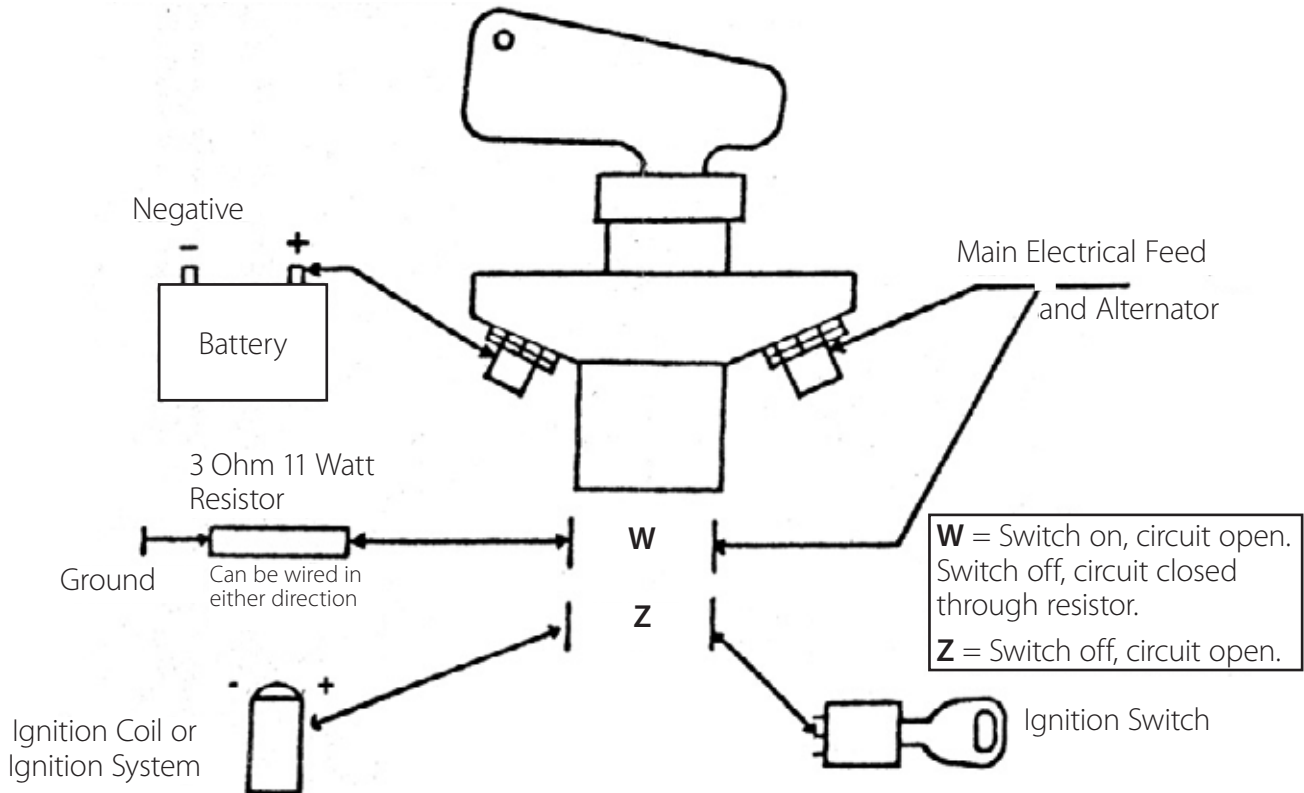


## 4430 Master Battery Switch with Alternator Protection Wiring Instructions

### Electrical Connections



If you disconnect the battery while an alternator-equipped engine is running, the alternator could be damaged by a voltage spike. This spike can be avoided by giving the alternator output a safe path to ground just when the switch is turned off. Our 4430 Master Battery Switch has an auxiliary set of contacts (labeled "W") which are open when the switch is on, but which make contact when the switch is turned off.

A spinning alternator can still put out electricity, so just disconnecting the battery will not stop a running engine. The 4430 switch has a third set of contacts (labeled "Z"), which interrupts the ignition circuit when the switch is turned off.

Begin by turning the car off and disconnecting the negative battery cable.

Cut the positive battery cable and install  $\frac{3}{8}$ " ring terminals on each cut end. Install one end on one main stud terminal on the switch and install the other end on the other stud.

Locate the main power wire from the ignition switch to the ignition coil. Cut this wire and install a  $\frac{1}{4}$ " female spade terminal on each cut end. Install one end on one of the "Z" contacts and the other end on the other "Z" contact. Polarity does not matter.

Now make a simple jumper wire with a  $\frac{3}{8}$ " ring terminal on one end and a  $\frac{1}{4}$ " female spade terminal on the other. Connect the female terminal to one of the "W" terminals (polarity is not important).

Connect the ring terminal to the  $\frac{3}{8}$ " main stud terminal which does not lead to the battery. ***Polarity is important in this step.*** If you connect the ring terminal to the stud which does lead to the battery, you will just short the battery to ground, draining the battery and creating a potential fire hazard.

Finally, connect one end of the supplied resistor to the last remaining "W" terminal. Connect the other end of the resistor to a chassis ground. Reconnect the negative battery cable.

Test your installation by turning the switch on and starting the car. The battery should be charging. With the engine running, turn the switch off. The engine should stop and all circuits should be off.