench, M6 Triple Square Socket & Ratchet

Disconnect both of the sway bar end links from the front sway bar. Counterhold the stud to keep it from turning, apply penetrating oil to the threads, then slowly work the nut back and forth until it can be removed.

TECH TIP

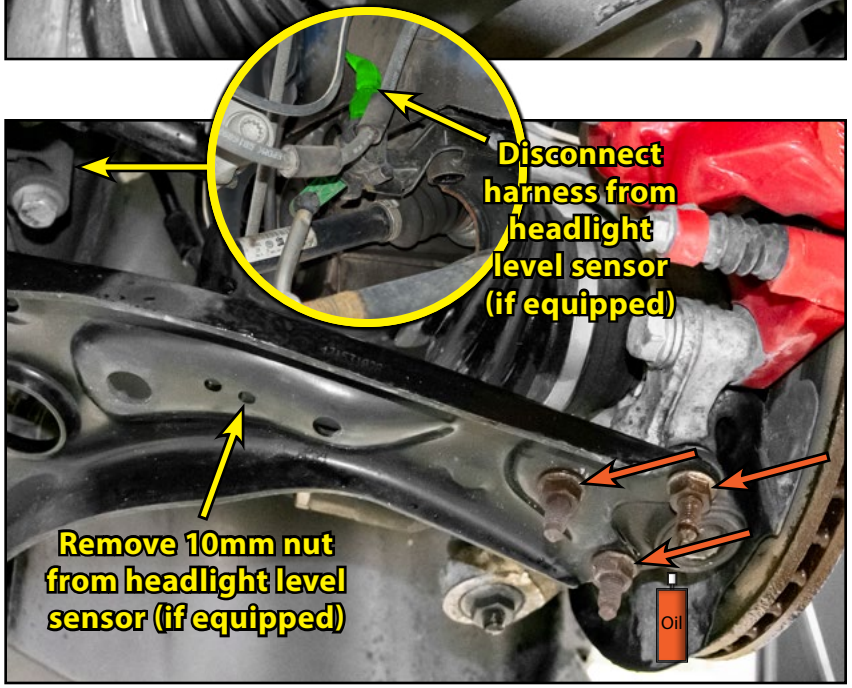
It is a good idea to use a spray lubricant/penetrating oil on this nut and any of the rusty fasteners you might encounter during this installation.



10mm & 16mm Sockets, Ratchet

Remove the three lower ball joint nuts (**ORANGE** arrows) from each side.

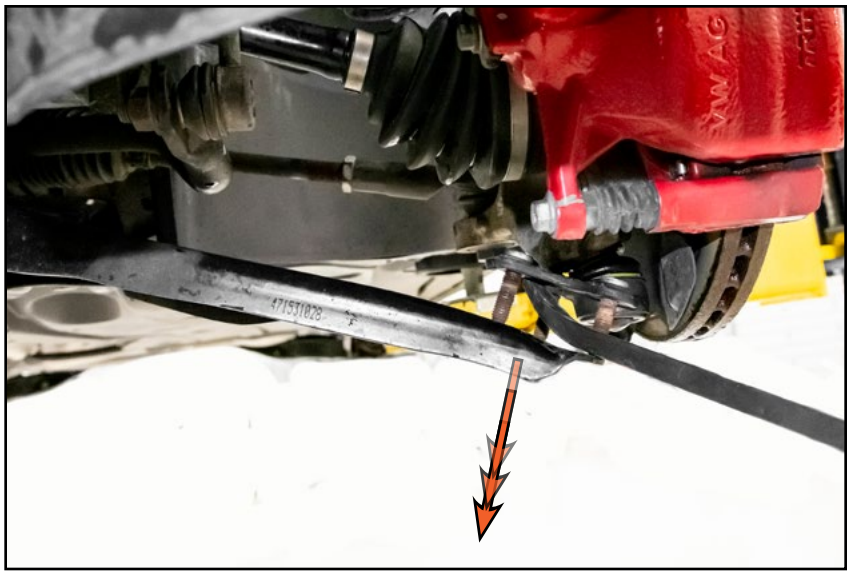
Vehicles with headlight leveling sensors only: Disconnect the wiring harness from each headlight leveling sensor, and remove the 10mm nut which secures each sensor to each control arm (**YELLOW** arrows and inset photo).



REMOVING THE ORIGINAL SWAY BAR

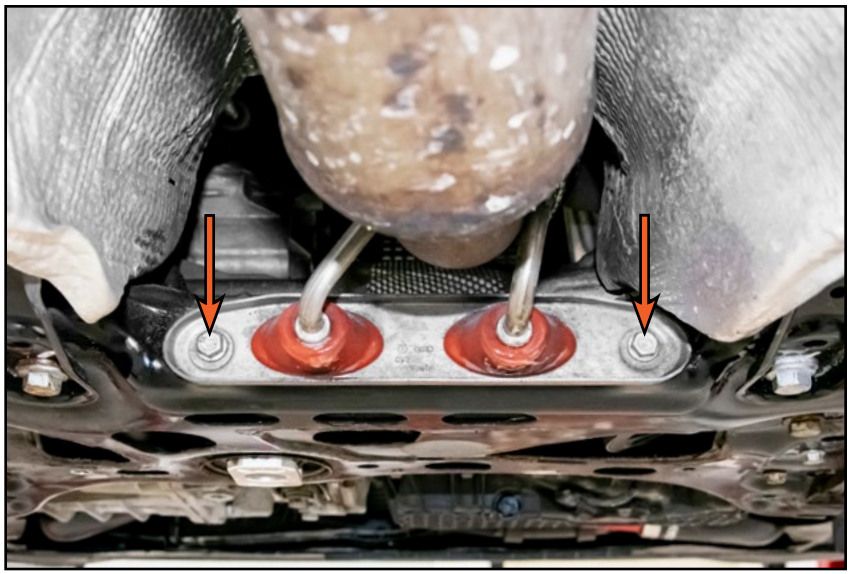
Step 5: Pry Bar

Pry down on each lower control arm to separate it from the ball joint and pull it off of the studs.



Step 6: 13mm Socket & Ratchet

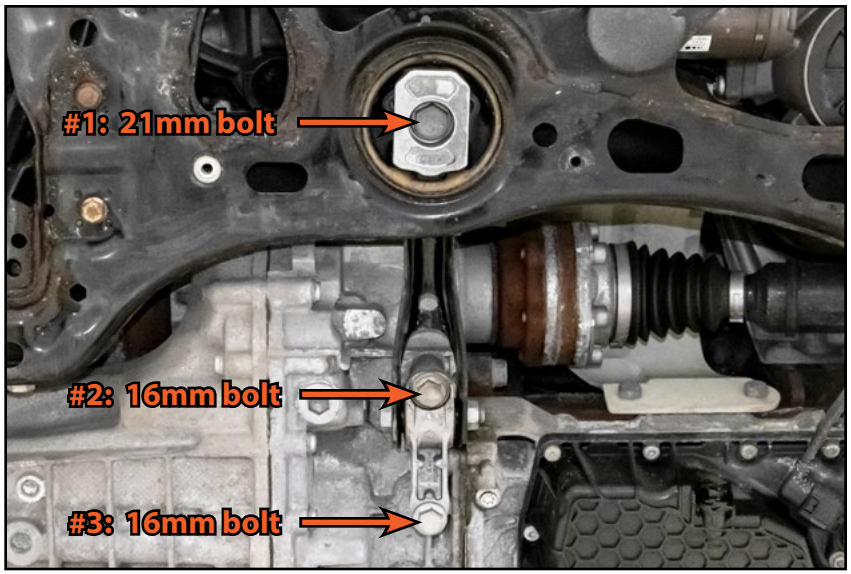
Remove the two exhaust hanger bolts (arrows) from the rear of the subframe.



REMOVING THE ORIGINAL SWAY BAR

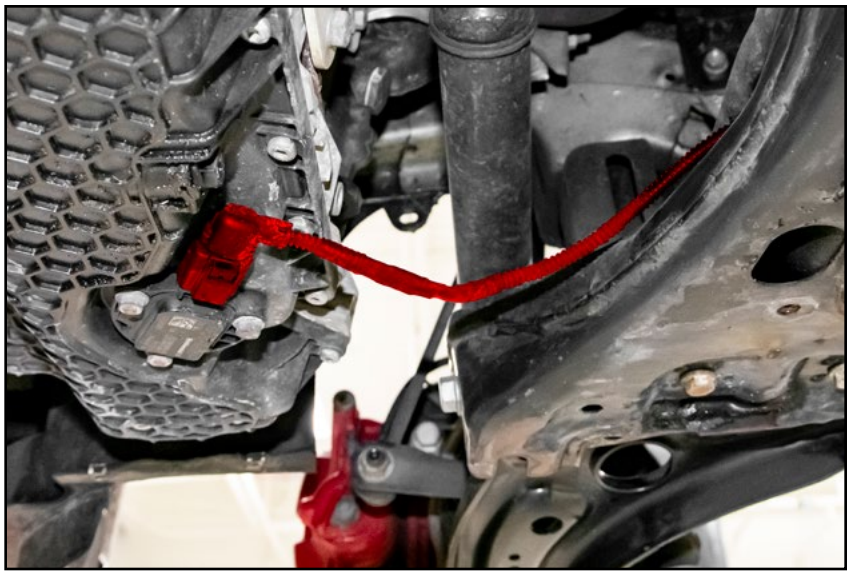
Step 7: 16mm, 21mm Socket & Ratchet

Remove the 21mm bolt (arrow) which secures the pendulum mount to the subframe, then the two bolts (arrows) which secure the pendulum mount to the transmission and pull the pendulum mount free from the subframe.



Step 8:

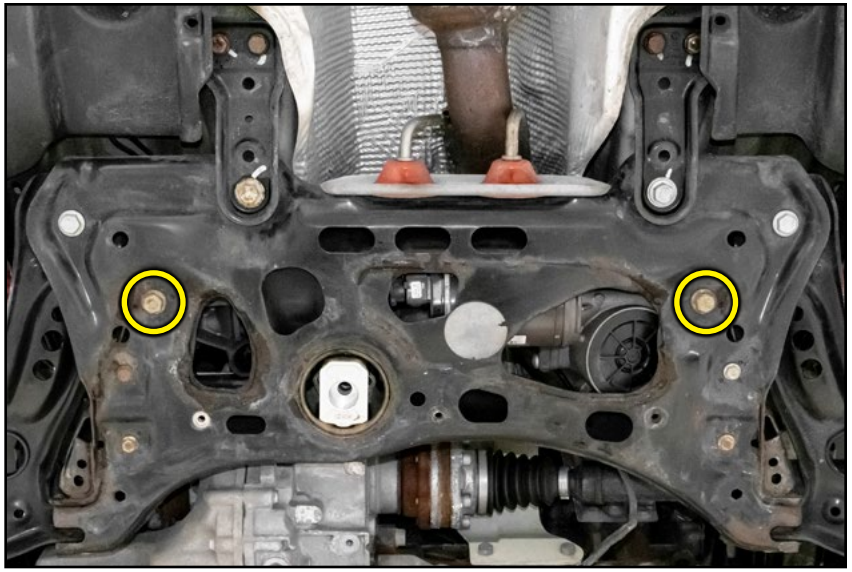
Disconnect the oil level sensor connector (highlighted in **RED**).



REMOVING THE ORIGINAL SWAY BAR

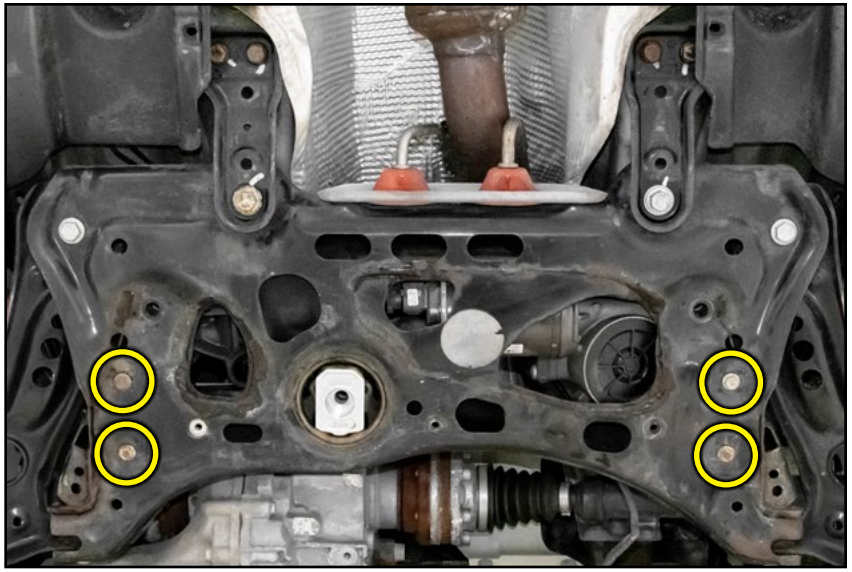
Step 9: 18mm Socket & Ratchet

Remove the two steering rack bolts (circled in **YELLOW**).



Step 10: 13mm Socket & Ratchet

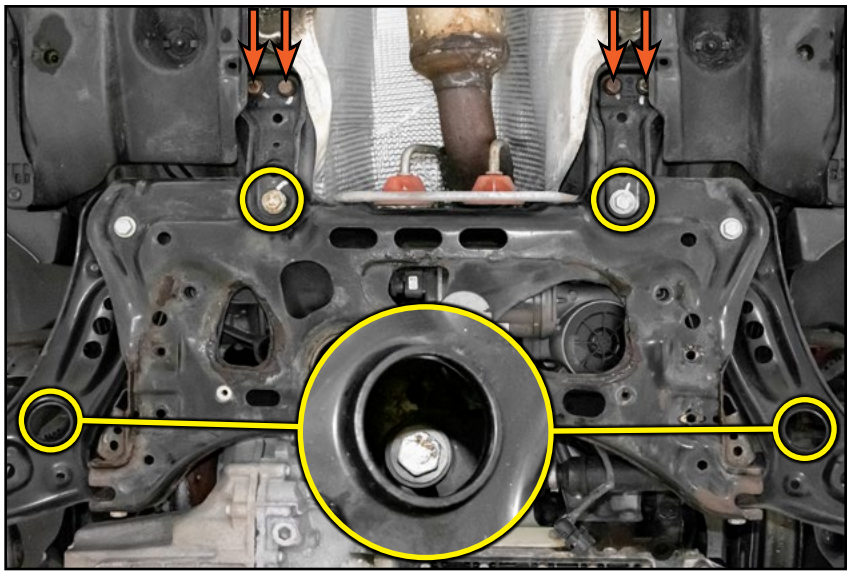
Remove the four sway bar bolts (circled in **YELLOW**).



REMOVING THE ORIGINAL SWAY BAR

Step 11: 16mm, 18mm Socket & Ratchet

Securely support the subframe from below with a transmission jack, then remove the two rear subframe bolts (circled in **YELLOW**). Remove the two front subframe bolts (inset photo). These bolts can be accessed through the opening in the lower control arm using an extension. Finally, remove the four bolts (arrows) which secure the subframe braces.



Step 12:

Lower the subframe slowly until you have just enough room to access the steering rack, then hang it up out of the way using mechanics wire. Free up the oil level sensor harness from the subframe.

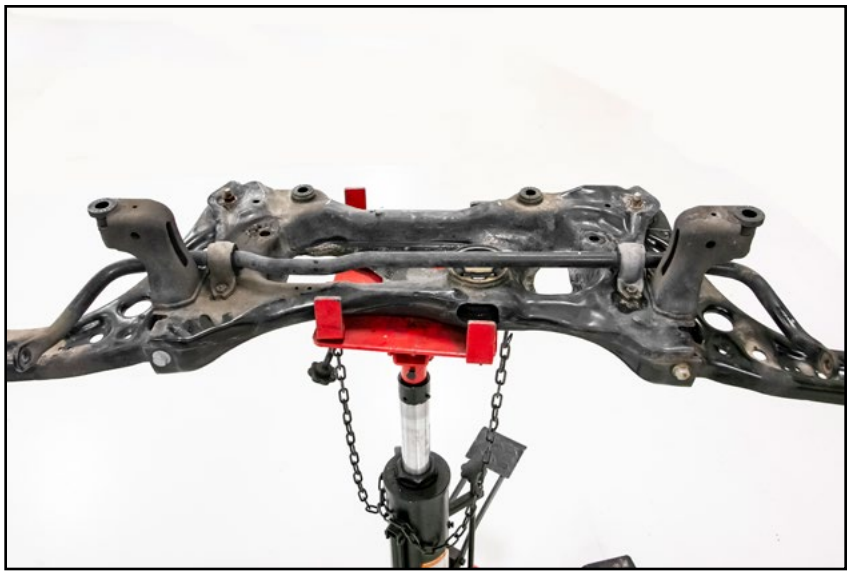
REMOVING THE ORIGINAL SWAY BAR

Step 13:

Remove the plastic rivet (highlighted in **RED**) which secures the steering rack wiring harness to the subframe. You will not be able to see it, as it is hidden in the top of the subframe.

Step 14:

Slowly lower the subframe from the vehicle as shown, then remove the original sway bar.



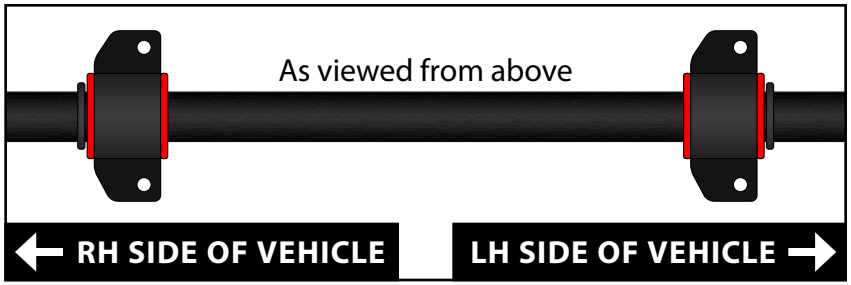
INSTALLING THE NEW SWAY BAR

Step 1:

Apply the provided poly grease to the inside of each bushing before installing them onto the sway bar.

Step 2:

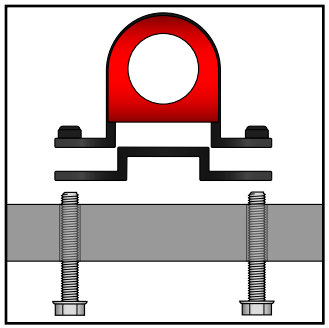
Slide the new bushings onto each end of the new sway bar (top photo), then slide the new upper mounting brackets over them as shown (bottom photo).



INSTALLING THE NEW SWAY BAR

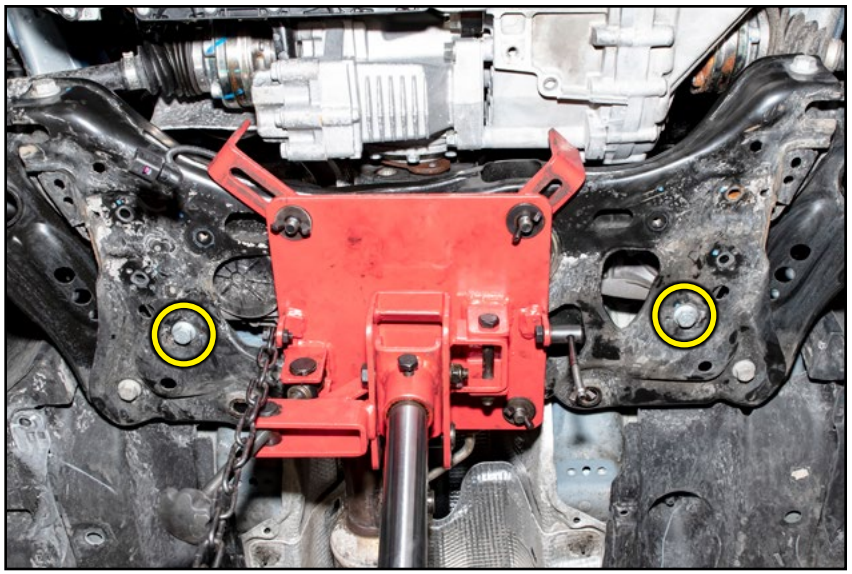
Step 3: 13mm Socket & Ratchet

Lay the lower mounting brackets into place then install the sway bar into the subframe (see illustration below). Slide the new bolts through the subframe and mounting brackets, tightening them until snug.



Step 4: 18mm Socket & Torque Wrench

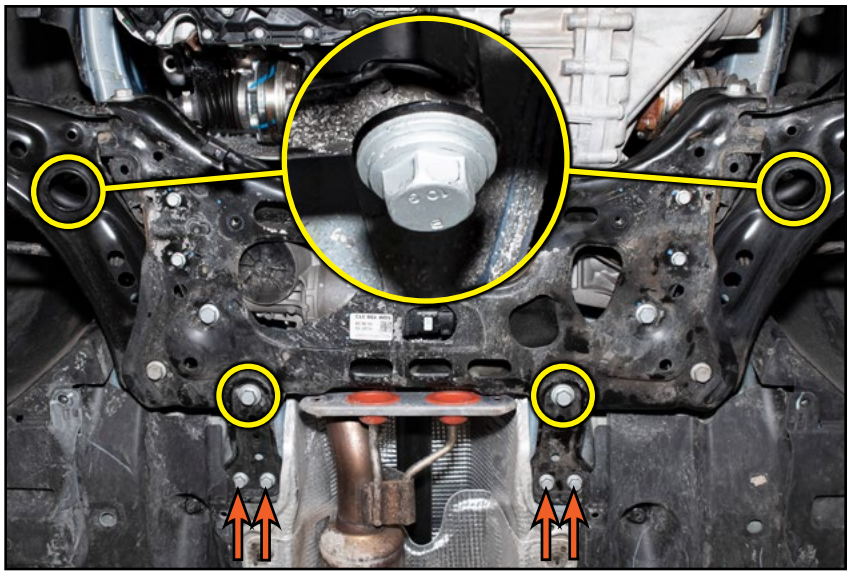
Carefully lift the subframe back into the vehicle and slide the oil level sensor harness back under the sway bar and into place. Slide the steering rack back into place and reinstall the push-rivet that secures the wiring harness to the subframe. Replace the steering rack bolts (circled in **YELLOW**) and torque them to 70 Nm (52 Ft-lbs) + 90°.



INSTALLING THE NEW SWAY BAR

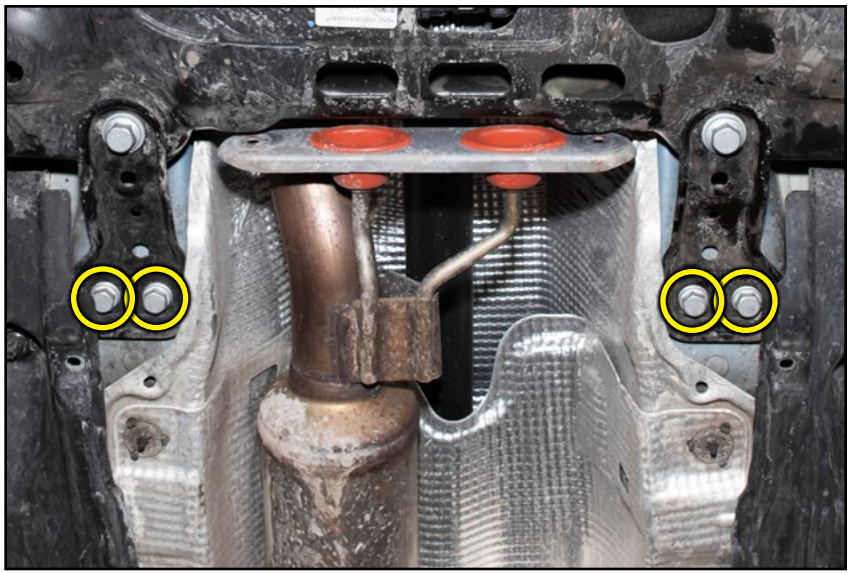
Step 5: 16mm, 18mm Socket & Torque Wrench

Install the four bolts (circled in **YELLOW**) which secure the subframe to the body and the four bolts (arrows) which secure the subframe braces to the body. Torque the subframe bolts to 70 Nm (52 Ft-lbs) + 180° in a diagonal pattern. Remove the transmission jack.



Step 6: 16mm Socket & Torque Wrench

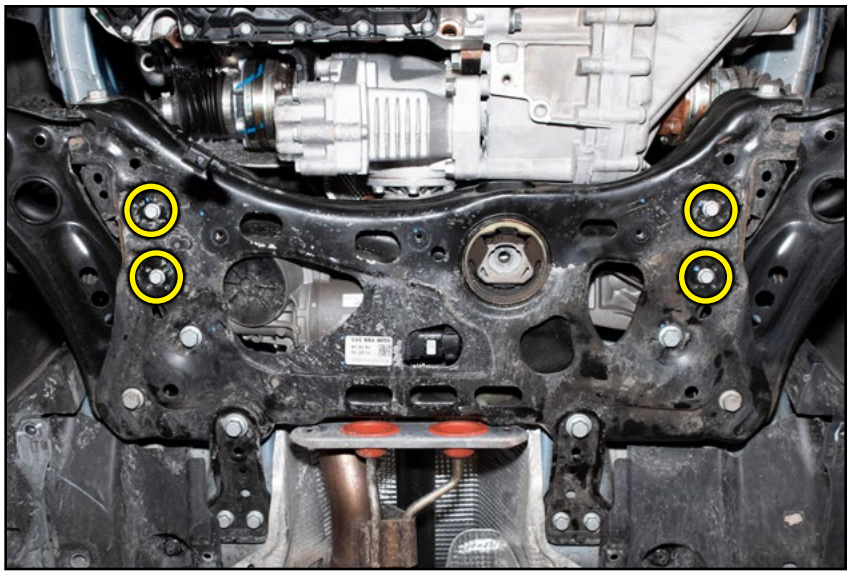
Torque the subframe brace bolts (circled in **YELLOW**) to 50 Nm (37 Ft-lbs) + 90°.



INSTALLING THE NEW SWAY BAR

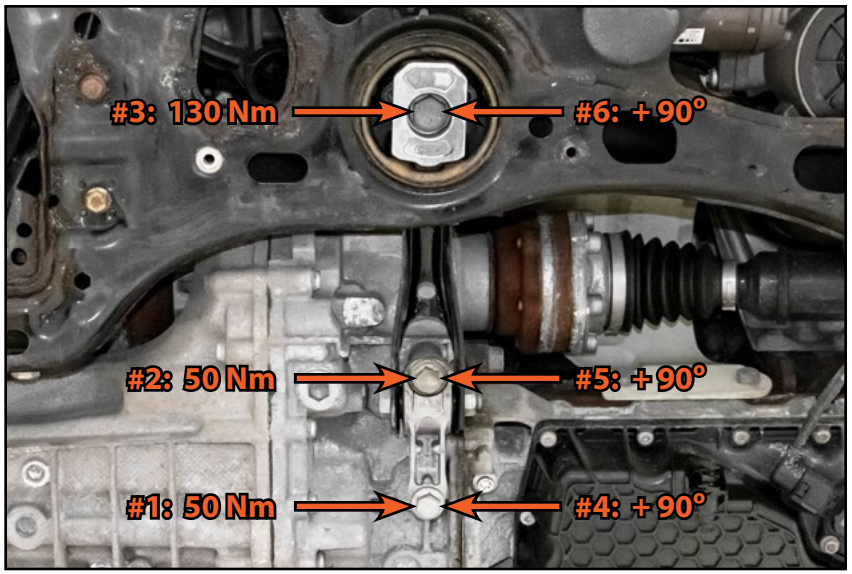
Step 7: 13mm Socket & Torque Wrench

Torque the sway bar bracket bolts (circled in **YELLOW**) to 20 Nm (15 Ft-lbs) + 180°.



Step 8: 16mm, 21mm Socket & Torque Wrench

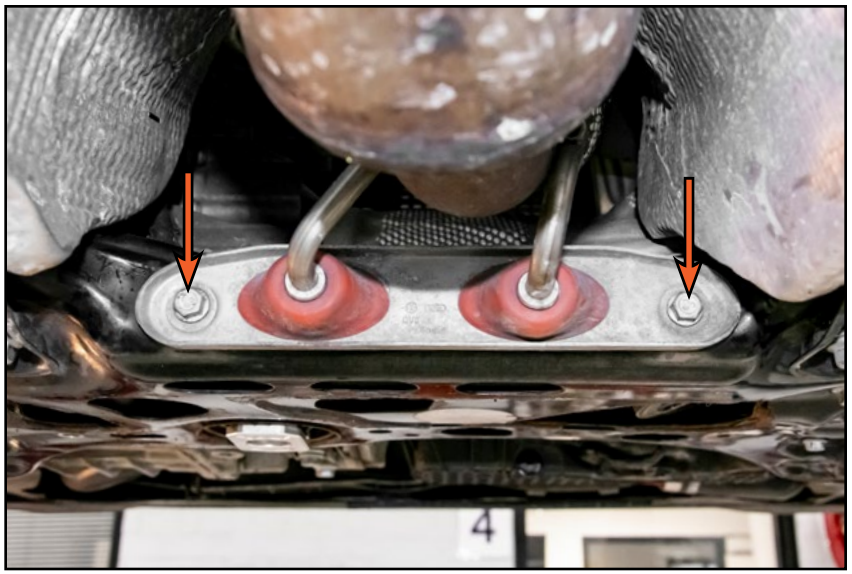
Reinstall the pendulum the subframe and replace the bolts. Torque the 16mm bolts to 50 Nm (37 Ft-lbs). Torque the 21mm bolt to 130 Nm (96 Ft-lbs). Finally, rotate all three bolts an additional 90°.



INSTALLING THE NEW SWAY BAR

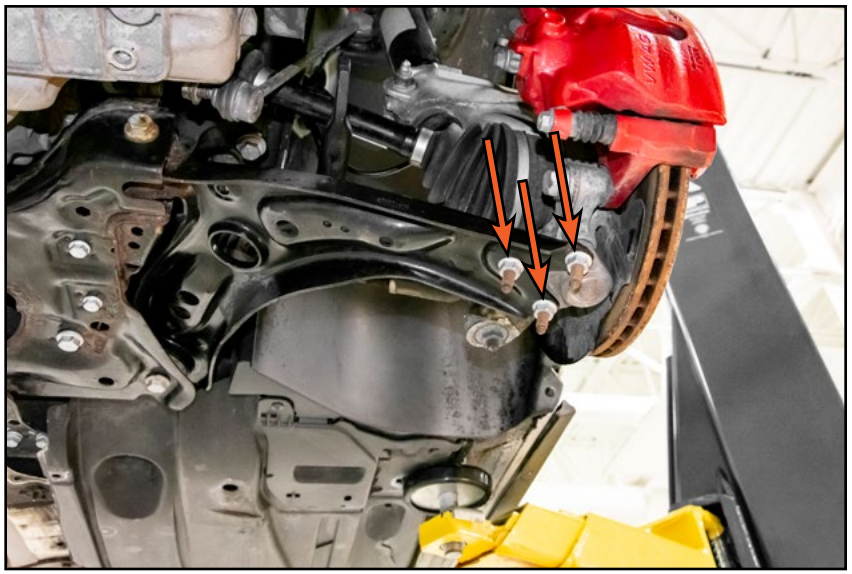
Step 9: 13mm Socket & Torque Wrench

Reinstall the downpipe mount bolts and torque them to 25 Nm (18 Ft-lbs).

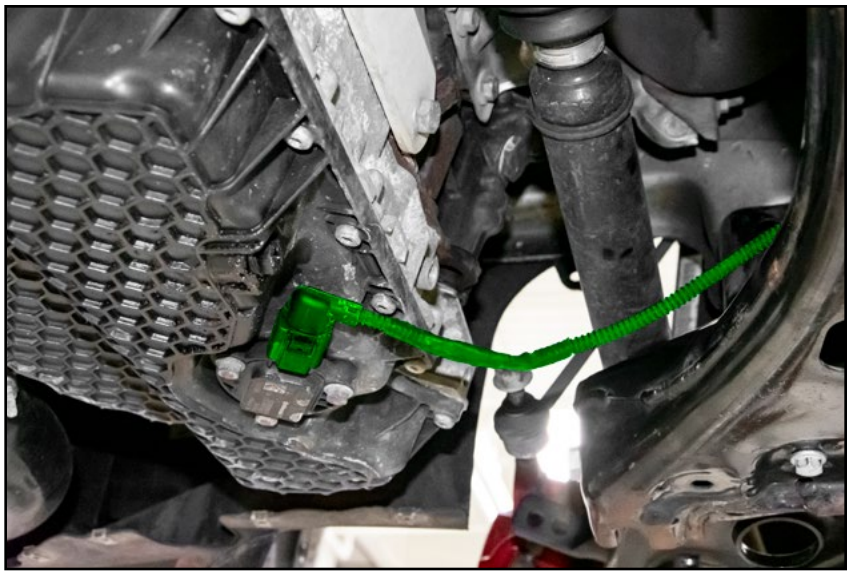


Step 10: 16mm Socket & Torque Wrench

Replace the ball joint nuts and torque them to 40 Nm (30 Ft-lbs) + 45°.



Route the oil level sensor (highlighted in **GREEN**) under the sway bar and reconnect it as shown.



TECH TIP

To maximize clearance between the new sway bar and surrounded components we highly recommend purchasing a set of our adjustable sway bar end links HERE.

18mm Wrench, M6 Triple Square Socket & Ratchet

Reconnect each sway bar end links to the sway bar and tighten each nut to 65 Nm (48 Ft-lbs).

- [ ] Reinstall the headlight leveling sensors (if equipped).
- [ ] Reinstall the skid plate or insulation panel.
- [ ] Reinstall the wheels.
- [ ] Perform a four-wheel alignment.

Congratulations, your installation is complete!

Your Adjustable Front Sway Bar installation is complete!

These instructions are provided as a courtesy by ECS Tuning

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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