



7CMZ/CKM-RV “Low-Profile” Muffler Kits

Kit	Description
PA-278221	Above-floor generator set mounting (curb-side exhaust)
PA-278206	Above-floor generator set mounting (street-side exhaust)
PA-278219	Below-floor generator set mounting (curb-side, rear exhaust)
PA-278205	Below-floor generator set mounting (street, or curb-side exhaust)
PA-278407	Below-floor generator set mounting (street, or curb-side exhaust)

The 7CMZ/CKM “Low Profile” models have five exhaust kits supplying spark-arrestor mufflers and mounting hardware. Two versions are designed for installation on vehicles with the generator compartment located at floor level, while the others are intended for generators installed with mounting trays below the vehicle floor.

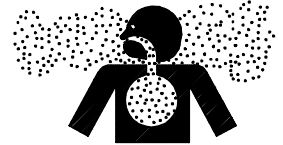
Since length varies with most installations, a tail pipe is not supplied. However, a tail pipe must be installed to direct exhaust gases beyond the vehicle’s perimeter. Use a tail pipe with few, and gradual bends, to avoid excessive back pressure. Face the tail pipe end away from the normal air stream, and position so that exhaust gases may not be drawn into the vehicle’s interior through windows, doors, air conditioners, etc. To meet CSA standards, maintain a minimum 3-inch clearance between exhaust piping and any combustible material in the compartment, or surrounding exhaust outlet in the compartment floor.

To install exhaust kits, see the following procedure. See the kit parts lists and illustrations to identify and locate components.



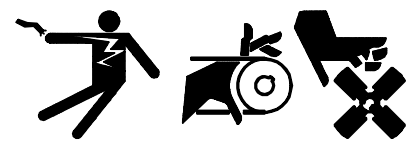
WARNING

Carbon monoxide can cause death, severe nausea or fainting. Install exhaust system tail pipe so discharged exhaust gases will not be drawn into vehicle interior through windows, doors, air conditioners, etc. A tail pipe must be installed to direct exhaust beyond the vehicle’s perimeter. Do not use flexible tail piping since this type could crack and allow lethal exhaust fumes to enter the vehicle.



WARNING

Accidental starting can cause death or serious personal injury. Disconnect battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator. The generator set can be started by remote start/stop switch unless this precaution is followed.



WARNING

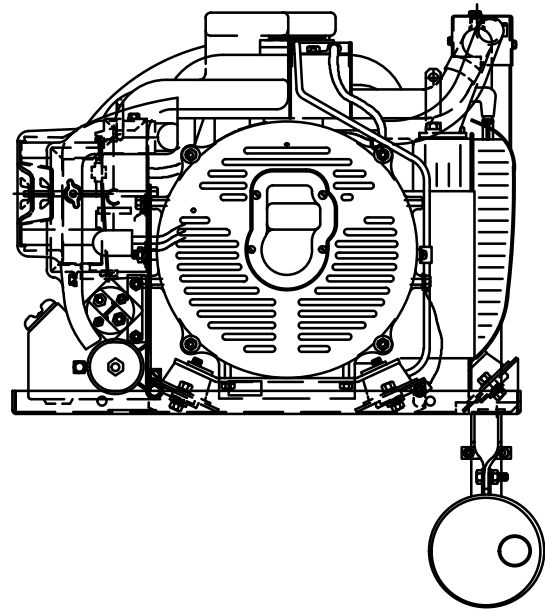
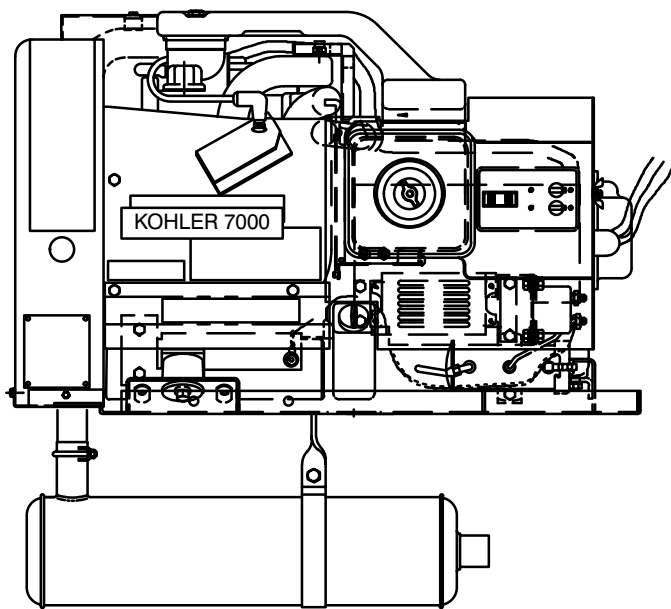
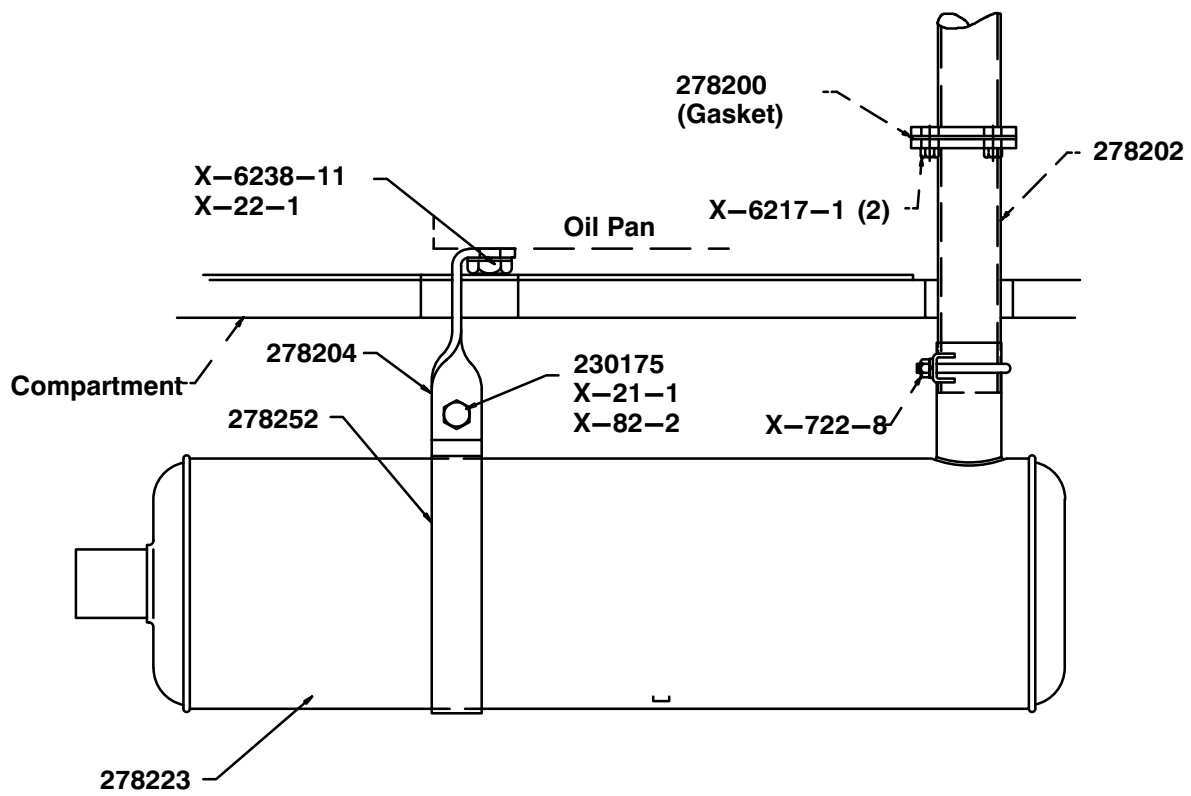
Hazardous noise can cause loss of hearing. Never operate generator without adequate hearing protection or muffler. Never operate generator with faulty exhaust system.



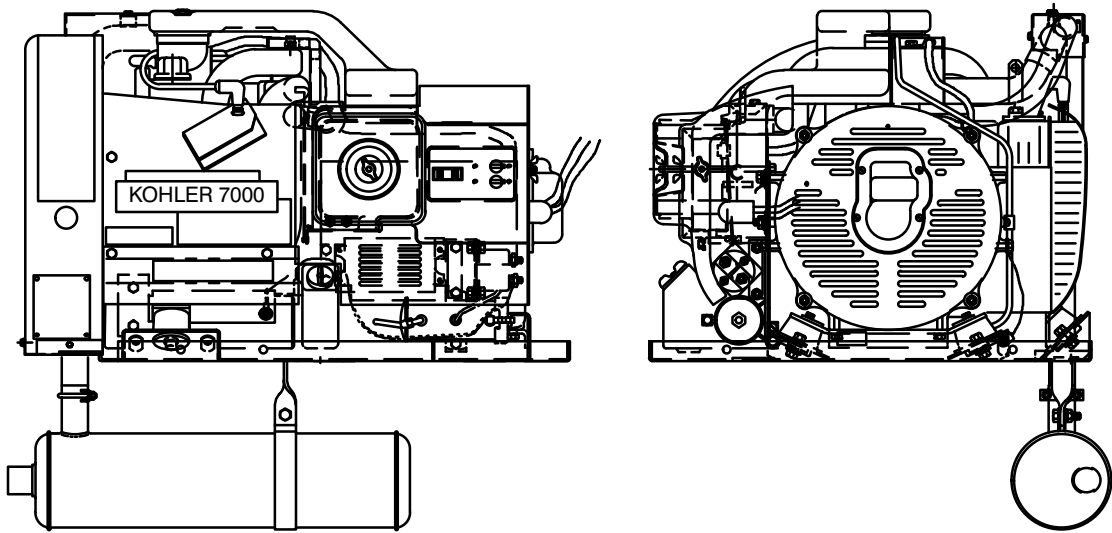
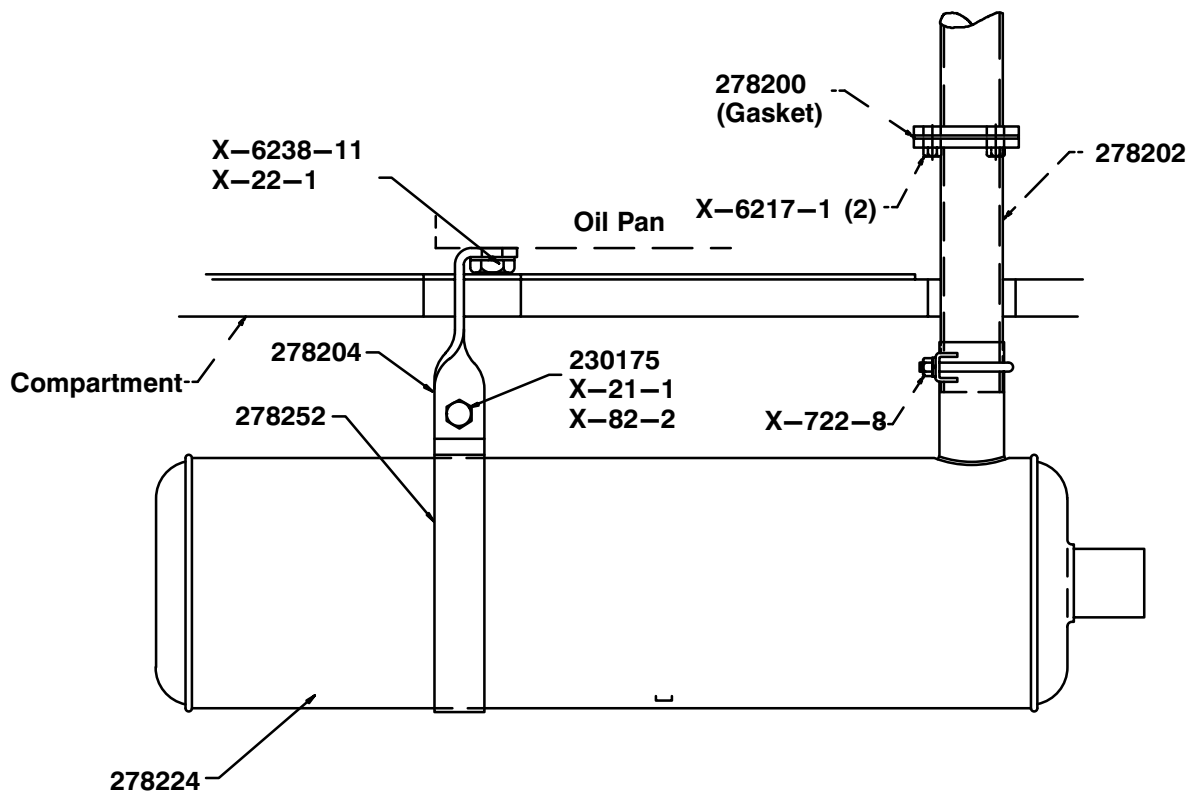
WARNING

Hot exhaust system can ignite adjacent combustible materials. Do not locate electrical wiring, fuel lines, or combustible material above the exhaust muffler. Be careful when parking your RV to prevent grass fires started by exhaust system and hot exhaust gases.

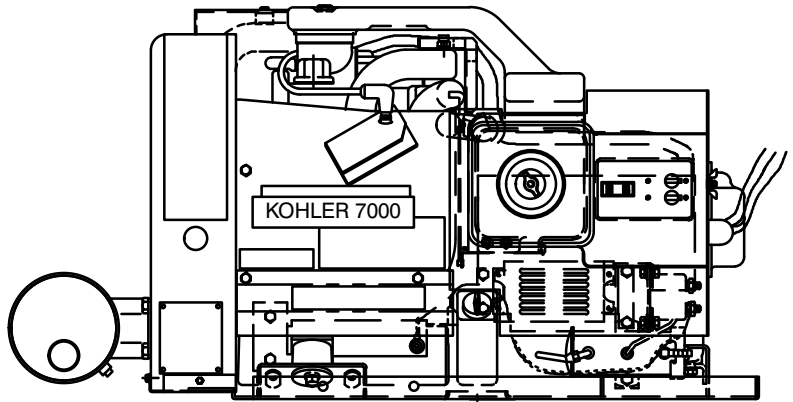
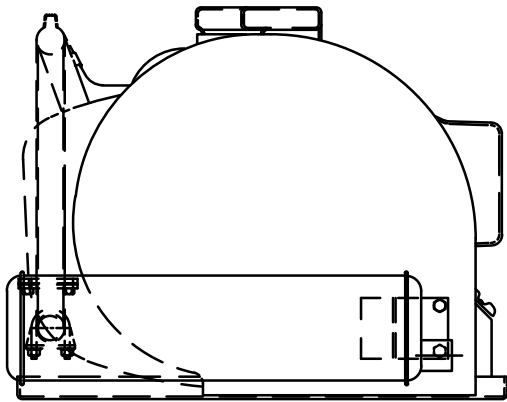
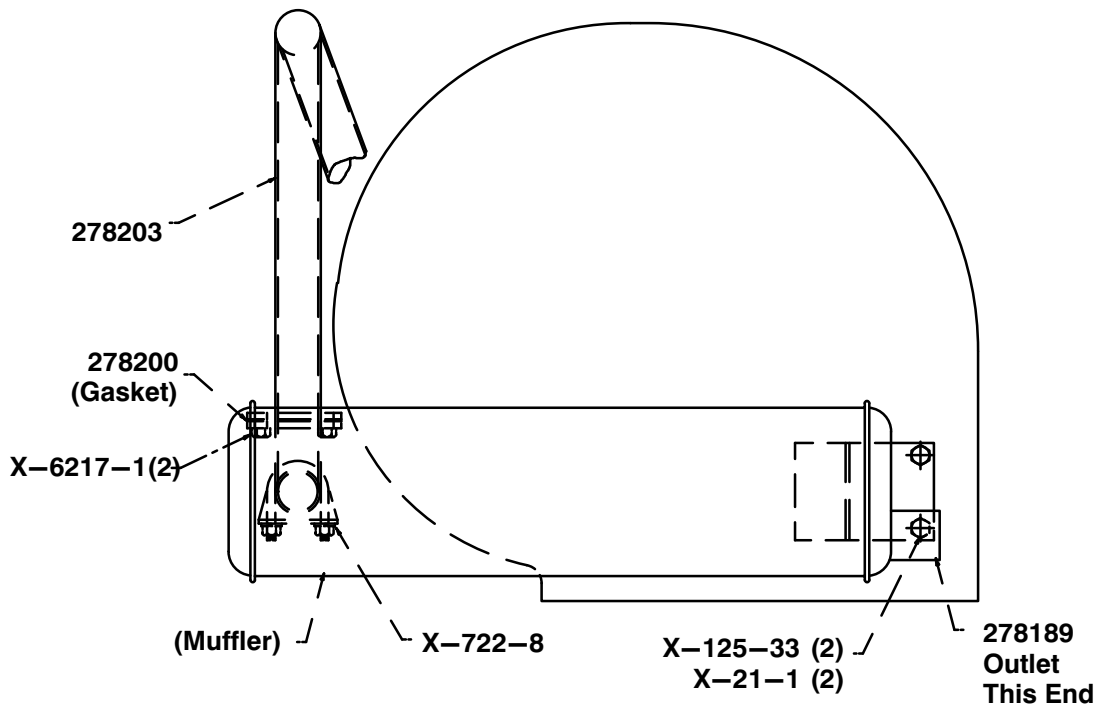




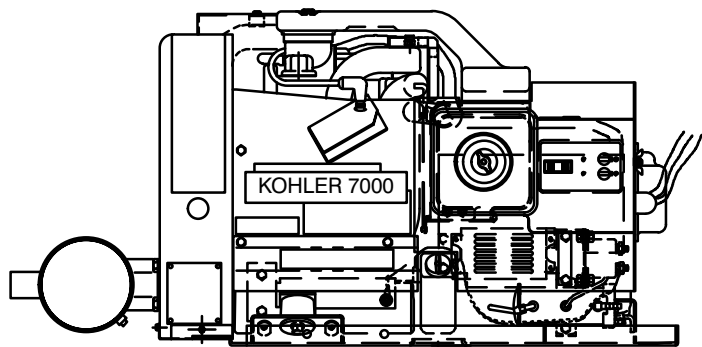
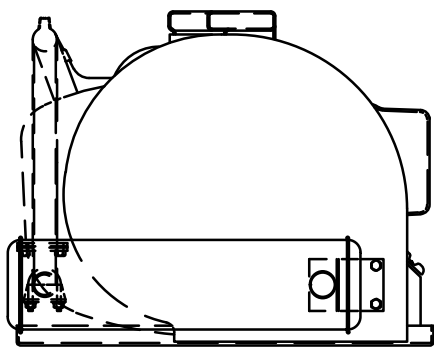
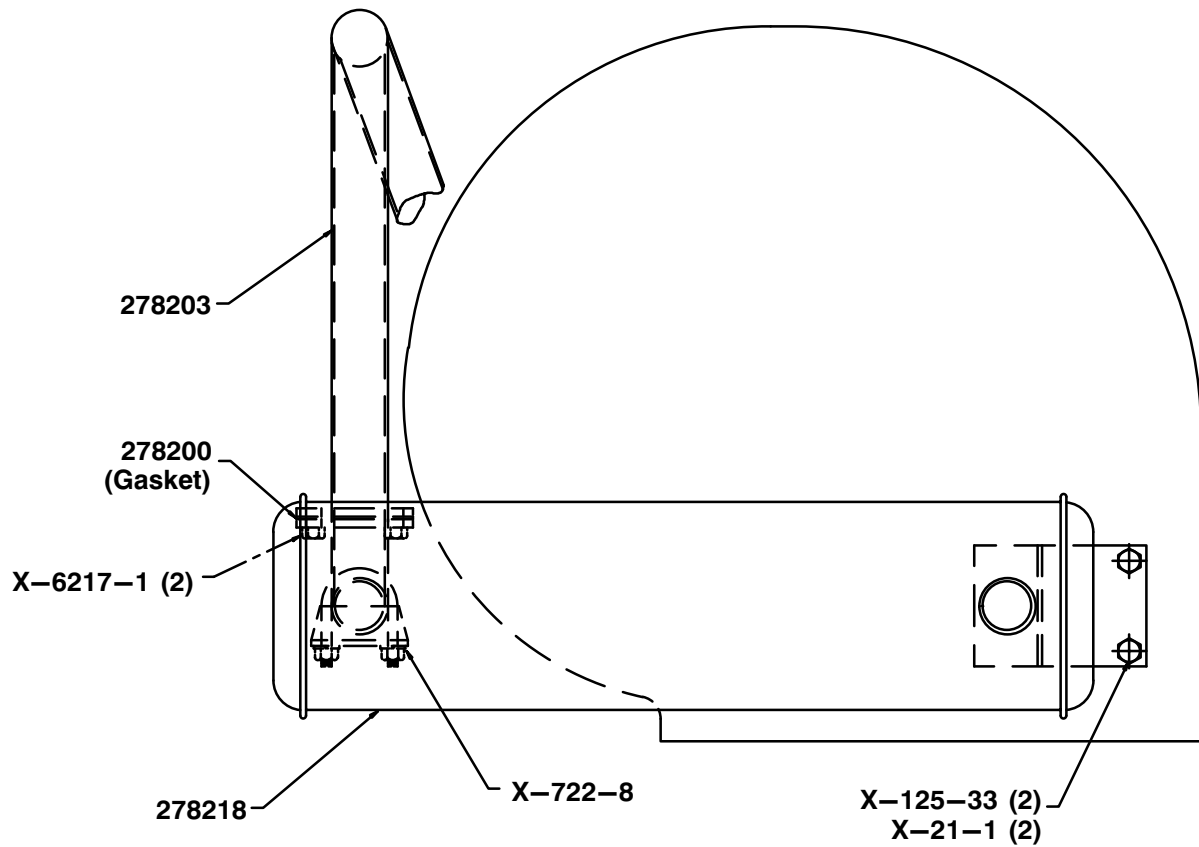
PA-278206
Above-Floor Generator Set Mounting,
(Street-Side Exhaust)



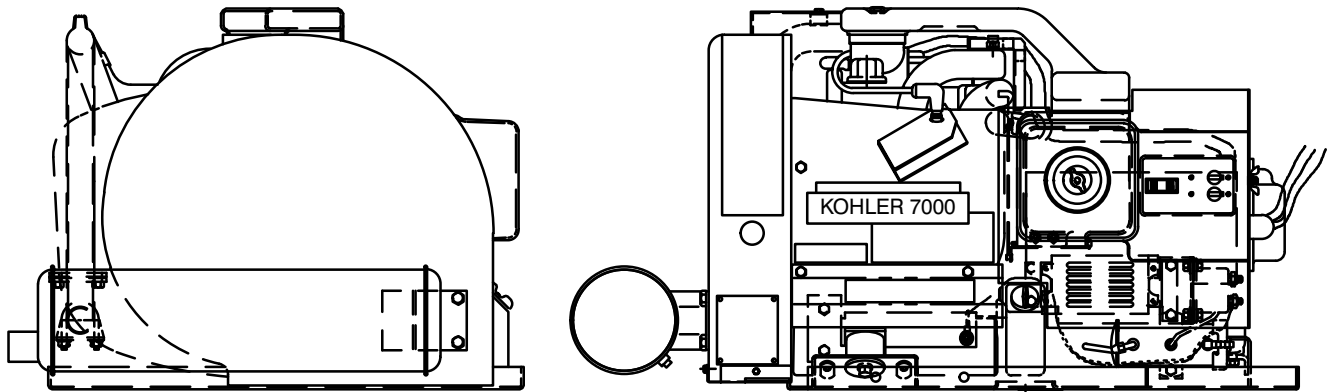
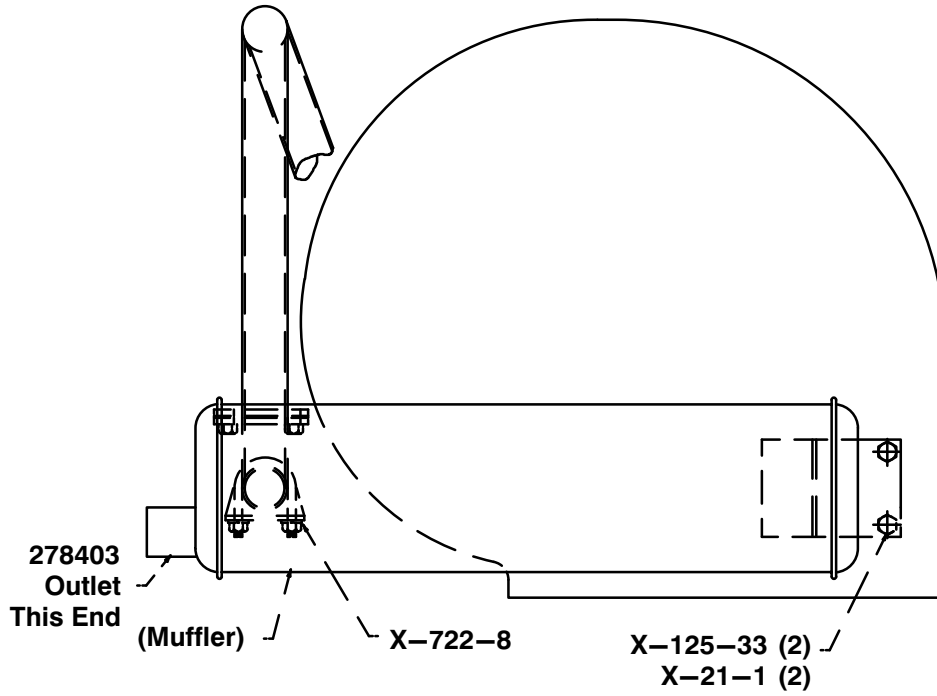
PA-278221
Above-Floor Generator Set Mounting,
(Curb-Side Exhaust)



PA-278205
Below-Floor Generator Set Mounting,
(Street, or Curb-Side Exhaust)



PA-278219
Below-Floor Generator Set Mounting,
(Curb-Side, Rear Exhaust)



PA-278407
Below-Floor Generator Set Mounting,
(Street, or Curb-Side, Side Exhaust)

Installation

1. Disconnect generator set battery, negative lead first.
2. Remove old muffler and mounting hardware, if installed.
3. Install gasket (278200, if supplied with kit) between engine manifold and exhaust pipe (278202 or 278203). Secure exhaust pipe to manifold with two screws (X-6217-1).
4. Open muffler clamp (X-722-8) and slide it over the muffler inlet. Slide the muffler inlet over the engine exhaust pipe for a minimum of 1 inch (25mm).
5. If installing generator set above floor, attach exhaust bracket (278204) to engine oil pan using screw (X-6238-11) and lock washer (X-22-1). Slide muffler mounting strap (278252) over muffler and attach to exhaust bracket with screw (230175), lockwasher (X-21-1) and hex nut (X-82-2).
6. If installing generator below floor, secure the muffler to the generator shroud using two screws (X-125-33) and washers (X-21-1).
7. Align muffler until parallel with generator set mounting tray and tighten muffler installed in step 4.
8. Slide tail pipe (not supplied with kit) over exhaust pipe, overlapping a minimum 1 inch (25mm) and secure with 1-3/8-inch muffler clamp (not supplied with kit). Secure tail pipe with proper mounting hangers to prevent unwanted movement of tail pipe.
Note: Muffler outlet OD is 1-3/8 inch (35mm).
9. Reconnect battery, negative lead last.
10. Test run the generator set to check for exhaust leaks and proper clearance of components.

Kit Parts

Description	Qty.	PA-278221	PA-278206	PA-278219	PA278205	PA-278407
Washer, lock 5/16-in.	1	X-21-1	X-21-1			
	2			X-21-1	X-21-1	X-21-1
Washer, Lock 3/8-in.	1	X-22-1	X-22-1			
Screw, HC 5/16-18 x 5/8 in.	2	X-6217-1	X-6217-1	X-6217-1	X-6217-1	
Screw, HC 5/16-18 x 1-1/2 in.	1	230175	230175			
Screw, HC 3/8-16 x 1 in.	1	X-6238-11	X-6238-11			
Muffler Clamp	1	X-722-8	X-722-8	X-722-8	X-722-8	X-722-8
Nut, hex 5/16-18	1	X-82-2	X-82-2			
Manifold Gasket	1	278200	278200	278200	278200	
Exhaust Pipe	1	278202	278202	278203	278203	
Bracket, exhaust	1	278204	278204			
Muffler	1	278224	278223	278218	278189	278403
Strap, muffler mounting	1	278252	278252			
Screw, HC 5/16-18 x 1/2 in	2			X-125-33	X-125-33	X-125-33