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INTRODUCTION

The purpose of this book is to provide the trained mechanic with a comprehensive reference to assist in diagnosis and repair of WESTERN® snowplow electrical systems. It contains schematics, diagrams and charts which supply information for the various types of vehicle and plow headlamp systems. Although intended primarily as a diagnostic tool for headlamp systems, the hydraulic system circuitry is also included to show the complete electrical system.

HOW TO USE THIS BOOK

Use the information in the Headlamp Index to locate the electrical schematic for the vehicle. All headlamp harnesses are tagged with the harness part number. The schematic is an abstract drawing showing the purpose of each component in the system. Where possible, component locations are indicated by enclosures on the schematic. The Lamp Type, Wire Color and Connector Identification charts and diagrams will give specific wire colors, their function and locations in connectors. Any special notes are found in the upper right corner of the schematic. Further information and a specific troubleshooting guide may be found in the appropriate Mechanic's Guides.

The 9- and 12-pin Vehicle Side schematics (relay system) contain all vehicle headlamp and harness types. The 7-pin Vehicle Side Schematics show only a few representatives applications. For other 7-pin vehicle headlamp and harness types, refer to the corresponding 9-pin Vehicle Side schematic and use only the headlamp circuitry.

EARLY REVISION VEHICLE HARNESSES (RELAY SYSTEM)

All 9- and 12-pin vehicle harnesses

are labeled with a white tag indicating the harness part number and revision level. Early 9-pin harness revisions 1-9 and 12-pin harness revisions 1-7 have a ground circuit in which the control. motor relay, and headlamp relays all ground through the 9- or 12-pin connector. Some of these early revision harnesses also have a diode in the ground wire to the headlamp relays. Complete 9- and 12-pin system schematics showing this early revision ground configuration are included in the relay section of the book. These schematics are for early revision harnesses using only the solenoid control. If a handheld control has been installed, the ground circuit has been modified into the later revision configuration, in which only the headlamp relays ground through the 9- or 12-pin connector and the control and motor relay ground separately to the battery. Early revision harnesses may be easily identified by a single black/orange wire on one of the motor relay primary terminals which does not continue on to the negative battery terminal. All vehicle side schematics in this book show only the later revision circuitry.

GROUNDS AND COMMONS

Notice that "ground" on the harness connectors may be referred to as "common". Most domestic vehicles use a **high side drive** headlamp system in which power is supplied by the switch to either headlamp. The headlamps have a common connection to ground. Some import vehicles as well as 1999 to 2002 Chevrolet/GMC, Dodge use a **low side drive** headlamp system in which power is supplied to the common connection of the headlamps. Ground is supplied to either headlamp by the switch.

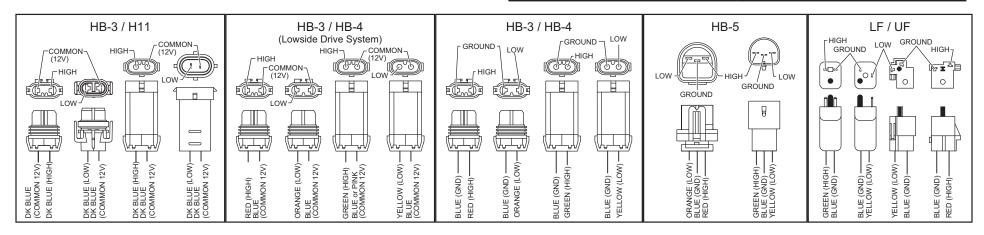
Whether the terminal in the headlamp harness is actually a negative ground or a positive 12-volt common depends on what type of vehicle headlamp system it is installed into. Prior to the publication of this book, all Western Products electrical schematics showed "ground" whether or not it was a true ground or a 12-volt common. Some of these early schematics appear in this book. Newer schematics of low side drive systems will show the more accurate term "common" where appropriate.

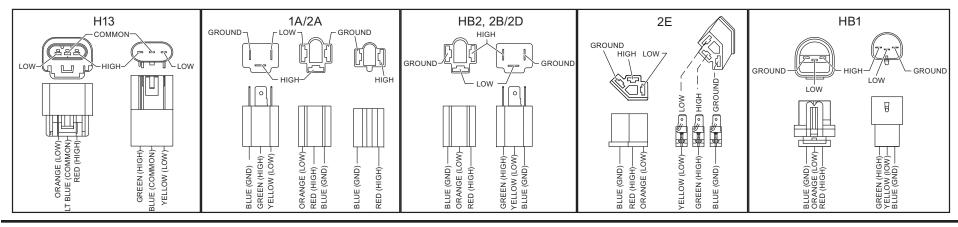
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NOTE: Blue ground wires may be LT or DK BLU, w/ or w/o WHT stripe, depending on harness.

Headlamp	Bulb	Headlamp	Bulb
Type	Type	Type	Type
LF	H4703	H13	9008
UF	H4701	HB-1	9004
1A1	H4851	HB-2	9003
2A1	H4652 (GMC/Chevy)	HB-3	9005
2A1	H4656 (Mitsubishi)	HB-4	9006
2B1	H6054	HB-5	9007
2D1	H6024	H11	H11
2E1	H6545		





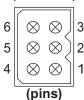
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4-PORT & 3-PORT ISOLATION MODULE - ELECTRICAL CONNECTORS - 3-PLUG SYSTEMS

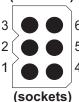
Solenoid Control Connectors

Control Side (end view)



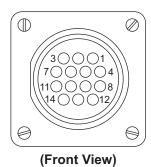
Pin No.	Solenoid Control Wire Color Only
1	White
2	Green
3	Brown
4	Black
5	Blue
6	Red

Vehicle Side (end view)



Pin No.	Wire Color	Control Function
1	Red/Yellow	+12V
2	Light Green	Valve S2
3	Orange/Black	Ground
4	Brown/Red	Motor Relay
5	Light Blue	Valve S3
6	White/Yellow	Valve S1

MVP® Blade Control Connectors



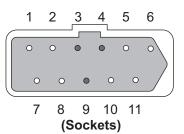
Pin No.	Wire Color	
1	Light Blue w/Orange Stripe	
2	Blue w/Orange Stripe	
3	Black w/White Stripe	
4	Light Green	
5	Light Blue	
6	White w/Yellow Stripe	
7	Brown w/Red Stripe	
8	Red w/Yellow Stripe	
9	Orange w/Black Stripe	
10	Brown w/Green Stripe	

MVP Blade to Straight Blade Adapter Kit PN 66760K



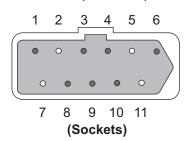
Plow Control Harnesses

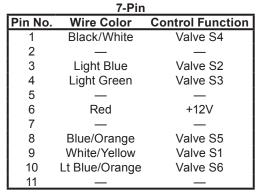
Plow (End View)



3-Pin				
Pin No.	Wire Color	Control Function		
1	_	_		
2	_	_		
3	Light Blue	Valve S3		
4	Light Green	Valve S2		
5	_	_		
6	_	_		
7	_	_		
8	_	_		
9	White/Yellow	Valve S1		
10	_	_		
11	_	_		

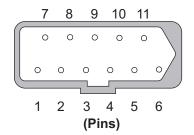
Plow (End View)





Plow Lighting Harness

Plow (End View)



11-Pin

11-7-111			
Pin No.	Wire Color	Control Function	
1	Black/White	PS Low Beam	
2	Black/Orange	Ground	
3	White/Yellow	PS High Beam	
4	White	DS High Beam	
5	Blue/Orange	PS Common	
6	Black	DS Low Beam	
7	Black/Orange	Ground	
8	Gray	Left Directional	
9	Purple	Right Directional	
10	Brown	Parking Lights	
11	Light Blue	DS Common	

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4-PORT & 3-PORT ISOLATION MODULE - ELECTRICAL CONNECTORS - 2-PLUG SYSTEMS

Solenoid Control Connectors

Control Side (end view)



Pin No.	Solenoid Control Wire Color Only	
1	Red	
2	Green	
3	White	
4	Black	

Vehicle Side (end view)

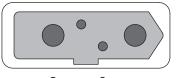


Pin No.	Wire Color	Control Function
1	Red	+12V
2	Red	Signal
3	Black	Signal
4	Black	Ground

Multiplex Harnesses

Plow (End View)

4



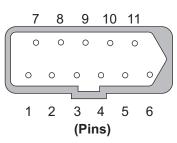
2 3 (Sockets)

4-Pin

Pin No.	Wire Color	Control Function
1	Red	+12V
2	Black	Ground
3	Tan	Signal
4	White	Signal

Plow Lighting Harness

Plow (End View)



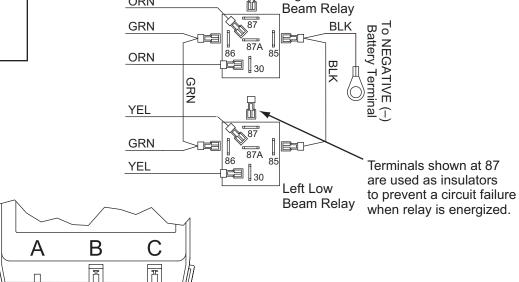
11-Pin				
Pin No.	Wire Color	Control Function		
1	Black/White	PS Low Beam		
2	Black/Orange	Ground		
3	White/Yellow	PS High Beam		
4	White	DS High Beam		
5	Blue/Orange	PS Common		
6	Black	DS Low Beam		
7	Black/Orange	Ground		
8	Gray	Left Directional		
9	Purple	Right Directional		
10	Brown	Parking Lights		
11	Light Blue	DS Common		

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A CAUTION

This adapter is required for vehicles equipped with a 4-headlamp lighting system that illuminates the low *and* high beams when in high-beam mode. This adapter prevents the low beams on the snowplow from illuminating when placed in high beam.



In-Line Adapter Relay Connections

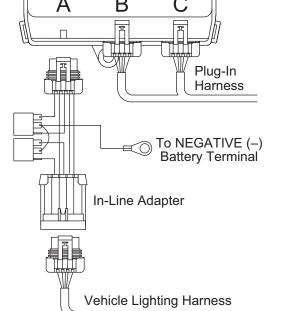
Right Low

Vehicle Control Harnesses

To NEGATIVE (-)
Battery Terminal

In-Line Adapter

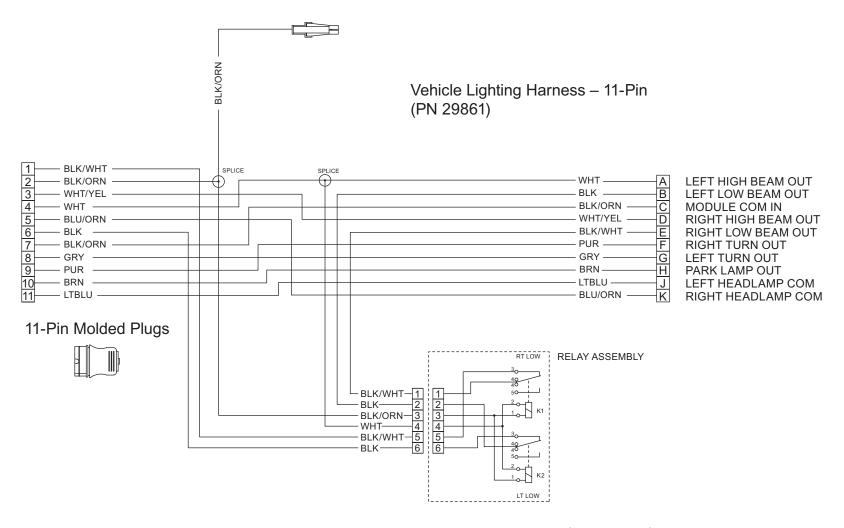
Vehicle Lighting Harness



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Relay Assembly (PN 29859)

Headlamp Type

Pages

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20	HB-3/HB-4	29048	28253
21	H13	29049	28986
22	HB-1 or HB-5	29050	28930
23	2B/2D or HB-2	29051	28464
24	HB-3/HB-4 4-Pin Connectors	29052	28924
25	2B/2D or 1A/2A 5-Pin Connectors	29053	29058
26	2B/2D 7-Pin Connectors	29054	29270
27	HB-3/H11	29400-2	29499

Harness Kit

Harness Part #

Overview

The Isolation Module acts as an electrical hub, automatically directing vehicle power to the appropriate vehicle or snowplow lighting devices, while also supplying battery power to the snowplow control.

The vehicle high and low beams enter and exit the Isolation Module through positions B (left side lighting) and position C (right side lighting). Park, turn, and DRL signals also enter through positions B and C.

The output of the vehicle high beam/ low beam select switch is directed to

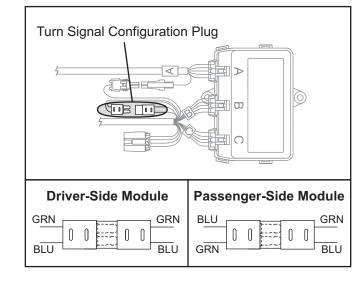
the Isolation Module via the plug-in harness. When the snowplow is not attached to the vehicle, the signal passes through the normally closed relay contacts to the vehicle headlamps. During this time, the Isolation Module is inactive, placing no current draw on the vehicle's electrical system.

With the snowplow attached, the Isolation Module is still inactive until either of the two following conditions are met: the vehicle parking lights are turned ON or the vehicle ignition switch is turned ON.

NOTE: References to "Left" and "Right" are correct for modules located on the driver's side of the vehicle. The reversible turn signal plug must be reversed for passenger-side installations.

Turning ON the vehicle parking lights activates a series of relays, automatically transferring the vehicle high and low beams to the snowplow while supplying battery power directly to the snowplow parking lights. All snowplow lighting exits the Isolation Module through position A.

Turning ON the vehicle ignition switch energizes a snowplow control relay, supplying vehicle battery power directly to the control via the vehicle control harness and plug-in harness. The vehicle ignition switch also supplies power to the vehicle turn signals. Activating the vehicle turn signals energizes turn signal circuit, which supply vehicle battery power directly to the snowplow turn signals.



White Label Non-DRL Module (PN 29060)

Snowplow not attached to vehicle:

System is inactive. Vehicle lighting system functions normally. Reason: No ground to module.

Snowplow attached to vehicle:

System is inactive until either the switched accessory wire or the vehicle parking lights are activated. Vehicle and snowplow lighting systems function as outlined in the Theory of Operation Overview. Reason: ground path is established from battery common to Pin C on Port A of the 3-port module via the following harnesses: vehicle battery cable, vehicle control harness, adapter, plug-in harness, vehicle lighting harness and snowplow lighting harness.

- Activating a switched accessory wire (a key-controlled power source) applies battery voltage to the VACC input of the module, which energizes the coil of the control power relay (part of the 3-port module). Energizing the coil of the control power relay causes the relay contacts to shift from the "N.O." (normally opened) position to the "N.C." (normally closed) position, which supplies battery voltage to the snowplow control via the plug-in harness and the vehicle control harness. The switched accessory wire only controls battery voltage to the snowplow control.
- Activating the vehicle park light circuit applies battery voltage to the module park circuit input. The voltage is applied to a solid state power device, which causes the device to turn ON and apply battery voltage to the snowplow park lamp filaments via the vehicle and snowplow lighting harnesses. Voltage is also applied to the module's high and low beam relay coils, which causes the relay contacts to shift from the "vehicle" to the "snowplow" position.
- With the four headlamp relays shifted to the "snowplow" position, the vehicle high and low beams are now directed to the snowplow headlamps via the vehicle and snowplow lighting harnesses. Toggling the dimmer switch between high and low beam will toggle the snowplow high and low beams.

- Activating the turn signal applies battery voltage to the module turn signal circuit input. The voltage is applied to a solid state power device, which causes the device to turn ON and apply battery voltage to the snowplow turn signal lamp filaments via the vehicle and snowplow lighting harnesses.
- On vehicles equipped with DRLs—either integrated into the vehicle headlamps or separated into dedicated DRL lamps—this module will not turn OFF the vehicle DRLs or transfer them to the snowplow. DRLs will remain on the vehicle and operate as the vehicle manufacturer intended.

Green Label DRL Module (PN 29070)

Snowplow not attached to vehicle:

System is inactive. Vehicle lighting system functions normally. Reason: No ground to module.

Snowplow attached to vehicle:

System is inactive until either the switched accessory wire or the vehicle parking lights are activated. Vehicle and snowplow lighting systems function as outlined in the Theory of Operation Overview. Reason: ground path is established from battery common to Pin C on Port A of the 3-port module via the following harnesses: vehicle battery cable, vehicle control harness, adapter, plug-in harness, vehicle lighting harness and snowplow lighting harness.

 Activating a switched accessory wire (a key-controlled power source) applies battery voltage to the VACC input of the module. A control circuit senses the voltage and energizes the coil of the control power relay (part of the 3-port module).
 Energizing the coil of the control power relay causes the relay contacts to shift from the "N.O." (normally opened) position to the "N.C." (normally closed) position, which supplies battery voltage to the snowplow control via the plug-in harness and the vehicle control harness. The switched accessory wire only controls battery voltage to the snowplow control.

- Activating the vehicle park light circuit applies voltage to the module park circuit input. A control circuit senses the voltage and turns ON a solid state power device, which applies battery voltage to the snowplow park lamp filaments via the vehicle and snowplow lighting harnesses.
- With the park light circuit energized, the control circuit monitors the vehicle high and low beam inputs. When battery voltage is sensed, the appropriate solid state power devices are turned ON, supplying battery voltage to the snowplow headlamps via the vehicle and snowplow lighting harnesses.
 Toggling the dimmer switch

- between high and low beam will toggle the snowplow high and low beams.
- Activating the turn signal applies voltage to the module turn signal circuit input. A control circuit senses the voltage and turns ON a solid state power device, which applies battery voltage to the snowplow turn signal lamp filaments via the vehicle and snowplow lighting harnesses.
- PN 29070 Only: On vehicles equipped with DRLs—either integrated into the vehicle headlamps or separated into dedicated DRL lamps—this module will not turn OFF the vehicle DRLs. The control circuit monitors the voltage level supplied by the vehicle to the vehicle high and low beams as well as the dedicated DRL inputs. When a lower voltage is sensed on either the high or low beam inputs or battery voltage is sensed on the turn signal or dedicated DRL inputs, the control circuit turns ON the snowplow

- turn signal filaments to operate as DRLs.
- PN 29070-1 Only: On vehicles equipped with DRLs integrated into the vehicle headlamps. Activation of the switched accessory wire (a key-controlled power source) Port C, Position C, applies battery voltage to the module's high and low beam relay coils, which causes the relay contacts to shift from the "vehicle" to the "snowplow" position. This module will transfer the vehicle headlamp DRLs to the snowplow (turns off vehicle DRLs).
- On vehicles equipped with dedicated DRL bulbs or vehicles using the turn signals as DRLs, this module will not turn OFF the vehicle bulbs.
 While the vehicle is in the DRL mode, this module will illuminate the snowplow light turn signal filaments.

Blue Label DRL Module (PN 29760-1)

Snowplow not attached to vehicle:

System is inactive. Vehicle lighting system functions normally. Reason: No ground to module.

Snowplow attached to vehicle:

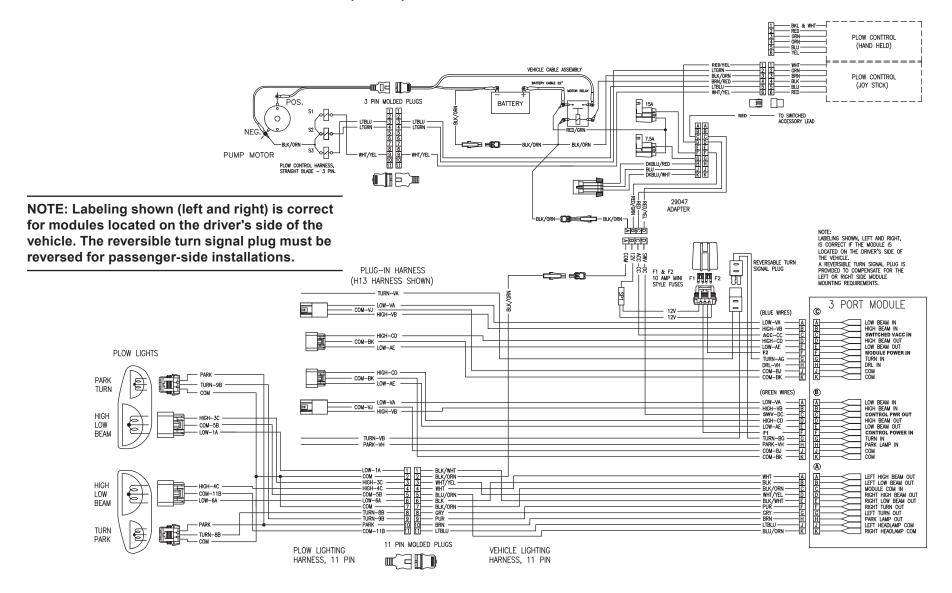
System is inactive until either the switched accessory wire or the vehicle parking lights are activated. Vehicle and snowplow lighting systems function as outlined in the Theory of Operation Overview. Reason: ground path is established from battery common to Pin C on Port A of the 3-port module via the following harnesses: vehicle battery cable, vehicle control harness, adapter, plug-in harness, vehicle lighting harness and snowplow lighting harness.

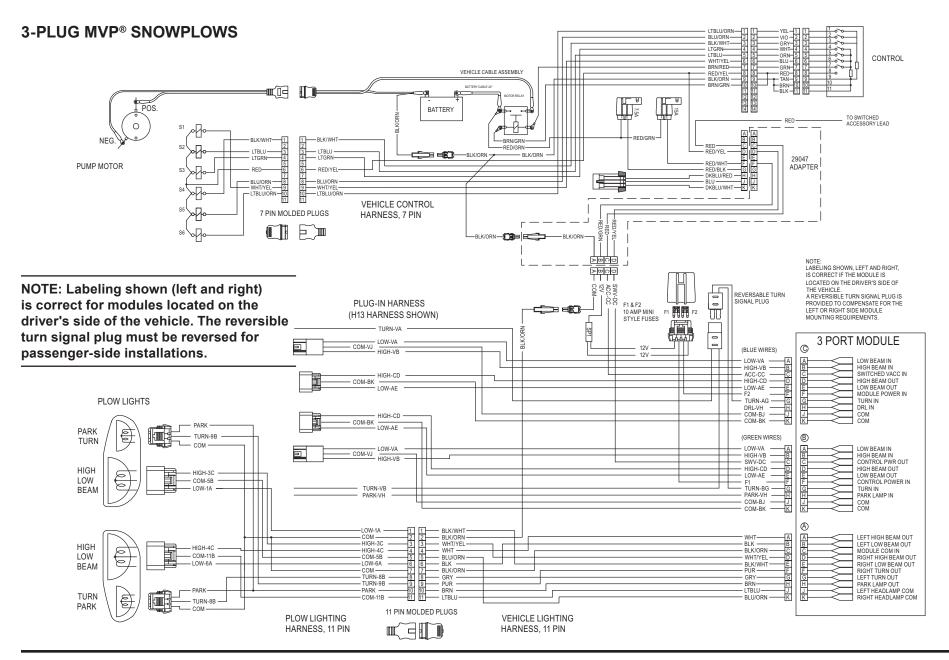
 Activating a switched accessory wire (a key-controlled power source) applies battery voltage to the VACC input of the module, which energizes the coil of the control power relay (part of the 3-port module). Energizing the coil of the control power relay causes the relay contacts to shift from the "N.O." (normally opened) position to the "N.C." (normally closed) position, which supplies battery voltage to the snowplow control via the plug-in harness and the vehicle control harness.

- Activating the vehicle park light circuit applies battery voltage to the module park circuit input. The voltage is applied to a solid state power device, which causes the device to turn ON and apply battery voltage to the snowplow park lamp filaments via the vehicle and snowplow lighting harnesses. Voltage is also applied to the module's high and low beam relay coils, which causes the relay contacts to shift from the "vehicle" to the "snowplow" position.
- With the four headlamp relays shifted to the "snowplow" position, the vehicle high and low beams are now directed to the snowplow headlamps via the vehicle and snowplow lighting harnesses. Toggling the dimmer switch between high and low beam will toggle the snowplow high and low beams.

- Activating the turn signal applies battery voltage to the module turn signal circuit input. The voltage is applied to a solid state power device, which causes the device to turn ON and apply battery voltage to the snowplow turn signal lamp filaments via the vehicle and snowplow lighting harnesses.
- On vehicles equipped with DRLs integrated into the vehicle headlamps, activating a switched accessory wire (a key-controlled power source) applies battery voltage to the module's high and low beam relay coils, which causes the relay contacts to shift from the "vehicle" to the "snowplow" position. This module will transfer the vehicle DRLs to the snowplow.

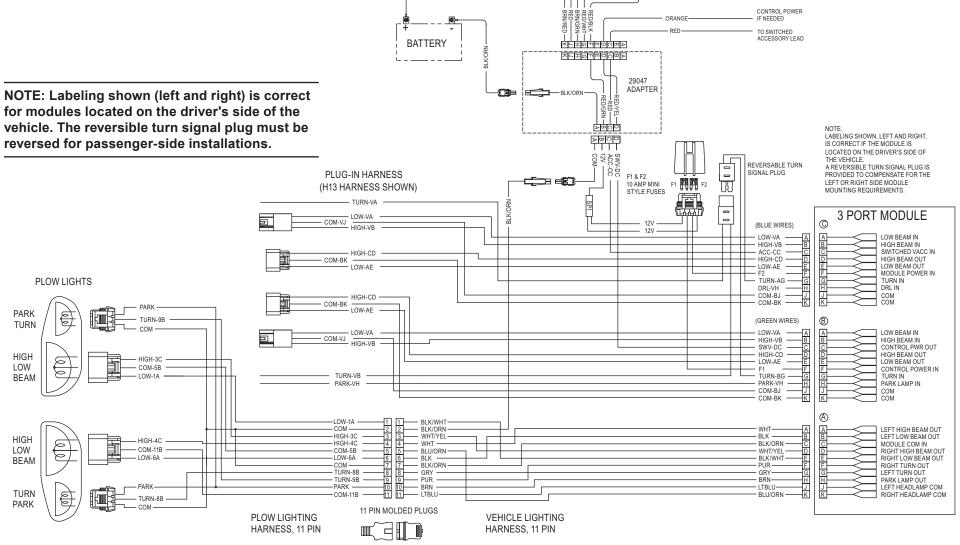
3-PLUG STRAIGHT BLADE SNOWPLOWS (11-PIN)





3-PLUG STRAIGHT BLADE SNOWPLOWS WITH CENTRAL HYDRAULICS

for modules located on the driver's side of the vehicle. The reversible turn signal plug must be reversed for passenger-side installations.



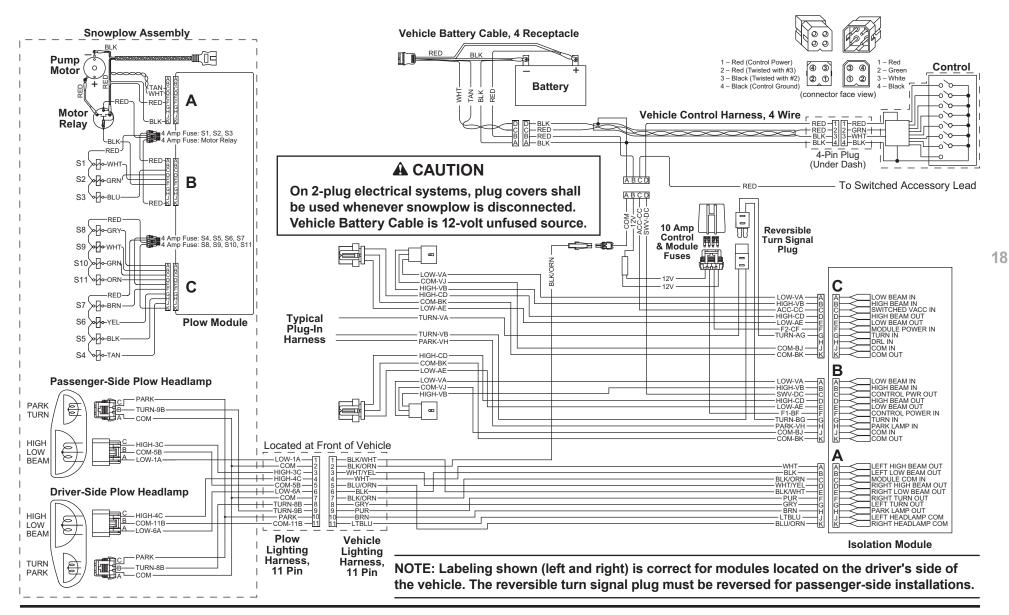
VEHICLE CONTROL HARNESS

CONFIGURATION PLUG IS NOT **REQUIRED WITH 3-PORT** LIGHTING MODULES

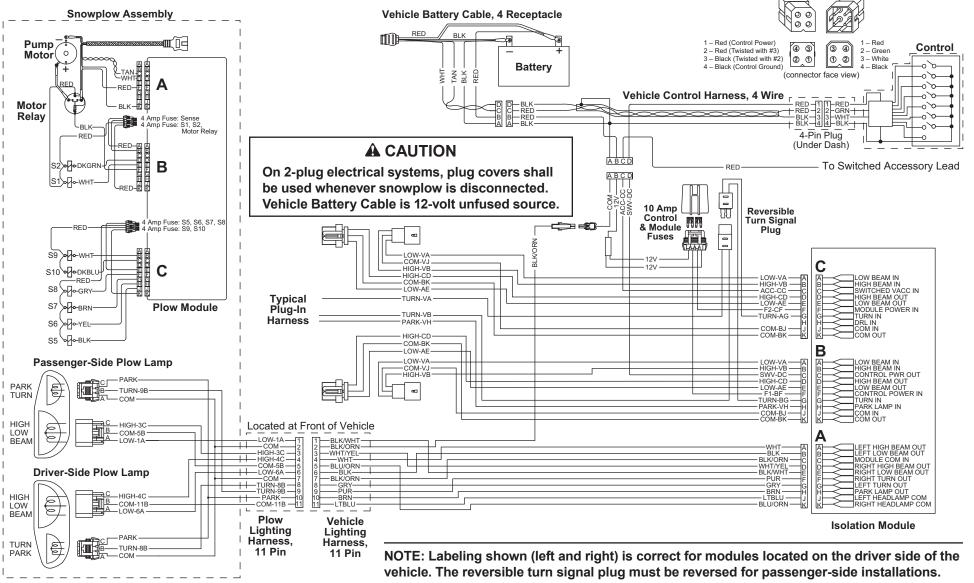
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Lit. No. 22373, Rev. 07 November 1, 2008

2-PLUG MVP PLUS™ SNOWPLOWS (11-PIN)



2-PLUG WIDE-OUT™ SNOWPLOWS



Lit. No. 22373, Rev. 07

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Harness Part #28253

Location	Wire Color	Stamp
Black Female Plug		
А	DK BLUE	COM-AJ
В	DK BLUE	HIGH-BB

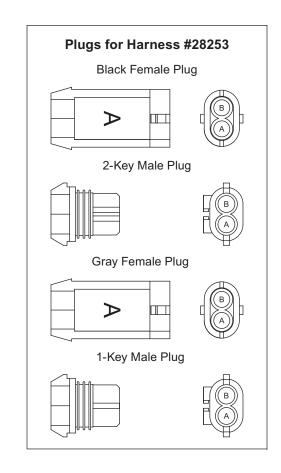
2-Key Male Plug			
Α	DK BLUE	HIGH-AD	
В	DK BLUE	COM-BK	

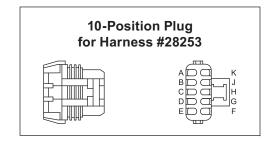
Gray Female Plug		
А	DK BLUE	COM-BA
В	DK BLUE	LOW-BA

1-Key Male Plug		
А	DK BLUE	LOW-AE
В	DK BLUE	COM-BA

Splice Tap Wires		
Loose	DK BLUE	TURN-VA

10-Position Plug "C"		
Α	DK BLUE	LOW-BA
В	DK BLUE	HIGH-BB
С	RED	ACC-CC
D	DK BLUE	HIGH-AD
Е	DK BLUE	LOW-AE
F	RED	F2-CF
G	DK BLUE	TURN-AG
Н	DK BLUE	DRL-VH
J	DK BLUE	COM-AJ
K	DK BLUE	COM-BK





Harness Part #28253

Location	Wire Color	Stamp
Black Female Plug		
А	DK GREEN	COM-AJ
В	DK GREEN	HIGH-BB

2-Key Male Plug		
Α	DK GREEN	HIGH-AD
В	DK GREEN	COM-BK

Gray Female Plug		
А	DK GREEN	COM-BA
В	DK GREEN	LOW-BA

1-Key Male Plug		
Α	DK GREEN	LOW-AE
В	DK GREEN	COM-BA

Splice Tap Wires		
Loose	DK GREEN	TURN-VB
Loose	DK GREEN	PARK-VH
Loose	DK BLUE	DRL-VH

10-Position Plug "B"		
Α	DK GREEN	LOW-BA
В	DK GREEN	HIGH-BB
С	RED	SWV-DC
D	DK GREEN	HIGH-AD
Ε	DK GREEN	LOW-AE
F	RED	F1-BF
G	DK GREEN	TURN-BG
Н	DK GREEN	PARK-VH
J	DK GREEN	COM-AJ
K	DK GREEN	COM-BK

Stamp

LOW-AE

COM-BJ

HIGH-CD

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Harness Part #28986

Wire Color

Female Plug

DK GREEN

DK GREEN

DK GREEN

Α

В

Location Female Plug

	Male Plug	
Α	DK GREEN	LOW-AA
В	DK GREEN	COM-BK
С	DK GREEN	HIGH-CB

Splice Tap Wires		
Loose	DK GREEN	TURN-VB
Loose	DK GREEN	PARK-VH

10-Position Plug "B"		
А	DK GREEN	LOW-AA
В	DK GREEN	HIGH-CB
С	RED	SWV-DC
D	DK GREEN	HIGH-CD
E	DK GREEN	LOW-AE
F	RED	F1-BF
G	DK GREEN	TURN-BG
Н	DK GREEN	PARK-VH
J	DK GREEN	COM-BJ
K	DK GREEN	COM-2K

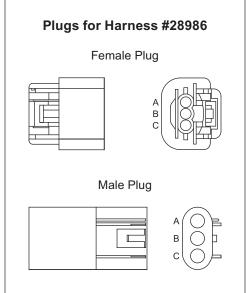
Harness Part #28986

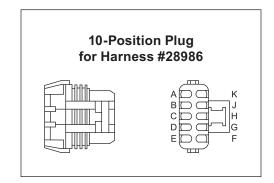
Location	Wire Color	Stamp
	Female Plug	
А	DK BLUE	LOW-AE
В	DK BLUE	COM-BK
С	DK BLUE	HIGH-CD

	Male Plug	
А	DK BLUE	LOW-AA
В	DK BLUE	COM-BJ
С	DK BLUE	HIGH-CB

Splice Tap Wires		
Loose	DK BLUE	TURN-VA

10-Position Plug "C"		
А	DK BLUE	LOW-AA
В	DK BLUE	HIGH-CB
С	RED	ACC-CC
D	DK BLUE	HIGH-CD
E	DK BLUE	LOW-AE
F	RED	F2-CF
G	DK BLUE	TURN-AG
Н	_	_
J	DK BLUE	COM-BJ
K	DK BLUE	COM-BK





Lit. No. 22373, Rev. 07 November 1, 2008

Harness Part #28930

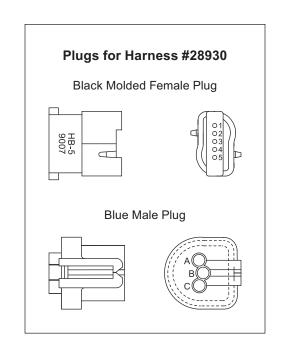
Location	Wire Color	Stamp
Black Molded Female Plug		
1	_	_
2	DK BLUE	COM-2J
3	DK BLUE	HIGH-3B
4	DK BLUE	LOW-4A
5		_

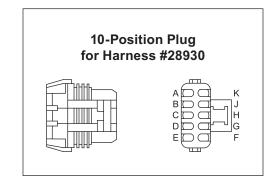
Blue Molded Male Plug		
A*	DK BLUE	LOW-AE
В*	DK BLUE	COM-BK
С	DK BLUE	HIGH-CD

^{*}Reversed for HB-1 Applications

Splice Tap Wires		
Loose	DK BLUE	TURN-VA

10-Position Plug "C"		
А	DK BLUE	LOW-4A
В	DK BLUE	HIGH-3B
С	RED	ACC-CC
D	DK BLUE	HIGH-CD
Е	DK BLUE	LOW-AE
F	RED	F2-CF
G	DK BLUE	TURN-AG
Н	_	_
J	DK BLUE	COM-2J
K	DK BLUE	COM-BK





Harness Part #28930

Location	Wire Color	Stamp	
Black	Black Molded Female Plug		
1	_	_	
2	DK GREEN	COM-2K	
3	DK GREEN	HIGH-3B	
4	DK GREEN	LOW-4A	
5	_	_	

Blue Molded Male Plug		
A*	DK GREEN	LOW-AE
В*	DK GREEN	COM-BJ
С	DK GREEN	HIGH-CD

^{*}Reversed for HB-1 Applications

Splice Tap Wires		
Loose	DK GREEN	TURN-VB
Loose	DK GREEN	PARK-VH

10-Position Plug "B"		
Α	DK GREEN	LOW-4A
В	DK GREEN	HIGH-3B
С	RED	SWV-DC
D	DK GREEN	HIGH-CD
E	DK GREEN	LOW-AE
F	RED	F1-BF
G	DK GREEN	TURN-BG
Н	DK GREEN	PARK-VH
J	DK GREEN	COM-BJ
K	DK GREEN	COM-2K

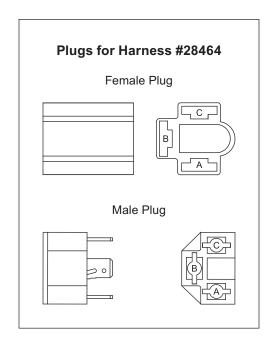
¹Not shown. Requires adapter kit 26641.

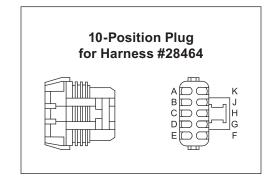
Location	Wire Color	Stamp
	Female Plug	
А	DK BLUE	COM-AK
В	DK BLUE	LOW-BE
С	DK BLUE	HIGH-CD

	Male Plug	
А	DK BLUE	HIGH-AB
В	DK BLUE	LOW-BA
С	DK BLUE	COM-CJ

Splice Tap Wires		
Loose	DK BLUE	TURN-VA

10-Position Plug "C"		
А	DK BLUE	LOW-BA
В	DK BLUE	HIGH-AB
С	RED	ACC-CC
D	DK BLUE	HIGH-CD
E	DK BLUE	LOW-BE
F	RED	F2-CF
G	DK BLUE	TURN-AG
Н	_	_
J	DK BLUE	COM-BJ
K	DK BLUE	COM-AK





Harness Part #28464

Location	Wire Color	Stamp
	Female Plug	
Α	DK GREEN	COM-AK
В	DK GREEN	LOW-BE
С	DK GREEN	HIGH-CD

	Male Plug	
А	DK GREEN	HIGH-AB
В	DK GREEN	LOW-BA
С	DK GREEN	COM-CJ

Splice Tap Wires		
Loose	DK GREEN	TURN-VB
Loose	DK GREEN	PARK-VH

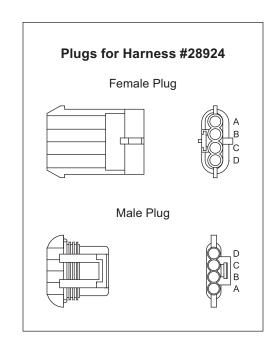
10-Position Plug "B"		
А	DK GREEN	LOW-BA
В	DK GREEN	HIGH-AB
С	RED	SWV-DC
D	DK GREEN	HIGH-CD
E	DK GREEN	LOW-BE
F	RED	F1-BF
G	DK GREEN	TURN-BG
Н	DK GREEN	PARK-VH
J	DK GREEN	COM-CJ
K	DK GREEN	COM-AK

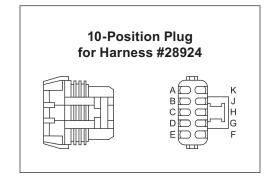
Location	Wire Color	Stamp
	Female Plug	
А	DK BLUE	HIGH-AB
В	DK BLUE	LOW-BA
С	DK BLUE	COM-CJ
D	DK BLUE	COM-DD

	Male Plug	
Α	DK BLUE	HIGH-AD
В	DK BLUE	LOW-BE
С	DK BLUE	COM-CK
D	DK BLUE	COM-DD

Splice Tap Wires		
Loose	DK BLUE	TURN-VA

10-Position Plug "C"		
Α	DK BLUE	LOW-BA
В	DK BLUE	HIGH-AB
С	RED	ACC-CC
D	DK BLUE	HIGH-AD
E	DK BLUE	LOW-BE
F	RED	F2-CF
G	DK BLUE	TURN-AG
Н	_	_
J	DK BLUE	COM-CJ
K	DK BLUE	COM-CK





Harness Part #28924

Location	Wire Color	Stamp
	Female Plug	
А	DK GREEN	HIGH-AB
В	DK GREEN	LOW-BA
С	DK GREEN	COM-CK
D	DK GREEN	COM-DD

	Male Plug	
Α	DK GREEN	HIGH-AD
В	DK GREEN	LOW-BE
С	DK GREEN	COM-CJ
D	DK GREEN	COM-DD

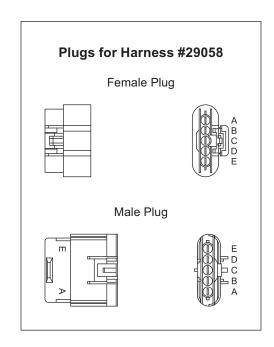
Splice Tap Wires			
Loose	DK GREEN	TURN-VB	
Loose	DK GREEN	PARK-VH	

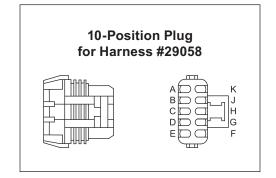
10-Position Plug "B"		
А	DK GREEN	LOW-BA
В	DK GREEN	HIGH-AB
С	RED	SWV-DC
D	DK GREEN	HIGH-AD
E	DK GREEN	LOW-BE
F	RED	F1-BF
G	DK GREEN	TURN-BG
Н	DK GREEN	PARK-VH
J	DK GREEN	COM-CJ
K	DK GREEN	COM-CK

Location	Wire Color	Stamp
	Female Plug	
Α	DK BLUE	HIGH-AD
В	DK BLUE	LOW-BE
С	DK BLUE	COM-CJ
D	DK BLUE	TURN
E	DK BLUE	PARK

	Male Plug	
Α	DK BLUE	HIGH-AB
В	DK BLUE	LOW-BA
С	DK BLUE	COM-CK
D	DK BLUE	TURN
E	DK BLUE	PARK

10-Position Plug "C"		
Α	DK BLUE	LOW-BA
В	DK BLUE	HIGH-AB
С	RED	ACC-CC
D	DK BLUE	HIGH-AD
E	DK BLUE	LOW-BE
F	RED	F2-CF
G	DK BLUE	TURN-AG
Н	_	_
J	DK BLUE	COM-CJ
K	DK BLUE	COM-CK





Harness Part #29058

Location	Wire Color	Stamp
	Female Plug	
Α	DK GREEN	HIGH-AD
В	DK GREEN	LOW-BE
С	DK GREEN	COM-CK
D	DK GREEN	TURN
Е	DK GREEN	PARK

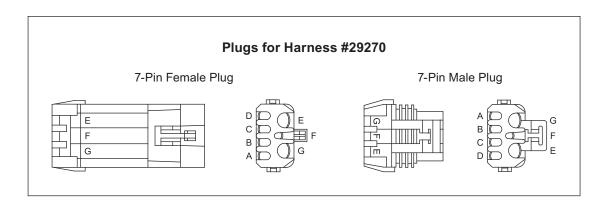
	Male Plug	
Α	DK GREEN	HIGH-AB
В	DK GREEN	LOW-BA
С	DK GREEN	COM-CJ
D	DK GREEN	TURN
Е	DK GREEN	PARK

10-Position Plug "B"		
А	DK GREEN	LOW-BA
В	DK GREEN	HIGH-AB
С	RED	SWV-DC
D	DK GREEN	HIGH-AD
E	DK GREEN	LOW-BE
F	RED	F1-BF
G	DK GREEN	TURN-BG
Н	DK GREEN	PARK
J	DK GREEN	COM-CJ
K	DK GREEN	COM-CK

Location	Wire Color	Stamp
7-	Pin Female Plu	g
А	BLACK	PARK
В	BLACK	LOW
С	BLACK	L TURN
D	BLACK	R TURN
E	BLACK	HIGH
F	_	_
G	BLACK	COM

7-Pin Male Plug		
А	BLACK	PARK
В	BLACK	LOW
С	BLACK	L TURN
D	BLACK	R TURN
E	BLACK	HIGH
F	_	_
G	BLACK	COM

10-Position Plug "C"		
Α	BLACK	LOW
В	BLACK	HIGH
С	RED	ACC
D	_	_
E	_	_
F	RED	F2
G	BLACK	R TURN
Н	_	_
J	_	_
K	BLACK	COM



10-Position Plug for Harness #29270

Harness Part #29270

Location	Wire Color	Stamp
10	-Position Plug	"B"
Α	BLACK	LOW
В	BLACK	HIGH
С	RED	SWV
D	BLACK	HIGH
E	BLACK	LOW
F	RED	F1
G	BLACK	L TURN
Н	BLACK	PARK
J	BLACK	COM
K	BLACK	COM

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Harness Part #29499

Location	Wire Color	Stamp
HB-3 Female Plug		
Α	DK BLUE	COM-AJ
В	DK BLUE	HIGH-BB

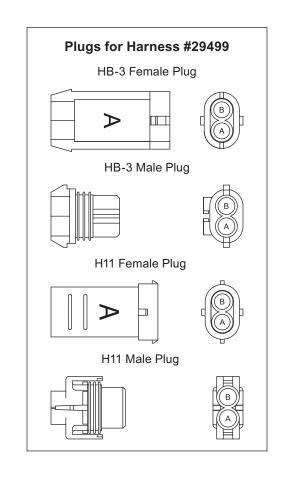
HB-3 Male Plug		
А	DK BLUE	HIGH-AD
В	DK BLUE	COM-BK

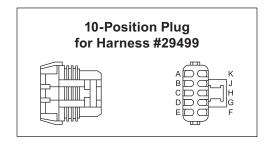
H11 Female Plug		
А	DK BLUE	COM-AA
В	DK BLUE	LOW-BA

	H11 Male Plug	
А	DK BLUE	COM-AA
В	DK BLUE	LOW-BE

	Splice Tap Wire	s
Loose	DK BLUE	TURN-VA

10-Position Plug "C"		
Α	DK BLUE	LOW-BA
В	DK BLUE	HIGH-BB
С	RED	ACC-CC
D	DK BLUE	HIGH-AD
Е	DK BLUE	LOW-BE
F	RED	F2-CF
G	DK BLUE	TURN-AG
Н	DK BLUE	DRL-VH
J	DK BLUE	COM-AJ
K	DK BLUE	COM-BK





Harness Part #29499

Location	Wire Color	Stamp
ŀ	IB-3 Female Plu	ıg
А	DK GREEN	COM-AJ
В	DK GREEN	HIGH-BB

	HB-3 Male Plug	l
А	DK GREEN	HIGH-AD
В	DK GREEN	COM-BK

H11 Female Plug		
А	DK GREEN	COM-AA
В	DK GREEN	LOW-BA

	H11 Male Plug	
А	DK GREEN	COM-AA
В	DK GREEN	LOW-BE

	Splice Tap Wire	s
Loose	DK GREEN	TURN-VB
Loose	DK GREEN	PARK-VH
Loose	DK BLUE	DRL-VH

10-Position Plug "B"		
А	DK GREEN	LOW-BA
В	DK GREEN	HIGH-BB
С	RED	SWV-DC
D	DK GREEN	HIGH-AD
Е	DK GREEN	LOW-BE
F	RED	F1-BF
G	DK GREEN	TURN-BG
Н	DK GREEN	PARK-VH
J	DK GREEN	COM-AJ
K	DK GREEN	COM-BK

4-PORT ISOLATION MODULE – HEADLAMP INDEX

Headlamp Type	Vehicle(s)	Year(s)	Page	Isolation Module Kit #	Short Plug-in	Long Plug-in	Isolation Module #
	Ford F-150 (New Body Style)	'04-Present		111611		1 10.9 111	
	Ford Super Duty	'05-Present					
	Dodge 1500, 2500, 3500	'06-Present		00400			
H13	Dodge Dakota	'05-Present	4.5	28400	00044	00040	00400
	Dodge Durango	'04-Present	45		28244	28242	26400
	GMC Yukon/Yukon XL (All New)	'07-Present					
	Chevy/GMC 1500/2500/3500 (All New)	'07-Present		28400, 28027-2,			
HB-3/H11	Toyota Tundra	'07-Present		29420-1			
	Chevy/GMC Tahoe/Suburban (All New)	'07-Present	42	27780, 29458, 28027-2	26351	26352	27781
	Chevy/GMC Trailblazer/Envoy/Bravada	'02-Present	44	28028	28032	28030	
	Chevy/GMC Blazer/Jimmy/S-10/Sonoma	'98-Present		07400.4			00400
	Chevy/GMC Colorado/Canyon (US vehicles)	'04-Present		27480-1			26400
	Nissan Titan	'04-Present	41	27480-1 & 28027	26361	26360	
	Chevy/GMC 1500/2500/3500 (New Body Style)	'99-'02		8437-1			
HB-3/HB-4	Chevy/GMC Colorado/Canyon (Canadian vehicles)	'04-Present		8437-1 & 28555			27781
	Chevy/GMC 1500/2500/3500/Avalanche	'03-Present		27780			1
	Chevy/GMC (Classic Style)	'90-'02					
	Chevy/GMC Blazer/Jimmy/S-10/Sonoma	'95–'97	42	8438	26351	26352	
	Ford Explorer	'02-Present		8438 & 28027			
	Jeep	'84-'02					1
2B/2D	Dodge	'72-'93					
	Ford	'80-Present		8439			
or	Chevy/GMC	'73-'02	0.0		00050	00050	
HB-2	Toyota	'84-Present	38		26356	26353	
	International	'89–'02		8439 & 26640			
	Chevy/GMC Blazer/Jimmy/S-10/Sonoma	'95–'97		0.400.0.07000			
2E	Dodge Dakota	'87–'96		8439 & 27968			
2B/2D or 1A/2A	Chevy/GMC C4500/5500	'03-Present	43	27890	27885	27886	1
2B/2D	Chevy/GMC Topkick/Kodiak 4500/5500	'90-'02	40	8443	n/a	26638	00400
HB-5/HB-1 (Quad)	Dodge	'99-'02	39	8442	26372	26370	26400
(, , , , , , , , , , , , , , , , , , ,	Dodge	'91-Present					1
	Ford	'80-Present					
HB-1	Mazda	'91-'94, '99-'03		8436			
or	Toyota 4Runner	'92–'95					
HB-5	Jeep Liberty	'02-Present	0.7		000.40	00054	
110-0	Mitsubishi FG	'05-Present	37	8436 & 28860	26349	26354	
	International	'03-Present		8436 & 26640			
	Dodge	'74–'83					
1A/2A	Chevy/GMC	'73–'87		8436 & 26641			
	Isuzu/Mitsubishi	'94–'97					
. =	Jeep Wagoneer	'85–'91	4-	00400 6 50000	000::	00010	1
LF/UF	Chevy/GMC	'88–'91	45	28400 & B62225	28244	28242	

SNOWPLOW HEADLAMPS

The Isolation Module acts as an electrical hub, automatically directing vehicle power to the appropriate vehicle or snowplow lighting devices, while also supplying battery power to the snowplow control.

The vehicle high and low beams enter and exit the Isolation Module through positions 3 (left-side lighting) and position 4 (right-side lighting). Park, turn and DRL signals also enter through positions 3 and 4. The output of the vehicle dimmer switch is directed to the Isolation Module via the long and short plug-in harnesses.

All snowplow lighting exits the Isolation Module through position 2.

When the snowplow is not attached to the vehicle, the signal passes through the normally closed relay contacts to the vehicle headlamps. During this time, the Isolation Module is inactive, placing no current draw on the vehicle's electrical system.

With the snowplow attached, the Isolation Module is still inactive until either of the two following conditions are met: The vehicle parking lights are turned ON or the vehicle ignition switch is turned ON.

Turning ON the vehicle parking lights activates a series of relays, automatically transferring the vehicle high and low beams to the snowplow while supplying battery power directly to the snowplow parking lights.

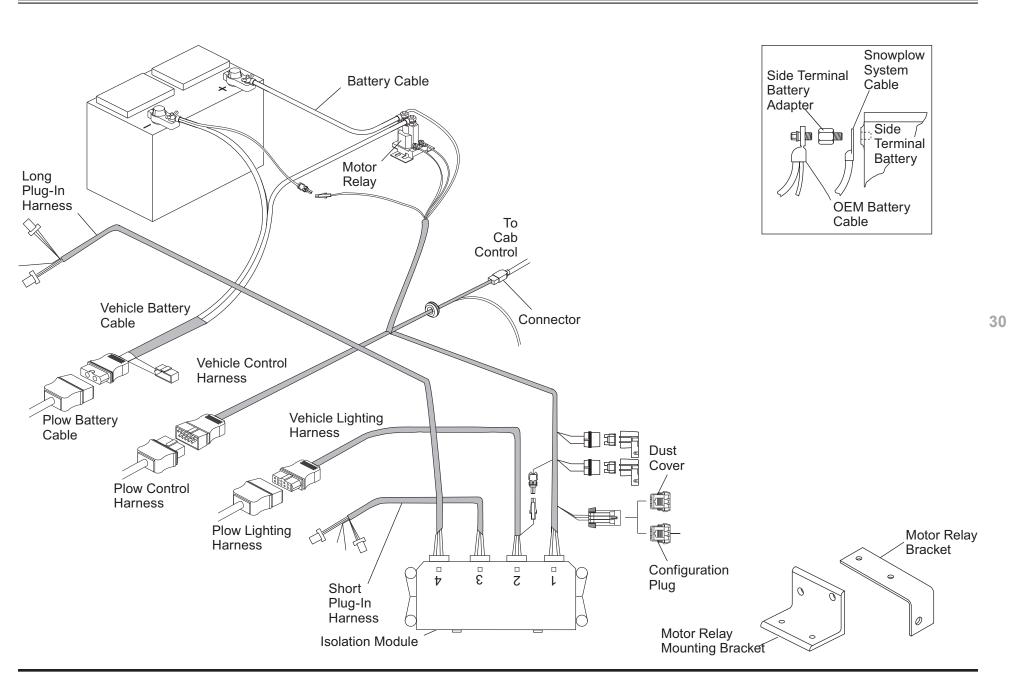
Turning ON the vehicle ignition switch energizes a snowplow control relay, supplying vehicle battery power directly to the control via the vehicle control harness. The vehicle ignition switch also supplies power to the vehicle turn signals. Activating the vehicle turn signals energizes turn signal relays, which supply vehicle battery power directly to the snowplow turn signals.

SNOWPLOW DAYTIME RUNNING LIGHTS

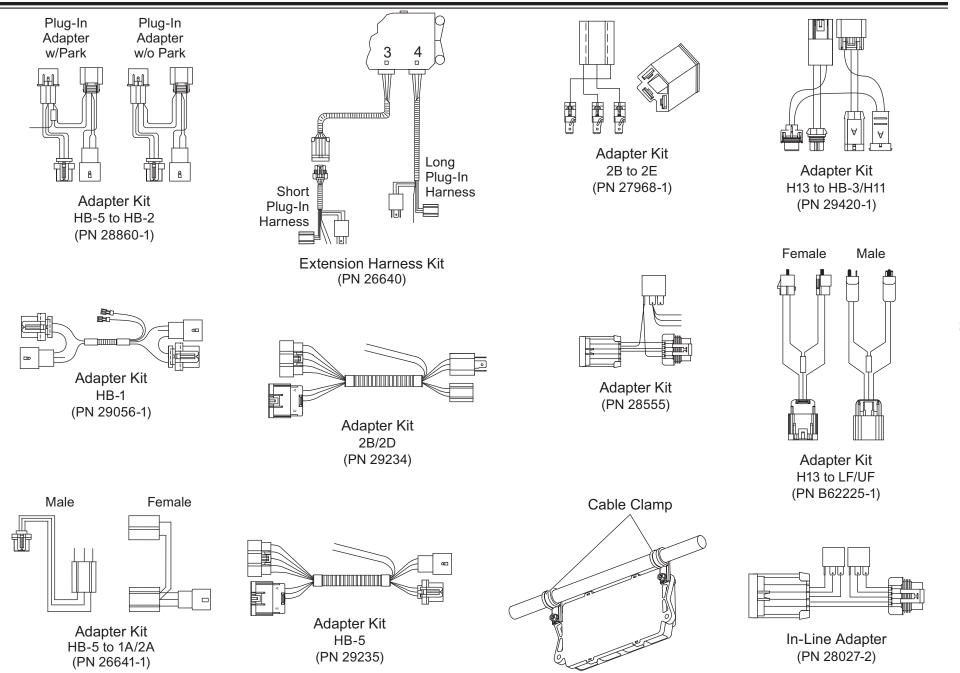
Because Daytime Running Lamps (DRLs) are controlled differently on some vehicles, two Isolation Modules have been developed.

The white Isolation Module transfers the DRL output from the vehicle headlamps to the snowplow headlamps when the vehicle ignition switch is turned ON and the snowplow is attached.

The green Isolation Module, designed for vehicles with dedicated DRL bulbs, senses the vehicle in the DRL mode and a series of relays energize, placing the snowplow low beams in series. This Isolation Module does not turn OFF the vehicle's dedicated DRLs.

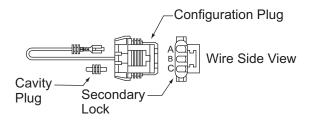


4-PORT ISOLATION MODULE SYSTEM - ADAPTER KITS



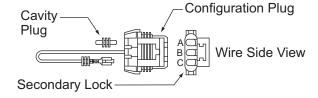
PLUG CONFIGURATION

Headlamp Common = Negative



- 1. Jumper Position B to Position A
- 2. Insert cavity plug into Position C
- 3. Install secondary lock

Headlamp Common = Positive



- 1. Jumper Position B to Position C
- 2. Insert cavity plug into Position A
- 3. Install secondary lock

To insert terminal or jumper wire into position:

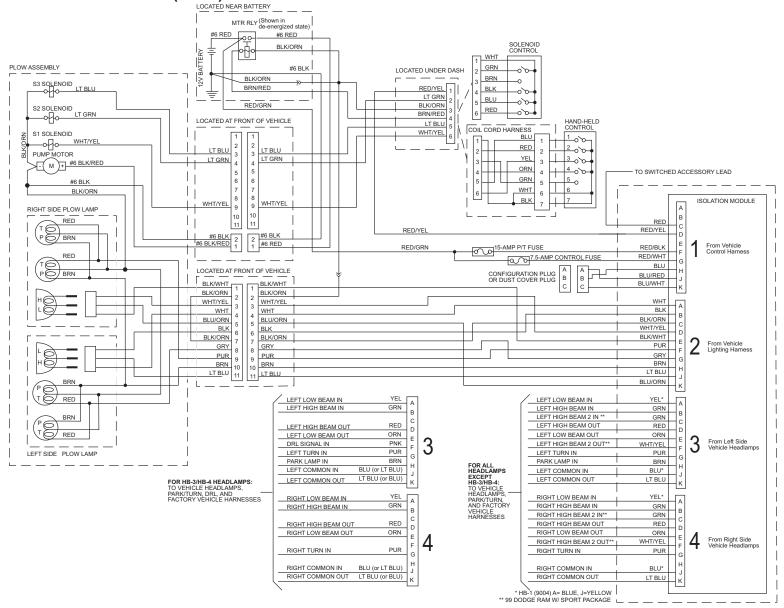
- 1. Push terminal into correct cavity,
- 2. Listen for a click. If terminal pulls out, carefully bend locking tab outward and reinstall terminal.

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.

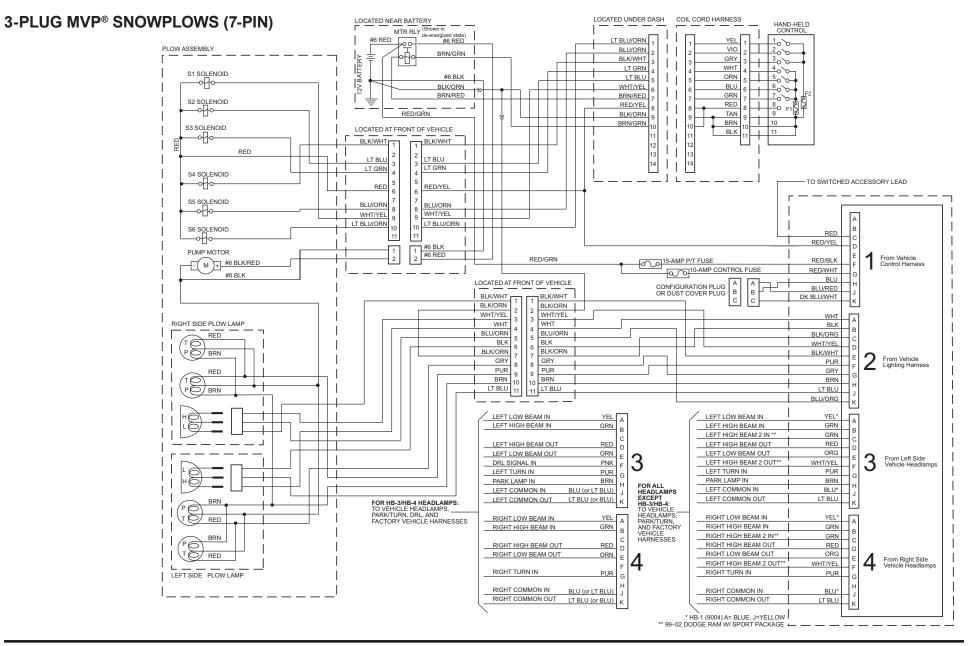
Some applications will not use the configuration plug and will be supplied with a "Dust Cover".

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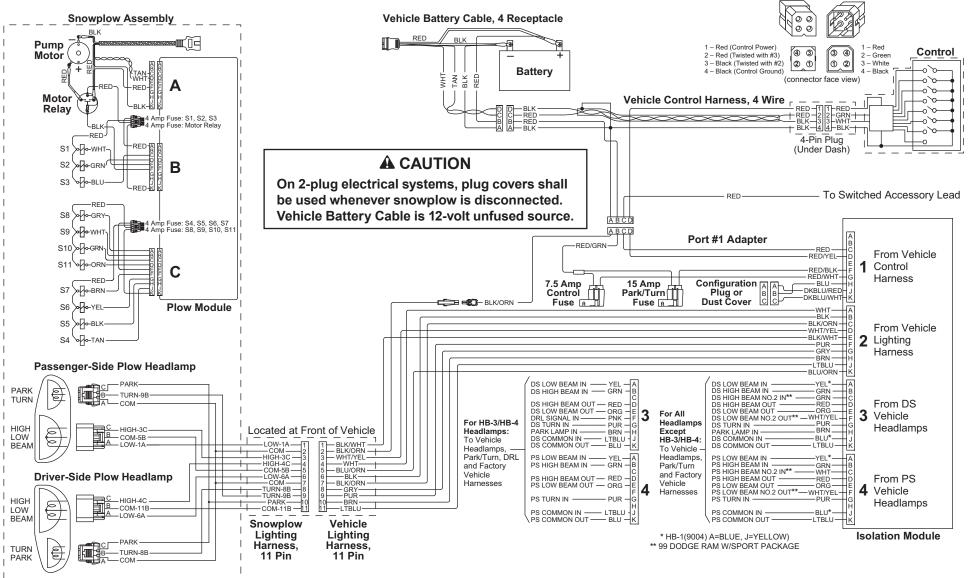
3-PLUG STRAIGHT BLADE SNOWPLOWS (3-PIN)



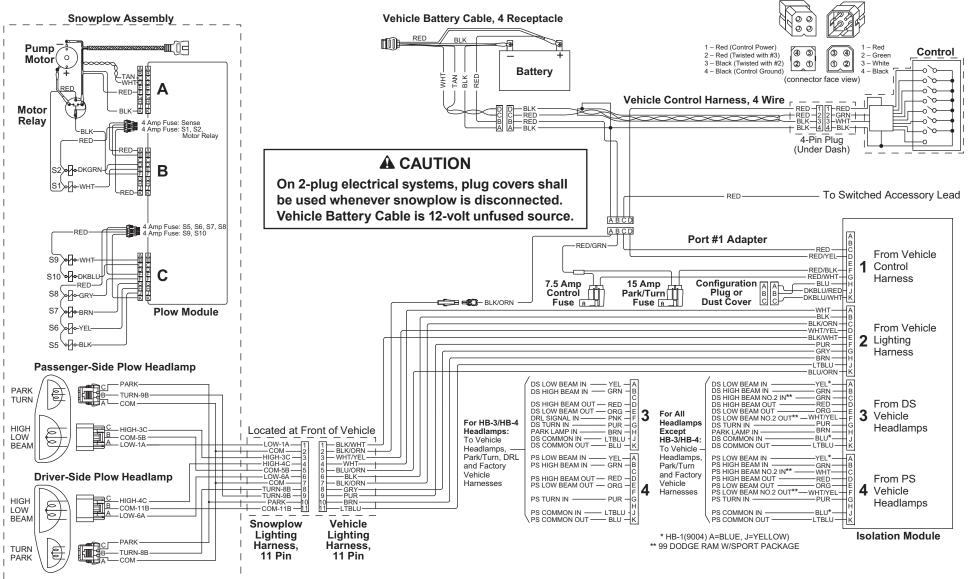




2-PLUG MVP PLUS™ SNOWPLOWS



2-PLUG WIDE-OUT™ SNOWPLOWS



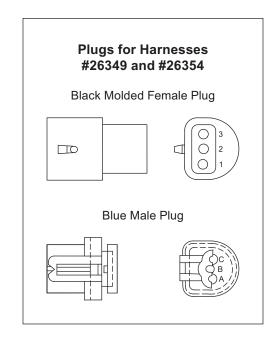
Location Wire Color	
Black Molded Female Plug	
1	GREEN
2	BLUE
3	YELLOW

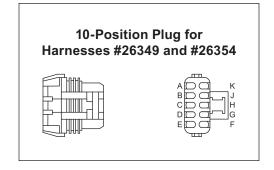
	Blue Male Plug
Α	LT BLUE* / ORANGE**
В	ORANGE* / LT BLUE**
С	RED
* * * * *	44.115.

^{*} HB-1 ** HB-5

Splice Tap Wires		
Loose	PURPLE	
Loose	BROWN	

10-Position Plug		
Α	BLUE* / YELLOW**	
В	GREEN	
С	_	
D	RED	
Е	ORANGE	
F		
G	PURPLE	
Н	BROWN	
J	YELLOW* / BLUE**	
K	LT BLUE	





Harness Part #26354

Location		Wire Color
Black Molded Female Plug		
	1	GREEN
	2	BLUE
	3	YELLOW

Blue Male Plug			
Α	LT BLUE* / ORANGE**		
В	ORANGE* / LT BLUE**		
С	RED		
* HB-1	** HB-5		

Splice Tap Wires		
Loose	PURPLE	

10-Position Plug				
Α	BLUE* / YELLOW**			
В	GREEN			
С	_			
D	RED			
Е	ORANGE			
F	_			
G	PURPLE			
Н	_			
J	YELLOW* / BLUE**			
K	LT BLUE			

¹ Not shown. Requires adapter kit 26641.

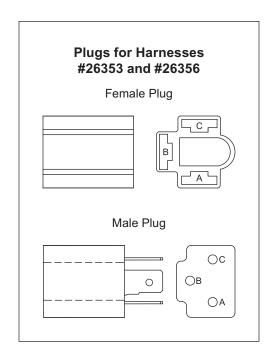
Location	Wire Color
	Female Plug

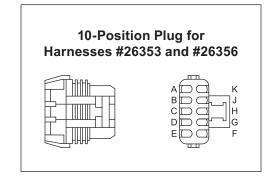
Female Plug	
Α	LT BLUE
В	ORANGE
С	RED

Male Plug	
А	GREEN
В	YELLOW
С	BLUE

Splice Tap Wires	
Loose	PURPLE

10-Position Plug	
Α	YELLOW
В	GREEN
С	_
D	RED
E	ORANGE
F	_
G	PURPLE
Н	_
J	BLUE
K	LT BLUE





Location	Wire Color
	Female Plug
Α	ORANGE
В	LT BLUE
С	RED

Male Plug	
Α	YELLOW
В	BLUE
С	GREEN

Splice Tap Wires	
Loose	PURPLE
Loose	BROWN

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10-Position Plug	
Α	YELLOW
В	GREEN
С	_
D	RED
Е	ORANGE
F	_
G	PURPLE
Н	BROWN
J	BLUE
K	LT BLUE

¹ Not shown. Requires adapter kit 27698.

Location Wire Color

Black Molded Female Plug (3 Wire)	
1	GREEN
2	BLUE
3	YELLOW

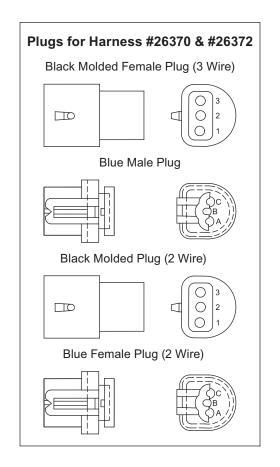
Blue Male Plug	
Α	ORANGE
В	LT BLUE
С	RED

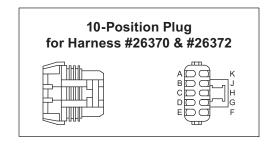
Black Molded Plug (2 Wire)	
1	GREEN
2	_
3	YELLOW

Blue Female Plug (2 Wire)	
Α	YELLOW
В	_
С	WHITE / YELLOW

Splice Tap Wires	
Loose	PURPLE

10-Position Plug	
Α	YELLOW
В	GREEN
С	GREEN
D	RED
Е	ORANGE
F	WHITE / YELLOW
G	PURPLE
Н	_
J	BLUE
K	LT BLUE





Harness Part #26372

Location Wire Color

Black Molded Female Plug (3 Wire)		
1	GREEN	
2	BLUE	
3	YELLOW	

Blue Male Plug	
Α	ORANGE
В	LT BLUE
С	RED

	Black Molded Plug (2 Wire)	
	1	GREEN
ı	2	_
	3	YELLOW

Blue Female Plug (2 Wire)	
Α	YELLOW
В	_
С	WHITE / YELLOW

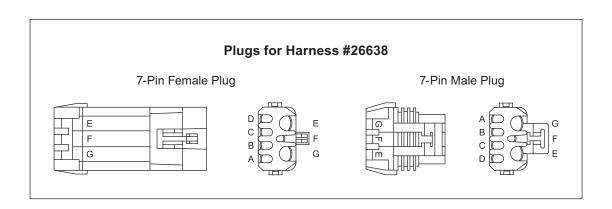
Splice Tap Wires	
Loose	BROWN
Loose	PURPLE

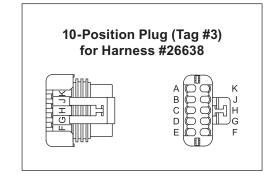
	10-Position Plug	
Α	YELLOW	
В	GREEN	
С	GREEN	
D	RED	
Е	ORANGE	
F	WHITE / YELLOW	
G	PURPLE	
Н	BROWN	
J	BLUE	
K	LT BLUE	

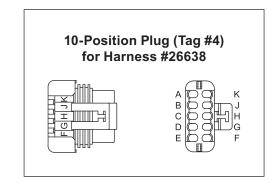
Location	Wire Color	
7-Pin Female Plug		
А	BROWN	
В	YELLOW	
С	PURPLE	
D	PURPLE	
E	GREEN	
F	_	
G	BLACK / ORANGE	

7-Pin Male Plug	
А	BROWN
В	ORANGE
С	PURPLE
D	PURPLE
E	RED
F	_
G	BLACK / ORANGE

10-Position Plug (Tag #3)	
А	YELLOW
В	GREEN
С	_
D	RED
Е	ORANGE
F	_
G	PURPLE
Н	_
J	BLUE
K	LT BLUE







Harness Part #26638

Location	Wire Color
10-Position	Plug (Tag #4)
Α	YELLOW
В	GREEN
С	_
D	_
E	_
F	_
G	PURPLE
Н	BROWN
J	_
K	LT BLUE

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Location	Wire Color
2-Key Female Plug	
Α	LT BLUE
В	GREEN

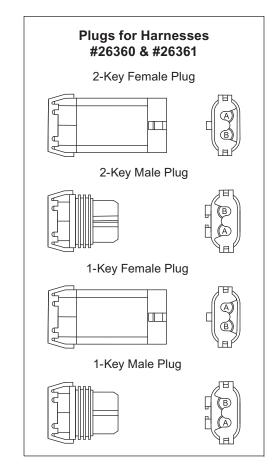
	2-Key Male Plug
Α	BLUE
В	RED

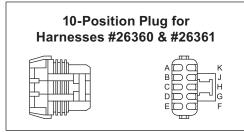
1-Key Female Plug	
А	BLUE
В	YELLOW

	1-Key Male Plug
Α	BLUE
В	ORANGE

Splice Tap Wires	
Loose	PURPLE

	10-Position Plug	
Α	YELLOW	
В	GREEN	
С		
D	RED	
E	ORANGE	
F	_	
G	PURPLE	
Н	_	
J	LT BLUE	
K	BLUE	





^{*} Pink wire not used on 27480.

Harness Part #26361

Locatio	on Wire Color		
	2-Key Female Plug		
Α	LT BLUE		
В	GREEN		

	2-Key Male Plug
Α	BLUE
В	RED

	1-Key Female Plug
Α	BLUE
В	YELLOW

1-Key Male Plug	
А	BLUE
В	ORANGE

Splice Tap Wires	
Loose	BROWN
Loose	PURPLE
Loose	PINK*

	10-Position Plug "B"	
Α	YELLOW	
В	GREEN	
С	_	
D	RED	
E	ORANGE	
F	PINK	
G	PURPLE	
Н	BROWN	
J	LT BLUE	
K	BLUE	

Location	Wire Color
2	-Key Female Plug
Α	GREEN
В	BLUE

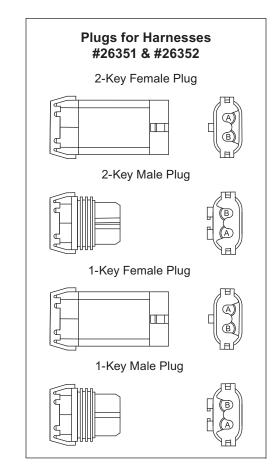
	2-Key Male Plug
Α	RED
В	LT BLUE

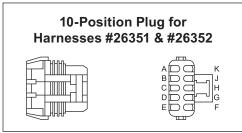
1-Key Female Plug	
Α	YELLOW
В	BLUE

	1-Key Male Plug
А	ORANGE
В	BLUE

	Splice Tap Wires	
Loose	PURPLE	_
Loose	BROWN	
Loose	PINK*	

	10-Position Plug
Α	YELLOW
В	GREEN
С	_
D	RED
Е	ORANGE
F	PINK
G	PURPLE
Н	BROWN
J	BLUE
K	LT BLUE





^{*} Pink wire not used on 8438.

Harness Part #26352

Location	n Wire Color
	2-Key Female Plug
А	GREEN
В	BLUE

	2-Key Male Plug
Α	RED
В	LT BLUE

	1-Key Female Plug
Α	YELLOW
В	BLUE

	1-Key Male Plug
Α	ORANGE
В	BLUE

	Splice Tap Wires
Loose	PURPLE

10-Position Plug		
Α	YELLOW	
В	GREEN	
С	_	
D	RED	
Е	ORANGE	
F	_	
G	PURPLE	
Н	_	
J	BLUE	
K	LT BLUE	

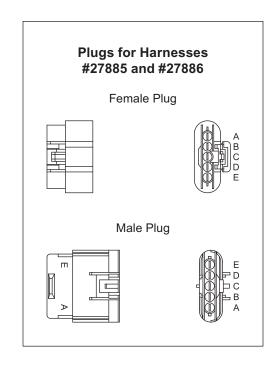
Location	Wire Color	
	Female Plug	
Α	YELLOW* / GREEN**	
В	GREEN* / YELLOW**	
С	BLUE	
D	PURPLE	
Е	BROWN	

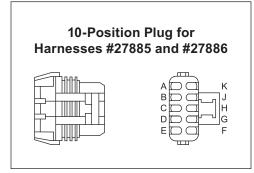
^{*} Rev. 0 ** Rev. 1

Male Plug	
Α	RED
В	ORANGE
С	LT BLUE
D	PURPLE
Е	BROWN

	10-Position Plug	
Α	GREEN*	
	YELLOW**	
В	YELLOW*	
	GREEN**	
С	_	
D	RED	
Е	ORANGE	
F		
G	PURPLE	
Н	BROWN	
J	BLUE	
K	LT BLUE	

^{*} Rev. 0 ** Rev. 1





Harness Part #27886

Location	Wire Color		
	Female Plug		
А	YELLOW* / GREEN**		
В	GREEN* / YELLOW**		
С	BLUE		
D	PURPLE		
E	BROWN		

* Rev. 0 ** Rev. 1

	Male Plug
Α	RED
В	ORANGE
С	LT BLUE
D	PURPLE
Е	BROWN

10-Position Plug	
Α	GREEN*
	YELLOW**
В	YELLOW*
	GREEN**
С	_
D	RED
E	ORANGE
F	_
G	PURPLE
Н	_
J	BLUE
K	LT BLUE

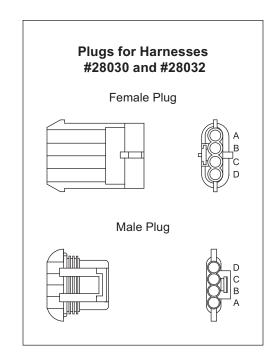
* Rev. 0 ** Rev. 1

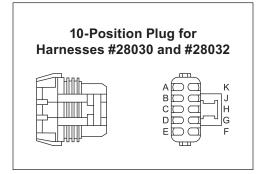
Wire Color		
Female Plug		
GREEN		
YELLOW		
LT BLUE		
BLUE		

Male Plug	
Α	RED
В	ORANGE
С	BLUE
D	BLUE

	Splice Tap Wires
Loose	PURPLE

10-Position Plug	
Α	YELLOW
В	GREEN
С	
D	RED
Е	ORANGE
F	_
G	PURPLE
Н	_
J	LT BLUE
K	BLUE





Harness Part #28032

Location	Wire Color		
	Female Plug		
А	GREEN		
В	YELLOW		
С	LT BLUE		
D	BLUE		

Male Plug				
Α	RED			
В	ORANGE			
С	BLUE			
D	BLUE			

Splice Tap Wires				
Loose	PURPLE			
Loose	BROWN			

10-Position Plug				
Α	YELLOW			
В	GREEN			
С	_			
D	RED			
Е	ORANGE			
F	_			
G	PURPLE			
Н	BROWN			
J	LT BLUE			
K	BLUE			

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Harness Part #28242*

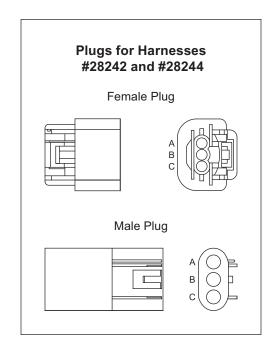
Location Wire Color				
Female Plug				
А	ORANGE			
В	LT BLUE			
С	RED			

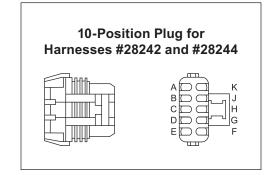
Male Plug				
Α	YELLOW			
В	BLUE			
С	GREEN			

Splice Tap Wires			
Loose	PURPLE		

^{*}Rev. 3 and Higher

10-Position Plug							
Α	A YELLOW						
В	GREEN						
С	_						
D	RED						
E	ORANGE						
F	_						
G	PURPLE						
Н	_						
J	BLUE						
K	LT BLUE						





Harness Part #28244*

Location	ocation Wire Color					
Female Plug						
Α	ORANGE					
В	LT BLUE					
С	RED					

Male Plug				
Α	YELLOW			
В	BLUE			
С	GREEN			

Splice Tap Wires				
Loose	PURPLE			
Loose	BROWN			

*Rev. 3 and Higher

10-Position Plug				
Α	YELLOW			
В	GREEN			
С	_			
D	RED			
Е	ORANGE			
F	_			
G	PURPLE			
Н	BROWN			
J	BLUE			
K	LT BLUE			

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Vehicle(s)	Year(s)	Headlamp Type	Headlamp Harness Part #	DRLs	Page No.
Chevrolet-GMC					
Silverado	'03	HB-3/HB-4	64075	Yes	86
Silverado, Sierra (Low Side Drive System)	'99–'02	HB-3/HB-4	26071	Yes	66
GM C4500, 5500	'03	2B, 1A/2A**	64126	Yes	59
S10/S15 Blazer, Jimmy and Pickup	'98	HB-3/HB-4	62914	Yes	80
All (except S10/S15 Blazer,	'98	2B	61546	Yes	59
Jimmy, and Pickup)	90	HB-3/HB-4	61716	Yes	60
K1500, K2500, K3500, C2500,		2B	61546	Yes	59
C3500 Pickups/Chassis Cabs, Blazer, Jimmy, Tahoe, Yukon	'96,'97	HB-3/HB-4	61716	Yes	60
	'83–'97	2B	61546	No	56
C10/C15 Plazar limmy		2E	62536*	Yes	77
S10/S15 Blazer, Jimmy and Pickup; Sonoma			61576	No	61
and Florap, Conoma		HB-3/HB-4	61586	Yes	78
		110-3/110-4	61716	No	57
	'92–'95	2B	61556	Yes	77
Suburban, Blazer, Jimmy,			61546	No	56
Tahoe, Yukon		HB-3/HB-4	61586	Yes	78
			61716	No	57
	'90-'95	2B	61556	Yes	77
			61546	No	56
K2500, K3500, K3500 HD		HB-3/HB-4	61586	Yes	78
Chassis Cabs		11D-3/ND-4	61716	No	57
		LF/UF	61581 modified	Yes	79
		LF/OF	61581	No	57

^{*} Early GM applications used 61576 and 61556 harnesses spliced together.

** DRL kit not required. Refer to relay connections only.

See Isolation Module Section for 2004 and newer applications.

Vehicle(s)	Year(s)	Headlamp Type	Headlamp Harness Part #	DRLs	Page No.	
	Chevro	olet-GMC				
	'88–'95	2B	61556	Yes	77	
		ZB	61546	No	56	
K1500, K2500, K3500, C2500,		HB3/HB4	61586	Yes	78	
C3500 Pickups			61716	No	57	
		LF/UF	61581 modified	Yes	79	
			61581	No	57	
K2500, K3500, K3500 HD, R20 2WD Chassis Cabs		1A/2A	61566	No	58	
	'81–'89	2B	61556	Yes	77	
		2B	61546	No	56	
		1A/2A	61566	No	58	
Cubumban Diaman Banan Dan		2B	61556	Yes	77	
Suburban, Blazer, Jimmy, R30 2WD, V30 4x4	'81–'91		61546	No	56	
2000, 030 484		LF/UF	61581 modified	Yes	79	
			61581	No	57	
1/4500 1/0500 1/0500 00500	'81–'87	1A/2A	61566	No	58	
K1500, K2500, K3500, C2500, C3500, V10, V20 Pickups		2D	2B 61556		77	
C3300, V10, V201 ickups		2B	61546	No	56	
Jeep						
		2B	61731	Yes	62	
Cherokee, Wagoneer, Pioneer	'84-'01		61731	No	61	
		LF/UF	61581	No	57	
Wrangler	'86–'03	O.D.	61731	Yes	62	
Comanche '86-'93		2B	01/31	No	61	

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Vehicle(s)	Year(s)	Headlamp Type	Headlamp Harness Part #	DRLs	Page No.
	De	odge			
		HB-1	62526	No	61
				Yes	62
Dakota 4x4	'87 <u>–</u> '98	HB-5	61591	No	56
Dakota 4x4	07-90	HD-0		Yes	59
		2E	04570	No	61
		20	61576	Yes	62
Dakota	'01–'03	HB-5	63413	No	67
Durango	'01–'03	116-5	Rev 1–3	Yes	70
Dakota/Durango	'99–'00	HB-5	26027	Yes	82
(Low Side Drive System)	99-00	пь-э		No	64
Ram 1500 ('99-'01)		HB-1	26009	Yes	81
Ram 2500, 3500	'99–'02	110-1	26009	No	63
(Low Side Drive)	HB-1/HB-5	26027	Yes	83	
(Low Side Drive)		G-07/1-01	26027	No	65
W100/150/200/250/300/350/		2B/2D	61731	No	61
350 4x4; RamCharger/	'72–'93	26/20	01/31	Yes	62
TrailDuster 4x4	1A/2A	61566	No	58	
Ram 1500, 2500, 3500 Pickup	'94-'98	HB-1	62526	No	61
& Chassis Cab 4x2/4x4	94-90	В ПВ-1		Yes	62
Ram 1500	'02	HB-5	63413	No	68
REV 3 only	02	110-0	Rev 3 only	Yes	69
Ram 1500/2500/3500	'03	HB-5	63413	No	84
Nam 1300/2300/3300	03	110-5	Rev 3 & Higher	Yes	85

Vehicle(s)	Year(s)	Headlamp Type	Headlamp Harness Part #	DRLs	Page No.
	Ford	(Mazda)			
F-150/250/350/	'80-'91 HB-1 2B	LID 4	61571	No	56
		пь-і		Yes	59
Super Duty HD/4x2/4x4		61546	No	56	
F-150 ('97-Present)		26	01540	Yes	59
F-250 LD ('97–'98)	'92–'98	HB-5	61591	No	56
	92-90	пь-э	01391	Yes	59
		HB-5	04504	No	56
'99 Super Duty Series	'99–'03	пь-э	61591	Yes No	59
F-250HD/350/450/550	99-03	2B	61546	No	56
		26	01540	Yes	59
Bronco II ('83-'90),		HB-5	61591	No	56
Bronco Full Size ('80–'93),		пр-э 01991	01091	Yes	59
Ranger ('83–'96),	'80-'96	HB-1	61571	No	56
B4000 Mazda ('94),		110-1	01371	Yes	59
Explorer/Navajo (Mazda)		2B	61546	No	56
('91-'94) (HB-1 only)		20		Yes	59
Toyota					
		HB-1	61571 (Oty 2)	No	76
4-Runner 4x4	'84 – '95	пь-і	61571 (Qty 2)	Yes	74
4-Rufflet 4x4	04-95	2B	61556	No	75
		26	61546 (Qty 2)	Yes	74
Tacoma Pickup 4x4	'95–'03	2B	61556	No	75
			61556	Yes	77
Pickup 4x4	'84–'95	2B	61556	No	75
Fickup 4X4	04- 90	ZD	61546 (Qty 2)	Yes	74

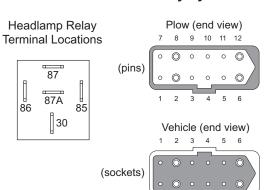
MVP® Blade Connectors

Pin#	Wire Color
1	Lt Blue w/Orange Stripe
2	Blue w/Orange Stripe
3	Black w/White Stripe
4	Lt Green
5	Lt Blue
6	White w/Yellow Stripe
7	Brown w/Red Stripe
8	Red
9	Orange w/Black Stripe
10	Brown w/Green Stripe

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Harness Connectors - Relay System



NOTE: The 7-, 9- and 12-pin harness connector pin #s are embossed in the molded plug.

Pin#	Wire Color		Control Function	
PIII #	7-Pin	9-Pin	12-Pin	Control Function
1	_	White/Yellow	White/Yellow	Valve S1(2W)
2	Black ^a	Black ^a	Black	Low Beam 9/12-Pin Rt
3	_	Lt Green	Lt Green	Valve S2(3W)
4	_	Lt Blue	Lt Blue	Valve S3(4W)
5	Black/Orange ^c	Black/Orange ^{c,d}	Black/Orange ^{c,d}	Ground
6	White	White	White	High Beam
7	_	_	Black/White	Low Beam 12-Pin Lt
8	_	_	Dk Blue/Orange	Gnd Low Beam 12-Pin Rt
9	Gray	Gray	Gray	Left Directional
10	Purple	Purple	Purple	Right Directional
11	Brown	Brown	Brown	Parking Lights
12	Orange/Black ^b	_	Lt Blue/Orange	Gnd Low Beam 12-Pin Lt

9 10 11 12

^aLeft and Right Sides.

^dOn Early Revision Harnesses, Black/Orange Wire is Ground for Motor Relay, Control and Headlight

Straight Blade Control Connectors

(end view)



White 2 Green 3 Brown 4 Black 5 Blue 6 Red

Vehicle Side (end view)



(sockets)

Pin #	Wire Color	Control Function
1	Red	+12V
2	Lt Green	S2 (3W)
3	Orange/Black	Ground
4	Brown/Red	Motor Relay
5	Lt Blue	S3 (4W)
6	White/Yellow	S1 (2W)

Control Side Wire Color Pin#

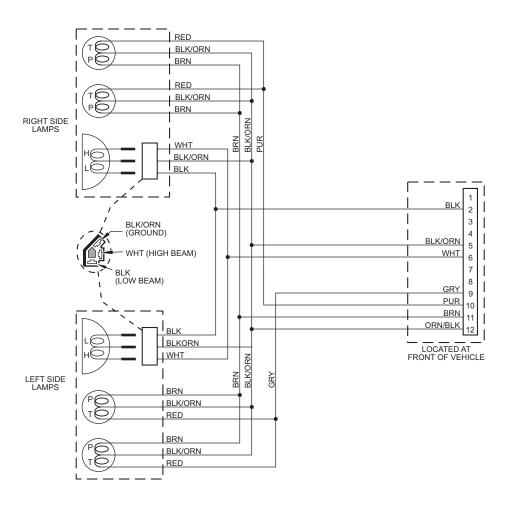
MVP Blade to Straight Blade Adapter Kit PN 66760K

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^b7-Pin System—Main Ground.

^cGround for Headlight Relays Only.

13775-90 13775-95



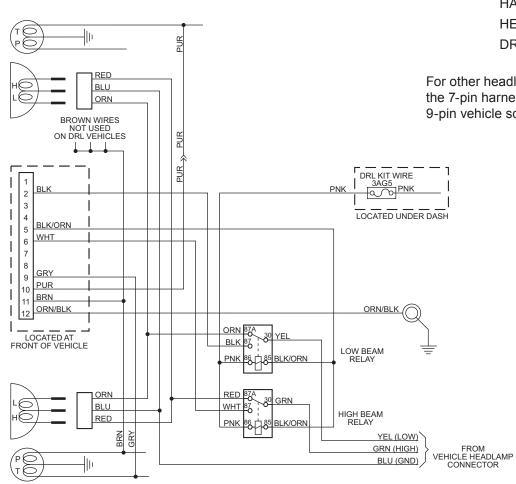
Lit. No. 22373, Rev. 07

NOTE: All relays are shown in the de-energized state.

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Headlamp Relay Terminal Locations





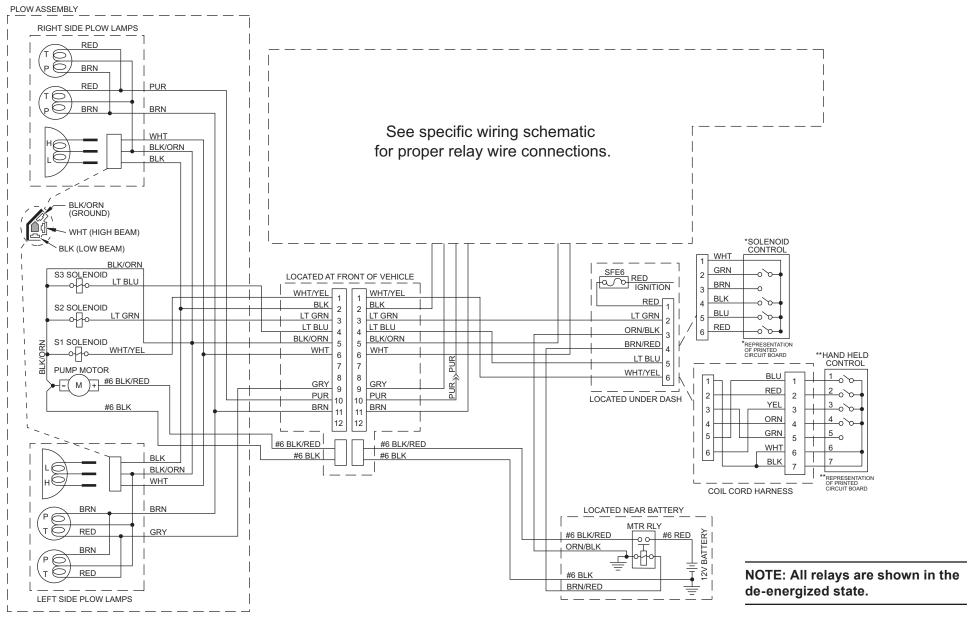
VEHICLE SIDE

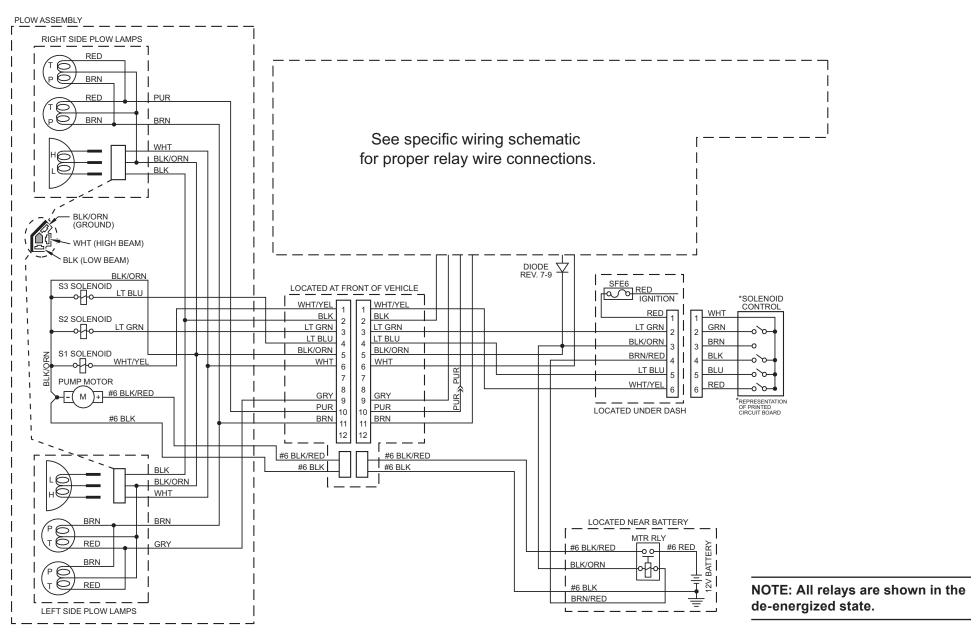
13775-95

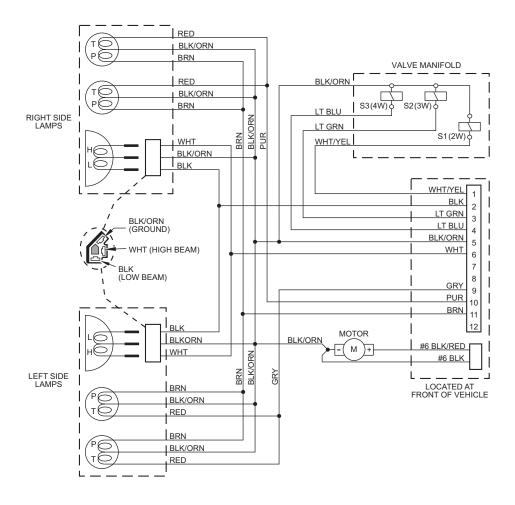
NOTE: All relays are shown in the de-energized state.

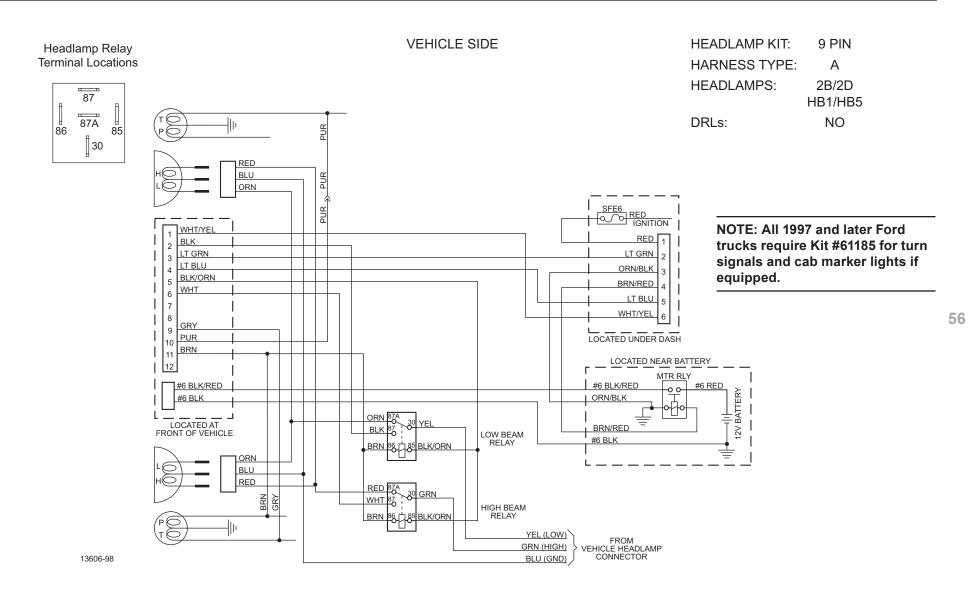
Lit. No. 22373, Rev. 07

ELECTRICAL SCHEMATIC - 9-PIN VEHICLE HARNESS - REVISION 10 AND LATER

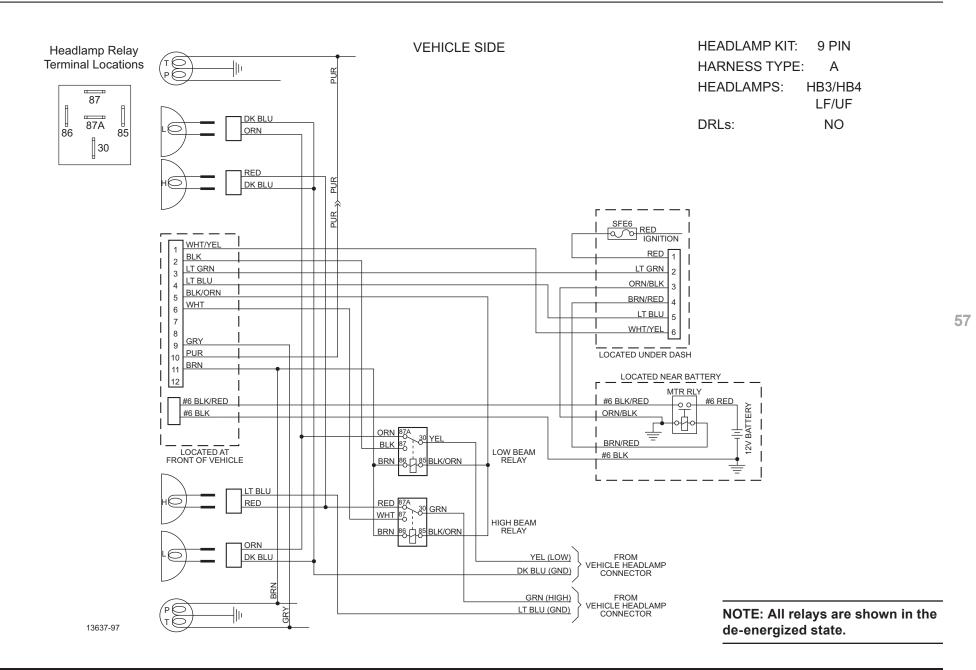


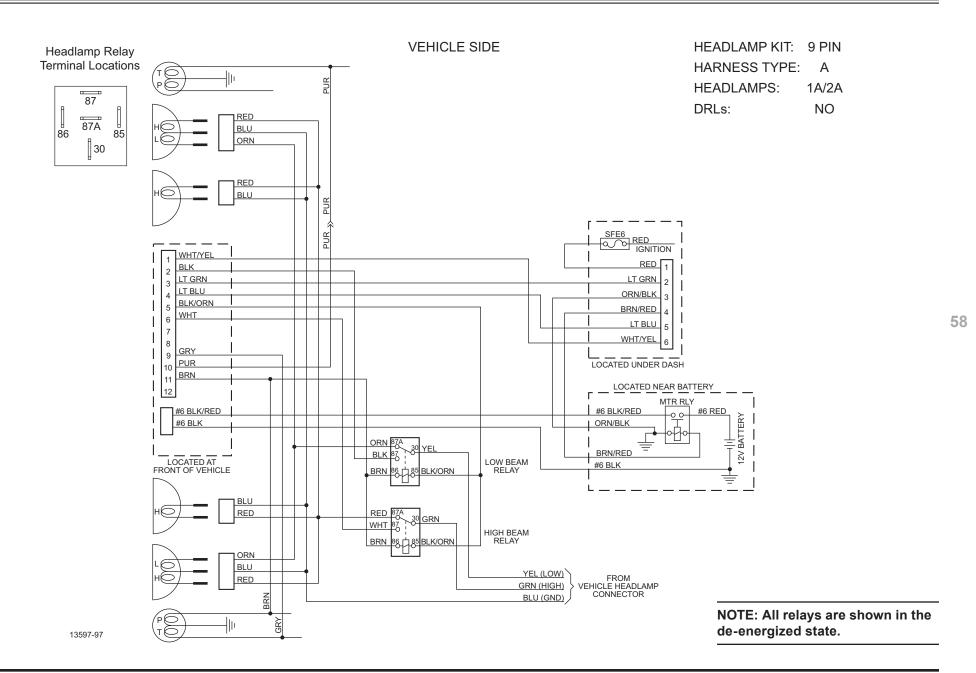


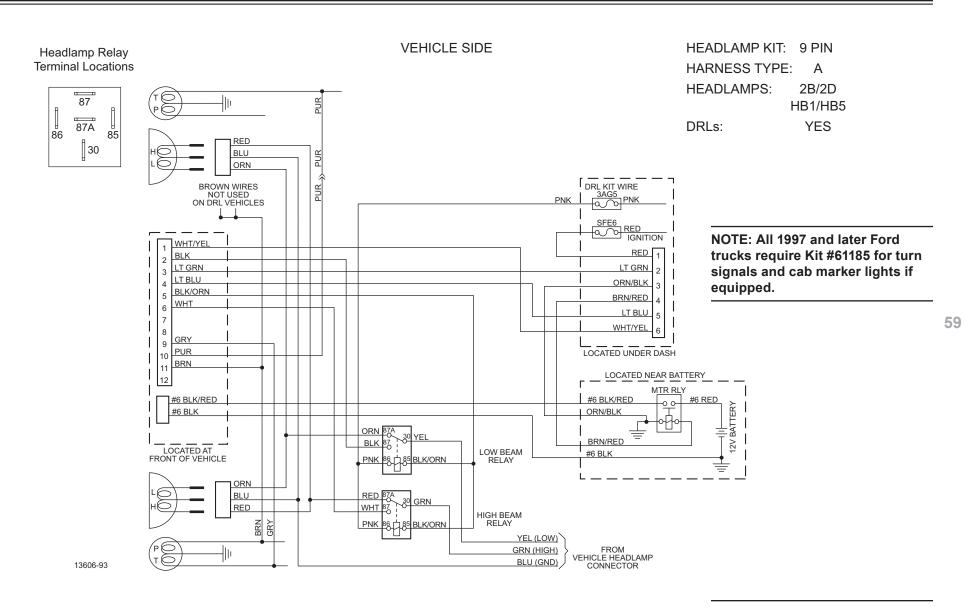




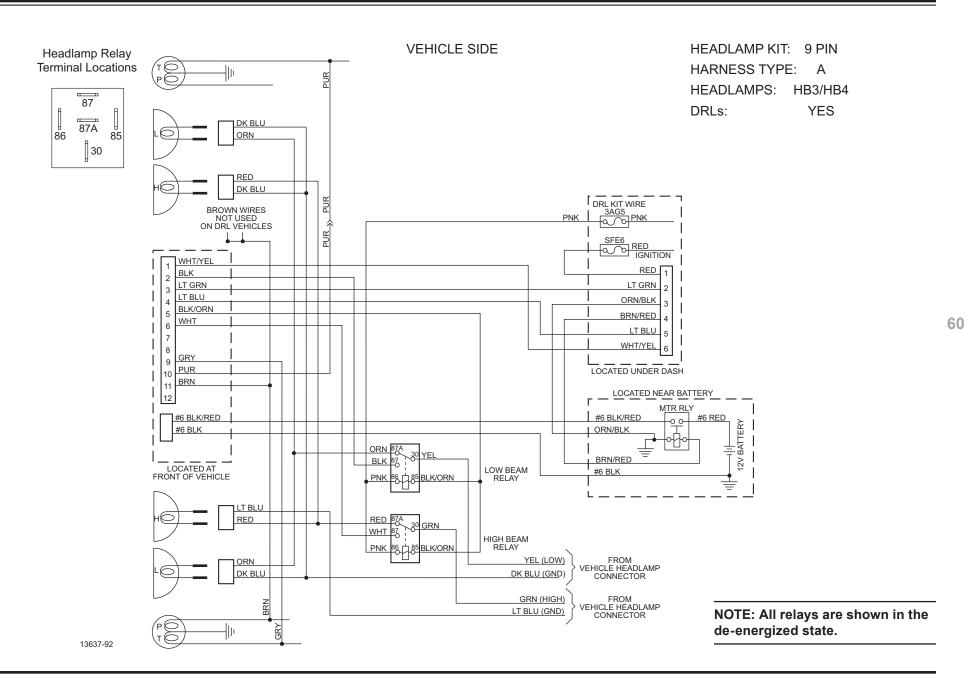
NOTE: All relays are shown in the de-energized state.







NOTE: All relays are shown in the de-energized state.

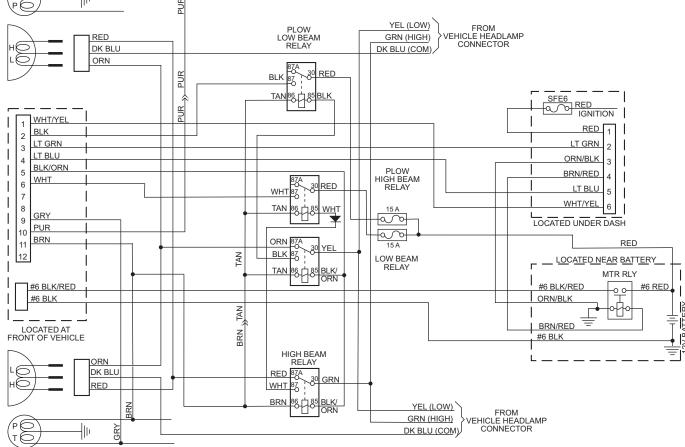


NOTE: All relays are shown in the de-energized state.

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NOTE: All relays are shown in the de-energized state.

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de-energized state.

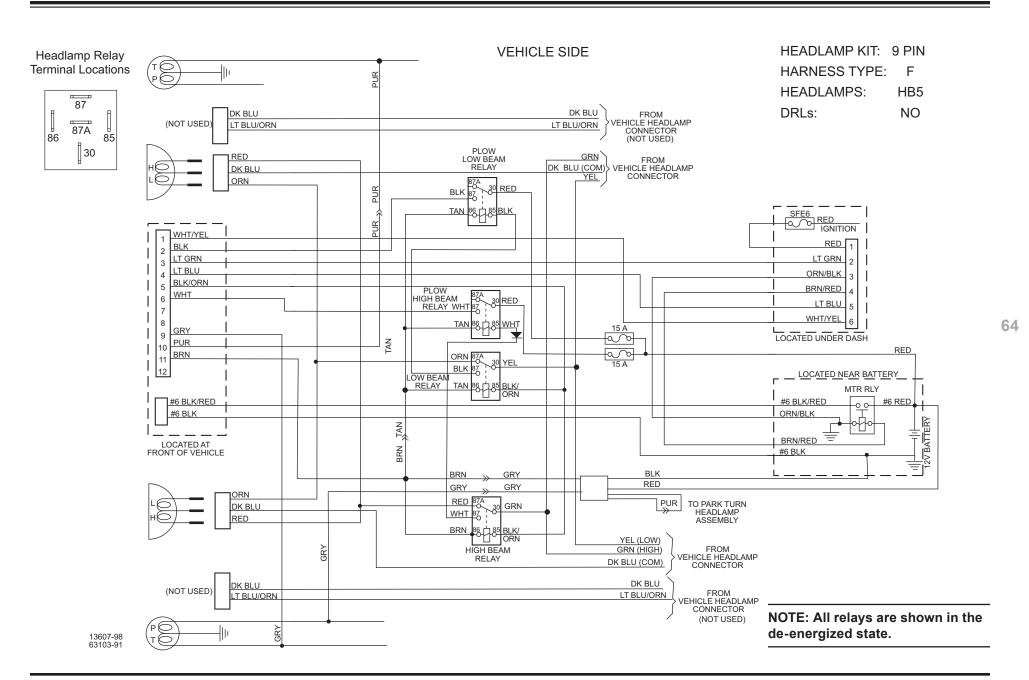
63

NOTE: All relays are shown in the

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13607-98 63103-91

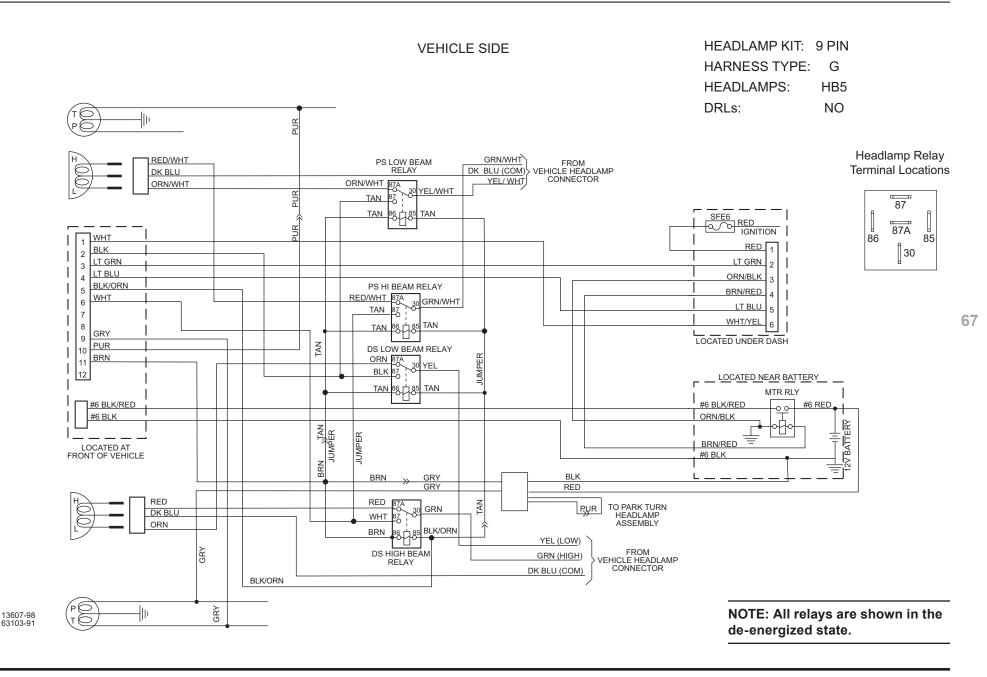
November 1, 2008

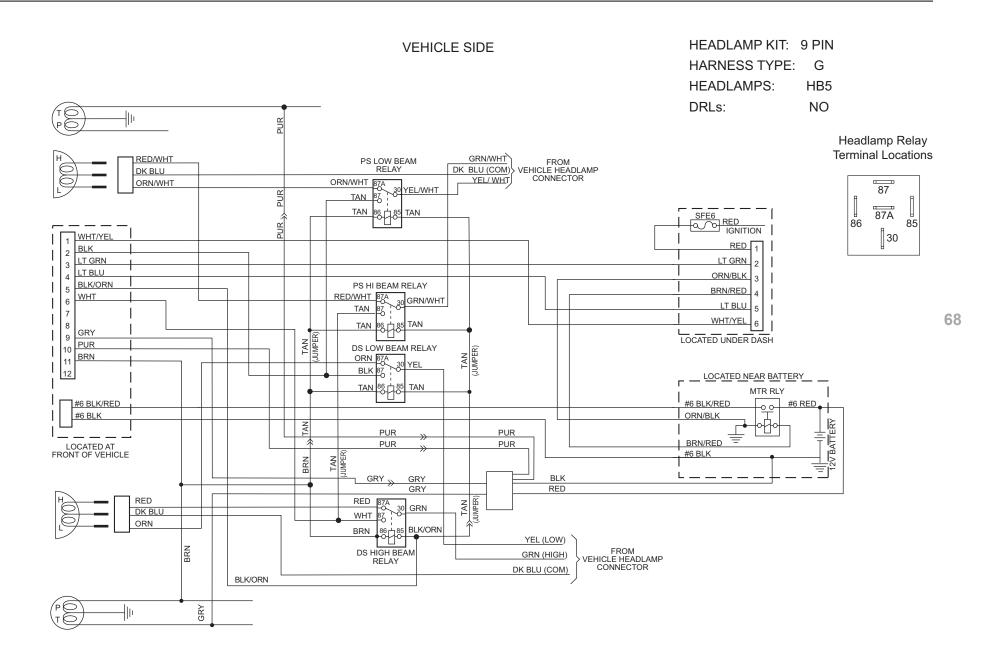


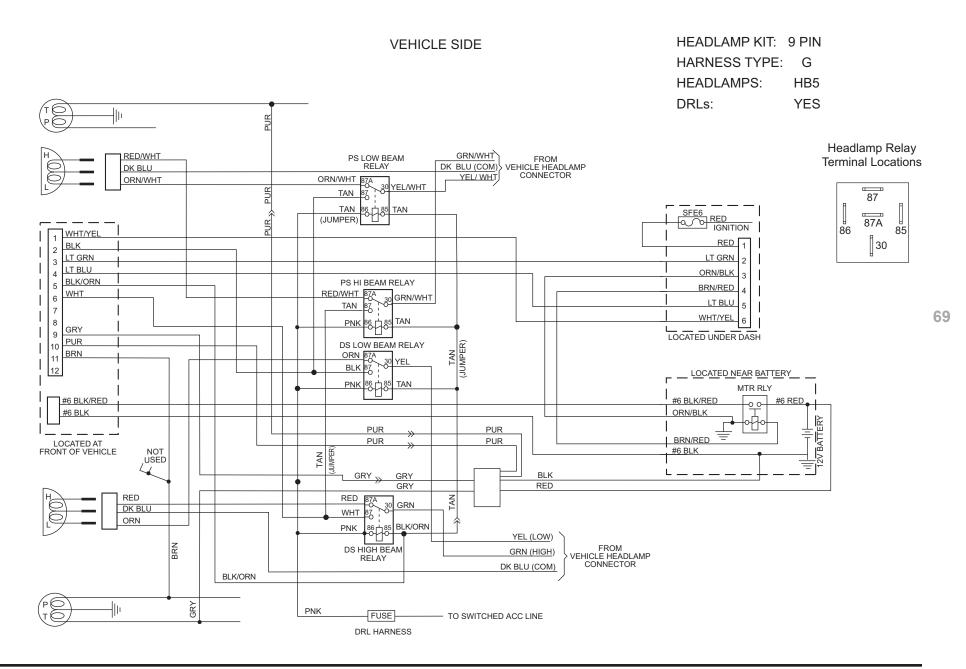
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66

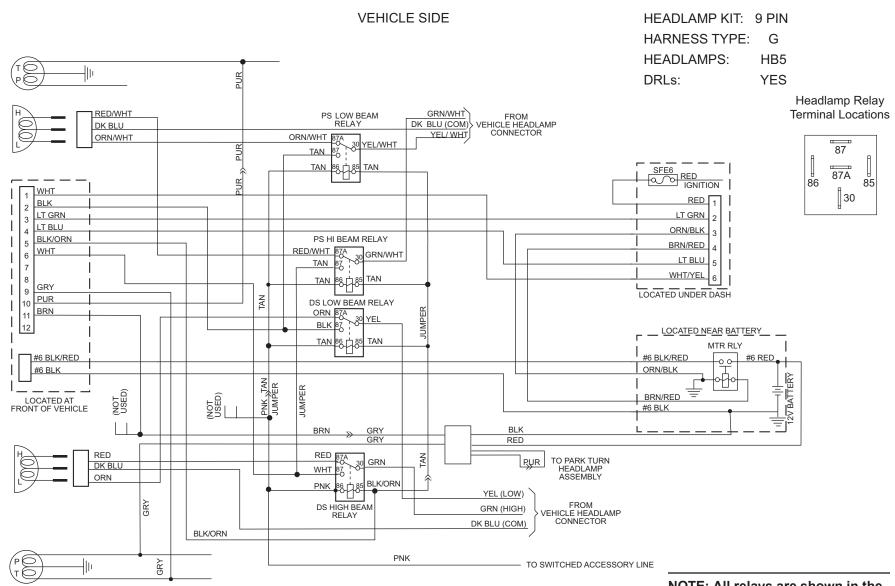
de-energized state.







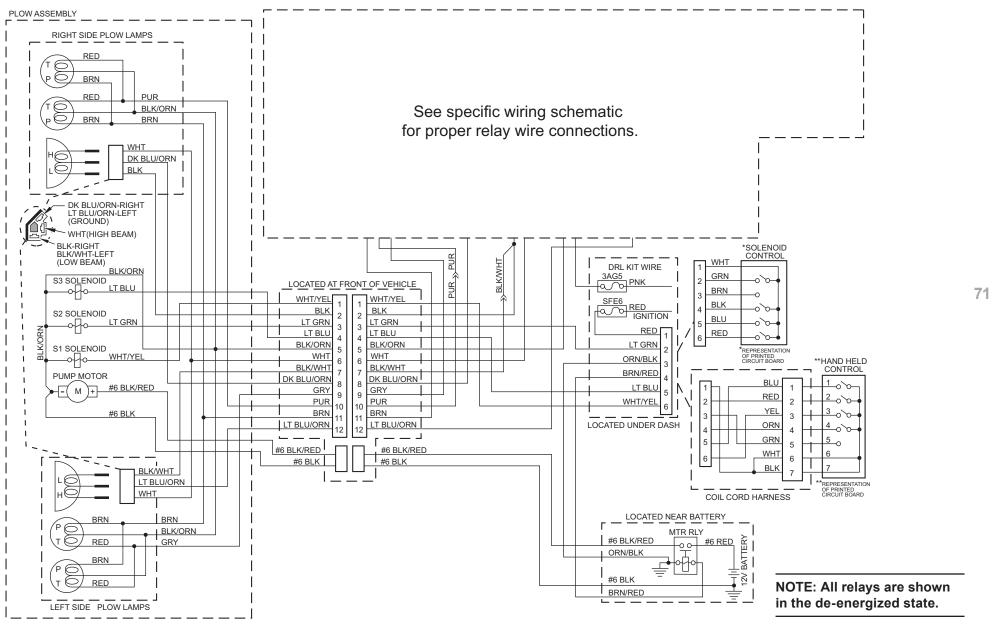
63103-91



NOTE: All relays are shown in the de-energized state.

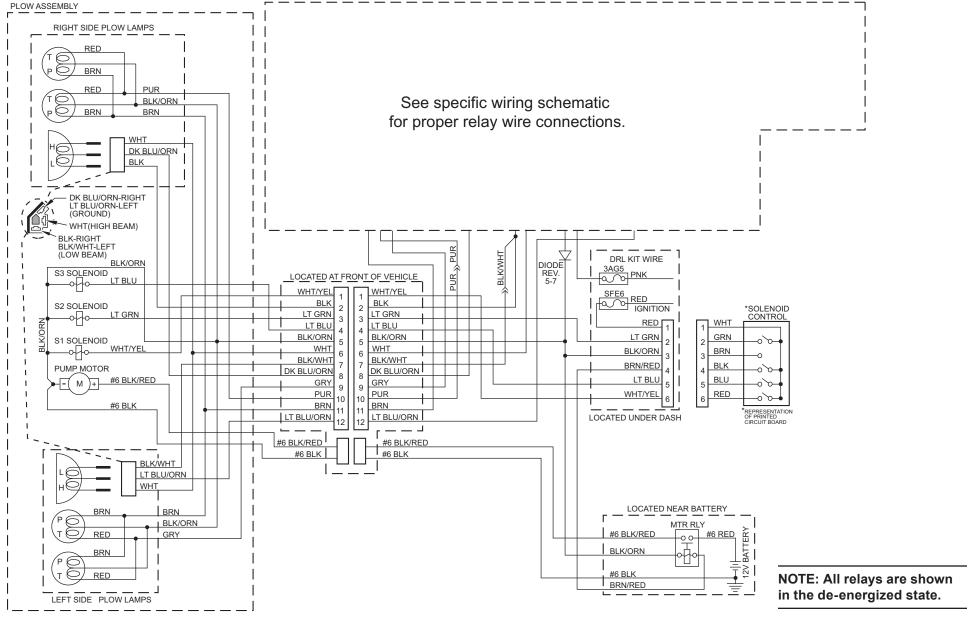
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ELECTRICAL SCHEMATIC – 12-PIN VEHICLE HARNESS – REVISION 8 AND LATER



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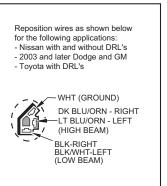


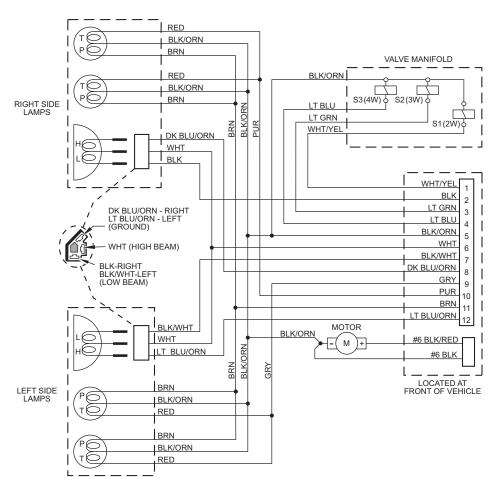
PLOW SIDE HEADLAMP KIT: 12 PIN





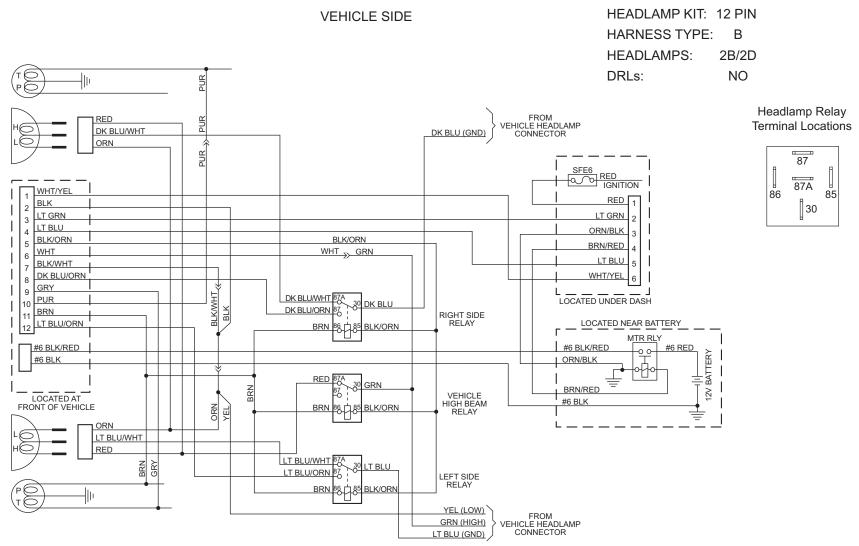
73





74

13625-92

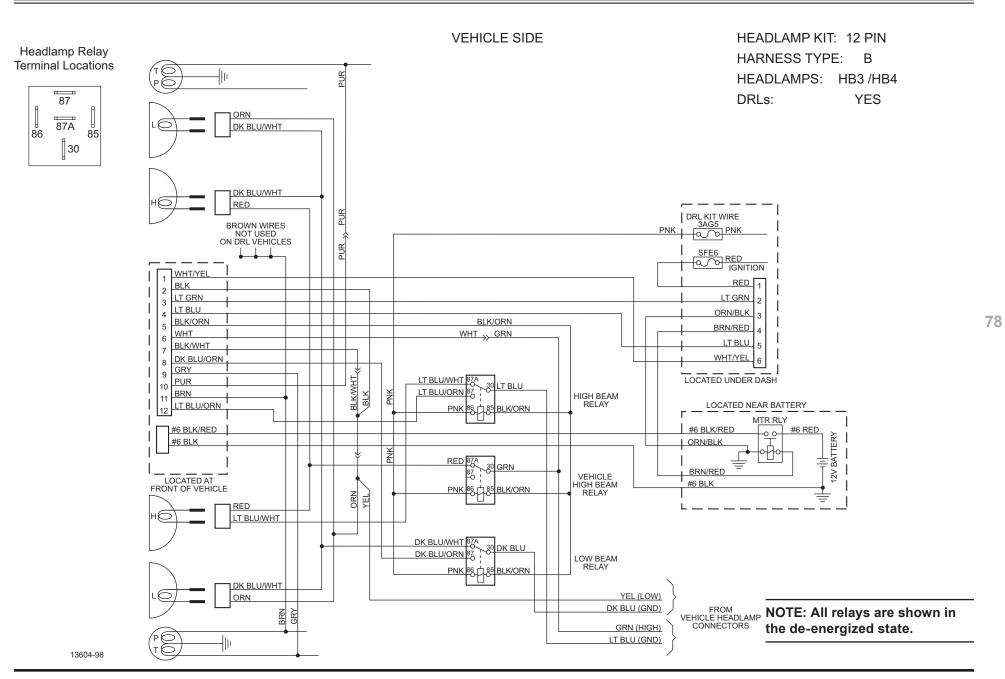


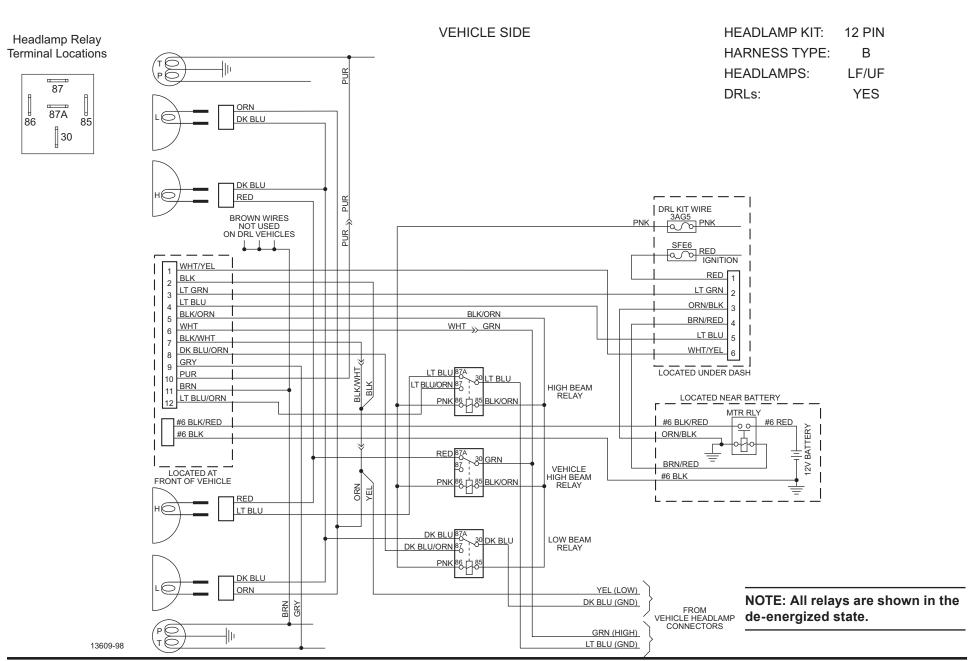
NOTE: All relays are shown in the de-energized state.

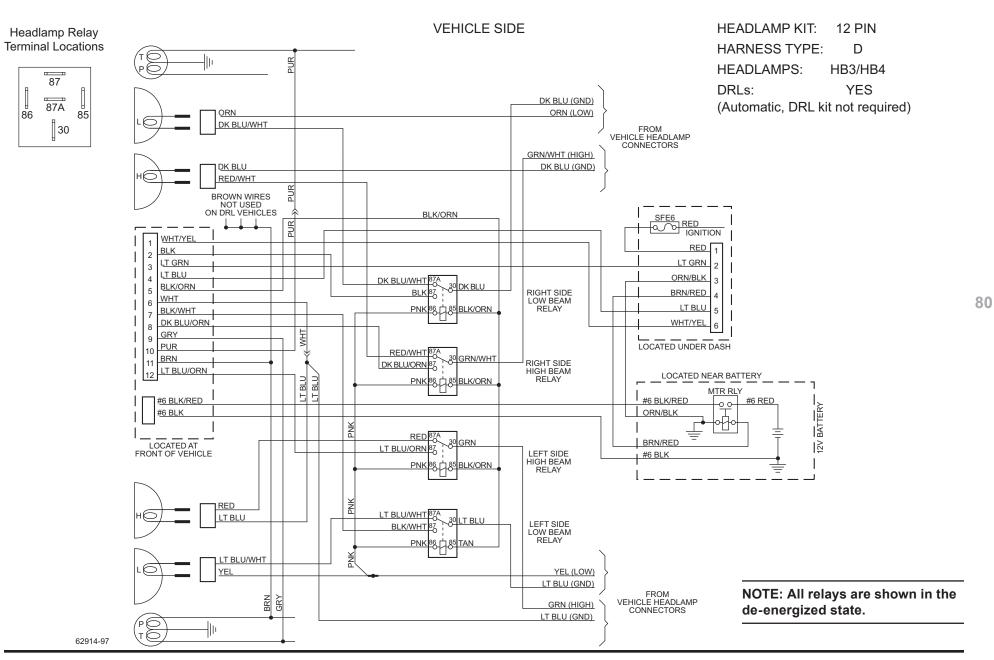
Lit. No. 22373, Rev. 07

NOTE: All relays are shown in the de-energized state.

77



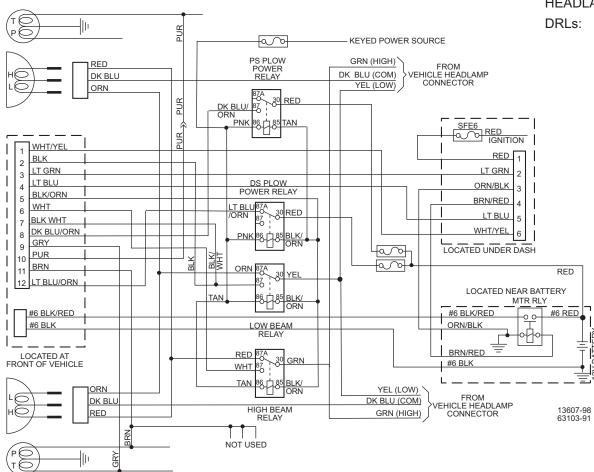






VEHICLE SIDE

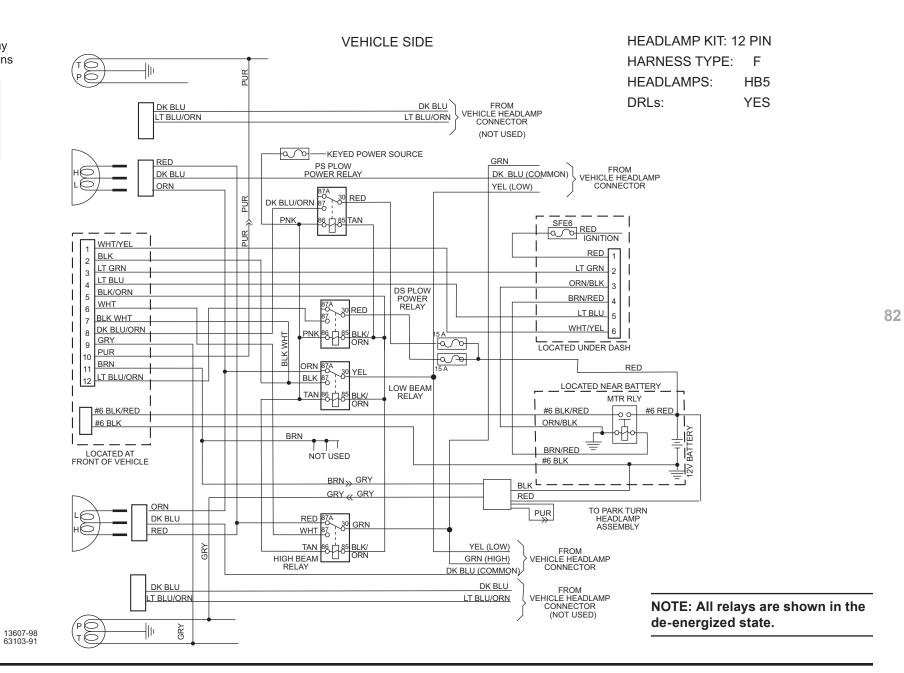
HEADLAMP KIT: 12 PIN
HARNESS TYPE: F
HEADLAMPS: HB1
DRLs: YES



NOTE: All relays are shown in the de-energized state.

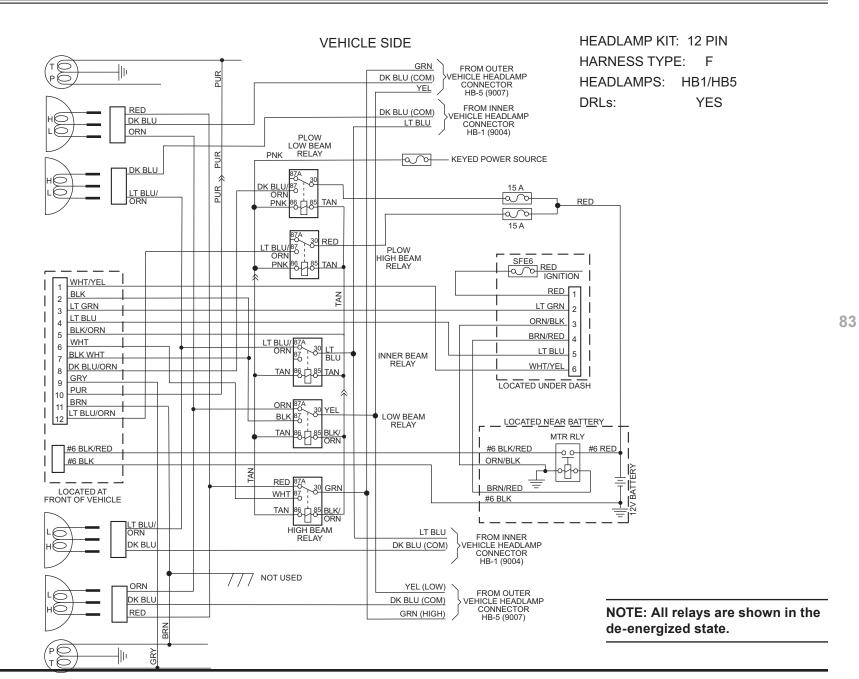
Lit. No. 22373, Rev. 07

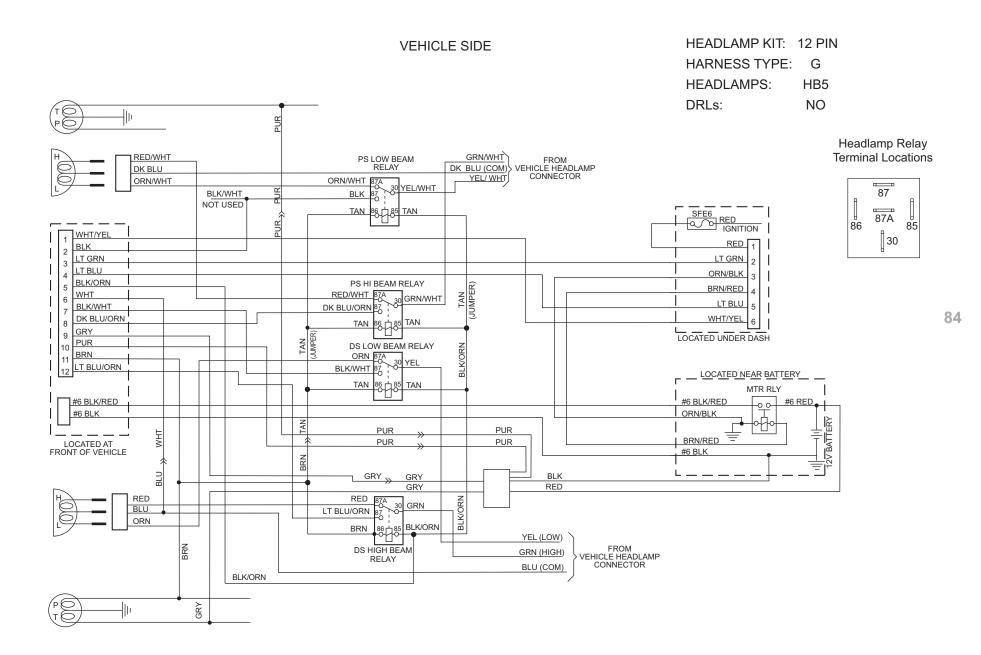


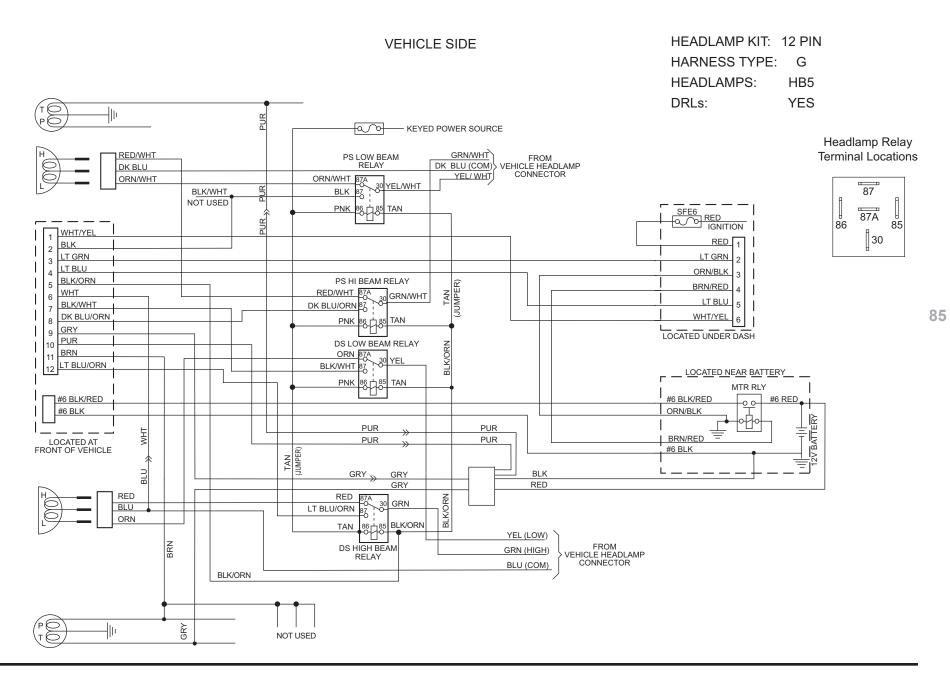


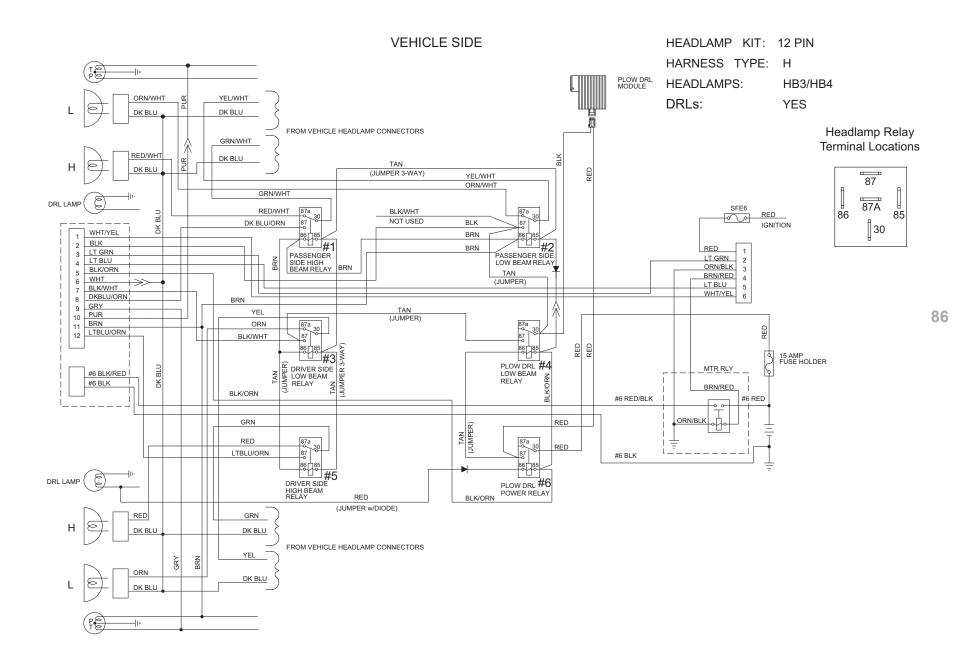


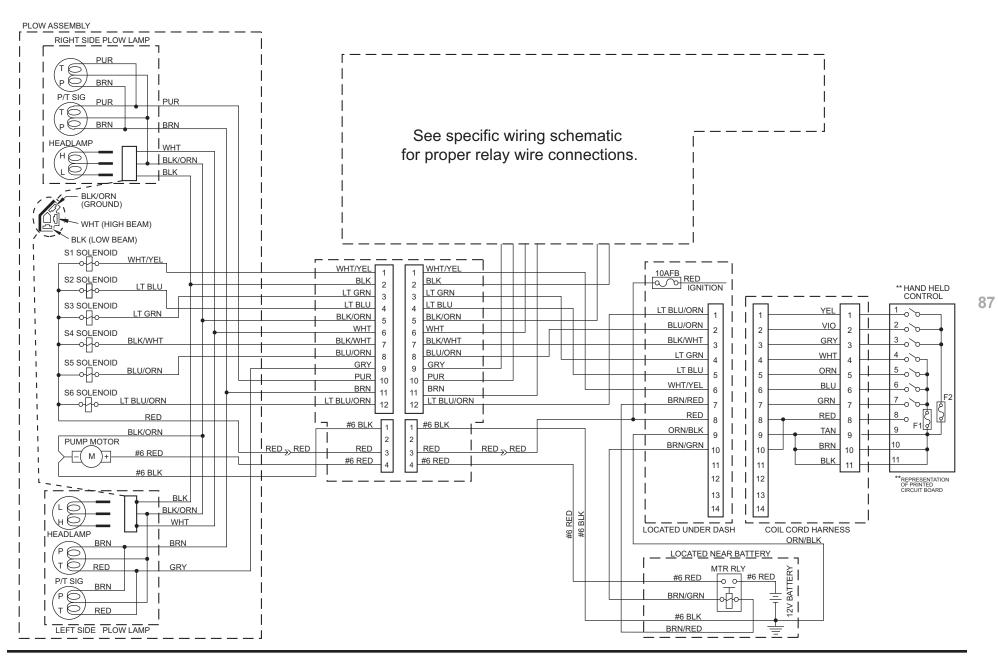
13607-98 63103-91

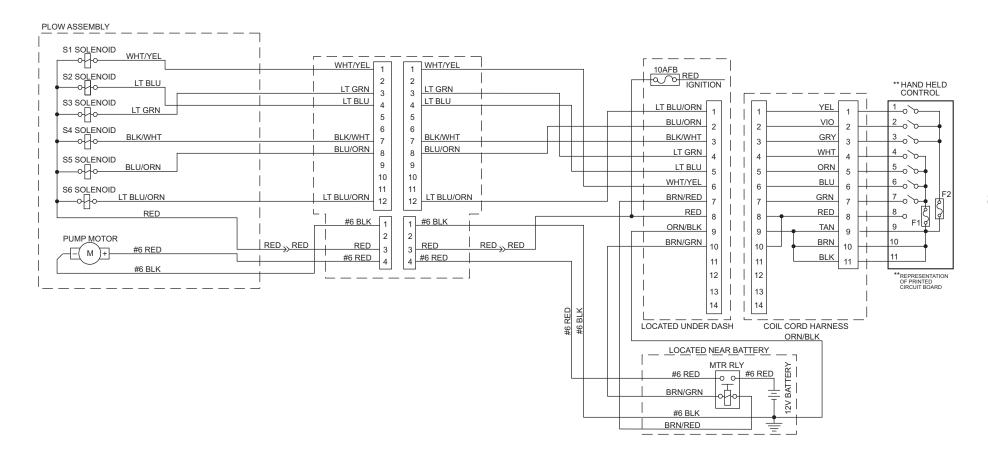




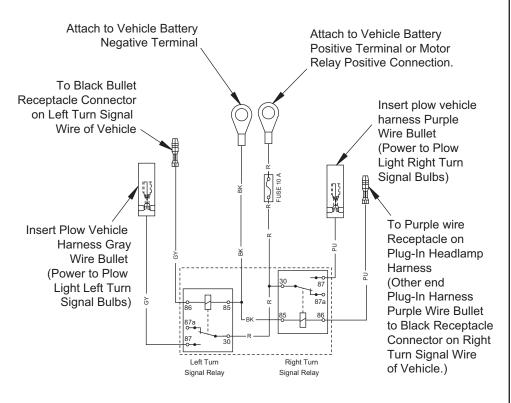




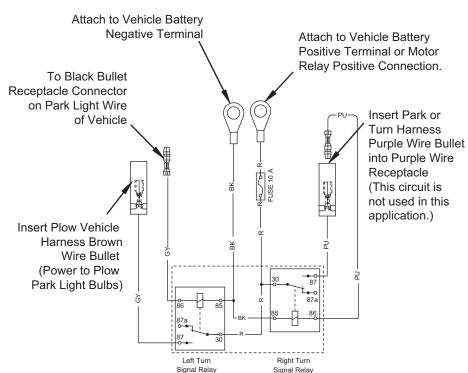




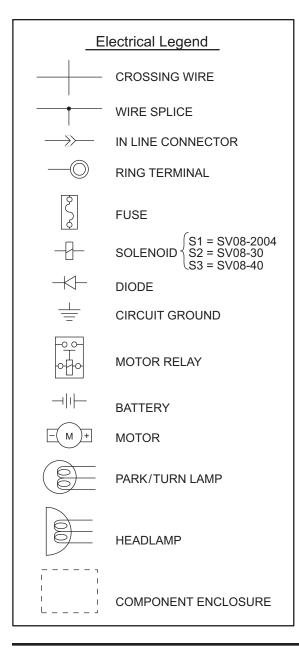
Turn Signal Application



Cab Marker / Park Lamps Application



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Wire Color Code				
BLK	Black	LTBLU	Light Blue	
BLK/ORN	Black w/Orange	LTBLU/ORN	Light Blue w/Orange	
BLK/RED	Black w/Red	LTBLU/WHT	Light Blue w/White	
BLK/WHT	Black w/White	LTGRN	Light Green	
BLU	Blue	ORN	Orange	
BLU/ORN	Blue w/Orange	ORN/BLK	Orange w/Black	
BRN	Brown	PNK	Pink	
BRN/RED	Brown w/Red	PUR	Purple	
DKBLU	Dark Blue	RED	Red	
DKBLU/ORN	Dark Blue w/Orange	TAN	Tan	
DKBLU/WHT	Dark Blue w/White	WHT	White	
GRN	Green	WHT/YEL	White w/Yellow	
GRN/WHT	Green w/White	YEL	Yellow	
GRY	Gray			

Abbreviations				
DRL	Daytime Running Lights	MTR RLY	Motor Relay	

Harness Type	Description	
А	Common Ground to Headlamps	
В	GM DRL System	
С	Independent Ground to Headlamps	
D	GM Enhanced DRL System	
E	Not Used	
F	Common 12V to Headlamps	
G	Headlamp Timer Module	
Н	Independent Headlamp, Common Ground	



Western Products PO Box 245038 Milwaukee, WI 53224-9538 www.westernplows.com

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