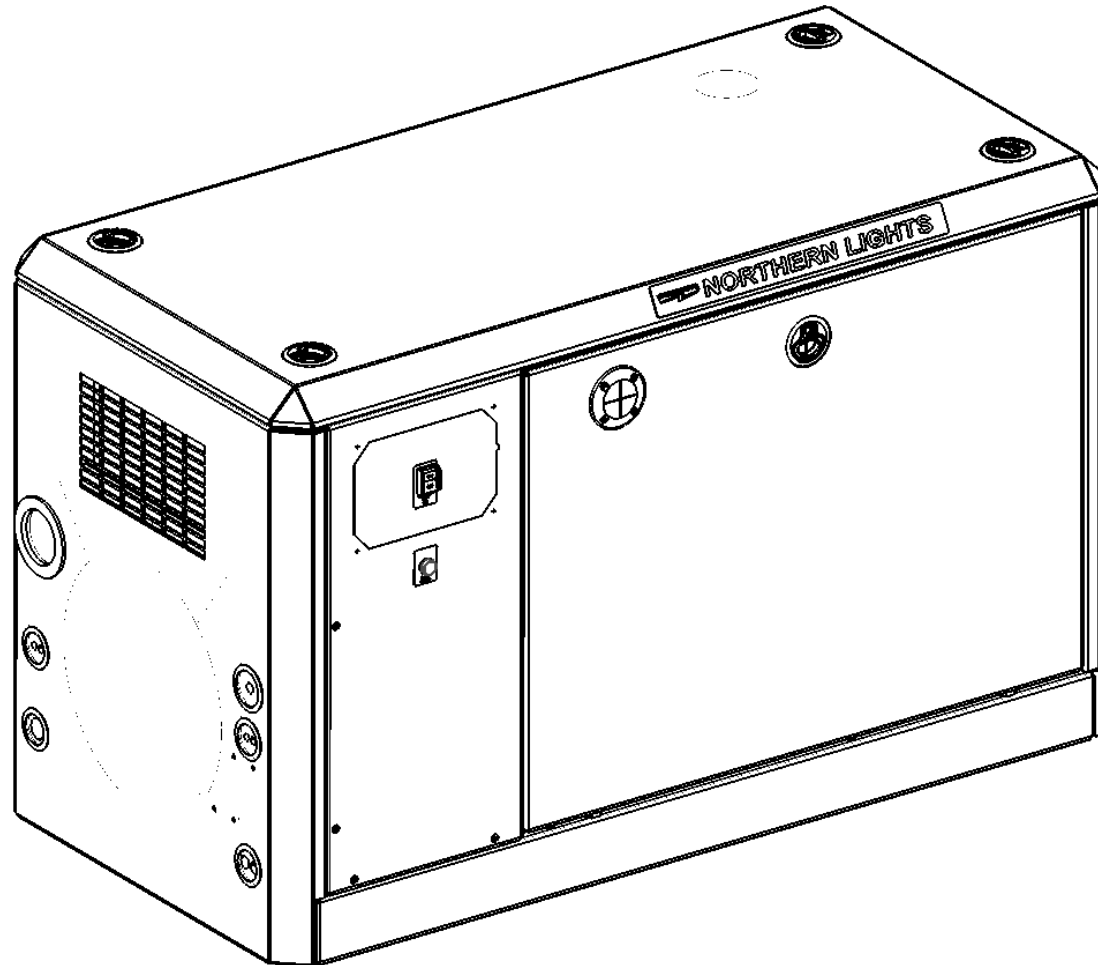




# M844LW3 / M844DW3

GEM Series Sound Enclosure • P/N 06-78450

## Assembly Instructions



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LIT NO.: L816b 1/23



# M844LW3 / M844DW3 GEM Sound Enclosure p/n 06-78450

ITEM #	DESCRIPTION	NLI P/N	QTY	NOTES
0.	Junction box bridge cover assembly	06-78110	1	
1.	Rear panel assembly	06-78403	1	
2.	Right side bottom valence assembly	06-78412	1	
3.	Left side bottom valence assembly	06-78404	1	
4.	Front bottom valence assembly	06-78405	1	
5.	Non-service side panel assembly	06-78401	1	
6.	Service side aft panel assembly	06-78106	1	
7.	Service side forward panel assembly	00-78105	1	
8.	Front panel assembly	06-78413	1	
9.	Seal bar assembly	06-78109	1	
10.	Top panel assembly	06-78417	1	
11.	Sound foam, snorkel receiver seal	55-78114	1	loose, bagged
12.	Kit, harness addition	22-72026	1	items bagged
13.	Grommet, siphon break	00-70146	2	loose, bagged
14.	5/16 flat washer, s/s	15-11000	4	loose, bagged
15.	M8 lock washer	15-00705	4	loose, bagged
16.	M8 capscrew, s/s	12-00776	4	loose, bagged
17.	Hose clamp #28	19-00028	1	loose, bagged

## SPECIFICATIONS

Enclosure (installed on generator base):

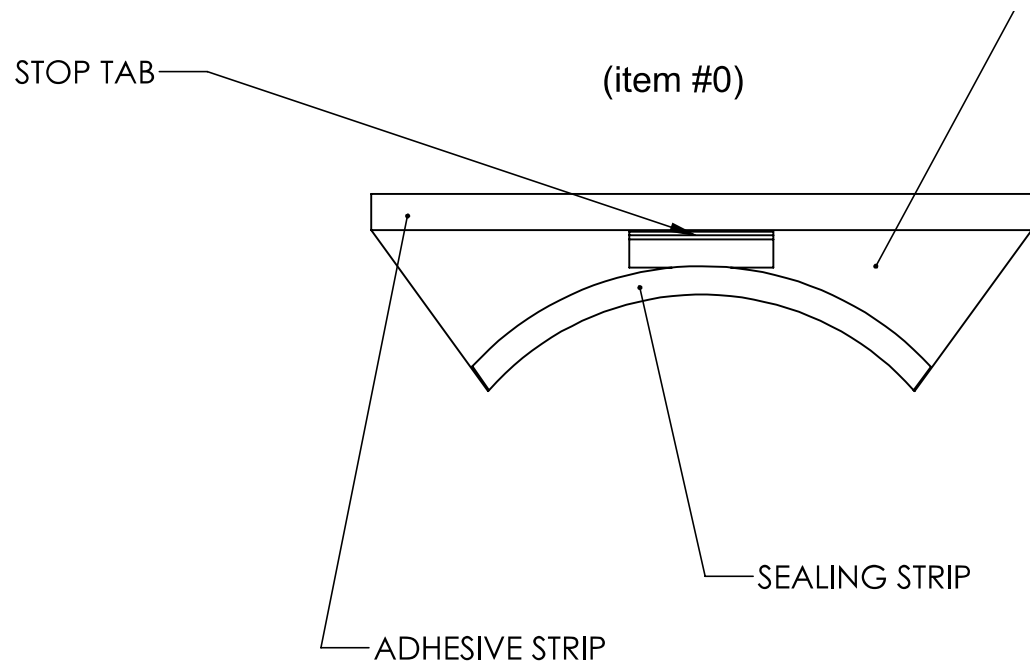
Length (OA)	46.1 in (1170 mm)
Width	22.6 in (574 mm)
Height	28.1 in (714 mm)
Assembled weight - shield only:	59 lbs (26.7 kg)
Assembled weight w/ genset:	997 lbs (452 kg)

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.

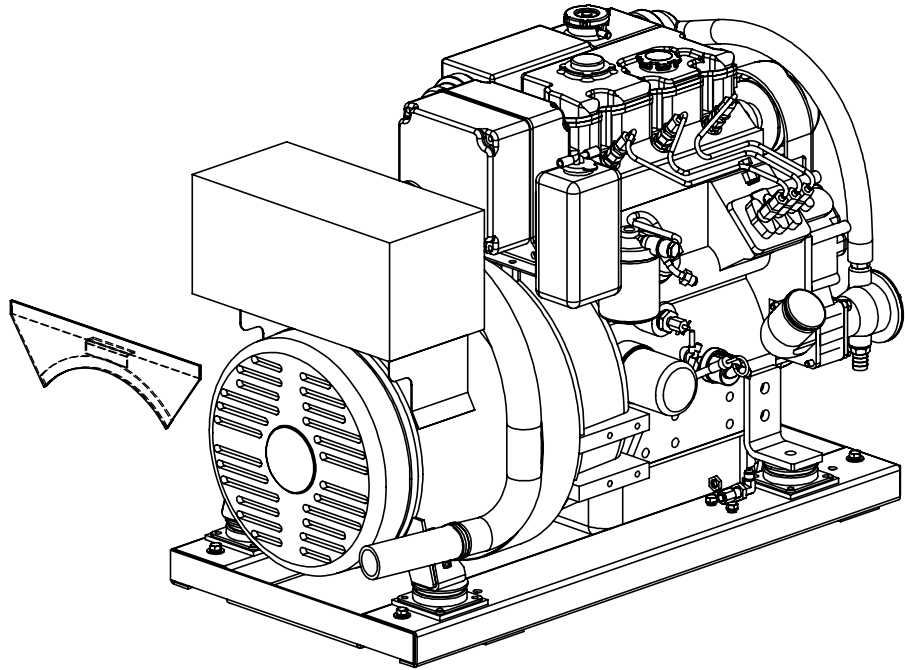
*Note: The Generator set features a single point lifting eye. However, the generator may still possess original factory lifting points, which need to be loosened and rotated down, until they are below the highest point of the engine. Be sure to retighten those bolts before moving on.*

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

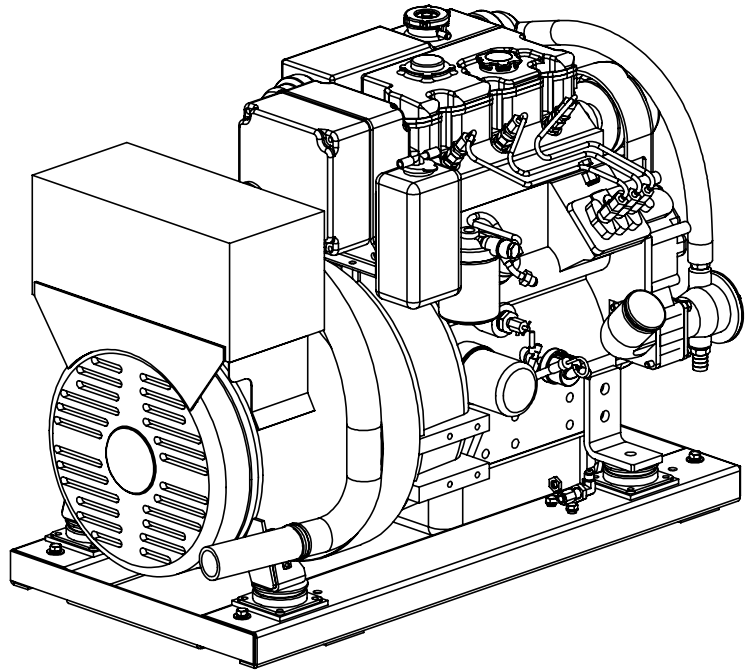
**A** PRIOR TO SOUND SHIELD ASSEMBLY, START WITH ITEM #0 SHOWN IN THE FOLLOWING ILLUSTRATIONS.



REMOVE ADHESIVE TAPE, ALIGN EDGES WITH JUNCTION BOX AND PRESS FIRMYL INTO PLACE.

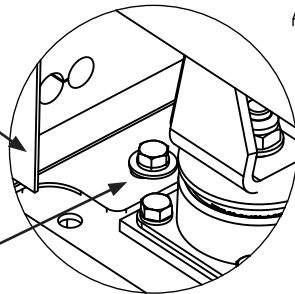


STOP TAB IS FLUSH  
WITH BOTTOM OF  
JUNCTION BOX



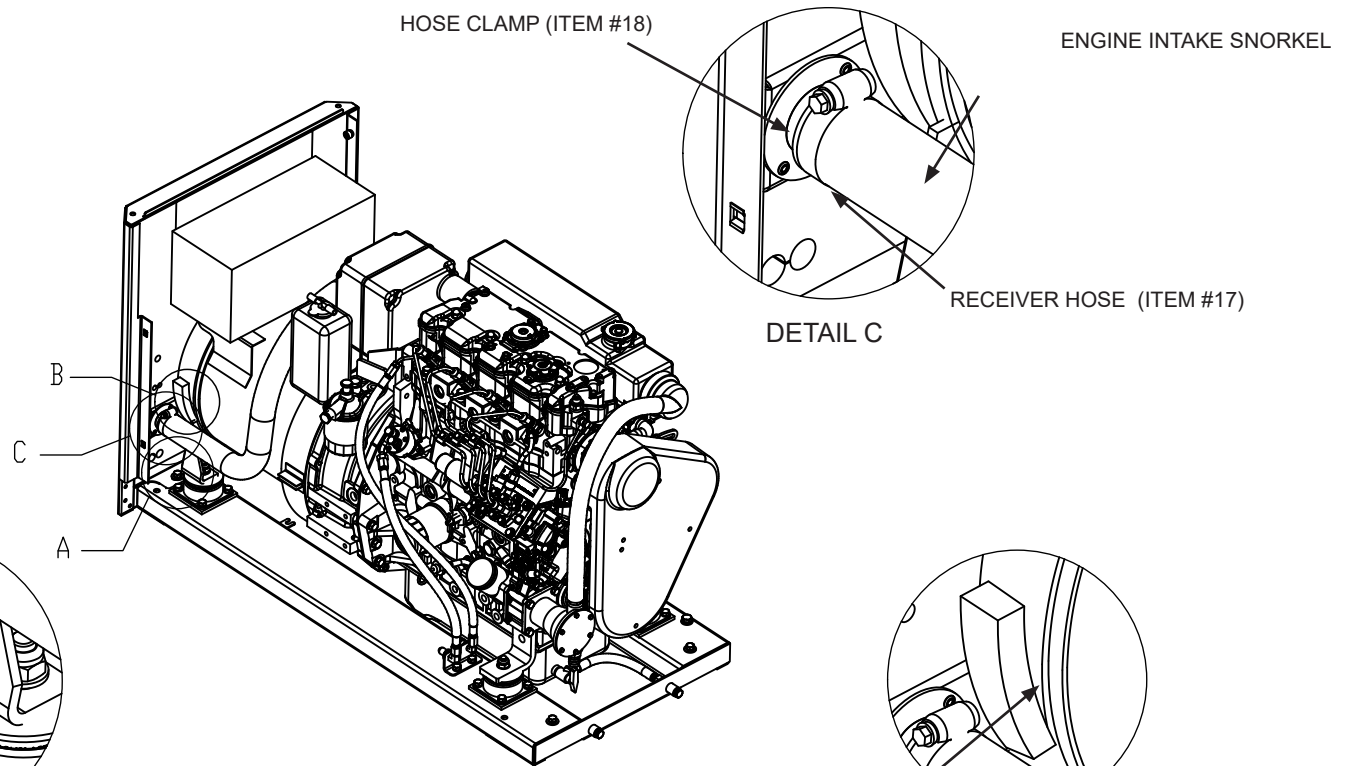
**B**

STEP 1.  
INSTALL REAR PANEL (ITEM #1) TO BACK END  
OF BASE FRAME. LOCATE MOUNTING TABS TO  
TAPPED MOUNTING HOLES ON TOP OF THE BASE  
FRAME. WITH FLAT WASHER, LOCK WASHER AND  
HEX HEAD CAPSCREW (ITEMS #14, 15, 16)

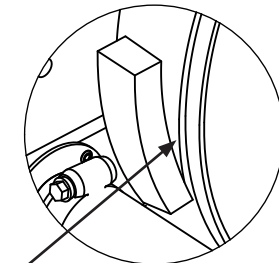


DETAIL A

5/16 FLAT WASHER, M8 LOCK WASHER, AND M8 HEX HEAD CAPSCREW (ITEMS #14,15,16)



DETAIL C

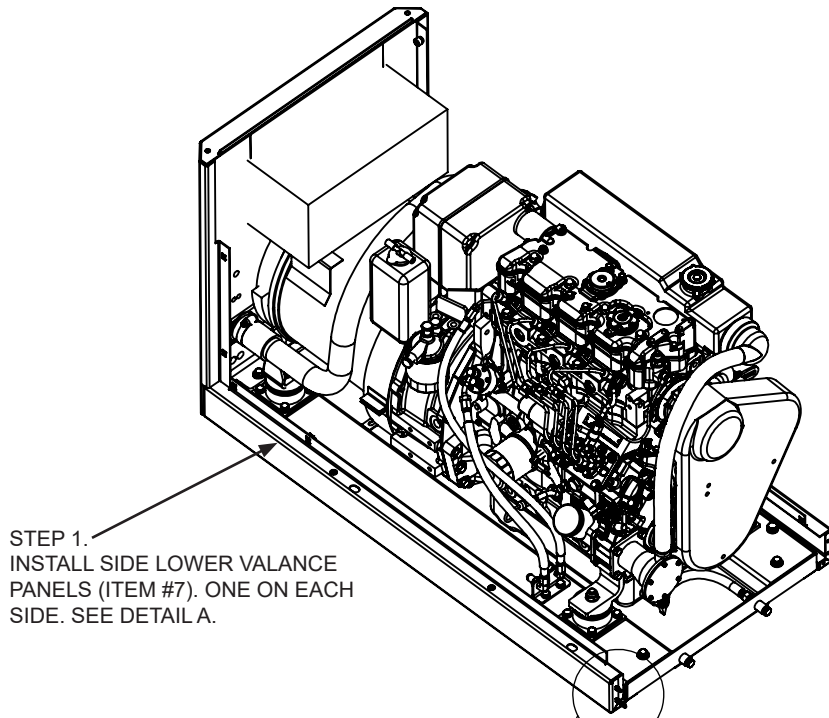


DETAIL B

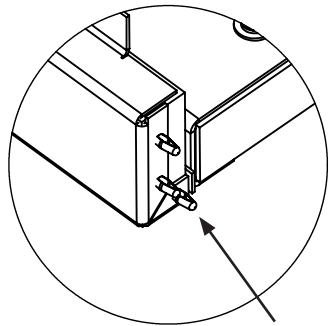
STEP 2.  
INSTALL RECEIVER SEAL STRIP (ITEM #11)  
TO REAR PANEL AS SHOWN. ENSURE FIT  
IS SNUG TO REAR PANEL.

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 receiver tube near the intake snorkel hose. Guide this hose into the hole following the instructions above. The tube limits the distance the snorkel hose can go inside the adapter hose.

C



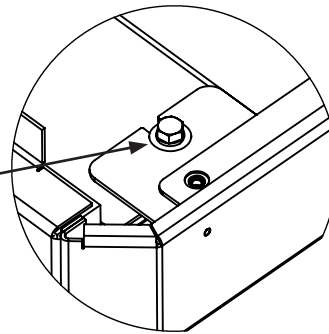
STEP 1.  
INSTALL SIDE LOWER VALANCE  
PANELS (ITEM #7). ONE ON EACH  
SIDE. SEE DETAIL A.



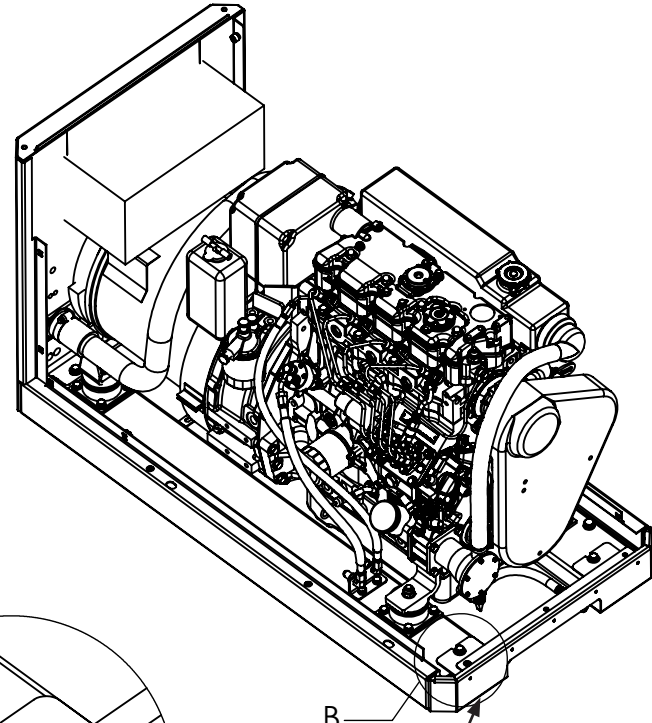
DETAIL A

NOTE PRE-INSTALLED PINS. GUIDE PINS  
INTO CORRESPONDING HOLES IN FRONT/  
REAR LOWER VALANCE, PUSHING FIRMLY  
TO SNAP INTO PLACE. DISPLACED PINS MAY  
BE PUSHED BACK INTO POSITION FROM THE  
INSIDE BY USING A LONG SCREWDRIVER OR  
PRY BAR. MOVE SOUND FOAM OUT OF THE  
WAY TO IMPROVE ACCESS TO PINS.

A  
5/16 FLAT WASHER,  
M8 LOCK WASHER,  
AND M8 HEX HEAD  
CAPSCREW (ITEMS  
#14,15,16)



DETAIL B



B

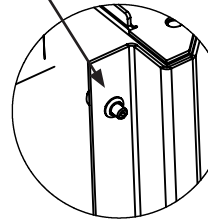
STEP 2.  
INSTALL FRONT LOWER VALANCE (ITEM #8) TO  
THE FRONT BASE FRAME. ALIGN TO PINS ON  
BOTH BOTTOM SIDE VALANCES. SEE DETAIL A.

LOCATE THE MOUNTING TABS TO THE TAPPED  
HOLES ON TOP OF THE BASE FRAME. SECURE  
WITH 5/16 FLAT WASHER, M8 LOCK WASHER,  
AND M8 HEX HEAD CAPSCREW (ITEMS  
#14,15,16). SEE DETAIL B. TIGHTEN BOLTS TO  
SECURE.

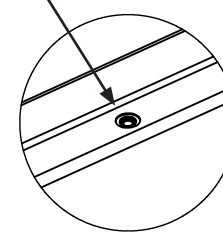
D

CAPTIVE THUMBSCREW

THREADED RECEPTACLE

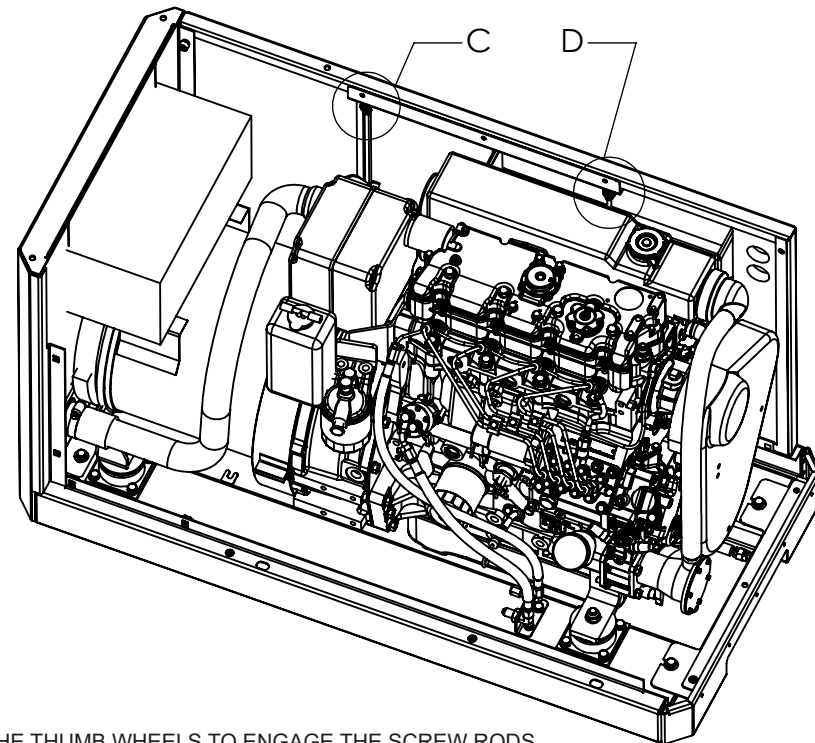
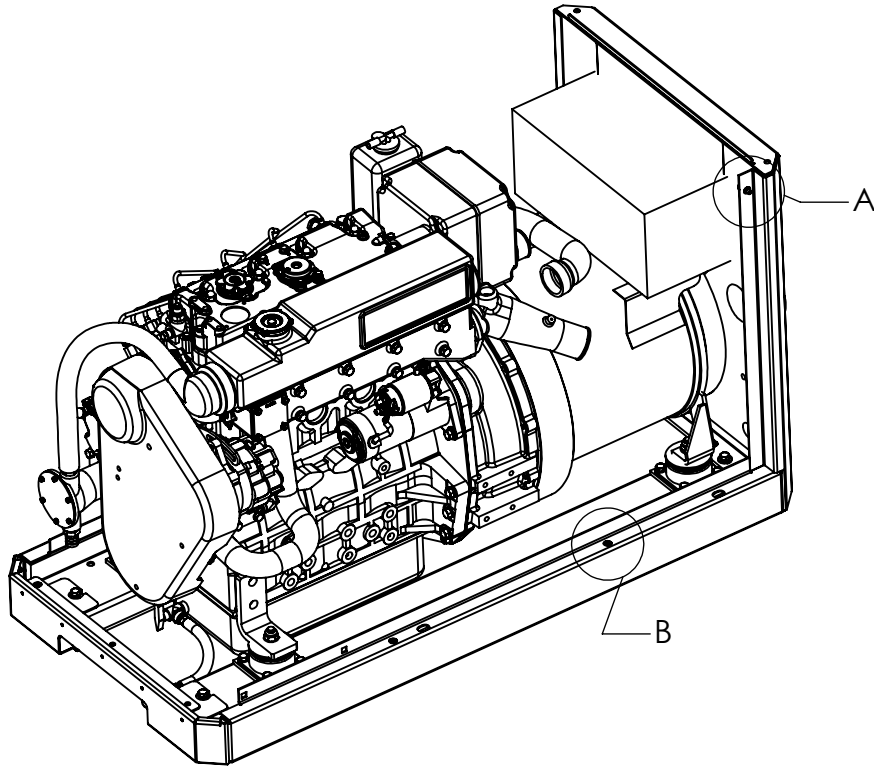


DETAIL A



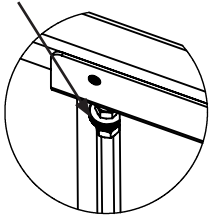
DETAIL B

INSTALL THE NON-SERVICE SIDE PANEL ASSEMBLY (ITEM #5). NOTE CAPTIVE THUMB SCREW (DETAIL A), AND THE THREADED RECEPTACLES ON TOP OF THE LOWER SIDE VALENCE (DETAIL B).

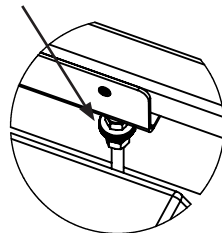


SCREW ROD THUMB WHEEL

SCREW ROD THUMB WHEEL



DETAIL C



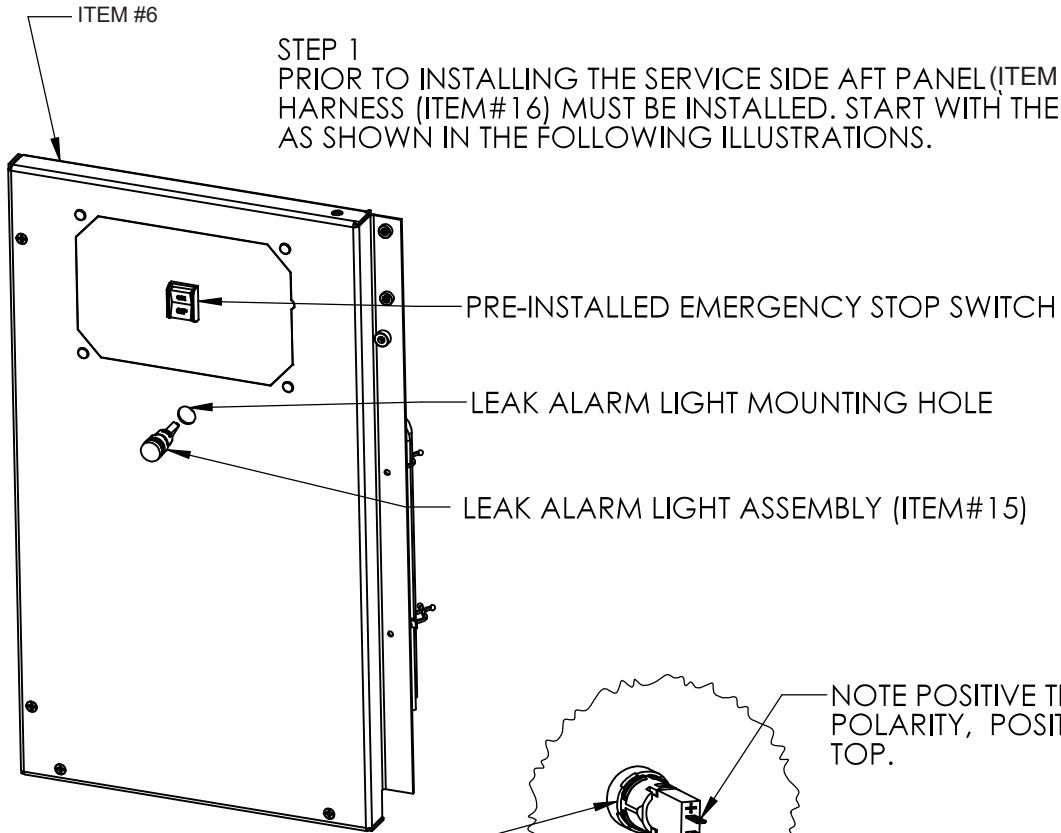
DETAIL D

USE THE THUMB WHEELS TO ENGAGE THE SCREW RODS INTO THE LOWER VALENCE (DETAILS C AND D). FINGER TIGHTEN. THEN ENGAGE THE CAPTIVE THUMB SCREW AT THE TOP REAR CORNER OF THE PANEL.

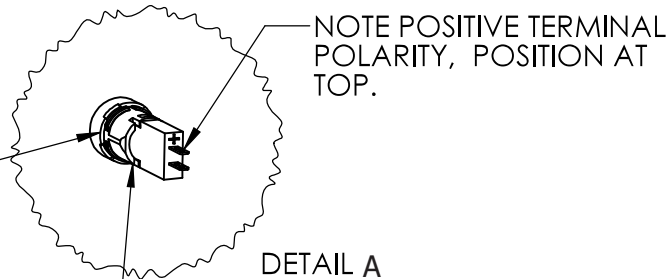


**E**

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.

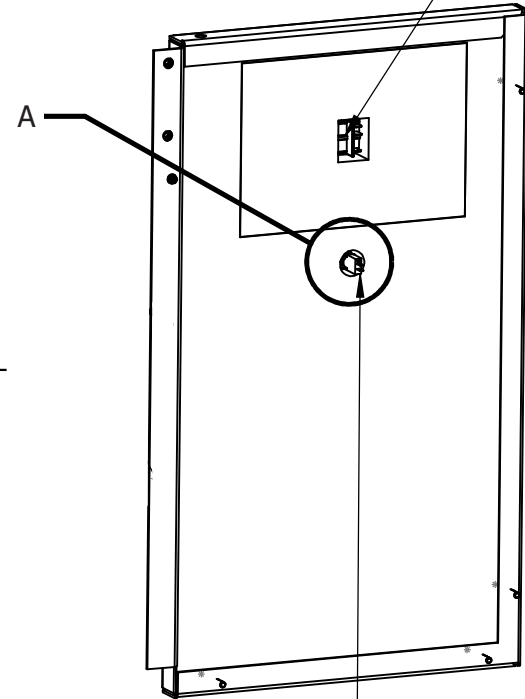


SCREW COLLAR  
UNSCREW COLLAR RING FROM LIGHT ASSEMBLY TO INSTALL THROUGH PANEL. RE-INSTALL COLLAR TO SECURE.

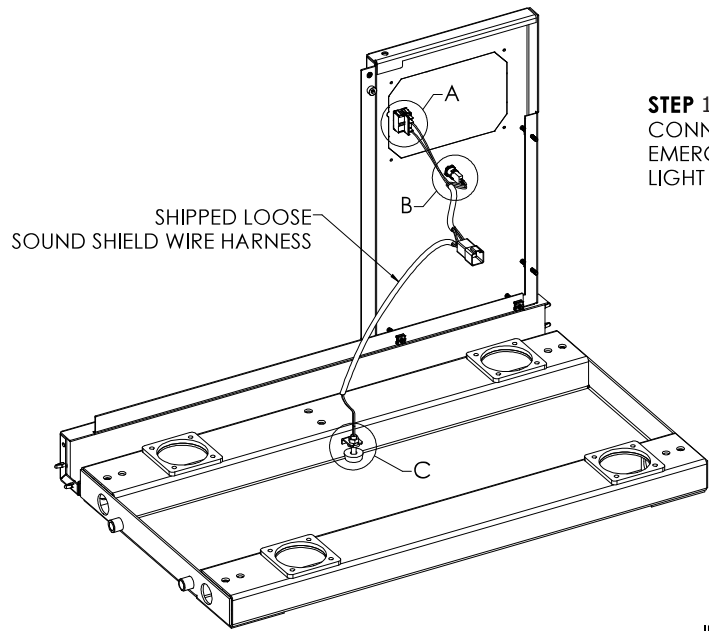


LEAK ALARM LIGHT

EMERGENCY STOP TERMINALS

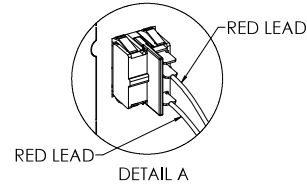


LEAK ALARM LIGHT TERMINALS

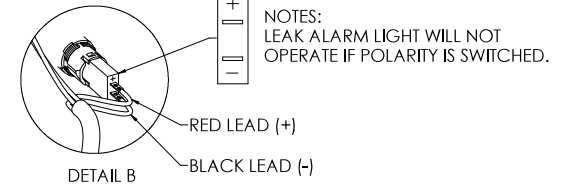


**STEP 1**  
 CONNECT SOUND SHIELD WIRE HARNESS TO EMERGENCY STOP SWITCH AND LEAK ALARM LIGHT AS SHOWN IN DETAIL A AND DETAIL B.

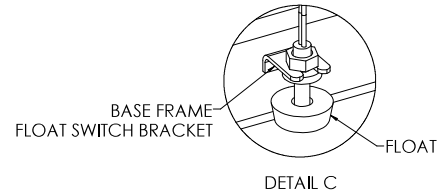
PRE-INSTALLED EMERGENCY STOP SWITCH



SHIPPED LOOSE LEAK ALARM LIGHT

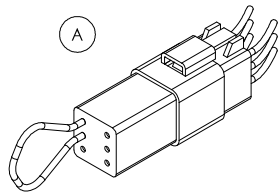


**STEP 2**  
 INSTALL FLOAT SWITCH TO THE CORRESPONDING BRACKET ON THE BASE FRAME. BE SURE TO CHECK THE LEAK ALARM LIGHT BY LIFTING UP THE FLOAT AFTER GENERATOR SET IS CONNECTED TO STARTER BATTERY.

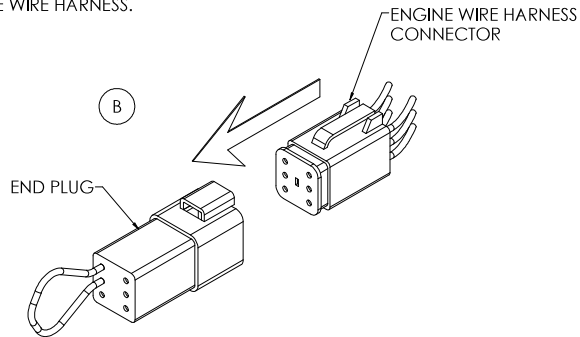


**STEP 3**

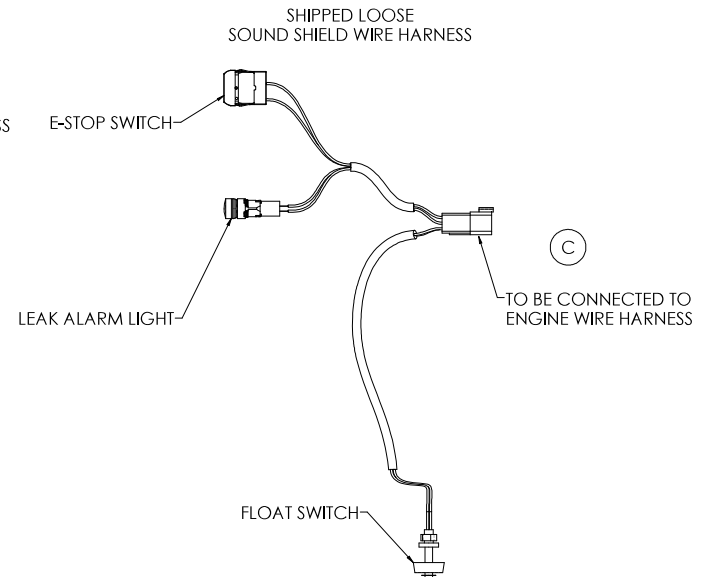
- A. LOCATE AND IDENTIFY THE ENGINE WIRE HARNESS.
- B. REMOVE THE ENGINE WIRE HARNESS END PLUG.
- C. CONNECT SOUND SHIELD WIRE HARNESS TO THE ENGINE WIRE HARNESS.



STANDARD ENGINE HARNESS CONNECTOR WITH PRE-INSTALLED END PLUG

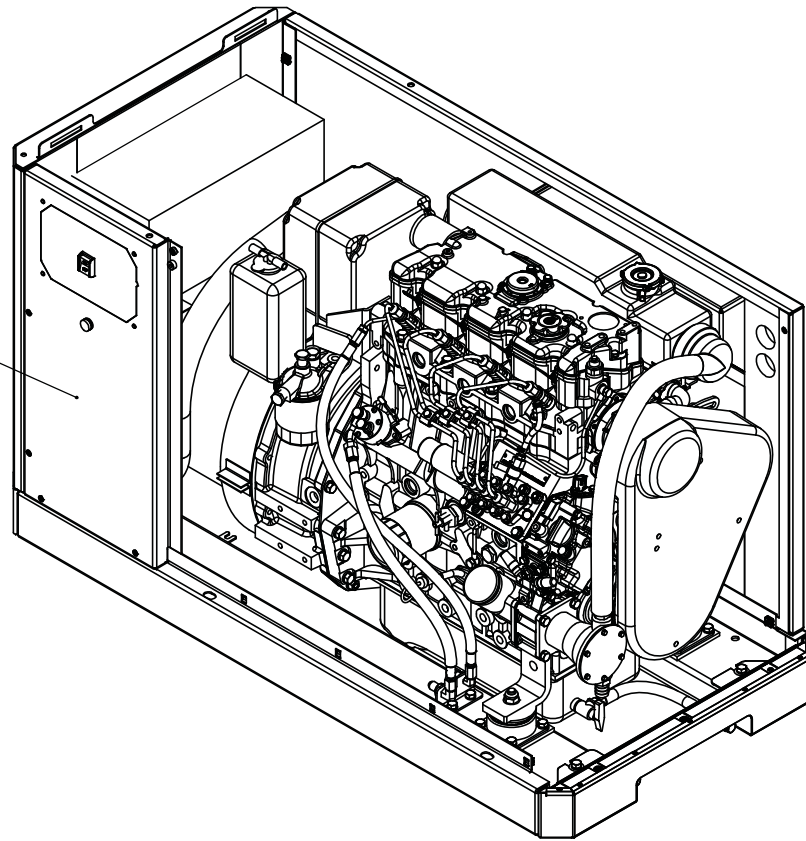


ENGINE HARNESS CONNECTOR WITH THE END PLUG REMOVED

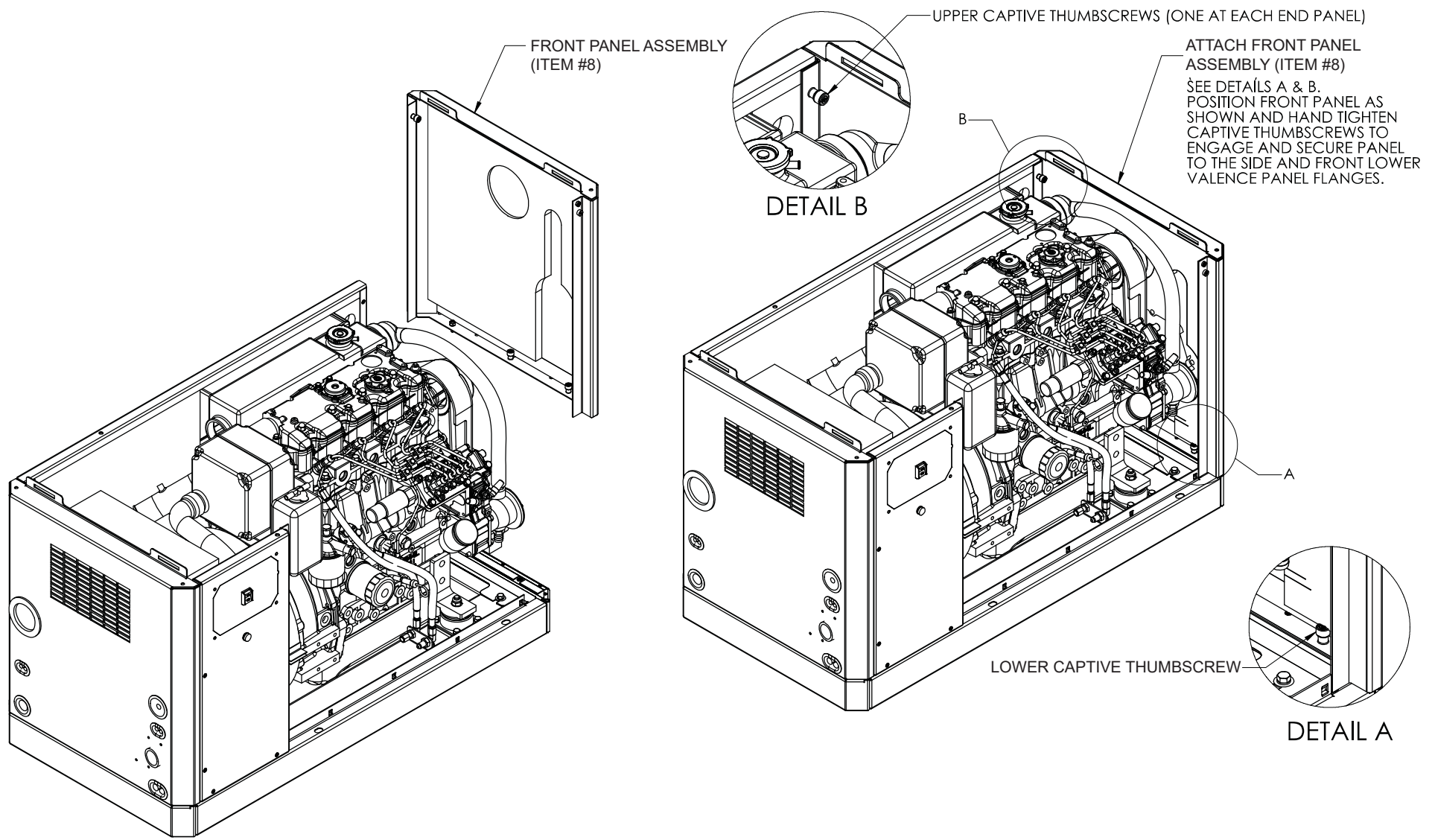


**F**

INSTALL THE SERVICE SIDE AFT PANEL ASSEMBLY (ITEM #6).  
LOCATE THE CAPTIVE SCREWS IN THE PANEL TO THE  
CORRESPONDING CAPTIVE NUTS ALONG THE FLANGES OF THE  
LOWER VALENCE AND REAR PANEL. HAND TIGHTEN ONLY TO AVOID  
DAMAGING HARDWARE.

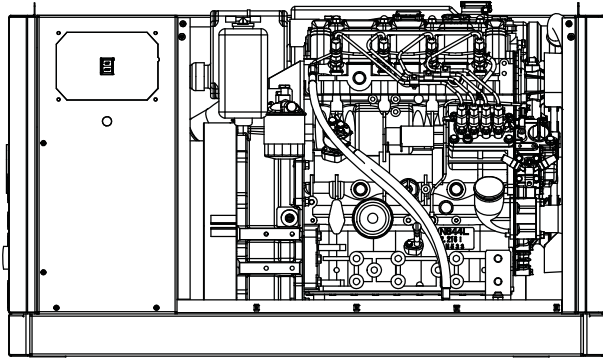


G

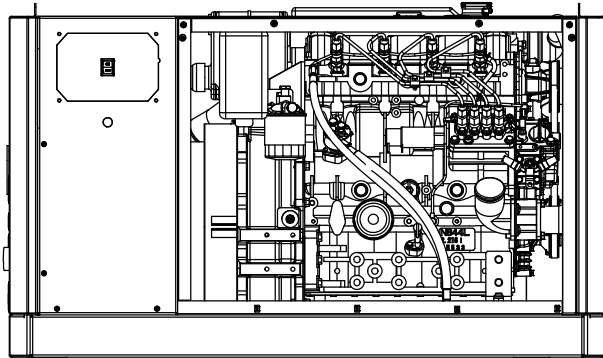


H

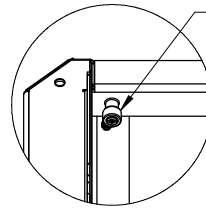
SEAL BAR ASSEMBLY (ITEM #9)



POSITION THE SEAL BAR ASSEMBLY

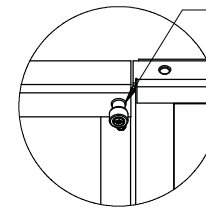


SEAL BAR INSTALLED



CAPTIVE THUMBSCREW  
FORWARD POSITION.

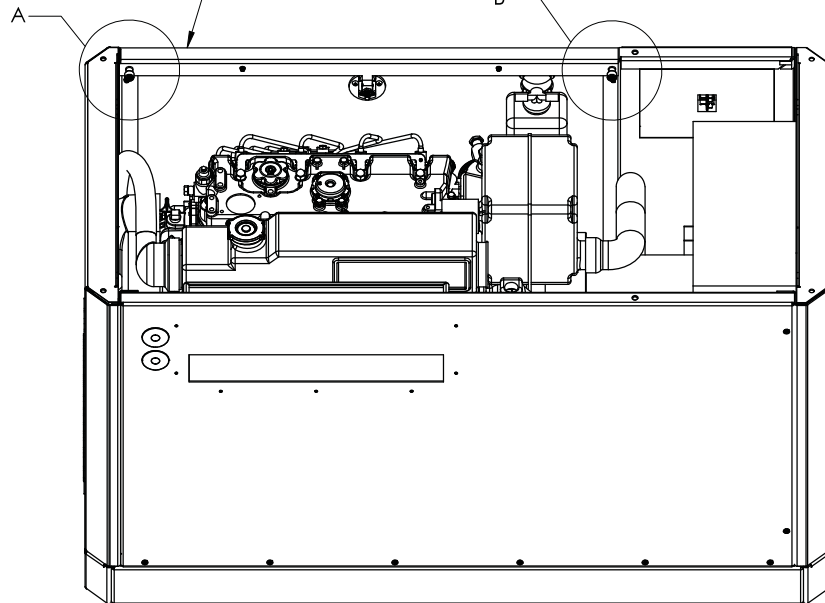
DETAIL A



CAPTIVE THUMBSCREW  
AFT POSITION.

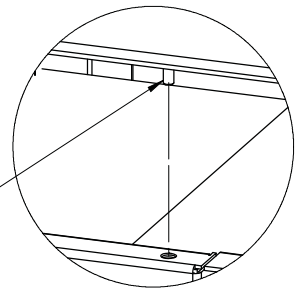
DETAIL B

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



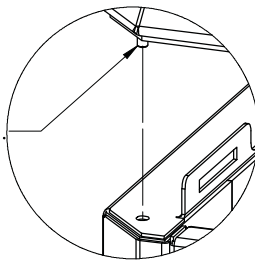


SIDE LOCATING PINS, 2 PLACES



DETAIL A

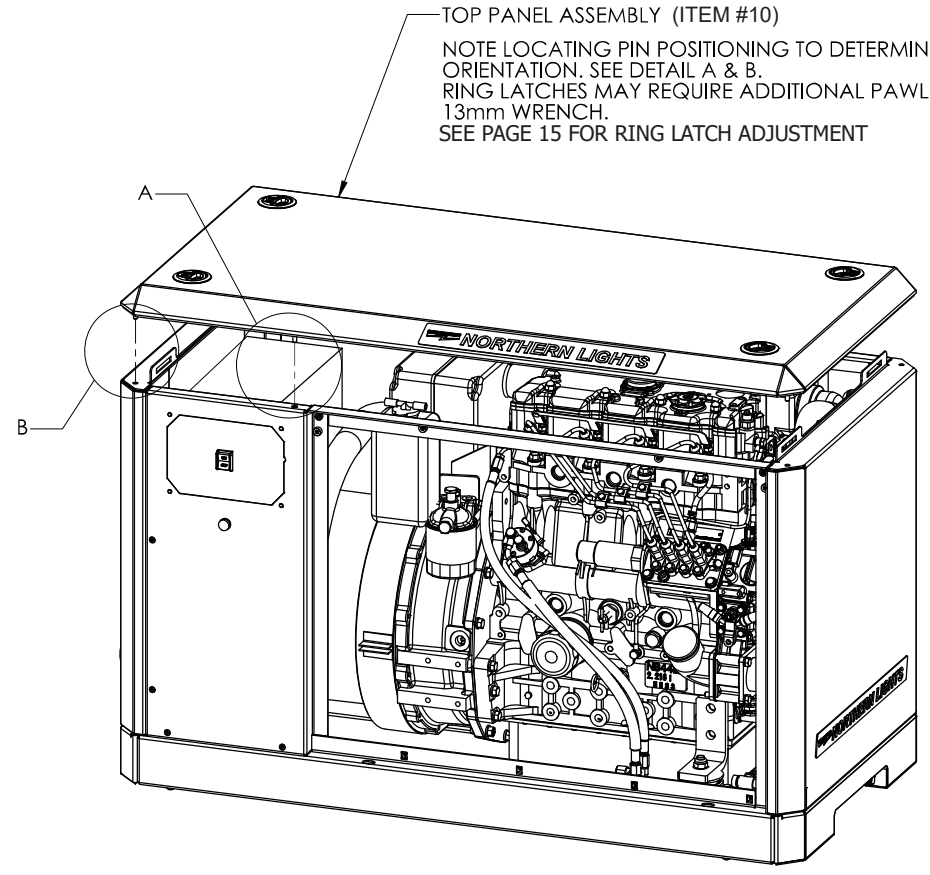
CORNER LOCATING PINS, 4 PLACES



DETAIL B

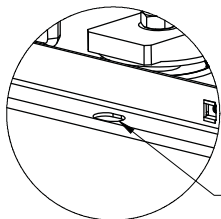
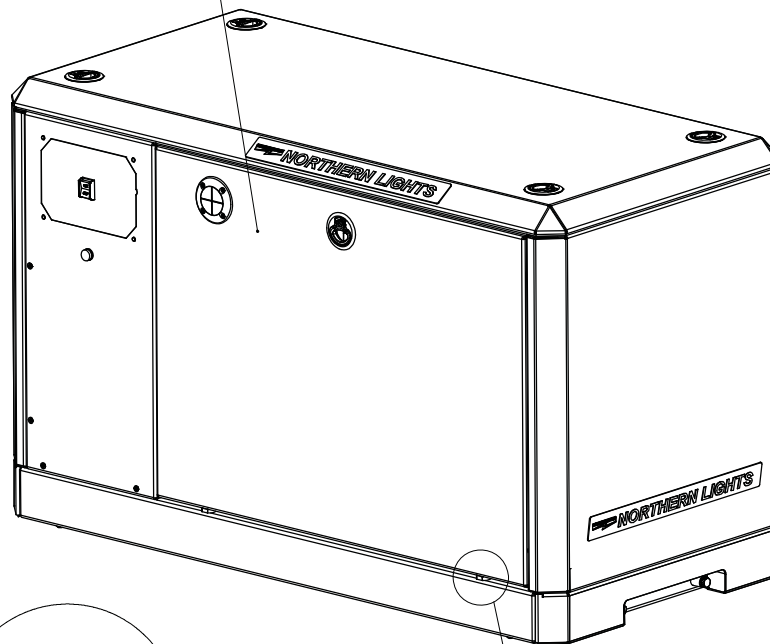
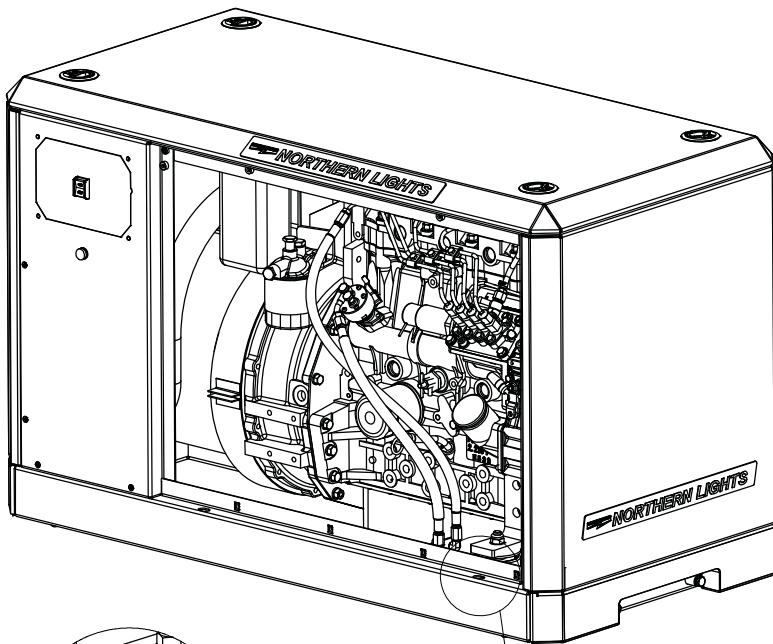
TOP PANEL ASSEMBLY (ITEM #10)

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



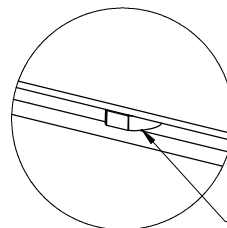
J

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.  
IF ADDITIONAL PAWL ADJUSTMENT IS NEEDED, USE A 13mm WRENCH.



LOCATOR PIN RECEPTACLE

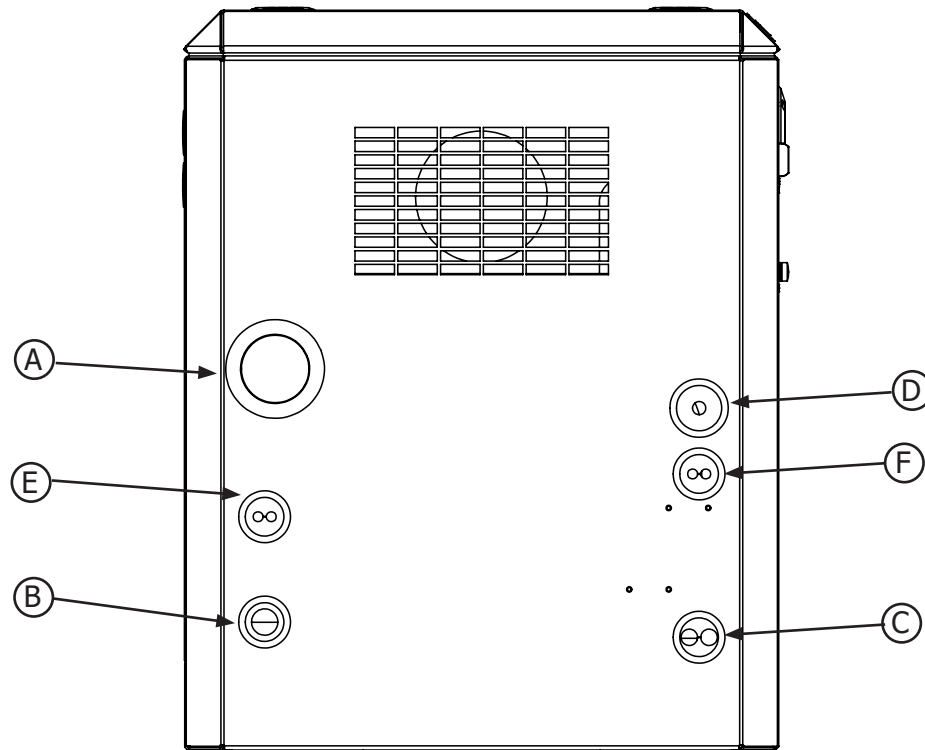
DETAIL A



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

DETAIL B

K



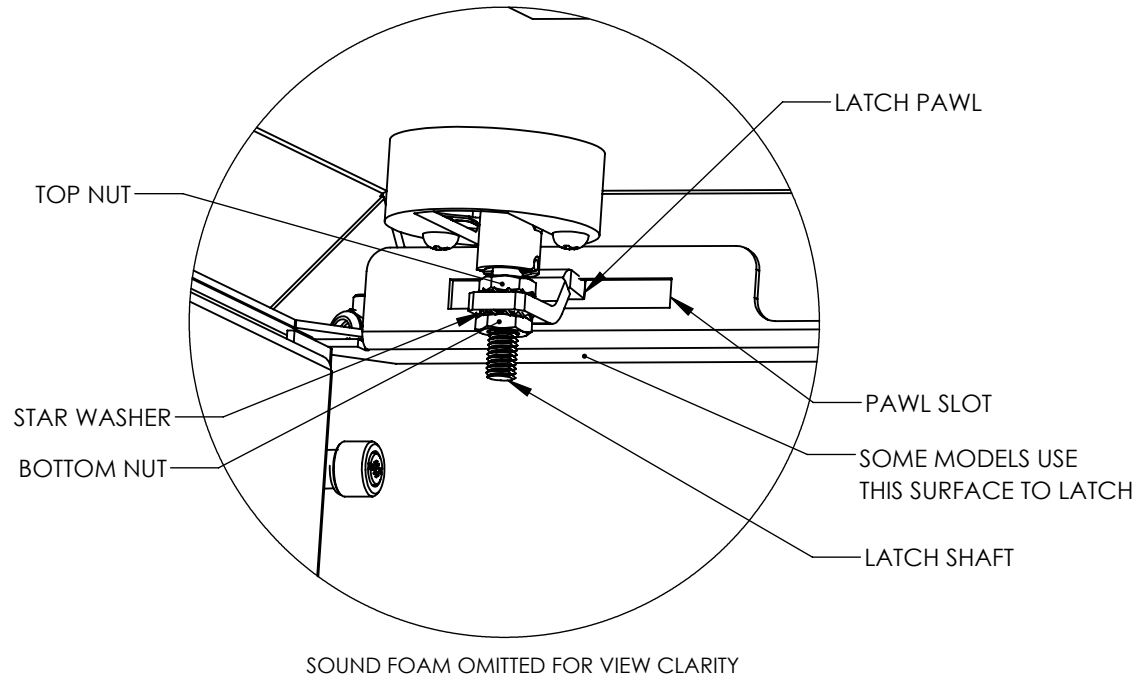
Install connections for exhaust, fuel, AC power leads, DC Control panel leads, battery and water through the holes in the rear panel as shown above and described below:

- A. Connect the genset 2" OD exhaust outlet to the exhaust system of the vessel through the top of the left hole .
- B. Connect the sea water pump to the vessel's water inlet. Push a 3/4" ID hose from the vessel's sea water strainer through the bottom left hole of the rear panel to the genset's 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 through the bottom right side hole. The inlet and return fittings are 1/4" NPT.
- D. Connect the DC control harness to the engine harness plug. Pass the harness and plug through the hole at the top right side hole of the rear panel.
- E. Connect the battery leads to the engine starter through the middle left side hole in the rear panel.
- F. Connect the AC output leads from the generator thru the middle right side hole in the rear panel.





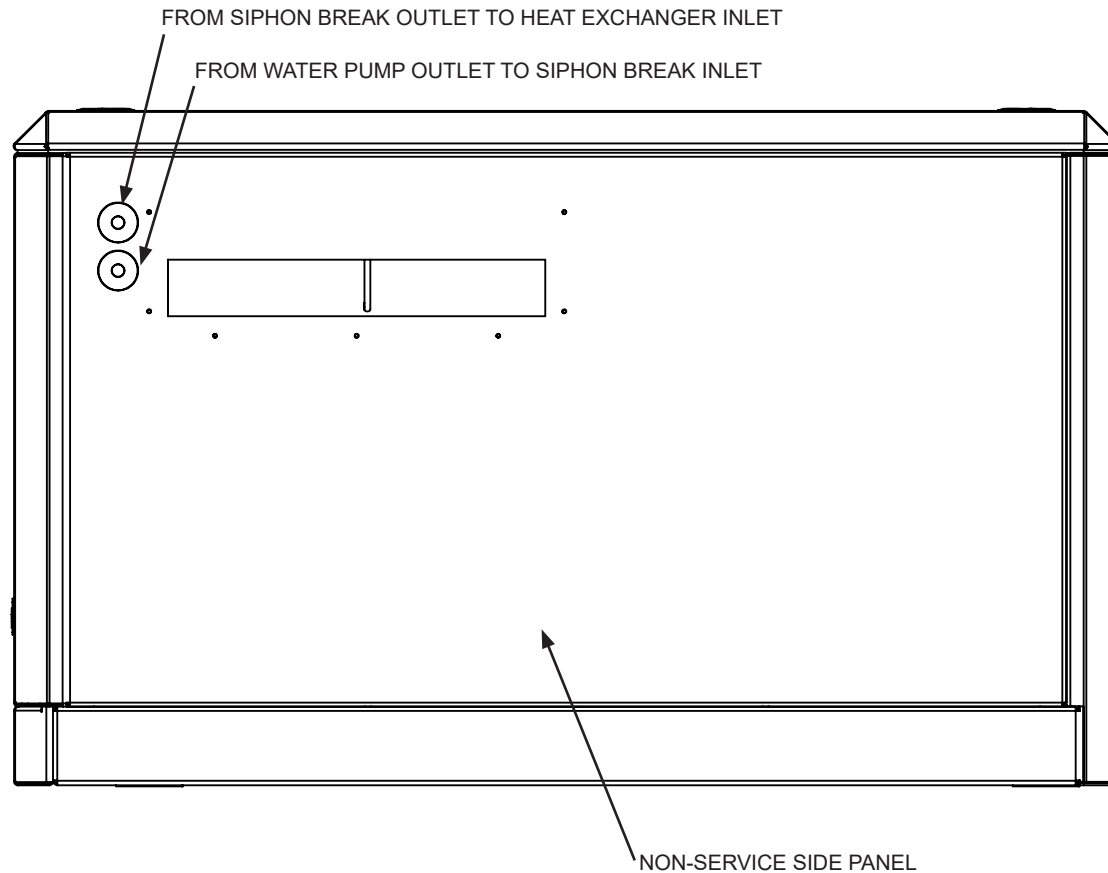
## RING LATCH GRIP ADJUSTMENT INSTRUCTIONS



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:

Push the two white plastic plugs out from the inside and replace them with the two rubber grommets (ITEM #13) provided.

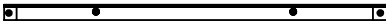
**CAUTION: GENERATOR SETS WITH WET EXHAUST THAT ARE INSTALLED NEAR OR BELOW THE VESSEL'S WATER LINE MUST USE A SIPHON BREAK TO PREVENT BACKFLOW OR WATER INTO THE ENGINE. THIS BACKFLOW CAN RUIN AN ENGINE AND POSSIBLY SINK THE VESSEL.**

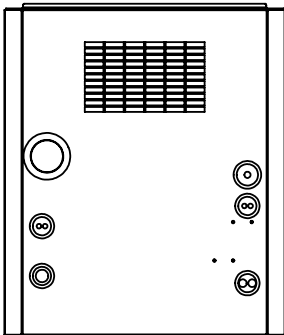
- A. Disconnect the hose from the seawater pump outlet to the the rubber water inlet on the expansion tank. Installation requires two lengths of hose, which must be of adequate length to allow mounting of a siphon break at a minimum of 12 inches above the vessel's water line.
- B. Route the saw water output hose through the bottom hole of the side panel to the inlet of the siphon break. The return line of the siphon break routes through the top hole to the rubber elbow water inlet of the heat exchanger.
- C. For more information, see the "Exhaust" section of IM1000 Installation Manual.

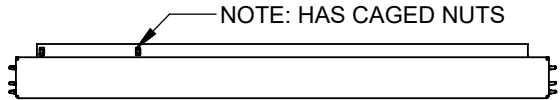


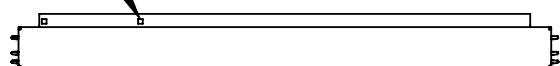
# PACKING LIST

- 
- ITEM #0 COVER PLATE ASSEMBLY, 06-78110 QTY:1

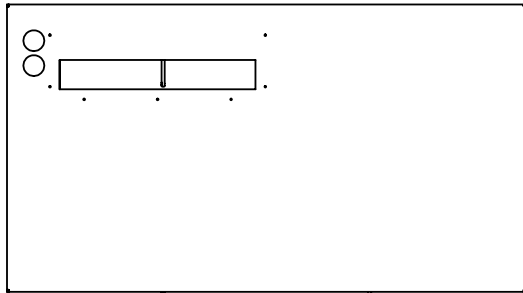
- 
- ITEM #9 SEAL BAR ASSEMBLY 06-78109 QTY:1

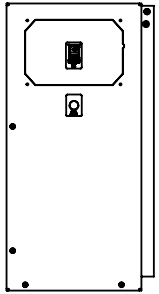
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- ITEM #1 REAR PANEL ASSEMBLY, 06-78403 QTY:1

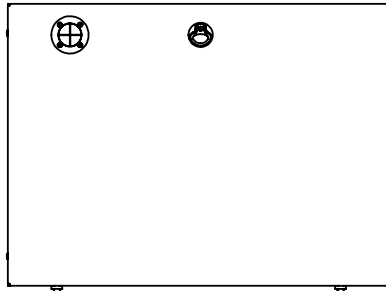
- 
- NOTE: HAS CAGED NUTS  
 ITEM #2 BOTTOM RIGHT SIDE VALENCE PANEL ASSEMBLY 06-78412 QTY: 1

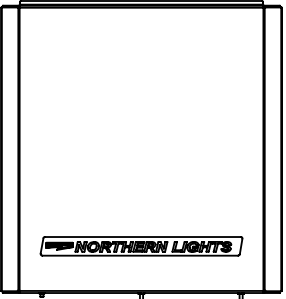
- 
- NOTE: NO CAGED NUTS  
 ITEM #3 BOTTOM LEFT SIDE VALENCE PANEL ASSEMBLY 06-78404 QTY: 1

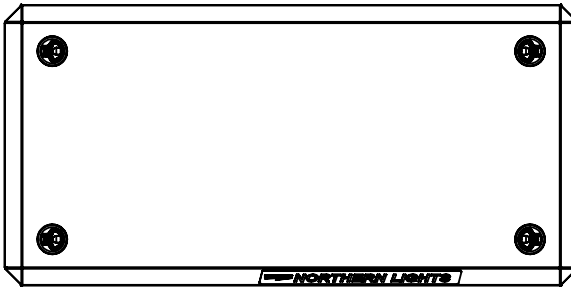
- 
- ITEM #4 BOTTOM FRONT VALENCE PANEL ASSEMBLY 06-78405 QTY: 1

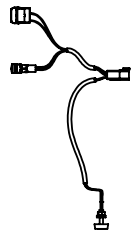
- 
- ITEM #5 NON-SERVICE SIDE PANEL ASSEMBLY 06-78401 QTY: 1

- 
- ITEM #6 SERVICE SIDE AFT PANEL ASSEMBLY 06-78106 QTY: 1







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- ITEM #7 SERVICE SIDE FWD PANEL ASSEMBLY 06-78105 QTY: 1

- 
- ITEM #8 FRONT PANEL ASSEMBLY 06-78413 QTY: 1

- 
- ITEM #10 TOP PANEL ASSEMBLY 06-78417 QTY: 1

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

## BAGGED ITEMS

- |   |  |
|---|--|
| <br><input type="checkbox"/> ITEM #16 M8 CAPSCREW 12-00776 QTY: 4      | <br><input type="checkbox"/> ITEM #13 GROMMET 00-70146 QTY: 2                 |
| <br><input type="checkbox"/> ITEM #15 M8 LOCK WASHER 15-00705 QTY: 4   | <br><input type="checkbox"/> ITEM #17 HOSE CLAMP 19-00028 QTY: 1              |
| <br><input type="checkbox"/> ITEM #14 5/16 FLAT WASHER 15-11000 QTY: 4 | <br><input type="checkbox"/> ITEM #11 SOUND FOAM SNORKEL SEAL 55-78114 QTY: 1 |

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

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