



ARC Technical Support
774-417-6542 or 732 851-5095

Pro Stock Rocker Switch Panel Instructions

SWITCH FUNCTIONS:

1. **Starter Switch:** This momentary switch is recessed to prevent accidental striking. It is mounted nearest the driver and next to the ignition switch for ease of operation.
2. **Ignition Switch:** This switch interlocks to the two fuel pump switches, shutting the pumps off when the ignition is killed. The switch is lighted red when on.
3. **Fuel Pump Switches:** Off in center position, on in up position. The ON position is safety interlocked with the ignition switch (Fuel Pump switches will not operate without Ignition on). The down position marked "TEST" is a spring return momentary action which bypasses the ignition switch interlock for the purpose of priming the carburetor bowls, testing the pump, etc. When only one fuel pump switch is needed, the second switch can be used for auxiliary use to power another component.
4. **Cooling Switch:** This is a dual function switch; in the down position marked "LO" only the water pump is powered. In the up position marked "HI" the fan and water pump are both powered.
5. **Lamps:** This is also a dual function switch. The down position is off. In the middle position marked "1 ON" only the gauge lamps are powered. In the up position marked "2 ON" the headlights are powered in addition to gauge lights.

WIRING INSTRUCTIONS FOR REAR PANEL CONNECTIONS

The heavy #6 cable is battery +. Connect this cable to the switched side of the main battery disconnect switch, or any junction point where high current battery + can be connected. This is the power for the entire switch panel so make sure it is connected solidly to a high current source.

Terminal #:

1. This terminal is only used on model 3710 and 3110. On these models connect to +12V. ***ALL OTHER MODELS HAVE NO CONNECTION ON THIS TERMINAL!***
2. To starter solenoid
3. Ignition turn on lead. On MSD ignitions this is usually the thin red wire.
4. Ground. Connect this terminal to a good chassis ground.
5. Fuel Pump #1. Connect this terminal directly to fuel pump. If running a single high output fuel pump such as Magnafuel, Aeromotive, etc. increase the fuse size to 20 Amps.

Continued...

6. Fuel Pump #2/Auxillary Connect this terminal to a second fuel pump or an auxillary accessory. Amp draw of all accessories connected to both fuel pump switches should not exceed 30 Amps total.
7. Line lock power takeoff. This is a fused constant power takeoff that can be used to power a line lock, transbrake button or any accessory that needs a fused constant power source.
8. Electric fan. This circuit has a max capacity of 30 Amps. If running a dual fan or large single fan with high Amp draw a relay should be used.
9. Electric water pump
10. Headlights
11. Gauge Lights

A Terminal: This terminal is hot when the ignition switch is on. (same function as terminal #3). On model 3701 it is used to power the nitrous switches. On other models it can be used to power accessories that you want to turn on with the ignition switch (such as a tach). This terminal's output is fused via the Ignition fuse.

B Terminal: This terminal is the same as terminal #4 (Ground) It is used on model 3701 to provide a Ground for the lighted Nitrous switches. Other models will not use this connection.

J Terminals: These terminals are **unfused**, constant power connections. Normally these should not be used as they are **unfused**. The line lock fused power takeoff (terminal #7) is a better choice for a power takeoff point.

FUSES

Starter: 10 Amps. This value fuse will be adequate for most starters. This fuse can be increased up to 30 Amps if necessary but for most starters 10 Amps is adequate.

Ignition: 20 Amps.

Fuel Pumps: 7.5 Amps. This fuse is sized for smaller Holley fuel pumps. If running a single high output fuel pump such as Magnafuel, Aeromotive, Product Engineering, etc. increase the fuse size to 20 Amps. Please note that the fuse is bypassed when the switch is in the test position.

Line lock power takeoff: 20A.

Electric Fan: 20 Amp. This fuse can be increased to a maximum value of 30 Amps. If a 30 Amp fuse is not large enough for the fan being used then a relay must be added to power the fan.

Electric water pump: 15 Amps. This is sufficient for most water pumps. This fuse can be increased up to 20 Amps but this should not be necessary in most instances.

Headlights: 20 Amps

Gauge Lamps: 10 Amps.

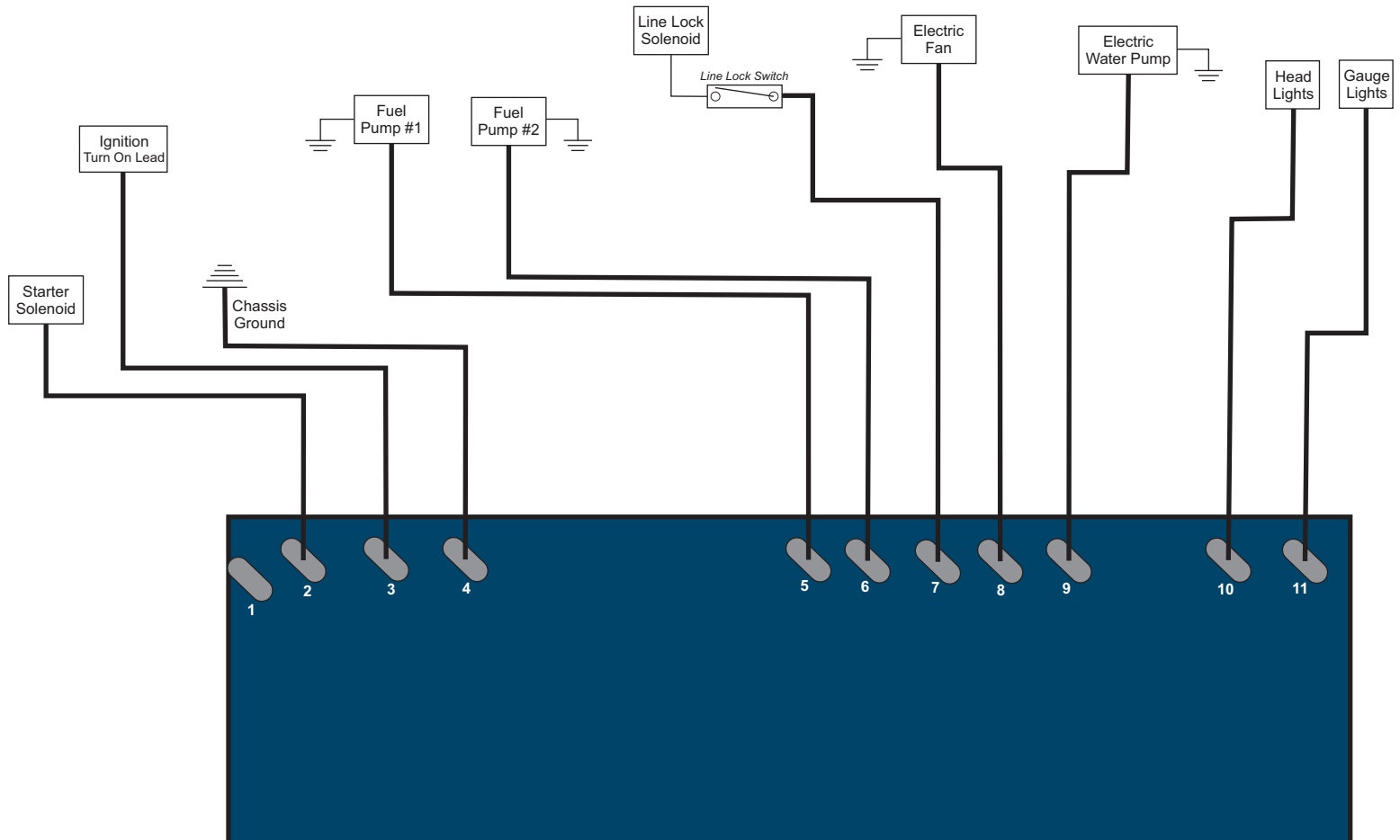
Wiring Notes

When determining wire length, leave enough slack so that in dash units can be slid forward or roll bar mount units can be opened and hinged down to allow access to fuses and connections. If sufficient slack is not provided the connectors or wiring could be damaged when accessing the unit. Due to the severe conditions experienced in a race car, it is recommended that only wire with 105 degree rating is used. An optional harness is available as ARC Part # 3120. It consists of 11 color coded type THHN 14 Gauge wires. This wire is very resistant to physical damage and its insulation is gas and oil resistant.



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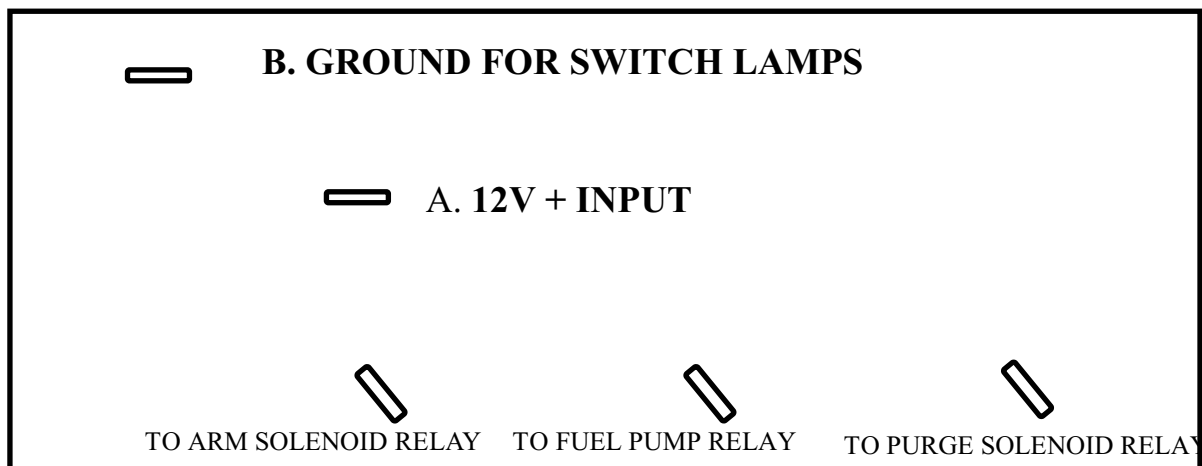
ARC 3700 Pro Stock Wiring Diagram



Operations & Connections for Nitrous Controls Section



The Arm switch makes 12V available to the stage solenoid relays. This power is then switched to the stage solenoids by means of stage actuating switches. These actuation switches are in the form of a THROTTLE, SHIFTER, A LEVER, by RPM or other types of switches. These may be connected to switch by 12V or Ground as shown in Figures 1 and 2. The fuel pump and purge switches will be activated if the arm switch is in the ON position



THE CONNECTIONS MARKED :

“To arm solenoid relays”

“To fuel pump relay”

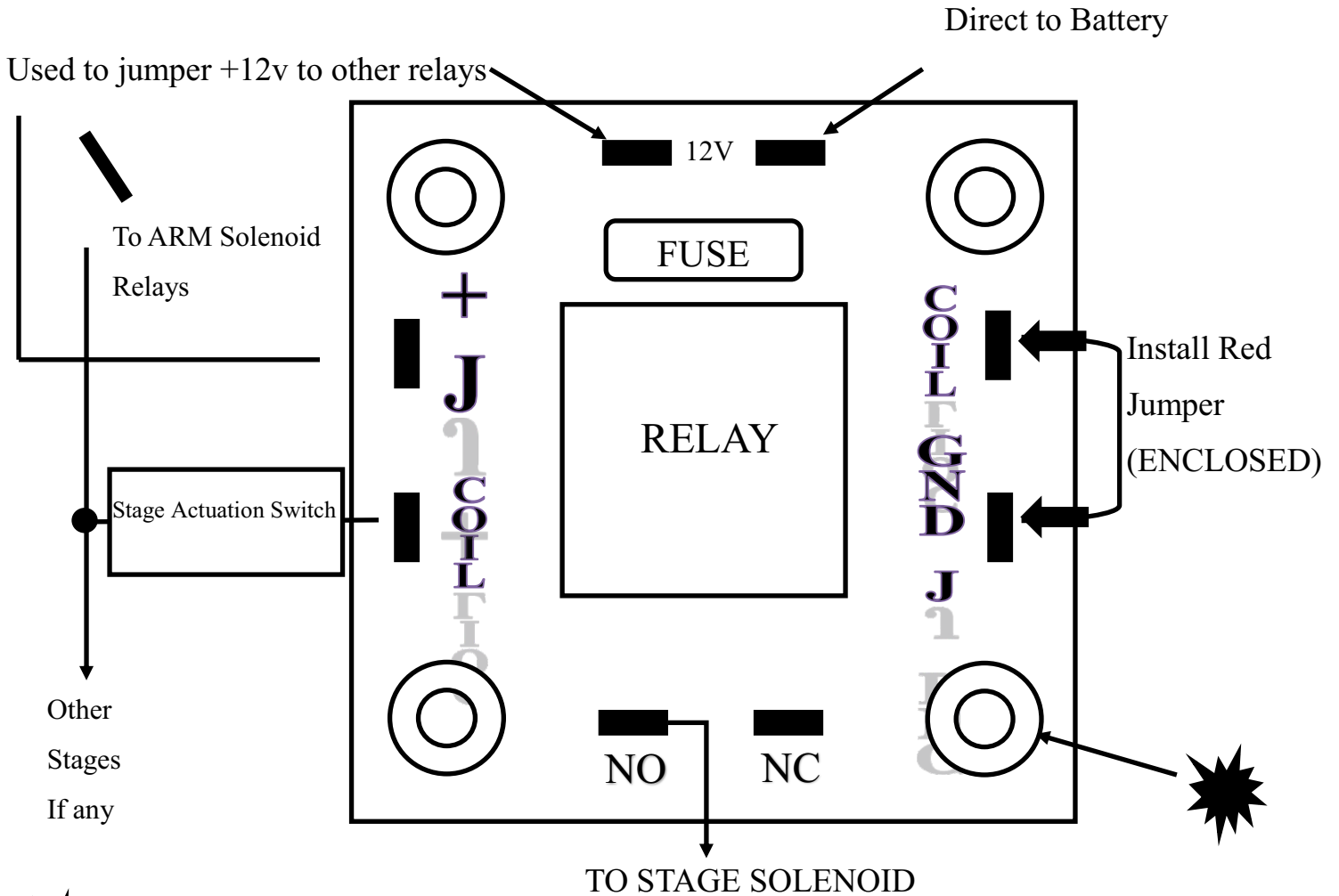
“To purge solenoid relay”

ARE DESIGNED TO OPERATE RELAYS DO NOT CONNECT THEM DIRECTLY TO NITROUS SOLENOIDS AND FUEL PUMPS.

THE DIAGRAMS ON THE FOLLOWING PAGES SHOW HOW TO CONNECT THESE CURCUITS

FIGURE 1
Switching 12V

PAGE 2



★ If relay board is not mounted to a grounded surface **DO NOT** connect the red jumper. **Run a lead from the right coil terminal to ground.**

FIGURE 1 SCHEMATIC

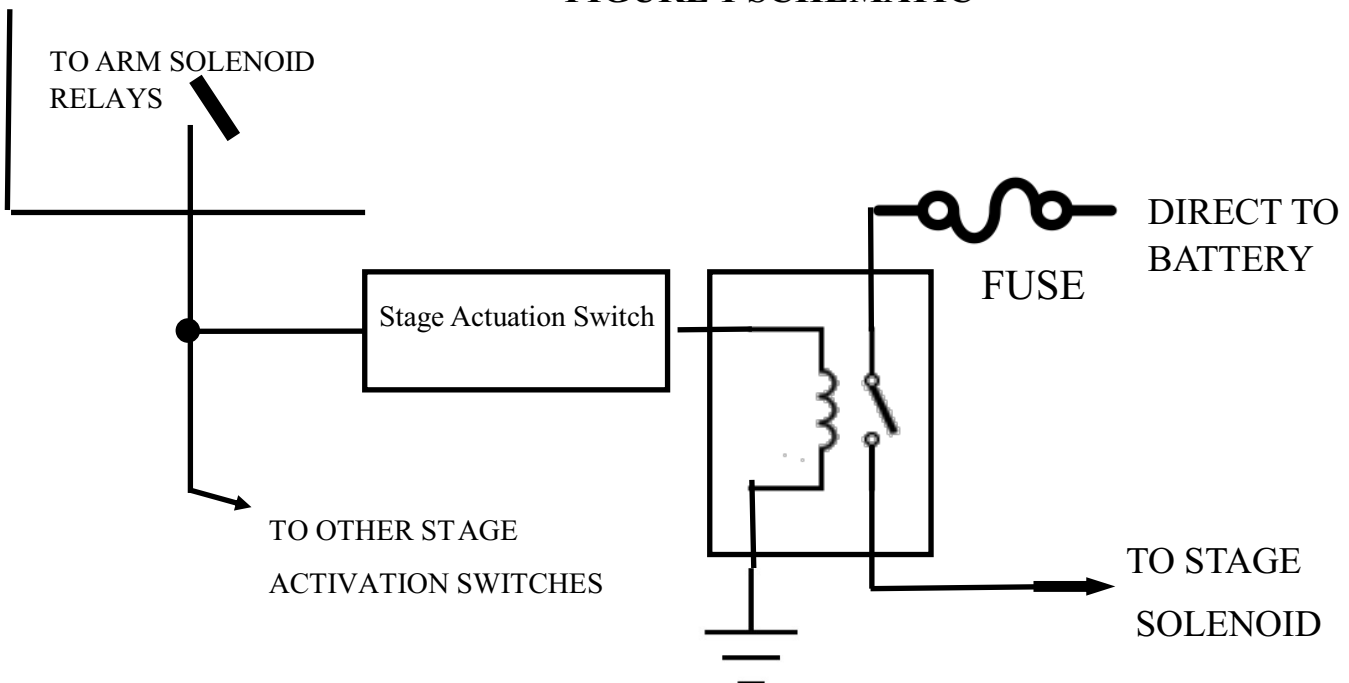
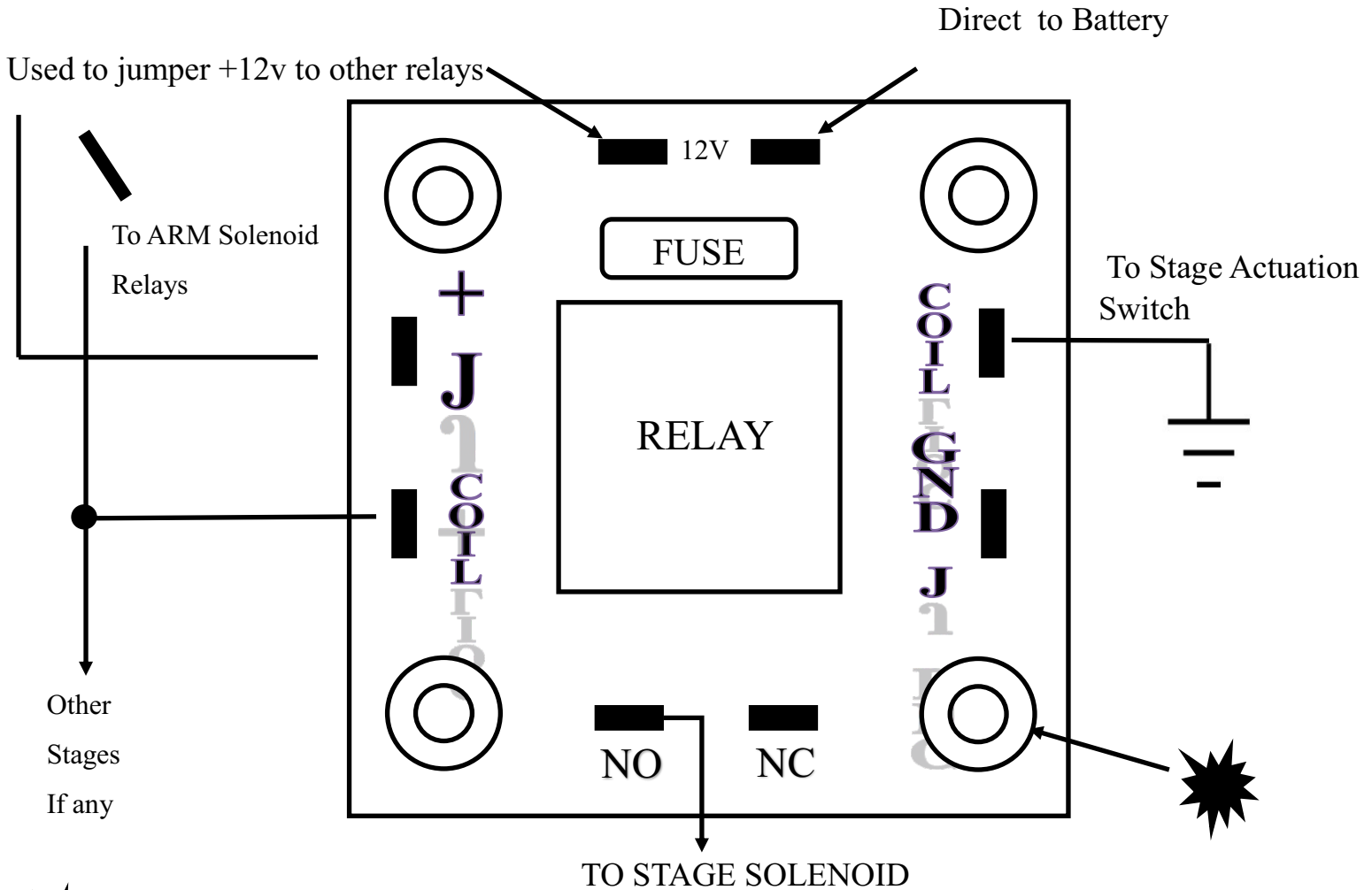
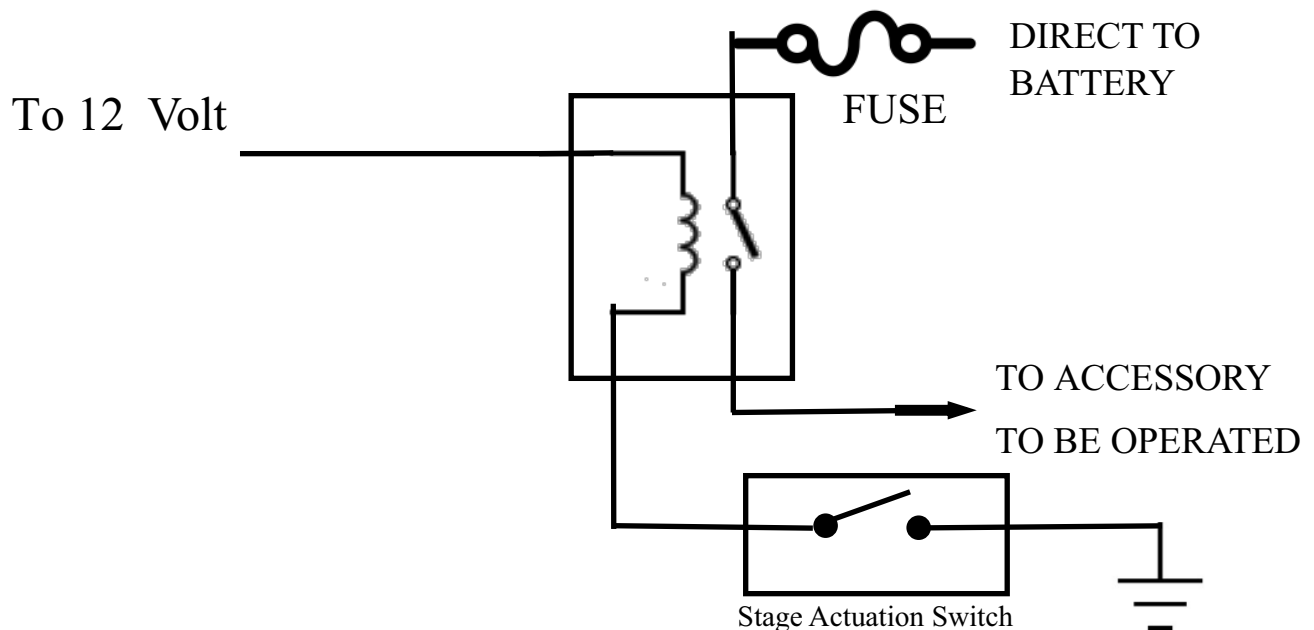


FIGURE 2
Switching Ground



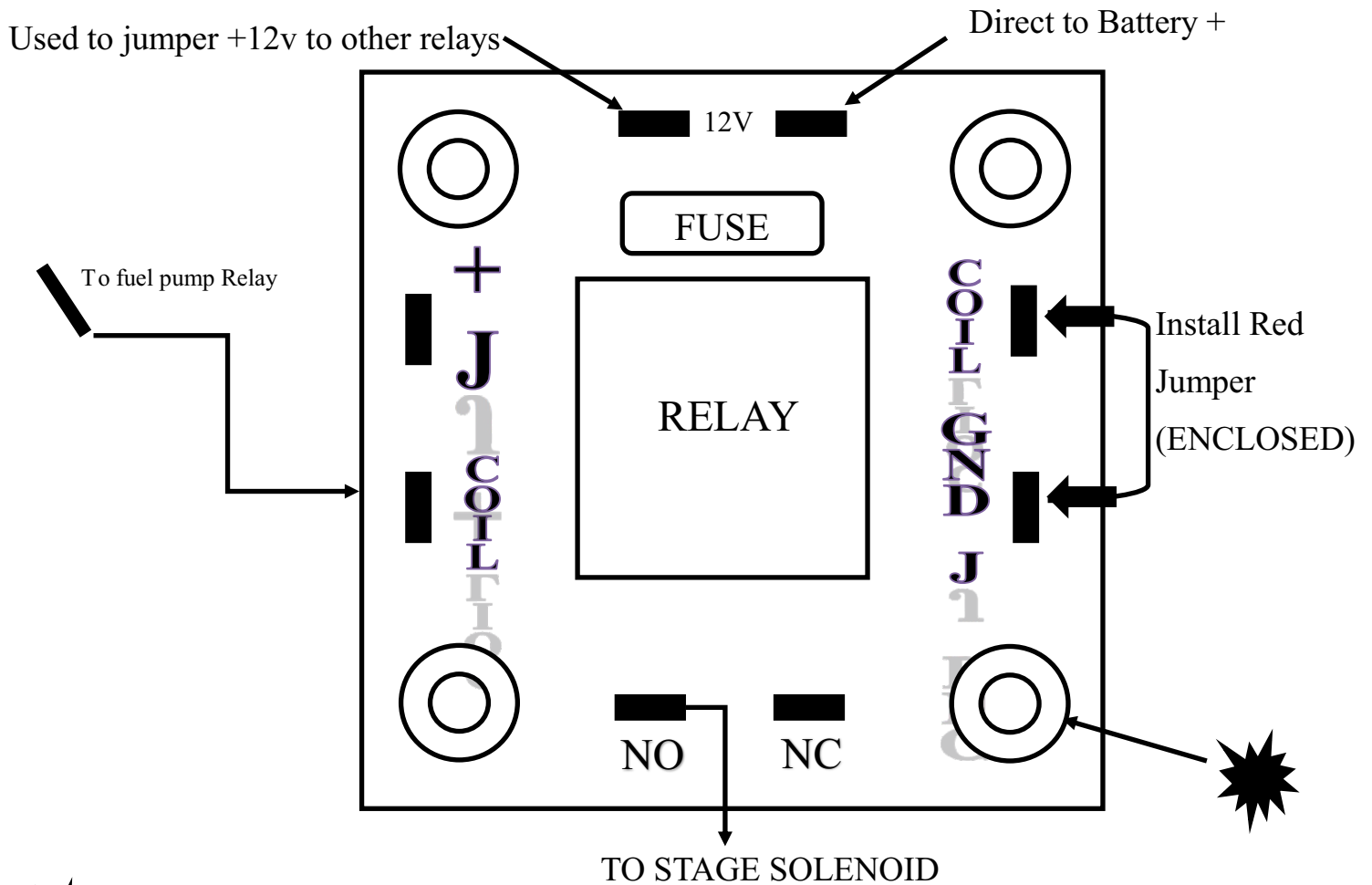
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FIGURE 2 SCHEMATIC



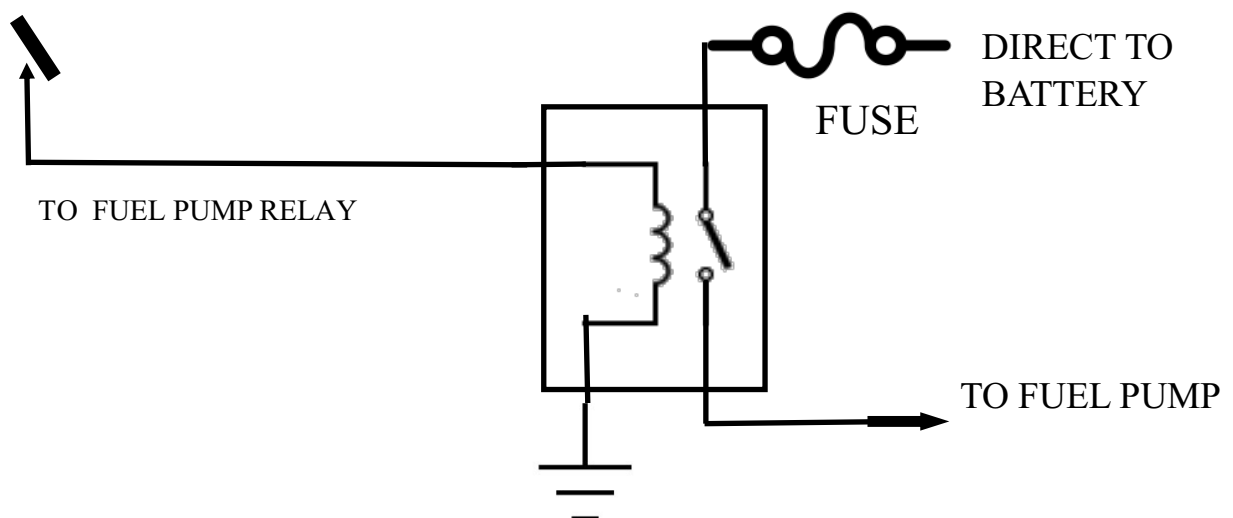
Fuel Pump Relay

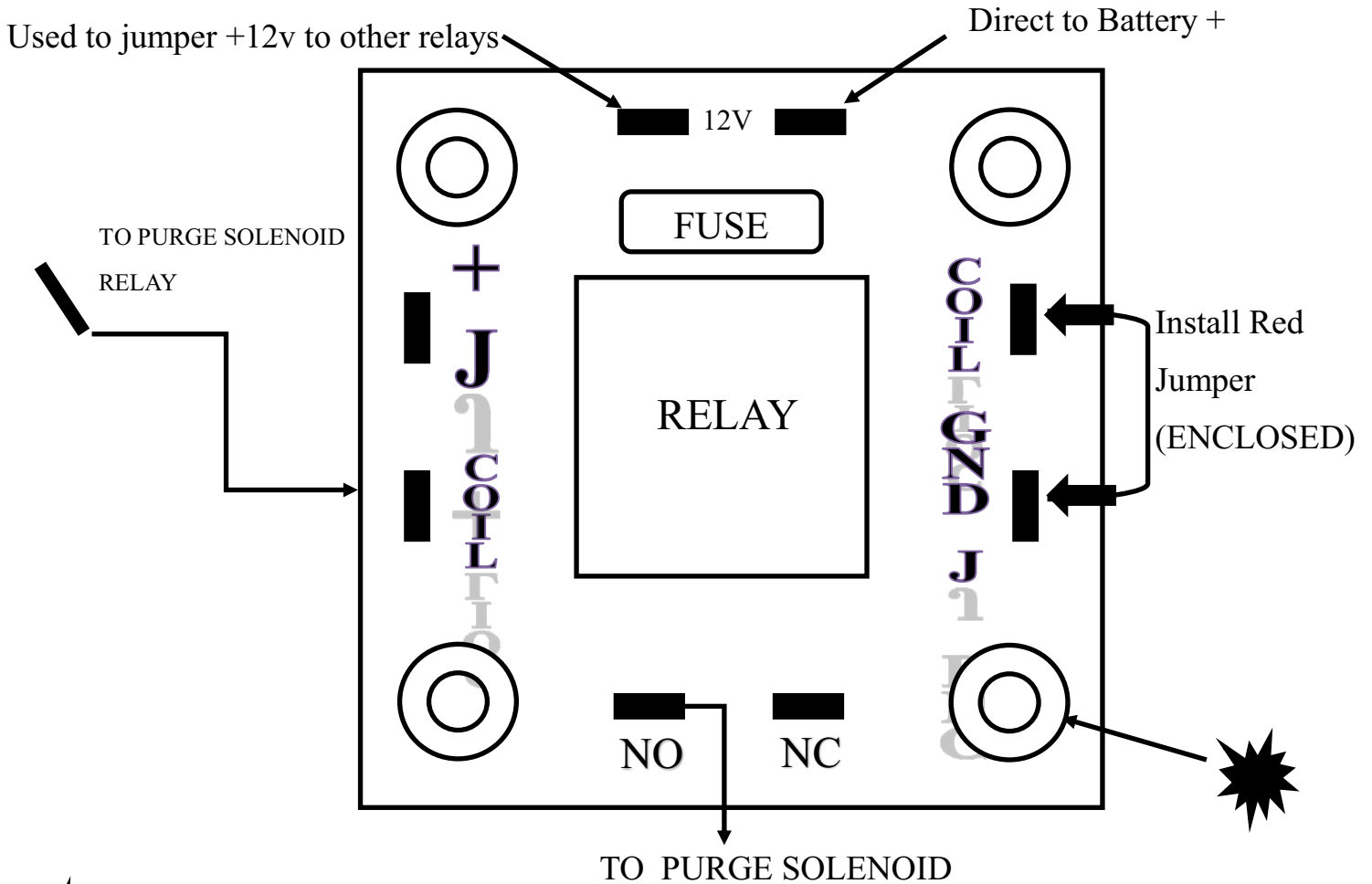
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★ If relay board is not mounted to a grounded surface **DO NOT** connect the red jumper. **Run a lead from the right coil terminal to ground.**

SCHEMATIC FUEL PUMP CIRCUIT





 If relay board is not mounted to a grounded surface **DO NOT** connect the red jumper. **Run a lead from the right coil terminal to ground.**

SCHEMATIC PURGE RELAY

