

INSTALLATION INSTRUCTIONS

Original Issue Date: **4/02**
 Model: **10/12/18RY/RZ and 10/12CC/CZ/CFC/CFZ**
 Market: **Residential/Commercial and Mobile**
 Subject: **Governor Control Replacement Kit GM22741**

Introduction

Use this kit to replace governor control board 254902 on model 10/12/18RY/RZ and 10/12CC/CZ/CFC/CFZ generator sets equipped with relay controllers. This instruction sheet explains how to mount the new governor control. Refer to the governor manufacturer’s instructions provided with the kit to calibrate the governor after installation.

Compare the existing governor with Figure 1 to verify that the generator set is equipped with the 254902 governor board before proceeding.

Note: Use this kit to replace only the 254902 board. Do *not* use this kit to replace any other governor.

Compare the kit parts with the parts list at the end of this publication before beginning installation. Perform the steps in the order shown.

Figure 2 shows an illustration of the replacement governor.

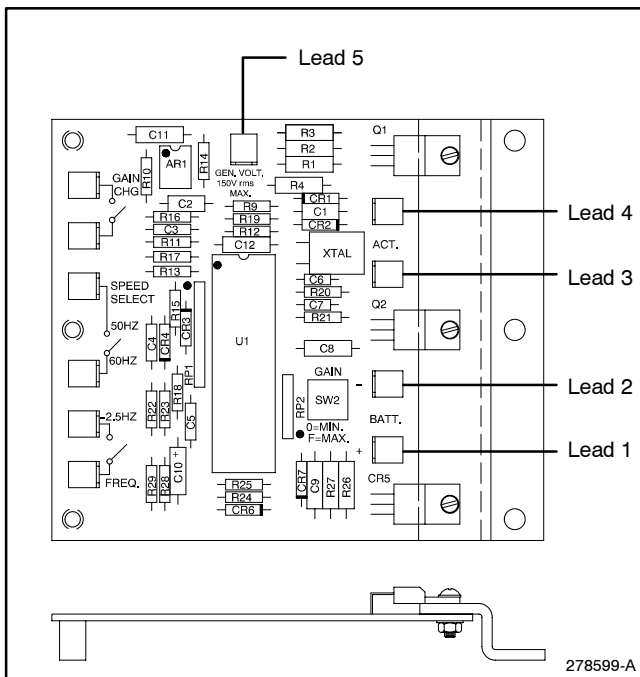


Figure 1 Governor Control Board 254902

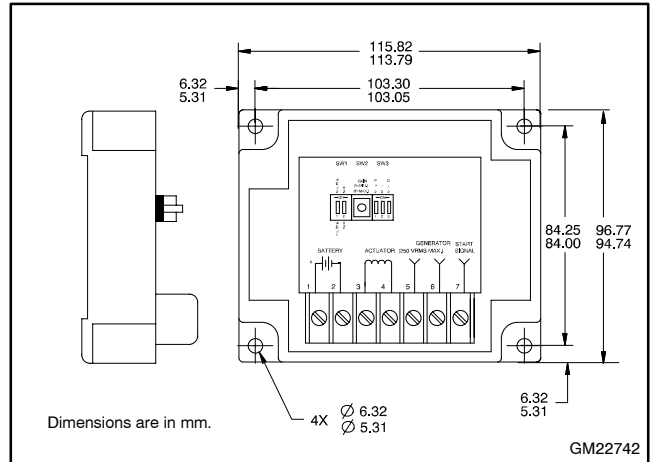


Figure 2 Replacement Governor GM22742

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.

Short circuits. Hazardous voltage/current can cause severe injury or death. Short circuits can cause bodily injury and/or equipment damage. Do not contact electrical connections with tools or jewelry while making adjustments or repairs. Remove all jewelry before servicing the equipment.

Installation Procedure

1. Place the generator set master switch in the OFF position.
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 cover from the generator set controller and locate the governor. See Figure 3.
5. Before disconnecting the old control board, label the leads 1-5 as shown in Figure 1 so that they can be easily reconnected to the new governor controller. Leads 1 and 2 are the battery connection, leads 3 and 4 are the actuator connection, and lead 5 is the voltage connection.
6. Disconnect and remove the old control board, 254902, along with its mounting bracket and spacers.
7. Use GM22742 as a template to mark the locations of the mounting holes for the new controller onto the side of the controller box. Reuse one of the top mounting holes.
8. Drill three 5.3-6.3 mm (0.21-0.25 in.) mounting holes at the marked locations.
9. Use four X-50-1 screws and four X-6210-1 nuts to mount the new controller.
10. Cut the push-on terminals from the governor leads and replace them with the X-285-6 spade terminals provided with the kit.
11. Connect leads 1-5 to terminals 1-5 on the new governor controller. See Figure 2 and the

controller label to identify terminals 1-5. Use the labels attached in step 5 to identify the leads.

Note: Do not use terminals 6 and 7 on the new governor controller.

12. Check that the generator set master switch is in the OFF position.
13. Reconnect the generator set engine starting battery, negative (-) lead last.
14. Reconnect power to the battery charger, if equipped.
15. Follow the governor control manufacturer's instructions provided with the kit to calibrate the controller.
16. Replace the generator set controller cover.

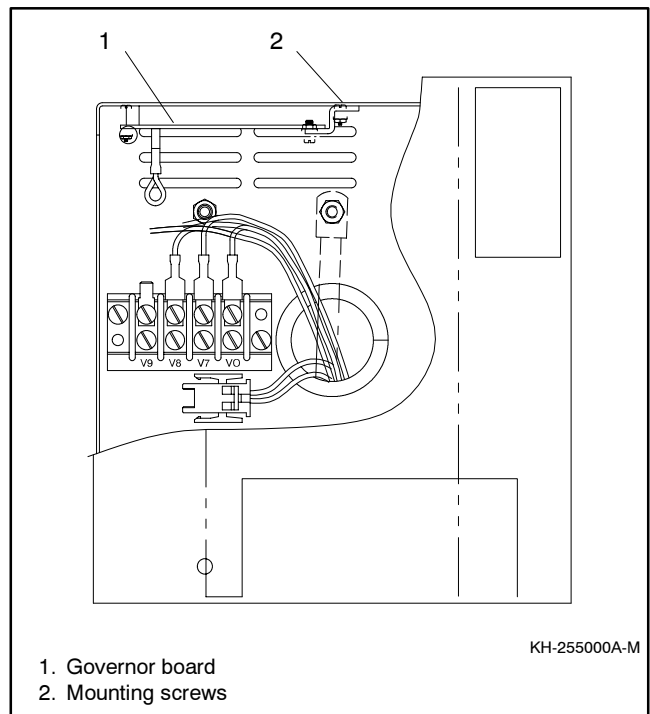


Figure 3 Governor Location (inside the generator set relay controller)

Parts List

Governor Control Replacement Kit

Kit: GM-22741		
Qty.	Description	Part Number
1	Controller, electronic governor	GM22742
7	Terminal, spade, 16-14 AWG	X-285-6
4	Screw, slotted pan head machine	X-50-1
4	Nut, flange whiz, 10-32	X-6210-1