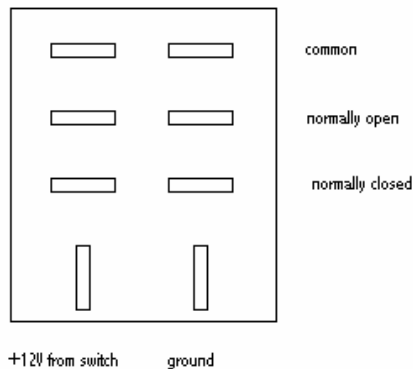


# Wiring Instructions for DPDT relay for center lamp application

## By Chris Lantieri



- Provide unswitched ground to the terminal labeled “ground”
- Provide switched +12V from the switch in dash (powered when ignition key is on)
- Provide +12V to both common terminals (fused 10 amp dedicated source, always on, unaffected by key position)
- Connect a wire from either “normally open” terminal to the “door close” wire
- Connect a wire from respective “normally closed” terminal to the “door open” wire
- Connect the +12V side of lamp to the other “normally closed” terminal
- Respective “normally open” terminal will stay vacant
- Provide a ground to the factory harness which provides ground to the lamp and the motor for the door

Here is how the relay operates, for those of us who are new to relays and their function:

When you push the switch to turn the center lamp on, a few things happen. The connection is made inside the switch sending +12V to the terminal labeled such on the relay above. This causes the relay to change state. Doing so connects the common side of the relay and the normally open side, which sends +12V to the motor to open the door while the other set of contacts on the relay sends +12V to the lamp to turn it on.

When the switch is placed in the off position, +12V is lost at the relay. This “drops” the relay and forces it to change back to its “de-energized” or, if you will, “relaxed” state. Continuity is then present between the normally closed position and common, which sends +12V to the motor to close the door, while disconnecting current from the lamp causing it to extinguish.