



Cyclic Cranking Kit #PA-278099 For 5RMV

The cyclic cranking kit has two adjustment pots. (one for "on" time and one for "off" time), see Figure 1. The factory setting is 6-8 seconds "on" time and 1-2 seconds "off" time. The on-off cycles can be adjusted from 1-60 seconds. The cyclic cranking kit will not operate when both pots are in the full counterclockwise position. If the cranking cycle seems too short, check the condition of the battery before readjusting the cyler — timing will decrease if the battery charge drops too low. See Figure 1 and part listing for description and location of components.

⚠ WARNING

UNIT STARTS WITHOUT NOTICE! Units with Automatic Transfer Switches start automatically. Potential injury or electrocution can result. Turn Generator Master Switch on controller to OFF position, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator.

MOUNTING AND CONNECTION

1. Place controller main switch to OFF position. Disconnect battery of generator set, negative lead first.
2. Remove controller cover.
3. Assemble cyclic cranking kit.
 - a. Install P.C. board holders on bracket.

NOTE

When installing holders, place large cut corner of bracket to the left side. See Figure 1.

- b. Remove 3/16" x 3/16" (5 mm x 5 mm) from top two corners of circuit board assembly. Slide circuit board assembly onto P.C. board holders.
- c. Install relay to bracket using lock washer and nut.

NOTE

Mount relay with terminals 1 and 2 nearest to circuit board assembly.

- d. Install tab adapter to relay terminal 7.
- e. Connect 3" lead to tab adapter and relay terminal 6.
- f. Connect lead with insulink to relay terminal 4.
- g. Crimp-on eyelet terminal to lead 71 and connect to terminal 1 of circuit board assembly.

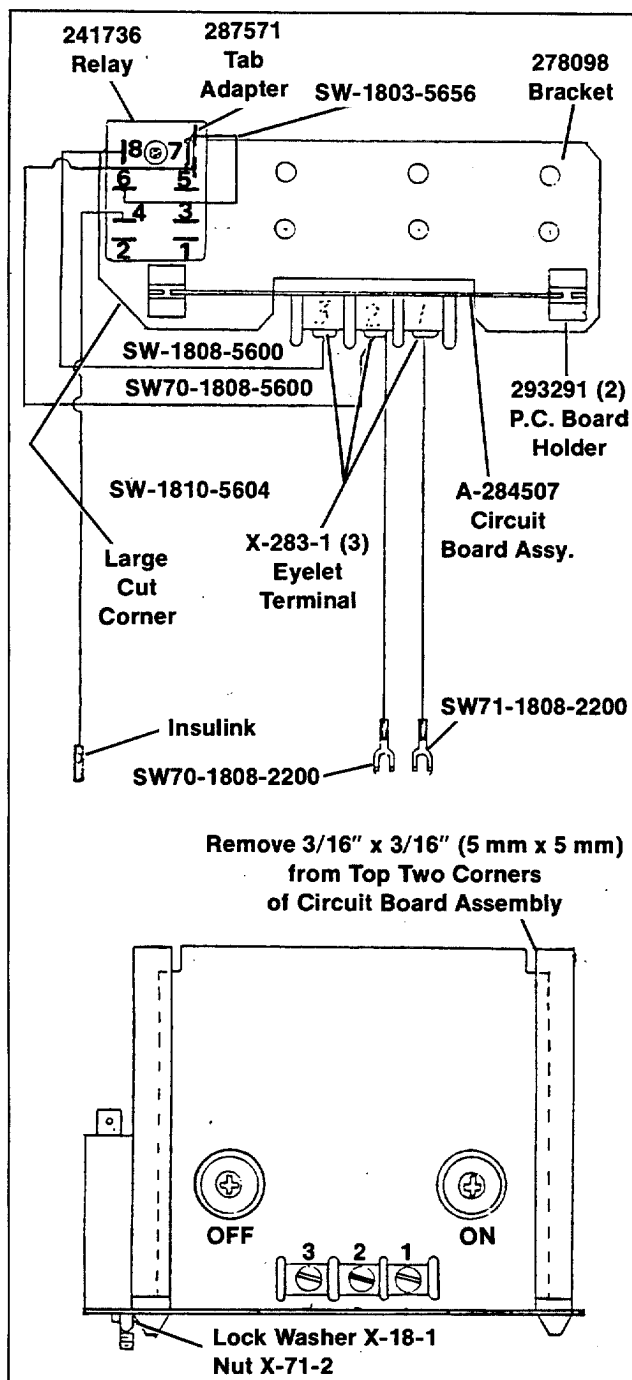


Figure 1. Cyclic Cranking Kit

- h. Twist stripped ends of leads 70 together and crimp-on eyelet terminal. Connect eyelet terminal to terminal 2 of circuit board assembly. Connect push-on terminal to tab adapter.
 - i. Crimp-on eyelet terminal to 8" lead (with no markings), and connect to terminal 3 of circuit board assembly and relay terminal 8.
4. Remove nuts and lock washers from CR, 1CR and 2CR relays.
 5. Mount cyclic cranking kit to top of relays using existing lock washers and nuts.
 6. Connect lead from terminal 1 of cyclic cranking kit to 71 on controller terminal strip. See Figure 2.
 7. Locate starter solenoid (mounted near starter) and determine which lead (70 or 51) from controller is connected to starter solenoid terminal. Remove the other end of this lead from the controller terminal strip. Cut terminal from lead, strip end and connect to lead (with insulink) from cyclic cranking relay terminal 4.
 8. Connect lead from terminal 2 of cyclic cranking kit to 70 on controller terminal strip.
 9. Adjust pots. if required.

PART LISTING

Part No.	Description	Qty.
A-284507	Board Assembly, Circuit	1
X-18-1	Washer, #6 Lock	1
X-71-2	Nut, 6-32	1
X-283-1	Terminal, Eyelet	3
241736	Relay	1
278098	Bracket	1
287571	Adapter, Tab	1
293291	Holder, P.C. Board	2
SW-1803-5656	Lead, 3"	1
SW-1808-5600	Lead, 8"	1
SW-1810-5604	Lead, 10" w/Insulink	1
SW70-1808-2200	Lead, #70 w/Spade	1
SW70-1808-5600	Lead, #70 w/Push-on	1
SW71-1808-2200	Lead, #71	1

NOTE

To increase the time period, turn pot. clockwise.

10. Replace the controller cover.
11. Check that the controller main switch is in the OFF position. Reconnect battery, negative lead last.

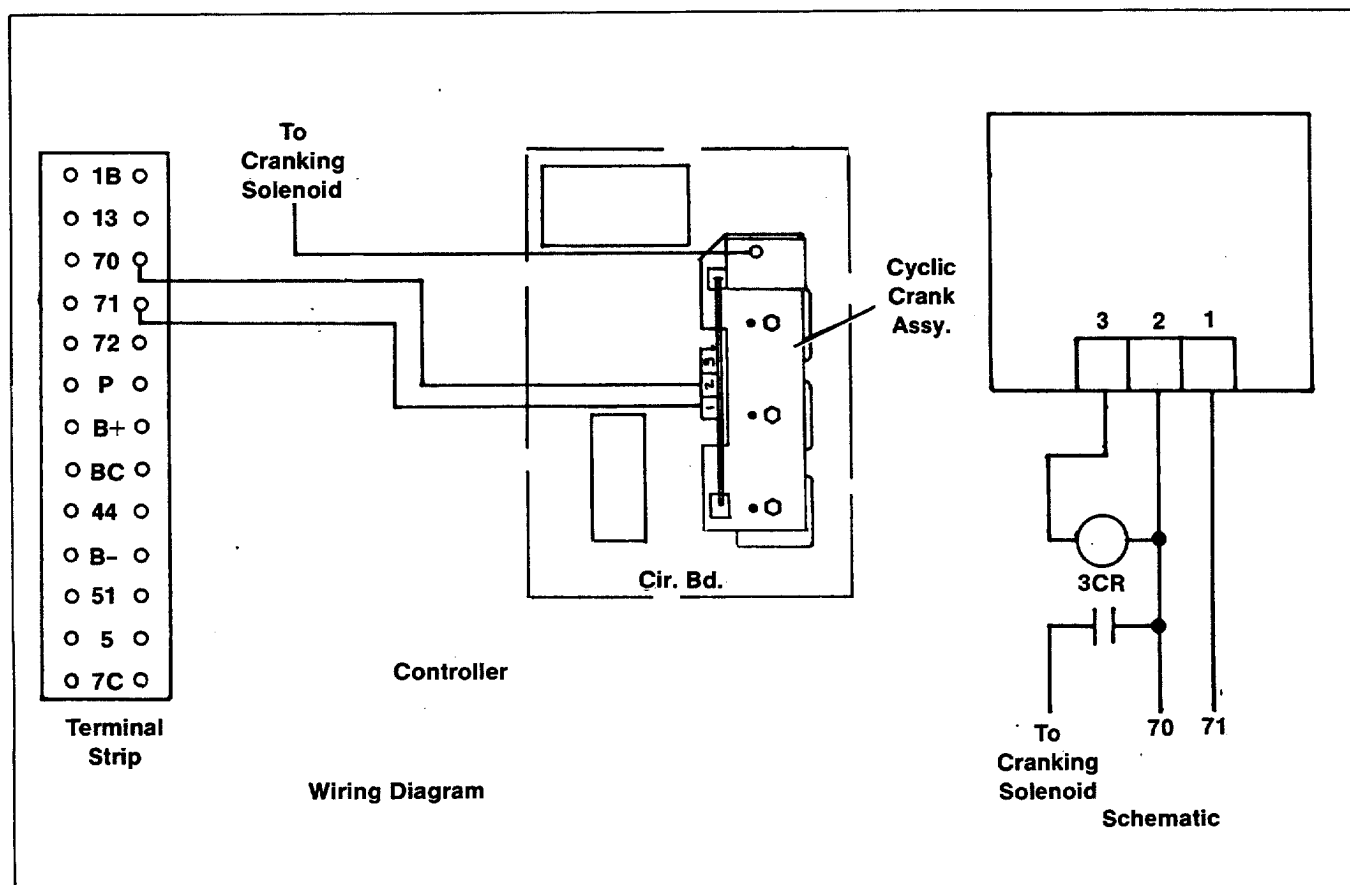


Figure 2. Wiring Diagram