

A relay is basically a large switch controlled by a smaller one or used to isolate circuits. The relay is rated at 70 amps however the continuous amp load being passed through it should be in the range of 35-40 amps. Staying in this range prevents shorting the life span of the relay.

We recommend using 8-10 gauge wire for the feed and load connections and 18 gauge wire for the control circuits. The FEED and CONTROL circuits require fuse protection. Read the installation instructions provided with the device being connected to the relay for the information on circuit protecting the device. The control feed wire is a very low amp circuit and can be protected with a 1-5 amp fuse.

Before starting the installation take note of the numbers listed next to each spade terminal on the bottom of the relay (#85, #86, #30, #87). The two larger terminals, #30 is the feed and #87 is the load. The two smaller terminals #85 and #86 are the control terminals. The relay can be operated one of two ways, by turning positive voltage on and off to terminal #85 on the relay or by turning ground on and off on terminal #86. Follow the correct chart located on the reverse side of this sheet on how you want to relay controlled.

Termination: Since this circuit has the potential to handle a very heavy amp load, soldering the two large terminals is a must. Strip 1/4 inch of insulation exposing the stranded wire. Insert the wire in the terminal and bend the tabs over on to the stranded wire and insulation as shown. Now solder the connection.

Controlling the relay turning positive voltage on and off.

RELAY#	USE
30	Feed: Connect this terminal "DIRECT" to the positive battery post or to the battery hot side of the starter solenoid. Be sure to install the appropriate fuse or circuit breaker size in-line on this wire.
87	<u>Load:</u> Connect this terminal to the positive wire of the device.
85	Control, Relay Coil Feed: Applying voltage to this wire activates the relay coil.
86	Control, Relay Coil Ground: Grounds relay coil.

Controlling the relay turning ground on and off.

RELAY#	USE
30	Feed: Connect this terminal "DIRECT" to the positive battery post or to the battery hot side of the starter solenoid. Be sure to install the appropriate fuse or circuit breaker size in-line on this wire.
87	Load: Connect this terminal to the positive wire of the device.
85	Control, Relay Coil Feed: Applying keyed or battery powered voltage to this terminal activates the relay coil.
86	Control, Relay Coil Ground: The relay will be activated by turning ground on and off on this terminal. Can be connected to a ground type temperature switch or to a toggle switch connected to ground.

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