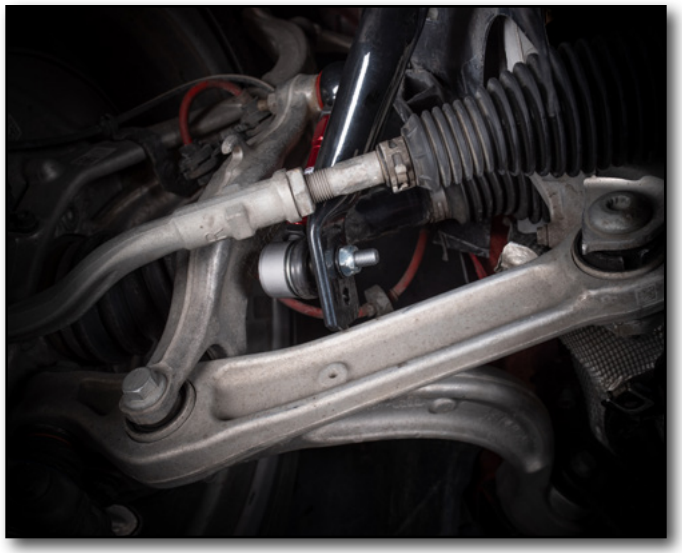
Audi B9 Adjustable Front Sway Bar Installation Instructions - ES4027361

Skill Level
2 - Moderate

Some Experience Recommended



REQUIRED TOOLS

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

Standard Automotive Tools

- 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#2834951
- **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

Required For This Install

- 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

Available On Our Website

Specialty Tools

- **Triple Square Sockets** ES#1910125

SHOP SUPPLIES AND MATERIALS

Standard Shop Supply Recommendations: We recommend that you have a standard inventory of automotive shop supplies before beginning this or any automotive repair procedure. The following list outlines the basic shop supplies that we like to keep on hand. Shop supplies with a hyperlink are available on our website.

- Hand Cleaner/Degreaser - Click Here
- Pig Mats - for protecting your garage floor and work area from spills and stains - Click Here
- Spray detailer - for rapid cleaning of anything that comes into contact with your paint such as brake fluid - Click Here
- Micro Fiber Towels - for cleaning the paint on your car - Click Here
- Latex Gloves - for the extra oily and dirty jobs - Click Here
- Medium and High Strength Loctite Thread lock compound - to prevent bolts from backing out - Click Here
- Anti-Seize Compound - to prevent seizing, galling, and corrosion of fasteners - Click Here
- Aerosol Brake/Parts Cleaner - for cleaning and degreasing parts
- Shop Rags - used for wiping hands, tools, and parts
- Penetrating oil - for helping to free rusted or stuck bolts and nuts
- Mechanics wire - for securing components out of the way
- Silicone spray lube - for rubber components such as exhaust hangers
- Paint Marker - for marking installation positions or bolts during a torquing sequence
- Plastic Wire Ties/Zip Ties - for routing and securing wiring harnesses or vacuum hoses
- Electrical tape - for wrapping wiring harnesses or temporary securing of small components

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.
- Whether lifting a vehicle using an automotive lift or a hydraulic jack, be sure and 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.

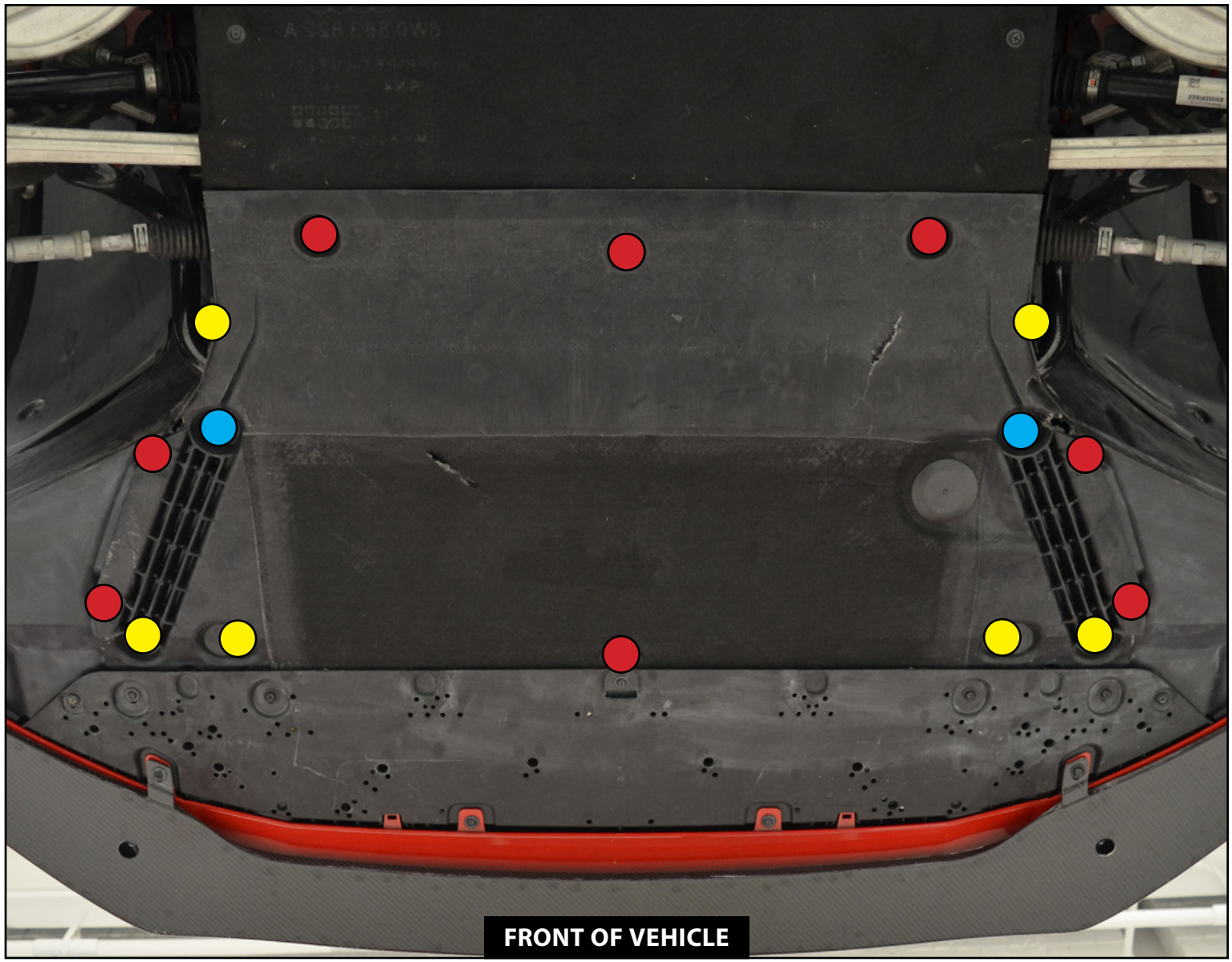
NEVER get underneath a vehicle that is supported only by a jack, and ALWAYS make sure that the vehicle is securely supported on jack stands.

REMOVING THE STOCK SWAY BAR

Step 1:

Safely lift and support the vehicle. Remove all of the fasteners from the engine insulation panel using the photo on the right and the color guide below for reference.

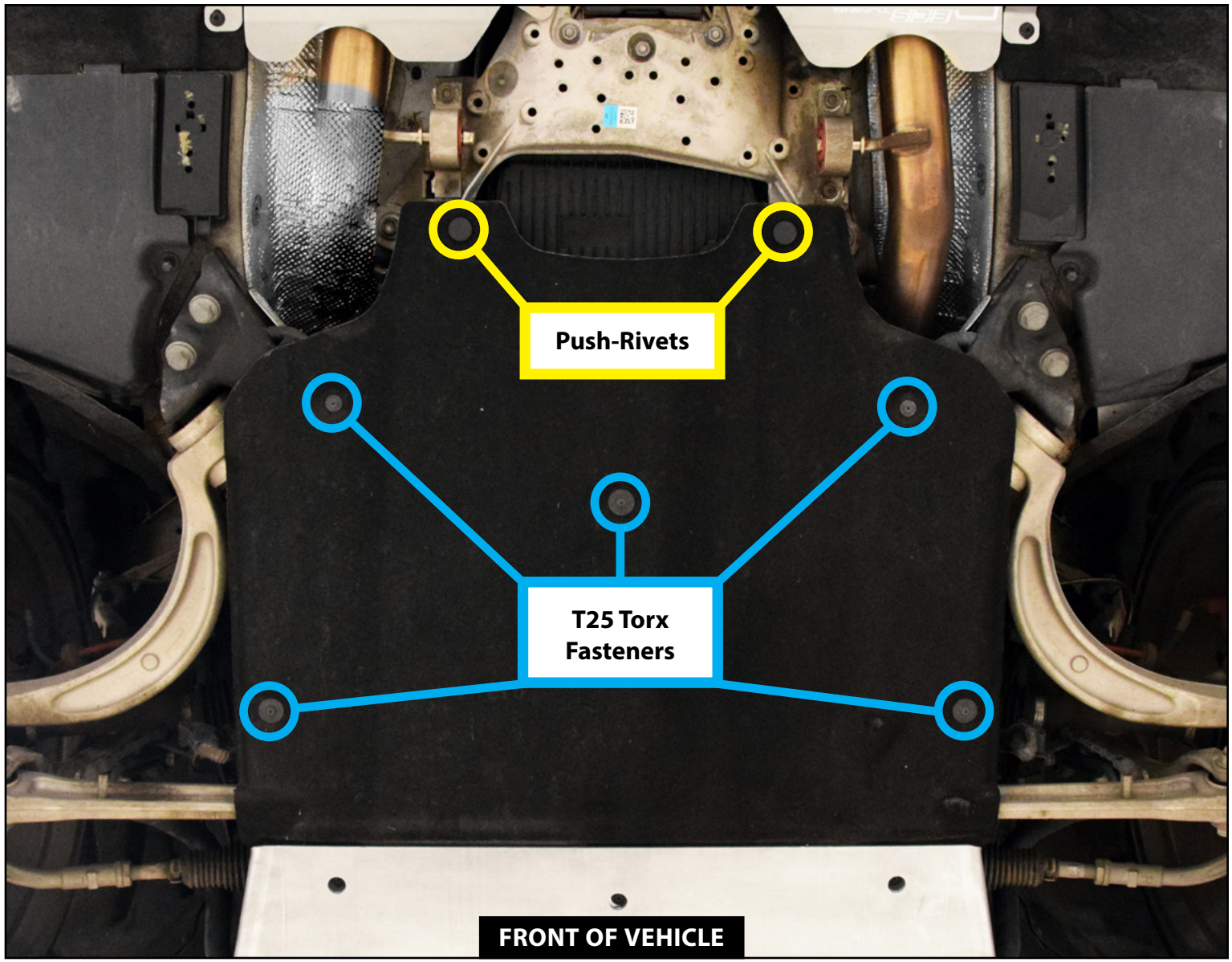
- T25 Torx **(QTY 8)**
- T30 Torx **(QTY 4)**
- 13mm **(QTY 2)**



REMOVING THE STOCK SWAY BAR

Step 2:

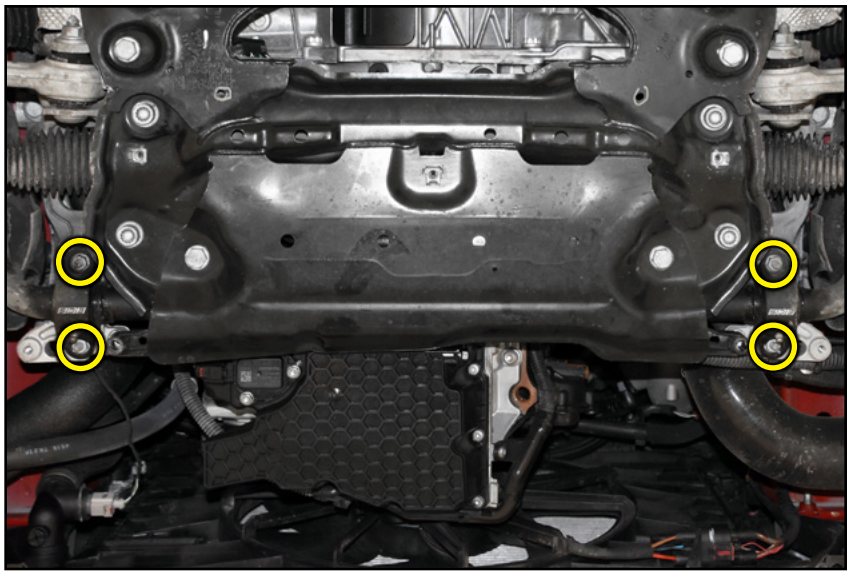
Remove the five T25 Torx fasteners (circled in **BLUE**) and the two push-rivets (circled in **YELLOW**), then remove the transmission insulation panel.



REMOVING THE STOCK SWAY BAR

Step 3: 13mm Socket & Ratchet

Remove the four nuts (circled in YELLOW) which secure the sway bar brackets to the vehicle.

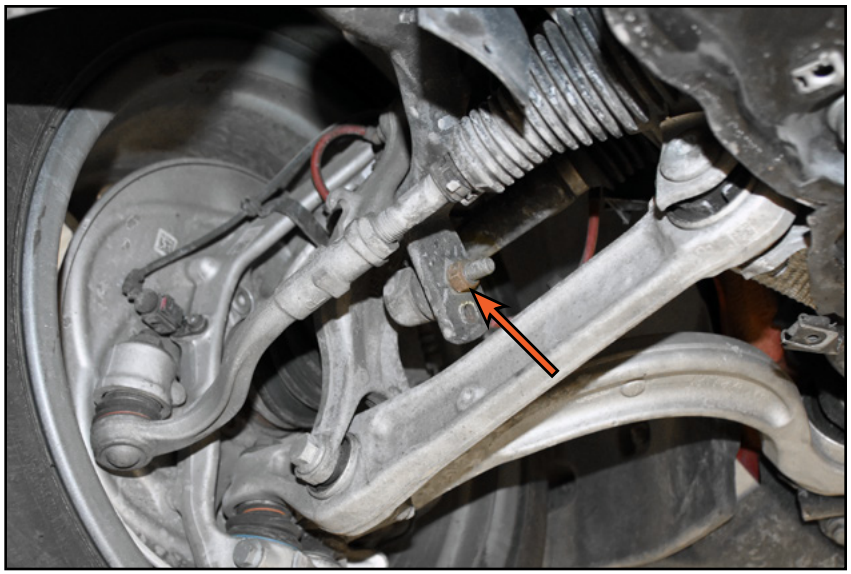


NOTE

This installation was completed on our shop A4 which already has our prototype adjustable sway bar installed, however removal of the stock bar follows the same procedure.

Step 4: 16mm Wrench, 16mm Socket & Ratchet

Remove the nut (arrow) which secures each end link to the sway bar.



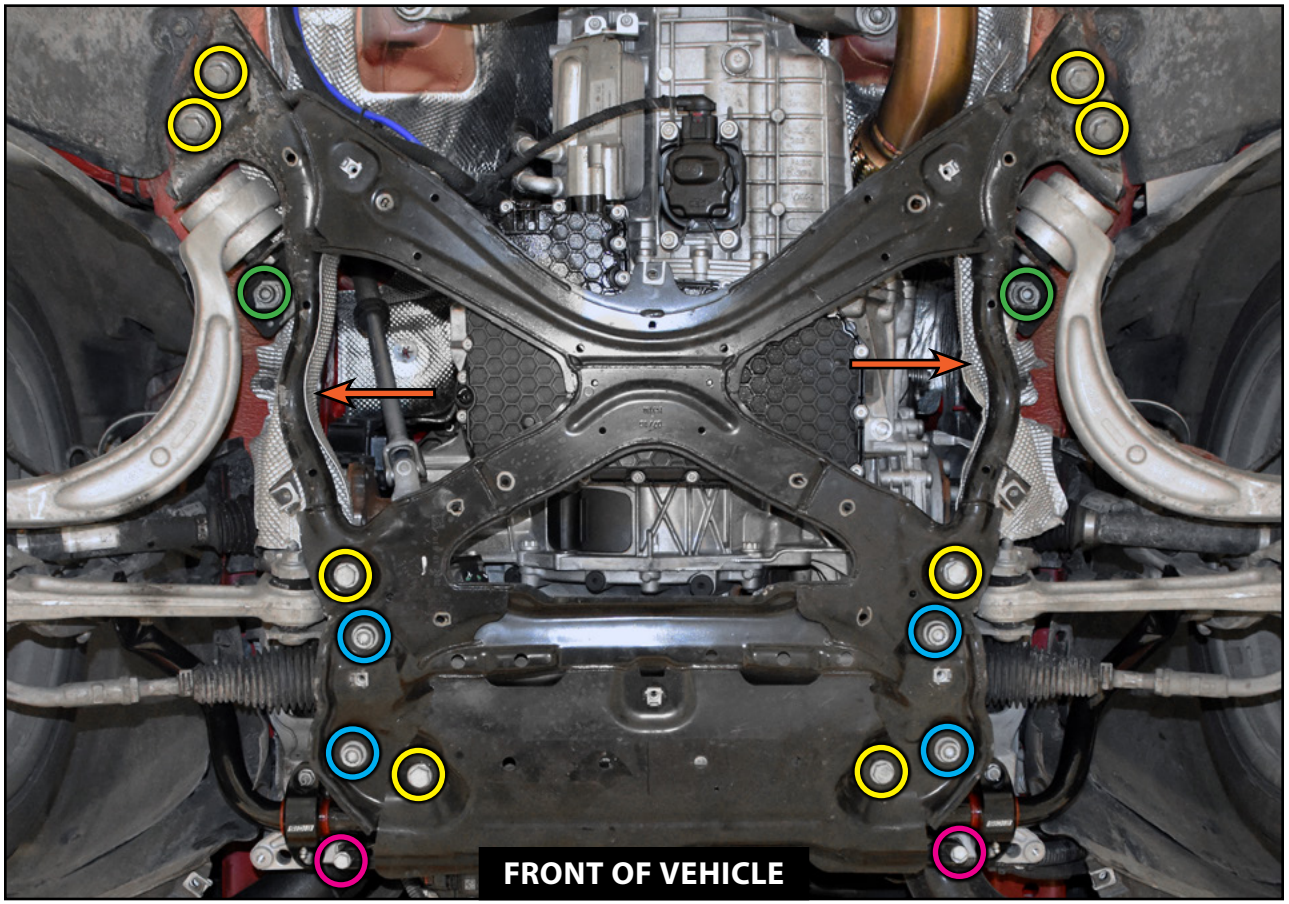
NOTE

Our vehicle is equipped with our adjustable end links, if your vehicle has stock end links, there will be a 16mm bolt you will need to counter-hold to remove this nut.

REMOVING THE STOCK SWAY BAR

Step 5:

We must lower the subframe slightly in order to slide the old sway bar out and slide the new one into place. Support the subframe from below then remove bolts (circled in **BLUE**) which secures the steering rack to the subframe. Remove all of the fasteners which secure the subframe in place using the photo and color guide below. Finally, remove the four nuts which secure the heat shields (arrows) to the top of the subframe.



- M14 Triple-Square bolts **(QTY 4)**
- M12 Triple-Square bolts **(QTY 2)**
- 13mm bolts **(QTY 2)**
- 17mm bolts **(QTY 8)**

REMOVING THE STOCK SWAY BAR

Step 6:

Carefully lower the subframe about six inches until there is enough room to slide the sway bar out.

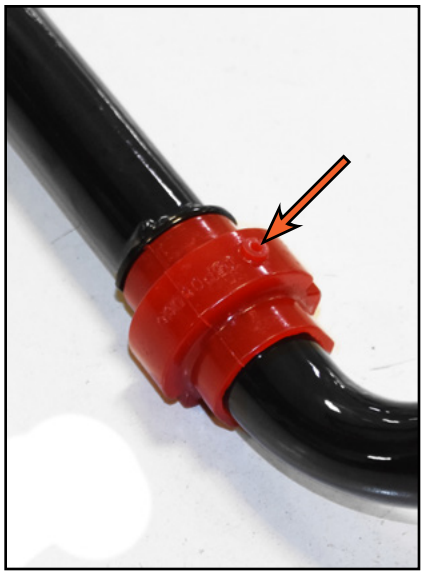
Step 7:

Remove the end links from each end of the sway bar, then carefully remove the sway bar from the vehicle.

INSTALLING THE NEW SWAY BAR

Step 1:

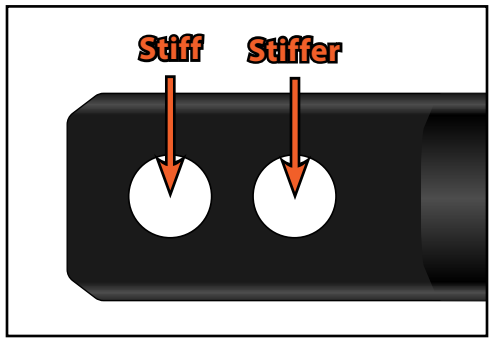
Slide the new bushings onto each end of the new sway bar, then slide the new brackets over the bushings so that the grease fitting (arrow in photo 2) aligns with the nub on the bushing (arrow in photo 1).



Step 2:

Lift the new sway bar into place and slide the end links into the holes in the new sway bar.

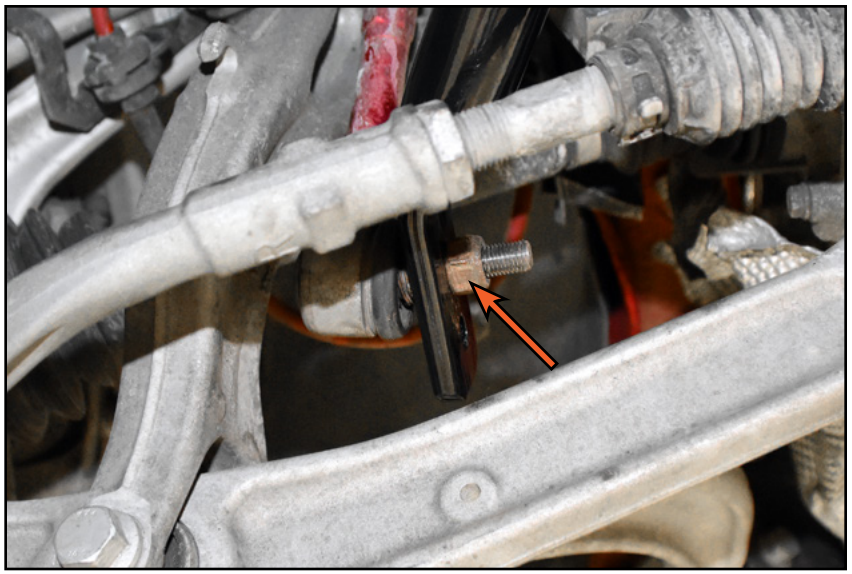
The two holes in each side of the sway bar represent the two stiffness settings. For a less stiff sway bar, select the outermost holes, for a stiffer sway bar, select the innermost holes.



INSTALLING THE NEW SWAY BAR

Step 3: 16mm Wrench, 16mm Socket & Ratchet

Install the end link nuts (arrow) and torque them to 68 Nm (50 Ft-lbs).

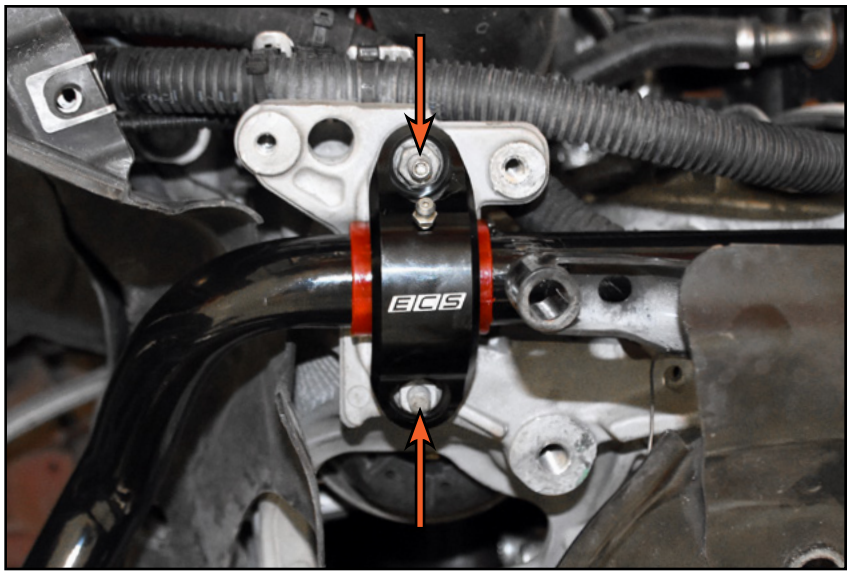


NOTE

If your vehicle is equipped with stock end links torque the nuts to 40 Nm (30 Ft-lbs) + 90°.

Step 12:

Replace the four sway bar bracket nuts (arrows) and torque them to 40 Nm (30 Ft-lbs) + 90°.



INSTALLING THE NEW SWAY BAR

Step 1: T25 Torx

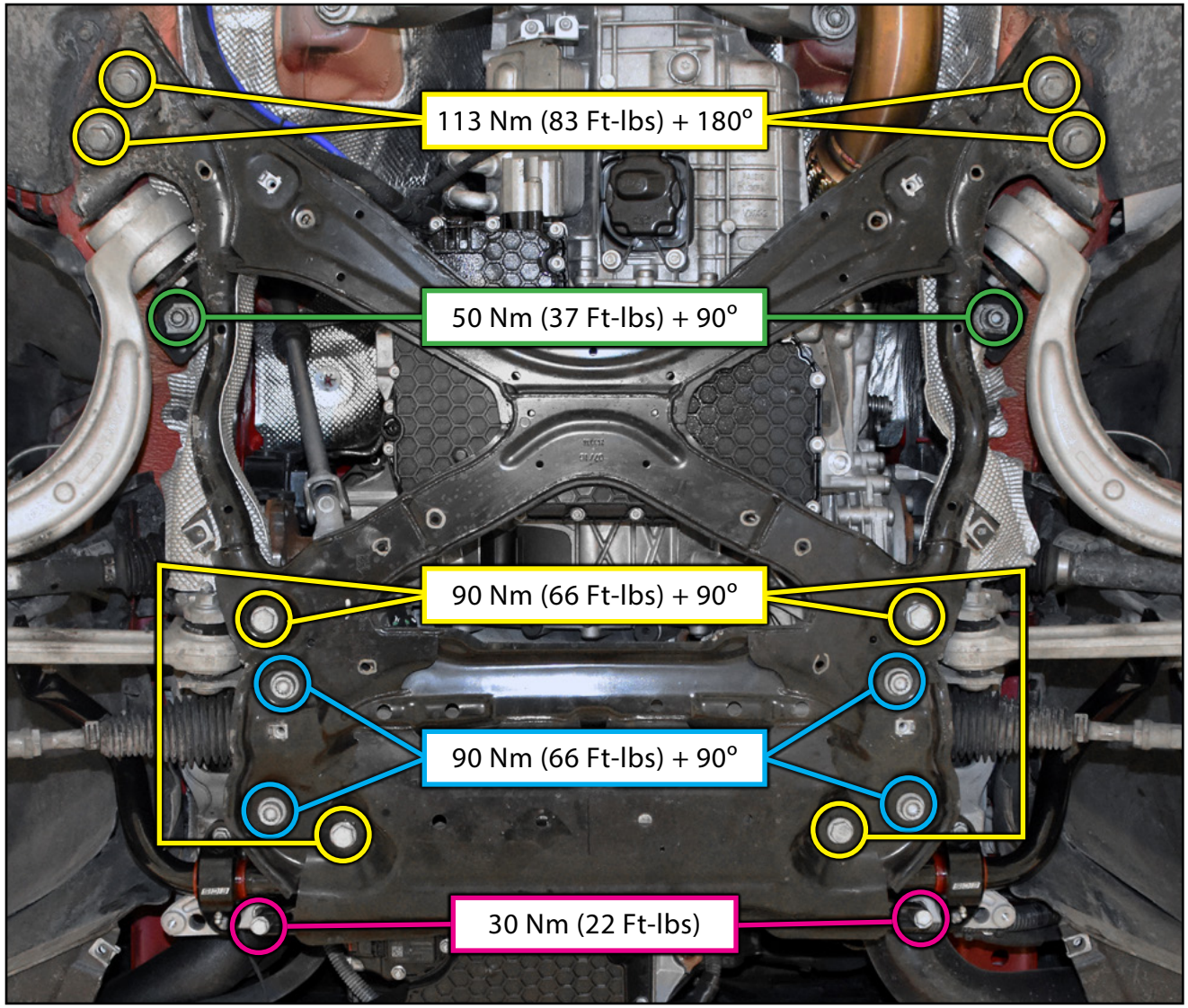
Reinstall the subframe as follows:

1. Loosely install bolts.
2. Loosely install bolts.
3. Torque bolts.
4. Torque bolts.

Reinstall the four nuts which secure the heat shields to the subframe.

Grease the sway bar bushings with a suitable synthetic non-petroleum based grease using the fittings on the new brackets, then reinstall the belly pans.

Congratulations, your installation is complete!



TORQUING TIPS

Torque to Yield or "Stretch" Bolts

Many bolts will have a torque specification listed in the format - xx Nm (xx Ft-lbs) + xx degrees. These bolts are torque to yield bolts, commonly referred to as "stretch" bolts. The correct procedure for torquing these bolts is:

Stage One - Torque the bolt(s) to the initial Nm or Ft-lb specification. If there is more than one, be sure to torque them in the correct sequence.
Stage Two - Tighten or "stretch" the bolt(s) the additional specified number of degrees. If there is more than one, be sure to follow the correct sequence.

Note - Some bolts may have two or more stages of torquing before the final stage of "stretching" the bolts.

When tightening more than one bolt in a specified sequence, be sure to mark each fastener with paint ***immediately*** after performing the final stage or "stretching" of the bolts. This will ensure that you keep track of which bolts have already been "stretched".

All Torque to Yield bolts should only be used once and should be replaced each time they are removed. If they are reused, they will not be able to achieve the proper clamping force with the specified torque.

Lubrication

Torque specifications are always listed for a dry fastener (***no*** lubrication) unless specified otherwise.

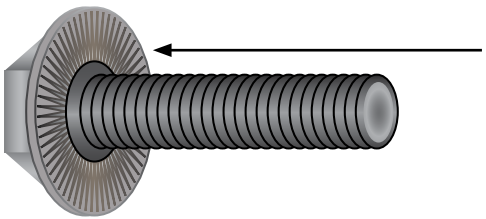
Some fasteners require lubrication on the threads -or- on the contact surface while torquing. These fasteners will be listed with the specific location and type of lubrication required. Always follow manufacturers recommendations exactly.

Lubricating a fastener that is intended to be installed dry and then torquing it to factory specifications will increase the clamping force and stress on the fastener and components, which can result in damage or failure.

Do not lubricate the threads of any fastener unless it is specifically recommended by the manufacturer.

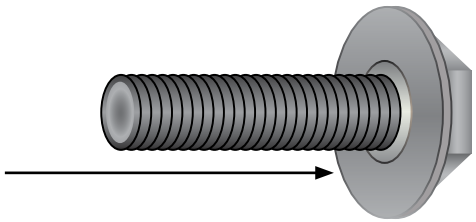
Ribbed vs. Non-Ribbed Bolts

Ribbed and Non-Ribbed bolts in the same location generally require a different torque specification.

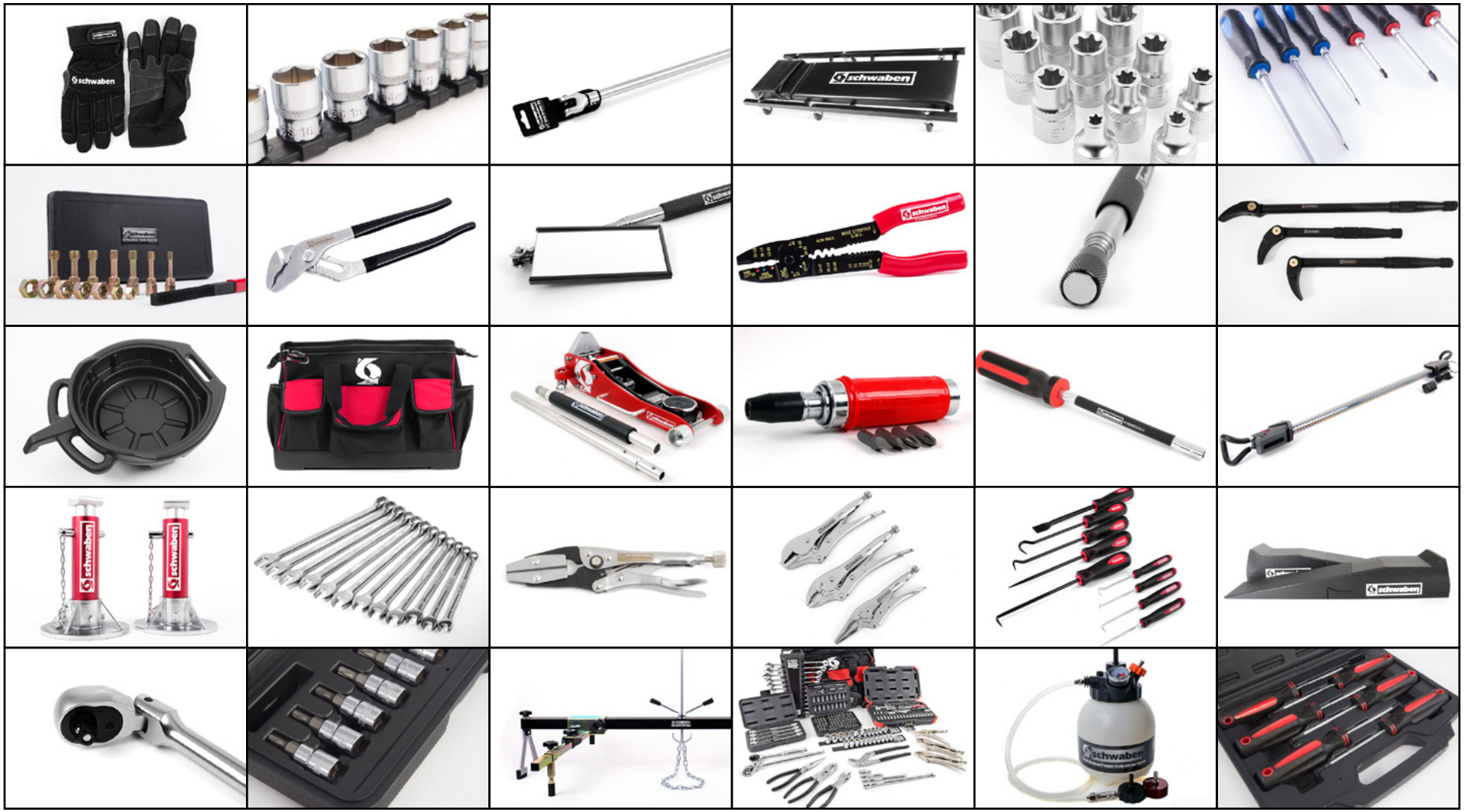


A ribbed bolt is identified by the ribs on the contact surface

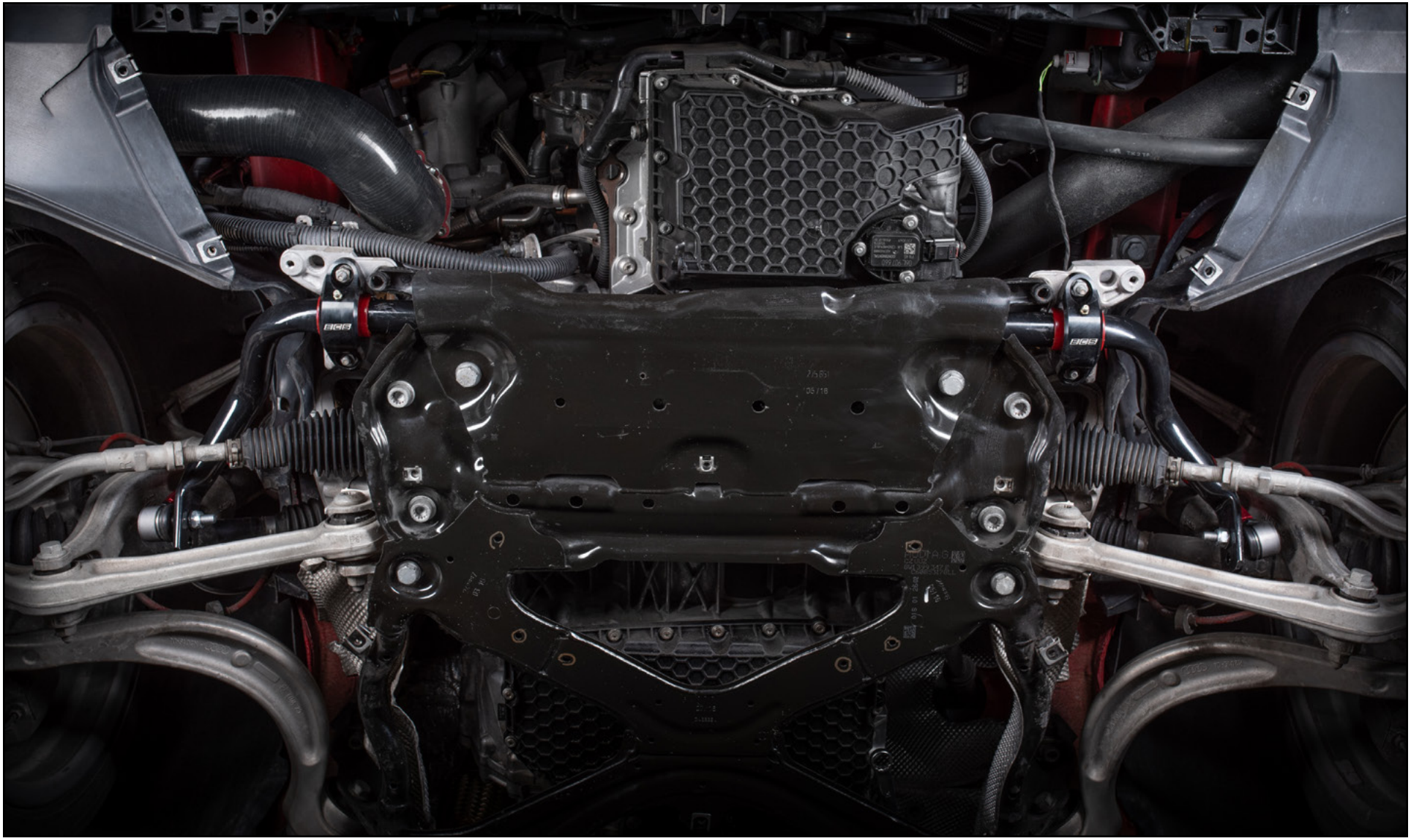
A non-ribbed bolt is identified by the smooth contact surface



At ECS Tuning, we carry a line of high quality Schwaben Tools and Equipment to help you build your ultimate tool collection. Never before has affordability and quality been so closely related. Our entire Schwaben line is subjected to strict in house testing for strength and durability. See what we have to offer and equip your garage without breaking the bank.



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.

Although this material has been prepared with the intent to provide reliable information, no warranty (express or implied) is made as to its accuracy or completeness. Neither is any liability assumed for loss or damage resulting from reliance on this material. SPECIFICALLY, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS MADE OR TO BE IMPLIED WITH RESPECT TO THIS MATERIAL. In no event will ECS Tuning, Incorporated or its affiliates be liable for any damages, direct or indirect, consequential or compensatory, arising out of the use of this material.