



BMW F2x/F3x Adjustable Front Sway Bar Installation

Replacing the weak, undersized factory front sway bar on your F2x/F3x with our upgraded Turner Motorsport sway bar will help to reduce body roll and understeer. Made of strong DOM tubing and blue powder coated for corrosion resistance, these sway bars perform as well as they look! We pair each sway bar with greasable polyurethane bushings, and black anodized 6061-T6 billet bushing brackets.

Our adjustable front sway bars feature two mounting points for the end links, this allows you to easily fine-tune the sway bar stiffness and vehicle handling balance.

Install time: 15-30 minutes with the subframe removed (or partially lowered for better access)

Please familiarize yourself with these instructions before starting your install.



Front Sway Bar Kit Parts List:

Upgraded Front Sway Bar	(QTY 1)
Billet Bushing Brackets	(QTY 2)
Black Polyurethane Bushings	(QTY 2)

These installation instructions have been broken up into several sections:

1) Front Sway Bar Installation

[\(Page 2\)](#)

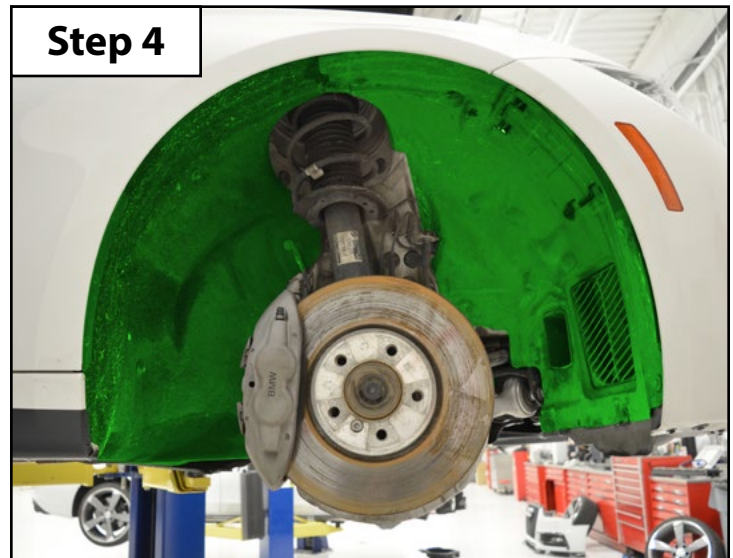
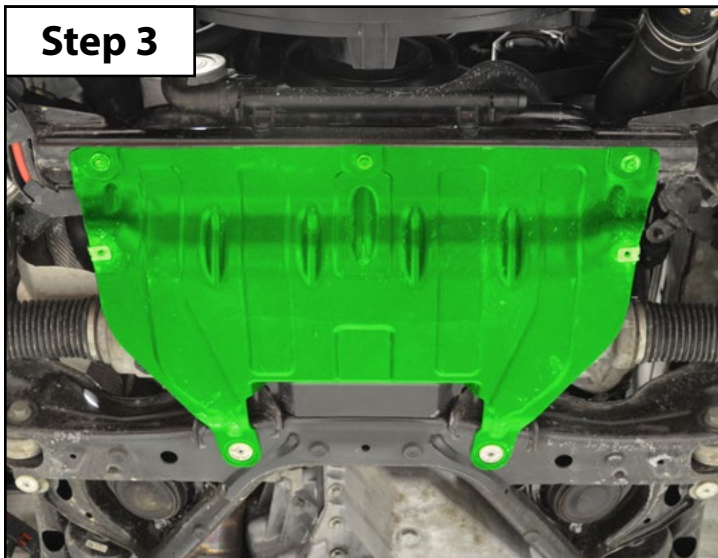
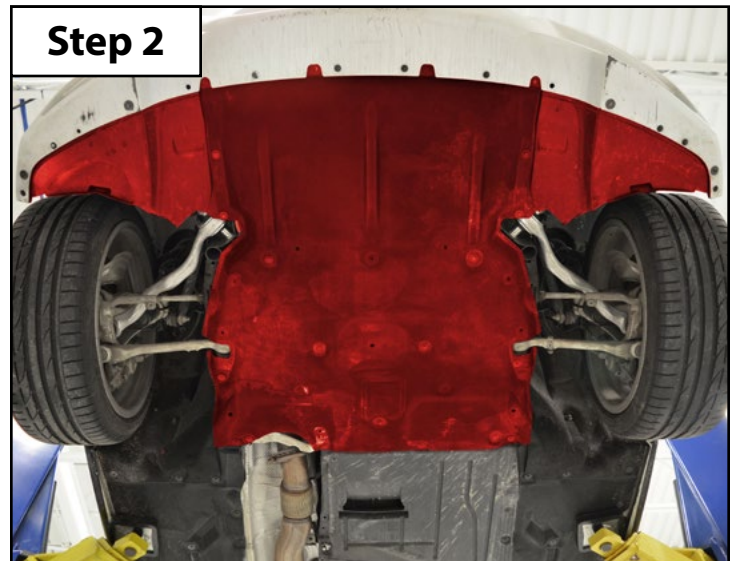
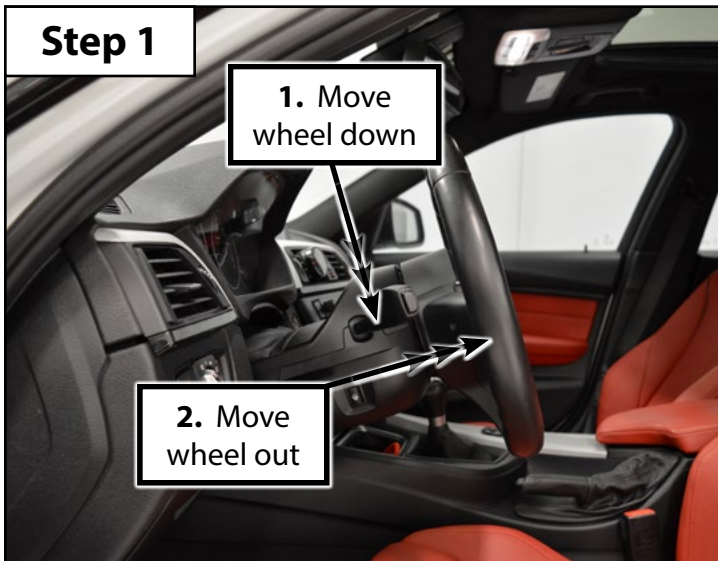
2) Front Subframe Reassembly

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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.

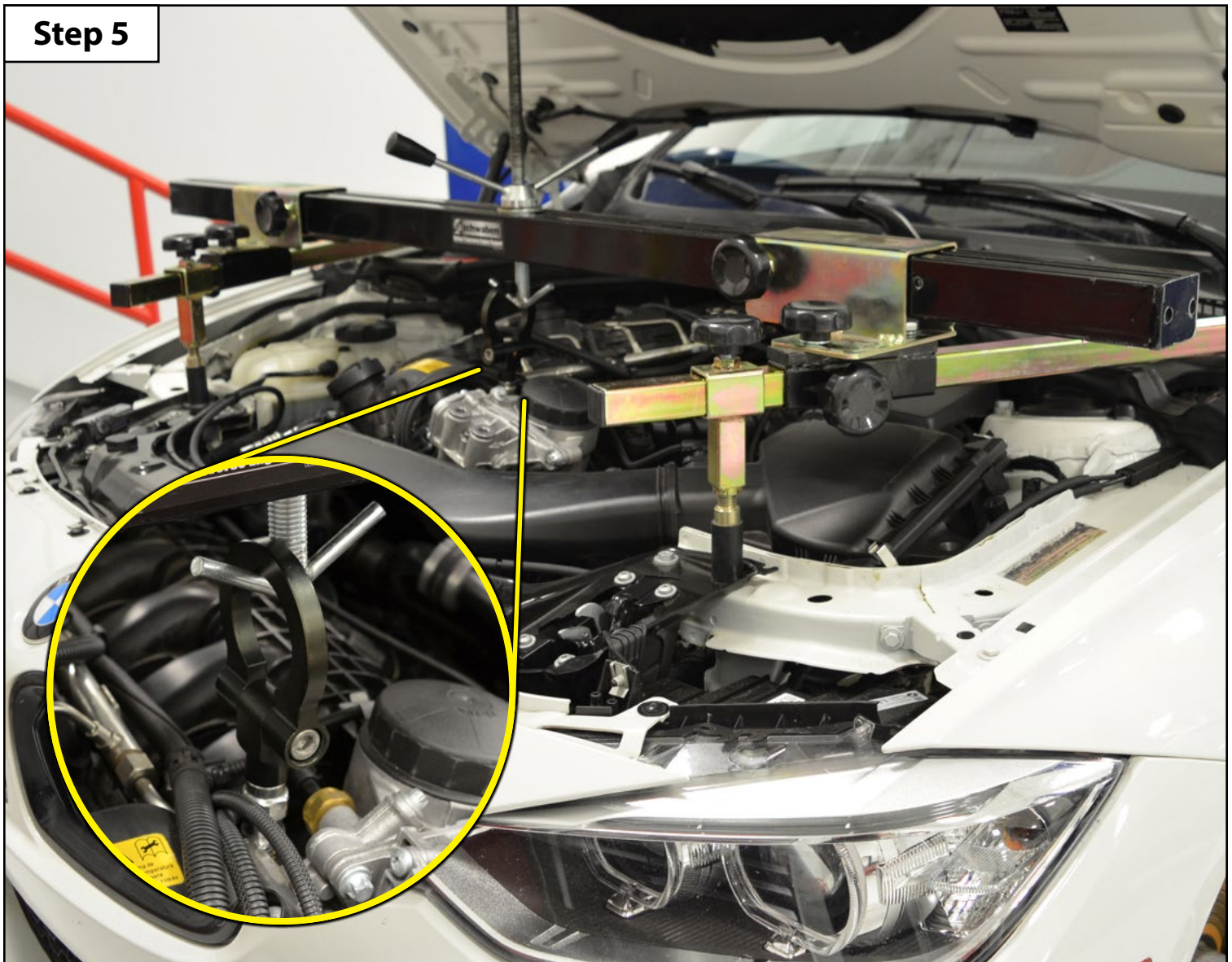
Section 1: Front Sway Bar Installation

- Step 1**
- Extend the steering column away from the dashboard as far back (toward the seat) and down as possible.
 - Rotate the steering wheel to its straight ahead position.
 - Disconnect the negative (-) battery terminal, then cover the battery post to prevent accidental contact.
- Step 2**
- Remove all of the OEM insulation panels underneath the vehicle (highlighted in **RED**).
- Step 3**
- Remove the power steering rack protective panel (highlighted in **GREEN**).
- Step 4**
- Remove all four wheels.
 - Remove the front fender liners on both sides (highlighted in **GREEN**).



Section 1: Front Sway Bar Installation

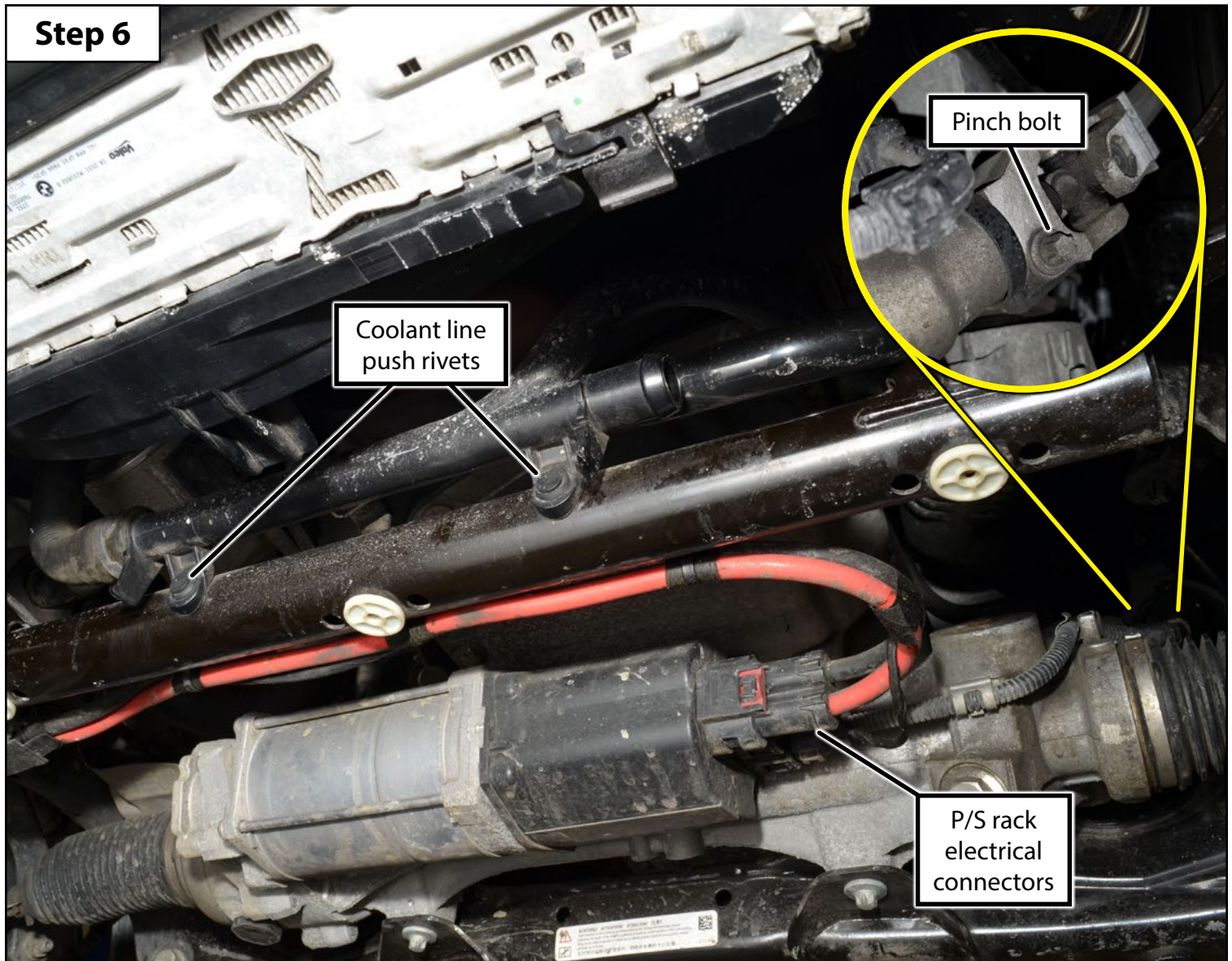
- Step 5**
- Install an engine support bar to hold the powertrain in place.
 - **Tech Tip:** A factory tow hook from an E9x or older BMW can be threaded into a hole near the front of the cylinder head (**YELLOW** inset photo).



Section 1: Front Sway Bar Installation

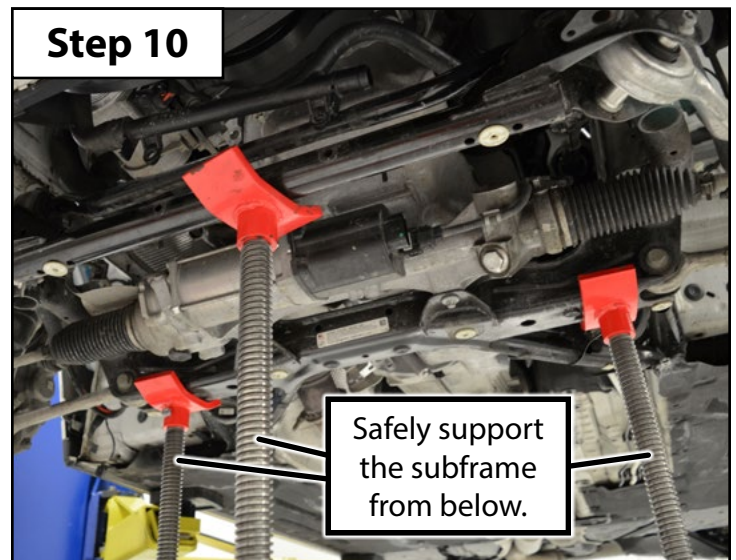
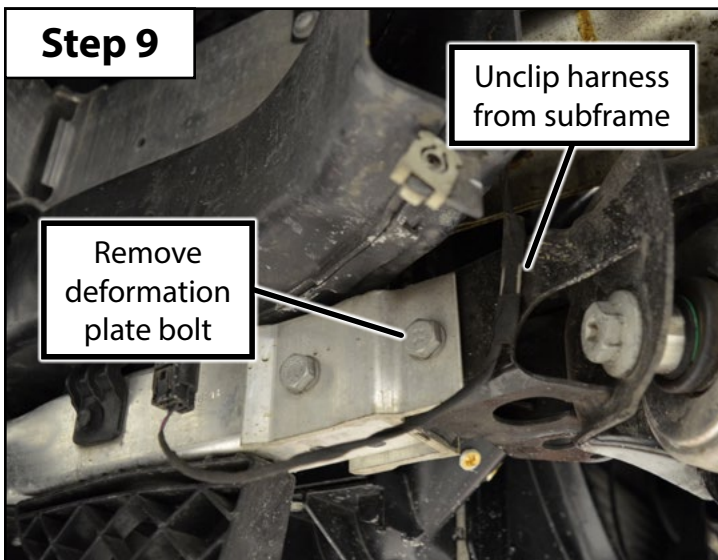
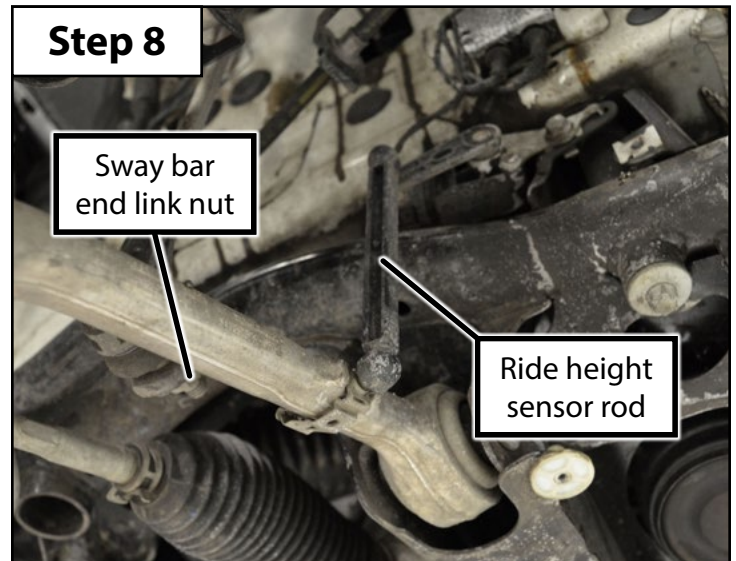
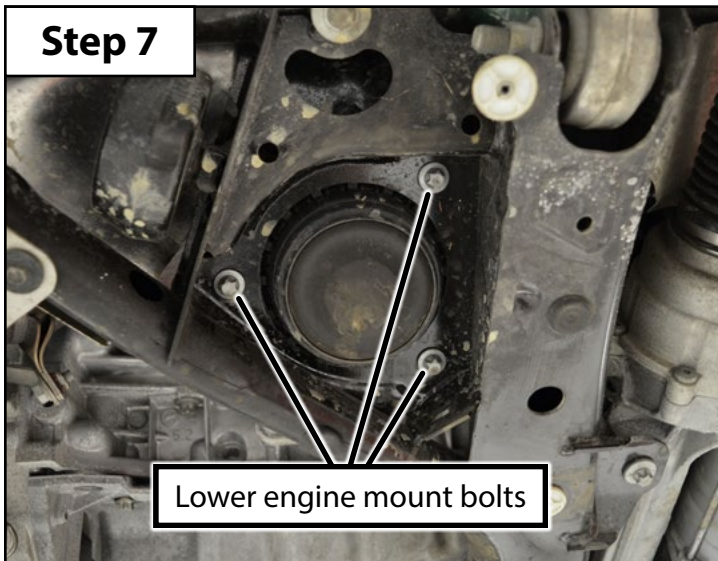
Step 6

- Release the two push rivets which secure the coolant pipe to the front of the subframe.
- Unlock and release the two front most electrical connectors from the power steering rack.
 - The rear most connector is affixed to the rack on both ends and does not need to be removed.
- Remove the pinch bolt from the lower steering shaft u-joint (**YELLOW** inset photo).
- Pull the steering shaft off of the steering rack.
 - **Tech Tip:** The nearby coolant hose is an ideal place to secure the shaft out of the way with a zip tie.



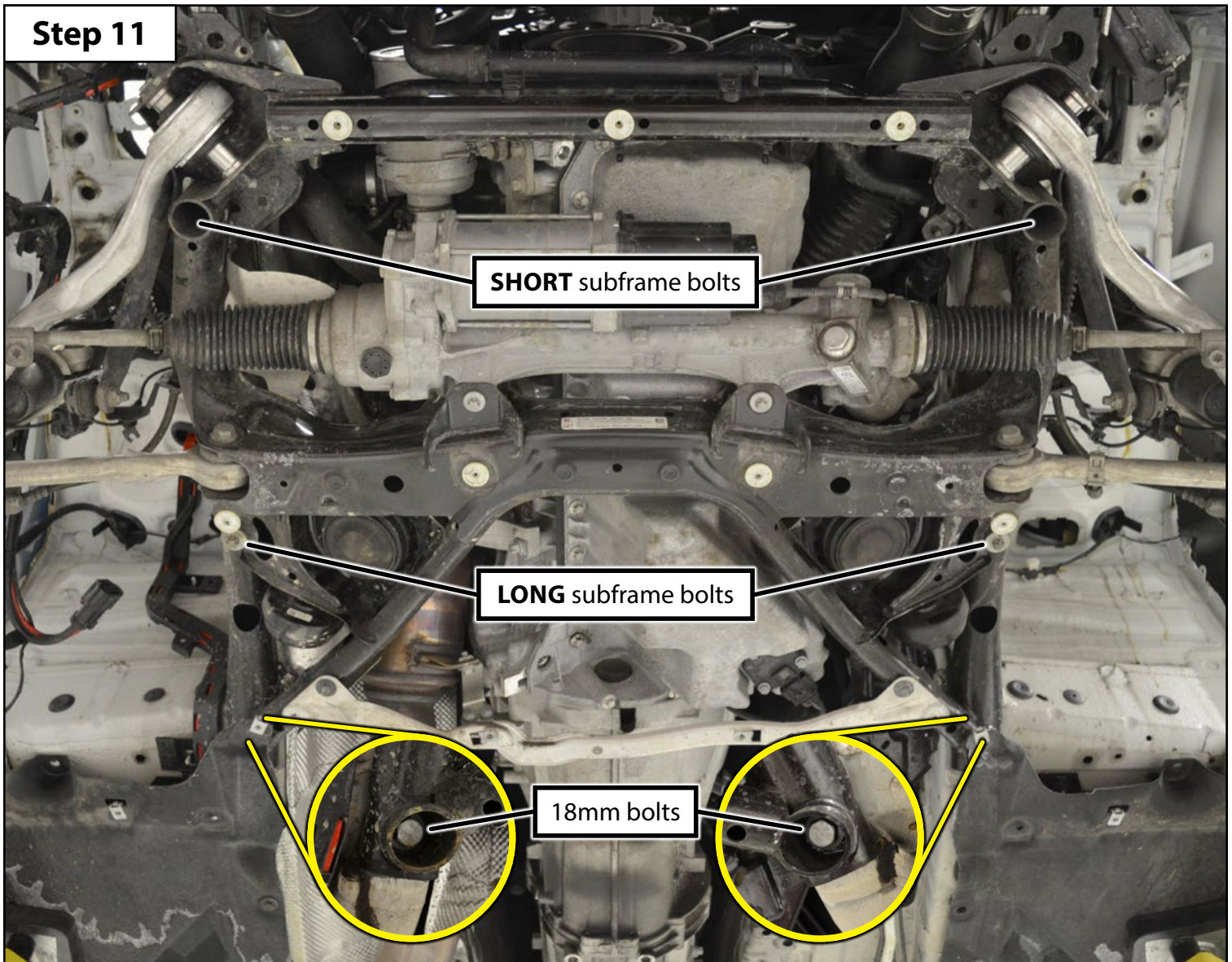
Section 1: Front Sway Bar Installation

- Step 7**
- Remove the lower engine mount bolts (3x on each side).
- Step 8**
- Release the ride height sensor rod from the LH lower control arm (if equipped).
 - Release the end links from the both sides of the front sway bar.
- Step 9**
- Working on the LH side of the vehicle, release the wiring harness clip from the subframe.
 - Remove the 13mm bolt which secures the front of the subframe to the deformation plate.
- Step 10**
- Safely support the subframe from below.



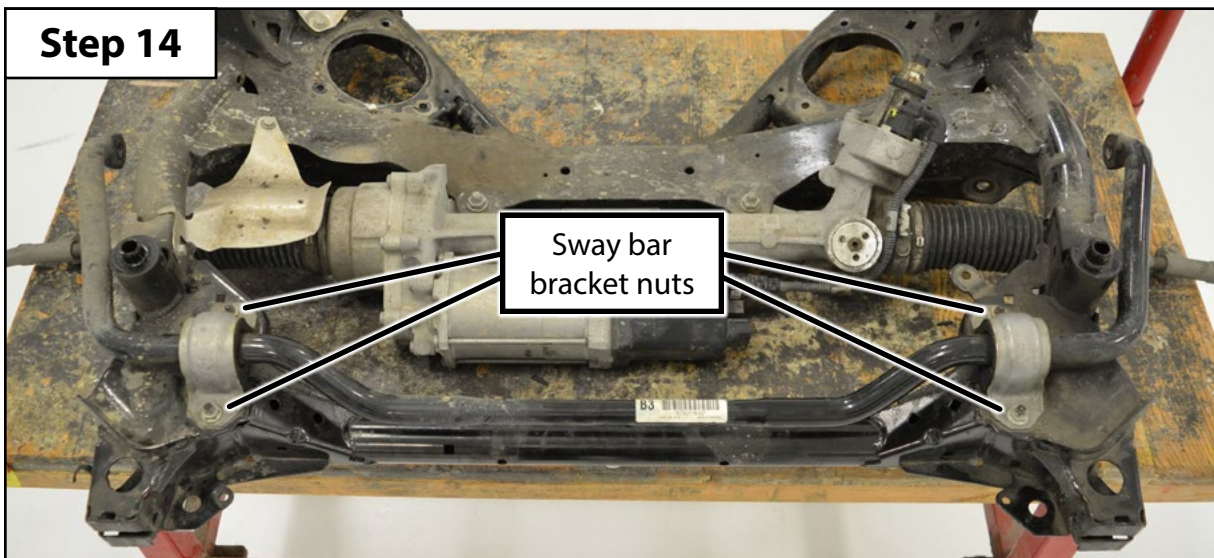
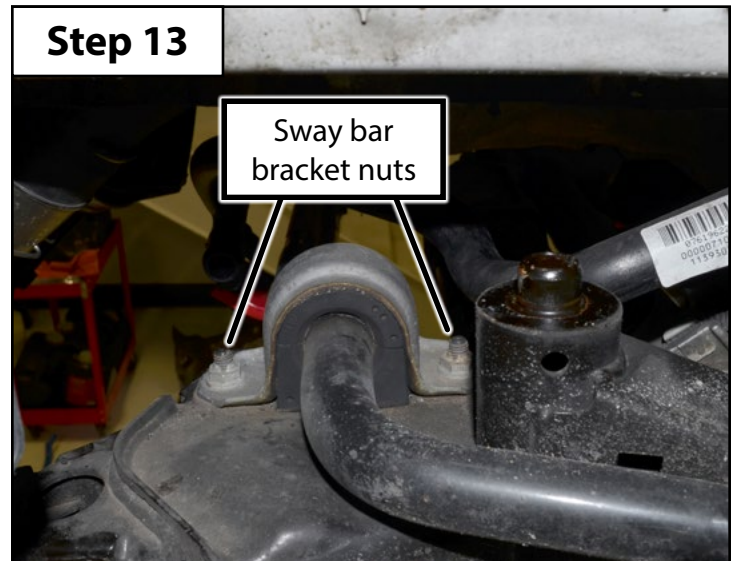
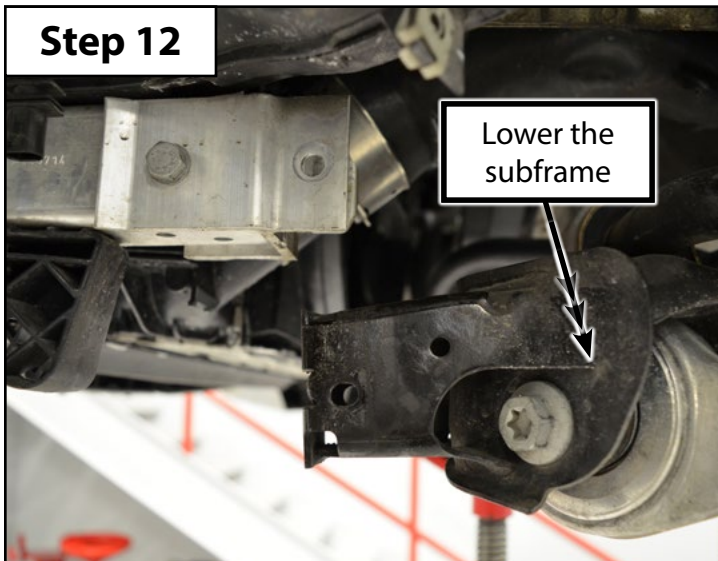
Section 1: Front Sway Bar Installation

- Step 11**
- Remove all eight bolts from the subframe.
 - Note:** The rear most bolts are partially obscured by the underbelly side panels (**YELLOW** inset photos).



Section 1: Front Sway Bar Installation

- Step 12**
- Lower the subframe no more than 4 inches, we **ARE NOT** completely removing the subframe. The goal is to gain enough room to be able to access and remove the front sway bar between the subframe and the body.
 - Tech Tip:** Use extreme caution while lowering the subframe, be absolutely certain that no components will be stretched or damaged before proceeding.
- Step 13**
- This photo shows the added room you will now have to access the front sway bar brackets.
- Step 14**
- This photo shows the subframe removed from the vehicle for better visibility.
 - Remove the nuts which secure the OEM sway bar to the subframe.
 - Remove the sway bar by sliding it out between the subframe and the body.

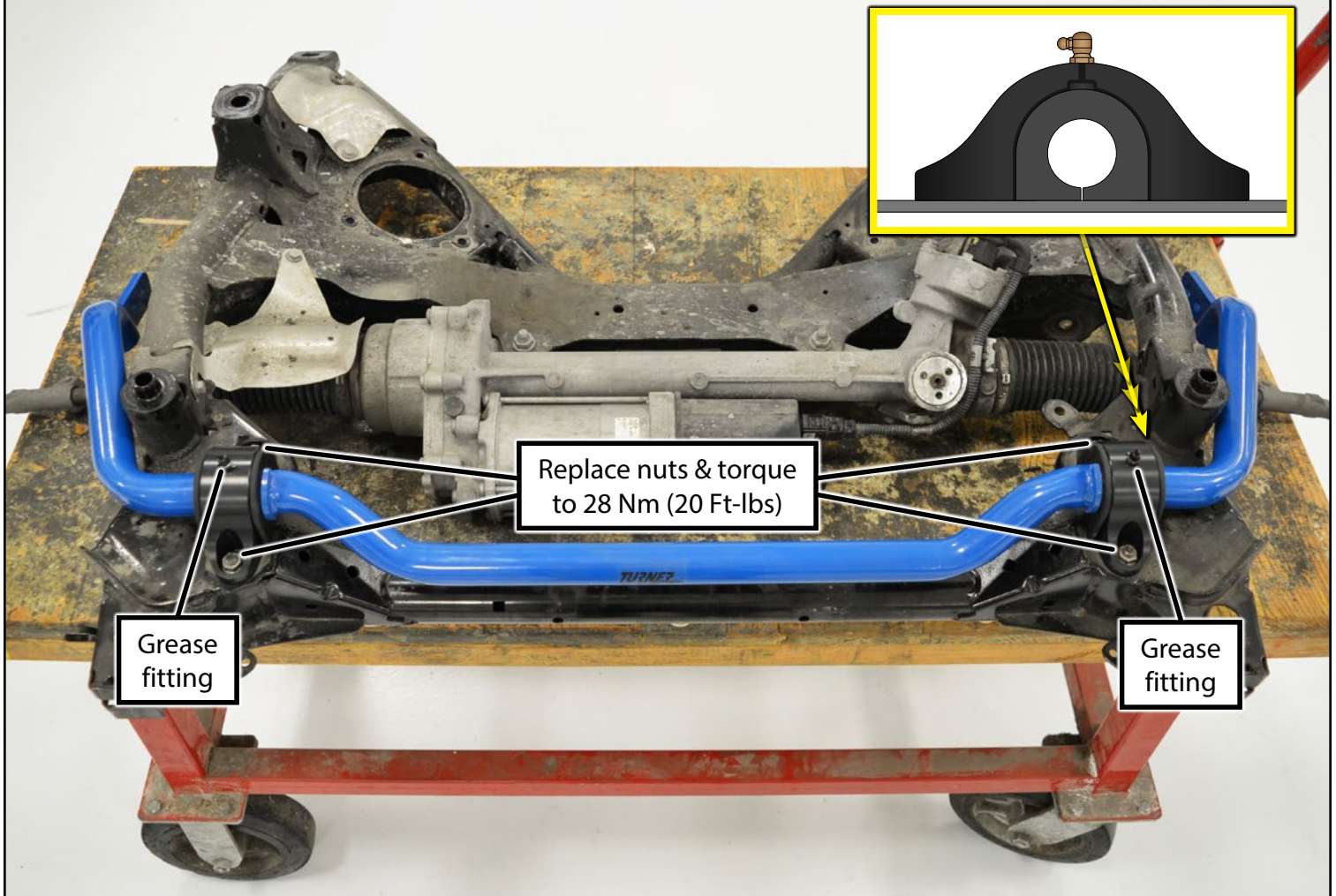


Section 1: Front Sway Bar Installation

Step 15

- Install the new bushings and brackets onto the new sway bar.
 - Reference the **YELLOW** inset photo for proper bushing orientation.
- Install the new sway bar onto the subframe and tighten the new 13mm nuts to 28 Nm.
- Be sure to orient the grease fittings so that they are easily accessible for future service.
 - Please note that the photos below show straight grease fittings installed into the brackets, but your brackets will come with 90° fittings installed.
 - We found that when the 90° fittings are turned toward the front of the vehicle we could reach them from below with the belly pan removed.

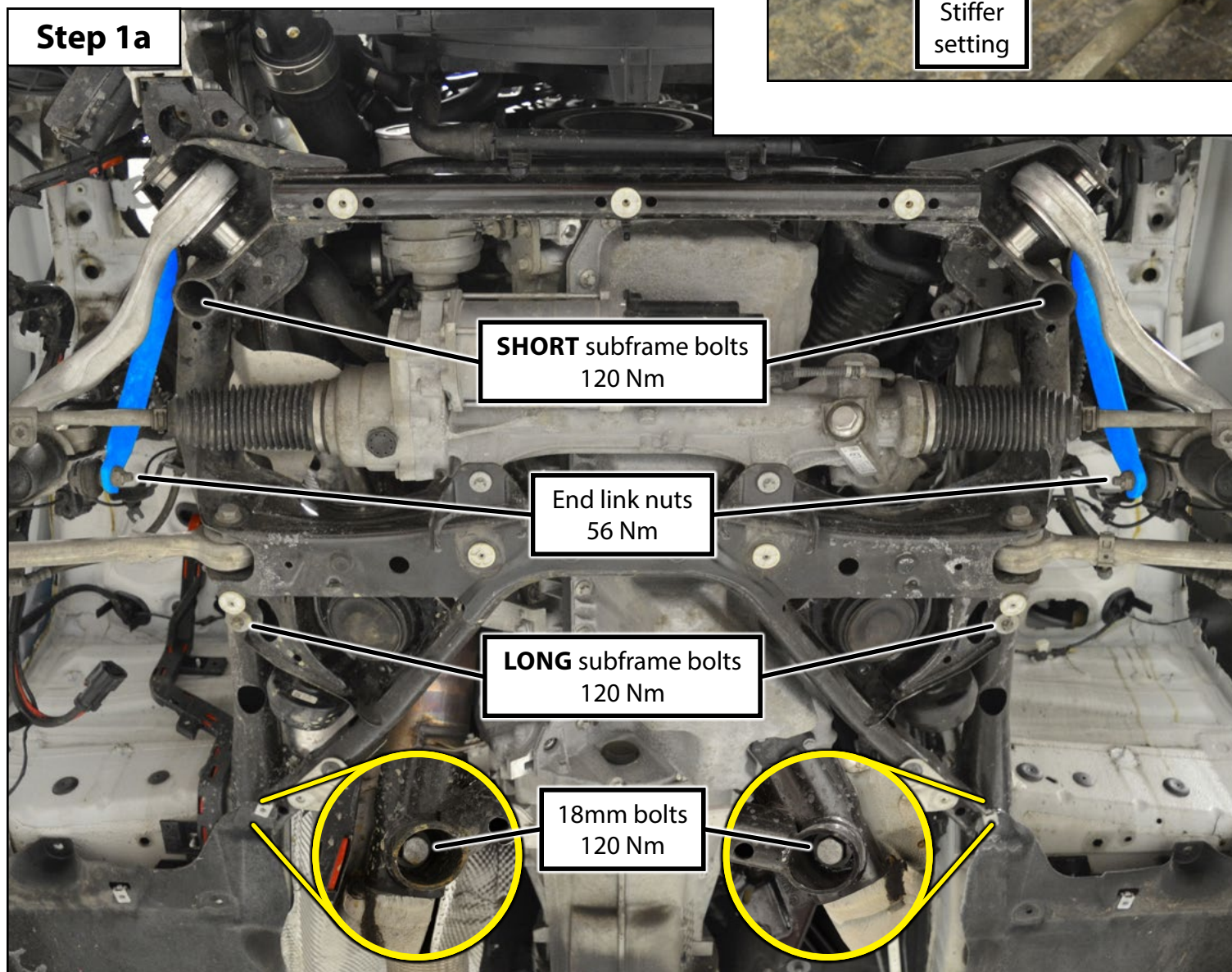
Step 15



Section 2: Front Subframe Reassembly

Step 1

- Lift the front subframe back up into place underneath the vehicle.
- Tighten the subframe bolts to 120 Nm (Step 1a photo below).
- Install the sway bar end links into the new sway bar and tighten them to 56 Nm.
 - Reference the Step 1b photo below and choose your desired stiffness setting.
- Reconnect the ride height sensor rod to the LH lower control arm (if equipped).



Section 2: Front Subframe Reassembly

- Step 2**
- Replace the lower engine mount bolts. Torque them to 19 Nm (Step 2 photo).
- Step 3**
- Working on the LH side of the vehicle, release the wiring harness clip from the subframe (Step 3 photo).
 - Reinstall the 13mm bolts which secure the front of the subframe to the deformation plates. Torque them to 19 Nm.
- Step 4**
- Be sure to orient the 90° grease fittings so that they are easily accessible for future service (Step 4 photo).
 - Perform a 4-wheel alignment.

