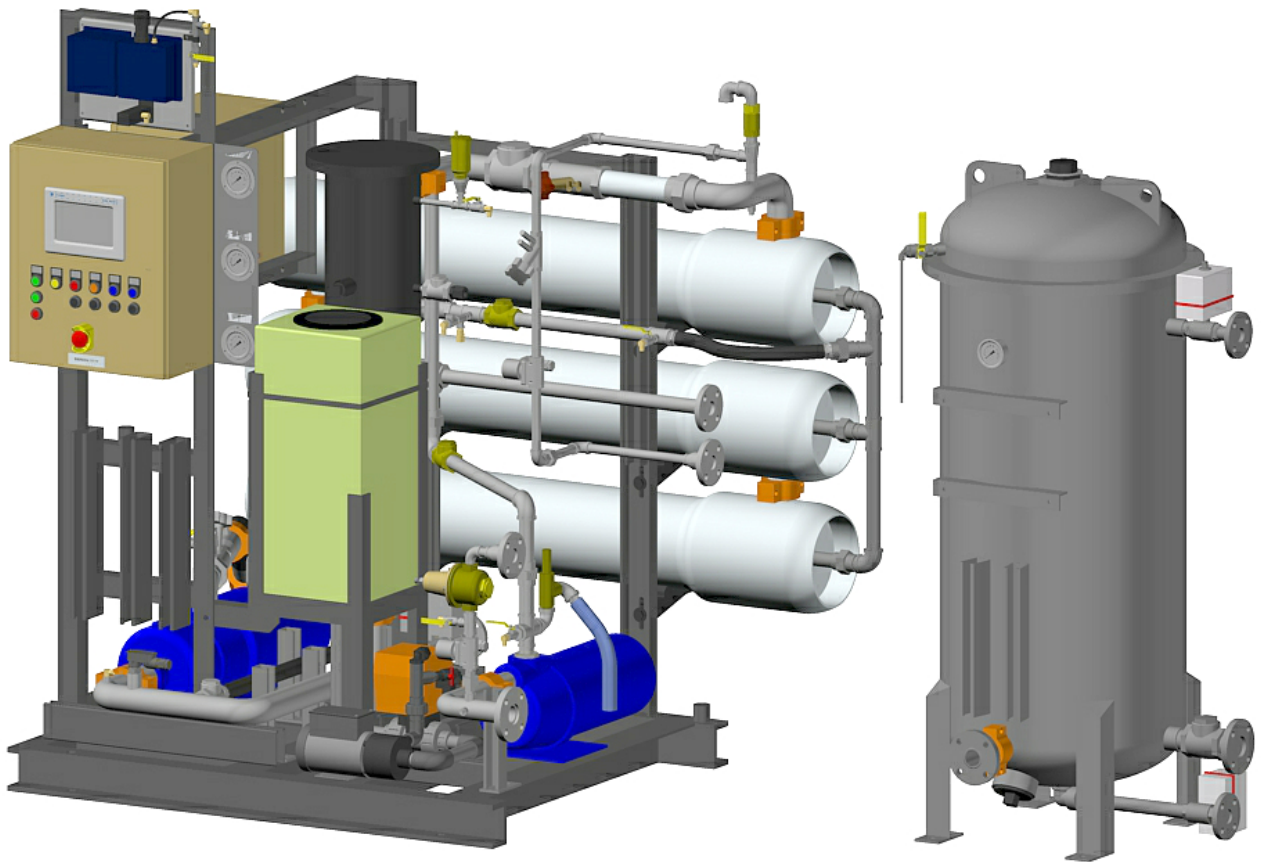


May 2016

**PARTS CATALOG
OIL WATER SEPARATOR
ULTRA-SEP MODEL 3000-MDA**



Compass
water solutions

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 manufactured prior to the date of this document.

When ordering parts, be certain to include Serial Number and Voltage of the Ultra-Sep model.

Model Number	Description
USBWS3000-MDA	ULTRA-SEP OILY WATER SEPARATOR

For Electrical Control Panel and Motor Control Center,
Refer to your Operation and Maintenance Manual.

For assistance contact COMPASS at parts@compasswater.com

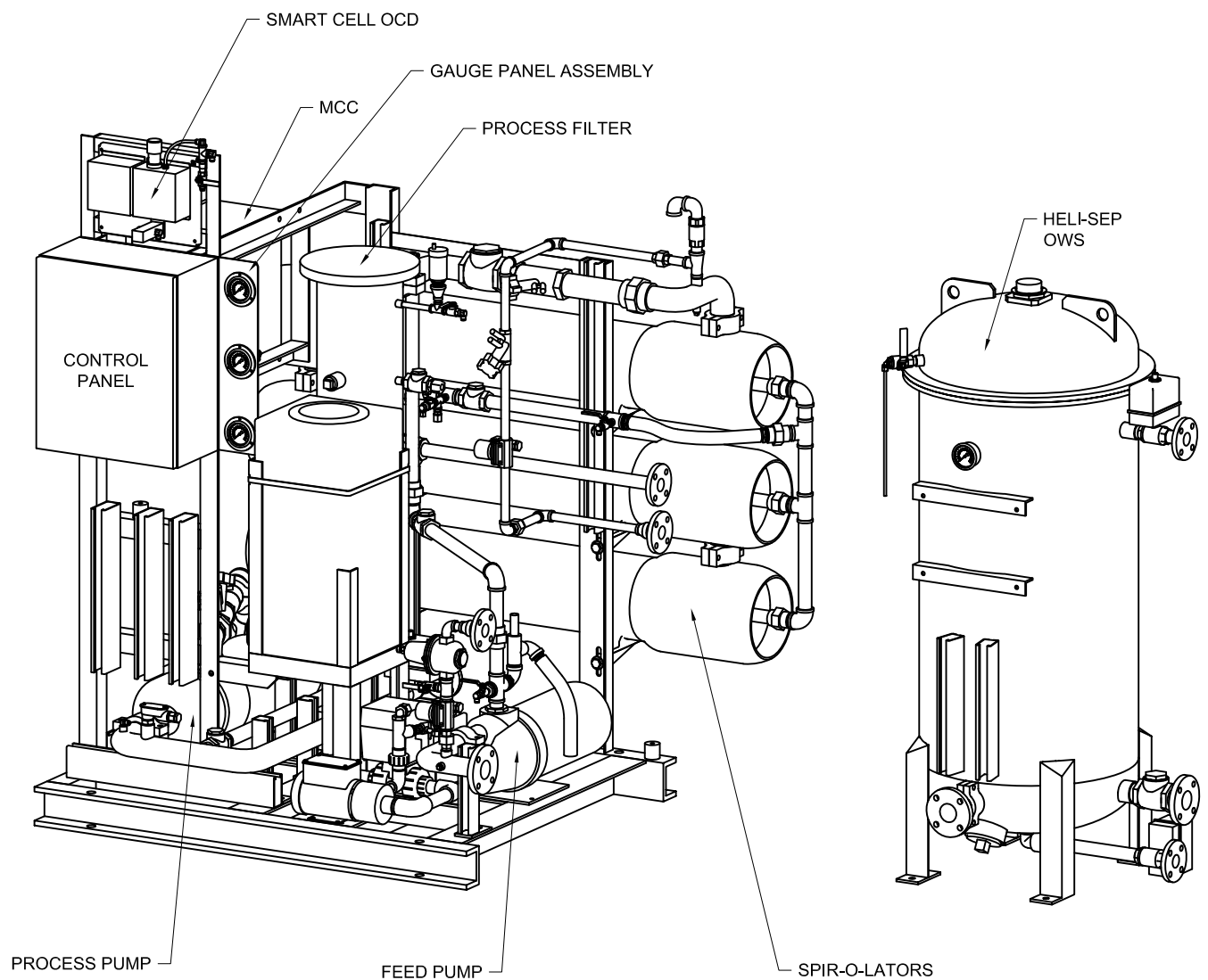
This parts book will cover all
Ultra-Sep system Serial numbers:

47411	47466	47493	47522
47446	47484	47494	47570

Some custom items may not be shown, refer to the
Installation and Operation Manual for your specific system

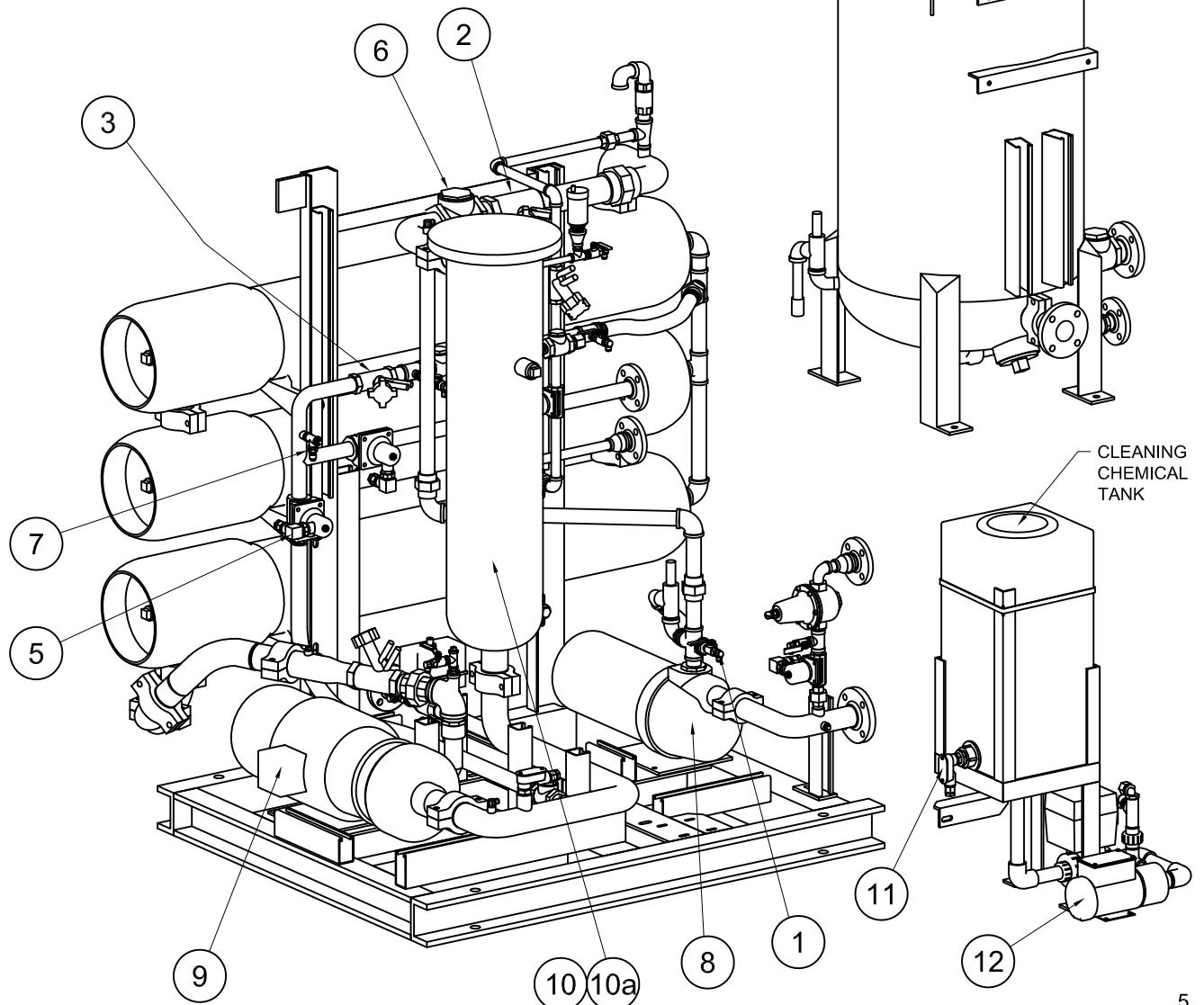
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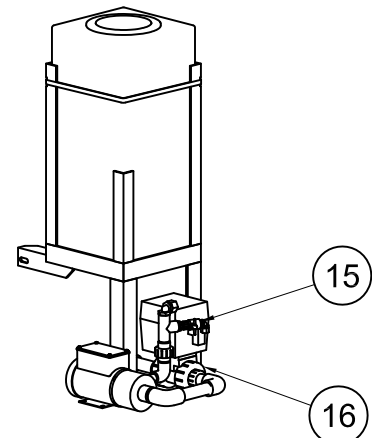
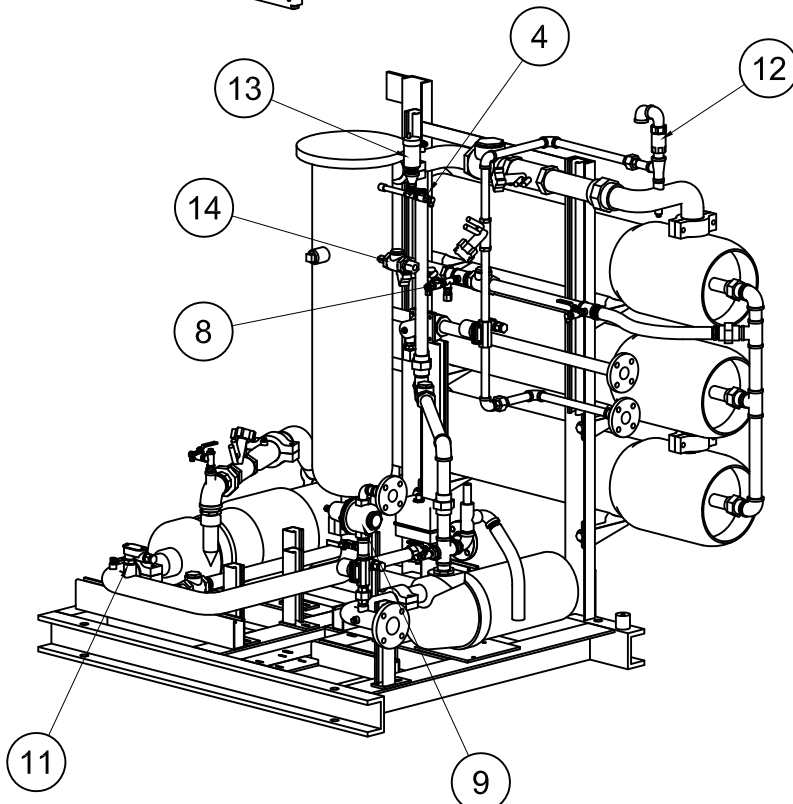
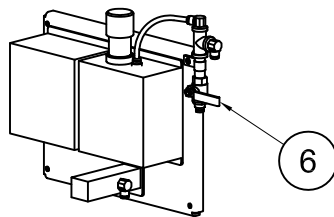
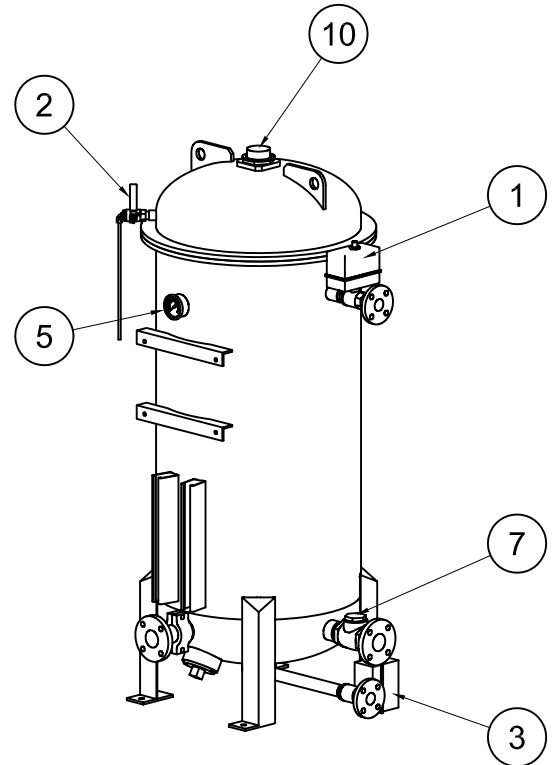
PARTS LIST

ITEM NO.	PART & ID #	CWS PART NO.	NOMENCLATURE OR DESCRIPTION
1	BV8	VBLB0400	BALL VALVE, 1/4" (SAMPLE)
2	GV2	VCTB3200	CONTROL VALVE, 2", CBV
3	GV3	VCTB1600	CONTROL VALVE, 1", CBV
4	SV1	VSDB1640	120V - SOLENOID VALVE, 1"
		VSDB1650	240V - SOLENOID VALVE, 1"
5	SV2	VSDB1640	120V - SOLENOID VALVE, 1"
		VSDB1650	240V - SOLENOID VALVE, 1"
6	CV3	VSCB3200	CHECK VALVE, SWING, 2"
7	CV8	VLCB0408	CHECK VALVE, LIFT, 1/4"
8	PU1	PMGI743302	380V / 50Hz - FEED PUMP / MOTOR
		PMGI7413007	440V / 60Hz - FEED PUMP / MOTOR
9	PU2	PMGI573310	380V / 50Hz - PROCESS PUMP / MOTOR
		PMGI271310	440V / 60Hz - PROCESS PUMP / MOTOR
10	FIL1	FHGB1720-US	PROCESS FILTER HOUSING
10a	FIL1	ORGN8000	PROCESS FILTER O-RING
11	LSL1	FLTS0808	FLOAT SWITCH, 1/2" MNPT
12	PU4	PMAC0001-US	CHEMICAL INJECTION PUMP



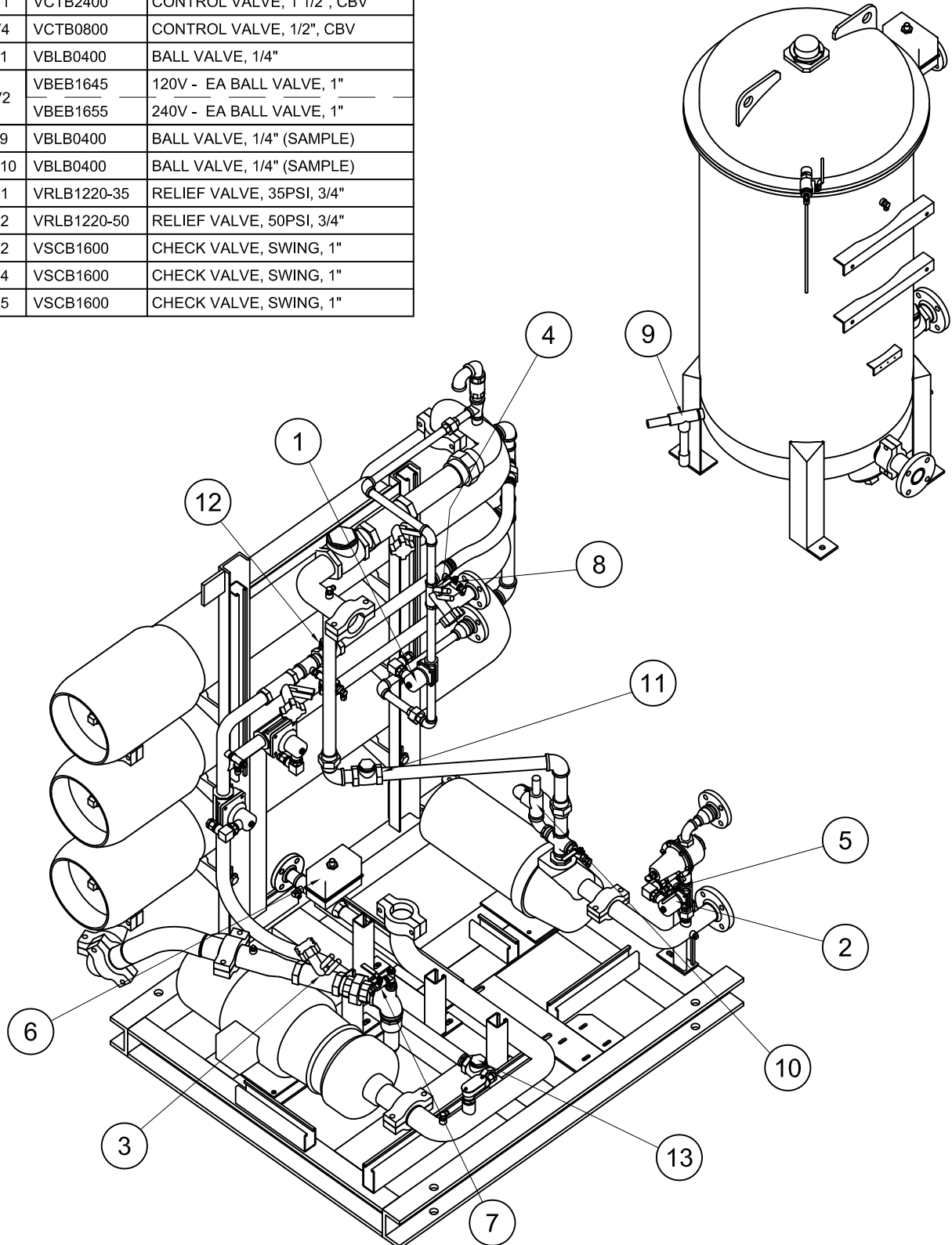
PARTS LIST

ITEM NO.	PART & ID #	CWS PART NO.	NOMENCLATURE OR DESCRIPTION
1	MV1	VBEB1645	120V - EA BALL VALVE, 1"
		VBEB1655	240V - EA BALL VALVE, 1"
2	BV2	VLB0800	BALL VALVE, 1/2" (VENT)
3	MV3	VBEB1645	120V - EA BALL VALVE, 1"
		VBEB1655	240V - EA BALL VALVE, 1"
4	BV4	VLB0400	BALL VALVE, 1/4" (VENT)
5	PI1	GALK0424	PRESS. GAUGE, -30-0-60 PSI
6	BV7	VLB0400	BALL VALVE, 1/4" (DRAIN)
7	CV1	VSCB3200	CHECK VALVE, SWING, 2"
8	CV7	VSCB0400	CHECK VALVE, SWING, 1/4"
9	RV1	VRGB0823	REGULATOR VALVE, 1/2"
10	OSP	OSPD0074	OIL SENSING PROBE "D"
11	TSH1	SWAT0806	TEMP. SWITCH, 1/2"
12	AE1	VBCB1200	VACUUM BREAKER / VENT, 3/4"
13	AE2	AVFV1004	AIR VENT / FILL VALVE, 3/4"
14	CV15	VSCB0800	CHECK VALVE, SWING, 1/2"
15	BV11	VLB0400	BALL VALVE, 1/4" (VENT)
16	MV4	VBEX1600	120/240V - EA BALL VALVE, 1"



PARTS LIST

ITEM NO.	PART & ID #	CWS PART NO.	NOMENCLATURE OR DESCRIPTION
1	SV3	VSDB0840	120V - SOLENOID VALVE, 1/2"
		VSDB0850	240V - SOLENOID VALVE, 1/2"
2	SV4	VSDB0840	120V - SOLENOID VALVE, 1/2"
		VSDB0850	240V - SOLENOID VALVE, 1/2"
3	GV1	VCTB2400	CONTROL VALVE, 1 1/2", CBV
4	GV4	VCTB0800	CONTROL VALVE, 1/2", CBV
5	BV1	VLB0400	BALL VALVE, 1/4"
6	MV2	VBEB1645	120V - EA BALL VALVE, 1"
		VBEB1655	240V - EA BALL VALVE, 1"
7	BV9	VLB0400	BALL VALVE, 1/4" (SAMPLE)
8	BV10	VLB0400	BALL VALVE, 1/4" (SAMPLE)
9	PR1	VRLB1220-35	RELIEF VALVE, 35PSI, 3/4"
10	PR2	VRLB1220-50	RELIEF VALVE, 50PSI, 3/4"
11	CV2	VSCB1600	CHECK VALVE, SWING, 1"
12	CV4	VSCB1600	CHECK VALVE, SWING, 1"
13	CV5	VSCB1600	CHECK VALVE, SWING, 1"



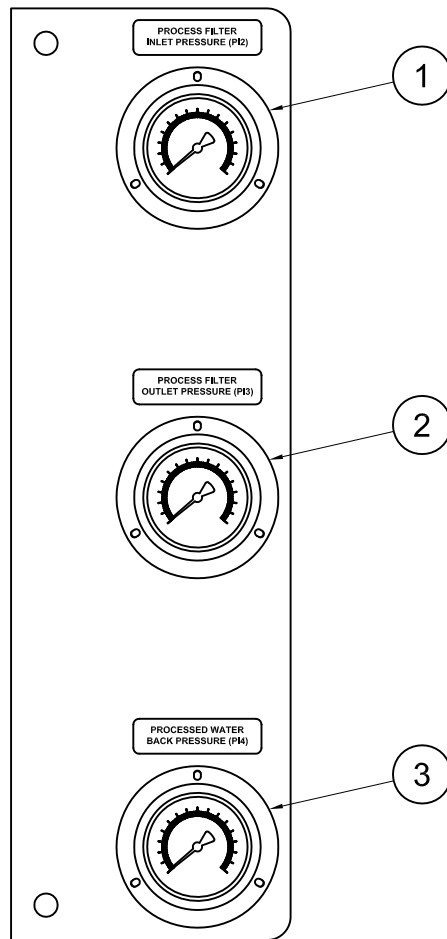
PARTS LIST

ITEM NO.	PART & ID #	CWS PART NO.	NOMENCLATURE OR DESCRIPTION
1	PI2	GALK0463	GAUGE, PSI 0-100, 2 1/2" D, FF
2	PI3	GALK0463	GAUGE, PSI 0-100, 2 1/2" D, FF
3	PI4	GALK0464	GAUGE, PSI 0-160, 2 1/2" D, FF
4	PSL1	SWVB0430	SWITCH VACUUM, 1/4" PRESET @ 5"Hg
5	PSL2	SWMB0030	SWITCH, LOW PRESS., 1/4" SET @ 30 PSI
6	30'	TUPE0400	TUBING, 1/4" BLACK POLYETHYLENE
7	10'	TUPE0401	TUBING, 1/4" RED POLYETHYLENE
8	10'	TUPE0402	TUBING, 1/4" BLUE POLYETHYLENE

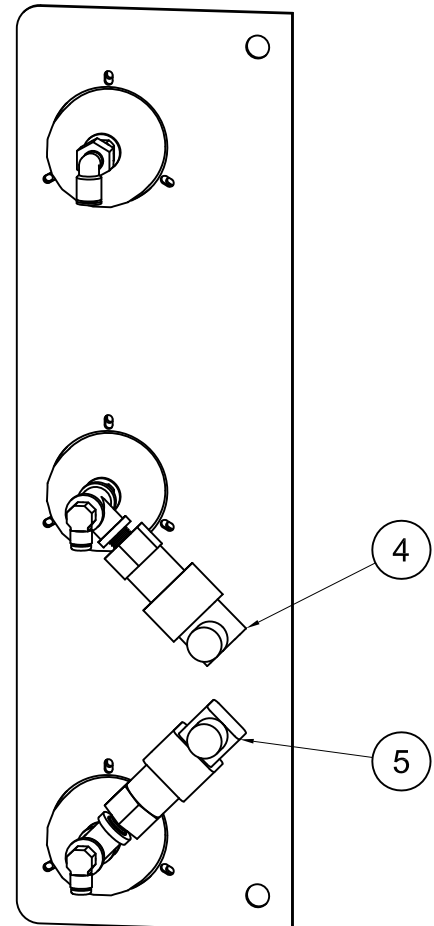


NOTES

1. ITEMS 6, 7, & 8 ARE NOT SHOWN
2. BLACK TUBING IS FOR CONNECTING PRESSURE GAUGES & SWITCHES TO THE FIELD PIPING LOCATIONS.
3. BLUE AND RED TUBING ARE FOR OCD CONNECTIONS.



FRONT VIEW

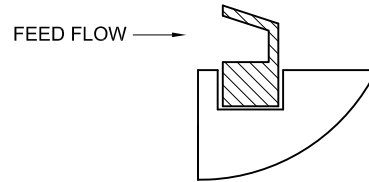


REAR VIEW

ULTRA-SEP A/C GAUGE PANEL

PARTS LIST

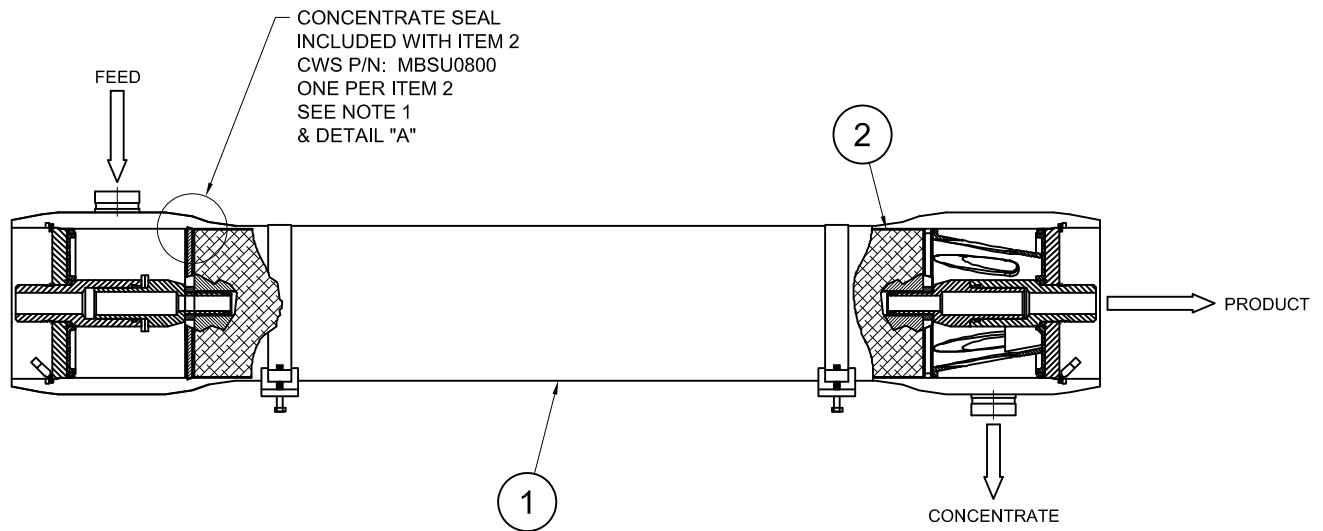
ITEM NO.	QTY. REQD.	CWS PART NO.	NOMENCLATURE OR DESCRIPTION
1	1	MHUP1840	MEMBRANE HOUSING, 8", 1L, 2" VIC 180°
2	1	MUFO0852	SPIR-O-LATOR, UF OWS 8" x 40"
3	2	JTMH0800	HOUSING HEAD REMOVAL TOOL (2 REQ)
4	1	JTMH0832	HOUSING 2" PORT REPAIR TOOL



DETAIL

A

IMPORTANT, NOTE
CONCENTRATE SEAL
ORIENTATION



8" SPIR-O-LATOR HOUSING - SINGLE ELEMENT

NOTES

1. THE CONCENTRATE SEAL END OF THE SPIR-O-LATOR MUST BE INSTALLED TOWARD THE HOUSING FEED AS SHOWN. SEE DETAIL "A".
2. ITEMS 3 AND 4 ARE TOOLS FOR HOUSING MAINTENANCE.

PARTS LIST

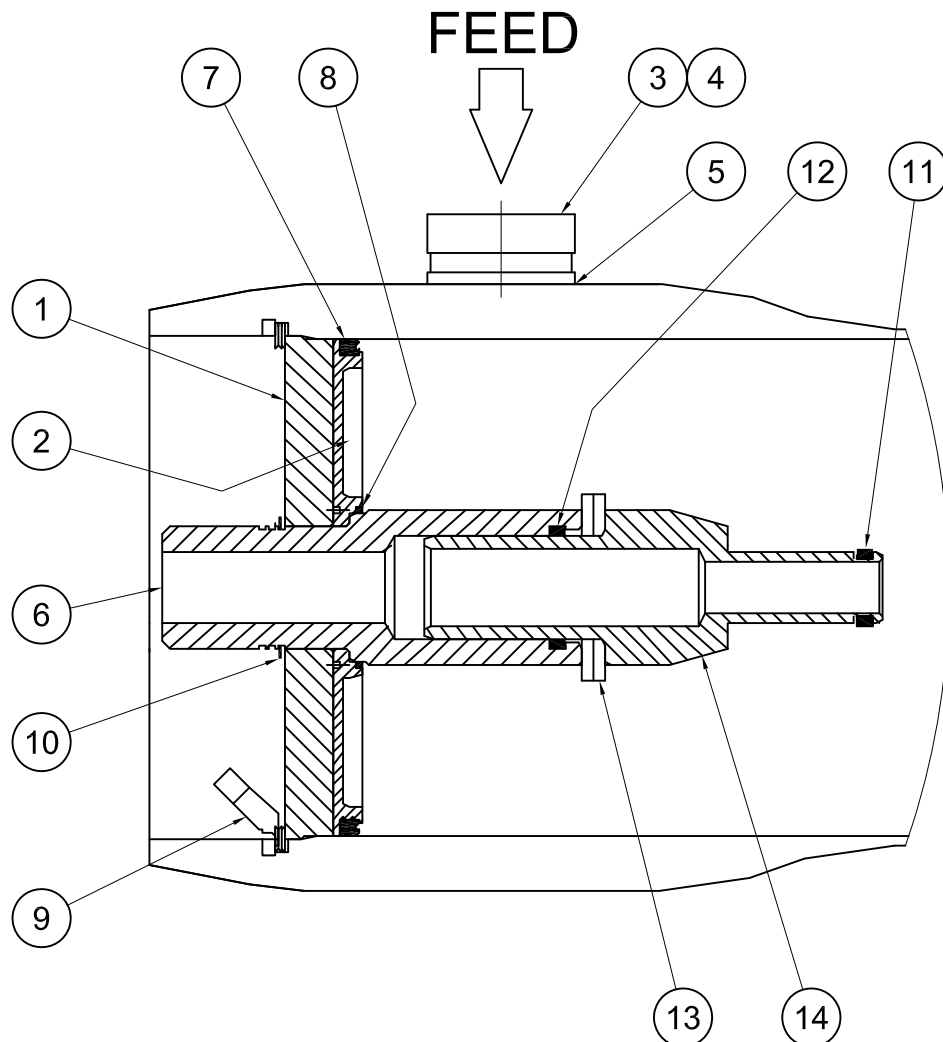
ITEM NO.	QTY. REQD.	CWS PART NO.	NOMENCLATURE OR DESCRIPTION
1	1	MHBP0815	BEARING PLATE
2	1	MHSP0815	SEAL PLATE
3	1	MHVP0890	FEED / CONCENTRATE PORT 2"
4	2	MHRP0890	RETAINING RING, FEED / CONCENTRATE PORT
5	1	MHSP0890	FEED / CONCENTRATE PORT SEAL
6	1	MHPP0815	PERMEATE PORT
7	1	MORN0442MK	HEAD SEAL
8	1	MORN0229	PERMEATE PORT SEAL
9	1	MHRR0815	HEAD RETAINING RING W/ FINGER PULL
10	1	MHPR0815	RETAINING RING, PERMEATE PORT
11	1	MORN0119-N	PWT SEAL, O-RING
12	1	MORN0326	ADAPTER SEAL, O-RING
13	2	MHSV0815	ADAPTER SPACERS, 3/16"
14	1	MADP0815	MEMBRANE ADAPTOR, 8"
15	1	MSPA0874	SUPPORT SADDLE, MOUNTING STRAP, & BOLTS



NOTES

1. ITEM 15 IS NOT SHOWN ON DRAWING.
2. ITEM 16 IS ONLY ON CONCENTRATE END OF HOUSING.

KIT	ITEMS CONTAINED	CWS PART NUMBER
COMPLETE HEAD	ITEMS 1,2,3,4,6,9,10,13,14,16	MHHK0815
SEAL KIT	ITEMS 5,7,8,11,12	MHSK0815



PARTS LIST

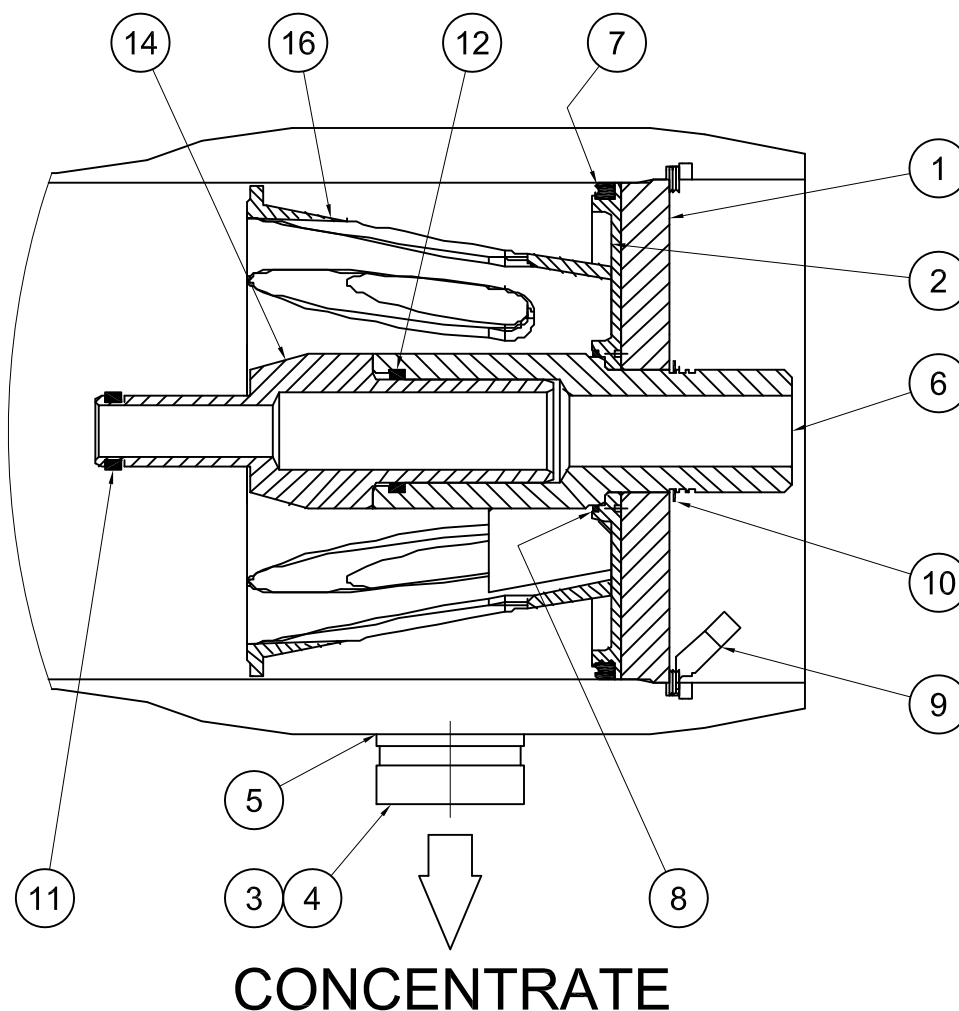
ITEM NO.	QTY. REQD.	CWS PART NO.	NOMENCLATURE OR DESCRIPTION
1	1	MHBP0815	BEARING PLATE
2	1	MHSP0815	SEAL PLATE
3	1	MHVP0890	FEED / CONCENTRATE PORT 2"
4	2	MHRP0890	RETAINING RING, FEED / CONCENTRATE PORT
5	1	MHSP0890	FEED / CONCENTRATE PORT SEAL
6	1	MHPP0815	PERMEATE PORT
7	1	MORN0442MK	HEAD SEAL
8	1	MORN0229	PERMEATE PORT SEAL
9	1	MHRR0815	HEAD RETAINING RING W/ FINGER PULL
10	1	MHRP0815	RETAINING RING, PERMEATE PORT
11	1	MORN0119-N	PWT SEAL, O-RING
12	1	MORN0326	ADAPTER SEAL, O-RING
13	2	MHSV0815	ADAPTER SPACERS, 3/16"
14	1	MADP0815	MEMBRANE ADAPTOR, 8"
15	1	MSPA0874	SUPPORT SADDLE, MOUNTING STRAP, & BOLTS
16	1	MHTR0815	THRUST CONE (ONLY ON CONCENTRATE END)



NOTES

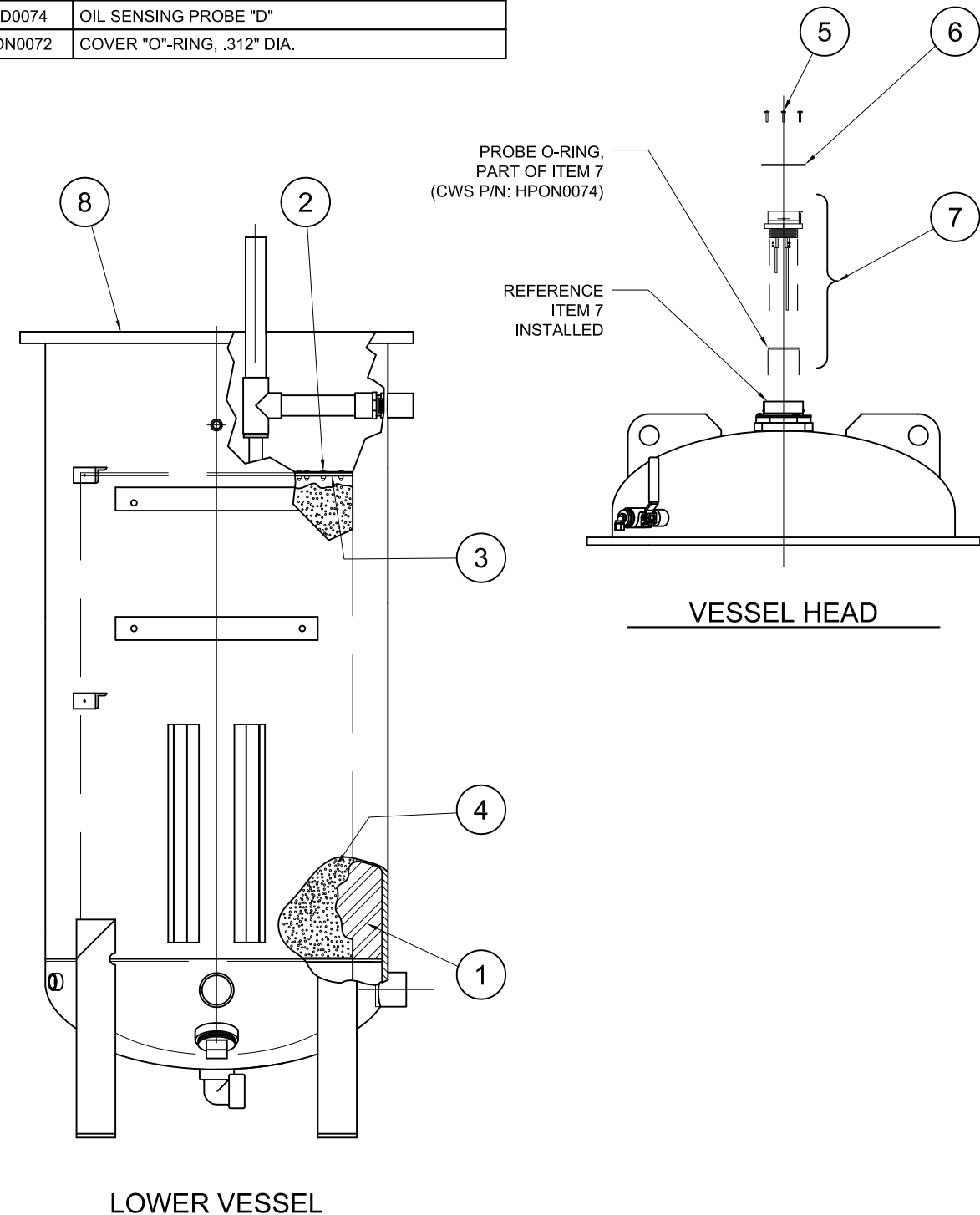
1. ITEM 15 IS NOT SHOWN ON DRAWING.
2. ITEM 16 IS ONLY ON CONCENTRATE END OF HOUSING.

KIT	ITEMS CONTAINED	CWS PART NUMBER
COMPLETE HEAD	ITEMS 1,2,3,4,6,9,10,13,14,16	MHHK0815
SEAL KIT	ITEMS 5,7,8,11,12	MHSK0815



PARTS LIST

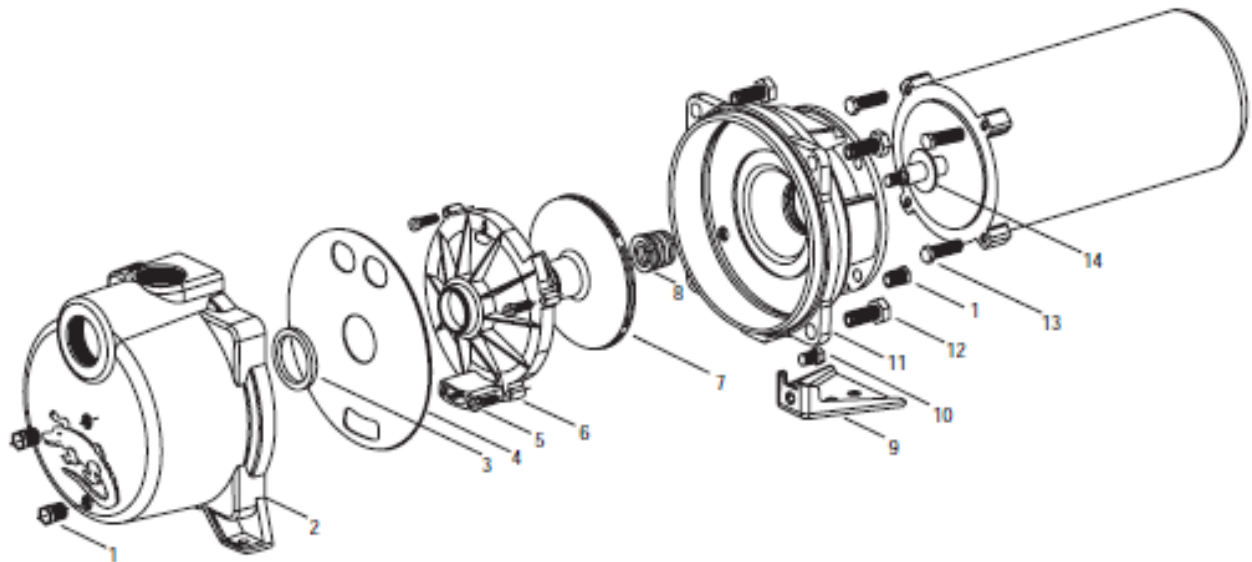
ITEM NO.	QTY. REQD.	CWS PART NO.	NOMENCLATURE OR DESCRIPTION
1	1	HSPP2567	OILY WATER PLATE PACK, MODELS 2000/3000
2	16	RVTS0306	3/16" RIVET SS
3	1	HSSD0563	SCREEN -D
4	30 LBS	FMPB0001	FILTER BEADS
5	3	STCS0812	SCREWS 8/32 X 3/4 SS
6	1	HSPP0075	(OSP) OIL SENSING PROBE PLATE - (AS REQUIRED)
7	1	OSPD0074	OIL SENSING PROBE "D"
8	1	HCON0072	COVER "O"-RING, .312" DIA.



HELI-SEP 2000/3000 SUB-ASSEMBLY

ULTRA-SEP™ 500 thru 10000

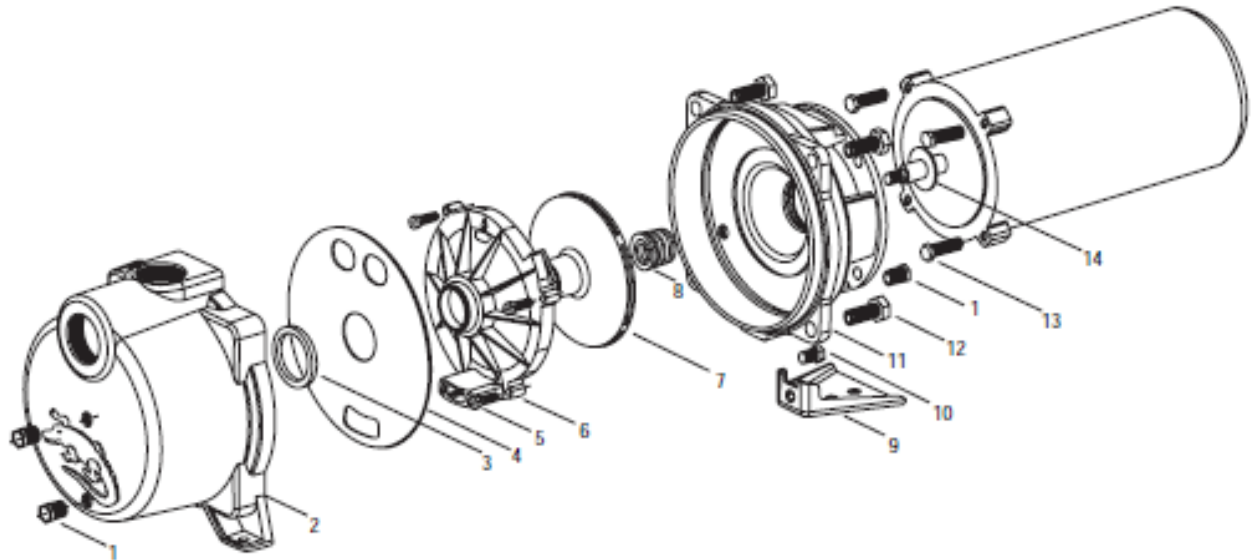
50HZ FEED PUMP (PU1) BREAKDOWN



ITEM NO.	QTY	DESCRIPTION	MATERIAL	CWS P/N
1	4	Drain Plug - 1/4" NPT	Zinc Plated Steel	PPTG0400
2	1	Casing	Cast Iron	PPCI1324
3	1	Guide Vane Seal Ring	BUNA-N	PPGN5231
4	1	Diaphragm	Neoprene	PPGN5256
5	3	Screw Phillip Head 1/4"-20UNC	Stainless Steel	BTCS0404
6	1	Guidevane	Lexan 10% G.F.	PPGY7406-2
7	1	Impeller	Noryl 20% G.F.	IMGY2713
8	1	Mechanical Seal	Carbon/Ceramic Buna	MSGS1010
9	1	Pump Foot	Steel	PPPF4408
10	1	Pump Foot Bolt	Steel	BHCP0603
11	1	Motor Adapter	Cast Iron	PPMA1310
12	4	Hex Head Bolt (adapter to casing)	Zinc Plated Steel	BHCP0805
13	4	Hex Head Bolt (adapter to motor)		BHCP0604
14	1	Deflector	BUNA-N	PPGS2700

NOTE: Reference Model GT20/GT203

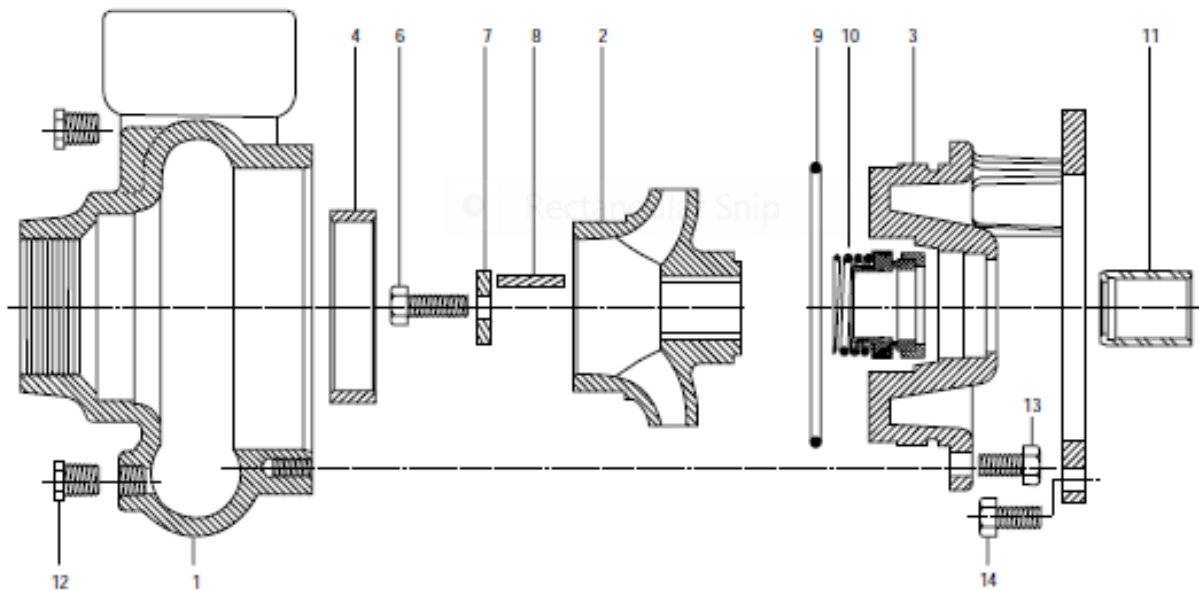
ULTRA-SEP™ 500 thru 3000 60HZ FEED PUMP (PU1) BREAKDOWN



ITEM NO.	QTY	DESCRIPTION	MATERIAL	CWS P/N
1	4	Drain Plug - 1/4" NPT	Zinc Plated Steel	PPTG0400
2	1	Casing	Cast Iron	PPCI1324
3	1	Guide Vane Seal Ring	BUNA-N	PPGN5231
4	1	Diaphragm	Neoprene	PPGN5256
5	3	Screw Phillip Head 1/4"-20UNC	Stainless Steel	BTCS0403-1
6	1	Guide vane	Lexan 10% G.F.	PPGY7406
7	1	Impeller	Noryl 20% G.F.	IMGY2715
8	1	Mechanical Seal	Carbon/Ceramic Buna	MSGS1010
9	1	Pump Foot	Steel	PPPF4408
10	1	Pump Foot Bolt	Steel	BHCP0603
11	1	Motor Adapter	Cast Iron	PPMA1310
12	4	Hex Head Bolt (adapter to casing)	Zinc Plated Steel	BHCP0805
13	4	Hex Head Bolt (adapter to motor)		BHCP0604
14	1	Deflector	BUNA-N	PPGS2700

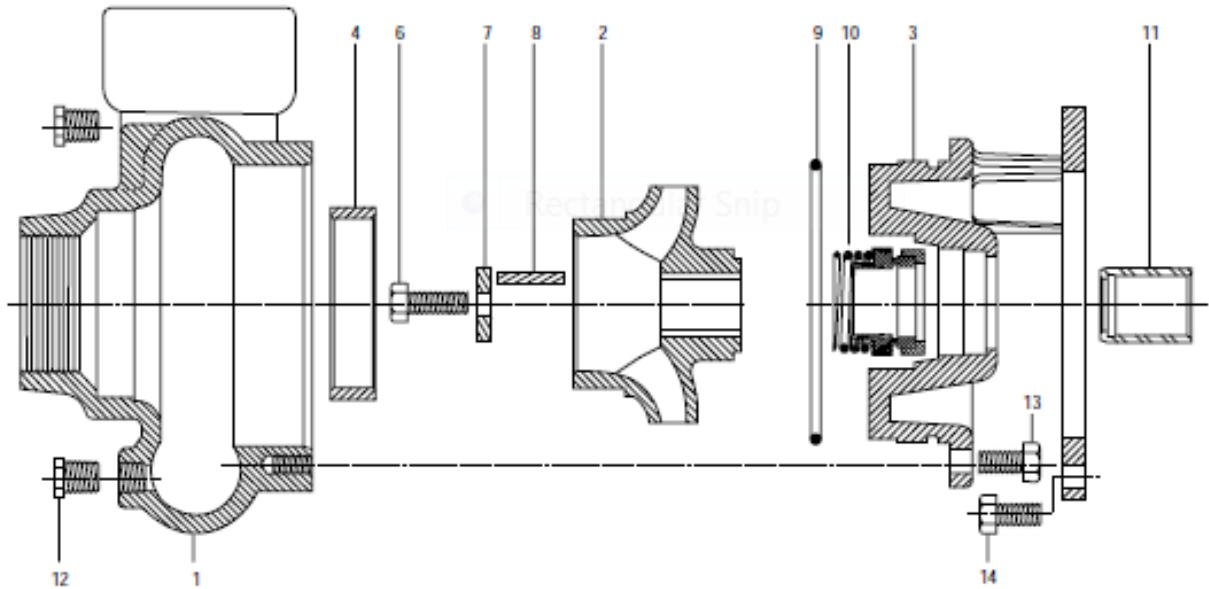
NOTE: Reference Model GT07/GT073

ULTRA-SEP™ 2000 thru 10000 50HZ PROCESS PUMP (PU2) BREAKDOWN



ITEM NO.	QTY	DESCRIPTION	MATERIAL	CWS P/N
1	1	Casing	Cast Iron	PPCI1102
2	1	Impeller (8.06)	Bronze	IMGB2345
3	1	Adapter	Cast Iron	PPMA1116
4	1	Wear Ring (casing)	Bronze	PPGB0468
5	n/a	Wear Ring (seal housing)	-	-
6	1	Impeller Bolt	AISI 303 Stainless Steel	PPGS1343
7	1	Impeller Washer		PPGS1339
8	1	Impeller Key		PPGS0411
9	1	Seal Housing O-Ring	BUNA-N	PPGN0574
10	1	Mechanical Seal	Carbon/Ceramic Buna	MSGs1013
11	1	Shaft Sleeve	AISI 300 SS	PPGS0466
12	4	Drain Plug - 1/4" NPT	Zinc Plated Steel	PPTG0400
13	8	Hex Head Bolt (adapter to casing)		BHCP0604
14	4	Hex Head Bolt (adapter to motor)		BHCP0806

ULTRA-SEP™ 3000 & 5000 60HZ PROCESS PUMP (PU2) BREAKDOWN



ITEM NO.	QTY	DESCRIPTION	MATERIAL	CWS P/N
1	1	Casing	Cast Iron	PPCI1612
2	1	Impeller (7.62)	Bronze	IMGB2755
3	1	Adapter	Cast Iron	PPMA1116
4	1	Wear Ring (casing)	Bronze	PPGB0468
5	n/a	Wear Ring (seal housing)	-	-
6	1	Impeller Bolt	AISI 303 Stainless Steel	PPGS1343
7	1	Impeller Washer		PPGS1339
8	1	Impeller Key		PPGS0411
9	1	Seal Housing O-Ring	BUNA-N	PPGN0574
10	1	Mechanical Seal	Carbon/Ceramic Buna	MSG1013
11	1	Shaft Sleeve	AISI 300 SS	PPGS0466
12	4	Drain Plug - 1/4" NPT	Zinc Plated Steel	PPTG0400
13	8	Hex Head Bolt (adapter to casing)		BHCP0604
14	4	Hex Head Bolt (adapter to motor)		BHCP0806

SMART CELL OIL CONTENT DETECTOR SPARE PARTS

When ordering spares, it is important to supply details of the type of monitor, serial number of monitor, part number of each spare required, its description and any other relevant information.

RECOMMENDED ON-BOARD SPARES

<u>Item</u>	<u>Qty</u>	<u>Part Number</u>
Cell wiper ring	1	SBWR9039
Fuse 1.25A	1	SBFU9089
Solenoid valve (230V) or Solenoid valve (115V)	1	SBSV9059
	1	SBSV9060

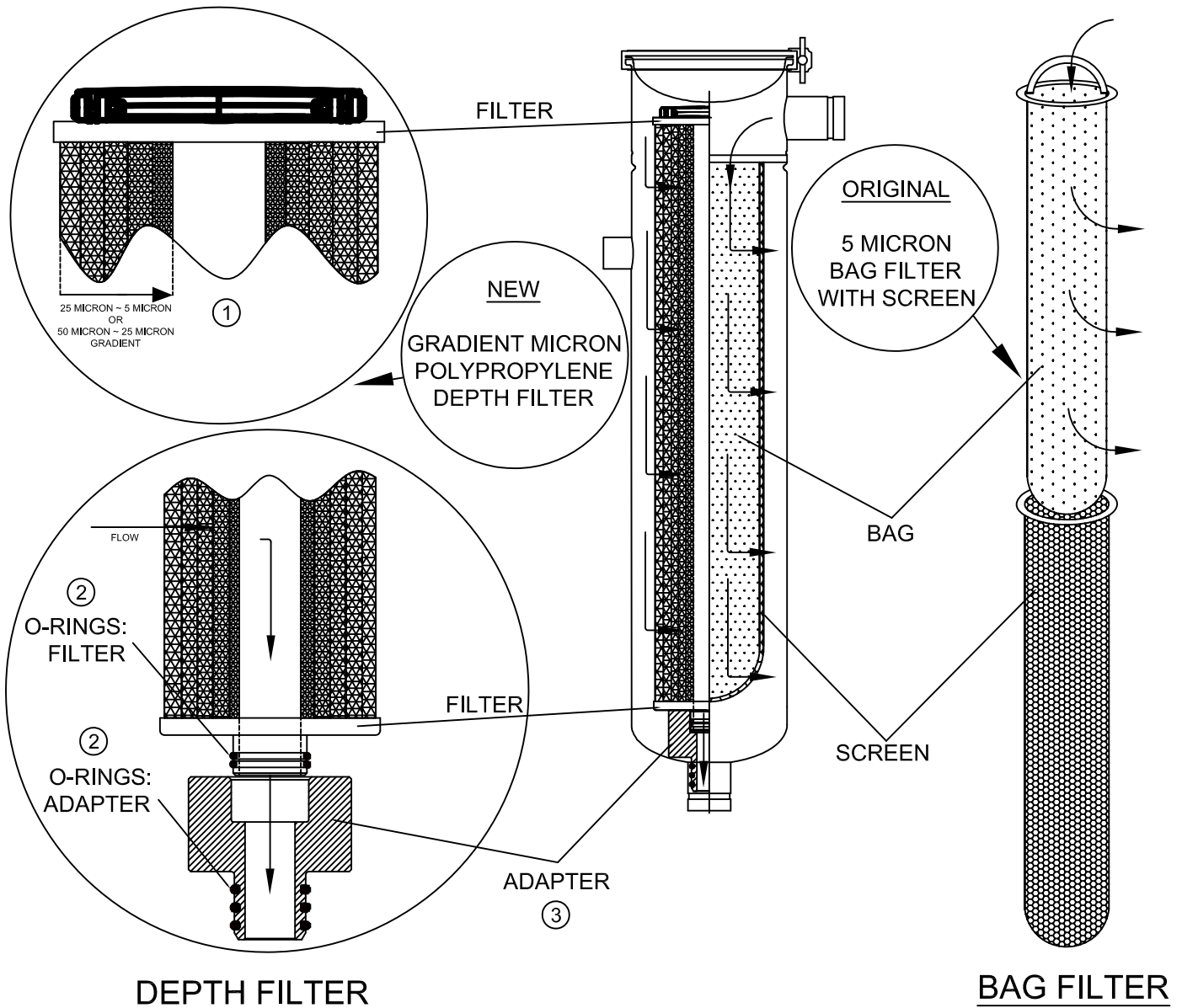
OTHER SPARES

<u>Item</u>	<u>Qty</u>	<u>Part Number</u>
Spare Smart Cell Assy Bilge	1	SBSC9171
Spare 110/240V Programmed Smart Bilge PCB Assy	1	SBBA9019
Membrane overlay	1	SBMO9030
LCD display module	1	SBDM9068
Smart Bilge Download Cable / Kit	1	SBDK0958
Calibration Verification Kit	1	SBVK0900





DEPTH FILTER REPLACING BAG FILTER



ITEM	5 MICRON FITS ULTRA-SEP MODELS			25 MICRON DUPLEX PRE-FILTERS	
	US500C-1000C	US2000-5000	US7500&10000	ALL-US5000	US7500&10000
DEPTH FILTER	FCCU0520	FCCU0530	FCCU0540	FCCU2530	FCCU2540
③ INITIAL ADAPTER	FHAB1610-US	FHAB1720-US	FHAB1730-US	FHAB1720-US	FHAB1730-US
O-RINGS: FILTER	ORGN2225	ORGN2225	ORGN2225	ORGN2225	ORGN2225
O-RINGS: ADAPTER	ORGN2322	ORGN2326	ORGN2334	ORGN2326	ORGN2334

- ① THESE FILTERS WILL NOT FIT IN ASME HOUSINGS.
- ② ADAPTERS AND FILTERS INCLUDE O-RINGS.
- ③ ADAPTERS REQUIRED FOR INITIAL RETROFIT ONLY.

BENEFITS (DEPTH FILTER)

- REDUCED SPIR-O-LATOR CLEANING
- IMPROVED SPIR-O-LATOR PERFORMANCE
- ABSORBS OIL
- MORE DIRT/OIL LOADING CAPACITY
- LESS BY-PASS POTENTIAL

RECOMMENDED ON BOARD SPARES

ITEM NO.	QTY. REQD.	CWS PART NO.	DESCRIPTION
1	1	VRKD0800	SOLENOID VALVE, REPAIR KIT 1/2"
2	1	VRKD1600	SOLENOID VALVE, REPAIR KIT 1"
3	2	VCLD0040	SOLENOID VALVE, REPLACEMENT COIL, 120V
		VCLD0050	SOLENOID VALVE, REPLACEMENT COIL, 240V
4	12	FCCU0530	DEPTH FILTER, 5 MICRON
5	1	FHAB1720-US	DEPTH FILTER ADAPTER
6	2	MCLN1511	SPIR-O-LATOR CLEANER, 4 GAL. / CASE
7	6	ASMS0000	SPIR-O-LATOR PRESERVATIVE, 2lbs EA.
8	1	MSGS1010	PU1, MECHANICAL SEAL
9	1	MSGS1013	PU2, MECHANICAL SEAL
10	1	SWVB0430	SWITCH, VAC. / LOW PRESS., 1/4"
11	1	SWMB0030	SWITCH, LOW PRESS., 1/4" 30PSI
12	1	SWAT0806	SWITCH, TEMP-NC 1/2"MNPT @ 125F
13	2	MHSK0815	SPIR-O-LATOR HOUSING SEAL KIT
14	2	MHHK0815	SPIR-O-LATOR HOUSING HEAD ASSEMBLY
15	1	OSPD0074	OIL SENSING PROBE, "D" US2000-3000