



Fisher Engineering

P.O. Box 529 Rockland, Maine 04841

December 3, 1999

Lit. No. 26499

E-Force Isolation Module with Central Hydraulics

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26500-1 KIT PARTS LIST

Control Harness Kit – 26500-1					
Part #	Qty	Description	Part #	Qty	Description
26498	1	Vehicle Control Harness	3666	6	Cable Tie
20040	1	Clutch and Solenoid Valve Harness	8274	1	Vehicle Cable Assembly
56526	2	Panel Mount Plate Set	21294	1	Snowplow Cable Assembly
66130	1	Rubber Grommet	90042	1	5/16-18 x 1" Cap Screw
8291	2	Plug Cover	90675	1	5/16-18 Locknut

⚠ CAUTION

Read this manual before installing or operating the snowplow.

26500-1

SAFETY INFORMATION

Read this manual and labels on the snowplow before installing or operating the snowplow.

⚠ 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 minor personal injury and/or damage to product or property.

NOTE: Identifies tips, helpful hints and maintenance information the reader should know.

NOTE: The FISHER® vehicle control harness contains two automotive-style ATC 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.

Torque all fasteners according to the torque chart, unless otherwise noted. For proper fit, do not tighten fasteners until instructed to do so.

DIAMETER- THREADS PER INCH	NC FASTENER TORQUE (FT-LB)		
	GRADE		
	G2	G5	G8
1/4 - 20	6	9	13
5/16 - 18	11	18	28
3/8 - 16	19	31	46
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

PLUG COVERS AND GRILLE PLATE INSTALLATION

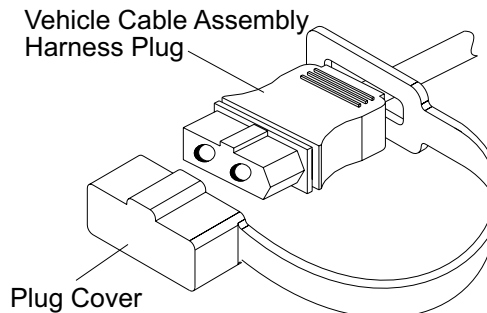
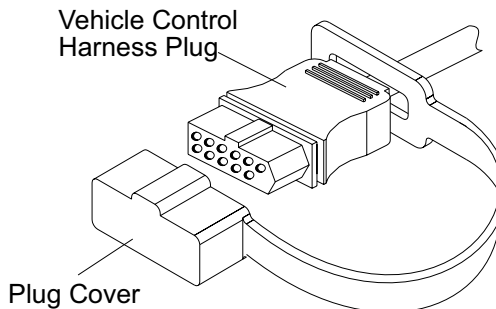
⚠ CAUTION

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. Two grille plate sets are supplied. Choose the two grille plates most suitable for your installation. Slide the lighting harness and cable assembly plugs into the plates. Select a convenient mounting location to make connections between the vehicle and the snowplow easier.
5. Mount grille plates to the vehicle grille using the supplied cable ties.
6. For applications that supply bumper mounting brackets, follow the instructions supplied with the kit.
7. If you choose not to install grille plates, secure the cable assembly and the control harness to prevent damage when not in use, but are easily retrieved for connection to the snowplow.

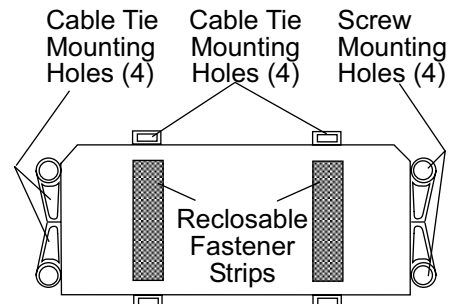
ISOLATION MODULE MOUNTING

⚠ CAUTION

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

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.

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.



Isolation Module
Bottom View

Suggested Mounting Options:

- Flat, non-metallic, non-drillable surfaces - use reclosable fasteners
- Flat, non-metallic, 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

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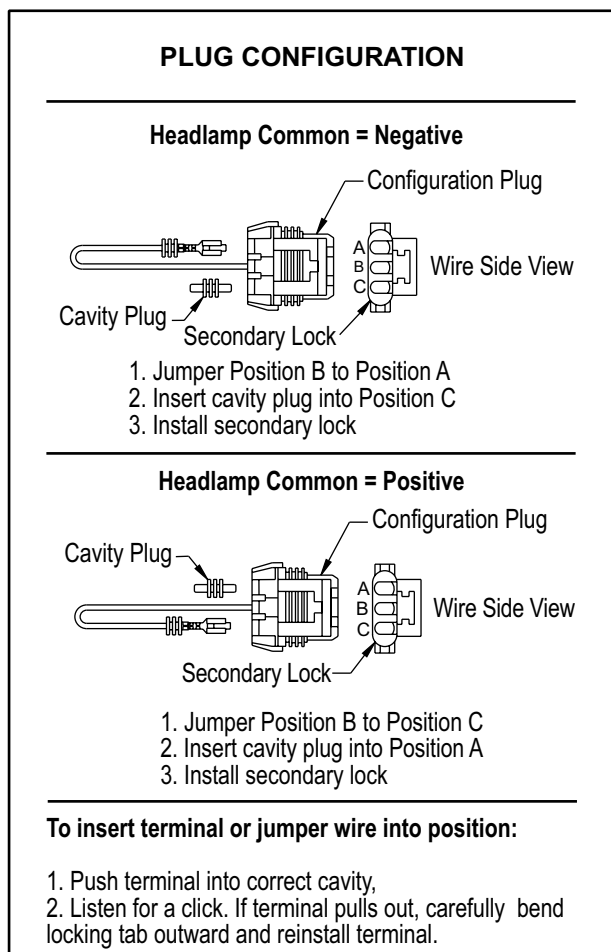
VEHICLE LIGHTING AND VEHICLE CONTROL HARNESS INSTALLATION

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 Peculiar Light 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 8, splice the red wire into the switched accessory wire using the supplied parallel splices and heatshrink tubing.



- 7 **For applications using the electric clutch and solenoid valve harness:** Splice the orange wire from the vehicle control harness to the red wire from the solenoid control harness.

For applications that do not use the electric clutch and solenoid valve harness: Cover the end of the orange wire with heatshrink tubing or electrical tape.

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 Peculiar Light Kit: The plug-in harnesses must be configured before installation. Before proceeding, refer to page 9 to determine the plug configuration for your style of headlights.

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 Peculiar Light 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.

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SOLENOID VALVE HARNESS INSTALLATION

This installation is for applications using the FISHER® solenoid electric valve with either an electric clutch or a solenoid-operated bypass valve.

1. Remove the fuse holder and fuse from the solenoid valve harness by cutting the red wire as close as possible to the fuse holder on the harness side. Discard the fuse holder. A weather-tight fuse holder is provided on the vehicle control harness.

⚠ CAUTION

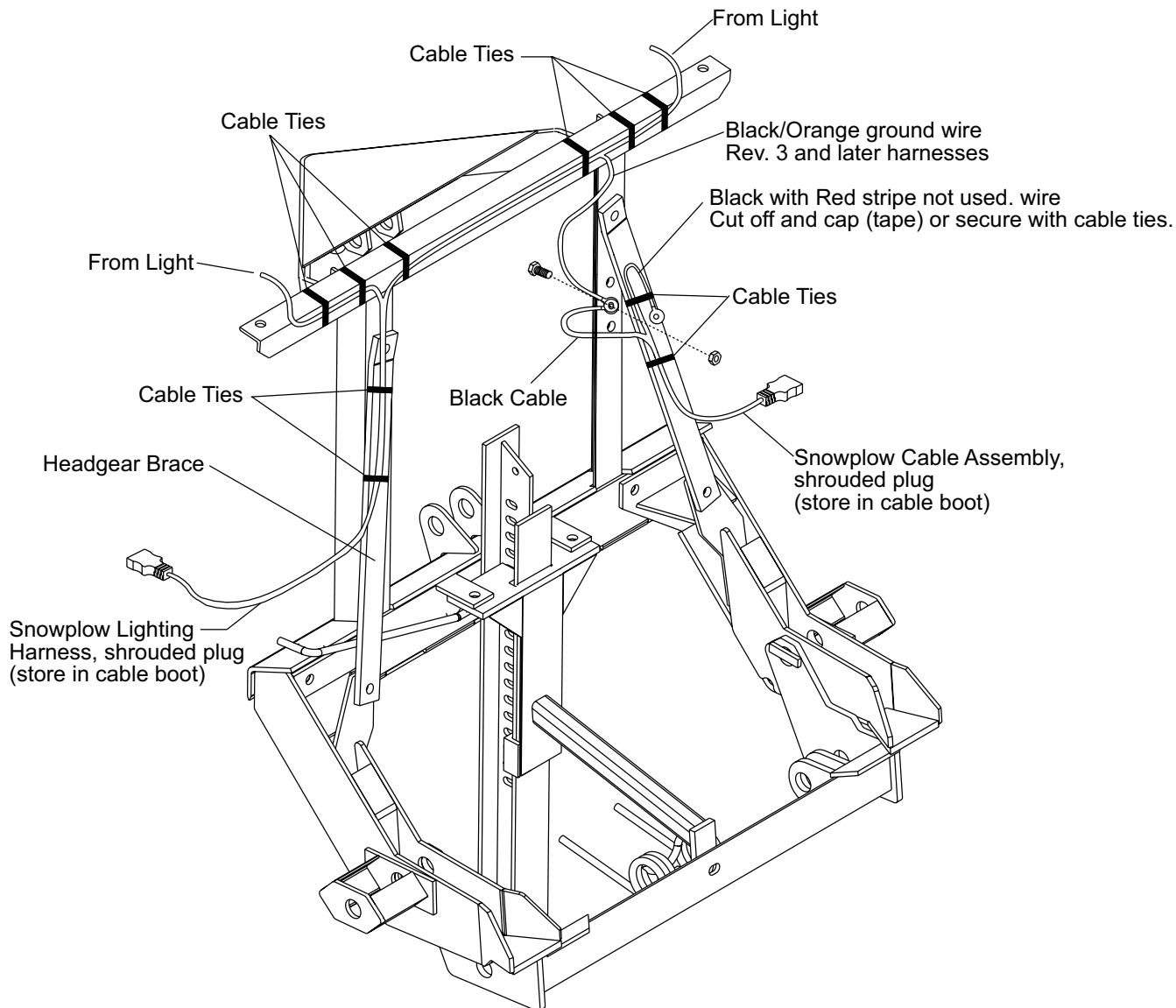
Before drilling through firewall, check the selected area for any wires, hoses, or other obstructions.

2. On the driver side, drill a 5/8" hole through the firewall of the vehicle in a convenient location away from sharp edges and hot or moving parts. If access through the firewall already exists, use the proper chafing material or existing plug cover.
3. Push the braided harness breakout with the cab control connector through the firewall hole into the cab. Route the harness to the selected control mounting location. Use a grommet to seal the firewall around the harness.
4. Mount the control following the instructions supplied with the control.
5. Splice the red wire from the solenoid valve harness to the orange wire from the vehicle control harness. Lengthen either wire as needed.
6. Route the blue, green, white/yellow, and black wires to the valve block. (The valve block is not supplied.) Connect per instructions on the valve block cover. Connect the black wire with the ring terminal to a good ground.
7. Route the black/orange and the brown/red wires to the bypass valve or electric clutch. (The bypass valve and electric clutch are not supplied.) Connect per manufacturer's instructions.
8. Route the black/orange wire to the negative battery terminal. Removal of the insulated terminals may be necessary.
9. Cable tie harnesses away from any hot or moving parts.
10. Reconnect the vehicle OEM battery cables and the following FISHER® wires to the battery:
 - red wire from the vehicle harness to the positive terminal
 - black/orange wire from the solenoid valve harness to the negative terminal
 - black wire from the vehicle cable assembly to the negative terminal

SNOWPLOW CABLE ASSEMBLY INSTALLATION

Only Revision 3 and later light harnesses require the extra snowplow-to-vehicle ground wire.

1. Locate a hole on the right side headgear upright. If one doesn't exist, drill an 11/32" through hole approximately 16" down from the crossbar.
2. Using supplied 5/16" hardware, attach the black/orange stripe wire from the headlamp harness and the black wire from the snowplow cable assembly to the headgear upright.
3. 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.



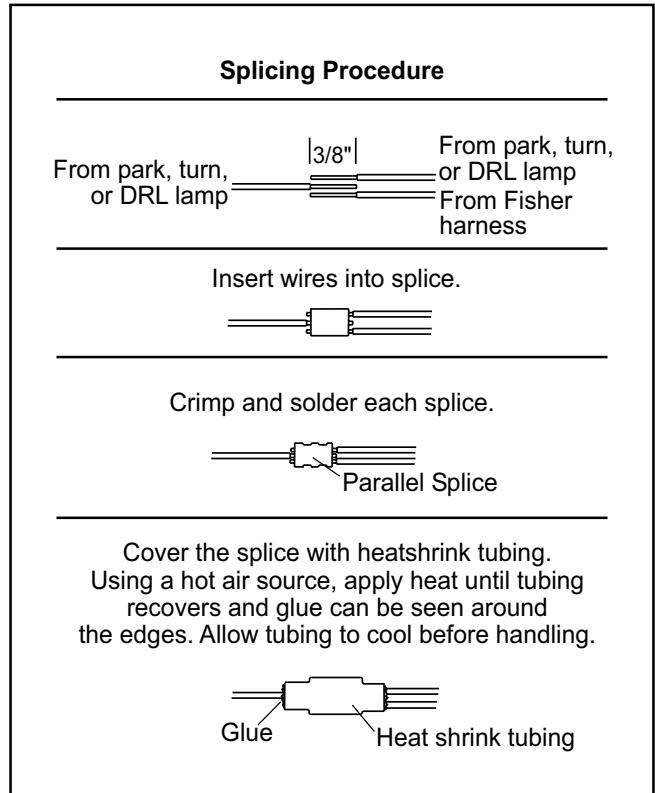
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RECOMMENDED SPLICING PROCEDURE

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.**

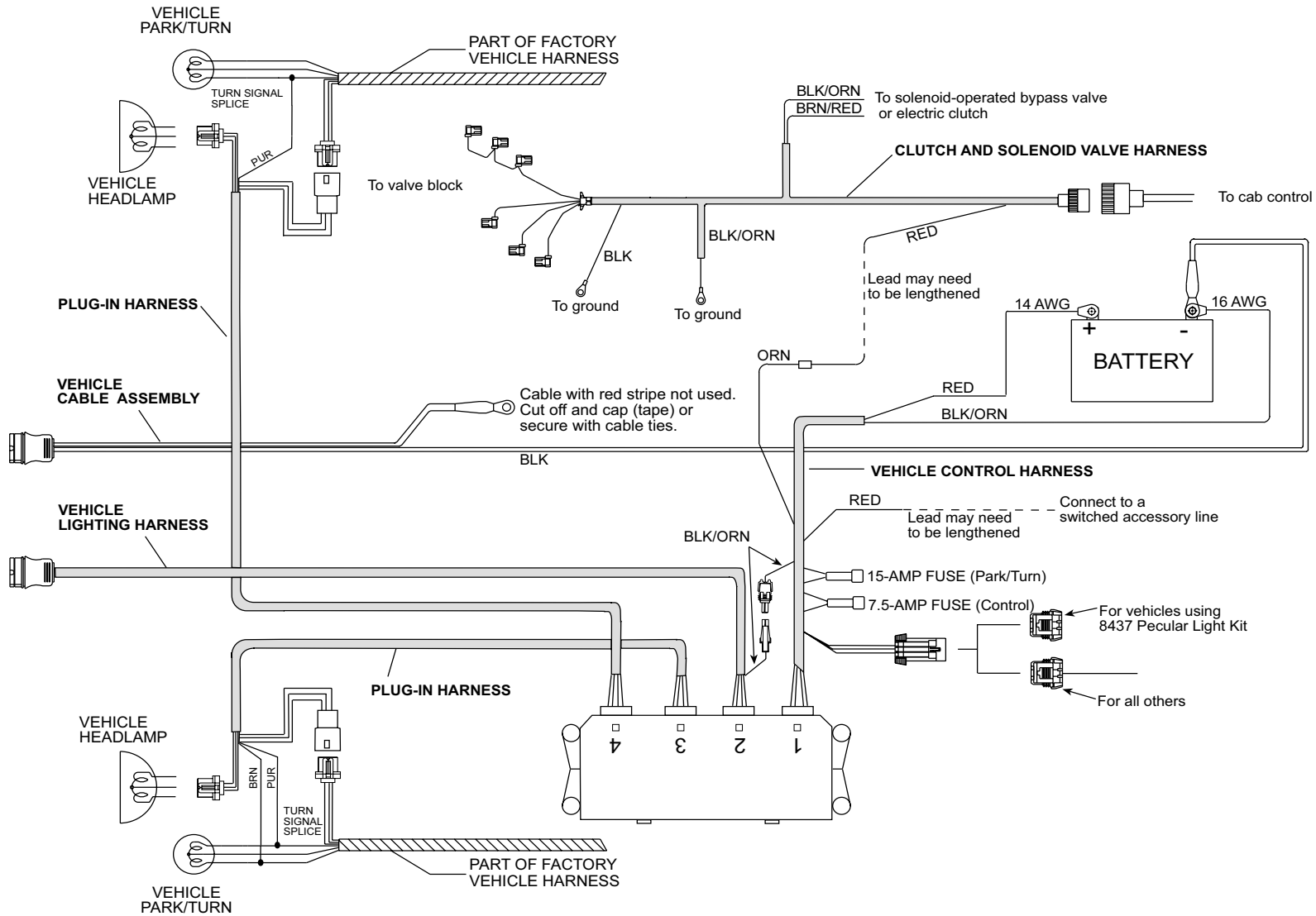
NOTE: Avoid using an excessive amount of solder as it can result in wicking. Wicking occurs when solder travels up the wire core. This may cause the wire to become stiff or brittle which could lead to a broken or open circuit.

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.

SYSTEM DIAGRAM – STRAIGHT BLADES



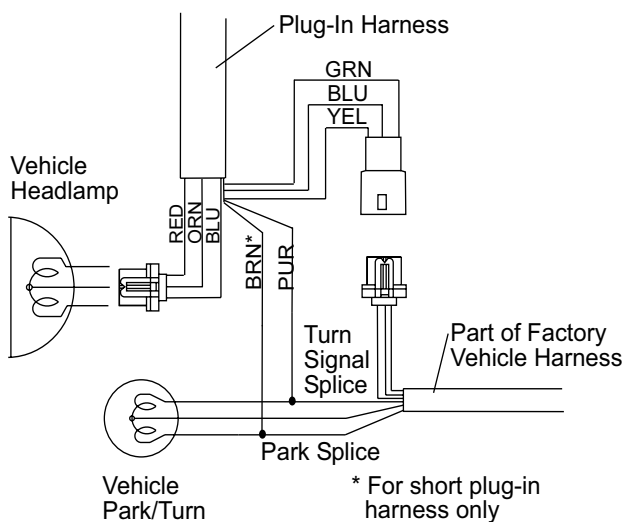
NOTE: The Isolation Module is shown on the driver side for illustration purposes only. Its location may be different for your vehicle.

The short plug-in harness contains the park and the DRL lamp wire. They are shown on the driver side for illustration purposes only.

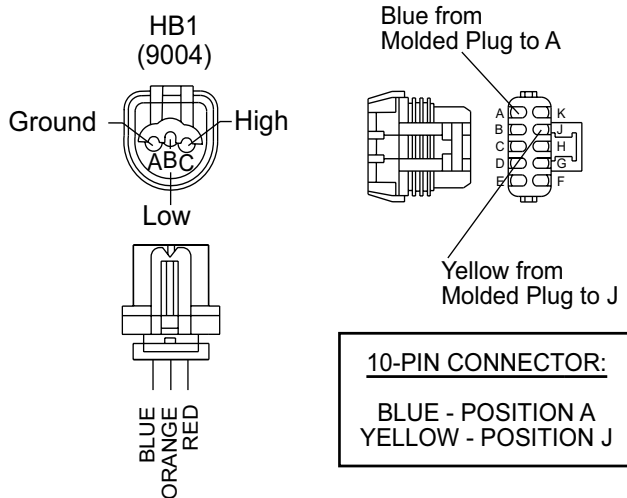
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**HEADLAMP WIRING FOR VEHICLES USING
8436 PECULIAR LIGHT KIT**

**HB-1 HEADLAMPS
(9004)**

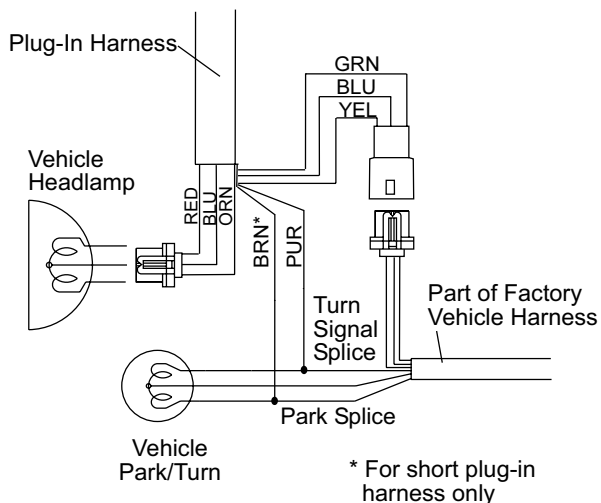


PLUG CONFIGURATION FOR HB-1 HEADLAMPS

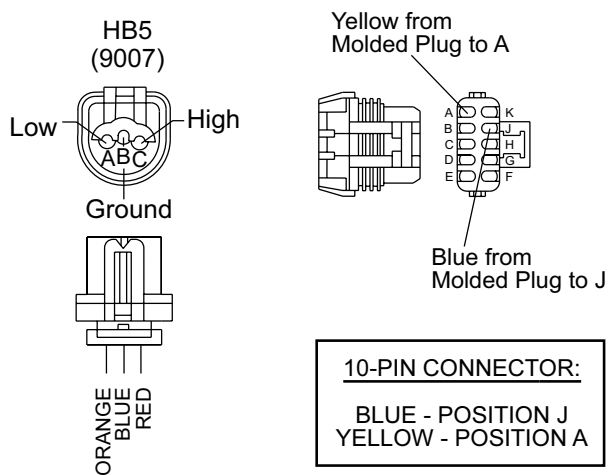


Install wires in both connectors as shown.
Install supplied secondary connector locks.

**HB-5 HEADLAMPS
(9007)**

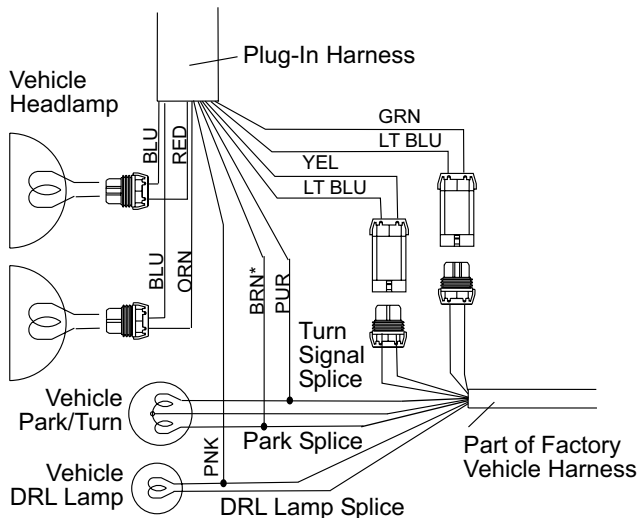


PLUG CONFIGURATION FOR HB-5 HEADLAMPS



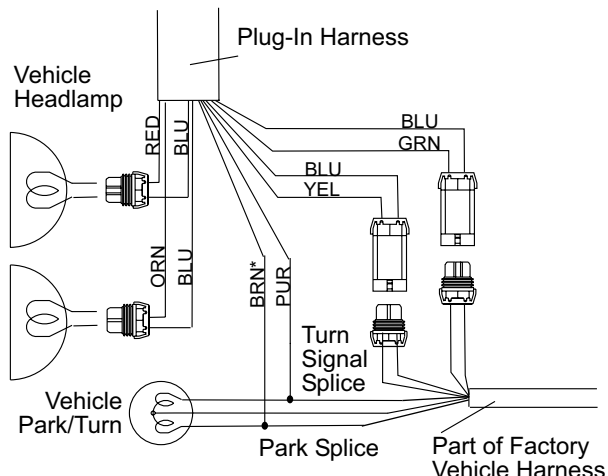
Install wires in both connectors as shown.
Install supplied secondary connector locks.

HEADLAMP WIRING FOR VEHICLES USING 8437 PECULIAR LIGHT KIT



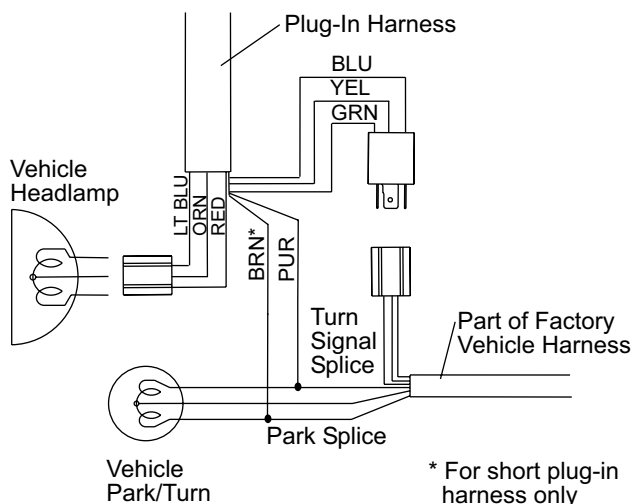
* For short plug-in harness only

HEADLAMP WIRING FOR VEHICLES USING 8438 PECULIAR LIGHT KIT



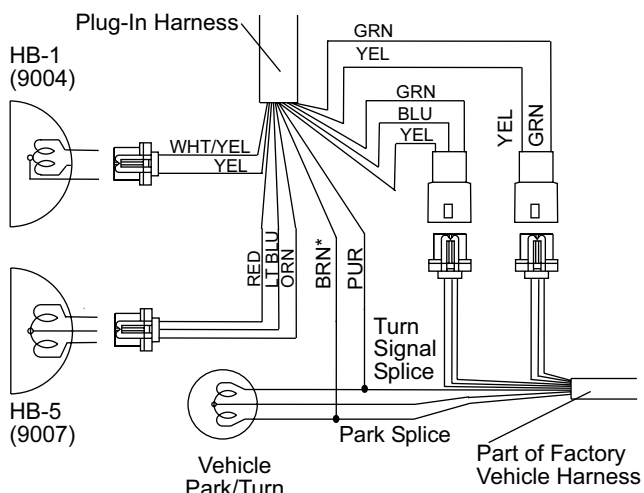
* For short plug-in harness only

HEADLAMP WIRING FOR VEHICLES USING 8439 PECULIAR LIGHT KIT



* For short plug-in harness only

HEADLAMP WIRING FOR VEHICLES USING 8442 PECULIAR LIGHT KIT



* For short plug-in harness only

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