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9-Pin Harness - Plow Schematic 1	4
12-Pin Harness - Plow Schematic 2	23
12-Pin Harness - Plow Schematic (Nissan and Toyota)	30

Headlamp Index

Headlamp Type	Harness Type	DRLs (Yes/No)	Page No.
1A/2A	9-Pin, A	No	18
1A/2A	9-Pin, C	No	22
2B/2D	9-Pin, A	No	15
2B/2D	9-Pin, A	, A Yes	
2B/2D	9-Pin, C	No	16
2B/2D	9-Pin, C	Yes	20
2B/2D	12-Pin, A	Nissan w/ and w/o DRLs; Toyota w/ DRLs	31
2B/2D	12-Pin, B	No	24
2B/2D	12-Pin, B	Yes	27

Headlamp Type	Harness Type	DRLs (Yes/No)	Page No.
2E	9-Pin, C	No	16
2E	9-Pin, C	Yes	20
2E	12-Pin, B	Yes	27*
HB1	7-Pin, A	No	12
HB1	7-Pin, A	Yes	13
HB1	9-Pin, A	No	15
HB1	9-Pin, A	Yes	21
HB1	9-Pin, C	No	16
HB1	9-Pin, C	Yes	20
HB1	12-Pin, A	No	25
HB1	12-Pin, A	Nissan w/ and w/o DRLs; Toyota w/DRLs)	31
HB3/HB4	9-Pin, A	No	17
HB3/HB4	9-Pin, A	Yes	19
HB3/HB4	12-Pin, B	Yes	28
HB3/HB4	12-Pin, D	Yes (Automatic, DRL kit not required)	26
HB5	7-Pin, A	No	12
HB5	7-Pin, A	Yes	13
HB5	9-Pin, A	No	15
HB5	9-Pin, A	Yes	21
LF/UF	12-Pin, B	Yes	29

* Early GM applications used two harnesses spliced together.

INTRODUCTION

The purpose of this book is to provide the trained mechanic with a comprehensive reference to assist in diagnosis and repair of FISHER® Minute Mount® 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 straight blade hydraulic system circuitry is also included to show the complete electrical system.

HOW TO USE THIS BOOK

Use the information in the Table of Contents 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 Mechanic's Guide for the SEHP system.

The 9- and 12-pin Vehicle Side schematics 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.

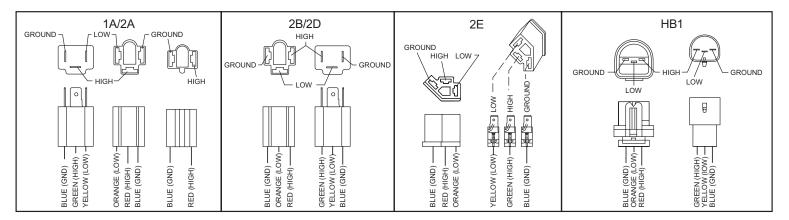
EARLY REVISION VEHICLE HARNESSES

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 9and 12-pin system schematics showing this early revision ground configuration are included in the front of the book. These schematics are for early revision harnesses using only the solenoid control. If a hand-held 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.

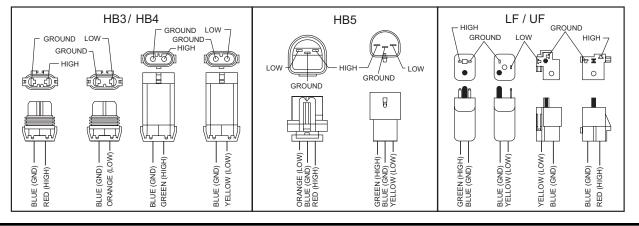
NOTE: To verify the correct light kit/plug-in harness on a particular vehicle, refer to the appropriate Kit Selection Guide.

Lamp Types and Harness Connectors

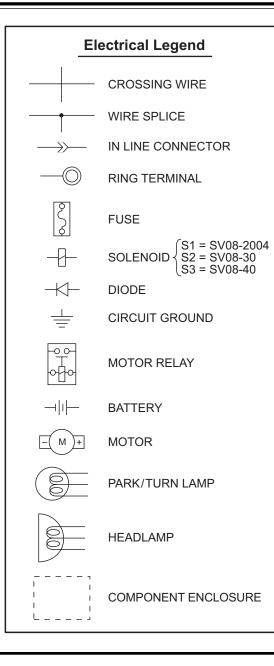
	LAMP TYPE	LAMP SIZE	CONFIGURATION		DESCRIPTION
	1A / 2A	4″ x 6.5″			Quad Rectangular Lamp
	2B	5.5″ x 7.88″			Dual Rectangular Lamp
NOTE: The lamp type is usually embossed in	2D	7″ DIA.	0	0	Dual Round Lamp
	2E	4″ x 6.5″			Dual Rectangular (Small Halogen Lamp)
the headlamp lens.	HB1	Can Vary			Dual Rectangular Halogen Lamp
	HB3 / HB4	Can Vary			Quad Composite Halogen Lamp
	HB5	Can Vary			Dual Rectangular Halogen Lamp
	LF / UF	3.64″ x 5.93″			Quad Rectangular Halogen Lamp



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



Electrical Legend and Wire Colors



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			

	Plow (end view)				v)		
		7	8	9	10	11	12
Headlamp Relay Terminal Locations	(pins)	(°	O	0			0
97	(1)	l	O	0	0	0	0
		1	2	3	4	5	6
86 87A 85							

Harness Connectors

9 10 11 12

Vehicle (end view) 2 3 4 5 6 1 \bigcirc \circ \circ \circ \bigcirc 0 \bigcirc

78

D: #	Wire Color			O	
Pin #	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	

RELAYS.

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

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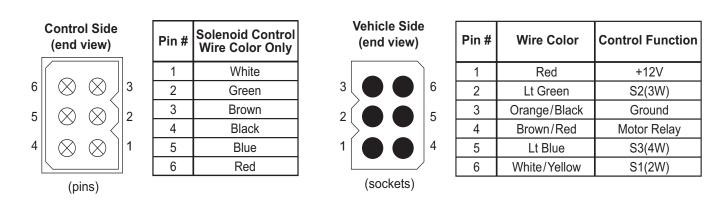
^a LEFT AND RIGHT SIDES.

^c GROUND FOR HEADLIGHT RELAYS ONLY.

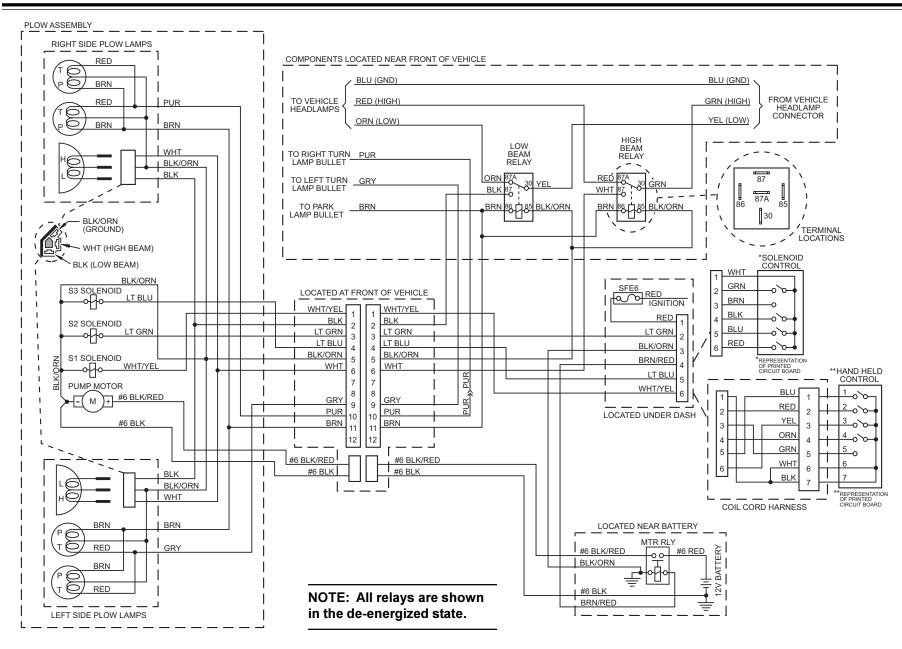
^b 7-PIN SYSTEM — MAIN GROUND. ^d ON EARLY REVISION HARNESSES, BLACK/ORANGE WIRE IS GROUND FOR MOTOR RELAY, CONTROL AND HEADLIGHT

Control Connectors

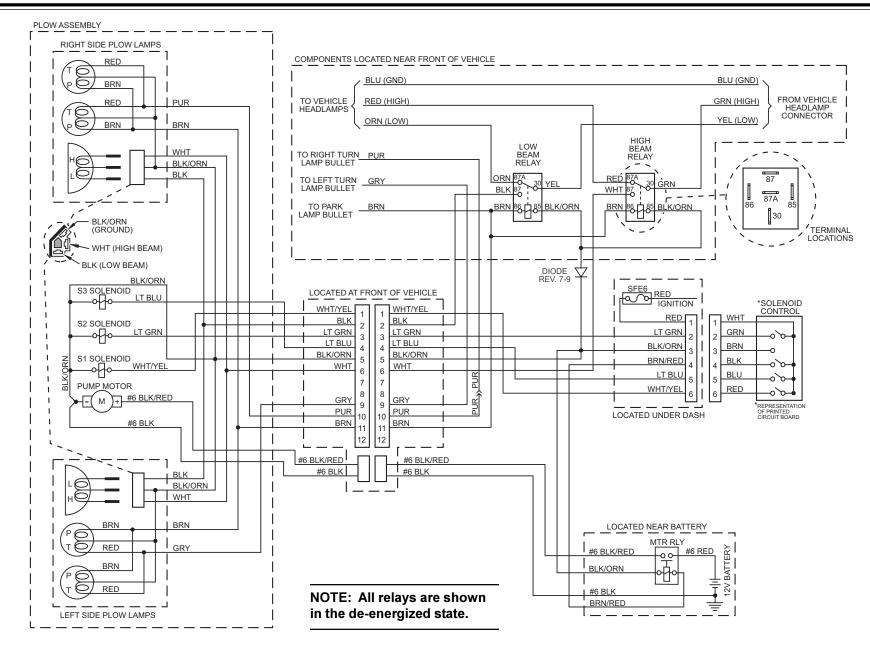
(sockets)



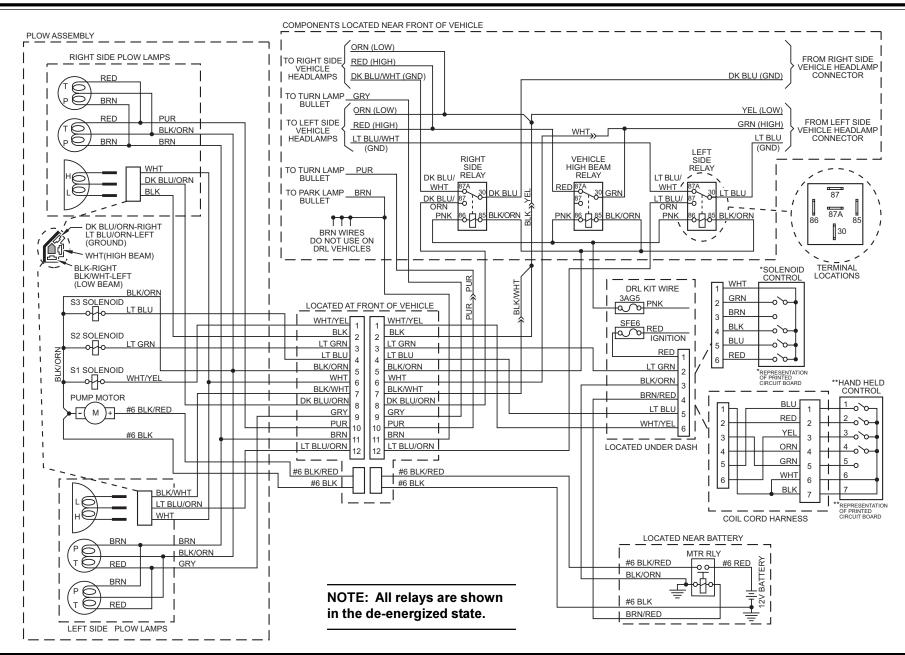
Electrical Schematic – 9-Pin Vehicle Harness



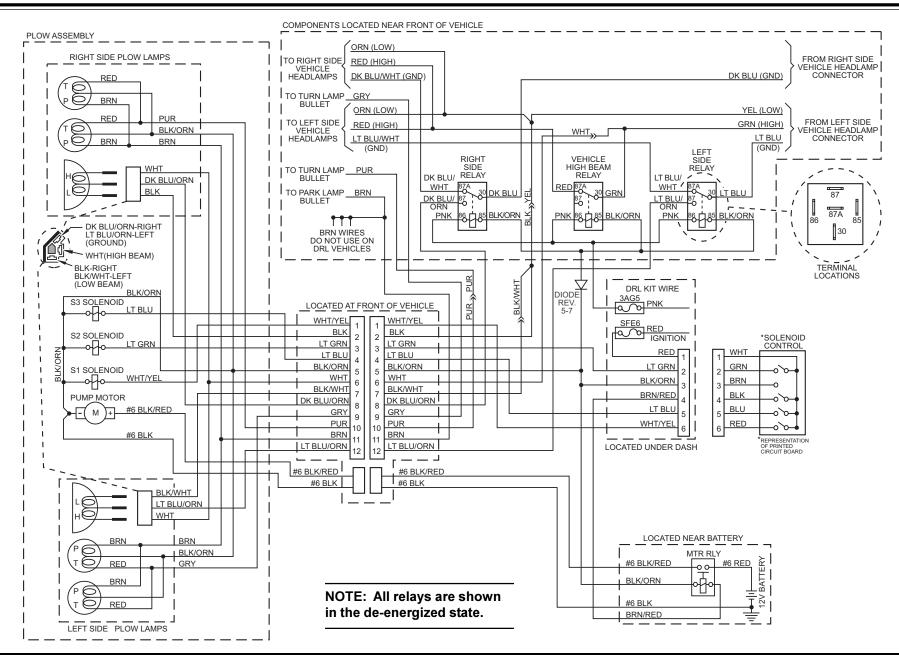
Electrical Schematic – 9-Pin Vehicle Harness – Revision 1-9

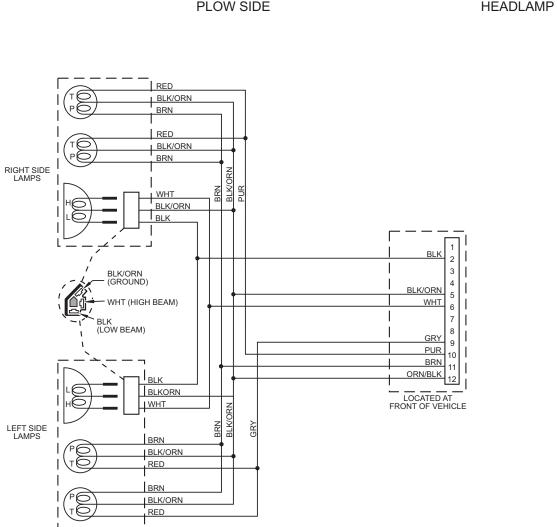


Electrical Schematic – 12-Pin Vehicle Harness



Electrical Schematic – 12-Pin Vehicle Harness – Revision 1-7

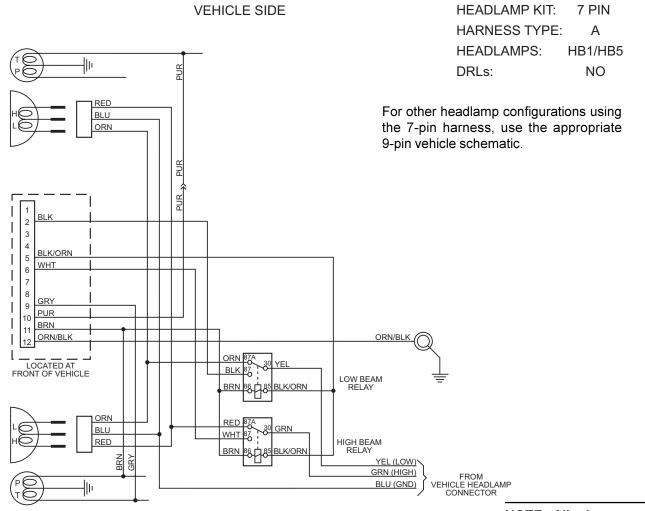




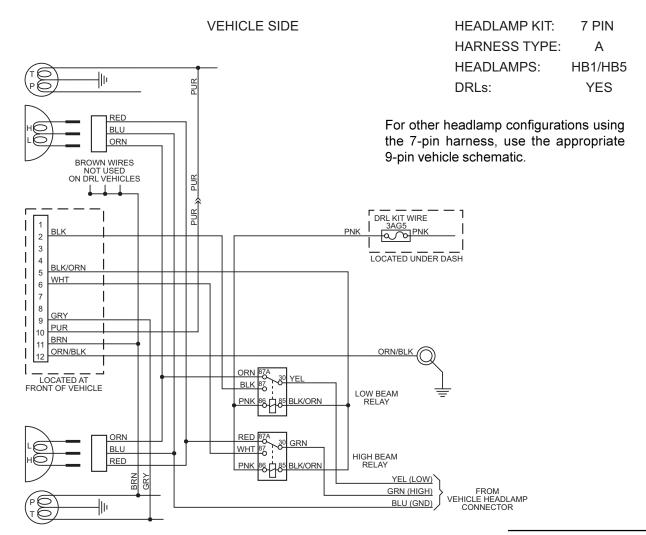
PLOW SIDE

HEADLAMP KIT: 7 PIN

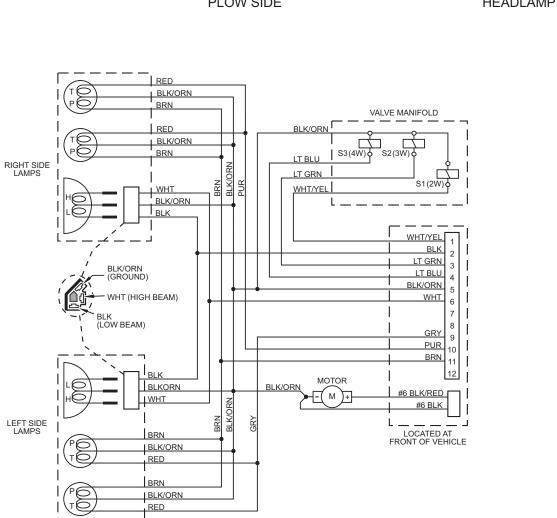
13775-90 13775-95

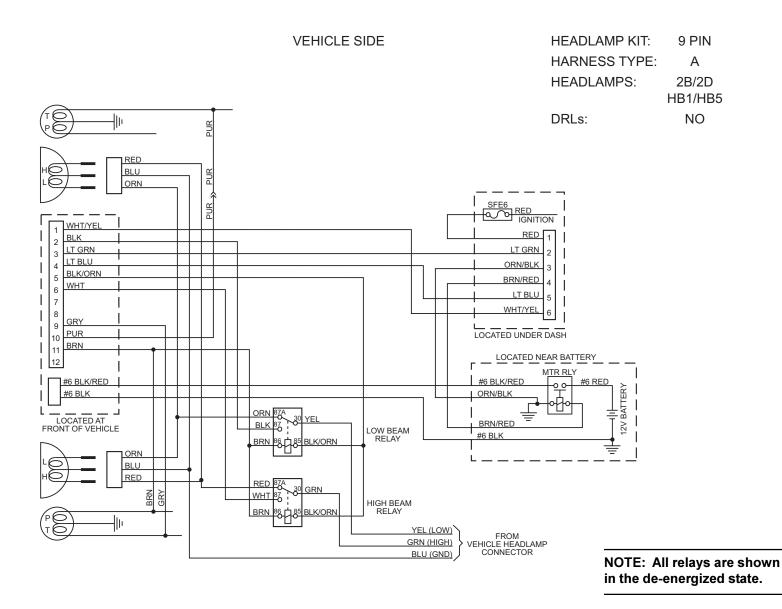


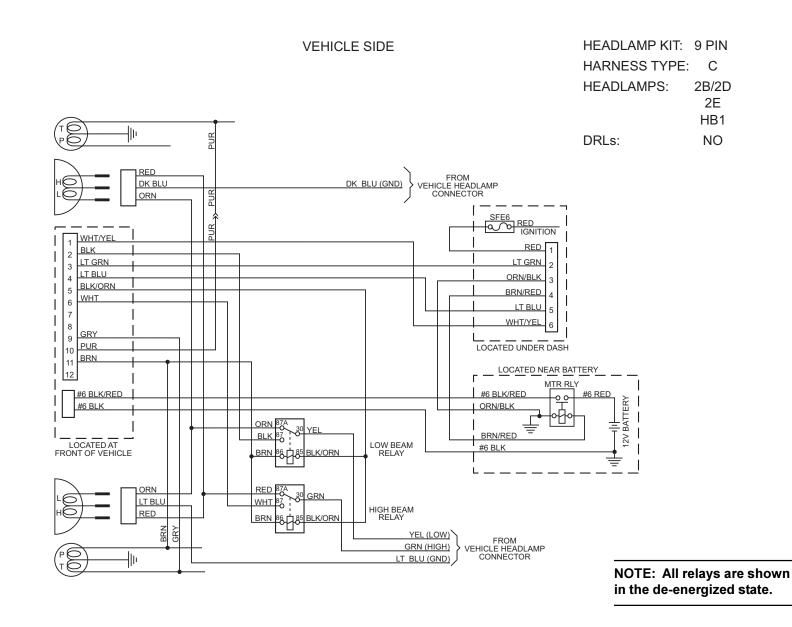
NOTE: All relays are shown in the de-energized state.

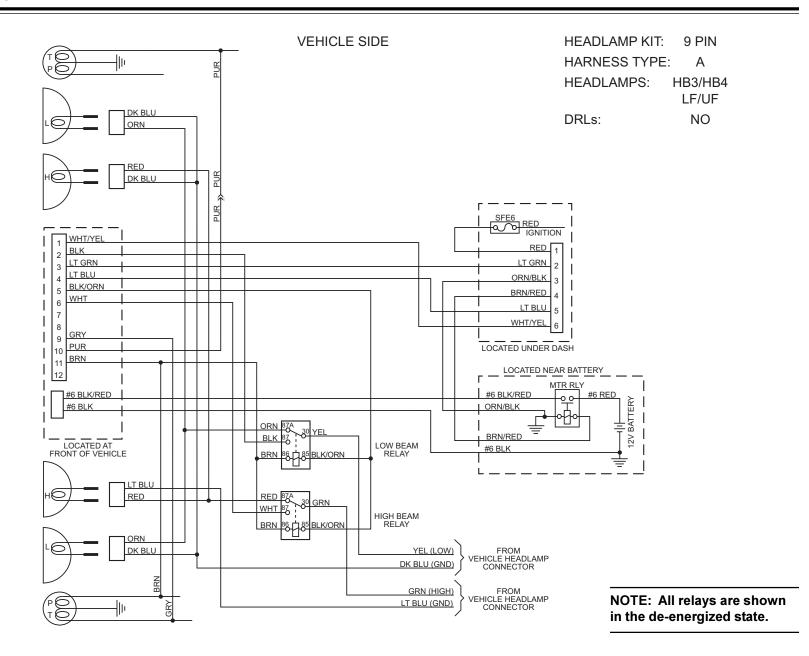


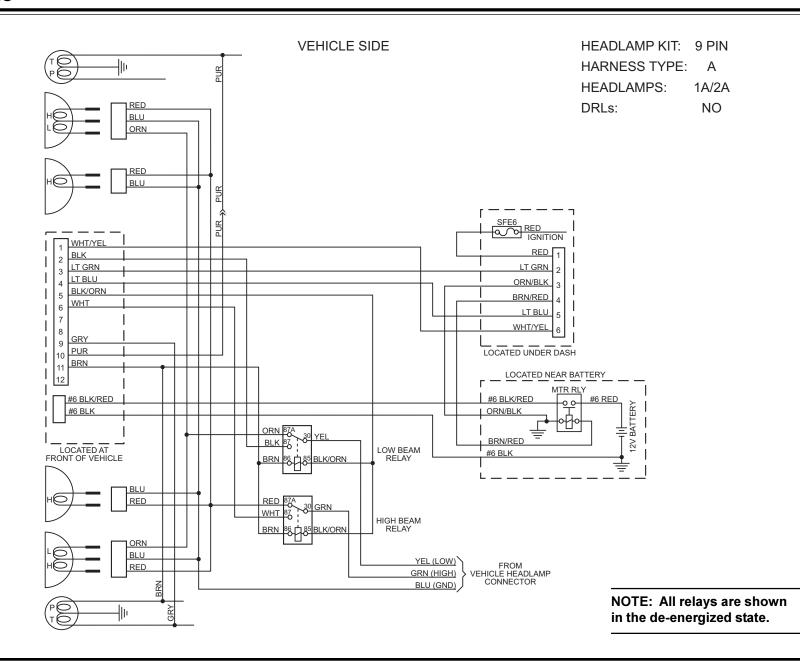
NOTE: All relays are shown in the de-energized state.

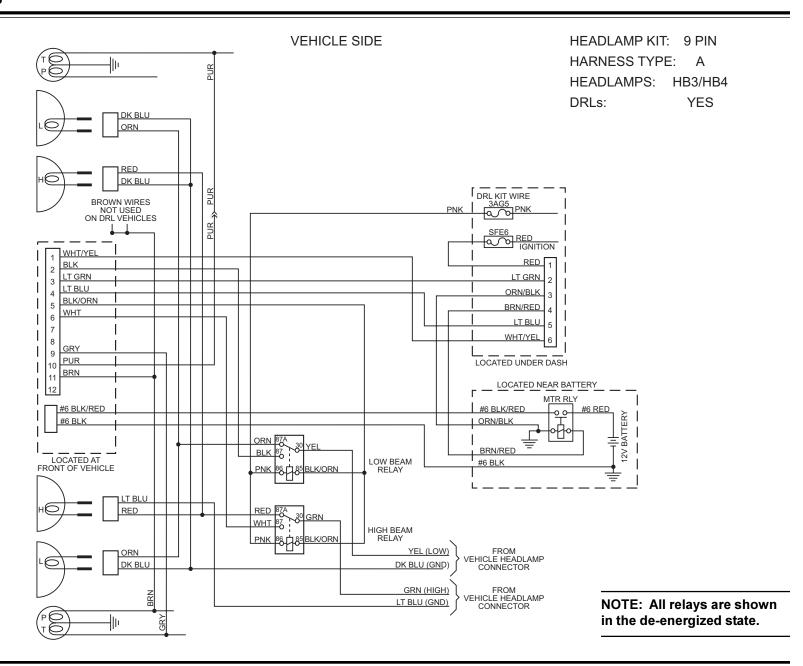


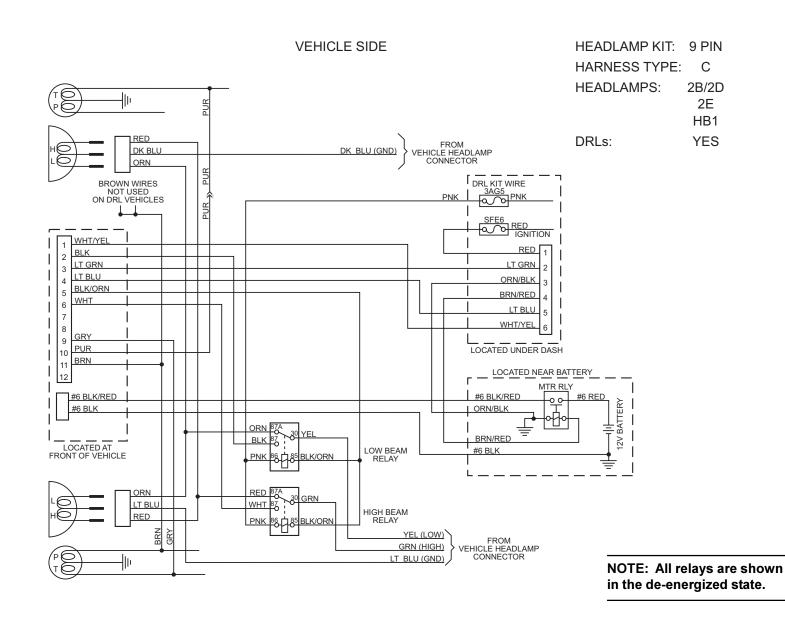


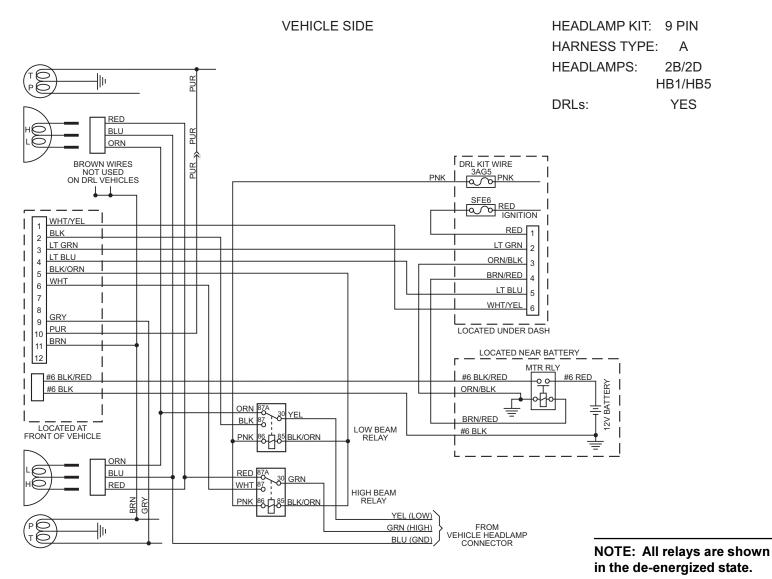


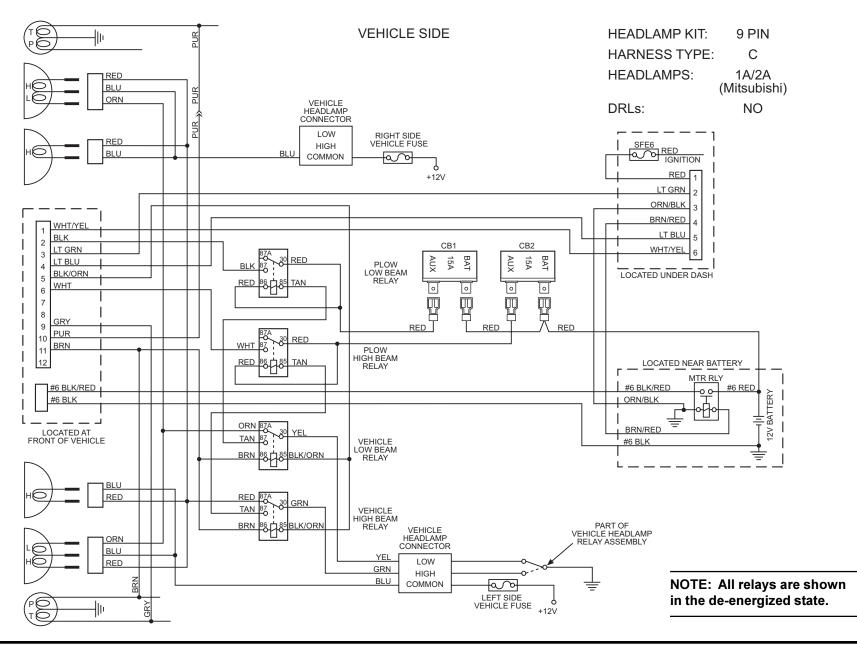


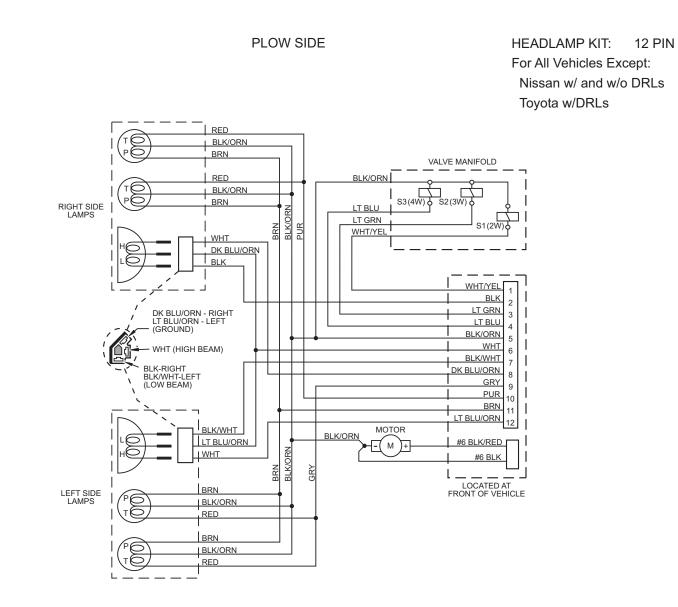




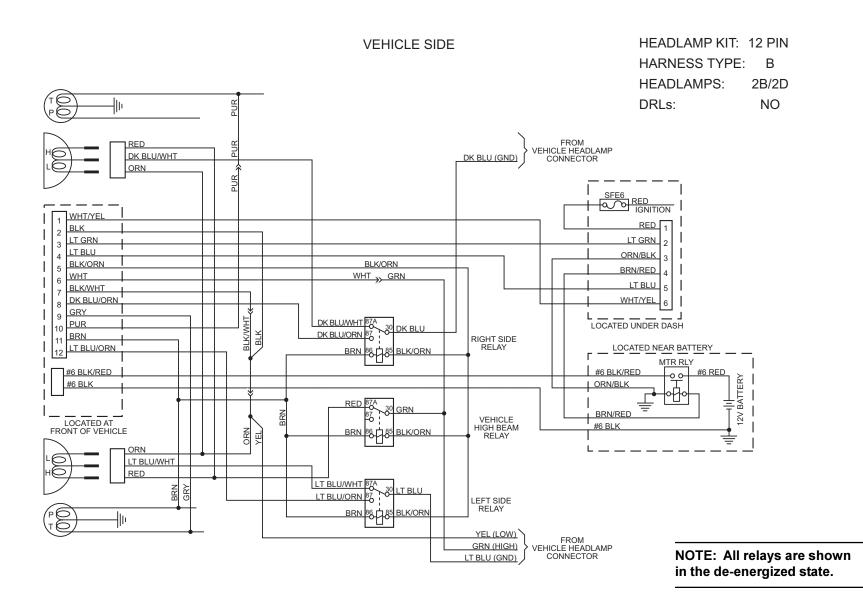


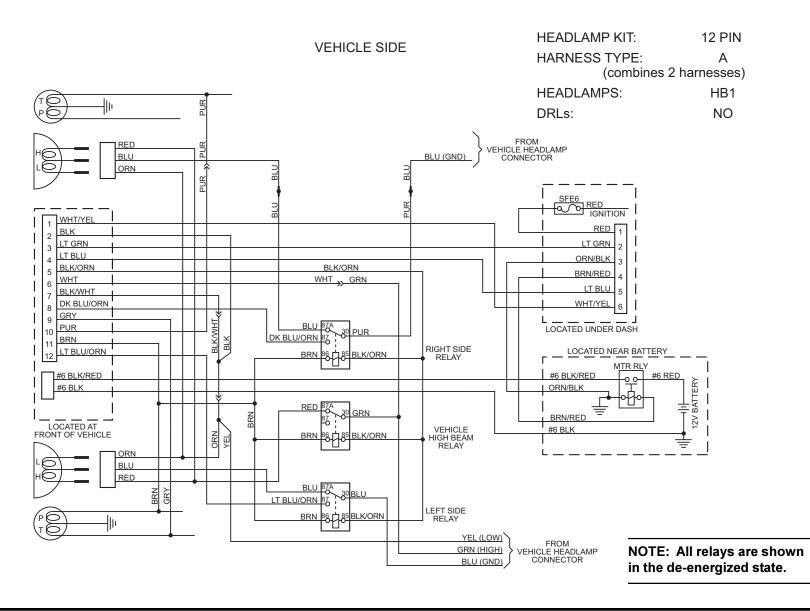


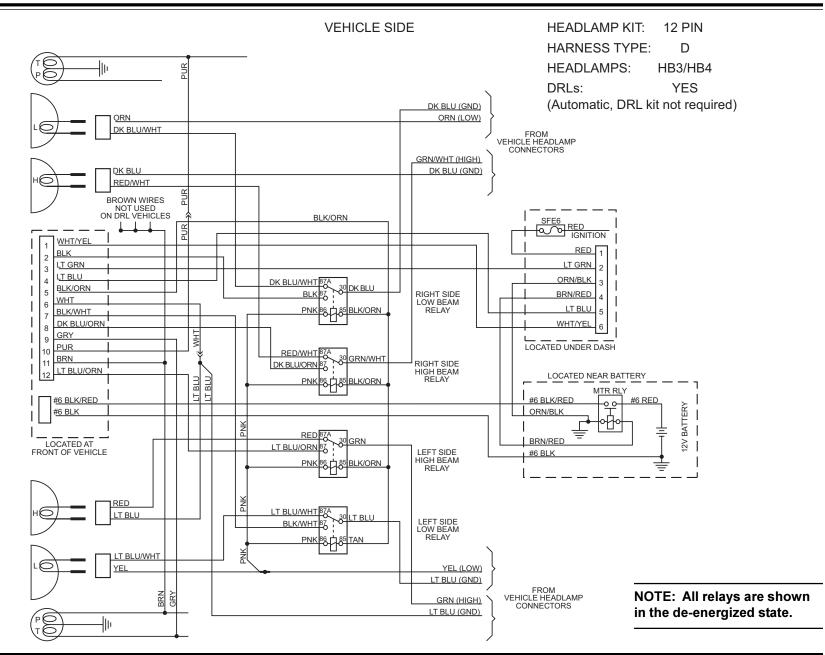


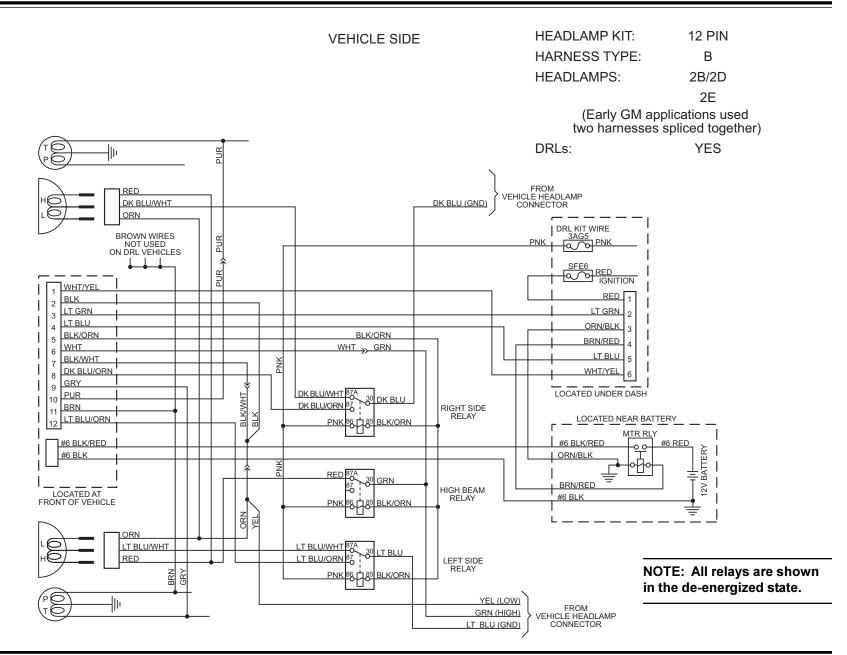


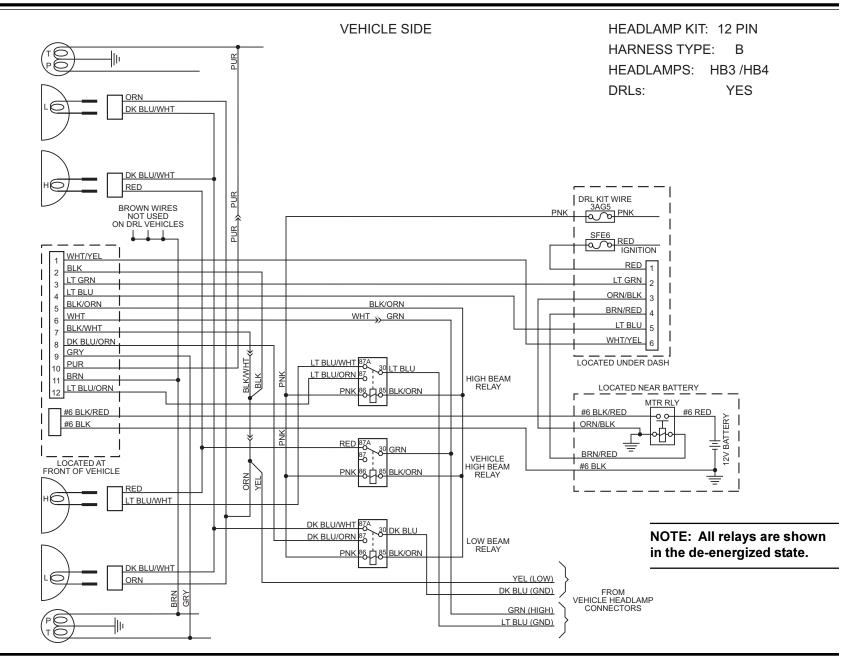
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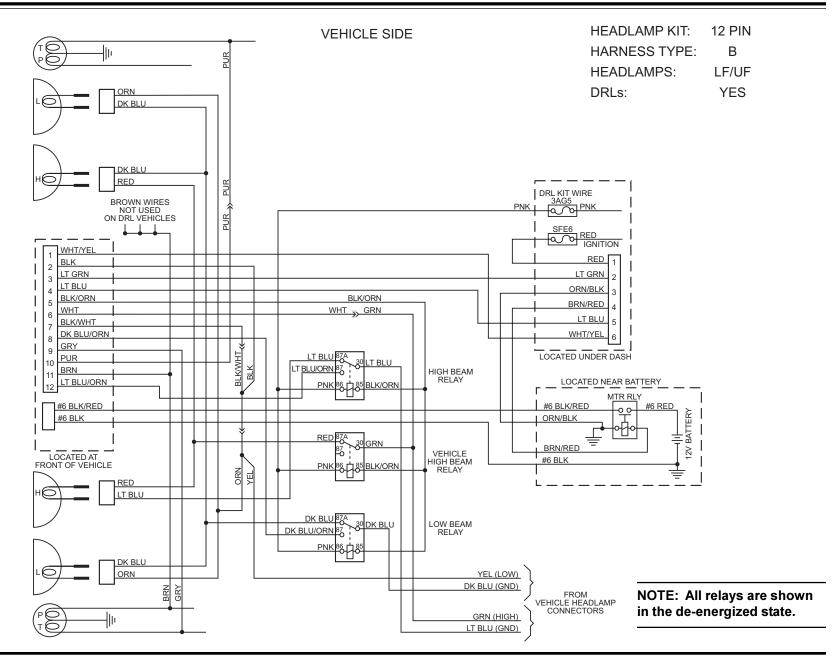


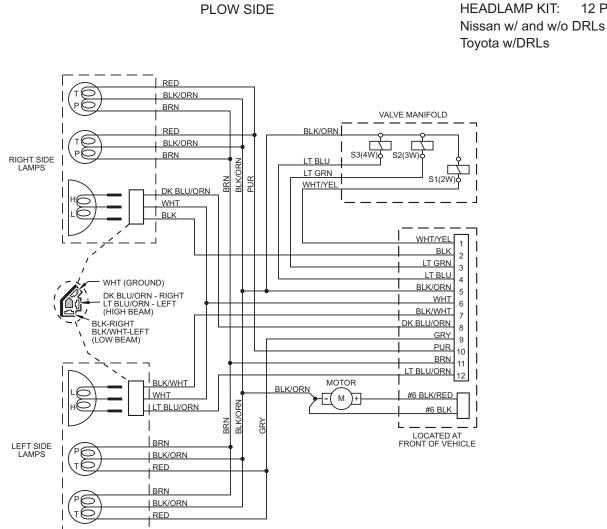






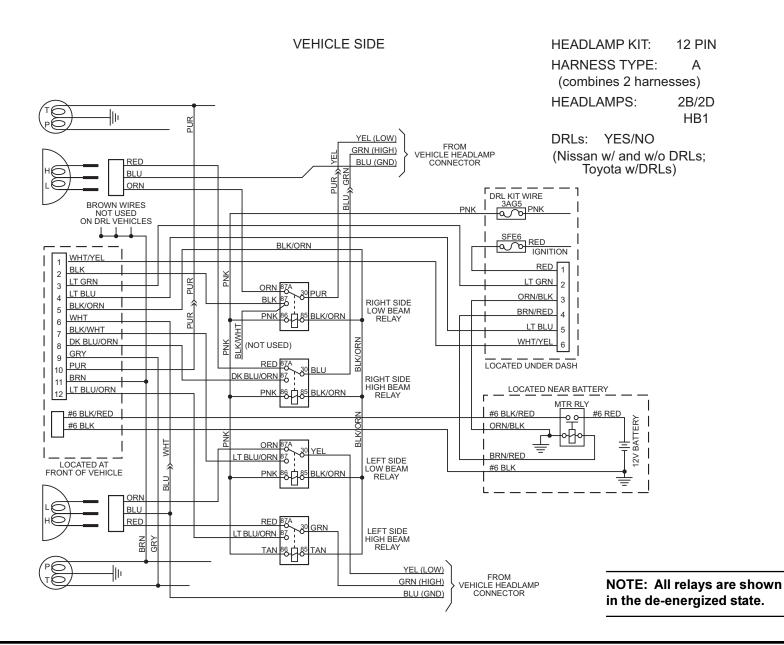






PLOW SIDE

12 PIN





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