



PARTS MANUAL

EH2250 Bentonite Pump

Bentonite Pump S/N: F18000F

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SERVICE • RELIABILITY • INNOVATION

Introduction

This parts manual contains assembly illustrations of the Akkerman EH2250 Bentonite Pump. The illustrations in this manual are intended to show typical construction of various parts. In some instances, the details of parts illustrated may not exactly represent their actual appearance, but will help to identify parts performing the same functions. Additional copies of this manual may be purchased from the Akkerman Product Support Department, or downloaded from the Akkerman web site at www.akkerman.com.

LOCATING PARTS

This parts manual is organized into 13 sections to help you locate parts information quickly. The first page of each section lists the assemblies within the section.

An Alphabetical Index, Section 12, is provided to help you find the page number of a specific assembly. If a part number is known, the Numerical Index, Section 13, can also be utilized to find the page number of an assembly.

USE GENUINE AKKERMAN PARTS

The use of parts other than genuine Akkerman parts could affect the efficient performance of the Bentonite Pump. ALWAYS use genuine Akkerman parts.

PARTS ORDERING

To order fast, accurate, and reliable parts service, call (800) 533-0386, (507) 567-2261, or fax (507) 567-2605, and provide the following information.

1. Model Number
2. Serial Number
3. Part Number, Description, and Quantity
4. Shipping Preference

MEASUREMENTS

The unit of measure in this manual is in inches unless indicated otherwise.

HARDWARE SPECIFICATION

All Akkerman products are assembled with SAE Grade 8 bolts, nuts, and washers. ALWAYS use matched fastener hardware when replacing or repairing the unit.

If you find any errors in this manual or have suggestions for improvement, please let us know. Email your comments via the Akkerman web site (Contact Us web page), or mail your suggestions to: Akkerman Inc., ATTN: Technical Publications, 58256 266th Street, Brownsdale, MN 55918.

Akkerman Inc. reserves the right to improve its product without notice or obligation.



Akkerman EH 2250 Bentonite Pump

NOTES



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NOTES



General Information

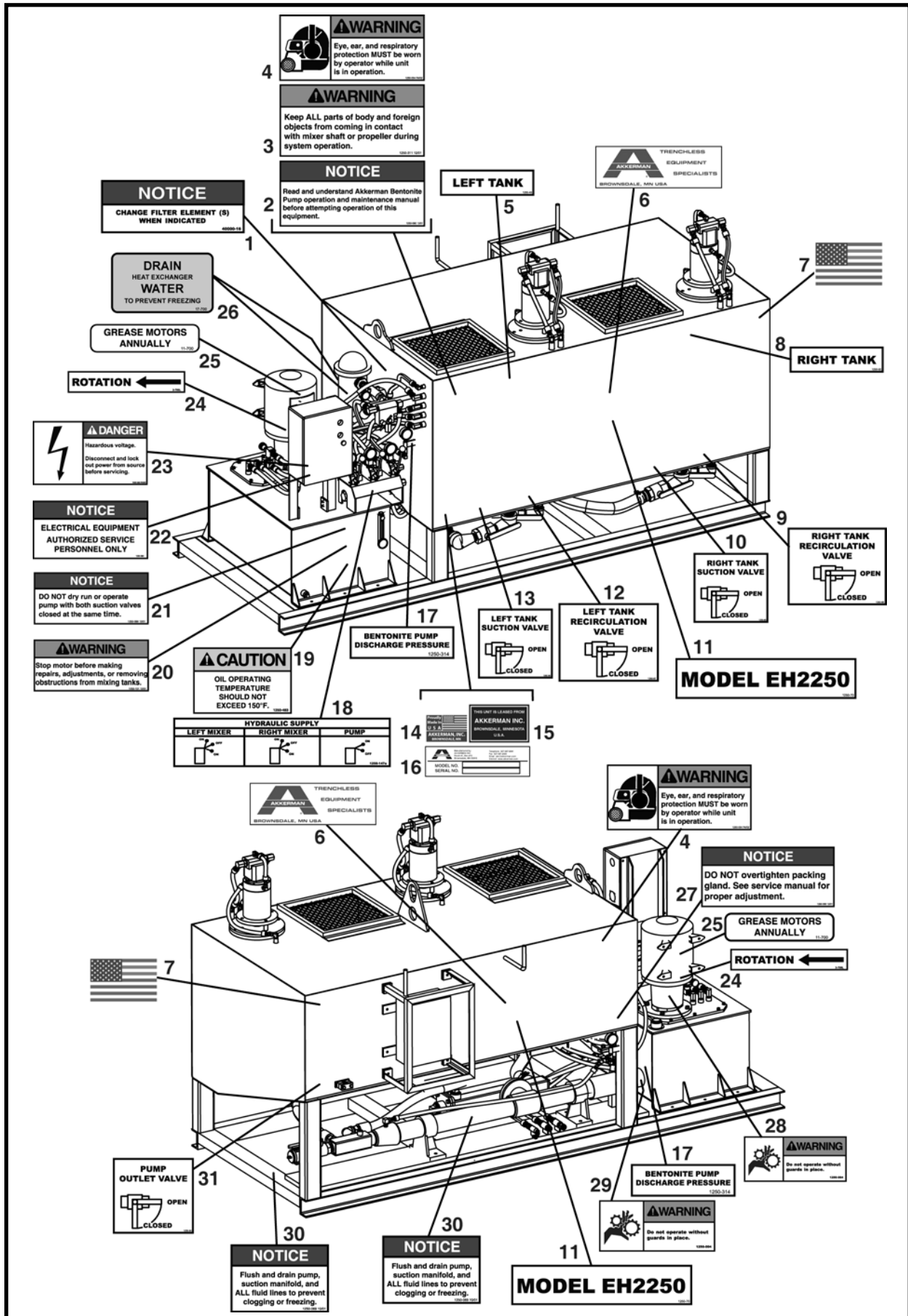
Bentonite Pump EH2250 2



Decals

Eh2250 Bentonite Pump Decals 2

EH250 BENTONITE PUMP DECALS



EH2250 BENTONITE PUMP DECALS

ITEM	QTY	PART NO.	DESCRIPTION
1	1	40000-16	DECAL, Notice Change Filter
2	1	1250-060	DECAL, Read & Understand Bentonite Manual
3	1	1250-311	DECAL, Warning Keep Away From Mixer
4	2	1250-054	DECAL, Warning Eye Ear & Respiratory Operation
5	1	1250-049	DECAL, Left Tank
6	2	1250-547	DECAL, Akkerman, Large
7	2	1250-559	DECAL, USA Flag, Medium
8	1	1250-050	DECAL, Right Tank
9	1	1250-068	DECAL, Right Tank Recirculation Valve
10	1	1250-066	DECAL, Right Tank Suction Valve
11	2	1250-070	DECAL, Model EH2250
12	1	1250-067	DECAL, Left Tank Recirculation Valve
13	1	1250-065	DECAL, Left Tank Suction Valve
14	1	1250-544	DECAL, Made in USA
15*	1	1250-098	DECAL, Lease
16	1	REF	PLATE, Serial Number
17	2	1250-314	DECAL, Bentonite Pump Discharge Pressure
18	1	1250-147a	DECAL, Hydraulic Supply Controls
19	1	1250-483	DECAL, Caution Oil Temperature
20	1	1250-151	DECAL, Warning Stop Motor Before Repairs
21	1	1250-089	DECAL, Notice Do Not Dry Run
22	1	1250-383	DECAL, Notice Electrical Equipment
23	1	1250-385	DECAL, Danger Hazardous Voltage
24	2	3-700L	DECAL, Rotation Left
25	2	11-700	DECAL, Grease Motors Annually
26	2	17-700	DECAL, Drain Water To Prevent Freezing
27	1	1250-090	DECAL, Notice Do Not Overtighten Packing Gland
28	2	1250-004	DECAL, Keep Guards In Place
29	2	1250-069	DECAL, Notice Flush & Drain To Prevent Freezing
30	1	1250-064	DECAL, Pump Outlet Valve

* Note: Decal used only on leased equipment.

NOTE: Cab assembly is removed to show detailed decal locations only. NEVER operate Bentonite Pump without cab in place.

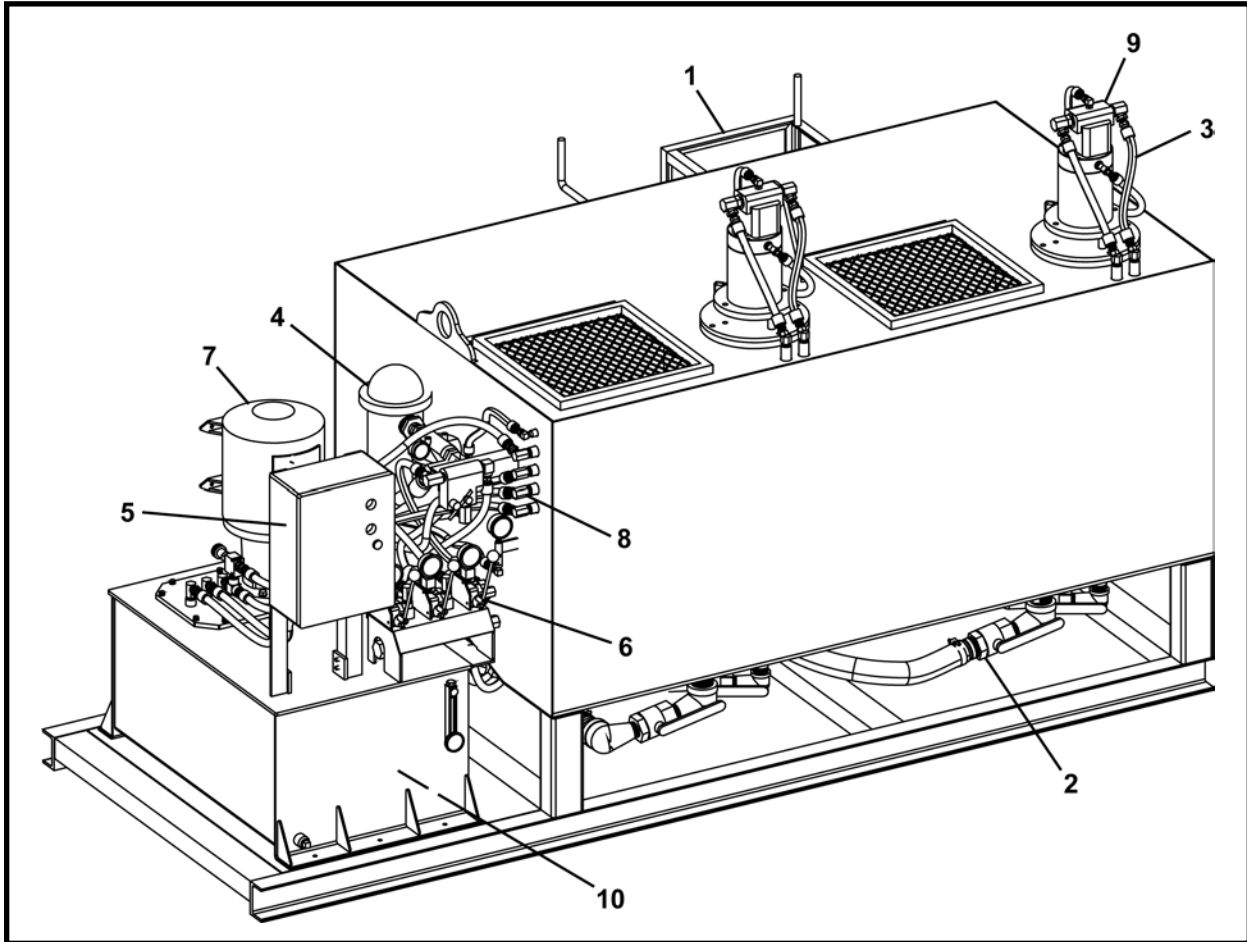
NOTES



Structurals

Electric/Hydraulic Bentonite Pump Assembly, F18000F00	2
Frame/Tank & Cab Assembly, 018060A00.....	3
Mixing Tank Assembly, 018062A03	4
Propeller Baffle Assembly, 018023A00	5
Motor Support Assembly, 018024A00	6
Bentonite Bracket Assembly, A02760A	7
Hydraulic Mixer Drive, 018002A00	8

ELECTRIC/HYDRAULIC BENTONITE PUMP ASSEMBLY, F18000F00



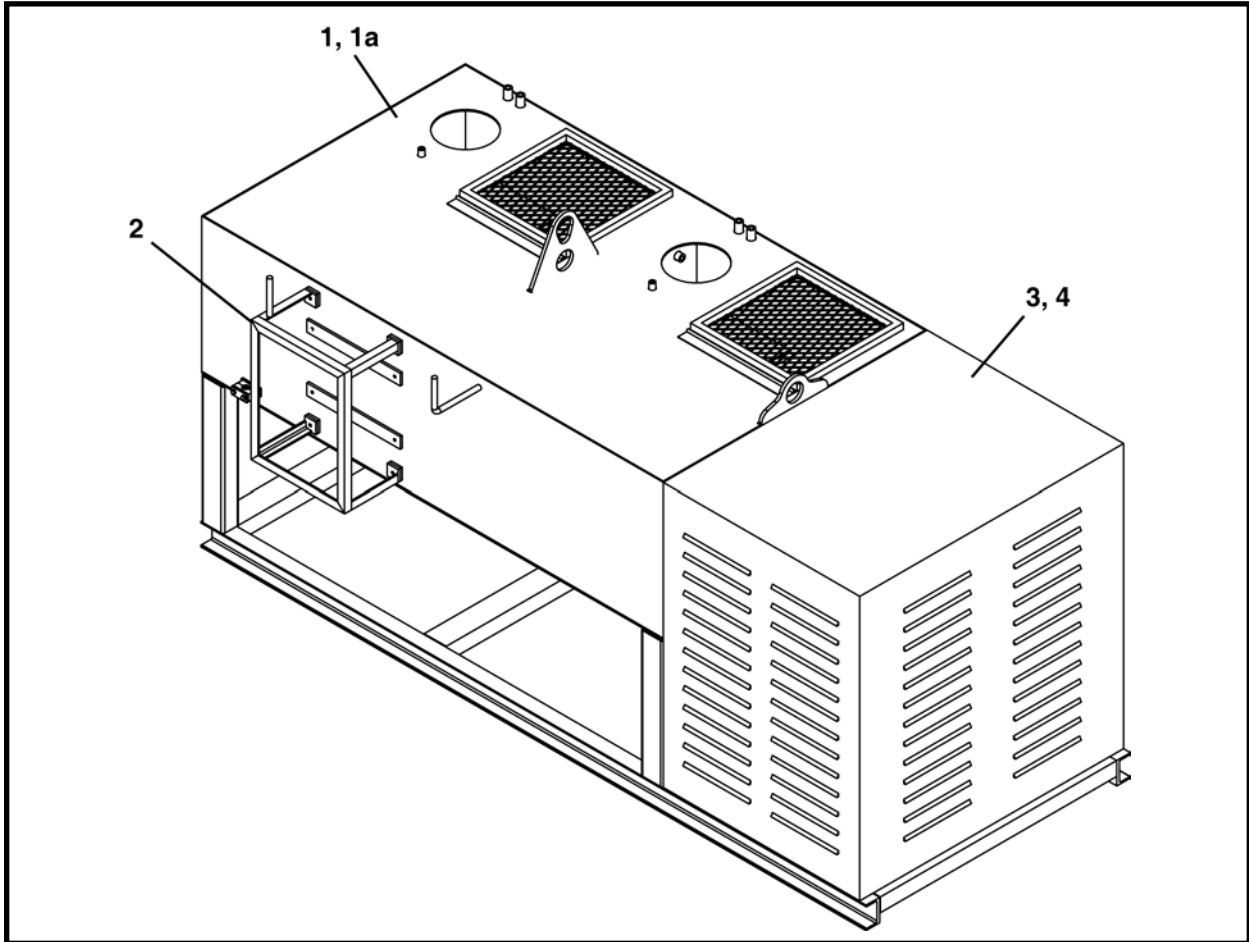
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F18000F00	ELECTRIC/HYDRAULIC BENTONITE PUMP ASSEMBLY
1*	1	018060A00	ASSEMBLY, Frame/Tank and Cab
2**	1	018081A	ASSEMBLY, Hydraulics Under Tank
3**	1	018070A01	HYDRAULICS, Mixer
4**	1	018082A	ASSEMBLY, Heat Exchanger & Hydraulics
5***	1	018039A01	ASSEMBLY, Electrical
6**	1	018083A	ASSEMBLY, Valve Hydraulics
7**	1	018094A	ASSEMBLY, Hydraulic Drive
8**	1	018095A	ASSEMBLY, Hydraulic Tank
9*	2	018002A00	DRIVE, Hydraulic Mixer
10	60 gal	P0126-001	OIL, Hydraulic

* Refer to this section for parts breakdown.

** Refer to Section 6, Hydraulics for parts breakdown.

*** Refer to Section 5, Electrical for parts breakdown.

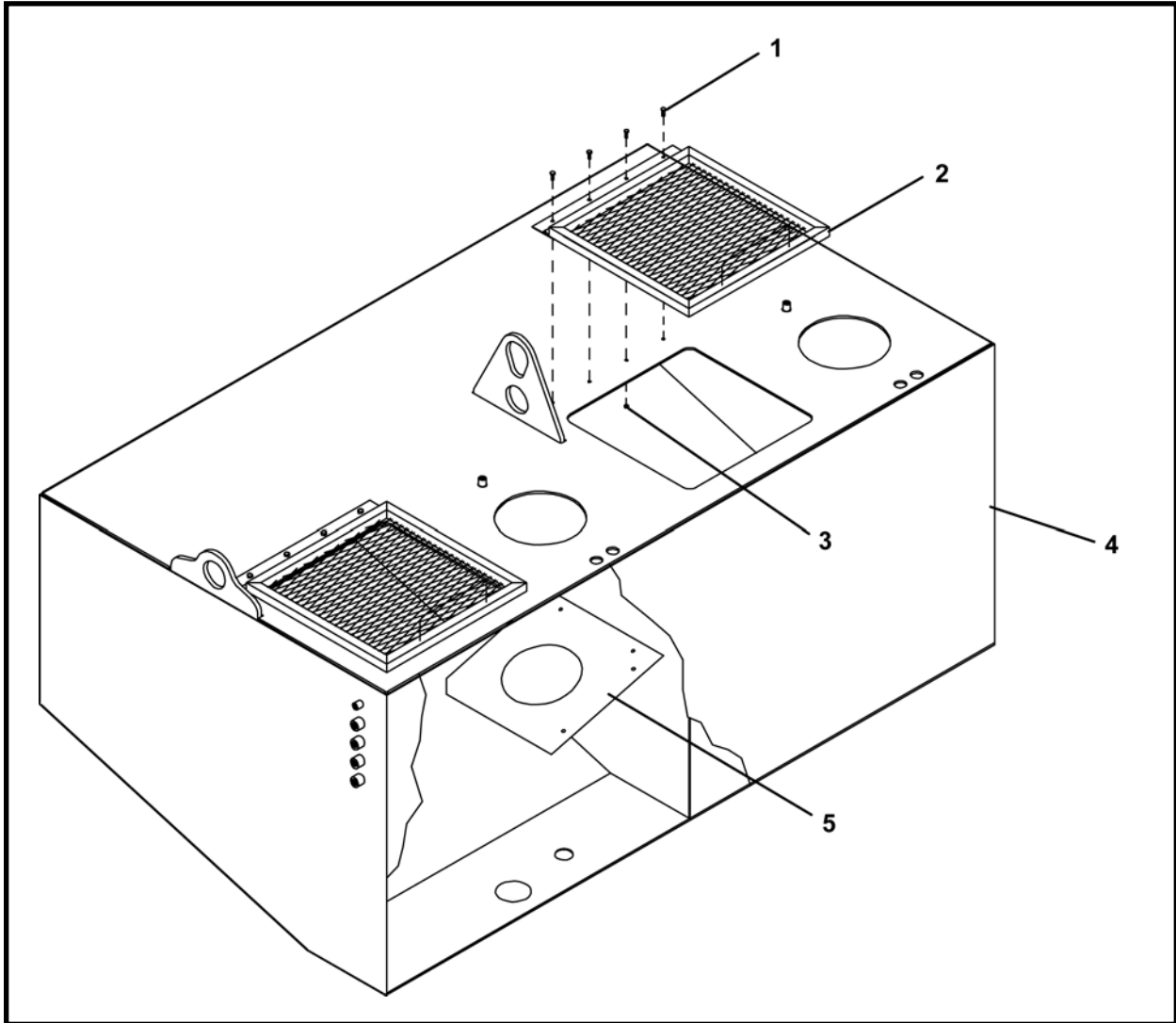
FRAME/TANK & CAB ASSEMBLY, 018060A00



ITEM	QTY	PART NO.	DESCRIPTION
0	1	018060A00	ELECTRIC/HYDRAULIC BENTONITE PUMP ASSEMBLY
1	1	018069A01	WELDMNT, Frame/Tank (Includes item 1a)
1a*	1	018062A03	ASSEMBLY, Mixing Tank
2*	1	A02760A	ASSEMBLY, Bentonite Bracket
3	1	P0130-001A	ASSEMBLY, Cab
4	9	P0001-08-004	BOLT, 1/2 UNC x 1

* Refer to this section for parts breakdown.

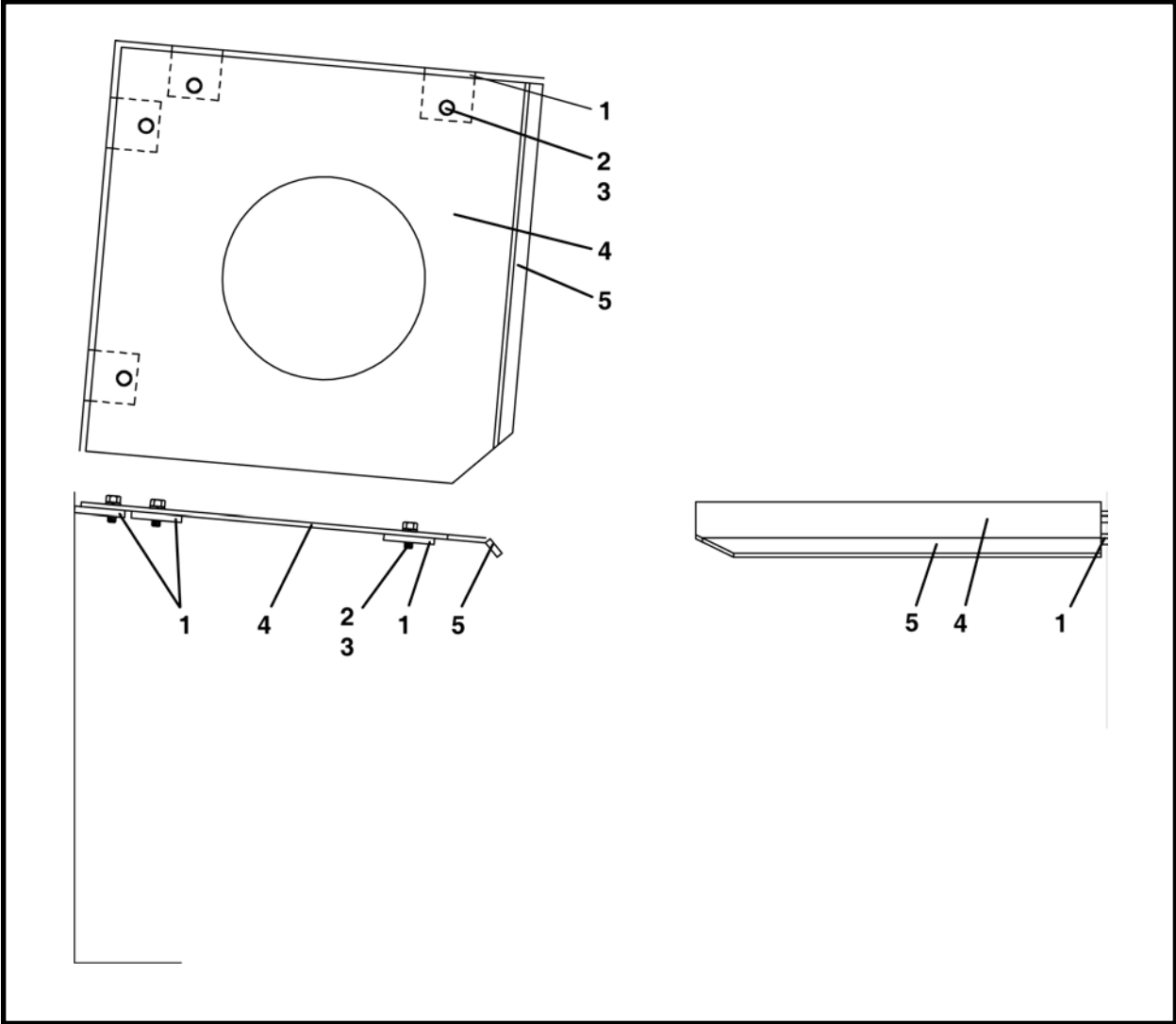
MIXING TANK ASSEMBLY, 018062A03



ITEM	QTY	PART NO.	DESCRIPTION
0	1	018062A03	MIXING TANK ASSEMBLY
1	8	P0001-04-003	BOLT, 1/4 UNC x .75
2	2	P0130-001B	ASSEMBLY, Mixer Door
3	8	P0003-04-000	NUT, 1/4
4	1	018063A03	WELDMENT, Mixer Tank Bulkhead
5*	2	018023A00	ASSEMBLY, Propeller Baffle
6*	2	018024A00	ASSEMBLY, Motor Support (not shown)

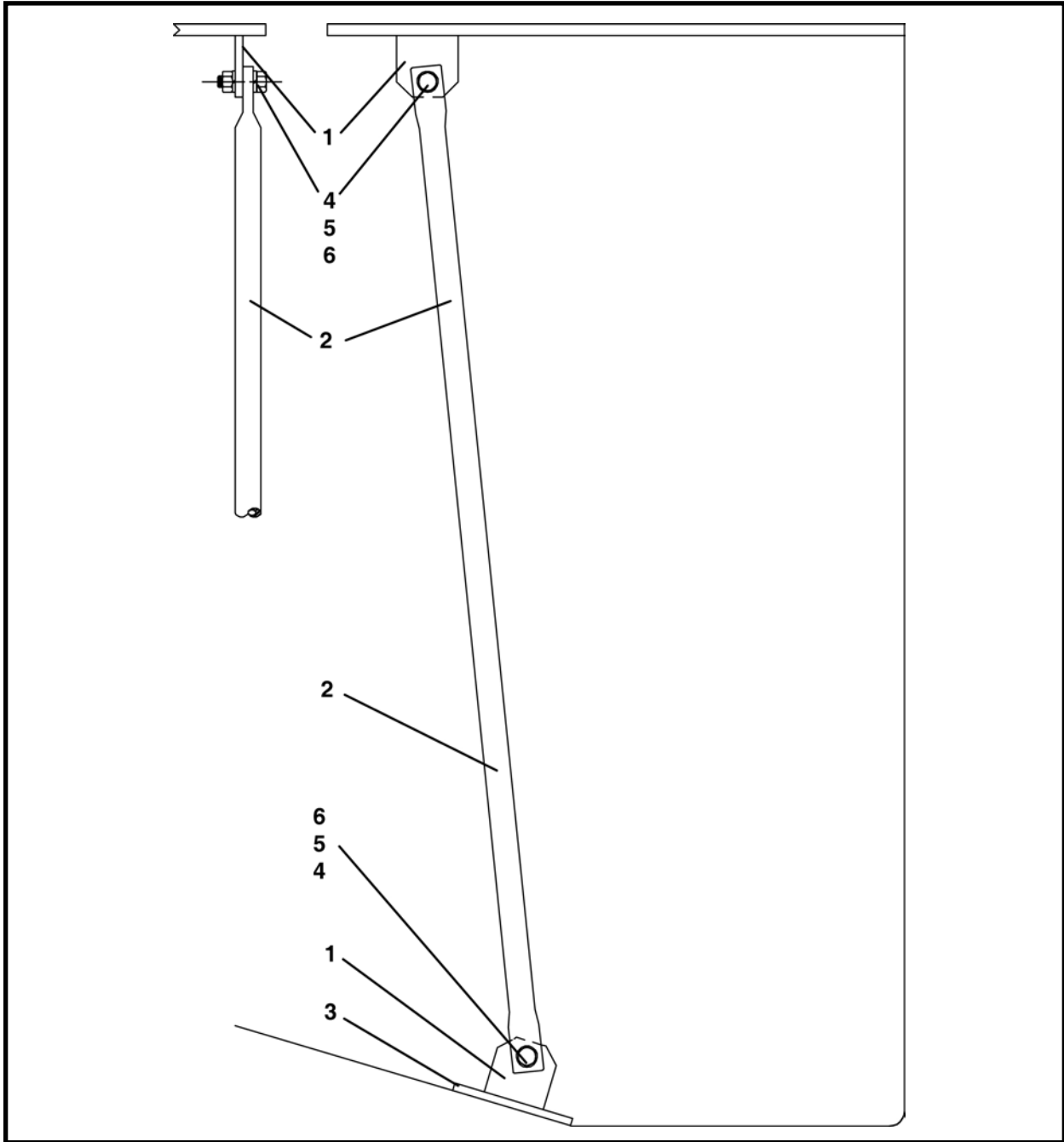
* Refer to this section for parts breakdown.

PROPELLER BAFFLE ASSEMBLY, 018023A00



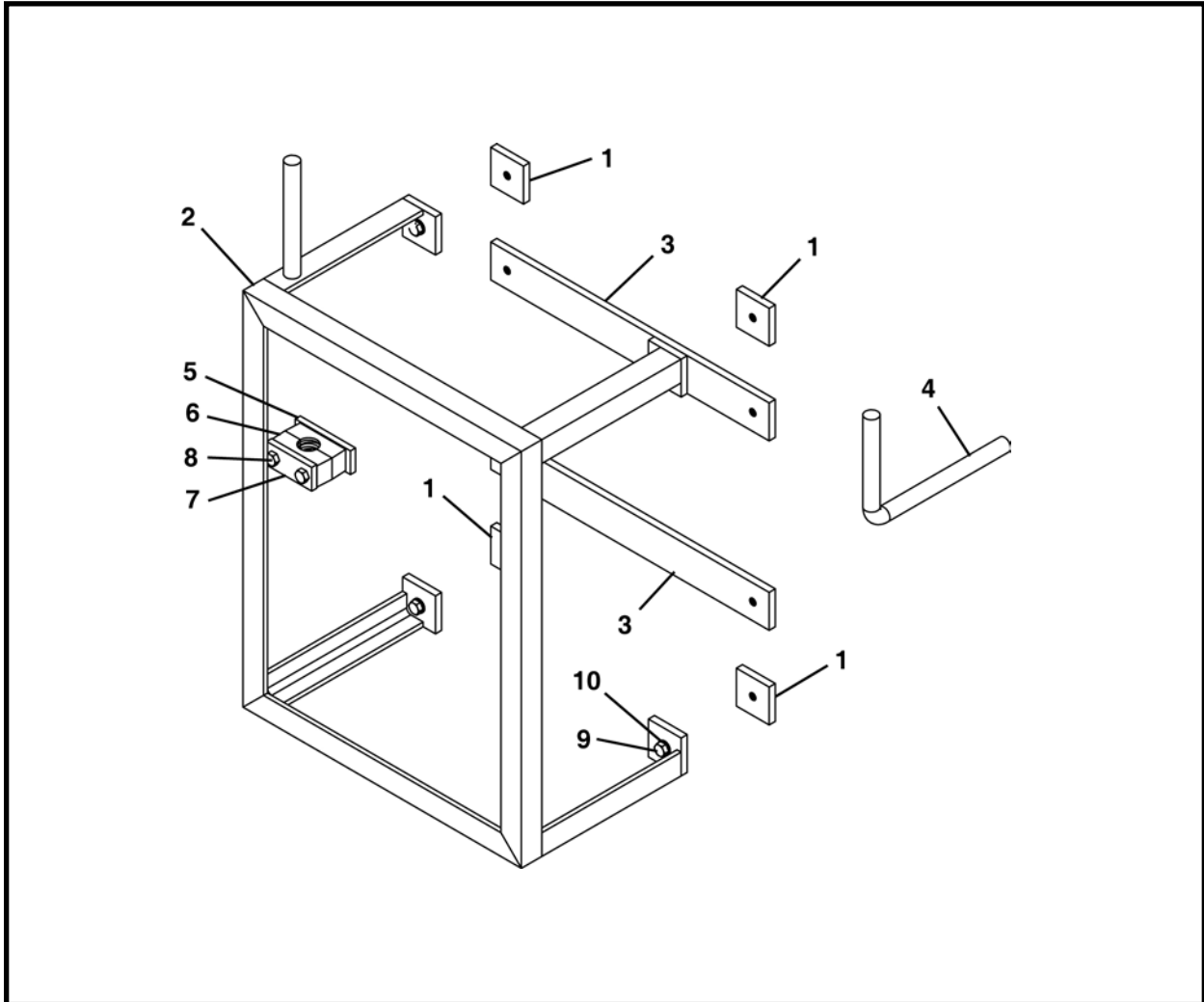
ITEM	QTY	PART NO.	DESCRIPTION
0	1	018023A00	PROPELLER BAFFLE ASSEMBLY
1	4	018049P00	BAR
2	4	P0001-05-003	BOLT, 5/16 UNC x .75
3	4	P0045-005	WASHER, Lock 5/16
4	1	018012P00	PLATE
5	1	018055P00	BAR

MOTOR SUPPORT ASSEMBLY, 018024A00



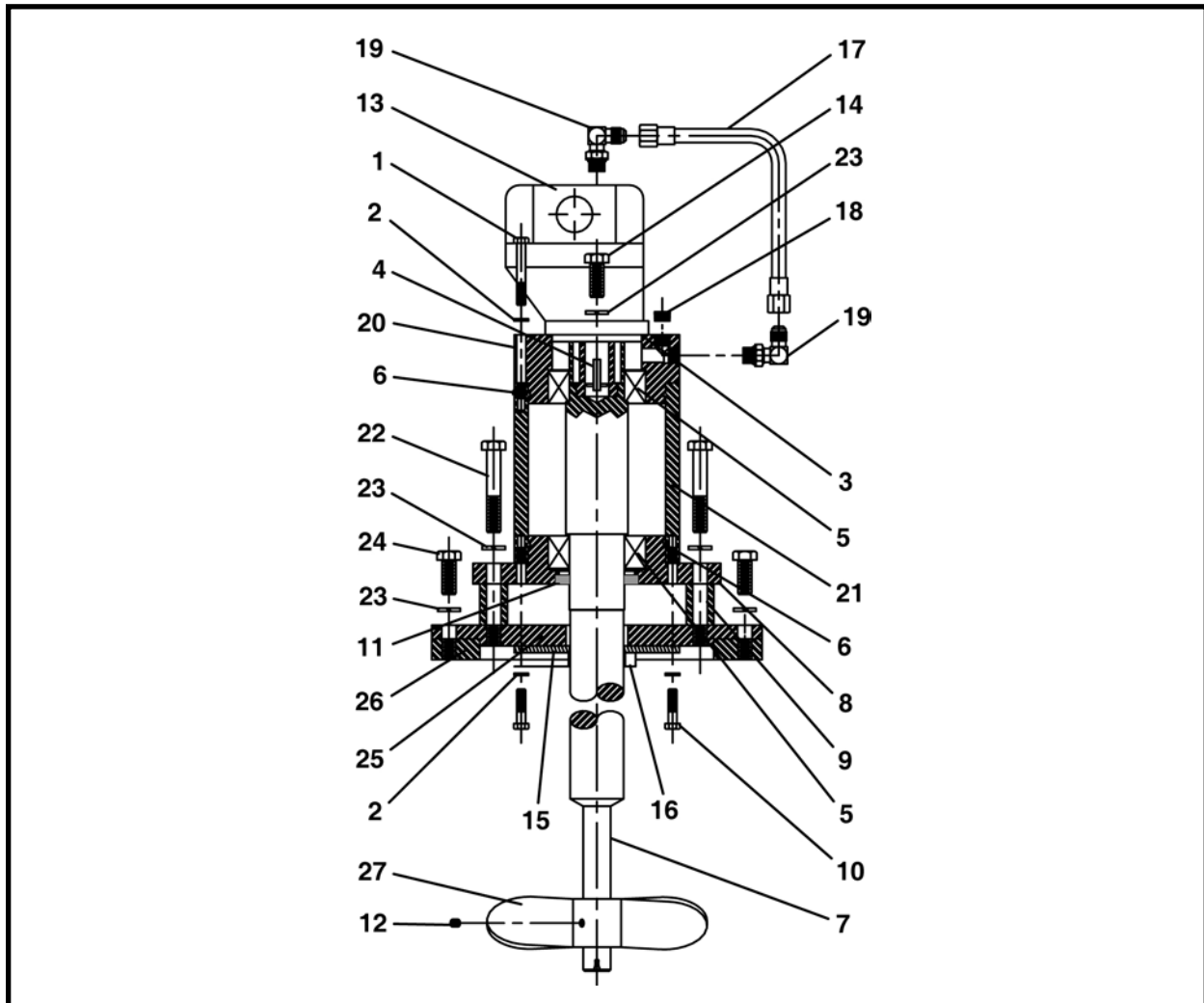
ITEM	QTY	PART NO.	DESCRIPTION
0	1	018024A00	MOTOR SUPPORT ASSEMBLY
1	2	018052P00	BAR
2	1	018054P00	ASSEMBLY, Motor Support
3	1	018053P00	BAR
4	2	P0001-06-005	BOLT, 3/8 UNC x 1.25
5	2	P0003-06-000	NUT, 3/8
6	4	P0045-006	WASHER, Lock 3/8

BENTONITE BRACKET ASSEMBLY, A02760A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A02760A	BENTONITE BRACKET ASSEMBLY
1	4	A02765P	PLATE
2	1	A02761A	WELDMENT, Bracket
3	2	A02769P	MOUNT, Box
4	1	A02768P	HOOK, Hose
5	1	P0059-050C	PLATE
6	1	P0059-052A	SET, Tube Clamp
7	1	P0059-050B	PLATE, Cover
8	2	P0059-050D	BOLT, 3/8 UNF
9	4	P0045-006	WASHER, Lock 3/8
10	4	P0001-06-003	BOLT, 3/8 UNC x .75

HYDRAULIC MIXER DRIVE ASSEMBLY, 018002A00



ITEM	QTY	PART NO.	DESCRIPTION
0	1	018002A00	HYDRAULIC MIXER DRIVE ASSEMBLY
1	4	P0001-05-009	BOLT, 5/16 UNC x 2.25
2	14	P0045-005	WASHER, Lock 5/16
3	1	P0085-152	ORING
4	1	P0047-003	KEY
5	2	P0065-042	BEARING
6	2	P0085-158	ORING
7	1	018068A00	ASSEMBLY, Propeller Shaft
8	1	018006P00	BEARING, Lower
9	4	018007P00	RISER
10	6	P0001-05-005	BOLT, 5/16 UNC x 1.25
11	1	P0080-016	SEAL
12	2	P0032-002	SCREW, Socket Set 5/16 x .375
13	1	P0304-141	MOTOR
14	2	P0001-08-005	BOLT, 1/2 UNC 1.25
15	1	018096P	SPACER, Belting
16	1	P0201-216	T-Clamp
17	1	A10311A-015	ASSEMBLY, Hose 3/8
18	1	P0300-026	FITTING, 04MP-HHP
19	2	P0300-042	FITTING, 06MJ-06MB90

(Continued on next page)

HYDRAULIC MIXER DRIVE ASSEMBLY, 018002A00

ITEM	QTY	PART NO.	DESCRIPTION
20	1	018004P00	BEARING, Upper
21	1	018008P00	TUBE, Housing
22	4	P0001-08-012	BOLT, 1/2 UNC x 3
23	10	P0045-008	WASHER, Lock 1/2
24	4	P0001-08-004	BOLT, 1/2 UNC x 1
25	1	018009P00	PLATE, Adapter
26	1	018010P00	RING, Mounting
27	1	018061P00	PROPELLER

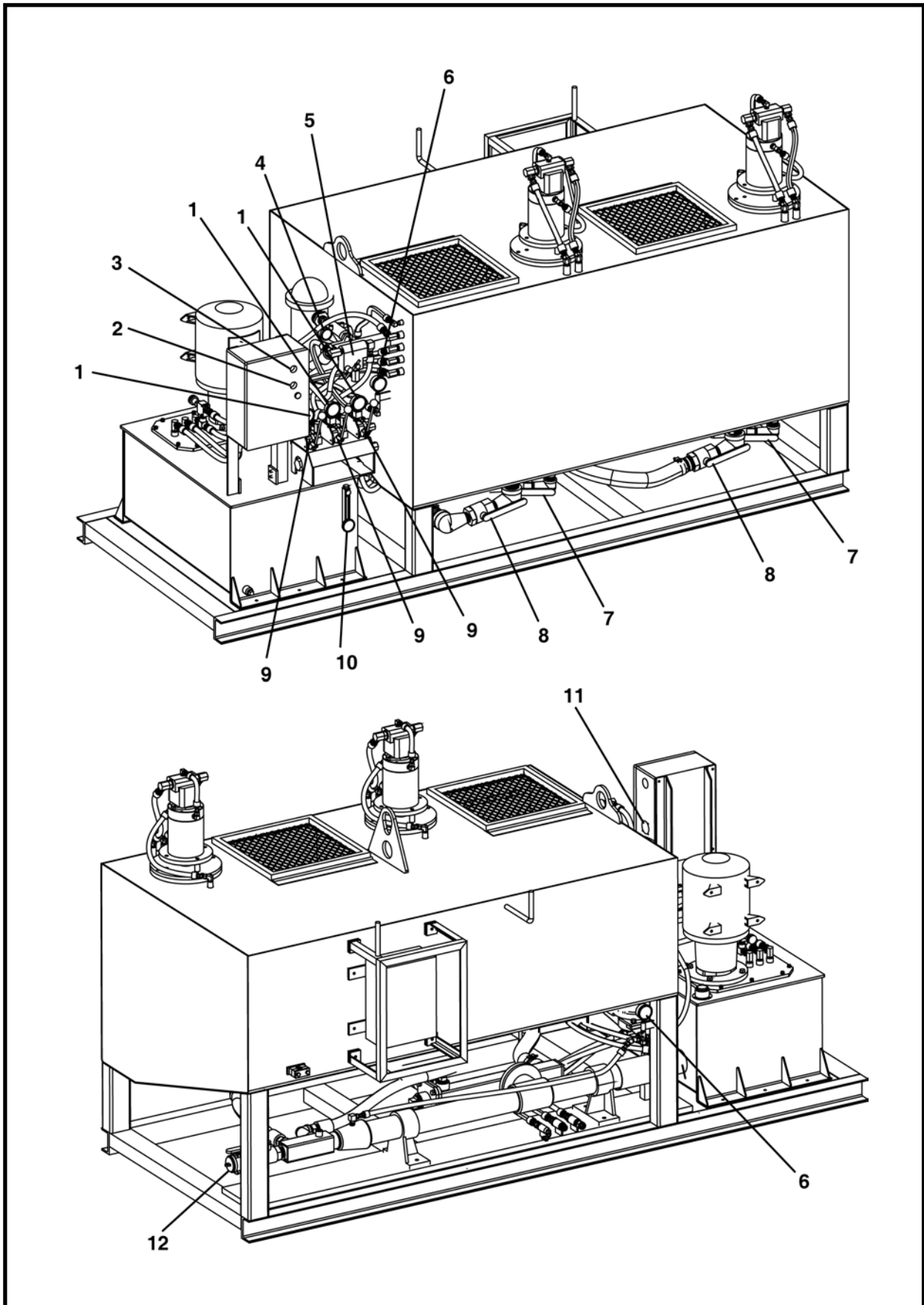
NOTES



Operator Controls

Eh2250 Bentonite Pump Controls 2

EH2250 BENTONITE PUMP CONTROLS



EH2250 BENTONITE PUMP CONTROLS

ITEM	QTY	PART NO.	DESCRIPTION
1	3	P0301-100	GAUGE, 5000 PSI
2	1	P0056-049	SWITCH, Stop
3	1	P0310-294	SWITCH, Start
4	1	P0301-105	GAUGE, Filter Indicator
5*	1	P0302-111	VALVE, Flow Control
6	2	P0301-110	GAUGE, 600 PSI
7*	2	P0302-192	VALVE, Recirculation Ball
8*	2	P0302-208	VALVE, Suction Ball
9*	3	P0302-252	VALVE, Four Way Three Position Detent
10	1	P0301-106	GAUGE, Sight
11	1	P0310-259	HOURMETER
12*	1	P0302-207	VALVE, Pump Outlet Ball

* Refer to Section 7, Valves for parts breakdown.

NOTES



Electrical

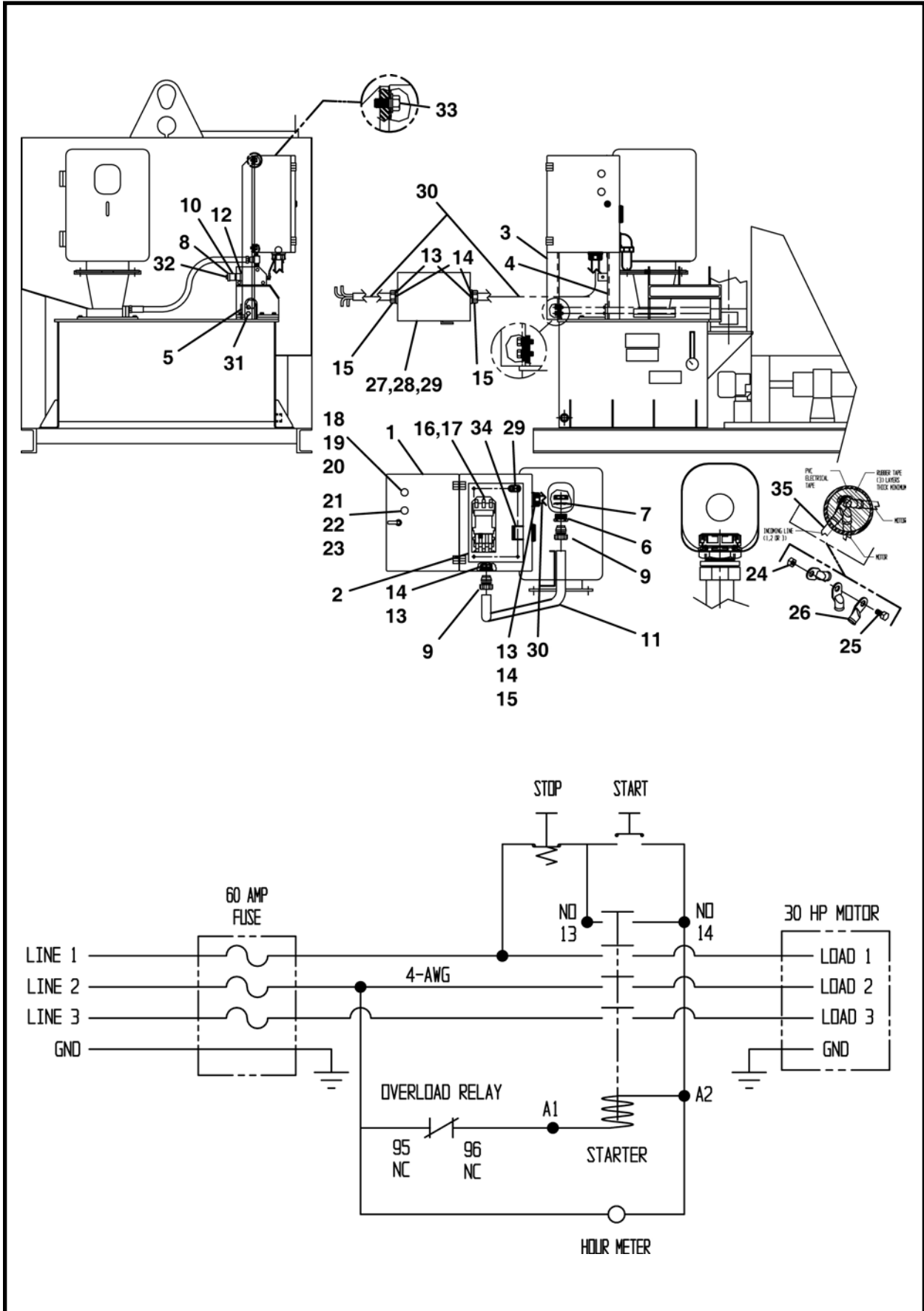
Eh2250 Bentonite Pump

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Tunnel Valve Components

Tunnel Valve Operator Station Electrical Schematic, F23339F00	4
Tunnel Valve Cable Pin Schematic, F23340F00 & F23341F00	5
Tunnel Valve Electrical Schematic, F23397F00	6
Tunnel Valve Junction Box Electrical Schematic, F23398F00	7

ELECTRICAL ASSEMBLY, 018039A01

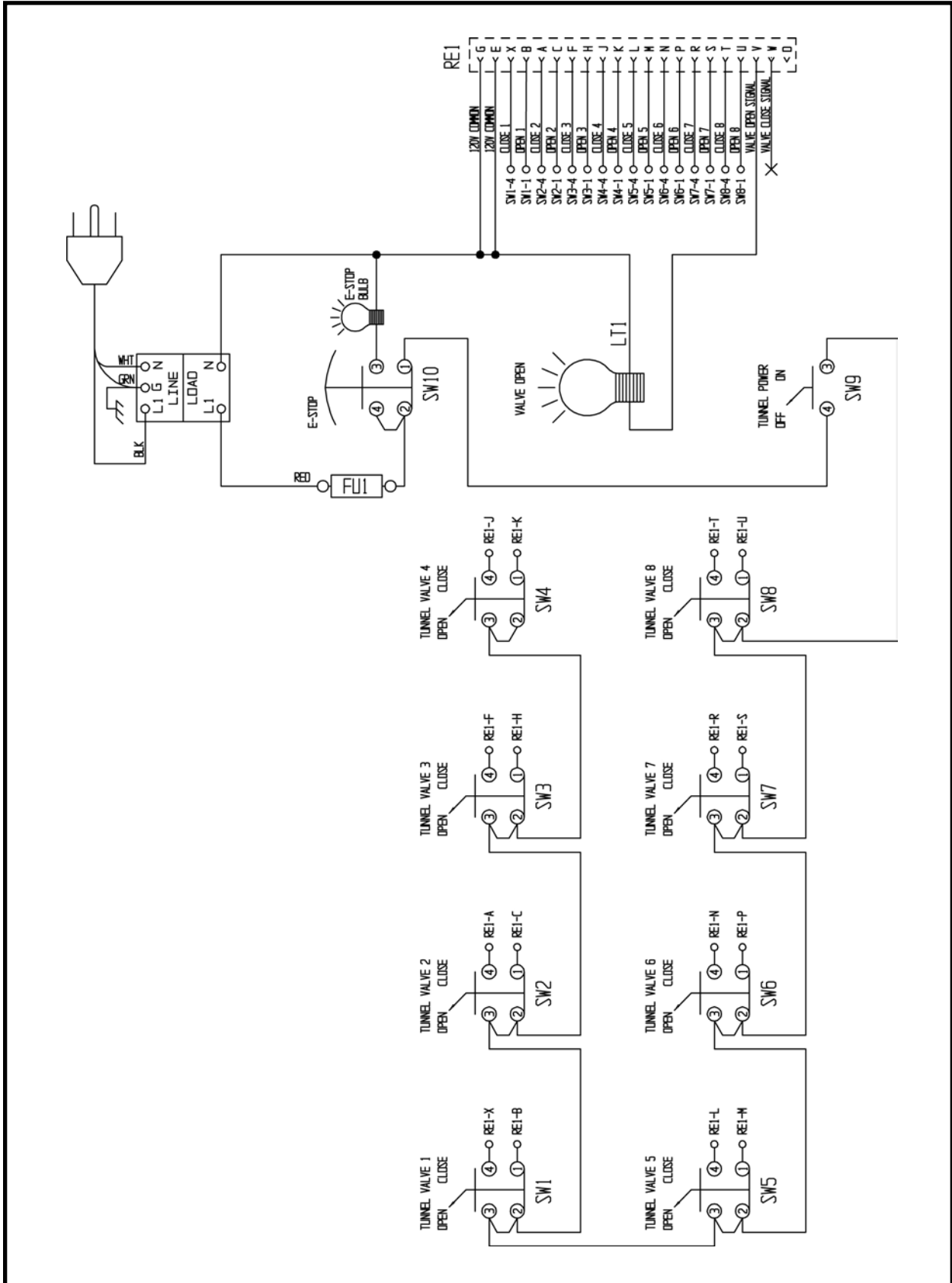


ELECTRICAL ASSEMBLY, 018039A01

ITEM	QTY	PART NO.	DESCRIPTION
0	1	018039A01	ELECTRICAL ASSEMBLY
1	1	018041P01	ASSEMBLY, Enclosure Electrical
2	1	018044P00	PANEL
3	1	018090P00	LEG, Left
4	1	018091P00	ANGLE
5	2	018092P00	BAR
6	1	P0311-049	HUB
7	1	P0311-059	CONNECTOR, Cable 1/2
8	1	P0059-053B	PLATE, Cover
9	2	P0311-008	CONNECTOR, Straight 1-1/4
10	1	P0059-053A	SET, Clamp
11	14 LI	P0312-020	LIQUITITE/SEALTITE
12	1	P0059-053C	PLATE
13	4	P0311-021	LOCKNUT, 1-1/4
14	4	P0311-035	BUSHING, Insulating 1-1/4
15	3	P0311-072	CONNECTOR, Strain Relief 1-1/4
16	1	P0310-872	CONTACTOR w/480V COIL
17	1	P0310-897	RELAY, 3 Phase Overload
18	1	P0310-294	SWITCH, Start
19	1	P0310-295	BOOT
20	1	P0056-053	PLATE, Start
21	1	P0056-049	SWITCH, Stop
22	1	P0056-051	BOOT
23	1	P0056-050	PLATE, Switch
24	6	P0027-017	NUT, Brass 1/4
25	6	P0027-018	BOLT, 1/4 UNC x .5
26	3	P0055-052	STUD, Tinned Copper
27	1	P0310-288	SWITCH, Disconnect
28	3	P0310-289	FUSE
29	2	P0311-036	CLAMP, Ground
30	1380 LI	P0054-035	CABLE
31	4	P0001-06-004	BOLT, 3/8 UNC x 1
32	2	P0001-06-009	BOLT, 3/8 UNC x 2.25
33	4	P0001-06-003	BOLT, 3/8 UNC x .75
34	1	P0310-259	HOUR METER
35	144 LI	P0054-006	WIRE
36	10	P0055-003	TERMINAL, Spade
37	120 LI	P0054-012	WIRE

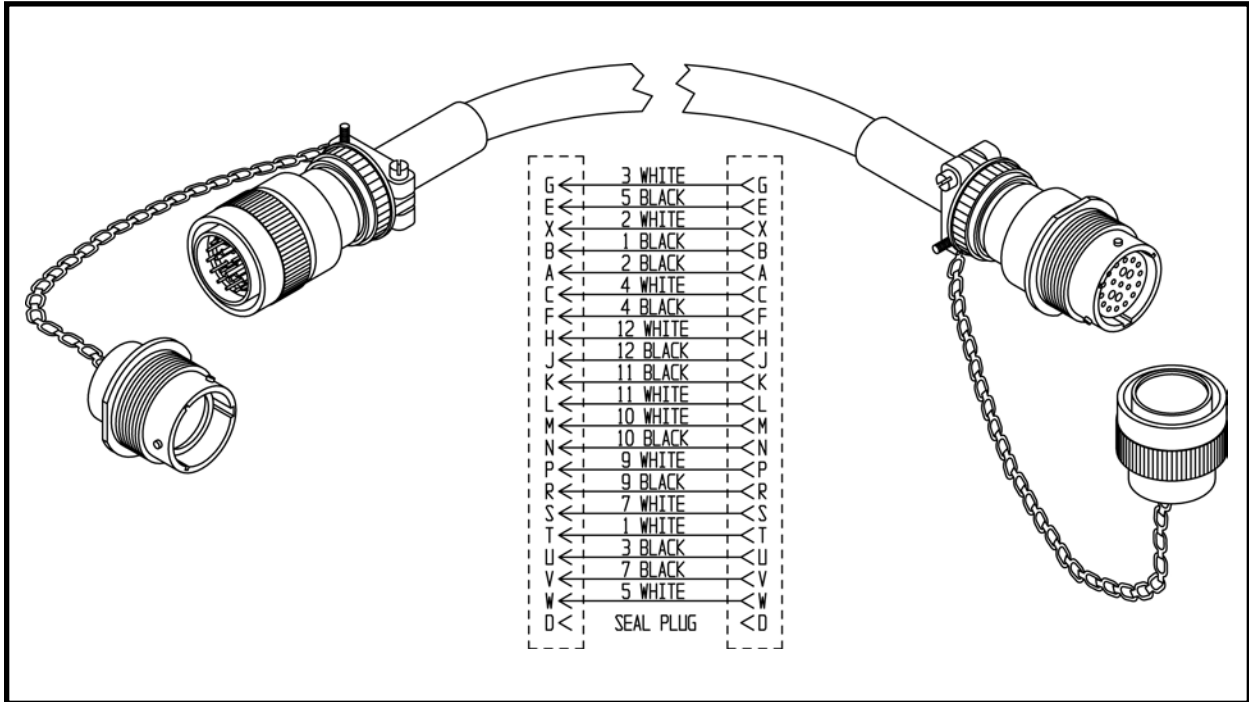
LI - Linear Inch

TUNNEL VALVE OPERATOR STATION ELECTRICAL SCHEMATIC, F23339F00



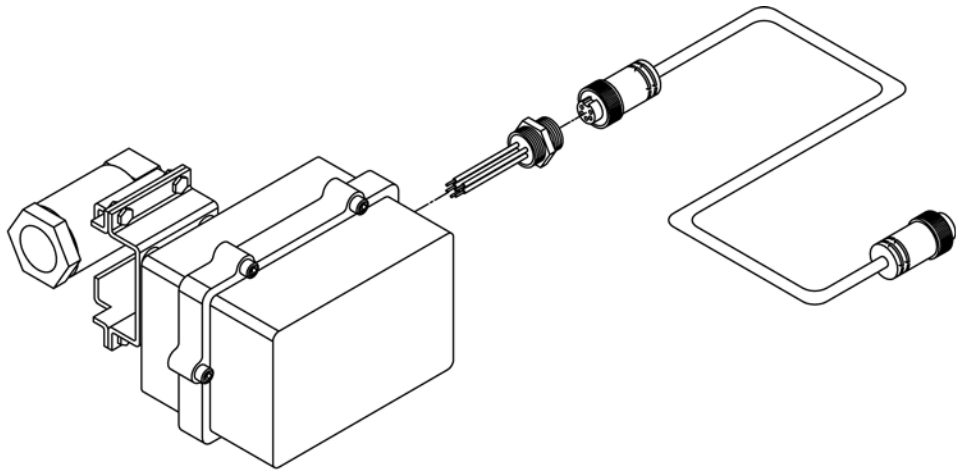
Note: For parts breakdown, refer to Section 11, Miscellaneous.

TUNNEL VALVE CABLE PIN SCHEMATIC, F23340F00 & F23341F00

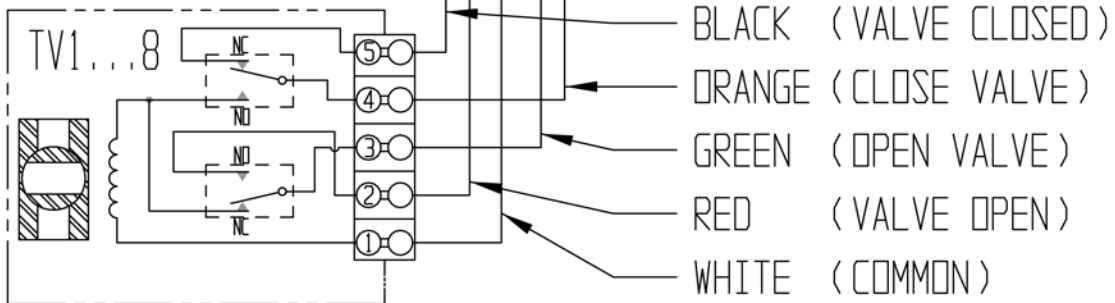
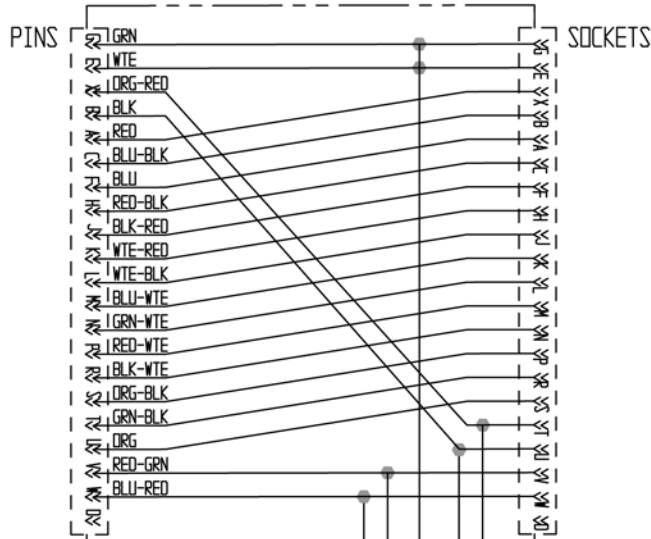


Note: For parts breakdown, refer to Section 11, Miscellaneous.

TUNNEL VALVE ELECTRICAL SCHEMATIC, F23397F00



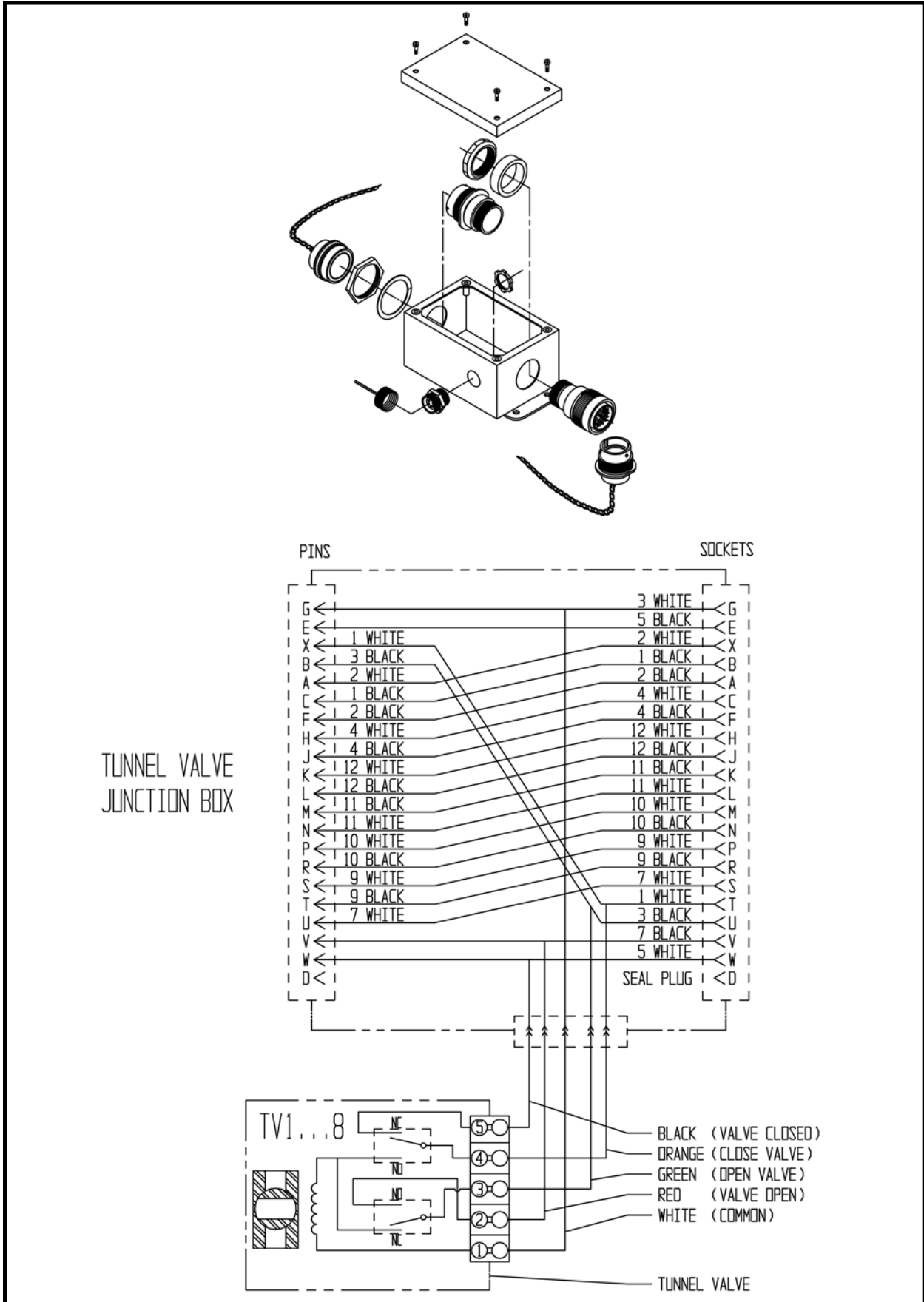
TUNNEL VALVE JUNCTION BOX



TUNNEL VALVE (TOP VIEW)

Note: For parts breakdown, refer to Section 11, Miscellaneous.

TUNNEL VALVE JUNCTION BOX ELECTRICAL SCHEMATIC, F23398F00



Note: For parts breakdown, refer to Section 11, Miscellaneous.

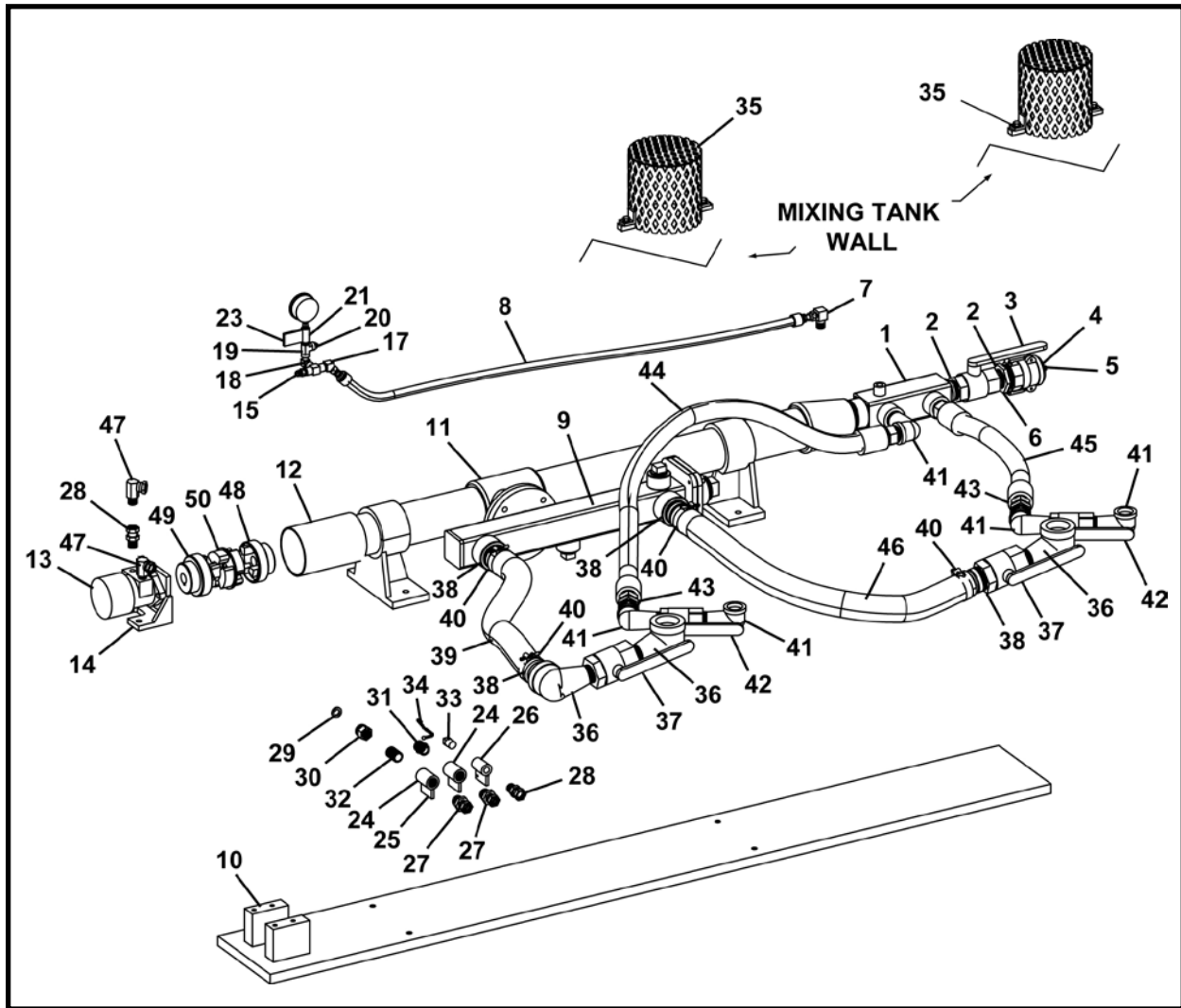
NOTES



Hydraulics

Hydraulics - Under Tank Assembly, 018081A	2
Mixing Tank Hydraulic Assembly, 018070A01	4
Heat Exchanger & Hydraulics Assembly, 018082A	5
Valve Hydraulics Assembly, 018083A	6
Hydraulics Drive Assembly, 018094A	8
Hydraulic Reservoir Assembly, 018014A00	10
Hydraulic Tank Assembly, 018095A	11

HYDRAULICS UNDER TANK ASSEMBLY, 018081A



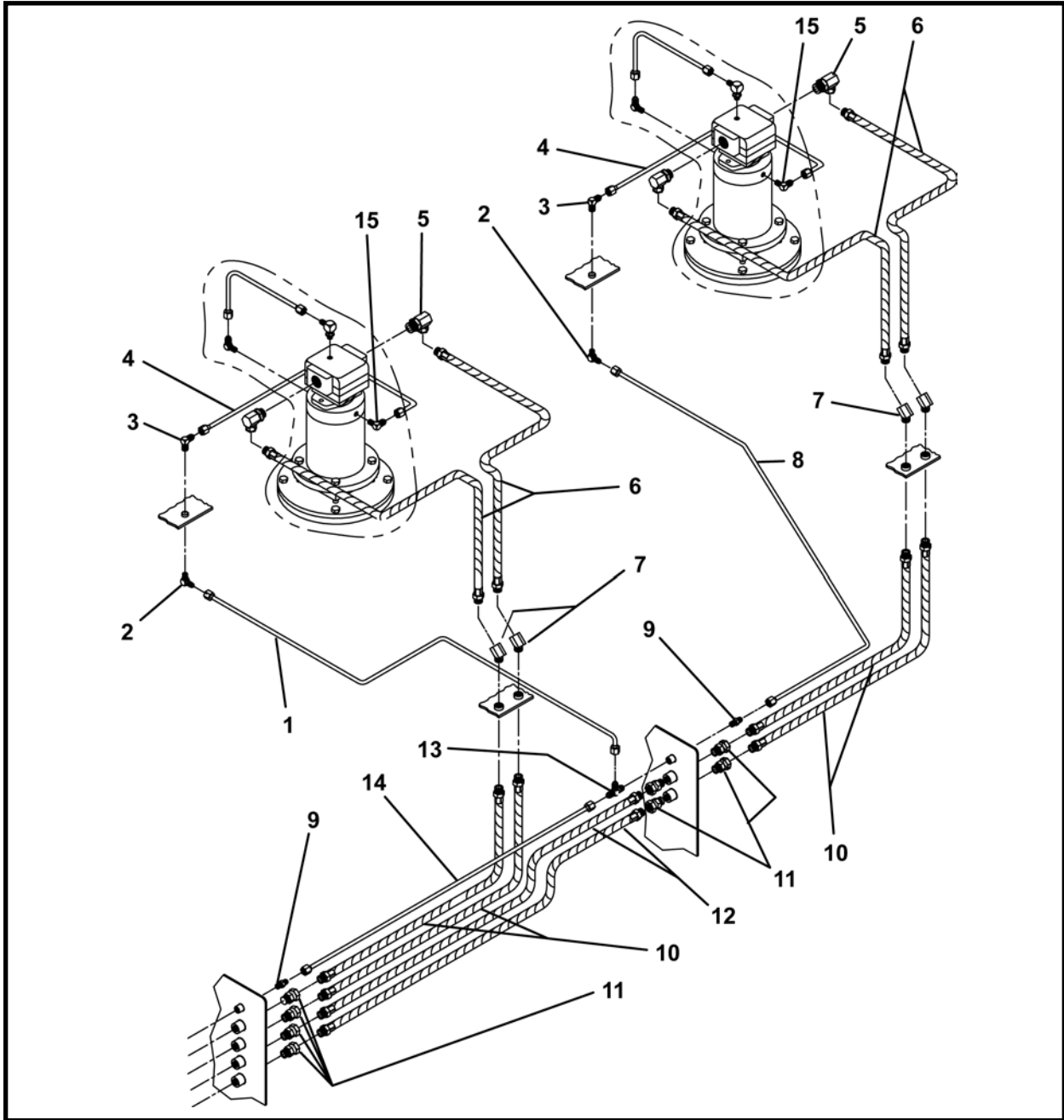
ITEM	QTY	PART NO.	DESCRIPTION
0	1	018081A	ASSEMBLY, Hydraulics Under Tank
1	1	012846A02	MANIFOLD, Discharge
2	2	P0402-007	NIPPLE, Close
3	1	P0302-207	VALVE, Pump Outlet Ball
4	1	P0100-021	SOCKET
5	1	P0100-027	PLUG, Dust
6	1	P0413-012A	BUSHING, Reducer
7	1	P0300-014	FITTING, 06MJ-08MP90
8	1	A10311A-060	ASSEMBLY, Hose 3/8 x 60
9	1	012813A01	ASSEMBLY, Suction Manifold
10	1	018025A00	WELDMENT, Base
11	1	P0303-183	PUMP
12	1	018030A00	WELDMENT, Guard
13	1	P0304-139	MOTOR, Pump Drive
14	1	P0304-142	BRACKET
15	1	P0300-121	FITTING, 06MJ-04MP
16	1	P0300-031	FITTING, 04FP-04FP-04FP

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HYDRAULICS UNDER TANK ASSEMBLY, 018081A

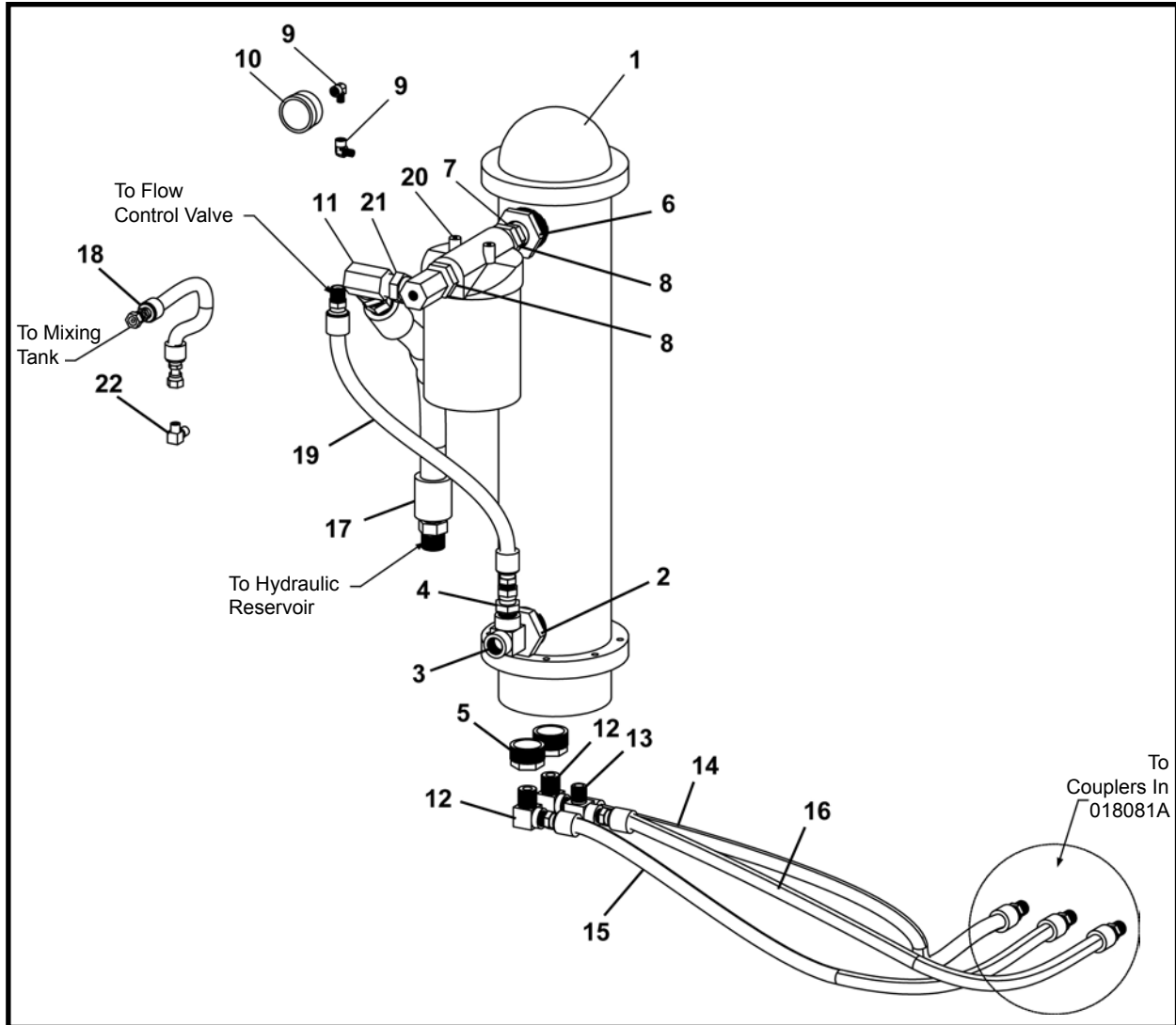
ITEM	QTY	PART NO.	DESCRIPTION
17	1	P0300-119	FITTING, 06MJ-04MP45
18	1	P0300-124	FITTING, 04MP-04MP90
19	1	P0300-275	FITTING, 04MP-04FP-04FP
20	1	P0063-016	FITTING, Grease Straight 1/4
21	1	P0400-001	COUPLING, Pipe
22	1	P0301-110	GAUGE, 600 PSI
23	1	018050P	MOUNT
24	2	P0400-004	COUPLING, Pipe
25	3	018064P	MOUNTING
26	1	P0400-003	COUPLING, Pipe
27	2	P0300-095	FITTING, 12MP-08FPX
28	2	P0300-010	FITTING, 08MP-08FPX
29	1	P0093-005	WASHER, Neoprene
30	1	P0093-004	FITTING, Hose
31	1	P0093-003	FITTING, Hose
32	1	P0406-001	NIPPLE
33	1	P0416-003	PLUG, 1/2" Square Head
34	1	P0100-001C	CHAIN
35	2	012992A00	STRAINER, Angle Suction
36	3	P0412-008A	ELBOW, 90 Degree
37	2	P0302-208	VALVE, Suction Ball
38	4	P0423-001	FITTING
39	1	P0201-159-024	HOSE, Suction
40	4	P0201-180	CLAMP, T-Bolt
41	5	P0412-006A	ELBOW, 90 Degree
42	2	P0302-192	VALVE
43	2	P0300-091	FITTING, 20MP-20FPX
44	1	A10350A-075	ASSEMBLY, Hose 1-1/4
45	1	A10350A-028	ASSEMBLY, Hose 1-1/4
46	1	P0201-159-040	HOSE, Suction
47	2	P0300-018	FITTING, 08MP-08FPX90
48	1	P0305-132A	COUPLERY
49	1	P0305-132B	COUPLER
50	1	P0305-182	INSERT

MIXING TANK HYDRAULIC ASSEMBLY, 018070A01



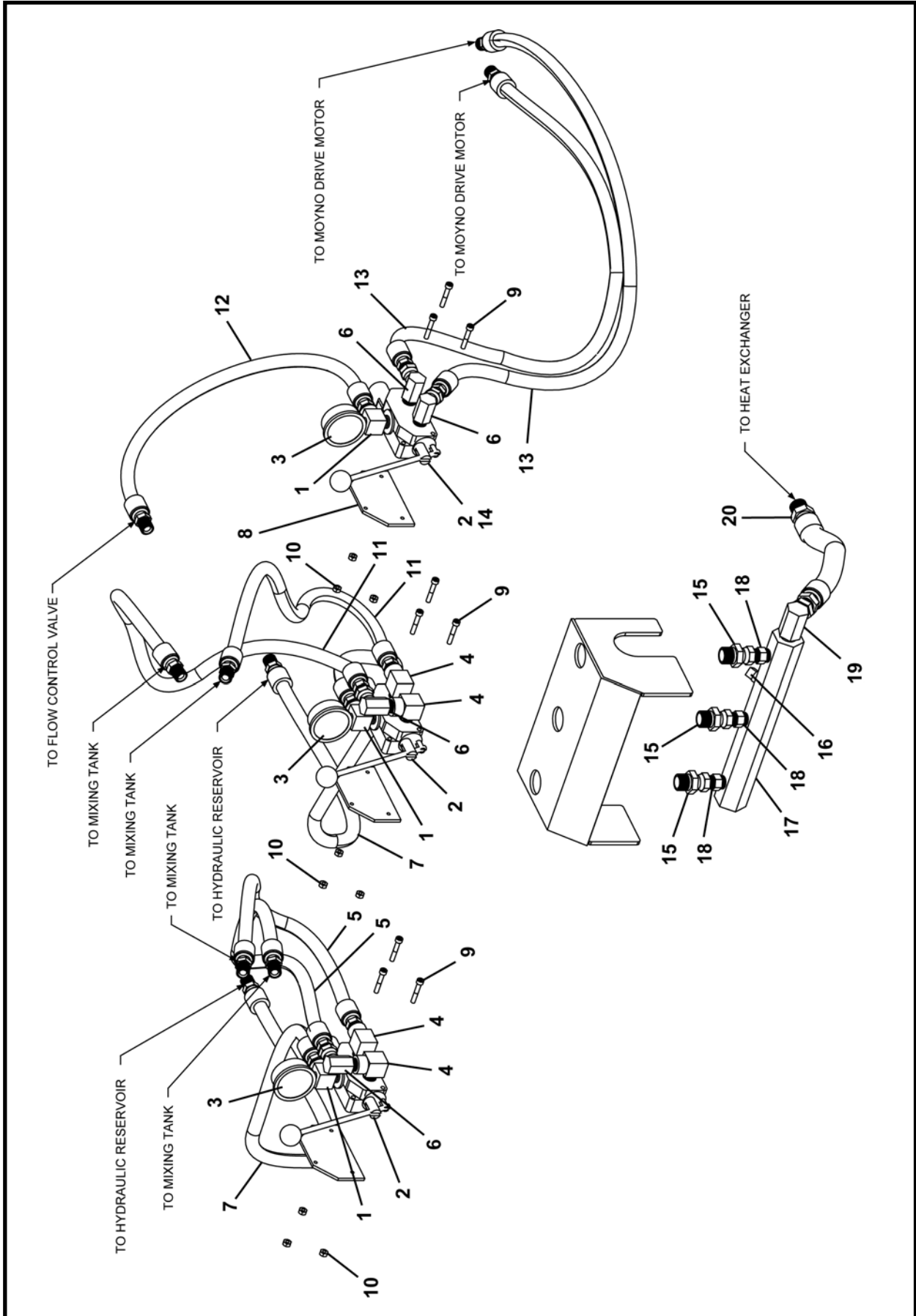
ITEM	QTY	PART NO.	DESCRIPTION
0	1	018070A01	MIXING TANK HYDRAULIC ASSEMBLY
1	1	A10311A-040	ASSEMBLY, Hose 3/8
2	2	P0300-125	FITTING, 06MJ-04MP90
3	2	P0300-119	FITTING, 06MJ-04MP45
4	2	A10311A-017	ASSEMBLY, Hose 3/8
5	4	P0300-198	FITTING, 12MB-08FPX90
6	4	A10345A-015	ASSEMBLY, Hose 1/2
7	4	P0300-029	FITTING, 08MP-08FP45
8	1	A10311A-035	ASSEMBLY, Hose 3/8
9	2	P0300-121	FITTING, 06MJ-04MP
10	4	A10320A-036	ASSEMBLY, Hose 1/2
11	8	P0300-010	FITTING, 08MP-08FPX
12	2	A10320A-040	ASSEMBLY, Hose 1/2
13	1	P0300-132	FITTING, 06MJ-04MP-06MJ
14	1	A10311A-030	ASSEMBLY, Hose 3/8
15	2	P0300-106	FITTING, 06MJ-06MP90

HEAT EXCHANGER & HYDRAULICS ASSEMBLY, 018082A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	018082A	HEAT EXCHANGER & HYDRAULICS ASSEMBLY
1	1	P0093-006	HEAT EXCHANGER
2	1	P0413-009	BUSHING
3	1	P0300-019	FITTING, 12MP-12FP-12FP
4	1	P0300-095	FITTING, 12MP-08FPX
5	2	P0413-006	BUSHING
6	1	P0413-010	BUSHING
7	1	P0300-013	FITTING, 16MP-16MP
8	2	P0300-001	FITTING, 20MP-16FPS
9	2	P0300-175	FITTING, 02MP-02FP90
10	1	P0301-105	GAUGE, Filter Indicator
11	1	P0300-005	FITTING, 16MP-16FPZ90
12	2	P0300-023	FITTING, 12MP-08FP90
13	1	P0300-032	FITTING, 08MP-08FP90
14	1	A10320A-038	ASSEMBLY, Hose 1/2
15	1	A10320A-044	ASSEMBLY, Hose 1/2
16	1	A10320A-050	ASSEMBLY, Hose 1/2
17	1	A10340A-025	ASSEMBLY, Hose 1
18	1	A10311A-030	ASSEMBLY, Hose 3/8
19	1	A10320A-030	ASSEMBLY, Hose 1/2
20	1	P0309-144	HOUSING, Filter
21	1	009651P00	ELBOW
22	1	P0300-125	FITTING, 06MJ-04MP90

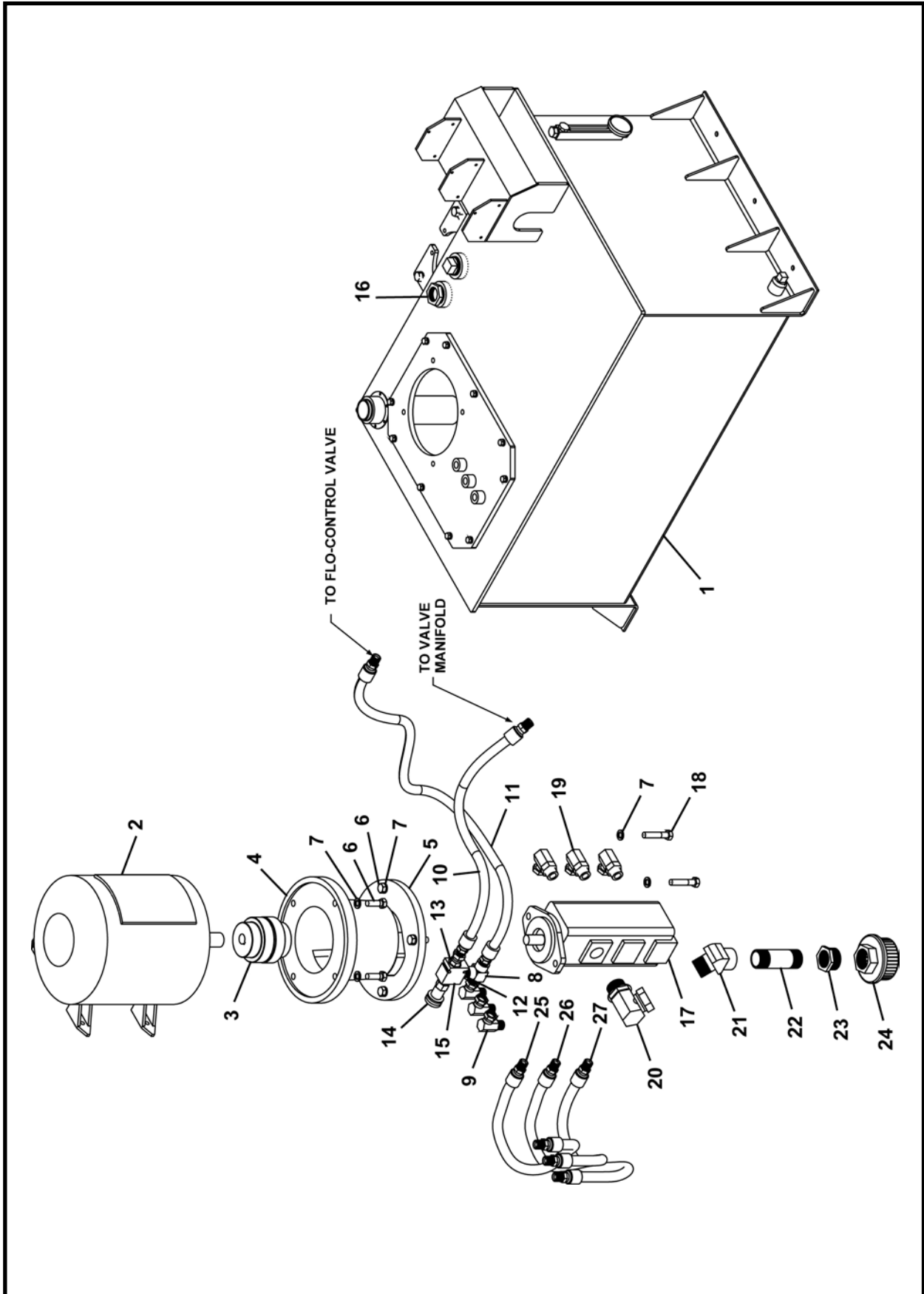
VALVE HYDRAULICS ASSEMBLY, 018083A



VALVE HYDRAULICS ASSEMBLY, 018083A

ITEM	QTY	PART NO.	DESCRIPTION
0	1	018083A	VALVE HYDRAULICS ASSEMBLY
1	3	009657P	FITTING
2	3	P0302-252	VALVE, Four Way Three Position Detent
3	3	P0301-100	GAUGE, 5000 PSI
4	4	P0300-032	FITTING, 08MP-08FP90
5	2	A10320A-044	ASSEMBLY, Hose 1/2
6	4	P0300-018	FITTING, 08MP-08FPx90
7	2	A10320A-026	ASSEMBLY, Hose 1/2
8	3	018036P00	BAR
9	9	P0031-04-006	SCREW, Socket Head Cap 1/4 UNC x 1.5
10	9	P0003-04-000	NUT, 1/4
11	2	A10320A-038	ASSEMBLY, Hose 1/2
12	1	A10320A-036	ASSEMBLY, Hose 1/2
13	2	A10320A-040	ASSEMBLY, Hose 1/2
14	1	023519P	SPACER
15	3	P0300-095	FITTING, 12MP-08FPX
16	1	P0416-003	PLUG
17	1	018033P00	ROD
18	3	P0300-048	FITTING, 08MP-08MP
19	1	P0300-034	FITTING, 12MP-12FPX90
20	1	A10330A-014	ASSEMBLY, Hose 3/4

HYDRAULICS DRIVE ASSEMBLY, 018094A

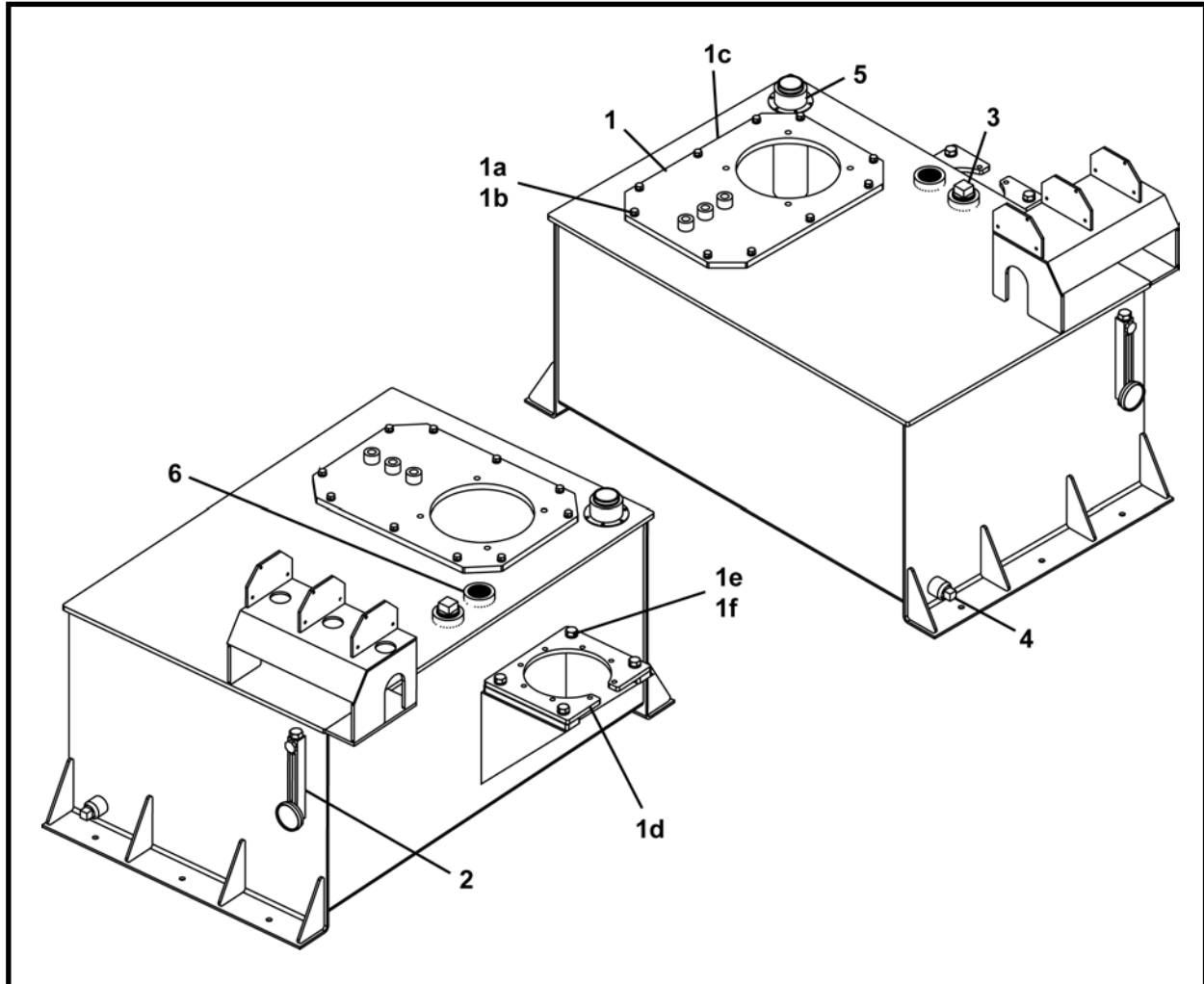


HYDRAULICS DRIVE ASSEMBLY, 018094A

ITEM	QTY	PART NO.	DESCRIPTION
0	1	018094A	HYDRAULICS DRIVE ASSEMBLY
1*	1	018014A00	ASSEMBLY, Hydraulic Reservoir
2	1	P0310-298	MOTOR, 30 HP
3	1	018078A00	ASSEMBLY, Coupling
4	1	P0303-211	MOUNT, Motor
5	1	018022P00	PLATE, Adapter
6	8	P0001-08-006	BOLT, 1/2 UNC x 1.5
7	10	P0045-008	WASHER, Lock 1/2
8	1	P0300-049	FITTING, 08MP-08FP-08FP
9	3	P0300-018	FITTING, 08MP-08FPX90
10	1	A10320A-024	ASSEMBLY, Hose 1/2
11	1	A10320A-028	ASSEMBLY, Hose 1/2
12	1	P0300-206	FITTING, 08MB-08MP
13	1	P0300-220	FITTING, 08MB-08FPX
14	1	P0302-254	VALVE, Pressure Control Relief
15	1	P0302-254A	BODY
16	1	P0413-005	BUSHING
17	1	P0303-210	PUMP, 3 Stage
18	2	P0001-08-010	BOLT, 1/2 UNC x 2.5
19	3	P0300-198	FITTING, 12MB-08FPX90
20	1	P0300-148	FITTING, 20MB-20FPX90-BR
21	1	P0300-110	FITTING, 20MP-20FP45
22	1	P0408-006	NIPPLE
23	1	P0413-008	BUSHING
24	1	P0309-117	SCREEN, Suction
25	1	A10320A-020	ASSEMBLY, Hose 1/2
26	1	A10320A-023	ASSEMBLY, Hose 1/2
27	1	A10320A-026	ASSEMBLY, Hose 1/2

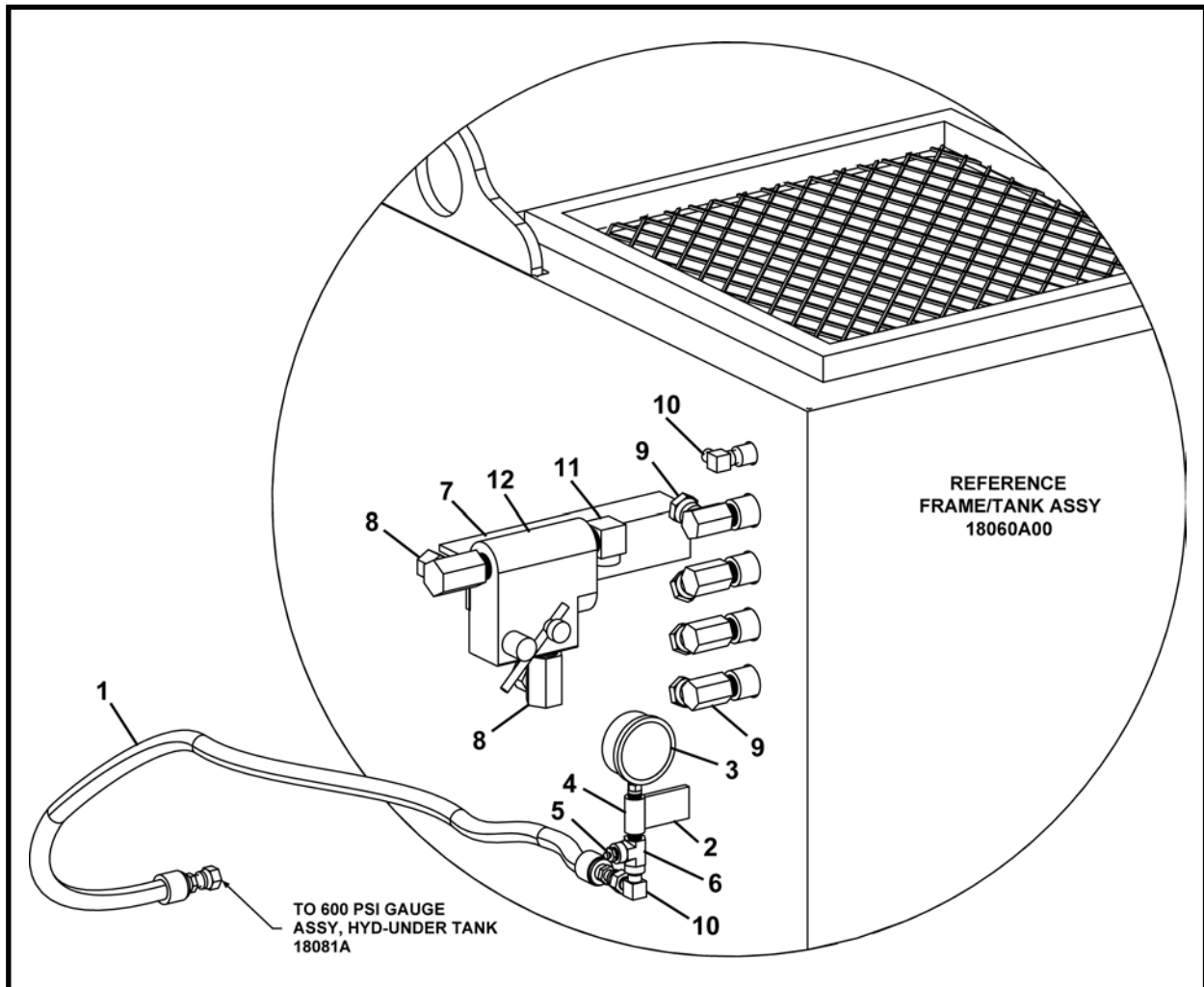
* Refer to this section for parts breakdown.

HYDRAULIC RESERVOIR ASSEMBLY, 018014A00



ITEM	QTY	PART NO.	DESCRIPTION
0	1	018014A00	HYDRAULIC RESERVOIR ASSEMBLY
1	1	018015A00	RESERVOIR, Hydraulic (Includes items 1a - 1f)
1a	10	P0001-05-003	BOLT, 5/16 UNC x .75
1b	10	P0045-005	WASHER, Lock 5/16
1c	1	P0029-010	SEAL, Blue Gasket
1d	1	008032P01	PLATE
1e	4	P0001-08-004	BOLT, 1/2 UNC x 1
1f	4	P0045-008	WASHER, Lock 1/2
2	1	P0301-106	GAUGE, Sight
3	1	P0416-006	PLUG, Square Head 1-1/4
4	1	P0416-004	PLUG, Square Head 3/4
5	1	P0308-100	BREATHER FILTER
6	2	018051P00	PIPE

HYDRAULIC TANK ASSEMBLY, 018095A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	018095A	HYDRAULIC TANK ASSEMBLY
1	1	A10311A-050	ASSEMBLY, Hose 3/8
2	1	018097P	MOUNT
3	1	P0301-110	GAUGE, 600 PSI
4	1	P0400-001	COUPLING 1/4
5	1	P0063-016	FITTING, Grease Straight 1/4
6	1	P0300-275	FITTING, 04MP-04FP-04FP
7	1	A02770P	MOUNT, Valve
8	2	P0300-022	FITTING, 12MP-08FPX90-BR
9	4	P0300-018	FITTING, 08MP-08FPX90
10	2	P0300-125	FITTING, 06MJ-04MP90
11	1	P0300-023	FITTING, 12MP-08FP90
12	1	P0302-111	VALVE, Flow Control

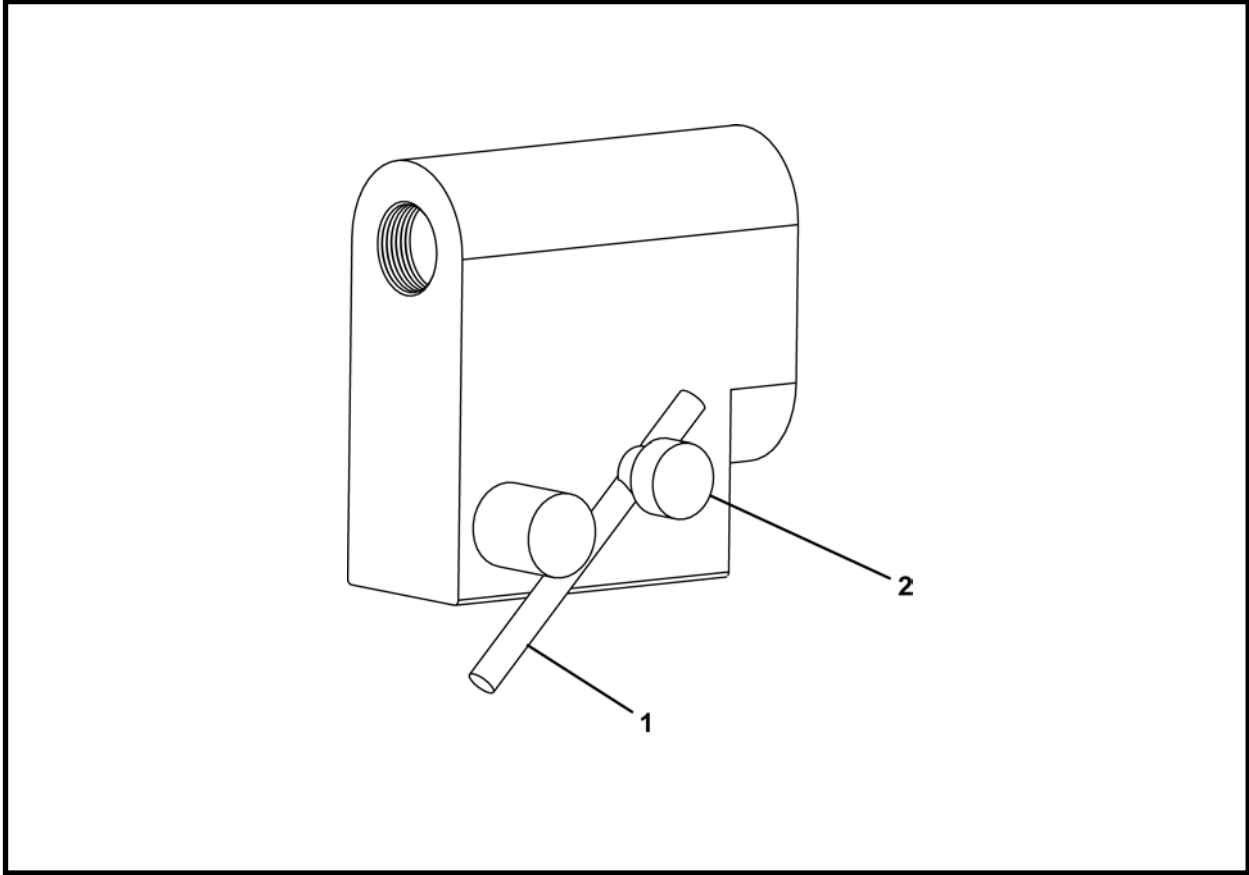
NOTES



Valves

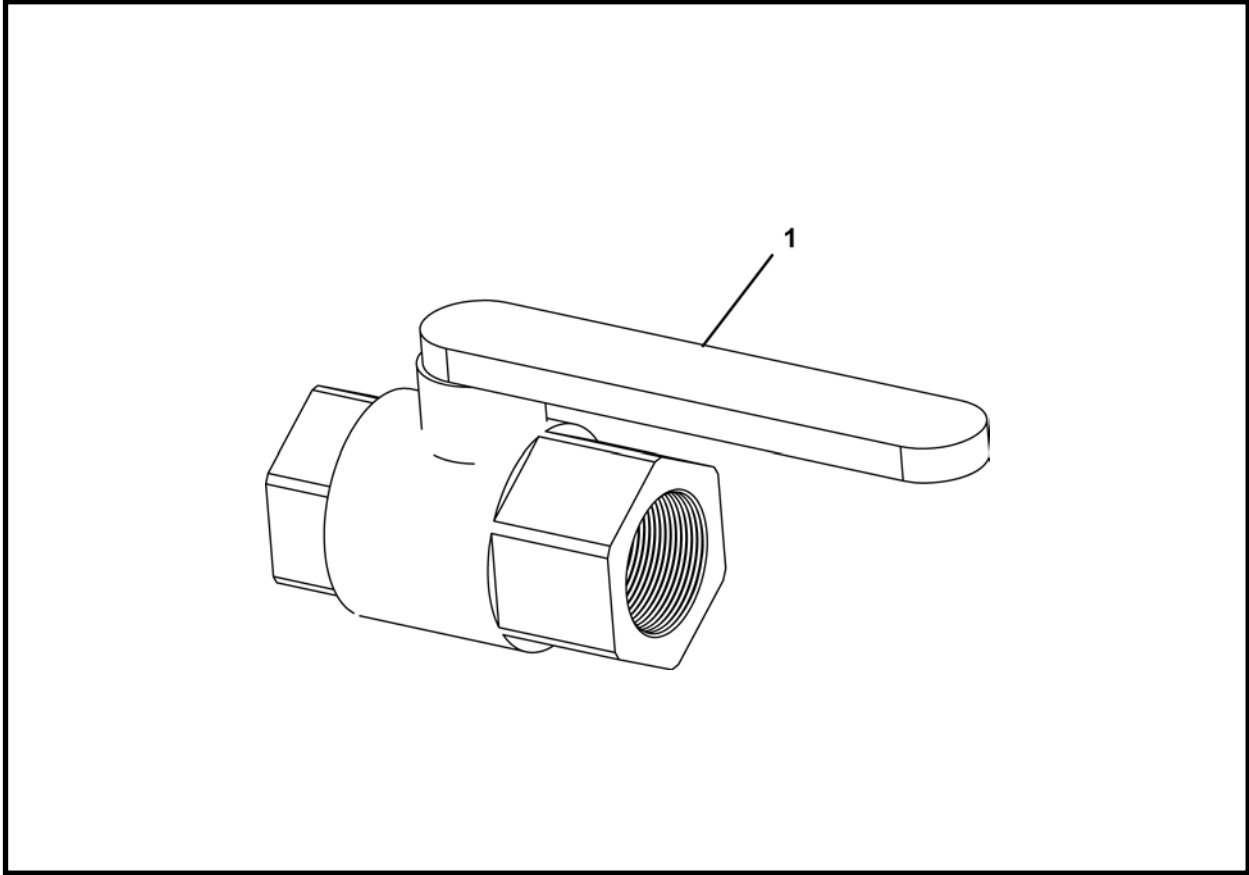
Flow Control Valve, P0302-111	2
Recirculation Ball Valve, P0302-192	3
Pump Outlet Ball Valve, P0302-207	4
Suction Ball Valve, P0302-208	5
Four Way Three Position Valve, P0302-252	6
Pressure Control Relief Valve, P0302-254	7

FLOW CONTROL VALVE, P0302-111



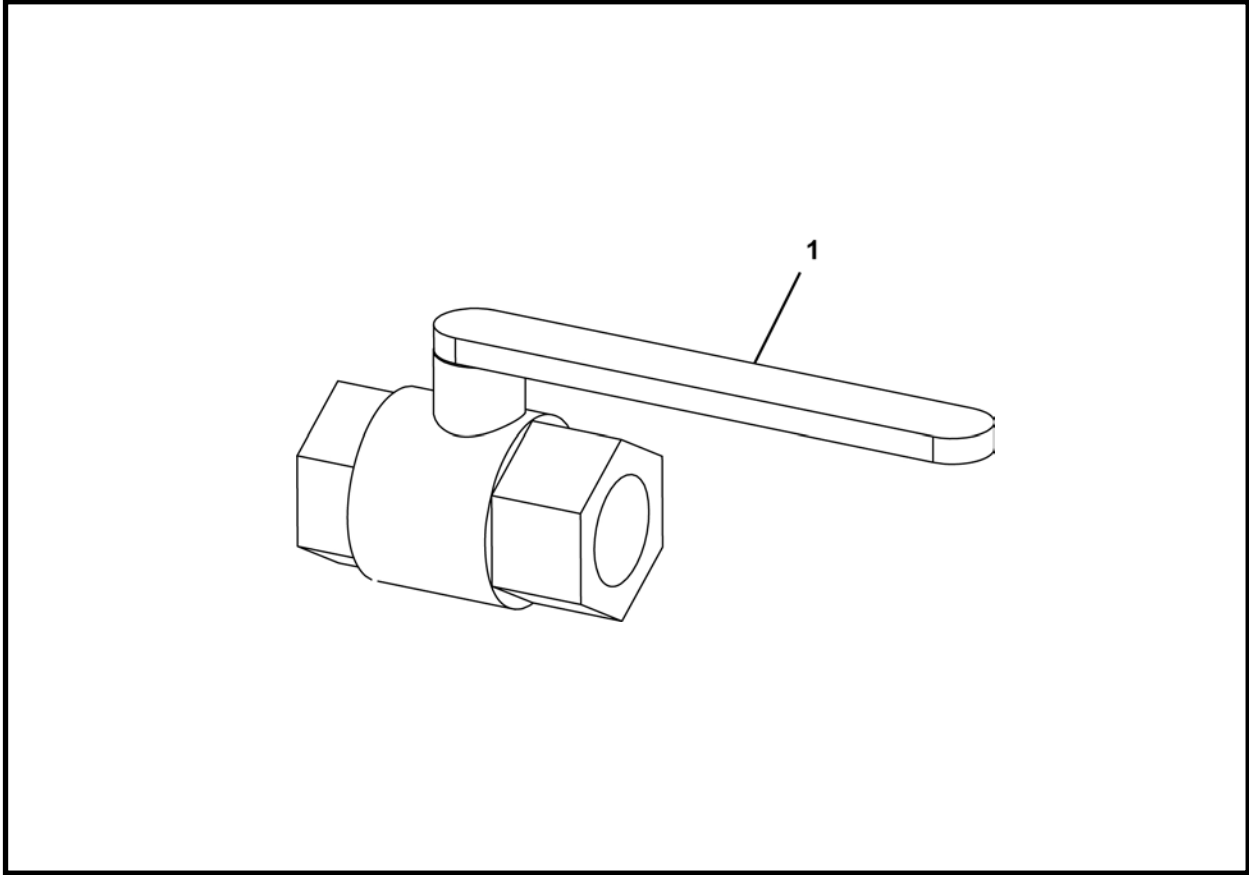
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-111	VALVE, Flow Control
1	1	P0302-111B	HANDLE
2	1	P0302-111C	KNOB

RECIRCULATION BALL VALVE, P0302-192



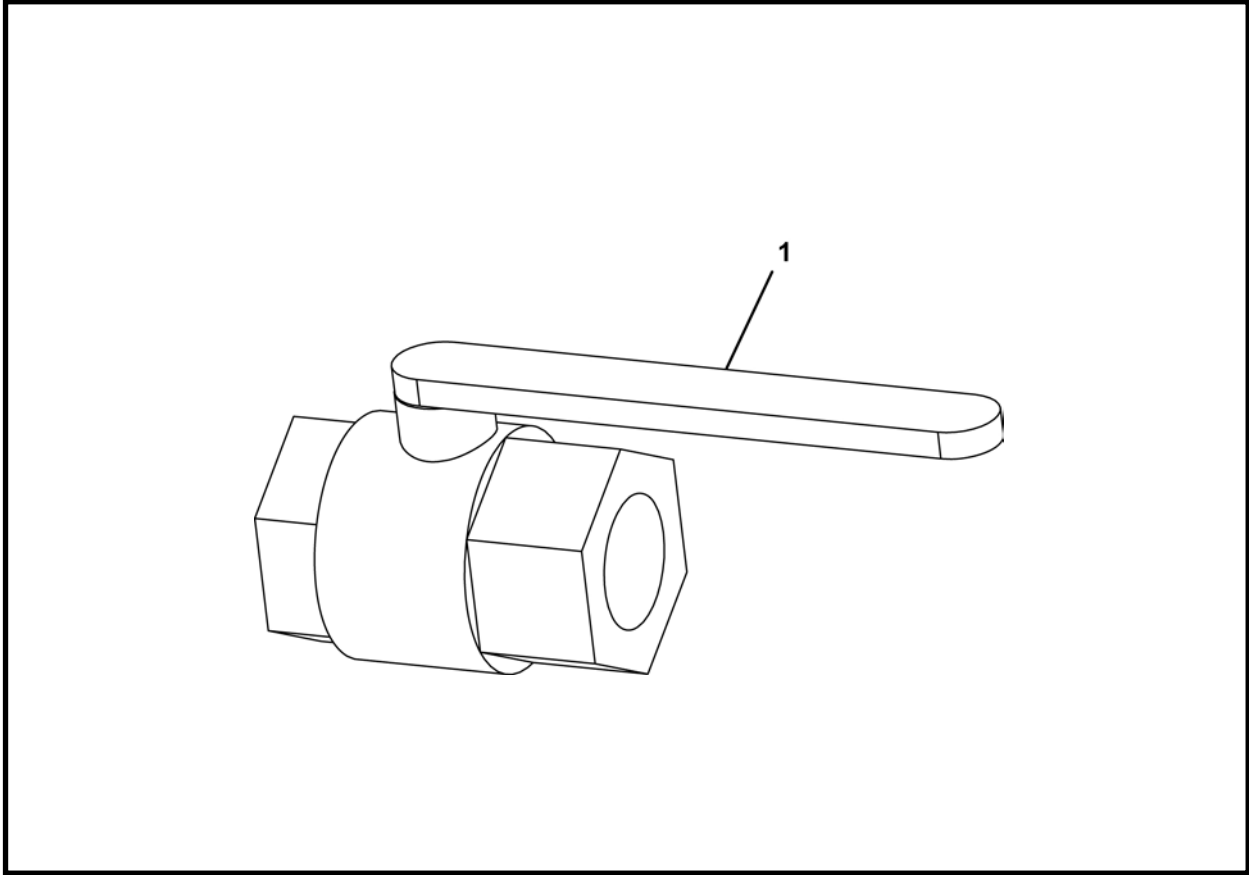
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-192	VALVE, Recirculation Ball
1	1	P0302-192A	HANDLE

PUMP OUTLET BALL VALVE, P0302-207



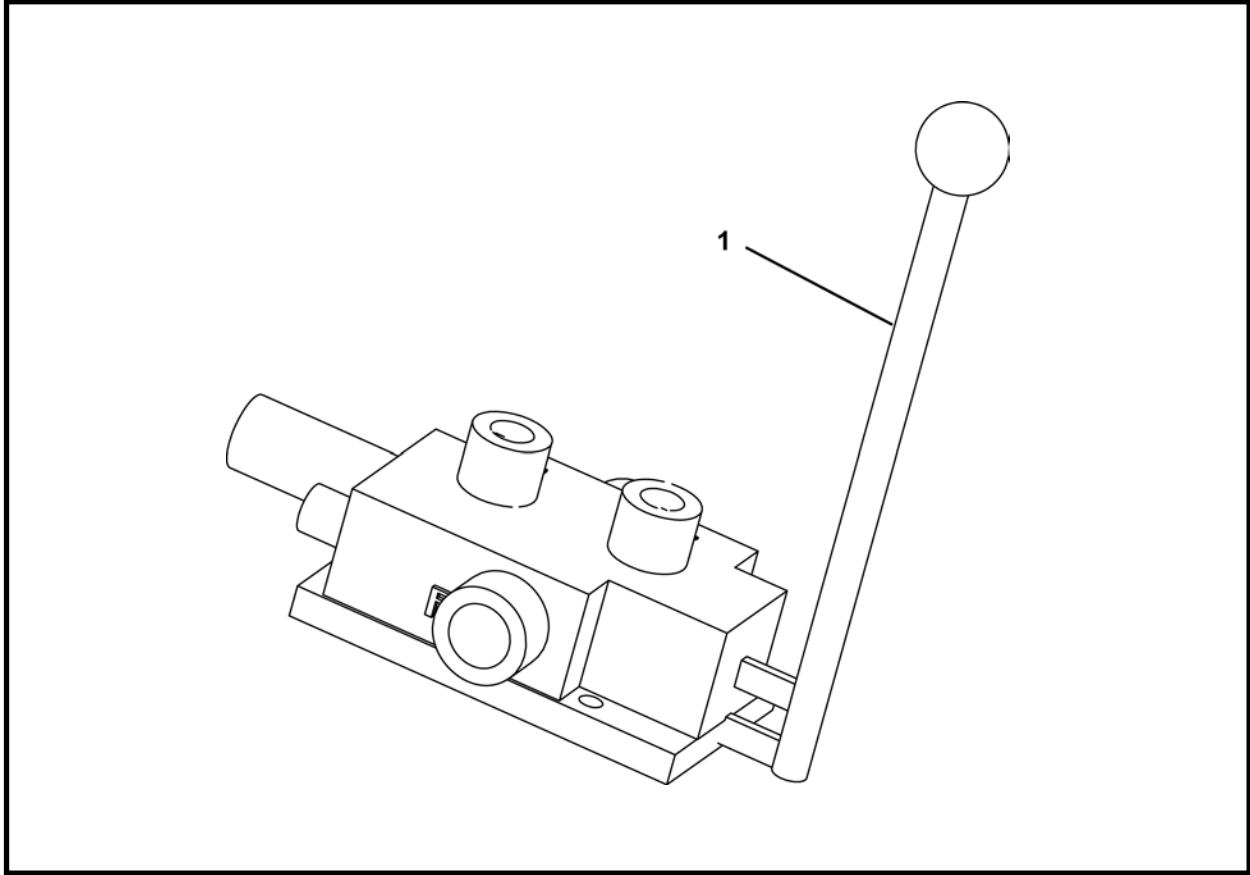
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-207	VALVE, Pump Outlet Ball
1	1	P0302-207B	HANDLE

SUCTION BALL VALVE, P0302-208



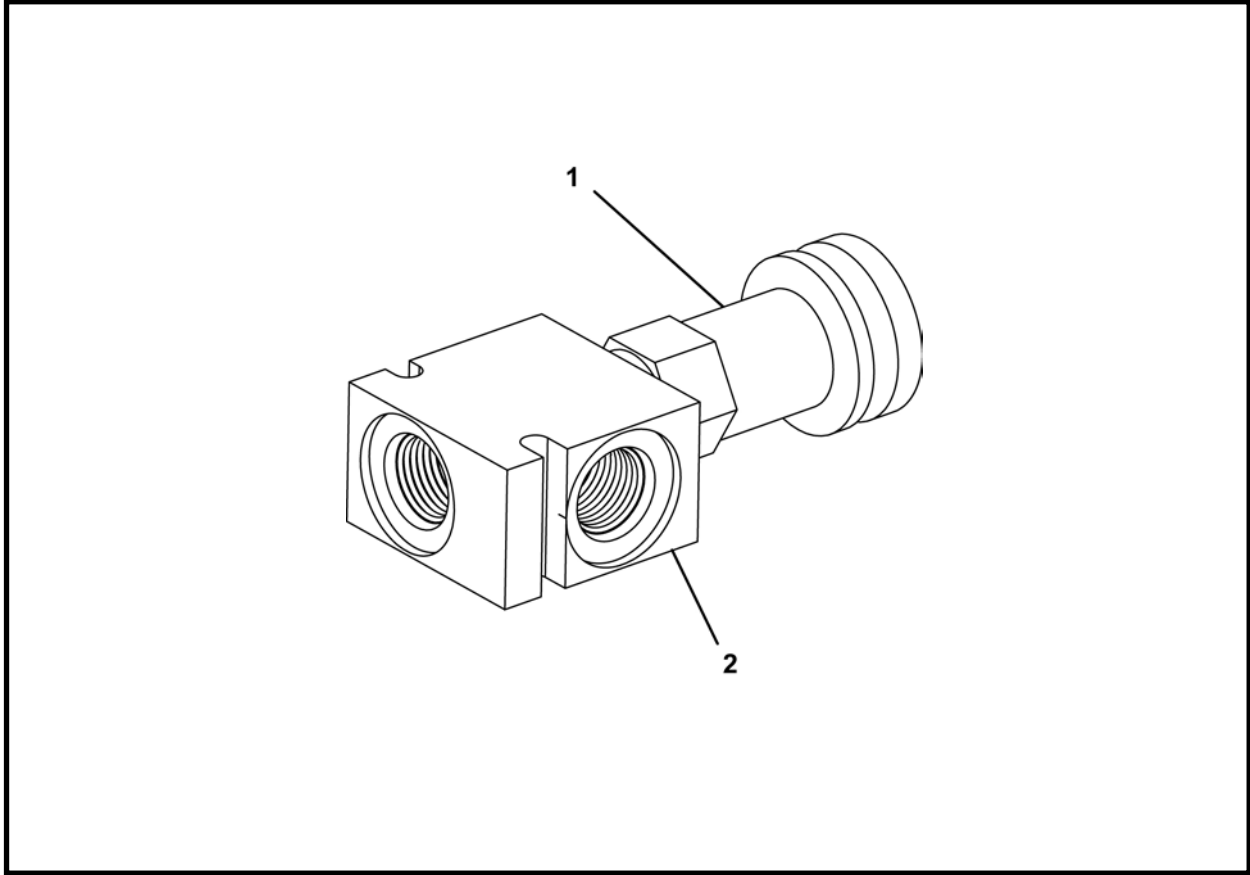
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-208	VALVE, Suction Ball
1	1	P0302-208A	HANDLE

FOUR WAY THREE POSITION DETENT VALVE, P0302-252



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-252	VALVE, Four Way Three Position Detent
1	1	P0302-207B	HANDLE & KNOB

PRESSURE CONTROL RELIEF VALVE, P0302-254



ITEM	QTY	PART NO.	DESCRIPTION
1	1	P0302-254	VALVE, Pressure Control Relief
2	1	P0302-254A	BODY

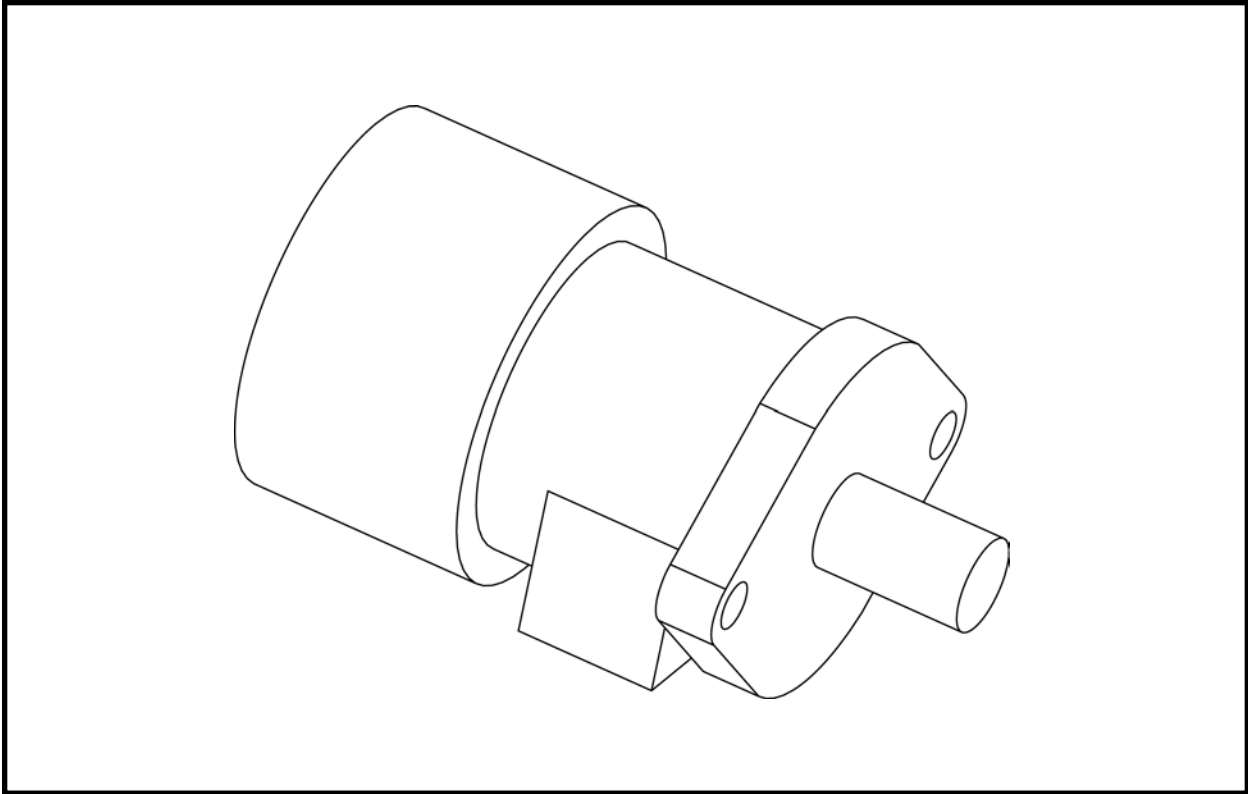
NOTES



Motors

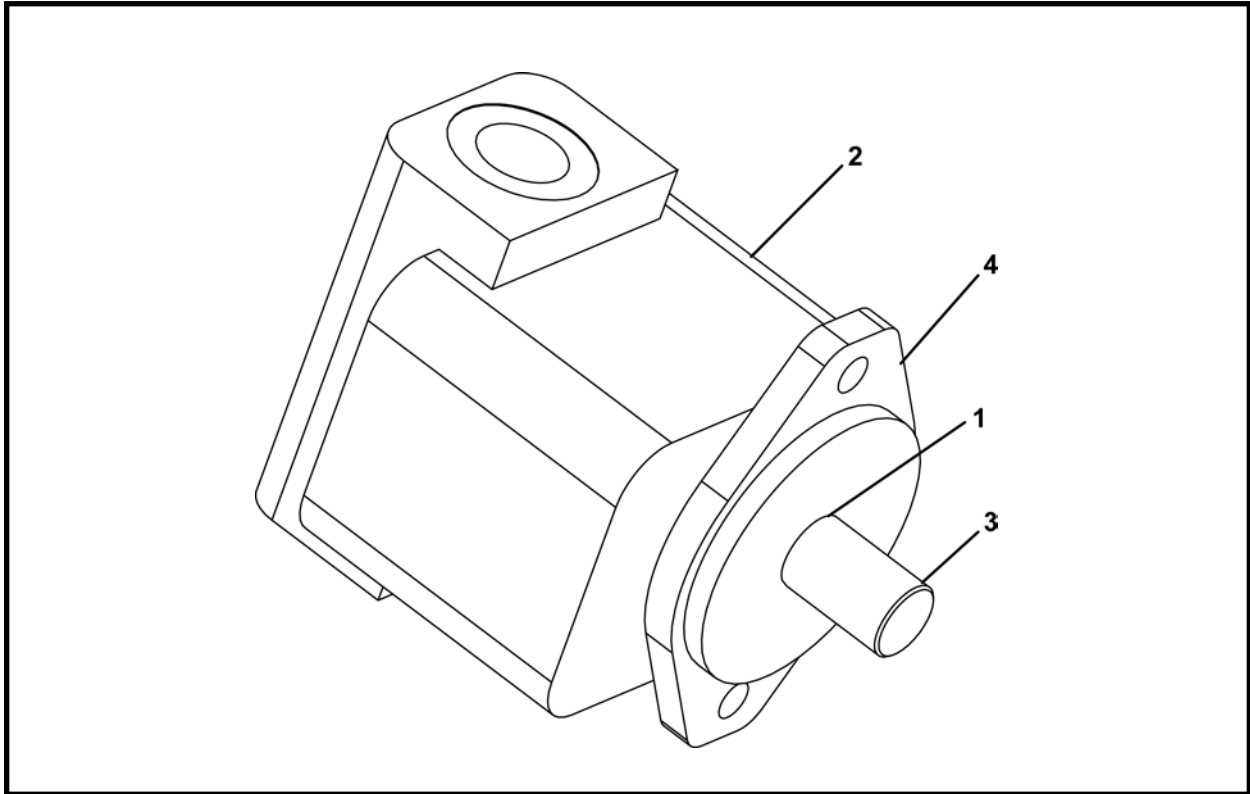
Pump Drive Motor, P0304-139	2
Mixer Drive Motor, P0304-141	3
30 HP Electric Motor, P0310-298	4

PUMP DRIVE MOTOR, P0304-139



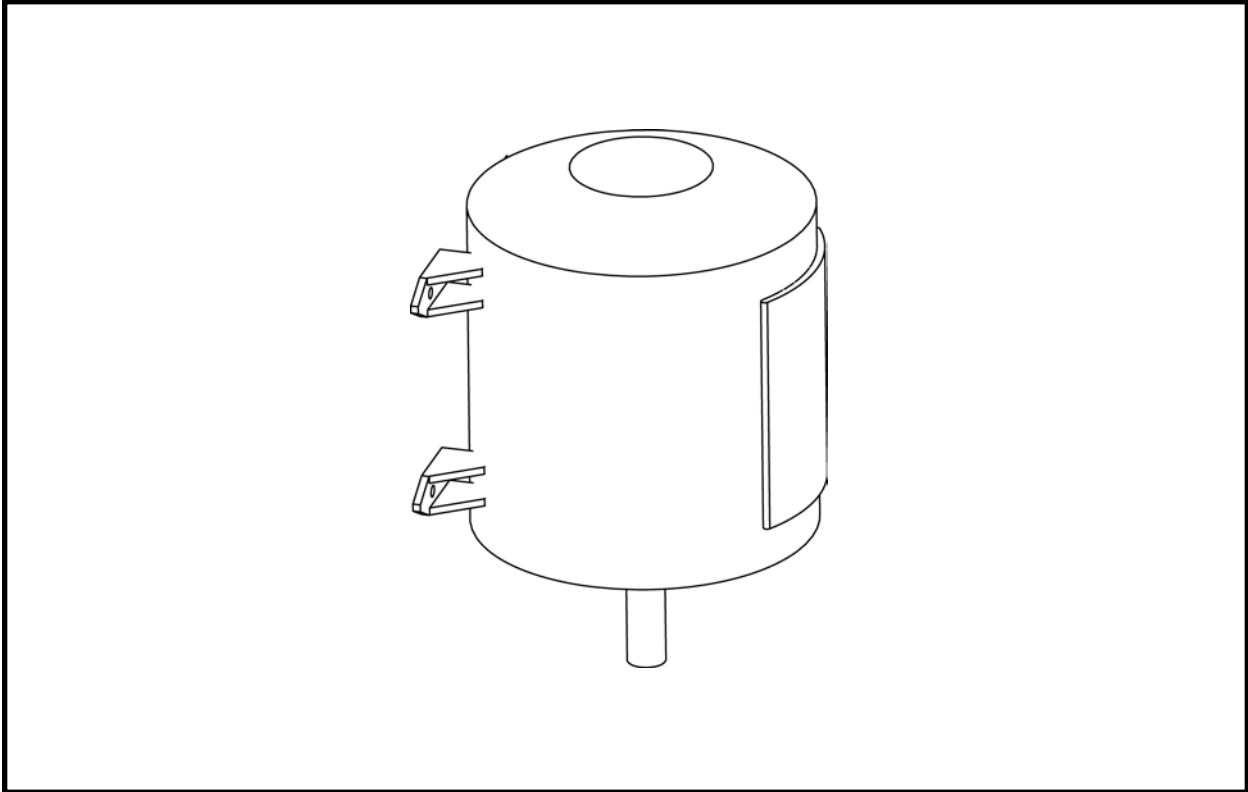
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0304-139	MOTOR, Pump Drive

MIXER DRIVE MOTOR, P0304-141



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0304-174	MOTOR
1	1	P0304-141A	SEAL, Shaft
2	1	P0304-141B	HOUSING
3	1	P0304-141C	SHAFT, Output
4	1	P0304-141D	FLANGE, Mounting
5	1	P0304-141F	KIT, Seal (Not Shown)

30 HP ELECTRIC MOTOR, P0310-298



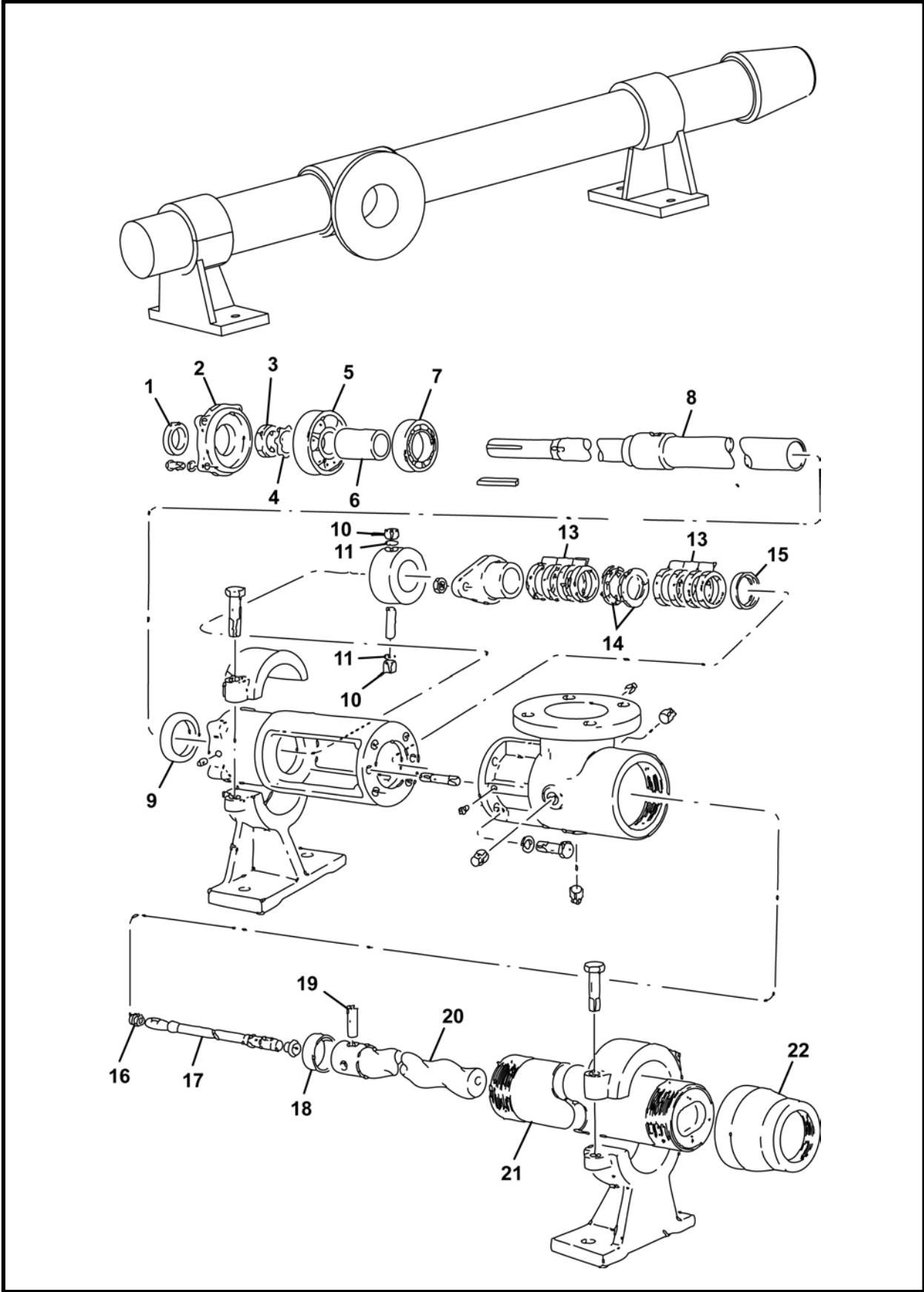
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0310-298	MOTOR, Electric 30 HP



Pumps

Single Screw Rotary Pump, P0303-183	2
Three Stage Pump, P0303-210	4

SINGLE SCREW ROTARY PUMP, P0303-183



SINGLE SCREW ROTARY PUMP, P0303-183

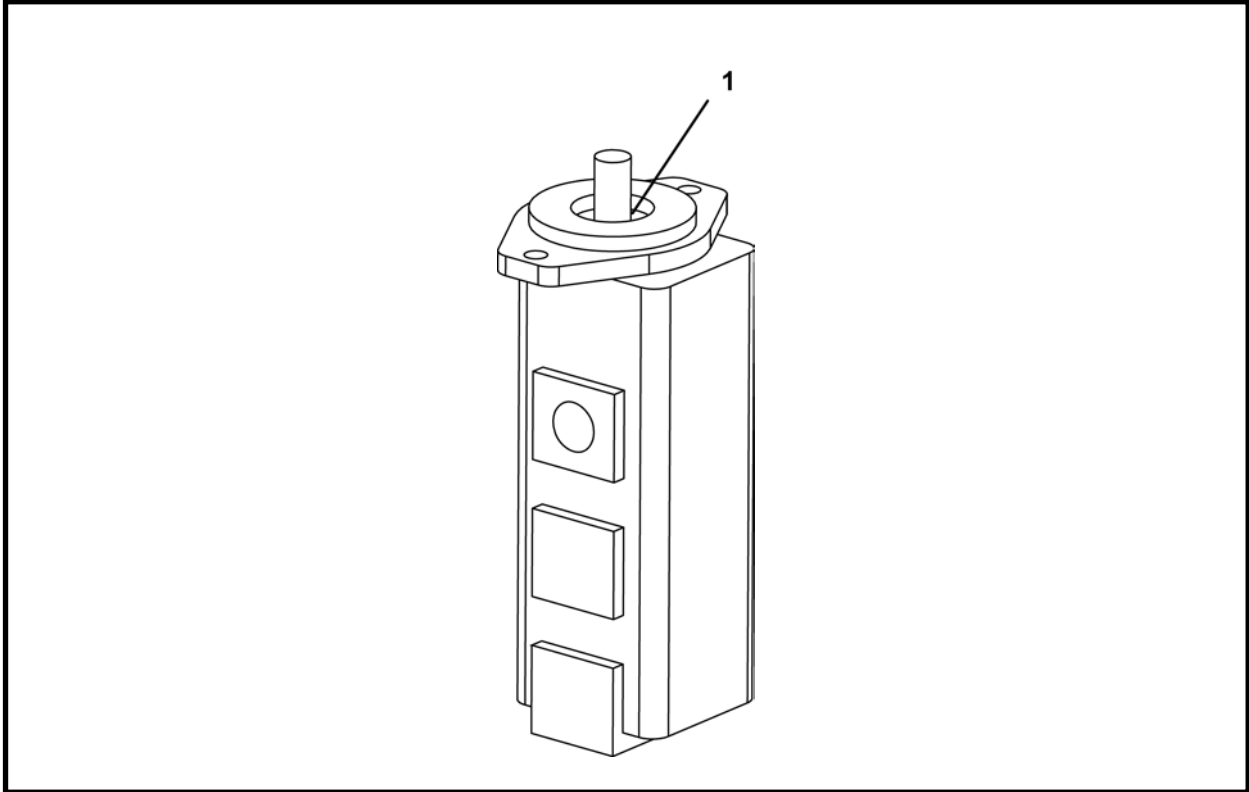
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-183	PUMP
1*	1	P0303-183I	SEAL
2	1	P0303-183G	PLATE, Bearing Cover
3*	1	-	NUT, Bearing Lock
4*	1	-	WASHER, Bearing Lock
5*	1	-	BEARING, Ball
6*	1	-	BEARING, Spacer
7*	1	-	BEARING, Ball
8	1	P0303-196	SHAFT, Drive
9*	1	P0303-183H	SEAL, Grease
10**	2	P0303-183D	SCREW, Pin Retaining
11**	2	P0303-183E	WASHER, Pin Retaining
12**	1	P0303-183C	PIN, Shaft
13	2	P0303-202	SET, Packing
14	2	P0303-183B	RING, Half
15	1	P0303-203	WASHER, Packing
16**	1	-	WASHER, Connecting
17**	1	-	ROD, Connecting
18	1	P0303-200	PIN, Retainer
19**	1	P0303-201	PIN, Rotor
20	1	P0303-205	ROTOR
21	1	P0303-204	STATOR
22	1	P0303-225	REDUCER

NOTE:

* Bearing Kit, P0303-221 includes items 1, 3, 4, 5, 6, 7, and 9

**Pump Kit, P0303-195 includes items 10, 11, 12, 16, 17, and 19

THREE STAGE PUMP, P0303-210



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-210	THREE STAGE PUMP
1	1	P0303-210A	SEAL, Shaft



Cylinders

Does Not Apply To The Bentonite Pump

NOTES



Miscellaneous

Supply Line

Bentonite Supply Line (2 In x 10.5 Ft), F13044F00	2
Bentonite Supply Line (2 In x 9.5 Ft), F13053F00	3
Bentonite Line Assembly (1 In x 10 Ft), F13055F00	4

Supply Hose

Bentonite Supply Hose (2 In x 50 Ft), F13045F00	5
Bentonite Supply Hose (2 In x 4 Ft), F13048F00	6

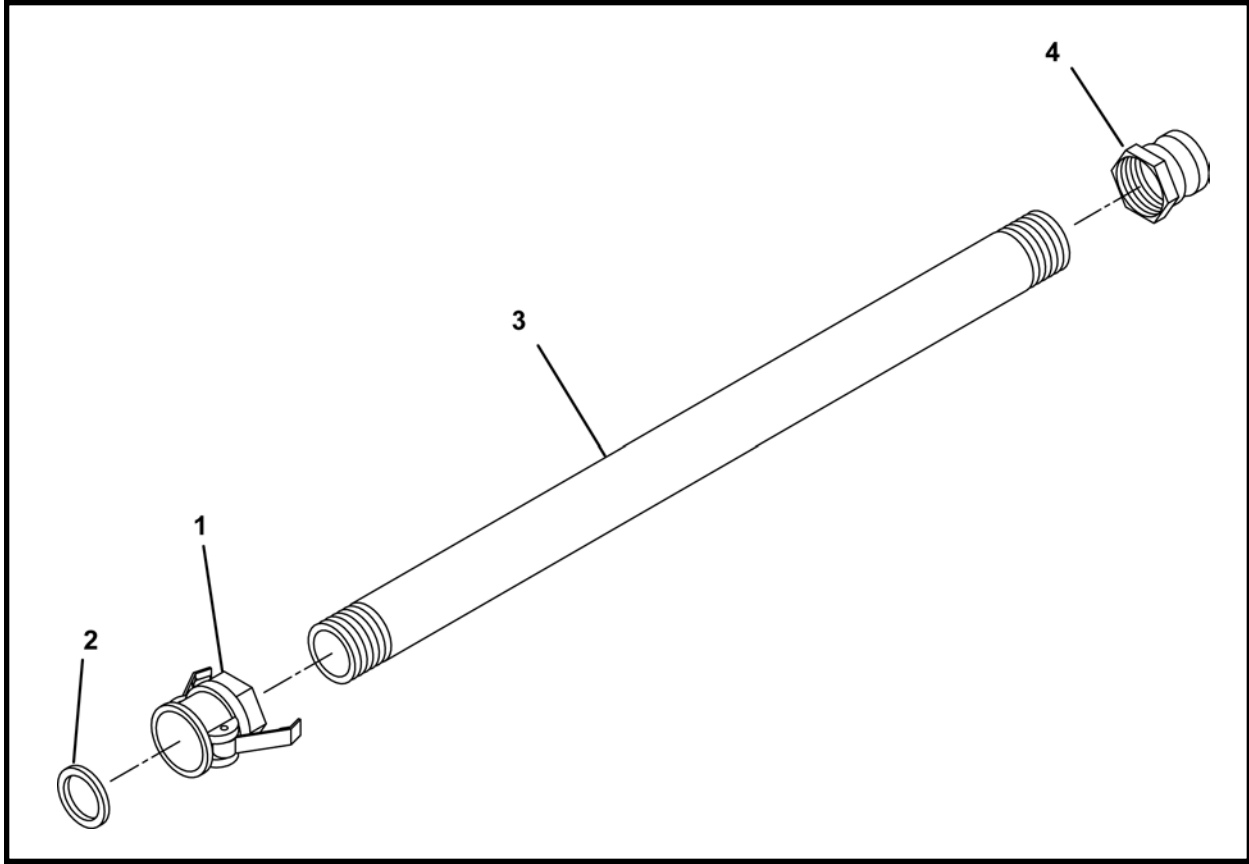
Tunnel Valve

Tunnel Valve Operator Station, F23339F00	7
Tunnel Valve Cable - 50 Feet, F23340F00	8
Tunnel Valve Cable - 100 Feet, F23341F00	9
Tunnel Valve, F23397F00	10
Tunnel Valve Junction Box, F23398F00	11

Injection System

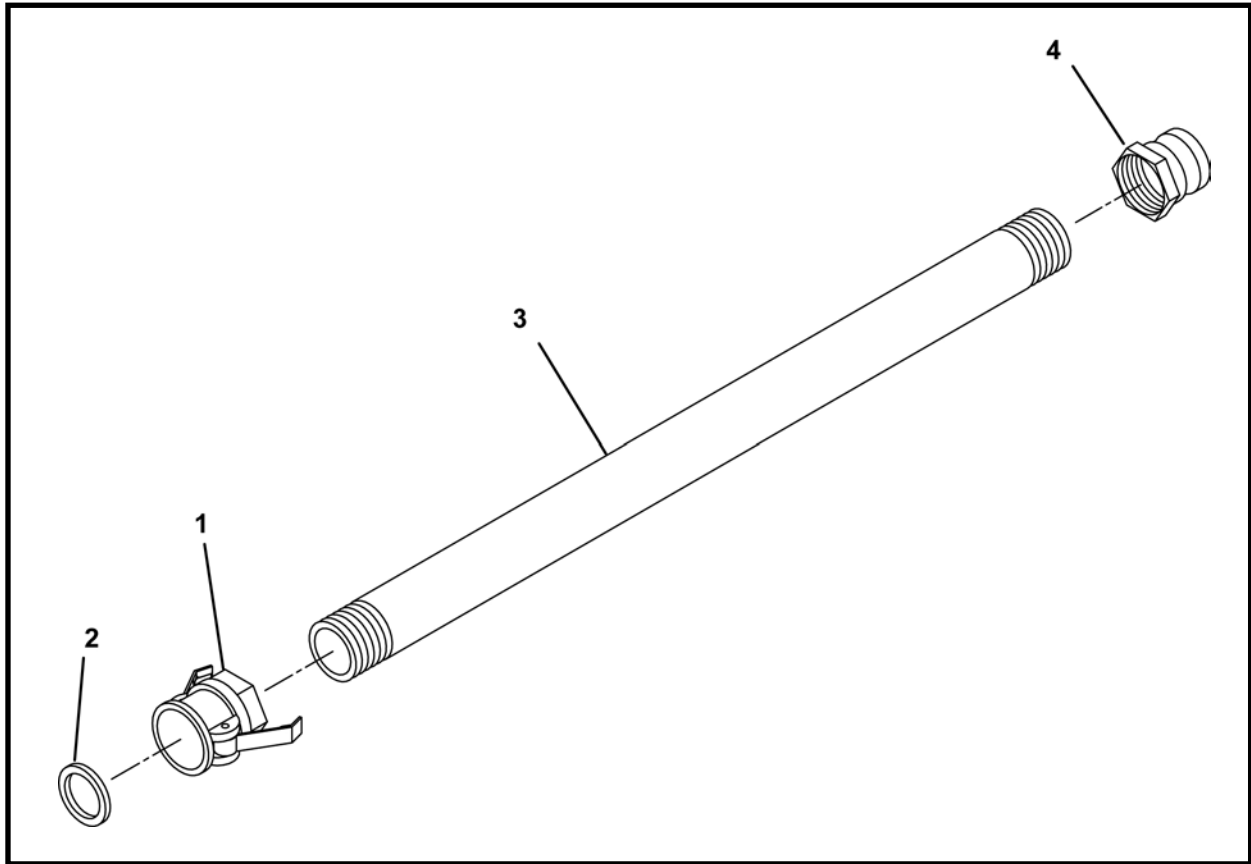
Three Point Bentonite Injection System, F13057F00	12
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BENTONITE SUPPLY LINE, F13044F00
(2 IN x 10.5 FT)



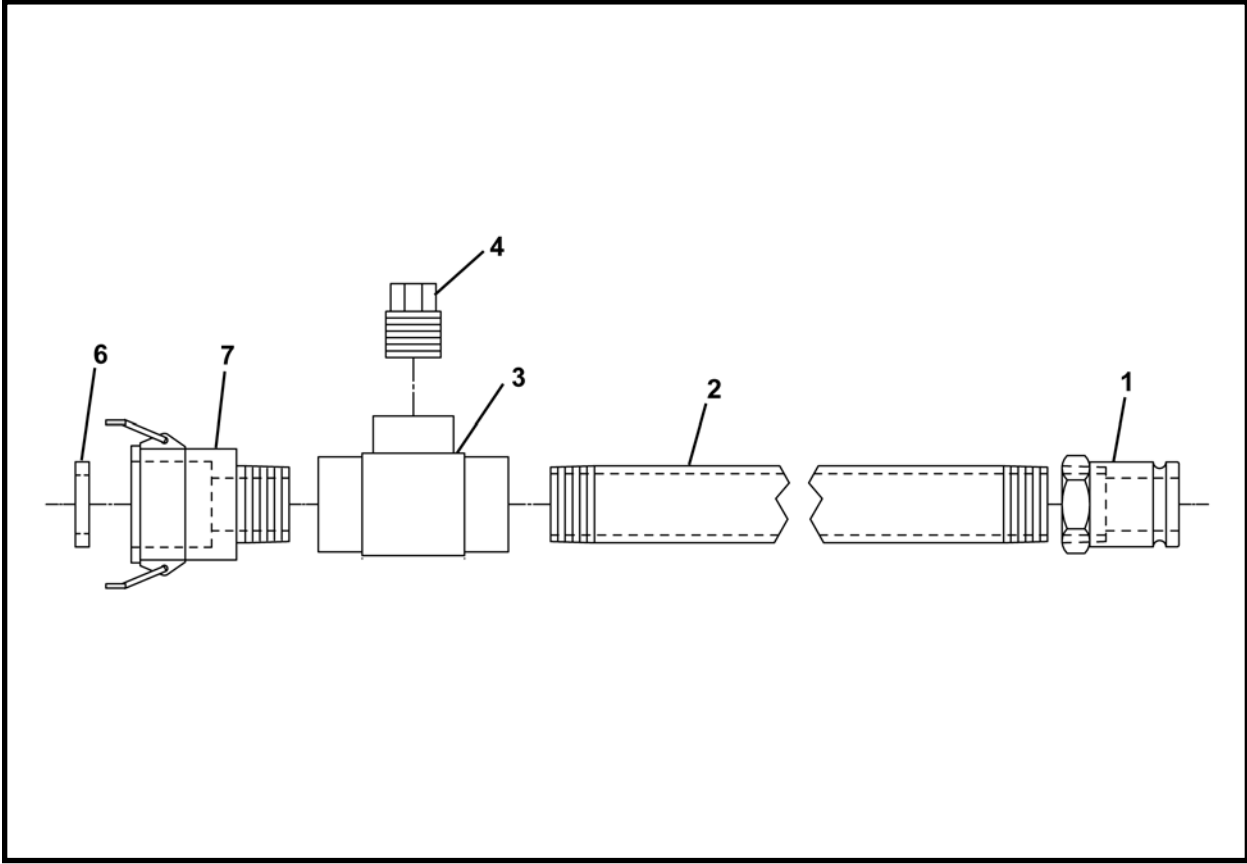
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F13044F00	BENTONITE SUPPLY LINE
1	1	P0100-021	COUPLER, Camlock With Gasket (Includes item 2)
2	1	P0100-025	GASKET
3	1	013043P00	PIPE, 2" x 126"
4	1	P0100-022	PLUG

**BENTONITE SUPPLY LINE, F13053F00
(2 IN x 9.5 FT)**



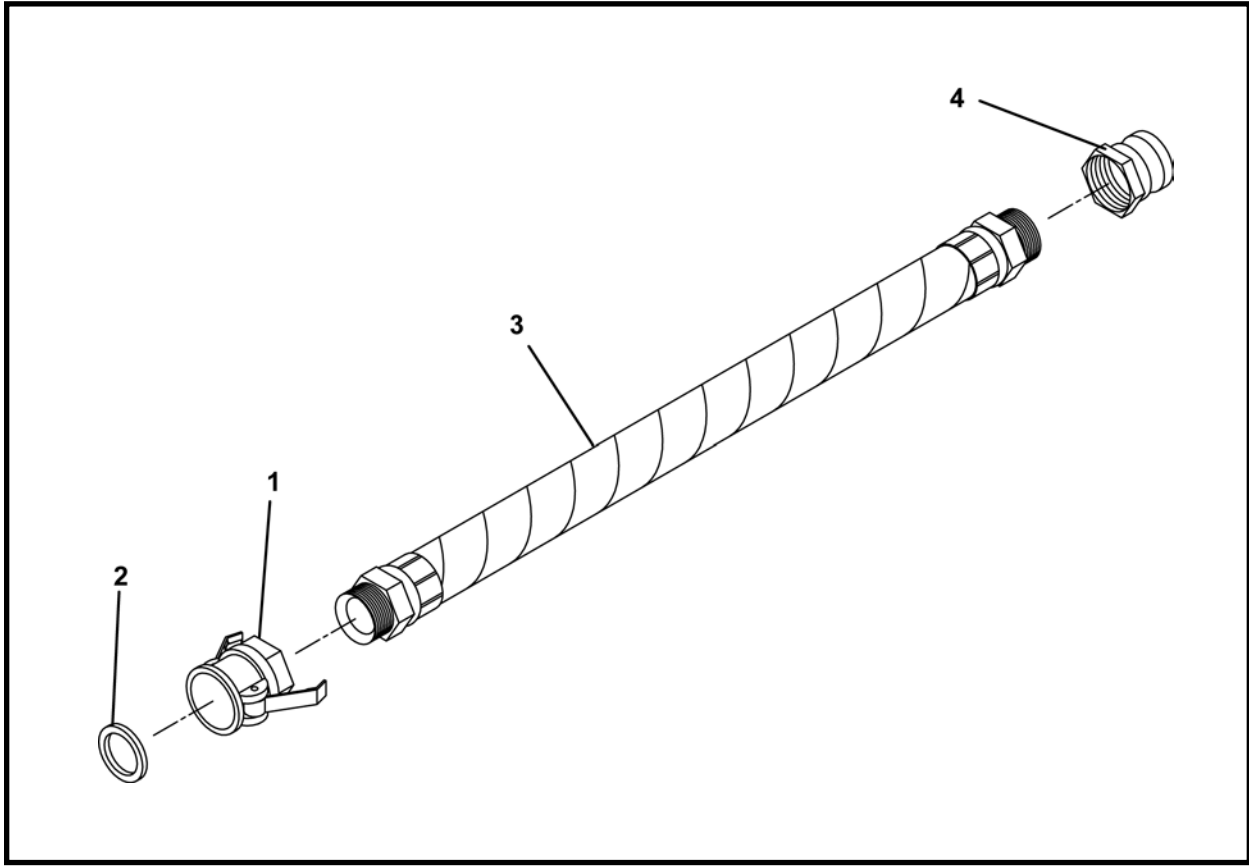
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F13053F00	BENTONITE SUPPLY LINE
1	1	P0100-021	COUPLER, Camlock With Gasket (Includes item 2)
2	1	P0100-025	GASKET
3	1	013052P00	PIPE, 2" x 114"
4	1	P0100-022	PLUG

BENTONITE LINE ASSEMBLY, F13055F00
(1 IN x 10 FT)



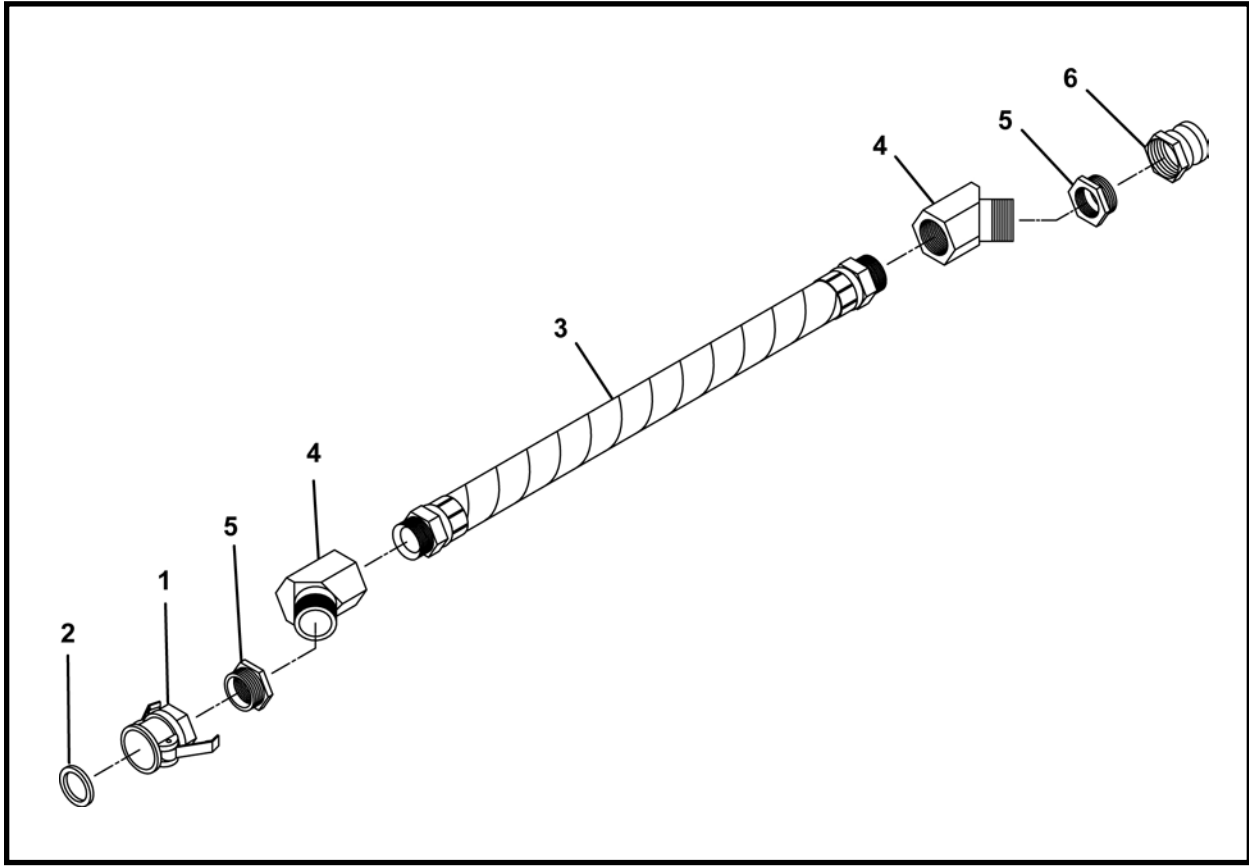
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F13055F00	BENTONITE LINE ASSEMBLY
1	1	P0100-024	PLUG
2	1	013054P00	PIPE, 1" x 115"
3	1	P0410-005B	TEE
4	1	P0416-004	PLUG
5	1	P0100-023	COUPLER, Camlock With Gasket (Includes item 6)
6	1	P0100-026	GASKET

**BENTONITE SUPPLY HOSE, F13045F00
(2 IN x 50 FT)**



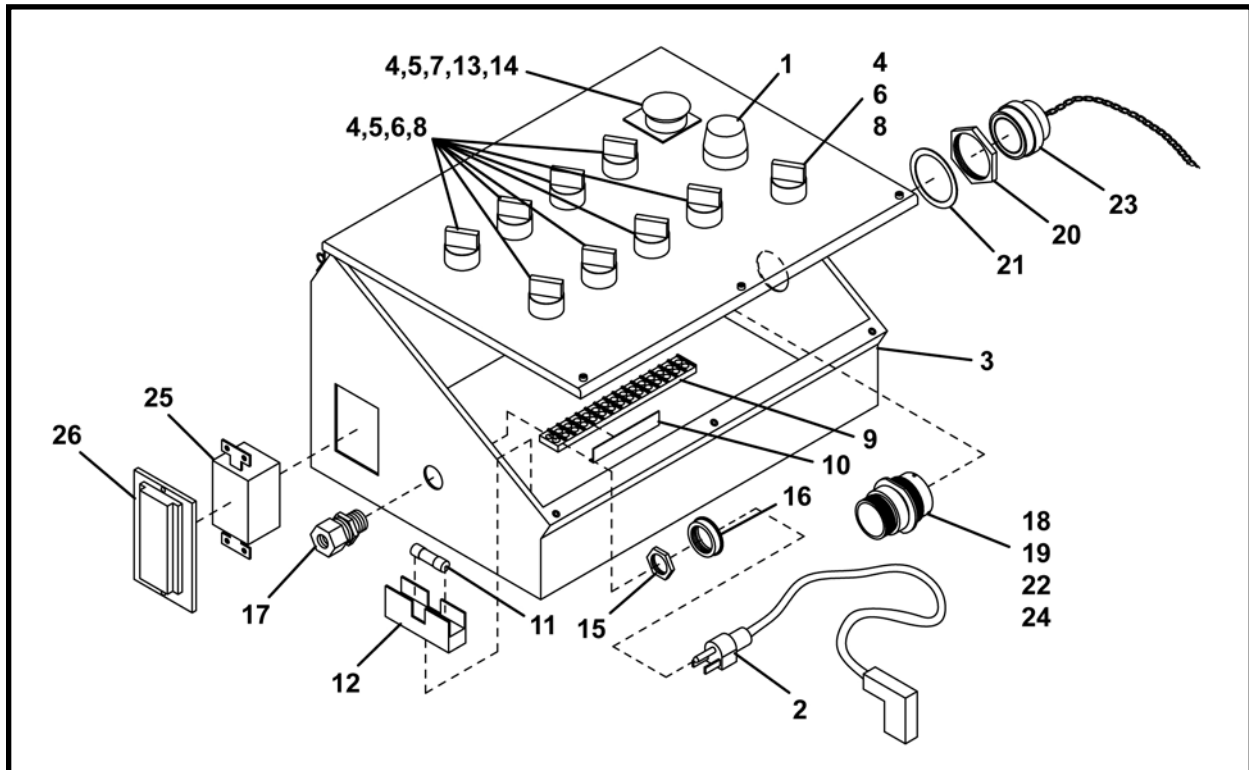
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F13045F00	BENTONITE SUPPLY HOSE
1	1	P0100-021	COUPLER, Camlock With Gasket (Includes item 2)
2	1	P0100-025	GASKET
3	1	P0200-078	ASSEMBLY, Hose 2" x 50'
4	1	P0100-022	PLUG

BENTONITE SUPPLY HOSE, F13048F00
(2 IN x 4 FT)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F13048F00	BENTONITE SUPPLY HOSE
1	1	P0100-021	COUPLER, Camlock With Gasket (Includes item 2)
2	1	P0100-025	GASKET
3	1	P0200-089	ASSEMBLY, Hose 1-1/2" x 48"
4	2	P0420-007	FITTING, 45 Degree Street
5	2	P0413-012	REDUCER
6	1	P0100-022	PLUG

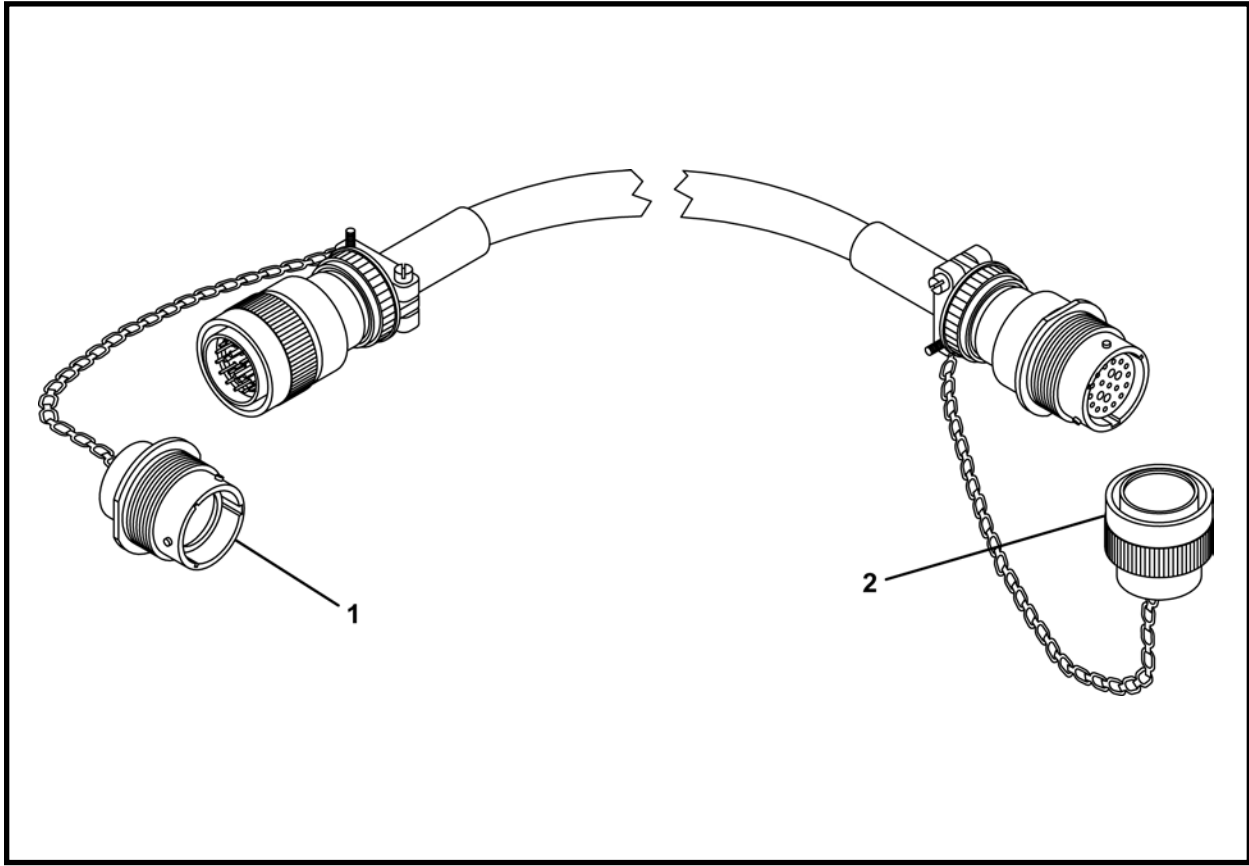
TUNNEL VALVE OPERATOR STATION, F23339F00



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F23339F00	TUNNEL VALVE OPERATOR STATION
1	1	P0056-068	LIGHT, Pilot
2	1	P0250-028B	VORD, Power
3	1	P0310-380	BOX, Operator Station
4	10	P0310-415	CONTACT BLOCK, Normally Open
5	9	P0310-416	CONTACT BLOCK, Normally Closed
6	9	P0310-419	LATCH, Mounting
7	1	P0310-420	E-STOP, Push Button
8	9	P0310-421A	SWITCH, Two Position
9	1	P0310-432	STRIP, 15 Position Barrier
10	1	P0310-434	STRIP, 10 Position Jumper
11	1	P0310-451	FUSE
12	1	P0310-473C	FUSEBLOCK
13	1	P0310-474	E-STOP LEGEND
14	1	P0310-636	MODULE, Power, With Latch 120V
15	1	P0311-018	NUT, Lock 1/2
16	1	P0311-032	BUSHING, 1/2 Insulating
17	1	P0311-121	RELIEF, Strain
18	3	P0313-006	SOCKET #12
19	17	P0313-008	SOCKET #16
20	1	P0313-009	NUT, Panel
21	1	P0313-010	WASHER, Lock
22	1	P0313-016	PLUG, Sealing
23	1	P0313-018	CAP
24	1	P0313-019	RECEPTACLE
25	1	P0310-492	INTERRUPTER, Ground Fault Circuit
26	1	P0310-492B	PLATE, Lift Cover

NOTE: For electrical schematic, refer to Section 5, Electrical.

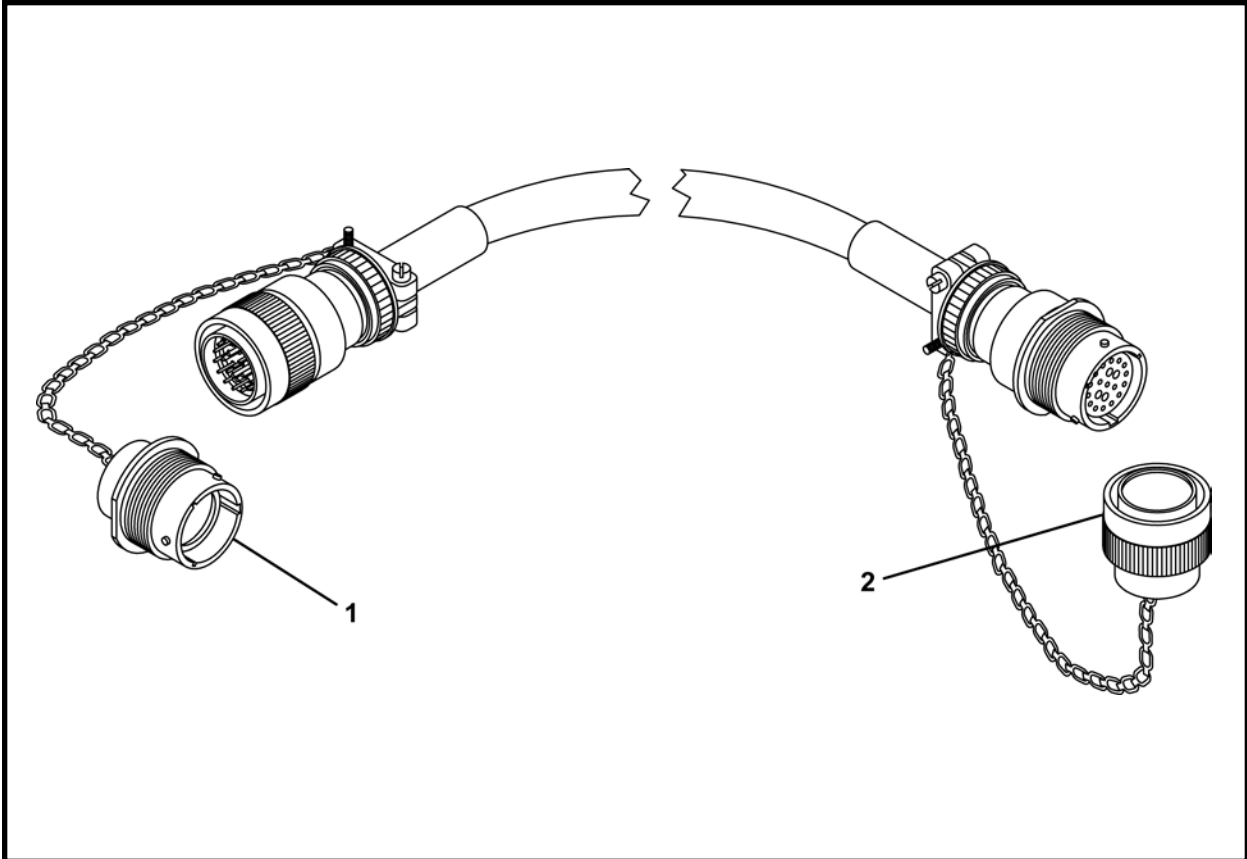
**TUNNEL VALVE CABLE, F23340F00
(50 FEET)**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F23340F00	TUNNEL VALVE CABLE - 50 FEET
1	1	P0313-017	CAP, Dust
2	1	P0313-018	CAP, Dust

NOTE: For electrical schematic, refer to Section 5, Electrical.

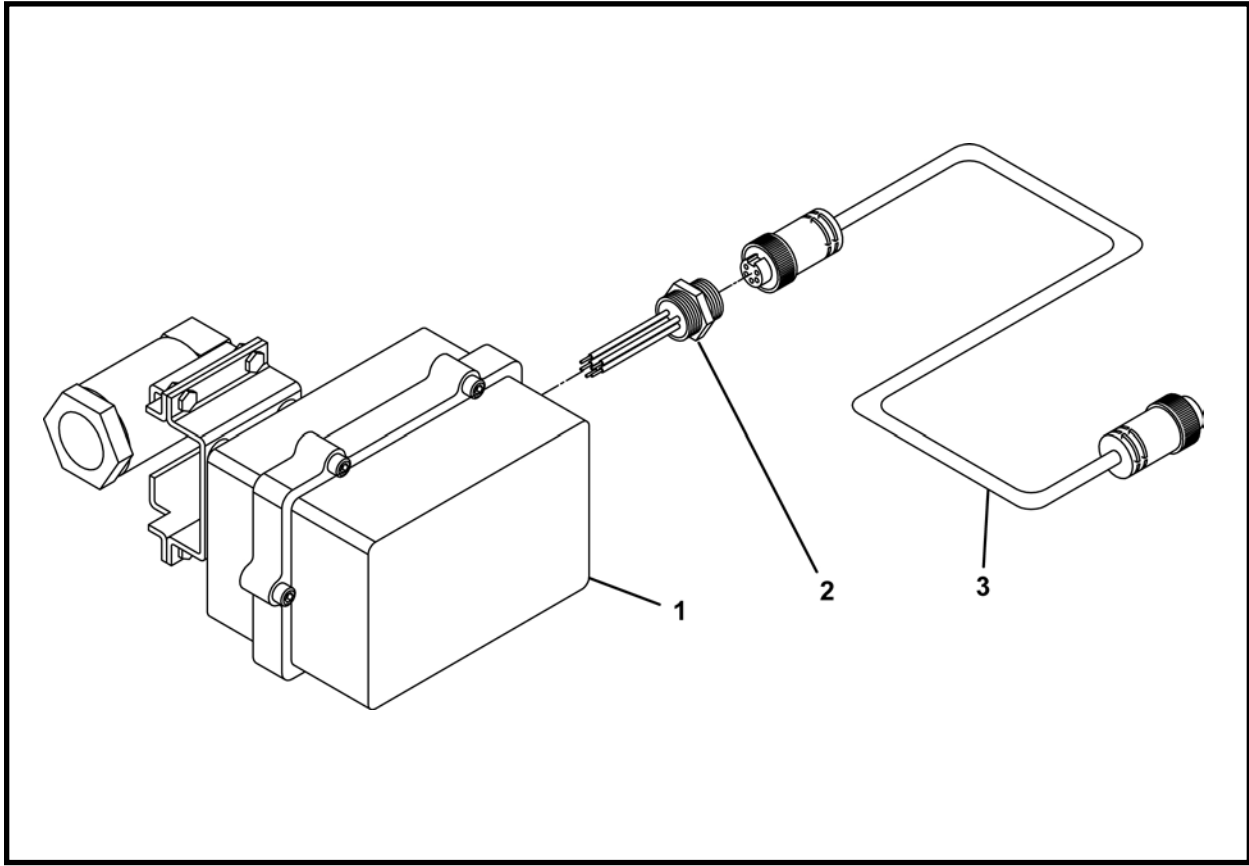
**TUNNEL VALVE CABLE, F23341F00
(100 FEET)**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F23341F00	TUNNEL VALVE CABLE - 50 FEET
1	1	P0313-017	CAP, Dust
2	1	P0313-018	CAP, Dust

NOTE: For electrical schematic, refer to Section 5, Electrical.

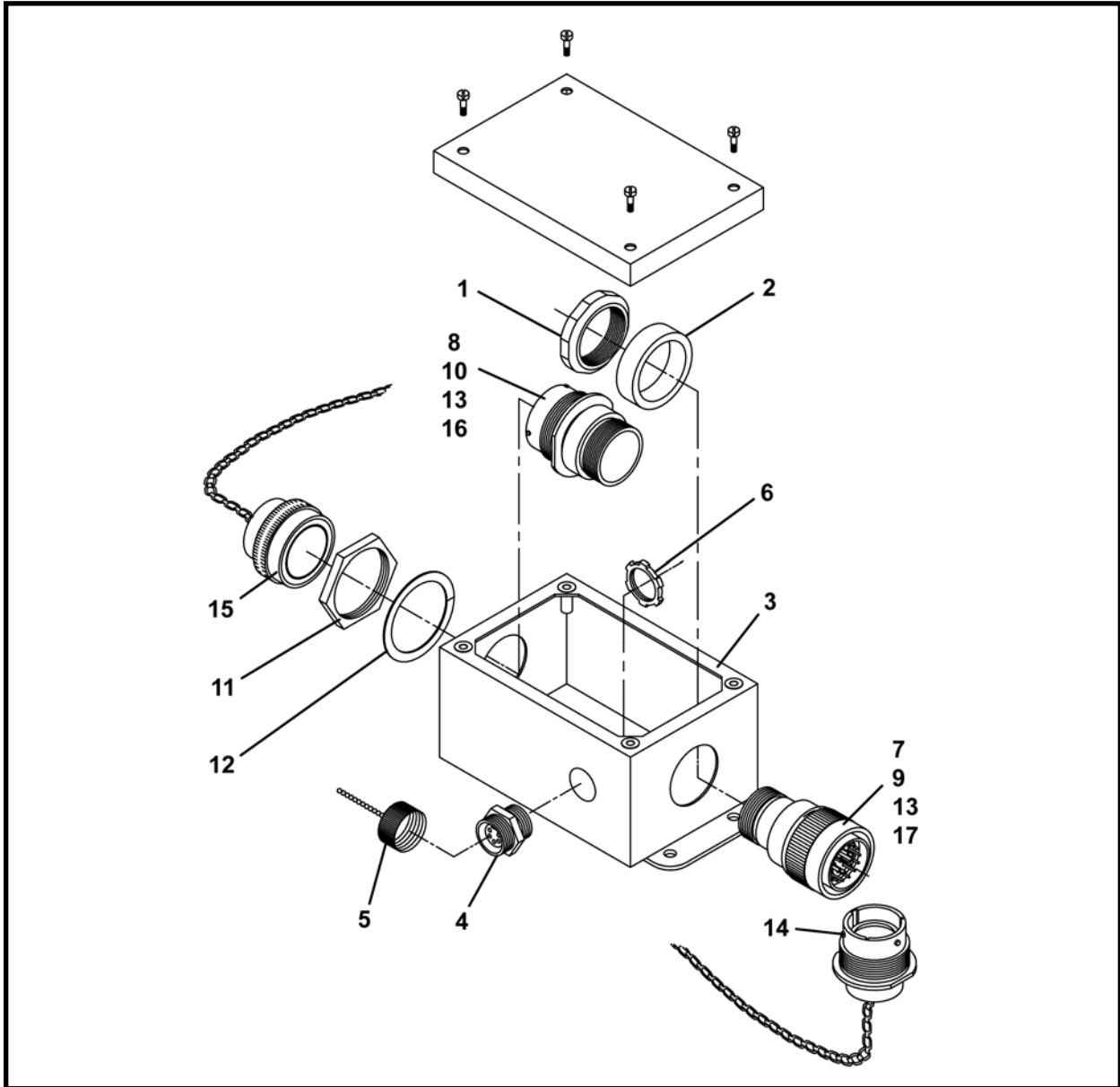
TUNNEL VALVE, F23397F00



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F23397F00	TUNNEL VALVE
1	1	P0302-285	VALVE, Ball, Electrically Actuated
2	1	P0054-073A	RECEPTACLE
3	1	P0054-105	EXTENSION, 5 Pole Mini

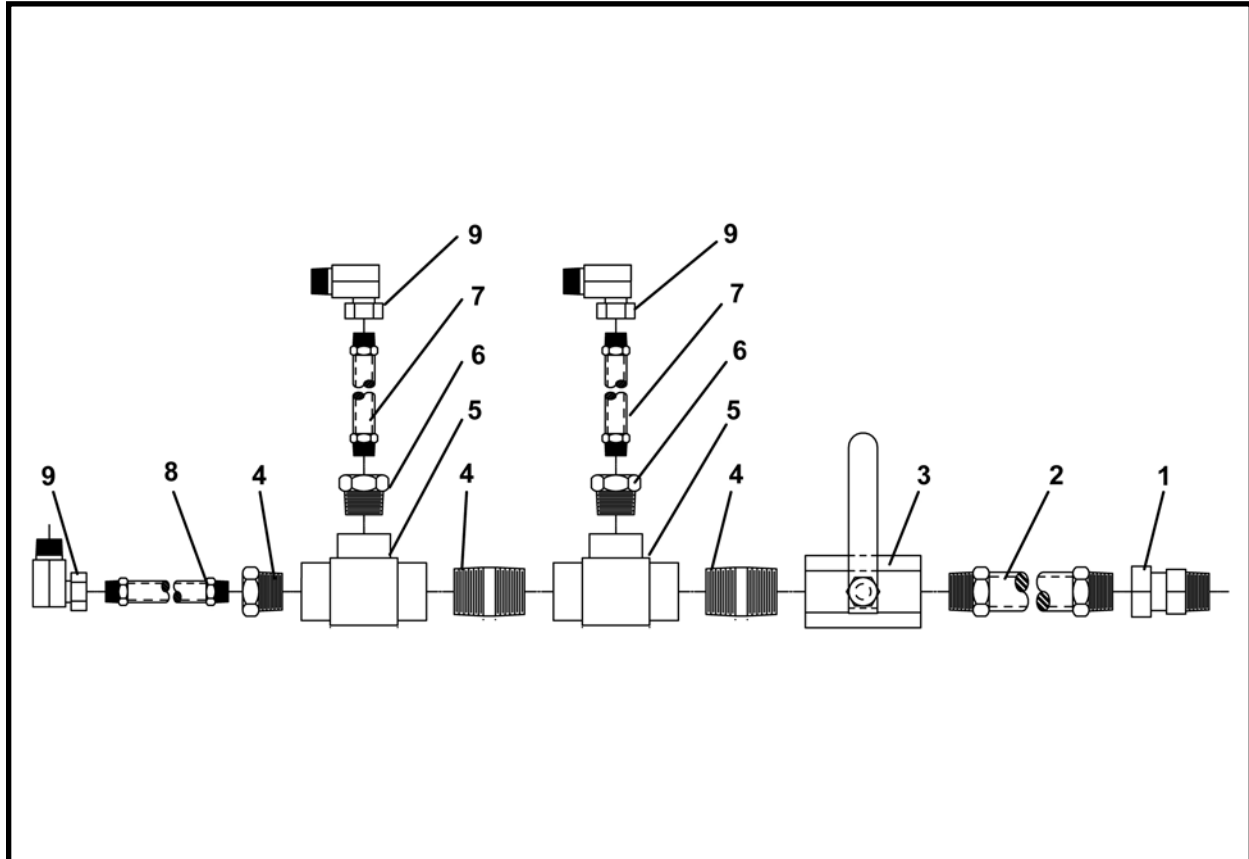
NOTE: For electrical schematic, refer to Section 5, Electrical.

TUNNEL VALVE JUNCTION BOX, F23398F00



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F23398F00	TUNNEL VALVE JUNCTION BOX
1	1	014427P00	NUT, Electrical Fitting
2	1	023364P00	SPACER, Receptacle
3	1	023365P00	ENCLOSURE
4	1	P0054-073B	CONNECTOR, 5 Pin Female Mini
5	1	P0054-090	CAP, Mini Closure
6	1	P0311-018	NUT, Lock 1/2
7	3	P0313-005	PIN
8	3	P0313-06	SOCKET
9	17	P0313-007	PIN
10	17	P0313-008	SOCKET
11	1	P0313-009	NUT, Panel
12	1	P0313-010	WASHER, Lock
13	2	P0313-016	PLUG, Sealing
14	1	P0313-017	CAP, Dust
15	1	P0313-018	CAP, Dust
16	1	P0313-019	RECEPTACLE, Female
17	1	P0313-020	RECEPTACLE, Male

THREE POINT BENTONITE INJECTION SYSTEM, F13057F00



ITEM	QTY	PART NO.	DESCRIPTION
0*	1	F13057F00	BENTONITE INJECTION SYSTEM, Three Point
1	1	P0300-117	ADAPTER, Swivel
2	1	A10330A0-060	ASSEMBLY, Hose 3/4 x 60
3	1	P0302-370	VALVE, 3/4 Brass Ball
4	2	P0402-004	NIPPLE 3/4
5	2	P0410-004A	TEE 3/4
6	3	P0300-012	BUSHING, Reducer
7	2	A10320A0-060	ASSEMBLY, Hose 1/2 x 60
8	1	A10320A0-120	ASSEMBLY, Hose 1/2 x 120
9	3	P0300-018	ADAPTER, Elbow Swivel

NOTE: Used with 1 Inch Bentonite Supply Lines, F13055F00.



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B

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