

INSTALLATION INSTRUCTIONS

Original Issue Date: **8/97**
 Model: **20-2000 kW**
 Market: **Industrial**
 Subject: **50 Hz Circuit Board Kits PA-354698, PA-354698-SD**

The 50 Hz circuit board kit includes a new controller circuit board A-347398 for installation in 50 Hz generator set microprocessor controllers with terminal strips TB1 and TB2. Controller circuit board A-347398 provides 60 Hz overspeed shutdown on 50 Hz models.

Save the original controller circuit board A-336415 of generator sets that are converted to 50 Hz using circuit board A-347398. Reinstall circuit board A-336415 if the generator set is converted back to 60 Hz at a later time.

Circuit Board Part Number	Model Frequency (Hz)	Shutdown Frequency (Hz)
A-336415	60	70
A-347398	50	60

NOTE

Circuit board A-347398 will cause immediate overspeed shutdown on 60 Hz generator sets.

Observe the following safety precautions while installing the kit.



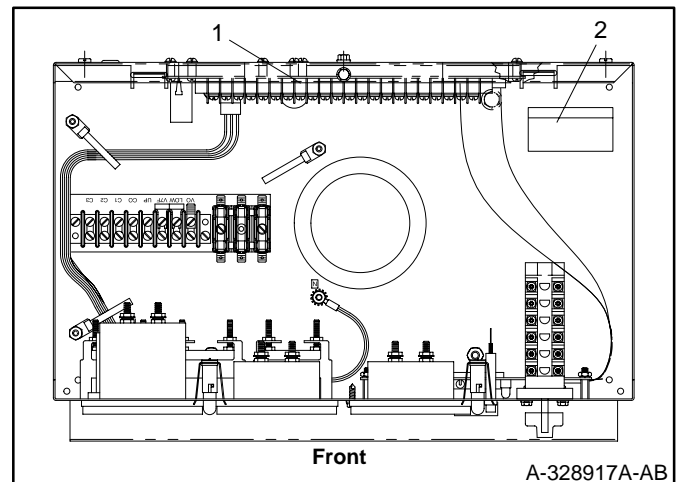
Accidental starting.
Can cause severe injury or death.

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

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

Installation

1. Place the generator set master switch in the OFF position.
2. Disconnect power to battery charger, if equipped.
3. Disconnect the generator set engine starting battery, negative (-) lead first.
4. Remove screws securing controller cover to controller and remove cover.
5. Locate controller main circuit board. See Figure 1.



1. Controller main circuit board
2. Decal (354704)

Figure 1. Controller Internal Components—Top View

6. Disconnect plugs and leads connected to controller main circuit board. Mark leads for reconnection later.
7. Remove controller main circuit board from controller.
8. Install new controller main circuit board A-347398 in controller. See Figure 2.
9. Connect plugs and leads that were disconnected from previous circuit board onto new circuit board.
10. With surface clean and dry install decal 354704 in controller. See Figure 1 for location.
11. Reinstall controller cover.
12. Check that the generator set master switch is in the OFF position.
13. Reconnect generator set engine starting battery(ies), negative (-) lead last. Reconnect power to battery charger, if equipped.

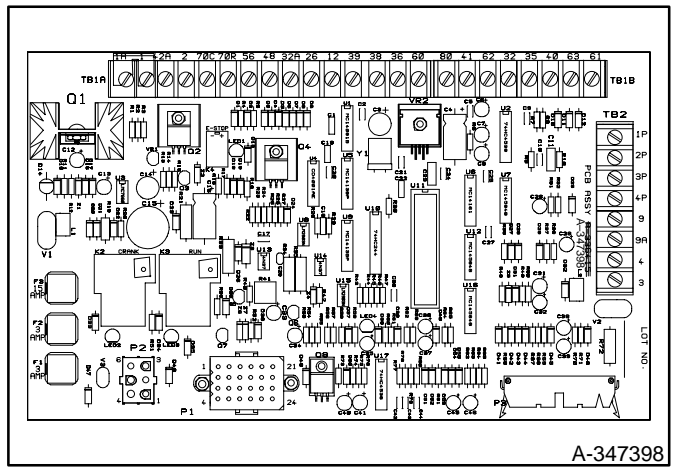


Figure 2. Controller Circuit Board with Terminal Strips TB1 and TB2

Circuit Board Kit

Parts List		
Kits: PA-354698, PA-354698-SD		
Qty.	Description	Part Number
1	Circuit board, controller	A-347398
1	Decal	354704