

## PERFORMANCE BY INTEGRATED ENGINEERING

## IE Audi 3.0T Crank Pulley Upgrade Install Guide for IEBAVJ6 & IEBAVJ7

Thank you for purchasing your IE 3.0T crankshaft pulley upgrade! This instruction guide is used for installation of IE's lower 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 hex bit
- 6mm allen bit
- Paint pen
- Angle grinder w/ grinding disc
- (2X) 10mm X 1.5 threaded bolts at least 60mm long

Before you begin, open your IE supercharger pulley and inspect.



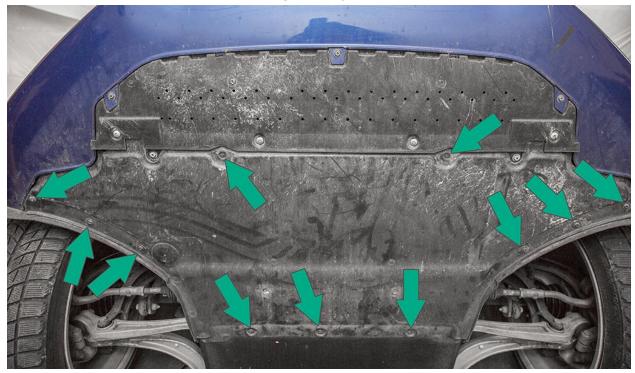
Safely rack your car on an auto lift or place onto jack stands. It is also recommended to allow the car to cool before beginning this install procedure.





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.



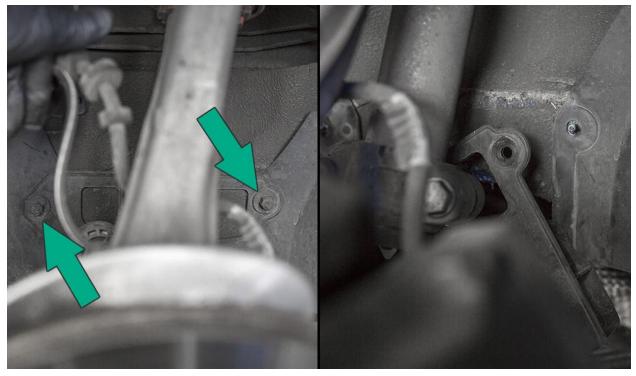
Remove belly pan from vehicle by sliding backwards.



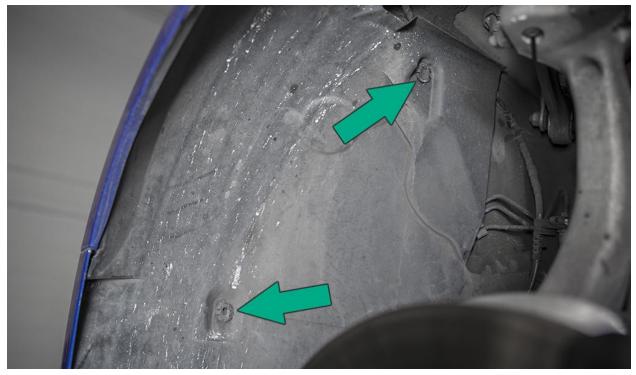
Remove the six T30 torx screws from the underside of the bumper that secures it to the radiator support.



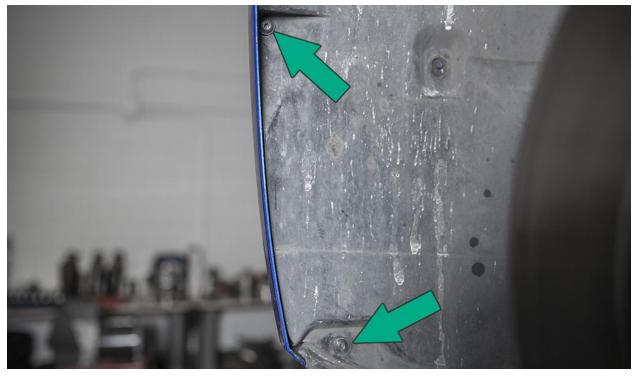
Remove the two 10mm nuts from the axel guard and let it sit disconnected. *Repeat this step on both sides of the car.* 



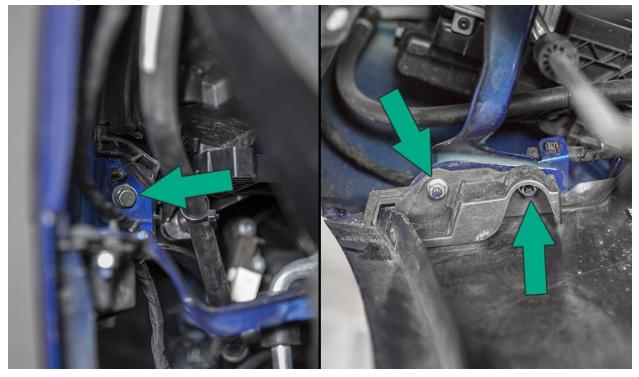
Using a small flathead, remove the two plastic retainers from the wheel well liner. *Repeat this step on both sides of the car.* 



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 (varys by car) from the radiator cowl.



Remove the cowl carefully by pulling upwards.



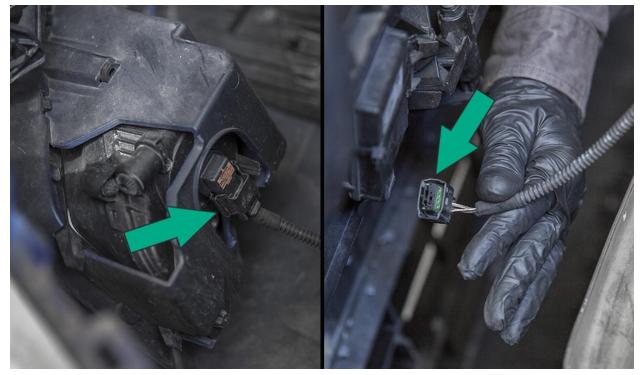
Remove the two T25 screws from the bumper to rad support, one on each side.



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.* 



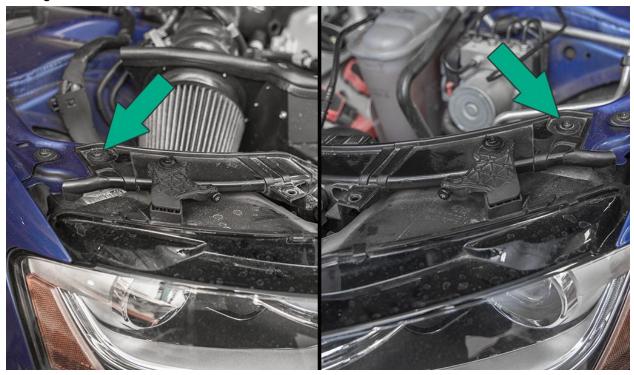
Verify all harness connectors are disconnected and free, then completely remove the front bumper.



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



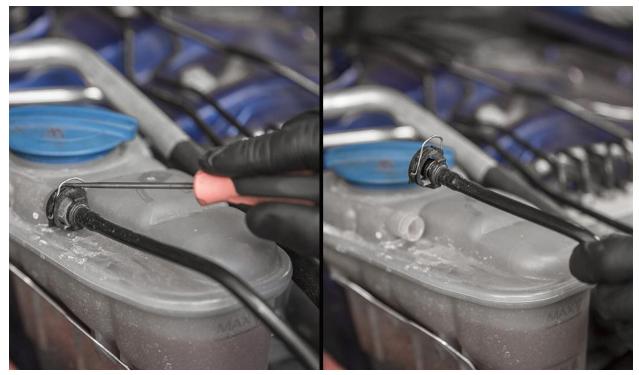
Remove the two T30 radiator support to fender bolts, one is located on each side above the headlights.



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



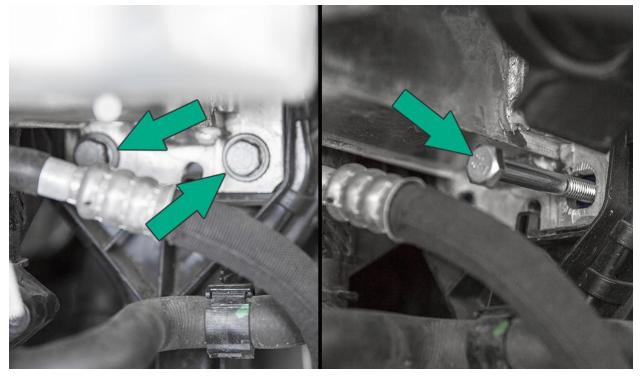
Using a small flathead, release the coolant overflow line spring clip. Gently pull back on the line to release it from the coolant tank.



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.* 



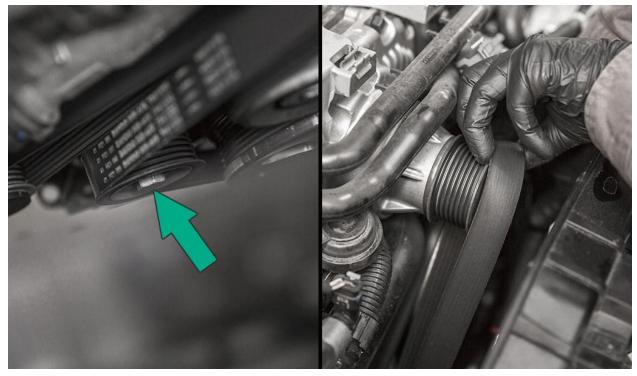
With the weight supported, carefully pull the front clip forward to access the pulley. Verify no lines or harnesses are being stretched or pulled.



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.



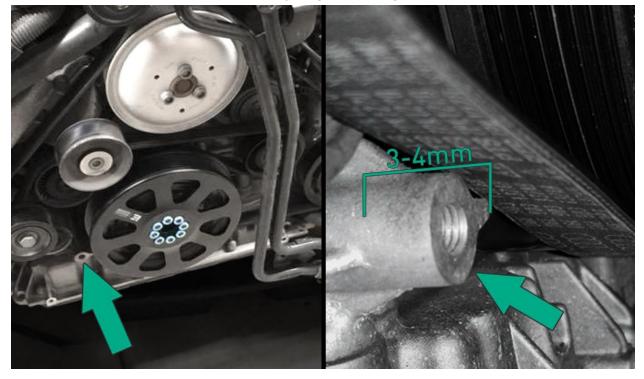
Using a paint pen, mark the top of the crank pulley and make note of the position. This will make reinstallation much easier as one bolt is slightly offset.



Using a 6mm hex bit, break loose and remove all 8 bolts securing the crank pulley to the crankshaft. Remove pulley.



To the side of the pulley there is a mount post on the engine block. Using an angle grinder and grind wheel, remove roughly 3-4mm of material from this post to make room for the larger pulley and belt. This post is not used to mount anything on this engine.



As previously mentioned, one factory pulley bolt is offset. The offset hole is in line with the IE logo on the IE pulley and with two small holes on the factory pulley. Take note of these locations.

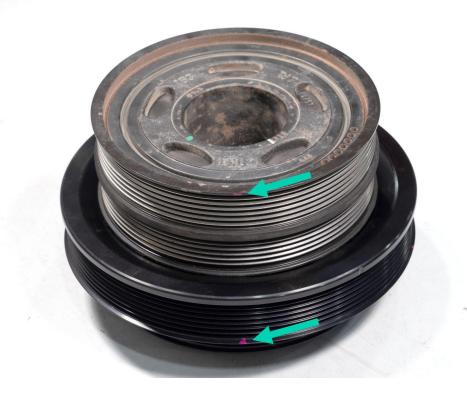




Using the identifying marks in the previous step, line up the offset holes and place the factory pulley on top of the IE pulley making sure all bolt holes line up.



Once the offset holes are aligned, mark the IE pulley with a paint pen in the same location as your paint mark on the factory pulley, so you know which side of the pulley needs to be facing directly up.



Install the pulley into the car, making sure the paint pen mark up is lined up vertically, same as uninstall, then apply blue loctite to the new supplied bolts and slide them into place through the pulley.



Tighten and torque all bolts using a 6mm allen bit to 20nm + 90 degree turn.



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 Pulleys!

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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