#TL100114

IC100024/25

APR 2.5T MQB Intercooler















INSTALLATION MANUAL

Notes:

These instructions were written for a North American-specification RS3 and TT-TS. Other vehicles, like the ROW RS3 and TT-RS, are similar.

When disassembling the car, be sure to keep all fasteners so they can be reused. It is recommended that you get some kind of compartmented tray to organize the fasteners, such as a fishing tackle box or several large ice cube trays. Fasteners that are not reused for reinstallation are noted in the instructions. All directions used in this manual (right, left, front, etc.) are based on if you were sitting in the driver's seat of the car.

These instructions assume that you have basic mechanical skills and several varieties of basic hand tools in order to install the kit. If you have any questions about the install, feel free to contact your APR representative.



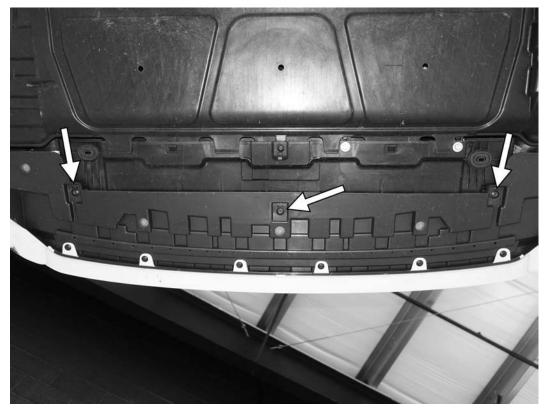


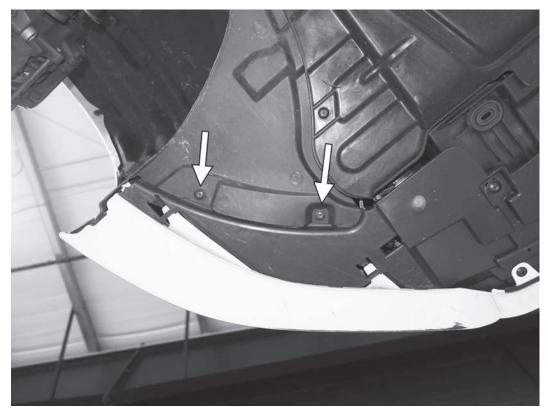


1) Securely lift the car using an auto lift or a jack and jackstands, and remove the front wheels.



2) Remove the three T30 screw holding the bottom of the bumper cover to the bottom of the radiator core support.

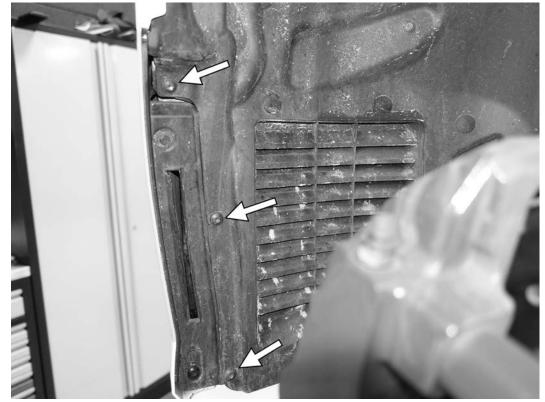




3) Remove the four T25 screws (two on each side of the car) that hold the bottom of the bumper cover to the lower portion of the fender liners.



4) Remove the six (three on each side) T25 screws holding the front of the fender liner to the back of the bumper cover.

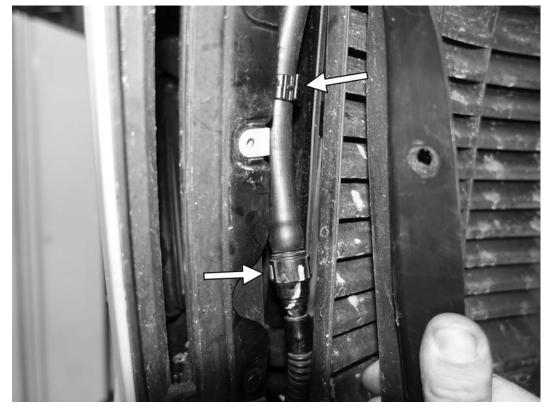




5) Pull back the front of the fender liner and remove the four (two on each side) T30 screws holding the bumper cover to the bottom of the front fender. The TT-RS only has one screw in this location.



6) On the left side of the RS3, pull back the fender to the front headlight washers to reveal the hose. Separate the hose from the upper clip to gain access. Apply a pair of locking pliers or pinching tool to hose to prevent washer fluid leakage. Disconnect the bottom side of the hose from the upper portion by pressing on the blue tabs and pulling away.



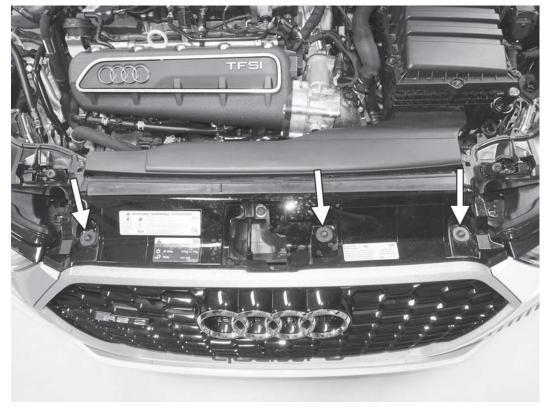


7) Pull back the fender liner and look towards the front of the car from the wheel well. Remove the two T30 screws (one on either side of the car) holding the back of the bumper cover to the front of the fender. The TT-RS does not have this screw.



8) Carefully pull out on the sides of the bumper cover, away from the sides of the car in order to separate the bumper cover from the fender.

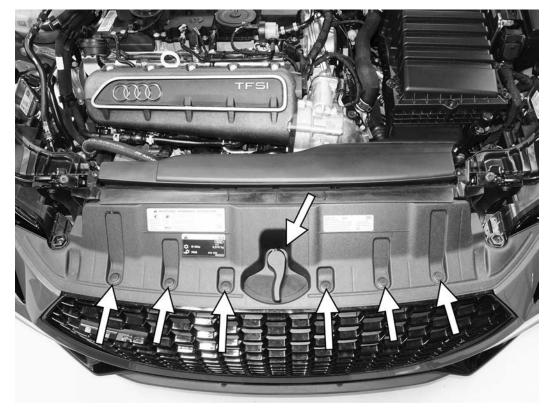


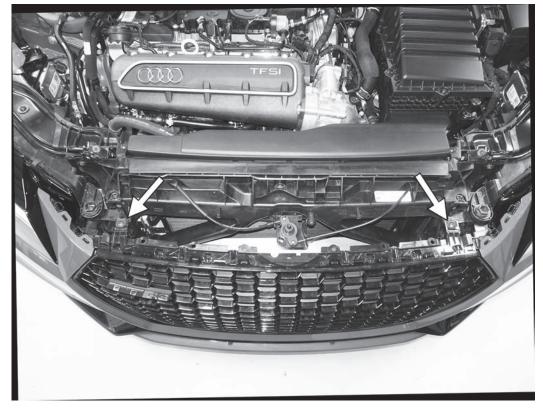


9) On the RS3, remove three T30 screws from the top of the bumper cover. With an assistant, slightly lift the top of the bumper cover and pull the bumper towards the front of the car a few inches.



10) On a TT-RS, remove the hood latch lever by pushing in the button on the back of the lever, then lift up on the lever. Remove the six pushbutton style pins holding the top of the bumper cover on. Once removed, lift up to unclip both sides of the panel. Then lifting from the front side of the panel, pull the panel away from the radiator core support.



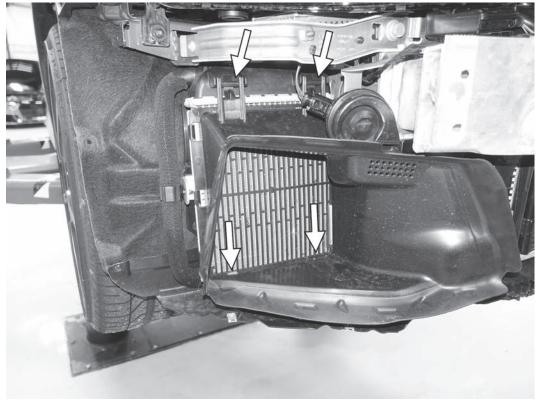


11) On a TT-RS, once the upper cover to the bumper is removed, remove the two T25 screws holding the two tabs on top of the bumper cover to the radiator core support. Note how these tabs are mounted to the core support. With an assistant, slightly lift the top of the bumper cover and pull the bumper towards the front of the car a few inches.



12) On the left side of the center of the bumper near the grill, disconnect the electrical connector going to the front parking sensors. Place the bumper cover away from the car, be careful not to scratch the paint.

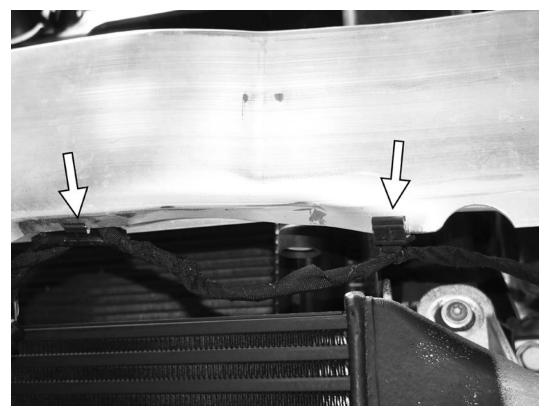


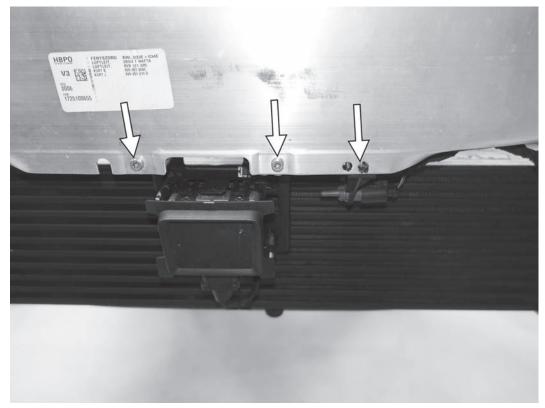


13) On the TT-RS, remove the two ducts for the side radiators. Push down on the bottom of the ducts, near the radiator, to release the bottom, then pull down to release the clips on top of the duct. Repeat for both sides.



14) On the RS3, locate the two clips holding the wiring harness to the bottom of the front crash beam, and remove them from the crash beam.

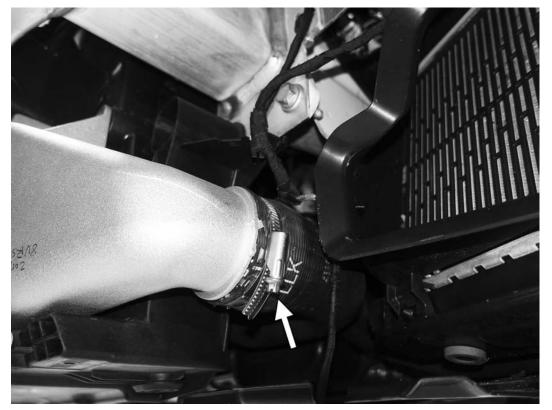


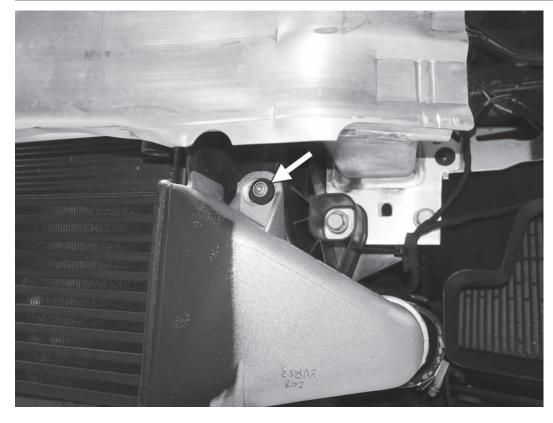


15) On the RS3, remove the outside air temperature sensor by first pushing in the smaller inner tab of the mounting clip, then squeeze the outer tabs of the fastener as you put it through the bumper crash beam. If equipped, remove the two T25 screws holding the adaptive cruise control sensor to the bottom of the bumper beam. Move the ACC sensor and Outside Air Temperature (OAT) sensor with the wiring harness out of the way of the stock intercooler.



16) Loosen the hose clamps holding both the intercooler inlet and outlet hose to the intercooler. Separate the intercooler hoses from the intercooler.



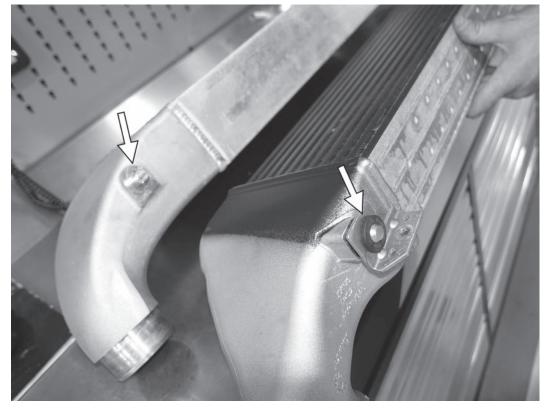


17) Remove the two T30 screws from the upper mounting tabs of the stock intercooler.



18) With an assistant supporting the stock intercooler, remove the two T30 screws from the lower intercooler mounting brackets.

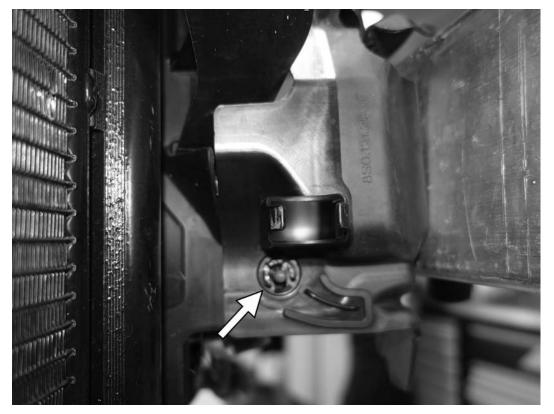


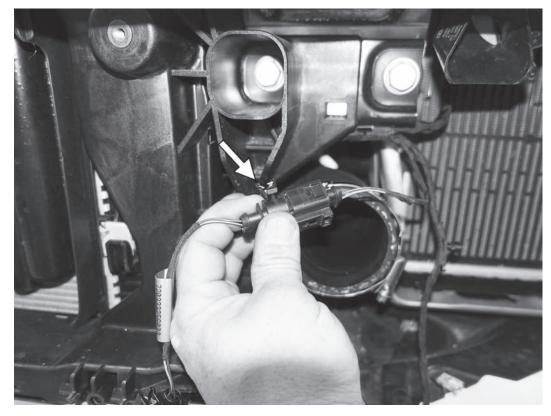


19) Place the stock intercooler and the APR intercooler next to each other. Pull the stock lower rubber grommet with the lower intercooler bracket off the bottom of the stock intercooler, and transfer it to the mounting post on the bottom of the APR intercooler in the same orientation.



20) For the TT-RS, on the lower right side of the left air duct to the radiator, separate and remove the Outside Air Temperature (OAT) sensor.

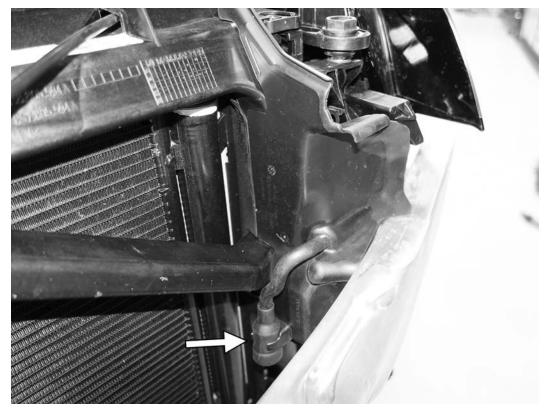


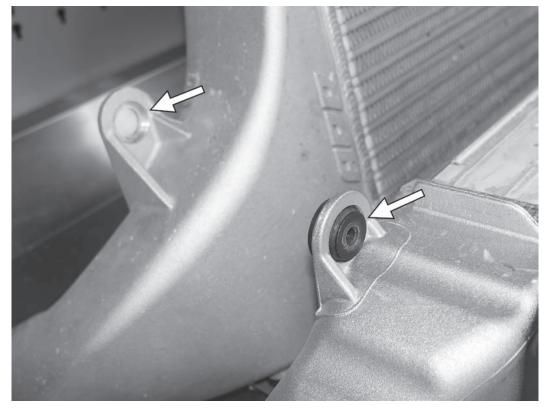


21) On the TT-RS, follow the wiring harness from the OAT sensor down towards the left side of the car. Unclip the wiring harness from the radiator core support.



22) For the TT-RS, separate the two headlight drains from the air guides on both sides of the radiator. Pulling towards the front of the car, remove both air guides from the three clips holding them to the radiator core support.



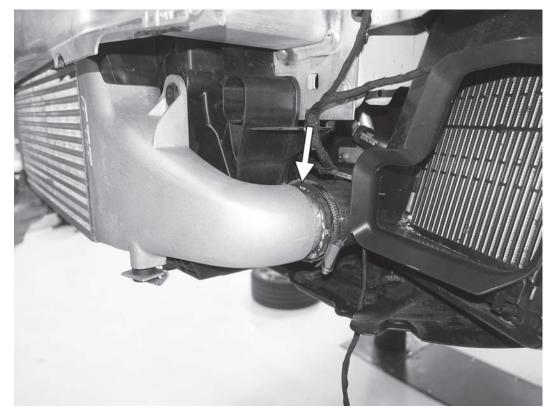


23) Transfer the stock upper intercooler brackets and grommets from the stock intercooler to the APR intercooler. Simply pull the metal insert out towards the front of the intercooler and then remove the rubber grommet from the back. Install both in the same orientation on the APR intercooler.



24) With an assistant, carefully maneuver the APR intercooler onto the car by angling the top of the intercooler in behind the crash bar and then rotating the bottom of the intercooler in.



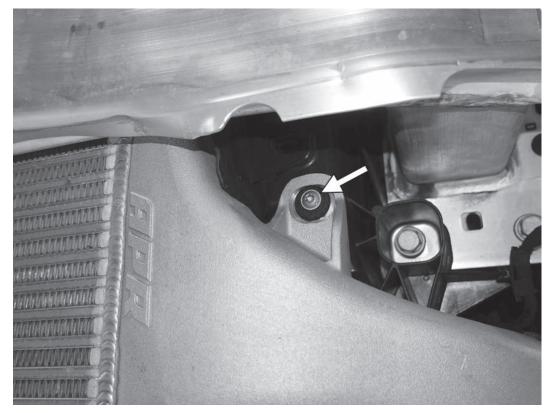


25) As you install the APR intercooler, loosely place the ends of the intercooler into the intercooler hoses on both sides of the car.



26) Install the lower intercooler brackets to the radiator core support, making sure the two alignment posts are correctly positioned in the bracket. Loosely install the two T30 screws.



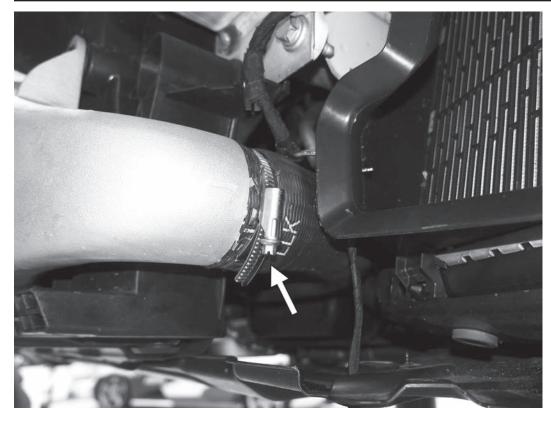


27) Install the two T30 screws that hold the intercooler to the upper mounting points on the radiator core support. Torque the two upper T30 intercooler mounting screws to 44 in-lbs (5Nm). Torque the two lower T30 intercooler mounting screws to 88 in-lbs (10Nm).



28) On both sides near the top of the intercooler behind the crash beam, make sure that the two headlight water drains are both facing down. On the TT-RS, the lower side of the air guides will need to be trimmed in order to reinstall the air guides.



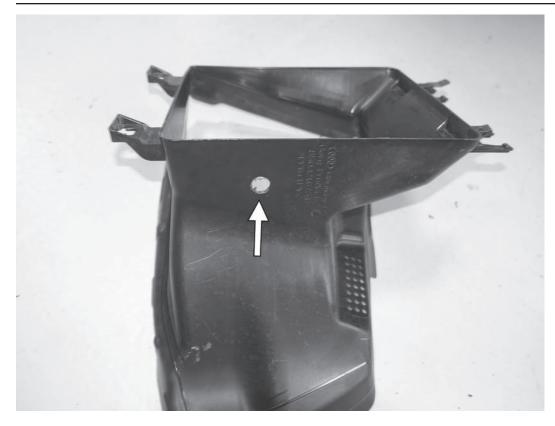


29) Fully install the intercooler hoses on both sides of the intercooler and torque the hose clamps in place to 48 in-lbs (5.5Nm). Do not overtorque the hose clamps.



30) On the RS3, put the wiring harness for the ACC sensor and OAT sensor back in place. Secure the ACC sensor with the original two T25 screws and torque to 48 in-lbs (5.5Nm). Push the mounting tab for the OAT sensor back into the crash beam, and install the two wire clips on the crash beam.



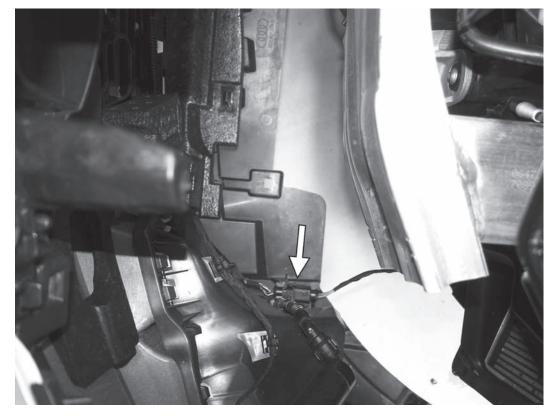


31) On the TT-RS left radiator air guide, locate the small hole on the side of the guide. Enlarge this hole with a drill bit to $\sim 1/2$ " (12.5mm).



32) On the TT-RS, install the OAT sensor into the previously drilled hole on the side of the left radiator air guide, then install both side radiator air guides to the radiators.



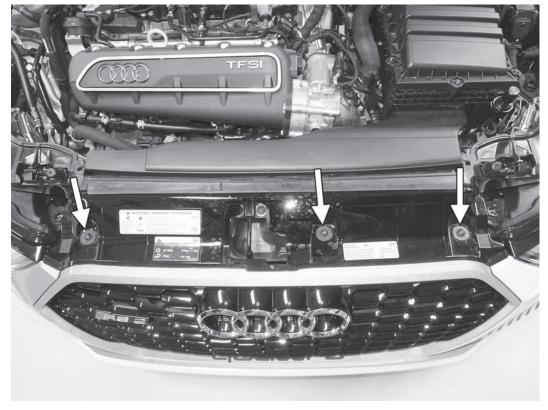


33) With an assistant, place the bumper cover close to the car and reconnect the electrical connector to the parking sensors.



34) Place the bumper cover back on the car, making sure all tabs are in the correct position. On the TT-RS, make sure the two upper mounting tabs correctly go into the slots on the radiator core support.



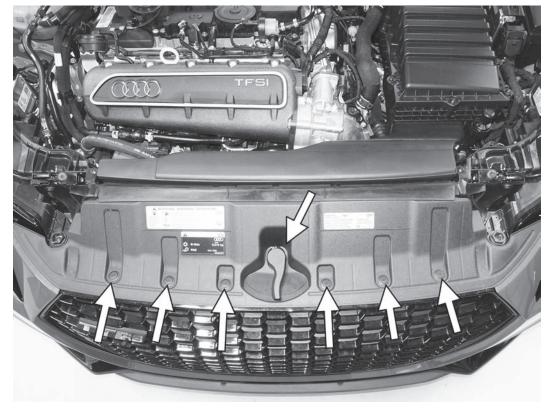


35) On a RS3, install the three T30 screws to hold the top of the bumper cover to the core support. Torque the screws to 35 in-lbs (4Nm).



36) On a TT-RS, install the two T25 screws holding the two tabs on the top of the bumper cover to the radiator core support.



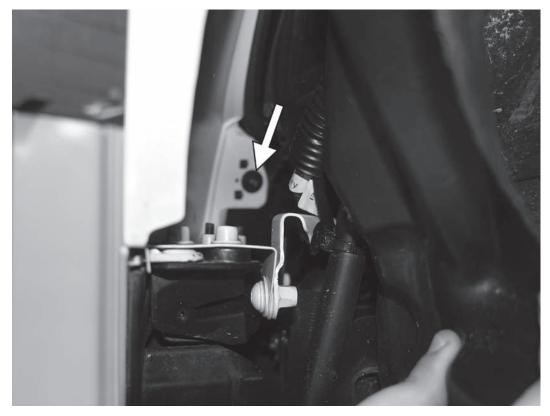


37) On a TT-RS, install the upper cover by first placing the back of the cover into the radiator core support, then lower the front side down to the bumper cover. Push in the clips on both sides of the upper cover, and then reinstall the six push button style pins to hold the cover in place. Finally, push the hood release handle back onto the mounting splines.



38) Push the side tabs of the bumper back into the clips on both sides of the front fenders.

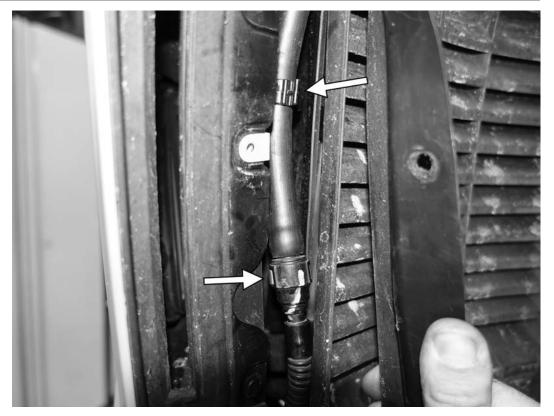


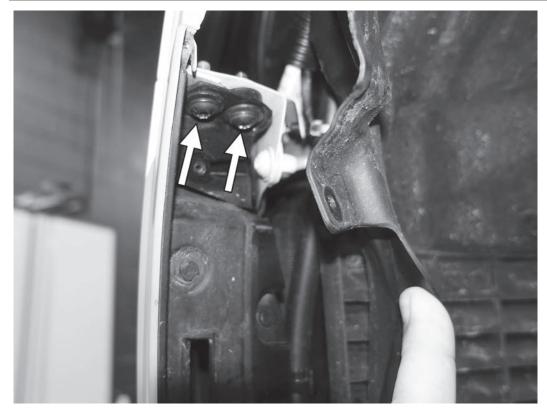


39) On the RS3, pull back the fender liners and install the two T30 screws holding the bumper cover to the front side of the fenders. Torque the T30 screws to 35 in-lbs (4Nm).



40) On the left side of the RS3, pull back the fender liner and reconnect the headlight washer hose by pushing the connector back onto the hose. Remove the clamp used to keep fluid from leaking and reinstall the hose in the mounting clip.

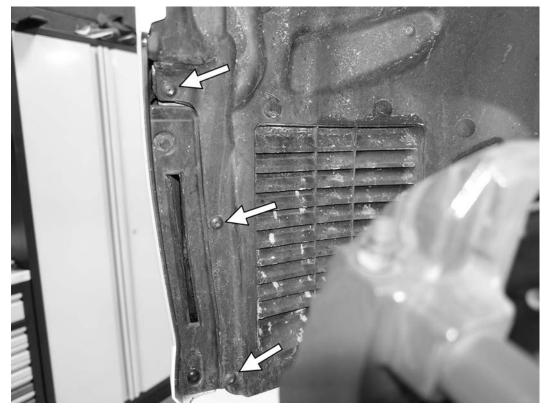


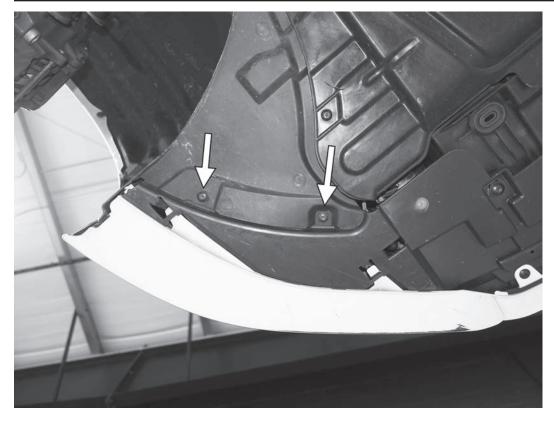


41) Install the four T30 screws (two on each side) that hold the back of the bumper cover to the bottom of the fender. Torque the screws to 18 in-lbs (2Nm). The TT-RS only has one screw in this location.



42) Install the six (three on each side) T25 screws holding the front of the fender liner to the back of the bumper cover. Torque the screws to 18 in-lbs (2Nm).

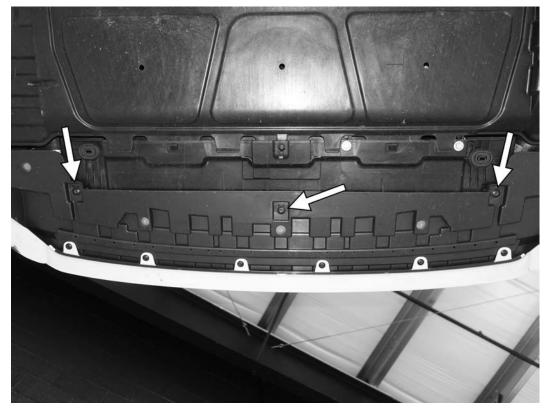




43) Reinstall the four T25 screws holding the bottom of the fender liner to the bottom of the bumper cover. Torque the screws to 18 in-lbs (2Nm).



44) Install the three T30 screws holding the bottom of the bumper cover to the bottom of the radiator core support. Torque the screws to 18 in-lbs (2Nm).





45) Reinstall the front wheels and torque the lug bolts to 88 ft-lbs (120Nm). Take car off lift or jackstands.



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