# **INSTALLATION INSTRUCTIONS**

# Remote Voltage Adjusting Potentiometer Kits PA-328066, PA-328066-SD, and SG-328066 20-300 kW Standby Generator Sets

This kit provides the ability to fine adjust the generator output voltage from a remote location. Use this kit on 20-300 kW units only.

The maximum recommended wire length from the potentiometer to the generator is 15 feet (4.6 meters). Customer-supplied 18-gauge twisted pair wire is recommended. Use a remote voltage regulator kit if further distance is required. Contact your distributor for more information on additional kits.

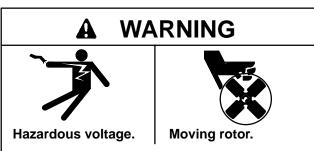


## Accidental starting.

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 remote 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.



Can cause severe injury or death.

Do not operate generator set without all guards and electrical enclosures in place.

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.

### **INSTALLATION**

- 1. Turn generator master switch to OFF position and disconnect battery cables, negative lead first.
- Determine desired mounting location for potentiometer. Drill mounting holes for potentiometer and nameplate. See Figure 1.

3. Using hardware attached to potentiometer, assemble potentiometer (X-6136-10) to panel. Attach knob (X-6136-15) to potentiometer.

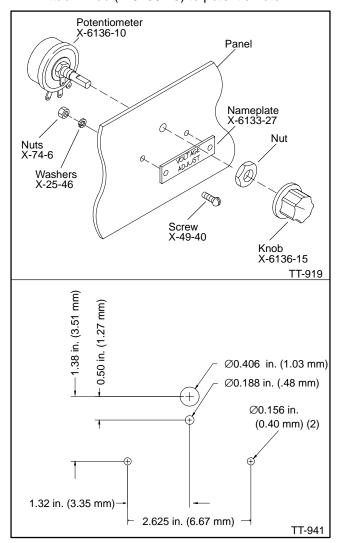


Figure 1. Potentiometer Installation

4. Attach voltage-adjust nameplate (X-6133-27) to panel using pan head screws (X-49-40), lock washers (X-25-46), and hex nut (X-74-6).

### NOTE

If a remote voltage regulator kit is utilized, the following connection information is not valid. Refer to the installation instructions provided with the remote voltage regulator kit for connection of the remote voltage adjust potentiometer.

The existing voltage adjust potentiometer in the generator controller box must be disconnected when the remote potentiometer is installed.

- 5. Remove cover from generator junction box and cover from generator controller box.
- 6. Connect remote potentiometer to leads (67 and 68) that run from the voltage regulator in the generator junction box to the voltage adjust potentiometer in the generator controller box at the point indicated in Figure 2. Tape to insulate the controller potentiometer leads.
- Route leads that run to the voltage regulator into the generator junction box. Replace the cover on the generator controller box.
- 8. Connect remote potentiometer to leads (67 and 68) as shown in Figure 3. The maximum recommended wire length from remote potentiometer to voltage regulator in generator junction box is 15 feet (4.6 m). Secure leads with cable tie (X-468-1). Install jumper wire on potentiometer between center lug and lug with lead 68 (as viewed form the back of the potentiometer).
- 9. Replace cover on generator junction box.
- 10. Reconnect battery cables, negative lead last. Disconnect load from generator set. Move generator master switch to RUN position. Use voltage adjusting potentiometer to set generator output to desired voltage. STOP generator set.

Parts List		
Kits PA-328066, PA-328066-SD, and SG-328066		
Qty.	Description	Part Number
2	Washer, 0.125 x 0.250 x 0.022 in. plain	X-25-46 *
1	Tie, cable	X-468-1
2	Screw, 4-40 x 0.375 in. pan head	X-49-40 *
1	Nameplate, voltage adjust	X-6133-27
1	Potentiometer	X-6136-10
1	Knob, finger grip	X-6136-15
2	Nut, 4-40 hex	X-74-6 *

<sup>\*</sup> Items not included with kit SG-328066

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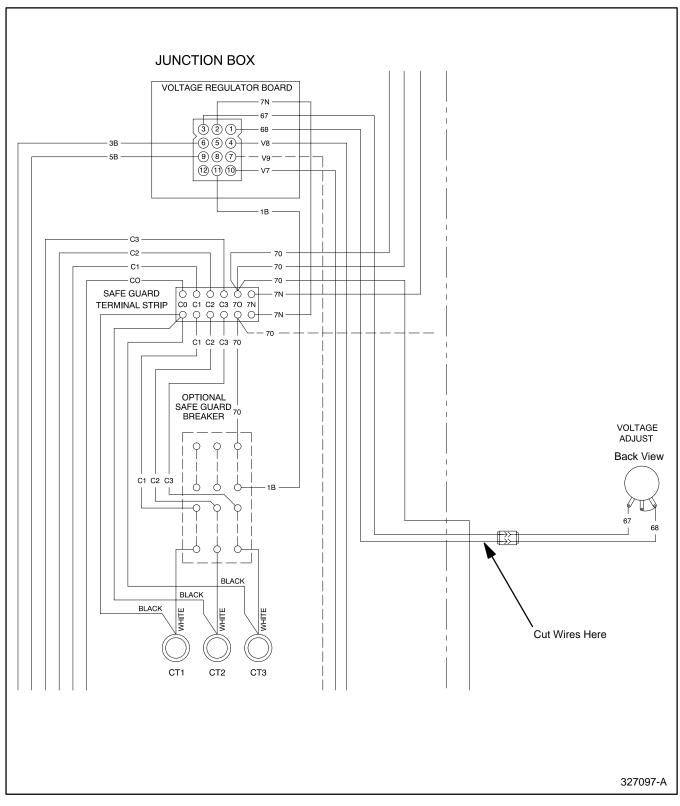


Figure 2. Disconnection of Controller Voltage Adjusting Potentiometer

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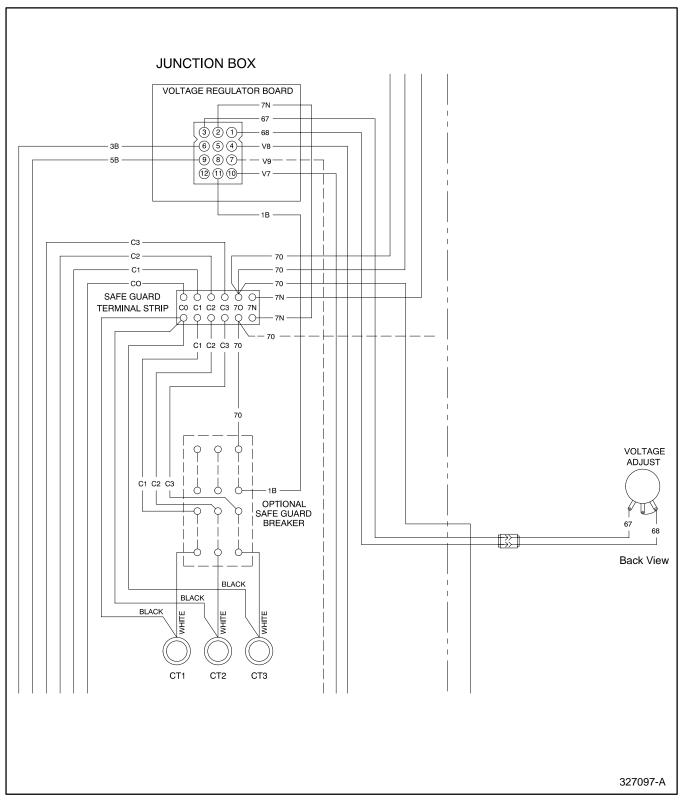


Figure 3. Wiring Diagram (20-300 kW)

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