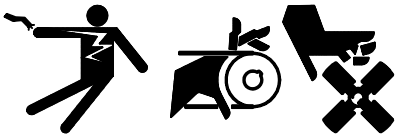
INSTRUCTIONS

Diode Circuit Board Service Kit 228674
Standby Models: 6/10/15ROZ, 10/12CZ, 10/12RZ, and 18RZ
Marine Models: 12.5/16/20CCOZ (three-phase only)

This kit is designed to be used when replacing the diode circuit board A-239669 located on the generator set rotor. Due to variations in design the kit contains a bracket and hardware necessary in some applications. For information regarding proper disassembly of the generator set refer to the appropriate service manual. Read these instructions completely before installing the kit.



WARNING

Accidental starting.
Can cause severe injury or death.
Disconnect battery cables before working on generator set (negative lead first and reconnect it last).

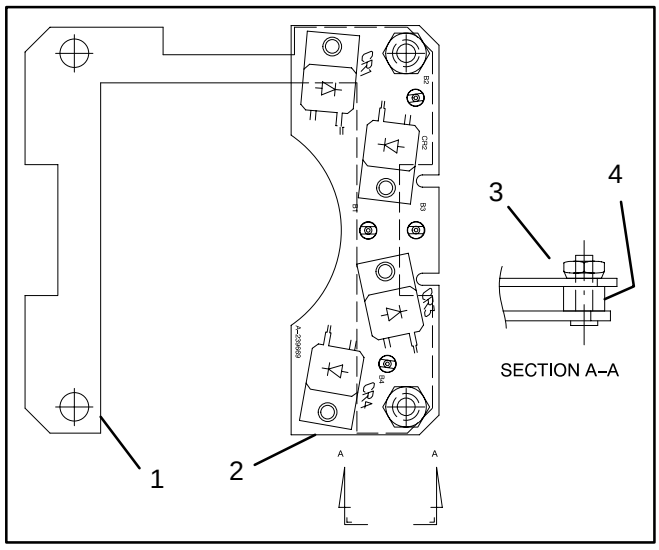
Accidental starting can cause severe injury or death. Turn generator master switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.
(standby models)

Accidental starting can cause severe injury or death. Disconnect battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by remote start/stop switch unless this precaution is followed.
(marine models)

INSTALLATION

1. Place generator master switch in OFF/RESET position (standby models only). Disconnect generator set battery, negative lead first.
2. Disassemble generator set as required.
3. Compare the original circuit board to the one supplied in the kit and determine if they appear to have different mounting hole locations. Another way to determine if the circuit boards are different is by placing the new circuit board on the rotor mounting location. If the circuit boards are different, the new circuit board will not mount to the rotor shaft without interference. In this application the bracket will be used to bring the circuit board outward to allow clearance of the rotor shaft. See Figure 1.

   Make notes as necessary to identify where the leads are connected to circuit board terminals B1, B2, B3, and B4. Remove existing circuit board if not already done.



1. Bracket
2. Diode Circuit Board
3. Nut
4. Spacer

Figure 1. Diode Circuit Board

4. **If the circuit boards have identical mounting hole locations**, the rotor is the newer design with the molded plastic bosses. In this application mount the new circuit board to the rotor using the original hardware. Bracket and hardware supplied with the kit will not be used.

   If the circuit boards have different mounting hole locations, the rotor is the earlier design and does not have the molded plastic bosses. For this application mount bracket (228673) to rotor using existing screws in the original location of circuit board holes. The original spacers under the old circuit board will not be reused. Place spacers X-400-143 (supplied with kit) on bracket studs, install circuit board A-239669, and secure with lock nuts X-101-22.

5. Resolder rotor leads to terminals B1 and B3. Resolder exciter leads to terminals B2 and B4.

   If bracket from the kit was installed the circuit board is now in a different location. As a result, the leads may not reach the circuit board terminals. It is acceptable to reverse leads to terminals B1 and B3 in order to provide sufficient lead length. It is also acceptable to reverse leads to terminals B2 and B4 in order to provide sufficient lead length. If this does not provide sufficient lead length, it will be necessary to add an additional length of wire to the short lead(s). The new lead should be the same type and gauge as the original lead. Keep the extension lead as short as practical to prevent damage when generator set is running.

6. Reassemble the generator set as instructed in the appropriate service manual.

PARTS LISTING

KIT 228674

Qty.	Description	Part No.
1	Board assembly, diode circuit	A-239669
1	Bracket	228673
2	Nut, lock 6-32	X-101-22
2	Spacer	X-400-143