

Installation Manual for VMAC *Throttle Commander* Throttle Control T500112

2006 and 2007 Classic
GMC 2500-3500, Chevrolet Silverado 2500HD-3500
6.6L Duramax Diesel

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2500HD-3500 6.6L Duramax Diesel

Changes and Revisions

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Important Information

The information in this manual is intended for certified VMAC installers who have been trained in installation procedures and for people with mechanical trade certification who have the tools and equipment to properly and safely perform the installation. Do not attempt this installation if you do not have the appropriate mechanical training, knowledge and experience.

Follow all safety precautions and standard shop practices for mechanical work.

These instructions are a general guide for installing this throttle control on standard production trucks and do not contain information for installation on non-standard trucks. If you have difficulty with the installation, contact VMAC.

The VMAC warranty form is located at the back of this manual. This warranty form must be completed and mailed or faxed to VMAC at the time of installation for any subsequent warranty claim to be considered valid.

To order parts, contact your VMAC dealer. Your dealer will ask for the VMAC serial number, part number, description and quantity. To locate your nearest dealer, call 1-800-738-8622.

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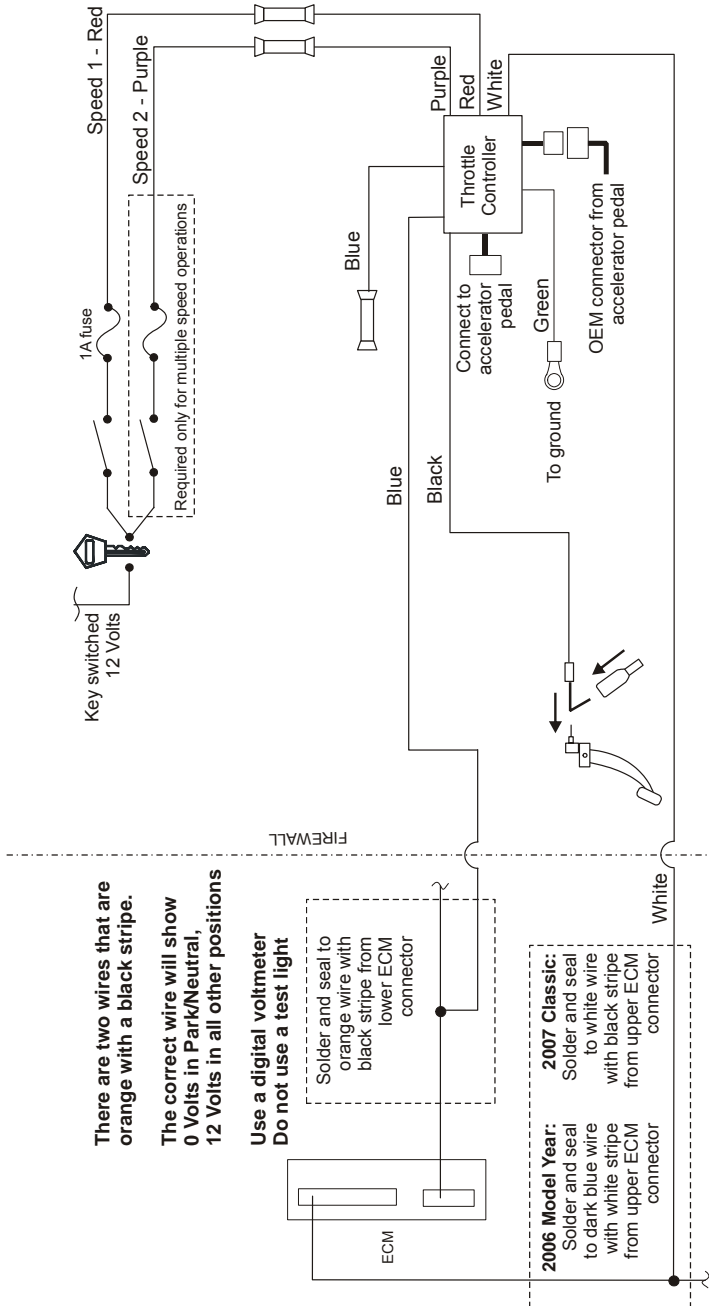
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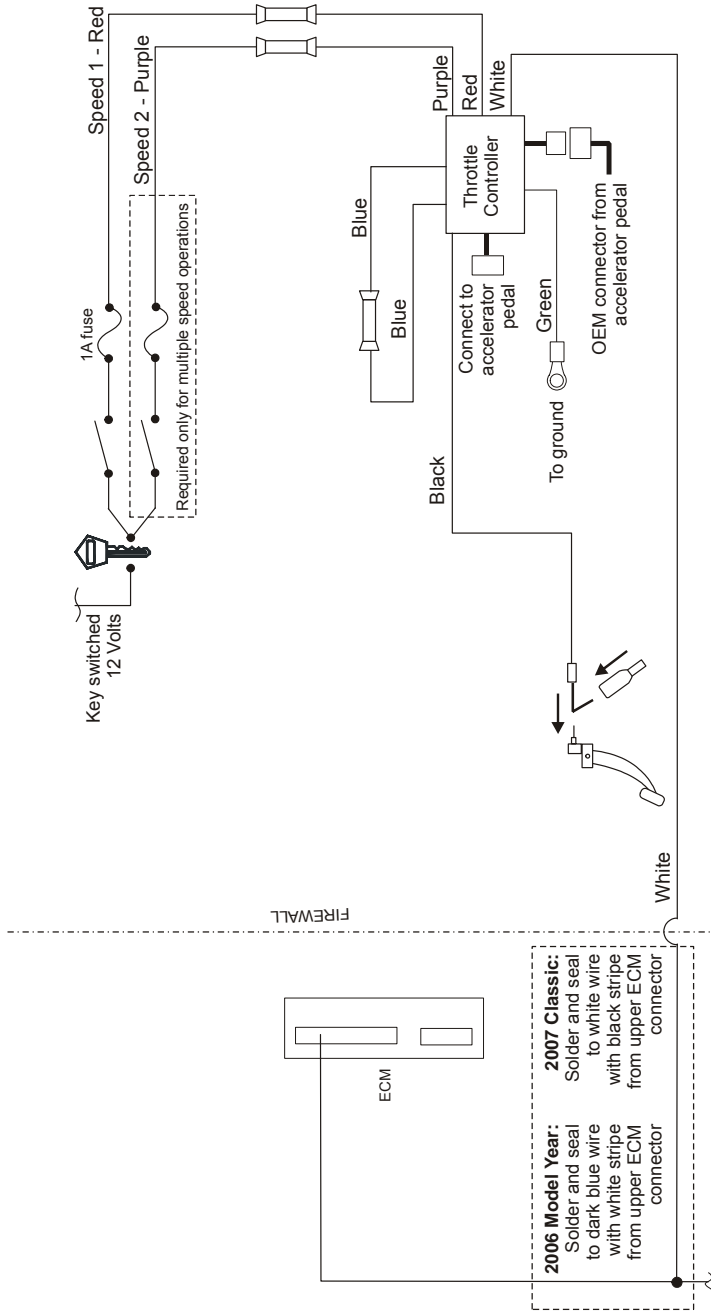
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Automatic Transmission

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Manual Transmission

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1.0 Preparation for Installation

- Lay out all of the control components and identify the wiring and connections according to the wiring diagram for the specific transmission type.
- If the truck has an automatic transmission, locate the ECM (Figure 1) and find the two wires that are orange with a black stripe in the bottom connector. Use a digital voltmeter (**DO NOT USE A TEST LIGHT**) to determine which wire has 0 Volts in Park/Neutral and 12 Volts in all other gear selector positions with the ignition on. Mark the wire with a piece of tape and turn the ignition off.

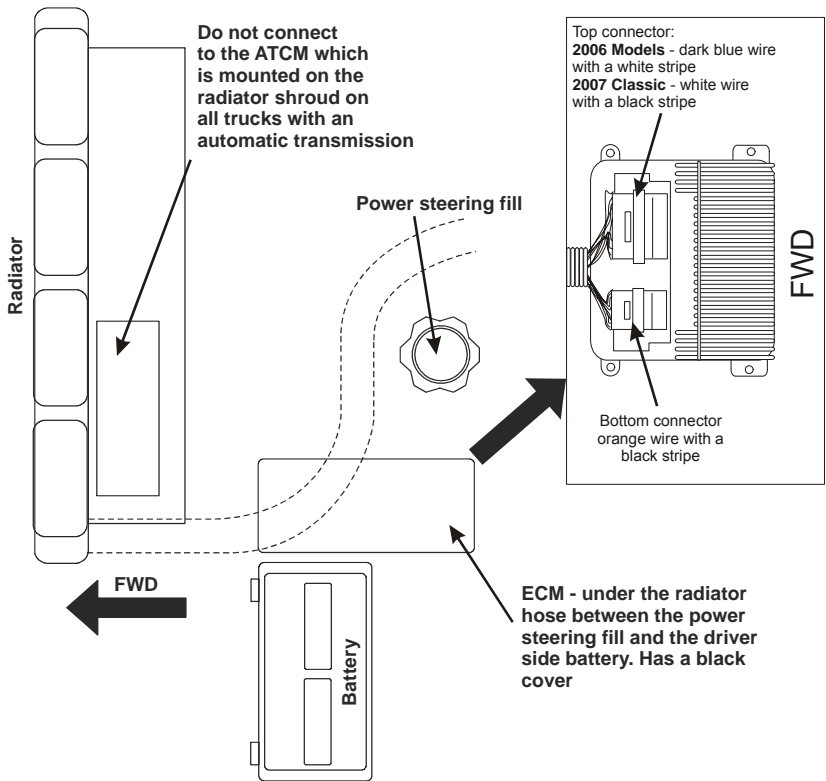


Figure 1

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- For 2006 Models:** find the two wires that are dark blue with a white stripe in the top connector. The correct wire is the smaller of the two.

For 2007 Classic: find the white wire with the black stripe in the top connector.

You can verify that you have the correct wire for both applications by checking for a constant 3 Volts with the engine idling at about 600 RPM. If your multi-meter can measure frequency, the reading will equal engine rpm.

- Disconnect the batteries.



***Handle wires, connectors and harnesses carefully.
Always disconnect batteries before handling electronic components.***

- Remove the center dash panel under the steering wheel.

2.0 Installing the Throttle Controller

- Fasten the throttle controller under the dash in a safe location so that the connectors will reach the accelerator pedal assembly.
- Unplug the OEM cable from the accelerator pedal assembly and connect it to the harness from the throttle controller. Connect the remaining harness to the connector on the accelerator pedal.
- Connect the green ground wire to a good ground under the dash.
- Remove the connector from the park brake switch, connect it to the piggyback connector on the black wire from the throttle controller and plug the connector back onto the park brake switch.
- Route the white tachometer wire from the throttle controller through a suitable opening in the firewall to the ECM.
- Peel back the tape on the wire bundle to the top ECM connector for easier access to the wires.

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- For 2006 Models:** solder and seal the white wire from the throttle controller to the dark blue with white stripe wire at the top ECM connector.

For 2007 Classic: solder and seal the white wire from the throttle controller to the white wire with the black stripe at the top ECM connector.

The preferred connection method is shown in Figure 2.

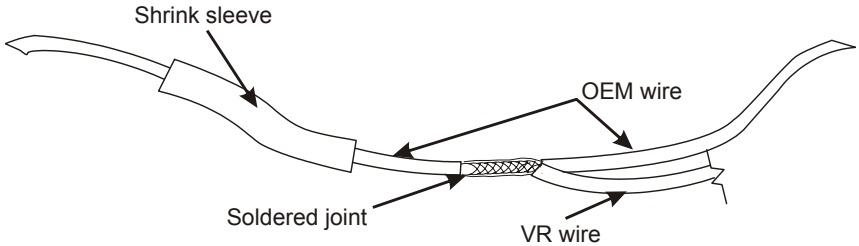


Figure 2

2.1 Automatic Transmission

- Route the long blue wire from the throttle controller through a suitable opening in the firewall to the ECM.
- Solder and seal the blue wire to the orange wire with a black stripe in the bottom ECM connector (located in the preparation tests).

2.2 Manual Transmission

- Cut the long blue wire to about six inches, strip the end and connect it to the short blue wire with the crimp connector.

3.0 Operational Test

3.1 Automatic Transmission

- Place the truck in a safe operating position and block the wheels. Make sure that there are no people around the vehicle. Sit in the driver's position with the transmission in Park and the park brake fully engaged.

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- Start the vehicle engine and wait for the idle to stabilize and engine temperature to reach normal operating range.
- Test operation of the throttle by quickly connecting and disconnecting the 18 gauge test wire from the battery wire to the red SPEED 1 throttle wire. The engine should start to idle up.
- Firmly apply and hold the foot brake. Release the park brake and activate the throttle as before. The engine should not idle up.
- Apply the park brake and shift the transmission into gear while keeping your foot on the brake. Momentarily activate the throttle as before. The engine should not idle up. Repeat this test in all gears. The engine should only idle up in Park and Neutral.
- Shift the transmission into Park and shut down the engine.

3.2 Manual Transmission

- Place the truck in a safe operating position and block the wheels. Make sure that there are no people around the vehicle. Sit in the driver's position with the transmission in neutral and the park brake fully engaged.
- Start the vehicle engine and wait for the idle to stabilize and engine temperature to reach normal operating range.
- Test operation of the throttle by quickly connecting and disconnecting the 18 gauge test wire from the battery wire to the red SPEED 1 throttle wire. The engine should start to idle up.
- Firmly apply and hold the foot brake. Release the park brake and activate the throttle as before. The engine should not idle up.
- Shut down the engine



If the vehicle fails the test, check your wiring to make sure that all the connections are correct and secure. If you require additional assistance, contact your local VMAC dealer or call VMAC at 1-800-738-8622 or 250-740-3200.

4.0 Auxiliary Equipment Connection

The throttle control has three possible speed settings by providing battery power to the red and purple wires. Default settings are:

Speed Selection	Red wire	Purple wire	Factory setting
Off	0 Volts	0 Volts	0 RPM
Speed 1	12 Volts	0 Volts	1,250 RPM
Speed 2	0 Volts	12 Volts	1,800 RPM
Speed 3	12 Volts	12 Volts	Approximate average of 1 & 2

Different methods for single speed connection are shown in Figure 3 (switched) and Figure 4 (relayed). Multiple speed connections are a duplicate of the single speed method.

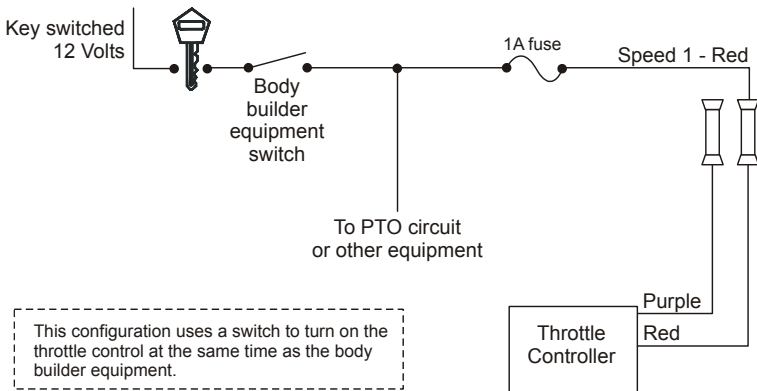


Figure 3

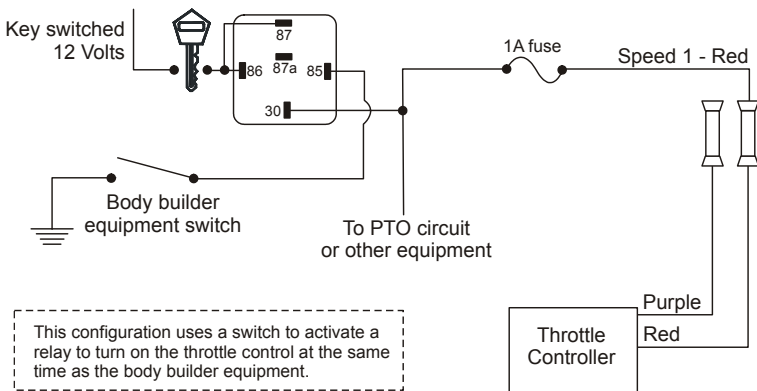


Figure 4

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4.1 Single Speed Control

- Connect the red wire from the throttle control through a suitable switch to an ignition activated 12-volt power source using an 18 gauge or heavier wire.
- Coil and insulate the purple wire with tape.
- Install a 1-amp inline fuse between the switch and the red wire.

4.2 Multiple Speed Control

- Make the single speed connection using the red wire.
- Connect the purple wire from the throttle control through a second switch to an ignition activated 12-volt power source using 18 gauge or heavier wire.
- Install a 1-amp inline fuse between the switch and the wire.

5.0 Adjusting the Throttle Control

- Make sure that the switches or equipment supplying power to the throttle control are turned off, the automatic transmission is in Park, manual transmission in neutral and the park brake is engaged.
- Start the engine. Allow the engine to reach normal operating temperature.
- Engine speed is adjusted by turning the screws on the throttle control. To increase the engine speed turn the screw clockwise, to decrease the engine speed turn the screw counter-clockwise.
- To adjust SPEED 1, activate the throttle control using the control that is connected to the red wire. Adjust the RPM by turning the RPM 1 screw.
- To adjust SPEED 2, activate the throttle control using the control that is connected to the purple wire. Adjust the RPM by turning the RPM 2 screw.
- SPEED 3 is an approximate average of SPEED 1 and SPEED 2.

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