

PERFORMANCE BY



INSTALLATION GUIDE

IE B9 RS5 AIR TO AIR INTERCOOLER

IETPDA1

support@performancebyie.com

www.performancebyie.com



This installation guide is for instructional purposes only. For best results, professional installation by an experienced technician is always recommended. By reading this guide you agree Integrated Engineering is not responsible for any damage or personal injury caused by incorrect installation.

DIFFICULTY



Expect 3-4 hours on average

REQUIRED TOOLS

- Flathead screwdriver
- Torx 25
- Torx 30
- 10mm Socket
- 10mm wrench
- Pick
- Trim Removal Tool
- 5mm Allen
- 13mm Socket
- Hose Clamp Pliers
- 17mm Socket
- Cutoff Wheel
- Prybar
- Needle Nose Pliers

BEFORE YOU BEGIN

It is highly recommended to pre-read this entire guide ahead of your installation to familiarize yourself with each step. Always park your vehicle in a safe and level location and allow plenty of time for the engine bay and exhaust to completely cool. Locate and prepare your work space with each required tool listed above. Unbox all components and verify the contents and quantities before you begin. If anything is missing or damaged, please contact us for immediate help at support@performancebyie.com

REQUIRED PARTS

- No additional parts are required for this install

OPTIONAL PARTS

SPECIAL NOTE:

This install guide has been photographed and written on a 2021 Audi RS5. Some steps and factory hardware specifications may vary depending on vehicle model, year, and region. This guide is for reference purposes only. If you are unsure of the installation procedure for any individual step or part, please seek professional help before proceeding.



INCLUDED PARTS

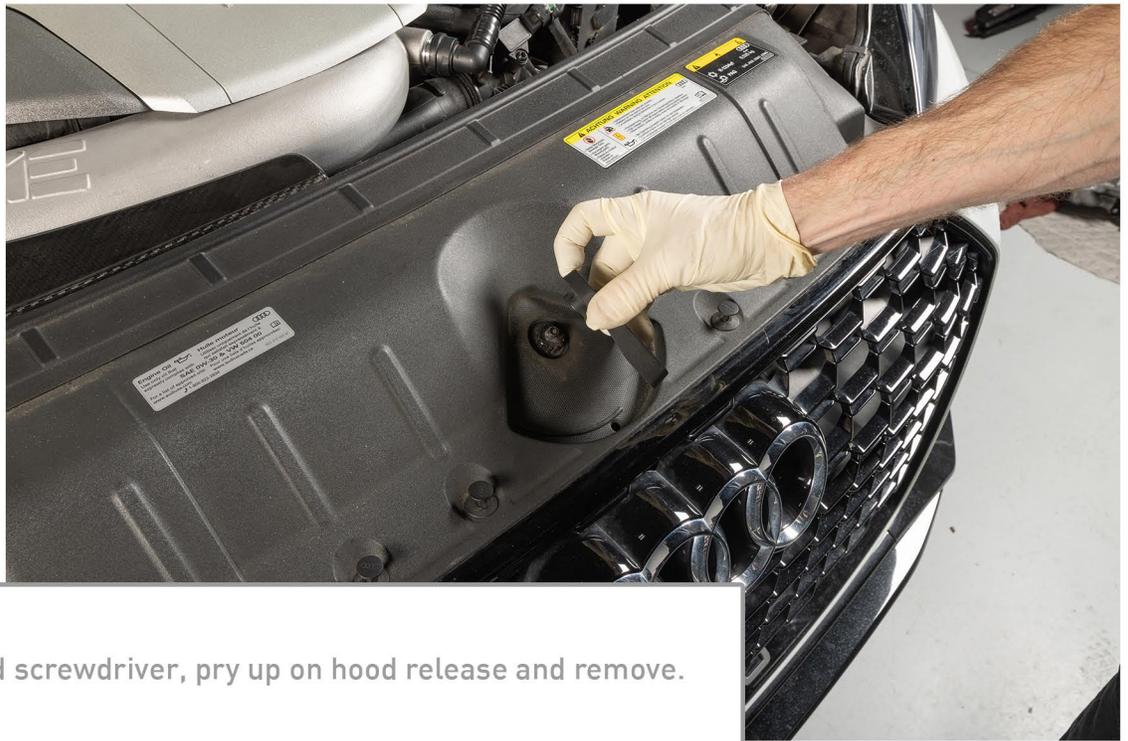
- 01 - RS5 Intercooler Tube Bracket
- 02 - RS5 Intercooler Silicone Coupler Cold Side
- 03 - 19mm Coolant Hose - 24 inches
- 04 - B9 RS5 Water Pump Delete Module
- 05 - RS5 Intercooler Silicone Coupler Hot Side
- 06 - RS5 Condenser Bracket Passenger Side
- 07 - RS5 Intercooler Hard Pipe
- 08 - RS5 Intercooler Bracket Passenger Side
- 09 - B9 RS5 Intercooler Assembly
- 10 - RS5 Condenser Bracket Driver Side
- 11 - B9 RS5 Silicone Hose Union
- 12 - B9 RS5 Silicone Coupler
- 13 - Worm-Drive Clamps for Soft Hose and Tube - 19-38mm - 9/16" Wide (2x)
- 14 - 301 SS Worm-Drive Clamp for Soft Hose & Tube, 2-5/16" to 3-1/4", 59mm-82mm - 9/16" Wide (6x)
- 15 - Metric DIN 125 18-8 SS Flat Washer M6 Screw Size, 12mm OD (4x)
- 16 - Zinc-Plated Steel Oversized Washer for M6 Screw Size, 6.4 mm ID, 18 mm OD (12x)
- 17 - POINTED SCREW FOR PLASTIC (4x)
- 18 - Metric 18-8 SS Socket Head Cap Screw M6 Thread, 20mm Length (8x)
- 19 - 18-8 Stainless Steel Nylon-Insert Locknut, M6x1 Thread Size (4x)
- 20 - Metric 18-8 Stainless Steel Socket Head Cap Screw, M6 Thread (4x)



Some items may be partially assembled.

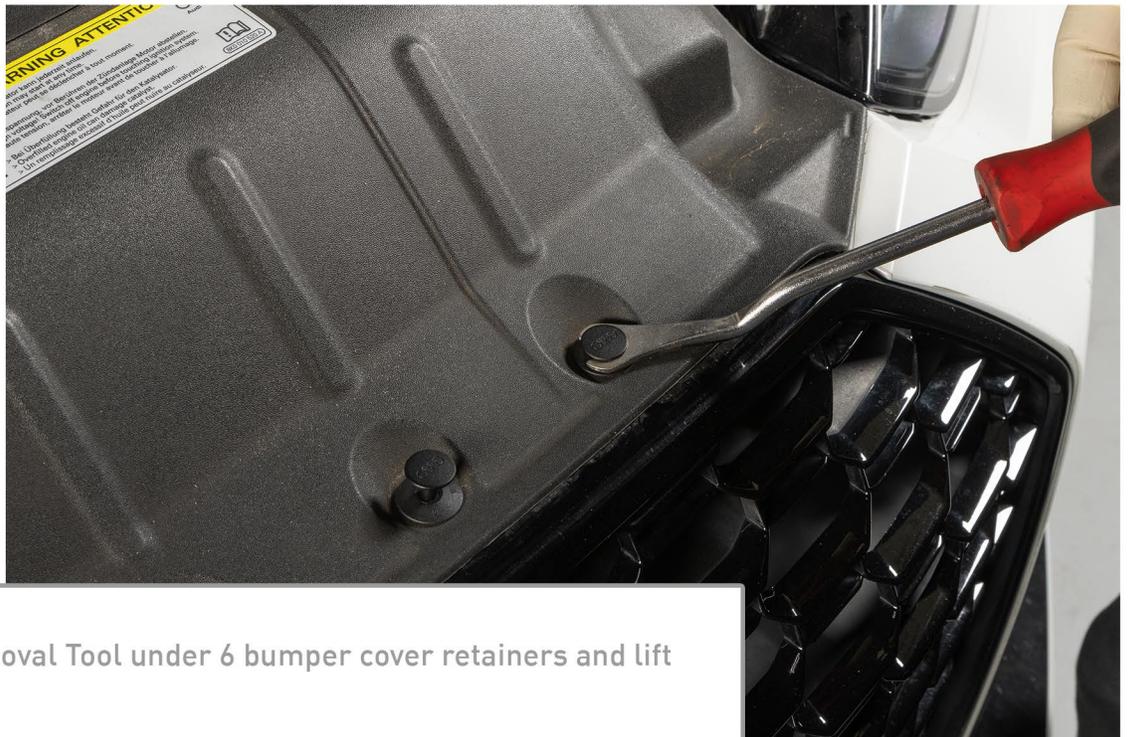


01



Using a flat head screwdriver, pry up on hood release and remove.

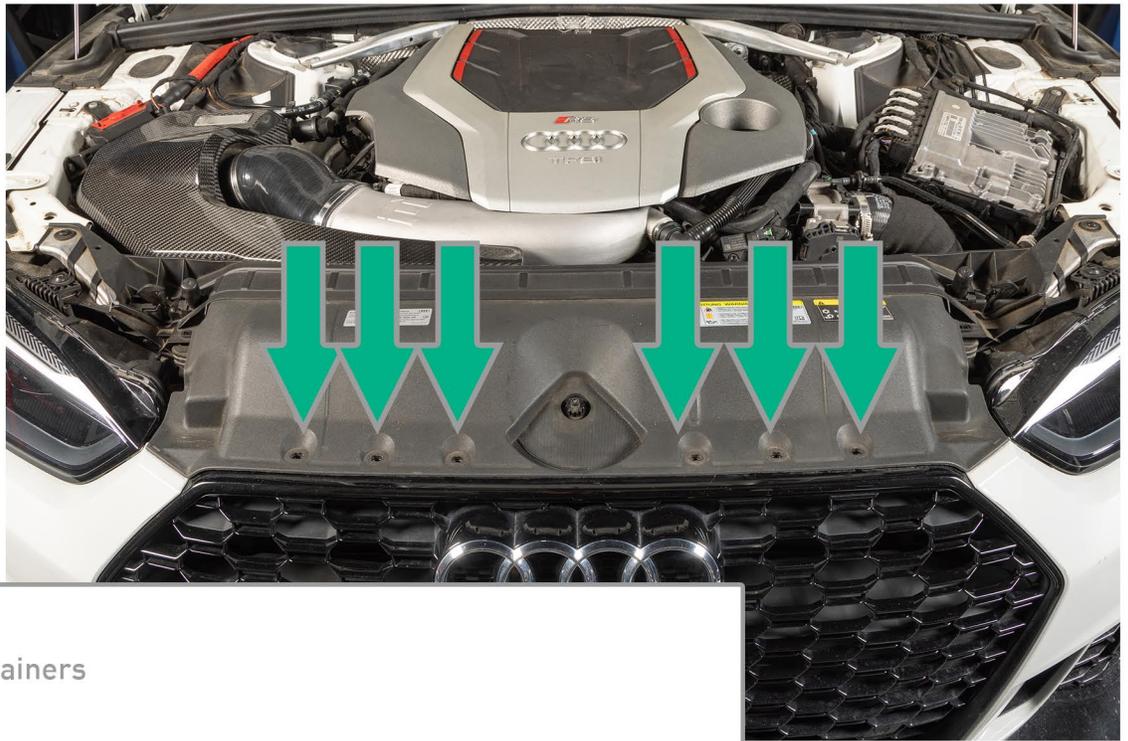
02



Insert Trim Removal Tool under 6 bumper cover retainers and lift to release.

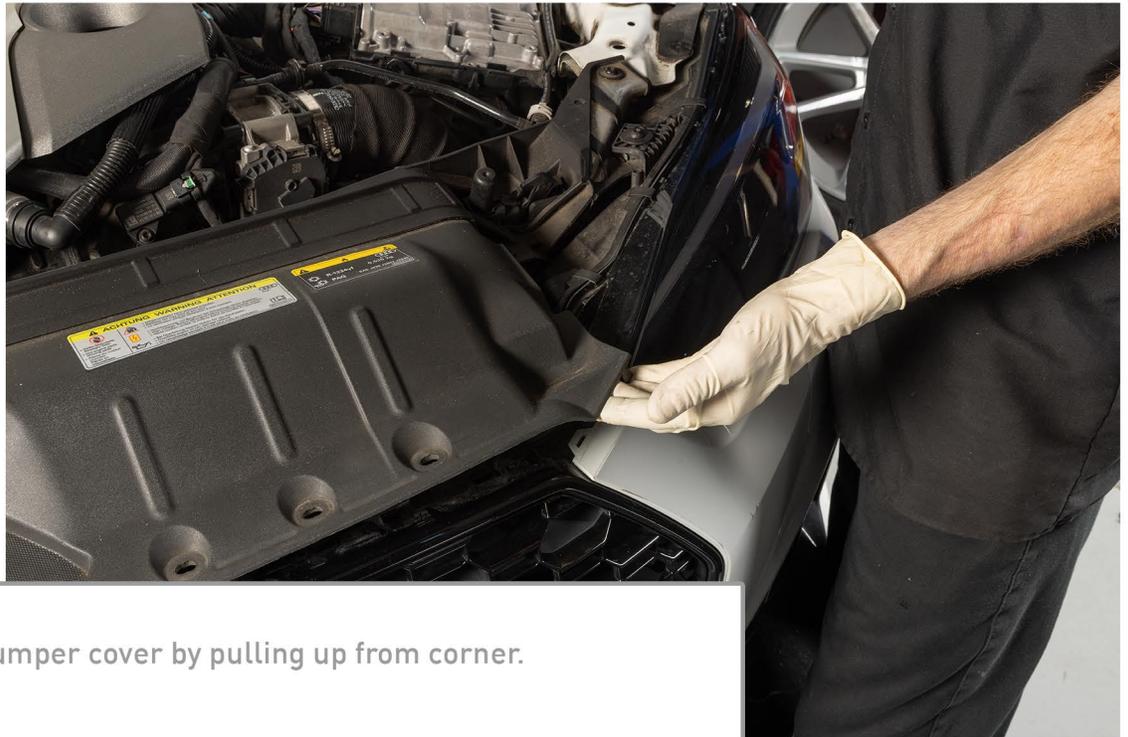


03



Remove all 6 retainers

04



Loosen upper bumper cover by pulling up from corner.

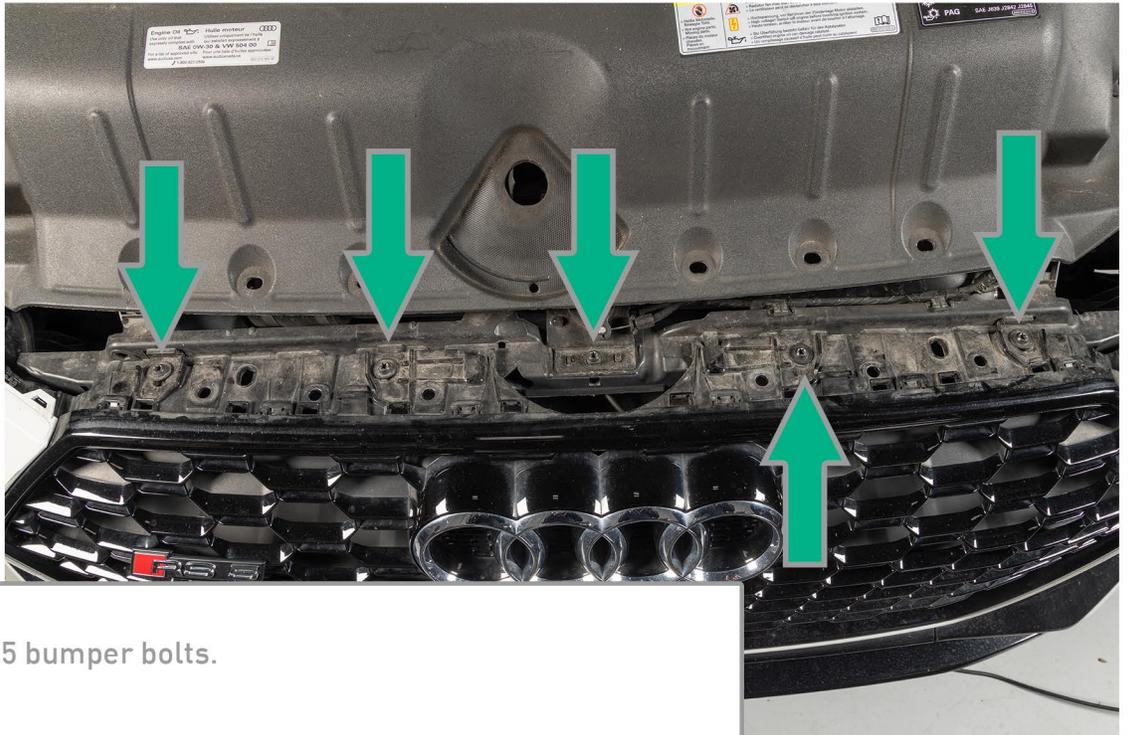


05



Remove upper bumper cover.

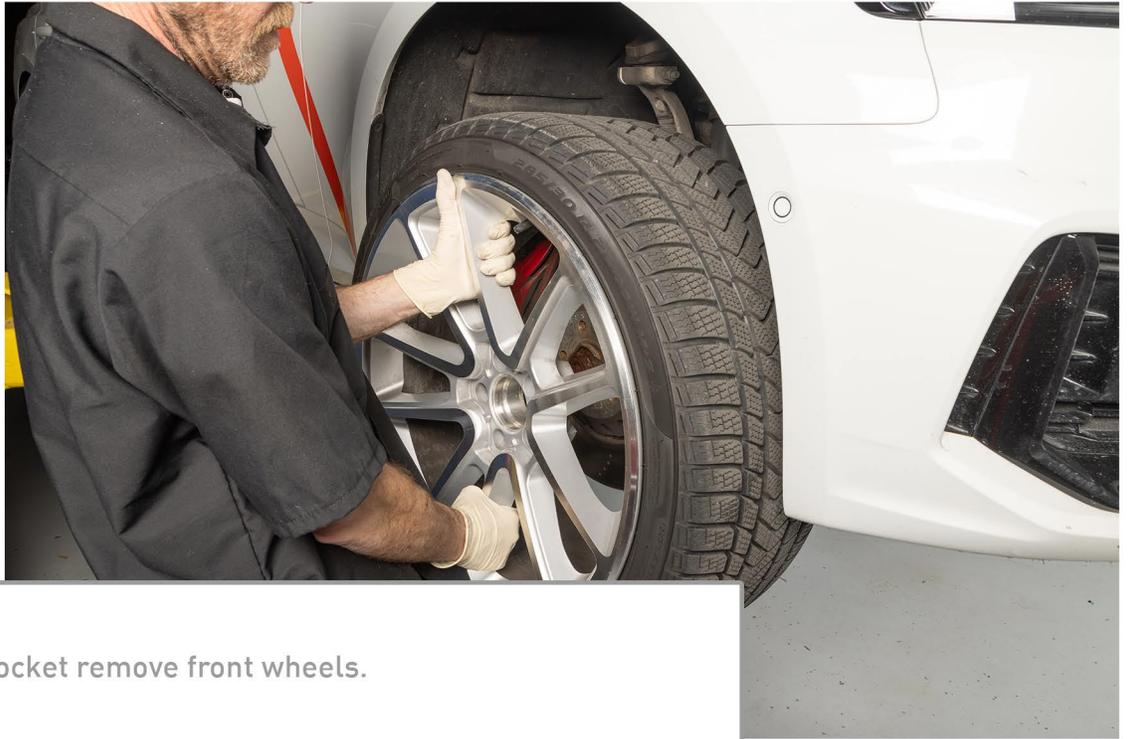
06



Remove 5 Torx 25 bumper bolts.

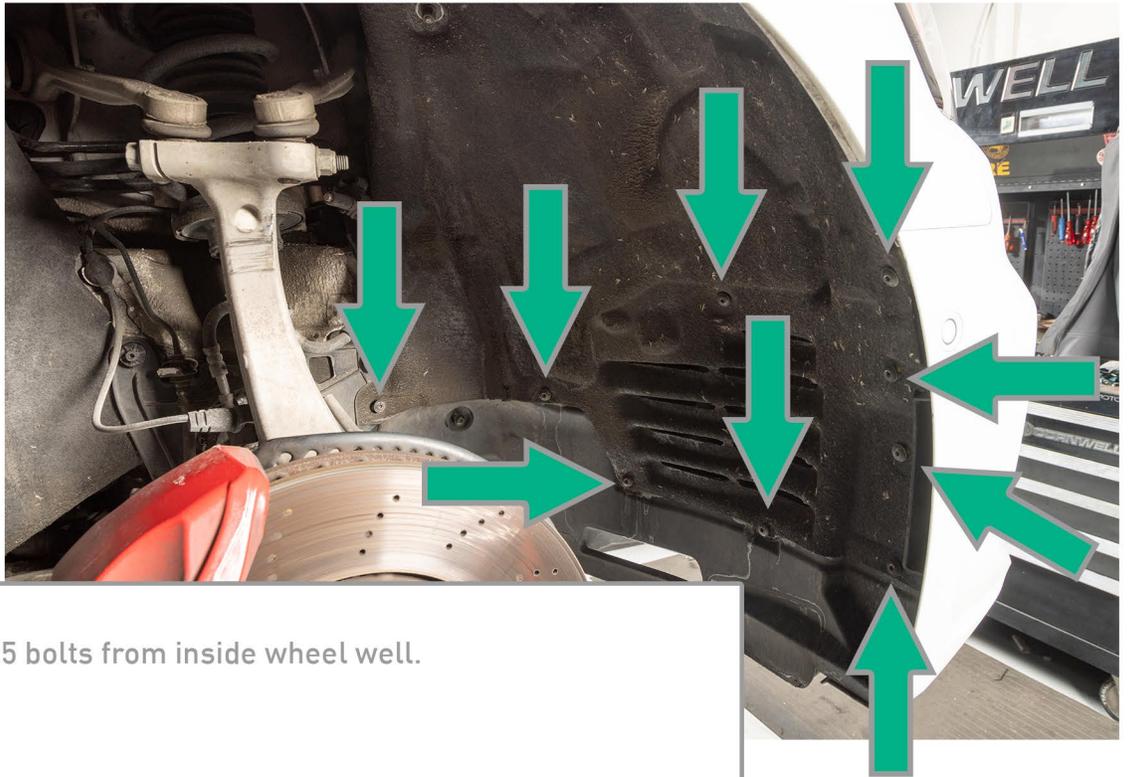


07



Using a 17mm socket remove front wheels.

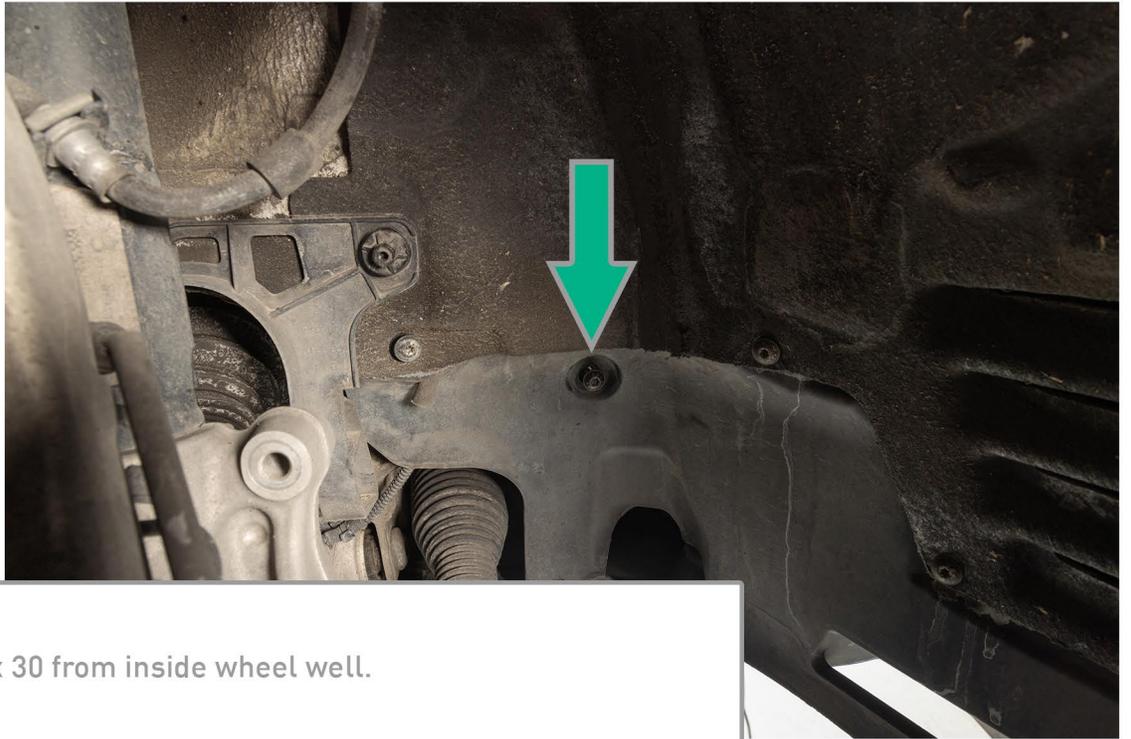
08



Remove 9 Torx 25 bolts from inside wheel well.

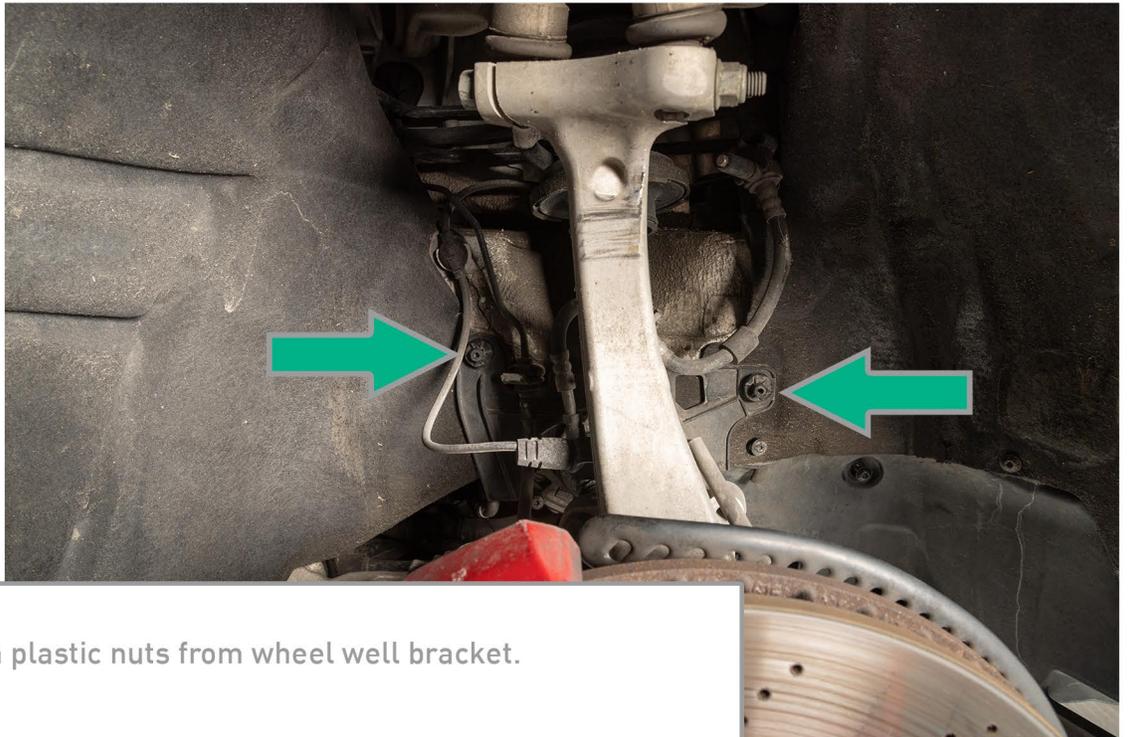


09



remove one Torx 30 from inside wheel well.

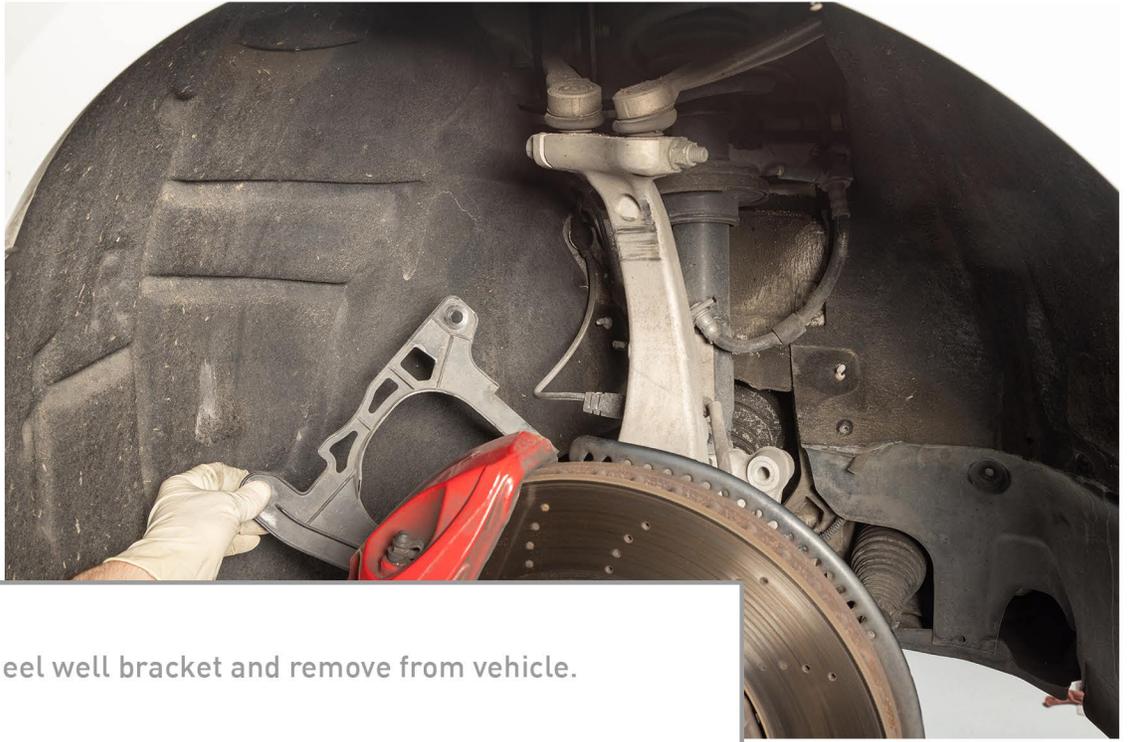
10



Remove 2 10mm plastic nuts from wheel well bracket.

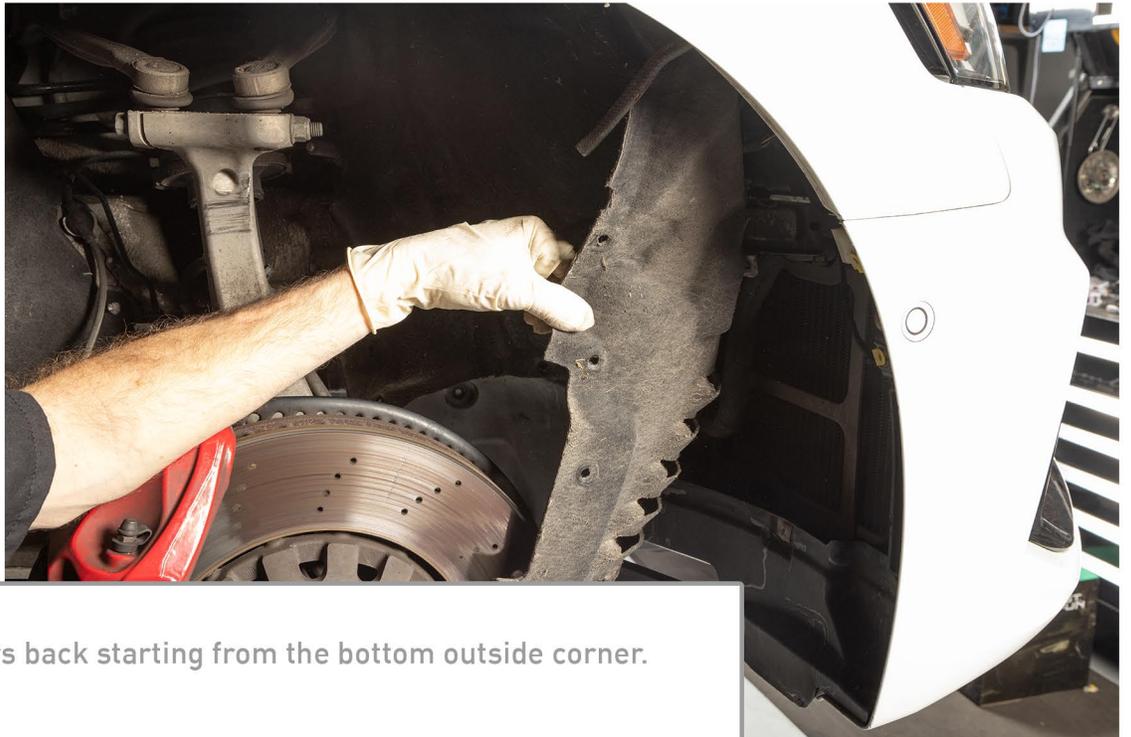


11



Lift corner of wheel well bracket and remove from vehicle.

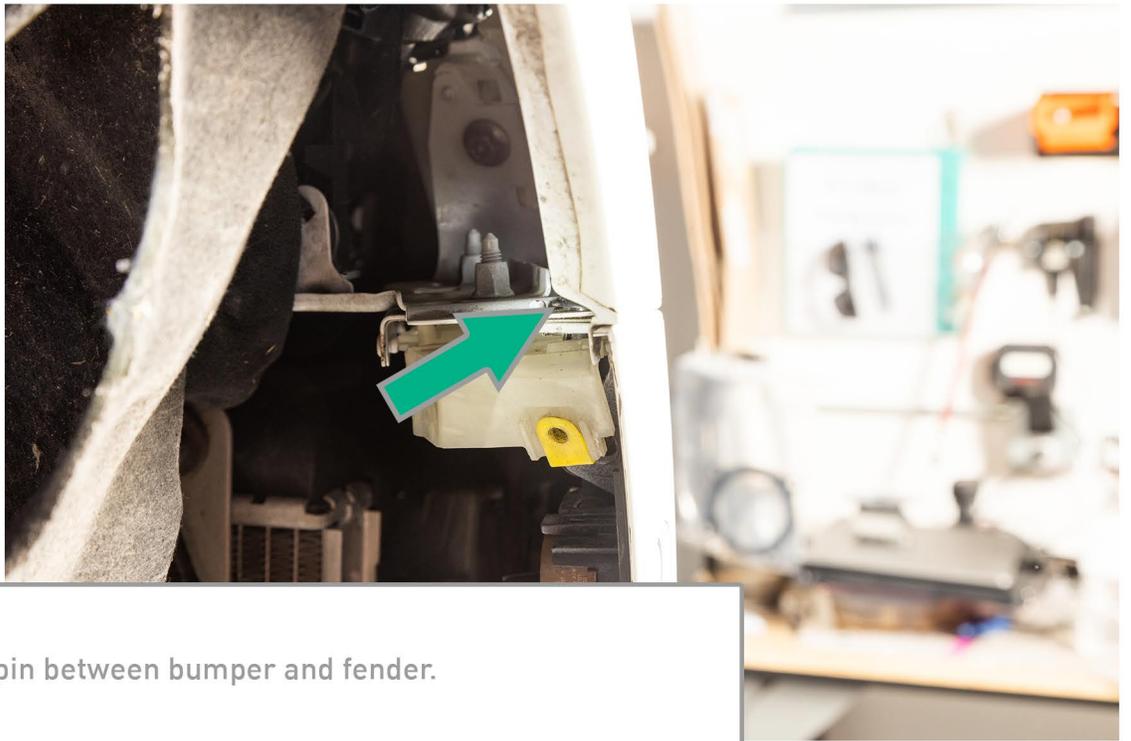
12



Pull fender liners back starting from the bottom outside corner.



13



Locate retainer pin between bumper and fender.

14



Using a pick, push center of retainer in until pin releases. Remove retainer from vehicle using a trim removal tool.

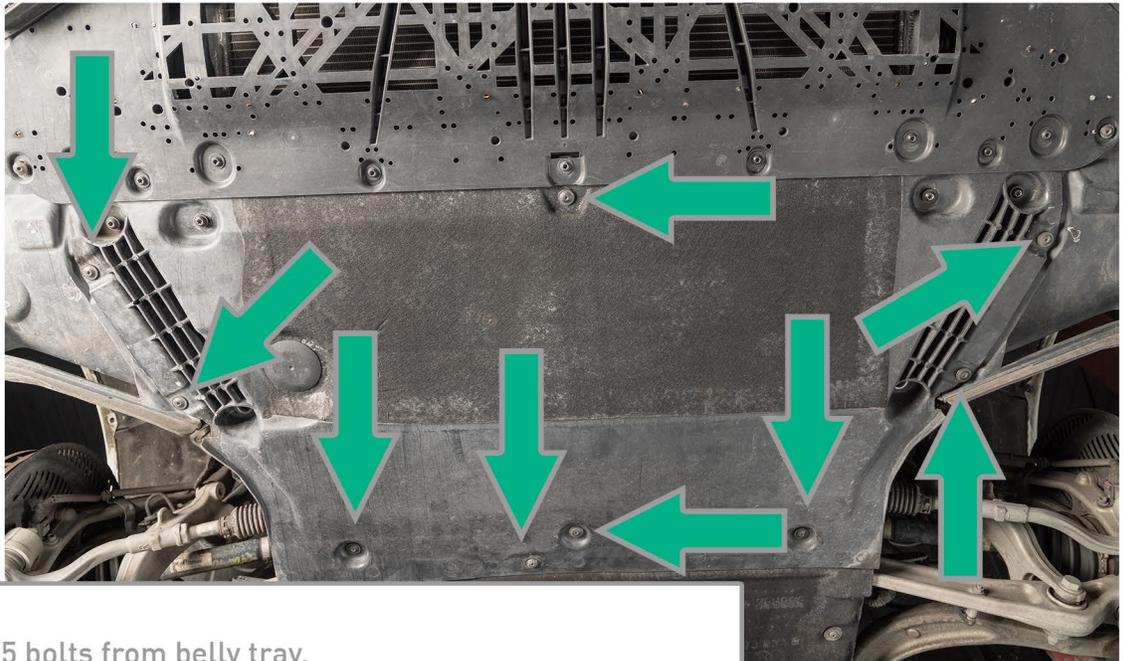


15



Remove bolt from inside of bumper. This can be done using a 10mm socket or Torx 30.

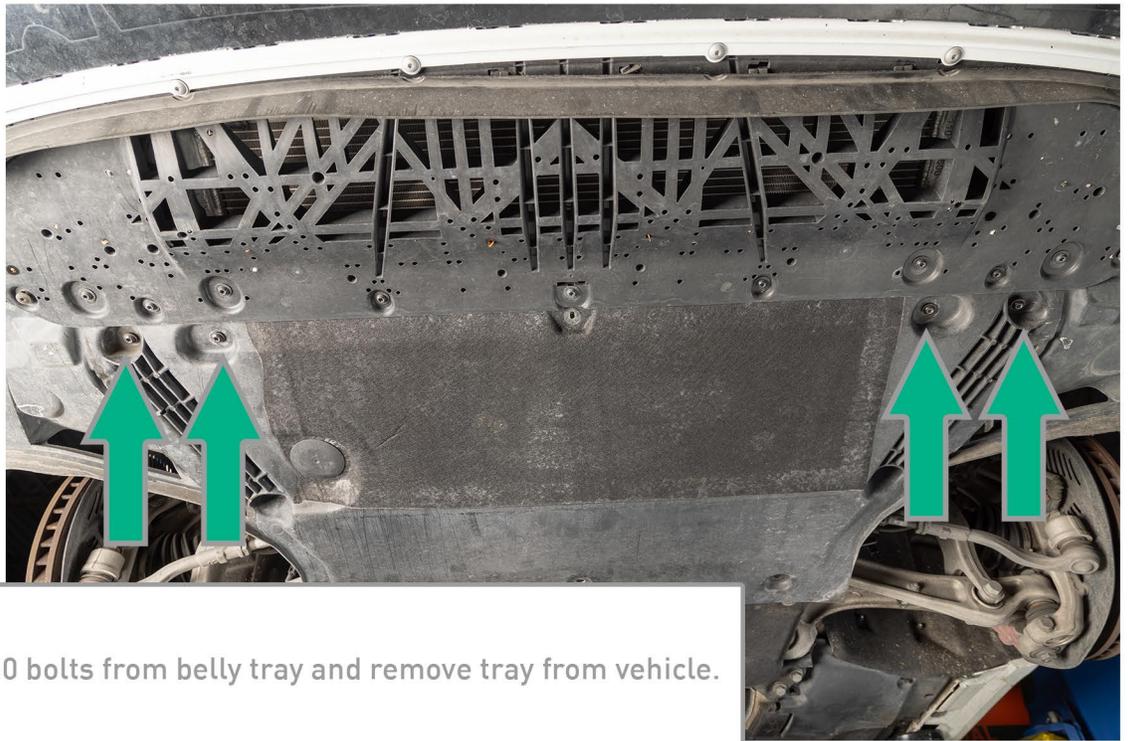
16



Remove 9 Torx 25 bolts from belly tray.

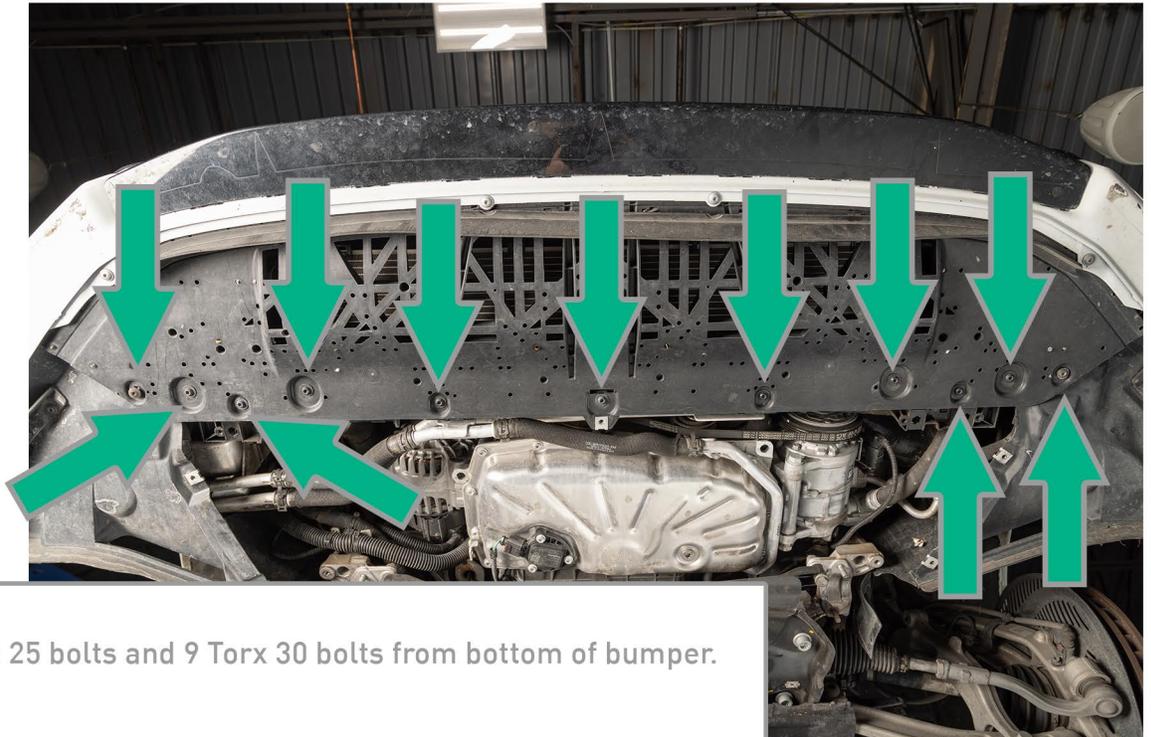


17



Remove 4 Torx 30 bolts from belly tray and remove tray from vehicle.

18



Remove 2 Torx 25 bolts and 9 Torx 30 bolts from bottom of bumper.

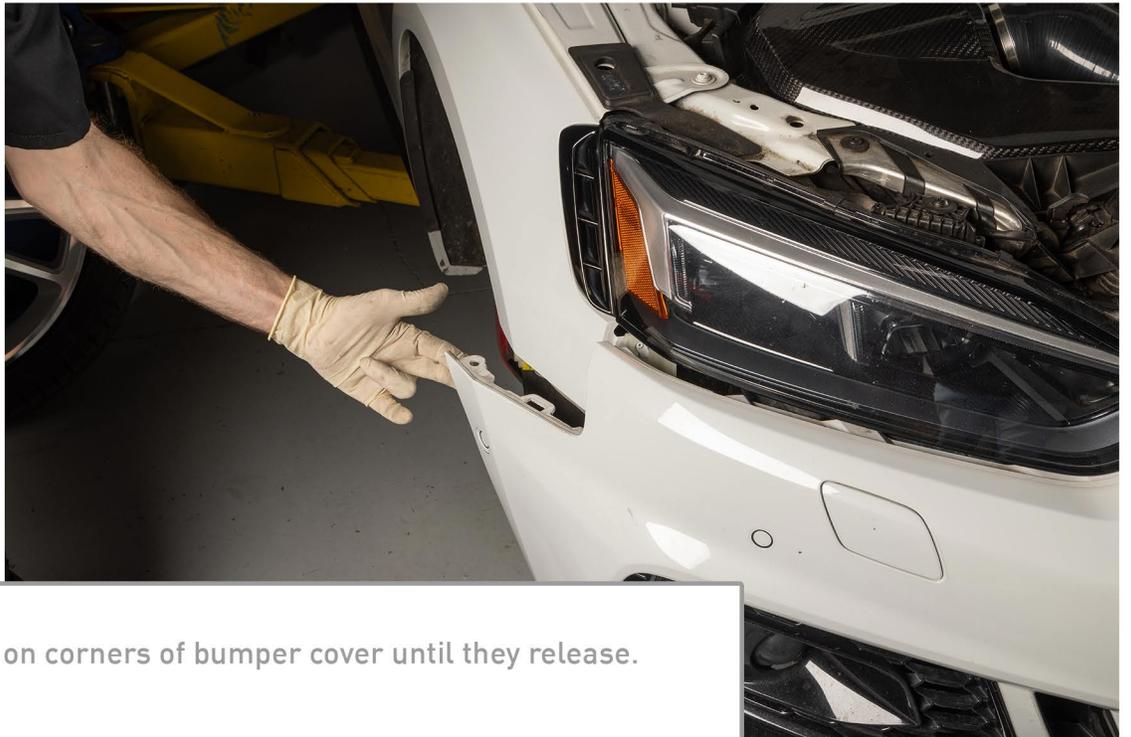


19



Remove lower fender liner on both sides of vehicle.

20



Gently pull back on corners of bumper cover until they release.

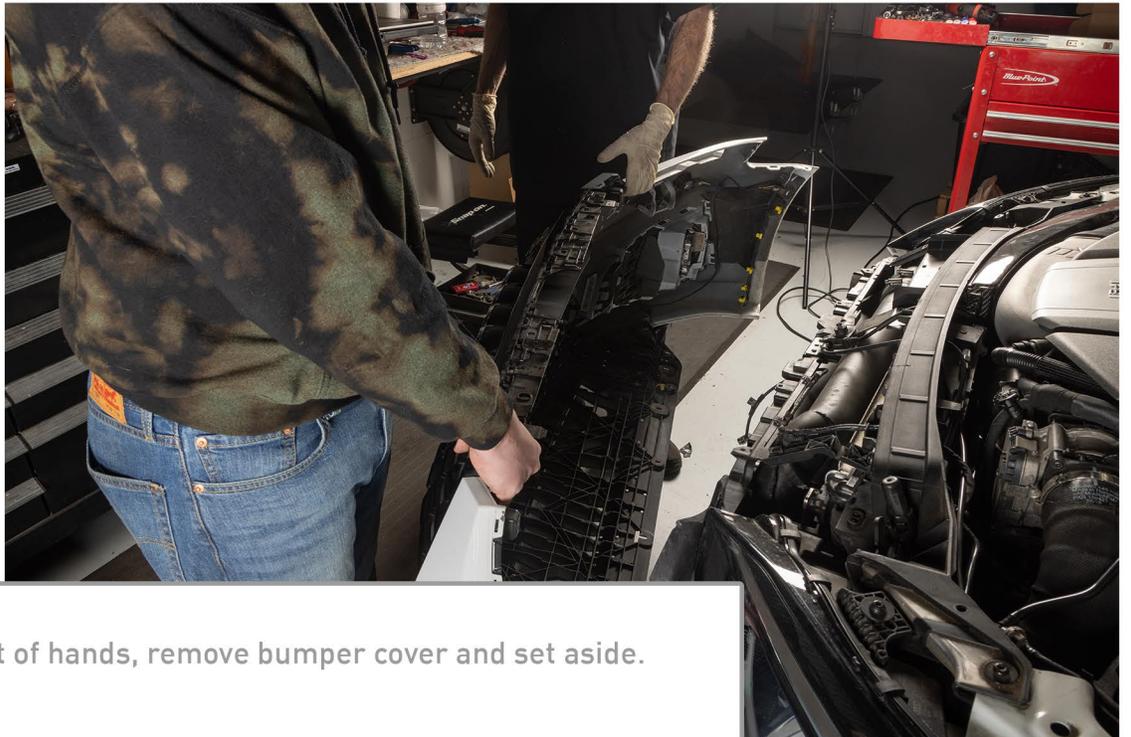


21



With an extra set of hands to support bumper cover, unplug all electrical connectors between vehicle and bumper cover.

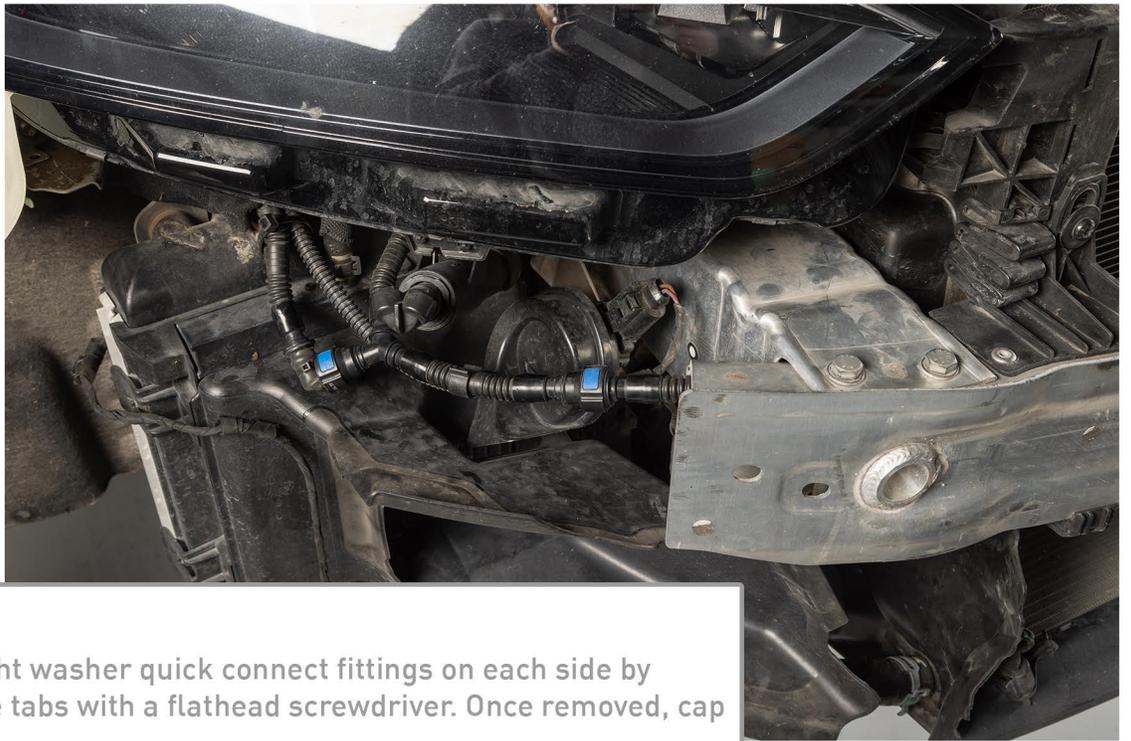
22



Using a extra set of hands, remove bumper cover and set aside.

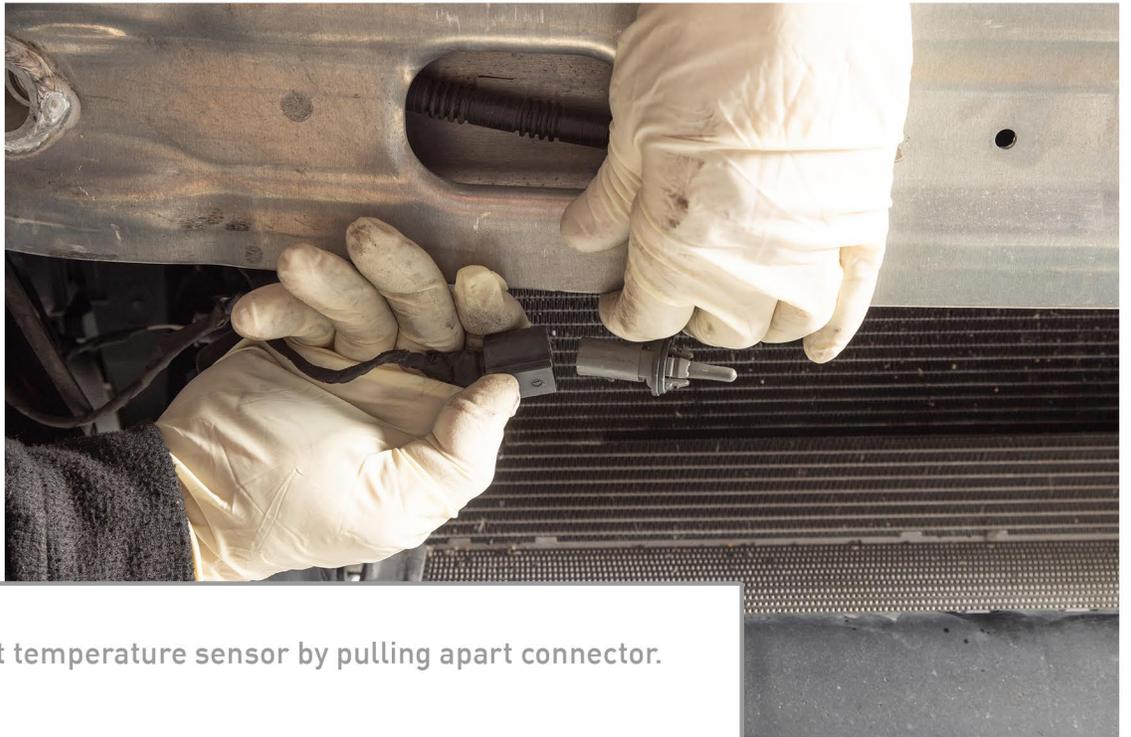


23



Remove headlight washer quick connect fittings on each side by pressing on blue tabs with a flathead screwdriver. Once removed, cap washer lines.

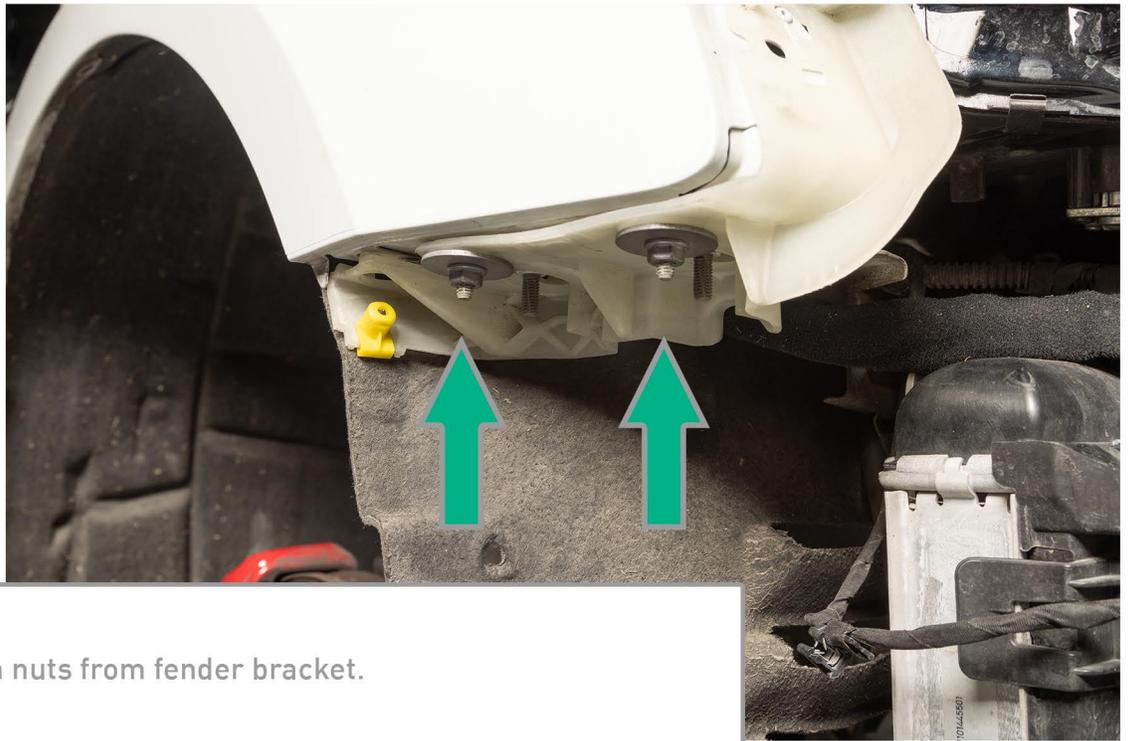
24



Remove ambient temperature sensor by pulling apart connector.

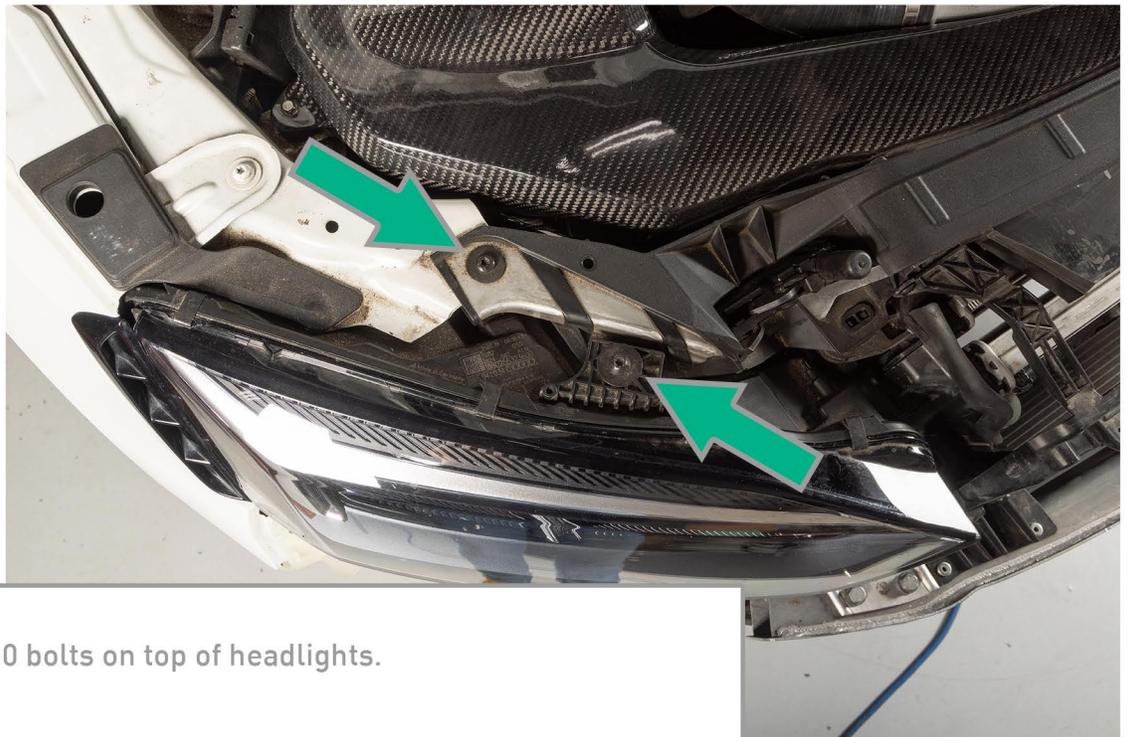


25



Remove 2 10mm nuts from fender bracket.

26



Remove 2 Torx 30 bolts on top of headlights.

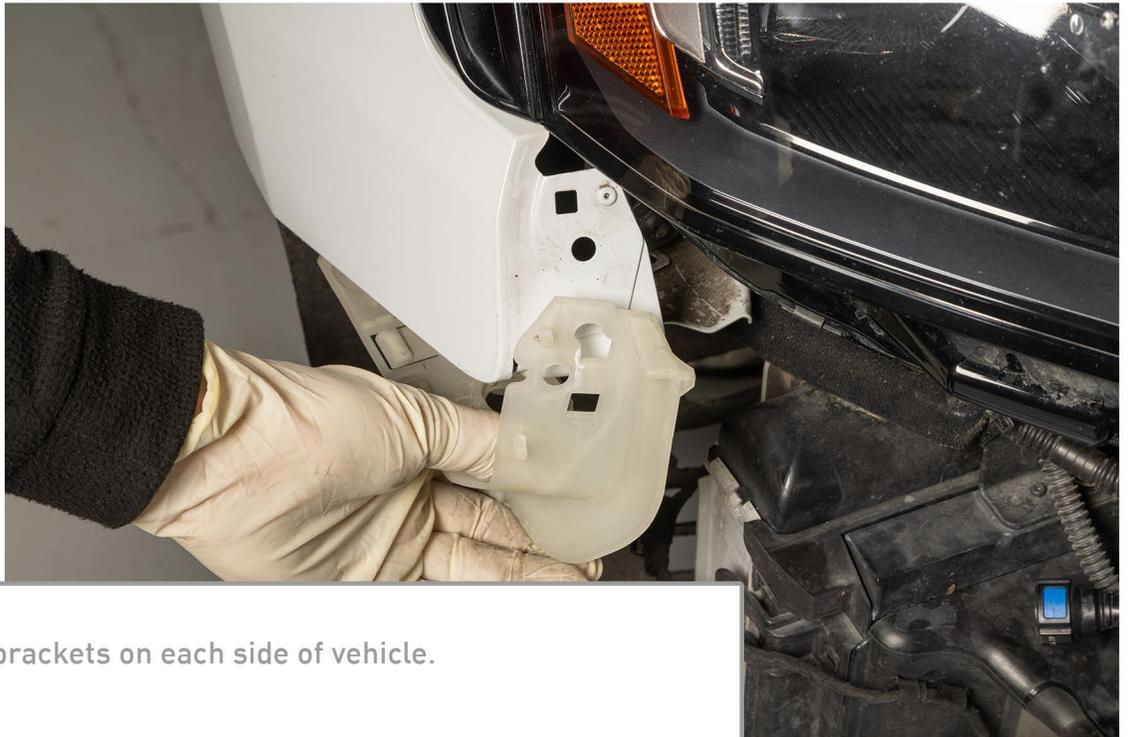


27



Remove 1 Torx 30 bolt and remove headlights.

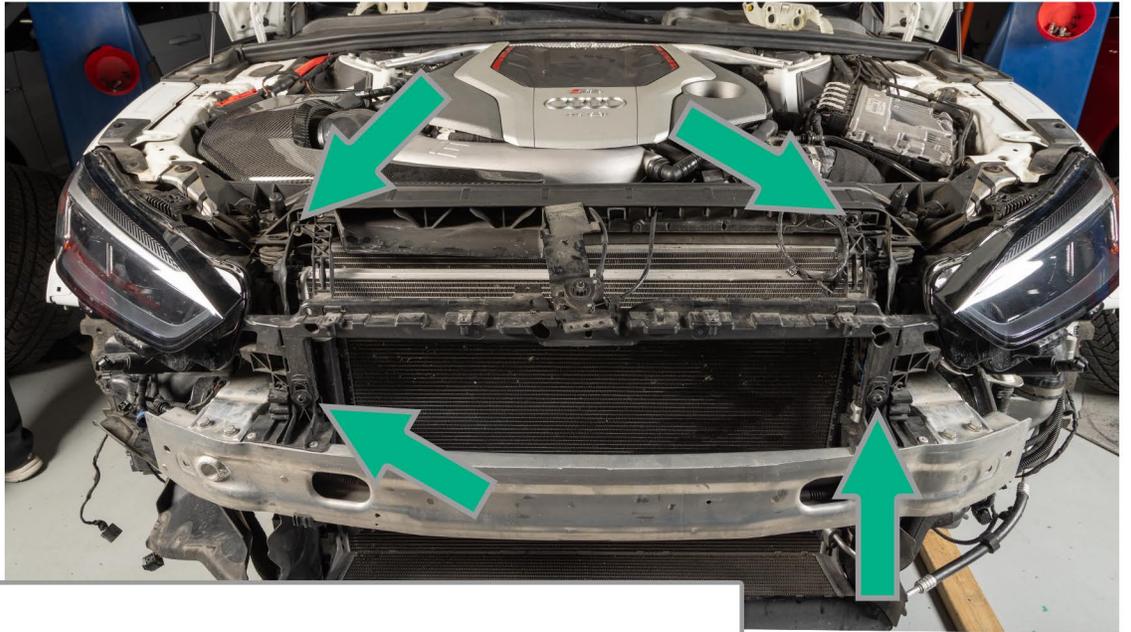
28



Remove fender brackets on each side of vehicle.

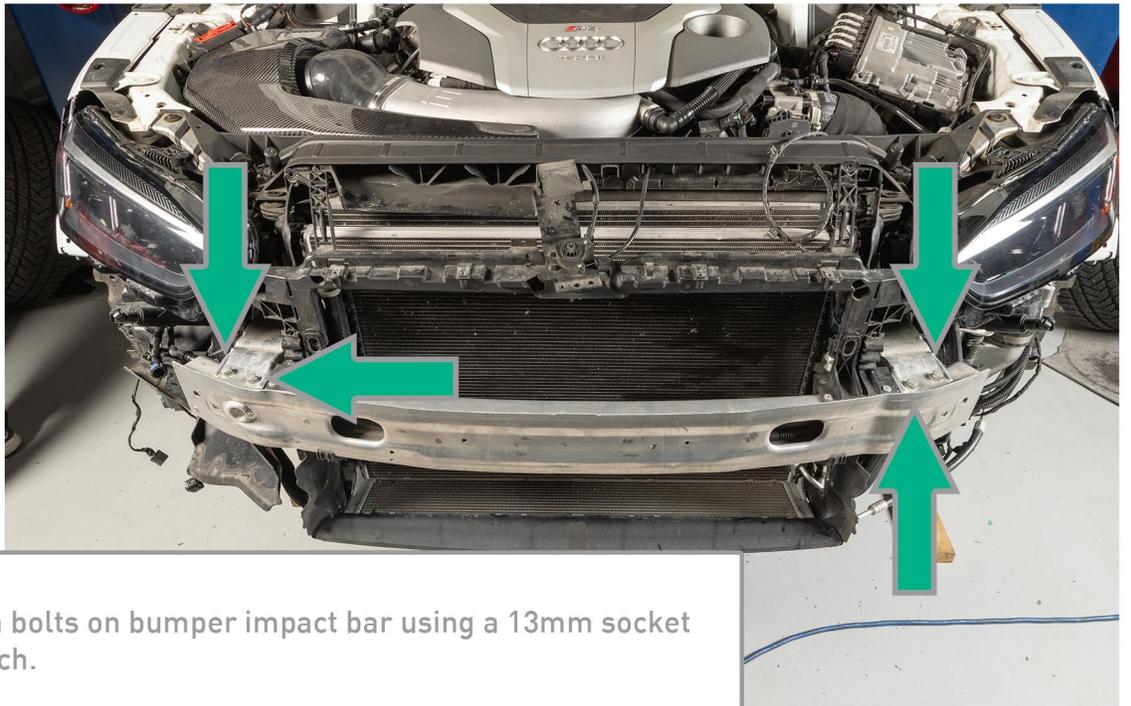


29



Remove 4 Torx 30 bolts from bumper support bracket.

30



Remove 4 13mm bolts on bumper impact bar using a 13mm socket and 13mm wrench.

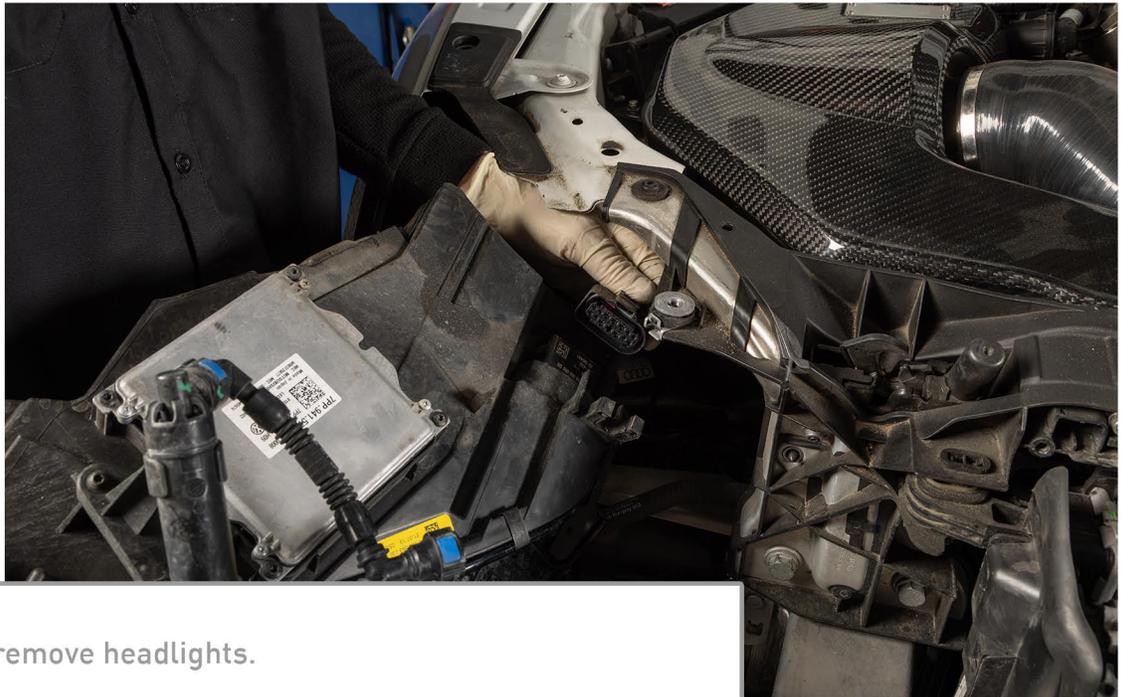


31



Using a prybar, remove bumper impact bar and bumper support bracket.

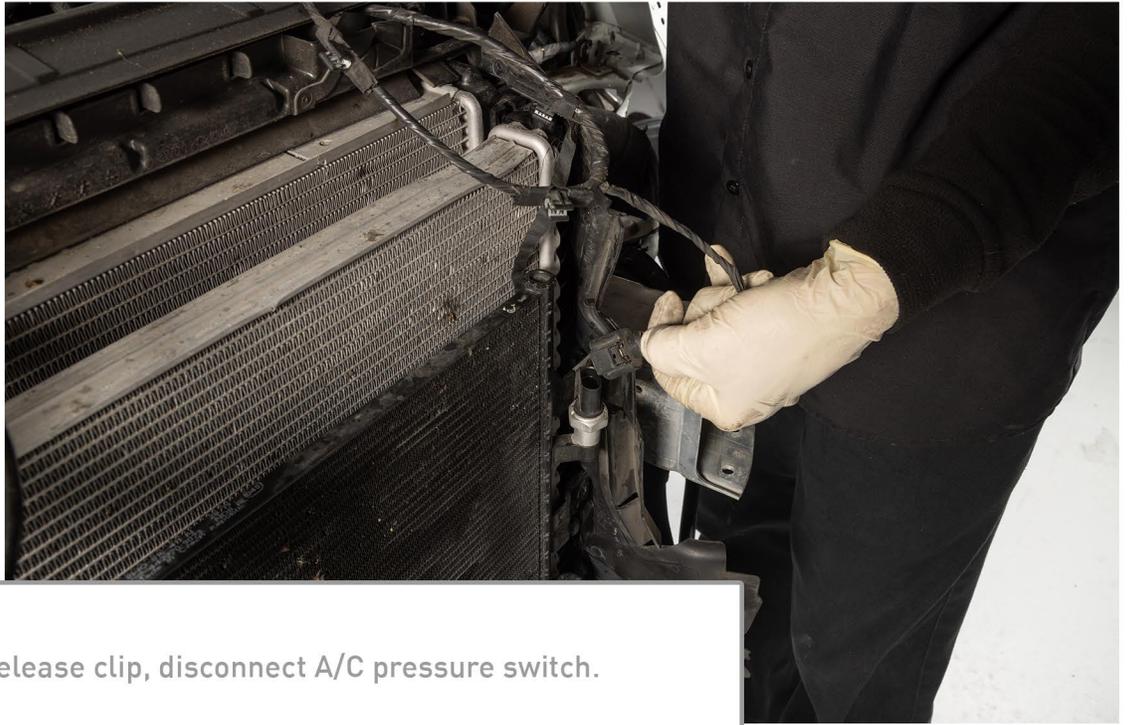
32



Disconnect and remove headlights.

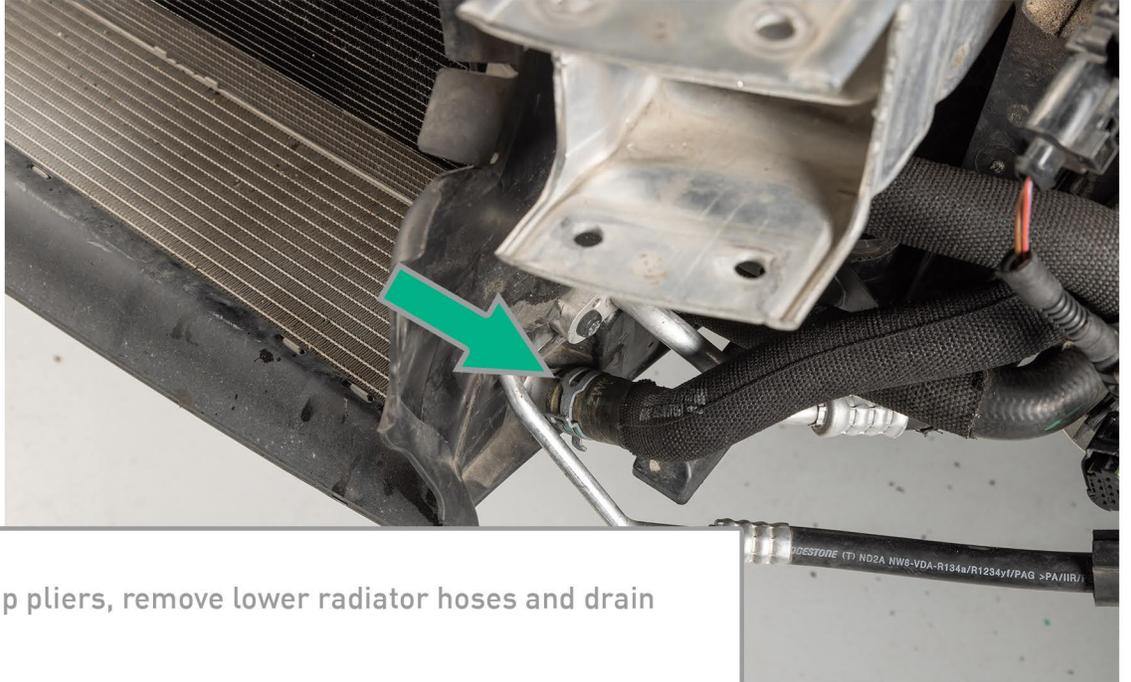


33



Using a pick to release clip, disconnect A/C pressure switch.

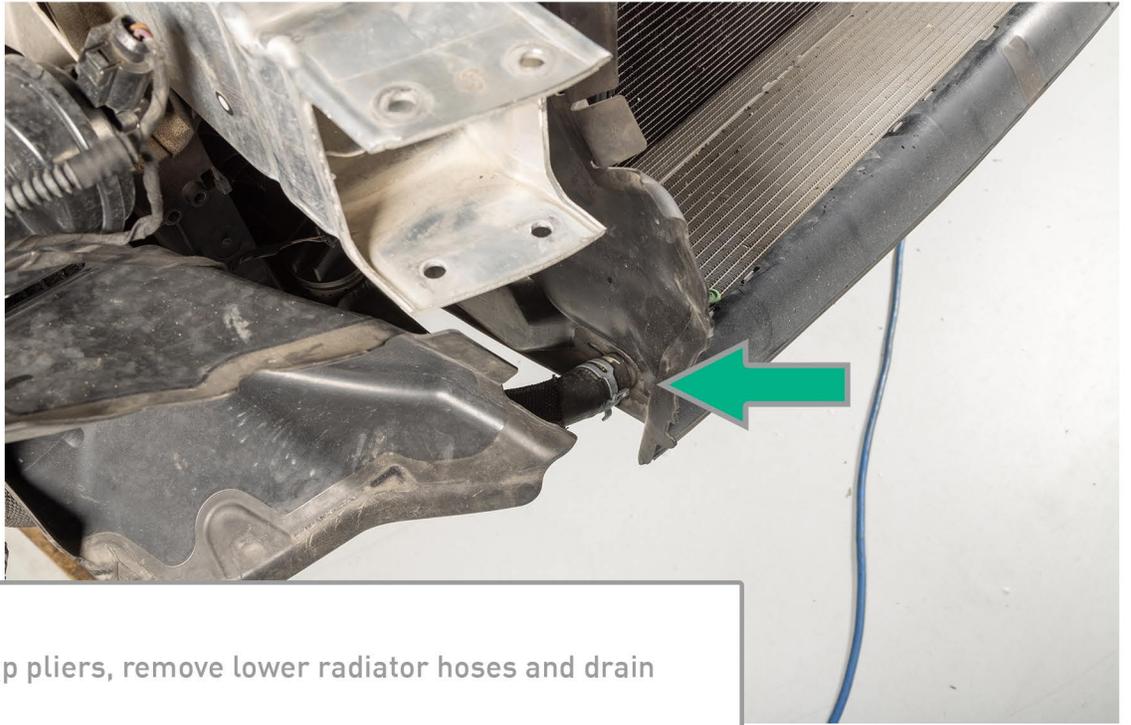
34



Using hose clamp pliers, remove lower radiator hoses and drain coolant.



35



Using hose clamp pliers, remove lower radiator hoses and drain coolant.

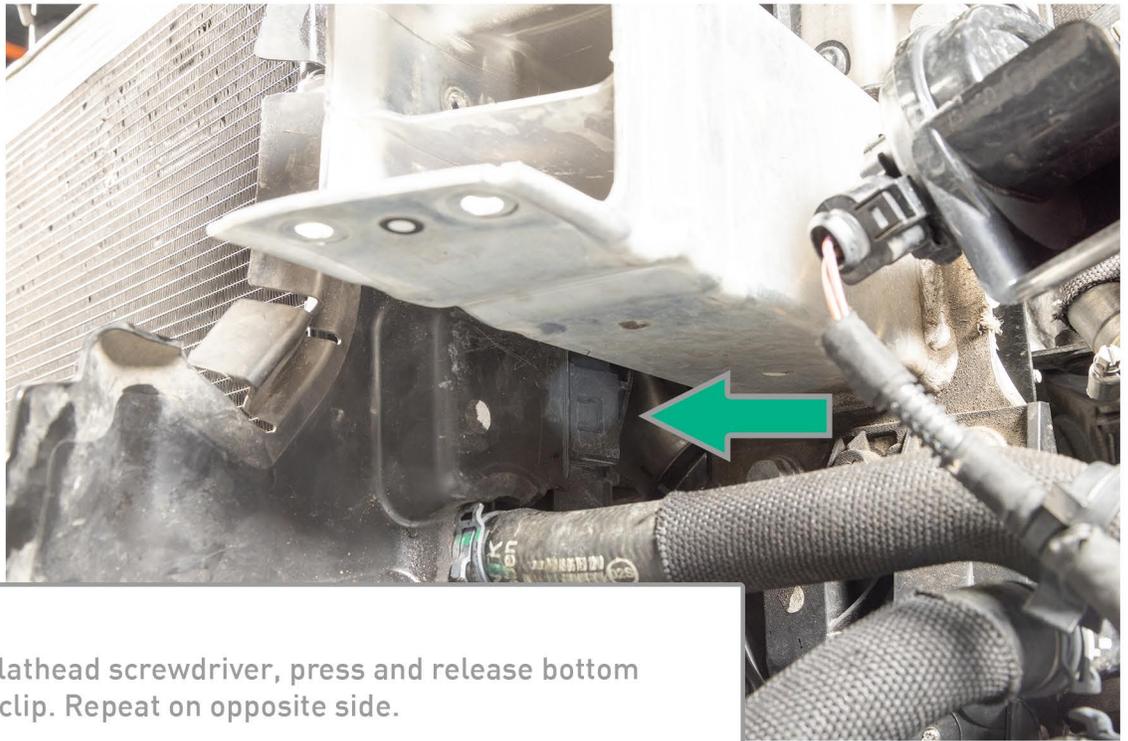
36



Using a pick or flathead screwdriver, press and release top radiator shroud clip. Repeat on opposite side.

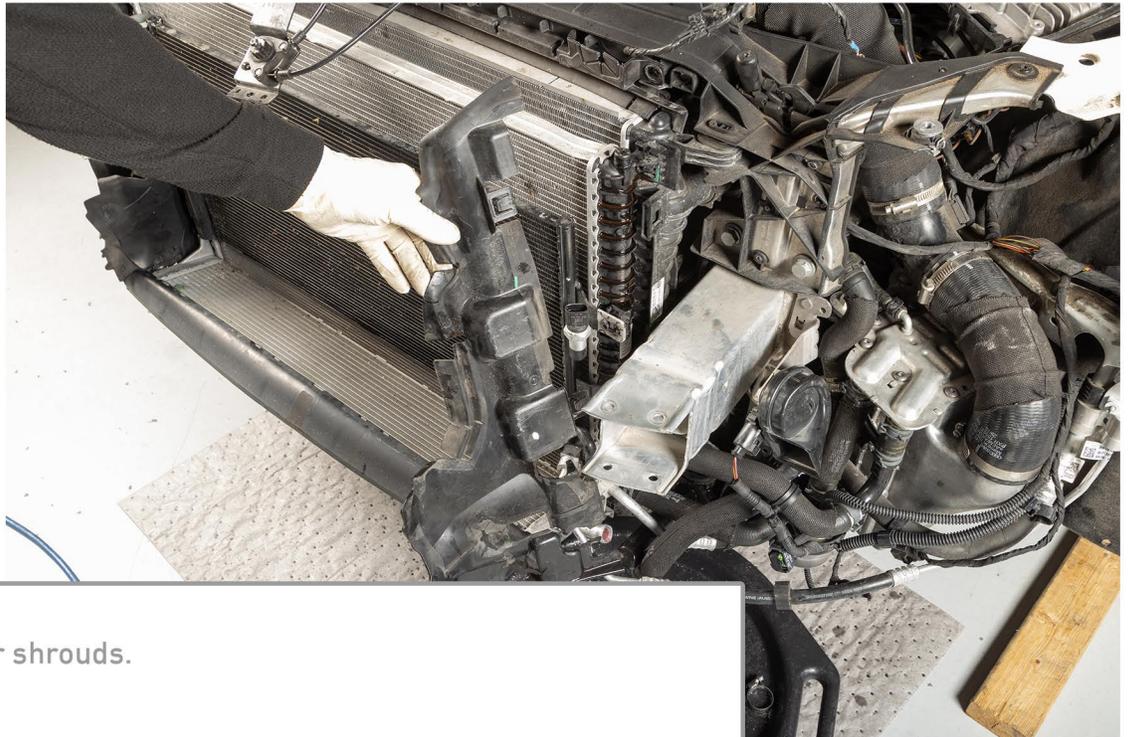


37



Using a pick or flathead screwdriver, press and release bottom radiator shroud clip. Repeat on opposite side.

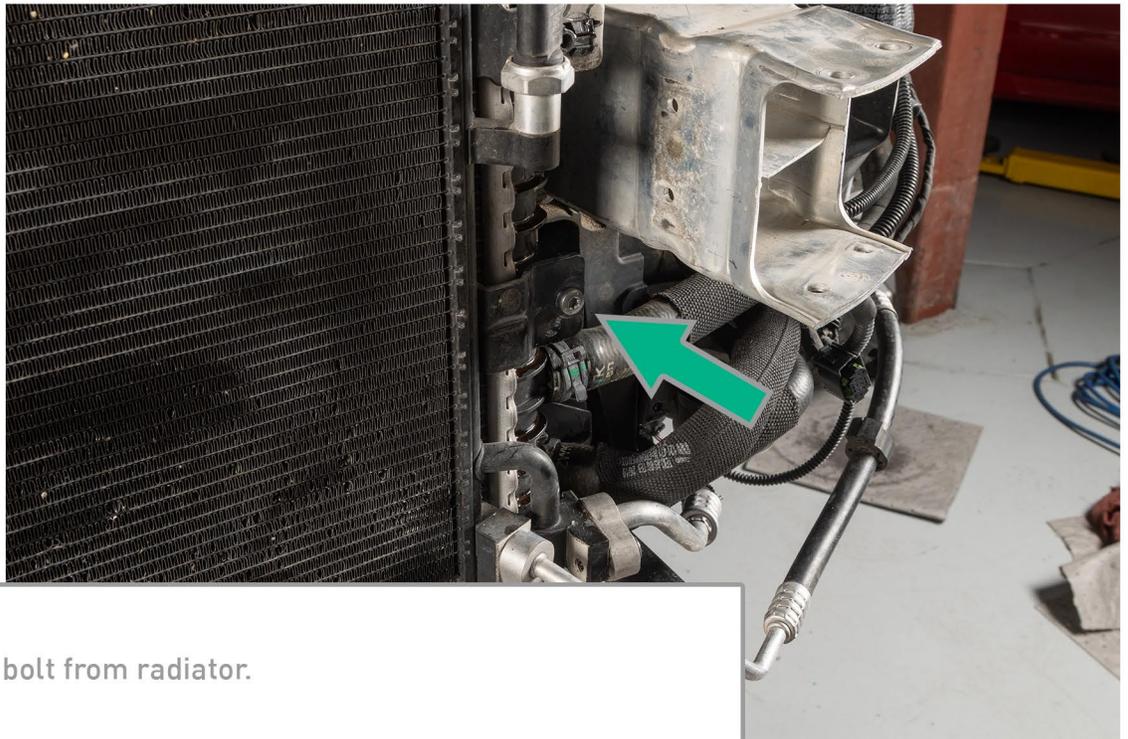
38



Remove radiator shrouds.

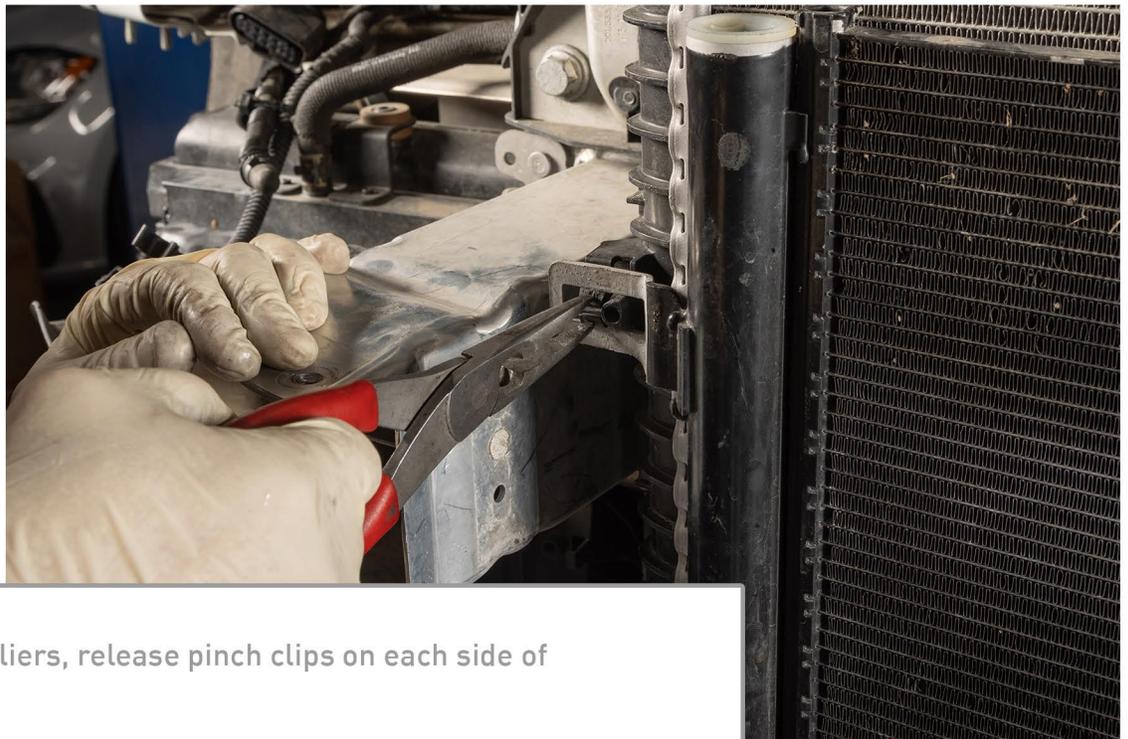


39



Remove Torx 30 bolt from radiator.

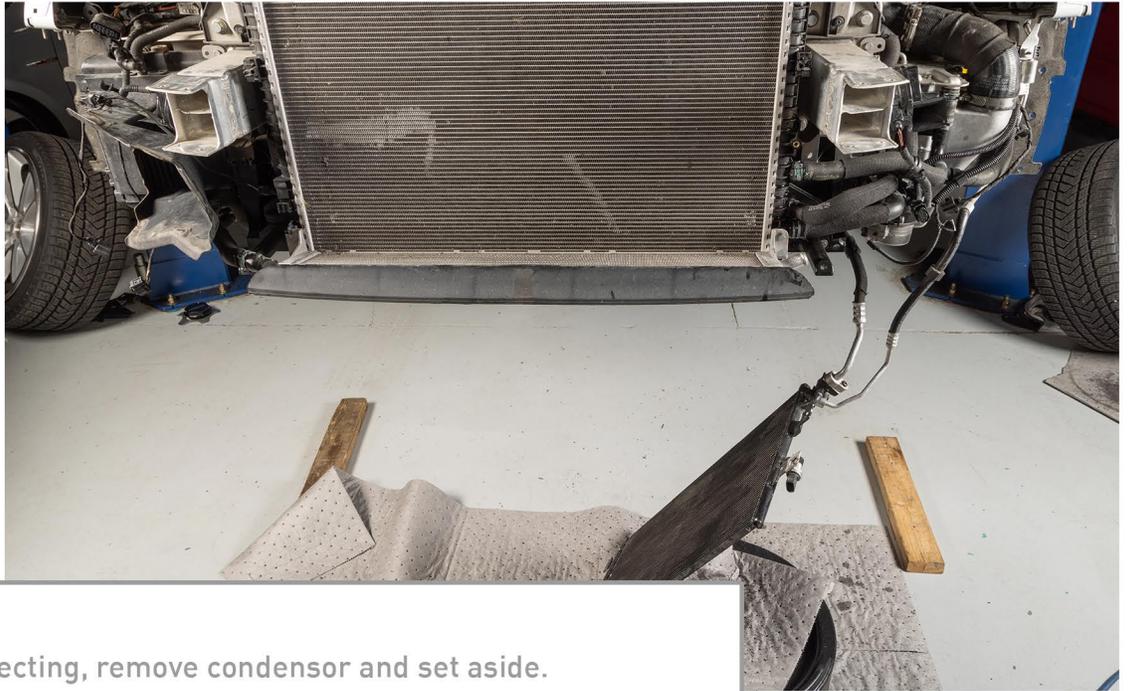
40



Using a pair of pliers, release pinch clips on each side of condenser.

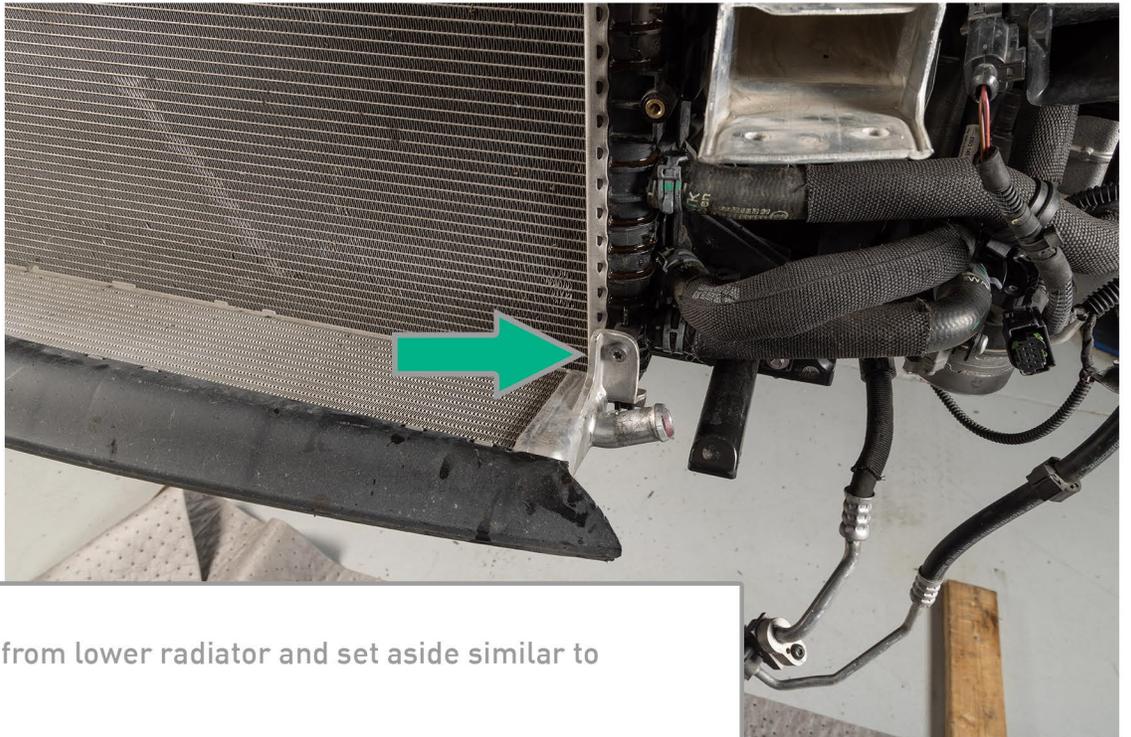


41



Without disconnecting, remove condenser and set aside.

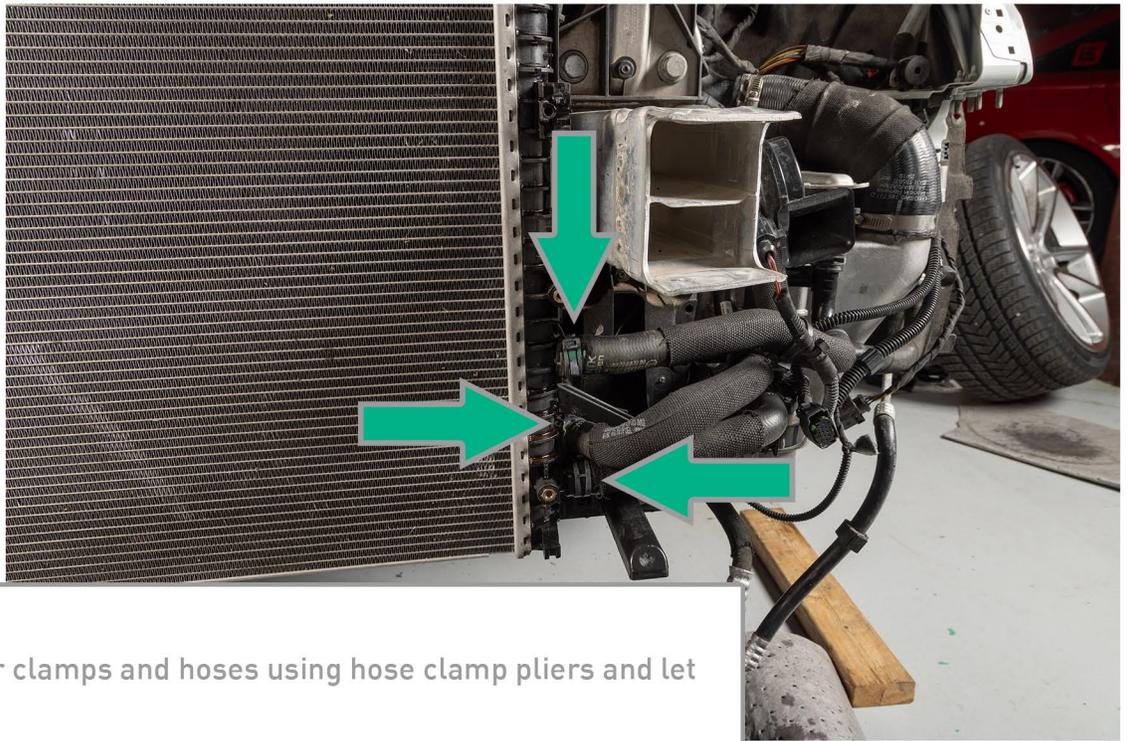
42



Remove Torx 30 from lower radiator and set aside similar to condenser.



43



Remove radiator clamps and hoses using hose clamp pliers and let drain.

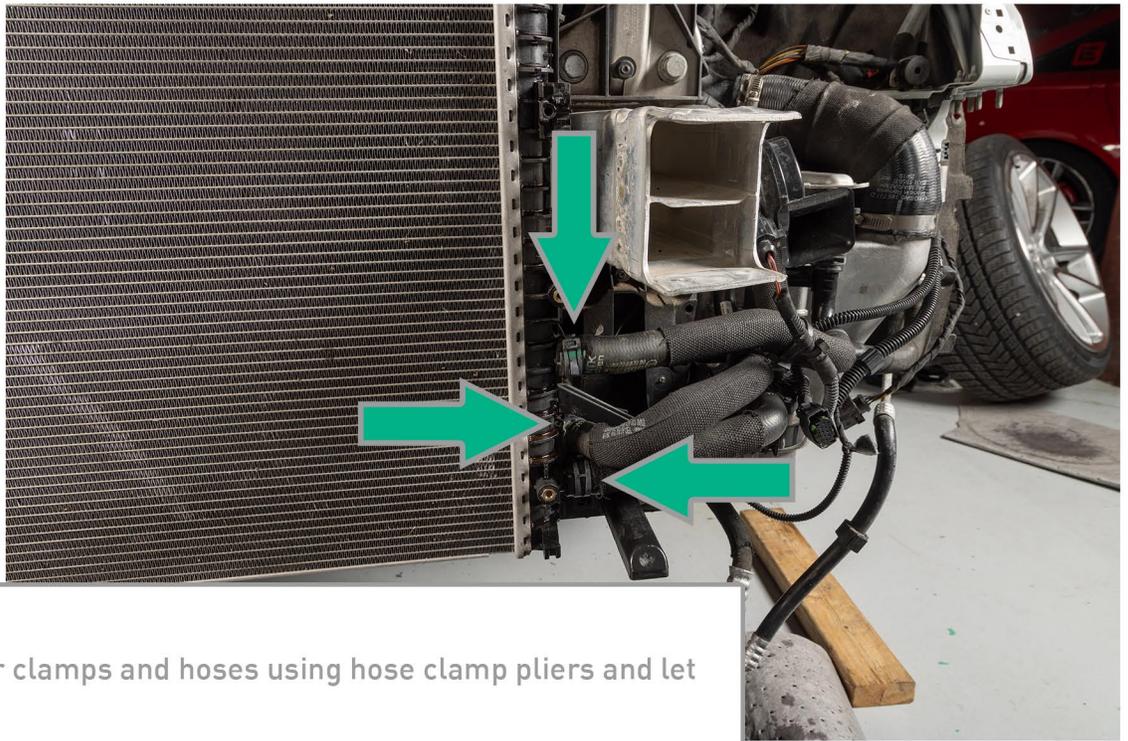
44



Using a set of pliers release two pinch clips on top of intercooler radiator and remove from vehicle.



43



Remove radiator clamps and hoses using hose clamp pliers and let drain.

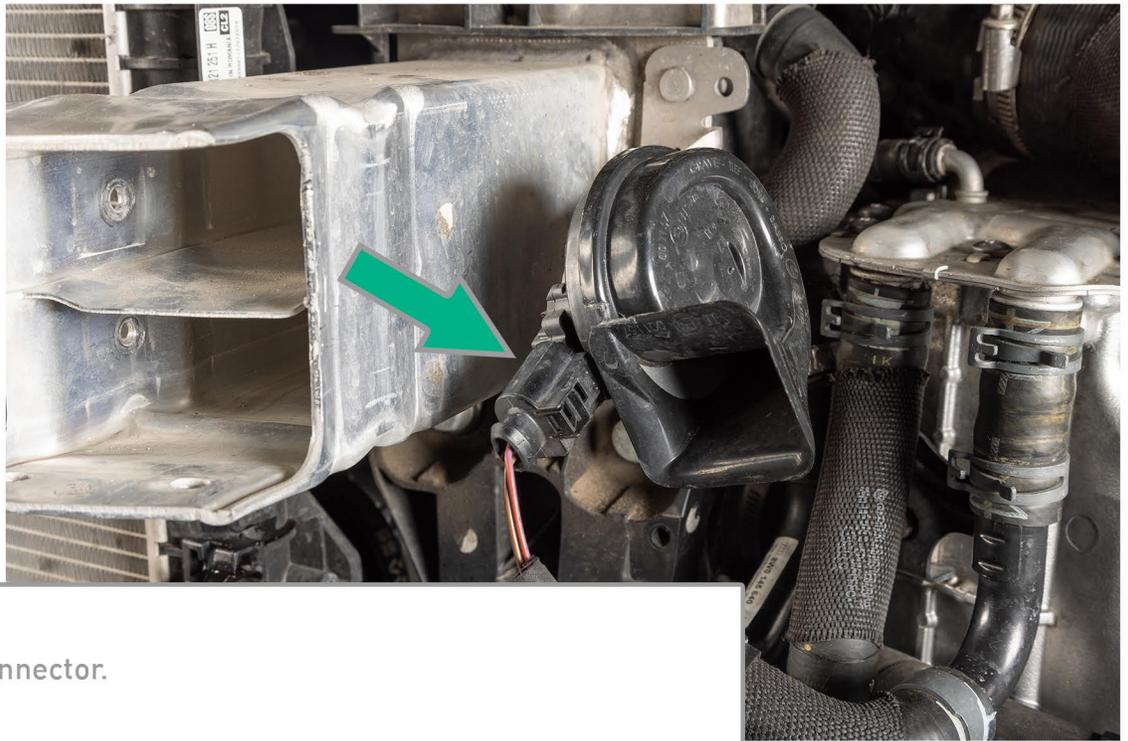
44



Using a set of pliers release two pinch clips on top of intercooler radiator and remove from vehicle.

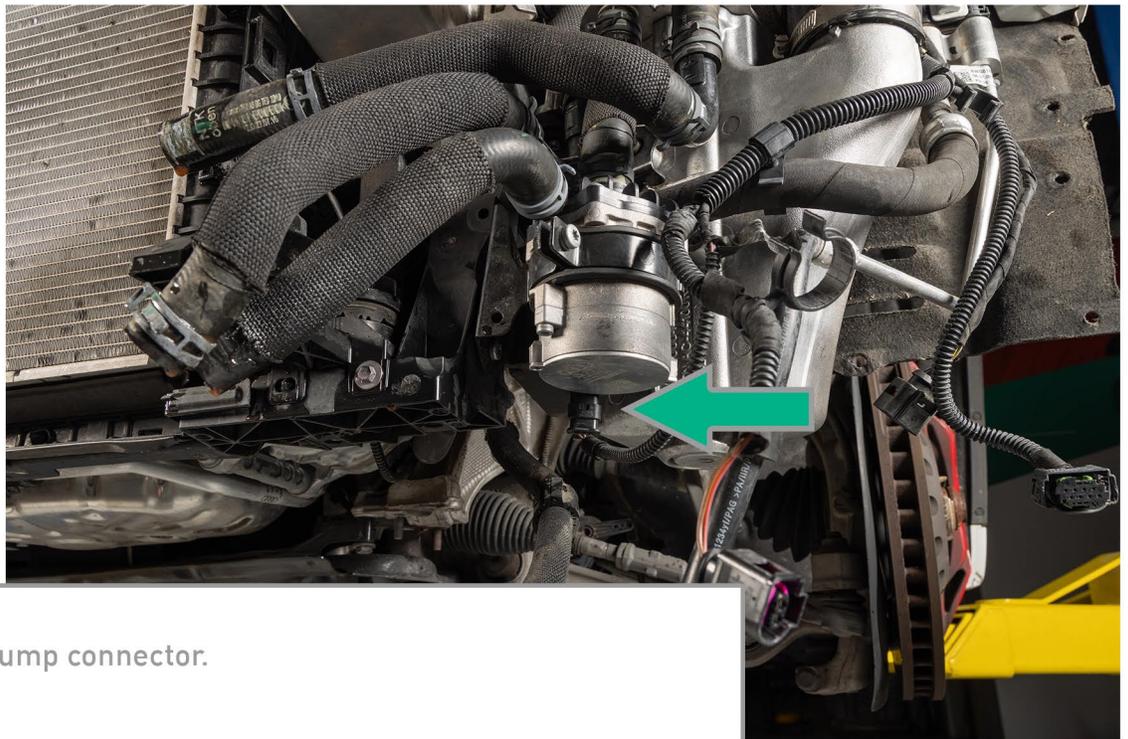


45



Remove horn connector.

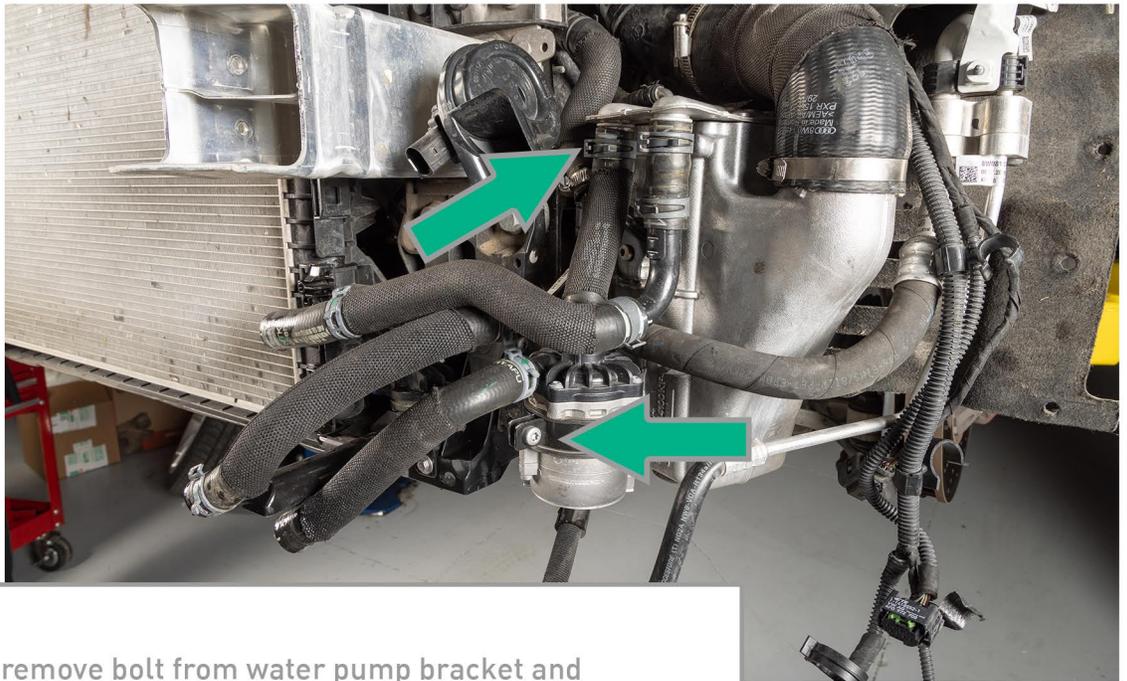
46



Remove water pump connector.

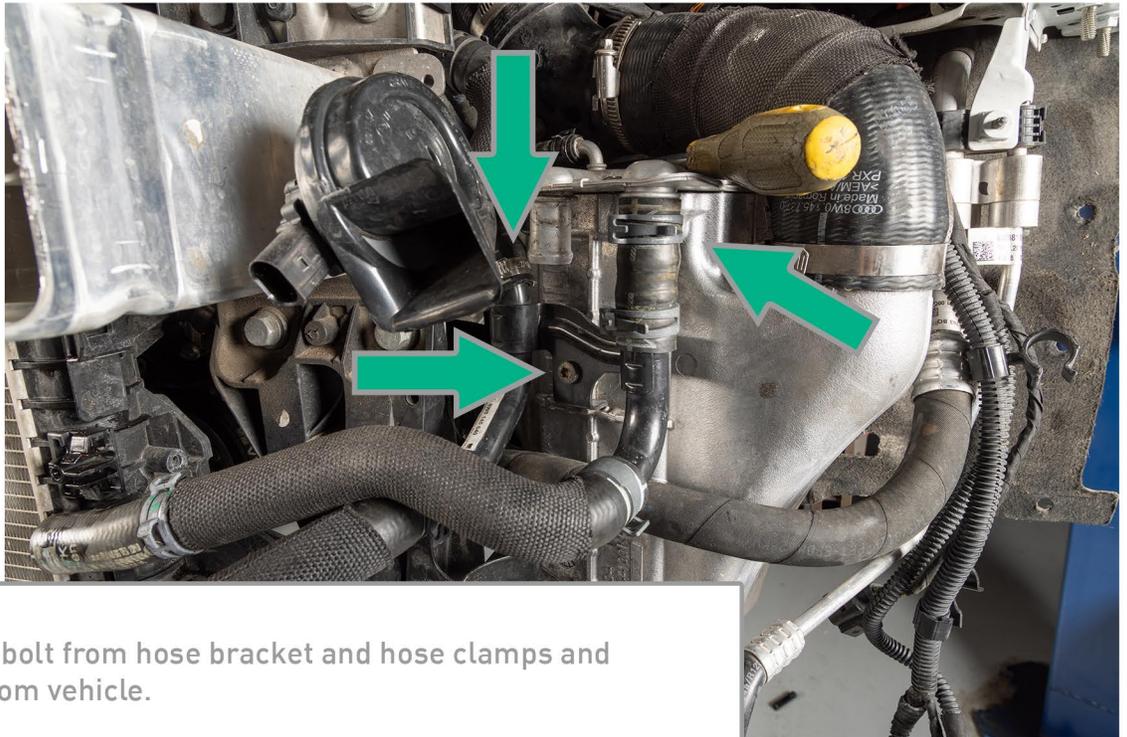


47



Using a Torx 30, remove bolt from water pump bracket and disconnect upper hose from. Remove water pump.

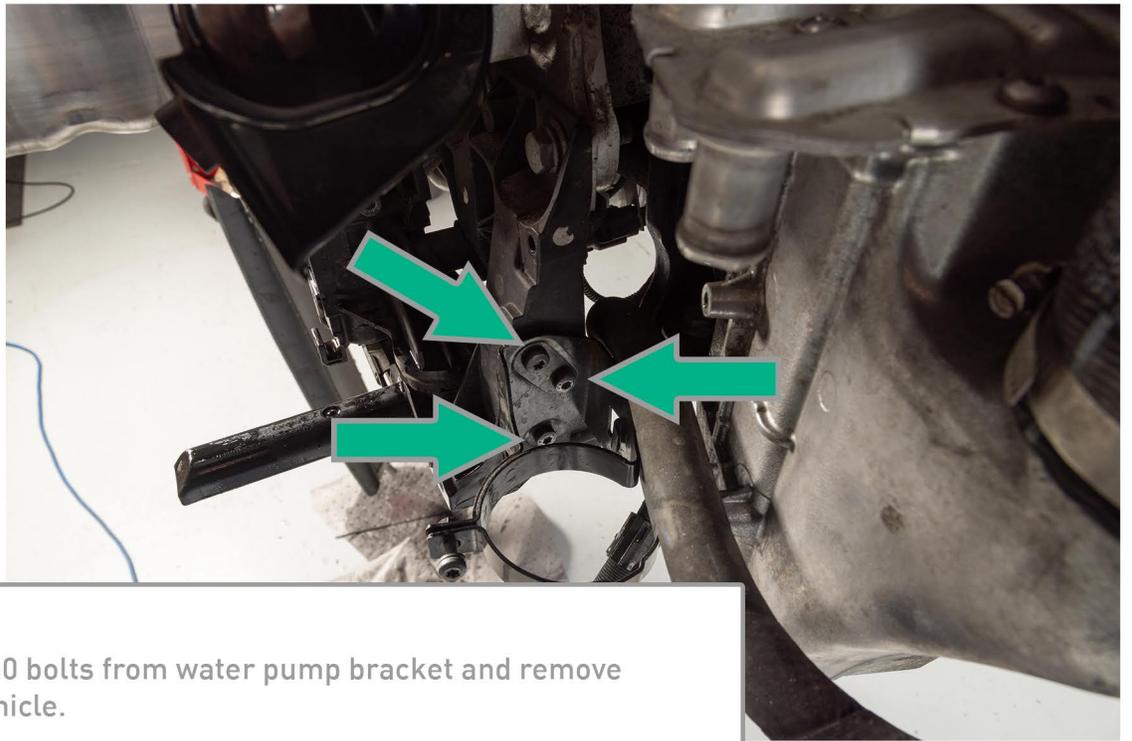
48



Remove Torx 30 bolt from hose bracket and hose clamps and remove hoses from vehicle.

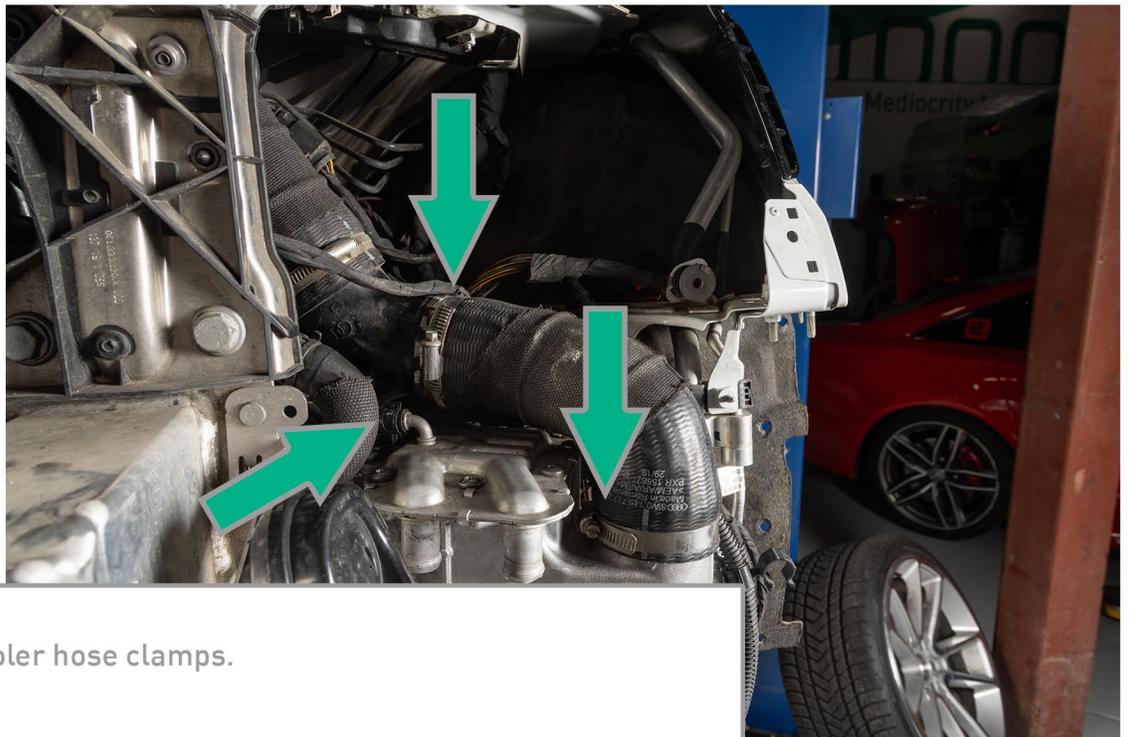


49



Remove 3 Torx 30 bolts from water pump bracket and remove bracket from vehicle.

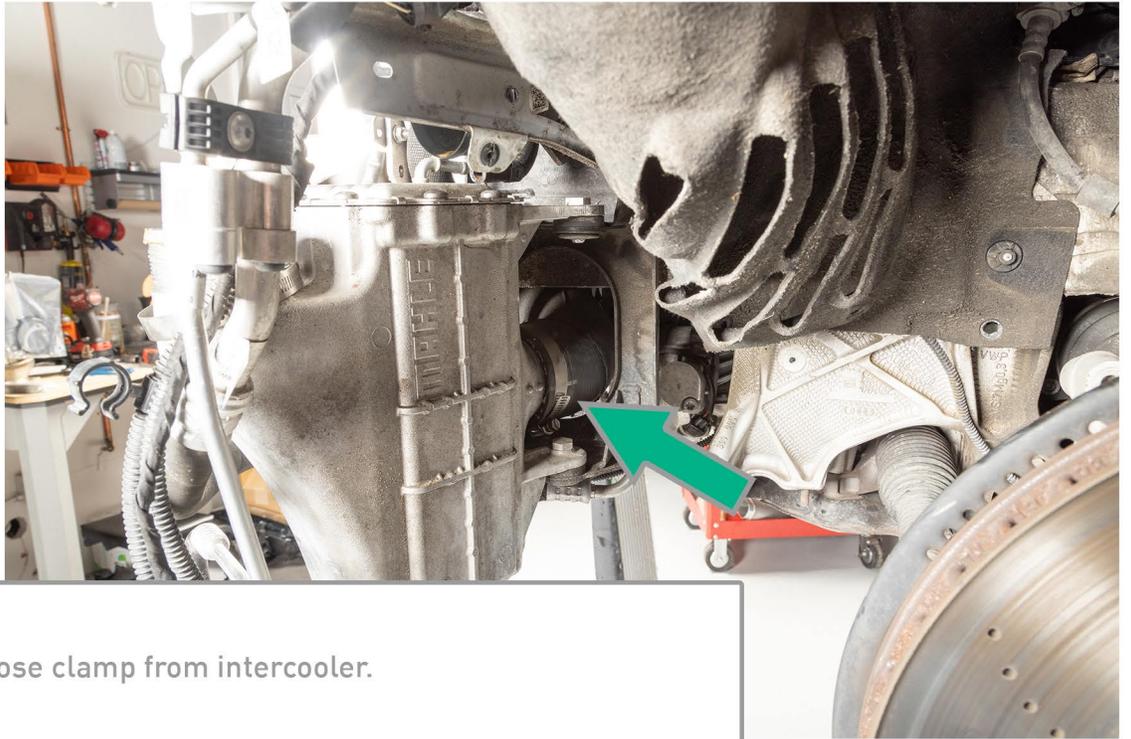
50



Remove intercooler hose clamps.



51



Remove lower hose clamp from intercooler.

52



Lift intercooler from grommets and remove from vehicle.

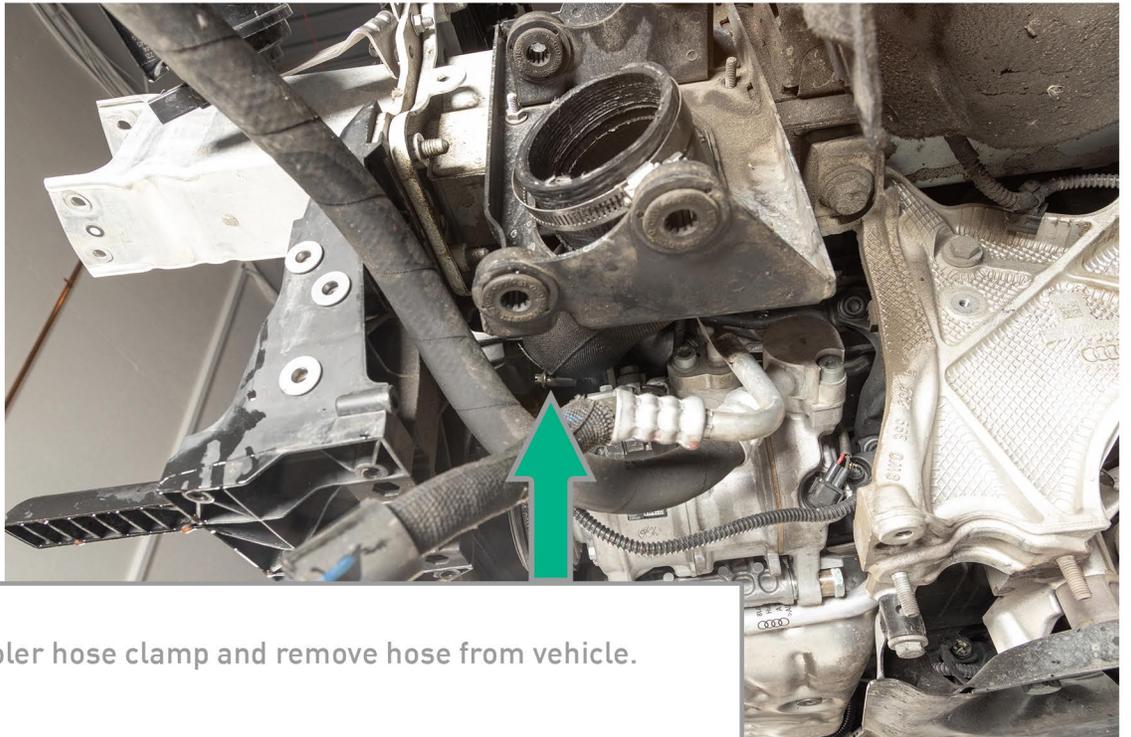


53



Remove clamp from intercooler coolant hose and remove hose from vehicle.

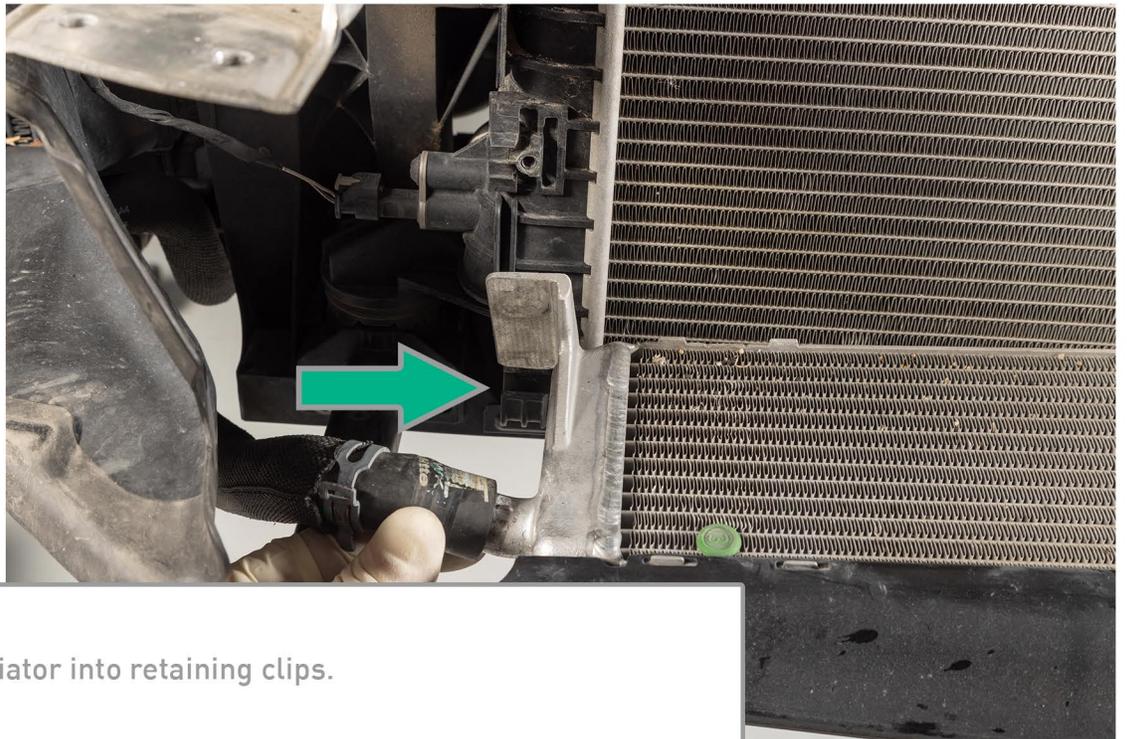
54



Remove intercooler hose clamp and remove hose from vehicle.

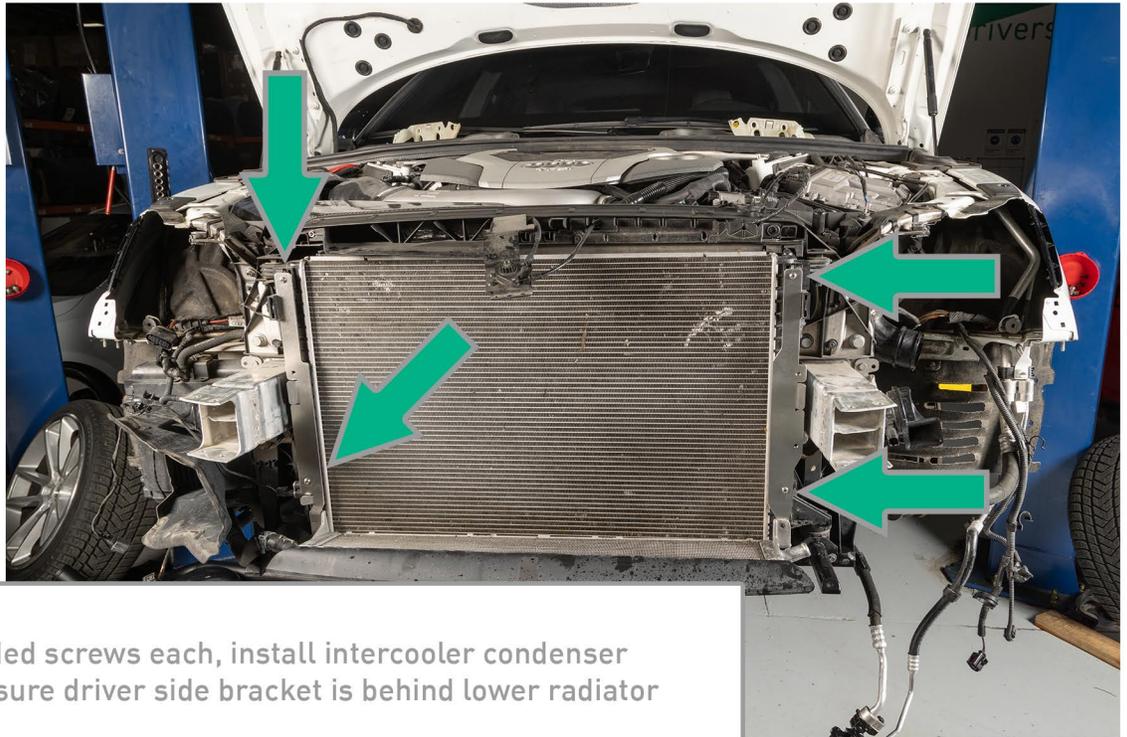


55



Insert lower radiator into retaining clips.

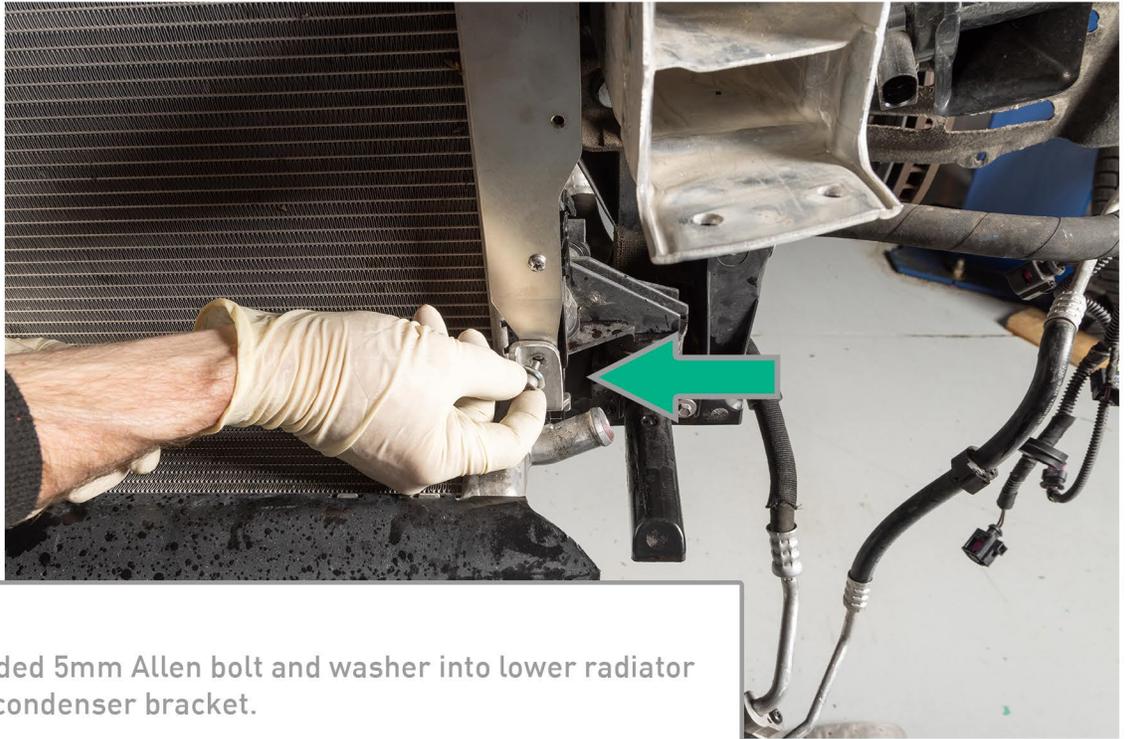
56



Using two included screws each, install intercooler condenser brackets. Make sure driver side bracket is behind lower radiator tab.

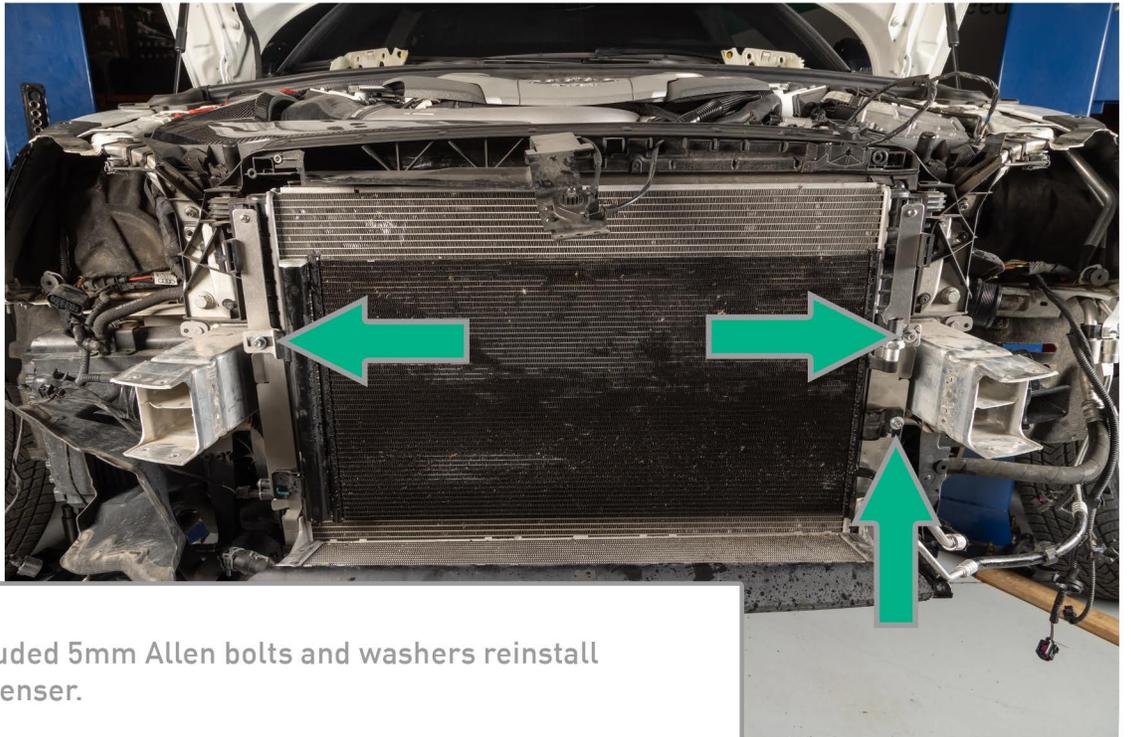


57



Install one included 5mm Allen bolt and washer into lower radiator and intercooler condenser bracket.

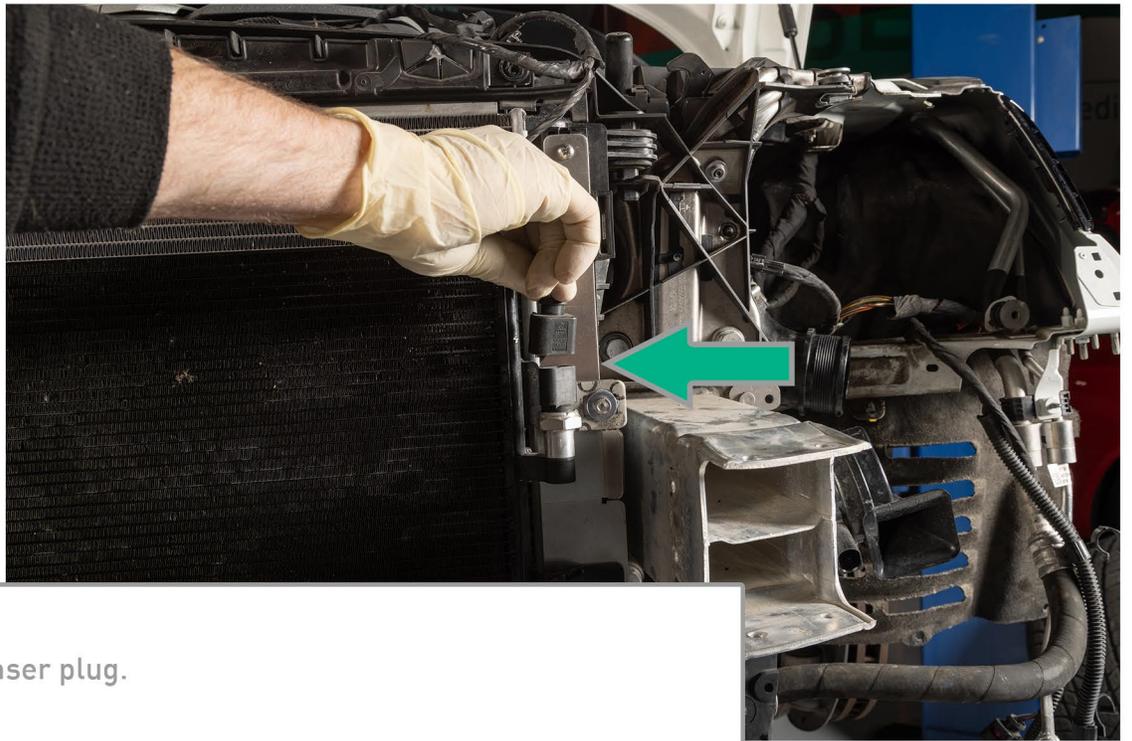
58



Using three included 5mm Allen bolts and washers reinstall intercooler condenser.

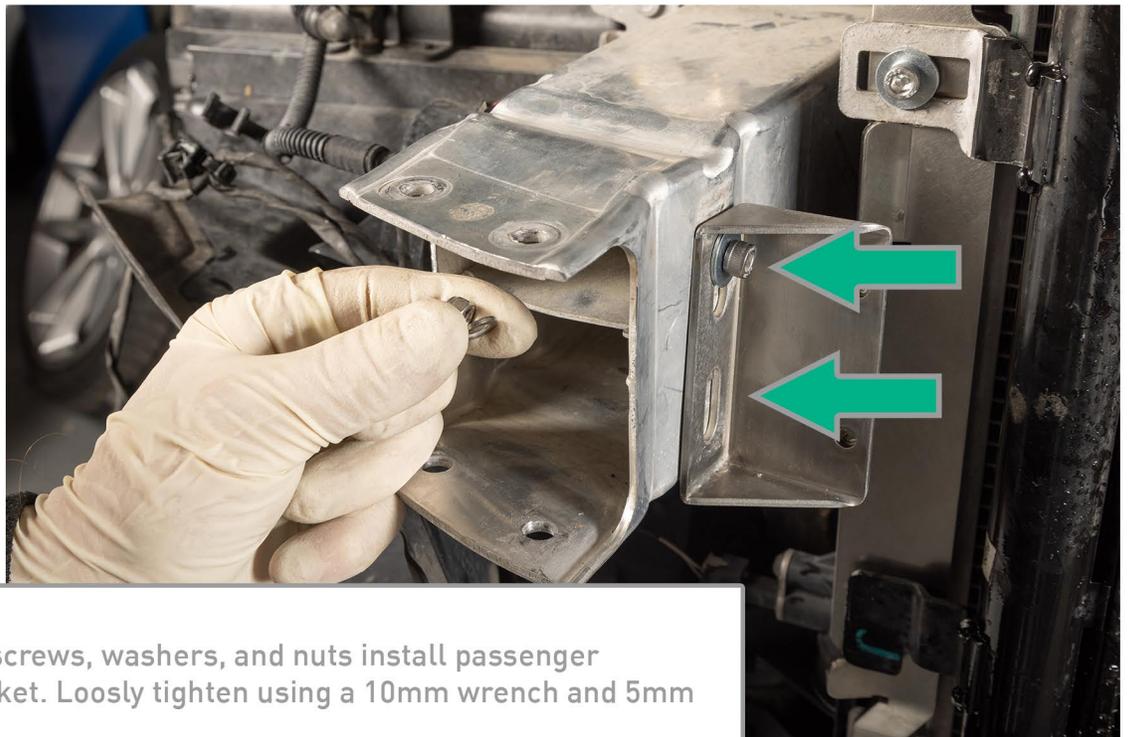


59



Reinstall condenser plug.

60



Using provided screws, washers, and nuts install passenger intercooler bracket. Loosly tighten using a 10mm wrench and 5mm Allen.

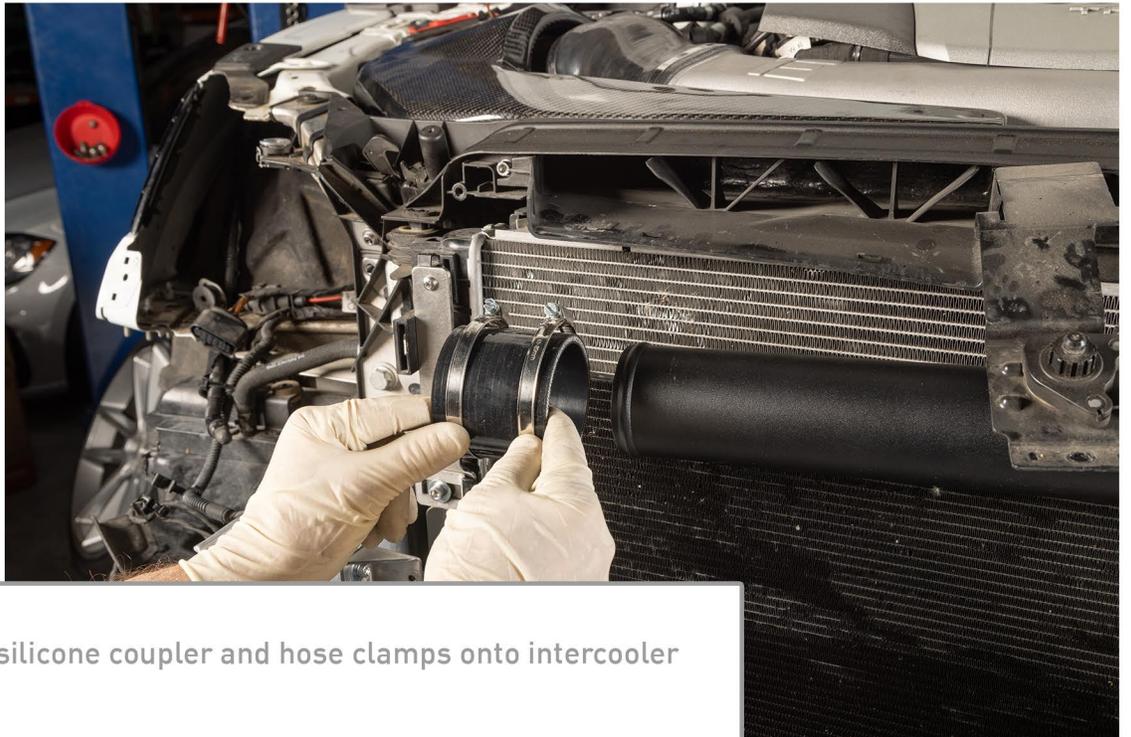


61



Assemble intercooler bracket between included intercooler pipe and crash beam. Loosly tighten 2 included 5mm Allen bolts, washers, and nuts using 5mm Allen wrench and 10mm wrench.

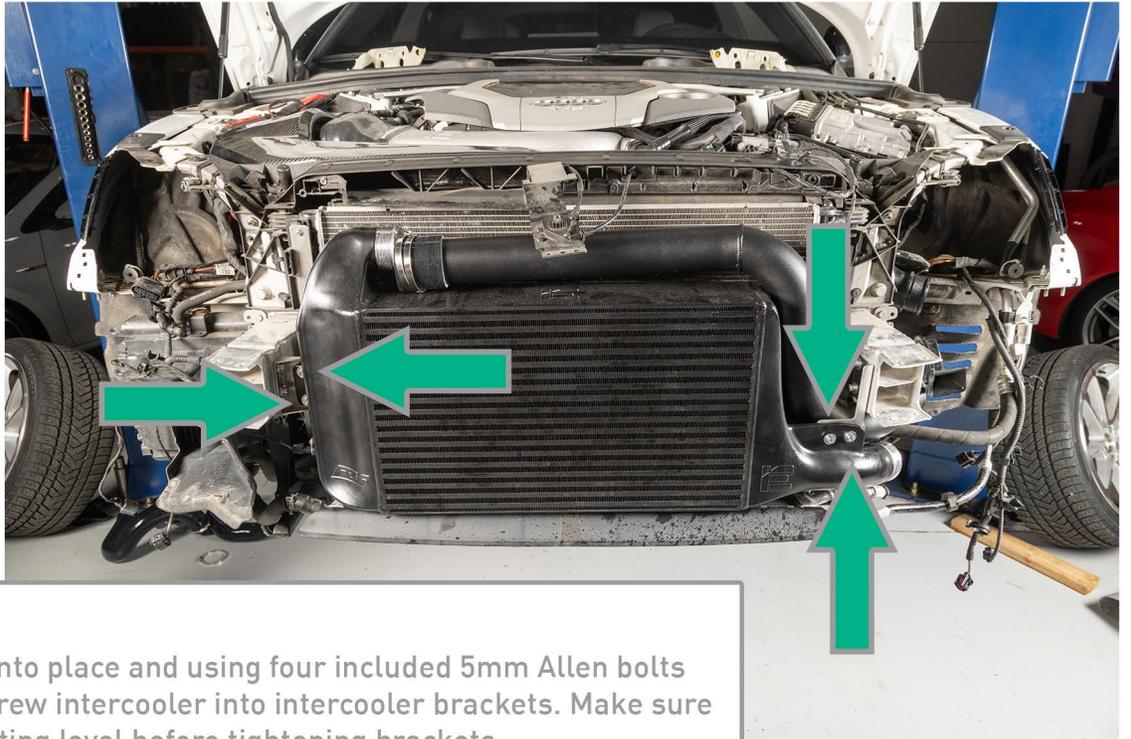
62



Install included silicone coupler and hose clamps onto intercooler pipe.

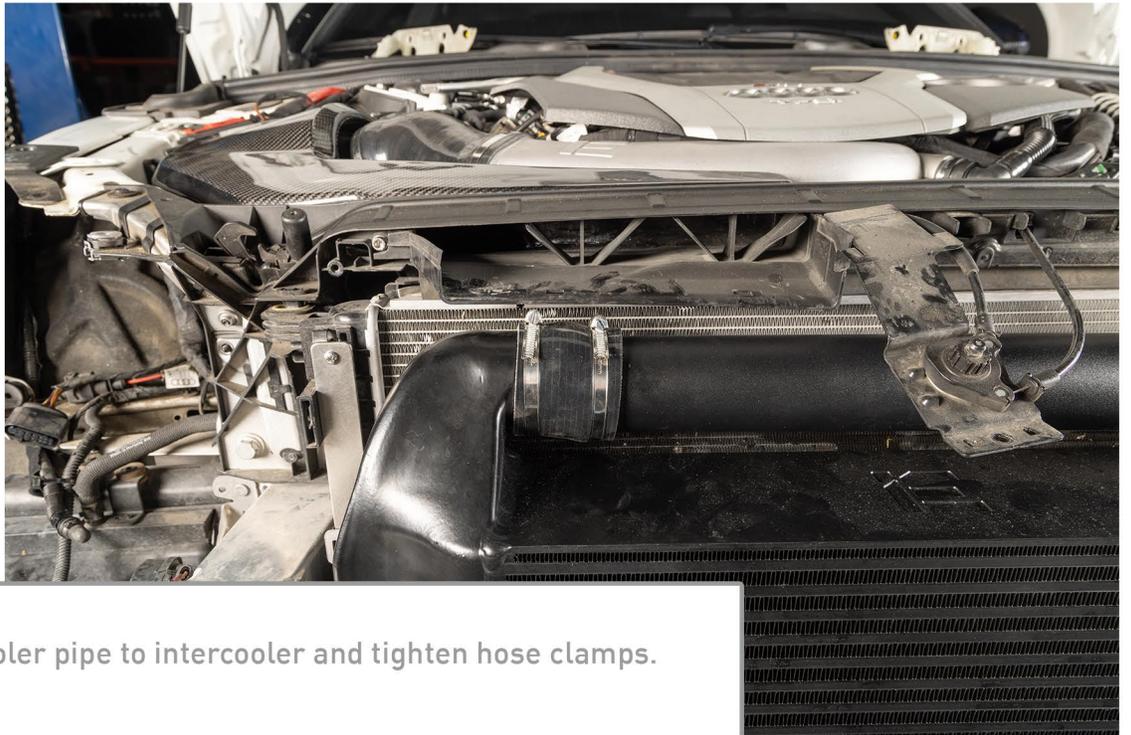


63



Lift intercooler into place and using four included 5mm Allen bolts and washers, screw intercooler into intercooler brackets. Make sure intercooler is sitting level before tightening brackets.

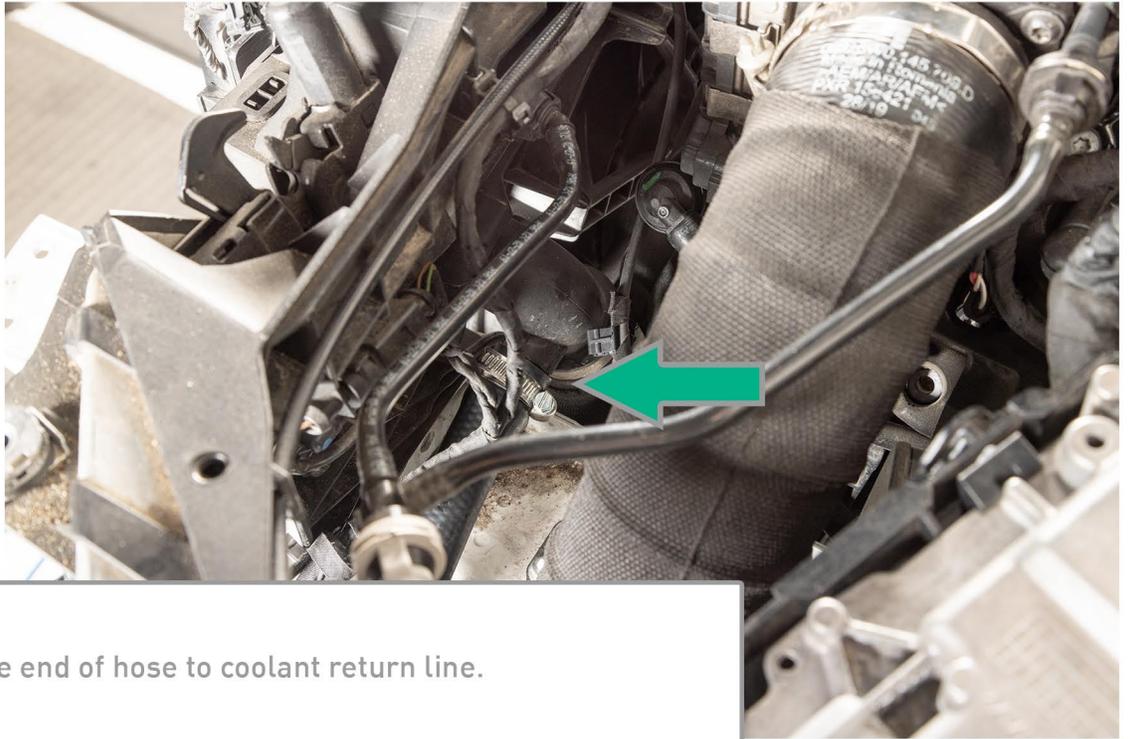
64



Connect intercooler pipe to intercooler and tighten hose clamps.

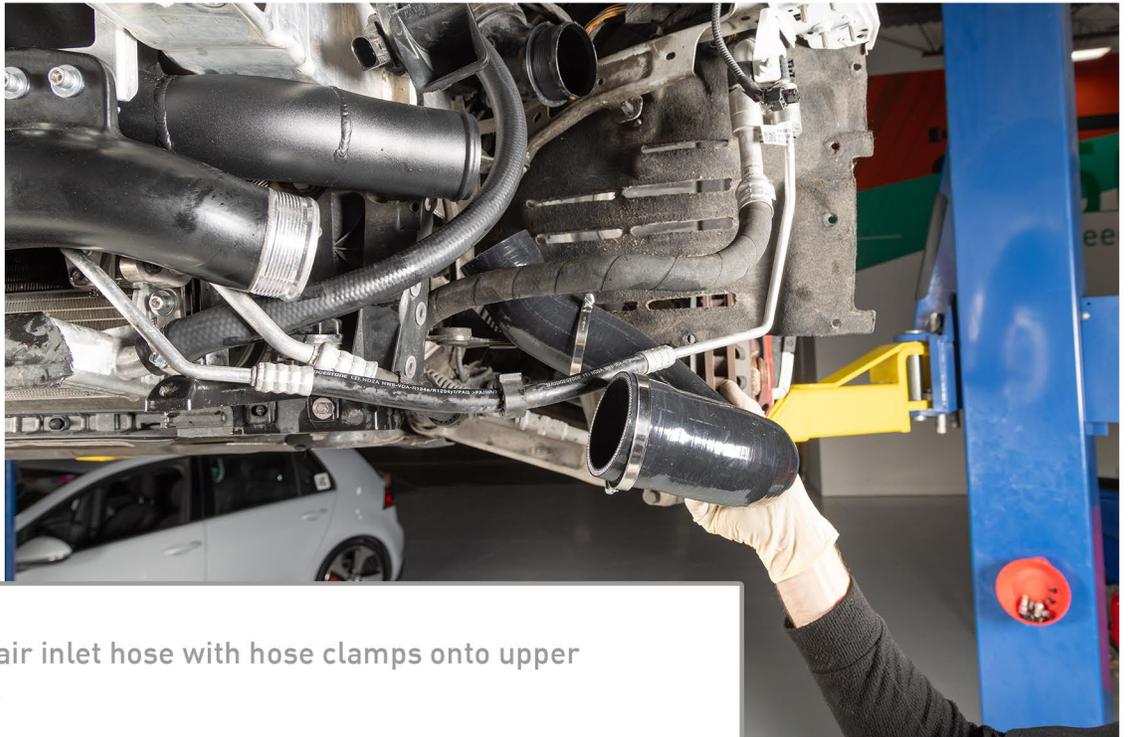


67



Connect opposite end of hose to coolant return line.

68



Install included air inlet hose with hose clamps onto upper intercooler pipe.

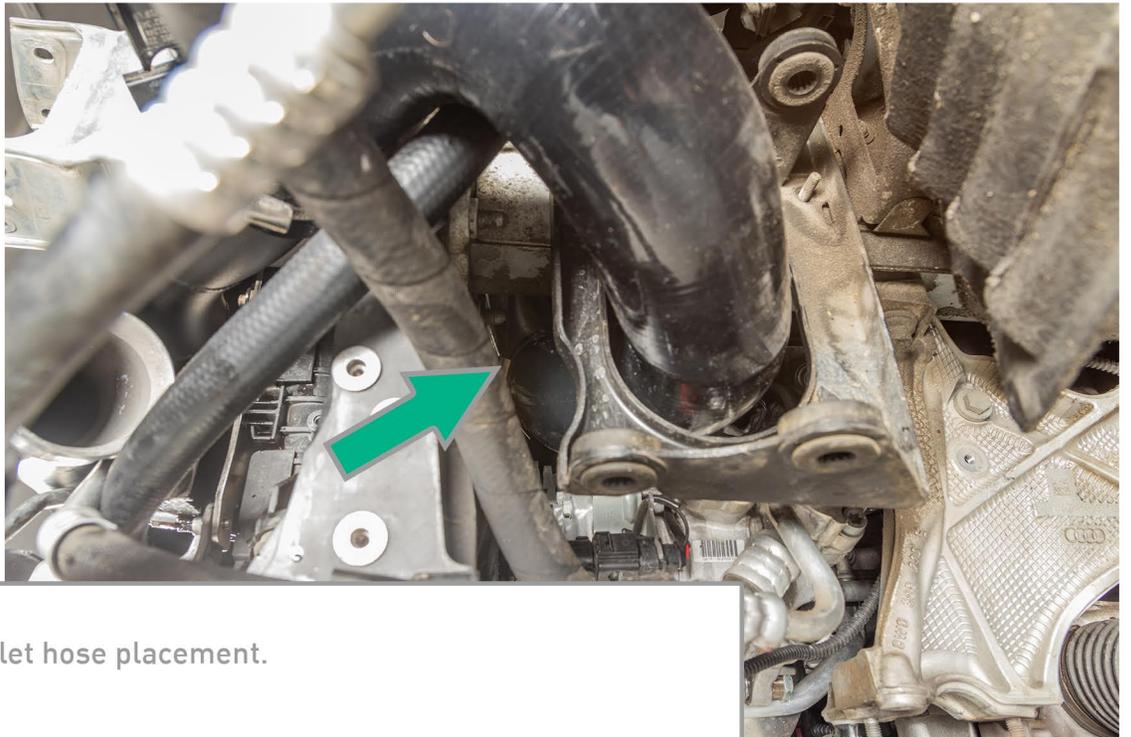


68



Closer look at inlet hose placement.

68



Closer look at inlet hose placement.

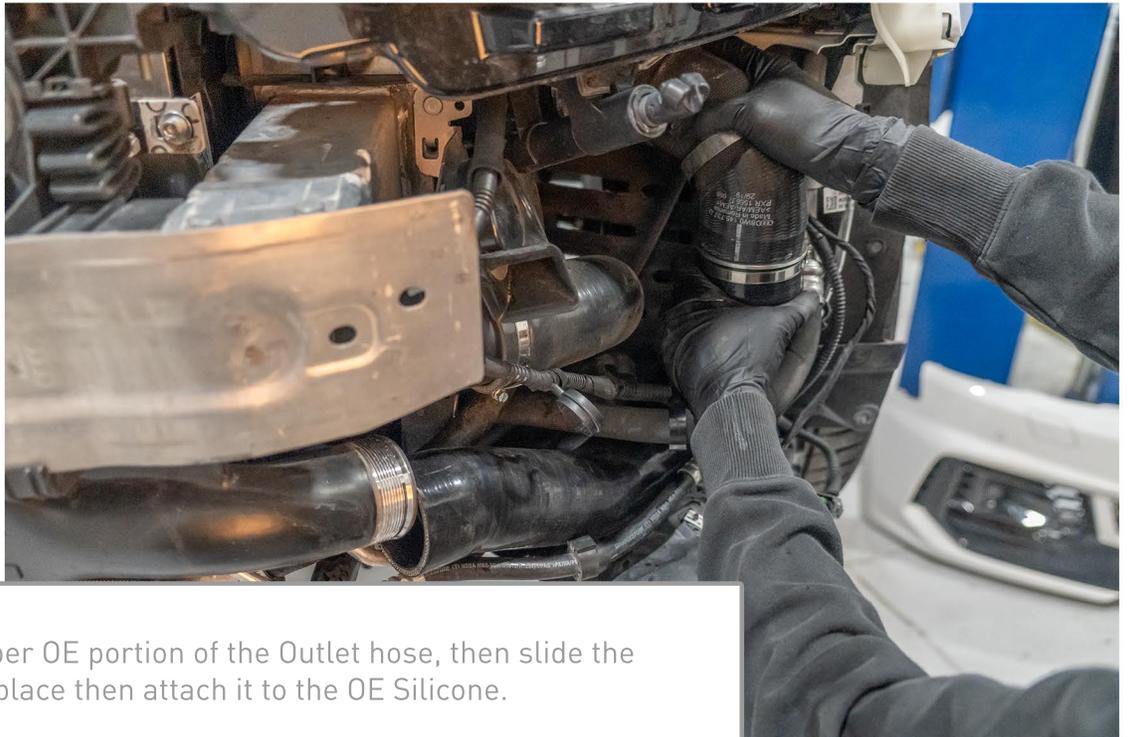


69



Slide a band clamp over the lower outlet hose, then insert the billet couplet to the top side.

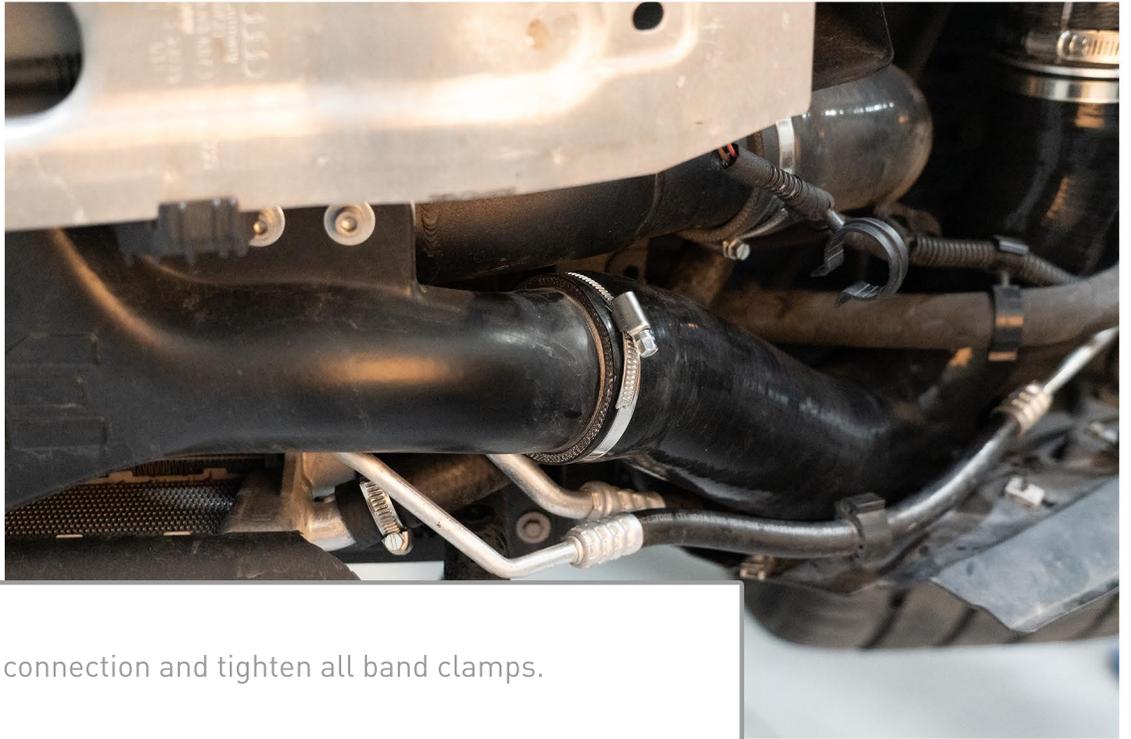
70



Reinstall the upper OE portion of the Outlet hose, then slide the outlet hose into place then attach it to the OE Silicone.

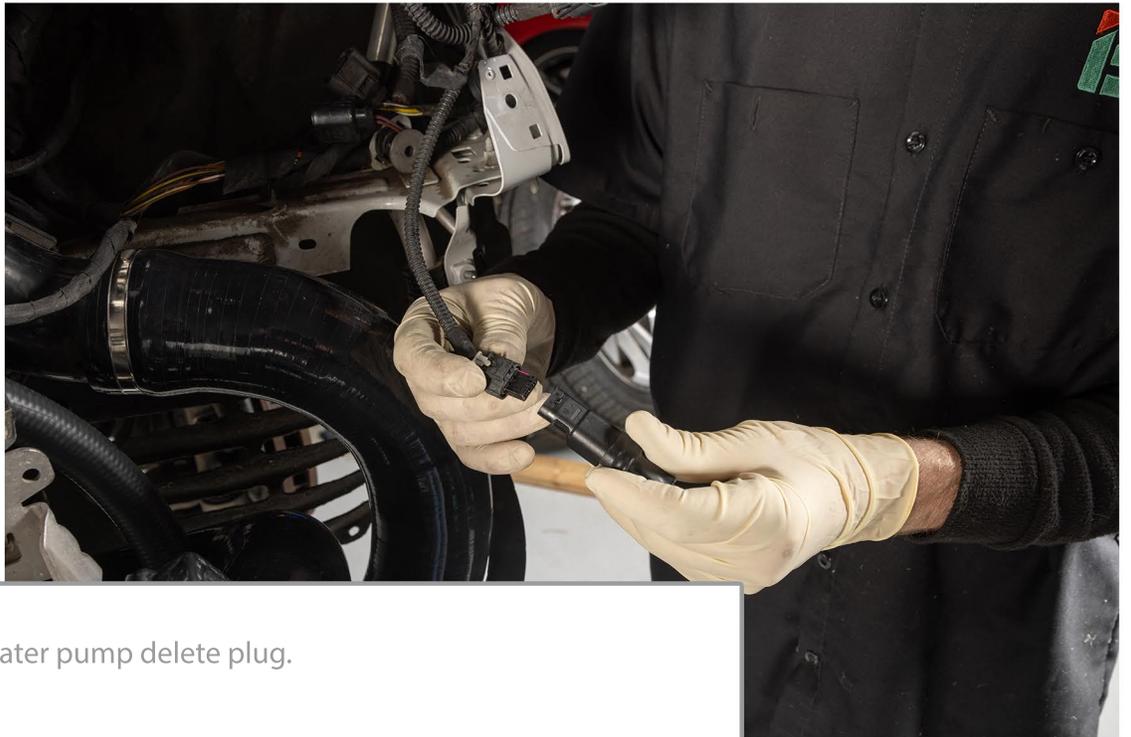


71



Install the lower connection and tighten all band clamps.

72



Install included water pump delete plug.



73



Using a cutoff wheel trim factory plastic bumper support where marked in above photo. Installation was done on a development vehicle with support previously trimmed.

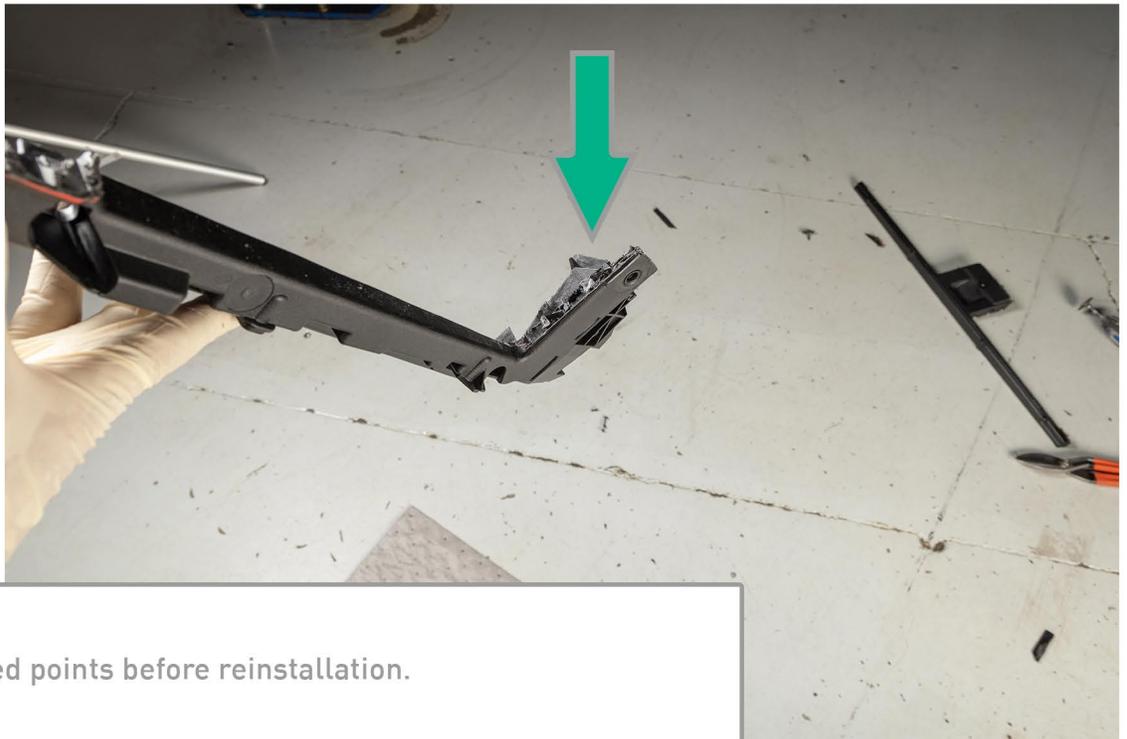
74



Trim underside of factory bumper support where marked in above photo.

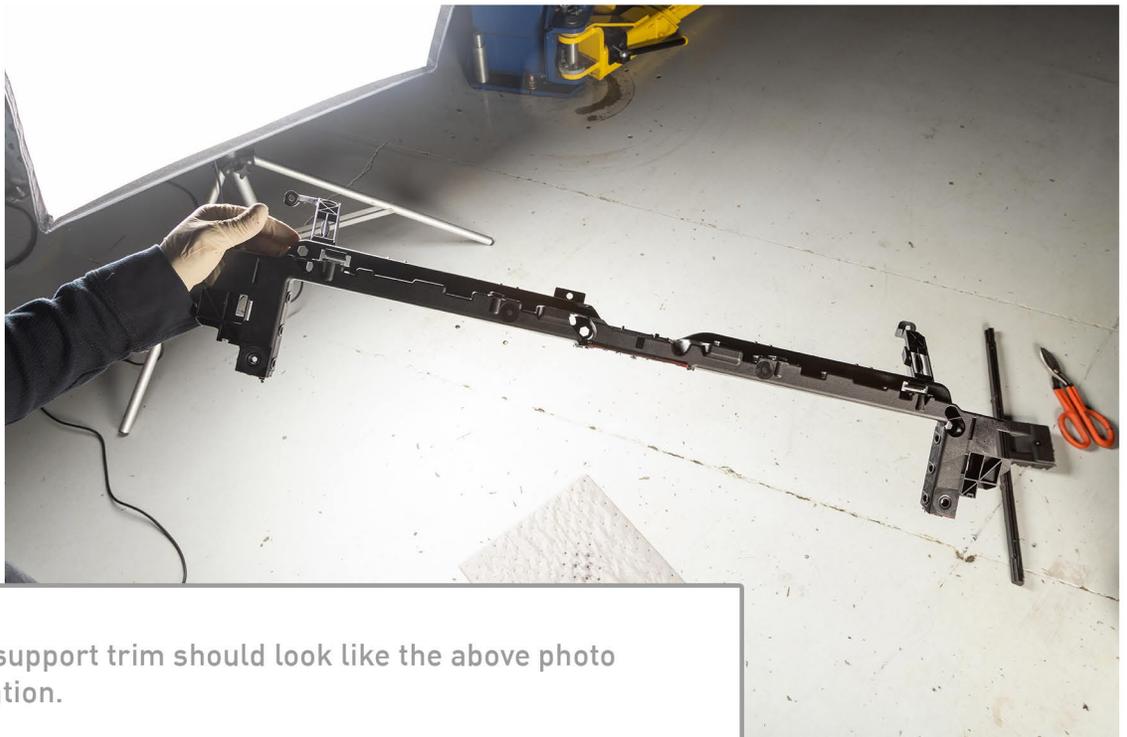


75



Clean up trimmed points before reinstallation.

76



Plastic bumper support trim should look like the above photo before reinstallation.

