

# ***VW GOLF IV/JETTA***

## ***Diesel-Motor ONLY***

**Supplemental Installation Information  
For the Original Standheizung**

### **Overview of process**

- 1. Mount Heating Unit**
- 2. Run wiring harness into vehicle**
- 3. Connect coolant hoses**
- 4. Mount fuel pump and run fuel lines**
- 5. Route wires inside vehicle and make final connections**
- 6. Tap fuel via sending unit**

# Mount Heating Unit

- **Air Box Removal**

- Disconnect MAF
- Disconnect air intake tube to MAF
- Remove screws to air box
- Remove snorkel

- **Battery Removal**

- Remove covers behind left headlamp
- Remove bolt and metal battery clamp
- Remove positive and negative battery terminals
- Remove [fuse holder](#) / [wiring chase](#) behind battery
- Remove [SHROUD](#) around left headlamp

- **Access to Plenum and water-tight box (for MY 2002 skip this step)**

- Remove both wiper arms
- Remove [plastic cover/cowling](#)
- Remove windshield wiper motor
- Purchase extra wiring grommet

- **Remove Bumper**

- Remove screws from the front of inside wheel liner
- Remove side markers and bulbs
- Remove front grill and lower bumper grills
- Remove all bumper bolts and remove front bumper
- Re-locate [horns](#) if necessary

- **Mount Metal coolant pipes**

- Loosen OEM bolt as per instructions
- Use part/position 19, M6X20mm with part/position 21 and part/position 17
- Insert metal cooling lines from **OUTSIDE** the car to the inside of the engine bay. There is not enough room in the engine bay to go from the inside out.

- **Mount Heating Unit**

- Heating unit mounts in this [POSITION](#)
- Use part/position 19, M6X20mm with part/position 21 and part/position 17
- Route Fresh [air intake hose](#)

# Run Wiring Harness

- **Engine Harness**

- Connect harness to heating unit
- Mount temperature sensor
- Splice second wire of temperature sensor to the **Blue Wire** of the harness to the Alternator's 4-pin connector
- Route wires into [watertight box](#) OR through firewall. Locate wires in OEM wiring chase
- Water-proof wires using [SILICONE](#)

*Re-assemble the watertight box, install wiper motor, and replace plastic cowling/cover re-assemble wipers*

## Connect Coolant to Heating Unit

- **Coolant Hoses - preparation**

- Prepare [new coolant hoses](#) by inserting connecting pieces with spring clamps on [both ends](#) in addition to the rubber spacers. Turn [rubber spacers](#) inside-out to ease installation
- Using vice grips, clamp [coolant hose](#) towards the back of the engine before metal line
- Loosen and remove hose from engine and stuff a rag into the hole or use a rubber plug

- **Coolant Hoses – cutting and measuring**

- From the engine block, follow OEM hose and cut after it turns 90 degrees
- Insert NEW hose into the short 90 deg hose and measure hose to the NEW metal hose
- Make cut to new hose and install onto the NEW metal coolant hose and re-install the other end to the engine block.
- Take remaining hose and insert into the other end of the cut OEM hose, measure and cut remaining hose and install
- [Finished Hose Routing](#) and [Detail](#)

- **Coolant Level**

*DO NOT FORGET TO FILL THE COOLANT LEVEL AFTER YOU START THE ENGINE!!!*

## Mount fuel pump and fuel lines

- **Fuel pump**

- Drill hole above the location for the OEM lift pad on the left side of the car
- Install Aluminum Riv-nut. If the Riv-nut fails, simply use a bolt on the inside accessing it through the hole for the lift pad
- [Mount pump](#)

- **Metal Fuel Lines**

- Remove all OEM brackets for brake lines and install new brackets re-installing the brake lines
- Brackets must be screwed on and off
- Starting from the rear, feed metal fuel line **FORWARD** following the [brake lines](#) up into the engine bay
- Route the line [UNDERNEATH](#) the ABS pump, then **OVER** the Motor mount
- Use supplied hose and reinforce the metal fuel line inside the engine bay

## Reinstallation TIME!

- Install fresh-air intake hose and muffler? Or baffle
- Install air box and MAF
- Install headlamp shroud and battery
- Install front bumper

## Vehicle Wiring Harness

- **Relay plate**
  - Insert Green and White wire into relay plate in position 86 of the Relay
  - Insert Red wire into fuse block of 1amp fuse
  - Mount Relay plate into Relay panel and mount Relay
- **Rear Pump wiring**
  - [Route wires](#) to the rear of the vehicle to the [back seat](#) area
  - Drill hole and cut to length wire to the rear pump
  - Acquire [OEM rubber Grommet](#), install provided OEM wiring terminals and wiring seals
  - Insert wires into provided housing
  - Connect to rear pump
  - It doesn't matter which wire is used for Pin 1 or Pin 2. I ran the black wire to Pin 1 and the brown wire to Pin 2
- **Telestart and Antennae**
  - Mount Telestart unit and connect wires
  - Mount Telestart Antennae
- **Final Wiring Connections**
  - Find FUSE 25, Black with Blue Tracer wire and cut
  - Connect RED wire from NEW harness to the cut wire from FUSE 25
  - Connect BLACK wire from NEW harness to the cut wire going back to the vehicle
  - Connect RED wire with round spade to 30A post on the Power Bar
  - Connect GROUND wires to the A-pillar ground connection

# Fuel Tap

- **Fuel Sending Unit**

- Use a hammer and large screw driver to tap the ring loose and to remove the sending unit
- Be very careful where you drill the top of the sending unit you must insure that both top and bottom [attachment bolts](#) are clear of any obstacles
- View of [TOP](#)
- View of [SIDE](#)

- **Routing Fuel Line**

- Using a wire hanger, find the place where the fuel lines run vertical to the tank (passenger's side)
- I routed the fuel lines underneath the car and over the muffler behind the heat shield following the brake cable and using it for attachment
- The provided hose is long enough to route to the rear pump location



**Removal of Battery**

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**Water-tight box and spare grommet**

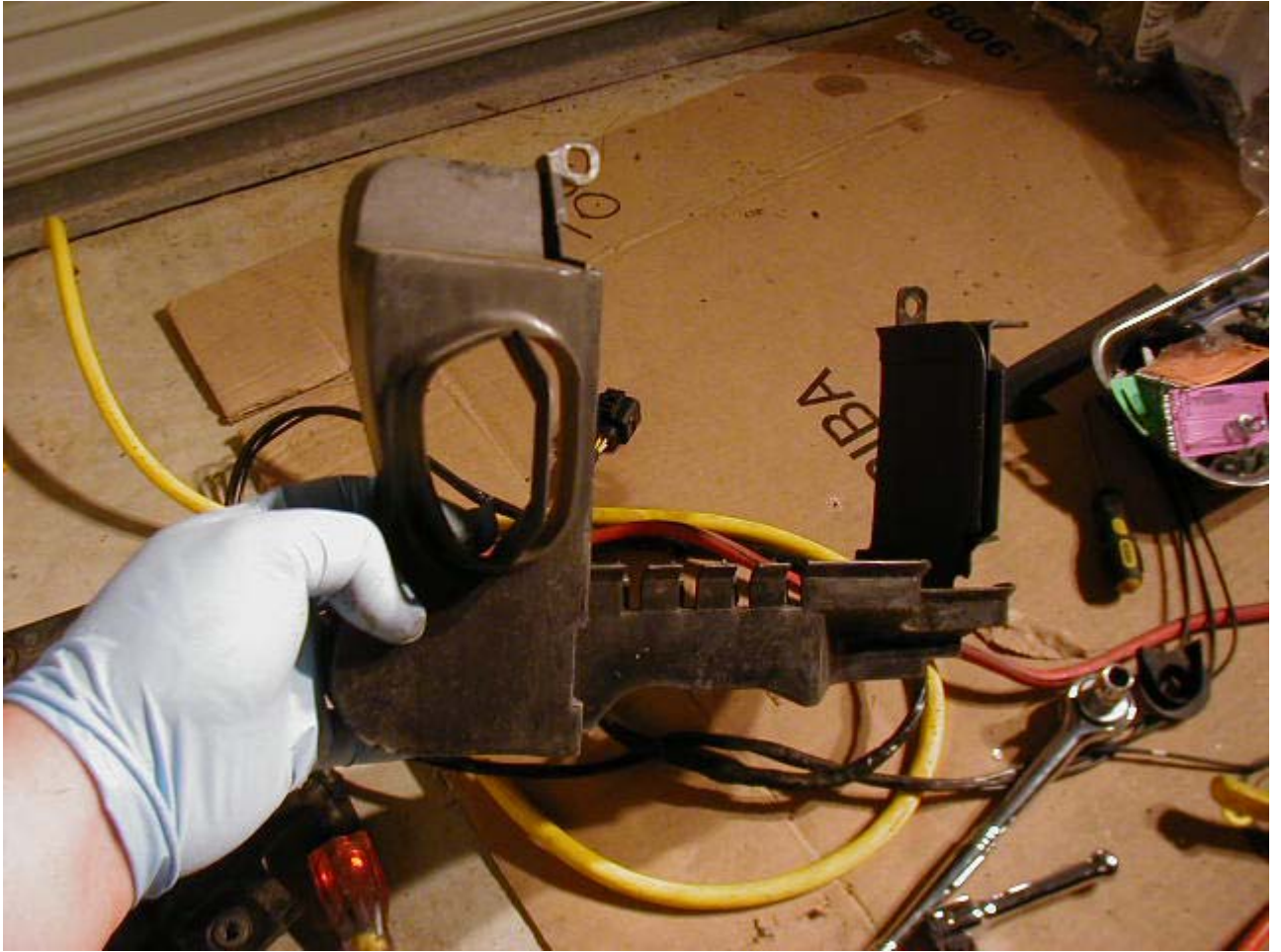
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**Sealing Wiring through Grommet**

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**Air Intake Shroud around Headlamp**

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Heating Unit

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**Horn Relocation and Install Prep**

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**Fuse Holder and Wiring Chase**

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**Air intake hose routing**

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Access to Water-Tight Box

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**Hose Bumper Preparation**

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**Hose Prep 1**

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**Hose Prep 2**

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## Hose Clamp and Removal

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**Final Hoses 1**

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**Final Hose Detail 2**

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**Mounting Of Rear Pump**

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**Fuel line under ABS pump**

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**Fuel line with Brake Lines**

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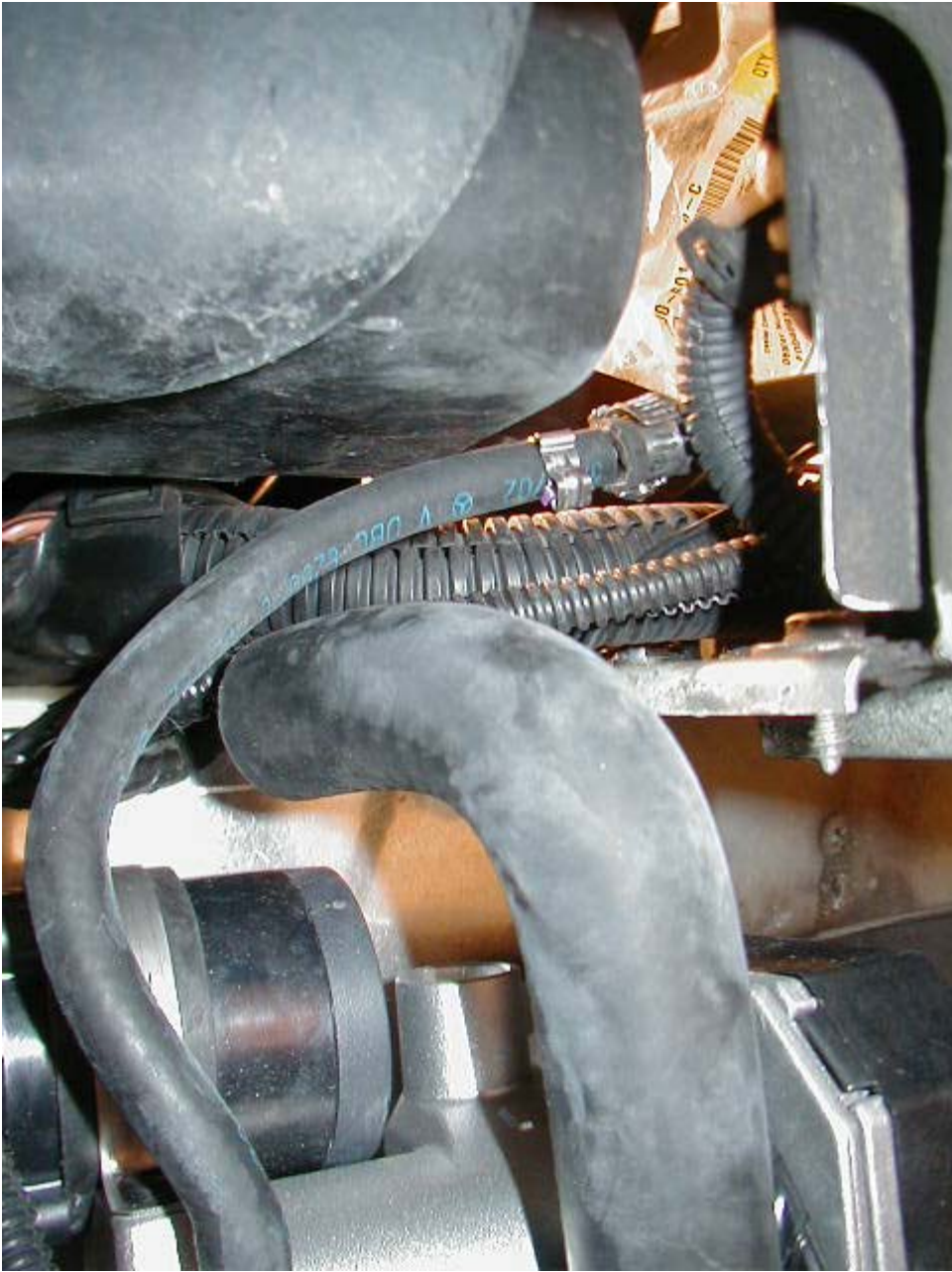
**Fuel sending unit detail**

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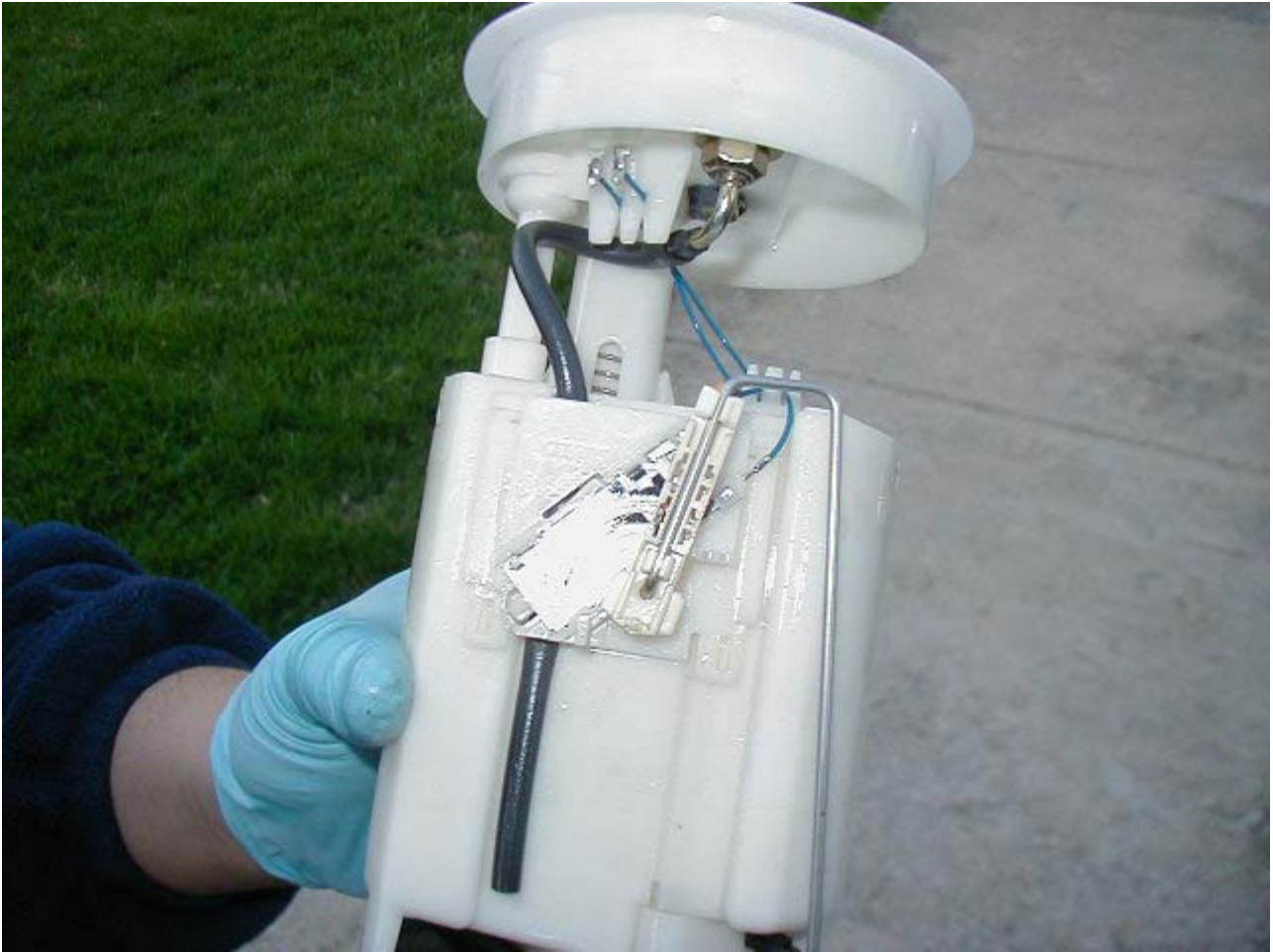


**Fuel Line Connection 1**



Fuel Line Connection 2





**Side of Fuel Sending Unit**

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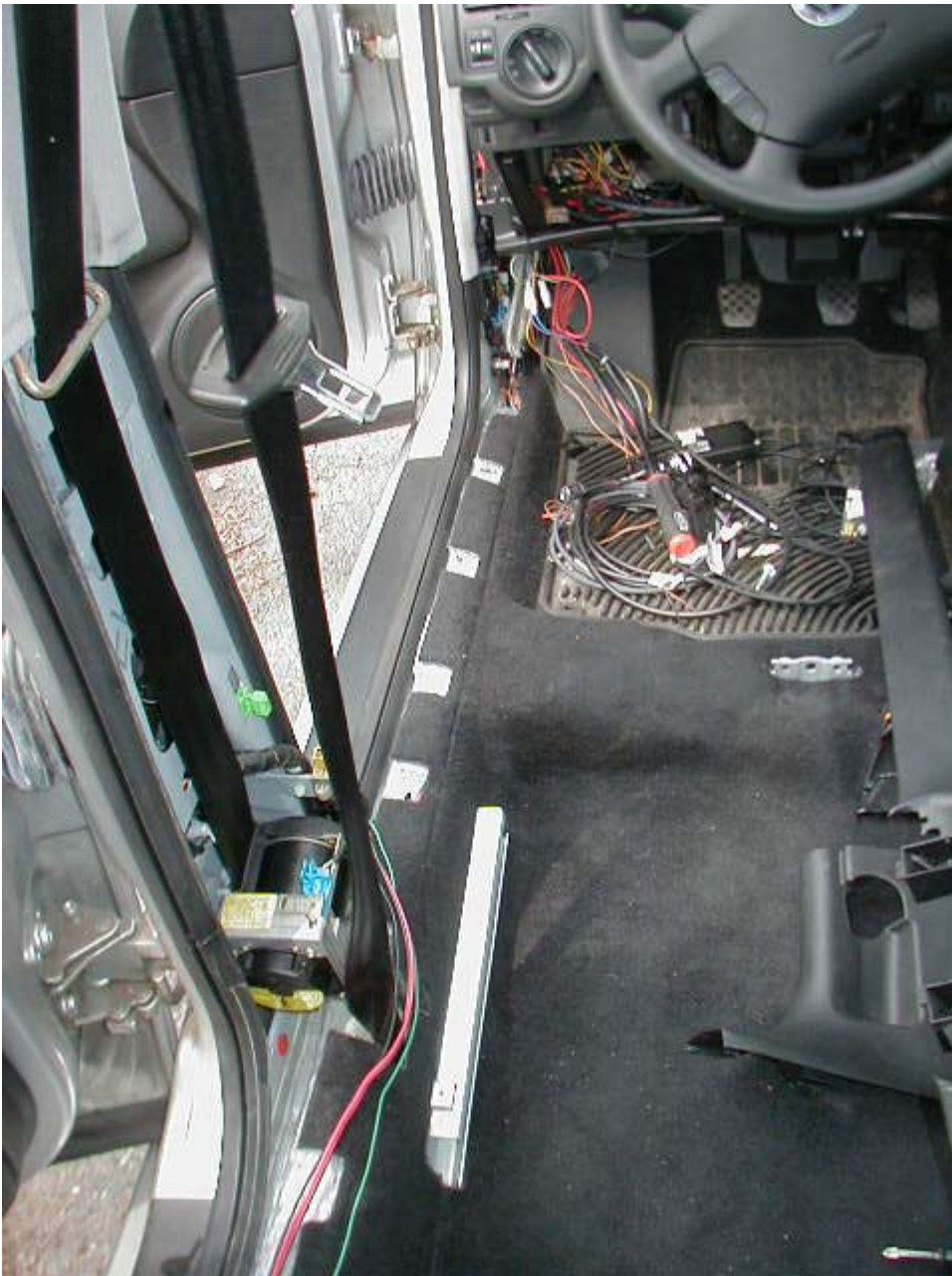
**OEM Grommet for Pump Harness**

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**Rear Pump Grommet under Seat**

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**Routing of wires to the rear**

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