April 28, 2003
Lit. No. 26478

ISOLATION MODULE TESTER

Parts List, Diagrams and Replacement Instructions

⚠ CAUTION
Read this document before testing any snowplows.

A DIVISION OF DOUGLAS DYNAMICS, L.L.C.

BEFORE YOU BEGIN

These instructions describe how to replace an Isolation Module Tester harness, how to test and replace an Isolation ModuleTester lamp, and how to replace the Isolation Module case.

> ⚠ CAUTION
>
> **Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.**
>
> **Batteries contain sulfuric acid which burns skin, eyes and clothing.**
>
> **Disconnect the battery before removing or replacing any electrical components.**

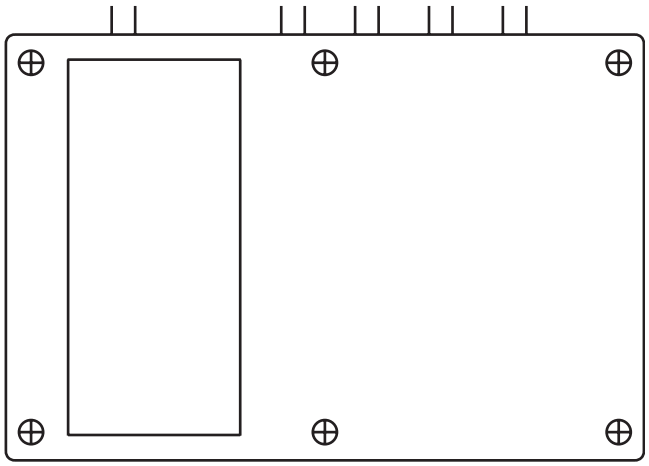
- When connecting the Isolation Module Tester power cable to a 12V power source, connect the red clip to the positive terminal and the black clip to the negative terminal. Connect the black clip last. When disconnecting, disconnect it first.
- If an Isolation Module Tester lamp (tester lamps are white, tester LEDs are green and slightly smaller) does not come on, the fault could be an open lamp element, an open circuit, or both.
- The Isolation Module Tester is protected by a fuse inside the tester that automatically resets itself. If the fuse activates, disconnect power from the Isolation Module Tester and wait several minutes. Then resume the test.
- The table below lists the user-serviceable parts inside the Isolation Module Tester.

Replacement Parts		
Part	**Qty**	**Description**
26475	5	Replacement Lamps
26476	1	Replacement Harness Kit
26517	1	Replacement Case w/ Label

COVER REMOVAL

1. Remove rubber feet to expose the cover screws.
2. Remove the six cover screws.
3. Position the Isolation Module Tester with the bottom cover down. Gently remove the top cover.

Bottom View
Cover Screws (6)



HARNESS REPLACEMENT

1. Following the cover removal instructions, remove the Isolation Module Tester cover.
2. Identify the defective harness. Lift the rubber grommet from the bottom cover groove.
3. Release the connector locking tab by pressing down on the tab end closest to the wire bundle.
4. Gently pull and rock the connector side to side to remove it from the printed circuit board receptacle.
5. Insert the replacement harness connector into the printed circuit board receptacle. The connector will snap into place when fully mated.
6. Center the rubber grommet in the bottom cover groove.
7. Carefully install the top cover, aligning the harness grommets with the top cover grooves.
8. Reinstall the cover screws and rubber feet. Do not overtighten the cover screws.
9. Install the harness identification label that matches the number for the harness being replaced. Remove the number label from its backing, wrapping the label around the harness. The clear section acts as a protective covering.

LAMP TEST

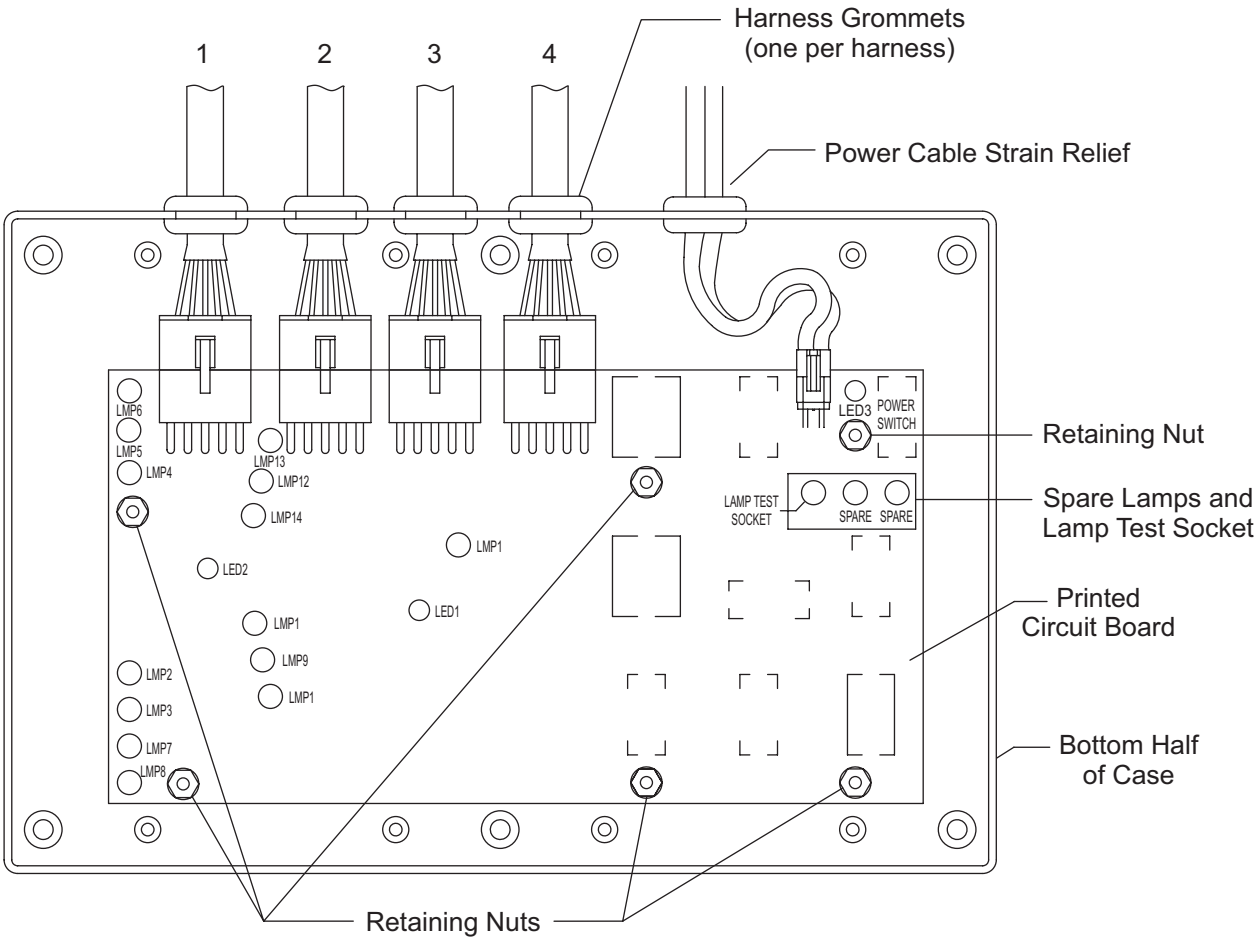
NOTE: Indicators labeled LED1, LED2, and LED3 are light-emitting diodes (LEDs) and cannot be checked or removed. Indicators labeled L1 through L14 are incandescent, socketed, replaceable lamps.

1. Following the cover removal instructions, remove the Isolation Module Tester cover.
2. Identify the suspected defective lamp.
3. Connect the Isolation Module Tester power cable to a 12V power source. The Isolation Module Tester power switch does not need to be on.
4. Remove the lamp to be tested and plug in to the lamp test socket located directly in front of the power cable plug.
5. If the lamp illuminates, it is operational. Return it to its original socket.
6. Carefully install the top cover, aligning the harness grommets with the cover grooves.
7. Reinstall the cover screws and rubber feet. Do not overtighten the cover screws.

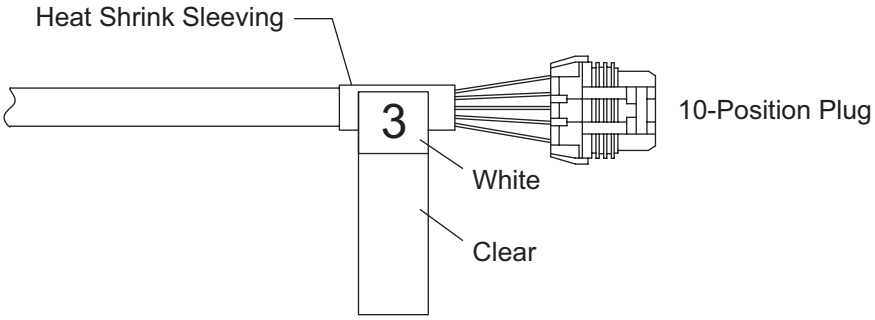
LAMP REPLACEMENT

1. Following the cover removal instructions, remove the Isolation Module tester cover.
2. Identify the suspected defective lamp and test following the lamp test instructions.
3. If the lamp is defective, remove and retain the light shield. Remove and discard the lamp.
4. Two spare lamps are provided with each Isolation Module Tester. They are located near the power switch on the printed circuit board. These lamps are labeled “SPARE”.
5. Remove a spare lamp from its socket and slide on the light shield if not present on the spare bulb. Install in the defective lamp’s socket.
6. Carefully install the top cover, aligning the harness grommets with the cover grooves.
7. Reinstall the cover screws and rubber feet. Do not overtighten the cover screws.

Inside View



Replacement Harness



Identification Label
(Label 3 shown for illustration purposes only.)

CASE REPLACEMENT

1. Following the cover removal instructions, remove the Isolation Module Tester cover.

2. Disconnect the power cable from the printed circuit board. Release the connector locking tab by pressing down on the tab end closest to the wire side.

3. Gently pull and rock the connector side to side to remove it from the printed circuit board receptacle.

4. Remove and retain the cable strain relief. Remove the power cable from the case.

5. Locate and remove the six white nylon retaining nuts. (See diagram page 5.) Lift the printed circuit board and connected harnesses from the bottom cover.

6. Install the printed circuit board and the connected harnesses into the replacement case, aligning the harness grommets with the case grooves.

7. Install the six nylon retaining nuts. Do not overtighten.

8. Feed the power cable through the hole in the bottom case and connect to the printed circuit board. The connector will snap into place when fully mated.

9. Install the power cable strain relief.

10. Carefully install the top cover, aligning the harness grommets with the top cover grooves.

11. Reinstall the cover screws. Do not overtighten. Reinstall the rubber feet.

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