



## APIKOL UR-S4/S6 GEN. II FRONT MOUNT INTERCOOLER INSTALLATION INSTRUCTIONS



Only work underneath your vehicle after properly supporting it with adequate jack stands on a flat surface. **NEVER work under a vehicle only supported with a jack.**

Estimated Installation Time: Approximately 3-5 Hours

- 1) Remove the lower bumper grilles, center grille first, followed by the side grilles. Remove front bumper assembly by removing two 6mm allen bolts (picture below is looking up at the underside of the bumper). Gently unclip the sides of bumper by pushing down on the sides of the bumper while simultaneously pulling out the top edge of the bumper followed by the bottom edge of the clip. The bumper can now be pulled straight off from the front of the vehicle (this procedure is much easier with a helper).

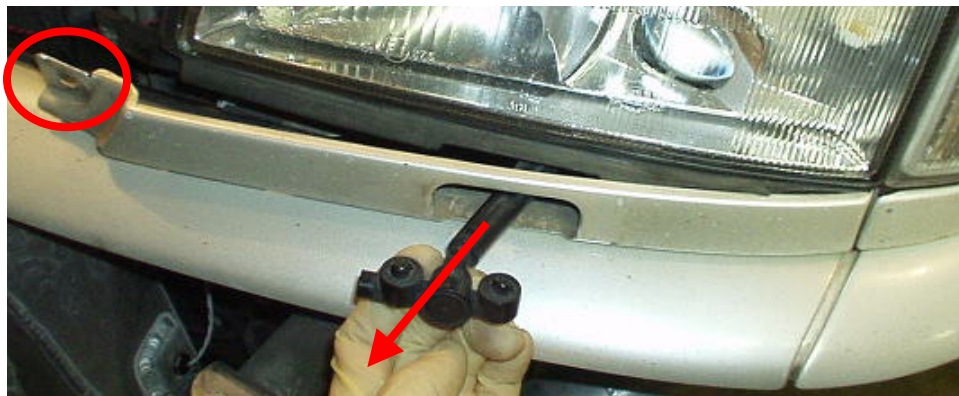


- 2) Remove plastic undertray.

- 3) Remove driver's headlight washer cover by pulling the headlight washer out (toward the front of the vehicle). The cover is held in place by a single tab on the top and two tabs on the bottom side. Carefully lift the highlighted tab in order to remove the cover in a forward/downward motion.



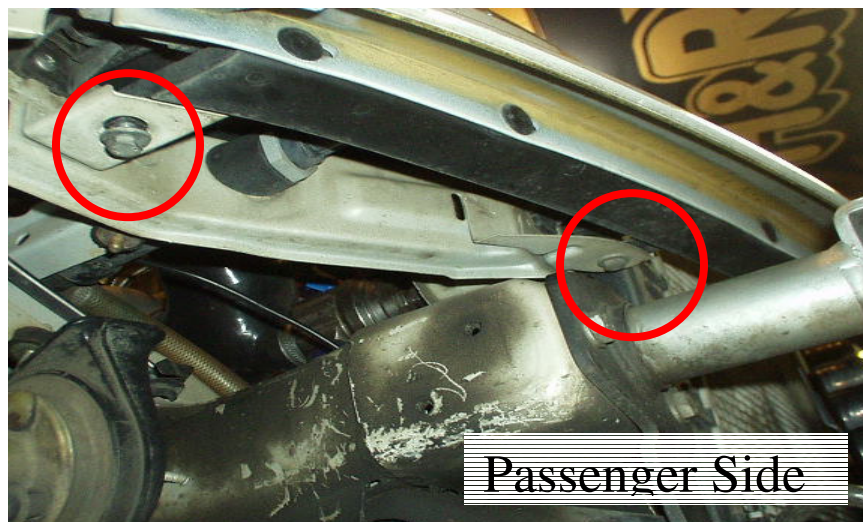
- 4) Remove the lower headlight trim piece by removing the single Phillips head screw, holding the headlight washer in it's extended position and carefully pulling the trim piece toward the vehicle centerline (to the left). Work the headlight washer assembly through the rectangular opening in the trim piece.



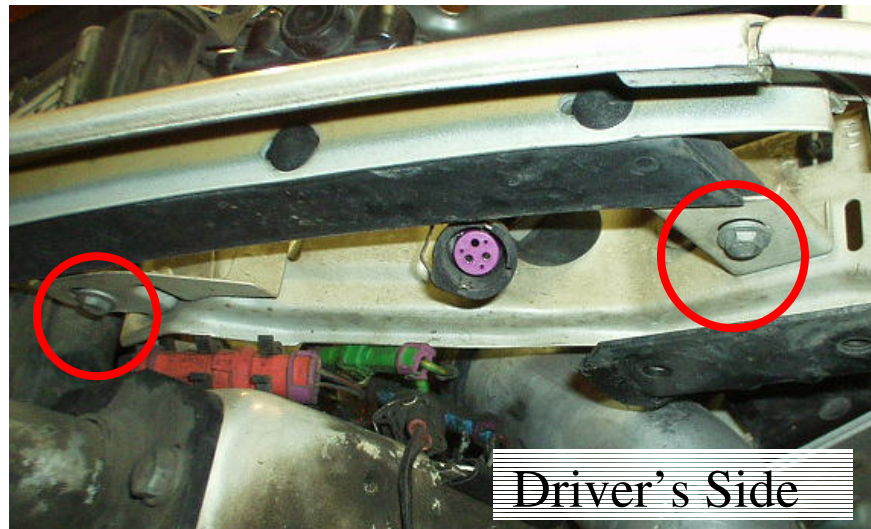
- 5) Remove the drivers side headlight by removing the 4 Phillips head screws which hold it in. 2 of the screws are circled in the picture and the remaining two are under the headlight and are accessible after removing the trim piece in the previous step. Unplug the headlight and turn signal.



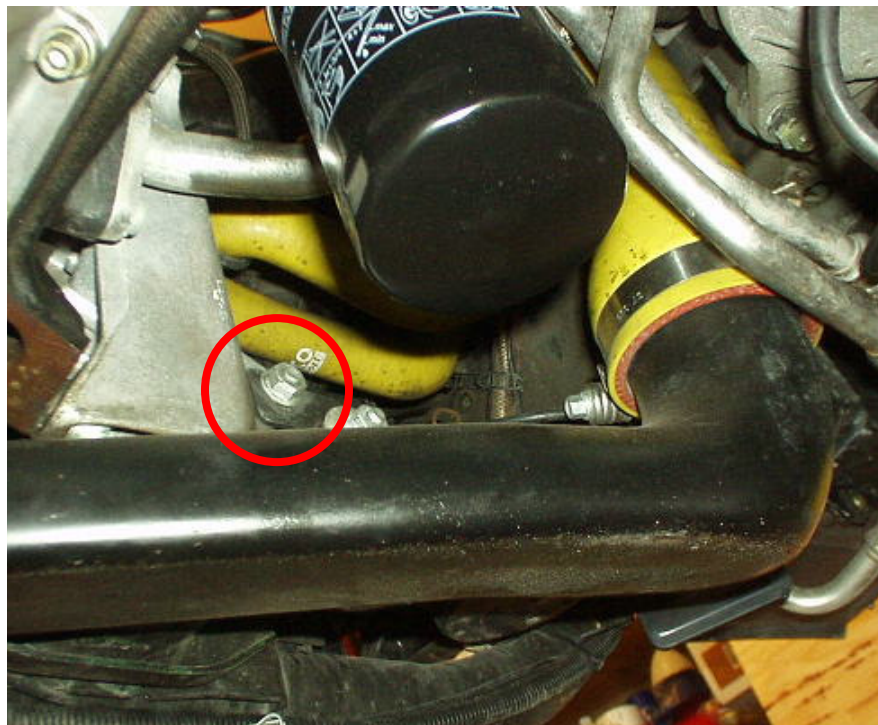
- 6) Remove the upper bumper trim section by removing the 4 bolts (10 mm wrench) which are located under the headlight assemblies. The corner trim pieces simply slide over the center trim section.





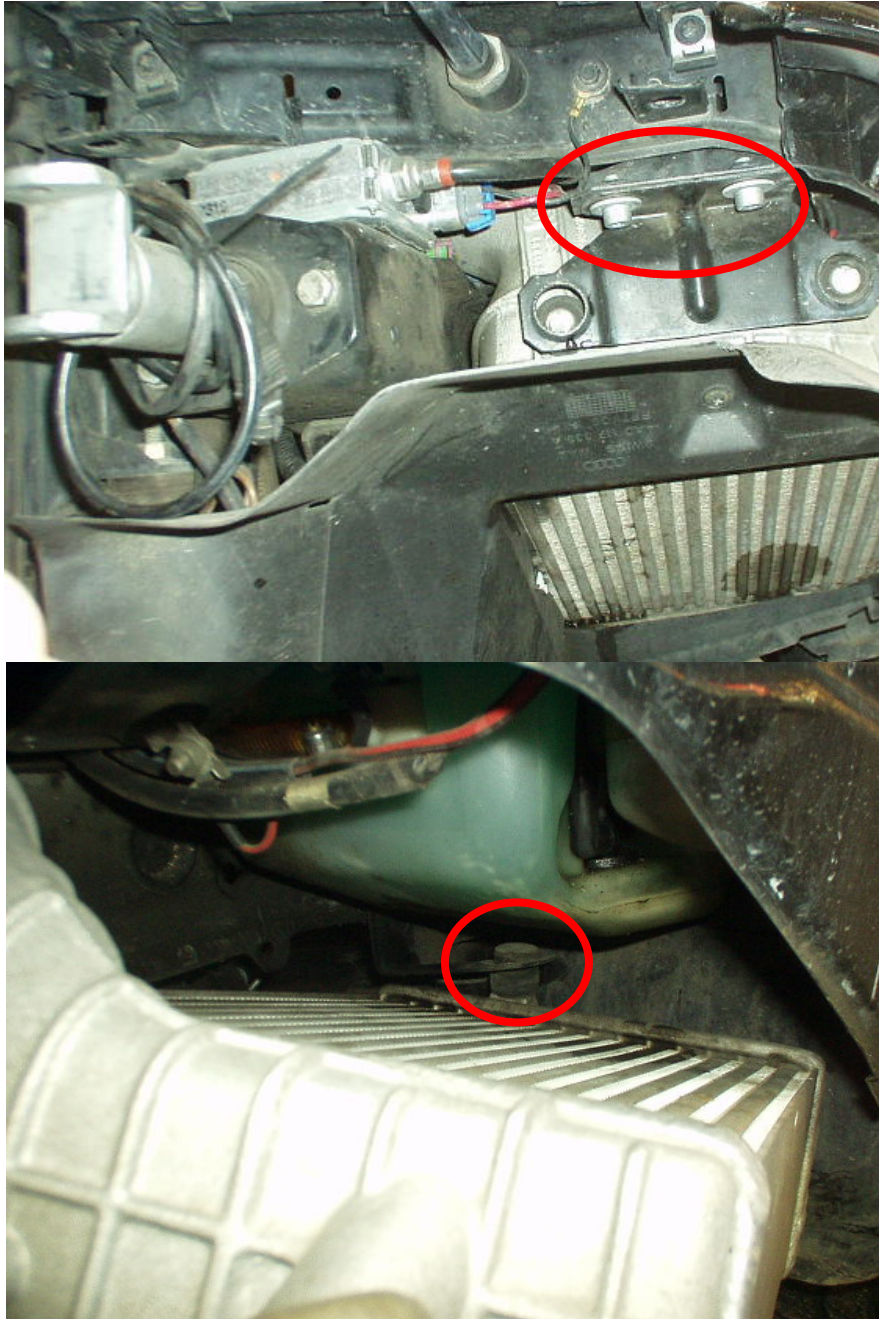


7) Remove the factory turbo to intercooler cross-over pipe. Remove the 13mm nut near the accordion hose (crossover pipe to lower intercooler inlet). Remove the 13mm fastener near the oil filter.





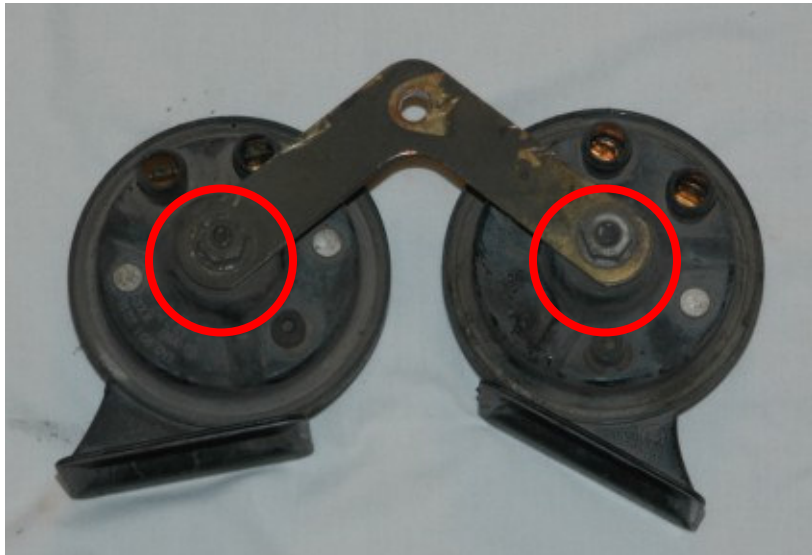
8) Remove the factory intercooler: First, loosen the upper and lower hose clamps. Second, remove the two front-most hex head fasteners. Third, remove the bottom hex head fastener by pulling the intercooler downward and patiently removing the final fastener.



9) Remove the power steering cooler and pull to the side.

10) Remove horn assembly by removing the single bolt (13mm) which mounts the “L” shaped horn bracket (seen below) to the passenger side frame rail. Pull back the rubber dust boots on each horn and disconnect the four electrical connections

11) Rotate the horns to orient them as seen in the picture below and re-tighten the fasteners.

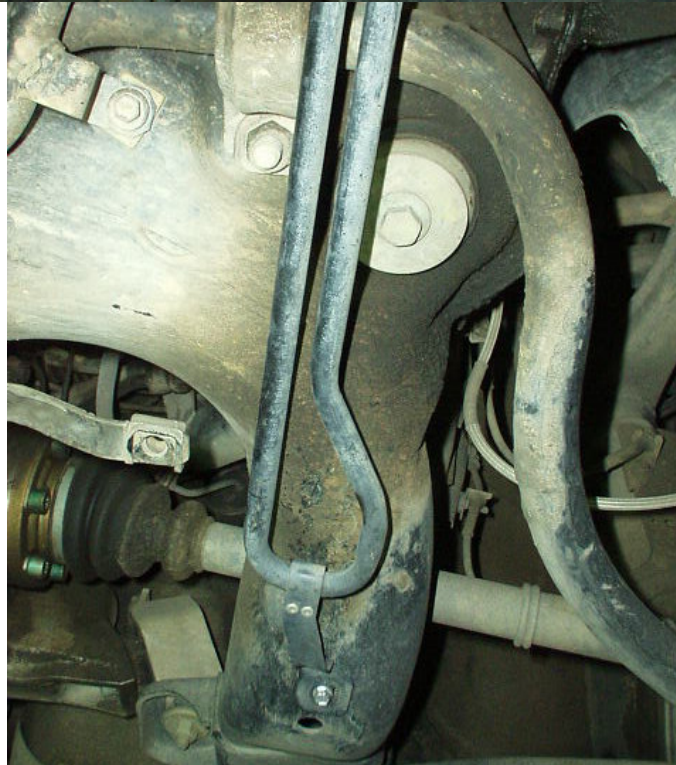


12) Re-install the “L” shaped horn bracket with the horns now positioned on top of the frame-mounting bracket. Re-connect the horn electrical connections and re-install the dust boots.

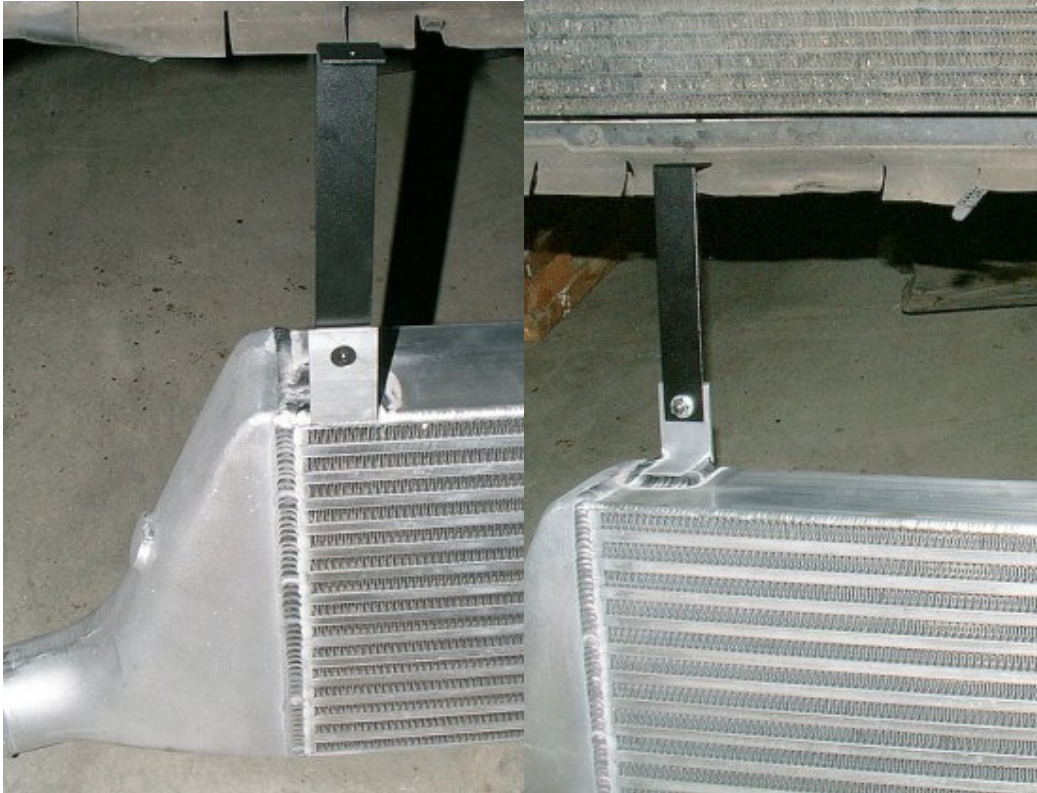




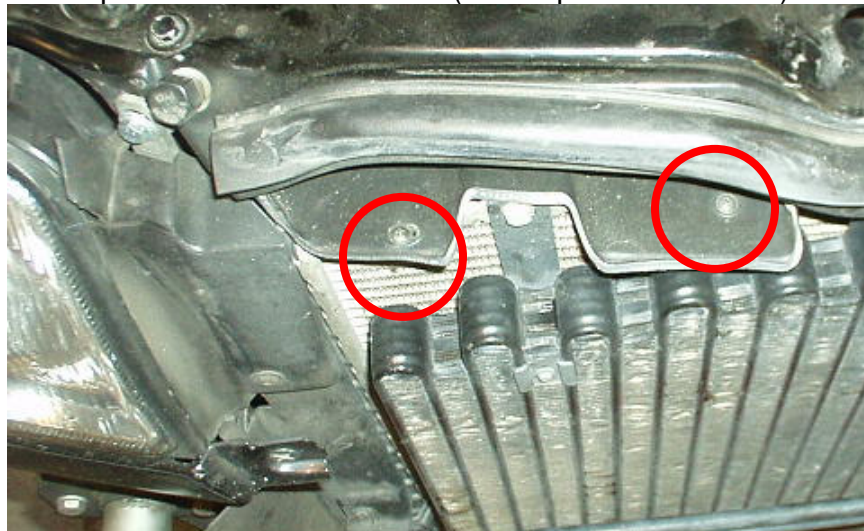
- 13) Relocate the power steering cooler under the vehicle and attach to the subframe with the included hex-head self-drilling screws. It is easiest to pre-drill holes for these screws. It is not necessary to remove the lines from the power steering cooler to complete this operation, the hoses will swivel. In many instances, some seepage may occur or is already occurring at these fittings. It is recommended that the factory crimp clamps be replaced with hose clamps at this time.



14) Install the two upper intercooler support brackets onto the aluminum intercooler mounting tabs using the provided flat-head hex head fasteners (2), flat washers (2) and nylock nuts (2). (The steel bracket should be located to the front of the tab and tightened so the brackets are oriented vertically off of the intercooler). The aluminum tab is countersunk to allow a flush hardware fit on the back of the tab.)



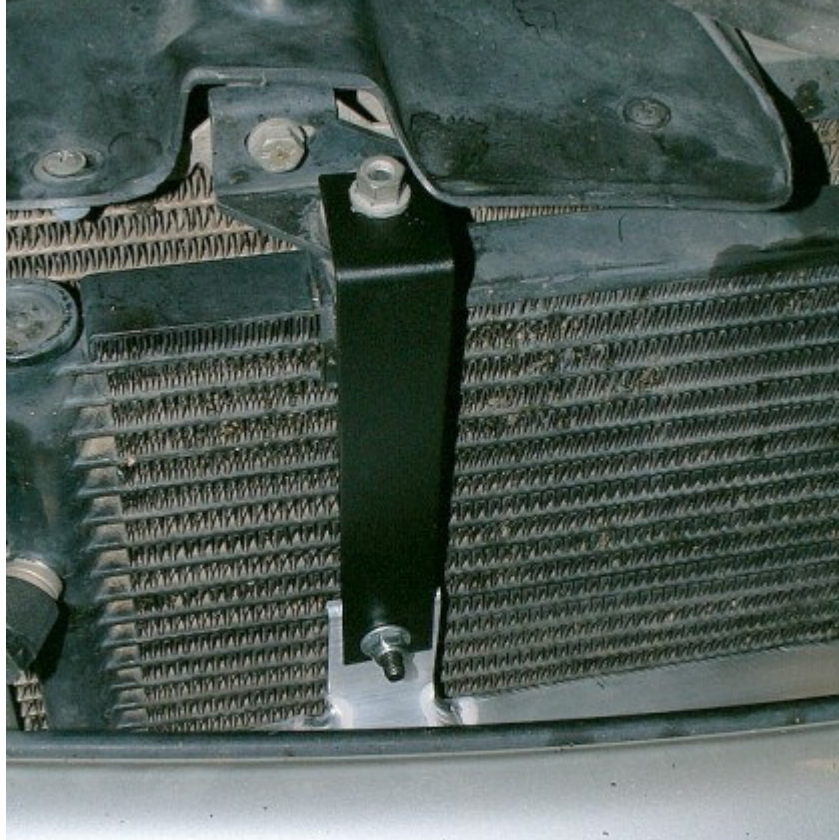
15) Remove the plastic air box inlet duct (2 Phillips head screws)-R12 only.





16) Remove the two nuts on top of the radiator (10mm wrench), and hang the FMIC with the intercooler support brackets on the protruding studs. Re-install the nuts and tighten.

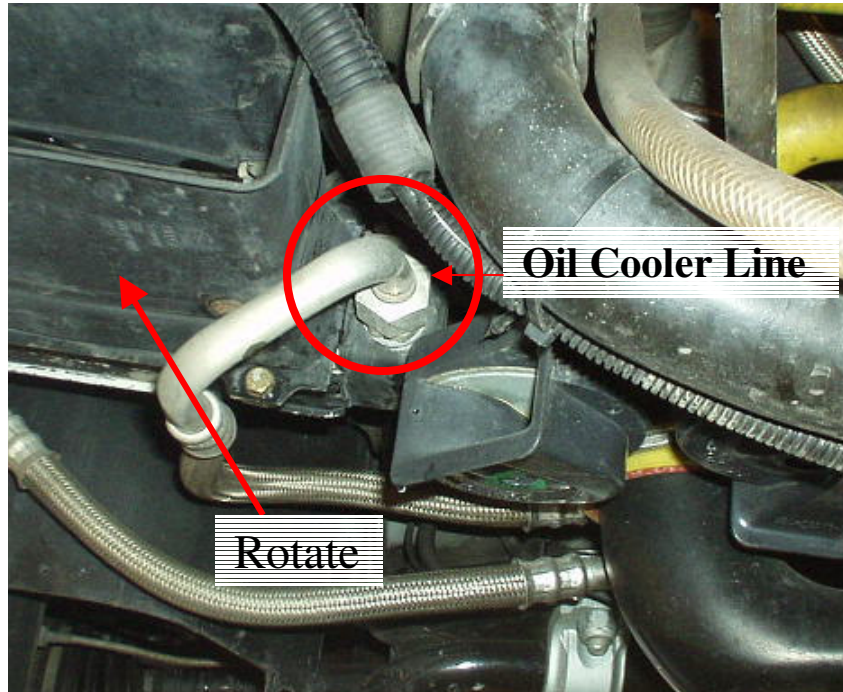
*Note: This step varies for vehicles equipped with R12 A/C condenser. See additional addendum for R12 install instructions.*



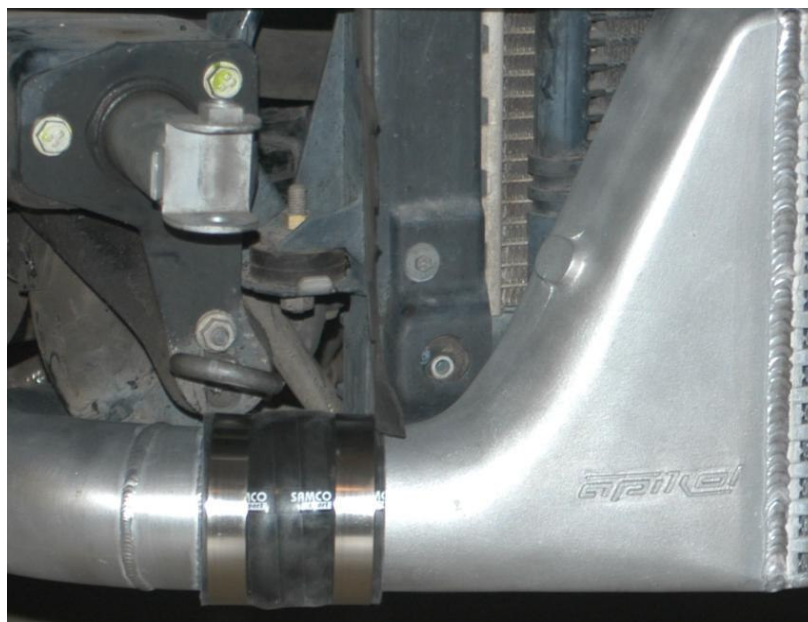
17) Trim the rubber AC/radiator shroud around the FMIC inlet and outlet to clear the intercooler end tanks.



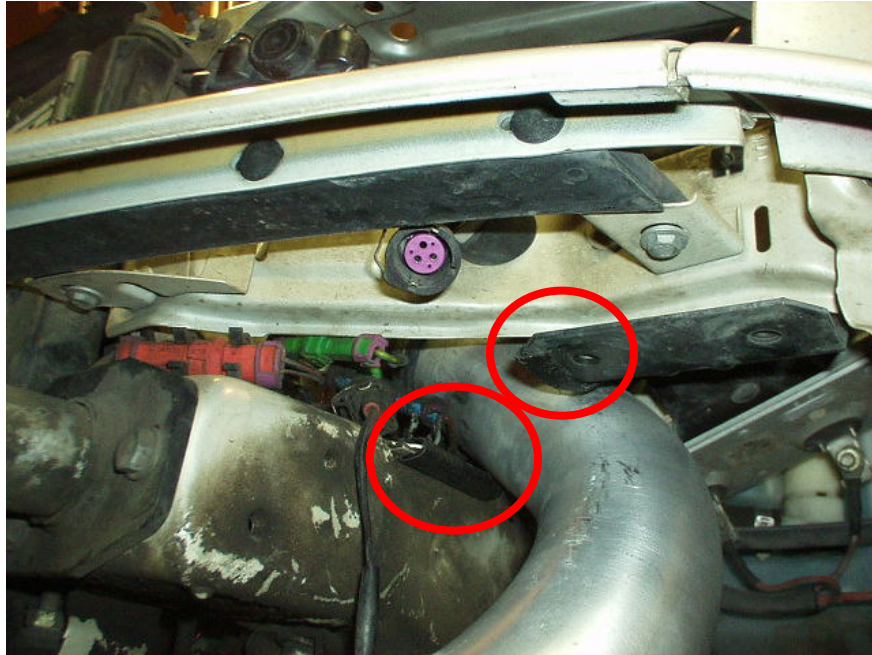
18) Install the supplied 2 3/4" intercooler inlet pipe to the turbocharger outlet hose, but do not yet tighten the hose clamp. (Note: The oil cooler line closest to the intercooler pipe may need to be loosened slightly and rotated clockwise and re-tightened to accommodate pipe fitment.)



19) Install the supplied 2 3/4" Samco hose coupling onto the intercooler inlet and tighten the hose clamp. Insert the 2 3/4" aluminum inlet pipe into the Samco hose coupling and tighten the hose clamp. Re-check alignment of the turbocharger outlet hose to intercooler piping and tighten the hose clamp.

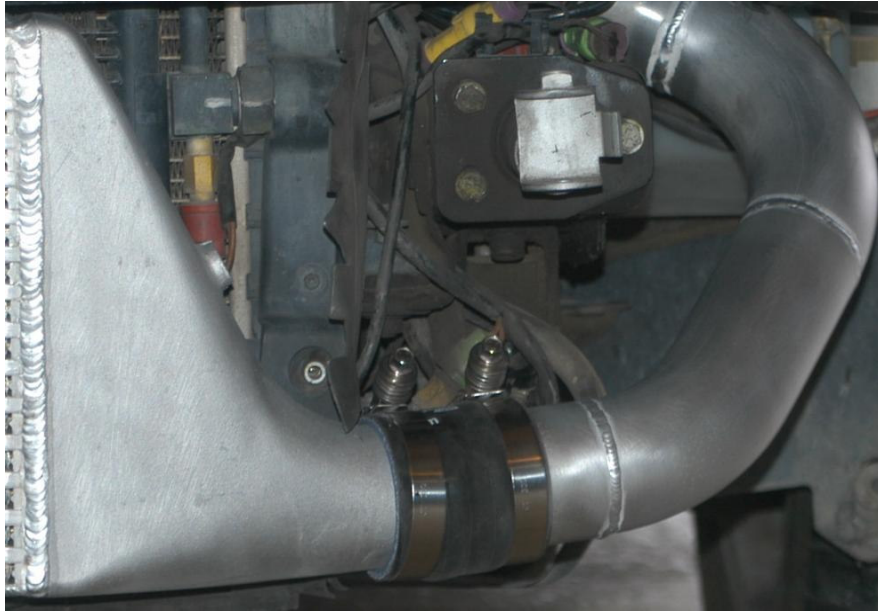


20) Place the supplied molding pieces (2) onto the inner edge of the stock intercooler upper support bracket and the driver's side frame rail where the intercooler outlet pipe will pass through to connect to the throttle-body hose.



21) Install the 2 ½" intercooler outlet pipe to the throttle body inlet hose. The hose fits snugly on the 2 ½" tubing and may slide in more easily with a slight application of liquid dish soap (Palmolive or equivalent) to the bead of the aluminum tube prior to installation. Do not tighten hose clamp.

22) Install the supplied 2 ½" Samco hose coupling onto the intercooler outlet and tighten the hose clamp. Insert the 2 ½" aluminum outlet pipe into the Samco hose coupling and tighten the hose clamp. Re-check alignment of the throttle body inlet hose to intercooler piping and tighten the hose clamp.



23) Install the lower mounting bracket to lower crossover tube with supplied hose clamps. Prior to fully tightening hose clamps, install the M6 mounting bolt through the bracket and tighten into the lower intercooler-mounting block. Tighten hose clamps.





24) Place the bumper cover face down on a soft/padded surface to avoid damage to the paint/plastic. Trim the inside of the bumper cover as depicted in supplementary bumper trimming instructions.

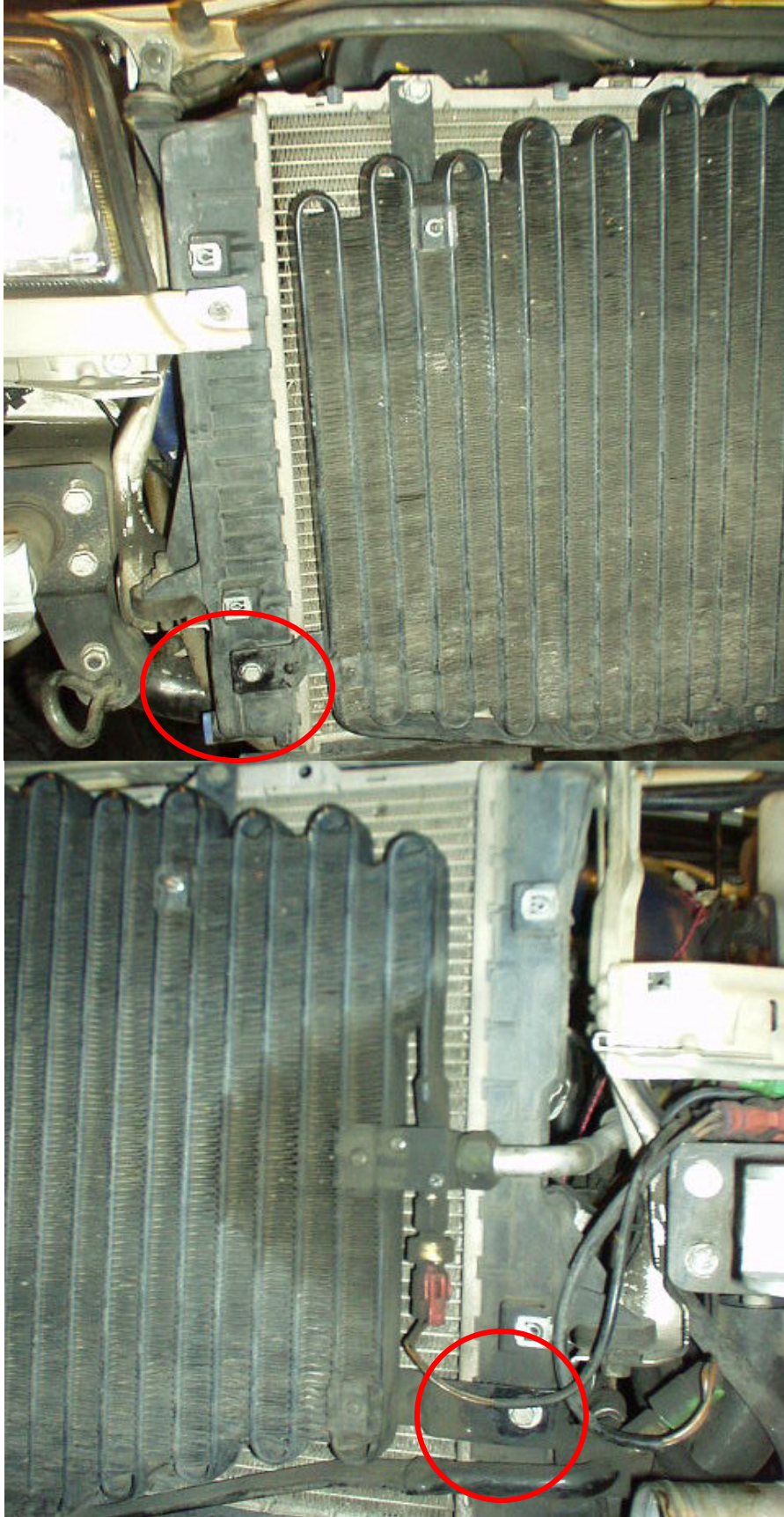
25) Reinstall trim, headlights etc. and bumper cover. Note: When test fitting the bumper cover it may be helpful to unscrew the bumper mounts on the chassis a few turns (maximum of 2-3mm). This will allow extra clearance for the intercooler behind the bumper cover, however, turning these mounts out too far will cause the rear of the bumper to not be in alignment with the fender flare.

Thank You For Your Gen. II Intercooler purchase. Please enjoy responsibly!!!!

Supplemental R12 install instructions:

1. Follow step 14 above. The AC condenser needs to be separated from the radiator. This is accomplished by removing 4 fasteners (2 on the top of the AC and to on the lower sides (all 10mm head bolts). The drivers side top bolt is most easily removed and re-installed if the upper radiator support is removed by taking out all visible painted bolts. The radiator support will need to be set aside, but cannot be completely removed due to the hood release cable.



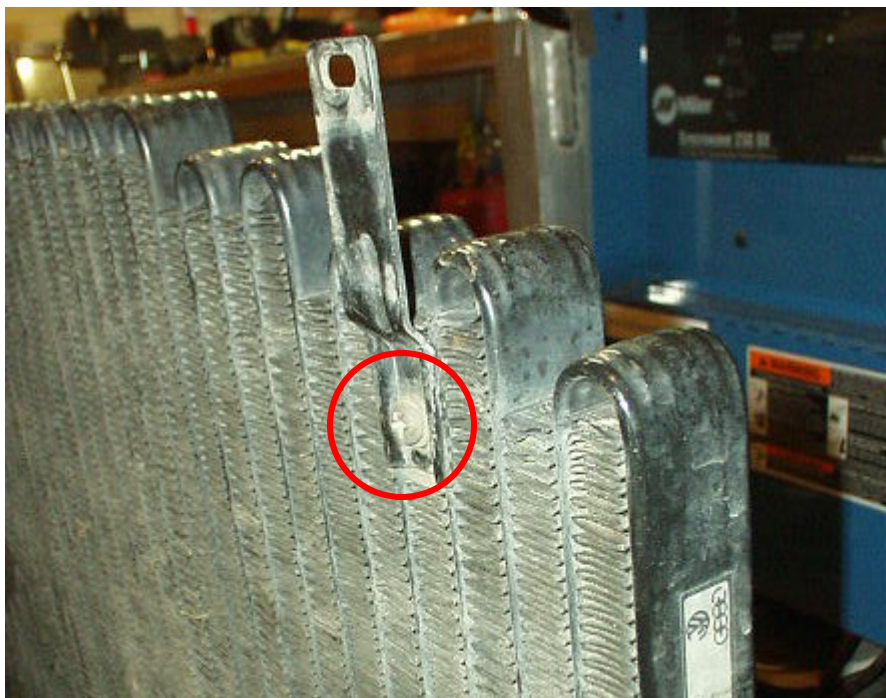




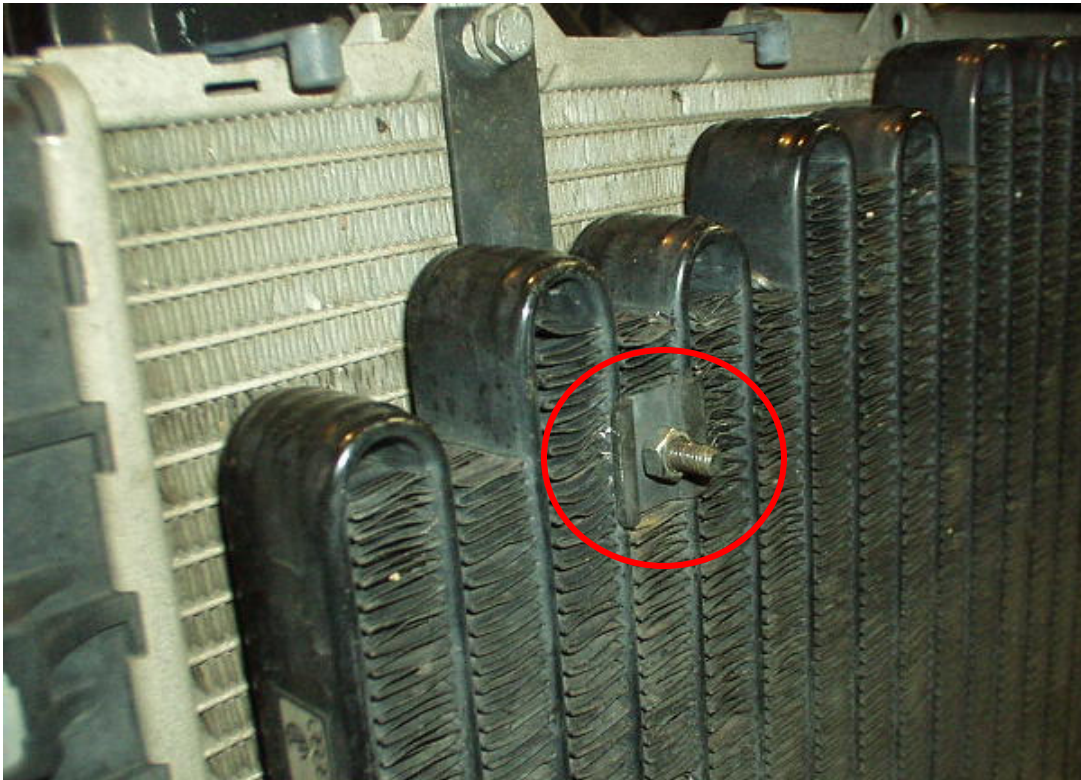
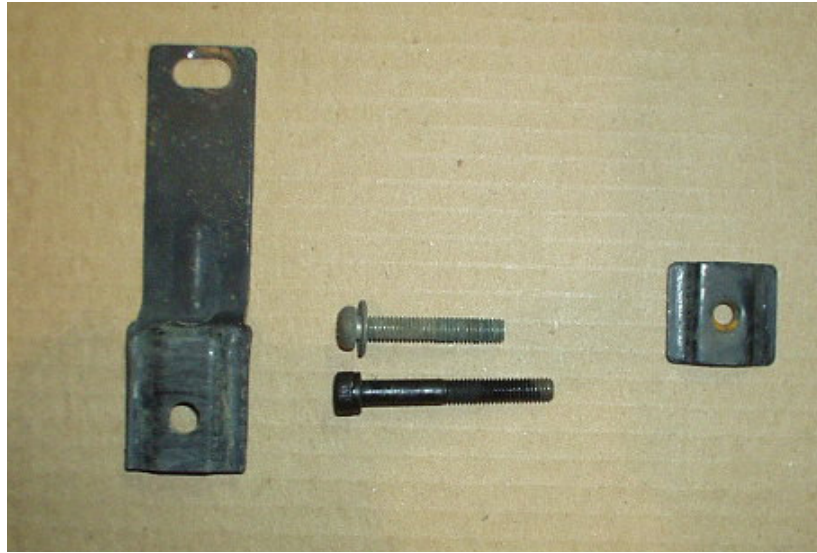
2. Once the 4 AC bolts are removed carefully swing the AC outwards.



3. Remove the 2 Phillips screws that hold the 2 upper mounting plates to the AC condenser.

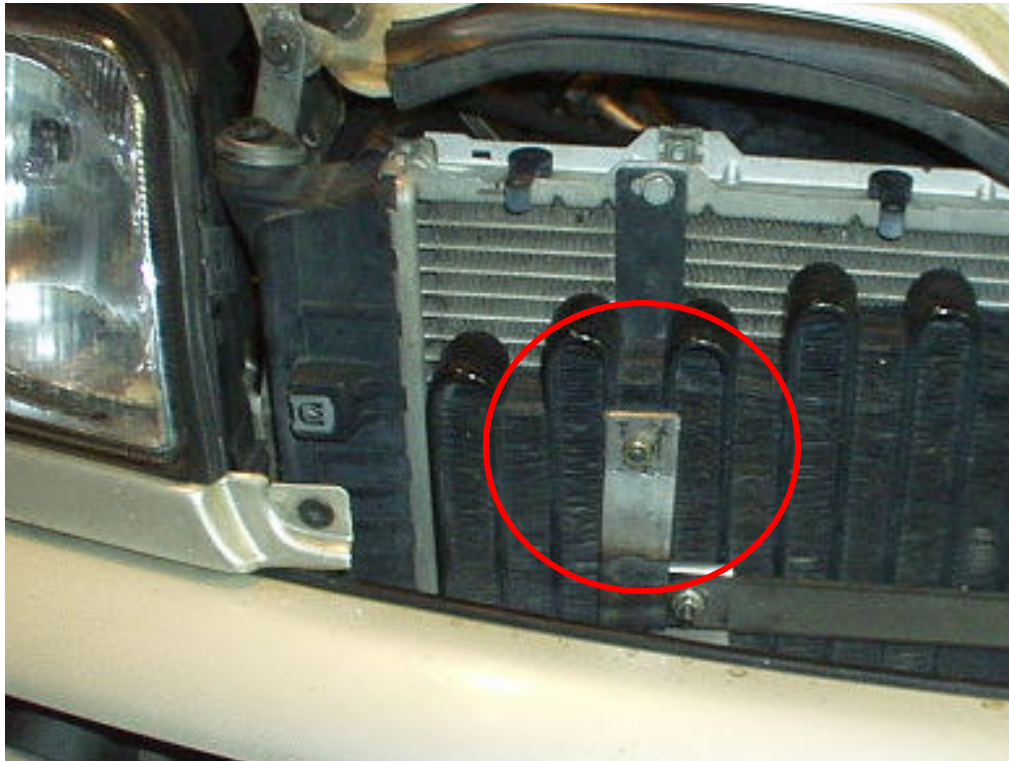


4. Replace the Phillips head screws with the longer hex head fasteners and reinstall on the AC. Place a supplied 10mm head nut on both protruding studs.



5. The longer bolts sticking through the AC condenser now provide a mounting location for the supplied FMIC bracket. After reinstalling the AC and the upper radiator support, hang the FMIC on the 2 studs and install with the remaining 2 10mm head nuts and the supplied wavy washers.





6. Continue with step 16 in the above instructions.