



**Forge Motorsport twintercooler for the VW Golf GTI MKV.**



Tools required :- Vehicle ramp or jack and axle stands, T20 torx driver, T30 torx driver, pozidrive screwdriver, 7mm hose driver, Sharp craft knife. Safety eyewear, footwear, gloves and protective clothing are also recommended.

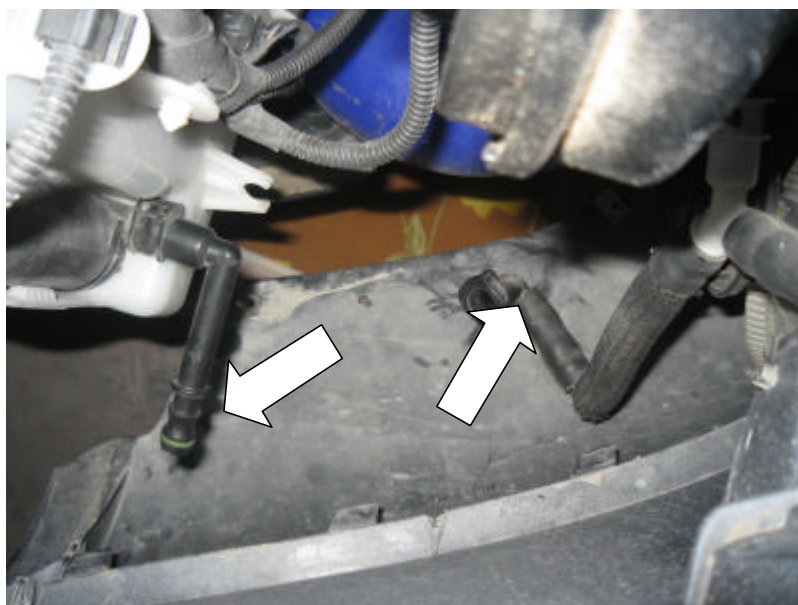
### 1/ Front Bumper removal.

Firstly raise the vehicle on a ramp or with a jack and axle stands. Open the bonnet. Now remove the 2x T20 torx screws from the upper edge of the top grille as per top arrow below, and then remove the 2 hidden pozidrive screws from below the number plate surround as indicated by the bottom arrow below. The top front grille can now be lifted upwards and away from the front of the car.



Now remove the 2x T30 screws that have been uncovered on the top edge of the bumper cover. Remove the 5x T20 Screws down each front wheel arch liner leading edge. Remove the 8x T20 screws from the lower edge of the front bumper.

Before removing the bumper, if your car equipped with head light washer nozzles unhook the water hose on the right side by removing the C clip.



Disconnect both front fog light connections. The complete bumper cover is now ready to be removed by sliding the upper side fixings forward, remove the full bumper cover from the vehicle.

2/ Now remove the 2 wind deflectors as indicated below with the larger arrows, these are fixed with a single pozidrive screw each side, the left deflector also houses the temperature sensor so unclip this too before complete removal. Now remove the T30 screws that hold the lower plastic tray as indicated with the smaller arrows below. This tray will not be refitted at a later stage; it is left off the vehicle to allow space for the twintercooler.





3/ Now remove the 2 horns and brackets. Use the right hand bracket and mount the left horn with this, you should be able to use the same body mounting point but this will raise the horn position in order to make space for the intercooler pipes at a later stage. Use the mounting bracket supplied to mount the right horn as pictured below.



4/ Remove the full engine undertray, this is fixed with 8x T20 screws. Now remove both the left and right lower standard intercooler pipes, the connections to the intercooler are just spring clips that will prize out with a flat blade screwdriver, the right hose then routes to a metal pipe connector which is of the same design connection, the left hose is then joined with a conventional hose clip to a plastic pipe. Once these hoses are removed you can then swap the seals from the standard hose connections on to the 3x new aluminum hose couplings.

Note: the 2 large and 1 small seals, the large seals goes to the inlet and the outlet connector of the stock intercooler, and the small one goes to the metal pipe.

The 2 larger couplings mount directly in to the stock intercooler and the smaller one mounts in the metal pipe which is attached to the sump on the right side of the vehicle.



5/ You can now mount the new twintercooler in to place using the T30 screws that were removed with the lower plastic tray, refit the other T30 screws to the crash protection bar at this point too. Make sure to route the fog light wiring through the gap in the twintercooler mounting bracket, also remount the temperature sensor in to the new location on the left side of the twintercooler.



6/ Now fit the new 3 way hoses to each side of the intercooler and the new twintercooler using the hose clips supplied. Routing should be as pictured below. Tighten all hose clips securely once the hoses are fully positioned.

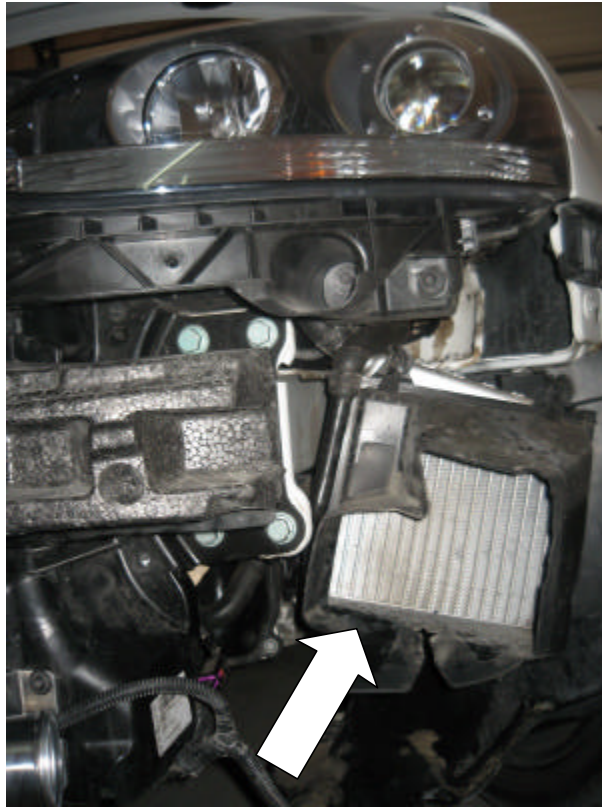


If you car equipped with DSG you might want to shorten the stock intercooler outlet silicon hose by 1-2 inches, to allow space from the black DSG metal pan.

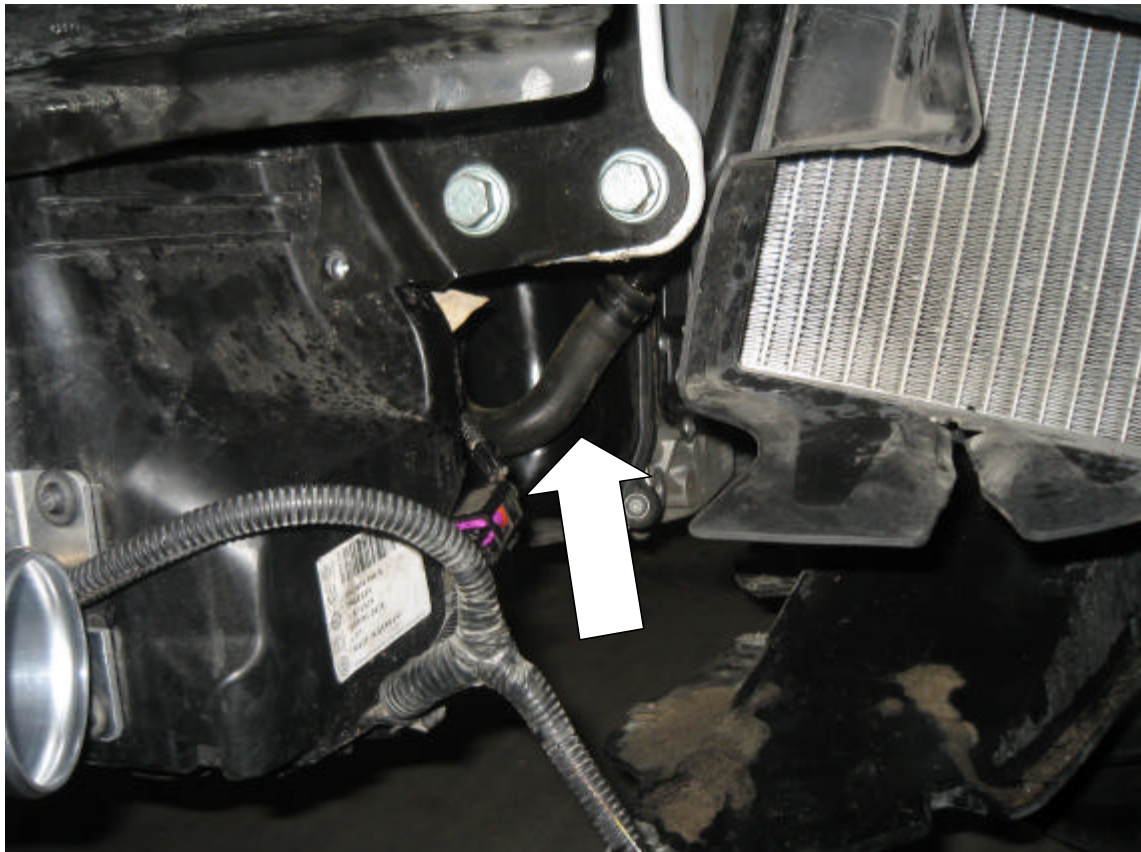




If you're equipped with "Hot Climate specifications" you will have an extra small radiator on front of the left wheel arch.



There is a pipe that goes to the extra radiator as shown below



When installing the twintercooler silicon hose, you need to push the radiator pipe upward and let it lay over the silicon hose. Weave the pipe around to find the best layout



6/ The front bumper will now require the 2 fog light panels removing; these are fixed by a single pozidrive screw.

If your car equipped with open front grills, you need to remove the 2 plastic pieces behind the grills to allow space for the silicon pipe.





Carefully refit the front bumper cover but do not force this on. Note if any areas around the fog light fixings are contacting with the new twintercooler piping. If they are then mark the area and then remove the front bumper and trim these areas with a sharp knife, you may have to cut as per the pictures below however some cars may require no trimming at all in this area.

