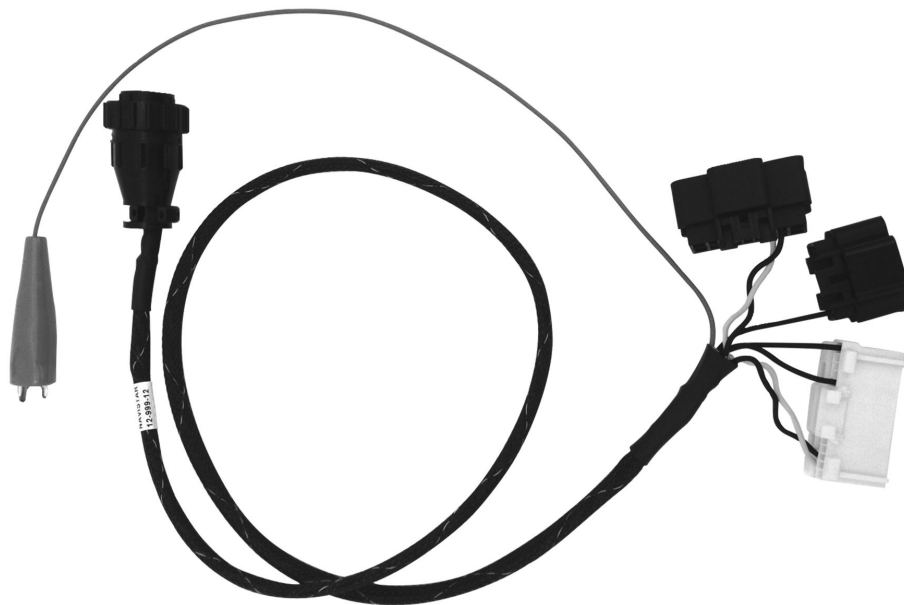


## Tool Instruction BCM Programming Harness

4328530R1

Tool Number: 12-999-12



0000421985

Figure 1. BCM Programming Harness

### Purpose

The Body Control Module (BCM) Programming Harness is used to reflash / reprogram the Body Controllers.

### Application(s)

Vehicles with 250K / 500K Baud BCMs

Additional Engine / Vehicle Applications May Apply



**GOVERNMENT REGULATION: Engine fluids (oil, fuel, and coolant) may be a hazard to human health and the environment. Handle all fluids and other contaminated materials (such as filters or rags) in accordance with applicable regulations. Recycle or dispose of engine fluids, filters, and other contaminated materials according to applicable regulations.**

## Application(s) (cont.)

**⚠ WARNING:** To prevent personal injury and / or death, read all safety instructions in the “Safety Information” section of the *Engine Service Manual* or *Engine Diagnostic Manual* .

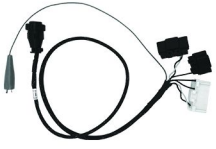

**⚠ WARNING:** To prevent property damage, personal injury, and / or death, park vehicle on hard flat surface, turn the engine off, set the parking brake, and install wheel chocks to prevent the vehicle from moving in either direction.

**⚠ WARNING:** To prevent personal injury and / or death, always wear safe eye protection when performing vehicle maintenance.

**⚠ WARNING:** To prevent property damage, personal injury, and / or death, inspect tool for wear / damage prior to use. Replace any worn or damaged components as necessary.

## Tool Contents

Table 1

| Image   | Tool Number | Qty | Description             |
|---|-------------|-----|-------------------------|
|  <p>0000421988</p>  | 12-999-12   | 1   | BCM Programming Harness |
|  <p>0000160075</p> | 4328530R1   | 1   | Tool Instruction        |

## Additional Tools Required

When using BCM Programming Harness (12-999-12), the following additional tools are required:

- EZ-Tech® or PC with Diamond Logic® Builder software installed
- Control Module Programming Station (12-801-01-01)
- Interface Cable (Nexiq 124032 or equivalent)

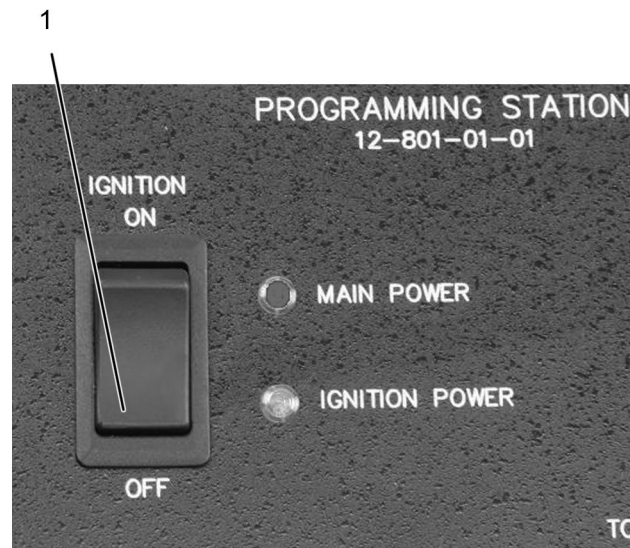
## Instructions

**IMPORTANT:** Please reference International® Service Portal<sup>SM</sup> regarding any possible revisions to this document.

## Instructions (cont.)

**NOTE:** The correct programming rate for the vehicle can be determined from the color of the vehicle's diagnostic port. If the vehicle is not on site, contact the vehicle owner to determine the color of the port.

- If the vehicle has a **GREEN** diagnostic port, it must have the new-style BCM, P/N 4044470C5 (or higher), and must be programmed at 500K.
- If the vehicle has a **BLACK** diagnostic port, it may be equipped with either an old-style BCM or a new-style BCM, but would always be programmed at 250K.

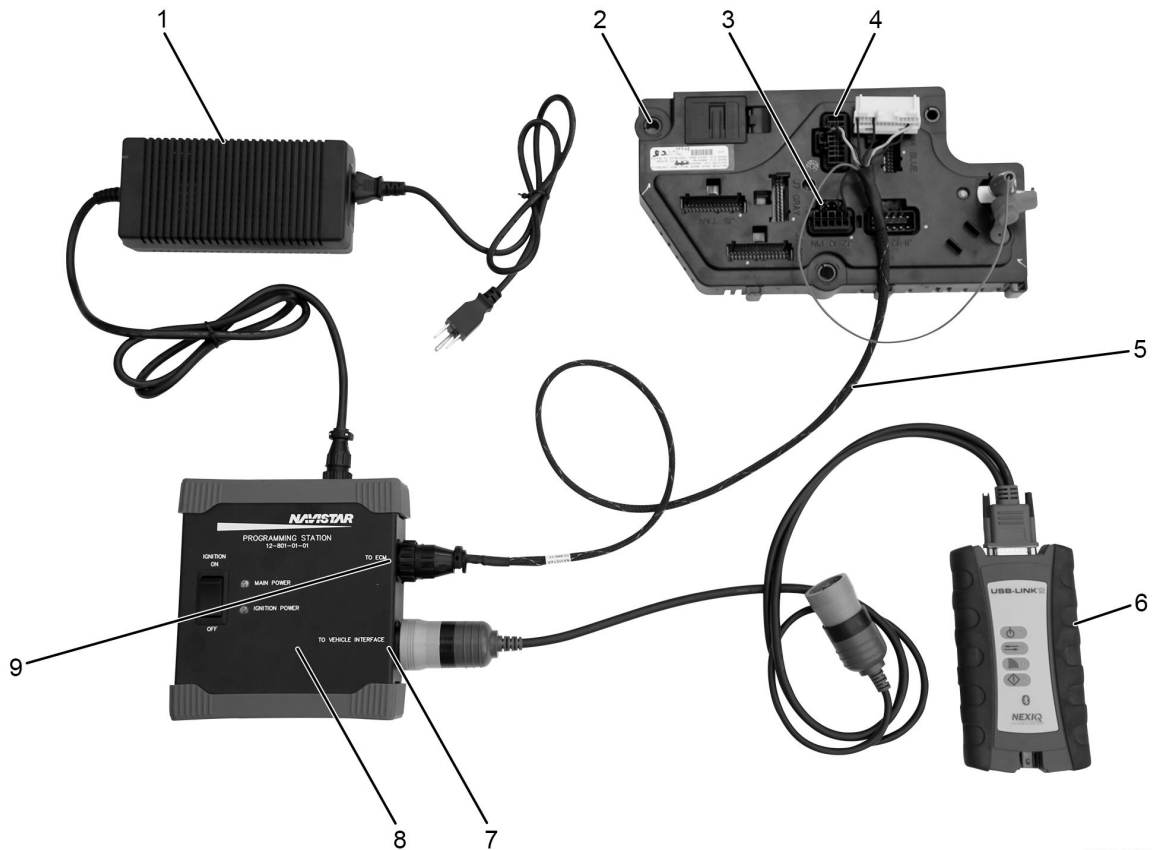


0000047110

**Figure 2. Control Module Programming Station Ignition Switch**

1. Ignition switch
1. Make sure ignition switch (Figure 2, Item 1) on Control Module Programming Station (12-801-01-01) is OFF.

## Instructions (cont.)

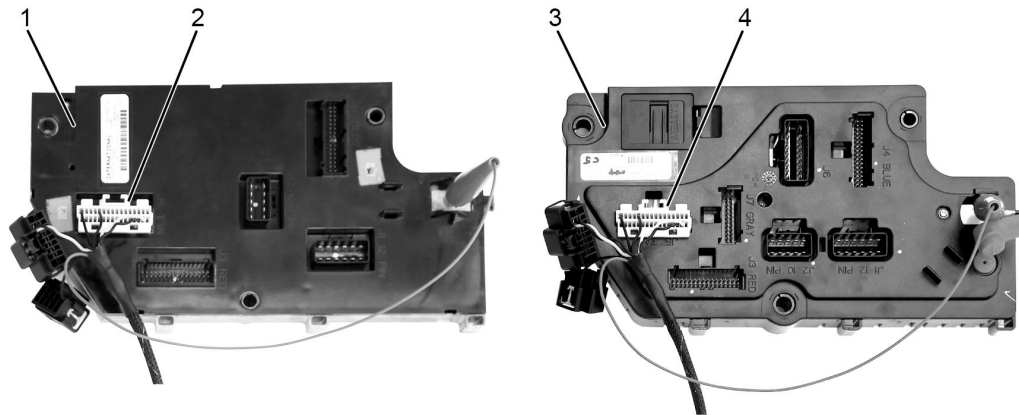


0000421986

**Figure 3. New-Style BCM Setup and Connections for 500K Programming**

1. 12-volt power supply (12-801-01-08)
  2. New-style BCM (4044470C5 or higher)
  3. J2 connector
  4. J6 connector
  5. Body control programming harness (12-999-12)
  6. Interface cable (Nexiq USB Link2)
  7. TO VEHICLE INTERFACE port
  8. Control module programming station (12-801-01-01)
  9. TO ECM port
2. Connect Control Module Programming Station (Figure 3, Item 8) to AC power source using 12-volt power supply (Figure 3, Item 1).
  3. Connect one end of BCM Programming Harness (Figure 3, Item 5) to Control Module Programming Station port labeled TO ECM (Figure 3, Item 9).
  4. If programming a new-style Body Control Module (Figure 3, Item 2) for 500K, connect J2 and J6 connectors on the BCM Programming Harness (Figure 3, Items 3 and 4) to the BCM.

## Instructions (cont.)



0000421987

**Figure 4. Connections for 250K Programming**

1. Old-style BCM
  2. J5 connector
  3. New-style BCM
  4. J5 connector
5. If programming an old-style BCM (Figure 4, Item 1) for 250K, connect the J5 connector to the BCM (Figure 4, Item 2).
  6. If programming a new-style BCM (Figure 4, Item 3) for 250K, connect the J5 connector to the BCM (Figure 4, Item 4).
  7. Connect interface cable (Figure 3, Item 6) to port (Figure 3, Item 7) labeled TO VEHICLE INTERFACE on Control Module Programming Station, and to EZ-Tech® or PC with Diamond Logic® Builder software.

### Programming Module

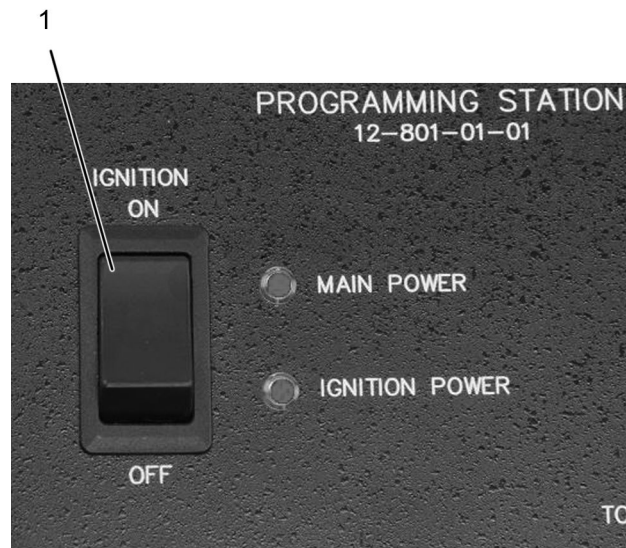
After connecting Control Module Programming Station 12-801-01-01 to BCM, Diamond Logic® Builder can be used to update module.

**NOTE: If the Diamond Logic® Builder software does not automatically connect to the module, after the Ignition Switch is turned ON, select the Com Link and Protocol from the Tools menu. Once connected, the Select tab will display information about the connected Module. If the software fails to connect (does not display information about the connected module), refer to Diamond Logic Builder User Guide for detailed instructions.**

**NOTE: Make sure all equipment is connected.**

## Instructions (cont.)

### Disconnecting Control Module Programming Station



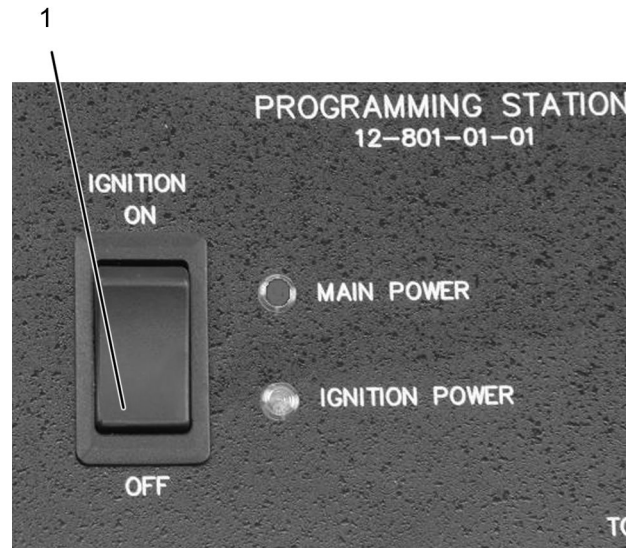
0000047108

**Figure 5. Control Module Programming Station Ignition Switch**

1. Ignition switch (ON)
8. Turn ignition switch on Control Module Programming Station to ON (Figure 5, Item 1).
9. Using Diamond Logic® Builder, program module. Refer to Diamond Logic® Builder User Guide for detailed instructions.

## Instructions (cont.)

### Disconnecting Control Module Programming Station



0000047110

**Figure 6. Control Module Programming Station Ignition Switch**

1. Ignition switch (OFF)
10. Once programming is complete, turn ignition switch on Control Module Programming Station to OFF (Figure 6, Item 1).
11. Disconnect interface cable from programming device (EZ-Tech® or PC).
12. Disconnect interface cable from Control Module Programming Station port labeled TO VEHICLE INTERFACE. Store interface cable for reuse.
13. Disconnect BCM Programming Harness from Body Control Module.
14. Disconnect BCM Programming Harness from Control Module Programming Station port labeled TO ECM. Store BCM Programming Harness for reuse.
15. Disconnect Control Module Programming Station from power source. Store components for reuse.

### Care and Maintenance

- Keep tools clean and free of contaminants
- Replace any damaged components

## Contact Information

If you would like to order additional tools or need replacement parts, please refer to the Navistar Service Tool Catalog. If you have questions, concerns, or feedback, please contact Navistar Service Tool Support Center:

- Submit a Service Tool iKNow Case File.
- Phone: 800-365-0088 (toll free).