NOTE: This is a "low side" drive electrical system. With a "low side" drive system, positive 12 volts is provided continuously, and the ground is switched on and off to control the coils.

NOTE: Left Side = Driver Side Right Side = Passenger Side

## **A** CAUTION

Batteries normally produce explosive gases which can cause personal injury. Therefore, do not allow flames, sparks or lit tobacco to come near the battery. When charging or working near a battery, always cover your face and protect your eyes, and also provide ventilation.

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

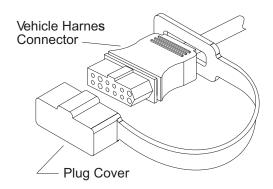
Disconnect the battery before removing or replacing any electrical components.

- 1. Turn off the vehicle ignition.
- 2. Disconnect both the negative (-) and the positive (+) battery cables.

NOTE: Use dielectric grease on all electrical connections to prevent corrosion. Fill receptacles and lightly coat ring terminals and blades before assembly.

- 3. Remove damaged or defective vehicle harness from vehicle. **Note original harness routing and connections while removing.**
- Stretch the rectangular opening of the plug cover strap over the replacement vehicle harness connector. Place the plug cover over the connector.

NOTE: After each use, check grease and add as required to maintain enough grease to prevent corrosion.



- Starting at front of vehicle, route the vehicle harness break out to the area behind the left-side headlamp. Route the rest of harness to the firewall.
- Route the harness breakout with the orange/ black stripe, brown/red stripe, and brown/green stripe wires to the motor relay.
- 7. Install the brown/red stripe and brown/green stripe wires to the small terminals of the motor relay.
- 8. Connect the female spade terminal on the small red wire from the vehicle harness to the male spade terminal on the small red wire from the vehicle battery cable.
- 9. Connect the orange/black stripe ring lug to the negative (-) battery terminal.
- 10. Remove the packing material from the end of the harness near the fuse. This will expose ten socket-type terminals.
- 11. Push the fuse through the firewall hole and then feed the end of the harness with the ten terminals through to the cab. Use a grommet to seal the firewall around the harness.

The company reserves the right under its product improvement policy to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications used herein.

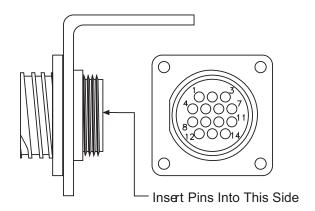
## **Under-Dash Vehicle Harness Connector Pin Assignments**

1. In the cab, pass the ten socket-type terminals through the connector mount bracket.

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

2. Insert each of the ten socket-type terminals into the connector housing as shown in chart above.

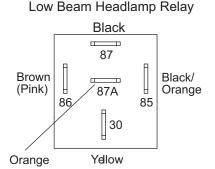
NOTE: You will feel a snap as the terminals are successfully inserted. An extraction tool is provided for removing pin terminals if necessary. Keep this tool for future use.

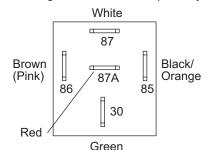


- Mount the connector bracket to the vehicle. Secure the connector to the bracket with the 6-32 screws, lock washers and nuts.
- 4. Locate an accessory wire that is controlled by the ignition switch.
- Route the 10-amp fuse holder red wire to this location and trim any excess length. Leave the 10amp fuse holder in the system.

## Plug-In Harness, Park/Turn and Headlight Relay Connections

- Insert the purple wire bullet from the vehicle harness into the purple wire receptacle on the peculiar harness. Connect the remaining wires from the vehicle harness to the headlamp relays as shown.
- Insert the brown wire bullet into the black bullet receptacle on the leftside park light wire. Insert the gray wire bullet into the black bullet receptacle on the left-side turn signal.





High Beam Headlamp Relay

- Use cable ties to secure the relays and prevent accidental grounding of any connections. Cable tie any harnesses and wires away from hot or moving engine parts.
- 4. Reconnect the vehicle battery positive (+) and negative (-) cables.

## **Relay Connections/System Diagram**

