



Part Number(s)
ES2643119/ES2643120
for VW MKIV Golf/Jetta/R32

P3Cars Digital Vent Gauge Install Guide

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Proper service and repair procedures are vital to the safe, reliable operation of all engine vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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P3Cars gauge components

wiring harness



display with
pigtail



processor

Tools

- 1/4-inch ratchet
- 3 inch long, 1/4-inch extension
- T20 Torx© driver
- small screwdriver
- exacto or pocket knife
- electric drill with 3/8" drill bit
- trim removal tools ([ES517779](#))
- work light
- zip or twist ties

Note! If you have a Golf/GTI/R32, you must purchase a Jetta style air vent. The P3Cars gauge will not install in the Golf style vent. ECS sells a pre-installed solution ([ES2643120](#)) that makes this process much easier!

Installation overview

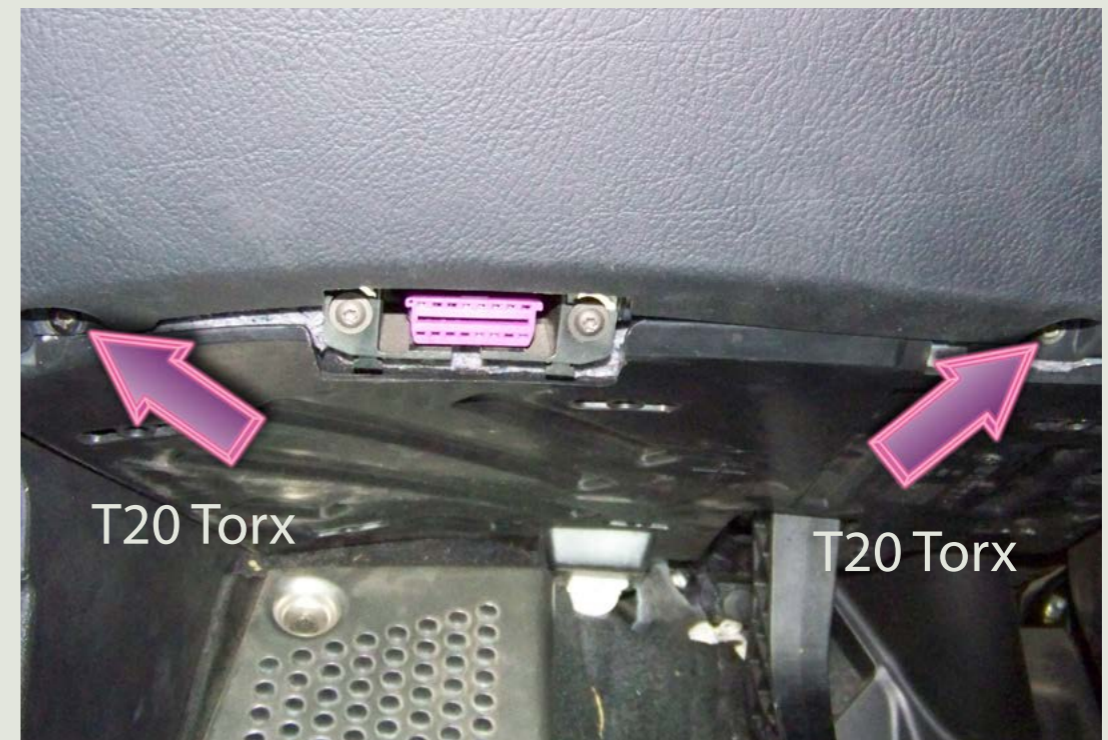
- (1) Remove interior trim
- (2) Modify air vent for P3Cars gauge
- (3) Install air vent with P3Cars gauge
- (4) Connect wiring and reinstall interior trim
- (5) Configure P3Cars gauge

Step 1

Pry off the fuse panel cover with a non-marring trim removal tool.



Using a T20 Torx socket, remove the screws that secure the left hand knee panel. The top of the panel is held with clips and can be pried loose by hand.



Step 1 continued

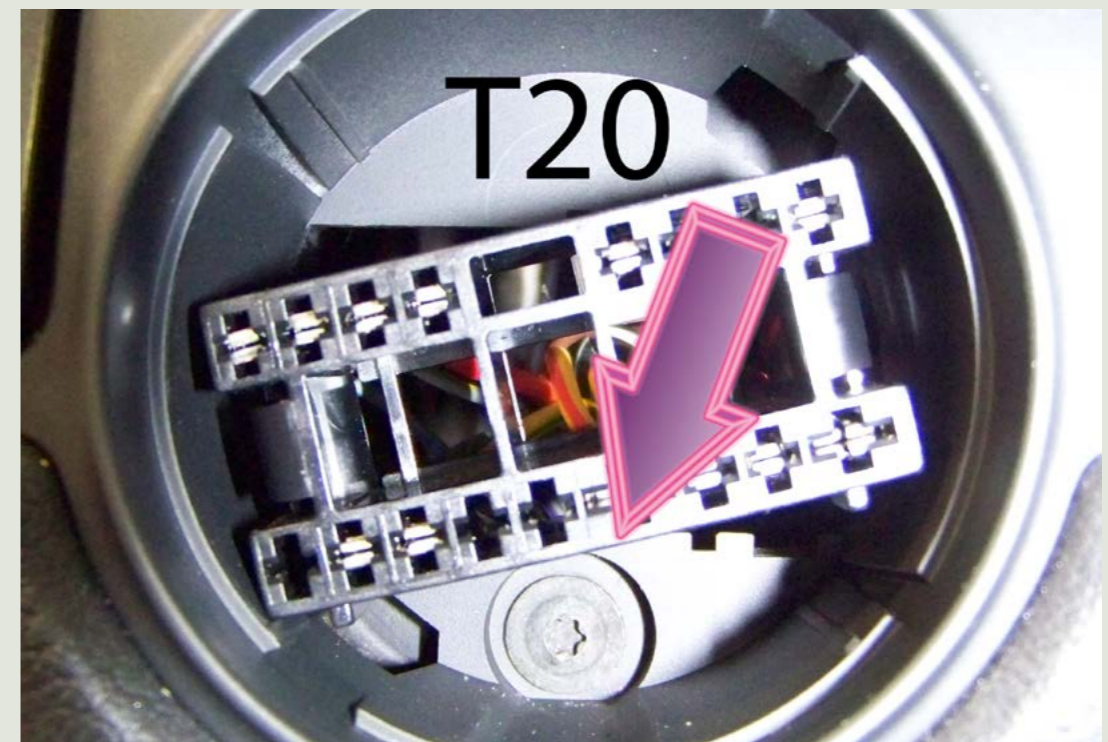
Remove the air vent. Set the headlight switch into the release position by pushing it in and turning halfway between off and on positions. Then pull it straight out and disconnect the wiring connector.



On a Jetta, remove the single T20 Torx screw. On a Golf, remove the swivelling air vent to access a second T20 screw that is located on the upper left.

Pull the air vent/headlight switch housing from the dashboard, and disconnect the interior light dimmer from the vent.

If you have a Golf, GTI, or R32, now is when you need to acquire a Jetta style vent. If you purchased the gauge pre-installed in a vent (ES2643120), skip to step 3, page 8.



Step 2

Prepare the Jetta style vent for the P3Cars gauge display.

Using a small flat-tipped screwdriver, pry loose the retaining clips found on the right, top, and left sides of the housing.

Slide the vent housing out of the air vent/headlight switch housing.



Step 2 continued

Carefully separate the bladed vent section from the vent housing.



Using the small screwdriver or a pocketknife, remove the top three air vent blades from the plastic guides. Be careful! The guides are extremely brittle.



Step 2 continued

Drill a hole for the gauge display's wiring pigtail on the left hand side of the vent housing. There is a mark on the back of the housing from the plastic mold that is a good place to center your drill bit.

Depending on the diameter of the bit, you may need to hold the drill at an angle to elongate the hole for the wiring connector.

Thread the wiring pigtail through the hole and align the three pins on the P3Cars gauge display with the three holes in both of the vent blade guides.

It is easiest to do this with the vents open, which requires that you line up the blade guide in the adjustment wheel mechanism.



Step 2 continued

With the gauge display assembly aligned, slide the air vent housing back into the air vent/headlight switch frame. Engage the clips you released earlier.

Make sure the gauge display sits flush and the adjustment wheel and air vent blades move freely.



Step 3

Install the air vent/headlight switch housing into the dashboard. Thread the gauge display wiring pigtail through the left most hole and down towards the fuse panel.

Swap over and plug in the interior light dimmer and headlight switch, then tighten down the T20 screw.



Step 4

Plug the wiring harness into the OBD2 diagnostic port.

What are those extra wires?

Expand your P3Cars gauge's functionality...

Green: Dimming (tee into interior light harness)

Blue: Analog Input 1

Brown: Analog Input 2

AUX Plug: External boost sensor



Run the harness up towards the fuse panel.

Step 4 continued

Connect the processor to the wiring harness, and the gauge display wiring pigtail to the processor.



Zip or twist tie the excess wiring into neat bundles, and tuck the wiring and the processor into the void above the fuse panel.

Reinstall the dash kickpanel and fuse panel cover.



Step 5

When everything is buttoned up, peel off the protective plastic covering. You are now ready to configure your gauge.

[P3Cars' website](#) has its own installation guides and configuration information, but here is a brief overview to get you up and running strictly utilizing the OBD2 data (no external or analog sensors).



The car does not need to be on for this procedure.

Hold both buttons to access the configuration menu.

Press the left button to change settings, and the right button to cycle through display modes.

When you are done and want to save your configuration, hold the right button until the display turns off.

Turn on the car and use the right button to cycle through each display modes.



This completes the installation of the P3Cars Digital Vent Gauge.

We hope this installation guide has been helpful and informative.

Thanks for reading!

