

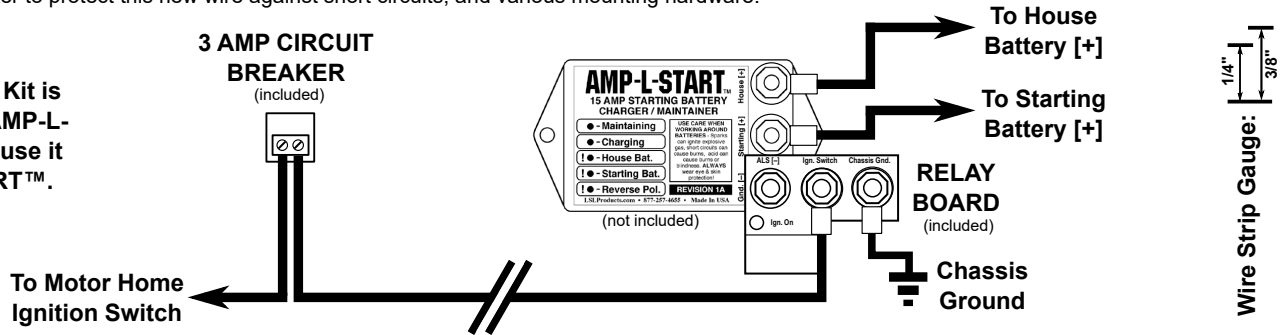
# AMP-L-START™

# IGNITION-CONTROLLED RELAY KIT

**GENERAL INFORMATION:** The AMP-L-START™ Relay Kit is designed to inhibit operation of your AMP-L-START™ whenever the motorhome engine is running. This is useful in applications where a DC-DC converter is also present - It prevents the converter and AMP-L-START™ from both running at the same time, thereby avoiding potential instability problems due to the converter and AMP-L-START™ "fighting" each other.

The relay is controlled by a 12 volt signal from your motorhome's ignition switch - when 12 volts is present on this signal wire (i.e., when the ignition switch is on), the contacts on the Relay Kit open to disconnect the AMP-L-START™ from chassis ground, thereby disabling it. As soon as the ignition signal wire voltage drops to 0 volts (i.e., when the ignition switch is off), the contacts in the Relay Kit close again, restoring normal AMP-L-START™ operation. The Relay Kit consists of a Relay Board (mounted to the GND. [-] terminal on the AMP-L-START™), 10 feet of wire for connecting the Relay Board to your ignition signal wire, a 3 amp circuit breaker to protect this new wire against short circuits, and various mounting hardware.

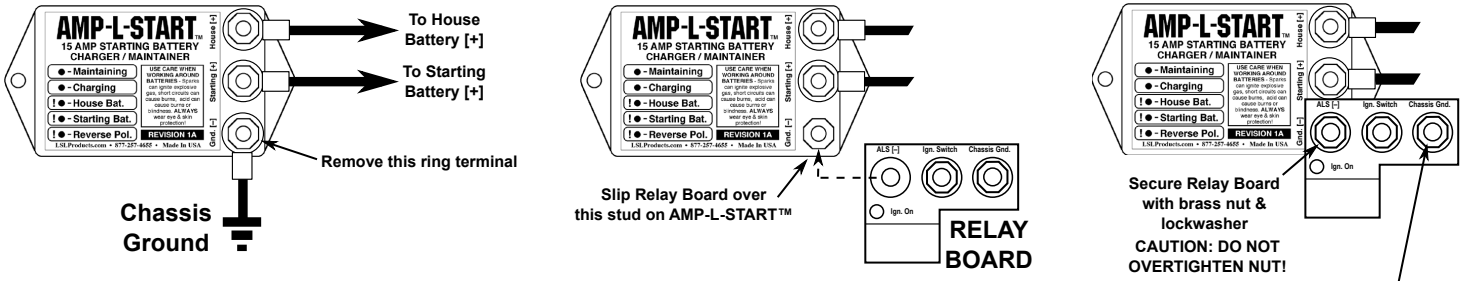
**NOTE: This Relay Kit is only for use with AMP-L-START™ - Do not use it with TRIK-L-START™.**



Wire Strip Gauge: 1/4" - 3/8"

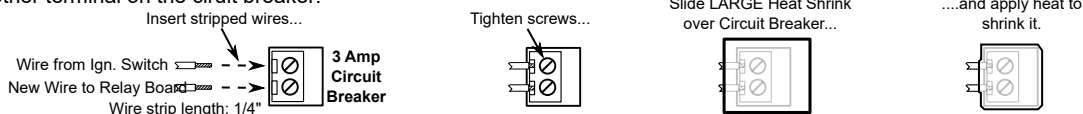
## STEP-BY-STEP INSTALLATION INSTRUCTIONS:

1. Locate the engine run (ignition) signal on your motorhome. This wire will have approx. 12 volts present when the motorhome ignition switch is in either the RUN or START positions, but will have no voltage present in any of the other switch positions. You will tap into this wire to control the Relay Board.
2. Route the new wire included in the Relay Kit from the engine run signal wire to your AMP-L-START™.
3. Remove the brass nut, ring terminal and lockwasher from AMP-L-START™'s GND [-] terminal, slip the ALS [-] hole in the Relay Board over this terminal, and secure the board with the nut and lockwasher you just removed. (Orient the relay board as shown below before tightening the nut):



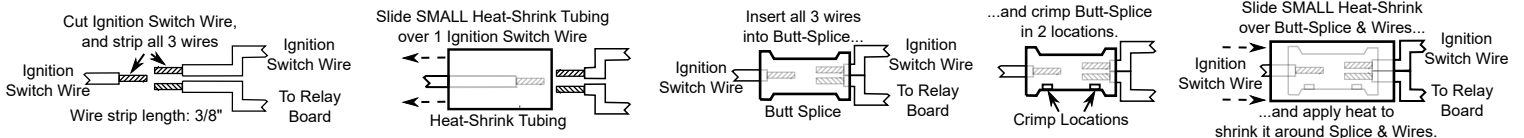
4. Take the ring terminal that you removed from the AMP-L-START™, and connect it to the CHASSIS GND. terminal on the Relay Board instead. (NOTE: Since this connection only carries a small amount of current, any wire which is 18 gauge or thicker can be used for it.)
5. Slip a red vinyl boot (included) over the end of the new wire next to the AMP-L-START™, strip 1/4" off the end of it and crimp on a ring terminal (included), and then connect that ring terminal to the IGN. SWITCH terminal on the relay board. Slip the red vinyl boot completely over this connection after tightening the brass nut. (NOTE: A red vinyl boot is only necessary on the IGN. SWITCH terminal - The other two terminals are not "hot".)

6. At the other end of the new wire you installed in step 2, cut and strip 1/4" off the end of the wire and connect it to either terminal on the circuit breaker (included). (Use the included small screwdriver to tighten the terminal strip screws on the circuit breaker.) Cut and strip 1/4" off a remaining piece of wire, and connect it to the other terminal on the circuit breaker:



7. Slip the included **LARGE** heat-shrink tubing over the circuit breaker and attached wires, and use a heat gun to shrink the tubing tightly around the circuit breaker and wires.

8. Use the included Butt-Splice and **SMALL** Heat-Shrink Tubing to splice the other end of this new wire to your ignition switch signal wire:



9. Turn the motorhome ignition switch to its RUN position, and confirm that the IGN. ON indicator light on the Relay Board is lit, and that no lights on the AMP-L-START™ are lit. Turn the ignition switch to its OFF position, and confirm that the IGN. ON indicator light is no longer lit.

This completes the installation process.