

# Lester Electrical

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## LESTRONIC II ELECTRONIC TIMER KIT NO. 24800S or 24920S BUILT IN OR PORTABLE TYPE CHARGERS

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### PLEASE SAVE THESE IMPORTANT SAFETY AND OPERATING INSTRUCTIONS

For correct operation of the equipment, it is important to read and be familiar with this entire manual before installing and operating your charger. **DO NOT DISCARD THIS MANUAL AFTER READING.**



**LOOK FOR THIS SYMBOL TO POINT OUT SAFETY PRECAUTIONS. IT MEANS: *BECOME ALERT—YOUR SAFETY IS INVOLVED.* IF YOU DO NOT FOLLOW THESE SAFETY INSTRUCTIONS, INJURY OR PROPERTY DAMAGE CAN OCCUR.**

This electronic timer kit is for use on 24 volt DC, 115 volt AC chargers only. If it is used on a charger of improper voltage, it will be damaged. This kit may differ in appearance from the one being replaced, but it is functionally equivalent. Follow the steps below to install the new timer kit.

**⚠CAUTION: THIS AND ALL SERVICE WORK ON YOUR CHARGER SHOULD BE PERFORMED BY QUALIFIED PERSONNEL ONLY.**

**⚠DANGER: HAZARD OF ELECTRICAL SHOCK. DO NOT ATTEMPT TO SERVICE YOUR CHARGER WHILE IT IS CONNECTED TO AC POWER OR THE BATTERIES. TURNING OFF THE CHARGER DOES NOT REDUCE THIS RISK!**

#### Step 1: De-energize charger

- Disconnect the AC cord from the wall outlet and the DC cord from the battery pack.

#### Step 2: Remove old electronic timer

- Remove the charger cover by removing its attachment screws.
- Disconnect the BLACK and RED wires from their attachment points inside your charger. (The new timer kit wires will attach to these same two locations.)
- If the timer kit has a GREEN wire connected to the heatsink with diode assembly, remove the wire and replace the nut, torquing it to 18 in-lbs. This kit does not connect at this point.
- Remove the two transformer primary wires and the AC cordset wires from the existing timer kit. These are attached to the electronic timer using quick disconnect (QD) terminals.
- Finally, remove the old timer kit attachment screws.

#### Step 3: Mounting new electronic timer

- Align the three dimpled mounting guide locations on the bottom of the new timer kit (as shown in Figure D) with the three hole mounting pattern in the charger case.
- Drive the 3/8 inch self threading screws (included with this kit) into the mounting locations. The screws will thread into the metal bracket located inside the plastic tray. Using longer screws may damage the electronics.

#### Step 4: Wiring new electronic timer

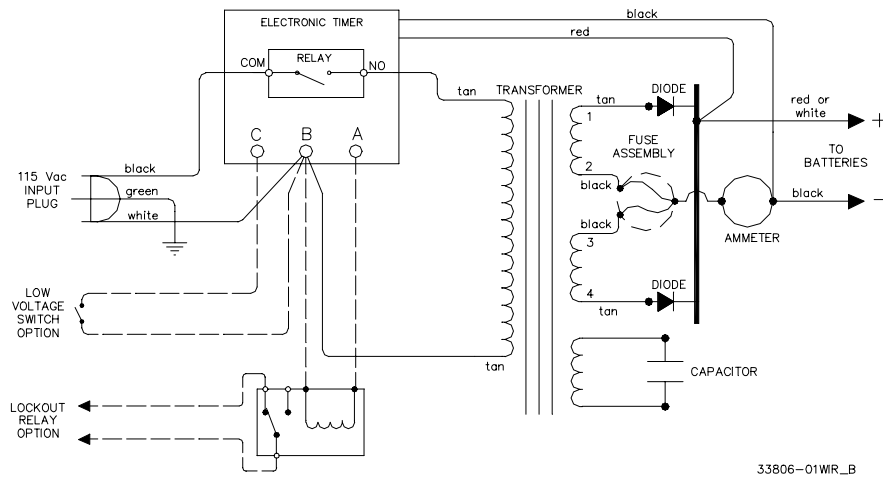
- The new timer kit is connected to your charger with a two conductor wire assembly, which attaches to the timer with a three pin connector. Attach the connector to the new timer kit as shown in Figure E.
- As shown in Figures A and B, attach the RED wire of the new wire assembly to the same point that the RED wire on the old kit was removed [typically the positive (+) DC wire]. If necessary, use the enclosed wire assy. adapter (QD to ring terminal, 18 in-lbs).
- Now attach the BLACK wire of the new wire assembly to the same point that the BLACK wire on the old kit was removed [typically the negative (-) DC wire]. If necessary, use the enclosed wire assembly adapter (QD to ring terminal, 18 in-lbs).
- Referring to Figure C, connect the BLACK wire of the AC cord to the common (COM) terminal on the relay. Connect the WHITE wire of the AC cord to the QD TERMINAL B on the kit.
- Connect either transformer primary wire to TERMINAL B on the kit, and the remaining primary wire to the normally open (NO) terminal on the relay.
- Attach other options (shown with dashed lines) to the electronic timer kit as shown in Figure A ,B & C.
- Use the enclosed wire ties to attach any loose or long wires in your charger.

**⚠CAUTION: BE SURE ALL CONNECTIONS ARE POSITIONED SO THEY DO NOT SHORT TOGETHER OR TO GROUND.**

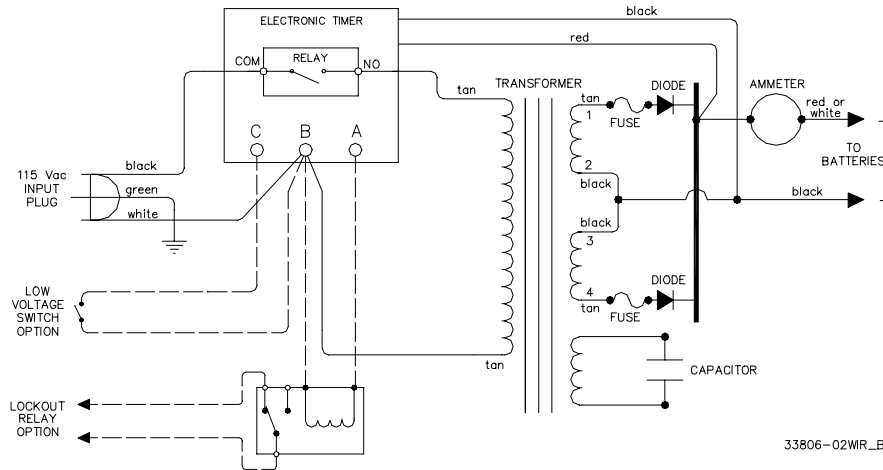
#### Step 5: Verifying proper installation

- Replace the charger cover.
- This unit will only function when both the AC cord is connected to a live outlet and the DC cord is connected to the battery pack.
- When the last of the two connections are made (either AC or DC), after a short delay (3-5 seconds), the control relay will click, the transformer will hum, and the ammeter will indicate charge current.
- If your charger performs as above, it is ready for use. However, the charger should be periodically monitored during the first charge cycle to verify proper turn off.

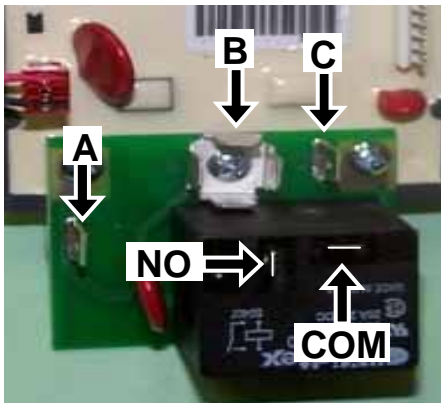
**FIGURE A — WIRING DIAGRAM FOR CHARGERS USING A DUAL ELEMENT FUSE ASSEMBLY**



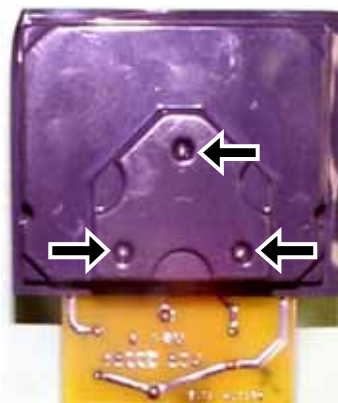
**FIGURE B — WIRING DIAGRAM FOR CHARGERS USING TWO SEPARATE DC FUSES**



**FIGURE C  
TERMINAL LOCATIONS**



**FIGURE D  
MOUNTING LOCATIONS**



**FIGURE E  
CONNECTOR LOCATION**



For questions about your Lester charger or to order parts and accessories,  
contact Lester Electrical and ask for a sales representative.  
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