



PARTS LIST FOR  
WATER TREATMENT SYSTEM  
***BIO-20D-0M10 /BIO-20D-1M10***  
***BIO-20D-0M30 /BIO-20D-1M30***  
(AFTER SERIAL #30007585)

Congratulations on the purchase of your new Mi-T-M water treatment system! This parts listing has been compiled for your benefit. You can be assured your Mi-T-M water treatment system was constructed and designed with quality and performance in mind. Each component has been rigorously tested to insure the highest level of acceptance.

The contents of this parts listing are based on the latest product information available at the time of publication. Mi-T-M reserves the right to make changes in price, color, materials, equipment, specifications or models at any time without notice.

### **WARNING**

THIS IS A PROFESSIONAL WATER TREATMENT SYSTEM. CAUTION SHOULD BE OBSERVED WHEN USING OR REPAIRING THIS UNIT! READ AND FOLLOW THE SAFETY WARNINGS LISTED BELOW BEFORE ATTEMPTING ANY REPAIRS ON THIS WATER TREATMENT SYSTEM!

### **SAFETY WARNINGS**

1. Serious injury or death could occur if the water treatment system is not properly grounded. Your water treatment system is powered by electricity and may cause electric shock or electrocution if not installed properly. Installation to this unit, including all electrical connections, must comply with all local, state and national codes. Any electrical wiring or repairs performed on this water treatment system should be done by Authorized Service Personnel in accordance with National and Local electrical codes.
2. NEVER alter or modify the equipment. Use only genuine Mi-T-M parts for repair of your water treatment system. Failure to do so can cause hazardous operating conditions and will VOID warranty.
3. Know how to stop and bleed pressures quickly. Be thoroughly familiar with controls. Do not operate without protective cover/guards. Follow the maintenance instructions specified in your operator's manual.
4. Before servicing, ALWAYS shut off the water and the unit. Allow the unit to cool down. NEVER assume the water treatment system is safe to work on just because it is not operating. It could restart at any time! ALWAYS disconnect from the power source. Service in a clean, dry flat area.
5. Be especially careful it properly dispose of any flammable materials. Consult Materials Safety Data Sheets for safe handling of chemicals used with your system, especially oxidizers and acids.

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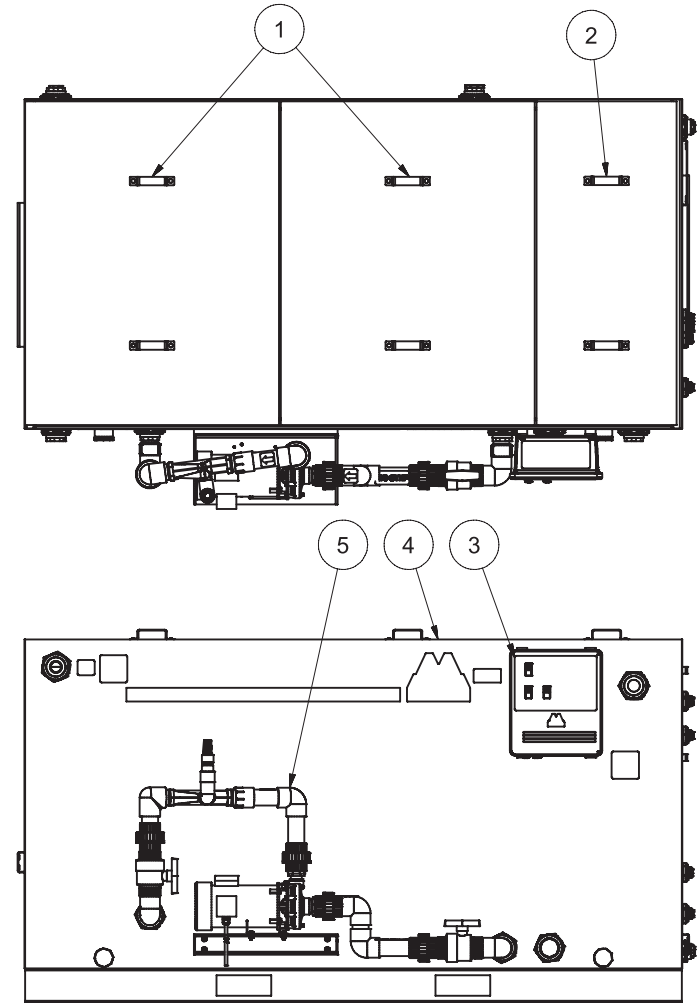
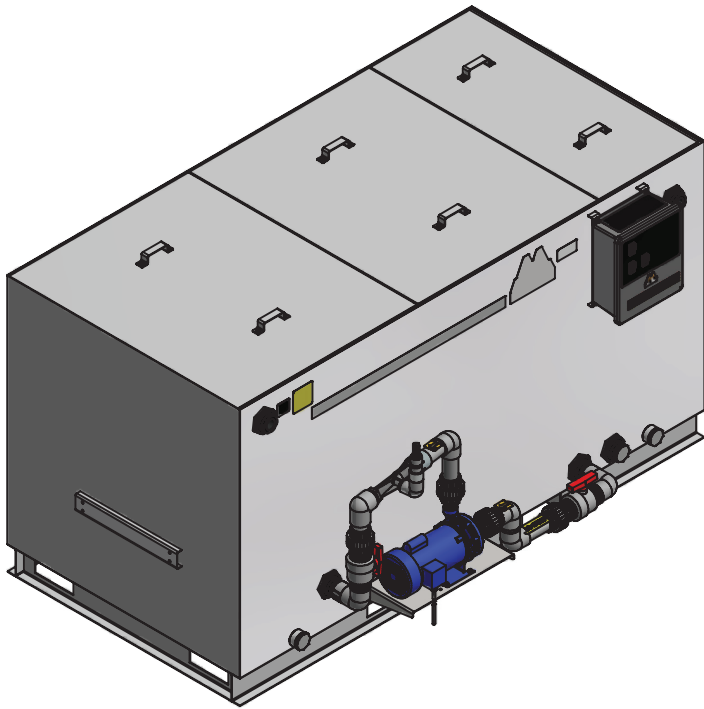
**NOTES**

<b>DATE</b>	<b>SERIAL NUMBER</b>	<b>REASON FOR CHANGE</b>
07/29/16	30007585	GOULDS STANDARD PUMP CHANGE AND CHECK VALVE CHANGE

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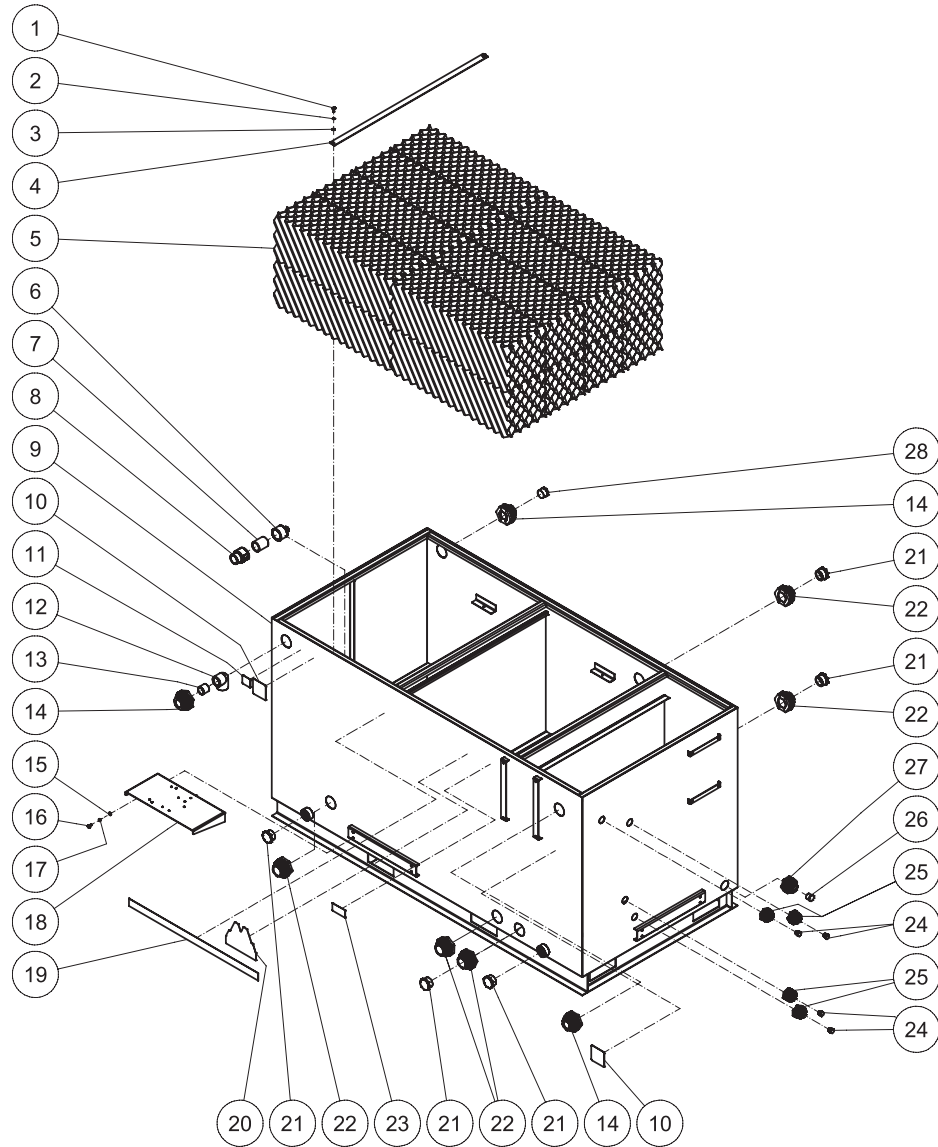
**NOTES**

# MAIN ASSEMBLY



BIO-20D 071216 MLK			
MAIN ASSEMBLY			
ITEM	DESCRIPTION	PART #	QTY
1	LARGE LID BIO (DS) (RS)	DWG	2
2	SMALL LID BIO (DS)	DWG	1
3	CONTROL PANEL - BIO-20D	DWG	1
4	TANK ASSEMBLY - BIO-20D-1M10/1M30	DWG	1
5	AERATOR PLUMBING	DWG	1

# TANK ASSEMBLY

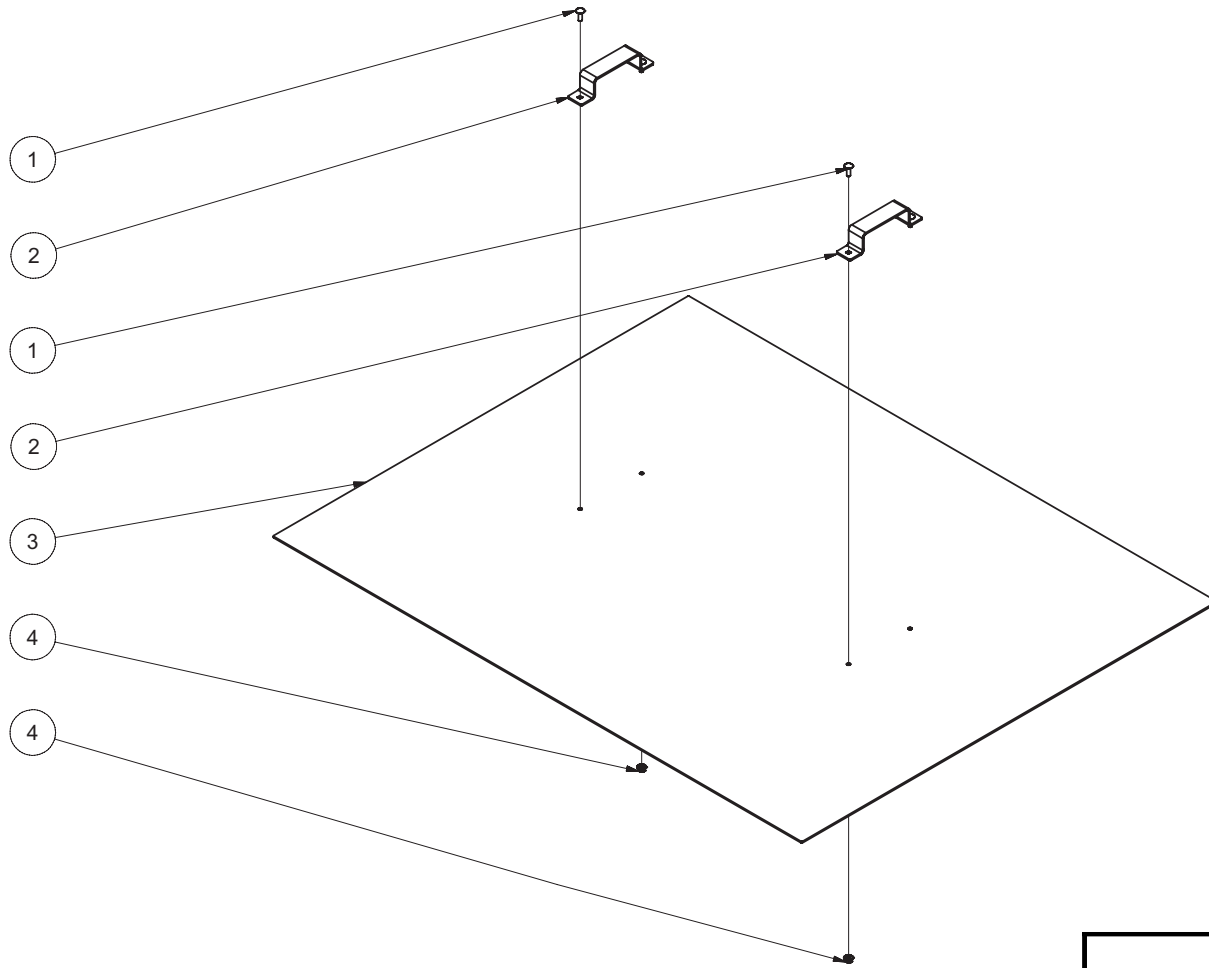


TANK ASSEMBLY - BIO-20D 072616 MLK



TANK ASSEMBLY - BIO-20D 072616 MLK			
TANK ASSEMBLY			
ITEM	DESCRIPTION	PART #	QTY
1	BOLT (1M10/1M30)	27-5016	4
-	BOLT (0M10/0M30)	27-5066	4
2	LOCKWASHER (0M10/0M30)	29-1006	4
-	LOCKWASHER (1M10/1M30)	29-1007	4
3	WASHER (0M10/0M30)	28-0121	4
-	WASHER (1M10/1M30)	28-0122	4
4	STRAP - SS (1M10/1M30)	12-013515	2
-	STRAP - ALUM (0M10/0M30)	56-0042	2
5	MEDIA	33-0337	16
6	REDUCER	55-1894	1
7	*PIPE 2" *(ONE FOOT REQUIRED)	55-1800	1
8	ADAPTER	55-1822	1
9	TANK (1M10/1M30)	12-9149	1
-	TANK (0M10/0M30)	12-0167	1
10	DECAL - NONPOTABLE WATER (SEE 71-0104)	N/A	2
11	DECAL - INLET (SEE 71-0104)	N/A	1
12	ELBOW	55-1610	1
13	NIPPLE	55-1674	1
14	BULKHEAD (INC. 25-0481 GASKET) (1M10/1M30)	55-1686	3
-	BULKHEAD (INC. 25-0481 O-RING) (0M10/0M30)	55-1686	2
15	WASHER (1M10/1M30)	28-0122	4
-	WASHER (0M10/0M30)	28-0121	4
16	BOLT (1M10/1M30)	27-5066	4
-	BOLT (0M10/0M30)	27-5016	4
17	LOCKWASHER (1M10/1M30)	29-1007	4
-	LOCKWASHER (0M10/0M30)	29-1006	4
18	PUMP SHELF	12-014908	1
19	DECAL Mi-T-M STRIPE	34-2282	1
20	DECAL - #5M	34-2171	1
21	PLUG (1M10/1M30)	55-1840	5
-	PLUG (0M10/0M30)	55-1840	3
22	BULKHEAD (INC. 25-0481 GASKET) (1M10/1M30)	55-1886	5
-	BULKHEAD (INC. 25-0481 O-RING) (0M10/0M30)	55-1886	3
23	DECAL- SILVER STICKER	N/A	1
24	PLUG (1M10/1M30)	55-0840	4
25	BULKHEAD (INC. 25-0506 GASKET) (1M10/1M30)	55-0886	4
26	PLUG (1M10/1M30)	55-1240	1
27	BULKHEAD (INC. 25-0482 GASKET) (1M10/1M30)	55-1286	1
28	PLUG (1M10/1M30)	55-1640	1
-	DECAL SET	71-0104	1
*MUST ORDER IN ONE FOOT LENGTHS			

# LARGE TANK LID ASSEMBLY

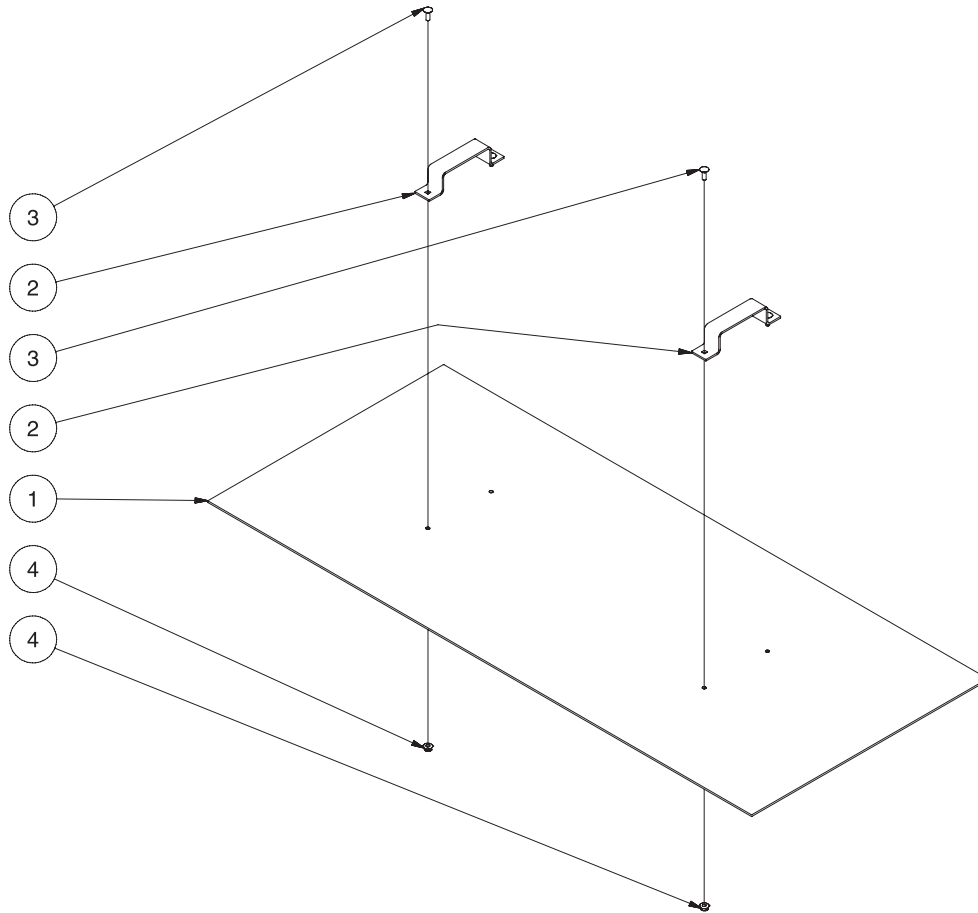


LARGE TANK LID 5'-113005-ASY

LARGE TANK LID ASSEMBLY			
REF. #	DESCRIPTION	PART#	QTY.
1	Bolt	31-5027	4
2	Handle	56-0040	2
3	Tank Lid	56-0043	1
4	Hex Nut	30-5202	4

LARGE LID BIO 092506 PJH

## SMALL TANK LID ASSEMBLY

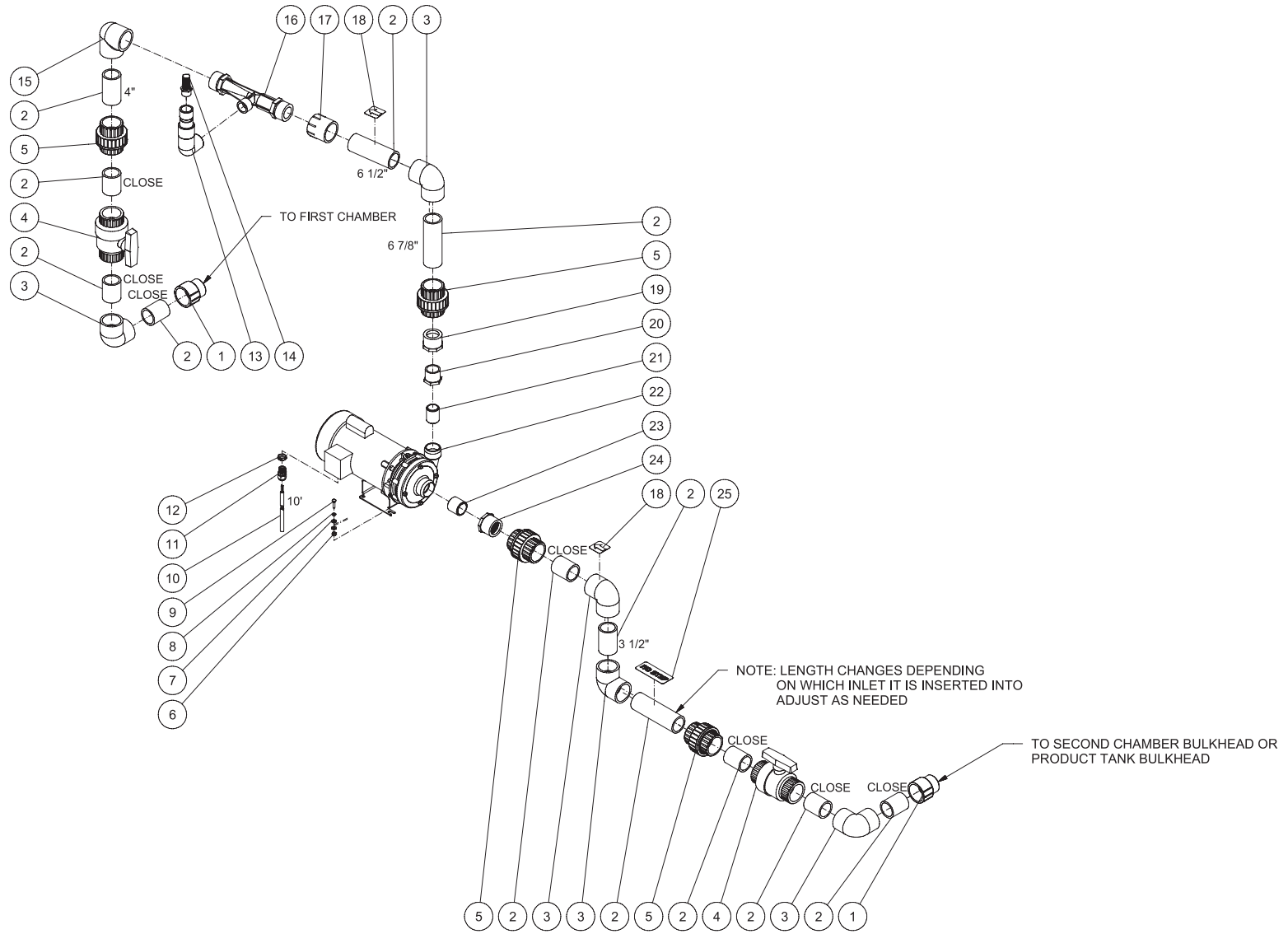


SMALL TANK LID-123003-ASY

SMALL TANK LID ASSEMBLY			
REF. #	DESCRIPTION	PART#	QTY.
1	Tank Lid	56-0043	1
2	Handle	56-0040	2
3	Bolt	31-5027	4
4	Hex Nut	30-5202	4

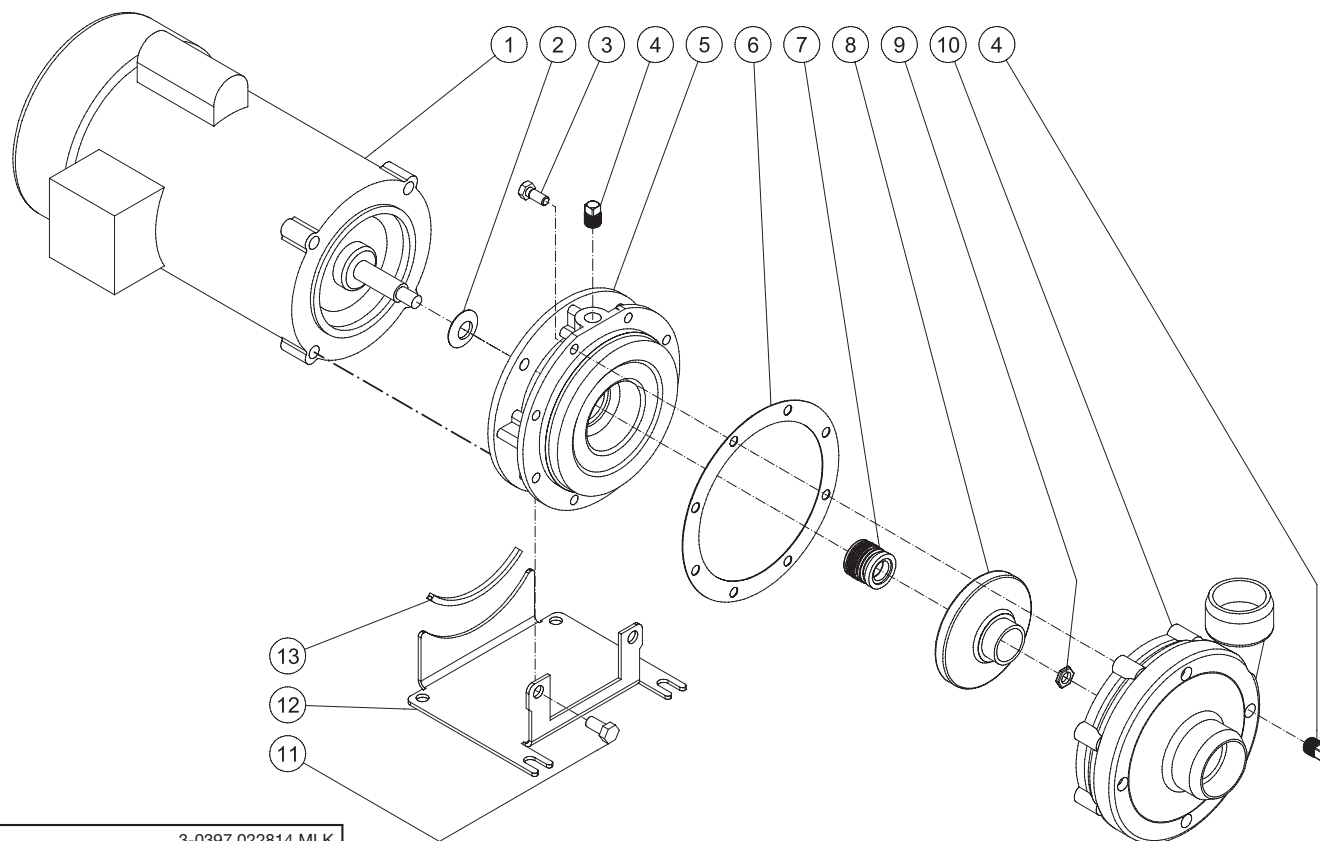
SMALL TANK LID-123003-ASY

# PLUMBING: AERATION



BIO-20R AERATOR PLUMBING 072616 MLK			
PLUMBING: AERATOR			
ITEM	DESCRIPTION	PART #	QTY
1	ADAPTER	55-1822	2
2	*PIPE 2" *(FOUR FEET REQUIRED)	55-1800	1
3	ELBOW	55-1809	5
4	BALL VALVE	55-1855	2
5	UNION	55-1845	4
6	LOCKNUT	30-5155	4
7	WASHER	28-0121	8
8	LOCKWASHER	29-1006	4
9	BOLT	27-8962	4
10	CORD (0M10/1M10)	32-0577	1
-	CORD *(TEN FEET REQUIRED) (0M30/1M30)	32-0247	1
11	STRAIN RELIEF (0M30/1M30)	32-0437	1
-	3 PIN RECEPTACLE MALE PLASTIC (0M10/1M10)	32-0573	1
12	ELECTRICAL LOCKNUT	32-0108	1
13	CHECK VALVE	55-0126	1
14	SCREEN	19-0246	1
15	ELBOW	55-1810	1
16	INJECTOR	55-0068	1
17	ADAPTER	55-1821	1
18	DECAL	N/A	2
19	REDUCER BUSHING	55-1823	1
20	REDUCER	55-1628	1
21	NIPPLE	55-1474	1
22	PUMP 1.5 HP (0M10/1M10)	3-0397	1
-	PUMP 1.5 HP (0M30/1M30)	3-0398	1
23	NIPPLE	55-1674	1
24	REDUCER	55-1828	1
25	DECAL - NO STEP	N/A	1
-	CRIMPED WIRE SPLICE (0M10/1M10)	32-0359	4
-	CRIMPED WIRE SPLICE (0M30/1M30)	32-0359	5
-	RING - #10 (NOT SHOWN)	32-0099	1
*MUST ORDER IN ONE FOOT LENGTHS			

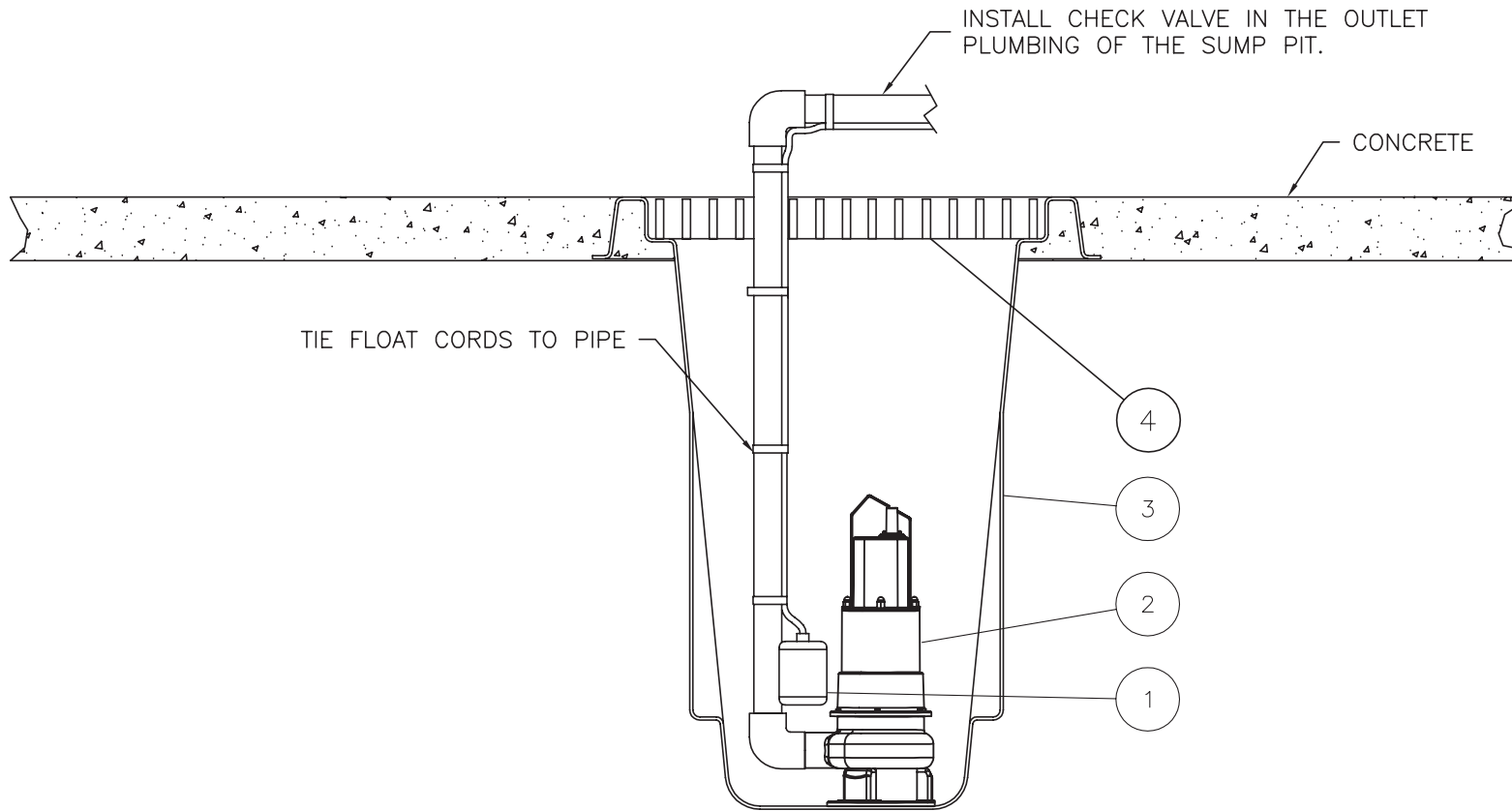
## AERATION PUMP



3-0397 022814 MLK			
AERATION PUMP			
ITEM	DESCRIPTION	Mi-T-M #	QTY
1	MOTOR	N/A	1
2	RUBBER SEAL	N/A	1
3	BOLT	27-0066	8
4	PLUG	24-0009	5
5	FRAME ADAPTOR	N/A	1
6	GASKET	26-0396	1
7	SHAFT SEAL	26-0395	1
8	IMPELLER	46-1564	1
9	LOCKNUT (3 PHASE ONLY)	N/A	1
10	FRONT CASING	N/A	1
11	BOLT	27-0116	4
12	BASE	N/A	1
13	MOTOR PAD	N/A	1

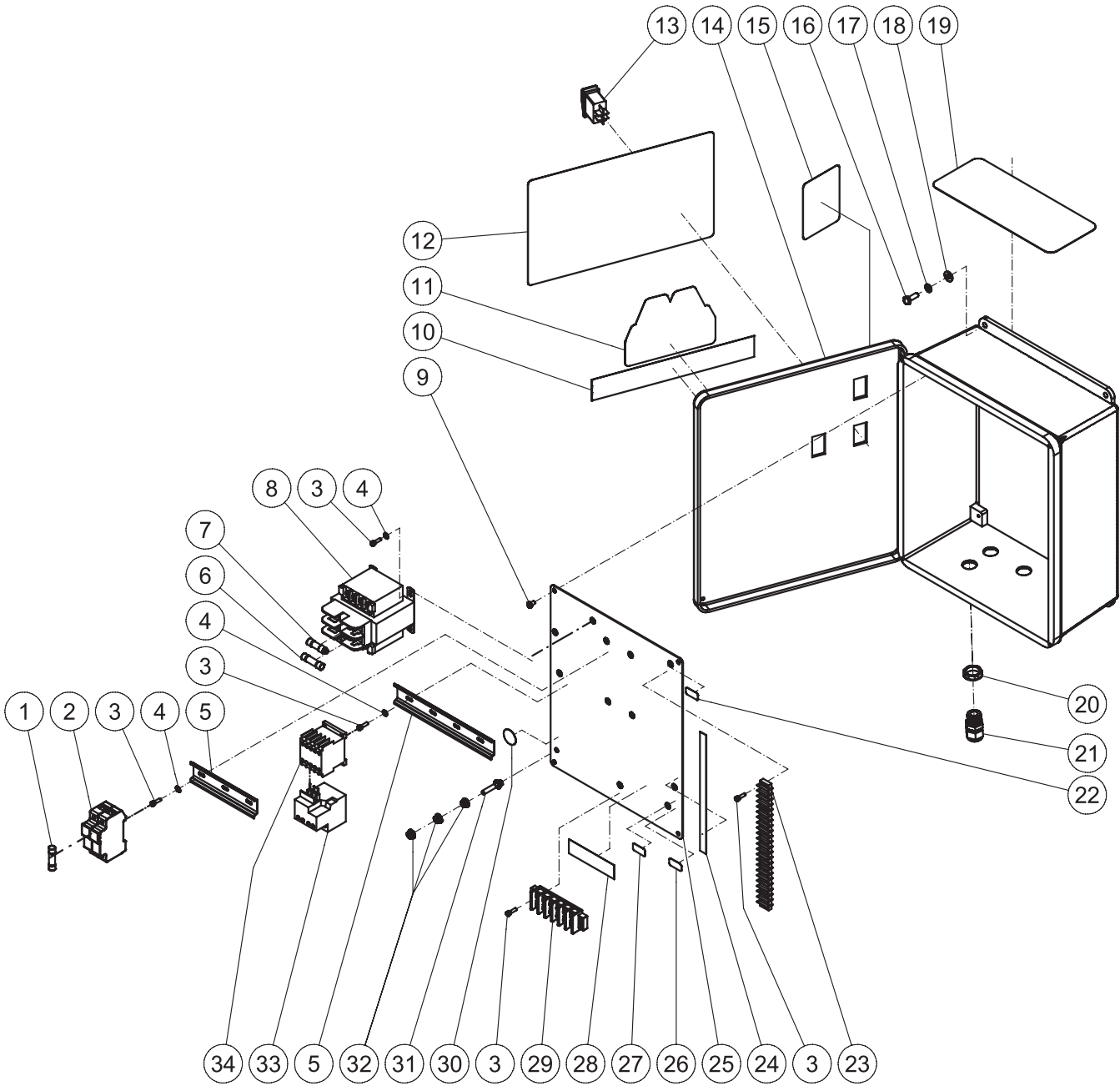
3-0397 022814 MLK

## SUMP PIT ASSEMBLY



SUMP PIT ASSY-010509-PJH			
SUMP PIT ASSEMBLY			
REF. #	DESCRIPTION	PART#	QTY.
1	Float	32-0528	1
2	Pump (Single Phase 230V)	3-0216	1
-	Pump (Three Phase 208-230V)	3-0325	1
-	Pump (Three Phase 460V)	3-0326	1
3	Pit	12-0071	1
4	Medium Grate	20-0480A01	1

# CONTROL PANEL



CONTROL PANEL - BIO-20D 071216 MLK

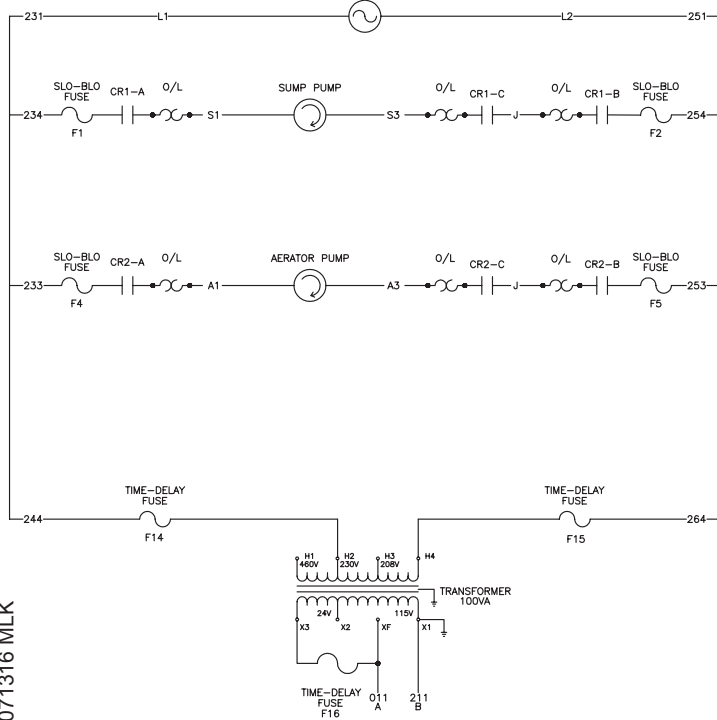


## CONTROL PANEL ASSEMBLY

ITEM	DESCRIPTION	PART #	QTY	ITEM	DESCRIPTION	PART #	QTY
1	FUSE - 1Ø 230V AERATION/TRANSFER	32-1026	2	18	WASHER	28-0121	4
-	FUSE - 1Ø 230V SUMP	32-1024	2	19	DECAL - OPERATION (SEE 71-0104)	N/A	1
-	FUSE - 1Ø 230V OZONE	32-1025	2	20	ELECTRICAL LOCKNUT	32-0108	3
-	FUSE - 3Ø 208V/230V AERATION/TRANSFER	32-1025	3	21	STRAIN RELIEF	32-0437	3
-	FUSE - 3Ø 460V AERATION/TRANSFER _208V/230V OZONE	32-0470	3	22	DECAL - 115 VOLT (SEE 71-0104)	N/A	1
-	FUSE - 3Ø 208V/230V SUMP	32-1024	3	23	TERMINAL STRIP	32-0463	1
-	FUSE - 3Ø 460V SUMP/OZONE	32-0741	3	24	DECAL - TERMINAL STRIP (SEE 71-0104)	N/A	1
2	FUSE HOLDER (0M10/1M10)	32-1006	2	25	ELECTRICAL PLATE	20-0520A06	1
-	FUSE HOLDER - 3 FUSE (0M30/1M30)	32-1007	2	26	DECAL - 1 PHASE (SEE 71-0104)	N/A	1
3	SCREW	27-8835	10	27	DECAL - 230 VOLT (SEE 71-0104)	N/A	1
4	STAR WASHER	28-1009	6	28	DECAL - TERMINAL STRIP (SEE 71-0104)	N/A	1
5	DIN RAIL (TWO FEET REQUIRED)	32-0316	1	29	TERMINAL BLOCK	32-0536	1
6	FUSE	32-1028	1	30	DECAL- GROUND PICTORIAL (SEE 71-0104)	N/A	1
7	FUSE	32-0740	2	31	BOLT	27-8898	1
8	TRANSFORMER	32-0735	1	32	NUT	30-3022	3
9	SCREW	27-8933	4	33	OVERLOAD - 1Ø 230V AERATION/TRANSFER	32-1016	1
10	DECAL - 10.5" LONG STRIPE	34-2267	1	-	OVERLOAD - 1Ø 230V SUMP	32-1014	1
11	DECAL - Mi-T-M	34-2169	1	-	OVERLOAD - 1Ø 230V OZONE	32-1015	1
12	DECAL - BIO ELECTRIC BOX (SEE 71-0104)	N/A	1	-	OVERLOAD - 3Ø 208V/230V AERATION/TRANSFER	32-1015	1
13	ROCKER SWITCH	32-0669	3	-	OVERLOAD - 3Ø 460V AERATION/TRANSFER _208V/230V OZONE	32-1012	1
14	ELECTRIC BOX	32-1030	1	-	OVERLOAD - 3Ø 208V/230V SUMP	32-1013	1
15	DECAL - DATA PLATE	34-1138	1	-	OVERLOAD - 3Ø 460V SUMP/OZONE	32-1010	1
16	BOLT	27-5016	4	34	CONTACTOR	32-1009	2
17	LOCKWASHER	29-1006	4	-	DECAL SET	71-0104	1

# LADDER DIAGRAM (SINGLE PHASE)

230V 1 $\phi$  LADDER DIAGRAM

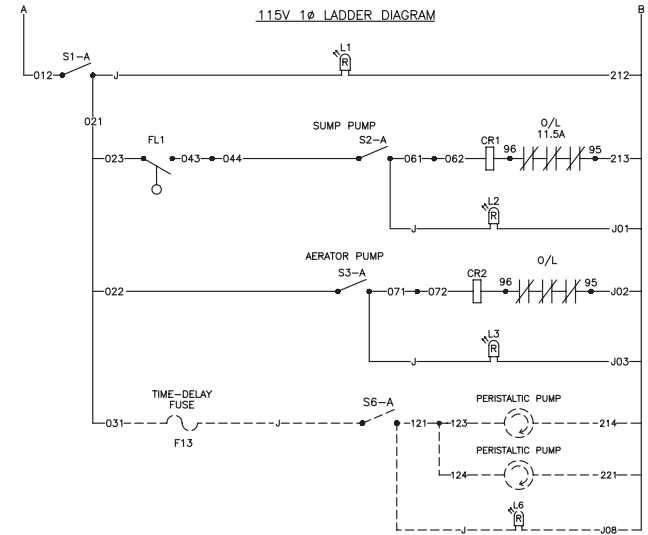


NOTES:  
1) LADDER DIAGRAM SHOWN WITH POWER TO UNIT AND NO WATER IN PIT

LEGEND

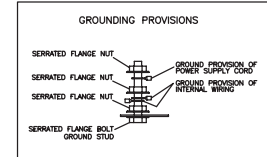
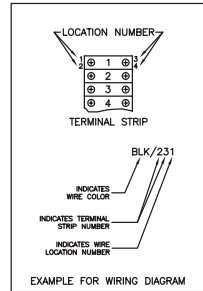
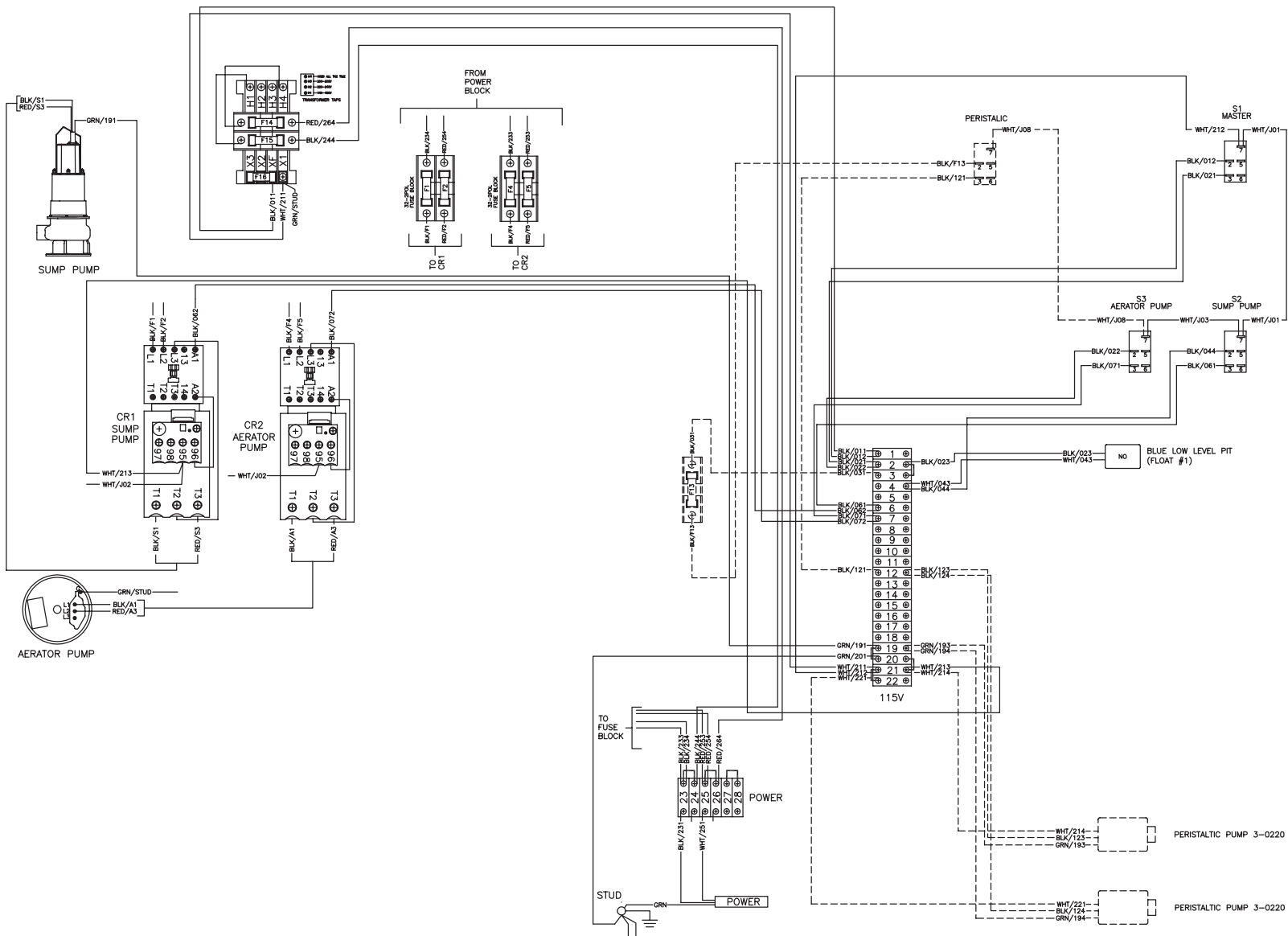
- CR1 = CONTROL RELAY, SUMP PUMP
- CR2 = CONTROL RELAY, AERATOR PUMP
- S1 = SWITCH, MASTER
- S2 = SWITCH, SUMP PUMP
- S3 = SWITCH, AERATOR PUMP
- L1 = LIGHT, FOR S1
- L2 = LIGHT, FOR S2
- L3 = LIGHT, FOR S3
- FL1 = FLOAT, N.O. BLUE LOW LEVEL (SUMP PIT)

115V 1 $\phi$  LADDER DIAGRAM



LADDER DIAGRAM - BIO-20D - 1 PHASE 071316 MLK

# WIRE DIAGRAM (SINGLE PHASE)

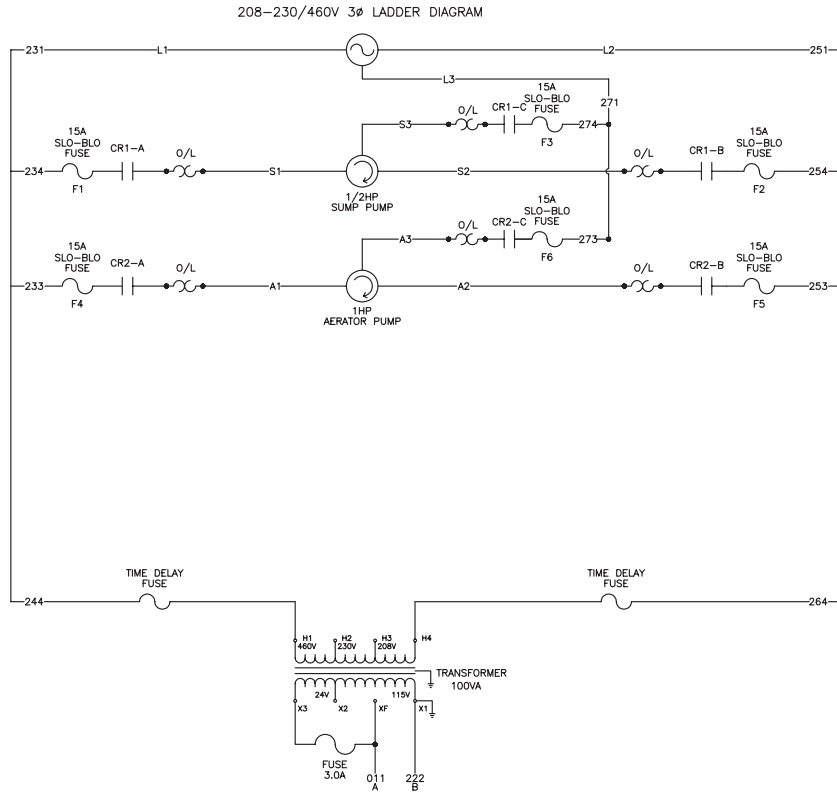


NOTES:

- 1) ALL WIRES ARE 16GA UNLESS OTHERWISE SPECIFIED IN THE TABLE ON THE LADDER DIAGRAM.
- 2) FUSE SIZES ARE SHOWN IN THE TABLE ON THE LADDER DIAGRAM OR ON A STICKER INSIDE THE BOX.

WIRING DIAGRAM - BIO-20D - 1 PHASE 083011 MLK

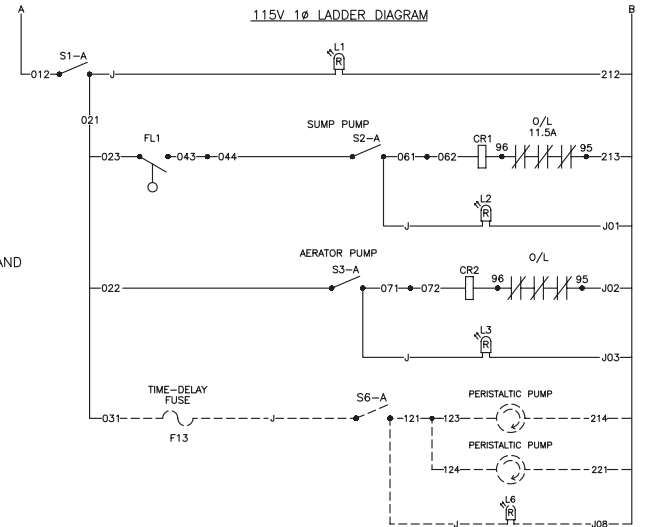
# LADDER DIAGRAM (THREE PHASE)



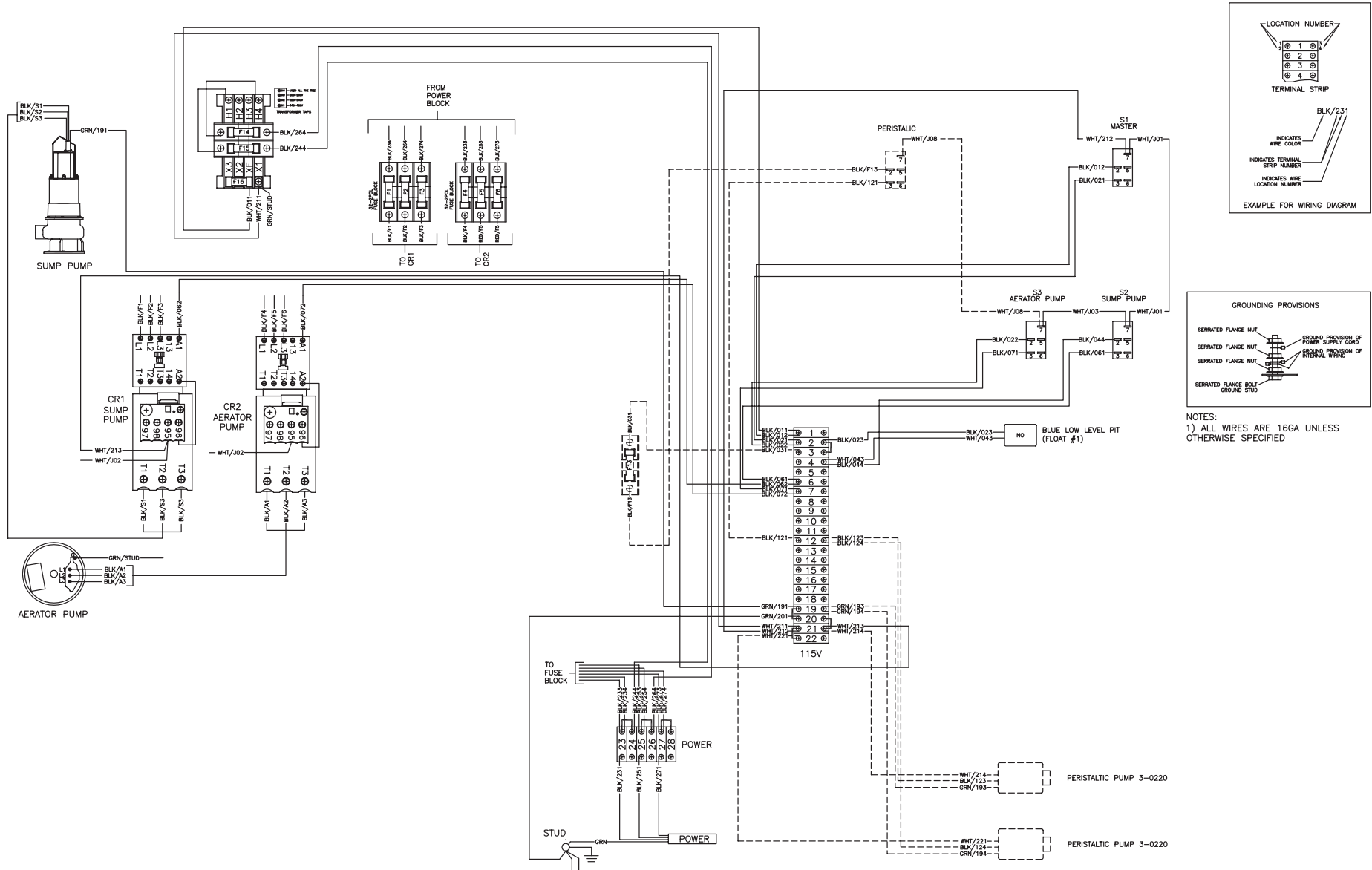
NOTE:  
LADDER DIAGRAM SHOWN WITH POWER TO UNIT AND  
NO WATER IN PIT

LEGEND

- CR1 = CONTROL RELAY, SUMP PUMP
- CR2 = CONTROL RELAY, AERATOR PUMP
- S1 = SWITCH, MASTER
- S2 = SWITCH, SUMP PUMP
- S3 = SWITCH, AERATOR PUMP
- L1 = LIGHT, FOR S1
- L2 = LIGHT, FOR S2
- L3 = LIGHT, FOR S3
- F1 = FLOAT, N.O. BLUE LOW LEVEL (SUMP PIT)



# WIRE DIAGRAM (THREE PHASE)



Manufactured by Mi-T-M  
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563-556-7484/ Fax 563-556-1235