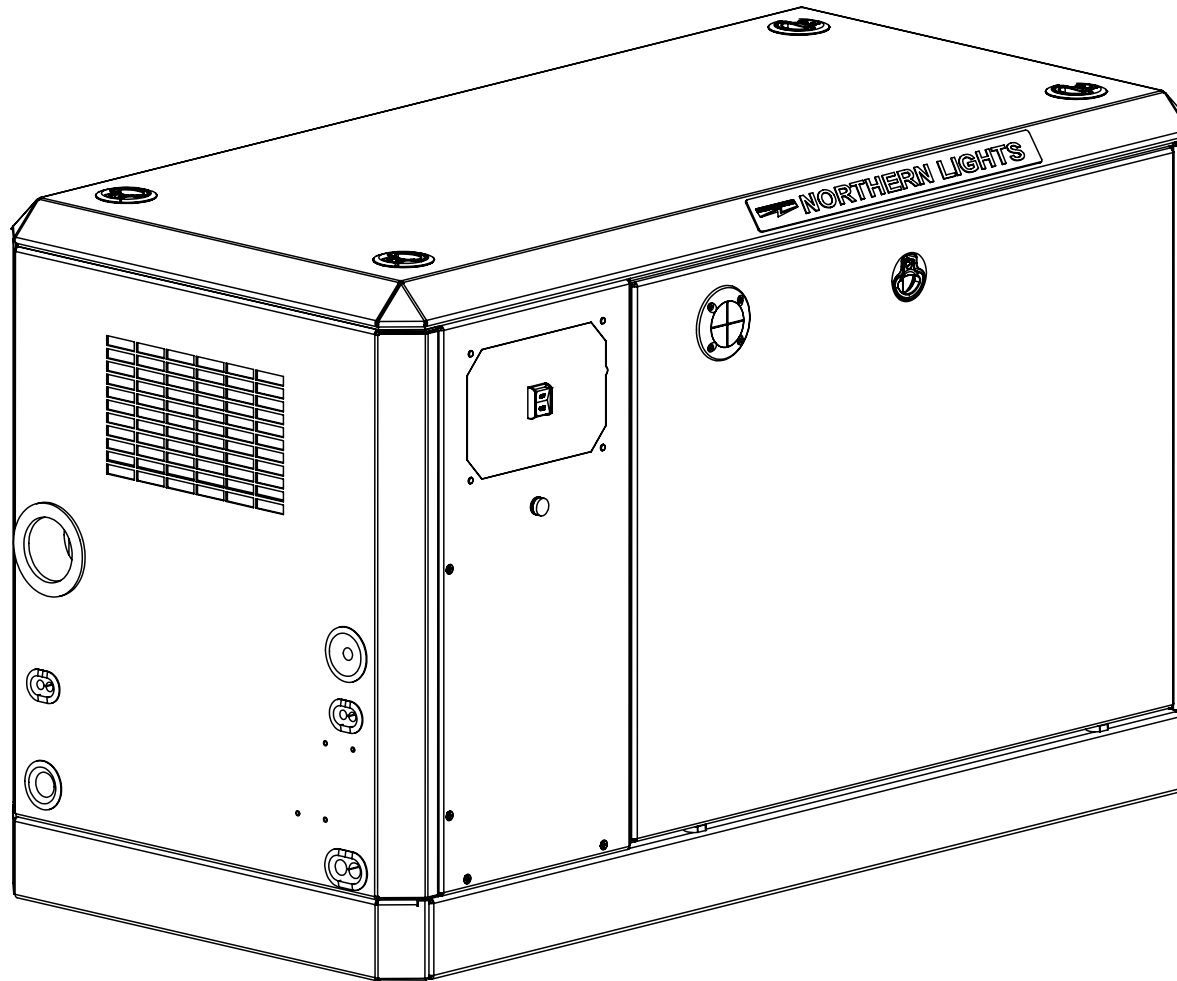




M844LW3 / M844DW3

GEM Series Sound Enclosure Assembly Instructions



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M844LW3 / M844DW3 GEM Sound Enclosure

ITEM #	DESCRIPTION	NLI P/N	QTY	NOTES
1.	Junction block off plate assembly	06-78110	1	
2.	Rear panel assembly	06-78102	1	includes 06-78108
3.	M8 flat washer	15-11000	4	loose, bagged
4.	M8 lock washer	15-00705	4	loose, bagged
5.	M8 hex head capscrew	12-00776	4	loose, bagged
6.	Sound foam, snorkel receiver seal	55-78114	1	loose, bagged
7.	Bottom side valence assembly	06-78104	2	
8.	Front bottom valence assembly	06-78108	1	
9.	Non-service side panel assembly	06-78107	1	
10.	Service side panel aft assembly	06-78106	1	
11.	Front panel assembly	06-78701	1	
12.	Seal bar assembly	06-78109	1	
13.	Top panel assembly	00-78103	1	
14.	Service side panel, fwd assembly	00-78105	1	
15.	Grommet 1-1/8" ID x 1-7/8" OD	00-70146	2	loose, bagged
16.	E-stop/leak alarm harness	22-72024	1	loose, bagged

SPECIFICATIONS

Enclosure (installed on generator base):

Length (OA)	46.1 in (1170 mm)
Width	22.6 in (573 mm)
Height	28.1 in (714 mm)
Assembled weight - shield only:	49.0 lbs (22.0 kg)
Assembled weight w/ genset:	997.0 lbs (452 kg)

Prior to assembly, inspect all components for damage. Report any damage to the shipping company. Check the packing list in the back of this manual to be sure all parts are included.

Note: The Generator set features a single point lifting eye. However, the generator may still possess original factory lifting points, which need to be loosened and rotated down, until they are below the highest point of the engine. Be sure to retighten those bolts before moving on.

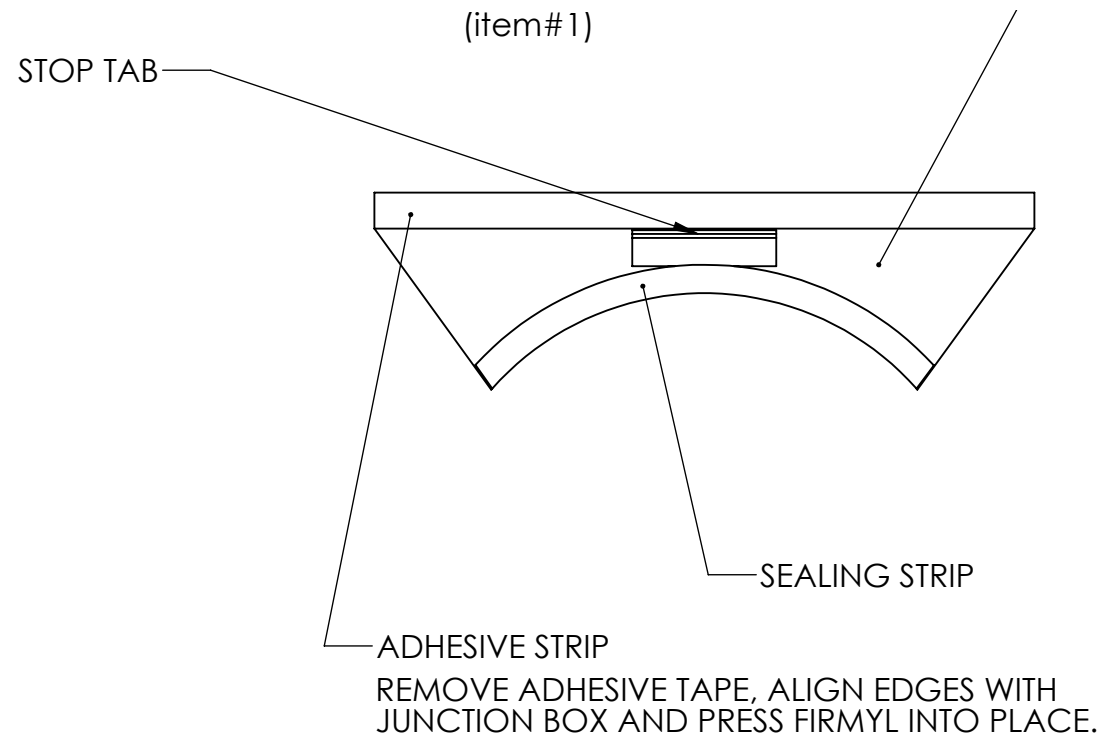
Select a mounting location in accordance with the guidelines in the IM1000 Installation Manual. The generator set must typically be mounted on a rigid, flat surface above a strong structure, such as the vessel's stringers, to minimize vibration transference to the hull.

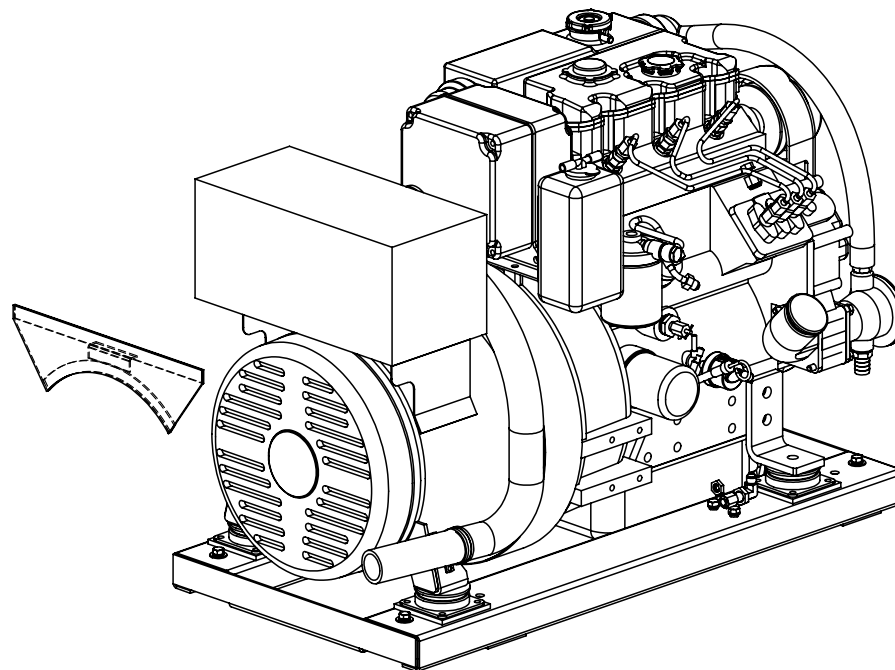
Note that the generator set is designed for single side service. When viewed from the rear, the right hand side is the service side and should be exposed for easy maintenance access.

Install the generator set in the vessel as near to a level attitude as possible. Ensure that the enclosure's left hand side and rear are at the recommended distances (6 inch recommended, 4 inch minimum.) from the vessel's bulkheads.

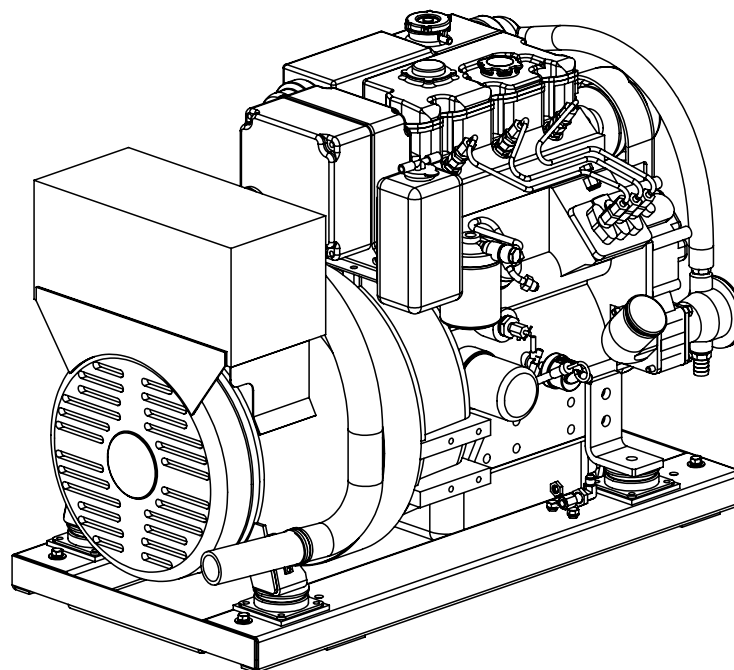
AVOID POSITIONING THE ENCLOSURE INTO CORNERS WITH OVERHEAD BLOCKED TO REDUCE CHANCE OF INTAKE/EXHAUST AIR RECIRCULATION OUTSIDE THE SHIELD.

A PRIOR TO SOUND SHIELD ASSEMBLY, START WITH ITEM #1 SHOWN IN THE FOLLOWING ILLUSTRATIONS.



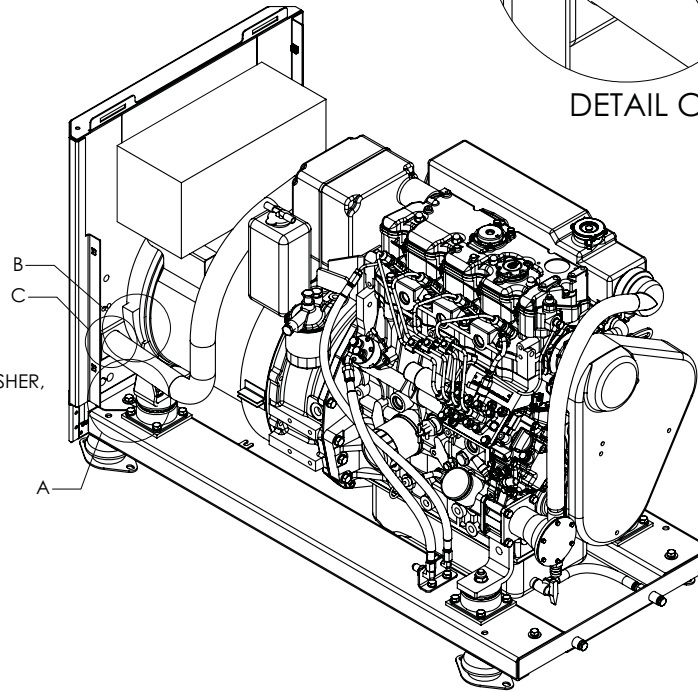
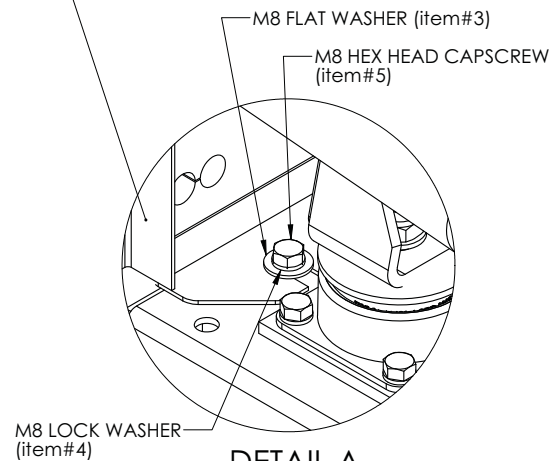


STOP TAB IS FLUSH
WITH BOTTOM OF
JUNCTION BOX



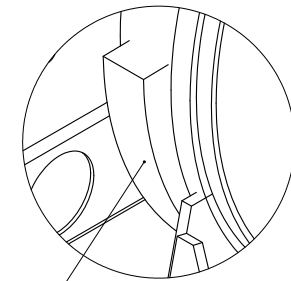
B

STEP 1.
INSTALL REAR PANEL/LOWER VALENCE ASSEMBLY (ITEM#2) TO BACK OF BASE FRAME. LOCATE MOUNTING TABS TO TAPPED MOUNTING HOLES ON TOP OF BASE FRAME WITH FLAT WASHER, LOCK WASHER, AND HEX HEAD CAPSCREW (items 3,4,5).



DETAIL C

STEP 3.
INSERT ENGINE AIR INTAKE SNORKEL HOSE INTO SNORKEL RECIEVER IN REAR PANEL, UNTIL IT HITS THE STOP.

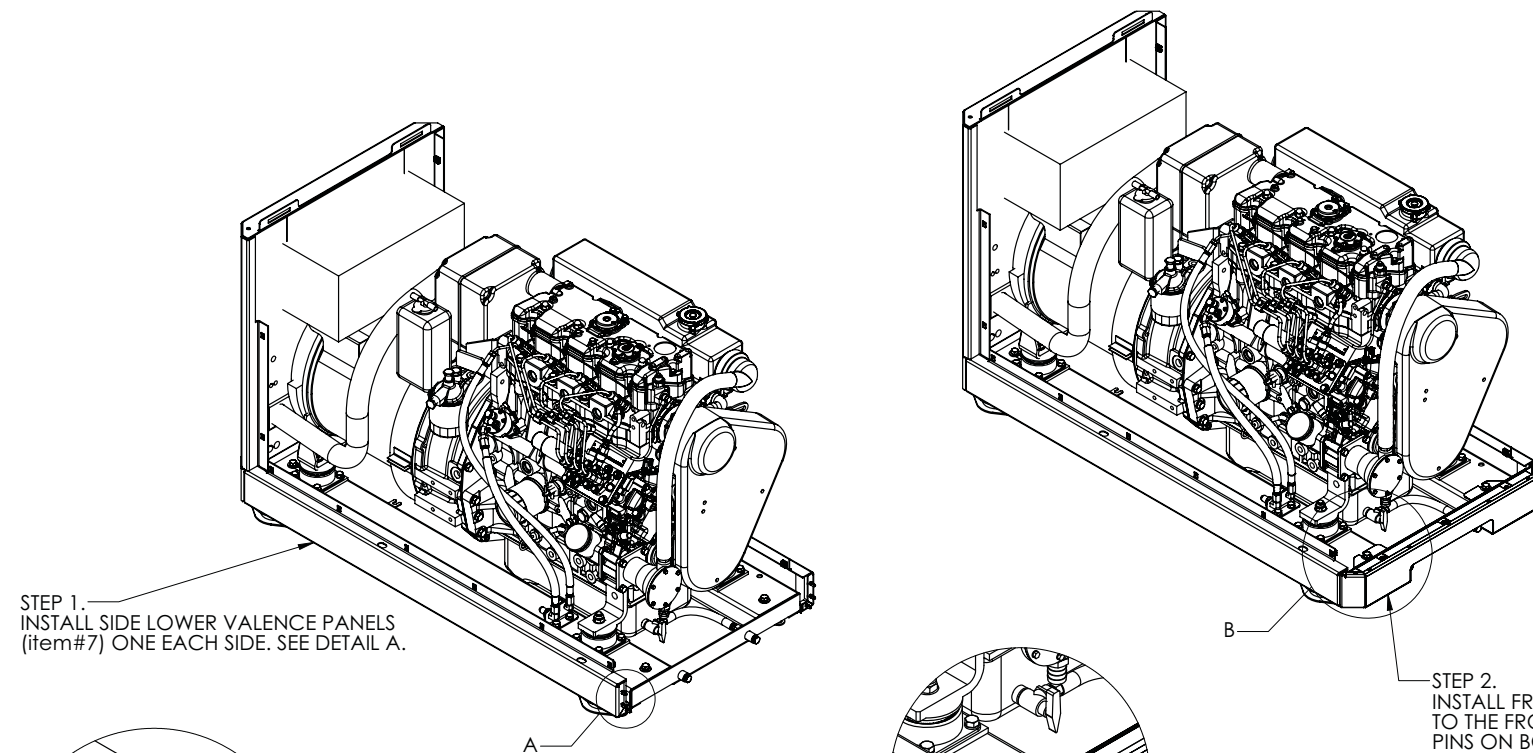


STEP 2.
INSTALL RECIEVER SEAL (ITEM#6) TO REAR PANEL AS SHOWN. ENSURE FIT IS SNUG TO GENERATOR BARREL.

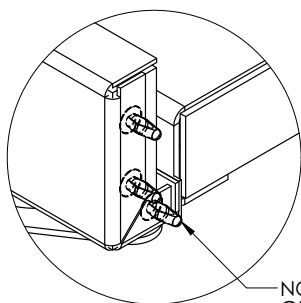
You may encounter some resistance as the rear panel comes into contact with the air intake snorkel hose. Note that the rear panel has a small hole in the vicinity of the intake snorkel. Guide this hose so that it is inserted in the panel hole, ensure that the hose does not go too far into the rear panel, blocking the hose end. (Generally this hose will install without adjustment at the retaining clamp.)

Note: The Generator set features a single point lifting eye. However, the generator may still possess original factory lifting points, which need to be loosened and rotated down, until they are below the highest point of the engine. Be sure to retighten those bolts before moving on.

C



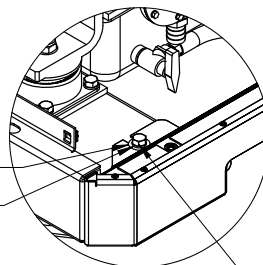
STEP 1.
INSTALL SIDE LOWER VALENCE PANELS
(item#7) ONE EACH SIDE. SEE DETAIL A.



DETAIL A

NOTE PRE-INSTALLED PINS.
GUIDE THESE INTO CORRESPONDING
HOLES IN EACH FRONT/REAR LOWER
VALENCE, PUSHING FIRMLY TO SNAP
INTO PLACE. DISPLACED PINS MAY
BE PUSHED BACK INTO POSITION BY
USING A LONG TOOL SUCH AS A SCREW
DRIVER OR PRY BAR FROM THE INSIDE.
PUSH/MOVE SOUND FOAM OUT OF THE
WAY FOR IMPROVED ACCESS TO PINS.

M8 FLAT WASHER (item#3)
M8 LOCK WASHER (item#4)

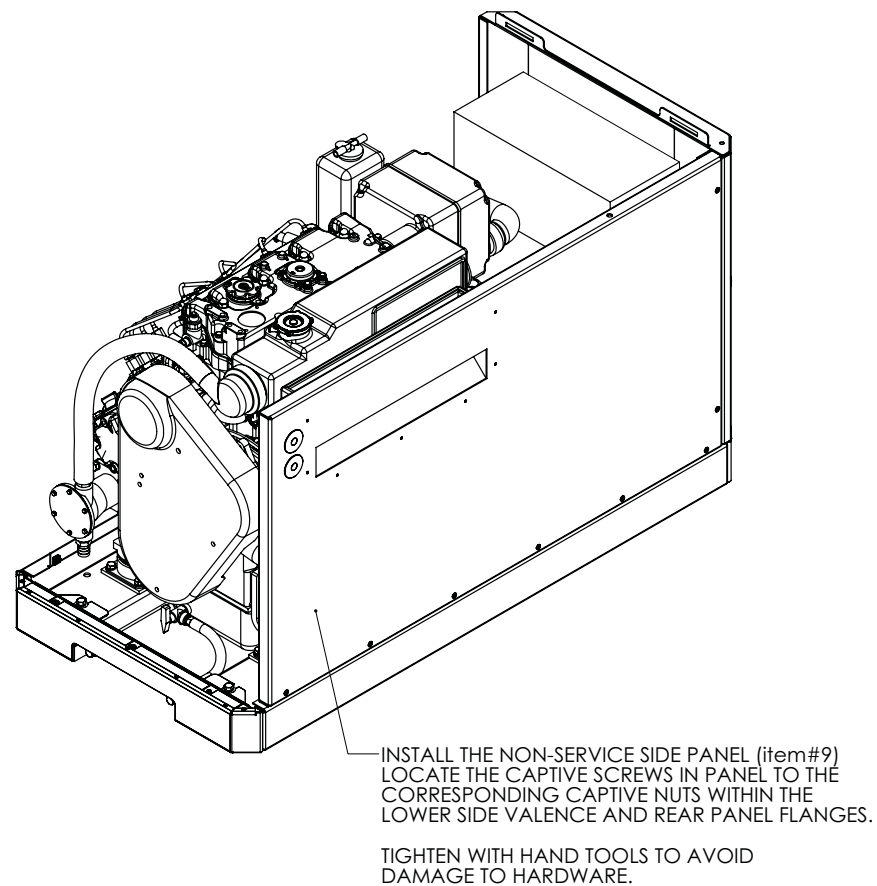
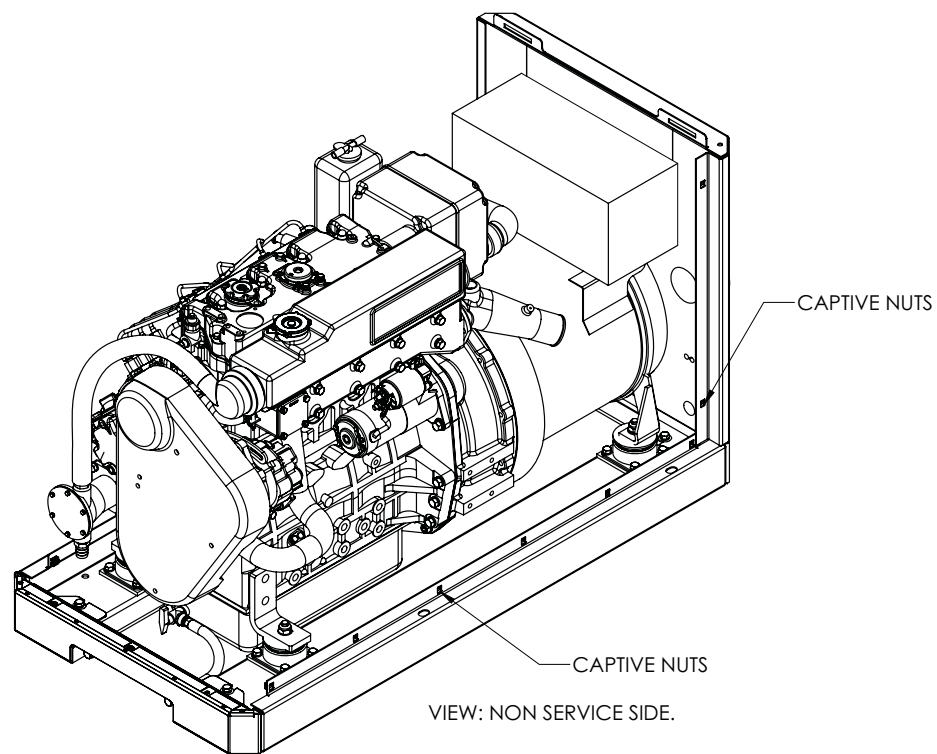


DETAIL B

M8 HEX HEAD CAPSCREW
(item#5).

STEP 2.
INSTALL FRONT LOWER VALENCE (item#8)
TO THE FRONT OF THE BASE FRAME. ALIGN TO
PINS ON BOTH BOTTOM SIDE VALENCES.
SEE DETAIL A.
LOCATE THE MOUNTING TABS TO THE
TAPPED HOLES ON THE TOP OF BASE FRAME
SECURE WITH M8 FLAT WASHER, LOCK WASHER,
AND HEX HEAD CAPSCREW. (items 3,4,5)
SEE DETAIL B.
TIGHTEN BOLTS TO SECURE.

D





-ITEM #'10

STEP 1
PRIOR TO INSTALLING THE SERVICE SIDE AFT PANEL (ITEM#10) THE LEAK ALARM LIGHT AND CONNECTING HARNESS (ITEM#16) MUST BE INSTALLED. START WITH THE ALARM LIGHT, THEN FOLLOW WITH THE HARNESS AS SHOWN IN THE FOLLOWING ILLUSTRATIONS.

–PRE-INSTALLED EMERGENCY STOP SWITCH

—LEAK ALARM LIGHT MOUNTING HOLE

LEAK ALARM LIGHT ASSEMBLY (ITEM#15)

SCREW COLLAR—
UNSCREW COLLAR RING FROM LIGHT
ASSEMBLY TO INSTALL THROUGH PANEL.
RE-INSTALL COLLAR TO SECURE.

- NOTE POSITIVE TERMINAL POLARITY, POSITION AT TOP.

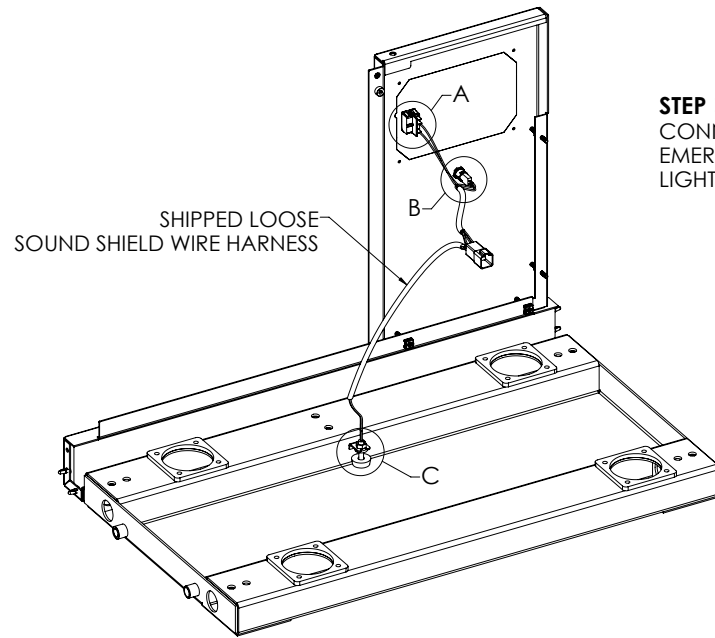
DETAIL A
SOUND FOAM OMITTED
FOR VIEW CLARITY.

ITEM#15.

EMERGENCY STOP TERMINALS-

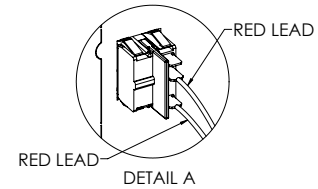
A

LEAK ALARM LIGHT TERMINALS-

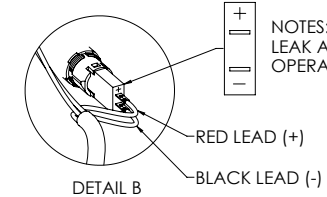
**STEP 1**

CONNECT SOUND SHIELD WIRE HARNESS TO EMERGENCY STOP SWITCH AND LEAK ALARM LIGHT AS SHOWN IN DETAIL A AND DETAIL B.

PRE-INSTALLED
EMERGENCY STOP SWITCH



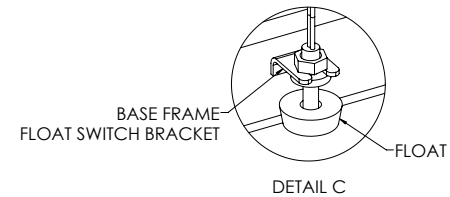
SHIPPED LOOSE
LEAK ALARM LIGHT



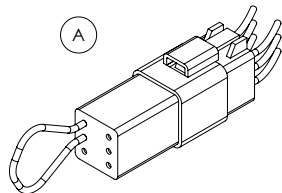
NOTES:
LEAK ALARM LIGHT WILL NOT
OPERATE IF POLARITY IS SWITCHED.

STEP 2

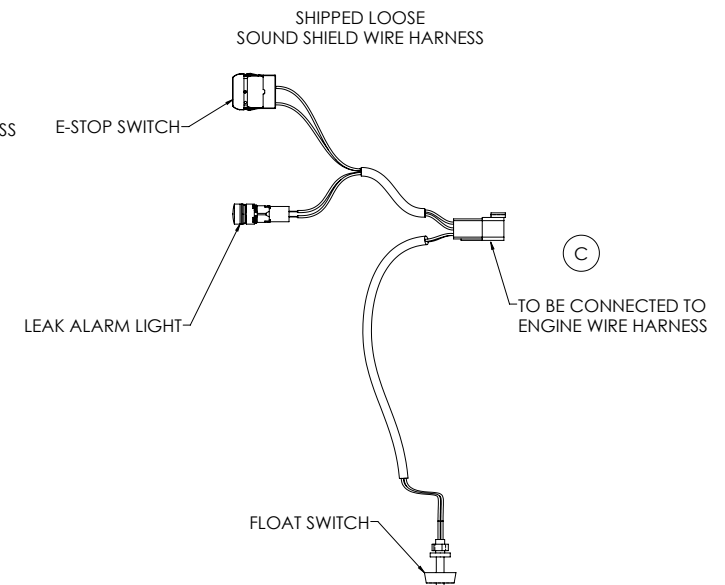
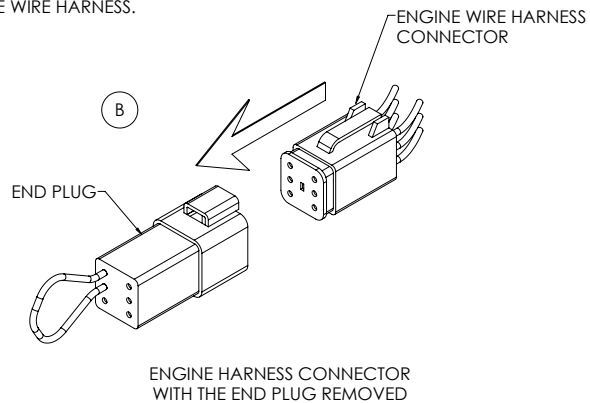
INSTALL FLOAT SWITCH TO THE CORRESPONDING BRACKET ON THE BASE FRAME. BE SURE TO CHECK THE LEAK ALARM LIGHT BY LIFTING UP THE FLOAT AFTER GENERATOR SET IS CONNECTED TO STARTER BATTERY.

**STEP 3**

- LOCATE AND IDENTIFY THE ENGINE WIRE HARNESS.
- REMOVE THE ENGINE WIRE HARNESS END PLUG.
- CONNECT SOUND SHIELD WIRE HARNESS TO THE ENGINE WIRE HARNESS.



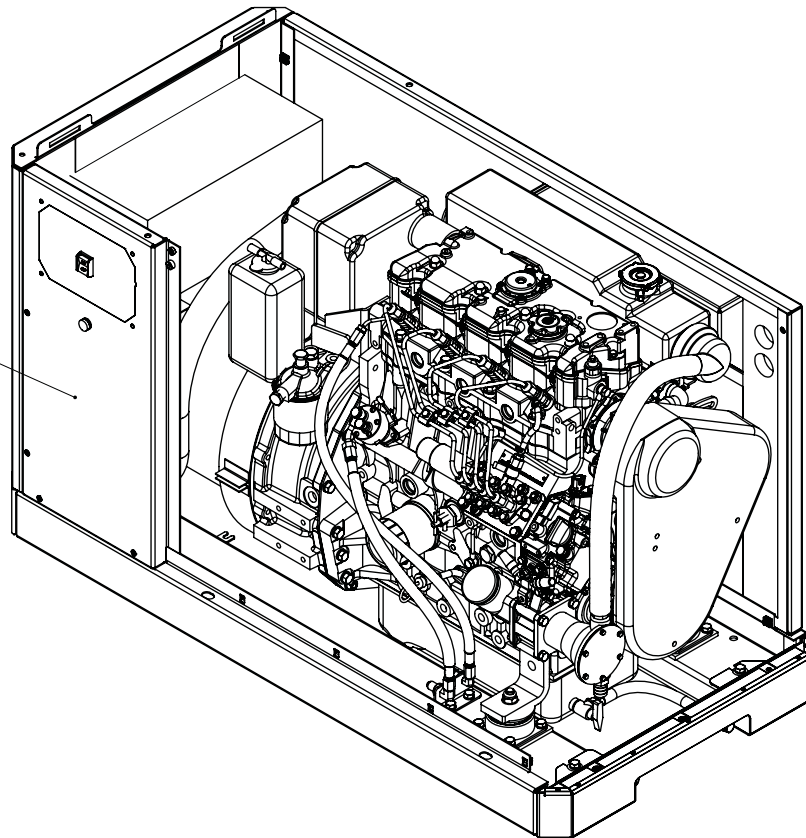
STANDARD ENGINE HARNESS CONNECTOR
WITH PRE-INSTALLED END PLUG

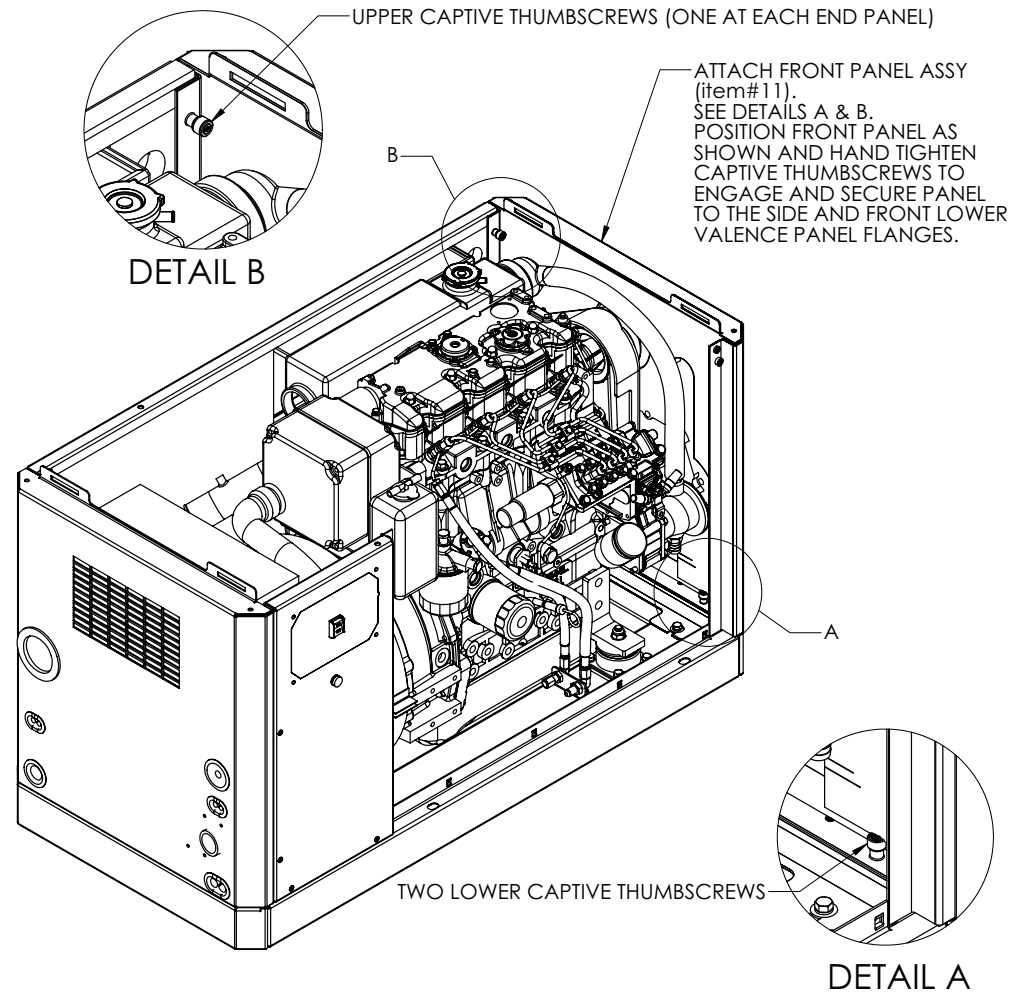
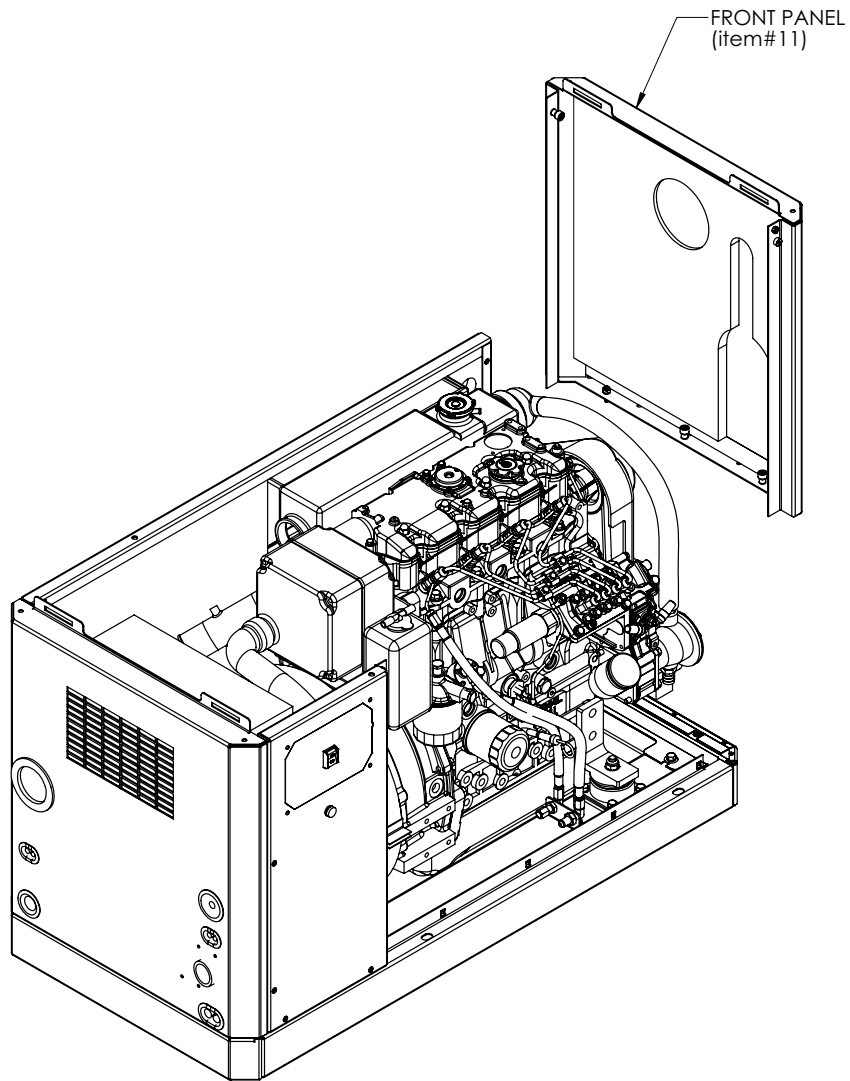


F

INSTALL SERVICE SIDE PANEL AFT (item#10).
LOCATE THE CAPTIVE SCREWS IN PANEL TO THE
CORRESPONDING CAPTIVE NUTS WITHIN THE LOWER
SIDE VALENCE AND REAR PANEL FLANGES.

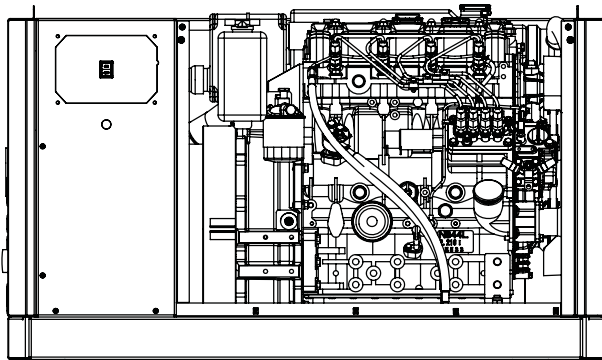
TIGHTEN WITH HAND TOOLS TO AVOID
DAMAGE TO HARDWARE.



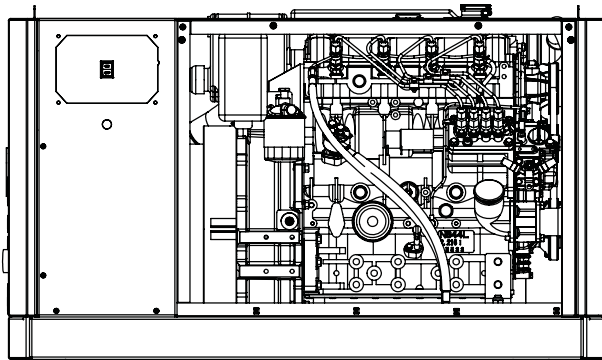
G

H

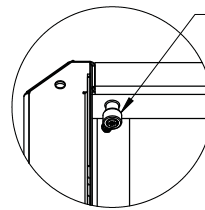
SEAL BAR ASSEMBLY (item#12).



POSITION THE SEAL BAR ASSEMBLY

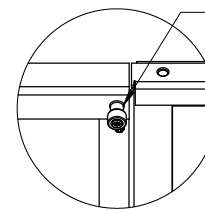


SEAL BAR INSTALLED



CAPTIVE THUMBSCREW
FORWARD POSITION.

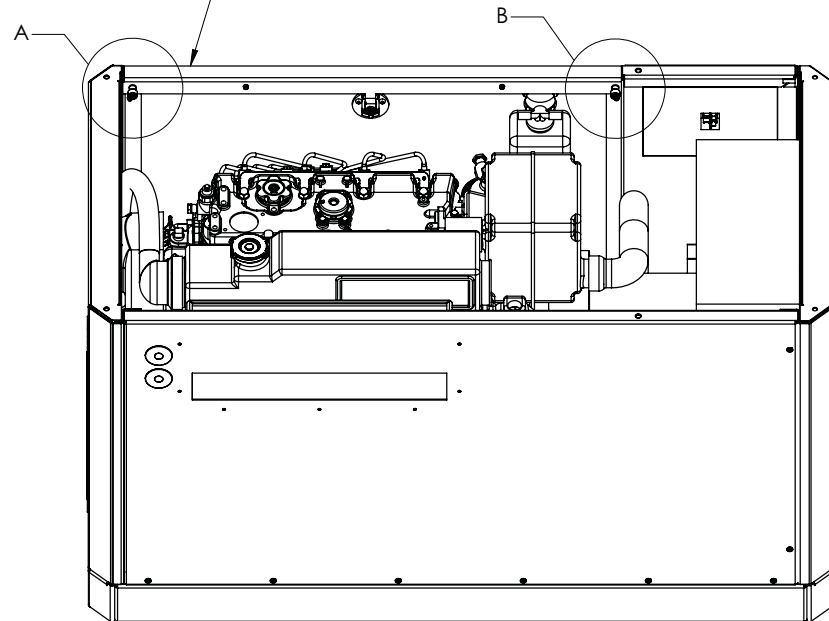
DETAIL A



CAPTIVE THUMBSCREW
AFT POSITION.

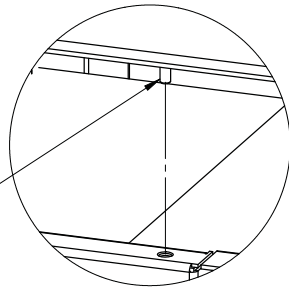
DETAIL B

INSTALL SEAL BAR ASSEMBLY TO PRESSED IN NUT POINTS AT FRONT PANEL
AND SERVICE SIDE AFT PANEL FLANGES. HAND TIGHTEN THUMBSCREWS
FROM THE INTERIOR OF THE SHIELD.



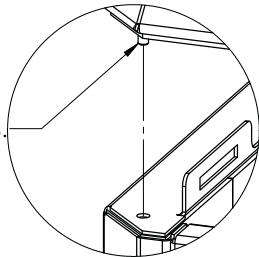
I

SIDE LOCATING PINS, 2 PLACES



DETAIL A

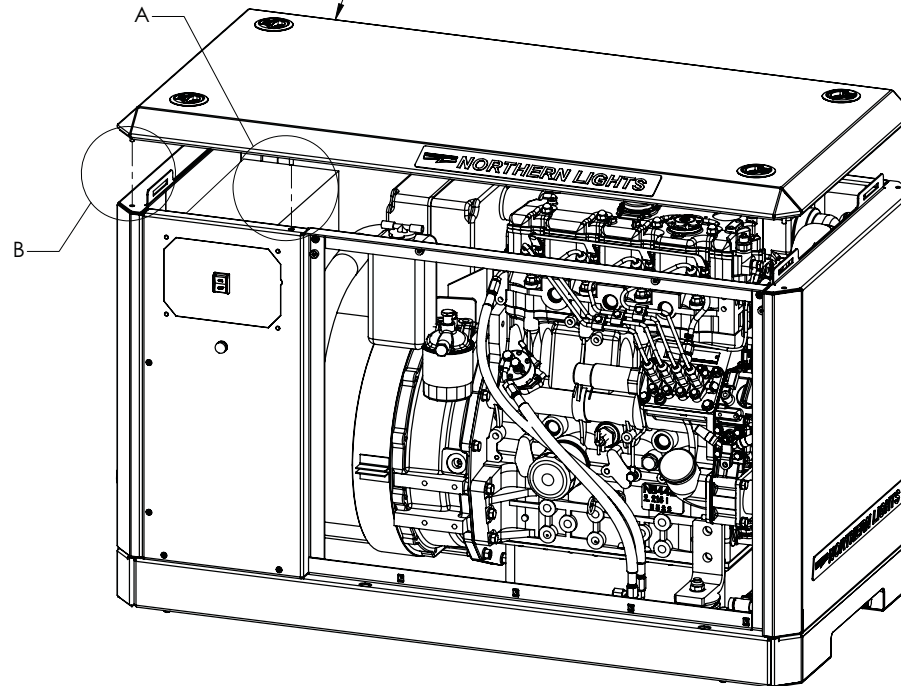
CORNER LOCATING PINS, 4 PLACES



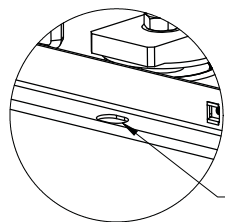
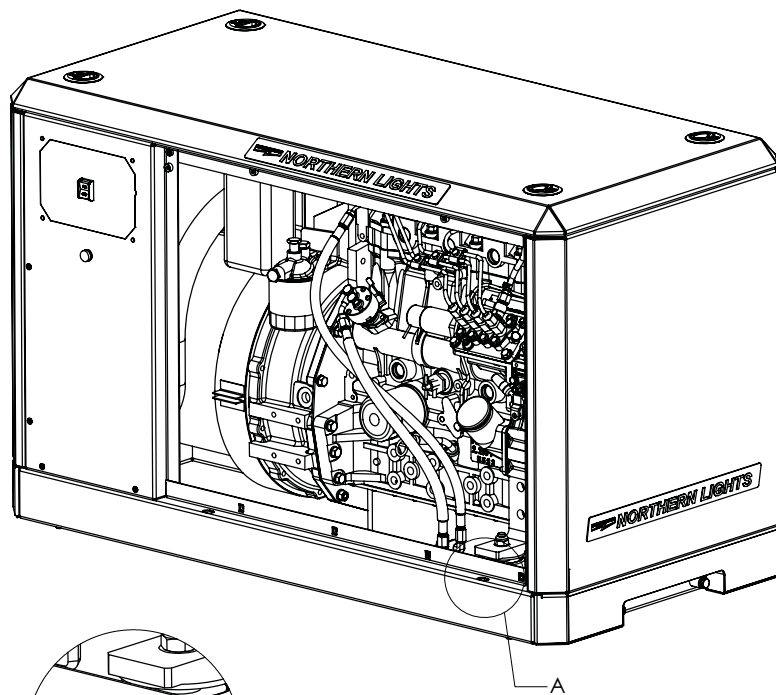
DETAIL B

TOP PANEL ASSEMBLY (item#13).

NOTE LOCATING PIN POSITIONING TO DETERMINE CORRECT PANEL ORIENTATION. SEE DETAIL A & B.
RING LATCHES MAY REQUIRE ADDITIONAL PAWL ADJUSTMENT, REQUIRES A 13mm WRENCH.
SEE PAGE 15 FOR RING LATCH ADJUSTMENT



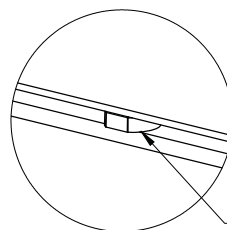
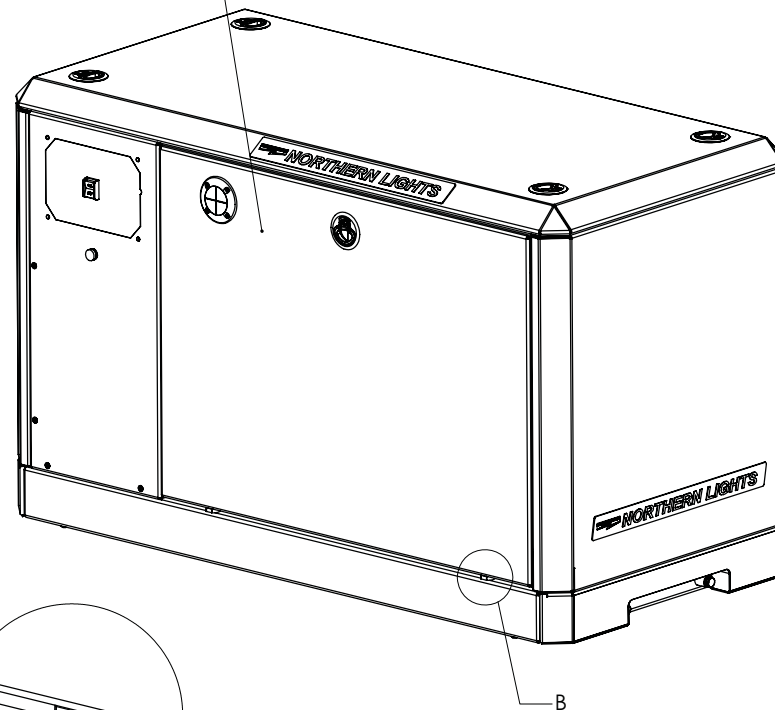
J



LOCATOR PIN RECEPTACLE

DETAIL A

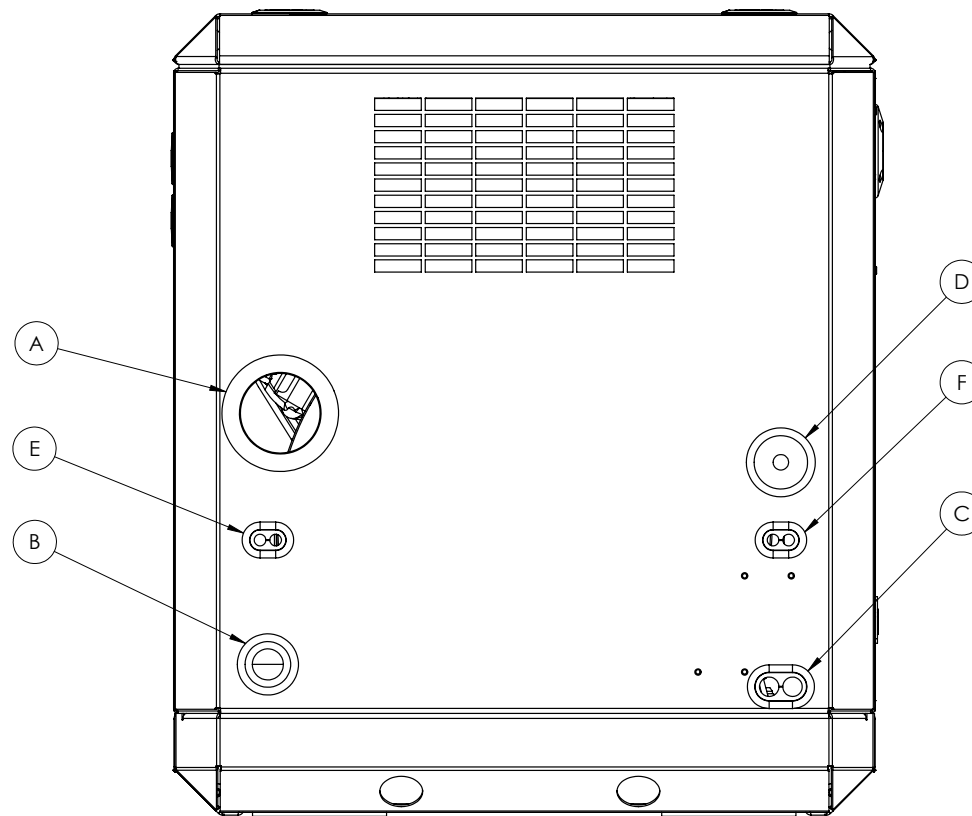
SERVICE SIDE PANEL ASSEMBLY (item#14).
INSTALL PANEL INTO LOCATOR PIN RECEPTACLES (SEE DETAIL A) AND
SECURE WITH RING LATCH. PANEL LATCH IS PRE-ADJUSTED AT FACTORY.
IF ADDITIONAL PAWL ADJUSTMENT IS NEEDED, USE A 13mm WRENCH.



LOCATOR PIN (ENGAGED) ON SERVICE SIDE PANEL ASSEMBLY, 2 PLACES.

DETAIL B

K

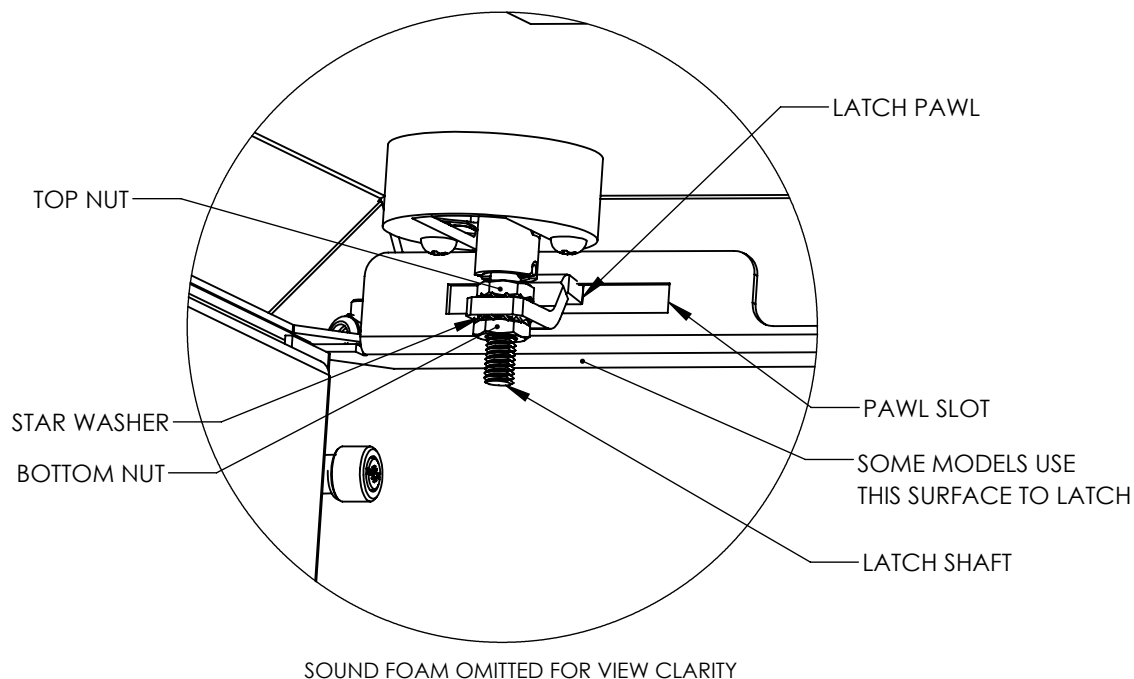


Install connections for exhaust, AC power leads, DC Control panel leads, battery and water through holes in the rear panel as shown above and described below:

- a. Connect the genset 2" OD exhaust outlet to the exhaust system of the vessel.
- b. Connect the sea water pump to the vessel's water inlet. Push a 3/4" hose from the vessel's sea water strainer through the lower hole at the bottom left of the rear panel to the sea water pump inlet fitting.
- c. Connect the vessel's fuel lines using Coast Guard approved rubber fuel hoses to the fuel manifold inside the sound shield. The outer fitting is 5/16" 37T JIC fuel suction, and the fitting is 1/4" 37T JIC fuel return.
- d. Connect the DC control harness to the engine harness plug. Pass the harness and plug through the hole at the mid-section of the right side of the rear panel.
- e. Connect the battery leads to the generator set passing the two leads through the second hole above the bottom left side of the rear panel.
- f. Connect the AC output leads from the generator to the vessel's power distribution panel. Pass the two leads through the middle hole on the right side of the rear panel.

Note: This unit features new, non-displaceable penetration grommeting for the AC, DC, and battery cables. Therefore, the fit will be snug.

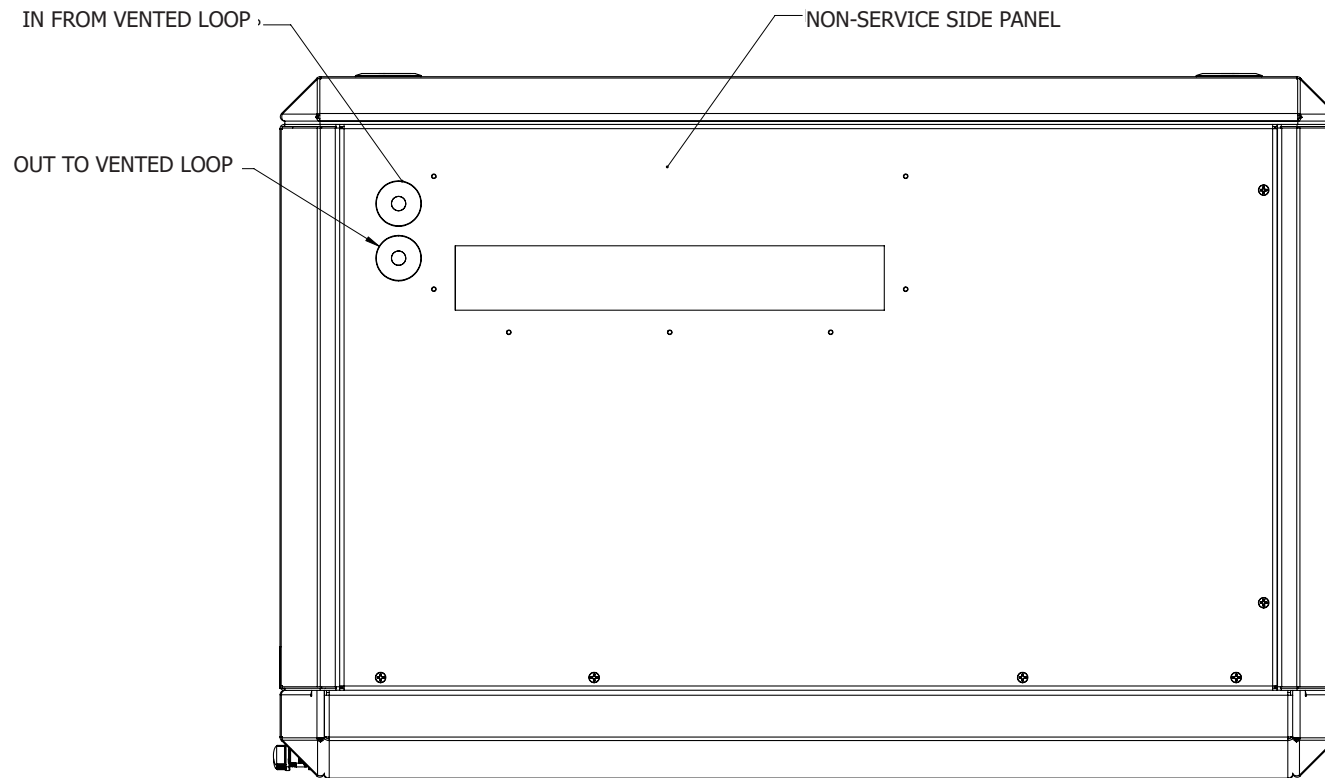
RING LATCH GRIP ADJUSTMENT INSTRUCTIONS



ALL LATCHES ARE PRE-ADJUSTED FROM FACTORY. IN THE EVENT A LATCH REQUIRES ADJUSTMENT, FOLLOW THESE STEPS:

1. NOTE THE INTERFERENCE, OR REASON WHY THE LATCH PAWL WILL NOT ENGAGE THE PAWL SLOT. IF PAWL HITS SLOT BRACKET OR SHELF IT MUST BE MOVED TO ALLOW PAWL TO ROTATE INSIDE SLOT.
2. LATCH PAWL SHOULD OPERATE WITHIN SLOT FREELY WHEN LATCH HANDLE ROTATES ON REMOVAL.
3. WITH LATCH IN CLOSED POSITION, (LATCH PAWL POINTING TOWARDS SLOT, LOOSEN THE BOTTOM NUT. TURN TOP NUT TO CHANGE POSITION OF PAWL AND THEN RE-TIGHTEN THE BOTTOM NUT. ENSURE THE NUT IS FULLY TIGHT BEFORE OPERATING THE LATCH.
4. AN IDEAL LATCH CONDITION IS WHEN THE PAWL SWINGS INTO POSITION ON CLOSING, PULLS UP AND ENGAGES THE TOP OF THE SLOT WITH INCREASING RESISTANCE. WHEN THE LATCH RING IS FULLY DEPRESSED THERE SHOULD BE FIRM COMPRESSION OF PANEL PERIMETER SEAL.
5. IF YOU CAN LIFT UP A CORNER OF THE TOP PANEL AND SEE A SPACE, THE LATCH IS NOT TIGHT ENOUGH.

M



FOR APPLICATIONS USING A SIPHON BREAK:

Remove the white plastic hole plugs by pushing them out from the inside and replace with the two rubber grommets (item 15) provided.

CAUTION: GENERATOR SETS WITH WET EXHAUST THAT ARE INSTALLED NEAR OR BELOW THE VESSEL'S WATER LINE MUST USE A SIPHON BREAK TO PREVENT BACKFLOW OR WATER INTO THE ENGINE. THIS BACKFLOW CAN RUIN AN ENGINE AND POSSIBLY SINK THE VESSEL.

- a. Disconnect the hose from the seawater pump output and from the rubber elbow on the expansion tank. Install two lengths of 3/4" hose. The hoses must be of adequate length to allow mounting of a siphon break, a minimum of 12 inches above the vessel's loaded water line.
- b. Pass the seawater pump output hose through the top hole in the panel. The hose from the expansion tank must go through the bottom hole in the panel.
- c. For more information, see the "Exhaust" section of IM1000 Installation Manual.

M844LW3 / M844DW3 SOUND SHIELD PACKING LIST

ITEM	DESCRIPTION	NLI P/N	QTY	PACKED
1	JUNCTION BLOCK OFF PLATE ASSEMBLY	06-78110	1	☐
2	REAR PANEL ASSEMBLY, Includes 06-78108	06-78102	1	☐
7	BOTTOM SIDE VALENCE ASSEMBLY	06-78104	2	☐
8	FRONT BOTTOM VALENCE ASSEMBLY	06-78108	1	☐
9	NON-SERVICE SIDE PANEL ASSEMBLY	06-78107	1	☐
10	SERVICE SIDE PANEL AFT ASSEMBLY	06-78106	1	☐
11	FRONT PANEL ASSEMBLY	06-78101	1	☐
12	SEAL BAR ASSEMBLY	06-78109	1	☐
13	TOP PANEL ASSEMBLY	00-78103	1	☐
14	SERVICE SIDE PANEL, FWD ASSEMBLY	00-78105	1	☐
HARDWARE BAG:				
3	M8 FLAT WASHER	15-11000	4	Loose ☐
4	M8 LOCK WASHER	15-00705	4	Loose ☐
5	M8 HEX HEAD CAPSCREW	12-00776	4	Loose ☐
6	SOUND FOAM, SNORKEL RECEIVER SEAL	55-78114	1	Loose ☐
15	GROMMET, 1-1/8" ID x 1-7/8" OD	00-70146	2	Loose ☐
16	E-STOP/LEAK ALARM HARNESS	22-72024	1	Loose ☐

Packed By: _____

Date: _____