

APIKOL B6 A4 1.8T SIDE 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 2-3 hours

<u>Required "specialty" Tools:</u> T45, T27, T20 Torx drivers, 6mm Hex

To Remove the OEM intercooler:

- 1) Safely support the front of your vehicle on jack stands.
- 2) Remove the lower engine cover (belly pan)
- 3) Pull the bottom edge of the fender liner toward the tire exposing a single T20 Torx. Remove this bolt on the driver and passenger sides. See figure 1 below.

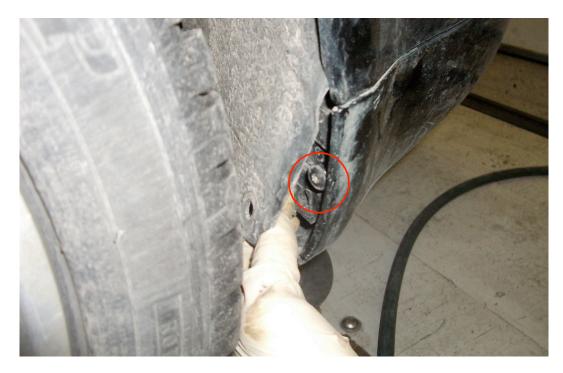


Figure 1 (Passenger Side Shown)

4) In the engine bay, remove the airbox inlet duct. The duct is 2 separate pieces that are easily removed as one. Remove the **2** phillips head screws on the radiator support which hold the front of the duct in. Remove the evap. canister rubber grommet from the duct. See Figure(s) 2 and 3 below.



Figure 2



Figure 3

5) Remove the driver and passenger side headlights. Each headlight is held in by **4** T27 Torx bolts. The 2 upper torx bolts located on the radiator support need to be completely removed. The lower 2 bolts need to be loosened several turns but it is much easier if the lower 2 bolts are NOT removed. Once the headlight can be slid out of the car toward the front, the headlight connector(s) need to be removed. See figures 4, 5 and 6 below.



Figure 4

Loosen

Figure 5

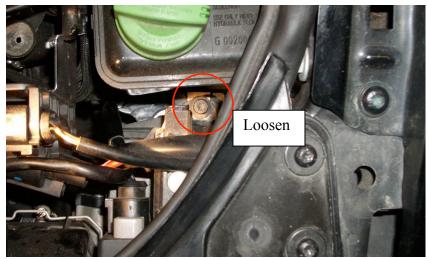


Figure 6

6) With the headlights out, the **6** 10mm nuts that hold the bumper to the fender can be removed. These nuts are accessed through the headlight opening. Figure 7 below shows the threaded studs on the bumper after the nuts have been removed.



Figure 7

7) Pull the lower edges of the bumper cover away from the car to release them from the fender clips. Be sure the T20 torx bolts were removed from Step (3). See Figure 8 below.



Figure 8

8) Remove the **2** lower fog light grills by gripping them firmly toward the inboard edges and pulling towards the front of the vehicle. See Figure 9 below.



Figure 9

9) Loosen entirely the **2** M6 hex bolts that bolt the bumper to the bumper struts. Removing the lower grilles exposes the 2 main bumper bolts that can be seen by looking upward from below in the grille opening. These bolts will not come out of the car completely, as they are captive. See Figure 10 below.



Figure 10

10) Carefully pull the bumper off of its mounts toward the front of the car. This is more easily done with a helper, because once the bumper is off the car about 6 inches, **2** connectors on the driver side will need to be unplugged and the washer fluid line to the headlight washers will need to be pinched off and unplugged.

11) Remove the **2** (driver and passenger) T27 Torx bolts that attach the fender to the radiator support and remove

the drivers side headlight bracket by removing the **2** T27 Torx. See Figure 11 below.

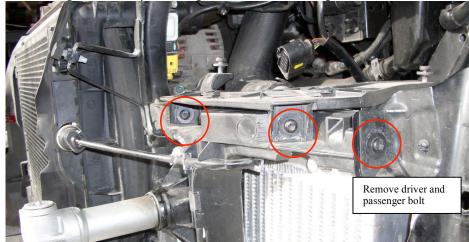


Figure 11

- 12) Remove the intercooler shroud by carefully pulling the shroud toward the driver side of the vehicle, which disengages the 3 clips.
- 13) Remove the lower AC hose bracket that bolts to the bottom of the intercooler with a single fastener.
- 14) Loosen the **4** T27 bolts that hold the upper part of the radiator support to the right and left fenders. See Figure 12 below.

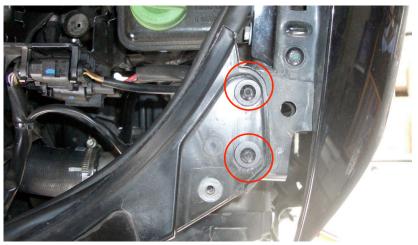


Figure 12

15) Loosen the **6** T45 bolts that hold the radiator bumper shock/radiator support to the vehicle. Remove 4 of these bolts, leave the upper 2 threaded in a few turns to prevent the radiator support from coming off entirely. See Figure 13.





Figure 13

- 16) Loosen upper and lower hoses on the intercooler using a 7mm socket. Using a flathead screwdriver or other similar instrument and CAREFULLY break the hose(s) loose from the intercooler taking care not to tear or puncture the hoses.
- 17) Unplug the sensor connector from upper intercooler end tank.
- 18) Pull the bottom of the intercooler out of the rubber grommet by pulling towards the front of the car.
- 19) Remove the intercooler from the vehicle. This is most easily done by removing the last drivers side T45 torx that is holding the radiator support on the car, pulling the radiator support away from the vehicle while lifting the intercooler upwards out of it's mounts and angling it out of the car towards the front.
- 20) Remove the sensor from the stock intercooler and install it on the APIKOL intercooler with the 2 longer supplied button-head allen bolts using a supplied wavy washer on each bolt. See Figure 14



Figure 14

21) Modify the lower AC hose bracket by filing the "nub" off of the bracket so it can sit flush on the APIKOL intercooler. See Figure 15 below.

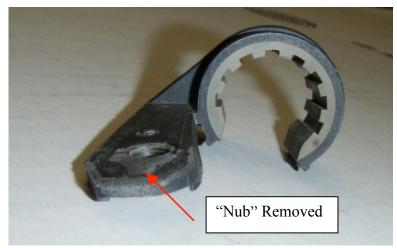


Figure 15

22) The air shroud for the intercooler needs to be slightly modified by having 2 thin strips of plastic cut away to accommodate for the increased size of the APIKOL SMIC. The circled arrows in Figure 16 need to be trimmed so that the entire shroud can rest flat, not on the 2 raised edges. Figure 17 depicts the amount of material to remove from each side. The red line indicates the cut line. Figure 18 depicts the 2 strips of plastic that need to be removed.





Figure 17

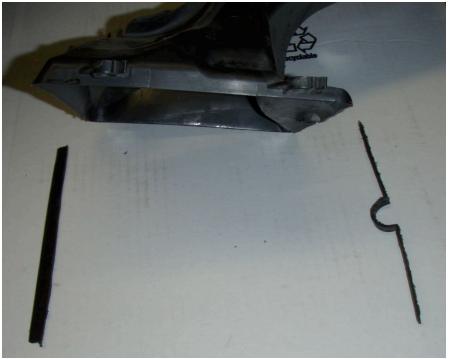


Figure 18

- 23) Installation is the reverse of removal!
- 24) Enjoy your new APIKOL intercooler!!!