



## VW Golf MKIV 1.8T Front Mounting intercooler Kit.



Please read these instructions before starting the installation. Please ensure at all times that you work safely and take suitable precautions to protect yourself from risk of injury. We accept no liability for this installation of this kit or for changes in the vehicle crash deformation characteristics.

### Tools required:

- 13mm and 10mm sockets with ratchet and extensions
- 4mm bladed and cross point screw drivers
- Torx socket or screw driver set T25 and T30
- 10 mm ring spanner
- Jig saw or craft knife
- Hacksaw or similar

Suitable means of safely supporting the front of the car whilst both front wheels off the ground.

It is good practice to check all components on installation that no foreign bodies are present that may be drawn into the engine on start up as severe damage may result.



After ensuring that the vehicle is secured in a stationary position the front of the vehicle should be elevated so that both front wheels are off the ground using suitable lifting equipment (see manufacturers handbook for lifting points). Once elevated the vehicle should be “made safe” with secondary supports (axle stands) if necessary. The bonnet (hood) should be opened.



Remove the two lower air intake covers using a bladed screwdriver to pull down the upper locking tabs



Behind each cover there is a T30 torx bolt that requires removing

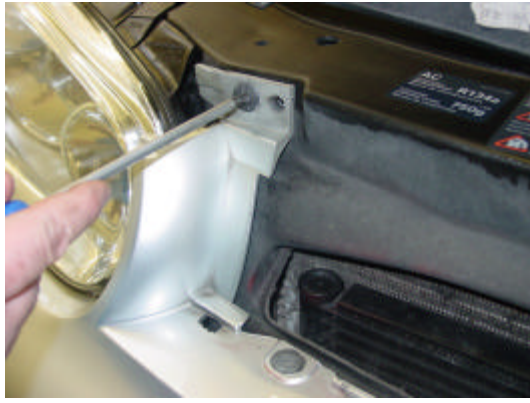


Next remove the four T25 torx head screws from the lower section of the wheel arch liner where it joins the front panel on each side. Access to these screws is made easier by turning the steering to a full lock position.



The front radiator grill can now be removed by pulling the top forward then lifting the grill upwards. There is no need to remove this completely as it is attached to the bonnet (hood) locking mechanism. Tilt upwards in order to gain access to the front panel securing bolts.





Remove the five T30 torx head bolts behind the grill panel that secure the front panel.  
The front panel can now slide forwards  
At this point it is necessary to disconnect the ambient temperature sensor located on the lower right hand side and also the headlight washer feed pipe if fitted. The front panel can now be removed and stored safely.



It is now necessary to remove the left hand (looking from the front of the car) headlight unit. This is done by removing two T25 bolts at the top and two T25 bolts from the lower front. The electrical connector is best removed after sliding the headlight forward slightly.



The front air guide can now be removed from the side mounted intercooler by gently prising the top clips free of the lugs and lowering off the lower securing bar. (Beware these clips are brittle)



The upper and lower hose clips can now be loosened

Remove the intercooler fixing bolts, two 10mm on the top and one 10mm on the lower. Before the intercooler is removed disconnect the MAP sensor connector (if fitted) from the intercooler.





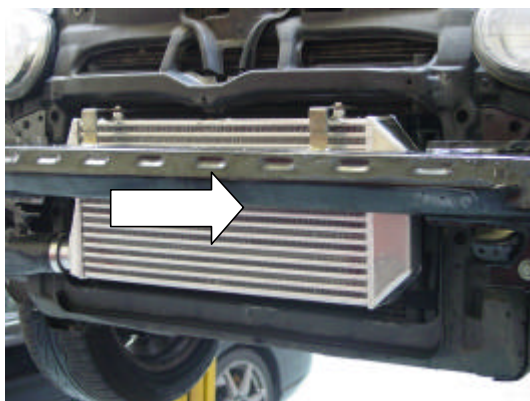
Completely remove the top hose from the intake manifold.



The front crash bumper is now removed by firstly removing the 13mm bolts and the T30 torx head bolts

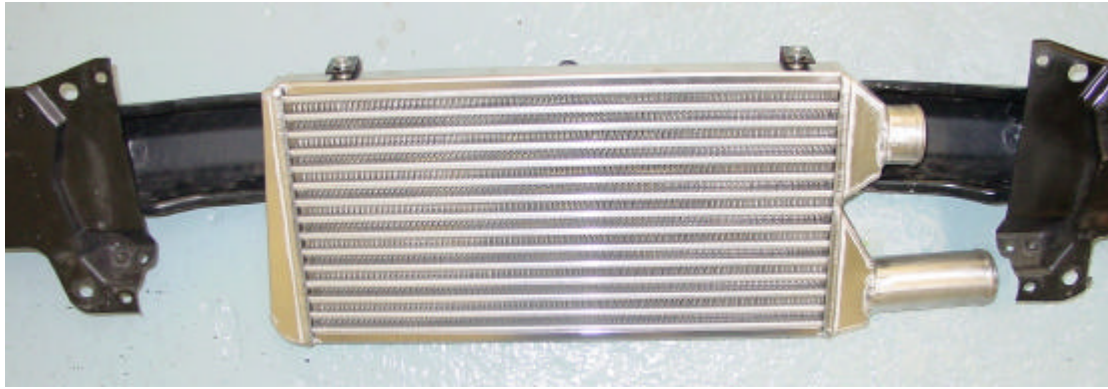


The bonnet (hood) locking panel brace needs removing (3 x T25 bolts) the lower portion of the bracket is cut



The lower section of this bracket can be removed with a hacksaw or similar tool. It needs to be left short enough not to impede the fit of the new Intercooler as per the picture here.





Next, assemble the new intercooler into the new crash bumper, as shown, securing the intercooler with the two 10mm bolts provided.

Attach the silicone hose (the one with the alloy insert bonded into the hose) after feeding the hose through the bumper. At this stage leave the hose clamp loose to allow the hose to be twisted.



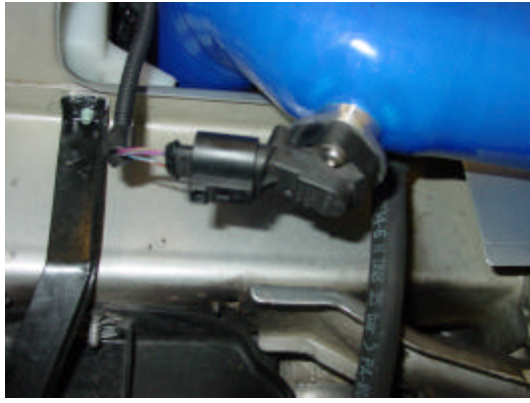
A small section of the front panel plastic edge will require trimming as per the picture, this is to allow the intercooler tube and pipe clearance. A craft knife or a strong sharp blade will be enough to cut through the plastic.



The bumper and intercooler assembly is now fitted to the vehicle using the 13mm bolts and T30 torx bolts that were removed from the original bumper.



The silicone hose is now connected to the intake manifold and the clamps on both ends tightened.



The MAP sensor (if fitted) from the original intercooler is removed and relocated into the silicone hose the screws provided. The sensor electrical connector is now refitted.



Insert the 25mm blanking plug into the top of the intake manifold hose and secure with the clamp provided. (This 25mm hose connection allows the relocation of the diverter valve with the optional "cold side relocation kit" if required.)



The lower silicone intercooler hose is now installed as shown, keeping the hose as close to the coolant radiator panel as possible, leaving a 2mm clearance. Ensure the hose clamps at both ends are secured.



Before the front panel is refitted the lower grill aperture on the left hand side needs trimming to allow clearance for the lower intercooler hose as shown. This can be done with a craft knife or saw or hobby grinder. It is useful to use the replacement grill cover (supplied) as a template.

The front panel can now be refitted as a reverse operation to its removal as detail above. The original lower air intake covers are discarded and replaced with the new pre-cut covers provided. Don't forget to reconnect the ambient temperature sensor and headlight washer hose if installed.



Re-assembly is the reverse of the dismantling procedure.



Where a component is secured by a number fixings it is good practice to leave each fixing loose before aligning the component and tightening the fixings.

If Xenon headlights are fitted it is advisable to have the headlight adjustment checked by your local dealer.

Where headlight washers have been disconnected it may also be necessary to refill the washer reservoir.

If you have disconnected the vehicle battery please consult your owners' manual for resetting the radio code, navigation system if fitted and auto open/close operation of windows.

Once satisfied that all tools have been removed and the vehicle is safe to use you may enjoy the benefits of your new purchase.



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