A Division of The Toro Company
P.O. Box 787 Iron Mountain, MI 49801-0787
ISO 9001:2008 REGISTERED
bossplow.com

2015+ DODGE RAM
UPFITTER WIRING
INSTALLATION MANUAL

⚠ WARNING

Serious injury or death can result if you do not follow these instructions and procedures which are outlined further within your owner's manual

- Read this manual carefully before operating this snowplow.
- Always follow the vehicle manufacturer's recommendations relating to snowplow installation. For recommended vehicle models refer to the BOSS Snowplow Application Chart and Selection Guide.
- Vehicles equipped with air bags are designed such that the air bags will be activated in a frontal collision equivalent to hitting a solid barrier (such as a wall) at approximately 14 mph or more, or, roughly speaking, a frontal perpendicular collision with a parked car or truck of similar size at approximately 28 mph or more. Careless or high speed driving while plowing snow, which results in vehicle decelerations equivalent to or greater than the air bag deployment threshold described above, would deploy the air bag.
- Many newer trucks are equipped with air bags. DO NOT under any circumstances disable or remove or relocate any sensors or other components related to the operation of the air bags.
- When transporting, position plow so as not to block vision or plow headlights.
- DO NOT change blade position when traveling.
- DO NOT exceed 40 mph when transporting plow.
- DO NOT exceed 14 mph when plowing.
- Always lower blade when vehicle is not in use.
- Make sure plow is properly attached before moving vehicle.
- To comply with Federal Regulations and to assure a safe vehicle, the Front Gross Axle Weight Rating (FGAWR), Rear Gross Axle Weight Rating (RGAWR), and the Gross Vehicle Weight Rating (GAWR) must not be exceeded at any time.
- Due to the variety of equipment that can be installed on this vehicle, it is necessary to verify that the Front Gross Axle Weight Rating (FGAWR), Rear Gross Axle Weight Rating (RGAWR), and the Gross Vehicle Weight Rating (GAWR) are not exceeded at any time. This may require weighing the vehicle and adding ballast as necessary. It may also limit payload capacity of the vehicle. It is the operator's responsibility to verify that these ratings are not exceeded.

Electrical System Wiring Procedure

⚠WARNING

Before starting any Electrical Wiring Procedure make sure that the engine is not running and that the engine has had sufficient time to cool down. Failure to do so may result in serious bodily injury or death.

⚠WARNING

Before starting any Electrical Wiring Procedure make sure to disconnect the battery. Failure to do so may result in serious bodily injury or death.

"NOTICE"

All plow wiring should be secured under the hood in a position that provides sufficient room so that hot or moving parts will not be contacted. Vehicle damage could occur if wires are not properly secured.

Note: Dielectric grease should be applied to all electrical connections.

1. Locate the upfitter blunt cut wires on the driver's side, under the fuse panel in the engine compartment.
2. Connect the YELLOW wire from Wiring Harness (60) to the White/Brown park light upfitter wire. Use the butt connector provided on the harness.
3. Connect the VIOLET wire from Wiring Harness (60) to the White/Violet driver side turn signal upfitter wire. Use the butt connector provided on the harness.
4. Connect the PINK wire from Wiring Harness (60) to the Violet/Brown passenger side turn signal upfitter wire. Use the butt connector provided on the harness.
5. Connect the BLUE wire from Wiring Harness (60) to the Black/Lt. Blue high beam headlight upfitter wire. Use the butt connector provided on the harness.
6. Connect the RED wire from Wiring Harness (60) to the Black/ Lt. Green low beam headlight upfitter wire. Use the butt connector provided on the harness.
7. Connect the BLACK wire from Wiring Harness (60) to the Black/Violet enable upfitter wire. Use the splice connector provided on the harness.

Note: Be sure that the firewall is clear of obstructions before drilling in Step 8.

8. Drill a 1-1/4" diameter hole through the firewall. The hole should be located on the driver side, in an easily accessible area.

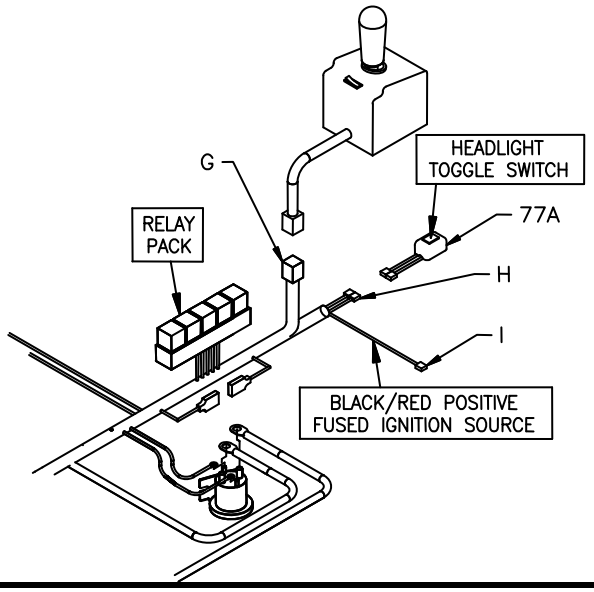

Figure 19. Internal Cab Wires G10144

9. Pull the two BLACK wires (H), BLACK/RED wire (I), and the 9 Pin Molex connector (G) from the engine compartment into the cab through the 1-1/4" diameter hole in the firewall.
10. Install Split Rubber Grommet (Not Shown) into the hole that was cut in the firewall.
11. Connect the Two Tab Connectors (H) to Headlight Toggle Switch (77A) as illustrated in the figure above.
12. Choose an area of the vehicle's dashboard for the light toggle switch to be mounted. Clean the area thoroughly. Allow the area to dry completely.
13. Remove the adhesive backing and apply the switch to the clean area of the dashboard. Apply pressure for 30 seconds.
14. Secure the 9 Pin Molex Connector (G) and wire loom underneath the dashboard.

15. Plug the controller into the 9 Pin Molex Connector (G).
16. Mount the plow control in a location that is comfortable for the operator to reach, and where the operator will not contact the control in the event of a crash. (See “V-Blade Controller Mounting Instructions” located in this manual.)

"NOTICE"
Before splicing into any electrical circuit, identify the circuit with a test lamp. Failure to test circuits may result in vehicle damage. Be sure the wire loom does not interfere with the operation of the vehicle’s pedals.

17. Connect the BLACK/RED wire (I) to a “keyed” 12V+ ignition source.

Note: This 12V+ source should only be active when the key is in the ON position. Failure to wire to a “keyed” source can allow the battery to drain.
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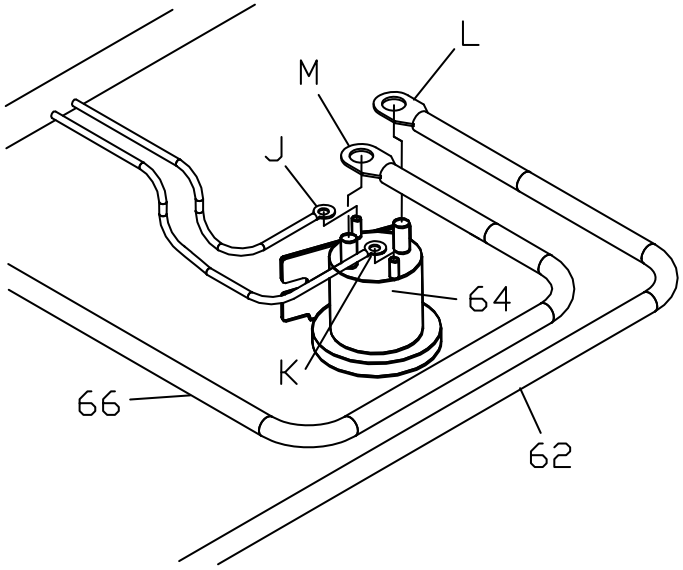


Figure 20. Solenoid Connections. G10145

18. Connect the WHITE/BLACK wire (J) of Wiring Harness (60) to the small terminal on Pump Solenoid (64).

19. Connect the BROWN wire (K) of Wiring Harness (60) to the small terminal on Pump Solenoid (64).

Note: Location of the wires on the small terminals does not matter.

20. Attach Power Unit Solenoid (64) securely inside the engine compartment. The Power Unit Solenoid should be mounted in the upright position as illustrated in Figure 20.

Note: The solenoid must be installed so that the solenoid posts do not contact the body, hood, or any other conductive material on the vehicle.

21. Attach the eyelet end of RED Power/Ground Cable (62) to the top of Pump Solenoid (64).

22. Connect Battery Cable (66) to the top post of Pump Solenoid (64).

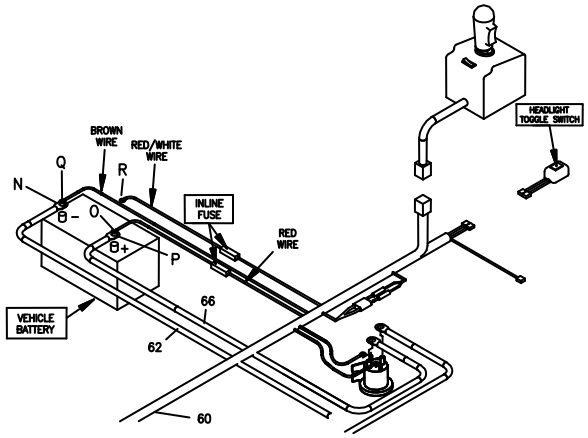


Figure 21. Battery Connections G10146

23. Attach the eyelet end (N) of BLACK Power/Ground Cable (62) to the negative battery terminal.

24. Connect the BROWN wire (Q) to the negative battery terminal.

25. Connect the unattached end (P) of Battery Cable (66) to the positive battery terminal.

26. Connect the RED Fused wire (O) to the positive battery terminal.

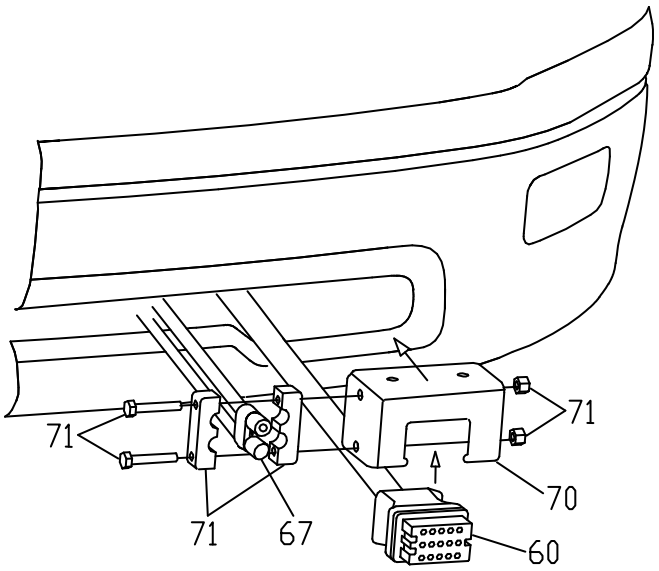


Figure 22. Vehicle Connections G10148

27. Mount the Black 15 Pin Control Harness Connector (60) to the lower area of the bumper using Control Harness Mounting Bracket (70).

28. Mount the BLACK and RED 2 Pin Power Ground Connector (67) to the lower area of the bumper using Power Ground Mounting Bracket with Hardware (71).

Note: Installation location will vary depending on truck.

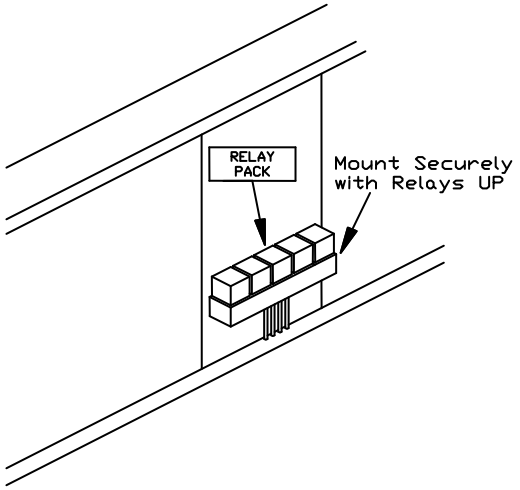
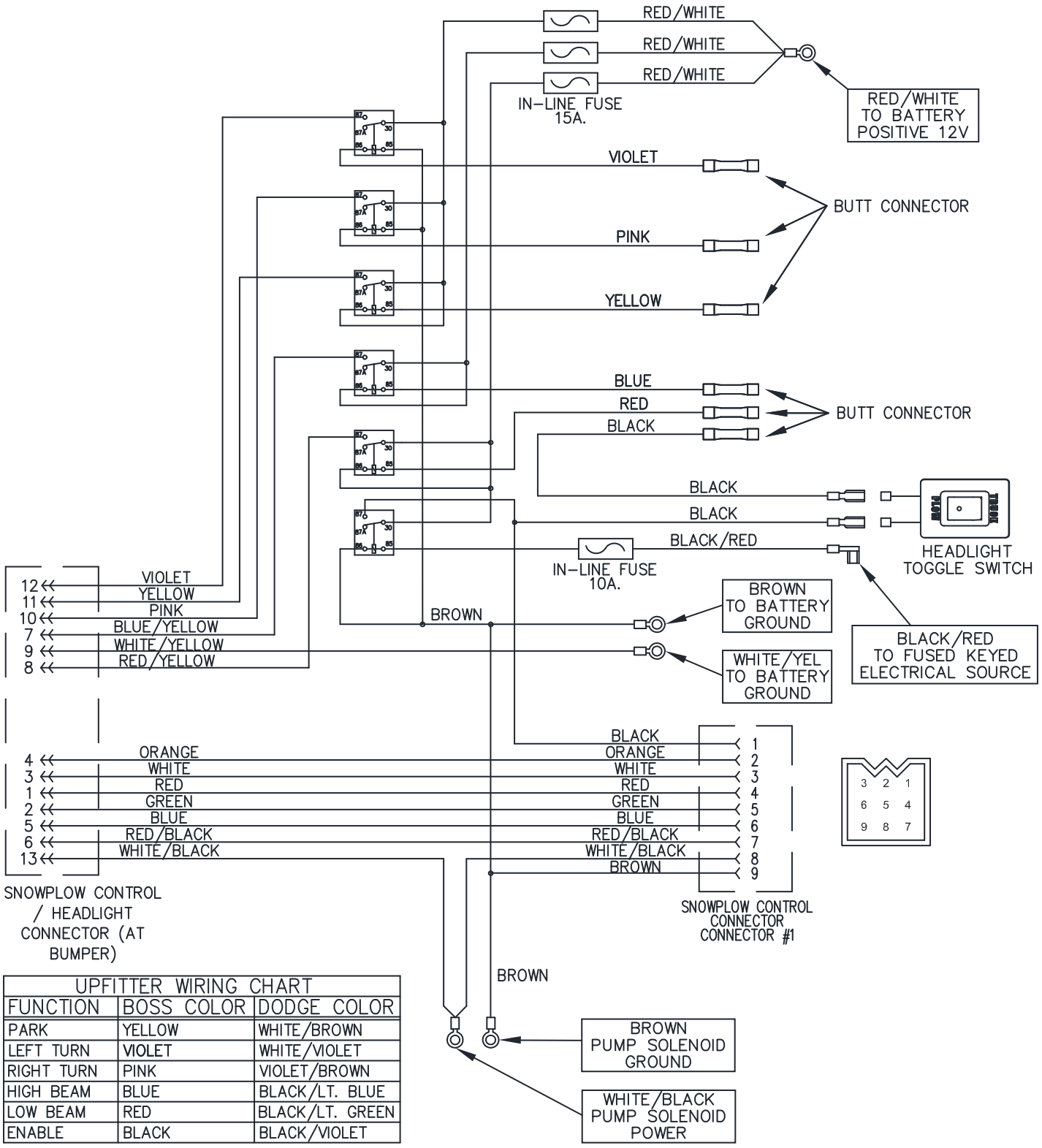


Figure 23. Relay Mounting. G10152

29. Attach the Relay Pack securely to the inside of the engine compartment using four Sheet Metal Screws. The relays should be positioned upright as illustrated above.

Wiring Schematic



UPFITTER WIRING CHART		
FUNCTION	BOSS COLOR	DODGE COLOR
PARK	YELLOW	WHITE/BROWN
LEFT TURN	VIOLET	WHITE/VIOLET
RIGHT TURN	PINK	VIOLET/BROWN
HIGH BEAM	BLUE	BLACK/LT. BLUE
LOW BEAM	RED	BLACK/LT. GREEN
ENABLE	BLACK	BLACK/VIOLET

Figure 28. Electrical System Wiring Schematic (Truck Side) G10883