

## INSTALLATION INSTRUCTIONS

Original Issue Date: 9/98

Model: 8.5-30 kW

Market: Industrial and Residential/Commercial

Subject: Battery Heater Kit PA-358225, GM89021-KP1, and GM89022-KP1

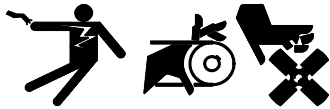
### Introduction

The battery heater kit includes a heating pad and battery wrap to help increase the battery temperature in cold climates. The battery heater is connected to a thermostat for controlled heating.

### Safety Precautions

Observe the following safety precautions while installing the kit.

#### WARNING

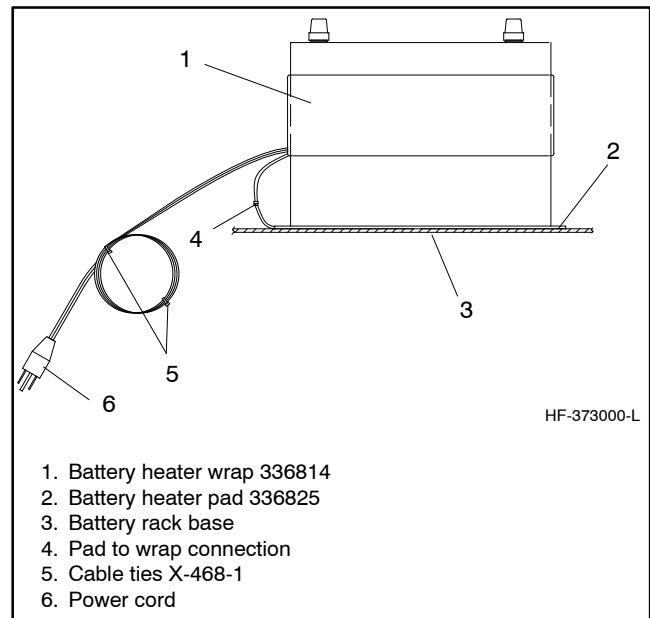


**Accidental starting.  
Can cause severe injury or death.**

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

**Disabling the 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) Move the generator set master switch to the OFF position. (2) Disconnect the power to the battery charger. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent starting of the generator set by an automatic transfer switch, remote start/stop switch, or engine start command from a remote computer.

**Disabling the generator set. Accidental starting can cause severe injury or death.** Before working on the generator set or equipment connected to the set, disable the generator set as follows: (1) Press the generator set on/off button to shut down the generator set. All indicator lamps dim. (2) Disconnect the power to the battery charger, if equipped. (3) Remove the battery cables, negative (-) lead first. Reconnect the negative (-) lead last when reconnecting the battery. Follow these precautions to prevent the starting of the generator set by the remote start/stop switch.



**Figure 1** Battery Heater Installation

## Installation Procedure

1. Place the generator set master switch in the OFF position or press the OFF button on the generator controller.
2. Disconnect the power to the battery charger, if equipped.
3. Disconnect the generator set engine starting battery(ies), negative (-) lead first.
4. Remove the battery from the battery rack.
5. Place battery heater pad 336825 or 336826 in the bottom of the battery rack. Center the battery heater pad in the battery rack. The battery pad may extend through the opening in the battery rack, if necessary.
6. Wrap battery heater wrap 336814 around the battery making certain that the connecting cable can be connected to the pad connector. See Figure 1.
7. Reinstall the battery into the battery rack. Position the battery on the center of the battery heater pad. See Figure 1.
8. Connect the battery wrap and pad connectors. See Figure 1.
9. Plug the battery heater into a convenient 120-volt electrical outlet. Coil the excess cord with cable ties X-468-1.
10. Check that the generator set master switch is in the OFF position.

11. Reconnect the generator set engine starting battery, negative (-) lead last.

12. Reconnect power to the battery charger, if equipped.

## Parts Lists

### Battery Heater Kit

Kit: PA-358225		
Qty.	Description	Part Number
2	Tie, cable	X-468-1
1	Heater, battery wrap	336814
1	Heater, battery pad	336825

### Battery Heater Kit

Kit: GM89021-KP1		
Qty.	Description	Part Number
1	Tie, cable	X-468-1
1	Heater, battery wrap	336814
1	Heater, battery pad	336826

### Battery Heater Kit

Kit: GM89022-KP1		
Qty.	Description	Part Number
2	Tie, cable	X-468-1
1	Heater, battery wrap	336814
1	Heater, battery pad	336825