RON FRANCIS Wiring

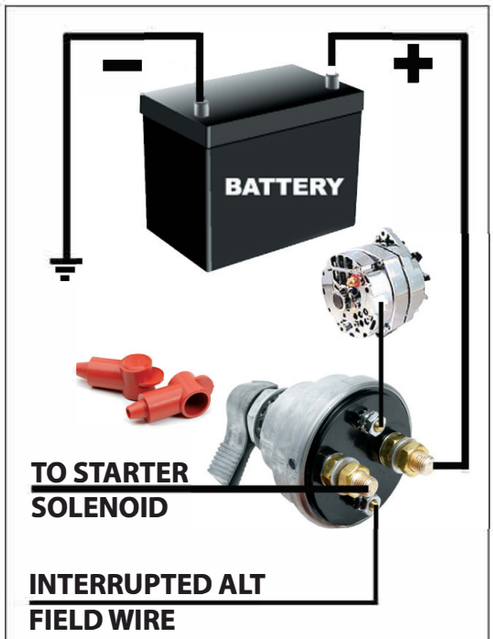
MS-56

BATTERY MASTER DISCONNECT SWITCH

With 'Field Interrupt' Circuit

Rubber stud boots included

Note: Uses part number BE-83 lugs.



Designed to be installed right inline on your positive battery cable. Extra heavy-duty. Protects against theft and electrical failures. Install under your hood, seat on firewall or at the rear of the car. Rubber insulator boots cover stud and nut for the extra protection needed to prevent short circuits. Uses 3/4" mounting hole.

Alternators with field/plug-in type connections should interrupt this circuit by cutting this wire and connecting them to the two 'SMALL" terminals on the switch. This will allow the engine to be shut down and not continue to run through the charging circuit.

With over 28 years of Street Rodding and as a wire harness business owner, I have overheard and been in many conversations with friends and customers regarding the best placement of the vehicle's master disconnect switch.

(1) Should it be placed in the positive or negative battery cable?
(2) Should it be placed as close to the battery as possible?
(3) Should it be mounted in an area that can be accessed easily in case of failure?
(4) Should it be protected from the weather?

The answer to these questions will differ greatly depending on whom you talk to. A lot of questions seem to get generated when speaking about this one very important part of your vehicle's restoration. Hopefully, some of the answers to those questions are noted below.

Answer (1) Until the invention of the electronic gadget, the master disconnect could be installed in either the positive or negative battery cable. Both lead to the power source and both essentially cut off the electrical flow from either terminal and would render the battery "disconnected". Digital radios, radio memory circuits, CD players, Electronic fuel injection computer memory circuits all require power to retain memory when the master disconnect switch is shut off. While these circuits operate immediately when current is applied, they operate much more effectively if power is kept applied. Shutting off the battery by use of a Master Disconnect shuts off these memory banks. In order to keep them "alive", Ron Francis Wiring offers a memory bypass circuit (part # MB-25) that bypasses the "disconnected" battery cable providing continuous power to the device(s). This is a great improvement over the alternative which is to "restart" these electronic circuits every time the car is pressed into service. To reverse this "bypass circuit" theory and install the disconnect in the ground circuit instead, is next to impossible. One would have to totally isolate the grounds for the circuits for these accessories to make this happen. Doing so might be possible as long as nothing in the vehicle has lost its ground and feeds back though this isolated ground you created.

Answer (2) Electrically I see no reason to mount the switch close to the battery, as long as the switch is mounted securely and the studs on the back of the switch are protected from touching ground. The MS-1 Master Disconnect switch from Ron Francis Wiring is supplied with tight fitting PVC caps that help protect these studs from both accidental grounding and corrosion. The shorter the distance between the battery and disconnect, the shorter the unprotected distance that might be physically damaged in case of an accident, etc.

Answer (3) The owner of the vehicle or the installer must determine this answer. A lot of people use this switch as an anti-theft deterrent as well as just a Battery shut off switch. Allowing easy access to the switch allows it to be easily found and defeated if you are using it as an anti-theft system. On the other hand, if you need to get to the switch to disconnect the battery in an emergency situation, easy accessibility can be critical. From past experience, these switches have proven very reliable and can be mounted in a unaccessible area, if you so desire.

Answer (4) These switches are weather resistant, not weather or water proof! To be safe, mount it in an area that is protected from water spray and other harsh conditions. Use dielectric grease on the connections to minimize any corrosion.