INSTALLATION INSTRUCTIONS

Original Issue Date: 4/00

Model: 17/22RY

Market: Residential/Commercial

Subject: Sound Attenuator Kit GM13784-KP1

Introduction

The sound attenuators reduce the sound levels produced by model 17RY and 22RY generator sets. The attenuators attach to the generator set weather housing and require an engine-mounted silencer.

Read the entire installation procedure and 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 1 shows a model 22RY generator set with attenuators.



Figure 1 Model 22 RY Generator Set with Attenuators

Safety Precautions

Observe the following safety precautions while installing the kit.



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.



Do not work on the generator set until it cools.

Servicing the exhaust system. Hot parts can cause severe injury or death. Do not touch hot engine parts. The engine and exhaust system components become extremely hot during operation.

Installation Procedure

1. Remove the generator set from service.

- 1.1 Place the generator set master switch in the OFF position.
- 1.2 Allow the generator set to cool.
- 1.3 Disconnect the power to the battery charger, if equipped.
- 1.4 Disconnect the generator set engine starting battery, negative (-) lead first.
- 1.5 Remove the generator set housing doors to allow access to the inside.

2. Check for mounting holes in the generator set housing and drill holes if necessary.

- 2.1 Check for mounting holes in the air intake and exhaust ends of the generator housing. Proceed to step 3 if the generator set housing has mounting holes for the attenuators. Otherwise, drill holes in the air intake and exhaust ends of the generator set housing as described below. Refer to Figure 3 for part identification.
- 2.2 Align the edges of the louver cover (GM13791) with the sides and bottom of the housing air intake end. See Figure 2. Mark the five hole locations.
- 2.3 Use a size M drill bit to drill five 0.297 in. (7.5 mm) holes through the generator set housing for the louver cover.
- 2.4 Measure and mark the location of the top left and top right attenuator holes at the locations shown in Figure 2. Drill two 0.297 in. (7.5 mm) holes through the generator set housing at the marks.
- 2.5 Temporarily attach the right-side panel to the generator set housing with one screw (X-25-40), washer (X-465-2) and nut (X-6210-2). Align the top and sides of the panel with the edges of the generator set housing. Mark the location of the second mounting hole.
- 2.6 Remove the attenuator panel and drill a 0.297 in. (7.5 mm) hole at the marked location.
- 2.7 Repeat steps 2.5 and 2.6 for the left-side panel (GM13804).
- 2.8 Repeat steps 2.4 through 2.7 on the generator set exhaust end. Use the hole locations shown in Figure 2 for the top attenuator holes on the exhaust end.

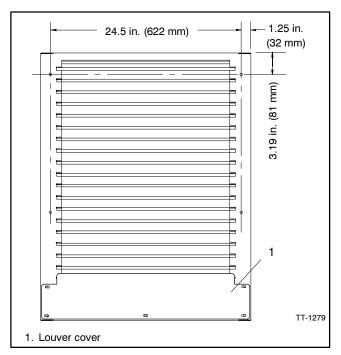


Figure 2 Attenuator Hole Locations and Louver Cover Position (air intake end)

3. Install the exhaust elbow and attenuators.

Note: Refer to Figure 3 for part identification.

Note: Do not use the louver cover on generator set housings with predrilled attenuator mounting holes.

- 3.1 Install the louver cover (GM13791) on the air intake end of the generator set housing using five screws (X-25-40), washers (X-465-2), and nuts (X-6210-2). See Figure 2 and Figure 4 for the louver cover location and orientation.
- 3.2 Attach the exhaust elbow (GM10670) to the generator set exhaust pipe using the clamp (X-722-5) provided. Position the elbow to direct the exhaust down and toward the center of the exhaust louvers as shown in Figure 5 and tighten the clamp.
- 3.3 Mount the side panels with the foam insulation facing the inside of the attenuator. See Figure 4 and Figure 5 for the side panel orientation. Use the 1/4-20 screws (X-25-40), washers (X-465-2), and nuts (X-6210-2) (if necessary) provided.
- 3.4 Mount the angled baffles (GM13805) using four screws through the attenuator side panels for each baffle, as shown in Figure 4 and Figure 5.

2 TT-1279 4/00

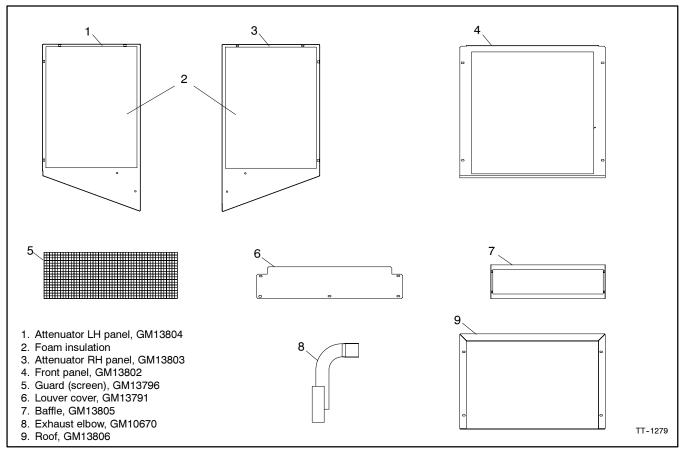


Figure 3 Sound Attenuator Parts (Hardware and screen brackets are not shown.)

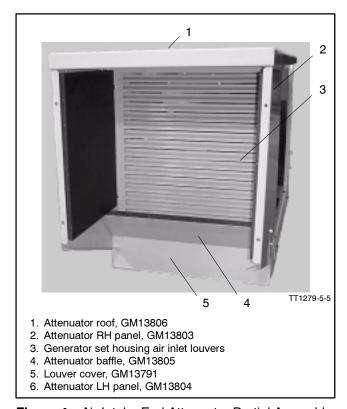


Figure 4 Air Intake End Attenuator Partial Assembly

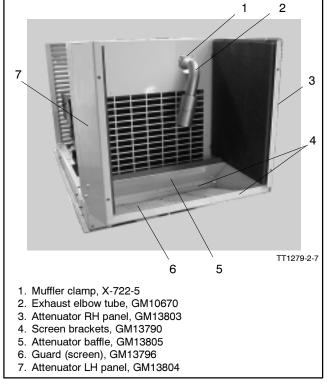


Figure 5 Exhaust End Attenuator Assembly (roof and front panel removed)

TT-1279 4/00 3

- 3.5 Attach the attenuator roof panels (GM13806) using 1/4-20 screws (X-465-2) and washers (X-25-40).
- 3.6 Place two screen brackets in each attenuator. Set the screen brackets (GM13790) in place as shown in Figure 5.
- 3.7 Set one guard (screen, GM13796) in each attenuator. Secure the guards and brackets as shown in Figure 6 using the plastic clips (X-6340-2) provided.
- 3.8 Align the attenuator edges flush with the generator set housing and tighten all hardware.
- 3.9 Attach the attenuator front panels (GM13802) to the side panels. Align the edges and tighten the hardware. See Figure 1 for a picture of the generator set with the attenuators installed.

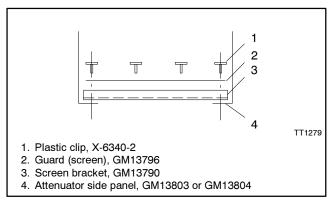


Figure 6 Guard and Screen Bracket Assembly

- 4. Return the generator set to service.
- 4.1 Reinstall the generator set housing doors.
- 4.2 Check that the generator set master switch is in the OFF position.
- 4.3 Reconnect the generator set engine starting battery, negative (-) lead last.
- 4.4 Reconnect power to the battery charger, if equipped.
- 4.5 Return the generator set master switch to its original position (AUTO for automatic operation).

Parts List

Sound Attenuator Kit

Kit: PA-GM13784-KP1		
Qty.	Description	Part Number
1	Tube, exhaust elbow	GM10670
4	Bracket, screen	GM13790
1	Cover. louver	GM13791
2	Guard, air inlet	GM13796
2	Attenuator, sound, front panel	GM13802
2	Attenuator, sound, RH panel	GM13803
2	Attenuator, sound, LH panel	GM13804
2	Attenuator, sound, baffle	GM13805
2	Attenuator, sound, roof	GM13806
36	Washer, 1/4	X-25-40
36	Screw, 1/4-20	X-465-2
1	Clamp, muffler	X-722-5
12	Nut, spiralock	X-6210-2
20	Clip, panel fastener	X-6340-2

TT-1279 4/00