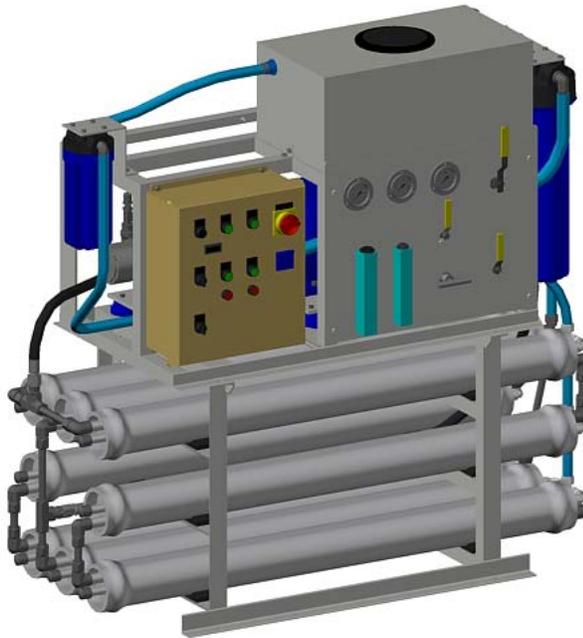


December 2015

**PARTS CATALOG  
SEA WATER DESALINATOR  
AQUA-SEP SERIES II  
MODEL 25 TPD**



**Compass**  
water solutions

15542 Mosher Ave. Tustin, CA 92780 U.S.A.

WEB: [compasswater.com](http://compasswater.com)

TEL: (949) 222-5777

FAX: (949) 222-5770

This parts catalog is a reference for all of the following  
Model numbers and Serial numbers manufactured  
prior to the date of this document.

<b>Model Number</b>	<b>Description</b>
ASSD2525225-MCS	AQUA-SEP SERIES II, 25 TPD

**Serial Numbers:**

33469 *	33509	33514
33486 *	33510	33565
33487 *	33512	33577

Serial Numbers with \* May have custom items not shown or listed in this document.  
For assistance with these additional items contact CWS at "parts@compasswater.com"

## **COMPONENT PART NUMBERS & DESCRIPTIONS**

NOTE: Some items listed are optional and may not be included on your Aqua-Sep system

<b><u>ITEM</u></b>	<b><u>COMPONENT NAME</u></b>	<b><u>DESCRIPTION</u></b>
1.	Control Box (Various)	Houses the electrical controls, wiring and safety switches. <b>Refer to System Manual</b> For Control Box Drawings. <i>(fig #1)</i>
2.	Membrane Housings & Membrane Elements	High pressure housing for spiral wound membranes. Reject dissolved solids. Only pure water permeates the membranes. Converts seawater to potable water. Housings <b>MHSA1440</b> , Element <b>MSHH0441-H</b> <i>(fig #1 &amp; #8)</i>
3.	Cleaning Solution Filter	Removes silt and sediment from cleaning solution. Filter Housing: <b>FCHQ7010</b> Filter Element: <b>FCAE3010</b> <i>(fig #1 &amp; #4)</i>
4.	Desalinator Frame	Serves to mount the system and houses the piping and booster pump/motor. <i>(fig #1)</i>
5.	Cleaning Solution Tank Assy.:	Tank for mixing cleaning solution. (Full Assy. <b>ASCT120110</b> ) (Tank Only <b>ASCT100175</b> ) <i>(fig #4)</i>
6.	Operating Pressure Gauge Assy.	Indicates system operating pressure. <b>ASOG120705</b> (Gauge only <b>GALK0438</b> , High Press. Switch <b>SWMS0016</b> ) <i>(fig #3)</i>
7.	Feed Pressure Gauge Assy.	Indicates the cartridge filter outlet and booster pump inlet pressure. <b>ASFG120705</b> (Gauge only <b>GALK0406</b> , Low Press. Switch <b>SWMS0430</b> ) <i>(fig #3)</i>
8.	Inlet Pressure Gauge Assy.	Indicates the cartridge filter inlet pressure. <b>ASIG120705</b> (Gauge Only <b>GALK0406</b> ) <i>(fig #3)</i>
9.	Operate/Clean Inlet Valve Assy.	Diverts flow during operating or cleaning mode. <b>ASIV120705</b> <i>(fig #3)</i>
10.	Operate/Clean Outlet Valve Assy.	Diverts flow during operating or cleaning mode. <b>ASOV120705</b> <i>(fig #3)</i>
11.	Cleaning Tank Drain Valve Assy.	Used to drain the cleaning solution tank. <b>ASDV120705</b> <i>(fig #3)</i>
12.	Pressure Control Valve Assy.	Variable orifice back pressure valve. Maintains system feedwater pressure sufficient to permeate the membranes. <b>ASCV120705</b> <i>(fig #3)</i>

## COMPONENT PART NUMBERS & DESCRIPTIONS

NOTE: Some items listed are optional and may not be included on your Aqua-Sep system

<u>ITEM</u>	<u>COMPONENT NAME</u>	<u>DESCRIPTION</u>
13.	Flowmeter "Product Water"	Provides instantaneous indication of product water production in gallons per minute and liters per minute. <b>FMTR50500</b> (fig #3)
14.	Flowmeter "Reject Water"	Provides instantaneous indication of water being rejected in gallons per minute and liters per minute. <b>FMTR50750</b> (fig #3)
15.	Cartridge Filter Housing	Contains replaceable filter cartridge (1 micron). Filter Housing: <b>FCHQ1520</b> Filter Element: <b>FCCH0120</b> (fig #7)
16.	Cartridge Filter Housing	Contains replaceable filter cartridge (5 micron). Filter Housing: <b>FCHQ1520</b> Filter Element: <b>FCCH0520</b> (fig #7)
17	Booster Pump / Motor Assy.	Complete Pump/Motor Assy. (fig #5) <b>ASBP250004</b> (When Ordering, Provide System Voltage)
18.	Electric Motor	7.5 H.P. motor with 213TC Frame (fig #5) <b>MTRD13075C</b> (When Ordering, Provide System Voltage)
19.	Booster Pump	APP 2.2 (fig #5 & #6) <b>PUDS2200</b>
20.	-	-
21.	Pressure Relief Valve	¼" Stainless Steel Valve Body Valve <b>VRHS0400</b> Aqua-Sep Set Spring (750-1500 PSI) <b>ASPS0001</b> (fig #5 & #6)
22.	Motor Mounts	Vibration Dampeners. <b>VBIR0507</b> (fig #5)
23.	Bell Housing *	Connects Booster Pump to Motor Housing (fig #5)
24.	Flex Coupling *	Couples Motor and Pump (fig #5)
		* Items 23 & 24 are sold as a set <b>PPBH2201</b>
25.	Product Valve Assy.	Controls Direction of flow based on the quality of the Processed Water. (fig #7) 120 VAC – <b>ASPV120705-120</b> 220 VAC – <b>ASPV120705-220</b>
26.	Solenoid Valve (1/2")	120 VAC – <b>VSDB0840</b> (fig #7) 220 VAC – <b>VSDB0850</b>

## **COMPONENT PART NUMBERS & DESCRIPTIONS**

NOTE: Some items listed are optional and may not be included on your Aqua-Sep system

<b><u>ITEM</u></b>	<b><u>COMPONENT NAME</u></b>	<b><u>DESCRIPTION</u></b>
27	TDS Probe	Checks quality of processed water. (fig #7) <b>MPCS1000</b>
28.	Drain Manifold	<b>ASDM120705</b> (fig #7)
29.	High Pressure Hose Assy. (3/4" x JIC-37°)	These are made to fit. Please indicate "End to End" measurement. Replace "--" in part number with the length in inches. <b>ASHA12 --</b> (fig #8)  [Example: <b>ASHA1275</b> = 75 inches long]
30.	Misc. Hoses & Tubing Details	Product Tubing (3/8" x 1/4" I.D.) <b>TUVC0406</b> 5/8" Tubing (Vinyl Braid) <b>TUVB1000</b> 1" Tubing (Vinyl Braid) <b>TUVB1600</b> [Refer to Drawing 123008 For Full Details]

## **PART NUMBERS & DESCRIPTIONS**

NOTE: Some items listed are optional and may not be included on your Aqua-Sep system

<b>ITEM</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>
A.	<b>FCAE3010</b>	Cleaning Filter Element
B.	<b>ASCT100175</b>	Cleaning Tank (Tank Only – No Fittings)
C.	<b>PABS1212 (2x)</b>	Pipe Adapter, 3/4" BSP to NPT
D.	<b>PAKS1200 (2x)</b>	Adapter Gasket, 3/4" SS, BSP
E.	<b>PNXS1200</b>	Pipe Nipple, SS Sch 80, 3/4" x Close
F.	<b>PTXS1200</b>	Pipe Tee, SS #3000, 3/4"
G.	<b>PBXS1204</b>	Pipe Bushing, SS Sch 80, 3/4" x 1/4"
H.	<b>PBTX0804</b>	Pipe Bushing, PVC Sch 80, 1/2" x 1/4"
I.	<b>PNTS0400</b>	Pipe Nipple, SS, 1/4" x Close
J.	<b>PEGX0800</b>	Pipe Adapter Elbow, 1/2" Hose x FNPT
K.	<b>FEMS1237</b>	Flare Elbow, 3/4" MNPT x 3/4" - 37° Hose
L.	<b>PNTS1200</b>	Pipe Nipple, SS, 3/4" x Close
M.	<b>PBTS1612</b>	Pipe Bushing, SS 1" x 3/4"
N.	<b>PTTS1600</b>	Pipe Tee, SS, 1"
O.	<b>PEHX1600</b>	Pipe Adapter Elbow, PVC, 1" Hose x MNPT
P.	<b>ITSM0400</b>	Insta-Tube, Straight Male 1/4"
Q.	<b>PBTS1604</b>	Pipe Bushing, SS, 1" x 1/4"
U.	<b>PETS0800</b>	Pipe Elbow, SS, 1/2"
V.	<b>PUTS0800</b>	Pipe Union, SS, 1/2"
W.	<b>PNTS0800 (6x)</b>	Pipe Nipple, SS, 1/2" x Close

\* There is no item "R", "S", or "T" in this list

## **PART NUMBERS & DESCRIPTIONS**

NOTE: Some items listed are optional and may not be included on your Aqua-Sep system

<b><u>ITEM</u></b>	<b><u>PART NUMBER</u></b>	<b><u>DESCRIPTION</u></b>
X.	<b>PAHX0812</b>	Pipe Adapter, 1/2" Hose x 3/4" MNPT
Y.	<b>PTTX1200</b>	Pipe Tee, PVC Sch 80, 3/4"
Z.	<b>PBTX1208</b>	Pipe Bushing, Threaded PVC, 3/4" x 1/2"
AA.	<b>PTTS1200</b>	Pipe Tee, SS, 3/4"
BB.	<b>FTEM0608</b>	Fast & Tite Elbow, 3/8" Tube x 1/2" MNPT
CC.	<b>FTFS1237 (2x)</b>	Flare Tee, 3/4" x 37° Hose
DD.	<b>FCNS1237 (2x)</b>	Flare Nut, 3/4"
EE.	<b>FCSS1237 (2x)</b>	Flare Sleeve, 3/4"
FF.	<b>PQTX0800 (8x)</b>	Pipe Cap, 1/2" Threaded
GG.	<b>FTEF0800 (8x)</b>	Fast & Tite Elbow, 1/2" Tube x FNPT
HH.	<b>CEFS1200 (16x)</b>	Compression Elbow, 3/4" Tube x FNPT
II.	<b>CTBS1200 (2x)</b>	Compression Tee, 3/4"
J J.	<b>TUSS1200</b>	Tubing, 3/4"
KK.	<b>MSDA0400 (16x)</b>	Membrane Saddle 4"
LL.	<b>FTTR0800 (6x)</b>	Fast & Tite Run Tee, 1/2" Tube x MNPT
MM.	<b>FTFM0800</b>	Fast & Tite, 1/2" Tube x MNPT
NN.	<b>PTTX0800</b>	Pipe Tee, Threaded PVC Sch 80, 1/2"
OO.	<b>PNTX0800</b>	Pipe Nipple, PVC Sch 80, 1/2" x Close

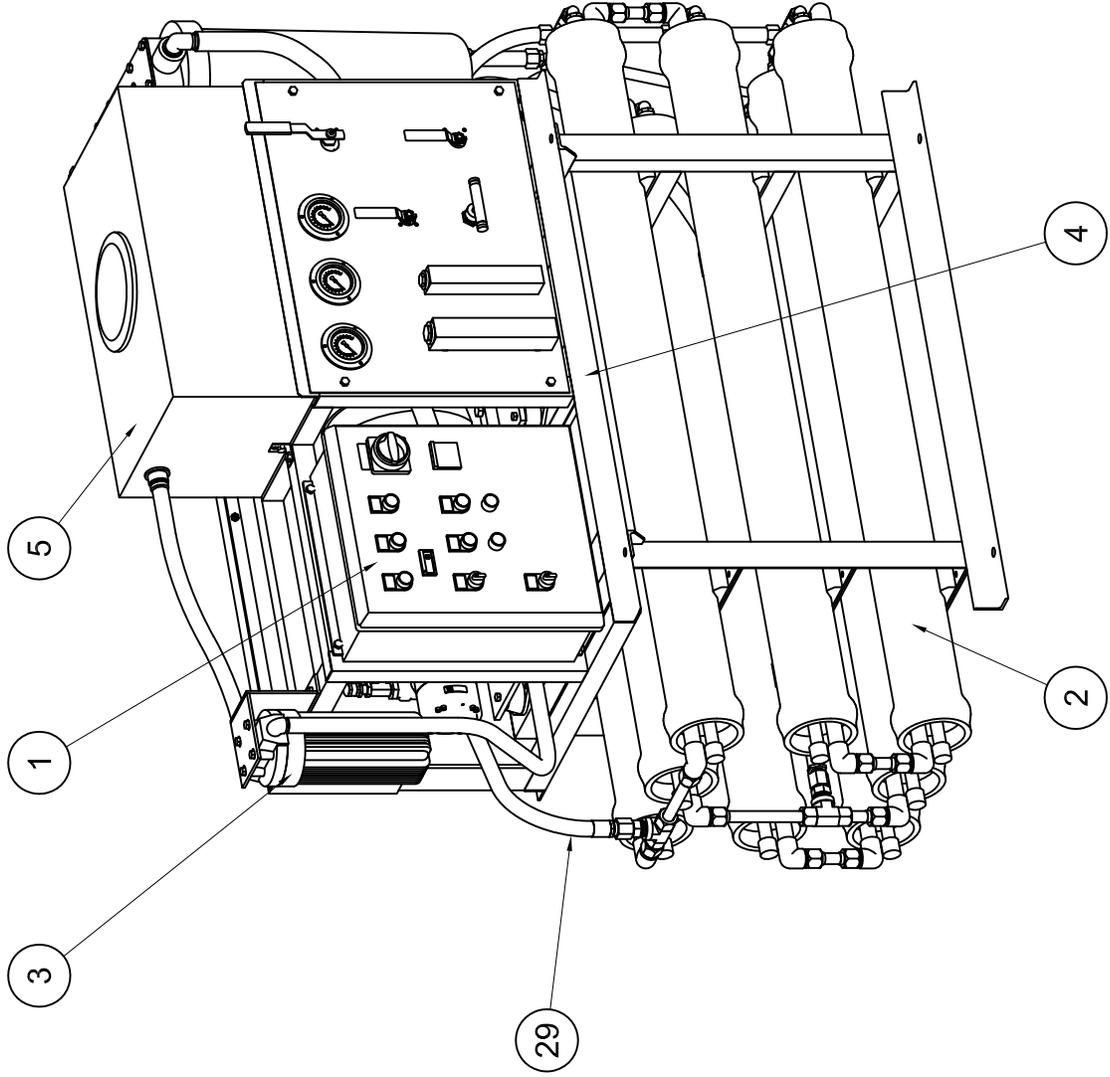
## **CONSUMABLES & REBUILD PARTS**

NOTE: Some items listed are optional and may not be included on your Aqua-Sep system

<b><u>PART NUMBER</u></b>	<b><u>DESCRIPTION</u></b>
<b>PDVK1525</b>	Booster Pump Valve Plate Set, APP 1.5 – 2.5
<b>PDSK1525</b>	Booster Pump Seal Set, APP 1.5 – 2.5
<b>PDPS1525</b>	Booster Pump Piston Set, APP 1.5 – 2.5
<b>PDRS2225</b>	Booster Pump Retainer Set, APP 2.2 – 2.5
<b>ORGN1122</b>	O-Ring, BB Filters
<b>ORGN1120</b>	O-Ring, Cleaning Filter
<b>ASAC1000</b>	Aqua-Sep Membrane Cleaner – Acid 2 lbs. (Mix 2 lbs. with 15 gallons of Water)
<b>ASAL2000</b>	Aqua-Sep Membrane Cleaner – Alkaline 2 lbs. (Mix 1 lb. with 15 gallons of Water)
<b>SBSP0001</b>	Aqua-Sep Preservative, Sodium Bisulfate 50 lbs. pail
<b>FCAE3010</b>	Cleaning Filter
<b>FCCH0120</b>	Filter Element: (1 micron) x 20” Long, BB
<b>FCCH0520</b>	Filter Element: (5 micron) x 20” Long, BB
<b>FCWQ1500</b>	Filter Housing Wrench, BB
<b>VRKD0800</b>	Solenoid Valve Rebuild Kit ½”

**ITEM COMPONENT NAME**

- 1. Control Box - Refer to System Manual For Control Box / Electrical Details
- 2. Membrane Housing: MHSA1440  
Membrane Element: MSHH0441-H
- 3. Cleaning Solution Filter: FCHQ7010  
Filter Element: FCAE3010
- 4. Desalinator Frame
- 5. Cleaning Solution Tank Assembly  
ASCT120110
- 29. High Pressure Hose Assembly  
(Refer to Figure #8)

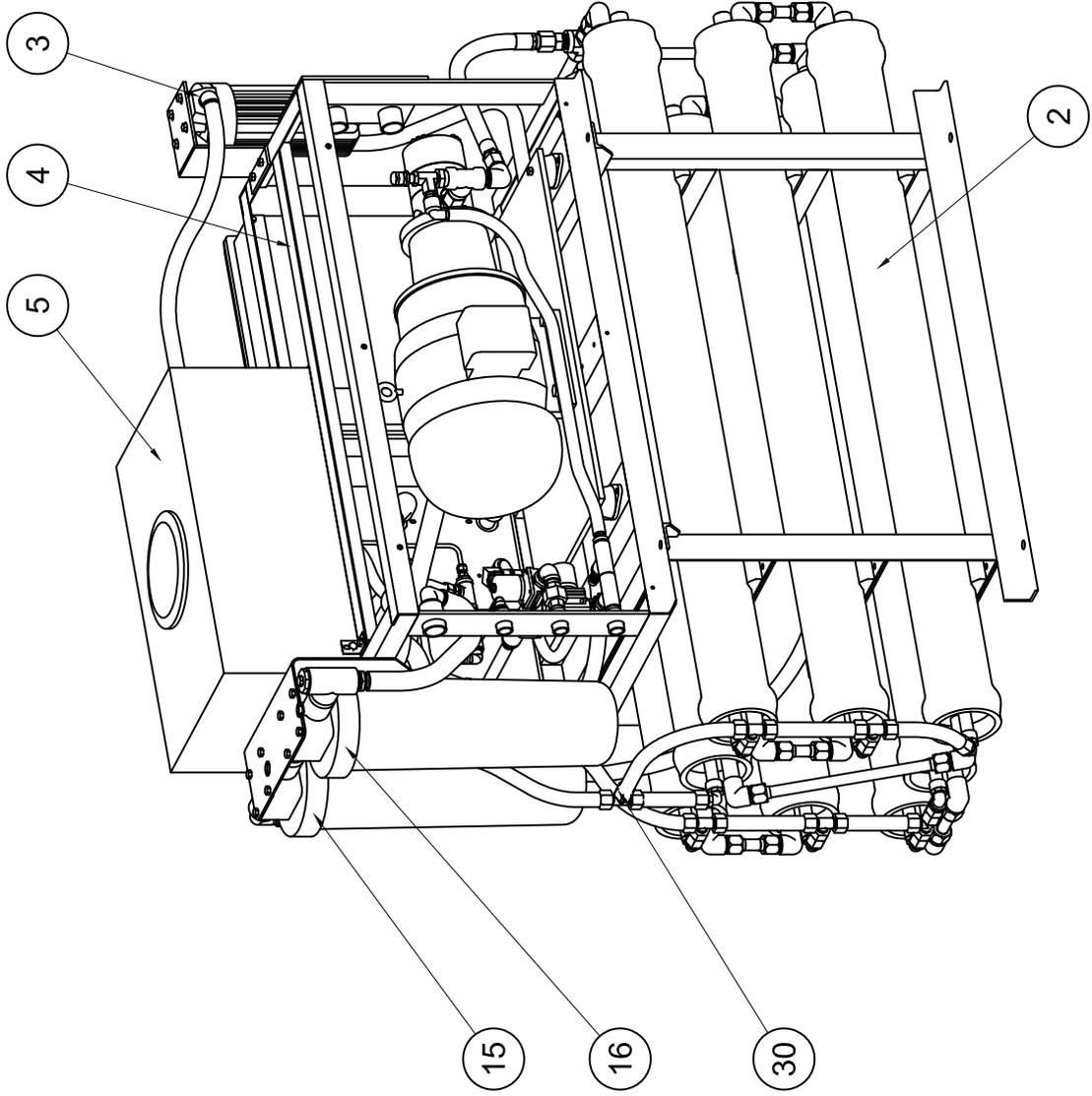


**FIGURE 1**

Sea Water Desalinator  
Front Iso View  
AQUA-SEP S2, DF 25

**ITEM COMPONENT NAME**

- 2. Membrane Housing: MHSA1440  
Membrane Element: MSHH0441-H
- 3. Cleaning Solution Filter: FCHQ7010  
Filter Element: FCAE3010
- 4. Desalinator Frame
- 5. Cleaning Solution Tank Assembly  
ASCT120110
- 15. Cartridge Filter Housing: FCHQ1520  
Filter (1 Micron) FCCH0120
- 16. Cartridge Filter Housing: FCHQ1520  
Filter (5 Micron) FCCH0520
- 30. Misc. Hose and Tubing Details  
(See Drawing 123008)

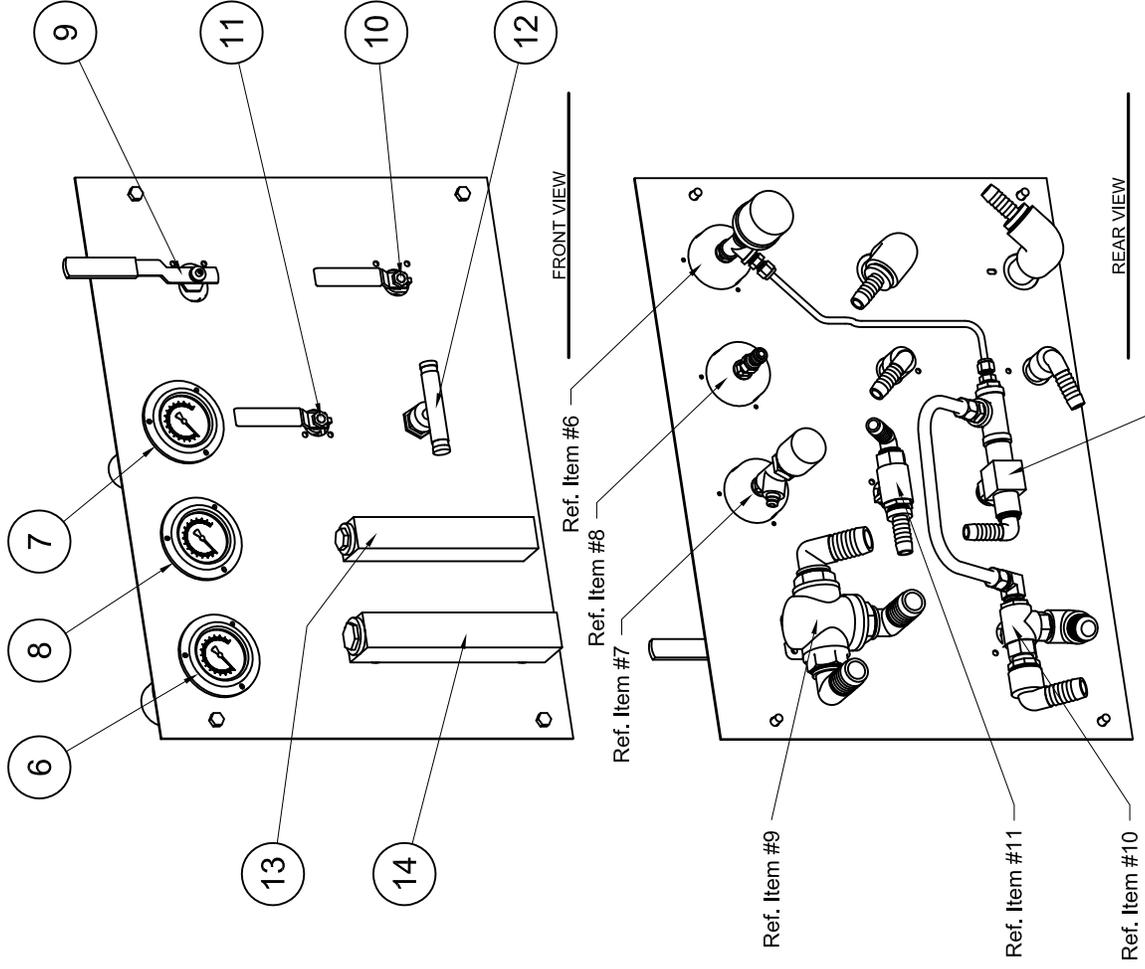


**FIGURE 2**

Sea Water Desalinator  
Rear Iso View  
AQUA-SEP S2, DF 25

**ITEM COMPONENT NAME**

- 6. Operating Pressure Gauge Assembly  
ASOG120705
- 7. Feed Pressure Gauge Assembly  
ASFG120705
- 8. Inlet Pressure Gauge Assembly  
ASIG120705
- 9. Operate / Clean Inlet Valve Assembly  
ASIV120705
- 10. Operate / Clean Outlet Valve Assembly  
ASOV120705
- 11. Cleaning Tank Drain Valve Assembly  
ASDV120705
- 12. Pressure Control Valve Assembly  
ASCV120705
- 13. Flowmeter - Product Water  
FMTR50500
- 14. Flowmeter - Reject Water  
FMTR50750



**NOTE:**

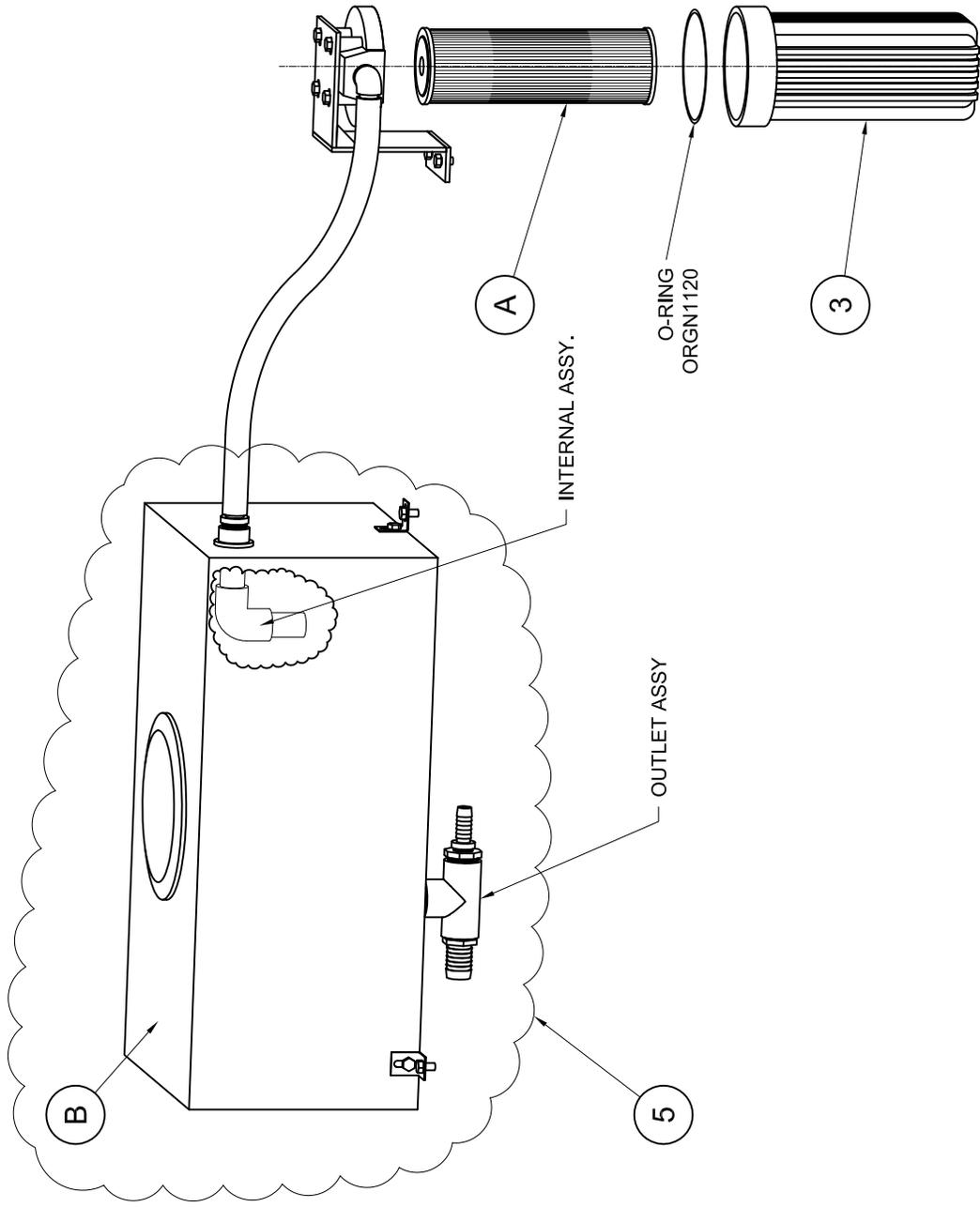
For Connections Details & Tubing callouts  
Refer to Drawing 123008

**FIGURE 3**

Sea Water Desalinator  
Instrument Panel Views  
AQUA-SEP S2, DF 25

**ITEM COMPONENT NAME**

- 3. Cleaning Solution Filter Housing  
FCHQ7010
- 5. Cleaning Solution Tank Assembly  
ASCT120110
- OUTLET ASSY:  
PNTX1600  
PTTX1600  
PBTX1608  
PAHX1600  
PAHX0800
- INTERNAL ASSY:  
PNTX1200  
PETX1200  
PNTX1216
- A. Cleaning Filter Element  
FCAE3010
- B. Cleaning Tank (Tank Only)  
ASCT100175



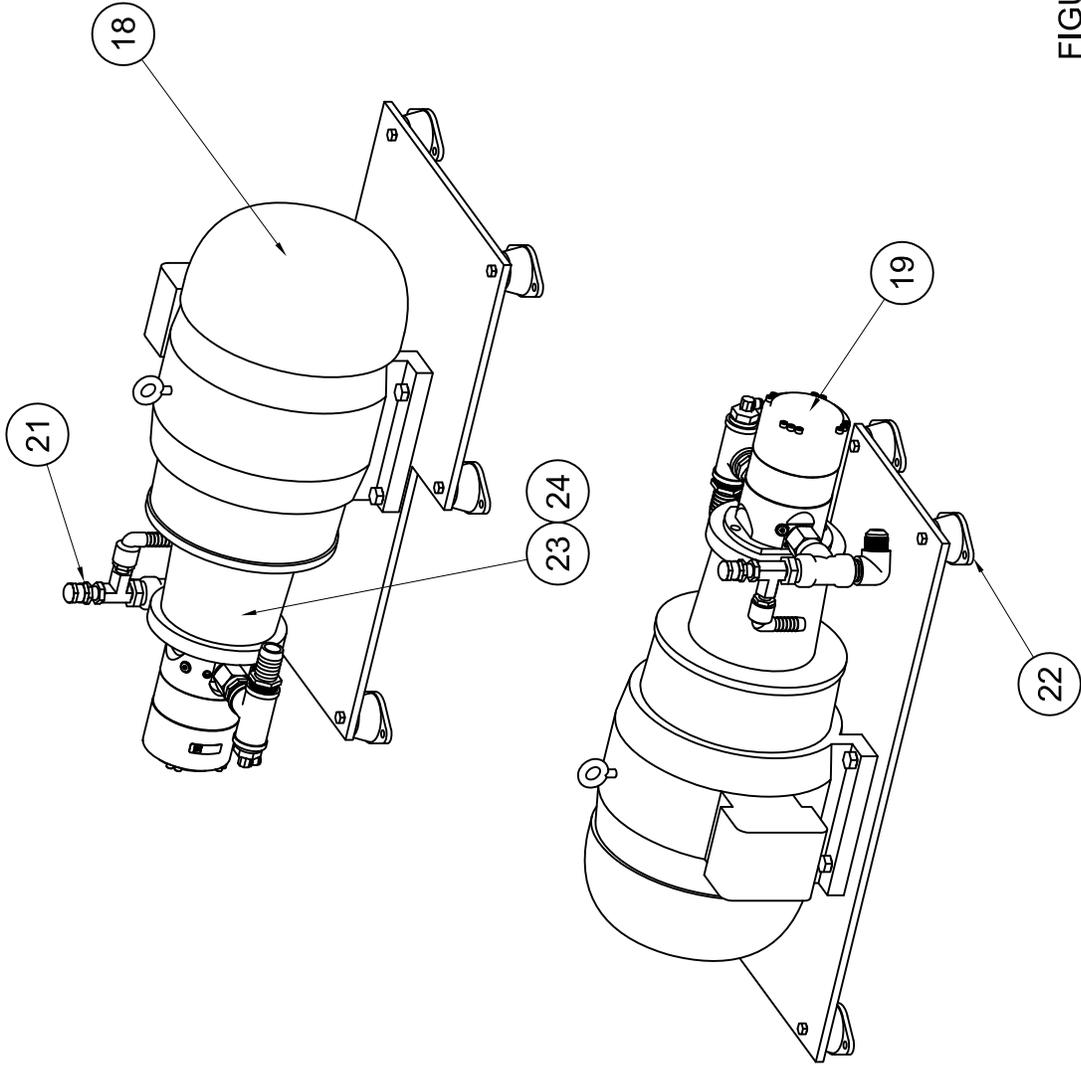
**FIGURE 4**

Sea Water Desalinator  
Cleaning Tank  
AQUA-SEP S2, DF 25-30

**ITEM COMPONENT NAME**

- 17. Booster Pump / Motor Assembly  
(Complete as Shown)  
ASBP250004  
(When Ordering, Provide System Voltage)
- 18. Electric Motor, 7.5 H.P.  
MTRD13075C  
(When Ordering, Provide System Voltage)
- 19. Booster Pump, APP2.2  
PUDS2200
- 21. Pressure Relief Valve  
Valve Body: VRHS0400  
Valve Spring: ASPS0001
- 22. Motor Mounts  
VBIR0507
- 23. Bell Housing \*
- 24. Flex Coupling \*

\* Items 23 & 24 are sold together  
as a set: PPBH2201



**NOTE:**

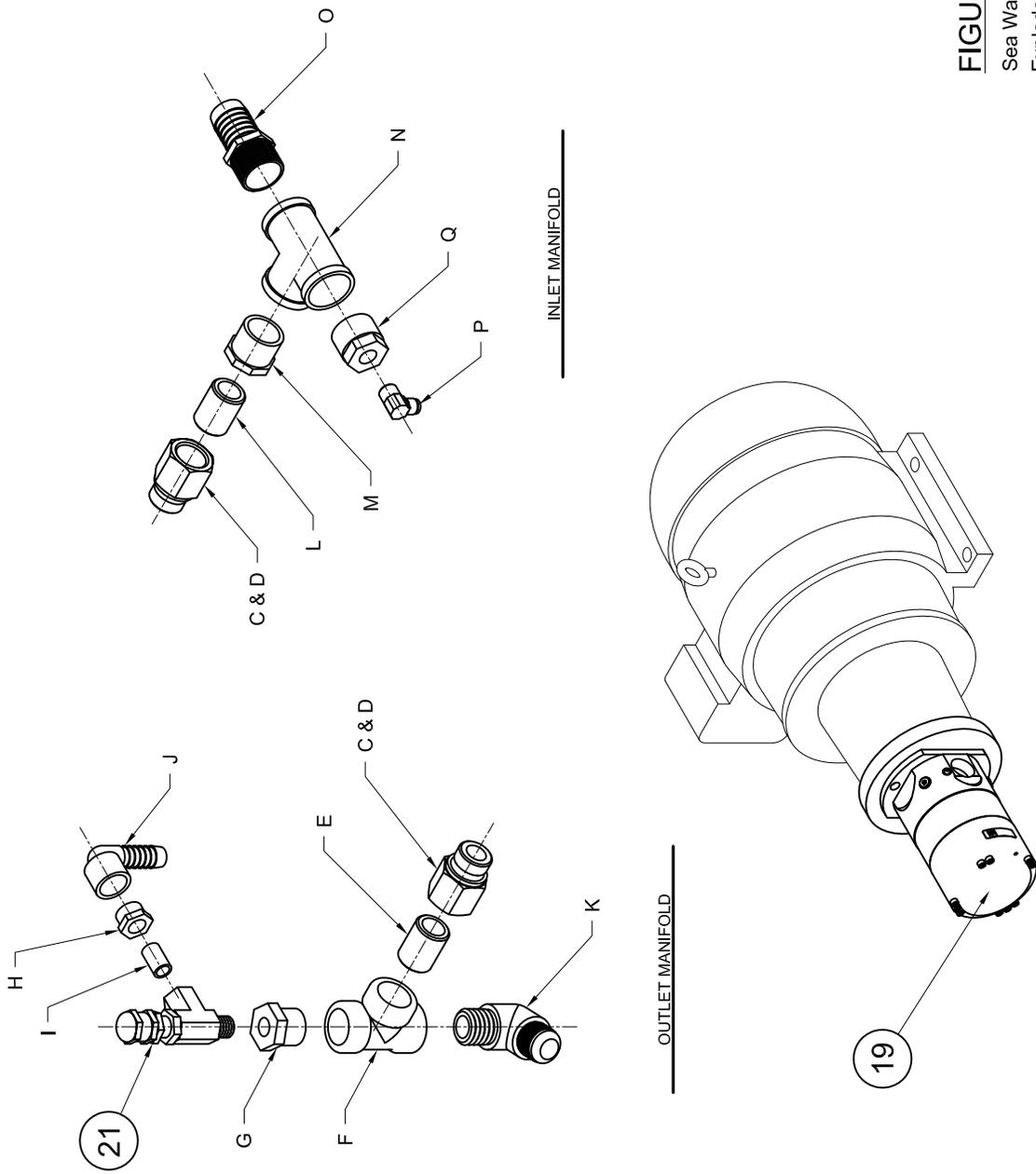
Detail exploded views on next sheet

**FIGURE 5**

Sea Water Desalinator  
High Pressure Pump  
AQUA-SEP S2, DF 25

**ITEM COMPONENT NAME**

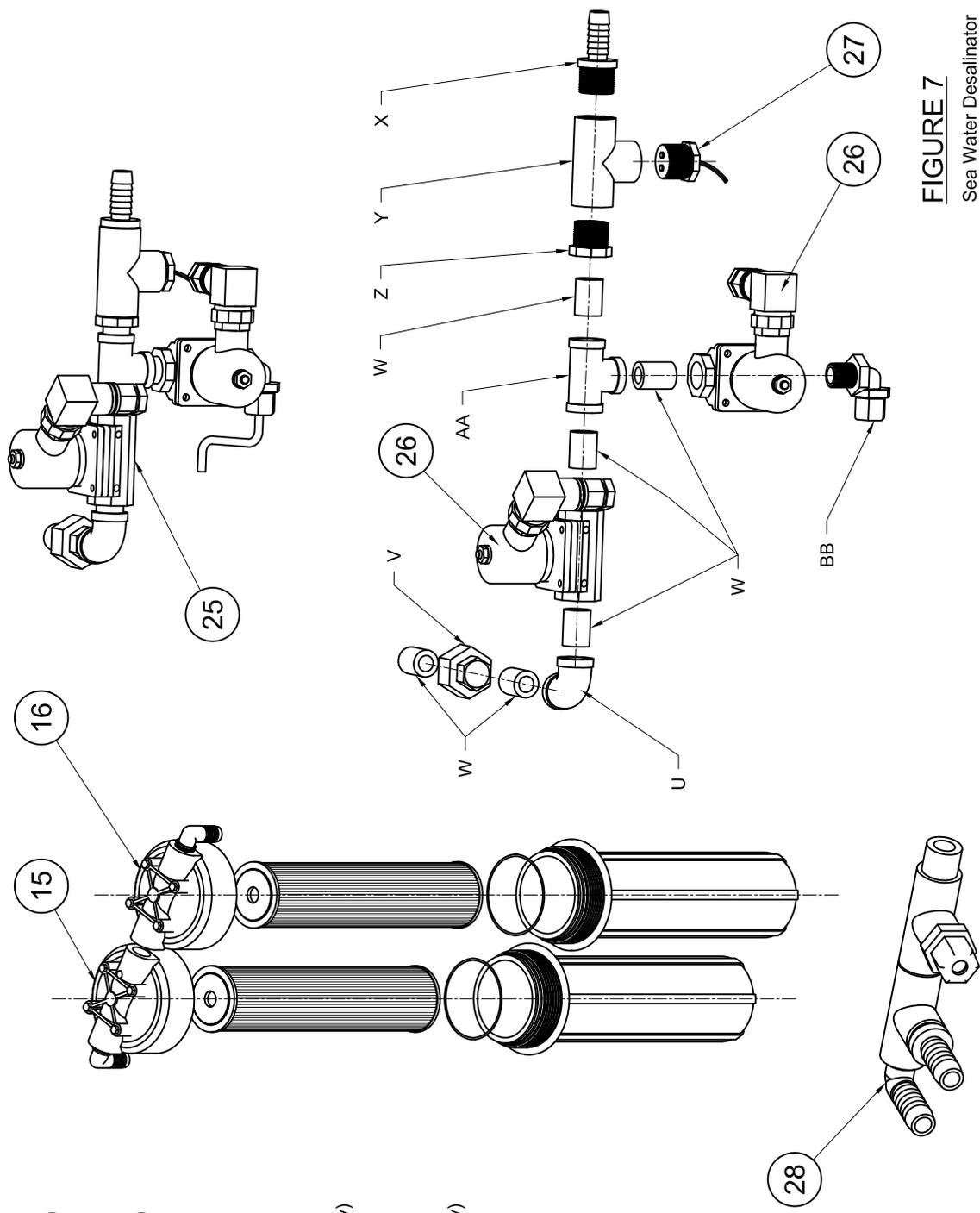
- 19. Booster Pump, APP2.2  
PUDS2200
- 21. Pressure Relief Valve  
Valve Body: VRHS0400  
Valve Spring: ASPS0001
- C. PABS1212 (2x)
- D. PAKS1200 (2x)
- E. PNXS1200
- F. PTXS1200
- G. PBXS1204
- H. PBTX0804
- I. PNTS0400
- J. PEGX0800
- K. FEMS1237
- L. PNTS1200
- M. PBTS1612
- N. PTTS1600
- O. PEHX1600
- P. ITSM0400
- Q. PBTS1604



**FIGURE 6**  
Sea Water Desalinator  
Exploded Details  
AQUA-SEP S2, DF 25

**ITEM COMPONENT NAME**

- 15. Cartridge Filter Housing: FCHQ1520  
Filter (1 Micron): FCCH0120  
O-RING: ORGN1122
- 16. Cartridge Filter Housing: FCHQ1520  
Filter (5 Micron): FCCH0520  
O-RING: ORGN1122
- 25. Product Valve Assembly  
120 VAC: ASPV120705-120  
220 VAC: ASPV120705-220
- 26. Solenoid Valve, 2-Way 1/2"  
(Included in Product Valve Assembly)  
120 VAC: VSDB0840  
220 VAC: VSDB0850
- 27. TDS Probe  
(Included in Product Valve Assembly)  
MPCS1000
- 28. Drain Manifold  
ASDM120705
- U. PETS0800
- V. PUTS0800
- W. PNTS0800 (6x)
- X. PAHX0812
- Y. PTTX1200
- Z. PBTX1208
- AA. PTTS1200
- BB. FTEM0608



**FIGURE 7**

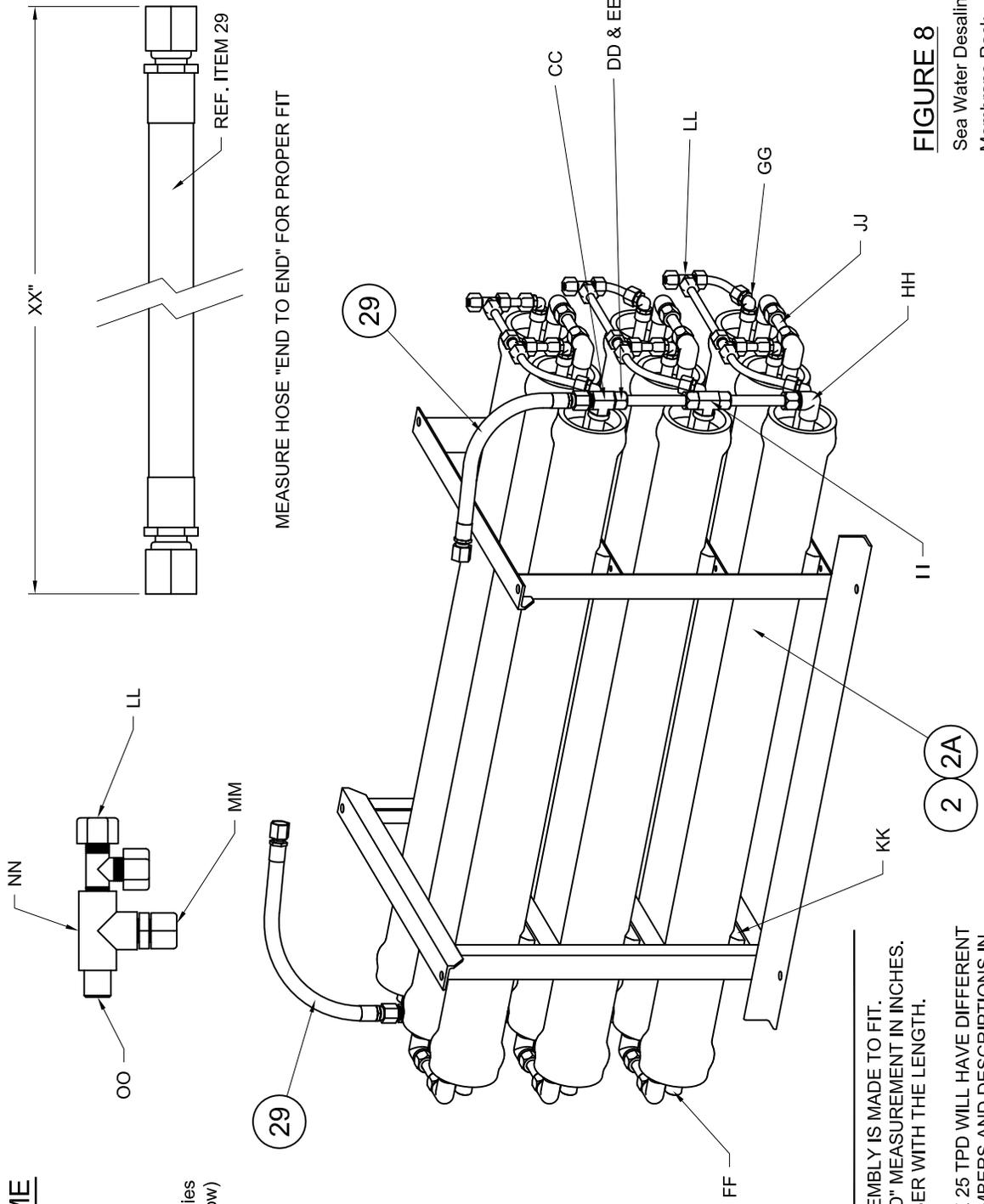
Sea Water Desalinator  
Filter / Manifolds  
AQUA-SEP S2, DF 25-30

**ITEM COMPONENT NAME**

- 2. Membrane Housings  
MHSA1440
- 2A. Membrane Element  
MSHH0441-H
- 29. High Pressure Hose Assemblies  
ASHA12 \_ \_ \_ (See Note Below)
- CC. FTFS1237 (2x)
- DD. FCNS1237 (2x)
- EE. FCSS1237 (2x)
- FF. PQT0800 (9x)
- GG. FTEF0800 (9x)
- HH. CEFS1200 (14x)
- II. CTBS1200 (4x)
- JJ. TUSS1200
- KK. MSDA0400 (18x)
- LL. FTTR0800 (7x)
- MM. FTFM0800
- NN. PTTX0800
- OO. PNTX0800

**NOTE**

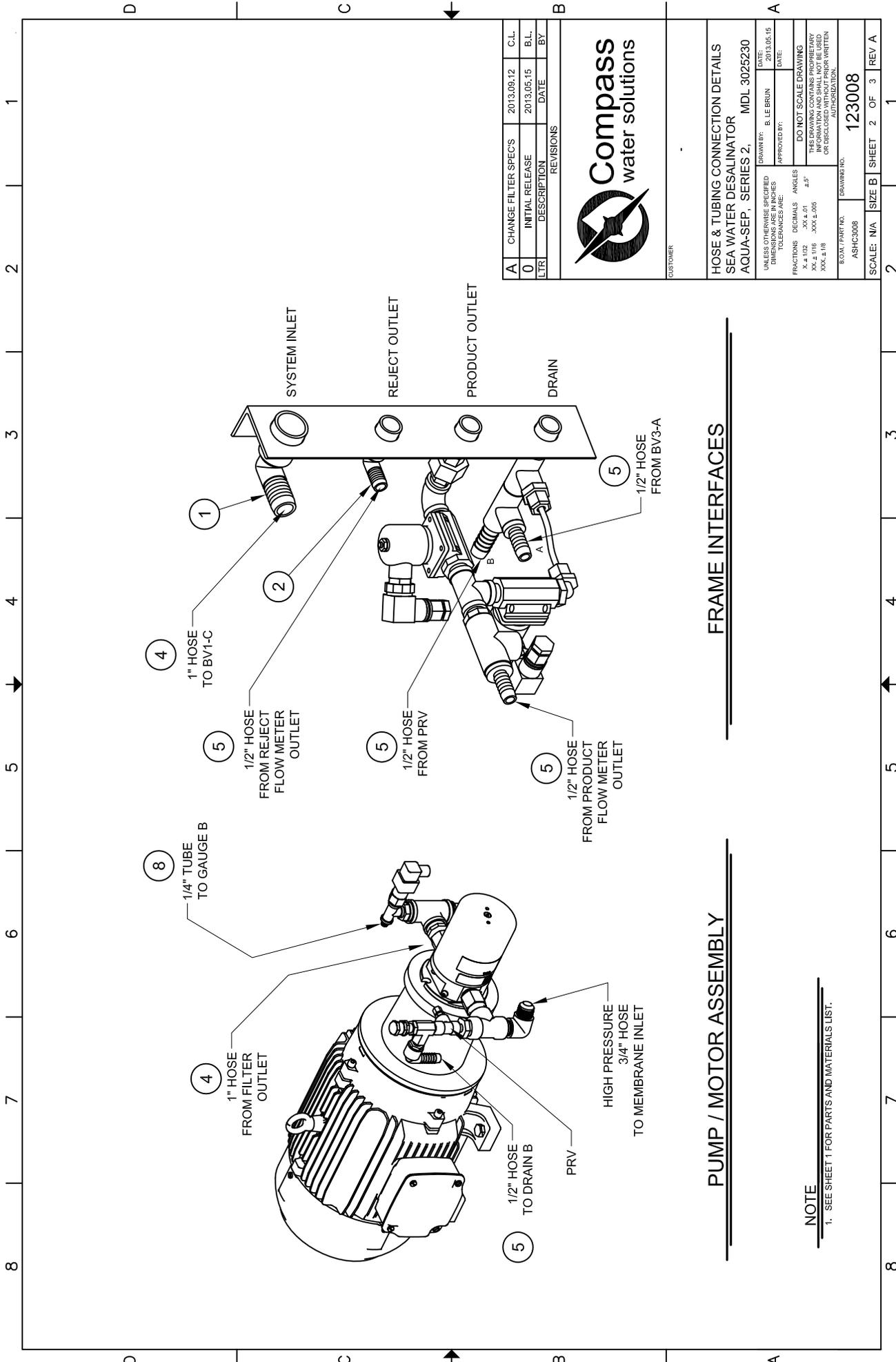
1. THE HIGH PRESSURE HOSE ASSEMBLY IS MADE TO FIT. PLEASE INCLUDE AN "END TO END" MEASUREMENT IN INCHES. REPLACE THE " \_ \_ \_ " IN PART NUMBER WITH THE LENGTH.
2. THE 30 TPD RACK IS SHOWN, THE 25 TPD WILL HAVE DIFFERENT QUANTITIES (REFER TO PART NUMBERS AND DESCRIPTIONS IN PARTS CATALOG).



**FIGURE 8**

Sea Water Desalinator  
Membrane Rack  
AQUA-SEP S2, DF 25-30





A		CHANGE FILTER SPECS	2013.09.12	C.L.
0	INITIAL RELEASE	2013.05.15	B.L.	
LTR	DESCRIPTION	DATE	BY	
REVISIONS				

DRAWN BY: B. LE BRUN		DATE: 2013.05.15
APPROVED BY:		DATE:
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES ARE:		
FRACTIONS	DECIMALS	ANGLES
X ± 1/32	.XX ± 0.01	± 5°
XX ± 1/16	.XX ± 0.005	
XXX ± 1/8		
BOUNT PART NO. 123008		DRAWING NO. 123008
SCALE: 1:1A	SIZE: B	SHEET 2 OF 3
REV A		

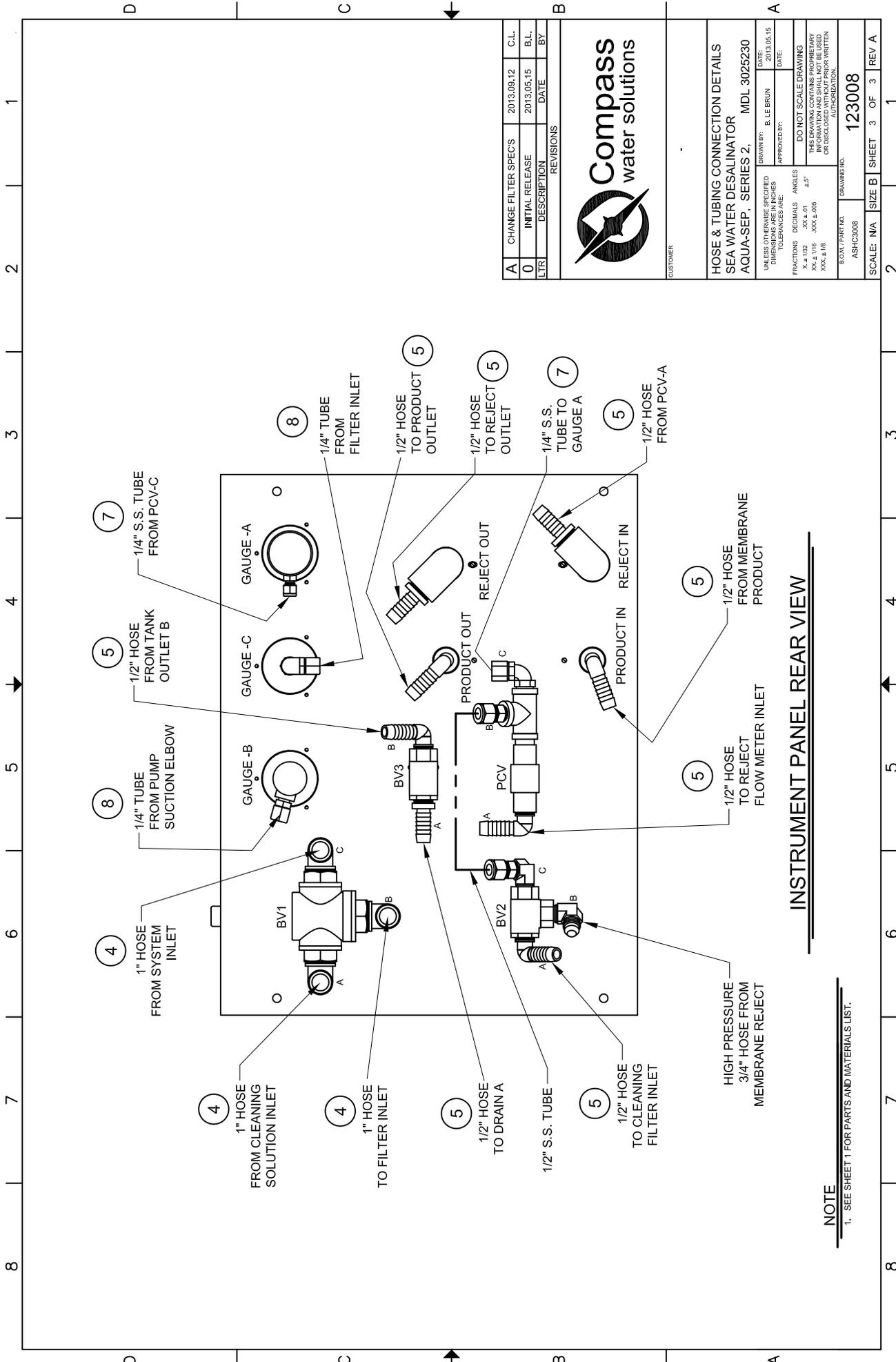
**HOSE & TUBING CONNECTION DETAILS**  
**SEA WATER DESALINATOR**  
**AQUA-SEP, SERIES 2, MDL 3025230**

**PUMP / MOTOR ASSEMBLY**

**NOTE**

1. SEE SHEET 1 FOR PARTS AND MATERIALS LIST.

CUSTOMER



REVISIONS		C.L.
A	CHANGE FILTER SPECS	2013.09.12
0	INITIAL RELEASE	2013.05.15
LTR	DESCRIPTION	DATE
		BY

HOSE & TUBING CONNECTION DETAILS	
SEA WATER DESALINATOR	
AQUA-SEP, SERIES 2, MDL 3025230	
DRAWN BY:	B. LE BRUN
DATE:	2013.05.15
APPROVED BY:	
DATE:	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ARE:	ANGLES
FRACTIONS	DECIMALS
X ± 1/32	.XX ± 0.01
XX ± 1/16	.XX ± 0.05
XXX ± 1/8	XXX ± 0.05
DO NOT SCALE DRAWING	
THIS DRAWING CONTAINS PROPRIETARY INFORMATION AND IS UNLAWFUL TO REPRODUCE OR DISCLOSE WITHOUT PRIOR WRITTEN AUTHORIZATION.	
BOAT/PART NO.	DRAWING NO.
ASHC3008	123008
SCALE: 1/4"	SIZE B
SHEET 3	OF 3
REV A	

**INSTRUMENT PANEL REAR VIEW**

**NOTE**  
1. SEE SHEET 1 FOR PARTS AND MATERIALS LIST.