

Installing the *Throttle Commander*

Ford F250 – F550 Super Duty

T500106 2005-2007 6.0L Diesel

T500116 2008-2010 6.4L Diesel

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VMAC – Vehicle Mounted Air Compressors

Toll Free: 1-800-738-8622

Fax: 1-250-740-3201

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Installation Manual for VMAC *Throttle Commander*
Ford F250-F550 Super Duty
T500106 – 2005-2007 6.0L Diesel
T500116 – 2008-2010 6.4L 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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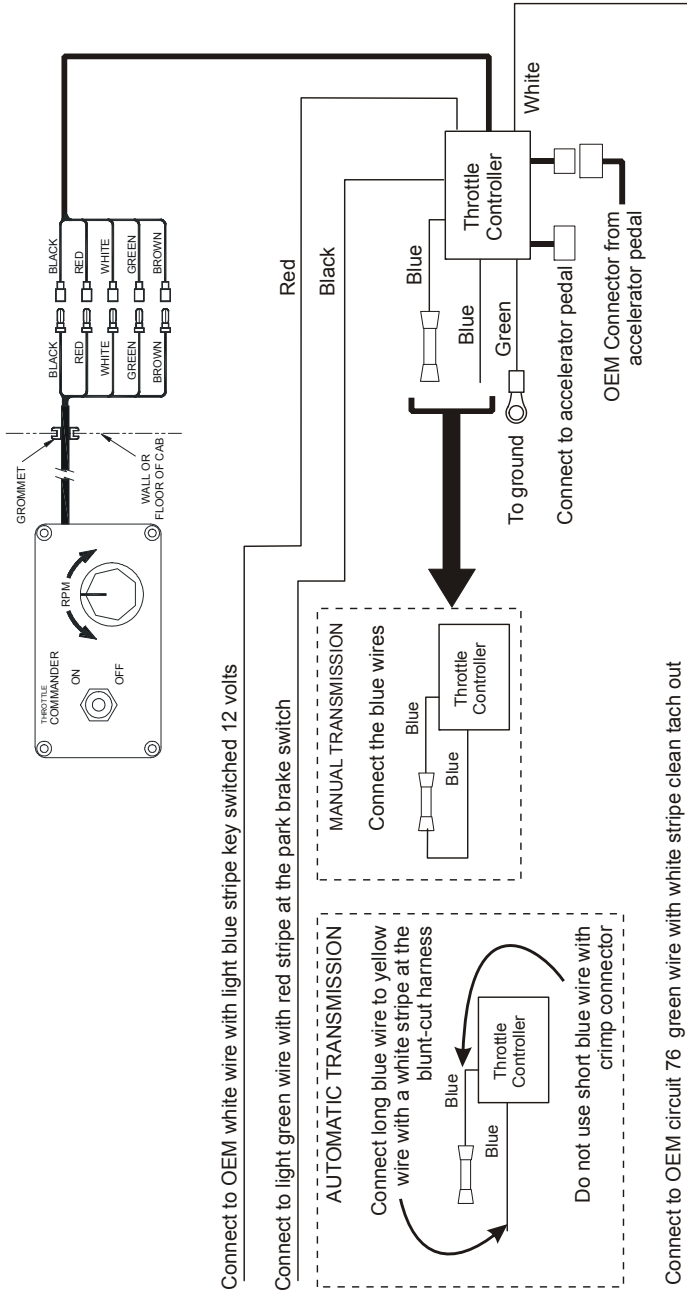
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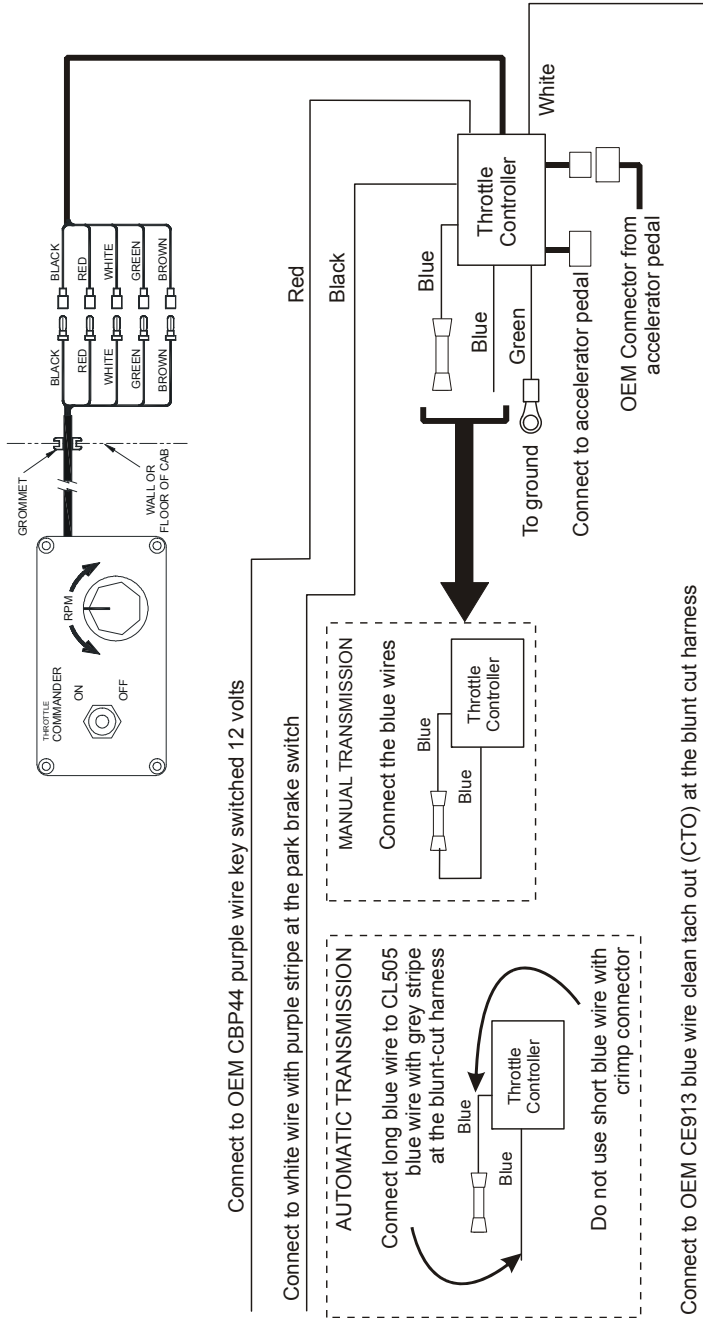


Wiring diagram 2005-2007 T500106

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Wiring diagram 2008-2010 T500116

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1.0 Preparing for Installation

- Disconnect the vehicle batteries.
- Study the wiring diagrams and locate the wires on the components so that you are familiar with the connections.

2.0 Installing the Throttle Control

- Remove the dash panel below the steering column and tie-wrap the throttle control box to the dash support bracket to the right of the steering column, behind the diagnostic connector (Figure 1) with the adjusting screws facing out.

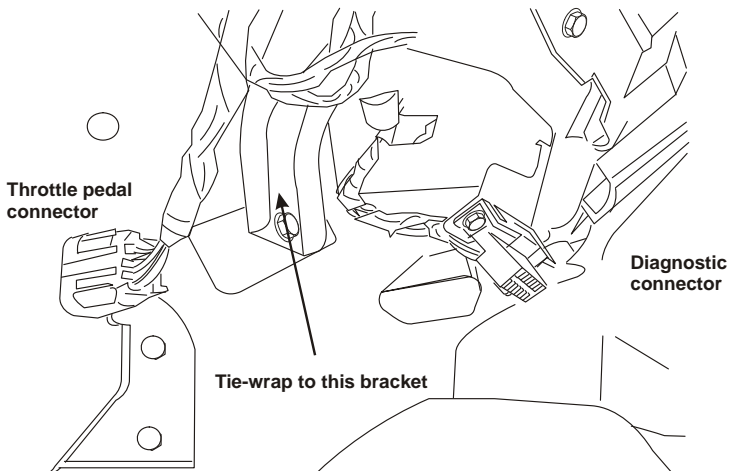


Figure 1

2.1 2005-2007 T500106 Connecting the Wiring

- Unplug the cable(s) from the foot pedal assembly and connect them to the matching connectors from the throttle control box.
- Connect the throttle control box cable(s) to the matching connectors on the foot pedal assembly.
- Connect the red wire to the key-switched 12V OEM white with blue stripe wire under the dash (Ford CCT #294) located near the OEM diagnostic connector (Figure 2).

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- Attach the green wire with the ring connector to the OEM ground above the diagnostic connector (Figure 2).

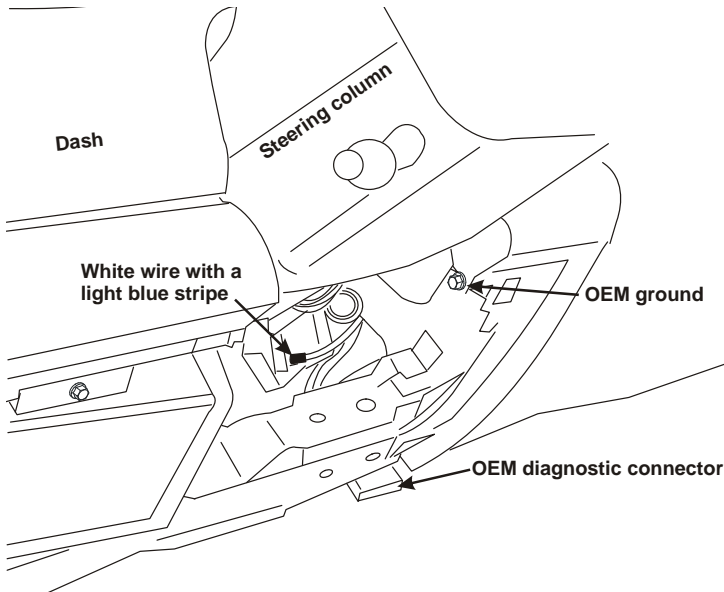


Figure 2

- Solder and seal the white wire to the OEM light green with white stripe Clean Tach Out (CTO - Ford CCT #76) wire located in the bundle of blunt cut wires near the park brake (Figure 3).

2.1.1 Automatic Transmission

- Solder and seal the long blue wire from the throttle control box to the yellow wire with a white stripe (PARK - Ford CCT 1857) in the bundle of blunt cut wires beside the park brake under the dash. Do not use the short blue wire with the butt connector.

2.1.2 Manual transmission

- Cut the long blue wire to about six inches, strip the end and crimp it to the short blue wire with the butt connector.
- Solder and seal the black wire from the throttle control box to the green with red stripe wire at the park brake (Figure 4).

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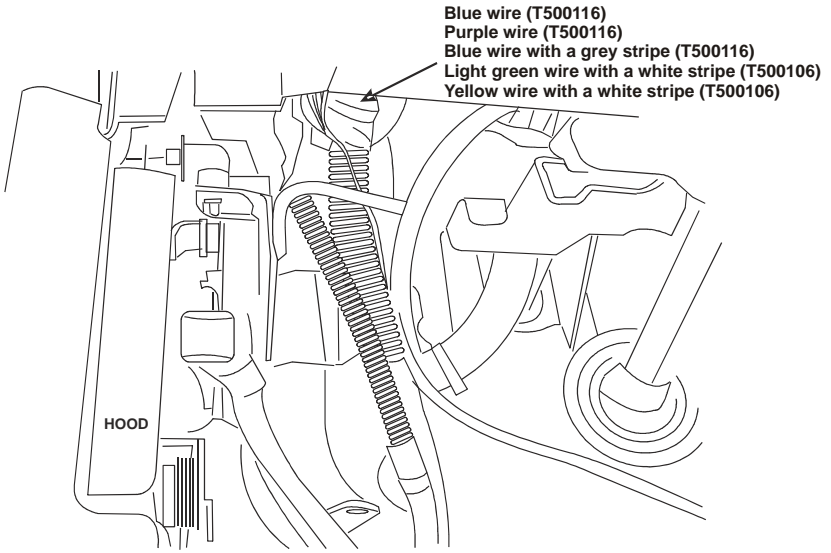


Figure 3

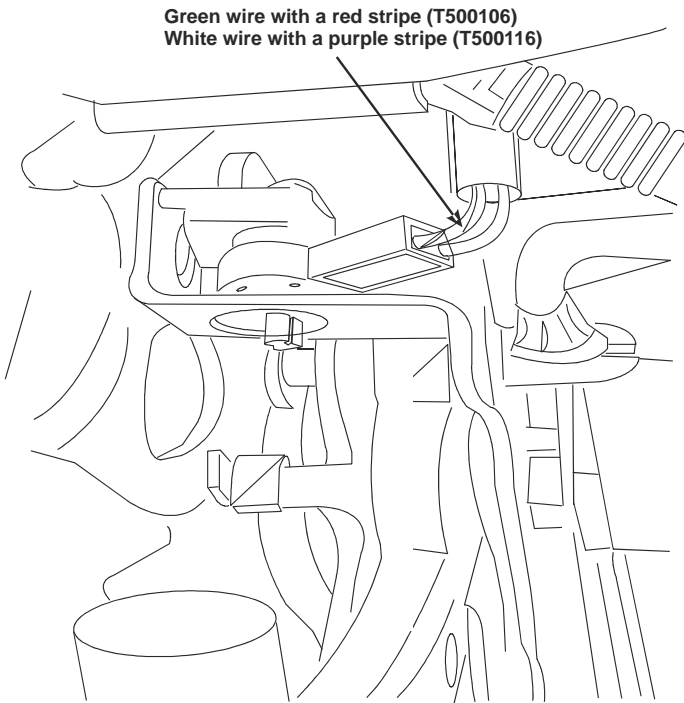


Figure 4

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2.2 2008-2010 T500116 Connecting the wiring

- Unplug the cables from the foot pedal assembly and connect them to the matching connectors from the throttle control box.
- Connect the throttle control box cables to the matching connectors from the foot pedal assembly.
- Connect the red wire to the key switched 12V OEM purple wire (Ford CCT CBP44) located in the bundle of blunt cut wires near the park brake (Figure 3).
- Attach the green wire with the ring connector to the OEM ground.
- Solder and seal the white wire to the OEM blue wire (Clean Tach Out CTO-Ford CCT CE913) located in the bundle of blunt cut wires near the park brake (Figure 3).
- Solder and seal the black wire from the throttle control box to the white wire with purple stripe at the park brake (figure4)

2.2.1 Automatic transmission

- Solder and seal the long blue wire from the throttle control box to the blue wire with grey stripe (PARK - Ford CCT CL505) in the bundle of blunt cut wires beside the park brake under the dash. Do not use the short blue wire with the butt connector.

2.2.2 Manual transmission

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

2.3 Remote Pendant Connections

- Route the remote pendant cable into the cab through a suitable opening.
- Connect the five colored wires on the pendant cable to the matching colored wires in the heavy cable from the throttle control box. Make sure that the bullet connectors are pushed together securely to make a good connection.

3.0 Completing and Testing the Installation

- 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 the supplied loom as required.
- Connect the batteries. Place the vehicle in a safe operating position and block the wheels. Ensure that there are no people near the vehicle before beginning the test.
- Place the automatic transmission in PARK or manual transmission in neutral and engage the park brake. Start the vehicle engine and wait for the idle to stabilize and for engine temperature to reach normal operating range.
- Make sure that the “RPM” knob is turned down counter-clockwise, turn on the switch on the remote pendant, then slowly turn up the “RPM” knob clockwise. The engine should begin to idle up.
- Turn the knob fully counter-clockwise. The engine should idle down.
- Firmly apply the service brake pedal and hold it down.
- Release the park brake and activate as before. The engine should not idle up.
- Apply the park brake and shift the automatic transmission into reverse with your foot on the service brake pedal and activate as before. The engine should not idle up. Repeat the test in all forward gears.
- Shift the transmission into Park and shut down the engine.



If the vehicle fails the test, check the wiring connections. If you require additional assistance, contact your local VMAC dealer or call VMAC at 1-800-738-8622 or 250-740-3200.

4.0 Operating the Pendant Controls

4.1 Turning the Throttle On

- Make sure that the “RPM” knob is turned down counter-clockwise before turning the throttle on to ensure the engine doesn’t rev past the desired operating speed.
- With the engine running and the truck in “Park” with the park brake on, turn on the switch on the remote pendant.
- Slowly turn up the “RPM” knob clockwise until the engine is at the desired speed.

4.2 Turning the Throttle Off

- Turn the “RPM” knob fully counter-clockwise.
- Turn off the switch on the remote pendant.
- Shut off the engine.

5.0 Troubleshooting

Problem	Possible Causes	Corrective Action
Engine RPM climbs to red line when Throttle Commander is activated	White wire not connected properly	Check connections
	RPM knob turned fully clockwise	Turn RPM knob counterclockwise
Engine stays at base idle (600 RPM) and accelerator pedal continues to have authority over engine speed	Park brake not on	Set park brake
	Black wire not connected properly, if automatic transmission, DDC not connected properly	With park brake on, check electrical continuity from black wire to chassis ground. If no continuity, check connection of black wire to park brake switch. If connection is good but still no continuity to ground, replace park brake switch
Engine RPM will not adjust below 1200 RPM	Proper operation of Throttle Commander being disrupted by PTO circuit	Disconnect all wires running to Ford CCT 322 (blue/yellow wire near data link connector at lower center of dash)
Engine stays at pre-set RPM even with Throttle Commander switched off	Proper operation of Throttle Commander being overridden by PTO circuit	Disconnect all wires running to Ford CCT 322 (blue/yellow wire near data link connector at lower center of dash)
"Check Engine" light comes on	Bad plug connection at the Throttle Commander or foot pedal assembly	Make sure all plugs are properly engaged and fully seated and latched



If you are unable to effectively troubleshoot operational problems, call your local VMAC dealer for technical support. To locate your nearest dealer call: 1-800-738-8622 or 250-740-3200.

6.0 Ordering Parts and Warranty

To order parts, contact your nearest VMAC dealer. Please quote the VMAC part number, the description and the quantity.

The VMAC 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.

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