

Installation Manual for VMAC Throttle Commander Throttle Control T500100

2003-2005

**Chevrolet Tahoe, GMC Yukon, CK2500HD-3500
4.8L, 5.3L, 6.0L and 8.1L Gasoline Engines**

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Installation Manual for VMAC *Throttle Commander* Throttle Control
2003-2005 Chevrolet Tahoe/GMC Yukon & C/K 2500HD – 3500
4.8L, 5.3L, 6.0L and 8.1L

Changes and Revisions

Version	Revision Details	Revised by/date	Approved	Implemented
00	Original manual small version	IB 05 Dec 2004	SM 12 Dec 2004	13 Dec 2004
01	Wiring and test revisions	IB 14 Jan 2005	SM18 Jan 2005	20 Jan 2005

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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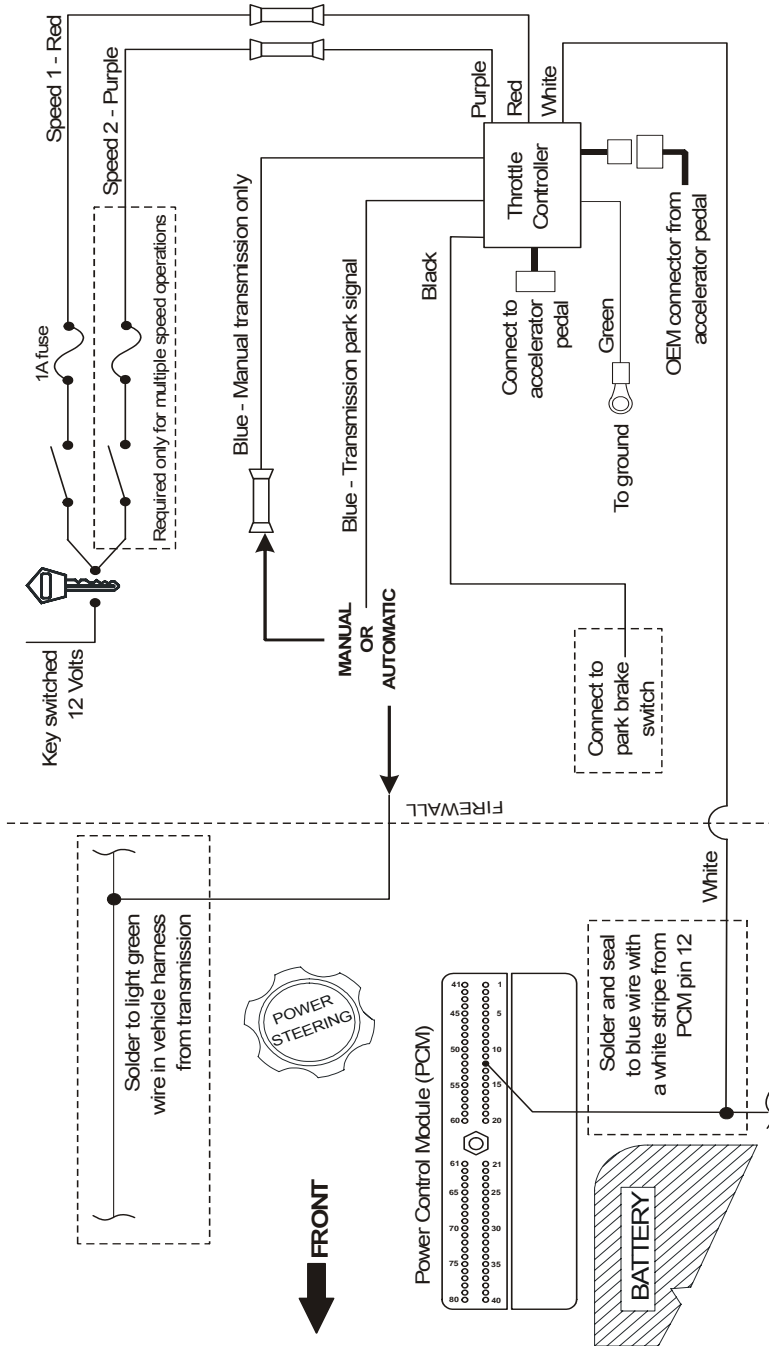
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1.0 Preparation for Installation

1.1 Automatic Transmission Trucks

- Remove the plastic engine cover and the three hex head cap screws from the plastic plate on the top of the manifold.
- Strip some of the tape from the wire harness that comes up the back of the engine and rests in the driver's side retaining trough on the manifold (Figure 1).
- Locate the two light green wires in the harness. Using a voltmeter, probe each wire and check for battery voltage in PARK and no voltage in all other gears including NEUTRAL. Do not use a test light. Mark the wire with a piece of tape.

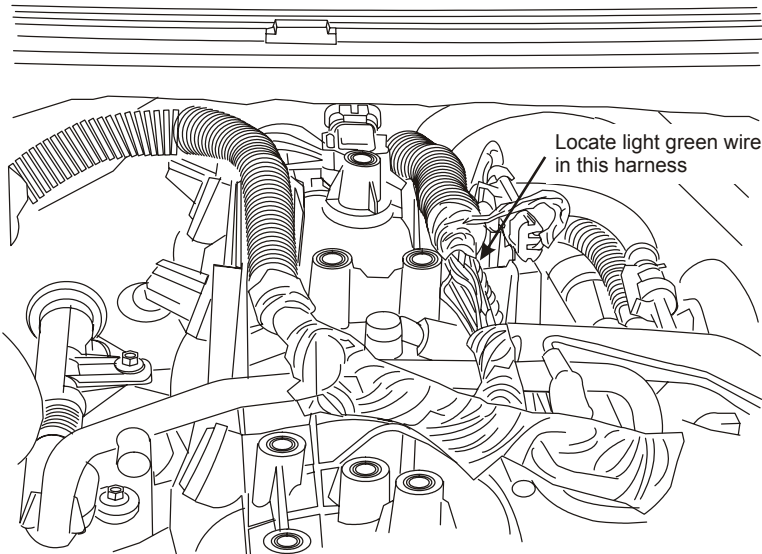


Figure 1

1.2 All Trucks

- Disconnect the batteries.



Handle wires and harnesses carefully. Disconnect batteries before handling electronic components.

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2.0 Installing the Throttle Control

- Fasten the throttle control box 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 control. Connect the remaining harness to the connector on the accelerator pedal.
- Connect the green ground wire to a good ground under the dash.
- Cut a slit in the main wire harness boot on the driver's side of the firewall and route the white TACH wire and, if the truck has an automatic transmission, the blue TRANSMISSION PARK SIGNAL wire into the engine compartment (without the crimp connector).
- Locate the Powertrain Control Module (PCM) fastened to the fender between the power steering fill cap and the driver's side battery. Remove the plastic cover, unclip the PCM and rotate it so that the connectors are facing up.
- Carefully remove the gray cover on the connector nearest the engine and locate the blue wire with a white stripe at location 12 on the connector (Figure 2). Pull back the loom to access the wire away from the PCM.



There may be more than one blue with white stripe wire in this harness.

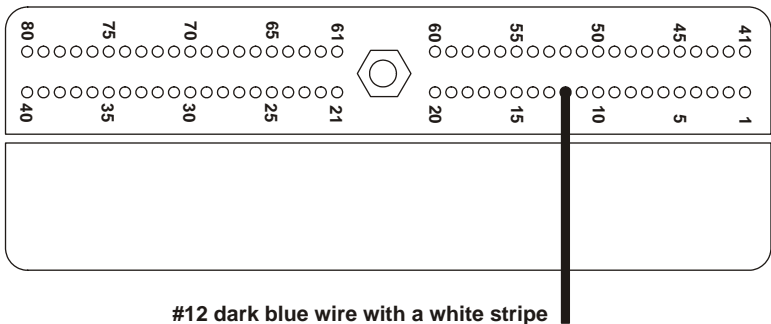


Figure 2

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- Solder and seal the white throttle control box wire to the blue wire with a white stripe (Figure 3). Reassemble the PCM, rotate it back into place and replace the plastic cover.

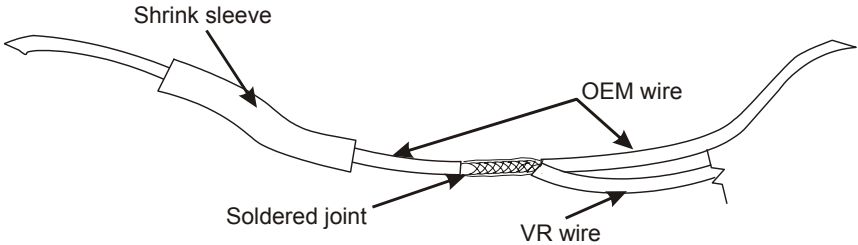


Figure 3

- Remove the OEM Park Brake wire at the park brake, connect the black PARK BRAKE wire from the throttle control box and connect the assembly to the park brake.
- For manual transmissions, cut the blue TRANSMISSION PARK SIGNAL wire to about 6 inches, strip the end and crimp it to the blue STANDARD TRANSMISSION ONLY wire at the throttle control box.
- For trucks with automatic transmissions, solder and seal the blue TRANSMISSION PARK SIGNAL wire to the tagged light green wire in the harness on the engine, then replace the plastic covers on the engine.
- Check all wiring to ensure that it will not contact any hot or moving components and will not interfere with the operation of the vehicle. Secure all wiring with nylon ties and supplied loom as required.
- Connect the batteries.
- Temporarily route an 18 gauge test wire from the positive battery terminal into the cab to perform the tests.

3.0 Operational Test

- 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.
- 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 reverse and all forward gears while keeping your foot on the brake. Momentarily activate the throttle as you move the selector into each gear. The engine should only idle up in Park.
- Shift back into Park and shut down the engine.
- Follow the setup instructions before connecting the throttle to the Body Builder wiring that will be used to turn the throttle on with your equipment.
- 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 4 (switched) and Figure 5 (relayed). Multiple speed connections are a duplicate of the single speed method.

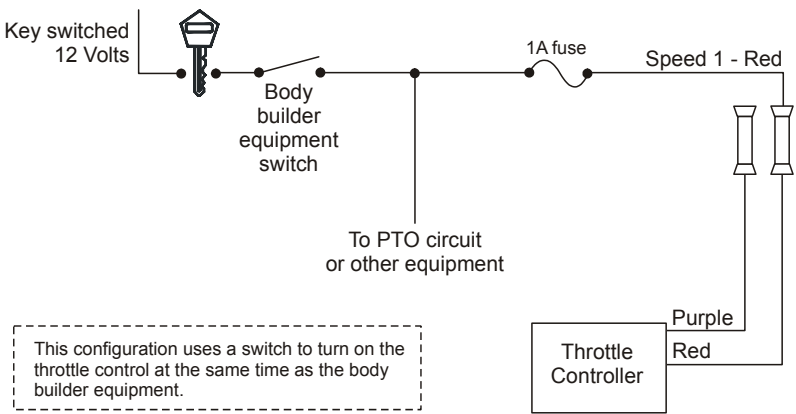


Figure 4

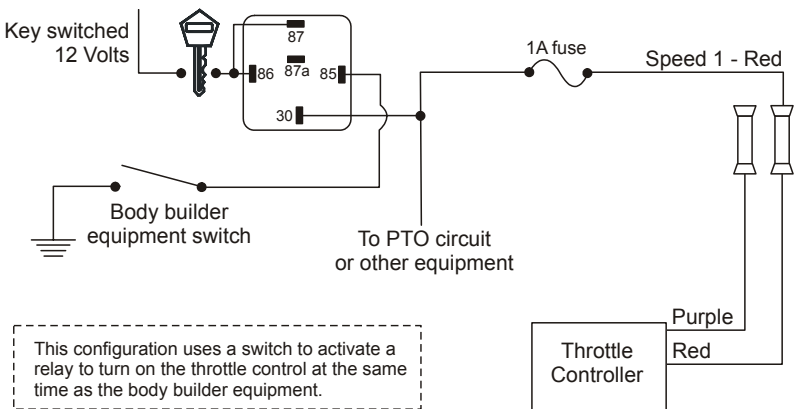


Figure 5

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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.
- 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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