



PARTS MANUAL

5200 Series Jacking System

Pump Unit S/N: F27700F

200 HP Auxiliary S/N: F27573F

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SERVICE • RELIABILITY • INNOVATION

Introduction

This parts manual contains assembly illustrations of the Akkerman 5200 Jacking System. The 5200 Jacking System includes the 5200 Pump Unit, Skids, Yokes and the 200 HP Auxiliary. 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 Aftermarket Support Department, or downloaded from the Akkerman web site at www.akkerman.com.

The 5200 Pump Unit cylinders extend to advance the TBM and pipe along the skid base against the thrust yoke. The yoke provides a 360 degree surface to minimize point pressure on jacking pipes and transfer thrust from the pump unit to the pipe. The skid serves as the foundation for the pump unit, yoke, haul unit, TBM and pipe, and transfers thrust to the reaction block.

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 the assembly.

USE GENUINE AKKERMAN PARTS

The use of parts other than genuine Akkerman parts, could affect the efficient performance of the Jacking System. 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.



5200 Pump Unit

NOTES



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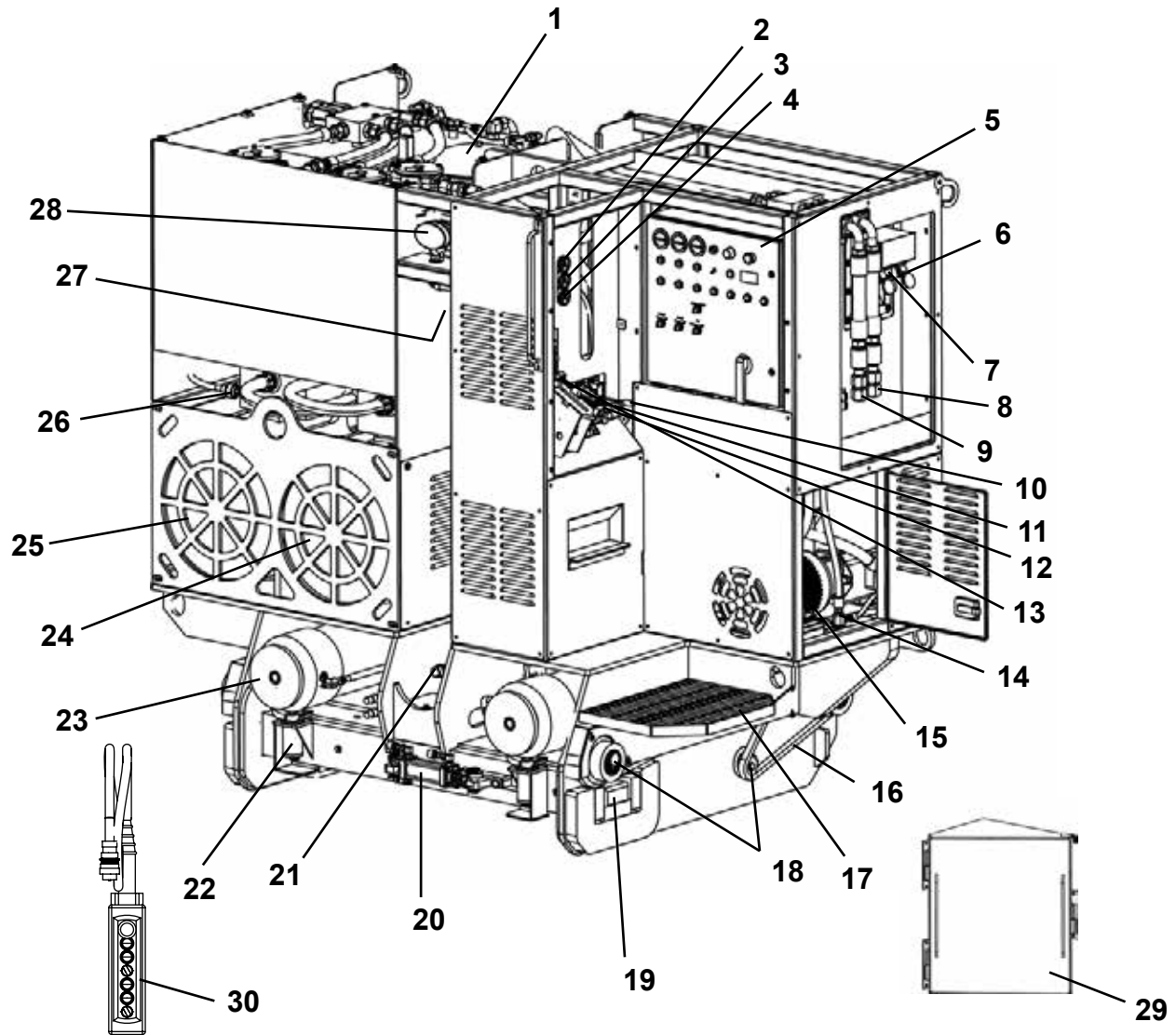
NOTES



General Information

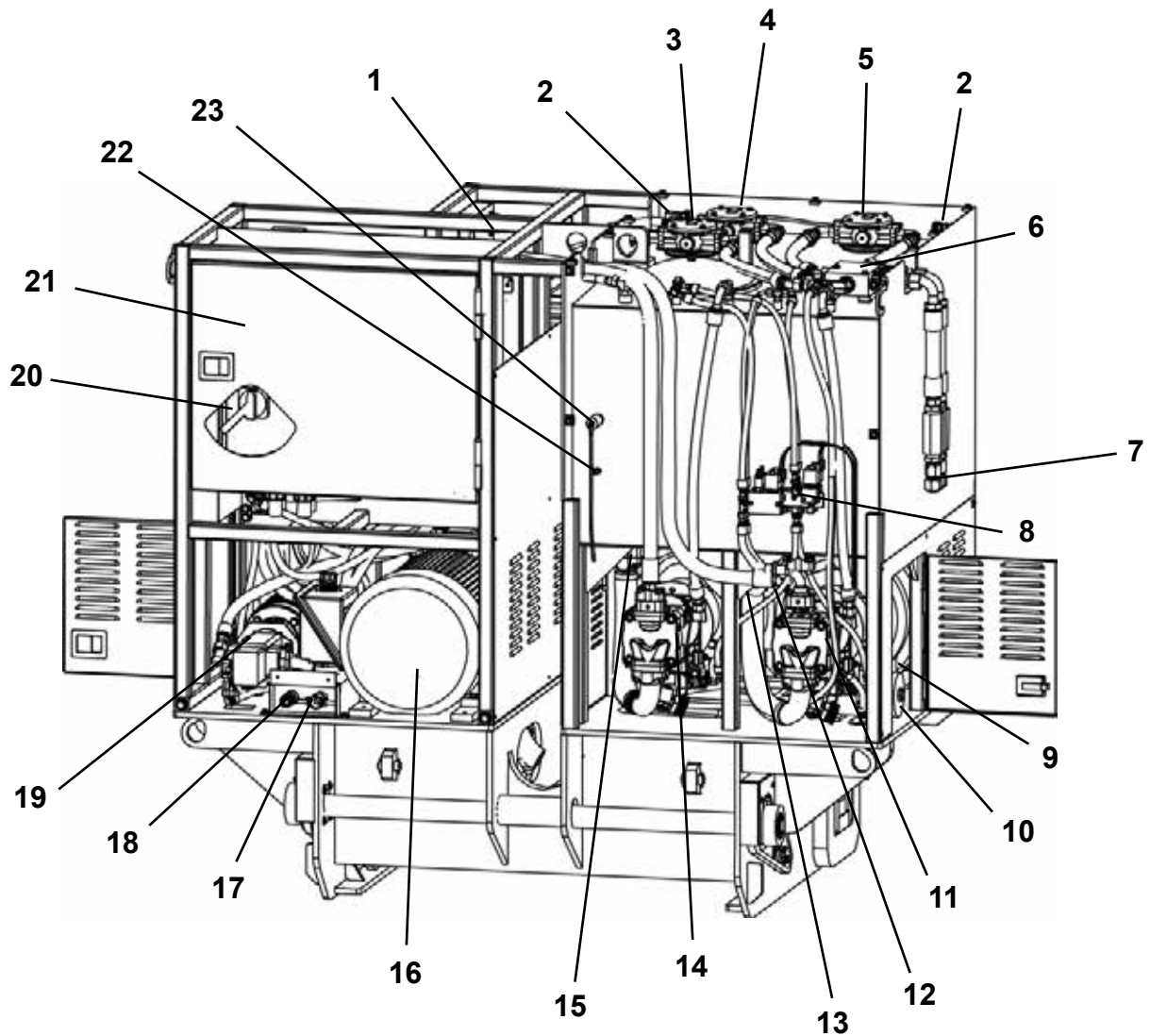
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5200 PUMP UNIT - FRONT COMPONENTS



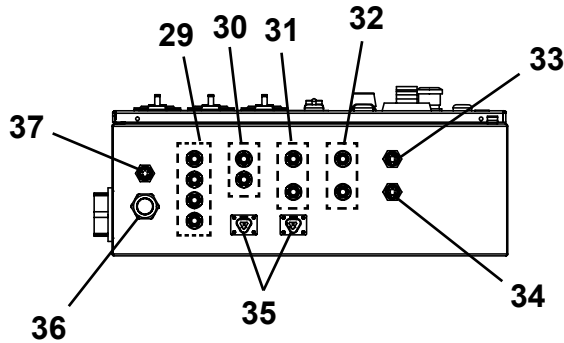
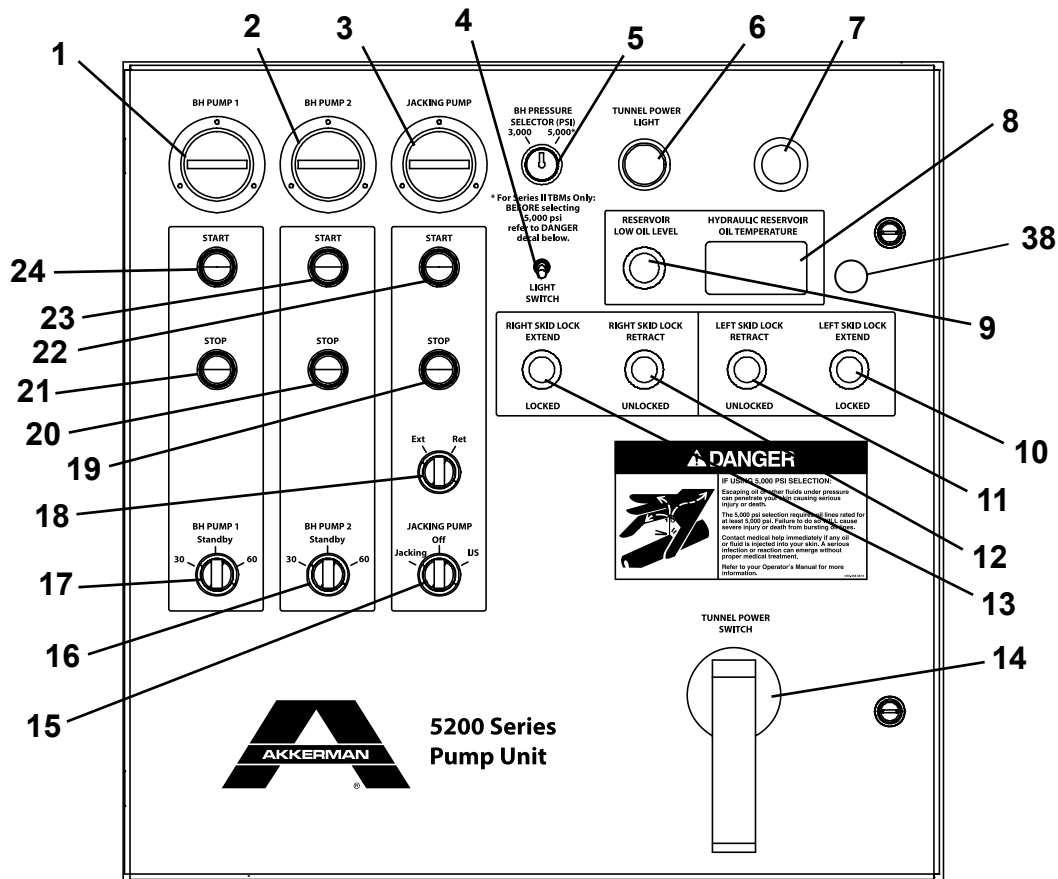
- | | |
|--|---|
| 1. Hydraulic Reservoir - 240 Gallons | 16. Drive Chain |
| 2. Return Filter 1 Indicator | 17. Operator Platform |
| 3. Return Filter 2 Indicator | 18. Drive Assembly |
| 4. Return Filter 3 Indicator | 19. Skid Lock |
| 5. Control Panel | 20. Skid Lock Cylinder |
| 6. Electrical Power Cable Cam Lock Connections | 21. Tank Oil Fill Hose |
| 7. Phase Error Light | 22. Ram Lift Cylinder |
| 8. Boring Head Supply Pressure Hose - BH Pump 2 | 23. Jacking Cylinder, 200 Ton Ram |
| 9. Boring Head Supply Pressure Hose - BH Pump 1 | 24. Boring Head 2 Supply 100 HP Motor |
| 10. Travel (Pump Unit Drive) Control | 25. Boring Head 1 Supply 100 HP Motor |
| 11. Skid Lock Cylinder Control | 26. Tunnel Power Cable Connection |
| 12. Ram Lift Cylinder/High Speed Cyl Retract Control | 27. Hydraulic Level/Temperature Gauge |
| 13. Jacking Cylinder Variable Speed Control | 28. Light |
| 14. IJS Supply Hose Connection | 29. Control Panel Vandal Resistant Door |
| 15. Cooling 5 HP Motor | 30. Control Pendant (Option) |

5200 PUMP UNIT - REAR COMPONENTS

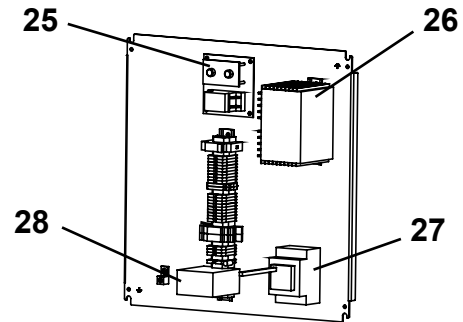


- | | |
|--|--|
| 1. Heat Exchanger | 13. Jacking Supply Shutoff Valve |
| 2. Tank Breather | 14. Boring Head 2 Supply Pump |
| 3. Return Filter 1 | 15. Boring Head 2 Supply Shutoff Valve |
| 4. Return Filter 2 | 16. Jacking System 60 HP Motor |
| 5. Return Filter 3 | 17. Heat Exchanger Water Supply Fitting |
| 6. Return Manifold | 18. Heat Exchanger Water Discharge Fitting |
| 7. Boring Head Return Hoses | 19. Cooling Pump |
| 8. Pressure Control Valves | 20. Main Power |
| 9. IJS Return Hose Connection | 21. Main Power Electrical Panel |
| 10. Tank Fill Pump | 22. Hydraulic Oil Temperature Sensor |
| 11. Boring Head 1 Supply Pump | 23. Low Oil Level Switch |
| 12. Boring Head 1 Supply Shutoff Valve | |

5200 PUMP UNIT - CONTROL PANEL



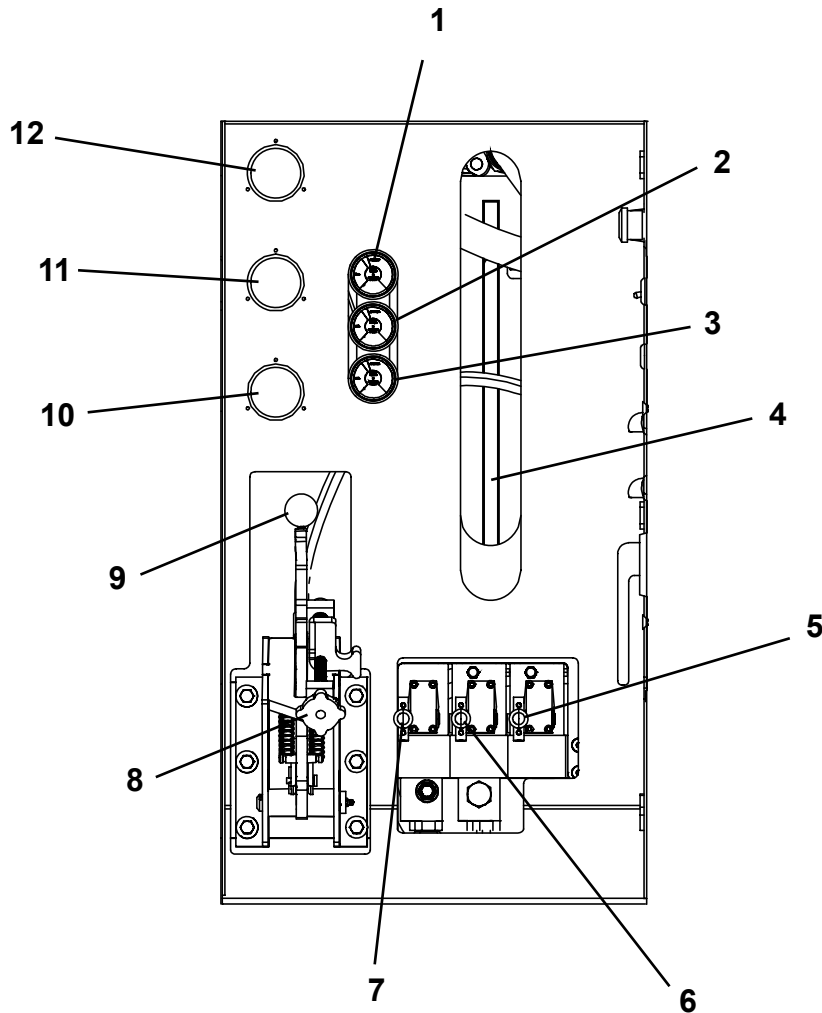
Bottom of Panel



Inside Panel

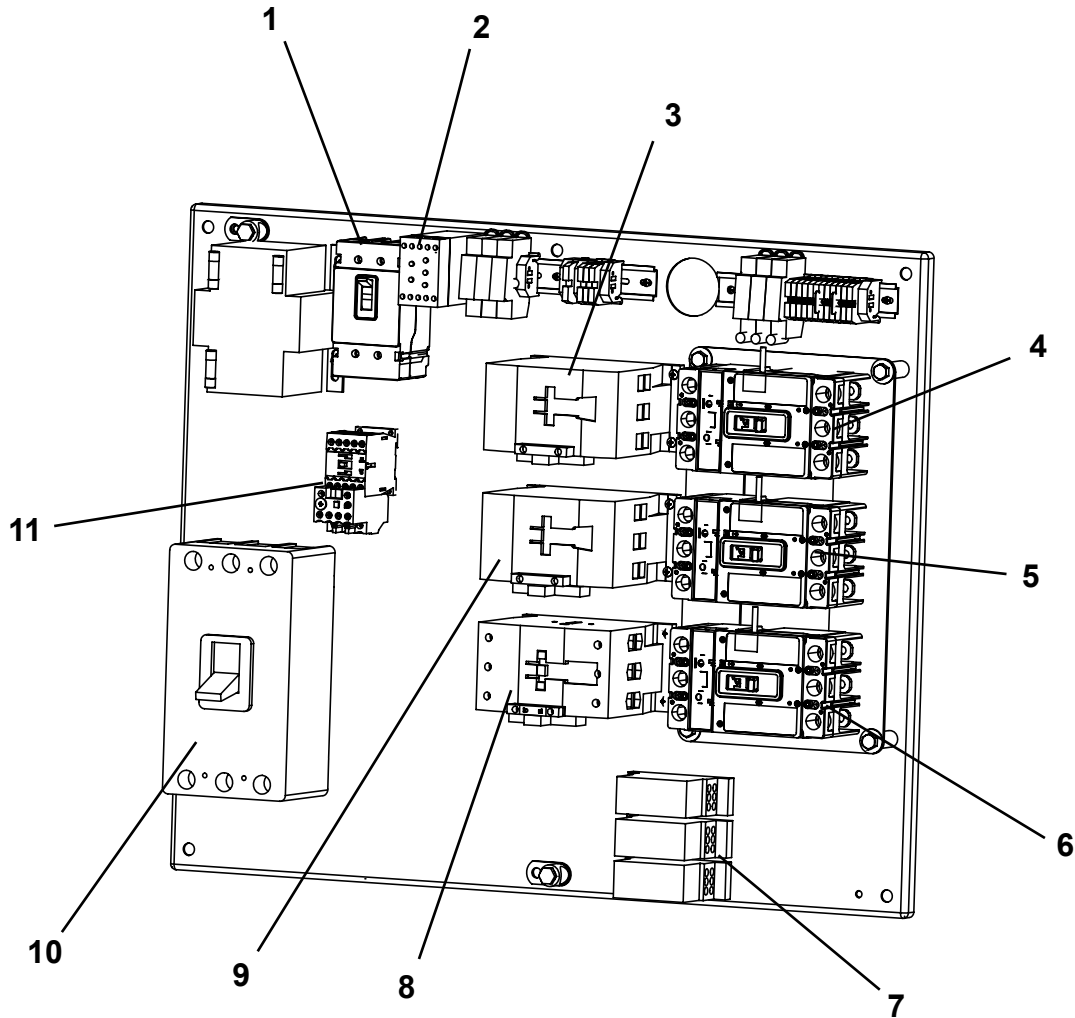
- | | |
|---|--|
| <ul style="list-style-type: none"> 1. Boring Head Pump 1 Hourmeter 2. Boring Head Pump 2 Hourmeter 3. Jacking Pump Hourmeter 4. Light Switch 5. Boring Head Pressure Selector 6. Tunnel Power Light 7. Emergency Stop (E-Stop) 8. Hydraulic Reservoir Oil Temperature 9. Reservoir Low Oil Level 10. Left Skid Lock Extend (Locked) Indicator 11. Left Skid Lock Retract (Unlocked) Indicator 12. Right Skid Lock Retract (Unlocked) Indicator 13. Right Skid Lock Extend (Locked) Indicator 14. Tunnel Power Switch 15. Jacking Pump Selector Switch 16. Boring Head Pump 2 Control 17. Boring Head Pump 1 Control 18. Jacking Cylinder Selector Switch 19. Jacking Pump Stop Control | <ul style="list-style-type: none"> 20. Boring Head Pump 2 Stop Control 21. Boring Head Pump 1 Stop Control 22. Jacking Pump Start Control 23. Boring Head Pump 2 Start Control 24. Boring Head Pump 1 Start Control 25. Pump Controller Board 26. 24V Power Supply 27. Tunnel Power Breaker 15 Amp 28. 480V Tunnel Power Contactor 29. Skid Lock Cable Receptacle 30. Tank Level & Temp. Cable Receptacle 31. Boring Head 1 Cable Receptacle 32. Boring Head 2 Cable Receptacle 33. Jacking Cable Receptacle 34. IJS/Auxiliary Cable Receptacle 35. Lights Cable Receptacle 36. Tunnel Power Cable Receptacle 37. Remote E-Stop Cable Receptacle 38. Auxiliary/Cooling Pump ON/OFF Switch |
|---|--|

5200 PUMP UNIT - OPERATOR CONTROL PANEL



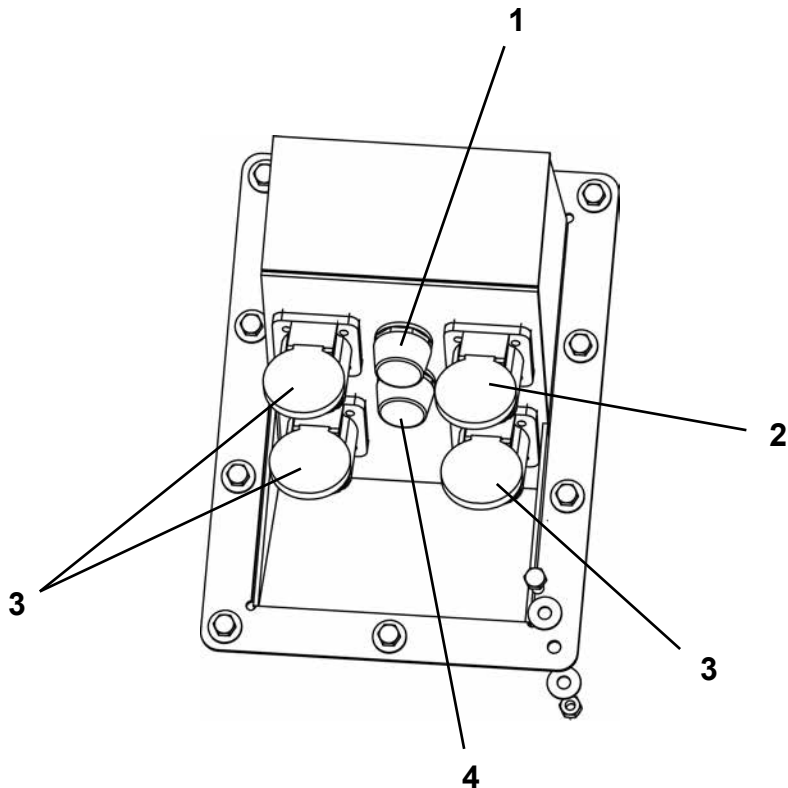
- | | |
|--|---|
| 1. Return Filter 1 Indicator | 7. Ram Lift Cylinder Control / High Speed Jacking
Cylinder Retract Control |
| 2. Return Filter 2 Indicator | 8. Speed Control Stop Adjustment |
| 3. Return Filter 3 Indicator | 9. Jacking Cylinder Variable Speed Control |
| 4. View to Hydraulic Reservoir Level & Temperature | 10. Jacking Pressure Gauge |
| 5. Travel Control | 11. Boring Head 2 Pressure Gauge |
| 6. Skid Lock Cylinder Control | 12. Boring Head 1 Pressure Gauge |

5200 PUMP UNIT - MAIN POWER ELECTRICAL PANEL



1. 480V Breaker
2. Phase Detector
3. Boring Head Motor 1 Contactor
4. Boring Head Motor 1 Breaker With Overload Relay
5. Boring Head Motor 2 Breaker With Overload Relay
6. Jacking Motor Breaker With Overload Relay
7. Power Distribution Block
8. Jacking Motor Contactor
9. Boring Head Motor 2 Motor Contactor
10. Main 400A Breaker
11. Cooling Motor Contactor & Overload Relay

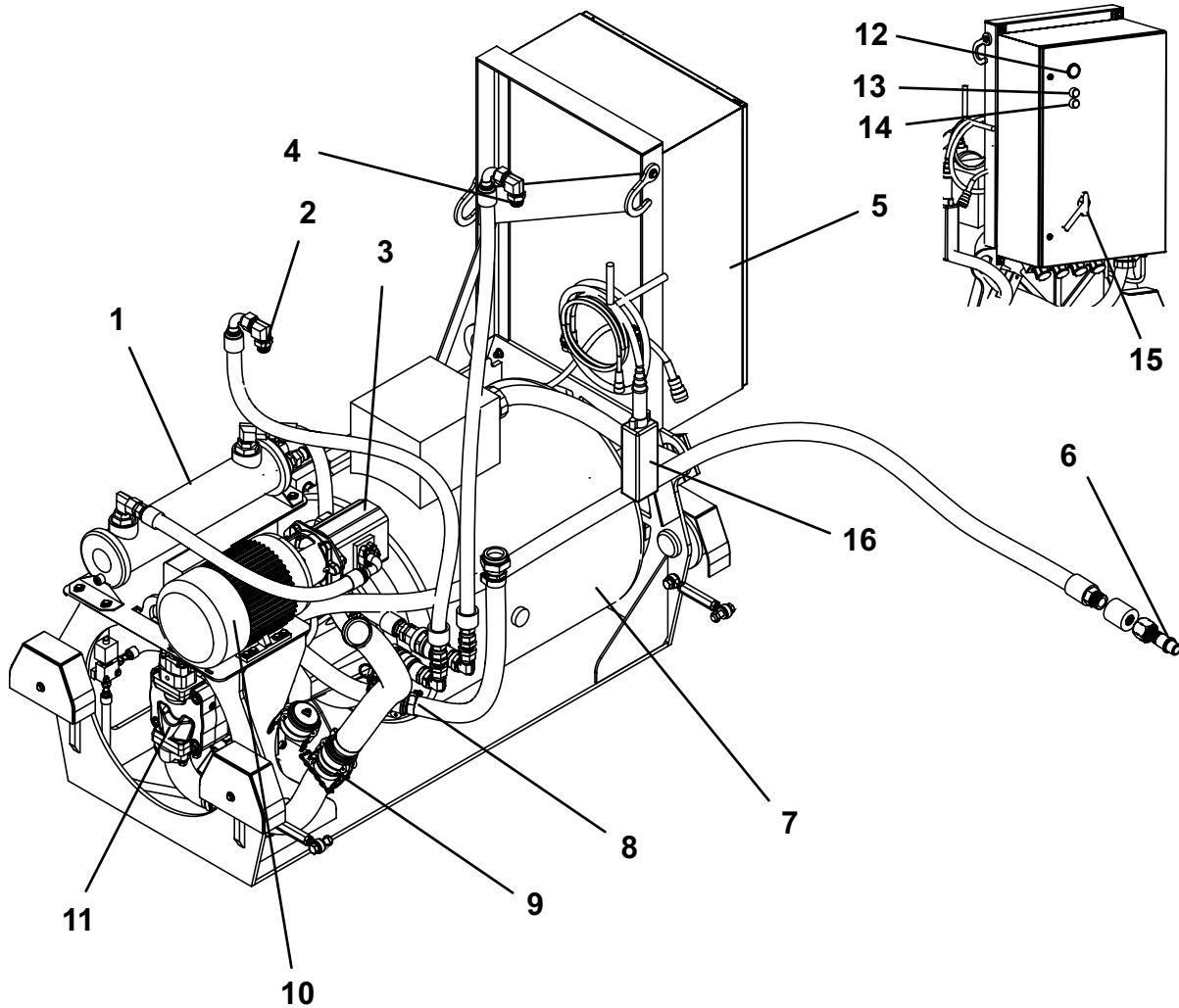
5200 PUMP UNIT - ELECTRICAL CONNECTIONS



1. Phase OK (Green) Light
2. Ground Cable Cam Lock Connection
3. Electrical Power Cable Cam Lock Connections
4. Phase Error (Red) Light

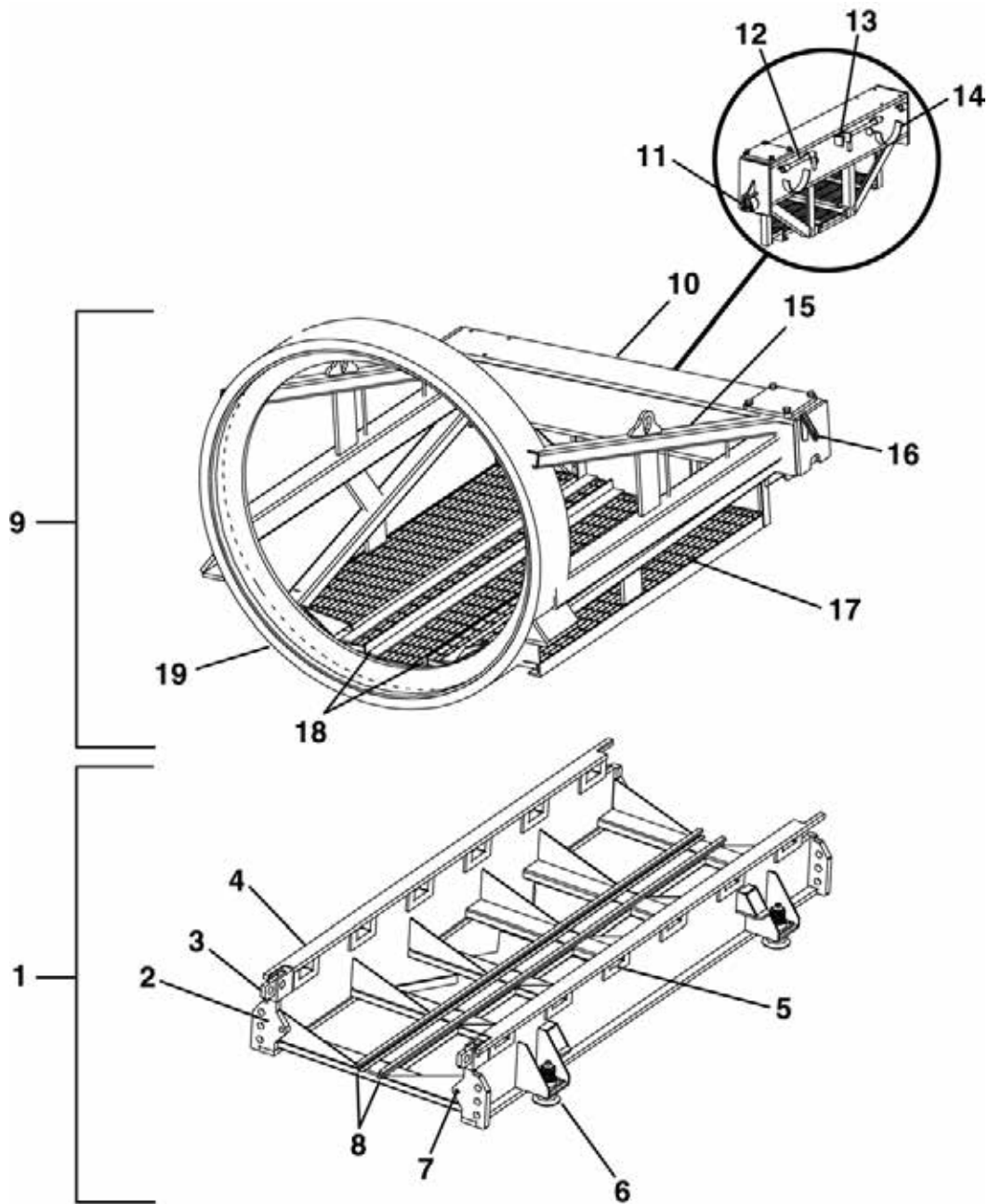
200 HP AUXILIARY

When using the 5200 Pump Unit with the single feed assembly and the 200 HP Auxiliary, each system will provide 60 gpm @ 5,000 psi for a total of 120 gpm @ 5,000 psi.



- | | |
|-------------------------------------|---------------------------------------|
| 1. Heat Exchanger | 9. Supply To Auxiliary Pump From 5200 |
| 2. Cooling Return To 5200 Tank | 10. Cooling Motor 5 HP |
| 3. Gear Pump | 11. Pump 200 HP Auxiliary |
| 4. Case Drain For 200 HP Pump | 12. Hourmeter |
| 5. Electrical Assembly | 13. Phase OK Indicator |
| 6. To Tunnel Pressure | 14. Phase Error Indicator |
| 7. 200 HP Motor | 15. Main Power Switch |
| 8. Supply To Cooling Pump From 5200 | 16. Control Pendant |

SKID & YOKE



- | | |
|----------------------------|----------------------------|
| 1. Skid | 11. Yoke Wheel |
| 2. Skid Base | 12. Yoke Retaining Pin |
| 3. Skid Split Bar | 13. Ram Retaining Pin Stop |
| 4. Side Skid Base Assembly | 14. Ram Cradle |
| 5. Skid Pocket | 15. Yoke Ring Support |
| 6. Leveling Assembly | 16. IJS Line Holder |
| 7. Skid Locator Pin | 17. Floor |
| 8. Rail | 18. Rail (for Haul Unit) |
| 9. Yoke | 19. Yoke Ring |
| 10. Dual Ram Yoke, Rear | |

NOTES

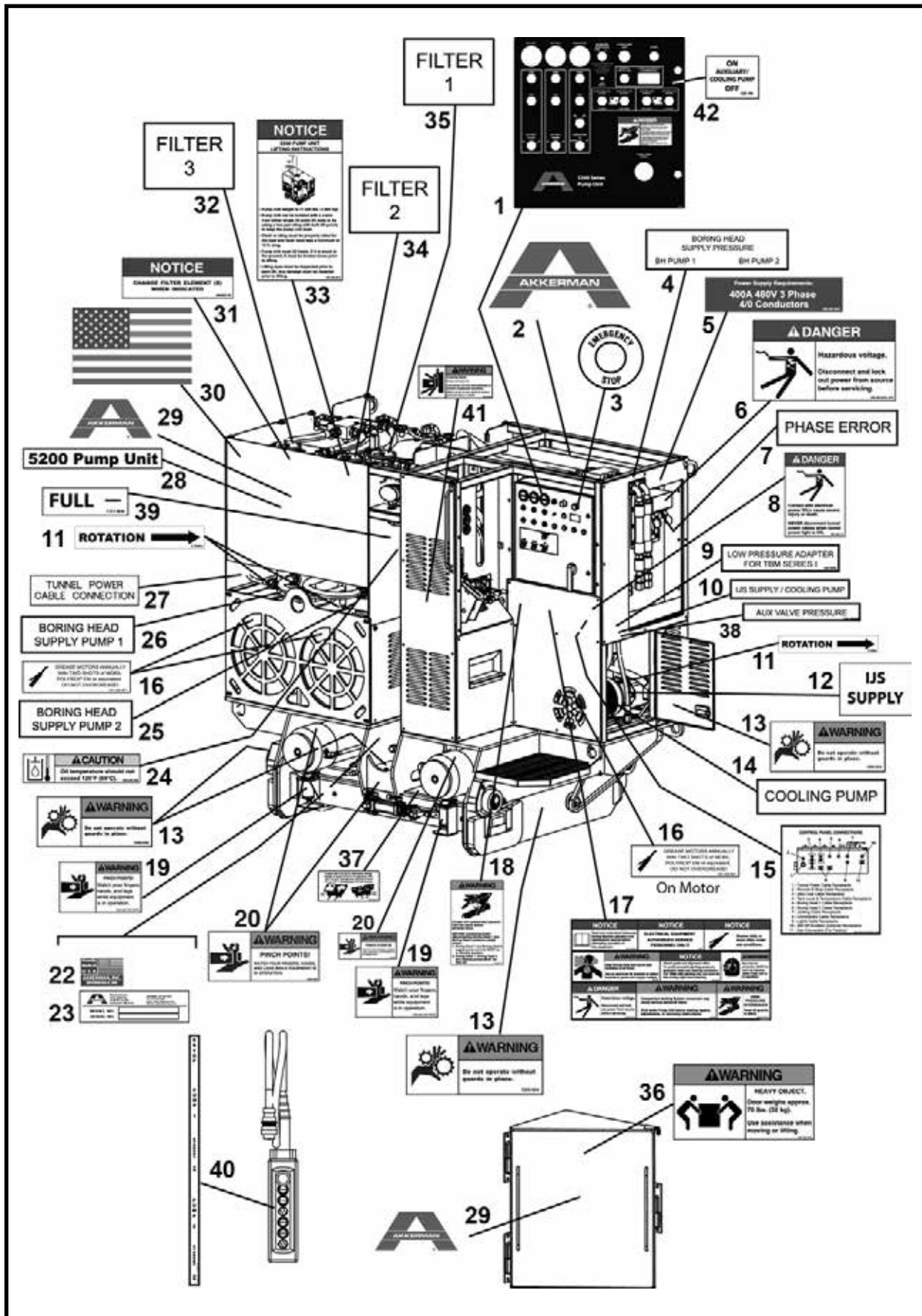


Decals

5200 Pump Unit	
Front Decals*	2
Rear Decals*	4
Operator Panel Decals*	6
<i>* Includes KIT, Decal 1255-002</i>	
200 HP Auxiliary Assembly	
Auxiliary Assembly 200 HP Decals, 1255-073	8
Skid Decals, 1255-010	10
Yoke Decals, 1255-037	11

5200 PUMP UNIT FRONT DECALS

5200 Pump Unit



5200 PUMP UNIT FRONT DECALS

5200 Pump Unit

ITEM	QTY	PART NO.	DESCRIPTION
1	1	1251-547	DECAL, 5200 Control Panel
2	1	1251-272	DECAL, Akkerman, Jumbo
3	1	P0310-474F	DECAL, Emergency Stop
4	1	1251-550A	DECAL, Boring Head Supply Pressure
5	1	1251-351	DECAL, Power Supply Requirements
6	1	1250-385	DECAL, Danger, Hazardous Voltage
7	1	1251-550B	DECAL, Phase Error
8	1	1251-365	DECAL, Danger, Electrical Contact
9	1	1251-550Z	DECAL, Low Pressure Adapter For TBM Series I
10	1	1251-550C	DECAL, IJS Supply/Cooling Pump
11	3	3-700Rw	DECAL, Rotation Right
12	1	1251-555A	LABEL, IJS Supply
13	4	1250-004	DECAL, Warning, Keep Guards In Place
14	1	1251-550D	DECAL, Cooling Pump
15	1	1251-633	DECAL, Control Panel Connections
16	3	1251-349	DECAL, Grease Motors Annually
17	1	1250-582	DECAL, Notice, Warning, Danger
18	1	1251-632	DECAL, Warning, Pressurized Hydraulic Fluid
19	2	1250-562	DECAL, Warning, Pinch Points
20	3	1250-480	DECAL, Warning, Pinch Points
21	-	-	-
22	1	1250-544	DECAL, Proudly Made In USA
23	1	REF	PLATE, Serial Number
24	1	1250-005	DECAL, Caution, Oil Temp Not To Exceed 125
25	1	1251-550E	DECAL, Boring Head Supply Pump 2
26	1	1251-550F	DECAL, Boring Head Supply Pump 1
27	1	1251-550Y	DECAL, Tunnel Power Cable Connection
28	1	1251-549	DECAL, 5200 Pump Unit
29	2	1251-245	DECAL, Akkerman X-Large
30	1	1250-559	DECAL, USA Flag, Medium
31	1	40000-16	DECAL, Notice, Change Filter Element
32	1	1251-550I	DECAL, Filter 3
33	1	1251-553	DECAL, Lifting Instructions
34	1	1251-550H	DECAL, Filter 2
35	1	1251-550G	DECAL, Filter 1
36	1	1251-551	DECAL, Warning, Heavy Object
37	1	1251-715	DECAL, Skid Locking Block Greasing
38*	1	1251-550AN	DECAL, Aux Valve Pressure
39	1	1251-806	DECAL, Full
40**	1	1251-721	DECAL, Remote Pendant Controls
41	1	1251-845	DECAL, Warning, Pump Unit Rolling
42***	1	1251-740	DECAL, Aux Cooling Pump Switch

* SN F27700F-05 & After

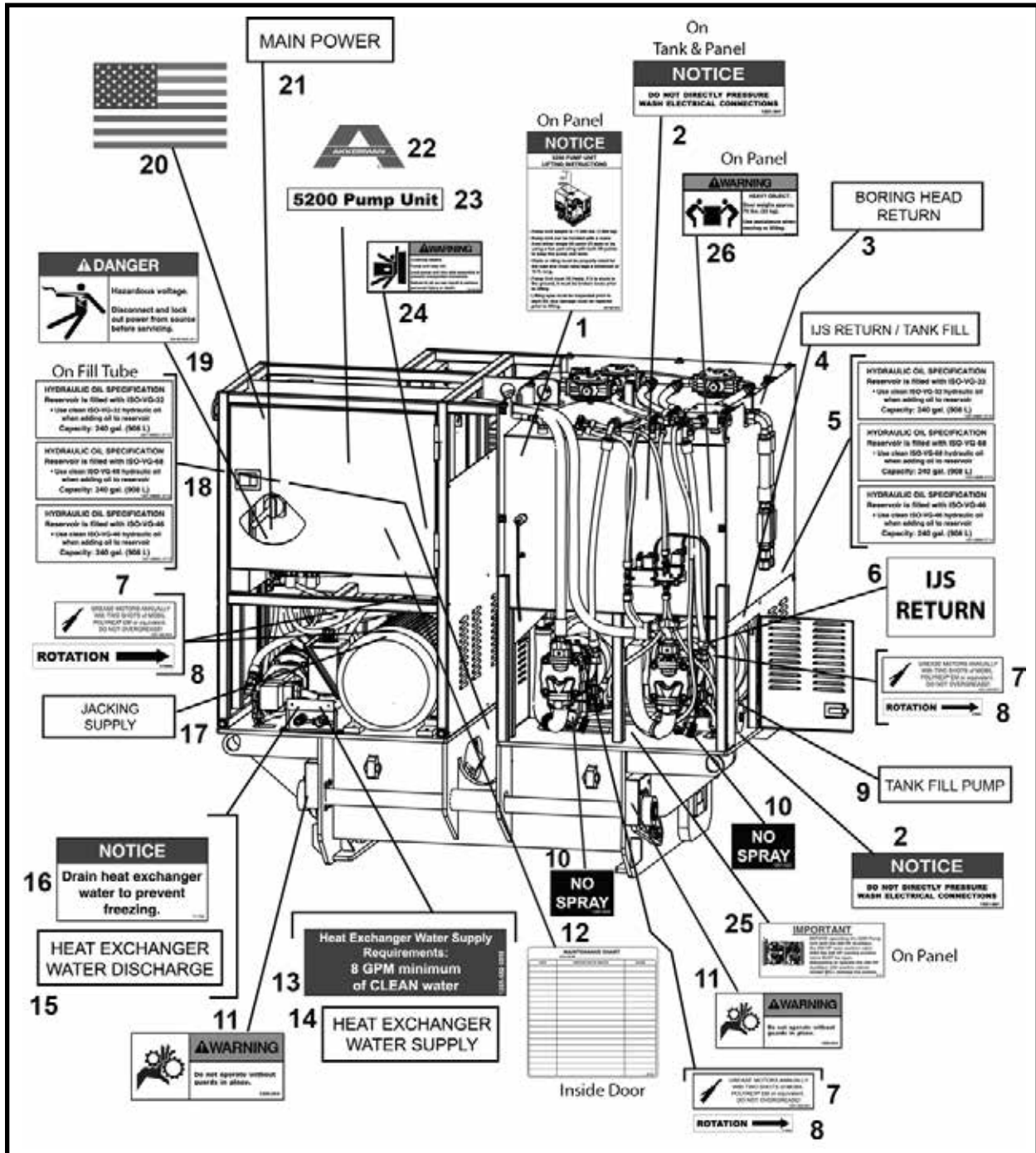
** Used on remote pendant (if used).

*** SN F27700F-03, and 07 & After are equipped with the Auxiliary/Cooling Pump ON/OFF switch.

Note: This is part of KIT, Decal 1255-002.

5200 PUMP UNIT REAR DECALS

5200 Pump Unit



ITEM	QTY	PART NO.	DESCRIPTION
1	1	1251-553	DECAL, Lifting Instructions
2	3	1251-561	DECAL, Notice, Do Not Pressure Wash Connections
3	1	1251-550J	DECAL, Boring Head Return
4	1	1251-550K	DECAL, IJS Return/Tank Fill
5.1	1	1251-586A	DECAL, Hydraulic Oil Specification ISO-VG-46
5.2	1	1251-586B	DECAL, Hydraulic Oil Specification ISO-VG-68
5.3	1	1251-586C	DECAL, Hydraulic Oil Specification ISO-VG-32
6	1	1251-555B	LABEL, IJS Return
7	4	1251-349	DECAL, Grease Motors Annually
8	4	3-700Rw	DECAL, Rotation Right

5200 PUMP UNIT REAR DECALS

5200 Pump Unit

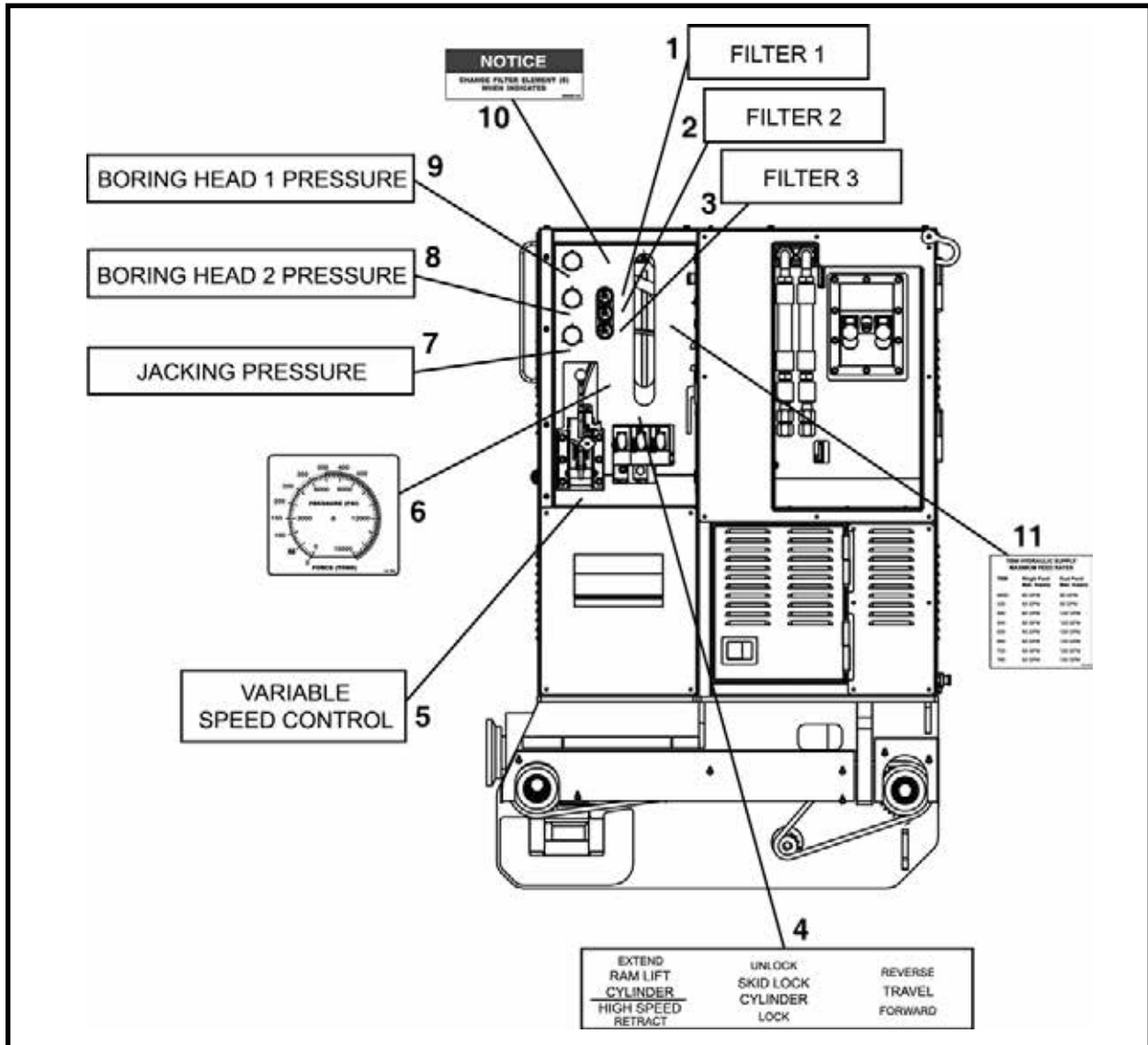
ITEM	QTY	PART NO.	DESCRIPTION
9	1	1251-550L	DECAL, Tank Fill Pump
10	2	1251-625	DECAL, No Spray
11	3	1250-004	DECAL, Warning, Keep Guards In Place
12	1	1251-350	DECAL, Maintenance Chart
13	1	1251-552	DECAL, Heat Exchanger Water Supply Requirements
14	1	1251-550M	DECAL, Heat Exchanger Water Supply
15	1	1251-550N	DECAL, Heat Exchanger Water Discharge
16	1	17-700	DECAL, Notice, Drain Heat Exchanger
17	1	1251-550O	DECAL, Jacking Supply
18.1	1	1251-586AL	LABEL, Hydraulic Oil Specification ISO-VG-46
18.2	1	1251-586BL	LABEL, Hydraulic Oil Specification ISO-VG-68
18.3	1	1251-586CL	LABEL, Hydraulic Oil Specification ISO-VG-32
19	1	1250-385	DECAL, Danger, Hazardous Voltage
20	1	1250-559	DECAL, USA Flag, Medium
21	1	1251-550P	DECAL, Main Power
22	1	1251-245	DECAL, Akkerman X-Large
23	1	1251-549	DECAL, 5200 Pump Unit
24	1	1251-845	DECAL, Warning, Pump Unit Rolling
25*	1	1251-659	DECAL, Important Open Suction Valves
26	1	1251-551	DECAL, Warning Heavy Object

* Used with 200 HP Auxiliary Unit (F27573F)

Note: This is part of KIT, Decal 1255-002.

5200 PUMP UNIT OPERATOR PANEL DECALS

5200 Pump Unit



ITEM	QTY	PART NO.	DESCRIPTION
1	1	1251-550Q	DECAL, Filter 1
2	1	1251-550R	DECAL, Filter 2
3	1	1251-550S	DECAL, Filter 3
4	1	1251-550T	DECAL, Operator Control
5	1	1251-550U	DECAL, Variable Speed Control
6	1	14-700	DECAL, Ton-Pressure Gauge
7	1	1251-550V	DECAL, Jacking Pressure
8	1	1251-550X	DECAL, Boring Head 2 Pressure
9	1	1251-550W	DECAL, Boring Head 1 Pressure
10	1	40000-16	DECAL, Notice, Change Filter Element
11	1	1252-063	DECAL, TBM Feed Rates

Note: This is part of KIT, Decal 1255-002.

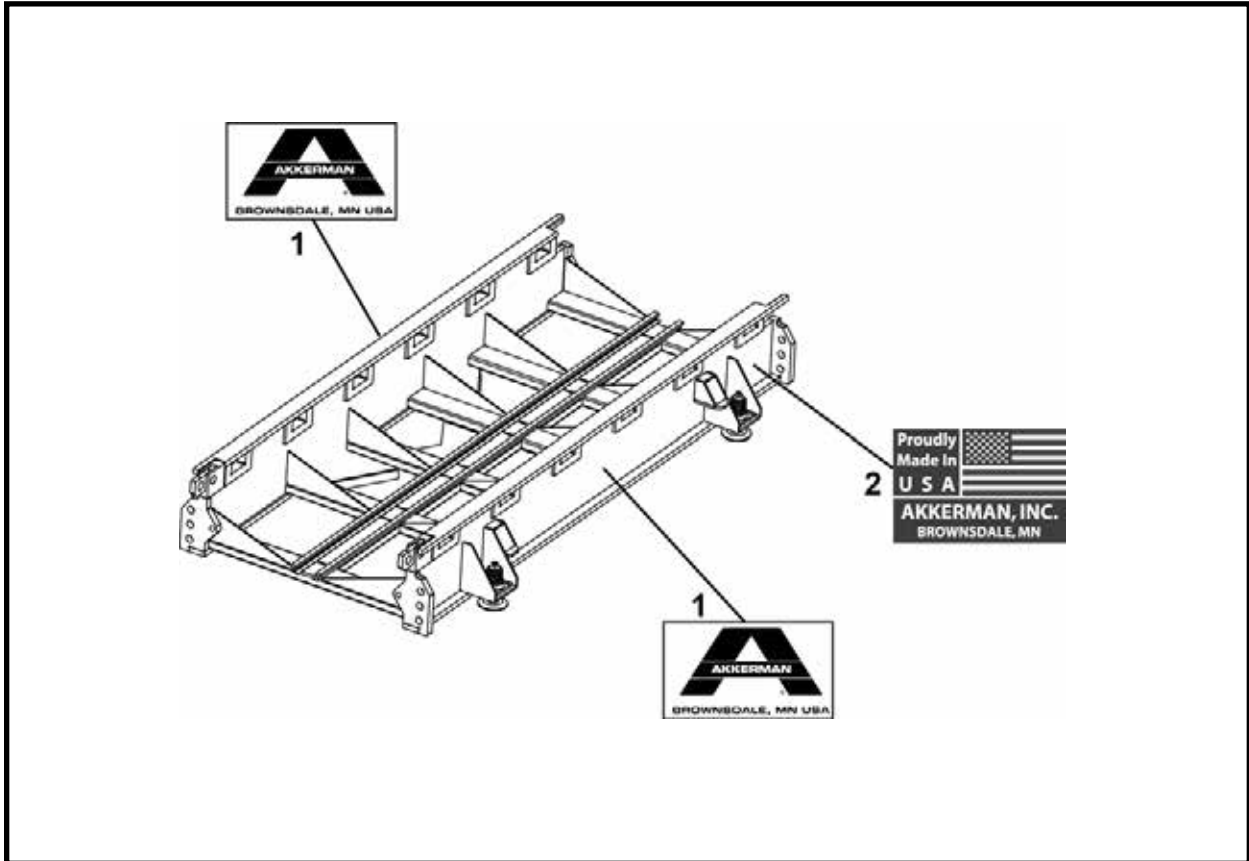
Decals

NOTES

AUXILIARY ASSEMBLY 200 HP DECALS, 1255-073
5200 Pump Unit - 200 HP Auxiliary

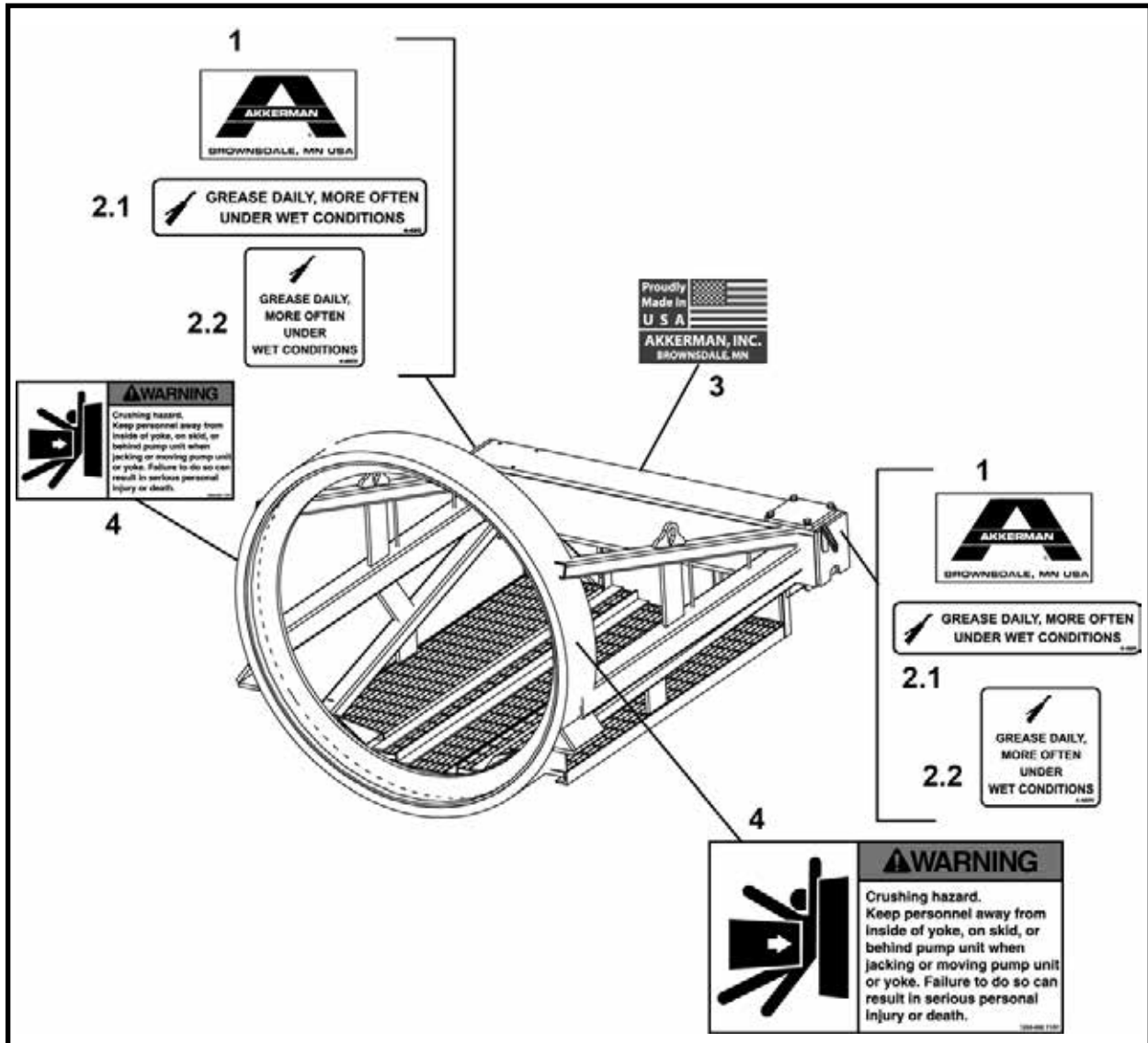
ITEM	QTY	PART NO.	DESCRIPTION
0	1	1255-073	KIT, Decal 200 HP Auxiliary Assembly
1	1	1251-550AA	DECAL, Phase OK
2	1	1251-550AB	DECAL, Hourmeter
3	1	1251-550P	DECAL, Main Power
4	2	3-700R	DECAL, Rotation - Right
5	6	1250-004	DECAL, Warning, Keep Guards In Place
6	3	1251-349	DECAL, Grease Motors Annually
7	1	1251-659	DECAL, IMPORTANT: Open Suction Valves
8	1	17-700	DECAL, Notice, Drain Heat Exchanger
9	2	1251-245	DECAL, Akkerman Logo - X-Large
10	4	1250-562	DECAL, Warning, Pinch Points
11	2	1251-651	DECAL, 200 HP Auxiliary -Model
12	1	1251-550AF	DECAL, 200 HP Auxiliary Motor
13	1	1250-544	DECAL, Made In USA
14	1	1251-652A	DECAL, Remote Pendant Control
15	1	1251-652B	DECAL, 200 HP Auxiliary Pendant
16	1	1251-652C	DECAL, Cooling Pump Switch
17	1	1250-559	DECAL, USA Flag - Medium
18	1	1251-552	DECAL, Heat Exchanger Water Requirement
19	1	1251-550M	DECAL, Heat Exchanger Water Supply
20	1	1251-550N	DECAL, Heat Exchanger Water Discharge
21	1	1251-550AO	DECAL, 200 HP Aux Pressure
22	1	1251-550AH	DECAL, Phase Detector
23	1	1251-550AI	DECAL, 5 HP Cool Contactor
24	1	1251-550AJ	DECAL, 200 HP Motor Contactor
25	1	1251-550AK	DECAL, 24V Aux Supply
26	1	1251-550AM	DECAL, 5HP Cool Breaker
27	1	1251-550AG	DECAL, Main Breaker
28	1	1251-550AL	DECAL, Distribution Block
29	1	1251-550AD	DECAL, From 200 HP Aux Case Drain To Tank
30	1	1251-550AE	DECAL, From 200 HP Aux Cooler To Tank
31	1	1251-550AC	DECAL, 200 HP Aux Pendant Connection
32	1	1251-550B	DECAL, Phase Error
33	1	1250-385	DECAL, Danger, Hazardous Voltage
34	1	1250-383	DECAL, Notice, Electrical Equipment
35	1	3-700L	DECAL, Rotation - Left
36	3	1251-840	DECAL, Notice, Lifting Instructions
37	1	1251-350	DECAL, Maintenance Chart

SKID DECALS, 1255-010



ITEM	QTY	PART NO.	DESCRIPTION
0	1	1255-010	KIT, Decal, Skid
1	2	1250-548	DECAL, Akkerman, XLarge
2	1	1250-544	DECAL, Made in USA

YOKE DECALS, 1255-037



ITEM	QTY	PART NO.	DESCRIPTION
0	1	1255-037	KIT, Decal, Skid
1	2	1251-246	DECAL, Akkerman, Large
2.1	2	4-480	DECAL, Grease Daily (Large Yokes)
2.2	2	4-480V	DECAL, Grease Daily (Small Yokes)
3	1	1250-544	DECAL, Made in USA
4	2	1250-002	DECAL, Warning, Contact

Decals

NOTES

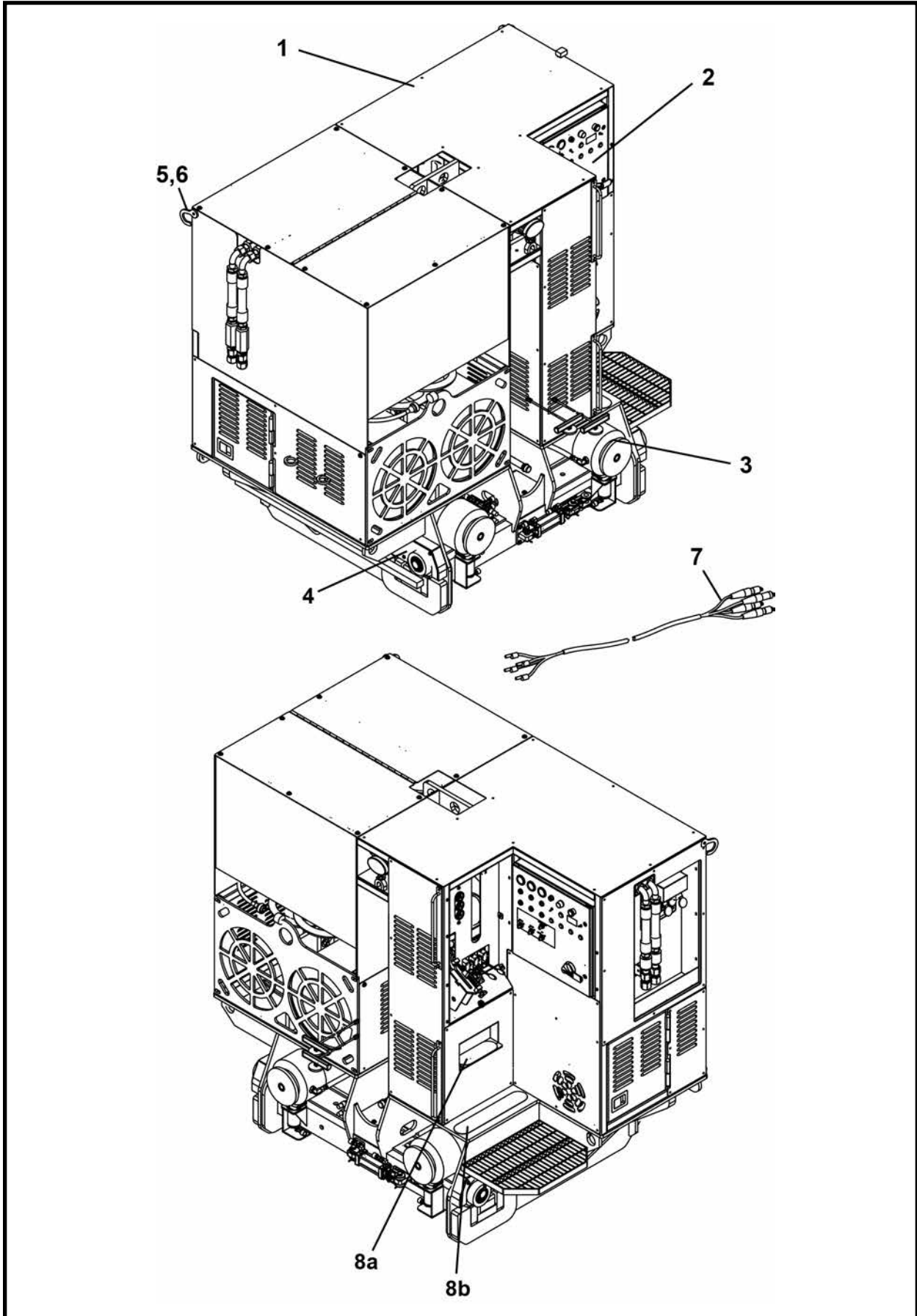


Structurals

5200 Pump Unit	
5200 Pump Unit Assembly, F27700F	2
Body Panels Assembly, 027708A	
SN F27700F-15 & Before	4
SN F27700F-16 & After	6
Base Assembly, 027801A	8
200 HP Auxiliary	
200 HP Auxiliary Assembly, F27573F	10
Skid	
Skid Assembly	14
Skid Mounting Assembly, 017300A	15
Skid Riser Assembly, F08297F00	16
Skid Extension	
2.5 Ft, F17006F00	17
40 Inch, F27630F	17
Skid Winch Drive Assembly, 022855A	18
Yoke	
360, 420/48SC, 480, 540	20
600, 660, 720, 780, 840	21

5200 PUMP UNIT ASSEMBLY, F27700F

5200 PUMP UNIT



5200 PUMP UNIT ASSEMBLY, F27700F

5200 PUMP UNIT

ITEM	QTY	PART NO.	DESCRIPTION
0	1	F27700F	FINAL ASSEMBLY, 5200 Pump Unit
1*	1	027708A	PANELS, Body
2.1**	1	027702A	ELECTRICAL ASSEMBLY (SN F27700F-11 & Before)
2.2**	1	031870A	ELECTRICAL ASSEMBLY (SN F27700F-12 & After)
3***	1	027709A	HYDRAULICS ASSEMBLY
4*	1	027801A	BASE ASSEMBLY
5	2	001689P00	HOOK, Power Cable
6	2	002636P01	BUSHING, Pump Unit Hook
7^	1	F20623F	STARTER CABLE ASSEMBLY
8	32 LI	P0122-005	TAPE, Anti-Skid 4 x 32 (Includes items 8a and 8b)
8a	11 LI	P0122-005-11	TAPE, Anti-Skid 4 x 11
8b	21 LI	P0122-005-21	TAPE, Anti-Skid 4 x 21
9^^	1	1255-002	KIT, Decal 5200
10^^^	1	027699A	KIT, Adapter, 5200 To TBM Series I

LI - Linear Inch

* Refer to this section for parts information.

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

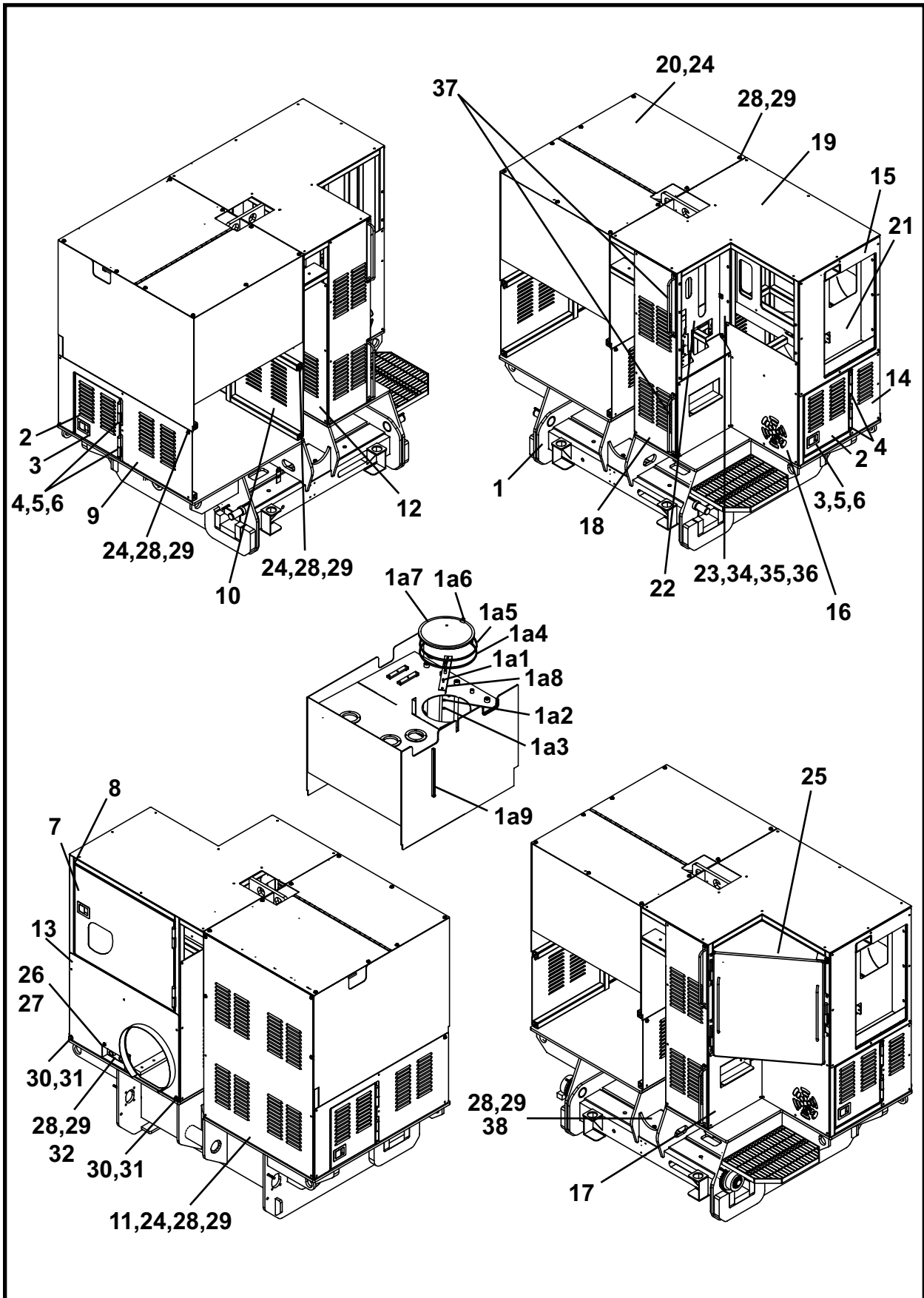
*** Refer to Section 6, Hydraulics for parts information.

^ Not part of F27700F, 5200 Final Assembly. Refer to Section 5, Electrical for parts information.

^^ Not Shown

^^^ Not Shown. Refer to Section 6, Hydraulics for parts information.

BODY PANELS ASSEMBLY, 027708A
5200 PUMP UNIT (SN F27700F-15 & BEFORE)

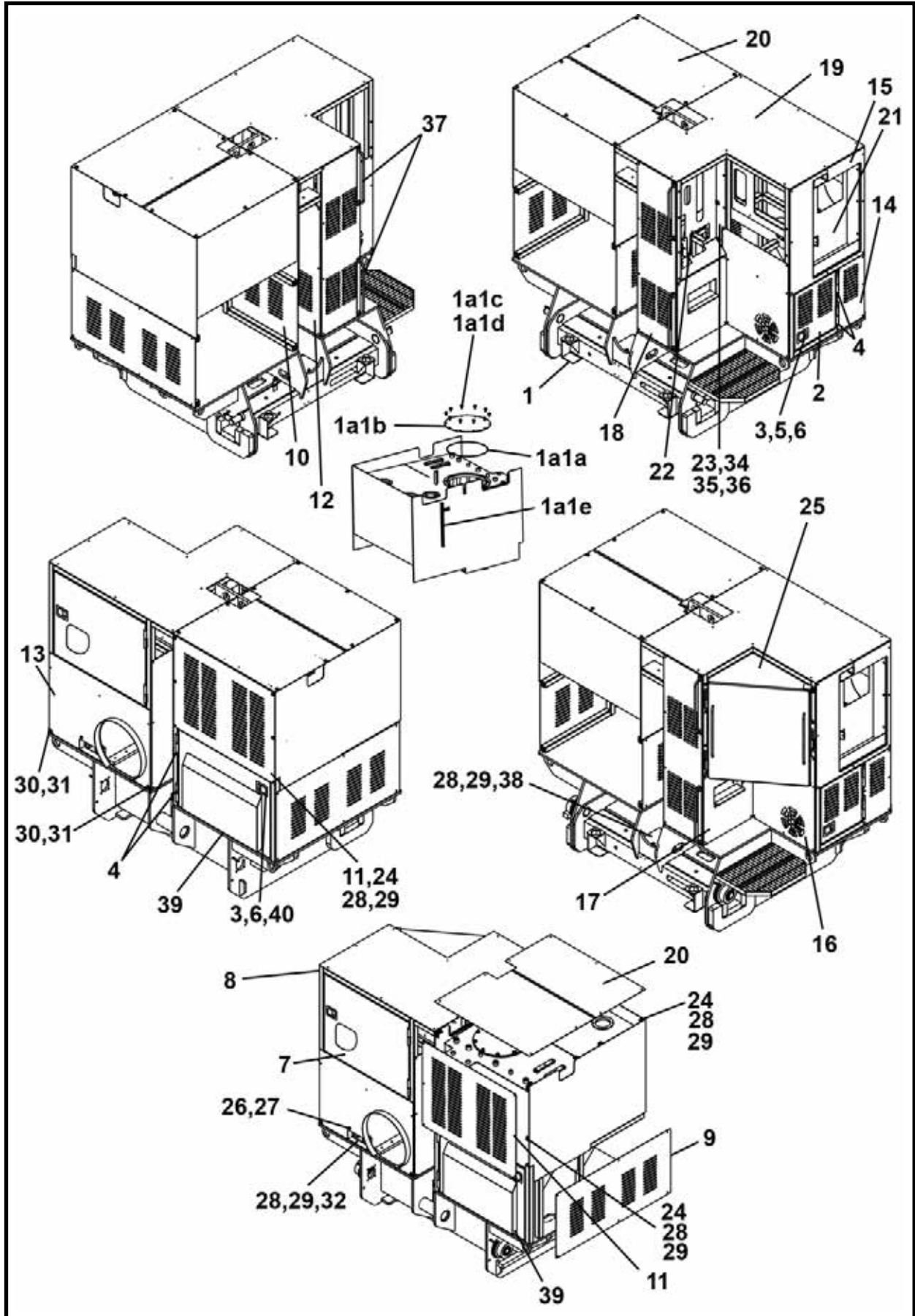


BODY PANELS ASSEMBLY, 027708A
5200 PUMP UNIT (SN F27700F-15 & BEFORE)

ITEM	QTY	PART NO.	DESCRIPTION
0	1	027708A	BODY PANELS ASSEMBLY
1	1	027701A	FRAME
1a	1	027745A	TANK, 235 Gallon (Includes items 1a1 - 1a8)
1a1	2	P0001-06-003	BOLT, Hex 3/8 UNC x .75
1a2	2	P0040-006	WASHER, Hardened Flat 3/8
1a3	2	P0003-06-000	NUT, Hex 3/8 UNC
1a4	1	P0201-224	CLAMP, Hose
1a5	1	P0201-218	CLAMP, Tube
1a6	1	P0416-004	PLUG, Square Head 3/4
1a7	1	P0308-105	KIT, End Cover (Includes items 1a71 and 1a72)
1a71	1	P0308-105A	GASKET, End Cover
1a72	1	P0308-105B	WASHER, Nylon
1a8	1	P0308-104	BRACKET, End Cover
1a9*	1	P0301-138	GAUGE, Sight
2	2	027756P	DOOR, Hinged
3	3	P0059-021	KEY, Latch Lock
4	6	P0052-008	HINGE
5	2	020473P	ANGLE
6	3	028359P00	DOOR FRAME, Latch Catch
7	1	027757P	DOOR, Hinged
8	1	027758P	ANGLE
9	1	027759P	PANEL, Tank Left Side
10	1	027760P	PANEL, Tank Right Side
11	1	027761P	PANEL, Tank Back
12	1	020372P	PANEL, 100 Gal Inside
13	1	028099A	PANEL, Oper Back
14	1	027763P	PANEL, Oper Bottom Right
15	1	027764P	PANEL, Oper Top Right
16	1	027793P	PANEL, Control Front
17	1	027893A	PANEL, Control Side Lower
18	1	027795P	PANEL, Oper Front
19	1	027796P	PANEL, Oper Top
20	1	027799A	PANEL, Hinged Tank Top
21	1	027845A	PANEL, Side
22	1	027850A	PANEL, Control Box
23	1	027836A	PANEL, Control Box Side
24	15	P0011-006A	NUT, Strut Square 3/8 UNC
25	1	027817A	GUARD, Panel
26	2	P0040-005	WASHER, Hardened Flat 5/16
27	2	P0001-05-003	BOLT, Hex 5/16 UNC x .75
28	18	P0040-006	WASHER, Hardened Flat 3/8
29	18	P0001-06-002	BOLT, Hex 3/8 UNC x .5
30	2	P0040-010	WASHER, Hardened Flat 5/8
31	2	P0001-10-004	BOLT, Hex 5/8 UNC x 1
32	1	027792A	CONNECTION, Water
33	81	P0035-002	SCREW, Hex Washer Head Tap 5/16 x .75
34	3	P0040-004	WASHER, Hardened Flat 1/4
35	3	P0001-04-003	BOLT, Hex 1/4 UNC x .75
36	6	P0030-05-003	SCREW, Socket Head Flat Cap 5/16 UNC x .75
37	2	030662A	HANDLE, Grab
38	1	027897P	GUARD, Latch Sensor

* Included in 5200 Pump Unit Hydraulics, 027709A. Refer to Section 6, Hydraulics for parts information.

BODY PANELS ASSEMBLY, 027708A
5200 PUMP UNIT (SN F27700F-16 & AFTER)

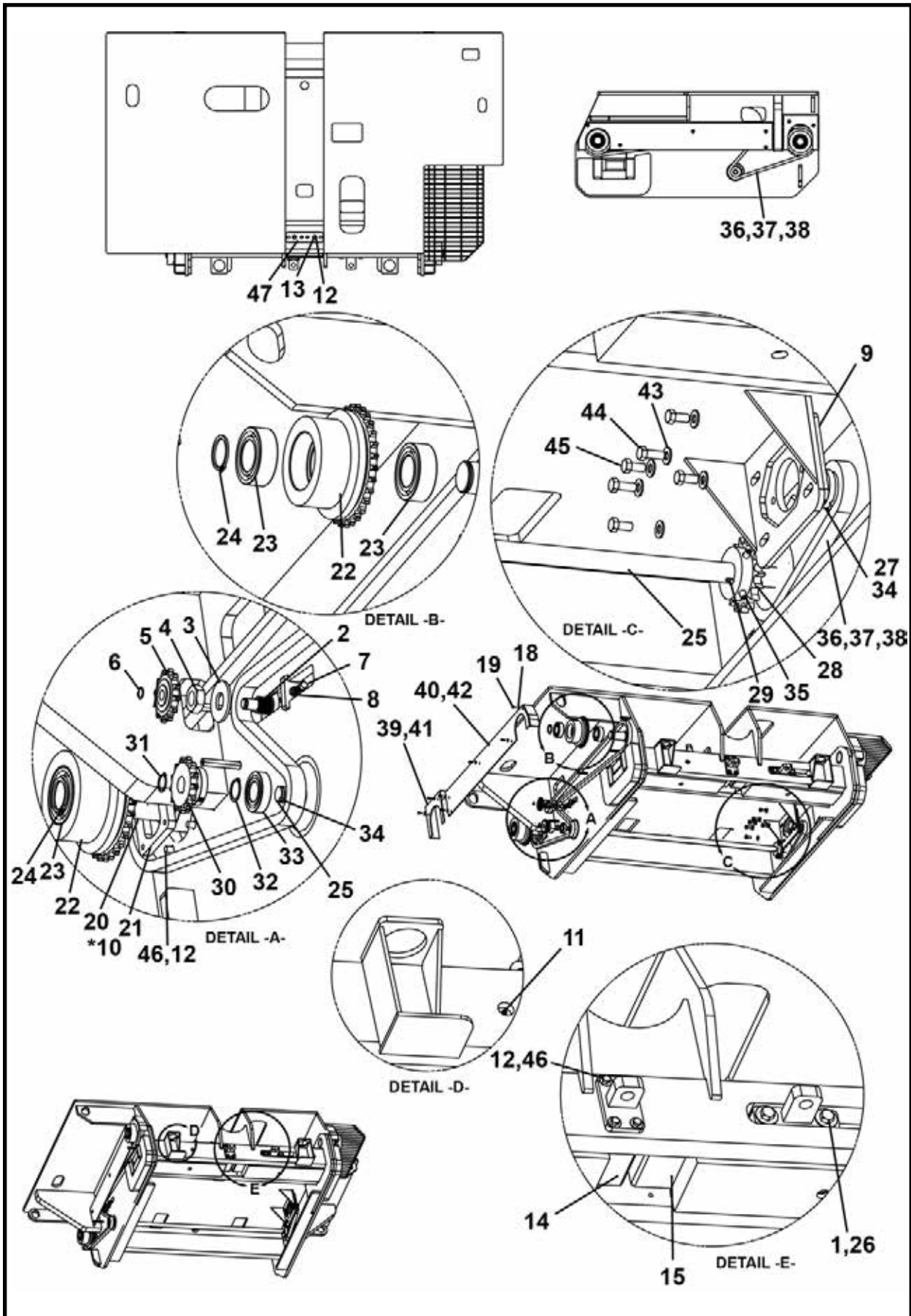


BODY PANELS ASSEMBLY, 027708A
5200 PUMP UNIT (SN F27700F-16 & AFTER)

ITEM	QTY	PART NO.	DESCRIPTION
0	1	027708A	BODY PANELS ASSEMBLY
1	1	027701A	FRAME
1a	1	032290A	TANK, 235 Gallon (Includes item 1a1)
1a1	1	A22739A	ASSEMBLY, Tank Access Port (Includes items 1a1a-d)
1a1a	1	A22742P	ORING
1a1b	1	A22741P	COVER
1a1c	10	P0001-08-004	BOLT, 1/2 UNC x 1
1a1d	10	P0040-008	WASHER, Flat 1/2
1a1e*	1	P0301-138	GAUGE, Sight
2	1	027756P	DOOR, Hinged
3	3	P0059-021	KEY, Latch Lock
4	6	P0052-008	HINGE
5	1	020473P	ANGLE
6	3	028359P00	DOOR FRAME, Latch Catch
7	1	027757P	DOOR, Hinged
8	1	027758P	ANGLE
9	1	032346P	PANEL, Tank Left Side
10	1	032345P	PANEL, Tank Right Side
11	1	032344P	PANEL, Tank Back
12	1	020372P	PANEL, 100 Gal Inside
13	1	028099A	PANEL, Oper Back
14	1	027763P	PANEL, Oper Bottom Right
15	1	027764P	PANEL, Oper Top Right
16	1	027793P	PANEL, Control Front
17	1	027893A	PANEL, Control Side Lower
18	1	027795P	PANEL, Oper Front
19	1	027796P	PANEL, Oper Top
20	1	027799A	PANEL, Hinged Tank Top
21	1	027845A	PANEL, Side
22	1	027850A	PANEL, Control Box
23	1	027836A	PANEL, Control Box Side
24	13	P0011-006A	NUT, Strut Square 3/8 UNC
25	1	027817A	GUARD, Panel
26	2	P0040-005	WASHER, Hardened Flat 5/16
27	2	P0001-05-003	BOLT, Hex 5/16 UNC x .75
28	16	P0040-006	WASHER, Hardened Flat 3/8
29	16	P0001-06-002	BOLT, Hex 3/8 UNC x .5
30	2	P0040-010	WASHER, Hardened Flat 5/8
31	2	P0001-10-004	BOLT, Hex 5/8 UNC x 1
32	1	027792A	CONNECTION, Water
33	81	P0035-002	SCREW, Hex Washer Head Tap 5/16 x .75
34	3	P0040-004	WASHER, Hardened Flat 1/4
35	3	P0001-04-003	BOLT, Hex 1/4 UNC x .75
36	6	P0030-05-003	SCREW, Socket Head Flat Cap 5/16 UNC x .75
37	2	030662A	HANDLE, Grab
38	1	027897P	GUARD, Latch Sensor
39	1	032340A	DOOR, Pump
40	1	032342P	ANGLE

* Included in 5200 Pump Unit Hydraulics, 027709A. Refer to Section 6, Hydraulics for parts information.

BASE ASSEMBLY, 027801A
5200 PUMP UNIT



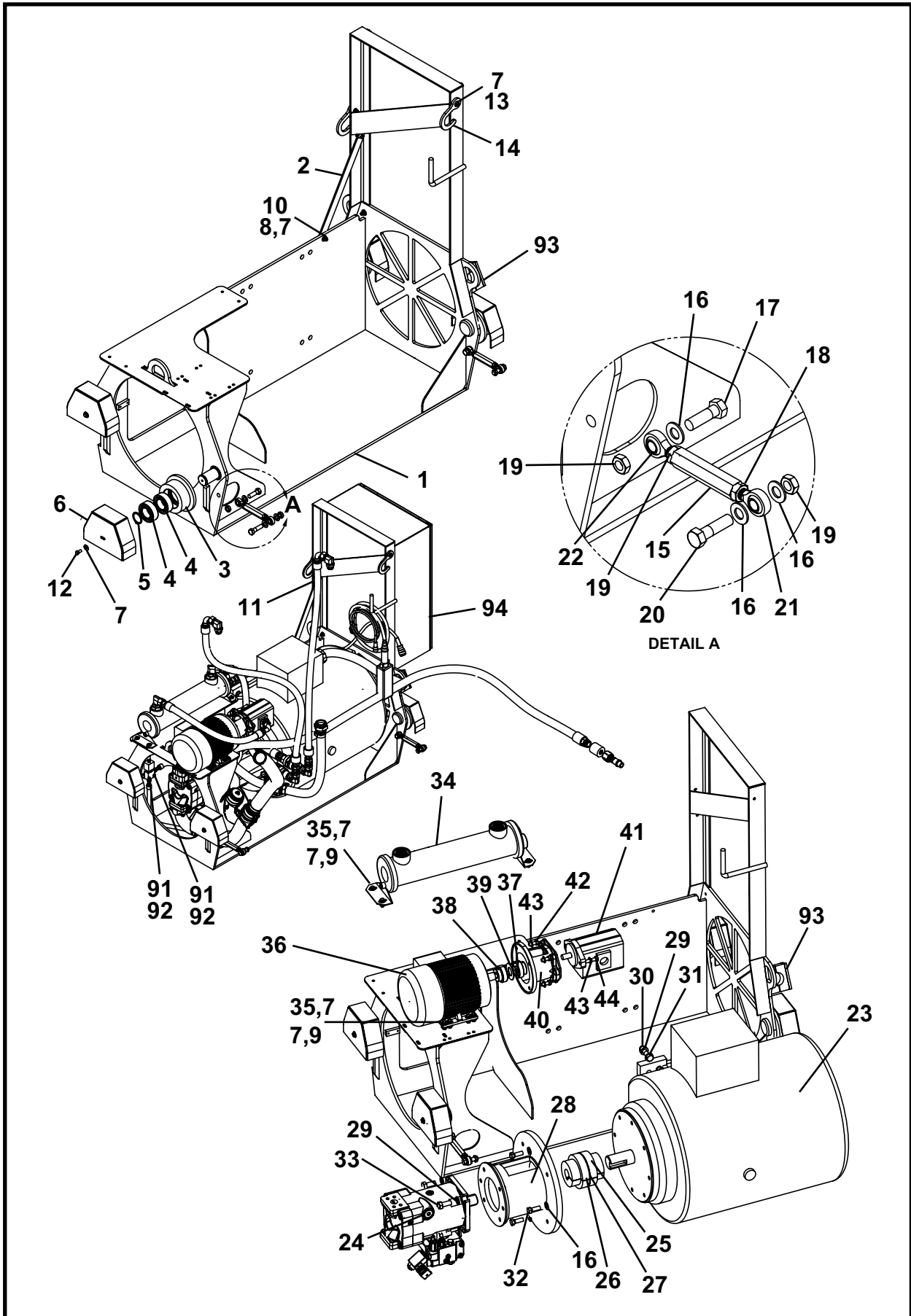
BASE ASSEMBLY, 027801A
5200 PUMP UNIT

ITEM	QTY	PART NO.	DESCRIPTION
0	1	027801A	BASE ASSEMBLY
1	4	P0001-10-010	BOLT, Hex 5/8 UNC x 2.5
2	2	020461P	SHAFT, Chain Tensioner
3	2	P0040-016	WASHER, Hardened Flat 1
4	2	P0008-16-000	NUT, Hex Jam 1 UNF
5	2	P0072-026	SPROCKET, Idler
6	2	P0077-007	SNAP RING, External
7	2	P0034-06-012	SCREW, Sq. Head Set 3/8 UNC x 3
8	2	P0007-06-000	NUT, Jam 3/8 UNC
9	1	021117P	MOUNT, Hyd Motor
10*	4	021149P	SHIM
11	8	P0063-001	FITTING, Grease - Straight
12	18	P0040-006	WASHER, Hardened Flat 3/8
13	2	P0001-06-003	BOLT, Hex 3/8 UNC x .75
14	1	021101P	BAR, Pump Unit Dog-Right
15	1	021102P	BAR, Pump Unit Dog-Left
16	2	020449A	CLEVIS, Rod
17	2	020446A	CLEVIS, Cylinder
18	14	P0040-004	WASHER, Hardened Flat 1/4
19	14	P0001-04-003	BOLT, Hex 1/4 UNC x .75
20	1	020455P	SHAFT, Rear Driven
21	2	020457P	PLATE, Rear Driven Axle
22	4	021103P	WHEEL, Pump Unit Drive
23	8	P0065-005	BEARING
24	4	P0077-054	SNAP RING, External
25	1	020456P	SHAFT, Front Drive
26	4	P0040-010	WASHER, Hardened Flat 5/8
27	1	P0071-001	SPROCKET
28	1	027599P	SPROCKET
29	1	021115P	KEY, Square 1/4 x 2
30	2	P0071-013	SPROCKET
31	2	P0077-013	SNAP RING, External
32	2	P0077-017	SNAP RING, External
33	2	P0065-260	BEARING, Ball
34	3	021114P	KEY, Square 1/4 x 1.25
35	4	P0033-06-016	SCREW, Sq. Head Set 3/8 UNC x 1
36	321 LI	P0078-002	CHAIN #60
37	3	P0078-005	LINK, Half
38	3	P0078-008	LINK, Master
39	1	021107A	GUARD, RH Rear
40	1	021105A	GUARD, RH Front
41	1	021108A	GUARD, LH Rear
42	1	021106A	GUARD, LH Front
43	6	P0040-008	WASHER, Hardened Flat 1/2
44	2	P0001-08-005	BOLT, Hex 1/2 UNC x 1.25
45	4	P0001-08-004	BOLT, Hex 1/2 UNC x 1
46	16	P0001-06-005	BOLT, Hex 3/8 UNC x 1.25
47	1	020460P	MOUNT, Sensor

* Use item 10 to shim a minimum of .060" gap between items 21 and 20.

LI - Linear Inch

200 HP AUXILIARY ASSEMBLY, F27573F
200 HP AUXILIARY



200 HP AUXILIARY ASSEMBLY, F27573F

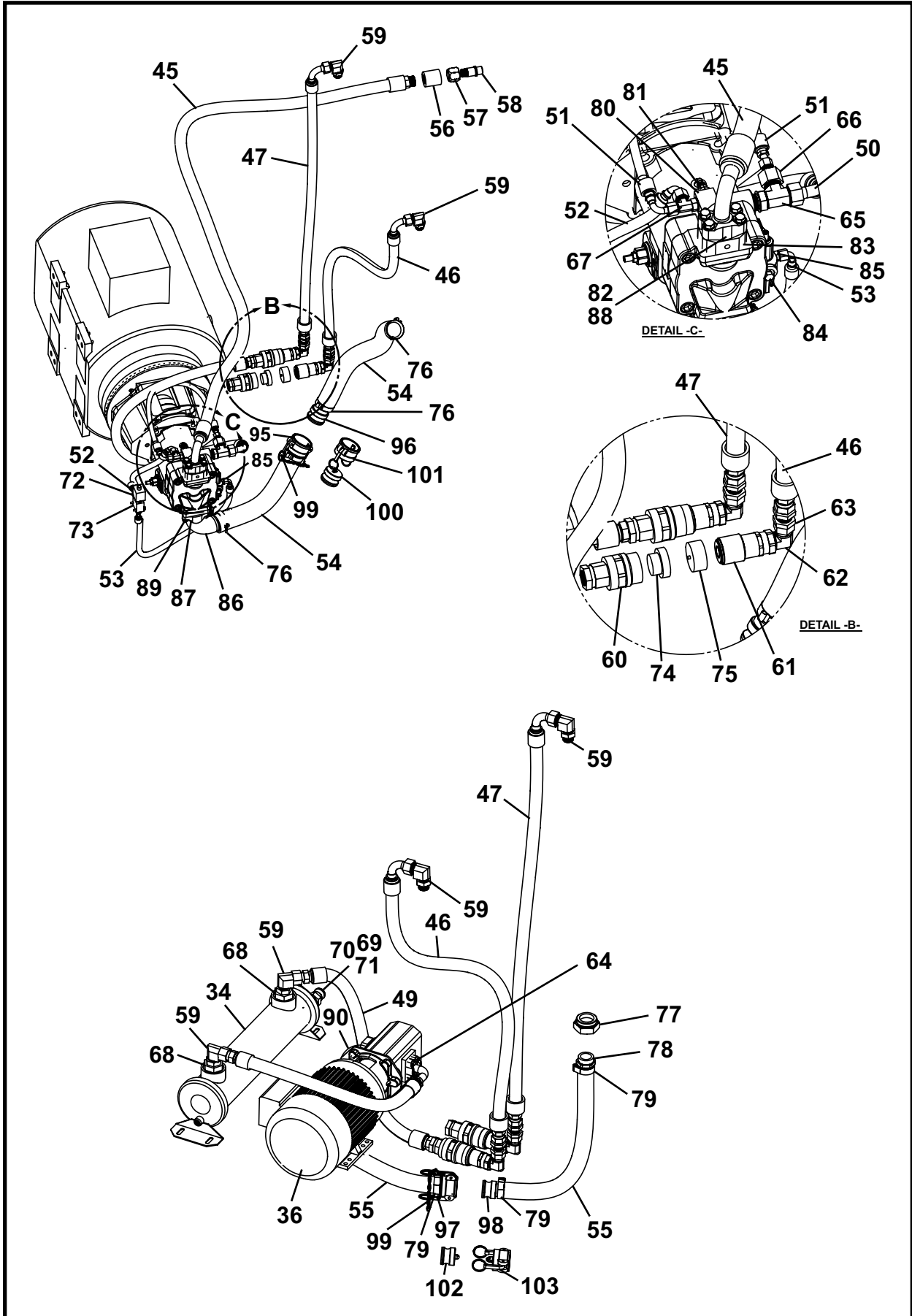
200 HP AUXILIARY

ITEM	QTY	PART NO.	DESCRIPTION
0	1	F27573F	ASSEMBLY, 200 HP AUX
1	1	027574A	DOLLY
2	1	027587P	STRAP, Supporting
3	4	027585P	WHEEL, Dolly
4	8	P0065-005	BEARING
5	4	P0077-054	SNAP RING, HD External
6	4	027475A	GUARD, Wheel
7	34	P0040-006	WASHER, Hardened Flat 3/8
8	8	P0013-06A-000	NUT, Nyloc 3/8 UNC
9	10	P0001-06-005	BOLT, Hex 3/8 UNC x 1.25
10	5	P0001-06-006	BOLT, Hex 3/8 UNC x 1.5
11	1	P0001-06-004	BOLT, Hex 3/8 UNC x 1
12	4	P0001-06-003	BOLT, Hex 3/8 UNC x .75
13	2	002636P01	BUSHING, Hook
14	2	001689P00	HOOK, Power Cable
15	2	A45092P	COUPLING
16	12	P0040-010	WASHER, Hardened Flat 5/8
17	2	P0001-10-008	BOLT, Hex 5/8 UNC x 2
18	2	P0008-10-000	NUT, Jam 5/8 UNF
19	2	P0008-10-000A	NUT, Jam 5/8 UNF LH
20	2	P0001-10-009	BOLT, Hex 5/8 UNC x 2.25
21	2	P0099-014	BEARING, Rod End RH 5/8
22	2	P0099-015	BEARING, Rod End LH 5/8
23*	1	P0304-345	MOTOR, 200 HP 1800 RPM
24**	1	P0303-348	PUMP, 200 HP Auxiliary
25	1	P0305-148	COUPLING, Motor
26	1	P0305-200	COUPLER
27	1	P0305-184	INSERT
28	1	P0305-246	MOUNT, Pump/Motor
29	20	P0040-012	WASHER, Hardened Flat 3/4
30	8	P0003-12-000	NUT, Hex 3/4 UNC
31	8	P0001-12-012	BOLT, Hex 3/4 UNC x 3
32	4	P0001-10-007	BOLT, Hex 5/8 UNC x 1.75
33	4	P0001-12-007	BOLT, Hex 3/4 UNC x 1.75
34	1	P0093-028	HEAT EXCHANGER
35	6	P0003-06-000	NUT, Hex 3/8 UNC
36*	1	P0304-343	MOTOR, 5 HP 480V 3 PH
37	1	P0305-240	COUPLING, Half Pump
38	1	P0305-239	COUPLING, Half Motor
39	1	P0305-241	INSERT
40	1	P0305-210	ADAPTER, Pump/Motor
41**	1	P0303-398	PUMP, Gear (Cooling)
42	4	P0001-08-005	SCREW, Hex Cap 1/2 UNC x 1.25
43	10	P0040-008	WASHER, Hardened Flat 1/2
44	2	P0001-08-008	BOLT, Hex 1/2 UNC x 2
45	1	A09867A-120	HOSE ASSEMBLY, 1-1/4 x 120
46	1	A10044A-070	HOSE ASSEMBLY, 1 x 70
47	1	A10044A-061	HOSE ASSEMBLY, 1 x 61
48	1	A10342A-030	HOSE ASSEMBLY, 1 x 30
49	1	A10447A-037	HOSE ASSEMBLY, 1 x 37
50	1	A09868A-058	HOSE ASSEMBLY, 1 x 58
51	1	A09912A-031	HOSE ASSEMBLY, 1/2 x 31
52	1	A10366A-016	HOSE ASSEMBLY, 3/8 x 16
53	1	A10079A-036	HOSE ASSEMBLY, 3/8 x 36

(Continued on next page)

200 HP AUXILIARY ASSEMBLY, F27573F

200 HP AUXILIARY



200 HP AUXILIARY ASSEMBLY, F27573F

200 HP AUXILIARY

ITEM	QTY	PART NO.	DESCRIPTION
54	1	P0201-225-052	HOSE, Suction 2-1/2 x 52
55	60 LI	P0201-252	HOSE, Suction 1.5 x 60
56	1	P0421-022	REDUCER, 1-1/4 x 1
57	1	027667P	NUT, Coupler
58	1	027669P	NIPPLE, Threaded
59	4	P0300-371	FITTING, 16MFOR-16MB90
60	2	P0100-034	COUPLER, Quick 1 Female
61	2	P0100-035	COUPLER, Quick 1 Male
62	2	P0300-514	FITTING, 16MJ-16FJX90
63	2	P0300-308	FITTING, 16MJ-16MJBKHD
64	1	P0300-716	KIT, Split Flange 16
65	1	P0300-419	FITTING, 16MFOR-16MB-16MFOR
66	1	P0300-631	FITTING, 16FFOR-08MFFOR
67	1	P0300-535	FITTING, 08MFOR-08MB-08MFOR
68	2	P0300-553	FITTING, 24MB-16FB
69	1	P0100-023	CAMLOCK, Brass 1
70	1	P0100-024	PLUG 1
71	1	P0300-013	FITTING, 16MP-16MP
72	2	P0300-356	FITTING, 06MFOR-06MB
73	1	P0302-775	VALVE, Dump
74	2	P0100-034A	PLUG, Female
75	2	P0100-035A	CAP, Male
76	2	P0201-228	CLAMP, T-Bolt
77	1	P0300-841	FITTING, 32MB-24FB
78	1	P0220-280	ADAPTOR, 1.5 Stem Beaded x MORB
79	4	P0201-216	T-CLAMP 1-7/8 x 2-1/16
80	1	P0302-779	BODY, PRV Port #8 Ports
81	1	P0302-778	VALVE, Relief
82	1	P0300-542	FITTING, 08MB-08MB
83	1	P0300-842	SPACER
84	1	P0300-027	PLUG, 06MB-PLUG
85	1	P0300-735	FITTING, 06MFFOR-04MB
86	1	P0303-340	HOSE BARB 90
87	1	P0100-059	FLANGE, Split
88	1	P0300-420	FLANGE, Split
89	4	P0001-08-006	SCREW, Hex Head Cap 1/2 UNC x 1.5
90	1	P0220-335	INSERT, 1-1/2 Beaded
91	2	P0040-004	WASHER, Hardened Flat 1/4
92	2	P0001-04-007	SCREW, Hex Head Cap 1/4 UNC x 1.75
93	1	P0059-074	CLAMP, Vibration 2-1/4
94***	1	027600A	ELECTRICAL ASSEMBLY
95	1	P0100-114	COUPLER, Camlock #40-SS
96	1	P0100-116	COUPLER, Camlock MALE #40-SS
97	1	P0100-113	COUPLER, Camlock #24-SS
98	1	P0100-115	COUPLER, Camlock MALE #24-SS
99	1	P0100-118	PLUG, Camlock #40-SS
100	1	P0100-120	CAP, Camlock #40-SS
101	1	P0100-117	PLUG, Camlock #24-SS
102	1	P0100-119	CAP, Camlock #24-SS
103	1	1255-073	KIT, Decal, 5200 200 HP Auxiliary

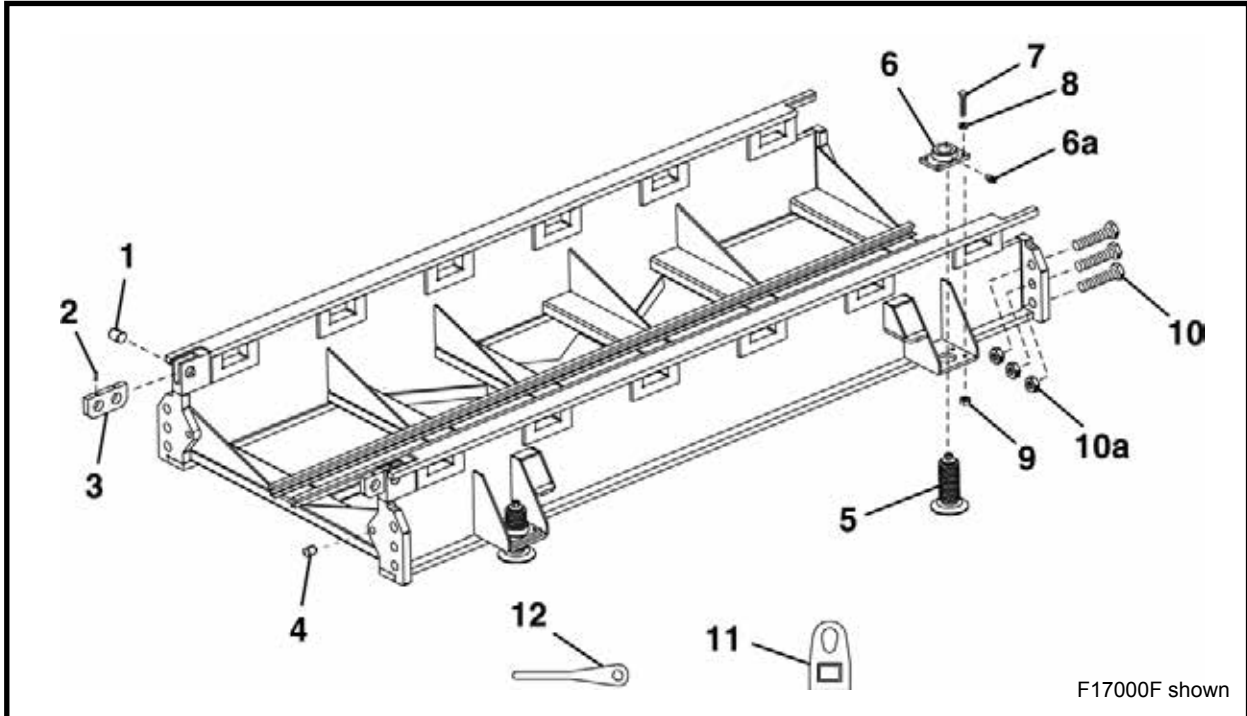
LI - Linear Inch

* Refer to Section 8, Motors for parts information.

** Refer to Section 9, Pumps for parts information.

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

SKID ASSEMBLY



F17000F shown

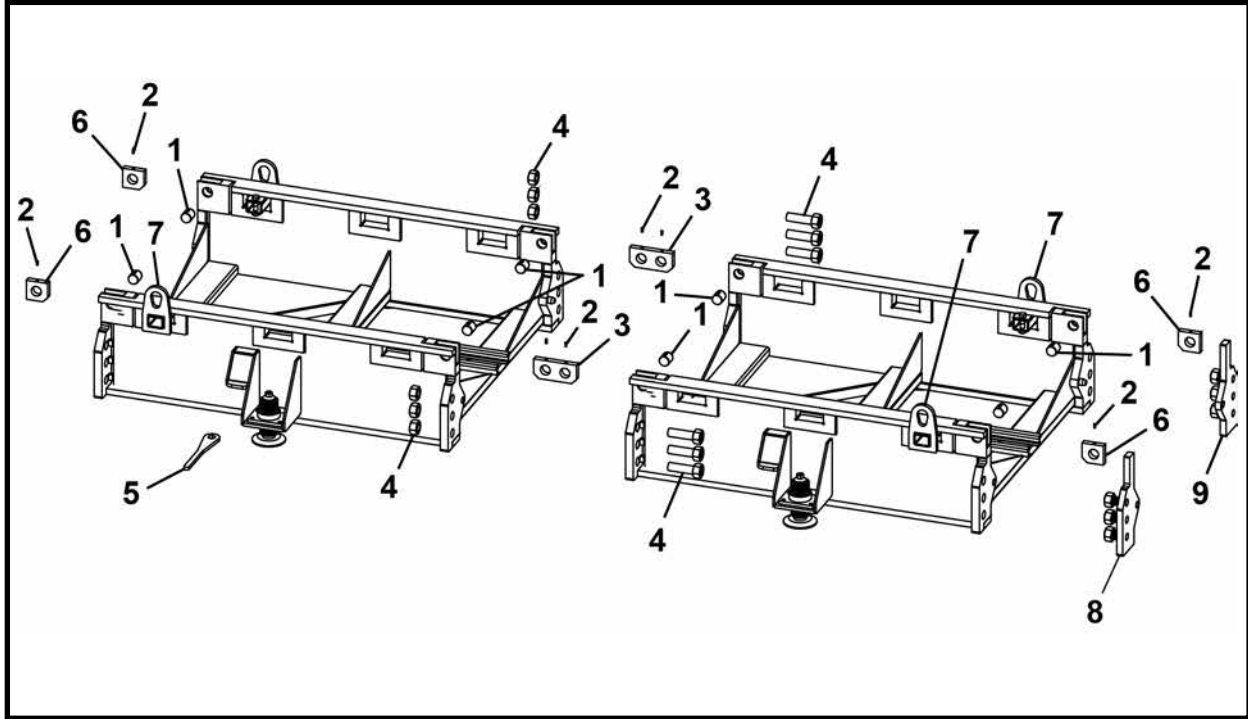
ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	F17000F00	SKID ASSEMBLY, 15 Foot
0.2	1	F17004F00	SKID ASSEMBLY, 7.5 Foot
0.3	1	F17007F00	SKID ASSEMBLY, 22.5 Foot
1*	4	017050P01	SKID SPLIT PIN
2*	4	P0033-06-016	SET SCREW, Socket 3/8 UNC x 1
3*	2	017048P01	SKID SPLIT BAR
4	2	017188P00	SKID LOCATOR PIN
5.1	4	005175A00	LEVELING SCREW ASSEMBLY (F17000F)
5.2	2	005175A00	LEVELING SCREW ASSEMBLY (F17004F)
5.3	6	005175A00	LEVELING SCREW ASSEMBLY (F17007F)
6.1	4	005177A00	LEVELING NUT ASSEMBLY (F17000F) (includes item 6a)
6.2	2	005177A00	LEVELING NUT ASSEMBLY (F17004F) (includes item 6a)
6.3	6	005177A00	LEVELING NUT ASSEMBLY (F17007F) (includes item 6a)
6a	1 per assembly	P0063-001	FITTING, Grease 1/4 UNF
7.1	16	P0001-12-010	BOLT, 3/4 UNC x 2.5 (F17000F)
7.2	8	P0001-12-010	BOLT, 3/4 UNC x 2.5 (F17004F)
7.3	24	P0001-12-010	BOLT, 3/4 UNC x 2.5 (F17007F)
8.1	16	P0045-012	WASHER, Lock 3/4 (F17000F)
8.2	8	P0045-012	WASHER, Lock 3/4 (F17004F)
8.3	24	P0045-012	WASHER, Lock 3/4 (F17007F)
9.1	16	P0003-12-000	NUT, 3/4 (F17000F)
9.2	8	P0003-12-000	NUT, 3/4 (F17004F)
9.3	24	P0003-12-000	NUT, 3/4 (F17007F)
10*	6	006911A00	SKID BOLT ASSEMBLY (includes 10a)
10a*	6	P0005-32-000	NUT, Hardened
11.1*	4	009815A00	LIFT EYE ASSEMBLY (F17000F & F17007F) (includes items 11a & 11b)
11.2*	2	009815A00	LIFT EYE ASSEMBLY (F17004F) (includes items 11a & 11b)
11a**	1 per assembly	P0001-16-016	BOLT, 1 UNC x 4
11b**	1 per assembly	P0003-16-000	NUT, 1
12	1	001563P00	WRENCH, Skid Assembly

* Items included in 017300A, Skid Mounting Assembly. Refer to this section for parts information.

** Not Shown

NOTE: Skid Riser Assembly, F08297F00 is designed for F17007F00 skid. Refer to this section.

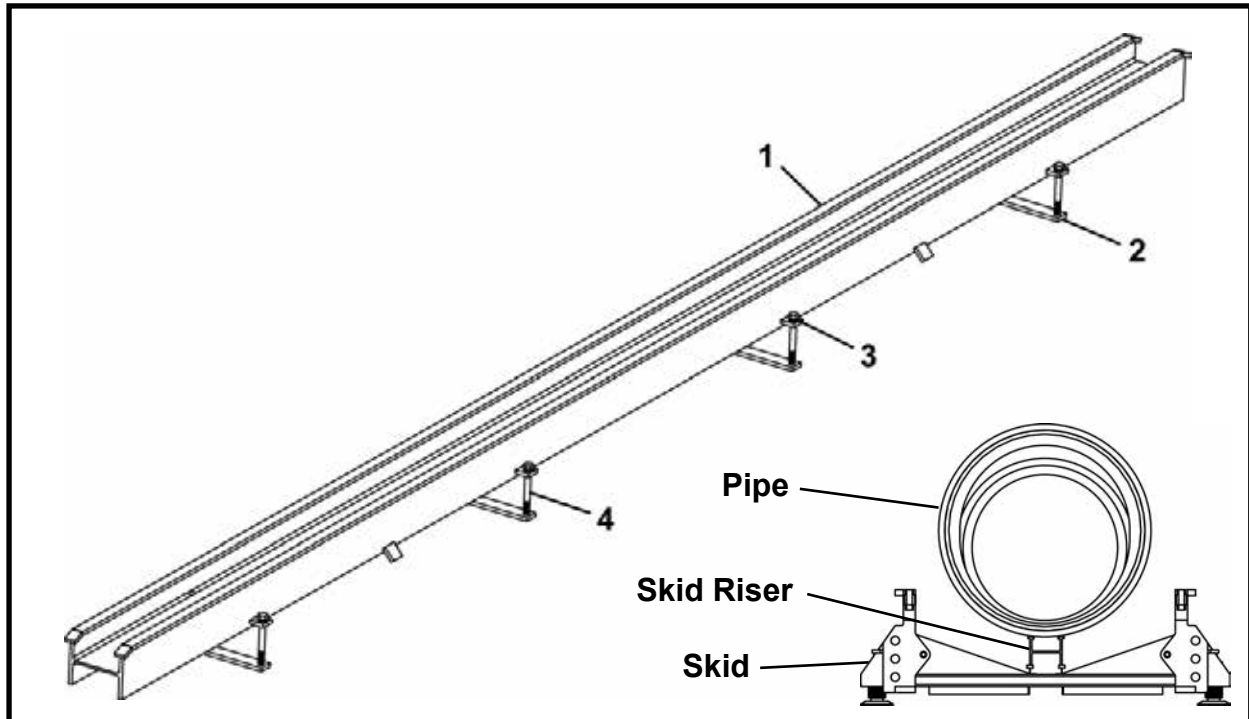
SKID MOUNTING ASSEMBLY, 017300A



ITEM	QTY	PART NO.	DESCRIPTION
0	-	017300A	SKID MOUNTING ASSEMBLY
1	8	017050P01	PIN, Skid Split
2	8	P0033-06-016	SCREW, Socket Head Cap 3/8 UNC x 1
3	2	017048P01	BAR, Skid Split
4	6	006911A00	SKID BOLT ASSEMBLY
5	1	001563P00	WRENCH, Skid
6	4	017301P	PLATE, Skid Pocket
7	4	009815A00	LIFT EYE
8	1	017017A00	THRUST PLATE ADAPTER ASSEMBLY
9	1	017018A00	THRUST PLATE ADAPTER ASSEMBLY

Note: Quantities may change per job requirements.

SKID RISER ASSEMBLY, F08297F00
22.5 SKID ASSEMBLY

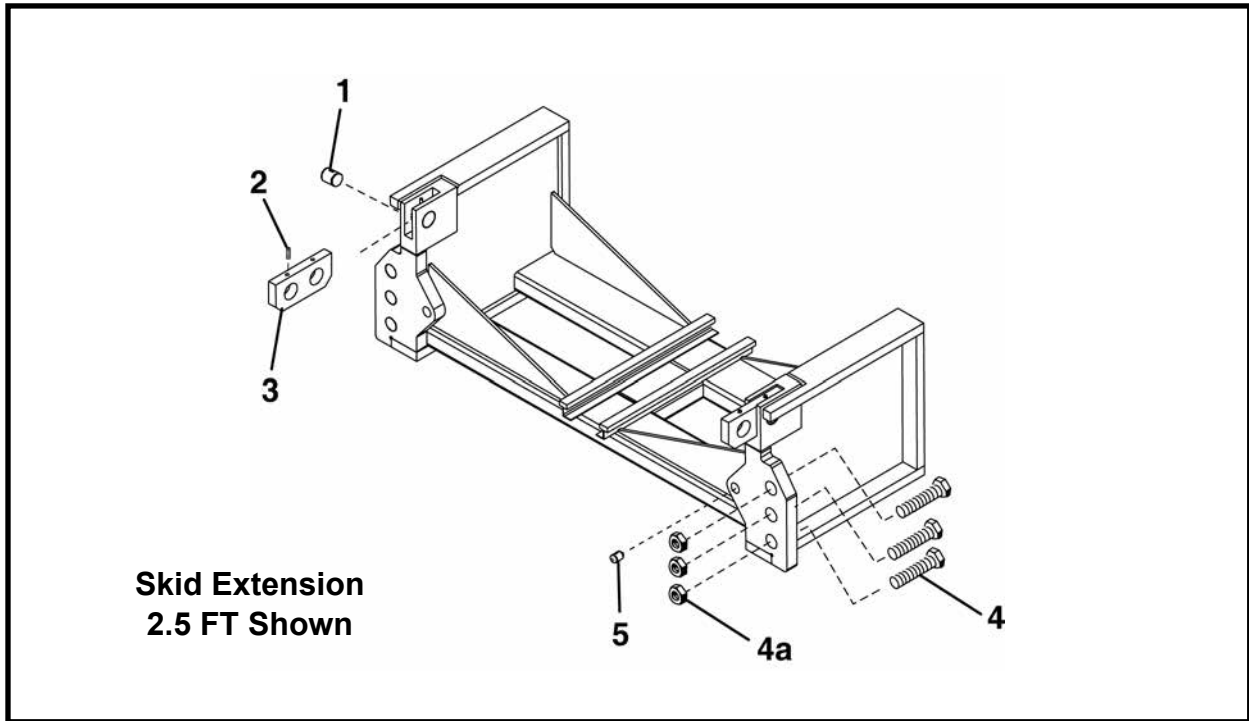


ITEM	QTY	PART NO.	DESCRIPTION
0	1	F08297F00	SKID RISER ASSEMBLY 20'
1	1	008257A	SKID RISER
2	4	008227P	BAR, Mounting
3	8	P0045-012	WASHER, Lock 3/4
4	8	P0001-12-028	BOLT, 3/4 UNC x 7

Note:

The F08297F00 skid riser (designed for the F17007F00 22.5 Skid) is used for the 360, 48SC and 420 Tunnel Boring Machines to support the smaller pipes for thrusting near the 5200 Pump Unit cylinder centers. The yokes for these TBMs are designed to work with this skid riser.

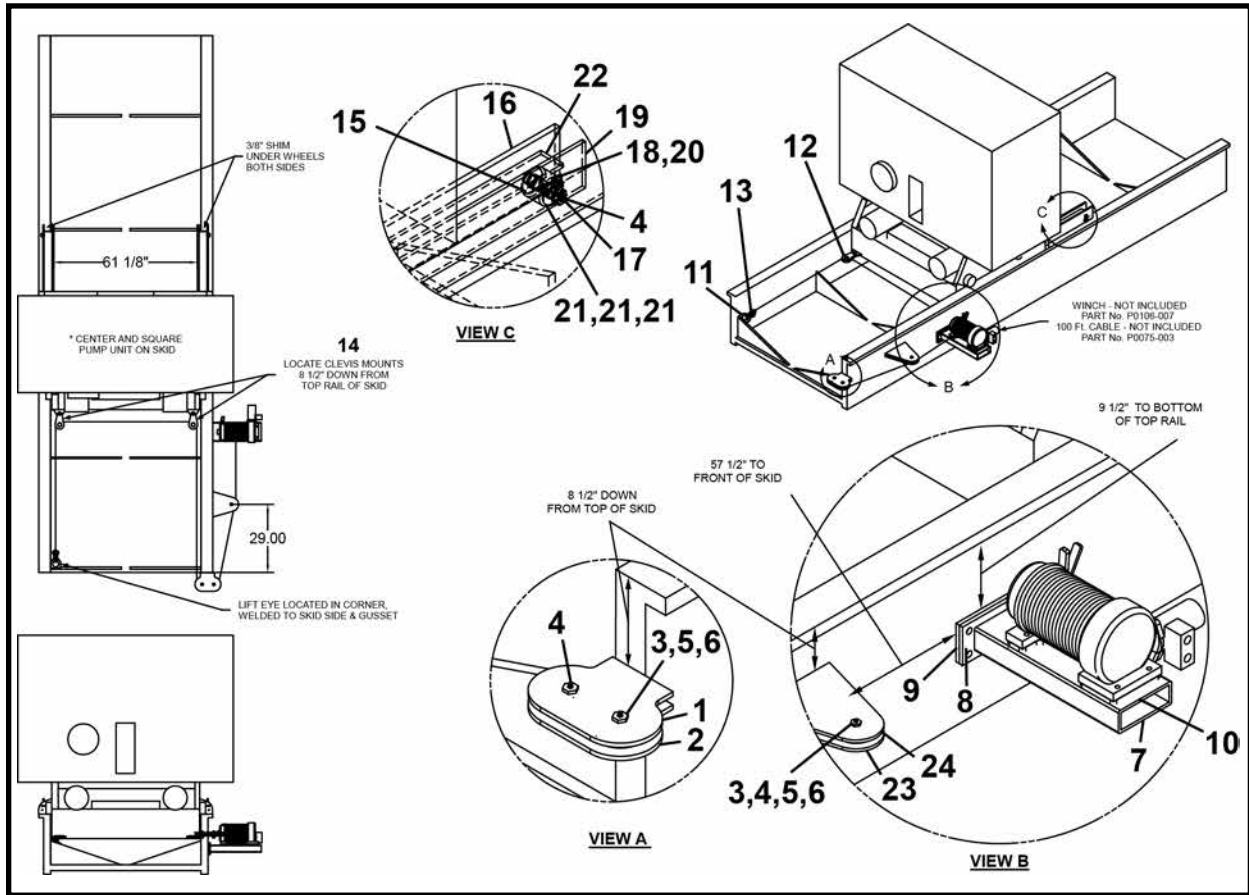
SKID EXTENSION ASSEMBLY
2.5 FT/ 40 IN SKID ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	F17006F00	SKID EXTENSION, 2.5 Foot
0.2	1	F27630F	SKID EXTENSION, 40 Inch
1*	2	017050P00	SKID SPLIT PIN
2*	2	P0033-06-016	SET SCREW, Socket 3/8-16 UNC x 1
3*	2	017048P00	SKID SPLIT BAR
4*	6	006911A00	SKID BOLT ASSEMBLY (includes 4a)
4a*	6	P0005-32-000	NUT, Hardened
5	1	017188P00	PIN, Skid Locator

* Items included in 017300A, Skid Mounting Assembly. Refer to this section for parts information.

SKID WINCH DRIVE ASSEMBLY, 022855A



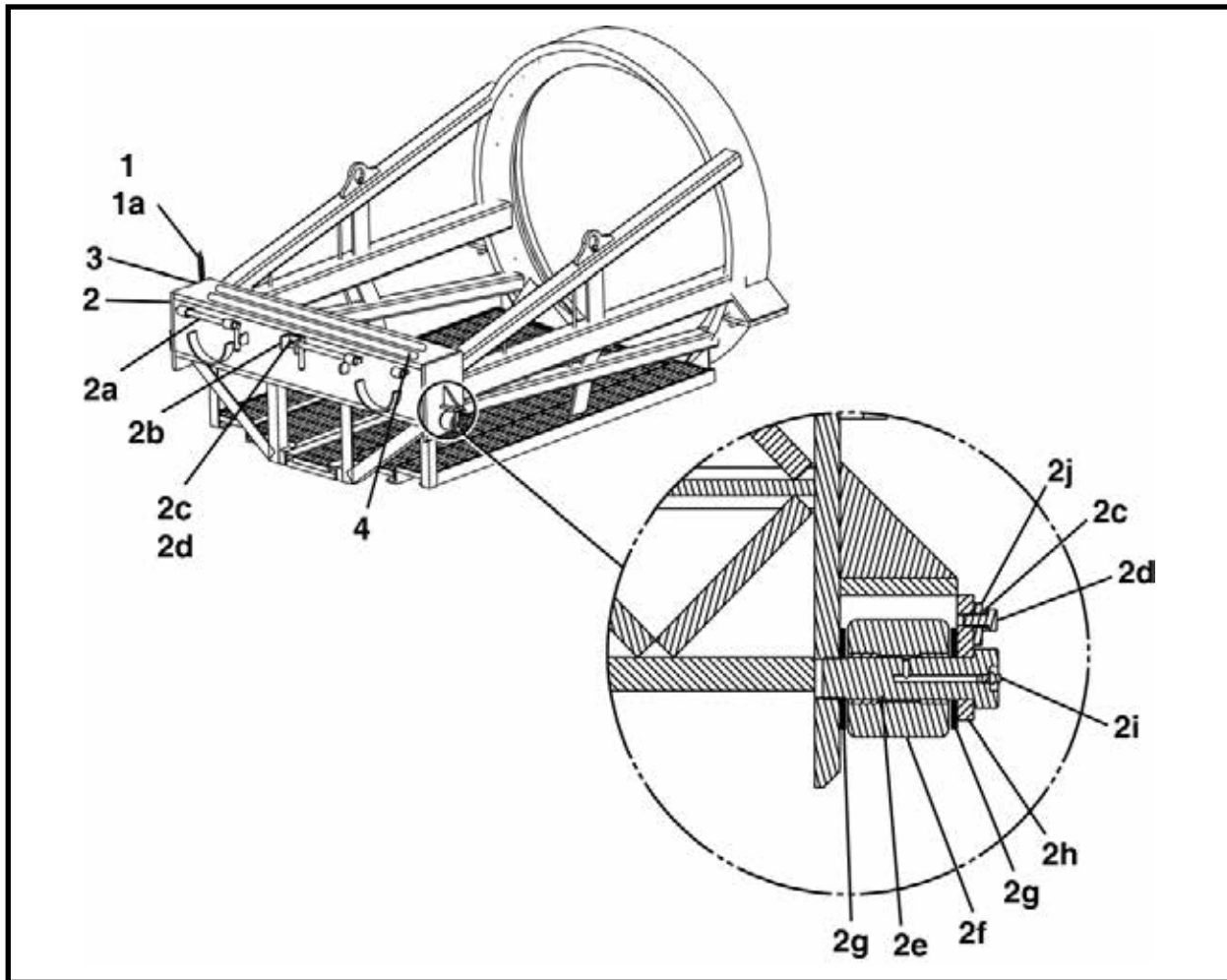
ITEM	QTY	PART NO.	DESCRIPTION
0	1	022855A	SKID WINCH DRIVE ASSEMBLY
1	1	022859P	PLATE, Sheave Support Top
2	1	022860P	PLATE, Sheave Support Bottom
3	3	002124P00	BOLT, Conveyor Lift
4	5	P0063-001	FITTING, Grease
5	3	025323A	PULLEY ASSEMBLY
6	3	P0007-12-000	NUT, Jam 3/4 UNC
7	1	022856P	TUBE, Winch Support
8	1	022857P	PLATE
9	1	022858P	PLATE, Winch Support Bolt
10	1	A12998P	PLATE, Winch Mount
11	1	003529P02	LIFT EYE
12	2	P0098-062	BLOCK, Cross Bolt Snatch
13	1	P0091-002	SHACKLE
14	2	A12997P0	MOUNT, Shackle
15	2	025802A00	WHEEL
16	2	022863P	PLATE, Inner
17	2	005363P00	SHAFT, Roller
18*	2	005364P00	BAR
19	2	022862P	PLATE, Outer
20*	2	P0001-06-004	BOLT, 3/8 UNC x 1
21*	4	P0040-020	WASHER, Hardened 1-1/4
22	2	022864P	PLATE, Spacer
23	1	022886P	SUPPORT, Pulley - Bottom
24	1	022887P	SUPPORT, Pulley - Top

NOTE: The skid winch drive is used on uphill drives with more than a 4% grade.

Not included in assembly: Winch, P0106-007 and Cable 100 Ft, P0075-003.

NOTES

YOKE ASSEMBLY
360 - 420/48SC - 480 - 540

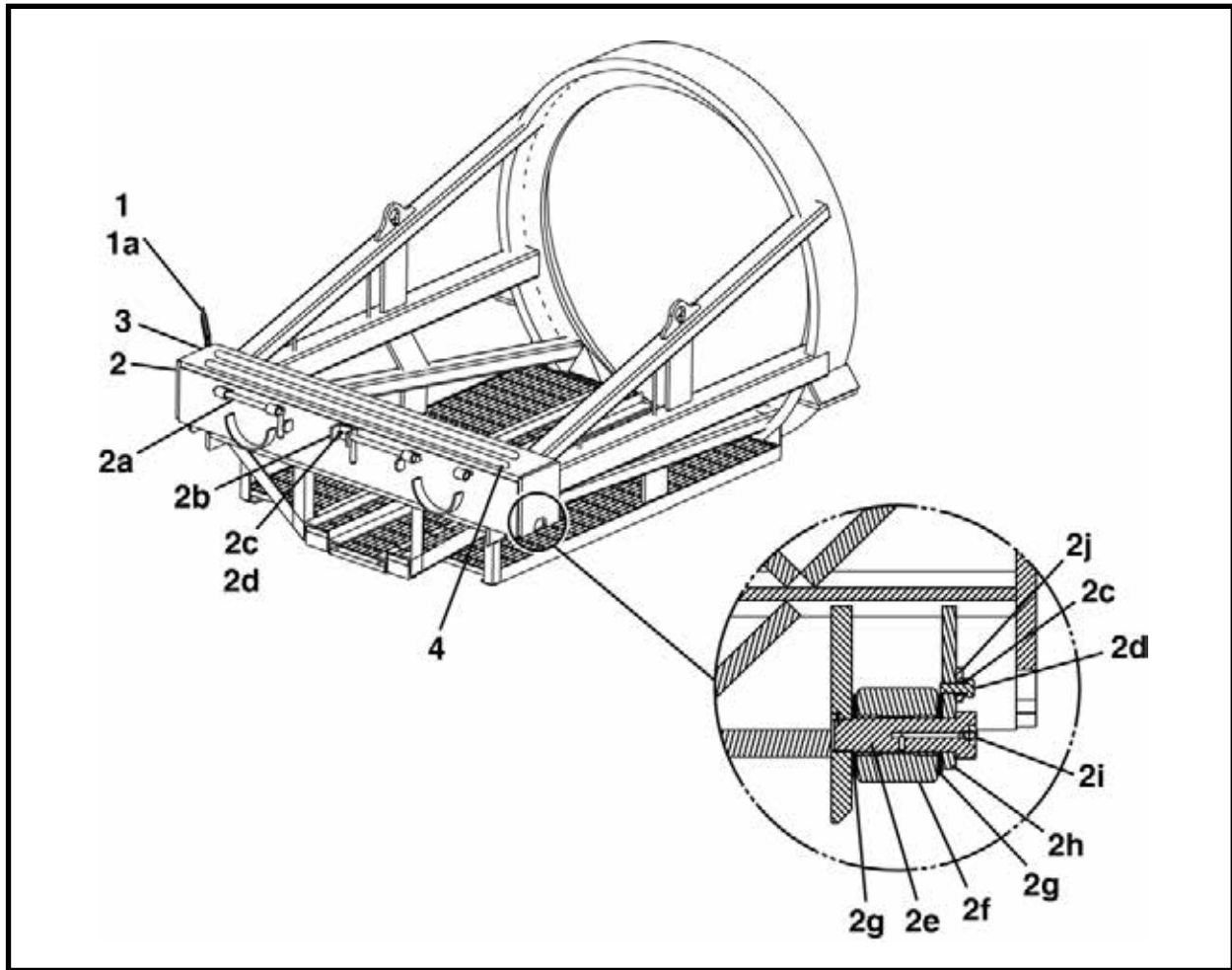


ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	F05646F00	360 DUAL RAM YOKE, 44 OD
0.2	1	F05647F00	420/48SC DUAL RAM YOKE, 52.5 OD
0.3	1	F29220F	420/48SC EXTENDED DUAL RAM YOKE, 52.5 OD
0.4	1	F05648F00	480 DUAL RAM YOKE, 58 OD
0.5	1	F29200F	480 EXTENDED DUAL RAM YOKE, 58 OD
0.6	1	F05649F00	540 DUAL RAM YOKE, 65 OD
0.7	1	F05655F	540 EXTENDED DUAL RAM YOKE, 65 OD
1	1	002027A00	7 STAGE LINE HOLDER (includes item 1a)
1a	1	002030P00	PIN, Line Holder
2	1	005353A00	DUAL RAM YOKE BAR (Includes items 2a - 2j)
2a	2	001795A00	PIN, Yoke Retaining
2b	1	005360P00	RAM RETAINING PIN STOP
2c	4	P0045-006	WASHER, Lock 3/8
2d	4	P0001-06-003	BOLT, 3/8 UNC x .75
2e	2	005363P00	SHAFT, Roller
2f	2	025802A00	WHEEL, Yoke
2g	4	P0040-020	WASHER, Hardened 1-1/4
2h	2	005362P00	PLATE, Roller Shaft
2i	2	P0063-001	FITTING, Grease
2j	2	005364P00	BAR
3	1	002159P00	HOLDER, Yoke Line
4	120 LI	P0122-005	TAPE, Anti Skid 4"
5	1	1255-037	KIT, Decal, Yoke (not shown)

LI - Linear Inch

YOKE ASSEMBLY

600 - 660 - 720 - 780 - 840



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	F05650F00	600 DUAL RAM YOKE, 72 OD
0.2	1	F29225F	600 EXTENDED DUAL RAM YOKE, 72 OD
0.3	1	F05478F00	660 DUAL RAM YOKE, 79 OD
0.4	1	F29375F	660 EXTENDED DUAL RAM YOKE, 79 OD
0.5	1	F05651F00	720 DUAL RAM YOKE, 86 OD
0.6	1	F29235F00	720 EXTENDED DUAL RAM YOKE, 86 OD
0.7	1	F05652F00	780 DUAL RAM YOKE, 93 OD
0.8	1	F05653F00	840 EXTENDED DUAL RAM YOKE, 100 OD
1	1	002027A00	7 STAGE LINE HOLDER (includes item 1a)
1a	1	002030P00	PIN, Line Holder
2	1	005353A00	DUAL RAM YOKE BAR (Includes items 2a - 2j)
2a	2	001795A00	PIN, Yoke Retaining
2b	1	005360P00	RAM RETAINING PIN STOP
2c	4	P0045-006	WASHER, Lock 3/8
2d	4	P0001-06-003	BOLT, 3/8 UNC x .75
2e	2	005363P00	SHAFT, Roller
2f	2	025802A00	WHEEL, Yoke
2g	4	P0040-020	WASHER, Hardened 1-1/4
2h	2	005362P00	PLATE, Roller Shaft
2i	2	P0063-001	FITTING, Grease
2j	2	005364P00	BAR
3	1	002159P00	HOLDER, Yoke Line
4	150 LI	P0122-005	TAPE, Anti Skid 4"
5	1	1255-037	KIT, Decal, Yoke (not shown)

LI - Linear Inch

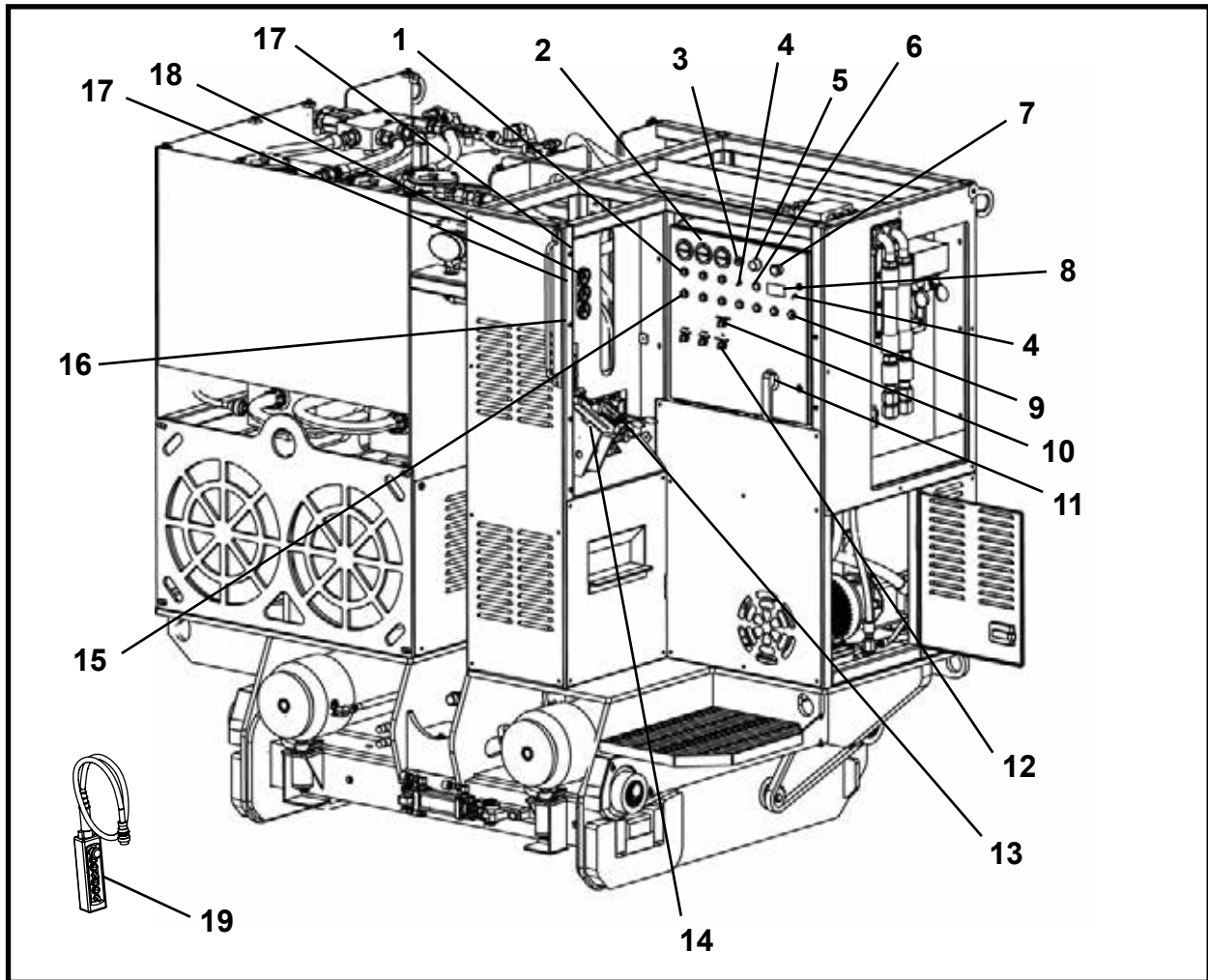
NOTES



Operator Controls

5200 Pump Unit	
Operator Controls	2
Variable Speed Control Assembly, 027861A	3
Pump Stroker Assembly, 027753A (SN F27700F-18 & Before)	4
Pump Stroker Assembly, 032797A (SN F27700F-19 & After)	5
200 HP Auxiliary	
Operator Controls	6

OPERATOR CONTROLS 5200 PUMP UNIT



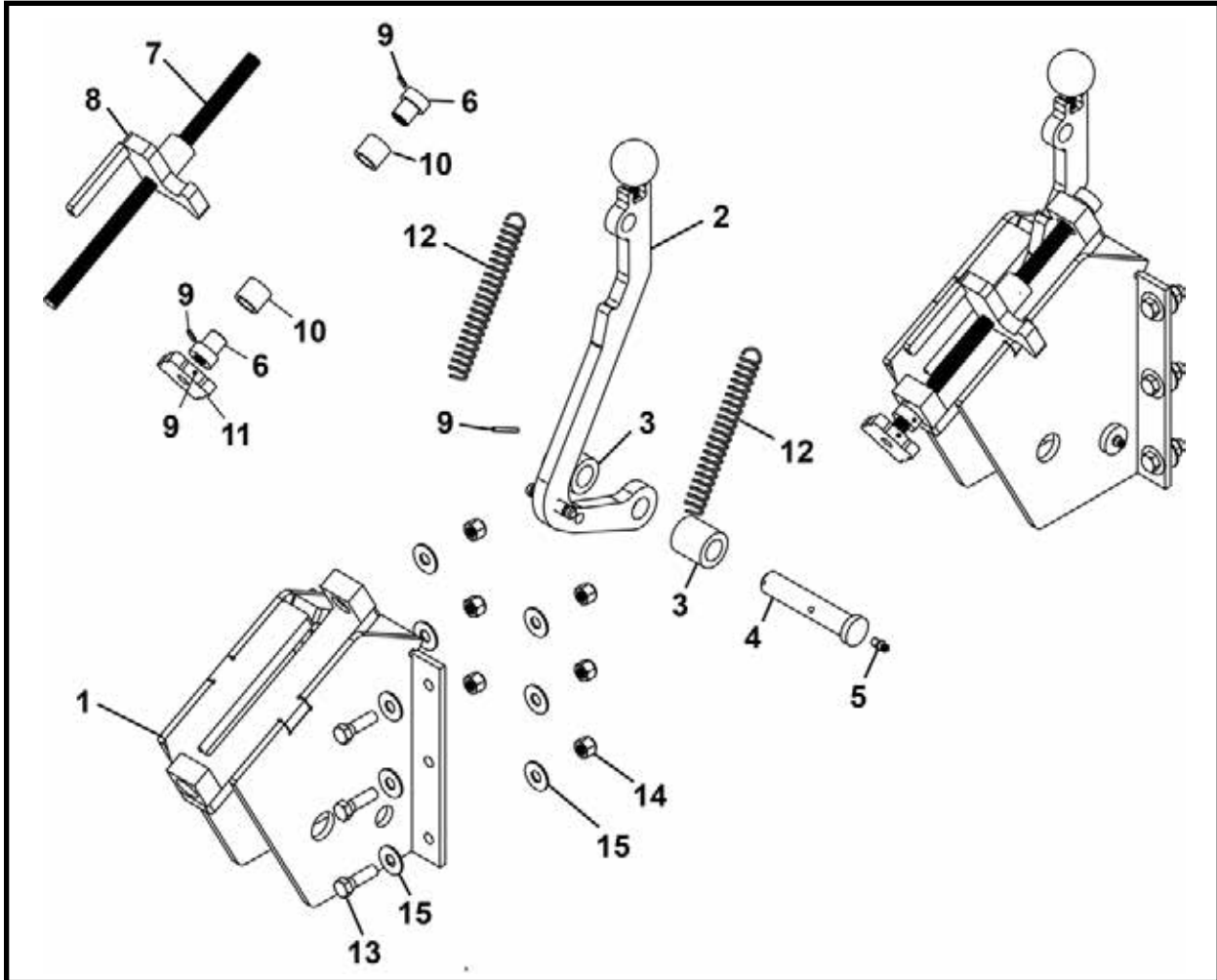
ITEM	QTY	PART NO.	DESCRIPTION
1	3	P0310-411F	SWITCH, Illuminated Pushbutton
2	3	P0251-410	HOURLMETER
3	1	P0310-421C	SWITCH, 2 Position Key Selector
4	2	P0056-147	SWITCH, Toggle
5	1	P0251-486	LIGHT, Red Indicator
6	1	P0056-129F	LIGHT, Red Pilot
7	1	P0310-420F	E-STOP, Illuminated Pushbutton
8	1	P0251-445	METER, Temperature
9	4	P0251-439	LIGHT, Green Indicator
10	1	P0310-421AF	SWITCH, 2 Position
11	1	P0251-482	HANDLE & SHAFT BREAKER
12	3	P0310-421F	SWITCH, 3 Position
13*	1	P0302-780	VALVE, 3 Section
14**	1	027861A	ASSEMBLY, Variable Speed Control
15	3	P0310-412F	SWITCH, Illuminated Pushbutton
16	1	P0301-155	GAUGE, 10,000 PSI (Jacking)
17	2	P0301-146	GAUGE, 6,000 PSI (Boring Head 1 & 2)
18	3	P0301-105	GAUGE, Filter Indicator
19***	1	027422A	ASSEMBLY, Pendant 5200

* Refer to Section 7, Valves for parts information.

** Refer to this section for parts information.

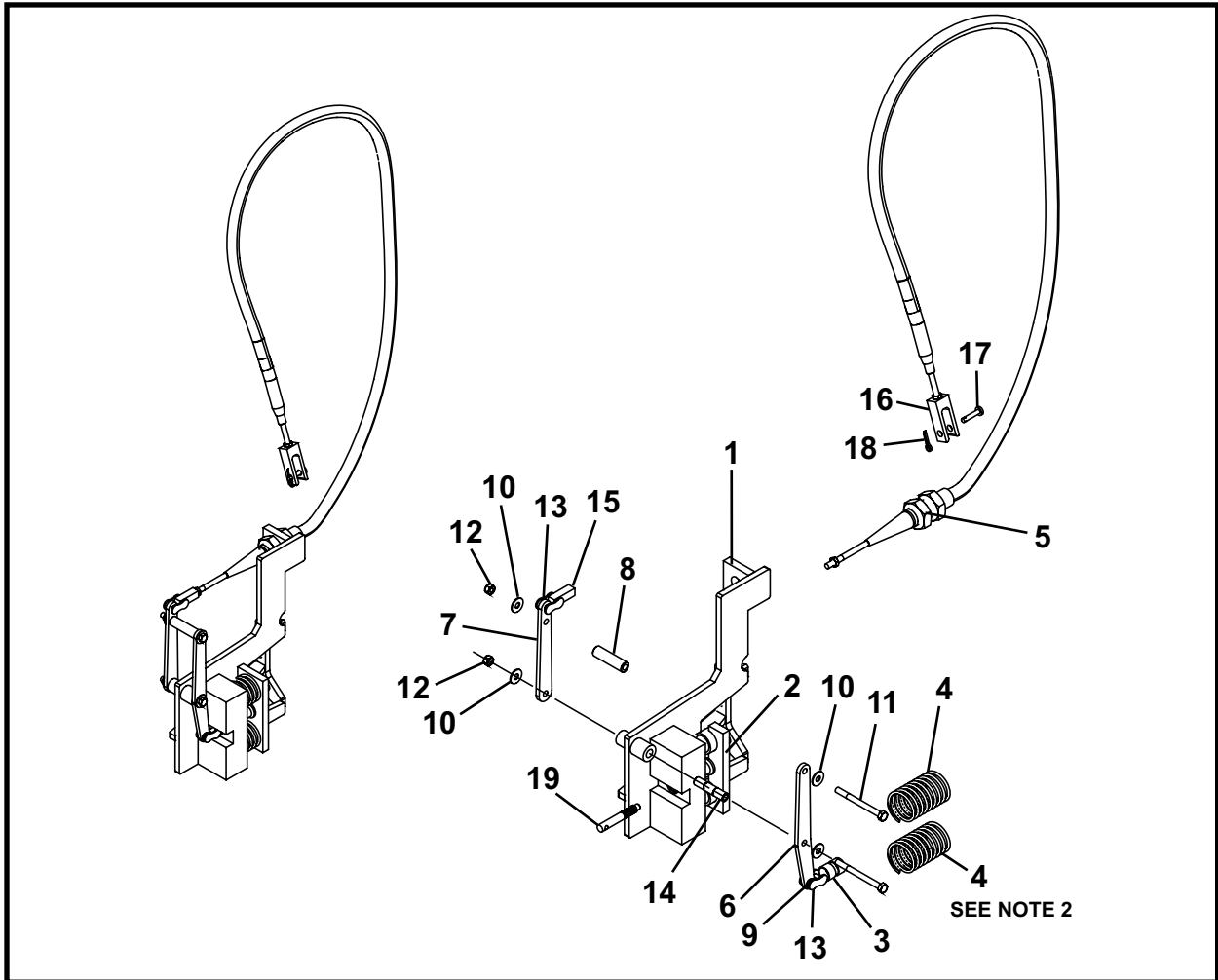
*** Refer to Section 5, Electrical for parts information.

VARIABLE SPEED CONTROL ASSEMBLY, 027861A
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027861A	ASSEMBLY, Variable Speed Control
1	1	027862A	FRAME
2	1	027865A	HANDLE
3	2	001166P00	ROD
4	1	008168P00	ROD
5	1	P0063-001	FITTING, Grease - Straight
6	2	008170P00	BUSHING
7	1	008169P00	ROD, Threaded
8	1	008160A00	STOP
9	4	P0049-038	PIN, Spring Roll 1/8 x 1/2
10	2	008171P00	BUSHING
11	1	008173P00	PLATE
12	2	P0070-004	SPRING
13	6	P0001-06-005	BOLT, Hex 3/8 UNC x 1.25
14	6	P0013-06A-000	NUT, Nyloc 3/8 UNC
15	12	P0040-006	WASHER, Hardened Flat 3/8

PUMP STROKER ASSEMBLY, 027753A
5200 PUMP UNIT (SN F27700F-018 & BEFORE)

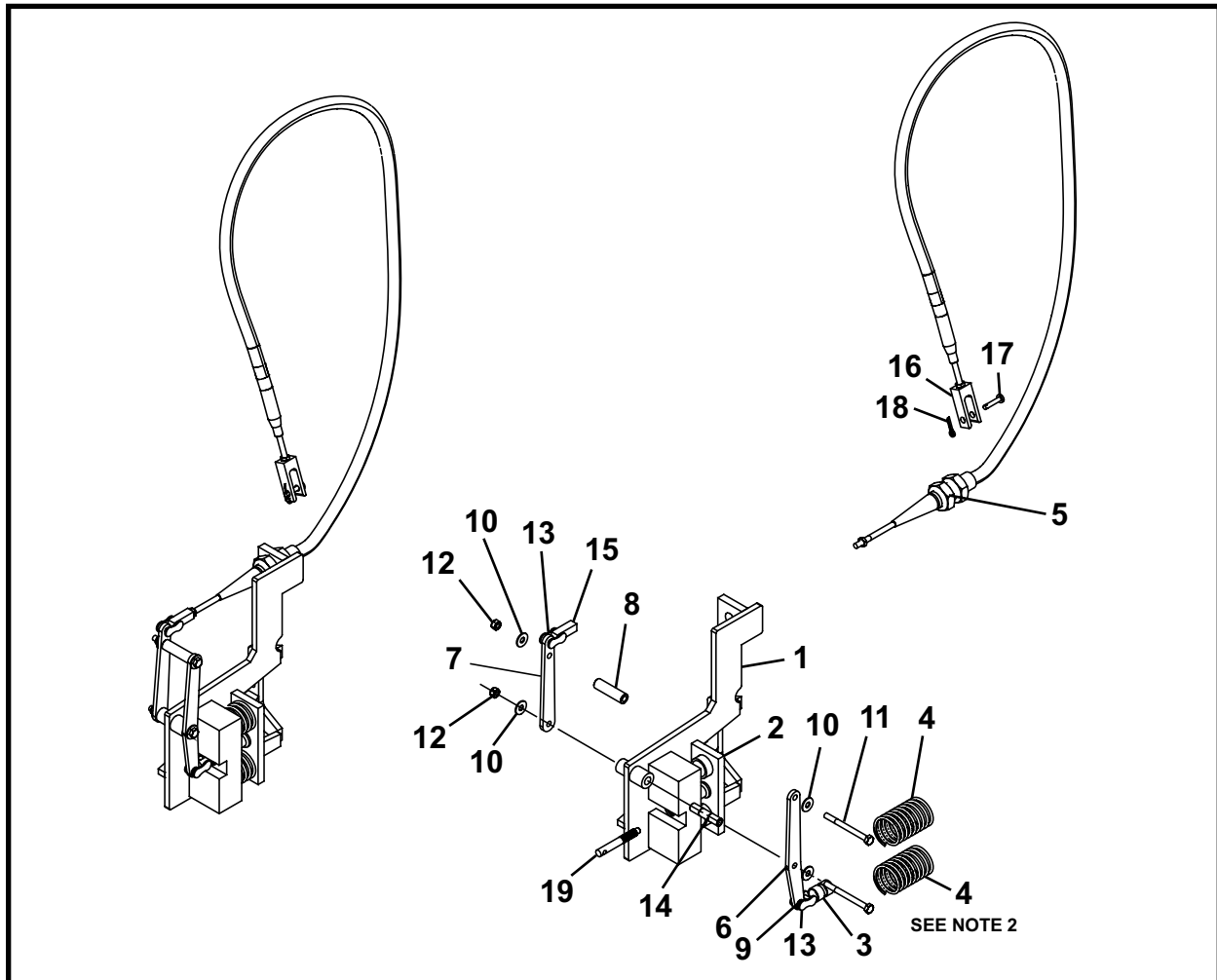


ITEM	QTY	PART NO.	DESCRIPTION
0		027753A	PUMP STROKER ASSEMBLY
1	1	027752A	PUMP STROKER
2	1	027775A	PLUNGER
3	2	P0065-158	BEARING
4	2	P0070-066	SPRING
5	1	P0102-114	CABLE ASSEMBLY
6	1	027770P	ARM, Long
7	1	027771P	ARM, Short
8	1	027773P	SPACER
9	6	P0040-004	WASHER, Hardened Flat 1/4
10	4	P0040-005	WASHER, Hardened Flat 5/16
11	2	P0001-05-014	BOLT, Hex 5/16 UNC x 3.5
12	2	P0013-03.5A-000	NUT, Nyloc 5/16-18
13	2	P0078-008	LINK, Repair Master
14	3	P0066-129	BUSHING
15	1	027776P	CONNECTION, Cable
16	1	008174P00	BAR
17	1	P0024-006	PIN, Clevis 3/8 x 1.25
18	1	P0048-032	PIN, Cotter 5/32 x .75
19	1	027859P	ROD, Plunger

NOTES:

1. Washers, item 10 are used as spacers to center connector link, item 14 onto lever arm.
2. Bushing, item 3 is press fit into block on item 1.
3. Lubricate arm pivot and plunger shaft and bearings with Moly 60 paste.

PUMP STROKER ASSEMBLY, 032797A
5200 PUMP UNIT (SN F27700F-019 & AFTER)

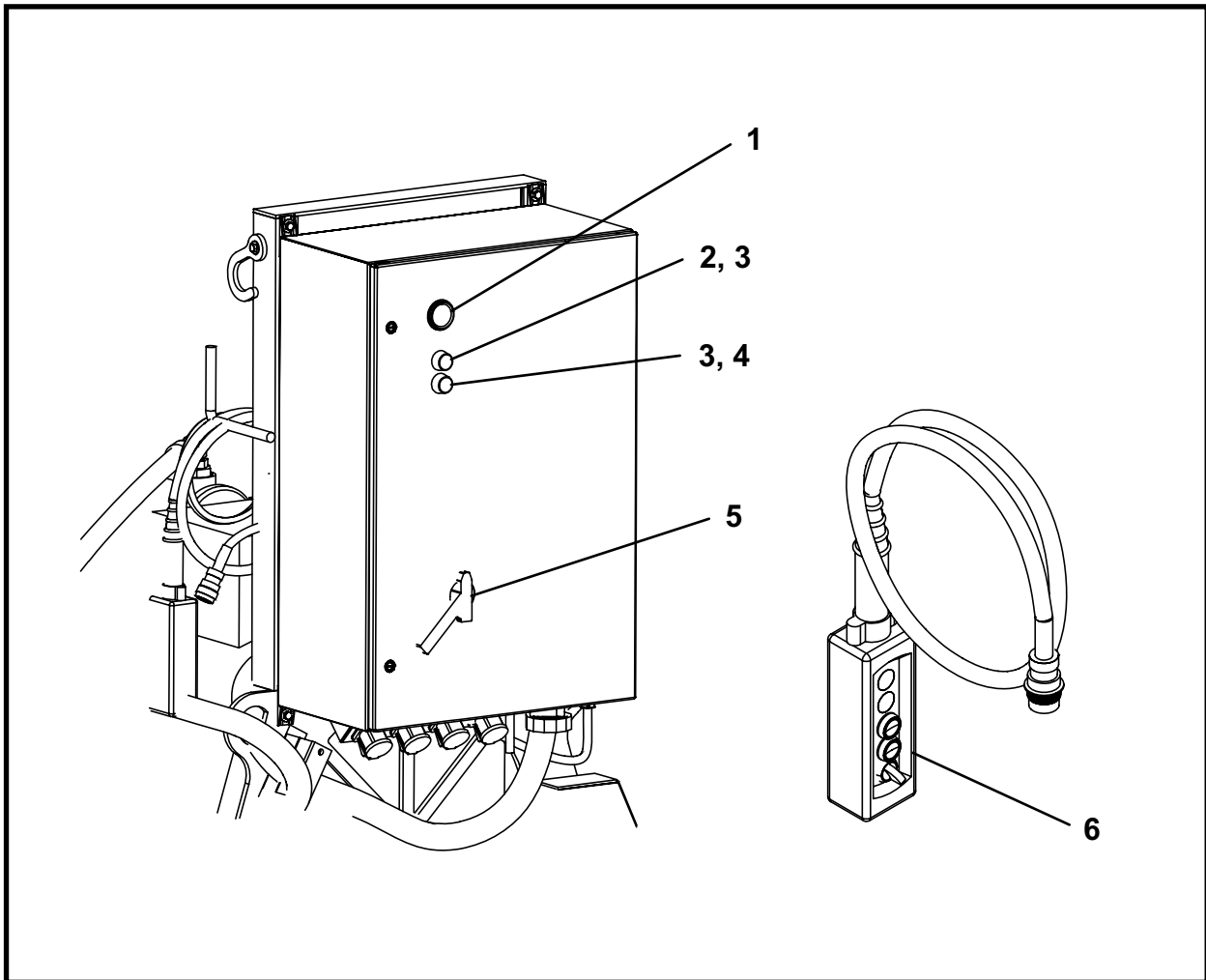


ITEM	QTY	PART NO.	DESCRIPTION
0		032797A	PUMP STROKER ASSEMBLY
1	1	032798A	PUMP STROKER
2	1	032794A	PLUNGER
3	2	P0065-158	BEARING
4	2	P0070-066	SPRING
5	1	P0102-114	CABLE ASSEMBLY
6	1	027770P	ARM, Long
7	1	027771P	ARM, Short
8	1	027773P	SPACER
9	6	P0040-004	WASHER, Hardened Flat 1/4
10	4	P0040-005	WASHER, Hardened Flat 5/16
11	2	P0001-05-014	BOLT, Hex 5/16 UNC x 3.5
12	2	P0013-03.5A-000	NUT, Nyloc 5/16-18
13	2	P0078-008	LINK, Repair Master
14	3	P0066-129	BUSHING
15	1	027776P	CONNECTION, Cable
16	1	008174P00	BAR
17	1	P0024-006	PIN, Clevis 3/8 x 1.25
18	1	P0048-032	PIN, Cotter 5/32 x .75
19	1	027859P	ROD, Plunger

NOTES:

1. Washers, item 10 are used as spacers to center connector link, item 14 onto lever arm.
2. Bushing, item 3 is press fit into block on item 1.
3. Lubricate arm pivot and plunger shaft and bearings with Moly 60 paste.

OPERATOR CONTROLS 200 HP AUXILIARY



ITEM	QTY	PART NO.	DESCRIPTION
1	3	P0251-410	HOURMETER
2	1	P0251-514	LENS, Green Plastic
3	2	P0251-463	LIGHT, Pilot
4	1	P0251-464	LENS, Red Plastic
5	1	P0251-430	HANDLE, Rotary, Mechanism
6*	1	027603A	ASSEMBLY, Pendant 200 Hp Auxiliary

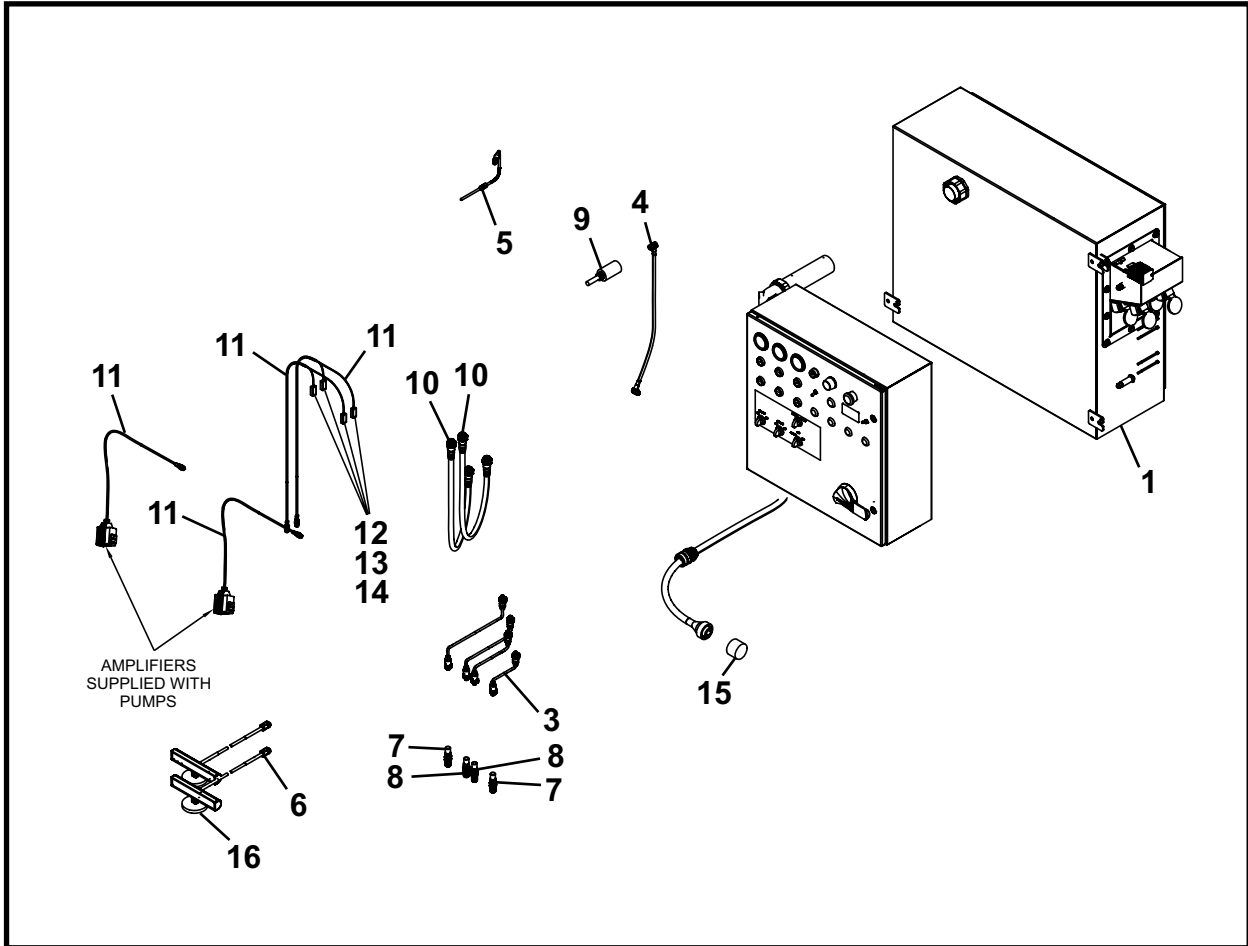
* Refer to Section 5, Electrical for parts information.



Electrical

5200 Pump Unit	
Electrical System	
SN F27700F-11 & Before, 027702A	2
Schematic, 027702A	3
SN F27700F-12 & After, 031870A	8
Schematic, 031872A	9
Large Electrical Panel Assembly, 027703A	18
Power Distribution Panel Assembly, 027704A	20
Connection Box Assembly, 027707A	22
Small Electrical Panel Assembly, 027705A (SN F27700F-11 & Before).....	24
Operator Panel Assembly, 031871A (SN F27700F-12 & After)	26
Remote E-Stop Assembly, 027858A	28
Starter Cable Assembly	29
TBM Power Cable, FA20511F0	30
5200 Pendant Option, 027421A	32
Pendant Assembly, 027422A	33
200 HP Auxiliary	
Electrical Assembly, 027600A	34
Schematic, 027600A	35
Cabinet Assembly, 027602A	36
Enclosure Assembly, 027598A	38
Panel Assembly, 027601A	40
Pendant Assembly, 027603A	42

ELECTRICAL SYSTEM, 027702A
5200 PUMP UNIT (SN F27700F-11 & BEFORE)

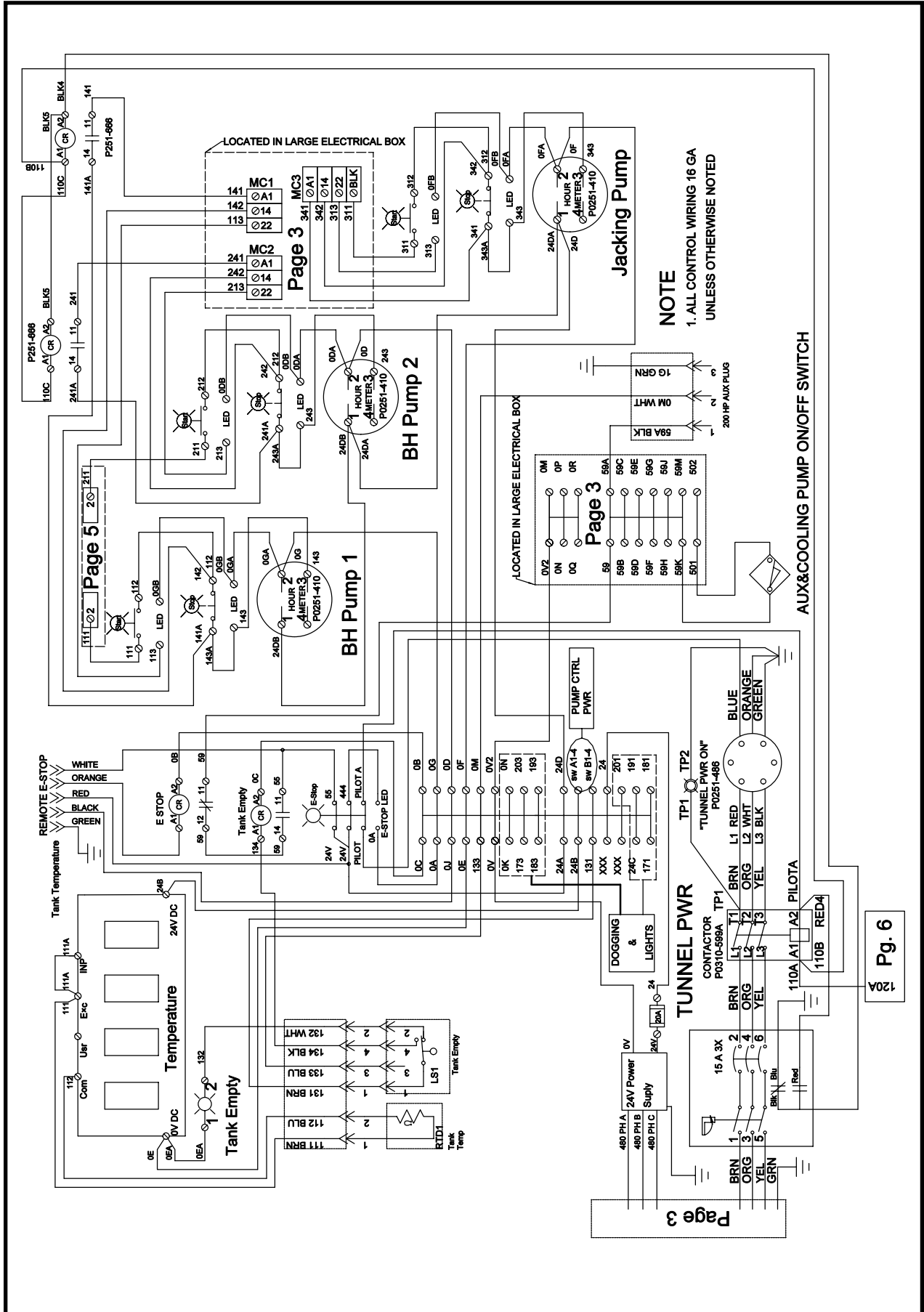


ITEM	QTY	PART NO.	DESCRIPTION
0	1	027702A	ELECTRICAL ASSEMBLY
1*	1	027703A	ASSEMBLY, Large Panel
2*	1	027705A	ASSEMBLY, Small Panel
3	4	P0054-573	CABLE
4	1	P0054-654	CABLE
5	1	019047A	ASSEMBLY, RTD Cable
6	1	019026A-180	ASSEMBLY, Cable Light
7	2	P0054-567	SWITCH, Proximity (D2 on end of part number - N/C switch)
8	2	P0251-455	SWITCH, Proximity (D1 on end of part number - N/O switch)
9	1	P0251-440	SWITCH, Level
10	2	P0054-105	CABLE
11	4	P0054-541	CABLE
12	4	P0313-084	SPADE 2 PIN
13	8	P0313-008	SOCKET #16
14	4	P0313-084A	SPADE WEDGE
15	1	P0054-067L	CAP, Male To Female Tunnel Power
16	2	P0091-019	MAGNET

* Refer to this section for parts information.

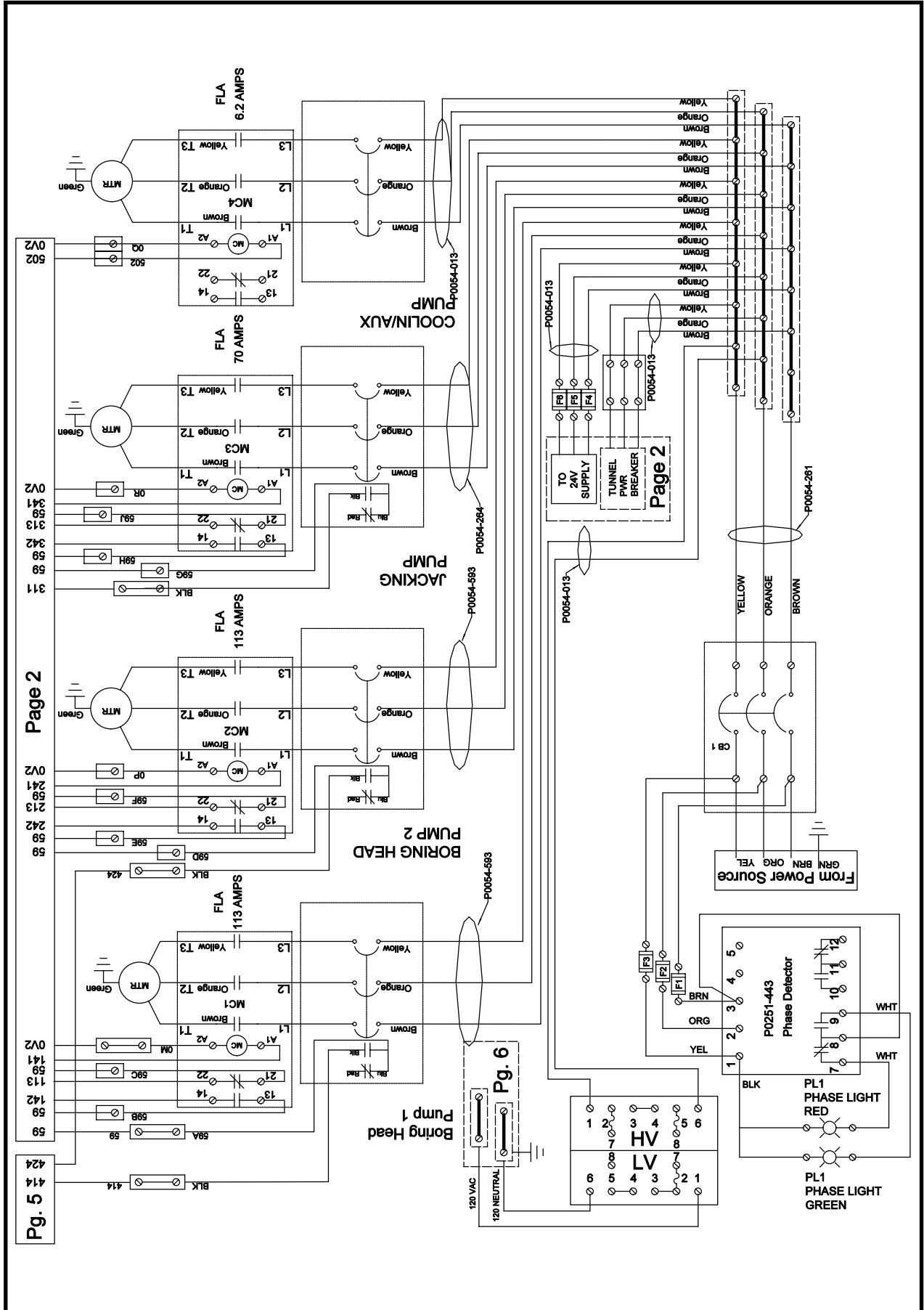
ELECTRICAL SCHEMATIC (Page 2), 027702A

5200 PUMP UNIT (SN F27700F-11 & BEFORE)

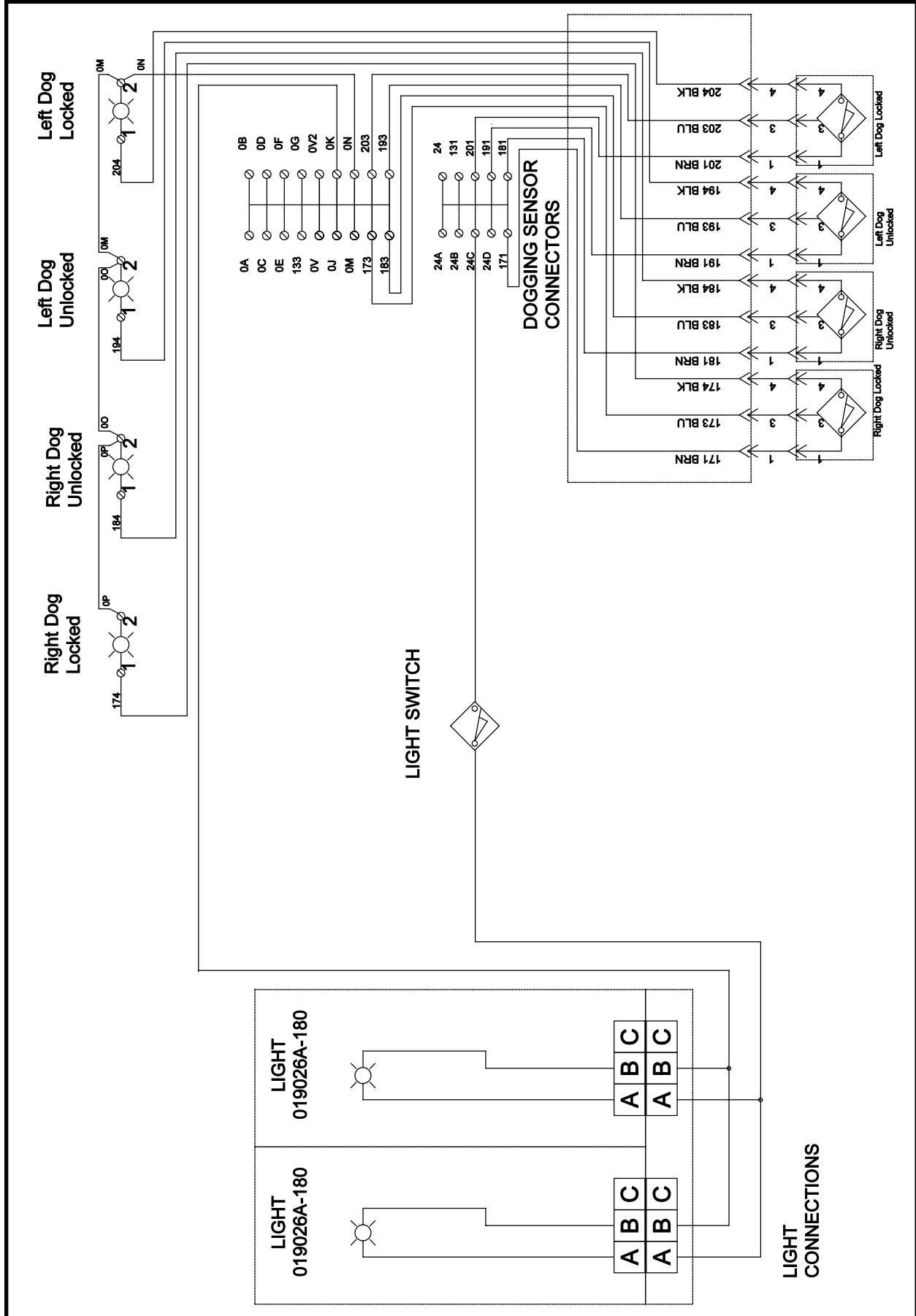


ELECTRICAL SCHEMATIC (Page 3), 027702A

5200 PUMP UNIT (SN F27700F-11 & BEFORE)

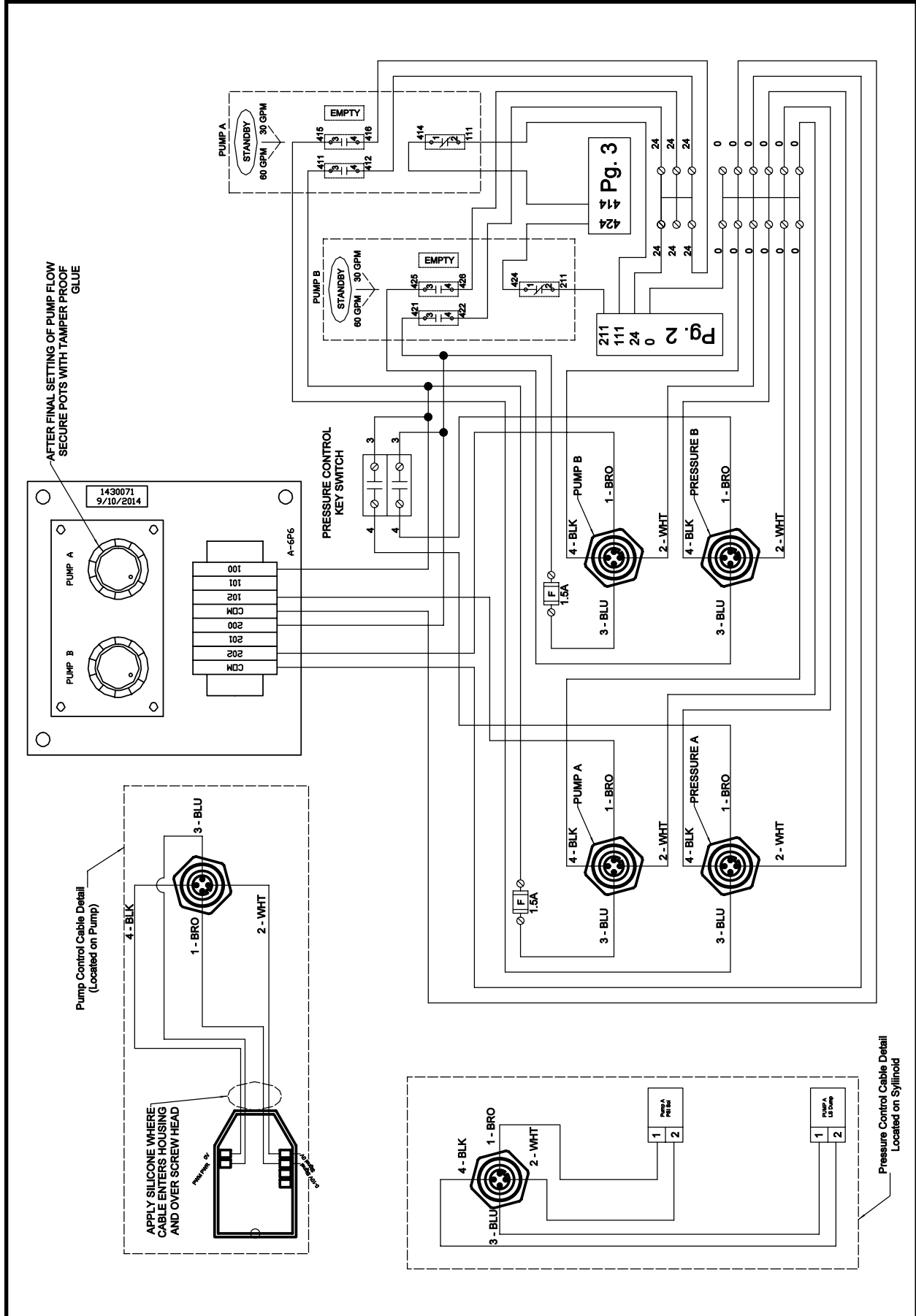


ELECTRICAL SCHEMATIC (Page 4), 027702A
5200 PUMP UNIT (SN F27700F-11 & BEFORE)

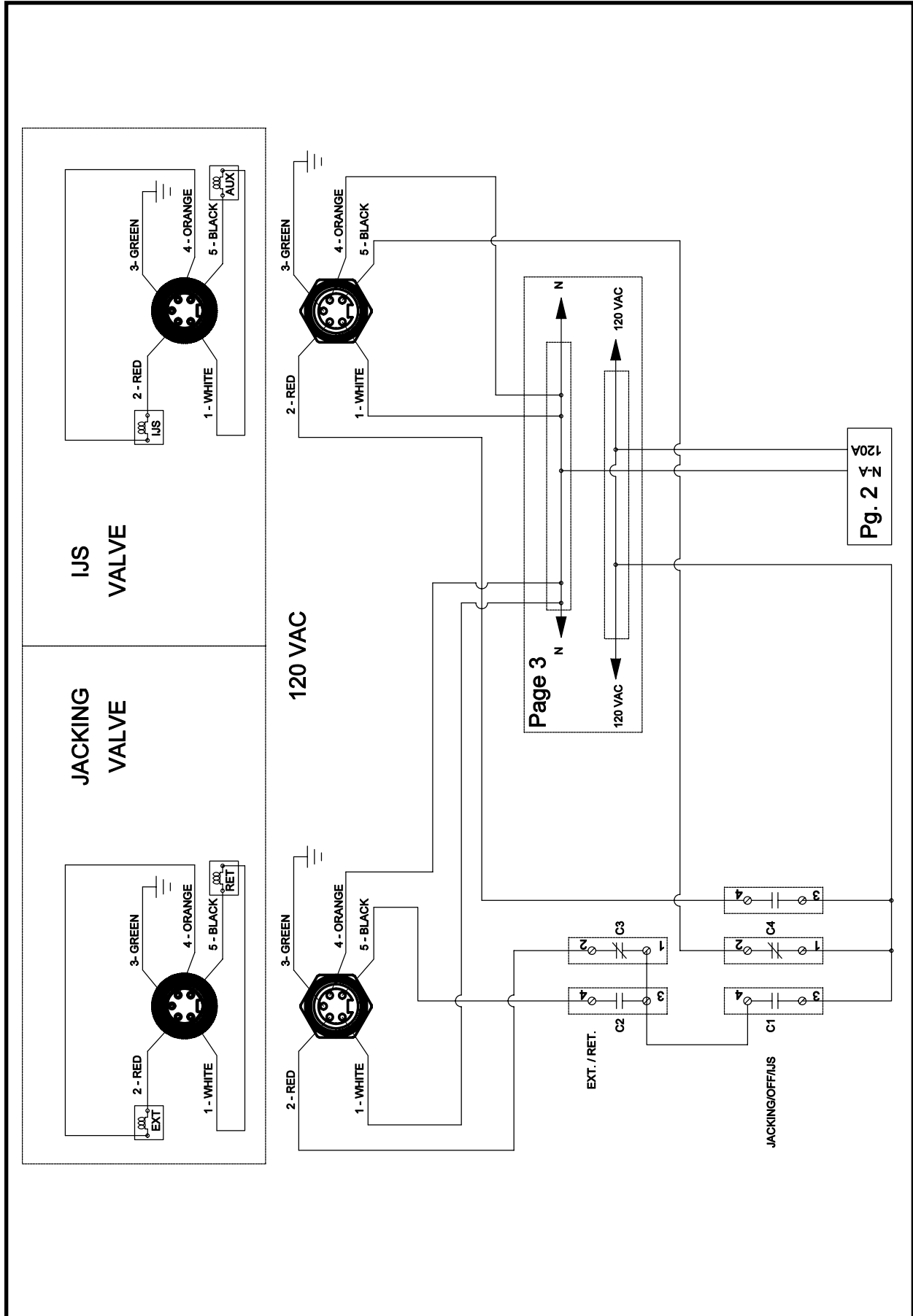


ELECTRICAL SCHEMATIC (Page 5), 027702A

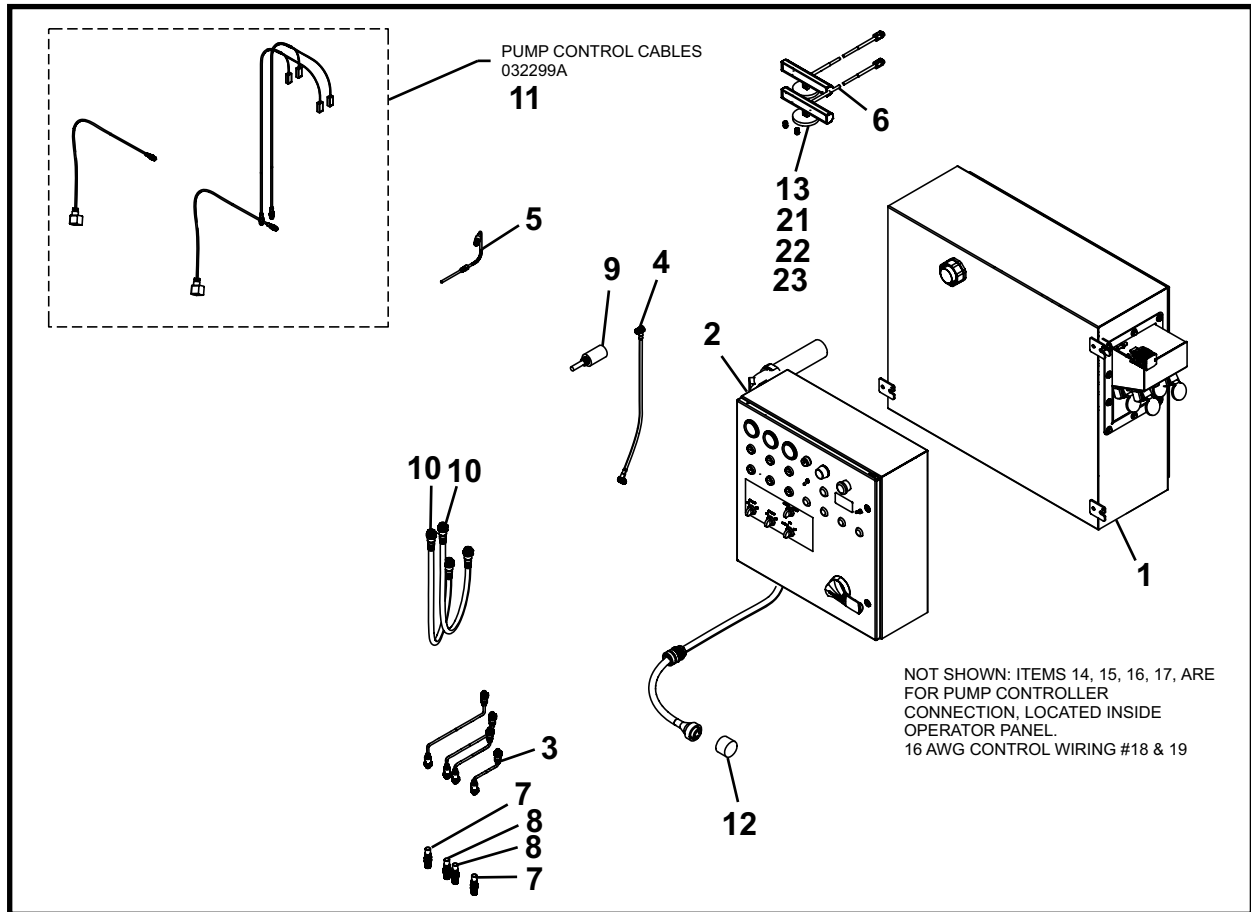
5200 PUMP UNIT (SN F27700F-11 & BEFORE)



ELECTRICAL SCHEMATIC (Page 6), 027702A
5200 PUMP UNIT (SN F27700F-11 & BEFORE)



ELECTRICAL SYSTEM, 031870A
5200 PUMP UNIT (SN F27700F-12 & AFTER)

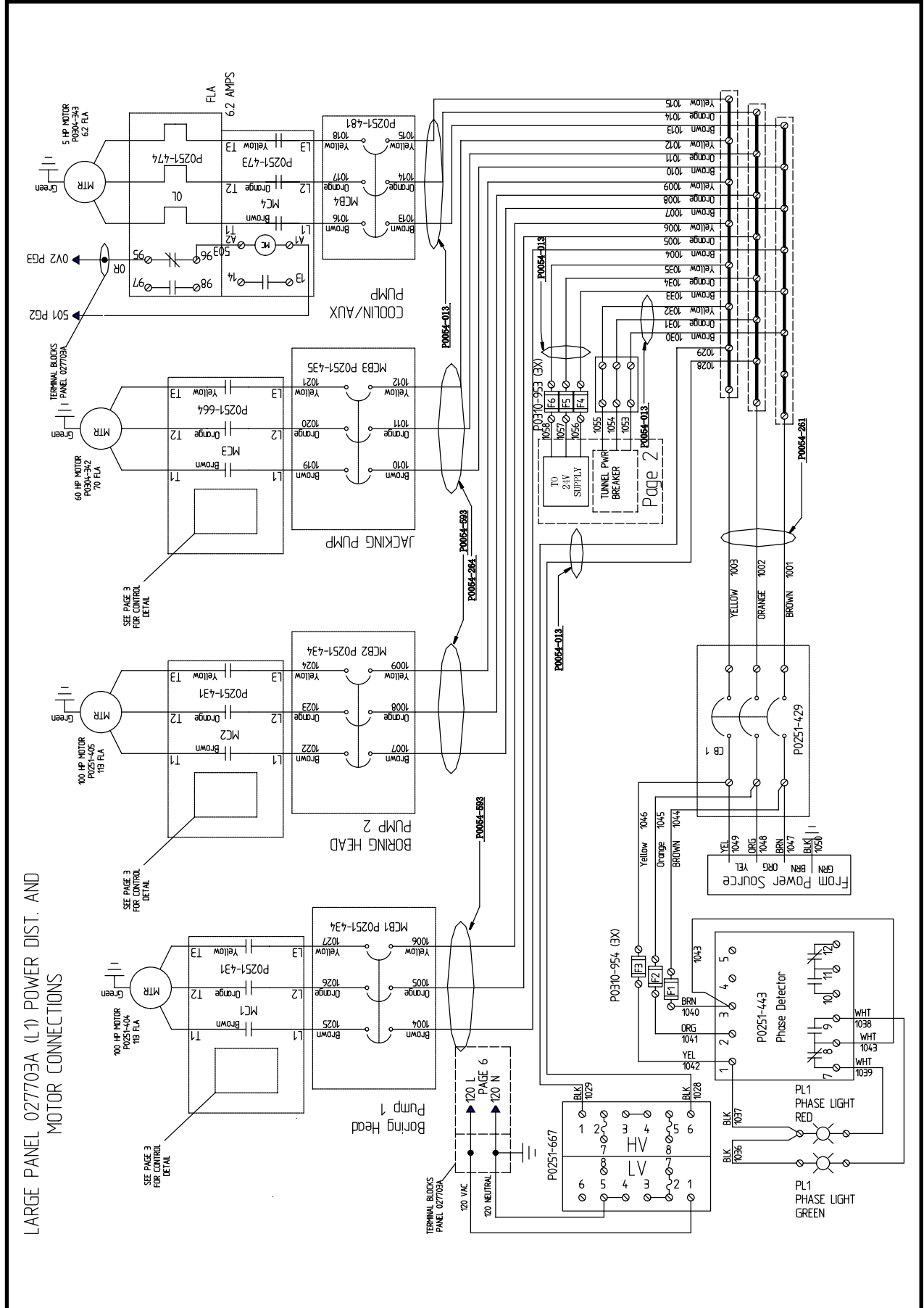


ITEM	QTY	PART NO.	DESCRIPTION
0	1	031870A	ELECTRICAL ASSEMBLY
1*	1	027703A	ASSEMBLY, Large Panel
2*	1	031871A	ASSEMBLY, Operator Panel
3	4	P0054-573	CABLE, 4C 4 90°M 5C 90°F 18G SK 8'
4	1	P0054-654	CABLE, 4C 4 90°M 5C 90°F 18G SK 14
5	1	019047A	ASSEMBLY, RTD Cable
6	2	019026A-180	ASSEMBLY, Cable Light
7	2	P0054-567	SWITCH, Proximity (D2 on end of part number - N/C switch)
8	2	P0251-455	SWITCH, Proximity (D1 on end of part number - N/O switch)
9	1	P0251-440	SWITCH, Level
10	2	P0054-105	CABLE, 5 C 16 GA MINI M/F SK 3'
11	2	032299A	CONTROL, Cable-Pump
12	1	P0054-067L	CAP, Male To Female Tunnel Power
13	2	P0091-019	MAGNET
14**	1	P0313-111	PLUG, DTM 12 Way A Key
15**	1	P0313-112	PLUG, DTM 12 Way B Key
16**	2	P0313-113	PLUG, DTM Wedgelock 12 Way
17**	12	P0313-077	SOCKET #20
18**	240	P0054-275	WIRE, 16 GA White With Blue Stripe 6
19**	240	P0054-275A	WIRE, 16 GA Blue/White Stripe
20*	-	031872A	SCHEMATIC
21	2	P0001-04-002	BOLT, Hex 1/4 UNC x .5
22	4	P0040-004	WASHER, Hardened Flat 1/4
23	2	P0003-04-000	NUT, Hex 1/4 UNC

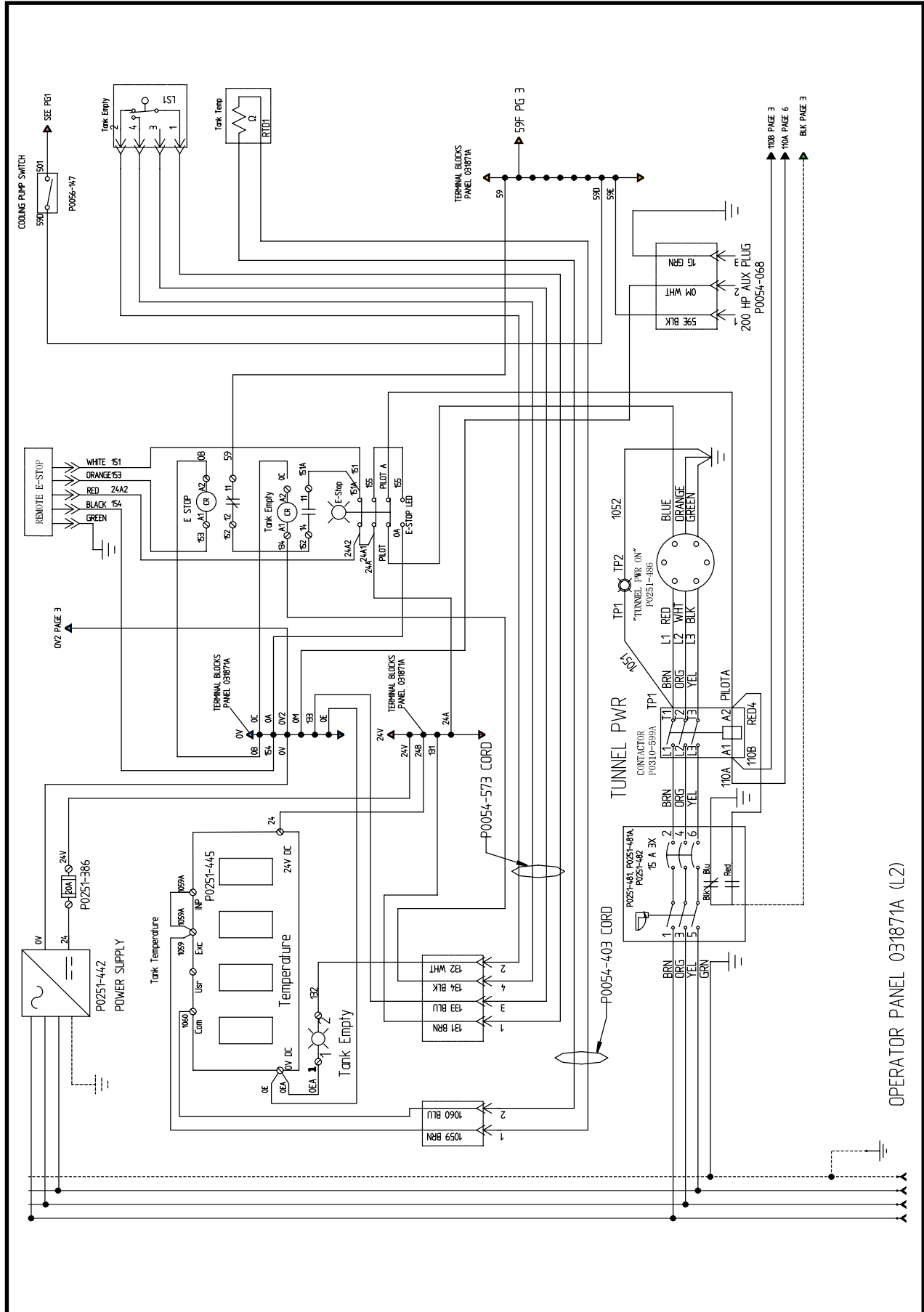
* Refer to this section for parts information. ** Not Shown

ELECTRICAL SCHEMATIC (Page 1), 031872A

5200 PUMP UNIT (SN F27700F-12 & AFTER)



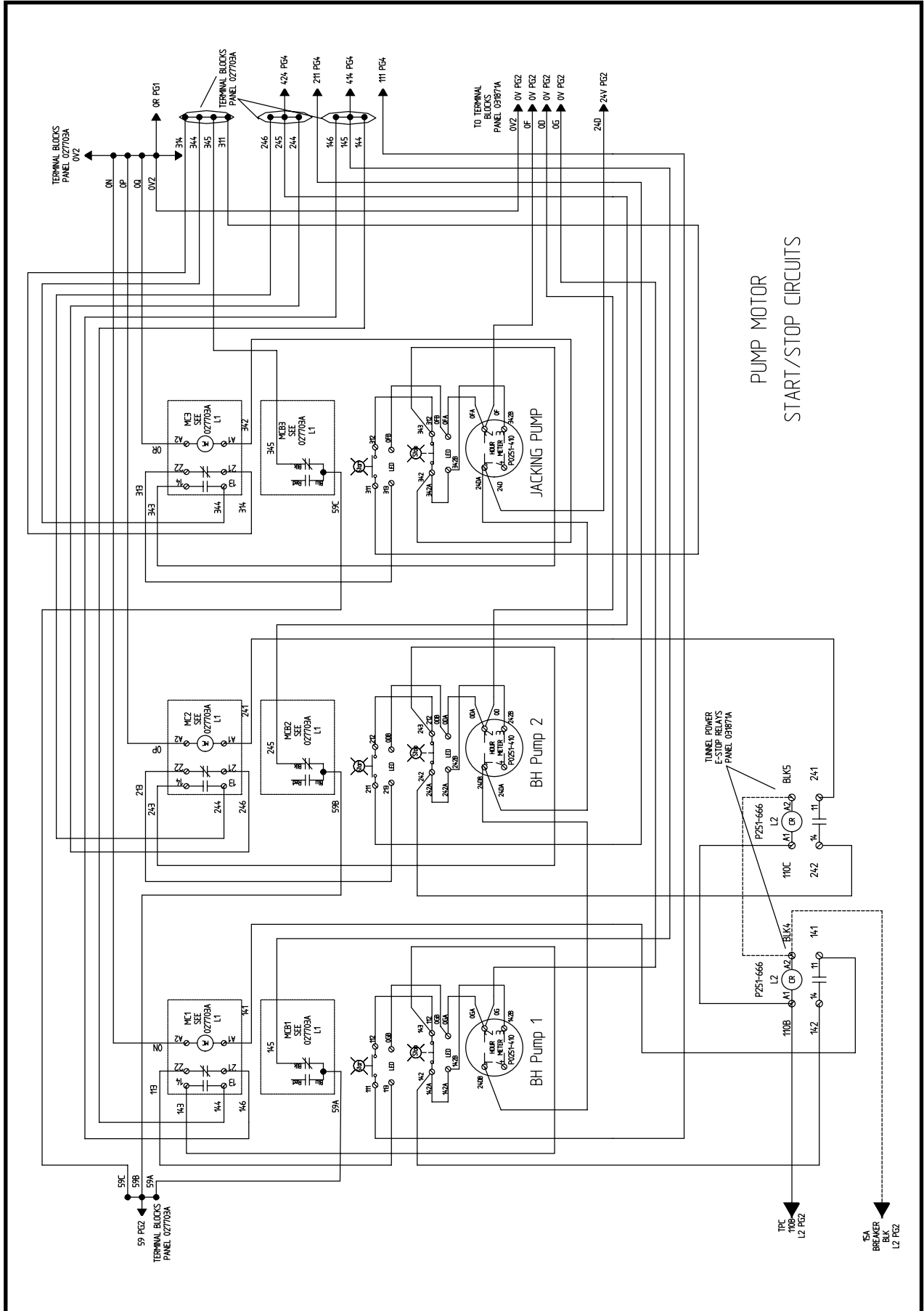
ELECTRICAL SCHEMATIC (Page 2), 031872A 5200 PUMP UNIT (SN F27700F-12 & AFTER)



OPERATOR PANEL 031871A (L2)

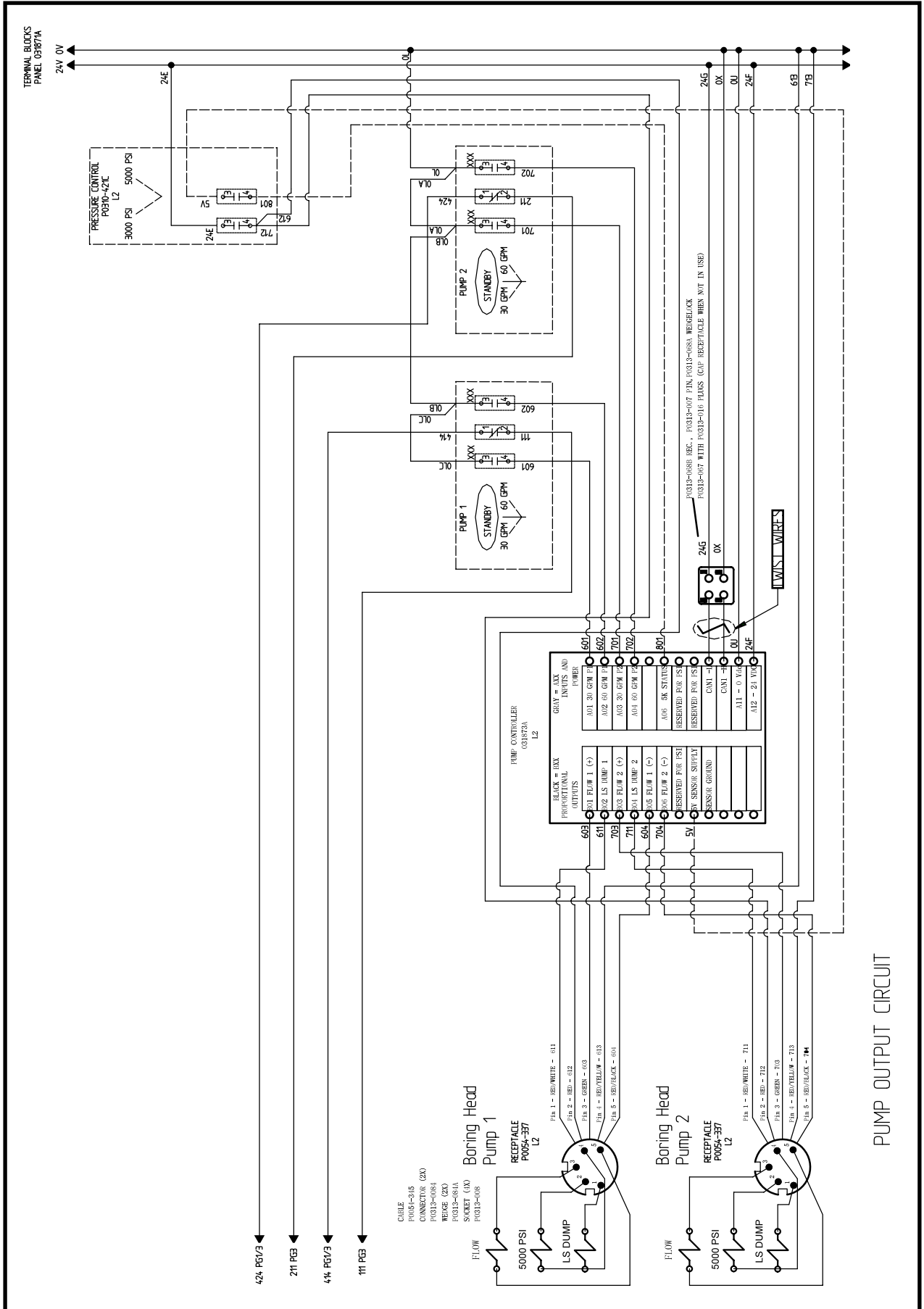
ELECTRICAL SCHEMATIC (Page 3), 031872A

5200 PUMP UNIT (SN F27700F-12 & AFTER)



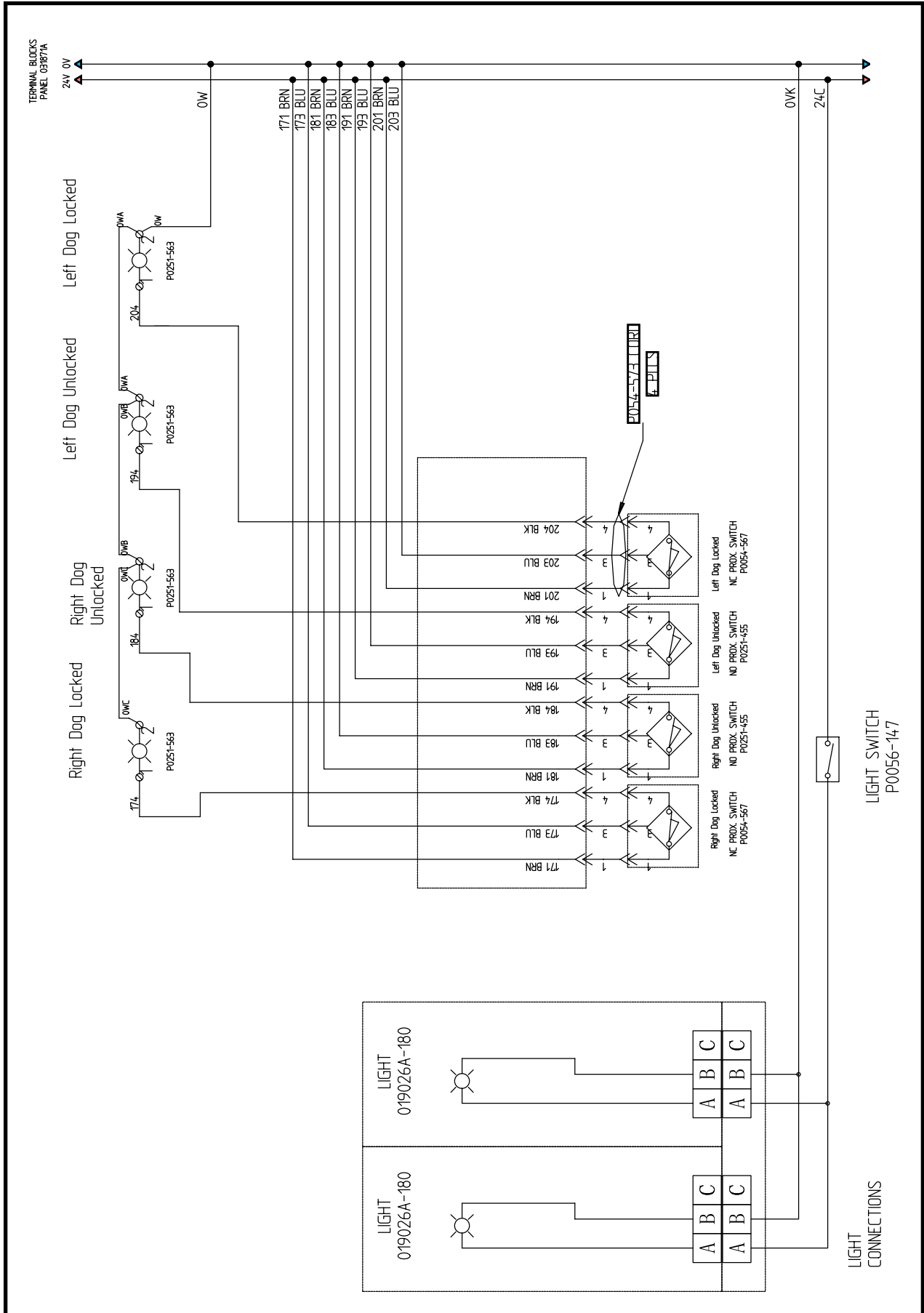
ELECTRICAL SCHEMATIC (Page 4), 031872A

5200 PUMP UNIT (SN F27700F-12 & AFTER)

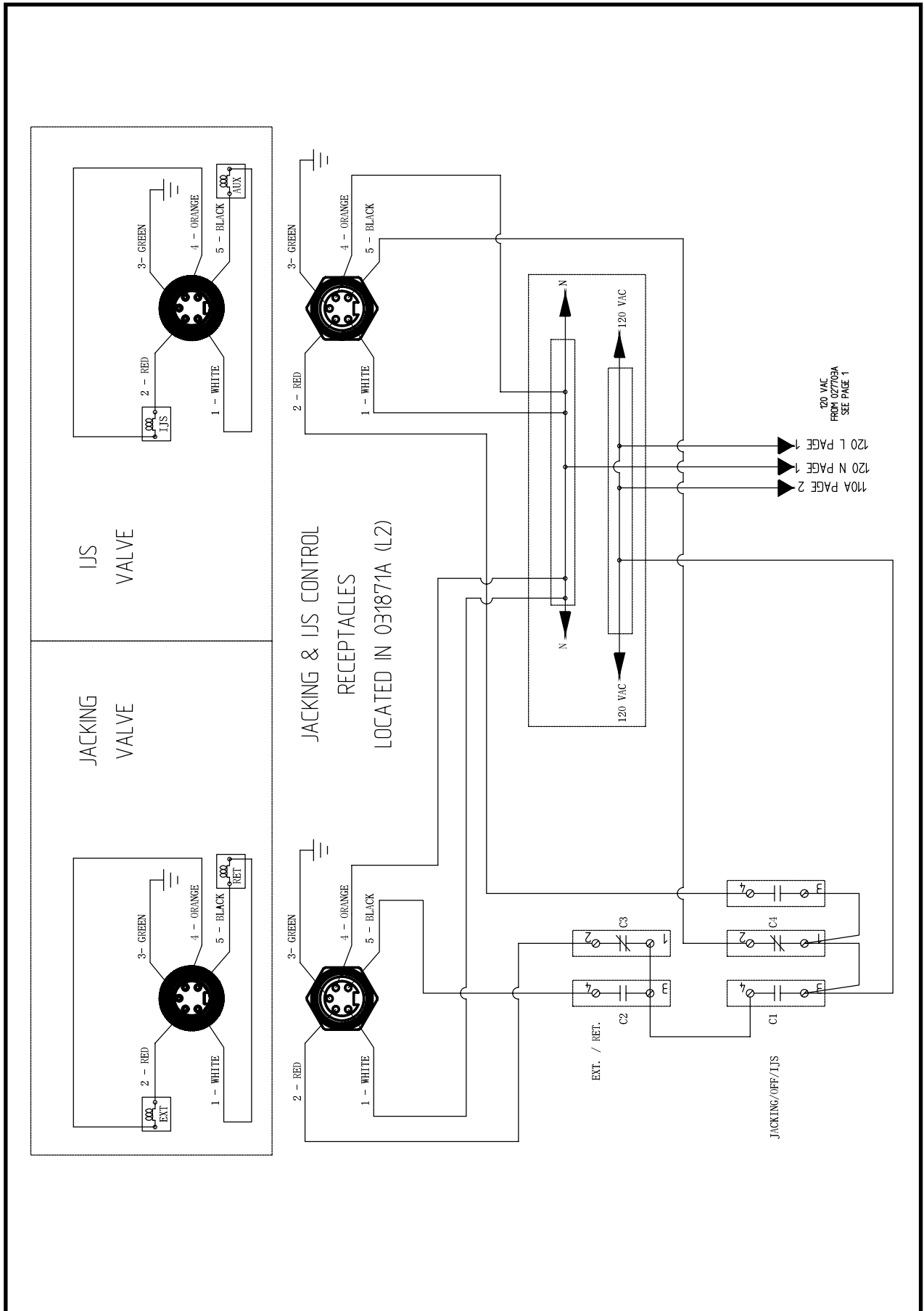


ELECTRICAL SCHEMATIC (Page 5), 031872A

5200 PUMP UNIT (SN F27700F-12 & AFTER)



ELECTRICAL SCHEMATIC (Page 6), 031872A
5200 PUMP UNIT (SN F27700F-12 & AFTER)



ELECTRICAL SCHEMATIC WIRE LIST, 031872A
5200 PUMP UNIT (SN F27700F-12 & AFTER)

WIRE NUMBER	DESCRIPTION	FROM LOCATION #1	TO LOCATION #2	WIRE COLOR/GAUGE
24V	24 Volt	24V FUSE	24V TERMINAL BLOCKS	Blu/Wht 16 AWG
24A	24 Volt	24V TERMINAL BLOCK	E-STOP SW NC #1	Blu/Wht 16 AWG
24A1	24 Volt	E-STOP SW NC #1	E-STOP SW NC #1	Blu/Wht 16 AWG
24A2	24 Volt	E-STOP SW NC #1	REMOT E-STOP RECP RED	RED 16 AWG
24B	24 Volt	24V TERMINAL BLOCK	TEMP DISPLAY PWR	Blu/Wht 16 AWG
24C	24 Volt	24V TERMINAL BLOCK	LIGHT SWITCH PWR	Blu/Wht 16 AWG
24D	24 Volt	24V TERMINAL BLOCK	HOURMETER 3 #1	Blu/Wht 16 AWG
24DA	24 Volt	HOURMETER 3 #1	HOURMETER 2 #1	Blu/Wht 16 AWG
24DB	24 Volt	HOURMETER 2 #1	HOURMETER 1 #1	Blu/Wht 16 AWG
24E	24 Volt	5K SW TERM RIGHT #3	24V TERMINAL BLOCKS	Blu/Wht 16 AWG
24F	24 Volt	24V TERMINAL BLOCK	CONTROLLER GRAY A12	Blu/Wht 20 AWG
24G	24 Volt	24V TERMINAL BLOCK	DIAGNOSTIC 1	Blu/Wht 16 AWG
0V	GROUND	24V POWERSUPPLY 0V	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0V2	GROUND	0V TERMINAL BLOCK	0V2 TERMINAL BLOCK	Wht/Blu 16 AWG
0	GROUND	E-STOP LED NEG (-)	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0B	GROUND	E-STOP RLY A2	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0C	GROUND	TANK EMPTY RLY A2	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0D	GROUND	HOURMETER 2 #2	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0DA	GROUND	HOURMETER 2 #2	STOP SW 2 LED X2	Wht/Blu 16 AWG
0DB	GROUND	STOP SW 2 LED X2	START SW2 LED X2	Wht/Blu 16 AWG
0E	GROUND	TEMP DISPLAY NEG (-)	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0EA	GROUND	TEMP DISPLAY NEG (-)	TANK EMPTY LED NEG (-)	Wht/Blu 16 AWG
0F	GROUND	HOURMETER 3 #2	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0FA	GROUND	HOURMETER 3 #2	STOP SW3 LED X2	Wht/Blu 16 AWG
0FB	GROUND	STOP SW3 LED X2	START SW3 LED X2	Wht/Blu 16 AWG
0G	GROUND	HOURMETER 1 #2	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0GA	GROUND	HOURMETER 1 #2	STOP SW1 LED X2	Wht/Blu 16 AWG
0GB	GROUND	STOP SW1 LED X2	START SW1 LED X2	Wht/Blu 16 AWG
0K	GROUND	LIGHTS NEG (-)	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0L	GROUND	60 GPM SW2 #3	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0LA	GROUND	60 GPM SW2 #3	30 GPM SW2 #3	Wht/Blu 16 AWG
0LB	GROUND	30 GPM SW2 #3	60 GPM SW1 #3	Wht/Blu 16 AWG
0LC	GROUND	60 GPM SW1 #3	30 GPM SW1 #3	Wht/Blu 16 AWG
0M	GROUND	200 HP AUX PLUG WHT	0V2 TERMINAL BLOCK	Wht/Blu 16 AWG
0N	GROUND	MC1 A2	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0.5	GROUND	MC2 A2	0V2 TERMINAL BLOCK	Wht/Blu 16 AWG
0Q	GROUND	MC3 A2	0V2 TERMINAL BLOCK	Wht/Blu 16 AWG
0R	GROUND	M4 OL 95	0V2 TERMINAL BLOCK	Wht/Blu 16 AWG
0S	GROUND	5 PIN RECP PIN 4 RED/YEL	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0T	GROUND	5 PIN RECP PIN 4 RED/YEL	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0U	GROUND	CONTROLLER GRAY A11	0V TERMINAL BLOCK	Wht/Blu 20 AWG
0W	DOG INDICATOR GROUND	LEFT DOG LOCKED NEG	0V TERMINAL BLOCK	Wht/Blu 16 AWG
0WA	DOG INDICATOR GROUND	LEFT DOG LOCKED NEG	LEFT DOG UNLOCKED NEG	Wht/Blu 16 AWG
0WB	DOG INDICATOR GROUND	LEFT DOG UNLOCKED NEG	R DOG UNLOCKED NEG	Wht/Blu 16 AWG
0WC	DOG INDICATOR GROUND	R DOG UNLOCKED NEG	R DOG LOCKED NEG	Wht/Blu 16 AWG
0X	GROUND	DIAGNOSTIC PIN 2	0V TERMINAL BLOCK	Wht/Blu 16 AWG
59A	E-STOP 24V	59 TERMINAL BLOCK	MCB1 AUX BLU	Blu/Wht 16 AWG
59B	E-STOP 24V	59 TERMINAL BLOCK	MC2 AUX BLU	Blu/Wht 16 AWG
59C	E-STOP 24V	59 TERMINAL BLOCK	MC3 AUX BLU	Blu/Wht 16 AWG
59D	E-STOP 24V	59 TERMINAL BLOCK	COOLING PUMP SW	Blu/Wht 16 AWG
59E	E-STOP 24V	59 TERMINAL BLOCK	200HP AUX PIN 1 BLK	Blu/Wht 16 AWG
59F	E-STOP 24V	59 TERMINAL BLOCK	59 TERMINAL BLOCK	Blu/Wht 16 AWG
120 N	120VAC Neutral	various	various	Wht 16 AWG
120 L	120VAC Line	various	various	Blk 16 AWG
110A	120VAC TO TNL PWR CTR A1	120 VAC STRIP	TNL PWR CTR A1	Blk 16 AWG
110B	120VAC TO REMOTE ESTOP RELAY COIL 1	TNL PWR CTR A1	RMT ESTOP RELAY1 A1	Blk 16 AWG
110C	120VAC TO REMOTE ESTOP RELAY COIL 2	RMT ESTOP RELAY1 A1	RMT ESTOP RELAY2 A1	Blk 16 AWG
BLK4	REMOTE ESTOP RELAY COIL 1 GROUND	RMT ESTOP RELAY1 A2	TNL PWR CB BLK	Blk 16 AWG
BLK5	REMOTE ESTOP RELAY COIL 2 GROUND	RMT ESTOP RELAY1 A2	RMT ESTOP RELAY2 A2	Blk 16 AWG
111	START PWR	PUMP SW1 STANDBY #2	START SW1 NO #3	Blu/Wht 20 AWG
112	START PWR	START SW1 NO #4	STOP SW1 NC #2	Blu/Wht 20 AWG
113	START LED PWR	MC1 #22	START SW1 LED X1	Blu/Wht 16 AWG
131	TANK LEVEL PWR	TANK LEVEL RECP #1 BRN	24V TERMINAL BLOCK	Brn 20 AWG
132	TANK EMPTY LED PWR	TANK LEVEL RECP #2 WHT	TANK EMPTY LED #2	Wht 20 AWG
133	TANK LEVEL 0V	TANK LEVEL RECP #3 BLU	0V TERMINAL BLOCK	Blu 20 AWG
134	TANK LEVEL CTRL	TANK LEVEL RECP #4 BLK	TANK EMPTY RELAY A1	Blk 20 AWG
141	TUNNEL POWER ESTOP	TUNL PWR ESTOP RLY1 #11	MC1 A1	Blu/Wht 16 AWG
142	TUNNEL POWER ESTOP	TUNL PWR ESTOP RLY1 #14	STOP SW1 NC#1	Blu 16 AWG
142A	"RUN" - STOP LED PWR	STOP SW1 NC #1	STOP SW 1 LED X1	Blu/Wht 16 AWG
142B	"RUN"-HOUR METER	STOP LED X1	HOURMETER 1 #3	Blu/Wht 16 AWG
143	RUN	STOP SW1 NC #2	MC1 NO#14	Blu/Wht 16 AWG
144	RUN	MC1 NO#13	VARIOUS RUN1 PWR	Blu/Wht 16 AWG
145	RUN	MCB1 AUX BLK	VARIOUS RUN1 PWR	Blu/Wht 16 AWG
146	RUN	VARIOUS RUN1 PWR	MC1 NC#21	Blu/Wht 16 AWG
151	REMOTE ESTOP 24V IN	REMOT ESTOP WHITE	E-STOP #2	Wht 16 AWG
151A	ESTOP 24V	E-STOP #2	TANK EMPTY #11	Blu/Wht 16 AWG
152	ESTOP 24V	TANK EMPTY #14	ESTOP RLY #14	Blu/Wht 16 AWG

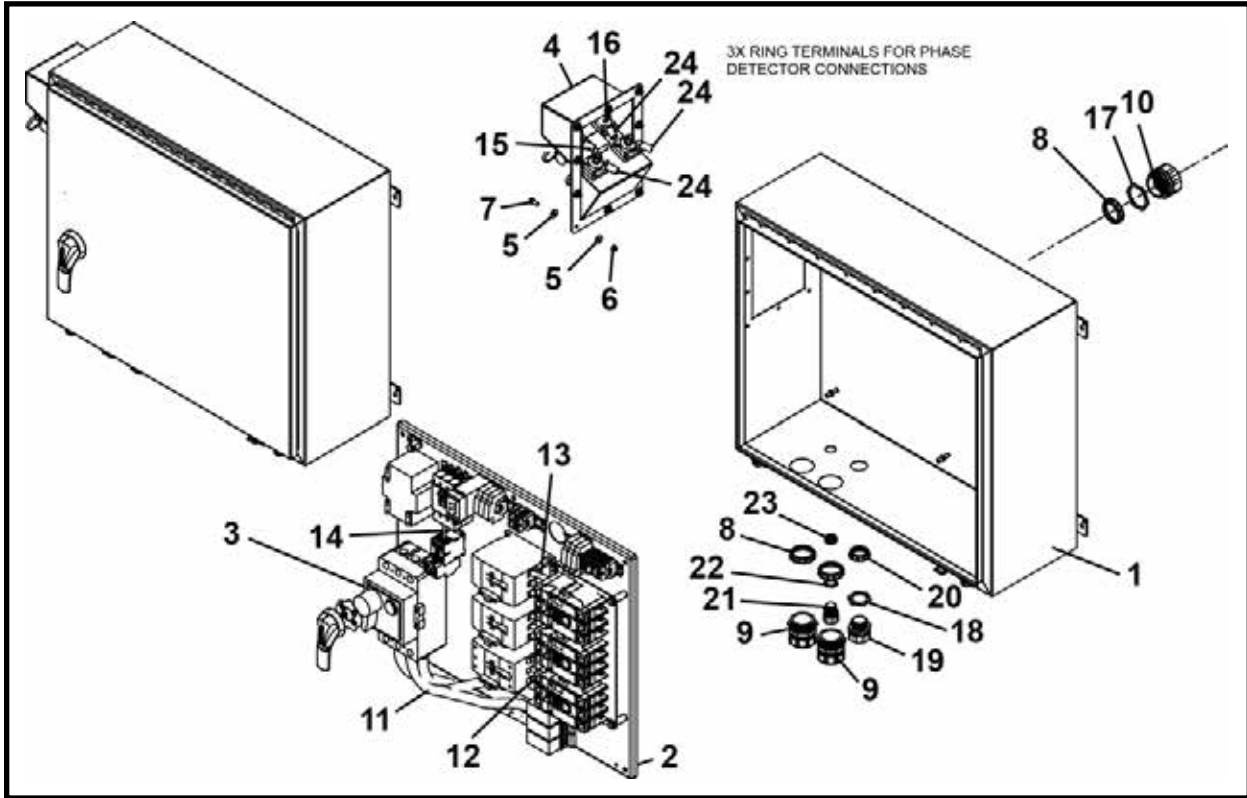
ELECTRICAL SCHEMATIC WIRE LIST, 031872A
5200 PUMP UNIT (SN F27700F-12 & AFTER)

WIRE NUMBER	DESCRIPTION	FROM LOCATION #1	TO LOCATION #2	WIRE COLOR/GAUGE
153	REMOTE ESTOP 24V OUT	REMOT ESTOP RECP ORG	ESTOP COIL A1	Org 16 AWG
154	REMOTE ESTOP 0V	REMOT ESTOP RECP BLK	0V TERMINAL BLOCK	Blk 16 AWG
155	ESTOP LED PWR	E-STOP #2	ESTOP LED #2	Blu/Wht 16 AWG
PILOT	TUNNE POWER PILOT	E-STOP #1	TNL PWR RECP ORANGE	Blu 16 AWG
PILOTA	TUNNE POWER PILOT	TNL PWR CTR A2	E-STOP #2	Blu/Wht 16 AWG
171	24V TO DOGGING PROX SW	RT DOG LOCK RECP # 1 BRN	24V TERMINAL BLOCK	Brn 20 AWG
173	DOGGING PROX SW GROUND	RT DOG LOCK RECP # 3 BLU	0V TERMINAL BLOCK	Blu 20 AWG
174	DOGGING PROX SW CTRL	RT DOD LOCK RECP #4 BLK	RT DOG LOCK LED #1	Blk 20 AWG
181	24V TO DOGGING PROX SW	RT DOG UNLOCK # 1 BRN	24V TERMINAL BLOCK	Brn 20 AWG
183	DOGGING PROX SW GROUND	RT DOG UNLOCK # 3 BLU	0V TERMINAL BLOCK	Blu 20 AWG
184	DOGGING PROX SW CTRL	RT DOG UNLOCK #4 BLK	RT DOG UNLOCK LED #1	Blk 20 AWG
191	24V TO DOGGING PROX SW	L DOG UNLOCK # 1 BRN	24V TERMINAL BLOCK	Brn 20 AWG
193	DOGGING PROX SW GROUND	L DOG UNLOCK # 3 BLU	0V TERMINAL BLOCK	Blu 20 AWG
194	DOGGING PROX SW CTRL	L DOG UNLOCK #4 BLK	L DOG UNLOCK LED #1	Blk 20 AWG
201	24V TO DOGGING PROX SW	L DOG LOCK RECP # 1 BRN	24V TERMINAL BLOCK	Brn 20 AWG
203	DOGGING PROX SW GROUND	L DOG LOCK RECP # 3 BLU	0V TERMINAL BLOCK	Blu 20 AWG
204	DOGGING PROX SW CTRL	L DOG LOCK RECP #4 BLK	L DOG LOCK LED #1	Blk 20 AWG
211	START PWR	PUMP SW2 STANDBY #2	START SW2 NO #3	Blu/Wht 16 AWG
212	START SWR	START SW2 NO #4	STOP SW2 NC #2	Blu/Wht 16 AWG
213	START LED PWR	MC2 #22	START SW2 LED X1	Blu/Wht 16 AWG
241	TUNNEL POWER ESTOP	TUNL PWR ESTOP RLY2 #11	MC2 A1	Blu/Wht 16 AWG
242	TUNNEL POWER ESTOP	TUNL PWR ESTOP RLY2 #14	STOP SW2 NC#1	Blu 16 AWG
242A	"RUN 2" - STOP LED PWR	STOP SW2 NC #1	STOP SW 2 LED X1	Blu/Wht 16 AWG
242B	"RUN 2"-HOUR METER	STOP LED 2 X1	HOURMETER 2 #3	Blu/Wht 16 AWG
243	RUN 2	STOP SW2 NC #2	MC2 NO#14	Blu/Wht 16 AWG
244	RUN 2	MC2 NO#13	VARIOUS RUN2 PWR	Blu/Wht 16 AWG
245	RUN 2	MCB2 AUX BLK	VARIOUS RUN2 PWR	Blu/Wht 16 AWG
246	RUN 2	VARIOUS RUN2 PWR	MC2 NC#21	Blu/Wht 16 AWG
311	START	VARIOUS RUN2 PWR	START SW3 NO #3	Blu/Wht 16 AWG
312	START	START SW3 NO #4	STOP SW3 NC #2	Blu/Wht 16 AWG
313	START LED PWR	MC3 NC #22	START SW3 LED X1	Blu/Wht 16 AWG
314	Run 3	MC3 NC #21	VARIOUS RUN3 PWR	Blu/Wht 16 AWG
342	RUN	STOP SW3 NC #1	MC3 A1	Blu/Wht 16 AWG
342A	"RUN 3" - STOP LED PWR	STOP SW3 NC #1	STOP LED 3 X1	Blu/Wht 16 AWG
342B	"RUN 3"-HOUR METER	STOP LED 3 X1	HOUR METER 3 #3	Blu/Wht 16 AWG
343	RUN 3	STOP SW3 NC #2	MC3 NO #14	Blu/Wht 16 AWG
344	RUN 3	MC3 NO#13	VARIOUS RUN3 PWR	Blu/Wht 16 AWG
345	RUN 3	MCB3 AUX BLK	VARIOUS RUN3 PWR	Blk 16 AWG
414	PUMP 1 STANDBY	PUMP SW1 STANDBY #1	VARIOUS RUN1 PWR	Blu/Wht 16 AWG
424	PUMP 2 STANDBY	PUMP SW2 STANDBY #1	VARIOUS RUN2 PWR	Blu/Wht 16 AWG
501	COOLING PUMP CONTROL	COOLING PUMP SW	MC4 A1	Blu/Wht 16 AWG
503	COOLING PUMP CONTROL	CONTACTOR/OL A2	OL 96	Wht/Blu 16 AWG
601	30 GPM P1	CONTROLLER GRAY A01	PUMP 1 STANDBY #4	Blk 20 AWG
602	60 GPM P1	CONTROLLER GRAY A02	PUMP 1 60 GPM #4	Blk 20 AWG
603	FLOW CONTROL P1 PWM(+)	CONTROLLER BLACK B01	5 PIN RECP PIN 3 GREEN	Gm 20 AWG
604	P1 FLOW CONTROL NEG (-)	CONTROLLER BLACK B05	5 PIN RECP PIN 5 RED/BLK	Blk 20 AWG
611	LS DUMP/BLOCK SOL. 1	CONTROLLER BLACK B02	5 PIN RECP PIN 1 RED/WH	Wht 20 AWG
612	PRESSURE SOL. 1 PWR	5K SW TERM LEFT #4	5 PIN RECP PIN 2 RED	Red 20 AWG
613	LS DUMP/BLK & PRESS NEG(-)	5 PIN RECP PIN 4 RED/YEL	0V TERMINAL BLOCK	Yel 20 AWG
701	30 GPM P2	CONTROLLER GRAY A03	PUMP 2 STANDBY #4	Blk 20 AWG
702	60 GPM P2	CONTROLLER GRAY A04	PUMP 2 60 GPM #4	Blk 20 AWG
703	FLOW CONTROL P2 PWM(+)	CONTROLLER BLACK B03	5 PIN RECP PIN 3 GREEN	Gm 20 AWG
704	P2 FLOW CONTROL NEG (-)	CONTROLLER BLACK B06	5 PIN RECP PIN 5 RED/BLK	Blk 20 AWG
711	LS DUMP/BLOCK SOL. 2	CONTROLLER BLACK B04	5 PIN RECP PIN 1 RED/WH	Wht 20 AWG
712	PRESSURE SOL. 2 PWR	5K SW TERM LEFT #4	5 PIN RECP PIN 2 RED	Red 20 AWG
713	LS DUMP/BLK & PRESS NEG(-)	5 PIN RECP PIN 4 RED/YEL	0V TERMINAL BLOCK	Yel 20 AWG
801	5000 PSI MODE ON STATUS	CONTROLLER GRAY A06	KEY SW CENTER TERM 4	Blu 20 AWG
CAN1-L	CAN1 -L	CONTROLLER GRAY A09	P0313-070 B	Gm 16 AWG
CAN1-H	CAN1 -H	CONTROLLER GRAY A10	P0313-070 A	Yel 16 AWG
0V TBD	0 Vdc	CONTROLLER GRAY A11	0V TERMINAL BLOCK	Wht / Blu 16 AWG
24V TBD	24 Vdc	CONTROLLER GRAY A12	24V TERMINAL BLOCKS	Blu / Wht 16 AWG
5V	5V (USED FOR 5K STATUS)	CONTROLLER BLACK B08	KEY SW CENTER TERM 3	Blu 20 AWG
1001	BROWN DISTRIBUTION FEED	MAIN BREAKER T1	DISTRUBUTION BLOCK BRN	3/0
1002	ORANGE DISTRIBUTION FEED	MAIN BREAKER T2	DISTRUBUTION BLOCK ORG	3/0
1003	YELLOW DISTRIBUTION FEED	MAIN BREAKER T3	DISTRUBUTION BLOCK YEL	3/0
1004	BH PUMP 1	DISTRUBUTION BLOCK BRN	BREAKER BH PUMP 1 L1	2 AWG
1005	BH PUMP 1	DISTRUBUTION BLOCK ORG	BREAKER BH PUMP 1 L2	2 AWG
1006	BH PUMP 1	DISTRUBUTION BLOCK YEL	BREAKER BH PUMP 1 L3	2 AWG
1007	BH PUMP 2	DISTRUBUTION BLOCK BRN	BREAKER BH PUMP 2 L1	2 AWG
1008	BH PUMP 2	DISTRUBUTION BLOCK ORG	BREAKER BH PUMP 2 L2	2 AWG
1009	BH PUMP 2	DISTRUBUTION BLOCK YEL	BREAKER BH PUMP 2 L3	2 AWG
1010	JACK PUMP	DISTRUBUTION BLOCK BRN	BREAKER JACKING PUMP L1	4 AWG
1011	JACK PUMP	DISTRUBUTION BLOCK ORG	BREAKER JACKING PUMP L2	4 AWG
1012	JACK PUMP	DISTRUBUTION BLOCK YEL	BREAKER JACKING PUMP L3	4 AWG
1013	COOLING/AUX PUMP	DISTRUBUTION BLOCK BRN	BREAKER COOL/AUX L1	Brn 14 AWG

ELECTRICAL SCHEMATIC WIRE LIST, 031872A
5200 PUMP UNIT (SN F27700F-12 & AFTER)

WIRE NUMBER	DESCRIPTION	FROM LOCATION #1	TO LOCATION #2	WIRE COLOR/GAUGE
1014	COOLING/AUX PUMP	DISTRUBUTION BLOCK ORG	BREAKER COOL/AUX L2	Org 14 AWG
1015	COOLING/AUX PUMP	DISTRUBUTION BLOCK YEL	BREAKER COOL/AUX L3	Yel 14 AWG
1016	COOLING/AUX PUMP	BREAKER COOL/AUX T1	CONTACTOR COOL/AUX L1	Brn 14 AWG
1017	COOLING/AUX PUMP	BREAKER COOL/AUX T2	CONTACTOR COOL/AUX L2	Org 14 AWG
1018	COOLING/AUX PUMP	BREAKER COOL/AUX T3	CONTACTOR COOL/AUX L3	Yel 14 AWG
1019	JACK PUMP	BREAKER JACKING PUMP T1	CONTACTOR JACK PUMP L1	4 AWG
1020	JACK PUMP	BREAKER JACKING PUMP T2	CONTACTOR JACK PUMP L2	4 AWG
1021	JACK PUMP	BREAKER JACKING PUMP T3	CONTACTOR JACK PUMP L3	4 AWG
1022	BH PUMP 2	BREAKER BH PUMP 2 T1	CONTACTOR BH PUMP 2 L1	2 AWG
1023	BH PUMP 2	BREAKER BH PUMP 2 T2	CONTACTOR BH PUMP 2 L2	2 AWG
1024	BH PUMP 2	BREAKER BH PUMP 2 T3	CONTACTOR BH PUMP 2 L3	2 AWG
1025	BH PUMP 1	BREAKER BH PUMP 1 T1	CONTACTOR BH PUMP 1 L1	2 AWG
1026	BH PUMP 1	BREAKER BH PUMP 1 T2	CONTACTOR BH PUMP 1 L2	2 AWG
1027	BH PUMP 1	BREAKER BH PUMP 1 T3	CONTACTOR BH PUMP 1 L3	2 AWG
1028	FEED 120 POWER SUPPLY	DISTRUBUTION BLOCK ORG	120 POWER SUPPLY 6 HV	Blk 14 AWG
1029	FEED 120 POWER SUPPLY	DISTRUBUTION BLOCK YEL	120 POWER SUPPLY 1 HV	Blk 14 AWG
1030	TUNNEL POWER BREAKER	DISTRUBUTION BLOCK BRN	TP BREAK TERMINAL BLOCK	Brn 14 AWG
1031	TUNNEL POWER BREAKER	DISTRUBUTION BLOCK ORG	TP BREAK TERMINAL BLOCK	Org 14 AWG
1032	TUNNEL POWER BREAKER	DISTRUBUTION BLOCK YEL	TP BREAK TERMINAL BLOCK	Yel 14 AWG
1033	24V POWER SUPPLY	DISTRUBUTION BLOCK BRN	24V POWER SUPPLY BRN F4	Brn 14 AWG
1034	24V POWER SUPPLY	DISTRUBUTION BLOCK ORG	24V POWER SUPPLY ORG F5	Org 14 AWG
1035	24V POWER SUPPLY	DISTRUBUTION BLOCK YEL	24V POWER SUPPLY YEL F6	Yel 14 AWG
1036	PHASE LIGHT	PHASE LIGHT RED	PHASE LIGHT GREEN	Red/Blk 18 AWG
1037	PHASE LIGHT	PHASE DETECTOR 1	PHASE LIGHT RED	Red/Blk 18 AWG
1038	PHASE LIGHT	PHASE DETECTOR 9	PHASE LIGHT GREEN	Red/Wht 18 AWG
1039	PHASE LIGHT	PHASE DETECTOR 7	PHASE LIGHT RED	Red/Wht 18 AWG
1040	PHASE DETECTOR	PHASE DETECTOR FUSE F1	PHASE DETECTOR 3	Brn 14 AWG
1041	PHASE DETECTOR	PHASE DETECTOR FUSE F2	PHASE DETECTOR 2	Org 14 AWG
1042	PHASE DETECTOR	PHASE DETECTOR FUSE F3	PHASE DETECTOR 1	Yel 14 AWG
1043	PHASE DETECTOR	PHASE DETECTOR 8	PHASE DETECTOR 3	Brn 16 AWG
1044	PHASE DETECTOR	MAIN BREAKER L1	PHASE DETECTOR FUSE F1	Brn 14 AWG
1045	PHASE DETECTOR	MAIN BREAKER L2	PHASE DETECTOR FUSE F2	Org 14 AWG
1046	PHASE DETECTOR	MAIN BREAKER L3	PHASE DETECTOR FUSE F3	Yel 14 AWG
1047	INCOMING POWER	INCOMING CAM LOCK BRN	MAIN BREAKER L1	3/O
1048	INCOMING POWER	INCOMING CAM LOCK ORG	MAIN BREAKER L2	3/O
1049	INCOMING POWER	INCOMING CAM LOCK YEL	MAIN BREAKER L3	3/O
1050	INCOMING GROUND	INCOMING CAM LOCK GRN	GROUND "LUG"	2 AWG
1051	TUNNEL POWER LIGHT	TUNNEL PWR CONTACT T1	TUNNEL POWER LIGHT	BLK 18 AWG
1052	TUNNEL POWER LIGHT	TUNNEL POWER LIGHT	GROUND LUG	GRN 18 AWG
1053	LARGE BOX TERMINAL BLOCK	LARGE BOX TERM BLOCK	TUNNEL POWER BRAKER	BRN 14 AWG
1054	LARGE BOX TERMINAL BLOCK	LARGE BOX TERM BLOCK	TUNNEL POWER BRAKER	ORG 14 AWG
1055	LARGE BOX TERMIANL BLOCK	LARGE BOX TERM BLOCK	TUNNEL POWER BRAKER	YEL 14 AWG
1056	24V POWER SUPPLY FEED	F4 FUSE	24V POWER SUPPLY	BLU 16 AWG
1057	24V POWER SUPPLY FEED	F5 FUSE	24V POWER SUPPLY	BLU 16 AWG
1058	24V POWER SUPPLY FEED	F6 FUSE	24V POWER SUPPLY	BLU 16 AWG
1059	TEMP DISP	TEMP RECEPTICLE # 1	TEMP DISPLAY EXC	BLU 16 AWG
1059A	TEMP DISP	TEMP DISPLAY EXC	TEMP DISPLAY INP	BLU 16 AWG
1060	TEMP DISP	TEMP RECEPTICLE # 2	TEMP DISPLAY COM	BLU 16 AWG

LARGE ELECTRICAL PANEL ASSEMBLY, 027703A
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027703A	LARGE ELECTRICAL PANEL ASSEMBLY
1	1	P0251-662	ENCLOSURE
2*	1	027704A	ASSEMBLY, Power Distribution Panel
3**	1	P0251-430	BREAKER, Operator
4*	1	027707A	ASSEMBLY, Connection Box
5	20	P0040-005	WASHER, Hardened Flat 5/16
6	10	P0013-03.5A-000	NUT, Nyloc 5/16
7	10	P0001-05-003	BOLT, Hex 5/16 UNC x .75
8	3	P0311-053	BUSHING, Insulating
9	2	P0311-108	STRAIN RELIEF
10	1	P0311-128	CONNECTOR
11	180 LI	P0054-261	WIRE, Motor Lead
12	60 LI	P0054-264	WIRE, Motor Lead
13	120 LI	P0054-593	CABLE
14	96 LI	P0054-013	WIRE
15	1	P0055-201	CLAMP, Ground
16	3	P0055-256	RING, Blue 1/2
17	1	P0311-054	NUT, Lock 2
18	1	P0311-021	LOCK NUT, 1-1/4
19	1	P0311-109	STRAIN RELIEF
20	1	P0311-035	BUSHING, Insulating
21	1	P0311-120	STRAIN RELIEF, 3/4
22	1	P0311-019	NUT, Lock 3/4
23	1	P0311-033	BUSHING, Insulating
24	3	P0055-203	CLAMP, Ground

LI - Linear Inch

* Refer to this section for parts information.

** The operator breaker assembly for SN F27700F-01 thru 05 is obsolete. If the operator breaker assembly requires replacement, a backer plate will be necessary to add to the electrical box since the new handle (blue) assembly has a smaller mounting hole pattern.

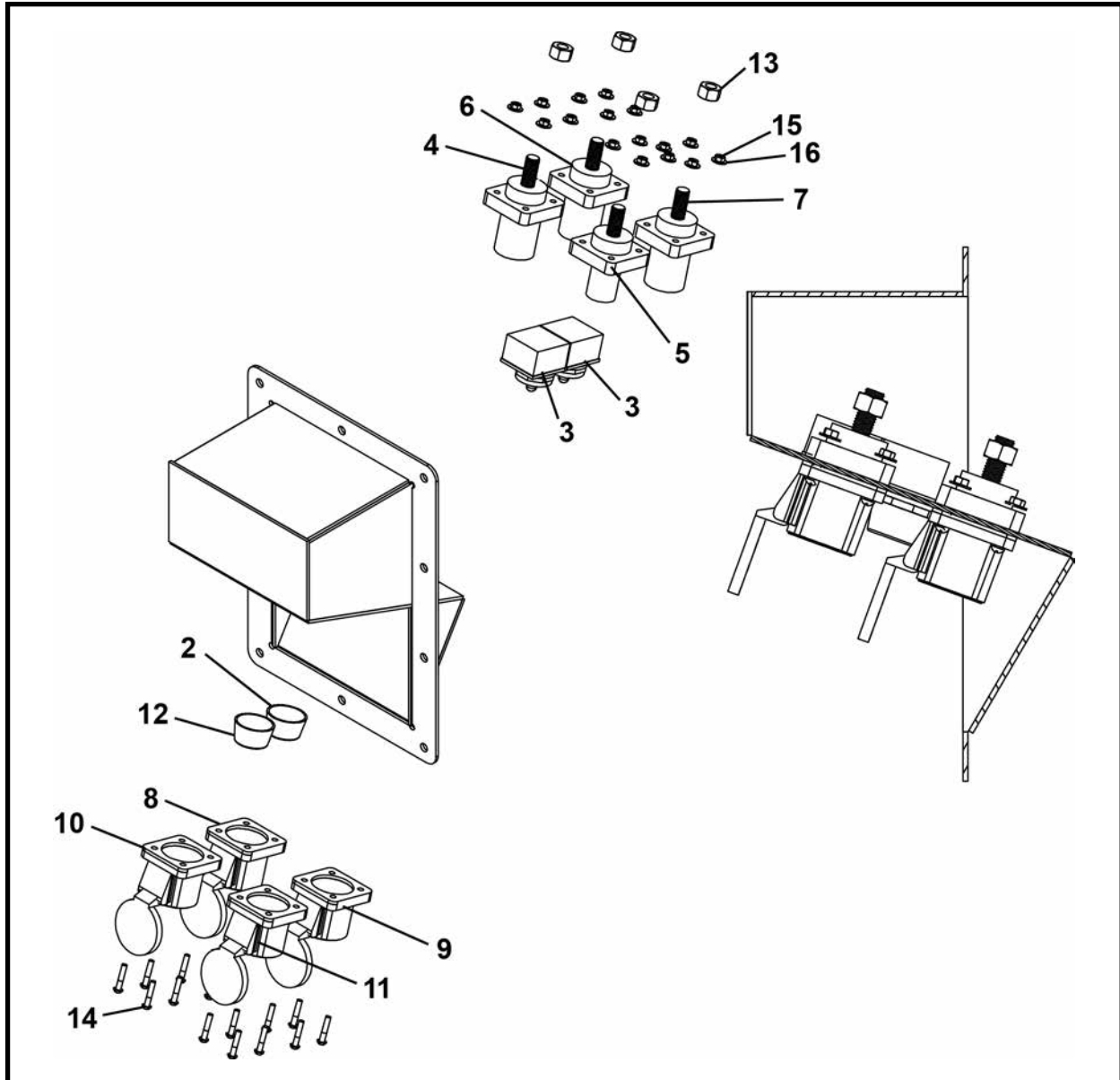
NOTES

POWER DISTRIBUTION PANEL ASSEMBLY, 027704A

5200 PUMP UNIT

ITEM	QTY	PART NO.	DESCRIPTION
10	1	P0251-474	RELAY, Overload 6-10 AMP
11	1	P0251-473	CONTACTOR, 5HP
12	1	P0251-481	BREAKER 480V 3 Phase
13	1	P0251-667	CONTROL, Transformer (110 Volt Transformer for Dynex Valve Coils)
14	3	P0251-432	CONTACT, Auxiliary
15	1	P0310-503-008	RAIL, DIN
16	7	P0310-571	STOP, Fuse Holder End
17	6	P0310-473B	HOLDER, Fuse
18	18	P0310-500	BLOCK, Terminal
19	1	P0310-503-010	RAIL, DIN
20	4	P0020-83-022	SCREW, Truss Head 8-32 x .375
21	3	P0311-036	CLAMP, Ground
22	1	P0310-573	JUMPER, Terminal Strip
23	3	P0310-953	FUSE, 5 A Time Delay
24	1	P0251-472	FUSE, 6A
25	2	P0251-380	FUSE, 3A
26	1	P0251-443	DETECTOR, Phase 480V
27	3	P0310-954	FUSE, 1.4A Time Delay
28	12	P0020-83-024	SCREW, Truss Head 8-32 x .75
29	4	P0020-83-023	SCREW, Truss Head 8-32 x .5
30	4	P0001-06-010	BOLT, Hex 3/8 UNC x 2.5
31	4	P0040-006	WASHER, Hardened Flat 3/8
32	4	P0013-06A-000	NUT, Nyloc 3/8 UNC
33	4	027747P	BUSHING
34	2	P0310-502	ANCHOR, DIN Rail End
35	10	P0020-10-325	SCREW, Truss Head 10-32 x .5

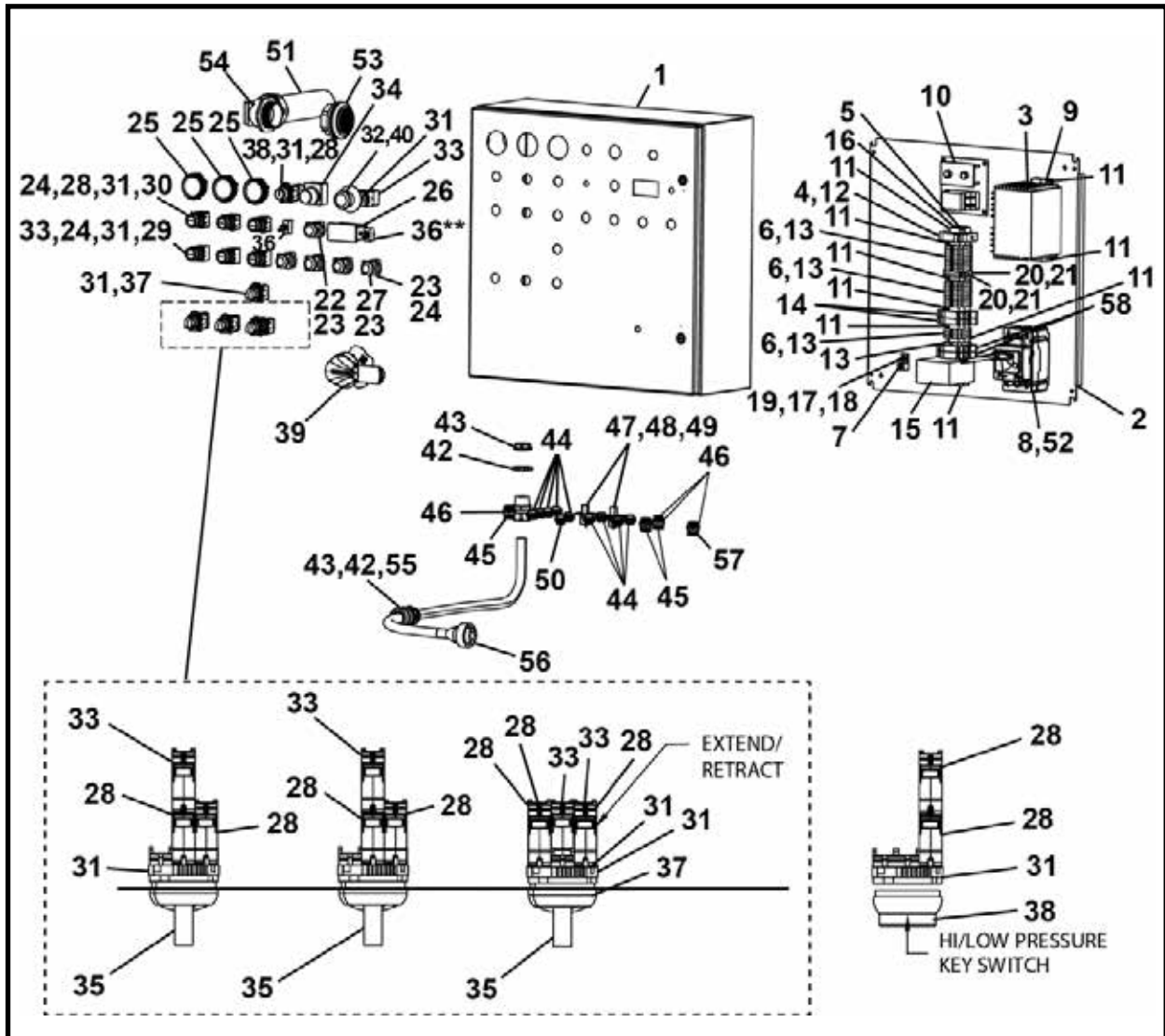
CONNECTION BOX ASSEMBLY, 027707A
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027707A	CONNECTION BOX ASSEMBLY
1	1	027706A	BOX, Connection
2	1	P0251-464	LENS, Plastic Red
3	2	P0251-463	LIGHT, Red 480V Pilot (Includes item 3a)
3a	1	P0310-130	BULB, Pilot Light
4	1	P0054-602	CAM LOCK, Brown
5	1	P0054-376	MOUNT, Panel
6	1	P0054-603	CAM LOCK, Orange
7	1	P0054-604	CAM LOCK YELLOW
8	1	P0054-606	COVER, Orange
9	1	P0054-607	COVER, Yellow
10	1	P0054-605	COVER, Brown
11	1	P0054-621	COVER, GREEN
12	1	P0251-514	LENS, Green Plastic
13	4	P0027-008	NUT, Brass Hex 1/2-13
14	16	P0017-10-327	SCREW, Machine 10 x 1 x 1
15	16	P0003-01-000	NUT, Hex 10-32
16	16	P0040-002	WASHER, #10

NOTES

SMALL ELECTRICAL PANEL ASSEMBLY, 027705A
5200 PUMP UNIT (SN F27700F-11 & BEFORE)



ITEM	QTY	PART NO.	DESCRIPTION
0		027705A	SMALL ELECTRICAL PANEL ASSEMBLY
1	1	P0251-668	ENCLOSURE
2	1	P0251-668A	PANEL
3	1	P0251-442	POWER SUPPLY 24V 480W
4	1	P0251-386	FUSE, 20A
5	8	P0020-83-022	SCREW, Truss Head 8-32 x .375
6	21	P0310-573	JUMPERS, Terminal Strip
7	1	P0055-157	LUGS
8	1	P0251-481	BREAKER, 480V 3 Phase
9	1	P0310-503-007	RAIL, DIN
10	1	P0302-776	BOARD, Controller
11	9	P0310-571	STOP, Fuse Holder End
12	1	P0310-473B	HOLDER, Fuse
13	22	P0310-500	BLOCK Terminal
14	2	P0251-409	RELAY, Contact
15	1	P0310-599A	STARTER, 5 HP
16	1	P0310-503-014	RAIL, DIN
17	1	P0040-004	WASHER, Hardened Flat 1/4

(Continued on next page)

SMALL ELECTRICAL PANEL ASSEMBLY, 027705A
5200 PUMP UNIT (SN F27700F-11 & BEFORE)

ITEM	QTY	PART NO.	DESCRIPTION
18	1	P0017-14-204	SCREW, Machine 1/4-20 x .75
19	1	P0013-04-000	NUT, Nyloc 1/4
20	2	P0310-570	HOLDER, Fuse
21	2	P0251-681	FUSE, 1.5A
22	1	P0056-129F	LIGHT, Red Pilot
23	5	P0056-131F	LATCH, Plastic
24	12	P0251-563	LIGHT, White LED Pilot
25*	3	P0251-410	HOURMETER
26	1	P0251-445	METER, Temperature
27	4	P0251-439	LIGHT, Green Indicator
28	12	P0056-121F	CONTACT
29	3	P0310-412F	SWITCH, Pushbutton Illuminated
30	3	P0310-411F	SWITCH, Pushbutton Illuminated
31	12	P0310-419F	LATCH, Mounting
32	1	P0310-420F	SWITCH, E-Stop Pushbutton, Illuminated
33	10	P0056-122F	BLOCK, Contact
34	1	P0251-486	LIGHT, Red Indicator
35	3	P0310-421F	SWITCH, 3 Position
36**	2	P0056-147	SWITCH, Toggle
37	1	P0310-421AF	SWITCH, 2 Position
38	1	P0310-421C	SWITCH, 2 Position Key Selector
39	1	P0251-482	BREAKER, Handle & Shaft
40	1	P0310-474F	DECAL, Emergency Stop
41	1	P0311-118	STRAIN RELIEF
42	2	P0311-020	NUT, Lock 1
43	2	P0311-034	BUSHING, Insulating
44	9	P0054-574	RECEPTACLE
45	3	P0054-073B	RECEPTACLE
46	4	P0311-018	NUT, Lock 1/2
47	2	P0054-575	CONNECTOR, Flanged
48	2	P0054-576	WEDGE, Connector
49	6	P0313-007	PINS
50	1	P0054-580	RECEPTACLE
51	8	P0312-032	CONDUIT
52	1	P0251-481A	BUSHING, Insulating
53	1	P0311-049	HUB
54	1	P0311-131	CONNECTOR
55	1	P0311-112	CORD GRIP
56	1	P0054-067K	CABLE
57	1	P0054-068	RECEPTACLE, 3 C 16 GA MINI FEM EXT 10"
58	2	P0251-666	RELAY, DIN Mount 120VAC

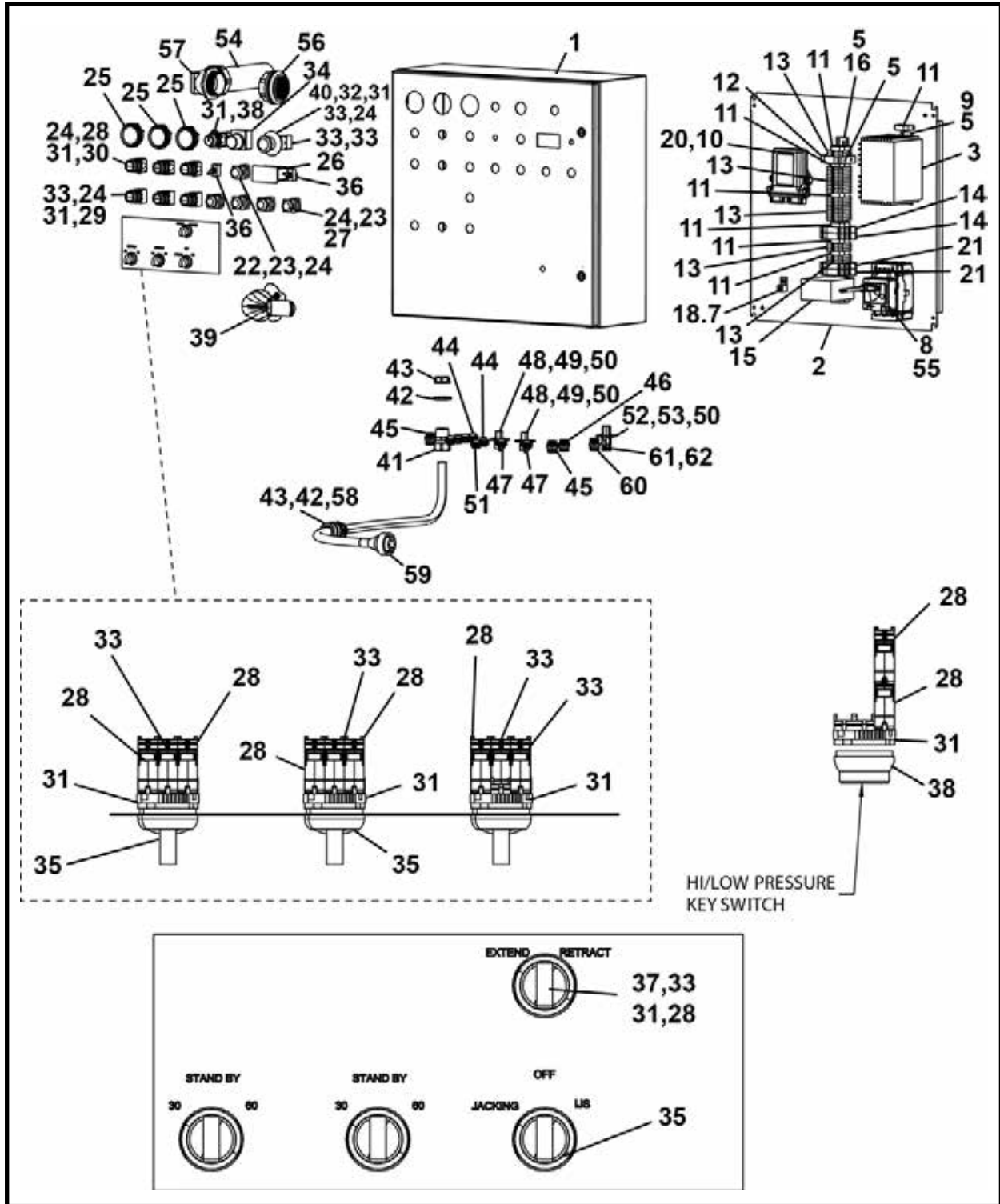
NOTE: For wiring details, refer to 027702A schematic in this section.

* If your hourmeter is analog, they are no longer available and must be replaced with a digital hourmeter. This will require panel assembly rework and rewiring. Contact your Akkerman Aftermarket Support representative for more information.

** SN F27700F-03, and 07 & After are equipped with the Auxiliary/Cooling Pump ON/OFF switch, P0056-147 (one of quantity item 36).

OPERATOR PANEL ASSEMBLY, 031871A

5200 PUMP UNIT (SN F27700F-12 & After)



ITEM	QTY	PART NO.	DESCRIPTION
0		031871A	OPERATOR PANEL ASSEMBLY
1		P0251-668	ENCLOSURE
2	1	P0251-668A	PANEL
3	1	P0251-442	POWER SUPPLY 24V 480W
4	1	P0251-386	FUSE, 20A
5	8	P0020-83-022	SCREW, Truss Head 8-32 x .375
6	3	P0310-573	JUMPERS, Terminal Strip
7	1	P0055-157	LUGS

(Continued on next page)

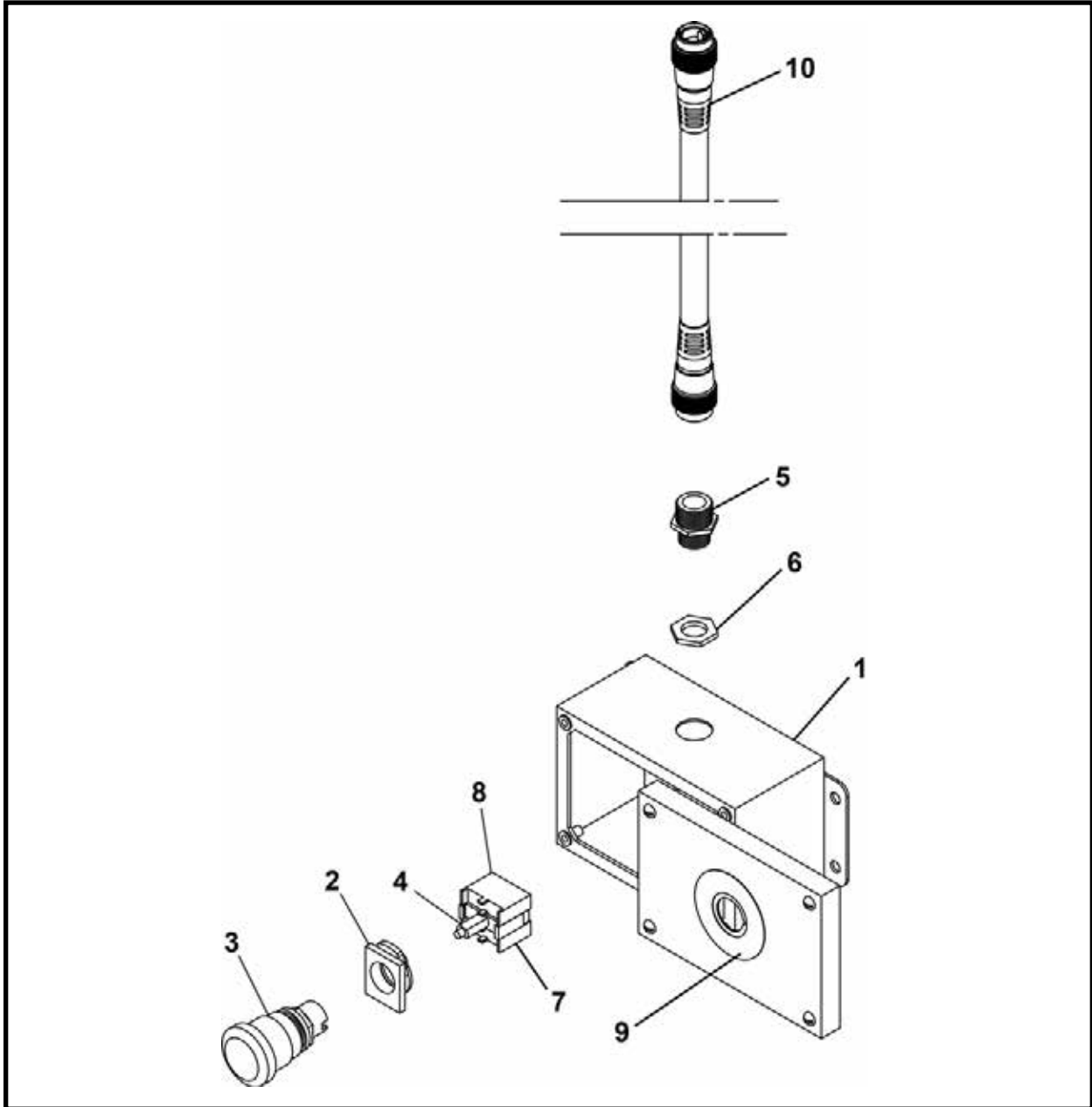
OPERATOR PANEL ASSEMBLY, 031871A
5200 PUMP UNIT (SN F27700F-12 & After)

ITEM	QTY	PART NO.	DESCRIPTION
8	1	P0251-481	BREAKER, 480V 3 Phase
9	1	P0310-503-007	RAIL, DIN
10	1	S10053A	ASSEMBLY, Control Module
11	9	P0310-571	STOP, Fuse Holder End
12	1	P0310-473B	HOLDER, Fuse
13	28	P0310-500	BLOCK Terminal
14	2	P0251-409	RELAY, Contact
15	1	P0310-599A	STARTER, 5 HP
16	1	P0310-503-016	RAIL, DIN
17	1	P0040-004	WASHER, Hardened Flat 1/4
18	1	P0017-14-204	SCREW, Machine 1/4-20 x .75
19	1	P0013-04-000	NUT, Nyloc 1/4
20	2	P0020-14-205	SCREW, Truss Head Machine 1
21	2	P0251-666	RELAY, DIN Mount 120 VAC
22	1	P0056-129F	LIGHT, Red Pilot
23	5	P0056-131F	LATCH, Plastic
24	12	P0251-563	LIGHT, White LED Pilot
25*	3	P0251-410	HOURMETER
26	1	P0251-445	METER, Temperature
27	4	P0251-439	LIGHT, Green Indicator
28	12	P0056-121F	CONTACT
29	3	P0310-412F	SWITCH, Pushbutton Illuminated
30	3	P0310-411F	SWITCH, Pushbutton Illuminated
31	12	P0310-419F	LATCH, Mounting
32	1	P0310-420F	SWITCH, E-Stop Pushbutton, Illuminated
33	10	P0056-122F	BLOCK, Contact
34	1	P0251-486	LIGHT, Red Indicator
35	3	P0310-421F	SWITCH, 3 Position
36	2	P0056-147	SWITCH, Toggle
37	1	P0310-421AF	SWITCH, 2 Position
38	1	P0310-421C	SWITCH, 2 Position Key Selector
39	1	P0251-482	BREAKER, Handle & Shaft
40	1	P0310-474F	DECAL, Emergency Stop
41	1	P0311-118	STRAIN RELIEF
42	2	P0311-020	NUT, Lock 1
43	2	P0311-034	BUSHING, Insulating
44	5	P0054-574	RECEPTACLE
45	3	P0054-073B	RECEPTACLE
46	4	P0311-018	NUT, Lock 1/2
47	2	P0054-337	RECEPTACLE, 5 C 22 GA Micro Fem DK 12"
48	2	P0054-575	CONNECTOR, Flanged
49	2	P0054-576	WEDGE, Connector
50	6	P0313-007	PINS
51	1	P0054-580	RECEPTACLE
52	1	P0313-068B	RECEPTACLE DT 4 Way Flange
53	1	P0313-068A	RECEPTACLE Wedgelock DT 4 Way
54	8	P0312-032	CONDUIT
55	1	P0251-481A	BUSHING, Insulating
56	1	P0311-049	HUB
57	1	P0311-131	CONNECTOR
58	1	P0311-112	CORD GRIP
59	1	P0054-067K	CABLE
60	1	P0054-068	RECEPTACLE, 3 C 16 GA MINI FEM EXT 10"
61	1	P0313-067	PLUG, DT 4 Way
62	4	P0313-016	PLUG, Sealing

NOTE: For wiring details, refer to 031872A schematic in this section.

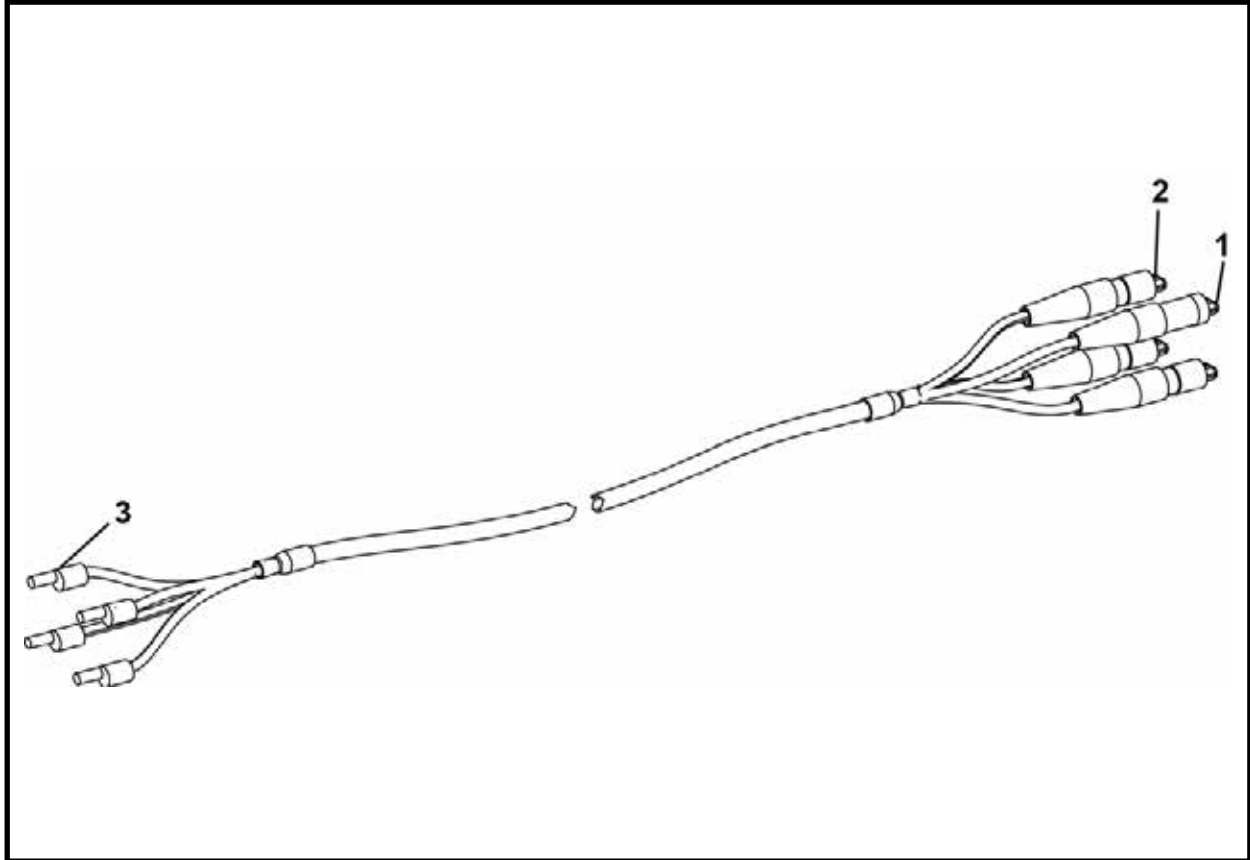
* If your hourmeter is analog, they are no longer available and must be replaced with a digital hourmeter. This will require panel assembly rework and rewiring. Contact your Akkerman Aftermarket Support representative for more information.

REMOTE E-STOP ASSEMBLY, 027858A
5200 PUMP UNIT



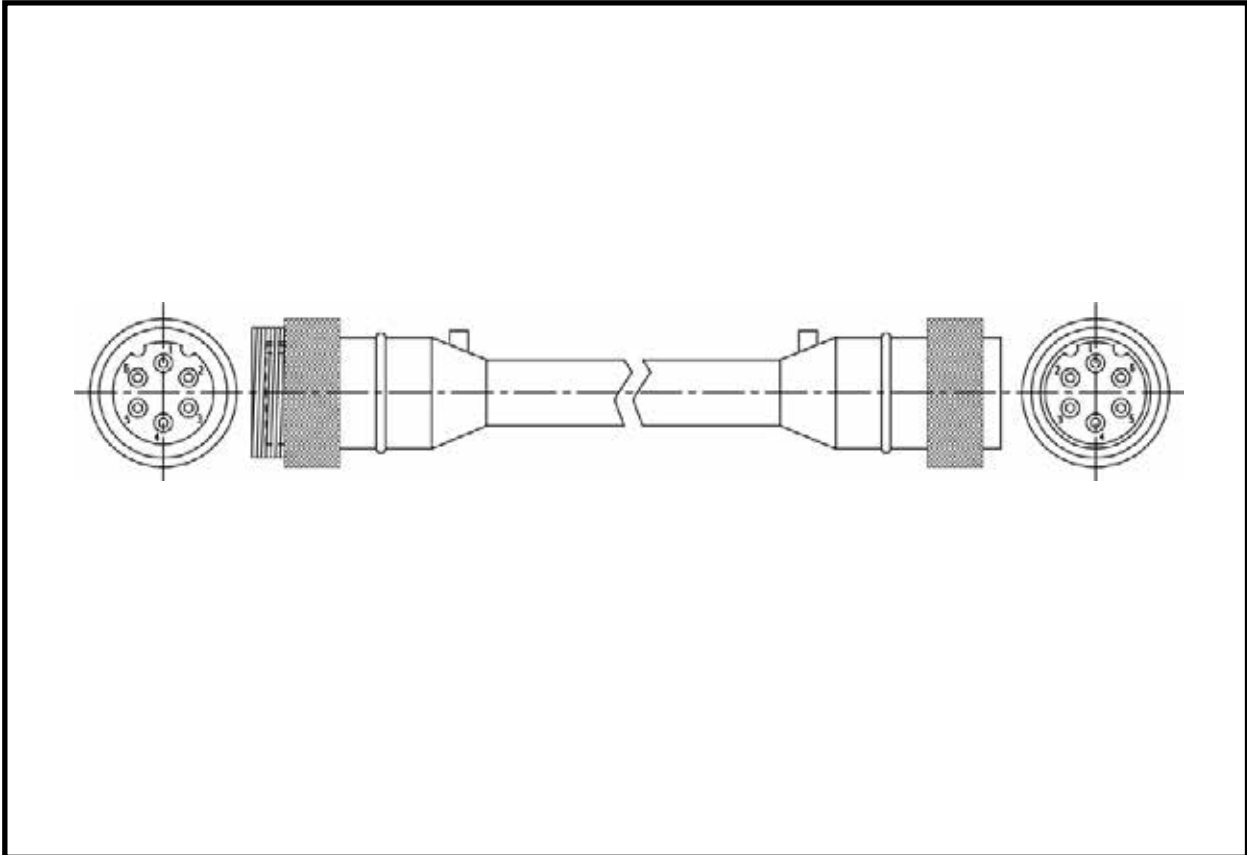
ITEM	QTY	PART NO.	DESCRIPTION
0	1	027858A	ASSEMBLY, REMOTE E-STOP - 5200 PU
1	1	019024P	BOX, ELECTRICAL-E-STOP
2	1	P0310-419F	LATCH, Mounting
3	1	P0310-420F	PUSHBUTTON, Illuminated E-Stop
4	1	P0251-171	MODULE, LED
5	1	P0054-073A	RECEPTACLE
6	1	P0311-018	NUT, Lock 1/2
7	1	P0056-122F	BLOCK, Contact
8	1	P0056-121F	CONTACT
9	1	P0310-474F	DECAL, Emergency Stop
10	1	P0054-480	CABLE, Mini

**STARTER CABLE ASSEMBLY
5200 PUMP UNIT**



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	F20623F	STARTER CABLE ASSEMBLY - 100 FT
0.2	1	F20643F	STARTER CABLE ASSEMBLY - 200 FT
1	1	P0054-374	CAP, Protective, Male
2	3	P0054-378	CAP, Protective, Female
3	4	P0055-227	PLUG

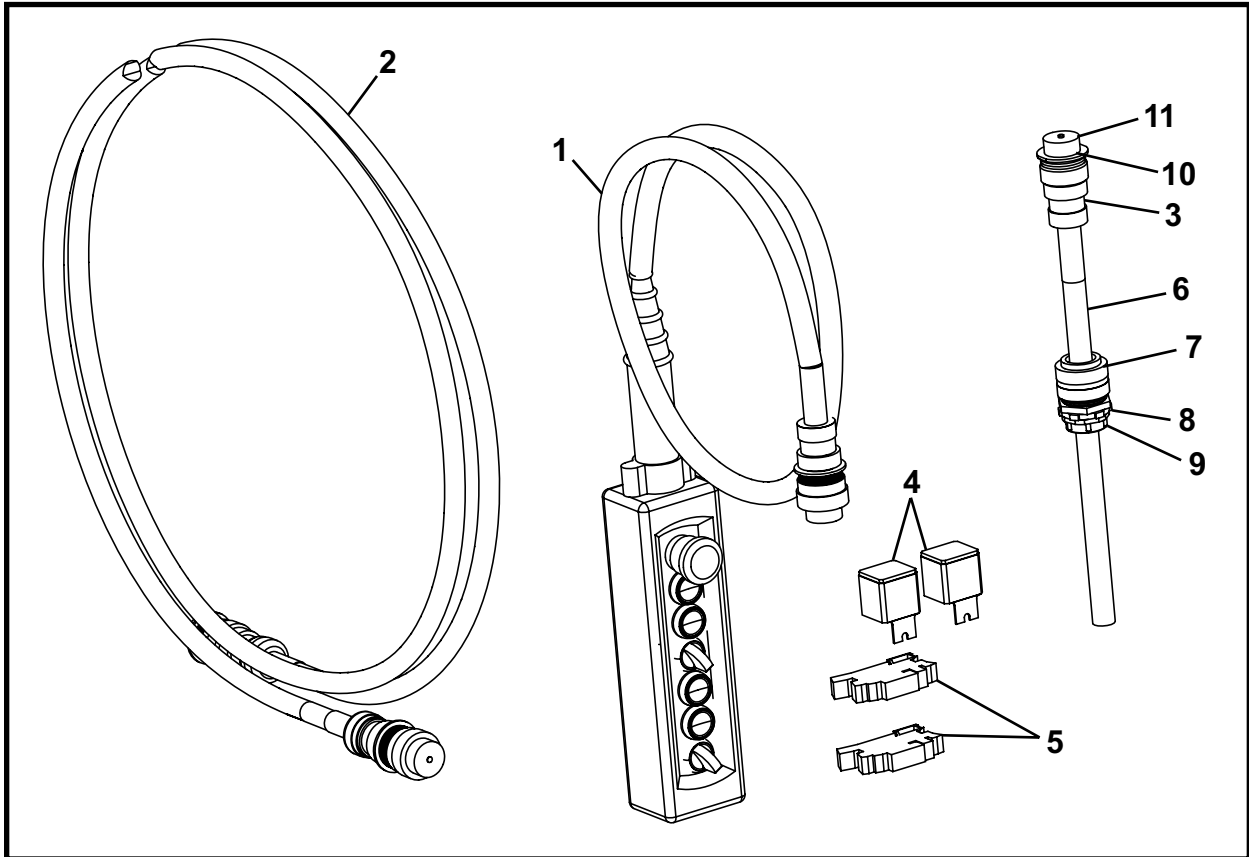
TBM POWER CABLE 100 FT, FA20511F0
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA20511F0	TBM POWER CABLE 100 FT

NOTES

5200 PENDANT ASSEMBLY OPTION, 027421A
5200 PUMP UNIT

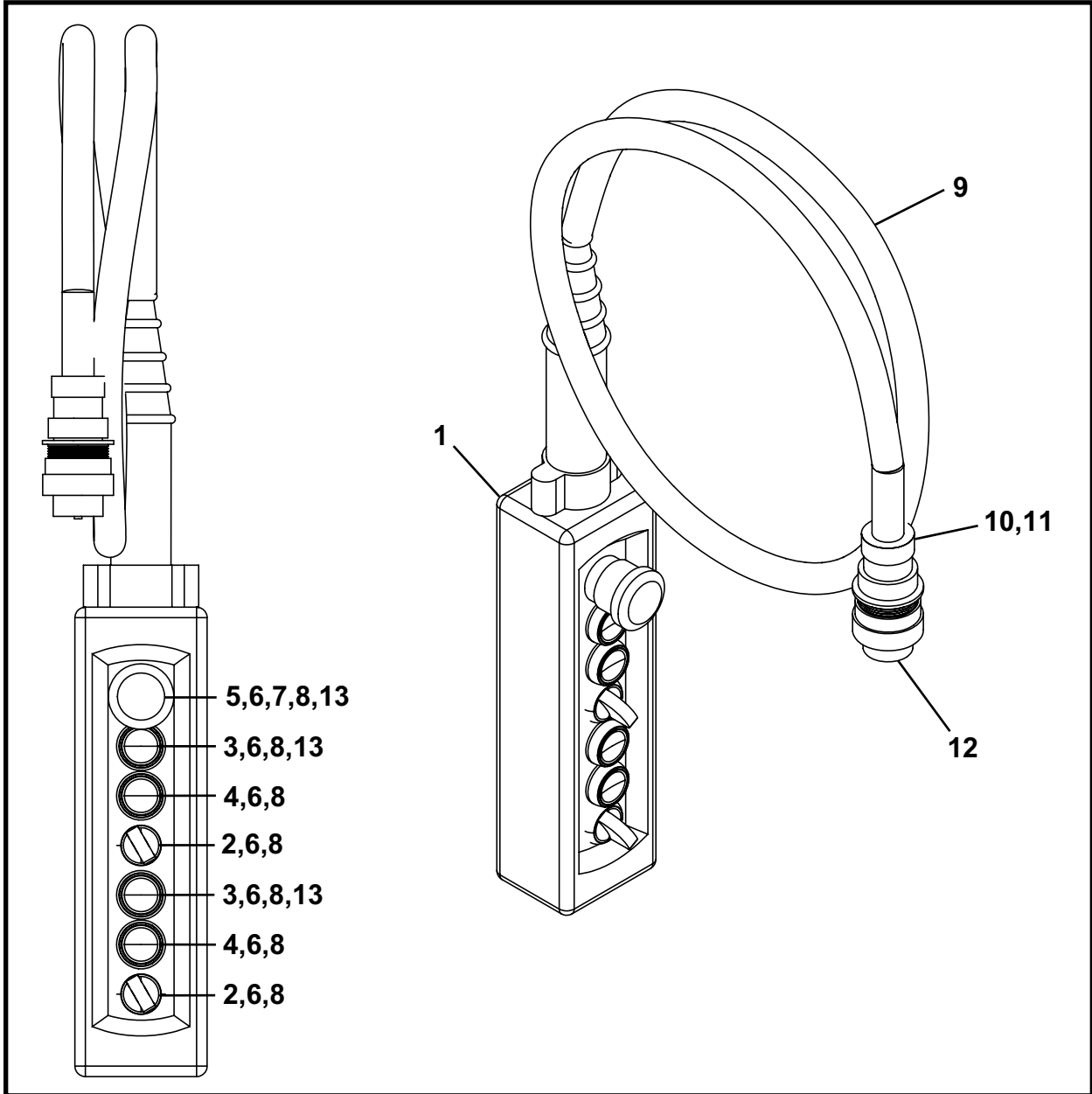


ITEM	QTY	PART NO.	DESCRIPTION
0	1	027421A	5200 PENDANT ASSEMBLY OPTION
1*	1	027422A	ASSEMBLY, Pendant
2	1	028273A00	CABLE, Pendant Extension 100 FT
3	1	P0313-021	PLUG W/CABLE CLAMP
4	2	P0310-409	RELAY, 24VDC, 10Amp
5	2	P0251-409	RELAY, Contactor Wago DIN Mount
6	60 LI	P0054-279	CABLE
7	1	P0311-112	CORD GRIP 1 NPT
8	1	P0311-020	NUT, Lock 1
9	1	P0311-034	BUSHING, Insulating 1
10	14	P0313-008	SOCKET #16
11	1	P0313-036	CAP, Dust

LI - Linear Inch

* Refer to this section for parts information.

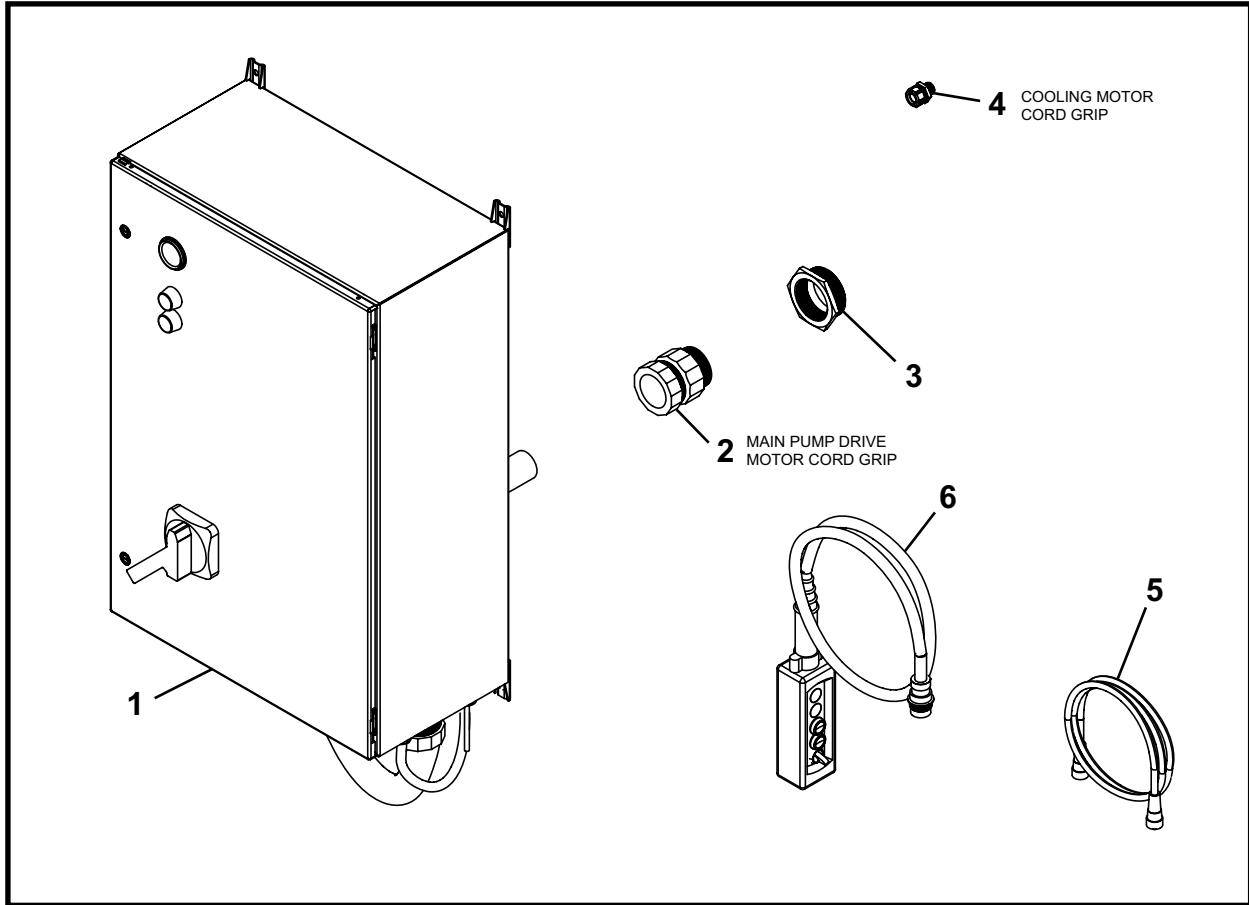
PENDANT ASSEMBLY, 027422A
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027422A	PENDANT ASSEMBLY
1	1	P0251-804	ENCLOSURE, Pendant
2	2	P0310-421AF	SWITCH, 2 Position
3	2	P0310-411F	SWITCH, Illuminated Pushbutton
4	2	P0310-412F	SWITCH, Illuminated Pushbutton
5	1	P0310-420F	E-STOP, Illuminated Pushbutton
6	7	P0056-121F	CONTACT, Normally Open
7	1	P0056-122F	CONTACT, Normally Closed
8	7	P0056-131F	LATCH, Mounting
9	120 LI	P0054-279	CABLE
10	1	P0313-022	RECEPTACLE W/CABLE CLAMP
11	14	P0313-007	PINS #16
12	1	P0313-035	CAP, Dust
13	3	P0251-563	LIGHT, Pilot LED White

LI - Linear Inch

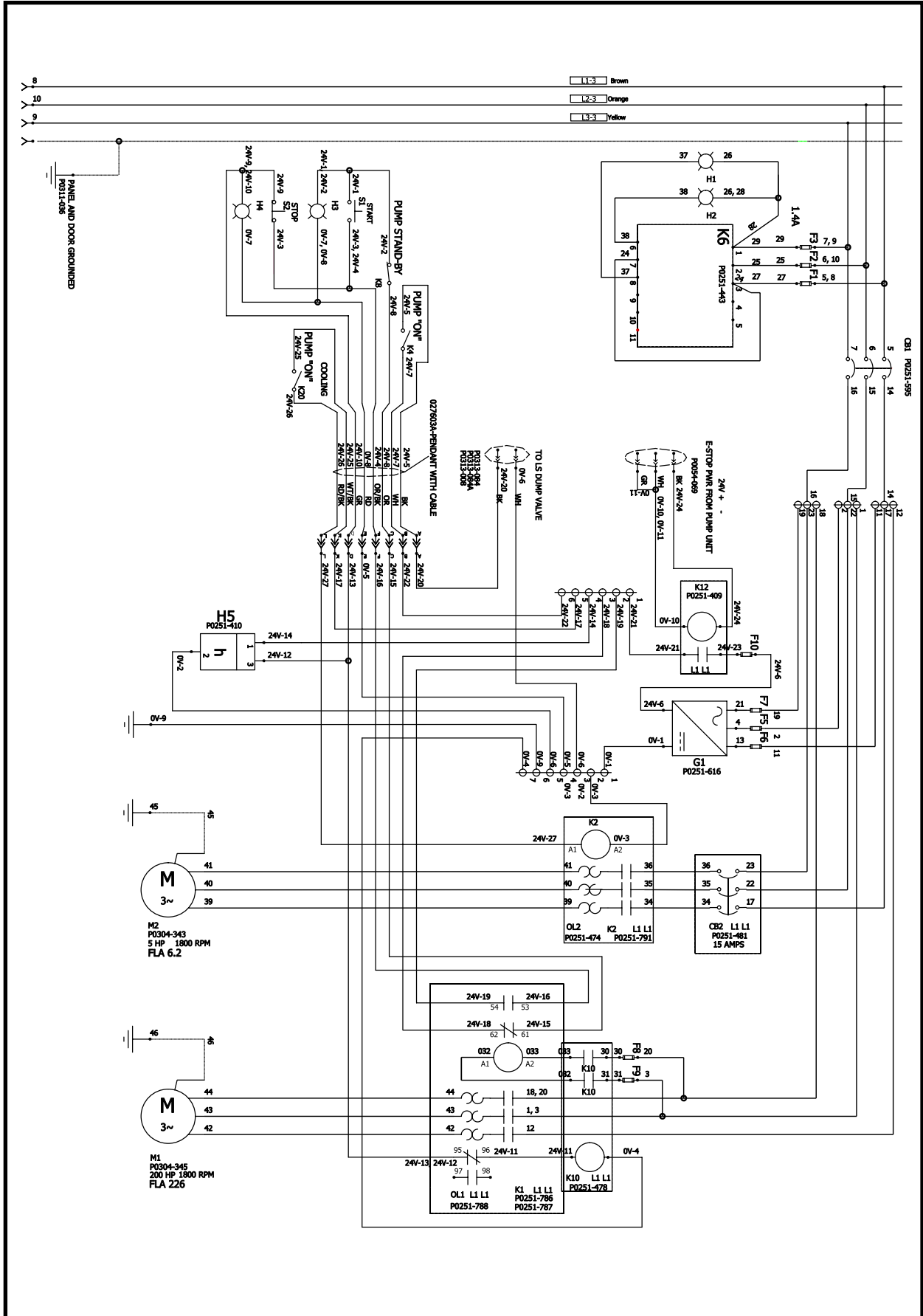
ELECTRICAL ASSEMBLY, 027600A
200 HP AUXILIARY



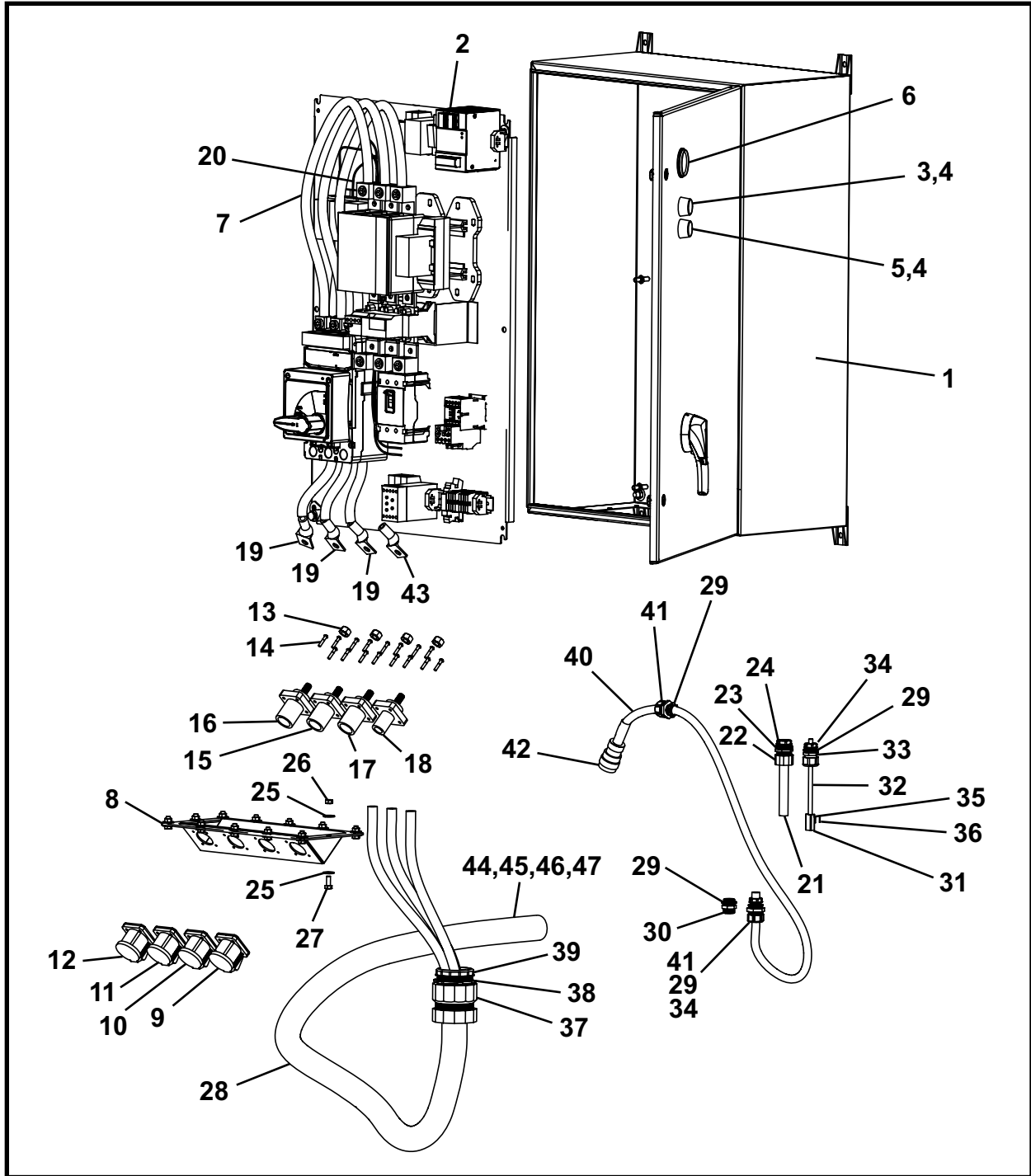
ITEM	QTY	PART NO.	DESCRIPTION
0	1	027600A	ELECTRICAL ASSEMBLY
1*	1	027602A	CABINET ASSEMBLY
2	1	P0311-129	STRAIN RELIEF 2 1/2"
3	1	P0311-144	BUSHING, Reducing 3 - 2-1/2
4	1	P0311-120	STRAIN RELIEF 3/4
5	1	P0054-278	CABLE, 3 C 16 GA Mini Extension 12'
6*	1	027603A	PENDANT ASSEMBLY

* Refer to this section for parts information.

ELECTRICAL SCHEMATIC, 027600A 200 HP AUXILIARY



CABINET ASSEMBLY, 027602A
200 HP AUXILIARY



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027602A	CABINET ASSEMBLY
1*	1	027598A	ENCLOSURE ASSEMBLY
2*	1	027601A	PANEL ASSEMBLY
3	1	P0251-514	LENS, Green Plastic
4	2	P0251-463	LIGHT, Pilot Red 480V
5	1	P0251-464	LENS, Plastic Red
6	1	P0251-410	HOURMETER
7	126 LI	P0054-261	WIRE, 3/0-1/C EPDM Motor Lead
8	1	027604A	BULKHEAD, Camlock

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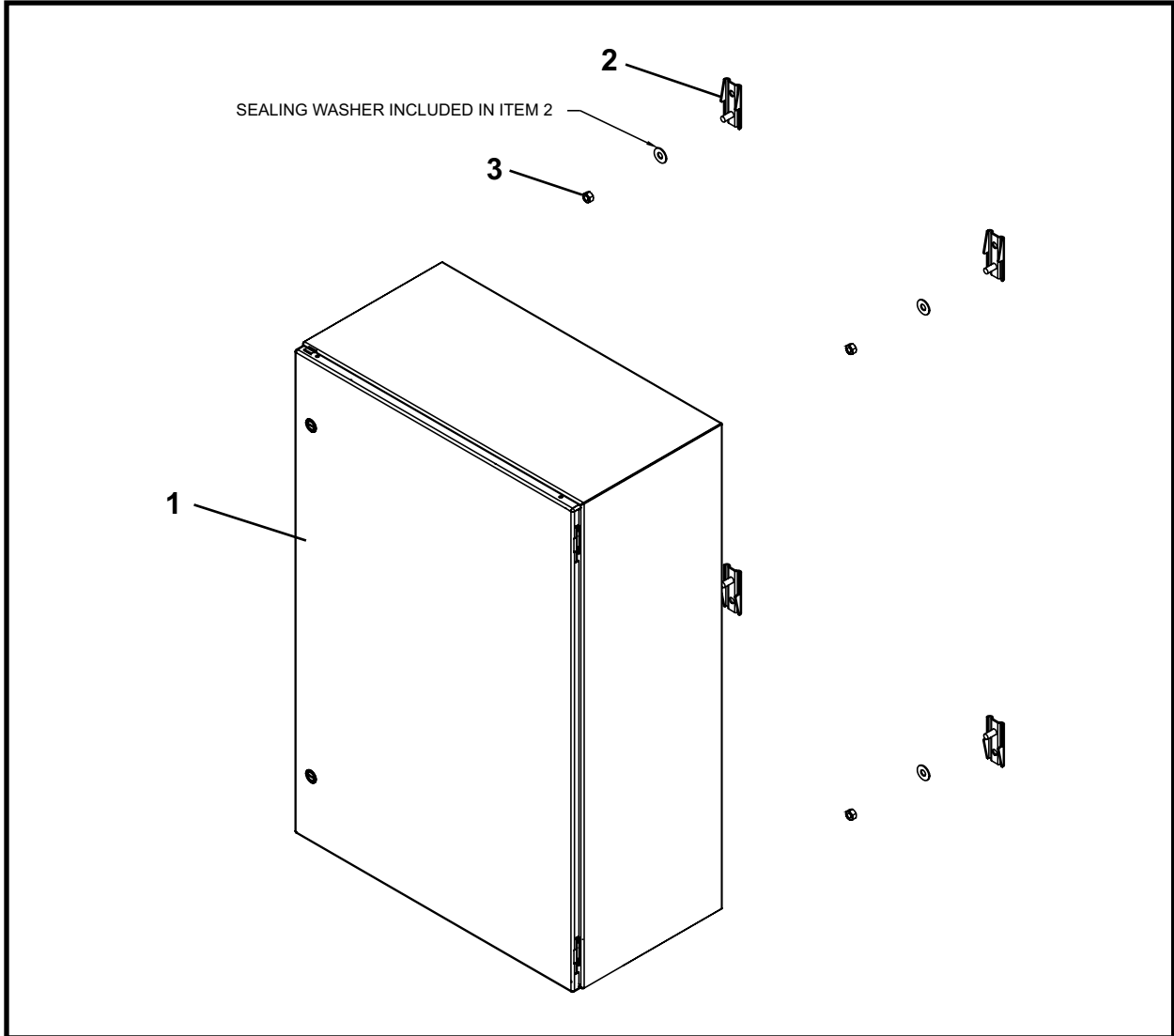
CABINET ASSEMBLY, 027602A
200 HP AUXILIARY

ITEM	QTY	PART NO.	DESCRIPTION
9	1	P0054-621	COVER, Green
10	1	P0054-607	COVER, Yellow
11	1	P0054-606	COVER, Orange
12	1	P0054-605	COVER, Brown
13	4	P0027-008	NUT, Hex Brass 1/2 UNC
14	16	P0017-10-327	SCREW, Machine 10-32 x 1
15	1	P0054-603	RECEPTACLE, Camlock Orange
16	1	P0054-602	RECEPTACLE, Camlock Brown
17	1	P0054-604	RECEPTACLE, Camlock Yellow
18	1	P0054-376	MOUNT, Panel, Green, Female
19	3	P0251-796	LUG, 3/0 45°
20	120 LI	P0054-007	WIRE, Standard 10 GA
21	120 LI	P0054-036	CORD, 4C 10 GA Cord
22	1	P0311-120	STRAIN RELIEF 3/4
23	1	P0311-019	NUT, Lock 3/4
24	1	P0311-033	BUSHING, Insulating 3/4
25	24	P0040-005	WASHER, Hardened Flat 5/16
26	12	P0003-05-000	NUT, Hex 5/16 UNC
27	12	P0001-05-003	BOLT, Hex 5/16 UNC x .75
28	120 LI	P0054-619	CONDUIT, 4/0 W 4
29	4	P0311-018	NUT, Lock 1/2
30	1	P0054-069	RECEPTACLE, 3 C 16 GA Male 10"
31	1	P0313-084	SPADE, 2 Pin
32	96 LI	P0054-033	CORD, 18 GA 2 Conductor
33	1	P0311-121	STRAIN RELIEF
34	2	P0311-032	BUSHING, Insulating 1/2
35	1	P0313-084A	WEDGE, Spade
36	2	P0313-008	SOCKET #16
37	1	P0311-129	STRAIN RELIEF 2-1/2
38	1	P0311-129A	NUT, Lock
39	1	P0311-129B	BUSHING, Insulation
40	96 LI	P0054-039	CABLE, 18 GA 10 Conductor
41	2	P0311-051	CONNECTOR, 5/8 Strain Relief
42	1	P0313-021	PLUG W/Cable Clamp
43	1	P0055-201	LUG, #1/0 x 1/4
44	3	P0054-509	CONNECTOR
45	3	P0027-030	SCREW, Hex Brass 3/8 UNC x 1
46	3	P0027-006	NUT, Brass 3/8 UNC
47	6	P0027-045	WASHER, Brass 3/8

LI - Linear Inch

* Refer to this section for parts information.

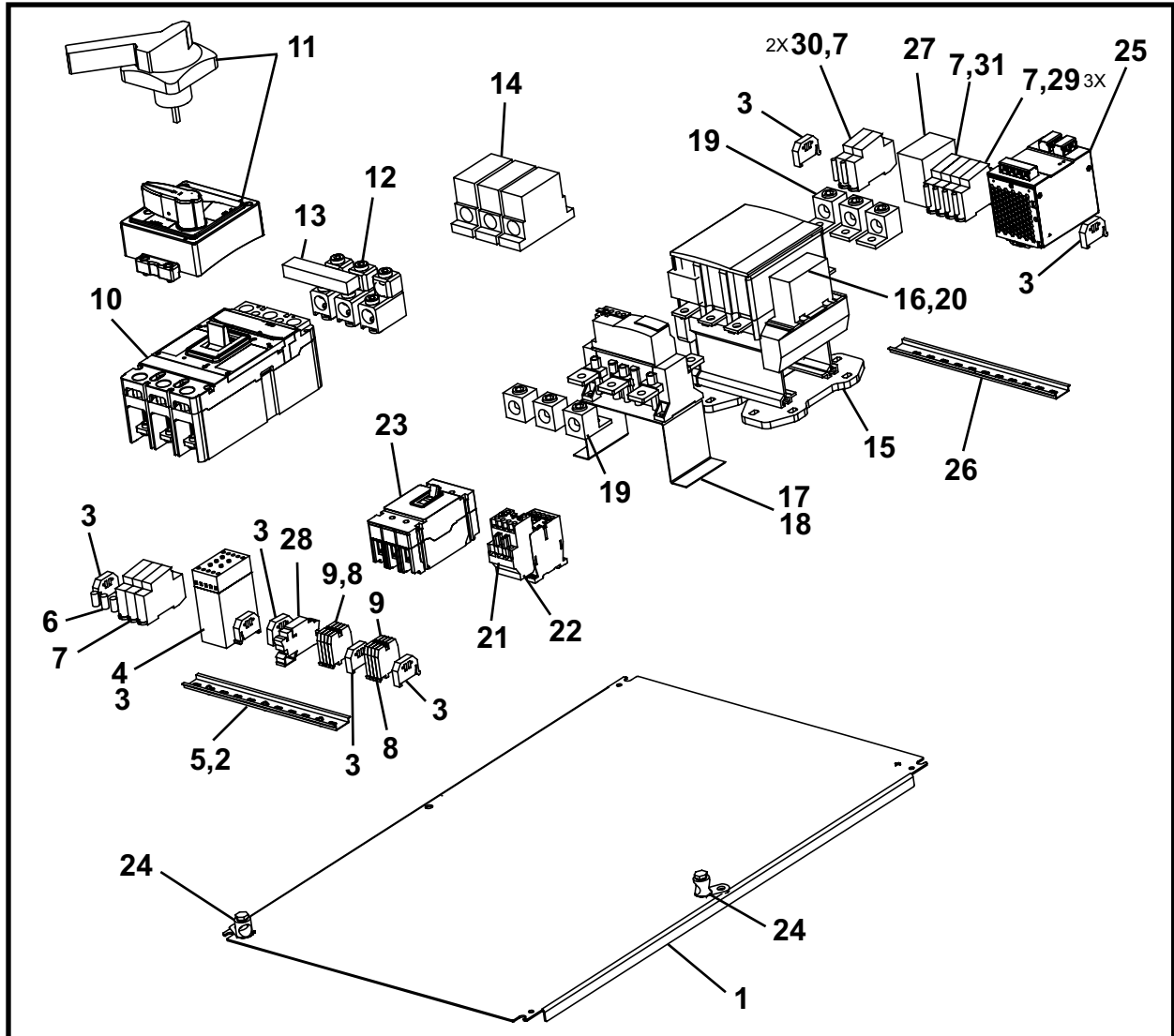
ENCLOSURE ASSEMBLY, 027598A
200 HP AUXILIARY



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027598A	ENCLOSURE ASSEMBLY
1	1	P0251-793	ENCLOSURE
2	1	P0251-795	KIT, Mounting Foot
3	4	P0003-06-000	NUT, Hex 3/8 UNC

NOTES

PANEL ASSEMBLY, 027601A
200 HP AUXILIARY



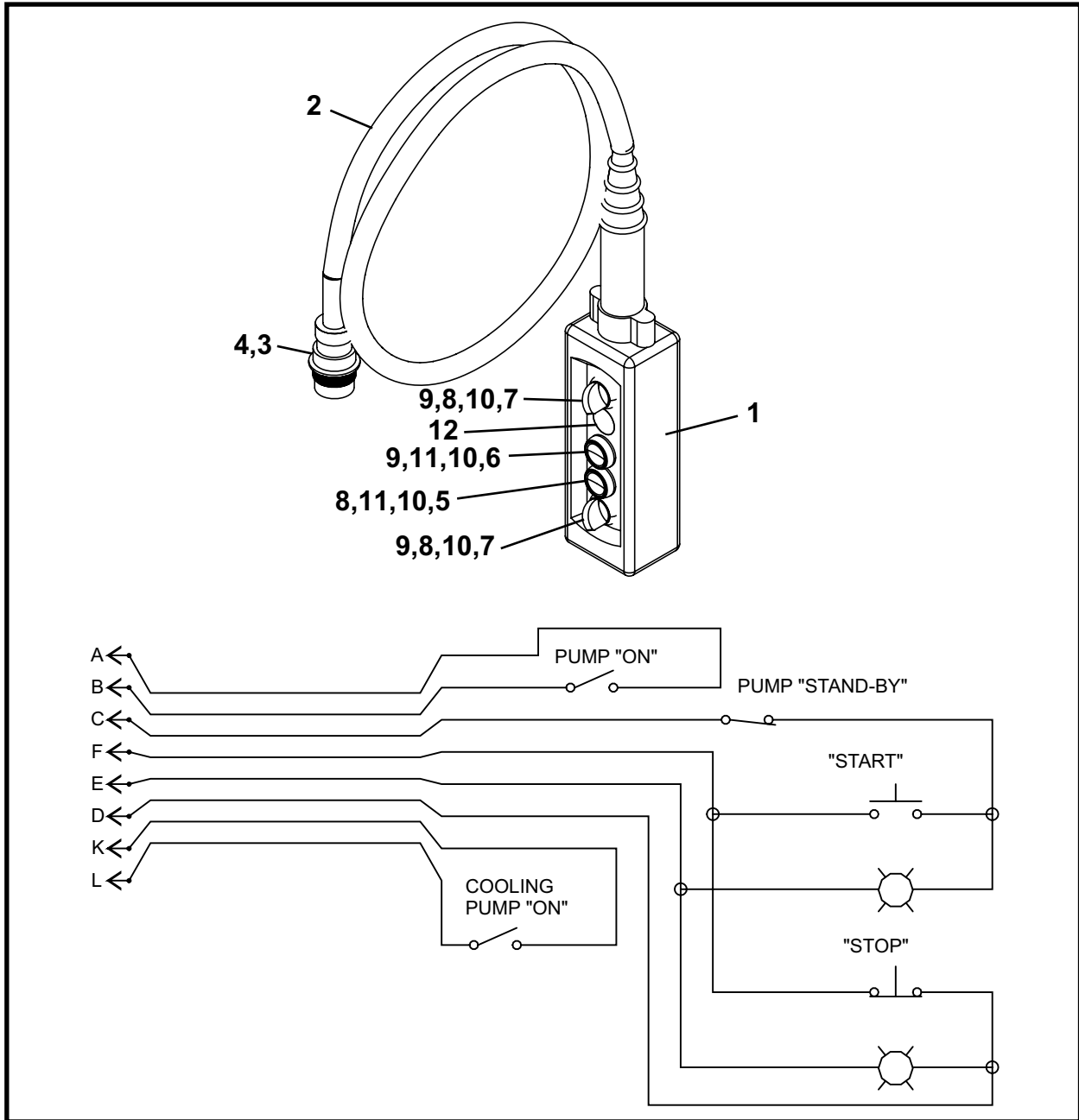
ITEM	QTY	PART NO.	DESCRIPTION
0	1	027601A	PANEL ASSEMBLY
1	1	P0251-794	PANEL
2	1	P0310-503-012	DIN RAIL - 12
3	5	P0310-571	FUSE HOLDER END STOP
4	1	P0251-443	DETECTOR, Phase 480V
5	3	P0020-83-022	SCREW, Truss Head 8-32 x .375
6	3	P0310-954	FUSE, Time Delay 1.4 Amp
7	9	P0310-473B	HOLDER, Fuse DIN Rail Midget
8	8	P0310-500	BLOCK, Terminal
9	8	P0310-573	JUMPER, Strip
10	1	P0251-595	BREAKER, 200 HP, 350-3 Amp
11	1	P0251-430	HANDLE, Rotary, Mechanism
12	1	P0251-595A	TERMINAL, 3 Pole Aluminum
13	1	P0251-595B	SHIELD, 3 Pole Terminal
14	3	P0251-441	BLOCK, Power Distribution
15	1	P0251-786	COIL, Contactor
16	1	P0251-787	CONTACTOR, 1 NO 1 NC
17	1	P0251-788	RELAY, Overload 200 HP
18	1	P0251-508	MOUNT, Relay

(Continued on next page)

PANEL ASSEMBLY, 027601A
200 HP AUXILIARY

ITEM	QTY	PART NO.	DESCRIPTION
19	6	P0251-792	LUG
20	1	P0251-511	RELAY, Overload
21	1	P0251-474	RELAY, Overload 6-10 Amp
22	1	P0251-473	CONTACTOR, 5HP-24V Coil
23	1	P0251-481	BREAKER, 480V 3PH 15/3 W/Lugs
24	2	P0311-036	CLAMP, Ground
25	1	P0251-616	POWER SUPPLY, 24V, 10 Amp
26	1	P0310-503-012	DIN RAIL - 12.0
27	1	P0251-478	CONTACTOR, 3/4 HP 480V 3PH 24VDC
28	1	P0251-409	RELAY, Contactor
29	3	P0310-953	FUSE, Time Delay 5 Amp
30	2	P0251-380	FUSE, 3A AC/DC
31	1	P0251-382	FUSE, 10A AC/DC

PENDANT ASSEMBLY, 027603A
200 HP AUXILIARY



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027603A	PENDANT ASSEMBLY - 200 HP Auxiliary
1	1	P0251-797	ENCLOSURE
2	180 LI	P0054-039	CABLE, Conductor 18 GA 10
3	1	P0313-022	RECEPTACLE W/CABLE CLAMP
4	6	P0313-007	PINS #16
5	1	P0310-412F	SWITCH, Illuminated Pushbutton Red
6	1	P0310-411F	SWITCH, Illuminated Pushbutton Green
7	1	P0310-421AF	SWITCH, 2 Position
8	2	P0056-122F	BLOCK, Contact Normally Closed
9	2	P0056-121F	CONTACT, NO
10	3	P0056-131F	LATCH, Mounting
11	2	P0251-563	LIGHT, Pilot, White LED
12	2	P0251-798	PLUG, Hole

LI - Linear Inch

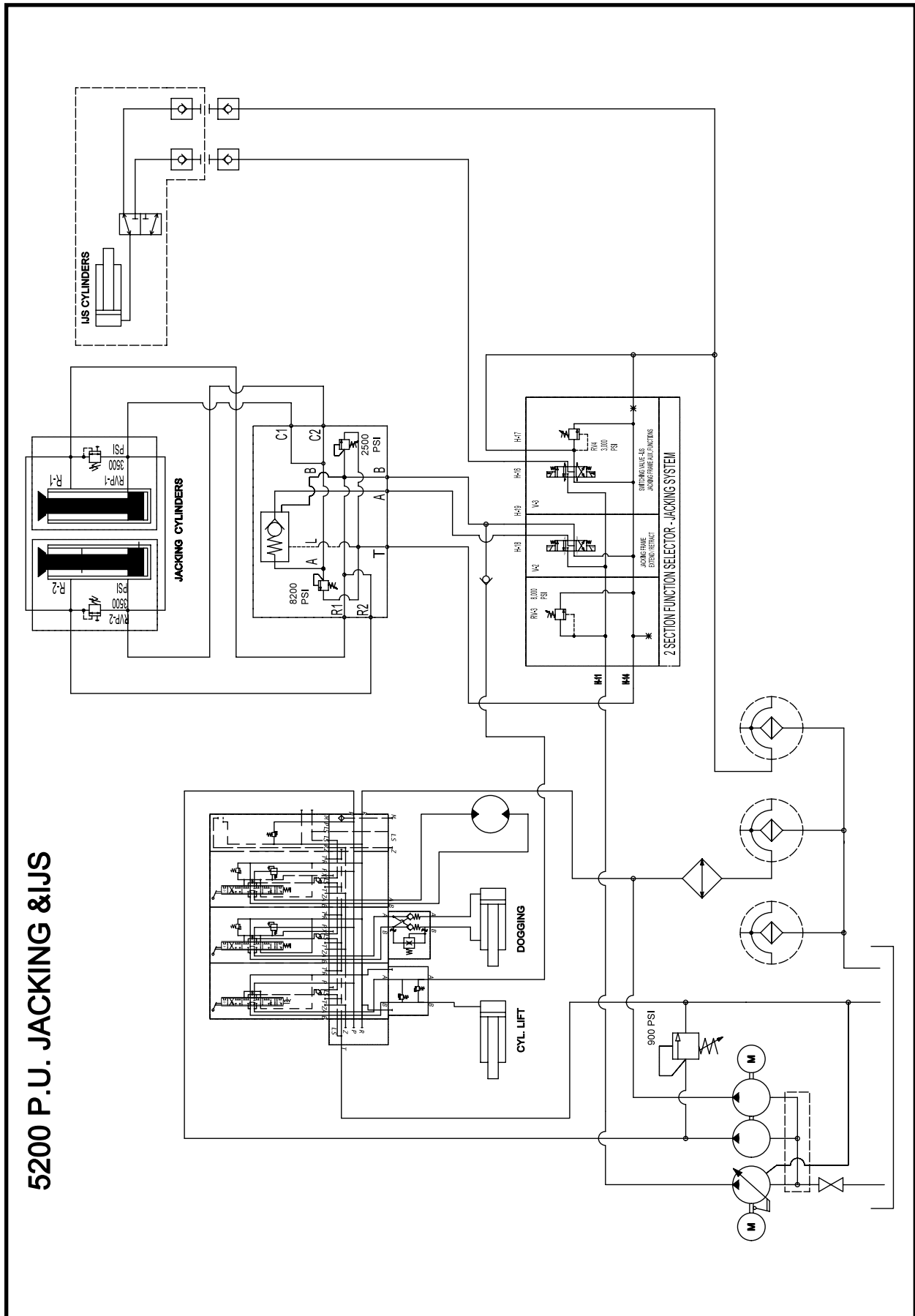


Hydraulics

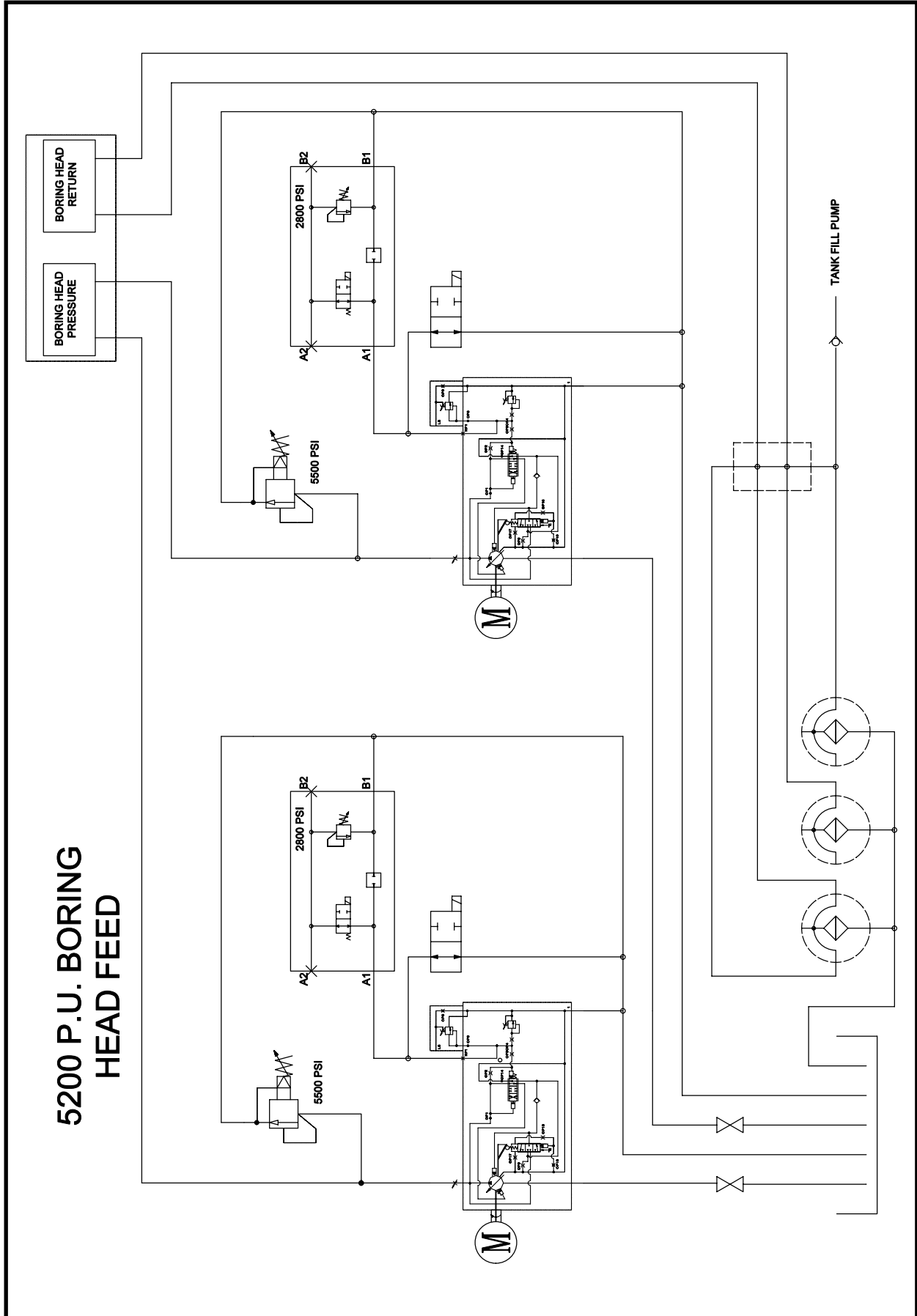
5200 Pump Unit	
Hydraulic Schematic, 027709A.....	2
Jacking & IJS	2
Boring Head Feed	3
Hydraulic Assembly, 027709A	4-12
Boring Head Pumps Assembly, 027750A (SN F27700F-15 & Before)	14
Boring Head Pumps Assembly, 027750A (SN F27700F-16 & After)	16
Left Side Hydraulics Assembly, 027751A	18
Cylinder Manifold Assembly, 027804A	20
Starter Hose Assembly (35 ft), F27691F	21
Adapter Kit - 5200 Pump Unit (3,000 psi) To TBM Series I, 027699A	22
Adapter Kit - 5000 Pump Unit (3,000 psi) To TBM Series II, 027698A	23
Hydraulic Line HP (5,000 psi) Assembly, F27674F	24
Single Feed Assembly, F27624F	25
IJS Starter Hose (Low Pressure) Assembly, F27868F	26
IJS Starter Hose (High Pressure) Assembly, F09802F01	27
IJS Tunnel Line, F09800F00	28

5200 PUMP UNIT HYDRAULIC SCHEMATIC (Part 1 of 2), 027709A

5200 PUMP UNIT

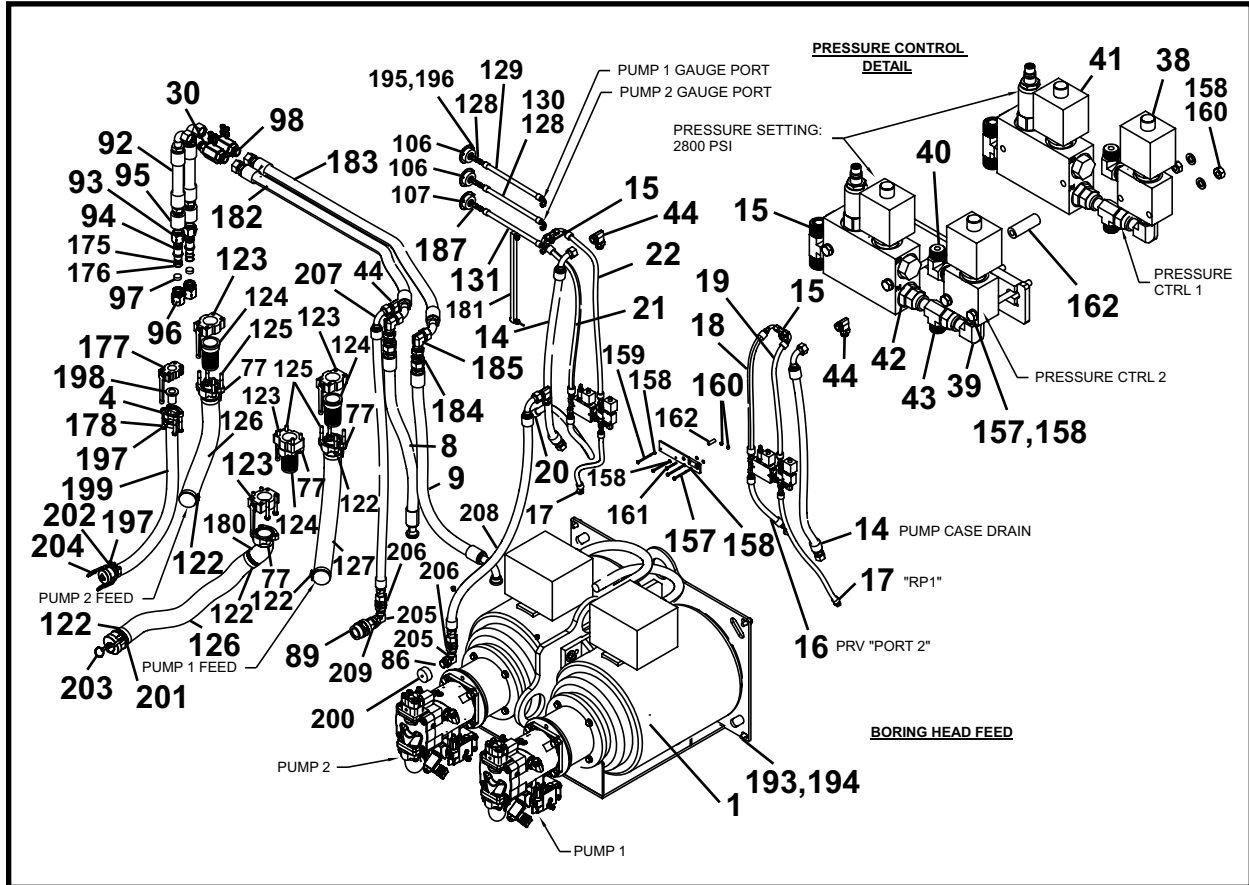


5200 PUMP UNIT HYDRAULIC SCHEMATIC (Part 2 of 2), 027709A
5200 PUMP UNIT



**5200 P.U. BORING
 HEAD FEED**

5200 PUMP UNIT HYDRAULICS, 027709A
5200 PUMP UNIT

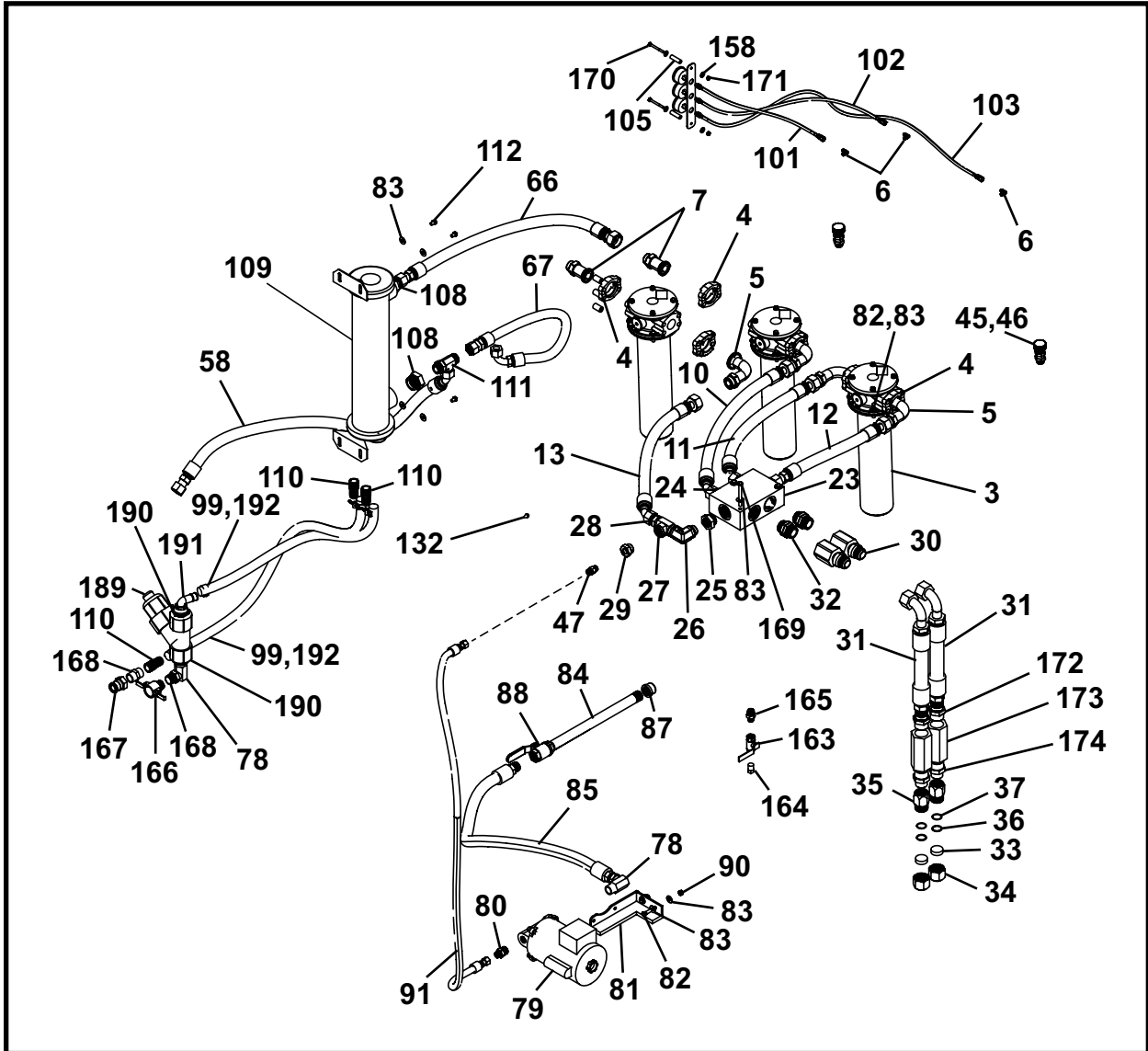


ITEM	QTY	PART NO.	DESCRIPTION
0	1	027709A	HYDRAULICS ASSEMBLY, 5200 Pump Unit
1*	1	027750A	ASSEMBLY, Boring Head Pumps
2*	1	027751A	ASSEMBLY, Left Side Hydraulics
3	3	P0309-212	FILTER, In-tank (Includes item 3a)
3a	3	P0309-212A	ELEMENT, Filter
4	7	P0300-446	ORING, 24SFO
5	4	P0300-845	FITTING, 20MFFOR-24L90
6	3	P0300-418	FITTING, 04MJ-02MP90-FGD
7	2	P0300-844	FITTING., 20MFFOR-24FL
8	1	A09837A-040	HOSE ASSEMBLY, 1-1/4 x 40
9	1	A09838A-050	HOSE ASSEMBLY, 1-1/4 x 50
10	1	A09846A-034	HOSE ASSEMBLY, 1 x 34
11	1	A09846A-030	HOSE ASSEMBLY, 1 x 30
12	1	A09846A-023	HOSE ASSEMBLY, 1 x 23
13	1	A09846A-032	HOSE ASSEMBLY, 1 x 32
14	2	A10342A-046	HOSE ASSEMBLY, 1 x 46
15	4	P0300-726	FITTING, 08MFOR-08MFOR-08MB
16	1	A10362A-015	HOSE ASSEMBLY, 1/2 x 15
17	2	A10079A-031	HOSE ASSEMBLY, 3/8 x 31
18	1	A10324A-032	HOSE ASSEMBLY, 1/2 x 32
19	1	A10312A-030	HOSE ASSEMBLY, 3/8 x 30
20	1	A10362A-034	HOSE ASSEMBLY, 1/2 x 34
21	1	A10324A-037	HOSE ASSEMBLY, 1/2 x 37
22	1	A10312A-041	HOSE ASSEMBLY, 3/8 x 41
23	1	027826P	MANIFOLD, Return

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5200 PUMP UNIT HYDRAULICS, 027709A

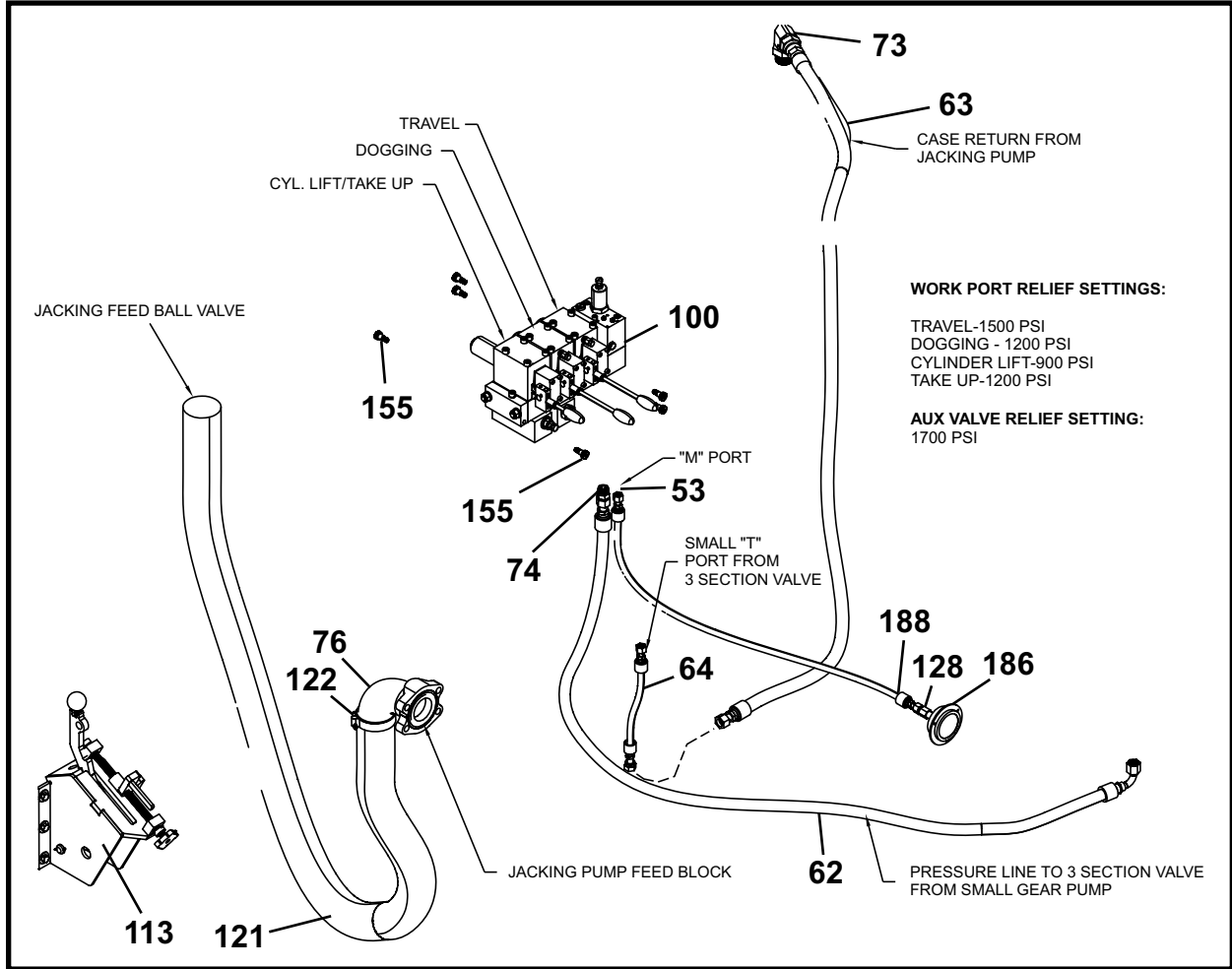
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
24	3	P0300-374	FITTING, 16MFOR-20MB
25	1	P0300-380	FITTING, 20MB-16FB
26	1	P0300-780	FITTING, 16MB-16FB90
27	1	P0300-537	FITTING, 16MB-16FB-16FB
28	2	P0300-319	FITTING, 16MFOR-16MB
29	1	P0300-846	FITTING, 16MB-08FB
30	4	P0300-591	SWIVEL, In-line 1-1/4
31	2	A09969A-068	HOSE ASSEMBLY, 1-1/4 x 68
32	2	P0300-783	FITTING, 20MJ-20MB
33	2	007086P00	PLUG, Rubber
34	2	007002P02	CAP, Coupler 1-1/4
35	2	005348P00	COUPLER, Female 1-1/4
36	2	P0084-123	RING, Back-Up
37	2	P0085-123	ORING
38	2	P0302-775	ASSEMBLY, Dump Valve
39	2	P0300-618	FITTING, 06FFORX-06MB90
40	2	P0300-355	FITTING, 06MFOR-06MB90

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5200 PUMP UNIT HYDRAULICS, 027709A
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
41	2	P0302-774	ASSEMBLY CONTROL VALVE
42	2	P0300-430	FITTING, 06MFOR-08MB
43	2	P0300-613	FITTING, 06MFOR-06FFORX-06MFOR
44	4	P0300-371	FITTING, 16MFOR-16MB90
45	2	P0308-102	BREATHER
46	2	P0300-137	FITTING, 12MB-12FPX
47	1	P0302-498	VALVE, Check
48**	1	027819A	VALVE ASSEMBLY
49*	1	027804A	MANIFOLD, Cylinder
50	1	P0300-424	FITTING, 12MFOR-12FFORX90
51	4	P0300-375	FITTING, 08MFOR-12MB
52	2	P0300-373	FITTING, 08MFOR-12MB90
53	1	P0300-362	FITTING, 04MFOR-04MB
54	1	A10323A-076	HOSE ASSEMBLY, 1/2 x 76
55	1	A10323A-019	HOSE ASSEMBLY, 1/2 x 19
56	1	A10321A-018	HOSE ASSEMBLY, 1/2 x 18
57	1	A10321A-032	HOSE ASSEMBLY, 1/2 x 32
58	1	A10369A-059	HOSE ASSEMBLY, 1 x 59
59	2	A10331A-057	HOSE ASSEMBLY, 3/4 x 57
60	1	A10372A-027	HOSE ASSEMBLY, 1/2 x 27
61	1	A10324A-074	HOSE ASSEMBLY, 1/2 x 74
62	1	A10324A-080	HOSE ASSEMBLY, 1/2 x 80

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5200 PUMP UNIT HYDRAULICS, 027709A

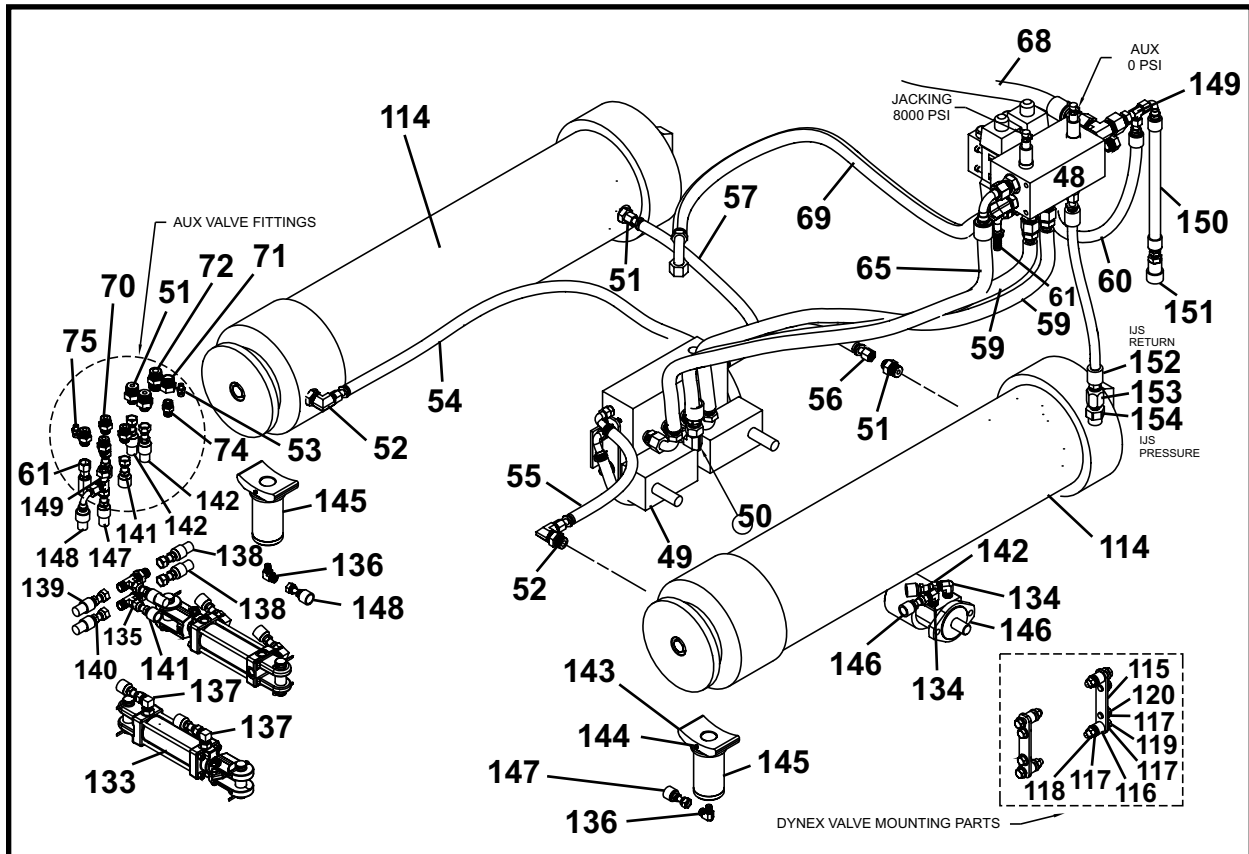
5200 PUMP UNIT

ITEM	QTY	PART NO.	DESCRIPTION
63	1	A10493A-088	HOSE ASSEMBLY, 1/2 x 88
64	1	A10059A-020	HOSE ASSEMBLY, 1/4 x 20
65	1	A09859A-057	HOSE ASSEMBLY, 3/4 x 57
66	1	A09984A-039	HOSE ASSEMBLY, 1 x 39
67	1	A09819A-034	HOSE ASSEMBLY, 3/4 x 34
68	1	A09984A-076	HOSE ASSEMBLY, 1 x 76
69	1	A10331A-060	HOSE ASSEMBLY, 3/4 x 60
70	4	P0300-300	FITTING, 08MFOR-10MB
71	1	P0300-565	FITTING, 12MORB-08FORB
72	1	P0300-329	FITTING, 12MFOR-12MB
73	1	P0300-632	FITTING, 12MFFOR-16MB90
74	1	P0300-305	FITTING, 08MFOR-08MB
75	1	P0300-809	FITTING, 04MFOR-04MBSPP
76	1	P0303-340	HOSE BARB 90
77	5	P0100-059	FLANGE, Split
78	2	P0300-005	FITTING, 16MP-16FPZ90
79****	1	P0303-363	PUMP, Oil
80	1	P0300-636	FITTING, 08MFOR-12MP
81	1	027820A	MOUNT, Transfer Pump
82	14	P0001-06-005	BOLT, Hex 3/8 UNC x 1.25
83	23	P0040-006	WASHER, Hardened Flat 3/8
84	1	031702P	PIPE
85	1	A09986A-096	HOSE ASSEMBLY, 1 x 96
86	1	P0100-035	COUPLING, Pipe 1
87	1	P0417-005	CAP, Pipe 1
88	1	P0302-609	VALVE, Ball 1
89	1	P0100-034A	PLUG, Female
90	2	P0003-06-000	NUT, Hex 3/8 UNC
91	1	A10362A-070	HOSE ASSEMBLY, 1/2 x 70
92	2	A09843A-068	HOSE ASSEMBLY, 1-1/4 x 68
93	2	027667P	COUPLER NUT, High Pressure
94	2	027669P	NIPPLE, Threaded
95	2	P0421-022	REDUCER, Threaded
96	2	027670P	COUPLER PLUG, High Pressure
97	2	007087P00	PLUG, Rubber
98	2	P0300-810	ADAPTER, FF6403-20-20
99	1	P0201-238-055	HOSE, Suction 1 x 55
100**	1	P0302-780	VALVE, 3 Section
101	1	A09958A-029	ASSEMBLY, Thermoplastic Hose 1/8 x 29
102	1	A09958A-034	ASSEMBLY, Thermoplastic Hose 1/8 x 34
103	1	A09958A-054	ASSEMBLY, Thermoplastic Hose 1/8 x 54
104	1	027851A	MOUNT, Filter Gauge
105	2	P0091-030	SPACER
106	2	P0301-146	GAUGE, 6000 PSI
107	1	P0301-155	GAUGE, 10,000 PSI
108	2	P0300-553	FITTING, 24MB-16FB
109	1	P0093-028	HEAT EXCHANGER
110	3	P0423-124	ADAPTER
111	1	P0300-419	FITTING, 16MFOR-16MB-16MFOR
112	4	P0001-06-002	BOLT, Hex 3/8 UNC x .5
113^^	1	027861A	ASSEMBLY, Manual Pump Stroker
114^	2	027818A	ASSEMBLY, Extended Cylinder
115	2	027824P	MOUNT, Valve
116	4	P0070-068	SPACER

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5200 PUMP UNIT HYDRAULICS, 027709A

5200 PUMP UNIT

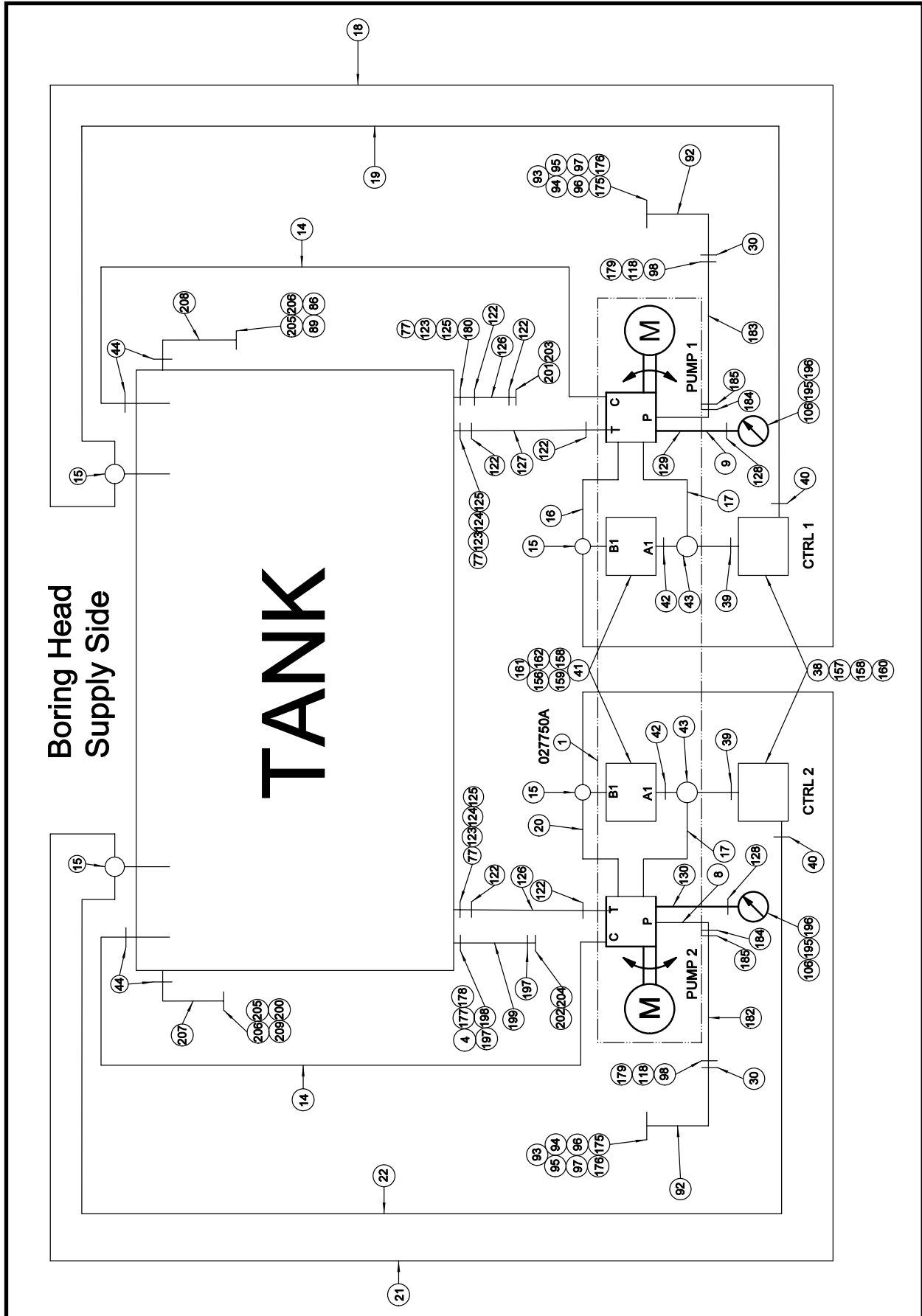


ITEM	QTY	PART NO.	DESCRIPTION
117	12	P0040-008	WASHER, Hardened Flat 1/2
118	8	P0003-08-000	NUT, Hex 1/2 UNC
119	4	P0001-08-010	BOLT, Hex 1/2 UNC x 2.5
120	2	P0001-08-003	BOLT, Hex 1/2 UNC x .75
121	1	P0201-225-078	HOSE, Suction 2-1/2 x 78
122	8	P0201-228	CLAMP, T-Bolt
123	4	P0302-711	VALVE, Butterfly
124	3	P0423-129	FLANGE, Barb to Split
125	16	P0001-08-014	BOLT, Hex 1/2 UNC x 3.5
126	2	P0201-225-027	HOSE, Suction 2-1/2 x 27
127	1	P0201-225-026	HOSE, Suction 2-1/2 x 26
128	3	P0300-594	FITTING, 4FB-4MFFOR
129	1	A10325A-145	HOSE ASSEMBLY, 1/4 x 145
130	1	A10325A-123	HOSE ASSEMBLY, 1/4 x 123
131	1	A10325A-072	HOSE ASSEMBLY, 1/4 x 72
132	250 GAL	P0126-001	OIL, Hydraulic
133 [^]	2	P0307-216	CYLINDER (Skid Lock)
134	2	P0300-340	FITTING, 08MFOR-08MP90
135	2	P0300-303	FITTING, 08MFOR-08MFOR-BKHD-08MFOR
136	2	P0300-770	FITTING, 06MFFOR-04MP90
137	4	P0300-316	FITTING, 08MFOR-08MB90
138	2	A10308A-019	HOSE ASSEMBLY, 3/8 x 19
139	1	A10308A-024	HOSE ASSEMBLY, 3/8 x 24
140	1	A10308A-018	HOSE ASSEMBLY 3/8 x 18
141	2	A10308A-063	HOSE ASSEMBLY 3/8 x 63
142	2	A10308A-067	HOSE ASSEMBLY 3/8 x 67

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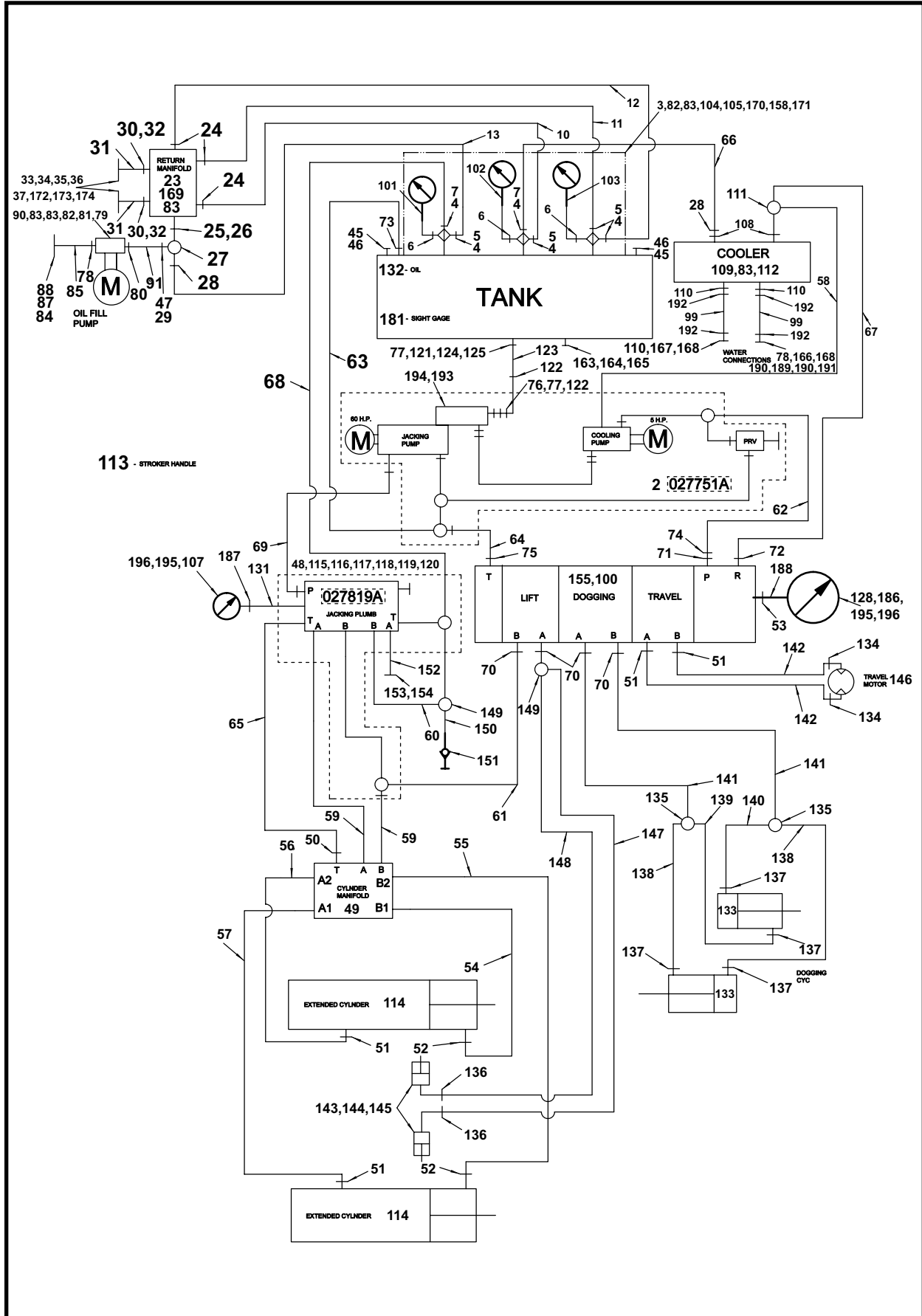
5200 PUMP UNIT HYDRAULICS, 027709A

5200 PUMP UNIT



5200 PUMP UNIT HYDRAULICS, 027709A

5200 PUMP UNIT



5200 PUMP UNIT HYDRAULICS, 027709A

5200 PUMP UNIT

ITEM	QTY	PART NO.	DESCRIPTION
143	2	020458P	PAD, Ram Lift
144	4	P0033-04-012	SCREW, Socket Head Set 1/4 UNC x .75
145 [^]	2	006011A02	RAM LIFT
146 ^{***}	1	P0304-100	MOTOR (Travel)
147	1	A10388A-090	HOSE ASSEMBLY, 3/8 x 90
148	1	A10312A-076	HOSE ASSEMBLY, 3/8 x 76
149	2	P0300-318	FITTING, 08MFOR-08FFORX-08MFOR
150	1	A09974A-120	HOSE ASSEMBLY, 1/2 x 120
151	1	P0100-013A	COUPLER
152	1	A09848A-016	HOSE ASSEMBLY, 1/2 x 16
153	1	009812P01	COUPLER, High Pressure
154	1	P0100-001A	COUPLER-Female End
155	6	PM10G-M8-1.25-30	SCREW, Shoulder - Metric
156	1	027853A	SPACER, Control Valve
157	2	P0001-04-013	BOLT, Hex 1/4 UNC x 3.5
158	11	P0040-004	WASHER, Hardened Flat 1/4
159	2	P0001-04-016	BOLT, Hex 1/4 UNC x 3.75
160	2	P0003-04-000	NUT, Hex 1/4 UNC
161	1	P0001-04-009	BOLT, 1/4 UNC x 2.25
162	1	P0070-067	BUSHING
163	1	P0302-185	VALVE, Ball 1/2
164	1	P0416-003	PLUG, Square Head 1/2
165	1	P0300-222	FITTING, 10MB-08MP
166	1	P0100-023	CAM LOCK
167	1	P0100-024	PLUG
168	1	P0300-013	FITTING, 16MP-16MP
169	3	P0001-06-014	BOLT, Hex 3/8 UNC x 3.5
170	2	P0001-04-010	BOLT, Hex 1/4 UNC x 2.5
171	2	P0013-04-000	NUT, Nyloc 1/4
172	2	P0300-058	FITTING, 24MP-20FPS
173	2	P0302-783	VALVE, Check
174	2	P0300-737	FITTING, 24MP-20MP
175	2	P0084-124	RING, Back-Up
176	2	P0085-124A	ORING
177.1	1	P0302-434	VALVE, Ball 2 (SN F27700F-15 & Before)
177.2	1	P0302-860	VALVE, Butterfly Shutoff 1-1/2 (SN F27700F-16 & After)
178	4	P0001-08-012	BOLT, Hex 1/2 UNC x 3
179	4	P0001-08-007	BOLT, Hex 1/2 UNC x 1.75
180	1	P0423-130	FLANGE, Barb To Split 2-1/2 x 45 Deg
181	1	P0301-138	GAUGE, Sight 18"
182	1	A09835A-059	HOSE ASSEMBLY, 1-1/4 x 59
183	1	A09835A-067	HOSE ASSEMBLY, 1-1/4 x 67
184	2	P0300-625	FITTING, 20MFFOR-20MFFOR BKHD
185	2	P0300-559	FITTING, 20MFFOR-20FFORX90
186	1	P0301-160	GAUGE, SS Front Flange
187	1	P0300-818	FITTING, 04MFFOR-04FP
188	1	A10326A-036	HOSE ASSEMBLY, 1/4 x 36
189	1	P0258-012	STRAINER, Line 1-1/2 12 Mesh
190	2	P0258-013	BUSHING, Reducer 1-1/2 MPT x 1 FPT
191	1	P0258-015	FITTING, Pipe 1 MPT x 1 Hose Shank 90 Deg
192	4	P0201-299	CLAMP, Radiator #16
193	4	P0001-10-006	BOLT, Hex 5/8 UNC x 1.5
194	4	P0040-010	WASHER, Hardened Flat 5/8
195	12	P0017-06-323	SCREW, Machine 6-32 x 1/2 RH

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5200 PUMP UNIT HYDRAULICS, 027709A

5200 PUMP UNIT

ITEM	QTY	PART NO.	DESCRIPTION
196	12	P0017-06-330	NUT, Zinc 6-32 UNC
197	2	P0201-216	T-CLAMP, 1 7/8-2 1/16
198	1	P0220-264	BARB, Hose 1.5 x 1.5
199	1	P0201-252-037	HOSE, Suction 1.50 x 37
200	1	P0100-035A	CAP, Male
201	1	P0100-116	CAMLOCK, Male #40-SS
202	1	P0100-115	CAMLOCK, Male #24-SS
203	1	P0100-120	CAMLOCK, Cap #40-SS
204	1	P0100-119	CAMLOCK, Cap #24-SS
205	2	P0300-452	FITTING 16FFORX-16MB90
206	2	P0300-582	FITTING, 16MFFOR-16MFFOR-BKHD
207	1	A10342A-061	HOSE ASSEMBLY, 1 x 61
208	1	A10342A-070	HOSE ASSEMBLY, 1 x 70
209	1	P0100-034	COUPLER, Quick Female 1

GAL - Gallons

* Refer to this section for parts information.

** Refer to Section 7, Valves for parts information.

*** Refer to Section 8, Motors for parts information

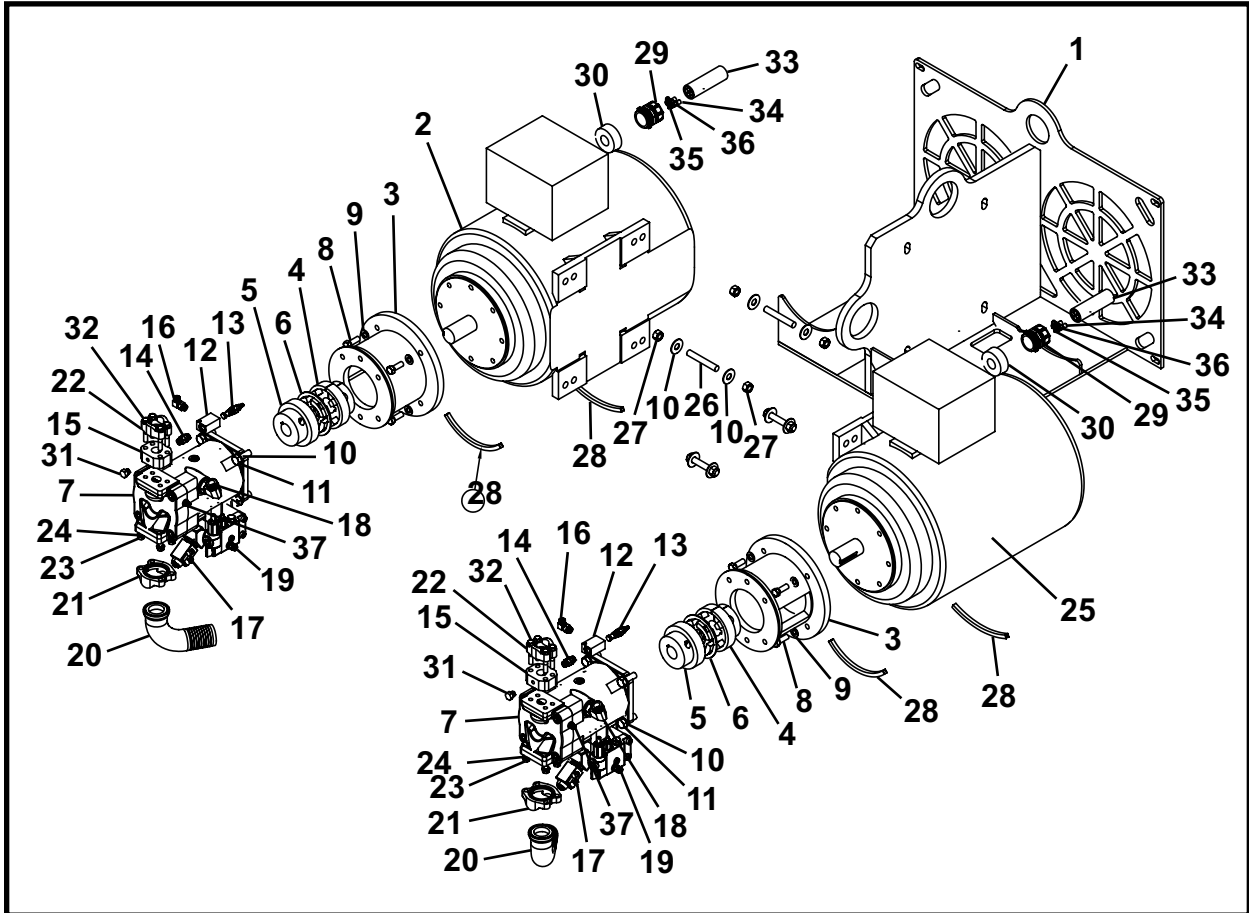
**** Refer to Section 9, Pumps for parts information.

^ Refer to Section 10, Cylinders for parts information.

^^ Refer to Section 4, Operator Controls for parts information.

NOTES

BORING HEAD PUMPS ASSEMBLY, 027750A
5200 PUMP UNIT (SN: F27700F-15 & BEFORE)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027750A	BORING HEAD PUMPS ASSEMBLY
1	1	020360A	CRADLE, Motor
2* ^	1	P0251-405	MOTOR, 100 HP (Boring Head 2)
3	2	P0305-199	MOUNT, Pump
4	2	P0305-112A	COUPLER
5	2	P0305-118B	COUPLING
6	2	P0305-112D	INSERTS
7.1**	2	032297A	PUMP ASSEMBLY WITH AMPLIFIER (F27700F-11 & Before)
7.2**	2	032298A	PUMP ASSEMBLY W/O AMPLIFIER (F27700F-12 thru 15)
8	8	P0001-10-007	BOLT, Hex 5/8 UNC x 1.75
9	8	P0040-010	WASHER, Hardened Flat 5/8
10	16	P0040-012	WASHER, Hardened Flat 3/4
11	8	P0001-12-008	BOLT, Hex 3/4 UNC x 2
12	2	P0302-779	BODY, Port
13	2	P0302-778	VALVE, Relief
14	2	P0300-542	FITTING, 08MB-08MB
15	2	P0300-842	SPACER, Gauge Part
16	2	P0300-316	FITTING, 08MFOR-08MB90
17	2	P0300-027	PLUG, 06MB-PLUG
18	2	P0300-371	FITTING, 16MFOR-16MB90
19	2	P0300-735	FITTING, 06MFFOR-04MB
20	2	P0303-340	HOSE BARB 90
21	2	P0100-059	FLANGE, Split
22	2	P0300-420	FLANGE, 20SF XO

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BORING HEAD PUMPS ASSEMBLY, 027750A
5200 PUMP UNIT (SN: F27700F-15 & BEFORE)

ITEM	QTY	PART NO.	DESCRIPTION
23	8	P0001-08-006	BOLT, Hex 1/2 UNC x 1.5
24	8	P0040-008	WASHER, Hardened Flat 1/2
25* ^	1	P0251-404	MOTOR, 100 HP (Boring Head 1)
26	4	021186P	ROD, Threaded
27	8	P0003-12-000	NUT, Hex 3/4 UNC
28	44 LI	P0253-134	RUBBER EDGE TRIM
29	2	P0311-108	STRAIN RELIEF
30	2	P0311-084	BUSHING, Reducer
31	2	P0300-193	PLUG, 08MB-PLUG
32	8	P0001-08-013	BOLT, Hex 1/2 UNC x 3.25
33	420 LI	P0054-015	CABLE, 2 GA 4 COND. TYPE W
34	6	P0055-060	LUG, 3/8" Lug 2 GA
35	6	P0027-025A	BOLT, Hex Brass 5/16 UNC x .75
36	6	P0027-005	NUT, Brass 5/16 UNC
37	2	P0300-362	FITTING, 04MFOR-04MB

LI - Linear Inch

* Refer to Section 8, Motors for parts information.

** Refer to Section 9, Pumps for parts information.

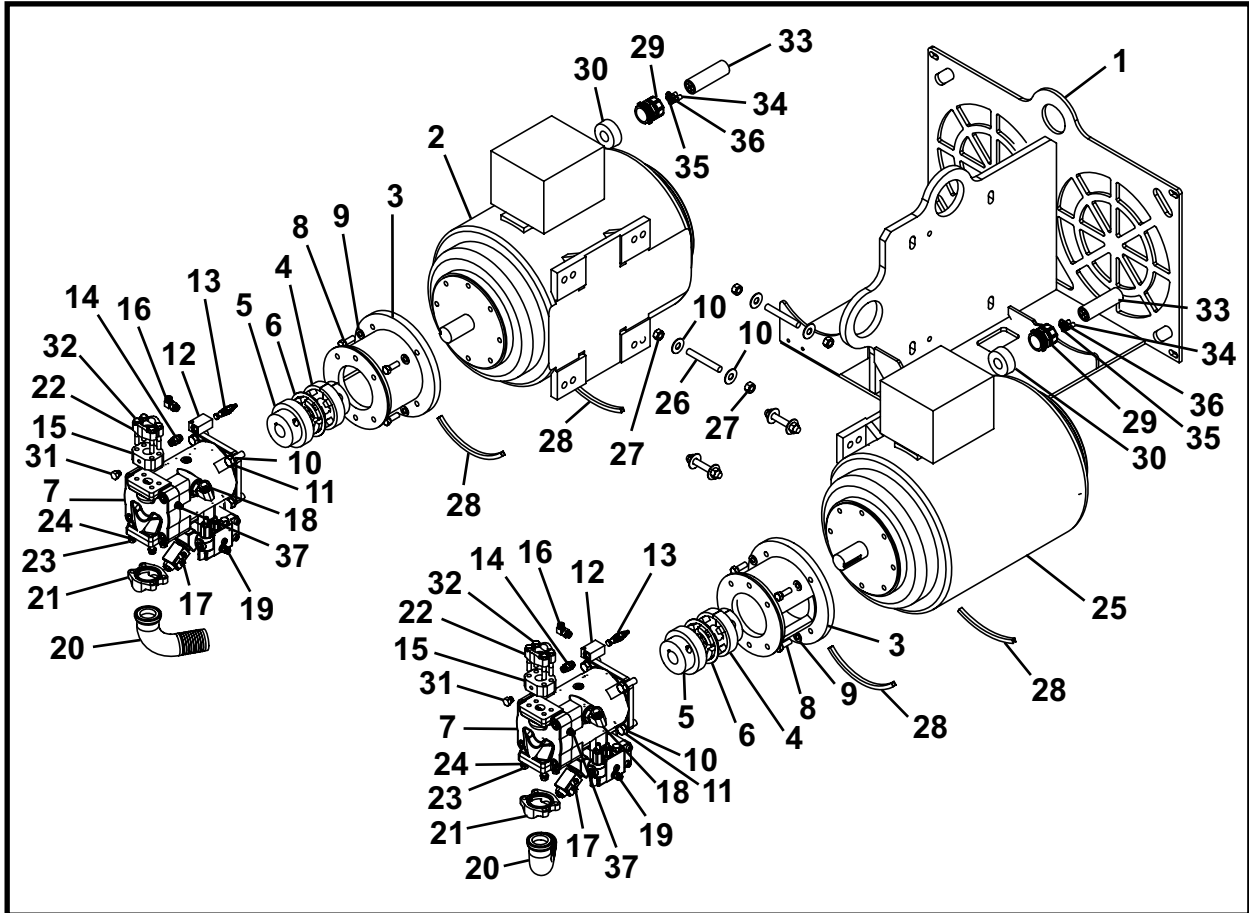
^ Motors are obsolete. If replacing motors:

Motor P0251-404 is replaced with P0251-951.

Motor P0251-405 is replaced with P0251-950.

Additional modifications to the 5200 Pump Unit are required when ordering the new motors. Contact your Akkerman Aftermarket Support representative for more information.

BORING HEAD PUMPS ASSEMBLY, 027750A
5200 PUMP UNIT (SN: F27700F-16 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027750A	BORING HEAD PUMPS ASSEMBLY
1	1	032295A	CRADLE, Motor
2*	1	P0251-950	MOTOR, 100 HP (Boring Head 2)
3	2	P0305-199	MOUNT, Pump
4	2	P0305-112A	COUPLER
5	2	P0305-118B	COUPLING
6	2	P0305-112D	INSERTS
7**	2	032298A	PUMP ASSEMBLY
8	8	P0001-10-007	BOLT, Hex 5/8 UNC x 1.75
9	8	P0040-010	WASHER, Hardened Flat 5/8
10	16	P0040-012	WASHER, Hardened Flat 3/4
11	8	P0001-12-008	BOLT, Hex 3/4 UNC x 2
12	2	P0302-779	BODY, Port
13	2	P0302-778	VALVE, Relief
14	2	P0300-542	FITTING, 08MB-08MB
15	2	P0300-842	SPACER, Gauge Part
16	2	P0300-316	FITTING, 08MFOR-08MB90
17	2	P0300-027	PLUG, 06MB-PLUG
18	2	P0300-371	FITTING, 16MFOR-16MB90
19	2	P0300-735	FITTING, 06MFFOR-04MB
20	2	P0303-340	HOSE BARB 90
21	2	P0100-059	FLANGE, Split
22	2	P0300-420	FLANGE, 20SF XO
23	8	P0001-08-006	BOLT, Hex 1/2 UNC x 1.5

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BORING HEAD PUMPS ASSEMBLY, 027750A
5200 PUMP UNIT (SN: F27700F-16 & AFTER)

ITEM	QTY	PART NO.	DESCRIPTION
24	8	P0040-008	WASHER, Hardened Flat 1/2
25*	1	P0251-951	MOTOR, 100 HP (Boring Head 1)
26	4	032491P	ROD, Threaded
27	8	P0003-12-000	NUT, Hex 3/4 UNC
28	44 LI	P0253-134	TRIM, Rubber Edge
29	2	P0311-108	STRAIN RELIEF
30	2	P0311-084	BUSHING, Reducer
31	2	P0300-193	PLUG, 08MB-PLUG
32	8	P0001-08-013	BOLT, Hex 1/2 UNC x 3.25
33	420 LI	P0054-015	CABLE, 2 GA 4 COND. TYPE W
34	6	P0055-060	LUG, 3/8" Lug 2 GA
35	6	P0027-025A	BOLT, Hex Brass 5/16 UNC x .75
36	6	P0027-005	NUT, Brass 5/16 UNC
37	2	P0300-362	FITTING, 04MFOR-04MB

LI - Linear Inch

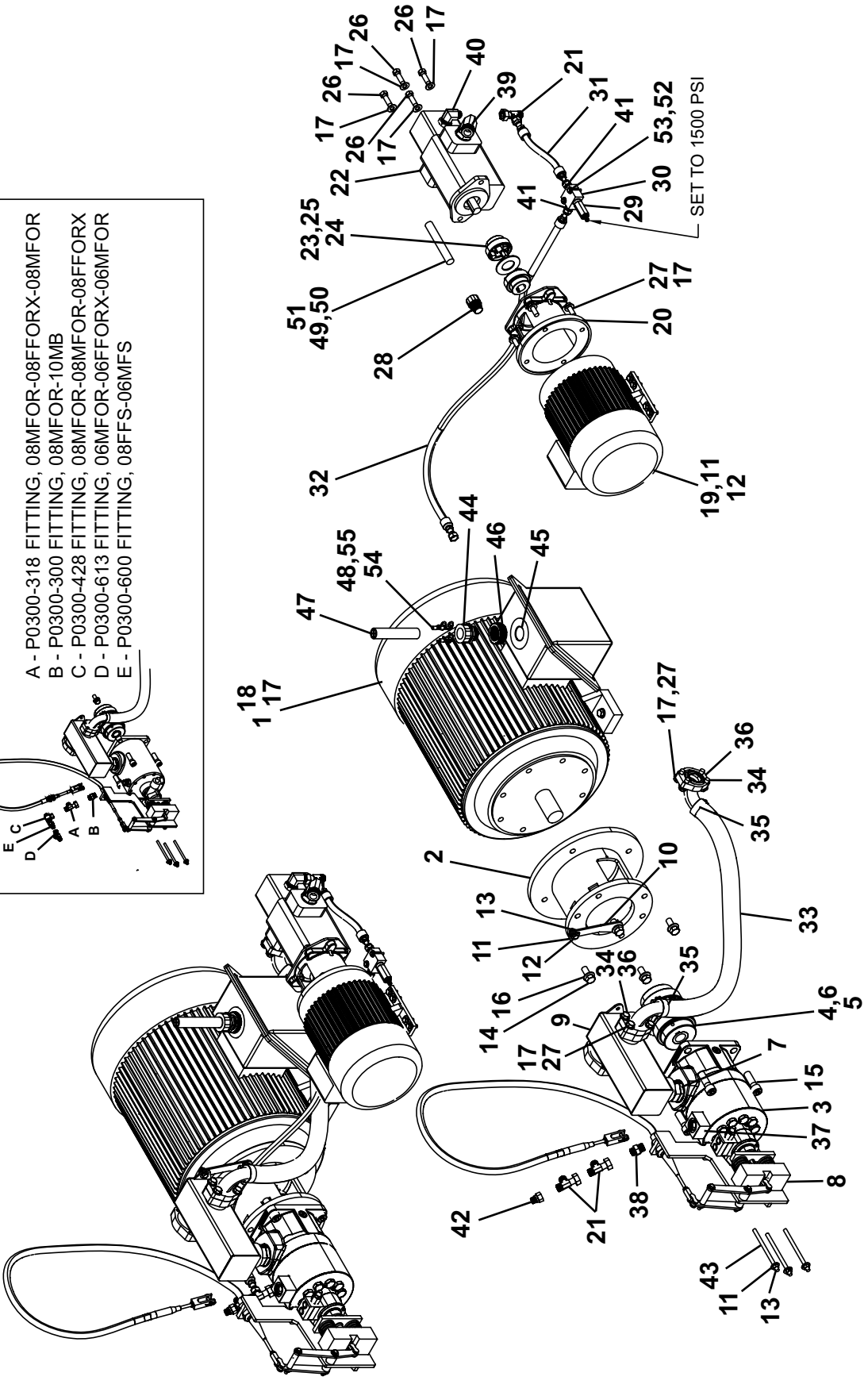
* Refer to Section 8, Motors for parts information.

** Refer to Section 9, Pumps for parts information.

LEFT SIDE HYDRAULICS ASSEMBLY, 027751A
5200 PUMP UNIT

Assembly For Earlier Models

- A - P0300-318 FITTING, 08MFOR-08FFORX-08MFOR
- B - P0300-300 FITTING, 08MFOR-10MB
- C - P0300-428 FITTING, 08MFOR-08MFORX
- D - P0300-613 FITTING, 06MFOR-06FFORX-06MFOR
- E - P0300-600 FITTING, 08FFS-06MFS



LEFT SIDE HYDRAULICS ASSEMBLY, 027751A
5200 PUMP UNIT

ITEM	QTY	PART NO.	DESCRIPTION
0	1	027751A	LEFT SIDE HYDRAULICS ASSEMBLY
1.1*	1	P0304-342	MOTOR, 60HP (Jacking) (F27700F-15 & Before)
1.2*	1	P0304-362	MOTOR, 60HP (Jacking) (F27700F-16 & After)
2	1	P0305-242	MOUNT, Motor
3.1**	1	P0303-227	PUMP (F27700F-18 & Before)
3.2**	1	P0303-878	PUMP (F27700F-19 & After)
4	1	P0305-224	COUPLER
5	1	P0305-201	COUPLER
6	1	P0305-112D	INSERTS
7	1	P0300-472	FITTING, 24MB-24MB
8.1***	1	027753A	ASSEMBLY, Pump Stroker (F27700F-18 & Before)
8.2***	1	032797A	ASSEMBLY, Pump Stroker (F27700F-19 & After)
9	1	027754A	MANIFOLD, Suction
10	1	027780P	BRACKET, Manifold Support
11	13	P0040-006	WASHER, Hardened Flat 3/8
12	9	P0001-06-004	BOLT, Hex 3/8 UNC x 1
13	4	P0003-06-000	NUT, Hex 3/8 UNC
14	4	P0001-10-006	BOLT, Hex 5/8 UNC x 1.5
15	4	P0001-12-007	BOLT, Hex 3/4 UNC x 1.75
16	4	P0040-010	WASHER, Hardened Flat 5/8
17	20	P0040-008	WASHER, Hardened Flat 1/2
18	4	P0001-08-009	BOLT, Hex 1/2 UNC x 2.25
19*	1	P0304-343	MOTOR, 5HP (Cooling)
20	1	P0305-210	ADAPTER, Pump Motor
21	3	P0300-318	FITTING, 08MFOR-08FFORX-08MFOR
22**	1	P0303-389	PUMP, Tandem Gear (Cooling)
23	1	P0305-240	COUPLING HALF, Pump
24	1	P0305-239	COUPLING HALF, Motor
25	1	P0305-241	INSERT
26	4	P0001-08-006	BOLT, Hex 1/2 UNC x 1.5
27	12	P0001-08-005	BOLT, Hex 1/2 UNC x 1.25
28	1	P0311-120	STRAIN RELIEF 3/4
29	1	P0302-513	CARTRIDGE
30	1	P0302-514	BODY, Port
31	1	A10388A-012	HOSE ASSEMBLY, 3/8 x 12
32	1	A10388A-050	HOSE ASSEMBLY, 3/8 x 50
33	33 LI	P0201-252	HOSE, Hydraulic Suction 1.5
34	2	P0220-335	INSERT
35	2	P0201-216	T-CLAMP
36	2	P0300-459	ORING, 24FLOR
37	1	P0300-329	FITTING, 12MFOR-12MB
38	1	P0300-300	FITTING, 08MFOR-10MB
39	1	P0300-371	FITTING, 16MFOR-16MB90
40	1	P0300-373	FITTING, 08MFOR-12MB90
41	2	P0300-356	FITTING, 06MFOR-06MB
42	1	P0300-600	FITTING, 08FFS-06MFS
43	3	016254P00	ROD, Mounting
44	1	P0311-109	STRAIN RELIEF
45	1	P0311-084	BUSHING, Reducer 3 x 2
46	1	P0311-055	BUSHING, Reducer 2"-1-1/4"
47	40 LI	P0054-035	CABLE, 4 Gauge 4 COND TYPE W-BE
48	3	P0055-052	STUD, Copper 5/16 4 GA W
49	50 LI	P0054-009	WIRE, 14 GA. 4 CON.
50	3	P0055-273	NUT, Wire Orange
51	1	P0055-011	TERMINAL, Ring #8 Blue
52	2	P0040-004	WASHER, Hardened Flat 1/4
53	2	P0001-04-006	BOLT, Hex 1/4 UNC x 1.5
54	3	P0027-019	BOLT, Brass 1/4 x .75
55	3	P0027-004	NUT, Brass 1/4 UNC

LI - Linear Inch

* Refer to Section 8, Motors for parts information.

** Refer to Section 9, Pumps for parts information.

*** Refer to Section 4, Operator Controls for parts information.

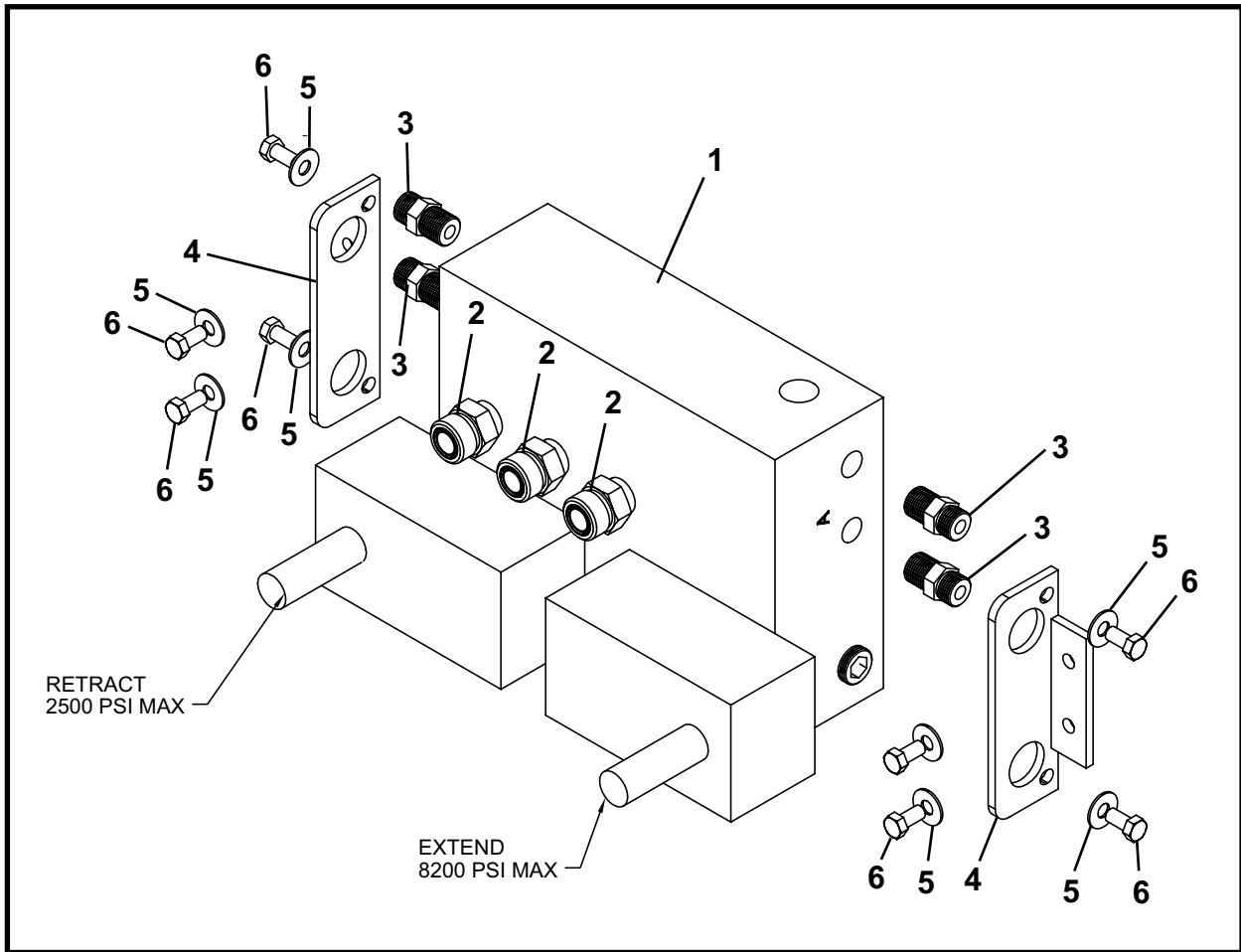
^ This motor is obsolete. If replacing motor, you must replace with Motor, P0304-362.

^^ This pump is obsolete. If replacing pump, you must replace with Pump P0303-878 AND Stroker 032797A.

^^^ Stroker Assembly is used only with Pump P0303-227, item 3.1.

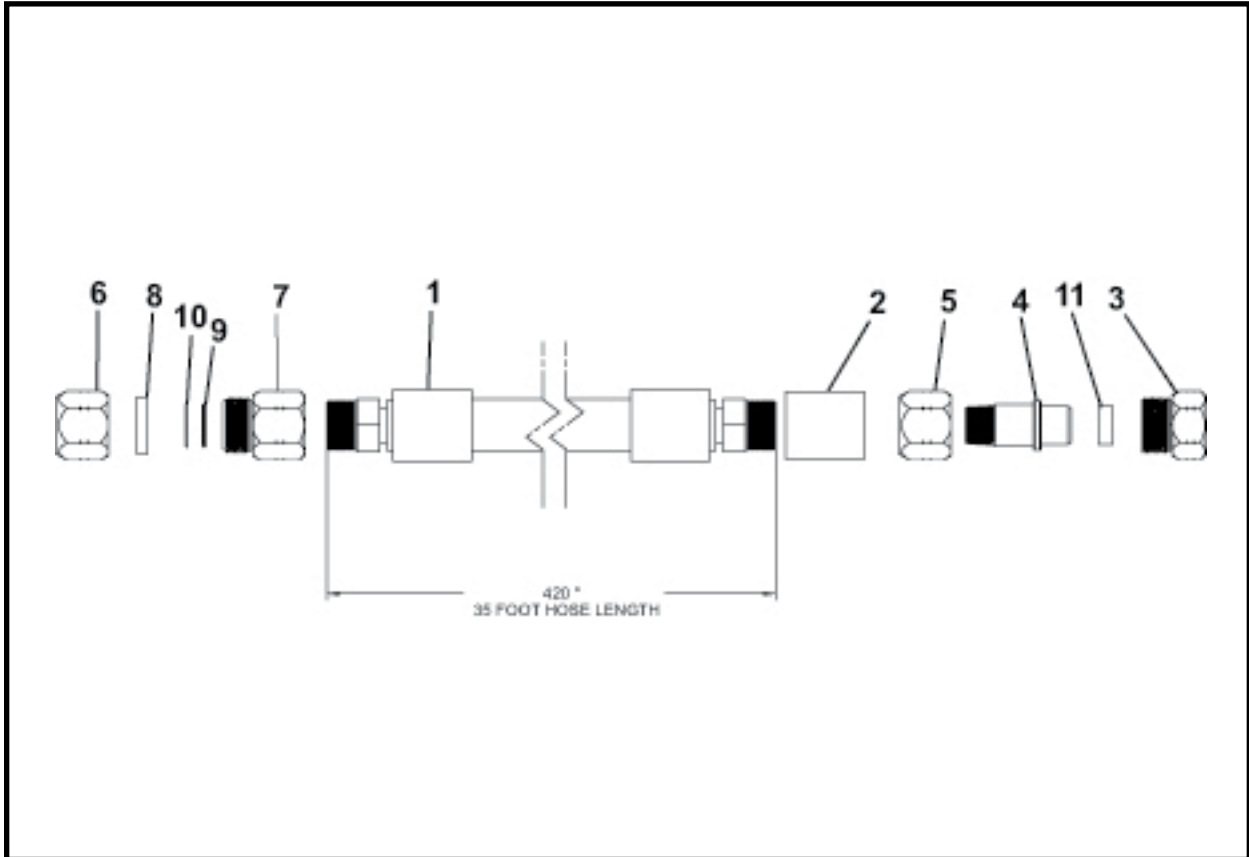
+ Stroker Assembly is used only with Pump P0303-878, item 3.2

CYLINDER MANIFOLD ASSEMBLY, 027804A
5200 PUMP UNIT



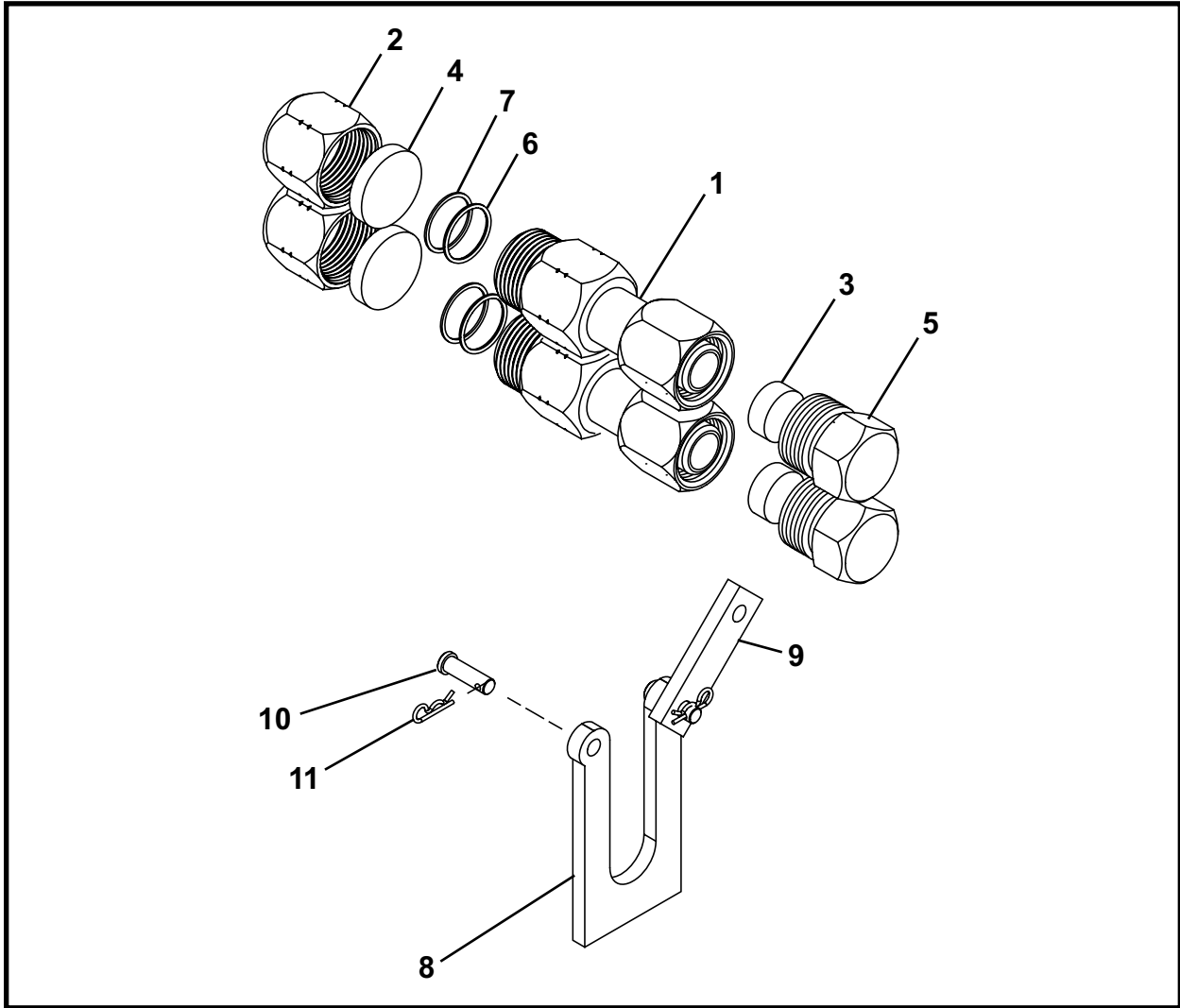
ITEM	QTY	PART NO.	DESCRIPTION
0	1	027804A	CYLINDER MANIFOLD ASSEMBLY
1	1	P0302-786	JACK MANIFOLD 7 PORT 5200 PUMP
2	3	P0300-369	FITTING, 12MFOR-12MP
3	4	P0300-382	FITTING, 08MFOR-08MP
4	2	027623A	MOUNT, Manifold
5	8	P0040-006	WASHER, Hardened Flat 3/8
6	8	P0001-06-003	BOLT, Hex 3/8 UNC x .75

**STARTER HOSE (HIGH PRESSURE) ASSEMBLY, 35', F27691F
5200 PUMP UNIT**



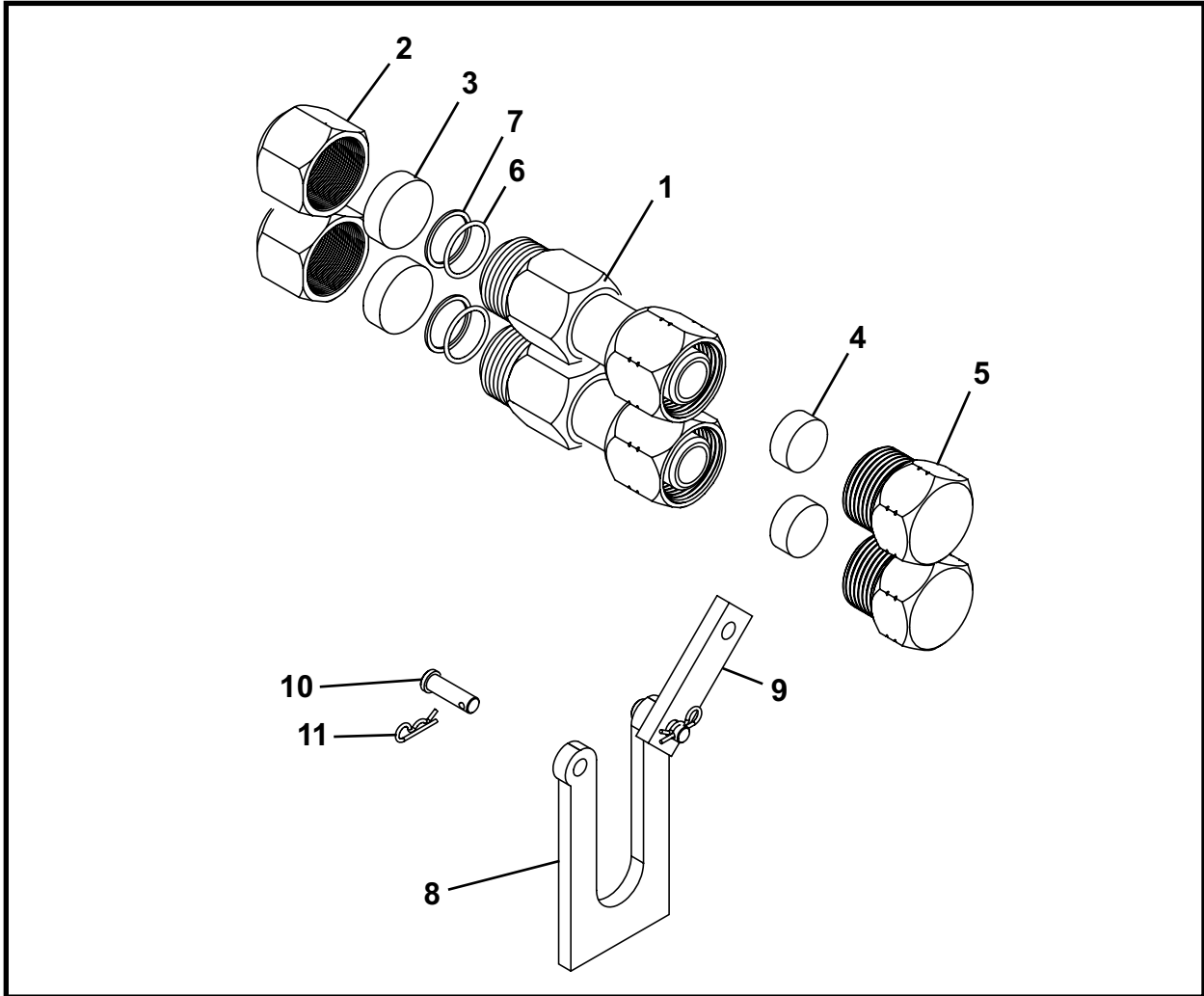
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F27691F	STARTER HOSE ASSEMBLY, 35'
1	1	A09851A-420	HOSE ASSEMBLY, 1-1/4 x 420 (35 ft)
2	1	P0421-022	REDUCER
3	1	027672P	PLUG, Storage, TBM High Pressure
4	1	027669P	NIPPLE, Threaded, TBM High Pressure
5	1	027667P	NUT, Couple, TBM High Pressure
6	1	027671P	CAP, Storage, TBM High Pressure
7	1	027687P	FITTING, Threaded, TBM High Pressure
8	1	027651P	INSERT, Rubber
9	1	P0085-124A	ORING
10	1	P0084-124	RING, Back-Up
11	1	007087P00	PLUG, Rubber

ADAPTER KIT - 5200 PUMP UNIT (3,000 PSI) TO TBM Series I, 027699A
5200 PUMP UNIT/TBM Series I



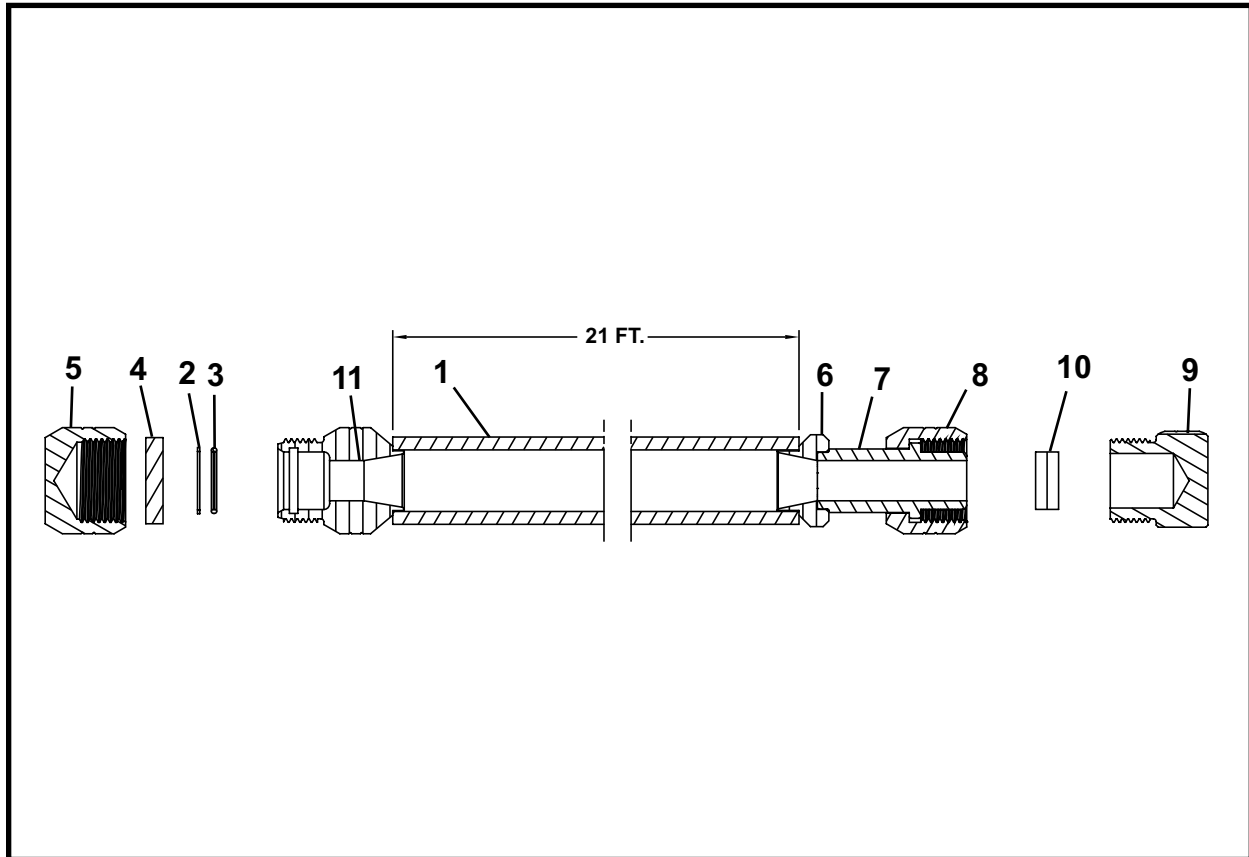
ITEM	QTY	PART NO.	DESCRIPTION
0	1	027699A	KIT, Adapter, 5200 Pump Unit To TBM Series I
1	2	027695A	FITTING, Adapter, 5200 To TBM Series I
2	2	027671P	CAP, Storage, TBM High Pressure
3	2	007087P00	PLUG, Rubber
4	2	027651P	INSERT, Rubber
5	2	005350P03	CAP, coupler 1-1/4
6	2	P0085-124A	ORING
7	2	P0084-124	RING, Back-Up
8	1	027697P	MOUNT
9	1	027696P	BAR, Retainer
10	2	P0024-006	PIN, Clevis 3/8 x 1-1/4
11	2	P0090-001	CLIP, Hitch Pin

ADAPTER KIT - 5000 PUMP UNIT (3,000 PSI) TO TBM Series II, 027698A
5000 PUMP UNIT/TBM Series II



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027698A	KIT, Adapter, 5000 Pump Unit To TBM Series II
1	2	027694A	FITTING, Adapter, Low Pressure To TBM Series II
2	2	007002P02	CAP, coupler 1-1/4
3	2	007086P00	PLUG, Rubber
4	2	007087P00	PLUG, Rubber
5	2	027672P	PLUG, Storage, TBM High Pressure
6	2	P0085-123	ORING
7	2	P0084-123	RING, Back-Up
8	1	027697P	MOUNT (Not part of this Adapter Kit)
9	1	027696P	BAR, Retainer
10	2	P0024-006	PIN, Clevis 3/8 x 1-1/4
11	2	P0090-001	CLIP, Hitch Pin

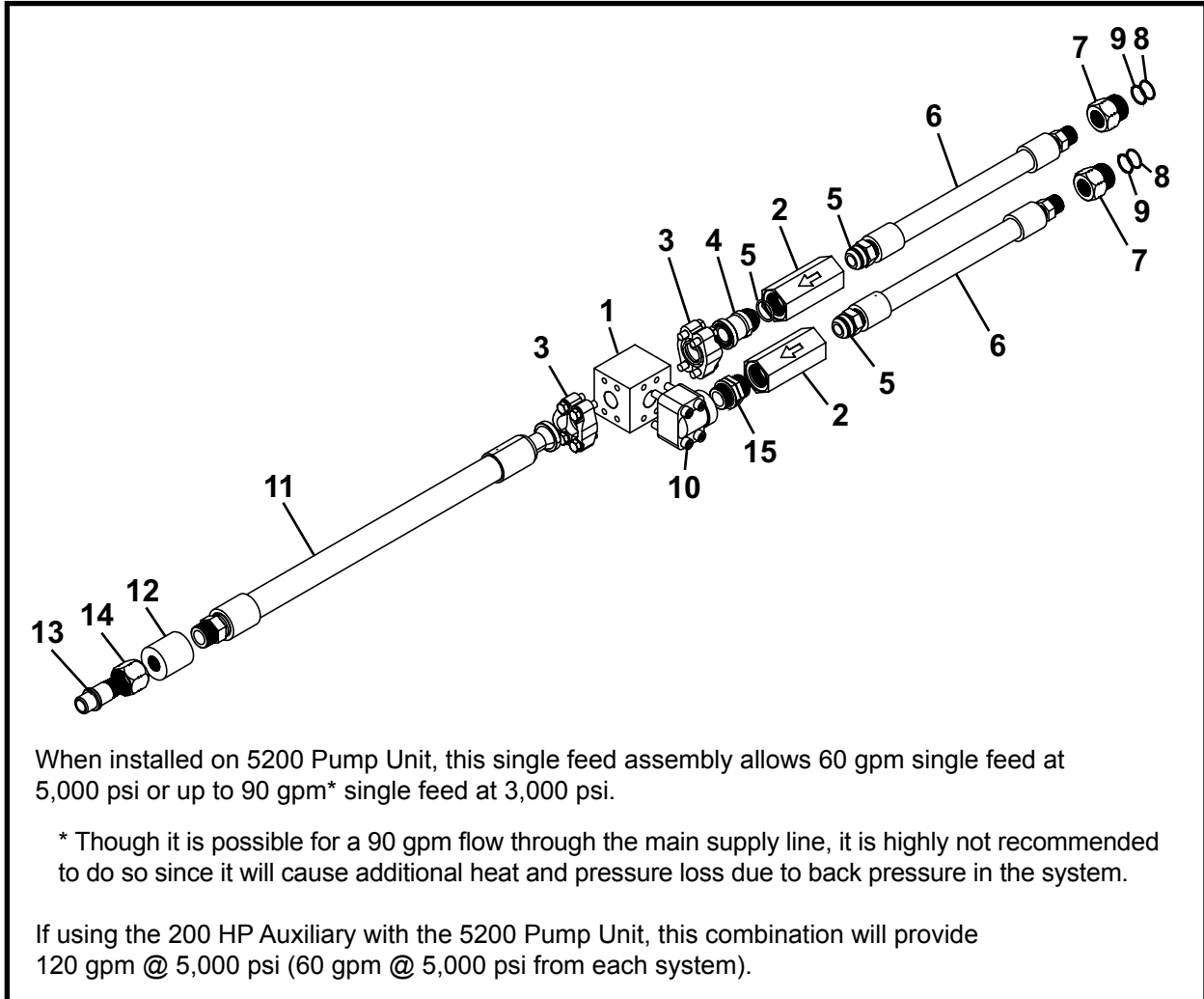
**HYDRAULIC LINE HP (5,000 PSI) ASSEMBLY, F27674F
5200 PUMP UNIT**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F27674F	ASSEMBLY, Hydraulic Line HP (5,000 psi)
1	1	NSS	PIPE
2	1	P0084-124	RING, Back-Up
3	1	P0085-124A	ORING
4	1	027612P	INSERT, Rubber
5	1	027671P	CAP, Storage, TBM High Pressure
6	1	NSS	RING, Adapter TBM High Pressure
7	1	NSS	NIPPLE, TBM High Pressure
8	1	NSS	NUT, Coupler, TBM-High Pressure
9	1	027672P	PLUG, Storage TBM High Pressure
10	1	007087P00	PLUGS, Rubber
11	1	NSS	FITTING, TBM High Pressure

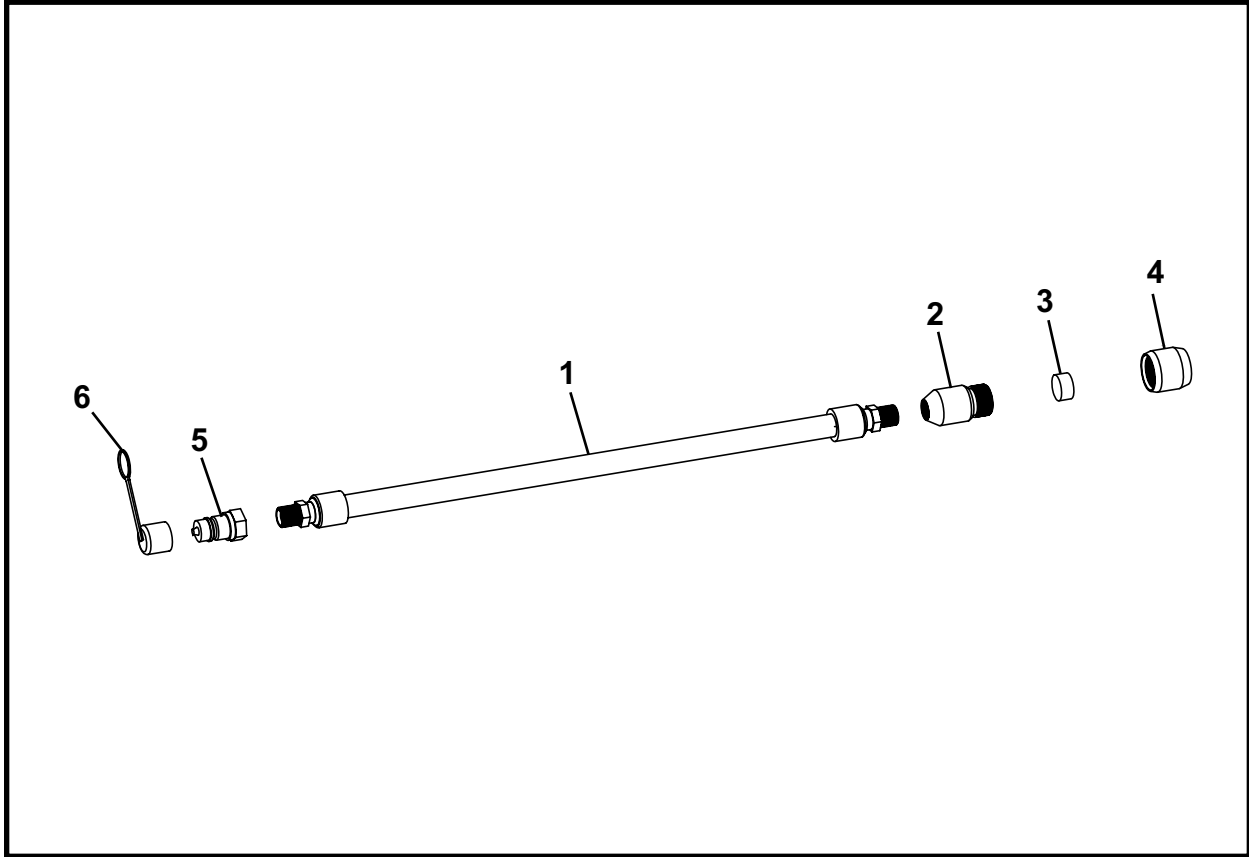
NSS - Not Sold Separately

**SINGLE FEED ASSEMBLY, F27624F
5200 PUMP UNIT**



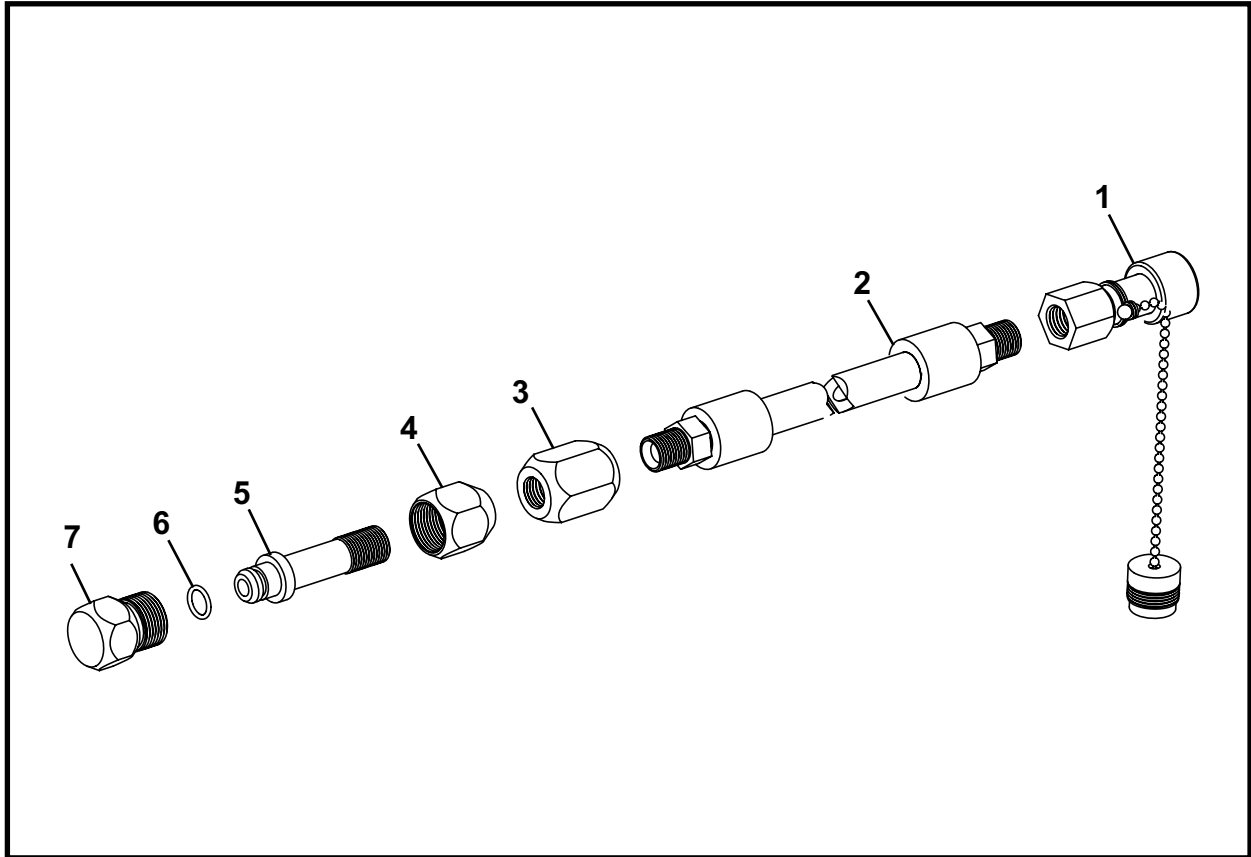
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F27624F	SINGLE FEED ASSEMBLY
1	1	P0302-787	BLOCK, Junction
2	2	P0302-500	VALVE, Check
3	2	P0300-420	FITTING, 20SF XO
4	1	P0300-789	FITTING, 20MJ-20FLH
5	3	P0300-447	ORING, 20OR
6	2	A09856A-018	HOSE ASSEMBLY 1 x 18
7	2	027673P	FITTING, TBM High Pressure
8	2	P0084-124	RING, Back-Up
9	2	P0085-124A	ORING
10	1	P0300-862	FITTING
11	1	A09857A-420	HOSE ASSEMBLY 1-1/4 x 420 (35 ft)
12	1	P0421-022	REDUCER
13	1	027669P	NIPPLE, TBM Threaded High Pressure
14	1	027667P	NUT, Coupler TBM High Pressure
15	1	P0300-368	FITTING, 20MB-20MB

**IJS STARTER HOSE 30 FT (Low Pressure) ASSEMBLY, F27868F
5200 PUMP UNIT**



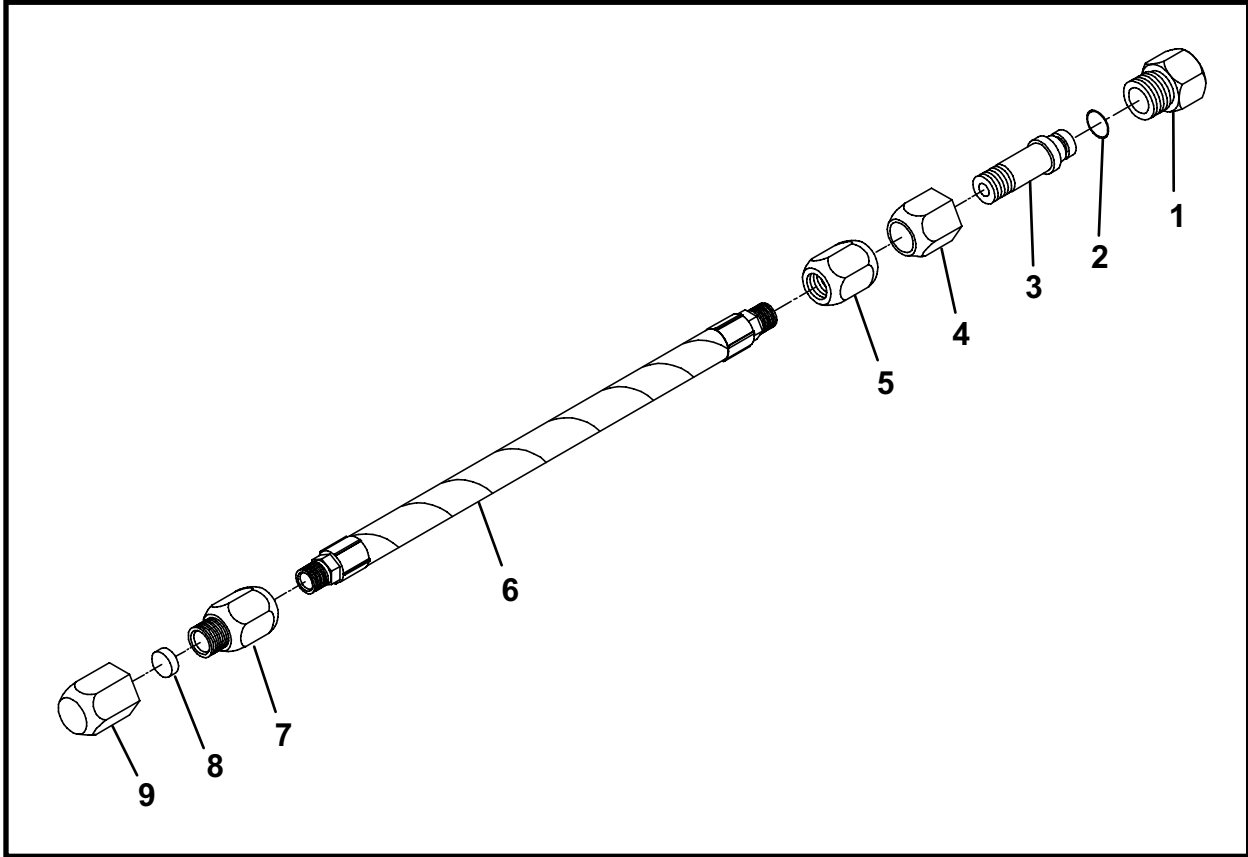
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F27868F	IJS STARTER HOSE ASSEMBLY
1	1	A10320A-360	HOSE ASSEMBLY 1/2 x 360
2	1	009809P00	COUPLER, Female 1/2
3	1	007085P00	PLUG, Coupler Cap
4	1	009811P01	CAP, Male
5	1	P0100-013B	NIPPLE, Female 1/2 NPT
6	1	P0100-013D	PLUG, Dust

**IJS STARTER HOSE 30 FT (High Pressure) ASSEMBLY, F09802F01
5200 PUMP UNIT**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	F09802F01	IJS STARTER HOSE ASSEMBLY
1	1	P0100-001B	COUPLER, Male
2	1	A10420A-360	HOSE ASSEMBLY, 1/2 x 360
3	1	009812P01	COUPLER, Hi-Pressure 1/2 NPT
4	1	005135P00	COUPLER, 1/2
5	1	005134P00	COUPLER, Male 1/2
6	1	P0085-113	ORING
7	1	009808P00	CAP, Female

**IJS TUNNEL LINE 10' 6", F09800F00
5200 PUMP UNIT**



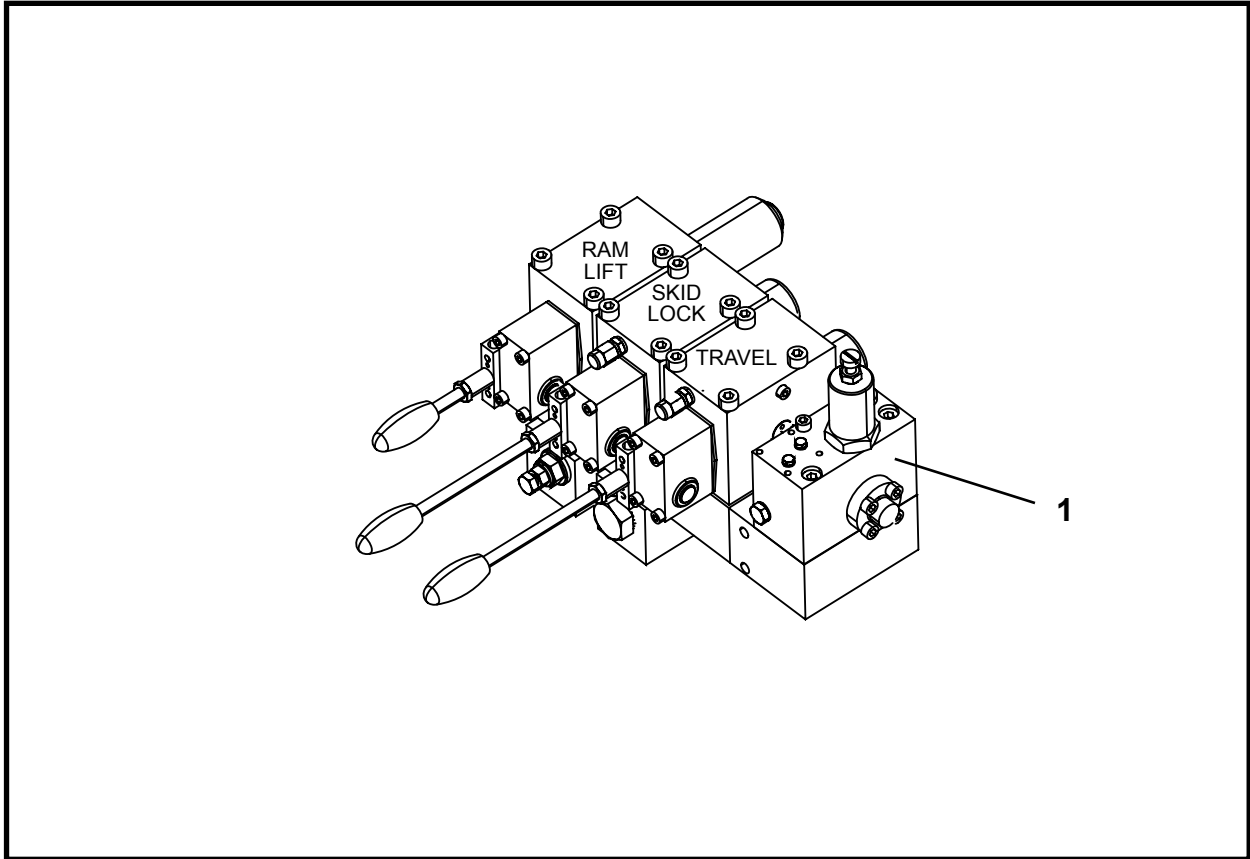
ITEM	QTY	PART NO.	DESCRIPTION
0	1	F09800F00	IJS TUNNEL LINE 10' 6"
1	1	009808P00	CAP, Female IJS
2	1	P0085-113	ORING
3	1	005134P00	COUPLER, Male
4	1	005135P00	COUPLER
5	1	009812P01	COUPLER, High Pressure
6	1	009806P00	PIPE
7	1	009809P00	COUPLER, Female
8	1	007085P00	PLUG, Coupler
9	1	009811P01	CAP, Male IJS



Valves

5200 Pump Unit	
Three Section Valve, P0302-780	2
Valve Assembly (Block Style), 027819A	4
Valve Assembly (Cylindrical Style), 027819A	5
Control Valve Assembly, A61057A	6

THREE SECTION VALVE, P0302-780
5200 Series PUMP UNIT

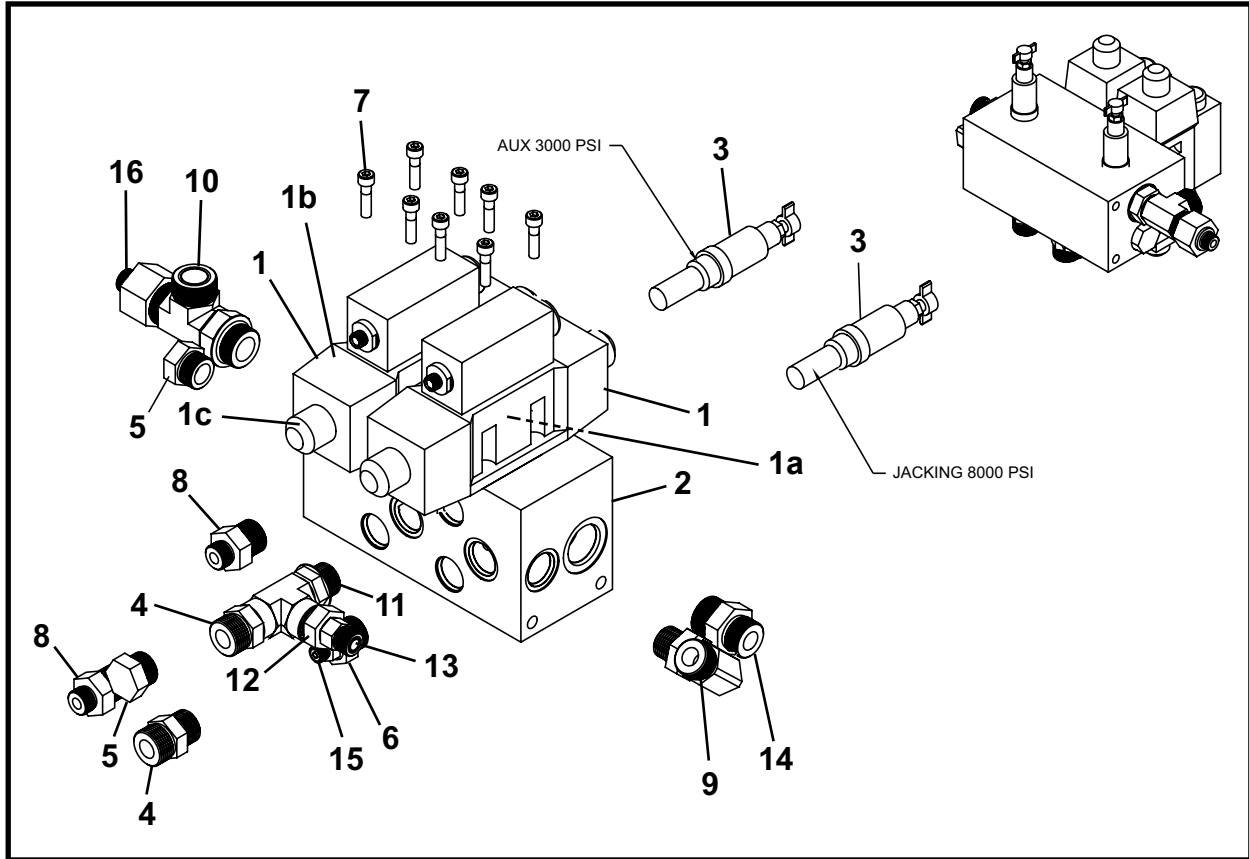


ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-780	VALVE, Three Section
1	1	P0302-780A	INLET, Open Center
2*	1	P0302-780B	KIT, Bolt
3*	1	P0302-780C	KIT, Tie Rod

* Not Shown

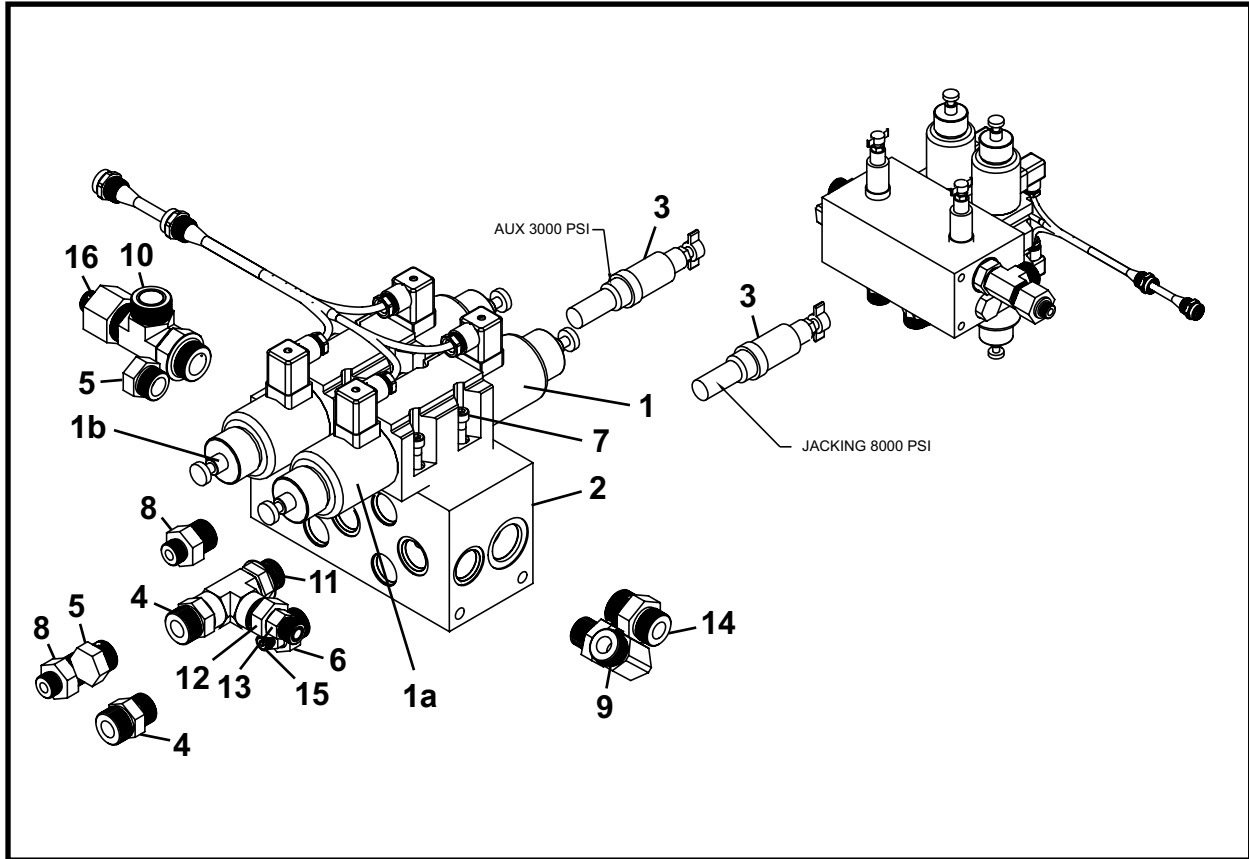
NOTES

VALVE ASSEMBLY (BLOCK STYLE), 027819A
5200 Series PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0		027819A	VALVE ASSEMBLY
1	2	P0302-382	VALVE (Includes items 1a - 1c)
1a	1	P0302-382A	SPOOL
1b	1	P0302-139	COIL
1c	1	P0302-139B	TUBE
2	1	A10205P0	BODY, Valve
3	2	P0302-306	RELIEF, Pilot Operated
4	2	P0300-329	FITTING, 12MFOR-12MB
5	2	P0300-145	PLUG, 12MB-PLUG
6	1	P0300-677	FITTING, 12MB-6FB
7	8	P0031-05-005	SCREW, Socket Head Cap 5/16 UNC x 1.25
8	2	P0300-375	FITTING, 08MFOR-12MB
9	1	P0300-372	FITTING, 12MFOR-12MB90
10	1	P0300-419	FITTING, 16MFOR-16MB-16MFOR
11	1	P0300-536	FITTING, 12MB-12FB-12FB
12	1	P0300-565	FITTING, 12MORB-08FORB
13	1	P0302-498	VALVE, Check
14	1	P0300-378	FITTING, 12MFOR-16MB
15	1	P0300-310	FITTING, 04MFOR-06MB
16	1	P0300-631	FITTING, 16FFOR-08MFFOR

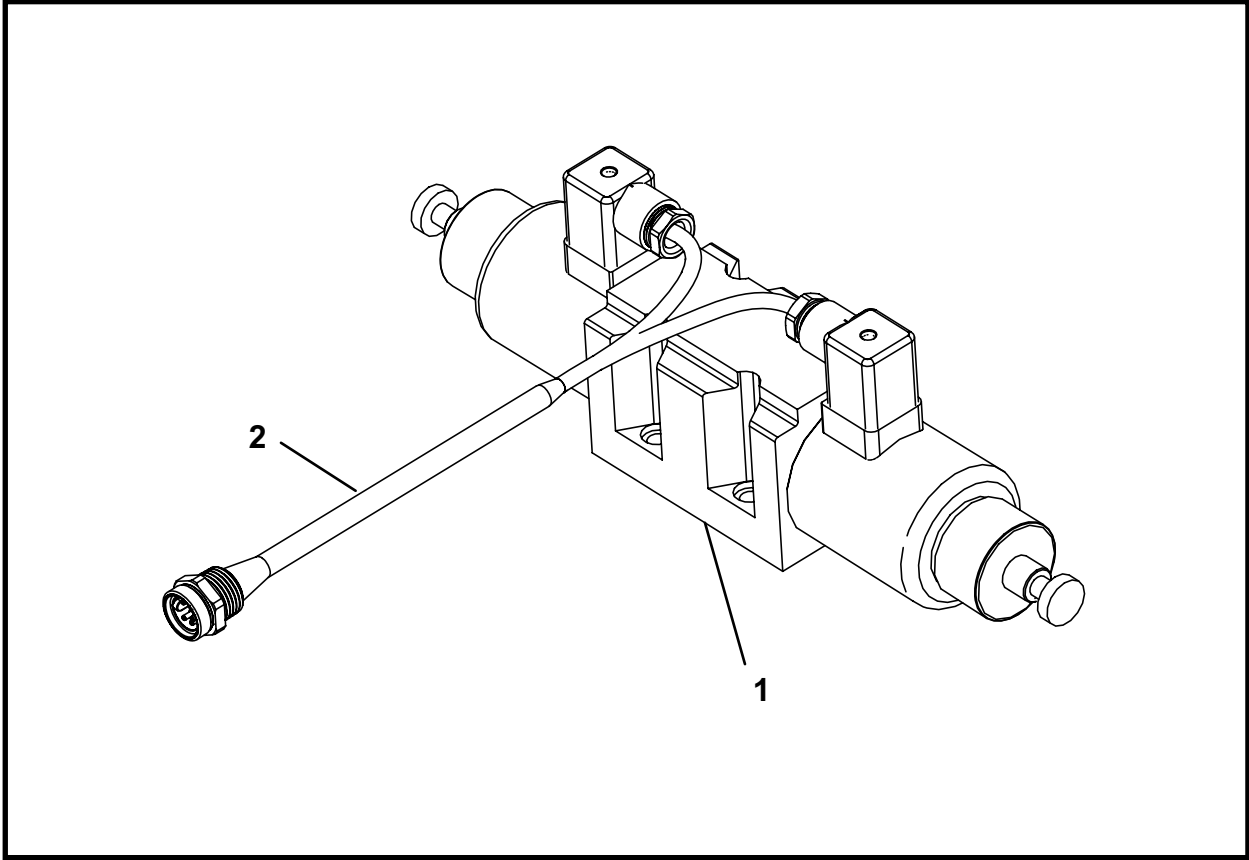
VALVE ASSEMBLY (CYLINDRICAL STYLE), 027819A
5200 Series PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0		027819A	VALVE ASSEMBLY
1*	2	A61057A	VALVE ASSEMBLY, Control (Includes items 1a - 1b)
1a	2	P0302-899	COIL
1b	2	P0302-898	TUBE
2	1	A10205P0	BODY, Valve
3	2	P0302-306	RELIEF, Pilot Operated
4	2	P0300-329	FITTING, 12MFOR-12MB
5	2	P0300-145	PLUG, 12MB-PLUG
6	1	P0300-677	FITTING, 12MB-6FB
7	8	P0031-05-005	SCREW, Socket Head Cap 5/16 UNC x 1.25
8	2	P0300-375	FITTING, 08MFOR-12MB
9	1	P0300-372	FITTING, 12MFOR-12MB90
10	1	P0300-419	FITTING, 16MFOR-16MB-16MFOR
11	1	P0300-536	FITTING, 12MB-12FB-12FB
12	1	P0300-565	FITTING, 12MORB-08FORB
13	1	P0302-498	VALVE, Check
14	1	P0300-378	FITTING, 12MFOR-16MB
15	1	P0300-310	FITTING, 04MFOR-06MB
16	1	P0300-631	FITTING, 16FFOR-08MFFOR

* Refer to this section for parts information.

CONTROL VALVE ASSEMBLY (CYLINDRICAL STYLE), A61057A
5200 Series PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A61057A	CONTROL VALVE ASSEMBLY
1	1	P0302-382	VALVE
2	1	A61015A	CORD, 3 Pos Dynex-Din/Mini



Motors

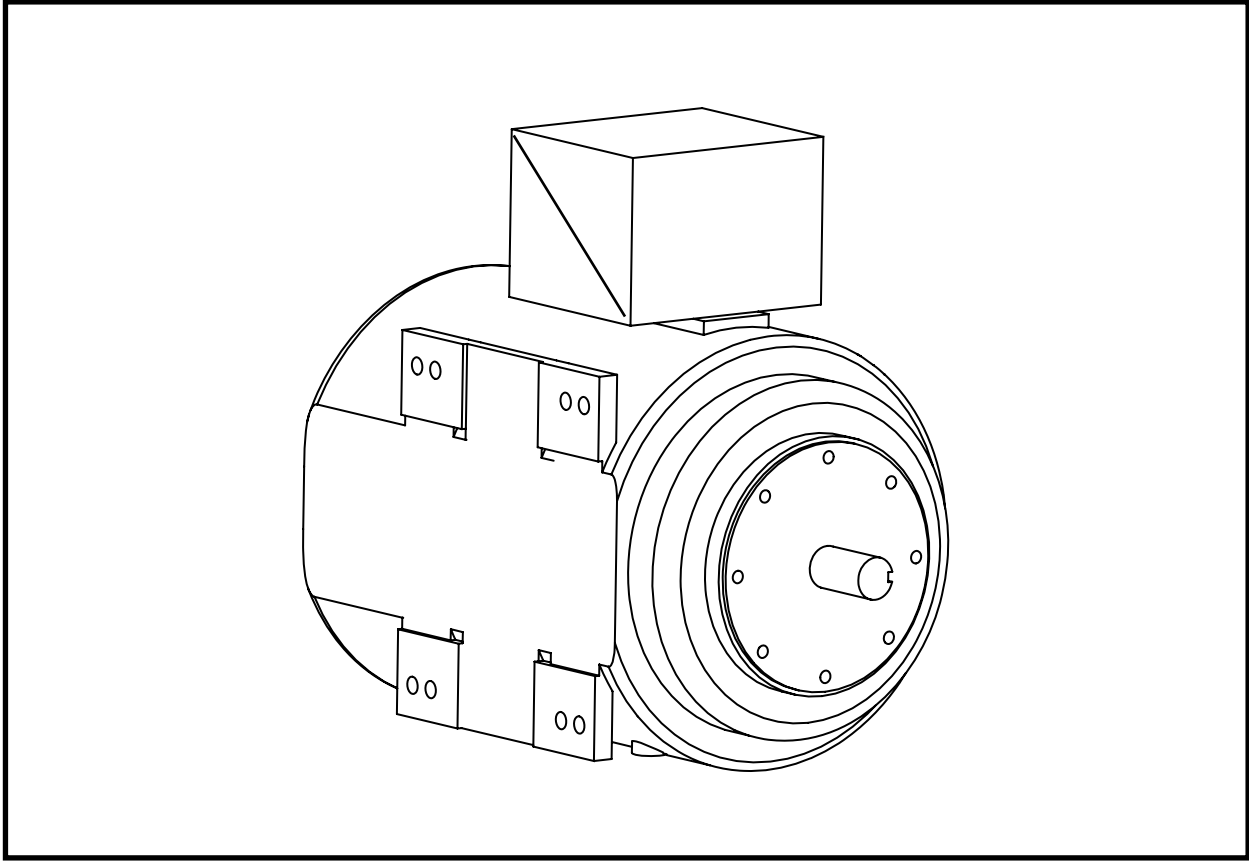
5200 Pump Unit

Electric Motor (Boring Head 1) 100HP, P0251-404 (F27700F-15 & Before).....	2
Electric Motor (Boring Head 1) 100HP, P0251-951 (F27700F-16 & After).....	3
Electric Motor (Boring Head 2) 100HP, P0251-405 (F27700F-15 & Before).....	4
Electric Motor (Boring Head 2) 100HP, P0251-950 (F27700F-16 & After).....	5
Electric Motor (Jacking) 60 HP, P0304-342 (F27700F-15 & Before)	6
Electric Motor (Jacking) 60 HP, P0304-362 (F27700F-16 & After).....	7
Electric Motor (Cooling) 5 HP, P0304-343	8
Hydraulic Motor (Travel) P0304-100	9

200 HP Auxiliary

Electric Motor 200 HP, P0304-345	10
Electric Motor (Cooling) 5 HP, P0304-343	11

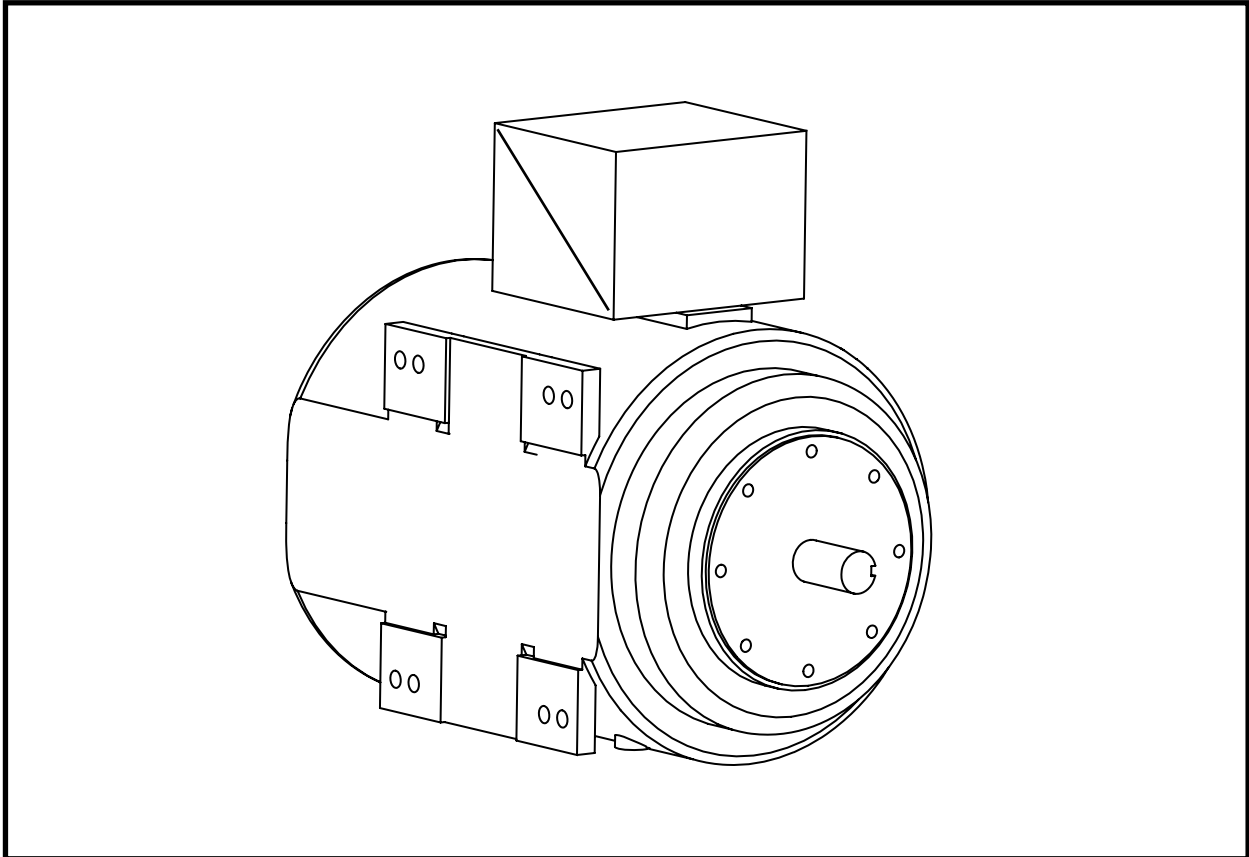
**BORING HEAD 1 100 HP MOTOR, P0251-404
5200 PUMP UNIT (SN F27700F-15 & BEFORE)**



ITEM	QTY	PART NO.	DESCRIPTION
0*	1	P0251-404	BORING HEAD 1 100 HP MOTOR (LH Stuffing)
1	1	P0251-404A	BASE
2	1	P0251-404B	COVER
3	1	P0251-404C	GASKET, Box
4	1	P0251-404D	GASKET, Cover

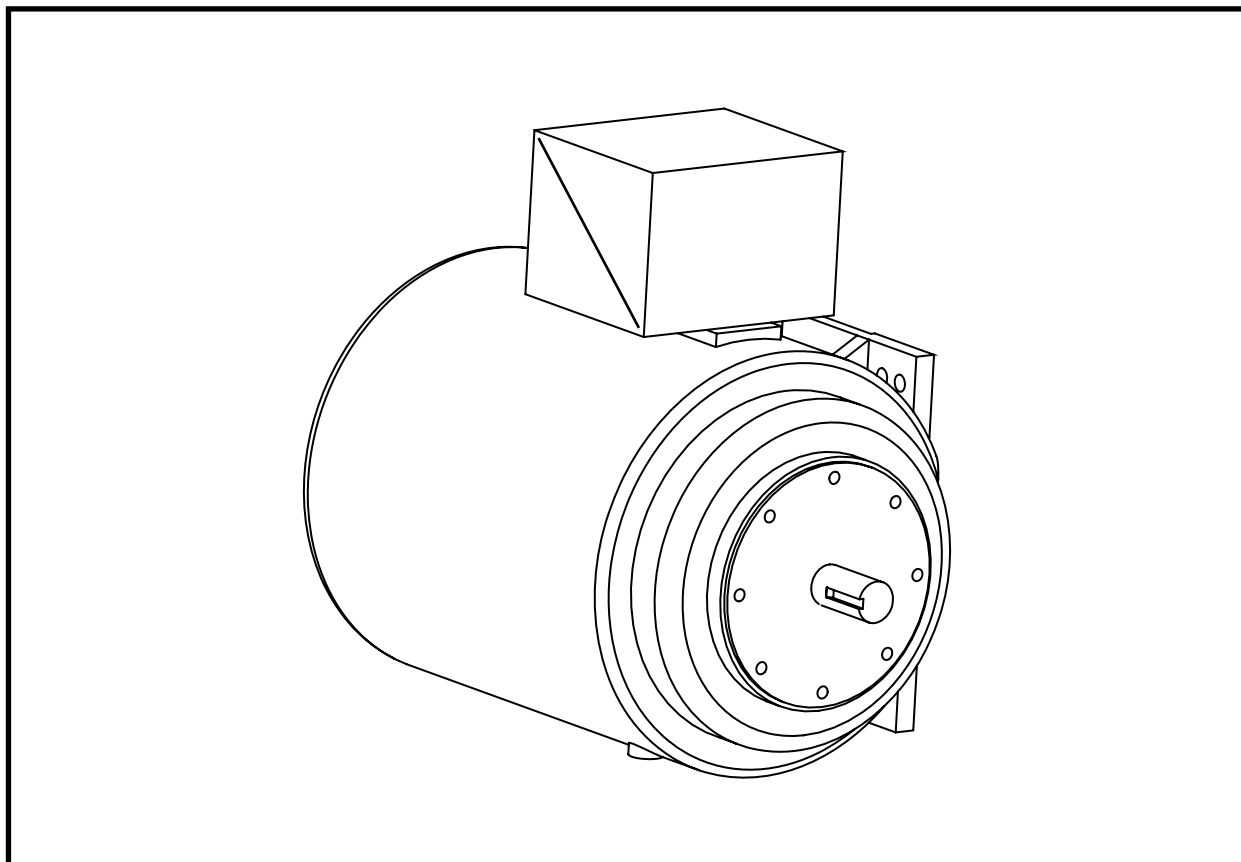
* Motor is obsolete. If replacing motor, order Motor, P0251-951. Modifications to the pump unit are required with this new motor. Contact your Akkerman Aftermarket Support representative for more information.

BORING HEAD 1 100 HP MOTOR, P0251-951
5200 PUMP UNIT (SN F27700F-16 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0251-951	BORING HEAD 1 100 HP MOTOR (LH Stuffing)

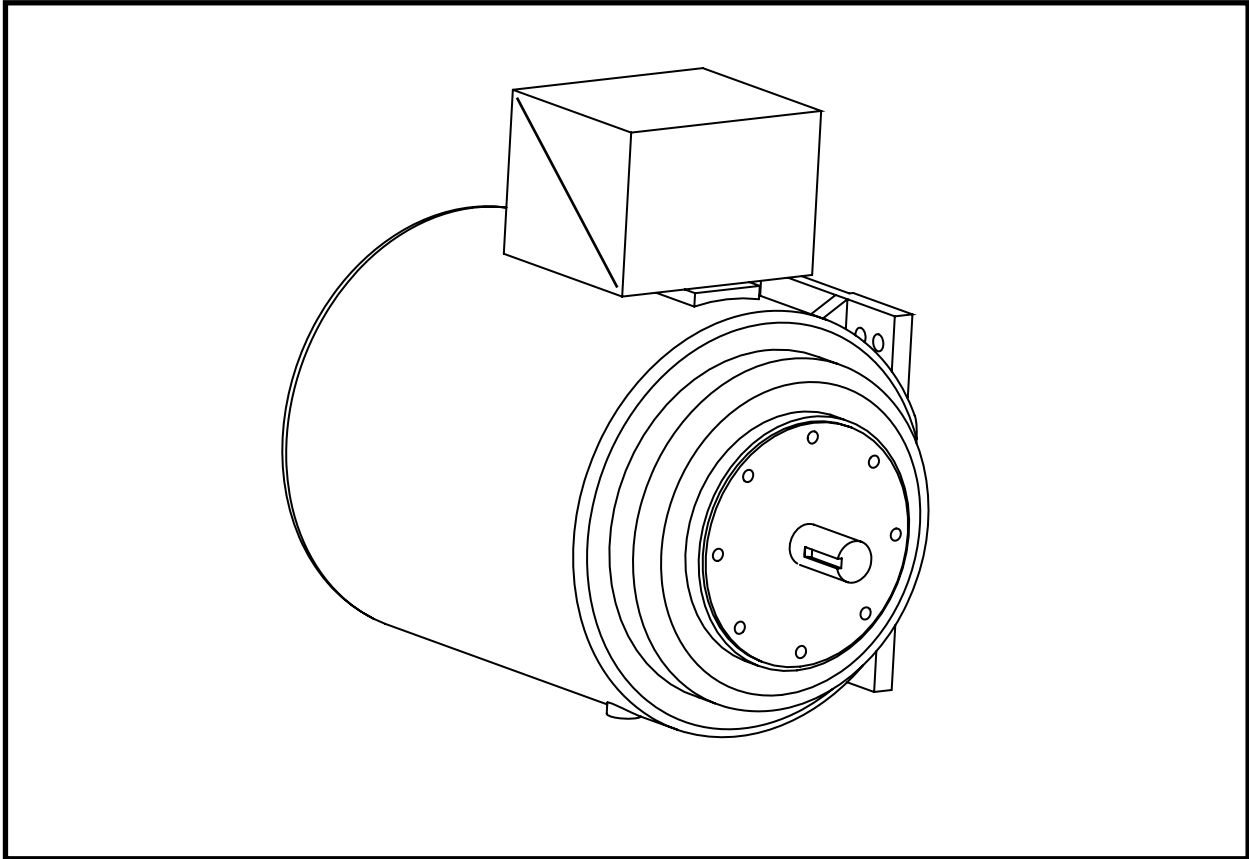
**BORING HEAD 2 100 HP MOTOR, P0251-405
5200 PUMP UNIT (SN F27700F-15 & BEFORE)**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0251-405	BORING HEAD 2 100 HP MOTOR (RH Stuffing)
1	1	P0251-404A	BASE
2	1	P0251-404B	COVER
3	1	P0251-404C	GASKET, Box
4	1	P0251-404D	GASKET, Cover

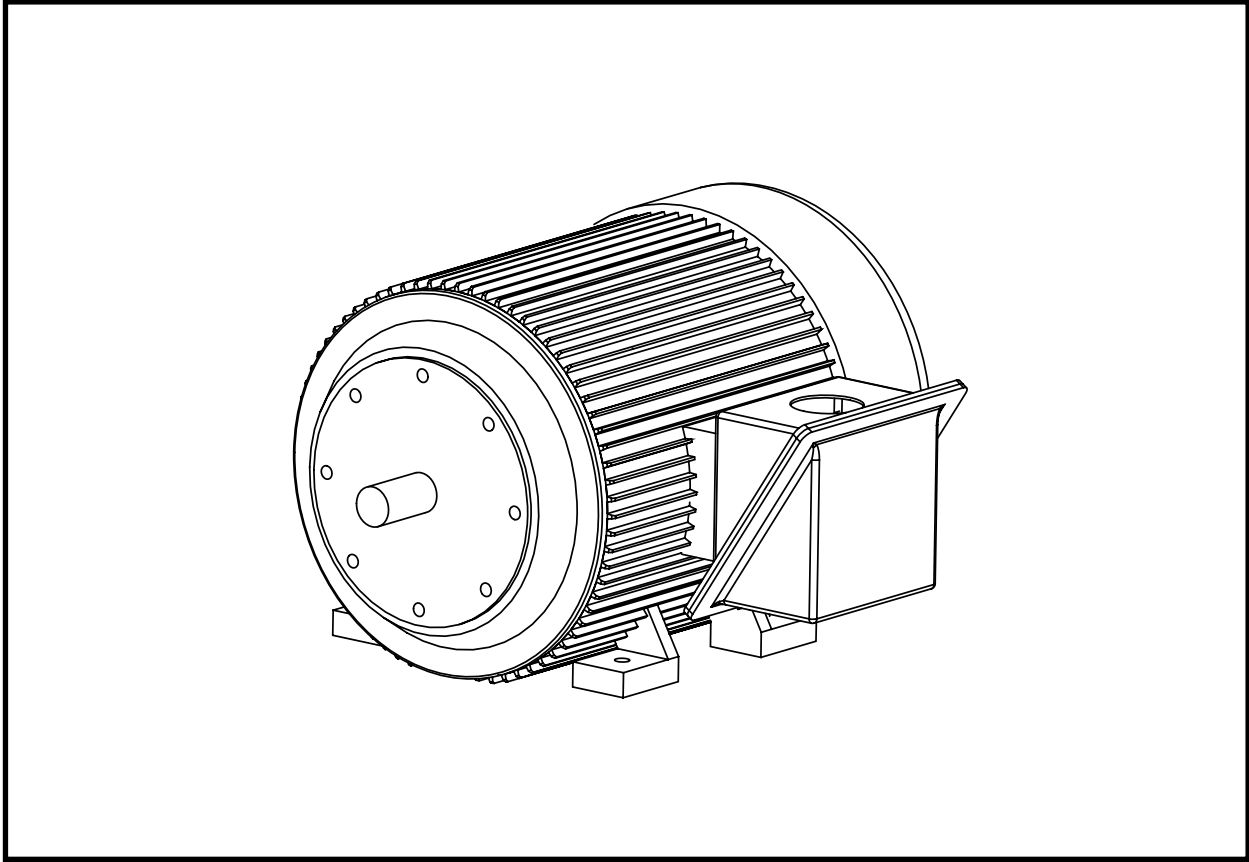
* Motor is obsolete. If replacing motor, order Motor, P0251-950. Modifications to the pump unit are required with this new motor. Contact your Akkerman Aftermarket Support representative for more information.

BORING HEAD 2 100 HP MOTOR, P0251-950
5200 PUMP UNIT (SN F27700F-16 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0251-950	BORING HEAD 2 100 HP MOTOR (RH Stuffing)

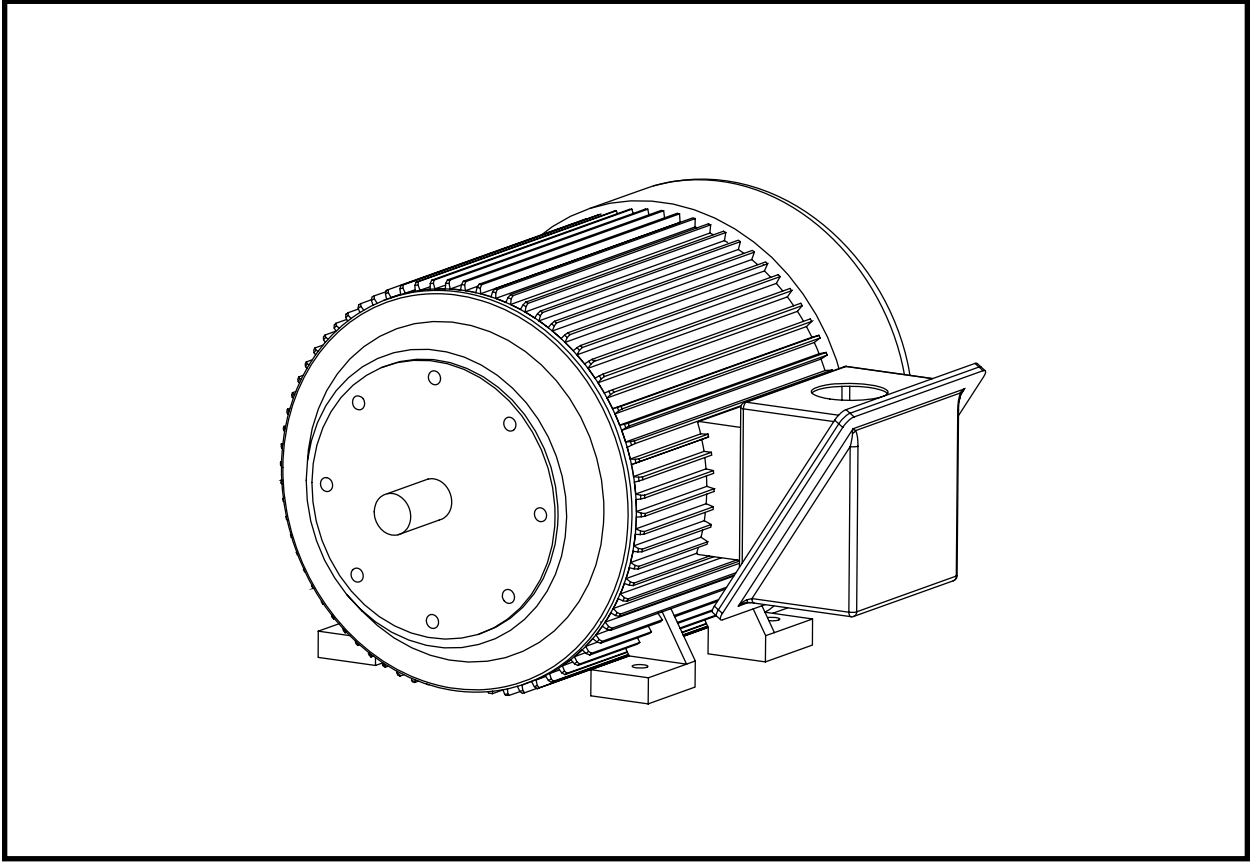
**JACKING 60 HP MOTOR, P0304-342
5200 PUMP UNIT (SN F27700F-15 & BEFORE)**



ITEM	QTY	PART NO.	DESCRIPTION
0*	1	P0304-342	JACKING 60 HP MOTOR

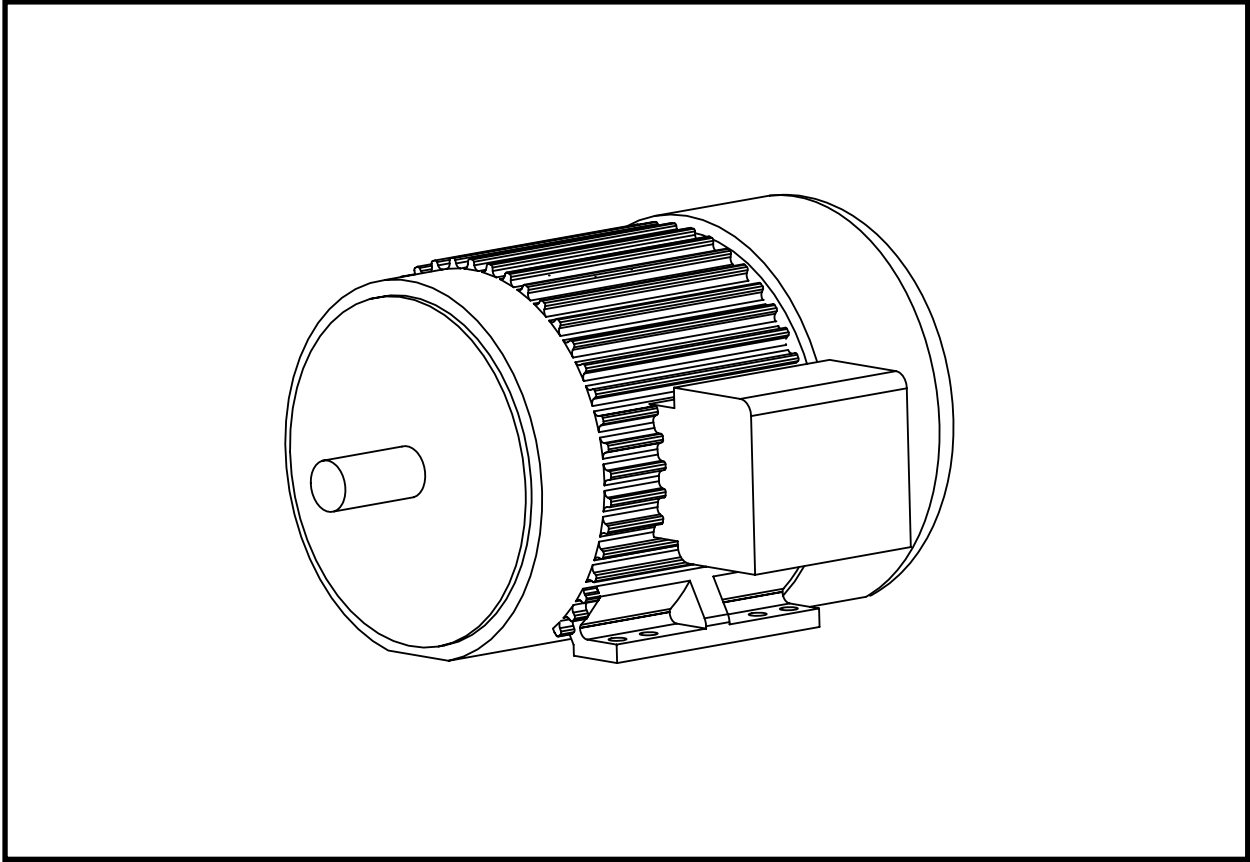
* This motor is obsolete. When replacing motor, replace with Motor, P0304-362.

JACKING 60 HP MOTOR, P0304-362
5200 PUMP UNIT (SN F27700F-16 & AFTER)



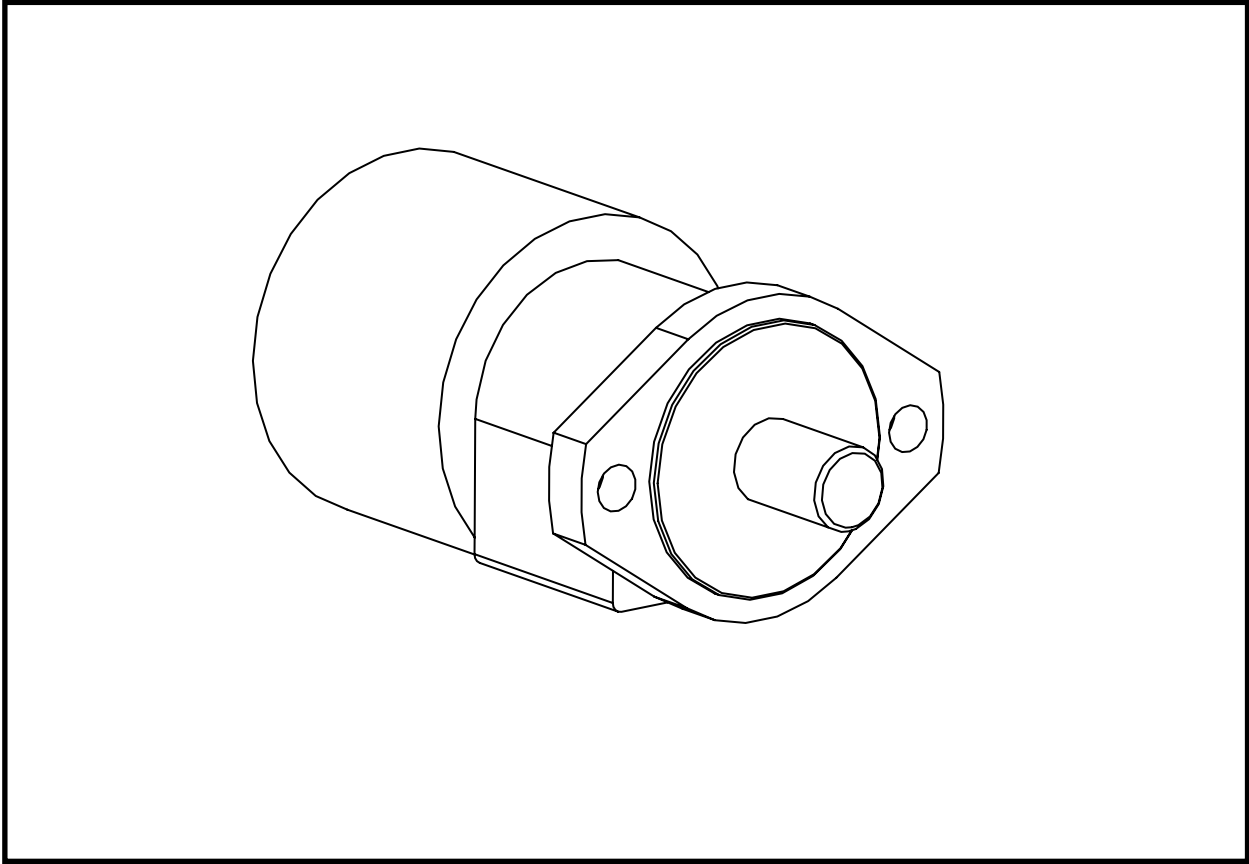
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0304-362	JACKING 60 HP MOTOR

**COOLING 5 HP MOTOR, P0304-343
5200 PUMP UNIT**



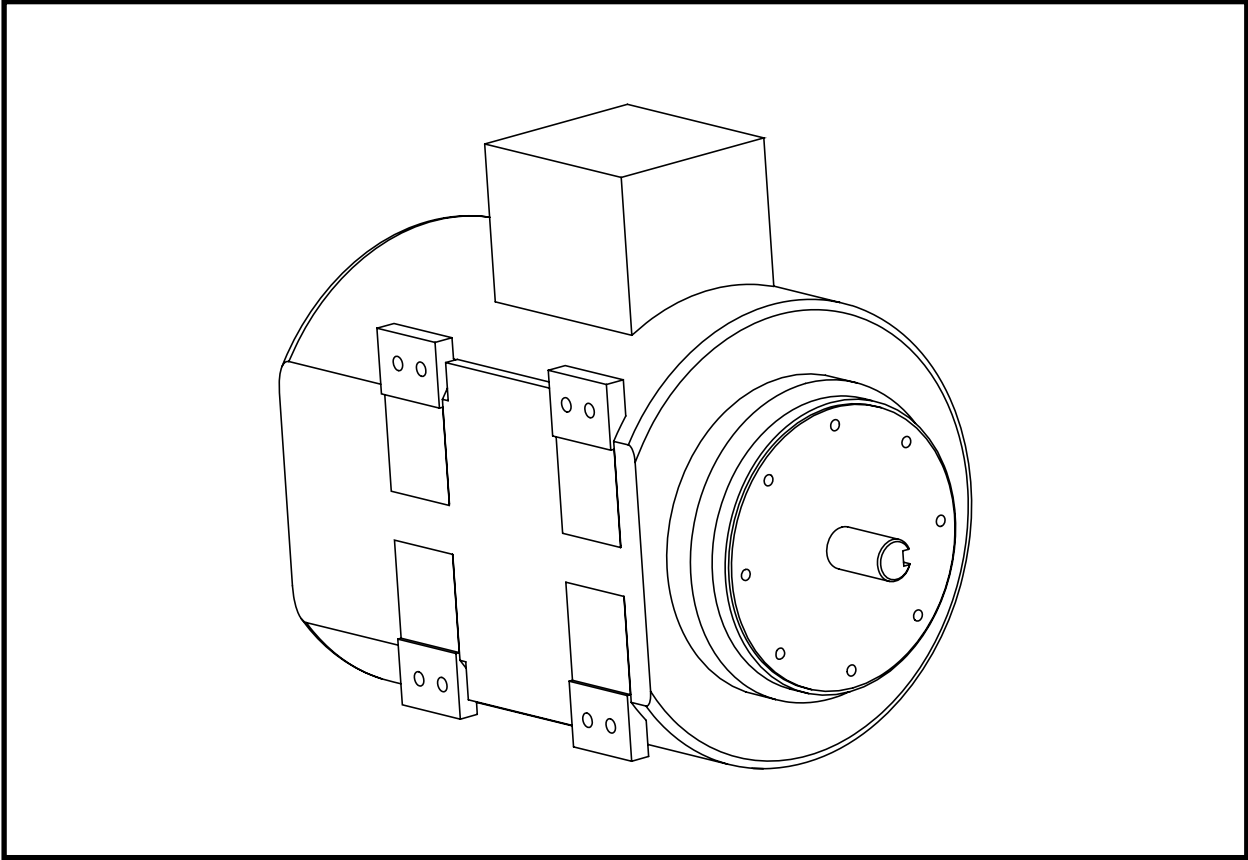
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0304-343	COOLING 5 HP MOTOR

HYDRAULIC TRAVEL MOTOR, P0304-100
5200 PUMP UNIT



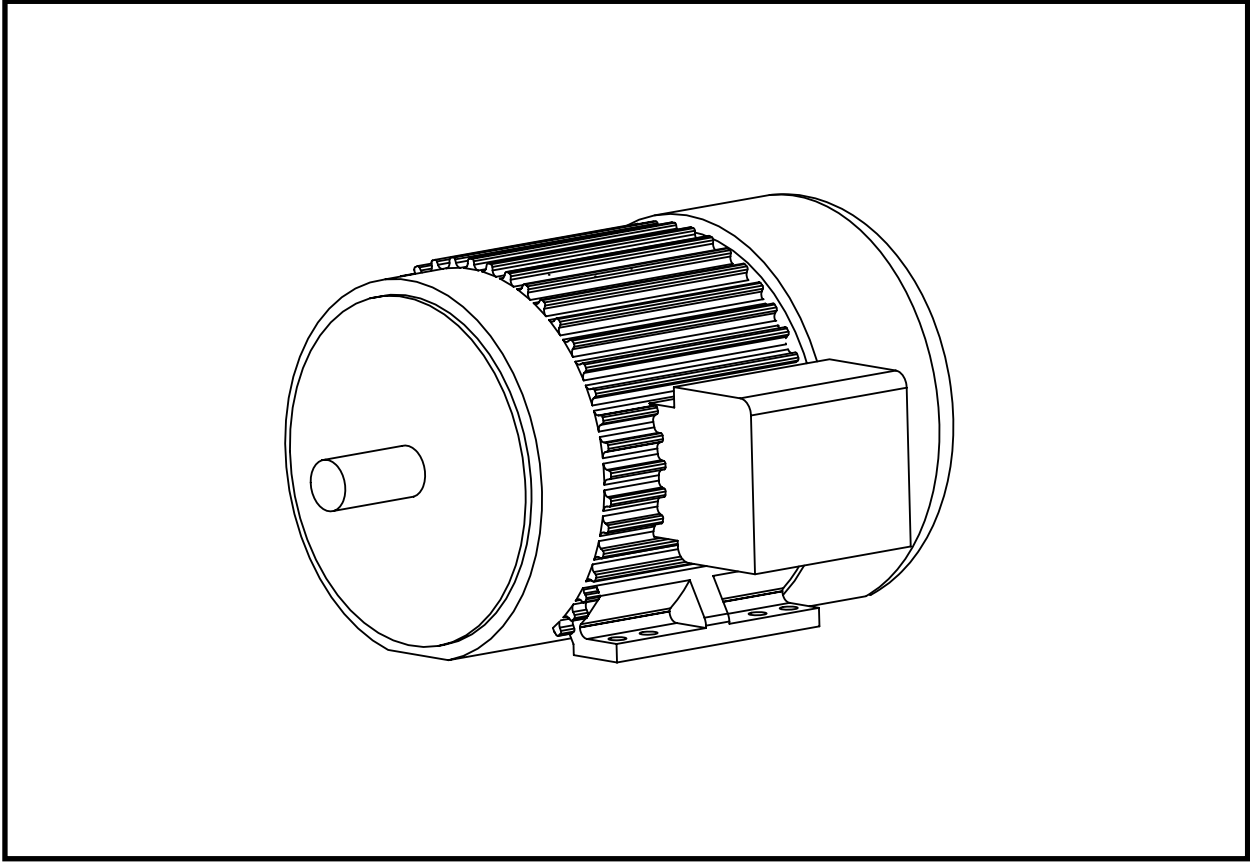
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0304-100	MOTOR, Hydraulic

200 HP AUXILIARY ELECTRIC MOTOR, P0304-345
200 HP AUXILIARY



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0304-345	200 HP AUXILIARY MOTOR

COOLING 5 HP MOTOR, P0304-343
200 HP AUXILIARY



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0304-343	COOLING 5 HP MOTOR

NOTES



Pumps

5200 Pump Unit

Pump Assembly With Amplifier, 032297A (SN F27700F-11 & Before).....	2
Pump Assembly W/O Amplifier, 032298A (SN F27700F-12 & After).....	3

Jacking Pump, P0303-227 (SN F27700F-18 & Before).....	4
Jacking Pump, P0303-878 (SN F27700F-19 & After).....	5

Cooling Pump, P0303-389	6
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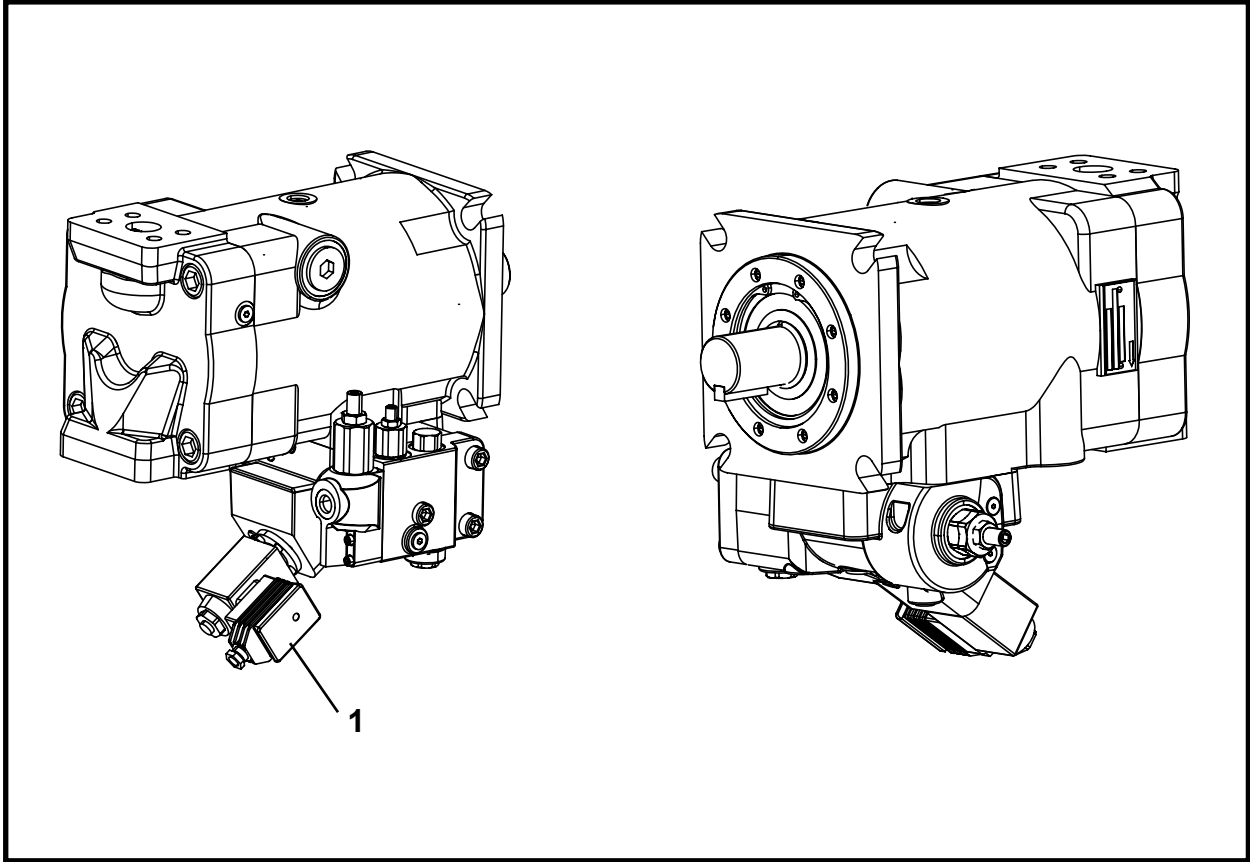
Oil Transfer Pump, P0303-363	7
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200 HP Auxiliary

200 HP Auxiliary Pump, P0303-348	8
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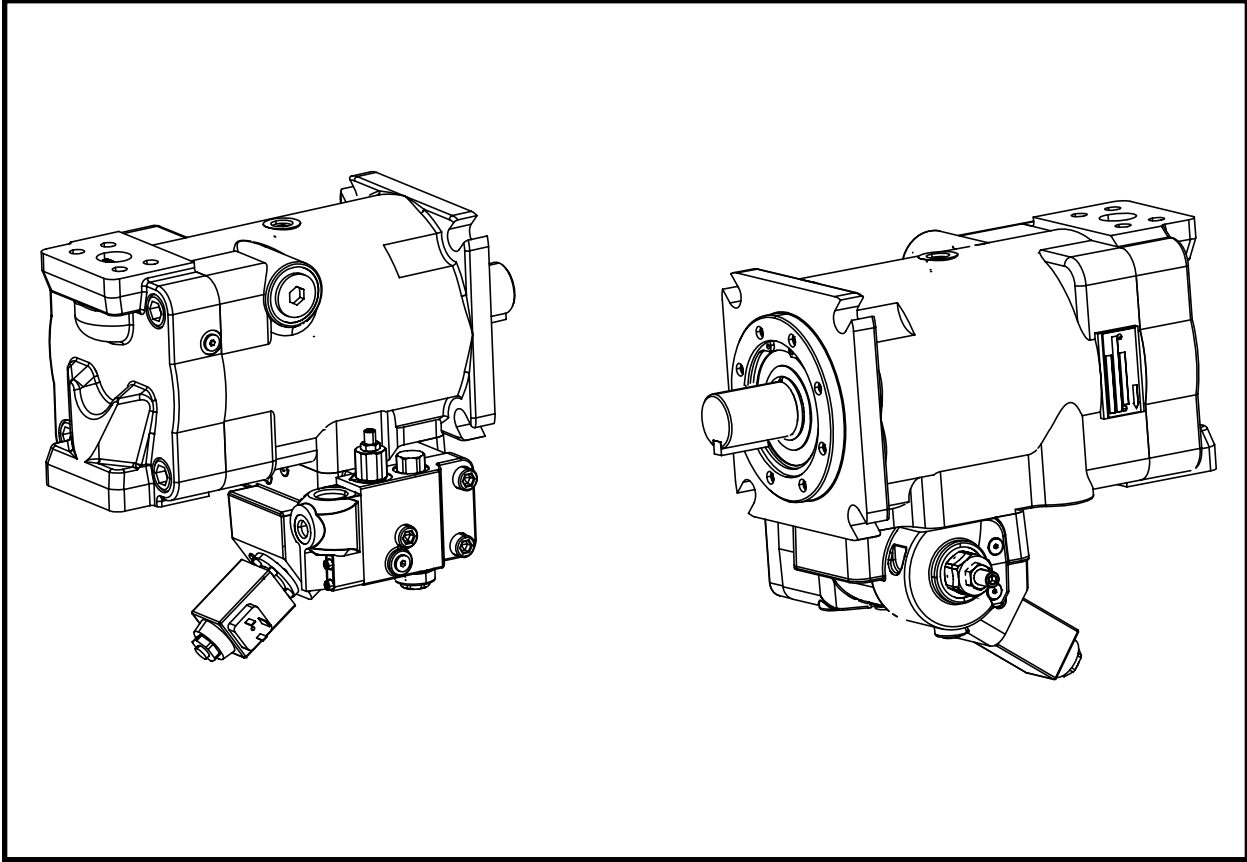
Cooling Pump, P0303-398	9
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PUMP ASSEMBLY WITH AMPLIFIER, 032297A
5200 PUMP UNIT (SN F27700F-11 & BEFORE)



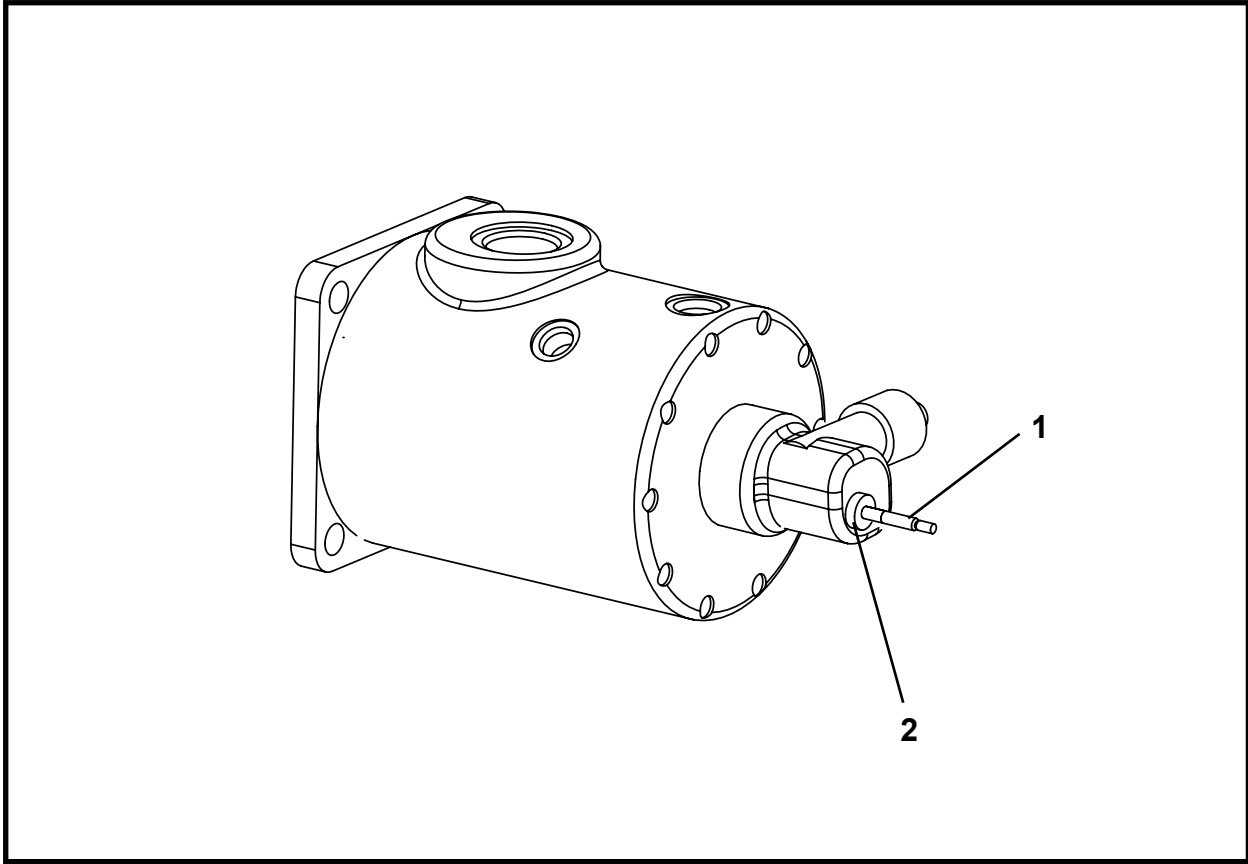
ITEM	QTY	PART NO.	DESCRIPTION
0	1	032297A	PUMP ASSEMBLY WITH AMPLIFIER
1	1	P0303-387A	AMPLIFIER

PUMP ASSEMBLY W/O AMPLIFIER, 032298A
5200 PUMP UNIT (SN F27700F-12 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	032298A	PUMP ASSEMBLY W/O AMPLIFIER

JACKING PUMP, P0303-227
5200 PUMP UNIT (SN F27700F-18 & BEFORE)

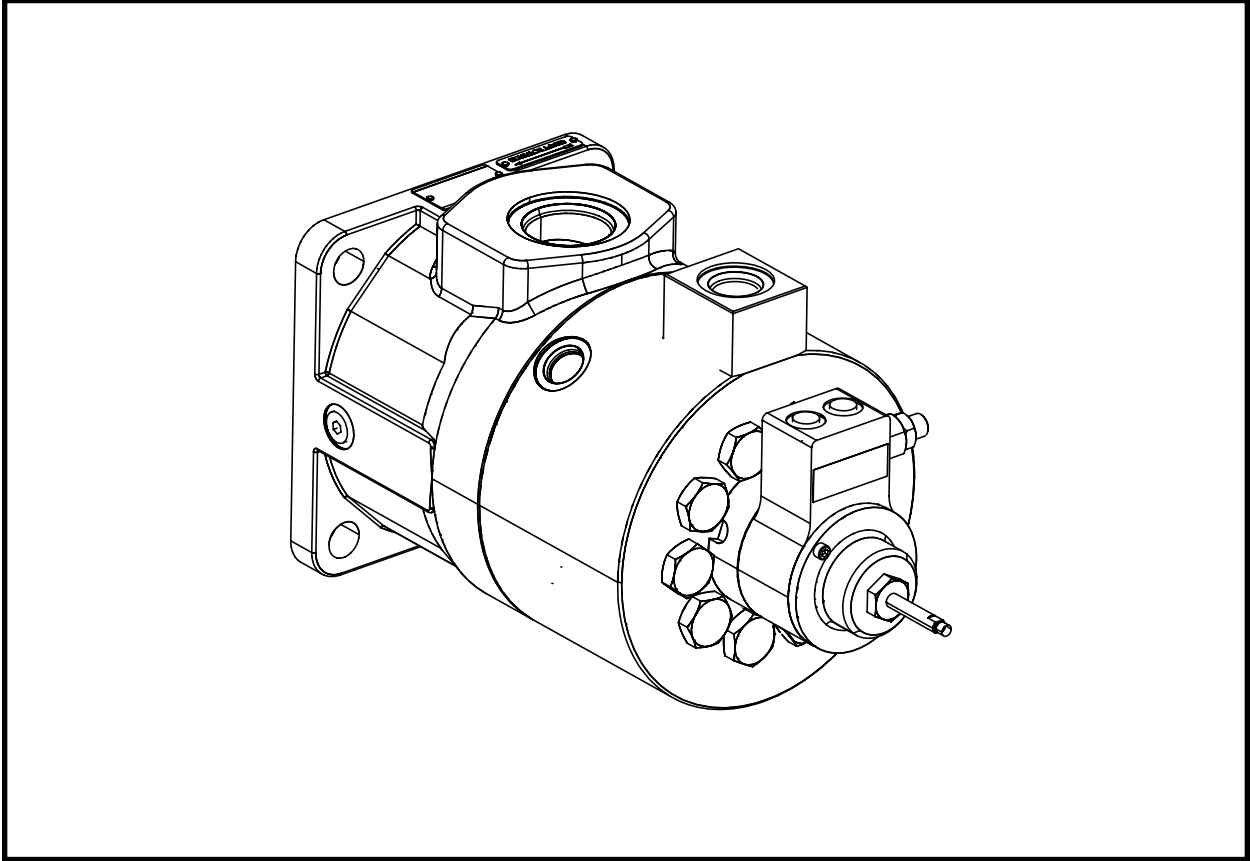


ITEM	QTY	PART NO.	DESCRIPTION
0*	1	P0303-227	JACKING PUMP
1	1	P0303-227A	STEM
2	1	P0303-227B	NUT
3**	1	P0303-227C	KIT, HP Shaft Seal
4**	1	P0303-227D	SPRING

* This pump is obsolete. When replacing pump, you must replace with Pump P0303-878 AND Stroker 032797A.

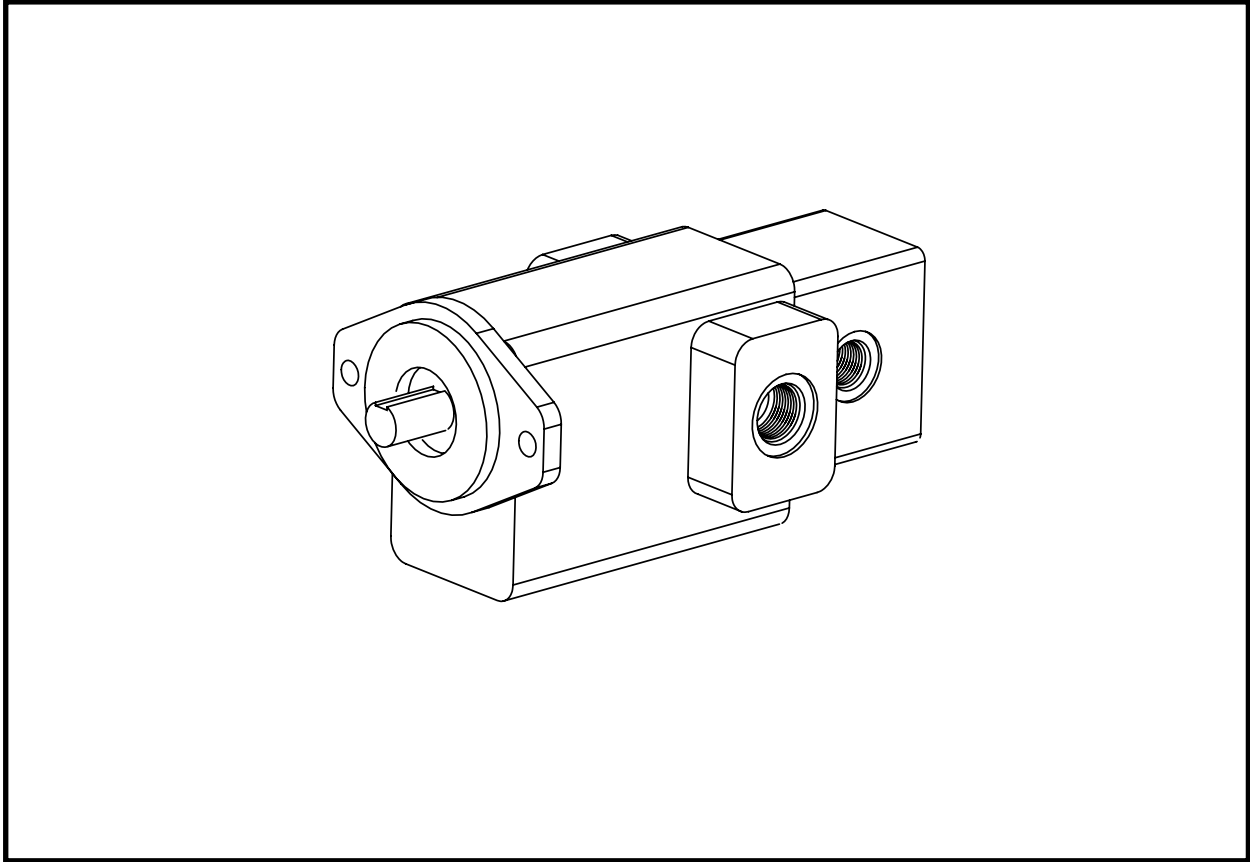
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JACKING PUMP, P0303-878
5200 PUMP UNIT (SN F27700F-19 & AFTER)



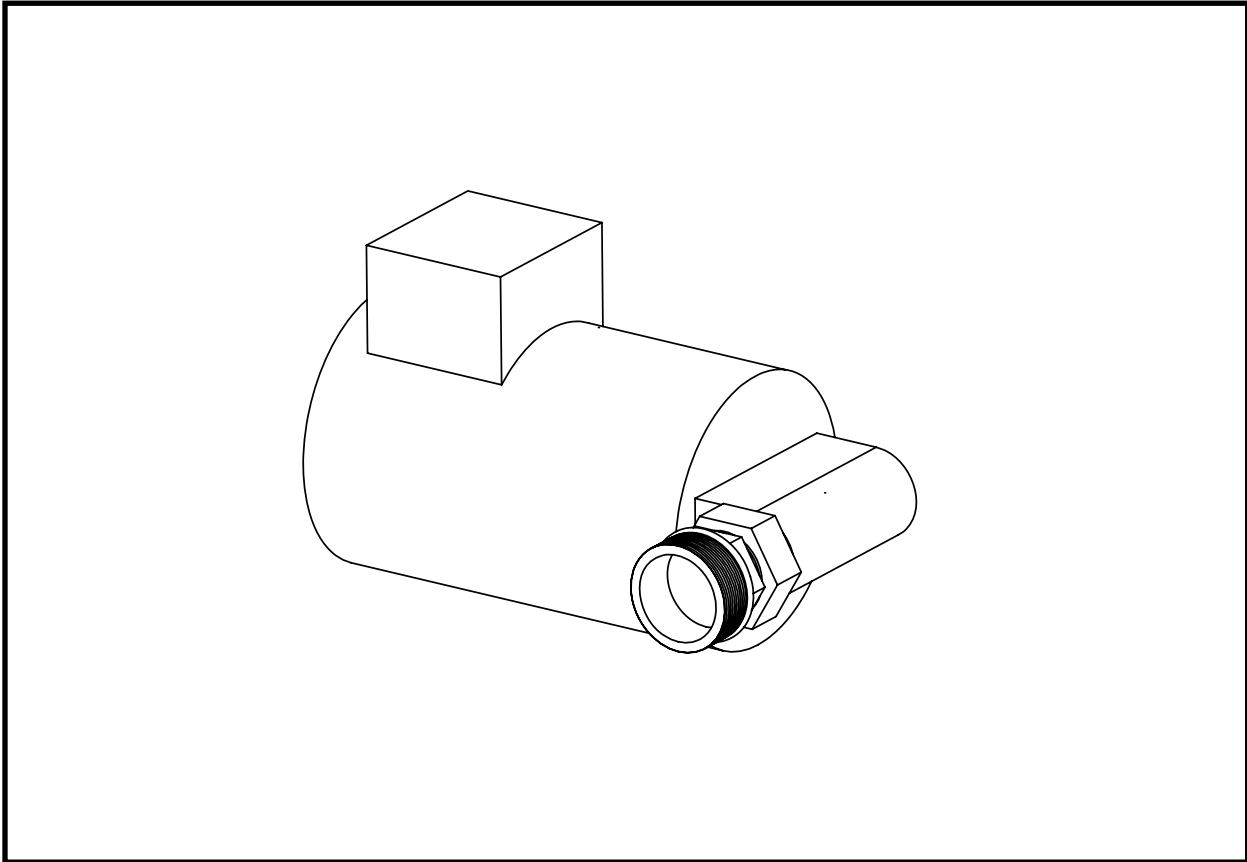
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-878	JACKING PUMP

COOLING PUMP, P0303-389
5200 PUMP UNIT



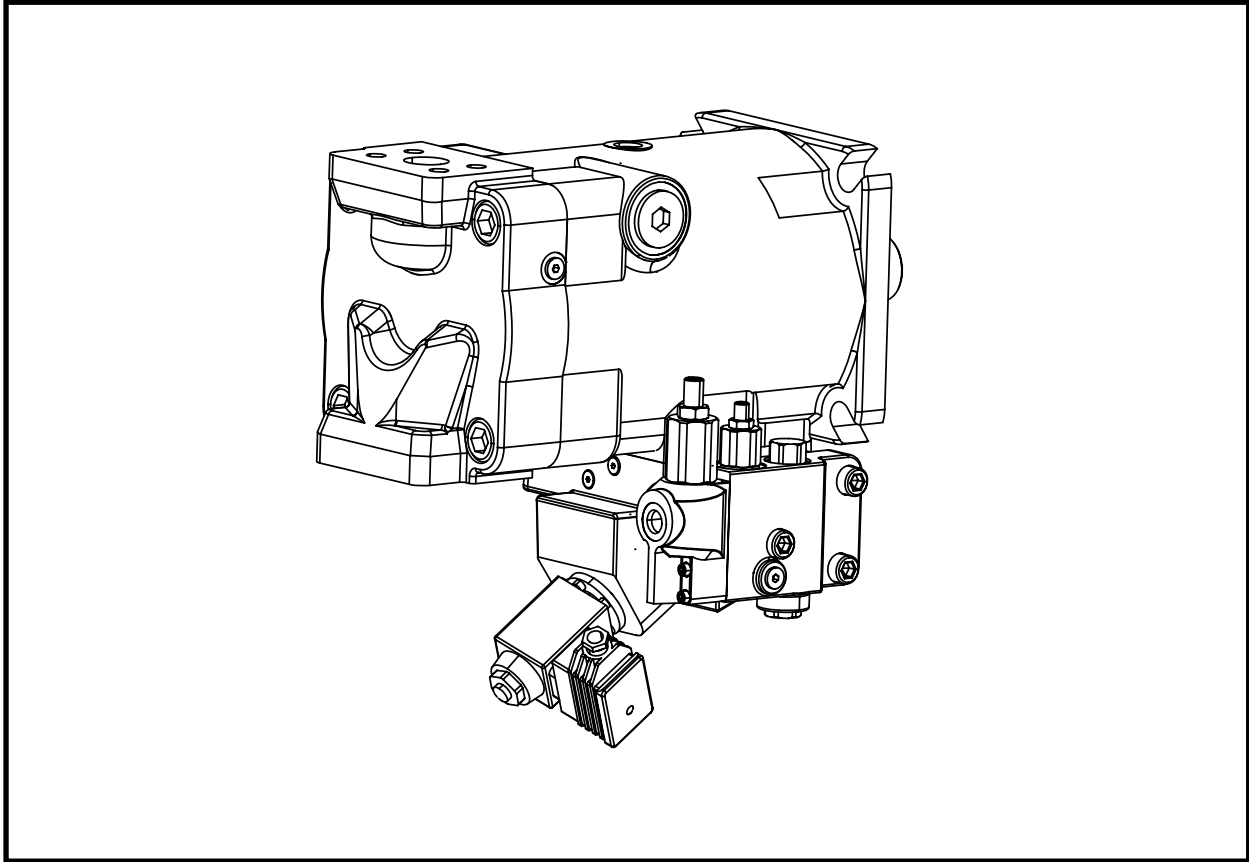
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-389	COOLING PUMP

OIL TRANSFER PUMP, P0303-363
5200 PUMP UNIT



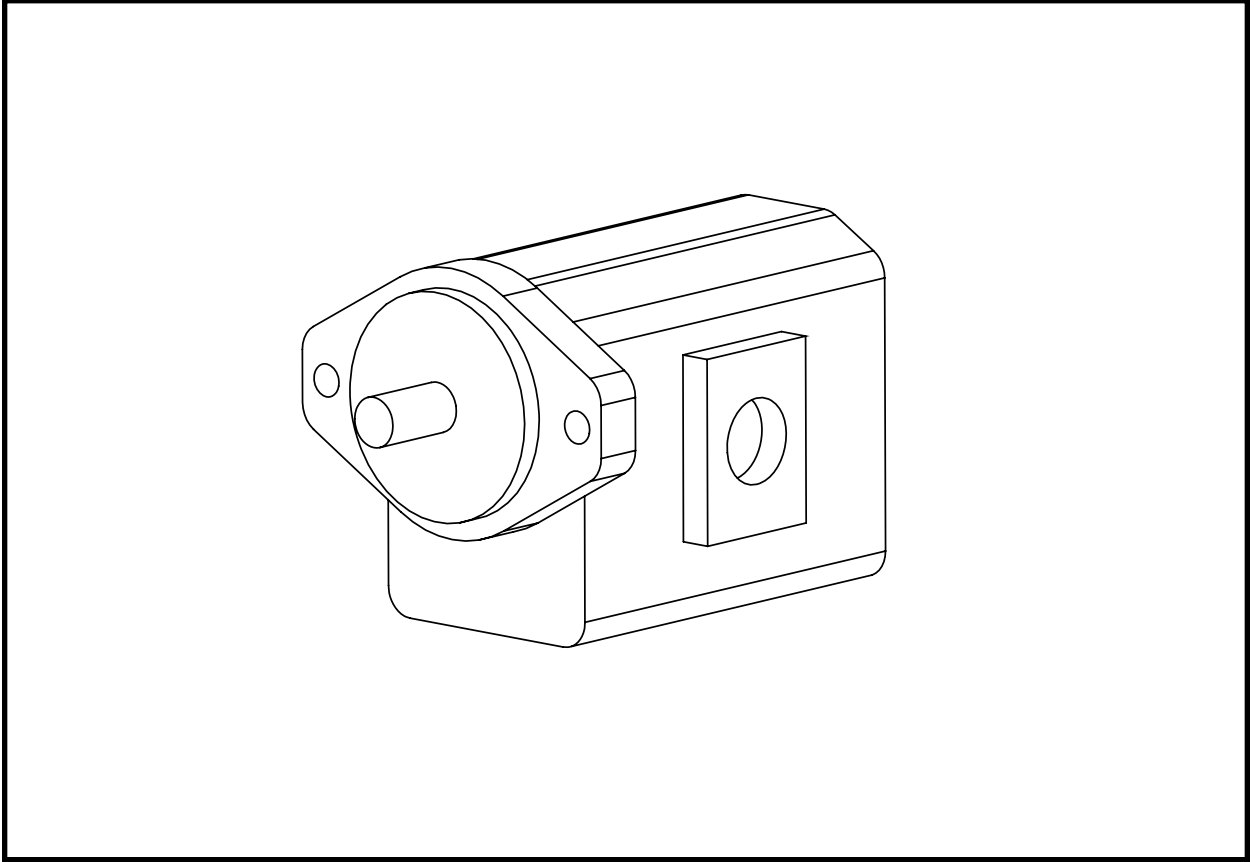
ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-363	OIL TRANSFER PUMP

200 HP AUXILIARY PUMP, P0303-348
200 HP AUXILIARY



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-348	200 HP AUXILIARY PUMP

COOLING PUMP, P0303-398
200 HP AUXILIARY



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-398	COOLING PUMP

NOTES

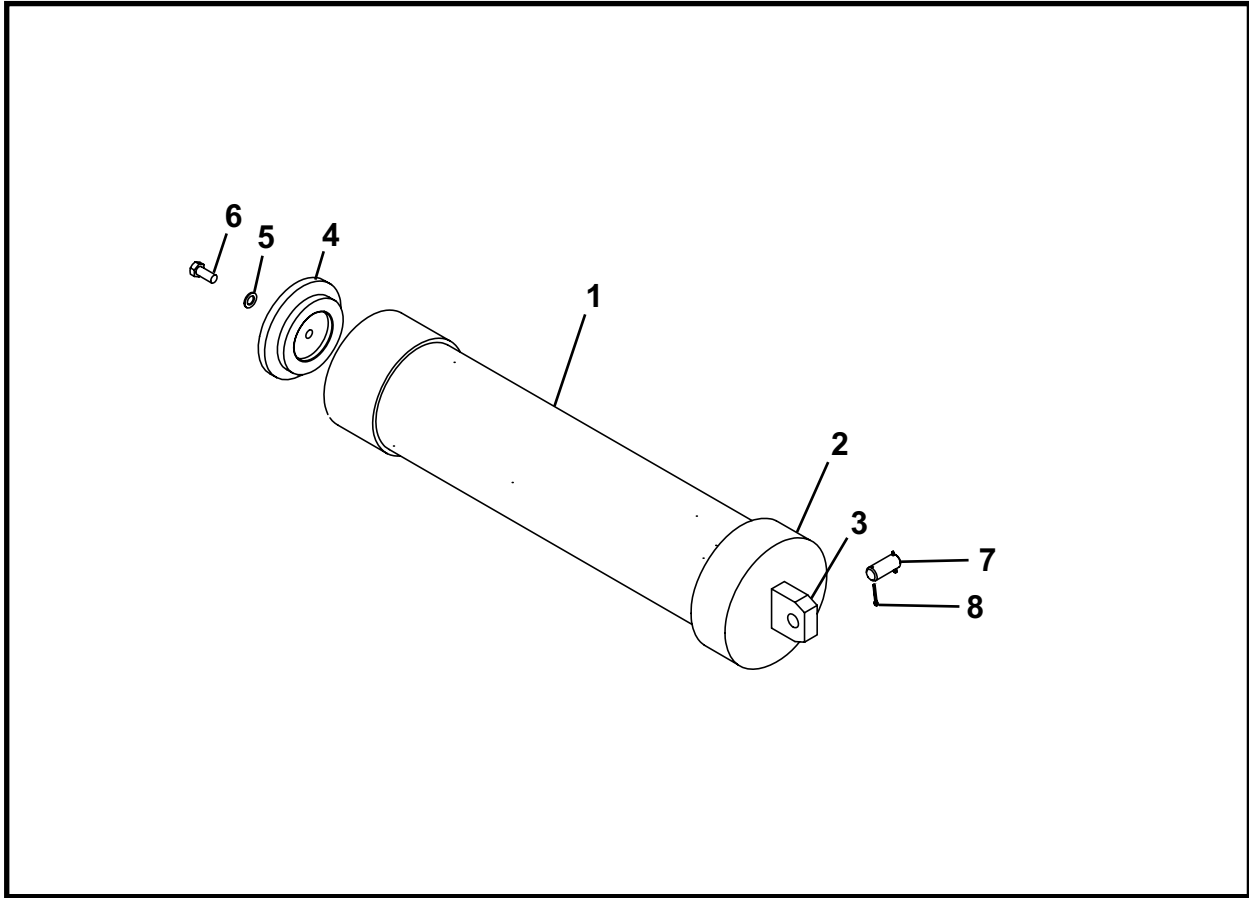


Cylinders

5200 Pump Unit

Extended Cylinder Assembly, 027818A	2
200 Ton Cylinder Ram Assembly, 016311A	3
Ram Lift Cylinder Assembly, 006011A02	4
Skid Lock Latching (Dogging) Cylinder Assembly, P0307-216	5

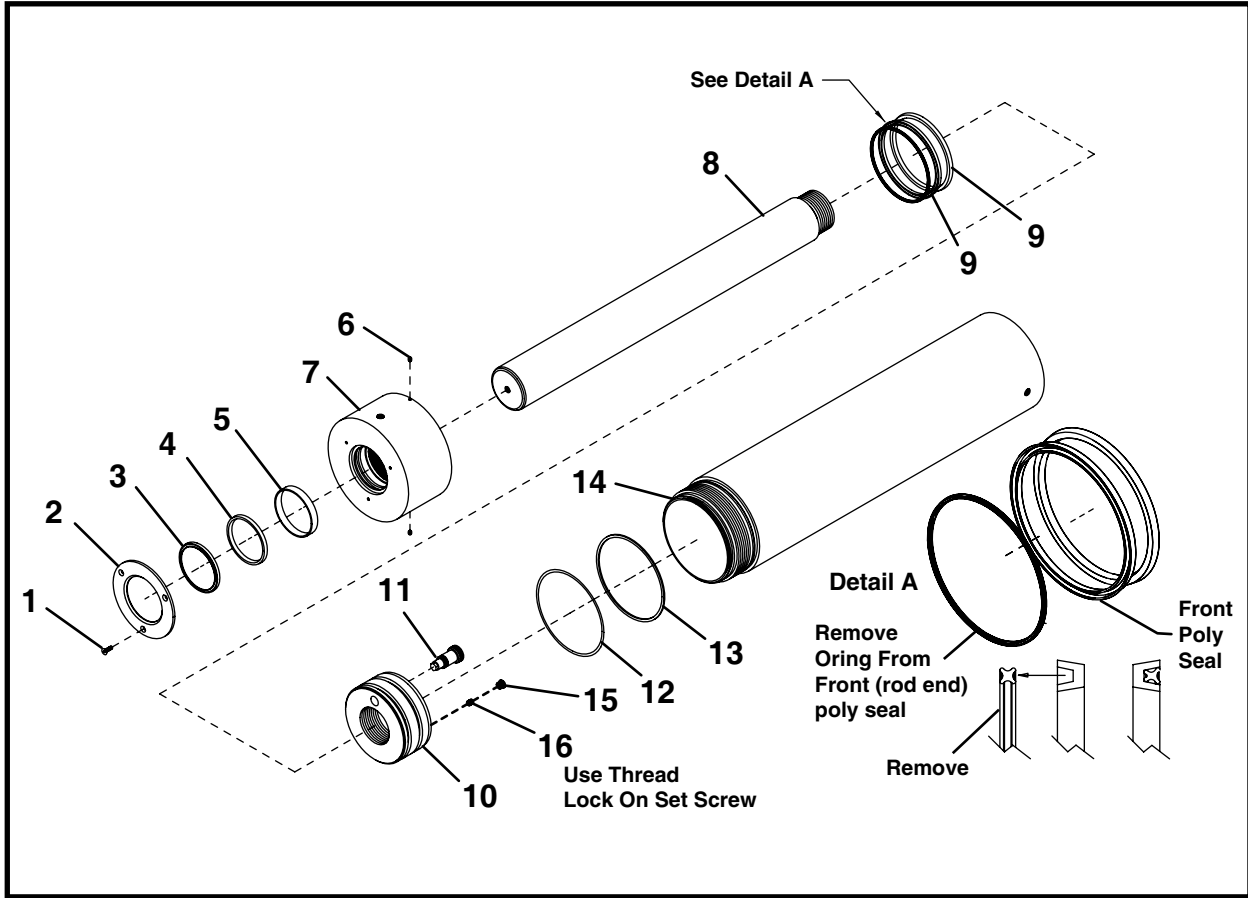
**EXTENDED CYLINDER ASSEMBLY, 027818A
5200 PUMP UNIT**



ITEM	QTY	PART NO.	DESCRIPTION
0	1	027818A	ASSEMBLY, Extended Cylinder
1*	1	016311A	ASSEMBLY, 200 Ton Cylinder Ram
2	1	027828P	PLATE, Round
3	1	020315P	PLATE, Cylinder Mounting
4	1	002923P00	CAP
5	1	P0040-012	WASHER, Hardened Flat 3/4
6	1	P0001-12-007	BOLT, Hex 3/4 UNC x 1.75
7	1	020314P	PIN, 1.25 x 3.00
8	2	P0048-035	PIN, Cotter 5/32 x 1.5

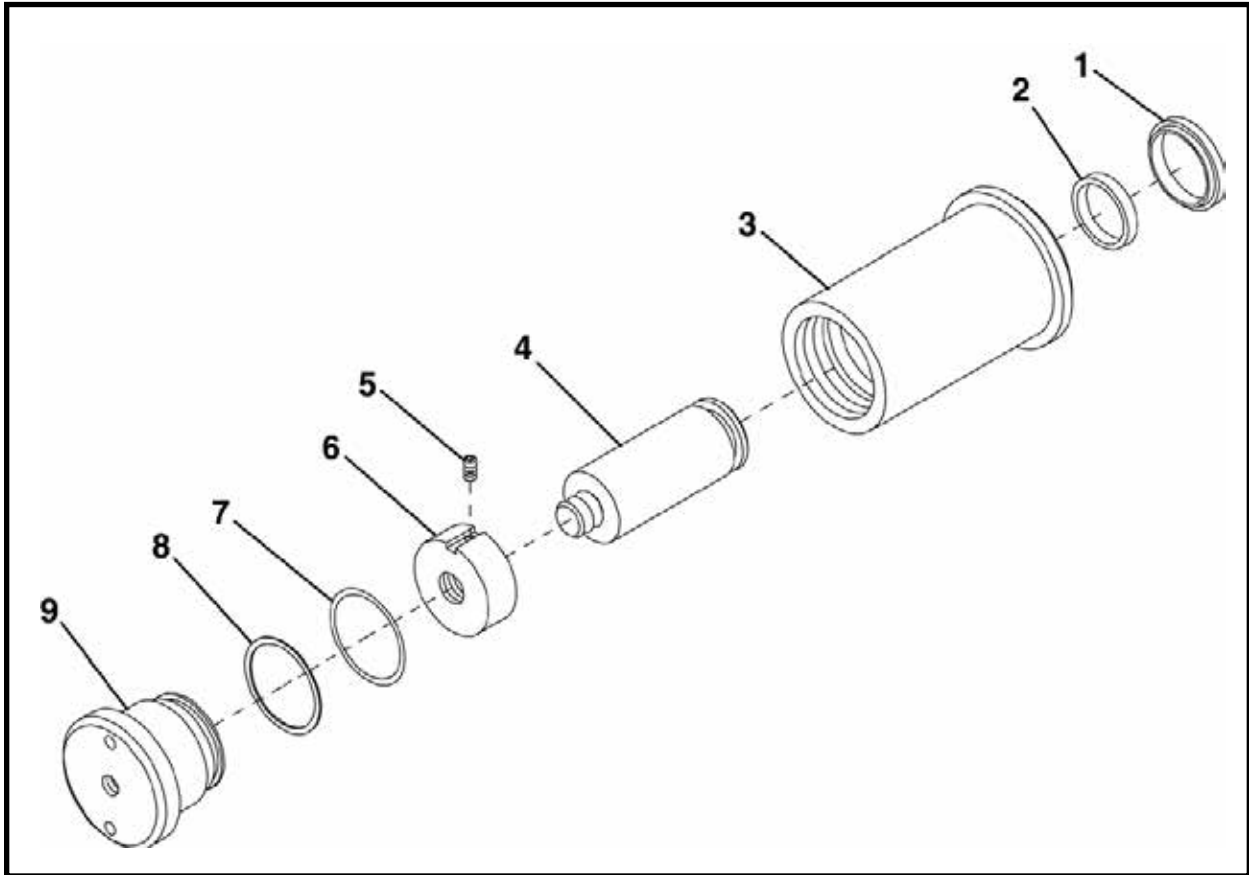
* Refer to this section for parts information.

**CYLINDER RAM ASSEMBLY, 200 TON, 016311A
5200 PUMP UNIT**



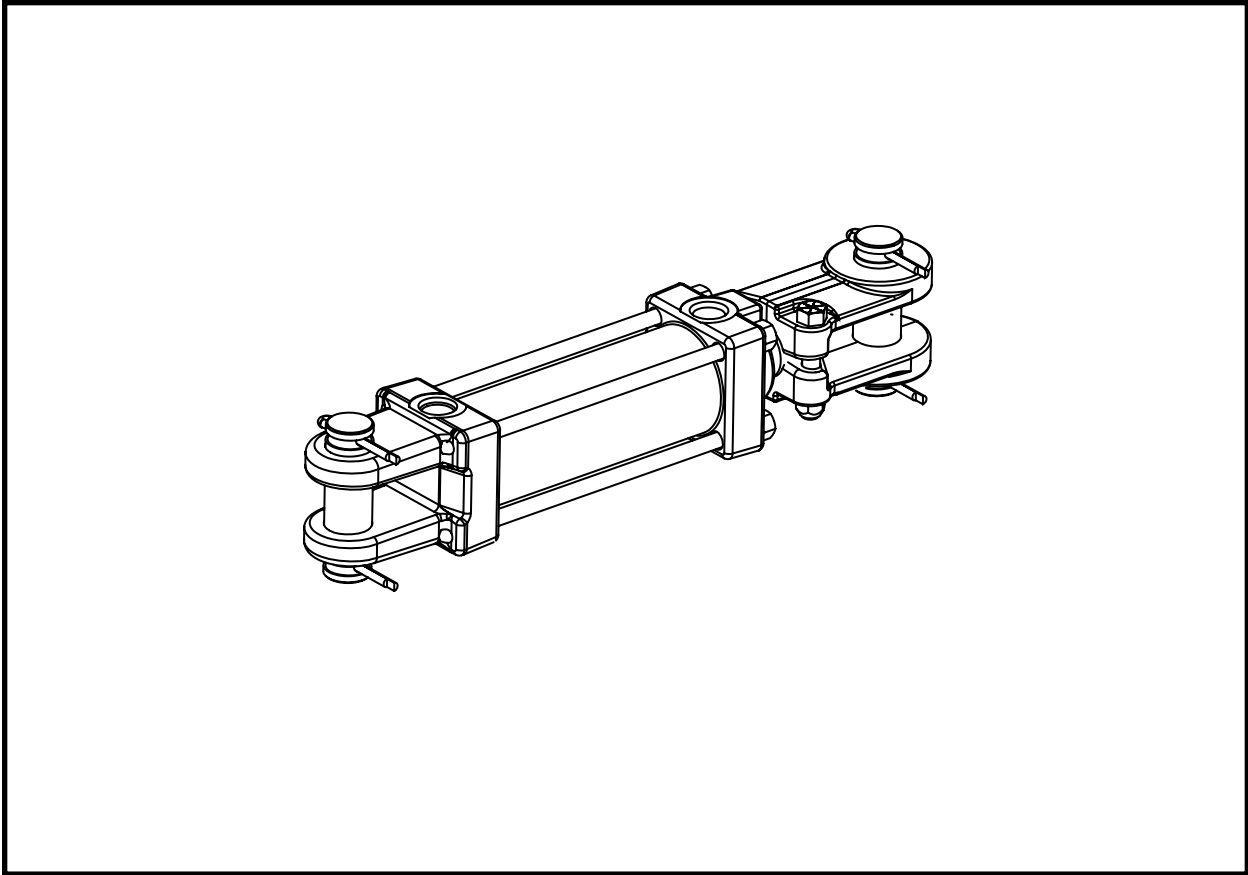
ITEM	QTY	PART NO.	DESCRIPTION
0	1	016311A	200 TON CYLINDER RAM ASSEMBLY
1	3	P0030-05-004	SCREW, Flat Head Cap 5/16 UNC x 1
2	1	006252P00	PLATE, Wiper Retainer
3	1	P0080-004	RETAINER, Seal/Grease
4	1	P0086-006	POLYSEAL
5	1	P0088-001	RING, Wear
6	2	P0033-05-005	SCREW, Hex Socket Head Set 5/16 UNC x 5/16
7	1	016296P	GLAND
8	1	005105P00	SHAFT
9	2	P0086-015	POLYSEAL
10	1	005472P01	PISTON
11	1	006258A02	CARTRIDGE, Relief
12	1	P0085-446	ORING
13	1	P0084-446	RING, Back-Up
14	1	016314A	BARREL
15	1	P0300-176	FITTING, 06MB-HHP
16	1	P0033-06-008	SCREW, Hex Socket Head Set 3/8 UNC x .5

RAM LIFT CYLINDER ASSEMBLY, 006011A02
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	006011A02	RAM LIFT CYLINDER ASSEMBLY
1	1	P0087-002	WIPER
2	1	P0086-002	POLYSEAL
3	1	006015P01	BARREL
4	1	006012P02	ROD
5	1	P0033-04-008	SET SCREW, Socket Head, 1/4 UNC x .5
6	1	008279P00	PISTON
7	1	P0085-224	O-RING
8	1	P0084-224	BACKUP RING
9	1	006248P00	BASE

SKID LOCK LATCHING (DOGGING) CYLINDER ASSEMBLY, P0307-216
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0307-216	SKID LOCK LATCHING (Dogging) CYLINDER ASSEMBLY

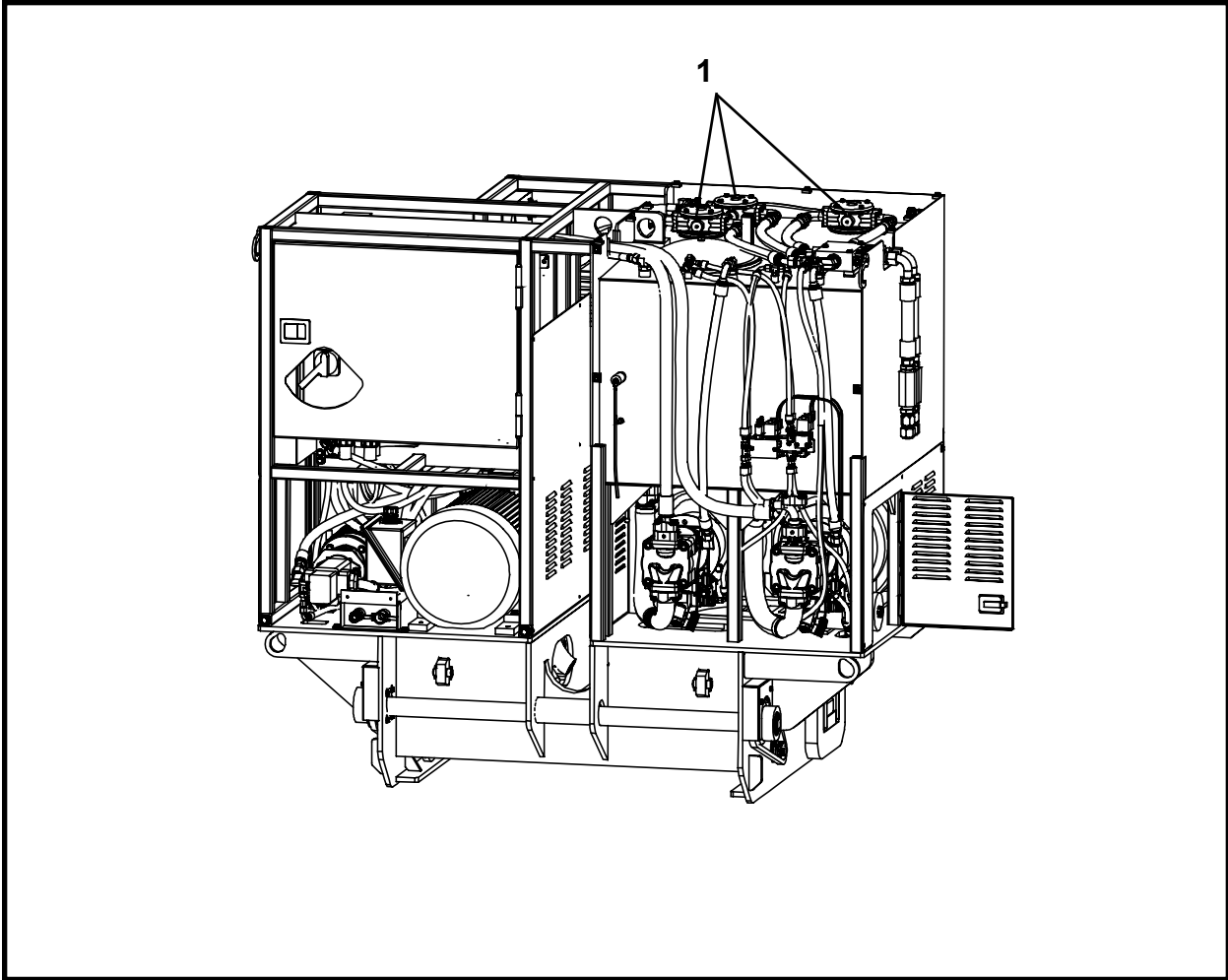
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FILTERS
5200 PUMP UNIT



ITEM	QTY	PART NO.	DESCRIPTION
1	3	P0309-212A	ELEMENT, Filter



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