SOUND GUARD INSTALLATION INSTRUCTIONS & PARTS LIST

FOR DIESEL GENERATORS

INTRODUCTION

Westerbeke's SOUND GUARD for Diesel Generators consists of five powder-coated panels and a powder-coated base. The panels are lightweight and easy to clean. They attach to each other and to the base to form a rigid, compact, sound-insulated enclosure for your generator. The front and rear end panels each have an attached sheet metal plenum to allow the entry and circulation of cooling air inside the SOUND GUARD.

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 required in marine installations.

Assembling Westerbeke's SOUND GUARD is quick and easy, even in close quarters. No tools are needed. The panels are assembled with quick-action neoprene latches and metal clasps. One or more of the panels can be easily removed for inspection and servicing. If major repairs to the generator are needed, the quick-release fasteners and handholds allow the entire enclosure to be disassembled in a few minutes.

The base has 16 grommetted access holes for the generator's external connections including the raw water line, fuel lines, exhaust line, AC wiring and battery cables. Westerbeke supplies the necessary fittings and hoses for these connections. The grommets are precut. Simply use the holes that are the most convenient for your installation. An elbow is provided for the exhaust line where it passes through the base; a wire-reinforced exhaust hose and hose clamps are included to connect this elbow to the water-injected exhaust elbow on the drive engine. Note: We recommend using an inline exhaust muffler with this SOUND GUARD.

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

Included with the SOUND GUARD for BTD Generator Models 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 SOUND GUARD enclosure. This cover plate *must* be installed.

The SOUND GUARD 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. The installation must be planned so there is a free circulation of air around the outside of the SOUND GUARD.

PREPARING THE GENERATOR FOR THE SOUND GUARD

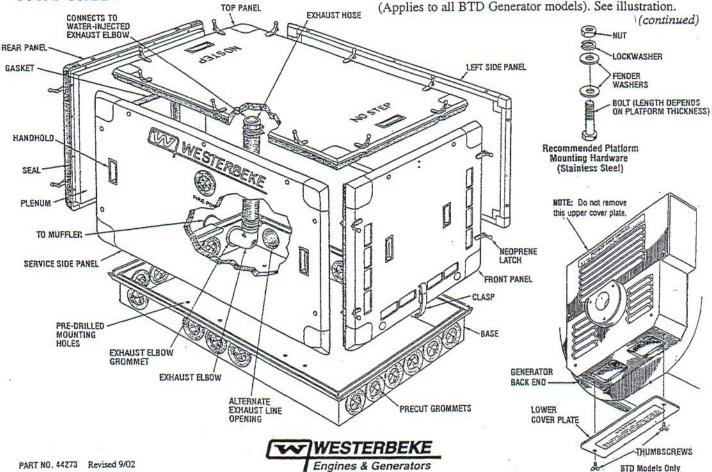
- Uncrate the SOUND GUARD, and find the following: base, two side panels, front and rear panels, top panel and cover plate kit. Installer supplies the mounting hardware.
- 2. Uncrate the generator.

Note: The next operations are most easily done in a shop by hoisting the generator to a comfortable working height for good visibility and easy access.

Remove the belt guard from the front of the generator's engine.

Note: Do not remove the upper cover plate from the top of the generator's back end (see illustration). The removal of this plate was only necessary for the installation of some earlier SOUND GUARD models.

4. Install the cover plate onto the bottom of the generator stator housing with the two thumbscrews supplied (Applies to all BTD Generator models). See illustration.



INSTALLING THE GENERATOR AND THE SOUND GUARD

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'S base that apply to your particular generator model.
- When adding the SOUND GUARD to an existing generator installation, place the SOUND GUARD'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, position the SOUND GUARD'S base on the bed/platform, then drill down into the bed/plat form through the four selected mounting holes in the base.

- 3. Lower the generator onto the base, aligning the four selected holes in the generator's rails with the four mount ing holes in the base. Make sure the generator end of the unit faces the rear panel of the SOUND GUARD.
- 4. Mount the generator and the SOUND GUARD base to the bed/platform. If installing onto a platform, mount with hex bolts from below the platform (see illustration). Use stainless steel bolts, washers and nuts.
- 5. Select the grommetted holes in the base for the raw water line, fuel lines, AC wiring and battery cables, and make the necessary connections. Choose the holes that are the most convenient for your installation. The elbow for the exhaust line must pass through the opening in the end of the base that is shown in the illustration.

Note: There is an alternate exhaust line opening for this elbow in the *side* of the base (see illustration). Use this

opening if it is more convenient. Before using it, swap its plastic cover with the *end* opening's precut grommet.

The exhaust hose that is attached to the elbow is wire-rein forced and, as such, may be difficult to install onto the water-injected exhaust elbow; lubricating the inside of the end of this exhaust hose (approx. 2 inches in) will make this easier to do.

6. After all the required external connections have been made through the openings in the base, assemble the SOUND GUARD panels as follows, using the illustration as a guide.

Note: When assembling the panels, make sure they seat properly in the V-grooves in the base, and that the rubber positioning guides in the sides of the panels fit snugly into the corresponding recesses in the adjacent panels.

Caution: A U-shaped foam rubber gasket has been installed on the plenum on the rear panel to provide a tight seal between the plenum and the generator grill. This is to prevent the generator from overheating. Make sure this gasket has not been damaged.

- a. Install any one side panel with any one end panel. Engage the two neoprene latches. Don't engage the metal clasp on the end panel yet.
- b. Install the remaining side panel and end panel. Engage the six neoprene latches. Don't engage the metal clasps on the end panels yet.
- c. Install the top panel and engage its eight neoprene latches with the end panels and the side panels.
- d. Now engage the metal clasp located at the bottom of each end panel with the base. The installation of the SOUND GUARD is now complete.

