



Dodge Valve Body Assistant (VBA) Installation Manual v2.1

Please read all instructions before installation.

For 2003.5 - 2006 5.9L Dodge

- 1) Remove the battery cables from the negative terminals on both batteries. Locate PCM. It is on the driver's side of the engine block towards the front.
- 2) There are two PCM connectors, one 60-pin (front), and one 50-pin (rear). You will need to tap two wires that run to the rear connector. Unplug this connector so that you can access the wires (There is a size 4 metric allen screw that holds this connector in, and a bolt that lies above the connector that holds the wire loom to the block).
- 3) We recommend that you perform these wire connections approximately 10" from the connector. If necessary, carefully cut the wire loom wrapping to access the wires.
- 4) Find the **yellow w/ brown stripe** wire that goes to pin **18 (2006 pin 17)** of the rear connector and cut it about 10" from the PCM plug.
- 5) Solder the **white wire from VBA** to the cut end of the **yellow w/ brown stripe** wire that runs to the PCM plug. Tape or heat-shrink all solder joints.
- 6) Solder the **green wire from VBA** to the cut end of the **yellow w/ brown stripe** wire that runs into the wire loom, away from the PCM plug. Tape or heat-shrink all solder joints.
- 7) Find the **black** wire that goes to pin **50** of the rear connector. Tap this wire by soldering the **black wire from the VBA** to the **black wire** in the wire loom. Tape or heat-shrink all solder joints.

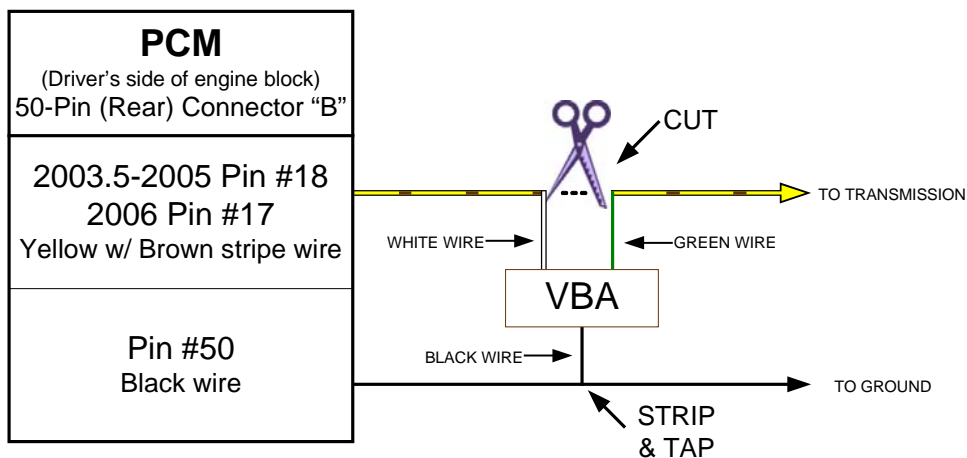
NOTE: There is another black wire that runs to pin **49** of the rear connector, it can be used in place of the one that lies in pin **50** if necessary.

- 8) Reassemble wiring harness with black electrical tape. Insert VBA inside of loom.

NOTE: **If your valve body has been modified prior to the installation of VBA**, go back to the rear connector; inspect the **Yellow w/ Pink stripe** wire for the presence of heat shrink and/or a resistor. If a resistor is present, it must be removed and orange wire soldered back together.

- 10) Reconnect the negative terminals on both batteries.

Wiring Diagram for 2003.5 – 2006 5.9L Dodge



For 2003 Dodge

- 1) Remove the battery cables from the negative terminals on both batteries. Locate the PCM. It is on the firewall, passenger side, behind the air box.
- 2) There are three (3) PCM connectors. You will need to tap a wire that runs to the middle connector and one that runs to the bottom connector. Unplug the connectors one at a time so that you can access these wires.
- 3) We recommend that you perform these wire connections approximately 10" from their connectors. If necessary, carefully cut the wire loom wrapping to access the wires.
- 4) Find the **light green w/ red stripe** wire that goes to pin **29** of the *middle* connector and cut it about 10" from the plug.
- 5) Solder the **white wire from VBA** to the cut end of the **light green w/ red stripe** wire that runs to the PCM plug. Tape or heat-shrink all solder joints.
- 6) Solder the **green wire from VBA** to the cut end of the **light green w/ red stripe** wire that runs into the wire loom, away from the PCM plug. Tape or heat-shrink all solder joints.
- 7) Find the **black w/ tan stripe** wire that goes to pin **32** of the *bottom* connector and strip back about a ½" inch of the insulation, approximately 10" from the plug. Do not cut this wire.

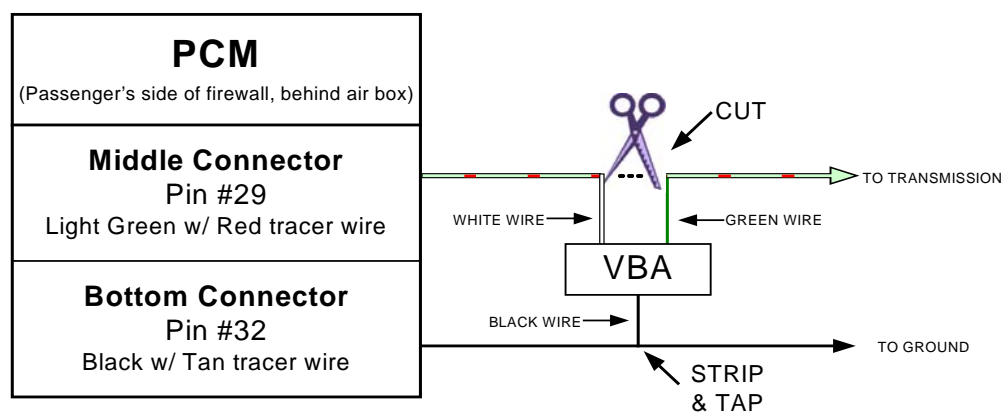
NOTE: If you are not able to connect to the wire in pin 32, you can connect to the wire in pin 31 as a substitute.

- 8) Solder the **black wire from VBA** to the **black w/tan stripe** wire in the wire loom that you just stripped. Tape or heat-shrink all solder joints.
- 9) Reassemble wiring harness with black electrical tape. Insert VBA inside of loom.

NOTE: **If your valve body has been modified prior to the installation of VBA**, go back to the middle connector; inspect the **violet w/ white stripe** wire for the presence of heat shrink and/or a resistor. If a resistor is present, it must be removed and the violet w/ white stripe wire soldered back together.

- 10) Reconnect the negative terminals on both batteries.

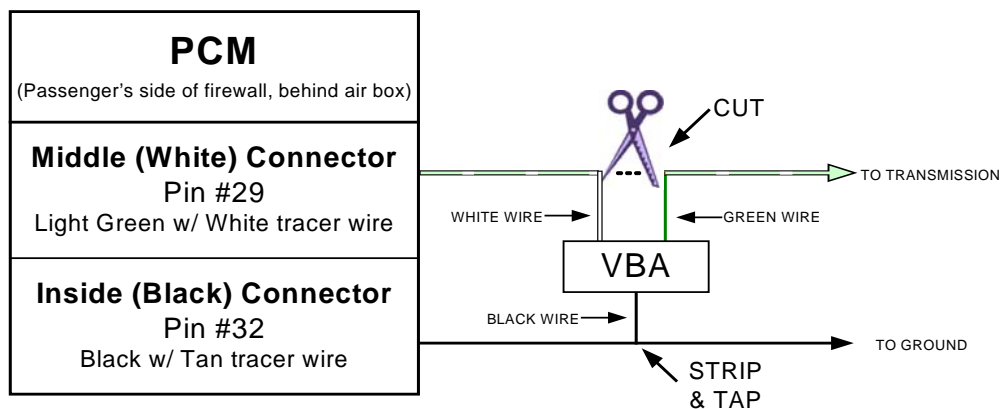
Wiring Diagram for 2003 Dodge



For 1996-2002 Dodge

- 10) Remove the battery cables from the negative terminals on both batteries. Locate the PCM. It is on the firewall, passenger side, behind the air box.
 - 11) There are three (3) PCM connectors. You will need to tap a wire that runs to the middle white connector, and a wire that runs to the inside black connector (closest to engine). Unplug these connectors one at a time so that you can access these wires more easily.
 - 12) We recommend that you perform these wire connections approximately 10" from the connector. If necessary, carefully cut the wire loom wrapping to access the wires.
 - 13) Find the **light green w/ white stripe** wire that goes to pin **29** of the middle connector and cut it about 10" from the plug.
 - 14) Solder the **white wire from VBA** to the cut end of the **light green w/ white stripe** wire that runs to the white PCM plug. Tape or heat-shrink all solder joints.
 - 15) Solder the **green wire from VBA** to the cut end of the **light green w/ white stripe** wire that runs into the wire loom, away from the PCM plug. Tape or heat-shrink all solder joints.
 - 16) Find the **black w/ tan stripe** wire that goes to pin **32** of the inside connector (closest to engine) and strip back about a ½" inch of the insulation, approximately 10" from the plug. Do not cut this wire.
 - 17) Solder the **black wire from VBA** to the **black w/tan stripe** wire in the wire loom that you just stripped. Tape or heat-shrink all solder joints.
 - 18) Reassemble wiring harness with black electrical tape. Insert VBA inside of loom.
- NOTE: **If your valve body has been modified prior to the installation of VBA**, go back to the middle white; inspect the **orange** wire for the presence of heat shrink and/or a resistor. If a resistor is present, it must be removed and orange wire soldered back together.
- 10) Reconnect the negative terminals on both batteries.

Wiring Diagram for 1996-2002 Dodge



Have Any Questions?

Thank you for purchasing the ATS Valve Body Assistant. Please check our website at <http://www.atsdiesel.com> for technical support and other performance products such as the Five Star torque converter, ATS High Performance Valve Body and ATS High Performance Transmission along with our full line of power enhancers. Please call or e-mail our Technical Service Department, 8:00am to 5:30pm Mountain Standard Time, Monday through Friday.

Contact Information

Toll Free: 800-949-6002

Local: 303-431-7973

Fax: 303-431-01135

Website: www.ATSDiesel.com

Email: info@ATSDiesel.com

We strive to make our instructions as clear and complete as possible. To achieve this, our instructions are under constant construction. We encourage you to visit our Technical Support Website (<http://www.atsdiesel.com/ATSWebsite/Technical.asp>) to check for the most up-to-date manuals and diagrams as well as other information. If you have any suggestions as to how we can improve this installation manual, let us know at Suggestions@ATSDiesel.com