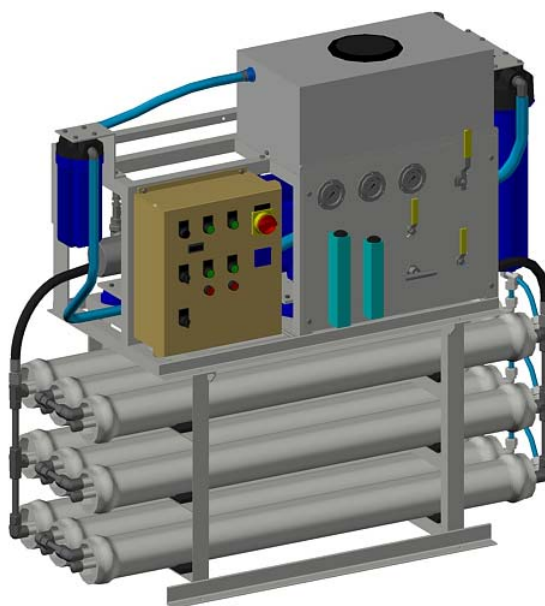


December 2015

**PARTS CATALOG
SEA WATER DESALINATOR
AQUA-SEP SERIES II
MODEL 30 TPD**



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

WEB: 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.

Model Number	Description
ASSD3025230-MCS	AQUA-SEP SERIES II, 30 TPD

Serial Numbers:

33472 *	33495 *	33617
33473 *	33540	33619
33492 *	33548	33621
33493 *	33574	33633 *
33494 *	33580	33634 *

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

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

COMPONENT PART NUMBERS & DESCRIPTIONS

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

ITEM	COMPONENT NAME	DESCRIPTION
13.	Flowmeter "Product Water"	Provides instantaneous indication of product water production in gallons per minute and liters per minute. FMTR50750 (fig #3)
14.	Flowmeter "Reject Water"	Provides instantaneous indication of water being rejected in gallons per minute and liters per minute. FMTR50200 (fig #3)
15.	Cartridge Filter Housing	Contains replaceable filter cartridge (1 micron). Filter Housing: FCHQ1520 Filter Element: FCCH0120 (fig #7)
16.	Cartridge Filter Housing	Contains replaceable filter cartridge (5 micron). Filter Housing: FCHQ1520 Filter Element: FCCH0520 (fig #7)
17	Booster Pump / Motor Assy.	Complete Pump/Motor Assy. (fig #5) ASBP300004 (When Ordering, Provide System Voltage)
18.	Electric Motor	10 H.P. motor with 215TC Frame (fig #5) MTRW1310C (When Ordering, Provide System Voltage)
19.	Booster Pump	APP 3.0 (fig #5 & #6) PUDS3000
20.	Pressure Switch	Set at 90 PSI. SWMS0490
21.	Pressure Relief Valve	¼" Stainless Steel Valve Body Valve VRHS0400 Aqua-Sep Set Spring (750-1500 PSI) ASPS0001 (fig #5 & #6)
22.	Motor Mounts	Vibration Dampeners. VBIR0507 (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 PPBH3000		
25.	Product Valve Assy.	Controls Direction of flow based on the quality of the Processed Water. (fig #7) 120 VAC – ASPV120705-120 220 VAC – ASPV120705-220
26.	Solenoid Valve (1/2")	120 VAC – VSDB0840 (fig #7) 220 VAC – VSDB0850

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>
27	TDS Probe	Checks quality of processed water. (fig #7) MPCS1000
28.	Drain Manifold	ASDM120705 (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. ASHA12 -- (fig #8) [Example: ASHA1275 = 75 inches long]
30.	Misc. Hoses & Tubing Details	Product Tubing (3/8" x 1/4" I.D.) TUVC0406 5/8" Tubing (Vinyl Braid) TUVB1000 1" Tubing (Vinyl Braid) TUVB1600 [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

ITEM	PART NUMBER	DESCRIPTION
A.	FCAE3010	Cleaning Filter Element
B.	ASCT100175	Cleaning Tank (Tank Only – No Fittings)
C.	PABS1212 (2x)	Pipe Adapter, ¾” BSP to NPT
D.	PAKS1200 (2x)	Adapter Gasket, ¾” SS, BSP
E.	PNXS1200	Pipe Nipple, SS Sch 80, ¾” x Close
F.	PTXS1200	Pipe Tee, SS #3000, ¾”
G.	PBXS1204	Pipe Bushing, SS Sch 80, ¾” x ¼”
H.	PBTX0804	Pipe Bushing, PVC Sch 80, ½” x ¼”
I.	PNTS0400 (2x)	Pipe Nipple, SS, ¼” x Close
J.	PEGX0800	Pipe Adapter Elbow, ½” Hose x FNPT
K.	FEMS1237	Flare Elbow, ¾” MNPT x ¾” - 37° Hose
L.	PNTS1200	Pipe Nipple, SS, ¾” x Close
M.	PBTS1612	Pipe Bushing, SS 1” x ¾”
N.	PTTS1600	Pipe Tee, SS, 1”
O.	PEHX1600	Pipe Adapter Elbow, PVC, 1” Hose x MNPT
P.	ITSM0400	Insta-Tube, Straight Male ¼”
Q.	PBTS1604	Pipe Bushing, SS, 1” x ¼”
R.	PTTS0400	Pipe Tee, SS, ¼”
U.	PETS0800	Pipe Elbow, SS, ½”
V.	PUTS0800	Pipe Union, SS, ½”
W.	PNTS0800 (6x)	Pipe Nipple, SS, ½” x Close

* There is no item “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

<u>ITEM</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
X.	PAHX0812	Pipe Adapter, 1/2" Hose x 3/4" MNPT
Y.	PTTX1200	Pipe Tee, PVC Sch 80, 3/4"
Z.	PBTX1208	Pipe Bushing, Threaded PVC, 3/4" x 1/2"
AA.	PTTS1200	Pipe Tee, SS, 3/4"
BB.	FTEM0608	Fast & Tite Elbow, 3/8" Tube x 1/2" MNPT
CC.	FTFS1237 (2x)	Flare Tee, 3/4" x 37° Hose
DD.	FCNS1237 (2x)	Flare Nut, 3/4"
EE.	FCSS1237 (2x)	Flare Sleeve, 3/4"
FF.	PQTX0800 (9x)	Pipe Cap, 1/2" Threaded
GG.	FTEF0800 (9x)	Fast & Tite Elbow, 1/2" Tube x FNPT
HH.	CEFS1200 (14x)	Compression Elbow, 3/4" Tube x FNPT
I I.	CTBS1200 (2x)	Compression Tee, 3/4"
J J.	TUSS1200	Tubing, 3/4"
KK.	MSDA0400 (18x)	Membrane Saddle 4"
LL.	FTTR0800 (7x)	Fast & Tite Run Tee, 1/2" Tube x MNPT
MM.	FTFM0800	Fast & Tite, 1/2" Tube x MNPT
NN.	PTTX0800	Pipe Tee, Threaded PVC Sch 80, 1/2"
OO.	PNTX0800	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

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
PDVK3035	Booster Pump Valve Plate Set, APP 3.0
PDSK3035	Booster Pump Seal Set, APP 3.0
PDSP3000	Booster Pump Swash Plate, APP 3.0
PDPS3035	Booster Pump Piston Set, APP 3.0
PDRS3035	Booster Pump Retainer Set, APP 3.0
ORGN1122	O-Ring, BB Filters
ORGN1120	O-Ring, Cleaning Filter
ASAC1000	Aqua-Sep Membrane Cleaner – Acid 2 lbs. (Mix 2 lbs. with 15 gallons of Water)
ASAL2000	Aqua-Sep Membrane Cleaner – Alkaline 2 lbs. (Mix 1 lb. with 15 gallons of Water)
SBSP0001	Aqua-Sep Preservative, Sodium Bisulfate 50 lbs. pail
FCAE3010	Cleaning Filter
FCCH0120	Filter Element: (1 micron) x 20” Long, BB
FCCH0520	Filter Element: (5 micron) x 20” Long, BB
FCWQ1500	Filter Housing Wrench, BB
VRKD0800	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) |

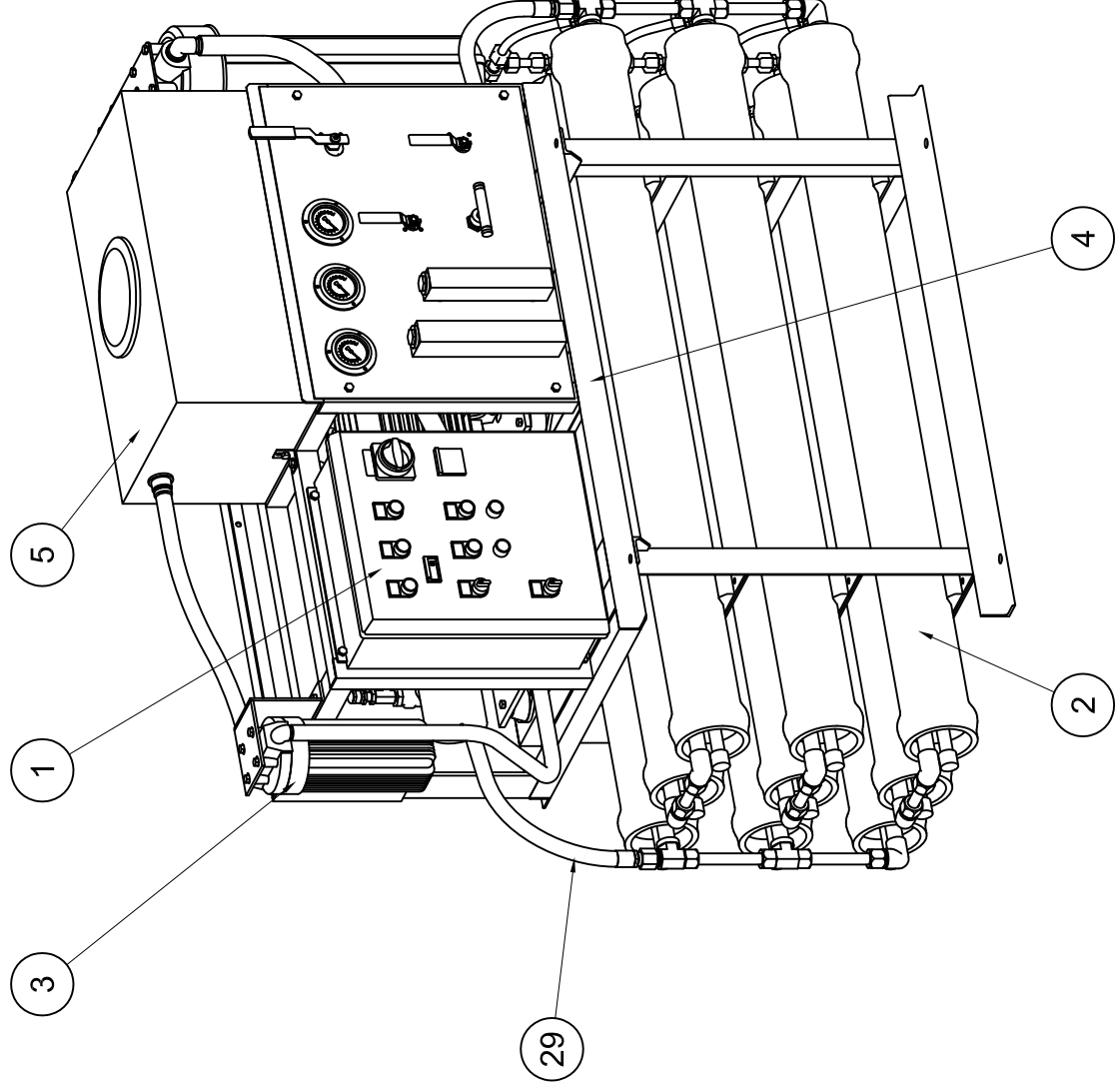


FIGURE 1

Sea Water Desalinator
Front Iso View
AQUA-SEP S2, DF 30

ITEM	COMPONENT NAME
2.	Membrane Housing: MHA1440 Membrane Element: MSH0441-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)

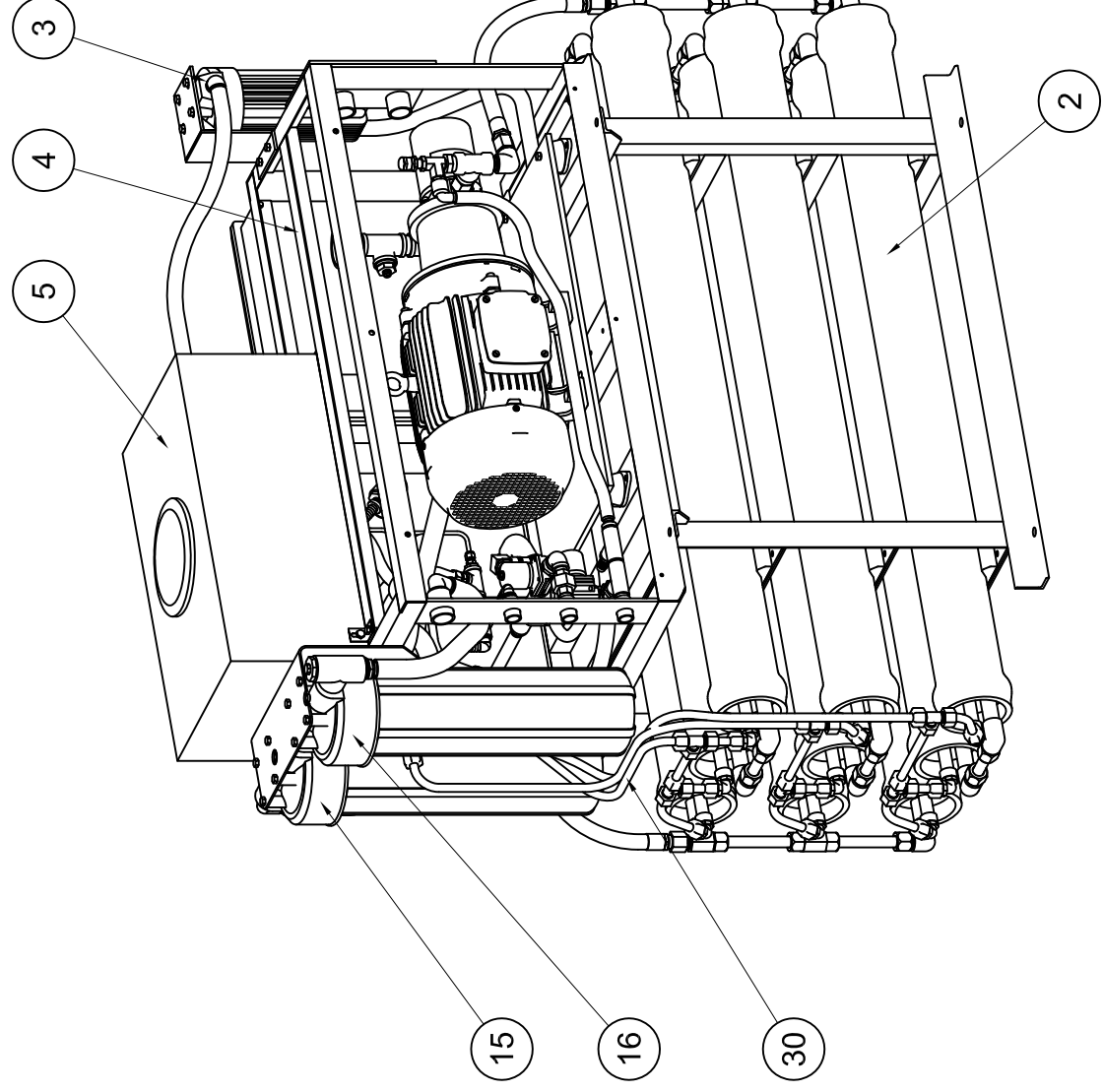


FIGURE 2

Sea Water Desalinator
Rear Iso View
AQUA-SEP S2, DF 30

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
FMTR50750
14. Flowmeter - Reject Water
FMTR50200

NOTE:

For Connections Details & Tubing callouts
Refer to Drawing 123008

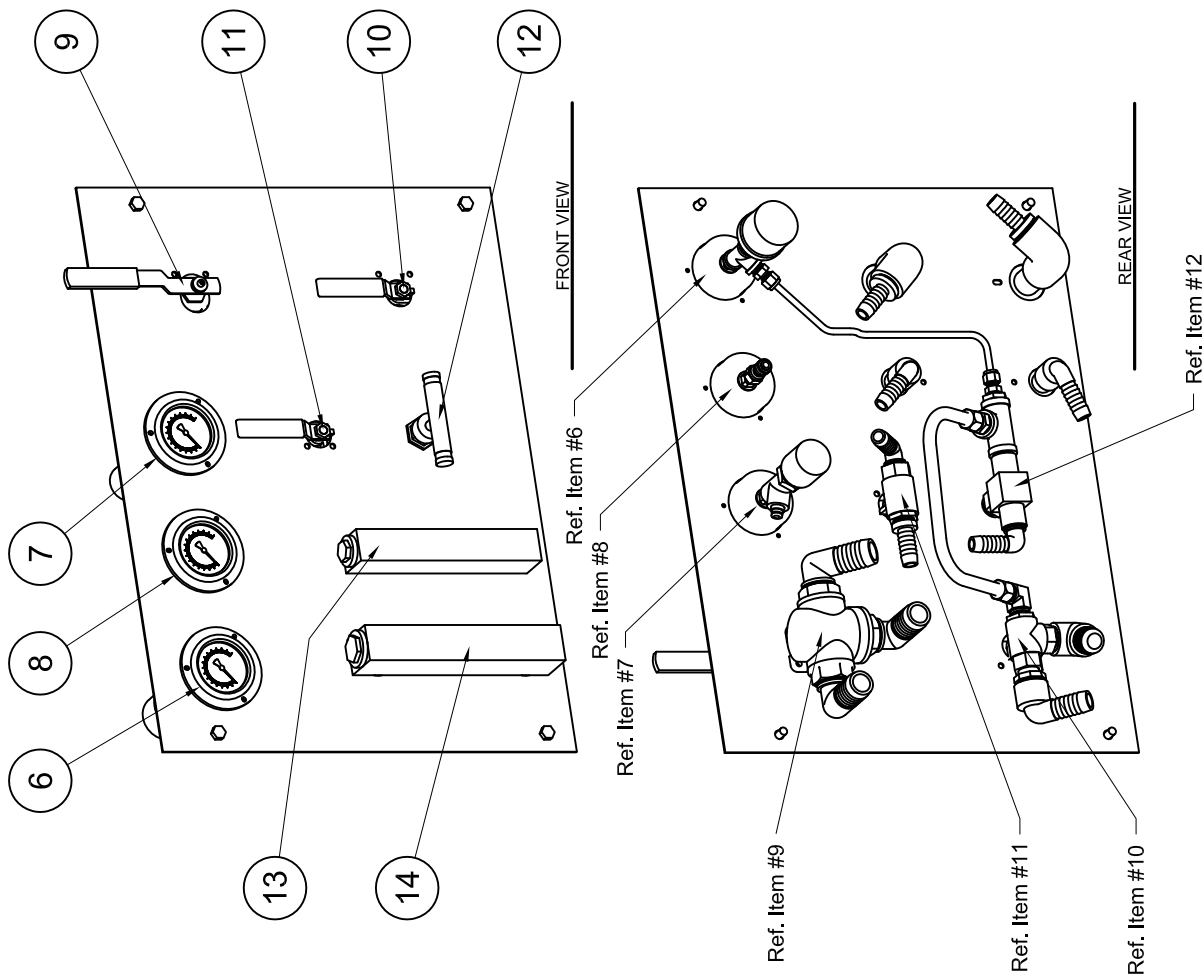


FIGURE 3

Sea Water Desalinator
Instrument Panel Views
AQUA-SEP S2, DF 30

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

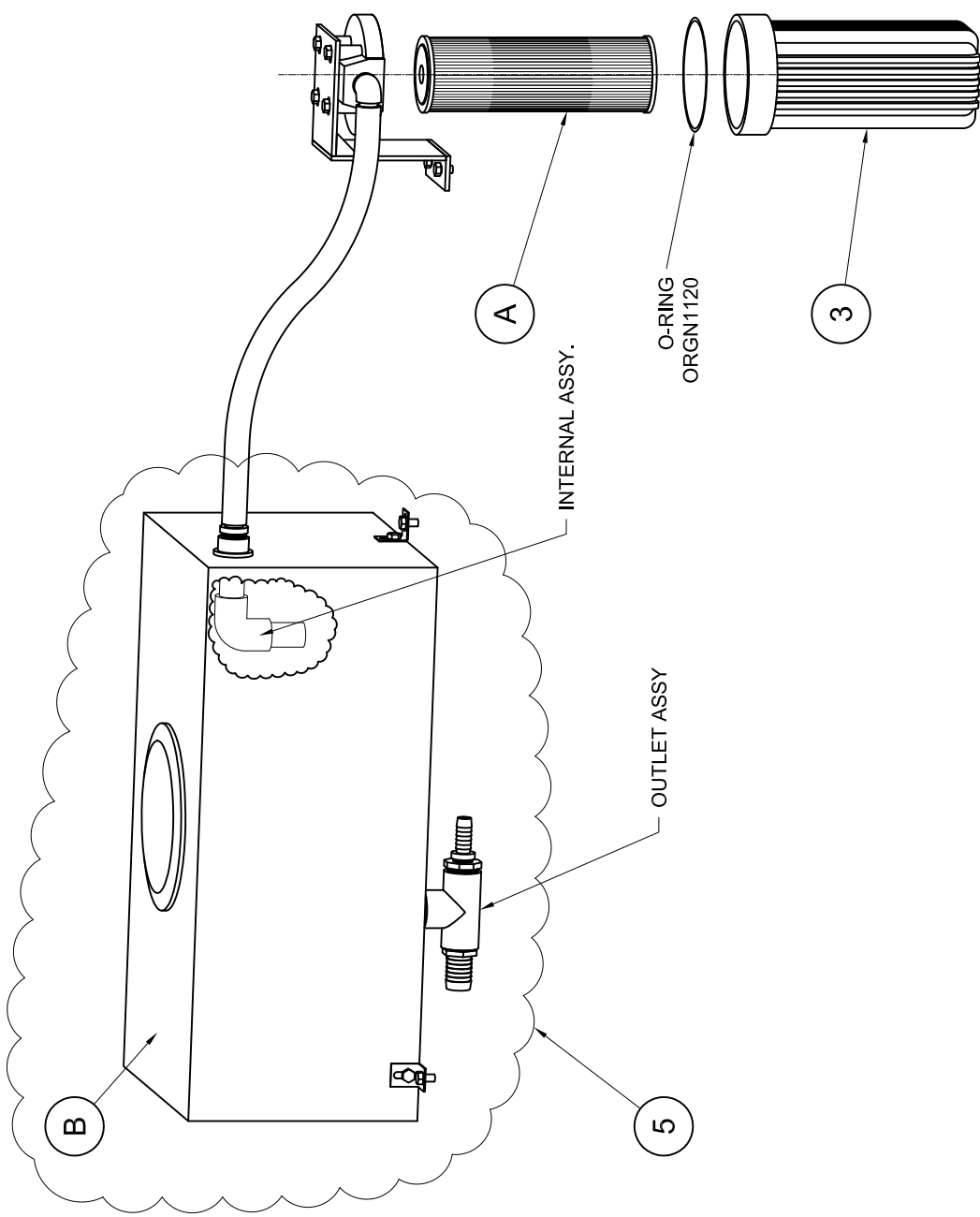
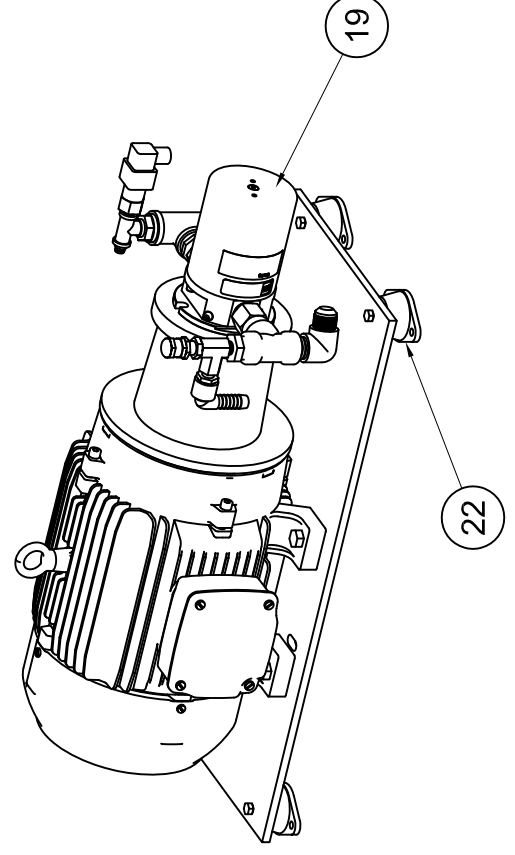
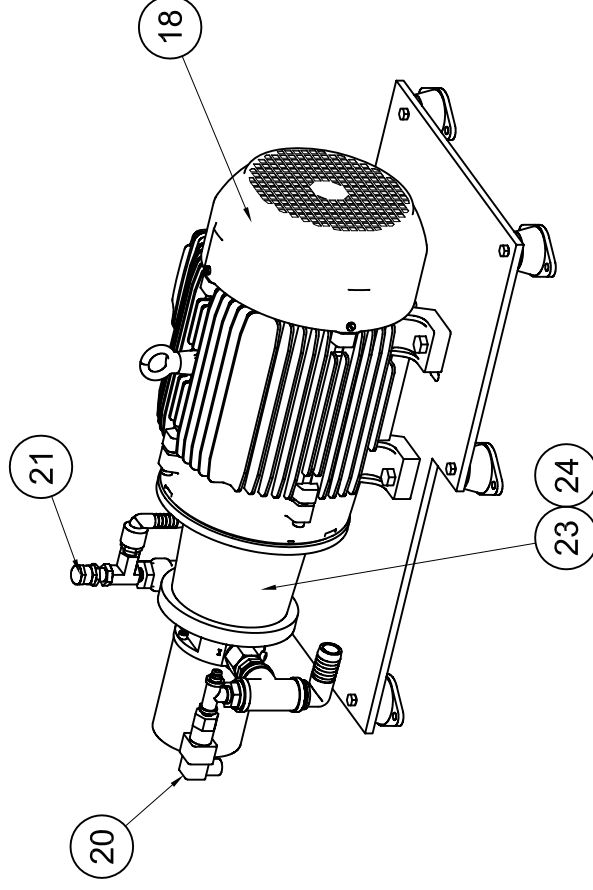


FIGURE 4

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

ITEM	COMPONENT NAME
17.	Booster Pump / Motor Assembly (Complete as Shown) ASBP300004 (When Ordering, Provide System Voltage)
18.	Electric Motor, 10 H.P. MTRW1310C (When Ordering, Provide System Voltage)
19.	Booster Pump, APP3.0 PUDS3000
20.	Pressure Switch SWMS0490
21.	Pressure Relief Valve Valve Body: VRHS0400 Valve Spring: ASPS0001
22.	Motor Mounts VBIR0507
23.	Bell Housing *
24.	Flex Coupling *
<p>* Items 23 & 24 are sold together as a set: PPBH3000</p>	



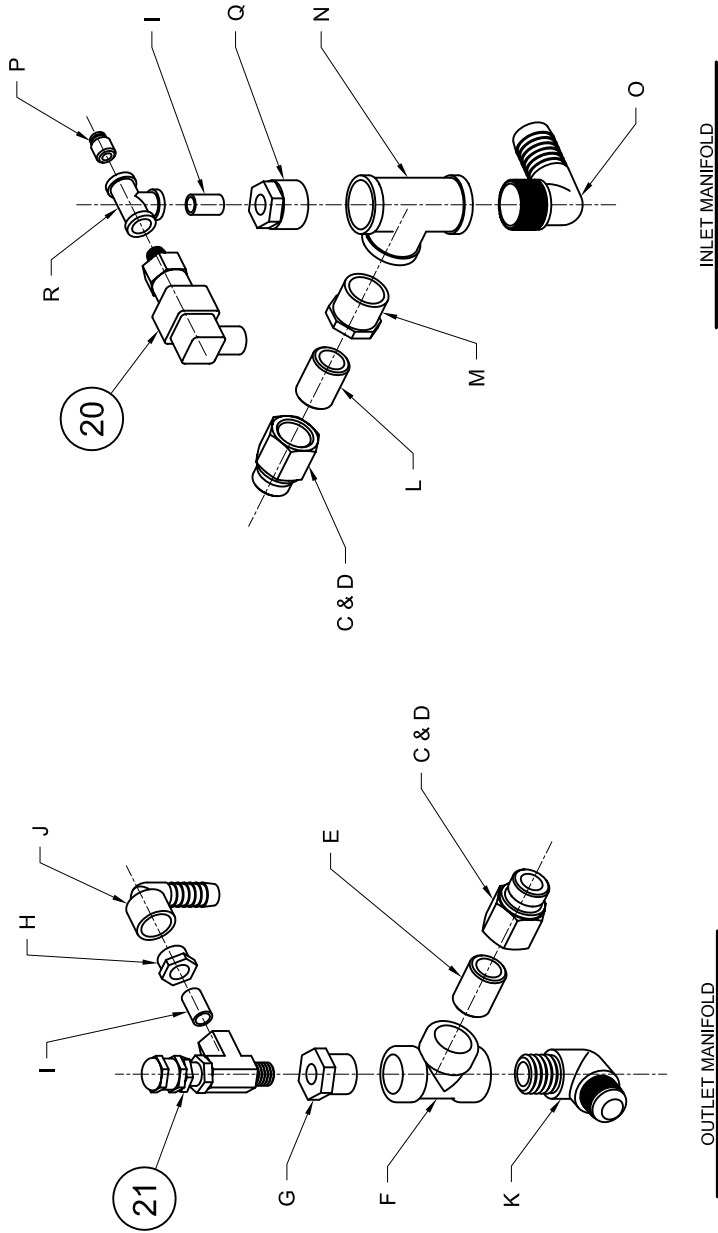
NOTE:

Detail exploded views on next sheet

FIGURE 5

Sea Water Desalinator
High Pressure Pump
AQUA-SEP S2, DF 30

ITEM	COMPONENT NAME
19.	Booster Pump, PUDS3000
20	Pressure Switch, Set @ 90PSI SWMS0490
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 (2x)
J.	PEGX0800
K.	FEMS1237
L.	PNTS1200
M.	PBTS1612
N.	PTTS1600
O.	PEHX1600
P.	ITSM0400
Q.	PBTS1604
R.	PTTS0400



INLET MANIFOLD

OUTLET MANIFOLD

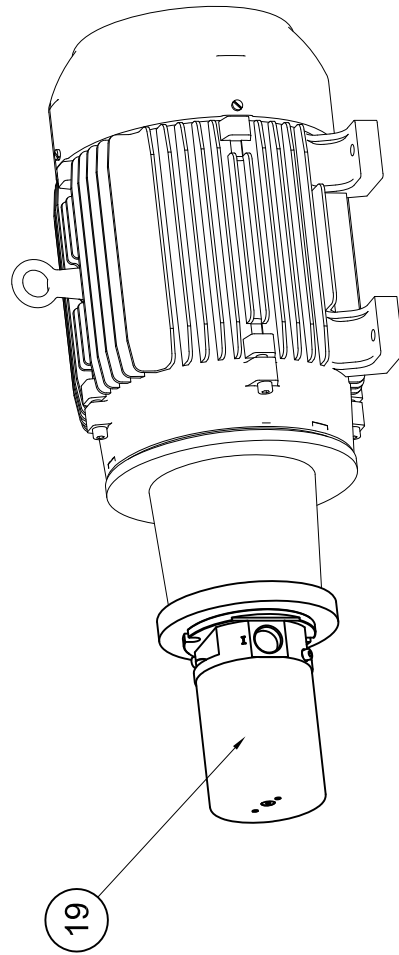


FIGURE 6

Sea Water Desalinator

Exploded Details

AQUA-SEP S2, DF 30

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

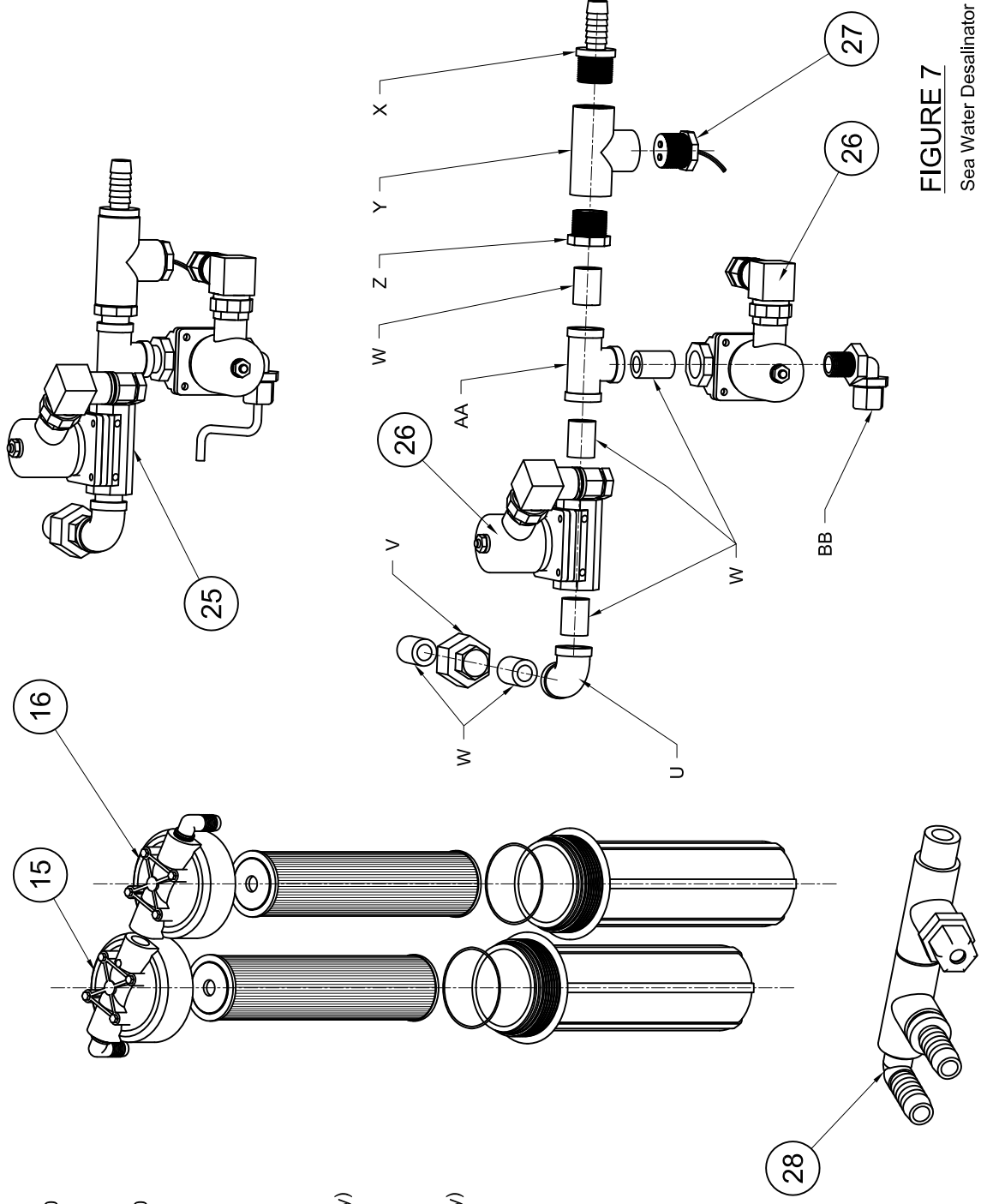
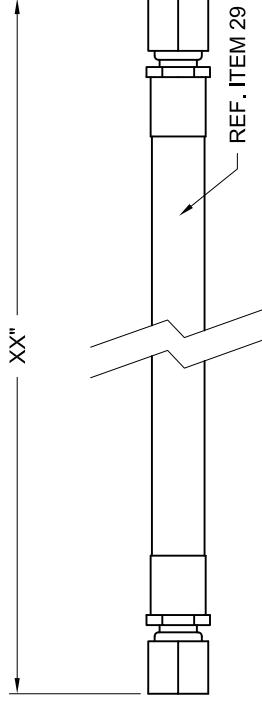
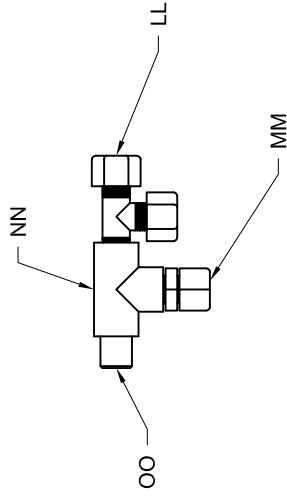


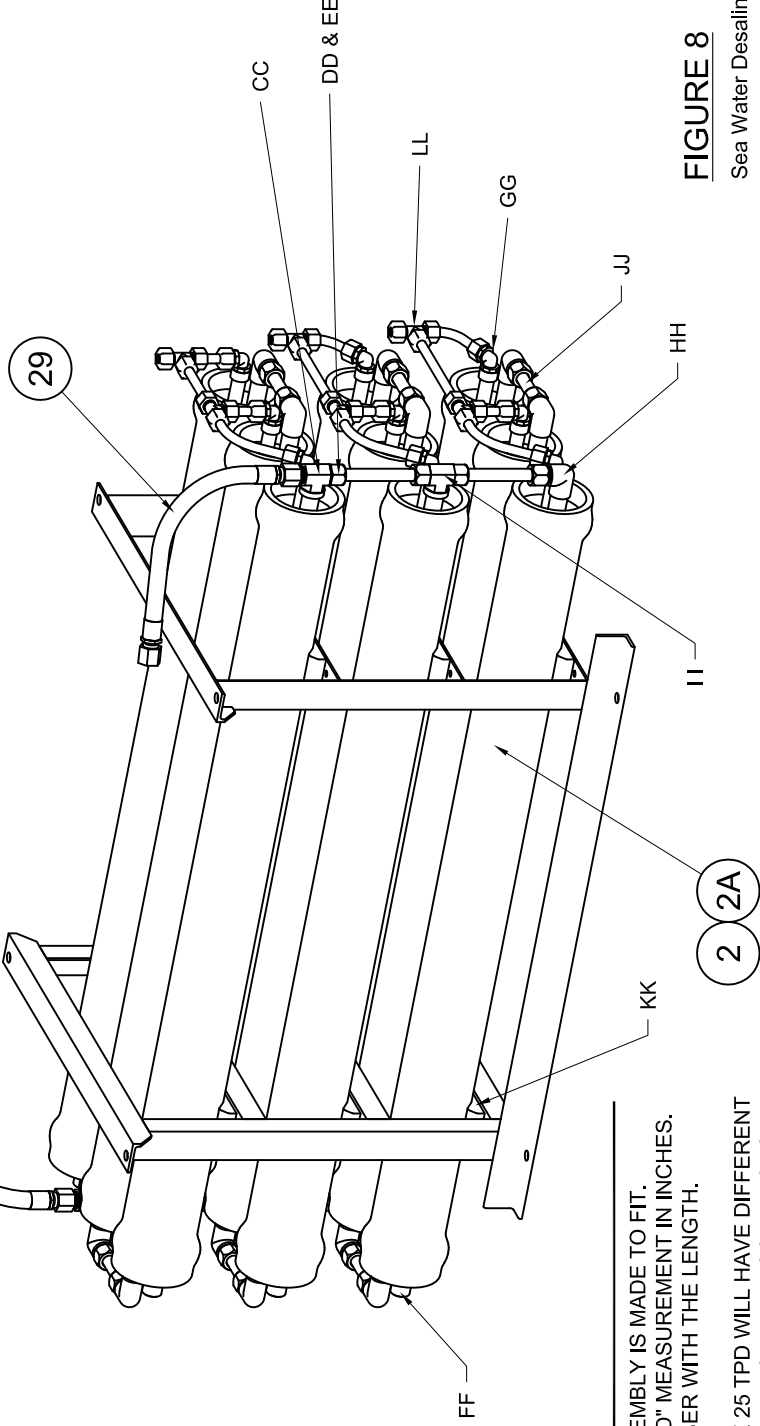
FIGURE 7

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.	PQTX0800 (9x)
GG.	FTEF0800 (9x)
HH.	CEFS1200 (14x)
II.	CTBS1200 (4x)
JJ.	TUSS1200
KK.	MSDA0400 (18x)
LL.	FTTR0800 (7x)
MM.	FTFM0800
NN.	PTTX0800
OO.	PNTX0800



MEASURE HOSE "END TO END" FOR PROPER FIT

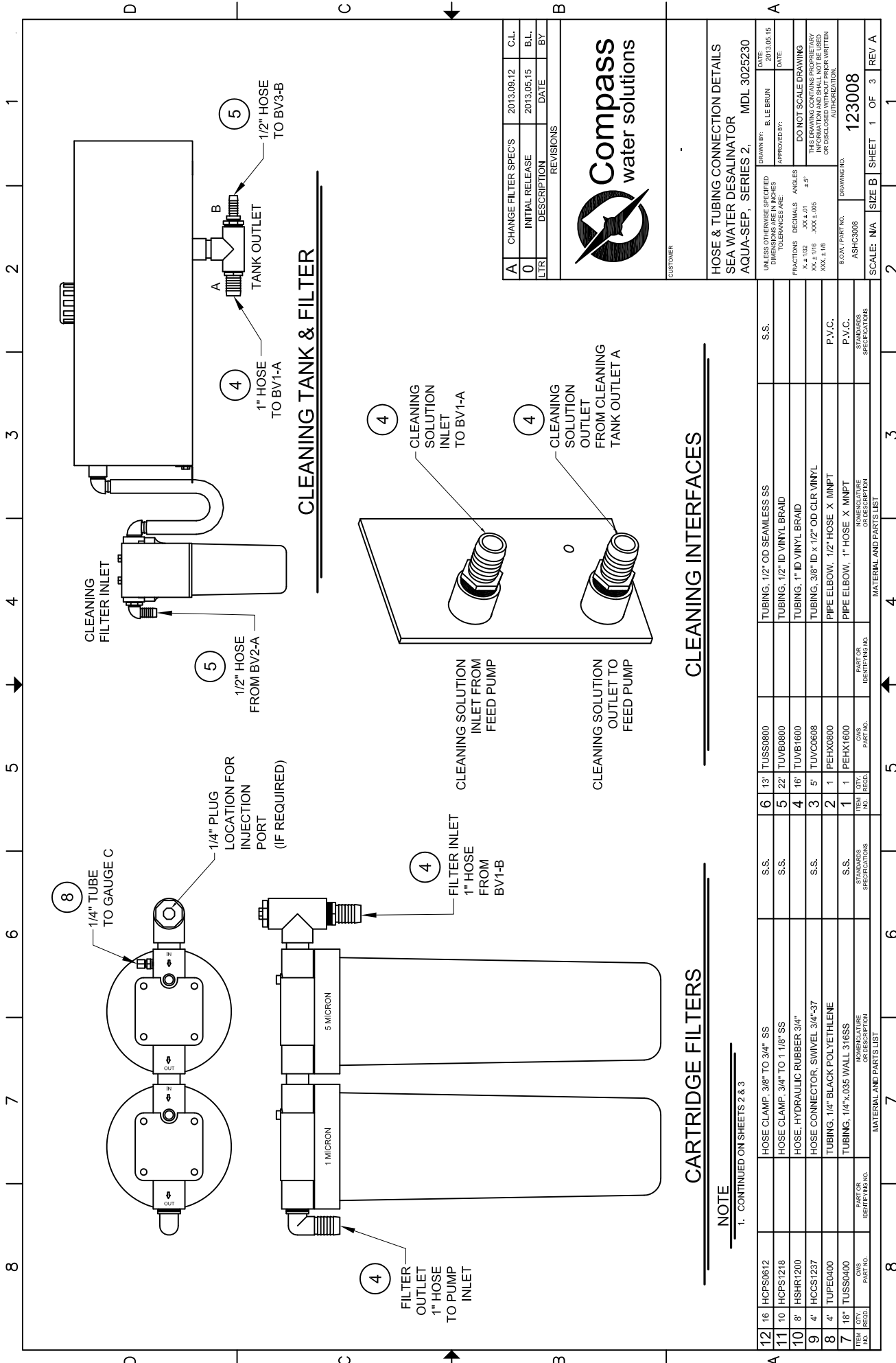


NOTE

- 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.
- 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



CLEANING TANK & FILTER

CLEANING INTERFACES

CARTRIDGE FILTERS

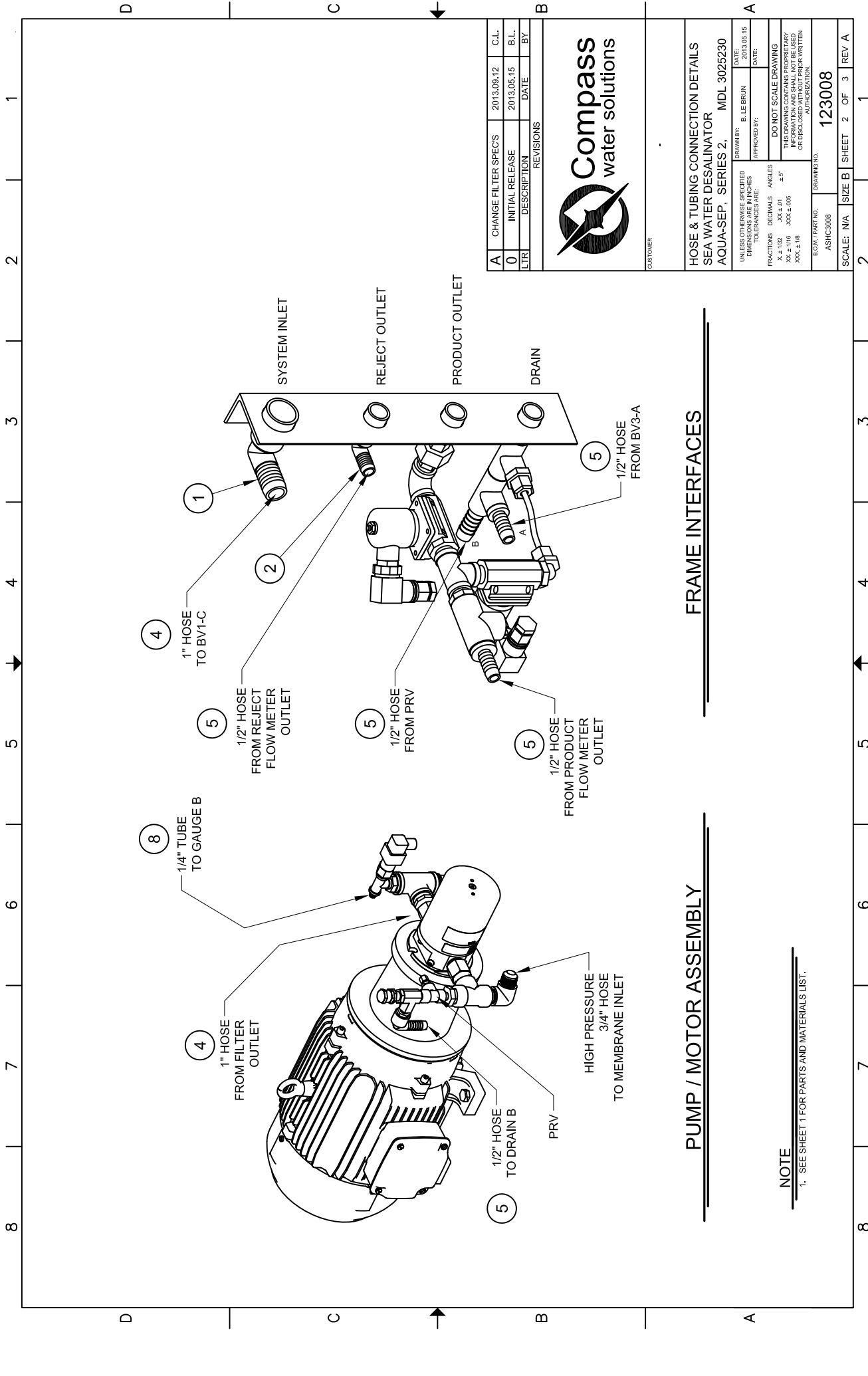
NOTE
1. CONTINUED ON SHEETS 2 & 3

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



HOSE & TUBING CONNECTION DETAILS				
SEA WATER DESALINATOR				
AQUA-SEP, SERIES 2, MDL 3025230				
DRAWN BY:		DATE:		
B. LE BRUN		2013.05.15		
APPROVED BY:		DATE:		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		DO NOT SCALE DRAWING		
FRACTIONS		DECIMALS		ANGLES
X ± 1/32		.XX ± 0.01		± 5°
XX ± 1/16		.XX ± 0.005		
XXX ± 1/8				
B.O.M. / PART NO.		DRAWING NO.		
ASHC3008		123008		
SCALE:	N/A	SIZE	B	SHEET 1 OF 3
REV	A			

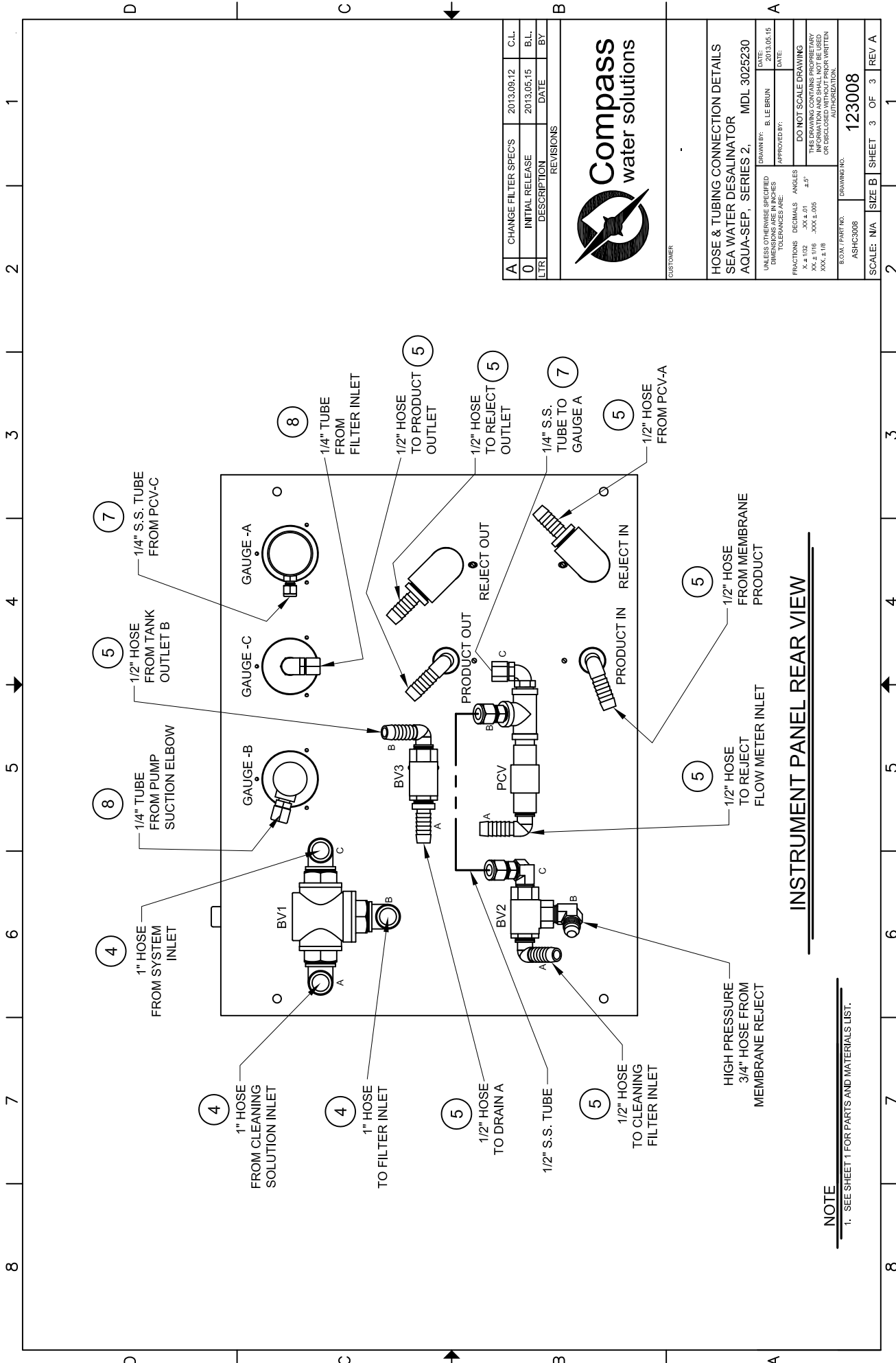
MATERIAL AND PARTS LIST									
ITEM NO.	QTY.	DESCRIPTION	IDENTIFYING NO.	STANDARDS SPECIFICATIONS	ITEM NO.	QTY.	DESCRIPTION	IDENTIFYING NO.	STANDARDS SPECIFICATIONS
12	16	HQPS0612			6	13'	TUSS0800		S.S.
11	10	HQPS1218			5	22'	TUVB0800		TUBING, 1/2" ID VINYL BRAID
10	8'	HSR1200			4	16'	TUVB1600		TUBING, 1" ID VINYL BRAID
9	4'	HQCS1237			3	5'	TUVCO608		TUBING, 3/8" ID x 1/2" OD CLR VINYL
8	4'	TUPE0400			2	1	PEHX0800		PIPE ELBOW, 1/2" HOSE X MNPT
7	18"	TUPE0400			1	1	PEHX1600		PIPE ELBOW, 1" HOSE X MNPT
MATERIAL AND PARTS LIST									
ITEM NO.	QTY.	DESCRIPTION	IDENTIFYING NO.	STANDARDS SPECIFICATIONS	ITEM NO.	QTY.	DESCRIPTION	IDENTIFYING NO.	STANDARDS SPECIFICATIONS
12	16	HQPS0612			6	13'	TUSS0800		S.S.
11	10	HQPS1218			5	22'	TUVB0800		TUBING, 1/2" ID VINYL BRAID
10	8'	HSR1200			4	16'	TUVB1600		TUBING, 1" ID VINYL BRAID
9	4'	HQCS1237			3	5'	TUVCO608		TUBING, 3/8" ID x 1/2" OD CLR VINYL
8	4'	TUPE0400			2	1	PEHX0800		PIPE ELBOW, 1/2" HOSE X MNPT
7	18"	TUPE0400			1	1	PEHX1600		PIPE ELBOW, 1" HOSE X MNPT



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



HOSE & TUBING CONNECTION DETAILS			
SEA WATER DESALINATOR			
AQUA-SEP, SERIES 2, MDL 3025230			
DRAWN BY:	DATE:	APPROVED BY:	DATE:
B. LE BRUN	2013.05.15		
DO NOT SCALE DRAWING			
THIS DRAWING CONTAINS PROPRIETARY INFORMATION AND IS NOT TO BE REPRODUCED OR DISCLOSED WITHOUT PRIOR WRITTEN AUTHORIZATION.			
B.O.M. / PART NO.	DRAWING NO.	SCALE:	REV A
ASHC3008	123008	N/A	1



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



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, TOLERANCES ARE:			
FRACTIONS	DECIMALS	ANGLES	
X ± 1/32	.XX ± .01	± 5°	
XX ± 1/16	.XX ± .005		
XXX ± 1/8			
DO NOT SCALE DRAWING			
THIS DRAWING CONTAINS PROPRIETARY INFORMATION. IT IS NOT TO BE REPRODUCED OR DISCLOSED WITHOUT PRIOR WRITTEN AUTHORIZATION.			
B.O.M. / PART NO.	ASHC3008	DRAWING NO.	123008
SCALE:	NA	SIZE	B
SHEET	3	OF	3
REV	A		

INSTRUMENT PANEL REAR VIEW

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