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## **IE Audi 3.0T Supercharger Pulley Upgrade Install Guide IEBAVJ1A**

Thank you for purchasing your IE 3.0T supercharger pulley upgrade! This instruction guide is used for installation of IE's upper overdrive pulley for Audi 3.0T (supercharged) applications. This kit needs to be installed by a professional or an experienced technician. Integrated Engineering is not responsible for any damage caused by incorrect installation.

### **Required To Install:**

- Flathead screwdriver
- Small flathead screwdriver
- Phillips head screwdriver
- Socket wrench
- Socket extension(s)
- 10mm socket
- 16mm socket
- 16mm crescent wrench
- T25 torx bit
- T30 torx bit
- 6mm Allen wrench
- Long ½" breaker bar
- Long 15/16" box end wrench
- IE Pulley Puller Tool IEBAVJ4
- (2X) 10mm X 1.5 threaded bolts at least 60mm long
- Torch or toaster oven

**WARNING:** Warranty VOID if non-IE puller tool (part number IEBAVJ4) is used to remove your pulley. Using any other tool other than the IE unit will DEFINITELY destroy your pulley. DO NOT ATTEMPT TO REMOVE IE PULLEY WITHOUT IE TOOL.

*Before you begin, open your IE supercharger pulley and inspect pulley. Read over the installation list and verify you have the correct tools to complete the installation.*



**Important Safety Note:**

Your new IE pulley is a very tight press fit design, this is to function reliably like the factory installed pulley. Installing the new pulley will require heating the pulley to very high temperatures to accomplish proper install of the press fit. For this reason, IE recommends a professional installation be performed. Otherwise, make sure you exercise extreme caution when working with heated metals and have the required safety equipment to perform the task. Integrated Engineering is not responsible for any damage or injury from incorrect installation.

Safely rack your car on an auto lift or place onto jack stands. It is also recommended to allow the car to cool before beginning this install procedure.



Remove both front wheels to gain access to the fender liners and belly pan hardware.



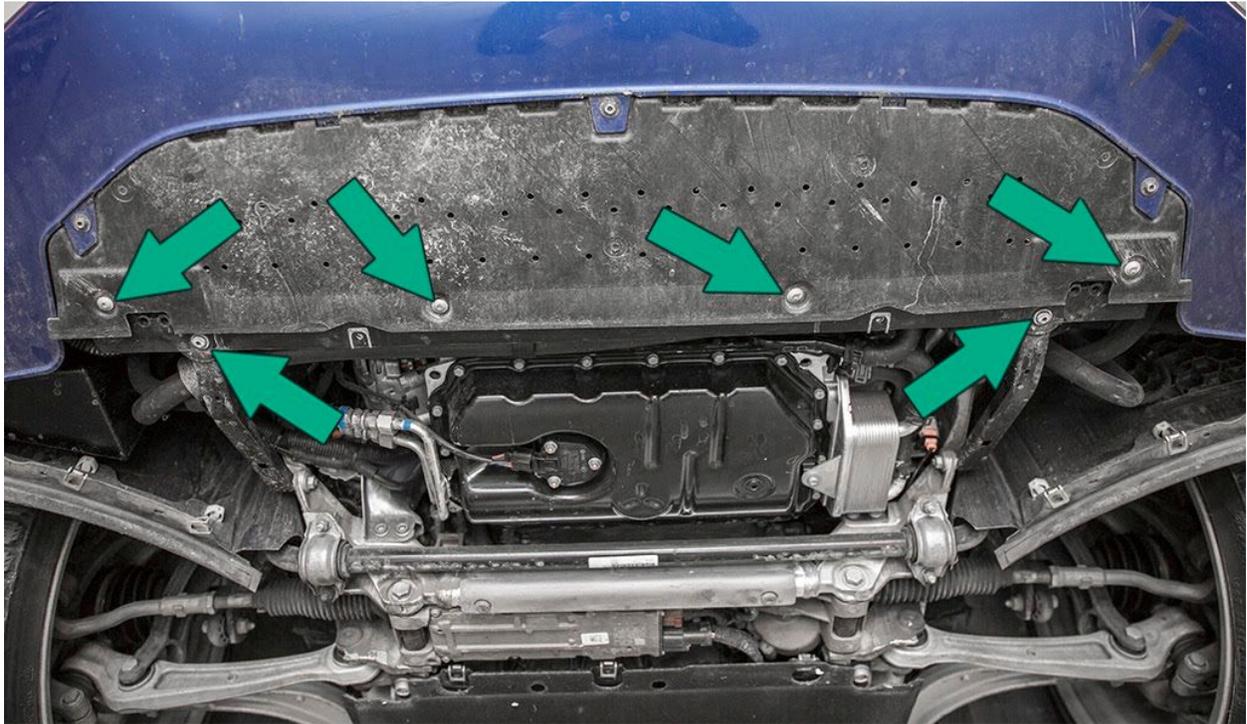
Remove the 11 phillips head screws holding the belly pan in place.



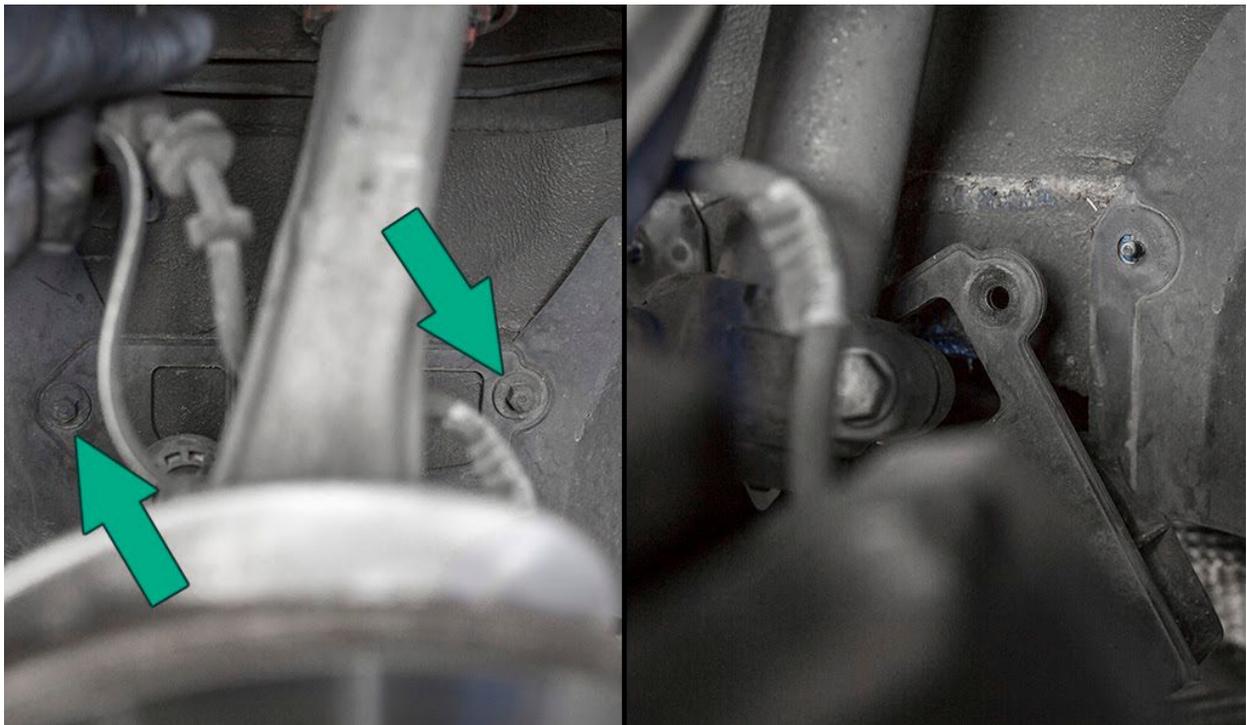
Remove belly pan from vehicle by sliding backwards.



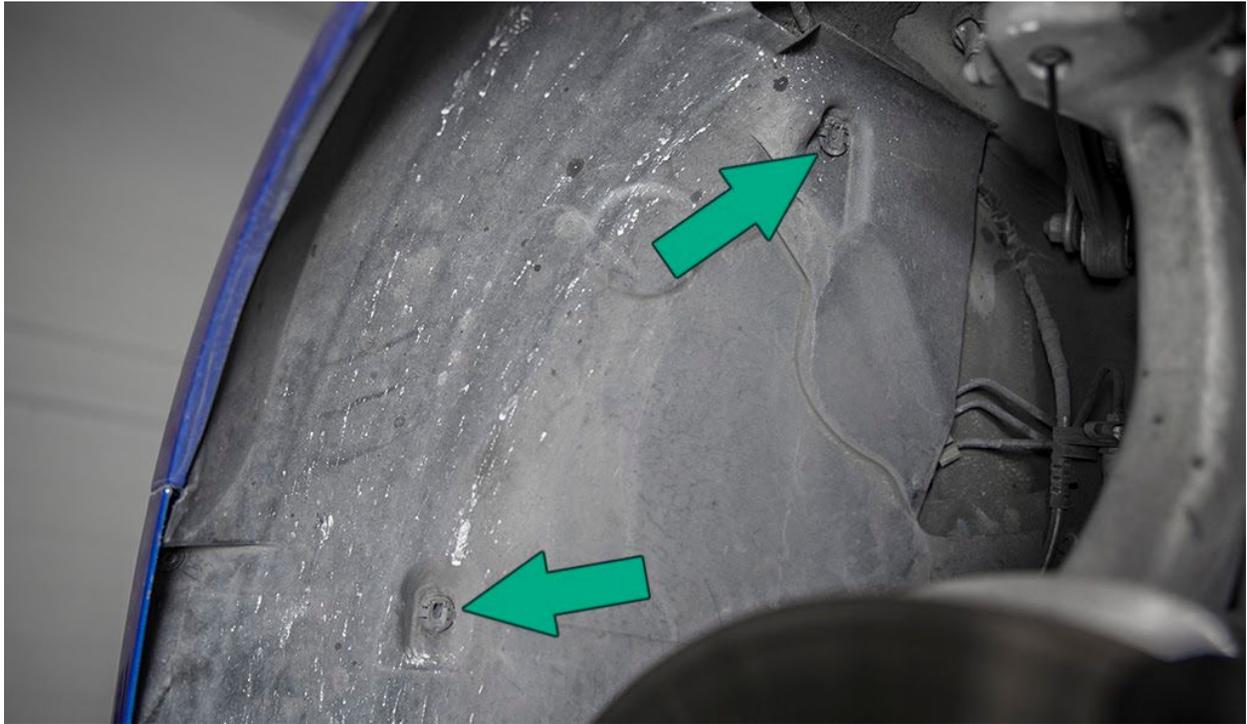
Remove the six T30 torx screws from the underside of the bumper that secures it to the radiator support.



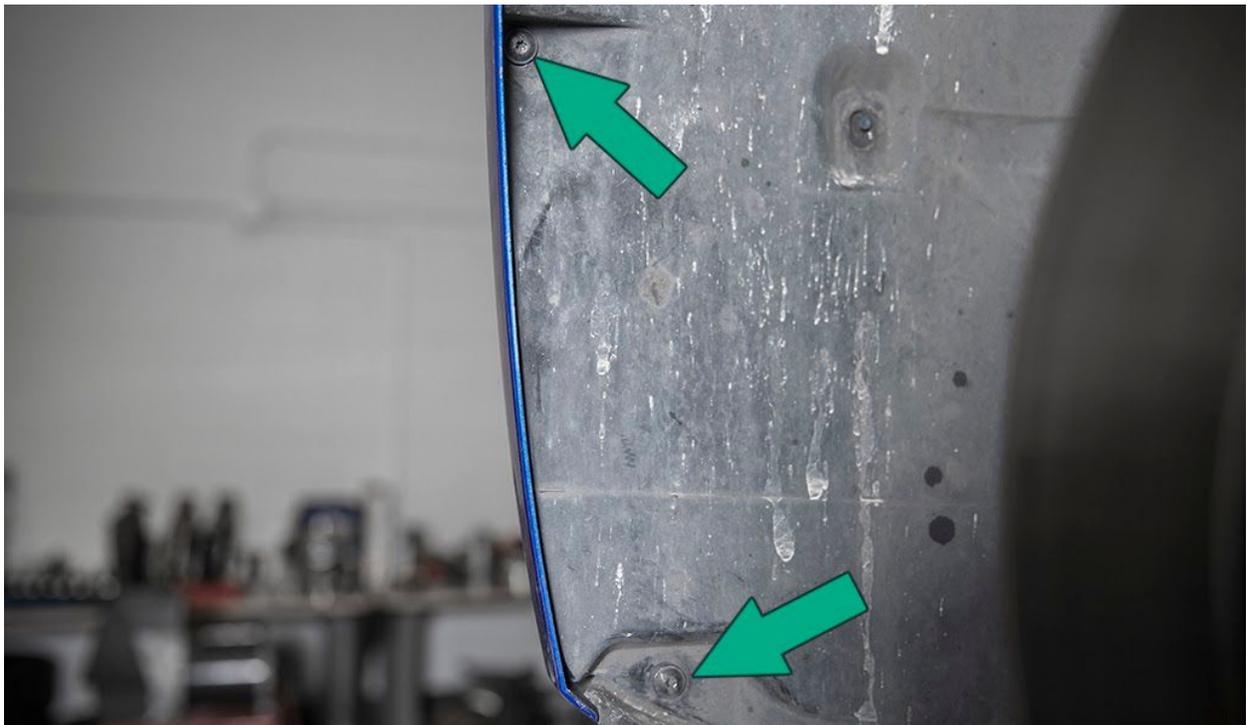
Remove the two 10mm nuts from the axel guard and let it sit disconnected. *Repeat this step on both sides of the car.*



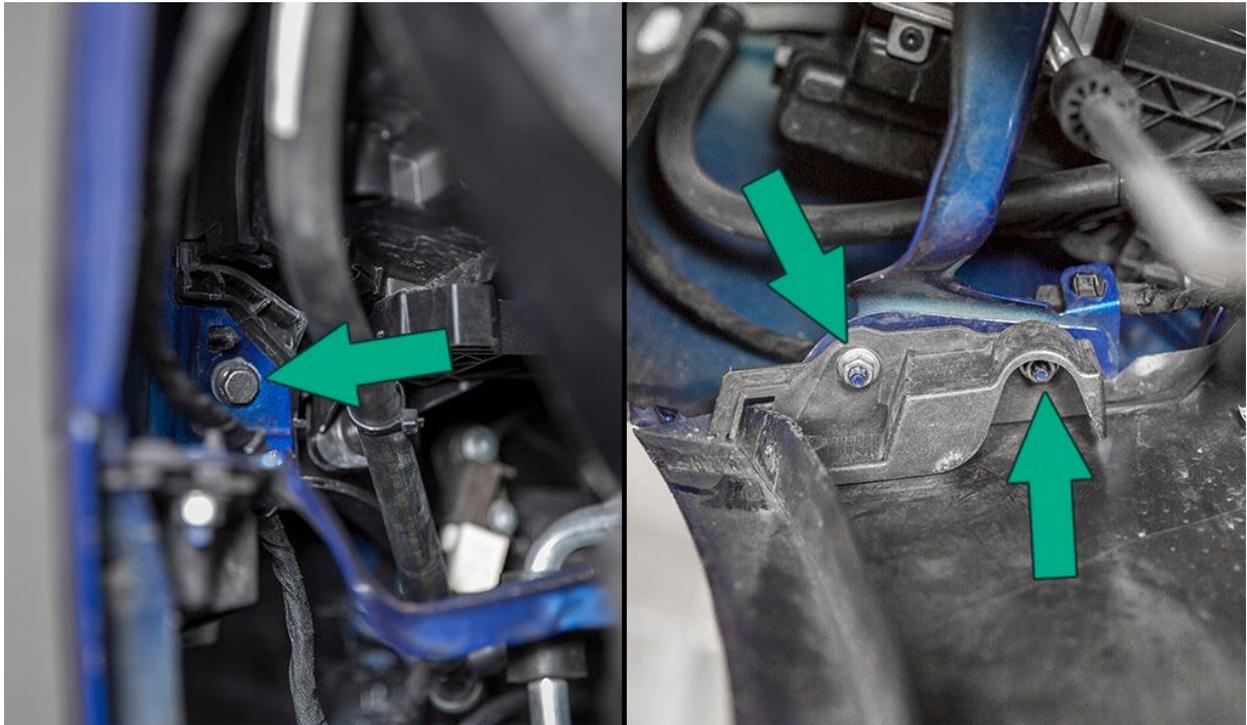
Using a small flathead, remove the two plastic retainers from the wheel well liner. *Repeat this step on both sides of the car.*



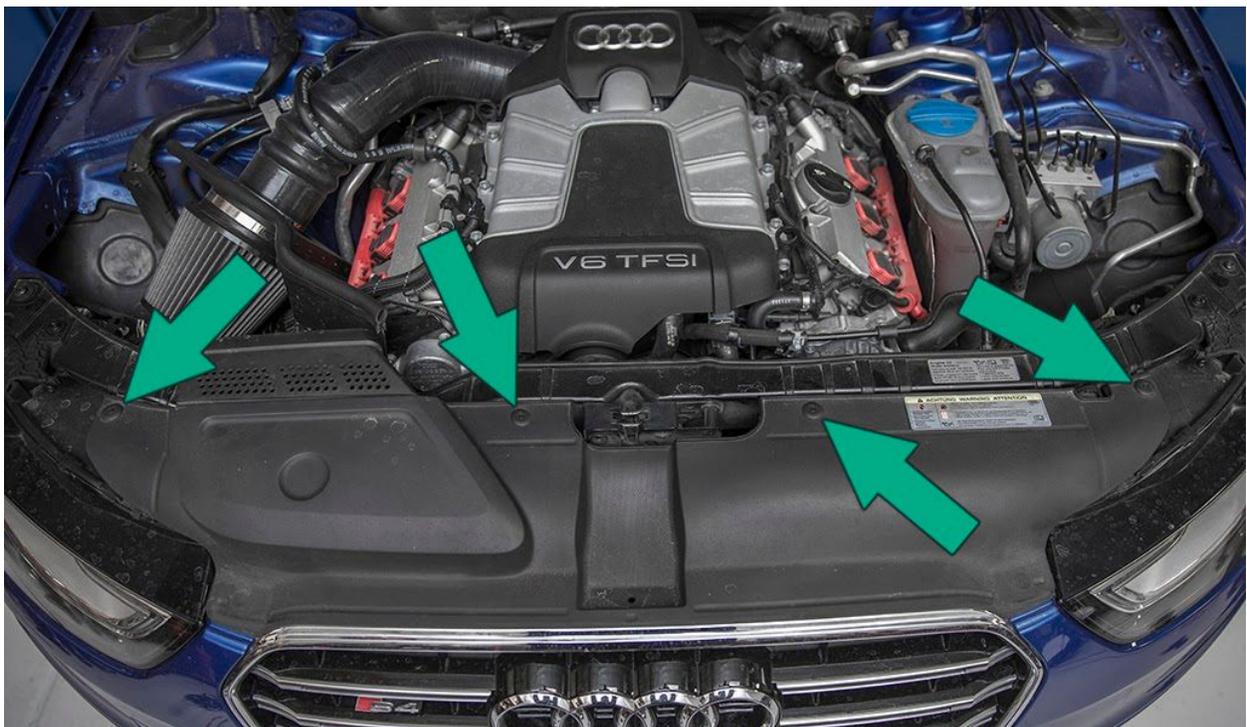
Remove the two outer T25 screws from the wheel well liner. *Repeat this step on both sides of the car.*



Pull the liner out of the way to gain access inside the fender. Remove the 10mm bolt directly behind the liner. Now loosen the two 10mm nuts under the bumper to fender bracket. You do not have to fully remove these nuts. *Repeat this step on both sides of the car.*



Remove the four push retainers or T30 bolts (varies by car) from the radiator cowl.



Remove the cowl carefully by pulling upwards.



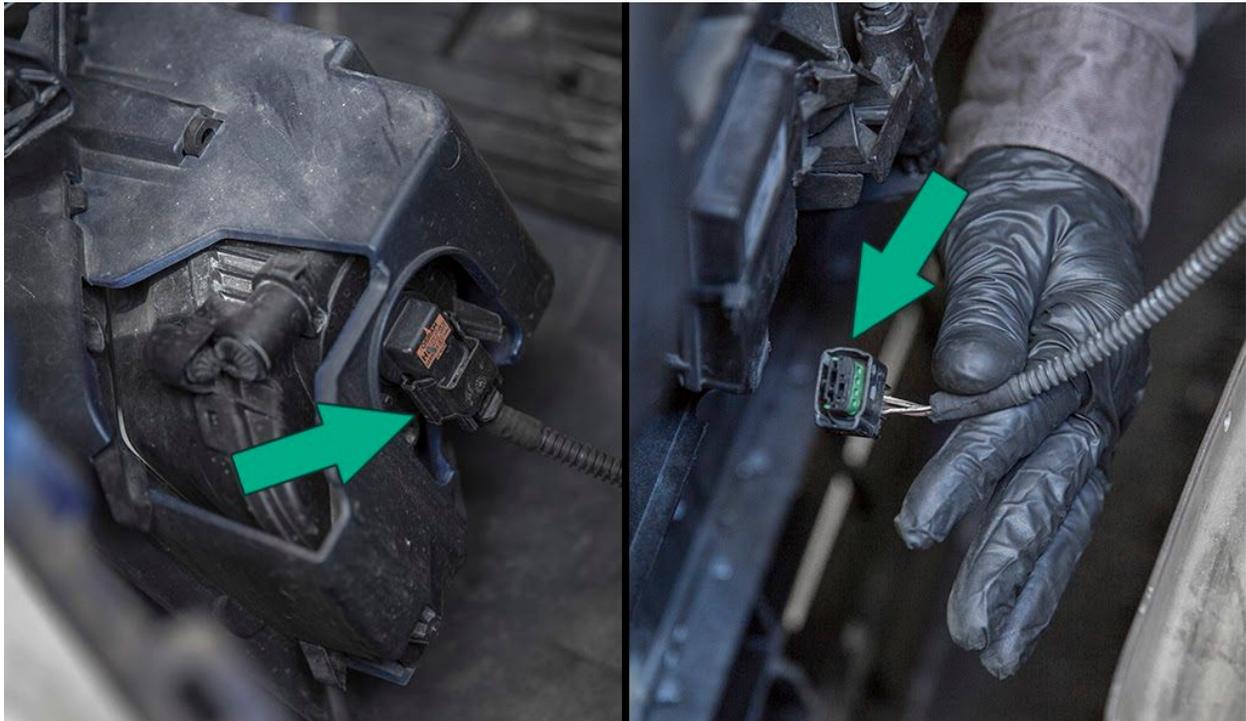
Remove the two T25 screws from the bumper to rad support, one on each side.



Release the bumper cover from the fender by pulling on the outer top edge. Repeat on both sides. *Note: Use caution during this step to not break the plastic clips that fasten the bumper.*



Pull the driver's side of the bumper cover forward and disconnect all electrical connectors located inside. *Note: Do not pull bumper too far forward in this step, it can damage the bumper harness.*



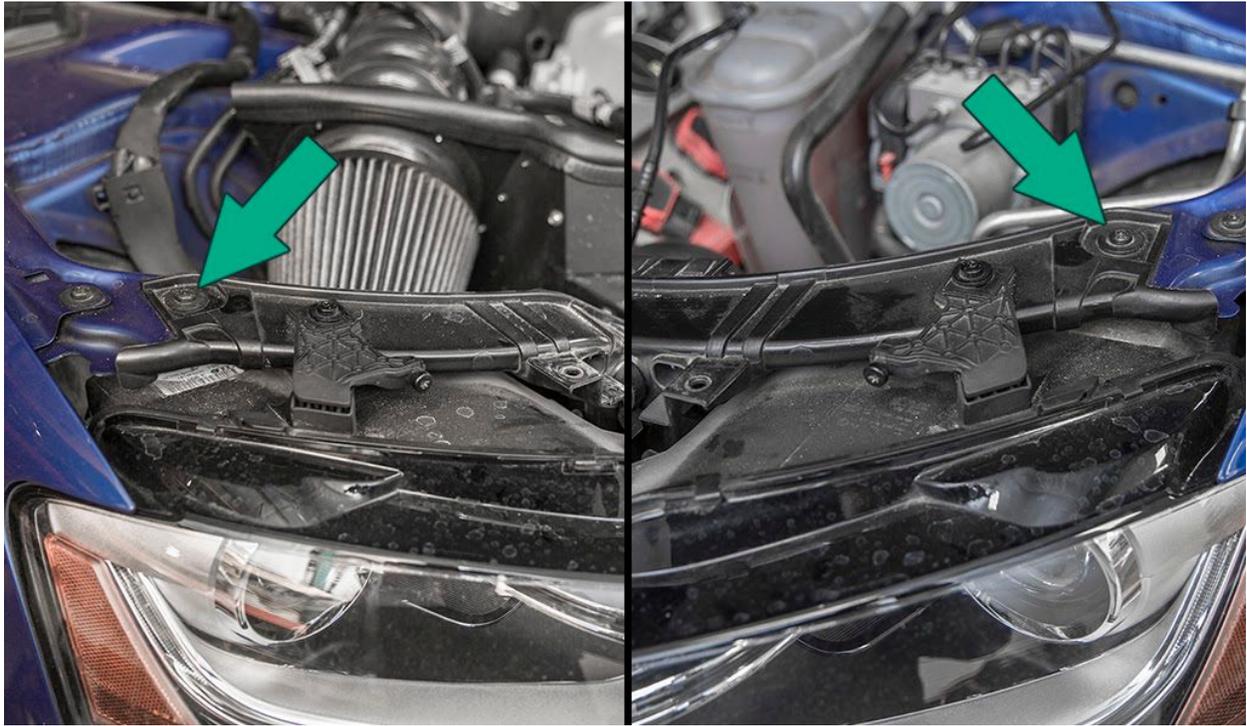
Verify all harness connectors are disconnected and free, then completely remove the front bumper.



Remove the two T25 screws from the air inlet and remove it.



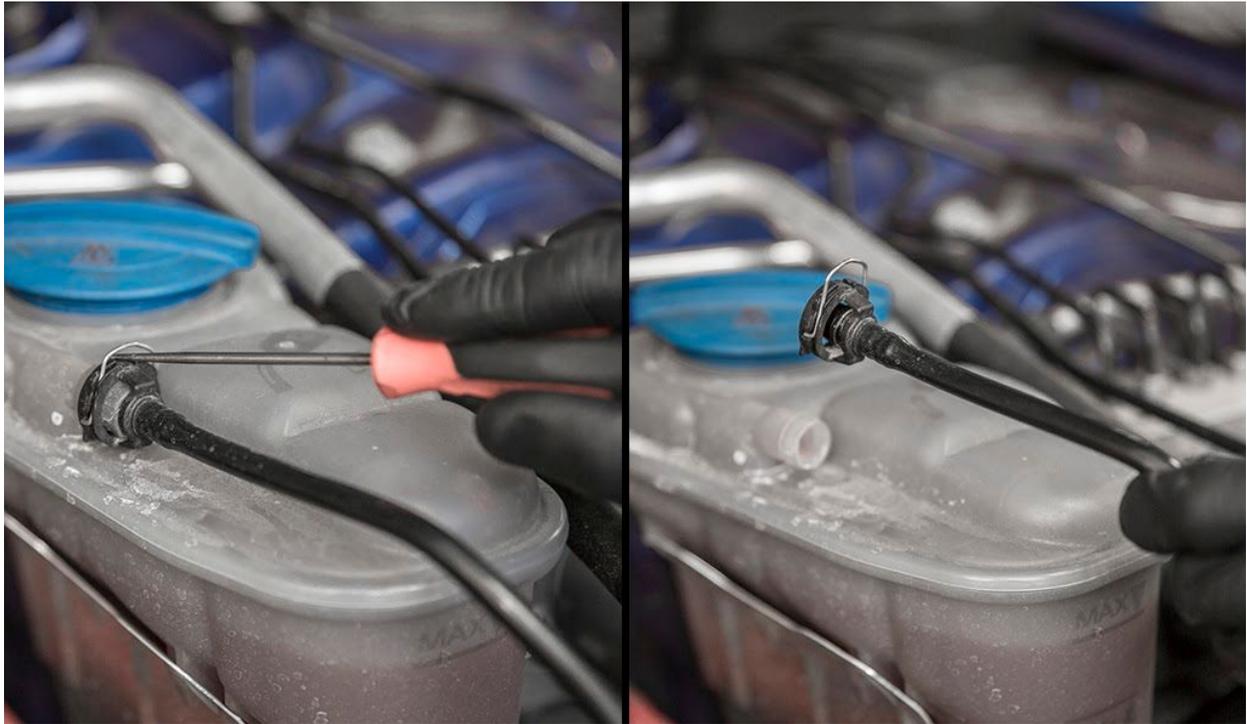
Remove the two T30 radiator support to fender bolts, one is located on each side above the headlights.



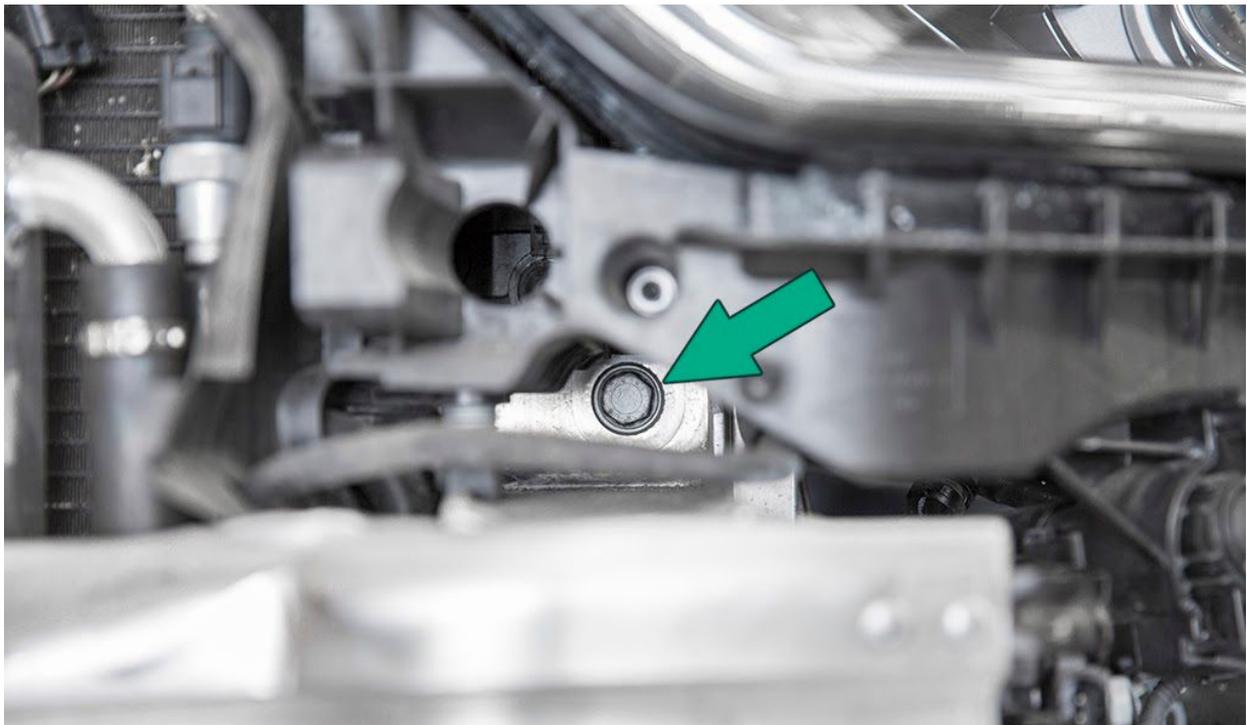
Loosen the coolant cap to remove any pressure from the coolant system.



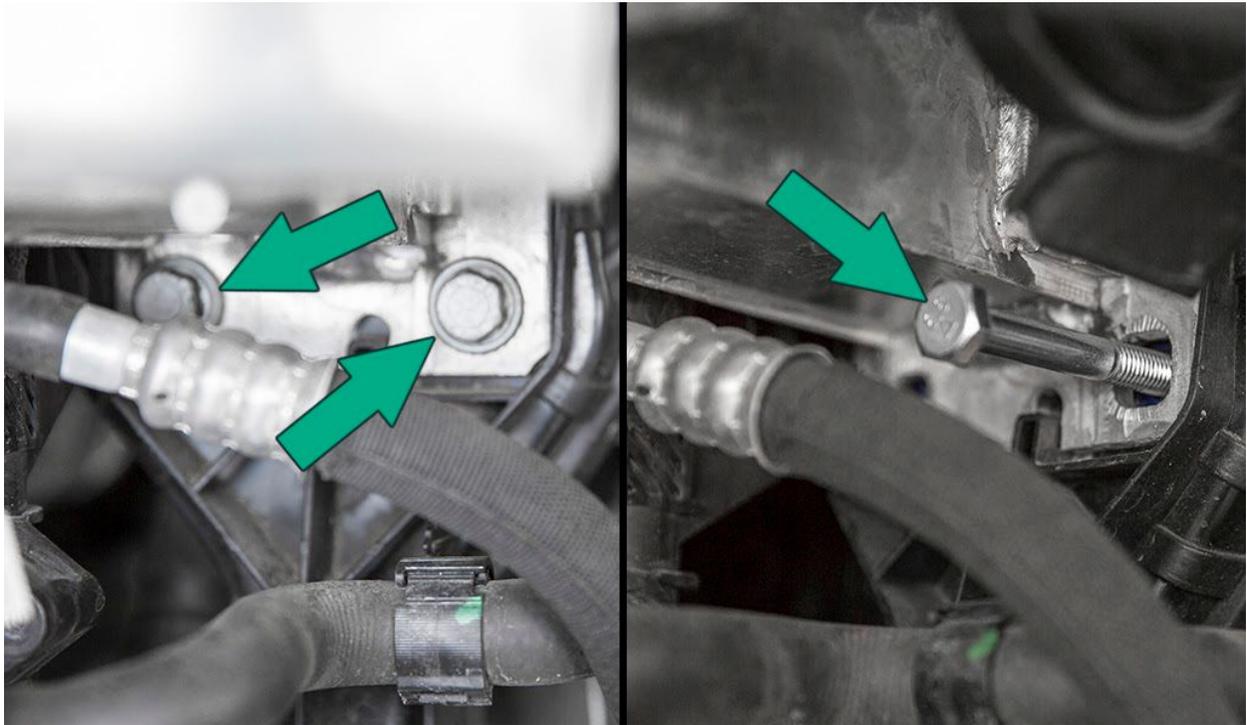
Using a small flathead, release the coolant overflow line spring clip. Gently pull back on the line to release it from the coolant tank.



Using a 16mm socket, remove the upper crash beam to radiator support bolts. One is located on each side



Remove the lower crash beam to radiator support bolts with a 16mm socket, two located on each side. *Note: We highly recommend installing a 10mmX1.5 threaded bolt at least 60mm in a lower hole on each side to support the weight.*



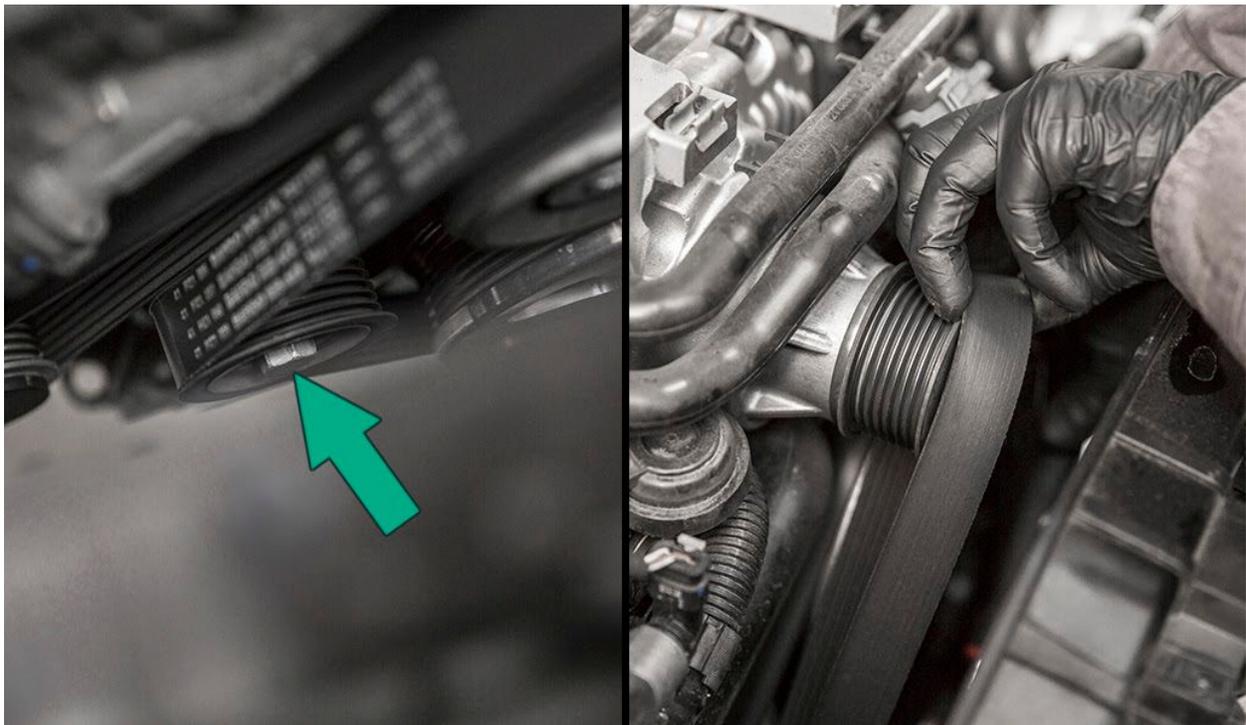
With the weight supported, carefully pull the front clip forward to access the pulley. Verify no lines or harnesses are being stretched or pulled.



Pull to remove the engine cover plastic.



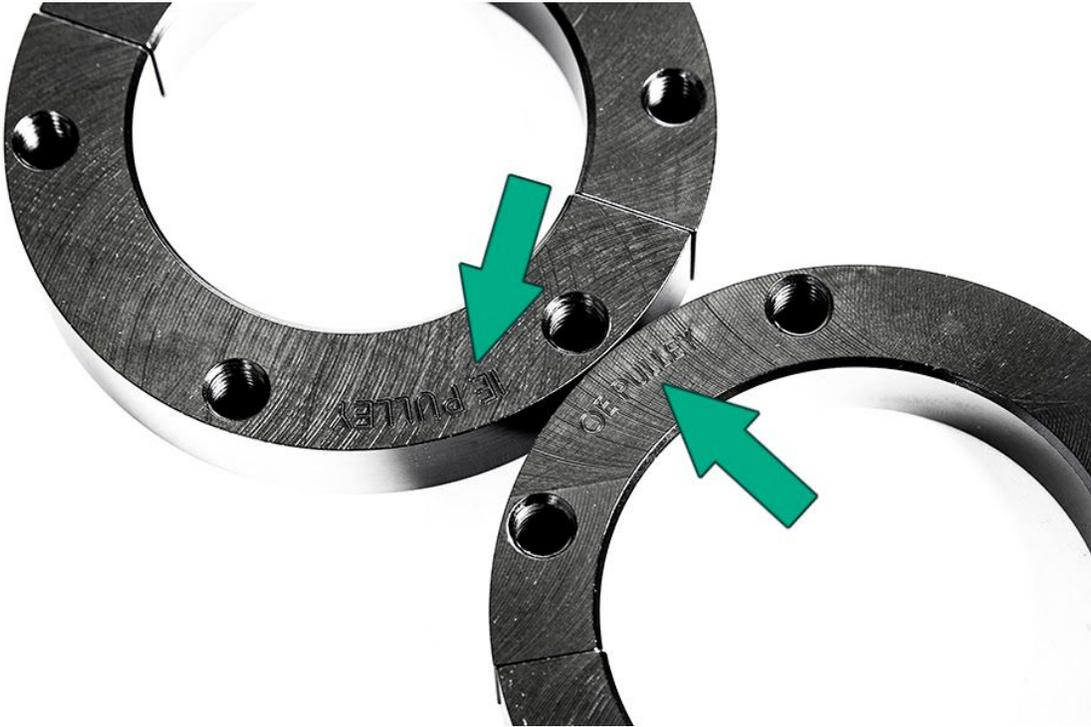
Using a 16mm crescent wrench on the belt tensioner bolt, release tension on the supercharger belt and remove it from the upper pulley.



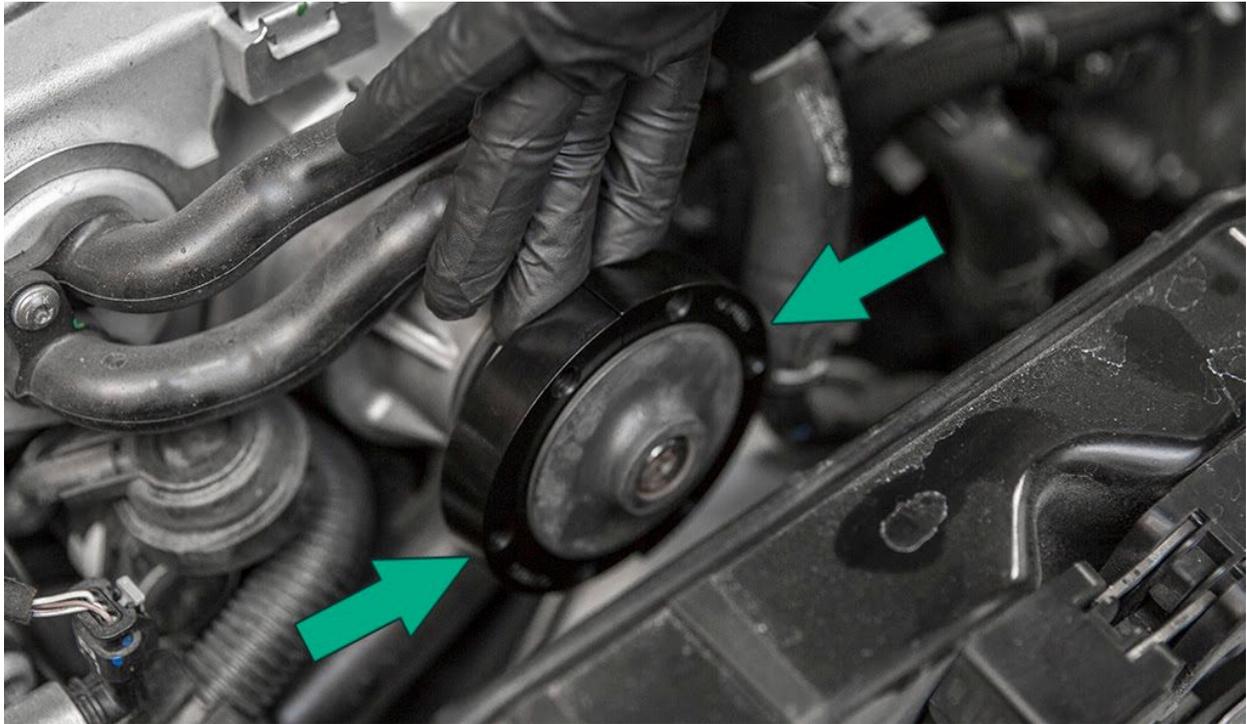
The following steps outline the removal of the factory pulley using the IE pulley tool IEBAVJ4 only. This tool is sold separately. If you are not using the IE tool, refer to the instructions for the manufacturer of the tool you will be using.



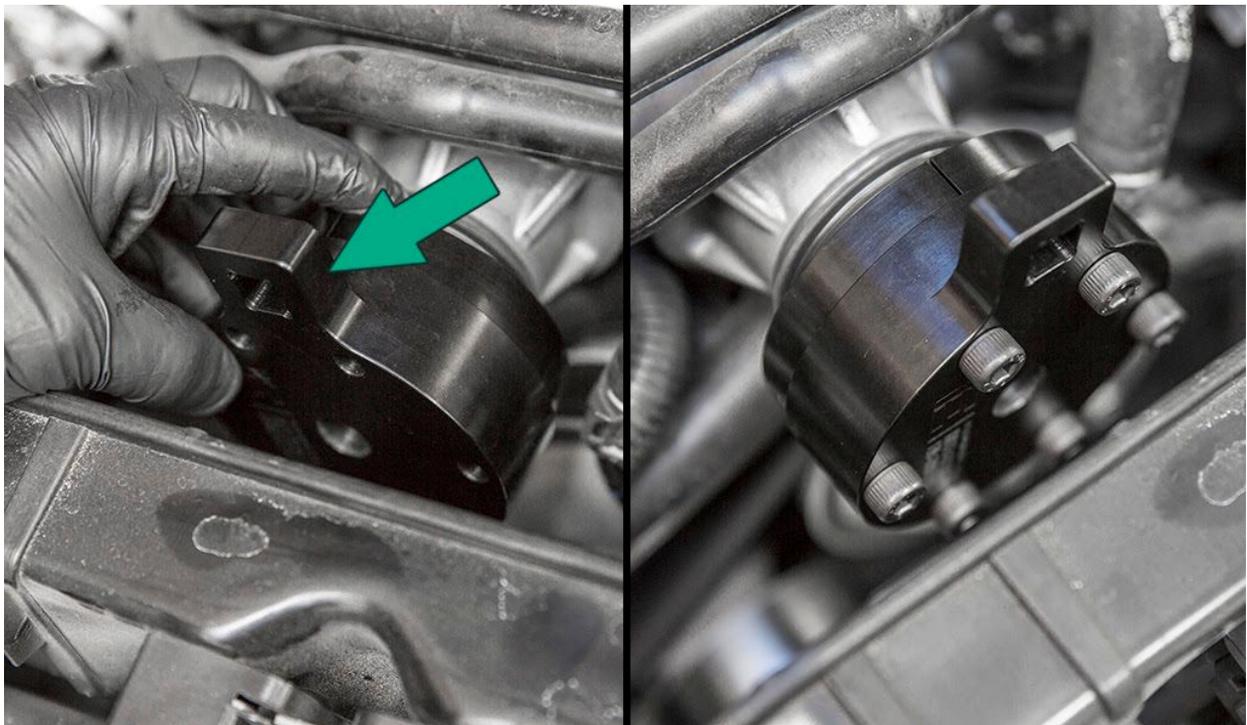
The IE puller tool includes two sets of pulley plates. One set is marked for the factory pulley, the second is for the IE pulley. Determine and use the correct plates in the following steps.



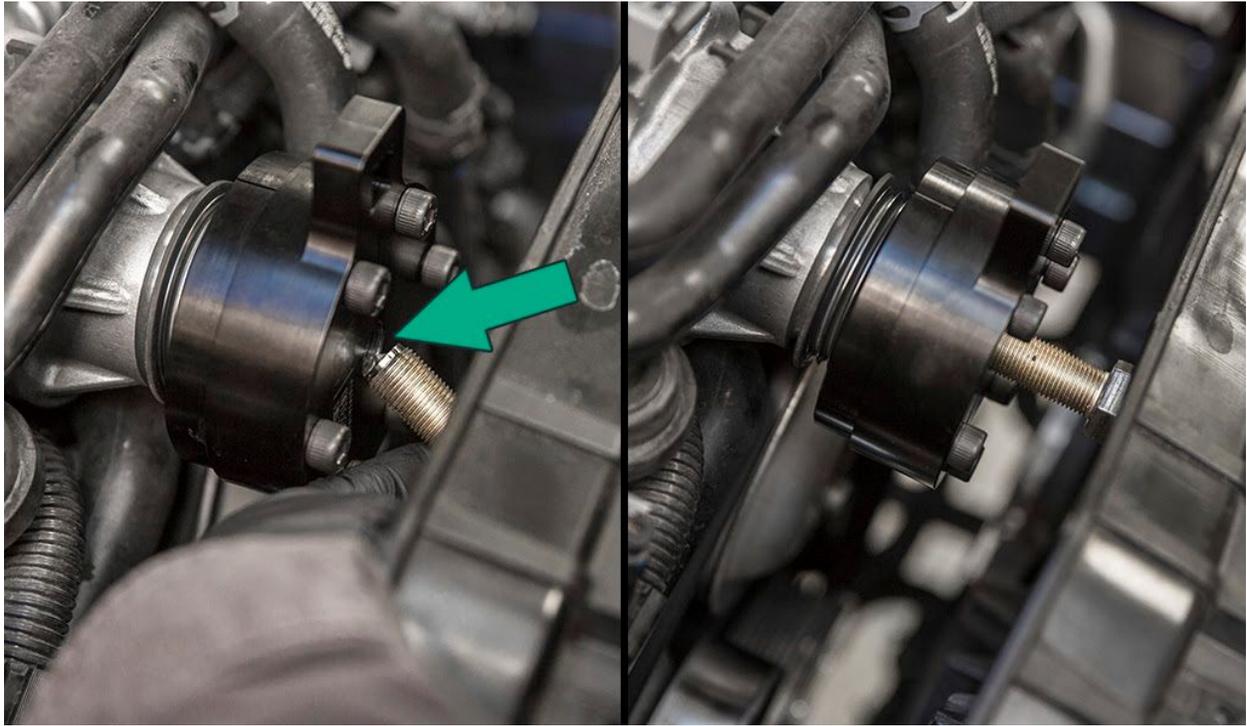
Install the plates marked "OE PULLEY" onto the pulley all the way forward and flush.



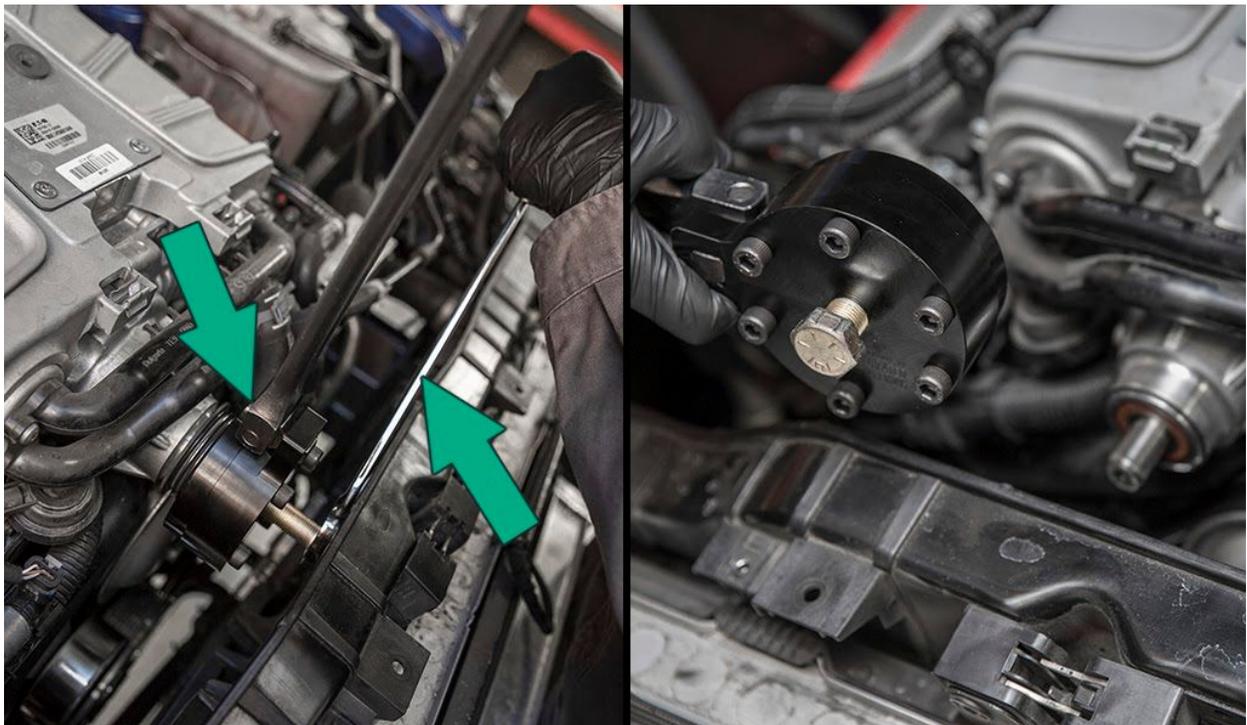
Place the pulley face over the plates with the breaker bar adapter facing upward. Line up the holes then install the included bolts with a 6mm allen wrench.



Insert the included push bolt into the puller tool. Thread tightly by hand until the bolt makes contact with the pulley shaft.



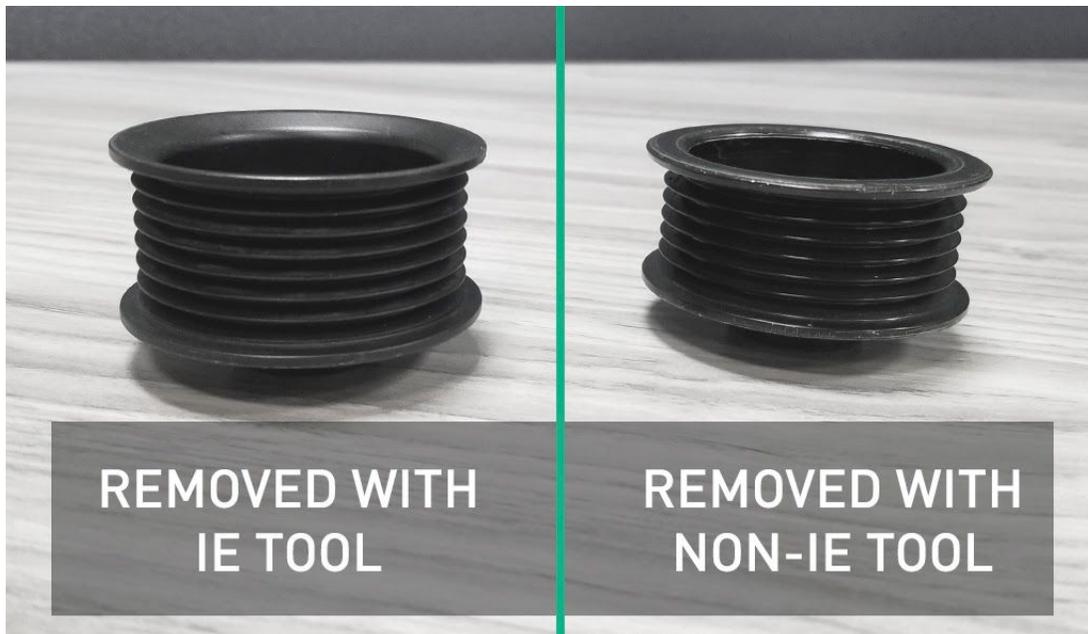
Using a long 1/2" breaker bar and 15/16" box end wrench, tighten the bolt slowly until the pulley and tool completely remove from the vehicle.



Heat the new IE pulley to at least 400 degrees fahrenheit using a toaster oven (recommended) or very carefully with a torch. With the pulley heated, quickly slide it into place. If the pulley cools down too much, you will have to use the pulley removal tool to pull it off and start over.



**WARNING:** The pulley requires a very tight press fit, If the pulley is not hot enough it will not slide all the way on. If this happens DO NOT attempt to hammer it on and DO NOT attempt to remove it with any tool besides the IE brand puller tool. Hammering or using a non-IE brand puller will result in a damaged pulley. IE will not replace damaged pulleys from improper installation.



With the new pulley installed, reassemble the car by following the reverse of this procedure.



Confirm everything has been reinstalled and no leftover parts remain. Start the car and confirm that there are no leaks or odd sounds. Enjoy the benefits of more power from your IE Overdrive Supercharger Pulley Upgrade! To compliment your new upper pulley and push your 3.0T to the next level, consider adding an IE crank overdrive pulley for the ultimate in pulley performance!



Thank you for purchasing another Integrated Engineering product. We are dedicated to serving your VW/Audi engine and performance needs. Please check our website frequently for new product releases. If you have any questions or concerns about this product please do not hesitate to contact us.

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