

# Diagnostic Harness Kit

## INSTALLATION INSTRUCTIONS

This diagnostic harness kit can be used with or without the snowplow connected to a vehicle. Follow the appropriate instructions for each testing situation.

See Mechanic's Guide for detailed testing safety notices and instructions.

1. **Off-Truck Testing:** Begin with Step 2.

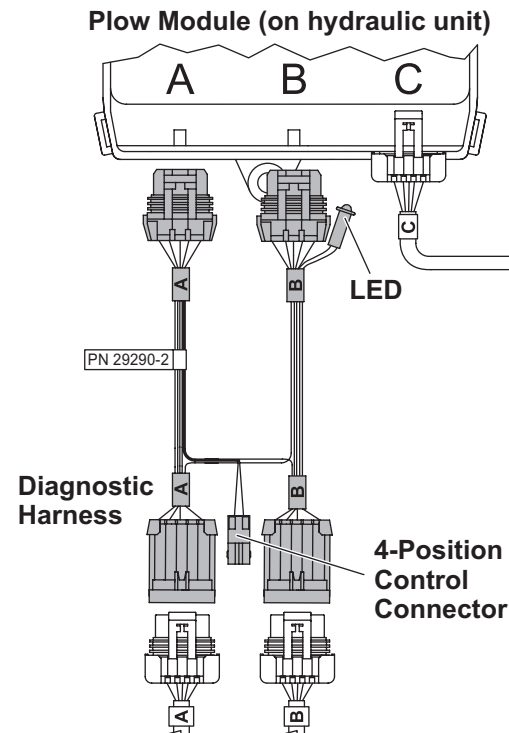
### **⚠ WARNING**

**Lower the blade when the vehicle is parked. Temperature changes could change hydraulic pressure, causing the blade to drop unexpectedly or damaging hydraulic components. Failure to do this could result in serious personal injury.**

**On-Truck Testing:** Lower the blade to the ground. Put the vehicle in park or in gear and remove the ignition key to prevent others from starting the vehicle during testing. Disconnect the snowplow and vehicle battery cables.

2. Remove the hydraulic unit covers.
3. Remove the short red cable from the motor relay.
4. Unplug the snowplow connectors from Ports A and B of the plow module.

5. Connect the diagnostic harness connectors A and B to the matching ports on the plow module (A to A and B to B).



6. Plug the connectors removed from the plow module into the matching connectors on the diagnostic harness (A to A and B to B).
7. **Off-Truck Testing:** Connect the snowplow control into the 4-position control connector on the diagnostic harness.

**On-Truck Testing:** Connect the snowplow control into the 4-position control connector either in the cab of the vehicle or on the diagnostic harness.

8. **Off-Truck Testing:** Connect a 12V power source to the snowplow battery cable (POSITIVE [+] 12V to the red wire and NEGATIVE [-] to the black wire). Turn ON the power source.

**On-Truck Testing:** Reconnect the snowplow and vehicle battery cables.

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**NOTE: If you connected the control inside the cab of the vehicle, the engine does not need to be running, but the vehicle ignition key must be turned to the "ON" position before proceeding. If you connected the control to the diagnostic harness, the key should be left out of the ignition.**

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9. Turn the snowplow control ON and perform a Solenoid Coil Activation Test (SCAT). Refer to a Mechanic's Guide for full instructions on performing a SCAT test.

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**NOTE: The green LED on the diagnostic harness will illuminate when the motor relay function is activated. This light only tests the plow module's motor relay output. Refer to a Mechanic's Guide for instructions on properly testing a motor relay.**

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**NOTE: If a control function times out before the desired coil activation is complete, release the button and press it again (hand-held control), or release the lever to the center position, then move it back into the desired function (joystick control).**

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10. After completing the SCAT test, turn the snowplow control OFF.

**Off-Truck Testing:** Disconnect the 12V power source.

**On-Truck Testing:** Turn the vehicle ignition OFF. Disconnect the snowplow and vehicle battery cables.

11. Perform any required repairs and retest as needed.
12. When testing is completed, disconnect the power source or the snowplow and vehicle battery cables as described in Step 10 before unplugging the diagnostic harness. Plug the snowplow connectors back into ports A and B of the plow module.
13. Reconnect the short red cable to the motor relay. Replace the hydraulic unit covers.

**After On-Truck Testing:** Reconnect the snowplow and vehicle battery cables.

The company reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used. This equipment manufacturer or the vehicle manufacturer may require or recommend optional equipment for snow removal. Do not exceed vehicle ratings with a snowplow. The company offers a limited warranty for all snowplows and accessories. See separately printed page for this important information.