

# **VEHICLE WIRING HARNESS INSTALLATION INSTRUCTIONS FOR LOW PROFILE, SINGLE STAGE, AND TWO-STAGE TAILGATE SPREADERS**

**⚠ CAUTION**

**Read this manual before installing or operating  
the spreader.**



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# SAFETY INFORMATION

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## **⚠ WARNING**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious personal injury.

## **⚠ CAUTION**

Indicates a situation that, if not avoided, may result in damage to product or property.

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**NOTE:** Identifies tips, helpful hints and maintenance information the owner/operator should know.

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## **Before You Begin**

- Park the vehicle on a level surface, place shift lever in PARK or NEUTRAL and set the parking brake.

## **⚠ WARNING**

- Driver to keep bystanders minimum of 25 feet away from operating spreader.
- Before working with the spreader, secure all loose-fitting clothing and unrestrained hair.
- Before operating the spreader, verify all safety guards are in place.
- Before servicing the spreader, wait for conveyor or spinner to stop.
- Do not climb into or ride on spreader.

## **⚠ CAUTION**

If rear directional/brake lights are obstructed when mounting the spreader, the lights must be relocated, or auxiliary directional/brake lights must be installed to the side of the spreader.

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**NOTE:** If the spreader obstructs the view of the license plate, check for any local regulations that may apply.

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## **Battery Safety**

## **⚠ 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, also provide ventilation.

Batteries contain sulfuric acid which burns skin, eyes and clothing.

Disconnect the battery before removing or replacing any electrical components.

# VEHICLE WIRING HARNESS INSTALLATION

**NOTE: Vehicle wiring harness is found in spreader assembly box.**

1. Before beginning this installation, remove the battery cables from the vehicle's battery.
2. Locate two existing 5/8" or larger holes on the driver's side of the firewall.
3. If no holes exist, find a location with clearance on both sides of the firewall for two 5/8" holes to be drilled. If only one hole exists, drill a second hole.

## ⚠ CAUTION

**Before drilling any holes, check both sides of the material for any wires, fuel tanks, etc. that may be damaged by drilling.**

4. Feed the following vehicle wiring harness wires from the engine compartment to the cab through the holes in firewall. Install grommets on wires and into holes in firewall.
  - Red eight-gauge wire with red connector
  - Red eight-gauge wire with white connector
  - Two wires with the two-way molded connector attached to the end

## ⚠ CAUTION

**Rubber grommet MUST be installed in firewall to protect wires. Failure to do this could result in a short causing damage to vehicle and equipment.**

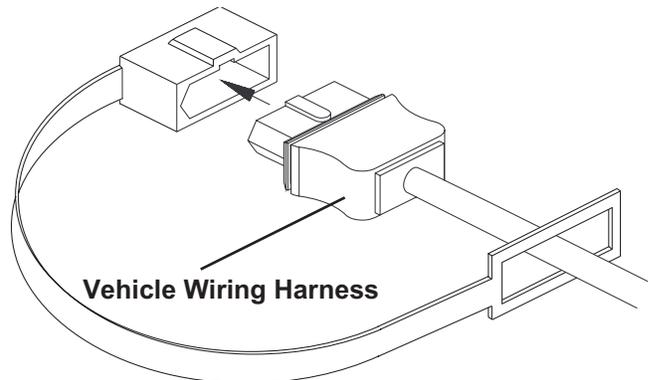
**NOTE: Protect the cab control wiring from abrasion and cutting from sharp edges during installation and operation. Use tape, grommets, etc.**

5. Route the shorter end of the vehicle wiring harness (end with two ring terminals) through the engine compartment to the battery. Use wire ties to secure the wiring away from any hot or moving parts.

## ⚠ CAUTION

**DO NOT connect the vehicle wiring harness to the battery at this time.**

6. Carefully route the longer end of the vehicle wiring harness along the vehicle's frame rail (driver's side recommended) to the rear of the vehicle.
7. Loop any excess wire in an out-of-the-way place and secure with a wire tie before exiting below the tailgate. Use wire ties to secure wiring away from any hot or moving parts such as exhaust, suspension, etc.
8. Install the plug cover by slipping the loop over the end of the vehicle wiring harness as shown.



9. Locate a convenient cab control mounting position in the cab that will not interfere with other equipment and will avoid unintentionally starting the spreader. Consult vehicle manufacturer body builder books to avoid restricted mounting areas.

**NOTE: Before mounting, be sure wires from vehicle harness have sufficient length to reach the back of the cab control.**

# VEHICLE WIRING HARNESS INSTALLATION

Refer to the *Electrical Schematics* for steps 11 - 19.

10. Choose which method will be used to provide power to the fused red wire of the harness.
  - Method 1. Locate a point to splice into an accessory wire under the dash controlled by the vehicle's ignition switch.
  - Method 2. Locate an unused fuse box socket controlled by the vehicle's ignition switch.

## ⚠ CAUTION

**Verify power is off. The ignition switch must be in the OFF position.**

### Method 1

11. Route the fused red wire to the splicing point on the vehicle accessory wire.
12. Splice the fused red wire into the vehicle accessory wire.
13. Use wire ties to secure excess wire.

### Method 2

11. Route the fused red wire to the fuse box area.
12. Add a spade terminal (not furnished) to the end of the fused red wire and plug it into a hot terminal of the fuse box that is controlled by the ignition switch.
13. Use wire ties to secure excess wire.
14. Reconnect the battery cables to the battery posts.
15. Connect the positive (red) and negative (black) wires of the spreader harness, routed through the engine compartment, to the battery.

**NOTE: Step 16 requires the cab control to be installed. Refer to Cab Control Installation Instructions.**

16. To check for proper installation, turn the ignition on and move the cab control power switch to the on position. The left (red) light should come on. Turn the controller off. If the left (red) light did not come on, check previous steps for proper installation.
17. The orange wire from the spreader vehicle harness is for the center high mount stop lamp. Center high mount stop lamps are required by federal law on 1994 and later vehicles. If the FMVSS 108 required viewing points are obstructed, you must provide an alternate lamp that meets the requirements.
18. Splice the orange wire into an existing Center High Mount Stop Lamp circuit wire tap. (Not for Low Profile Models 500 and 1000.)

### **Always use the tap provided by the OEM manufacturer.**

**DO NOT** splice the orange wire into the wire coming off the stoplight switch by the brake pedal. Splicing at the stoplight switch may affect transmission shifting, cruise control, or other vehicle functions.

(Check with the vehicle manufacturer or dealer to verify that the CHMSL circuit is capable of powering the extra 2 AMP load and for the location of the vehicle tap.)

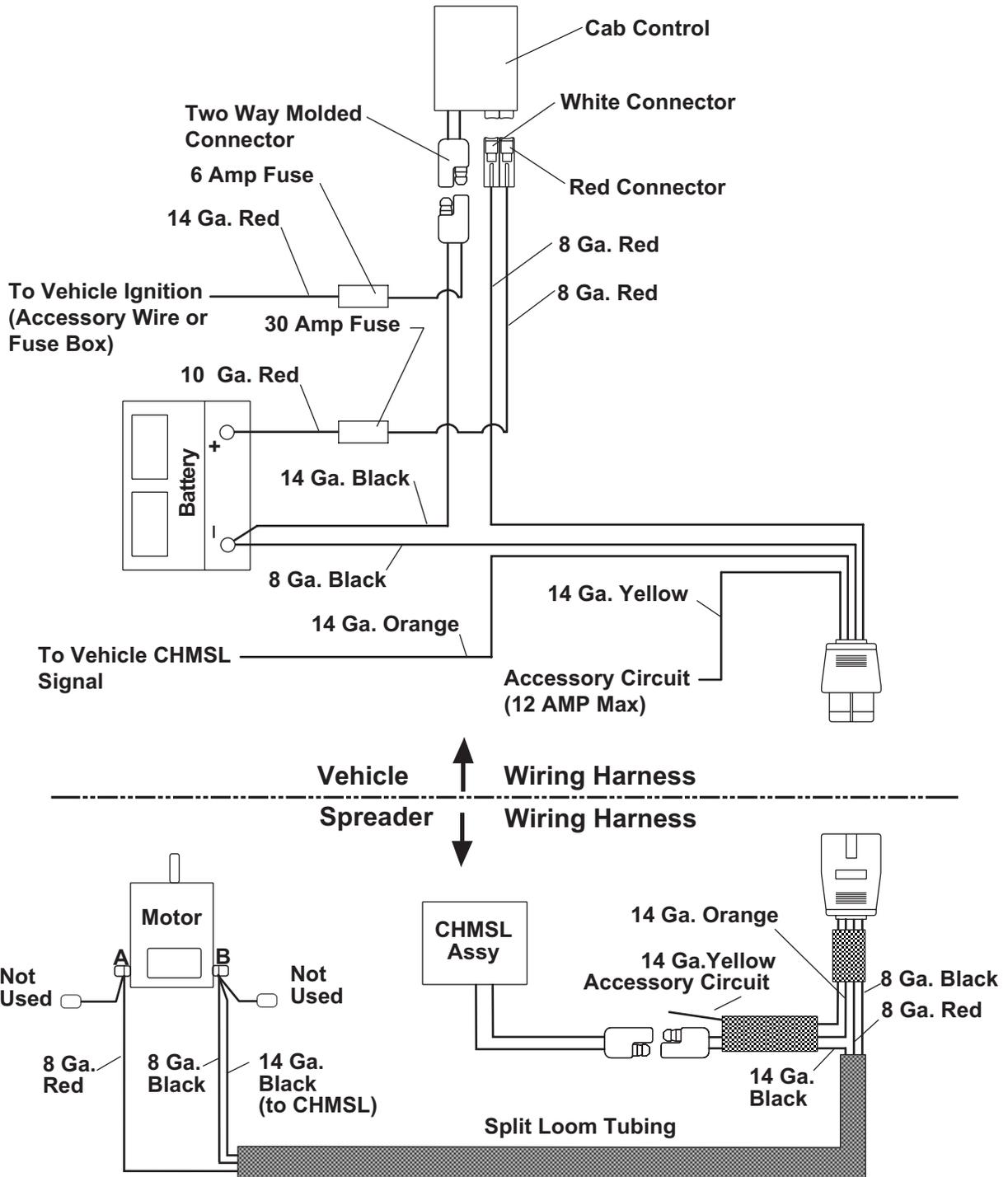
If the host vehicle CHMSL circuit is not capable of powering the additional 2 AMP load, use 63632 CHMSL Isolation Harness kit.

For vehicles with a tap along the frame rail or at the rear cross member: Cut the tape holding the orange wire where it exits the convoluted tubing. Pull out the orange wire to the location where the vehicle CHMSL tap is located. Cut a small "V" notch in the tubing for the wire to exit. Pull the wire through the "V" notch and tape the tubing on each side of the exit point. Trim any excess length of orange wire and splice into the vehicle tap.

## Accessory Circuit

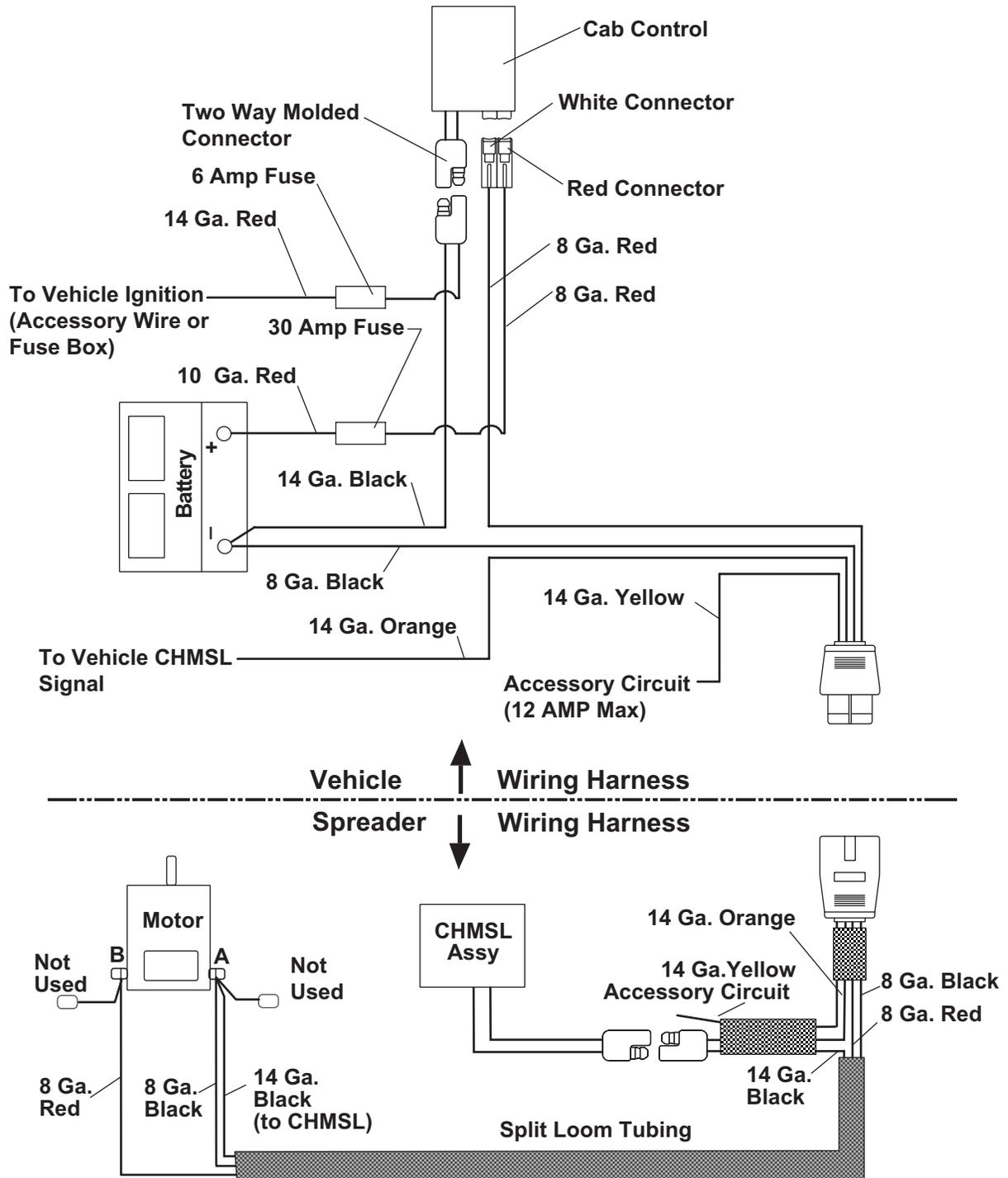
The yellow wire in the vehicle harness is provided for accessory use of 12 AMPS or less.

# 4 PIN HARNESS WIRING DIAGRAM - SINGLE STAGE SPREADERS



**Motor Specification:**  
 12 Volt DC, .56 kW Motor

# 4 PIN HARNESS WIRING DIAGRAM - 2 STAGE SPREADERS

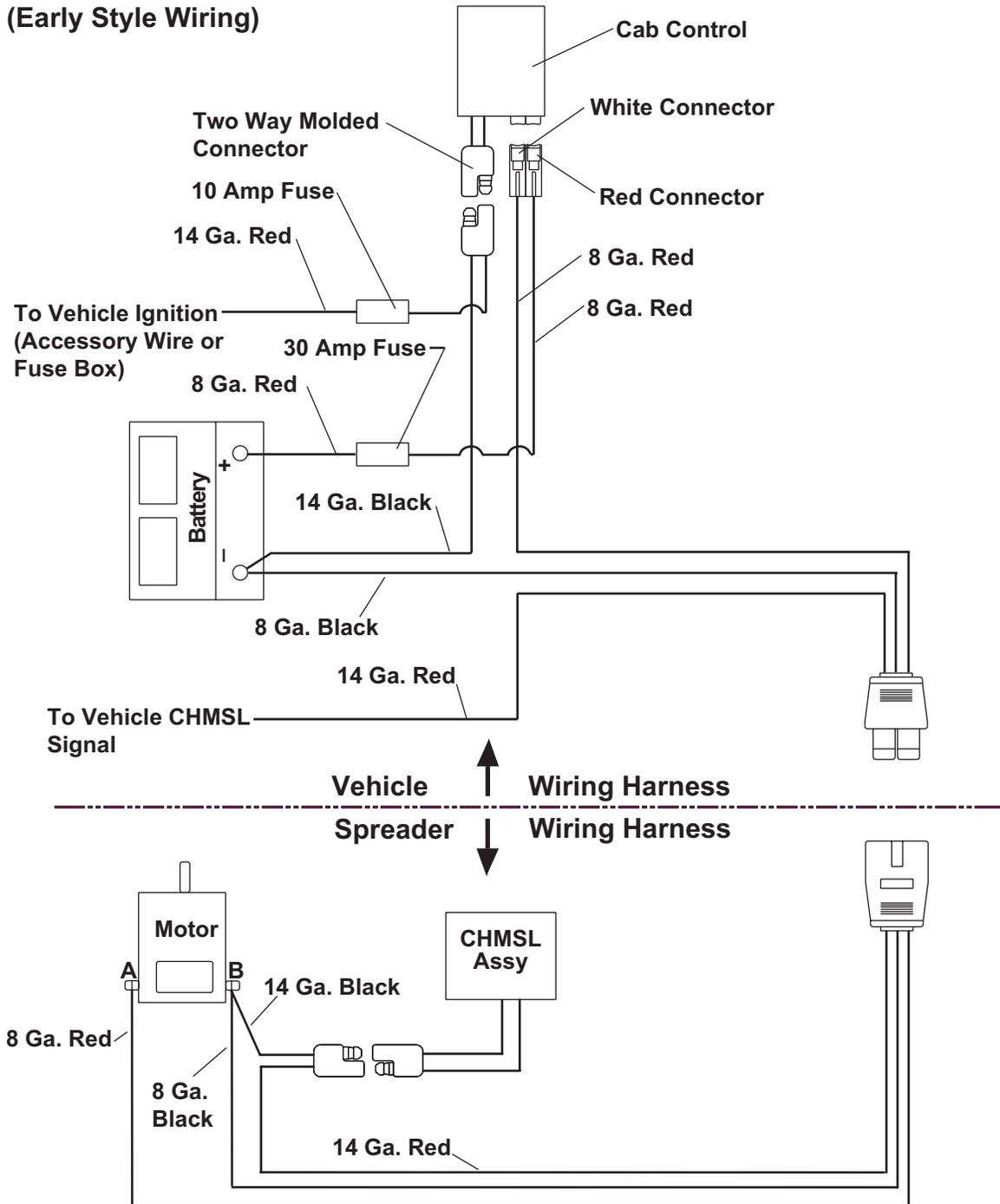


**Motor Specification**  
 12 Volt DC, .56 kW Motor



# 3 PIN HARNESS WIRING DIAGRAM - SINGLE STAGE SPREADER

(Early Style Wiring)

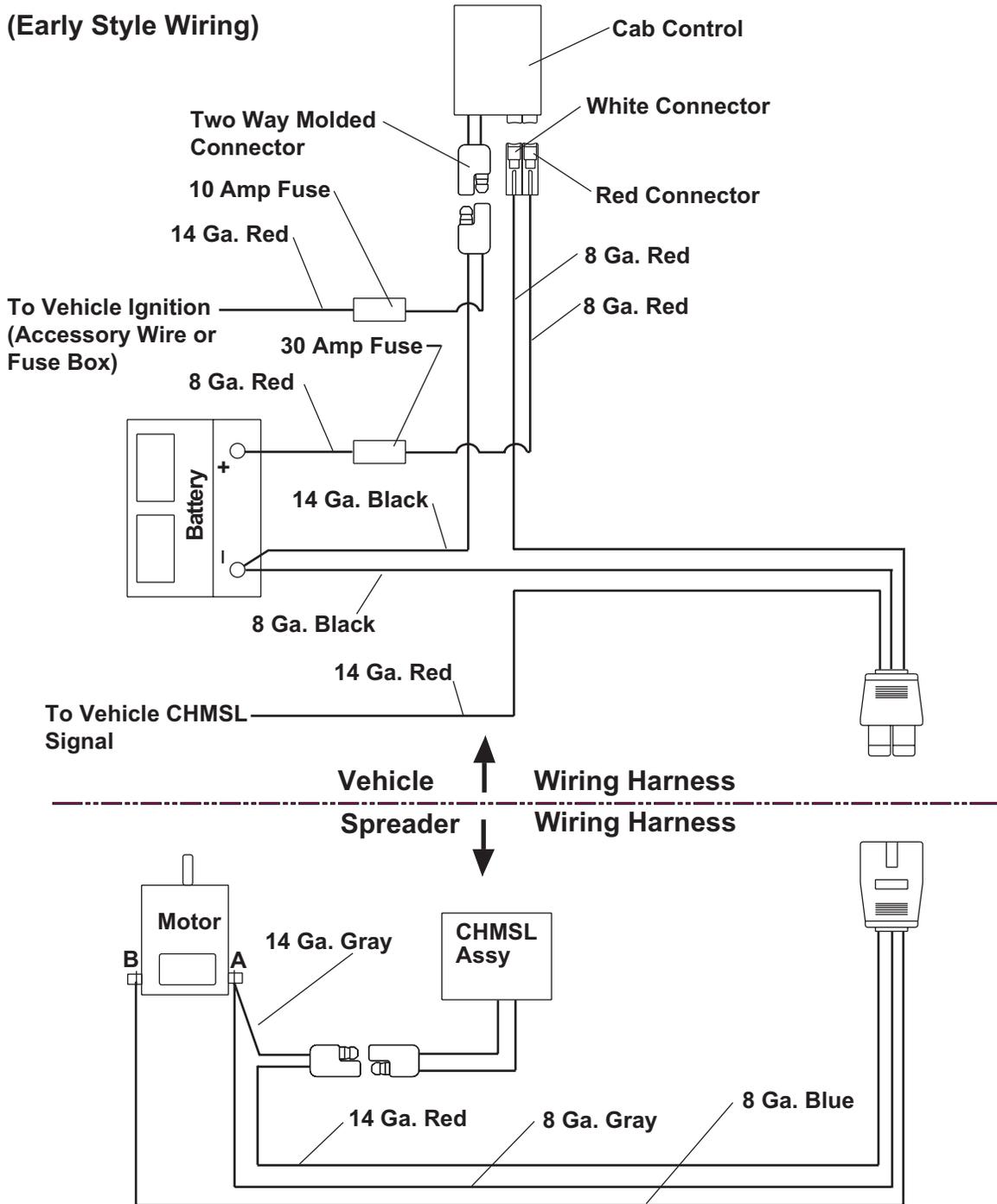


**Motor Specification**

12 Volt DC, .56 kW Motor

# 3 PIN HARNESS WIRING DIAGRAM - 2 STAGE SPREADER

**(Early Style Wiring)**



**Motor Specification**

12 Volt DC, .56 kW Motor

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