

SOUND GUARD SST-E INSTALLATION INSTRUCTIONS & PARTS LIST

FOR DIESEL GENERATOR MODELS 22.0/17.0 EDE 17.0/13.5 EDE



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INTRODUCTION

Westerbeke's SOUND GUARD SST-E for D-NET diesel generators consists of five aluminum powder-coated panels, an aluminum air dam 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 allow entry and circulation of cooling air inside the SOUND GUARD SST-E. The rear panel also has a removable cover to accommodate power take-off (PTO) equipment.

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.

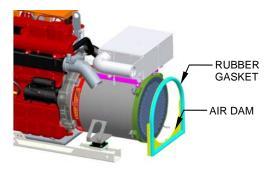
Assembling Westerbeke's SOUND GUARD SST-E is quick and easy, even in close quarters. A flat-head and a Philips head screwdrivers are required to assemble the stainless steel frame. The panels require no assembly and can be easily removed for inspection and servicing. If necessary, the entire enclosure 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. AC wires are brought through the SOUND GUARD SST-E via grommet then up to AC side of panel box where they attach to the terminal block.

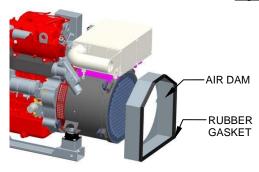
The SOUND GUARD SST-E utilizes the large capacity fan between the engine's flywheel and the generator to supply air for cooling, and to evacuate air from the SOUND GUARD SST-E. The installation must be planned so there is a free circulation of air around the outside of the SOUND GUARD SST-E. Clearance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

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-E onto the bed/platform.

Included with the SOUND GUARD SST-E is an air dam to be installed at the rear of the generator's housing. (Fig.1 22.0 EDE; Fig.2 17.0 EDE). This is necessary to prevent the recirculation of heated air within the enclosure. *This air dam must be installed*.



(Fig. 1) 22.0 EDE



(Fig. 2) 17.0EDE

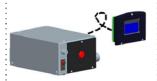
PREPARING THE GENERATOR FOR THE SOUND GUARD

- Uncrate the SOUND GUARD SST-E, and find the following: base, front and rear frame, two frame supports, two side panels, front and rear panels, top panel, and air dam. This SOUND GUARD SST-E 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 Genset.
- 3. Remove the belt guard from the front of the generator's engine. Interference with the SOUND GUARD SST-E enclosure and poor air circulation will result if the belt guard is not removed. *The belt guard must be removed.*
- 4. **WARNING:** The digital display <u>must</u> be removed from the panel box when generator is installed in a SOUND GUARD SST-E. Failure to do so <u>may cause damage</u> to the display from excessive heat, this type of failure is not covered under the limited warranty. There are two options listed in the following page.



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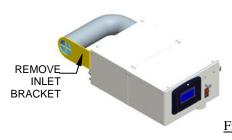
Remote-mount the digital display with extension cable to a desired location and seal the panel box opening with a cover plate. (Kit: 53341)



Remote-mount the digital display with extension cable to a desired location and install an analog start/stop switch. (Kit: 53342)



Remove the inlet bracket on the side of panel box. See <u>Fig 3</u>.



Reinstall the bracket screws on the panel box to close the tapped holes. Air hose will be re-attached to the rear frame of the SOUND GUARD SST-E. See Fig. 4.

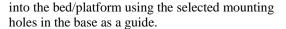


INSTALLING THE GENERATOR AND SOUND GUARD SST-E

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

- Install the air dam with seal gasket onto the rear of the generator stator housing; reuse four screws on the louver plate. See <u>Fig 1&2</u>.
 - The air dam should be installed outside of the louvered plate, with the rubber gasket facing away from the generator.
- 8. Select the mounting holes in the SOUND GUARD SST-E's base that apply to your particular generator model.
- 9. When adding the SOUND GUARD SST-E to an existing generator installation, place the SOUND GUARD SST-E's base on the bed (or platform) and align the selected mounting holes in the base with the existing mounting holes in the bed/platform.

For a new installation, place the SOUND GUARD SST-E's base on the bed/platform, then drill down



- 10. Lower the generator onto the base, aligning the selected holes in the generator's rails with the mounting holes in the base. Make sure the generator end of the unit faces the rear panel of the SOUND GUARD SST-E. If installing onto a platform, mount with hex bolts from below the platform. Use stainless steel bolts, washers and nuts.
- 11. Install front and rear frame and leave screws loose until all are in place.
- 12. Relocate air inlet hose from inlet bracket on panel box to rear frame.
- 13. 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. See Fig. 5

Battery Cable, Positive Red (to starter motor)
Battery Cable, Negative Black (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)
3" Exhaust Hose (22.0 EDE) /
2" Exhaust Hose (17.0 EDE)

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

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

Caution: A rubber gasket has been installed on the air dam to provide a seal between the rear panel and the air dam. This is to prevent hot air from recirculating and overheating the generator. Make sure this gasket has not been damaged.

16. Line up the panel latches with the holes in the SOUND GUARD SST-E 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).

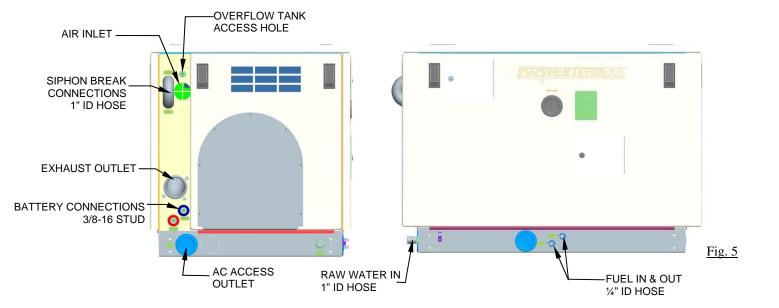


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Installation of the SOUND GUARD SST-E is now complete.

Review the final installation checklist and insure all items are complete:

Air dam is installed on the generator housing.	
Plastic belt guard is removed from the engine.	
All cables and hoses are tight with no leaks.	
Air dam gasket at the rear panel seals properly.	
None of the air inlets or outlets is blocked.	
There is enough space around the enclosure for proper cooling and removal of p	panels.
All the electrical connections are connected properly and connections are secure	ed.

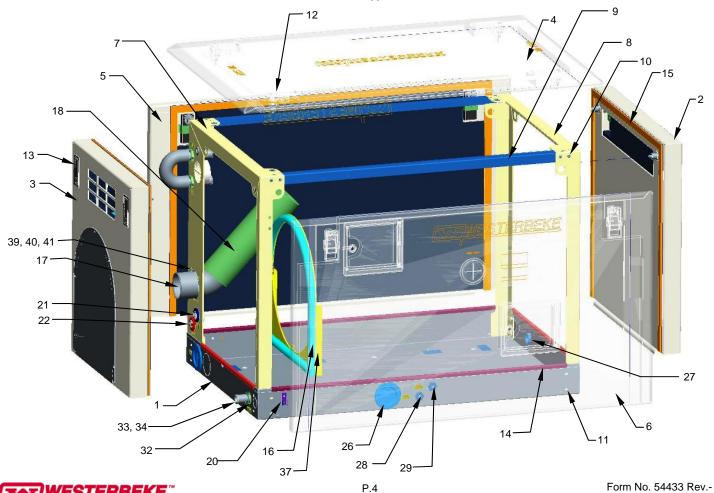




SOUND GUARD SST-E 17.0 EDE - 22.0 EDE PARTS LIST

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

REF.	PART #	PART NAME	QTY	REF.	PART #	PART NAME	QTY
1	54415	Base (includes connectors)	1	20	49543	Terminal, Ground Lug	1
2	54424	Panel, Front 17.0-22.0 EDE	1	21	49546	Terminal, Battery Pos.	1
3	54421	Panel, Rear 17.0-22.0 EDE	1	22	49544	Terminal, Battery Neg.	1
4	54428	Panel, Top 17.0-22.0 EDE	1	23	49661	Cable, Ground	1
5	54431	Panel, Side 17.0-22.0 EDE	1	24	49902	Cable, Battery Pos.	1
6	54429	Panel, Service Side 17.0-22.0 EDE	1	25	49903	Cable, Battery Neg.	1
7	54417	Frame, Rear 17.0 EDE	1	26	39498	Grommet, Neoprene	2
	54178	Frame, Rear 22.0 EDE		27	42806	Plug, Drain Hose Access	1
8	54419	Frame, Front 17.0-22.0 EDE	1	28	49545	1/8 NPT Bulkhead Fitting	2
9	54420	Frame, Support 17.0-22.0 EDE	2	29	48484	Elbow, 1/8 NPT x 1/4 Hose	4
10	49535	Screw, 10-32 x 1/2 flat head	12	30	22927	Hose, Fuel 1/4 ID	as req.
11	49536	Screw, 10-32 x 3/8 hex slot	16	31	24906	Clamp, Fuel Hose	4
12	49540	Latch Assembly (top & side panel)	8	32	48193	1/2 NPT Bulkhead Fitting	3
13	49537	Latch Assembly (front & rear panel)	4	33	36618	Nipple, 1/2 NPT x 1 Hose	5
14	49547	Gasket, Base Edge	as req.	34	36616	Elbow, 1/2 NPT x 1 Hose	1
15	43248	Gasket, Panel Edge	as req.	35	11779	Hose 1" Wire Inserted	as req.
16	39479	Gasket, Air Dam 17.0 EDE	as req.	36	11405	Clamp, Raw Water Hose	8
16	43574	Gasket, Air Dam 22.0 EDE	as req.	37	54412	Air Dam 17.0 EDE	1
17	37534	Elbow, Exhaust Outlet 2" 17.0 EDE	1	31	53084	Air Dam 22.0 EDE	
17	52040	Elbow, Exhaust Outlet 3" 22.0 EDE	1	38	37402	Kit, Exhaust Elbow 45 deg 17.0 EDE	1
18	54370	Hose, Exhaust 2" ID	1 38	49762	Kit, Exhaust Elbow 45 deg 22.0 EDE	l	
10	53057	Hose, Exhaust 3" ID		52056	Capscrew, ¼-20 x ½" hex head	4	
19	11411	Clamp, Exhaust Hose 17.0 EDE	4	40	52055	Lock washer, 1/4	4
	11505	Clamp, Exhaust Hose 22.0 EDE	4	41	52054	Flat washer, 1/4	4



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Engines & Generators