

## Installation instructions for Electric Choke Kit for PH3100Ri generator (Part# 69887)

### 1) Preparation.

a) The choke kit consists of the items shown in Figure 1.

- (A) Small screws – Qty 2
- (B) Large screw – Qty 1
- (C) Choke actuator – Qty 1
- (D) Adapter harness – Qty 1
- (E) Actuator controller – Qty 1

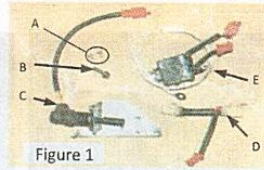


Figure 1

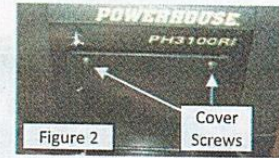


Figure 2

Cover  
Screws

b) You will need a #2 Philips head screw driver to complete these procedures – a magnetic tip is recommended.

c) Remove maintenance door, by loosening the two screws shown in Figure 2.

d) Disconnect the negative battery terminal, FIRST. (Figure 3)

e) Disconnect the positive battery terminal. (Figure 3).

f) Remove control panel, by removing 6 screws. (Figure 4)

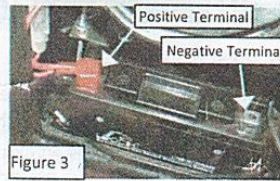


Figure 3

Positive Terminal  
Negative Terminal



Figure 4

Remove Screws

### 2) Install the choke actuator. (Figure 1 – Item C)

a) Disconnect the choke return spring. (Figure 5)

b) Remove the vent hose shown in Figure 5 by lifting straight up on the right end then pulling the left end to the right. By lowering the left end you can then slide it out to the left.

c) Remove the old choke spring bracket by removing the 2 screws as shown in Figure 5. This bracket may be discarded. Be careful not to drop and lose the screws. They will be needed to reinstall the new choke actuator assembly. A magnetic screw driver is recommended. The two small screws included in the kit (Figure 1 – Item A) are spares.

d) Feed the wiring harness from the new choke actuator around the inside corner of the generator (Figure 6), towards the control panel and install the choke actuator and bracket assembly in place of the old spring bracket. Be sure to route the wiring harness so that it does not interfere with any moving parts or rub on sharp edges.

e) Your generator will have one of two different style carburetor brackets (Figure 7-A or Figure 7-B). Regardless of the bracket style, and regardless of where the old bracket may have been installed, both screws used to connect the new actuator will be installed through the slot. Although the new actuator bracket has 4 holes, you will only use 2 of them. For most installations the 2 holes circled in red on Figure 6 will allow you to correctly adjust the actuator.

i) With the bracket resting on top of the carburetor, install the right screw as shown in Figure 8, but do NOT tighten it at this time.

ii) Install the left screw (Figure 9) but do NOT tighten at this time.

iii) Reconnect the choke return spring as shown by the arrow in Figure 10.

iv) Slide the new choke actuator bracket to the left until the end of the actuator just touches the choke lever (Figure 11). If this is not possible, you may have to use different screw holes in the actuator bracket to allow proper adjustment.

v) Tighten both screws, then confirm that the actuator is still just touching the choke lever. If it is displacing the lever or is not touching it, then you will need to loosen the screws and adjust accordingly. Always be sure both screws are tight when installation is complete.

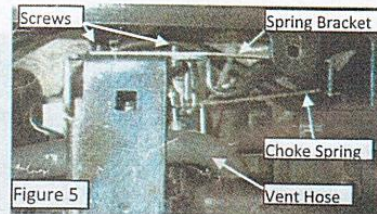


Figure 5

Screws Spring Bracket

Choke Spring  
Vent Hose

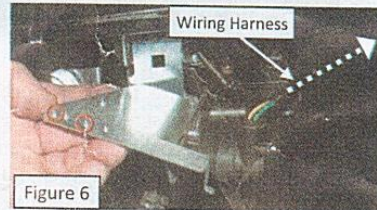


Figure 6

Wiring Harness



Figure 7-A

Figure 7-B



Figure 8

Right Screw



Figure 9

Left Screw

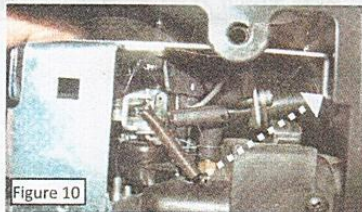


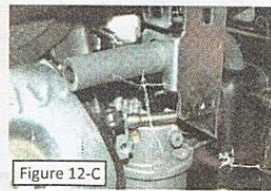
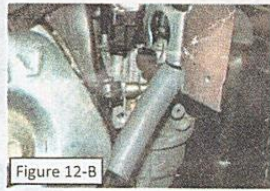
Figure 10



Figure 11

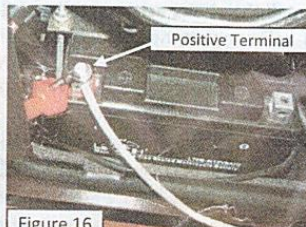
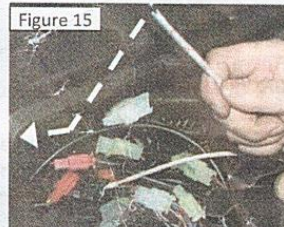
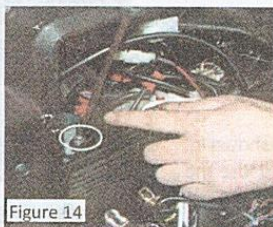
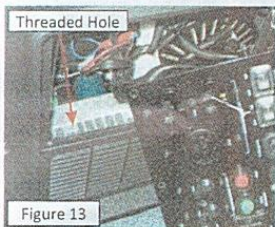


- f) Replace the vent hose, as shown in Figures 12-A through 12-D.



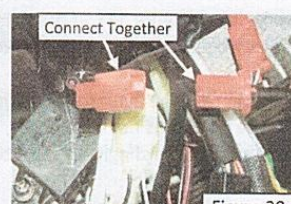
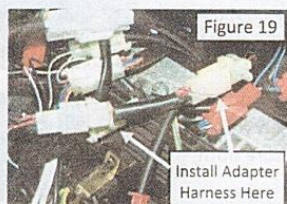
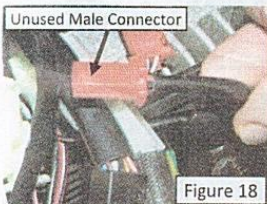
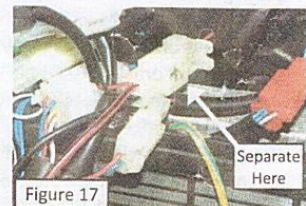
3) Install the choke actuator controller. (Figure 1 – Item E)

- Go to the control panel cavity and locate the empty threaded hole on the top of the inverter, as shown in Figure 13.
- Using the large screw provided (Figure 1 – Item B), mount the controller to the top of the inverter. (Figure 14)
- Route the long, single wire with the white protective sleeve around the inside corner of the generator, towards the battery, as shown in Figure 15 and connect it and the positive battery cable to the positive battery terminal. (Figure 16)



4) Make electrical connections.

- Locate the large, white, two pin connector that goes to the voltage regulator. It will have a black wire and a red wire with a black stripe. (Figure 17)  
**Note:** There may or may not also be an unused, small, two wire harness with a red two pin connector that has a small red wire and a small black wire coming from one of the large white connectors. (Figure 18) If this small harness is present, be careful **NOT** to confuse it with one of the harnesses described in the steps below. It is recommended to tape over the connector to prevent its accidental use. Accidental use of this connector may result in failure of the voltage regulator.
- Unplug the white connector, and install the adapter harness between the two ends that were just unplugged, as shown in Figure 19.
- Plug the red male connector from the adapter harness (Figure 1-D) into the mating red female connector from the choke controller. (Figure 20)
- Plug the remaining red, male connector from the choke controller into the mating red, female connector coming from the choke actuator installed in section 2. (Figure 21)
- Reconnect the negative battery cable to the battery.



5) Close up the generator.

- Replace the control panel, using the 6 screws removed at the beginning of this procedure.
- Replace the maintenance door.