



# Installation Manual

For the



Drive Disable Circuit (DDC)  
Part #3550694



1333 KIPP ROAD NANAIMO B.C. V9X 1R3  
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**THE BENCHMARK IN INNOVATION**

**Installation Manual – Document Number: 1900823**

Drive Disable Circuit Part #3550694

**Application:**

Trucks with automatic transmissions

**Revision History:**

Version	Revision Details	Revised by/date	Approved by/date	Implemented
00	Original document creation	IB Feb 03/04	SM Feb 5/04	Feb 5/04
01	2004.5 OEM running change	IB May 31, 2004	SM May 31, 2004	May 31, 2004

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## General Information

### Ordering Parts

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

### Warranty

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.

## 1.0 Installation



**IF THE VEHICLE HAS AN AUTOMATIC TRANSMISSION, A DRIVE DISABLE CIRCUIT (DDC) MUST BE CONNECTED SO THAT THE COMPRESSOR WILL NOT FUNCTION UNLESS THE TRANSMISSION IS IN PARK OR NEUTRAL AND THE PARK BRAKE IS FULLY ENGAGED.**

**FAILURE TO PROPERLY INSTALL AND VERIFY THE FUNCTION OF THIS SAFETY FEATURE CAN RESULT IN INJURY OR DEATH.**

**BE SURE TO PERFORM THE SAFETY TEST BEFORE PROCEEDING.**

### 1.1 Installation 2004.5 Model Year

1. Locate the ECM on the passenger side of the engine compartment (Figure 1).



**Figure 1 - 4500-5500 Chassis ECM**

**VMAC – Vehicle Mounted Air Compressors**

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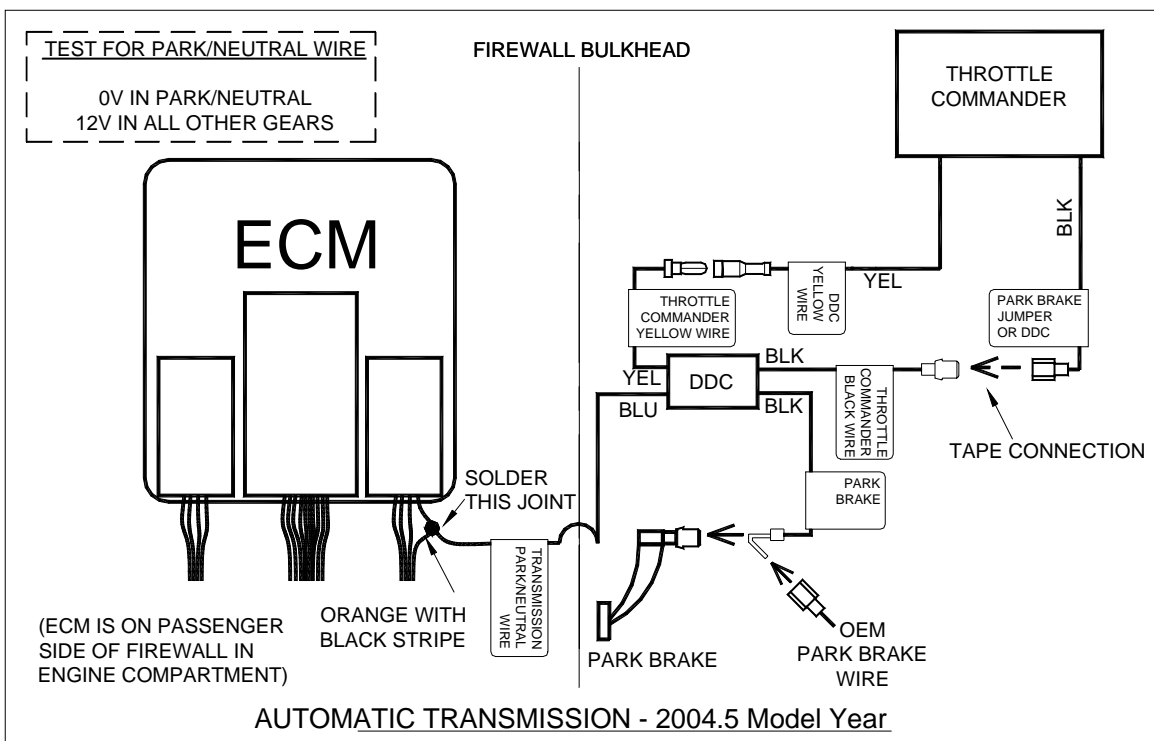
Fax: 1-250-740-3201

2. Locate the connector closest to the engine on the ECM (There are 3). Peel back the tape on the wire bundle for this connector.
3. Locate the wire that is orange with a black stripe.



**Do not connect to the solid orange wire.**

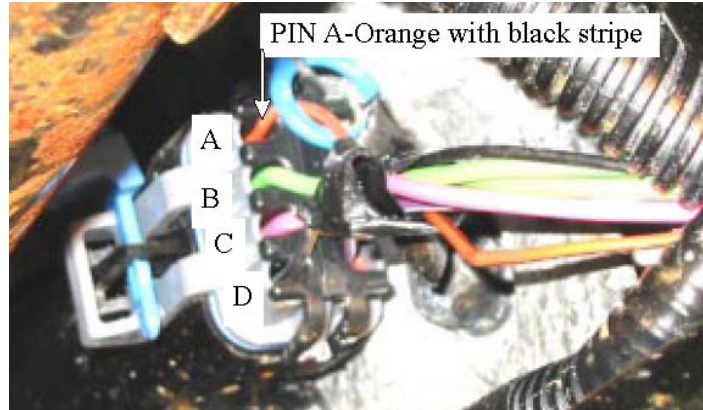
4. Probe the wire and check for 0V in Park and Neutral and 12V in all gears.
5. Once you have confirmed that you have the correct wire, connect the blue DDC wire to this wire (Figure 2). Solder and seal the connection.



**Figure 2**

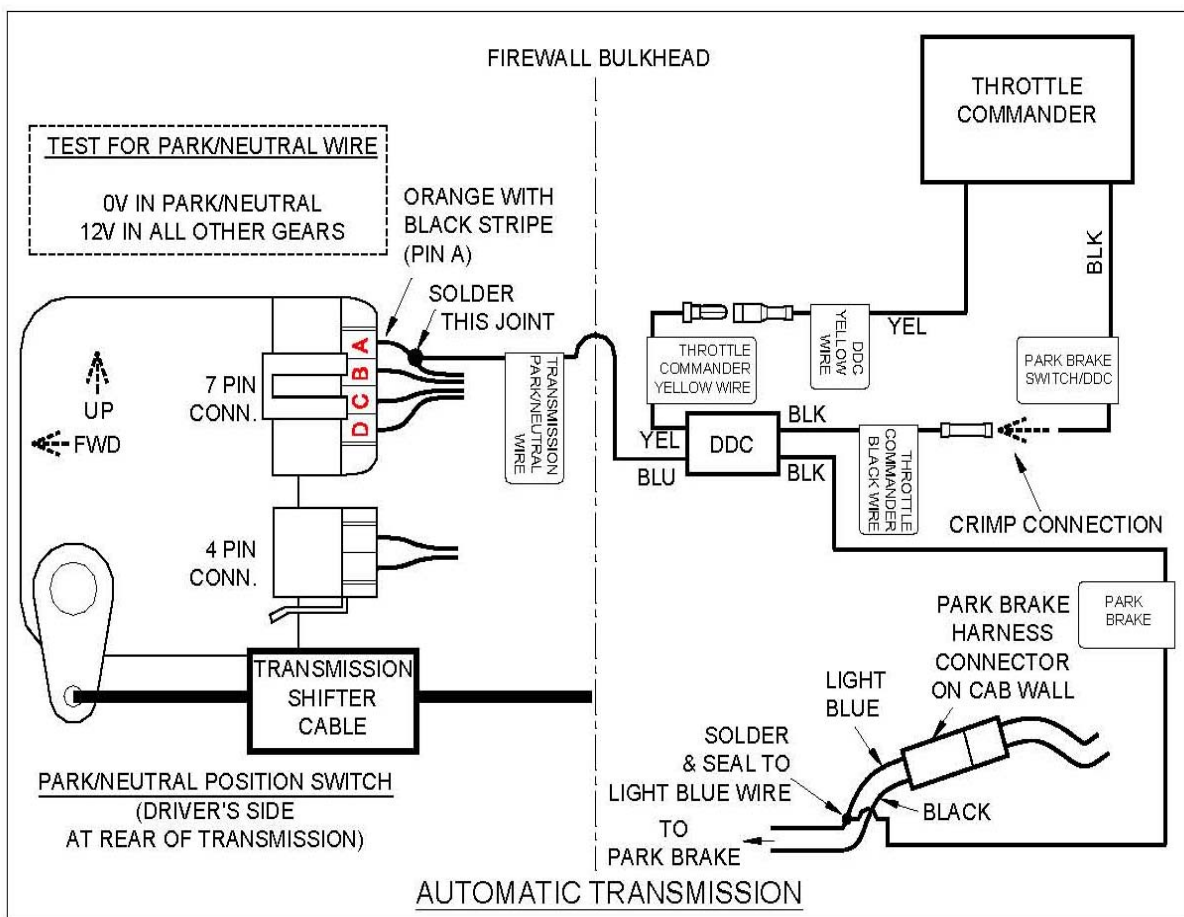
## 1.2 Installation 2003-2004 Model Years

1. Locate the Park/Neutral Position Switch on the driver's side of the transmission near the rear. The top connector has seven pins labeled A to G (Figure 3).
2. Locate the orange/black wire on pin A of the top connector on the transmission.
3. Pull back the loom to access the wire away from the connector.



**Figure 3**

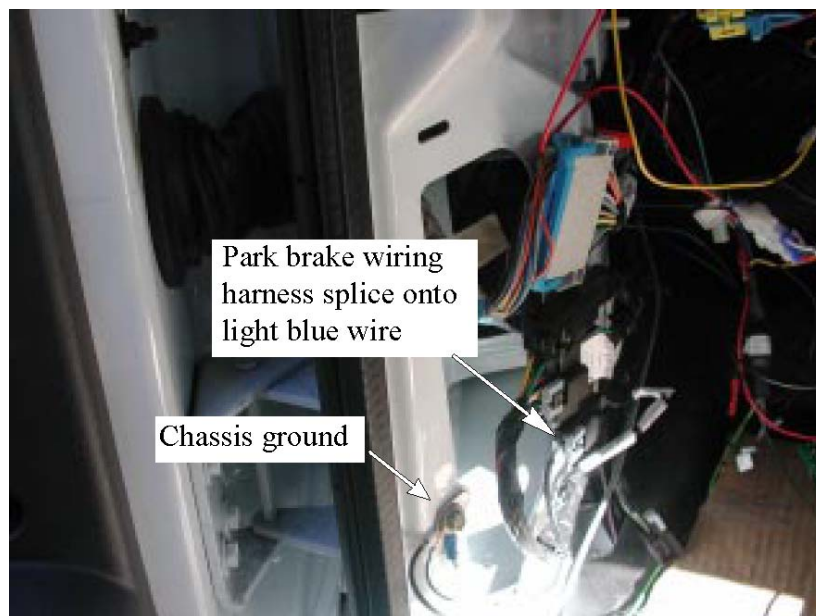
4. Connect the blue “Transmission Park/Neutral” wire from the DDC to the orange with black stripe wire at pin A (Figure 4). Solder and seal this connection or, if this is not possible, use a T-tap quick connector.



**Figure 4**

### 1.3 All Model Years

1. Connect the black “Park Brake Switch/DDC” wire on the throttle to the black “Throttle Black Wire” on the DDC.
2. Locate the park brake connector on the drive side cab wall by the chassis ground.
3. Splice the black “Park Brake” wire from the DDC to the light blue wire at the park brake (Figure 5).
4. Connect the “DDC yellow wire” on the throttle to the “throttle yellow wire” on the DDC.
5. Cover the blue and white wires with 1/4 inch plastic loom from the firewall to the ECM and transmission. Use nylon ties to keep the wires from contacting moving parts and hot areas.



**Figure 5**

## 2.0 Testing the system

1. Place the vehicle in a safe operating position and block the wheels. Ensure that there are no people around the vehicle before beginning the test.
2. Sit in the driver's position with the automatic transmission in Park and the park brake fully engaged.
3. Start the vehicle engine and wait for the idle to stabilize. Engine temperature should be in the normal operating range.
4. Momentarily activate the throttle by applying 12V to the speed 1 wire and turning it off quickly. The engine should start to idle up.
5. Firmly apply the service brake pedal and hold it down.
6. Release the park brake and momentarily activate the throttle as before. The engine should not idle up.
7. Apply the park brake and shift the automatic transmission into gear with your foot on the service brake pedal. Momentarily activate the throttle as before. The engine should not idle up.
8. Shift the transmission back into Park and shut down the engine.



**If the vehicle fails the test, check the wiring to make sure that all the connections are correct and secure. If you require additional assistance, contact your local VMAC dealer.**

**To locate your nearest dealer call 1-800-738-8622 or 250-740-3200.**





# Warranty Registration

Complete this form at the time of installation. Warranty will be void if this form is not received by VMAC within 30 days by mail or fax.

## Installer Information

Company Name \_\_\_\_\_  
Installer Name \_\_\_\_\_  
City \_\_\_\_\_ State/Prov \_\_\_\_\_  
Zip/Postal Code \_\_\_\_\_ Telephone \_\_\_\_\_  
Installation Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Day Month Year

## Owner Information

Owner Name \_\_\_\_\_  
Address \_\_\_\_\_  
City: \_\_\_\_\_ State/Prov \_\_\_\_\_  
Zip/Postal Code \_\_\_\_\_ Telephone \_\_\_\_\_  
Purchase Date \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
Day Month Year

Purchased From \_\_\_\_\_

## Application

Vehicle Make \_\_\_\_\_ Year \_\_\_\_\_ Engine type/size \_\_\_\_\_  
Vehicle Identification Number (VIN#): \_\_\_\_\_

## Product Information

System Identification Number **V** \_\_\_\_\_  
Compressor Number **P** \_\_\_\_\_  
Tank Serial Number **9** \_\_\_\_\_  
Throttle Control Serial Number **3** \_\_\_\_\_  
Throttle Commander Serial Number **T5** \_\_\_\_\_  
Clutch Pump Serial Number **D** \_\_\_\_\_



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