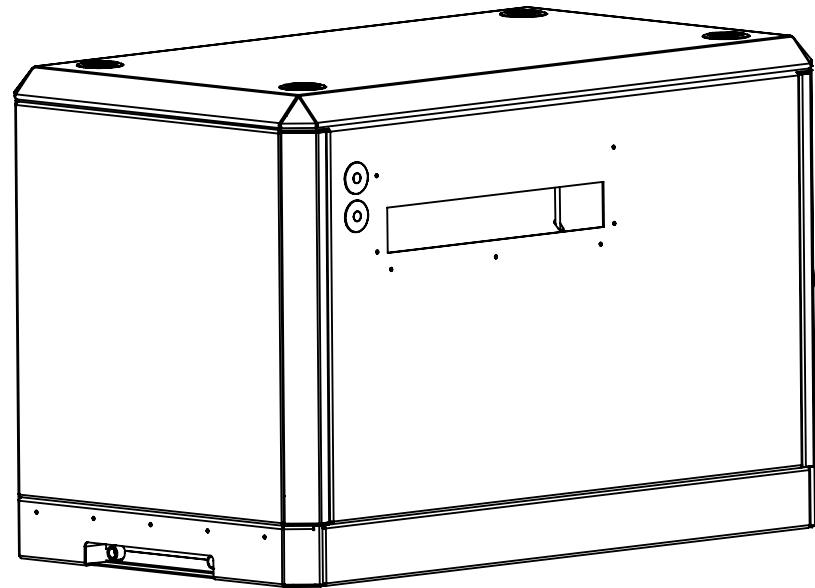
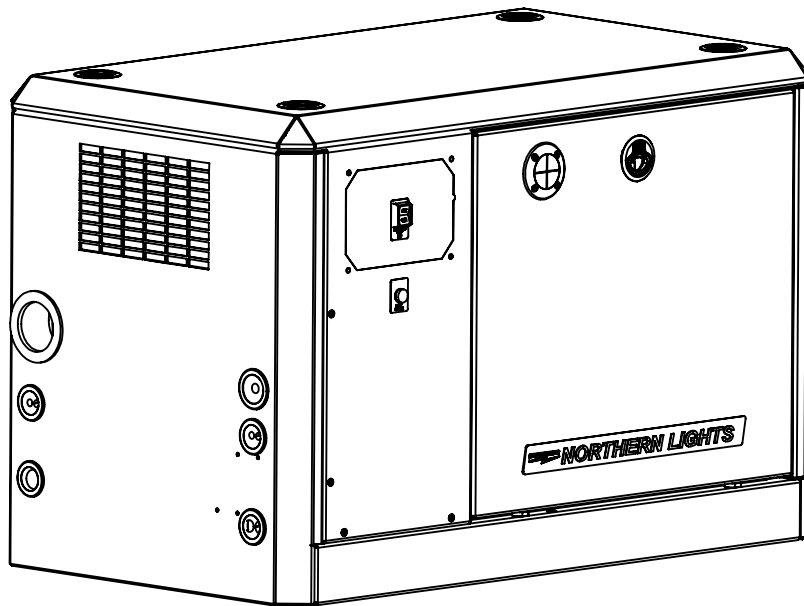




# M843NW3

**GEM Series Sound Enclosure • P/N 06-73150**  
**Assembly Instructions**



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LIT NO.: L834 11/22



## M843NW3 GEM Sound Enclosure p/n 06-73150

ITEM #	DESCRIPTION	NLI P/N	QTY	NOTES
0.	Junction box bridge cover assembly	06-73111	1	
1.	Rear panel assembly	06-73161	1	
2.	Right side bottom valence assembly	06-73162	2	
3.	Left side bottom valence assembly	06-73132	1	
4.	Front bottom valence assembly	06-73165	1	
5.	Non-service side panel assembly	06-73163	1	
6.	Service side aft assembly	06-73106	1	
7.	Service side forward panel assembly	06-73105	1	
8.	Front panel assembly	06-73167	1	
9.	Seal bar assembly	06-73110	1	
10.	Top panel assembly	06-73103	1	
11.	Sound foam, snorkel receiver seal	55-73174	1	Loose, bagged
12.	Kit, harness addition	22-72026	1	Contents bagged
13.	Grommet, siphon break	00-70146	2	Loose, bagged
14.	M8 flat washer (s/s)	15-11000	4	Loose, bagged
15.	M8 lock washer (s/s)	15-00705	4	Loose, bagged
16.	M8 capscrew (s/s)	12-00776	4	Loose, bagged

### SPECIFICATIONS

#### Enclosure:

Length (OA)	38.8 in (986 mm)
Width	22.6 in (574 mm)
Height	25.8 in (655 mm)
Assembled weight (shield only)	53 lbs (24 kg)
Assembled weight (with generator set)	797 lbs (355 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.

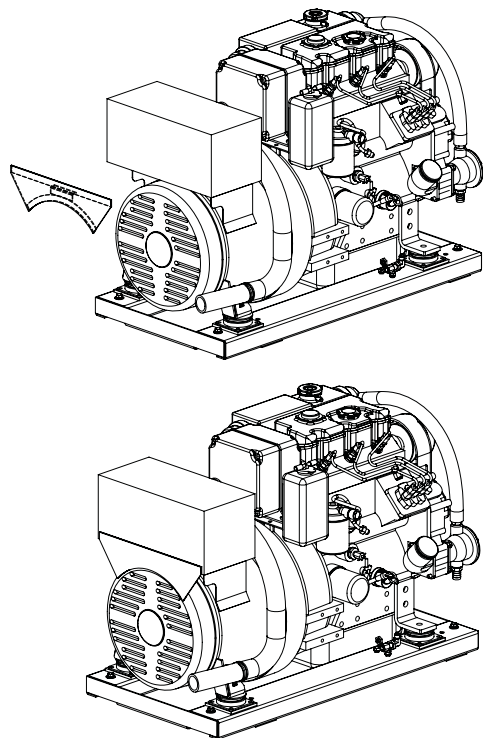
*Note: The Generator set features a single point lifting eye. However, the generator may still possess original factory lifting points, which need to be loosened and rotated down, until they are below the highest point of the engine. Be sure to retighten those bolts before moving on.*

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.

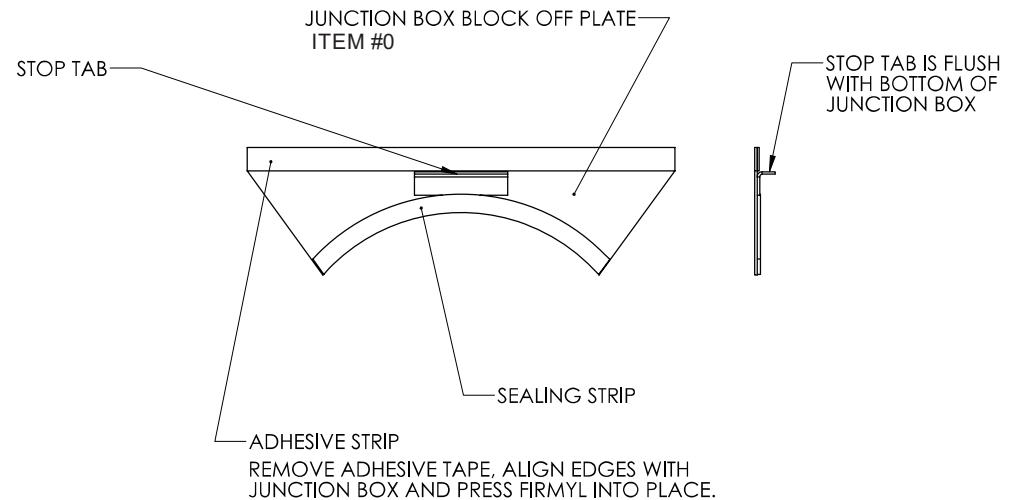
Note that the generator set is designed for single side service. When viewed from the rear, the right hand side is the service side and should be exposed for easy maintenance access.

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.**



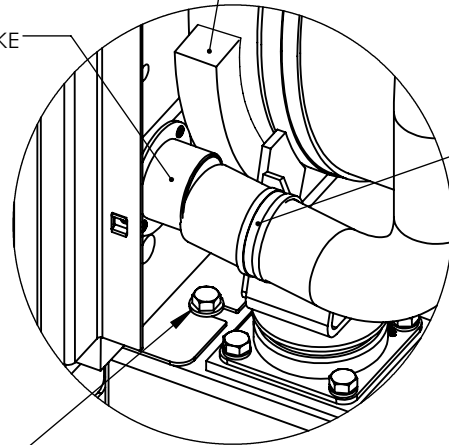
PRIOR TO SOUND ENCLOSURE ASSEMBLY, INSTALL THE JUNCTION BOX BLOCK OFF PLATE ITEM #0 AS SHOWN IN FOLLOWING ILLUSTRATIONS.



INSTALL REAR PANEL ASSEMBLY (ITEM #1)  
TO REAR OF BASE FRAME.  
ALIGN MOUNTING TABS TO TAPPED HOLES  
ON TOP OF THE BASE FRAME.  
(SEE DETAIL A.)

INSTALL THE SNORKEL RECIEVER SEAL  
(ITEM #11) TO THE REAR PANEL TO CLOSE  
THE GAP AT THE SNORKEL BOX /GENERATOR  
END BELL CLEARANCE. ENSURE SEAL IS FULLY  
ADHERED TO THE REAR PANEL.

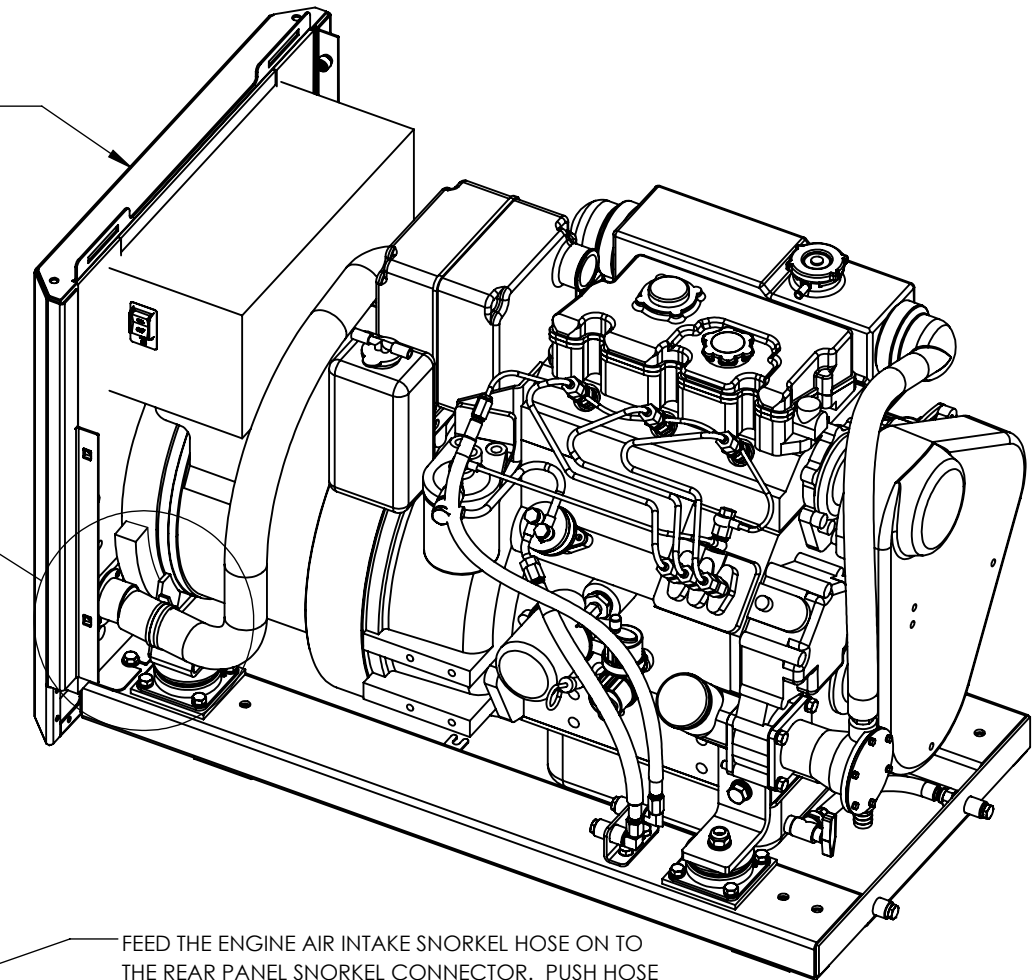
REAR PANEL AIR INTAKE  
SNORKEL ADAPTER

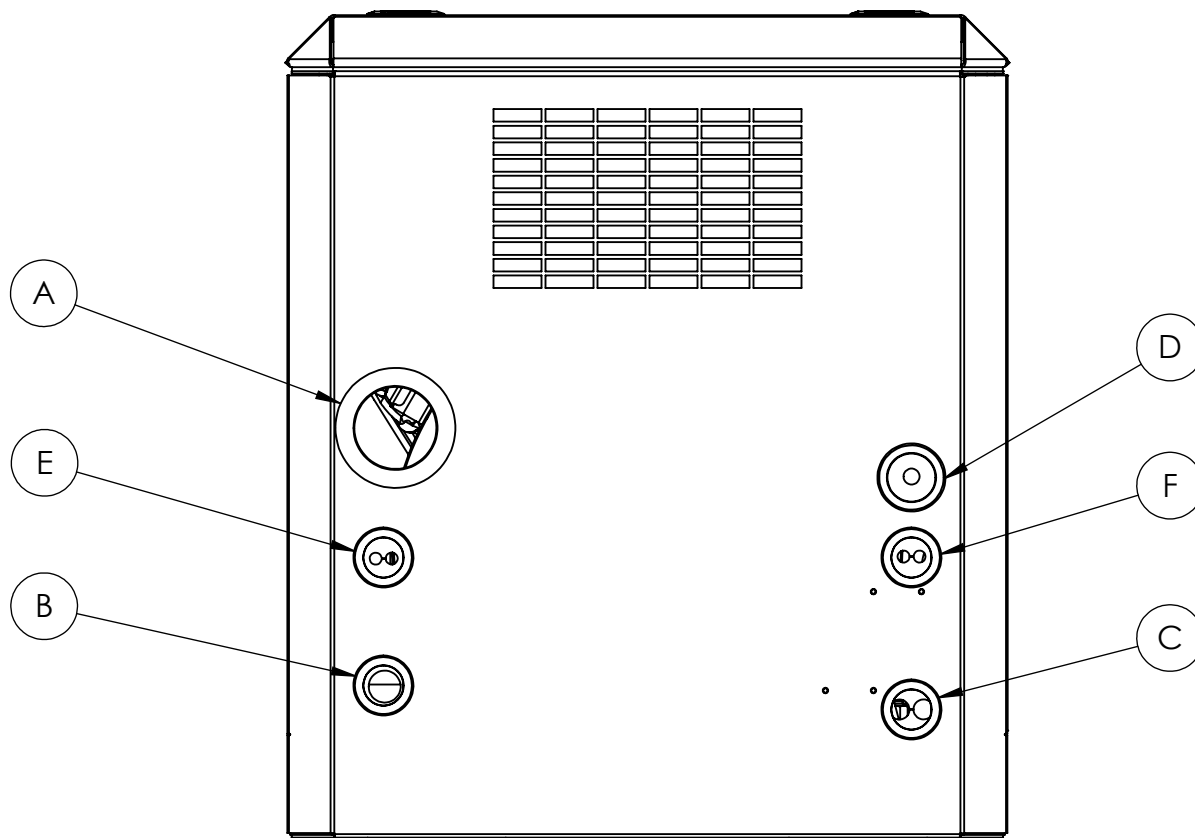


DETAIL A

SECURE REAR PANEL ASSEMBLY TO THE BASE FRAME USING  
2 M8 CAPSCREWS (ITEM #16), M8 LOCKWASHERS (ITEM #15)  
AND M8 FLATWASHERS (ITEM #14).

FEED THE ENGINE AIR INTAKE SNORKEL HOSE ON TO  
THE REAR PANEL SNORKEL CONNECTOR. PUSH HOSE  
TO ADVANCE UNTIL FULLY ENGAGED. LOOSEN THE  
RETAINER CLAMP TO ALLOW THE HOSE MORE SLACK TO  
SLIP THRU. RE-TIGHTEN AS REQUIRED.

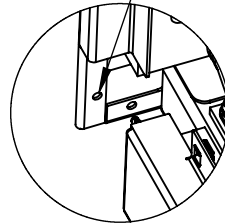




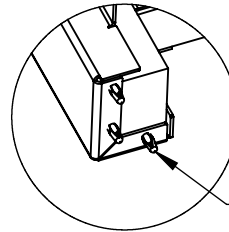
Install connections for exhaust, AC power leads, DC control cables, Battery leads and water through the holes in the rear panel as shown above and described below.

- A. Connect the genset's 2" OD exhaust elbow to the exhaust system of the vessel.
- B. Connect the sea water pump inlet to the the vessel's water inlet. Push a 3/4" ID hose from the vessel's sea water strainer through the lower holeat 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 hose to the fuel manifold inside the sound shield, through the bottom hole on the right side of the rear panel. Both the inlet and return line fittings are 1/4" NPT.
- D. Connect the DC control harness to the engine harness plug. Pass the harness and plug through the top hole on the right side of the rear panel.
- E. Connect the battery leads to the generator set, passing the two leads through the middle hole on the left side of the rear panel.
- F. Connect the AC output leads from the generator junction box to the vessel's power distribution panel. Pass the leads through the middle hole on the right side of the the rear panel.

PIN LOCKING HOLES. ALIGN THE PINS AT THE END OF THE LOWER VALENCE PANEL ASSEMBLY .  
 PUSH TOGETHER FIRMLY UNTIL IT SNAPS IN PLACE.

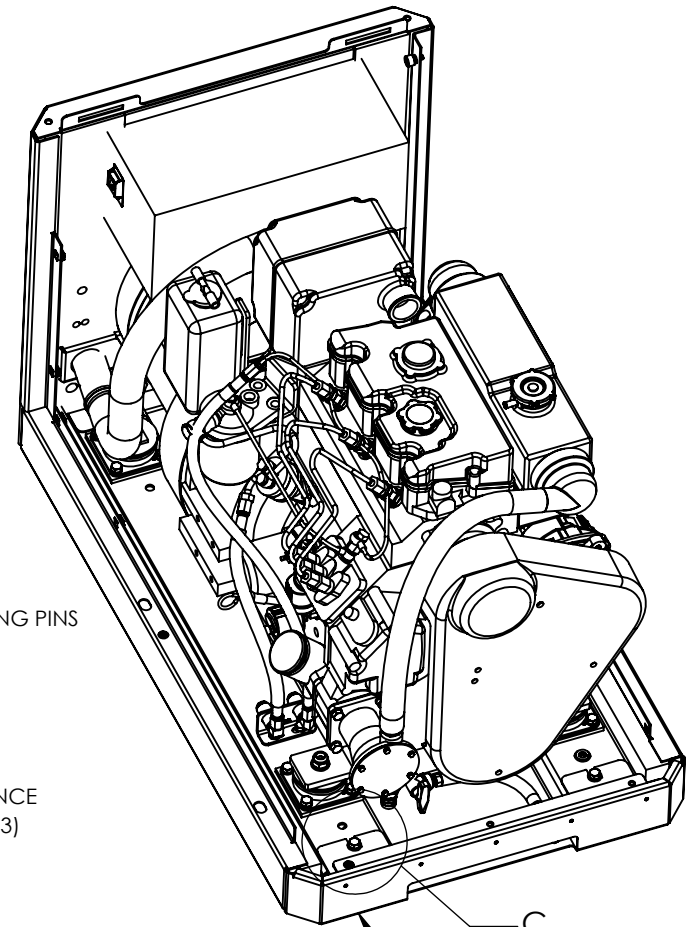


DETAIL A



LOCKING PINS

DETAIL B



C

NOTE: RIGHT SIDE VALENCE HAS 2X 10-32 CAGED NUTS INSTALLED AT THIS LOCATION.

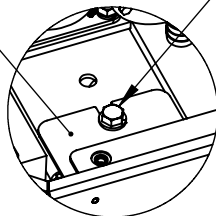
RIGHT SIDE BOTTOM VALENCE PANEL ASSEMBLY (ITEM#2) SEE DETAIL A AND B.

LEFT SIDE BOTTOM VALENCE PANEL ASSEMBLY (ITEM#3)

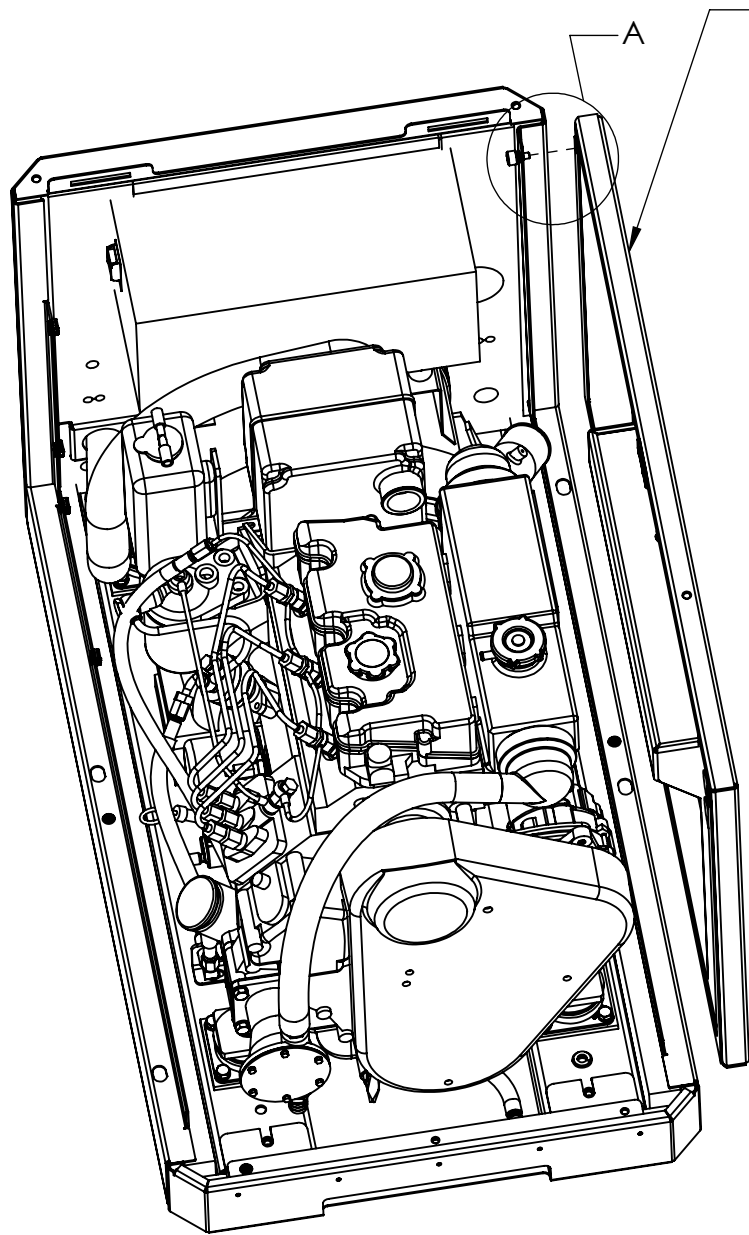
FRONT LOWER VALENCE PANEL ASSEMBLY (ITEM#4) ALIGN HOLES TO LOCKING PINS, PUSH FIRMLY UNTIL IT SNAPS TOGETHER. NOTE THE HOLES ON THE TOP OF THE FRONT VALENCE ASSEMBLY TABS WILL ALIGN WITH TAPPED HOLES ON TOP OF THE BASE FRAME. SECURE BOTH TABS TO BASE USING 2 EACH M8 FLAT WASHER, M8 LOCKWASHER, AND M8 CAPSCREW (ITEMS#14,15,16). SEE DETAIL C.

M8 CAPSCREW (ITEM#16)  
 M8 LOCKWASHER (ITEM#15)  
 M8 FLATWASHER (ITEM #14)

FRONT LOWER VALENCE MTG TAB.

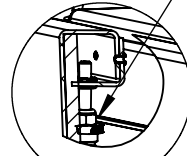


DETAIL C

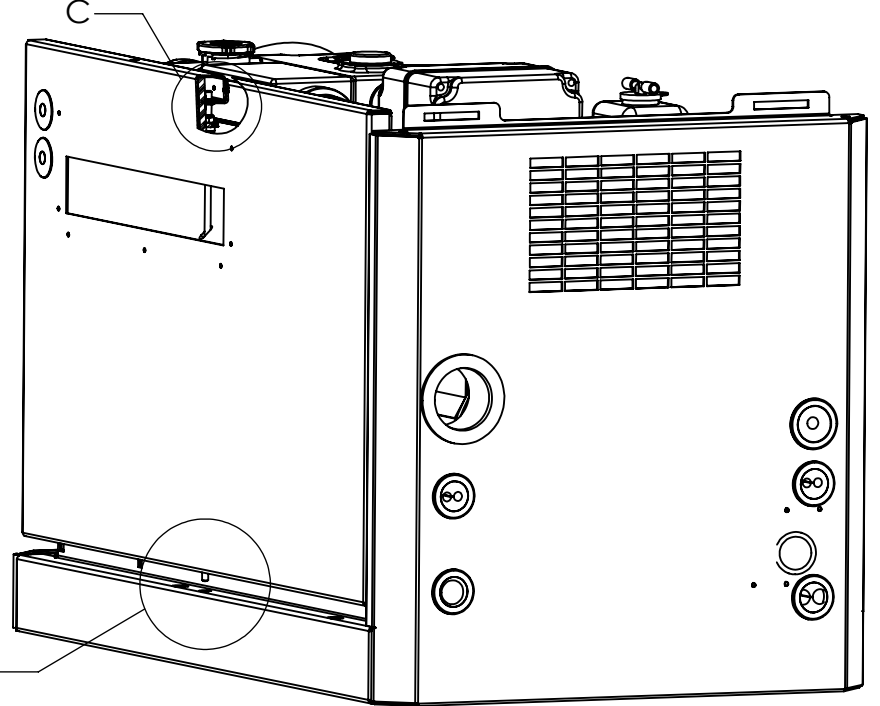


NON-SERVICE SIDE PANEL ASSEMBLY (ITEM#5)  
POSITION PANEL ON LEFT SIDE, NOTE CAPTIVE THUMBSCREW AT TOP  
OF REAR PANEL ALIGNS TO RIVET NUT IN TOP CORNER FACE OF SIDE PANEL. (DETAIL A)

SCREW ROD ACTUATOR WHEEL. OPERATES THE SCREW ROD. ROTATE CLOCKWISE TO  
ENGAGE SIDE PANEL TO BASE PANEL. ACCESS FROM INSIDE THE SHIELD.



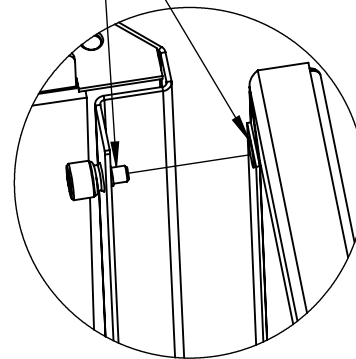
DETAIL C  
CUT AWAY



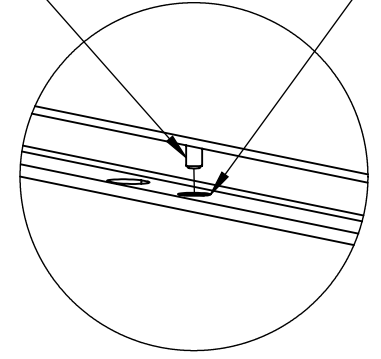
1/4-20 RIVET NUT  
CAPTIVE THUMBSCREW

SCREW ROD

SCREW ROD RECEPTACLE



DETAIL A



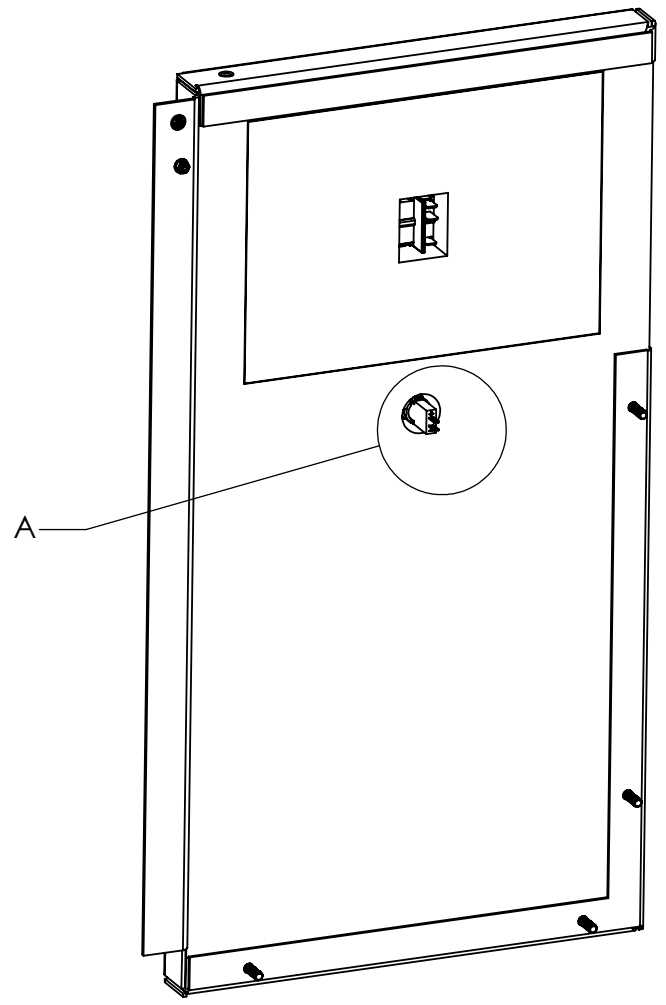
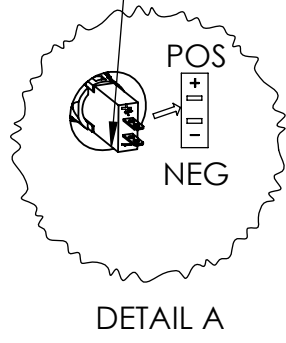
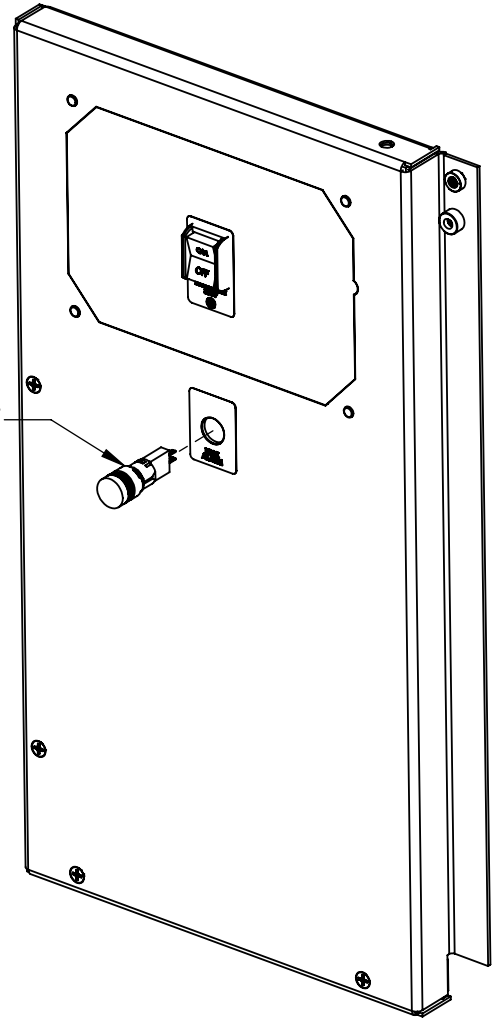
DETAIL B



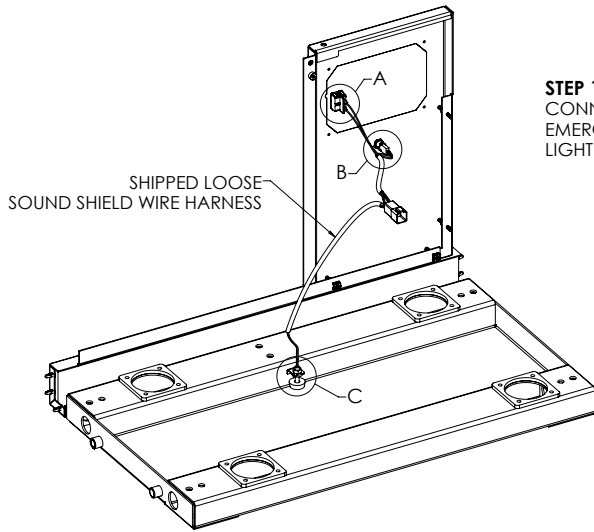
! CUSTOMER MUST INSTALL THE LEAK ALARM LIGHT BEFORE INSTALLING THIS PANEL TO THE ENCLOSURE ASSEMBLY ! ITEM IS PROVIDED LOOSE IN BAG WITH ELECTRICAL CONNECTION HARNESS.

**NOTE ORIENTATION: +(POSITIVE POLARITY) MUST BE ON TOP.**  
UNSCREW RETAINER NUT, INSERT LIGHT THRU FRONT OF PANEL AND THREAD ON RETAINER NUT FROM THE SOUND FOAM SIDE UNTIL FIRMLY HAND TIGHT.  
NOTE: LIGHT COMPONENT MAY VARY IN APPEARANCE. POLARITY OBSERVATION STILL APPLIES.

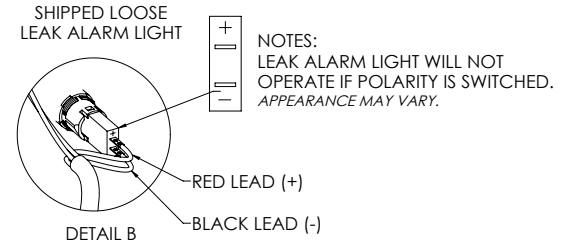
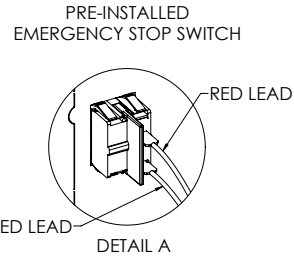
LEAK ALARM LIGHT  
22-90382



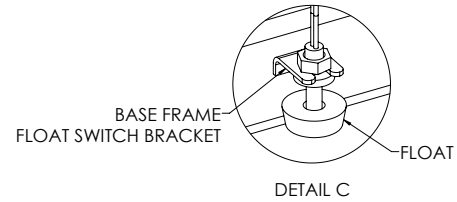
**SOUND SHIELD WIRE HARNESS INSTALLATION**



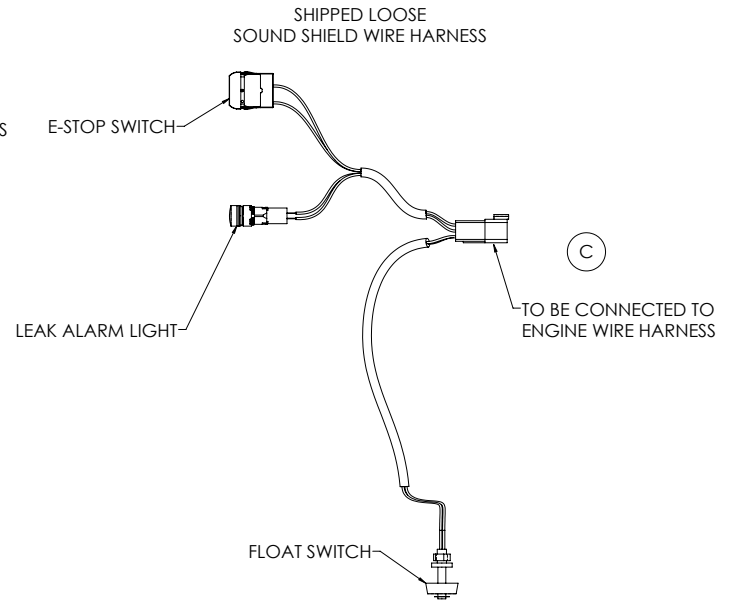
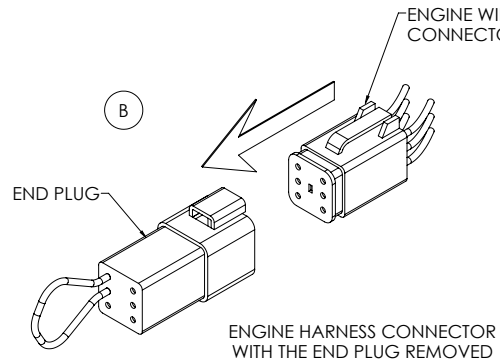
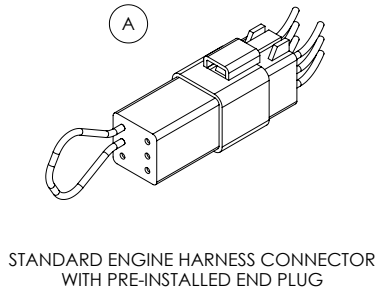
**STEP 1**  
CONNECT SOUND SHIELD WIRE HARNESS TO EMERGENCY STOP SWITCH AND LEAK ALARM LIGHT AS SHOWN IN DETAIL A AND DETAIL B.

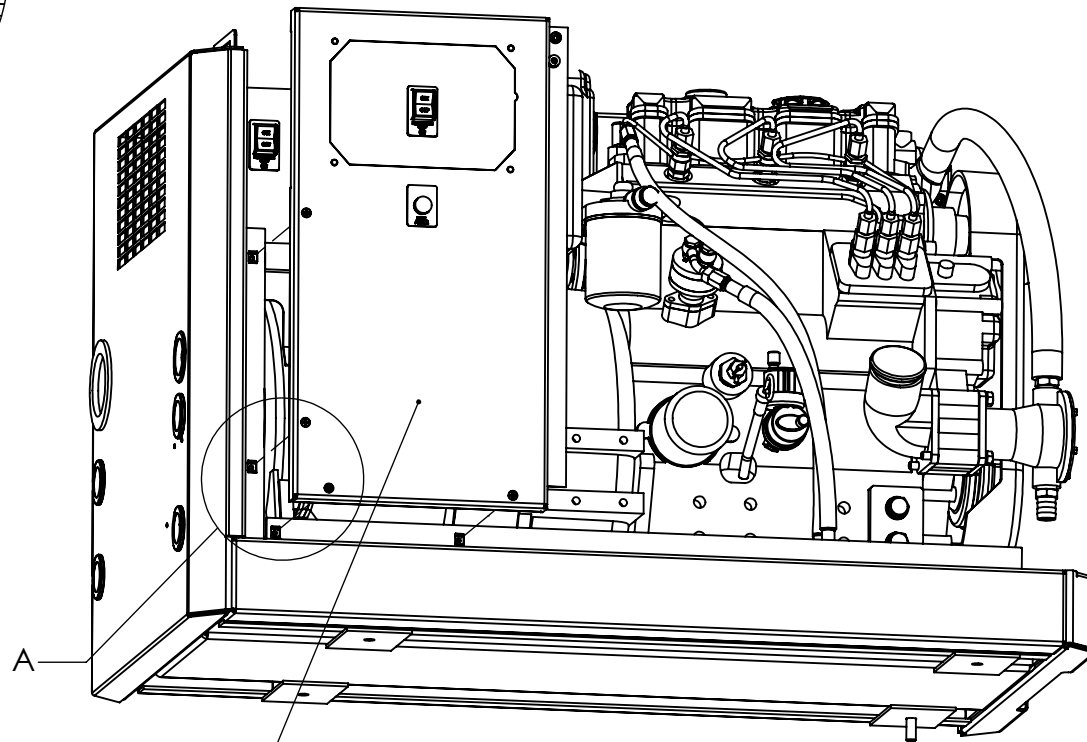
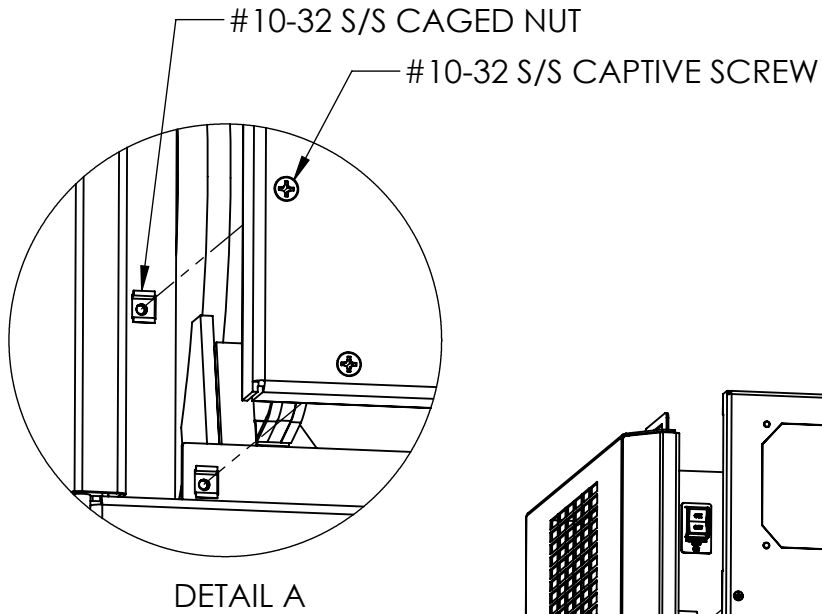


**STEP 2**  
INSTALL FLOAT SWITCH TO THE CORRESPONDING BRACKET ON THE BASE FRAME. BE SURE TO CHECK THE LEAK ALARM LIGHT BY LIFTING UP THE FLOAT AFTER GENERATOR SET IS CONNECTED TO STARTER BATTERY.



**STEP 3**  
A. LOCATE AND IDENTIFY THE ENGINE WIRE HARNESS.  
B. REMOVE THE ENGINE WIRE HARNESS END PLUG.  
C. CONNECT SOUND SHIELD WIRE HARNESS TO THE ENGINE WIRE HARNESS.

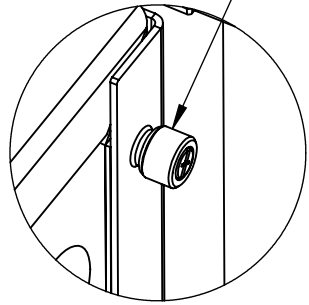




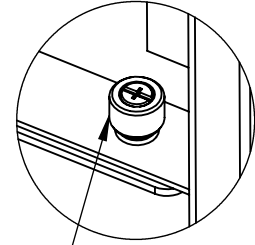
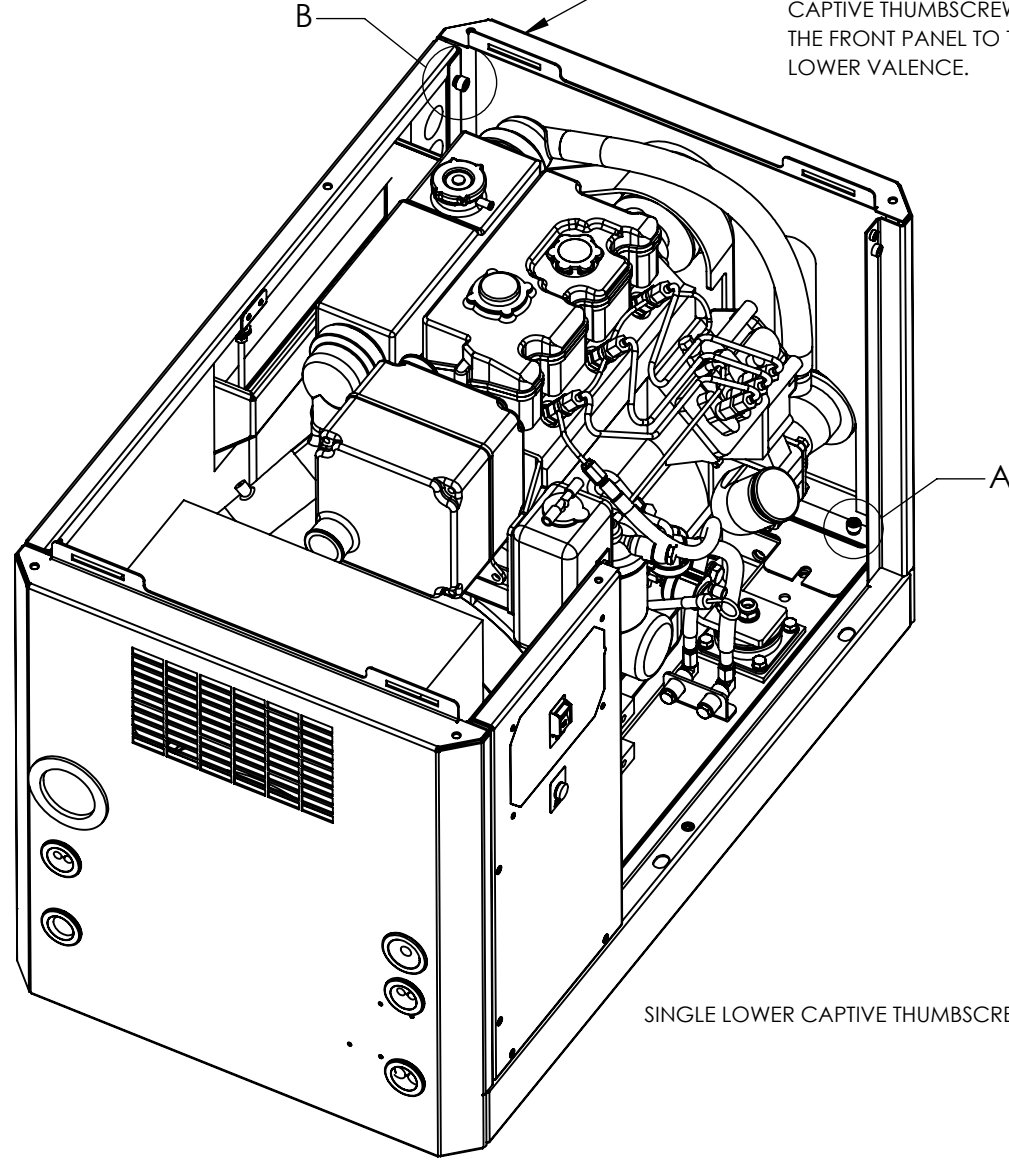
FOLLOWING THE COMPLETE CONNECTION OF THE SHIELD'S WIRE HARNESS ASSEMBLY (ITEM#12) ,  
 INSTALL THE SERVICE SIDE AFT PANEL ASSEMBLY (ITEM#6).  
 THE PANEL'S CAPTIVE SCREWS ALIGN TO CORRESPONDING CAGED NUTS WITHIN THE LOWER  
 SIDE VALENC AND REAR PANEL FLANGES. TIGHTEN USING HAND TOOLS ONLY.

TWO UPPER CAPTIVE THUMBSCREWS  
(FRONT AND REAR)

ATTACH FRONT PANEL ASSEMBLY (ITEM #8)  
(SEE DETAILS A AND B).  
POSITION PANEL AS SHOWN AND HAND TIGHTEN  
CAPTIVE THUMBSCREWS TO ENGAGE AND SECURE  
THE FRONT PANEL TO THE LEFT SIDE PANEL AND FRONT  
LOWER VALENCE.

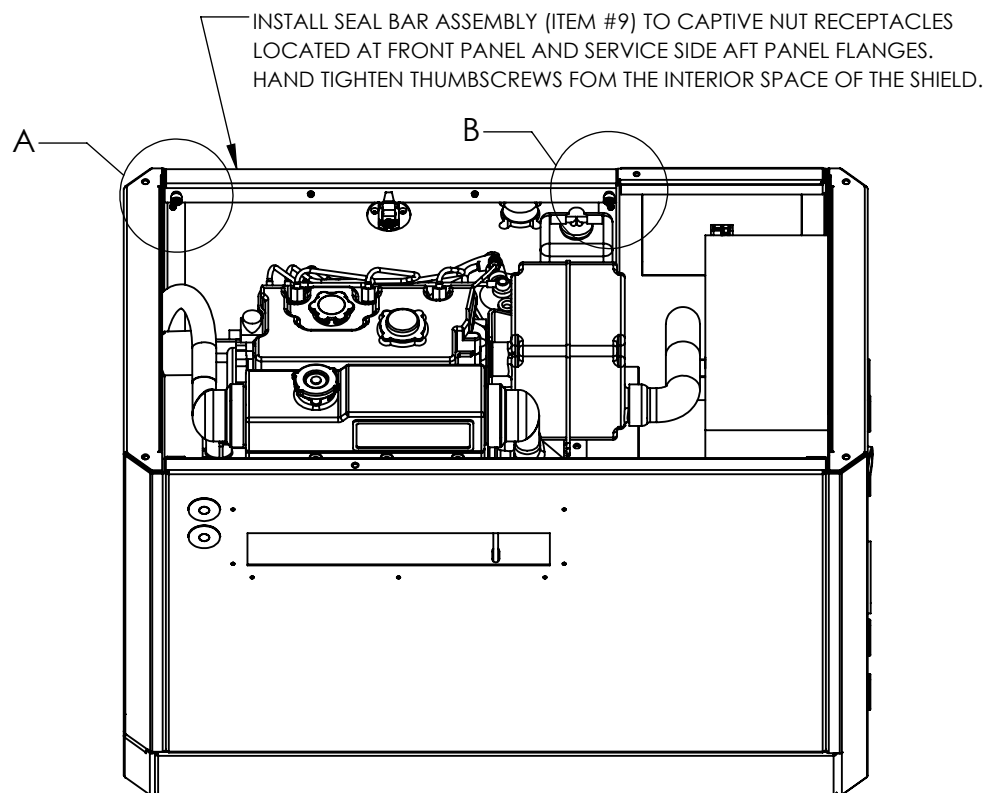
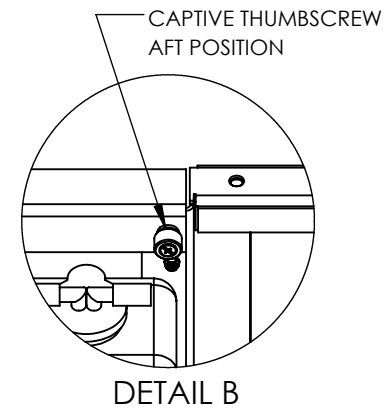
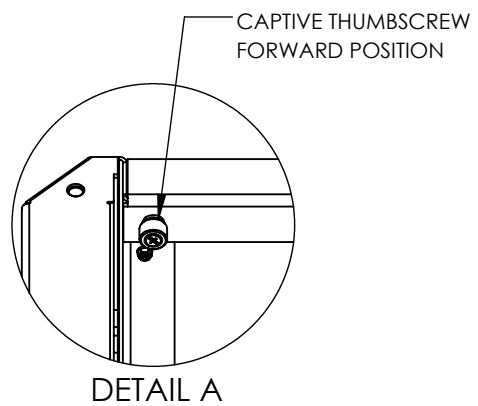
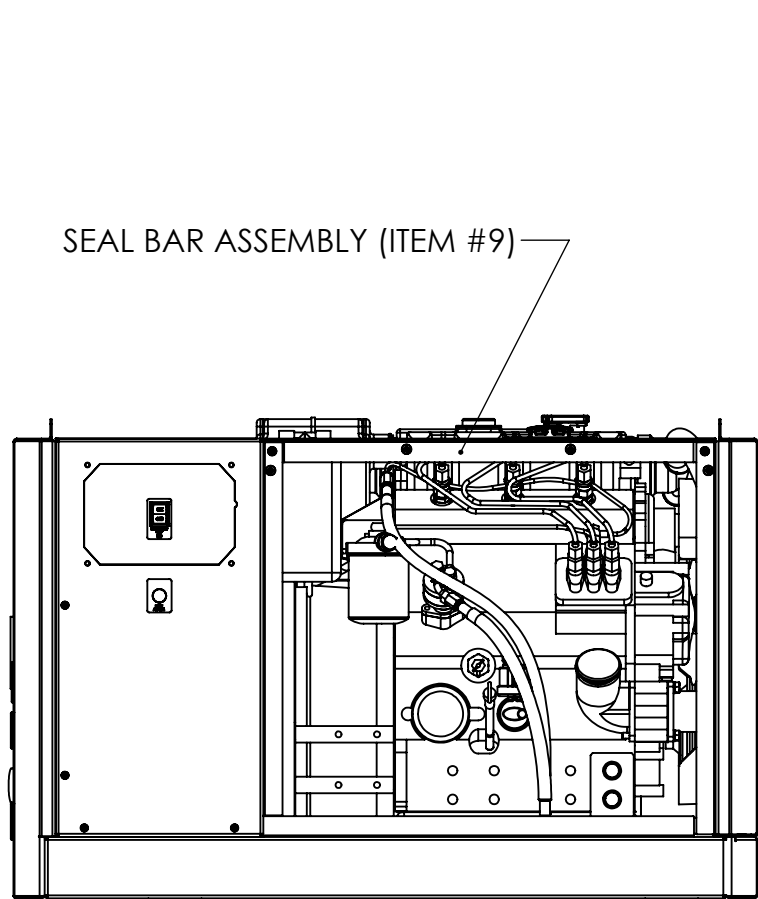


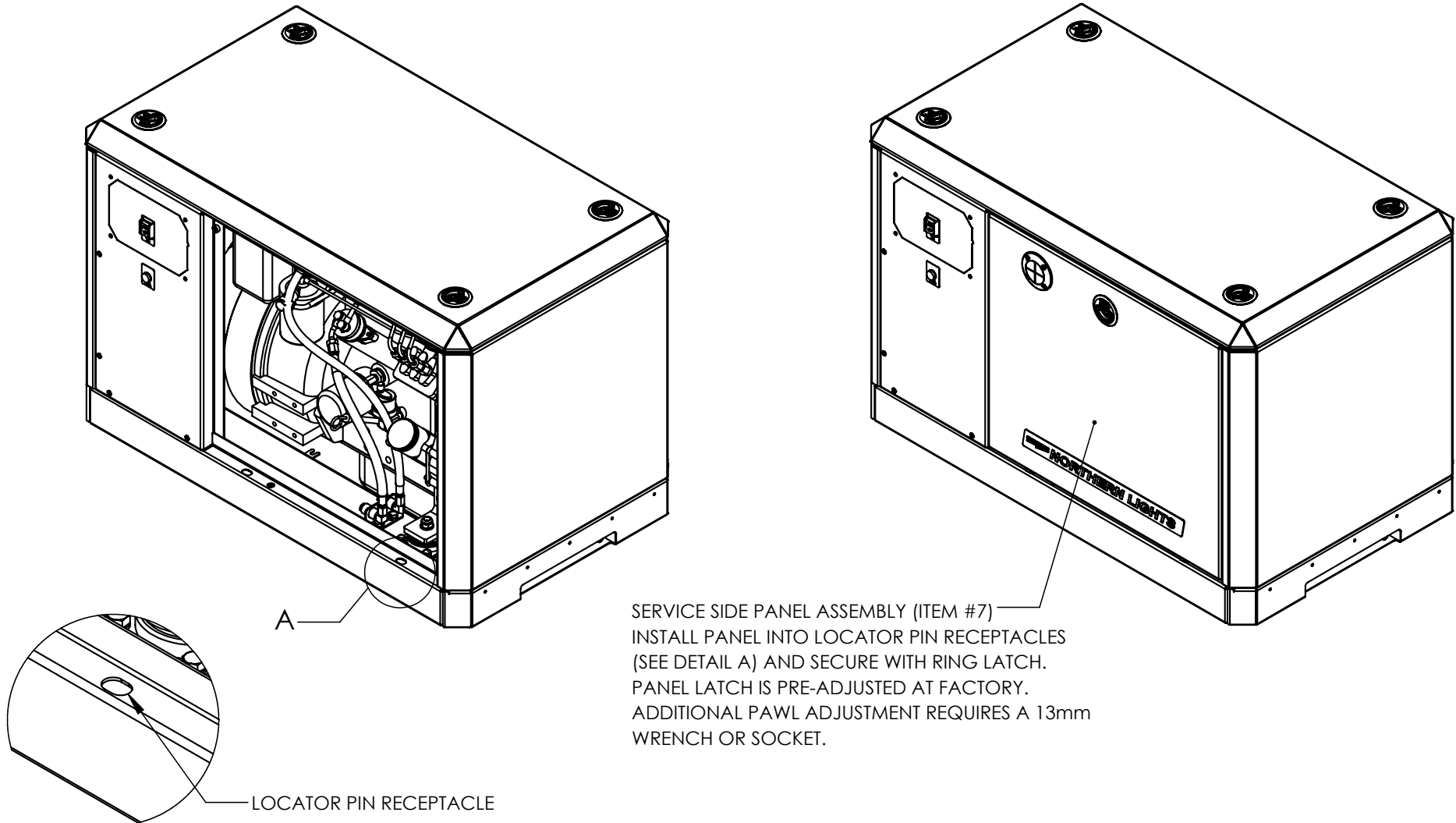
DETAIL B

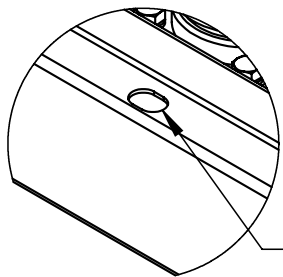
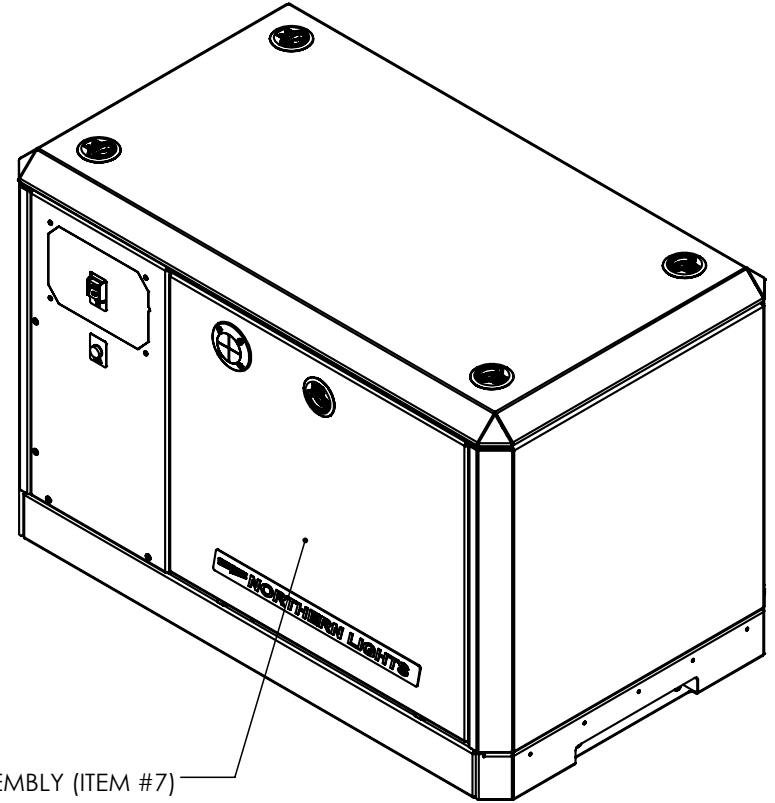
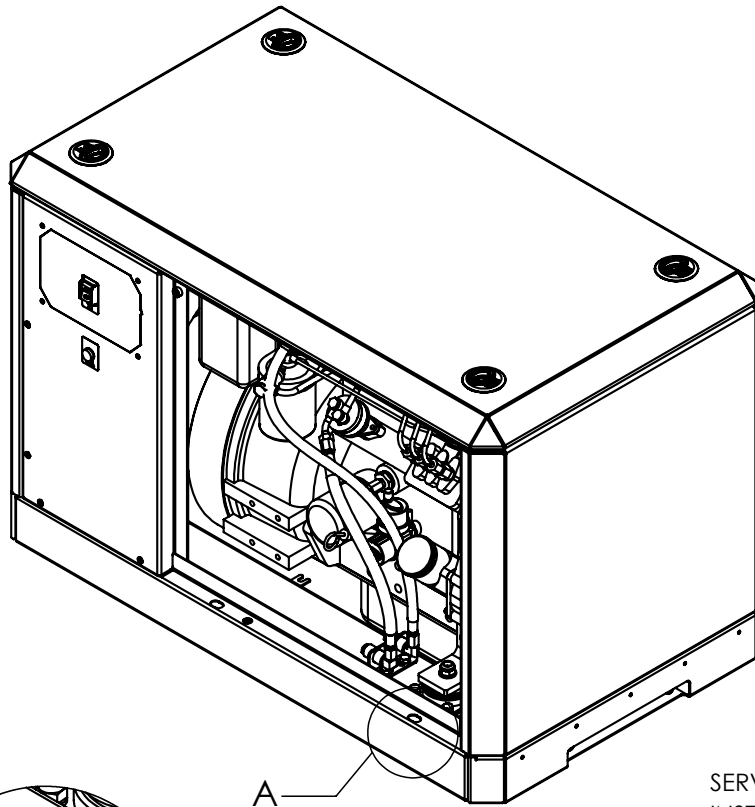


SINGLE LOWER CAPTIVE THUMBSCREW

DETAIL A





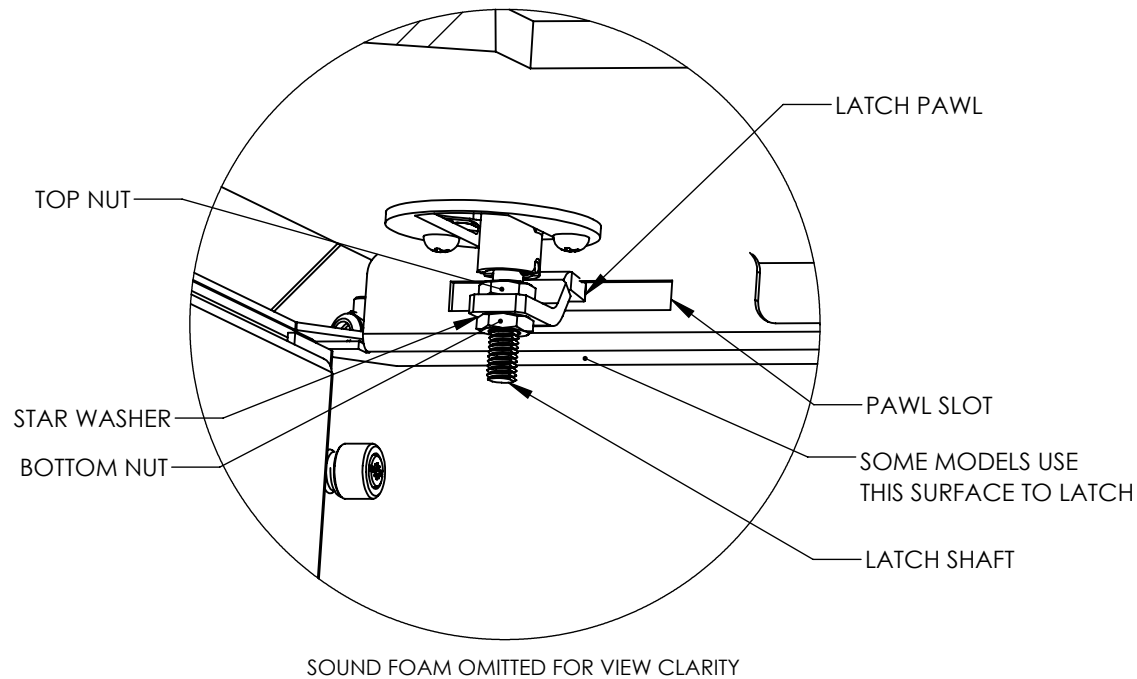


LOCATOR PIN RECEPTACLE

DETAIL A

SERVICE SIDE PANEL ASSEMBLY (ITEM #7)  
INSTALL PANEL INTO LOCATOR PIN RECEPTACLES  
(SEE DETAIL A) AND SECURE WITH RING LATCH.  
PANEL LATCH IS PRE-ADJUSTED AT FACTORY.  
ADDITIONAL PAWL ADJUSTMENT REQUIRES A 13mm  
WRENCH OR SOCKET.

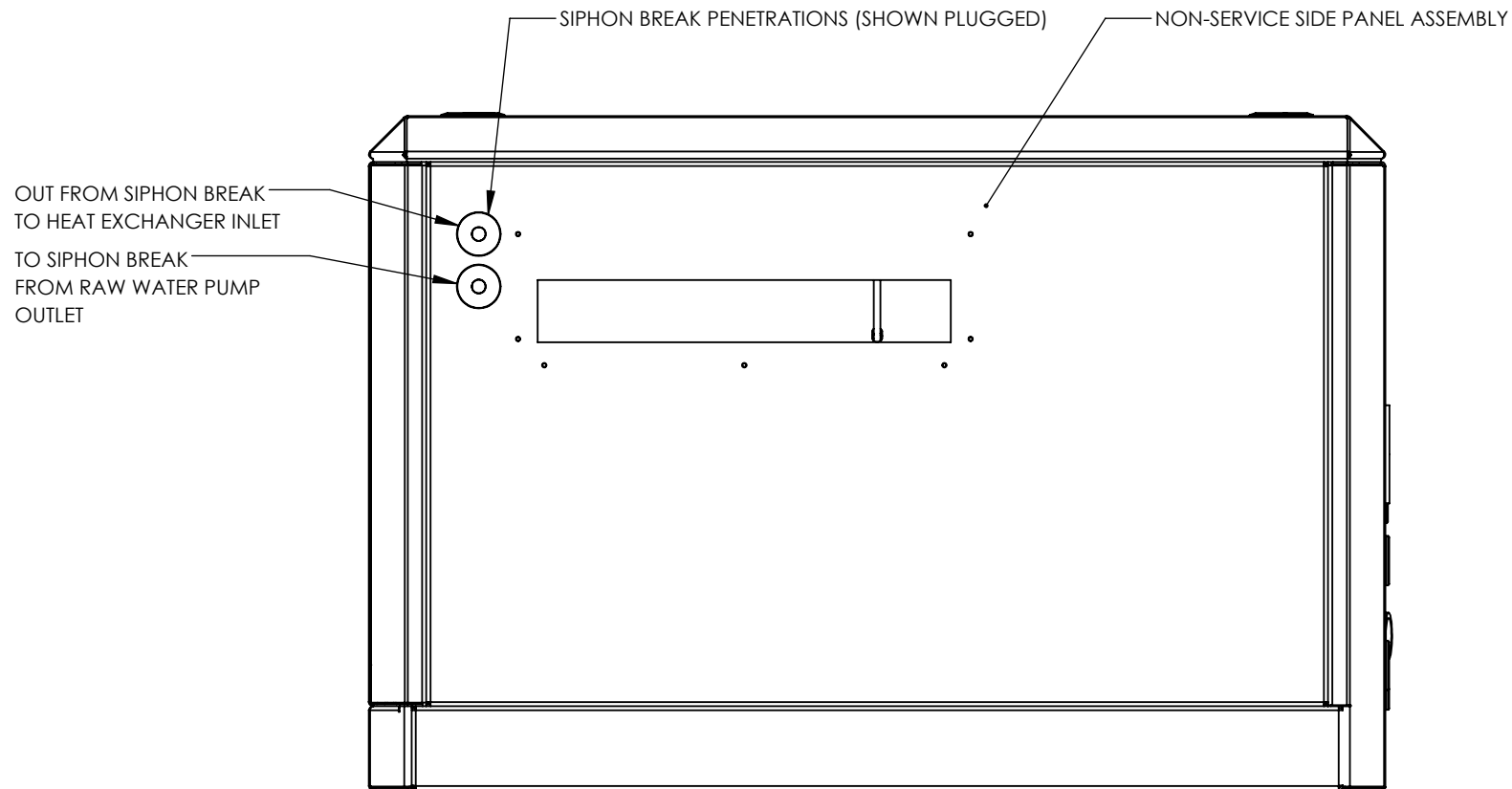
## RING LATCH GRIP ADJUSTMENT INSTRUCTIONS



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.





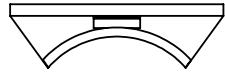
**IF YOU HAVE CHOSEN TO INSTALL A SIPHON BREAK:**

Note the two plugged holes in the upper left corner on the Non-service side panel. Reference the plumbing diagram in the mounting and exhaust sections of the IM-1000 Installation manual. Remove the white plastic plugs by pushing them out from the inside of the shield and replace with the two rubber grommets provided (item#13).

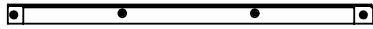
**CAUTION: GENERATOR SETS WITH WET EXHAUST THAT ARE INSTALLED NEAR OR BELOW THE VESSEL'S WATER LINE MUST USE A SIPHON BREAK TO PREVENT BACKFLOW OF WATER INTO THE ENGINE. THIS BACKFLOW CAN RUIN AN ENGINE AND POSSIBLY SINK THE VESSEL.**

- A. Disconnect the hose from the sea water pump output and from the rubber elbow on the expansion tank. Install two lengths of 3/4" ID hose. The hose should be of adequate length to allow mounting of a siphon break at a minimum of 12" above the vessel's loaded water line.
- B. Pass the seawater pump output hose through the lower hole in the side panel to the siphon break. Run the the hose from the siphon break through the upper hole in the side panel and connect to the rubber elbow of the expansion tank/heat exchanger.
- C. For more information, see the 'exhaust' section of the IM-1000 Installation Manual.

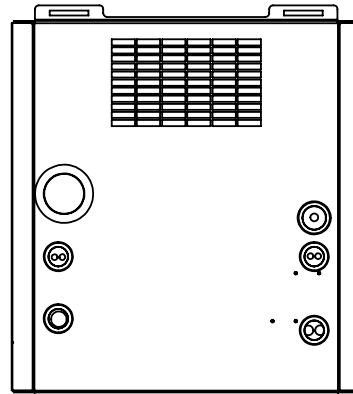
# PACKING LIST



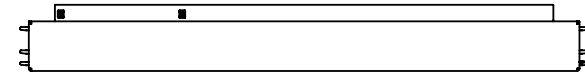
ITEM#0 JUNCTION BOX  
BRIDGE COVER ASSY  
06-73111 QTY: 1



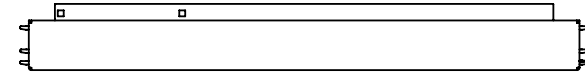
ITEM#9 SEAL BAR ASSEMBLY  
06-73110 QTY: 1



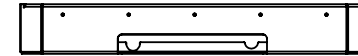
ITEM#1 REAR PANEL ASSEMBLY  
06-73161 QTY: 1



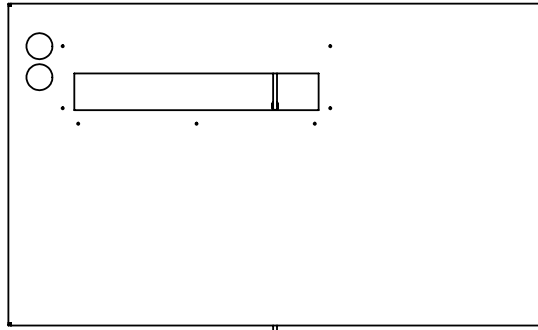
ITEM#2 RIGHT SIDE BOTTOM VALENCE ASSEMBLY  
06-73162 QTY: 1



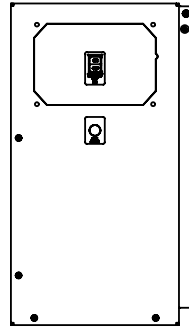
ITEM#3 LEFT SIDE BOTTOM VALENCE ASSEMBLY  
06-73132 QTY: 1



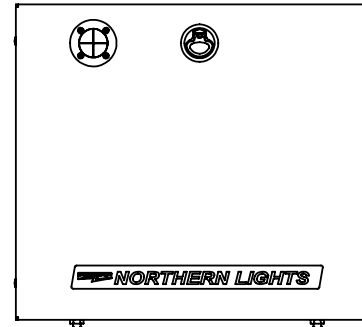
ITEM#4 FRONT BOTTOM VALENCE ASSEMBLY  
06-73165 QTY: 1



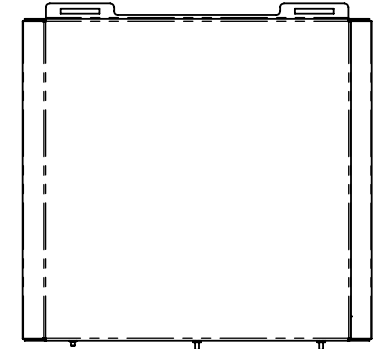
ITEM#5 NON-SERVICE SIDE PANEL ASSEMBLY  
06-73163 QTY: 1



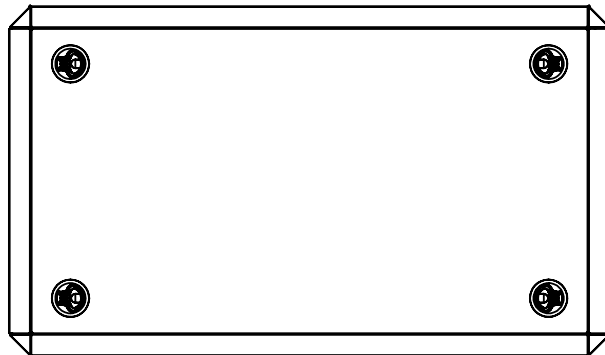
ITEM#6 SERVICE SIDE PANEL  
AFT ASSEMBLY 06-73106 QTY: 1



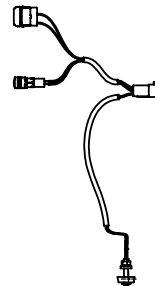
ITEM#7 SERVICE SIDE PANEL FWD ASSEMBLY  
06-73105 QTY: 1



ITEM#8 FRONT PANEL ASSEMBLY  
06-73167 QTY: 1



ITEM#10 TOP PANEL ASSEMBLY  
06-73103 QTY: 1



ITEM#12 KIT, HARNESS  
ADDITION  
22-72026 QTY: 1



ITEM#16 M8 CAPSCREW  
12-00776 QTY: 4



ITEM#13 GROMMET  
00-70146 QTY: 2



ITEM#15 M8 LOCK WASHER  
15-00705 QTY: 4



ITEM#14 M8 FLAT WASHER  
15-11000 QTY: 4



ITEM#11 SOUND FOAM  
SNORKEL RECIEVER SEAL  
55-73174 QTY: 1

Packed By : \_\_\_\_\_

Date : \_\_\_\_\_