

B8/B8.5 S/Q5 Heat Exchanger Upgrade Kit



034Motorsport's heat exchanger upgrade for the B8/8.5 S/Q5 3.0T is engineered to provide better and more efficient cooling of the charge air.



(Hot)

Estimated time of completion: 4-6 hours

Tools Needed:

- Hands (2) (Opposable thumbs are required!)
- 13mm socket
- 8mm socket
- T25 Torx
- T30 Torx
- Adjustable wrench
- Electric drill
- 1/8" drill bit
- 5mm Allen wrench
- 4mm Allen wrench
- 3/16" Allen wrench
- Pliers or Spring Clamp Pliers



B8/8.5 S/Q5 Heat Exchanger Upgrade Kit

Supplied Parts:

- Heat exchanger assembly
- Diverter plate
- (2) 25x3 o-ring
- (2) cap plate
- (8) M6x10 hex head drive flat head screw
- Mounting bracket (LH + RH)
- (8) self-tapping screw
- (4) M8x14 button head cap screw
- (4) M8 lock washer
- 90deg -10AN o-ring barb fitting
- Straight -10AN o-ring barb fitting
- (2) -10AN o-ring plug
- 90deg silicone hose
- Straight silicone hose
- (4) 16x25 worm drive hose clamp
- Air block off plate (LH + RH)
- (2) 1-1/4" grommet
- (2) hose coupler
- 8" zip-tie
- Zip-tie anchor

About This Guide

This Install Guide documents the installation process of the 034Motorsport's Heat Exchanger Upgrade Kit (034 H.E.) on a 2016 Audi SQ5 (some photos were borrowed from the B8 S4 installation instructions). There may be other minor differences with your vehicle depending on specific vehicle, market, options, etc.

Getting Started

- Ensure you have all parts and tools required for installation by reading the complete Install Guide.

Step 1

Raise the car off the ground, either with a lift, or a jack and jack stands. When using a jack, **ALWAYS** use jack stands. Being crushed by your car will put a real damper on your day

Step 2

Remove the front wheels , front bumper cover, and belly pan



Step 3

Remove Radiator and Intercooler shrouds



Step 4

Place a catch pan underneath the car. Using pliers or spring clamp pliers, disconnect coolant lines from the stock heat exchanger.
Remove OEM H.E. with T30 Torx bit



Step 5

Disconnect outside air temp sensor and horn from both sides



Start assembly of the 034 H.E. :

Decide if you want the large 034 logo on display or hidden, as this will determine orientation. We put ours facing forward, obvi

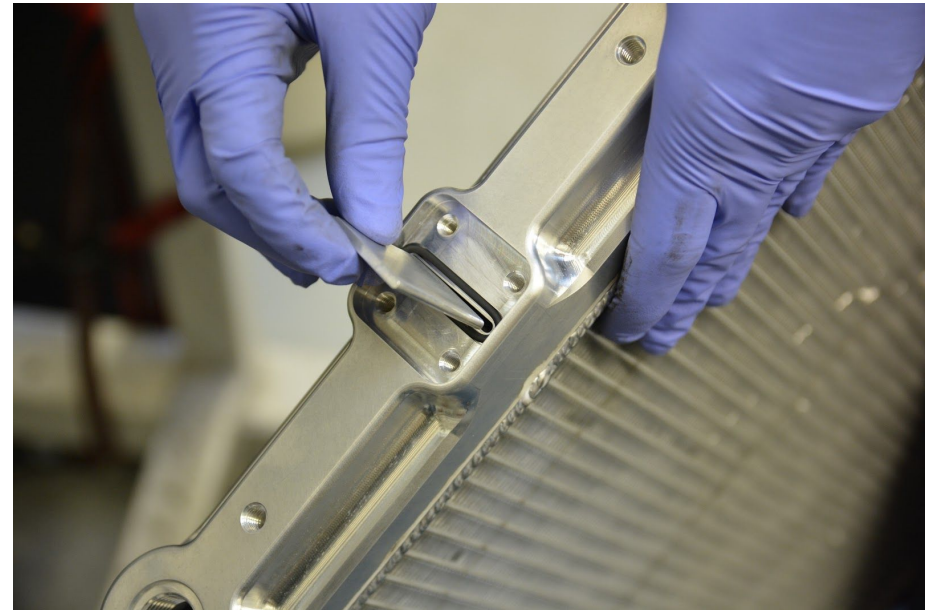
Step 6

Install the 25mm o-ring into both end tanks.



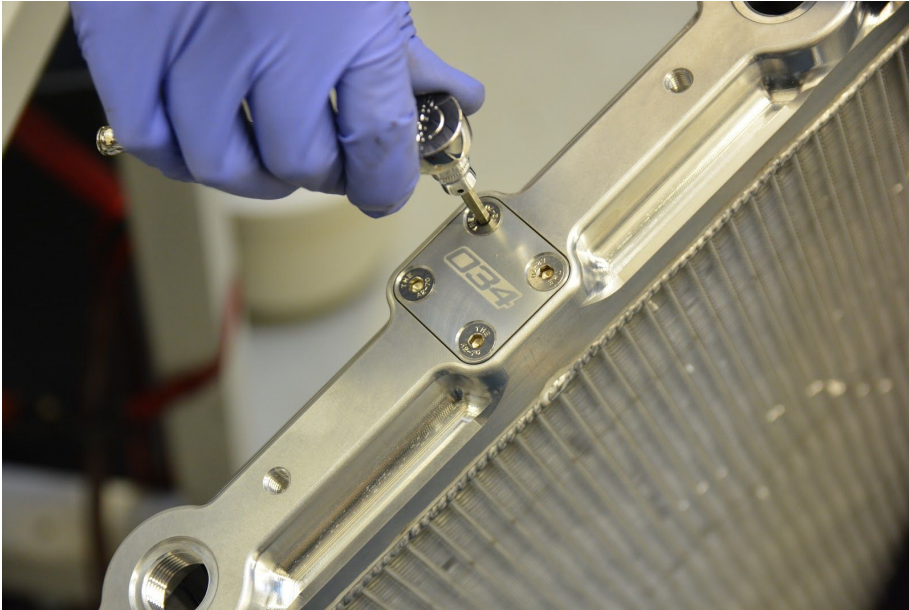
Step 7

Install diverter plate into left-hand side end tank.



Step 8

Install cap plates, torquing the M6 flat head screws to 12NM.

**Step 9**

Install -10AN plugs onto the right side end tank.



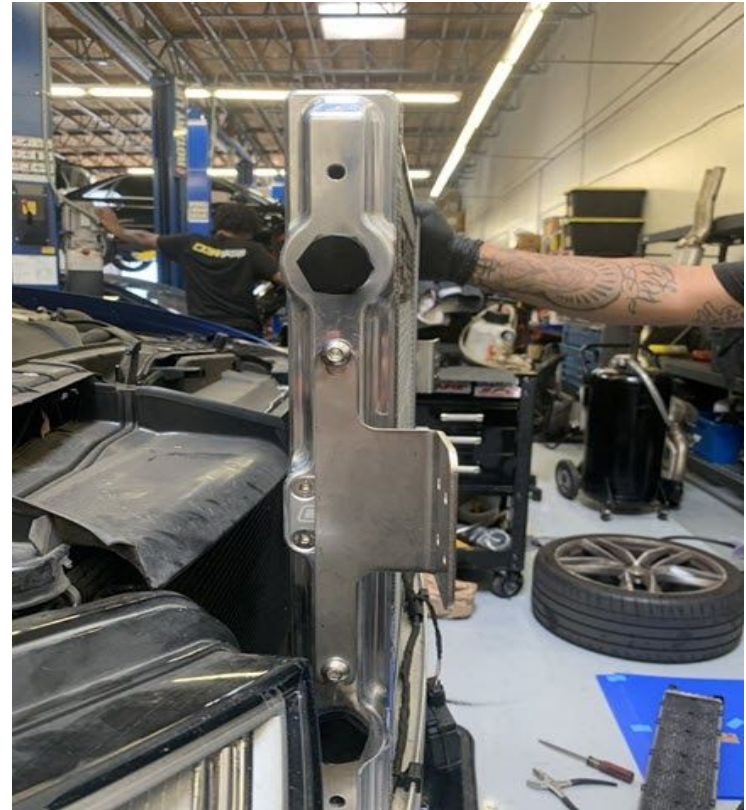
Step 10

On the left-hand end cap, install 90deg -10AN barb fitting on upper threaded hole facing downward. Install straight -10AN barb fitting on lower threaded hole



Step 11

Install mounting brackets using the M8 button head cap screws, with the 90deg tab sitting below the cap plates (horizontal mid-point)



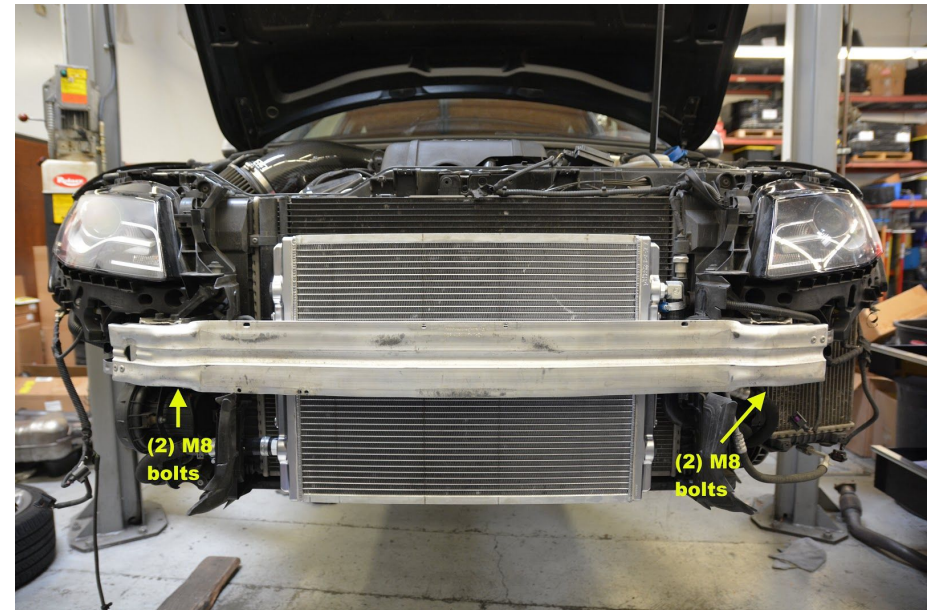
Step 12

Slide the 034 H.E. into position for a mock up, centering in the middle. Mark the edges of the mounting bracket with a marker or scribe on backside of the bumper bar



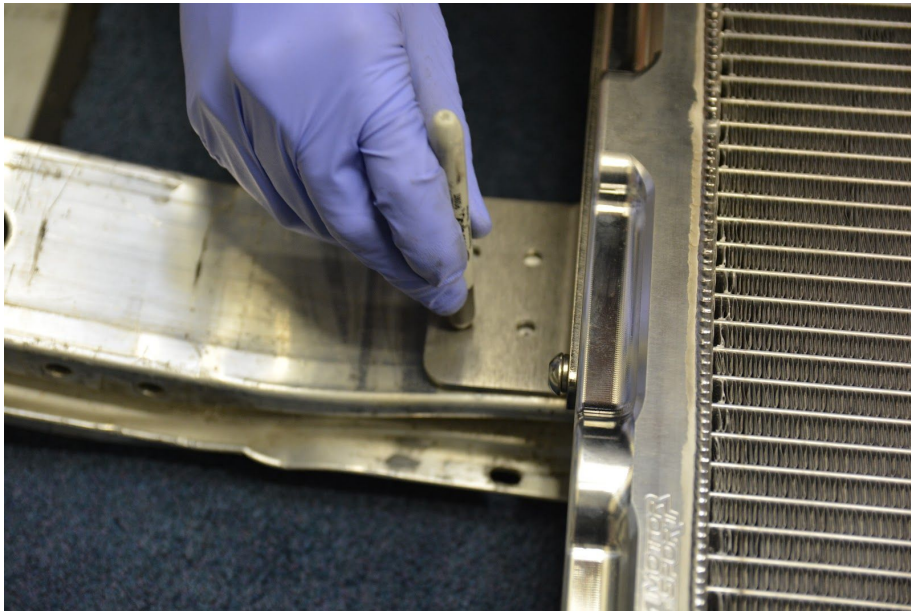
Step 13

Using a 13mm socket, remove M8 bolts from the bumper bar mounting bracket, and remove bar. (May require a pry bar)



Step 14

Set the bumper bar face down, and place the 034 H.E. over the backside, aligning with markings from Step 7. Mark all (8) holes from bracket onto bumper bar

**Step 15**

Pull off 034 H.E. and center punch the (8) dots to make drilling easier

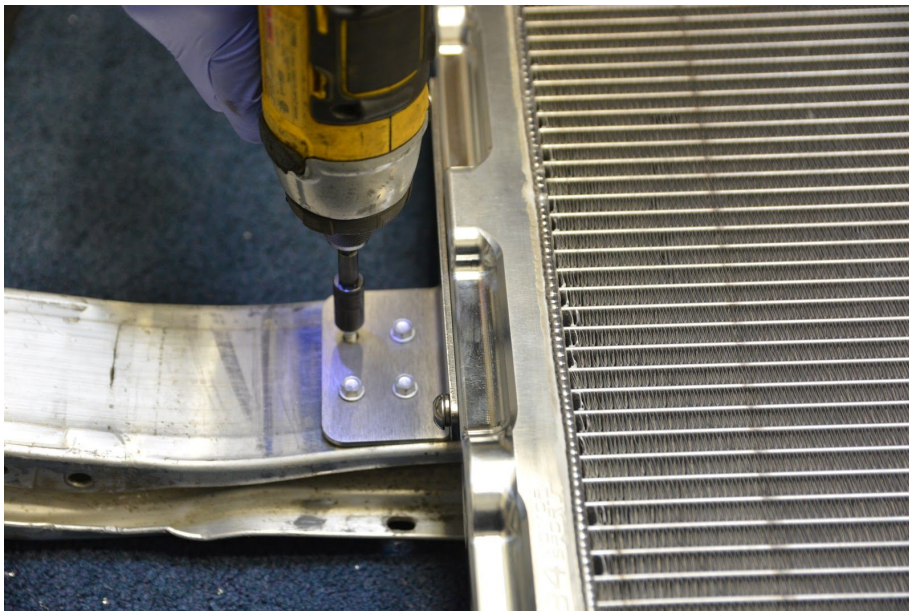


Step 16

Using an 1/8" drill bit, drill out the holes

Step 17

Re-align 034 H.E. into position, and mount it to the bumper bar using the (8) self-tapping screws



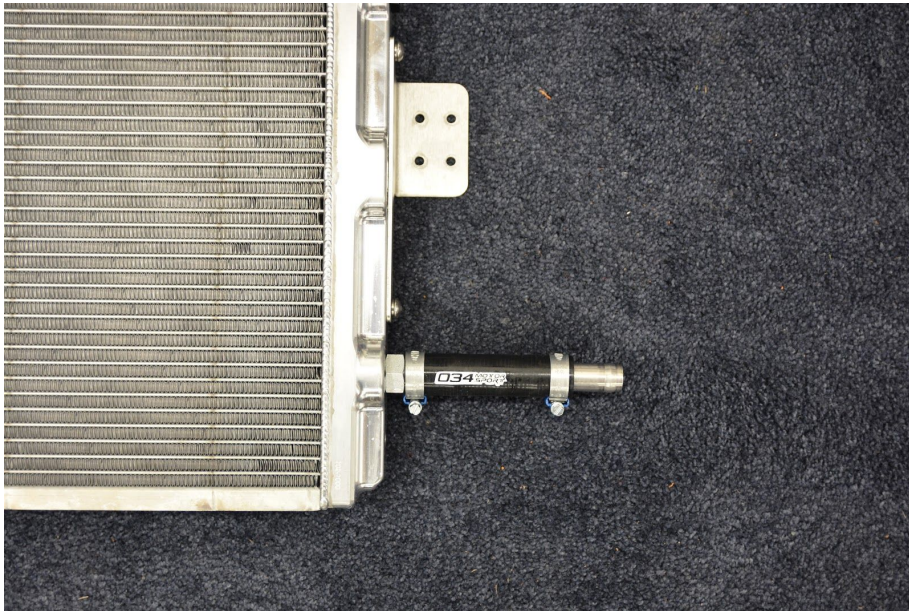
Step 18

Install 90deg silicone hose onto upper 90deg barb fitting using a worm drive hose clamp, and install hose coupler using another hose clamp



Step 19

Install the straight silicone hose onto the straight -10AN barb fitting using a hose clamp. Insert hose coupler, secure with another hose clamp

**Step 20**

Drill 3/16" hole through bumper bar and mounting bracket for zip-tie anchor on the left side (where the hoses are)



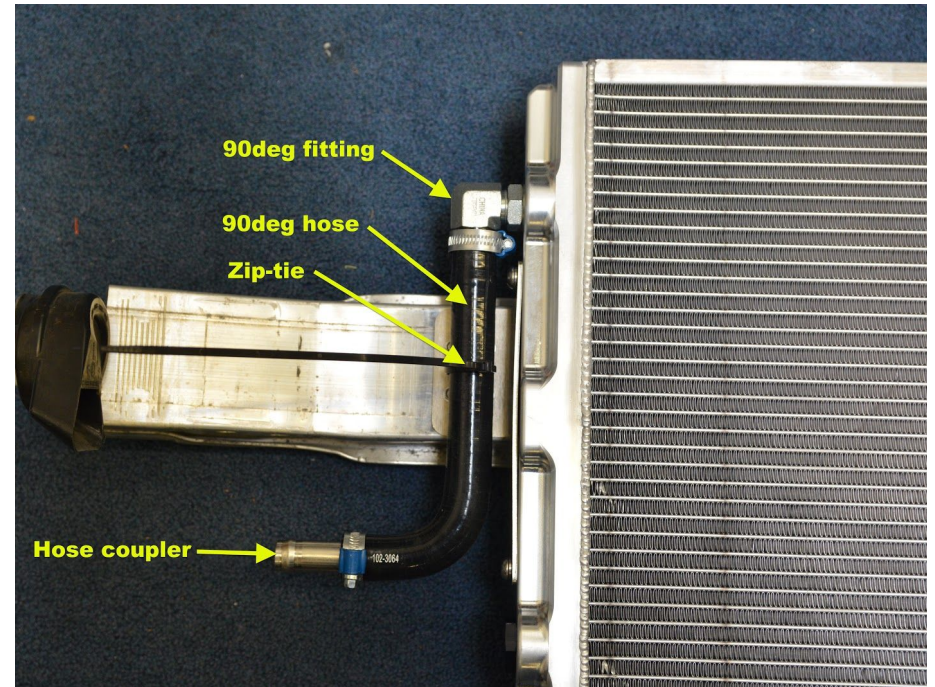
Step 21

Insert zip-tie anchor, and install zip-tie.



Step 22

Loosely secure 90deg silicone hose to bumper bar with the zip-tie



Step 23

Using a 13mm socket, reinstall the bumper bar/ 034 H.E. back onto the car



(Make sure surfaces are dry and clean for optimal tape adhesion)

Step 24

Remove tape backing from the solid plate, and mount to the outside of the air deflector on the right side, covering the large opening. Press firmly

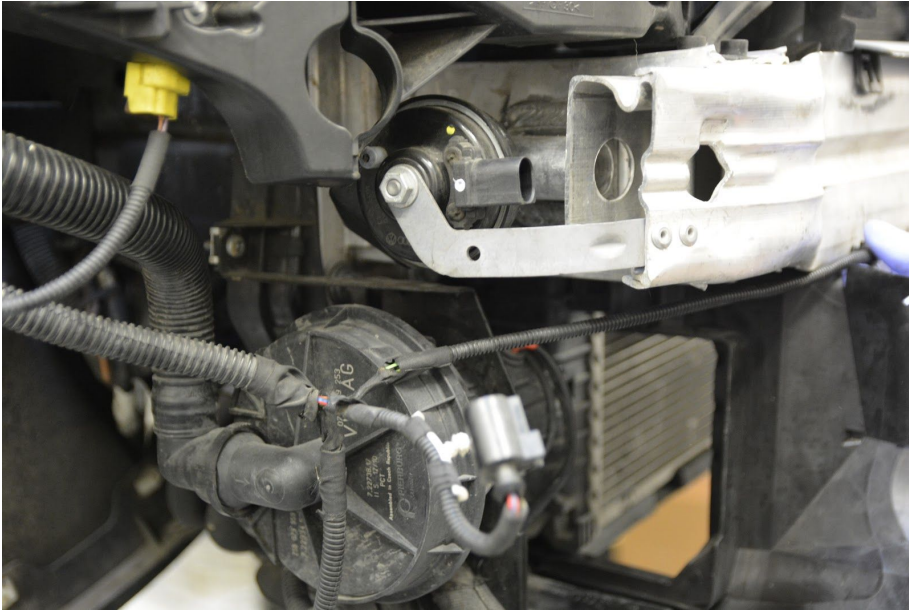
Step 25

Connect coolant lines to hose couplers using hose clamps



Step 26

Reconnect outside air temp sensor and horn



Step 27

Reinstall intercooler and radiator air ducts



Step 28

Fill and bleed coolant, and check for leaks

Step 29

Reinstall the front bumper, belly pan, and front wheels.



That's it! You are done! Enjoy!