

Replacing the Blower Motor in a MK4 Golf / Jetta

This is a guide to replacing the blower motor in a MK4 (99.5-2005) Golf or Jetta. This procedure takes about 30 minutes to complete.

New Beetles use the same motor, and likely can use the same basic procedure. The big difference in a Beetle is the glovebox. I don't have a Beetle and thus don't know how the glovebox attaches to the car.

Tools needed:

Torx T20 socket

Torx T25 socket

6mm socket

Ratchet for above, short extension isn't a bad idea

Trim/molding removal tool

A quarter coin (yup, your standard American 25 cent coin)

Something soft to kneel on - optional if you're young and have flexible joints, mandatory if you have creaky old man knees like me!

Notes on tools:

A screwdriver-type Torx tool will work OK for the T20 screws. The T25 screw is on the side of the dash and you may not have enough clearance for that type of tool. A socket works best for the T25.

If you don't have 6mm socket, a 6mm box wrench will work. There isn't a lot of room to swing the wrench, but it is doable.

You can use a wide screwdriver or putty knife in place of the trim tool. Wrapping the tool with some tape or such will help prevent damage to the plastic trim.

Step 1 - Open the passenger side door

If you have difficulty with this step, you should not continue!

Step 2 - Remove dashboard side trim panel

Open the glovebox door and slip the trim/molding tool under the side dash panel. Pull it straight away from the dash.

The photo shows one of the tools from a cheap \$7 Harbor Freight trim/molding tool set. They're plastic so they don't mar the trim.



Here is the view behind the dash. The red arrow points to the blower motor. You can see the glovebox is right up against the blower motor which makes access difficult.



Step 3 - Loosen the glovebox

Use a Torx T25 socket to remove the screw that attaches the glovebox bracket to the body. The blue arrow in the above picture points to the screw.

With the glovebox door open, remove the three Torx T20 screws at the top of the glovebox.



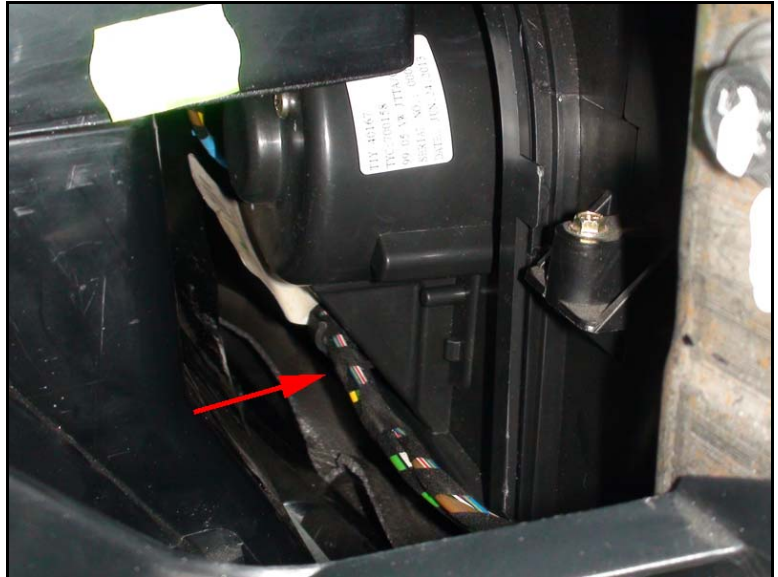
Close the glovebox door and remove the three T20 screws at the bottom of the glovebox.



Pull the side of the glovebox forward about three inches. Don't pull it much more than that as it is still attached to the car by a screw underneath the console.

You can see that you now have much more room to access the motor.

The red arrow points to a wire harness that is clipped to the blower motor. Pull the wire straight up and out of the clip on the motor.



Step 6 - Remove foam panel

Stick your head into the footwell and look up. You'll see a piece of gray foam that helps absorb sound.

The red arrow points to a plastic screw that we need to remove. There are two screws holding the foam on, but you only need to remove the screw by the door.

The screw has a wide but shallow slot in it. A wide screwdriver will work, but you have to be very careful not to damage the slot.

The best way to remove the screw - a common quarter coin. It fits perfectly into the slot. Once you get it unscrewed a few turns, you can just use your fingers.



Here is a closeup of the plastic screw. You can see how the slot has a curved bottom, which the quarter fits nicely into.



The front side of the foam is tucked up under the dash. Just gently pull it down until it's free. Pull the foam down into the footwell and out of your way.

It'll look something like this.



Step 7 - Remove the Bottom Plate

With the foam out of the way, you can now see the Bottom Plate that secures the blower motor into the housing.

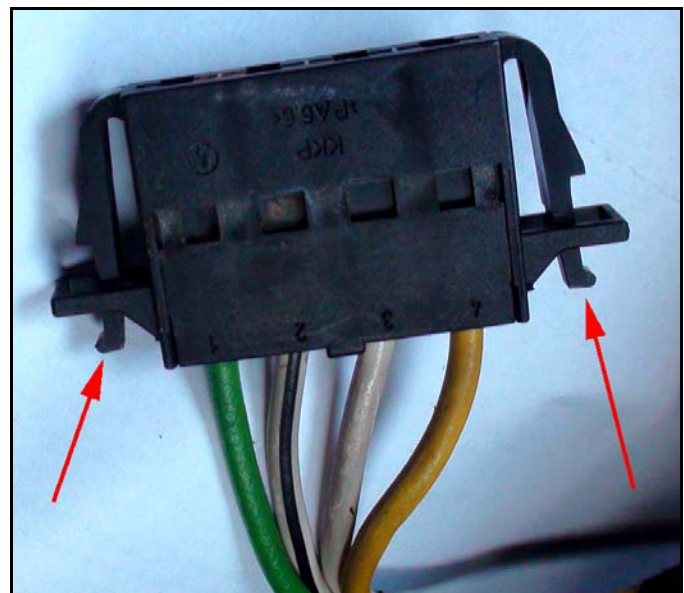
The red arrows point to the two 6mm screws that need to be removed.

First remove the electrical connector on the right side of the plate.



Squeeze the two tangs on the connector and pull it off. The red arrows show the two tangs you need to squeeze.

Once the connector is off, remove the two screws and the Bottom Plate will fall out.



If you look at the top side of the Bottom Plate, you'll see this funky looking green thing. This is the resistor pack that allows the blower motor to operate at different speeds.

If your blower motor will not run at all four speeds, the resistor pack is likely the issue. You can buy a new Bottom Plate/resistor pack to remedy this issue.



Step 8 - Remove the blower motor

Now you can remove the blower motor itself. I reach my right hand in behind the glovebox and press down on the motor while using my left hand to reach up under the dash and pull down on the plastic part of the motor. The motor can be a bit stuck in the housing, especially if it's the original motor that's been in there for a decade.

Remember that wire harness that was clipped to the motor? You unclipped it in Step 3. As the motor moves downward, make sure the harness gets pulled back and out of the way so the motor doesn't pull on it. Pulling on wiring harnesses is generally A Bad Thing.

The motor will move down until it hits the lower part of the dashboard. It'll look something like this.

Reach in and remove the electrical connector on the motor. Squeeze the two tangs (similar to the other connector) to pull it off.

In the photo, you can see the wire harness that was clipped to the motor. It's been moved back and out of the way so the motor didn't pull on it.

To get the motor all the way out, reach underneath and grab the metal part of the dash that the motor is resting on. You can carefully pull that metal bar back about an inch. Combine that with rotating the rear of the motor down and the front upward and it'll pop out.

It's one of those things you really can't describe - just keep working it around and it'll finally pop loose.



Step 9 - Install the new blower motor

Installation is basically the reverse of removal.

Pull the lower dashboard bar back about an inch and slide the motor back up above the metal bar.

Re-attach the electrical connector onto the motor. You should feel and hear it click into place. Give it a light tug to make sure it's properly attached.

Push the motor up into the opening in the housing. Note that the "flange" on the motor assembly must stay on the back side of the housing. If the sides of the motor get on the front side of the opening the motor will not go all the way up.

As you move the motor upwards, make sure that wire harness (from Step 3) gets moved around to the bottom side of the motor.

Once the motor is all the way up, it should sort of stick in place. If it doesn't, hold it in place with one hand while you attach the Bottom Plate with the other hand.

Put the Bottom Plate into position and install the two screws. The screws thread into plastic, so this is no place to be a gorilla with the wrench. Tighten the screws until they contact, then another 1/16 of turn is plenty.

Re-attach the electrical connector to the Bottom Plate, it should click into place. If you forget this step, the motor will only run on high speed.

This isn't a bad time to test the motor, especially if you're installing a used motor. Turn the ignition on and verify the motor works on all 4 speeds.

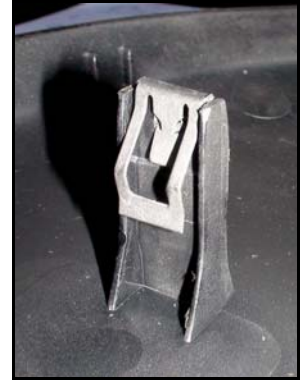
Put the foam panel back into position, tucking the front edge up and under the metal bar on the lower part of the dash.

Re-install the plastic nut that holds the foam panel. Run it up with your fingers, then use the quarter to tighten it. Again, it's threaded into plastic so don't over-tighten it.

Reach in behind the glovebox and re-attach the wire harness into the clip on the motor. Just push it straight down and into the clip.

Re-install the glovebox screws. Thread the T25 screw in a few turns, but don't tighten it just yet. Install the six T20 screws, those will pull the glovebox up into the correct position. Then tighten the T25 screw.

Install the dash side panel. If one of the metal clips on the panel fell off when you removed it, just put the clip back on the plastic tang on the panel and tap it down into position. See the photo to the right.



The front edge of the panel tucks under the A-pillar. The bottom edge of the panel needs to be forward of the lower part of the glovebox, like in the photo to the right.

If the panel rides up on top of the lower glovebox, the panel clips won't want to fit properly into the holes in the dash.

Once it's in the correct position, push the panel clips into the holes in the dash. A couple of hits with a closed fist will drive it home.

