



INSTALLATION GUIDE

**CTS Turbo B8 3.0T Supercharger
Pulley Upgrade Kit
CTS-HW-0133**



WHAT IS INCLUDED

1. Belt
2. CTS Supercharger Pulley

CTS Supercharger pulley removal tool is recommended [CTS-HW-0134]



TOOLS REQUIRED

1. Philips head screwdriver
2. 16mm, 17mm Socket
3. Ratchet
4. T-25, T-30 torx
4. 19mm wrench
5. Oven
6. Can of compressed air

NOTES

Vehicle used in this guide is a 2011 Audi S4. Always make sure the car is safe to work on. Do not work on a hot motor. We do not accept any liability for incorrect installation or damage during the install.

STEP 1

Place the pulley in a 500 degree F oven for at least an hour. Pulley temp must be at least 500F in order to be installed.

**STEP 2**

Raise the vehicle using a hoist or jack stands and remove the front two wheels.

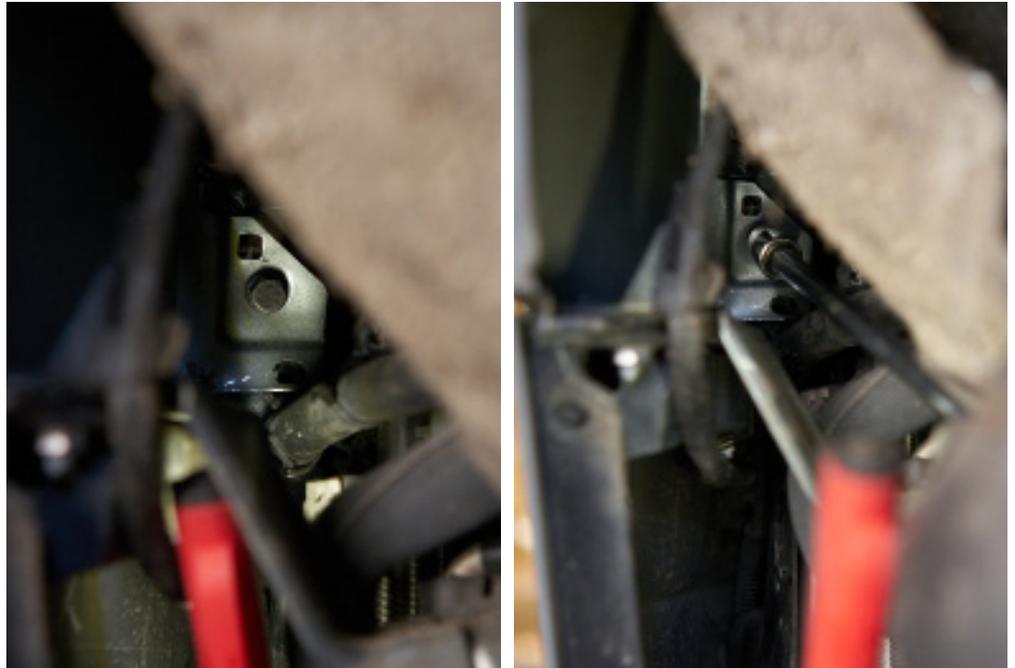
STEP 3

Remove the three T25 Torx screws and the plastic clip holding the fender liners in place.



STEP 4

Pull the fender liner back and remove the 10mm bolt from the front bumper

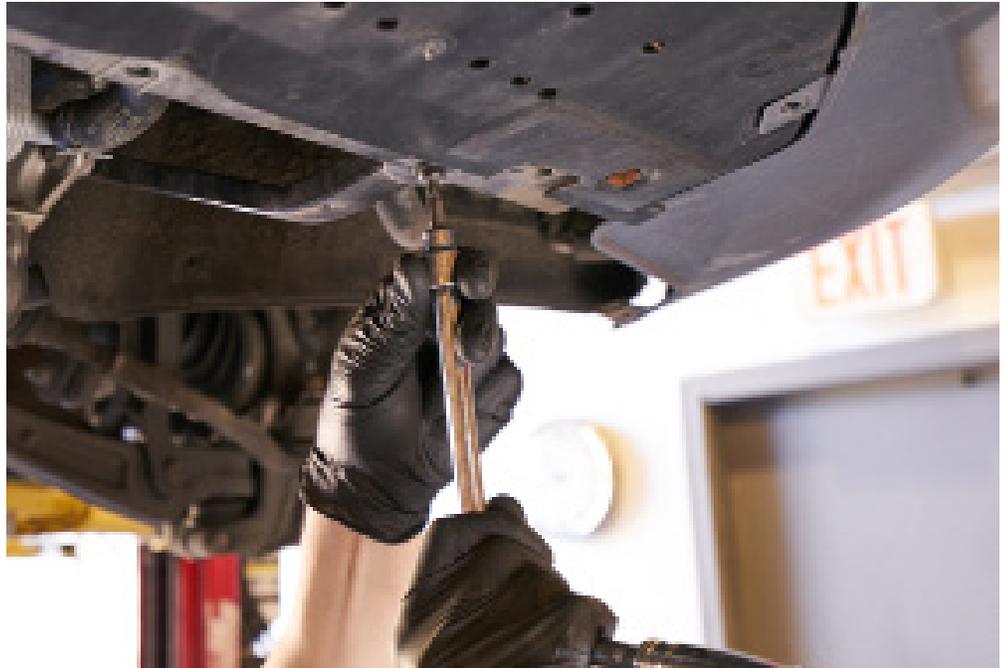
**STEP 5**

Loosen the bolt holding the bumper cover to the fender with a 10mm socket.

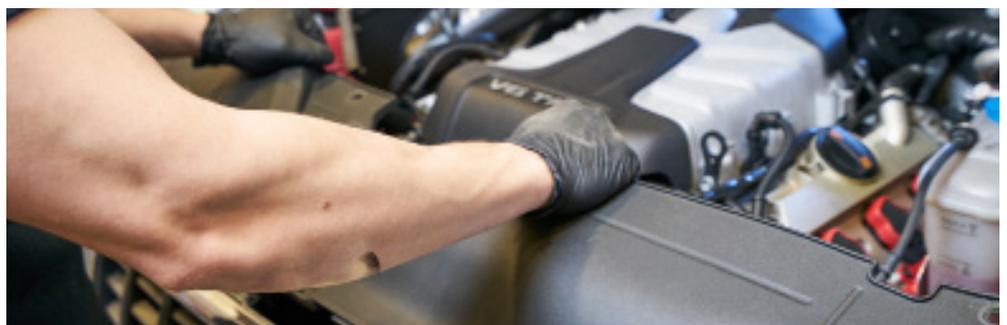


STEP 6

Remove the 1 1/4 quarter turn fasteners from the belly pan and the four T30 Torx from the bottom of the bumper cover.

**STEP 7**

Remove the cover to the upper radiator by removing the four T30 screws.



STEP 8

Remove the air inlet by unscrewing the two T25 Torx on either side

**STEP 9**

Remove the upper bumper cover by unscrewing the two T25 Torx screws on either side of the headlights.



STEP 10

Carefully pull out the bumper cover on each side of the front fenders

**STEP 11**

Unclip the foglight and the homelink connections and remove the front bumper cover.

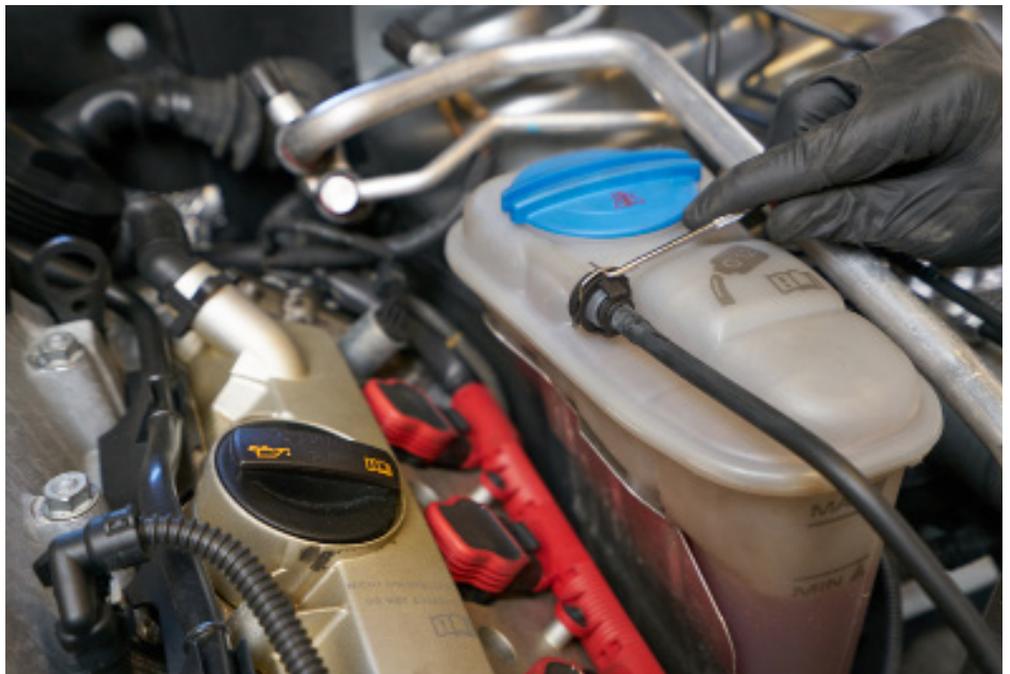


STEP 12

Remove the plastic air duct on the secondary radiator.

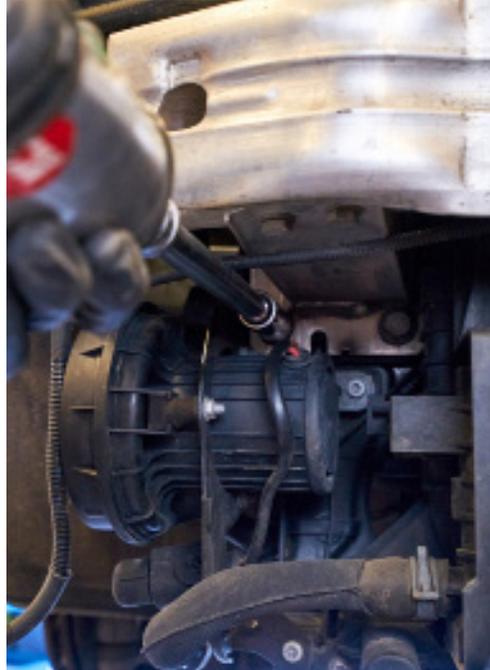
**STEP 13**

Unclip and remove the coolant overflow hose from the reservoir.



STEP 14

Using a 16mm socket, remove the lower left side crash bar bolt on the passenger side and the, and the lower right bolt on the driver's side.

**STEP 15**

Replace the crash bar bolts with the two M10 x 120mm bolts provided with the removal tool. Leave the bolts extended out as shown.

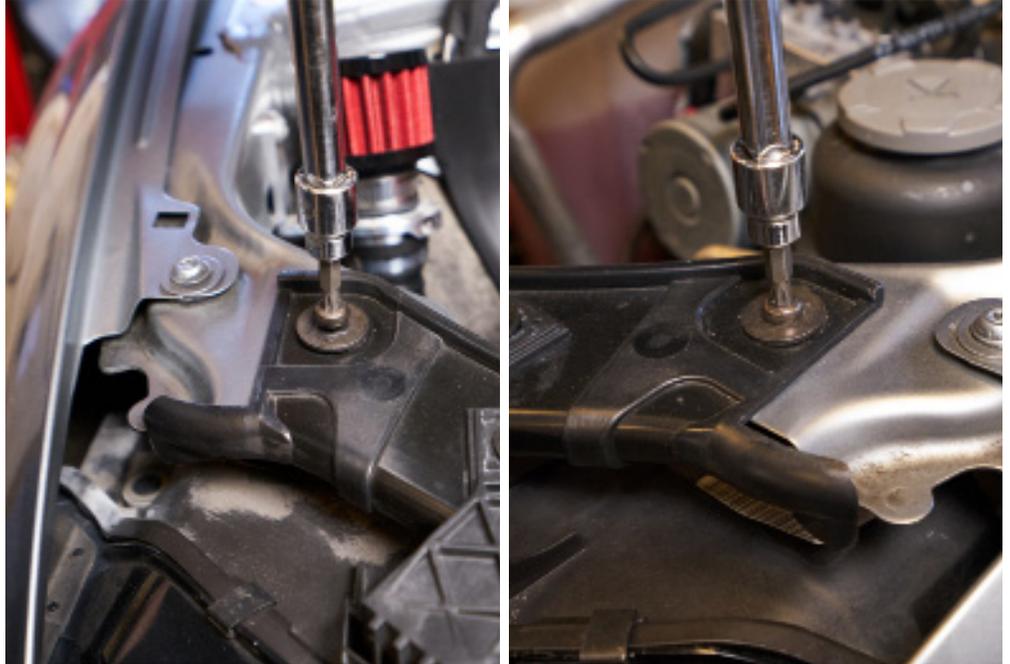
Remove the rest of the crash bar bolts.



STEP 16

Remove the two T30 Torx screws holding the radiator to the fenders.

Unclip the Headlight harnesses from the radiator support.

**STEP 17**

Pull the radiator support forward into "service position" onto the longer bolts installed in step 15. This will give you access to the front of the engine.



STEP 18

Remove the supercharger cover and make note of how the supercharger drive belt is routed around the pulleys.

**STEP 19**

Remove the plastic cap on the supercharger pulley



STEP 20

Remove the plastic cover on the tensioner pulley and release the tension on the supercharger belt by using a 16mm socket.

Remove the drive belt.

**STEP 21**

Install the removal tool by placing the two semi-circle pieces around the pulley and secure in place with the supplied ring.

Note: one set is sized for the stock pulley and one for the CTS pulley

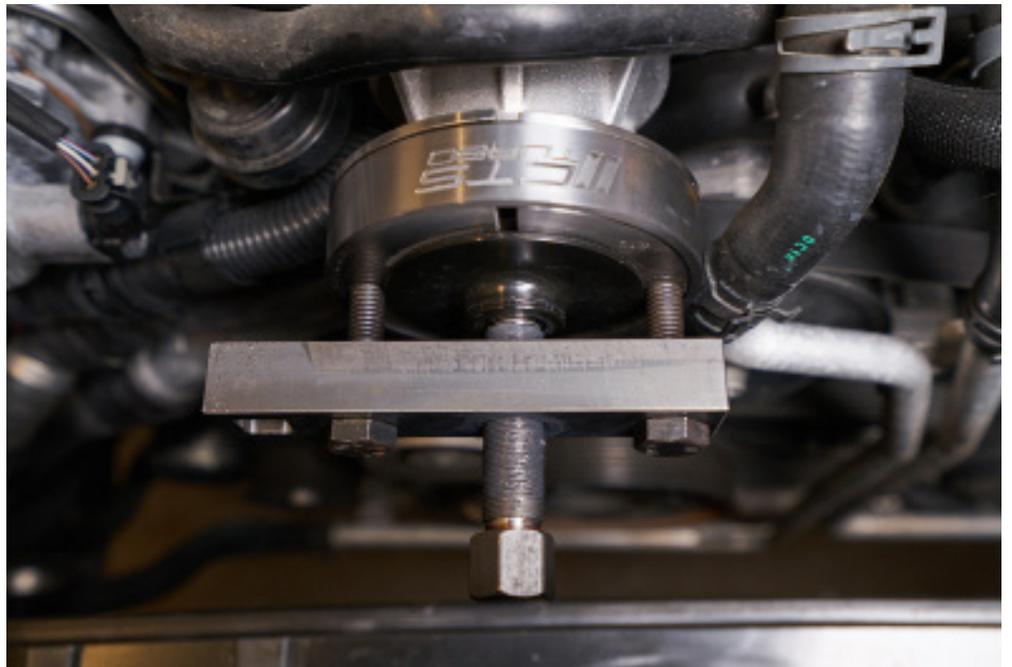


STEP 22

Apply some thread lubricant to the center bolt.

**STEP 23**

Install the block as shown using the two M10 bolts. Thread them by hand until they bottom out against the pulley. Adjust the center bolt until snug. Ensure that the block is perfectly parallel with the face of the pulley



STEP 24

Use a 1/2" breaker bar to hold the block in place and remove the pulley by using a 19mm wrench on the center bolt. Be very careful during this process and take your time. Do not strip the center bolt.

**STEP 25**

Take the CTS pulley out of the oven and immediately install it onto the supercharger shaft. The pulley should bottom out on the shaft. Hold it in place for a few seconds to ensure proper positioning. **DO NOT USE FORCE TO INSTALL PULLEY.** Heat the pulley more if required.



STEP 26

Cool the pulley with compressed air till it's cool to touch.

Reinstall everything by following steps in reverse 20 through 1.

Load proper tuning software and you are done!

