



Service Parts List and Installation Instructions for Isolation Module with Central Hydraulics



⚠ CAUTION

Read this document before installing the snowplow.

⚠ CAUTION

See your WESTERN® outlet for application recommendations. The Selection List has specific vehicle and snowplow requirements.

PARTS LIST

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CENTRAL HYDRAULIC HARNESS KIT PARTS LIST

26500-1 – CENTRAL HYDRAULIC HARNESS KIT					
PART	QTY	DESCRIPTION	PART	QTY	DESCRIPTION
26498	1	VEHICLE CONTROL HARNESS	21294	1	PLOW CABLE ASSEMBLY
66130	1	RUBBER GROMMET	68494	1	5/16-18 X 1 HEX CAP SCREW G5
61548	2	PLUG COVER	91332	1	5/16-18 HEX LOCKNUT GB
59223	6	CABLE TIE	90313	2	5/16 FLAT WASHER
61169	1	VEHICLE CABLE ASSEMBLY			

SAFETY

SAFETY DEFINITIONS

WARNING

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

CAUTION

Indicates a situation that, if not avoided, could result in damage to product or property.

NOTE: Identifies tips, helpful hints and maintenance information the owner/operator should know.

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	 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.			

FUSES

The vehicle control harness contains two automotive-style fuses. One fuse is for the snowplow park/turn lamp power and the other is for the snowplow control power. If a problem should occur and fuse replacement is necessary, the replacement fuse should be of the same value as the original. Installing a fuse of a larger value could damage the system.

INSTALLATION INSTRUCTIONS

PLUG COVER INSTALLATION

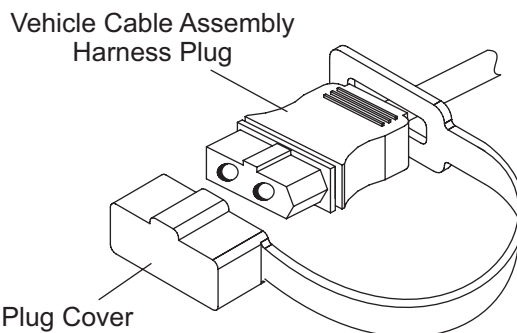
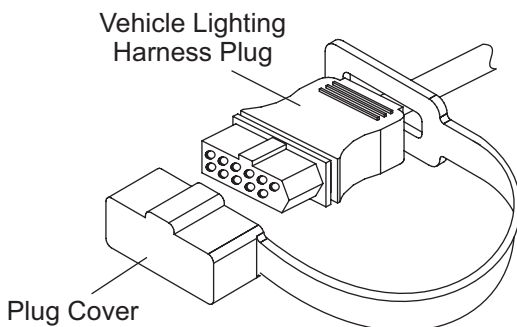
⚠ CAUTION

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.

1. Turn off the vehicle ignition.
2. Disconnect both the negative (-) and the positive (+) battery cables.
3. Stretch the rectangular opening of the plug cover straps over the harness plugs. Place the plug covers over the molded harness plugs when the snowplow is not in use.



4. Secure the vehicle cable assembly and the lighting harness to prevent damage when not in use, but ensure they can be easily retrieved for connection to the snowplow.

ISOLATION MODULE MOUNTING

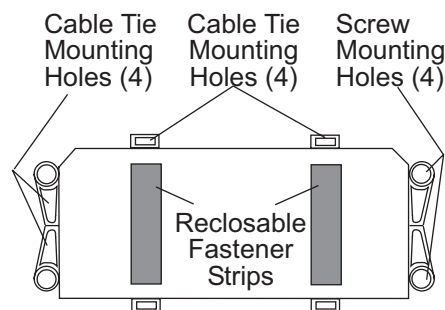
The design of the Isolation Module allows it to be mounted to various types of surfaces **within** the engine compartment. The function of the Isolation Module will not be affected by its mounting orientation.

⚠ CAUTION

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

Locate a flat surface **within** the engine compartment of the vehicle for mounting the Isolation Module. For example, the firewall, side of washer reservoir, fender well or radiator shroud are possible mounting locations. If a flat surface cannot be located, cable tie the Isolation Module to existing brackets or harnessing. Reclosable fastener strips, cable ties, and self-drilling screws are supplied for mounting the Isolation Module. When using the reclosable fastener, the mounting surface must be free of dirt and grease. If using self-drilling screws, install the screws in opposite corners if possible.

Suggested Mounting Options:



Isolation Module
Bottom View

- Flat, nonmetallic, non-drillable surfaces - use reclosable fasteners
- Flat, nonmetallic, drillable surfaces - use self-drilling screws (supplied), nuts and bolts (not supplied)
- Flat metallic surfaces - use reclosable fasteners, self-drilling screws (supplied), nuts and bolts (not supplied)
- No flat surface found - use cable ties and tie to existing brackets or harness

INSTALLATION INSTRUCTIONS

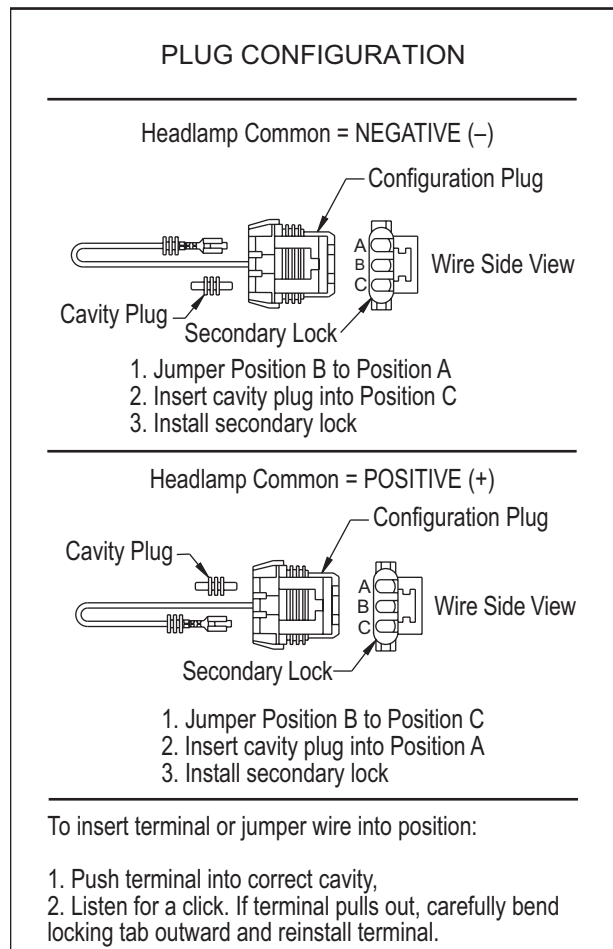
VEHICLE LIGHTING AND HARNESS INSTALLATION

1. Find a location in the grille or bumper on the driver side for routing the vehicle lighting harness.
2. Route the lighting harness around or through the radiator bulkhead to the Isolation Module and connect to Position 2.
3. Connect vehicle control harness to Position 1 on the Isolation Module. Connect the single-wire connector (black/orange wire) from the vehicle control harness to the single-wire connector (black/orange wire) on the vehicle lighting harness. Install the configuration plug on the vehicle control harness 3-position plug near connection to the Isolation Module. Refer to plug configuration drawing for instructions.

For vehicles using the 8437 or 27780 Harness Kit: Install the supplied dust cover on the vehicle control harness 3-position plug near connection to the Isolation Module.

NOTE: If unsure of headlamp common, configure plug for a negative common. Complete the installation and check headlamp functions. Turn on the vehicle lights in the low beam mode. Both low beams should be on. If the left low beam does not illuminate, change plug configuration to positive common and test headlamp functions.

4. Continue routing the vehicle control harness to the battery. Do not connect at this time.
5. Locate an accessory wire that is controlled by the ignition switch. Route the red wire from the vehicle control harness to this location. Lengthen wire as needed.
6. Following the recommended splicing procedure shown on page 6, splice the red wire into the switched accessory wire using the supplied parallel splices and heatshrink tubing.



- 7 **For applications using manual valves:** The orange wire is not used. Cover the end of the orange wire with heatshrink tubing or electrical tape and secure wire out of the way.

For applications using an electric clutch or solenoid valve system: The orange wire is protected by a 7.5 amp fuse in the Isolation Module control harness and is "hot" when the keyed accessory wire is "on". The orange wire draws power directly from the battery.

INSTALLATION INSTRUCTIONS

PLUG-IN HARNESS INSTALLATION

This procedure assumes the Isolation Module is mounted on the driver side of the vehicle. If the selected mounting location is on the passenger side, then use the short plug-in harness on the passenger side and use the long plug-in harness on the driver side.

For vehicles using the 8436 Harness Kit: The plug-in harnesses must be configured before installation. Before proceeding, refer to pages 8 and 9 to determine the plug configuration for your style of headlamps.

1. Remove the headlamp connector(s) on the **driver side**. Connect the short plug-in harness male connector(s) to the female connector(s) removed from the headlamp(s). Connect the plug-in harness female connector(s) to the headlamp(s). Route to the Isolation Module. Connect **driver side** plug-in harness to Position 3 on the Isolation Module.

NOTE: Only the short plug-in harness connects to the vehicle parking light circuit.

For vehicles using the 8437 or 27780 Harness Kit: On the driver side, locate the DRL light positive wire. Splice the pink wire from the short plug-in harness into the DRL positive wire following the splicing procedure. If the Isolation Module is mounted on the passenger side of the vehicle, splice into the passenger side DRL positive wire.

2. On the **driver side**, locate the turn signal wire. Splice the purple wire from the plug-in harness into this wire following the recommended splicing procedure. Locate the parking light wire. Splice the brown wire from the plug-in harness into this wire following the splicing procedure. Repeat for the turn signal only on the passenger side.

3. Remove the headlamp connector(s) from the headlamps on the **passenger side**. Connect the long plug-in harness female connector(s) to the headlamp(s). Connect the plug-in harness male connector(s) to the female connector(s) removed from the headlamp(s). Route across radiator bulkhead to Isolation Module. Connect **passenger side** plug-in harness to Position 4 on the Isolation Module.
4. Cable tie the vehicle control, vehicle lighting harness, both plug-in harnesses away from any sharp, hot or moving parts.

VEHICLE CABLE ASSEMBLY INSTALLATION

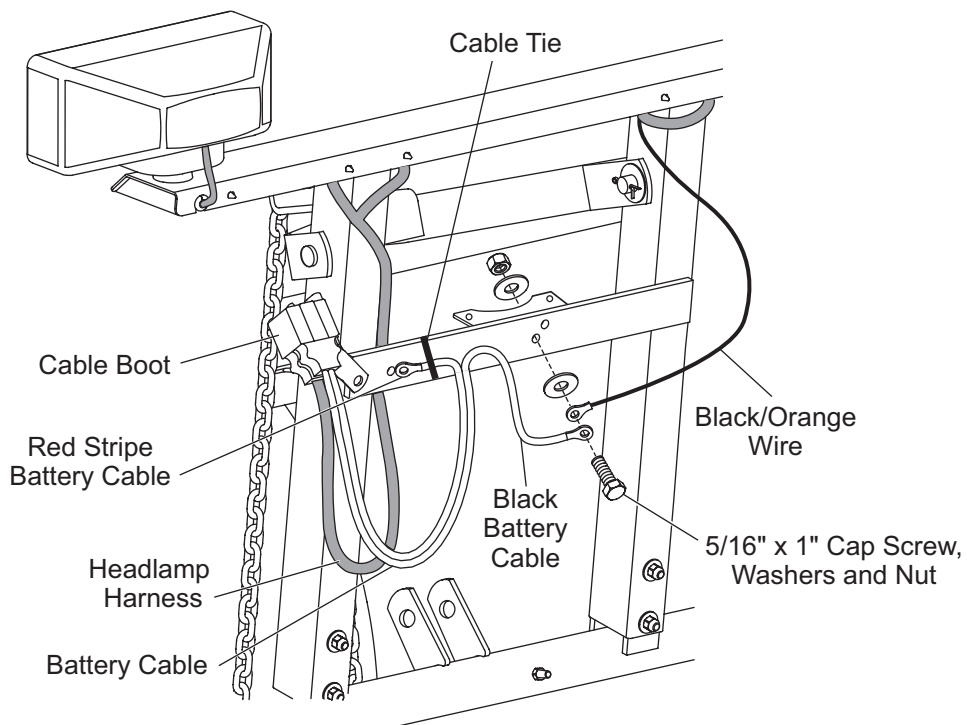
1. Route the vehicle cable assembly from the bumper or grille through or around the radiator bulkhead to the battery. Be sure to avoid sharp edges and hot or moving parts.
2. Route the black wire from the vehicle cable assembly to the negative (-) battery terminal. Do not connect at this time.
3. The black wire with red stripe will not be used. Cut off and cap (tape) or cable tie out of the way.

INSTALLATION INSTRUCTIONS

PLOW CABLE ASSEMBLY INSTALLATION

1. Use one of the holes in the upper lift frame cross bar (through the hydraulic unit mounting bracket) to make the following connection:
2. The black with red stripe wire of the snowplow cable assembly is not used. Cut off and cap (tape) or secure it using cable ties.

Insert the 5/16" x 1" capscrew through the black battery cable terminal, then the black/orange wire terminal from the headlamp harness, a flat washer and the back of the hydraulic bracket. Secure with another flat washer and locknut inside the hydraulic unit mounting bracket. **DO NOT** remove finish from the lift frame. This does not need to ground the frame.



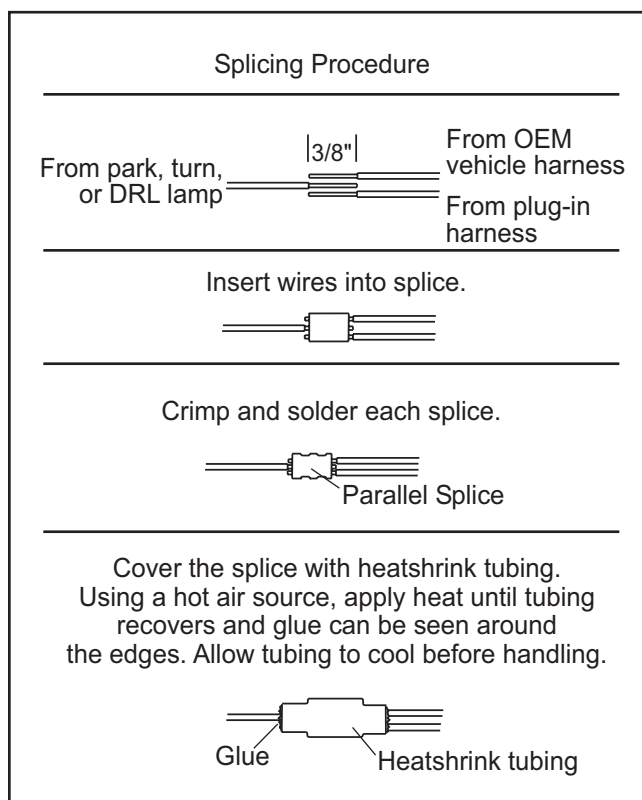
INSTALLATION INSTRUCTIONS

RECOMMENDED SPLICING PROCEDURE

1. Locate wire to be spliced into.
2. Cut wire at least 1-1/2" from any other splice, connector, or terminal. If wires are covered by tubing or braid, remove enough of it to achieve the minimum clearance required.
3. Strip away 3/8" of the insulation from the ends of the wires to be spliced.
4. Slide two wires into one end of the supplied parallel splice.
5. Place a piece of heatshrink tubing (3/16" x 1-1/4" long) over the remaining wire to be spliced.
6. Insert remaining wire into the open end of the splice and crimp using an appropriate crimp tool. One or two crimps may be necessary to ensure a good connection. No wire strands should be visible outside of the splice.
7. Preheat a soldering tool for at least one minute to help promote even solder flow.
8. Apply heat to the splice. Avoid heating too close to the insulation. Apply solder to the wires. Use just enough solder to produce an even flow through the splice. **Use rosin core solder ONLY. Do not use acid core solder.**

NOTE: Avoid using an excessive amount of solder as it can result in wicking. Wicking occurs when solder travels up the wire core. This may cause the wire to become stiff or brittle which could lead to a broken or open circuit.

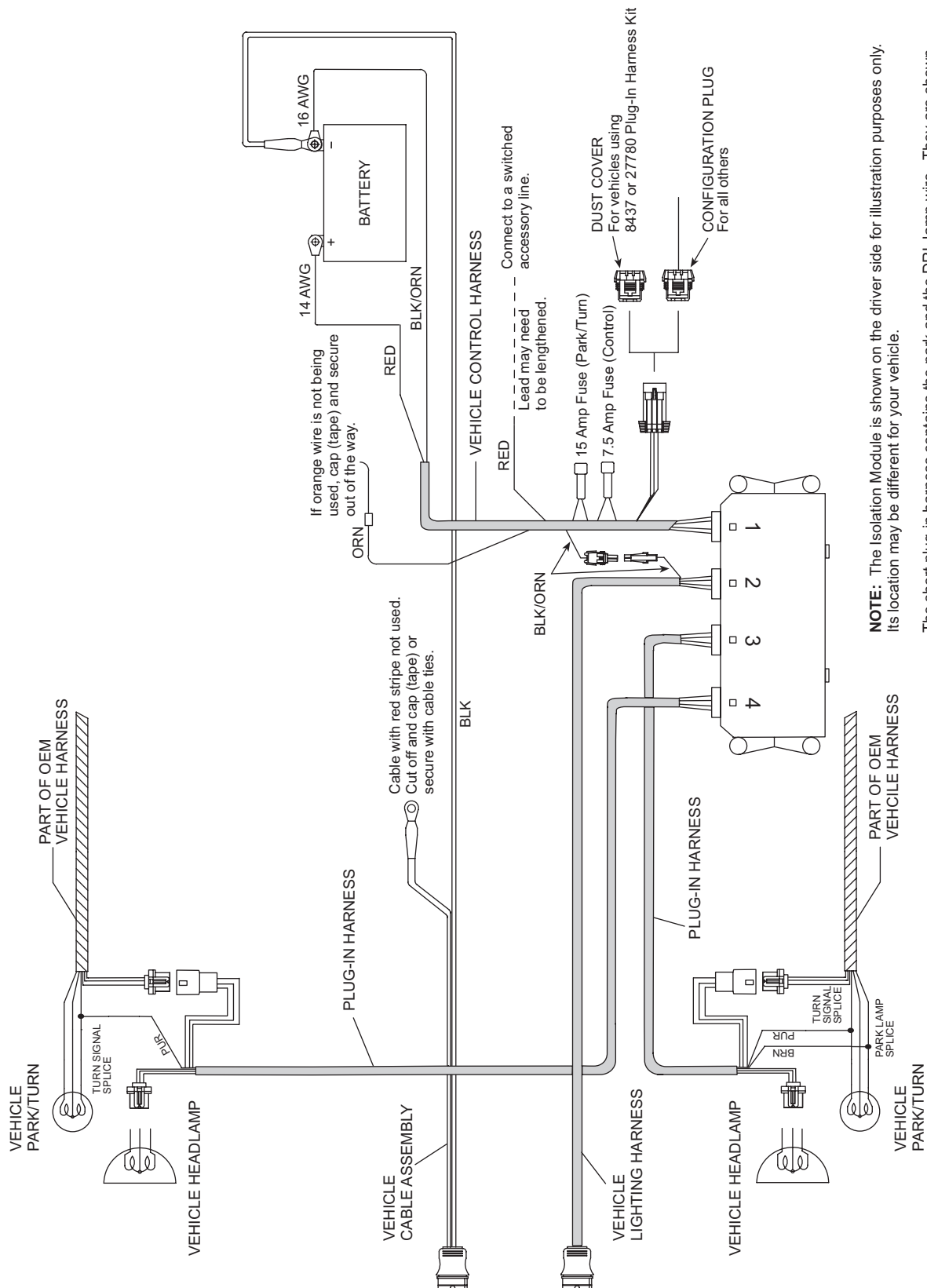
9. Check circuits for continuity.
10. Cover the splice with heatshrink tubing. The tubing should extend beyond the splice on both sides.
11. Using a hot air source, starting in the center and working to either side, apply heat until the tubing recovers and glue can be seen around the edges. Allow the tubing to cool before handling.



NOTE: The splices supplied will accommodate 18-gauge wires as shown. For vehicles with a large gauge wire for the park/turn wires, cut the wire, strip the ends 3/8" to 1/2" and twist together. Apply solder to the splice and cover with heat shrink tubing.

INSTALLATION INSTRUCTIONS

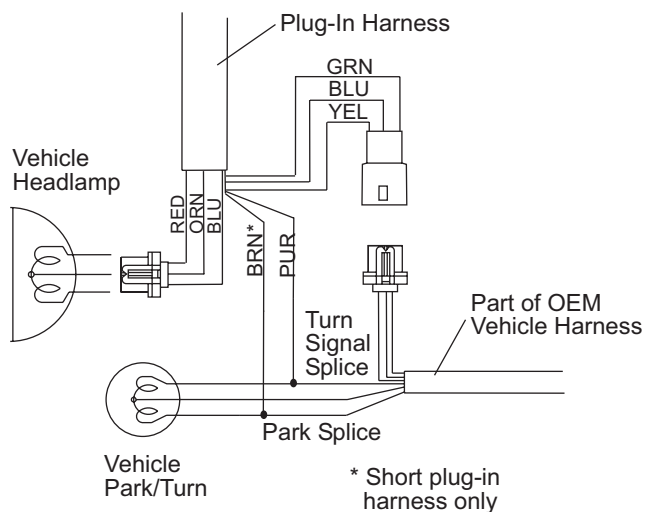
VEHICLE SIDE DIAGRAM – STRAIGHT BLADES



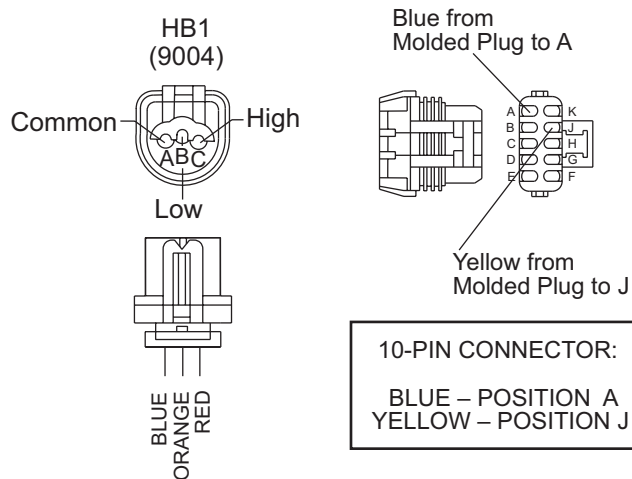
INSTALLATION INSTRUCTIONS

HEADLAMP WIRING FOR VEHICLES USING 8436 HARNESS KIT

HB-1 Headlamps (9004)

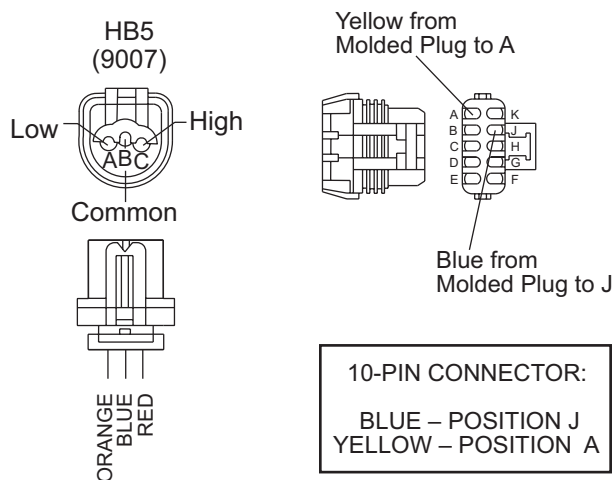


Plug Configuration for HB-1 Headlamps



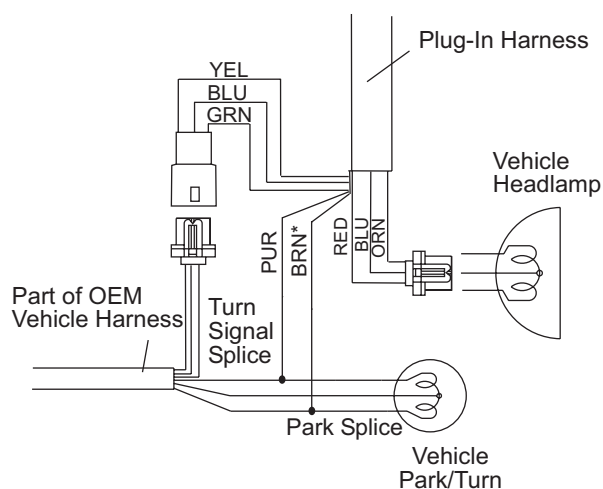
Install wires in both connectors as shown.
Install supplied secondary connector locks.

Plug Configuration for HB-5 Headlamps



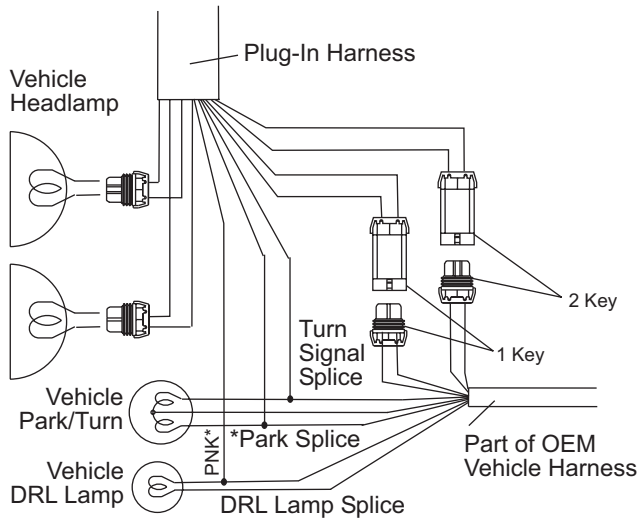
Install wires in both connectors as shown.
Install supplied secondary connector locks.

HB-5 Headlamps (9007)



INSTALLATION INSTRUCTIONS

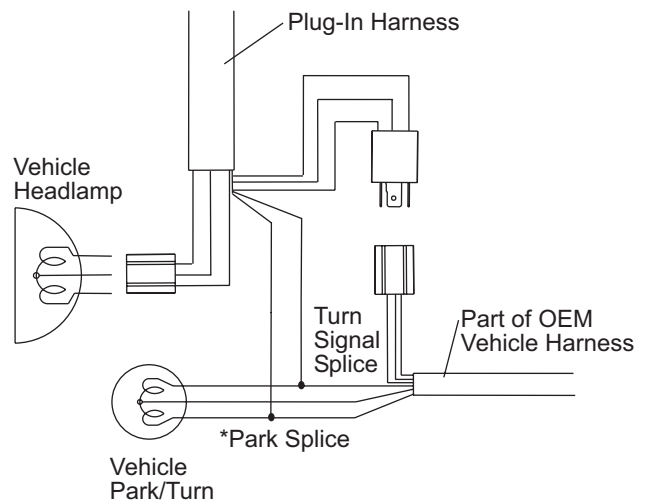
8437, 8438, 27480, and 27780 HARNESS KITS



* Short plug-in harness only.

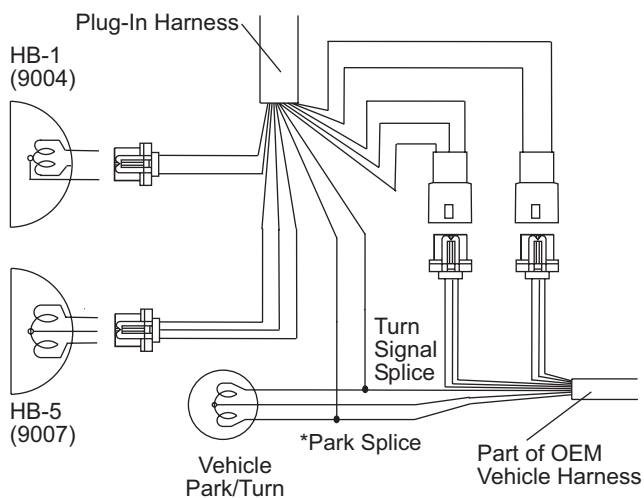
NOTE: Pink wire not used in 8438 or 27480 Harness Kits.

8439 HARNESS KIT



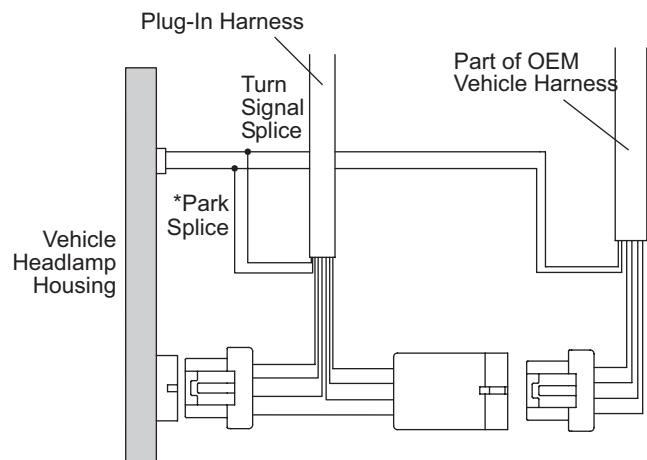
* Short plug-in harness only

8442 HARNESS KIT



* Short plug-in harness only.

28028 HARNESS KIT



* Short plug-in harness only.



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