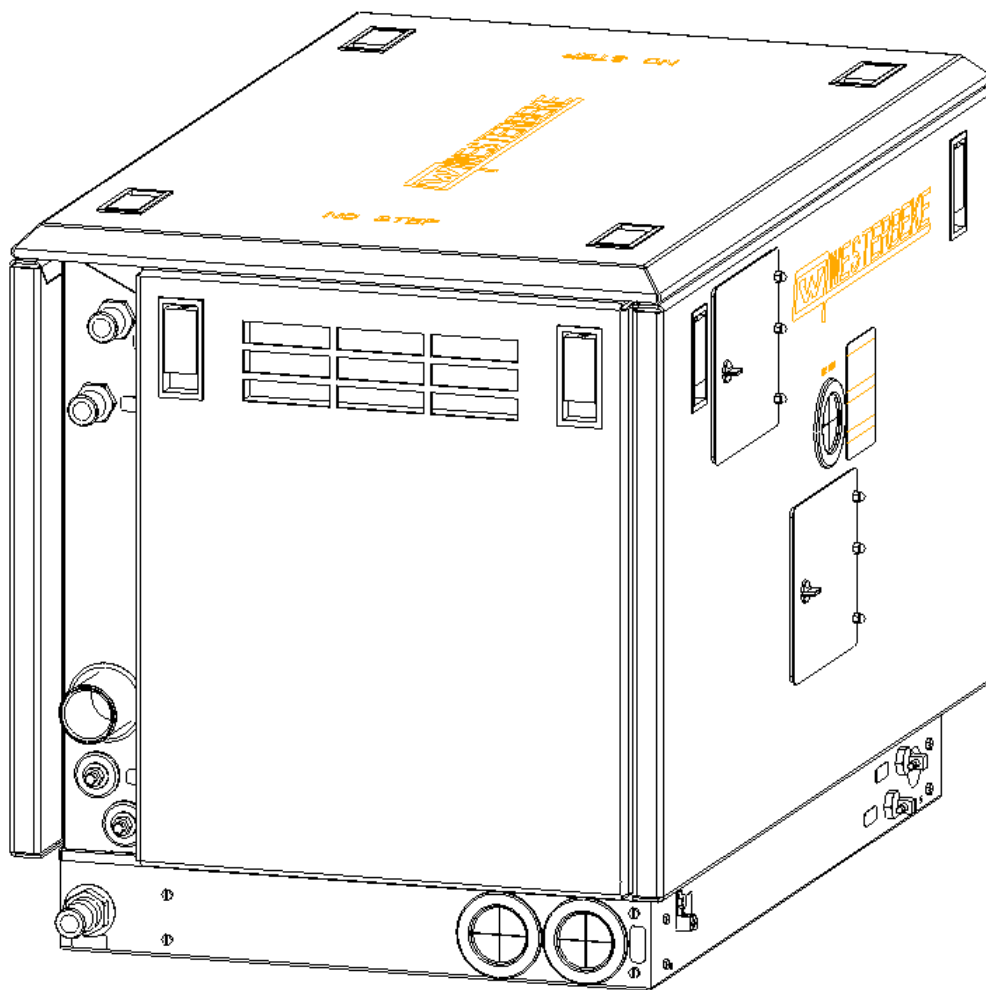


# SOUND GUARD SST INSTALLATION INSTRUCTIONS & PARTS LIST

FOR DIESEL GENERATOR MODELS 8.0 BTDA, 10.0 BTDA, 11.5 BTD, 12.6 BTD



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## INTRODUCTION

Westerbeke's SOUND GUARD SST for diesel generators consists of five aluminum powder-coated panels and a stainless steel base. The panels are lightweight and easy to clean. They attach to a stainless steel frame and to the base to form a high quality rigid, compact, sound-insulated enclosure for your generator. The front and rear end panels each have a plenum attached to allow the entry and circulation of cooling air inside the SOUND GUARD SST.

The base serves as a drip pan. A drip pan is an important part of your generator installation. Not only will it help maintain a clean compartment, but drip pans are also required in marine installations.

Assembling Westerbeke's SOUND GUARD SST is quick and easy, even in close quarters. A flat-head and a Philips head screwdriver are required to assemble the stainless steel frame. The panels require no assembly and can be easily removed for inspection and servicing. If necessary, the entire enclosure can be disassembled in just a few minutes.

The base and frame contain bulkhead fittings for all the generator's external connections including the raw water line, siphon break, fuel lines, exhaust line, AC wiring, and battery cables. Westerbeke supplies the necessary hoses, cables and hardware to make these connections, allowing quick and easy "plug-and-play" installations.

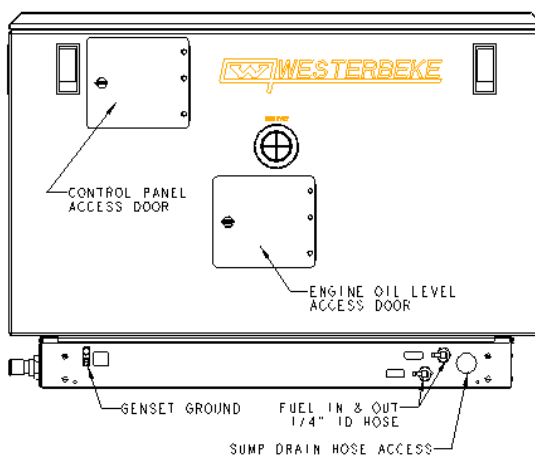
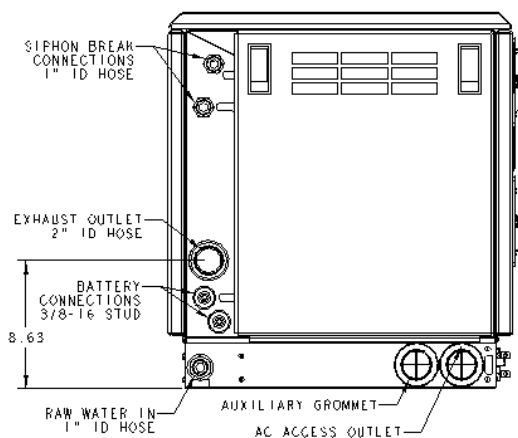
There are pre-drilled mounting holes in the bottom of the base. Use the appropriate holes to mount the generator and the SOUND GUARD SST onto the bed/platform.

Included with the SOUND GUARD SST is a cover plate to be installed at the bottom-rear of the generator's housing to cover two rectangular holes. This is necessary to prevent the recirculation of heated air within the enclosure. *This cover plate must be installed.*

The SOUND GUARD SST utilizes the large capacity fan between the engine's flywheel and the generator to supply air for cooling and combustion, and to evacuate air from the SOUND GUARD SST. The installation must be planned so there is a free circulation of air around the outside of the SOUND GUARD SST. Clearance should also be planned to facilitate removal of any panel.

## PREPARING THE GENERATOR FOR THE SOUND GUARD

1. Uncrate the SOUND GUARD SST, and find the following: base, front and rear frame, two frame supports, two side panels, front and rear panels, top panel, and cover plate kit. This SOUND GUARD SST also includes several hoses, cables and necessary hardware to make external electrical, fuel and water connections cleanly and easily. Installer supplies the generator mounting hardware.
2. Uncrate the generator.
3. Remove the belt guard from the front of the generator's engine. Interference with the SOUND GUARD SST enclosure and poor air circulation will result if the belt guard is not removed. *The belt guard must be removed.*
4. Install the cover plate onto the bottom of the generator housing with the two thumbscrews supplied (applies to all BTDA Generator models). See illustration on the next page.
5. Remove the two screws on the AC circuit breaker box cover that will be behind the new SOUND GUARD SST's rear frame. These two screws are not necessary and will allow the circuit breaker box cover to be removed more easily.



## INSTALLING THE GENERATOR AND SOUND GUARD SST

Note: For additional mounting information, see Westerbeke's *INSTALLATION MANUAL for MARINE ENGINES & GENERATORS*, Publication #43268.

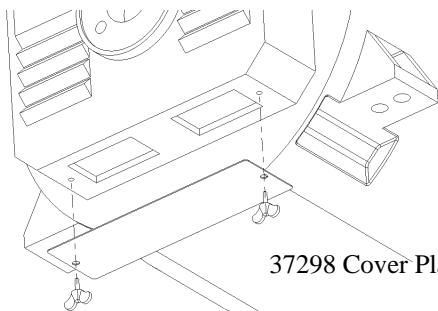
1. Select the four mounting holes in the SOUND GUARD SST's base that apply to your particular generator model.
2. When adding the SOUND GUARD SST to an existing generator installation, place the SOUND GUARD SST's base on the bed (or platform) and align the four selected mounting holes in the base with the four existing mounting holes in the bed/platform.

For a new installation, place the SOUND GUARD SST's base on the bed/platform, then drill down into the bed/platform using the four selected mounting holes in the base as a guide.

3. Lower the generator onto the base, aligning the four selected holes in the generator's rails with the four mounting holes in the base. Make sure the generator end of the unit faces the rear panel of the SOUND GUARD SST. If installing onto a platform, mount with hex bolts from below the platform. Use stainless steel bolts, washers and nuts.
4. Skip the following step if Westerbeke or a Westerbeke Dealer has already pre-assembled your generator with a SOUND GUARD SST.

Install and connect the provided hoses and cables between the engine/generator and appropriate bulkhead fittings located on the base and rear frame sections. Use the following checklist to ensure all internal connections are made. **Note:** The molded exhaust hose may need to be trimmed depending on the particular generator model.

- \_\_\_ Battery Cable, Positive (to starter motor)
- \_\_\_ Battery Cable, Negative (to engine block ground)
- \_\_\_ Genset Ground Cable (to engine block ground)
- \_\_\_ 1/4" Fuel Supply Hose (to fuel lift pump)
- \_\_\_ 1/4" Fuel Return Hose (from engine)
- \_\_\_ 1" Raw Water Inlet Hose (to raw water pump)
- \_\_\_ 1" Raw Water Hose (from heat exchanger to siphon break)
- \_\_\_ 1" Raw Water Hose (from siphon break to water injected exhaust elbow)
- \_\_\_ 2" Exhaust Hose, Molded



37298 Cover Plate Kit

5. Next, make the external connections between the vessel and SOUND GUARD SST. Before attaching the side panels, it is a good idea to start the generator and check for any leaks.
6. After the generator has been connected and operates properly, assemble the SOUND GUARD SST panels using the illustrations as a guide.

**Note:** When assembling the panels, make sure they seat properly onto the base edge gasket.

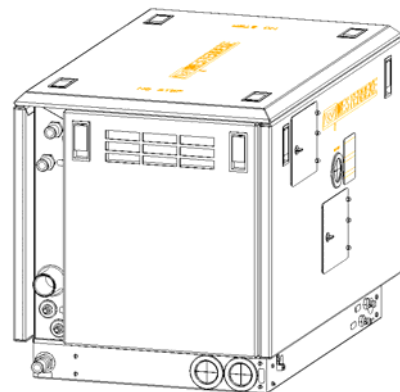
**Caution:** A D-Shaped foam rubber gasket has been installed on the plenum of the rear panel to provide a tight seal between the plenum and the generator air inlet grill. This is to prevent hot air from recirculating and overheating the generator. Make sure this gasket has not been damaged.

Line up the panel latches with the holes in the SOUND GUARD SST frame. Firmly hold the panel against the frame to compress the panel gasket and then close the latch. Latch tension can be easily adjusted by either tightening or loosening the plastic nut on the latch (putting more or less initial tension on the rubber swell bushing).

Installation of the SOUND GUARD SST is now complete.

### Final installation checklist:

- \_\_\_ Cover Plate Kit is installed on the bottom of the generator housing.
- \_\_\_ Plastic belt guard is removed from the engine.
- \_\_\_ All cables and hoses are tight with no leaks.
- \_\_\_ Generator gasket on the rear panel seals properly.
- \_\_\_ None of the air inlets or outlets are blocked.
- \_\_\_ There is enough space around the enclosure for proper cooling and removal of panels.



## SOUND GUARD SST PARTS LIST

When ordering parts, provide Part Number, Name and Quantity for each part needed.

| REF. | PART # | PART NAME                    | QTY     | REF. | PART # | PART NAME                 | QTY     |
|------|--------|------------------------------|---------|------|--------|---------------------------|---------|
| 1    | 49492  | Base (includes connectors)   | 1       | 20   | 11411  | Clamp, Exhaust Hose       | 4       |
| 2    | 49491  | Panel, Front                 | 1       | 21   | 49543  | Terminal, Ground Lug      | 1       |
| 3    | 49493  | Panel, Rear                  | 1       | 22   | 49546  | Terminal, Battery Pos.    | 1       |
| 4    | 49496  | Panel, Top                   | 1       | 23   | 49544  | Terminal, Battery Neg.    | 1       |
| 5    | 49494  | Panel, Side                  | 1       | 24   | 49661  | Cable, Ground             | 1       |
| 6    | 49495  | Panel, Service Side          | 1       | 25   | 49659  | Cable, Battery Pos.       | 1       |
| 7    | 49504  | Frame, Rear                  | 1       | 26   | 49660  | Cable, Battery Neg.       | 1       |
| 8    | 49503  | Frame, Front                 | 1       | 28   | 39498  | Grommet, Neoprene         | 2       |
| 9    | 49505  | Frame, Support               | 2       | 29   | 42806  | Plug, Drain Hose Access   | 1       |
| 10   | 49535  | Screw, 10-32 x 1/2 flat head | 12      | 30   | 49545  | 1/8 NPT Bulkhead Fitting  | 2       |
| 11   | 49536  | Screw, 10-32 x 3/8 hex slot  | 16      | 31   | 48484  | Elbow, 1/8 NPT x 1/4 Hose | 5       |
| 12   | 49540  | Latch Assembly               | 8       | 32   | 22927  | Hose, Fuel 1/4 ID         | as req. |
| 13   | 49537  | Latch Assembly (end panels)  | 4       | 33   | 24906  | Clamp, Fuel Hose          | 4       |
| 14   | 49547  | Gasket, Base Edge            | as req. | 34   | 48193  | 1/2 NPT Bulkhead Fitting  | 3       |
| 15   | 49548  | Gasket, Panel Edge           | as req. | 35   | 36618  | Nipple, 1/2 NPT x 1 Hose  | 6       |
| 16   | 43574  | Gasket, Generator            | as req. | 36   | 11779  | Hose 1" Wire Inserted     | as req. |
| 17   | 42815  | Elbow, Exhaust Outlet 2"     | 1       | 37   | 11405  | Clamp, Raw Water Hose     | 8       |
| 18   | 49561  | Hose, Exhaust 2" Molded      | 1       | 38   | 37298  | Cover Plate Kit           | 1       |
| 19   | 42782  | Grommet, Exhaust Outlet      | 1       |      |        |                           |         |

