



INSTALLATION GUIDE

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



20630 Mufford Crescent, Unit #309
Langley, British Columbia V2Y 2V9

WHAT IS INCLUDED

1. Belt
2. CTS Supercharger Pulley
3. CTS Supercharger pulley removal tool



TOOLS REQUIRED

1. Philips head screwdriver
2. 16mm, 17mm Socket
3. Ratchet
4. T-25, T-30 torx
4. 19mm wrench
5. Toaster 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

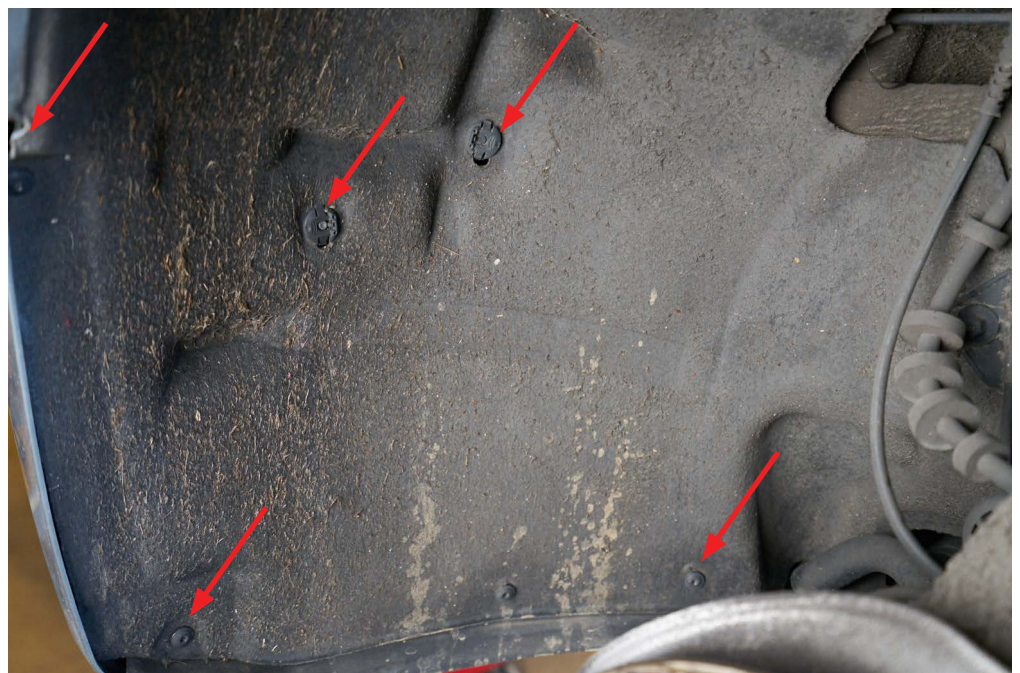
Place the pulley in a 450 degree F oven for at least an hour. Use an oven thermometer as temperatures may vary oven to oven.

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



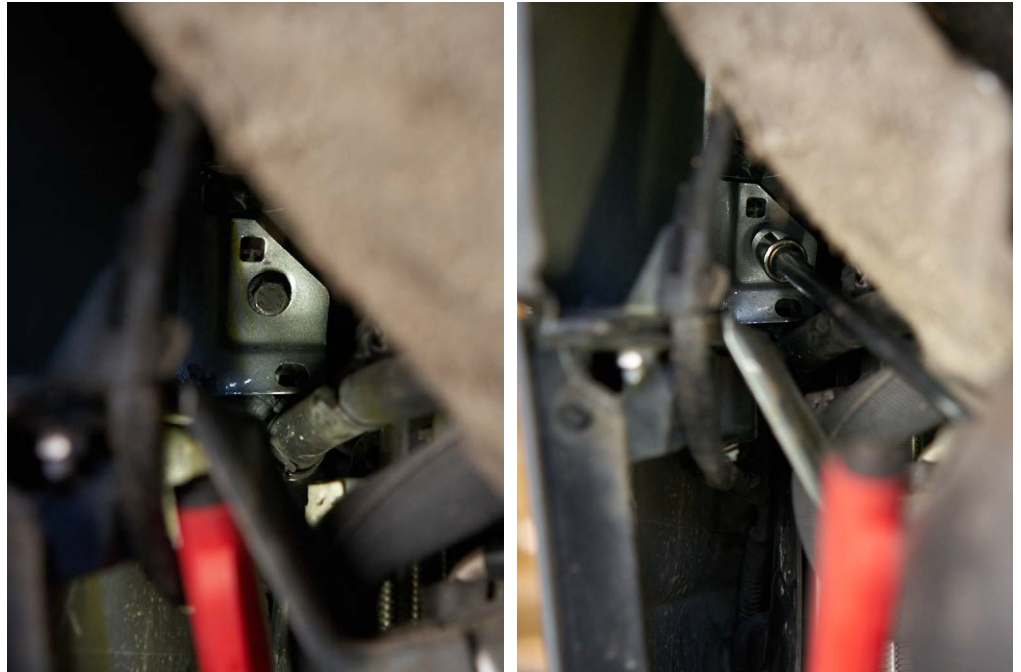
STEP 3

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

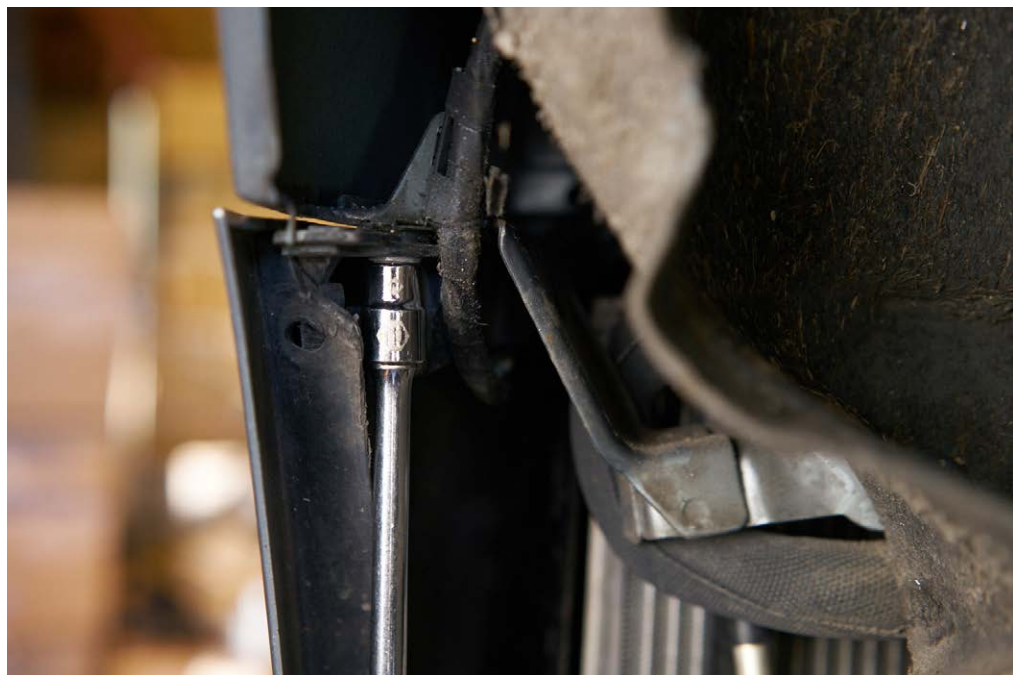


STEP 4

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.

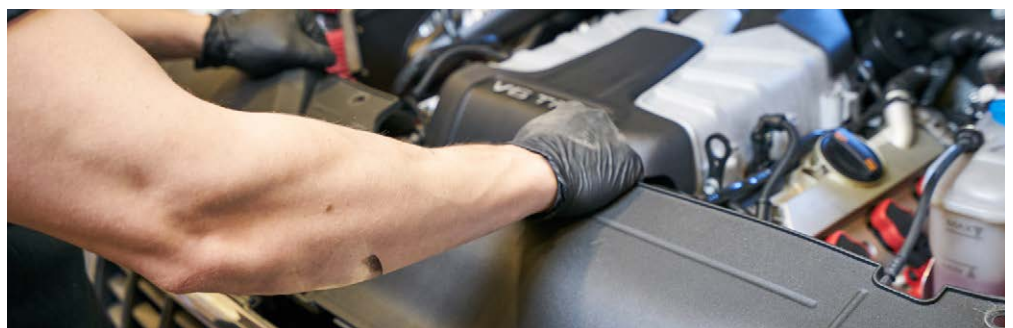
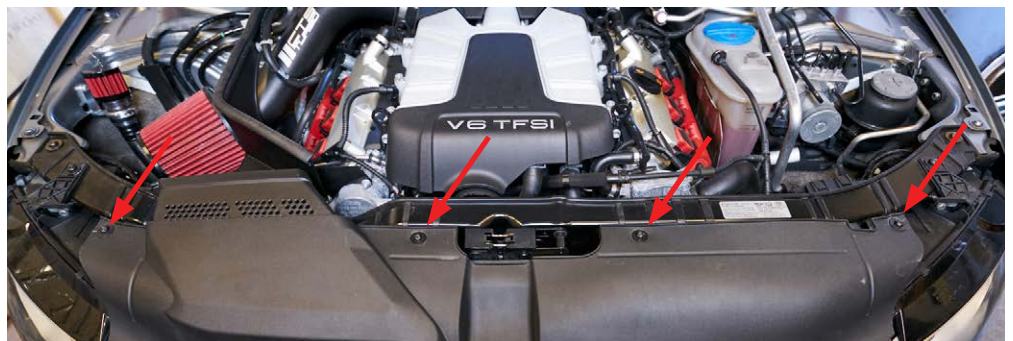


STEP 6

Remove the 11 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.



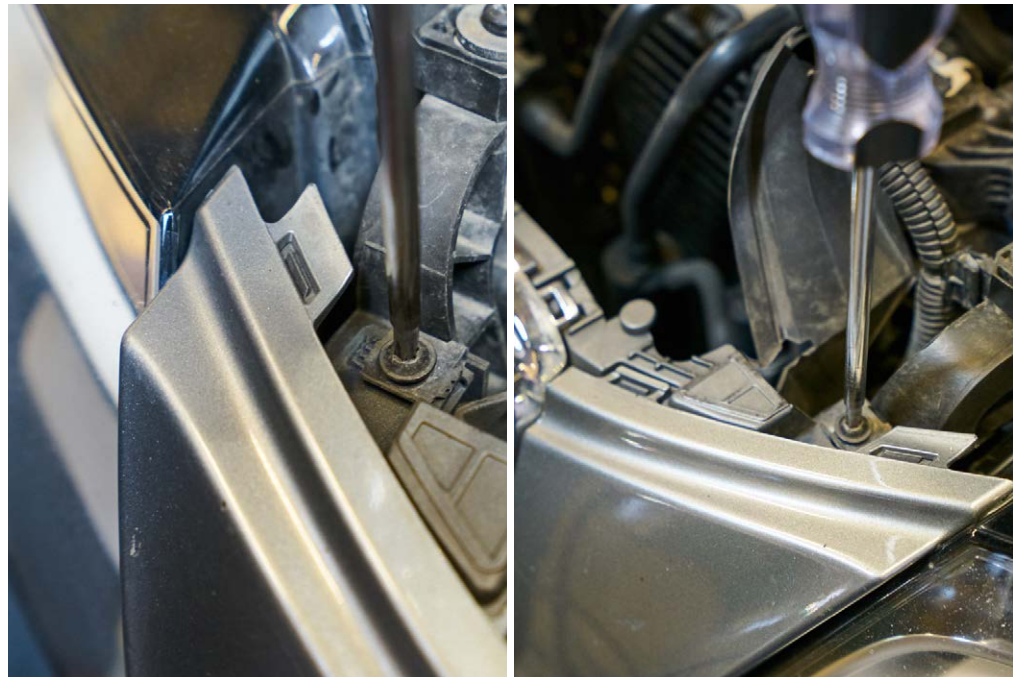
STEP 8

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.

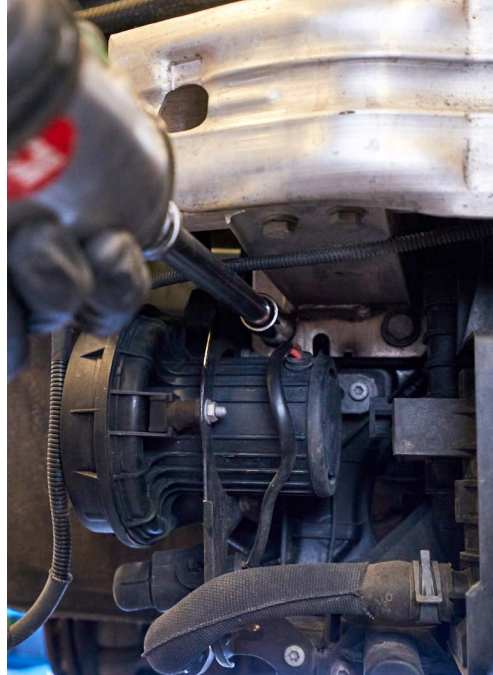
**STEP 13**

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 kit. Leave the bolt extended out as shown.

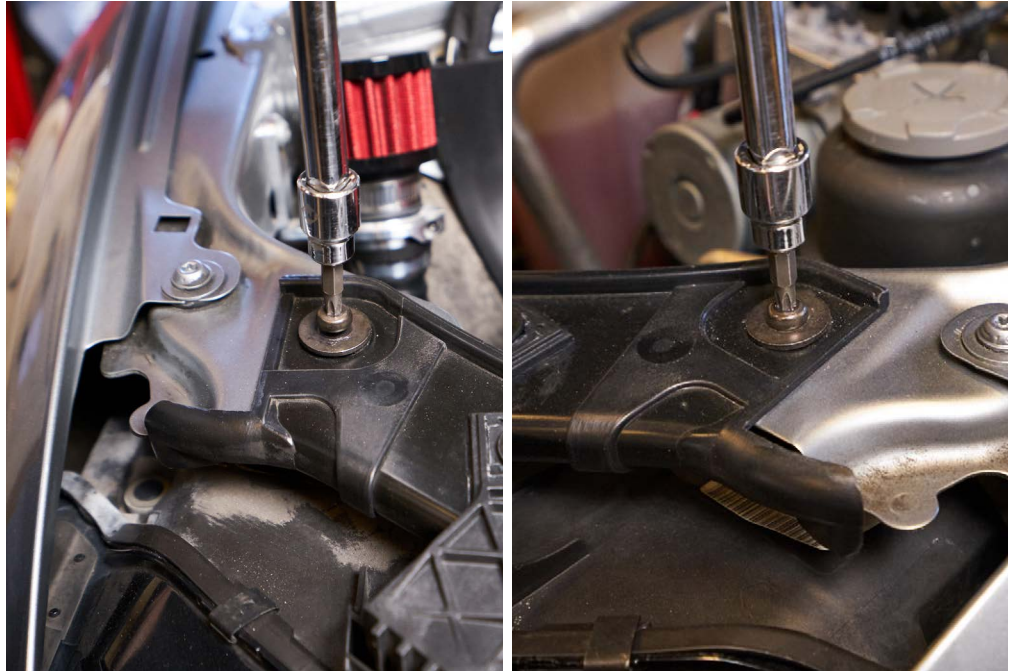
Remove the rest of the crash bar bolts.



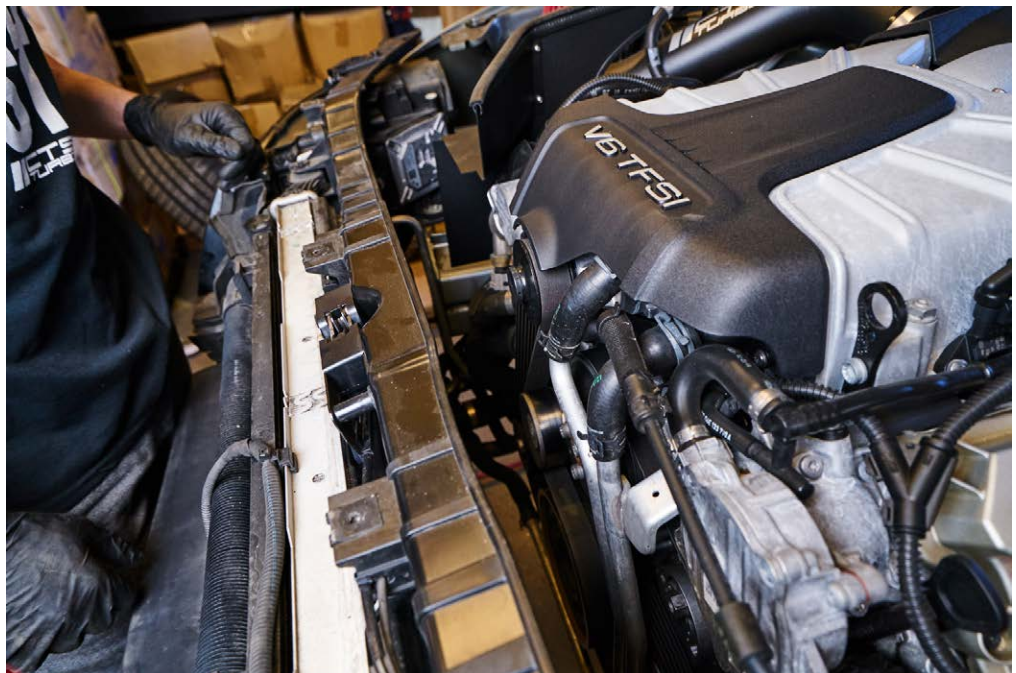
STEP 16

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.

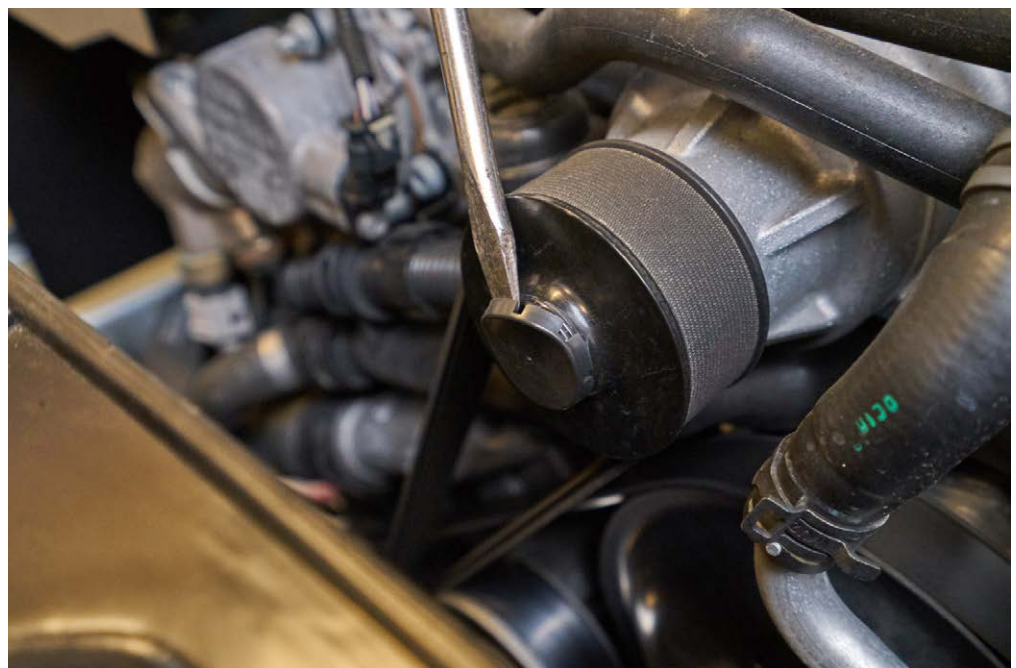


STEP 18

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

**STEP 19**

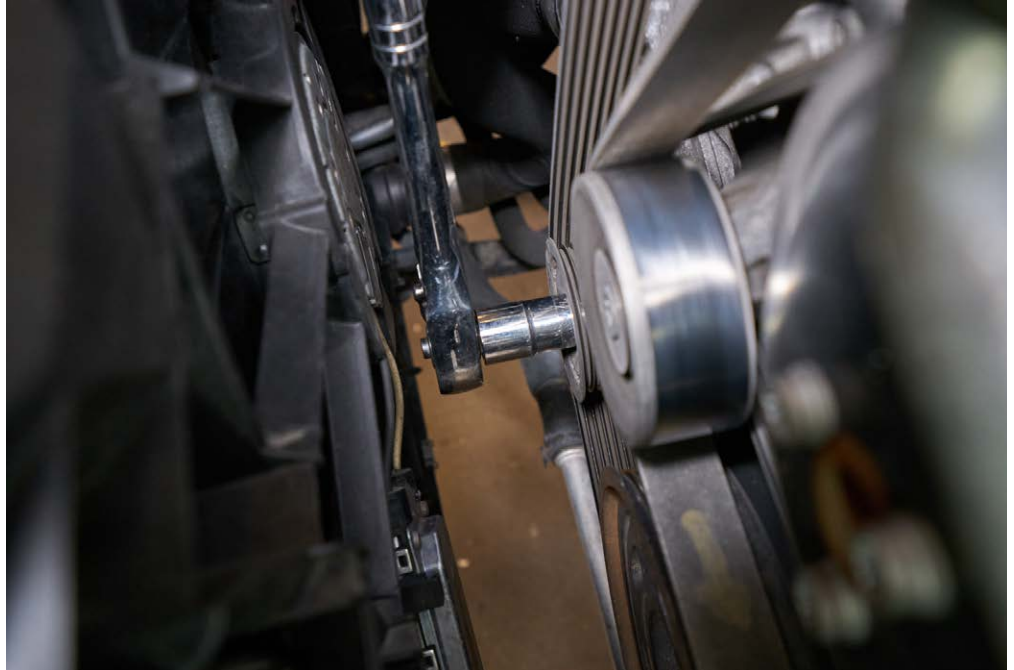
Remove the plastic cap on the supercharger pulley



STEP 20

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

Remove the 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



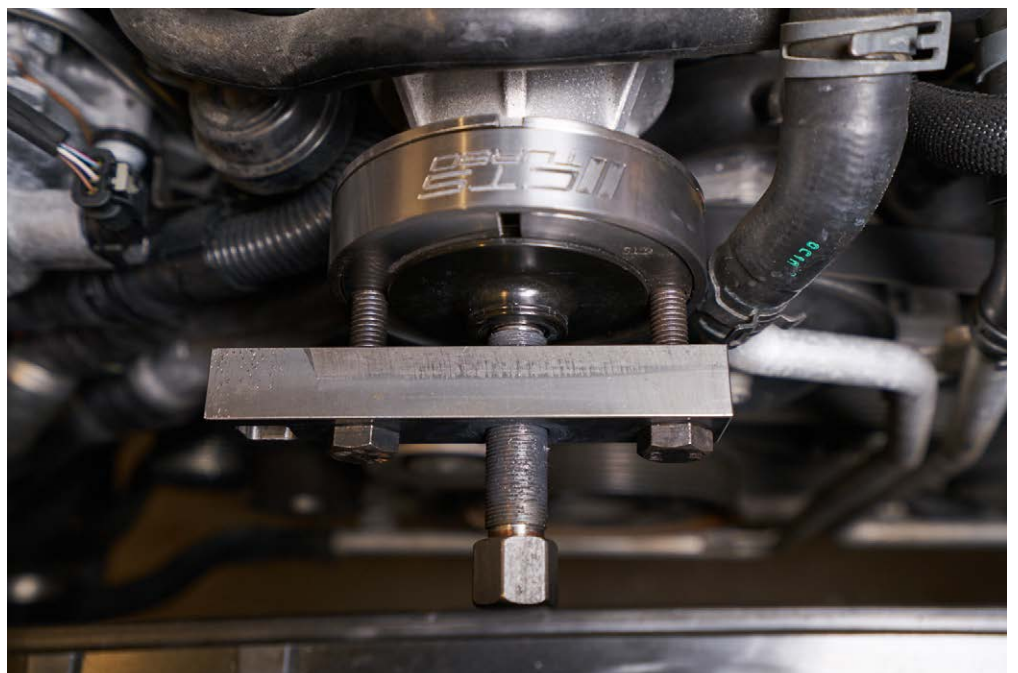
STEP 22

Apply some thread lubricant to the center bolt.

**STEP 23**

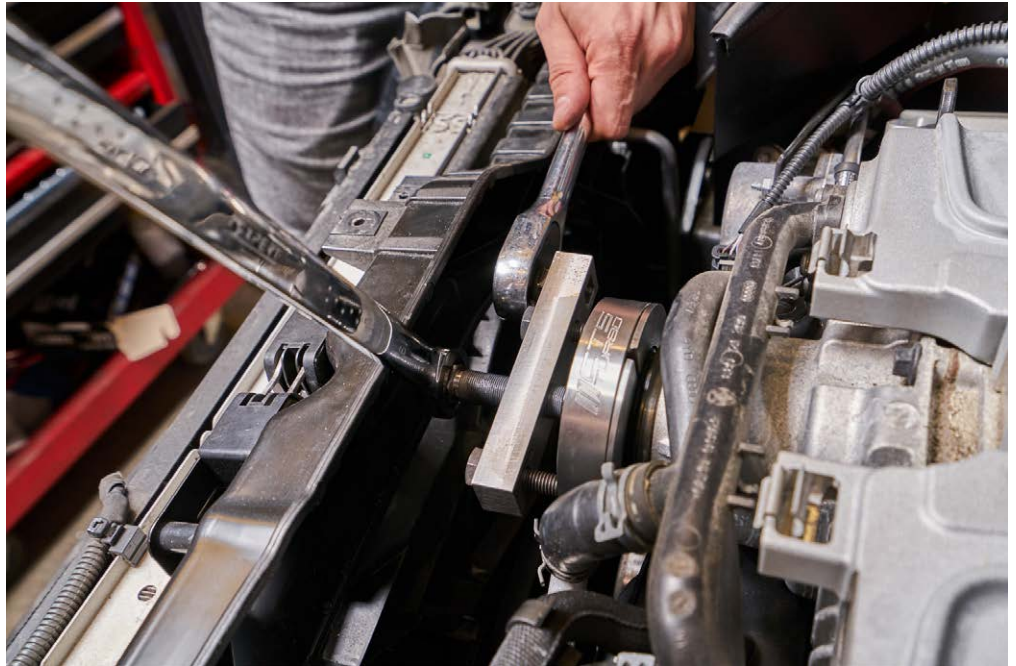
Install the block as showing using the two M10 bolts. Thread them by hand until they bottom out against the pulley.

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 ratchet.

**STEP 25**

Make sure to use high temperature gloves and take the CTS pulley out of the oven and immediately install it onto the supercharger drive shaft. The pulley should bottom out on the shaft. Hold it in place for a few seconds to ensure proper positioning.



STEP 26

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

Reinstall everything by following steps in reverse 20 through 1.

You are done!

