



# ***BD Ford PressureLoc***

## **Installation Manual**

*For electronically controlled E4OD and 4R100 automatic transmissions*

**Part#: 1060380**

**\*\* READ ALL INSTRUCTIONS BEFORE INSTALLATION \*\***

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## Tools Required

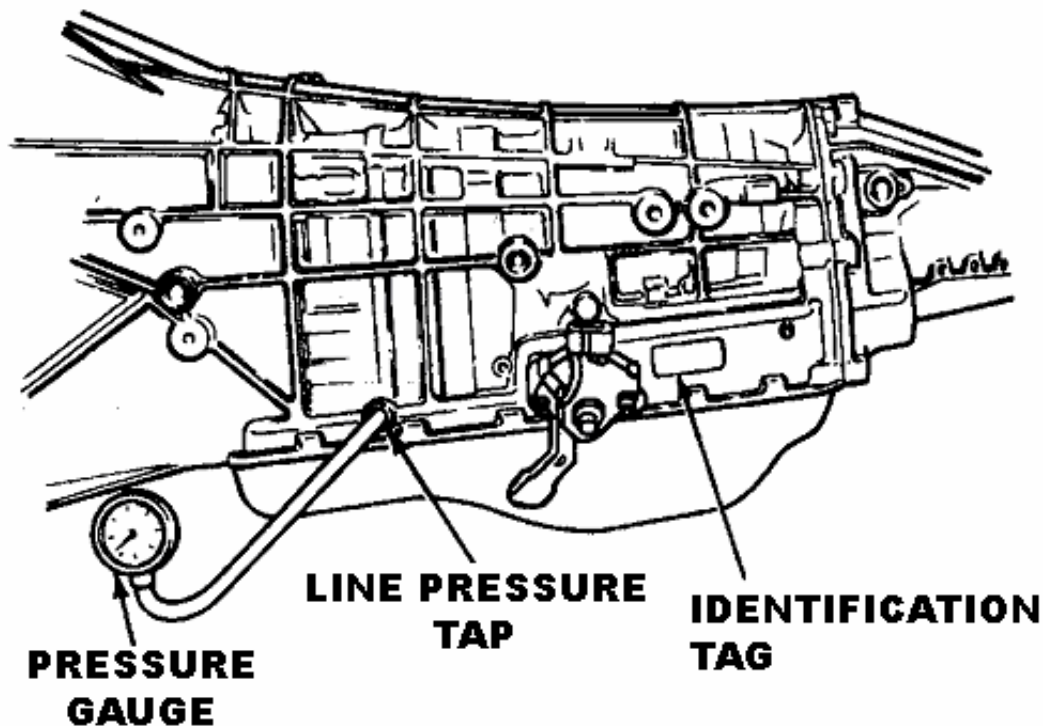
- Pressure Gauge (0-250psi)
- Combination wrench set
- Wire strippers & crimpers
- Phillips head screwdriver

## Pre-Installation

With engine turned off and park brake set, locate the pressure test port on driver side of transmission and remove the plug. Install the test gauge into this port.

Road test vehicle and confirm the transmission is in good working condition and service if possible to determine oil condition.

Check and record transmission line pressures with vehicle at idle.



**\*\*NOTE\*\* THE PRESSURES MUST BE WITHIN SPECIFICATIONS!**

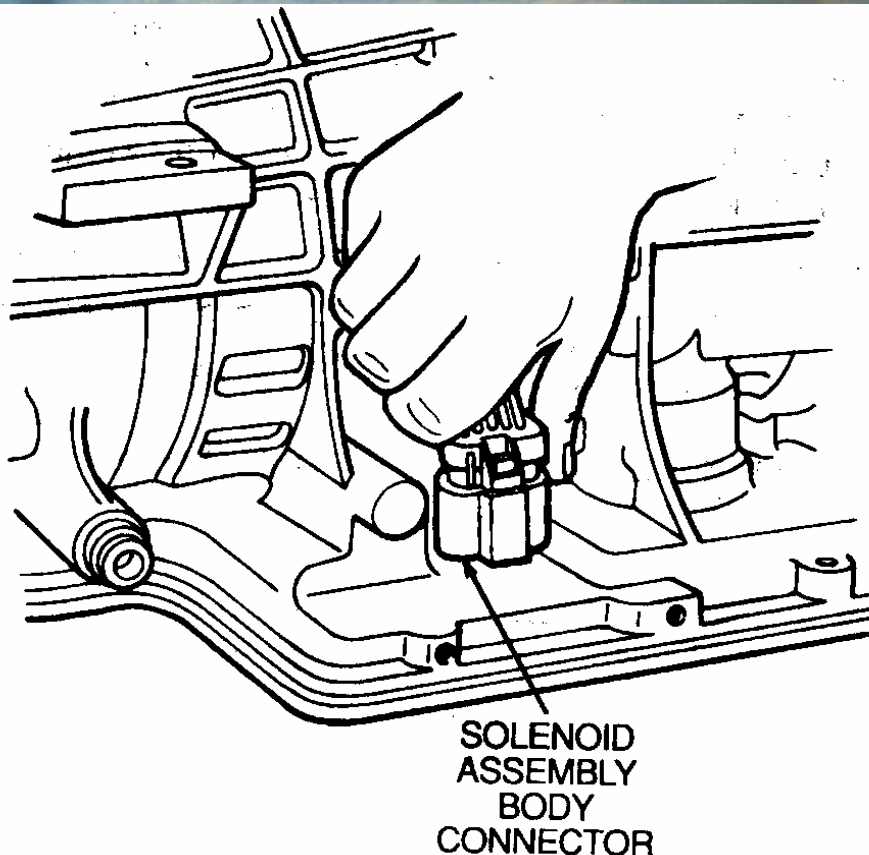
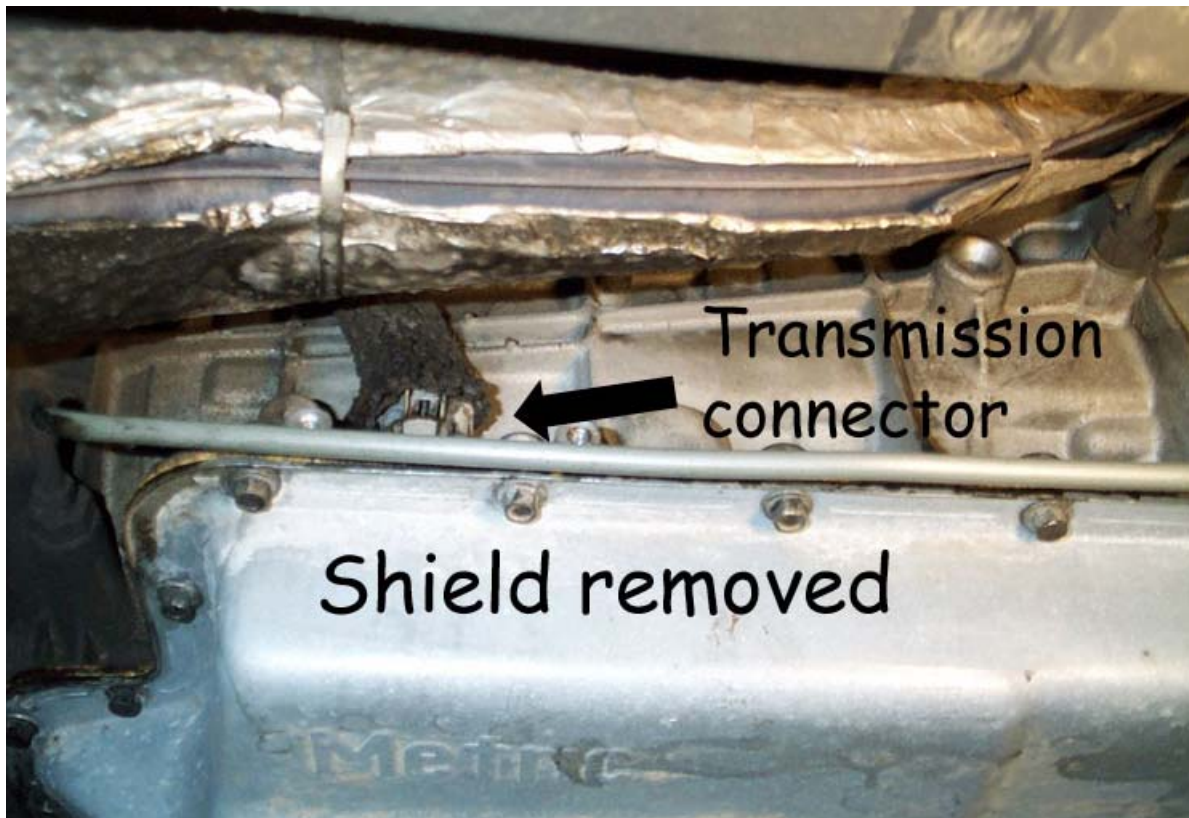
GEAR SELECTION	STOCK LINE PRESSURE
Park / Neutral	50-65 psi
Drive	50-65 psi
Reverse	85-110 psi

**CAUTION:** If pressures are NOT within specifications, the transmission must be repaired and/or adjusted BEFORE the installation of the BD PressureLoc System.

## Installation

**DISCONNECT THE NEGATIVE TERMINAL FROM BOTH BATTERIES OR DAMAGE TO COMPUTER CONTROLLER MAY RESULT.**

Locate the transmission wire connector at the rear of the passenger side of the transmission. It will be covered by a heat shield that should be removed for easy access to the connector. **Remove dirt and oil from around the connector.**







Remove the wiring connector plug from the transmission valve body controller.

Insert the wire harness connector into the receiving connector of the BD PressureLoc control harness and ensure there is positive connection.

Insert the mating end of the connector from the BD PressureLoc harness into the connector of the valve body controller and ensure positive connection.



Run the PressureLoc wiring harness along the OEM wiring harness that runs over the transmission and along the rear cross-member and secure with it tie straps.

Feed the wiring harness up through an existing hole in the firewall or floorboard and into the cab ending up under the dash. If the hole has no rubber grommet, one should be installed to protect the wiring harness.

Hook the **Red power wire** to a switched 12-volt power source.

Connect the free **Black (ground) wire** to a good ground.

Hook up wiring harness to the PressureLoc control box as per diagram and notes below.

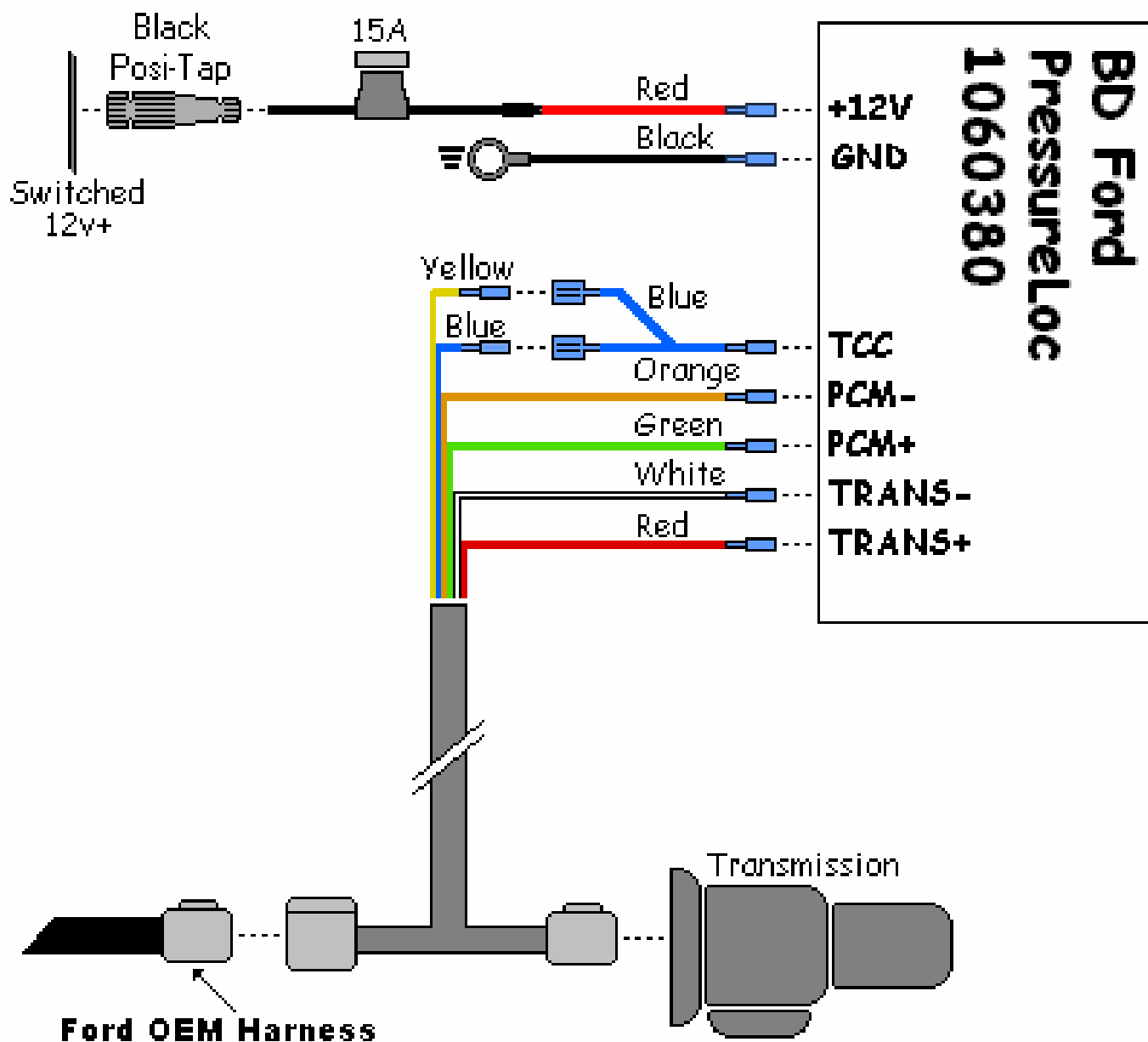
### *Wiring Installation*

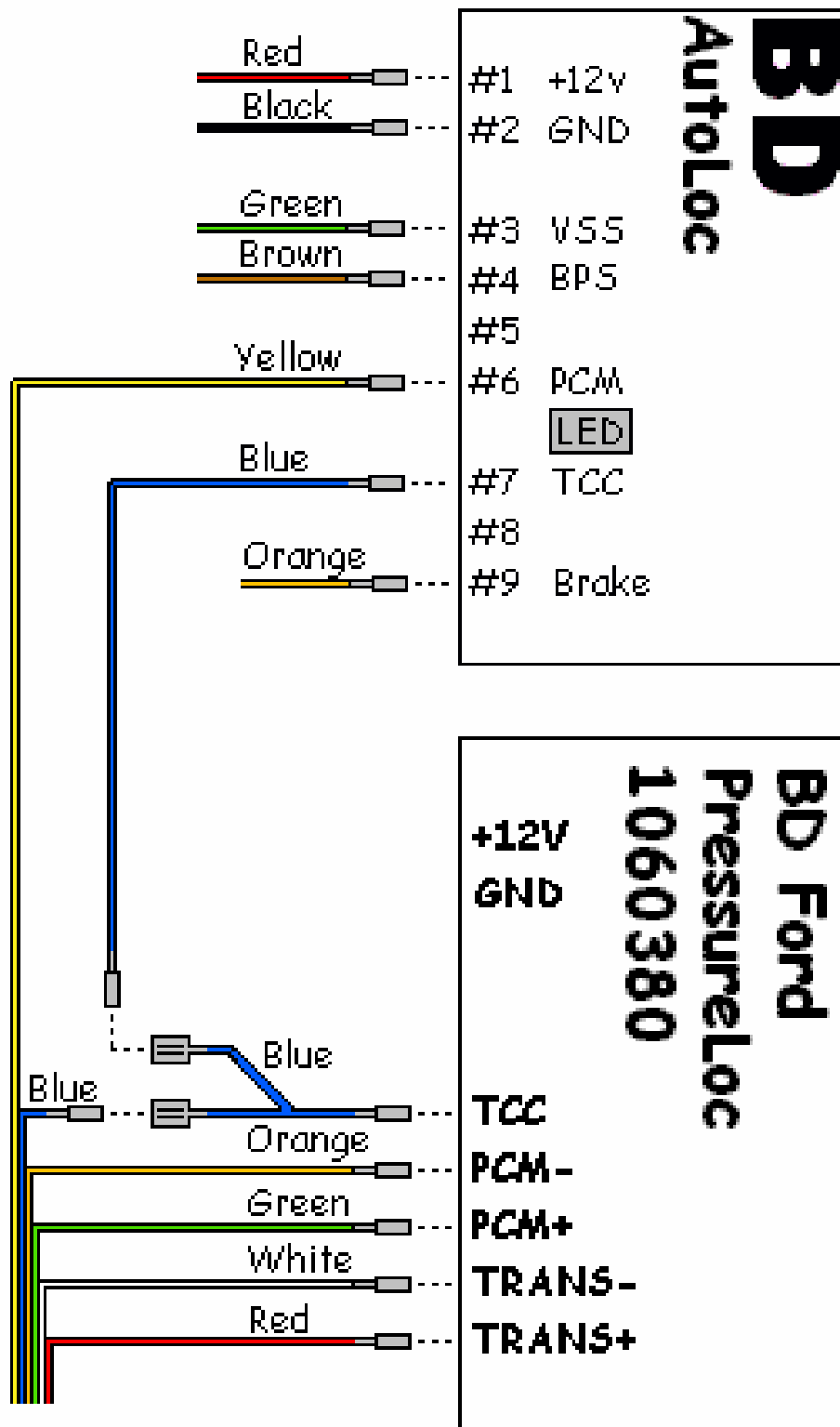
Trim all wires to proper length as required to fit then strip insulation approximately 1/8" from ends for solderless connectors.

WIRE	FUNCTION	INSTRUCTIONS
<b>RED</b>	<b>TRANS +</b>	Crimp female spade connector and connect to module.
<b>WHITE</b>	<b>TRANS -</b>	Crimp female spade connector and connect to module.
<b>GREEN</b>	<b>PCM +</b>	Crimp female spade connector and connect to module.
<b>ORANGE</b>	<b>PCM -</b>	Crimp female spade connector and connect to module.
<b>BLUE</b>	<b>TCC #1</b>	Crimp on a female spade connector, connect to one side of the blue TCC wire y-cable.
<b>YELLOW</b>	<b>TCC #2</b>	Crimp on a female spade connector, connect to the other free spot of the TCC Y-cable.

## Wiring Diagrams

*BD PressureLoc installed as an ADD-ON with a BD AutoLoc*

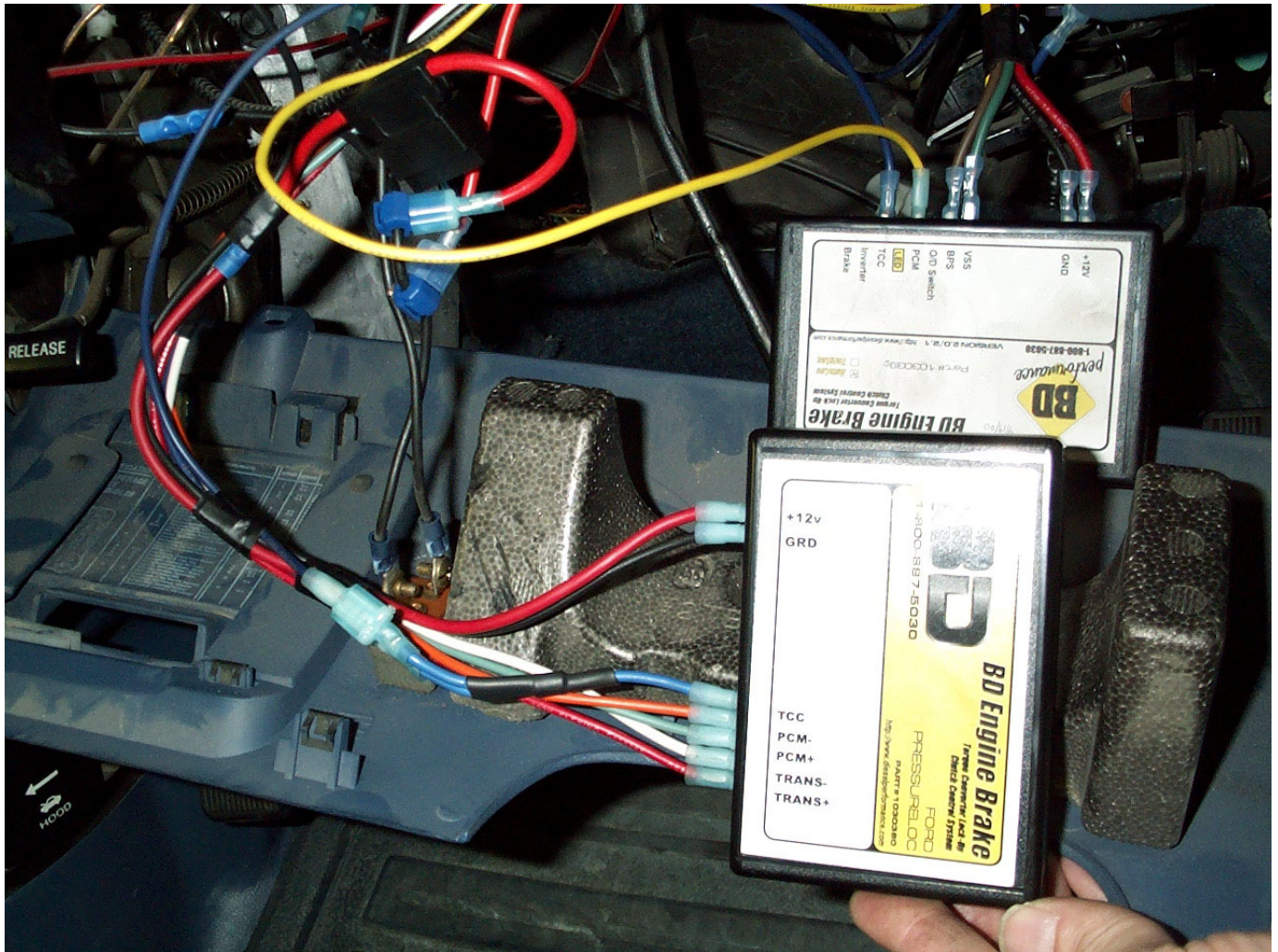


BD Auto/Torq/BrakeLoc installed at the same time

**\*\*NOTE: YELLOW WIRE** – Install a female spade connector and connect to the **AUTOLOC** Control Box **PCM** terminal. See next page for more details.

Connect a jumper wire with female spade connectors on both ends from “TCC terminal” located on the AUTOLOC Control Box to the free end of the Y-cable that is connected to the PRESSURELOC Control Box.





## Road Test

With a pressure gauge attached, road test the vehicle at cruising speed with the torque converter clutch locked up to check and confirm the operation. The pressure should be approximately 135 psi at lockup.

Shut off the engine, remove the pressure gauge and re-install the plug using thread sealant to prevent any leakage.

Secure the control box in a position of your choice and secure all the wires under dash with tie straps.

## Operation

The operation of the BD PressureLoc System for your E4OD/4R100 transmission is completely automatic. The BD PressureLoc is completely invisible to the Ford

transmission Electronic Control Unit (ECU) and does not affect gear shifting or shift patterns.

It operates by sensing the TCC signal from the ECU and pressure will increase only when the lock-up signal is sent from the ECU to the TCC and will automatically return to stock pressures when the lock-up signal is shut off. As your transmission shifts and the TCC locks up, the BD PressureLoc engages to automatically control the TCC line pressure and ensure a positive engagement.

Combine the BD PressureLoc with a BD Engine Brake and a BD AutoLoc to obtain the most effective engine braking system on the market today.

For more information on these and other performance products contact the Sales and Service Department at BD Engine Brake, Inc.

BD ENGINE BRAKE, INC.  
LIMITED WARRANTY STATEMENT

THE INSTALLATION OF THIS PRODUCT INDICATES THAT THE BUYER HAS READ AND UNDERSTANDS THIS AGREEMENT AND ACCEPTS ITS TERMS AND CONDITIONS.

**DISCLAIMER OF LIABILITY**

BD Engine Brake Inc., its successors, distributors, jobbers, and dealers (hereafter "**BD**") shall in no way be responsible for the product's proper use and service. **THE BUYER HEREBY WAIVES ALL LIABILITY CLAIMS.**

**BD** disclaims any warranty and expressly disclaims any liability for personal injury or damages. **BD** also disclaims any liability for incidental or consequential damages including, but not limited to, repair labor, rental vehicles, hotel costs, or any other inconvenience costs by reason of use or sale of any such equipment. The **BUYER** acknowledges and agrees that the disclaimer of any liability for personal injury is a material term for this agreement and the **BUYER** agrees to indemnify **BD** and to hold **BD** harmless from any claim related to the item of any equipment purchased.

This warranty shall not apply to any unit that has been improperly stored or installed, or to misapplication, improper operation conditions, accidents, neglect, or which has been improperly repaired or altered or otherwise mistreated by the **BUYER** or his agent. **BD** also assumes no liability regarding the improper installation or misapplication of its products. It is the installer's responsibility to check for proper installation and if in doubt, contact the manufacturer.

**LIMITATION OF WARRANTY**

BD Engine Brake Inc. (hereafter "**BD**") warrants to the **BUYER** that any parts purchased shall be free from defects in material workmanship. A defect is defined as a condition within the product that would render the product inoperable. **BD** gives Limited Warranty as to description, quality, merchantability, fitness for any product's purpose, productiveness, or any other matter of **BD's** product sold herewith. **BD** shall be in no way responsible for the product's open use and service and the **BUYER** hereby waives all rights other than those expressly written herein. This Warranty shall not be extended or varied except by a written instrument signed by **BD** and the **BUYER**.

**The Warranty is Limited to one (1) year from the date of sale and labor costs incurred by the removal and replacement of the BD product, while performing warranty work, will be covered for 1 (one) year , payable at BD rates, at authorized centers and with prior approval. Until BD has approved the claim, the consumer may be responsible for these costs.**

A Return Authorization (WA) number, obtained in advance from **BD**, must accompany all products returned for warranty consideration. All products must be returned, shipping prepaid, to **BD** and must be accompanied by a dated proof of purchase receipt. All Warranty claims are subject to approval by **BD** and repaired or replaced product will be returned to the customer freight collect. Accepted warranty units, which have been replaced, become the sole property of **BD**.

This warranty is in lieu of all other warranties or guaranties, either expressed or implied, and shall not extend to any consumer or to any person other than the original purchaser residing within the boundaries of the continental U.S. or Canada.

IN THE EVENT THAT THE BUYER DOES NOT AGREE WITH THIS AGREEMENT, THE BUYER MAY PROMPTLY RETURN THIS PRODUCT, IN A NEW AND UNUSED CONDITION, WITH A DATED PROOF OF PURCHASE, TO THE PLACE OF PURCHASE WITHIN THIRTY (30) DAYS FROM DATE OF PURCHASE FOR A FULL REFUND.