

Audi B8 Carbon Fiber Front Strut Brace Installation Instructions



Thank you for purchasing your new Carbon Fiber Front Strut Brace, we appreciate your business!



Project Overview:

Adding a strut brace to your Audi is an excellent and common handling upgrade. A strut brace works by tying the strut towers together, preventing strut tower flex and alignment changes during aggressive driving. ECS Tuning has engineered a lightweight and extremely rigid strut bar kit comprised of carbon fiber, which not only provides a lightweight solution, but also will dress up your engine bay.

Don't settle for a boring stainless steel or aluminum strut bar, your Audi deserves the best! This kit is easy to install, but make sure you have these tools on hand before you begin:

- 1/2" drive breaker bar & torque wrench
- 1/2" drive 16mm socket
- 3/8" drive torque wrench & ratchet
- 3/8" drive 10mm & 13mm sockets
- 3/8" drive 6mm Hex (Allen) socket (or key)
- 13mm box end wrench

Here's a quick rundown of what we'll be doing to install your new carbon fiber strut brace:

- Disconnect the EVAP hose from the pipe near the RH front strut tower, flip it around, then reinstall it.
- Loosely install the strut tower brackets.
- Loosely install the carbon fiber front strut bar into the two strut tower brackets.
- Ensure that all components are aligned and centered.
- Torque all fasteners to specification.

Section 1: Flipping the EVAP Hose

- Step #1**
- Remove the intake tube.
 - Note the location and orientation of the EVAP hose which has been highlighted in **RED** in **Fig: 1.1**.
 - This hose will interfere with the new carbon fiber strut bar once installed.
 - Release the hose clamps on both ends of the hose.
 - The clamp nearest the engine will likely need to be cut off as it is only meant to be used once.
 - The clamp nearest the strut tower is a squeeze type clamp and can be easily removed with a pair of pliers.
- Step #2**
- Remove the hose, flip it around, and orient it as shown (highlighted in **GREEN** in **Fig: 1.2**).
 - To clarify, the end of the hose which was attached to the steel line on the strut tower must now be attached to the plastic valve near the engine, and vice versa.
 - Ensure that the bend in the hose is oriented as shown in **Fig: 1.2**, away from the strut tower.
 - Reinstall the stock squeeze clamp on the strut tower side of the hose, and install the new screw clamp which is included with the kit onto the engine side of the hose.

Fig: 1.1

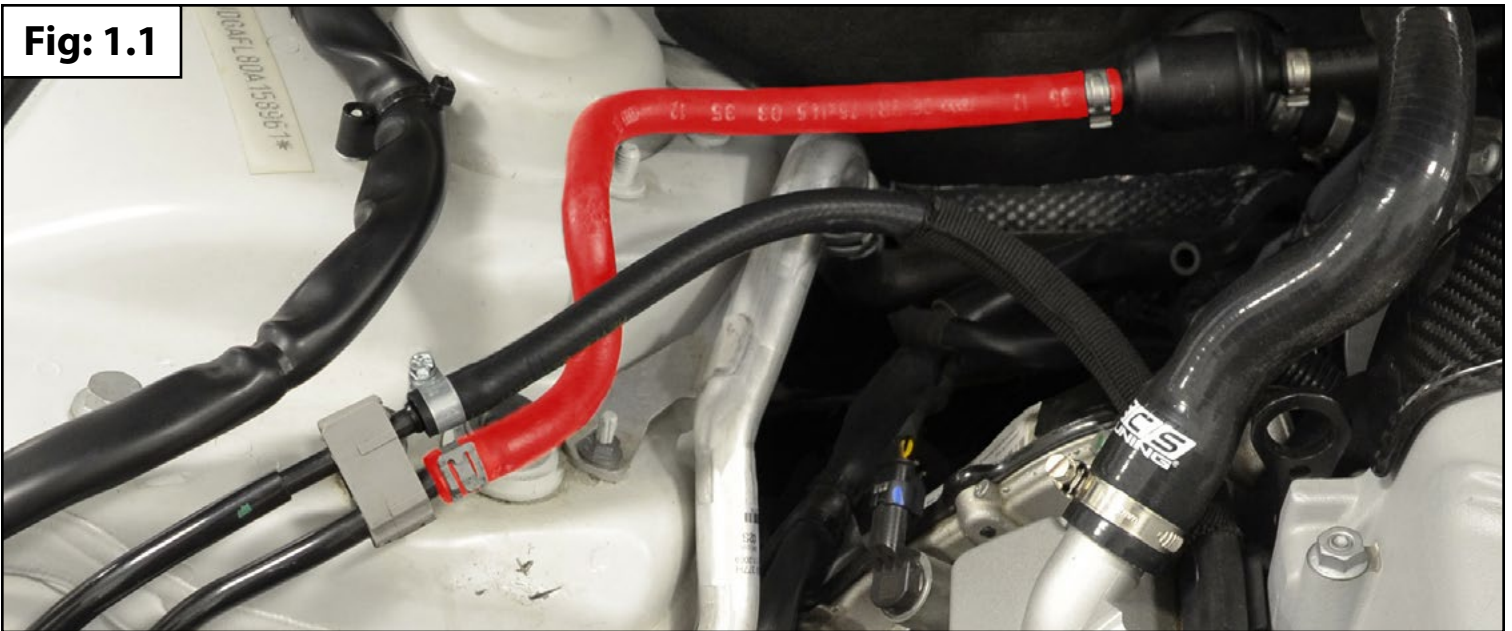
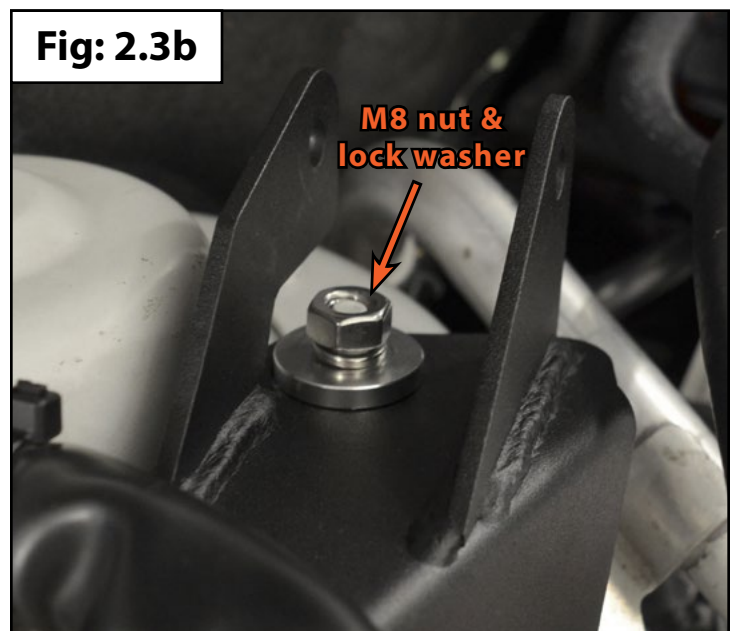
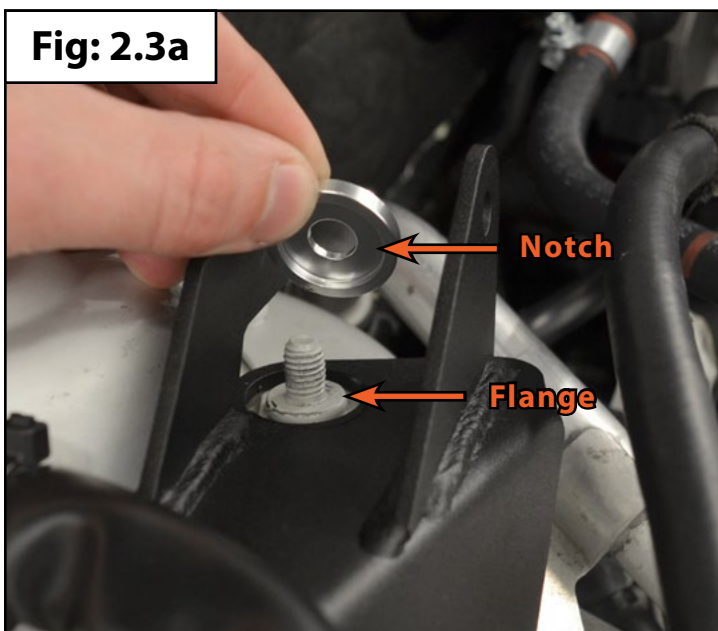
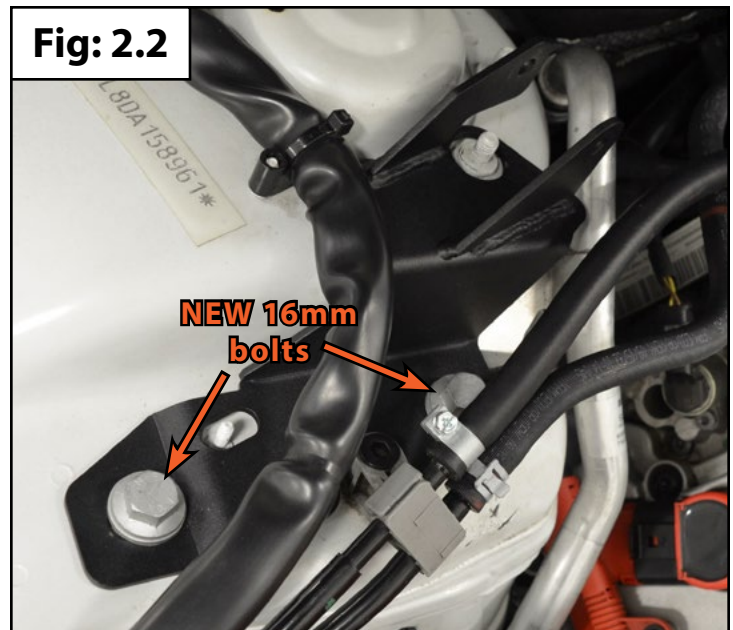
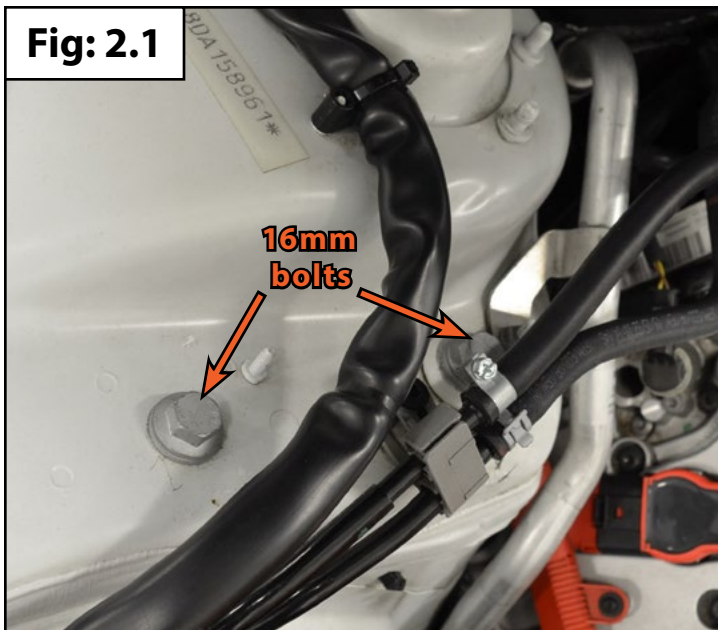


Fig: 1.2



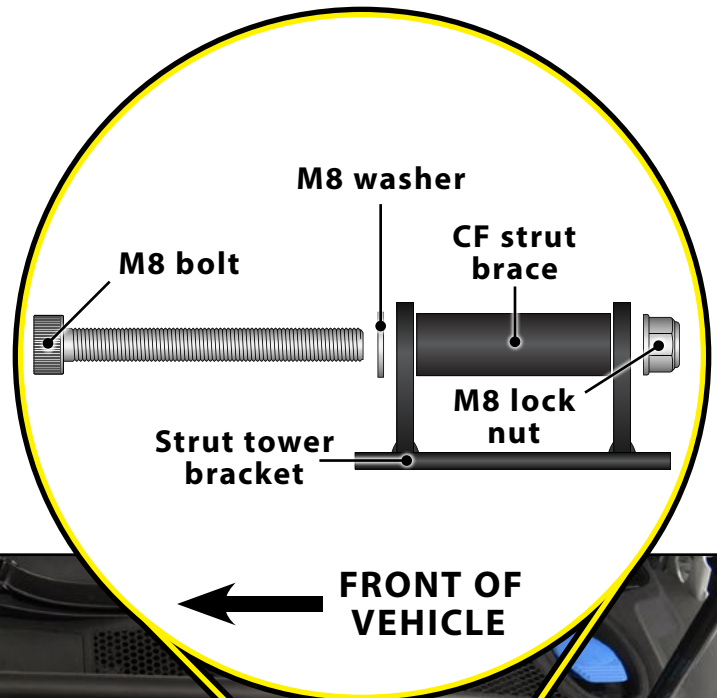
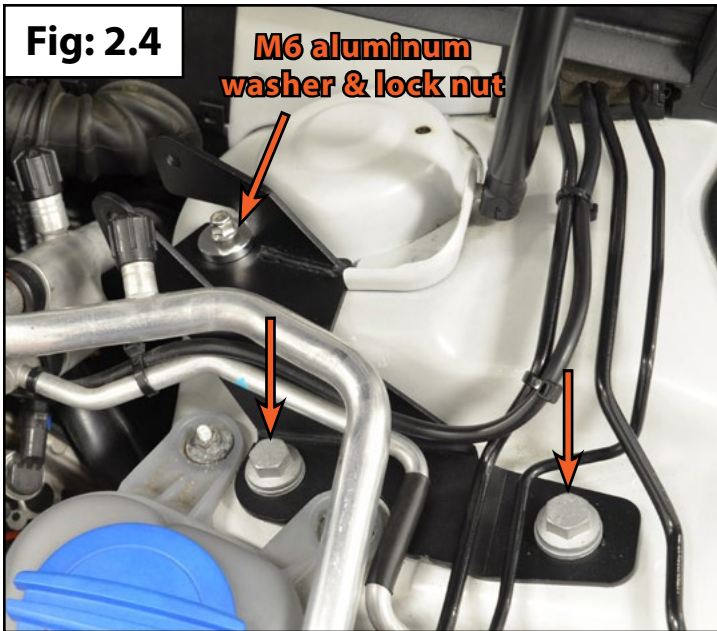
Section 2: Installing the CF Strut Brace

- Step #1**
- Remove the two 16mm bolts from the RH strut tower (arrows in **Fig: 2.1**).
NOTE: These are stretch bolts (also known as "Torque to Yield") and they **MUST** be replaced. Replacement bolts are included in the kit for this reason.
- Step #2**
- Slide the RH strut tower bracket into place and loosely install two of the new 16mm bolts into place (**Fig: 2.2**).
- Step #3**
- Align the notched side of the included M8 aluminum washer with the flange on the M8 stud located on top of the RH strut tower (**Fig: 2.3a**).
 - Loosely install the M8 aluminum washer, the M8 lock washer, and the M8 nut onto the stud as shown (**Fig: 2.3b**).
 - Reinstall the intake tube.



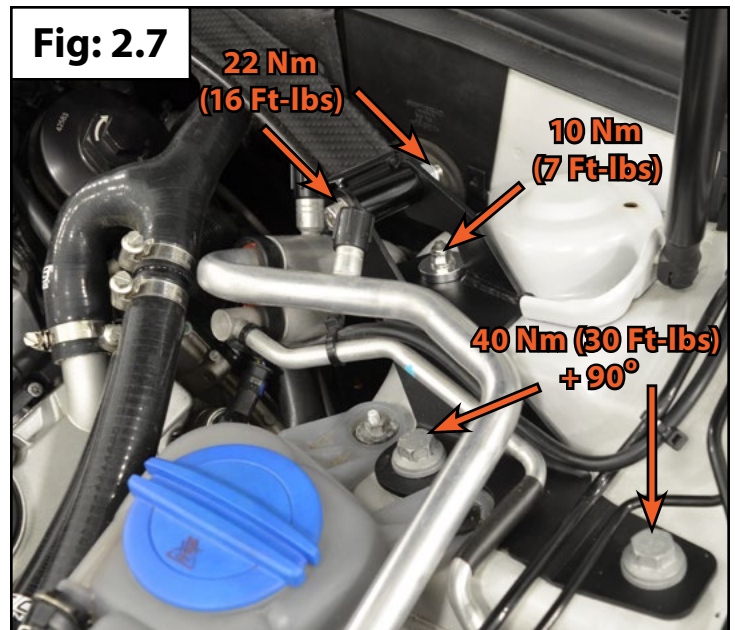
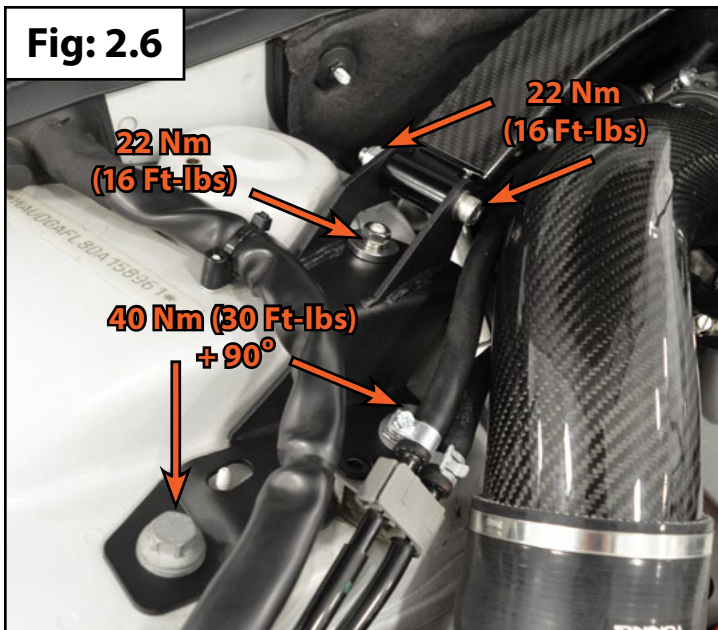
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- Step #4**
- Install the LH strut tower bracket in the same manner as the RH bracket (**Fig: 2.4**).
NOTE: The LH strut tower has an M6 stud, and only the M6 aluminum washer and the M6 lock nut are required on this side.
- Step #5**
- Place one of the included M6 washers onto each of the 6mm Hex/Allen bolts.
 - Place the carbon fiber strut brace into the two strut tower brackets.
 - Insert the bolts into the front of the strut tower brackets, through the carbon fiber strut brace, and out the back of the bracket as shown in the inset photo in **Fig: 2.5**.
 - Loosely install the 13mm lock nuts onto the bolts.
NOTE: If you have an ECS Tuning Oil Catch Can System installed you may need to bend the hose support bracket down slightly in order to clear the bottom of the carbon fiber strut brace.
 - Adjust the two strut tower brackets so that the brace is centered and aligned as desired, then proceed to the next page for torque specifications.



Section 2: Installing the CF Strut Brace

- Step #6**
- Torque all of the fasteners on the **RH** of the vehicle to the following specifications (**Fig: 2.6**):
 1. The Hex (Allen) bolt/locking nut which secures the strut brace to the RH strut tower bracket:
 - 22 Nm (16 ft-lbs)
 2. The M8 nut on the RH strut tower bracket:
 - 22 Nm (16 ft-lbs)
 3. The 16mm bolts on the RH strut tower bracket:
 - 40 Nm (30 ft-lbs) + an additional 90°
- Step #7**
- Torque all of the fasteners on the **LH** of the vehicle to the following specifications (**Fig: 2.7**):
 1. The Hex (Allen) bolt/locking nut which secures the strut brace to the LH strut tower bracket:
 - 22 Nm (16 ft-lbs)
 2. The M6 lock nut on the LH strut tower bracket:
 - 10 Nm (7 ft-lbs)
 3. The 16mm bolts on the LH strut tower bracket:
 - 40 Nm (30 ft-lbs) + an additional 90°



Your installation is now complete!