

INSTALLATION INSTRUCTIONS

Original Issue Date: 4/98

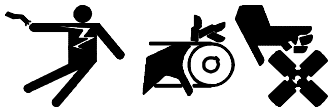
Model: All

Market: All

Subject: **Relay Service Kit 354414 for Replacing Relay A-283472**

Service kit 354414 replaces discontinued relay A-283472. Observe the following safety precautions while installing the kit.

⚠ WARNING



**Accidental starting.
Can cause severe injury or death.**

Disconnect battery cables before working on generator set. (Remove negative (–) lead first when disconnecting battery. Reconnect negative (–) lead last when reconnecting battery.)

Disabling generator set. Accidental starting can cause severe injury or death. Before working on the generator set or connected equipment, disable the generator set as follows:
1) Turn the generator set master switch to OFF position.
2) Disconnect power to battery charger. 3) Remove battery cables (remove negative (–) lead first). Reconnect negative (–) lead last when reconnecting battery. Follow these precautions to prevent starting of generator set by an automatic transfer switch or remote start/stop switch.

Short circuits. Hazardous voltage/current can cause severe injury or death. Short circuits can cause bodily injury and/or equipment damage. Do not contact electrical connections with tools or jewelry while making adjustments or repairs. Remove wristwatch, rings, and jewelry before servicing equipment.

Installation

1. Place the generator set master switch in the OFF position.
2. Disconnect power to battery charger, if equipped.
3. Disconnect the generator set engine starting battery(ies), negative (–) lead first.
4. Remove controller cover or panel to access relay.

5. Disconnect leads of relay (A-283472) to be replaced. Take notes of lead identification. Use masking tape to mark each lead with the letters indicated on the wiring diagram in Figure 1.

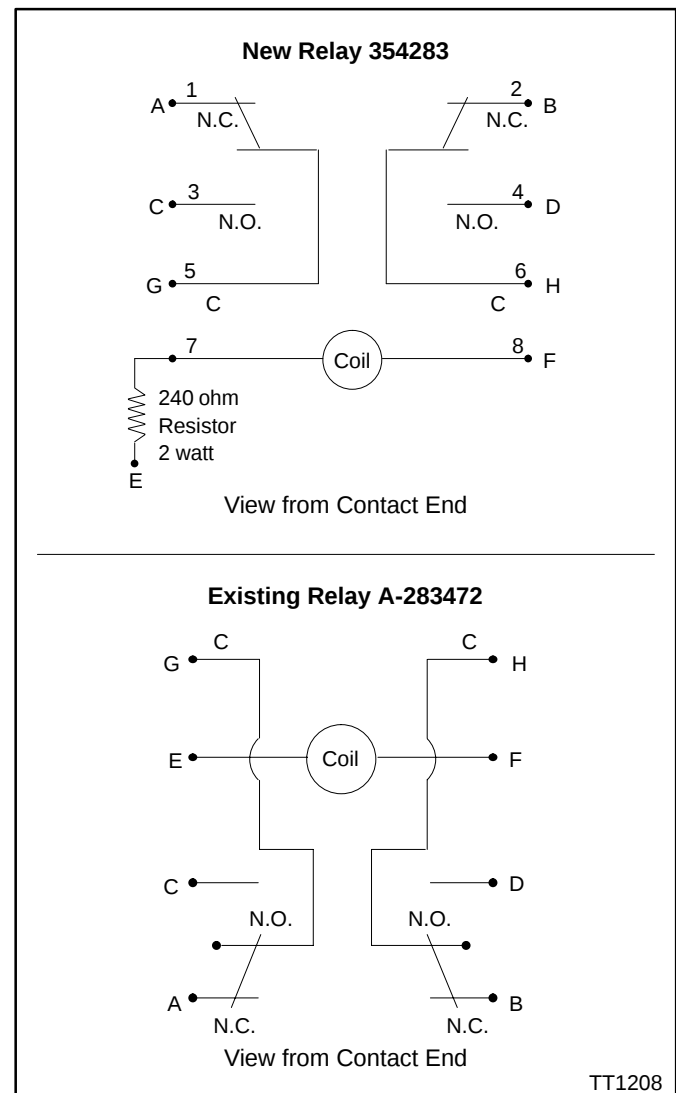


Figure 1. Relay Wiring Diagrams—shown de-energized

6. Remove the existing 0.25 in. (6.35 mm) in. (6.3 mm) push-on terminals from each lead.

7. Strip the end of each lead and crimp on a 3/16 in. (4.8 mm) push-on terminal (X-431-24).
8. Remove old relay (282472).
9. Drill the mounting holes for the new relay. See Figure 2. Locate the new relay mounting holes as close to the old relay location as possible.

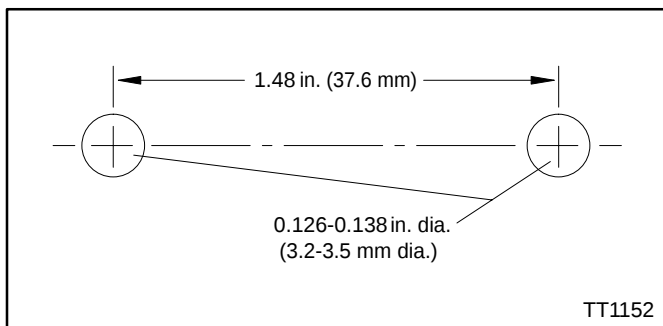


Figure 2. Relay Mounting Holes

10. Mount the new relay (354283) using screws (X-51-15), lock washers (X-22-7), and nuts (X-72-4).
11. Crimp female terminal (X-431-24) to one end of resistor and male terminal to the other end.

12. Connect leads to the new relay following the wiring diagram in Figure 1. Be sure to connect the 240 ohm voltage dropping resistor (X-6066-1) in series with the coil at pin 7. Without the resistor the coil will burn out from excessive voltage.
13. Replace the controller cover or panel.
14. Check that the generator set master switch is in the OFF position.
15. Reconnect generator set engine starting battery(ies), negative (–) lead last.
16. Reconnect power to battery charger, if equipped.

Relay Service Kit

Parts List		
Kit: 354414		
Qty.	Description	Part Number
2	Washer, lock	X-22-7
2	Screw, 8-32 x 5.0	X-51-15
8	Nut, hex 8-32	X-72-4
8	Terminal, 3/16 push-on 18-22 gauge	X-431-24
2	Terminal, tab 3/16 14-18 gauge	X-431-57
1	Resistor, 240 ohm 2 watt	X-6066-1
1	Relay, 24vdc 10 amp	354283