

## **Ground Wire Kit installation for the 1.8T engine in VW Jetta's and Golf models from 2002-2004**

### **Tools Needed**

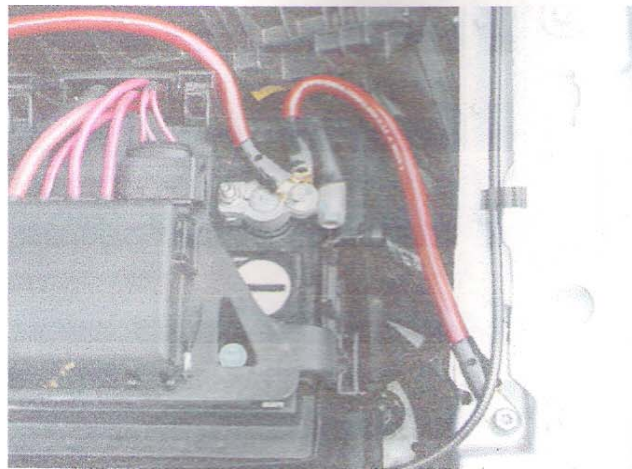
**Large Philips Head Screwdriver  
10mm Socket and ratchet and 10mm crescent wrench**

### **Parts in kit**

**6 large diameter wires –  
one 10mm nut – one 10mm bolt – and 1 washer**

**Note:** There are several wires in the kit that are very close in length...but no 2 are exactly the same size. Lay all the wires out in size order..this will help with the installation.

1. Open Hood...and remove Engine cover – there are 4 plastic large Philips head screws on the engine cover – turn them ¼ turn, and they should pop up. With all 4 popped up – remove engine cover and set aside.
2. Remove Battery cover – there are 2 circular push buttons on the right and left side of the cover that you push straight in and then pull the cover straight up.
3. Look at the battery – the negative terminal (the one closest to the drivers side of the car) should have an extra screw sticking up from it...that is where 2 of your wires will attach...find the shortest wire in the kit and the 3rd longest wire in the kit...place one end of each around that screw (the small end of the long wire goes onto the battery)...place one washer that is included in the kit on top of those 2 terminal ends...and use the included nut to tighten down those terminals to the battery. Leave a little loose for adjustment.
4. Connect the other end of the shortest wire to the 10mm bolt at the corner of the drivers side fender and the front of the car...it is on the fender lip...make sure you leave some room for the wire to curve under the battery cover.....see picture below for how it should look when both wires are attached.



5. Take the 3rd longest wire that is now connected on one end to the battery - and run it between the battery and the air box...under the couple of hoses that go to the engine....and then back forward to the bracket that is sticking up from the right front corner of the engine.

6. Remove the bolt that is at the back side of the bracket that faces towards the cabin of the car....you are going to replace it with the longer bolt supplied in the kit...(Picture of bracket is on the next page.)(**ALL connections to this point are Large Terminals**)

7. Of the 4 wires that are left – take the 3 longest wires... And using the longer bolt – secure one of the ends of all 3 to the bracket and new bolt – The picture below shows all 4 wires on the bracket – the battery connection and the 3 other wires you just connected..**See pic on the next page** for how it should look. (2002-2004 owners refer to last page of this manual for **addition instructions.**)

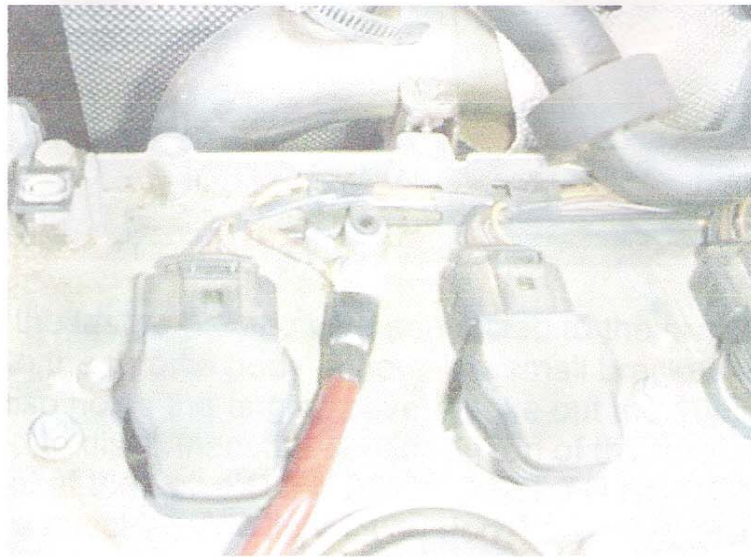




Leave that bolt loose so you can adjust the wires.

8. Take the longest wire of those 3 – and run it up to the coil pack ground....run it around to the left of the valve cover oil fill cap and between the 2 left coil packs....take out the bolt with the 10mm head....place the new wire over the stock brown wire ground lead –and re-install the bolt. See picture below for how it should look.

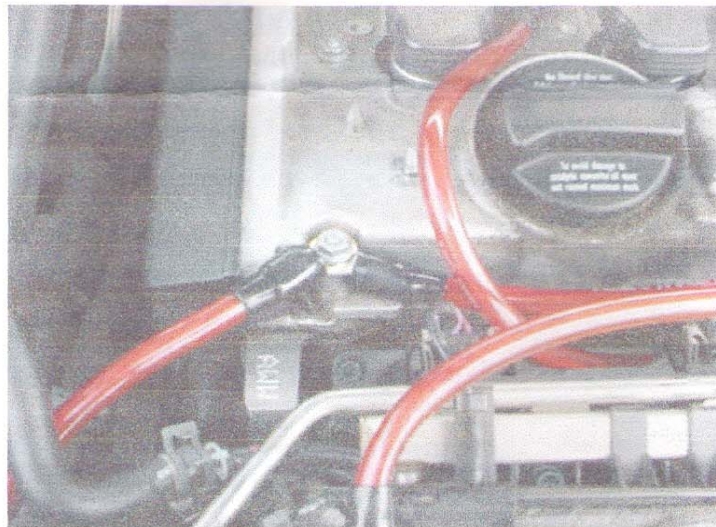
**NOTE:** When installed correctly, this terminal end should face down. This allows the wire to lay flat on the valve cover.



9. The Shortest of those 3 wires from that bracket goes to the valve cover bolt on the front left of the engine, you may have to run the wire behind the small metal tube that is connected to the Fuel Pressure Regulator bracket....or you can run it up and over the bracket and tube. The wire is long enough to run it as you wish....then remove the nut on the front left of the valve cover, and connect this wire...leave nut off...you will be adding another wire to this location..

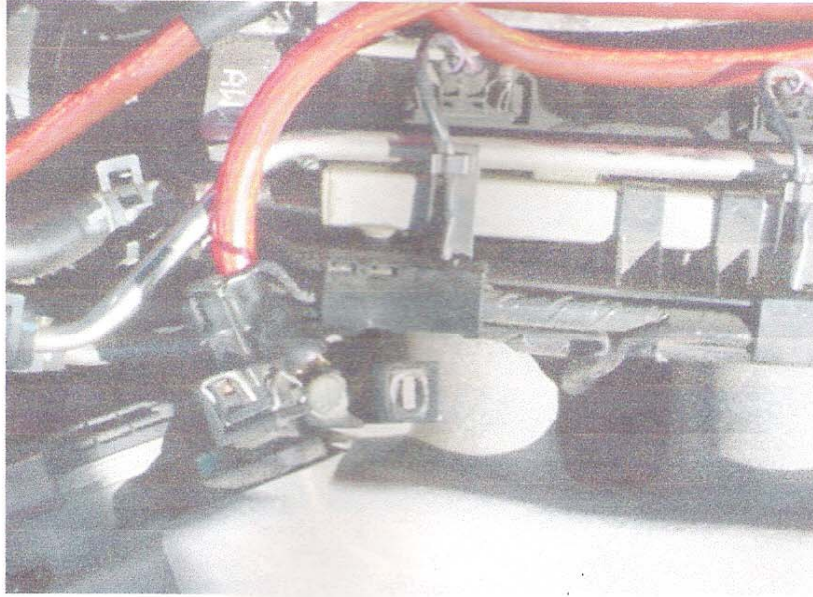
10. At this time find the last wire in the kit – and connect the large terminal end to that same front left valve cover bolt – run that wire towards the left fender

11. Once those 2 wire ends are secured on that bolt - replace the nut and re-tighten – but leave loose for wire adjustment. See picture below for how it should look.



12. Now take the last remaining wire connected to the bracket – and run it around to the throttle body – there is a small bracket that sits next to it...it also holds the engine cover – take out the 10mm bolt (you may need to disconnect the sensor on top of the throttle body to get a clear shot at the bolt – **DO NOT FORGET TO RE-CONNECT** – you **WILL** get a check engine light if you don't)...The picture on the next page shows how it should look – you can run the wire under the sensor wire





13. Now take the final loose end of the wire you connected to the left valve cover bolt –and run it to the left fender – take out the lower of the 2 silver bolts(also 10mm) and connect terminal. Picture below...



When all the wires are on it should look like this...



14. When all the wires are in – go back and make sure all the nuts and bolts are tight (do not over-tighten the coil pack bolt – you can strip it...) You may not be able to get the Engine cover back on without adjustment...it is possible...make sure you see where all the engine cover spaces are.....and run the wires through them.....People have reported success with the engine cover – and some not.....

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