

## INSTALLATION INSTRUCTIONS

### Voltage Regulator Kit PA-239479 for R-Series Generator Sets

This kit is used on all R-Series generator sets with relay and NFPA controller models except 22.5 kW, 32.5 kW, and 47 kW. This kit includes voltage regulator board G-269315 and diode assembly A-269957. When using circuit board G-269315 on relay controllers, the diode must be used to prevent voltage surge damage to meter and panel lamps during start-up. When using this kit with NFPA controllers, the diode assembly A-269957 is not used. Install voltage regulator board G-269315 only.

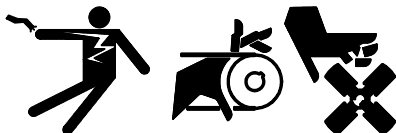
#### NOTE

Before replacing voltage regulator board, check SCR module for proper operation. Voltage regulator board will be damaged if SCR module is shorted.

Refer to R-Series Service Manual TP-5074 for voltage regulator board adjustment.



#### WARNING



#### Accidental starting.

#### Can cause severe injury or death.

Disconnect battery cables before working on generator set (negative lead first and reconnect it last).

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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.

1. Move generator master switch to OFF position. Disconnect battery of generator set, negative lead first.
2. Remove controller cover by removing six screws.
3. Remove P1 and P2 from old voltage regulator board.

4. Remove four screws and lift out old board.
5. Install new voltage regulator board using four screws.
6. Replace P1 and P2 connections.
7. Install diode assembly to controller terminal strip. See Figure 1. Connect cathode lead to terminal 15 and anode lead to terminal V0.

#### NOTE

If diode leads are reversed, the 10-amp. controller fuse will blow.

8. Check that generator master switch is in the OFF position. Reconnect battery, negative lead last.
9. Follow instructions given in R-Series Service Manual regarding voltage regulator board adjustment.

#### Hazardous voltage 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 adjustments are made. Remove wristwatch, rings, and jewelry that can cause short circuits.

#### NOTE

If the LED on the voltage regulator board does not light and the posistor generates heat (see Figure 1), low voltage to the board is indicated. Causes may be open leads V7 or V8 or blown 3-amp. sensing lead fuses (if equipped). It is not an indication that the new voltage regulator board is defective.

10. Install controller cover using six screws.

Parts List		
Kit PA-239479		
Description	Qty.	Part No.
Diode Assembly	1	A-269957
Voltage Regulator Board	1	G-269315

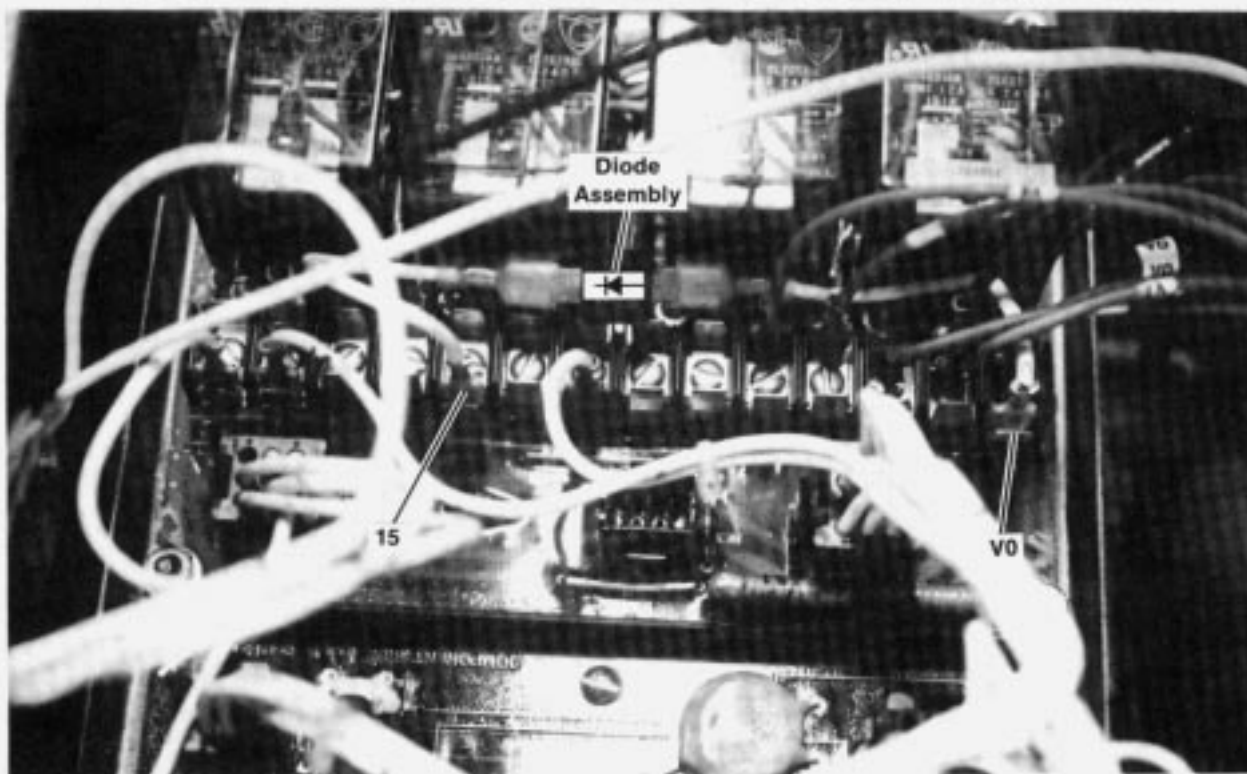
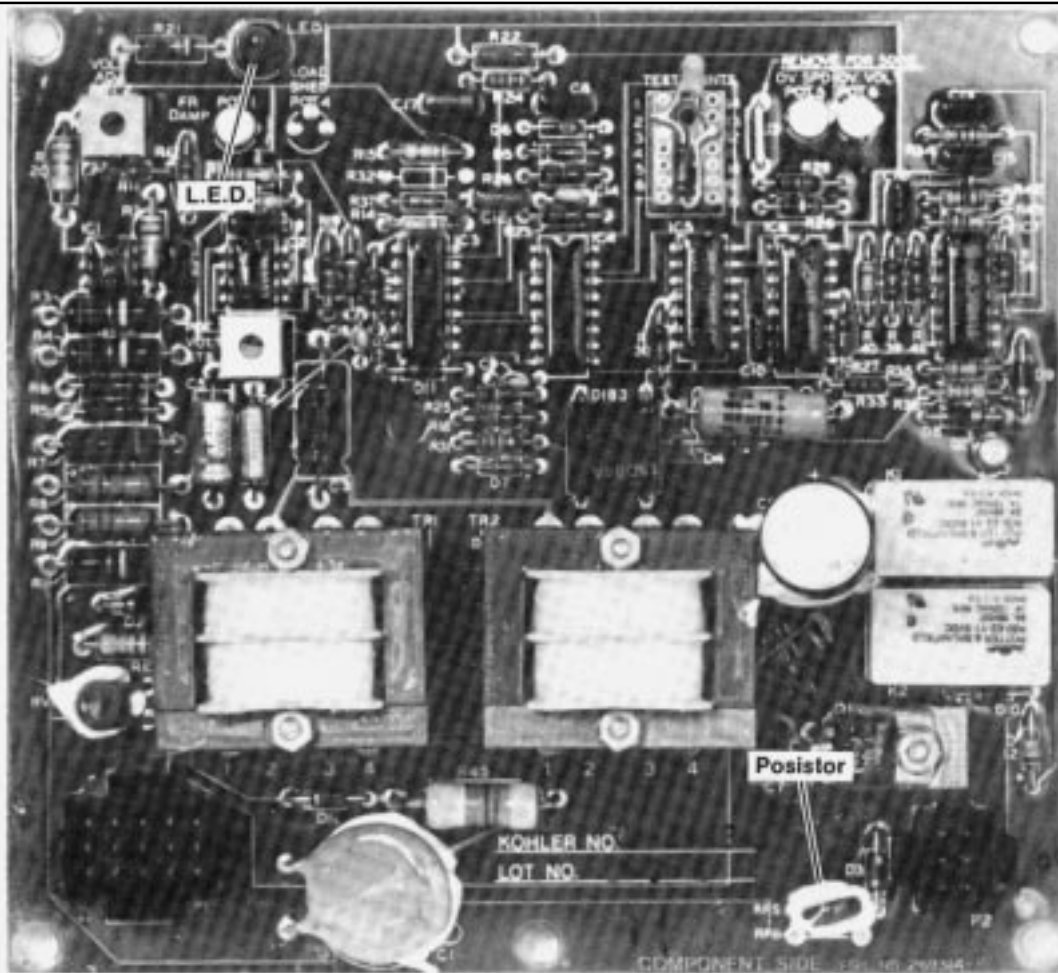


Figure 1. Installing Voltage Regulator Kit