

**RON FRANCIS**  
*Wiring*

## **MS-21**

**Electric Master  
Disconnect  
W/Toggle Switch**

The electric master disconnect solenoid will carry 110 amps of continuous load. Some vehicles' alternators are capable of producing a higher amperage output. In most vehicles this will happen only for a very short period of time and will not affect this product.

### **Mounting**

**The electric master disconnect solenoid should be mounted as close as possible to the path of the positive battery cable running between the battery and starter solenoid. The disconnect solenoid is WATER RESISTANT not WATER PROOF. For this reason, when mounting the solenoid, choose a location carefully to limit exposure as much as possible. The solenoid must be mounted with the black solenoid internal shaft cover facing down.**

### **Battery Cable Connections**

The two large solenoid studs accept a 3/8 battery cable ring terminal (not provided). Cut the battery cable allowing enough excess to reach the solenoid stud terminals. Install the ring terminals on the cable using the correct crimp tool, or solder the terminal onto the cable. The cable from the battery should be connected to the 3/8 terminal on the solenoid that has a jumper attached.

**Note: The installation of the battery cable ring terminals is an important procedure. Failure to make these connections properly can cause electrical system damage.**

**The electric master disconnect solenoid requires a MOMENTARY contact type switch for proper operation. The kit has been supplied with this type switch. Using an ON/OFF type switch will cause the solenoid to fail prematurely.**

The toggle switch supplied will actuate the master disconnect solenoid by moving the switch lever in either direction. After a click is heard from the solenoid, let the switch lever return to its relaxed position. The switch mounting location should be hidden in an area of the vehicle so the disconnect solenoid can be used as an anti-theft system.

Connect the black SOLENOID->SW wire to the small stud on the solenoid (the one WITHOUT the red jumper wire) and run the other end to the toggle switch. Using the blue insulated ring terminal supplied, cut the wire to length and connect it to the center pole on the switch. Connect the black wire SW->GROUND to either outer pole on the switch and run it to a good ground. **NOTE: Pre-installed on the switch is a jumper wire running between both outer poles.**

### Toggle Switch Installation

**The electric master disconnect solenoid requires a MOMENTARY contact type switch for proper operation. The kit has been supplied with this type switch. Using an ON/OFF type switch will cause the solenoid to fail prematurely.**

The toggle switch supplied will actuate the master disconnect solenoid by moving the switch lever in either direction. After a click is heard from the solenoid, let the switch lever return to its relaxed position. The switch mounting location should be hidden in an area of the vehicle so the disconnect solenoid can be used as an anti-theft system.

Connect the black SOLENOID->SW wire to the small stud on the solenoid (the one WITHOUT the red jumper wire) and run the other end to the toggle switch. Using the blue insulated ring terminal supplied, cut the wire to length and connect it to the center pole on the switch. Connect the black wire SW->GROUND to either outer pole on the switch and run it to a good ground. **NOTE: Pre-installed on the switch is a jumper wire running between both outer poles.**