

3.0T Upper Supercharger Pulley Upgrade

034Motorsport is proud to offer this high-quality Supercharger Pulley Upgrade for the B8/B8.5 Audi S4/S5/Q5/SQ5 & C7/C7.5 Audi A6/A7 3.0T FSI! At 57.70mm in diameter, the 034Motorsport 3.0 TFSI Supercharger Pulley is significantly smaller than the factory unit to increase the drive ratio of the supercharger. Spinning the supercharger faster yields increased boost pressure throughout the RPM range, resulting in increased horsepower and torque throughout the powerband when paired with Stage 2 Performance Software.

Installation Spiciness Rating: MEDIUM

Installation of your Upper Supercharger Pulley Upgrade is a straightforward process that should take approximately 2 hours to complete.

Supplied Parts:

- 034Motorsport Upper Pulley
- Continental Replacement Belt

Tools Needed:

- 16mm Socket
- T30 Torx
- T25 Torx
- Small Pick
- Torque Wrench
- Oven Mitts

Getting Started

Confirm you have received all the parts included with your purchase by reading the complete guide, if there are missing components, please contact:

customerservice@034motorsport.com

About This Guide

This Install Guide documents the installation process on an B8 Audi S4. There may be minor differences depending on specific vehicle, market, options, etc.

Install Steps

Step 1

Lift the car.

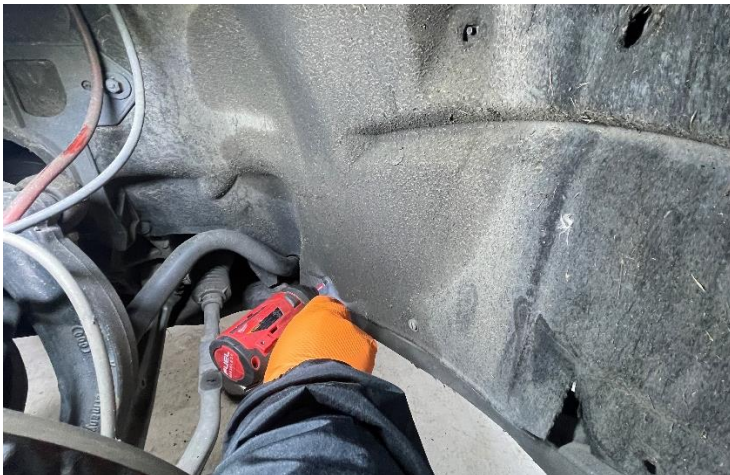
Step 2

Remove the front wheels.



Step 3

Using a T25 Torx, remove the hardware from the front half of the front wheel liners.



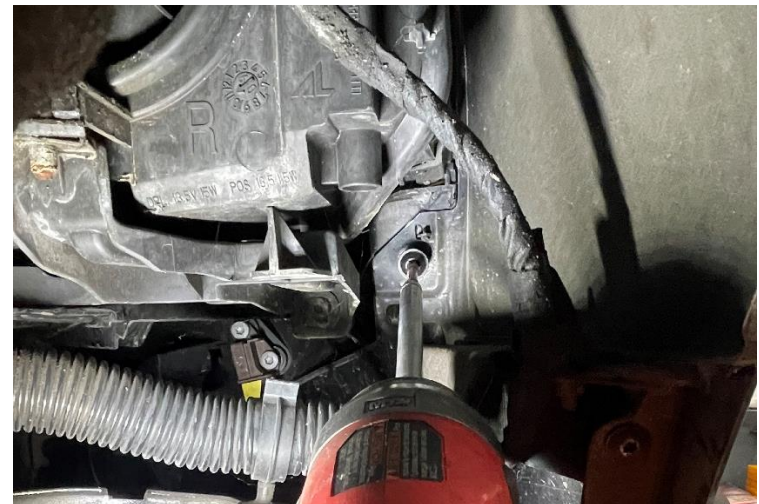
Step 4

Fold the front half of the wheel liner behind the brake rotor.



Step 5

Using a T25 Torx, remove the hardware for the front bumper.



Step 6

Using a T30 Torx, remove the hardware for the front bumper/fender union.

**Step 7**

Lift the car higher to access the underside.

Step 8

Using a T25 Torx, remove the hardware securing the bellypan to the front bumper.

**Step 9**

Lower the car enough for you to access the engine bay.

Step 10

Using a T30 Torx, remove the hardware from the radiator cover.

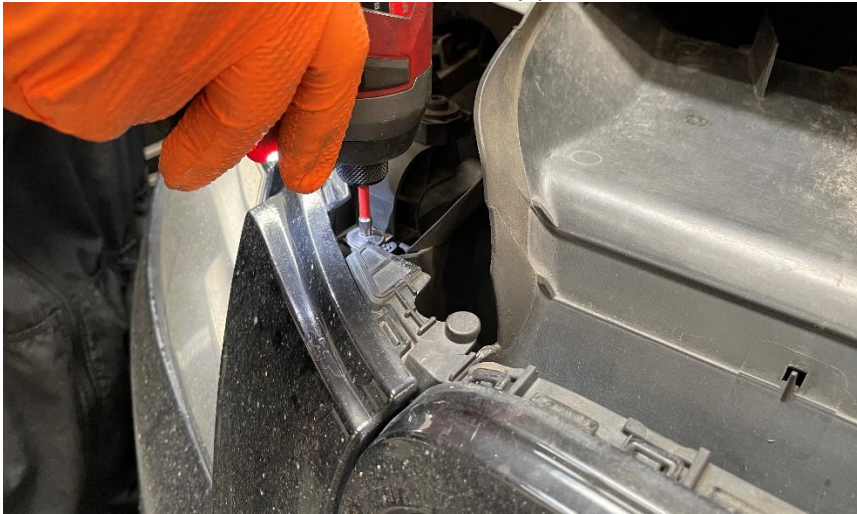
**Step 11**

Remove the radiator cover.



Step 12

Using a T25 Torx, remove the hardware securing the bumper to the radiator support.

**Step 13**

Pull the front bumper forward a few inches.

Step 14

Disconnect the crash sensor plug.

**Step 15**

Disconnect the fog light plugs.

**Step 16**

Remove the front bumper.

Step 17

Using a T25 Torx, remove the hardware for the fresh air duct.

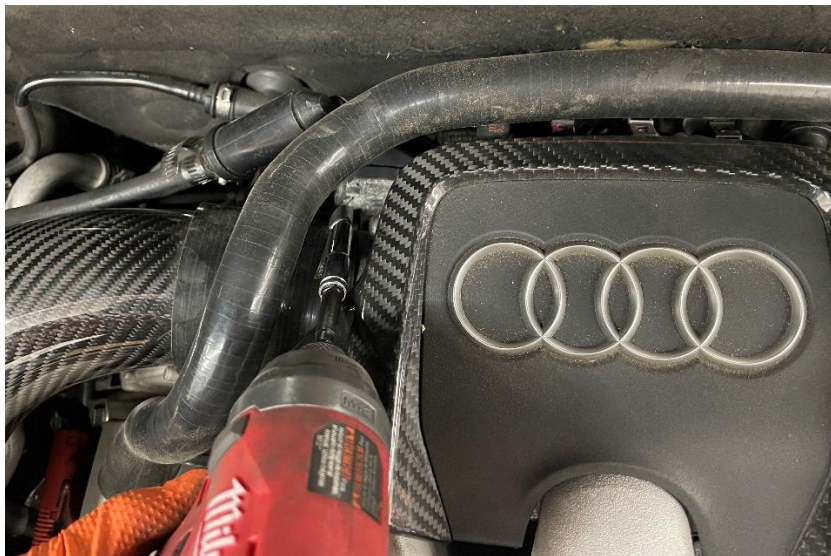


Step 18

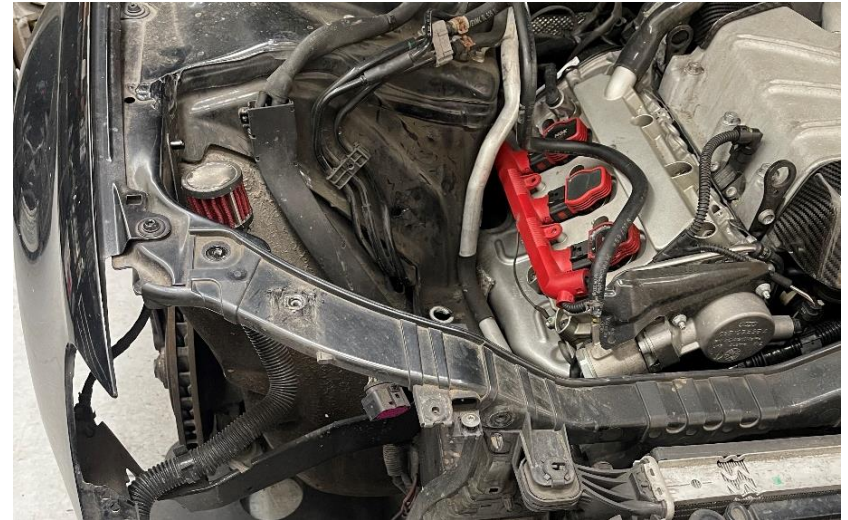
Using a T30 Torx, remove the hardware securing the radiator support to the fenders.

**Step 19**

Loosen the hose clamps securing the intake hose to the throttle body.

**Step 20**

Remove the intake and airbox. (We took out the headlight, this was not necessary)

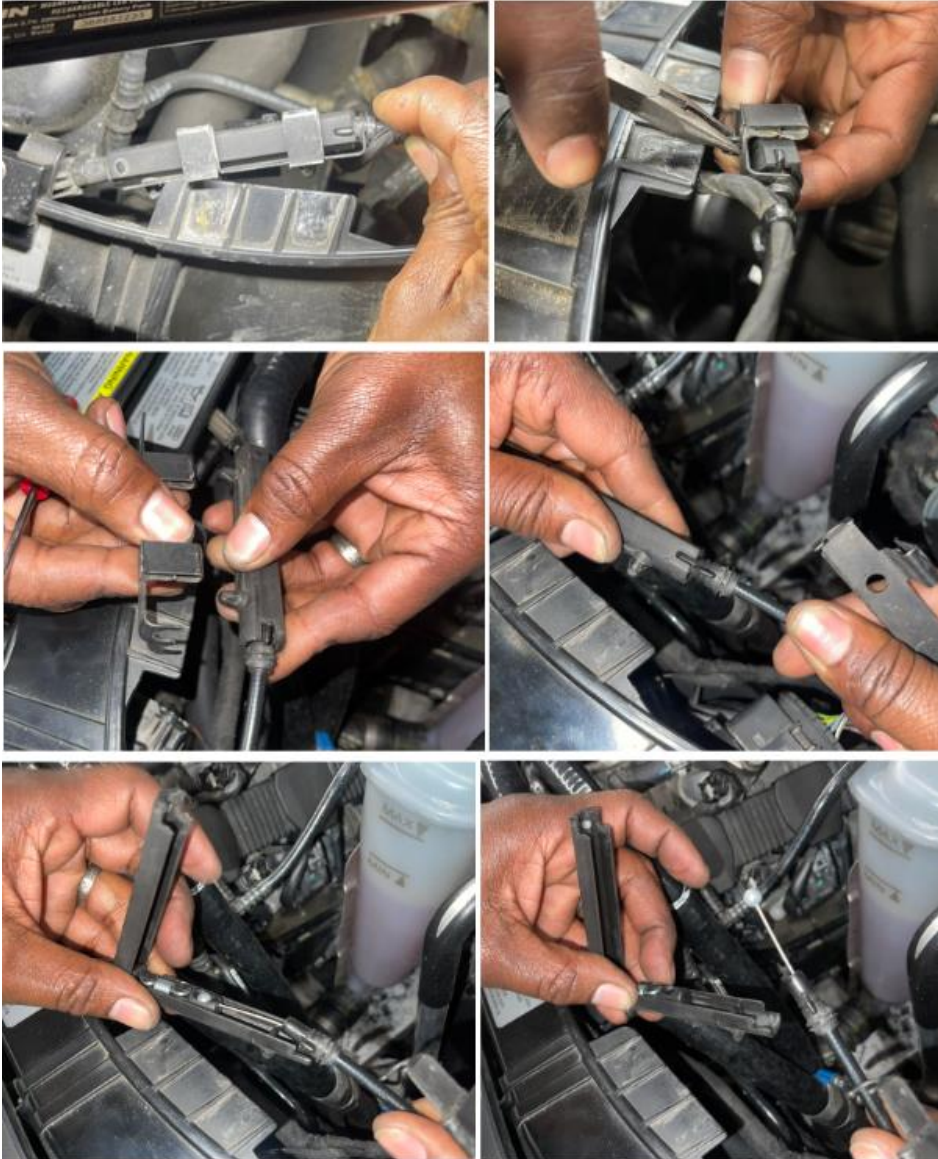
**Step 21**

Using a 16mm socket, remove the upper crash bar hardware. Replace these with longer bolts to enable service mode.



Step 22

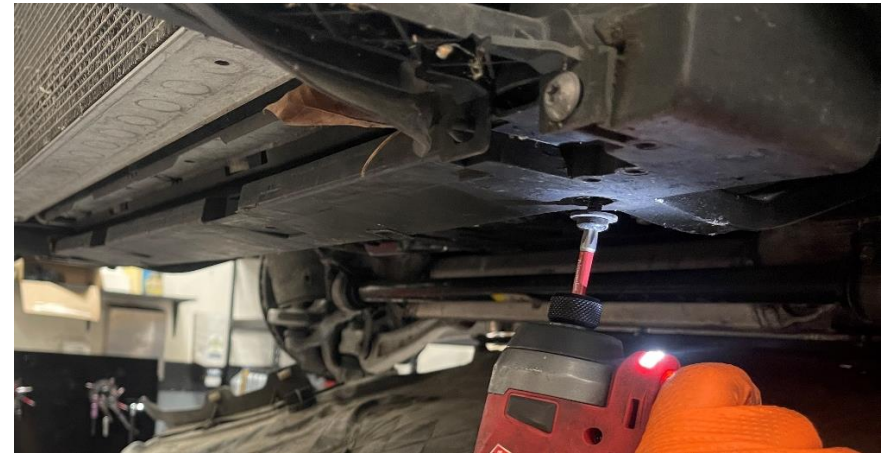
Unclip the hood release cable from the radiator support. Remove the mounting bracket. Separate the cable casings.

**Step 23**

If you have a catch can that is mounted to the radiator support, remove the mounting bracket.

Step 24

Using a T30 Torx, remove the hardware securing the radiator support to the subframe.

**Step 25**

Disconnect the air pump plug ends on both sides of the car.



Step 26

Disconnect the horn plug ends.

**Step 27**

Remove the impact sensor from the crash bar.

**Step 28**

Disconnect the coolant line from the coolant reservoir.

**Step 29**

Disconnect the AC pressure sensor plug and unclip it from the radiator support.



Step 30

Remove the intercooler ducts.

Step 31

Remove the lower engine cover.

**Step 32**

Using a 16mm socket, remove the remaining hardware securing the crash bar to the chassis.

**Step 33**

Carefully pull the front clip forward, into service mode.

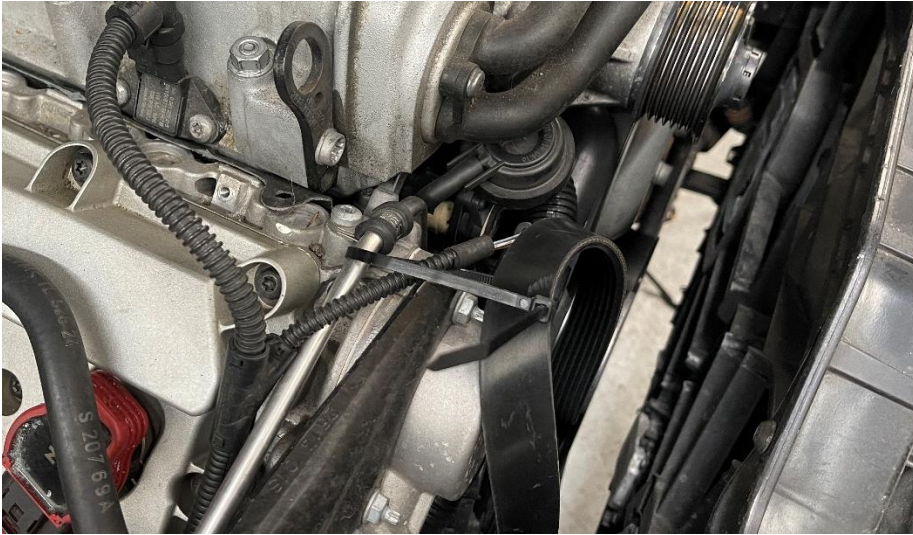
**Step 34**

Using a 16mm socket, loosen the belt tensioner.



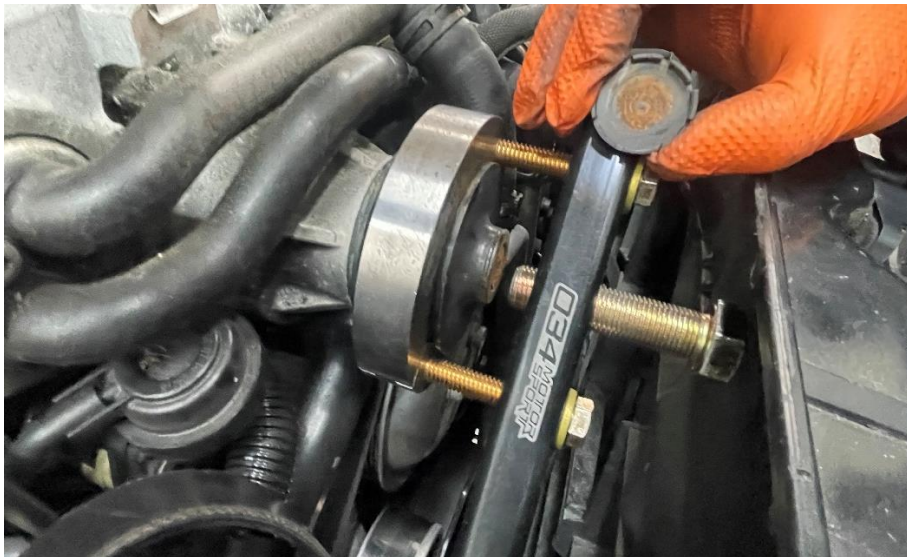
Step 35

Secure the belt to the engine.



Step 36

Remove the small cap from the upper pulley shaft. (We did this out of sequence with Step 37)



Step 37

Set up the pulley removal tool. There are various options on the market, but you obviously have the 034 version, right?

Here's the quick and dirty:

- Put each half of the removal ring over the pulley ribs.
- Screw the two side bolts through the threaded holes on the removal ring, locking the two halves together.
- Make sure that the bar is parallel to the pulley and that the sides bolts have equal thread engagement.
- Use a wrench with a ½" drive to stabilize the assembly.
- Make sure that the center bolt is contacting the pulley shaft only, not the pulley.
- Continue threading the center bolt until the pulley pops off the shaft.



Step 38

The tolerance between the pulley and the shaft is tight! In order to install the 034 pulley properly, it will need to go in an oven for 20-30 minutes at 400° F.

Step 39

Wearing an oven mitt or heat resistant glove, install the 034 upper pulley on the pulley shaft. The logo and part number will be facing the supercharger. Make sure your pulley looks like the photo below. Allow the pulley to cool off before proceeding to the remaining steps.

**Step 40**

Release the belt from the engine secured in Step 35.

Step 41

Using a 16mm socket, compress the belt tensioner. Slide the belt over the upper pulley. Tighten the belt tensioner.

**Step 42**

Reinstall the cap over the pulley shaft.

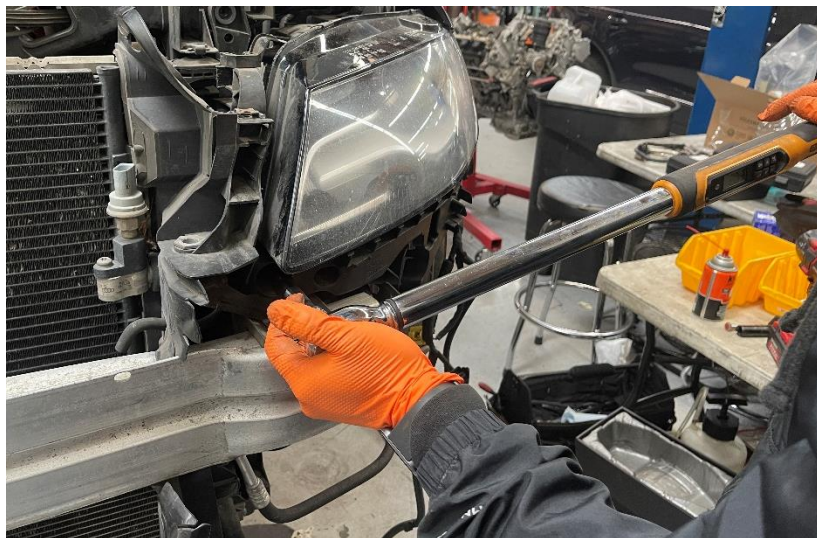
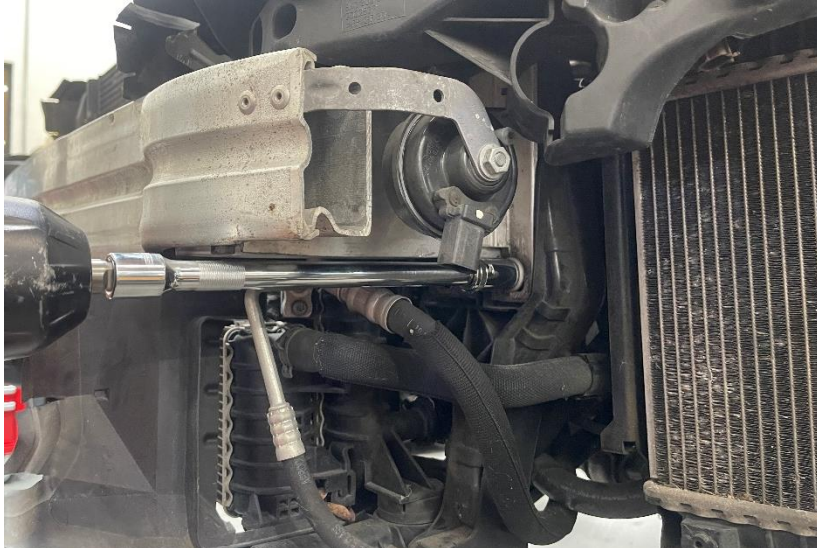


Step 43

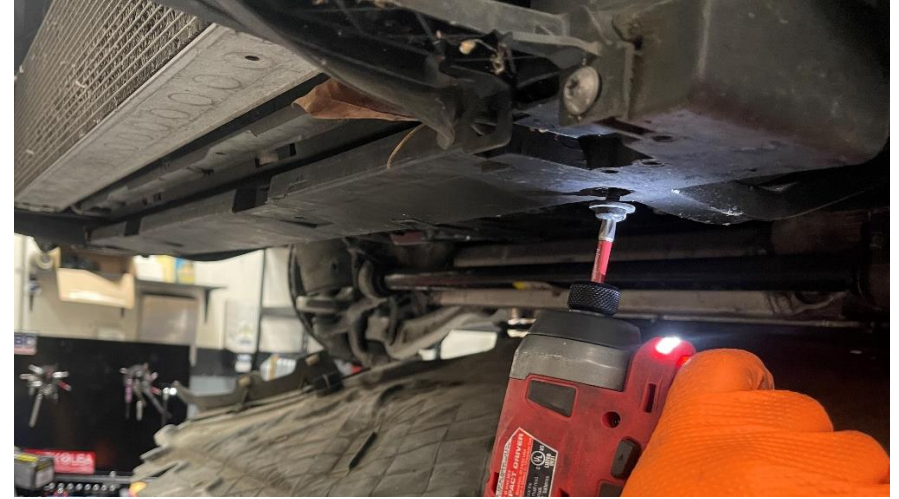
Push the front clip back into place, out of service mode.

Step 44

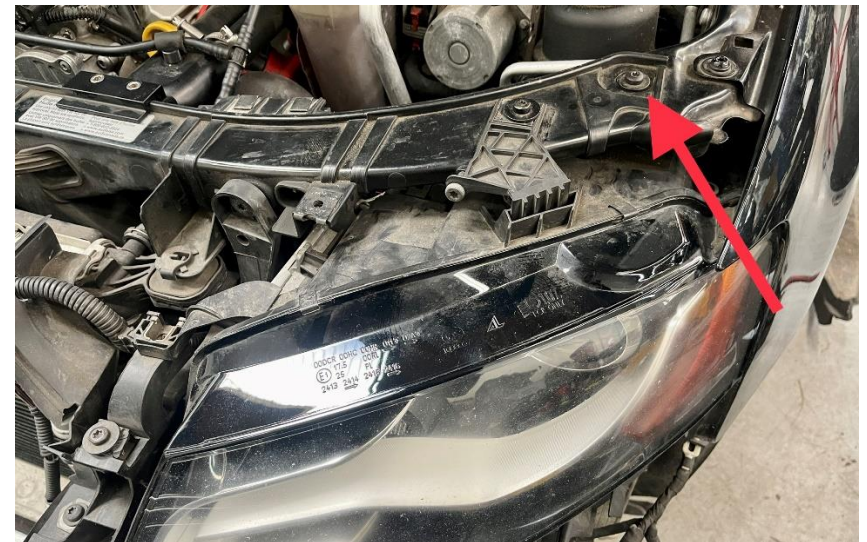
Using a 16mm socket, reinstall the crash bar hardware. Remove the long bolts installed in Step 21. Torque to **30Nm**.

**Step 45**

Using a T30 Torx, reinstall the hardware securing the radiator support to the subframe.

**Step 46**

Using a T30 Torx, remove the hardware securing the radiator support to the fenders.

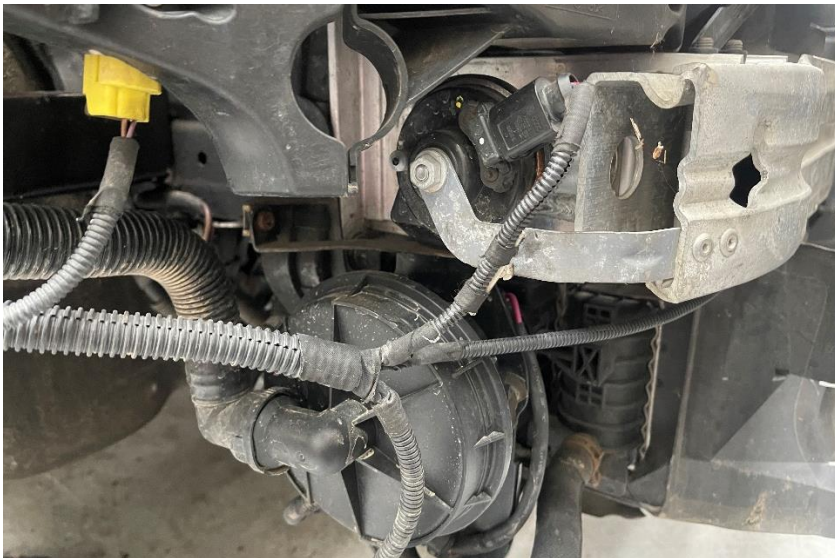


Step 47

Reinstall the coolant line to the coolant reservoir.

**Step 48**

Reinstall the plug ends to the horn and air pump.

**Step 49**

Reinstall the AC pressure sensor plug and clip it back to the radiator support.

**Step 50**

Reinstall the intercooler ducts.



Step 51

Reinstall the impact sensor to the crash bar.

**Step 52**

Reinstall the lower engine cover.

**Step 53**

Get the front bumper close to the car and reinstall the fog light plug ends.

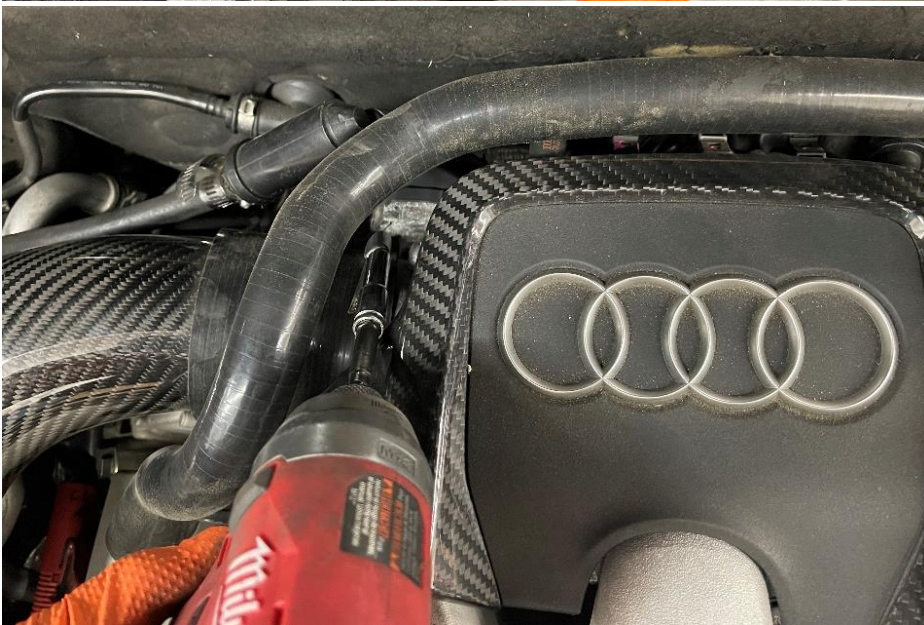
**Step 54**

Reinstall the crash sensor plug.

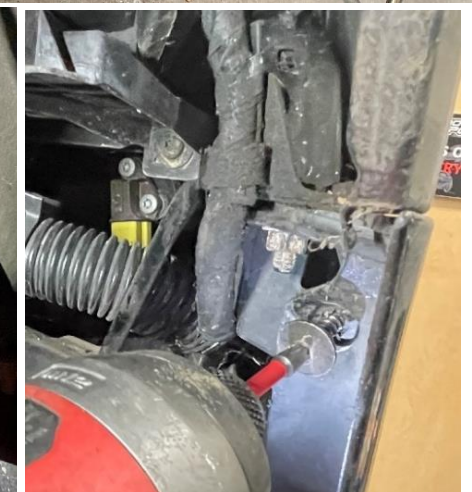


Step 55

Reinstall the air duct, intake and airbox.

**Step 56**

Reinstall the front bumper.



Step 57

Reinstall the catch can if removed earlier.

Step 58

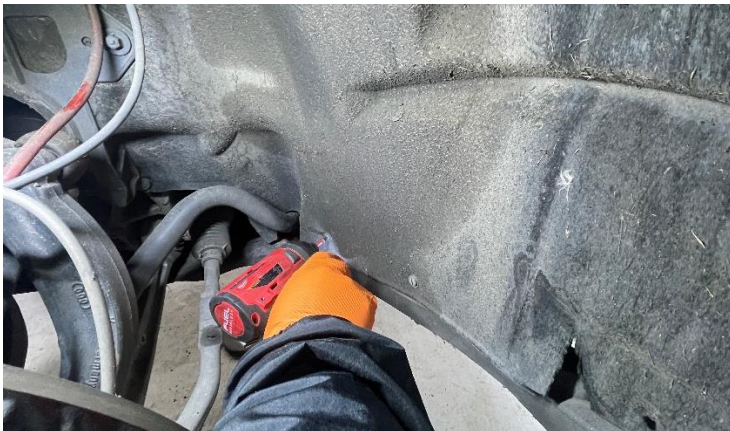
Using a T30 Torx, reinstall the hardware for the radiator cover.

**Step 59**

Raise the car up.

Step 60

Unfold the wheel liner and reinstall the hardware.

**Step 61**

Raise the car up higher and reinstall the bellypan hardware.

**Step 62**

You're done. Enjoy the upgrade.

