

69892

HARNESS KIT

3-PORT ISOLATION MODULE

LIGHT SYSTEM

Parts List and Installation Instructions

⚠ CAUTION

Read this document before installing the snowplow.

⚠ CAUTION

See your sales outlet/website for specific vehicle application recommendations before installation. The online selection system has specific vehicle and snowplow requirements.

PARTS LIST

7-Wire Plug-In Harness		
Part	Description	Qty
69886	Vehicle Lighting Harness – 11 Pin w/Relays	1
69986	Plug-In Harness	1
–	Reclosable Fasteners	4

SAFETY DEFINITIONS

⚠ WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

⚠ CAUTION

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTE: Indicates a situation or action that can lead to damage to your snowplow and vehicle or other property. Other useful information can also be described.

FUSES

The snowplow electrical and hydraulic systems contain several blade-style automotive fuses. If a problem should occur and fuse replacement is necessary, the replacement fuse must be of the same type and amperage rating as the original. Installing a fuse with a higher rating can damage the system and could start a fire. Fuse Replacement, including fuse ratings and locations, is located in the Maintenance section of the Owner's Manual.

BATTERY SAFETY

⚠ 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.

TORQUE CHART

⚠ CAUTION

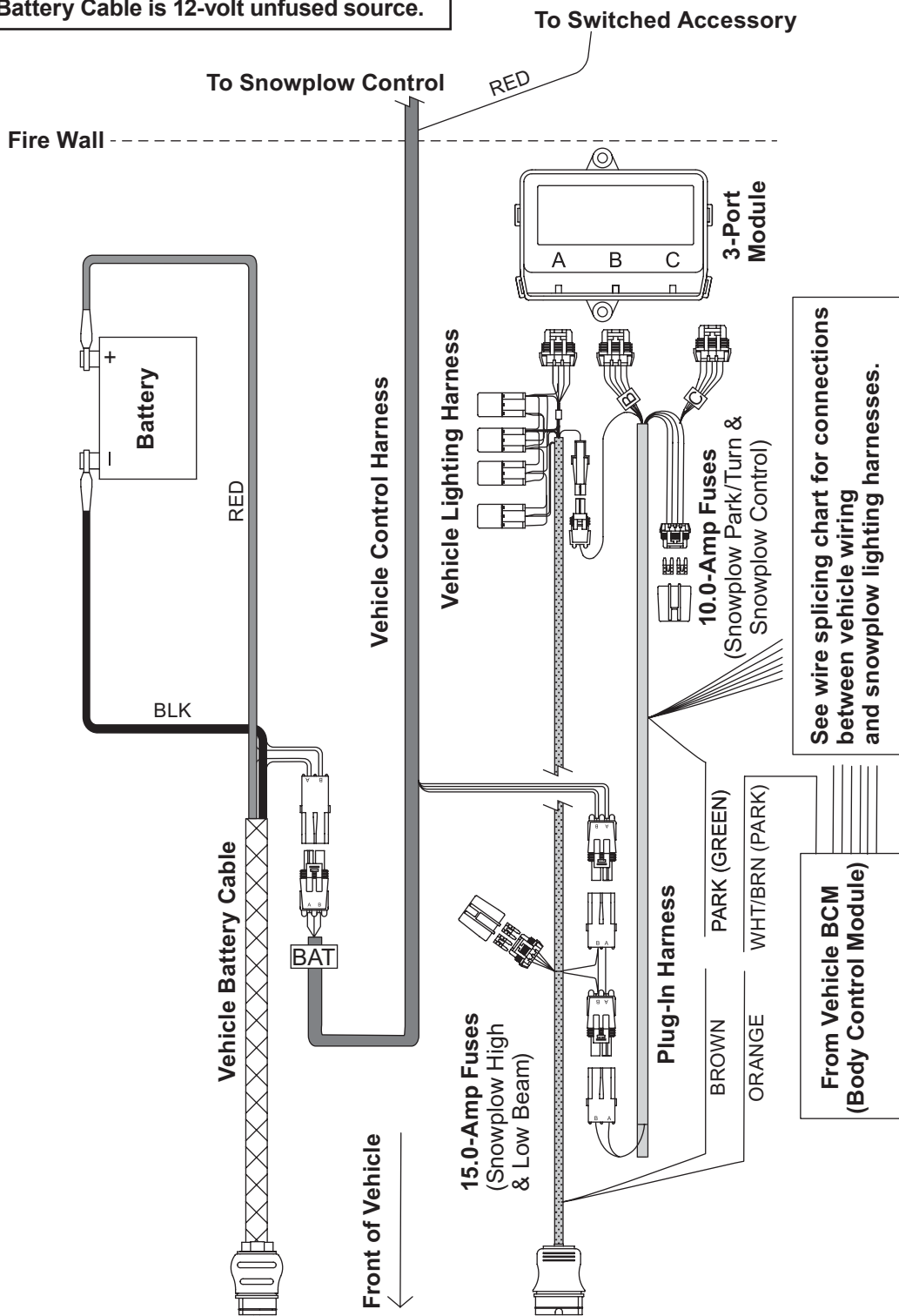
Read instructions before assembling. Fasteners should be finger tight until instructed to tighten according to the torque chart. Use standard methods and practices when attaching snowplow, including proper personal protective safety equipment.

Recommended Fastener Torque Chart (ft-lb)			
Size	Torque		
	 SAE Grade 2	 SAE Grade 5	 SAE Grade 8
1/4-20	6	9	13
5/16-18	11	18	28
3/8-16	19	31	46
3/8-24	24	46	68
7/16-14	30	50	75
1/2-13	45	75	115
9/16-12	66	110	165
5/8-11	93	150	225
3/4-10	150	250	370
7/8-9	150	378	591
1-8	220	583	893
Metric Grade 8.8 (ft-lb)			
Size	Torque	Size	Torque
M 6	7	M 12	60
M 8	17	M 14	95
M 10	35	M 16	155

These torque values apply to fasteners except those noted in the instruction.

TYPICAL 2-PLUG, 3-PORT MODULE SYSTEM DIAGRAM

⚠ CAUTION
 On 2-plug electrical systems, plug covers shall be used whenever snowplow is disconnected. Vehicle Battery Cable is 12-volt unfused source.

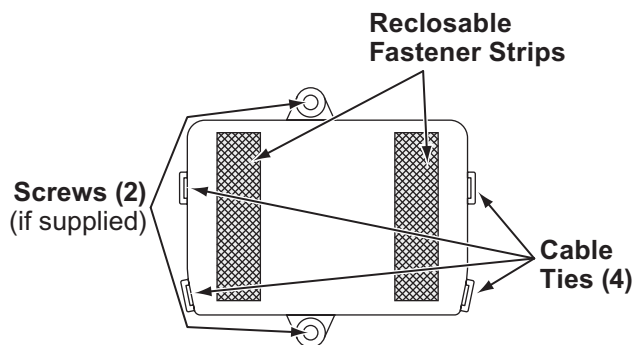


INSTALLATION INSTRUCTIONS

Isolation Module Mounting

Locate a flat surface within the engine compartment of the vehicle for mounting the isolation module (**on the driver's side, if possible**). The fire wall, fender well or radiator shroud are possible mounting locations. If a suitable flat surface is not accessible, cable tie the isolation module to existing brackets or harnessing.

Reclosable fastener strips and/or cable ties are supplied for mounting the isolation module, but self-drilling screws can also be used. When using reclosable fastener strips, the mounting surface must be free of dirt and grease.



Isolation Module (bottom view)

Vehicle Battery Cable Installation

⚠ 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.

NOTE: When instructed, make all snowplow battery cable connections to the auxiliary battery, if vehicle is so equipped.

NOTE: Use dielectric grease on all electrical connections to prevent corrosion. Fill receptacles and lightly coat ring terminals before assembly.

1. Turn OFF the vehicle ignition.
2. Disconnect both the NEGATIVE (–) and the POSITIVE (+) battery cables.
3. Route the supplied vehicle battery cable from the grille or bumper to the battery, avoiding any sharp edges and hot or moving parts. Cable tie only the end section closest to the grille.
4. Route the red wire from the vehicle battery cable to the POSITIVE (+) battery terminal. Do not connect at this time.
5. Route the black wire from the vehicle battery cable to the NEGATIVE (–) battery terminal. *Do not connect at this time.* The 4-position connector from the vehicle battery cable will connect to the mating connector (labeled "BAT") on the end of the vehicle control harness.

Vehicle Lighting and Vehicle Control Harness Installation

1. Route lighting harnesses from grille area around or through the radiator bulkhead to the isolation module.
2. Connect the 4-position connector from the vehicle lighting harness to the matching 4-position connector from the vehicle control harness.
3. Connect the vehicle lighting harness to position "A" on the isolation module.
4. Route the end of the vehicle control harness with the white 4-pin connector to the fire wall.

Connect the black 4-position connector (labeled "BAT") from the end of the vehicle control harness to the 4-position connector from the vehicle battery cable. Do not cable tie the harness at this time.

CAUTION

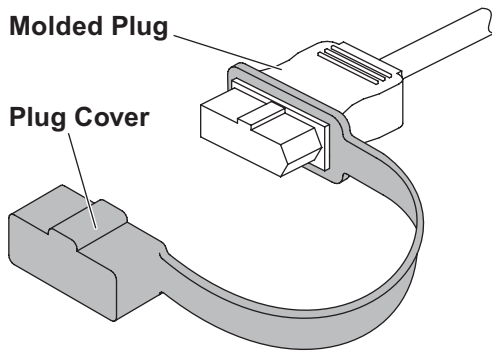
Before installing self-drilling screws or drilling mounting holes, check the selected mounting area for any wires, hoses or other obstructions.

5. On the driver's side, locate an existing hole through the fire wall for the vehicle control harness. If access through the fire wall does not exist, drill a 5/8" hole through the fire wall in a convenient location away from sharp edges and hot or moving parts.
6. Push the braided harness breakout with the cab control connector through the fire wall hole into the cab. Use a grommet, existing plug cover or proper chafing material to protect the harness where it passes through the fire wall. Route the harness to the selected control mounting location.

To mount the control, follow the instructions supplied with the control.
7. Locate an accessory wire controlled by the ignition switch. Acceptable accessory wires show +12V when the ignition switch is turned ON, and 0V when it is OFF.
8. Route the red "ACC" wire from the vehicle control harness to this location and trim away excess length.
9. Following the recommended splicing procedure given at the end of this document, splice the red "ACC" wire into the switched accessory wire using the supplied parallel splices and heatshrink tubing.

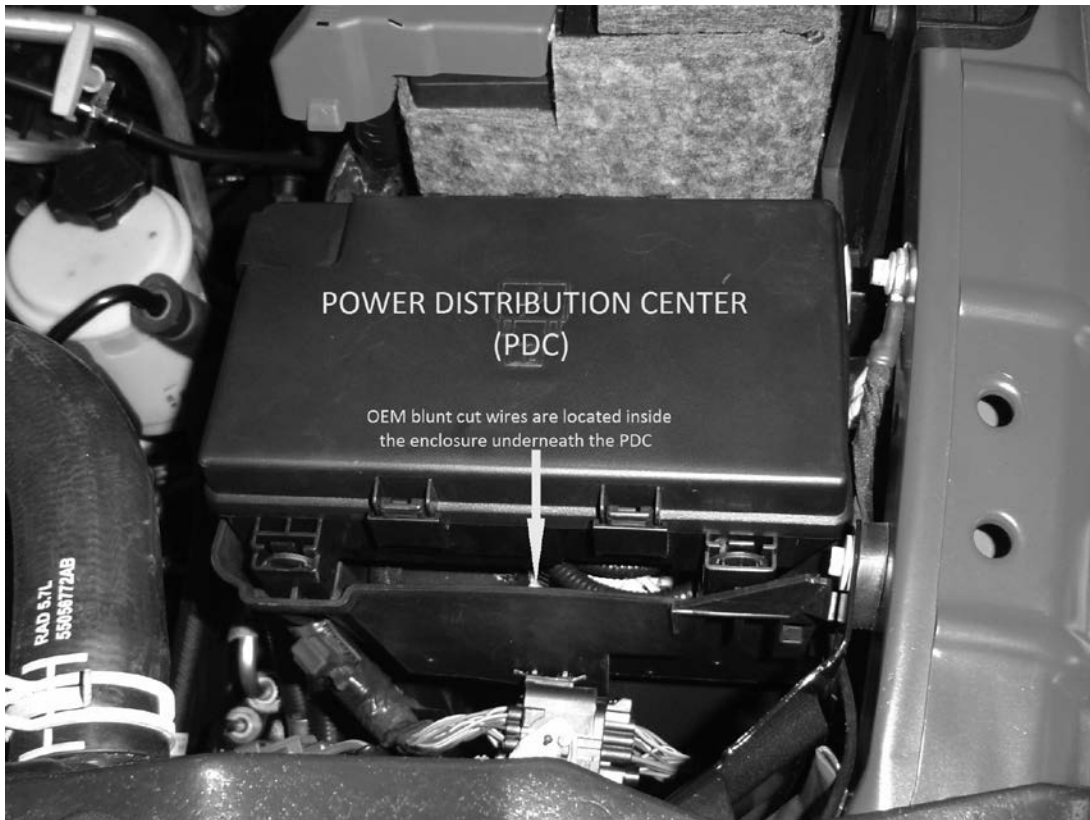
PLUG COVER INSTALLATION

1. Stretch the rectangular opening of the plug cover strap over the end of the vehicle battery cable. Place the plug cover over the molded plug when snowplow is not in use.



PLUG-IN HARNESS INSTALLATION

1. Connect the plug-in harness connector "B" to module port B and connector "C" to port C.
2. Connect the 4-position connector from the middle of the vehicle control harness to the matching 4-position connector from the plug-in harness.
3. Locate the OEM supplied blunt cut wires from the vehicle. The wires are underneath PDC on the driver's side.
4. Locate the wires (marked Low, High, Park, Enable, Turn DS, Turn PS) from the plug-in harness.



5. Splice the wires from the plug-in harness to the blunt cut wires from the OEM supplied according to the following color codes.

<u>Plug-in Harness</u>	<u>OEM Supplied</u>
LOW	BLACK/LT GREEN
HIGH	BLACK/LT BLUE
TURN-DS	WHITE/VIOLET
TURN-PS	VIOLET/BROWN
ENABLE	BLACK/VIOLET

Vehicle Lighting Harness

ORANGE	WHITE/BROWN
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<u>Vehicle Lighting Harness</u>	<u>Plug-In Harness</u>
BROWN	PARK

BATTERY CONNECTIONS

NOTE: Cable tie the control harness and accessory tap away from the brake, clutch, gas or parking brake pedals, and any moving parts.

1. Attach the POSITIVE (+) OEM cable to the battery. Attach the RED vehicle battery cable to the POSITIVE (+) battery terminal following OEM battery cable connection recommendations.
2. Attach the NEGATIVE (-) OEM cable to the battery. Attach the BLACK vehicle battery cable to the NEGATIVE (-) battery terminal following OEM battery cable connection recommendations.

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.

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