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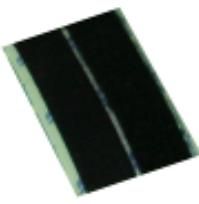
# **Allison Pressure Controller**

## **Transmission Line Pressure Booster Module**

|                |                                  |
|----------------|----------------------------------|
| <b>1031315</b> | <b>2011-2016 Duramax 6.6 LML</b> |
|----------------|----------------------------------|

This kit fits both the 2011-2015.5 and 2015.5-2016 transmission controller types.

## Kit Contents

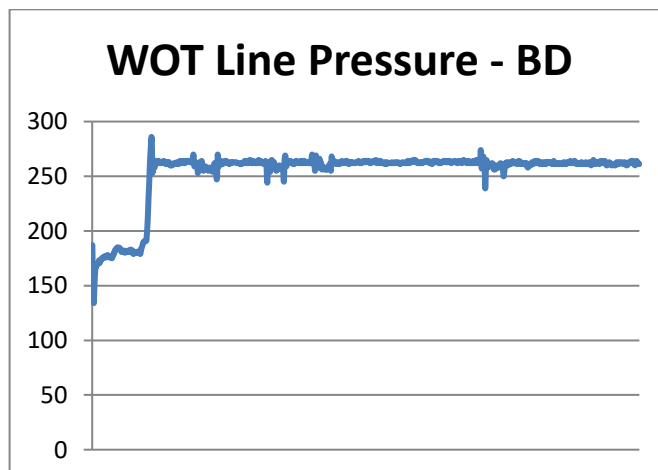
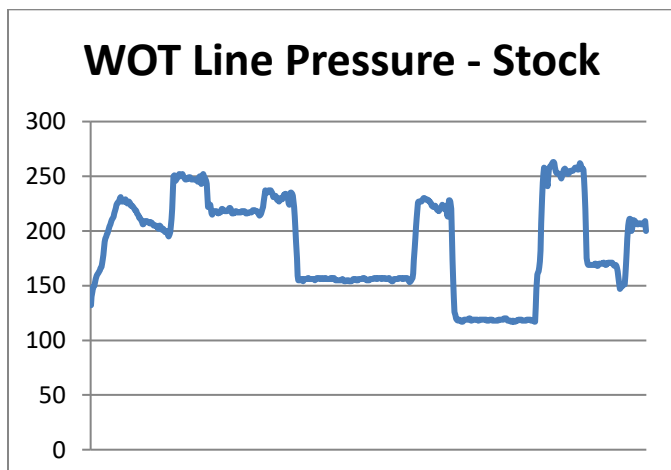
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|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |
| Control Module                                                                    | Wire Harness                                                                      | Velcro                                                                             | Tie Wrap                                                                            |
| Qty: 1                                                                            | Qty: 1                                                                            | Qty: 2 pcs                                                                         | Qty: 6                                                                              |

## Introduction

2011-2016 Allison transmissions utilize variable line pressure that adjusts to different engine load to improve fuel economy. The problem with this is that it drops line pressure after a shift, causing clutch slippage and failure in higher powered trucks. The BD pressure controller module boosts line pressure up to 275psi when the engine is over 15psi boost and runs stock pressure under normal conditions to prevent harsh shifting.

The kit is fully plug-and-play. It plugs into factory connectors and requires no special setup.

At wide open throttle, the stock strategy raises line pressure only for shifts, dropping line pressure to different levels for each gear. First – 200psi, Second 220psi, Third 160psi, **Fourth – 130psi**, Fifth – 175psi, Sixth – 180psi. The BD pressure box keeps line pressure at 250+psi when you are at full throttle to protect your transmission.



BD Engine Brake Inc.

Plant Address: 33541 MacLure Rd. Abbotsford, BC, Canada V2S 7W2

U.S. Shipping Address: 88-446 Harrison St, Sumas, WA 98295 U.S. Mailing Address: P.O. Box 231, Sumas, WA 98295

Phone: 604-853-6096 | Fax: 604-853-8749 | Internet: [www.bd-power.com](http://www.bd-power.com)

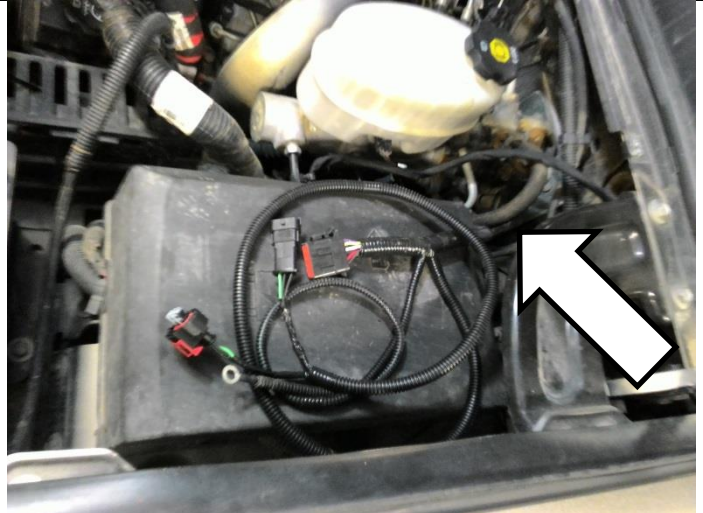
## Tools Required for Installation

- 10mm wrench or ratchet
- Side cutters
- Long needle nose or Allison transmission connector tool.

## Installation

Open the hood, fish the wire harness supplied in this kit down the firewall behind the fuse box to below the vehicle to be connected to the transmission.

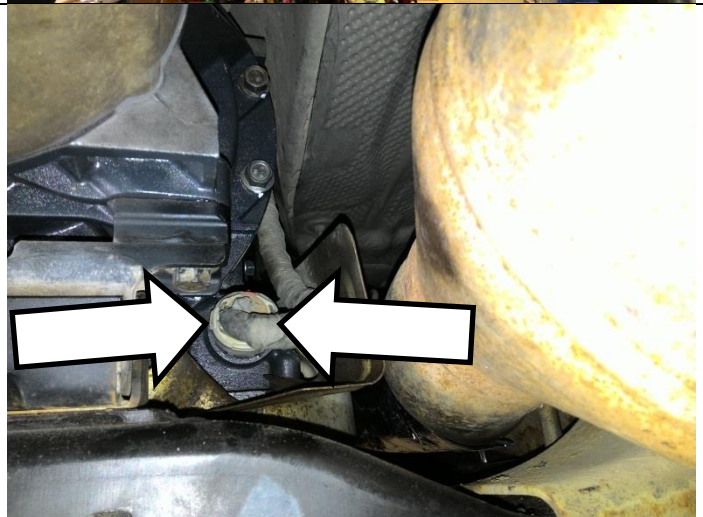
The transmission portion of the harness is the round 20 pin plugs. Leave the remainder in the engine bay as shown.



Feed the 20 pin round connector of the BD harness up over the transmission and down the back side by the main transmission connector.



Disconnect the transmission 20 way round electrical connector by squeezing on both sides and wiggling it off. You may either use the special Allison tool for this, long needlenose pliers or remove the heat shield to get your fingers on the connector.

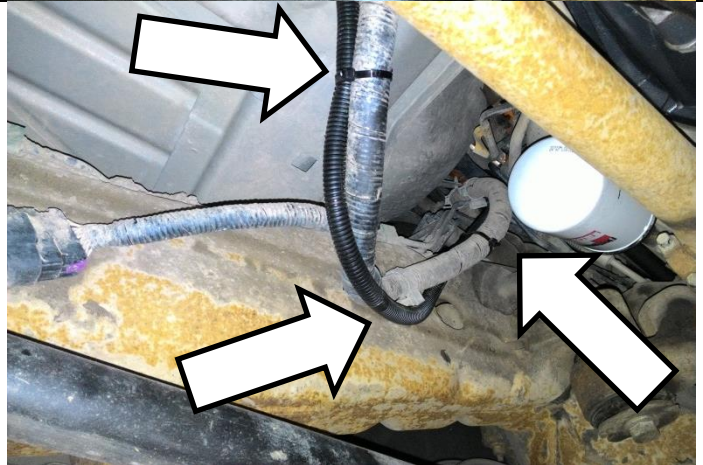




Connect the BD harness inline and carefully zip tie the harnesses so that they stay away from the exhaust pipe.



Zip tie the new harness to the existing vehicle harnesses, out of the way of the front drive shaft and other moving parts on its route to the engine bay.



Back up in the engine bay; attach the ground terminal to the body. This is the single black wire with ring terminal. The suggested ground location is the large stud on the firewall. Use a 10mm wrench to remove and reinstall the nut over the ring terminal.

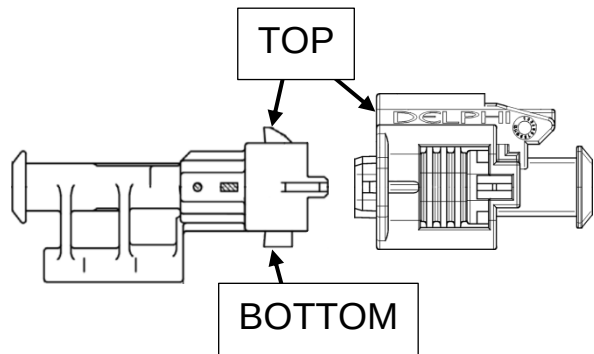


Locate the engine MAP sensor and plug the BD harness inline. Zip tie the wiring to keep it away from moving or hot parts.

**NOTE** It may be possible to connect this plug upside-down. Refer to the pictures below for correct orientation.



## LML Map Plug Orientation



Connect the module to the gray plug from the transmission/engine wiring harness.

The module may now be zip tied to existing wiring at the firewall or mounted to the fuse box with Velcro.



To check operation of the pressure controller, attach a mechanical pressure gauge to the Allison transmission test port. Whenever the truck is over 15 psi of boost the line pressure should go to maximum (250-275psi).



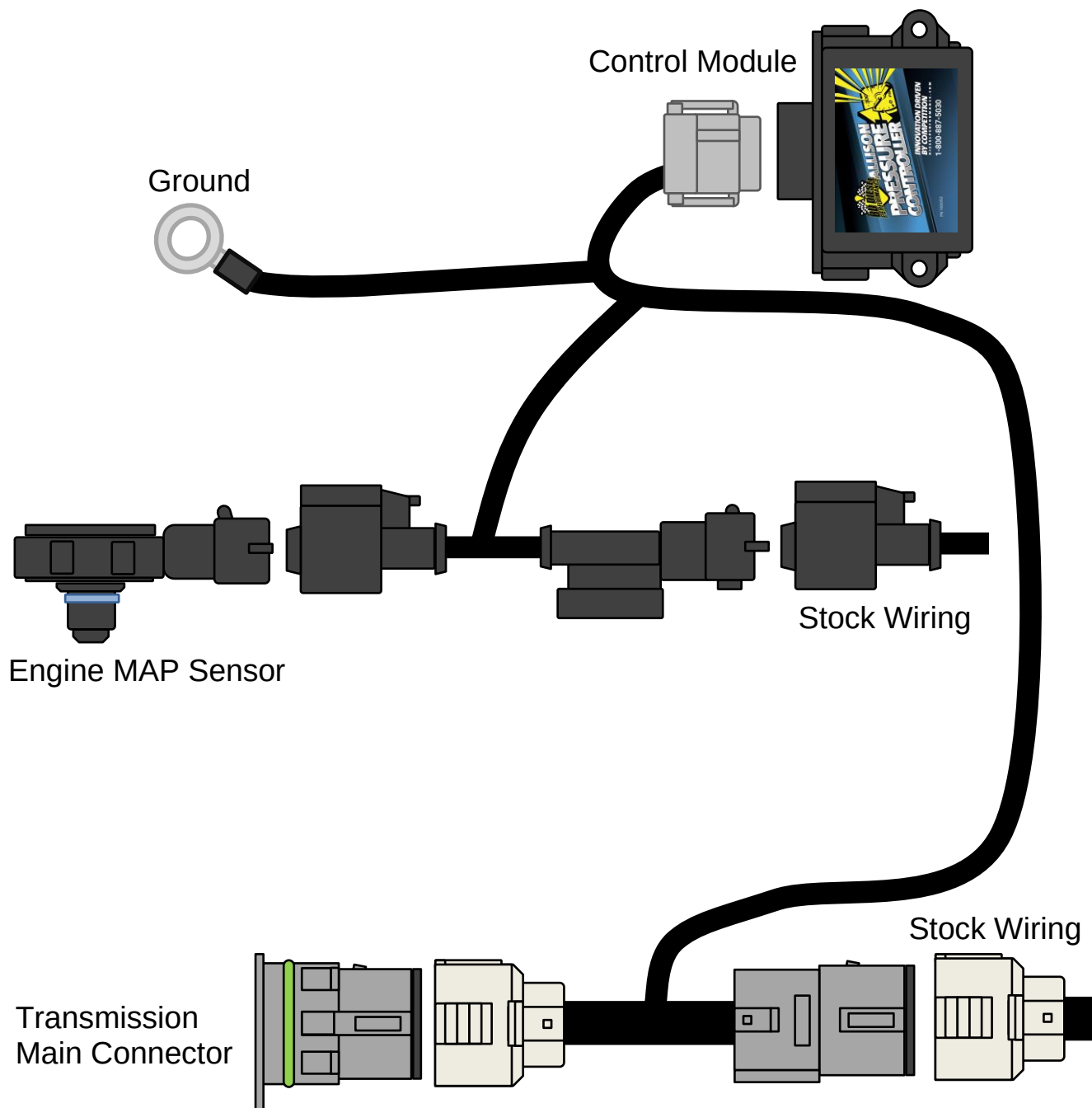
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## Wiring Diagram



### Pressure Indicator LED

An indicator LED (not supplied) can also be added to show when line pressure boosting is active. This will light up whenever the PCS solenoid is being controlled.



#### Gray Plug

**10** – 12V for Pressure Light

**11** – Ground for Pressure Light