

---

## INSTALLATION INSTRUCTIONS

---

Original Issue Date: **3/91**

Model: **20-300 kW**

Market: **Industrial**

Subject: **Generator Strip Heater Kits PA-253213, PA-253213-SD**



The generator strip heater kit heats the unit in cold climates and helps prevent condensation from forming in the generator. Observe the following safety precautions while installing the kit.



**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 set 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 set. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

<b>⚠ WARNING</b>	
 <b>Hazardous voltage.</b>	 <b>Moving rotor.</b>
<b>Can cause severe injury or death.</b>	
Do not operate generator set without all guards and electrical enclosures in place.	

**Hazardous voltage can cause severe injury or death.** Whenever electricity is present, there is the hazard of electrocution. Open main circuit breaker on all power sources before servicing equipment. Electrically ground the generator set and electrical circuits when in use. Never come into contact with electrical leads or appliances when standing in water or on wet ground, as the chance of electrocution is increased under such conditions.

**Hazardous voltage can cause severe injury or death.** Disconnect generator set from load by opening line circuit breaker or by disconnecting generator set output leads from transfer switch and heavily taping ends of leads. If high voltage is transferred to load during test, personal injury and equipment damage may result. Do not use the safeguard circuit breaker in place of the line circuit breaker.

## Installation

1. Disconnect engine starting battery, negative (–) lead first.
2. Disconnect generator set from load by opening line circuit breaker or disconnecting output leads from transfer switch and heavily taping end of leads.
3. Remove junction box panels to expose end bracket and stator.
4. Connect AC leads to strip heaters. Position lead terminals perpendicular to strip heater. See Figure 1.
5. Assemble strip heaters (291269), screws (X-465-7), washers (X-25-40), and spiral lock nuts (X-6210-2) as shown in Figure 1. Install spiral lock nuts so the flange is against the stator shell when

assembly is installed. Strip heater terminals must be on the same side as the screw heads. Assemble components hand-tight to allow strip heater expansion and contraction.

6. Secure strip heater assemblies to stator with lock nuts (X-101-8). Position strip heaters with the AC terminals closest to the end bracket of the generator set. See Figure 1.
7. Open circuit breaker to AC power source. With customer-supplied leads and terminals, connect strip

heaters to AC voltage source using appropriate wiring diagram in Figure 2.

8. Replace junction box side panels.
9. Close circuit breaker to AC power source.
10. Reconnect generator set to load by closing line circuit breaker or reconnecting output leads to transfer switch. Reconnect engine starting battery, negative (-) lead last.

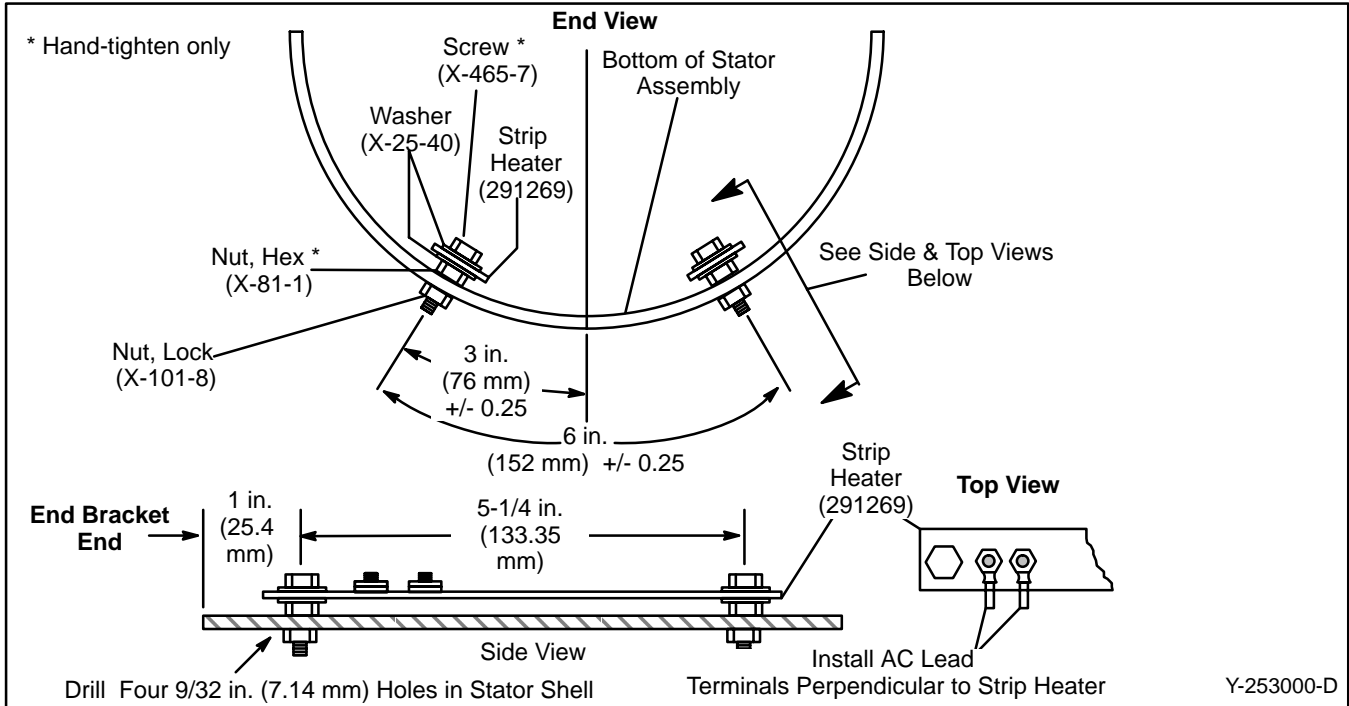


Figure 1. Generator Heater Installation

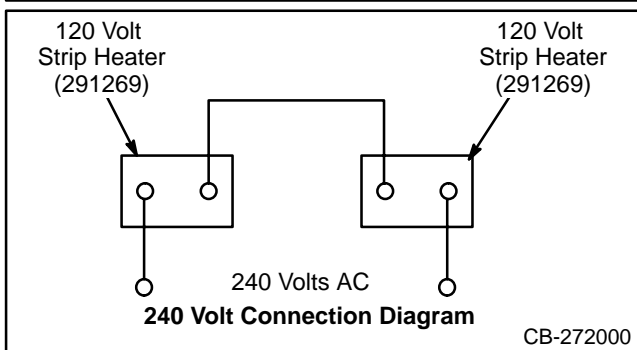
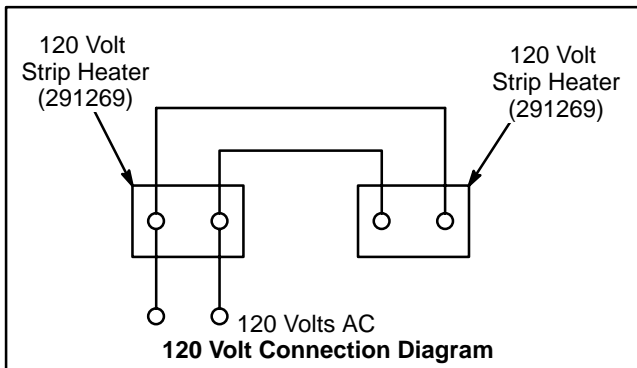


Figure 2. Heater Kit Wiring Diagrams

## Parts List

KITS: PA-253213/PA-253213-SD		
Qty.	Description	Part Number
8	Washer, plain	X-25-40
4	Nut, elastic stop	X-101-8
4	Screw, 1/4-20 x1	X-465-7
4	Nut, spiral lock	X-6210-2
2	Heater, strip	291269