

INSTALLATION INSTRUCTIONS

Original Issue Date: 9/95
Model: 80/100 kW (Detroit Diesel Powered)
Market: Industrial
Subject: Sound Shield Enclosure Kits PA-324805, 324805, PA-327171, 327171

Sound shield enclosure provides sound dampening of an operating generator set and applies to the following sound shield enclosure kits.

Models	Kits
80/100 kW	PA-324805-SD, 324805-SD, PA-327171, 327171

The sound shield enclosure is preassembled at the factory and some final assembly is required at the time of installation. For sound shield enclosure dimensions see Figure 1 and Figure 2.

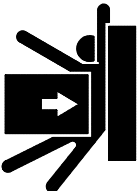


Accidental starting.
Can cause severe injury or death.

Disconnect battery cables before working on generator set (negative lead first and reconnect it last).

Accidental starting can cause severe injury or death. Turn generator set master switch to OFF position, disconnect power to battery charger, and remove battery cables (remove negative lead first and reconnect it last) to disable generator set before working on any equipment connected to generator set. The generator set can be started by automatic transfer switch or remote start/stop switch unless these precautions are followed.

⚠ WARNING



Unbalanced weight.
Improper lift can cause severe injury or death and/or equipment damage.

Do not use lifting eyes.
Use lifting bars through holes in skid to lift generator set.

Installation

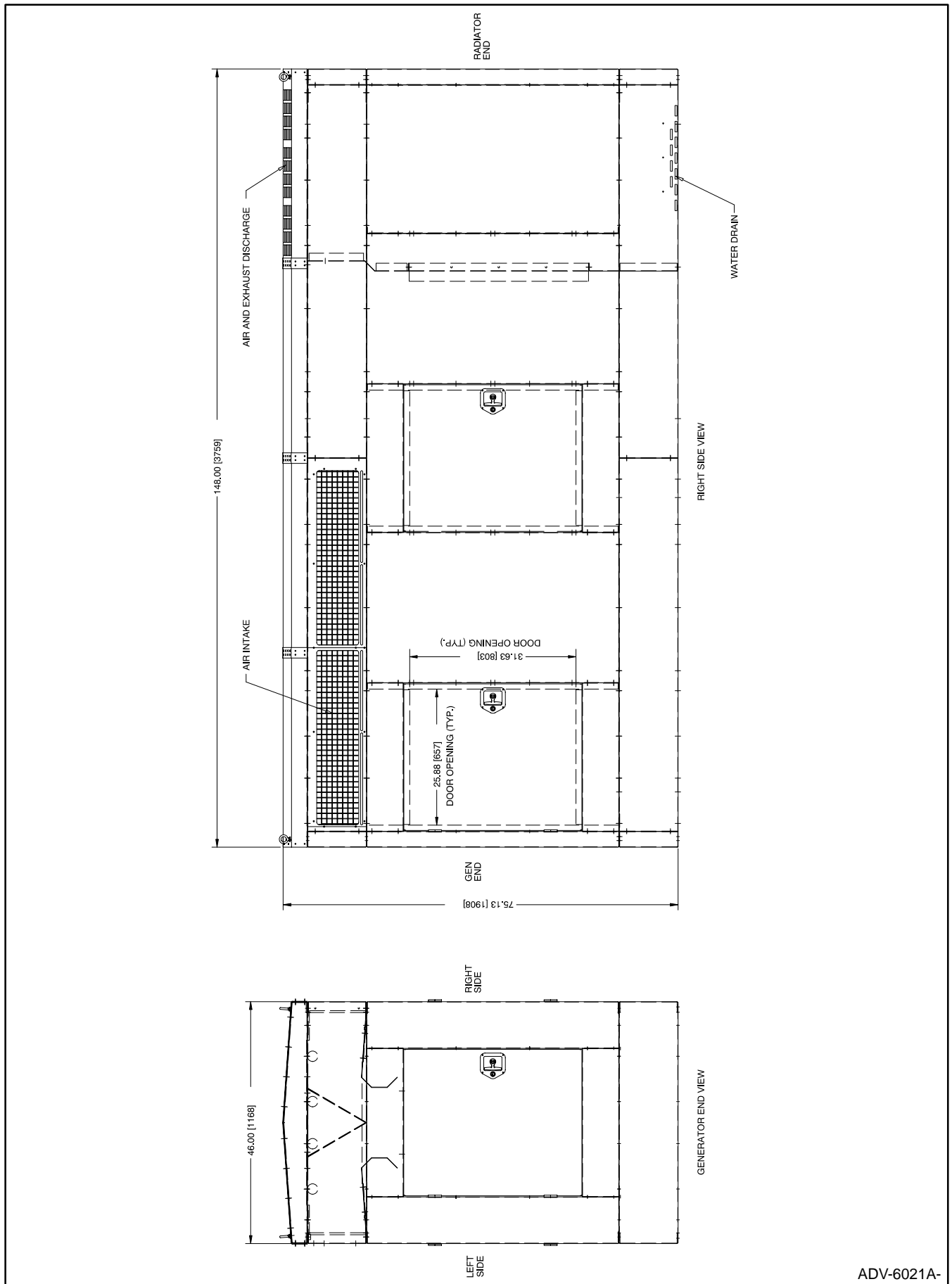
1. Move generator set master switch to the OFF position. Disconnect the generator set engine starting battery, negative (–) lead first.

2. Mark sound shield enclosure access doors so they can be reinstalled in their original locations. Doors and openings are factory aligned for fit and appearance.

3. Remove sound shield enclosure access doors.

4. Remove screws attaching the sound shield enclosure to the shipping pallet.
5. Remove drill screws attaching radiator duct flange to radiator shroud, if installed. See Figure 3. Do not remove bolts attaching radiator duct flange to the sound shield enclosure.

6. Remove any shipped-loose components, packing material, and literature from inside the sound shield enclosure. If exhaust piping is preassembled, be sure that exhaust system is disconnected at generator set exhaust manifold.



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Figure 1. Sound Shield Enclosure Dimension Drawing

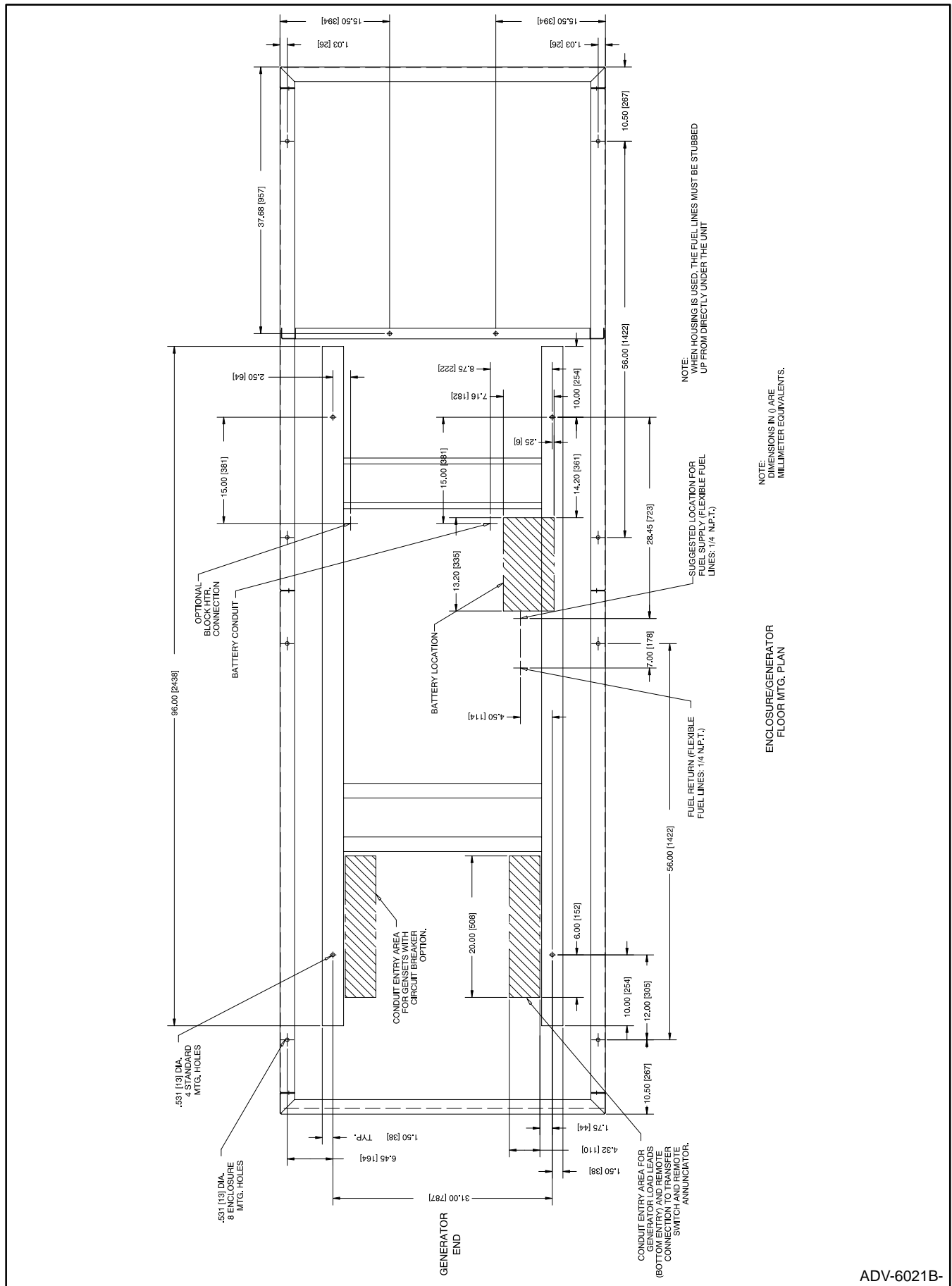
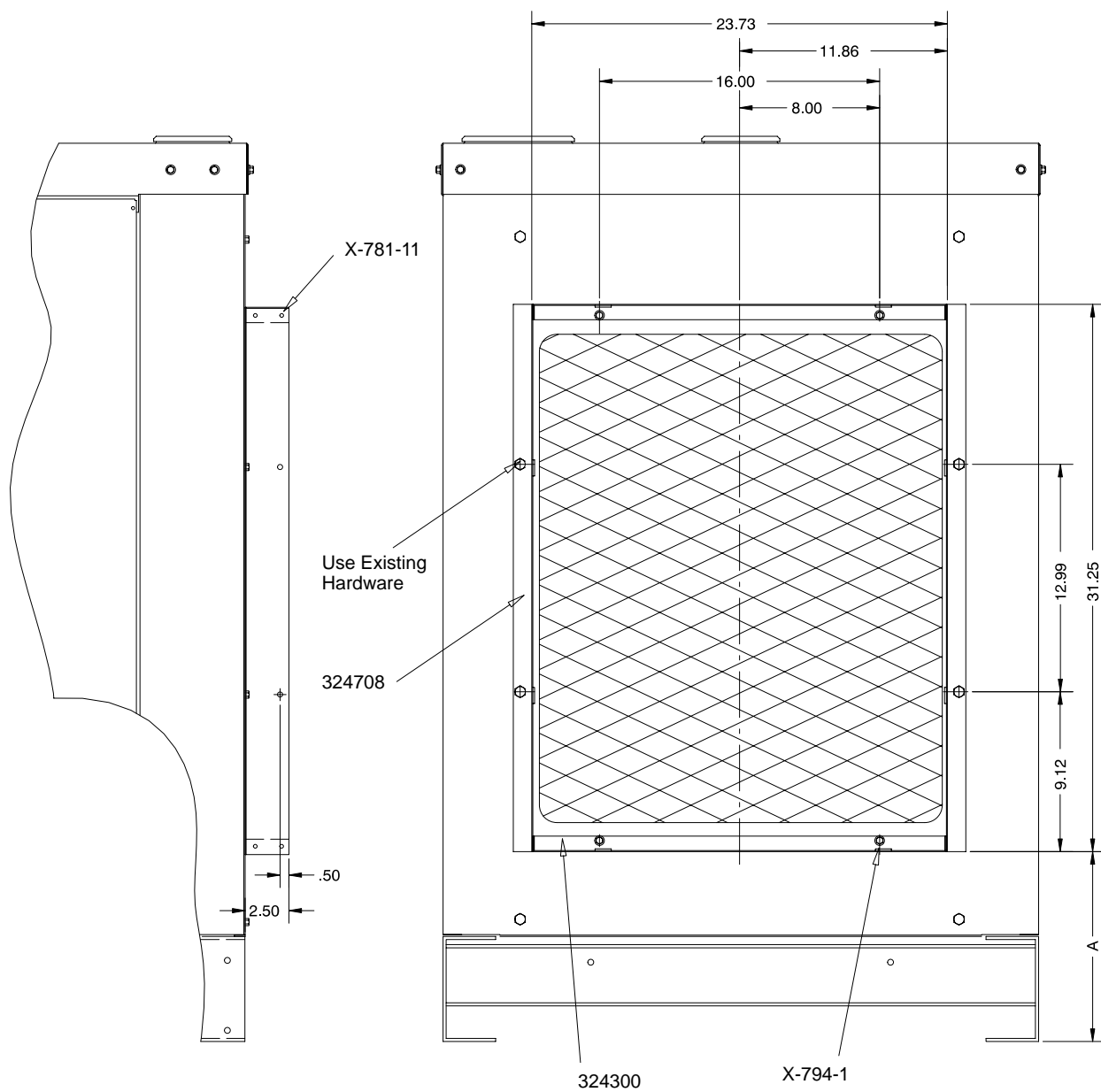


Figure 2. Sound Shield Enclosure Dimension Drawing



AR-324000-A

Figure 3. Radiator Duct Flange Mounting

7. Check weight of sound shield enclosure and choose lifting equipment capable of handling the weight. Use applicable sound shield enclosure spec sheet for weights. Place sound shield enclosure on a solid flat surface until installed over generator set.

Hoist the sound shield enclosure, including the silencer at each eye bolt on top of the sound shield enclosure. Lift slowly to prevent damage to generator set and/or sound shield enclosure. The unit may require balancing to achieve vertical removal because the silencer is mounted to the sound shield enclosure. Use load levelers as necessary to balance the load. If exhaust system is preassembled, use care that loose exhaust system does not damage engine and/or sound shield enclosure.

8. Consult applicable generator set spec sheet for generator set weight. Lift generator set and place it on the mounting base using lifting equipment capable of handling the weight. Mount generator set to mounting base. Remove lifting equipment from generator set.
9. Raise sound shield enclosure and place it over generator set. Observe each corner for adequate clearance while carefully lowering sound shield enclosure. Check that exhaust system is correctly aligned if unit has preassembled exhaust piping. Remove hoist equipment from sound shield enclosure.
10. Align radiator duct flange to radiator shroud. Attach radiator duct flange to radiator shroud using four drill screws (X-794-1). Predrill mounting holes if an impact wrench is not available. See Figure 3.
11. Secure sound shield enclosure to mounting base. See Figure 2 for hole locations.

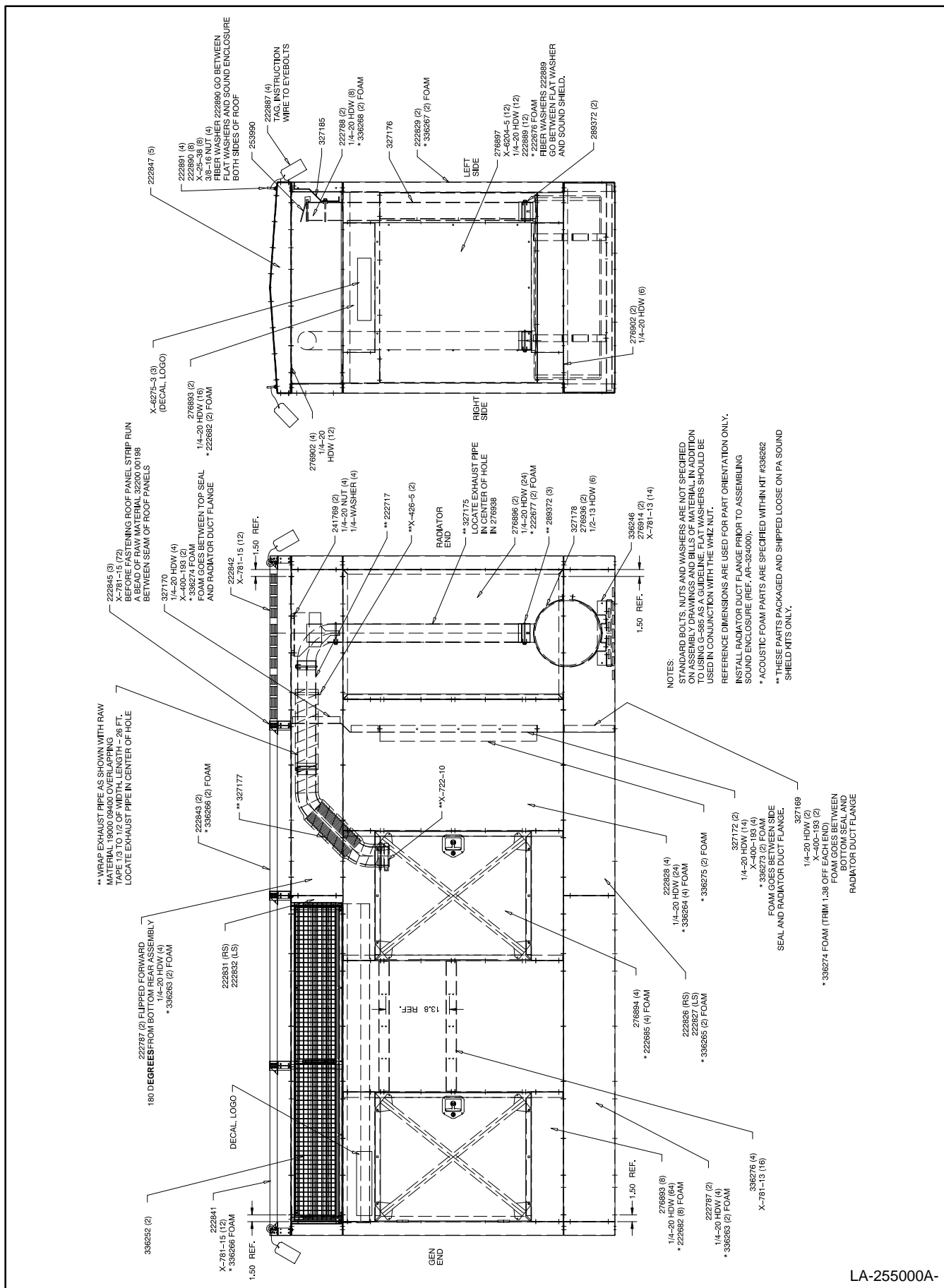
NOTE

The exhaust system may be partially preassembled on some units.

12. Starting at exhaust muffler install exhaust pipes (327175, 222717, and 327177). At each connection install exhaust clamps (289372). Install exhaust clamp (X-722-10) at exhaust manifold outlet. Do not yet final tighten exhaust clamps. See Figure 4 or Figure 5.

With each section installed and exhaust pipe centered in exhaust port of sound shield enclosure, final tighten all exhaust clamps.

13. Install fiberglass exhaust wrap (19000 09400) over exhaust piping starting at exhaust manifold. Overlap exhaust wrap about 1/3 to 1/2 of the material width. Use hose clamp (X-426-5) to secure the beginning of the exhaust wrap. The end of exhaust wrap must stop at or beyond point where exhaust pipe goes through the hole in the sound shield enclosure. Secure the end of exhaust wrap with second hose clamp (X-426-5).
14. Finalize generator set installation. Install battery rack and cables. Connect fuel supply and return line to generator set. Make all AC connections and replace junction box panels. Connect all remote electrical wiring (remote emergency stop, remote annunciator, etc.).
15. Install all sound shield enclosure access doors in their original locations. If required, readjust doors for fit and appearance. Check that all hardware has been tightened. With generator set master switch in the OFF position, reconnect engine starting battery, negative (–) lead last.



LA-255000A-

Parts List				
KITS PA-324805, 324805, PA-327171, 327171			Unique Parts	
Qty.	Description	Common Parts	PA-324805-SD 324805-SD	PA-327171 327171
8	Washer, plain 1.25 in. (32 mm) O.D.	X-25-38		
8	Spacer	X-400-193		
2	Clamp, hose 2 17/32	X-426-5		
2	Tie, cable	X-468-7		
1	Clamp, muffler	X-722-10		
12	Nut, retainer	X-6204-5		
3	Decal			X-6276-8
1	Decal		X-6301-2	
2	Decal		X-6301-4	
2	Decal		X-6302-2	
1	Clamp, U	X-722-5		
8	Rivet, pop 1/8 in. (3 mm) aluminum/steel	X-781-11		
90	Rivet, pop 1/8 in. (3 mm) stainless	X-781-13		
152	Rivet, pop 1/8 in. (3 mm) aluminum/stainless	X-781-15		
4	Screw, drill hex.	X-794-1		
32	Foam, seal tape (ft.)	19000 08100		
26	Insulation, fiberglass (ft.)	19000 09400		
53	Foam, PVC seal tape (ft.)	19010 08118		
1	Pipe, exhaust	222717		
4	Bracket, battery charger		324807	336276
1	Strap		324800	336255
1	Support, foam wedge		324798	336253
2	Strap, foam wedge		324799	336254
4	Tag, instruction	222887		
12	Washer, fiber	222889		
8	Washer, fiber	222890		
4	Bolt, eye	222891		
4	Louver, air intake		324803	336258
2	Baffle		324797	336251
1	Channel, air intake		324789	222831
2	Support, screen		324801	336257
1	Channel, air intake		324788	222832
2	Louver, air intake		324804	336259
2	Mount, controller	241769		
1	Cap, rain	253990		
1	Muffler, exhaust	327178		
5	Support, roof		324794	222847
2	Panel, roof		324792	222843
1	Panel, end roof		324791	222842
1	Panel, end roof		324790	222841
4	Support, corner		324787	222829
12	Support, door		324758	276893
5	Door		324759	276894
4	Support, side door		324786	222898
2	Panel, side		324761	276896
1	Door, front		324762	276897
4	Channel, solid		324781	222787
1	Channel, drain		324784	222826
4	Channel, end		324783	222788
12	Gusset, corner		324767	276902
2	Support, screen		324802	336256
2	Support, baffle		324796	336256
3	Strip, roof panel		324793	222847
1	Channel, drain		324785	222827
1	Support, muffler		324808	336246
2	Stiffener, muffler support		324774	276914
10	Brace, door		324775	276915
2	Screen	336252		
5	Latch, key locking	276918		
2	Clamp, muffler	276936		
1	Pipe, exhaust	327175		
1	Support, exhaust	327185		

Parts List (continued)				
KITS PA-324805, 324805, PA-327171, 327171			Unique Parts	
Qty.	Description	Common Parts	PA-324805-SD 324805-SD	PA-327171 327171
1	Pipe, exhaust	327176		
5	Clamp, exhaust pipe	289372		
40	Screw, flat head machine	295098		
10	Hinge, split	297601		
2	Frame, air duct	324300		
2	Frame, air duct	324708		
1	Seal, top		324806	327170
1	Seal bottom		324782	327169
2	Seal, side		324795	327172
1	Pipe, flex exhaust	327177		
1	Kit, acoustic foam	336262		