



Plug-In Harness Installation Instructions for DRL Equipped Vehicles:

1999 & Later Dodge Ram with dual HB-1 headlamps & DRL's

1999 & Later Dodge Ram with quad HB-5 & HB-1 headlamps & DRL's

1999 & Later Dakota with dual HB-5 headlamps & DRL's

*Use 61550 Headlamp Kit 12-Pin with Straight and MVP® Blades
All Installations Require a 61584 DRL Kit*

STRAIGHT BLADE KITS

Harness Kit No. 63400 HB-1 -F

Harness Kit No. 63404 HB-5/HB-1 -F

MVP® BLADE KITS

Plug-In Kit No. 63402 HB-1 -F

Plug-In Kit No. 63406 HB-5/HB-1 -F

⚠ CAUTION

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

PARTS LIST CHART

Indented parts are included in the assembly under which they are listed. Quantities shown are included with the assembly.

With DRL's (All Require 61584 Kit)						
Part No.		Ram Dual		Ram Quad		Dakota
		Straight Blade	MVP® Blade	Straight Blade	MVP® Blade	Straight Blade
		63400 Harness Kit HB-1	63402 Plug-in HB-1	63404 Harness Kit HB5/HB1	63406 Plug-In HB5/HB1	63404 Harness Kit HB5
26009	PLUG-IN HARNESS HB-1(9004) -F	1	1			
26027	PLUG-IN HARNESS HB-5/HB-1 -F			1	1	1
61557	VEHICLE HARNESS 12-PIN	1		1		1
63390	VEHICLE HARNESS 12-PIN SPECIAL		1		1	
63399	PLOW HARNESS MVP SPECIAL		1		1	
63401	VEHICLE HARNESS MVP SPECIAL		1		1	
56496	V-PLOW CONNECTOR BAGGED ASSY		1		1	
26013	FUSE HOLDER ASSY	1	1	1	1	1
61535	RELAY SPDT	1	1	2	2	2
62919	JUMPER ASSY - 2 WAY			2	2	2
61562	JUMPER WIRE (Tan)	2	2			
26270	HEAT SHRINK TUBING 1/2" BLACK (2" Long)		1		1	
61572	PARTS BAG (HARNESS KITS U)	1	1	1	1	1
. 61535	RELAY SPDT	3	3	3	3	3
. 60109	FLASHER HD	1	1	1	1	1
. 61548	PLUG COVER	2	2	2	2	2
. 59224	BULLET RECEPTACLE CONNECTOR	3	3	3	3	3
. 59223	CABLE TIE	8	8	8	8	8

Abbreviations	
ASSY	Assembly
HD	Heavy Duty
SPDT	Single Pole Double Throw
U	UniMount® System

HARNESS INSTALLATION

INSTALLATION INSTRUCTIONS

NOTE: This installation uses the vehicle headlamp circuits to activate relays, which allow the plow headlamps to be powered directly off the battery.

NOTE: MVP® installations – The operator will have three connector sets to mate and disconnect when mounting and removing the plow from the vehicle. There will be a 12-pin connector set for the operation of the headlamps, turn signals and parking lights. A separate 12-pin connector set is used to control the hydraulic system. This kit contains a special plow and vehicle harness for the operation of the hydraulic system, and a second special vehicle harness for the lights. The connectors for the hydraulic system are identified by white marking tape at the molded ends.

1. Follow the installation instructions furnished with the mount with the following exceptions.
2. Locate the end of the plug-in harness with the four wires (six on quads) with blade receptacles behind the driver-side headlamp. Route the other end of the harness with the purple wire bullet end to the area behind the passenger-side headlamp.
3. On the passenger-side, remove the headlamp connector from the vehicle headlamp and mate the vehicle socket with the male connector on the plug-in harness. Mate the plug-in harness socket with the vehicle headlamp.
 - **On Quad Lamps:** you will have two male and two socket ends to connect, the three wire connectors go to the outside headlamps and the two wire connectors go to the in-board headlamps.
 - **Dakota Dual Lamps:** only the three wire connectors of the plug-in harness are used. The two wire connectors can be plugged together to keep them out of the way.

Connect the purple wire bullet to the black bullet receptacle attached to the passenger-side turn signal wire on the vehicle.
4. On the driver-side, make the same connections to the vehicle headlamps and sockets as you made on the passenger-side.
5. Connect the purple wire bullet from the vehicle harness to the purple wire bullet receptacle on the plug-in harness.

(Continued on next page)

HARNESS INSTALLATION

INSTALLATION INSTRUCTIONS

(Continued)

⚠ 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 that burns skin, eyes and clothing.

Disconnect the battery before removing or replacing any electrical components.

6. Remove NEGATIVE battery cable from battery.
 7. At the motor relay, remove the nut, lock washer, and 22" red battery cable from the large terminal and install the 5/16" ring terminal of the fuse holder assembly, found in this kit, to the motor relay terminal. (See diagram below.) Reinstall the 22" red battery cable, lock washer, and nut. Secure nut.
 8. Install the 61184 DRL Kit following instructions furnished with the kit except for the relay connections.
- NOTE:** Tape the four (five on quads) headlamp relays together with electrical tape to ease wire installation.
- **MVP® Installations** - Proceed to Step 1 on page 4 at this time.
 - **Straight Blade Installations** - Attach wires from the vehicle harness and the plug-in harness to the four relays (five on quad installations) as shown in the diagram for your vehicle. (See page 5 or 6.)
 - **Dakota Installations** - The two blue wires with receptacles are not used. They can be bundled and tied out of the way. (See page 7 or 8.)

(Continued on next page)

Fuse Holder Assembly



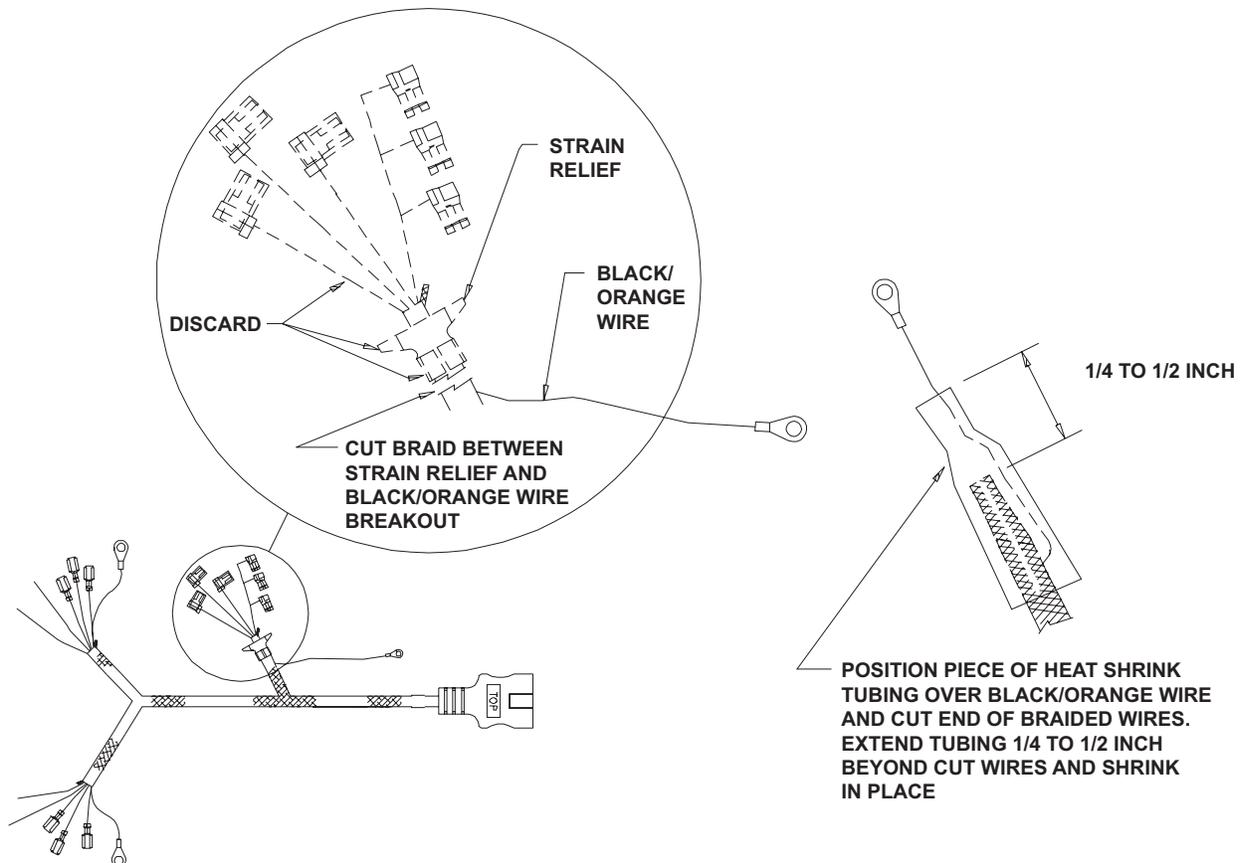
HARNESS INSTALLATION

INSTALLATION INSTRUCTIONS

(Continued)

MVP® Installations Only

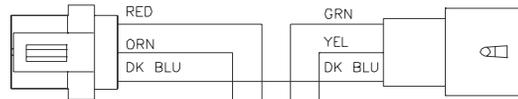
1. The 61550 12-pin headlamp kit plow harness needs to be modified to remove the wires and terminals that normally connect to the hydraulic unit. Follow the diagram below for this modification.
2. The vehicle harness for the headlamps (no white tape on braid behind the mold) has been shortened and should be routed from the bumper/grill area to behind the driver-side headlamps for connection to the headlamp relays.
3. Attach wires from the modified vehicle harness and the plug-in harness to the four relays (five on quad installations) as shown in the wiring diagram for your vehicle. (See page 5 or 6.)
4. Attach the plow harness with the white tape on the mold provided in this kit to the hydraulic unit on the MVP® plow. Secure the harness to the side angle of the lift frame.
5. On the vehicle, install the modified vehicle harness with the white tape on the braid routing it from the bumper/grill area to the cab and also to the motor relay.
6. Inside the cab, insert the terminals into the Connector as shown in the standard MVP® instructions.
7. Under the hood, make the connections at the motor relay as shown in the standard MVP® instructions.
8. Secure both special vehicle harnesses behind the bumper/grill area.
9. Pass along to the owner/operator, that when attaching the plow to the vehicle, the two ends with the white tape are to be mated together. The two ends without the white tape are mated together.



RAM DUAL HB-1 with DRL'S
 63400 HARNESS KIT or 63402 PLUG-IN HARNESS KIT (MVP®)
 12-PIN HEADLAMPS

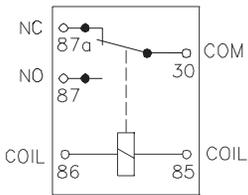


Passenger Side



PUR
 TO TURN SIGNAL
 BULLET CONNECTOR

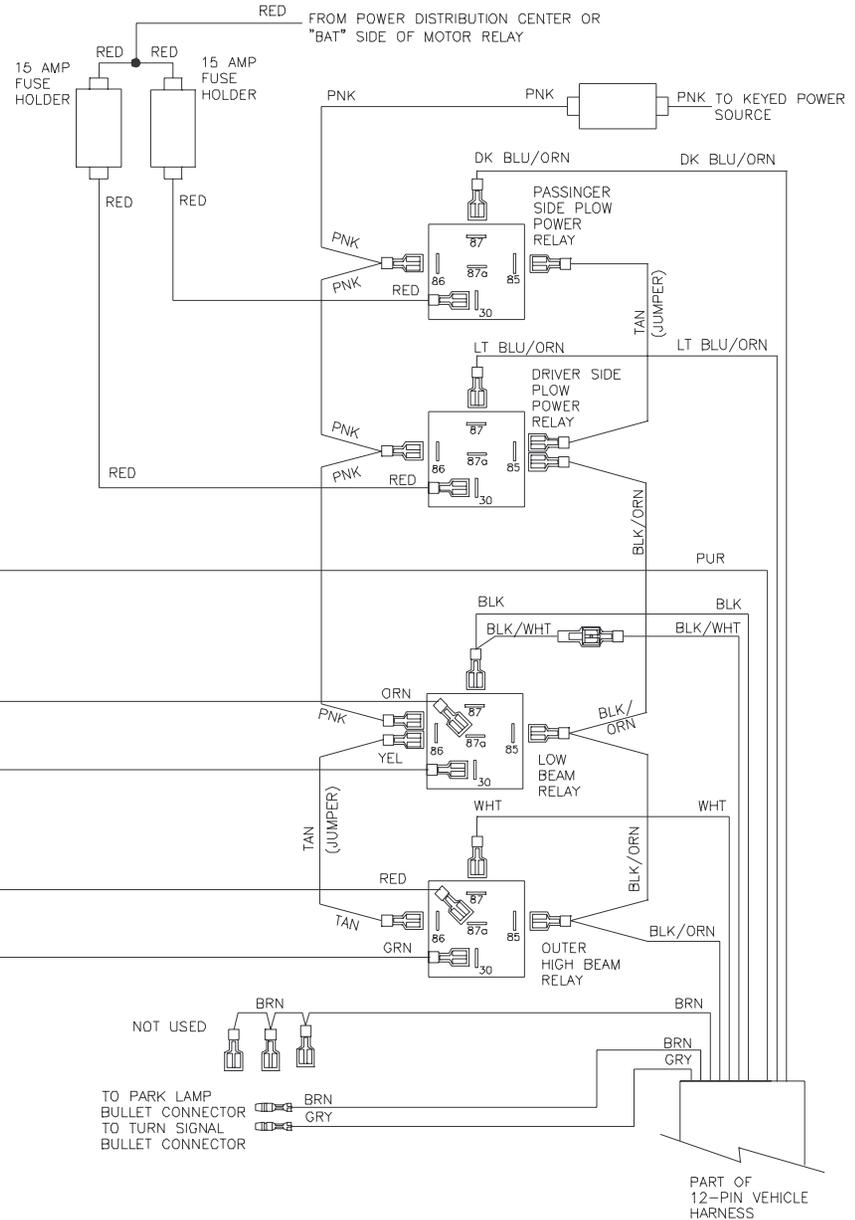
PLUG-IN HARNESS



THE RELAY SHOWN
 IS NOT ENERGIZED

RELAY PIN OUT
 (VIEWED FROM THE BOTTOM)
 85 - COIL CONNECTION
 86 - COIL CONNECTION
 30 COMMON
 87a - NC (NORMALLY CLOSED)
 87 - NO (NORMALLY OPEN)

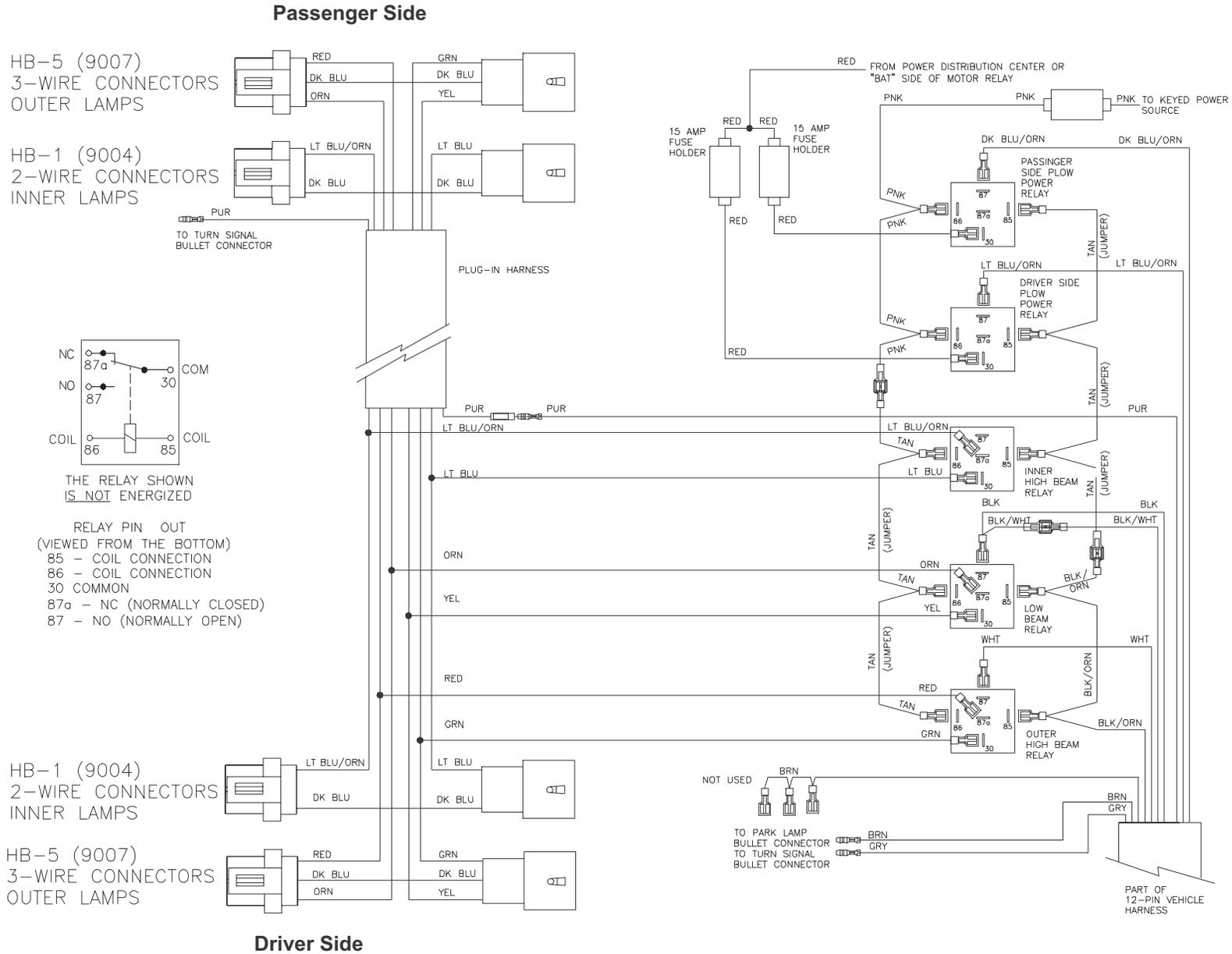
Driver Side



RAM QUAD HB-5/HB-1 with DRL'S 63404 HARNESS KIT or 63406 PLUG-IN HARNESS KIT (MVP®) 12-PIN HEADLAMPS



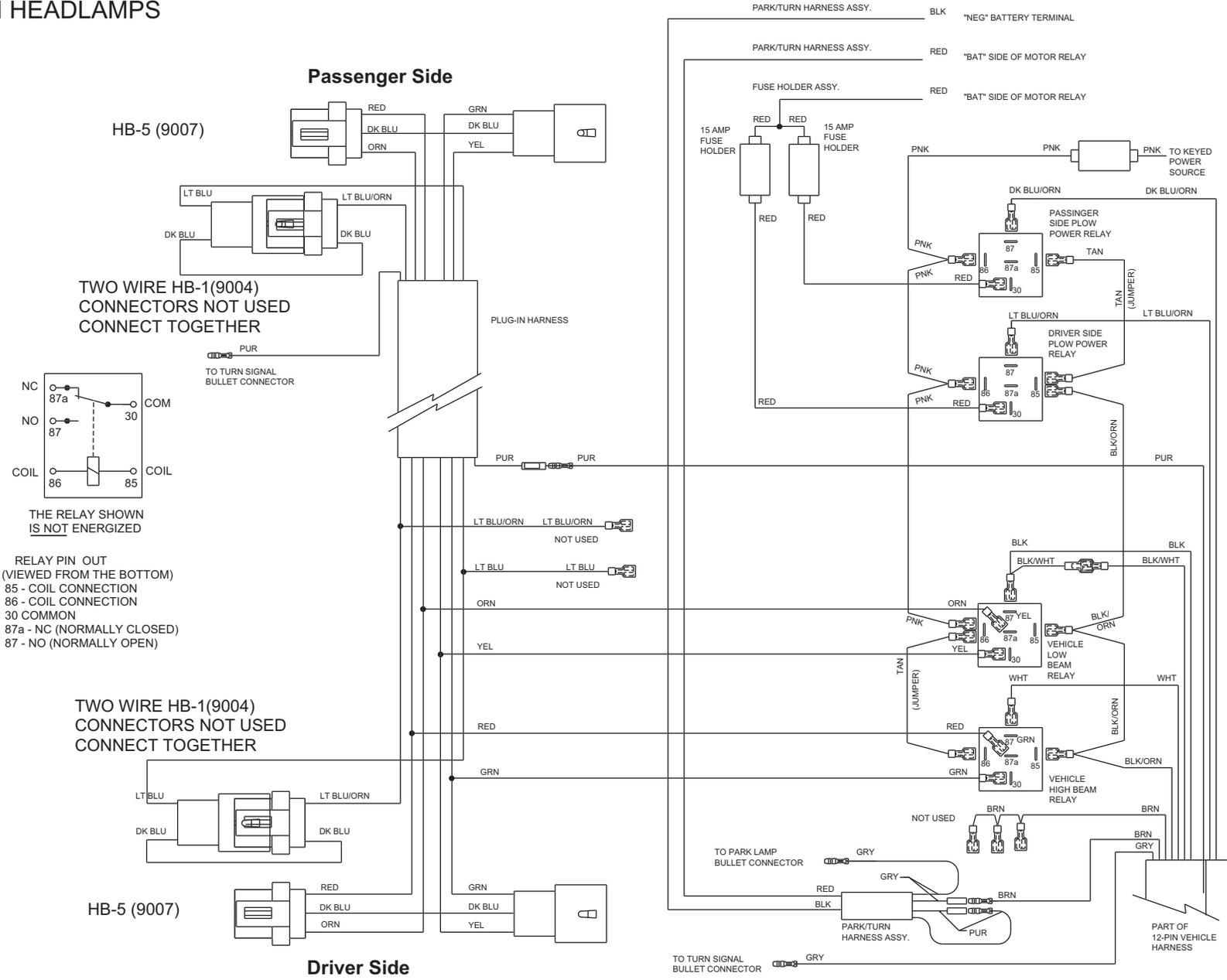
RELAY CONNECTIONS DIAGRAM



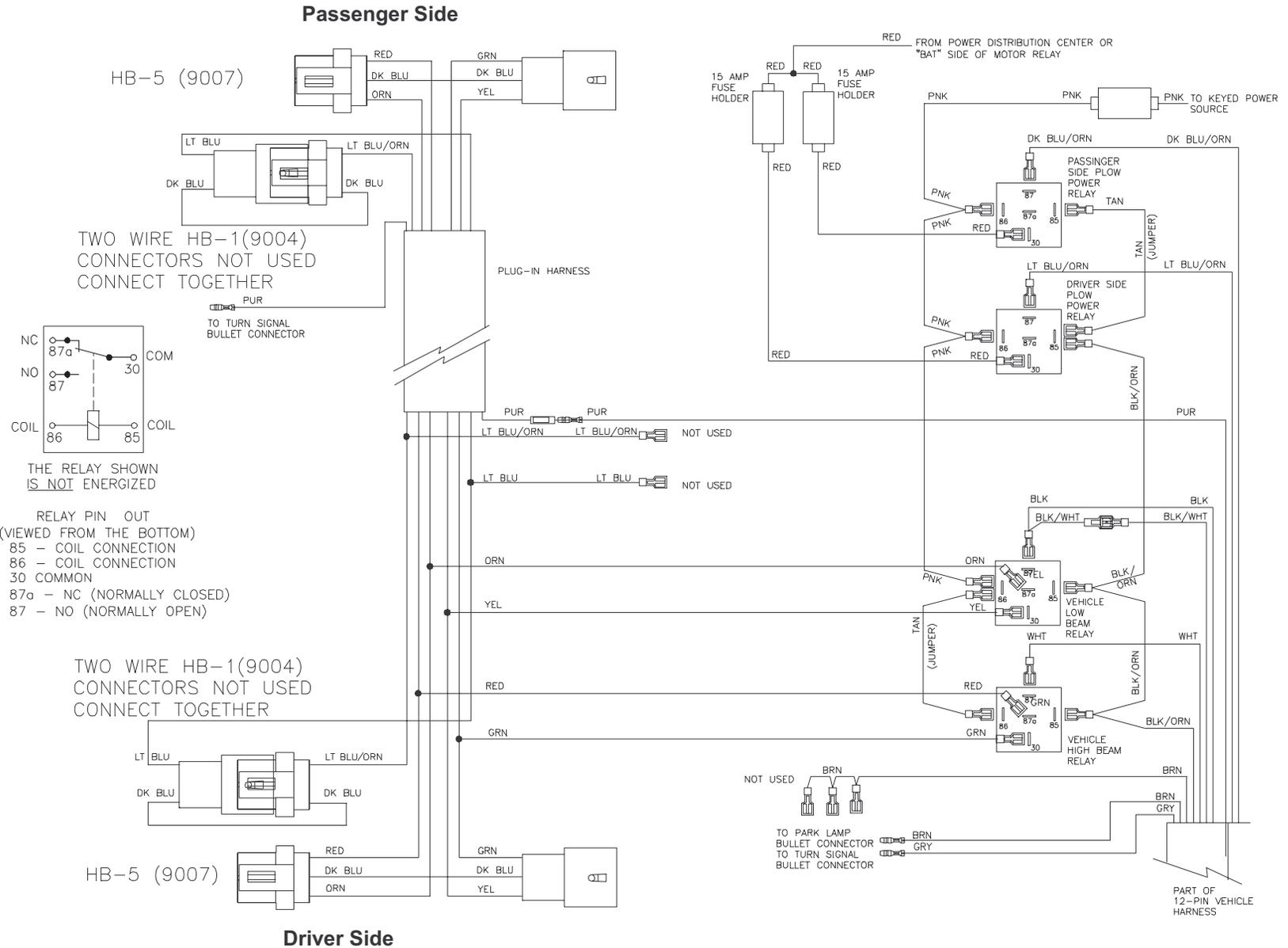
2000 and Later DAKOTA DUAL HB-5 with DRL'S 63404 HARNESS KIT 12-PIN HEADLAMPS



RELAY CONNECTIONS DIAGRAM



1999 DAKOTA DUAL HB-5 with DRL'S 63404 HARNESS KIT 12-PIN HEADLAMPS





WESTERN PRODUCTS
P.O. BOX 245038
MILWAUKEE, WI 53224-9538

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

Western Products 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 herein. Western Products and the vehicle manufacturer may require and/or recommend optional equipment for snow removal. Western Products offers a limited warranty on all snowplows and accessories. See separately printed page for this important information. The following are registered® trademarks of Douglas Dynamics, L.L.C.: MVP®, UNIMOUNT®, and WESTERN®.