PARTS MANUAL

Guided Boring Machine

4812A S/N: FA40034F
Power Pack SN: P275T (FA40033F) & P150Q (FA40035F)
Powered Cutter Head SN: PCH 20 (FA43100F),
PCH 22.5 (FA42850F), PCH 28.5 (FA43000F),
PCH 36 (FA44400F) & PCH 44 (FA43400F)

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SERVICE • RELIABILITY • INNOVATION

Introduction

This parts manual contains assembly illustrations of the Akkerman 4812A Guided Boring Machine (GBM), P275T Power Pack, P150Q Power Pack and Powered Cutter Heads. 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 GBM consists of the 4812A jacking frame, P275T Power Pack or P150Q Power Pack, guidance system, powered cutter head (if used), and tooling.

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

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

USE GENUINE AKKERMAN PARTS
The use of parts other than genuine Akkerman parts could affect the efficient performance of the Guided Boring Machine. 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.

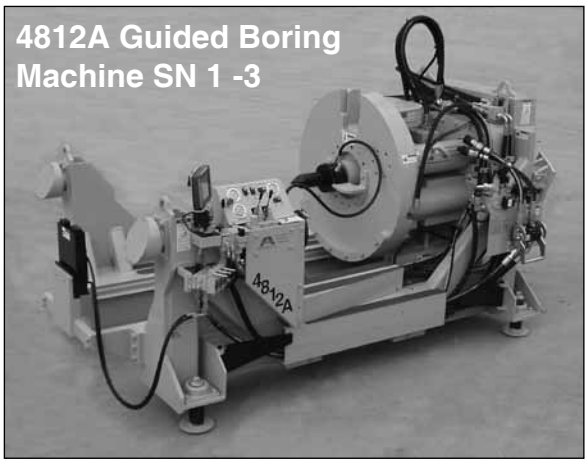
1. Model Number
2. Serial Number
3. Part Number, Description, and Quantity
4. Shipping Preference

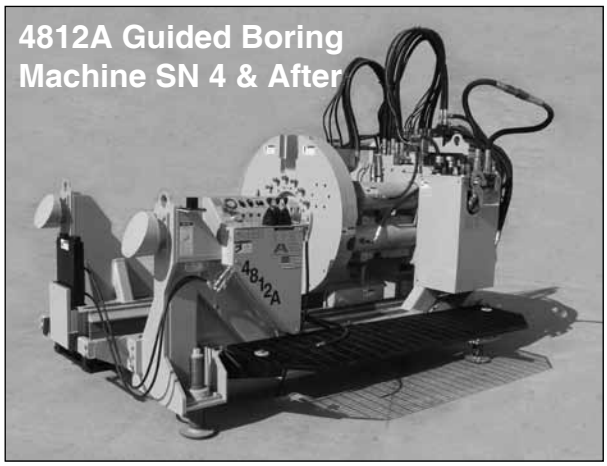
MEASUREMENTS
The unit of measure in this manual is in inches unless indicated otherwise.

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.





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NOTES

General Information

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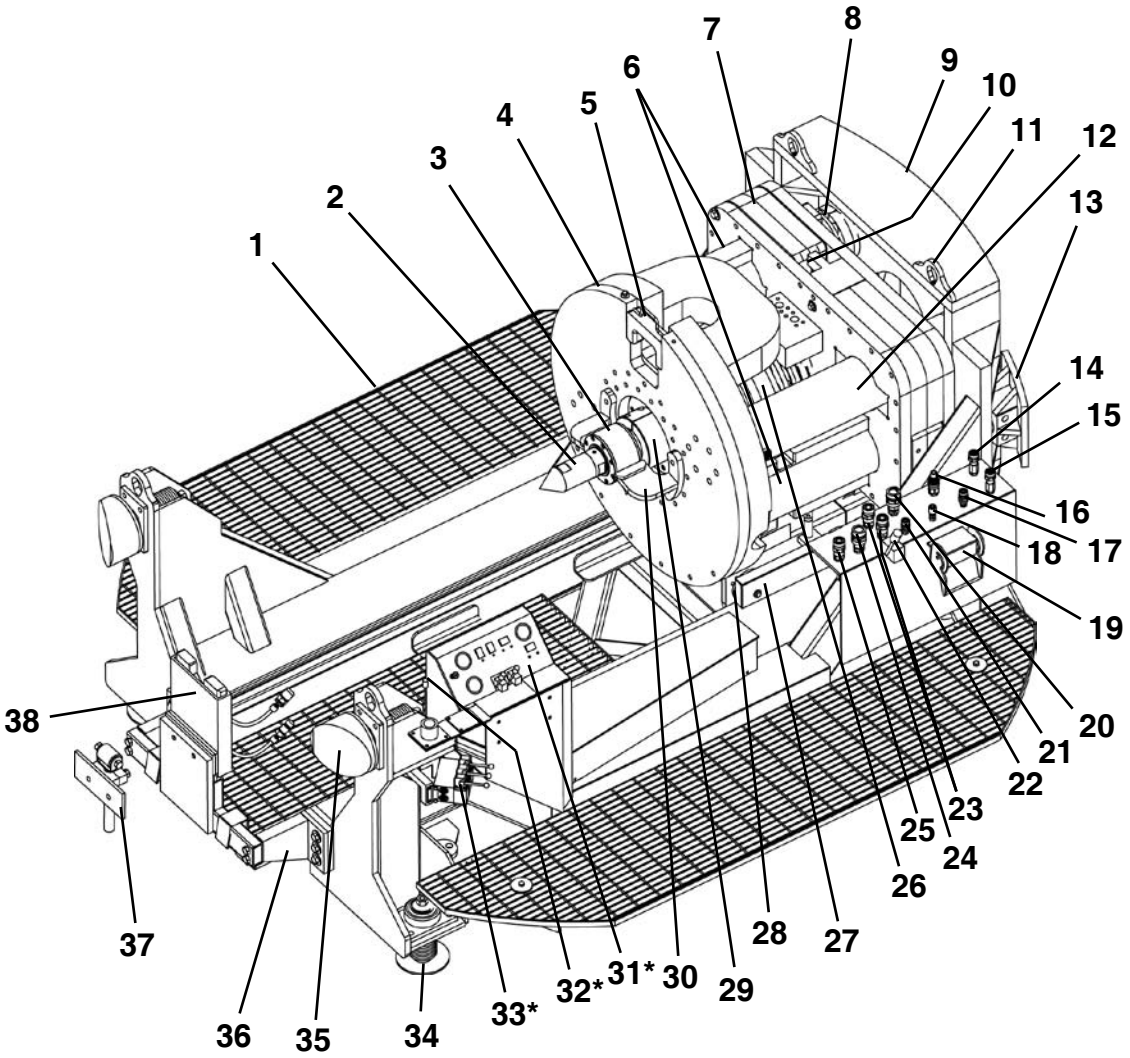
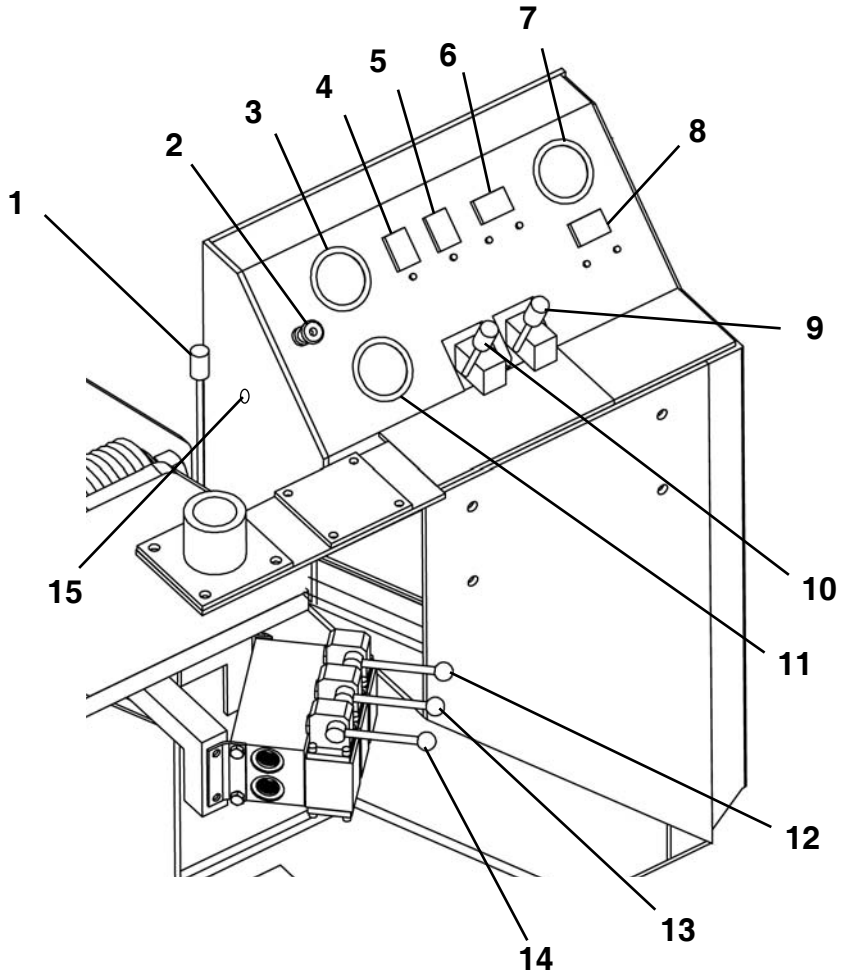
GBM 4812A JACKING FRAME (SN FA40034F-1 THRU 3)



1. Operator Platform
2. Alignment Guide Rod
3. Fluid Swivel
4. Push Plate (Thrust Block)
5. Ring Segment
6. Thrust Cylinder - Keyed
7. Rabbit Assembly
8. Cylinder Retainer
9. Frame Assembly
10. Latching Indicator
11. Lifting Eye
12. Thrust Cylinder - Fixed
13. Rear Push Pad
14. Jacking Pressure QD
15. Jacking Load Sense QD
16. Drive Rotation/PCH Auger Drive Pressure IN QD
17. Case Drain QD
18. Rotational Load Sense QD
19. PCH Auger Drive QD
20. Tank QD
21. Cutter Head Load Sense QD
22. Power Cutter Head Rotation Control
23. Cutter Head Control QD
24. Tank QD
25. Cutter Head Pressure IN QD
26. Auger Drive Motor
27. Wheel Guard
28. Wheel
29. Pullback Coupler
30. Swivel Support
31. Control Console*
32. Thrust Cylinder Control*
33. Control Valve Bank*
34. Leveling Assembly
35. Front Anchor Block
36. Rail Extension
37. Casing Support
38. Make Up Tool

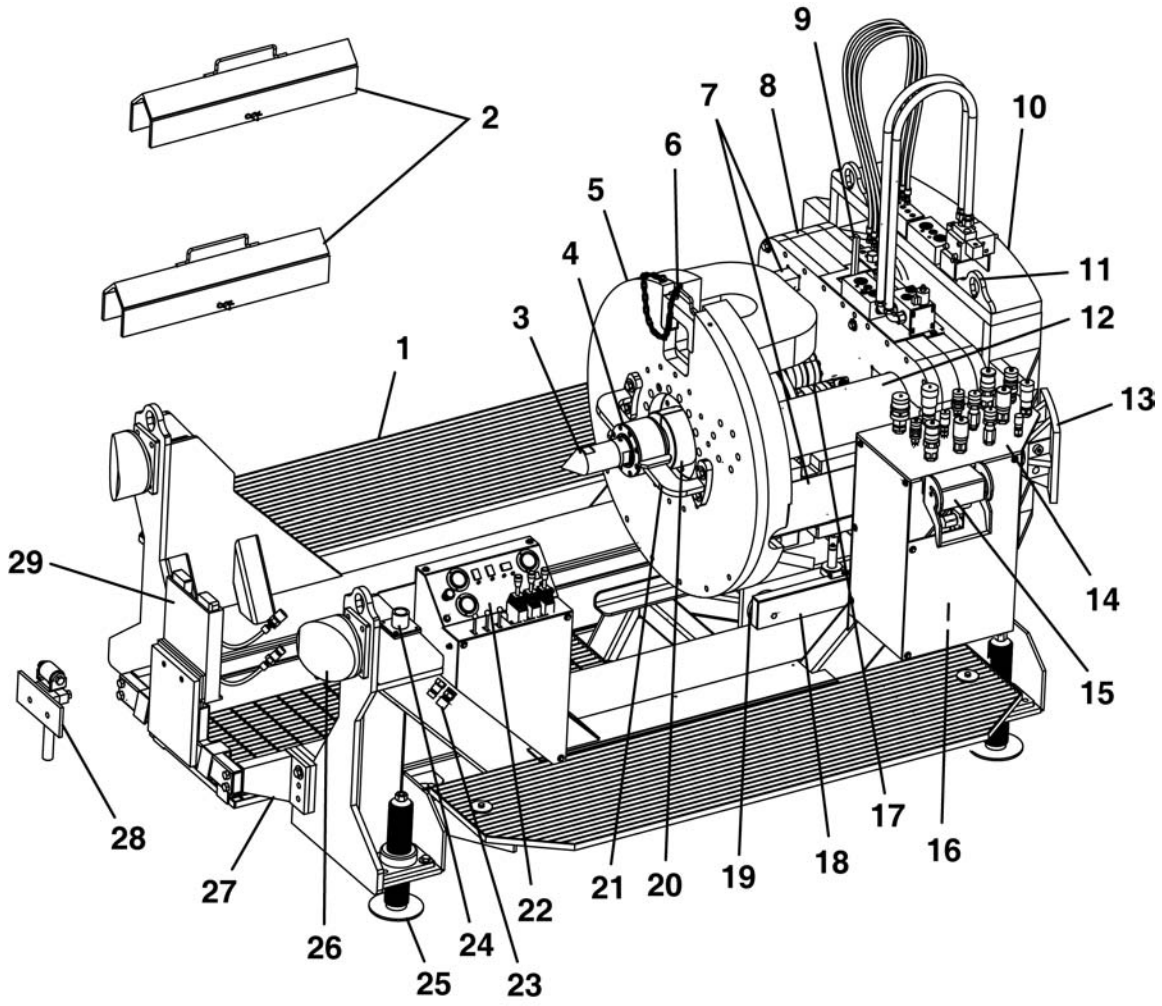
* For control identification, refer to GBM 4812A Controls (SN1 - 3) in this section.
QD - Quick Disconnect

GBM 4812A CONTROLS (SN FA40034F-1 THRU 3)



1. Thrust Cylinder Control
2. Control Panel Shutdown
3. Jacking Pressure Gauge
4. Jacking Speed Switch
5. Rotation Pressure Switch
6. PCH Auger Drive Switch
7. PCH Cutter Drive Pressure Gauge
8. PCH Cutter Drive Switch
9. PCH Auger Control
10. Drive Rotation Control
11. Drive Rotation/PCH Auger Drive
12. Hydraulic Latching Control
13. Push Plate Brake Control
14. Make Up Tool Control
15. Control Panel Power Supply 12 VDC

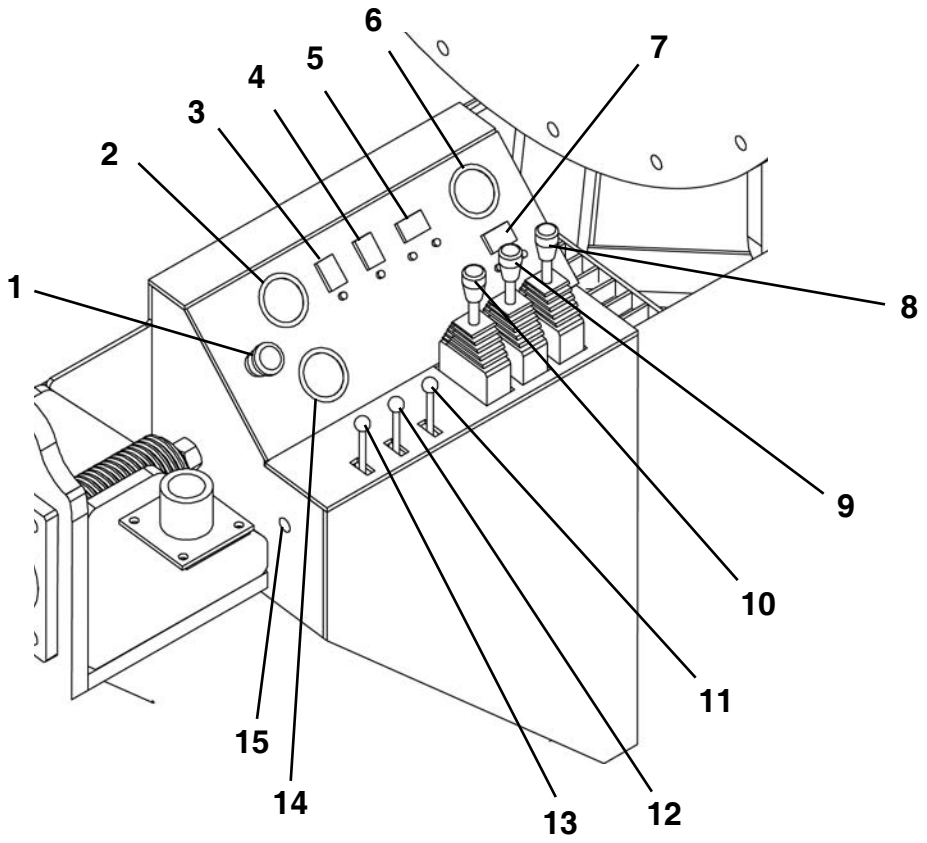
GBM 4812A JACKING FRAME (SN FA40034F-4 & AFTER)



1. Operator Platform
2. Cylinder Stops
3. Alignment Guide Rod
4. Fluid Drive Swivel Adapter
5. Push Plate (Thrust Block)
6. Handled Ring Segment
7. Thrust Cylinder - Keyed
8. Rabbit Assembly
9. Latching Indicator
10. Frame Assembly
11. Lifting Eye
12. Thrust Cylinder - Fixed
13. Rear Push Pad
14. Hydraulic Console*
15. PCH Auger Drive QD
16. Power Cutter Head Rotation Control
17. Auger Drive Motors
18. Wheel Guard
19. Wheel
20. Pullback Coupler
21. Swivel Support
22. Control Console**
23. Make Up Tool Hyd. Connection
24. Tablet PC Mount
25. Leveling Assembly
26. Front Anchor Block
27. Rail Extension
28. Casing Support
29. Make Up Tool

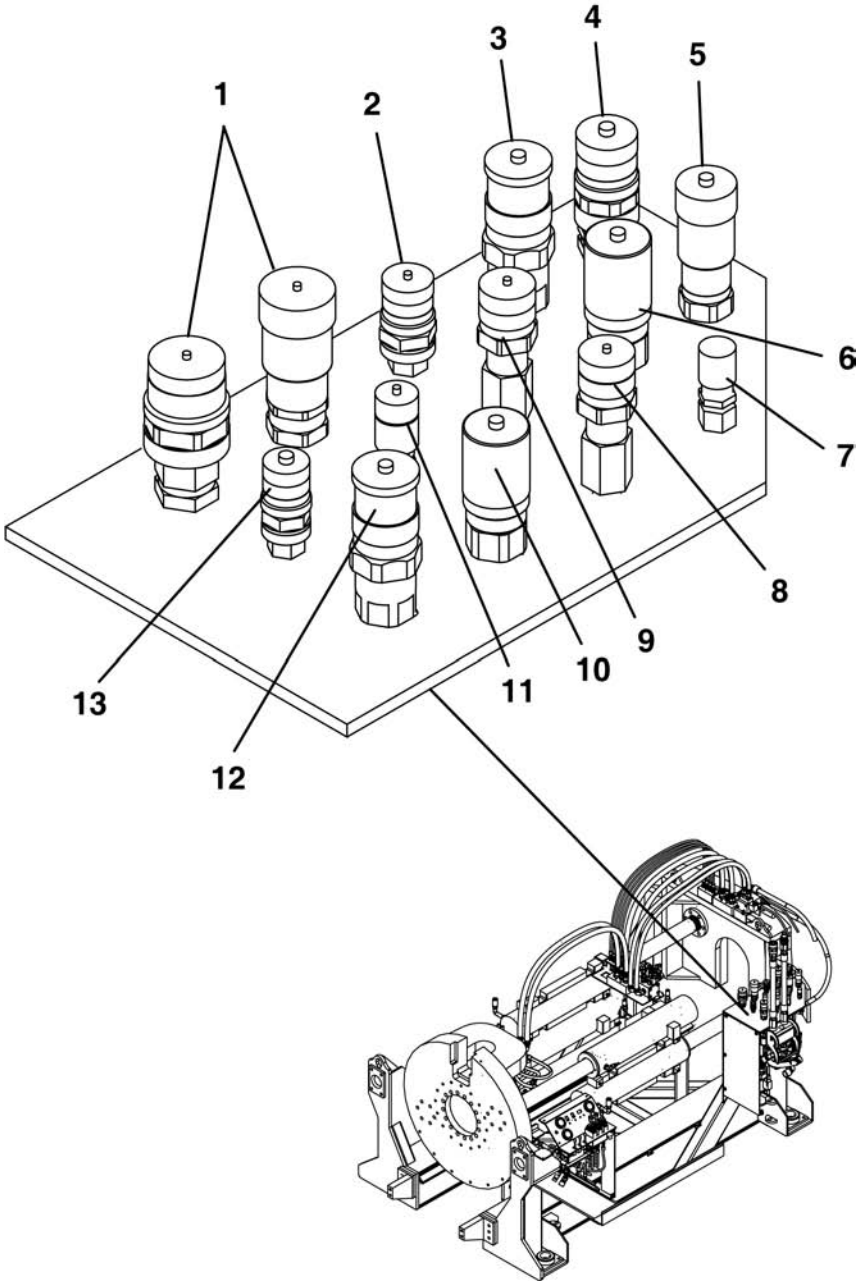
* For hydraulic console identification, refer to GBM 4812A Hydraulic Console (SN FA40034F-4 & After) in this section.
** For control console identification, refer to GBM 4812A Controls (SN FA40034F-4 & after) in this section.
QD - Quick Disconnect

GBM 4812A CONTROLS (SN FA40034F-4 & AFTER)



1. Control Panel Shutdown
2. Jacking Pressure Gauge
3. Jacking Speed Switch
4. Rotation Pressure Switch
5. PCH Auger Drive Switch
6. PCH Cutter Drive Pressure Gauge
7. PCH Cutter Drive Switch
8. PCH Auger Control
9. Drive Rotation Control
10. Thrust Cylinder Control
11. Hydraulic Latching Control
12. Push Plate Brake Control
13. Make Up Tool Control
14. Drive Rotation/PCH Auger Drive Gauge
15. Control Panel Power Supply 12 VDC

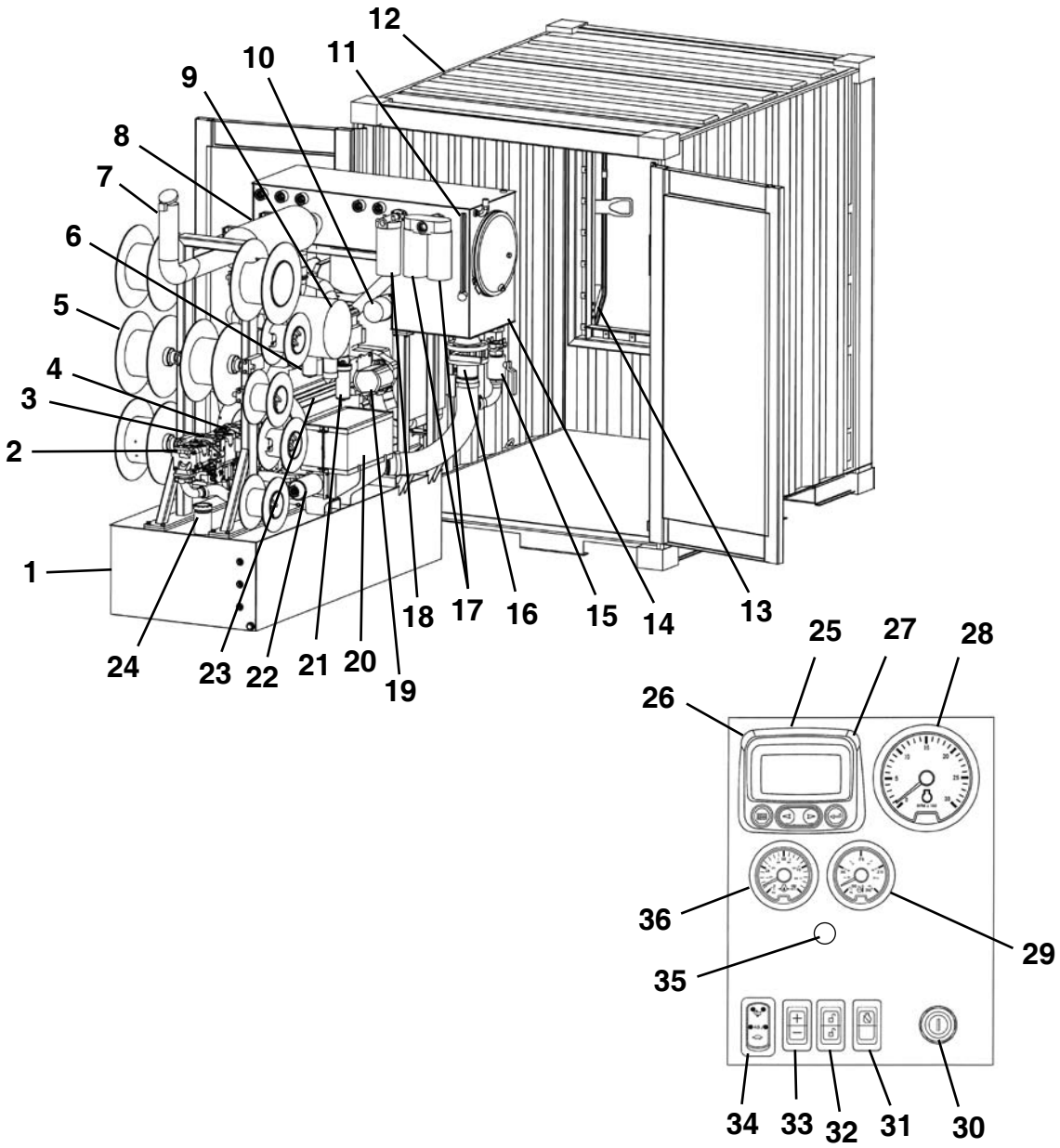
GBM 4812A HYDRAULIC CONSOLE (SN FA40034F-4 & AFTER)



1. Tank QD
2. Case Drain QD
3. Cutter Head Control QD
4. P150 Cutter Head Pressure IN QD*
5. P150 Presssure
   Drive Rotation/PCH Auger Drive QD*
6. Cutter Head Control QD
7. PCH Case Drain QD
8. Jacking Pressure QD
9. Jacking Load Sense QD
10. P275 Pressure IN
    Drive Rotation/PCH Auger Drive QD
11. Rotational Load Sense QD
12. P275 Cutter Head Pressure IN QD
13. Cutter Head Load Sense QD

* 4812A SN 5 & After
QD - Quick Disconnect

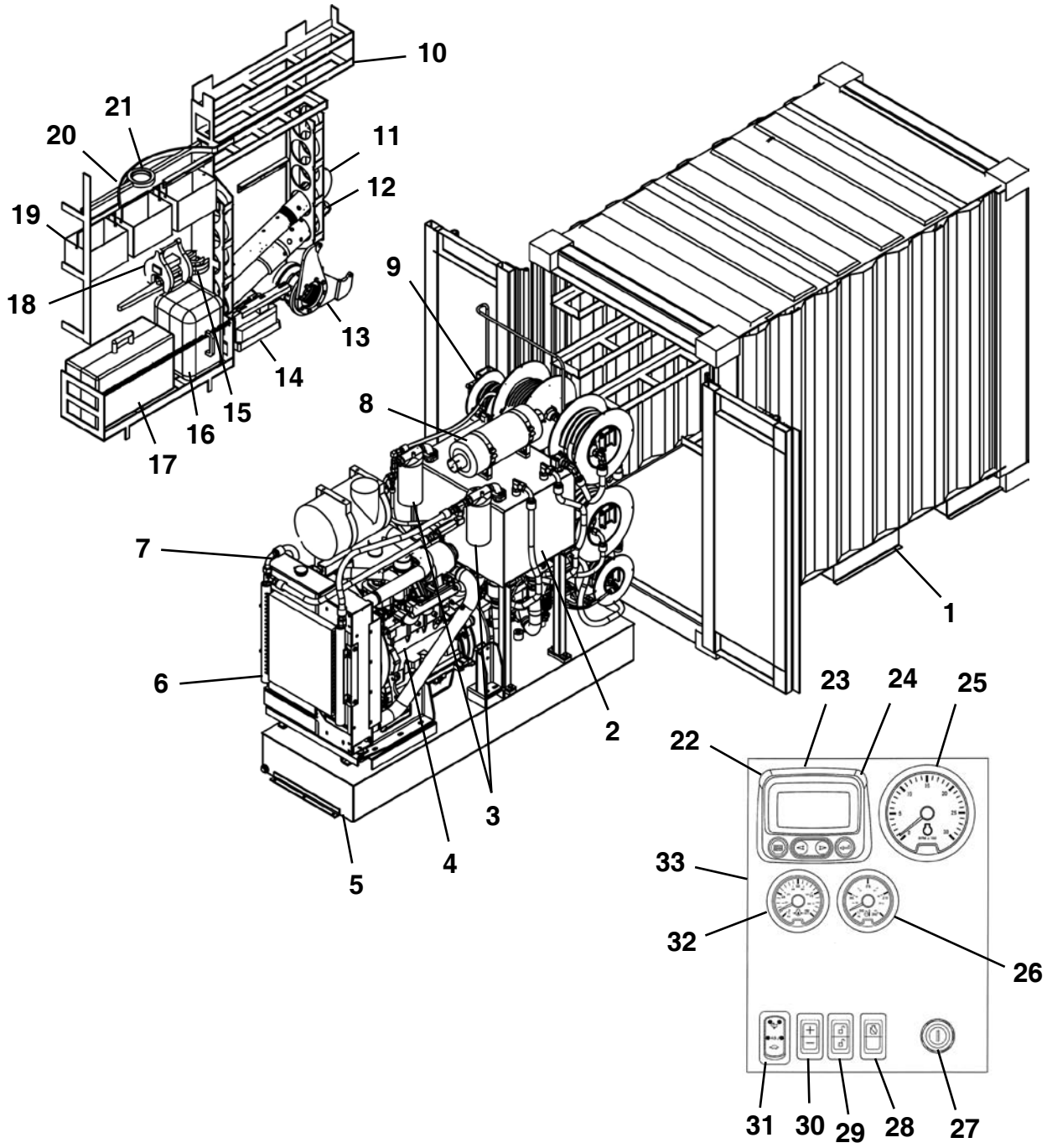
POWER PACK P275T



1. Fuel Tank
2. Jacking Pump
3. PCH Cutter Bit Drive Pump
4. Drive Rotation/PCH Auger Drive Pump
5. Hydraulic Hose Reels
6. Fuel Filter
7. Exhaust Extension
8. Muffler
9. Air Cleaner
10. Alternator
11. Oil Level Sight Gauge With Oil Temperature Gauge
12. Container
13. Rear Access Door
14. Hydraulic Reservoir
15. Cooling Pump Suction Valve
16. Main Shutoff Valve
17. High Flow Return Filter
18. Low Pressure Return Filter
19. Cooling Pump
20. Battery
21. Engine Oil Filter
22. Hydraulic Suction Manifold
23. Engine
24. Fuel Fill
25. Diagnostic Gauge/Hour Meter
26. Warning Indicator Light
27. Stop Engine Indicator Light
28. Tachometer
29. Engine Coolant Temp. Gauge
30. Key Start Switch
31. Override Shutdown Switch
32. Bump Speed Enable Switch
33. Speed Select Switch
34. High-Low Speed Select Switch
35. * Monitor Switch
36. Engine Oil Pressure Gauge

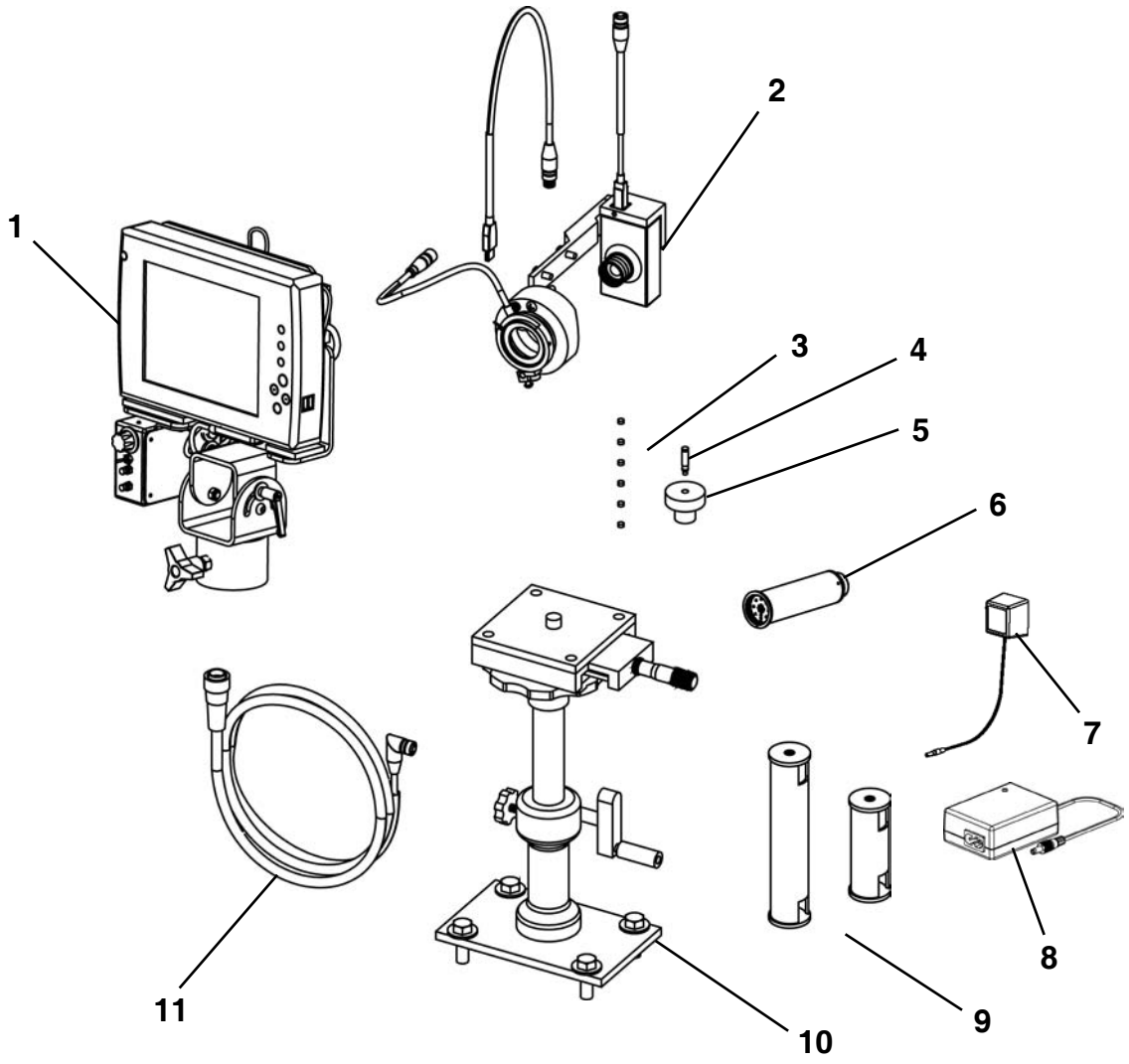
* Used on P275T SN FA40033F-1 - 4 Only

POWER PACK P150Q



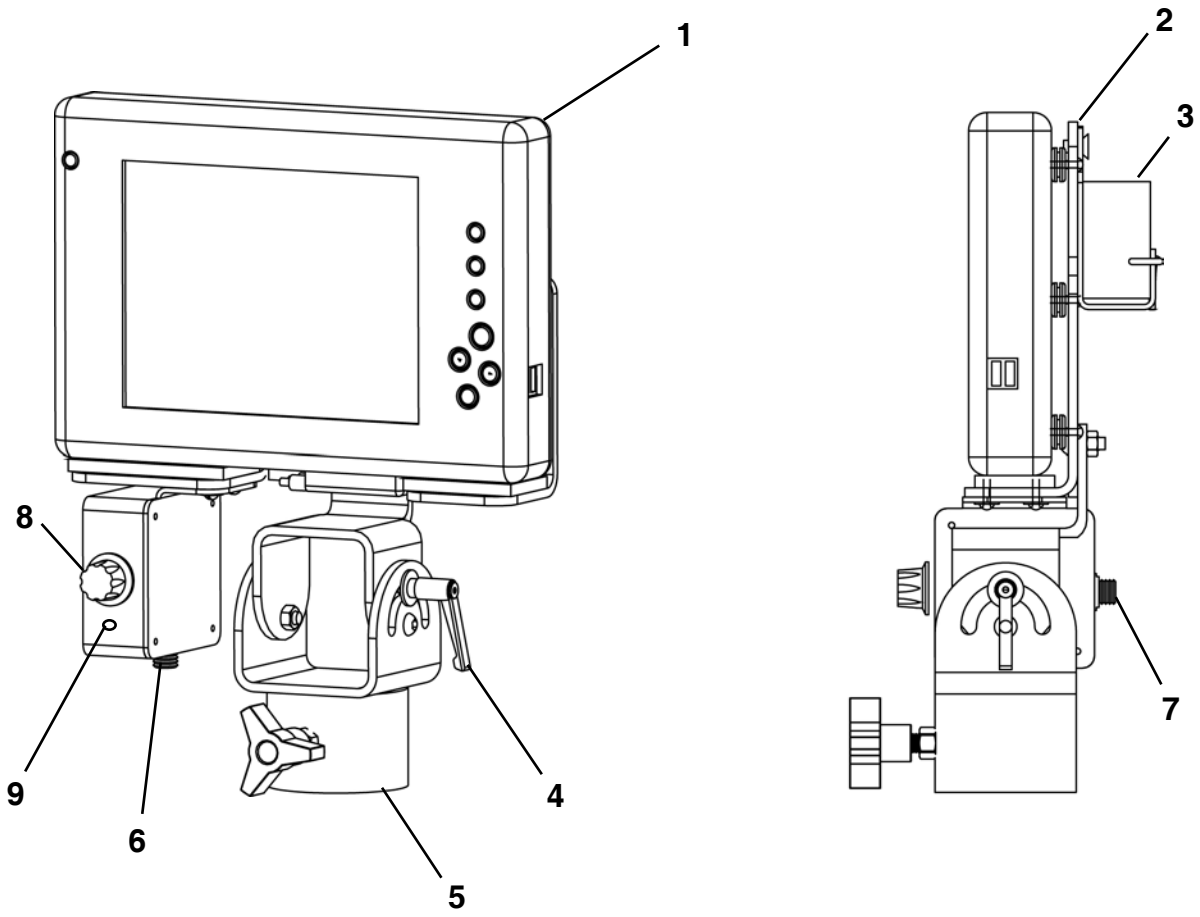
1. Container
2. Hydraulic Reservoir
3. Hydraulic Pressure Filter
4. Engine - 4 Cyl. 154 HP
5. Fuel Tank
6. Oil Cooler
7. Radiator
8. Muffler
9. Hydraulic Hose Reel
10. Emergency Stop
11. Steering Head
12. Reaming Head Adapter
13. Dual Tube Breakout Tool
14. Breakout Tool Power Pack
15. Wrench Set
16. Theodolite
17. Guidance System
18. Launch Shaft Breakout Tool
19. Storage Basket
20. Pilot Tube Support Bar
21. Pilot Tube Scraper
22. Warning Indicator Light
23. Diagnostic Gauge/Hour Meter
24. Stop Engine Indicator Light
25. Tachometer
26. Engine Coolant Temp. Gauge
27. Key Start Switch
28. Override Shutdown Switch
29. Bump Speed Enable Switch
30. Speed Select Switch
31. High-Low Speed Select Switch
32. Engine Oil Pressure Gauge
33. Remote Instrument Panel (Control Pendant)

GUIDANCE SYSTEM



1. Tablet PC With Docking Station
2. Camera Optics
3. Laser Bore Sight Batteries
4. Laser Bore Sight
5. Alignment Holder
6. Target
7. Overnight Charger
8. Smart Charger
9. Column Extensions: 6” & 12”
10. Theodolite Stand
11. Guidance Power Cable

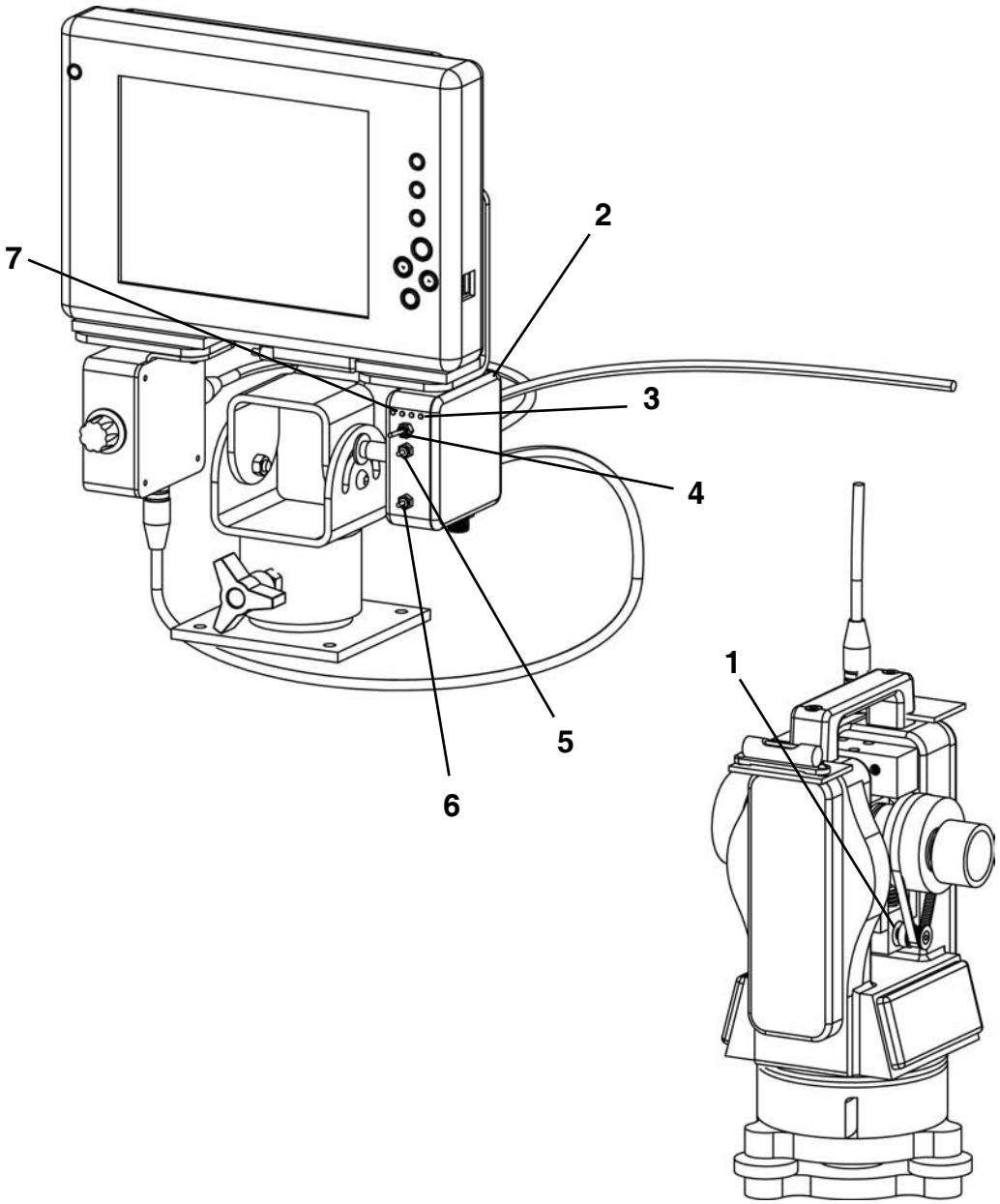
TABLET PC ASSEMBLY WITHOUT REMOTE FOCUS (SN FA42035F-86 & BEFORE)



1. Tablet PC
2. Docking Station
3. Power Adapter
4. Monitor Tilt Adjustment
5. Monitor Top Mount
6. Power In Cable Connection
7. LED Cable Connection
8. LED Brightness Control
9. Camera Power Indicator

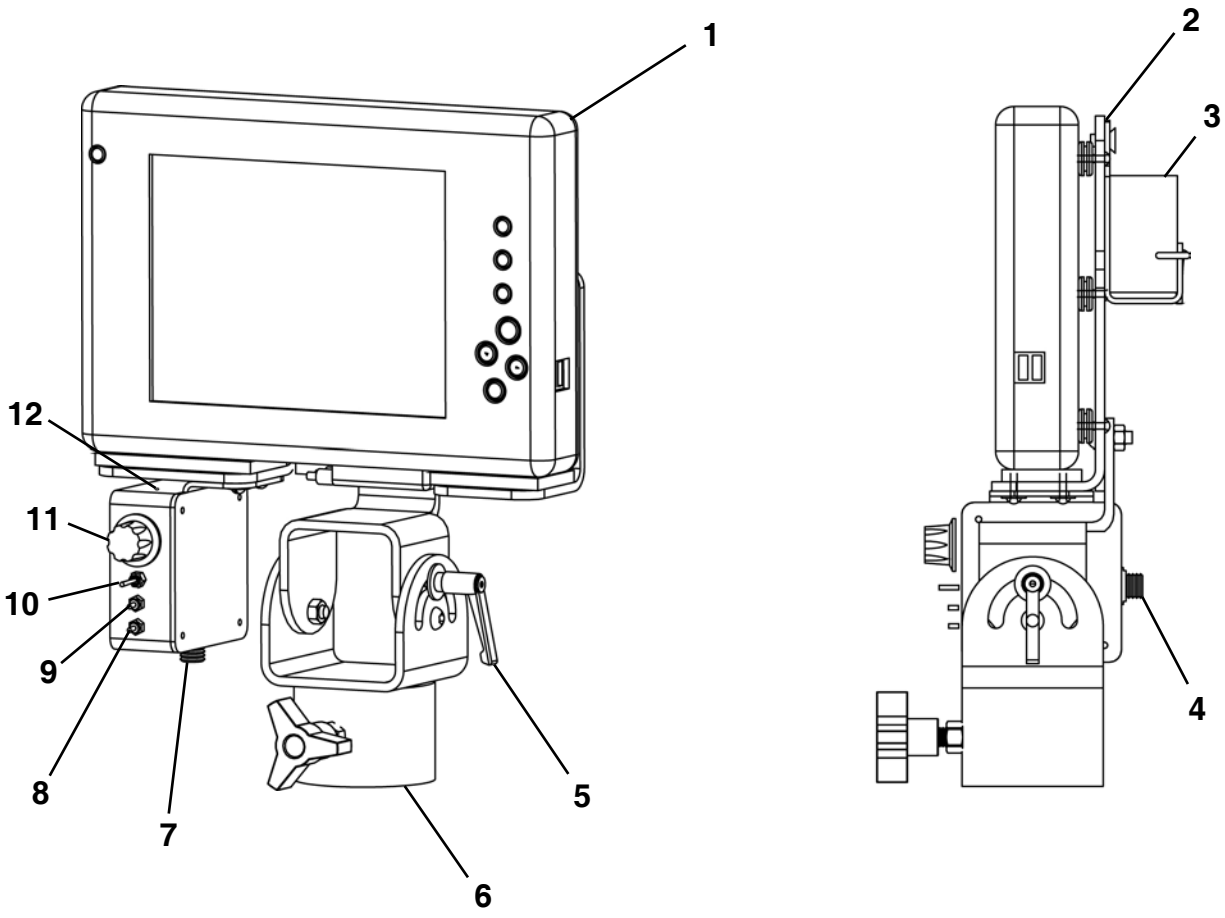
* Some units have been updated with the Remote Focus Kit option. See Tablet PC Assembly With Remote Focus Kit (SN FA42035F-86 & Before).

REMOTE FOCUS KIT (SN FA42035F-86 & BEFORE)



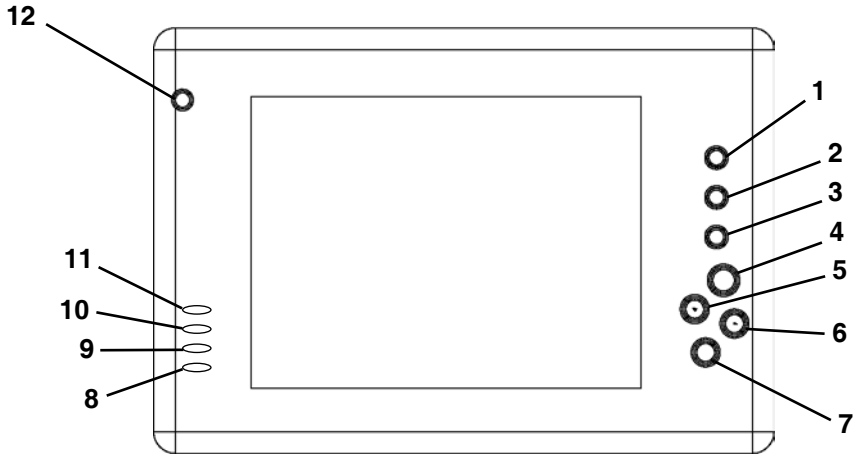
1. Drive Motor
2. Remote Focus Control Box
3. LED Limit Light
4. SLOW/FAST Focus Speed Switch
5. IN
6. OUT
7. LED Run

TABLET PC ASSEMBLY WITH REMOTE FOCUS (SN FA42035F-87 & AFTER)



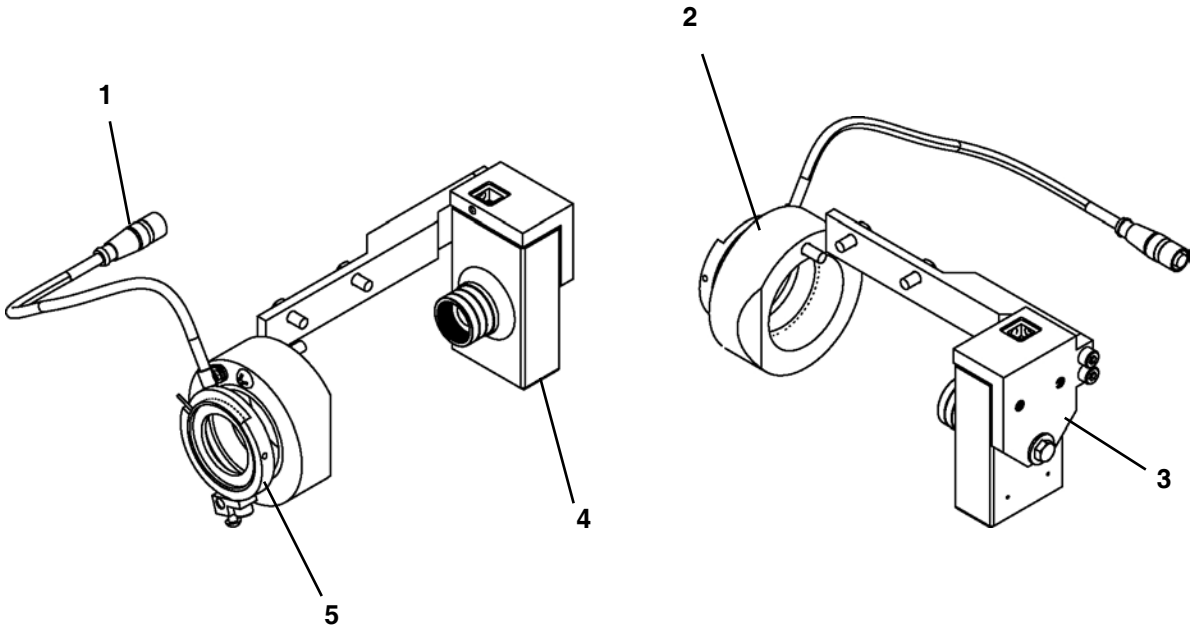
1. Tablet PC
2. Docking Station
3. Power Adapter
4. LED Cable Connection
5. Monitor Tilt Adjustment
6. Monitor Top Mount
7. Power In Cable Connection
8. OUT Focus
9. IN Focus
10. SLOW/FAST Focus Speed Switch
11. LED Brightness Control
12. Camera Power Indicator

TABLET PC CONTROLS



1. Rotate Screen
2. Windows Task Manager
3. Select Up
4. Select Down (Enter)
5. Up
6. Down
7. Function Key
8. Power Light
9. Charge Light
10. Hard Drive Light
11. Wireless Light
12. Power

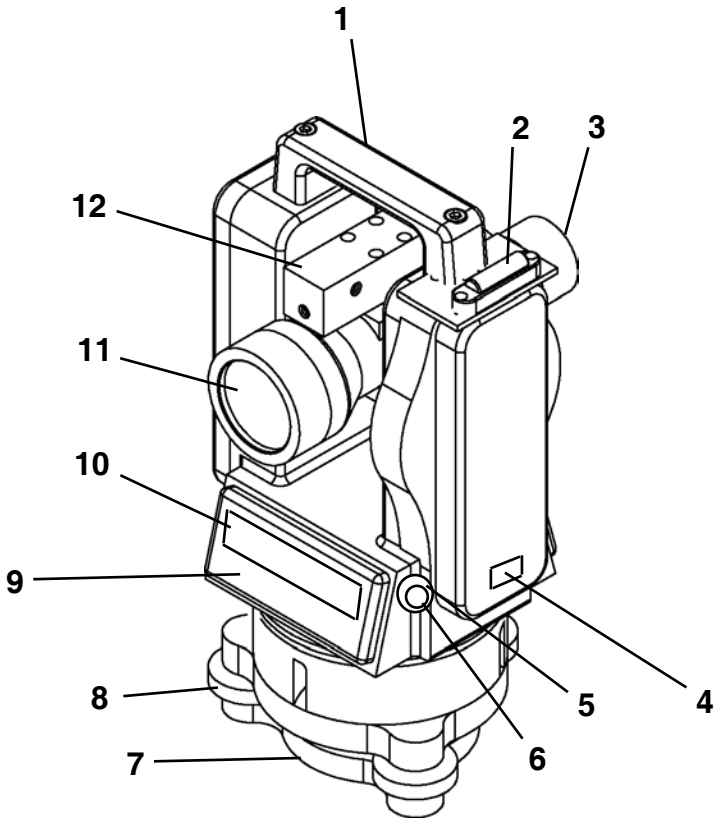
CAMERA OPTICS



1. LED Cable
2. Counterweight
3. Camera Bracket
4. Video Camera
5. Iris Mount

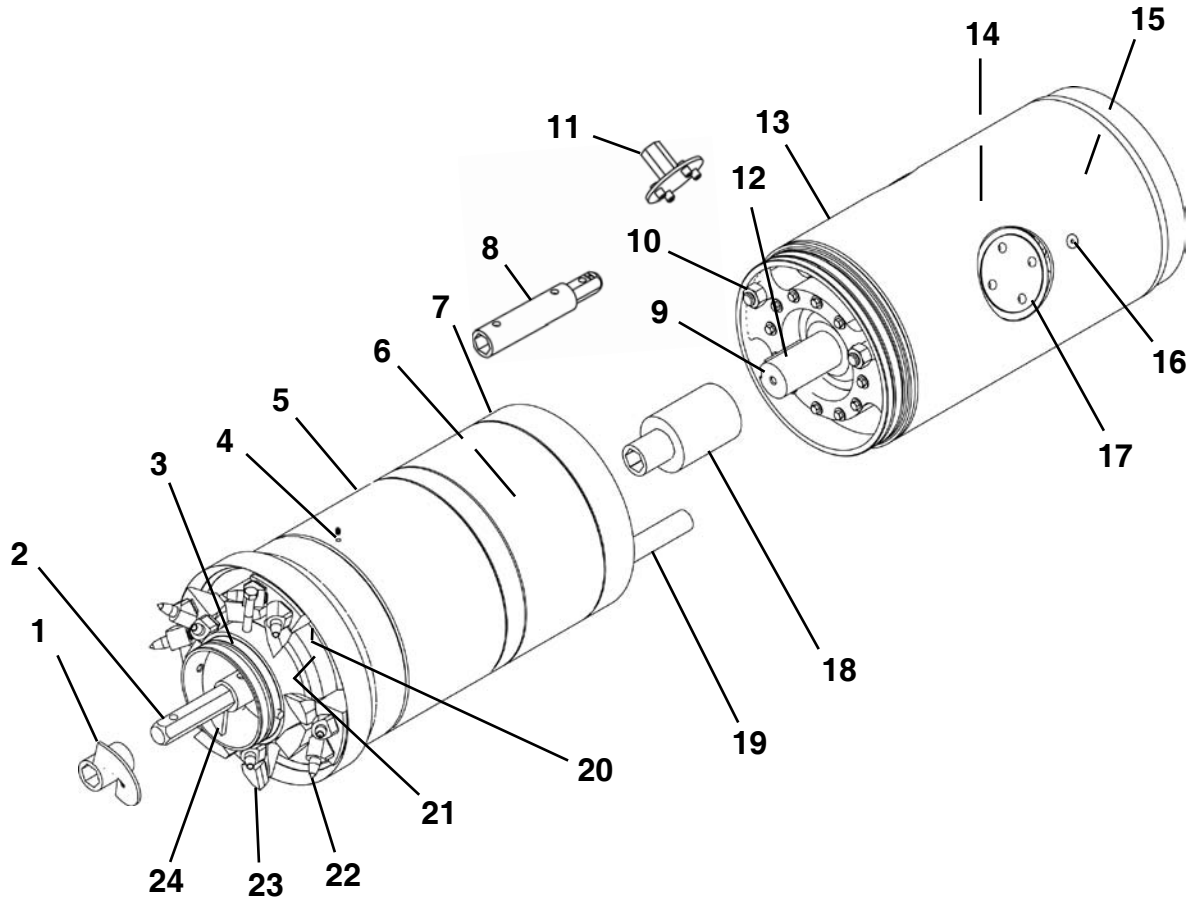
THEODOLITE

NOTICE For more information, refer to your theodolite manual.



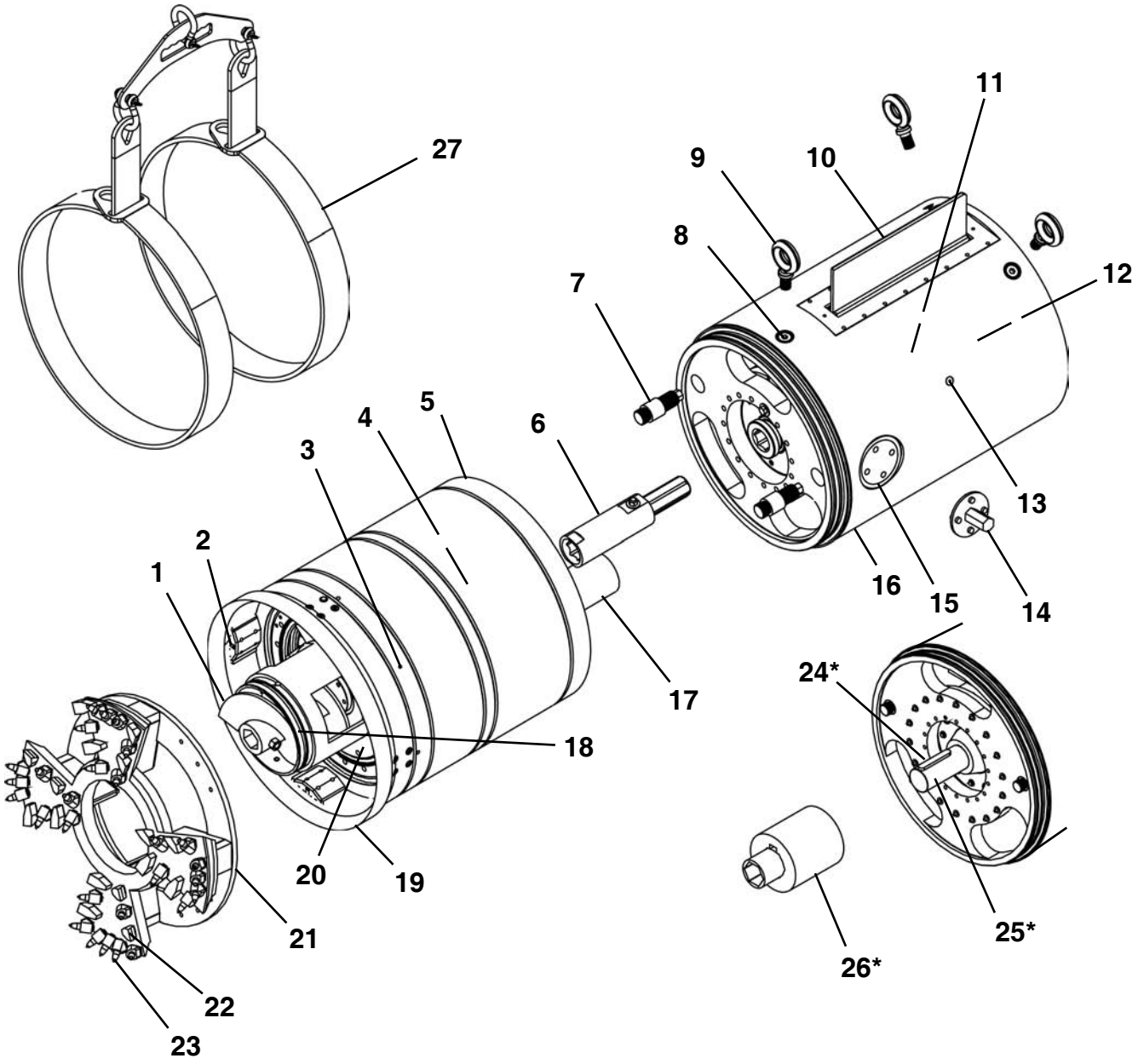
1. Carrying Handle
2. Level
3. Telescope Eyepiece
4. Power Switch
5. Optical Plummet Focusing Ring
6. Optical Plummet
7. Base Plate
8. Leveling Screw
9. Keyboard
10. Display
11. Objective
12. Camera Mount

POWERED CUTTER HEAD 20 - 22.5 - 28.5



1. Lead Auger
2. Hex Connector
3. PCH Auger Casing
4. External Grease Port
5. Front Section
6. Hydraulic Motor
7. Bell End
8. GBM Gear Box Connection
9. Drive Shaft Keyway
10. Alignment Pins
11. Port Hole Wrench
12. Auger Drive Shaft
13. Rear Section
14. Auger Drive Gear Box
15. Hydraulic Drive Motor
18. Lubrication Port (3)
17. Port Hole
18. Auger Drive Shaft Coupling
19. Hydraulics
20. Jetting Ports (3)
21. Mixing Chamber
22. Cutter Bullet Bit
23. Cutter Dirt Bit
24. PCH Auger Section

POWERED CUTTER HEAD 36 & 44



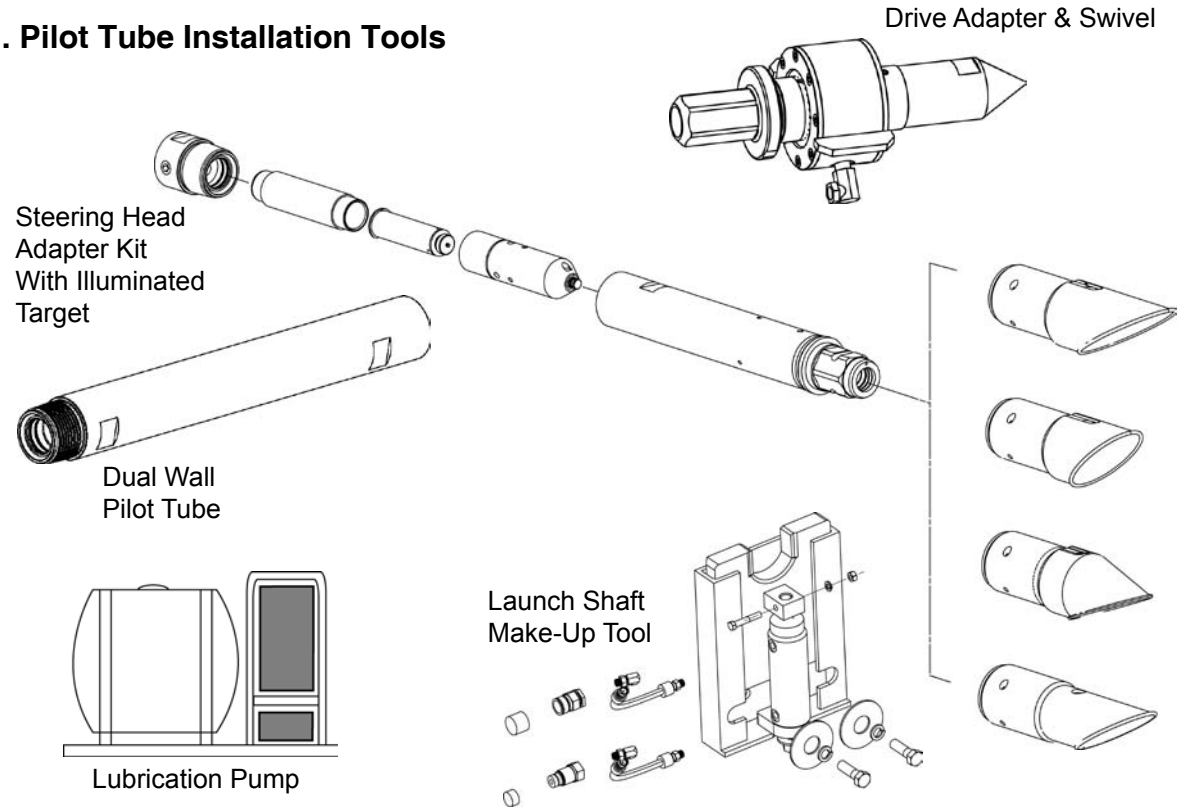
1. PCH Auger Section
2. Jetting Port (4)
3. External Grease Port
4. Hydraulic Motors
5. Bell End
6. Gear Box Connector Extension
7. Alignment Pins
8. Lifting Lugs *
9. Lifting Eye *
10. Dirt Wing
11. Auger Drive Gear Box
12. Hydraulic Drive Motors
13. Lubrication Port (3)
14. Port Hole Wrench
15. Port Hole
16. Rear Section
17. Hydraulics
18. PCH Auger Casing
19. Front Section
20. Mixing Chamber
21. PCH Cutter Head
22. Cutter Dirt Bit
23. Cutter Bullet Bit
24. Drive Shaft Keyway **
25. Auger Drive Shaft **
26. Coupler **
27. Lifting Straps - Front Section

* Later models are not equipped with lifting lugs and lifting eyes. Use a properly rated lifting strap for the weight of the PCH.

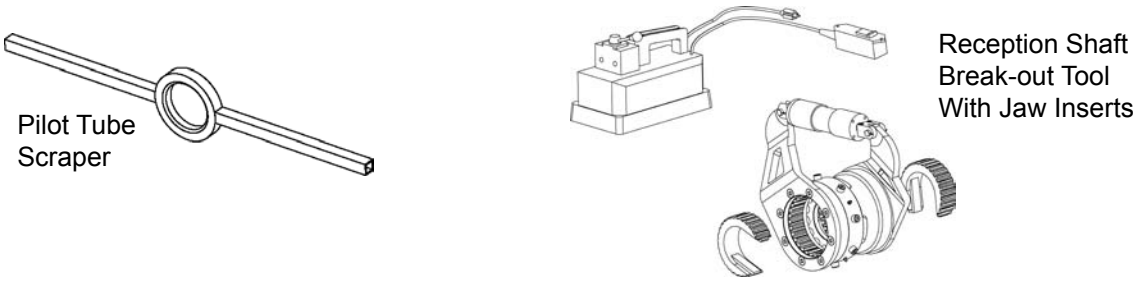
** PCH 44 SN FA43400F-1 and 2 Only

GBM TOOLING - THREE STEP METHOD for 11” - 16” OD Pipe

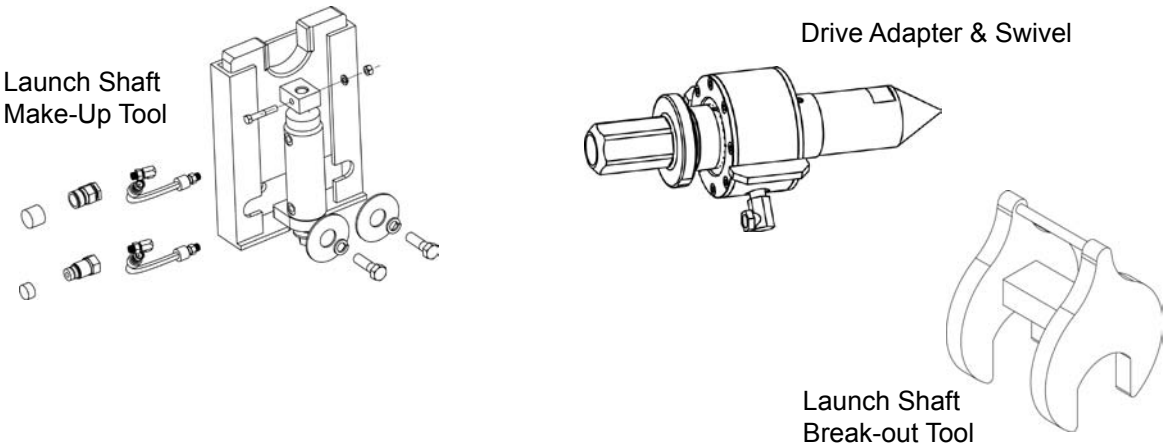
1. Pilot Tube Installation Tools



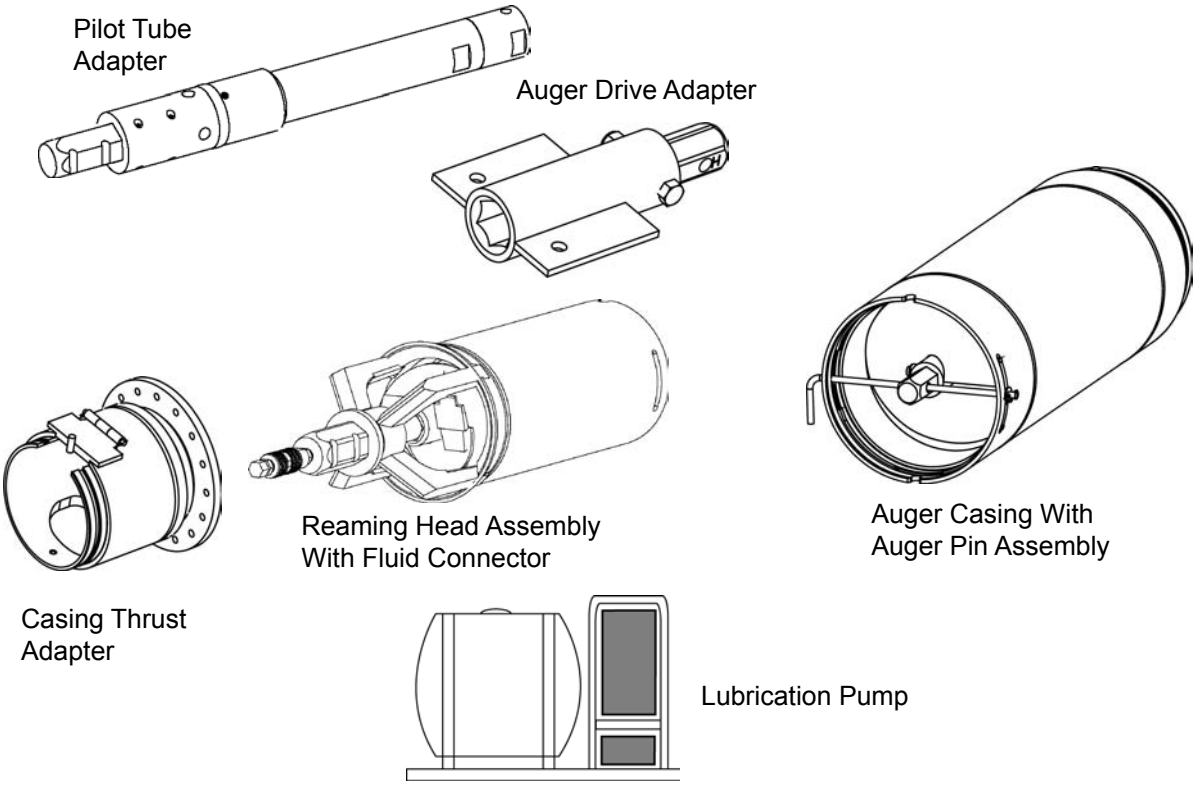
2. Pilot Tube Reception Shaft Removal Tools



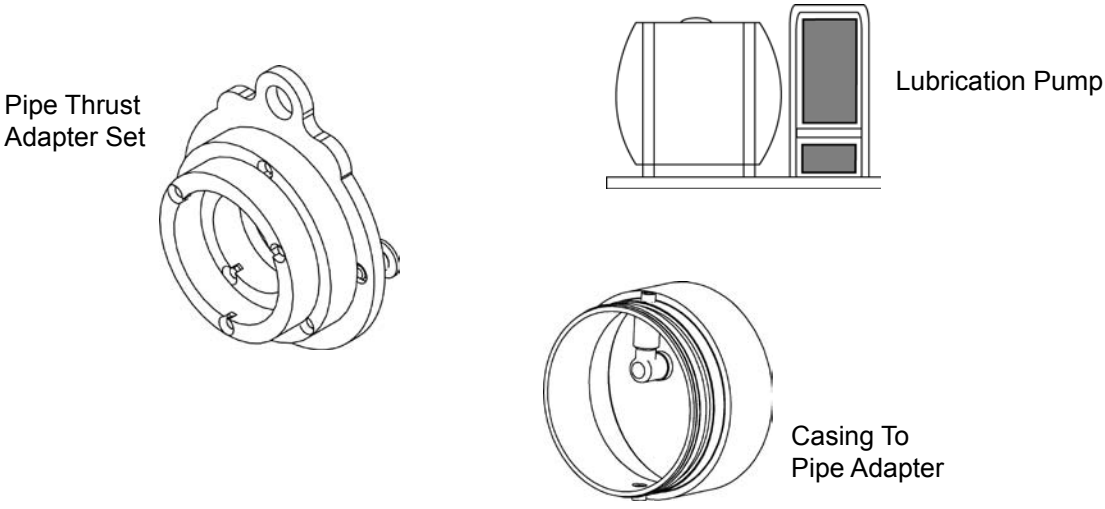
3. Pilot Tube Launch Shaft Pull Back Tools



4. Upsizing Tool: Reaming Head Thrust Casing Installation Tools

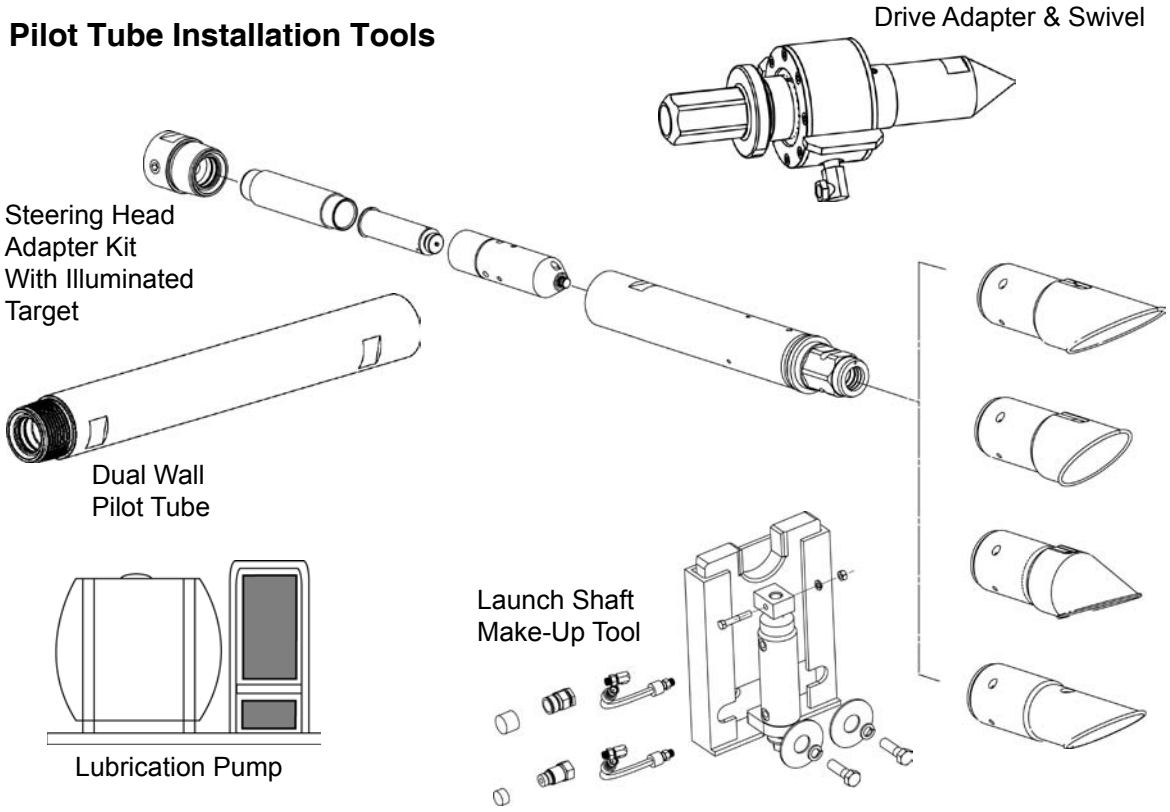


5. Pipe Installation Tools

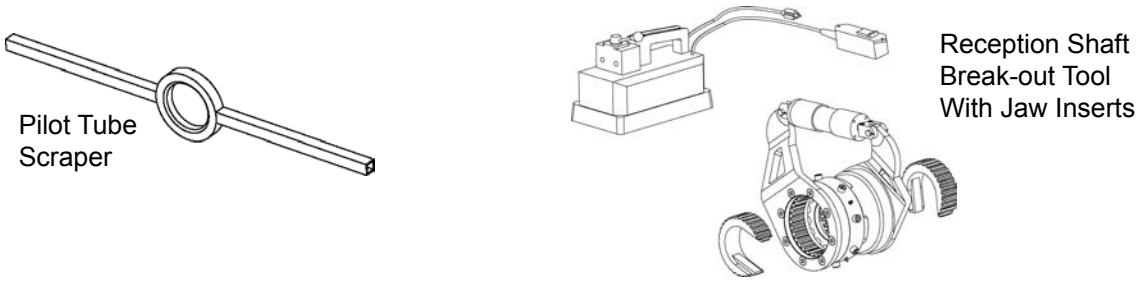


GBM TOOLING - THREE STEP METHOD WITH POWERED CUTTER HEAD (PCH20 - 22.5 - 28.5) for 20” - 35.5” OD Pipe

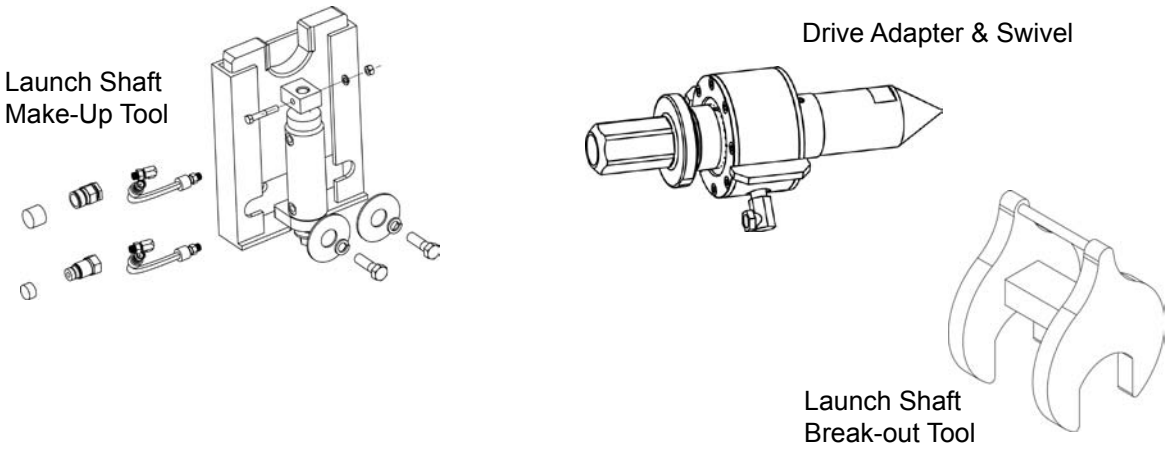
1. Pilot Tube Installation Tools



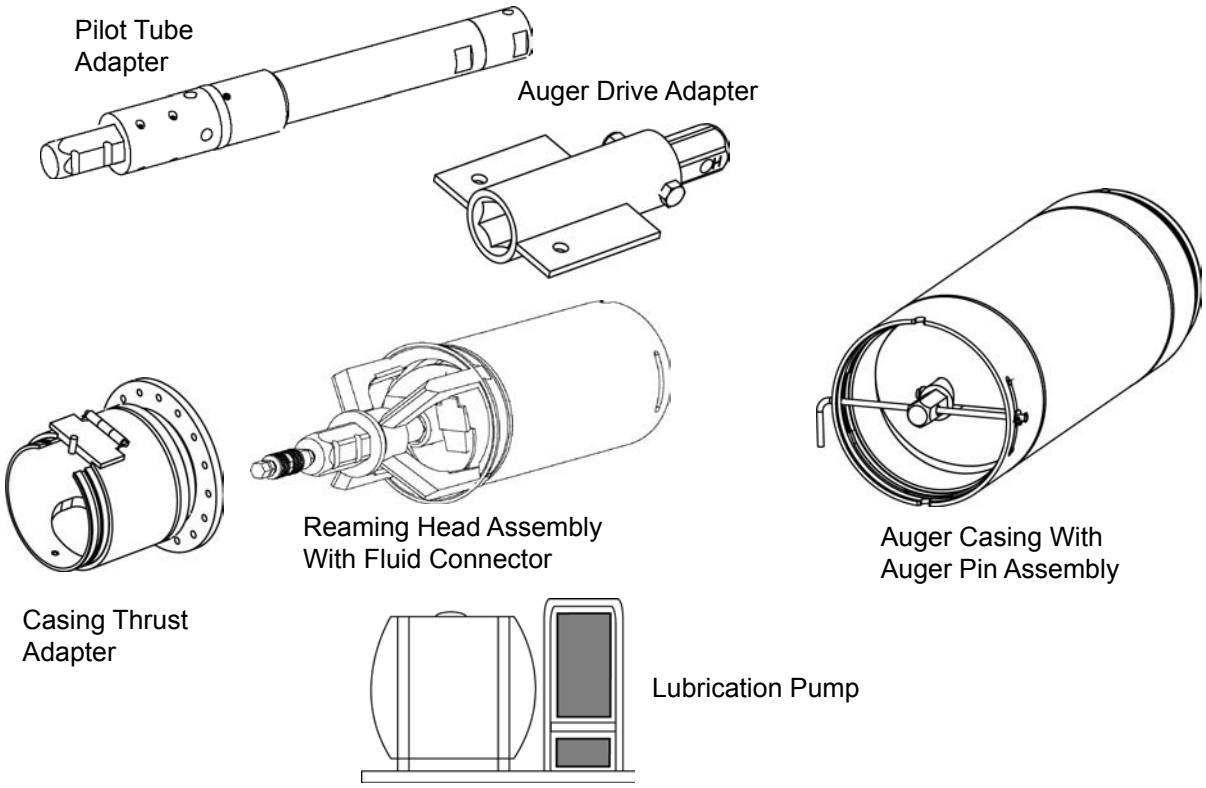
2. Pilot Tube Reception Shaft Removal Tools



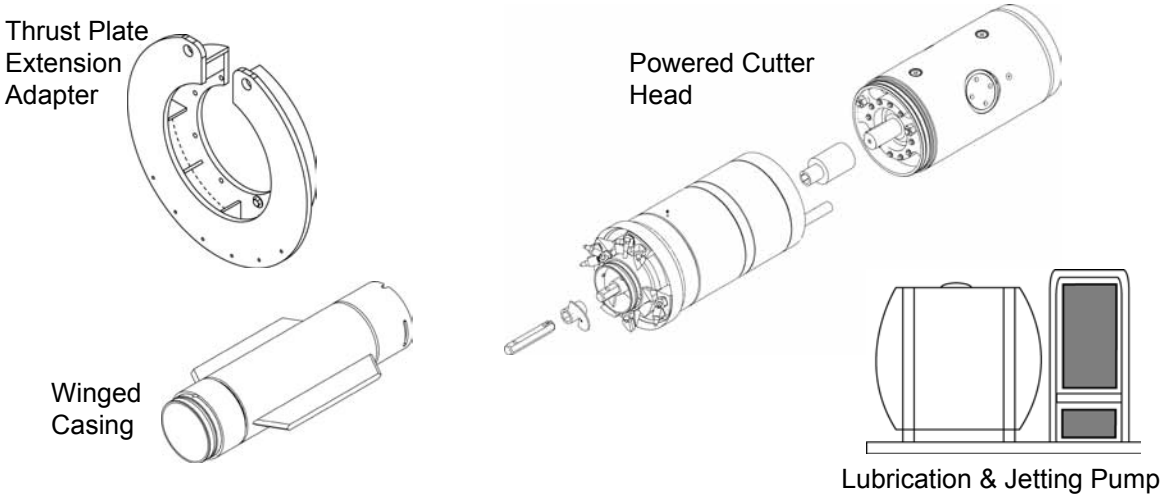
3. Pilot Tube Launch Shaft Pull Back Tools



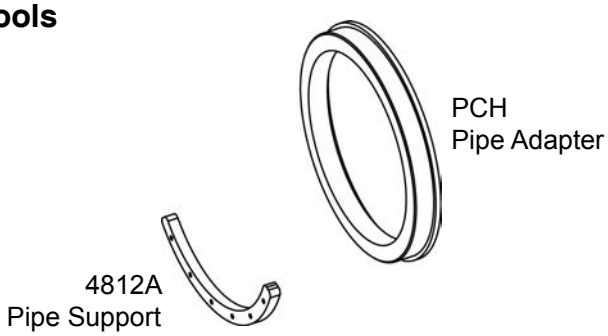
4. Upsizing Tool: Reaming Head Thrust Casing Installation Tools



5. Upsizing Tool: Powered Cutter Head Installation Tools

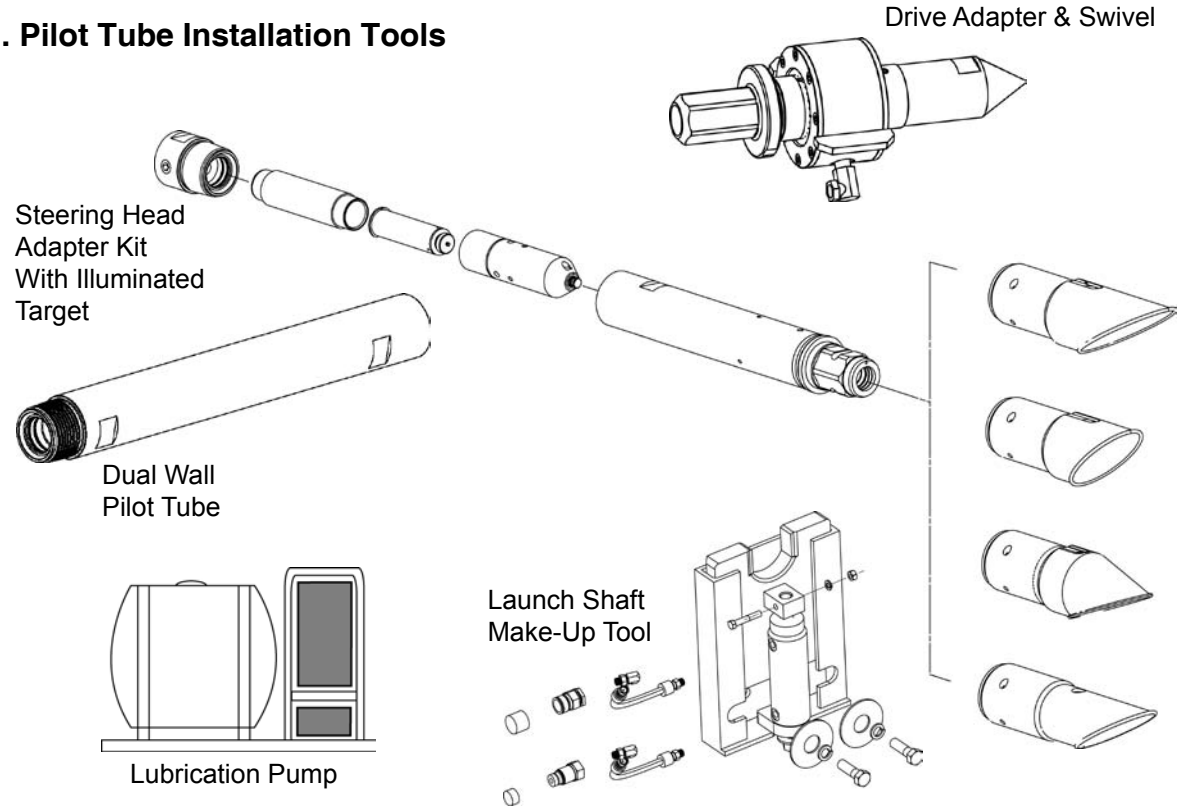


6. Pipe Installation Tools

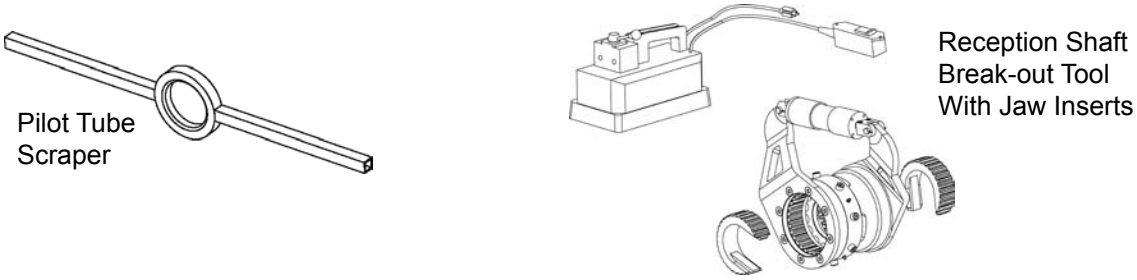


GBM TOOLING - THREE STEP METHOD WITH POWERED CUTTER HEAD (PCH36 - 44) for 36” - 48” OD Pipe

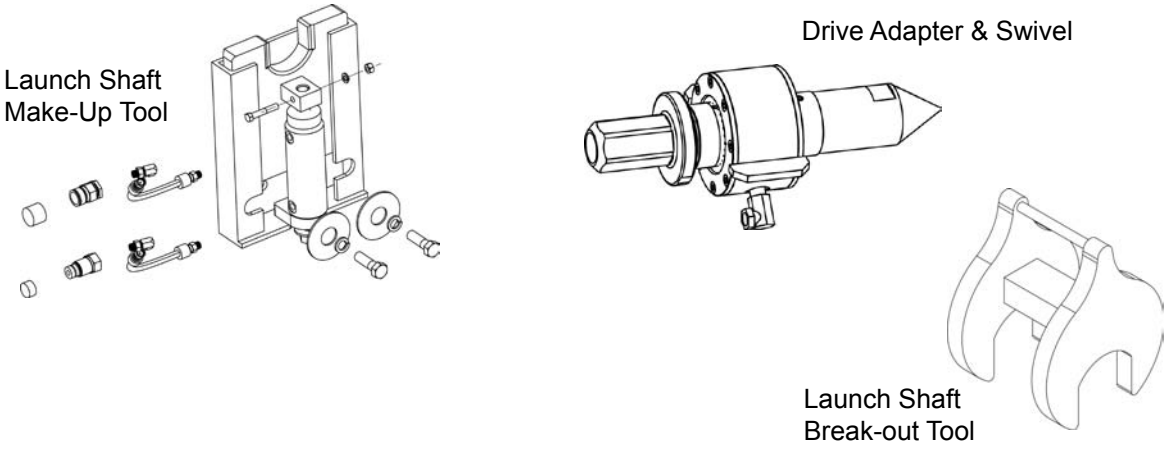
1. Pilot Tube Installation Tools



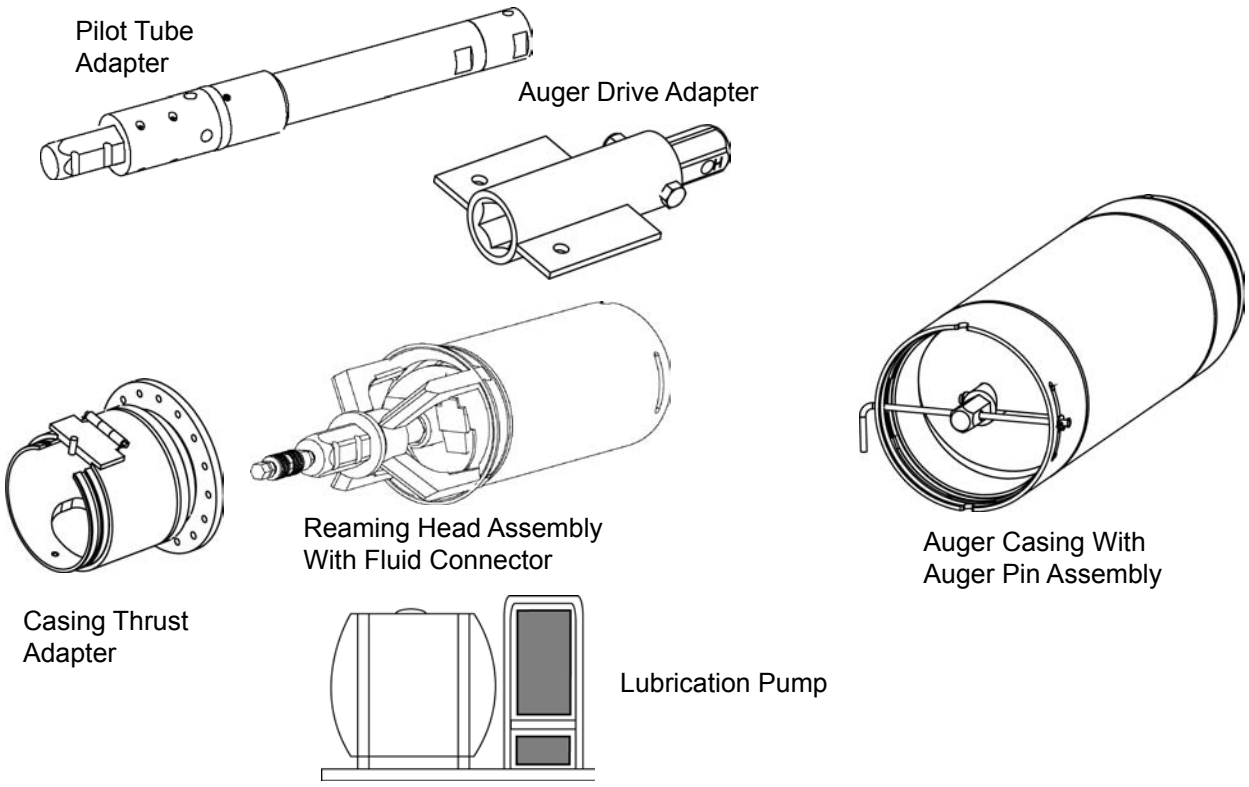
2. Pilot Tube Reception Shaft Removal Tools



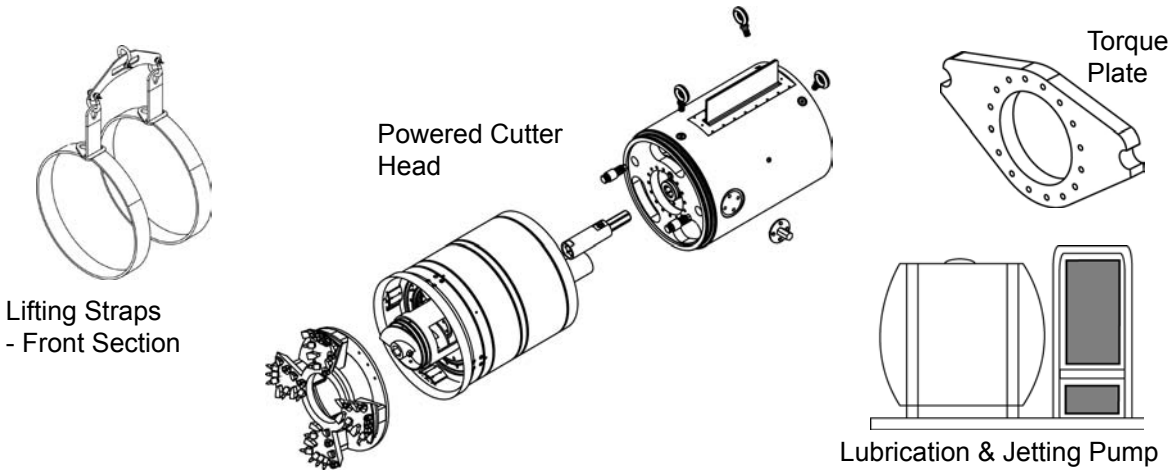
3. Pilot Tube Launch Shaft Pull Back Tools



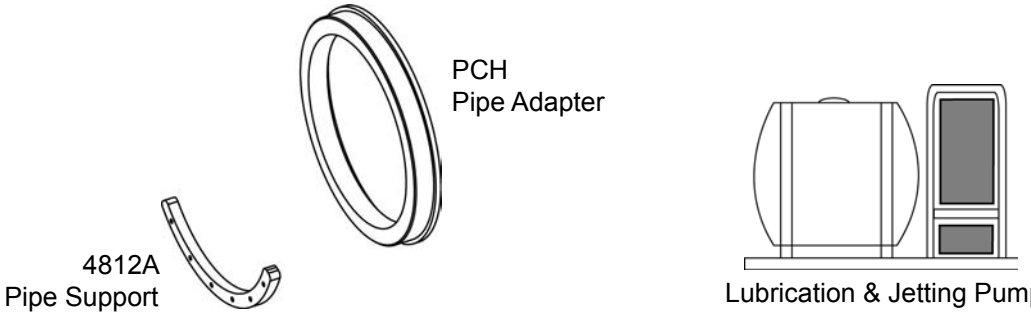
4. Upsizing Tool: Reaming Head Thrust Casing Installation Tools



5. Upsizing Tool: Powered Cutter Head Installation Tools



6. Pipe Installation Tools



NOTES

Decals

GBM 4812A 2
4812A SN FA40034F-1 Thru 3 2
4812A SN FA40034F-4 & After 4

Power Packs
P275T 6
Remote Instrument Panel (Control Pendant) 8
P150Q 10
Remote Instrument Panel (Control Pendant) 12

Guidance System 14
Guidance System (SN FA42035F-86 & Before) 14
Remote Focus Kit (SN FA42035F-86 & Before) 16
Guidance System (SN FA42035F-87 & After) 18
GBM Replaceable Battery Target 20

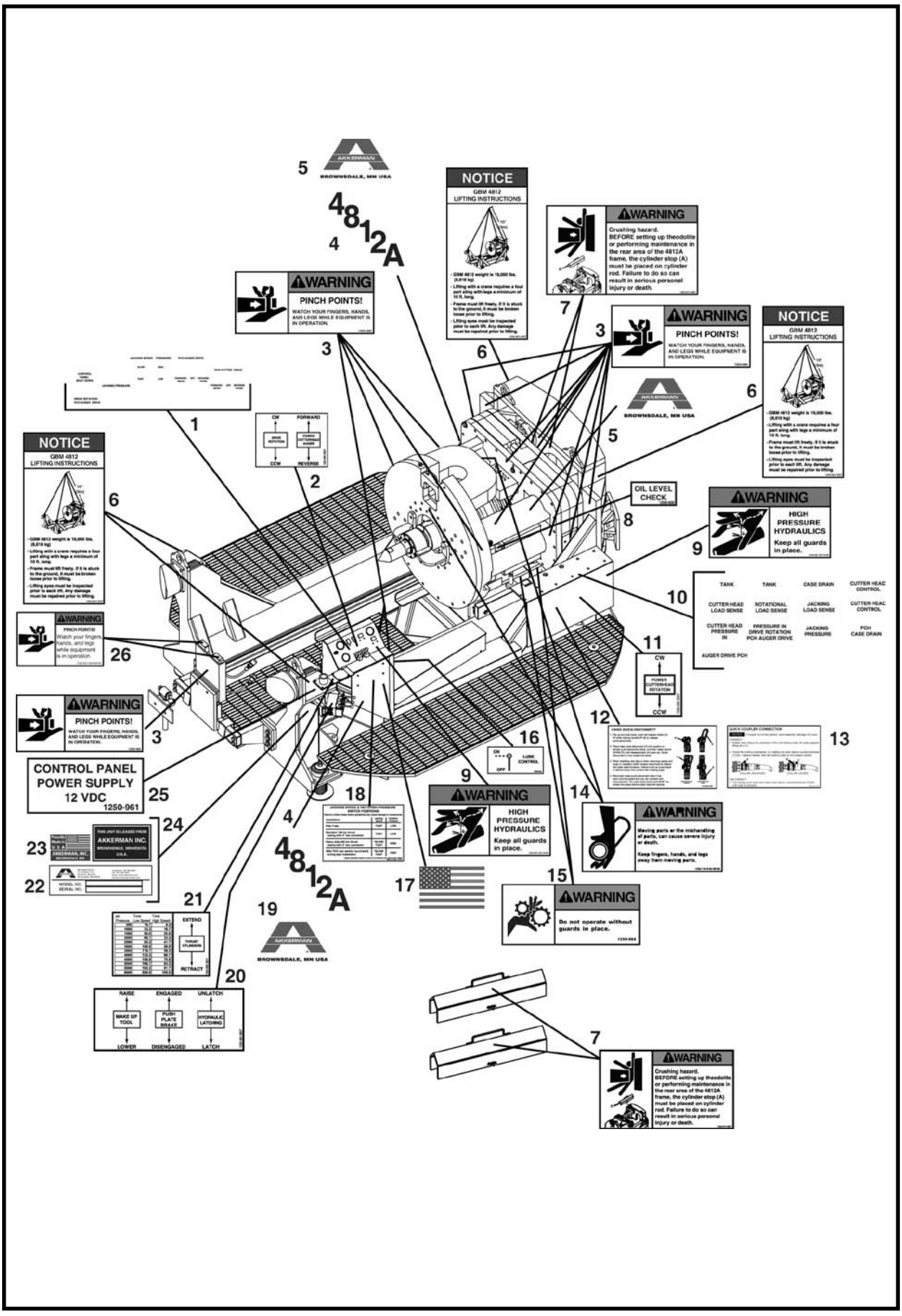
Pilot Tube Rack 22
30” Pipe Tubes 22
60” Pipe Tubes 23

Wire Basket 24
1 Meter Casing Basket 24
5 Foot Casing Basket 25

Miscellaneous 26
Jetting & Lubrication Pump Shaft Control 26
PCH Lifting Strap 27

GBM 4812A DECALS

4812A (SN FA40034F-1 THRU FA40034F-3)



GBM 4812A DECALS

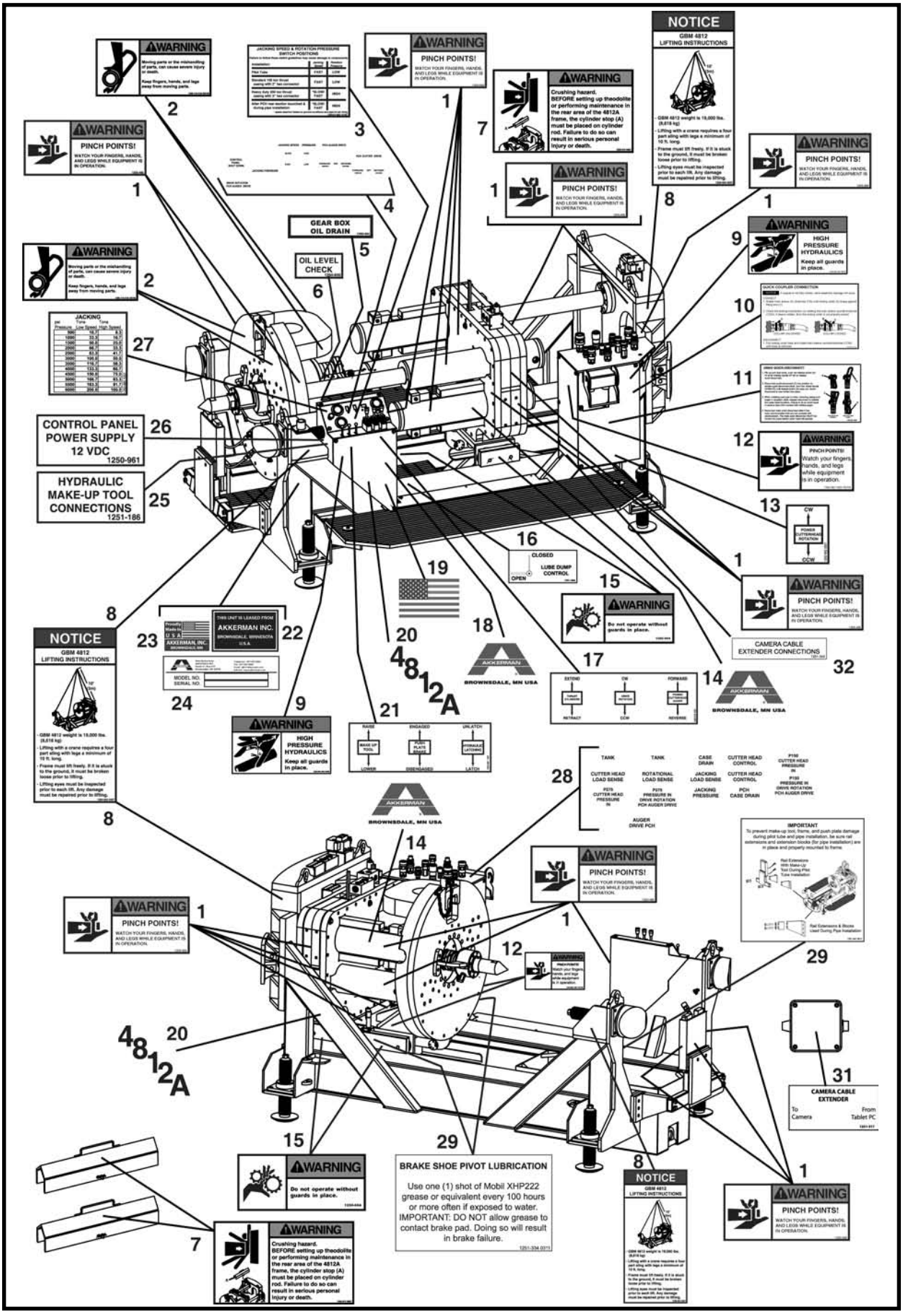
4812A (SN FA40034F-1 THRU FA40034F-3)

ITEM	QTY	PART NO.	DESCRIPTION
1	1	1250-946	DECAL, 4812A Console Controls
2	1	1250-943	DECAL, Drive Rotation - PCH Auger Control
3	14	1250-480	DECAL, Warning Pinch Points
4	2	1250-939	DECAL, 4812A
5	2	1251-246	DECAL, Akkerman, Large
6	4	1250-953	DECAL, Notice 4812A Lifting Instructions
7	4	1250-974	DECAL, Warning Use Cylinder Stop
8	1	1250-930	DECAL, Oil Level Check
9	2	1250-003	DECAL, Warning High Pressure Hydraulics
10	1	1250-964	DECAL, 4812A Hydraulic Connections
11	1	1250-942	DECAL, PCH Rotation Control
12	1	1250-906	DECAL, Quick Disconnect - PCH
13	1	1250-574	DECAL, Quick Coupler Connection
14	2	1250-719	DECAL, Warning Moving Parts
15	4	1250-004	DECAL, Keep Guards In Place
16	1	1250-963	DECAL, Lube Control
17	1	1250-558	DECAL, USA Flag, Small
18	1	1250-975	DECAL, Jacking Speed/Rotation Pressure Switch Positions
19	1	1251-247	DECAL, Akkerman, Medium
20	1	1250-962	DECAL, Make Up Tool - Push Plate Brake - Hydraulic Latching
21	1	1250-960	DECAL, Thrust Cylinders - Jacking Pressure Chart
22	1	REF	PLATE, Serial Number
23	1	1250-544	DECAL, Made in USA
24*	1	1250-098	DECAL, Lease
25	1	1250-961	DECAL, Control Panel Power Supply 12 VDC
26	1	1250-562	DECAL, Warning Pinch Points

* Note: Decal used only on leased equipment.

GBM 4812A DECALS

4812A (SN FA40034F-4 & AFTER)



GBM 4812A DECALS

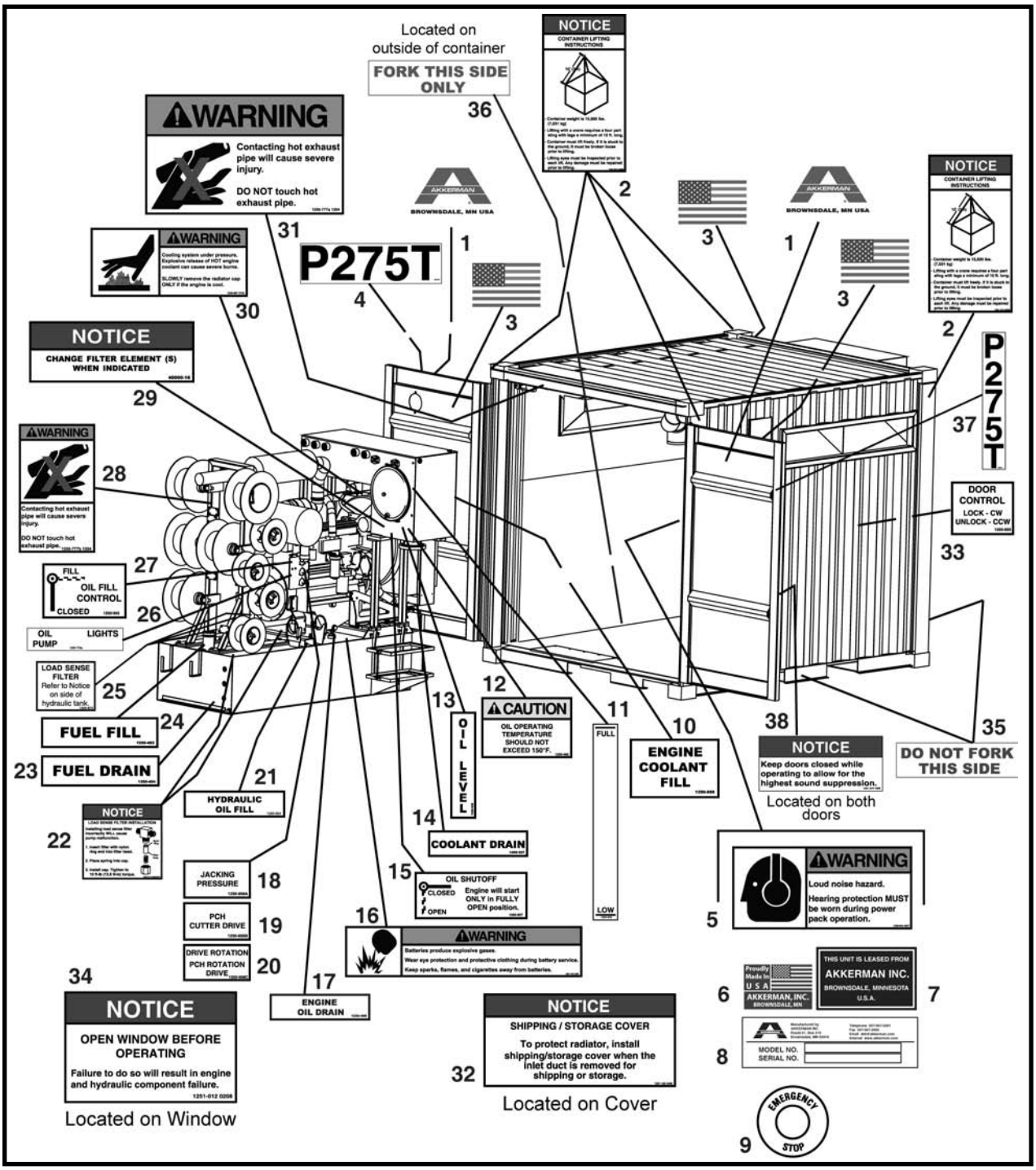
4812A (SN FA40034F-4 & AFTER)

ITEM	QTY	PART NO.	DESCRIPTION
1	22	1250-480	DECAL, Warning Pinch Points
2	4	1250-719	DECAL, Warning Moving Parts
3	1	1250-975	DECAL, Jacking Speed/Rotation Pressure Switch Positions
4	1	1250-946	DECAL, 4812A Console Controls
5	1	1250-484	DECAL, Gear Box Oil Drain
6	1	1250-930	DECAL, Oil Level Check
7	4	1250-974	DECAL, Warning Use Cylinder Stop
8	4	1250-953	DECAL, Notice 4812A Lifting Instructions
9	2	1250-003	DECAL, Warning High Pressure Hydraulics
10	1	1250-574	DECAL, Quick Coupler Connection
11	1	1250-906	DECAL, Quick Disconnect - PCH
12	6	1250-562	DECAL, Warning Pinch Points
13	1	1250-942	DECAL, PCH Rotation Control
14	2	1251-246	DECAL, Akkerman, Large
15	4	1250-004	DECAL, Keep Guards In Place
16	1	1251-159A	DECAL, Lube Dump Control
17	1	1250-979	DECAL, Thrust Cyl - Rotation - PCH Auger Controls
18	1	1251-247	DECAL, Akkerman, Medium
19	1	1250-558	DECAL, USA Flag, Small
20	2	1250-939	DECAL, 4812A
21	1	1250-981	DECAL, Make Up Tool - Brake - Hyd Latching Controls
22*	1	1250-098	DECAL, Lease
23	1	1250-544	DECAL, Made in USA
24	2	REF	PLATE, Serial Number
25	1	1251-186	DECAL, Hydraulic Make-Up Tool Connections
26	1	1250-961	DECAL, Control Panel Power Supply 12 VDC
27	1	1250-980	DECAL, Jacking Pressure Chart
28	1	1250-964	DECAL, 4812A Hydraulic Connections
29	2	1251-334	DECAL, Brake Shoe Pivot Lubrication
30	1	1251-341	DECAL, Important Use Rail Extensions
31	1	1251-317	DECAL, Camera Cable Extender
32	1	1251-342	DECAL, Camera Cable Extender Connections

* Note: Decal used only on leased equipment.

POWER PACK P275T DECALS

P275T



ITEM	QTY	PART NO.	DESCRIPTION
1	2	1251-246	DECAL, Akkerman, Large
2.1*	4	1250-950	DECAL, Container Lifting Instructions (SN 1 & 2)
2.2	4	1251-013	DECAL, Container Lifting Instructions (SN 3 & After)
3	3	1250-558	DECAL, USA Flag, Small
4	1	1250-951	DECAL, Model P275T
5	1	1250-944	DECAL, Warning Loud Noise Hazard
6	1	1250-544	DECAL, Made in USA
7*	1	1250-098	DECAL, Lease (used only with leased equipment)
8	1	REF	PLATE, Serial Number
9	1	P0310-474F	DECAL, Emergency Stop

POWER PACK P275T DECALS

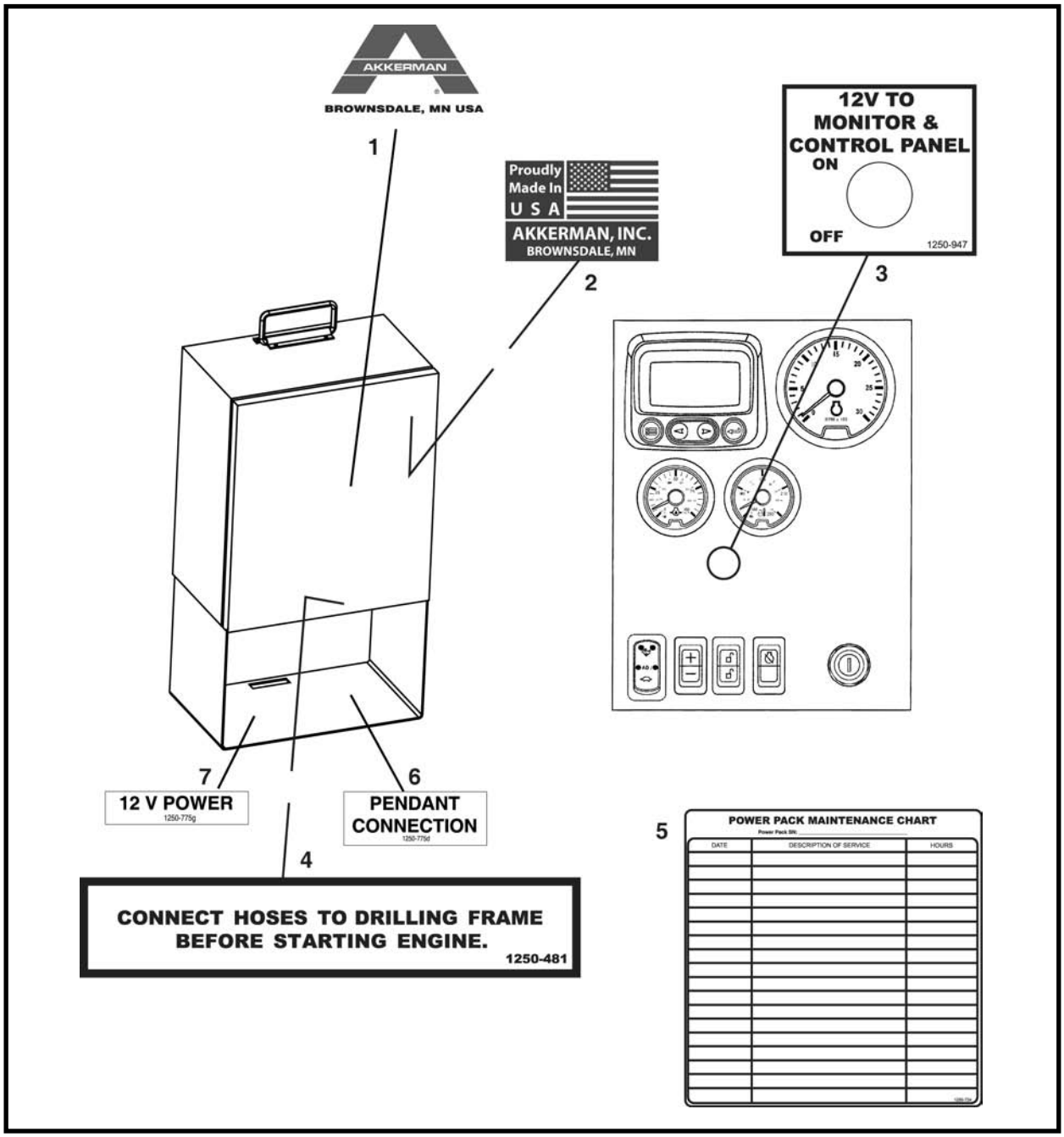
P275T

ITEM	QTY	PART NO.	DESCRIPTION
10	1	1250-959	DECAL, Engine Coolant Fill
11	1	1250-932	DECAL, Reservoir Level Gauge
12	1	1250-483	DECAL, Caution Oil Temperature
13	1	1250-649	DECAL, Oil Level
14	1	1250-527w	DECAL, Coolant Drain
15	1	1250-957	DECAL, Oil Shutoff
16	1	1251-016	DECAL, Warning Battery Explosion
17	1	1250-498	DECAL, Engine Oil Drain
18	1	1250-958A	DECAL, Jacking Pressure
19	1	1250-958B	DECAL, PCH Cutter Drive
20	1	1250-958C	DECAL, Drive Rotation - PCH Rotation Drive
21	1	1250-854	DECAL, Hydraulic Oil Fill
22	2	1250-872	DECAL, Load Sense Filter Installation
23	1	1250-494	DECAL, Fuel Drain
24	1	1250-493	DECAL, Fuel Fill
25	3	1250-873	DECAL, Load Sense Filter
26	1	1250-775aw	DECAL, Oil Pump/Lights
27	1	1250-955	DECAL, Oil Fill Control
28	1	1250-777b	DECAL, Warning Hot Exhaust, Small
29	1	40000-16	DECAL, Notice Change Filter
30	1	1250-697	DECAL, Warning Coolant System Pressure
31	1	1250-777a	DECAL, Warning Hot Exhaust
32	1	1251-182	DECAL, Shipping/Storage Cover
33	1	1250-956	DECAL, Door Control (SN 1 & 2)
34	3	1251-012	DECAL, Notice Open Window Before Operating (SN 3)
35	2	1251-196	DECAL, Do Not Fork This Side
36	1	1250-931	DECAL, Fork This Side Only
37	1	1250-951V	DECAL, Model P275T (Vertical)
38	2	1251-274	DECAL, Sound Suppression

* Not Shown

REMOTE INSTRUMENT PANEL DECALS

P275T PENDANT



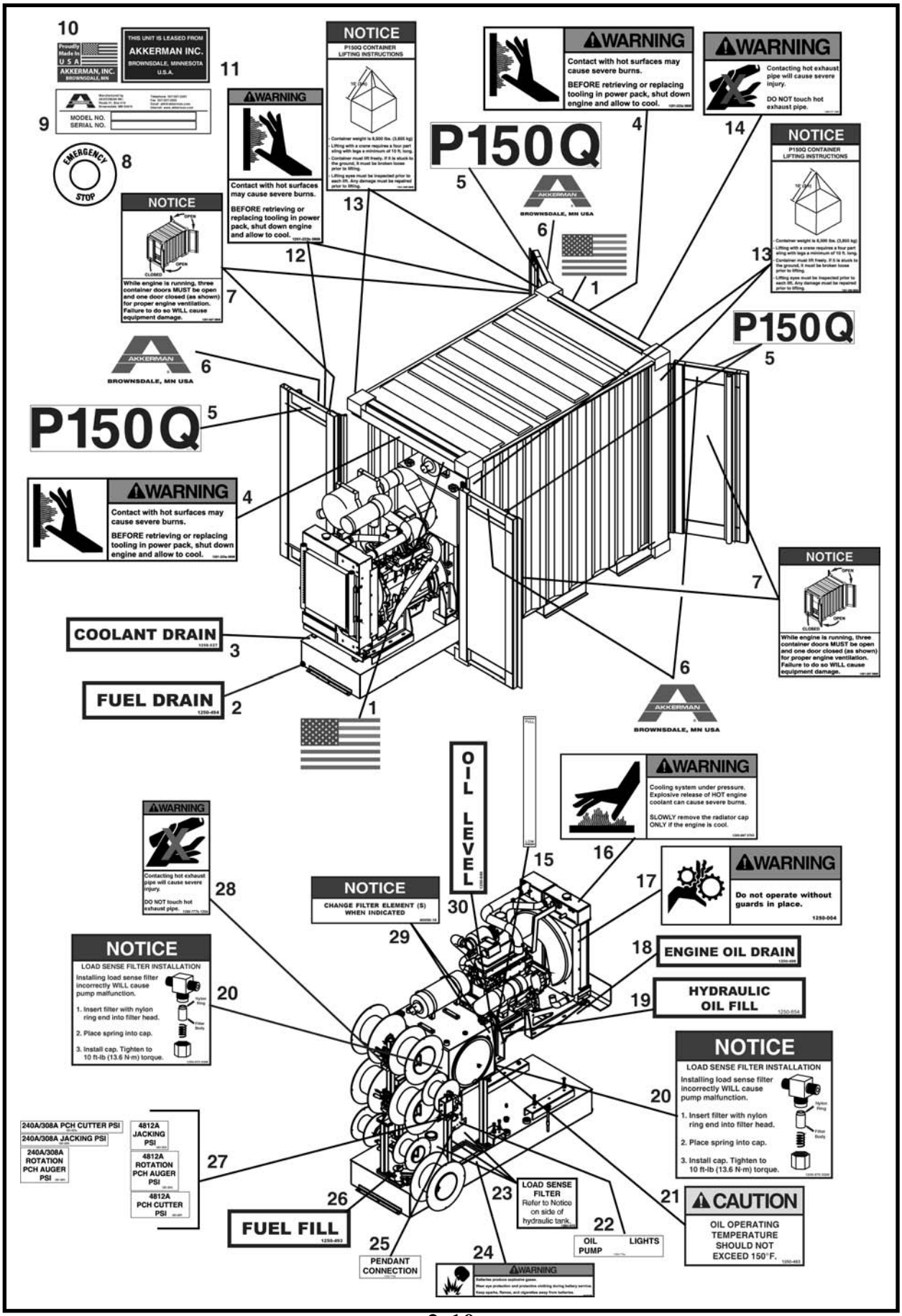
ITEM	QTY	PART NO.	DESCRIPTION
1	1	1251-247	DECAL, Akkerman Medium
2	1	1250-544	DECAL, Made In USA
3	1	1250-947	DECAL, 12 V To Monitor & Control Panel (SN 4 & Before Only)
4	1	1250-481	DECAL, Connect Hoses
5*	1	1250-724	DECAL, Power Pack Maintenance Chart
6	1	1250-775d	DECAL, Pendant Connection
7	1	1250-775g	DECAL, 12 V Power

* Located on inside front cover of instrument panel.

NOTES

POWER PACK DECALS

P150Q



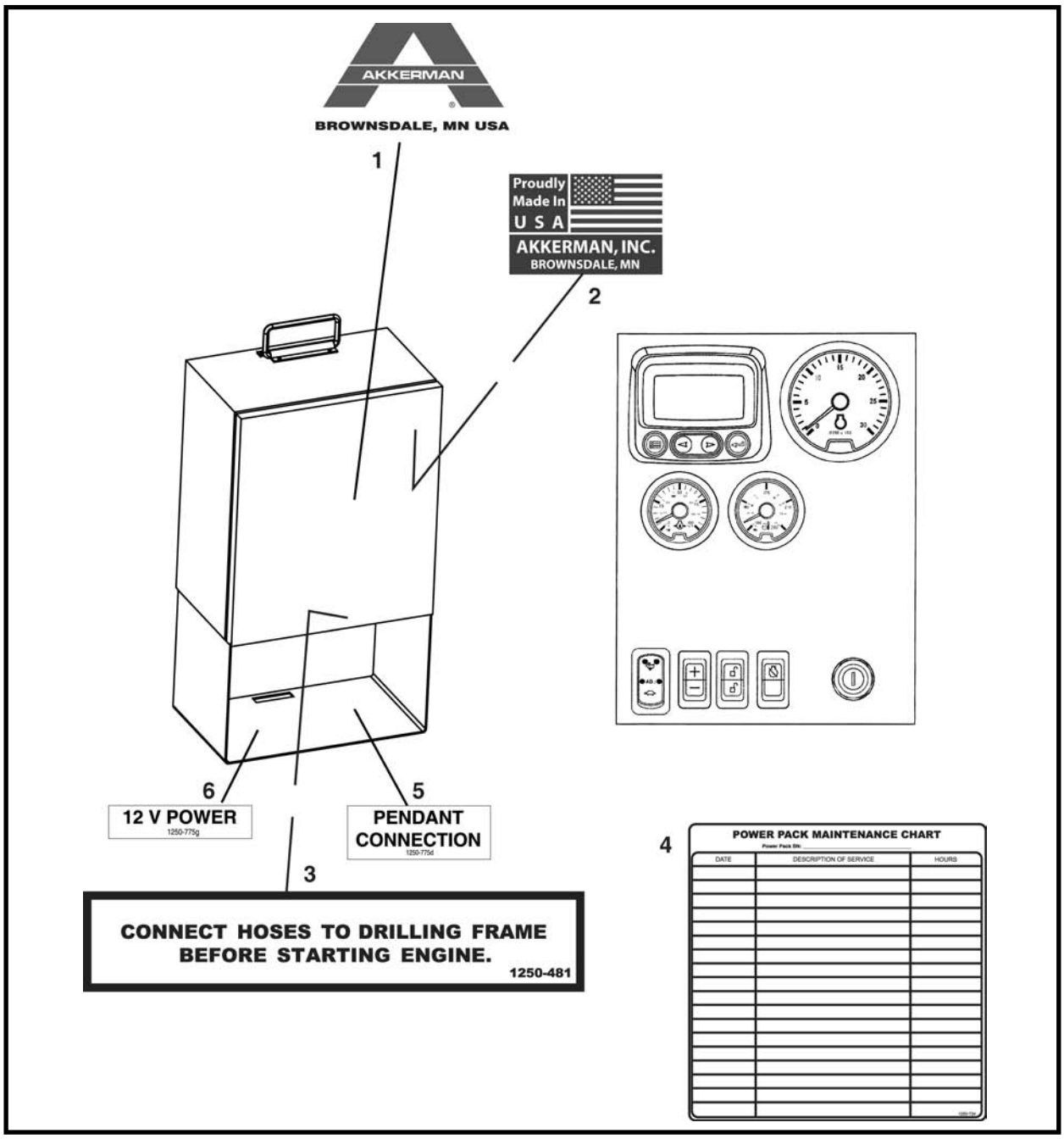
POWER PACK DECALS

P150Q

ITEM	QTY	PART NO.	DESCRIPTION
1	2	1250-558	DECAL, USA Flag, Small
2	1	1250-494	DECAL, Fuel Drain
3	1	1250-527	DECAL, Coolant Drain
4	2	1251-223a	DECAL, Warning Contact With Hot Surfaces
5	4	1251-206	DECAL Model P150Q
6	4	1251-246	DECAL, Akkerman, Large
7	4	1251-207	DECAL, Notice Container Doors Open
8	1	P0310-474F	DECAL, Emergency Stop
9	1	REF	PLATE, Serial Number
10	1	1250-544	DECAL, Made in USA
11	1	1250-098	DECAL, Lease (used only with leased equipment)
12	2	1251-223b	DECAL, Warning Contact With Hot Surfaces
13	4	1251-209	DECAL, Container Lifting Instructions
14	1	1250-777a	DECAL, Warning Hot Exhaust
15	1	1251-222	DECAL, Reservoir Level Gauge
16	1	1250-697	DECAL, Warning Coolant System Pressure
17	1	1250-004	DECAL, Warning Keep Guards In Place
18	1	1250-498	DECAL, Engine Oil Drain
19	1	1250-854	DECAL, Hydraulic Oil Fill
20	2	1250-872	DECAL, Load Sense Filter Installation
21	1	1250-483	DECAL, Caution Oil Temperature
22	1	1250-775a	DECAL, Oil Pump/Lights
23	3	1250-873	DECAL, Load Sense Filter
24	1	1251-016	DECAL, Warning Battery Produce Explosive Gases
25	1	1250-775d	DECAL, Pendant Connection
26	1	1250-493	DECAL, Fuel Fill
27a	1	1251-237a	DECAL,240A/308A PCH Cutter PSI
27b	1	1251-237b	DECAL, 240A/308A Jacking PSI
27c	1	1251-237c	DECAL, 240A/308A Rotation PCH Auger PSI
27d	1	1251-237d	DECAL, 4812A Jacking PSI
27e	1	1251-237e	DECAL, 4812A Rotation PCH Auger PSI
27f	1	1251-237f	DECAL, 4812A PCH Cutter PSI
28	1	1250-777b	DECAL, Warning Hot Exhaust, Small
29	2	40000-16	DECAL, Notice Change Filter
30	1	1250-649	DECAL, Oil Level

REMOTE INSTRUMENT PANEL DECALS

P150Q PENDANT



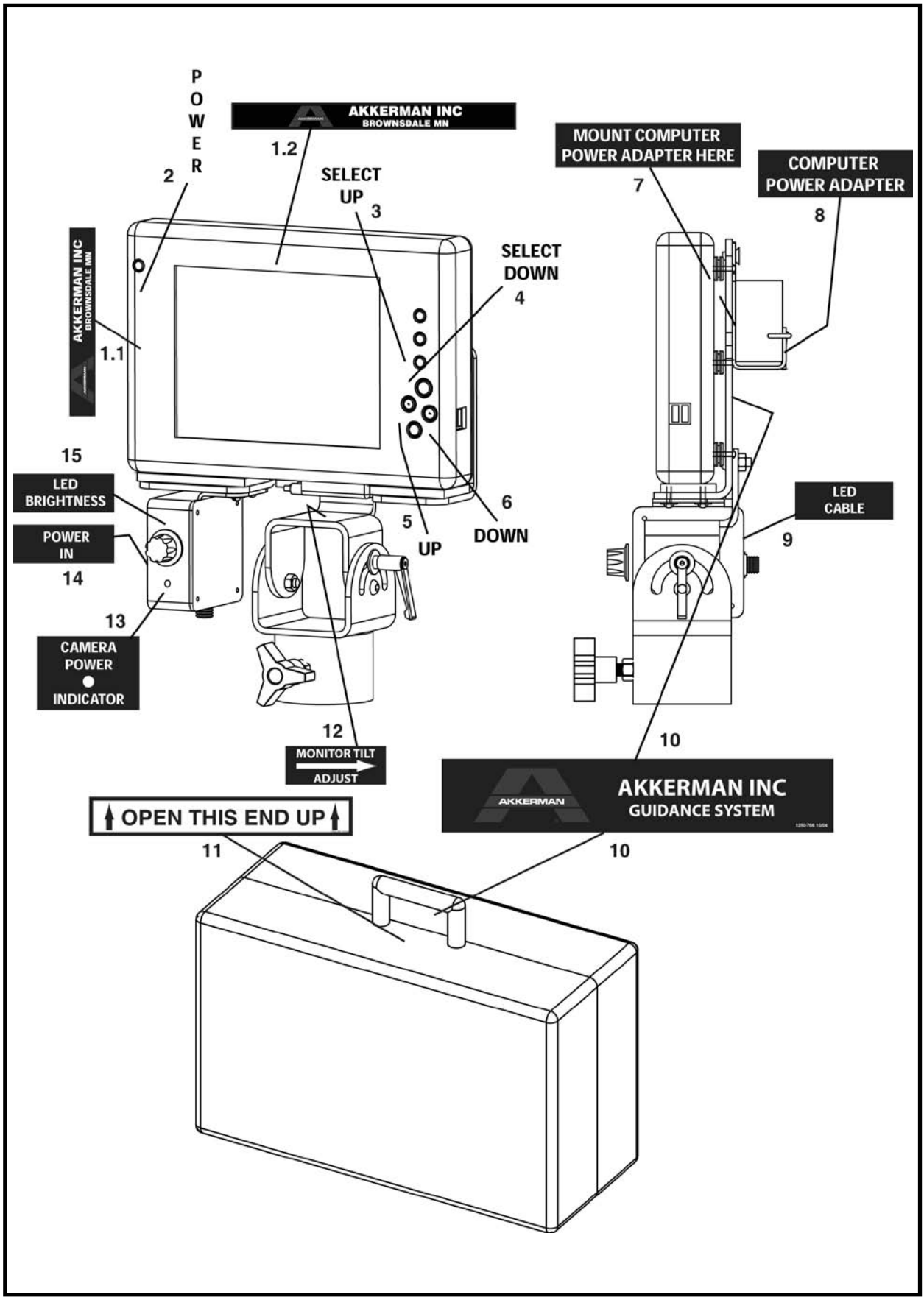
ITEM	QTY	PART NO.	DESCRIPTION
1	1	1251-247	DECAL, Akkerman Medium
2	1	1250-544	DECAL, Made In USA
3	1	1250-481	DECAL, Connect Hoses
4*	1	1250-724	DECAL, Power Pack Maintenance Chart
5	1	1250-775d	DECAL, Pendant Connection
6	1	1250-775g	DECAL, 12V Power

* Located on inside front cover of instrument panel.

NOTES

GUIDANCE SYSTEM DECALS

GUIDANCE SYSTEM (SN FA42035F-86 & BEFORE)



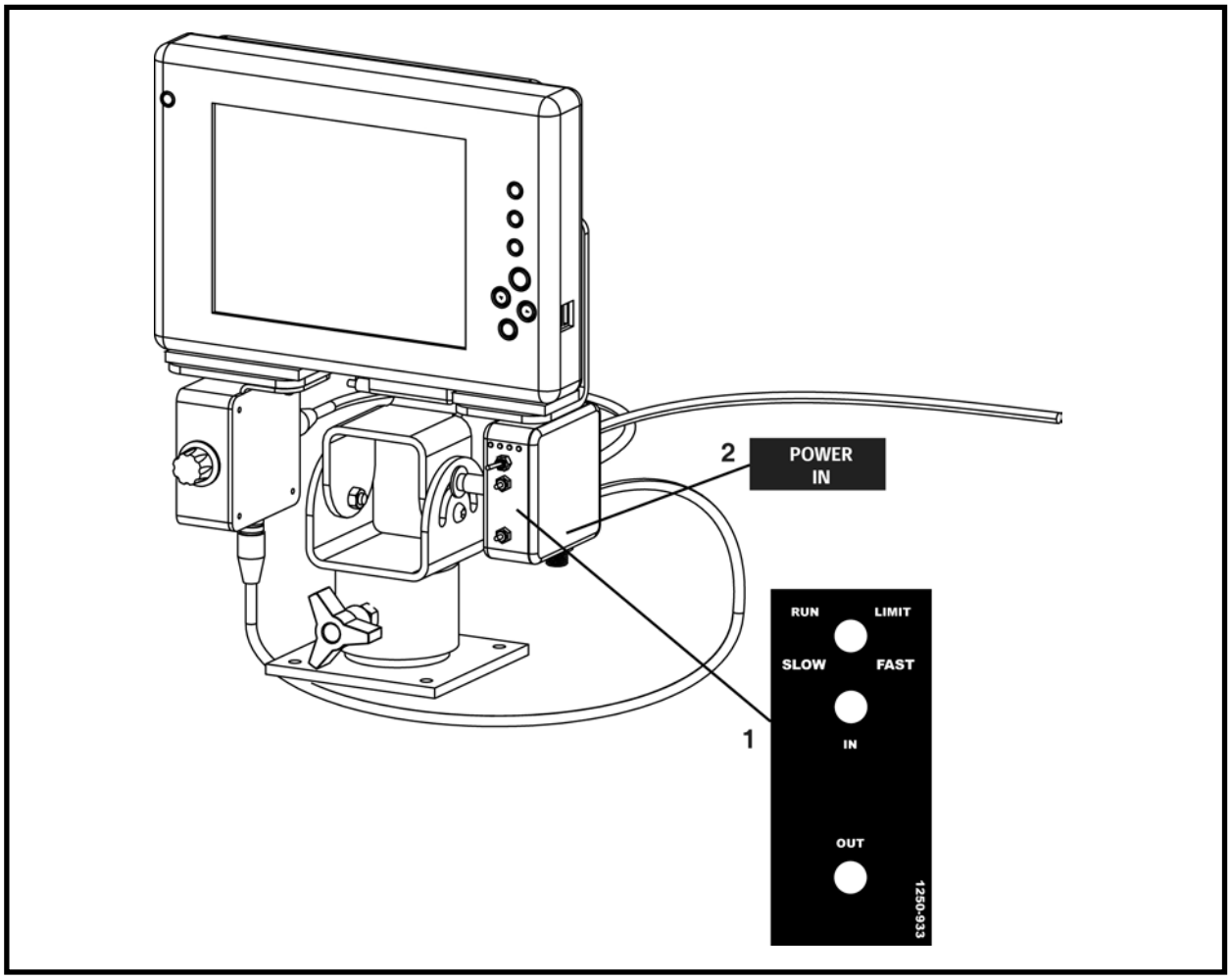
GUIDANCE SYSTEM DECALS

GUIDANCE SYSTEM (SN FA42035F-86 & BEFORE)

ITEM	QTY	PART NO.	DESCRIPTION
1.1	1	1250-752B	DECAL, Guidance System Layout (1.94 x .25)
1.2	1	1250-752B1	DECAL, Guidance System Layout (3.5 x .3125)
2	1	1250-752A	DECAL, Power
3	1	1250-752F	DECAL, Select Up
4	1	1250-752G	DECAL, Select Down
5	1	1250-752H	DECAL, Down
6	1	1250-752I	DECAL, Up
7	1	1250-752K	DECAL, Mount Power Adapter Here
8	1	1250-752L	DECAL, Computer Power Adapter
9	1	1250-752M	DECAL, LED Cable
10	2	1250-766	DECAL, Akkerman Guidance System
11	1	1250-765	DECAL, Open This Side
12	1	1250-752J	DECAL, Monitor Tilt Adjust
13	1	1250-752E	DECAL, Camera Power Indicator
14	1	1250-752D	DECAL, Power In
15	1	1250-752C	DECAL, LED Brightness

REMOTE FOCUS KIT DECALS

GUIDANCE SYSTEM (SN FA42035F-86 & BEFORE)

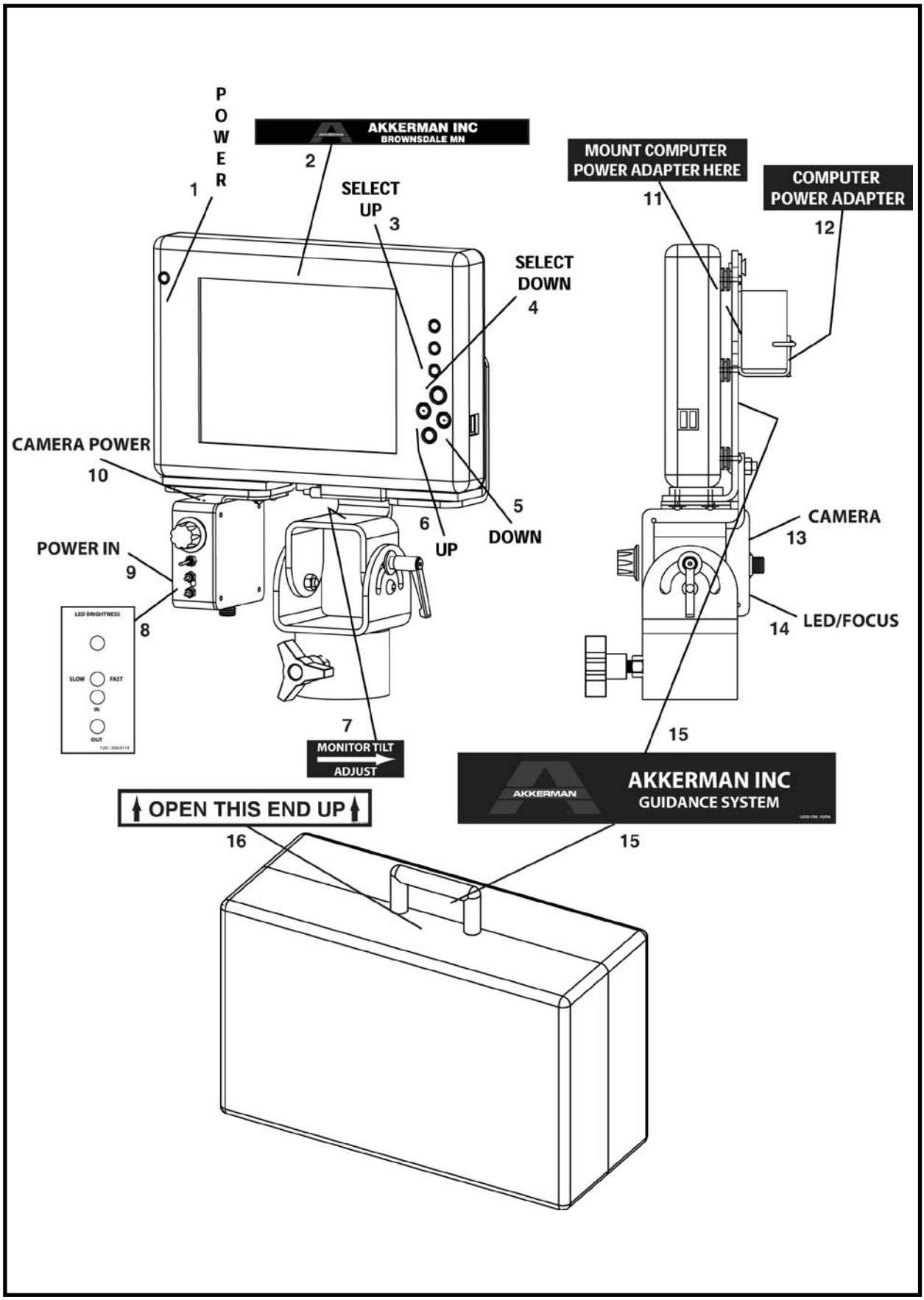


ITEM	QTY	PART NO.	DESCRIPTION
1	1	1250-933	DECAL, Remote Focus Kit
2	1	1250-752D	DECAL, Power In

NOTES

GUIDANCE SYSTEM DECALS

GUIDANCE SYSTEM (SN FA42035F-87 & AFTER)



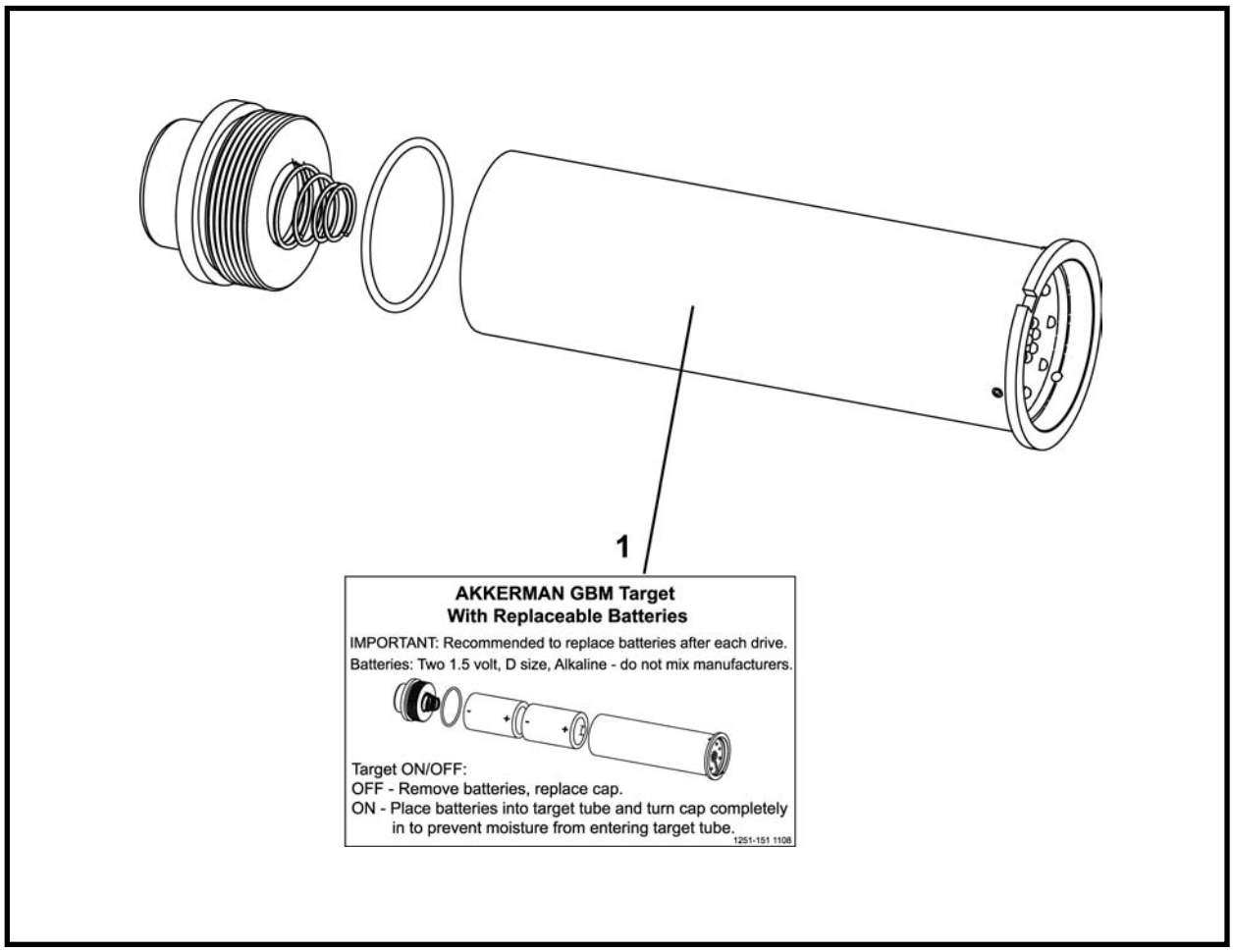
GUIDANCE SYSTEM DECALS

GUIDANCE SYSTEM (SN FA42035F-87 & AFTER)

ITEM	QTY	PART NO.	DESCRIPTION
1	1	1250-752A	DECAL, Power
2	1	1250-752B1	DECAL, Guidance System Layout
3	1	1250-752F	DECAL, Select Up
4	1	1250-752G	DECAL, Select Down
5	1	1250-752H	DECAL, Down
6	1	1250-752I	DECAL, Up
7	1	1250-752J	DECAL, Monitor Tilt Adjust
8	1	1251-256	DECAL, LED Brightness & Remote Focus
9	1	1251-256A	DECAL, Power In
10	1	1251-256B	DECAL, Camera Power
11	1	1250-752K	DECAL, Mount Power Adapter Here
12	1	1250-752L	DECAL, Computer Power Adapter
13	1	1251-256C	DECAL, Camera
14	1	1251-256D	DECAL, LED/Focus
15	2	1250-766	DECAL, Akkerman Guidance System
16	1	1250-765	DECAL, Open This Side

GBM REPLACEABLE BATTERY TARGET DECAL

GUIDANCE SYSTEM TARGET A44853A

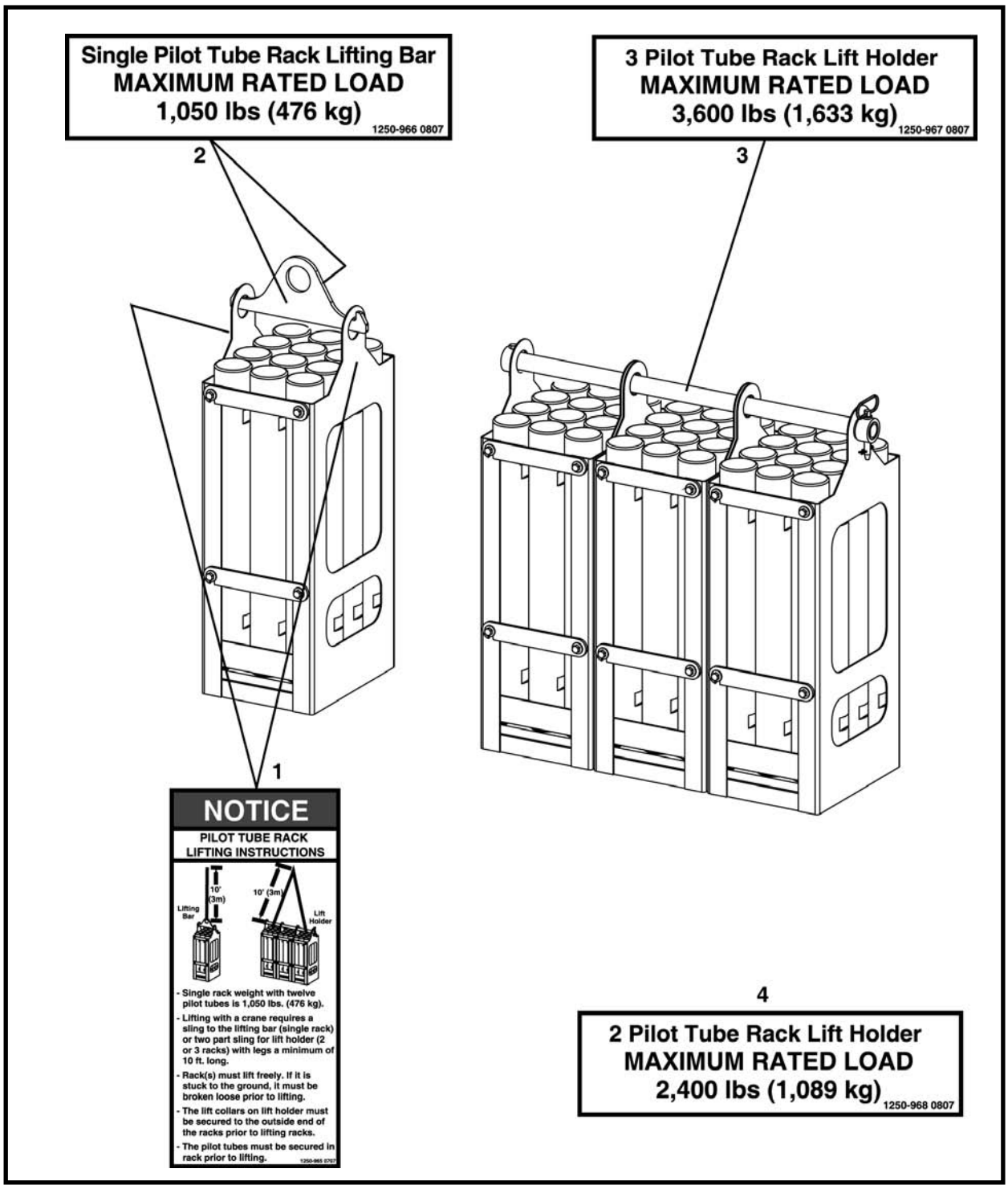


ITEM	QTY	PART NO.	DESCRIPTION
1	1	1251-151	DECAL, GBM Replaceable Battery Target

NOTES

PILOT TUBE RACK DECAL

30" PILOT TUBES

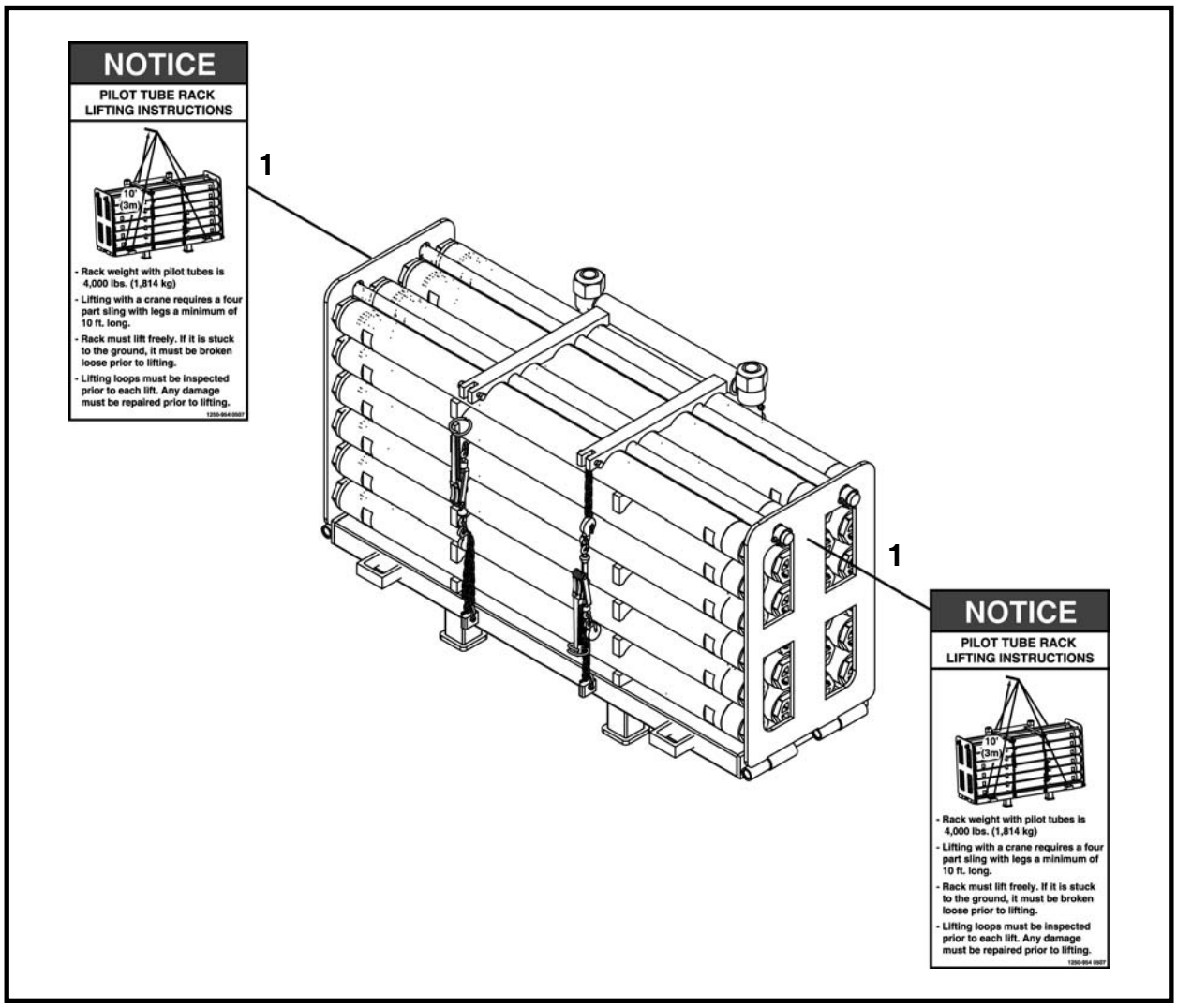


ITEM	QTY	PART NO.	DESCRIPTION
1	2*	1250-965	DECAL, Lifting Instructions
2	2	1250-966	DECAL, Single Rack Lift Bar Max Load
3	1	1250-967	DECAL, Three Rack Lift Holder Max Load
4	1	1250-968	DECAL, Two Rack Lift Holder Max Load

* Quantity Per Rack

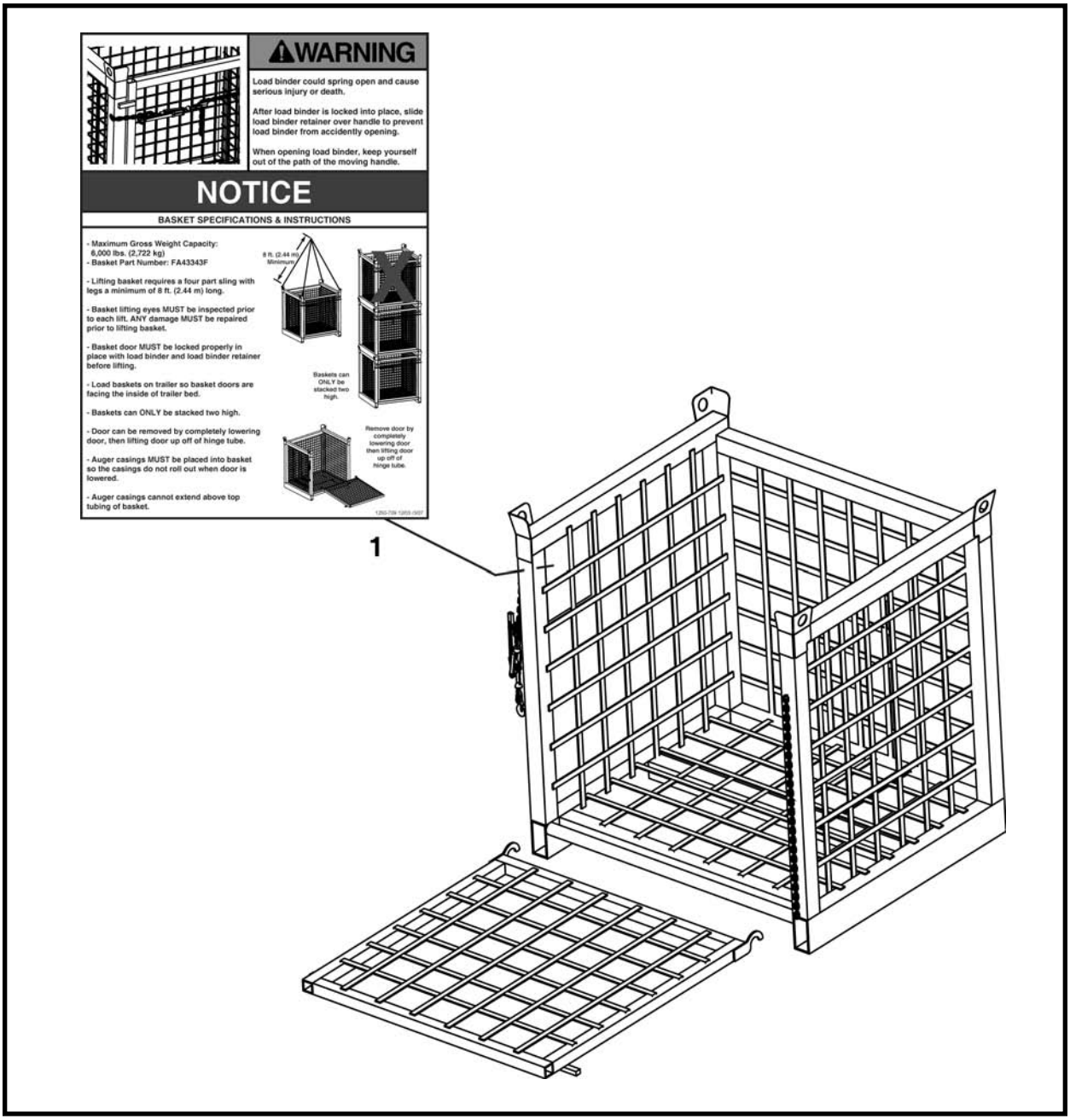
PILOT TUBE RACK DECAL

60” PILOT TUBES



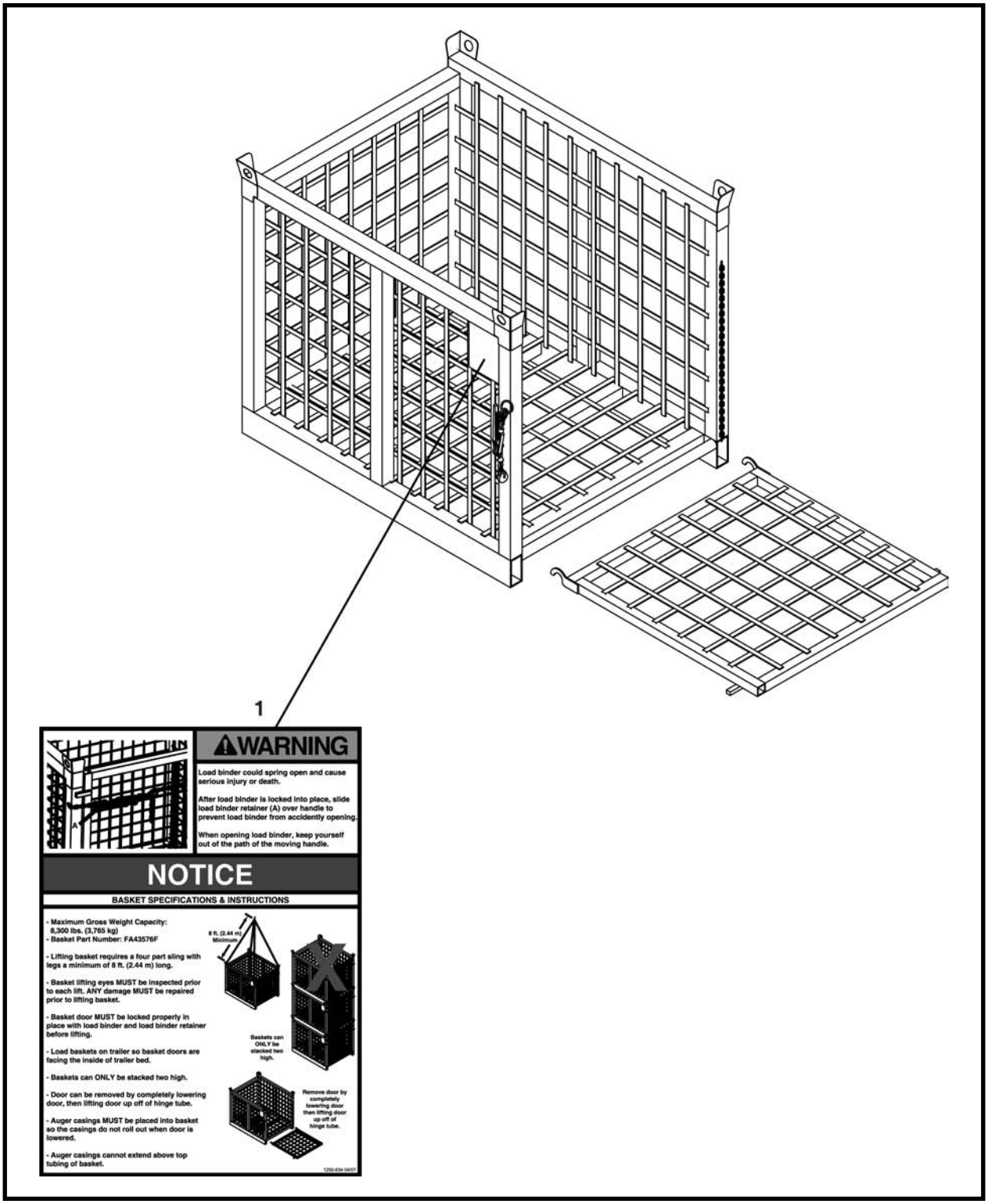
ITEM	QTY	PART NO.	DESCRIPTION
1	1	1250-954	DECAL, Basket Warning & Instructions

WIRE BASKET DECAL
1 METER CASING



ITEM	QTY	PART NO.	DESCRIPTION
1	1	1250-709	DECAL, Basket Warning & Instructions

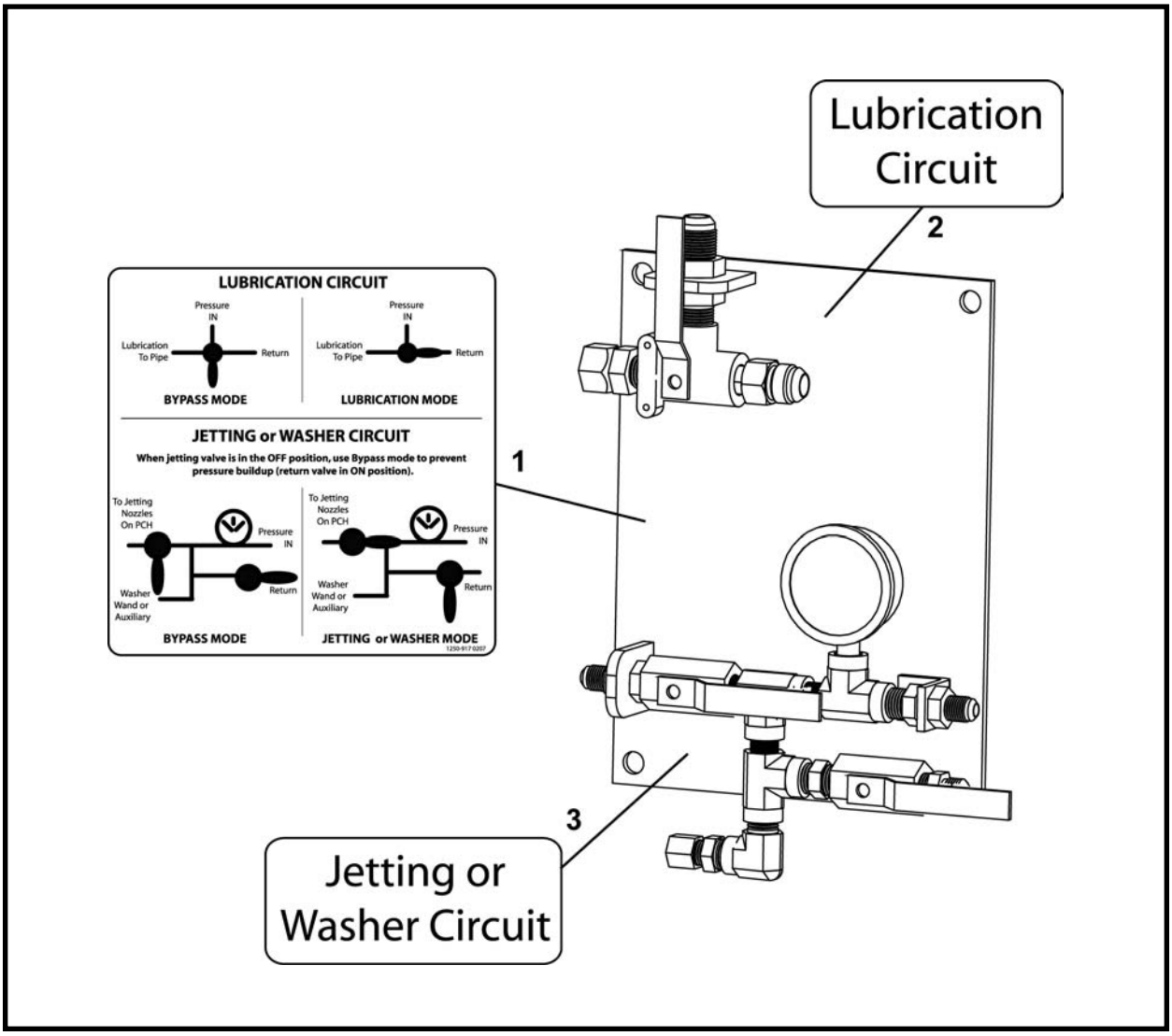
WIRE BASKET DECAL
5 FOOT CASING



ITEM	QTY	PART NO.	DESCRIPTION
1	1	1250-934	DECAL, Basket Warning & Instructions

JETTING & LUBRICATION PUMP SHAFT CONTROL DECALS

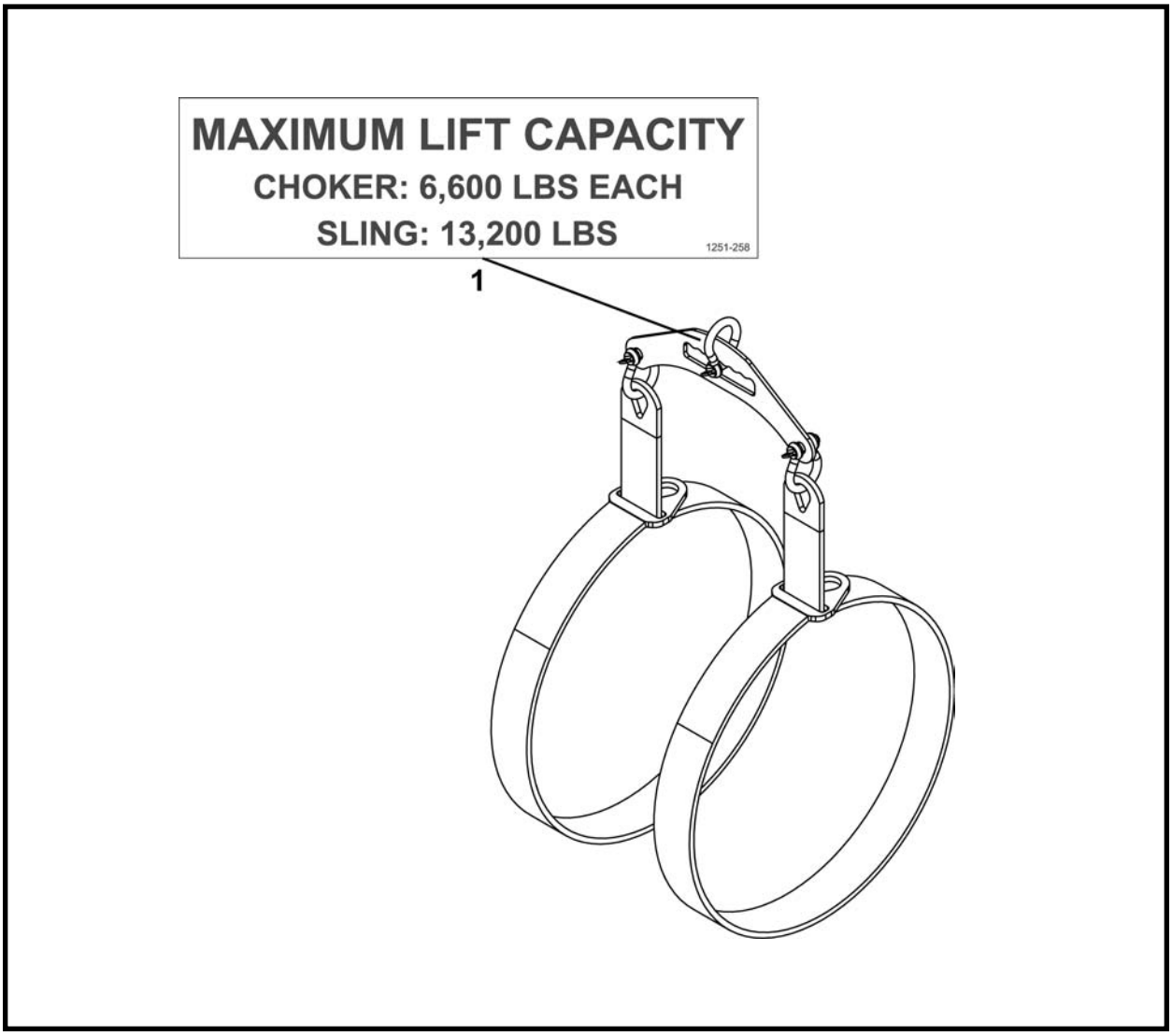
2325D/2325E JETTING & LUBRICATION PUMP



ITEM	QTY	PART NO.	DESCRIPTION
1	1	1250-917a	DECAL, Lubrication-Jetting-Washer Control
2	1	1250-917b	DECAL, Lubrication Circuit
3	1	1250-917c	DECAL, Jetting Or Washer Circuit

PCH LIFTING STRAP DECAL

PCH



ITEM	QTY	PART NO.	DESCRIPTION
1	1	1251-258	DECAL, Maximum Lift Capacity

NOTES

Structurals

GBM Frame

Frame Assembly 4812A, FA40034F **3**
- Rabbit Assembly, A43284A 4
- Push Plate Assembly, A43285A 6
  - SN FA40034F-1 & 2 6
    - Thrust Block Assembly, A43257A (SN FA40034F-1 & 2) 8
  - SN FA40034F-3 & After 10
    - Auger Drive Assembly, A44367A (SN FA40034F-3 - 10) 12
    - Auger Drive Assembly, A45970A (SN FA40034F-11 & After) 14
  - Latching Lock Assembly, A44079A 16
- 4812A Frame Assembly, A44000A (SN FA40034F-1 - 3) 18
- 4812A Frame Assembly, A44000A (SN FA40034F-4 & After) 19
- MakeUp Mount Assembly, A44047A 20
  - Hydraulic MakeUp Tool, A42430A 21
- Casing Support Assembly, A44088A 22
- Operator Platform Assembly, A44098A 23
- Drive Adapter & Swivel Assembly, FA44111F 24
  - Fluid Swivel Assembly, A41547A 25
- GBM Riser Block, A45626A 26

Power Packs

Power Pack Assembly, P275T, FA40033F **28**
- SN FA40033F-1 & 2 28
- SN FA40033F-3 & After 30
  - Power Unit Assembly, A43951A 32
    - Engine, 275HP, P0125-124 33
    - P275T Base Assembly, A43950A 34
  - P275T Container Assembly, A43995A (SN FA40033F-1 & 2) 36
    - Louver Assembly, A43970A (SN FA40033F-1 & 2) 38
  - P275T Gen 2 Container Assembly, A44549A (SN FA40033F-3 & After) 40

Power Pack Assembly, P150Q, FA40035F **43**
- Container Group Assembly, A44987A 44
  - Power Unit Assembly, A44986A 46
    - Power Unit Base Assembly, A44985A 48
      - Power Unit Base A45858A 50
    - Engine, 154 HP, P0125-132 52
- E-Stop Assembly, A43765A 53

(Continued on next page)

Structurals (continued)

Guidance System

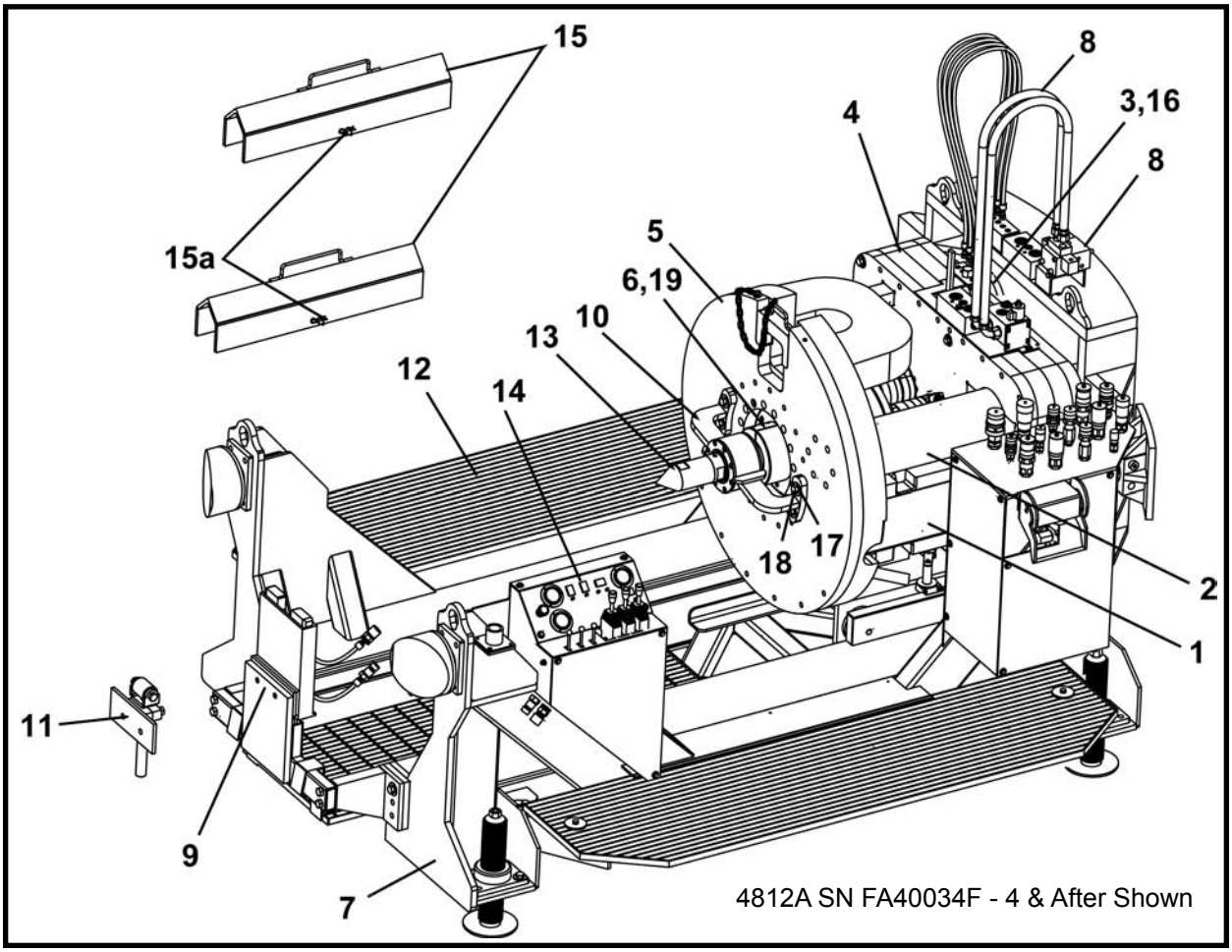
Without Remote Focus (SN FA42035F-86 & Before)
Guidance System Assembly G3, FA42035F 54
Guidance System Case G3, A42460A 55
Theodolite Stand, A42455A 56
Tablet PC Assembly, A42454A 57
Docking Station Assembly, A42056A 58
Camera & Optics Assembly, A42458A 59
Theodolite Assembly, A42466A 60
Target & Charger 61
Theodolite Shaft Stand - Latching Frame, FA40051F 62
Remote Focus Assembly, FA42096F 64
Motor Drive Assembly, A42037A 65

With Remote Focus (SN FA42035F-87 & After)
Guidance System Assembly G3, FA42035F 66
Guidance System Case G3, A42460A 67
Theodolite Stand, A42455A 68
Tablet PC Assembly, A42454A 69
Docking Station Assembly, A42056A 70
Camera & Optics Assembly, A42458A 71
Target, A44853A 72
Theodolite & Remote Focus Assembly, A45641A 73
Motor Drive Assembly, A42037A 74
Theodolite Shaft Stand - Latching Frame, FA40051F 75

Guidance System Assembly G2 To G3 Replacement (SN A42000-17 & Before)
Guidance System G2 To G3 Conversion Kit, FA42036F 76
Tablet PC Assembly, A42454A 77
Docking Station Assembly, A42056A 78
Camera & Optics Assembly, A42458A 79
Remote Focus Assembly, A42037A 80
Target, A44853A 81

Dirt Bucket, FA43805F 82

FRAME ASSEMBLY 4812A, FA40034F

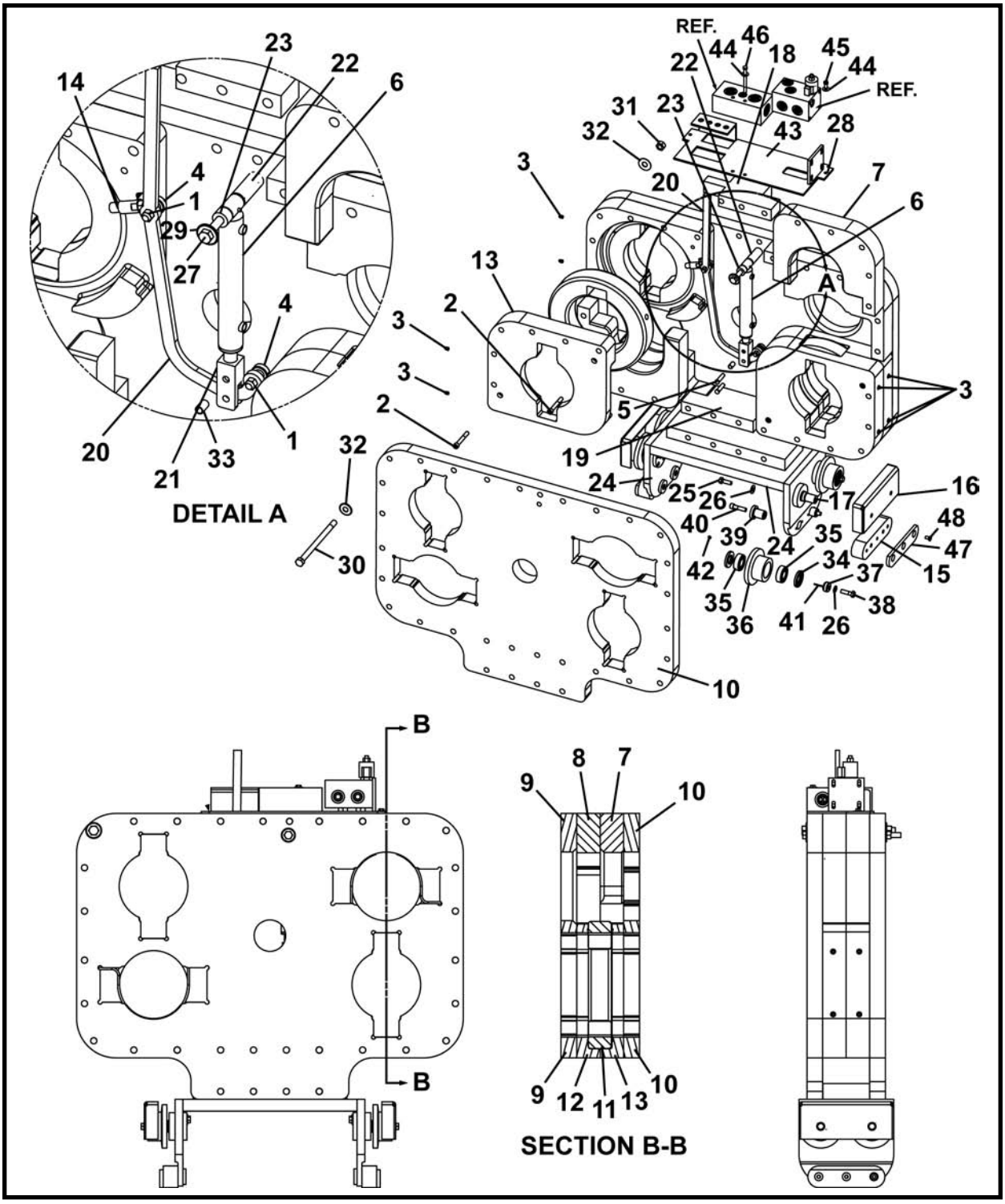


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40034F	FRAME ASSEMBLY, 4812A
1*	2	A43240A	CYLINDER ASSEMBLY, Keyed
2*	2	A43241A	CYLINDER ASSEMBLY, Fixed
3	2	A43254P	CYLINDER RETAINER
4**	1	A43284A	RABBIT ASSEMBLY
5**	1	A43285A	PUSH PLATE ASSEMBLY
6	1	A43297A	COUPLER, Pullback
7**	1	A44000A	FRAME ASSEMBLY
8.1***	1	A44045A	HYDRAULICS ASSEMBLY (SN FA40034F-1 Thru 3)
8.2***	1	A44567A	HYDRAULICS ASSEMBLY (SN FA40034F-4 & After)
9**	1	A44047A	MAKEUP MOUNT ASSEMBLY
10	2	A44057A	SWIVEL SUPPORT WELDMENT
11**	1	A44088A	CASING SUPPORT ASSEMBLY
12**	1	A44098A	OPERATOR PLATFORM ASSEMBLY
13**	1	FA44111F	DRIVE SWIVEL ADAPTER ASSEMBLY
14****	1	A44854A	ELECTRICAL ASSEMBLY, 4812A
15	2	A44182A	CYLINDER SAFETY STOP ASSEMBLY, (Includes item 15a)
15a	2	P0090-015	PIN, Hitch
16	12	P0031-16-012	SCREW, Socket Head Cap 1 x 3
17	4	P0040-012	WASHER, Flat, Hardened 3/4
18	4	P0001-12-010	BOLT, 3/4 UNC x 2.5
19	4	P0031-08-005	SCREW, Socket Head Cap 1/2 UNC x 1.25

* Refer to Section 10, Cylinders for parts breakdown.
** Refer to this section for parts breakdown.
*** Refer to Section 6, Hydraulics for parts breakdown.
**** Refer to Section 5, Electrical for parts breakdown.

RABBIT ASSEMBLY, A43284A

4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43284A	RABBIT ASSEMBLY
1	4	P0004-08-000	NUT, 1/2 NF
2	4	P0031-08-014	SCREW, Socket Head 1/2 UNC x 3.5
3	8	P0063-004	FITTING, Grease 1/8 NPT
4	2	P0099-009	ROD EYE
5	2	P0099-010	PIN, Clevis With Head 1/2”
6*	1	P0307-203	CYLINDER

RABBIT ASSEMBLY, A43284A

4812A

ITEM	QTY	PART NO.	DESCRIPTION
7	2	A43256P	RESTRAINT, Fixed Cylinder
8	2	A43262P	SPACER, Fixed Cylinder
9	1	A43265P	PLATE, Main Rear Rabbit
10	1	A43266P	PLATE, Main Front Rabbit
11	2	A43267P	PLATE, Keyhole
12	2	A43268P	PLATE, Front Keyhole
13	2	A43269P	PLATE, Front Keyhole
14	2	A43270P	ROD EYE EXTENSION
15	2	A45507P	BAR, Slide
16	2	A46066P	COVER, Wheel
17	4	A44542P	SHAFT IDLER
18	1	A43277P	SPACER
19	1	A43278P	BLOCK, Center Support
20	1	A43279P	LINKAGE ARM, Rabbit
21	1	A43280P	CLEVIS, Cylinder Rod
22	1	A43281P	SUPPORT, Cylinder Long
23	1	A43282P	SUPPORT, Cylinder Short
24	1	A43283A	TRAVEL STAGE RABBIT WELDMENT
25	16	P0001-08-006	BOLT, 1/2 UNC x 1-1/2
26	20	P0040-008	WASHER, Hardened Flat 1/2
27	1	P0001-10-048	BOLT, 5/8 UNC x 12
28	1	P0003-10-000	NUT, 5/8
29	2	P0040-010	WASHER, Hardened Flat 5/8
30	32	A46163P	BOLT, 3/4 UNC x 11.3
31	32	P0003-12-000	NUT, 3/4
32	64	P0040-012	WASHER, Hardened Flat 3/4
33	1	A44271P	BUSHING
34	8	P0080-034	SEAL
35	8	P0065-226	BEARING
36	4	A44541P	WHEEL, Idler
37	4	A44540P	CAP, Idler
38	4	P0001-08-007	BOLT, 1/2 UNC x 1.75
39	4	A45506P	SHAFT, Slide Bar
40	4	P0031-08-008	BOLT, 1/2 UNC x 2
41	4	P0049-044	PIN
42	4	P0063-001	FITTING, Grease
43	1	A45035A	HYDRAULIC MOUNTING PLATE WELDMENT
44	4	P0040-006	WASHER, Hardened Flat 3/8
45	2	P0001-06-003	BOLT, 3/8 UNC x .75
46	2	P0001-06-015	BOLT, 3/8 UNC x .25
47	2	A45953P	PAD, Rabbit Slide
48	6	P0030-06-003	SCREW, Flat Head Socket Head Cap 3/8 x .75

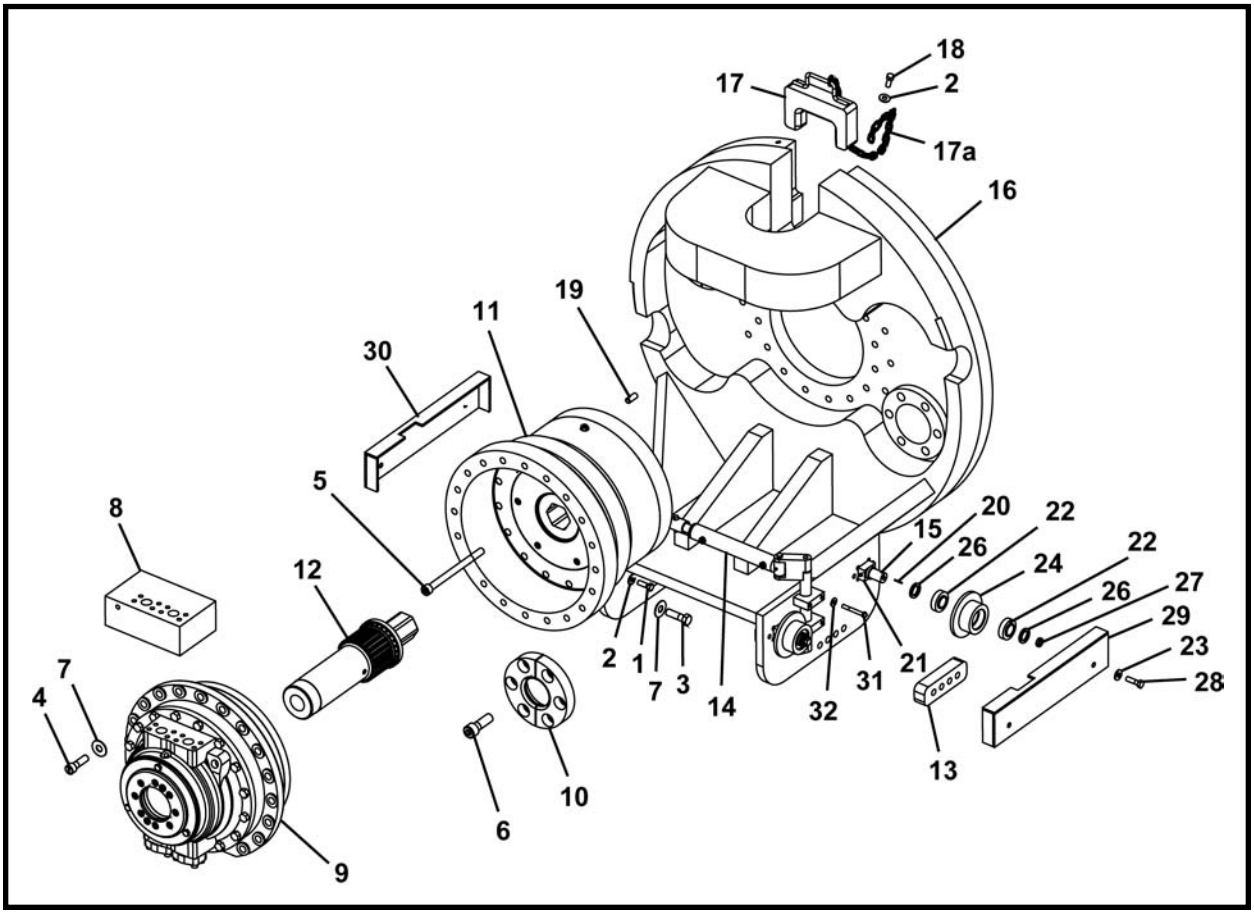
* Refer to Section 10, Cylinders for parts breakdown.

Fastener Torque: Tighten the following fasteners to the torque specified with LPS2 lubricant.

1/2	85 ft-lbs
5/8	170 ft-lbs
3/4	300 ft-lbs

PUSH PLATE ASSEMBLY, A43285A

4812A (SN FA40034F-1 & 2)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43285A	DRILLING DRIVE ASSEMBLY
1	8	P0001-08-006	BOLT, 1/2 UNC x 1.5
2	8	P0040-008	WASHER, Hardened Flat 1/2
3	8	P0001-12-010	BOLT, 3/4 UNC x 2.5
4	17	P0031-12-010	SCREW, Socket Head Cap 3/4 x 2.5
5	16	P0031-12-040	SCREW, Socket Head Cap 3/4 x 10
6	12	P0031-16-012	SCREW, Socket Head Cap 1 x 3
7	17	P0040-012	WASHER, Hardened Flat 3/4
8	1	P0302-506	VALVE, Two Speed
9	1	P0304-174	MOTOR
10	2	A43254P	RETAINER, Cylinder
11*	1	A43257A	ASSEMBLY, Thrust Block
12	1	A43263P	SHAFT, 4812A Drive Motor
13	2	A43273P	WEAR SHOE
14*	1	A44079A	ASSEMBLY, Latching Lock
15	4	A43275P	SHAFT, Idler Wheel
16	1	A43286A	WELDMENT, Push Plate
17	1	A44266A	ASSEMBLY, Handled Ring Segment (Includes item 17a)
17a	12 LI	P0094-004	CHAIN
18	1	P0001-08-005	BOLT, 1/2 UNC x 1.25
19	1	P0037-076	PIN, Dowel
20	4	P0049-044	PIN
21	4	P0063-001	FITTING, Grease
22	8	P0065-226	BEARING
23	8	P0040-008	WASHER, Hardened Flat 1/2

PUSH PLATE ASSEMBLY, A43285A

4812A (SN FA40034F-1 & 2)

ITEM	QTY	PART NO.	DESCRIPTION
24	4	A44541P	WHEEL, Idler
25	-	-	-
26	8	P0065-227	BEARING
27	4	A44540P	CAP
28	4	P0001-08-006	BOLT, 1/2 UNC x 1.5
29	1	A44170P	COVER, Right Large Wheel
30	1	A44190P	COVER, Left Large Wheel
31	4	P0001-06-012	BOLT, 3/8 UNC x 3
32	8	P0040-006	WASHER, Hardened Flat 3/8

* Refer to this section for parts breakdown.

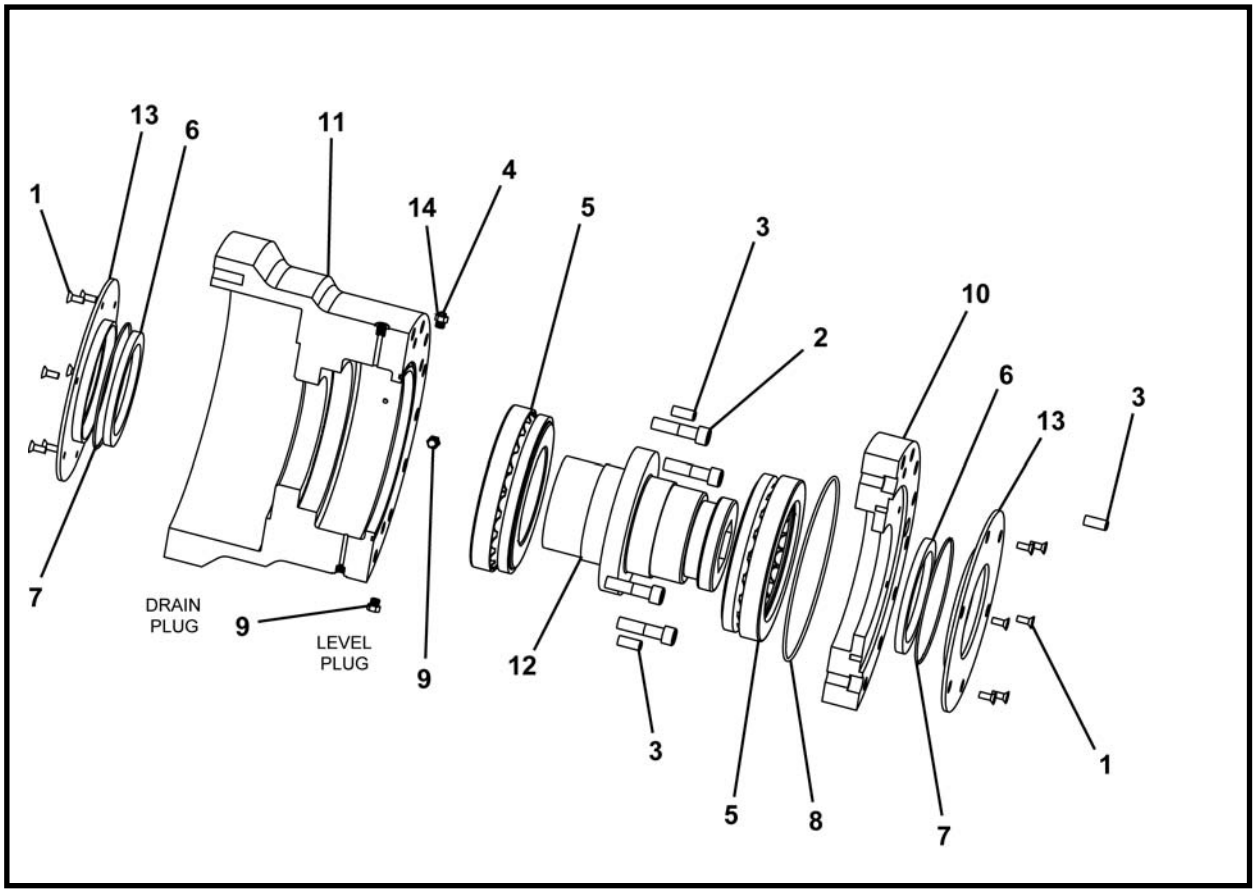
LI - Linear Inch

Fastener Torque: Tighten the following fasteners to the torque specified with LPS2 lubricant.

3/8	35 ft-lbs
1/2	85 ft-lbs
5/8	170 ft-lbs
3/4	300 ft-lbs
1	725 ft-lbs

THRUST BLOCK ASSEMBLY, A43257A

4812A (SN FA40034F-1 & 2)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43257A	THRUST BLOCK ASSEMBLY
1	12	P0030-06-004	SCREW, Flat Head 3/8 UNC x 1
2	4	P0031-12-012	SCREW, Socket Head Cap 3/4 UNC x 3
3	3	P0037-076	PIN, Dowel
4	1	P0063-012	FITTING, Grease
5	2	P0065-213	BEARING, Thrust Block
6	2	P0065-216	SEAL
7	2	P0085-266	ORING
8	1	P0085-381	ORING
9	2	P0300-027	06MB-PLUG
10	1	A43258P	COVER, Front
11	1	A43259P	SECTION, Rear
12	1	A43260P	BLOCK, Shaft
13	2	A43261P	RETAINER, Seal
14	1	P0300-776	PLUG, 06MB-02FP

Fastener Torque: Tighten the following fasteners to the torque specified with LPS2 lubricant.

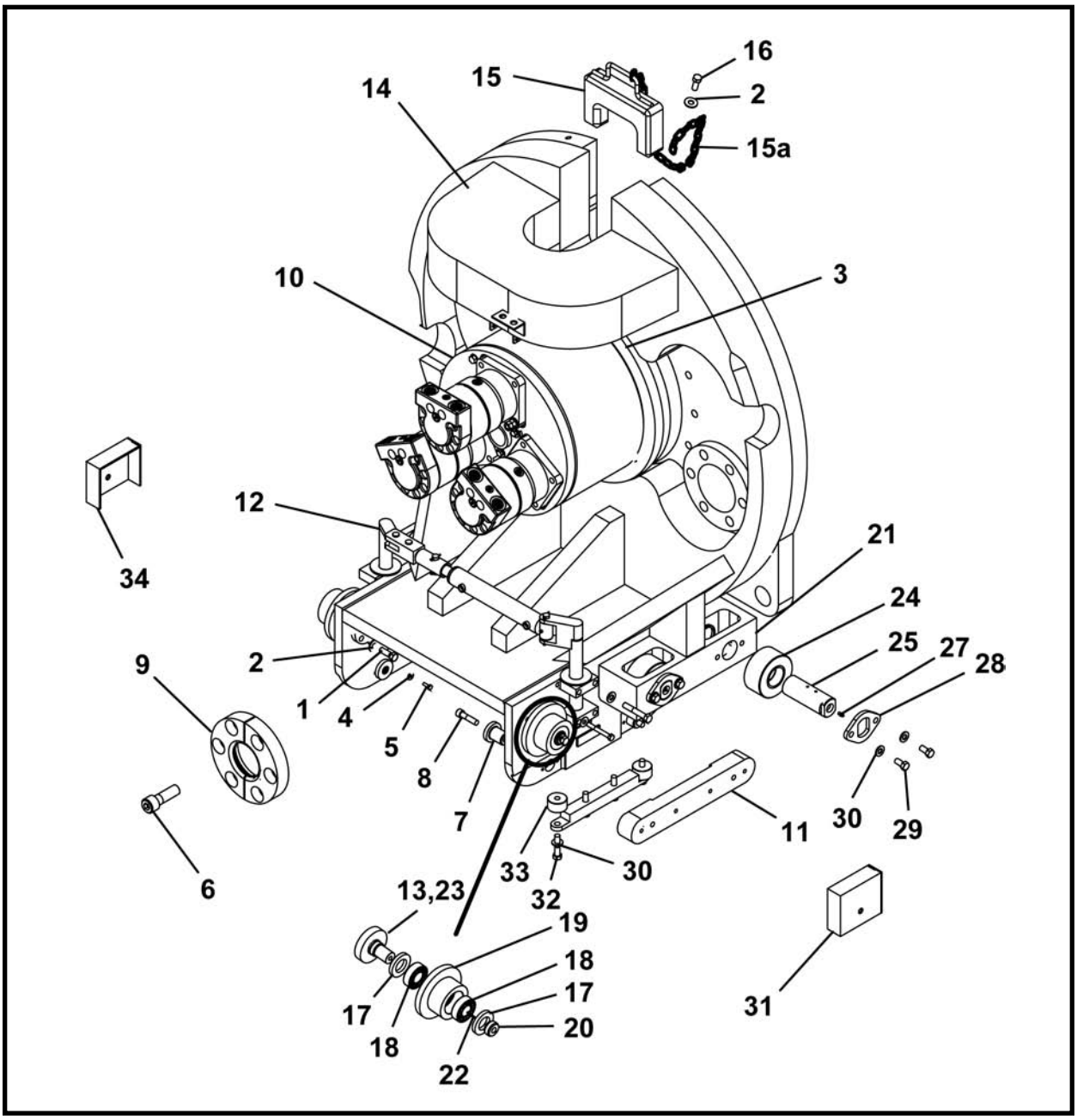
3/8 35 ft-lbs

3/4 300 ft-lbs

NOTES

PUSH PLATE ASSEMBLY, A43285A

4812A (SN FA40034F-3 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43285A	DRILLING DRIVE ASSEMBLY
1	16	P0001-08-006	BOLT, 1/2 UNC x 1.5
2	21	P0040-008	WASHER, Hardened Flat
3	16	P0031-12-016	SCREW, Socket Head Cap 3/4 UNC x 4
4	8	P0040-004	WASHER, Hardened Flat
5	8	P0001-04-003	BOLT, 1/4 UNC x .75
6	12	P0031-16-012	SCREW, Socket Head Cap 1 x 3
7	4	A45506P	SHAFT, Slide Bar
8	4	P0031-08-008	WASHER
9	2	A43254P	RETAINER, Cylinder
10.1*	1	A44367A	ASSEMBLY, Auger Drive (4812A SN 3 - 10)
10.2*	1	A45970A	ASSEMBLY, Auger Drive (4812A SN 11 & After)
11	2	A45505P	BAR, Slide

PUSH PLATE ASSEMBLY, A43285A

4812A (SN FA40034F-3 & AFTER)

ITEM	QTY	PART NO.	DESCRIPTION
12*	1	A44079A	ASSEMBLY, Latching Lock
13	4	A44542P	SHAFT IDLER
14	1	A43286A	WELDMENT, Push Plate
15	1	A44266A	ASSEMBLY, Handled Ring Segment (Includes item 15a)
15a	12 LI	P0094-004	CHAIN
16	1	P0001-08-005	BOLT, 1/2 UNC x 1.25
17	8	P0080-034	SEAL
18	8	P0065-226	BEARING
19	4	A44541P	WHEEL, Idler
20	4	A44540P	CAP, Idler
21	2	A46525P	HOUSING, Wheel
22	4	P0049-044	PIN
23	4	P0063-001	FITTING, Grease 1/4 Straight
24	4	A46533A	WHEEL, 4.5 (Includes item 24a)
24a	4	A46528P	BUSHING
25	4	A46526P	AXLE
26	8	P0001-08-012	BOLT, 1/2 UNC x 3
27	4	P0063-001	FITTING, Grease 1/4 Straight
28	4	A46529P	RETAINER, Axle
29	8	P0001-08-004	BOLT, 1/2 UNC x 1
30	12	P0040-008	WASHER, 1/2
31	1	A46540P	GUARD, Wheel - Right
32	4	P0001-08-009	BOLT, 1/2 UNC x 2.25
33	4	P0065-265	ROLLER, Track
34	1	A46539P	GUARD, Wheel - Left

* Refer to this section for parts breakdown.

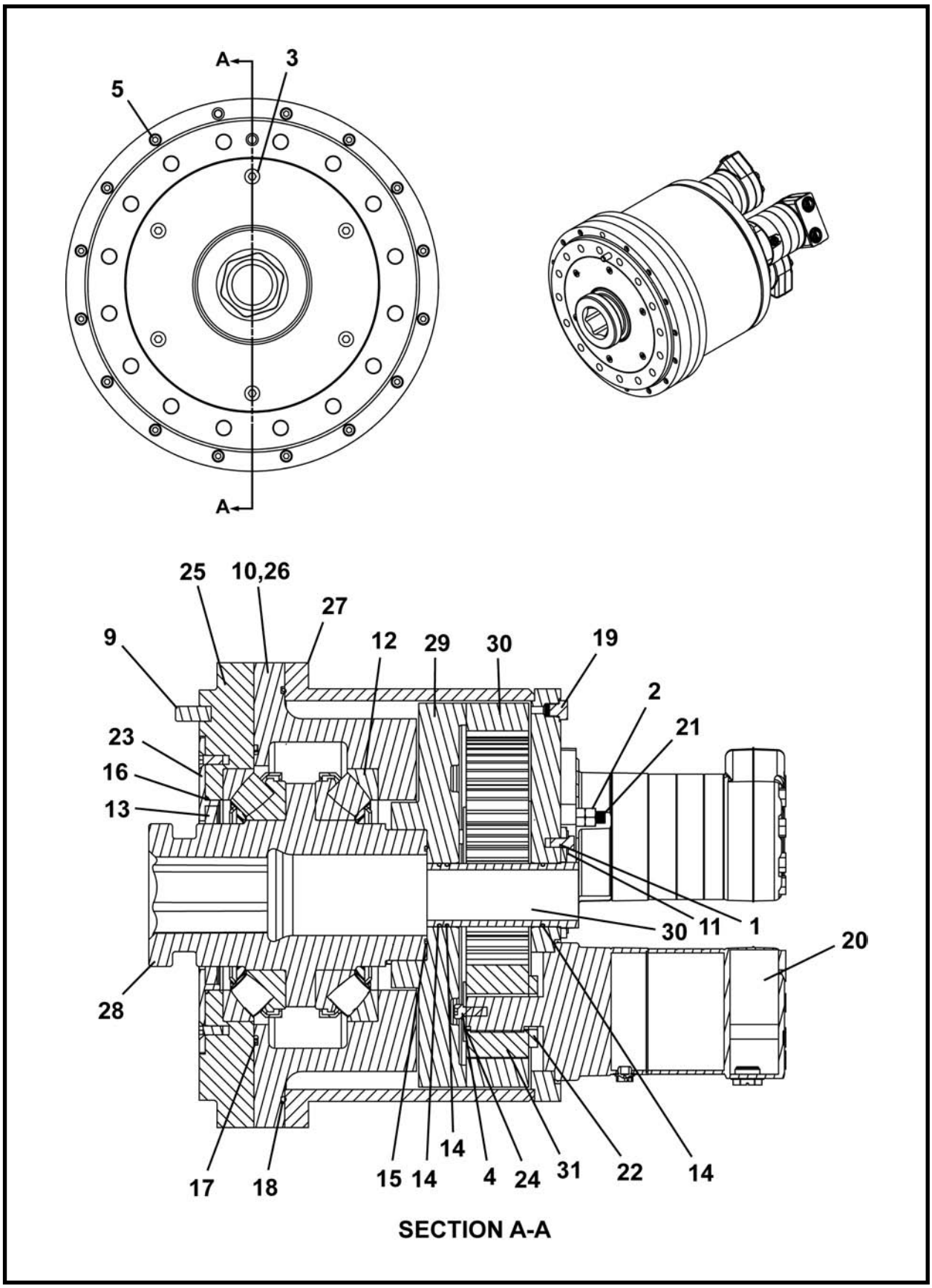
LI - Linear Inch

Fastener Torque: Tighten the following fasteners to the torque specified with LPS2 lubricant.

3/8	35 ft-lbs
1/2	85 ft-lbs
3/4	300 ft-lbs
1	725 ft-lbs

AUGER DRIVE ASSEMBLY, A44367A

4812A (SN FA40034F-3 THRU 10)



SECTION A-A

AUGER DRIVE ASSEMBLY, A44367A

4812A (SN FA40034F-3 THRU 10)

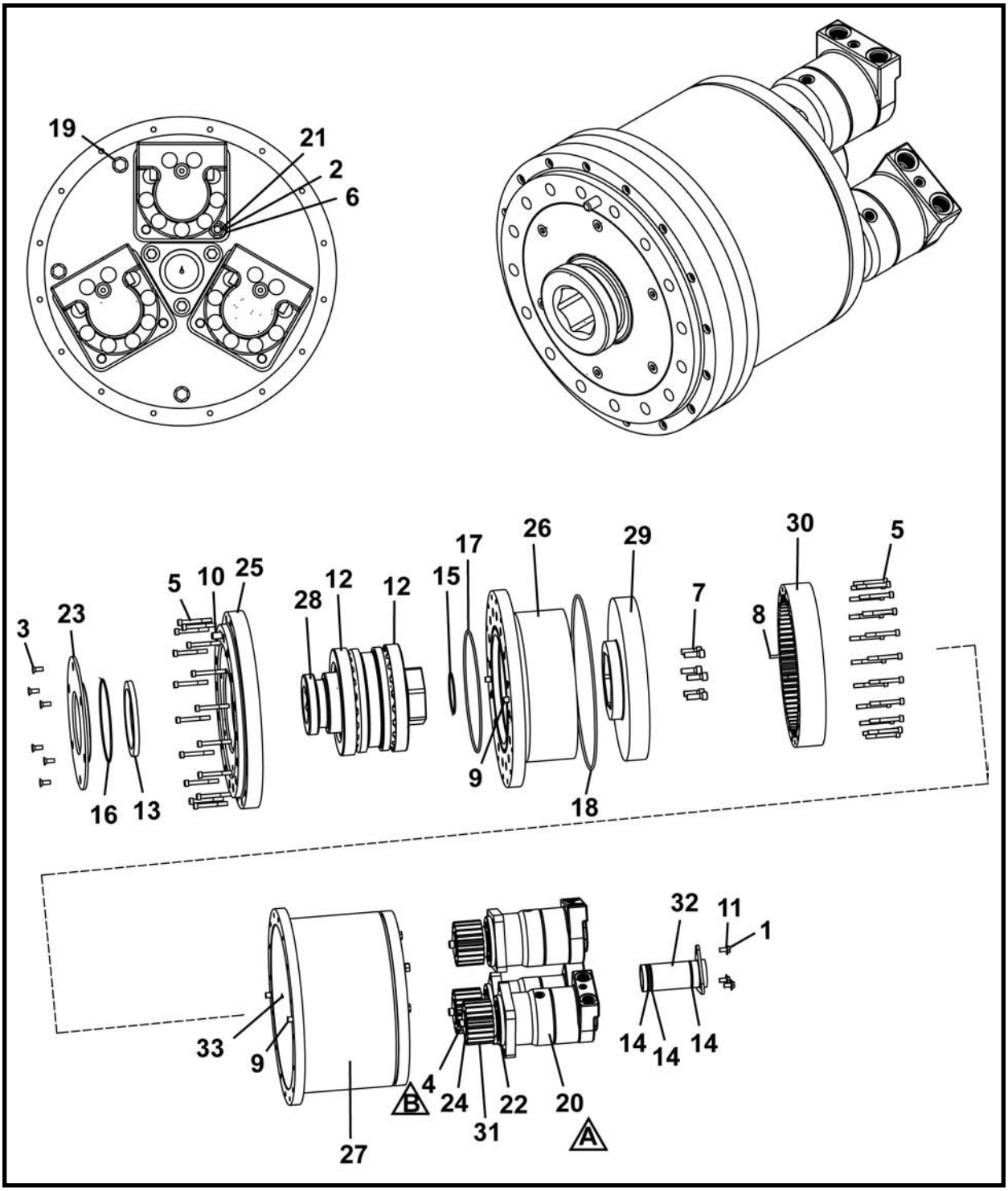
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44367A	AUGER DRIVE ASSEMBLY
1	3	P0001-06-003	BOLT, 3/8 UNC x .75
2	3	P0003-08-000	NUT, 1/2
3	6	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
4	3	P0031-06-004	SCREW, Socket Head Cap 3/8 UNC x 1
5	16	P0031-06-012	SCREW, Socket Head Cap 3/8 UNC x 3
6	20	P0031-06-012	SCREW, Socket Head Cap 3/8 UNC x 3
7	6	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC x 1.5
8	2	P0037-025	PIN, Dowel
9	4	P0037-064	PIN, Dowel
10	1	P0037-076	PIN, Dowel
11	3	P0040-006	WASHER, Hardened Flat 3/8
12	2	P0065-213	BEARING, Thrust Block
13	1	P0065-216	SEAL
14	3	P0085-229	ORING
15	1	P0085-241	ORING
16	1	P0085-266	ORING
17	1	P0085-381	ORING
18	1	P0085-386	ORING
19	3	P0300-027	PLUG, 06MB
20	3	P0304-165	MOTOR, Hydraulic
21	12	A43190P	ROD, Threaded
22	3	A43191P	WASHER
23	1	A43261P	RETAINER, Seal
24	3	A43863P	WASHER, Pinion
25	1	A44368P	COVER, Front
26	1	A44369P	COVER, Rear
27	1	A44370A	WELDMENT, Bulkhead
28	1	A44371P	SHAFT, Auger Drive
29	1	A44372P	ADAPTER, Auger Drive
30	1	A44373P	RING, Gear
31	3	A44374P	PINION
32	1	A44375A	WELDMENT, Rear Seal
33*	8 QT	P0126-014	Lube, Mobilgear 630 Gear

* Not Shown

QT - Quart

AUGER DRIVE ASSEMBLY, A45970A

4812A (SN FA40034F-11 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45970A	AUGER DRIVE ASSEMBLY
1	3	P0001-06-003	BOLT, 3/8 UNC x .75
2	3	P0003-08-000	NUT, 1/2
3	6	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
4	3	PM12B-1.75-025	SCREW, Socket Head Cap M12 - 1.75 - 25
5	36	P0031-06-012	SCREW, Socket Head Cap 3/8 UNC x 3
6	12	P0040-008	WASHER, Hardened Flat 1/2

AUGER DRIVE ASSEMBLY, A45970A

4812A (SN FA40034F-11 & AFTER)

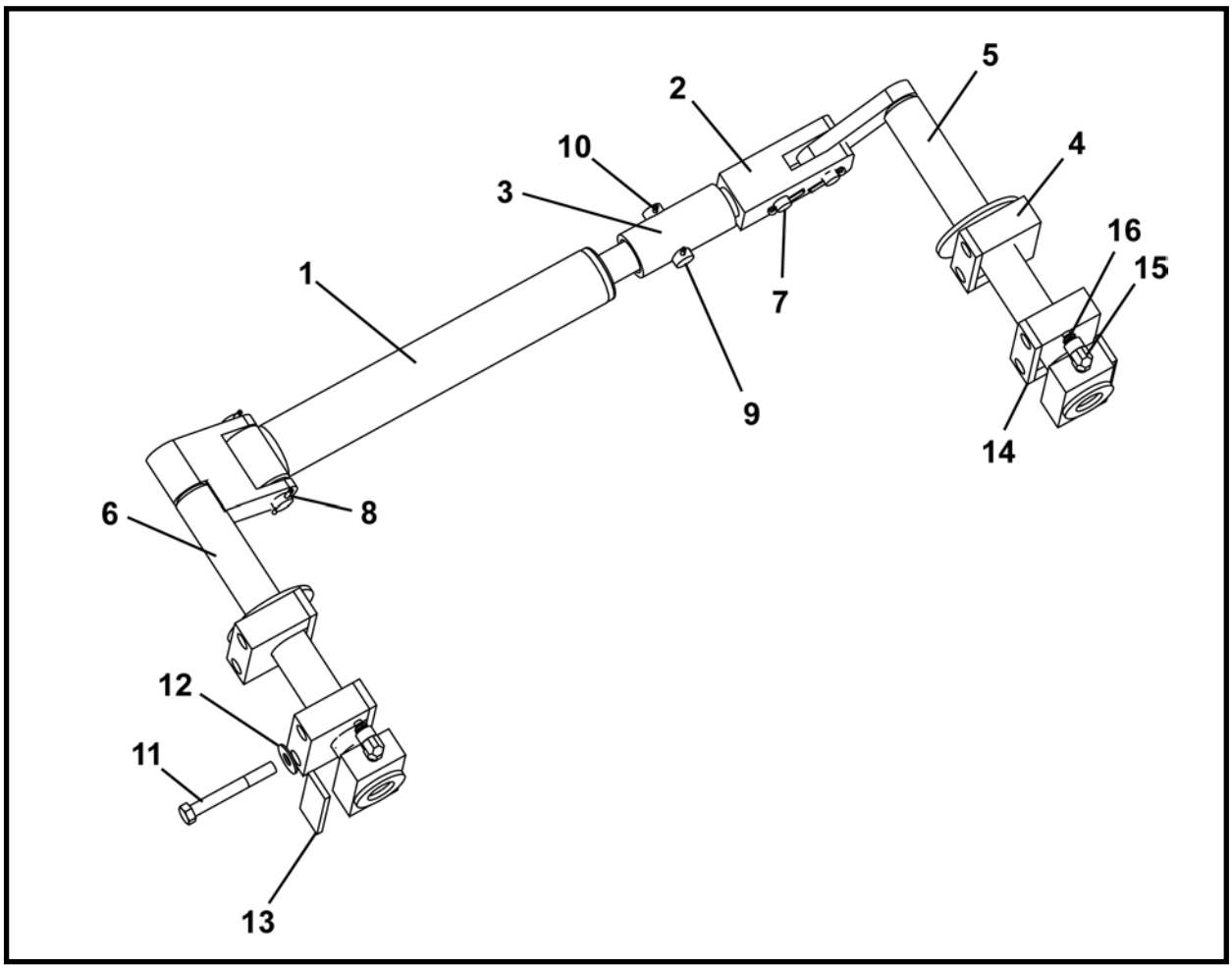
ITEM	QTY	PART NO.	DESCRIPTION
7	6	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC x 1.5
8	2	P0037-025	PIN, Dowel
9	4	P0037-064	PIN, Dowel
10	1	P0037-076	PIN, Dowel
11	3	P0040-006	WASHER, Hardened Flat 3/8
12	2	P0065-213	BEARING, Thrust Block
13	1	P0065-216	SEAL
14	3	P0085-229	ORING
15	1	P0085-241	ORING
16	1	P0085-266	ORING
17	1	P0085-381	ORING
18	1	P0085-386	ORING
19	3	P0300-027	PLUG, 06MB
20	3	P0304-328	MOTOR, Hydraulic
21	12	A43190P	ROD, Threaded
22	3	A46024P	SPACER, Pinion
23	1	A43261P	RETAINER, Seal
24	3	A46023P	WASHER, Pinion
25	1	A44368P	COVER, Front
26	1	A44369P	COVER, Rear
27	1	A44370A	WELDMENT, Bulkhead
28	1	A44371P	SHAFT, Auger Drive
29	1	A44372P	ADAPTER, Auger Drive
30	1	A44373P	RING, Gear
31	3	A45994P	PINION
32	1	A44375A	WELDMENT, Rear Seal
33	8 QT	P0126-014	LUBE, Mobilgear Gear

QT - Quart

A - Apply silicone sealant between motors and gear case.
B - Apply Loctite® to threads of pinion bolts.

LATCHING LOCK ASSEMBLY, A44079A

4812A



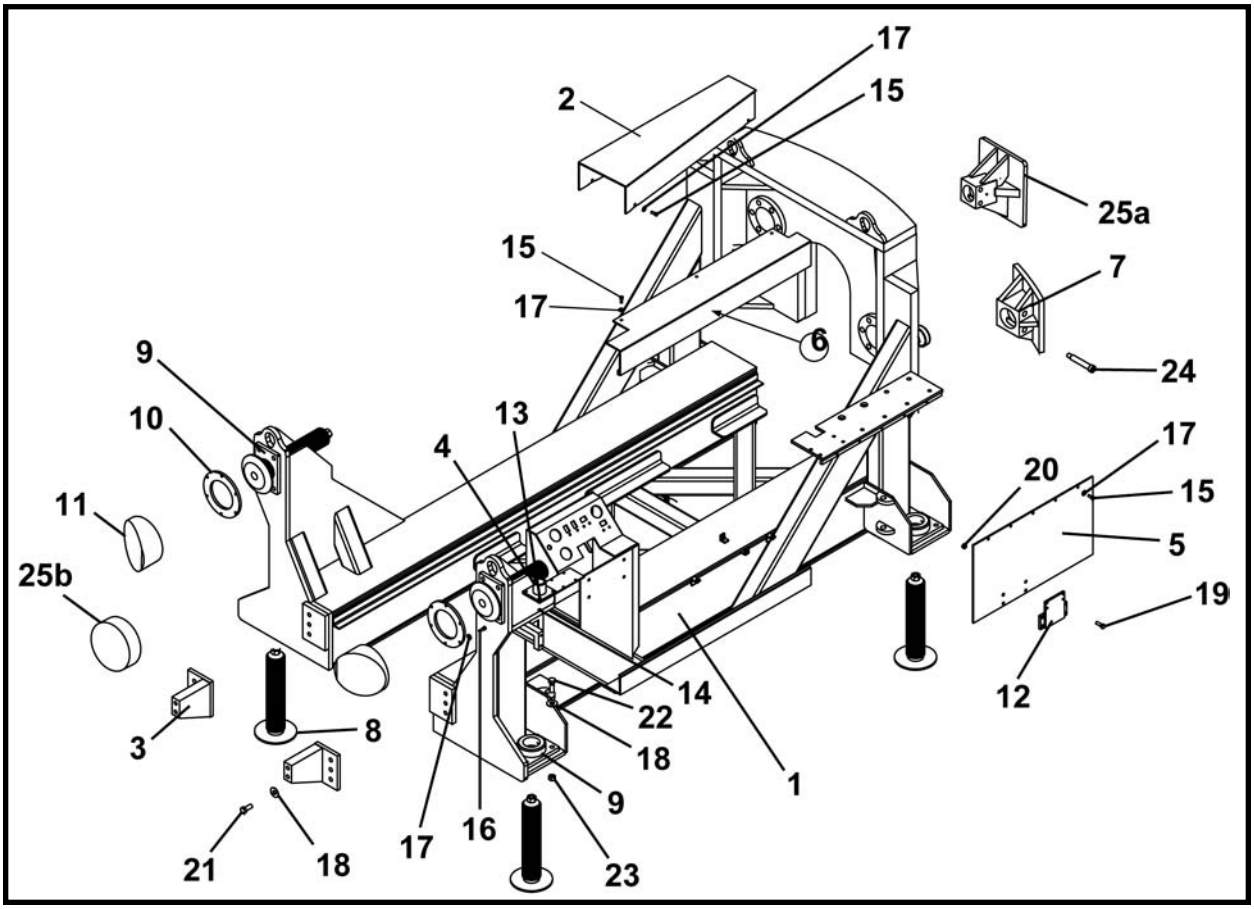
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44079A	LATCHING LOCK ASSEMBLY
1*	1	P0307-203	CYLINDER
2	1	A43280P	CLEVIS
3	1	A44080P	EXTENSION ROD, Cylinder
4	4	A44081P	RETAINER, Short Pivot
5	1	A46494A	SHAFT, Pivot
6	1	A46495A	SHAFT, Clevis
7	2	P0099-010	PIN
8	1	A44272P	PIN, Clevis
9	1	A44273P	PIN
10	6	P0048-025	PIN, Cotter
11	8	P0001-06-012	BOLT, 3/8 UNC x 3
12	8	P0040-006	WASHER, Hardened Flat 3/8
13	2	A46492P	BAR, Brake Pad
14	4	A46493P	SPACER, Brake Shaft
15	2	P0300-175	FITTING, 02MP-02FP90
16	2	P0063-004	FITTING, Grease - Straight 1/8-NPT

* Refer to Section 10, Cylinders for parts breakdown.

NOTES

4812A FRAME ASSEMBLY, A44000A

4812A (SN FA40034F-1 THRU 3)

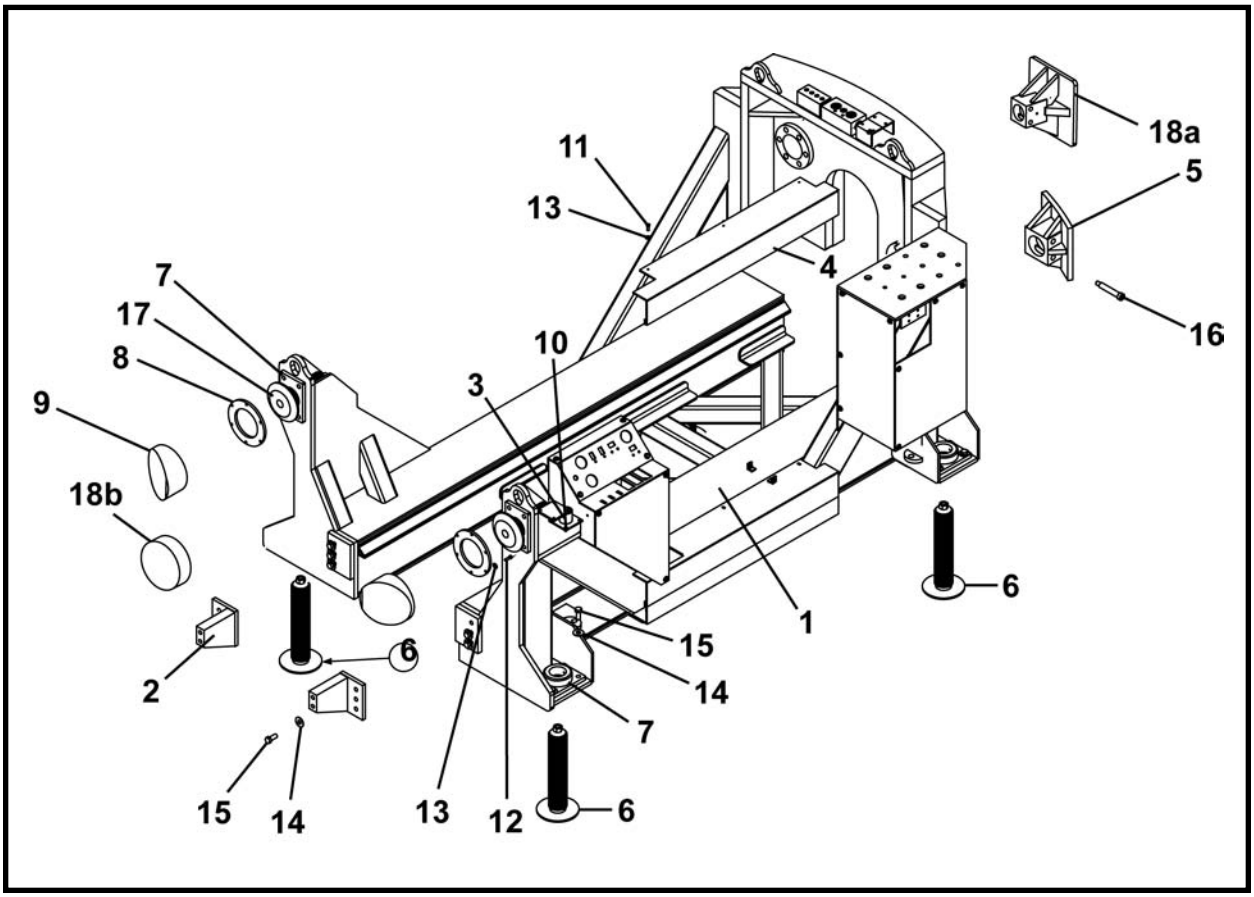


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44000A	4812A FRAME ASSEMBLY (Includes items 1 - 24)
1	1	A44001A	WELDMENT, Tubular Skid
2	1	A44303A	COVER, Top Hose
3	2	A44147A	ASSEMBLY, Rail Extension
4	1	A42030A	ASSEMBLY, Bottom Mount Monitor
5	1	A44313P	COVER, Hose Quick Connect
6	1	A44237A	COVER, Upper Hose
7	2	A44036A	PUSH PAD, Rear
8	6	A44443A	SCREW, Adjustable
9	6	005177A00	NUT, Leveling
10	2	A44044P	RING, Front Anchor
11	2	A44039P	BLOCK. Front Anchor
12	1	A44310A	MOUNT, Quick Connect
13	4	P0001-04-03	BOLT, 1/4 UNC .75
14	4	P0003-04-000	NUT, 1/4
15	12	P0001-06-004	BOLT, 3/8 UNC x 1
16	12	P0001-06-005	BOLT, 3/8 UNC x 1.25
17	24	P0040-006	WASHER, Hardened Flat 3/8
18	6	P0040-012	WASHER, Hardened Flat 3/4
19	4	P0001-08-006	BOLT, 1/2 UNC x 1.5
20	4	P0003-08-000	NUT, 1/2
21	6	P0001-12-007	BOLT, 3/4 UNC x 1.75
22	24	P0001-12-009	BOLT, 3/4 UNC x 2.25
23	24	P0003-12-000	NUT, 3/4
24	4	P0030S-16-020	BOLT, Shoulder 1 x 5
25*	1	FA44423F	ASSEMBLY, Square Shaft Adapter (Includes items 25a - 25b)
25a	2	A44424A	ADAPTER, Square Back
25b*	2	A44444P	BLOCK, Front Anchor

* Not included in assembly A44000A.

4812A FRAME ASSEMBLY, A44000A

4812A (SN FA40034F-4 & AFTER)

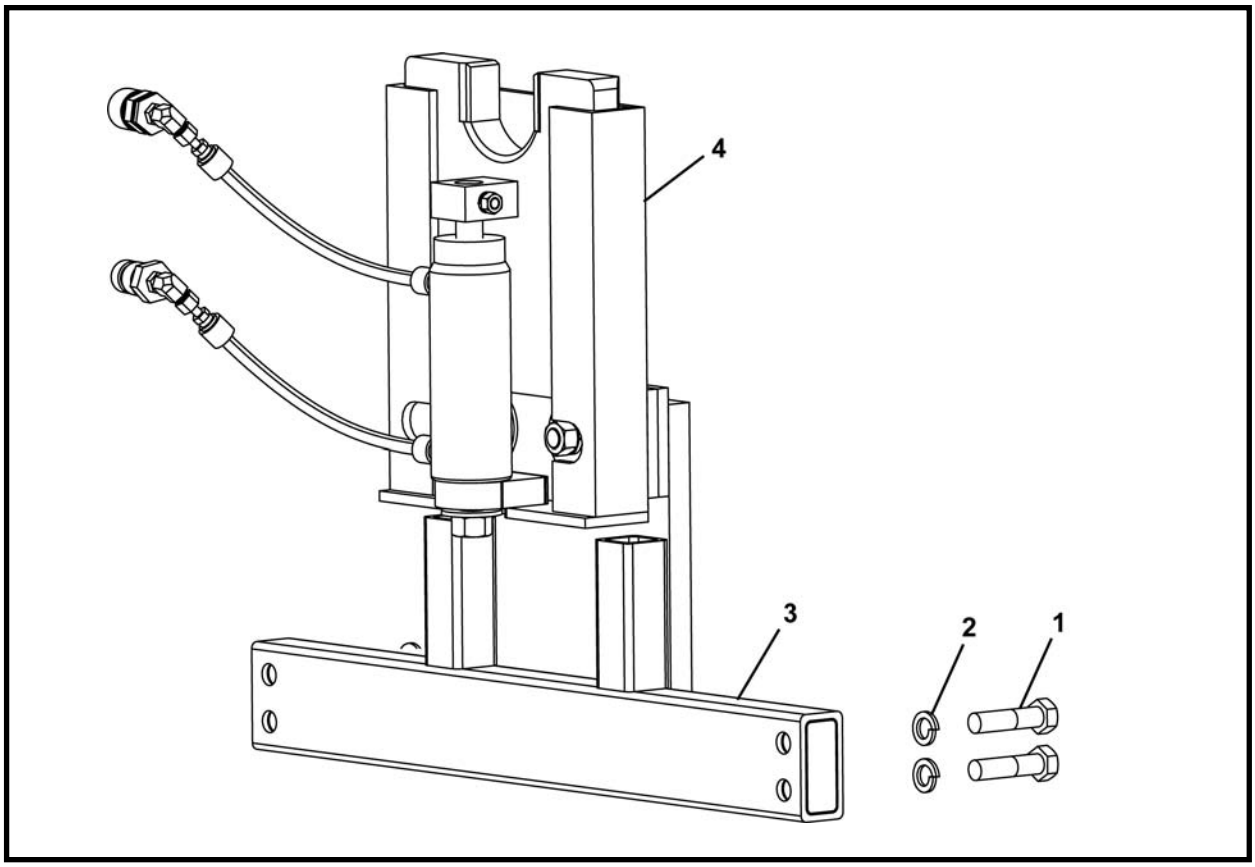


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44000A	4812A FRAME ASSEMBLY (Includes items 1 - 17)
1	1	A44001A	WELDMENT, Tubular Skid (Includes items 1a - 1b)
1a	1	A44134P	COVER, Front
1b	1	A44137P	COVER, Right
2	2	A44147A	ASSEMBLY, Rail Extension
3	1	A42030A	ASSEMBLY, Bottom Mount Monitor
4	1	A44237A	COVER, Upper Hose
5	2	A44036A	PUSH PAD, Rear
6	4	A44443A	SCREW, Adjustable
7	6	005177A00	NUT, Leveling
8	2	A44044P	RING, Front Anchor
9	2	A44039P	BLOCK. Front Anchor
10	4	P0001-04-003	BOLT, 1/4 UNC .75
11	12	P0001-06-004	BOLT, 3/8 UNC x 1
12	12	P0001-06-005	BOLT, 3/8 UNC x 1.25
13	24	P0040-006	WASHER, Hardened Flat 3/8
14	20	P0040-012	WASHER, Hardened Flat 3/4
15	22	P0001-12-007	BOLT, 3/4 UNC x 1.75
16	4	P0030S-16-020	BOLT, Shoulder 1 x 5
17	2	005175A00	ASSEMBLY, Leveling Screw
18*	1	FA44423F	ASSEMBLY, Square Shaft Adapter (Includes items 18a - 18b)
18a*	2	A44424A	ADAPTER, Square Back
18b*	2	A44444P	BLOCK, Front Anchor

* Not included in assembly A44000A.

MAKEUP MOUNT ASSEMBLY, A44047A

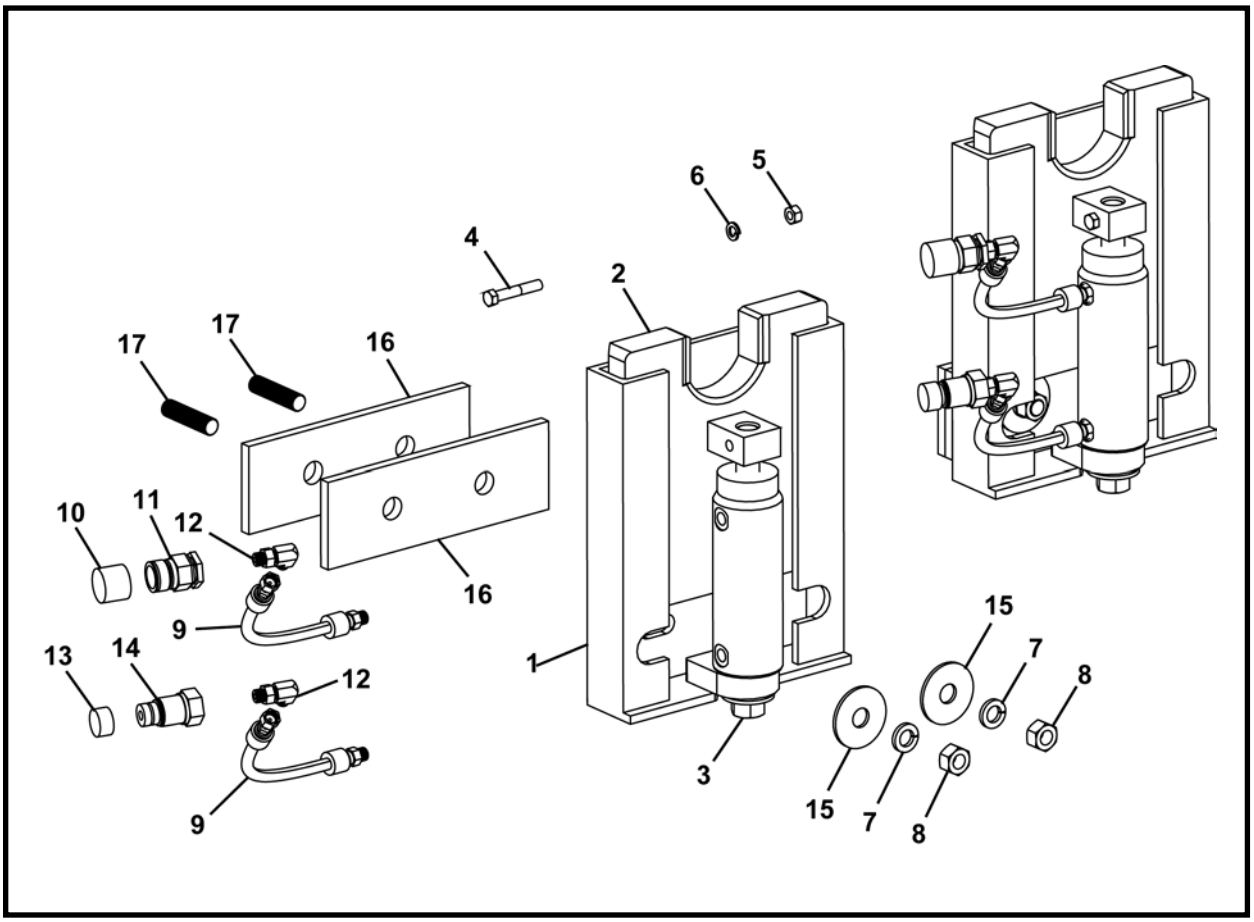
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44047A	MAKEUP MOUNT ASSEMBLY
1	4	P0001-12-012	BOLT, 3/4 UNC x 3
2	4	P0045-012	WASHER, Lock 3/4
3	1	A44046A	MOUNT
4	1	A42430A	HYDRAULIC MAKEUP TOOL

HYDRAULIC MAKEUP TOOL, A42430A

4812A

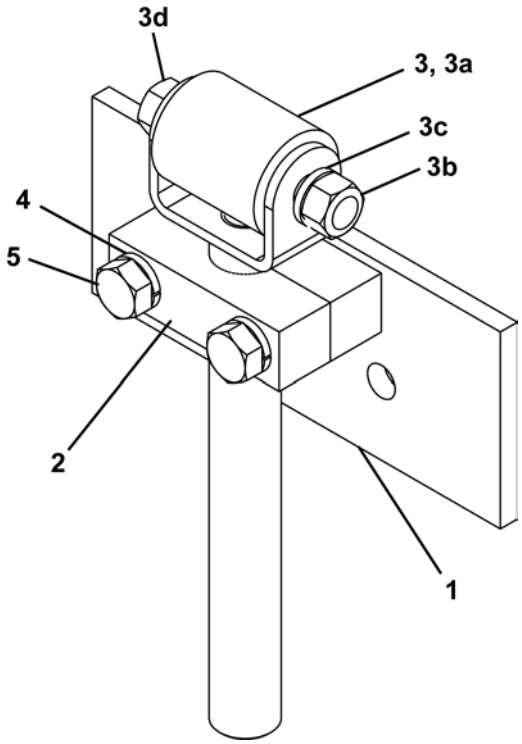


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42430A	HYDRAULIC MAKEUP TOOL
1	1	A42431A	HOUSING
2	1	A42437A	PLATE
3*	1	014603A00	CYLINDER
4	1	P0001-07-010	BOLT, 7/16 UNC x 2.5
5	1	P0003-07-000	NUT, 7/16
6	1	P0045-007	WASHER, Lock 7/16
7	2	P0045-012	WASHER, Lock 3/4
8	2	P0003-12-000	BOLT, 3/4 UNC x 2.5
9	2	A10348A-072	HOSE ASSEMBLY 1/4 x 72
10	1	P0100-047A	PLUG, Dust
11	1	P0100-047	COUPLER, Female
12	2	P0300-311	FITTING, 04MFFOR-06MB90
13	1	P0100-046A	CAP, Dust
14	1	P0100-046	COUPLER, Female
15	2	004124P01	WASHER
16	2	A42453P	SPACER, Rubber
17	2	P0025-12-048	STUD

* For parts breakdown, refer to section 10, Cylinders.

CASING SUPPORT ASSEMBLY, A44088A

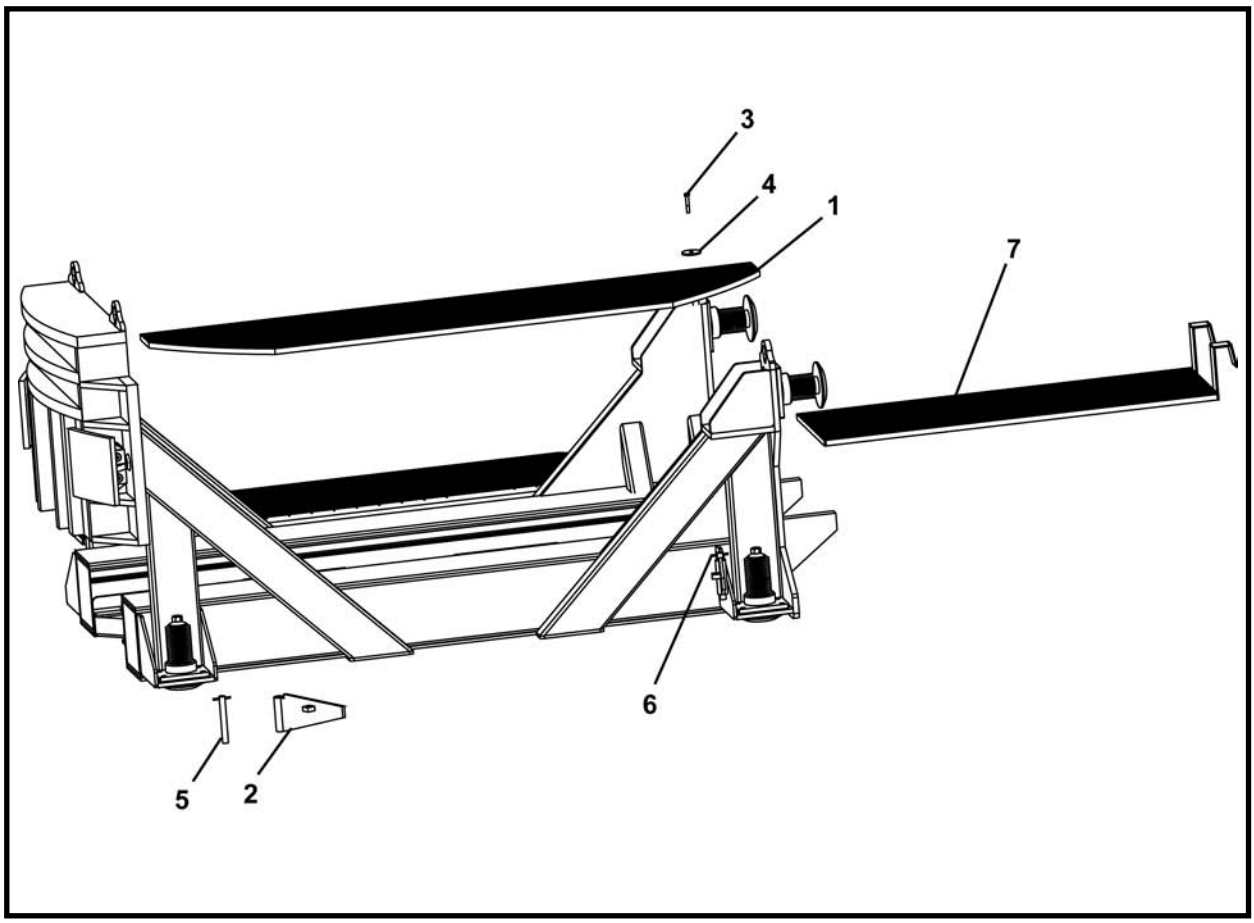
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44088A	CASING SUPPORT ASSEMBLY
1	1	A44078A	SUPPORT
2	1	A40449P	CLAMP
3	1	A40167A	ASSEMBLY, Roller Bracket (Includes items 3a -3d)
3a	1	A40448P	ROLLER
3b	1	P0003-12-000	NUT
3c	1	P0045-012	WASHER, Lock
3d	1	P0001-12-020	BOLT, 3/4-10 UNC x 5
4	2	P0045-012	WASHER, Lock 3/4
5	2	P0001-12-011	BOLT, 3/4 UNC 2.75

OPERATOR PLATFORM ASSEMBLY, A44098A

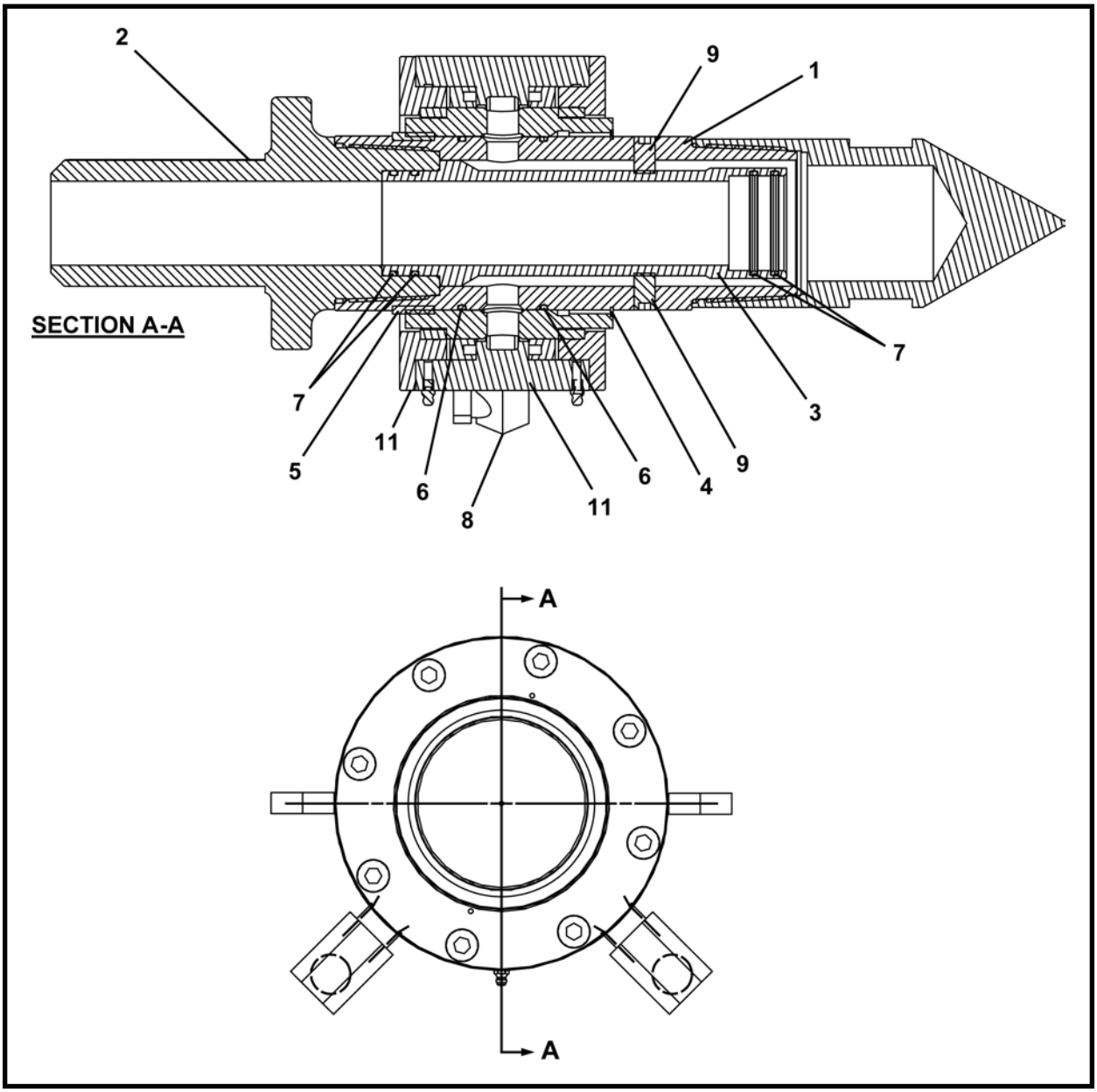
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44098A	OPERATOR PLATFORM ASSEMBLY
1	2	A44091A	CATWALK, Side
2	4	A42488A	HINGE
3	4	P0001-08-012	BOLT, 1/2 UNC x 3
4	4	003640P00	WASHER, Steering Link
5	4	A42485P	PIN, Hinge
6	4	P0049-125	PIN, Spring
7	1	A44097A	CATWALK, Center

DRIVE ADAPTER & SWIVEL ASSEMBLY, FA44111F

4812A



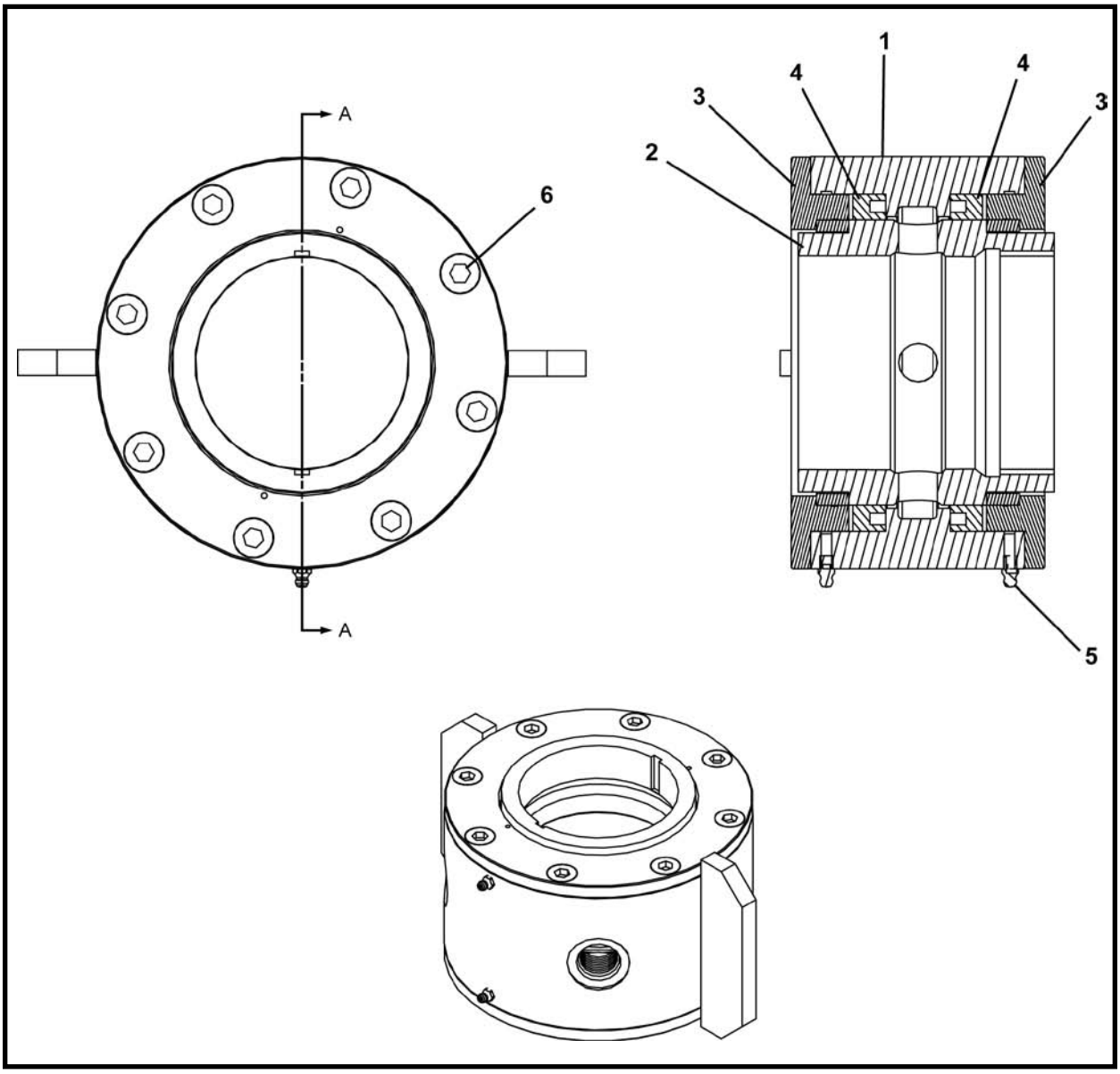
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44111F	DRIVE ADAPTER & SWIVEL ASSEMBLY
1	1	A44076P	TUBE, Outer - Swivel Mount
2	1	A43296P	ADAPTER, Drive
3	1	A40543P	TUBE, Inner - Swivel Mount
4	1	P0077-049	RING, External Spiral Snap
5	2 LI	P0047-002	KEYSTOCK
6	2	P0085-241	ORING
7	4	P0085-228	ORING
8	2	P0300-198	FITTING, 12MB-08FPX90
9	2	P0033-08-016	SCREW, Socket Head Set 1/2 UNC x 1
10	1	A40581P	ALIGNMENT GUIDE
11*	1	A41547A	FLUID SWIVEL ASSEMBLY

* Refer to this section for parts breakdown.

LI - Linear Inch

FLUID SWIVEL ASSEMBLY, A41547A

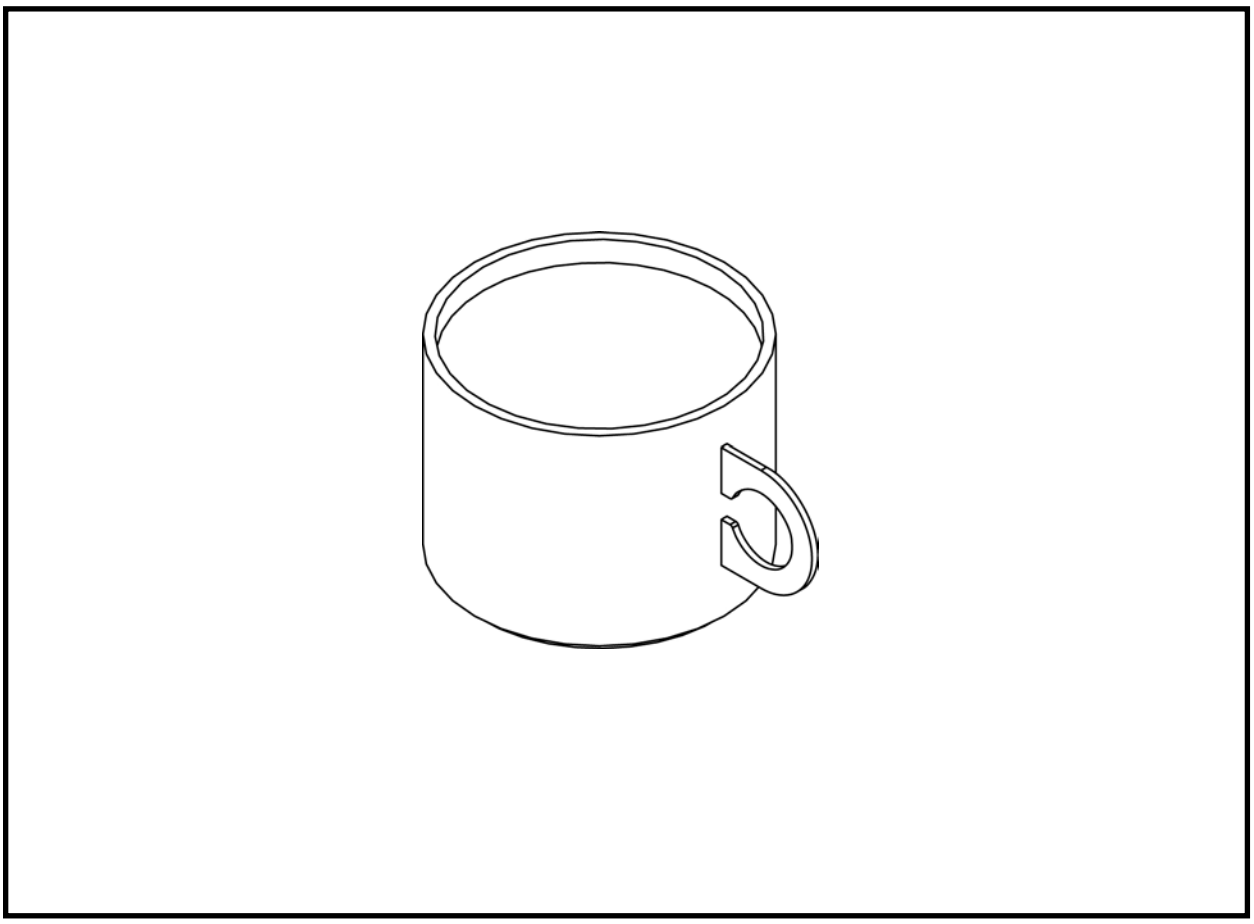
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A41547A	FLUID SWIVEL ASSEMBLY
1	1	A41546A	OUTER SWIVEL WELDMENT
2	1	A41544P	SWIVEL, Inner
3	2	A41543A	SWIVEL PLATE ASSEMBLY
4	2	P0065-211	SEAL, Rod
5	2	P0063-001	FITTING, Grease
6	16	P0030-06-003	SCREW, Flat Head Cap 3/8 UNC x .75

GBM RISER BLOCK, A45626A

4812A



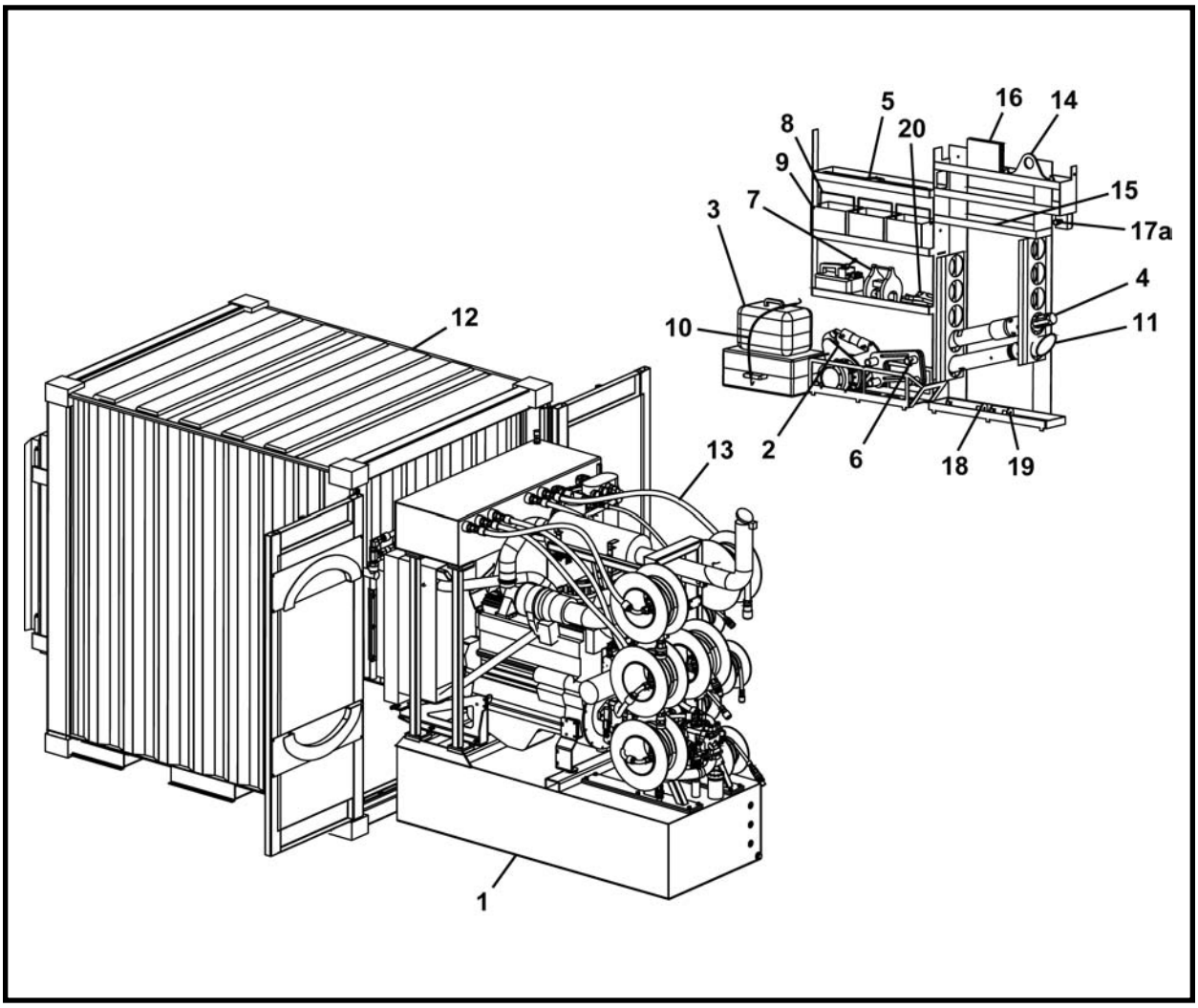
ITEM	QTY	PART NO.	DESCRIPTION
0	*	A45626A	GBM RISER BLOCK

* Four per 4812A.

NOTES

P275T POWER PACK ASSEMBLY, FA40033F

P275T (SN FA40033F-1 & 2)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40033F	P275T POWER PACK ASSEMBLY
1*	1	A43951A	POWER UNIT ASSEMBLY, P275T
2+	1	FA40230F	DUAL TUBE BREAKOUT TOOL
3*	1	FA42035F	GUIDANCE SYSTEM G3 ASSEMBLY
4+	1	FA41403F	ADAPTER, Pilot Tube
5+	1	FA40482F	SCRAPER, Pilot Tube
6*	1	FA40051F	THEODOLITE SHAFT STAND
7+	1	FA42240F	BREAK-OUT TOOL LAUNCH SHAFT ASSEMBLY
8	3	A42687P	HANDLE, Basket
9	3	A42686P	BASKET
10	1	003088A00	STRAP, 30” Tie Down
11+	1	FA40245F	STEERING HEAD
12*	1	A43995A	CONTAINER ASSEMBLY, P275T
13**	1	A43900A	HYDRAULICS P275T
14	1	A40540P	HOLDER, Pilot Tube Lifting Bar
15	25	P0085-228	ORING
16	1	050050A	MANUAL
17***	1	A43996A	ELECTRICAL ASSEMBLY (Includes item 17a)
17a	1	P0251-185	E-STOP w/Box

P275T POWER PACK ASSEMBLY, FA40033F

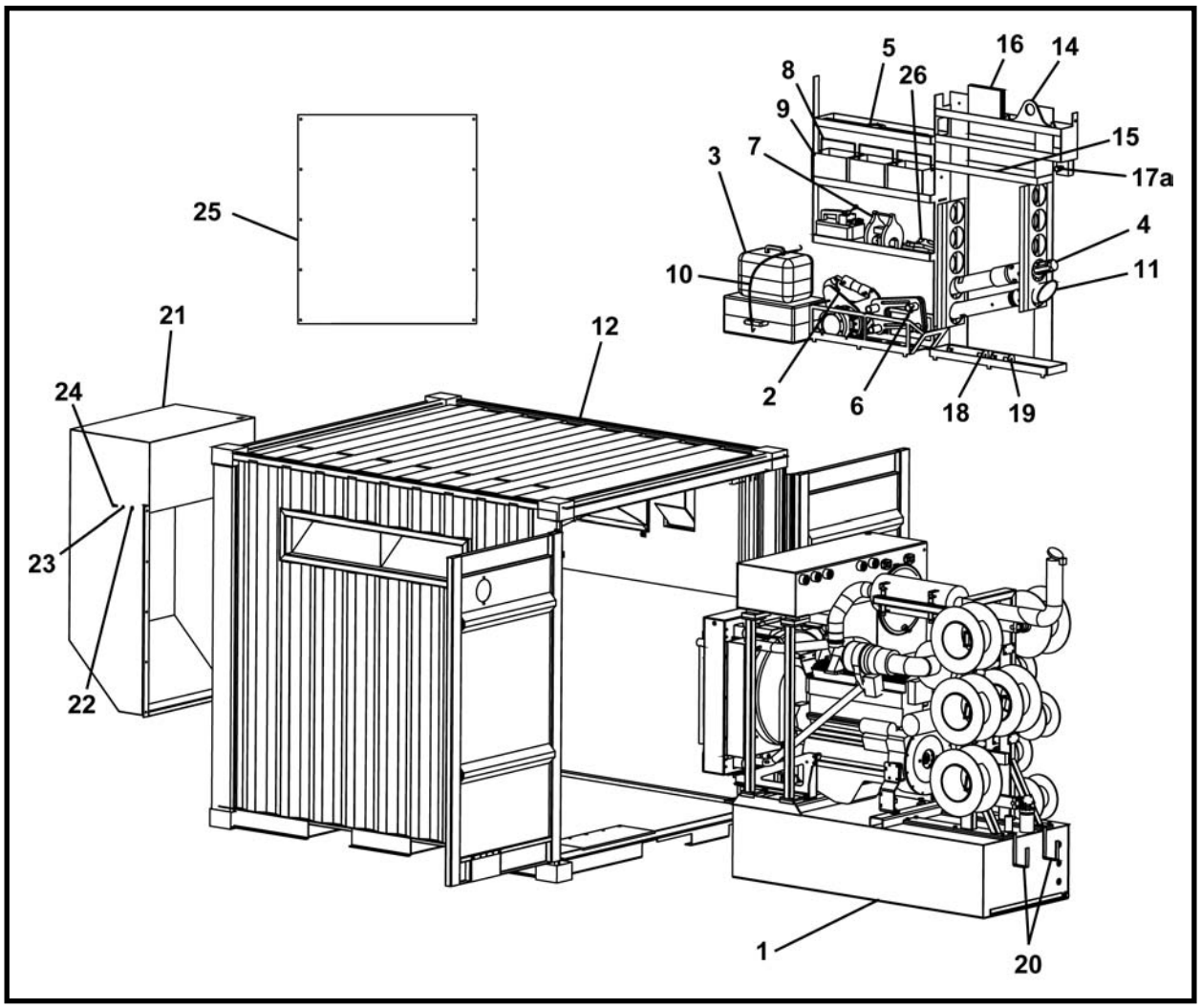
P275T (SN FA40033F-1 & 2)

ITEM	QTY	PART NO.	DESCRIPTION
18	1	A42012A	TUBE, Riser 12”
19	1	A42013A	TUBE, Riser 6”
20	1	FA40244F	GBM WRENCH SET (Includes items 20a - 20c)
20a	1	A40583P	WRENCH, 3-5/8 Opening x 12
20b	1	A40584P	WRENCH, 3-5/8 Opening x 24
20c	1	A40515P	WRENCH, Shaft Tensioner 3-1/8 Opening

* Refer to this section for parts breakdown.
** Refer to Section 6, Hydraulics for parts breakdown.
*** Refer to Section 5, Electrical for parts breakdown.
+ Refer to Section 11, Miscellaneous/Tooling for parts breakdown.

P275T POWER PACK ASSEMBLY, FA40033F

P275T (SN FA40033F-3 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40033F	P275T POWER PACK ASSEMBLY
1*	1	A43951A	ASSEMBLY, P275T Power Unit
2****	1	FA40230F	DUAL TUBE BREAKOUT TOOL
3*	REF	FA42035F	GUIDANCE SYSTEM G3 ASSEMBLY
4****	1	FA41403F	ADAPTER, Pilot Tube
5****	1	FA40482F	SCRAPER, Pilot Tube
6*	1	FA40051F	THEODOLITE SHAFT STAND
7****	1	FA42240F	BREAK-TOOL LAUNCH SHAFT ASSEMBLY
8	3	A42687P	HANDLE, Basket
9	3	A42686P	BASKET
10	1	003088A00	STRAP, 30” Tie Down
11****	1	FA40245F	STEERING HEAD
12	1	A44549A	CONTAINER ASSEMBLY, 275T Gen 2
13**	1	A43900A	HYDRAULICS. P275T
14	1	A40540P	HOLDER, Pilot Tube Lifting Bar
15	25	P0085-228	ORING
16	1	050050A	MANUAL
17***	1	A43996A	ELECTRICAL ASSEMBLY (Includes item 17a)
17a	1	P0251-185	E-STOP w/Box

P275T POWER PACK ASSEMBLY, FA40033F

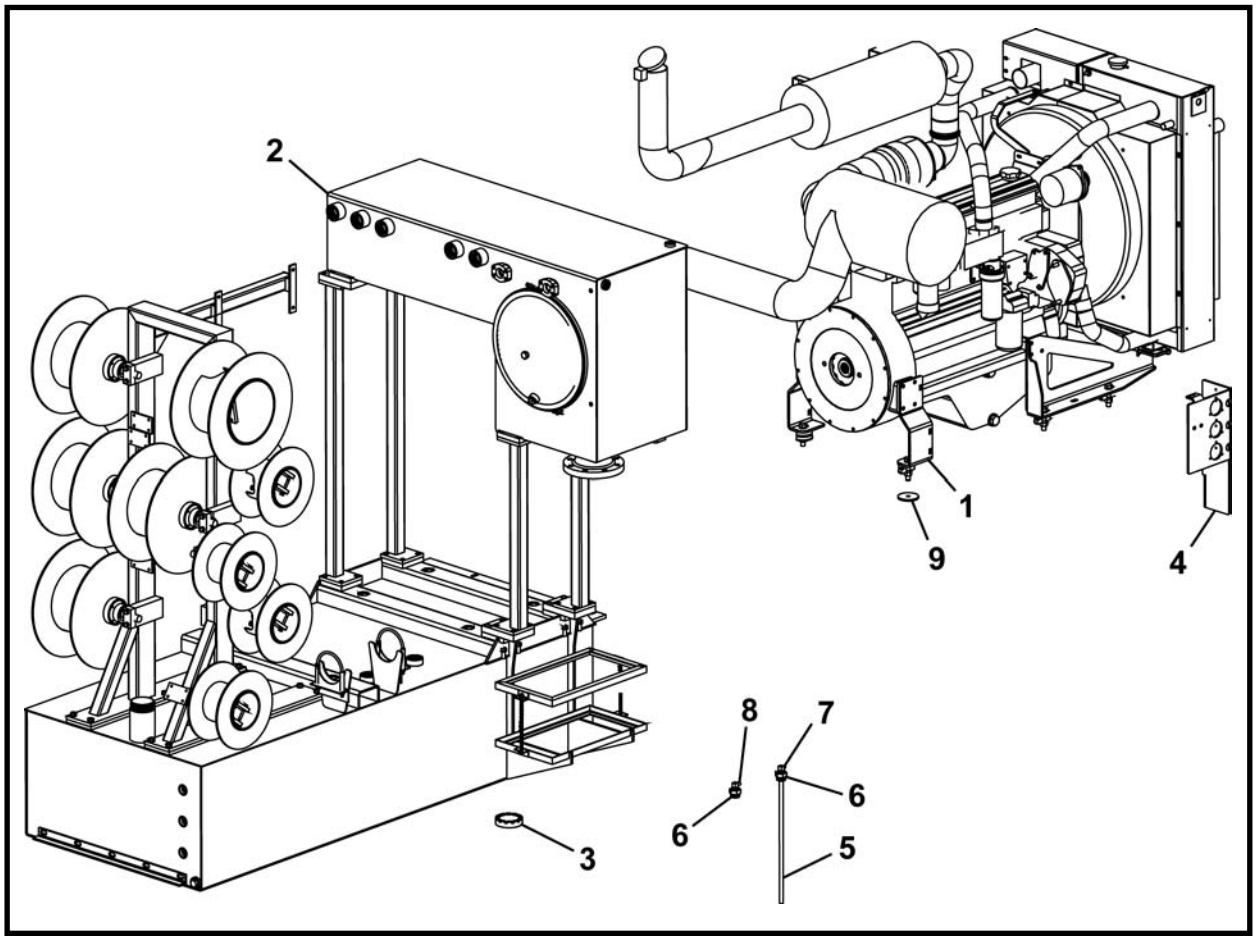
P275T (SN FA40033F-3 & AFTER)

ITEM	QTY	PART NO.	DESCRIPTION
18	1	A42012A	TUBE, Riser 12”
19	1	A42013A	TUBE, Riser 6”
20	2	A44718P	CORD, Hanger Pendant
21	1	A44592A	DUCT, Radiator Inlet
22	10	P0040-006	WASHER, Hardened Flat 3/8
23	10	P0045-006	WASHER, Lock 3/8
24	10	P0001-06-004	BOLT, 3/8 UNC x 1
25	1	A44672P	COVER, Shipping
26	1	FA40244F	GBM WRENCH SET (Includes items 26a - 26c)
26a	1	A40583P	WRENCH, 3-5/8 Opening x 12
26b	1	A40584P	WRENCH, 3-5/8 Opening x 24
26c	1	A40515P	WRENCH, Shaft Tensioner 3-1/8 Opening

* Refer to this section for parts breakdown.
** Refer to Section 6, Hydraulics for parts breakdown.
*** Refer to Section 5, Electrical for parts breakdown.
**** Refer to Section 11, Miscellaneous/Tooling for parts breakdown.

P275T POWER UNIT ASSEMBLY, A43951A

P275T

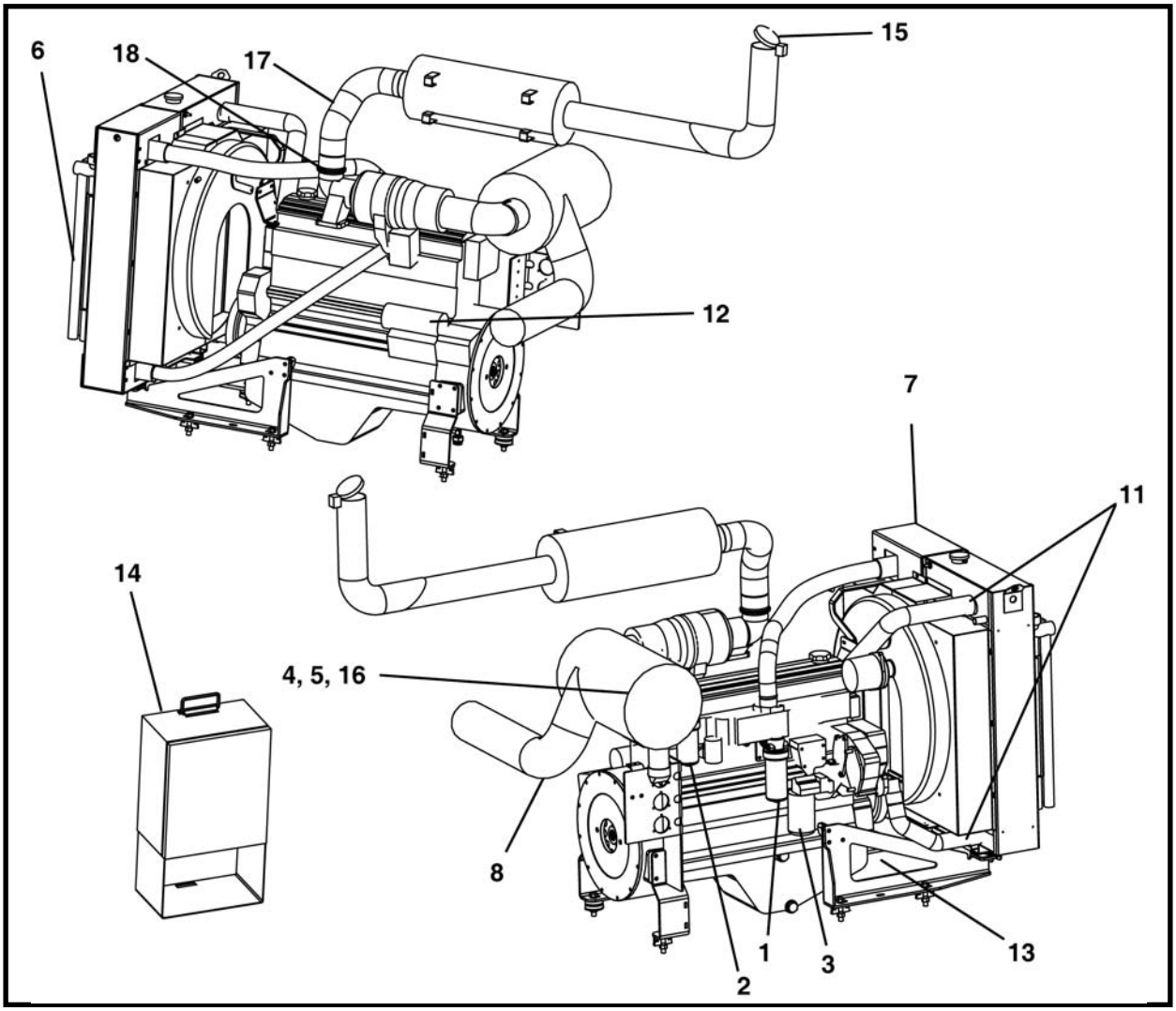


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43951A	P275T POWER UNIT ASSEMBLY
1*	1	P0125-124	ENGINE, 275HP
2*	1	A43950A	BASE ASSEMBLY, P275T
3	1	P0125-123	FUEL CAP
4	1	A43967P	MOUNT, Pump Gauge
5	1	A44172P	TUBE, Suction
6	2	A42563P	FITTING, Fuel Tank
7	1	P0300-296	FITTING, 04MJIC X 06MORB90
8	1	P0300-042	FITTING, 06MJ-06MB90
9	6	003640P00	WASHER

* Refer to this section for parts breakdown.

ENGINE, 275HP, P0125-124

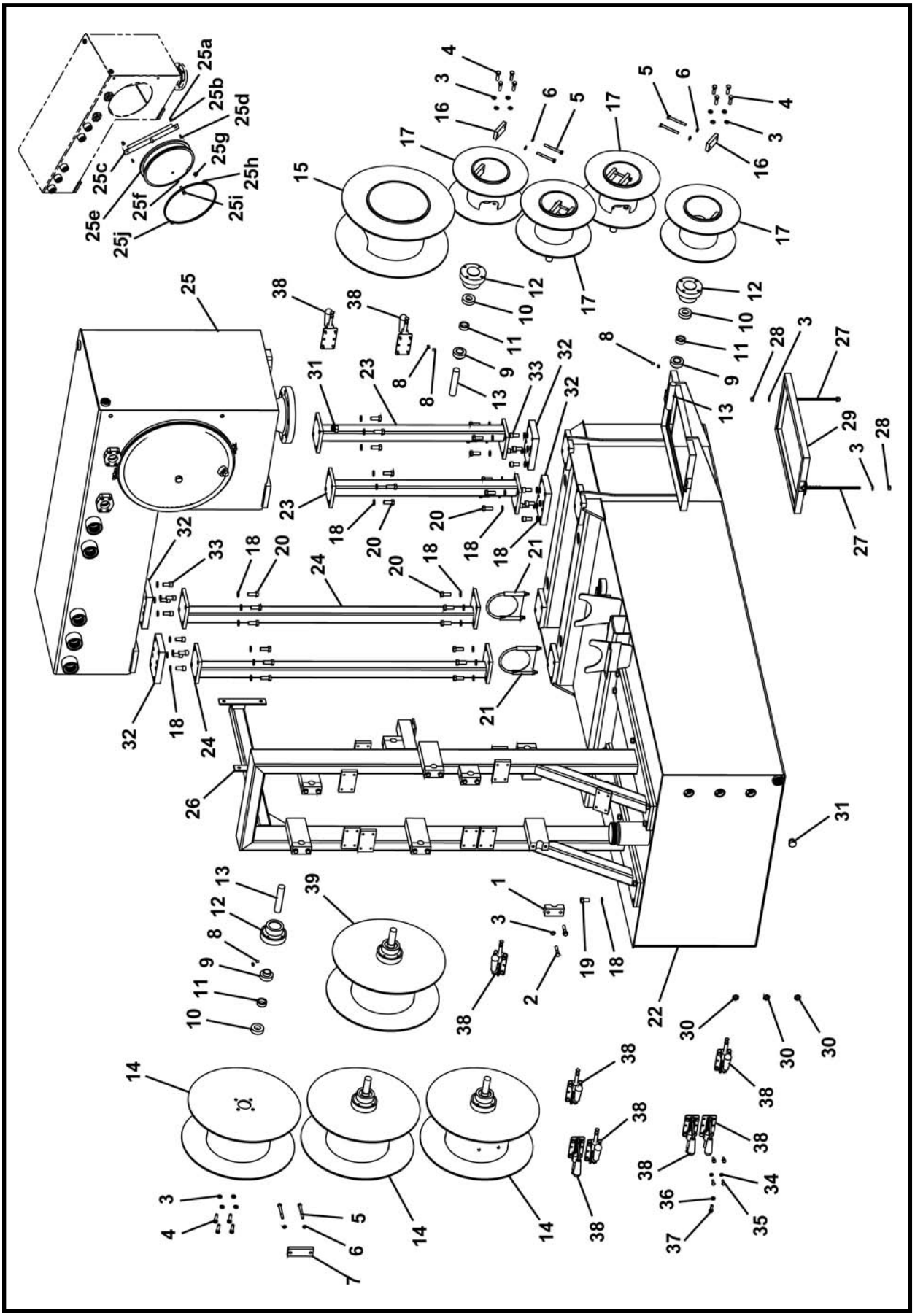
P275T



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0125-124	ENGINE, 275 HP
1	1	P0125-124A	FILTER, Primary Fuel
2	1	P0125-124B	FILTER, Final Fuel
3	1	P0125-124C	FILTER, Oil
4	1	P0125-124D	FILTER, Primary Air
5	1	P0125-124E	FILTER, Safety Air
6	1	P0125-124F	OIL COOLER
7.1	1	P0125-124R	RADIATOR (SN FA40033F-1 & 2)
7.2	1	P0125-124G	RADIATOR (SN FA40033F-3 & After)
8	1	P0125-124H	ELBOW
9*	1	P0125-124I	HOSE, Hump Straight
10*	1	P0125-124J	KIT, Over Flow Bottle
11	1	P0125-124K	KIT, Inlet and Return Hose
12	1	P0125-124L	STARTER
13	1	P0125-124M	ENGINE CONTROL UNIT/COMPUTER
14	1	P0125-124N	CONTROL PANEL & 50’ Cord (Includes item 14a)
14a*	1	P0125-124S	CORD, 50’
15	1	P0125-124P	CAP, Rain
16	1	P0125-124Q	ASSEMBLY, Air Cleaner
17	1	P0125-124T	TUBE, Turbo To Muffler
18	1	P0125-124V	CLAMP, Exhaust

* Not Shown

P275T BASE ASSEMBLY, A43950A
P275T



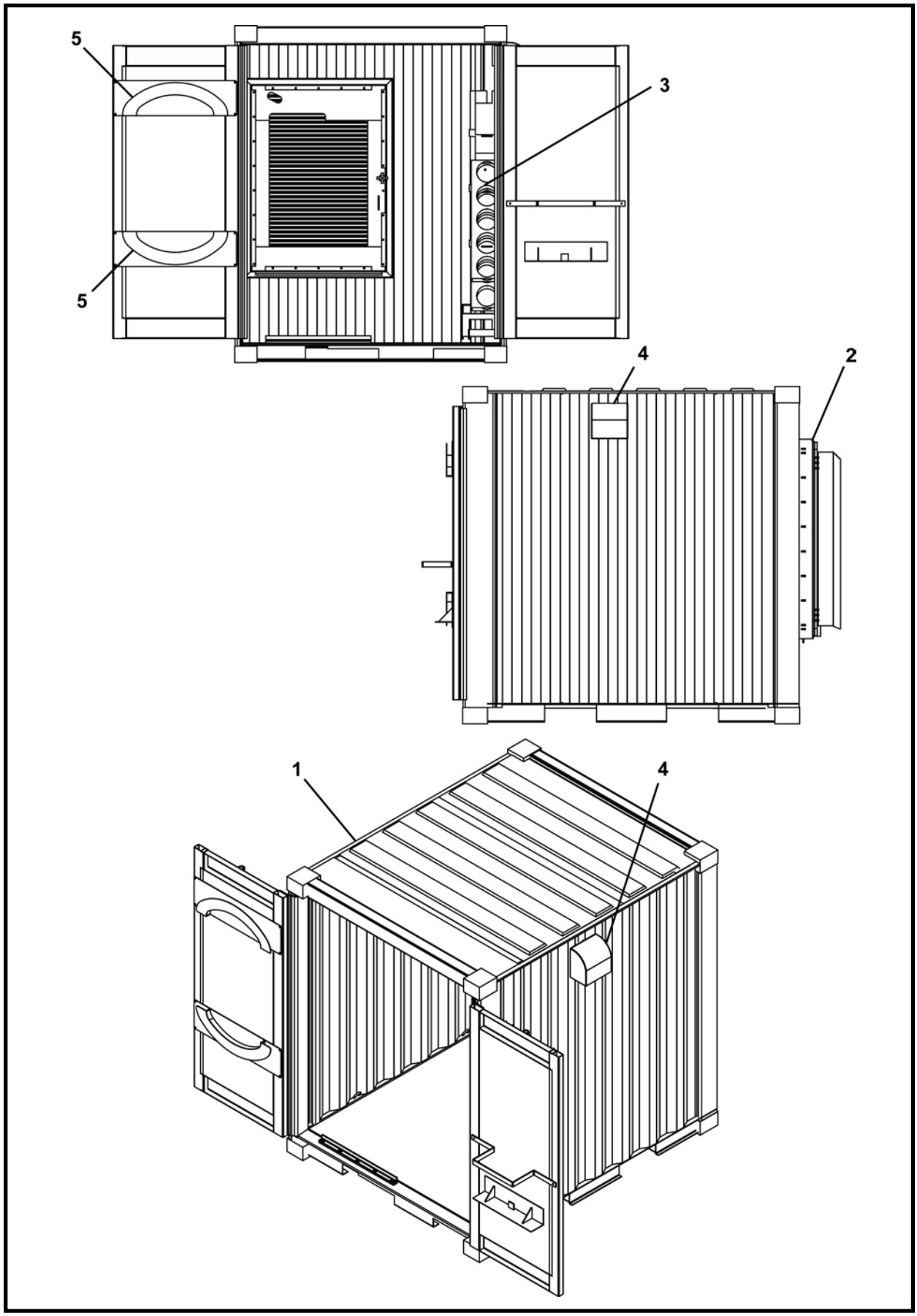
P275T BASE ASSEMBLY, A43950A
P275T

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43950A	P275T BASE ASSEMBLY
1	9	A43560P	MOUNT, Front Shaft
2	18	P0001-06-007	BOLT, 3/8 UNC x 1.75
3	58	P0045-006	WASHER, Lock 3/8
4	36	P0001-06-005	BOLT, 3/8 UNC x 1.25
5	18	P0001-05-012	BOLT, 5/16 UNC x 3
6	18	P0045-005	WASHER, Lock 5/16
7	5	A42521P	PLATE, Mounting Reel Fitting
8	18	P0033-05-006	SCREW, Socket Set 5/16 UNC x .375
9	9	P0065-214	BEARING, Insert
10	9	P0065-215	BEARING, Ball
11	9	A43555P	HUB, Spacer
12	9	A43556P	SPOOL, Hub
13	9	A43952P	ROD, Hose Reel
14	4	A42624A	REEL, Left 3/4-1
15	1	A42610A	REEL, Right 3/4-1
16	4	A42518P	PLATE, Mounting Reel Fitting
17	4	A42623A	REEL, Right 3/8
18	60	P0045-008	WASHER, Lock 1/2
19	12	P0001-08-004	BOLT, 1/2 UNC x 1
20	32	P0001-08-005	BOLT, 1/2 UNC x 1.25
21	2	P0201-246	U-BOLT, 3/8
22	1	A44220A	FUEL TANK
23	2	A43926A	ASSEMBLY, Reservoir Leg - Short
24	2	A43927A	ASSEMBLY, Reservoir Leg - Long
25	1	A44230A	HYDRAULIC RESERVOIR (Includes items 25a - 25j)
25a	2	P0003-06-000	NUT, 3/8
25b	2	P0040-006	WASHER, Hardened Flat 3/8
25c	1	P0308-104	BRACKET
25d	2	P0001-06-003	BOLT, 3/8 UNC x .75
25e*	1	P0308-105A	GASKET, End Cover
25f*	1	P0308-105B	COVER, Nylon Washer End
25g	1	P0416-004	PLUG, 3/4
25h	1	P0201-218	CLAMP, Tube
25i	1	P0001-10-010	BOLT, 5/8 UNC x 2.5
25j	1	P0201-224	CLAMP, Hose
26	1	A43955A	SUPPORT, Hose Reel
27	2	A43966P	ROD, Battery Box
28	4	P0003-06-000	NUT, 3/8
29	1	A43980A	BATTERY BOX
30	3	P0301-145	BUTTON, Sight Gauge
31	2	P0300-060	PLUG, 10MB
32	4	A44632P	BLOCK
33	16	P0031-08-004	SCREW, Socket Head Cap 1/2 UNC x 1
34	36	P0045-004	WASHER, Lock 1/4
35	36	P0001-04-003	BOLT, 1/4 UNC x .75
36	9	P0003-05-000	NUT, 5/16
37	9	P0001-05-004	BOLT, 5/16 UNC x 1
38	9	P0059-061	CLAMP, Toggle
39	1	A46067A	REEL, Mid Left 3/4-1

* P0308-105, End Cover Kit includes items 25e and 25f.

P275T CONTAINER ASSEMBLY, A43995A

P275T (SN FA40033F-1 & 2)



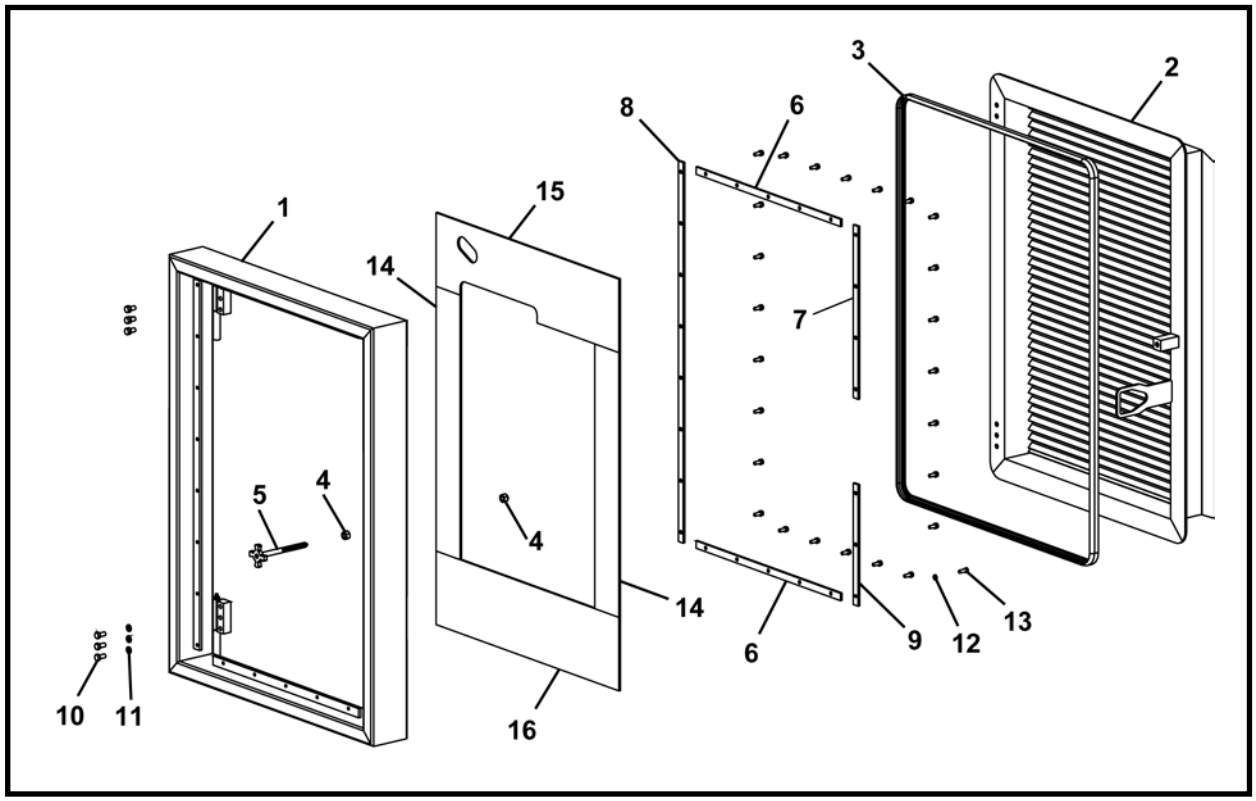
P275T CONTAINER ASSEMBLY, A43995A

P275T (SN FA40033F-1 & 2)

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43995A	ASSEMBLY, P275T Container
1	1	P0125-122	CONTAINER, Tricon
2	1	A43970A	ASSEMBLY, Louver
3	1	A42750A	SHELVING
4	1	A44210A	ASSEMBLY, Intake Hood
5	2	A44169A	MOUNT, Pendant Cord

LOUVER ASSEMBLY, A43970A

P275T (SN FA40033F-1 & 2)

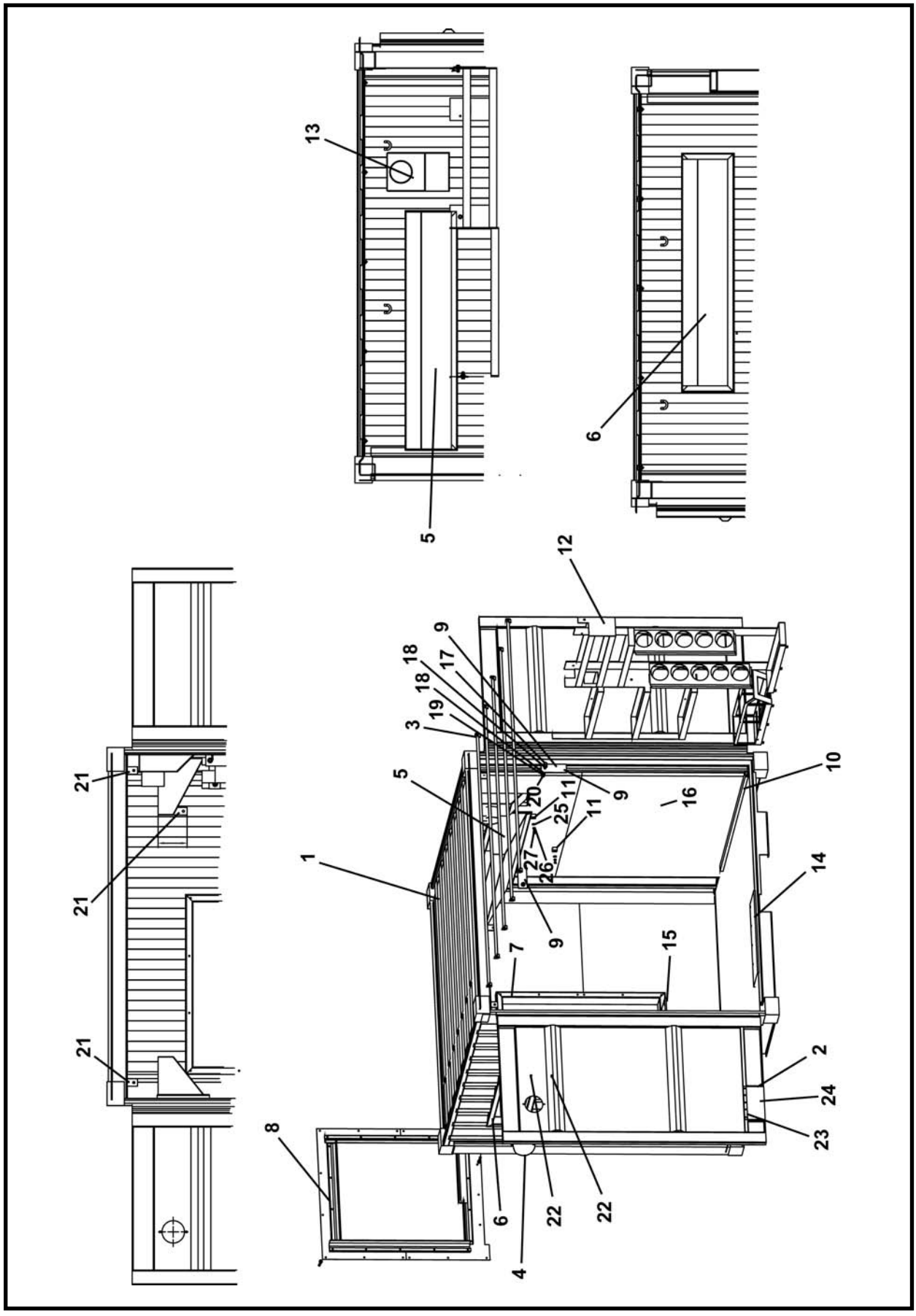


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43970A	ASSEMBLY, Louver
1	1	A43919A	FRAME, Louver
2	1	A43965A	WELDMENT, Louver Frame
3	1	P0253-125	SEAL, Bulb
4	2	P0013-10-000	NUT, Lock 5/8
5	1	A43971A	LOCK, Louver
6	2	A43918P	BAR, Radiator Seal
7	1	A43922P	BAR, Radiator Seal - Short
8	1	A43921P	BAR, Radiator
9	1	A44160P	BAR, Radiator Seal
10	6	P0001-08-004	BOLT, 1/2 UNC x 1
11	6	P0045-008	WASHER, Lock 1/2
12	26	P0045-006	WASHER, Lock 3/8
13	26	P0001-06-004	BOLT, 3/8 UNC x 1
14	2	A44164P	SEAL AIR FLOW - Side
15	1	A44163P	SEAL AIR FLOW - Top
16	1	A44162P	SEAL AIR FLOW - Bottom

NOTES

P275T GEN 2 CONTAINER ASSEMBLY, A44549A

P275T (SN FA40033F-3 & AFTER)



P275T GEN 2 CONTAINER ASSEMBLY, A44549A

P275T (SN FA40033F-3 & AFTER)

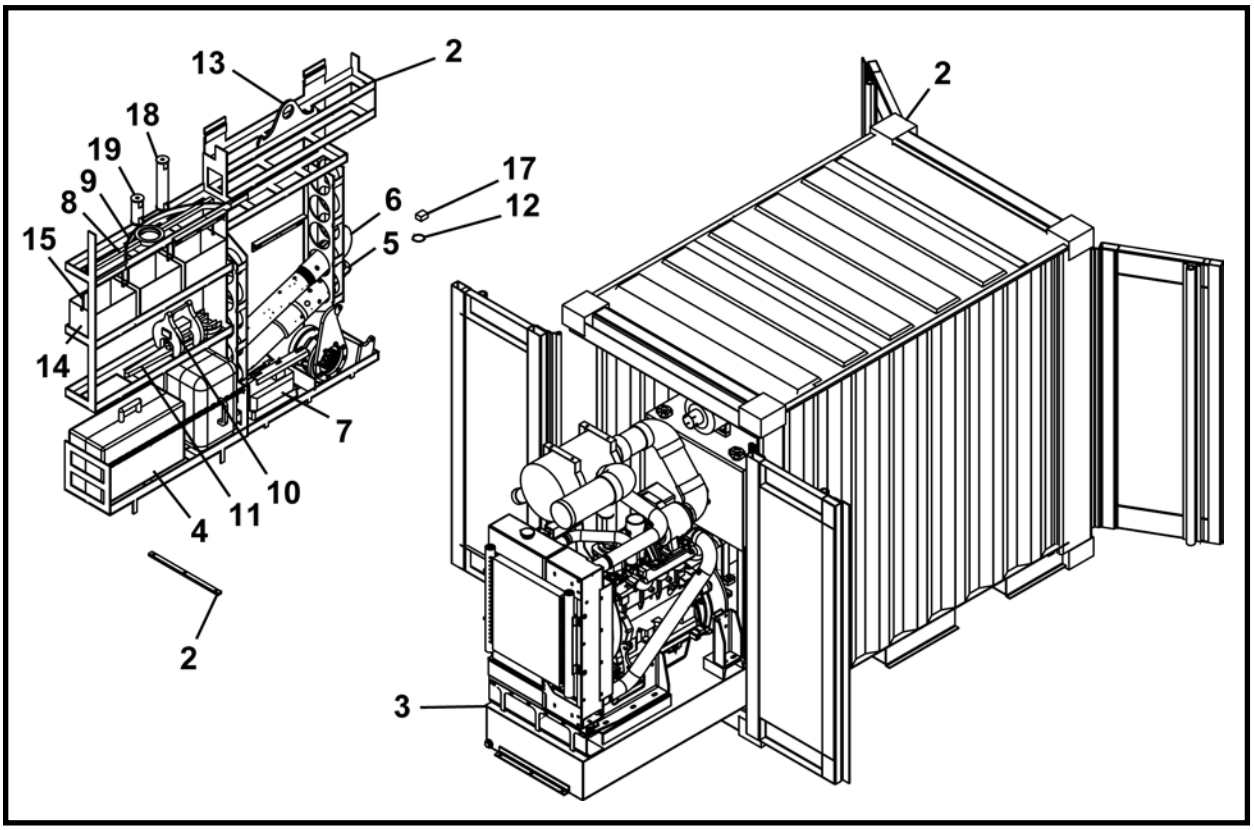
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44549A	ASSEMBLY, P275T Gen 2 Container
1	1	P0125-128	CONTAINER, Bicon
2	1	A44603A	FLAP, Door Opening
3	5	A44606A	ASSEMBLY, Foam Support
4	1	A44671P	COVER, Exhaust Opening
5	1	A44704A	DUCT, Right Exhaust
6	1	A44706A	DUCT, Left Exhaust
7	1	A44588A	WELDMENT, Radiator Opening
8	1	A44709A	ASSEMBLY, Radiator Seal
9	2	A44716P	PLATE, Tooling Rack Mount
10	1	A44717P	TUBE, Tooling Rack Mount
11	2	A44522P	BLOCK
12	1	A42750A	SHELVING
13	1	A44578A	ASSEMBLY, Intake Hood
14	1	A44626P	MOUNT, Rear Power Unit
15	1	A44625P	MOUNT, Front Power Unit
16	224 SF	P0111-018	FOAM, Acrylic
17	2	P0001-08-006	BOLT, 1/2 UNC x 1.5
18	4	P0040-008	WASHER, Hardened Flat 1/2
19	2	P0045-008	WASHER, Lock 1/2
20	2	P0003-08-000	NUT, 1/2
21	3	A44232P	MOUNT, Bar Light - Long
22	2	P0001-04-004	BOLT, 1/4 UNC x 1
23	1	A44722P	BAR, Door Flap Mount
24	1	A44721P	RUBBER DOOR FLAP
25	2	P0040-006	WASHER, Hardened Flat 3/8
26	2	P0045-006	WASHER, Lock 3/8
27	2	P0001-06-004	BOLT, 3/8 UNC x 1

SF - Square Foot

NOTES

P150Q POWER PACK ASSEMBLY, FA40035F

P150Q



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40035F	P150Q POWER PACK ASSEMBLY
1**	1	A44988A	ASSEMBLY, P150Q Hydraulic
2*	1	A44987A	ASSEMBLY, Container Group
3*	1	A44986A	ASSEMBLY, P150Q Power Unit
4*	REF	FA42035F	ASSEMBLY, Guidance System G3
5****	1	FA41403F	ADAPTER, Pilot Tube
6****	1	FA40245F	STEERING HEAD
7****	1	FA40230F	DUAL TUBE BREAKOUT TOOL
8****	1	FA40482F	SCRAPER, Pilot Tube
9	2	A40118P	PILOT TUBE SUPPORT BAR
10****	1	FA42240F	ASSEMBLY, Break-Out Tool Launch
11	1	FA40244F	GBM Wrench Set (Includes items 11a - 11c)
11a	1	A40583P	WRENCH, 3-5/8 Opening x 12
11b	1	A40584P	WRENCH, 3-5/8 Opening x 24
11c	1	A40515P	WRENCH, Shaft Tensioner 3-1/8 Opening
12	25	P0085-228	ORING
13	1	A40540P	HOLDER, Pilot Tube Lifting Bar
14	3	A42686P	BASKET, P100-Q
15	3	A42687P	HANDLE, Basket
16***	1	A45949A	ASSEMBLY, P150Q Electrical
17*	1	A43765A	ASSEMBLY, E-Stop
18	1	A42012A	EXTENSION, Column 12”
19	1	A42013A	EXTENSION, Column 6”

* Refer to this section for parts breakdown.

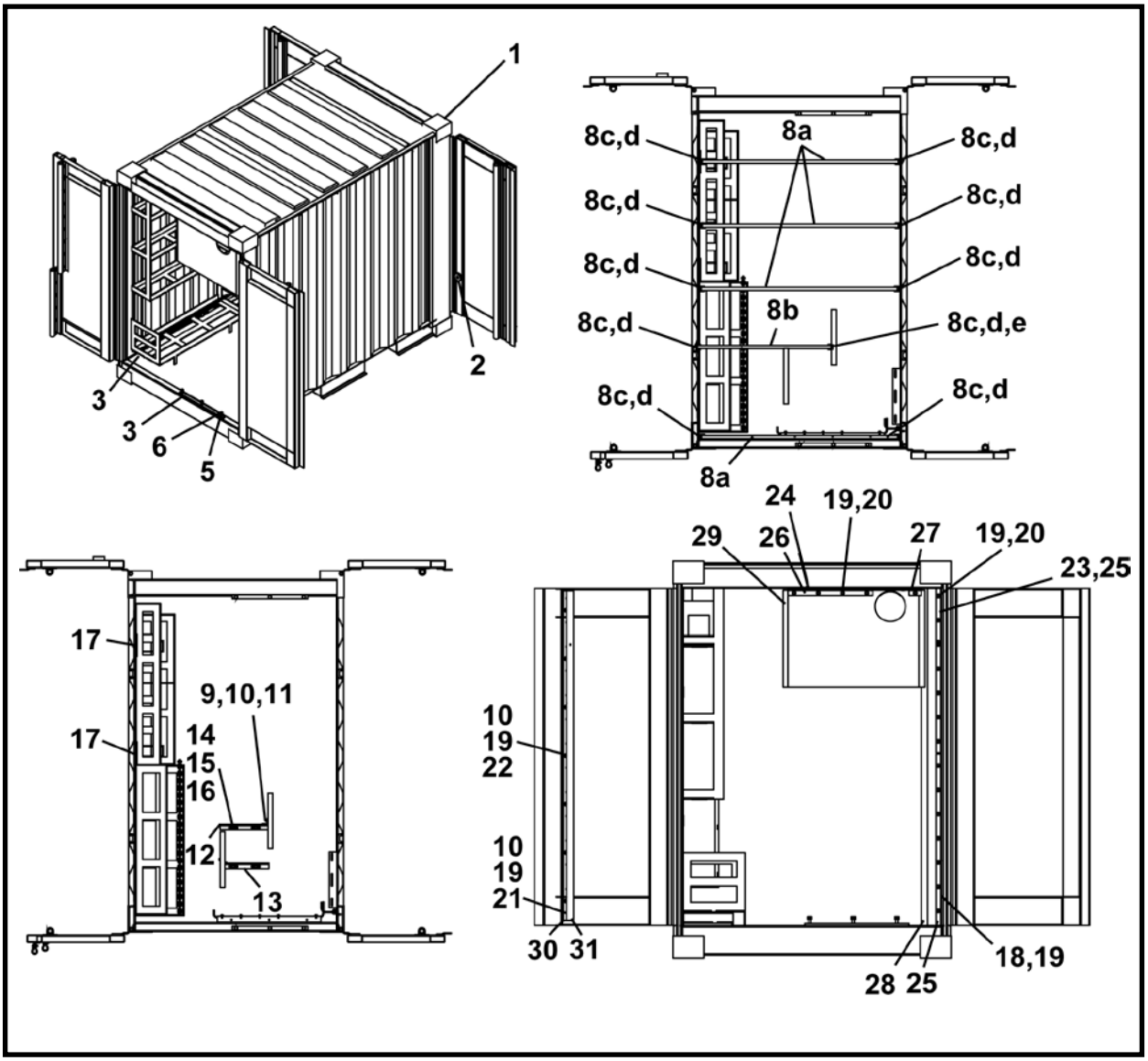
** Refer to Section 6, Hydraulics for parts breakdown.

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

**** Refer to Section 11, Miscellaneous/Tooling for parts breakdown.

CONTAINER GROUP ASSEMBLY, A44987A

P150Q



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44987A	CONTAINER GROUP ASSEMBLY
1	1	P0125-120	CONTAINER (Includes item 1a)
1a	1	P0125-120A	KIT, Seal
2	4	P0253-112	BUMPER, Rubber
3	1	A44887A	SHELVING, Container
4	1	A44965P	MOUNT, Reel Door
5	6	P0045-008	WASHER, Lock 1/2
6	6	P0001-08-004	BOLT, 1/2 UNC x 1
7	1	P0111-018-074	FOAM
8	1	A43395A	ASSEMBLY, Foam Support (Includes items 8a - 8e)
8a	4	A43389P	SUPPORT, Foam - Long
8b	1	A43390P	SUPPORT, Foam - Short
8c	10	P0001-04-002	BOLT, 1/4 UNC x .5
8d	10	A43393A	MOUNT, Pipe
8e	1	P0003-04-000	NUT, 1/4
9	2	P0045-004	WASHER, Lock 1/4

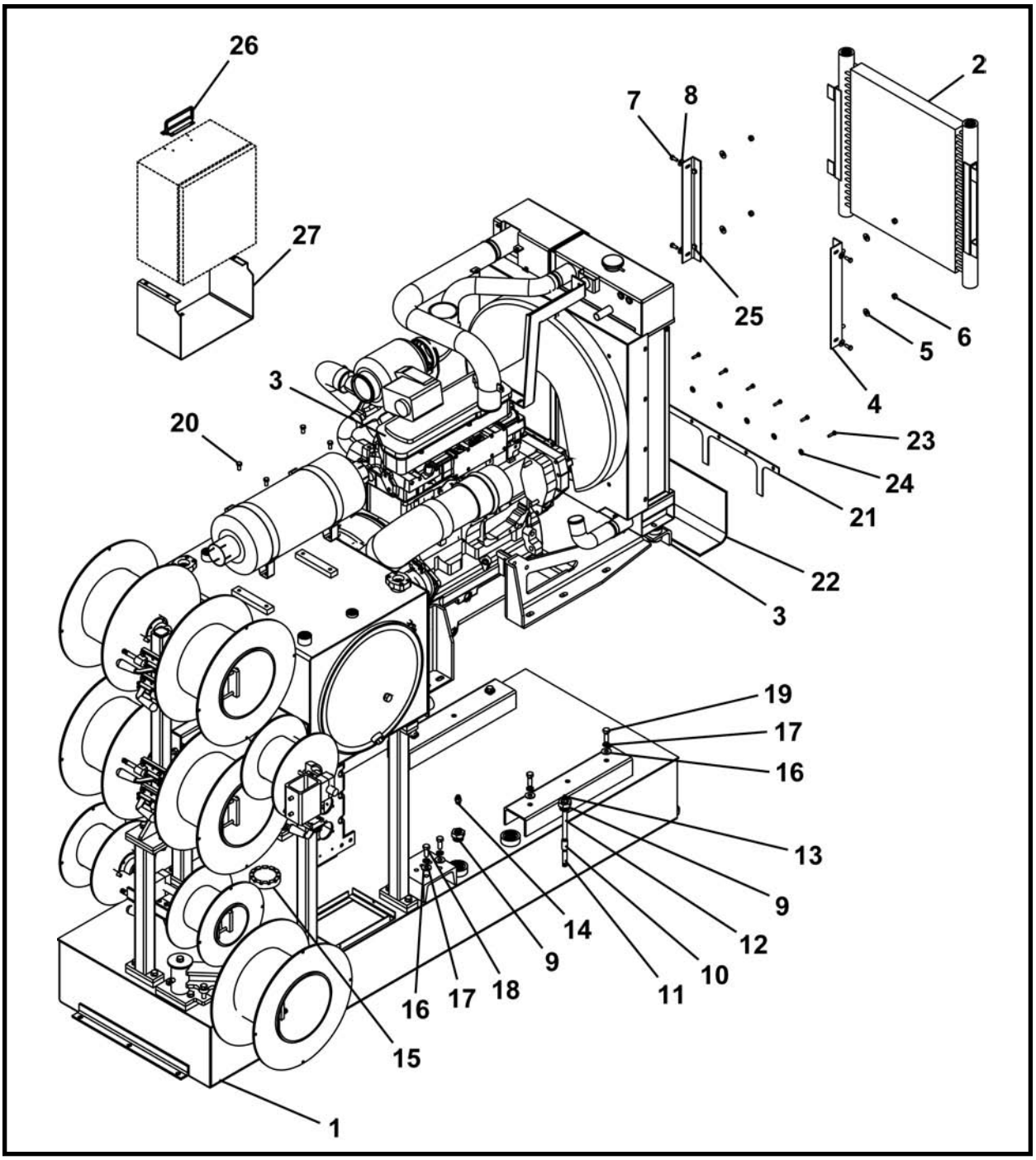
CONTAINER GROUP ASSEMBLY, A44987A

P150Q

ITEM	QTY	PART NO.	DESCRIPTION
10	23	P0003-004	NUT, 1/4
11	2	P0001-04-004	BOLT, 1/4 UNC x 1
12	1	A44994A	MOUNT, Air Cleaner - Rear
13	1	A44997A	MOUNT, Air Cleaner - Front
14	4	P0001-06-003	BOLT, 3/8 UNC x .75
15	4	P0045-006	WASHER, Lock 3/8
16	4	P0003-06-000	NUT, 3/8
17	2	A44999P	MOUNT, Shelving
18	10	P0035-012	SCREW, Drill 1/4 x 1
19	64	P0040-004	WASHER, Hardened Flat 1/4
20	19	P0001-04-003	BOLT, 1/4 UNC x .75
21	14	P0001-04-005	BOLT, 1/4 UNC x 1.25
22	7	P0020-14-207	SCREW, Truss Head 1/4 UNC x 1.5
23	1	A45149P	MOUNT, Side Seal
24	1	A45150P	MOUNT, Top Seal
25	2	A45151P	BAR, Side Seal
26	1	A45152P	BAR, Large Top Seal
27	1	A45153P	BAR, Small Top Seal
28	1	A45155P	SEAL, SIDE
29	1	A45156P	SEAL, Top
30	1	A45158P	BAR, Top Door Seal
31	1	A45160P	SEAL, Top Door

P150Q POWER UNIT ASSEMBLY, A44986A

P150Q



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44986A	P150Q POWER UNIT ASSEMBLY
1	1	A44985A	ASSEMBLY, Power Unit Base
2	1	P0125-132A	OIL COOLER
3*	1	P0125-132	ENGINE, 154 HP
4	2	A44991P	MOUNT, Oil Cooler
5	4	P0040-006	WASHER, Hardened Flat 3/8
6	4	P0003-06-000	NUT, 3/8
7	4	P0001-05-003	BOLT, 5/16 UNC x .75
8	4	P0040-005	WASHER, Hardened Flat 5/16

P150Q POWER UNIT ASSEMBLY, A44986A

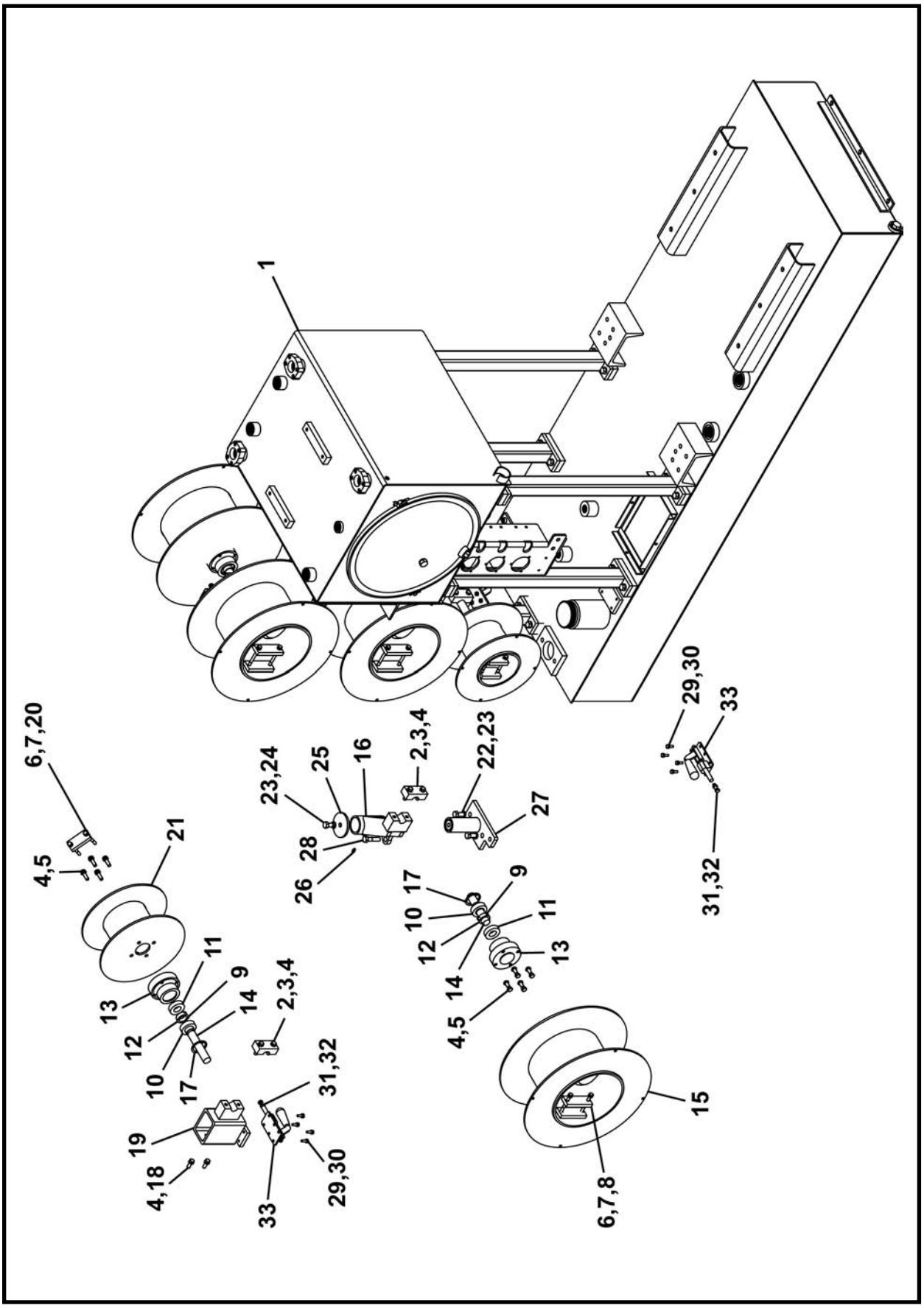
P150Q

ITEM	QTY	PART NO.	DESCRIPTION
9	2	A42563P	FITTING, Fuel Tank
10	1	P0400-001	COUPLING, Pipe 1/4
11	1	P0403-005	NIPPLE 1/4 x 3
12	1	P0403-010	NIPPLE, 1/4 x 5-1/2
13	1	P0300-245	FITTING, 04MJ-06MB
14	1	P0300-041	FITTING, 06MJ-06MB
15	1	P0125-123	CAP, Diesel Fuel
16	8	P0040-008	WASHER, Hardened Flat 1/2
17	8	P0045-008	WASHER, Lock 1/2
18	4	P0001-08-005	BOLT, 1/2 UNC x 1.25
19	4	P0001-08-006	BOLT, 1/2 UNC x 1.5
20	4	P0001-06-003	BOLT, 3/8 UNC x .75
21	1	A45148P	MOUNT, Lower Seal
22	1	A45154P	SEAL, Bottom
23	6	P0035-012	SCREW, Drill 1/4 x 1
24	6	P0040-004	WASHER, Hardened Flat 1/4
25	4	P0001-06-004	BOLT, 3/8 UNC x 1
26	1	P0059-022	HANDLE
27	1	A44234P	STAND, Control Box

* Refer to this section for parts breakdown.

P150Q POWER UNIT BASE ASSEMBLY, A44985A

P150Q



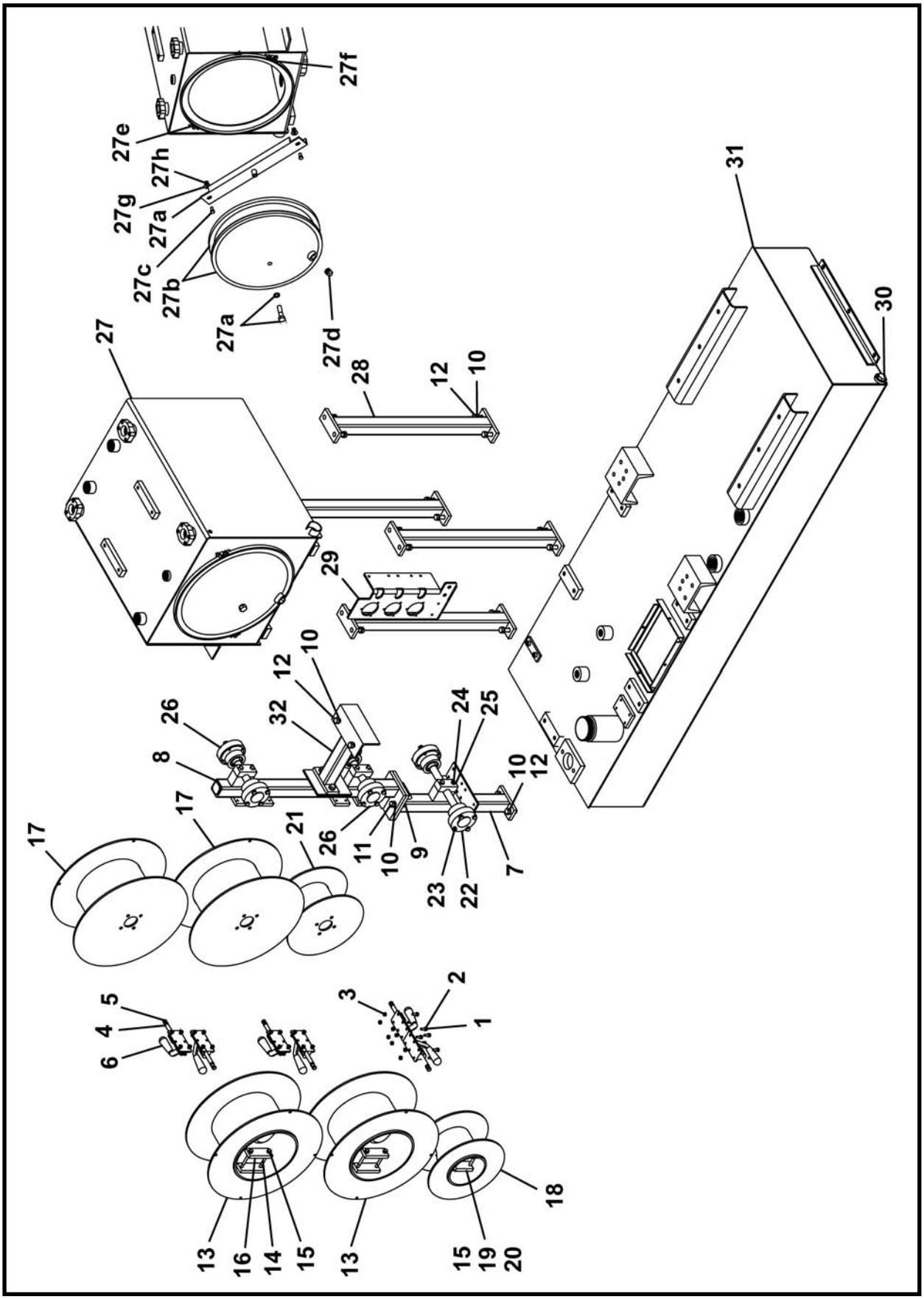
P150Q POWER UNIT BASE ASSEMBLY, A44985A

P150Q

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44985A	ASSEMBLY, Power Unit Base
1	1	A45858A	POWER UNIT BASE P100Q/P150Q
2	2	A43560P	MOUNT, Shaft - Front
3	4	P0001-06-007	BOLT, 3/8 UNC x 1.75
4	14	P0045-006	WASHER, Lock 3/8
5	8	P0001-06-005	BOLT, 3/8 UNC x 1.25
6	4	P0001-05-012	BOLT, 5/16 UNC x 3
7	4	P0045-005	WASHER, Lock 5/16
8	1	A42521P	FITTING, Mounting Plate Reel
9	4	P0033-05-006	SCREW, Socket Head Cap 5/16 UNC x 3/8
10	2	P0065-214	BEARING, Insert
11	2	P0065-215	BEARING, Ball
12	2	A43555P	SPACER, Hub
13	2	A43556P	HUB, Spool
14	2	A43952P	ROD, Hose Reel
15	1	A42610A	REEL, Right 3/4
16	1	A44974A	REEL, Swing Arm
17	2	P0076-024	RING, Internal Snap
18	2	P0001-06-004	BOLT, 3/8 UNC x 1
19	1	A44967A	MOUNT, Reel Door
20	1	A42518P	FITTING, Mounting Plate Reel
21	2	A42623A	REEL, Right 3/8
22	2	P0001-08-005	BOLT, 1/2 UNC x 1.25
23	3	P0045-008	WASHER, Lock 1/2
24	1	P0001-08-003	BOLT, 1/2 UNC x .75
25	1	003640P00	WASHER, Steering Link
26	1	P0063-001	FITTING, Grease Straight
27	1	A44969A	MOUNT, Swing Arm
28	1	P0001-08-008	BOLT, 1/2 UNC x 2 NC GRD 8 HEX BOLT
29	8	P0045-004	WASHER, Lock 1/4
30	8	P0001-04-003	BOLT, 1/4 UNC x .75
31	2	P0003-005	NUT, 5/16
32	2	P0001-05-004	BOLT, 5/16 UNC x 1
33	2	P0059-061	CLAMP, Toggle

POWER UNIT BASE P150Q, A45858A

P150Q



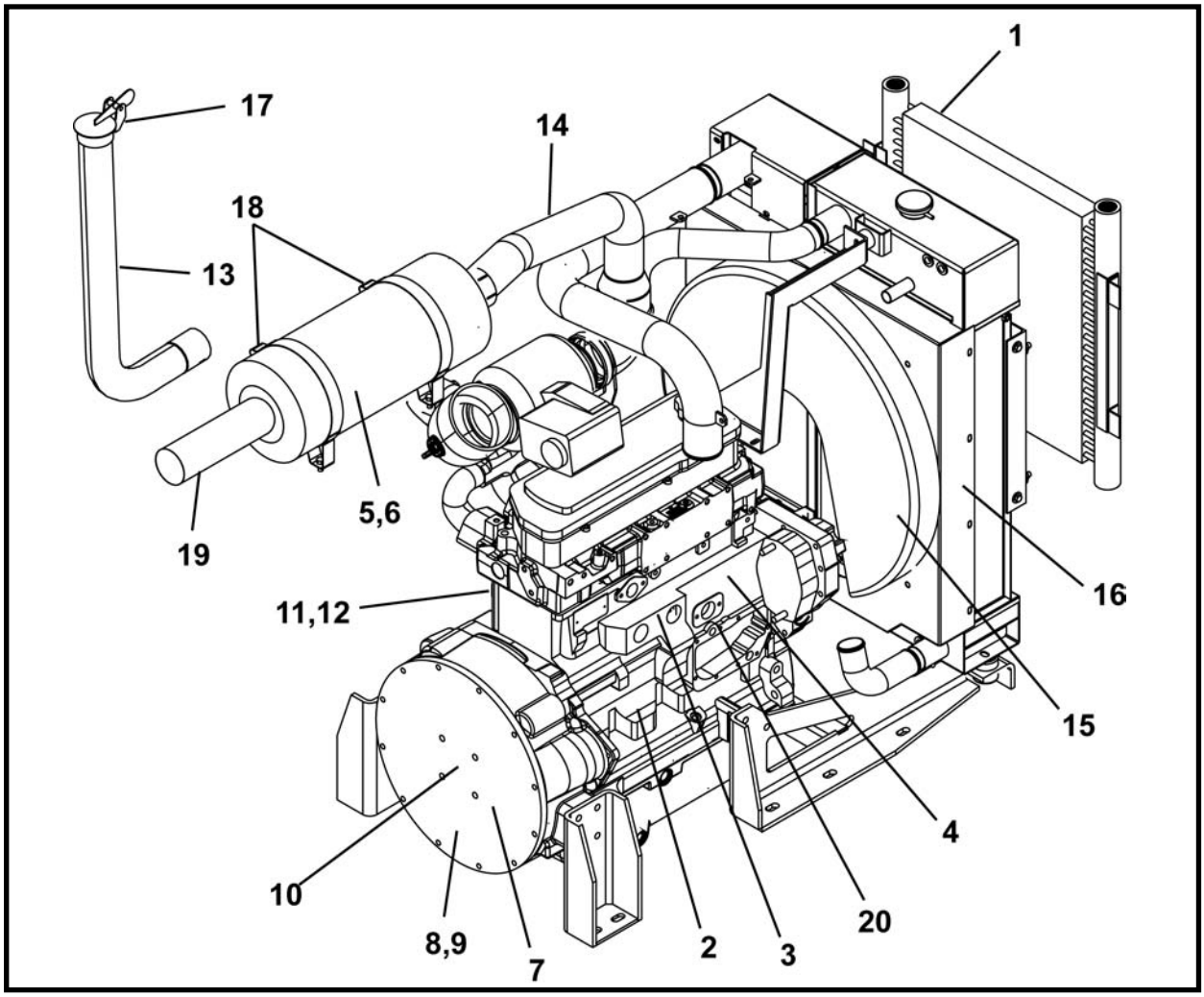
POWER UNIT BASE P150Q, A45858A

P150Q

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45858A	POWER UNIT BASE P100Q/P150Q
1	24	P0045-004	WASHER, Lock 1/4
2	24	P0001-04-003	BOLT, 1/4 UNC x .75
3	24	P0003-004	NUT, 1/4
4	6	P0003-005	NUT, 5/16
5	6	P0001-05-004	BOLT, 5/16 UNC x 1
6	6	P0059-061	CLAMP, Toggle
7	1	A43565A	SUPPORT, Vertical - Bottom
8	1	A43564A	SUPPORT, Vertical - Top
9	6	P0003-08-000	NUT, 1/2
10	24	P0045-008	WASHER, Lock
11	4	P0001-08-006	BOLT, 1/2 UNC x 1-1/2
12	20	P0001-08-005	BOLT, 1/2 UNC x 1-1/4
13	2	A42610A	REEL, Right 3/4
14	8	P0001-05-014	BOLT, 5/16 UNC x 3.5
15	12	P0045-005	WASHER, Lock 5/16
16	4	A42521P	FITTING, Mounting Plate Reel
17	2	A42624A	REEL, Left 3/4
18	1	A42623A	REEL, Right 3/8
19	2	A42518P	FITTING, Mounting Plate Reel
20	4	P0001-05-012	BOTL, 5/16 UNC x 3
21	1	A42618A	REEL, Left 3/8
22	1	A43557A	ASSEMBLY, Hub-Short
23	24	P0001-06-003	BOLT, 3/8 UNC x .75
24	3	A43560P	MOUNT, Shaft-Front
25	6	P0001-06-007	BOLT, 3/8 UNC x 1.75
26	2	A43566A	ASSEMBLY, Hub-Short
27	1	A44903A	TANK, Hydraulic (Includes items 27a - 27h)
27a	1	P0308-104	BRACKET, End Cover
27b	1	P0308-105	KIT, End Cover
27c	2	P0001-06-003	BOLT, 3/8 UNC x .75
27d	1	P0416-003	PLUG, Square Head 1/2
27e	1	P0201-218	CLAMP, Tube
27f	1	P0201-224	CLAMP, Hose
27g	2	P0040-006	WASHER, Hardened Flat 3/8
27h	2	P0003-06-000	NUT, 3/8
28	3	A42542A	WELDMENT, Tank Leg
29	1	A44998A	MOUNT, Gauge
30	1	P0300-060	PLUG, 10MB
31	1	A44980A	ASSEMBLY, Fuel Reservoir
32	1	A44959A	SUPPORT, Hose Reel

ENGINE, 154HP, P0125-132

P150Q

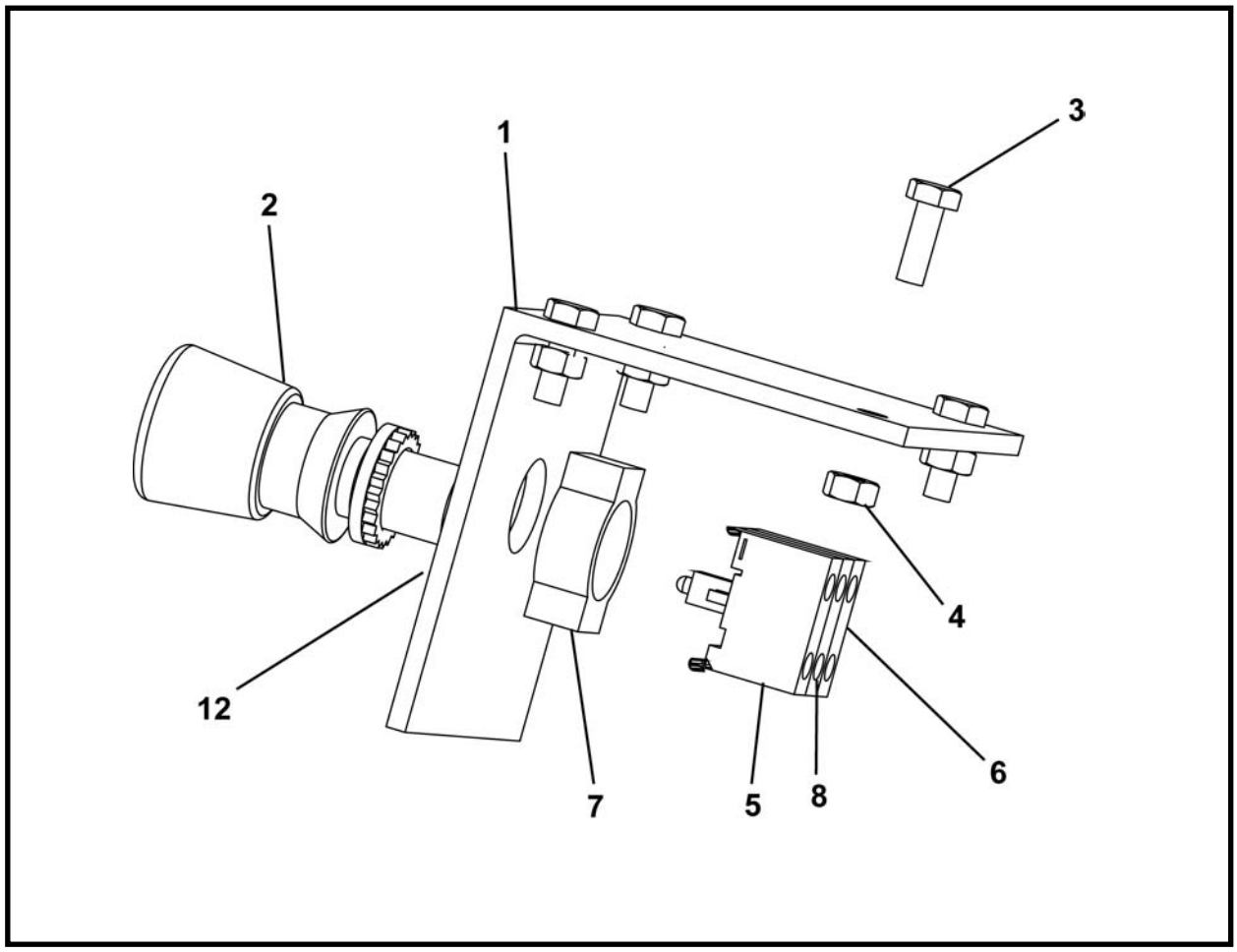


ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0125-132	ENGINE, 154 HP
1	1	P0125-132A	OIL COOLER
2	1	P0125-119A	FILTER, Oil
3	1	P0125-124B	FILTER, Final Fuel
4	1	P0125-124A	FILTER, Main Fuel
5	1	P0125-132B	FILTER, Main Air
5	1	P0125-124E	FILTER, Safety Air
6	1	P0125-119F	BOLTS FOR B PAD
7	1	P0125-119G	PUMP ADAPTER FOR B PAD
8	1	P0125-119H	ORING ADAPTER FOR B PAD
9	1	P0125-119I	SHAFT, Drive Coupler For B Pad
10	1	P0125-132C	STARTER
11	1	P0125-119K	STARTER RELAY
12	1	P0125-119L	TUBE, Exhaust Exit
13	1	P0125-132D	TUBE, Turbo To Muffler
14	1	P0125-132E	KIT, Cooling Package
15	1	P0125-132F	RADIATOR
16	1	P0125-119V	RAINCAP
17	2	P0125-132G	CLAMP, Muffler Mounting
18	1	P0125-119X	TUBE, Exhaust Extension
19	1	P0125-132H	PUMP, Fuel Transfer
20*	1	P0125-132I	PUMP, Fuel Injection
21*	1	P0125-132J	COVER, Air Cleaner
22*	3	P0125-132K	CLIP, Air Cleaner Cover

* Not Shown

E-STOP ASSEMBLY, A43765A

P150Q

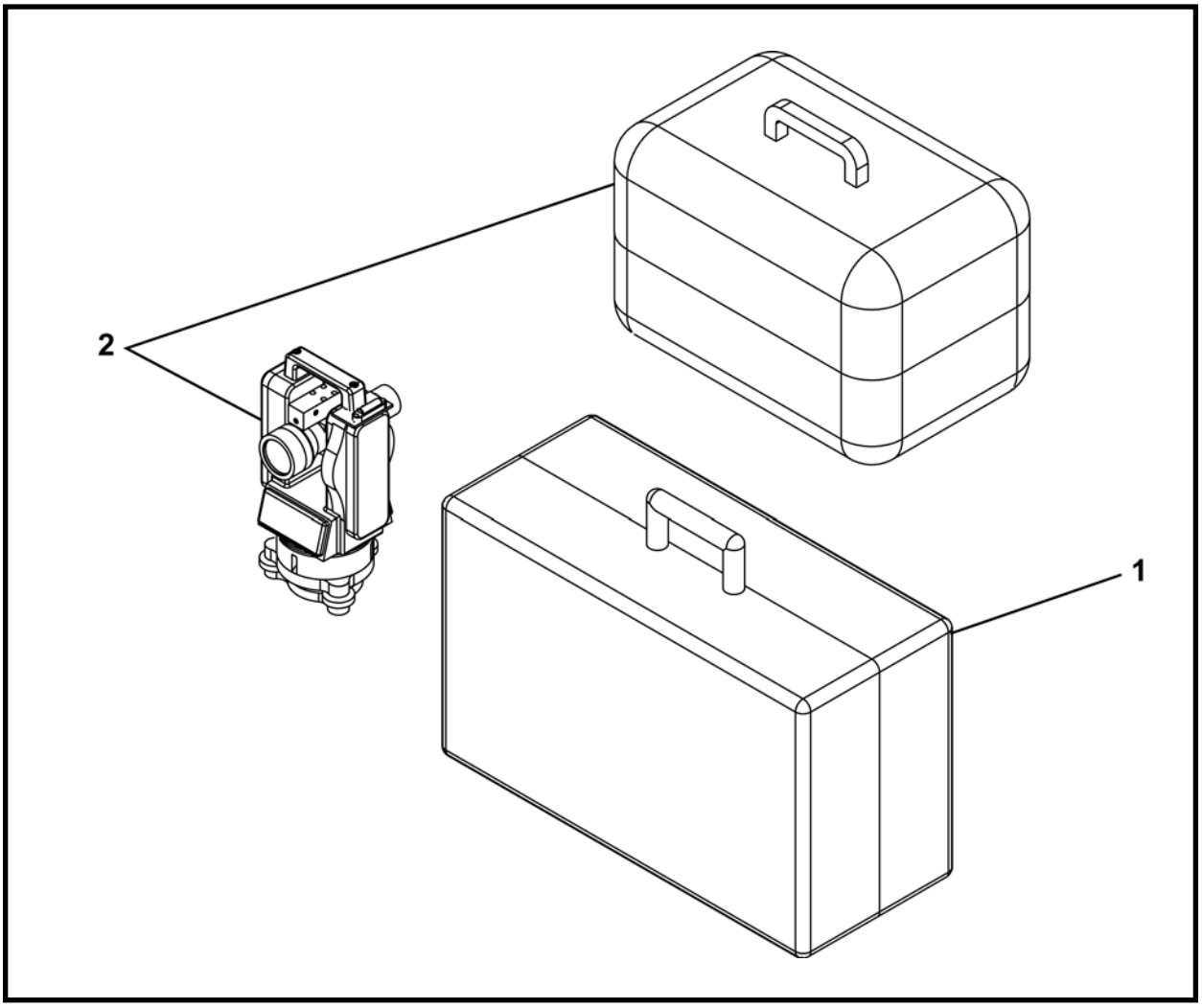


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43765A	ASSEMBLY, E-Stop
1	1	A43706P	PLATE
2	1	P0310-420F	PUSHBUTTON, Illuminated E-Stop
3	4	P0001-04-003	BOLT, 1/4 UNC x .75
4	4	P0001-04-001	BOLT, 1/4 UNC x .38
5	1	P0056-121F	CONTACT
6	1	P0045-122F	BLOCK, Contact
7	1	P0310-419F	MOUNTING LATCH
8	1	P0251-171	MODULE, LED
9*	180 LI	P0054-013	WIRE, 14 GA White & Black
10*	90 LI	P0054-014	WIRE, 12 GA White & Black
11*	80 LI	P0054-498	WRAP, Spiral Wire 3/8
12	1	P0310-474F	DECAL, E-Stop

LI - Linear Inch
* Not Shown

GUIDANCE SYSTEM ASSEMBLY G3, FA42035F

GUIDANCE SYSTEM G3 WITHOUT REMOTE FOCUS (SN FA42035F-86 & BEFORE)

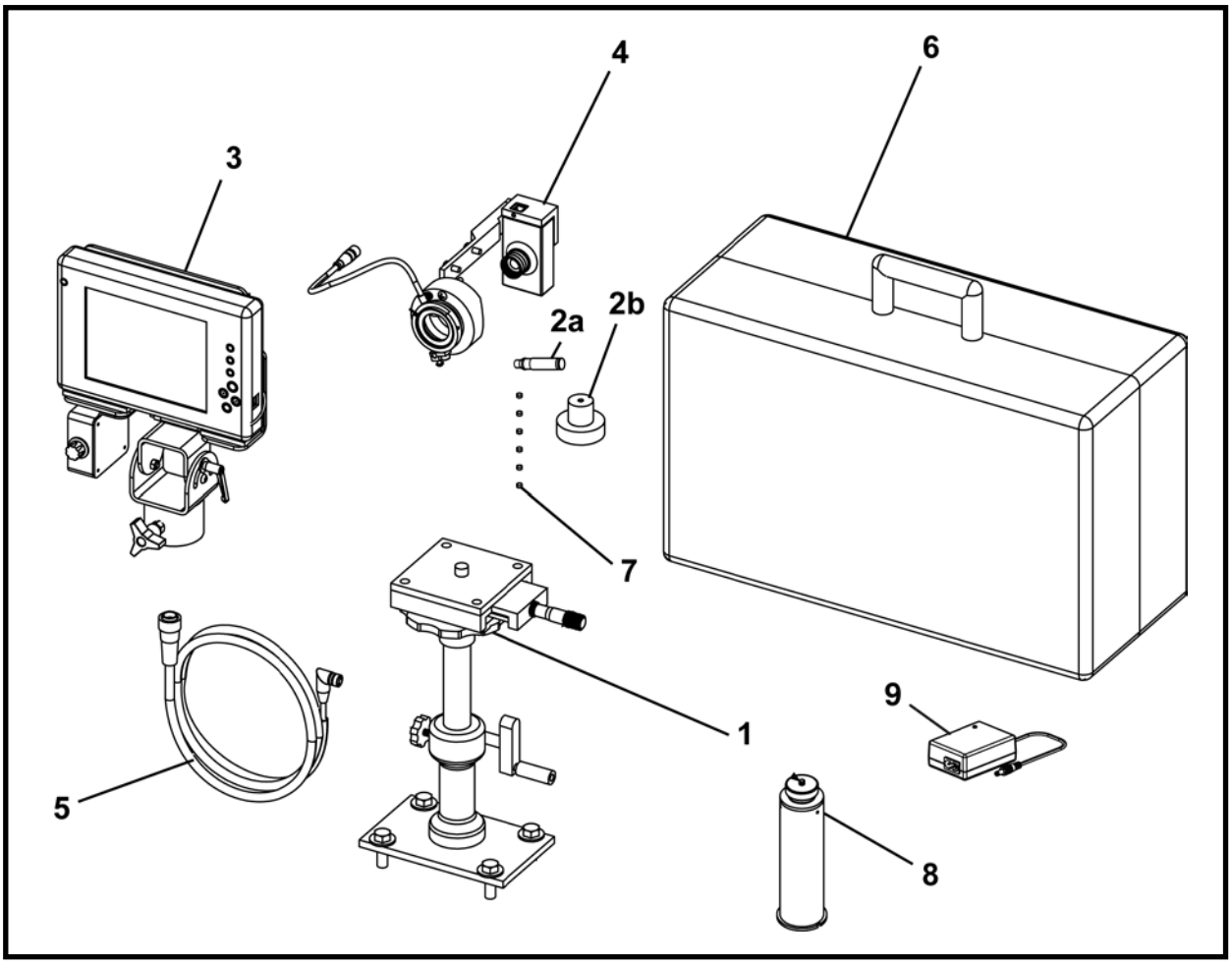


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42035F	GUIDANCE SYSTEM ASSEMBLY G3
1*	1	A42460A	ASSEMBLY, Guidance System Case G3
2*	1	A42466A	ASSEMBLY, Theodolite G3

* Refer to this section for parts breakdown.

GUIDANCE SYSTEM CASE G3, A42460A

GUIDANCE SYSTEM G3 WITHOUT REMOTE FOCUS (SN FA42035F-86 & BEFORE)



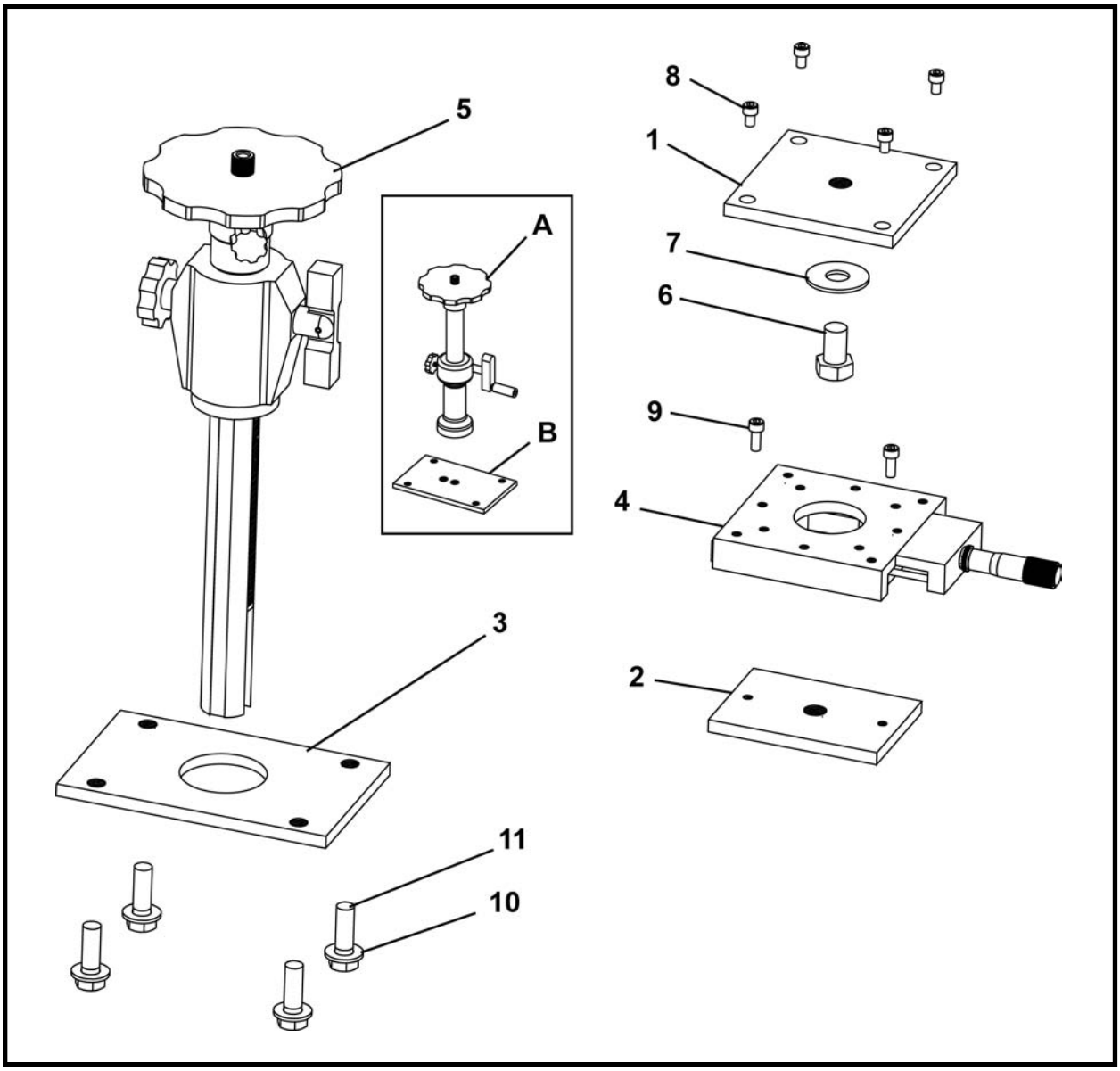
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42460A	GUIDANCE SYSTEM CASE G3
1*	1	A42455A	STAND, Theodolite G3
2	1	A42028A	ASSEMBLY, Laser Sight Alignment Tool (Includes items 2a & 2b)
2a	1	P0251-133	BORESIGHT, Laser
2b	1	A42023P	HOLDER, Boresight Laser
3*	1	A42454A	ASSEMBLY, Tablet PC
4*	1	A42458A	CAMERA OPTICS
5	1	A42456A	ASSEMBLY, GBM Power Cable G3
6	1	P0251-144	CASE, Guidance System
7	6	P0064-020	BATTERY
8a*	1	A40150A	TARGET (Rechargeable)
8b*	1	A44853A	TARGET (Uses Replaceable D Size Alkaline Batteries)
9*	1	P0310-707	CHARGER, Smart (Use with A40150A Target)

NOTE: If you want the remote focus component added to your guidance system (SN FA42035F-86 & Before), refer to Remote Focus Assembly, FA42096F in this section.

* Refer to this section for parts breakdown.

THEODOLITE STAND, A42455A

GUIDANCE SYSTEM G3

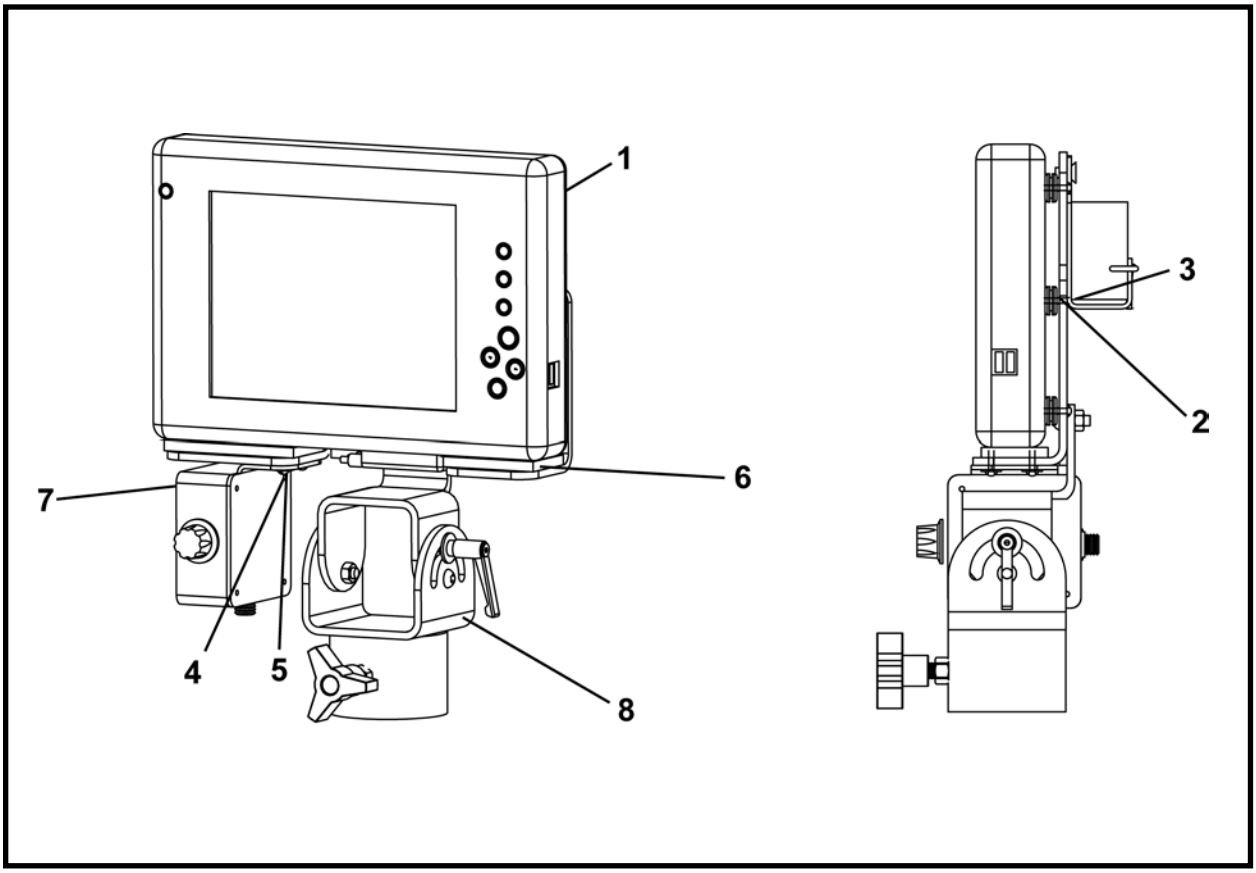


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42455A	THEODOLITE STAND
1	1	A42010P	PLATE, Upper Adapter
2	1	A42011P	PLATE, Lower Adapter
3*	1	A46385P	PLATE, Mounting
4	1	P0251-129	TRANSLATION STAGE
5*	1	A46386A	COLUMN, Elevator
6	1	P0027-032	BOLT, 5/8-11 UNC X 1
7	1	P0027-046	WASHER, Flat 5/8
8	4	P0031-04-000	SCREW, Socket Head Cap 1/4-20 X 3/8
9	2	P0031-04-001	SCREW, Socket Head Cap 1/4-20 X 5/8
10	4	P0040-008	WASHER, Hardened Flat 1/2
11	4	P0001-08-006	BOLT, 1/2 UNC x 1.50

* Earlier models were equipped with Elevator Column, P0251-128 (A) and Mounting Plate, A42017P (B). Elevator Column P0251-128 is no longer available and must be replaced with Elevator Column, A46386A (item 5) and Mounting Plate, A46385P (item 3) when part replacement is necessary.

TABLET PC ASSEMBLY, A42454A

GUIDANCE SYSTEM G3 WITHOUT REMOTE FOCUS (SN FA42035F-86 & BEFORE)



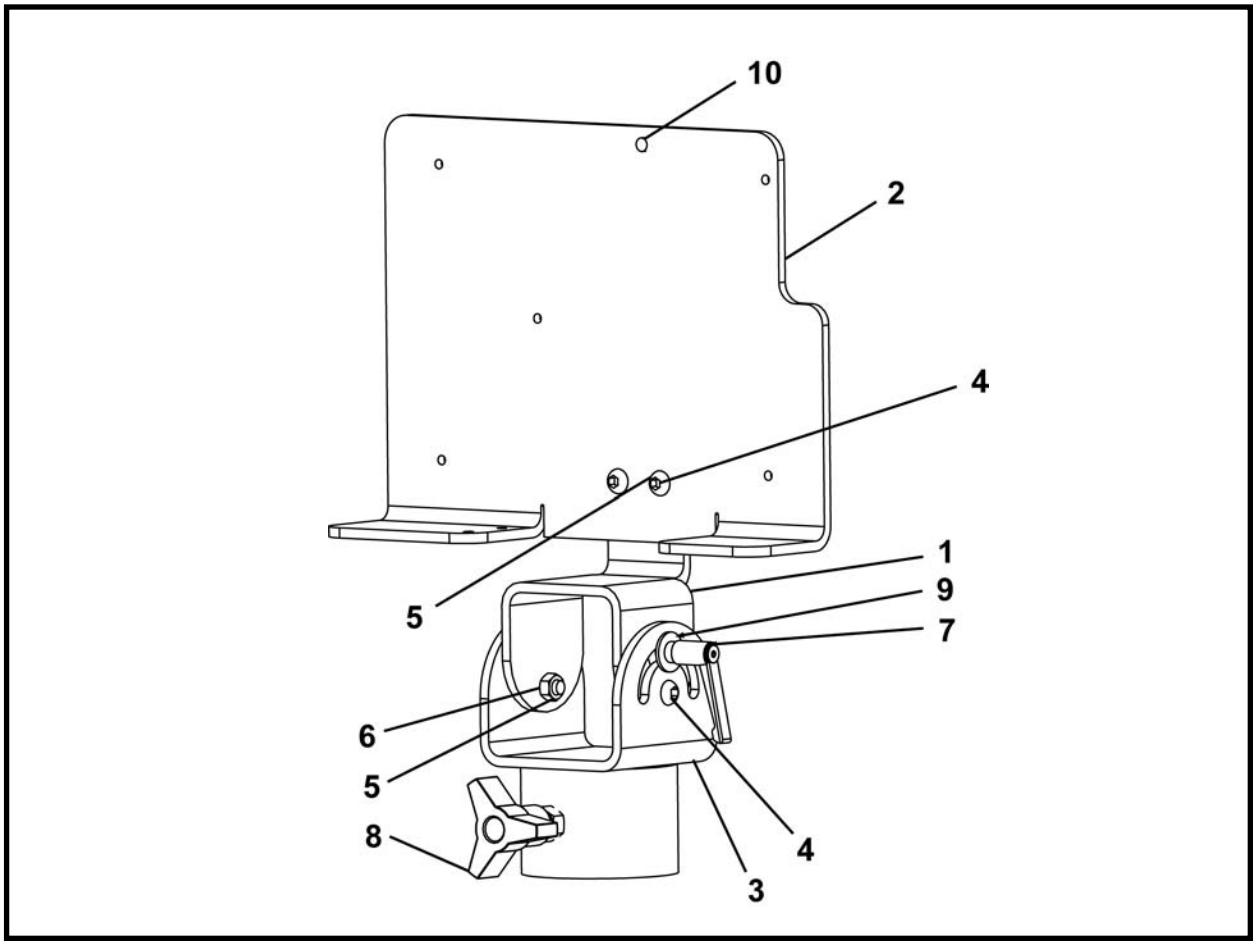
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42454A	TABLET PC ASSEMBLY
1	1	P0251-157	TABLET PC
2	5	P0253-132	BUMPER, Recessed Rubber
3	5	PM4I-0.7-14	SCREW, Flat Slotted Machine
4	2	P0017-08-323	SCREW, Machine 8-32 x .5
5	2	P0040-001	WASHER, #8
6	5 LI	P0253-018	GASKET, Rubber 1/4
7**	1	A42498A	ASSEMBLY, Power Adapter
8*	1	A42056A	ASSEMBLY, Docking Station
9***	1	P0064-122	BATTERY, Tablet PC

* Refer to this section for parts breakdown.
** Refer to Section 5, Electrical, for parts breakdown.
*** Not Shown

LI - Linear Inch

DOCKING STATION ASSEMBLY, A42056A

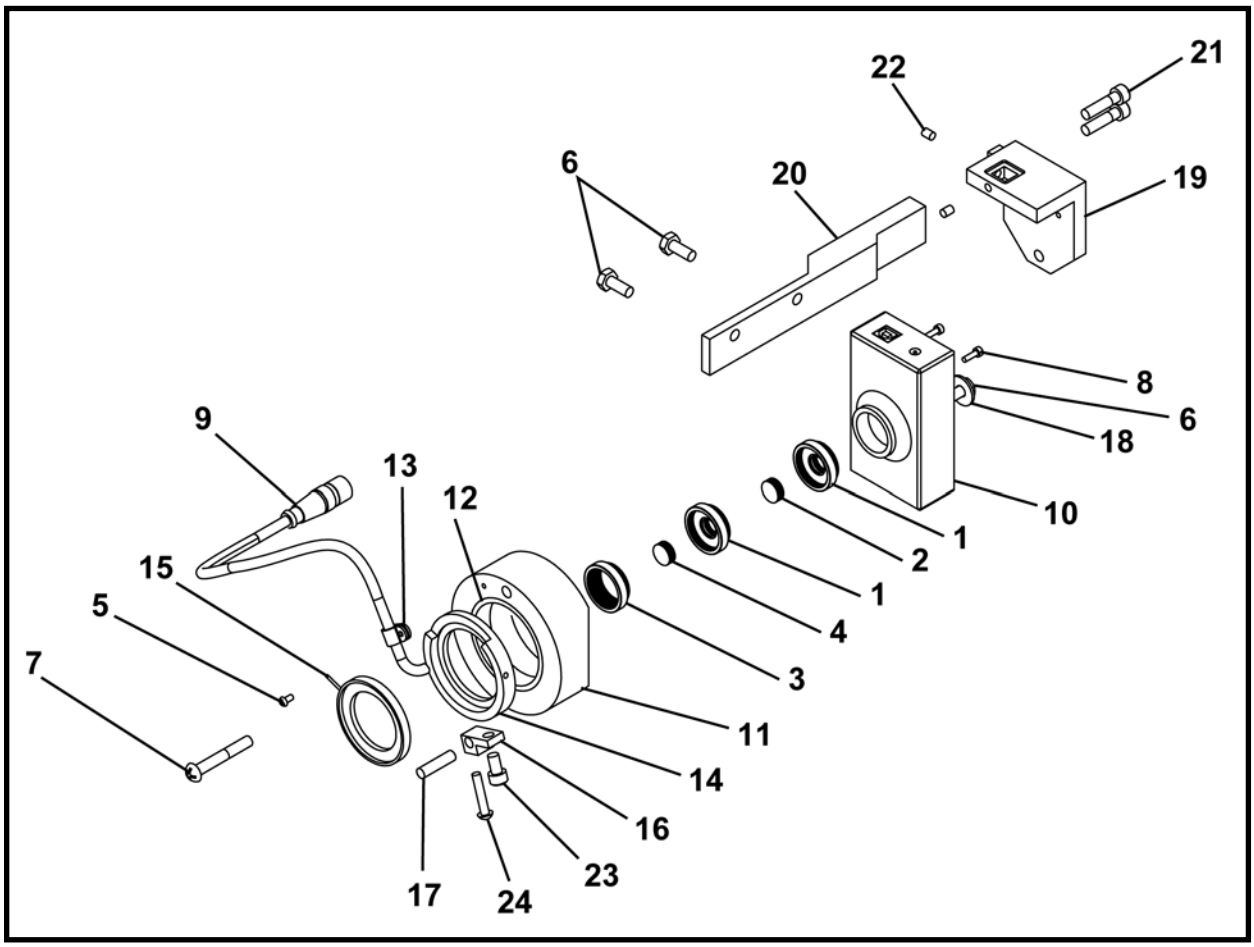
GUIDANCE SYSTEM G3



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42056A	ASSEMBLY, Docking Station
1	1	A42051P	MOUNT, Pivot
2	1	A42052P	BACK, Docking Station
3	1	A42053A	MOUNT, Tablet
4	4	P0022-14-204	SCREW, Button Head Socket 1/4-20 x .75
5	4	P0013-04-000	NUT, 1/4
6	3	P0059-064	WASHER, Plastic
7	1	P0059-063	HANDLE, Plastic
8	1	P0059-062	HANDLE, Plastic
9	1	P0040-004	WASHER, Hardened Flat 1/4
10	1	P0030-04-002	SCREW, Flat Head Cap 1/4 UNC x .5

CAMERA OPTICS ASSEMBLY, A42458A

GUIDANCE SYSTEM G3 WITHOUT REMOTE FOCUS (SN FA42035F-86 & BEFORE)

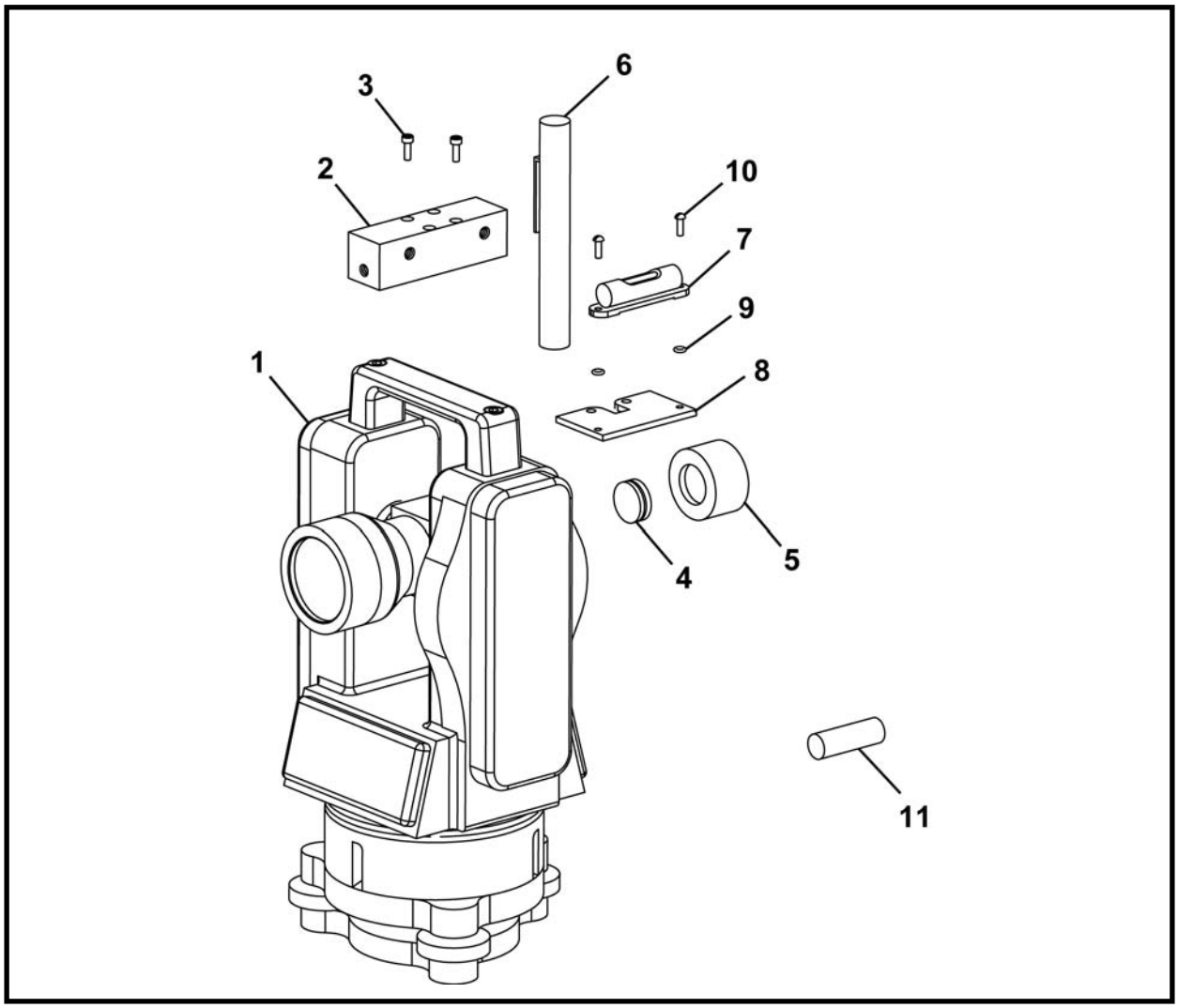


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42458A	ASSEMBLY, Camera Optics
1	2	P0250-124	MOUNT, Lens
2	1	P0250-125	LENS 36
3	1	P0250-127	TUBE, Extension
4	1	P0250-126	LENS 42
5	1	P0310-431A	SCREW, #6 With Square Washer
6	3	P0001-04-002.5	BOLT, 1/4-20 x 5/8 SS
7	1	P0017-14-208	SCREW, Round Head Machine 1/4-20 X 1 3/4 SS
8	2	PM3B-.5-10	SCREW, Socket Head Cap, M3-.5 x 10
9	1	A42006A	CABLE, LED
10	1	P0251-143	CAMERA
11	1	A40773P	COUNTERWEIGHT, Theodolite
12	1 LI	P0253-118	TAPE 1/8 x 1/2
13	1	P0055-122	CLAMP
14	1	P0251-141	MOUNT, Iris
15	1	P0251-142	IRIS
16	1	A42462P	BLOCK, Iris Mount
17	1	A42468P	MOUNT, Iris
18	1	P0040-004	WASHER, Hardened Flat 1/4
19	1	A42464P	PLATE, Camera Mount
20	1	A42465P	ARM, Camera Mount
21	2	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
22	2	P033-1024-001	SCREW, Set 10-24 x .25
23	1	P0031-04-000	SCREW, Socket Head Cap 1/4 x .38
24	1	P0019-10-323	SCREW, Pan Head #10-32 x .38

LI - Linear Inch

THEODOLITE ASSEMBLY, A42466A

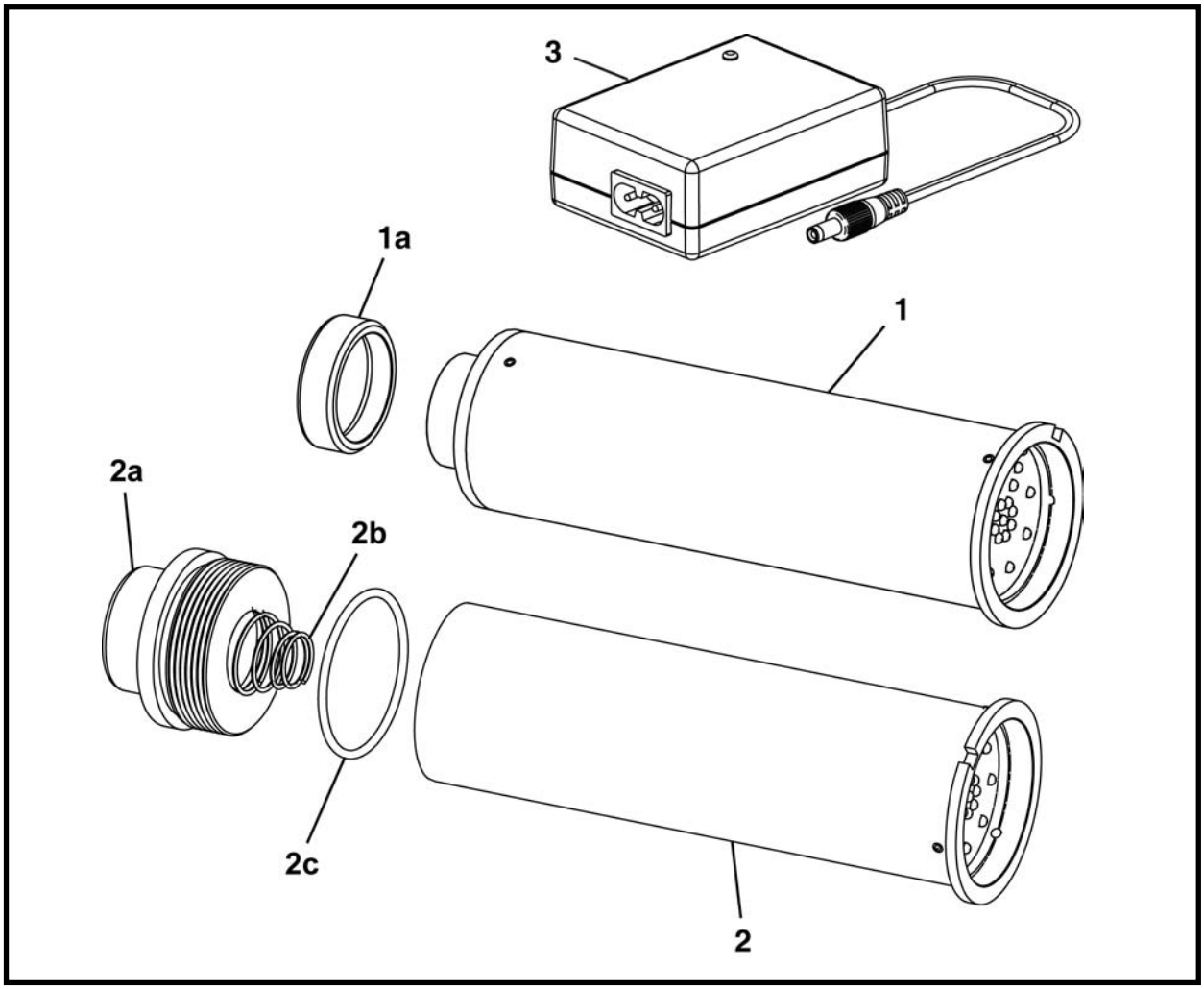
GUIDANCE SYSTEM G3 WITHOUT REMOTE FOCUS (SN FA42035F-86 & BEFORE)



ITEM	QTY	PART NO.	DESCRIPTION
0*	1	A42466A	ASSEMBLY, Theodolite
1	1	P0251-123	THEODOLITE (Includes itemS 1a - 1f)
1a	1	P0251-123B	CASE, Battery
1b	1	P0251-123D	SEAL EYEPIECE
1c	1	P0251-123E	LEVEL
1d	1	P0251-123F	DIAGONAL EYEPIECE
1e	1	P0251-123L	LCD HOLDER
1f	1	P0251-123M	LATCH, Carrying Case
2	1	A40772P	MOUNT, Camera
3	2	PM3B-.5-10	SCREW, Socket Head Cap SS M3-10
4	1	P0251-123A	EYEPIECE 40
5	1	A42022P	RING, Seal
6	1	P0251-147	LENS PEN
7	1	P0251-163	ASSEMBLY, Level
8	1	A42467P	PLATE, Level Mounting
9	2	P0085-006	ORING
10	2	P0017-06-322	SCREW, Slotted Machine 6-32 x .375
11	6	P0064-026	BATTERY, AA Size

* Includes carrying case.

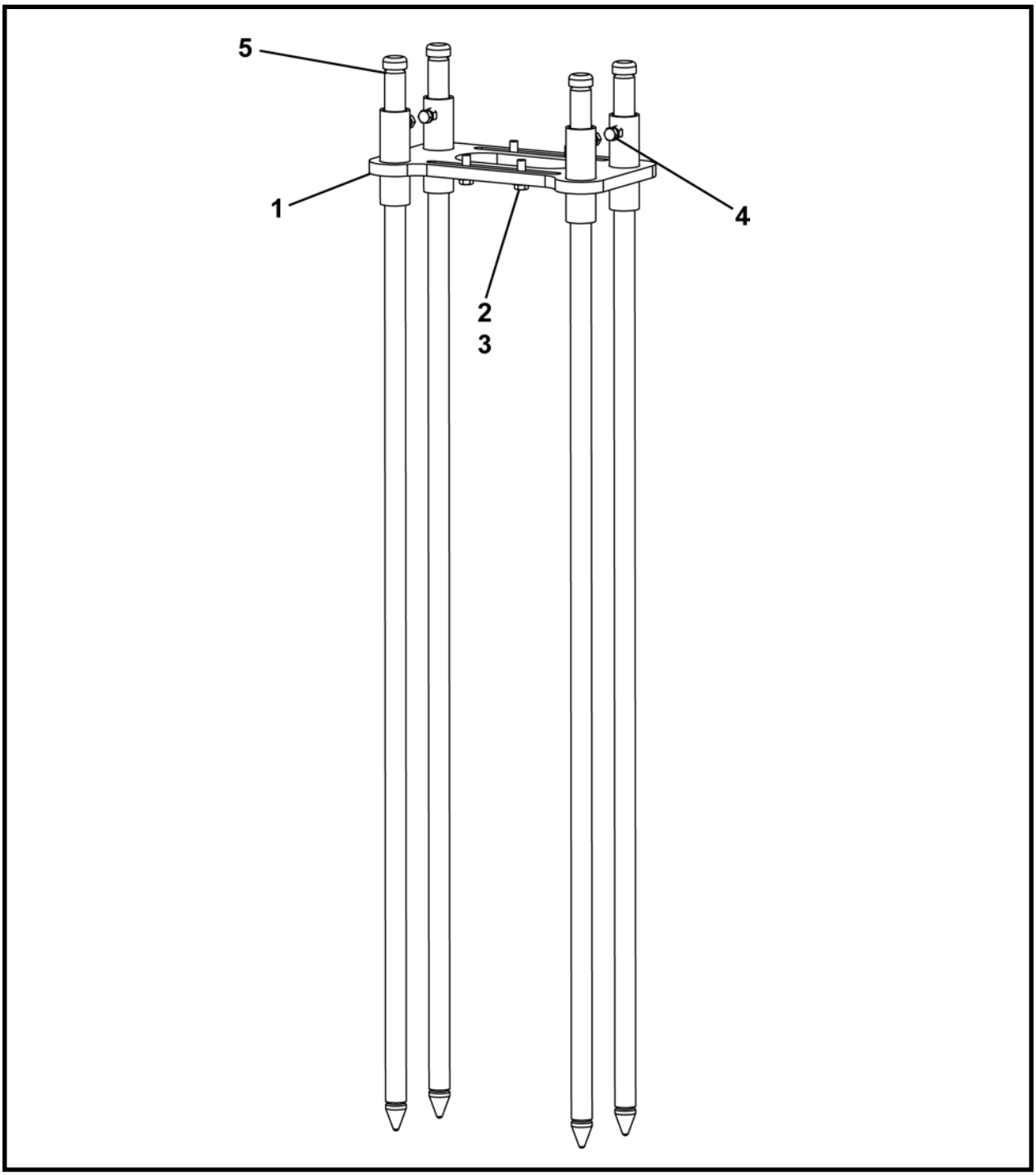
TARGET & CHARGER
GUIDANCE SYSTEM



ITEM	QTY	PART NO.	DESCRIPTION
1	1	A40150A	TARGET (Rechargeable) (Includes item 1a)
1a	1	P0100-033	COVER, Receptacle
2	1	A44853A	TARGET (Uses Replaceable D Size Alkaline Batteries) (Includes items 2a - 2c)
2a	1	A44852P	CAP, Battery Target
2b	1	P0070-058	SPRING, Compression
2c	1	P0085-131	ORING
3	1	P0310-707	CHARGER, Smart (Use with A40150A Target)

THEODOLITE SHAFT STAND, FA40051F

GUIDANCE SYSTEM

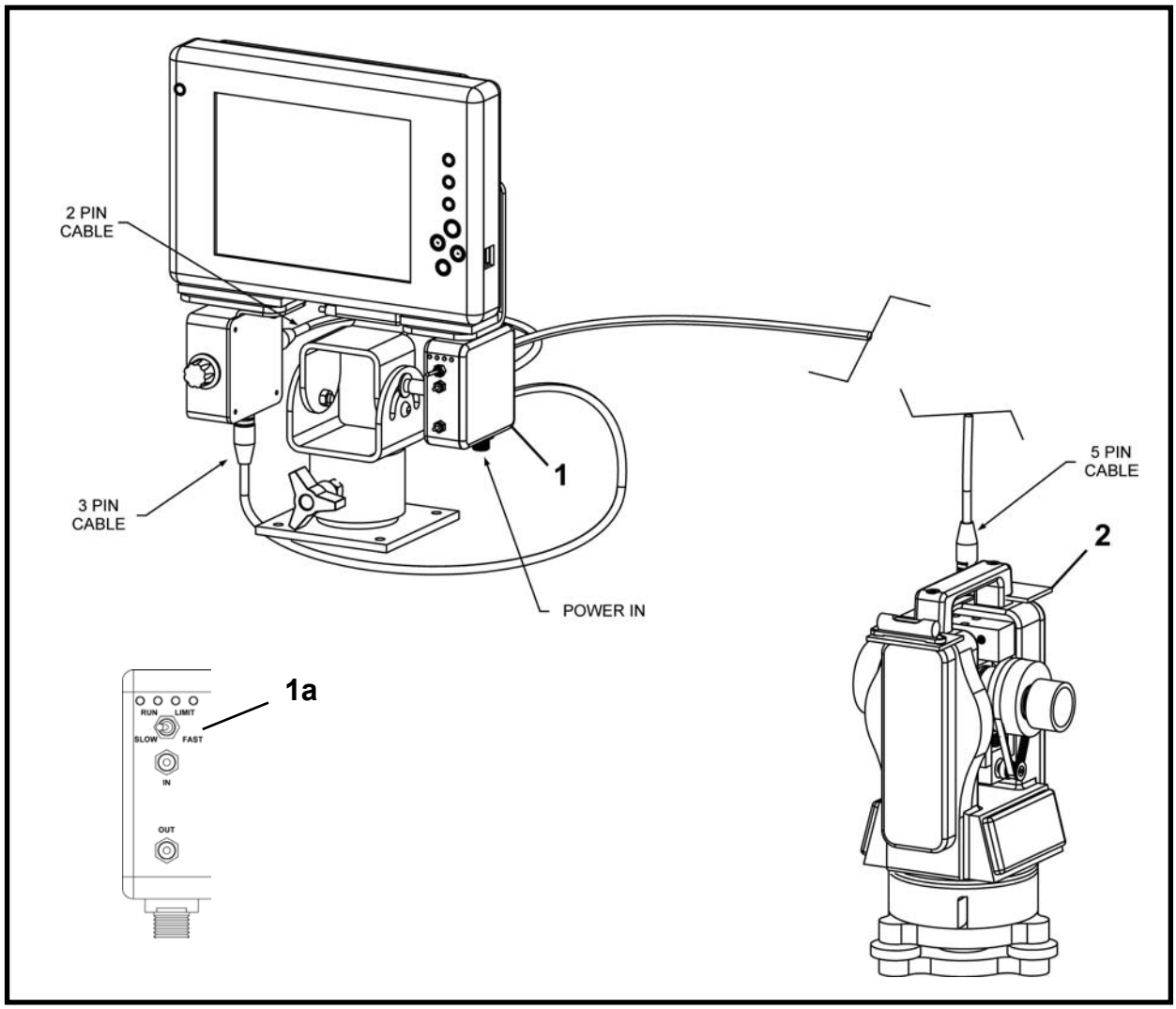


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40051F	THEODOLITE SHAFT STAND - Latching Frame
1	1	A40117A	WELDMENT, Mounting Base
2	4	P0001-08-006	BOLT, 1/2 UNC x 1.5
3	4	P0040-008	WASHER, Flat 1/2
4	4	P0001-08-004	BOLT, 1/2 UNC x 1
5	4	A42235A	STAKE

NOTES

REMOTE FOCUS ASSEMBLY, FA42096F

GUIDANCE SYSTEM G3 (SN FA42035F-86 & BEFORE)

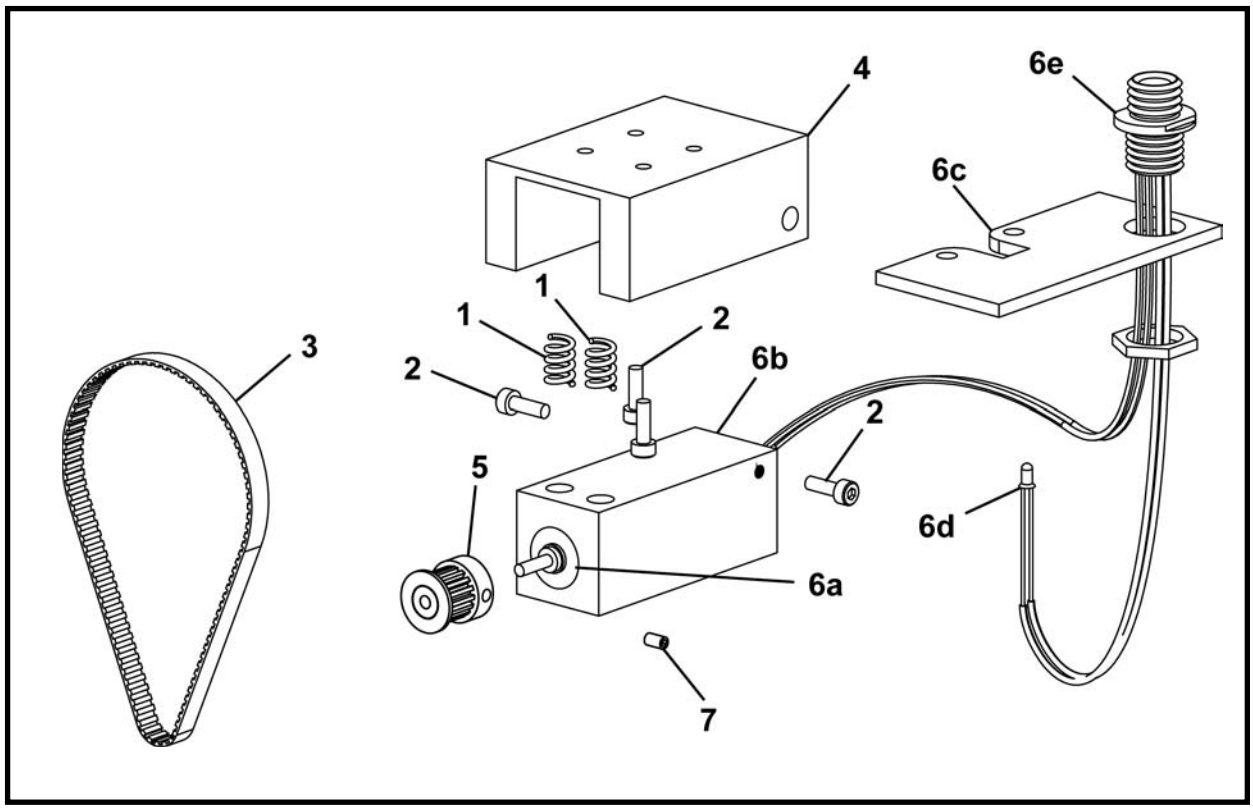


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42096F	REMOTE FOCUS ASSEMBLY
1	1	A42049A	ASSEMBLY, Remote Focus Electrical (Includes items 1a-1b)
1a	1	1250-933	DECAL, Remote Focus
1b	1	050041A	INSTRUCTIONS, Installation
2*	1	A42037A	ASSEMBLY, Motor Drive

*Refer to this section for parts breakdown.

NOTE: This assembly, Remote Focus Assembly, FA42096F, is used to add the remote focus component to your guidance system (SN FA42035F-86 & Before).

MOTOR DRIVE ASSEMBLY, A42037A
GUIDANCE SYSTEM G3 (SN FA42035F-86 & BEFORE)

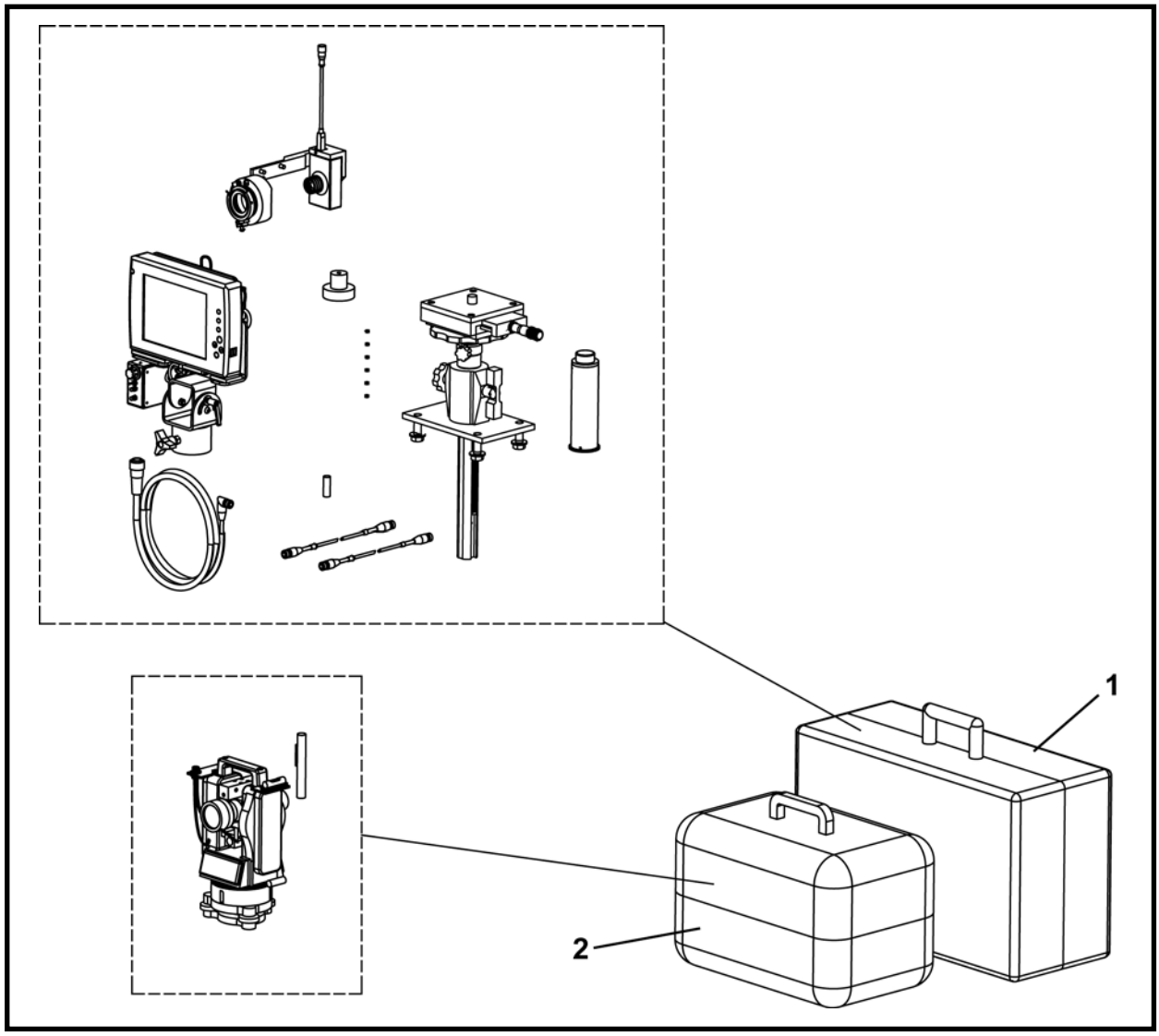


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42037A	MOTOR DRIVE ASSEMBLY
1	2	P0070-034	SPRING
2	4	PM3B-.5-10	SCREW, Socket Head Cap M3-10 SS
3	1	P0067-049	BELT, Timing
4	1	A42039P	HOUSING, Motor Bracket
5	1	P0066-112	PULLEY
6	1	A42097A	ASSEMBLY, Motor - Remote Focus (Includes items 6a - 6e)
6a	1	NSS	MOTOR, Gear
6b	1	NSS	MOTOR, Housing
6c	1	NSS	PLATE, Connector Mounting
6d	1	NSS	LED, Red
6e	1	NSS	CONNECTOR
7	1	P0033-440-03	SCREW, Set

NSS - Not Sold Separately

GUIDANCE SYSTEM ASSEMBLY G3, FA42035F

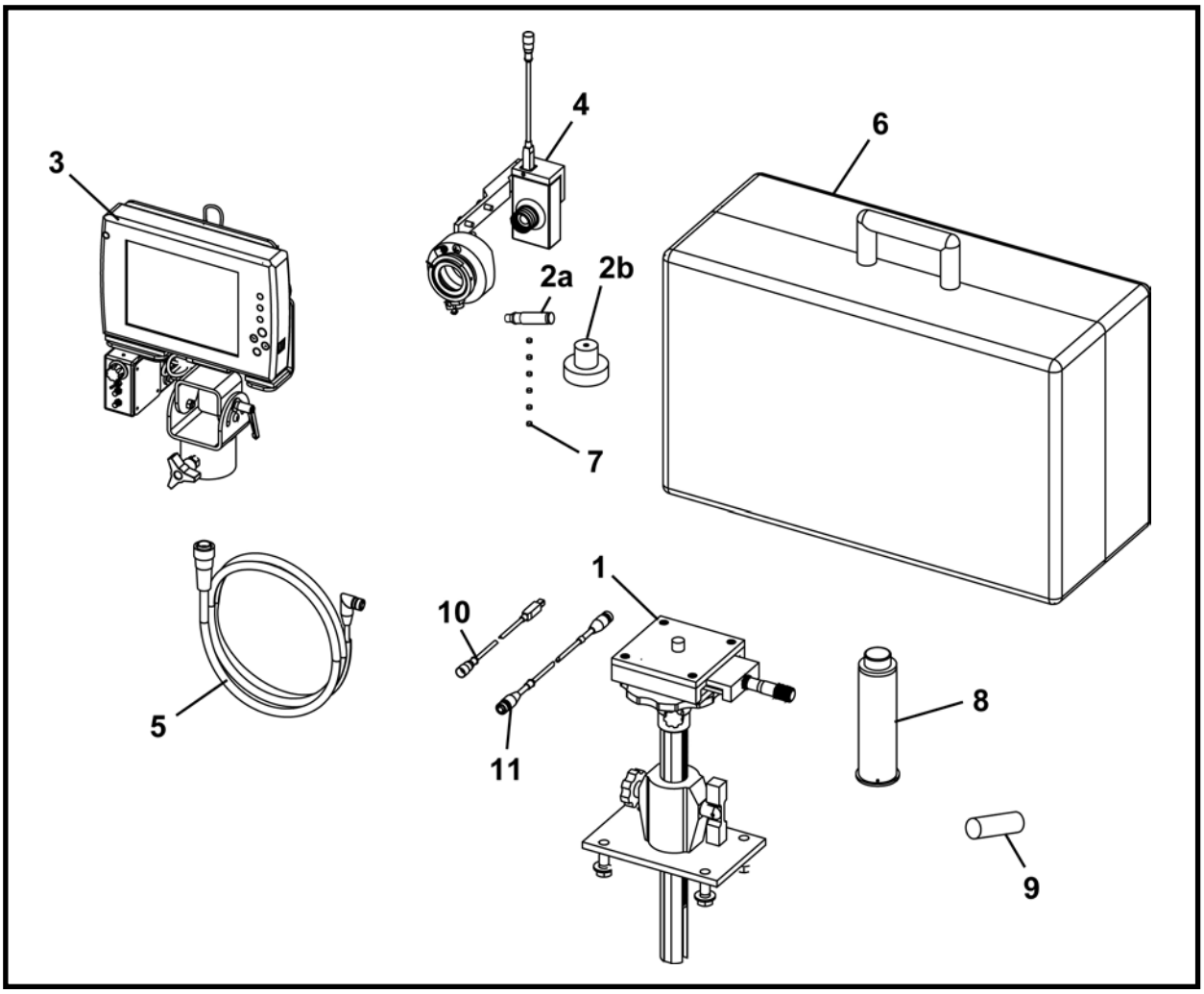
GUIDANCE SYSTEM G3 WITH REMOTE FOCUS (SN FA42035F-87 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42035F	GUIDANCE SYSTEM ASSEMBLY G3
1	1	A42460A	ASSEMBLY, Guidance System Case G3
2	1	A45641A	ASSEMBLY, Theodolite & Remote Focus

GUIDANCE SYSTEM CASE G3, A42460A

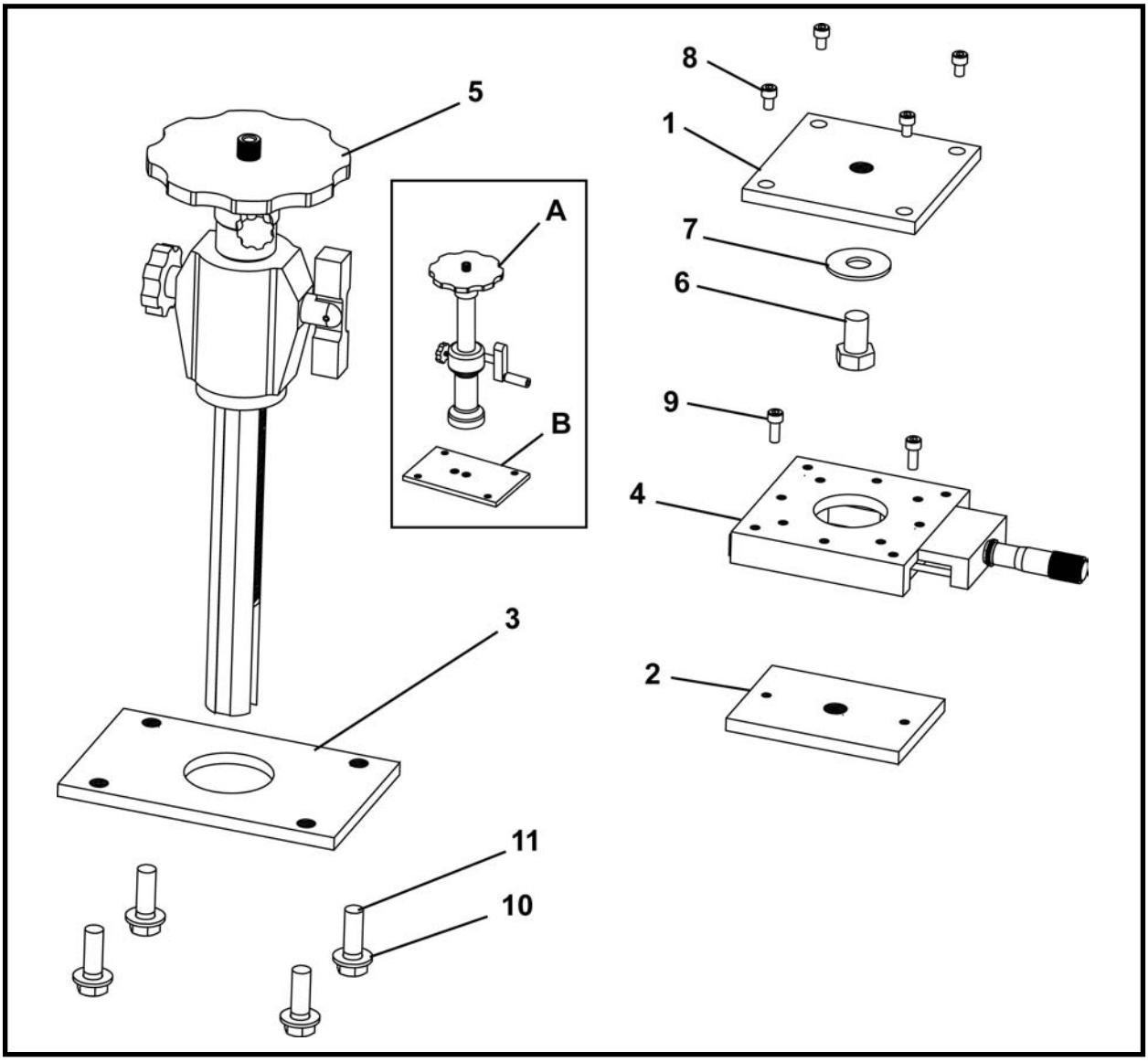
GUIDANCE SYSTEM G3 WITH REMOTE FOCUS (SN FA42035F-87 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42460A	GUIDANCE SYSTEM CASE G3
1	1	A42455A	STAND, Theodolite G3
2	1	A42028A	ASSEMBLY, Laser Sight Alignment Tool (Includes items 2a & 2b)
2a	1	P0251-133	BORESIGHT, Laser
2b	1	A42023P	HOLDER, Boresight Laser
3	1	A42454A	ASSEMBLY, Tablet PC
4	1	A42458A	CAMERA OPTICS
5	1	A42456A	ASSEMBLY, GBM Power Cable G3
6	1	P0251-144	CASE, Guidance System
7	6	P0064-020	BATTERY
8	1	A44853A	TARGET (Uses Replaceable D Size Alkaline Batteries)
9	6	P0064-026	BATTERY, AA Size
10	1	P0054-594	CABLE, Camera
11	1	P0054-345	CABLE, 5 Pin (Remote Focus)

THEODOLITE STAND, A42455A

GUIDANCE SYSTEM G3 (SN FA42035F-95 & AFTER)

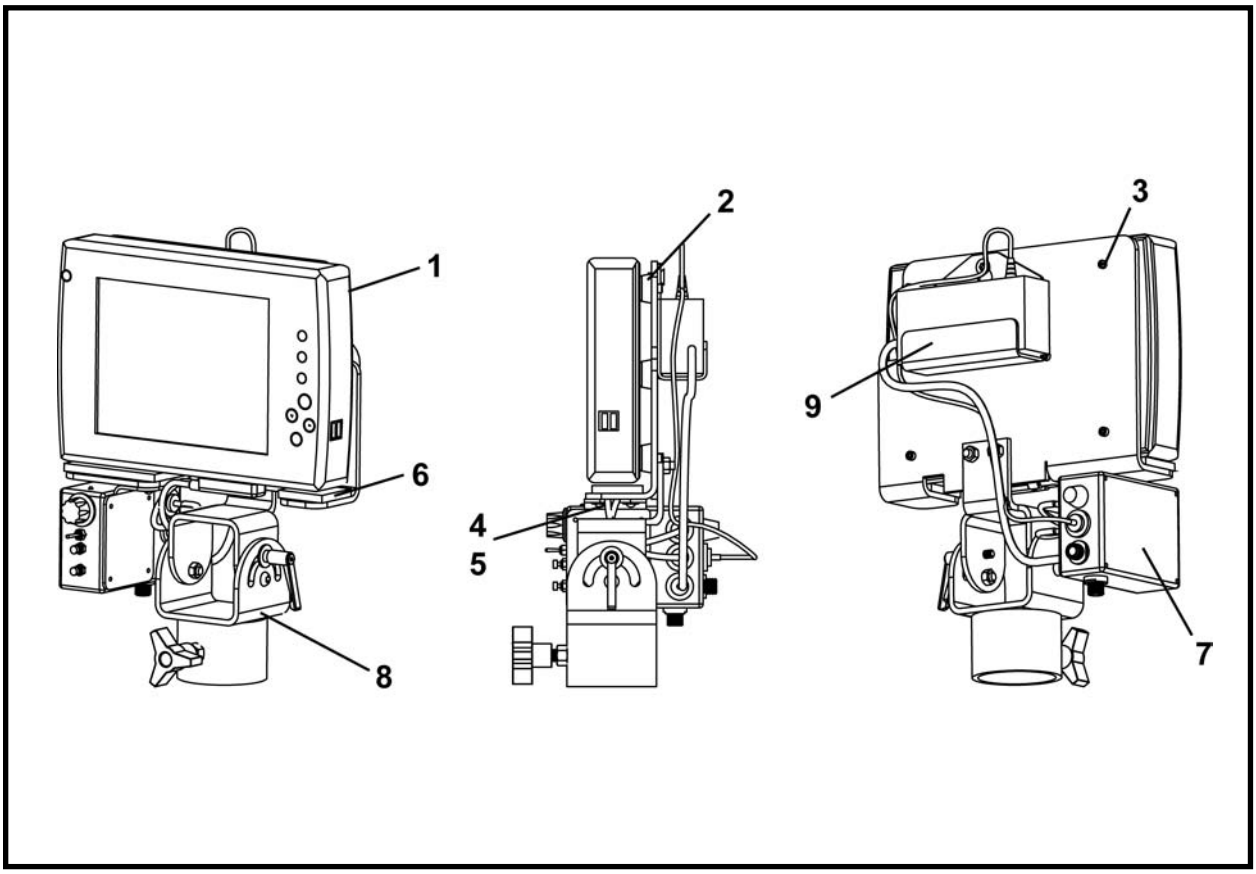


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42455A	THEODOLITE STAND
1	1	A42010P	PLATE, Upper Adapter
2	1	A42011P	PLATE, Lower Adapter
3*	1	A46385P	PLATE, Mounting
4	1	P0251-129	TRANSLATION STAGE
5*	1	A46386A	COLUMN, Elevator
6	1	P0027-032	BOLT, 5/8-11 UNC X 1
7	1	P0027-046	WASHER, Flat 5/8
8	4	P0031-04-000	SCREW, Socket Head Cap 1/4-20 X 3/8
9	2	P0031-04-001	SCREW, Socket Head Cap 1/4-20 X 5/8
10	4	P0040-008	WASHER, Hardened Flat 1/2
11	4	P0001-08-006	BOLT, 1/2 UNC x 1.50

* Guidance systems SN FA42035F-94 & before were equipped with Elevator Column, P0251-128 (A) and Mounting Plate, A42017P (B). Elevator Column P0251-128 is no longer available and must be replaced with Elevator Column, A46386A (item 5) and Mounting Plate, A46385P (item 3) when part replacement is necessary.

TABLET PC ASSEMBLY, A42454A

GUIDANCE SYSTEM G3 WITH REMOTE FOCUS (SN FA42035F-87 & AFTER)



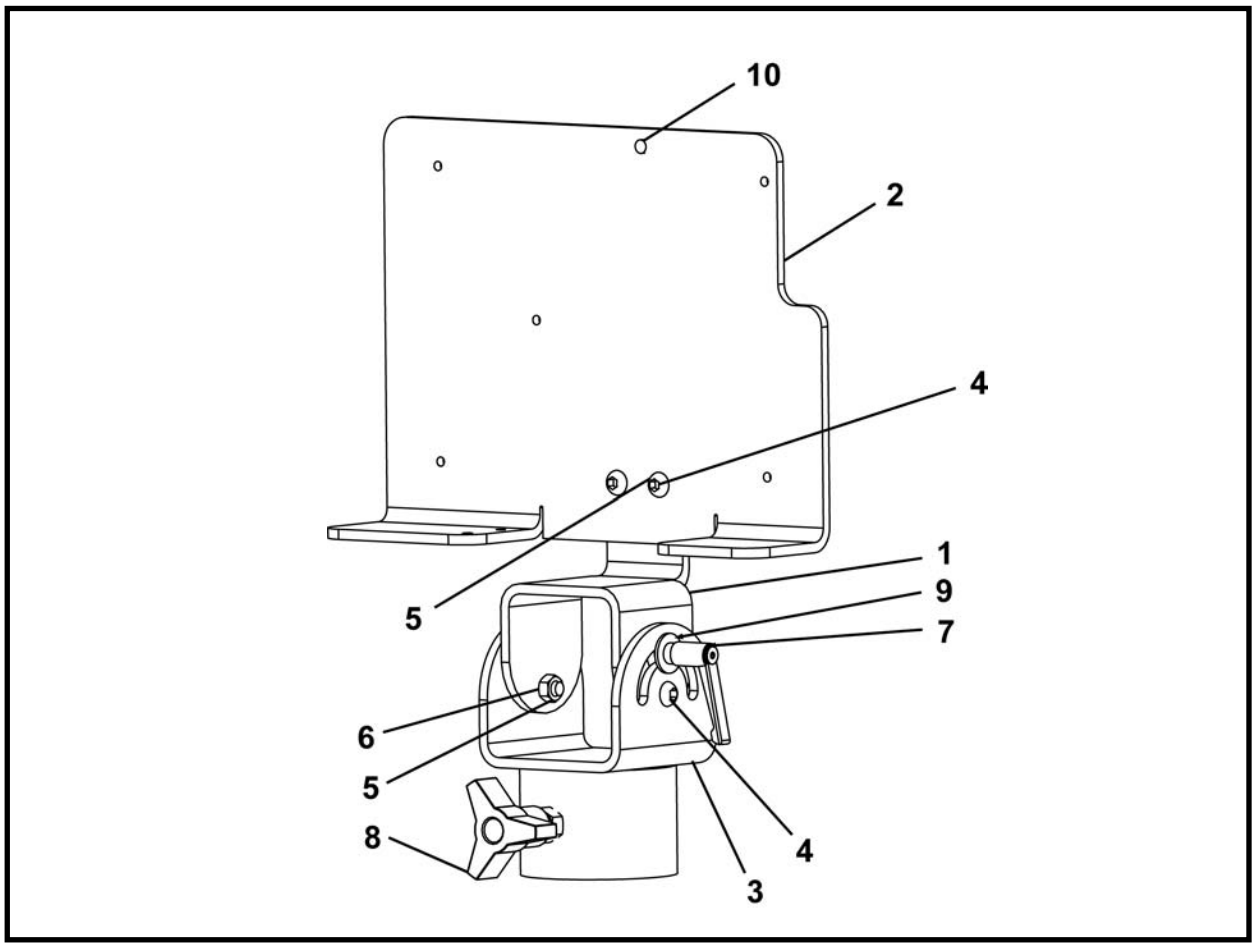
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42454A	TABLET PC ASSEMBLY
1	1	P0251-157	TABLET PC
2	5	P0253-132	BUMPER, Recessed Rubber
3	5	PM04B-0.70-014	SCREW, Slotted Head Cap SS
4	2	P0017-08-323	SCREW, Machine 8-32 x .5
5	2	P0040-001	WASHER
6	5 LI	P0253-018	GASKET, Rubber 1/4
7*	1	A45640A	ASSEMBLY, Power Adapter
8	1	A42056A	ASSEMBLY, Docking Station
9	1	A42055P	HANGER, Power Adapter
10**	1	P0064-122	BATTERY, Tablet PC

* See Section 5, Electrical, for parts breakdown.
** Not Shown

LI - Linear Inch

DOCKING STATION ASSEMBLY, A42056A

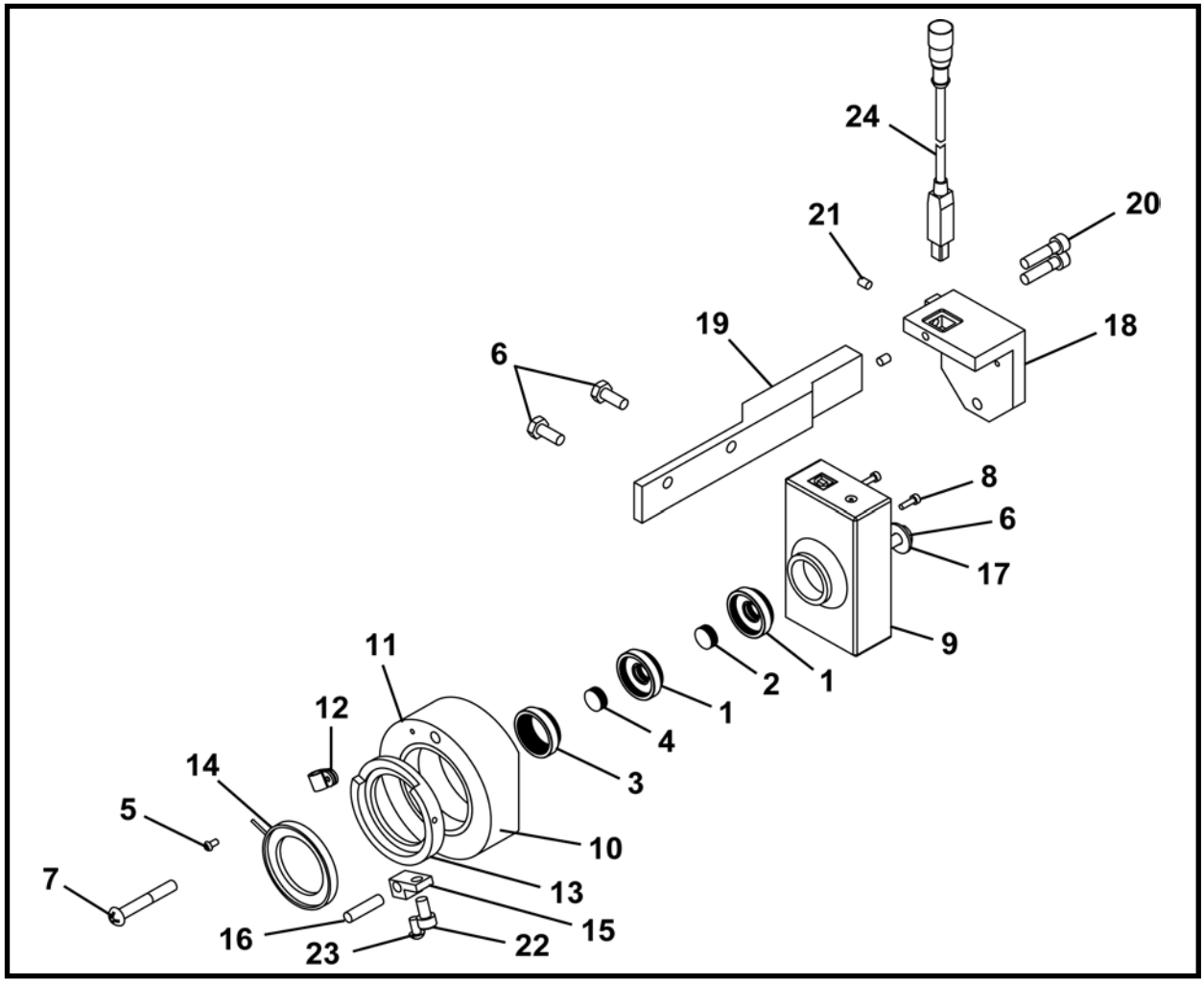
GUIDANCE SYSTEM G3



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42056A	ASSEMBLY, Docking Station
1	1	A42051P	MOUNT, Pivot
2	1	A42052P	BACK, Docking Station
3	1	A42053A	MOUNT, Tablet
4	4	P0022-14-204	SCREW, Button Head Socket 1/4-20 x .75
5	4	P0013-04-000	NUT, 1/4
6	3	P0059-064	WASHER, Plastic
7	1	P0059-063	HANDLE, Plastic
8	1	P0059-062	HANDLE, Plastic
9	1	P0040-004	WASHER, Hardened Flat 1/4
10	1	P0030-04-002	SCREW, Flat Head Cap 1/4 UNC x .5

CAMERA OPTICS ASSEMBLY, A42458A

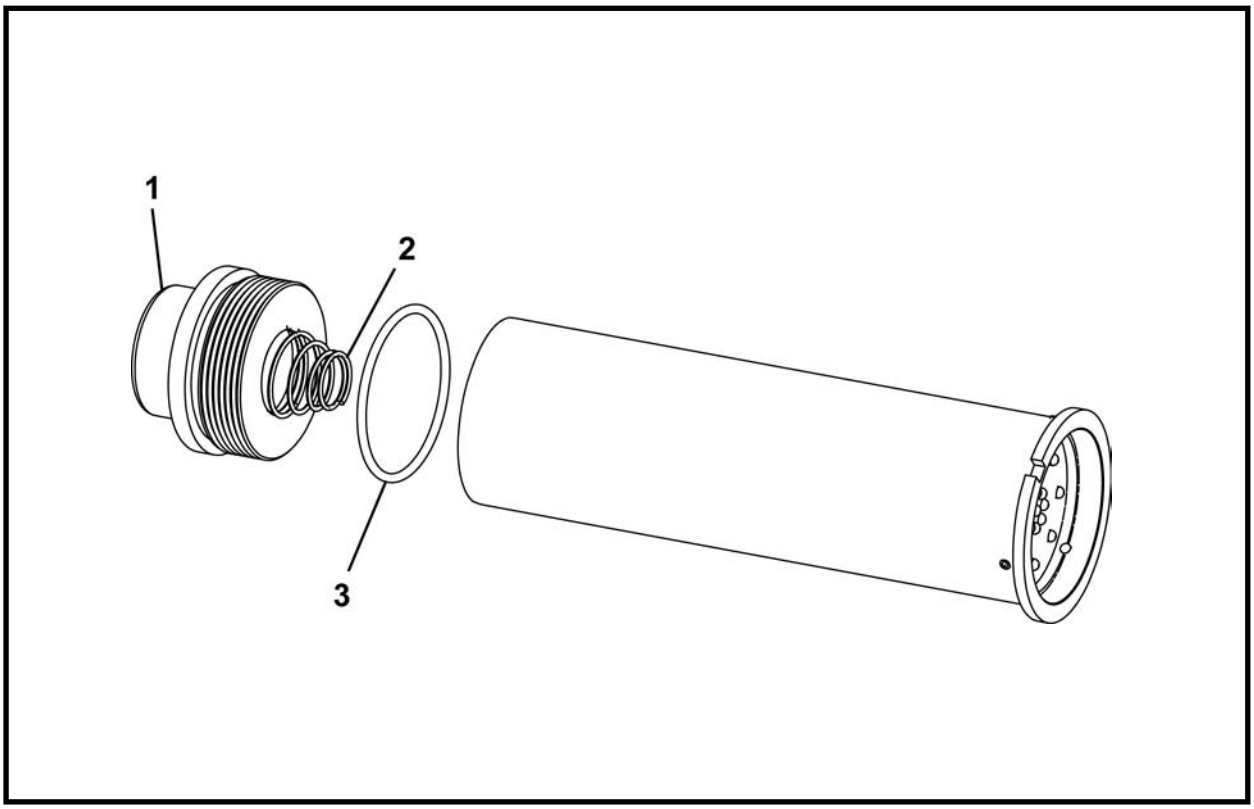
GUIDANCE SYSTEM G3 WITH REMOTE FOCUS (SN FA42035F-87 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42458A	ASSEMBLY, Camera Optics
1	2	P0250-124	MOUNT, Lens
2	1	P0250-125	LENS 36
3	1	P0250-127	TUBE, Extension
4	1	P0250-126	LENS 42
5	1	P0310-431A	SCREW, #6 With Square Washer
6	3	P0001-04-002.5	BOLT, 1/4-20 x 5/8 SS
7	1	P0017-14-208	SCREW, Round Head Machine 1/4 UNC x 1.75 SS
8	2	PM3B-.5-10	SCREW, Socket Head Cap, M3-.5 x 10
9	1	P0251-143	CAMERA
10	1	A40773P	COUNTERWEIGHT, Theodolite
11	1 LI	P0253-118	TAPE 1/8 x 1/2
12	1	P0055-122	CLAMP
13	1	P0251-141	MOUNT, Iris
14	1	P0251-142	IRIS
15	1	A42462P	BLOCK, Iris Mount
16	1	A42468P	MOUNT, Iris
17	1	P0040-004	WASHER, Hardened Flat 1/4
18	1	A42464P	PLATE, Camera Mount
19	1	A42465P	ARM, Camera Mount
20	2	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
21	2	P0033-1024-001	SCREW, Set 10-24 x .25
22	1	P0031-04-000	SCREW, Socket Head Cap 1/4 x .38
23	1	P0019-10-323	SCREW, Pan Head #10-32 x .38
24	1	P0054-488	CABLE

LI - Linear Inch

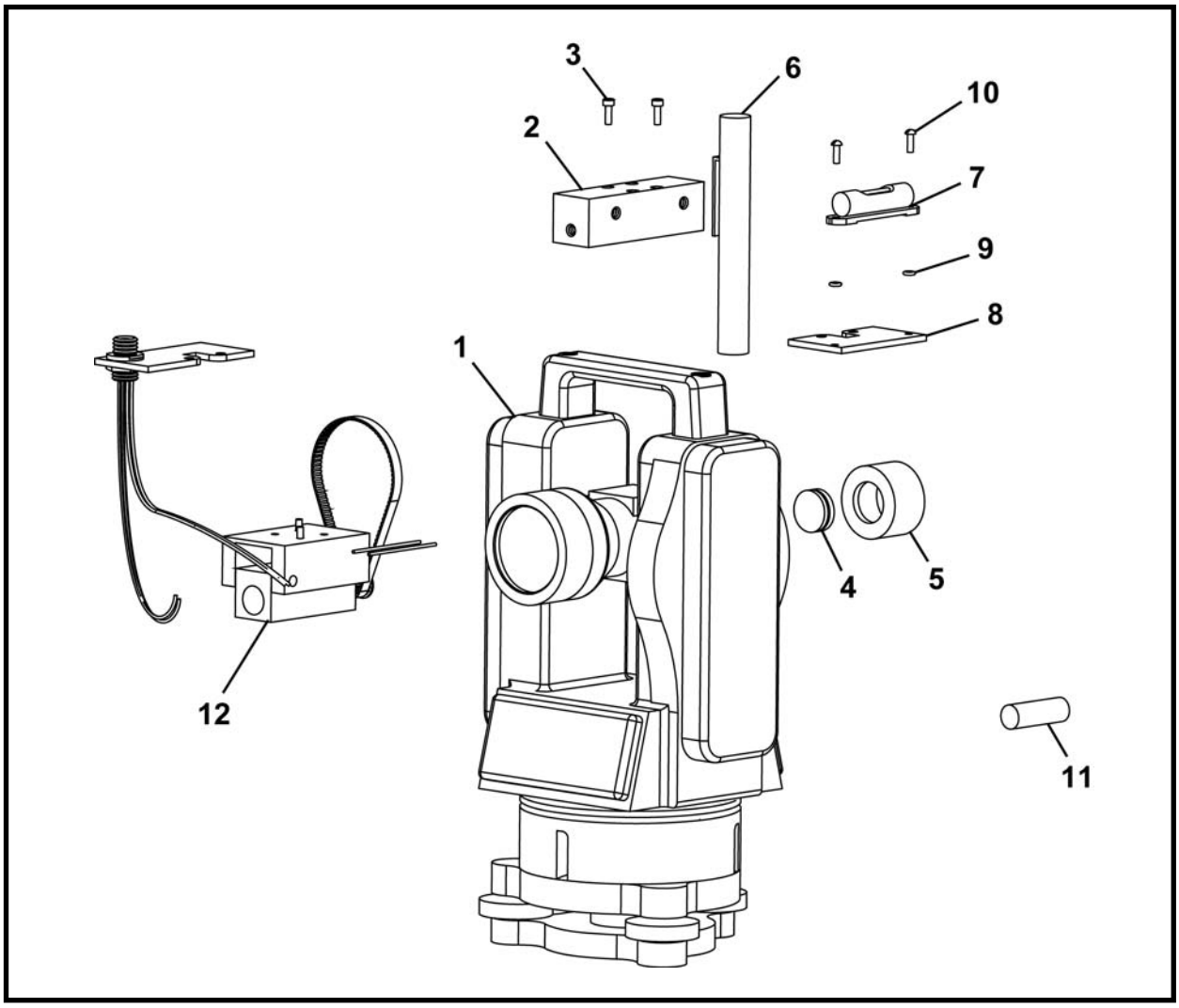
TARGET, A44853A
GUIDANCE SYSTEM



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44853A	TARGET (Uses Replaceable D Size Alkaline Batteries)
1	1	A44852P	CAP, Battery Target
2	1	P0070-058	SPRING. Compression
3	1	P0085-131	ORING

THEODOLITE & REMOTE FOCUS ASSEMBLY, A45641A

GUIDANCE SYSTEM G3 WITH REMOTE FOCUS (SN FA42035F-87 & AFTER)

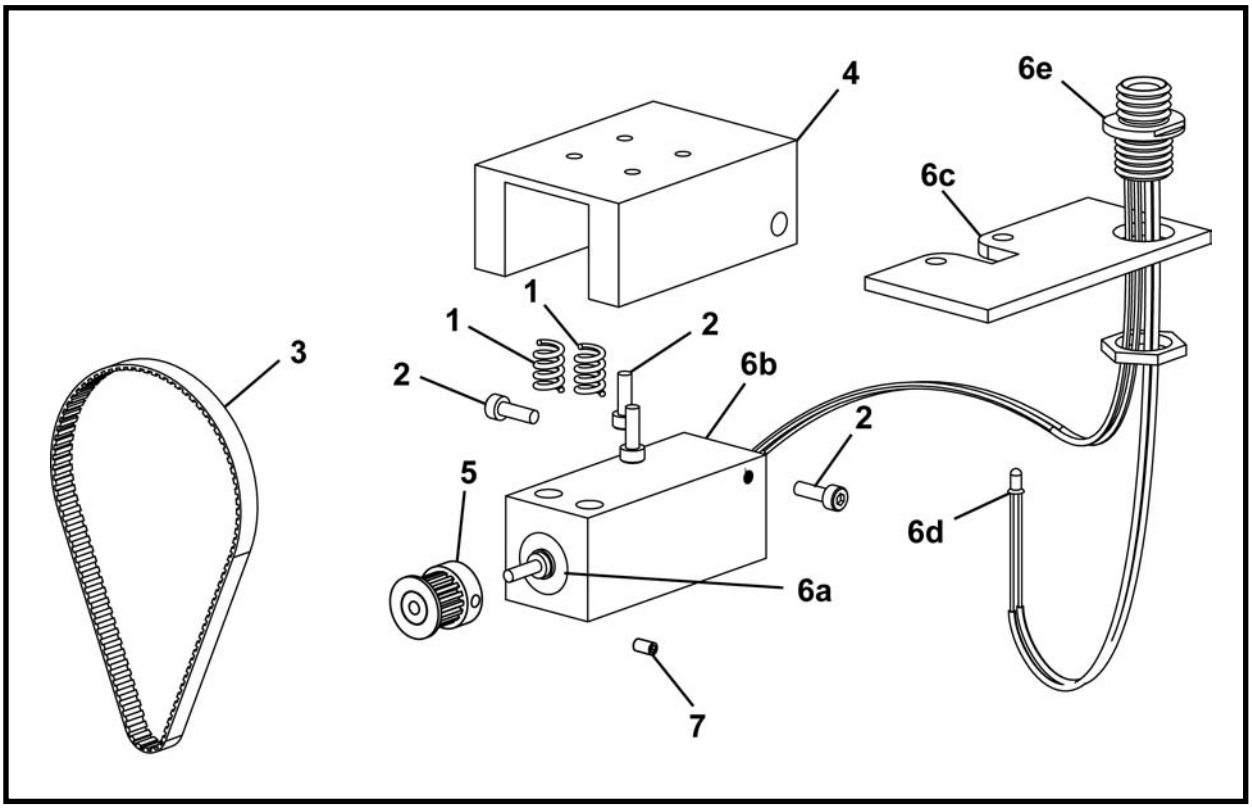


ITEM	QTY	PART NO.	DESCRIPTION
0*	1	A45641A	ASSEMBLY, Theodolite & Remote Focus
1	1	P0251-123	THEODOLITE (Includes items 1a - 1f)
1a	1	P0251-123B	CASE, Battery
1b	1	P0251-123D	SEAL EYEPIECE
1c	1	P0251-123E	LEVEL
1d	1	P0251-123F	DIAGONAL EYEPIECE
1e	1	P0251-123L	LCD HOLDER
1f	1	P0251-123M	LATCH, Carrying Case
2	1	A40772P	MOUNT, Camera
3	2	PM3B-.5-10	SCREW, Socket Head Cap SS M3-10
4	1	P0251-123A	EYEPIECE 40
5	1	A42022P	RING, Seal
6	1	P0251-147	LENS PEN
7	1	P0251-163	ASSEMBLY, Level
8	1	A42467P	PLATE, Level Mounting
9	2	P0085-006	ORING
10	2	P0017-06-322	SCREW, Slotted Machine 6-32 x .375
11	6	P0064-026	BATTERY, AA Size
12	1	A42037A	ASSEMBLY, Motor Drive

* Includes carrying case.

MOTOR DRIVE ASSEMBLY, A42037A

GUIDANCE SYSTEM G3 WITH REMOTE FOCUS (SN FA42035F-87 & AFTER)

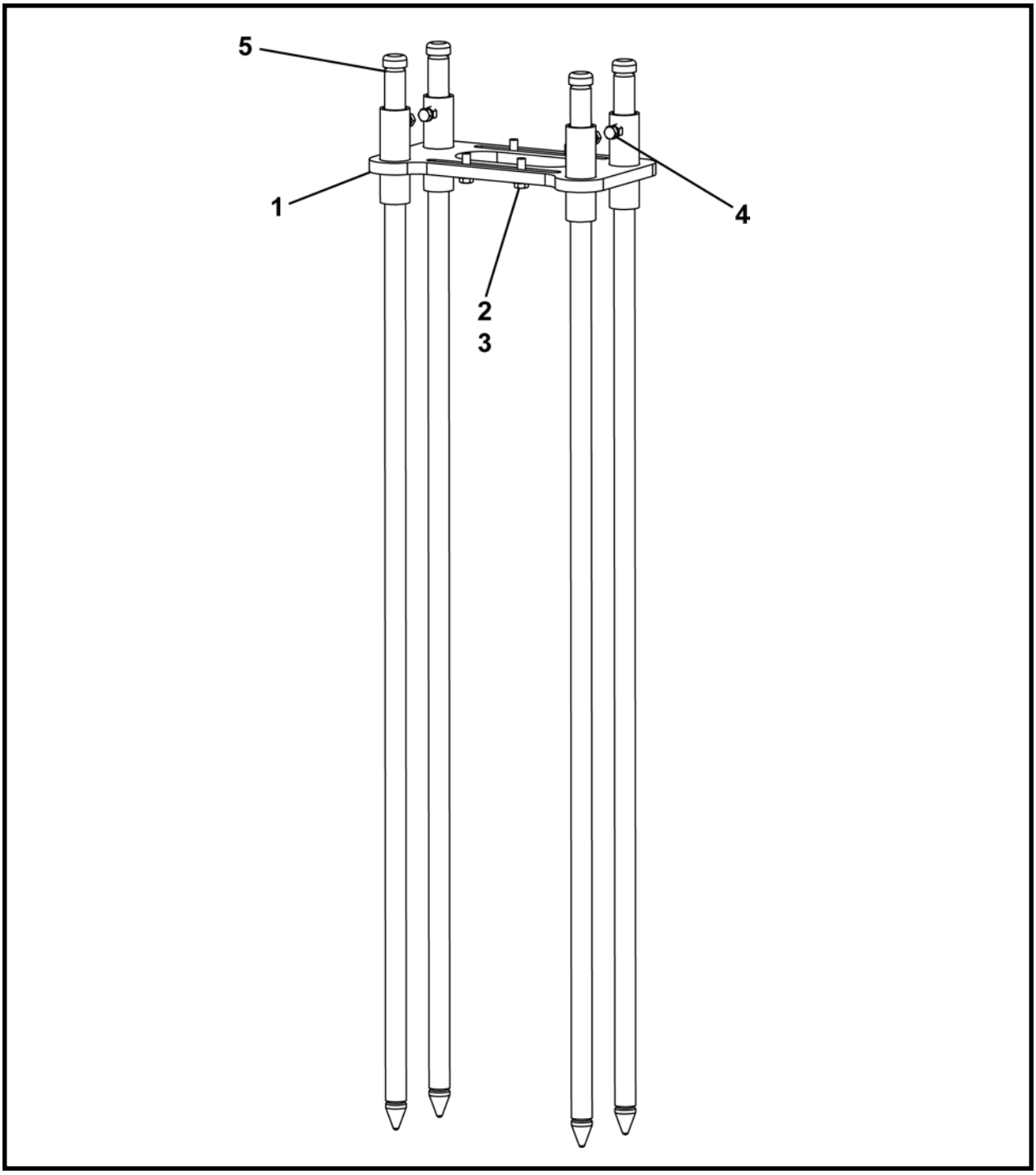


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42037A	MOTOR DRIVE ASSEMBLY
1	2	P0070-034	SPRING
2	4	PM3B-.5-10	SCREW, Socket Head Cap M3-10 SS
3	1	P0067-049	BELT, Timing
4	1	A42039P	HOUSING, Motor Bracket
5	1	P0066-112	PULLEY
6	1	A42097A	ASSEMBLY, Motor - Remote Focus (Includes items 6a - 6e)
6a	1	NSS	MOTOR, Gear
6b	1	NSS	MOTOR, Housing
6c	1	NSS	PLATE, Connector Mounting
6d	1	NSS	LED, Red
6e	1	NSS	CONNECTOR
7	1	P0033-440-03	SCREW, Set

NSS - Not Sold Separately

THEODOLITE SHAFT STAND, FA40051F

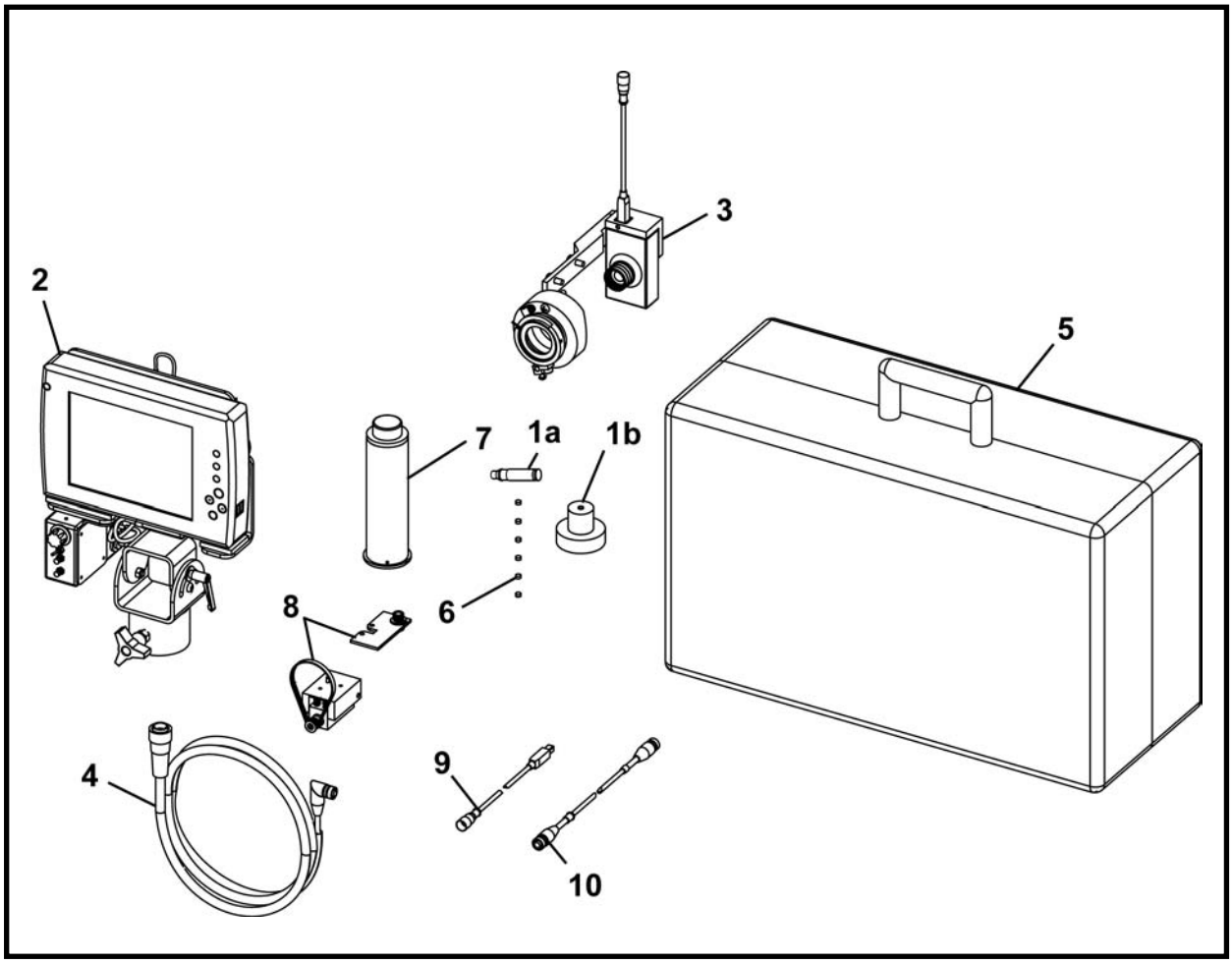
GUIDANCE SYSTEM



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40051F	THEODOLITE SHAFT STAND - Latching Frame
1	1	A40117A	WELDMENT, Mounting Base
2	4	P0001-08-006	BOLT, 1/2 UNC x 1.5
3	4	P0040-008	WASHER, Flat 1/2
4	4	P0001-08-004	BOLT, 1/2 UNC x 1
5	4	A42235A	STAKE

GUIDANCE SYSTEM G2 TO G3 CONVERSION KIT, FA42036F

REPLACES GUIDANCE SYSTEM G2 (SN A42000-17 & BEFORE)



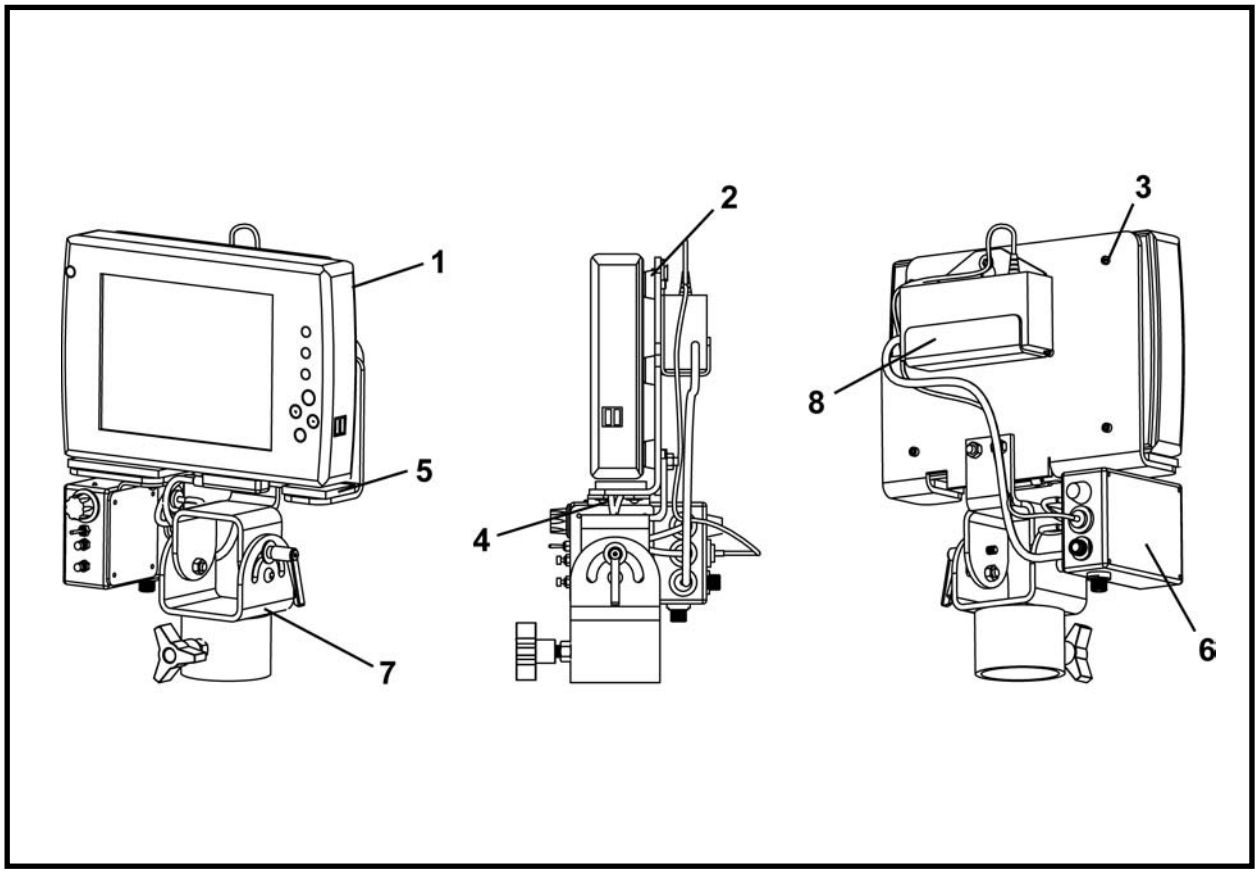
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42036F	GUIDANCE SYSTEM CASE G3
1	1	A42028A	ASSEMBLY, Laser Sight Alignment Tool (Includes items 2a & 2b)
1a	1	P0251-133	BORESIGHT, Laser
1b	1	A42023P	HOLDER, Boresight Laser
2	1	A42454A	ASSEMBLY, Tablet PC
3	1	A42458A	CAMERA OPTICS
4	1	A42456A	ASSEMBLY, GBM Power Cable G3
5	1	P0251-144	CASE, Guidance System
6	6	P0064-020	BATTERY
7	1	A44853A	TARGET (Uses Replaceable D Size Alkaline Batteries)
8*	1	A42037A	ASSEMBLY, Motor Drive
9	1	P0054-594	CABLE, Camera
10	1	P0054-345	CABLE, 5 Pin

NOTE: Use this Guidance System G3 Conversion Kit, FA42036F to replace your SN A42000 guidance system components less theodolite.

*Refer to this section for parts breakdown.

TABLET PC ASSEMBLY, A42454A

REPLACES GUIDANCE SYSTEM G2 (SN A42000-17 & BEFORE)



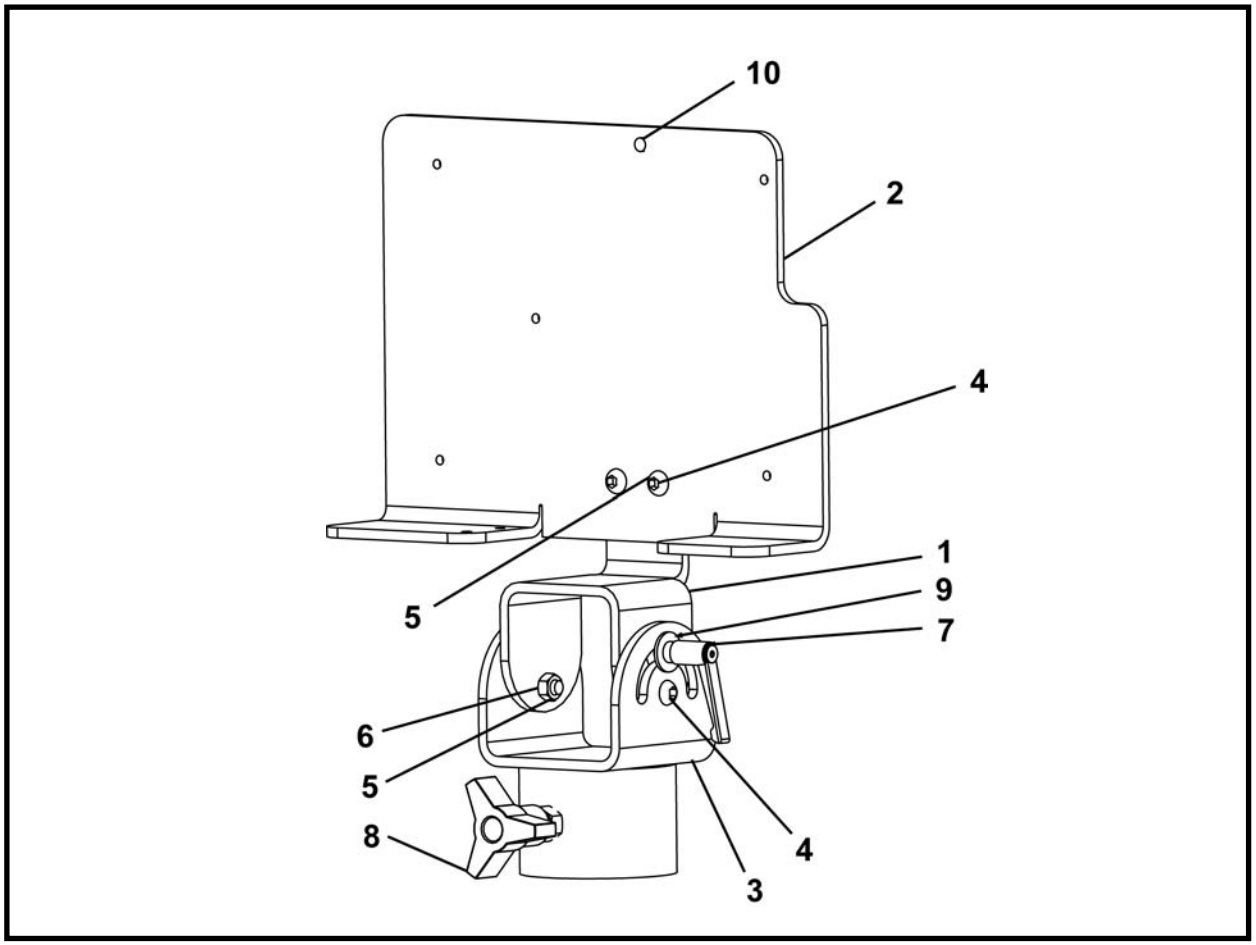
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42454A	TABLET PC ASSEMBLY
1	1	P0251-157	TABLET PC
2	5	P0253-132	BUMPER, Recessed Rubber
3	5	PM04C-0.70-014	SCREW, Slotted Pan Head SS
4	2	P0017-08-323	SCREW, Machine 8-32 x .5
5	5 LI	P0253-018	GASKET, Rubber 1/4
6*	1	A45640A	ASSEMBLY, Power Adapter
7	1	A42056A	ASSEMBLY, Docking Station
8	1	A42055P	HANGER, Power Adapter
9**	1	P0064-122	BATTERY, Tablet PC

* See Section 5, Electrical, for parts breakdown.
** Not Shown

LI - Linear Inch

DOCKING STATION ASSEMBLY, A42056A

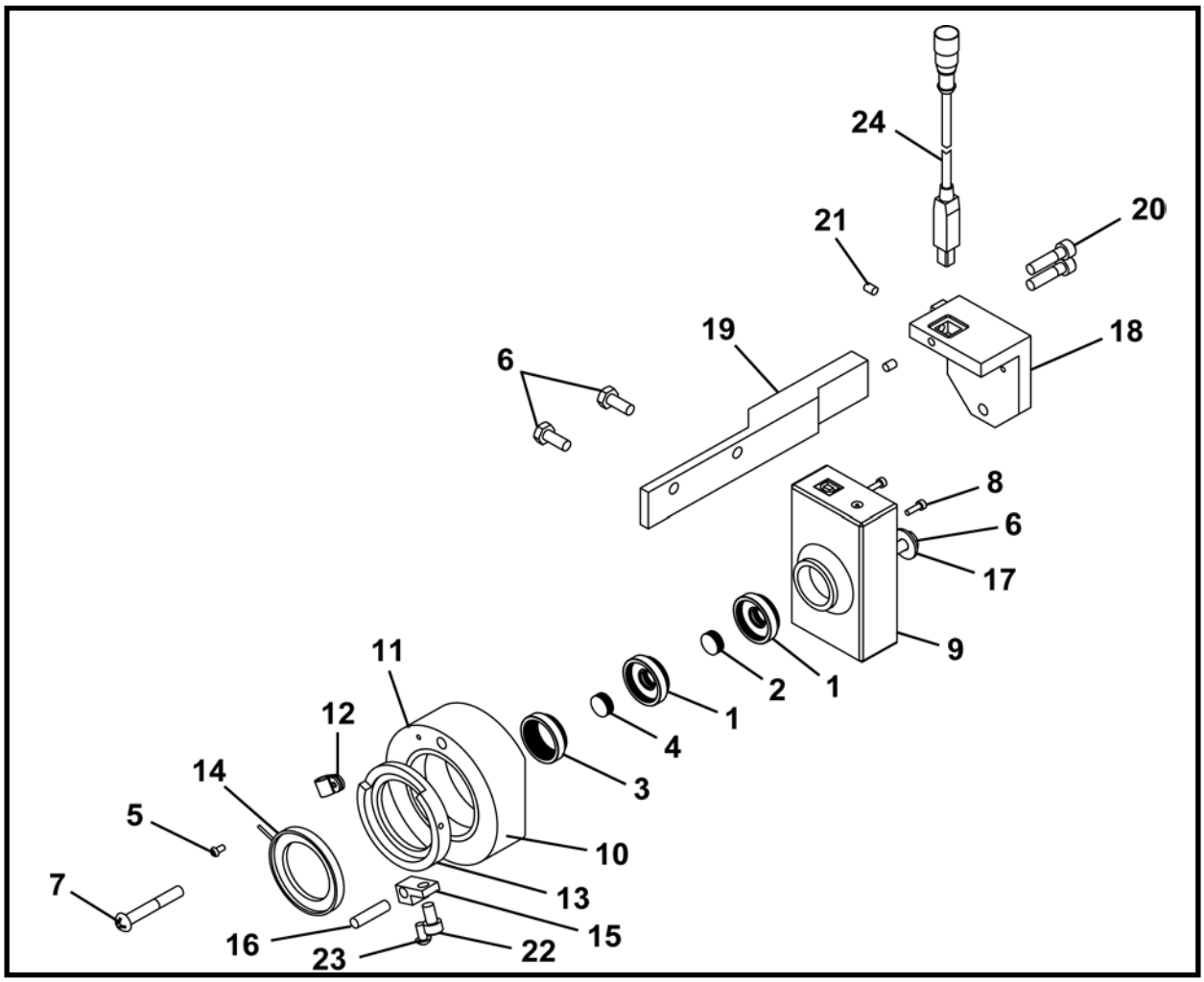
GUIDANCE SYSTEM G3



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42056A	ASSEMBLY, Docking Station
1	1	A42051P	MOUNT, Pivot
2	1	A42052P	BACK, Docking Station
3	1	A42053A	MOUNT, Tablet
4	4	P0022-14-204	SCREW, Button Head Socket 1/4-20 x .75
5	4	P0013-04-000	NUT, 1/4
6	3	P0059-064	WASHER, Plastic
7	1	P0059-063	HANDLE, Plastic
8	1	P0059-062	HANDLE, Plastic
9	1	P0040-004	WASHER, Hardened Flat 1/4
10	1	P0030-04-002	SCREW, Flat Head Cap 1/4 UNC x .5

CAMERA OPTICS ASSEMBLY, A42458A

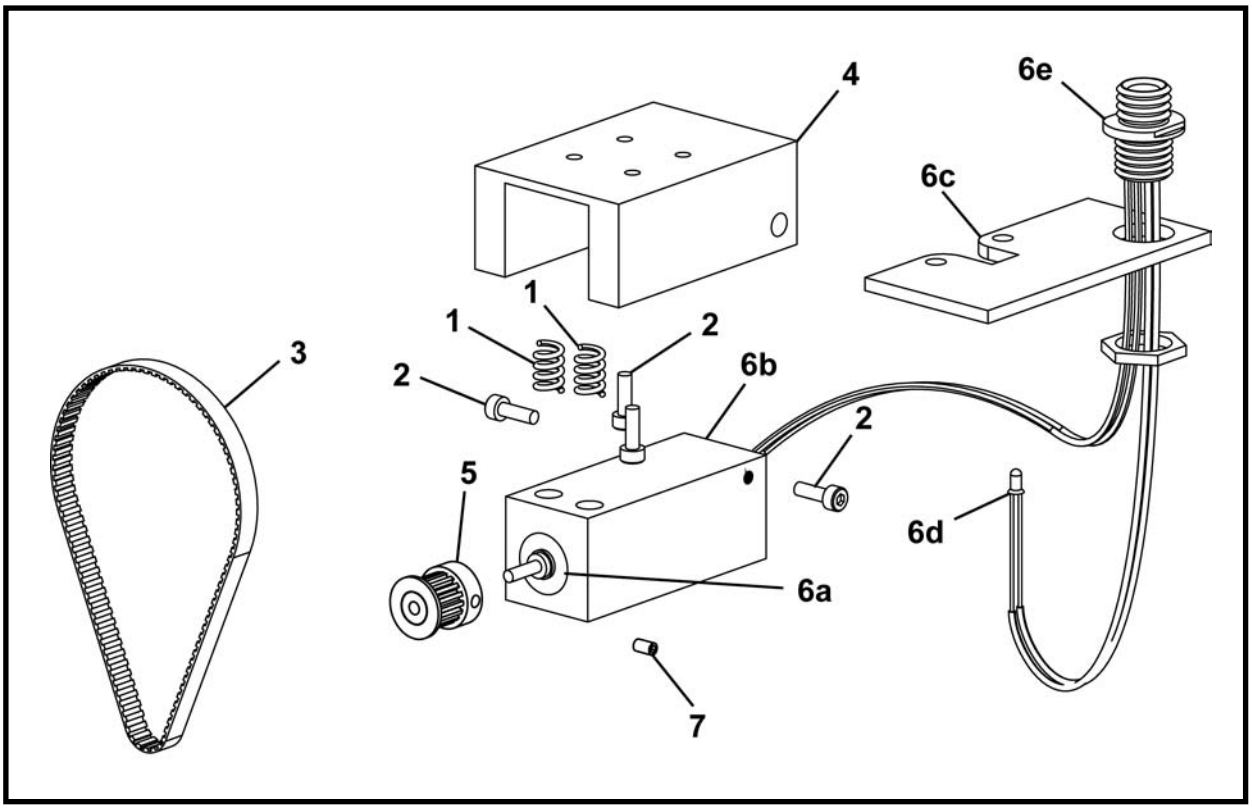
REPLACES GUIDANCE SYSTEM G2 (SN A42000-17 & BEFORE)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42458A	ASSEMBLY, Camera Optics
1	2	P0250-124	MOUNT, Lens
2	1	P0250-125	LENS 36
3	1	P0250-127	TUBE, Extension
4	1	P0250-126	LENS 42
5	1	P0310-431A	SCREW, #6 With Square Washer
6	3	P0001-04-002.5	BOLT, 1/4-20 x 5/8 SS
7	1	P0017-14-208	SCREW, Round Head Machine 1/4 UNC x 1.75 SS
8	2	PM3B-.5-10	SCREW, Socket Head Cap, M3-.5 x 10
9	1	P0251-143	CAMERA
10	1	A40773P	COUNTERWEIGHT, Theodolite
11	1 LI	P0253-118	TAPE 1/8 x 1/2
12	1	P0055-122	CLAMP
13	1	P0251-141	MOUNT, Iris
14	1	P0251-142	IRIS
15	1	A42462P	BLOCK, Iris Mount
16	1	A42468P	MOUNT, Iris
17	1	P0040-004	WASHER, Hardened Flat 1/4
18	1	A42464P	PLATE, Camera Mount
19	1	A42465P	ARM, Camera Mount
20	2	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
21	2	P0033-1024-001	SCREW, Set 10-24 x .25
22	1	P0031-04-000	SCREW, Socket Head Cap 1/4 x .38
23	1	P0019-10-323	SCREW, Pan Head #10-32 x .38
24	1	P0054-488	CABLE

REMOTE FOCUS ASSEMBLY, A42037A

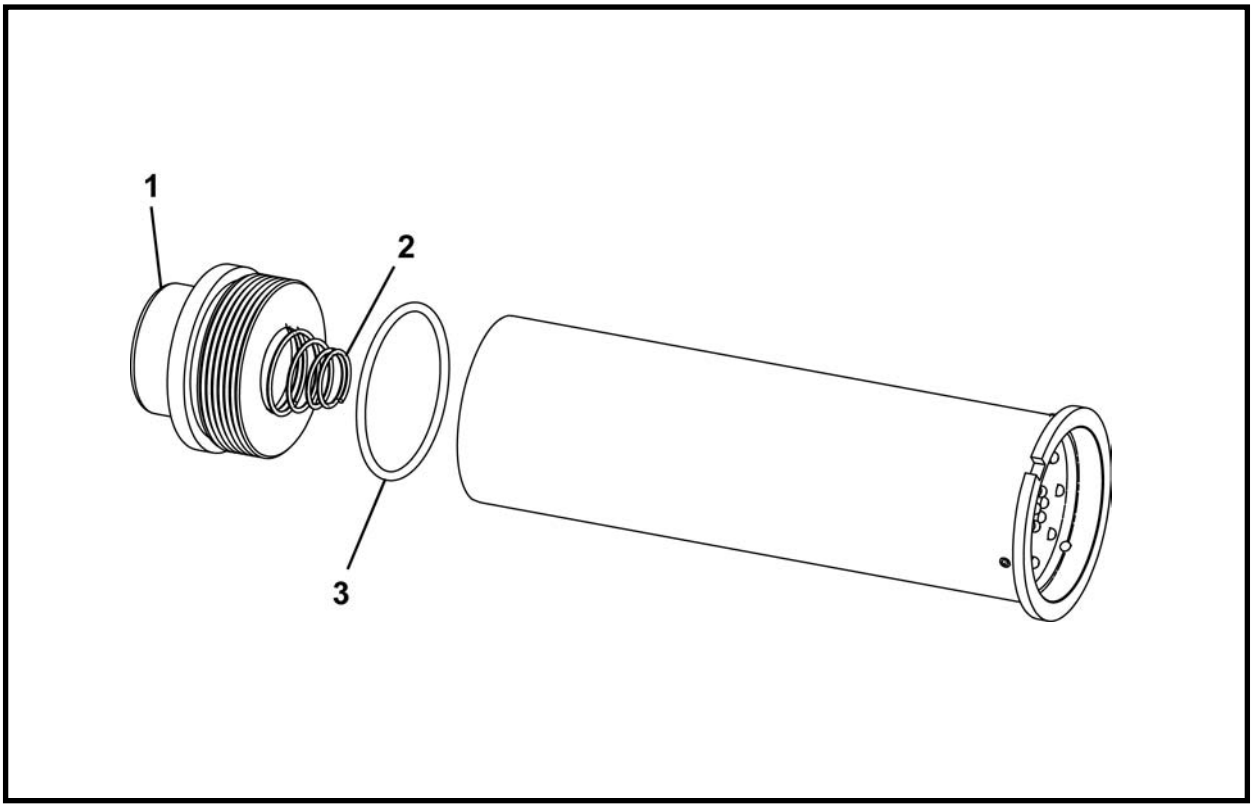
REPLACES GUIDANCE SYSTEM G2 (SN A42000-17 & BEFORE)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42037A	REMOTE FOCUS ASSEMBLY
1	2	P0070-034	SPRING
2	4	PM3B-.5-10	SCREW, Socket Head Cap M3-10 SS
3	1	P0067-049	BELT, Timing
4	1	A42039P	HOUSING, Motor Bracket
5	1	P0066-112	PULLEY
6	1	A42097A	ASSEMBLY, Motor - Remote Focus (Includes items 6a - 6f)
6a	1	NSS	MOTOR, Gear
6b	1	NSS	MOTOR, Housing
6c	1	NSS	PLATE, Connector Mounting
6d	1	NSS	LED, Red
6e	1	NSS	CONNECTOR
6f*	1	P0033-440-03	SCREW, Set

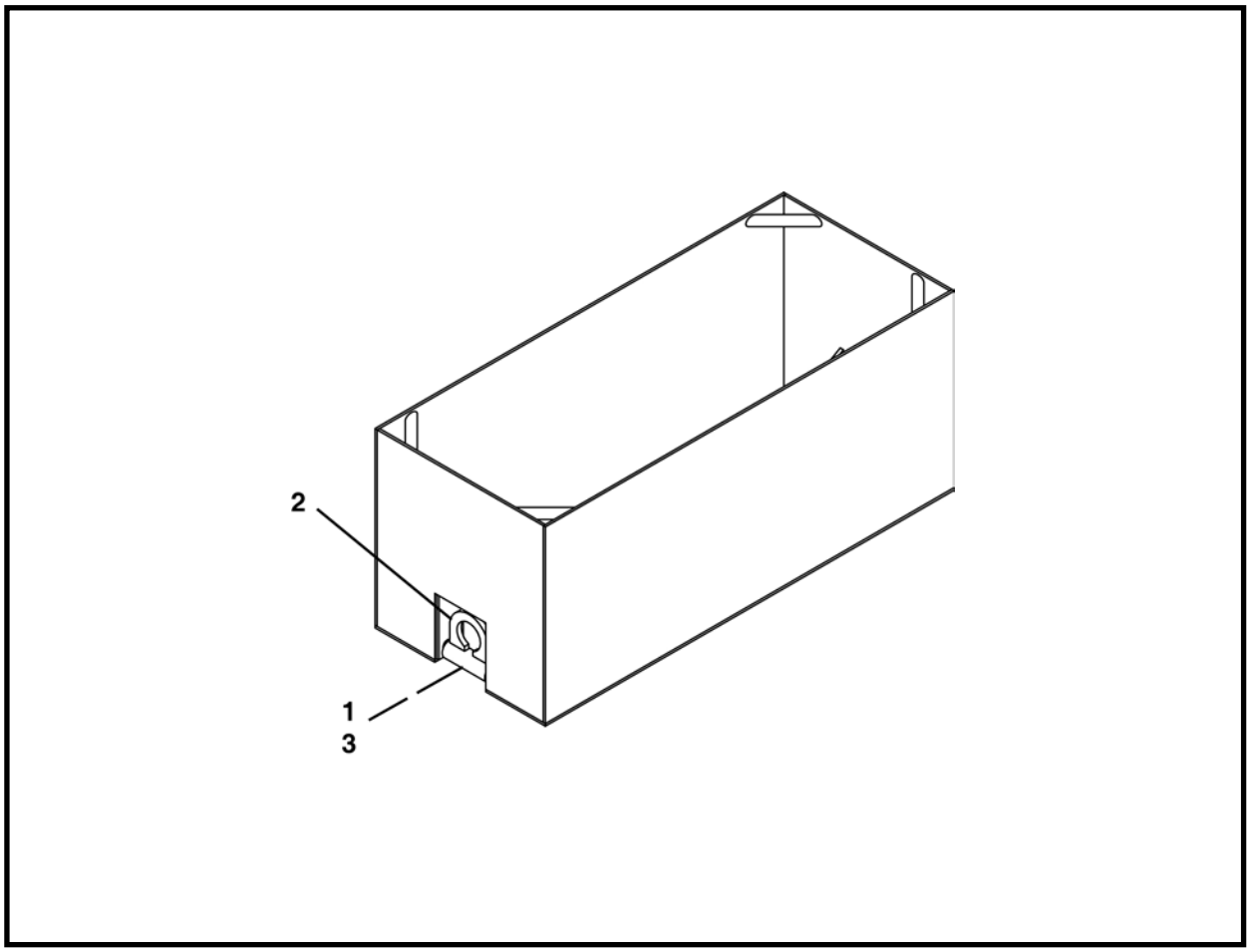
NSS - Not Sold Separately

TARGET, A44853A
GUIDANCE SYSTEM



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44853A	TARGET (Uses Replaceable D Size Alkaline Batteries)
1	1	A44852P	CAP, Battery Target
2	1	P0070-058	SPRING. Compression
3	1	P0085-131	ORING

DIRT BUCKETS



ITEM	QTY	PART NO.	DESCRIPTION	Height	Width	Length
0.1	1	FA43805F	DIRT BUCKET (10.7 Cu-Ft)	20”	20”	48”
0.2	1	FA45520F	DIRT BUCKET (16.6 Cu-Ft)	27.75”	20”	54”
1	2	A40524P	PIN, Lifting Eye			
2	2	003529P02	LIFTING EYE			
3	2	010291P00	BUSHING			

Operator Controls

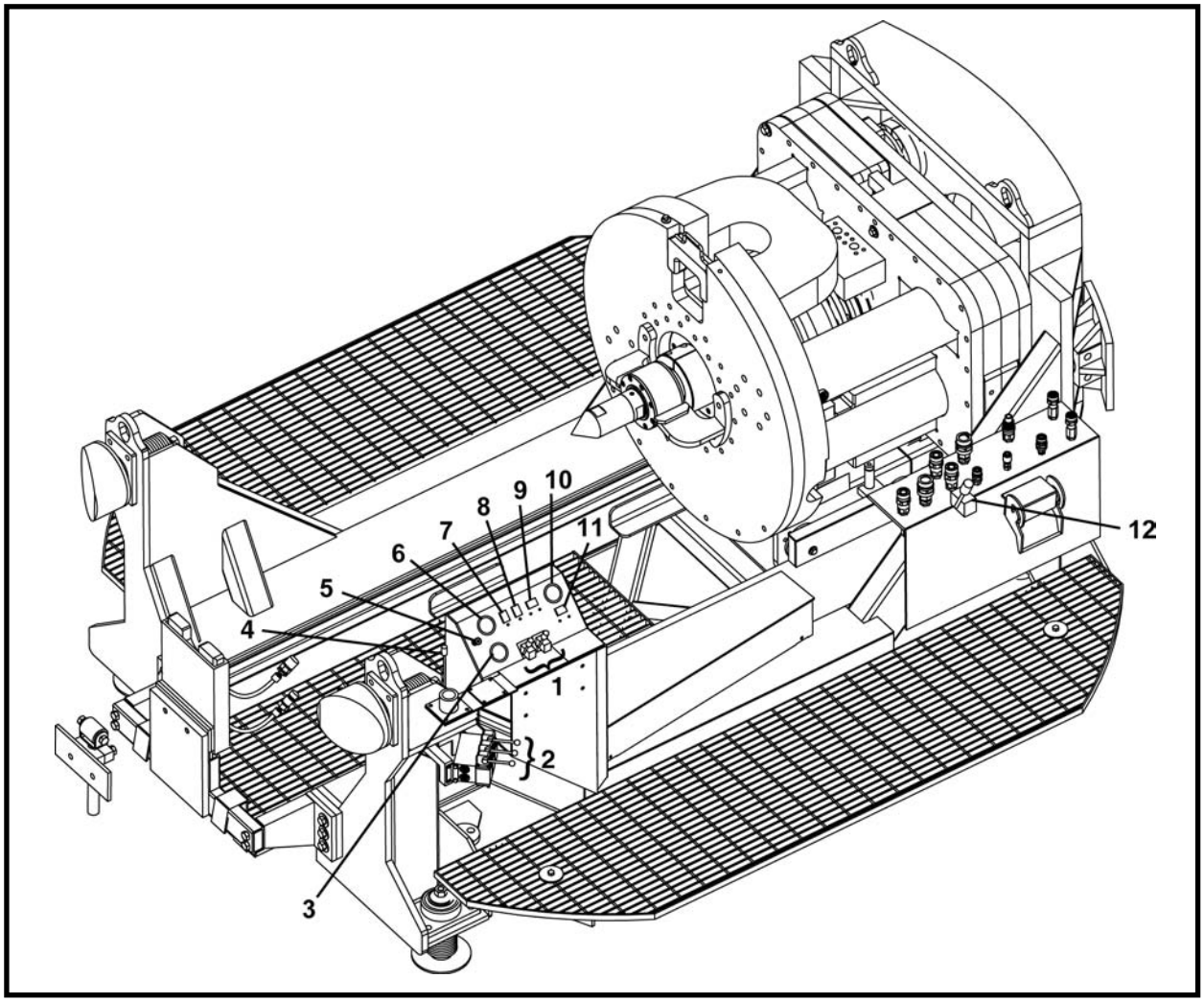
GBM 4812A

4812A Frame Controls 2
SN FA40034F-1 Thru 3 2
SN FA40034F-4 & After 3

Power Packs

P275T Power Pack Controls 4
P150Q Power Pack Controls 5
Remote Instrument Panel (Control Pendant)
P275T Remote Instrument Panel Controls, P0125-124N (SN FA40034F-1 - 4) .. 6
P150Q & P275T Remote Instrument Panel Controls, P0125-124N (P275T SN FA40034F-5 & After) 7
E-Stop Assembly 8

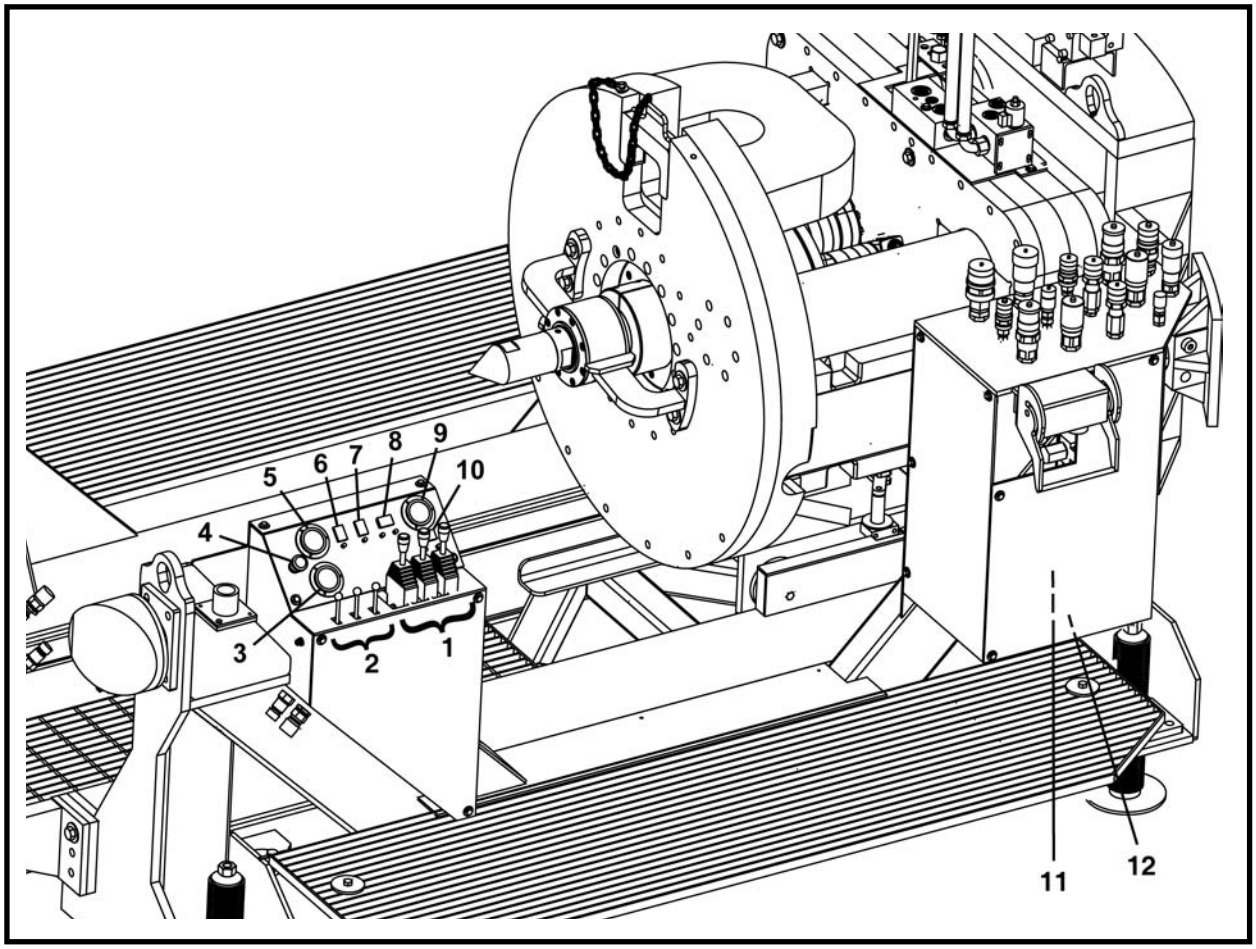
4812A FRAME CONTROLS
(SN FA40034F-1 THRU 3)



ITEM	QTY	PART NO.	DESCRIPTION
1*	1	P0302-511	VALVE, Two Section
2*	1	P0302-698	VALVE, Three Section
3	1	P0301-142	GAUGE, 5000 PSI (Drive Rotation - PCH Auger Drive)
4*	1	P0302-509	VALVE, Jack
5	1	P0310-420F	E-STOP, Push Button
6	1	P0301-146	GAUGE, 6000 PSI (Jacking Pressure)
7	1	P0251-174	SWITCH, Rocker (Jacking Speed)
8	1	P0251-174	SWITCH, Rocker (Rotation Pressure Hi-Low)
9	1	P0251-175	SWITCH, Rocker (PCH Auger Drive)
10	1	P0301-142	GAUGE, 5000 PSI (PCH Cutter Drive)
11	1	P0251-175	SWITCH, Rocker (PCH Cutter Drive)
12*	1	P0302-508	VALVE, Cutter Bit Drive (PCH)

* Refer to Section 7, Valves for parts breakdown.

4812A FRAME CONTROLS
(SN FA40034F-4 & AFTER)

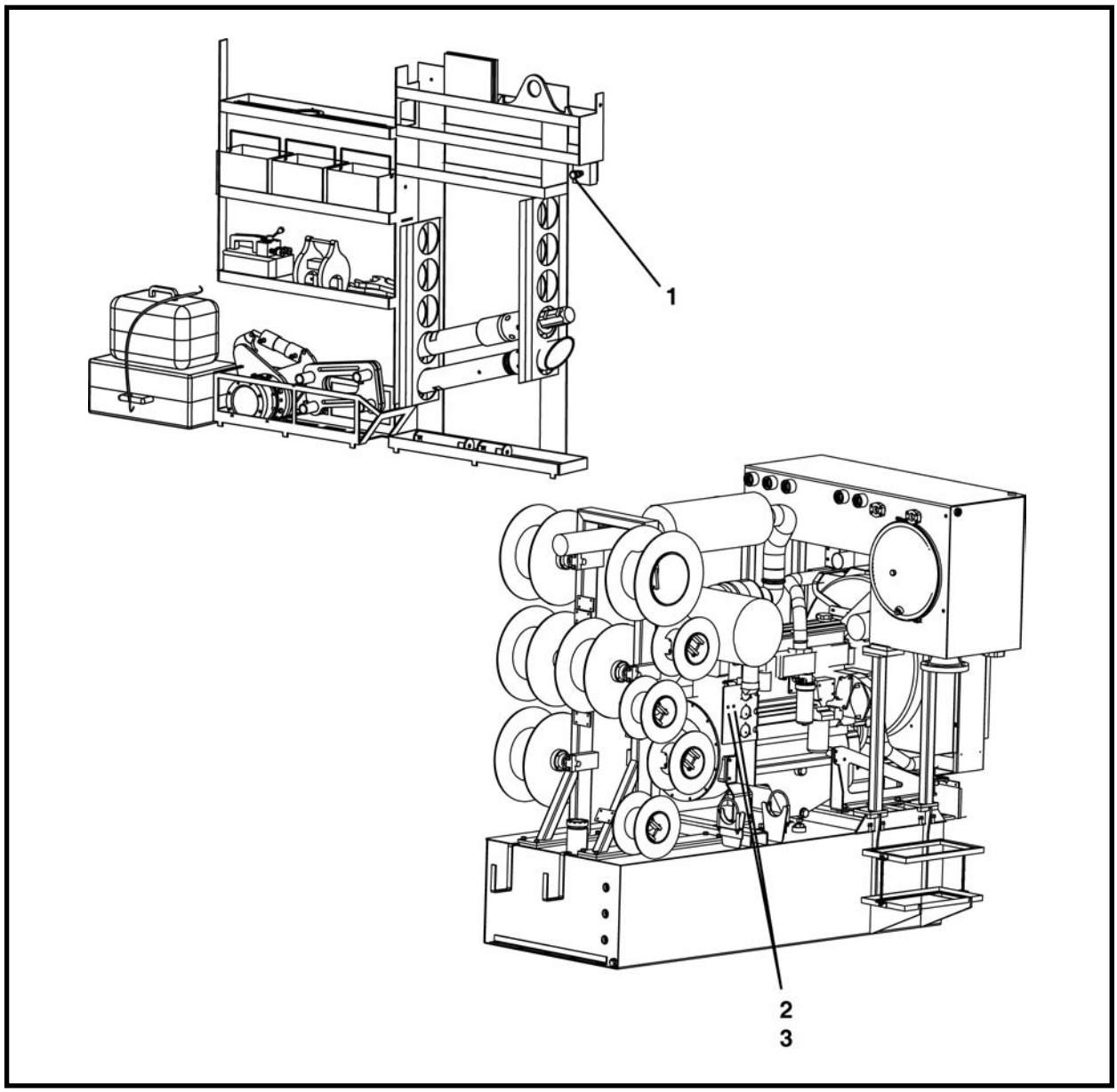


ITEM	QTY	PART NO.	DESCRIPTION
1*	1	P0302-522	VALVE, Remote Pilot Control
2*	1	P0302-698	VALVE, Three Section
3	1	P0301-142	GAUGE, 5000 PSI (Drive Rotation - PCH Auger Drive)
4	1	P0310-420F	E-STOP, Push Button
5	1	P0301-146	GAUGE, 6000 PSI (Jacking Pressure)
6	1	P0251-174	SWITCH, Rocker (Jacking Speed)
7	1	P0251-174	SWITCH, Rocker (Rotation Pressure Hi-Low)
8	1	P0251-175	SWITCH, Rocker (PCH Auger Drive)
9	1	P0301-142	GAUGE, 5000 PSI (PCH Cutter Drive)
10	1	P0251-175	SWITCH, Rocker (PCH Cutter Drive)
11*	1	P0302-523	VALVE, Two Section (PCH Auger/ Jacking Frame Auger Drive)
12*	1	P0302-508	VALVE, Cutter Bit Drive (PCH)

* Refer to Section 7, Valves for parts breakdown.

P275T POWER PACK CONTROLS

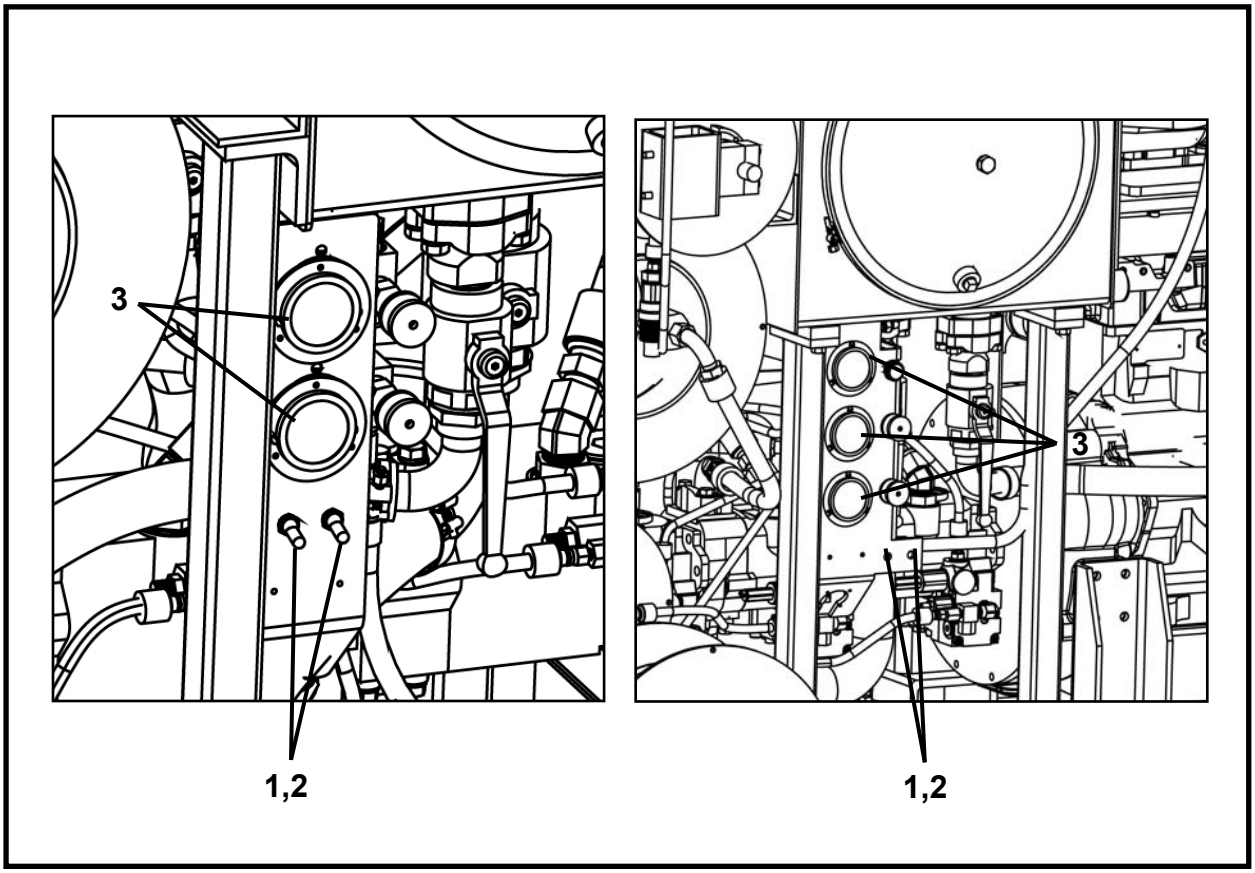
P275T



ITEM	QTY	PART NO.	DESCRIPTION
1	1	P0251-185	E-STOP w/Box
2	2	P0056-009	SWITCH, Toggle
3	2	P0056-010	BOOT, Toggle Switch

P150Q POWER PACK CONTROLS

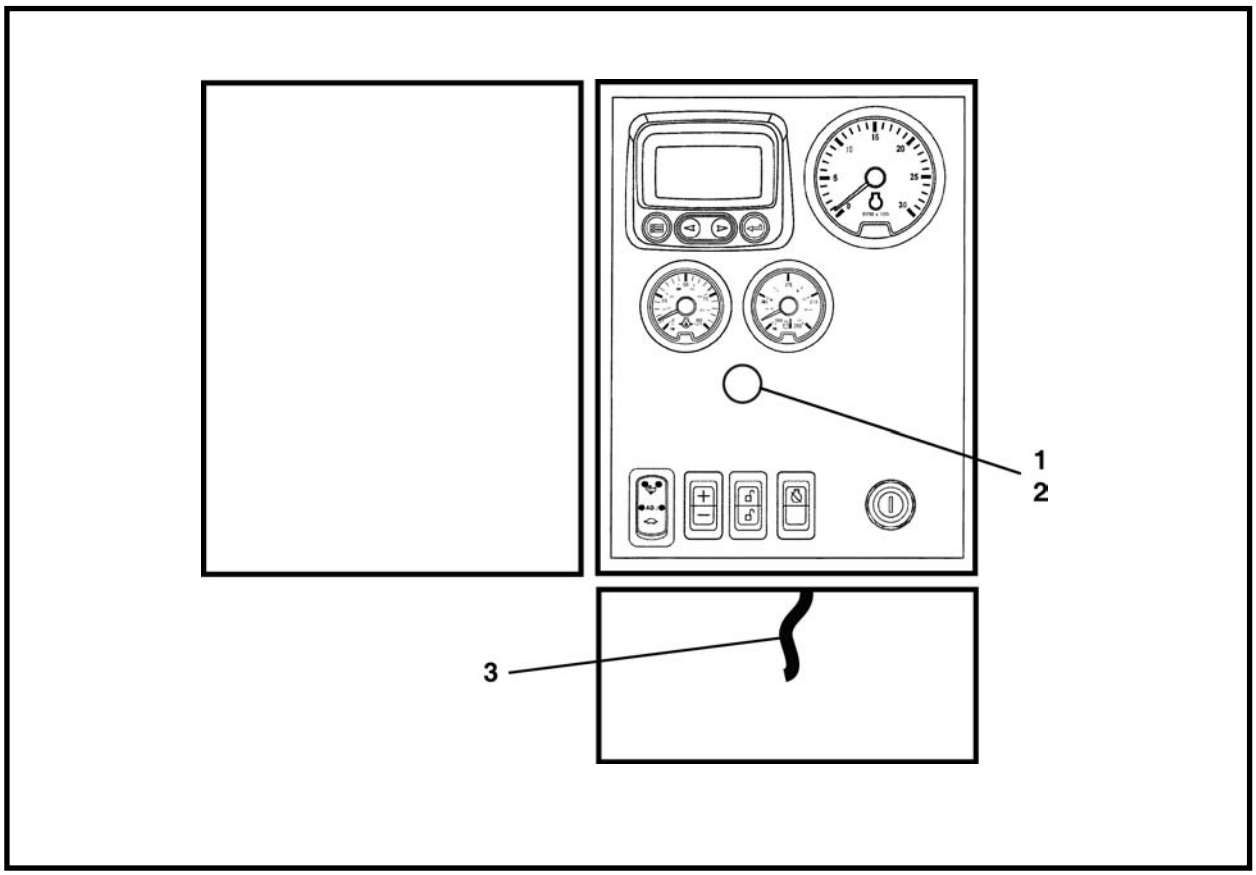
P150Q



ITEM	QTY	PART NO.	DESCRIPTION
1	2	P0056-009	SWITCH, Toggle
2	2	P0056-010	BOOT, Toggle Switch
3	3	P0301-142	GAUGE, 5000 psi

REMOTE INSTRUMENT PANEL CONTROLS, P0125-124N

P275T (SN FA40034F-1 THRU 4)

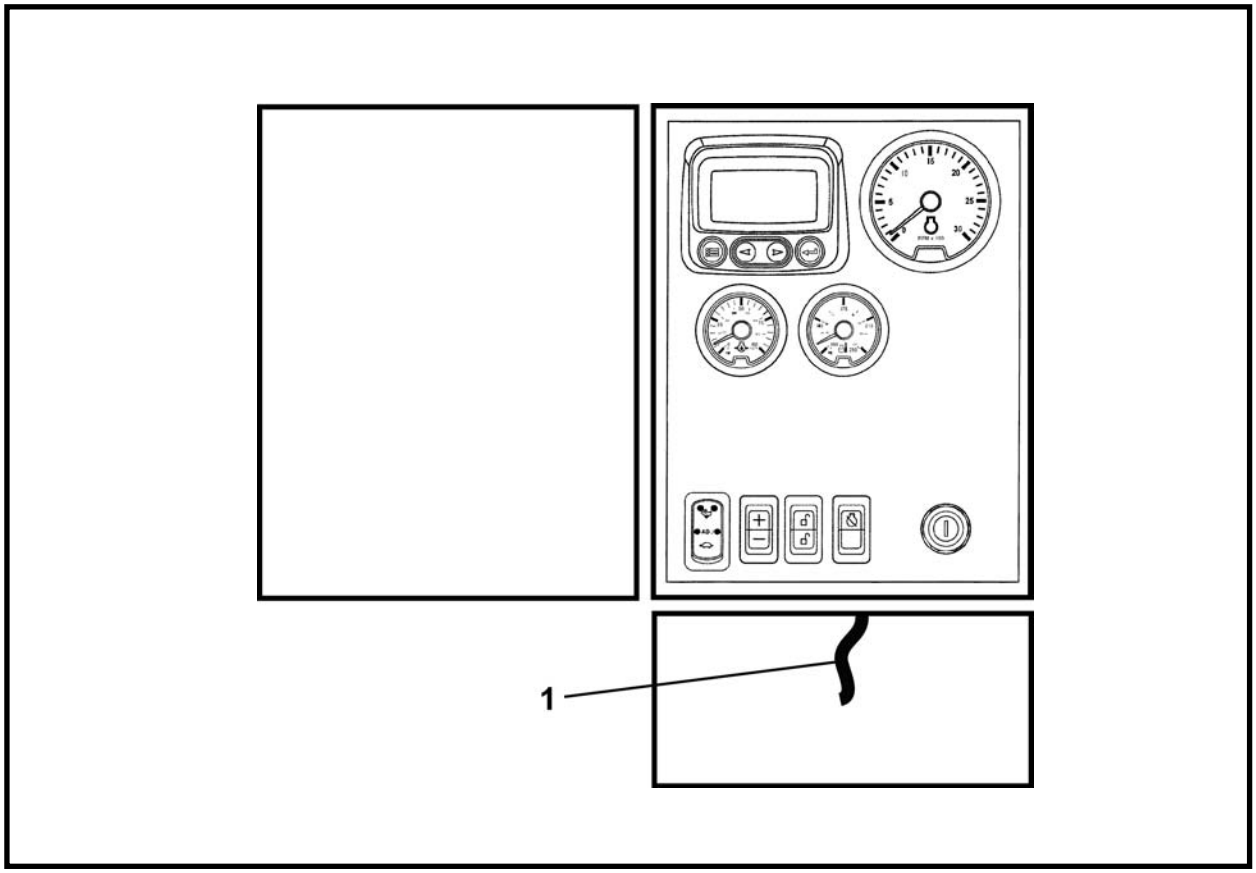


ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0125-124N	REMOTE INSTRUMENT PANEL With 50’ Cord
1	1	P0056-009	SWITCH, Toggle
2	1	P0056-010	BOOT, Toggle Switch
3	1	P0125-124S	CORD, 50’
4*	1	P0125-138	HARNESS, Control Panel Pendant (Inside Control Box)

* Not Shown

REMOTE INSTRUMENT PANEL CONTROLS, P0125-124N

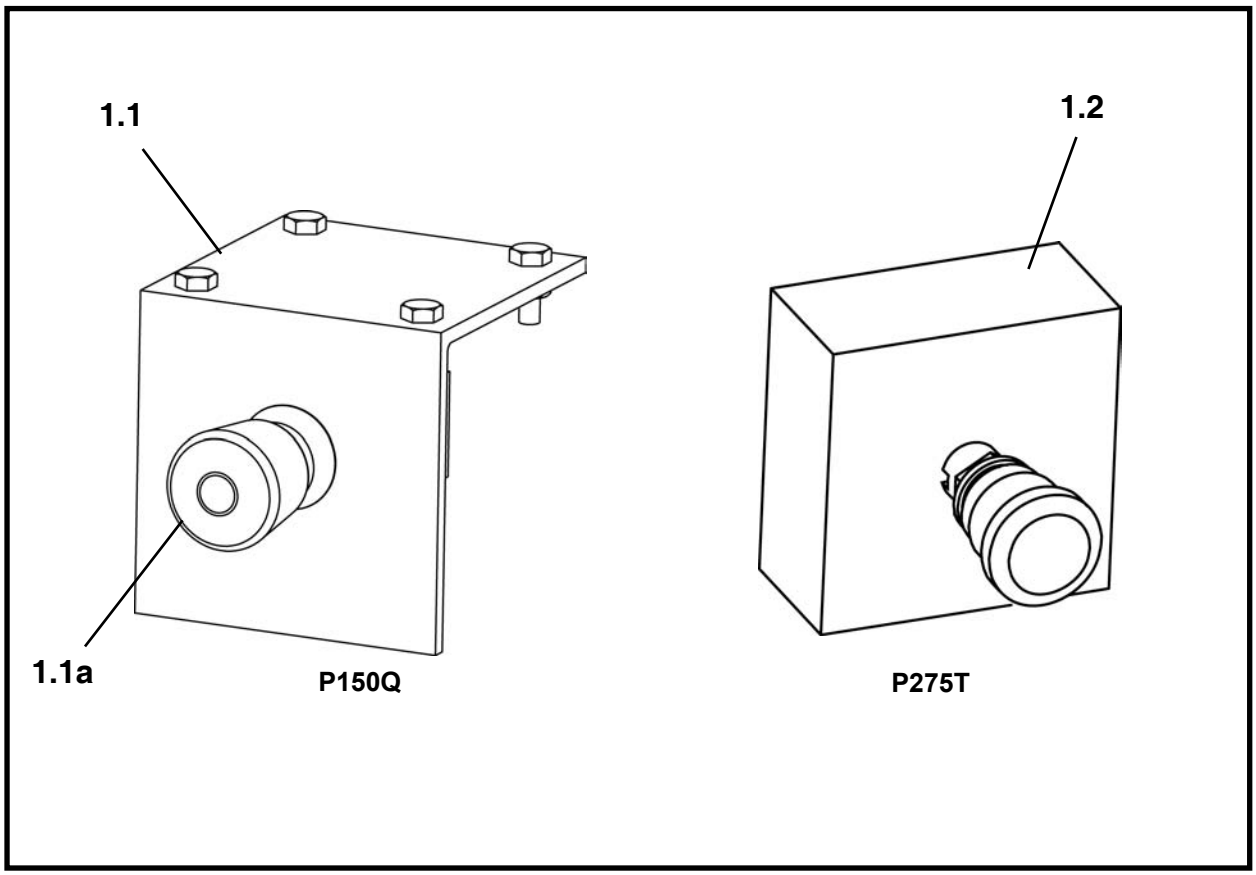
P150Q & P275T (SN FA40034F-5 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0125-124N	REMOTE INSTRUMENT PANEL With 50’ Cord
1	1	P0125-124S	CORD, 50’
2*	1	P0125-138	HARNESS, Control Panel Pendant (Inside Control Box)

* Not Shown

E-STOP ASSEMBLY



ITEM	QTY	PART NO.	DESCRIPTION
1.1*	1	A43765A	E-STOP ASSEMBLY, P150Q
1a	1	P0310-420F	PUSHBUTTON, Illuminated E-Stop
1.2	1	P0251-185	E-STOP ASSEMBLY, P275T

* For complete parts breakdown, refer to E-Stop Assembly, A43765A in Section 3, Structurals.

Electrical

GBM 4812A
4812A Electrical Schematic, A44854A 2

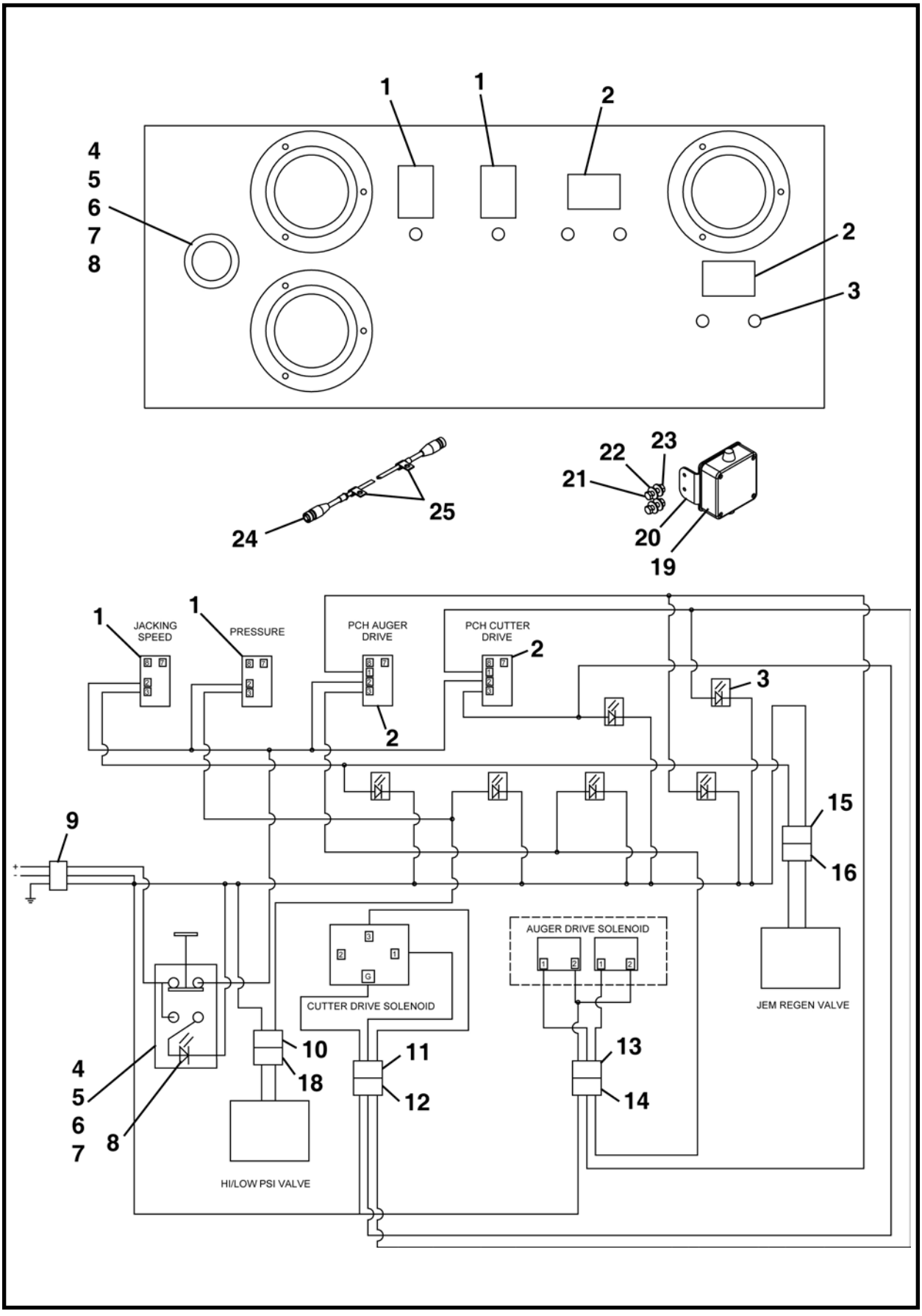
P150Q
P150Q Electrical Assembly, A45949A 4

P275T
P275T Electrical Assembly, A43996A 6

Guidance System
SN FA42035F-86 & Before
Power Adapter Assembly, A42498A 8
Remote Focus Electrical Assembly, A42049A 9

SN FA42035F-87 & After
Power Adapter Assembly, A45640A 10

4812A ELECTRICAL SCHEMATIC, A44854A



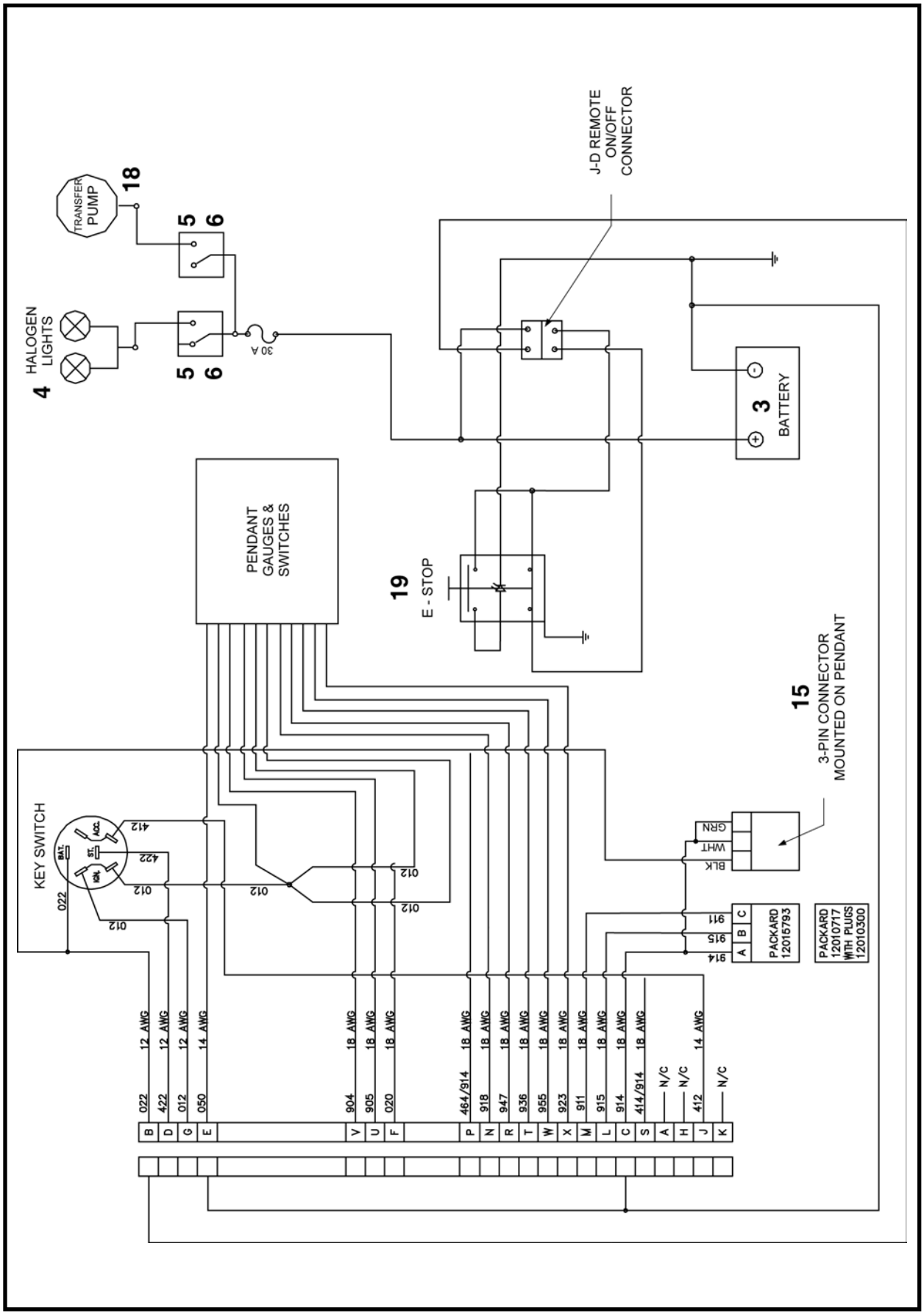
4812A ELECTRICAL SCHEMATIC, A44854A

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44854A	ELECTRICAL SCHEMATIC 4812A
1	2	P0251-174	SWITCH, Rocker
2	2	P0251-175	SWITCH, Rocker
3	6	P0251-181	LAMP, LED
4	1	P0310-420F	E-STOP, Pushbutton
5	1	P0310-419F	LATCH, Mounting
6	1	P0056-122F	BLOCK, Contact
7	1	P0056-121F	CONTACT
8	1	P0251-171	MODULE, LED
9	1	P0054-071	RECEPTACLE, 3 Pin Male
10	1	P0054-402	RECEPTACLE, 2 Pin Female
11	1	P0054-082C	CABLE, 4 Pin Male
12	1	P0054-070	RECEPTACLE, 4 Pin Female
13	1	P0054-343	CABLE, 5 Pin
14	1	P0054-337	PIN, Micro 5
15	1	P0054-406	RECEPTACLE, 3 Pin Female
16	1	P0054-484	CABLE, 3 Pin
17*	1	A45482P	MOUNT
18	1	P0054-403	CABLE, 2 Pin Male Pigtail
19**	1	A46342A	USB EXTENDER
20**	1	A42050P	MOUNT, Box
21**	2	P0001-04-004	BOLT, 1/2 UNC x 1
22**	4	P0040-004	WASHER, Hardened Flat 1/4
23**	2	P0003-04-000	NUT, 1/4
24**	1	P0054-594	CABLE
25**	2	P0055-220	STRAP, Loop

* Not Shown; located inside control console.
** Added to 4812A (SN FA40034F-11 & After)

P150Q POWER PACK ELECTRICAL ASSEMBLY, A45949A

P150Q



P150Q POWER PACK ELECTRICAL ASSEMBLY, A45949A

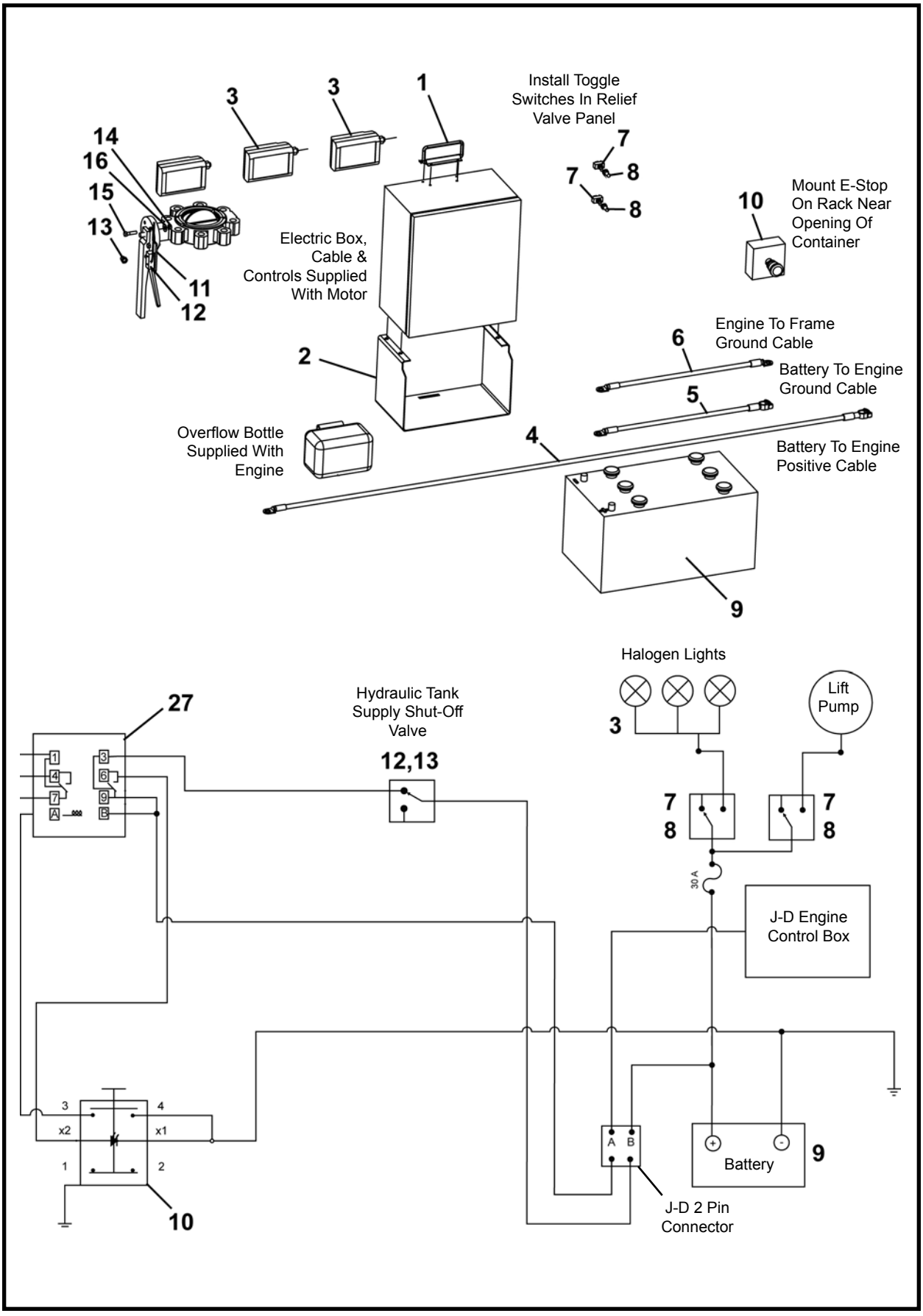
P150Q

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45949A	ELECTRICAL ASSEMBLY, P150Q
1*	1	A40128A	CABLE, Positive
2*	1	A40129A	CABLE, Negative
3	1	P0064-019	BATTERY
4	2	P0053-026	LIGHT, Halogen Flood
5	3	P0056-009	SWITCH, Toggle
6	3	P0056-010	SWITCH, Toggle Boot
7*	8	P0017-10-326	SCREW, Machine 10-32 x .75
8*	8	P0001-03-000	NUT
9*	4	P0054-008	WIRE, 12 GA
10*	2	P0055-011	TERMINAL, Ring
11*	6	P0055-100A	TERMINAL, Male Push
12*	6	P0055-101A	TERMINAL, Female Push
13*	1	P0054-031	HOLDER, Fuse - 30 AMP (Includes item 14)
14*	1	P0054-031C	FUSE - 30 AMP
15	1	P0054-068	RECEPTACLE, 3 Pin Female
16*	13	P0054-018	CABLE, 16 GA
17*	1	P0054-090	CAPS, Mini-Plex
18	1	P0303-281	PUMP, Transfer
19	1	A43765A	E-STOP

* Not Shown

P275T ELECTRICAL ASSEMBLY, A43996A

P275T



P275T ELECTRICAL ASSEMBLY, A43996A

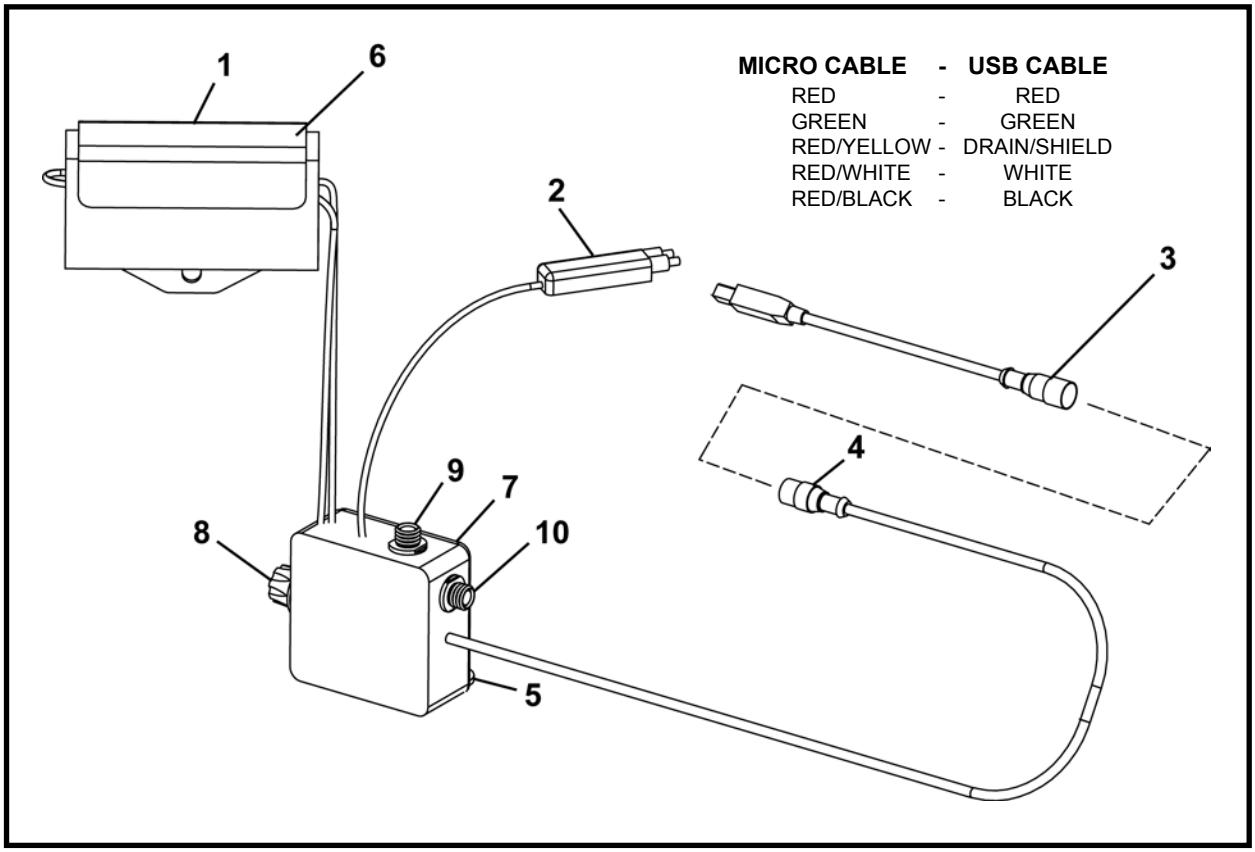
P275T

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43996A	ELECTRICAL ASSEMBLY, P275T
1	1	P0059-022	HANDLE
2	1	A44234P	STAND, Control Box
3	3	P0053-026	LIGHT, Halogen
4	1	A44268A	CABLE, Positive
5	1	A44269A	CABLE, Negative
6	1	A44270A	CABLE, Negative
7	2	P0056-009	SWITCH, Toggle
8	2	P0056-010	SWITCH, Toggle Boot
9	1	P0064-123	BATTERY
10	1	P0251-185	E-STOP w/Box
11	1	A44200P	PLATE
12	1	P0056-024	SWITCH
13	1	P0056-026	BOOT, Switch
14	2	P0003-05-000	NUT, 5/16 UNC
15	2	P0001-05-005	BOLT, 5/16 UNC x 1.25
16	2	P0040-005	WASHER, Hardened Flat 5/16
17*	4	P0054-008	WIRE, 12 GA
18*	2	P0055-011	TERMINAL, Ring
19*	6	P0055-100A	TERMINAL, Male Push
20*	6	P0055-101A	TERMINAL, Female Push
21*	1	P0054-031	HOLDER, Fuse - 30 AMP (Includes item 22)
22*	1	P0054-031C	FUSE - 30 AMP
23*	1	P0054-068	RECEPTACLE, 3 Pin Female
24*	13	P0054-018	CABLE, 16 GA
25*	1	P0054-090	CAPS, Mini-Plex
26*	1	P0054-086A	CABLE, 6 Pin Mini
27*	1	P0056-088	RELAY
28*	1	P0054-216	RECEPTACLE, 6 Pin Female
29*	1	P0054-195	ADAPTER, Extension
30*	1	P0054-087	CABLE, Mini 3 Pin

* Not Shown

POWER ADAPTER ASSEMBLY, A42498A

GUIDANCE SYSTEM (SN FA42035F-86 & BEFORE)

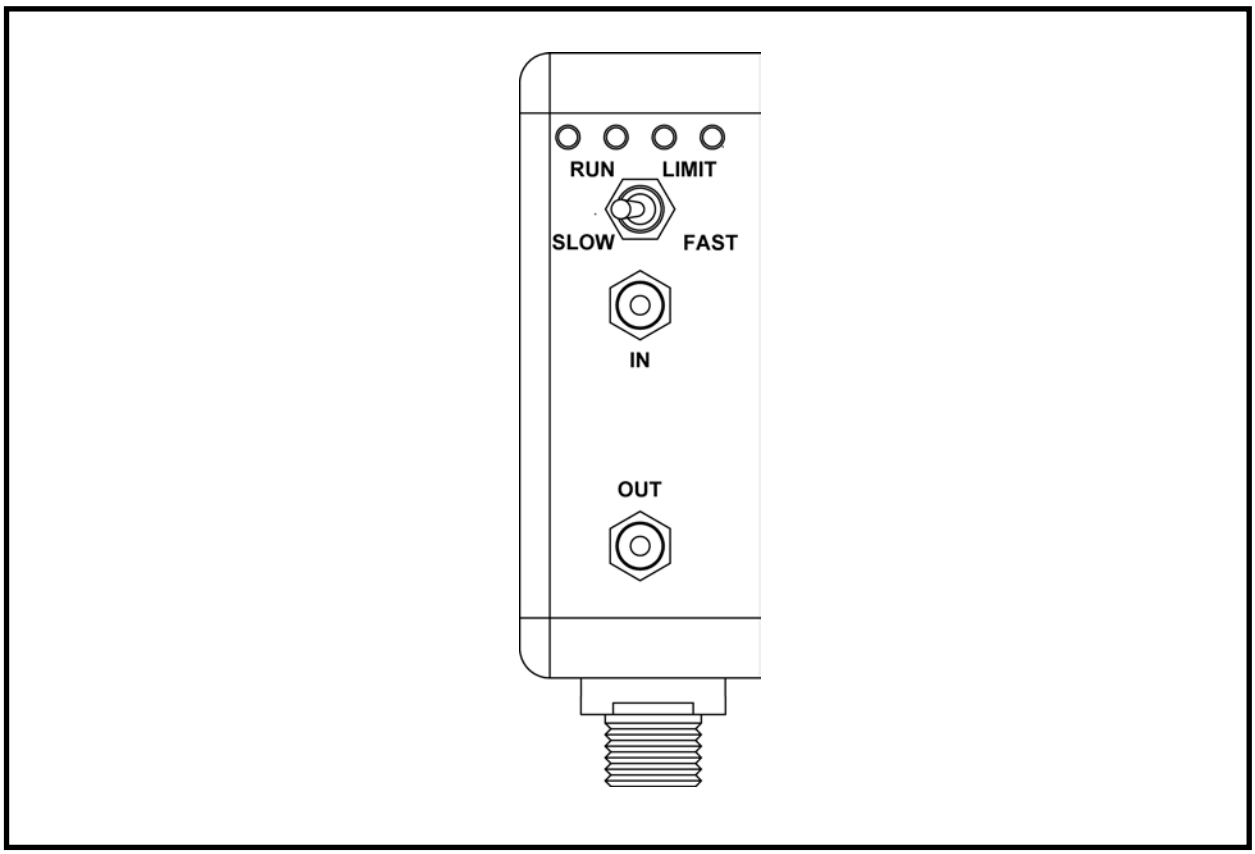


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42498A	ASSEMBLY, Power Adapter
1	1	NSS	POWER BRICK
2	1	NSS	CONNECTOR, USB
3	1	P0054-488	CABLE
4	1	NSS	CABLE
5	1	A42050P	MOUNT, Plastic Box
6	1	A42055P	HANGER, Power Adapter
7	1	NSS	BOX, Plastic
8	1	P0310-966	KNOB
9	1	NSS	RECEPTACLE
10	1	NSS	CONNECTOR

NSS - Not Sold Separately

REMOTE FOCUS ELECTRICAL ASSEMBLY, A42049A

GUIDANCE SYSTEM (SN FA42035F-86 & BEFORE)

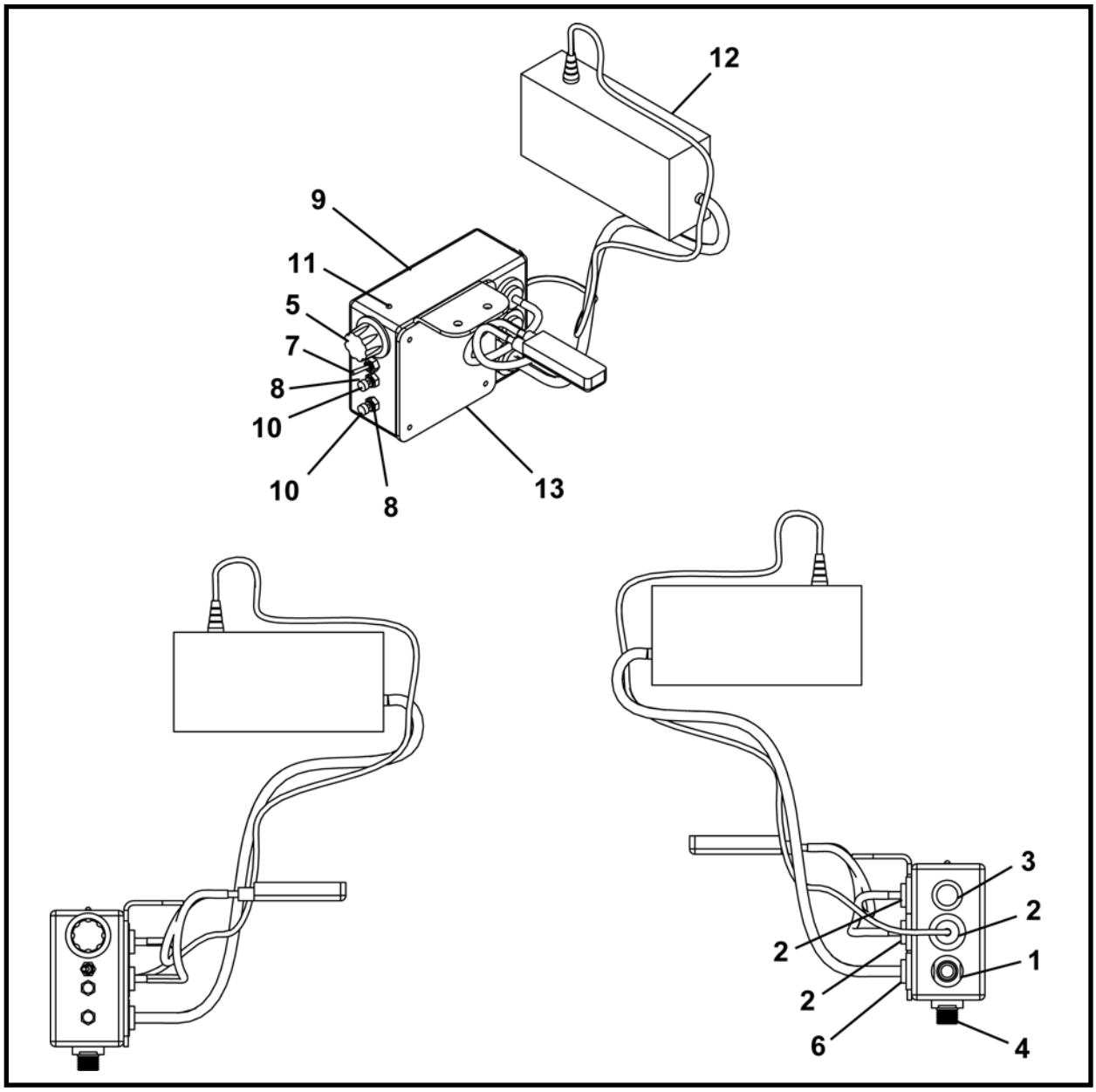


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42049A	ASSEMBLY, Remote Focus Electrical
1	1	1250-933	DECAL, Remote Focus
2	1	050041A	INSTRUCTIONS, Installation

NOTE: This assembly is part of Remote Focus Assembly, FA42096F which is used to add the remote focus component to the guidance system (SN FA42035F-86 & Before).

POWER ADAPTER ASSEMBLY, A45640A

GUIDANCE SYSTEM (SN FA42035F-87 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45640A	ASSEMBLY, Power Adapter
1	1	NSS	CONNECTOR
2	3	NSS	RECEPTACLE
3	1	NSS	RECEPTACLE
4	1	NSS	RECEPTACLE
5	1	P0310-966	KNOB
6	1	NSS	RECEPTACLE
7	1	NSS	SWITCH, Toggle
8	1	NSS	SWITCH
9	1	NSS	BOX
10	2	NSS	BUTTON, Black
11	1	NSS	LED, Red
12	1	NSS	POWER BRICK
13	1	A45666P	BRACKET

NSS - Not Sold Separately

Hydraulics

GBM 4812A
- Hydraulic Assembly, 4812
  - SN FA40034F-1 Thru 3, A44045A 2
  - SN FA40034F-4 & After, A44567A 8
- PCH Auger Drive Hydraulic Connection (4812A SN FA40034F-4 & After)
  - 2 Port Mobile Half Assembly, A46259A 16

Power Pack
- Hydraulic Assembly
  - P257T
    - P275T, A43900A 18
    - P275T 50’ Extension Hose Kit, A45600A 25
  - P150Q
    - P150Q, A44988A 26

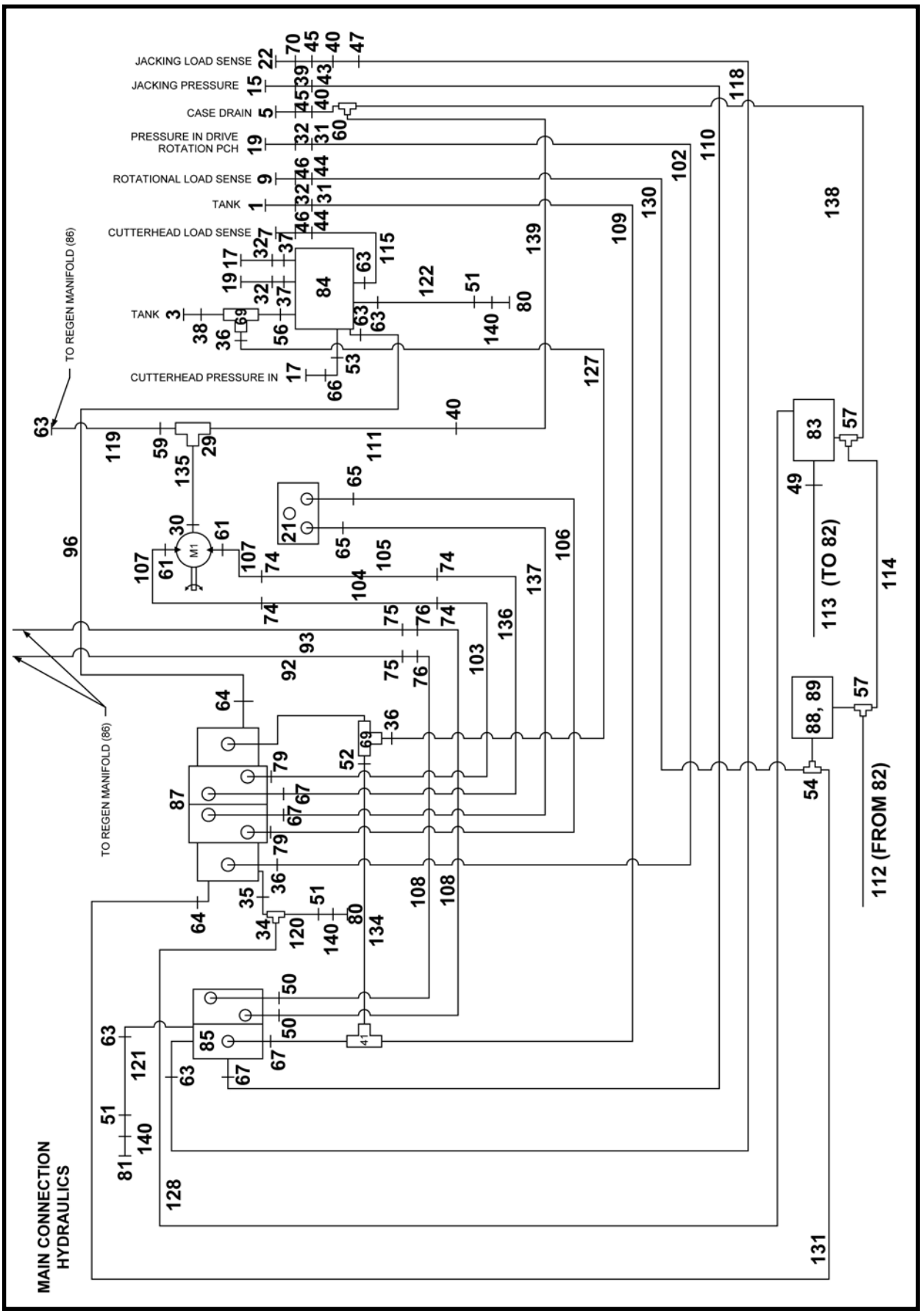
Powered Reaming Head
- PRH Hydraulic Assembly, A45306A 31

Powered Cutter Head
- PCH 20, A43162A 32
- PCH 22.5, A42902A 36
- PCH 28.5, A43654A 40
- PCH 36, A44384A 44
- PCH 44, A43878A 48
- Powered Cutter Head Hoses 52

Pilot Tube Breakout Tool - Reception Shaft
- Hydraulic Plumbing - Breakout Tool, A40233A 53
- Power Pack 120V, A40257A 54
- Power Pack 230V, A45440A 55
- Power Pack, 1 HP Sealed, A46443A 56

4812A HYDRAULICS ASSEMBLY, A44045A

4812A (SN FA40034F-1 THRU FA40034F-3)



4812A HYDRAULICS ASSEMBLY, A44045A

4812A (SN FA40034F-1 THRU FA40034F-3)

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44045A	ASSEMBLY, 4812A Hydraulics
1	1	P0100-034	COUPLER, Female Quick 1
2	1	P0100-034A	PLUG
3	1	P0100-035	COUPLER, Male Quick 1
4	1	P0100-035A	CAP
5	1	P0100-038	COUPLER, Female Quick 1/2
6	1	P0100-038A	PLUG
7	1	P0100-040	COUPLER, Female Quick 3/8
8	1	P0100-040A	PLUG
9	1	P0100-041	COUPLER, Male Quick 3/8
10	1	P0100-041A	CAP
11	2	P0100-046	COUPLER, Male
12	2	P0100-046A	CAP, Orange Dust
13	2	P0100-047	COUPLER, Female
14	2	P0100-047A	PLUG, Orange Dust
15	1	P0100-065	COUPLER, Female
16	1	P0100-065A	PLUG
17	2	P0100-067	COUPLER, Female
18	2	P0100-067A	CAP
19	2	P0100-068	COUPLER, Male
20	2	P0100-068A	PLUG
21a	1	P0100-069	MULTI FASTER, Fixed Half
21b	1	P0100-070	MULTI FASTER, Mobile Half
22	1	P0100-072	COUPLER, ORB 1/2
23	1	P0100-072A	PLUG
24	1	P0300-060	FITTING, 10MB-PLUG
25	1	P0300-126	FITTING, 06FJ-CAP
26	1	P0300-223	FITTING, 06MJ-10MB
27	2	P0300-269	FITTING, 06MJ-08MB
28	2	P0300-300	FITTING, 08MFOR-10MB
29	1	P0300-303	FITTING, 08MFOR-08MFOR-BKHD-08MFOR
30	1	P0300-305	FITTING, 08MFOR-08MB
31	2	P0300-308	FITTING, 16MJ-16MJBKHD
32	4	P0300-309	ORING, 16OR
33	4	P0300-311	FITTING, 04MFFOR-06MB90
34	1	P0300-312	FITTING, 04MFOR-04FFORX-04MFOR
35	1	P0300-314	FITTING, 04MFOR-05MB
36	3	P0300-319	FITTING, 16MFOR-16MB
37	2	P0300-321	FITTING, 16MJ-12MB
38	1	P0300-323	FITTING, 16MB-12MB45
39	1	P0300-324	ORING, 12OR
40	3	P0300-325	FITTING, 08MJ-08MJBKHD
41	1	P0300-328	FITTING, 16MFOR-16FFORX-16MFOR
42	4	P0300-329	FITTING, 12MFOR-12MB
43	1	P0300-330	FITTING, 12MJ-12MJBKHD
44	6	P0300-331	FITTING, 06MJ-04MJBKHD
45	2	P0300-332	ORING, 08OR
46	4	P0300-333	ORING, 06OR
47	1	P0300-334	FITTING, 08FJ-04MJ
48	2	P0300-355	FITTING, 06MFOR-06MB90
49	1	P0300-356	FITTING, 06MFOR-06MB
50	2	P0300-361	FITTING, 12MFOR-10MB
51	3	P0300-362	FITTING, 04MFOR-04MB
52	1	P0300-371	FITTING, 16MFOR-16MB90

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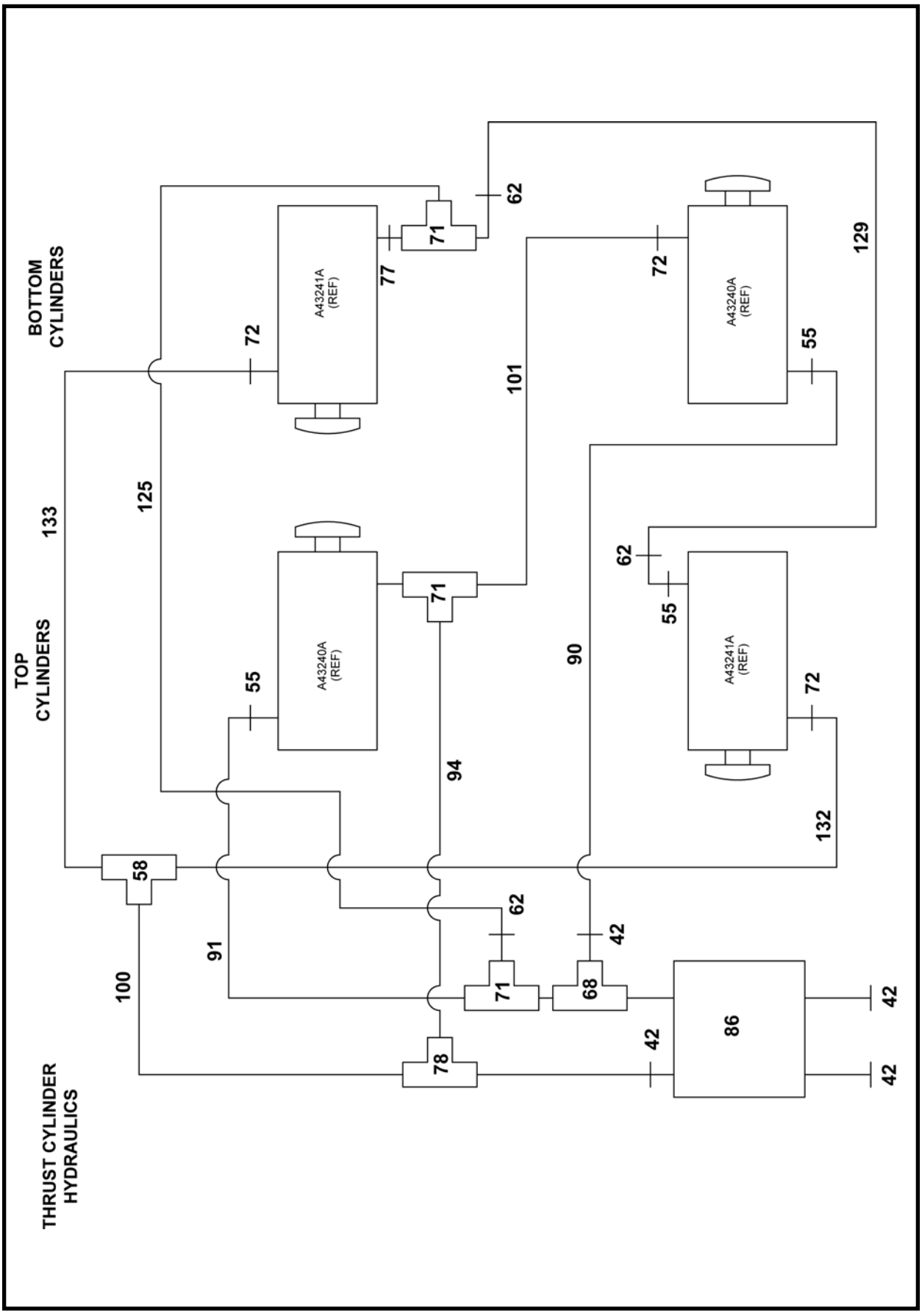
4812A HYDRAULICS ASSEMBLY, A44045A

4812A (SN FA40034F-1 THRU FA40034F-3)



4812A HYDRAULICS ASSEMBLY, A44045A

4812A (SN FA40034F-1 THRU FA40034F-3)

ITEM	QTY	PART NO.	DESCRIPTION
53	1	P0300-374	FITTING, 16MFOR-20MB
54	1	P0300-376	FITTING, 06MFOR-06MFOR-06MB
55	3	P0300-378	FITTING, 12MFOR-16MB
56	1	P0300-380	FITTING, 20MB-16FB
57	2	P0300-386	FITTING, 06MFOR-06MB-06MFOR
58	1	P0300-387	FITTING, 10MFOR-10MFORBKHD-10MFOR
59	1	P0300-395	FITTING, 08FFOR-04MFOR
60	1	P0300-412	FITTING, 08MJ-08FJX-08MJ
61	2	P0300-420	FITTING, 20SFXO
62	3	P0300-424	FITTING, 12MFOR-12FFORX90
63	6	P0300-427	FITTING, 04MFOR-04MB90
64	6	P0300-430	FITTING, 06MFOR-08MB
65	2	P0300-434	FITTING, 16MFOR-16MB45
66	1	P0300-452	FITTING, 16MB-14FFORX90
67	4	P0300-479	FITTING, 16MFOR-12MB
68	1	P0300-536	FITTING, 12MB-12FB-12FB
69	2	P0300-537	FITTING, 16MB-16FB-16FB
70	1	P0300-565	FITTING, 12MORB-08FORB
71	3	P0300-579	FITTING, 12MFS-12MAORB-12MFS
72	3	P0300-580	FITTING, 10MFS-12MORB
73	4	P0300-581	FITTING, 6MFFOR-6MFFOR-BKHD
74	4	P0300-582	FITTING, 16MFS-16MFS BKHD
75	2	P0300-585	FITTING, 12MFFOR-12MFFOR-BKHD W/O LN
76	2	P0300-586	FITTING, FS0306-12
77	1	P0300-587	FITTING, 16MB-12FB
78	1	P0300-588	FITTING, FS6602-12-12-12
79	2	P0300-589	FITTING, 16MFFOR-12MB90
80	2	P0301-142	GAUGE, 5000 PSI
81	1	P0301-146	GAUGE, 6000 PSI
82	1	P0302-698	VALVE, Three Section
83	1	P0302-421A	VALVE, Pressure Reducing
84	1	P0302-508	VALVE, Cutter
85	1	P0302-509	VALVE, Jack
86	1	P0302-519	MANIFOLD, Regen Block
87	1	P0302-511	VALVE, Two Section
88	1	P0304-310	VALVE, Solenoid
89	1	P0302-514	BODY, Port 3/8
90	1	A10056A-052	HOSE ASSEMBLY 3/4 x 52
91	1	A10056A-064	HOSE ASSEMBLY 3/4 x 64
92	1	A10056A-079	HOSE ASSEMBLY 3/4 x 79
93	1	A10056A-081	HOSE ASSEMBLY 3/4 x 81
94	1	A10057A-068	HOSE ASSEMBLY 1/2 x 68
95	2	A10058A-088	HOSE ASSEMBLY 1/4 x 88
96	1	A10059A-100	HOSE ASSEMBLY 1/4 x 100
97	2	A10059A-110	HOSE ASSEMBLY 1/4 x 110
98	1	A10060A-084	HOSE ASSEMBLY 1/4 x 84
99	1	A10060A-086	HOSE ASSEMBLY 1/4 x 86
100	1	A10061A-015	HOSE ASSEMBLY 1/2 x 15
101	1	A10061A-021	HOSE ASSEMBLY 1/2 x 21
102	1	A10062A-126	HOSE ASSEMBLY 1 x 126
103	1	A10063A-064	HOSE ASSEMBLY 1 x 64
104	1	A10063A-072	HOSE ASSEMBLY 1 x 72
105	1	A10063A-078	HOSE ASSEMBLY 1 x 78

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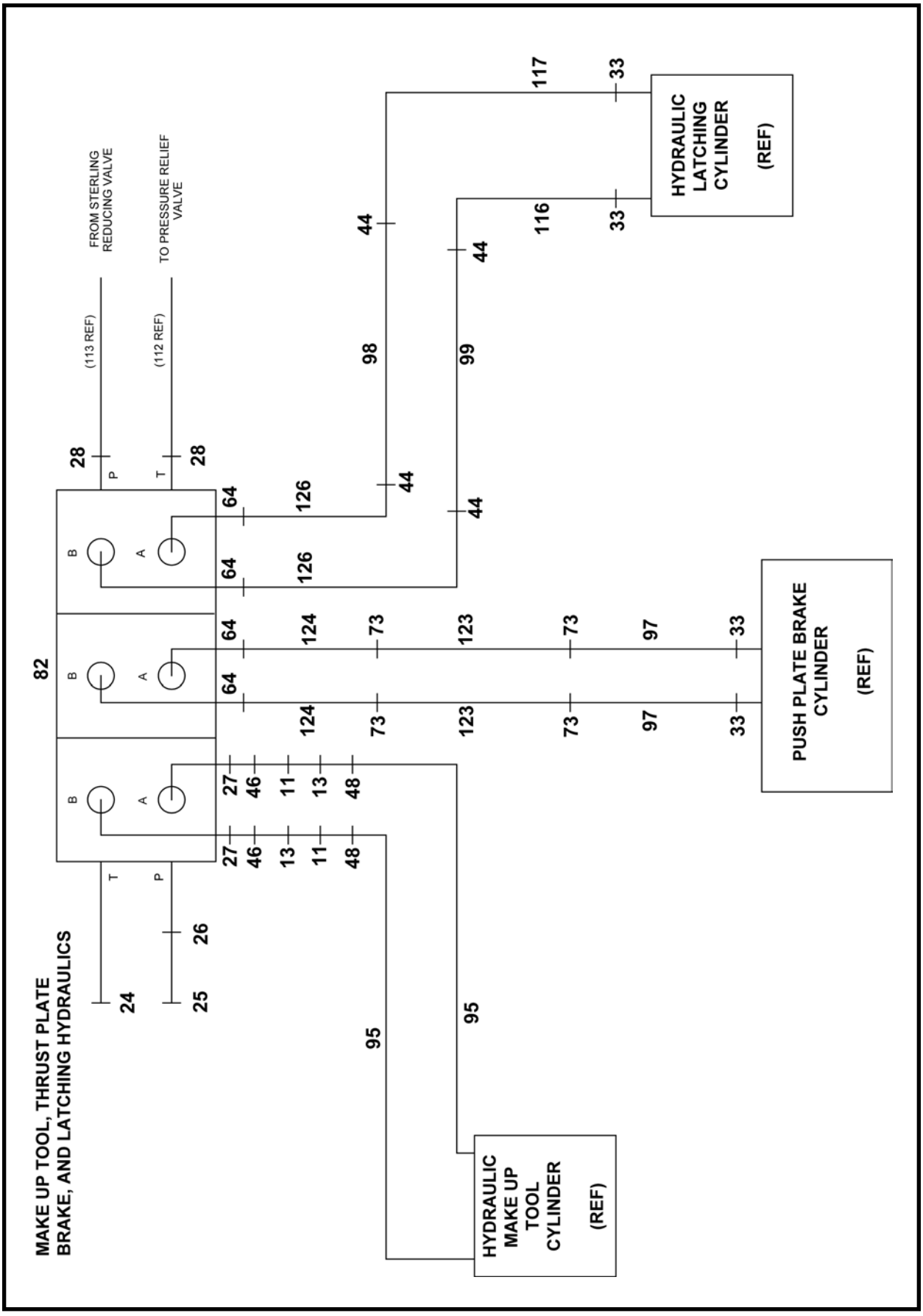
MAKE UP TOOL, THRUST PLATE
BRAKE, AND LATCHING HYDRAULICS
FROM STERLING
REDUCING VALVE
TO PRESSURE RELIEF
VALVE
(113 REF)
(112 REF)
HYDRAULIC
LATCHING
CYLINDER
(REF)
PUSH PLATE BRAKE
CYLINDER
(REF)
HYDRAULIC
MAKE UP
TOOL
CYLINDER
(REF)
82
28
26
24
25
95
27
46
13
11
48
64
124
73
123
97
33
126
44
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99
116
117

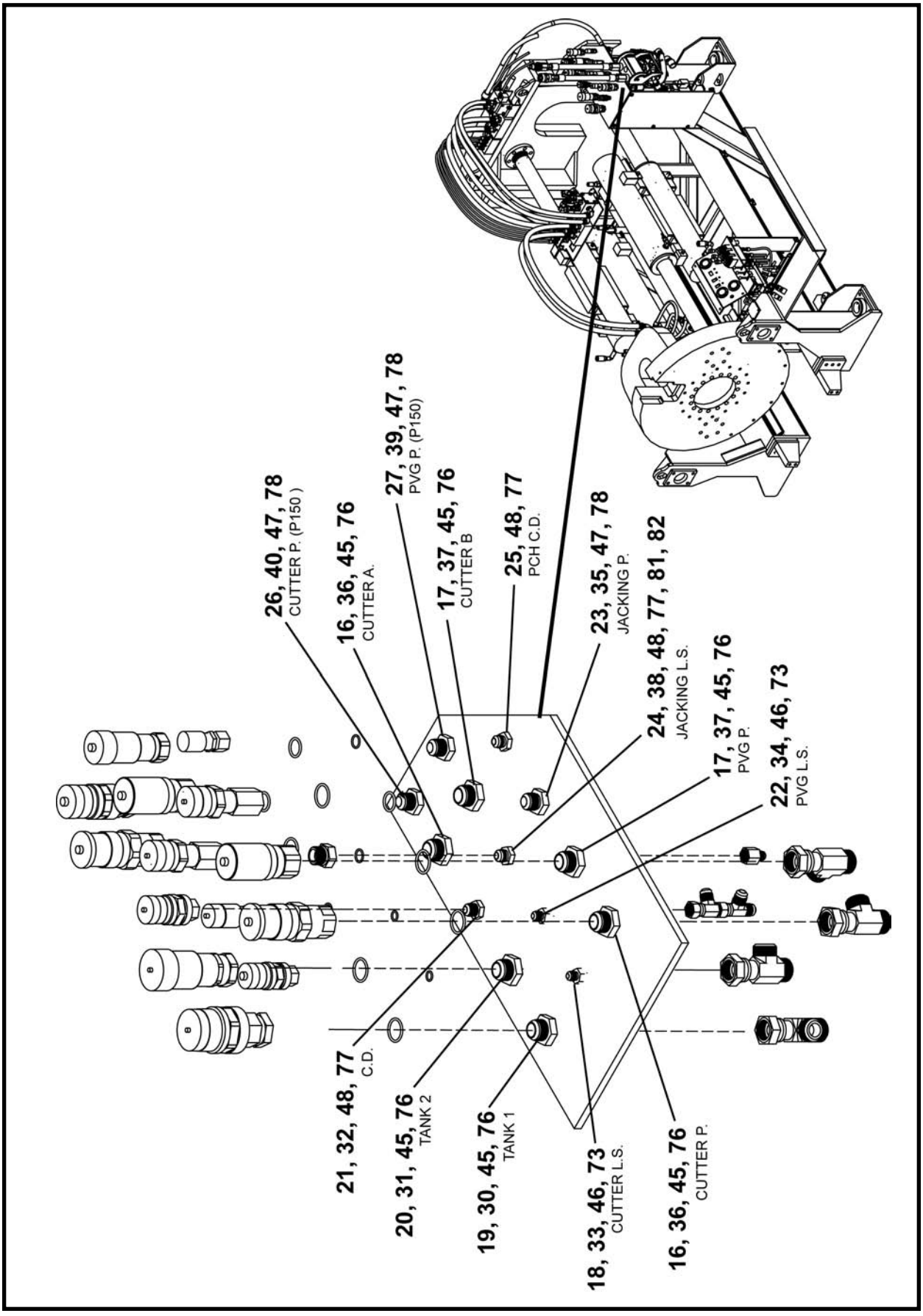
4812A HYDRAULICS ASSEMBLY, A44045A

4812A (SN FA40034F-1 THRU FA40034F-3)

ITEM	QTY	PART NO.	DESCRIPTION
106	1	A10063A-126	HOSE ASSEMBLY 1 x 126
107	2	A10064A-070	HOSE ASSEMBLY 1 x 70
108	2	A10065A-066	HOSE ASSEMBLY 3/4 x 66
109	1	A10066A-120	HOSE ASSEMBLY 1 x 120
110	1	A10067A-151	HOSE ASSEMBLY 3/4 x 151
111	1	A10068A-092	HOSE ASSEMBLY 1/2 x 92
112	1	A10312A-025	HOSE ASSEMBLY 3/8 x 25
113	1	A10312A-030	HOSE ASSEMBLY 3/8 x 30
114	1	A10313A-020	HOSE ASSEMBLY 3/8 x 20
115	1	A10315A-017	HOSE ASSEMBLY 1/4 x 17
116	1	A10315A-022	HOSE ASSEMBLY 1/4 x 22
117	1	A10315A-030	HOSE ASSEMBLY 1/4 x 30
118	1	A10319A-124	HOSE ASSEMBLY 1/4 x 124
119	1	A10325A-030	HOSE ASSEMBLY 1/4 x 30
120	1	A10326A-020	HOSE ASSEMBLY 1/4 x 20
121	1	A10326A-030	HOSE ASSEMBLY 1/4 x 30
122	1	A10326A-097	HOSE ASSEMBLY 1/4 x 97
123	2	A10327A-084	HOSE ASSEMBLY 1/4 x 84
124	2	A10327A-120	HOSE ASSEMBLY 1/4 x 120
125	1	A10331A-071	HOSE ASSEMBLY 3/4 x 71
126	2	A10339A-120	HOSE ASSEMBLY 1/4 x 120
127	1	A10342A-115	HOSE ASSEMBLY 1 x 115
128	1	A10348A-050	HOSE ASSEMBLY 1/4 x 50
129	1	A10353A-084	HOSE ASSEMBLY 3/4 x 84
130	1	A10363A-120	HOSE ASSEMBLY 1/4 x 120
131	1	A10364A-040	HOSE ASSEMBLY 1/4 x 40
132	1	A10365A-047	HOSE ASSEMBLY 1/2 x 47
133	1	A10365A-063	HOSE ASSEMBLY 1/2 x 63
134	1	A10369A-036	HOSE ASSEMBLY 1 x 36
135	1	A10372A-080	HOSE ASSEMBLY 1/2 x 80
136	1	A10381A-060	HOSE ASSEMBLY 1 x 60
137	1	A10381A-126	HOSE ASSEMBLY 1 x 126
138	1	A10390A-090	HOSE ASSEMBLY 3/8 x 90
139	1	A10391A-086	HOSE ASSEMBLY 1/2 x 86
140	3	A43043P	ADAPTOR, 4MB-4MB

4812A HYDRAULICS ASSEMBLY, A44567A

4812A (SN FA40034F-4 & AFTER)



4812A HYDRAULICS ASSEMBLY, A44567A

4812A (SN FA40034F-4 & AFTER)

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44567A	HYDRAULIC ASSEMBLY 4812A
1	1	P0302-523	VALVE, Two Section
2	1	P0302-421A	VALVE, Pressure Reducing
3	1	P0304-310	VALVE, Solenoid
4	1	P0302-698	VALVE, Three Section
5	2	P0302-530	VALVE, Shuttle
6	1	P0302-513	CARTRIDGE
7	1	P0302-528	VALVE, Motor Speed
8	1	P0302-522	CONTROLS, Hyd 3 Bank
9	2	P0302-514	BODY, Port 3/8
10	1	P0302-524	VALVE, Hyd Pilot
11	1	P0302-508	VALVE, Cutter
12	1	P0302-519	MANIFOLD, Regen Block
13	1	A44479P	MANIFOLD, Auger Drive
14	1	A43766P	MANIFOLD, Case Drain
15	1	A43181P	MANIFOLD, Drive 20 PCH
16	2	P0100-067	COUPLER, Female
17	2	P0100-068	COUPLER, Male
18	1	P0100-040	COUPLER, Female 3/8
19	1	P0100-034	COUPLER, Female Quick 1
20	1	P0100-035	COUPLER, Male Quick 1
21	1	P0100-038	COUPLER, Female 1/2
22	1	P0100-041	COUPLER, Male 3/8
23	1	P0100-065	COUPLER, Female
24	1	P0100-072	COUPLER, ORB 1/2
25	1	P0100-088	COUPLER, Female End Quick
26	1	P0100-036	COUPLER, Female 3/4
27	1	P0100-037	COUPLER, Male 3/4
28	1	P0100-046	COUPLER, Male
29	1	P0100-047	COUPLER, Female
30	1	P0100-034A	PLUG, Female
31	1	P0100-035A	CAP, Male
32	1	P0100-038A	PLUG, Female
33	1	P0100-040A	PLUG, Female
34	1	P0100-041A	CAP, Male
35	1	P0100-065A	PLUG, 3/4
36	2	P0100-067A	CAP, 1
37	2	P0100-068A	PLUG, 1
38	1	P0100-072A	PLUG, 1/2
39	1	P0100-037A	CAP, Male
40	1	P0100-036A	PLUG, Female
41	1	P0100-047A	PLUG, Orange Dust
42	1	P0100-046A	CAP, Orange Dust
43	1	P0301-146	GAUGE, 6000 PSI
44	2	P0301-142	GAUGE, 5000 PSI
45*	6	P0300-309	ORING, 16OR
46*	4	P0300-333	ORING, 06OR
47*	3	P0300-324	ORING, 12OR
48*	3	P0300-332	ORING, 08OR
49	1	A44474P	MOUNT, Valve Plate
50*	6	P0300-633	FITTING, 10MFFOR-12MB90
51*	4	P0300-329	FITTING, 12MFOR-12MB
52*	2	P0300-632	FITTING, 12MFOR-16MB90
53*	11	P0300-319	FITTING, 16MFOR-16MB
54*	1	P0300-434	FITTING, 16MFOR-16MB45
55*	5	P0300-479	FITTING, 16MFOR-12MB
56*	11	P0300-580	FITTING, 10MFS-12MORB
57*	1	P0300-385	FITTING, 10MFOR-10MB
58*	13	P0300-356	FITTING, 06MFOR-06MB
59*	3	P0300-383	FITTING, 10MFOR-10MB90
60*	12	P0300-430	FITTING, 06MFOR-08MB

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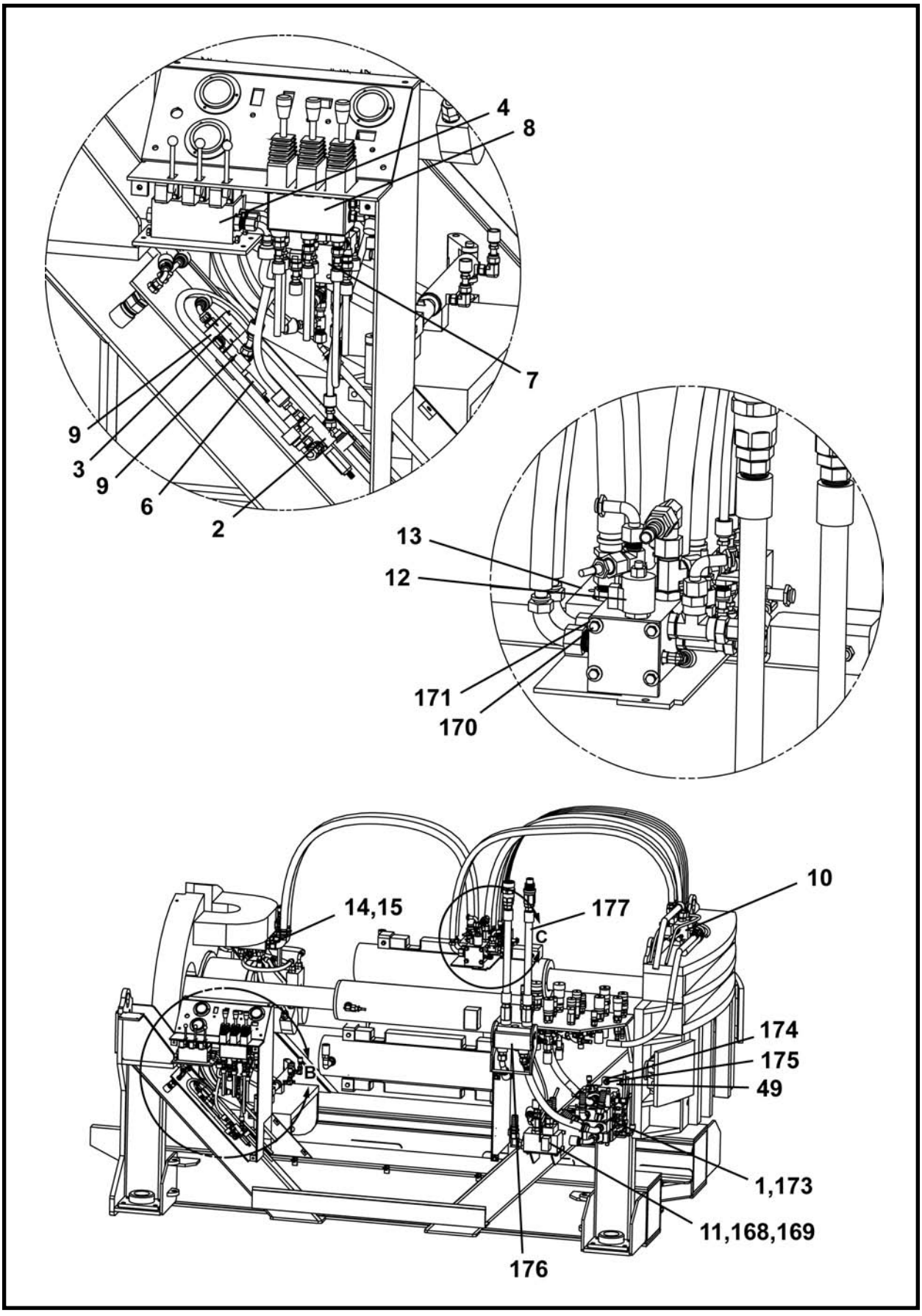
4812A HYDRAULICS ASSEMBLY, A44567A

4812A (SN FA40034F-4 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
61*	2	P0300-027	FITTING, 06MB-PLUG
62*	5	P0300-355	FITTING, 06MFOR-06MB90
63*	10	P0300-604	FITTING, 06MFOR-06MFOR
64*	2	P0300-193	FITTING, 08MB-PLUG
65*	2	P0300-589	FITTING, 16MFFOR-12MB90
66*	2	P0300-613	FITTING, 06MFOR-06FFORX-06MFOR
67*	5	P0300-314	FITTING, 04MBFOR-05MB
68*	5	P0300-386	FITTING, 06MFOR-06MB-06MFOR
69*	3	P0300-310	FITTING, 04MFOR-06MB
70*	2	P0300-300	FITTING, 08MFOR-10MB
71*	3	P0300-338	FITTING, 06MBX-06MBX90
72*	1	P0300-311	FITTING, 04MFFOR-06MB90
73*	4	P0300-331	FITTING, 06MJ-04MJBKHD
74*	2	P0300-060	FITTING, 10MB-PLUG
75*	3	P0300-594	FITTING, 4FB-4MFFOR
76*	6	P0300-308	FITTING, 16MJ-16MJBKHD
77*	3	P0300-325	FITTING, 08MJ-08MJBKHD
78*	3	P0300-330	FITTING, 12MJ-12MJBKHD
79*	4	P0300-426	FITTING, 16MJ-16FJX-16MJ
80*	2	P0300-412	FITTING, 08MJ-08FJX-08MJ
81*	1	P0300-454	FITTING, 08FJ-06MJ
82*	1	P0300-565	FITTING, 12MORB-08FORB
83*	1	P0300-192	FITTING, 06MJ-06FJX-06MJ
84*	2	P0300-305	FITTING, 08MFOR-08MB
85*	1	P0300-316	FITTING, 08MFOR-08MB90
86*	4	P0300-273	FITTING, 16MB-HHP
87*	5	P0300-427	FITTING, 04MFOR-04MB90
88*	2	P0300-361	FITTING, 12MFOR-10MB
89*	3	P0300-362	FITTING, 04MFOR-04MB
90*	1	P0300-372	FITTING, 12MFOR-12MB90
91*	3	P0300-371	FITTING, 16MFOR-16MB90
92*	2	P0300-380	FITTING, 20MB-16FB
93*	1	P0300-419	FITTING, 16MFOR-16MB-16MFOR
94*	1	P0300-535	FITTING, 08MFOR-08MB-08MFOR
95*	1	P0300-579	FITTING, 12MFS-12MAORB-12MFS
96*	1	P0300-424	FITTING, 12MFOR-12FFORX90
97*	1	P0300-422	FITTING, 10MFOR-10FFPRX-10MFOR
98*	2	P0300-536	FITTING, 12MB-12FB-12FB
99**	1	A09925A-050	HOSE ASSEMBLY 1/4 x 50
100**	1	A10361A-012	HOSE ASSEMBLY 1/2 x 12
101**	1	A09926A-059	HOSE ASSEMBLY 3/8 x 59
102**	1	A10044A-061	HOSE ASSEMBLY 1 x 61
103**	1	A10381A-062	HOSE ASSEMBLY 1 x 62
104**	1	A10046A-050	HOSE ASSEMBLY 3/4 x 50
105**	1	A10381A-058	HOSE ASSEMBLY 1 x 58
106**	1	A10365A-070	HOSE ASSEMBLY 1/2 x 70
107**	1	A09900A-034	HOSE ASSEMBLY 1/2 x 34
108**	1	A10061A-038	HOSE ASSEMBLY 1/2 x 38
109**	1	A10365A-042	HOSE ASSEMBLY 1/2 x 42
110**	1	A10335A-052	HOSE ASSEMBLY 1/2 x 52
111**	1	A10056A-064	HOSE ASSEMBLY 3/4 x 64
112**	1	A10056A-054	HOSE ASSEMBLY 3/4 x 54
113**	1	A10335A-036	HOSE ASSEMBLY 1/2 x 36
114**	1	A10387A-016	HOSE ASSEMBLY 1/4 x 16
115**	1	A10387A-014	HOSE ASSEMBLY 1/4 x 14
116**	1	A10312A-011	HOSE ASSEMBLY 3/8 x 11
117**	1	A10312A-017	HOSE ASSEMBLY 3/8 x 17
118**	1	A10339A-130	HOSE ASSEMBLY 1/4 x 130
119**	1	A10313A-013	HOSE ASSEMBLY 3/8 x 13
120**	1	A10079A-034	HOSE ASSEMBLY 3/8 x 34
121**	1	A10338A-019	HOSE ASSEMBLY 1/4 x 19

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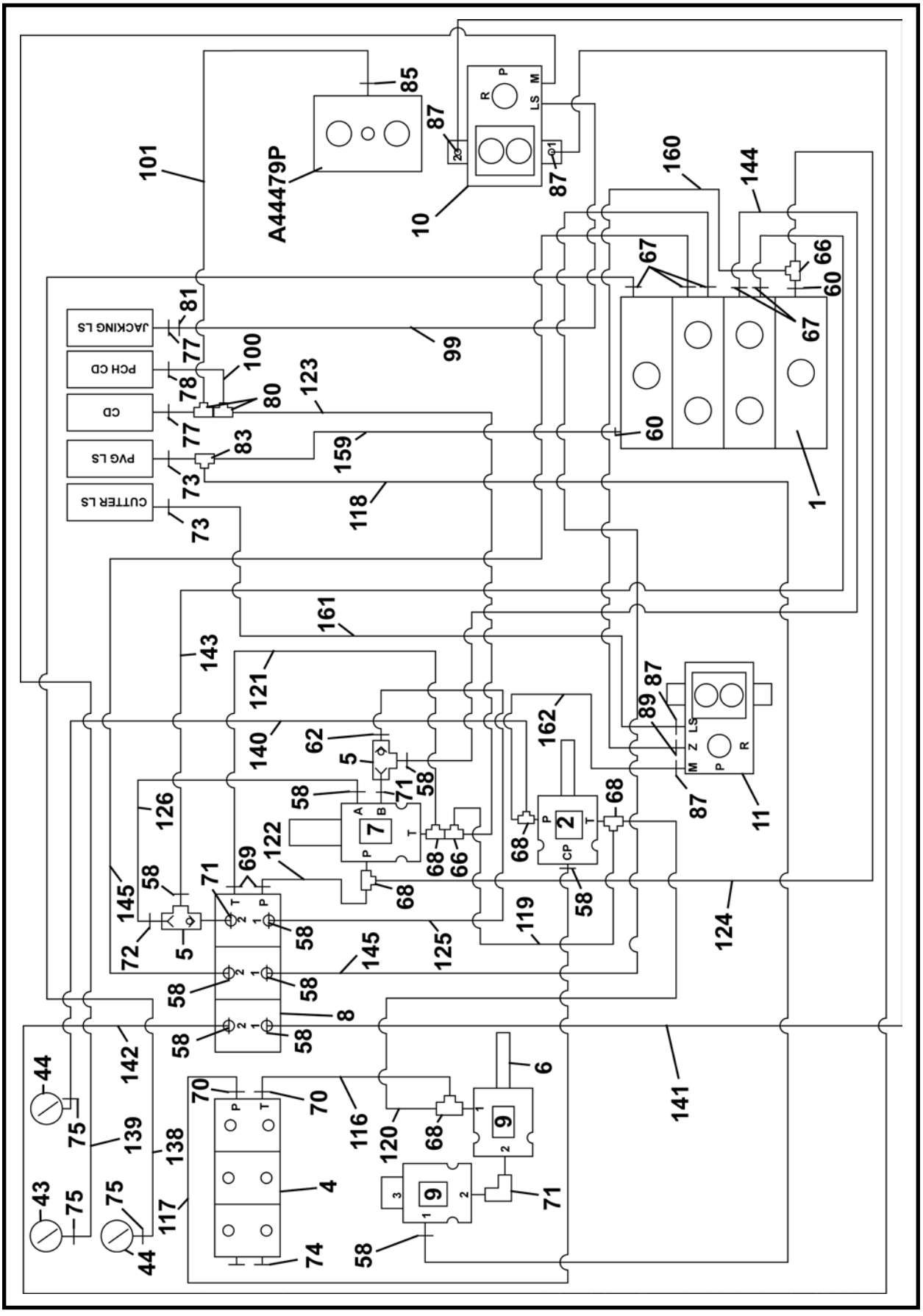
4812A HYDRAULICS ASSEMBLY, A44567A

4812A (SN FA40034F-4 & AFTER)



4812A HYDRAULICS ASSEMBLY, A44567A

4812A (SN FA40034F-4 & AFTER)

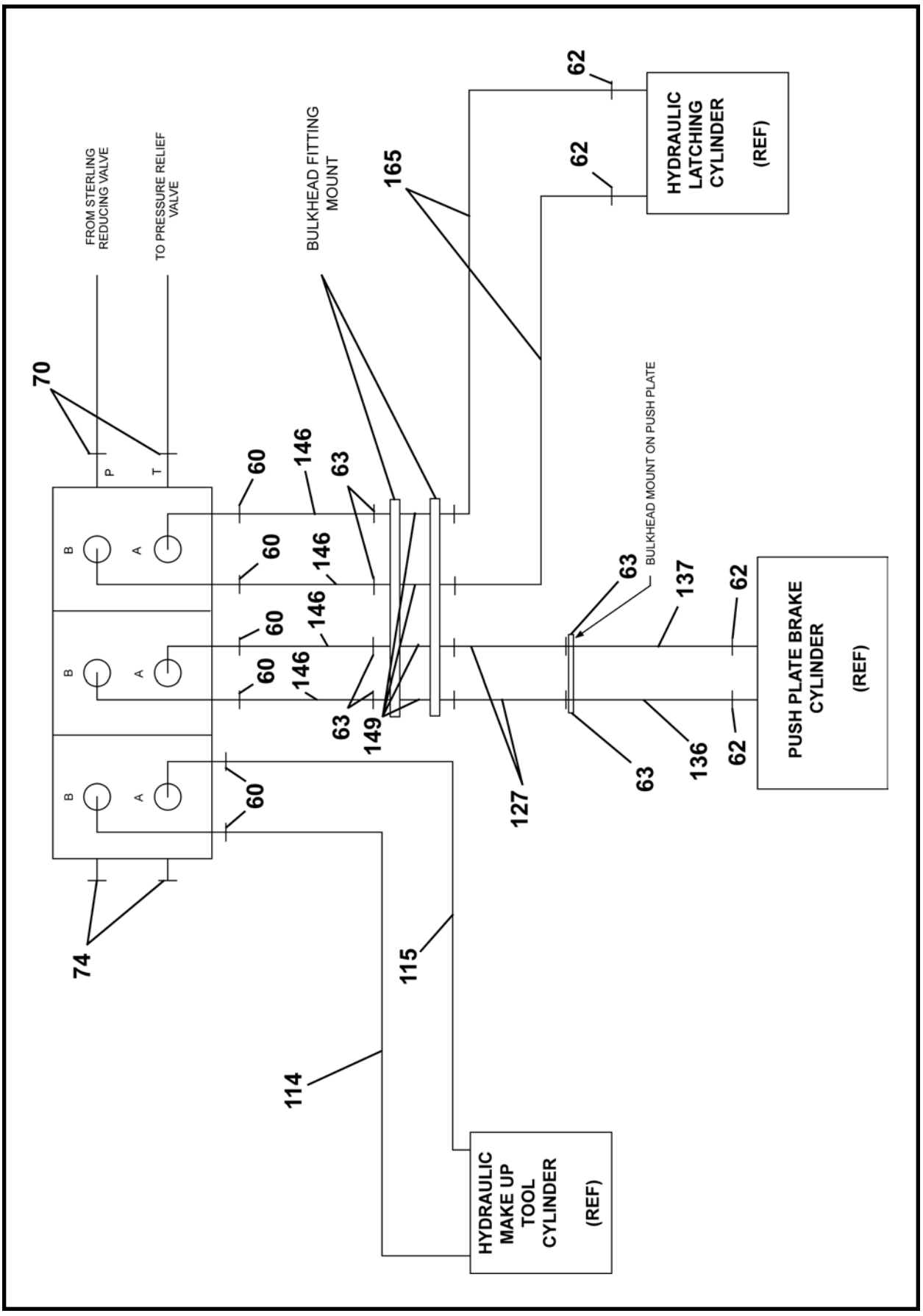
ITEM	QTY	PART NO.	DESCRIPTION
122**	1	A10338A-034	HOSE ASSEMBLY 1/4 x 34
123**	1	A09923A-117	HOSE ASSEMBLY 3/8 x 117
124**	1	A10327A-144	HOSE ASSEMBLY 1/4 x 144
125**	1	A10364A-028	HOSE ASSEMBLY 1/4 x 28
126**	1	A10059A-018	HOSE ASSEMBLY 1/4 x 18
127**	2	A10327A-079	HOSE ASSEMBLY 1/4 x 79
128**	1	A10471A-072	HOSE ASSEMBLY 3/8 x 72
129**	2	A09933A-021	HOSE ASSEMBLY 1/2 x 21
130**	1	A09933A-016	HOSE ASSEMBLY 1/2 x 16
131**	1	A09933A-026	HOSE ASSEMBLY 1/2 x 26
132**	1	A09933A-027	HOSE ASSEMBLY 1/2 x 27
133**	1	A09933A-015	HOSE ASSEMBLY 1/2 x 15
134**	2	A10079A-022	HOSE ASSEMBLY 3/8 x 22
135**	1	A10079A-016	HOSE ASSEMBLY 3/8 x 16\
136**	1	A10364A-033	HOSE ASSEMBLY 1/4 x 33
137**	1	A10364A-038	HOSE ASSEMBLY 1/4 x 38
138**	1	A09920A-149	HOSE ASSEMBLY 1/4 x 149
139**	1	A09920A-188	HOSE ASSEMBLY 1/4 x 188
140**	1	A09922A-029	HOSE ASSEMBLY 1/4 x 29
141**	1	A10059A-186	HOSE ASSEMBLY 1/4 x 186
142**	1	A10059A-173	HOSE ASSEMBLY 1/4 x 173
143**	1	A10338A-131	HOSE ASSEMBLY 1/4 x 131
144**	1	A10338A-128	HOSE ASSEMBLY 1/4 x 128
145**	2	A10338A-133	HOSE ASSEMBLY 1/4 x 133
146**	4	A10327A-196	HOSE ASSEMBLY 1/4 x 196
147**	2	A10381A-072	HOSE ASSEMBLY 1 x 72
148**	2	A10063A-092	HOSE ASSEMBLY 1 x 92
149**	4	A10364A-093	HOSE ASSEMBLY 1/4 x 93
150**	2	A10331A-095	HOSE ASSEMBLY 3/4 x 95
151**	1	A09924A-036	HOSE ASSEMBLY 3/4 x 36
152**	1	A09927A-031	HOSE ASSEMBLY 3/4 x 31
153**	1	A10062A-018	HOSE ASSEMBLY 1 x 18
154**	1	A10019A-024	HOSE ASSEMBLY 1 x 24
155**	1	A10381A-031	HOSE ASSEMBLY 1 x 31
156**	1	A10044A-020	HOSE ASSEMBLY 1 x 20
157**	1	A10044A-043	HOSE ASSEMBLY 1 x 43
158**	2	A10018A-028	HOSE ASSEMBLY 1 x 28
159**	1	A10387A-017	HOSE ASSEMBLY 1/4 x 17
160**	1	A10338A-036	HOSE ASSEMBLY 1/4 x 36
161**	1	A10315A-029	HOSE ASSEMBLY 1/4 x 29
162**	1	A10314A-084	HOSE ASSEMBLY 1/4 x 84
163**	1	A10018A-026	HOSE ASSEMBLY 1 x 26
164**	1	A10066A-019	HOSE ASSEMBLY 1 x 19
165**	2	A10364A-023	HOSE ASSEMBLY 1/4 x 23
166**	1	A10059A-015	HOSE ASSEMBLY 1/4 x 15
167**	1	A10309A-095	HOSE ASSEMBLY 3/8 x 95
168	4	P0040-006	WASHER, Hardened Flat 3/8
169	4	PM10A-1.25-020	BOLT, M10 x 1.25 x 20
170	8	P0040-005	WASHER, Hardened Flat 5/16
171	4	P0001-05-004	BOLT, 5/16 UNC x 1
172	4	PM08A-1.25-020	BOLT, M08 x 1.25 x 20
173	4	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
174	4	P0040-008	WASHER, Hardened Flat 1/2
175	4	P0001-08-004	BOLT, 1/2 UNC x 1
176	1	P0100-069	MULTI FASTER, Fixed Half
177***	1	A46259A	ASSEMBLY, Mobile Half 2 Port
178	1	A45436A	KIT, Fitting
179	1	A45437A	KIT, Hose

* Items included in item 178, A45436A, Fitting Kit ** Items included in item 179, A45437A, Hose Kit
*** Refer to this section for parts breakdown.

(Graphics continued on next page)

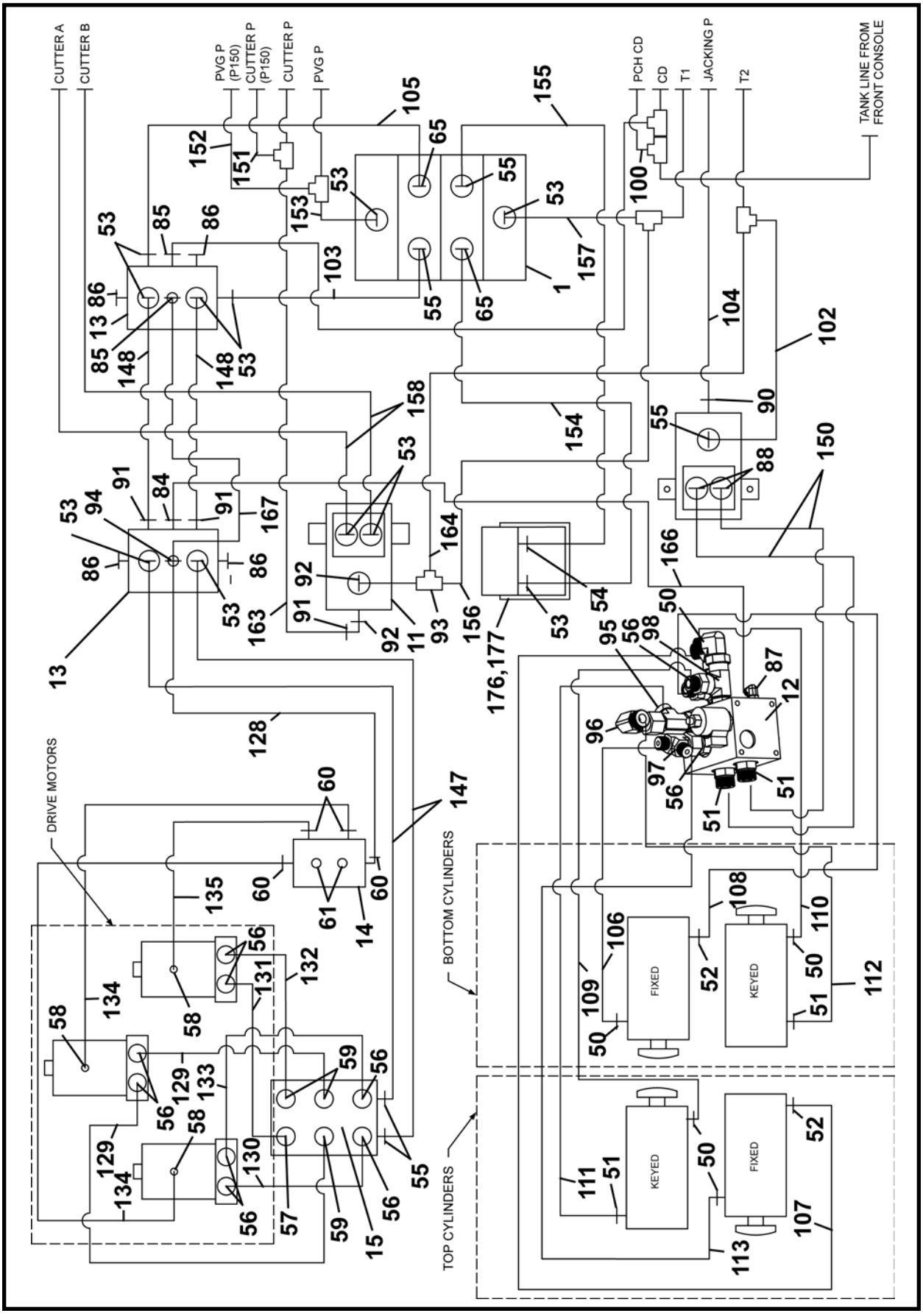
4812A HYDRAULICS ASSEMBLY, A44567A

4812A (SN FA40034F-4 & AFTER)



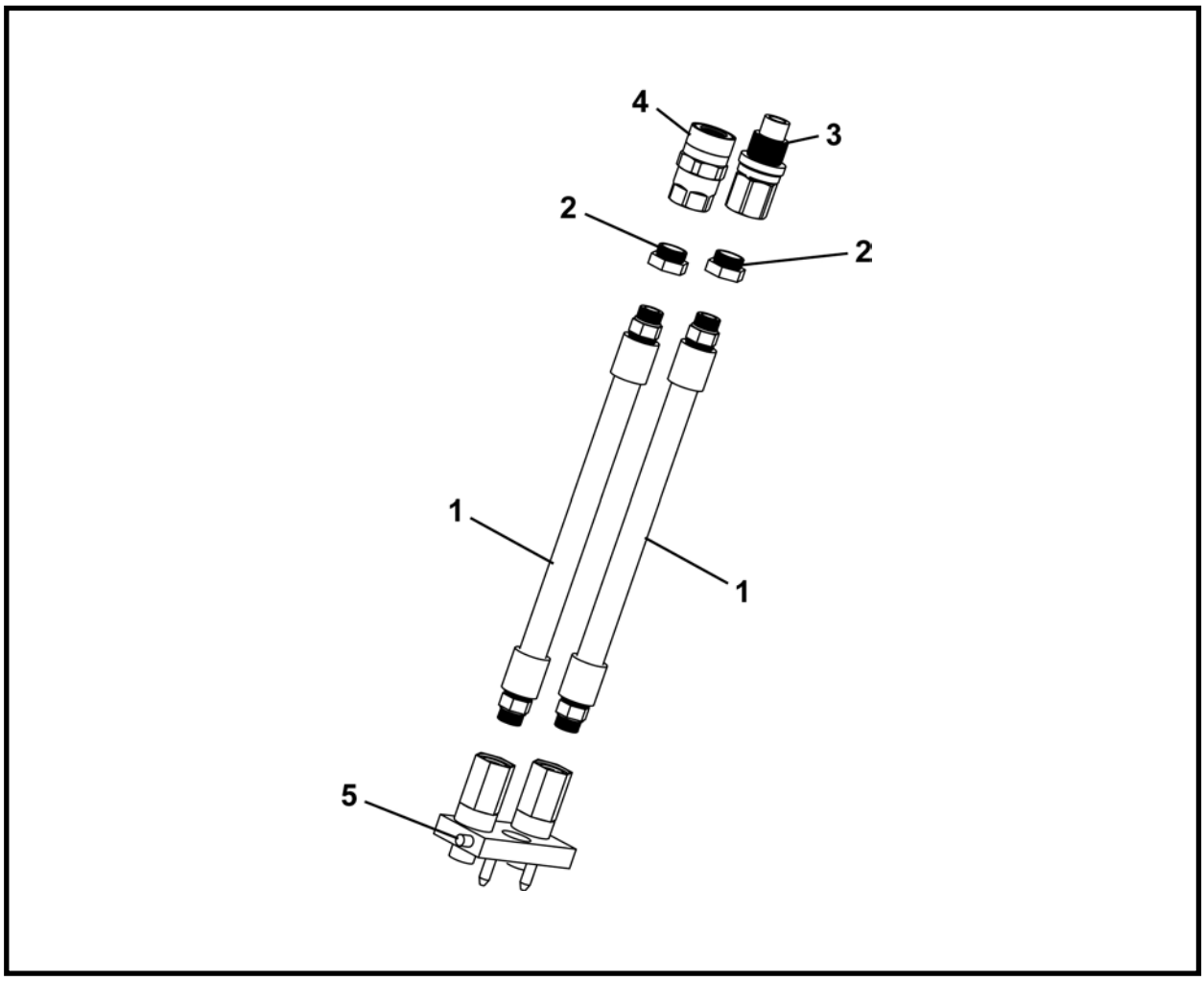
4812A HYDRAULICS ASSEMBLY, A44567A

4812A (SN FA40034F-4 & AFTER)



2 PORT MOBILE HALF ASSEMBLY, A46259A

4812A (SN FA40034F-4 & AFTER) PCH AUGER DRIVE HYDRAULIC CONNECTION

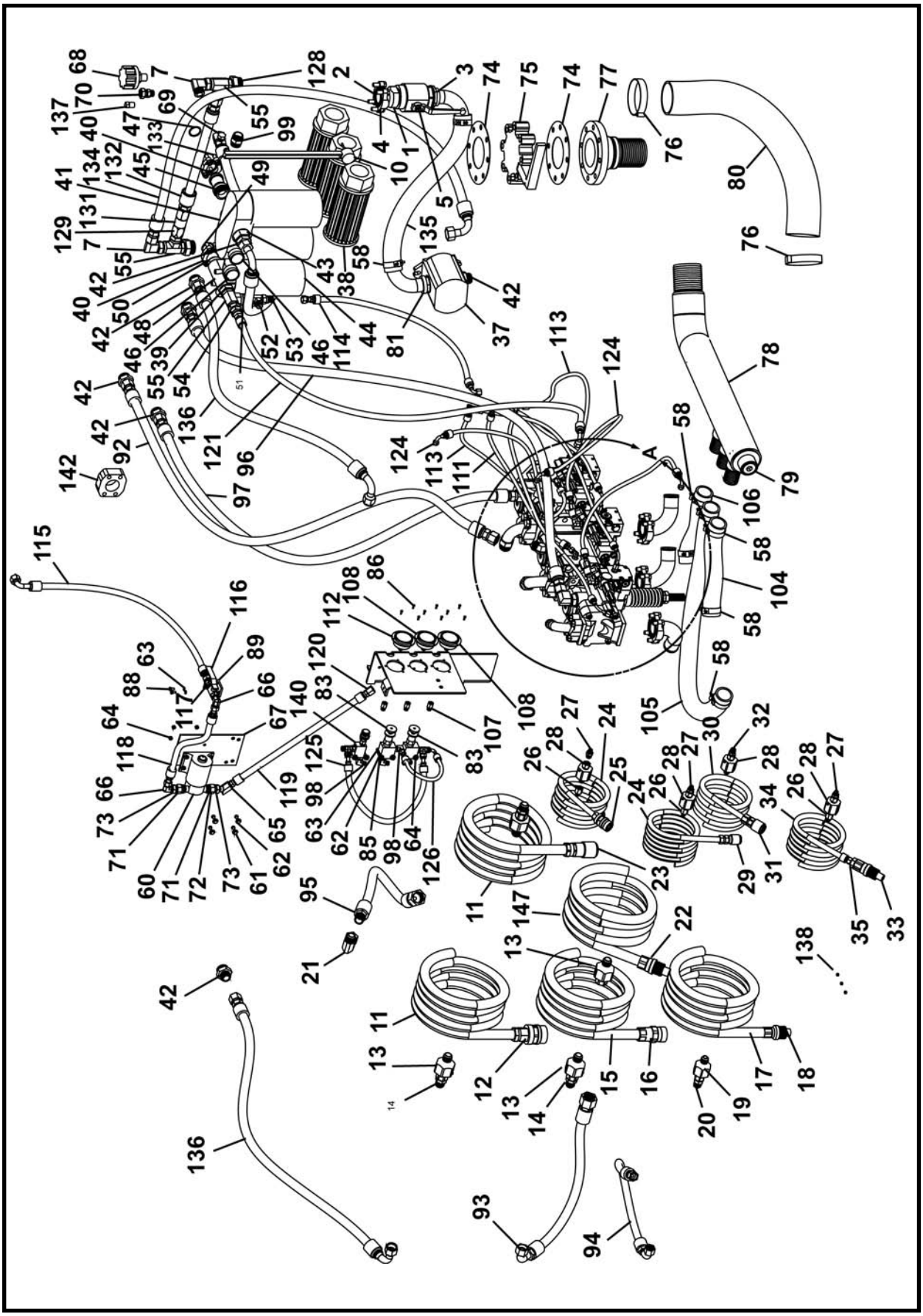


0	1	A46259A	2 PORT MOBILE HALF ASSEMBLY
1	2	A10483A-024	HOSE ASSEMBLY, 1 x 24
2	2	P0300-380	FITTING, 20MB-16FB
3	1	P0100-073	BODY, 1-1/4
4	1	P0100-074	BODY, 1-1/4
5	1	P0100-070	MULTIFASTER, Fixed Half

NOTES

P275T HYDRAULIC ASSEMBLY, A43900A

P275T POWER PACK



P275T HYDRAULIC ASSEMBLY, A43900A

P275T POWER PACK

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43900A	ASSEMBLY, P275T Hydraulic
1	1	A42606P	VALVE, Ball
2*	1	P0300-444	ORING, 32OR
3	1	P0220-222	FITTING, 32 INSERT-90-32MB
4*	1	P0300-443	FITTING, 32CFHS
5*	1	P0302-434	VALVE, Ball ORB
6*	1	P0300-420	FITTING, 20SFXO
7*	3	P0300-371	FITTING, 16MFOR-16MB90
8*	1	P0300-434	FITTING, 16MFOR-16MB45
9*	3	P0300-528	FITTING, 06MB-04FP90
10	1	P0301-138	GAUGE, Sight
11**	2	A10356A-600	HOSE ASSEMBLY 1 x 600
12	1	P0100-034	COUPLER, Quick Female 1
13	4	P0300-437	SWIVEL JOINT
14*	3	P0300-441	FITTING, 16MJ-16MJ
15**	1	A10480A-600	HOSE ASSEMBLY 1 x 600
16	1	P0100-067	COUPLER, Female
17**	1	A10303A-600	HOSE ASSEMBLY 3/4 x 600
18	1	P0100-066	COUPLER, Male
19	1	P0300-436	SWIVEL JOINT
20*	1	P0300-440	FITTING, 12MJ-12MJ
21*	1	P0300-514	FITTING, 16MJ-16FJX90
22	1	P0100-068	COUPLER, Male
23	1	P0100-035	COUPLER, Quick Male 1
24**	2	A10302A-600	HOSE ASSEMBLY 3/8 x 600
25	1	P0100-040	COUPLER, Female 3/8
26*	3	P0300-454	FITTING, 08FJ-06MJ
27*	3	P0300-439	FITTING, 08MJ-06MJ
28	4	P0300-435	SWIVEL JOINT
29	1	P0100-041	COUPLER, Male 3/8
30**	1	A10462A-600	HOSE ASSEMBLY 1/2 x 600
31	1	P0100-039	COUPLER, Male 1/2
32*	1	P0300-438	FITTING, 08MJ-08MJ
33	1	P0100-071	FITTING, ORB
34**	1	A09949A-600	HOSE ASSEMBLY 3/8 x 600
35*	1	P0300-565	FITTING, 12MORB-08FORB
36	1	P0303-302	PUMP ASSEMBLY
37	1	P0303-307	PUMP
38*	3	P0309-153	STRAINER
39*	1	P0300-380	FITTING, 20MB-16FB
40*	2	P0300-449	FITTING, 20CFHS
41	1	P0309-186	FILTER HEAD, Dual Element
42*	1	P0300-374	FITTING, 16MFOR-20MB
43*	1	P0300-161	FITTING, 24MB-20FB
44	3	P0309-172	ELEMENT, Filter
45*	1	P0303-309	FLANGE
46	2	P0301-105	GAUGE, Filter Indicator
47*	1	P0300-456	ORING, 24OR
48	1	P0309-144B	VALVE, Bypass
49*	1	P0300-447	ORING, 20OR
50*	1	P0303-308	FLANGE
51*	1	P0300-396	FITTING, 16MB-10FB
52*	1	P0300-423	FITTING, 10MFOR-10MB-10MFOR

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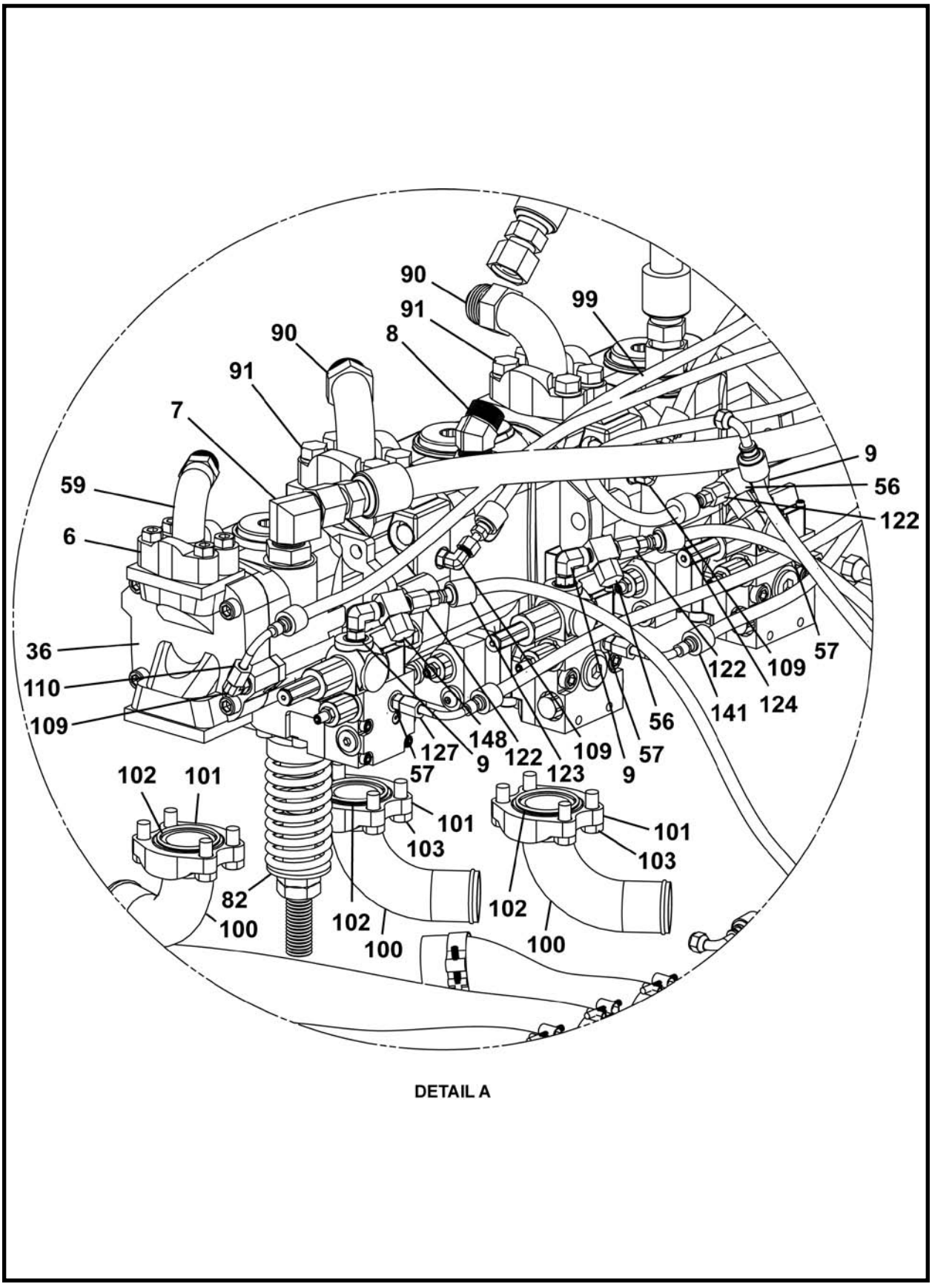
P275T HYDRAULIC ASSEMBLY, A43900A

P275T POWER PACK



DETAIL A

P275T HYDRAULIC ASSEMBLY, A43900A

P275T POWER PACK

ITEM	QTY	PART NO.	DESCRIPTION
53*	1	P0300-527	FITTING, 10FFORX-08MFOR
54*	1	P0300-378	FITTING, 12MFOR-16MB
55*	3	P0300-537	FITTING, 16MB-16FB-16FB
56	2	P0309-180	FILTER
57*	3	P0300-362	FITTING, 04MFOR-04MB
58	8	P0201-180	CLAMP, T-Bolt
59*	1	P0300-421	FITTING, 20FLH6K-16MJ90
60	1	P0303-281	PUMP, Transfer
61	4	P0001-04-005	BOLT, 1/4 UNC X 1.25
62	10	P0040-004	WASHER, Hardened Flat 1/4
63	12	P0045-004	WASHER, Lock 1/4
64	10	P0003-04-000	NUT, 1/4
65*	1	P0300-029	FITTING, 08MP-08FP45
66*	2	P0300-340	FITTING, 08MFOR-08MP90
67	1	A44979P	MOUNT, Transfer Pump
68	1	P0309-188	BREATHER, Reservoir
69*	1	P0300-060	FITTING, 10MB-PLUG
70*	1	P0300-208	FITTING, 10MB-12FPX
71	2	P0093-004	FITTING, Hose
72	2	P0093-005	WASHER, Neoprene
73*	2	P0300-012	FITTING, 12MP-08FPS
74	2	P0426-040B	GASKET, Flange
75*	1	P0302-516	VALVE, Butterfly
76	2	P0201-186	CLAMP, T-Bolt
77	1	A03994A	CONNECTION, Slurry Valve Hose
78	1	A43990A	MANIFOLD, Suction
79*	1	P0300-239	FITTING, 20MB-HHP
80*	1	P0201-236-040	HOSE, Longhorn 4
81	1	P0220-248	ELBOW, 90 Degree Insert
82	1	A42525A	ASSEMBLY, Pump Support
83	2	P0302-402	VALVE, Relief 5000 PSI
84*	2	P0300-386	FITTING, 06MFOR-06MB-06MFOR
85	6	P0031-04-008	SCREW, Socket Head Cap 1/4 UNC x 2
86	9	P0017-06-323	SCREW, Machine 6-32 x 1/2
87	1	A43967P	MOUNT, Pump Gauge
88	2	P0001-04-002	BOLT, 1\4 UNC x .5
89	1	A44176P	MOUNT, Valve
90*	2	P0220-245	FITTING, 24FLH6K-20MJ90
91*	2	P0300-461	FITTING, 24SFXO-M16
92**	1	A10374A-071	HOSE ASSEMBLY 1 x 71
93**	1	A10479A-037	HOSE ASSEMBLY 1 x 37
94**	1	A10304A-048	HOSE ASSEMBLY 3/4 x 48
95**	1	A10481A-034	HOSE ASSEMBLY 1 x 34
96**	1	A10374A-082	HOSE ASSEMBLY 1 x 82
97**	1	A10374A-066	HOSE ASSEMBLY 1 x 66
98*	4	P0300-311	FITTING, 04MFFOR-06MB90
99*	2	P0300-319	FITTING, 16MFOR-16MB
100	3	P0220-210	FITTING, 32 INSERT-90-20FL
101*	3	P0300-518	FLANGE
102*	3	P0300-460	FITTING, 32FLOR
103	12	P0001-08-005	BOLT, 1/2 UNC x 1.25
104*	1	P0201-159-017	HOSE, Suction 2 Hydraulic
105*	1	P0201-159-034	HOSE, Suction 2 Hydraulic

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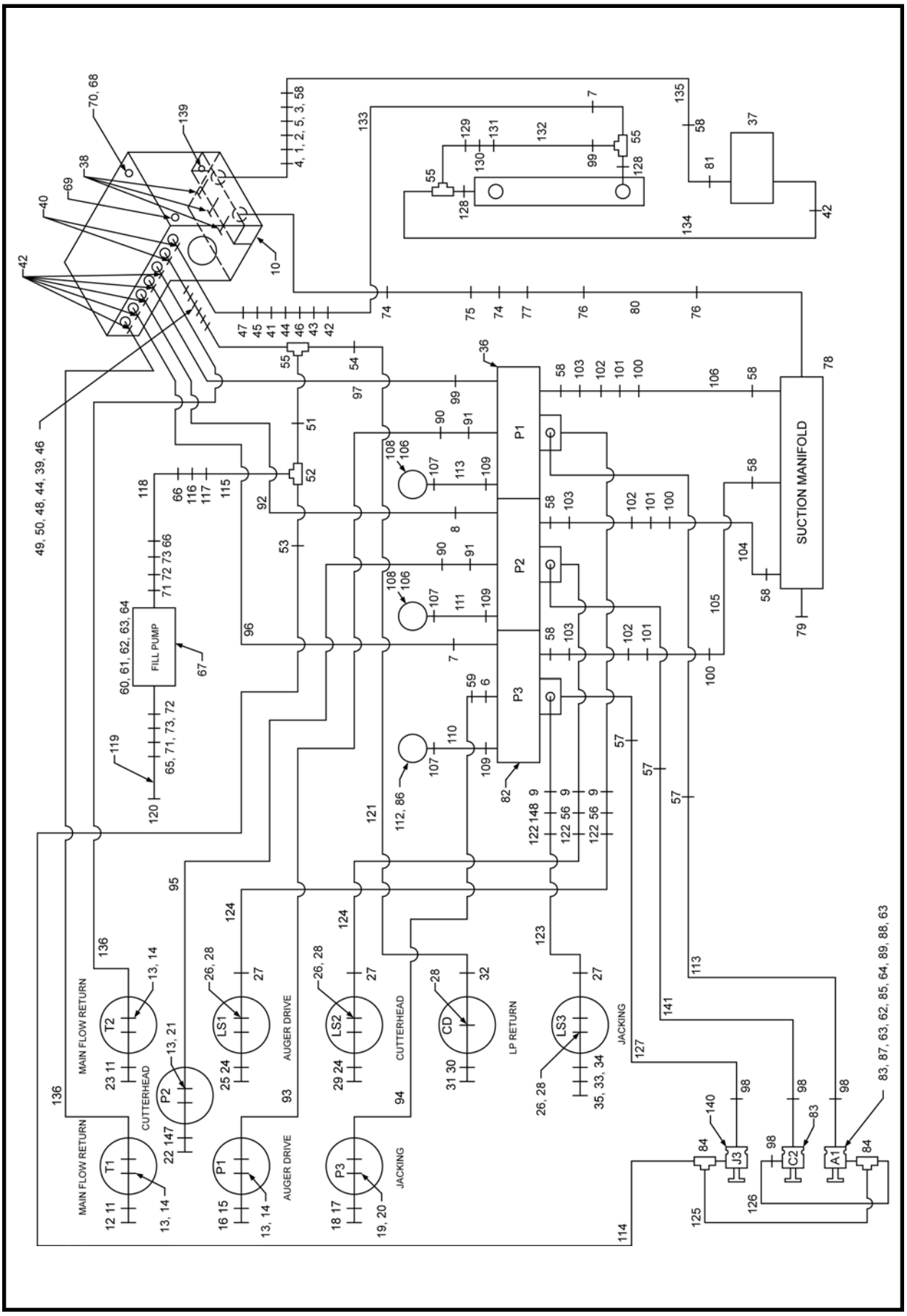
P275T HYDRAULIC ASSEMBLY, A43900A

P275T POWER PACK



P275T HYDRAULIC ASSEMBLY, A43900A

P275T POWER PACK

ITEM	QTY	PART NO.	DESCRIPTION
106*	1	P0201-159-012	HOSE, Suction 2 Hydraulic
107*	3	P0300-594	FITTING, 4FB-4MFFOR
108	2	P0301-142	GAUGE, 5000 PSI
109*	3	P0300-427	FITTING, 04MFOR-04MB90
110**	1	A10325A-045	HOSE ASSEMBLY 1/4 x 45
111**	2	A10326A-030	HOSE ASSEMBLY 1/4 x 30
112*	1	P0301-146	GAUGE, 6000 PSI
113**	2	A10326A-016	HOSE ASSEMBLY 1/4 x 16
114**	1	A10471A-036	HOSE ASSEMBLY 3/8 x 36
115**	1	A10470A-038	HOSE ASSEMBLY 1/2 x 38
116*	1	P0302-185	VALVE, Ball
117*	1	P0300-567	FITTING, 10MJ-8MPKBHD
118**	1	A10491A-018	HOSE ASSEMBLY 1/2 x 18
119**	1	A10461A-064	HOSE ASSEMBLY 1/2 x 64
120*	1	P0417-003	CAP, Pipe 1/2
121**	1	A10373A-069	HOSE ASSEMBLY 1/2 x 69
122*	3	P0300-268	FITTING, 04MJ-04FP
123**	1	A10371A-032	HOSE ASSEMBLY 1/4 x 32
124**	2	A10371A-044	HOSE ASSEMBLY 1/4 x 44
125**	1	A10313A-024	HOSE ASSEMBLY 1/4 x 24
126**	1	A10314A-015	HOSE ASSEMBLY 1/4 x 15
127**	1	A10325A-042	HOSE ASSEMBLY 1/4 x 42
128*	2	P0300-553	FITTING, 24MB-16FB
129*	1	P0300-322	FITTING, 16MJ-16MB
130*	1	P0300-309	ORING, 16OR
131	1	P0302-488	VALVE, Check
132**	1	A10447A-020	HOSE ASSEMBLY 1 x 20
133**	1	A10343A-058	HOSE ASSEMBLY 1 58
134**	1	A10343A-072	HOSE ASSEMBLY 1 X 72
135*	1	P0201-159-028	HOSE, Suction 2 Hydraulic
136**	2	A10370A-060	HOSE ASSEMBLY 1 x 60
137	1	P0416-003	PLUG, Square Head 1/2
138	320 QT	P0126-001	OIL , Hydraulic
139	1	P0309-160	FITTING
140	1	P0302-544	VALVE, Relief 6000 PSI
141**	1	A10325A-026	HOSE ASSEMBLY 1/4 x 26
142*	2	P0303-310	SPACER, Oring
143	1	A45905A	KIT, Hose
144	1	A45906A	KIT, FITTING
145	18	P0074-002	HOOK
146	180 LI	P0074-001	ROPE, Back Rubber 7/16
147**	1	A09950A-600	HOSE ASSEMBLY 1 x 600
148	1	P0309-203	FILTER

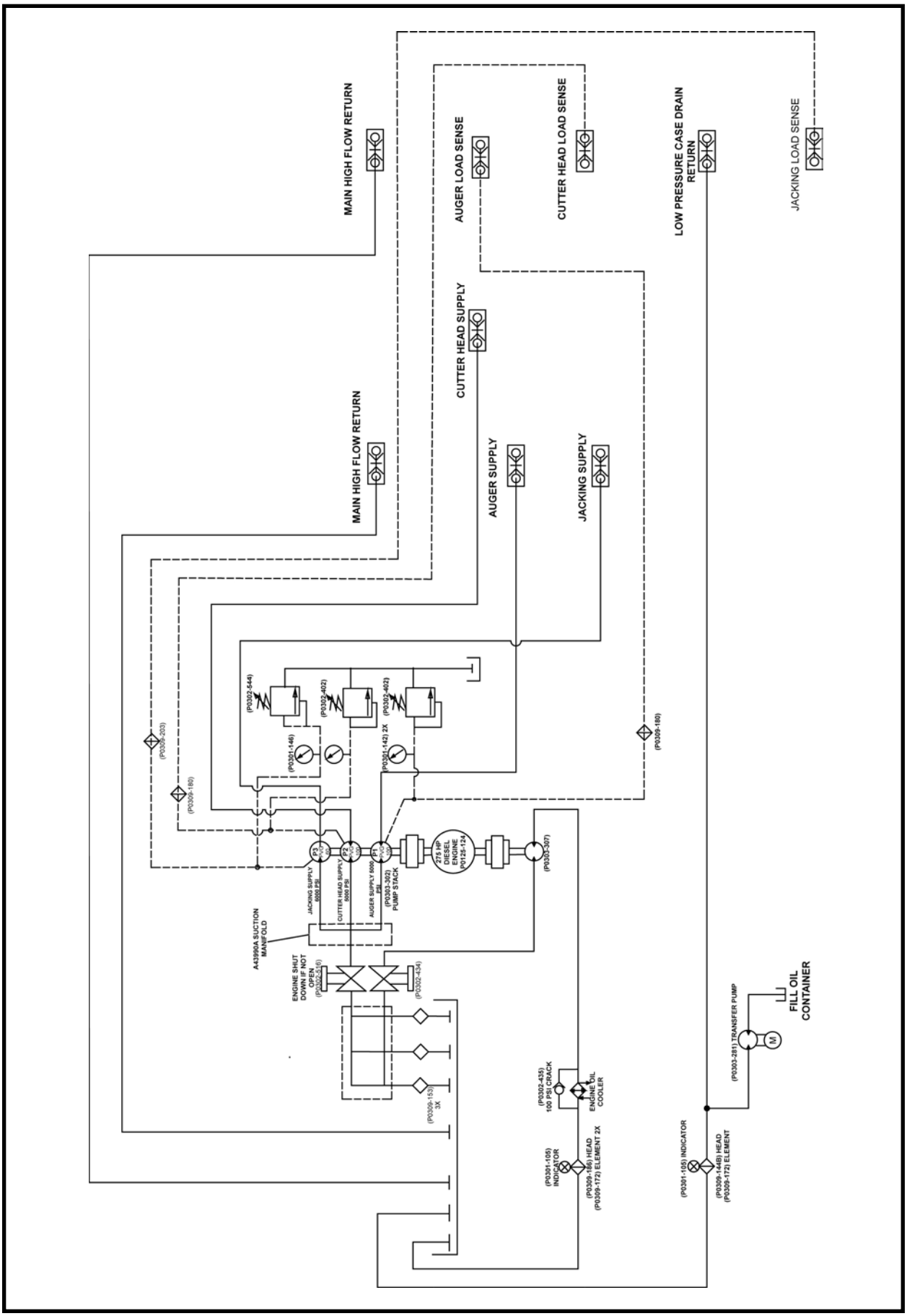
LI - Linear Inch
QT - Quart

* Items included in item 178, A45906A, Fitting Kit
** Items included in item 179, A45905A, Hose Kit

(Graphic continued on next page)

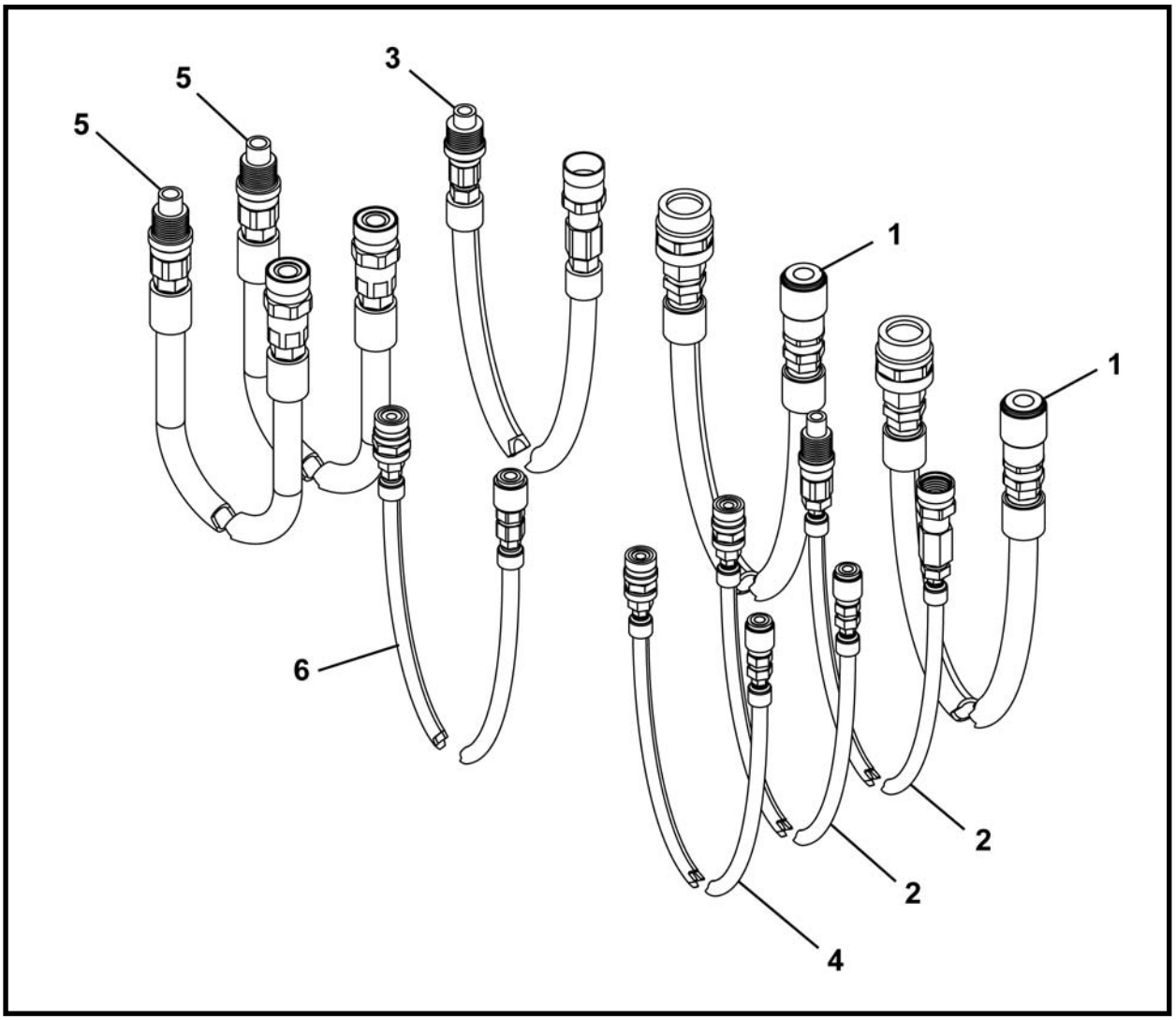
P275T HYDRAULIC ASSEMBLY, A43900A

P275T POWER PACK



P275T 50’ EXTENSION HOSE KIT, A45600A

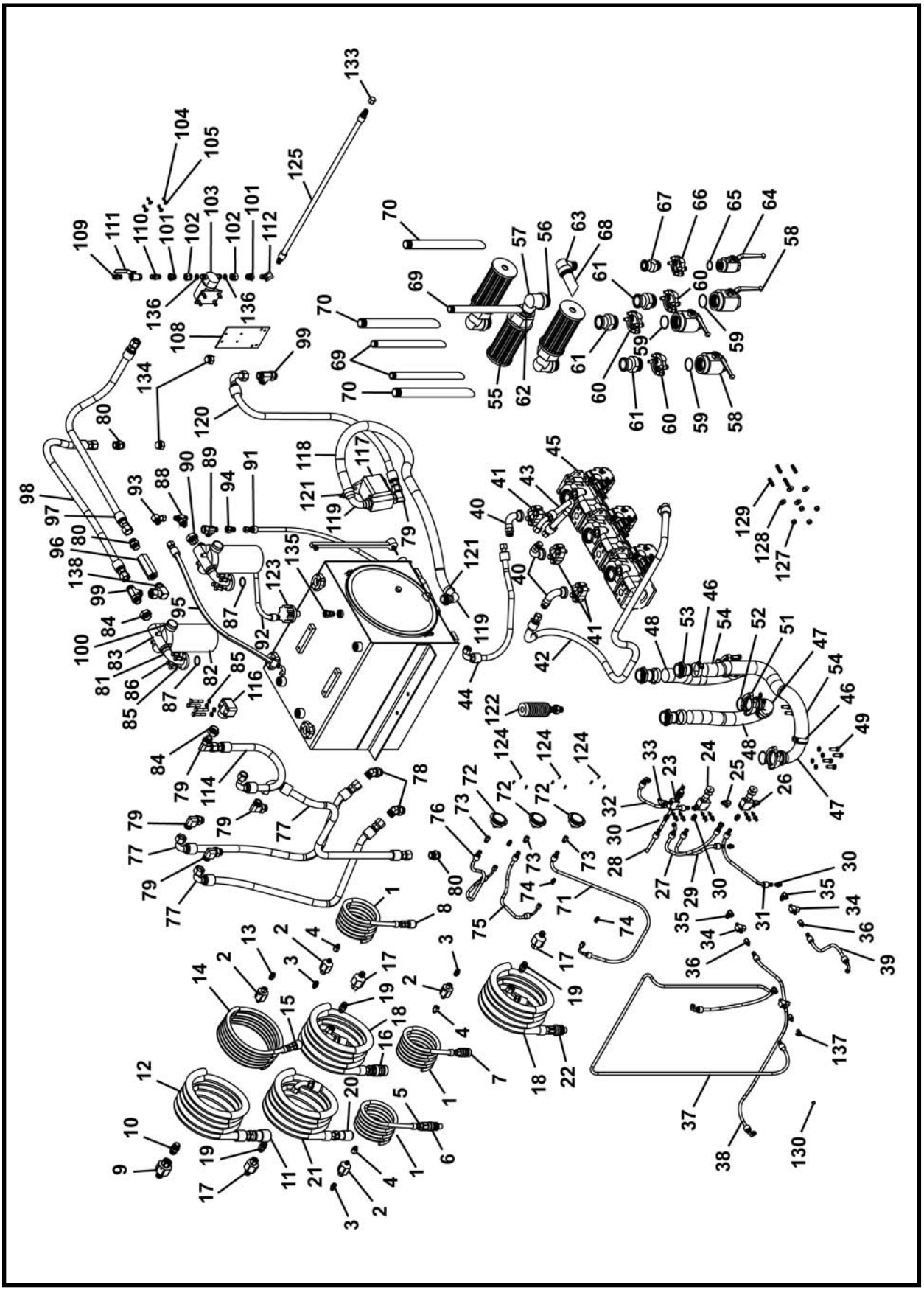
P275T POWER PACK



0	1	A45600A	P275T 50’ EXTENSION HOSE KIT
1	2	A40172A	HOSE ASSEMBLY, Low Pressure 1 (Return)
2	2	A40173A	HOSE ASSEMBLY, High Pressure 3/8 (Rotation Load Sense)
3	1	A45601A	HOSE ASSEMBLY, 6000 PSI 3/4 (Jacking)
4	1	A45602A	HOSE ASSEMBLY, High Pressure 3/8 (Jacking Load Sense)
5	2	A45603A	HOSE ASSEMBLY, High Pressure 1 (Rotation Pressure)
6	1	A45604A	HOSE ASSEMBLY, Case Drain 1/2 (Case Drain)

P150Q HYDRAULIC ASSEMBLY, A44988A

P150Q POWER PACK



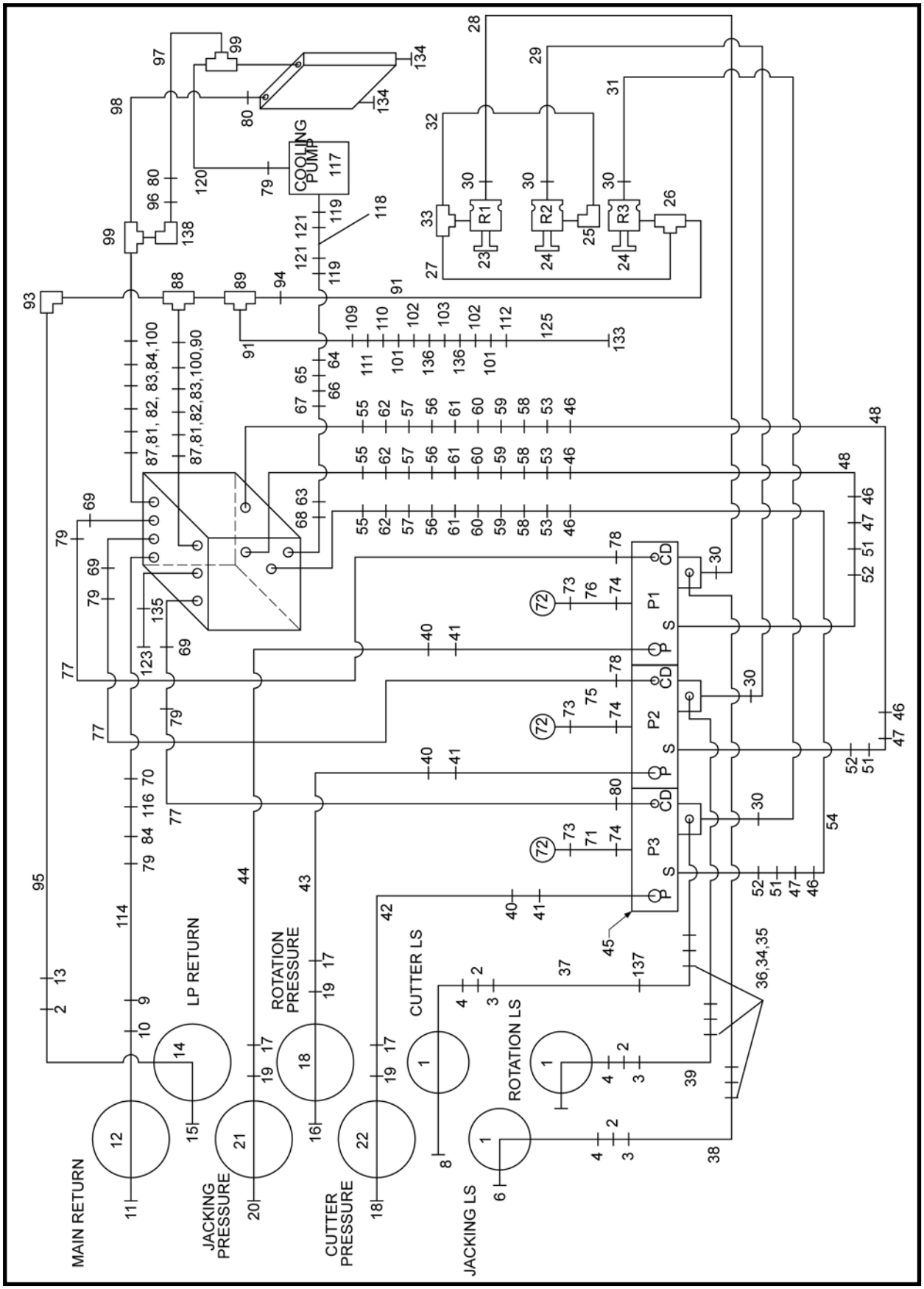
P150Q HYDRAULIC ASSEMBLY, A44988A

P150Q POWER PACK

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44988A	ASSEMBLY, P150Q Hydraulic
1*	3	A10302A-600	HOSE ASSEMBLY 3/8 x 600
2	4	P0300-435	SWIVEL JOINT
3**	3	P0300-439	FITTING, 08MJ-06MJ
4	1	P0100-041	COUPLER, Male 3/8
5**	3	P0300-454	FITTING, 08FJ-06MJ
6	1	P0100-040	COUPLER, Female 3/8
7	1	P0100-071	BODY
8**	1	P0300-677	FITTING, 12MB-6FB
9	1	P0300-437	SWIVEL JOINT
10**	1	P0300-441	FITTING, 16MJ-16MJ
11	1	P0100-035	COUPLER, Male Quick 1
12*	1	A10451A-600	HOSE ASSEMBLY 1
13**	1	P0300-438	FITTING, 08MJ-08MJ
14*	1	A10462A-600	HOSE ASSEMBLY 1/2
15	1	P0100-039	COUPLER, Male 1/2
16	1	P0100-037	COUPLER, Male Quick 3/4
17	3	P0300-436	SWIVEL JOINT
18*	2	A09929A-600	HOSE ASSEMBLY 3/4
19**	3	P0300-440	FITTING, 12MJ-12MJ
20*	1	A10303A-600	HOSE ASSEMBLY 3/4
21	1	P0100-036	COUPLER, Female Quick 3/4
22	1	P0100-066	COUPLER, Male
23	1	P0302-544	VALVE, Relief 6000 PSI
24	2	P0302-402	VALVE, Relief 5000 PSI
25**	1	P0300-311	FITTING, 04MFFOR-06MB90
26**	1	P0300-386	FITTING, 06MFOR-06MB-06MFOR
27*	1	A10327A-022	HOSE ASSEMBLY 1/4
28*	1	A10326A-027	HOSE ASSEMBLY 1/4
29*	1	A10326A-015	HOSE ASSEMBLY 1/4
30**	6	P0300-310	FITTING, 04MFOR-06MB
31*	1	A10326A-022	HOSE ASSEMBLY 1/4
32*	1	A10314A-018	HOSE ASSEMBLY 1/4
33**	1	P0300-376	FITTING, 06MFOR-06MFOR-06MB
34	3	P0309-180	FILTER
35**	3	P0300-528	FITTING, 06MB-04FP90
36**	3	P0300-268	FITTING, 04MJ-04FP
37*	1	A10371A-132	HOSE ASSEMBLY 1/4
38*	1	A10371A-046	HOSE ASSEMBLY 1/4
39*	1	A10371A-028	HOSE ASSEMBLY 1/4
40**	3	P0300-421	FITTING, 20FLH6K-16MJ90
41**	3	P0300-420	FITTING, 20SFXO
42*	1	A09934A-048	HOSE ASSEMBLY 3/4
43*	1	A09934A-028	HOSE ASSEMBLY 3/4
44*	1	A10304A-038	HOSE ASSEMBLY 3/4
45	1	P0303-343	PUMP, Triple
46	6	P0201-180	CLAMP, T-Bolt
47	3	P0220-210	FITTING, 32 INSERT-90-CODE 61-20FL
48**	2	P0201-159-020	HOSE, Suction 2
49	12	P0001-08-006	BOLT, 1/2 UNC x 1.5
50	12	P0045-008	WASHER, Lock 1/2
51**	3	P0300-518	FLANGE
52**	3	P0300-460	FITTING, 32FLOR
53	3	P0220-224	FITTING, 32 INSERT-32MB

P150Q HYDRAULIC ASSEMBLY, A44988A

P150Q POWER PACK



ITEM	QTY	PART NO.	DESCRIPTION
54**	1	P0201-159-036	HOSE, Suction 2
55**	3	P0309-153	STRAINER
56	3	P0402-008	NIPPLE, Close 2
57	3	P0412-008A	ELBOW, Street 90 Degree 2
58**	3	P0302-434	VALVE, ORB Suction Ball 2
59**	3	P0300-444	FITTING, 32OR
60**	3	P0300-443	FITTING, 32CFHS
61	3	A42606P	VALVE, Ball 2
62	3	P0413-015	BUSHING
63	1	P0412-007A	ELBOW, Street 90 Degree 1-1/2
64**	1	P0302-418	VALVE, ORB Suction Ball 1-1/4
65**	1	P0300-447	ORING, 20OR
66**	1	P0300-446	FITTING, 24SFO
67**	1	P0300-445	FITTING, 20MJ-24FL
68	1	A42511P	PIPE, Return
69	3	A44955P	PIPE, Return 1
70	3	A40718P	PIPE, Return
71*	1	A10325A-023	HOSE ASSEMBLY 1/4
72	3	P0301-146	GAUGE, 6000 PSI
73**	3	P0300-594	FITTING, 4FB-4MFFOR
74**	3	P0300-362	FITTING, 04MFOR-04MB
75*	1	A10325A-022	HOSE ASSEMBLY 1/4
76*	1	A10325A-027	HOSE ASSEMBLY 1/4
77*	3	A10343A-044	HOSE ASSEMBLY 1
78**	2	P0300-434	FITTING, 16MFOR-16MB45
79**	5	P0300-371	FITTING, 16MFOR-16MB90
80**	3	P0300-319	FITTING, 16MFOR-16MB
81**	2	P0303-280	FITTING, CODE 61 ELBOW TO MALE SAE 90 D
82	2	P0309-172	ELEMENT, Filter
83	2	P0309-144B	HEAD, Filter
84**	2	P0300-380	FITTING, 20MB-16FB
85	12	P0045-007	WASHER, Lock 7/16
86	8	P0001-07-005	BOLT, 7/16 UNC x 1.25
87**	2	P0300-458	FITTING, 20FLOR
88**	1	P0300-513	FITTING, 10MFOR-10MFOR-10MB
89**	1	P0300-422	FITTING, 10MFOR-10FFORX-10MFOR
90	1	P0300-451	FITTING, 20MB-10FB
91*	1	A10471A-047	HOSE ASSEMBLY 3/8
92*	1	A10359A-026	HOSE ASSEMBLY 1/2
93**	1	P0300-389	FITTING, 10MFOR-10FFORX90
94**	1	P0300-527	FITTING, 10FFORX-08MFOR
95	1	A10357A-048	HOSE ASSEMBLY 1/2
96**	1	P0302-488	VALVE, Check
97*	1	A10374A-051	HOSE ASSEMBLY 1
98*	1	A10374A-047	HOSE ASSEMBLY 1
99**	2	P0300-419	FITTING, 16MFOR-16MB-16MFOR
100	2	P0301-105	GAUGE, Filter Indicator
101**	2	P0300-012	FITTING, 12MP-08FPS
102	2	P0093-004	FITTING, Hose
103	1	P0303-281	PUMP, Transfer
104	4	P0001-04-005	BOLT, 1/4 UNC x 1.25
105	10	P0040-004	WASHER, Hardened Flat 1/4
106	4	P0045-004	WASHER, Lock 1/4

(Continued on next page)

P150Q HYDRAULIC ASSEMBLY, A44988A

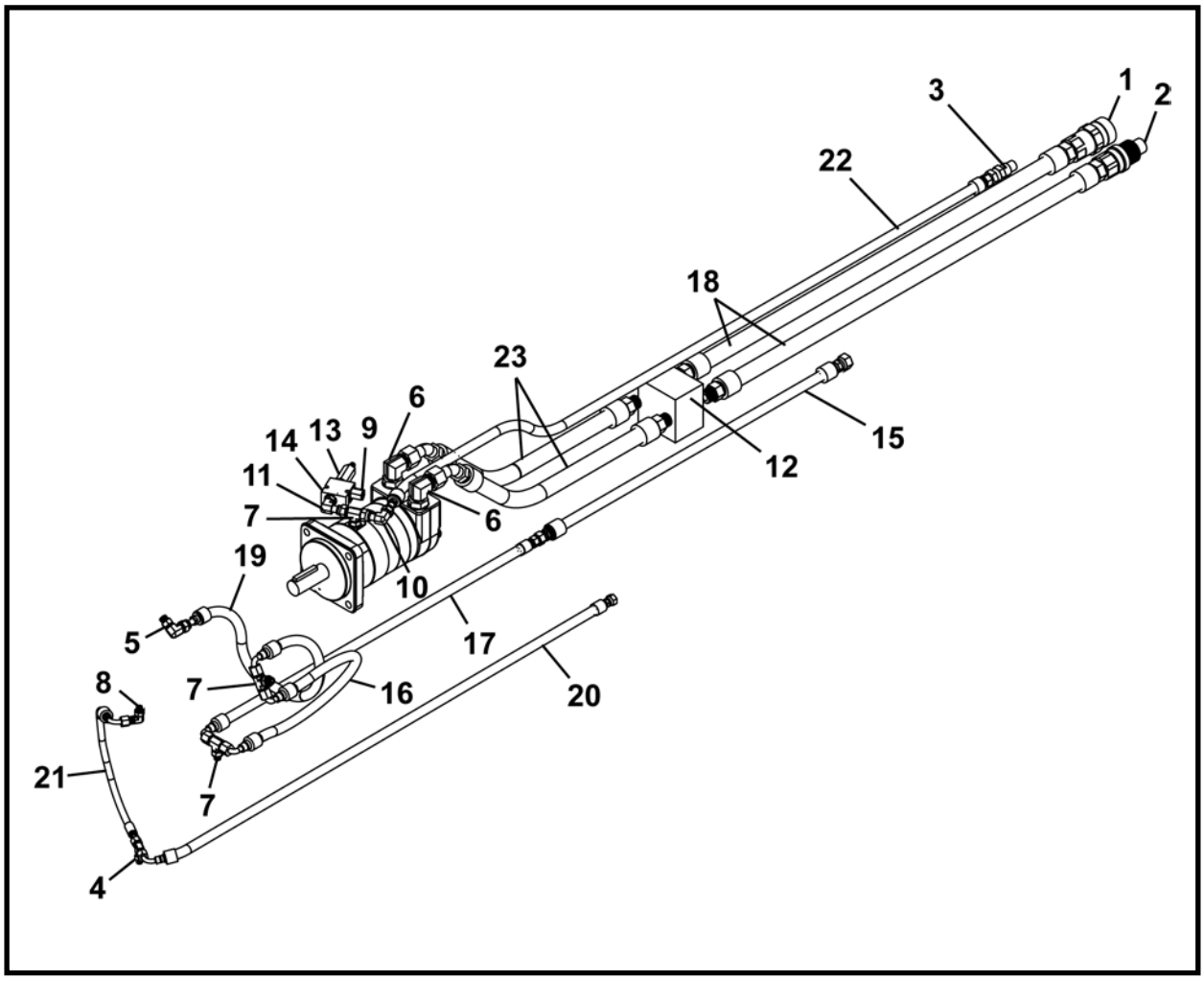
P150Q POWER PACK

ITEM	QTY	PART NO.	DESCRIPTION
107	10	P0003-04-000	NUT, 1/4
108	1	A44979P	MOUNT, Transfer Pump
109**	1	P0300-382	FITTING, 08MFOR-08MP
110**	1	P0300-048	FITTING, 08MP-08MP
111**	1	P0302-185	VALVE, Ball 1/2
112**	1	P0300-029	FITTING, 08MP-08FP45
113	1	P0301-138	GAUGE, Sight
114	1	A10370A-037	HOSE ASSEMBLY 1
115	4	P0001-07-010	BOLT, 7/16 UNC x 2.5
116**	1	P0303-278	FITTING, CODE 61 ELBOW TO SAE THREAD
117	1	P0303-250	PUMP, Gear
118**	1	P0201-227-053	RETURN LINE 1-1/4’
119	2	P0220-223	FITTING, 20 INSERT-90-20MB
120*	1	A10343A-048	HOSE ASSEMBLY 1
121	2	P0201-205	CLAMP, T
122	1	A42525A	ASSEMBLY, Pump Support
123	1	P0309-188	BREATHER, Reservoir
124	9	P0017-10-324	SCREW, Machine 10-32 x .5
125*	1	A10461A-040	HOSE ASSEMBLY 1/2
126	6	P0001-04-008	BOLT, 1/4 UNC x 2
127	4	P0003-08-000	NUT, 1/2
128	4	P0040-008	WASHER, Hardened Flat 1/2
129	4	P0025-002A	STUD, 1/2 UNC x 1.75
130	240 QT	P0126-001	OIL, Hydraulic
131	-	A44989A	KIT, Hose P150Q
132	-	A44990A	KIT, Fitting P150Q
133	1	P0417-003	CAP, Pipe 1/2
134**	2	P0300-028	FITTING, 16MP-PLUG-SOLID BACK
135**	1	P0300-208	FITTING, 10MB-12FPX
136	2	P0093-005	WASHER, Neoprene
137**	1	P0300-271	FITTING, 04MJ-04FJX90
138**	1	P0300-615	FITTING, 16FFORX-16MB90
139	180 LI	P0074-001	RUBBER ROPE, Black 7/16
140	18	P0074-002	HOOK, Rubber Rope

LI - Linear Inch
QT - Quart

* Items included in item 131, A44989A, Hose Kit
** Items included in item 132, A44990A, Fitting Kit

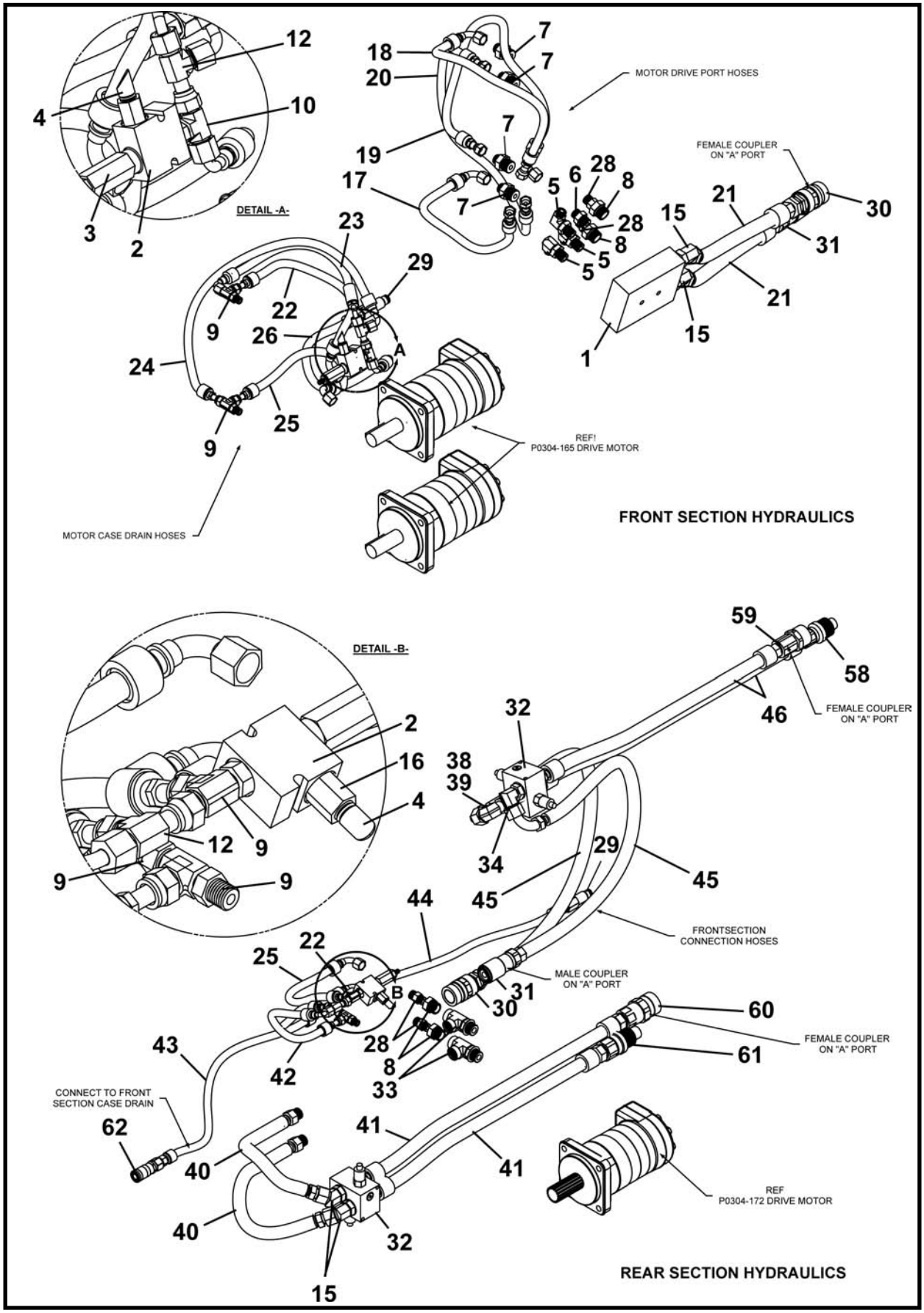
PRH HYDRAULIC ASSEMBLY, A45306A
POWERED REAMING HEAD



0	1	A45306A	PRH HYDRAULIC ASSEMBLY
1	1	P0100-067	COUPLER, Female
2	1	P0100-068	COUPLER, Male
3	1	P0100-089	COUPLER, Male End Quick
4	1	P0300-313	FITTING, 04MFOR-04MFOR-04FFORX
5	1	P0300-355	FITTING, 06MFOR-06MB90
6	2	P0300-372	FITTING, 12MFOR-12MB90
7	3	P0300-376	FITTING, 06MFOR-06MFOR-06MB
8	1	P0300-427	FITTING, 04MFOR-04MB90
9	1	P0300-572	FITTING, 06MB-04FP
10	1	P0300-603	FITTING, 06MFOR-06FFORX90
11	1	P0300-618	FITTING, 06FFORX-06MB90
12	1	P0302-496	RELIEF, Dual Crossover 5,000 psi
13	1	P0302-513	CARTRIDGE
14	1	P0302-514	BODY
15	1	A09919A-034	HOSE ASSEMBLY 1/2 x 34
16	1	A09939A-024	HOSE ASSEMBLY 3/8 x 24
17	1	A09940A-036	HOSE ASSEMBLY 3/8 x 36
18	2	A09941A-040	HOSE ASSEMBLY 3/4” x 40
19	1	A10079A-024	HOSE ASSEMBLY 3/8 x 24
20	1	A10318A-048	HOSE ASSEMBLY 1/4 x 48
21	1	A10325A-018	HOSE ASSEMBLY 1/4 x 18
22	1	A10418A-064	HOSE ASSEMBLY 3/8 x 64
23	2	A10478A-023	HOSE ASSEMBLY 3/4 x 23

PCH 20 HYDRAULIC ASSEMBLY, A43162A

PCH 20



PCH 20 HYDRAULIC ASSEMBLY, A43162A

PCH 20

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43162A	HYDRAULIC ASSEMBLY, PCH 20
1	1	A43181P	MANIFOLD, Drive
2	2	P0302-514	BODY, Port 3/8
3	2	P0302-513	CARTRIDGE
4	2	P0403-003	NIPPLE
5	3	P0300-302	FITTING, 08MFOR-10MB90
6	1	P0300-300	FITTING, 08MFOR-10MB
7	4	P0300-375	FITTING, 08MFOR-12MB
8	4	P0300-565	FITTING, 12MORB-08FORB
9	3	P0300-386	FITTING, 06MFOR-06MB-06MFOR
10	1	P0300-376	FITTING, 06MFOR-06MFOR-06MB
11	3	P0300-310	FITTING, 04MFOR-06MB
12	2	P0300-613	FITTING, 06MFOR-06FFORX-06MFOR
13	1	P0300-313	FITTING, 04MFOR-04MFOR-04FFORX
14	1	P0300-312	FITTING, 04MFOR-04FFORX-04MFOR
15	4	P0300-359	FITTING, 12MFOR-12MB45
16	2	P0300-572	FITTING, 06MB-04FP
17	1	A10474A-018	HOSE ASSEMBLY 3/8 x 18
18	1	A10474A-022	HOSE ASSEMBLY 3/8 x 22
19	1	A10474A-037	HOSE ASSEMBLY 3/8 x 37
20	1	A10308A-031	HOSE ASSEMBLY 3/8 x 31
21	2	A10452A-016	HOSE ASSEMBLY 3/4 x 16
22	2	A10321A-022	HOSE ASSEMBLY 3/8 x 22
23	1	A09948A-022	HOSE ASSEMBLY 3/8 x 22
24	1	A10079A-035	HOSE ASSEMBLY 3/8 x 35
25	2	A10312A-020	HOSE ASSEMBLY 3/8 x 20
26	1	A10049A-030	HOSE ASSEMBLY 3/8 x 30
27	1	A10312A-023	HOSE ASSEMBLY 3/8 x 23
28	2	P0302-498	VALVE, Check
29	2	P0100-089	COUPLER, Male
30	3	P0100-036	COUPLER, Female
31	3	P0100-037	COUPLER, Male
32	2	P0302-496	RELIEF, Dual Crossover
33	2	P0300-536	FITTING, 12MB-12FB-12FB
34	1	P0300-372	FITTING, 12MFOR-12MB90
35	1	P0300-602	FITTING, 06MFOR-06MFOR-06FFORX
36	2	P0300-042	FITTING, 06MJ-06MB90
37	2	P0300-677	FITTING, 12MB-6FB
38	1	P0300-329	FITTING, 12MFOR-12MB
39	1	P0300-424	FITTING, 12MFOR-12FFORX90
40	2	A10452A-023	HOSE ASSEMBLY 3/4 x 23
41	2	A10486A-050	HOSE ASSEMBLY 3/4 x 50
42	1	A10079A-018	HOSE ASSEMBLY 3/8 x 18
43	1	A10418A-030	HOSE ASSEMBLY 3/8 x 30
44	1	A10418A-039	HOSE ASSEMBLY 3/8 x 39
45	2	A10453A-057	HOSE ASSEMBLY 3/4 x 57
46	2	A10439A-036	HOSE ASSEMBLY 3/4 x 36
47	1	A09947A-016	HOSE ASSEMBLY 1/2 x 16
48	2	A10474A-021	HOSE ASSEMBLY 3/8 x 21
49	1	P0300-629	FITTING, 08MFOR-08MFOR-08MFOR-08MFOR
50	2	P0300-316	FITTING, 08MFOR-08MB90
51	1	P0300-332	ORING, 08OR
52	1	P0300-628	FITTING, 08FFORX-08MJ

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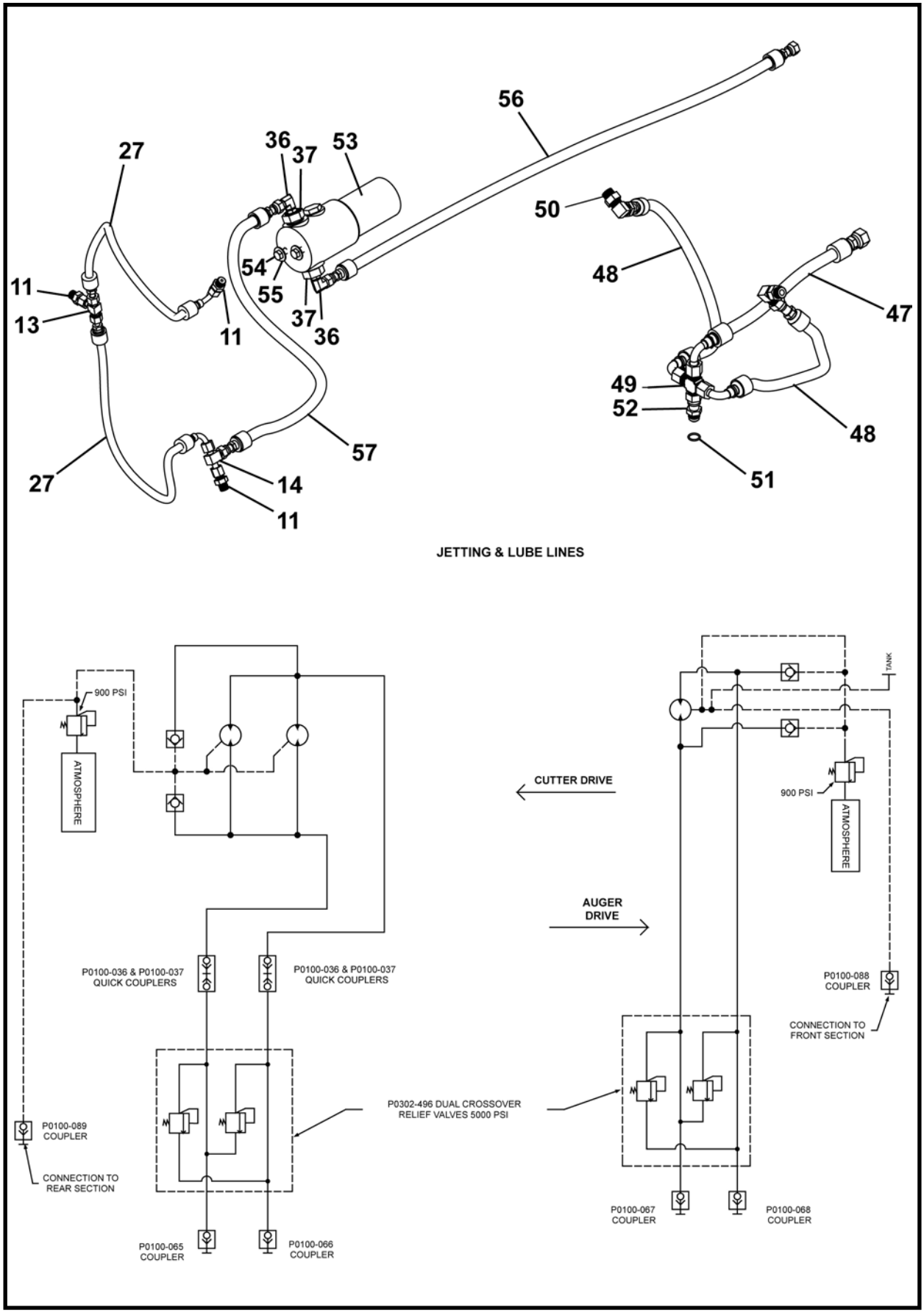
PCH 20 HYDRAULIC ASSEMBLY, A43162A

PCH 20



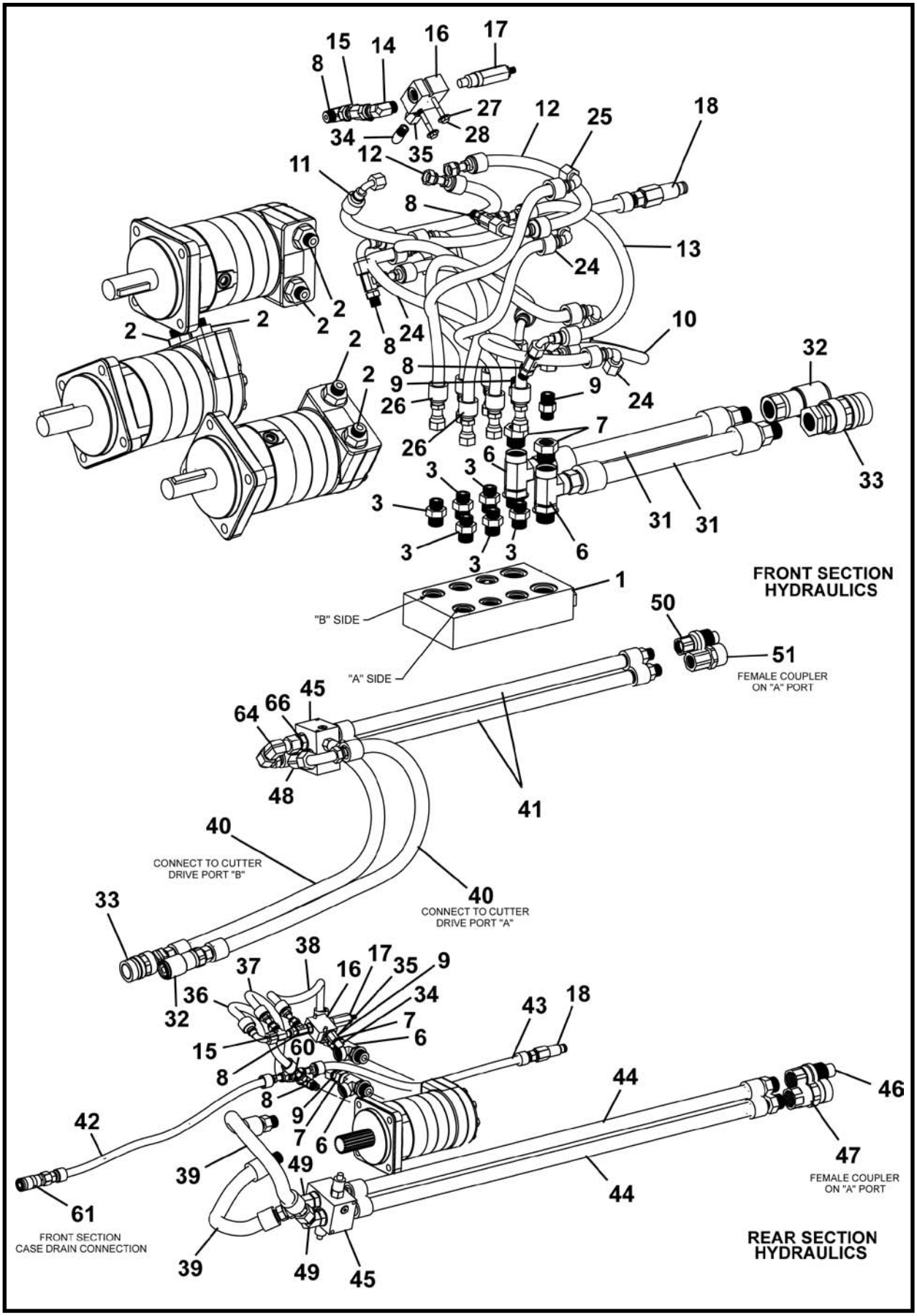
PCH 20 HYDRAULIC ASSEMBLY, A43162A

PCH 20

ITEM	QTY	PART NO.	DESCRIPTION
53	1	P0309-187	FILTER ASSEMBLY
54	2	P0001-06-003	BOLT, 3/8 UNC x 3/4
55	2	P0040-006	WASHER, Hardened Flat 3/8
56	1	A10414A-039	HOSE ASSEMBLY 3/8 x 39
57	1	A10311A-020	ASSEBMLY, Hose 3/8 x 20
58	2	P0100-066	COUPLER, Male
59	2	P0100-065	COUPLER, Female
60	1	P0100-067	COUPLER, Female
61	1	P0100-068	COUPLER, Male
62	1	P0100-088	COUPLER, Female
63	2	A10439A-096	HOSE ASSEMBLY 3/4 x 96
64	2	A10317A-012	HOSE ASSEMBLY 1/4 x 12
65	1	P0300-250	FITTING, 04MJ-04MB
66	2	P0300-258	FITTING, 04MJ-PLUG

PCH 22.5 HYDRAULIC ASSEMBLY, A42902A

PCH 22.5



PCH 22.5 HYDRAULIC ASSEMBLY, A42902A

PCH 22.5

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42902A	HYDRAULIC ASSEMBLY, PCH 22.5
1	1	A42895A	ASSEMBLY, Main Drive Manifold
2	6	P0300-375	FITTING, 08MFOR-12MB
3	6	P0300-300	FITTING, 08MFOR-10MB
4	1	P0309-187	ASSEMBLY, Water Filter (Includes item 4a)
4a	1	P0309-187A	ELEMENT
5	2	P0300-677	FITTING, 12MB-6FB
6	4	P0300-536	FITTING, 12MB-12FB-12FB
7	4	P0300-565	FITTING, 12MORB-08FORB
8	6	P0300-386	FITTING, 06MFOR-06MB-06MFOR
9	2	P0302-498	VALVE, Check
10	2	A10079A-015	HOSE ASSEMBLY 3/8 x 15
11	1	A10049A-044	HOSE ASSEMBLY 3/8 x 44
12	2	A10079A-021	HOSE ASSEMBLY 3/8 x 21
13	1	A10079A-016	HOSE ASSEMBLY 3/8 x 16
14	1	P0300-603	FITTING, 06MFOR-06FFORX90
15	2	P0300-613	FITTING, 06MFOR-06FFORX-06MFOR
16	2	P0302-514	BODY, Port 3/8
17	2	P0302-513	CARTRIDGE
18	2	P0100-089	COUPLER, Male End Quick
20	1	P0300-313	FITTING, 04MFOR-04MFOR-04FFORX
21	1	P0300-312	FITTING, 04MFOR-04FFORX-04MFOR
22	3	P0300-310	FITTING, 04MFOR-06MB
23	1	A10315A-036	HOSE ASSEMBLY 1/4 x 36
24	3	A10474A-018	HOSE ASSEMBLY 3/8 x 18
25	1	A10474A-026	HOSE ASSEMBLY 3/8 x 26
26	2	A10474A-028	HOSE ASSEMBLY 3/8 x 28
27	4	P0040-004	WASHER, Hardened Flat 1/4
28	4	P0001-04-006	BOLT, 1/4 UNC x .5
29	2	P0040-006	WASHER, Hardened Flat 3/8
30	2	P0001-06-003	BOLT, 3/8 UNC x .75
31	2	A10439A-016	HOSE ASSEMBLY 3/4 x 16
32	3	P0100-037	COUPLER, Male Quick 3/4
33	3	P0100-036	COUPLER, Female Quick 3/4
34	2	P0403-003	NIPPLE
35	2	P0300-572	FITTING, 06MB-04FP
36	1	A10079A-019	HOSE ASSEMBLY 3/8 x 19
37	1	A10312A-024	HOSE ASSEMBLY 3/8 x 24
38	1	A10312A-021	HOSE ASSEMBLY 3/8 x 21
39	2	A10452A-023	HOSE ASSEMBLY 3/4 x 23
40	2	A10453A-060	HOSE ASSEMBLY 3/4 x 60
41	2	A10439A-035	HOSE ASSEMBLY 3/4 x 35
42	1	A10418A-031	HOSE ASSEMBLY 3/8 x 31
43	1	A10418A-039	HOSE ASSEMBLY 3/8 x 39
44	2	A10048A-048	HOSE ASSEMBLY 3/4 x 048
45	2	P0302-496	RELIEF, Dual Crossover
46	1	P0100-068	COUPLER, Male
47	1	P0100-067	COUPLER, Female
48	12	P0300-372	FITTING, 12MFOR-12MB90
49	2	P0300-359	FITTING, 12MFOR-12MB45
50	2	P0100-066	COUPLER, Male
51	2	P0100-065	COUPLER, Female
52	2	A10317A-012	HOSE ASSEMBLY 1/4 x 12

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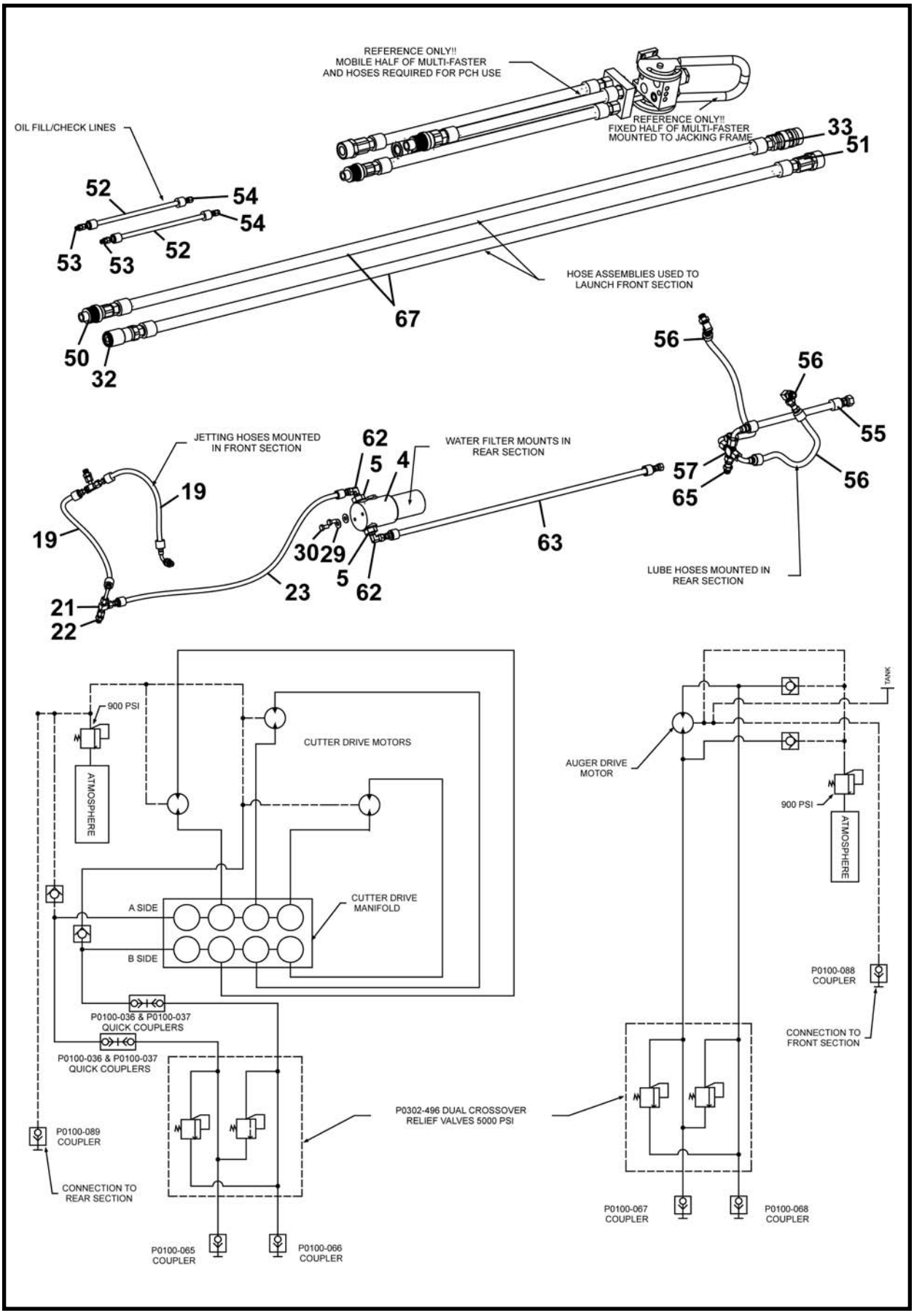
PCH 22.5 HYDRAULIC ASSEMBLY, A42902A

PCH 22.5



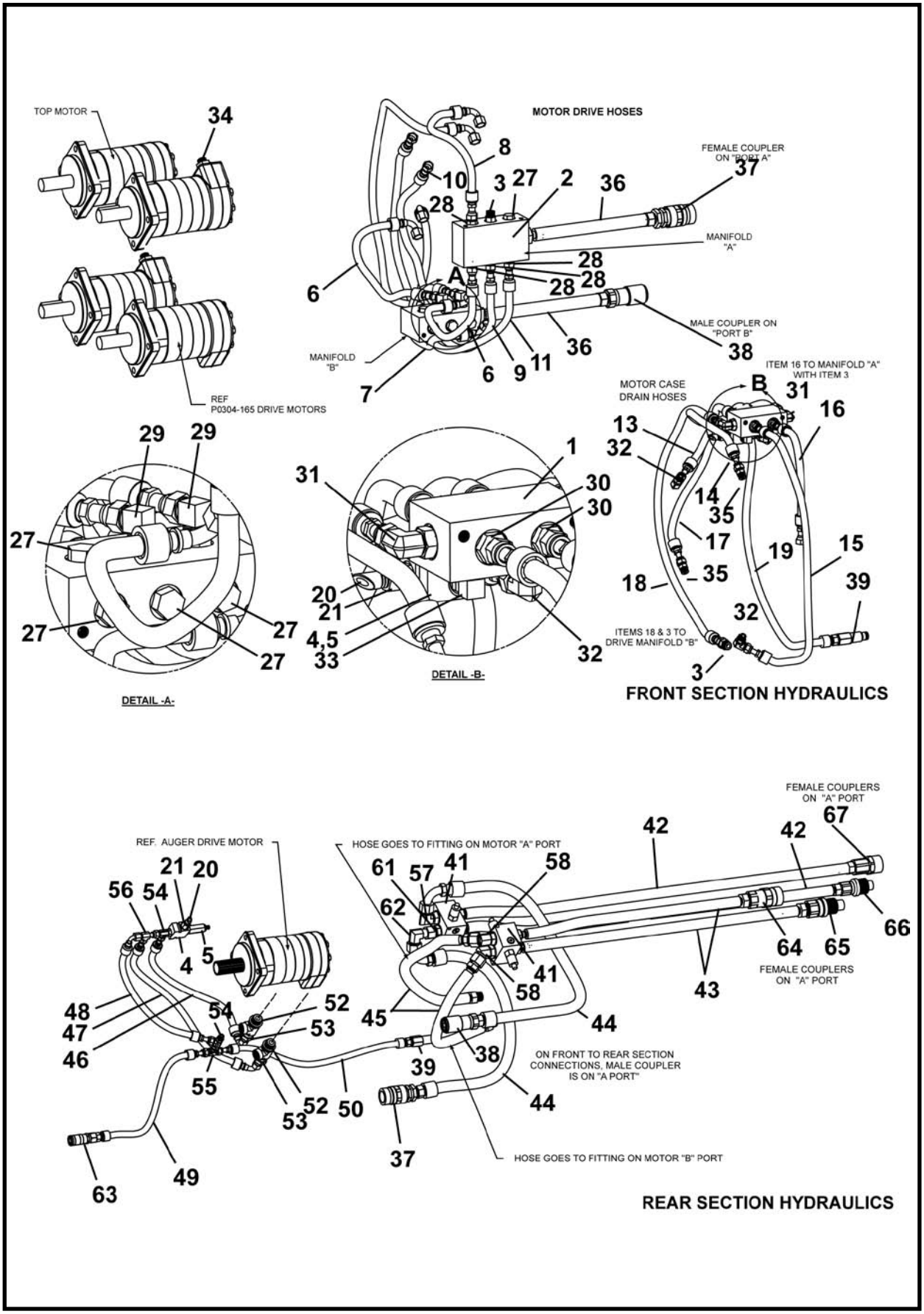
PCH 22.5 HYDRAULIC ASSEMBLY, A42902A

PCH 22.5

ITEM	QTY	PART NO.	DESCRIPTION
53	2	P0300-250	FITTING, 04MJ-04MB
54	2	P0300-258	FITTING, 04MJ-PLUG
55	1	A09947A-016	HOSE ASSEMBLY 1/2 x 16
56	2	A10474A-029	HOSE ASSEMBLY 3/8 x 29
57	1	P0300-629	FITTING, 08MFOR-08MFOR-08MFOR-08MFOR
58	2	P0300-316	FITTING, 08MFOR-08MB90
59	1	P0300-332	ORING, 08OR
60	1	P0300-602	FITTING, 06MFOR-06MFOR-06FFORX
61	1	P0100-088	COUPLER, Female Quick
62	2	P0300-042	FITTING, 06MJ-06MB90
63	1	A10414A-039	HOSE ASSEMBLY 3/8 x 39
64	1	P0300-424	FITTING, 12MFOR-12FFORX90
65	1	P0300-628	FITTING, 08FFORX-08MJ
66	1	P0300-329	FITTING, 12MFOR-12MB
67	2	A10439A-096	HOSE ASSEMBLY 3/4 x 96

PCH 28.5 HYDRAULIC ASSEMBLY, A43654A

PCH 28.5



PCH 28.5 HYDRAULIC ASSEMBLY, A43654A
PCH 28.5

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43654A	HYDRAULIC ASSEMBLY, PCH 28.5
1	1	A43766P	MANIFOLD, Case Drain
2	2	A43689P	MANIFOLD, Main Drive
3	4	P0302-498	VALVE, Check
4	2	P0302-514	BODY, Port 3/8
5	2	P0302-513	CARTRIDGE
6	2	A10474A-020	HOSE ASSEMBLY 3/8 x 20
7	1	A10474A-022	HOSE ASSEMBLY 3/8 x 22
8	1	A10474A-018	HOSE ASSEMBLY 3/8 x 18
9	1	A10474A-039	HOSE ASSEMBLY 3/8 x 39
10	1	A10308A-022	HOSE ASSEMBLY 3/8 x 22
11	1	A10308A-045	HOSE ASSEMBLY 3/8 x 45
12	1	A10474A-044	HOSE ASSEMBLY 3/8 x 44
13	1	A10313A-016	HOSE ASSEMBLY 3/8 x 16
14	1	A10313A-025	HOSE ASSEMBLY 3/8 x 25
15	1	A10313A-037	HOSE ASSEMBLY 3/8 x 37
16	1	A10388A-015	HOSE ASSEMBLY 3/8 x 15
17	1	A10313A-023	HOSE ASSEMBLY 3/8 x 23
18	1	A10388A-037	HOSE ASSEMBLY 3/8 x 37
19	1	A10418A-044	HOSE ASSEMBLY 3/8 x 44
20	2	P0403-003	NIPPLE
21	2	P0300-572	FITTING, 06MB-04FP
22	1	A10308A-028	HOSE ASSEMBLY 3/8 x 28
23	1	A10474A-026	HOSE ASSEMBLY 3/8 x 26
24	1	A10301A-048	HOSE ASSEMBLY 3/8 x 48
25	1	P0300-428	FITTING, 08MFOR-08MFOR-08FFORX
26	1	P0300-318	FITTING, 08MFOR-08FFORX-08MFOR
27	8	P0300-193	FITTING, 08MB-PLUG
28	6	P0300-305	FITTING, 08MFOR-08MB
29	4	P0300-316	FITTING, 08MFOR-08MB90
30	4	P0300-430	FITTING, 06MFOR-08MB
31	2	P0300-717	FITTING, 06MFFOR-08MB90
32	3	P0300-355	FITTING, 06MFOR-06MB90
33	1	P0300-338	FITTING, 06MBX-06MBX90
34	8	P0300-375	FITTING, 08MFOR-12MB
35	2	P0300-356	FITTING, 06MFOR-06MB
36	2	A10486A-016	HOSE ASSEMBLY 3/4 x 16
37	3	P0100-036	COUPLER, Female
38	3	P0100-037	COUPLER, Male
39	2	P0100-089	COUPLER, Male
40	1	P0309-187	FILTER ASSEMBLY
41	2	P0302-496	RELIEF, Dual Crossover
42	2	A10439A-048	HOSE ASSEMBLY 3/4 x 48
43	2	A10486A-035	HOSE ASSEMBLY 3/4 x 35
44	2	A10453A-060	HOSE ASSEMBLY 3/4 x 60
45	2	A10452A-028	HOSE ASSEMBLY 3/4 x 28
46	1	A10312A-021	HOSE ASSEMBLY 3/8 x 21
47	1	A10312A-027	HOSE ASSEMBLY 3/8 x 27
48	1	A10079A-021	HOSE ASSEMBLY 3/8 x 21
49	1	A10418A-031	HOSE ASSEMBLY 3/8 x 31
50	1	A10418A-039	HOSE ASSEMBLY 3/8 x 39
51	1	A10414A-039	HOSE ASSEMBLY 3/8 x 39
52	2	P0300-536	FITTING, 12MB-12FB-12FB
53	2	P0300-565	FITTING, 12MORB-08FORB

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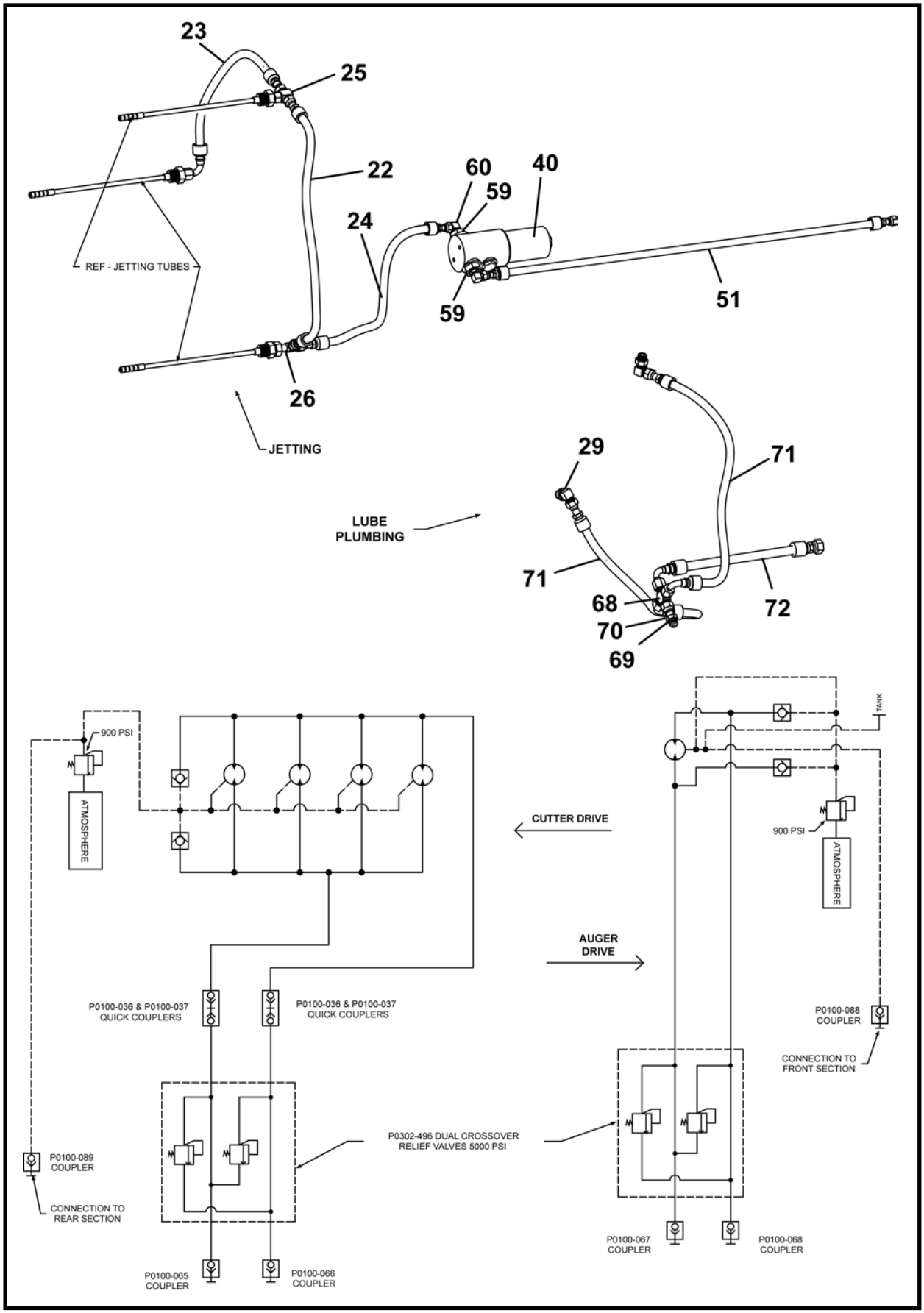
PCH 28.5 HYDRAULIC ASSEMBLY, A43654A

PCH 28.5



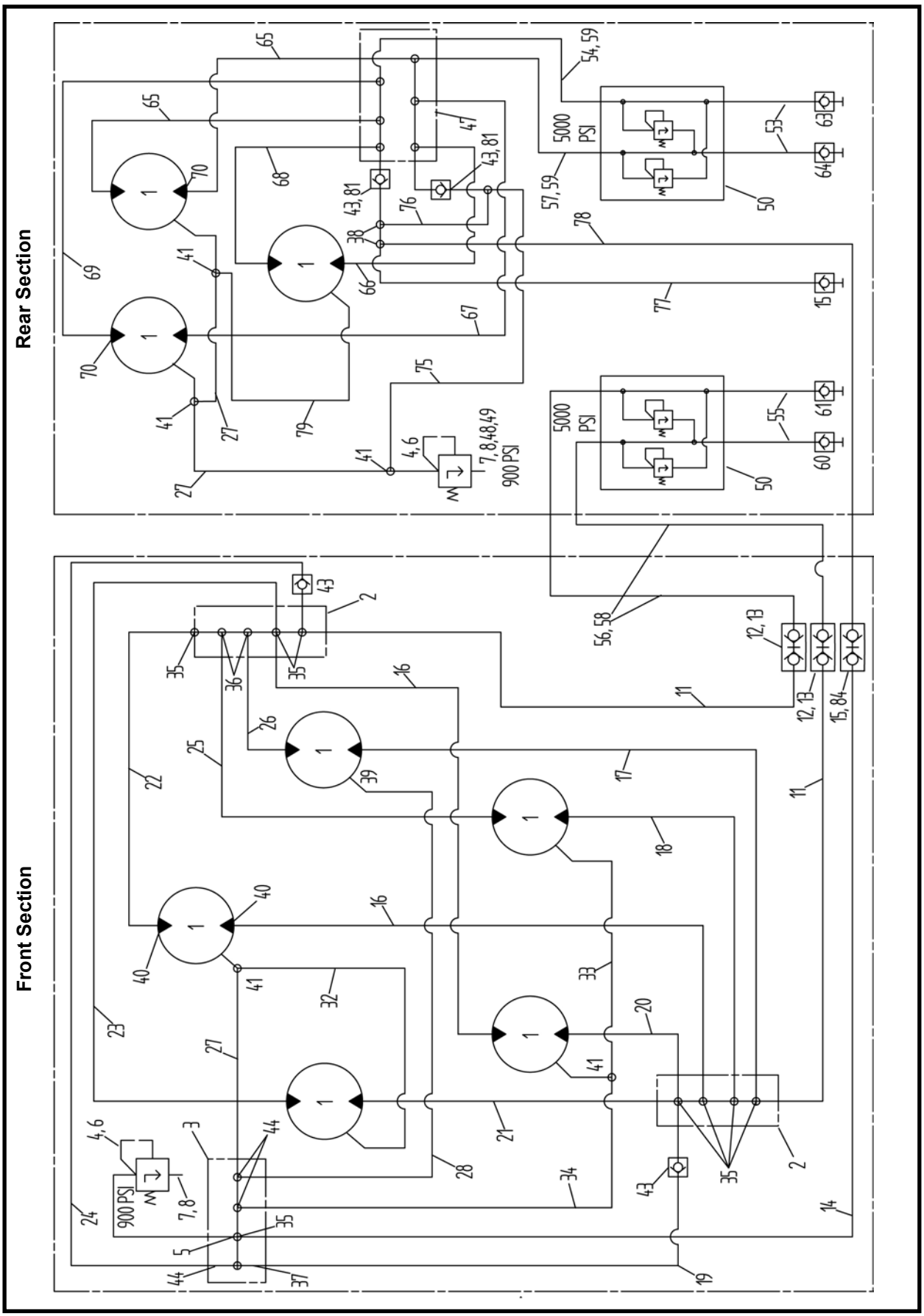
PCH 28.5 HYDRAULIC ASSEMBLY, A43654A

PCH 28.5

ITEM	QTY	PART NO.	DESCRIPTION
54	2	P0300-386	FITTING, 06MFOR-06MB-06MFOR
55	1	P0300-602	FITTING, 06MFOR-06MFOR-06FFORX
56	1	P0300-613	FITTING, 06MFOR-06FFORX-06MFOR
57	1	P0300-372	FITTING, 12MFOR-12MB90
58	2	P0300-359	FITTING, 12MFOR-12MB45
59	2	P0300-677	FITTING, 12MB-06FB
60	2	P0300-042	FITTING, 06MJ-06MB90
61	1	P0300-329	FITTING, 12MFOR-12MB
62	1	P0300-424	FITTING, 12MFOR-12FFORX90
63	1	P0100-088	COUPLER, Female
64	1	P0100-067	COUPLER, Female
65	1	P0100-068	COUPLER, Male
66	2	P0100-066	COUPLER, Male
67	2	P0100-065	COUPLER, Female
68	1	P0300-629	FITTING, 08MFOR-08MFOR-08MFOR-08MFOR
69	1	P0300-332	ORING, 08OR
70	1	P0300-628	FITTING, 08FFORX-08MJ
71	2	A10474A-028	HOSE ASSEMBLY 3/8 x 28
72	1	A09947A-016	HOSE ASSEMBLY 1/2 x 16
73	2	A10317A-012	HOSE ASSEMBLY 1/4 x 12
74	2	P0300-250	FITTING, 04MJ-04MB
75	2	P0300-258	FITTING, 04MJ-PLUG
76	2	A10439A-096	HOSE ASSEMBLY 3/4 x 96

PCH 36 HYDRAULIC ASSEMBLY, A44384A

PCH 36

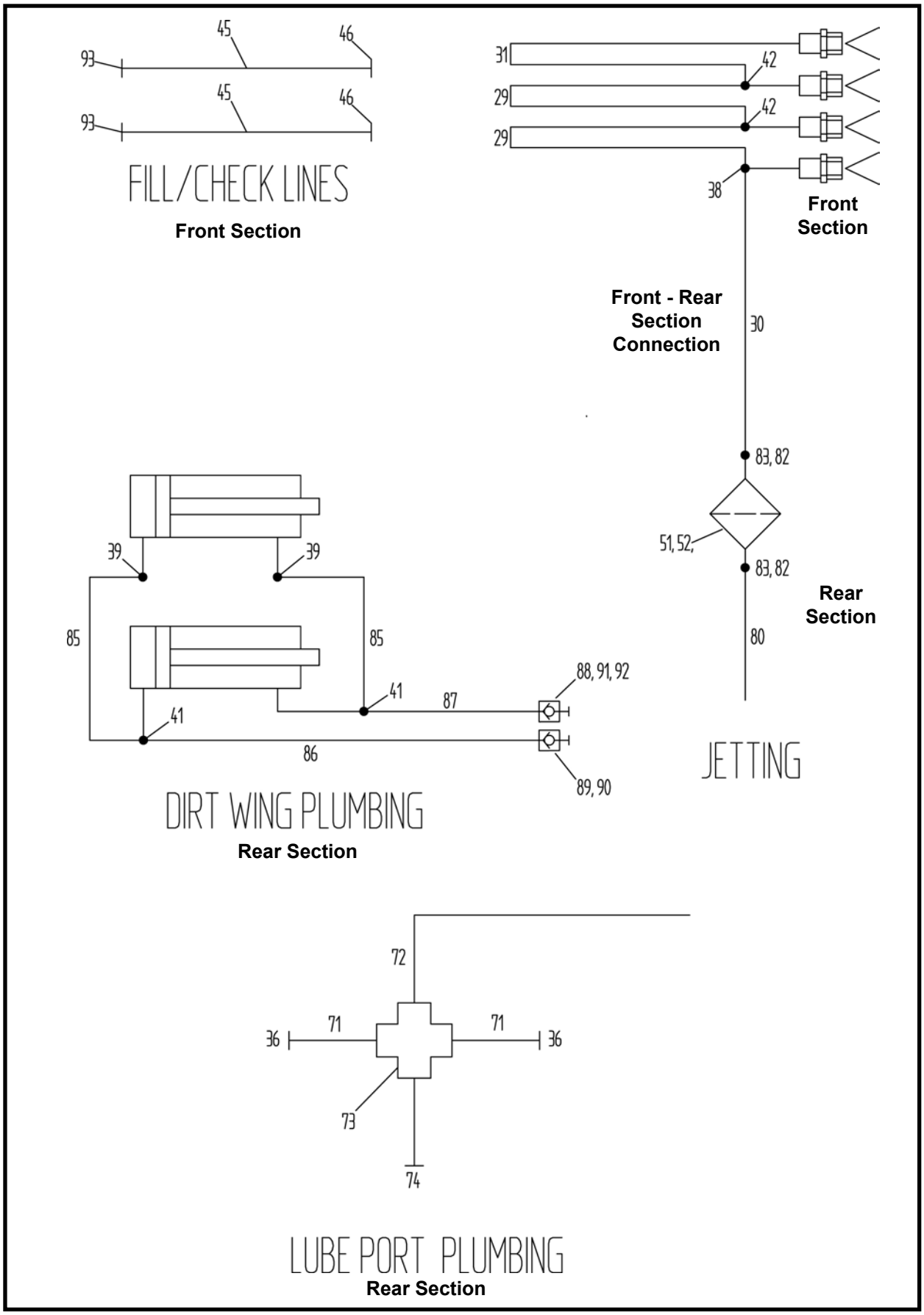


PCH 36 HYDRAULIC ASSEMBLY, A44384A

PCH 36

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44384A	HYDRAULIC ASSEMBLY, PCH 36
1	8	P0304-165	MOTOR, Hydraulic
2	2	A43689P	MANIFOLD, Main Drive PCH
3	1	A43766P	MANIFOLD, Case Drain
4	2	P0302-514	BODY, Port 3/8
5	1	P0300-338	FITTING, 06MBX-06MBX90
6	2	P0302-513	CARTRIDGE
7	2	P0300-572	FITTING, 06MB-04FP
8	2	P0403-003	NIPPLE, 1/4 x 2
9	6	P0300-193	FITTING, 08MB-PLUG
10	1	P0300-176	FITTING, 06MB-HHP
11	2	A10483A-017	HOSE ASSEMBLY 1 x 17
12	2	P0100-034	COUPLER, Female Quick 1
13	2	P0100-035	COUPLER, Male 1
14	1	A10424A-060	HOSE ASSEMBLY, 1/2 x 60
15	2	P0100-089	COUPLER, Male
16	2	A10308A-064	HOSE ASSEMBLY 3/8 x 64
17	1	A10474A-062	HOSE ASSEMBLY 3/8 x 62
18	1	A10474A-040	HOSE ASSEMBLY 3/8 x 40
19	1	A10388A-020	HOSE ASSEMBLY 3/8 x 20
20	1	A10474A-025	HOSE ASSEMBLY 3/8 x 25
21	1	A10474A-021	HOSE ASSEMBLY 3/8 x 21
22	1	A10308A-022	HOSE ASSEMBLY 3/8 x 22
23	1	A10308A-045	HOSE ASSEMBLY 3/8 x 45
24	1	A10388A-060	HOSE ASSEMBLY 3/8 x 60
25	1	A10474A-019	HOSE ASSEMBLY 3/8 x 19
26	1	A10474A-022	HOSE ASSEMBLY 3/8 x 22
27	3	A10079A-018	HOSE ASSEMBLY 3/8 x 18
28	1	A10079A-022	HOSE ASSEMBLY 3/8 x 22
29	1	A10308A-027	HOSE ASSEMBLY 3/8 x 27
30	1	A09926A-050	HOSE ASSEMBLY 3/8 x 50
31	1	A10309A-027	HOSE ASSEMBLY 3/8 x 27
32	1	A10082A-021	HOSE ASSEMBLY 3/8 x 21
33	1	A10082A-042	HOSE ASSEMBLY 3/8 x 42
34	1	A10313A-023	HOSE ASSEMBLY 3/8 x 23
35	9	P0300-305	FITTING, 08MFOR-08MB
36	4	P0300-316	FITTING, 08MFOR-08MB90
37	1	P0300-717	FITTING, 06MFFOR-08MB90
38	4	P0300-318	FITTING, 08MFOR-08FFORX-08MFOR
39	5	P0300-356	FITTING, 06MFOR-06MB
40	10	P0300-375	FITTING, 08MFOR-12MB
41	7	P0300-386	FITTING, 06MFOR-06MB-06MFOR
42	2	P0300-428	FITTING, 08MFOR-08MFOR-08FFORX
43	4	P0302-498	VALVE, Check
44	4	P0300-430	FITTING, 06MFOR-08MB
45	2	A10317A-015	HOSE ASSEMBLY 1/4 x 15
46	2	P0300-253	FITTING, 04MJ-04MJ
47	1	A44108P	MANIFOLD, Auger Drive
48	2	P0040-004	WASHER, Hardened Flat 1/4
49	2	P0001-04-006	BOLT, 1/4 UNC x 1.5
50	2	P0302-517	RELIEF, Crossover
51	1	A44840P	BRACKET, Water Filter
52	1	P0309-187	ASSEMBLY, Filter

(Continued on next page)


45
46
93
45
46
93
FILL/CHECK LINES
Front Section
31
42
29
42
29
38
Front Section
Front - Rear Section Connection
30
83, 82
51, 52,
83, 82
Rear Section
80
JETTING
39
39
85
85
41
87
88, 91, 92
41
86
89, 90
DIRT WING PLUMBING
Rear Section
72
71
71
36
36
73
74
LUBE PORT PLUMBING
Rear Section

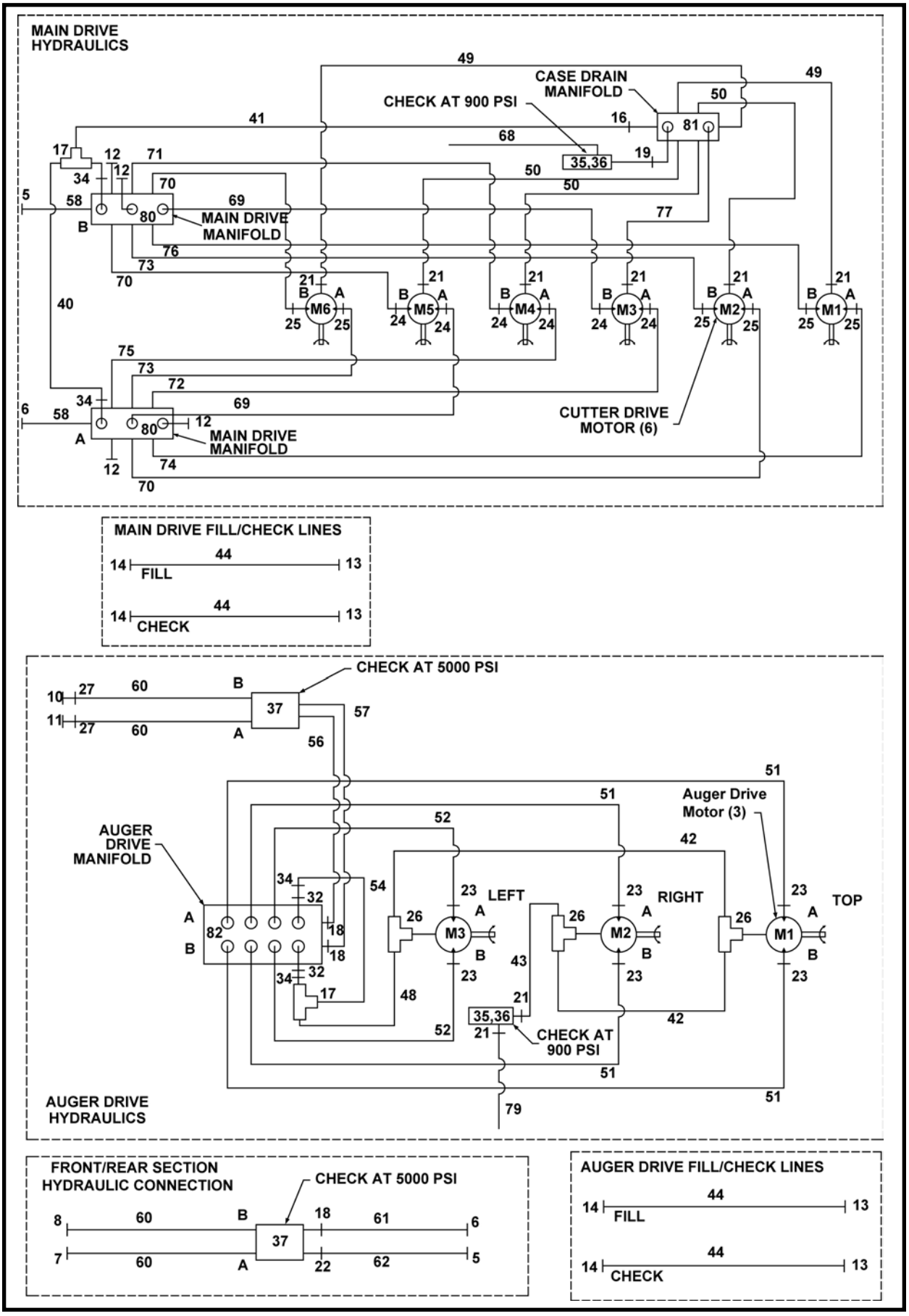
PCH 36 HYDRAULIC ASSEMBLY, A44384A

PCH 36

ITEM	QTY	PART NO.	DESCRIPTION
53	2	A10483A-049	HOSE ASSEMBLY 1 x 49
54	1	A10482A-039	HOSE ASSEMBLY 1 x 39
55	2	A10482A-036	HOSE ASSEMBLY 1 x 36
56	2	A10444A-068	HOSE ASSEMBLY 1 x 68
57	1	A10482A-029	HOSE ASSEMBLY 1 x 29
58	1	P0300-371	FITTING, 16MFOR-16MB90
59	3	P0300-319	FITTING, 16MFOR-16MB
60	1	P0100-067	COUPLER, Female
61	1	P0100-068	COUPLER, Male
62	1	P0300-668	FITTING, 16MFFOR-16FFORX90
63	1	P0100-073	BODY
64	1	P0100-074	BODY
65	2	A10452A-034	HOSE ASSEMBLY 3/4 x 34
66	1	A10452A-20	HOSE ASSEMBLY 3/4 x 20
67	1	A10452A-023	HOSE ASSEMBLY 3/4 x 23
68	1	A10452A-024	HOSE ASSEMBLY 3/4 x 24
69	1	A10452A-029	HOSE ASSEMBLY 3/4 x 29
70	6	P0300-372	FITTING, 12MFOR-12MB90
71	2	A10491A-036	HOSE ASSEMBLY 1/2 x 36
72	1	A09947A-020	HOSE ASSEMBLY 1/2 x 20
73	1	P0300-629	FITTING, 08MFOR-08MFOR-08MFOR-08MFOR TE
74	1	P0300-628	FITTING, 08FFORX-08MJ
75	1	A10388A-025	HOSE ASSEMBLY 3/8 x 25
76	1	A10308A-016	HOSE ASSEMBLY 3/8 x 16
77	1	A10474A-054	HOSE ASSEMBLY 3/8 x 54
78	1	A10496A-040	HOSE ASSEMBLY 3/8 x 40
79	1	A10497A-018	HOSE ASSEMBLY 3/8 x 18
80	1	A10045A-052	HOSE ASSEMBLY 3/8 x 52
81	2	P0300-565	FITTING, 12MORB-08FORB
82	2	P0300-042	FITTING, 06MJ-06MB90
83	2	P0300-677	FITTING, 12MB-6FB
84	1	P0100-088	COUPLER, Female
85	2	A10327A-023	HOSE ASSEMBLY 1/4 x 23
86	1	A10498A-138	HOSE ASSEMBLY 1/4 x 138
87	2	A10498A-147	HOSE ASSEMBLY 1/4 x 147
88	1	P0100-010A	COUPLER
89	1	P0100-010D	CAP, Dust
90	1	P0100-010B	NIPPLE
91	1	P0100-010E	PLUG, Dust
92	1	P0400-001	COUPLING
93	2	P0300-258	FITTING, 04MJ-PLUG

PCH 44 HYDRAULIC ASSEMBLY, A43878A

PCH 44



PCH 44 HYDRAULIC ASSEMBLY, A43878A

PCH 44

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43878A	HYDRAULIC ASSEMBLY, PCH 44
1	1	P0100-010A	COUPLER, Male 1/4
2	1	P0100-010B	NIPPLE, Female 1/4
3	1	P0100-010D	CAP, Dust
4	1	P0100-010E	PLUG, Dust
5	3	P0100-034	COUPLER, Female Quick 1
6	3	P0100-035	COUPLER, Male 1
7	2	P0100-067	COUPLER, Female
8	2	P0100-068	COUPLER, Male
9	-	-	MULTIFASTER (Refer to 4812A Hydraulic Assembly)
10	2	P0100-073	BODY
11	2	P0100-074	BODY
12	4	P0300-193	FITTING, 08MB-PLUG
13	4	P0300-250	FITTING, 04MJ-04MB
14	4	P0300-258	FITTING, 04MJ-PLUG
15	1	P0300-303	FITTING, 08MFOR-08MFOR-BKHD-08MFOR
16	4	P0300-316	FITTING, 08MFOR-08MB90
17	3	P0300-318	FITTING, 08MFOR-08FFORX-08MFOR
18	3	P0300-319	FITTING, 16MFOR-16MB
19	1	P0300-338	FITTING, 06MBX-06MBX90
20	2	P0300-355	FITTING, 06MFOR-06MB90
21	8	P0300-356	FITTING, 06MFOR-06MB
22	1	P0300-371	FITTING, 16MFOR-16MB90
23	6	P0300-372	FITTING, 12MFOR-12MB90
24	6	P0300-373	FITTING, 08MFOR-12MB90
25	8	P0300-375	FITTING, 08MFOR-12MB
26	3	P0300-376	FITTING, 06MFOR-06MFOR-06MB
27	4	P0300-380	FITTING, 20MB-16FB
28	2	P0300-386	FITTING, 06MFOR-06MB-06MFOR
29	1	P0300-428	FITTING, 08MFOR-08MFOR-08FFORX
30	2	P0300-438	FITTING, 08MJ-08MJ
31	3	P0300-562	CAP
32	2	P0300-565	FITTING, 12MORB-08FORB
33	1	P0300-593	FITTING, 12MFFOR X 4
34	4	P0302-498	VALVE, Check
35	2	P0302-513	CARTRIDGE
36	2	P0302-514	BODY, Port 3/8
37	2	P0302-517	RELIEF, Crossover
38	1	P0309-187	ASSEMBLY, Filter
39	1	P0400-001	COUPLING, Pipe 1/4
40	1	A10308A-020	HOSE ASSEMBLY 3/8 x 20
41	1	A10308A-042	HOSE ASSEMBLY 3/8 x 42
42	2	A10313A-025	HOSE ASSEMBLY 3/8 x 25
43	1	A10313A-040	HOSE ASSEMBLY 3/8 x 40
44	4	A10317A-010	HOSE ASSEMBLY 1/4 x 10
45	2	A10364A-026	HOSE ASSEMBLY 1/4 x 26
46	1	A10368A-014	HOSE ASSEMBLY 1/2 x 14
47	1	A10368A-051	HOSE ASSEMBLY 1/2 x 51
48	1	A10388A-025	HOSE ASSEMBLY 3/8 x 25
49	2	A10418A-032	HOSE ASSEMBLY 3/8 x 32
50	3	A10418A-048	HOSE ASSEMBLY 3/8 x 48
51	4	A10452A-046	HOSE ASSEMBLY 3/4 x 46
52	2	A10452A-052	HOSE ASSEMBLY 3/4 x 52
53	2	A10474A-012	HOSE ASSEMBLY 3/8 x 12

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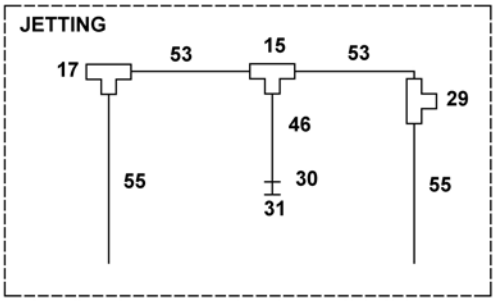
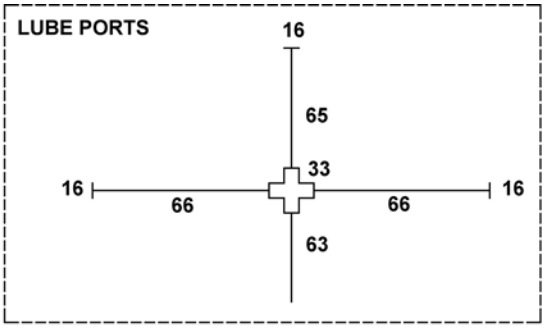
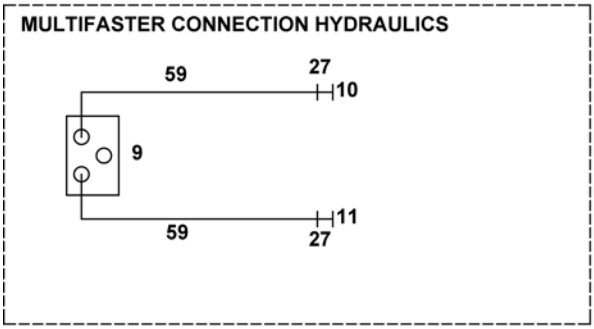
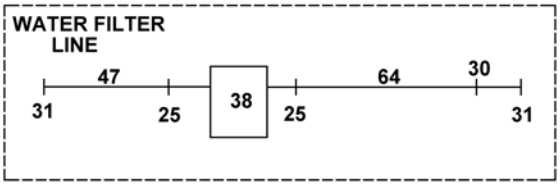
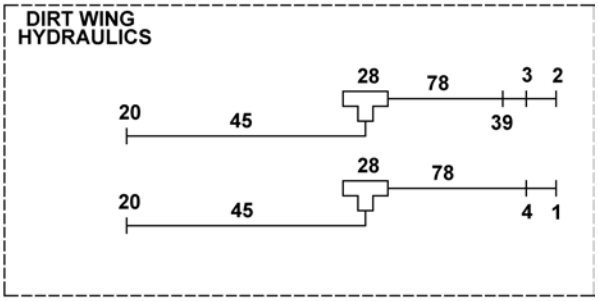
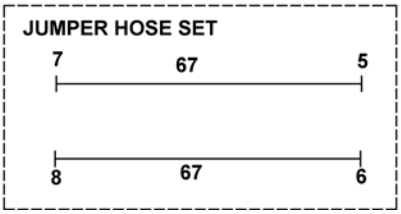

JETTING
17
53
15
53
29
46
55
30
31
55


LUBE PORTS
16
65
33
16
66
66
16
63


MULTIFASTER CONNECTION HYDRAULICS
59
27
10
9
59
11
27


WATER FILTER
LINE
47
64
30
31
25
38
25
31


DIRT WING
HYDRAULICS
28
78
3
2
20
45
39
28
78
20
45
4
1

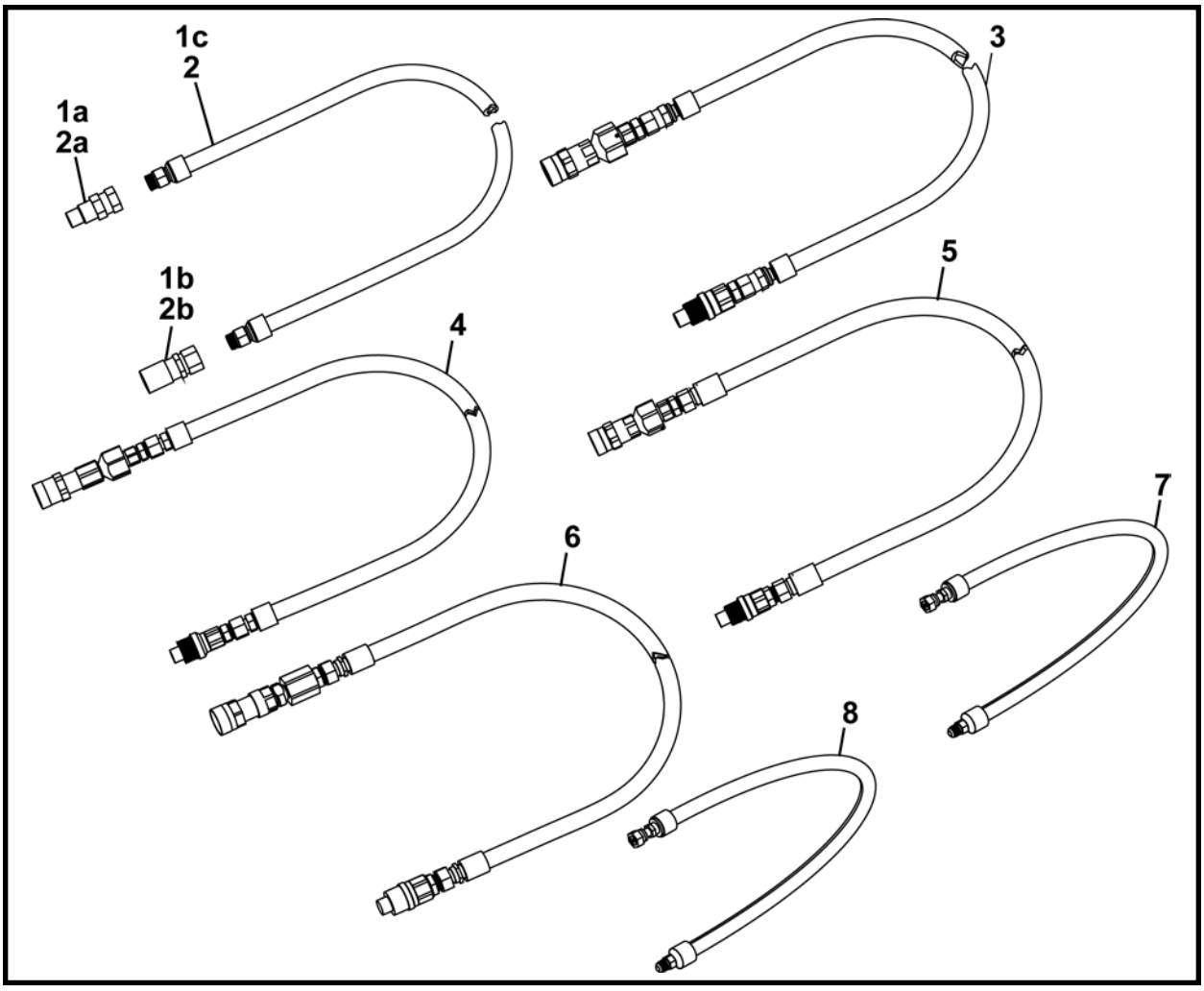

JUMPER HOSE SET
7
67
5
8
67
6

PCH 44 HYDRAULIC ASSEMBLY, A43878A

PCH 44

ITEM	QTY	PART NO.	DESCRIPTION
54	1	A10474A-025	HOSE ASSEMBLY 3/8 x 25
55	2	A10474A-032	HOSE ASSEMBLY 3/8 x 32
56	1	A10482A-040	HOSE ASSEMBLY 1 x 40
57	1	A10482A-050	HOSE ASSEMBLY 1 x 50
58	2	A10483A-016	HOSE ASSEMBLY 1 x 16
59	2	A10483A-024	HOSE ASSEMBLY 1 x 24
60	4	A10483A-088	HOSE ASSEMBLY 1 x 88
61	1	A10484A-049	HOSE ASSEMBLY 1 x 49
62	1	A10484A-059	HOSE ASSEMBLY 1 x 59
63	1	A10488A-012	HOSE ASSEMBLY 3/4 x 12
64	1	A10489A-063	HOSE ASSEMBLY 1/2 x 63
65	1	A10493A-012	HOSE ASSEMBLY 1/2 x 12
66	2	A10493A-044	HOSE ASSEMBLY 1/2 x 44
67	2	A10494A-168	HOSE ASSEMBLY 1 x 168
68	1	A10495A-048	HOSE ASSEMBLY 3/8 x 48
69	2	A10496A-025	HOSE ASSEMBLY 3/8 x 25
70	3	A10496A-027	HOSE ASSEMBLY 3/8 x 27
71	1	A10496A-035	HOSE ASSEMBLY 3/8 x 35
72	1	A10496A-038	HOSE ASSEMBLY 3/8 x 38
73	2	A10496A-048	HOSE ASSEMBLY 3/8 x 48
74	1	A10496A-049	HOSE ASSEMBLY 3/8 49
75	1	A10496A-053	HOSE ASSEMBLY 3/8 x 53
76	1	A10496A-070	HOSE ASSEMBLY 3/8 x 70
77	1	A10497A-061	HOSE ASSEMBLY 3/8 x 61
78	2	A10498A-050	HOSE ASSEMBLY 1/4 x 50
79	1	A10499A-028	HOSE ASSEMBLY 3/8 x 28
80	2	A43689P	MANIFOLD, Main Drive PCH
81	1	A43766P	MANIFOLD, Case Drain
82	1	A44108P	MANIFOLD, Auger Drive

POWERED CUTTER HEAD HOSES

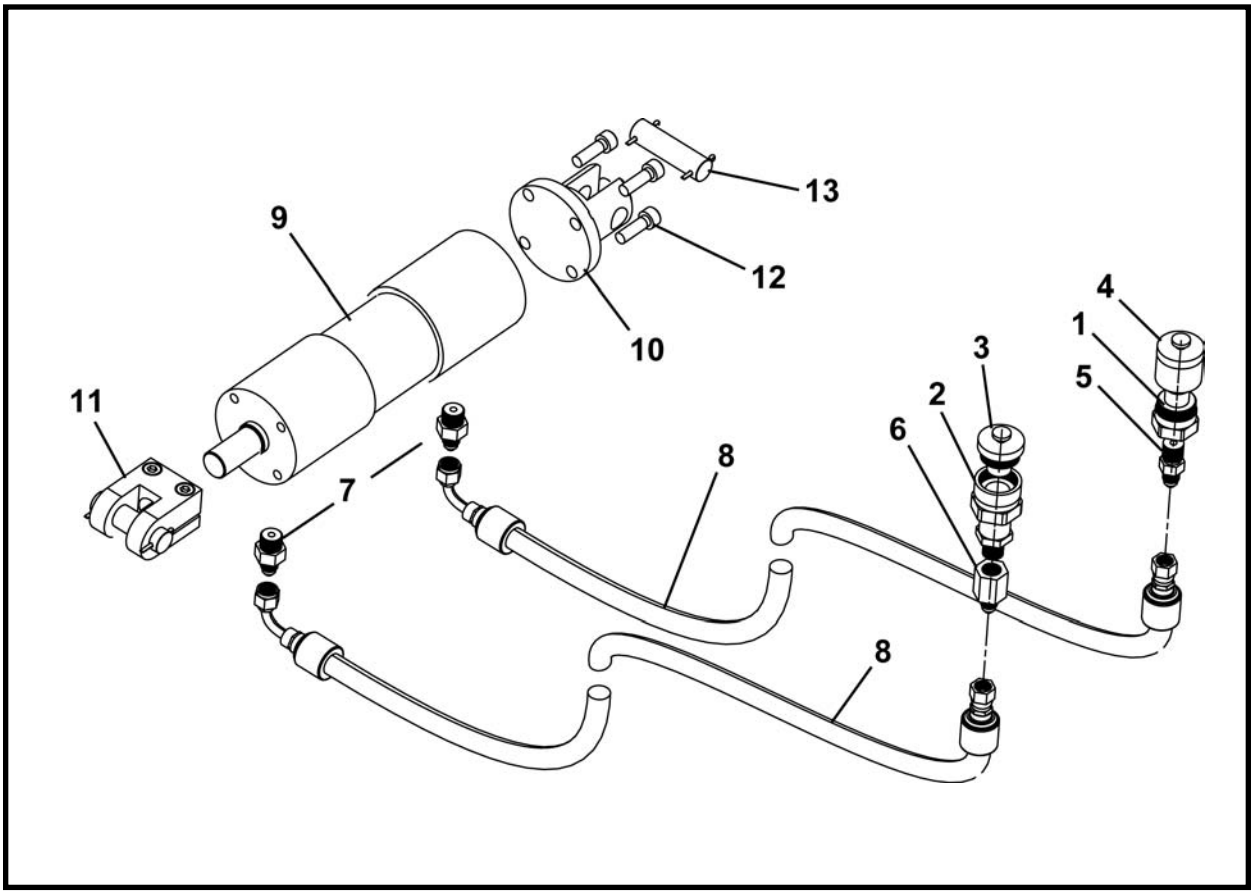


ITEM	QTY	PART NO.	DESCRIPTION
1	1	FA44767F	PCH CASE DRAIN HOSE, PCH 20/22.5/28.5 (Includes items 1a - 1c)
1a	1	P0100-088	COUPLER, Female Quick
1b	1	P0100-089	COUPLER, Male Quick
1c	1	A10095A-1200	HOSE ASSEMBLY 3/8 x 100 ft
2	1	FA45118F	PCH CASE DRAIN HOSE, PCH 36/44 (Includes items 2a - 2b)
2a	1	P0100-088	COUPLER, Female Quick
2b	1	P0100-089	COUPLER, Male Quick
3	1	FA44768F	PCH AUGER DRIVE HOSE, PCH 20/22.5/28.5 (Includes items 3a - 3b)
3a	1	A44772A	HOSE ASSEMBLY 3/4 x 100 ft
3b	9.17 QT	P0126-001	OIL, Hydraulic
4	1	FA44769F	PCH CUTTER BIT HOSE, PCH 20/22.5/28.5 (Includes items 4a - 4b)
4a	1	A44773A	HOSE ASSEMBLY 3/4 x 100 ft
4b	9.17 QT	P0126-001	OIL, Hydraulic
5	1	FA44770F	PCH CUTTER BIT HOSE, PCH 36/44 (Includes items 5a - 5b)
5a	1	A44774A	HOSE ASSEMBLY 1 x 80 ft
5b	13.05 QT	P0126-001	OIL, Hydraulic
6	1	FA44771F	PCH AUGER DRIVE HOSE, PCH 36/44 (Includes items 6a - 6b)
6a	1	A44775A	HOSE ASSEMBLY 1 x 80 ft
6b	13.05 QT	P0126-001	OIL, Hydraulic
7	1	A10476A-300	PCH JETTING HOSE, 3/8 x 25’
8	1	P0200-103	PCH LUBE HOSE, 5/8 x 25’

QT -Quart

HYDRAULIC PLUMBING - BREAKOUT TOOL, A40233A

BREAKOUT TOOL - RECEPTION SHAFT

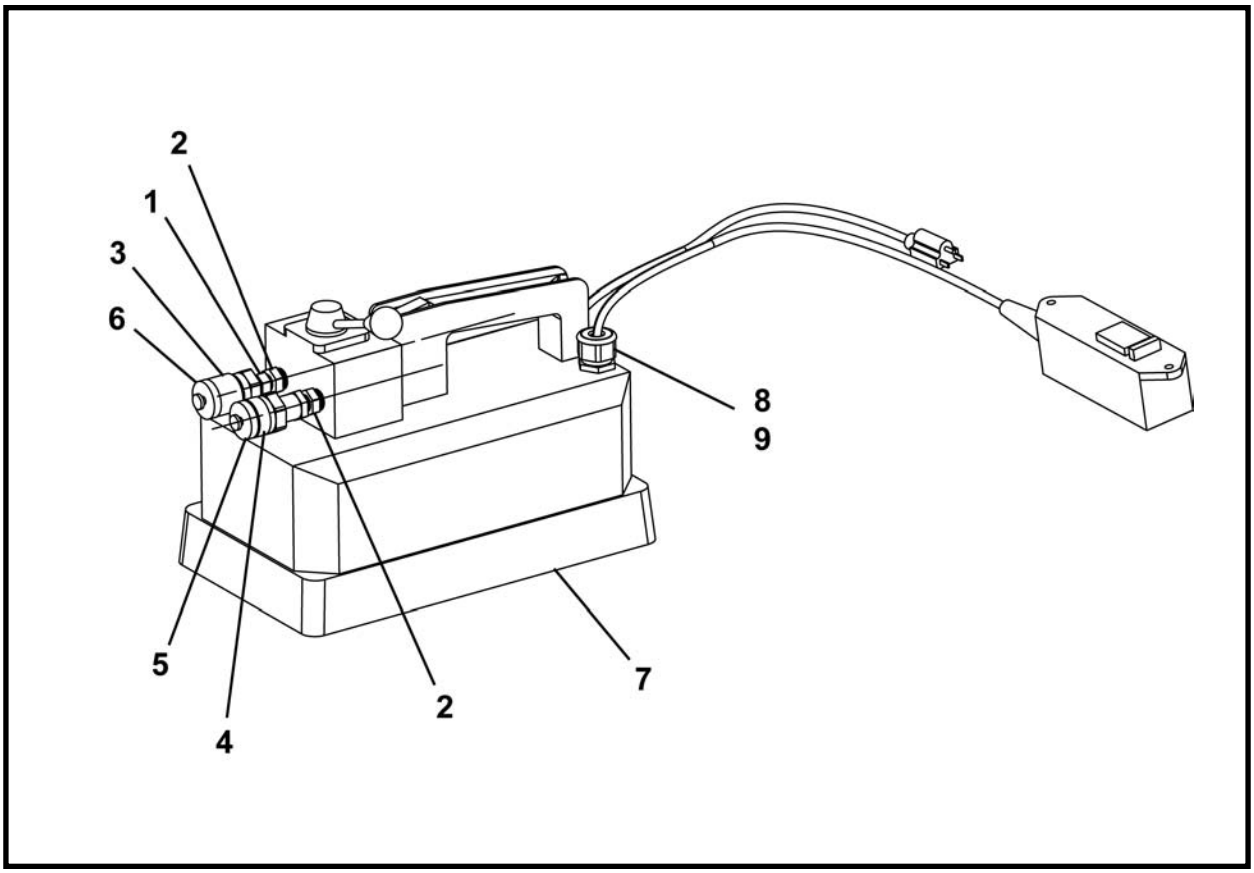


ITEM	QTY	PART NO.	DESCRIPTION
0*	1	A40233A	HYDRAULIC PLUMBING - BREAKOUT TOOL
1	1	P0100-010B	NIPPLE
2	1	P0100-010A	COUPLER
3	1	P0100-010E	PLUG, Dust
4	1	P0100-010D	CAP, Dust
5	1	P0300-249	FITTING, 04MJ-04MP
6	1	P0300-268	FITTING, 04MJ-04FP
7	2	P0300-245	FITTING, 04MJ-06MB
8	2	A10405A-120	HOSE ASSEMBLY 1/4 x 120
9**	1	P0307-146	CYLINDER
10	1	A40589P	MOUNT, Pivot
11	1	P0307-136B	KIT, Rod Clevis
12	4	P0031A-05-004	SCREW, Socket Head Cap 5/16 NF x 1
13	1	P0307-136B1	CLEVIS

* For main assembly parts breakdown, refer to Pilot Tube Breakout Tool - Reception Shaft, FA40230F in Section 11, Miscellaneous/Tooling.

** For parts breakdown, refer to Section 10, Cylinders.

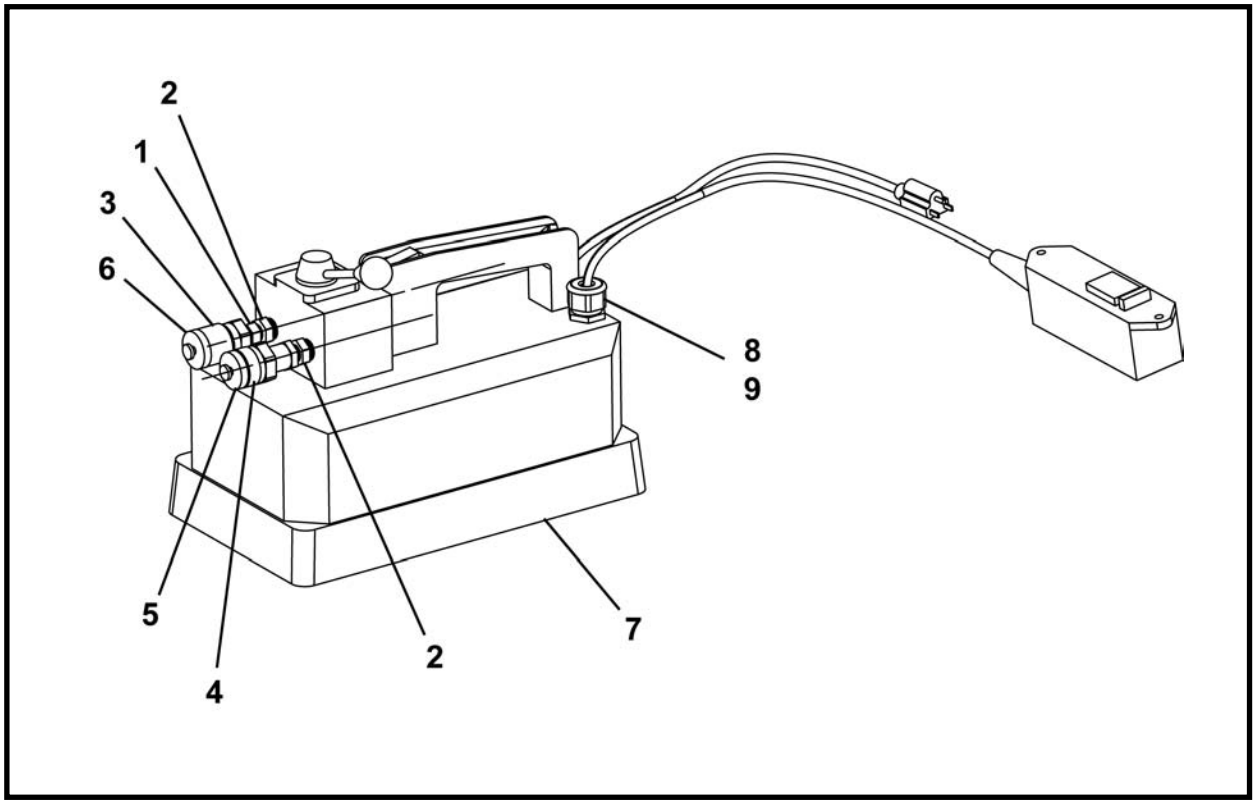
POWER PACK 120V, A40257A
BREAKOUT TOOL - RECEPTION SHAFT



ITEM	QTY	PART NO.	DESCRIPTION
0*	1	A40257A	POWER PACK PLUMBING
1	1	P0300-113	FITTING, 04MP-04MP
2	2	P0300-093	FITTING, 06MP-04FPS
3	1	P0100-010B	NIPPLE
4	1	P0100-010A	COUPLER
5	1	P0100-010E	PLUG, Dust
6	1	P0100-010D	CAP, Dust
7	1	P0303-251	PUMP WITH REMOTE
8	1	P0311-121	RELIEF, Strain
9	1	P0311-018	NUT, 1/2

* For main assembly parts breakdown, refer to Pilot Tube Breakout Tool - Reception Shaft, FA40230F in Section 11, Miscellaneous/Tooling.

POWER PACK 230V, A45440A
BREAKOUT TOOL - RECEPTION SHAFT

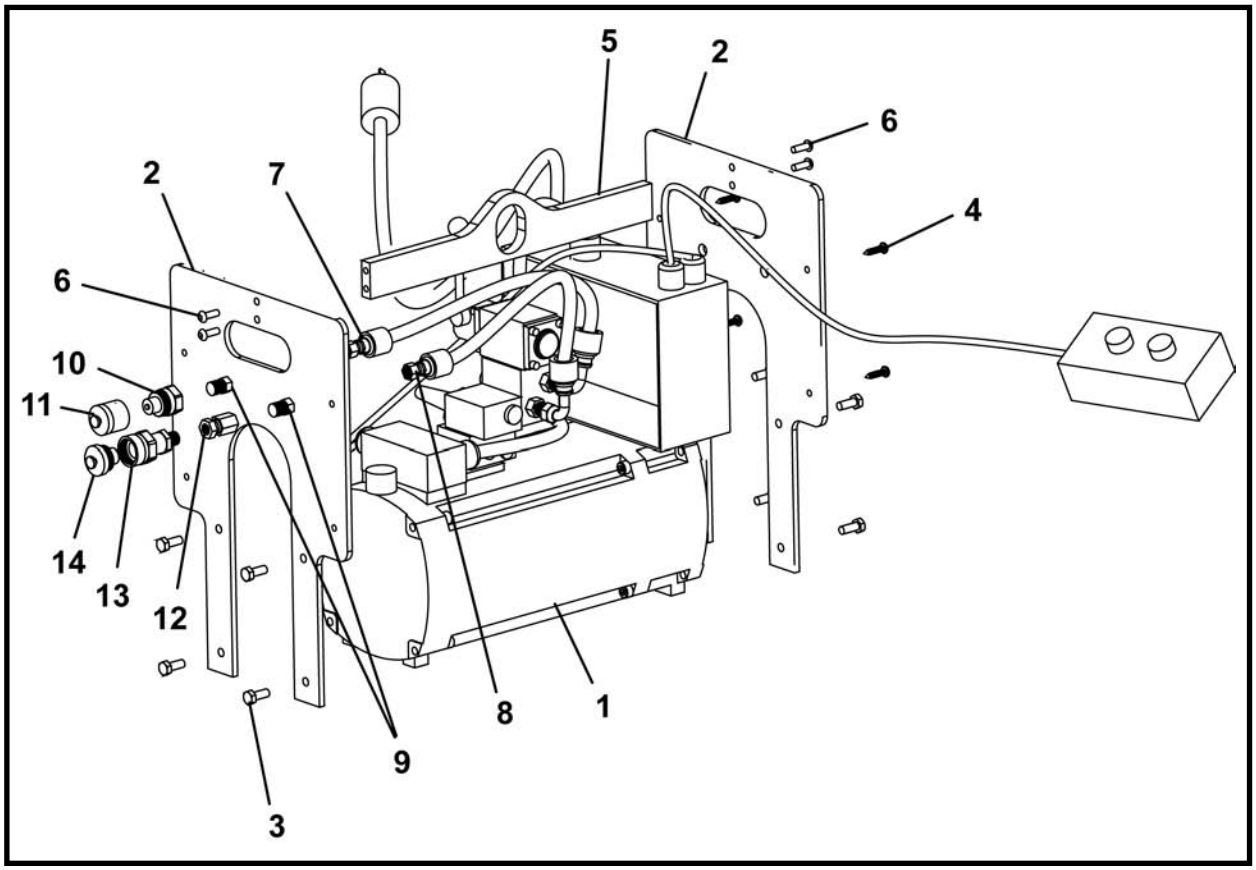


ITEM	QTY	PART NO.	DESCRIPTION
0*	1	A45440A	POWER PACK 230V
1	1	P0300-113	FITTING, 04MP-04MP
2	2	P0300-093	FITTING, 06MP-04FPS
3	1	P0100-010B	NIPPLE
4	1	P0100-010A	COUPLER
5	1	P0100-010E	PLUG, Dust
6	1	P0100-010D	CAP, Dust
7	1	P0303-346	PUMP WITH REMOTE 230V
8	1	P0311-121	RELIEF, Strain
9	1	P0311-018	NUT, 1/2

* For main assembly parts breakdown, refer to Pilot Tube Breakout Tool - Reception Shaft, FA40230F in Section 11, Miscellaneous.

POWER PACK, 1 HP SEALED 120V, A46443A

BREAKOUT TOOL - RECEPTION SHAFT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A46443A	POWER PACK, 1 HP Sealed
1	1	P0303-347	POWER UNIT
2	2	A46441P	PLATE, End
3	8	PM08A-1.25-020	BOLT
4	4	P0035-014B	SCREW, Pan Head Tap
5	1	A46442P	CROSSBAR
6	4	P0022-14-204	SCREW, Button Head Socket 1/4 UNC x .75
7	1	A10371A-017	HOSE ASSEMBLY, 1/4 x 17
8	1	A10371A-013	HOSE ASSEMBLY, 1/4 x 13
9	2	P0300-740	FITTING, 04MP-04MJBKHD
10	1	P0100-010B	NIPPLE
11	1	P0100-010D	CAP, Dust
12	1	P0300-785	FITTING
13	1	P0100-010A	COUPLER
14	1	P0100-010E	PLUG, Dust

Valves

GBM 4812A
Pressure Reducing Valve, P0302-421A 2
Cutter Valve, P0302-508 3
Three Position, 4 Way Detent (Ends), Spring Center (Mid) Valve, P0302-698 4
Solenoid Valve, P0304-310 5

Serial Number FA40034F-1 thru 3
Jack Valve, P0302-509 6
Two Section Valve, P0302-511 7

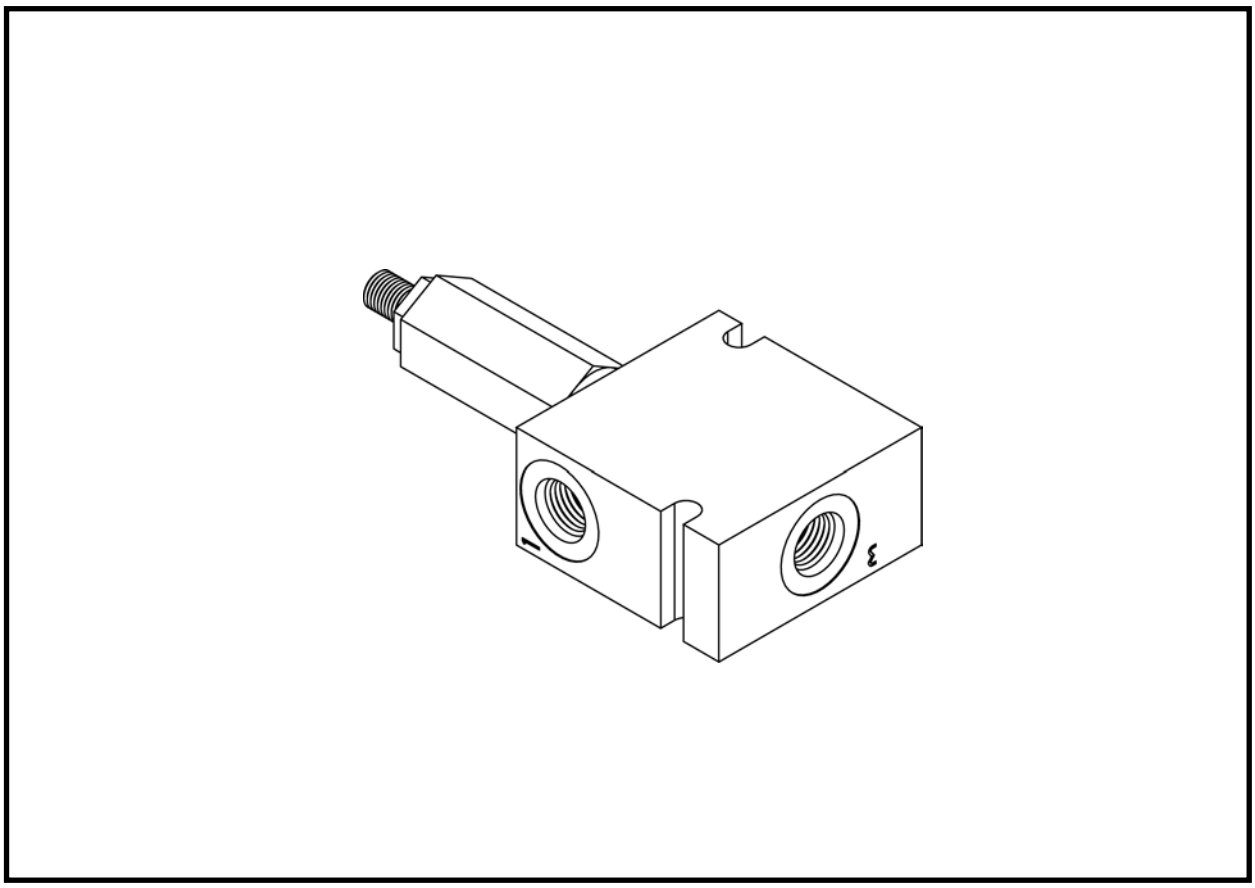
Serial Number FA40034F-4 & After
Hydraulic Pilot Valve, P0302-524 8
Motor Speed Valve, P0302-528 9
Shuttle Valve, P0302-530 10
Remote Pilot Control Valve, P0302-522 11
Two Section Valve, P0302-523 12

Power Packs
Relief Valve, P0302-402 13
Relief Valve, P0302-544 14

P275T
Butterfly Valve, P0302-516 15

PRESSURE REDUCING VALVE, P0302-421A

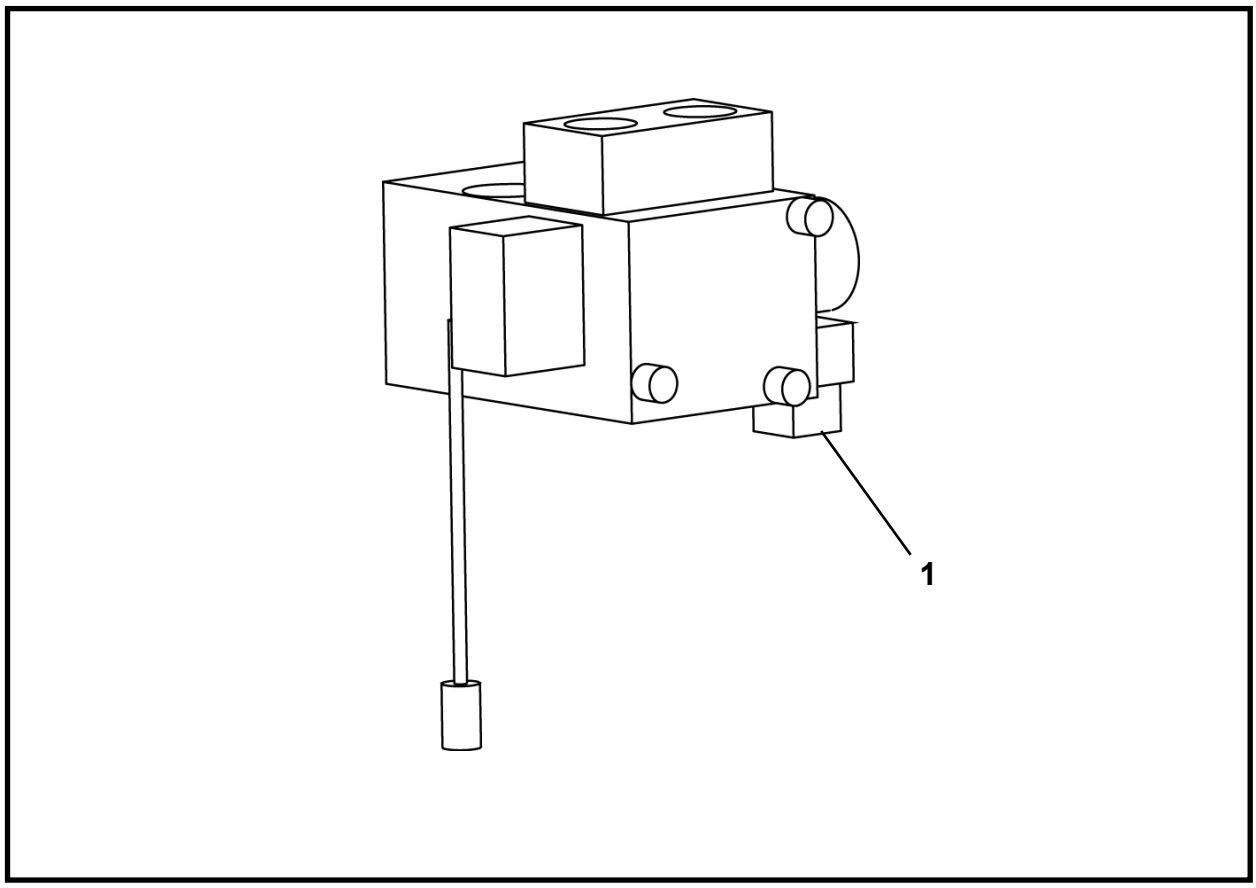
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-421A	VALVE, Pressure Reducing

CUTTER VALVE, P0302-508

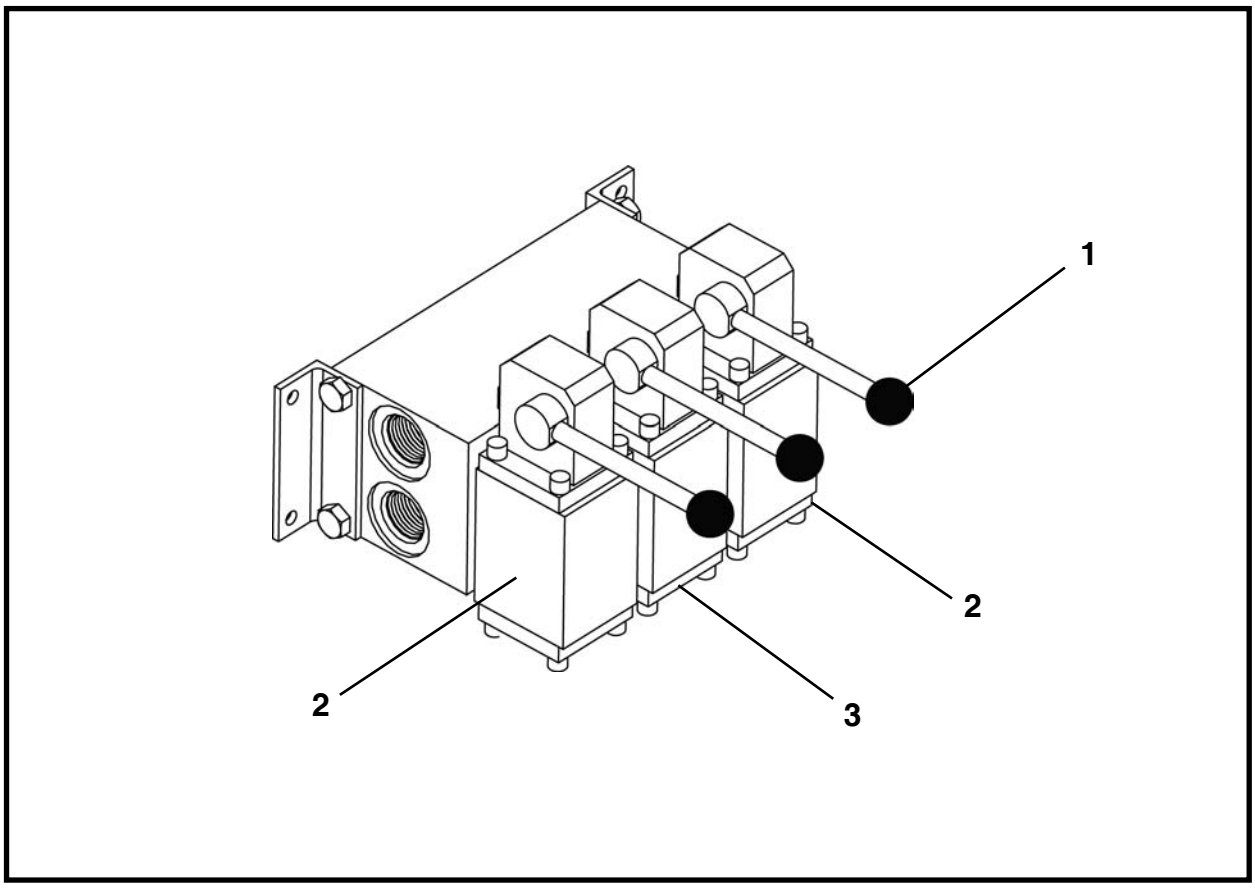
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-508	VALVE, Cutter
1	1	P0302-508A	CONNECTOR, Electrical

THREE POSITION, 4 WAY DETENT (Ends), SPRING CENTER (Mid) VALVE, P0302-698

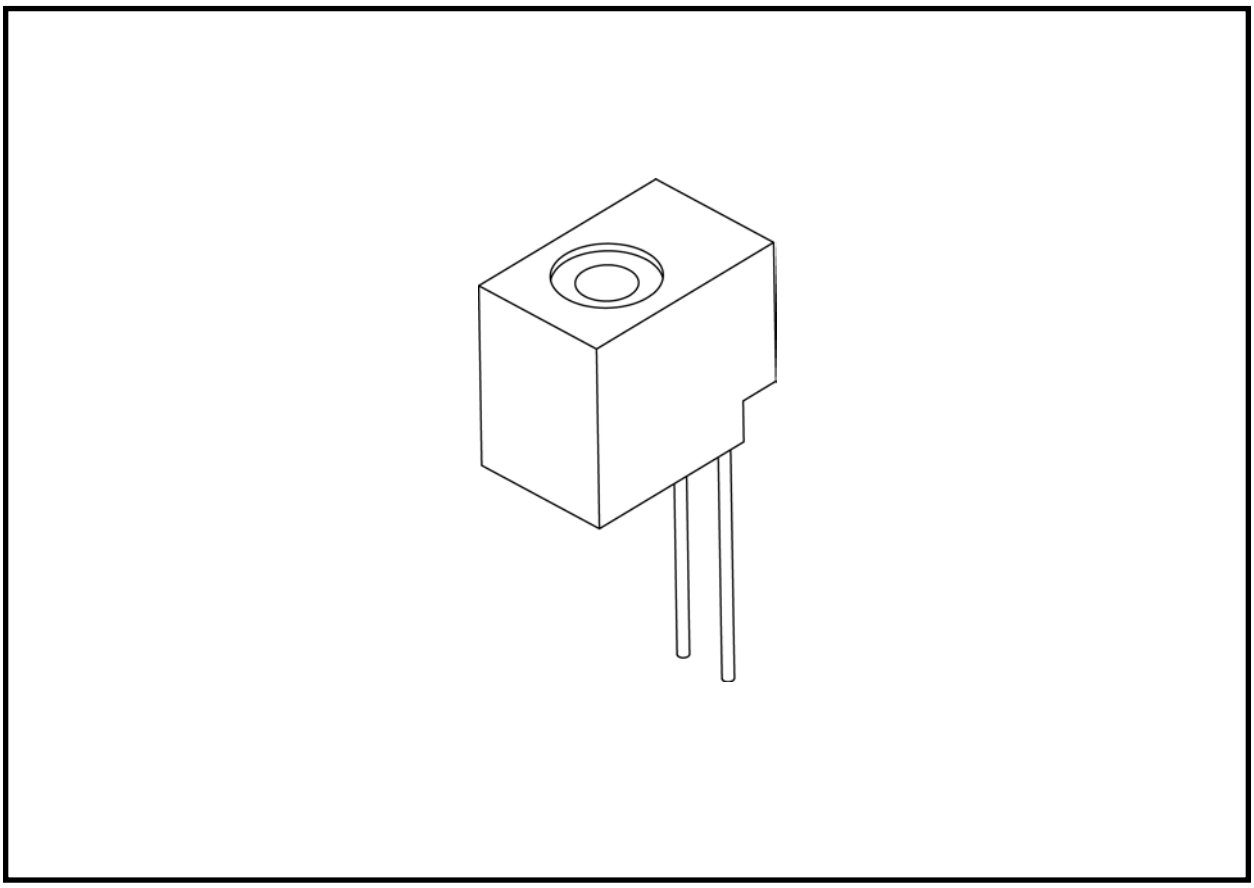
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-421	VALVE, Three Position, 4 Way Detent (End Sections), Spring Center (Middle Section)
1	3	P0302-421B	HANDLE, Black Ball
2	2	P0302-421C	SECTION, Valve (With Handle)
3	1	P0302-421D	SECTION, Valve (With Handle)

SOLENOID VALVE, P0304-310

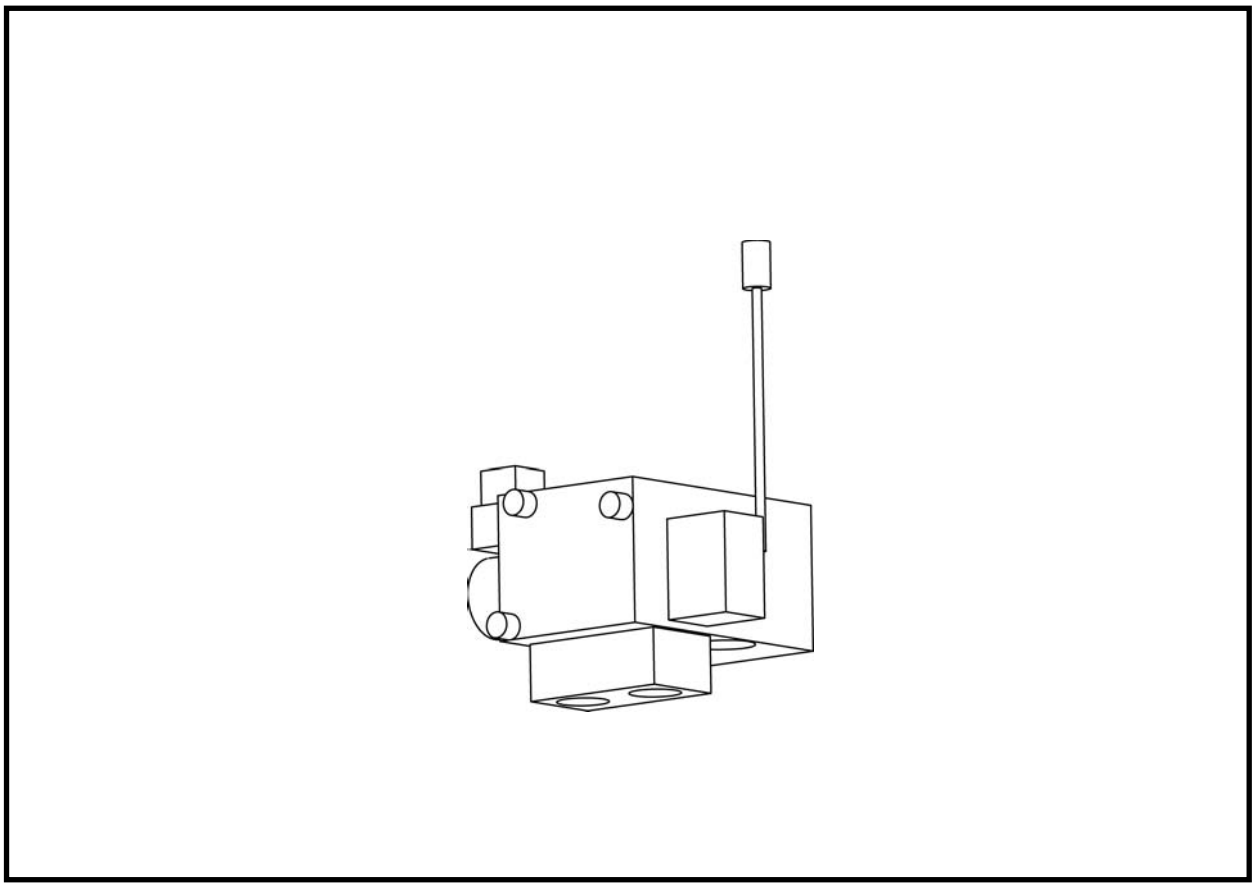
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0304-310	VALVE, Solenoid

JACK VALVE, P0302-509

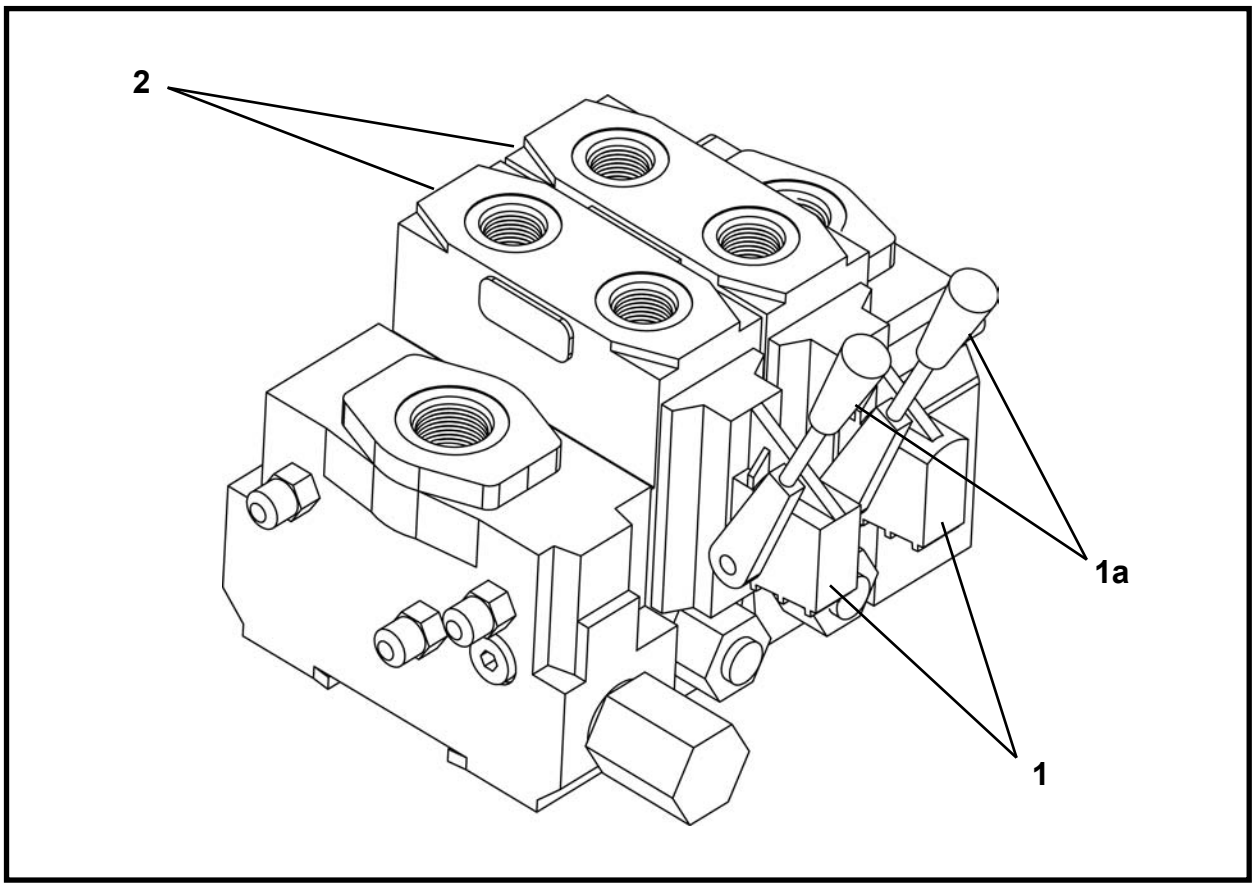
4812A (SN FA40034F-1 THRU 3)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-509	VALVE, Jack

TWO SECTION VALVE, P0302-511

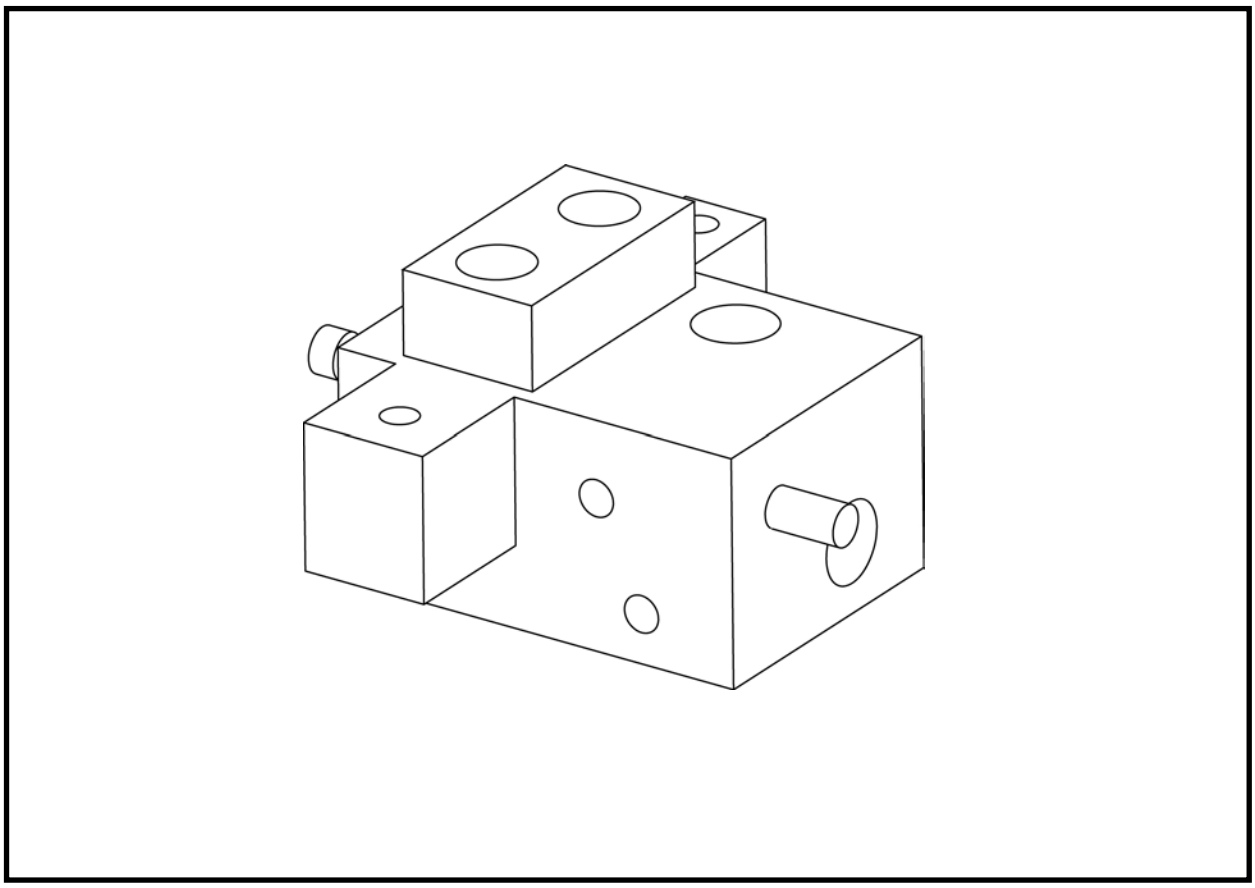
4812A (SN FA40034F-1 THRU 3)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-511	VALVE, Two Section
1	2	P0302-383A	HANDLE With Mount (Includes item 1a)
1a	2	P0302-383I	HANDLE
2	2	P0302-383B	KIT, Cover
3	2	P0302-383G	KIT, Seal

HYDRAULIC PILOT VALVE, P0302-524

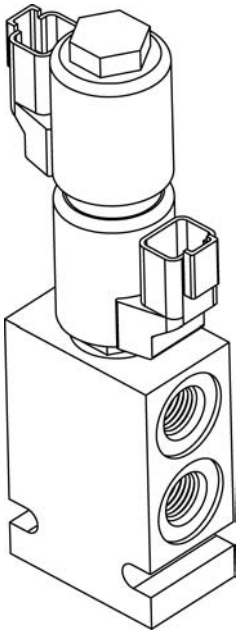
4812A (SN FA40034F-4 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-524	VALVE, Hydraulic Pilot

MOTOR SPEED VALVE, P0302-528

4812A (SN FA40034F-4 & AFTER)

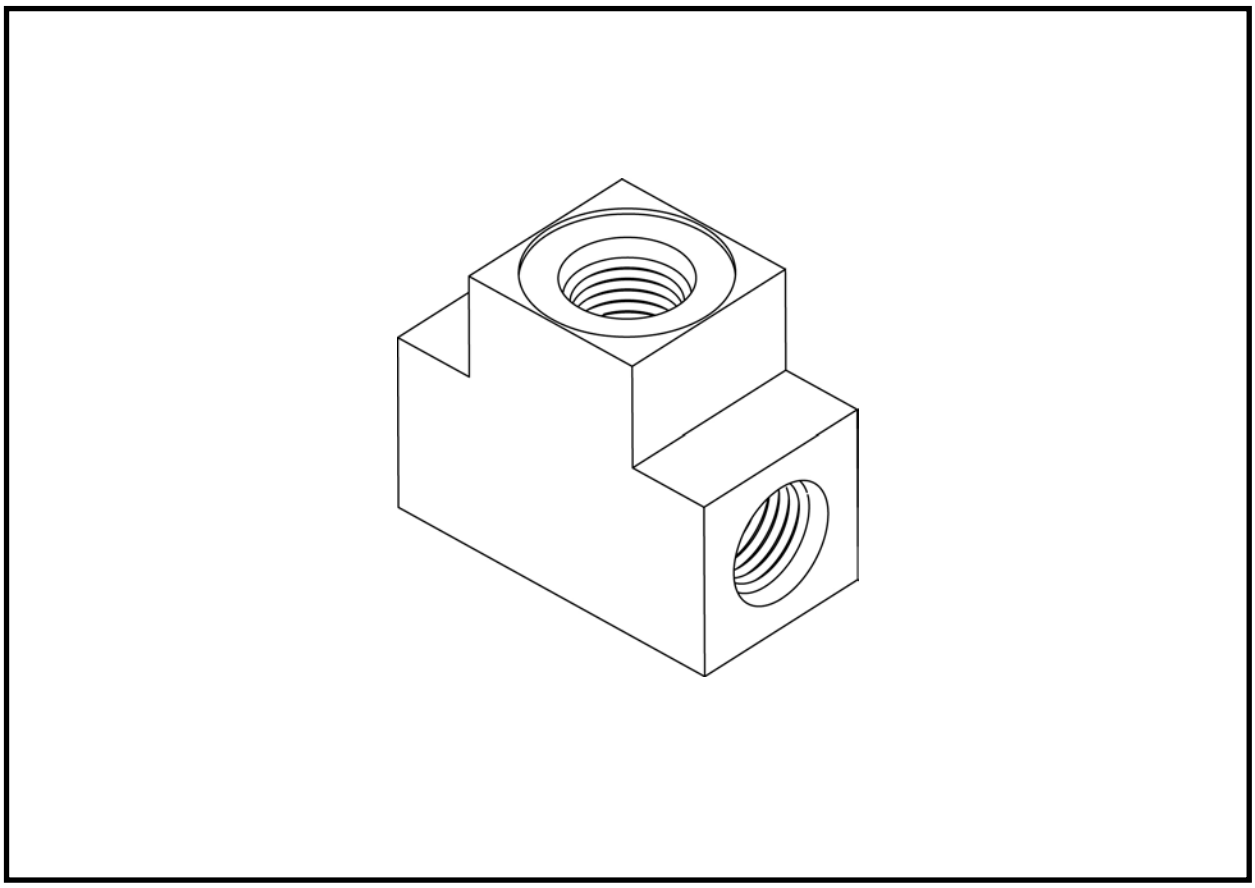


ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-528	VALVE, Motor Speed
1*	1	P0302-528A	CONNECTOR, Electrical

* Not Shown

SHUTTLE VALVE, P0302-530

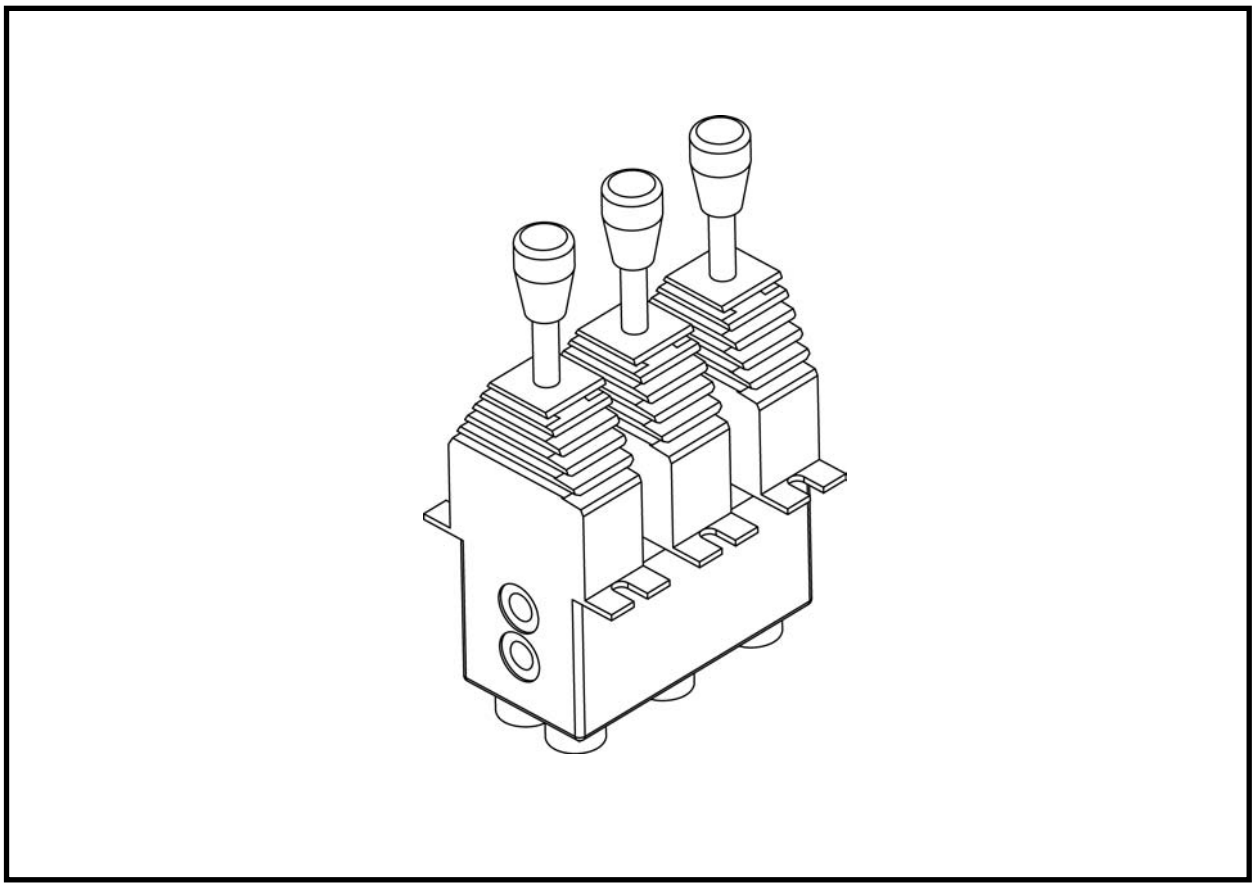
4812A (SN FA40034F-4 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-530	VALVE, Shuttle

REMOTE PILOT CONTROL VALVE, P0302-522

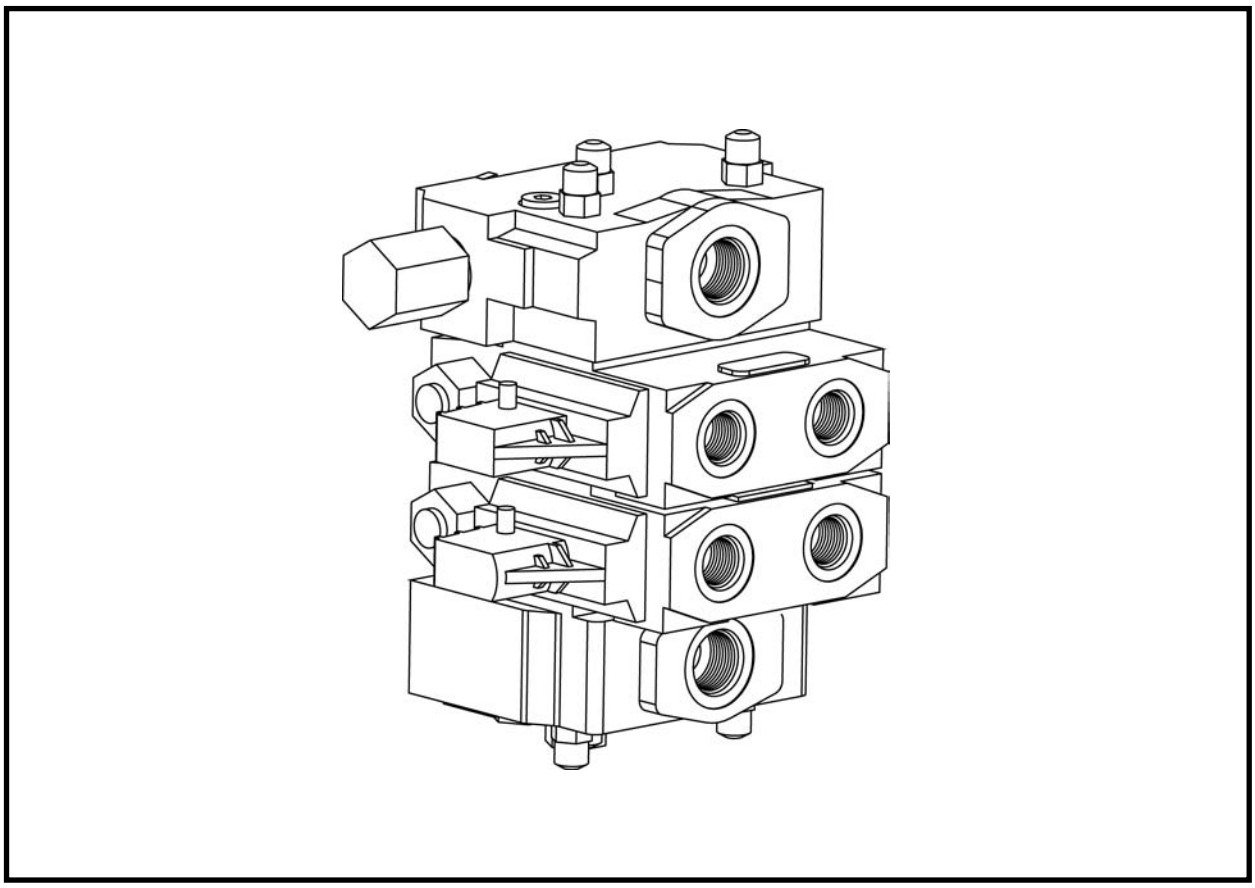
4812A (SN FA40034F-4 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-522	VALVE, Remote Pilot Control

TWO SECTION VALVE, P0302-523

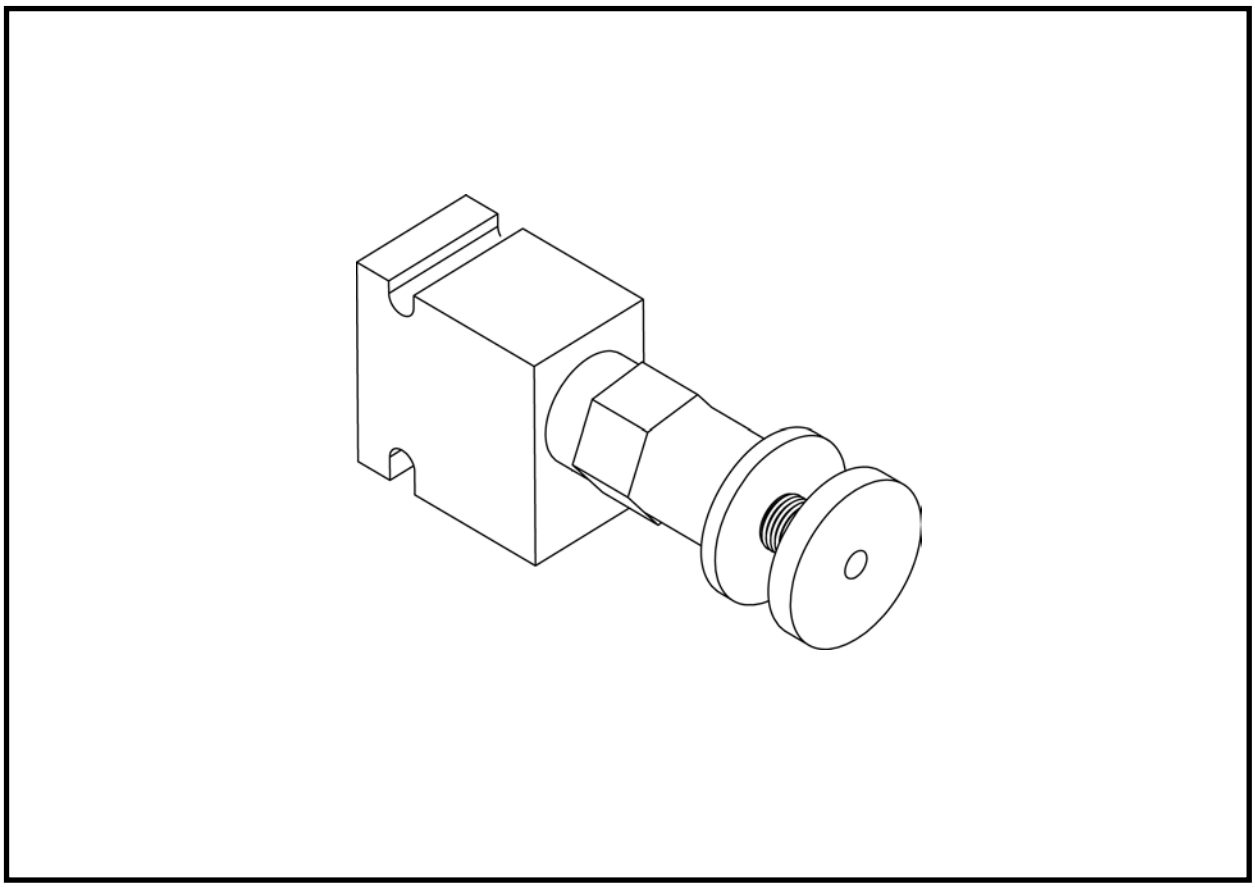
4812A (SN FA40034F-4 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-523	VALVE, Two Section
1	1	P0302-383G	KIT, Spool & Front Cover Seal

RELIEF VALVE, P0302-402

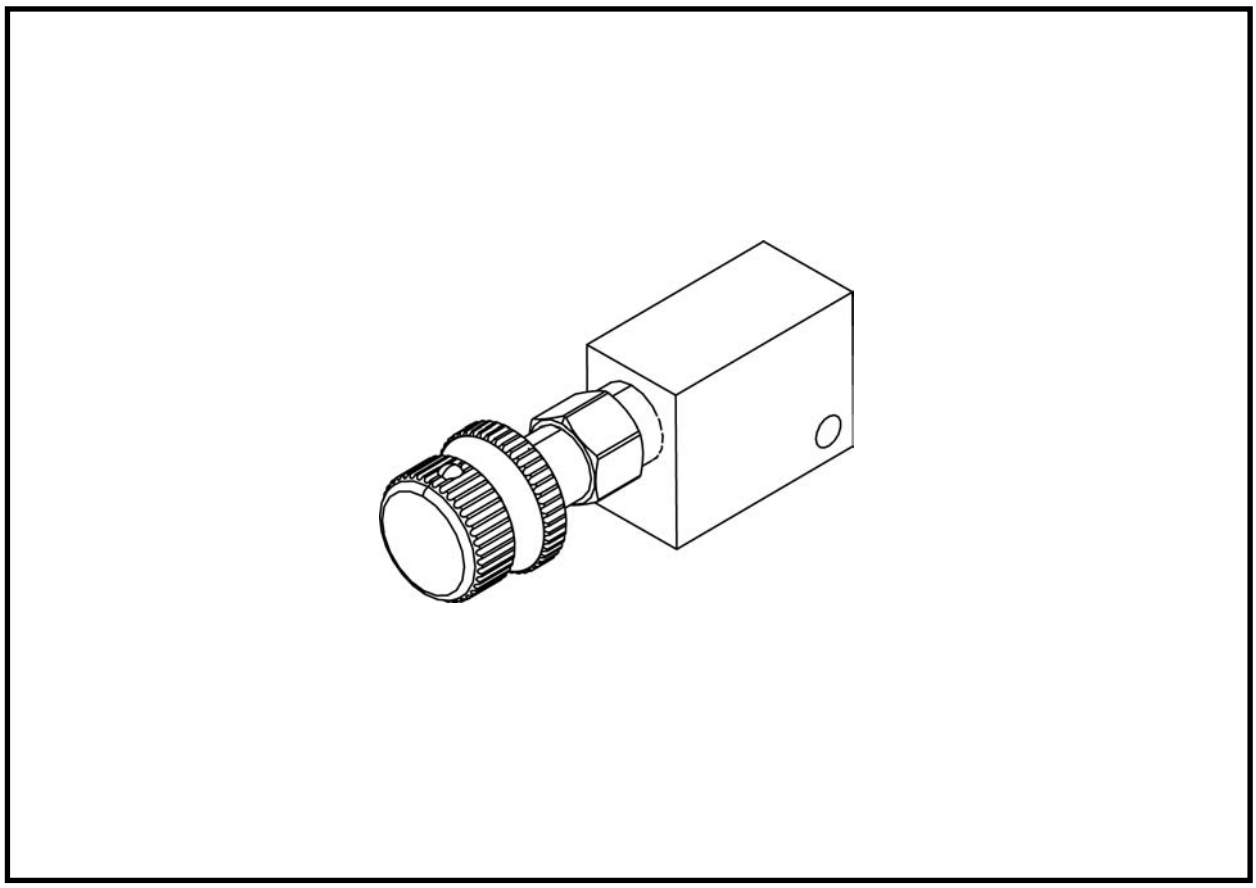
P275T - P150Q



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-402	VALVE, Relief 5000 PSI

RELIEF VALVE, P0302-544

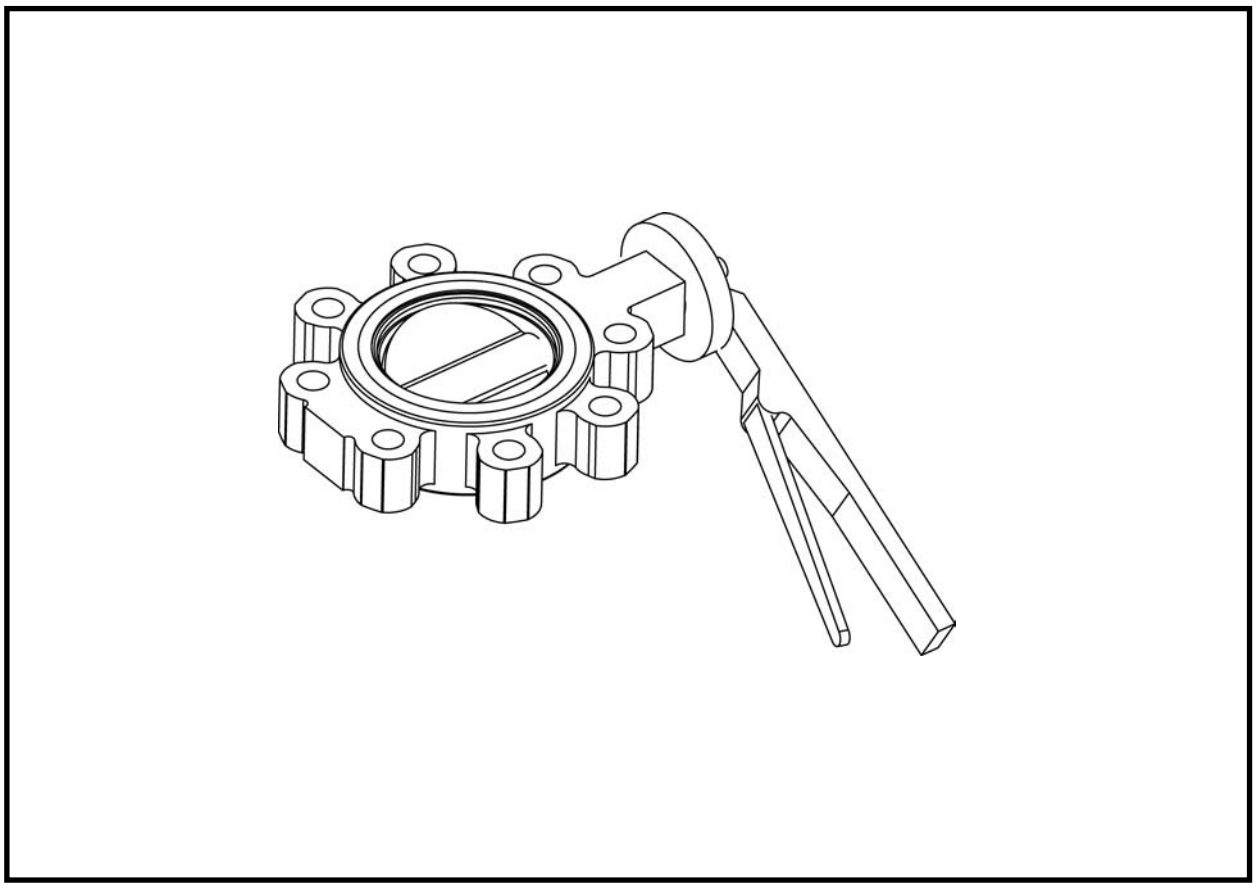
P275T - P150Q



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-544	VALVE, Relief 5000 PSI

BUTTERFLY VALVE, P0302-516

P275T



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0302-516	VALVE, Butterfly

NOTES

Motors

GBM 4812A
4812A (SN FA40034F-1 & 2)
Motor, P0304-174 2

4812A Frame (SN FA40034F-3 Thru 10)
Motor, Hydraulic Drive, P0304-165 3

4812A Frame (SN FA40034F-11 & After)
Motor, Hydraulic Drive, P0304-328 4

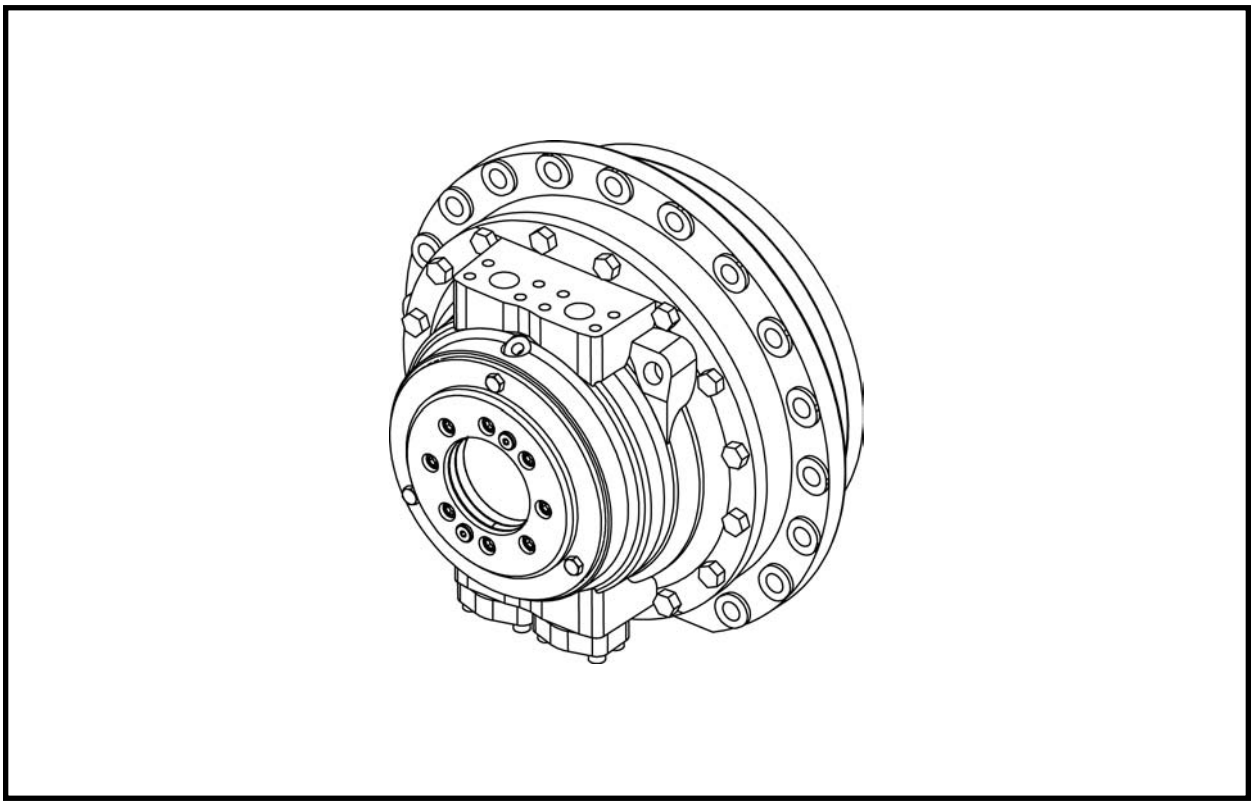
Powered Cutter Head
PCH 20 - 22.5 - 28.5 - 36 - 44 (Front Section) & PCH 36 - 44 (Rear Section)
Motor, Hydraulic Drive, P0304-165 5

PCH 20 - 22.5 - 28.5 (Rear Section)
Motor, PCH Auger Drive, P0304-172 6

Guidance System - Remote Focus
Motor, Remote Focus, A42097A 7

MOTOR, P0304-174

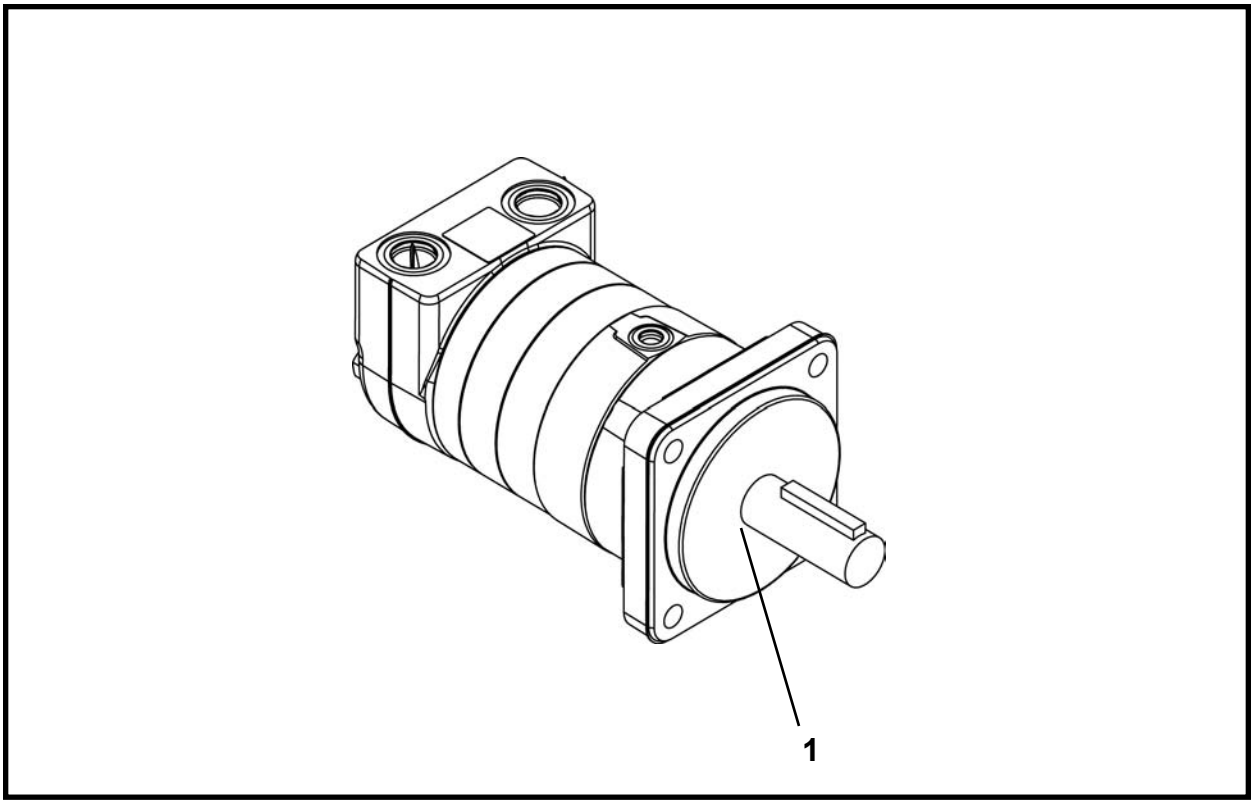
4812A (SN FA40034F-1 & 2)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0304-174	MOTOR

MOTOR, HYDRAULIC, P0304-165

4812A (SN FA40034F-3 THRU 10)

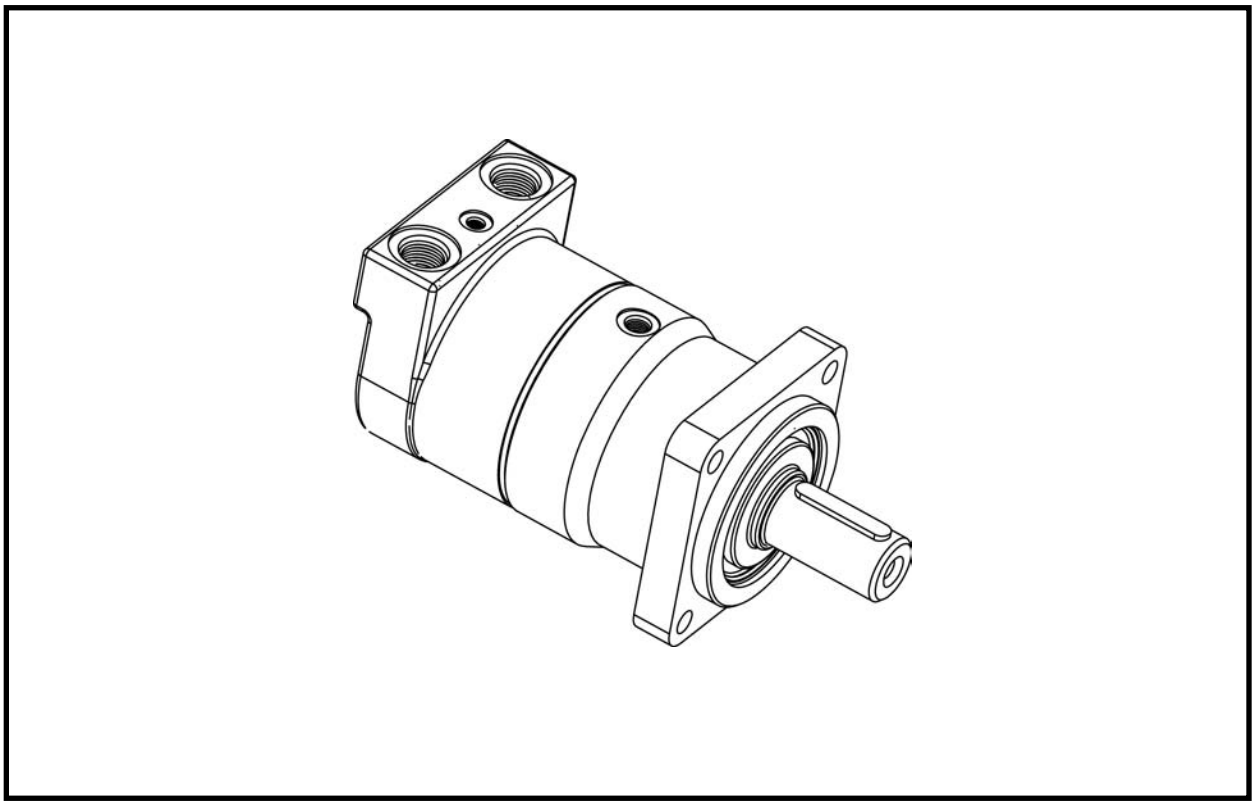


ITEM	QTY	PART NO.	DESCRIPTION
0	*	P0304-165	MOTOR, Hydraulic/PCH Cutter Drive
1	1	P0304-165A	SEAL, Shaft

* Three per 4812A Jacking Frame and quantity varies per Powered Cutter Head model.

MOTOR, HYDRAULIC, P0304-328

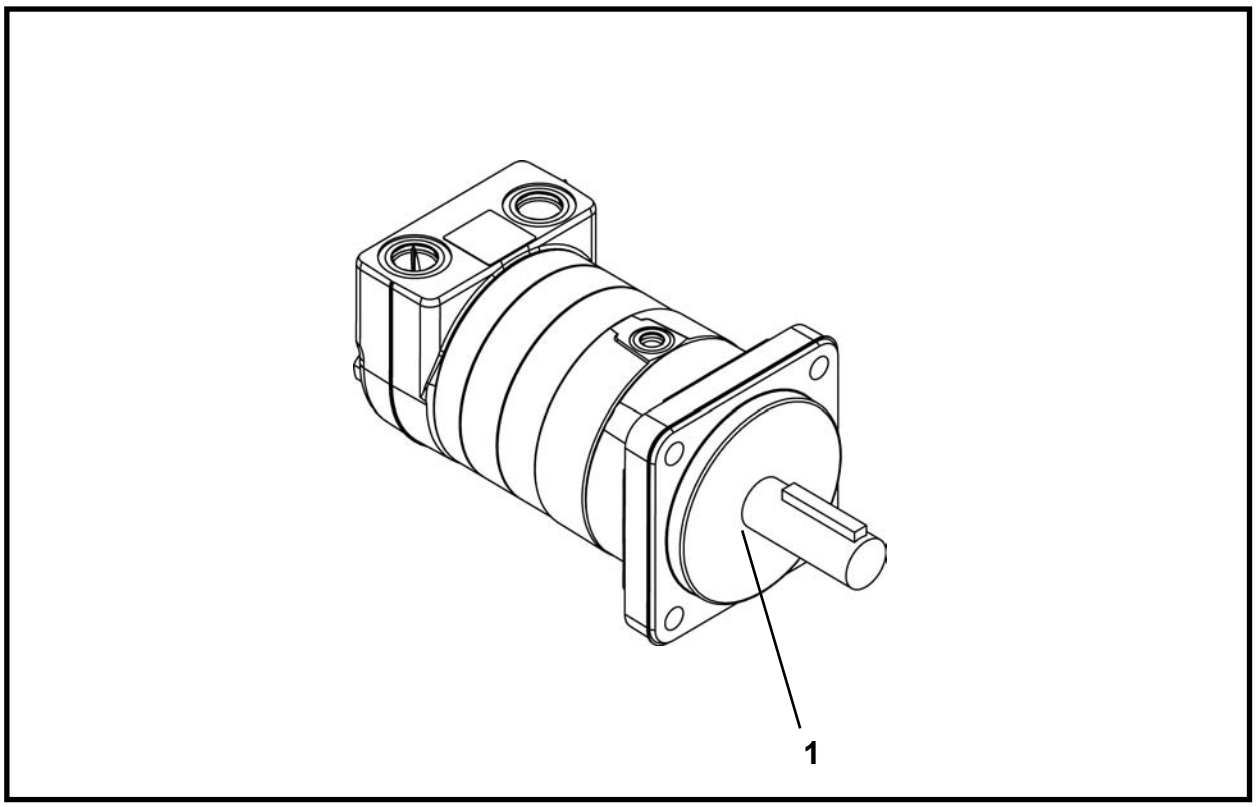
4812A (SN FA40034F-11 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	*	P0304-328	MOTOR, Hydraulic

* Three per 4812A Jacking Frame

MOTOR, HYDRAULIC, P0304-165
PCH 20-22.5-28.5-36-44 FRONT SECTION
PCH 36-44 REAR SECTION

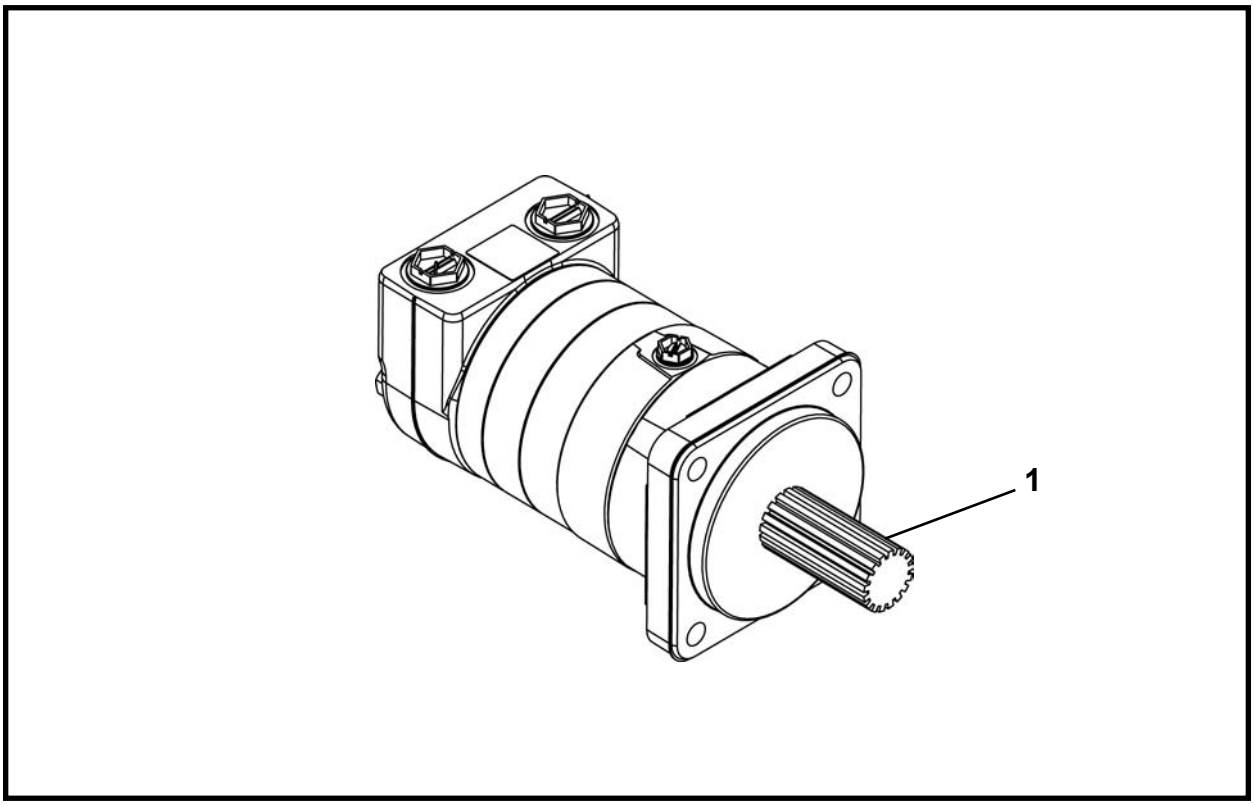


ITEM	QTY	PART NO.	DESCRIPTION
0	*	P0304-165	MOTOR, Hydraulic/PCH Cutter Drive
1	1	P0304-165A	SEAL, Shaft

* Quantity varies per Powered Cutter Head model.

MOTOR, PCH AUGER DRIVE, P0304-172

PCH - 20 - 22.5 - 28.5 REAR SECTION

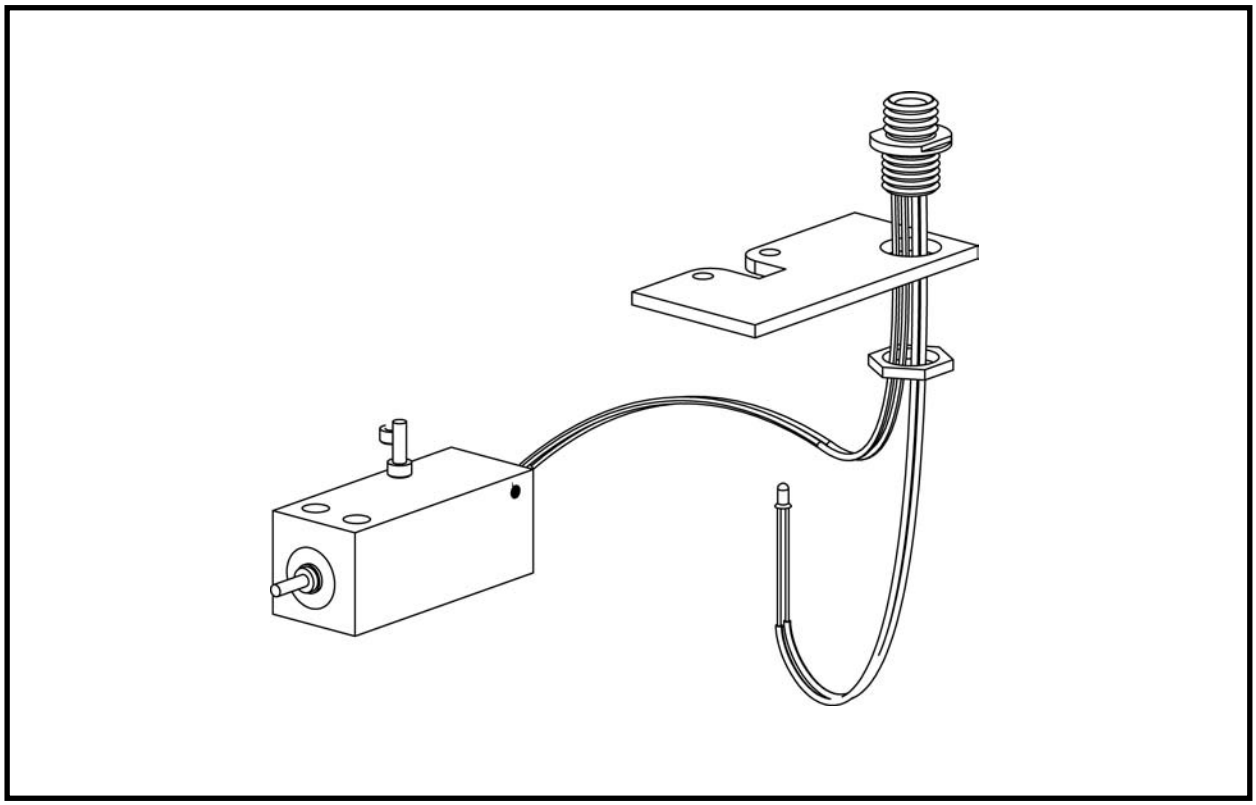


ITEM	QTY	PART NO.	DESCRIPTION
0	*	P0304-172	MOTOR, PCH Cutter Drive
1	1	P0304-172A	SHAFT, Splined
2**	1	P0304-172B	KIT, Seal

* Quanity varies per Powered Cutter Head model.
** Not Shown

MOTOR, REMOTE FOCUS, A42097A

GUIDANCE SYSTEM - REMOTE FOCUS



ITEM	QTY	PART NO.	DESCRIPTION
0	*	A42097A	MOTOR, Remote Focus

NOTES

Pumps

Power Packs
Transfer Pump, P0303-281 2

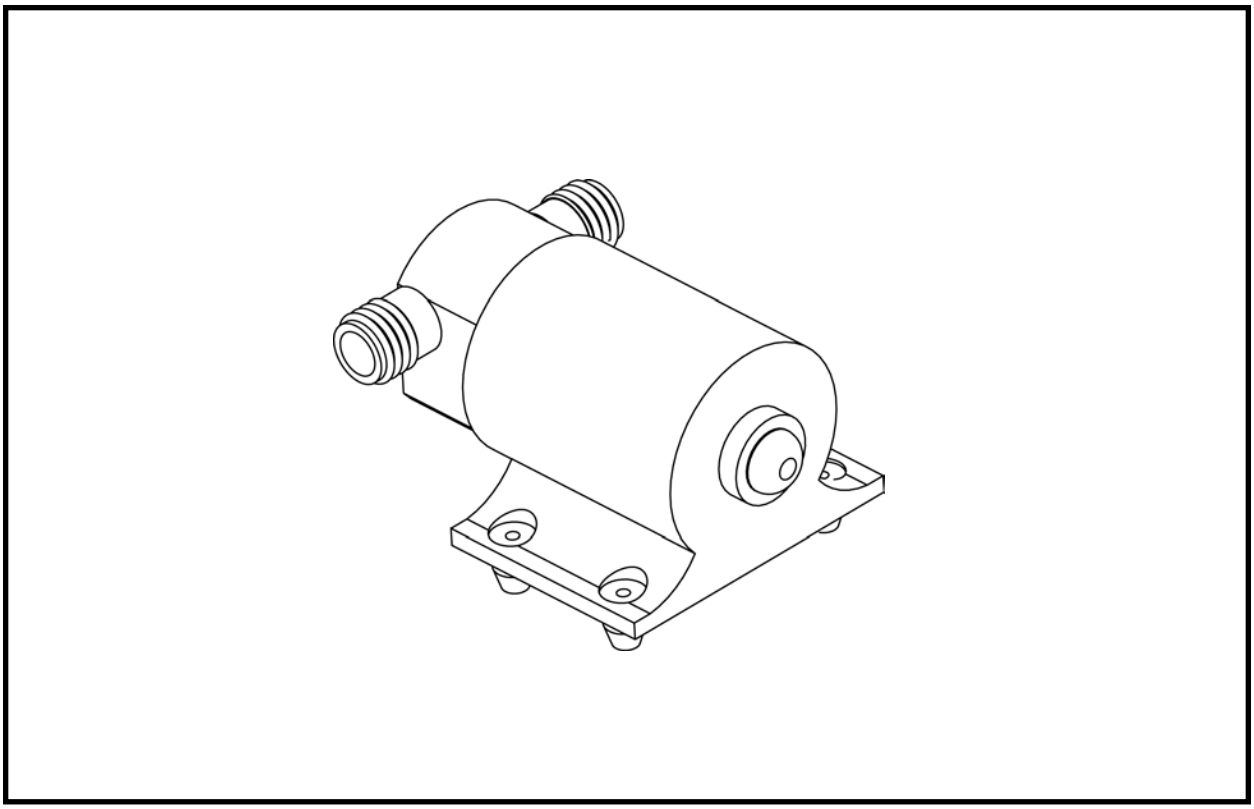
P275T
Pump Assembly (Auger-Cutter-Jacking Supply), P0303-302 3
Cooling Pump, P0303-307 4

P150Q
Gear Pump, P0303-250 5
Triple Pump (Auger-Cutter-Jacking Supply), P0303-343 6

Reception Shaft Breakout Tool
Power Pack 120V, A40257A 7
Power Pack 230V, A45440A 8
Power Pack 1HP 120V, A46443A 9

TRANSFER PUMP, P0303-281

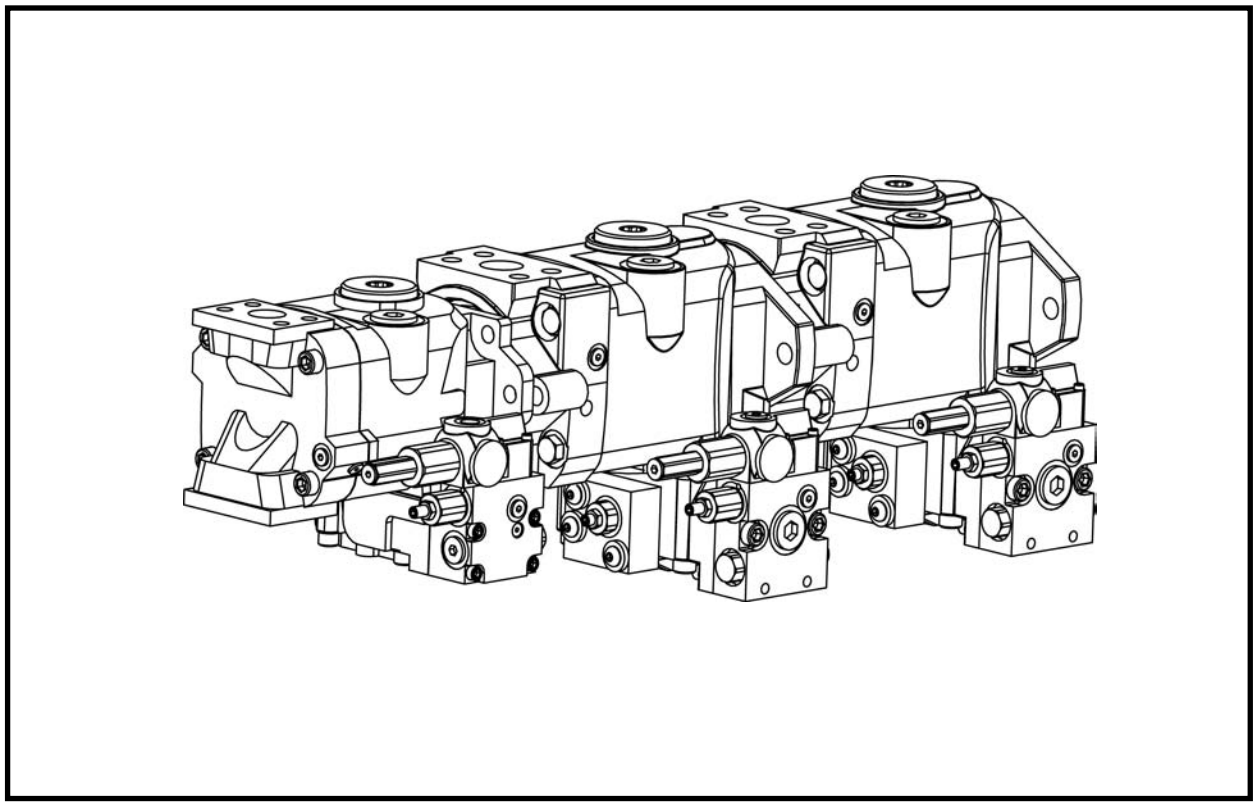
P275T & P150Q POWER PACKS



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-281	TRANSFER PUMP

PUMP ASSEMBLY (AUGER-CUTTER-JACKING SUPPLY), P0303-302

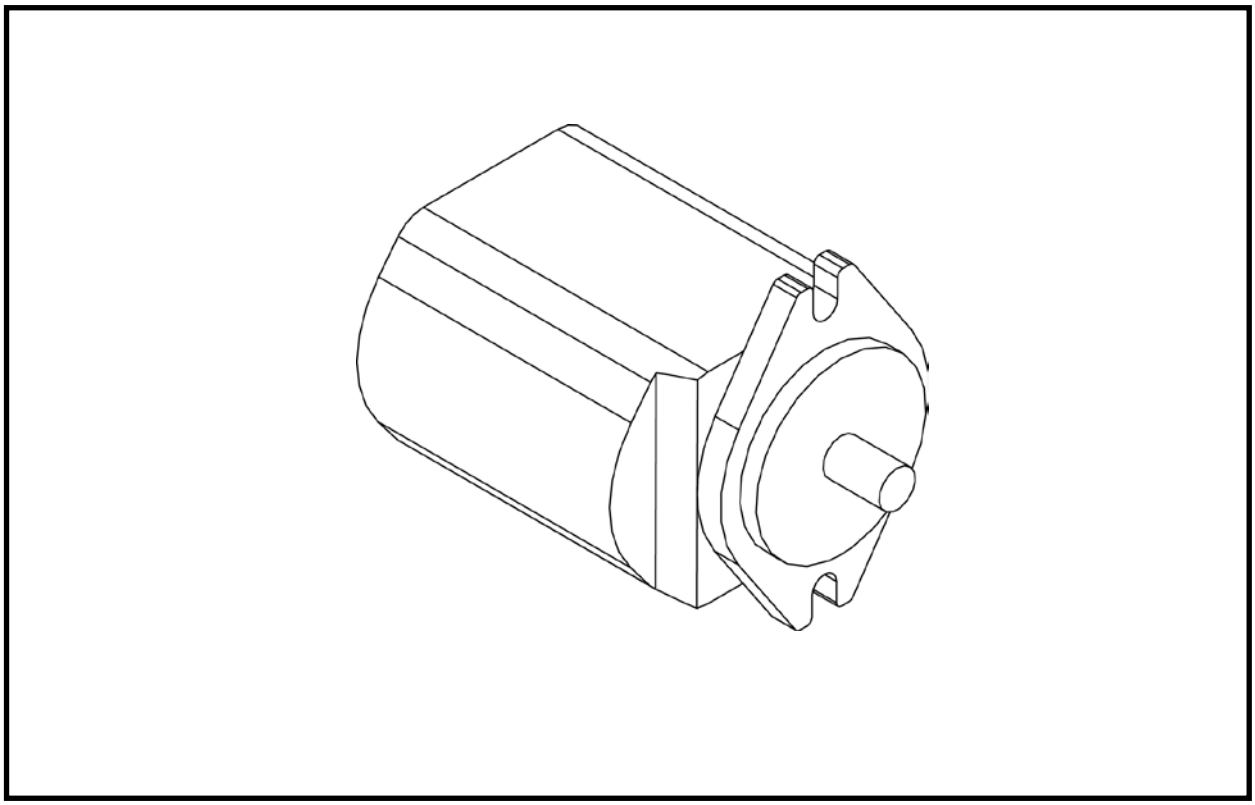
P275T POWER PACK



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-302	AUGER-CUTTER-JACKING SUPPLY PUMP ASSEMBLY

COOLING PUMP, P0303-307

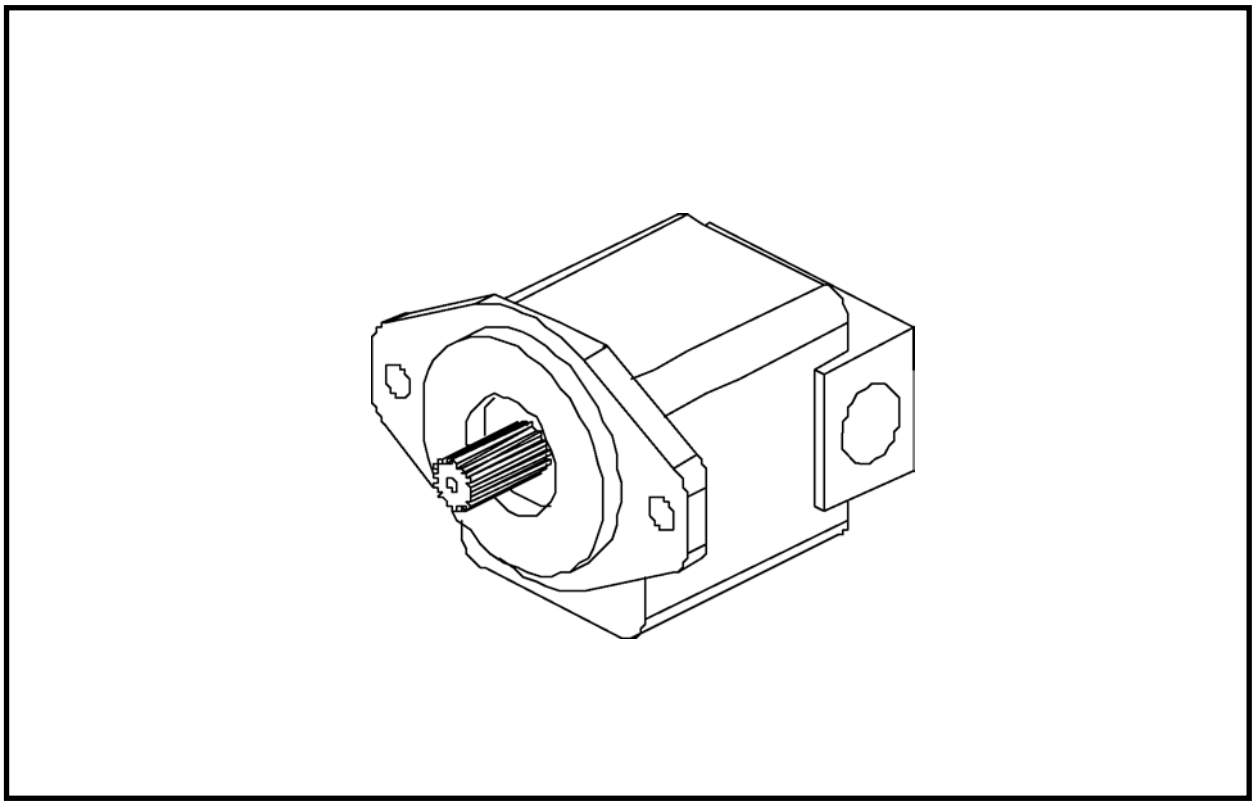
P275T POWER PACK



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-307	COOLING PUMP

GEAR PUMP, P0303-250

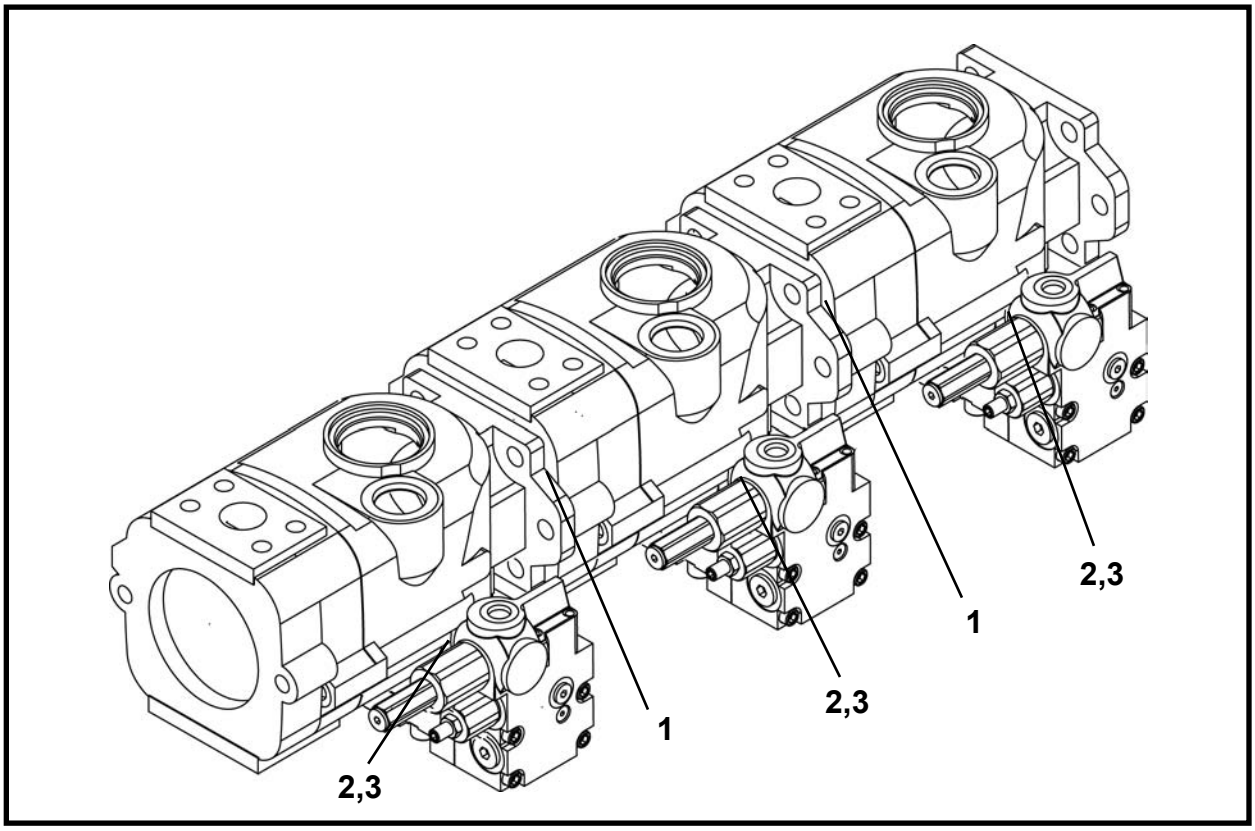
P150Q POWER PACK



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-250	GEAR PUMP

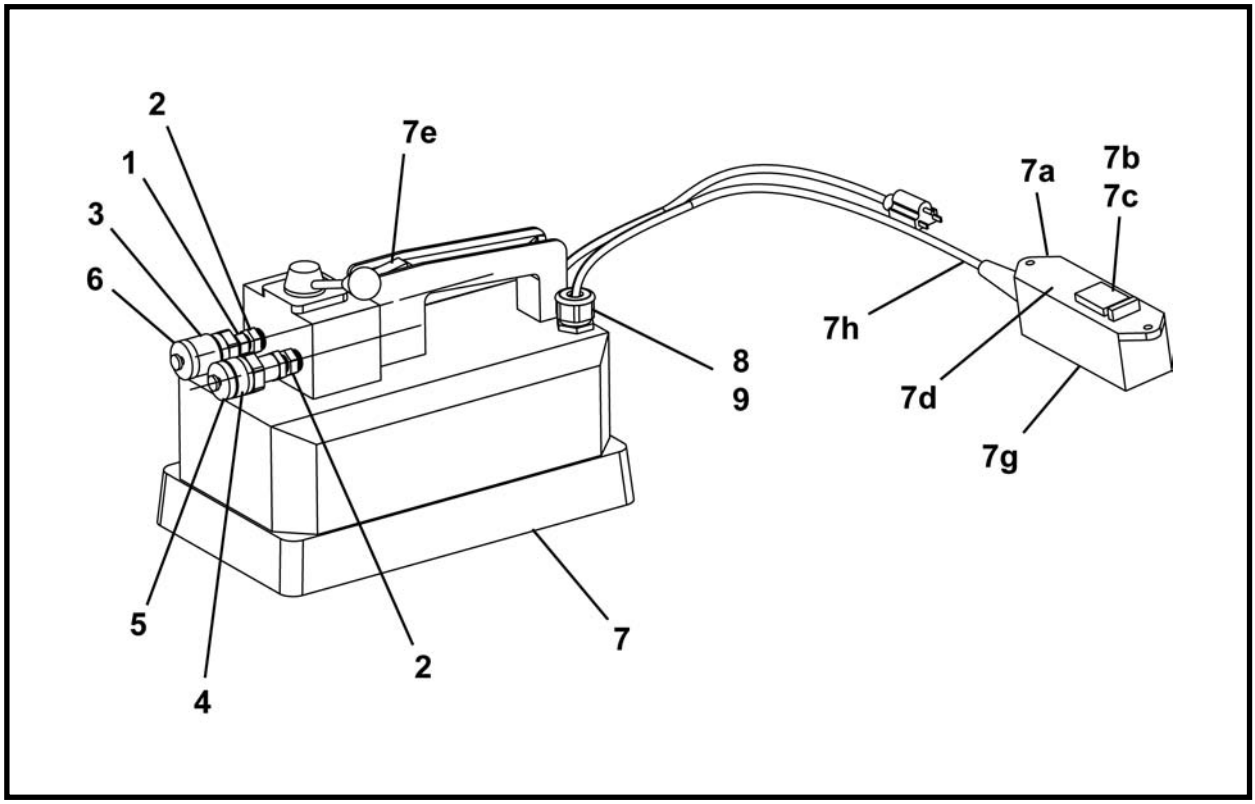
TRIPLE PUMP, P0303-343

P150Q POWER PACK



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0303-343	TRIPLE PUMP
1	2	P0303-286B	ORING
2	3	P0303-286C	GASKET, Pump Control
3	3	P0303-286D	ORING, Pump Control

POWER PACK 120V, A40257A
BREAKOUT TOOL - RECEPTION SHAFT



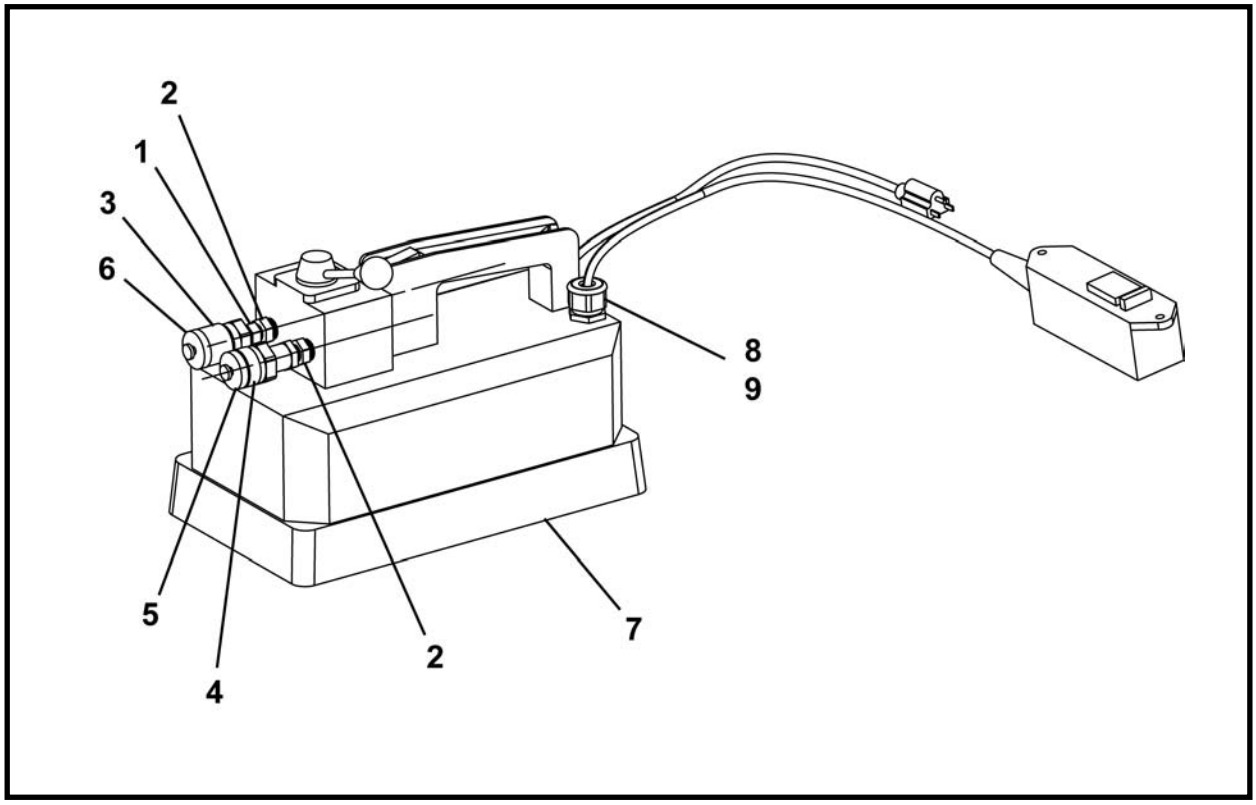
ITEM	QTY	PART NO.	DESCRIPTION
0*	1	A40257A	POWER PACK 120V
1	1	P0300-113	FITTING, 04MP-04MP
2	2	P0300-093	FITTING, 06MP-04FPS
3	1	P0100-010B	NIPPLE
4	1	P0100-010A	COUPLER
5	1	P0100-010E	PLUG, Dust
6	1	P0100-010D	CAP, Dust
7**	1	P0303-251	PUMP WITH REMOTE 120V (Includes items 7a - 7h)
7a	1	P0303-251A	COVER, Remote
7b	1	P0303-251B	SWITCH, Remote
7c	1	P0303-251C	COVER, Remote Switch
7d	1	P0303-251D	DECAL
7e	1	P0303-251E	SWITCH, Pump Rocker
7f***	1	P0303-251F	RELAY
7g	1	P0303-251G	HOUSING, Switch
7h	1	P0303-251H	ASSEMBLY, Remote Hand Switch With Cord
8	1	P0311-121	RELIEF, Strain
9	1	P0311-018	NUT, 1/2

* For main assembly parts breakdown, refer to Pilot Tube Breakout Tool - Reception Shaft, FA40230F in Section 11, Miscellaneous.

** A 230V Pump With Remote, P0303-346 is available. Refer to Power Pack 230V, A45440A in this section.

*** Not Shown

POWER PACK 230V, A45440A
BREAKOUT TOOL - RECEPTION SHAFT

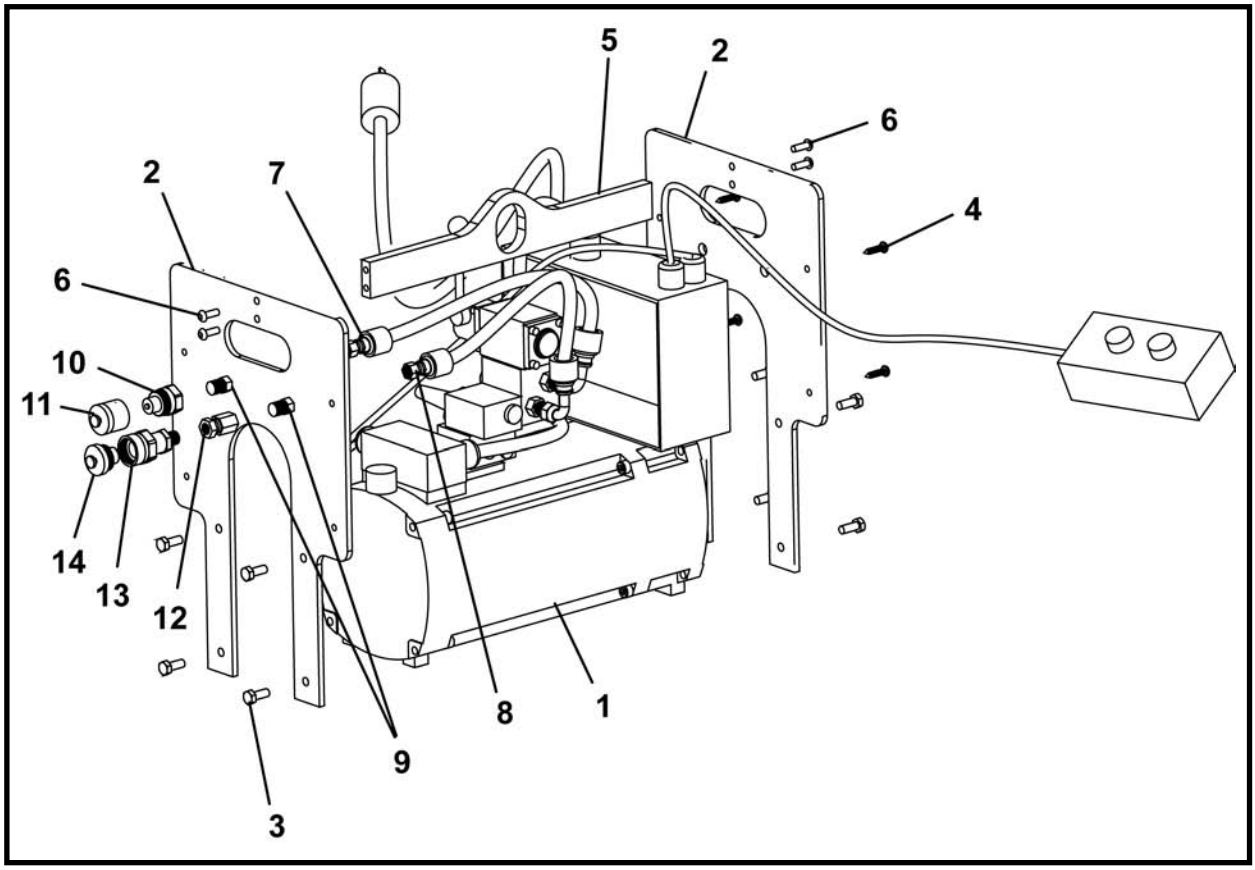


ITEM	QTY	PART NO.	DESCRIPTION
0*	1	A45440A	POWER PACK 230V
1	1	P0300-113	FITTING, 04MP-04MP
2	2	P0300-093	FITTING, 06MP-04FPS
3	1	P0100-010B	NIPPLE
4	1	P0100-010A	COUPLER
5	1	P0100-010E	PLUG, Dust
6	1	P0100-010D	CAP, Dust
7	1	P0303-346	PUMP WITH REMOTE 230V
8	1	P0311-121	RELIEF, Strain
9	1	P0311-018	NUT, 1/2

* For main assembly parts breakdown, refer to Pilot Tube Breakout Tool - Reception Shaft, FA40230F in Section 11, Miscellaneous.

POWER PACK, 1 HP SEALED 120V, A46443A

BREAKOUT TOOL - RECEPTION SHAFT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A46443A	POWER PACK, 1 HP Sealed
1	1	P0303-347	POWER UNIT
2	2	A46441P	PLATE, End
3	8	PM08A-1.25-020	BOLT
4	4	P0035-014B	SCREW, Pan Head Tap
5	1	A46442P	CROSSBAR
6	4	P0022-14-204	SCREW, Button Head Socket 1/4 UNC x .75
7	1	A10371A-017	HOSE ASSEMBLY, 1/4 x 17
8	1	A10371A-013	HOSE ASSEMBLY, 1/4 x 13
9	2	P0300-740	FITTING, 04MP-04MJBKHD
10	1	P0100-010B	NIPPLE
11	1	P0100-010D	CAP, Dust
12	1	P0300-785	FITTING
13	1	P0100-010A	COUPLER
14	1	P0100-010E	PLUG, Dust

NOTES

Cylinders

GBM 4812A
Keyed Cylinder Assembly, A43240A 2
Fixed Cylinder Assembly, A43241A 3
Cylinder Safety Stop Assembly, A44182A 4
Rabbit Assembly / Latching Lock Cylinder Assembly, P0307-203 5
Hydraulic Make Up Tool Cylinder
Cylinder Assembly, 014603A00 6

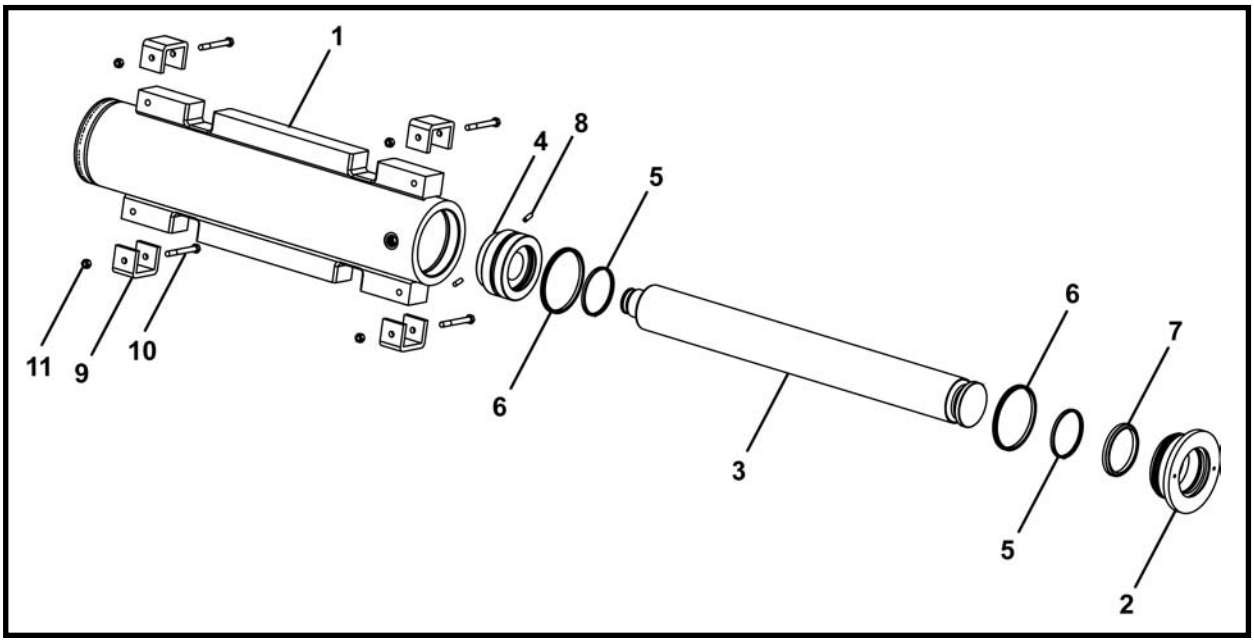
Reception Shaft Breakout Tool
Cylinder Assembly, P0307-146 7

Powered Cutter Head
Torque Wing Cylinder PCH 36 - PCH 44, P0307-204 8

Hydraulic Pipe Adapter
Cylinder Assembly, P0307-151 9

KEYED CYLINDER ASSEMBLY, A43240A

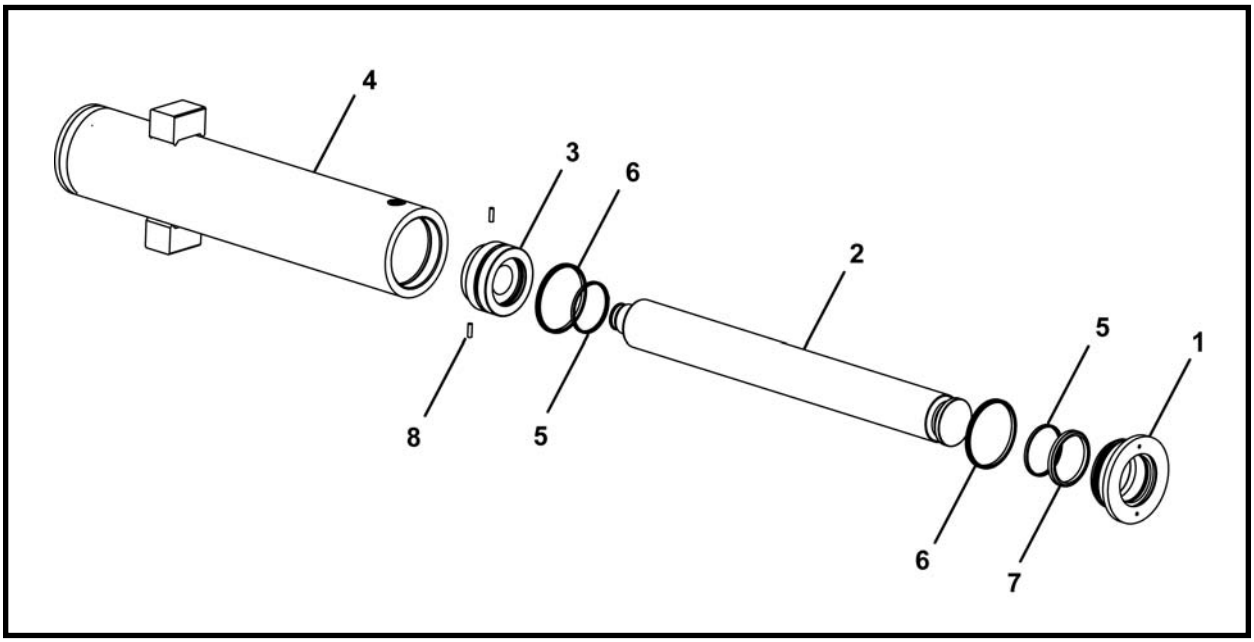
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43240A	KEYED CYLINDER ASSEMBLY
1	1	A43242A	BARREL WELDMENT
2	1	A43249P	GLAND
3	1	A43250P	SHAFT
4	1	A43251P	PISTON
5	2	P0088-158	ROD T SEAL
6	2	P0088-157	PISTON T SEAL
7	1	P0088-159	WIPER
8	2	P0033-06-020	SCREW, Set
9	4	A44073P	BLOCK, Cylinder Stop
10	4	P0001-08-018	BOLT, 1/2 UNC x 4.5
11	4	P0003-08-000	NUT, 1/2

FIXED CYLINDER ASSEMBLY, A43241A

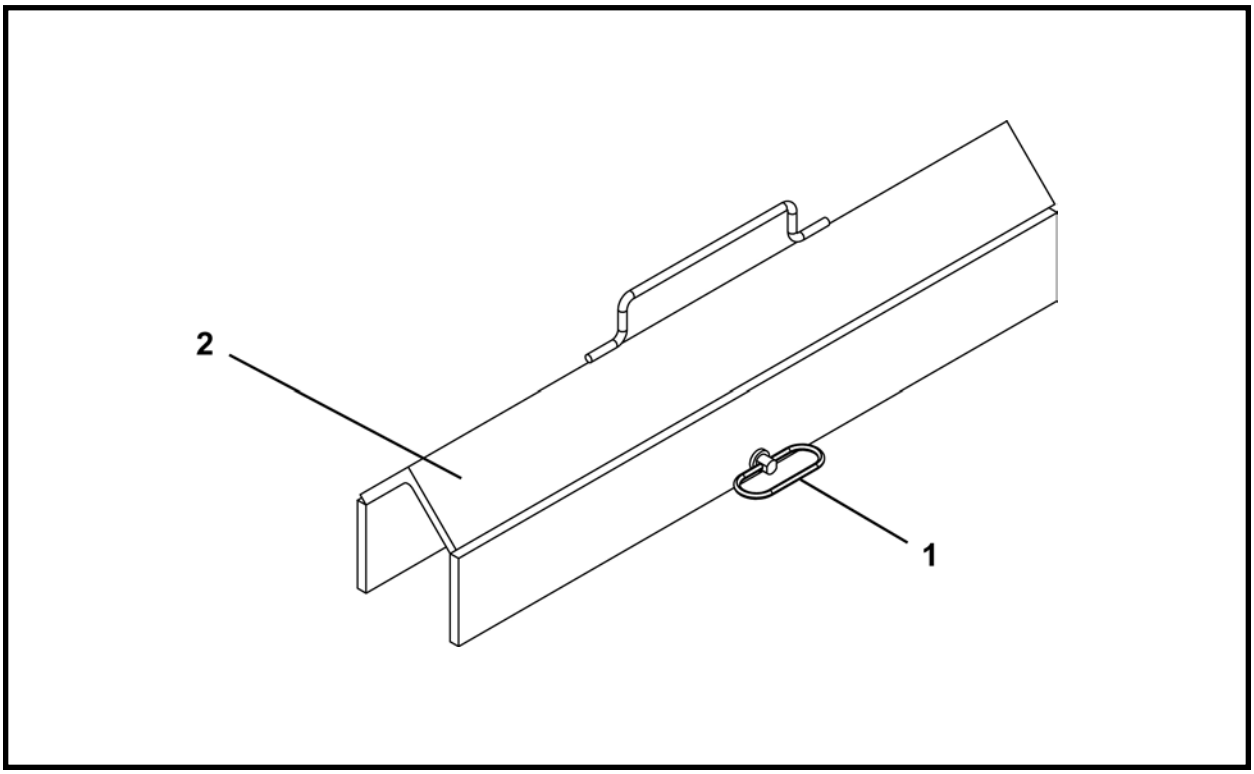
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43241A	FIXED CYLINDER ASSEMBLY
1	1	A43249P	GLAND
2	1	A43250P	SHAFT
3	1	A43251P	PISTON
4	1	A43252A	BARREL WELDMENT
5	2	P0088-158	ROD T SEAL
6	2	P0088-157	PISTON T SEAL
7	1	P0088-159	WIPER
8	2	P0033-06-020	SCREW, Set

CYLINDER SAFETY STOP ASSEMBLY, A44182A

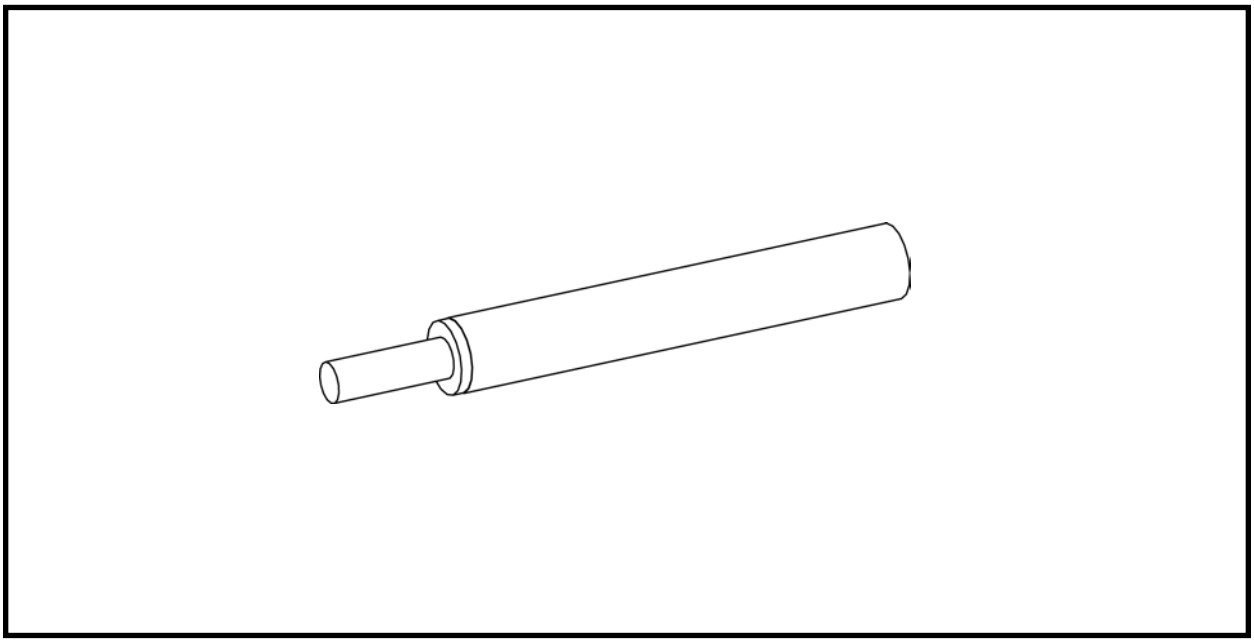
4812A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44182A	CYLINDER SAFETY STOP ASSEMBLY
1	1	P0090-015	PIN, Hitch
2	1	A44183A	STOP, Cylinder Safety

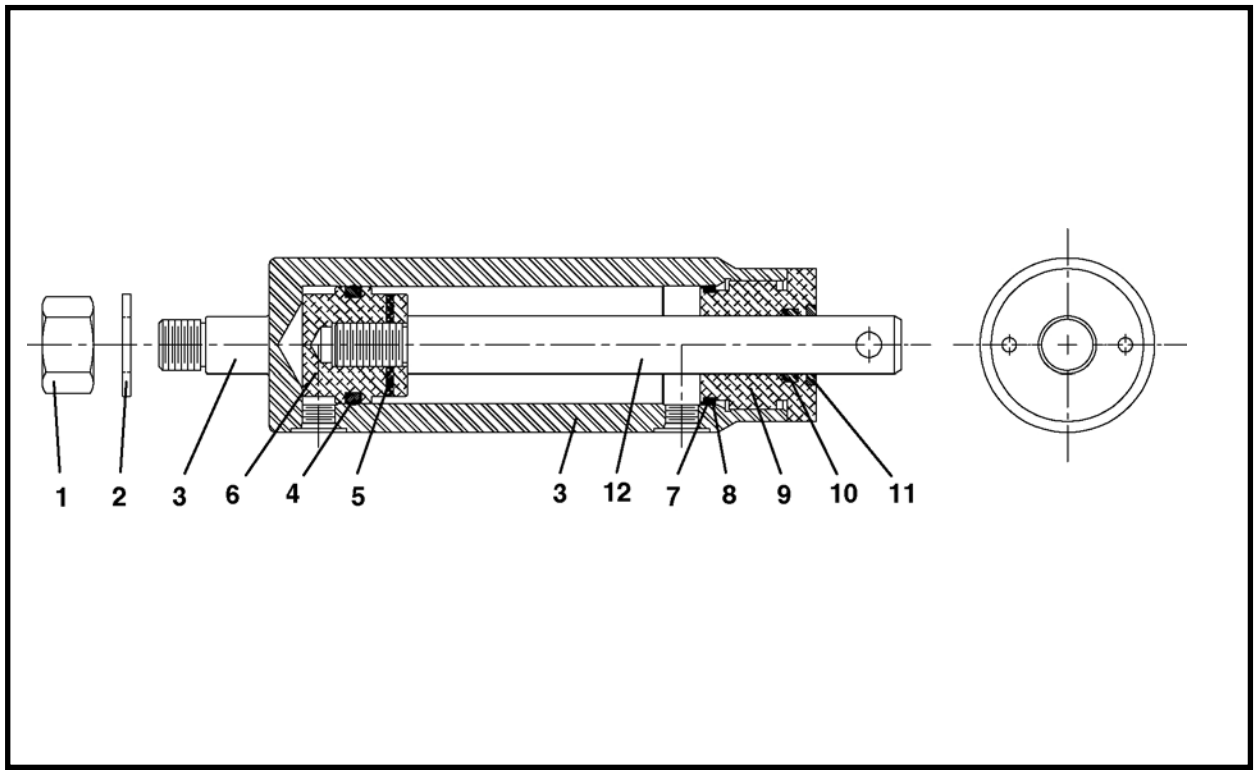
CYLINDER ASSEMBLY, P0307-203

4812A RABBIT ASSEMBLY / LATCHING LOCK



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0307-203	CYLINDER ASSEMBLY

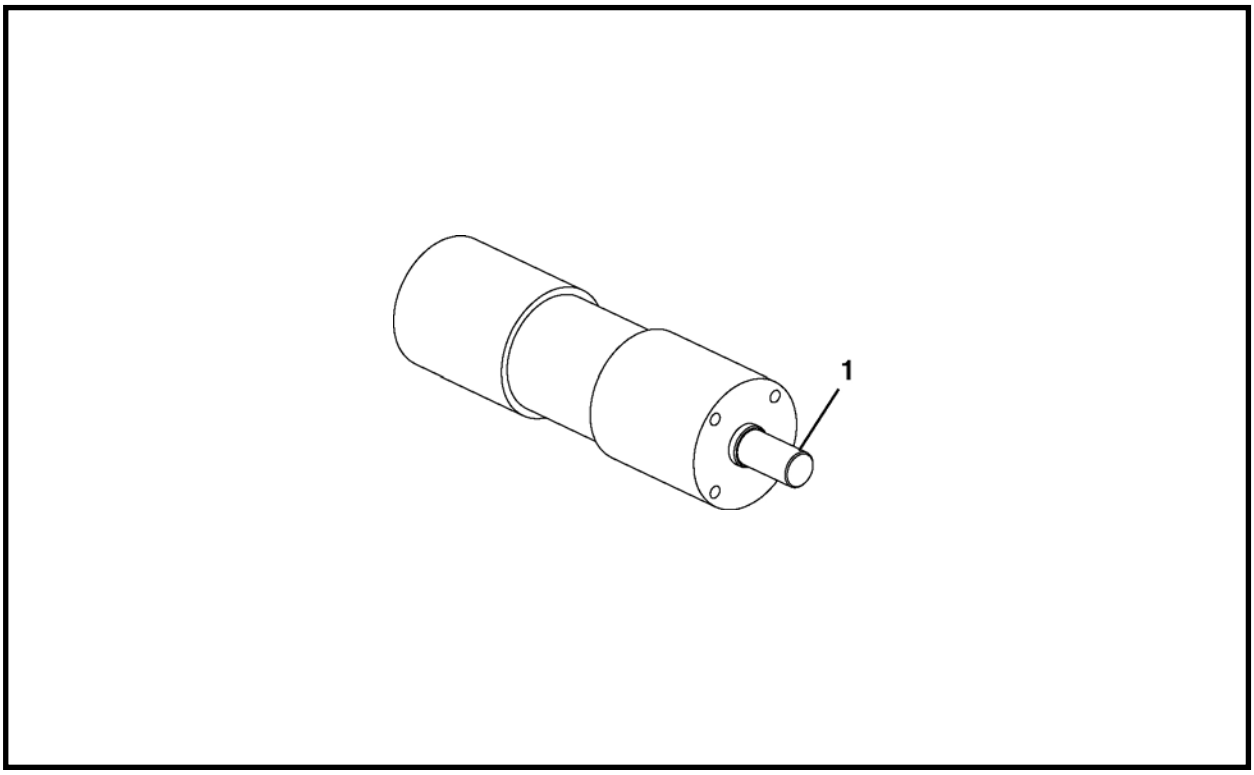
CYLINDER ASSEMBLY, 014603A00
HYDRAULIC MAKE UP TOOL



ITEM	QTY	PART NO.	DESCRIPTION
0	1	014603A00	ASSEMBLY, Hydraulic Dirt Wing Cylinder
1	1	P0004-14-000	NUT, 7/8 UNF
2	1	P0040-014	WASHER, 7/8
3	1	014605P00	BARREL, Cylinder
4*	1	P0085-C2	SEAL
5	1	P0049-042	PIN, Roll
6	1	010864P00	PISTON
7*	1	P0085-224	ORING
8*	1	P0084-224	RING, Back Up
9	1	001245P00	GLAND
10*	1	P0086-001	POLYSEAL
11*	1	P0080-001	WIPER
12	1	014604P00	SHAFT
13	1	010748A00	KIT, Seal

* Items included in item 13, 010748A00 Seal Kit.

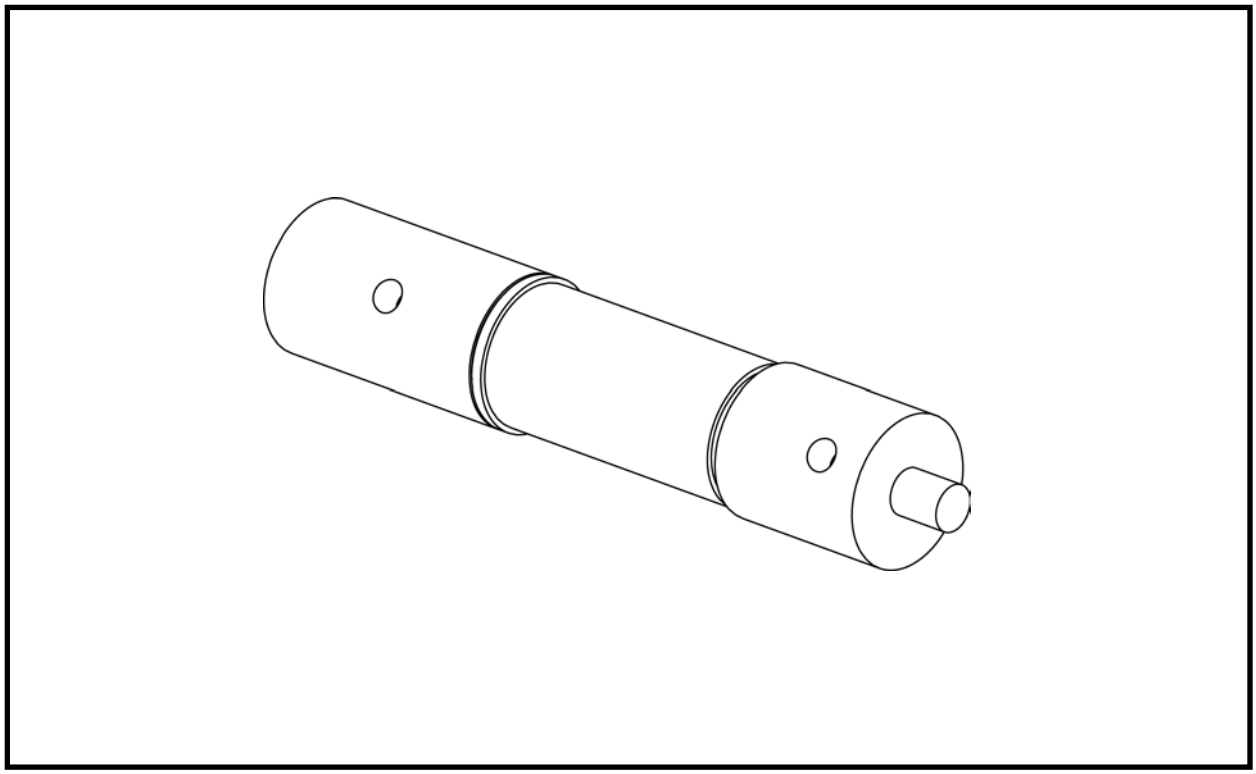
CYLINDER ASSEMBLY, P0307-146
RECEPTION SHAFT BREAKOUT TOOL



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0307-146	CYLINDER ASSEMBLY
1	1	P0307-146A	ROD
2	1	P0307-136E	KIT, Seal (not shown)

CYLINDER ASSEMBLY, P0307-204

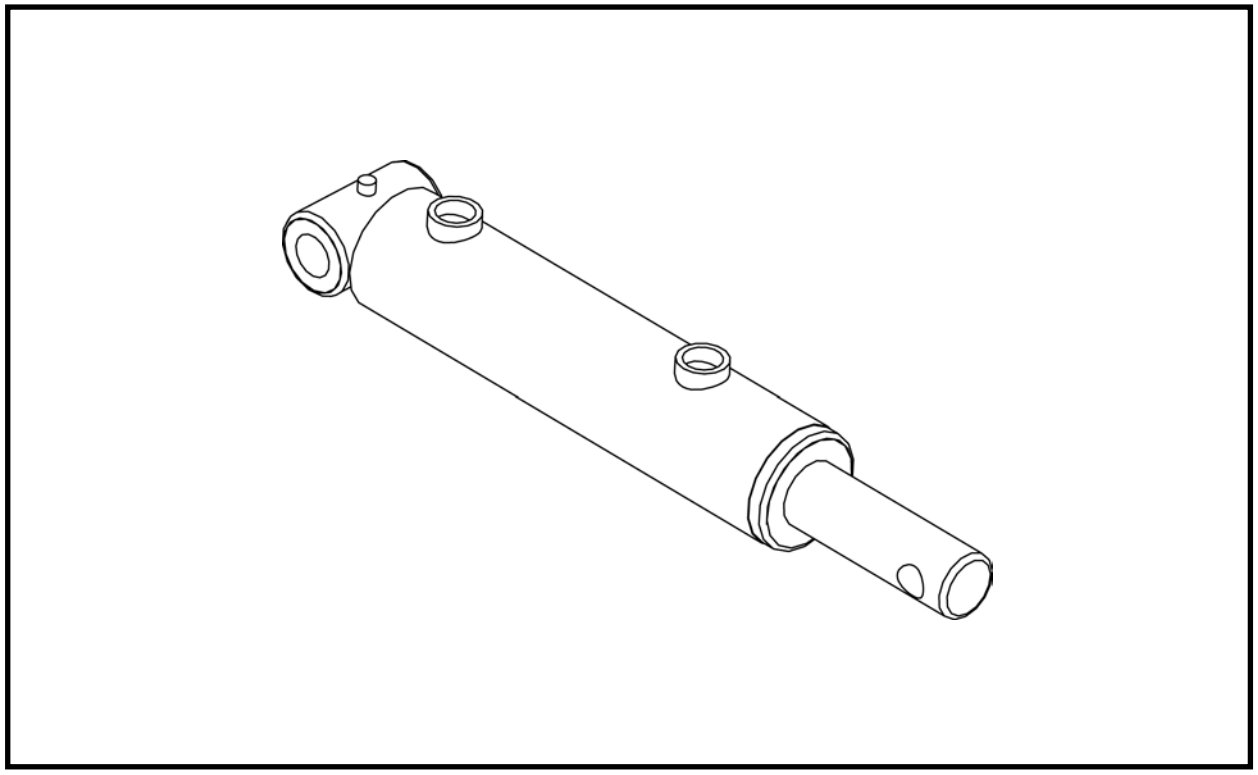
PCH 36 - PCH 44



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0307-204	CYLINDER ASSEMBLY

NOTE: Used on PCH 36 & 44 torque wing assembly. A44145A.

CYLINDER ASSEMBLY, P0307-151
HYDRAULIC PIPE ADAPTER



ITEM	QTY	PART NO.	DESCRIPTION
0	1	P0307-151	CYLINDER ASSEMBLY

NOTE: Used on Hydraulic Pipe Adapter - 18” Denlok, FA45061F.

NOTES

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Miscellaneous/Tooling (continued)

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Miscellaneous/Tooling (continued)

Powered Cutter Head (continued)

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Miscellaneous/Tooling (continued)

Pipe Adapters (continued)

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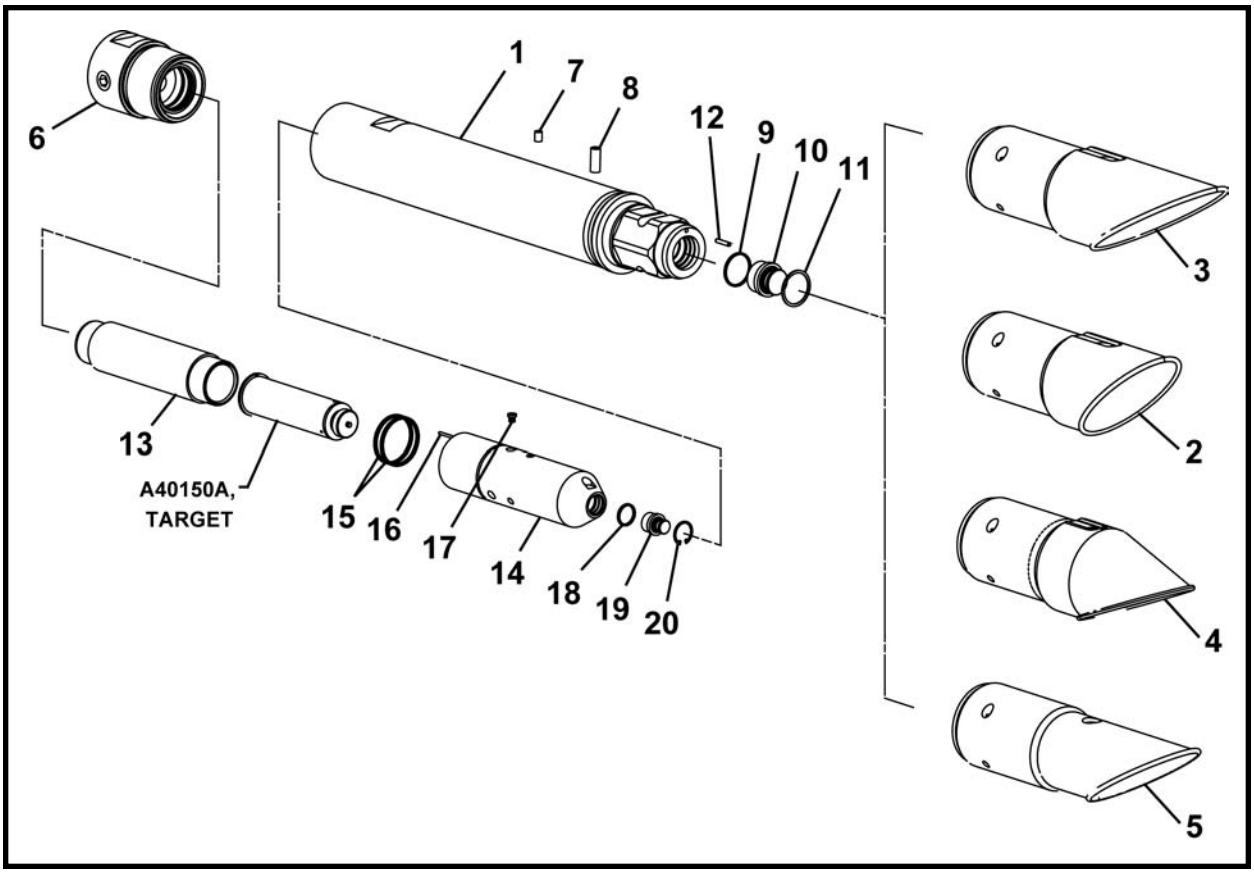
STEERING HEAD ASSEMBLY, FA40245F

STEERING HEAD

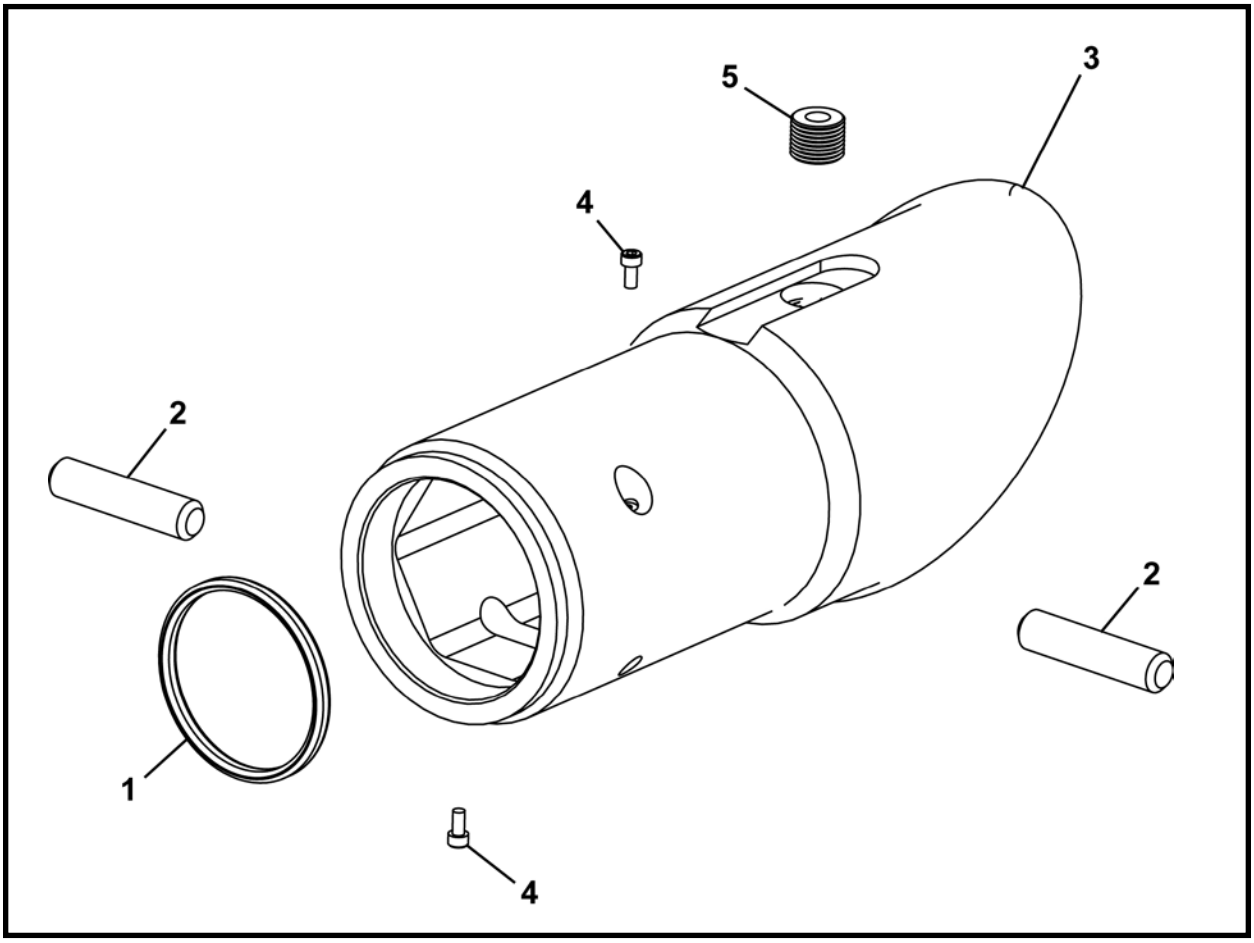


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40245F	STEERING HEAD ASSEMBLY
1	1	A40246A	ADAPTER, Steering Head
2	1	A40247A	STEERING HEAD, 45 Degree (5” Diameter)
3	1	A40248A	STEERING HEAD, 30 Degree (5” Diameter)
4	1	A40249A	STEERING HEAD, Bullet
5	1	A42706A	STEERING HEAD, 30 Degree (4” Diameter)
6	1	A40250A	CONNECTION, Air & Fluid (Includes item 6a)
6a*	2	P0085-228	ORING
7	3	P0033-06-008	SCREW, Socket Head Cap 3/8-16 UNC x 0.5
8	1	P0033-08-020	SCREW. Socket Set 1/2-13 UNC x 1.25
9	1	P0085-130	ORING
10	1	P0302-404	VALVE, Check
11	1	P0076-055	RING, Spiral Snap
12	1	P0049-079	PIN, Roll 3/16 x 1
13	1	A40594P	TUBE, Inner
14	1	A40595A	HOLDER, Target
15	2	P0085-229	ORING
16	1	P0049-044	PIN, Roll 1/8 x 1.25
17	3	P0300-224	PLUG, 02MB-HHP
18	1	P0085-120	ORING
19	1	P0302-405	VALVE, Check
20	1	P0076-056	RING, Internal Snap

* Not Shown

STEERING HEAD, 45 DEGREE, 5” DIAMETER, A40247A

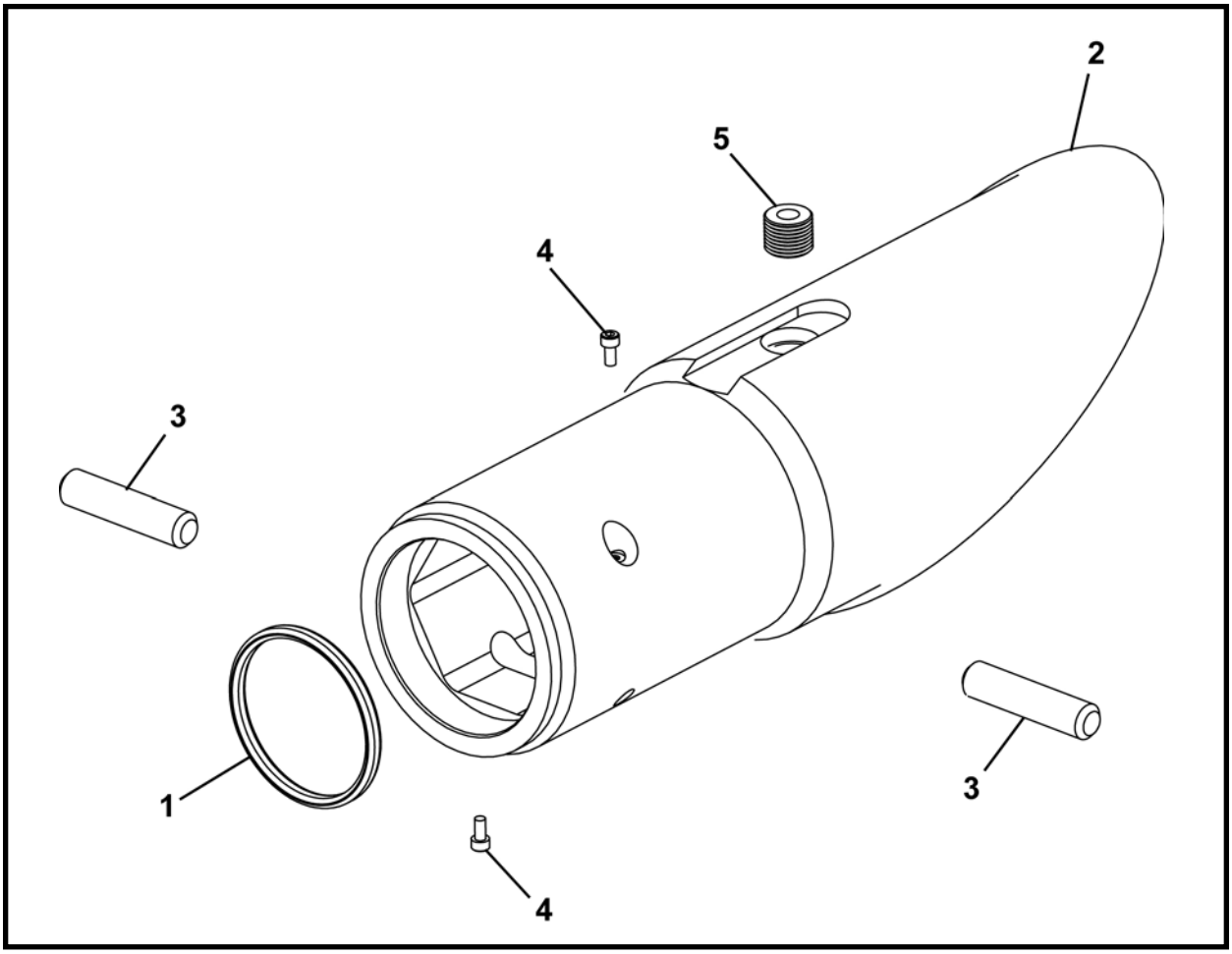
STEERING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A40247A	STEERING HEAD, 45 Degree, 5” Diameter
1	1	P0085-336	ORING
2	2	A40582P	PIN, Connection
3	1	A40578P	45 DEGREE LEAD 5.0
4	2	P0031-1024-001.5	SCREW, Socket Head Cap 10-24 UNC x .375
5	1	A40297P	PORT, Lubrication

STEERING HEAD, 30 DEGREE, 5” DIAMETER, A40248A

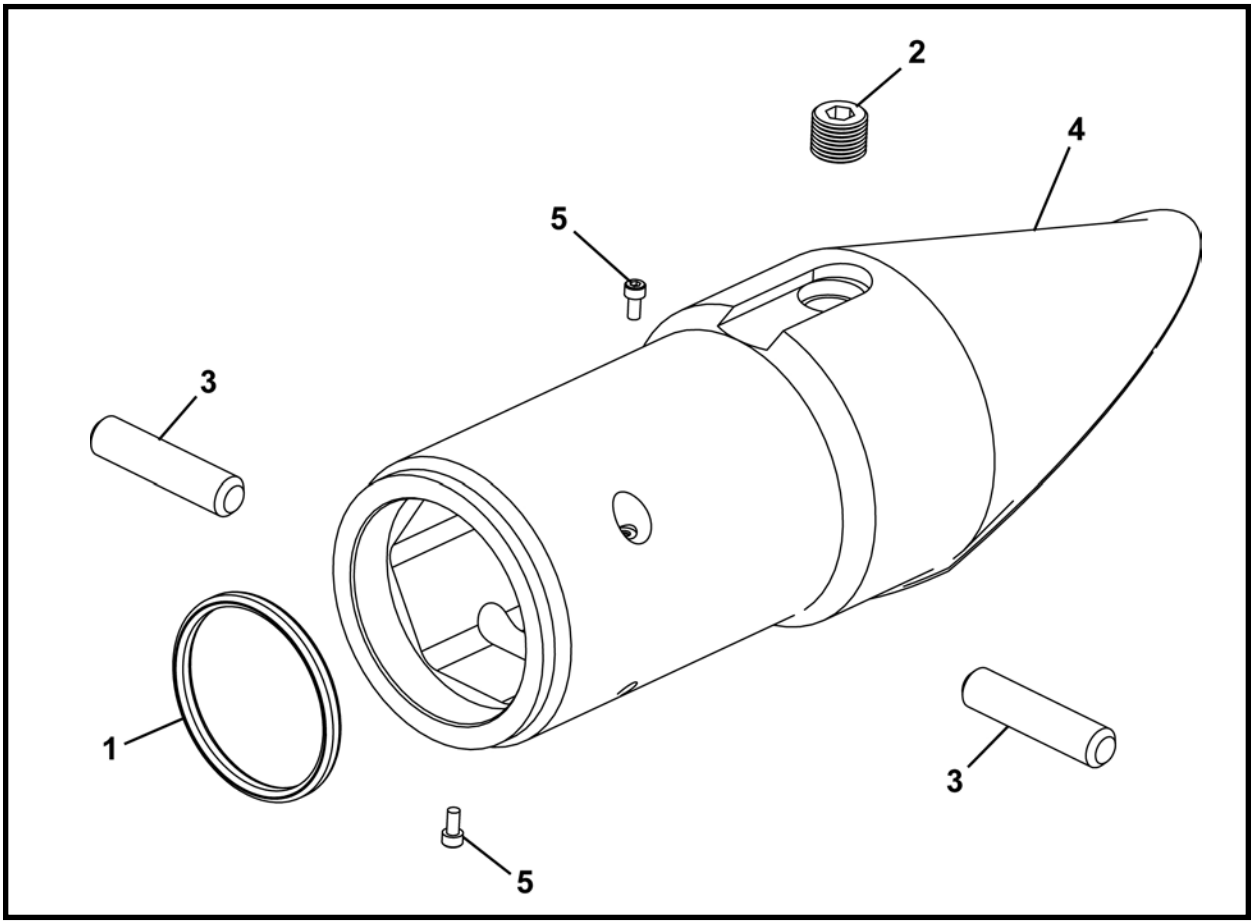
STEERING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A40248A	STEERING HEAD, 30 Degree, 5” Diameter
1	1	P0085-336	ORING
2	1	A40579P	30 DEGREE LEAD 5.0
3	2	A40582P	PIN, Connection
4	2	P0031-1024-001.5	SCREW, Socket Head Cap 10-24 UNC x .375
5	1	A40297P	PORT, Lubrication

STEERING HEAD, BULLET, A40249A

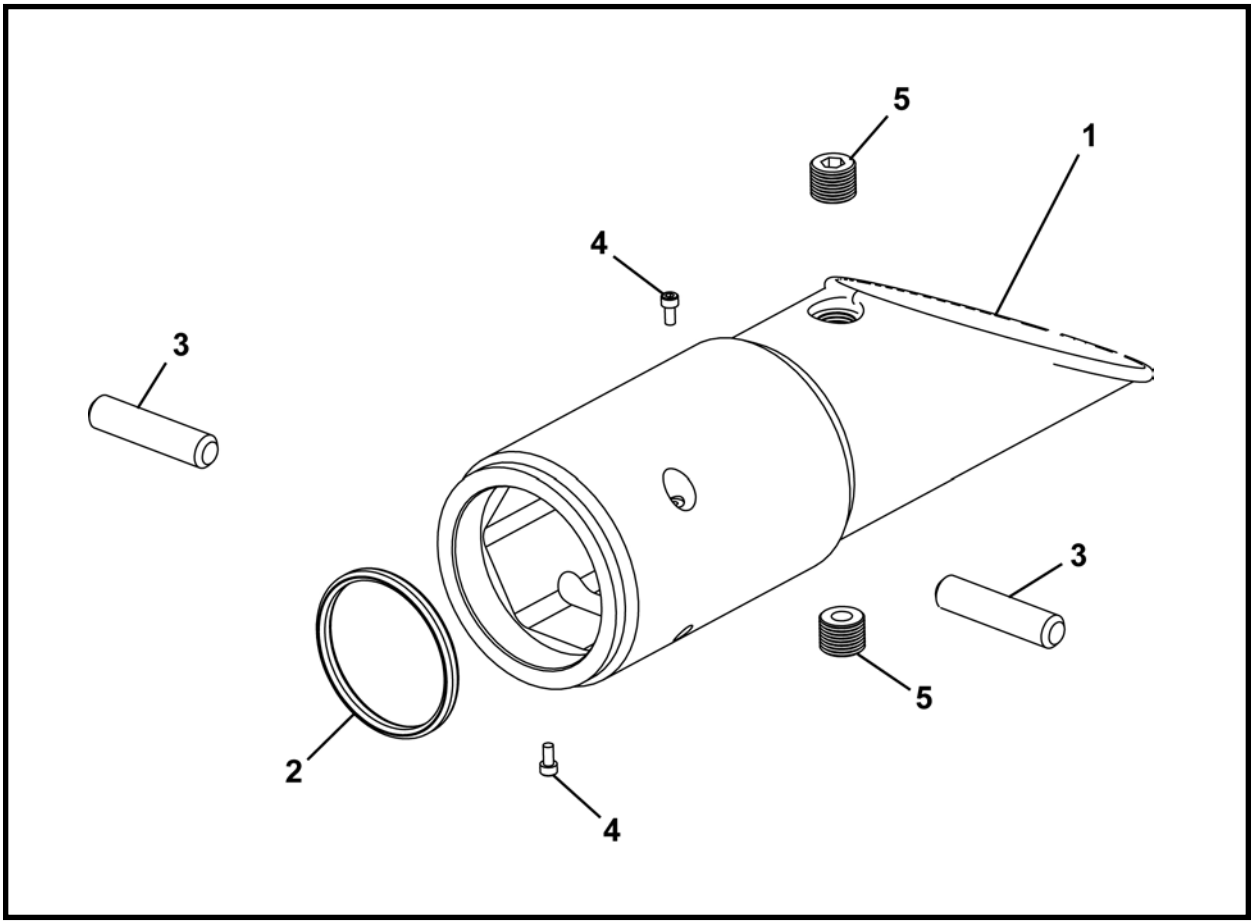
STEERING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A40249A	STEERING HEAD, Bullet
1	1	P0085-336	ORING
2	1	A40297P	PORT, Lubrication
3	2	A40582P	PIN, Connection
4	1	A40580P	BULLET LEAD
5	2	P0031-1024-001.5	SCREW, Socket Head Cap 10-24 UNC x .375

STEERING HEAD, 30 DEGREE, 4” DIAMETER, A42706A

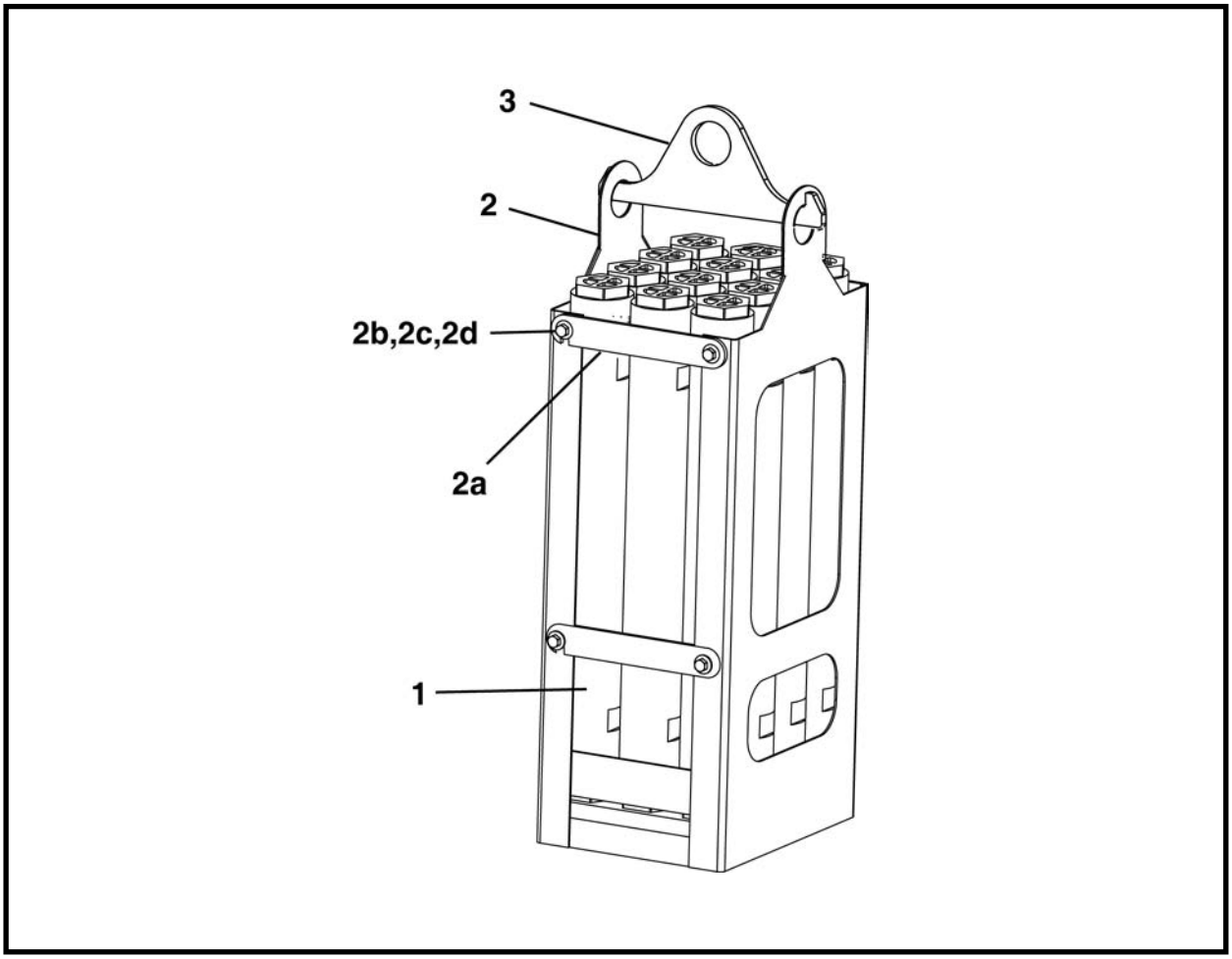
STEERING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42706A	STEERING HEAD, 30 Degree, 4” Diameter
1	1	A42707P	30 DEGREE LEAD 4.0
2	1	P0085-336	ORING
3	2	A40582P	PIN, Connection
4	2	P0031-1024-001.5	SCREW, Socket Head Cap 10-24 UNC x .375
5	1	A40297P	PORT, Lubrication

PILOT TUBE RACK, FA40255F

PILOT TUBE - 30 INCH

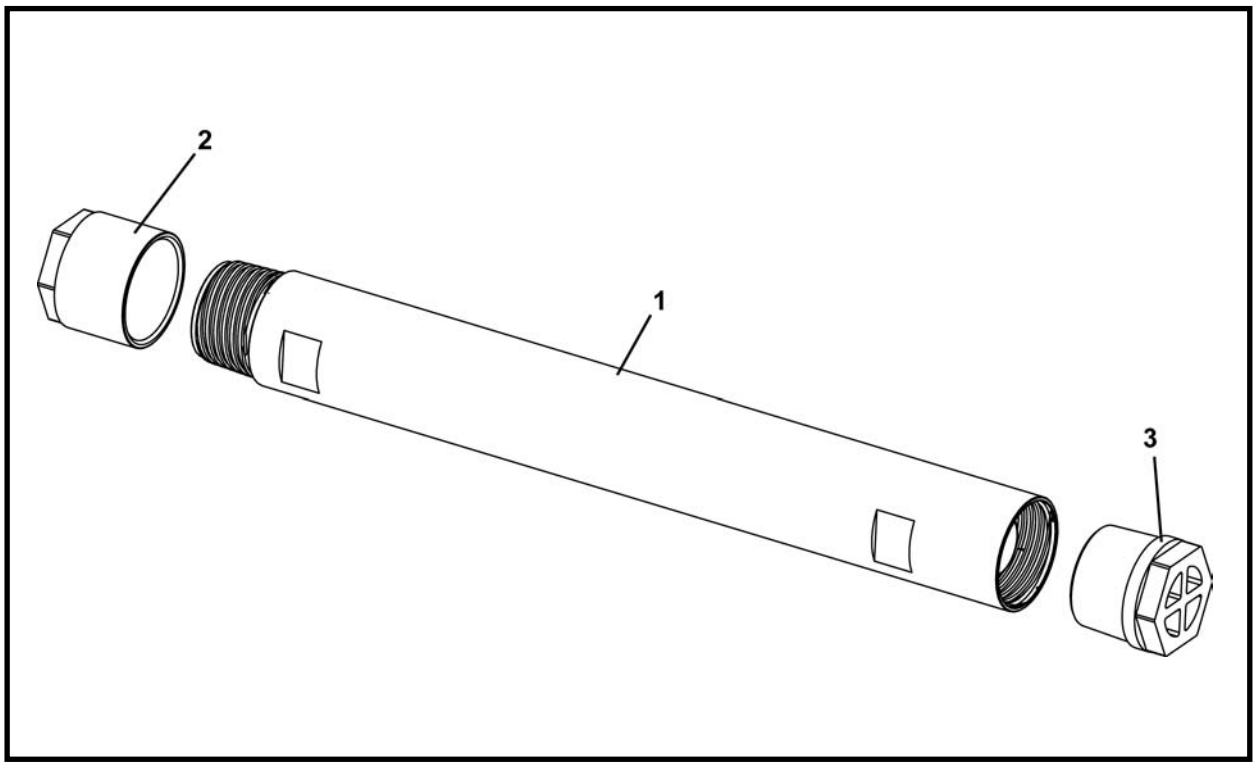


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40255F	PILOT TUBE RACK (Includes items 1 & 2)
1	12	A40237A	TUBE, Pilot 30 in.
2	1	A40220A	HOLDER, Pilot Tube (Includes items 2a - 2d)
2a	2	A40538P	BAR, Front Latch
2b	4	P0003-08-000	NUT, 1/2
2c	4	P0001-08-005	BOLT, 1/2 UNC x 1.25
2d	4	P0045-008	WASHER, Lock 1/2
3*	1	A40540P	BAR, Lifting

* Not part of Assembly FA40255F

PILOT TUBE 30 In., A40237A

PILOT TUBE - 30 INCH

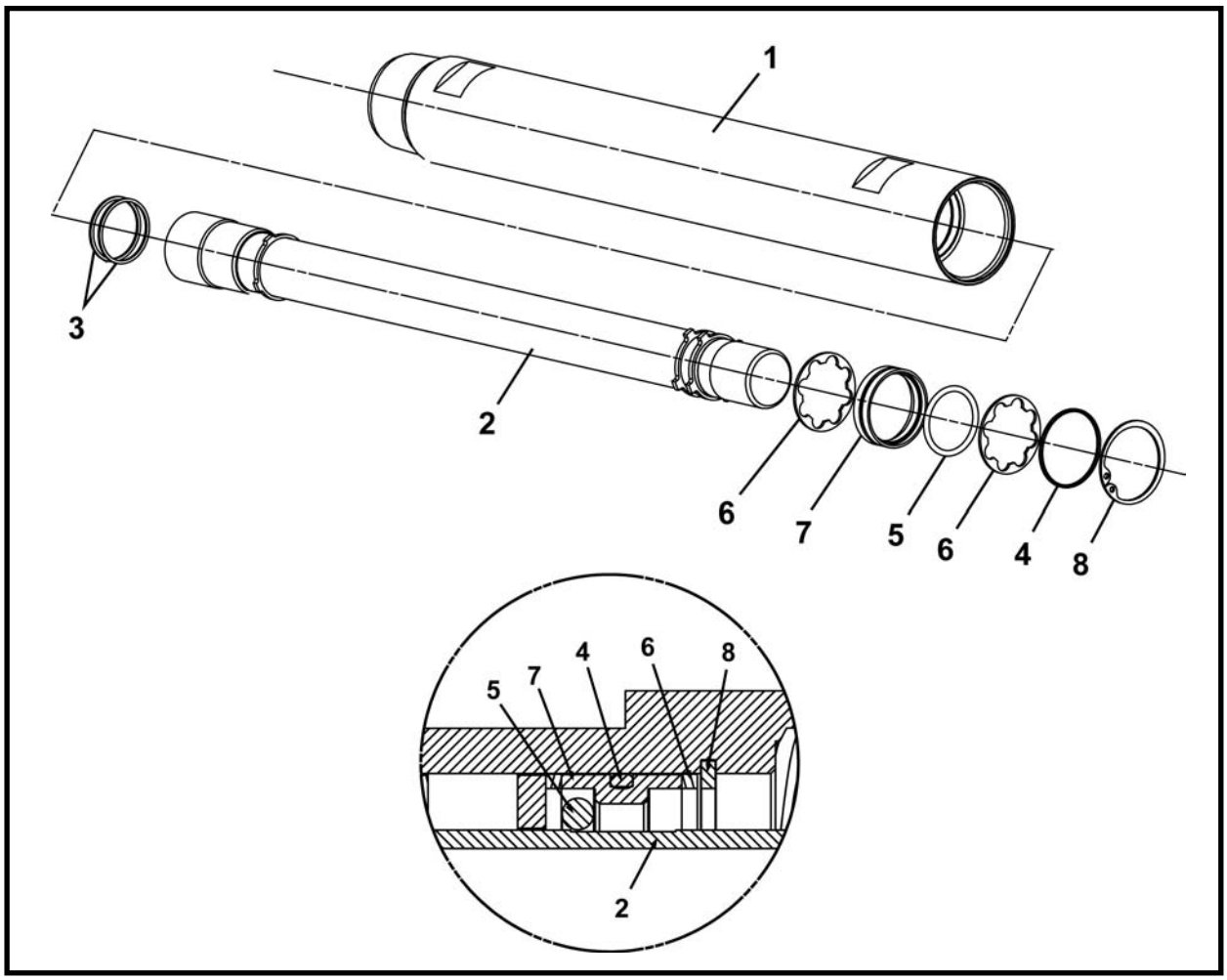


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A40237A	PILOT TUBE 30 In.
1	1	A42356A	PILOT TUBE, Dual Wall
2	1	A42362P	PROTECTOR, Pin Thread
3	1	A42361P	PROTECTOR, Box Thread

Note:
1. Use Copper Guard 4® to lubricate tool joint threads.
2. Clean and lubricate tool joint and inner tube after use to prevent corrosion.

DUAL WALL PILOT TUBE, A42356A

PILOT TUBE - 30 INCH



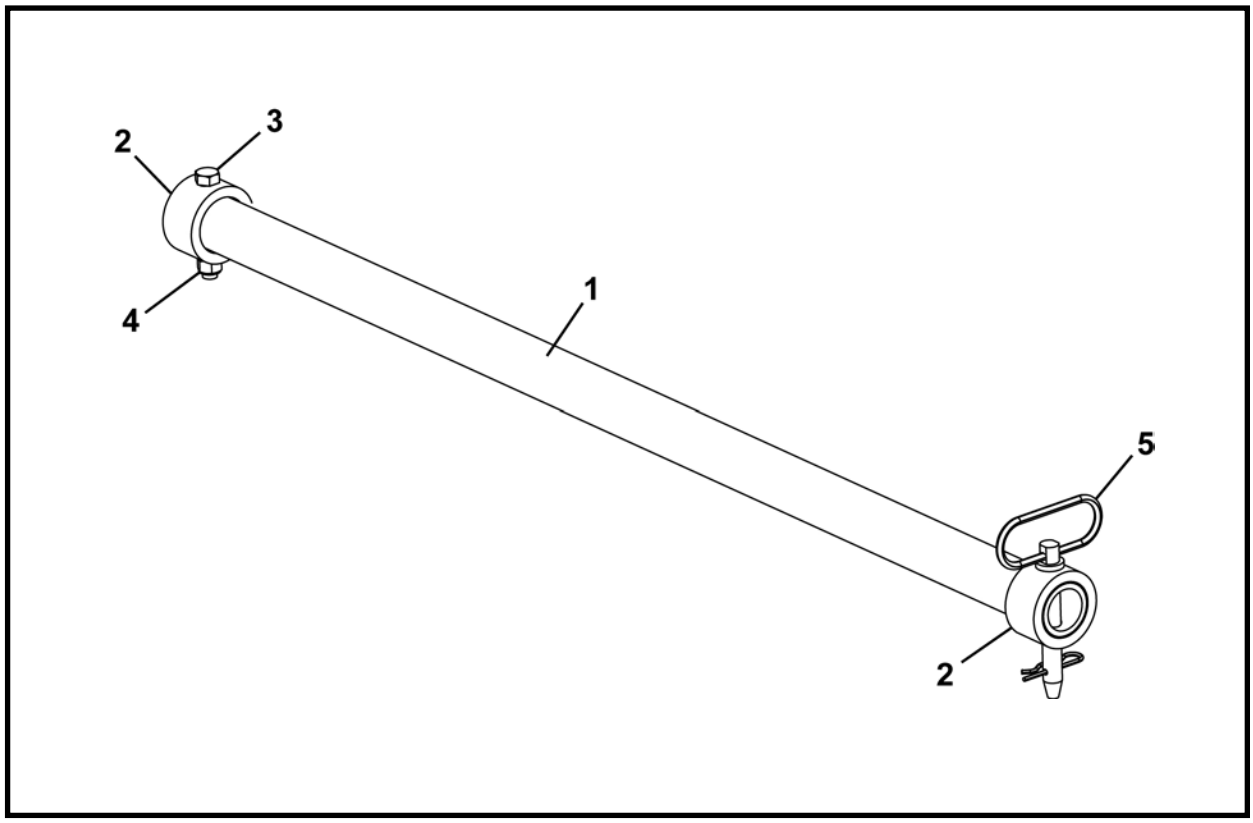
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42356A	PILOT TUBE, Dual Wall
1	1	A40573P	TUBE, Outer
2	1	A42360A	TUBE, Inner
3	2	P0085-228	ORING
4	1	P0085-149	ORING
5	1	P0085-331	ORING
6	2	A42357P	WASHER, Drip Valve
7	1	A42363P	SPACER, Drip Valve
8	1	P0077-050	RING, Internal Snap

Note:

1. Use Copper Guard 4® to lubricate tool joint threads.
2. Clean and lubricate tool joint and inner tube after use to prevent corrosion.
3. Item 4, Oring fits into external groove of item 7, Drip Valve Spacer as shown in inset.

PILOT TUBE LIFT HOLDERS

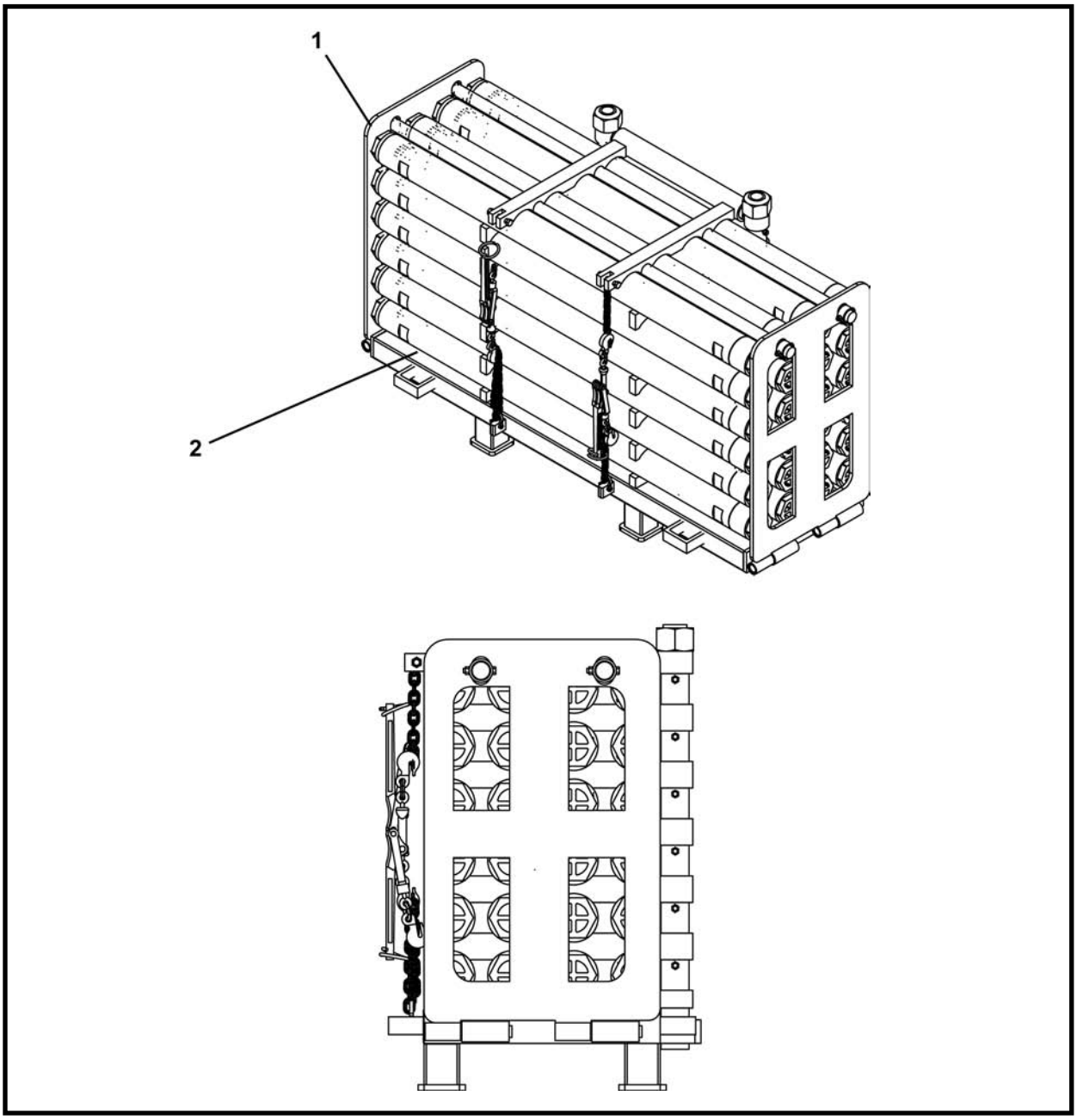
PILOT TUBE - 30 INCH



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	A42250A	PILOT TUBE LIFT HOLDERS, 2
0.2	1	A42251A	PILOT TUBE LIFT HOLDERS, 3
1.1	1	A42252P	TUBE, Lift 2 Holders
1.2	1	A42254P	TUBE, Lift 3 Holders
2	2	A42253P	TUBE, Collar Lift
3	1	P0001-08-014	BOLT, 1/2-13 UNC x 3.5
4	1	P0013-08-000	NUT, Lock 1/2
5	1	P0090-010	PIN, Hitch 5/8 x 3.75

PILOT TUBE (60 INCH) ASSEMBLY, FA44453F

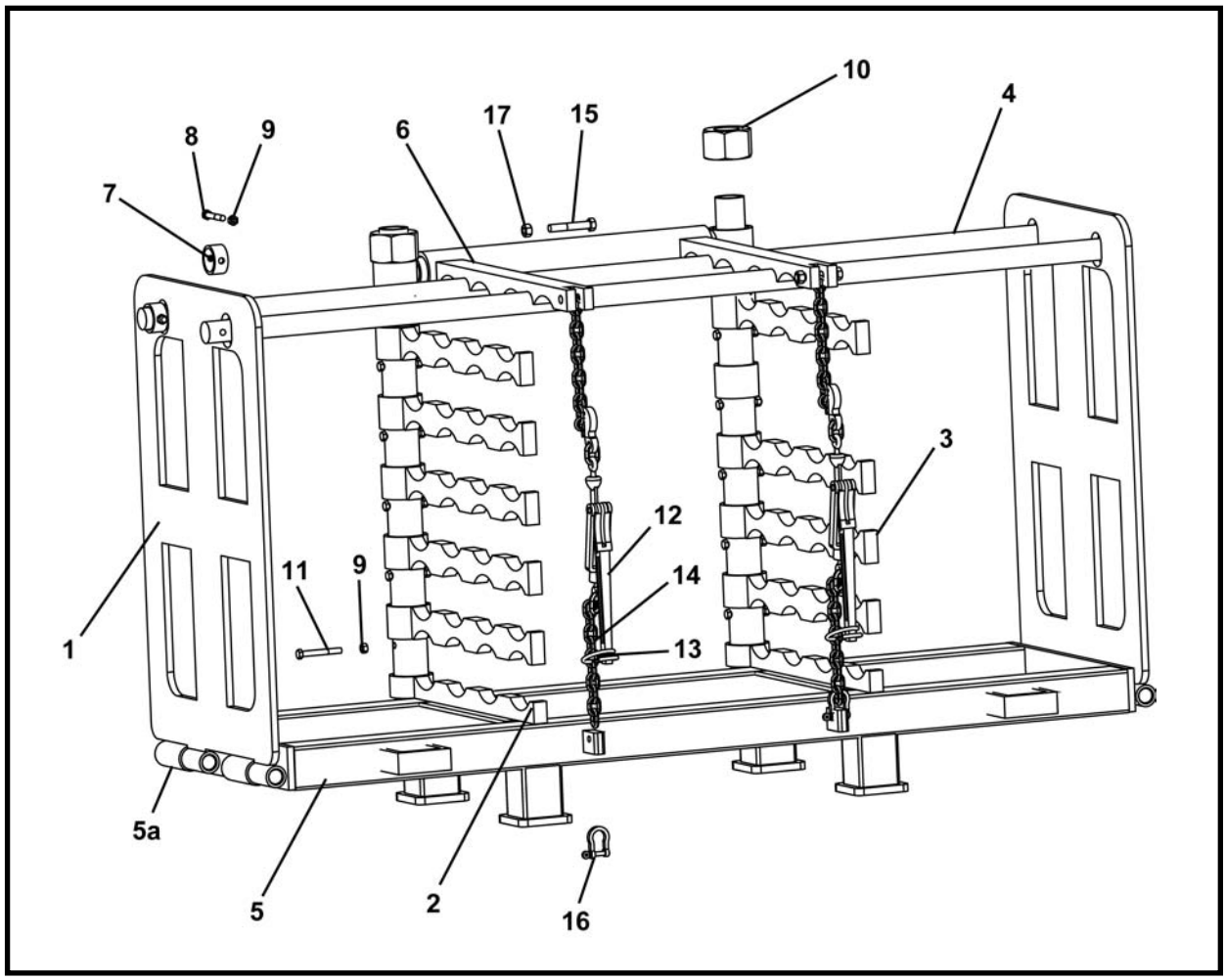
PILOT TUBE - 60 INCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44453F	PILOT TUBE RACK 60 Inch
1	1	A43575A	RACK, Pilot Tube 60 Inch
2	24	A43333A	TUBE, Pilot 60 Inch

PILOT TUBE (60 INCH) RACK, A43575A

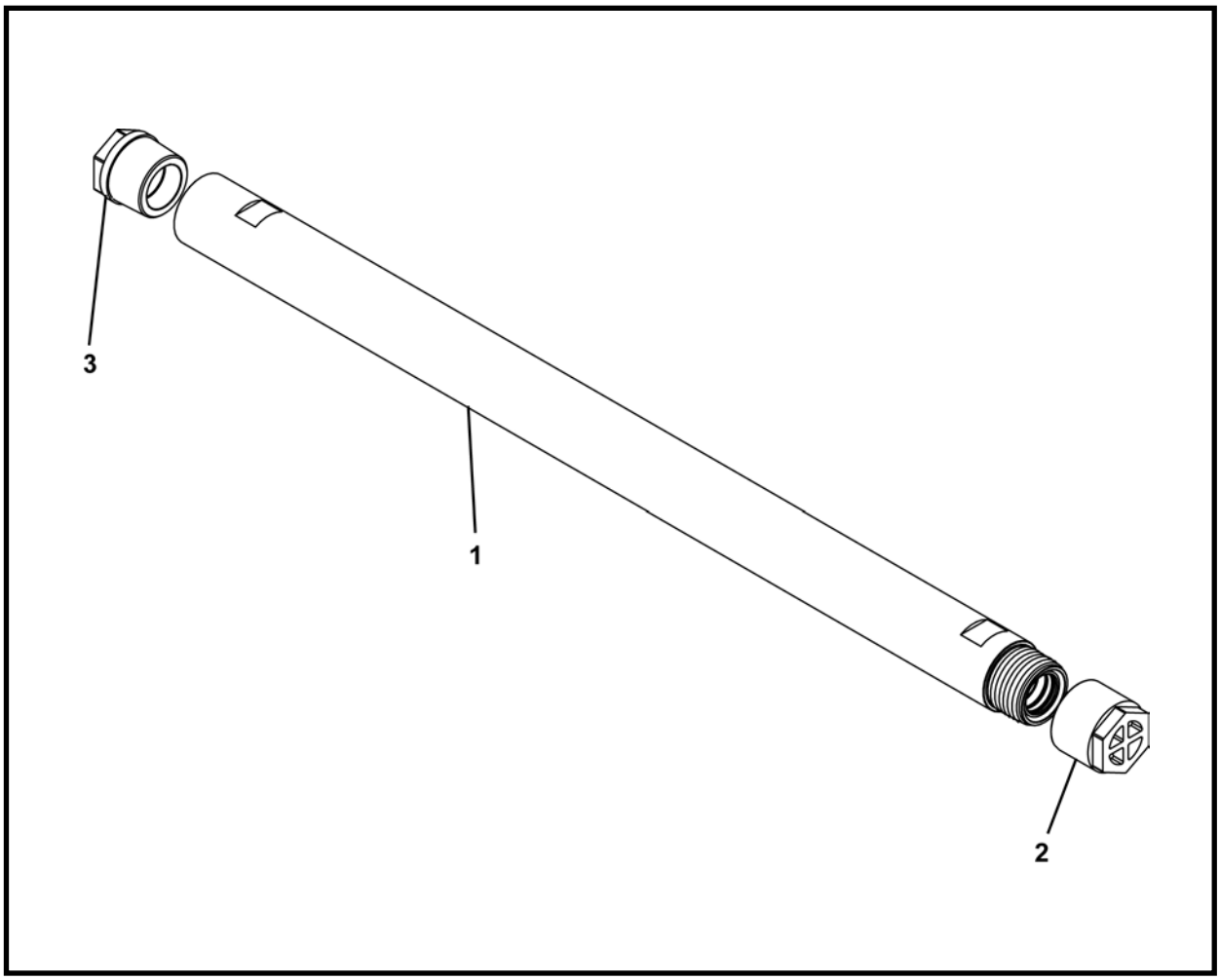
PILOT TUBE - 60 INCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43575A	PILOT TUBE RACK 60 Inch
1	2	A43409A	DOOR
2	2	A43412A	WELDMENT, Single Notched
3	10	A43415A	WELDMENT, Double Notched
4	2	A43420P	Rod CLOSURE
5	1	A43421A	FRAME (Includes item 5a)
5a	4	A43406A	HINGE, Door
6	1	A43423A	ASSEMBLY, Closure
7	4	A43429P	COLLAR Rod
8	4	P0001-06-010	BOLT, 3/8 UNC x 2.5
9	16	P0003-06-000	NUT, 3/8
10	2	P0005-32-000	NUT, 2 UNC x 4.5
11	12	P0001-06-012	BOLT, 3/8 UNC x 3
12	2	P0094-012	LOAD BINDER, 1/4
13	2	A26092P	RETAINER, Load Binder
14	2	A26096P	CHAIN BASKET
15	2	P0001-08-012	BOLT, 1/2 UNC x 3
16	2	P0091-018	CONNECTOR
17	2	P0003-08-000	NUT, 1/2

PILOT TUBE (60 INCH), A43333A

PILOT TUBE - 60 INCH

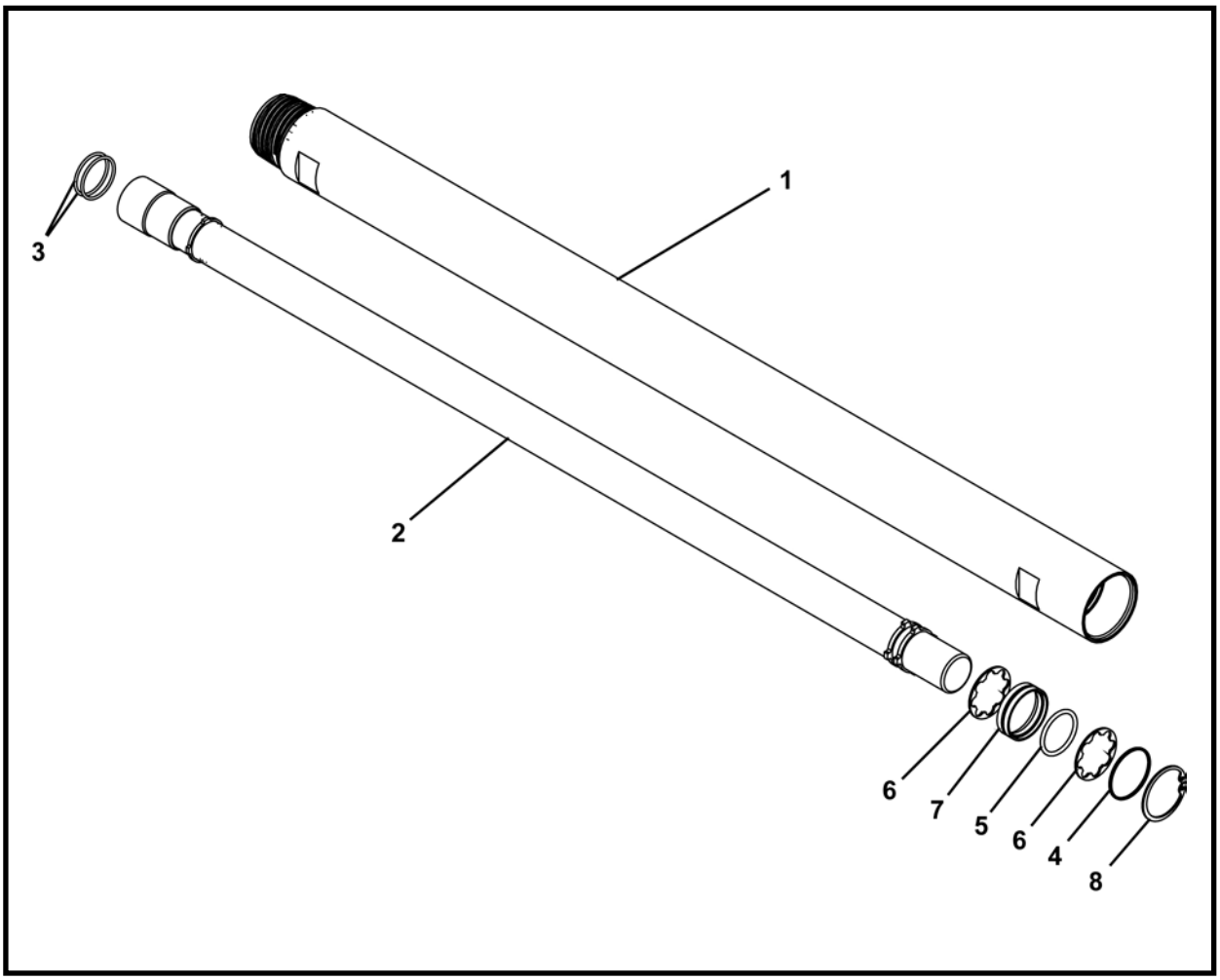


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43333A	TUBE, Pilot 60 Inch
1	1	A43329A	ASSEMBLY, Pilot Tube, 60 Inch
2	1	A42361P	PROTECTOR, Box Thread
3	1	A42362P	PROTECTOR, Pin Thread

Note:
1. Use Copper Guard 4® to lubricate tool joint threads.
2. Clean and lubricate tool joint and inner tube after use to prevent corrosion.

PILOT TUBE ASSEMBLY (60 INCH), A43329A

PILOT TUBE - 60 Inch



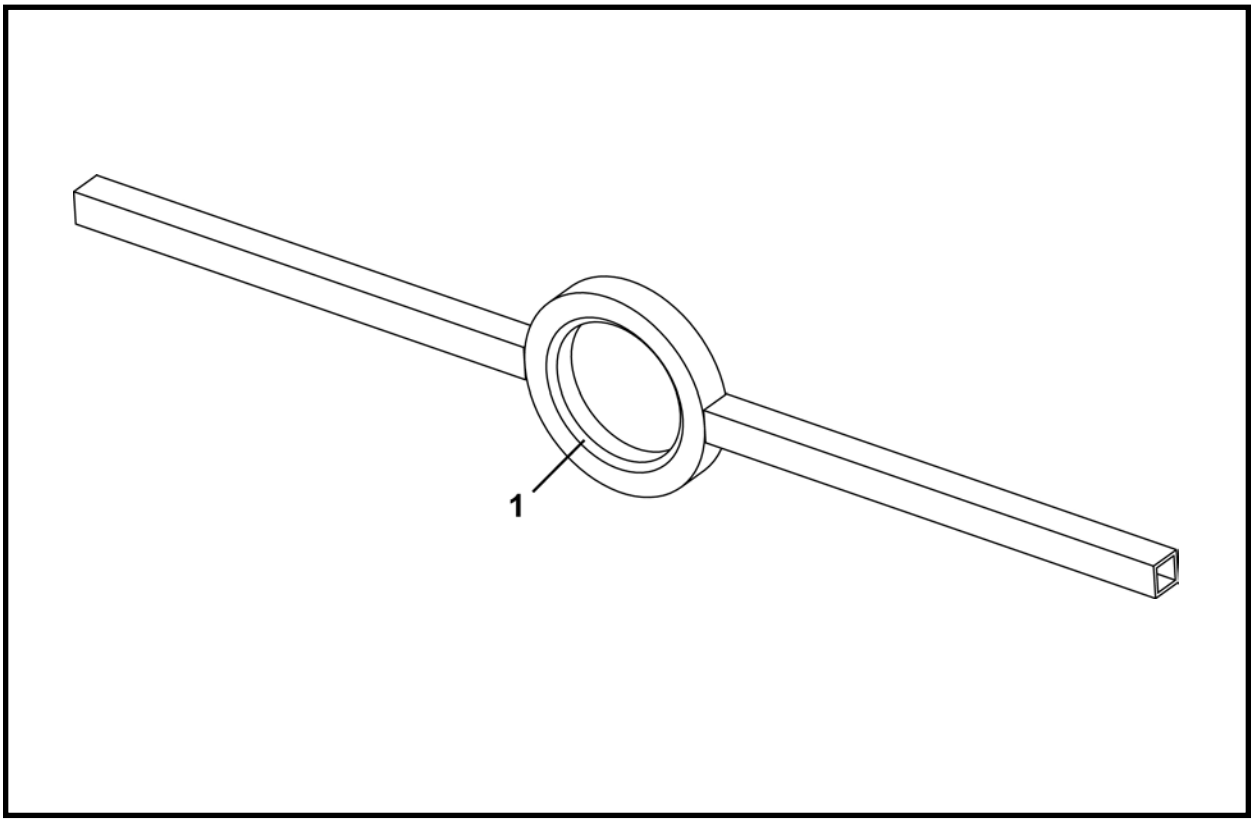
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43329A	PILOT TUBE ASSEMBLY 60 Inch
1	1	A43331P	TUBE, Outer
2	1	A43330A	TUBE, Inner
3	2	P0085-228	ORING
4	1	P0085-149	ORING
5	1	P0085-331	ORING
6	2	A42357P	WASHER, Drip Valve
7	1	A42363P	SPACER, Drip Valve
8	1	P0077-050	RING, Internal Snap

Note:

1. Use Copper Guard 4® to lubricate tool joint threads.
2. Clean and lubricate tool joint and inner tube after use to prevent corrosion.
3. Use snap ring pliers (No. 10) to apply internal snap ring, item 8.

PILOT TUBE SCRAPER, FA40482F

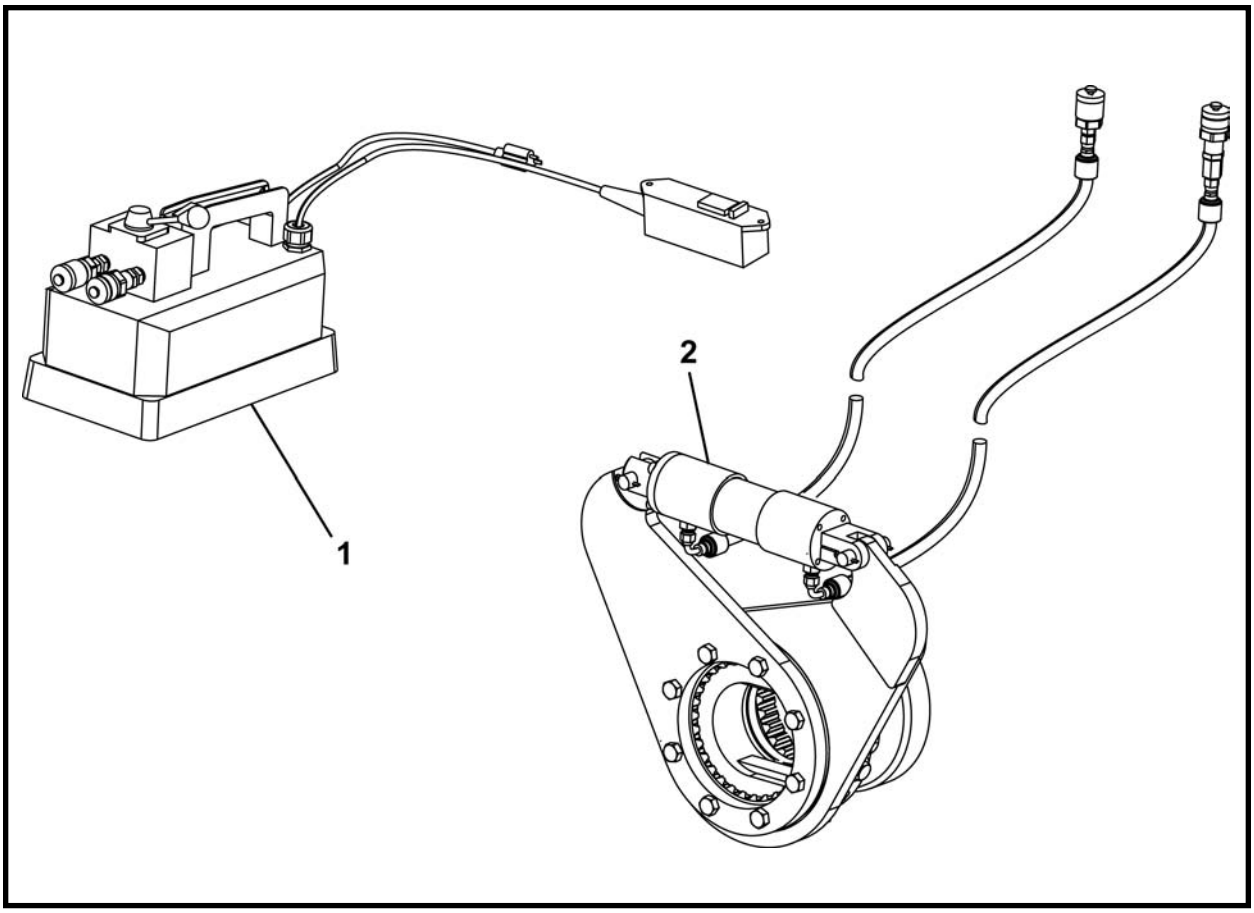
PILOT TUBE



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40482F	PILOT TUBE SCRAPER
1	1	P0085-S17	ORING

PILOT TUBE BREAKOUT TOOL - RECEPTION SHAFT, FA40230F

BREAKOUT TOOL



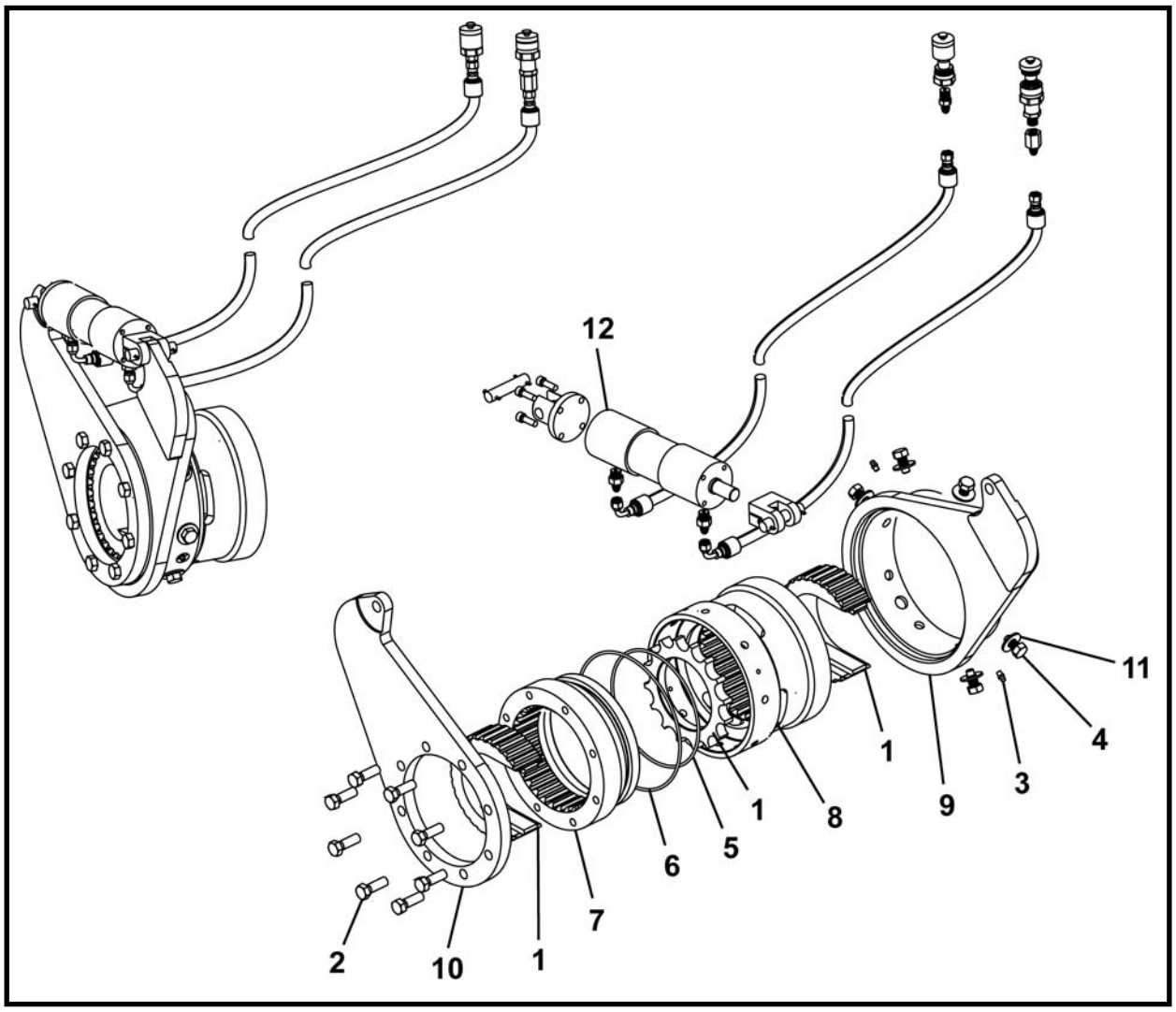
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA40230F	TOOL, Pilot Tube Breakout, Reception Shaft
1*	1	A40257A	POWER PACK PLUMBING
2	1	A40491A	ASSEMBLY, Breakout Tool

* For parts breakdown, refer to Power Pack - Breakout Tool, A40257A in Section 6, Hydraulics.

NOTE: * An optional 1 HP sealed power pack is available; A46443A.
* Also, a 230V power pack is available; A45440A. For parts breakdown, refer to Power Pack - Breakout Tool, A45440A in Section 6, Hydraulics.

BREAKOUT TOOL ASSEMBLY, A40491A

BREAKOUT TOOL



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A40491A	BREAKOUT TOOL ASSEMBLY
1	1	A40231A	INSERTS, Breakout Tool (Includes items 1a - 1b)
1a	2	A40590P	INSERT
1b	1	A40591P	SPACER
2	8	P0001-08-006	BOLT, 1/2 UNC x 1.5
3	4	P0063-001	FITTING, Grease
4	8	A40493P	BOLT, Retaining
5	1	P0085-261	ORING
6	1	P0085-266	ORING
7	1	A40586P	HUB, Male
8	1	A40585P	HUB, Female
9*	1	A40485A	WELDMENT, Cylinder Frame
10*	1	A40489P	PLATE, Cylinder Arm
11	8	P0040-008	WASHER, Hardened Flat 1/2
12**	1	A40233A	HYDRAULIC PLUMBING

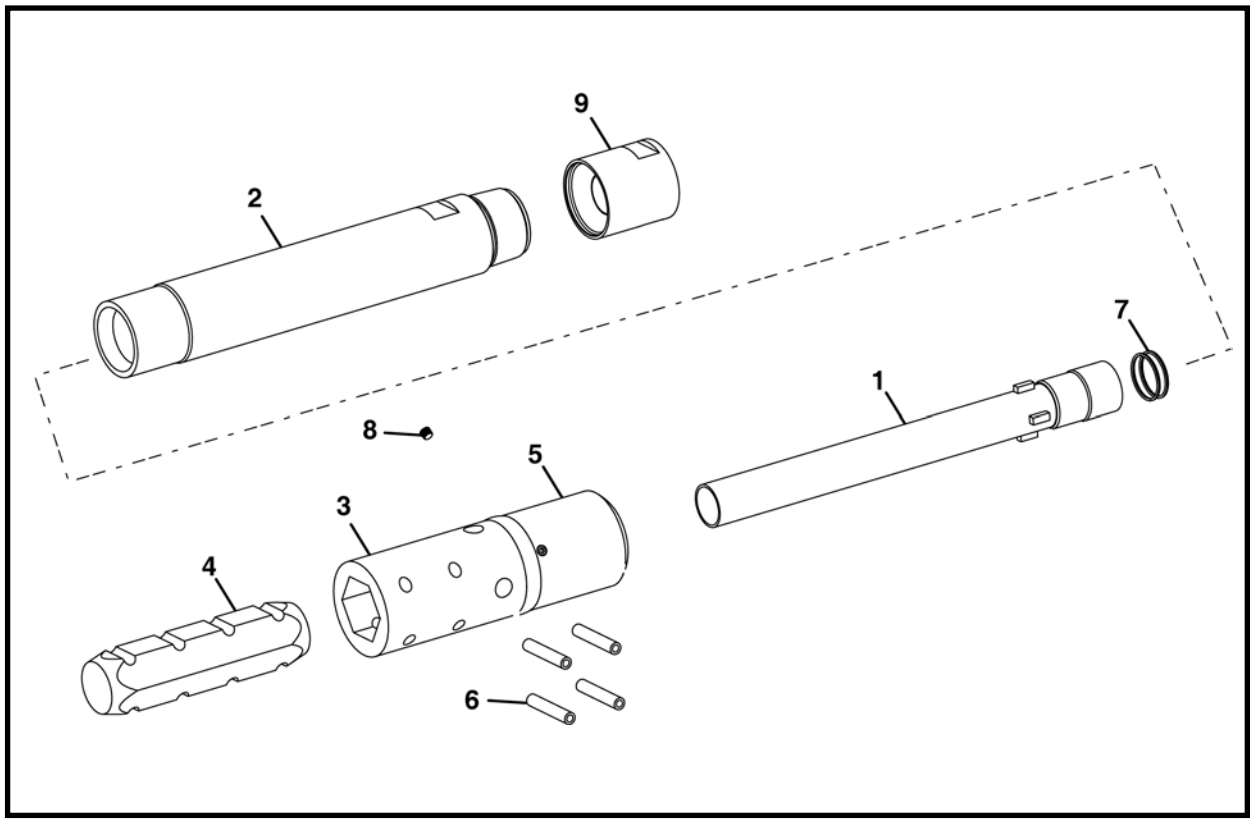
NOTE: Use anti-seize on all bolts.

* On an earlier version of the Breakout Tool Assembly, the cylinder arm plates were offset. The offset arms are no longer available. When replacing offset arms with items 9 and 10, they must be replaced as a set.

** For parts breakdown, refer to Hydraulic Plumbing - Breakout Tool, A40233A in Section 6, Hydraulics.

PILOT TUBE ADAPTER, FA41403F

PILOT TUBE

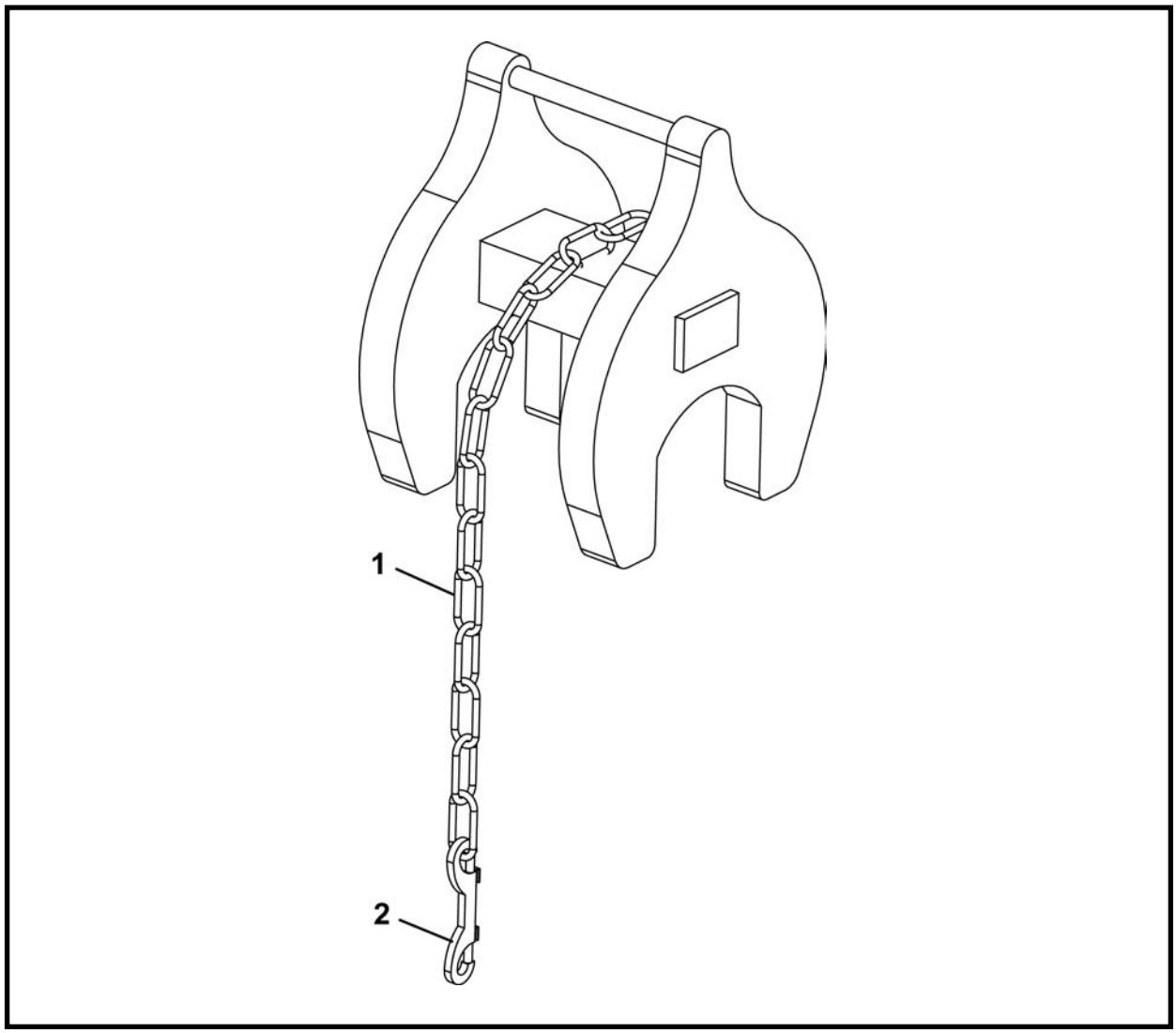


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA41403F	PILOT TUBE ADAPTER
1	1	NSS	TUBE, Inner
2	1	NSS	TUBE
3	1	NSS	ADAPTER, Female
4	1	A41332P	STEM, Hex Connection
5	1	NSS	BODY, Fluid Outlet
6	4	P0049-201	PIN, Spiral Spring
7	2	P0085-228	ORING
8	3	P0300-144	PLUG
9	1	FA40243F	CONNECTOR, Fluid, Reception Shaft

NSS - Not Sold Separately

BREAKOUT TOOL - LAUNCH SHAFT ASSEMBLY, FA42240F

BREAKOUT TOOL

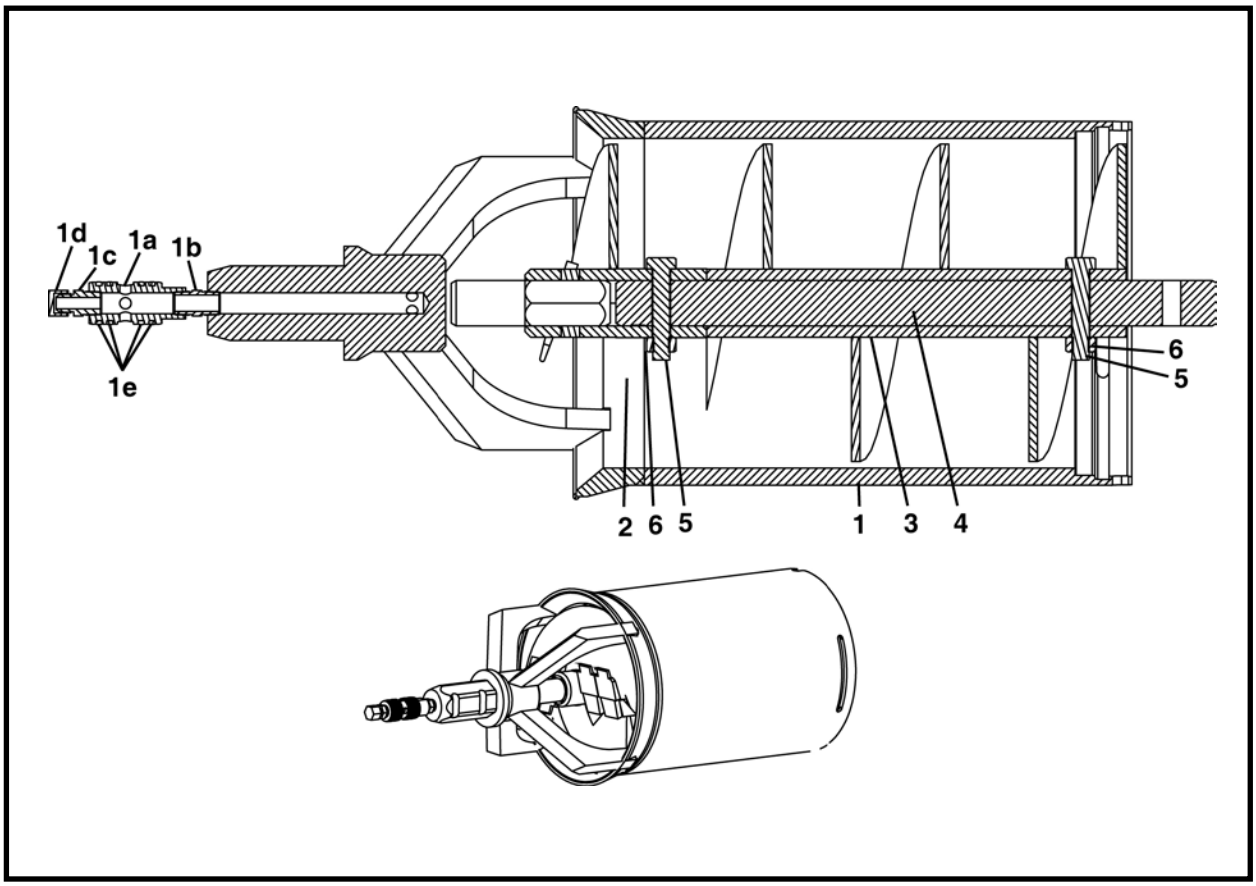


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42240F	BREAKOUT TOOL - LAUNCH SHAFT ASSEMBLY
1	20 IN	P0094-001-020	CHAIN 2/0 x 20
2	1	P0098-046	HOOK, Double Snap

IN - Linear Inch

REAMING HEAD, 11” - 16” OD

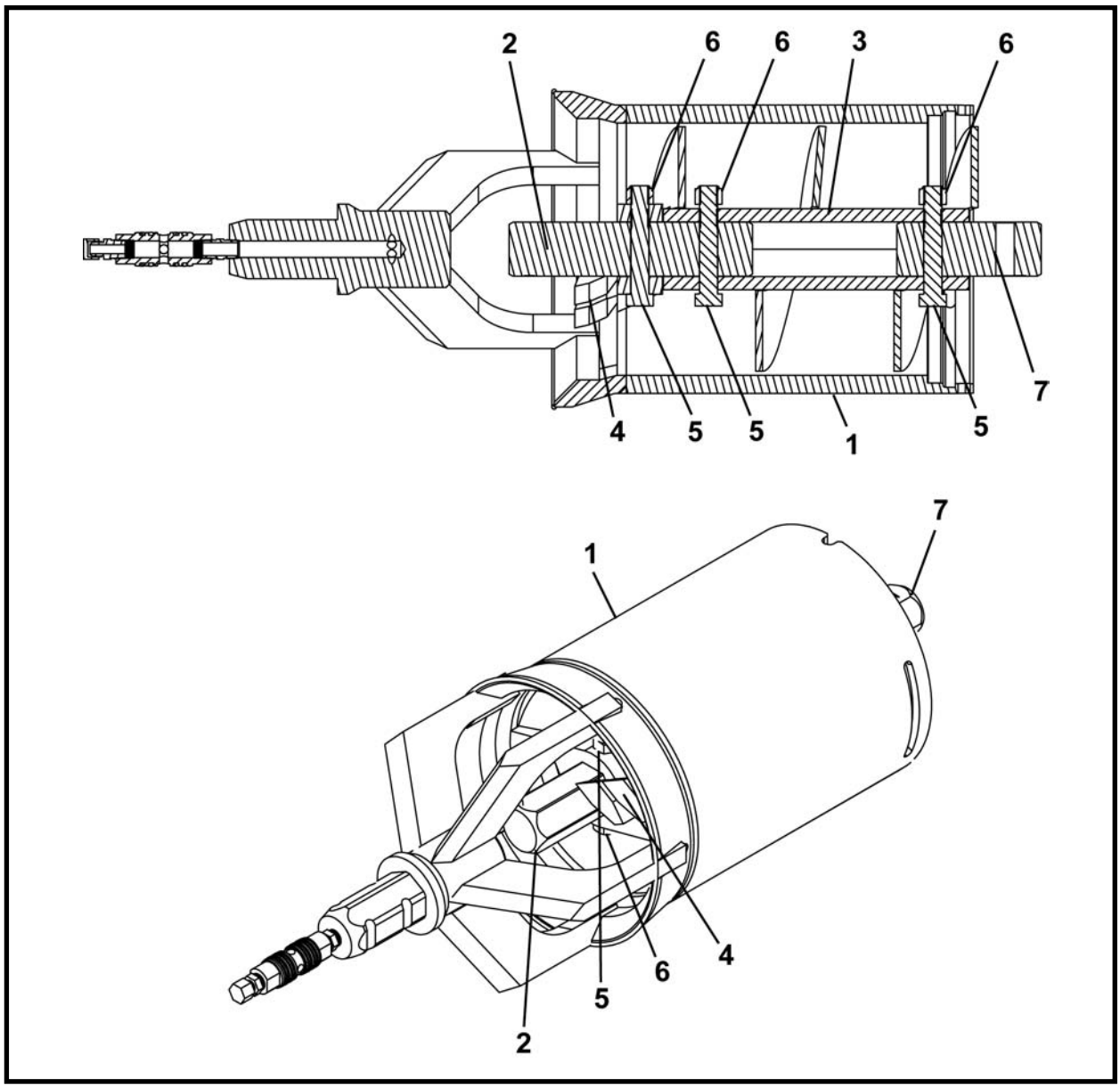
REAMING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA40304F	REAMING HEAD 11” OD Casing
0.2	1	FA40284F	REAMING HEAD 12” OD Casing
0.3	1	FA40324F	REAMING HEAD 14” OD Casing
0.4	1	FA40344F	REAMING HEAD 16” OD Casing
1.1	1	A40307A	WELDMENT, Reaming Head 11” OD Casing (Includes 1a - 1e)
1.2	1	A40287A	WELDMENT, Reaming Head 12” OD Casing (Includes 1a - 1e)
1.3	1	A40327A	WELDMENT, Reaming Head 14” OD Casing (Includes 1a - 1e)
1.4	1	A40347A	WELDMENT, Reaming Head 16” OD Casing (Includes 1a - 1e)
1a	1	A40976P	ADAPTER, Fluid
1b	1	P0300-107	NIPPLE
1c	1	P0300-174	ADAPTER
1d	1	P0300-140	CAP
1e	4	P0085-325	ORING
2.1	1	A41225A	CUTTER BIT 11” OD Casing
2.2	1	A41225A	CUTTER BIT 12” OD Casing
2.3	1	A40328A	CUTTER BIT 14” OD Casing
2.4	1	FA40348F	CUTTER BIT 16” OD Casing
3.1	1	A40313A	WELDMENT, Lead Auger 11” OD Casing
3.2	1	A40293A	WELDMENT, Lead Auger 12” OD Casing
3.3	1	A40333A	WELDMENT, Lead Auger 14” OD Casing
3.4	1	A40353A	WELDMENT, Lead Auger 16” OD Casing
4	1	A40907P	STEM
5	2	P0001-12-016	BOLT, 3/4 UNC x 4
6	2	P0013-12A-000	NUT, Nylock Lock

REAMING HEAD 16” OD - 4812A, 5” CORE, FA43804F

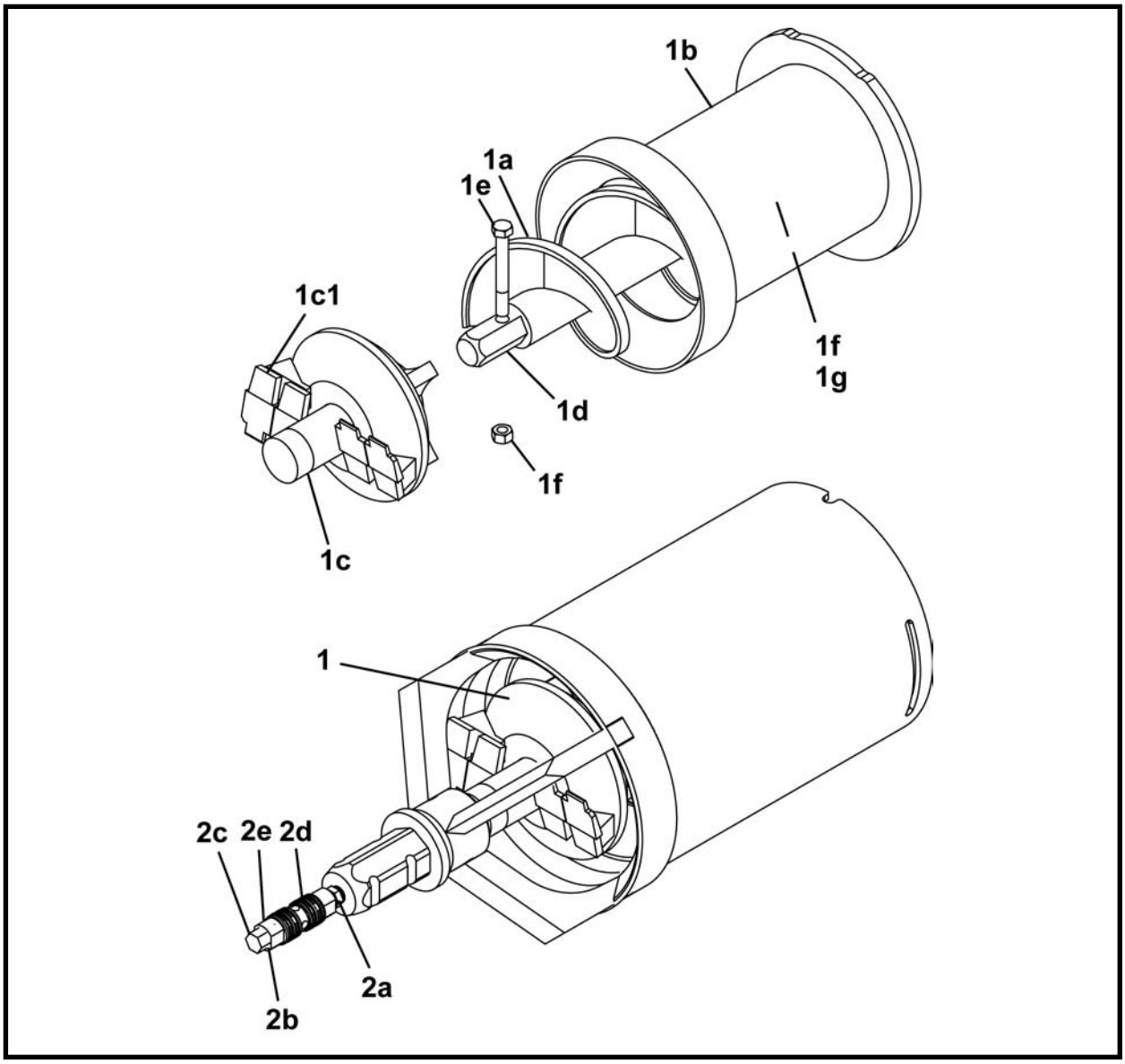
REAMING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA43804F	REAMING HEAD 16” OD Casing-4812A, 5” Core
1	1	A43842A	WELDMENT, Reaming Head 16” OD Casing (Includes 1a - 1e)
1a	1	A40976P	ADAPTER, Fluid
1b	1	P0300-107	NIPPLE
1c	1	P0300-174	ADAPTER
1d	1	P0300-140	CAP
1e	4	P0085-325	ORING
2	1	A46253P	SHAFT, Lead Hex
3	1	A43836A	WELDMENT, Lead Auger 5” Core
4	1	A43837A	CUTTER BIT
5	3	P0001-16-024	BOLT, 1 UNC x 6
6	3	P0013-16-000	NUT, 1 Nylock Lock
7	1	A43807P	SHAFT, Hex End

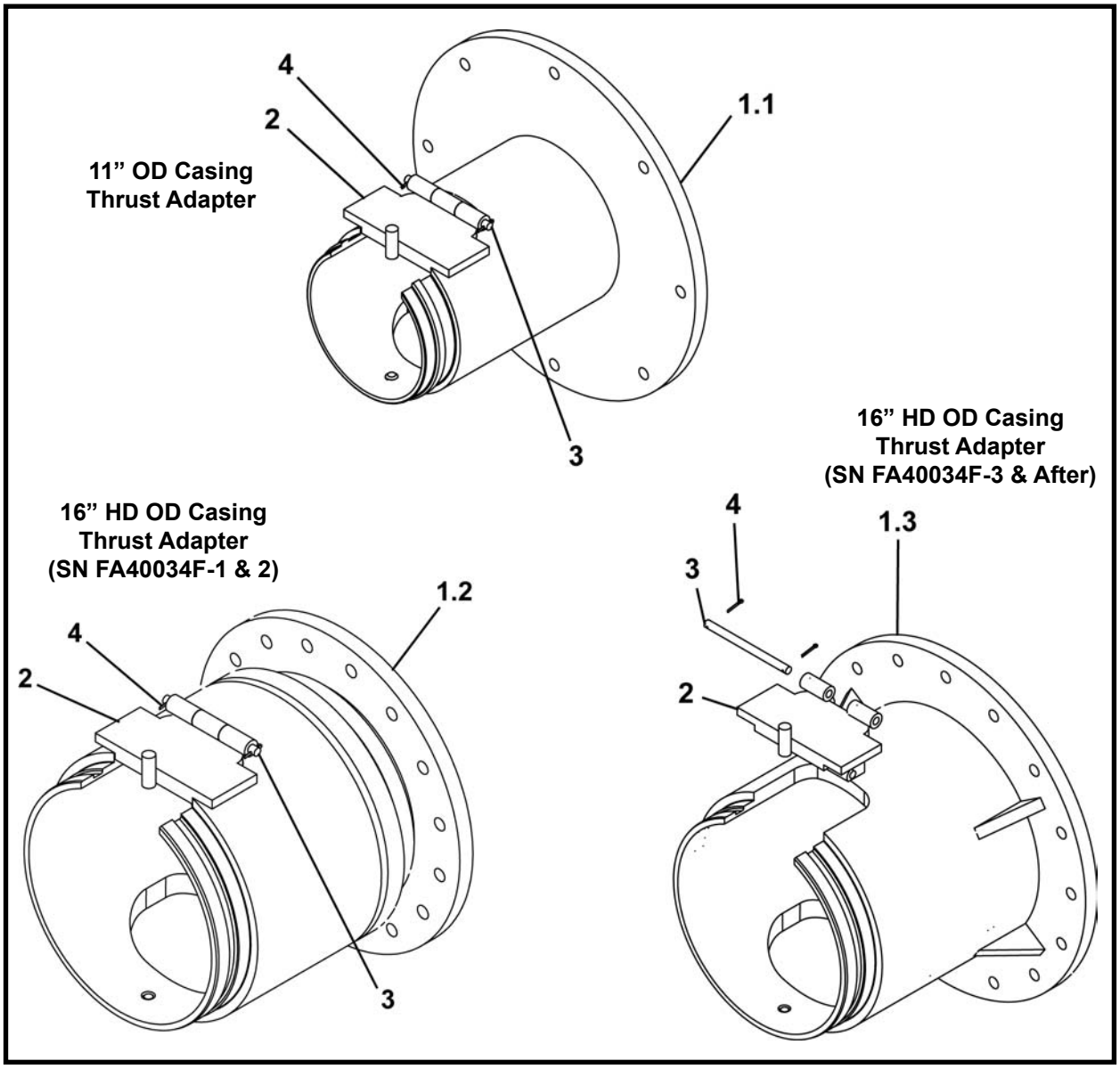
16” OD SEALABLE REAMING HEAD, FA46144F

REAMING HEAD



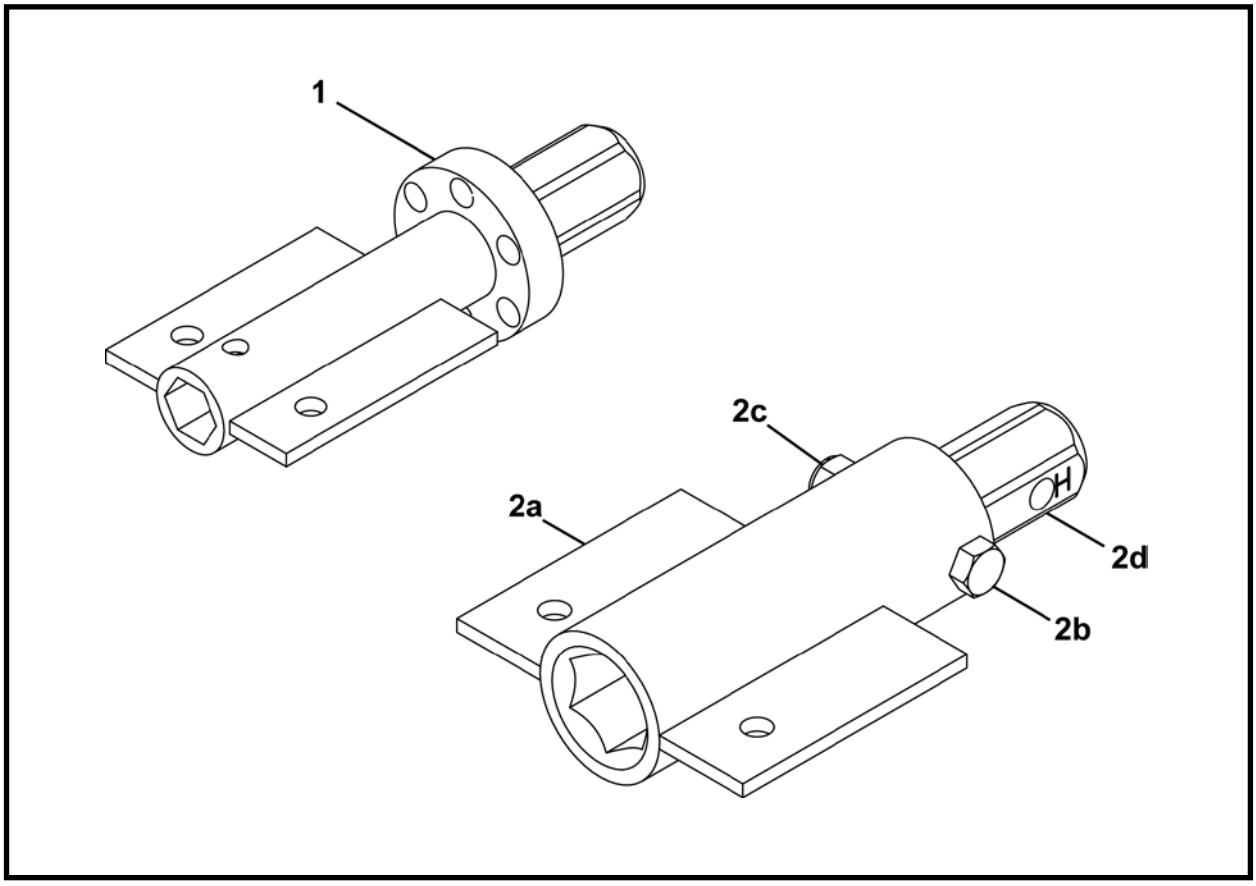
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA46144F	SEALABLE REAMING HEAD 16” OD
1	1	A46141A	SEALABLE AUGER ASSEMBLY (Includes items 1a - 1g)
1a	1	A40313A	AUGER, Starter
1b	1	A46138A	INSERT, Auger
1c	1	A46139A	BIT, Auger (Includes item 1c1)
1c1	4	P0050-001	CUTTER TEETH
1d	1	A46140P	STEM, 2” Hex
1e	1	P0001-12-022	BOLT, 3/4 UNC x 5.5
1f	2	P0013-12A-000	NUT, Nylock 3/4
1g	1	P0001-12-016	BOLT, 3/4 UNC x 4
2	1	A46143A	REAMING HEAD, Sealable (Includes items 2a - 2e)
2a	1	P0300-107	NIPPLE
2b	1	P0300-174	ADAPTER
2c	1	P0300-140	CAP
2d	4	P0085-325	ORING
2e	1	A40976P	ADAPTER, Fluid

CASING THRUST ADAPTERS



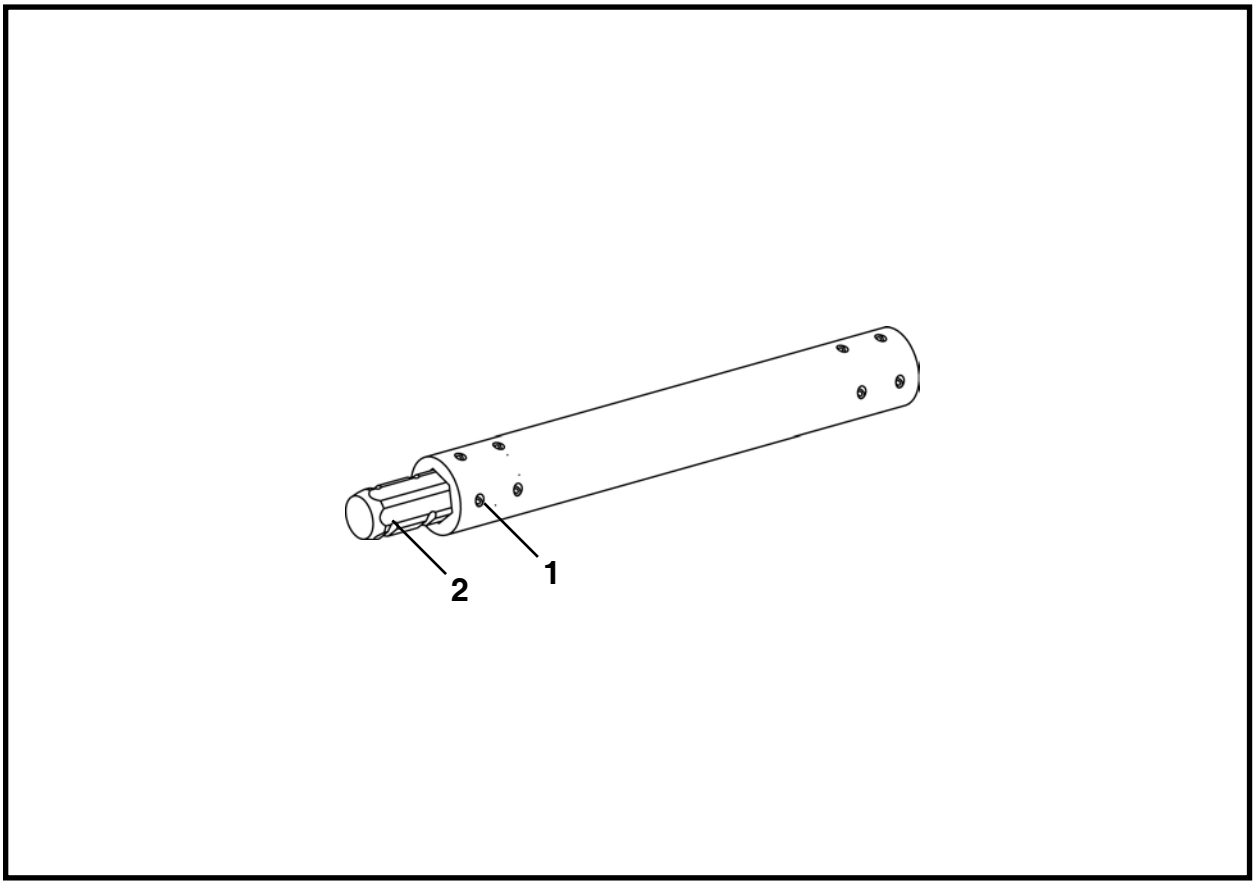
ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA44324F	ADAPTER, Casing Thrust, 11” OD Casing 4812A
0.2	1	FA43803F	ADAPTER, Casing Thrust, 16” HD OD Casing for 4812A (SN FA40034F-1 & 2)
0.3	1	FA45407F	ADAPTER, Casing Thrust, 16” HD OD Casing 4812A for 4812A (SN FA40034F-3 & After)
1.1	1	A44325A	WELDMENT, Casing Adapter 11”
1.2	1	A44052A	WELDMENT, Casing Adapter 16” HD
1.3	1	A44052A	WELDMENT, Casing Adapter 16” HD
2	1	A44061A	COVER, Casing Hatch
3	1	A44072P	HINGE BAR
4	2	P0048-025	PIN, Cotter 1/8 x 1

AUGER DRIVE ADAPTERS



ITEM	QTY	PART NO.	DESCRIPTION
1	1	FA44321F	AUGER DRIVE ADAPTER - 2” Hex
2	1	FA43802F	AUGER DRIVE ADAPTER - 3” Hex (Includes items 2a - 2d)
2a	1	A44075A	WELDMENT, Auger Drive Adapter
2b	1	P0001-16-024	BOLT, 1 UNC x 6
2c	1	P0013-16-000	NUT, Nylock 1
2d	1	A44109P	CONNECTOR, 3” Hex

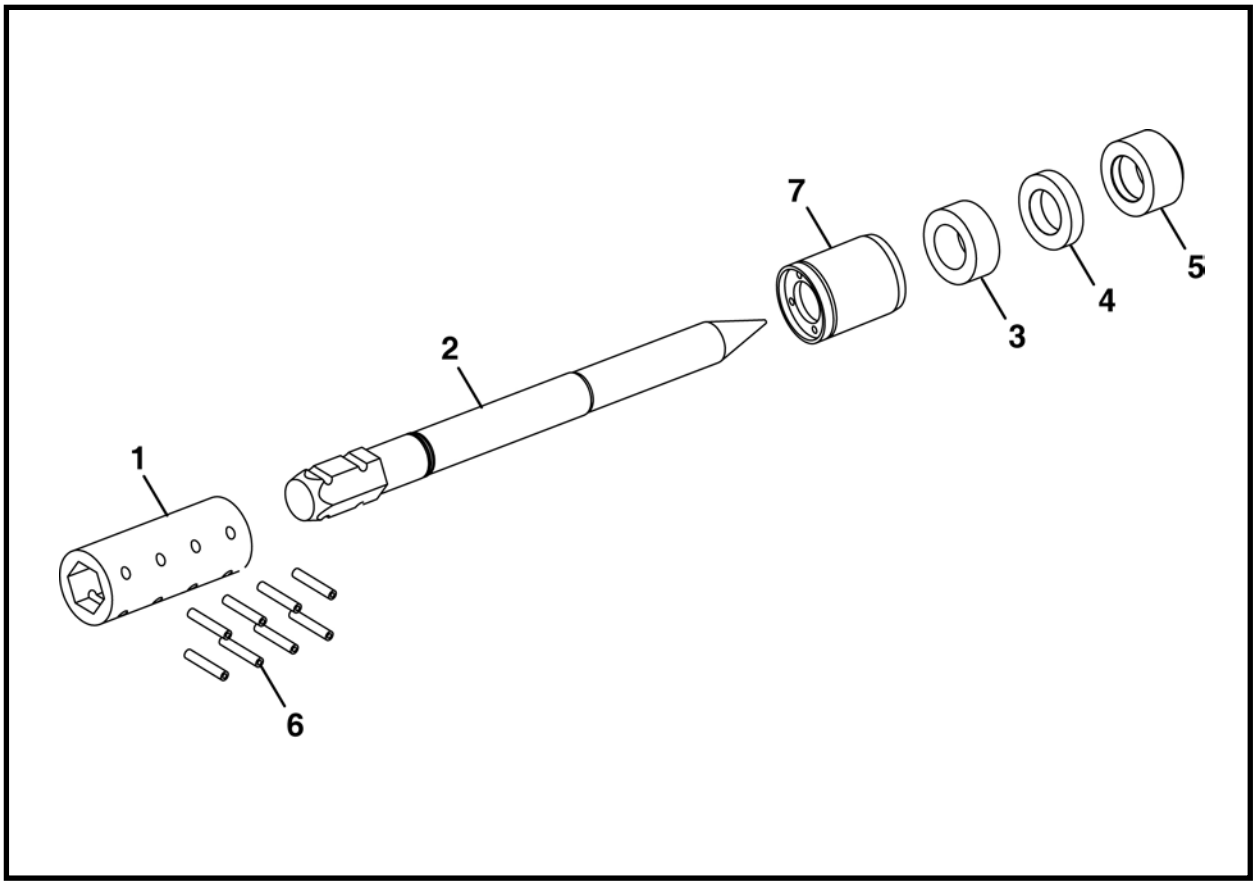
GUIDE ROD, 3 FT, FA41234F
3” ID HEX CONNECTION
CUTTER HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA41234F	GUIDE ROD 3 FT (Includes items 1a and 1b)
1	8	P0049-201	PIN, Spiral Spring
2	1	A41332P	STEM, Hex Connection

NOTE: Pilot Tube Adapter FA41403F, is installed ahead of 3 ft. Guide Rod FA41234F.

PILOT GUIDE ROD, FA41236F
3” ID HEX CONNECTION
CUTTER HEAD



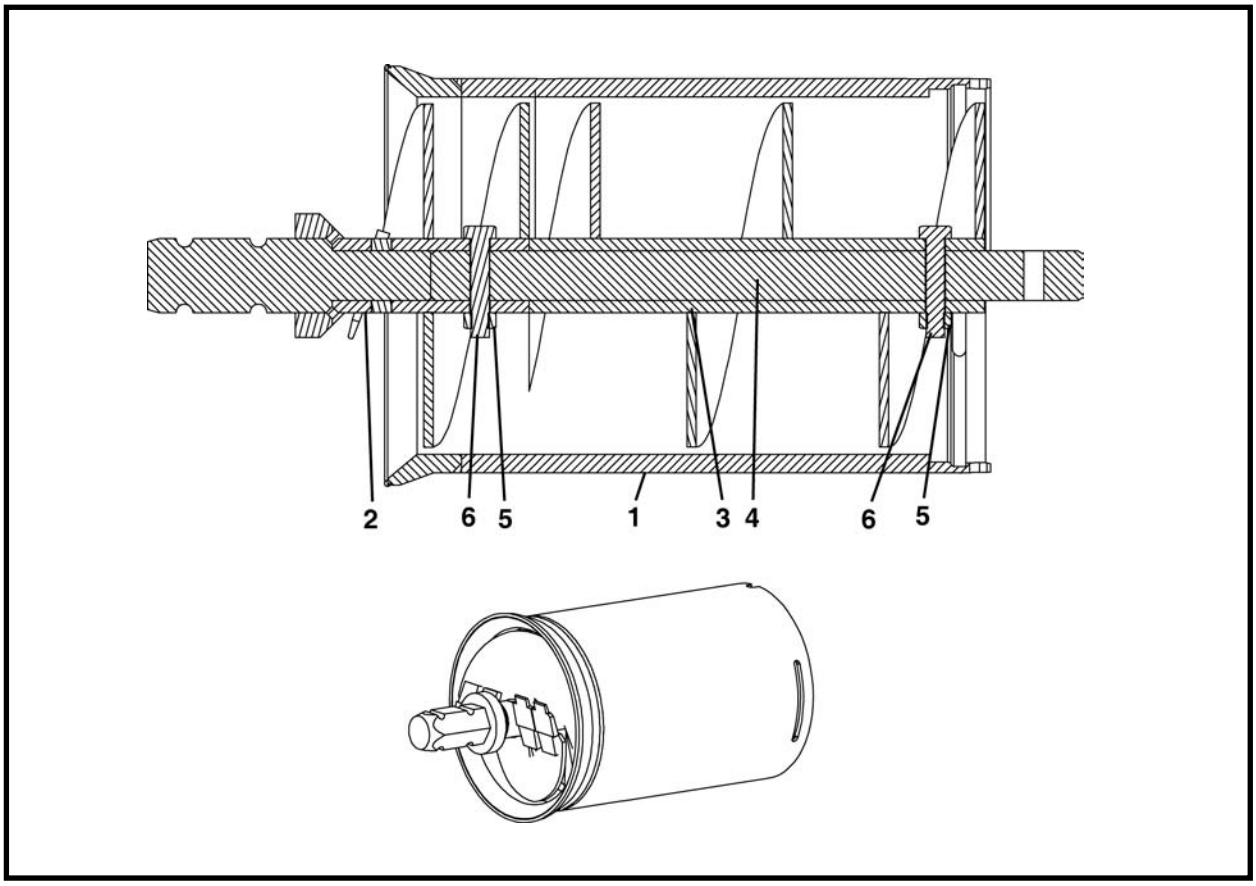
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA41236F	PILOT GUIDE ROD
1	1	A41325P	ADAPTER, Female
2	1	A41326P	SHAFT, Guide
3*	2	A41327P	RING, Back Wear
4*	2	A41328P	WASHER, Thrust
5*	2	A41329P	RING, Front Wear
6	8	P0049-201	PIN, Spiral Spring
7	1	A41435A	RETAINER, Thrust Washer

* Includes a spare item.

NOTE: Mounts to Cutter Head and Hex Core Pilot Tube.

CUTTER HEAD ASSEMBLY, 11” - 16” OD

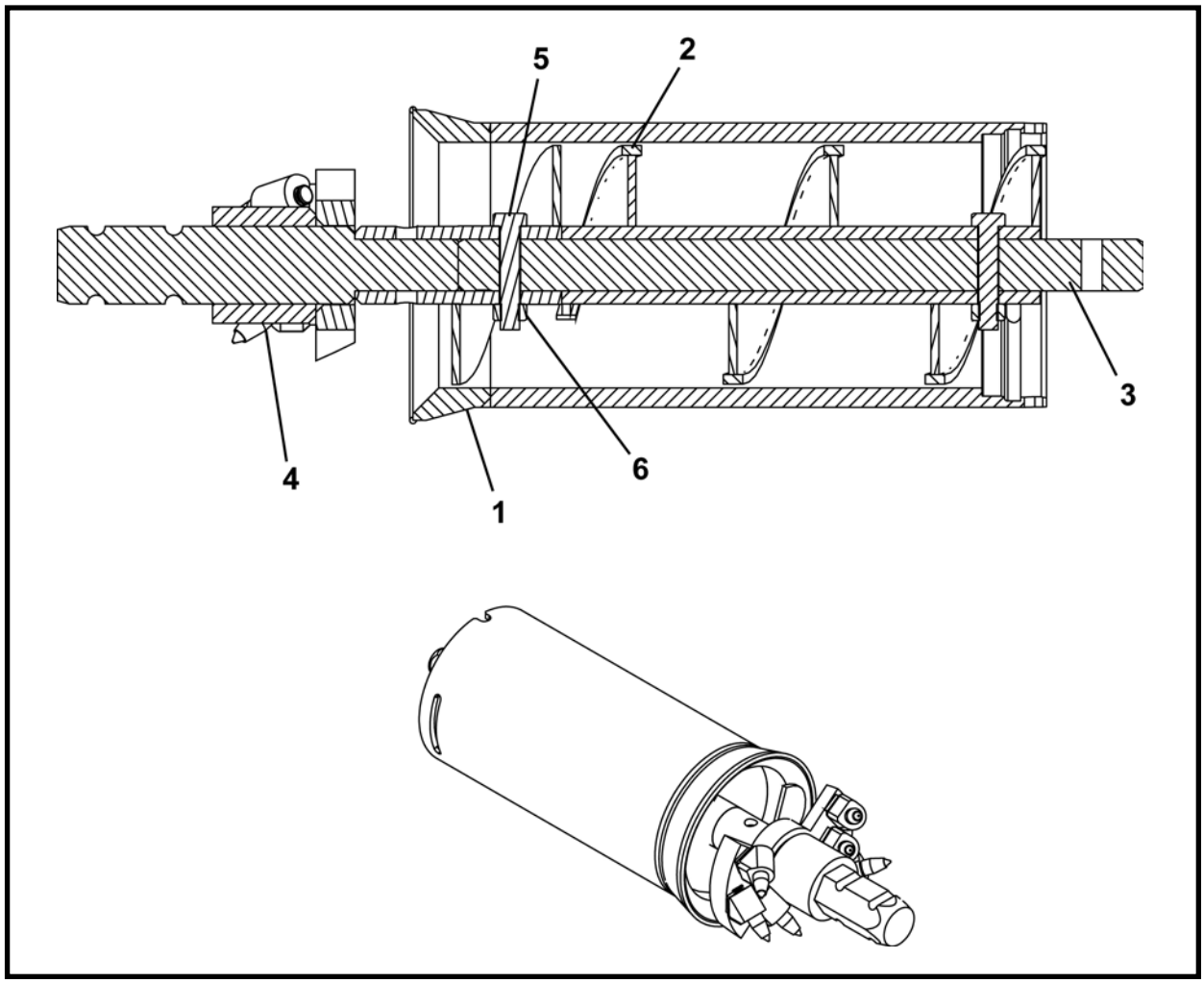
CUTTER HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA40305F	CUTTER HEAD 11” OD Casing
0.2	1	FA40285F	CUTTER HEAD 12” OD Casing
0.3	1	FA40325F	CUTTER HEAD 14” OD Casing
0.4	1	FA40345F	CUTTER HEAD 16” OD Casing
1.1	1	A40311A	WELDMENT, Cutter Head 11” OD Casing
1.2	1	A40291A	WELDMENT, Cutter Head 12” OD Casing
1.3	1	A40331A	WELDMENT, Cutter Head 14” OD Casing
1.4	1	A40351A	WELDMENT, Cutter Head 16” OD Casing
2.1	1	A40279A	CUTTER BIT 11” OD Casing
2.2	1	A40289A	CUTTER BIT 12” OD Casing
2.3	1	A40329A	CUTTER BIT 14” OD Casing
2.4	1	A40349A	CUTTER BIT 16” OD Casing
3.1	1	A40313A	WELDMENT, Lead Auger 11” OD Casing
3.2	1	A40293A	WELDMENT, Lead Auger 12” OD Casing
3.3	1	A40333A	WELDMENT, Lead Auger 14” OD Casing
3.4	1	A40353A	WELDMENT, Lead Auger 16” OD Casing
4	1	A40907P	STEM
5	2	P0001-12-016	BOLT, 3/4 UNC x 4
6	2	P0013-12A-000	NUT, Nylock Lock

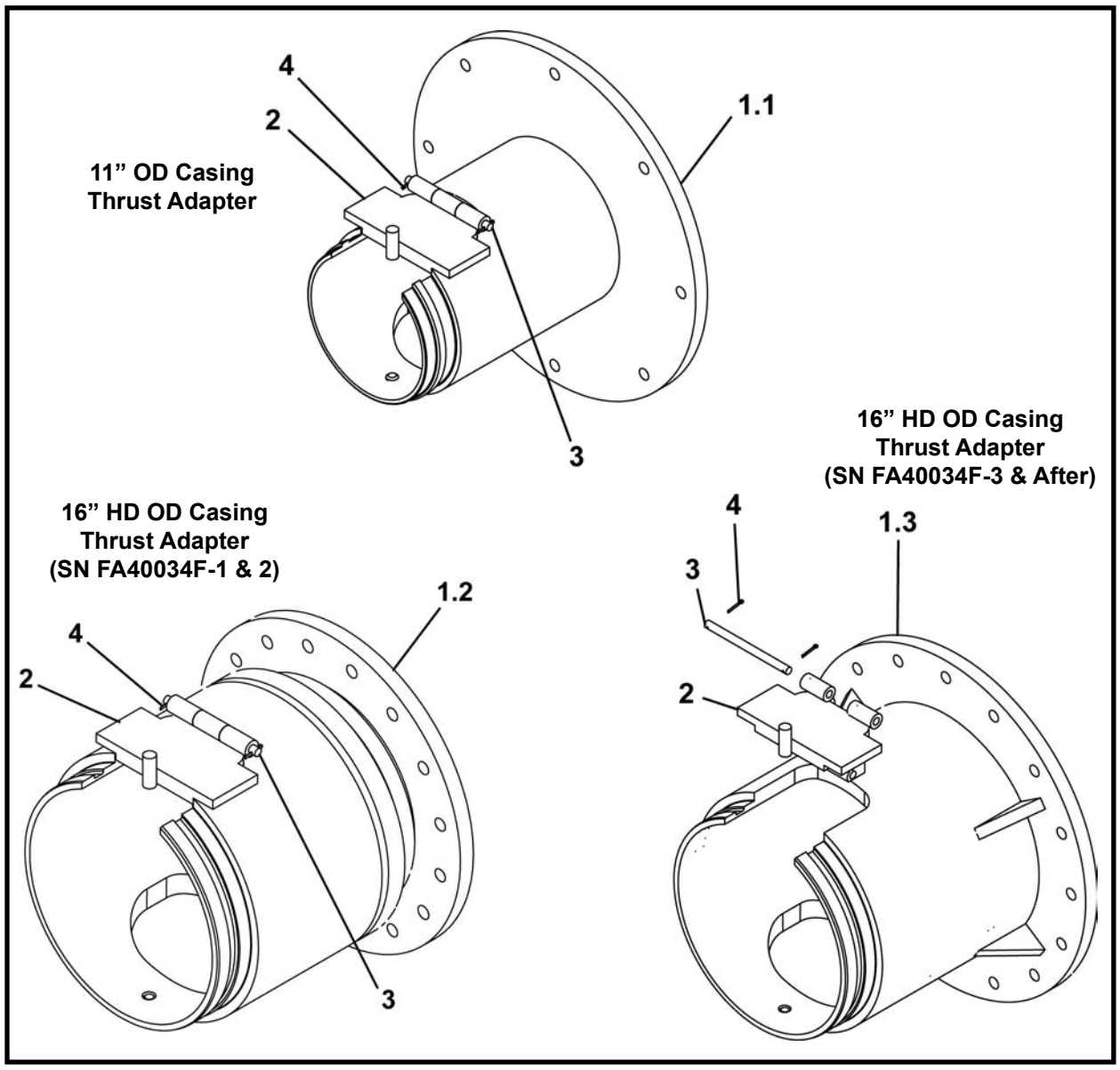
FULL FACE CUTTER HEAD ASSEMBLY, 11” OD, FA43763F

CUTTER HEAD



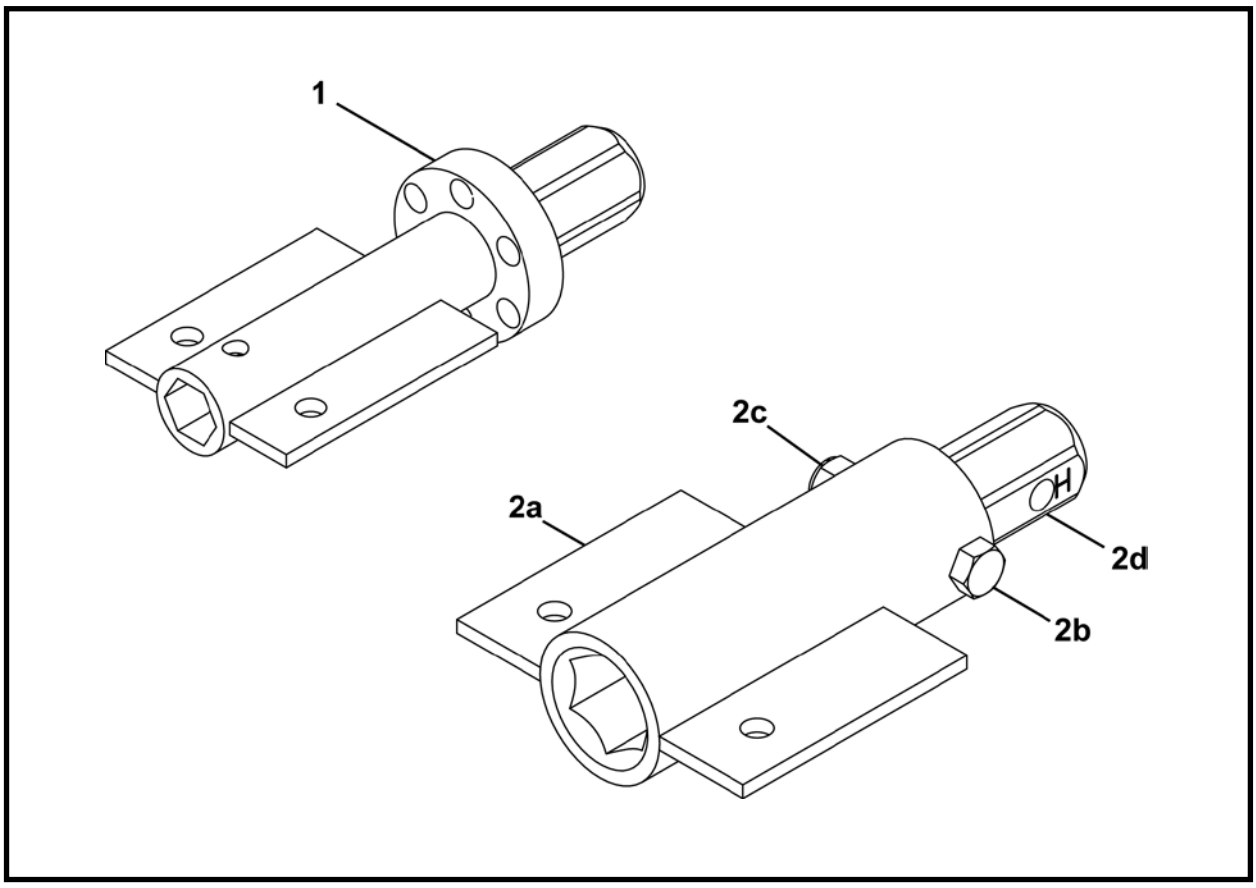
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43763F	FULL FACE CUTTER HEAD ASSEMBLY - 11” OD
1	1	A40311A	WELDMENT, Cutter Head
2	1	A40313A	CASING, Auger
3	1	A40907P	STEM
4	1	A43762A	CUTTER BIT
5	2	P0001-12-016	BOLT, 3/4 UNC x 4
6	2	P0013-12A-000	NUT, Nylock Lock

CASING THRUST ADAPTERS



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA44324F	ADAPTER, Casing Thrust, 11” OD Casing 4812A
0.2	1	FA43803F	ADAPTER, Casing Thrust, 16” HD OD Casing for 4812A (SN FA40034F-1 & 2)
0.3	1	FA45407F	ADAPTER, Casing Thrust, 16” HD OD Casing 4812A for 4812A (SN FA40034F-3 & After)
1.1	1	A44325A	WELDMENT, Casing Adapter 11”
1.2	1	A44052A	WELDMENT, Casing Adapter 16” HD
1.3	1	A44052A	WELDMENT, Casing Adapter 16” HD
2	1	A44061A	COVER, Casing Hatch
3	1	A44072P	HINGE BAR
4	2	P0048-025	PIN, Cotter 1/8 x 1

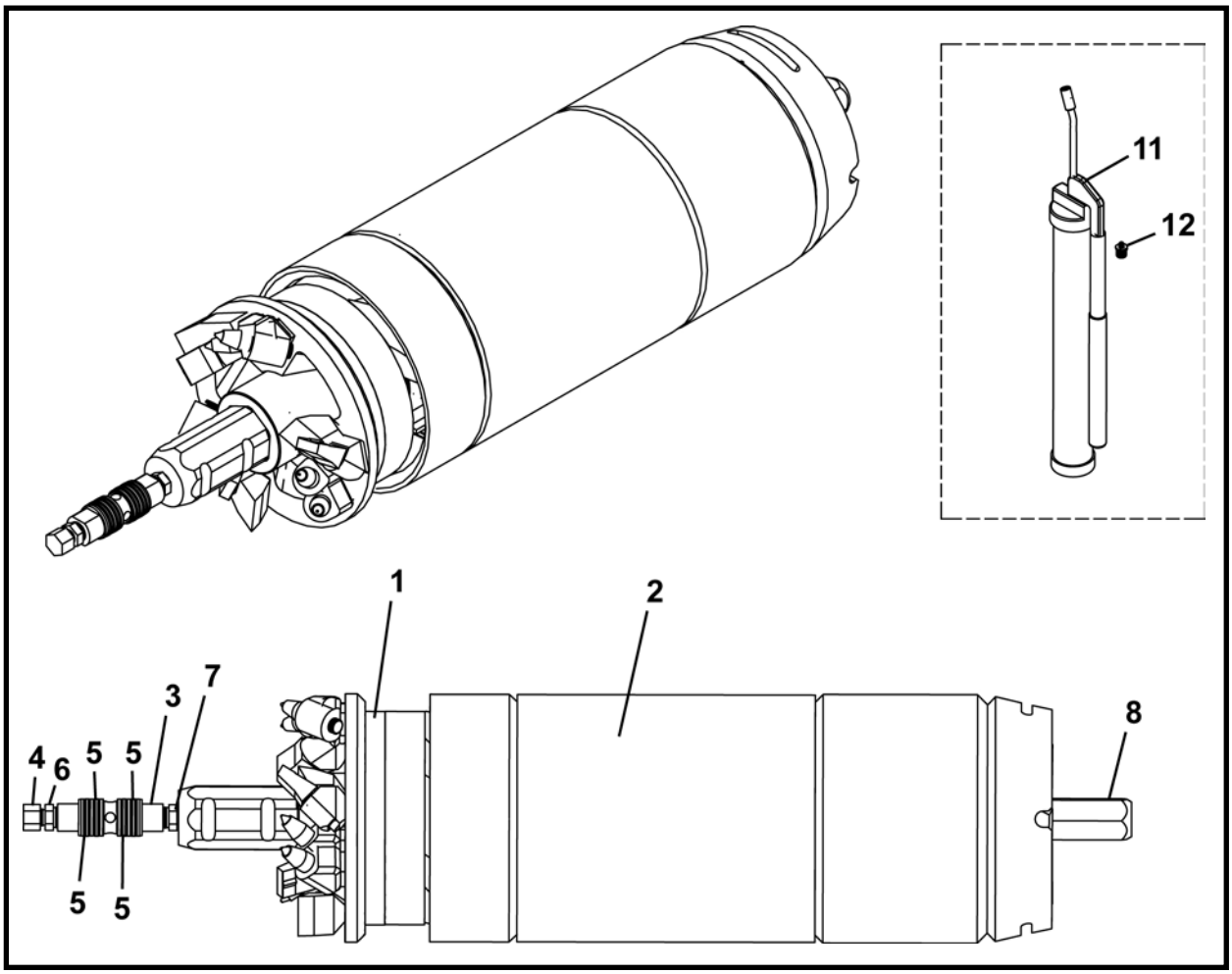
AUGER DRIVE ADAPTERS



ITEM	QTY	PART NO.	DESCRIPTION
1	1	FA44321F	AUGER DRIVE ADAPTER - 2” Hex
2	1	FA43802F	AUGER DRIVE ADAPTER - 3” Hex (Includes items 2a - 2d)
2a	1	A44075A	WELDMENT, Auger Drive Adapter
2b	1	P0001-16-024	BOLT, 1 UNC x 6
2c	1	P0013-16-000	NUT, Nylock 1
2d	1	A44109P	CONNECTOR, 3” Hex

INTEGRAL BEARING SWIVEL CUTTER HEAD, 11” OD, FA44634F

11” OD SWIVEL

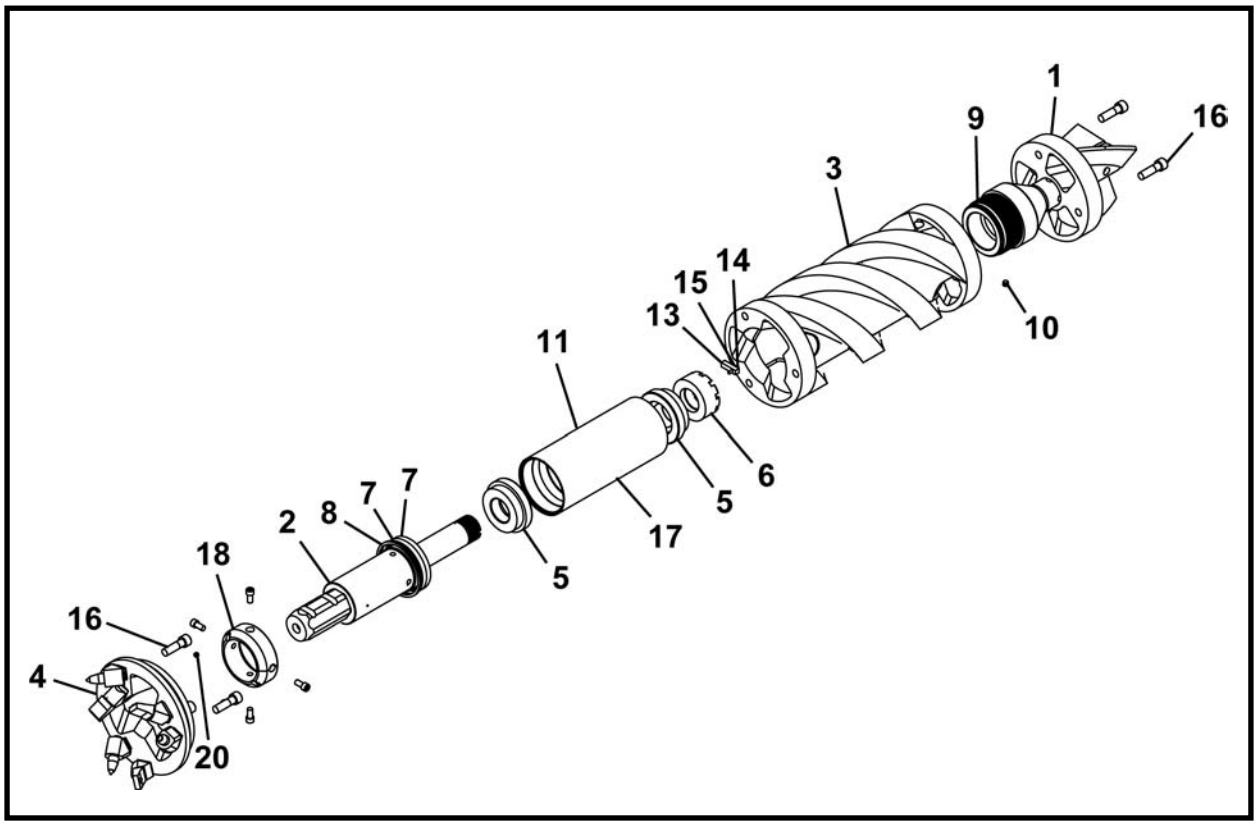


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44634F	INTEGRAL BEARING SWIVEL CUTTER HEAD, 11” OD
1*	1	A44664A	ASSEMBLY, Auger 11” Swivel Cutter
2	1	A44654A	CASING, 11” Swivel Cutter
3	1	A40976P	ADAPTER, Fluid
4	1	P0300-140	FITTING, 10FJ-CAP
5	4	P0085-325	ORING
6	1	P0300-174	FITTING, 10MJ-12MP
7	1	P0300-107	FITTING, 12MP-12MP
8	1	A42135P	SHAFT, Hex End
9**	1	P0001-12-016	BOLT, 3/4 UNC x 4
10**	1	P0013-12A-000	NUT, Nylok 3/4
11	1	P0126-039	GUN, Oil
12	1	P0063-016	FITTING, Grease Straight

* For parts breakdown, refer to this section.
** Not Shown

AUGER SWIVEL CUTTER ASSEMBLY, 11”, A44664A

11” OD SWIVEL

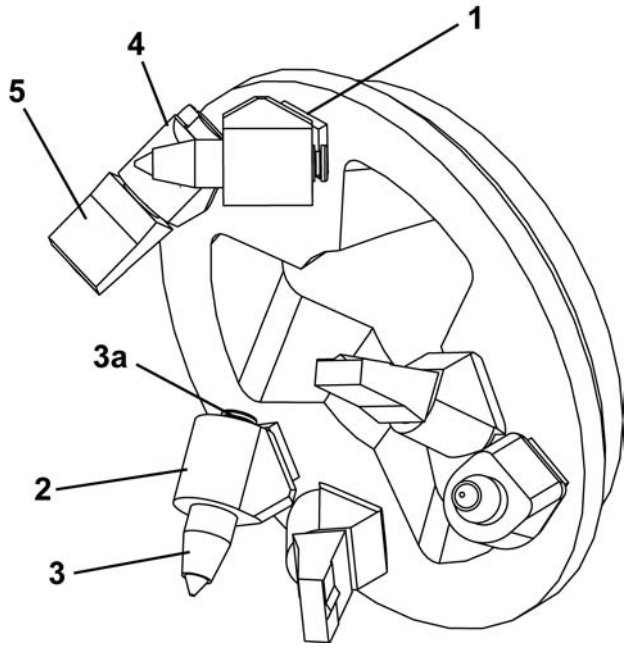


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44664A	AUGER SWIVEL CUTTER ASSEMBLY, 11”
1	1	A44662A	AUGER, Rear
2	1	A46148P	SHAFT WITH HEX
3	1	A44651A	FLUTES, Auger
4*	1	A46151A	CUTTER BIT, Hard Ground
5	2	P0065-182	BEARING
6	1	A42351P	RING, Washer Support
7	1	P0065-183	SEAL, Oil
8	1	P0065-185	V-SEAL
9	1	P0085-252	ORING
10	1	P0300-026	FITTING, 04MP-HHP
11	1	P0300-176	FITTING, 06MB-HHP
12	1 GAL	P0126-030	OIL, Mobil Gear 636
13	1	A42601P	KEY, Swivel Shaft
14	1	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
15	1	P0040-004	WASHER, Hardened Flat 1/4
16	6	P0031-12-010	SCREW, Socket Head Cap 3/4 x 2.5
17	1	A42349P	HOUSING
18	1	A46257P	RETAINER, Seal
19	4	P0031-08-004	SCREW, Socket Head Cap 1/2 UNC x 1
20	2	P0300-144	FITTING, 02MP-HHP

* Refer to this section for parts breakdown.
GAL - Gallon
NOTE: Lubricate ONLY with Mobil Gear 636 oil (Part number P0126-030)
Note: If components in this assembly do not match your auger swivel cutter assembly, contact your Product Support representative.

HARD GROUND CUTTER BIT, A46151A

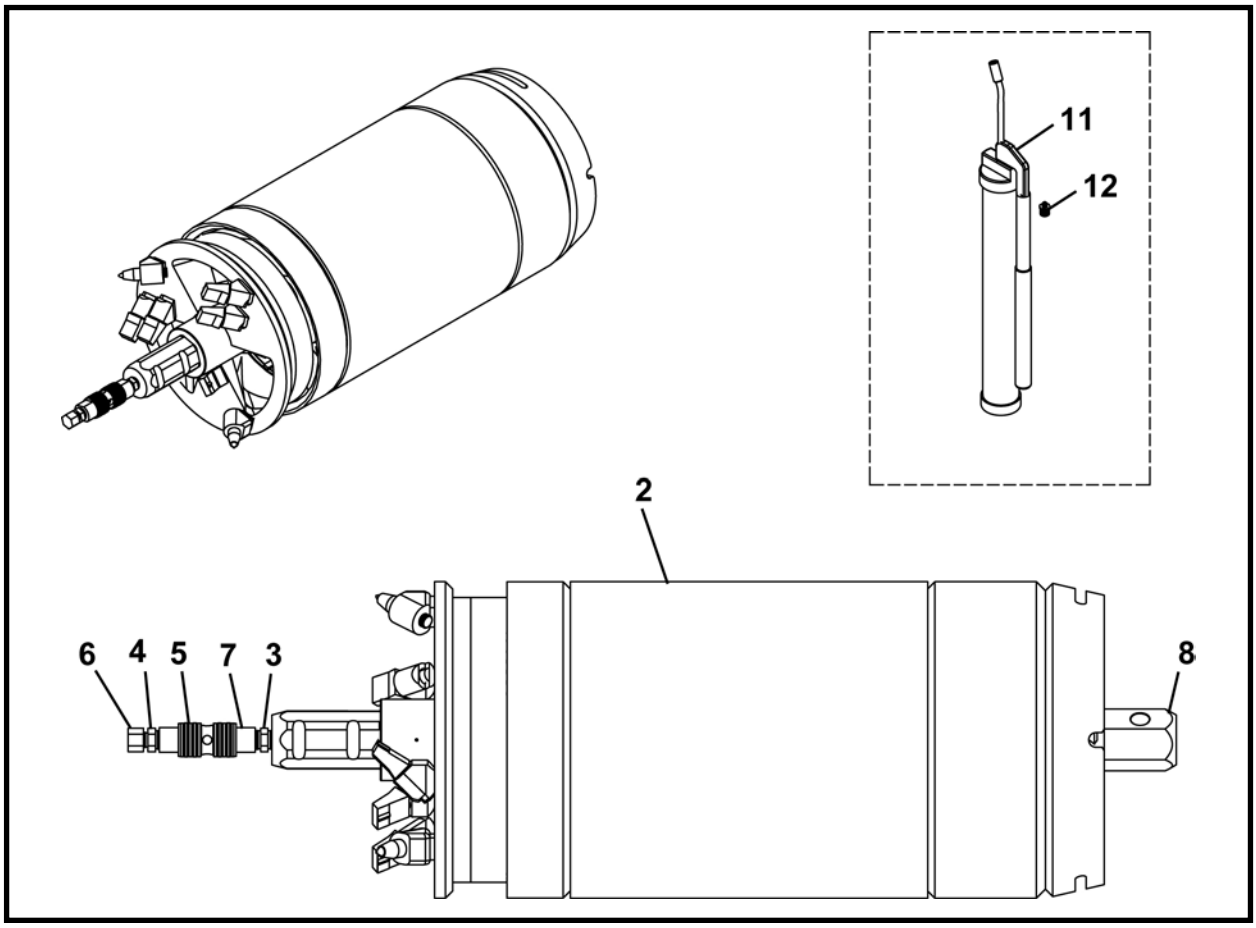
11” OD SWIVEL



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A46151A	CUTTER BIT, Hard Ground 11”
1	3	A43159P	PAD
2	3	P0051-021	HOLDER, Bit
3	3	P0050-045	CUTTER BIT (Includes item 3a)
3a	3	P0050-045A	LOCK RING
4	3	P0051-004	HOLDER, Bit
5	3	P0050-010	BIT, Cutter

INTEGRAL BEARING SWIVEL CUTTER HEAD, 16” OD, FA44723F

16” OD SWIVEL

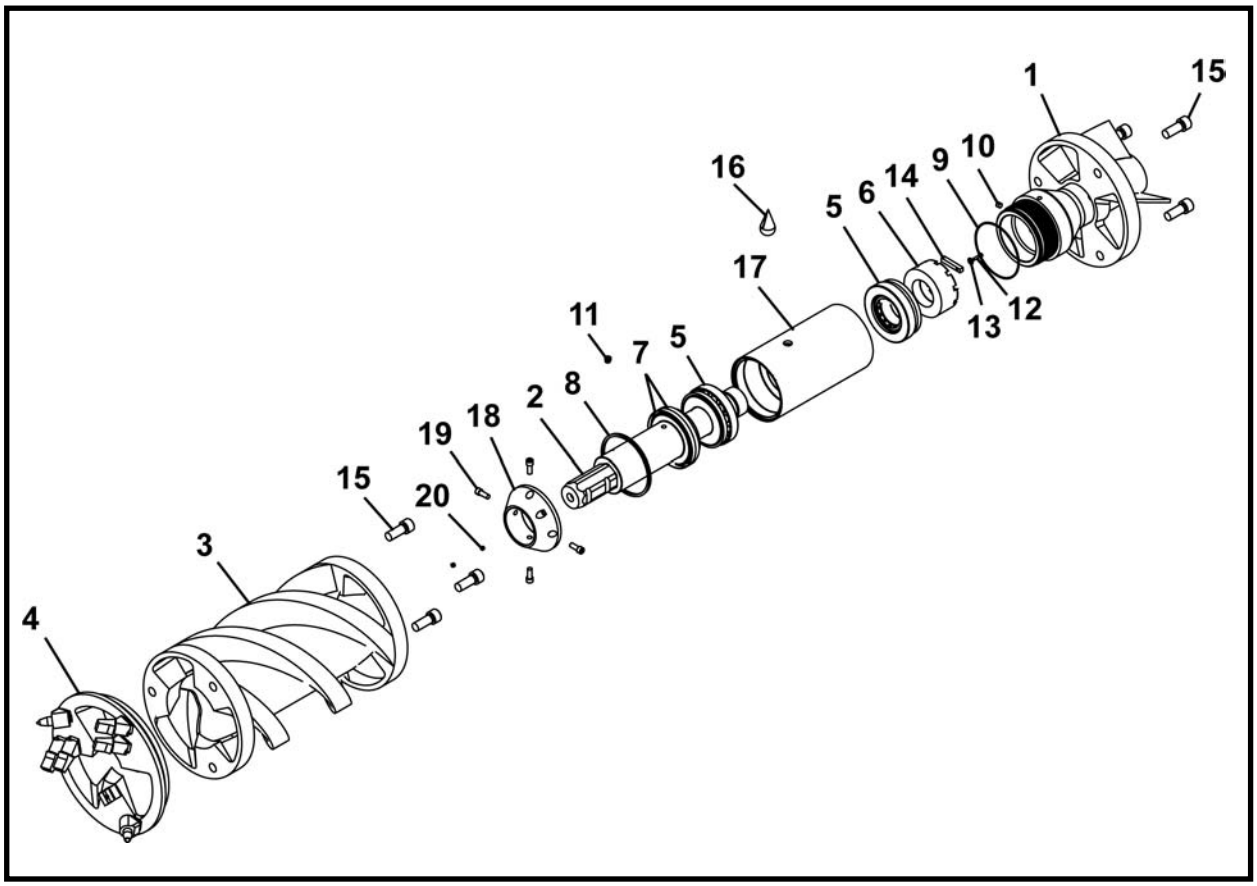


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44723F	INTEGRAL BEARING SWIVEL CUTTER HEAD, 16” OD
1*	1	A44726A	AUGER SWIVEL CUTTER ASSEMBLY 16”
2	1	A44731A	CASING 16”
3	1	P0300-107	FITTING, 12MP-12MP
4	1	P0300-174	FITTING, 10MJ-12MP
5	4	P0085-325	ORING
6	1	P0300-140	FITTING, 10FJ-CAP
7	1	A40976P	ADAPTER, Fluid
8	1	A43807P	SHAFT, Hex End
9**	1	P0013-16-000	NUT, Nylock 1
10**	1	P0001-16-024	BOLT, 1 UNC x 6
11	1	P0126-039	GUN, Oil
12	1	P0063-016	FITTING, Grease Straight

* For parts breakdown, refer to this section.
** Not Shown

AUGER SWIVEL CUTTER ASSEMBLY, 16”, A44726A

16” OD SWIVEL

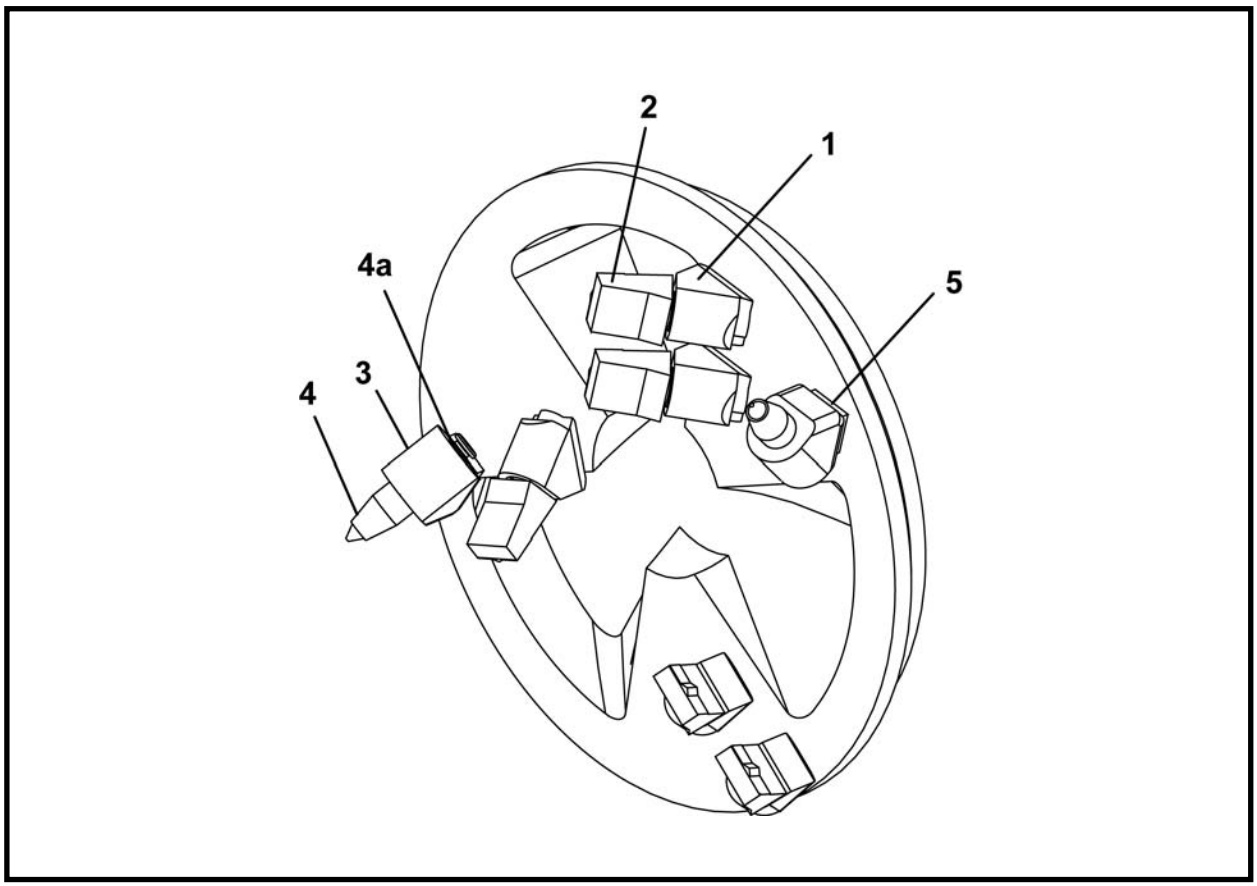


ITEM	QTY	PART NO.	DESCRIPTION
0*	1	A44726A	AUGER SWIVEL CUTTER ASSEMBLY, 16”
1	1	A44725A	AUGER, Rear
2	1	A46040P	SHAFT WITH HEX
3	1	A44727A	FLUTES, Auger
4*	1	A46126A	CUTTER BIT, Hard Ground
5	2	P0065-176	BEARING
6	1	A44745P	RING, Washer Support
7	1	P0065-177	SEAL, Grease
8	1	P0065-188	V-SEAL
9	1	P0085-261	ORING
10	1	P0300-026	FITTING, 04MP-HHP
11	1	P0300-176	FITTING, 06MB-HHP
12	1	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
13	1	P0040-004	WASHER, Hardened Flat 1/4
14	1	A42601P	KEY, Swivel Shaft
15	6	P0031-16-010	SCREW, Socket Head Cap 1 x 2.5
16	1 GAL	P0126-030	OIL, Mobil Gear 636
17	1	A44747P	HOUSING
18	1	A46065P	RETAINER, Seal
19	4	P0031-08-005	SCREW, Socket Head Cap 1/2 UNC x 1.25
20	2	P0300-144	FITTING, 02MP-HHP

* Refer to this section for parts breakdown.
GAL - Gallon
NOTE: Lubricate ONLY with Mobil Gear 636 oil (Part number P0126-030)
Note: If components in this assembly do not match your auger swivel cutter assembly, contact your Product Support representative.

HARD GROUND CUTTER BIT, A46126A

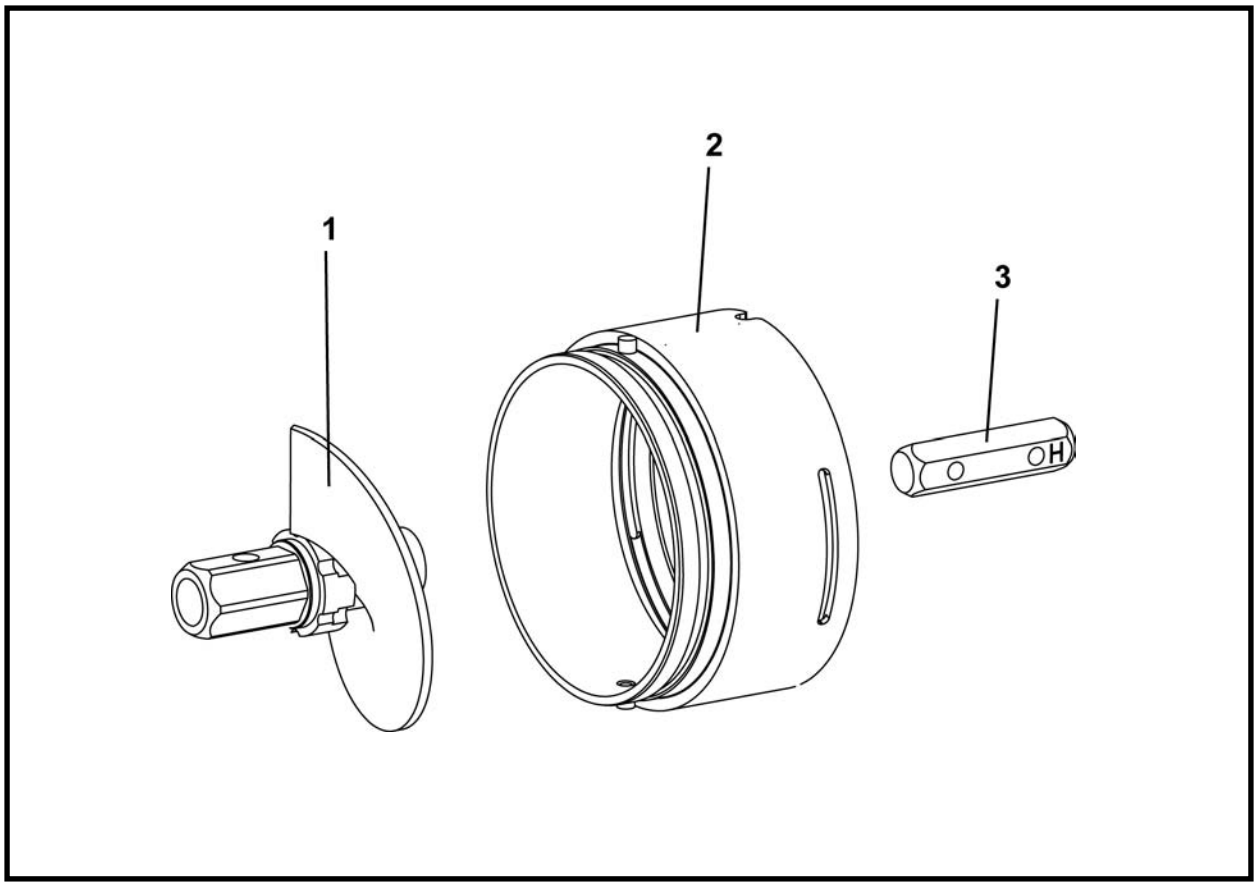
16” OD SWIVEL



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A46126A	CUTTER BIT, Hard Ground 16”
1	5	P0051-004	HOLDER, Bit
2	5	P0050-010	BIT, Cutter
3	2	P0051-021	HOLDER, Bit
4	2	P0050-045	CUTTER BIT (Includes item4a)
4a	2	P0050-045A	LOCK RING
5	2	A43159P	PAD

16” HD X 16” CASING & AUGER ASSEMBLY, FA46157A

16” OD SWIVEL TO STANDARD 16” CASINGS

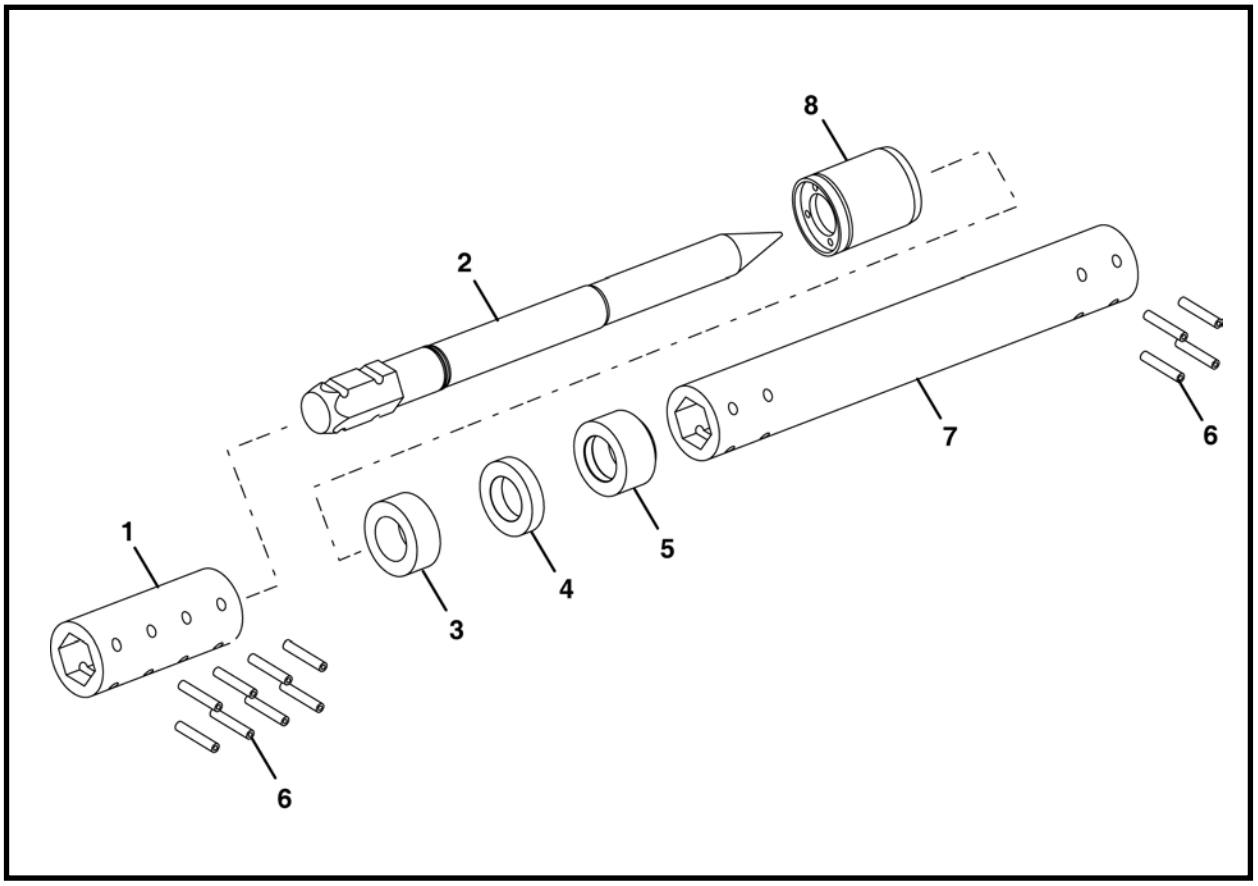


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A46157A	CASING & AUGER ASSEMBLY, 16” HD x 16”
1	1	A45634A	AUGER, Transition
2	1	A46156A	CASING, 16 HD To 16 Standard
3	1	A42135P	SHAFT, Hex End
4*	1	P0001-12-012	BOLT, 3/4 UNC x 3
5*	1	P0013-12A-000	NUT, Nylock 3/4
6*	1	P0001-16-024	BOLT, 1 UNC x 6
7*	1	P0013-16-000	NUT, Nylock 1

* Not Shown

NOTE: This transitional assembly is used to connect the 16” swivel cutter head to the standard (100 ton) 16” augers and casings.

PILOT GUIDE ROD SWIVEL, FA41235F
3” ID HEX CONNECTION
CUTTER HEAD



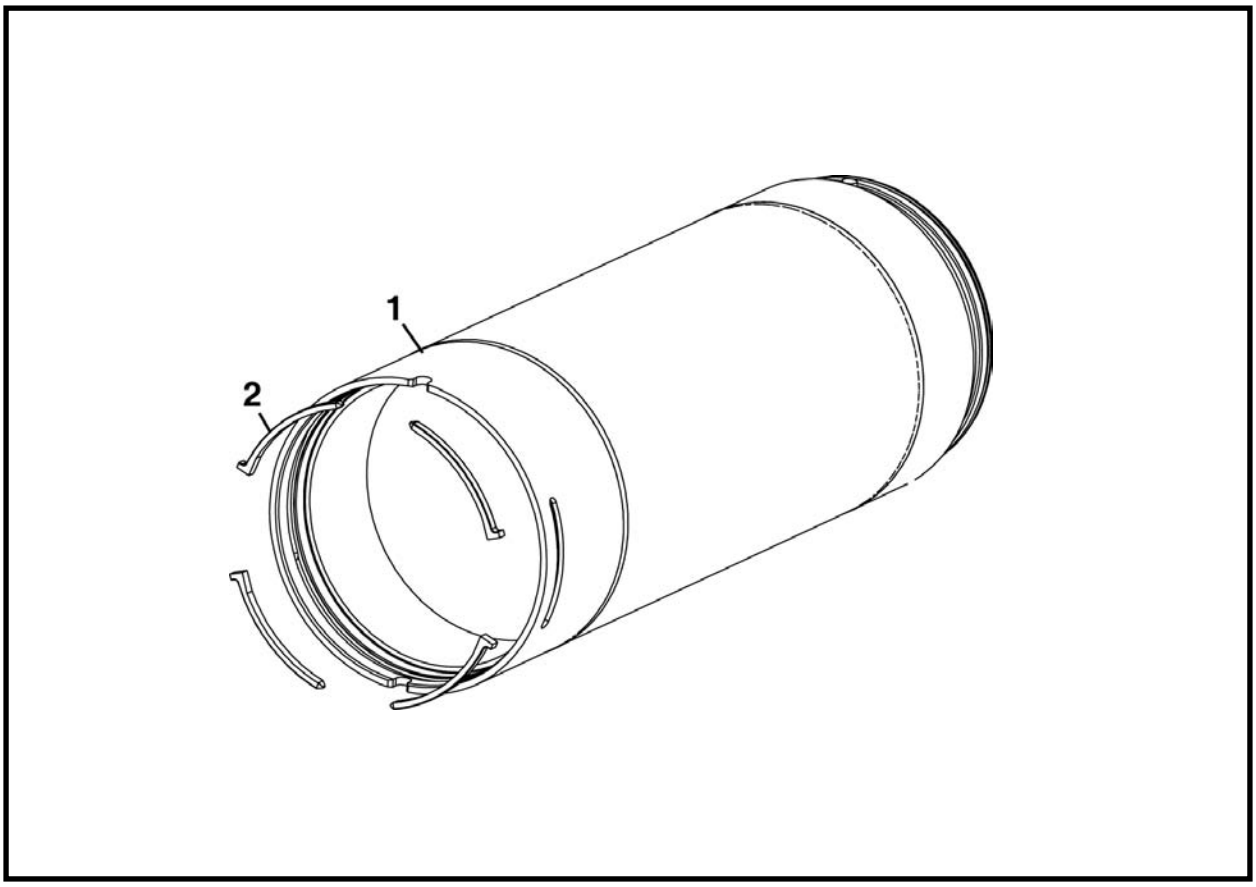
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA41235F	SWIVEL, Pilot Guide Rod
1	1	A41325P	ADAPTER, Female
2	1	A41326P	SHAFT, Guide
3*	2	A41327P	RING, Back Wear
4*	2	A41328P	WASHER, Thrust
5*	2	A41329P	RING, Front Wear
6	12	P0049-201	PIN, Spiral Spring
7	1	A41331P	TUBE, Hex Core Pilot
8	1	A41435A	RETAINER, Thrust Washer

* Includes a spare item.

NOTE: Mounts to Cutter Head and Pilot Tube Adapter.

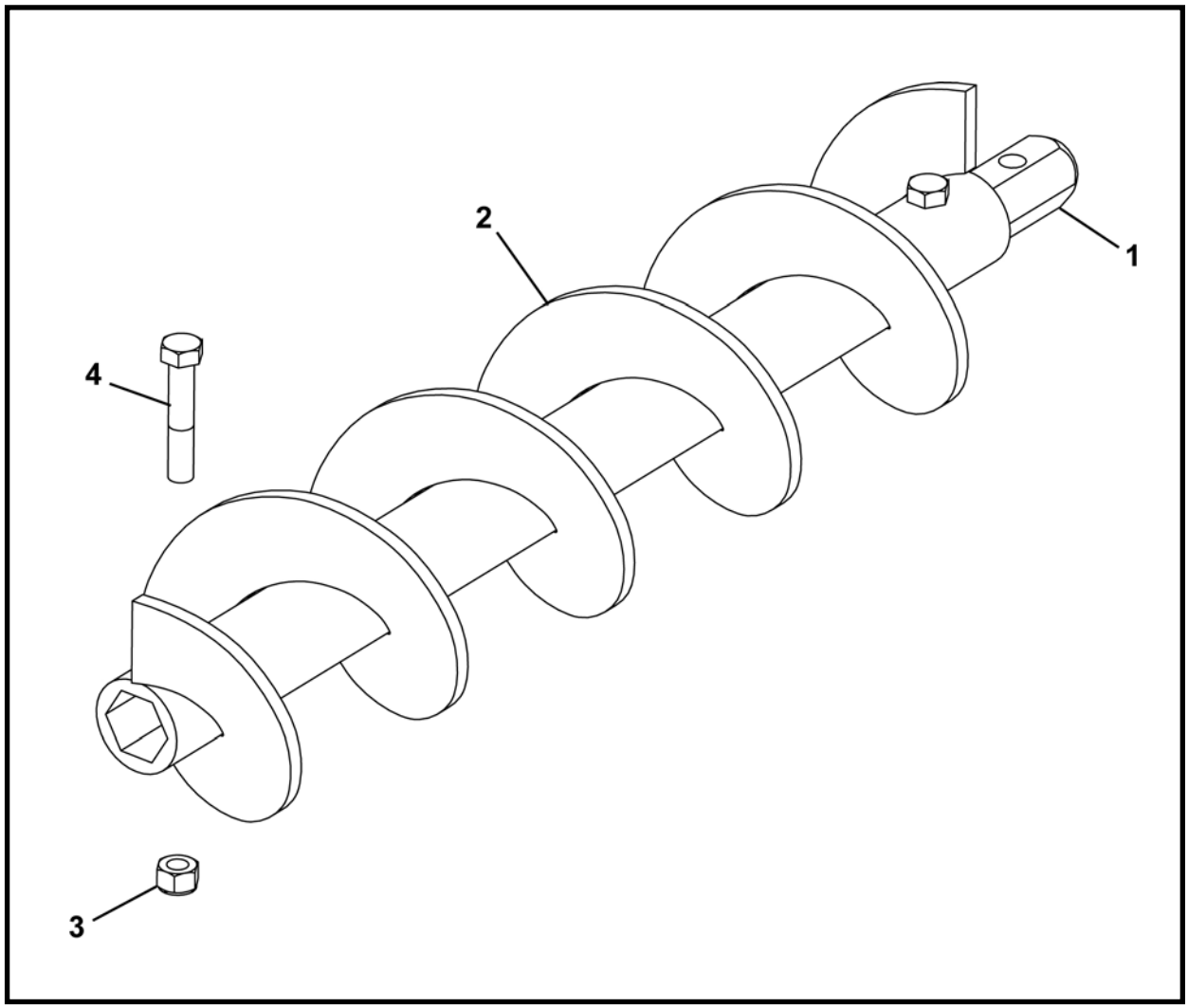
NOTES

THRUST CASING
1 METER CASING



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA40301F	THRUST CASING 11” OD Casing
0.2	1	FA40281F	THRUST CASING 12” OD Casing
0.3	1	FA40321F	THRUST CASING 14” OD Casing, 10” VCP
0.4	1	FA40341F	THRUST CASING 16” OD Casing, 12” VCP
1.1	1	FA40302F	WELDMENT, Thrust Casing 11” OD Casing
1.2	1	A40282A	WELDMENT, Thrust Casing 12” OD Casing
1.3	1	A40322A	WELDMENT, Thrust Casing 14” OD Casing
1.4	1	A40342A	WELDMENT, Thrust Casing 16” OD Casing
2.1	4	A40602P	CLIP, Retaining 11” OD Casing
2.2	4	A40669P	CLIP, Retaining 12” OD Casing
2.3	4	A40638P	CLIP, Retaining 14” OD Casing
2.4	4	A40643P	CLIP, Retaining 16” OD Casing

AUGER ASSEMBLY
FOR 1 METER CASING

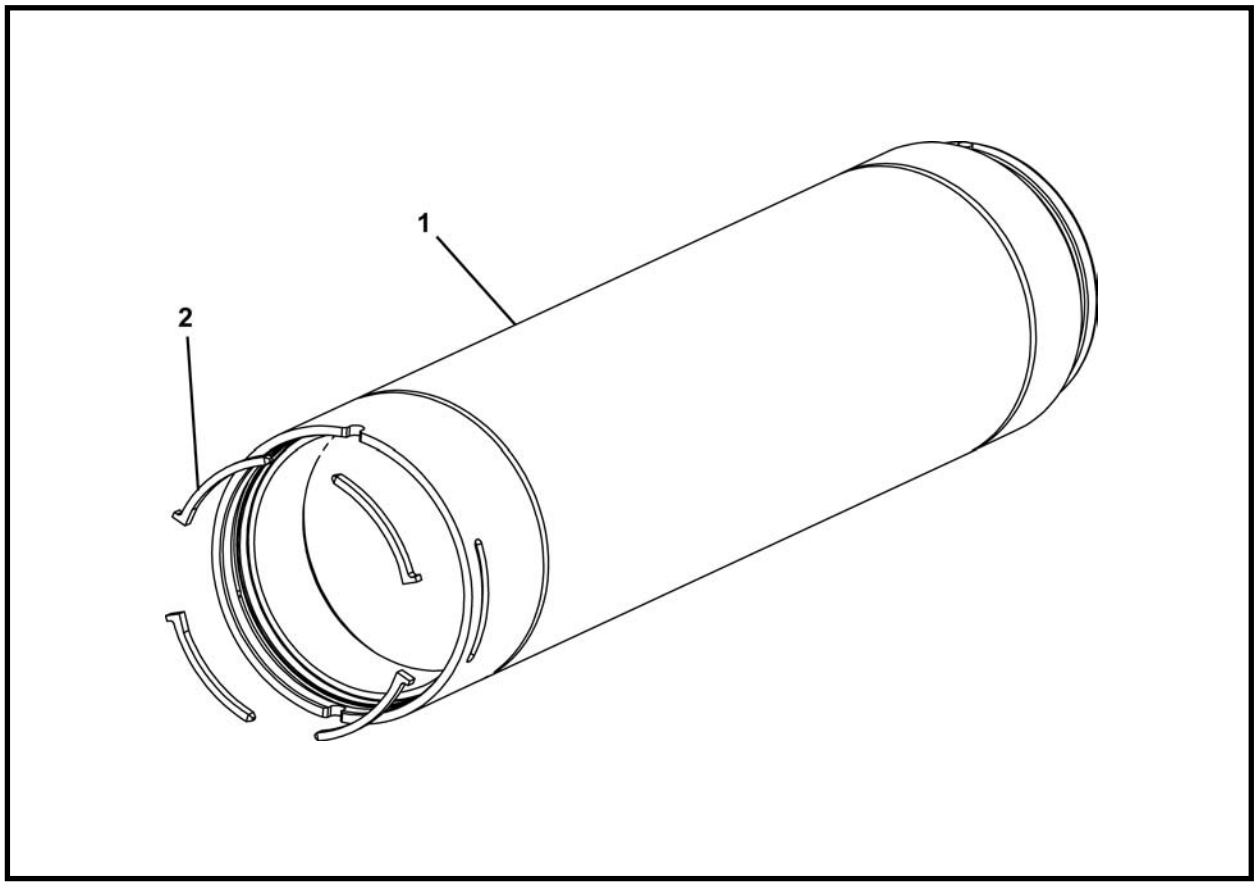


ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA42057F	AUGER ASSEMBLY, 11” OD Casing (9.25 OD x 1M)
0.2*	1	FA45405F	AUGER ASSEMBLY, 11” OD Casing (9.25 OD x 37.38”)
0.3	1	FA42140F	AUGER ASSEMBLY, 12” OD Casing (10 OD x 1M)
0.4	1	FA42143F	AUGER ASSEMBLY, 14” OD Casing (12 OD x 1M)
0.5	1	FA42146F	AUGER ASSEMBLY, 16” OD Casing (14 OD x 1M)
0.6*	1	FA45406F	AUGER ASSEMBLY, 16” OD Casing (14 OD x 37.38”)
1	1	A42135P	SHAFT, Hex End
2.1	1	A42058A	WELDMENT, Auger 9.25 OD
2.2	1	A45403A	WELDMENT, Auger 9.25 OD
2.3	1	A42142A	WELDMENT, Auger 10 OD
2.4	1	A42145A	WELDMENT, Auger 12 OD
2.5	1	A42148A	WELDMENT, Auger 14 OD
2.6	1	A45404A	WELDMENT, Auger 14 OD
3	2	P0013-12A-000	NUT, Nylock Lock 3/4
4	2	P0001-12-016	BOLT, 3/4 UNC x 4

* This auger is used when installing the reaming head assembly. The hex connector clearance grows in length to a point where a short auger is required to line up the augers to the casings. One short auger may be required (depending on soil conditions, thrust) every 100 ft of casing installation.

THRUST CASING - HEAVY DUTY, 16” OD 5 FT, FA43800F

5 FOOT CASING

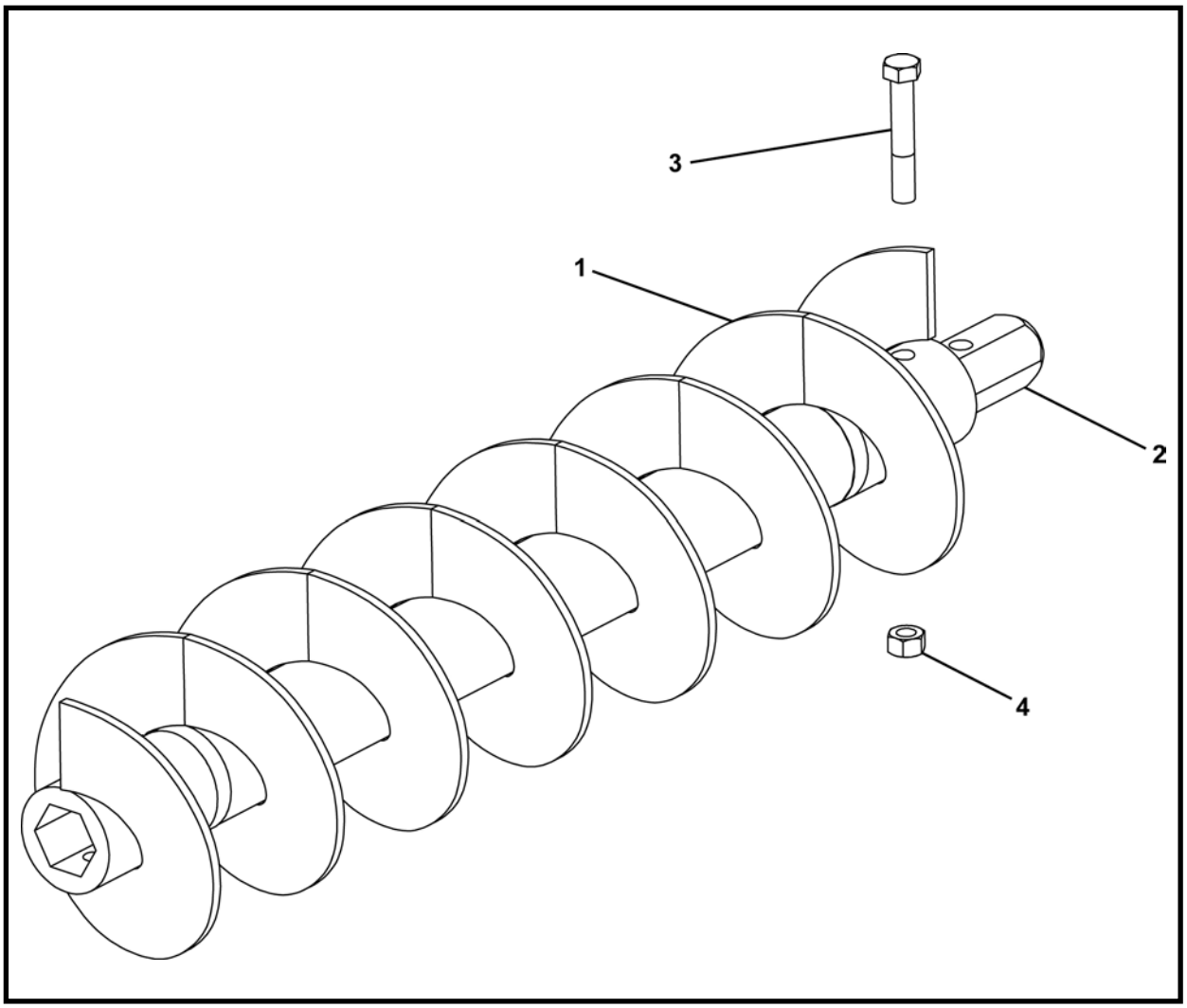


ITEM	QTY	PART NO.	DESCRIPTION
0*	1	FA43800F	THRUST CASING HD 16” OD Casing x 5 FT
1	1	A43806A	WELDMENT, Thrust Casing HD, 16” OD Casing
2	4	A43813P	CLIP, Retaining HD 16” OD Casing

* Heavy Duty - 200 Ton Capacity

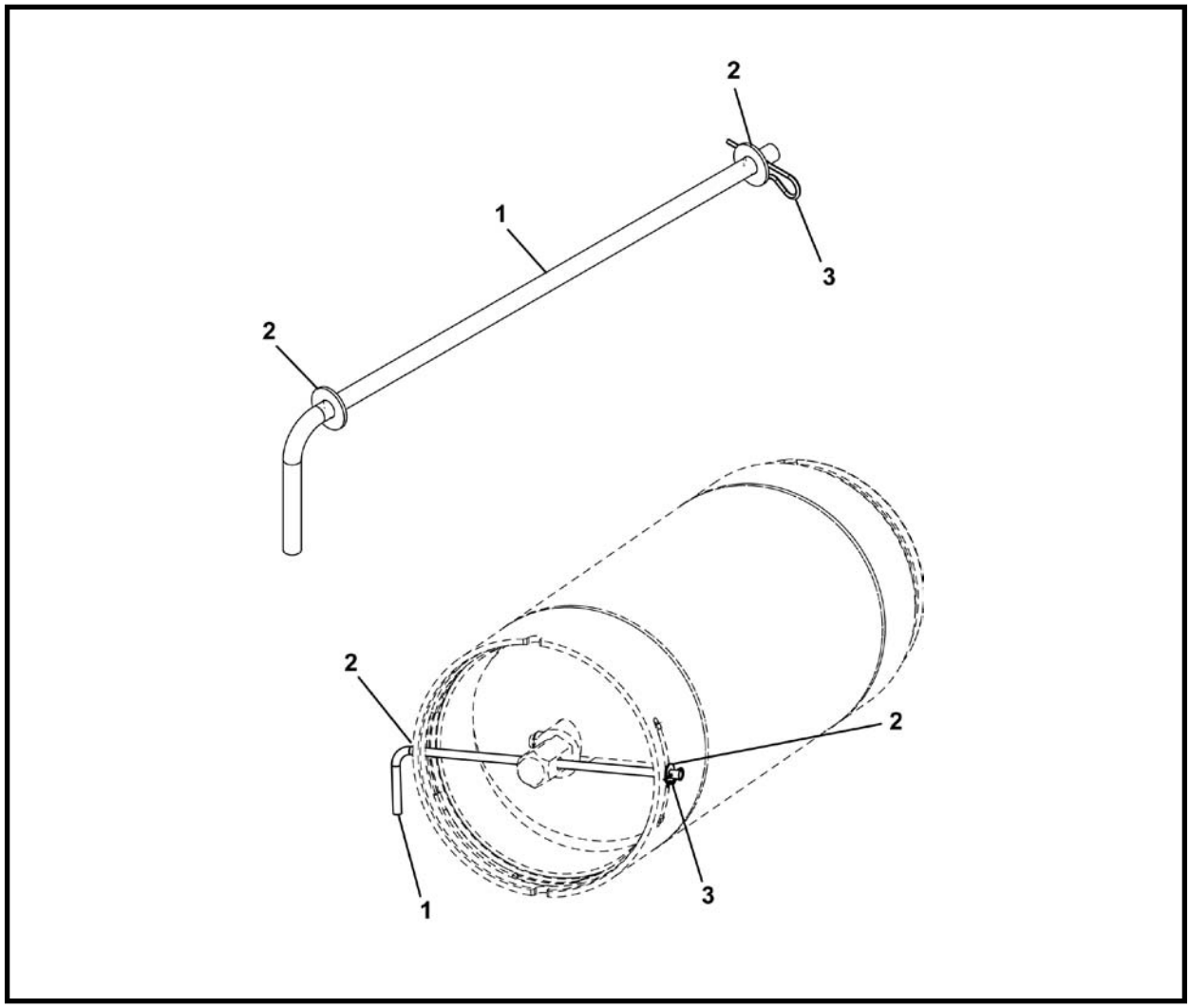
AUGER ASSEMBLY 13.5 OD X 5 FT, FA45809F

FOR 5 FOOT HD CASING



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45809F	AUGER ASSEMBLY, 13.5 OD x 5 FT
1	1	A45810A	AUGER 13.5 OD x 5 FT
2	1	A43807P	SHAFT, Hex End
3	1	P0001-16-024	BOLT, 1 UNC x 6
4	1	P0013-16-000	NUT, Nylock 1

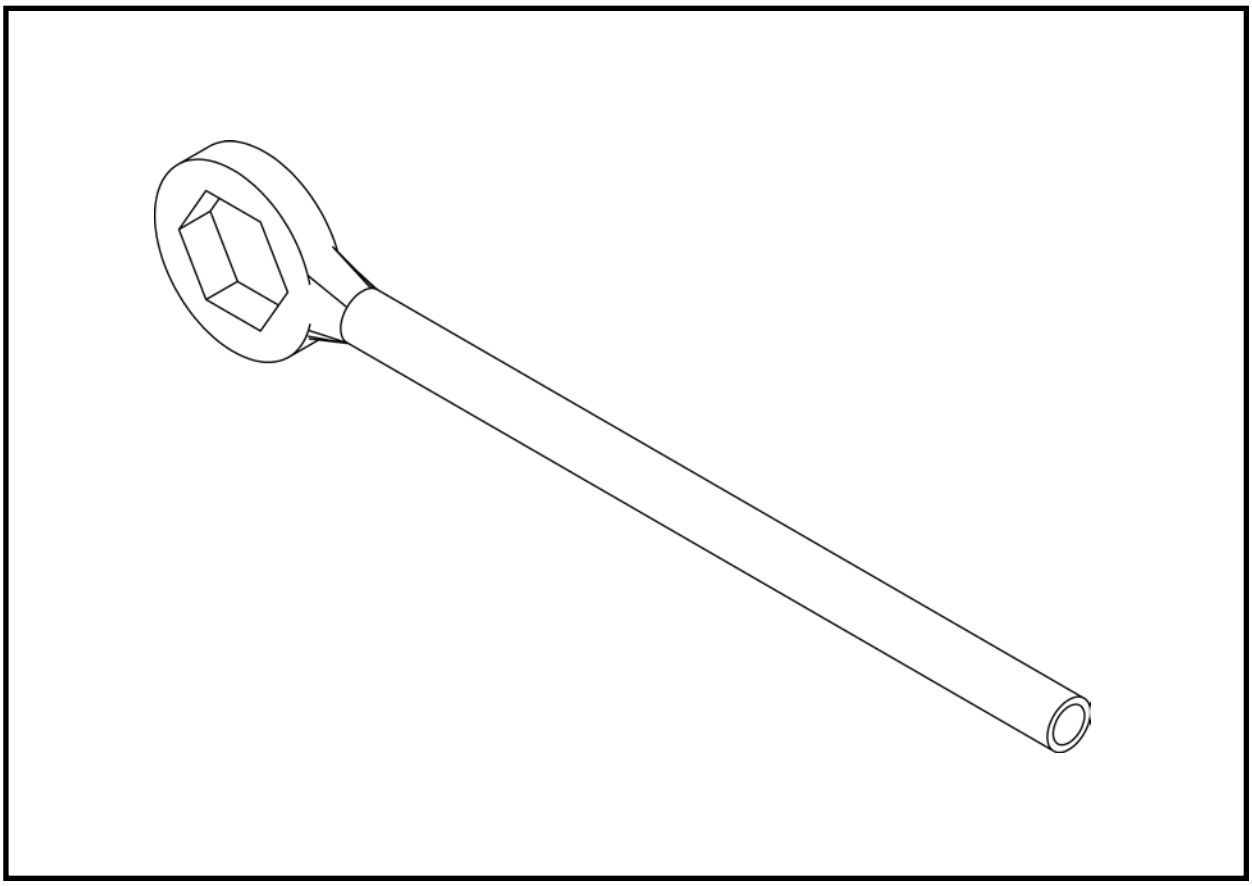
CASING AUGER PIN, A41921A



ITEM	QTY	PART NO.	DESCRIPTION
0*	1	A41921A	CASING AUGER PIN
1	1	A41922P	PIN, Auger
2	2	P0040-008	WASHER, Hardened Flat 1/2
3	1	P0090-002	CLIP, Hitch Pin 1/8

* Item 1, Pin, goes through clip retaining slot in casing, through hole in auger stem, through clip retaining slot in casing and secured in place with item 2, hardened flat washer and item 3, hitch pin clip.

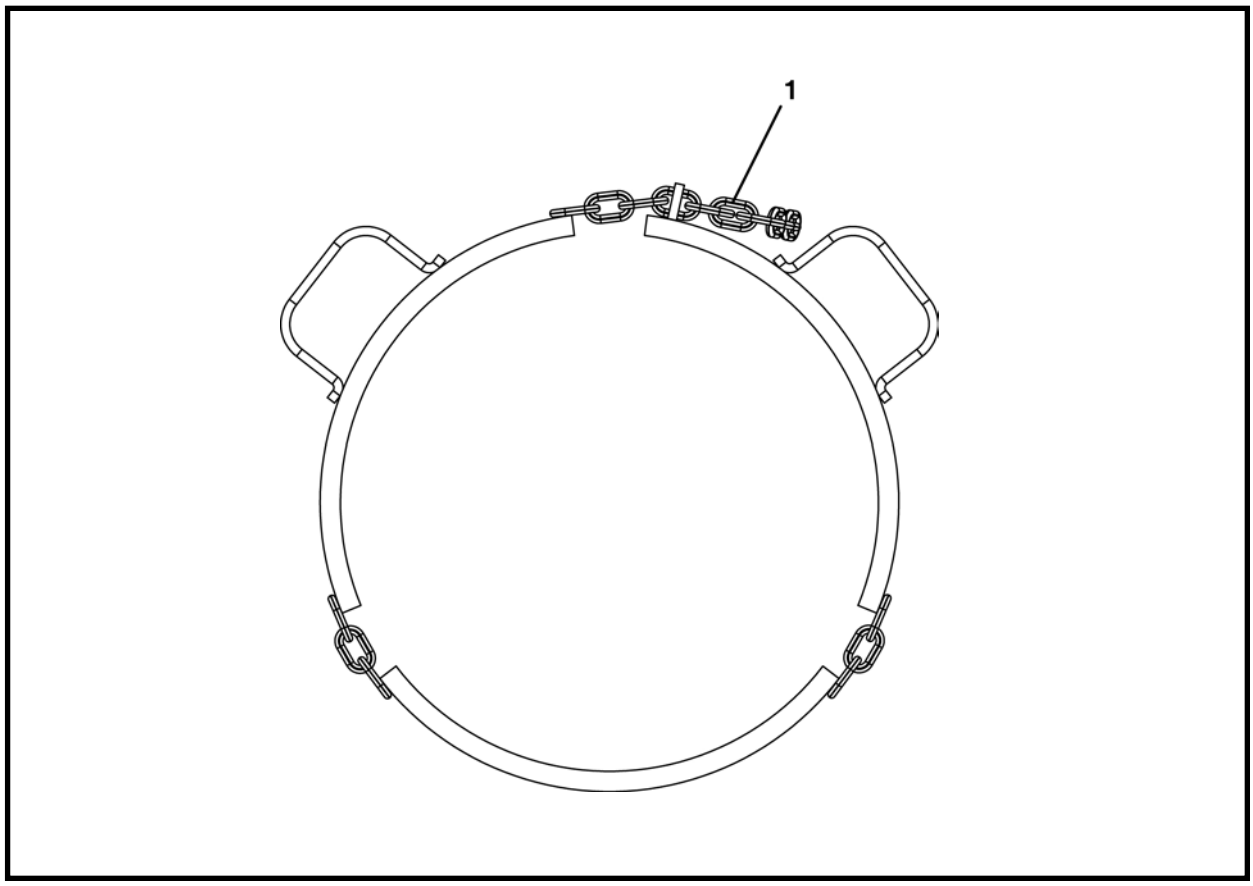
AUGER HEX WRENCH



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	A45622A	AUGER HEX WRENCH 2”
0.2	1	A44123A	AUGER HEX WRENCH 3”

Note: This wrench is used to assist in aligning the auger hex connections during casing installation.

CASING EXTENSION RING 2”, A44127A
FOR USE WITH 5 FOOT HD CASINGS



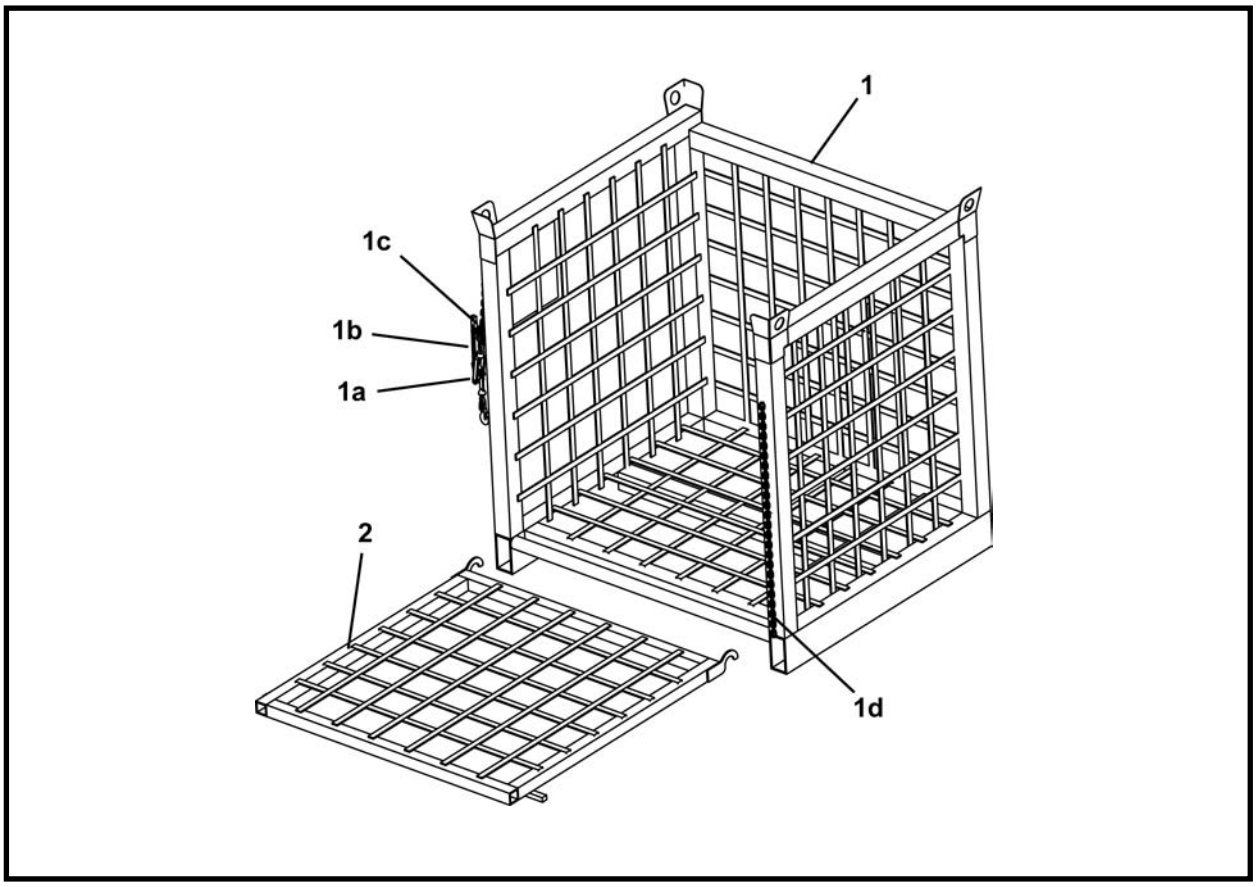
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44127A	CASING EXTENSION RING 2”
1	22 IN	P0094-004	CHAIN

IN - Inch

NOTE: Once the 5 foot casing is fully advanced, the casing extension ring is placed between the casing thrust adapter and the casing in the launch shaft. The casing is then advanced to provide an additional 2 inches of space for ease of installing the next casing and auger.

NOTES

BASKET ASSEMBLY, FA43343F
1 METER THRUST CASING

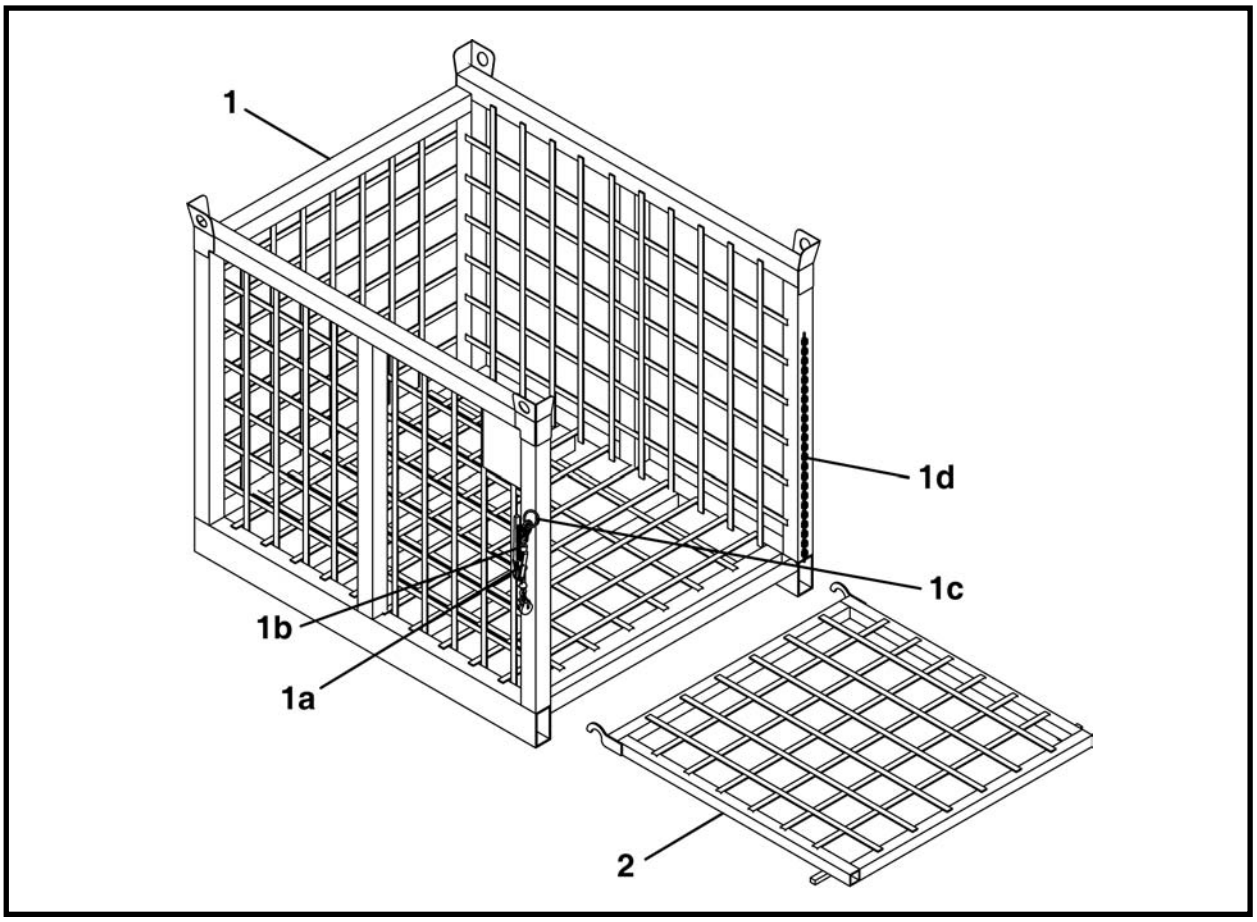


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43343F	ASSEMBLY, Basket
1	1	A43341A	WELDMENT, Basket (Includes 1a - 1d)
1a	1	P0094-012	LOAD BINDER, 1/4
1b	1	P0098-009	LINK, Hammerloc 9/32
1c	1	A26092P	RETAINER, Load Binder
1d	40 LI	P0094-002	CHAIN 9/32 x 40
2	1	A43342A	WELDMENT, DOOR

LI - Linear Inch

BASKET ASSEMBLY, FA43576F

5 FOOT THRUST CASING

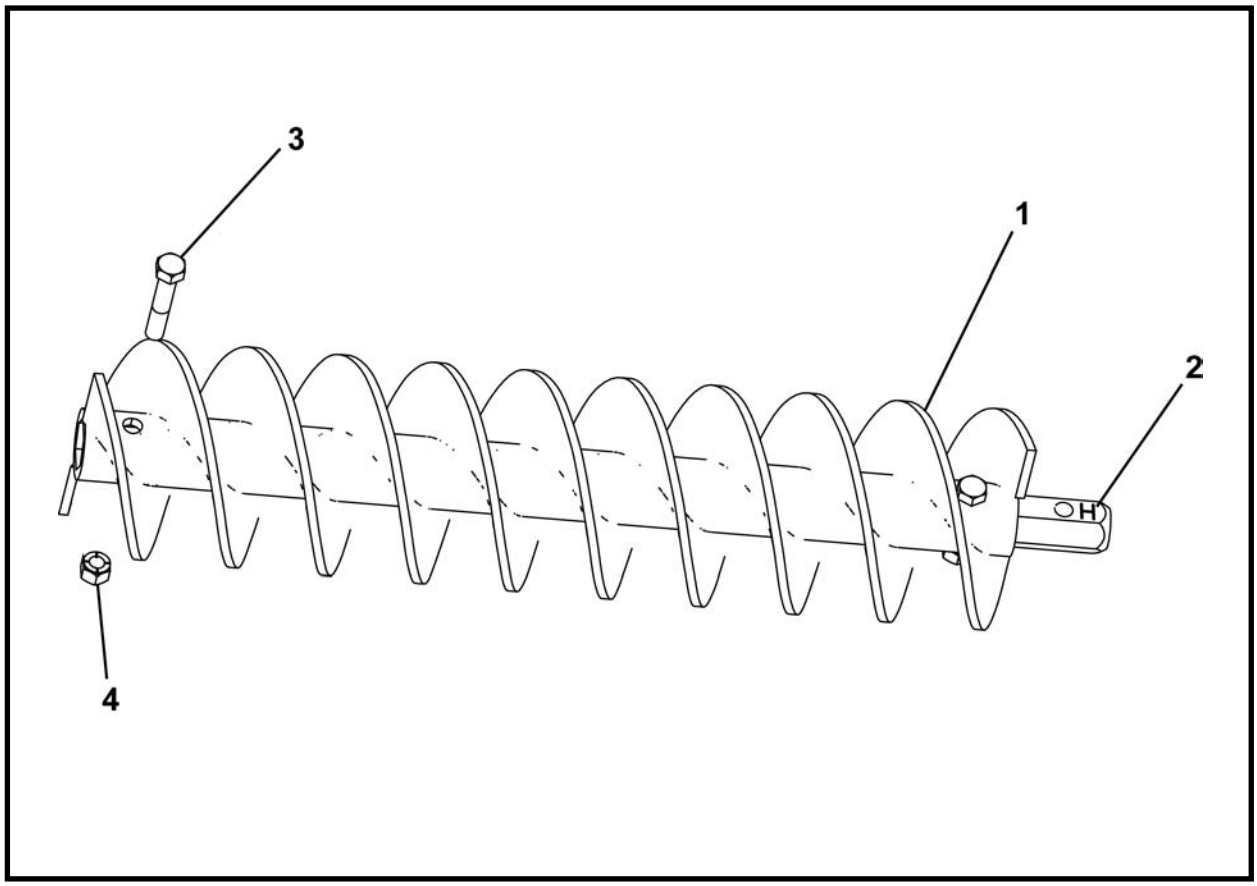


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43576F	ASSEMBLY, Basket
1	1	A43831A	WELDMENT, Basket (Includes 1a - 1d)
1a	1	P0094-012	LOAD BINDER, 1/4
1b	1	P0098-009	LINK, Hammerloc 9/32
1c	1	A26092P	RETAINER, Load Binder
1d	40 LI	P0094-002	CHAIN 9/32 x 40
2	1	A43342A	WELDMENT, DOOR

LI - Linear Inch

RESTRICTED FLOW AUGER

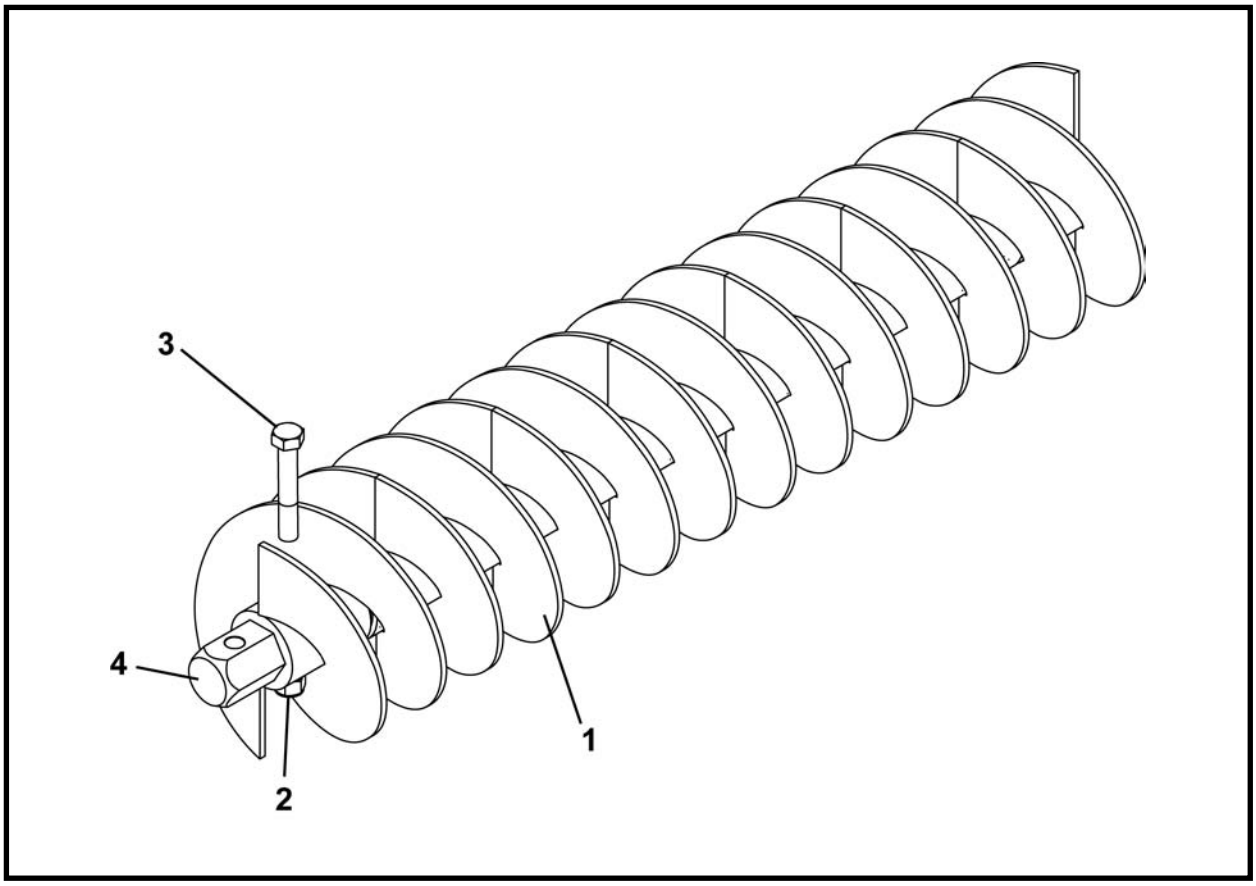
1 METER CASING



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA42060F	AUGER, Restricted Flow 11” OD
0.2	1	FA45309F	AUGER, Restricted Flow 14” OD
1.1	1	A42061A	AUGER, Double
1.2	1	A45322A	AUGER, Double
2	1	A42135P	CONNECTOR, Hex 2”
3	2	P0001-12-016	BOLT, 3/4 UNC x 4
4	2	P0013-12A-000	NUT, Nylok Lock 3/4

RESTRICTED FLOW AUGER, FA45830F

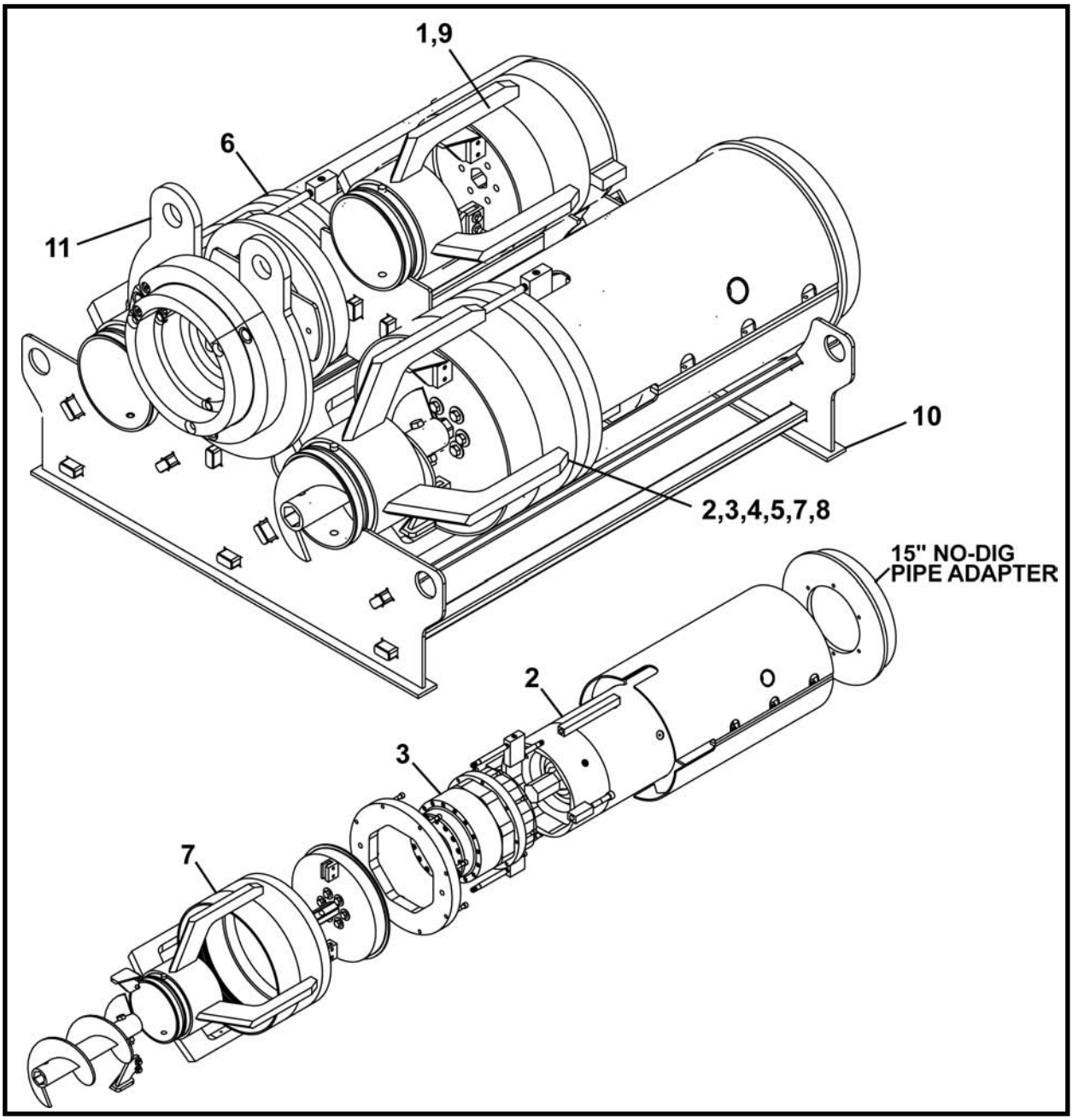
5 FOOT CASING



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45830F	AUGER, RESTRICTED FLOW
1	1	A45835A	AUGER, Close Pitch
2	1	P0013-16-000	NUT, Nylok Lock 1
3	1	P0001-16-024	BOLT, 1 UNC x 6
4	1	A43807P	CONNECTOR, Hex 3”

POWERED REAMING HEAD ASSEMBLY, FA45200F

POWERED REAMING HEAD (SN FA45200F-2 & 3)



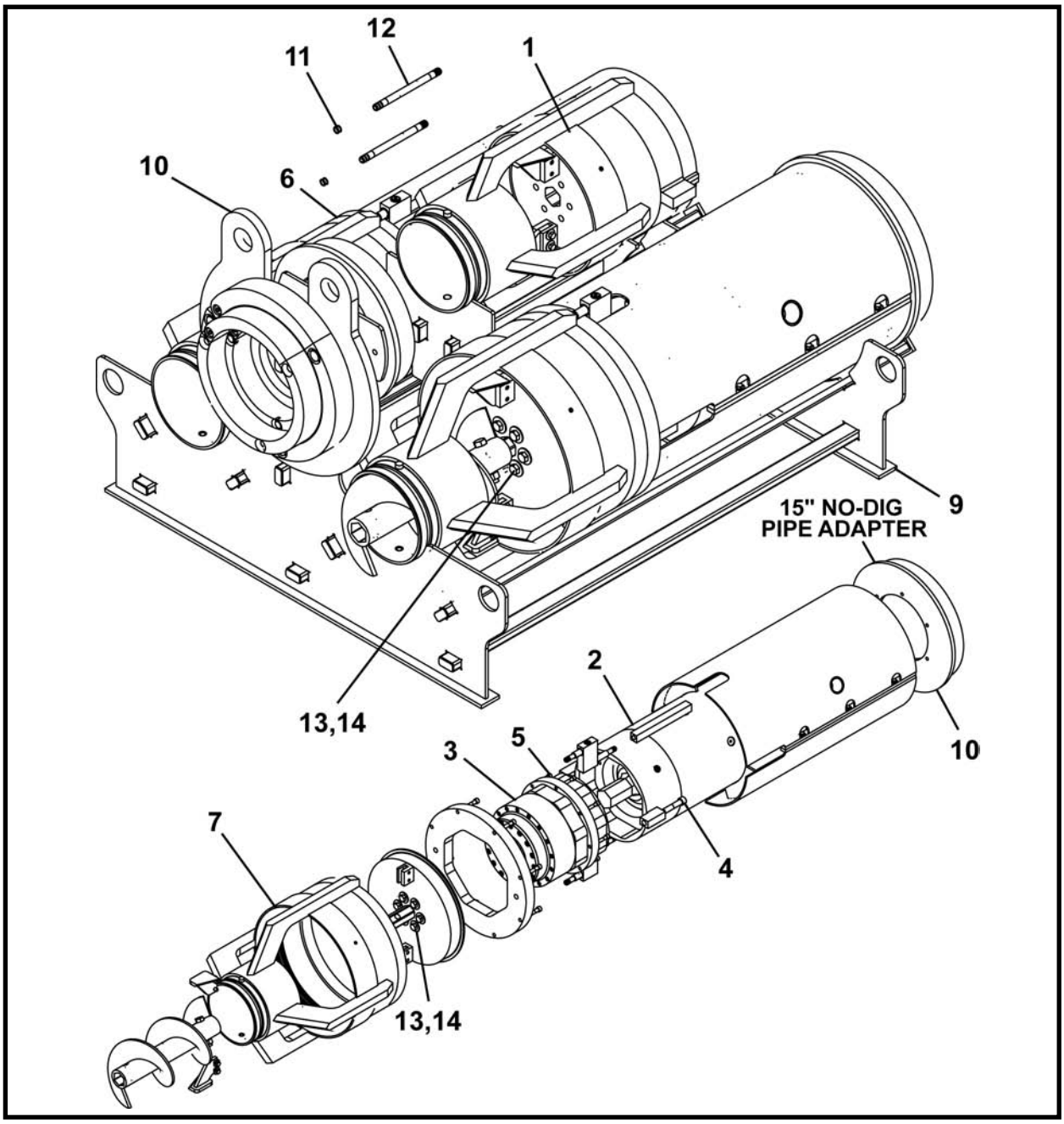
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45200F	POWERED REAMING HEAD ASSEMBLY
1	1	A45201A	ASSEMBLY, Front Section PRH
2	1	A45202A	ASSEMBLY, Rear Section PRH
3	1	A45203A	ASSEMBLY, PRH Bearing
4	2	P0031-12-015	SCREW, Socket Head Cap 3/4 UNC x 3.5
5	8	P0031-07-007	SCREW, Socket Head Cap 7/16 UNC x 1.75
6	1	A45265A	KIT, 11” - 16” Increase
7	1	A45266A	KIT, 11” - 20” Increase
8*	1	A45306A	ASSEMBLY, PRH Hydraulics
9	1	A45461A	EXTENSION, 14” PRH
10	1	A45464A	STAND, PRH Shipping
11**	1	FA45428F	ADAPTER, Pipe, 10 - 12 - 15” No-Dig

* For parts breakdown, refer to section 6, Hydraulics.

** For parts breakdown, refer to this section.

POWERED REAMING HEAD ASSEMBLY, FA45200F

POWERED REAMING HEAD (SN FA45200F-4 & AFTER)

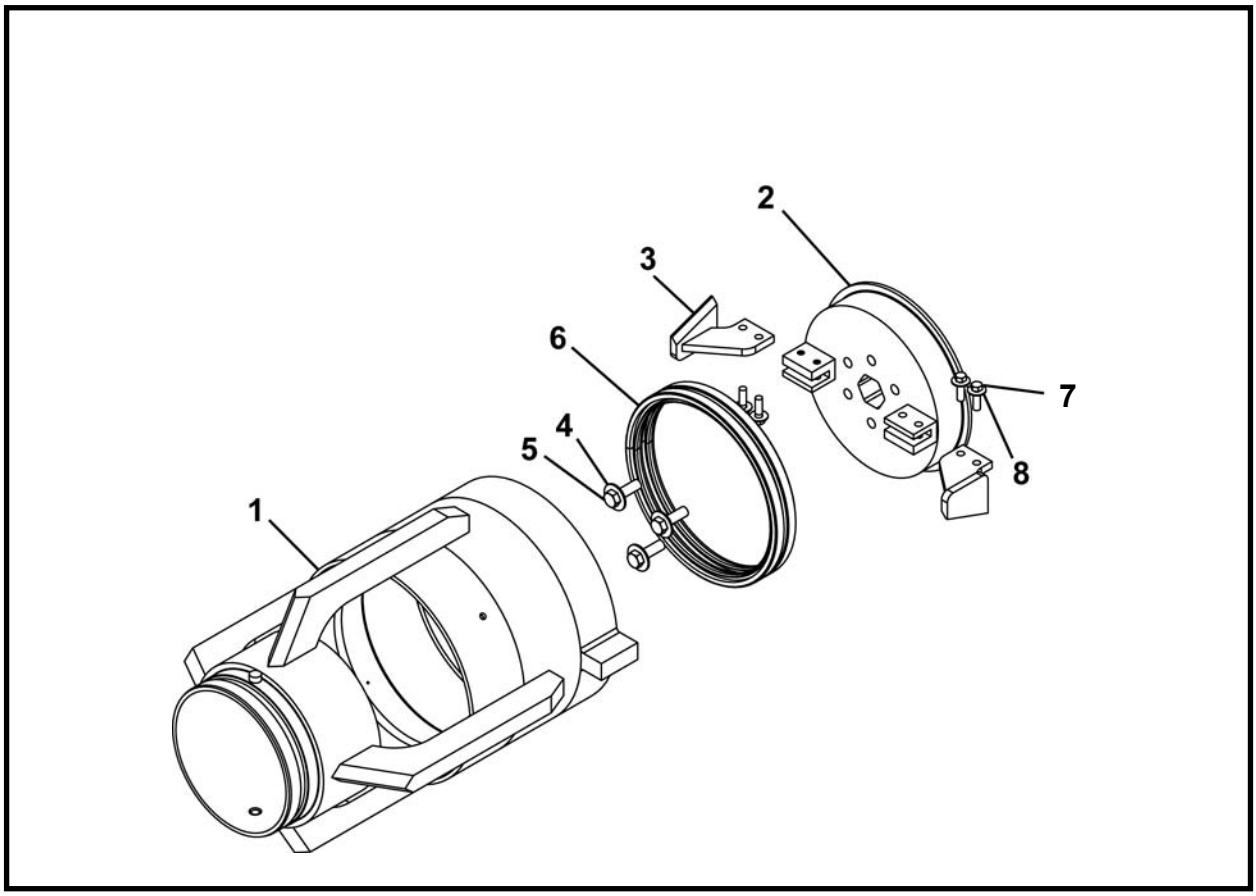


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45200F	POWERED REAMING HEAD ASSEMBLY
1	1	A45201A	ASSEMBLY, Front Section PRH
2	1	A45202A	ASSEMBLY, Rear Section PRH
3	1	A45203A	ASSEMBLY, PRH Bearing
4	2	P0031-12-015	SCREW, Socket Head Cap 3/4 UNC x 3.5
5	8	P0031-07-007	SCREW, Socket Head Cap 7/16 UNC x 1.75
6	1	A45265A	KIT, 11” - 16” Increase
7	1	A45266A	KIT, 11” - 20” Increase
8*	1	A45306A	ASSEMBLY, PRH Hydraulics
9	1	A45464A	STAND, PRH Shipping
10**	1	FA45428F	ADAPTER, Pipe, 10 - 12 - 15” No-Dig
11	8	P0085-015	ORING
12.1	2	A45230A	TUBE, Jetting (SN FA45200F-4)
12.2	2	A46517P	TUBE, Jetting (SN FA45200F-5 & After)
13	6	P0001-10-008	BOLT, 5/8 UNC x 2
14	6	P0040-010	WASHER, Hardened Flat 5/8

* For parts breakdown, refer to section 6, Hydraulics ** For parts breakdown, refer to this section.

PRH 11” - 14” FRONT SECTION ASSEMBLY, A45201A

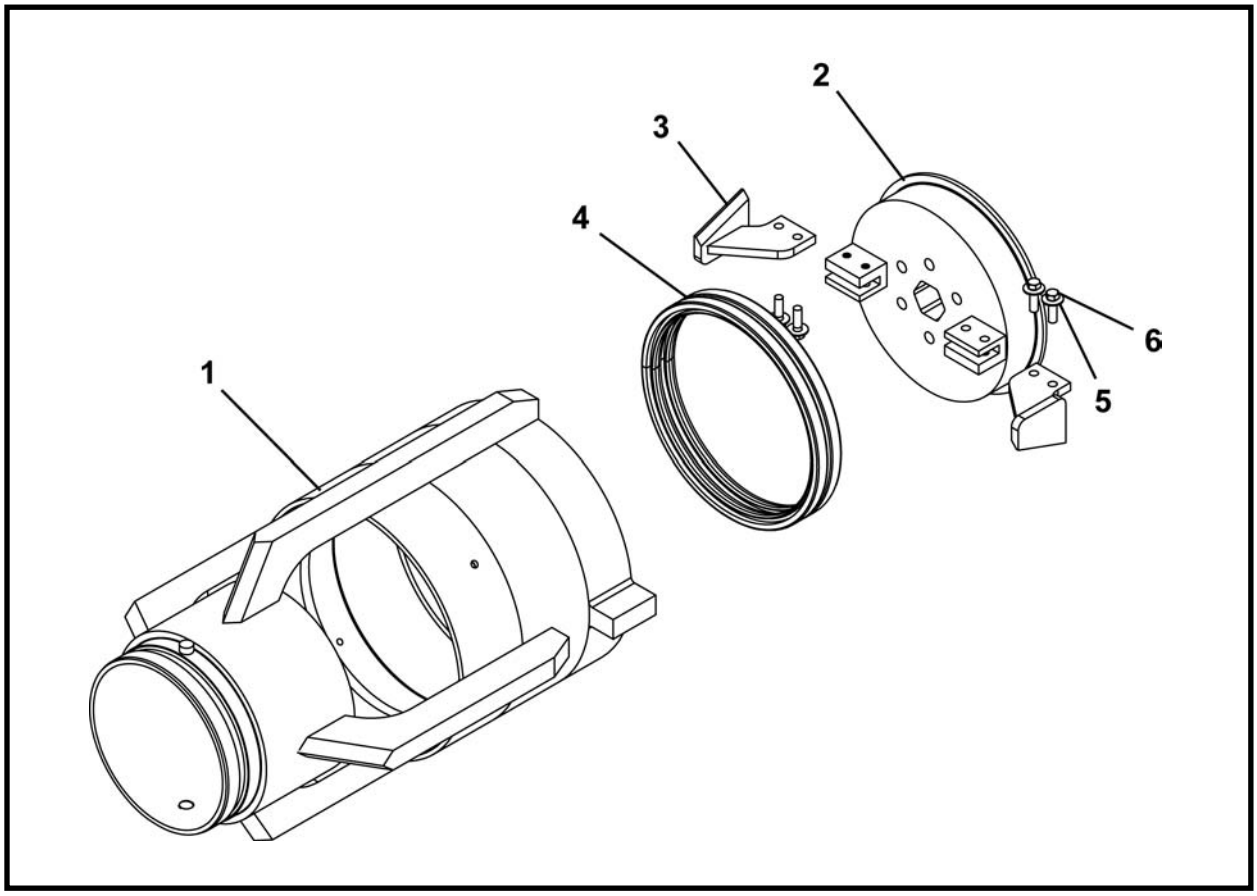
POWERED REAMING HEAD (SN FA45200F-2 THRU 4)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45201A	11” - 14” PRH FRONT SECTION ASSEMBLY
1	1	A45204A	WELDMENT, Front Section
2	1	A45205A	WELDMENT, Cutterhead
3	2	A45235A	WELDMENT, Periphery Cutter
4	6	P0040-010	WASHER, Hardened Flat 5/8
5	6	P0001-10-008	BOLT, 5/8 UNC x 2
6	2	P0080-035	SEAL
7	4	P0001-07-006	BOLT, 7/16 UNC x 1.5
8	4	P0040-007	WASHER, Hardened Flat 7/16

PRH 11” - 14” FRONT SECTION ASSEMBLY, A45201A

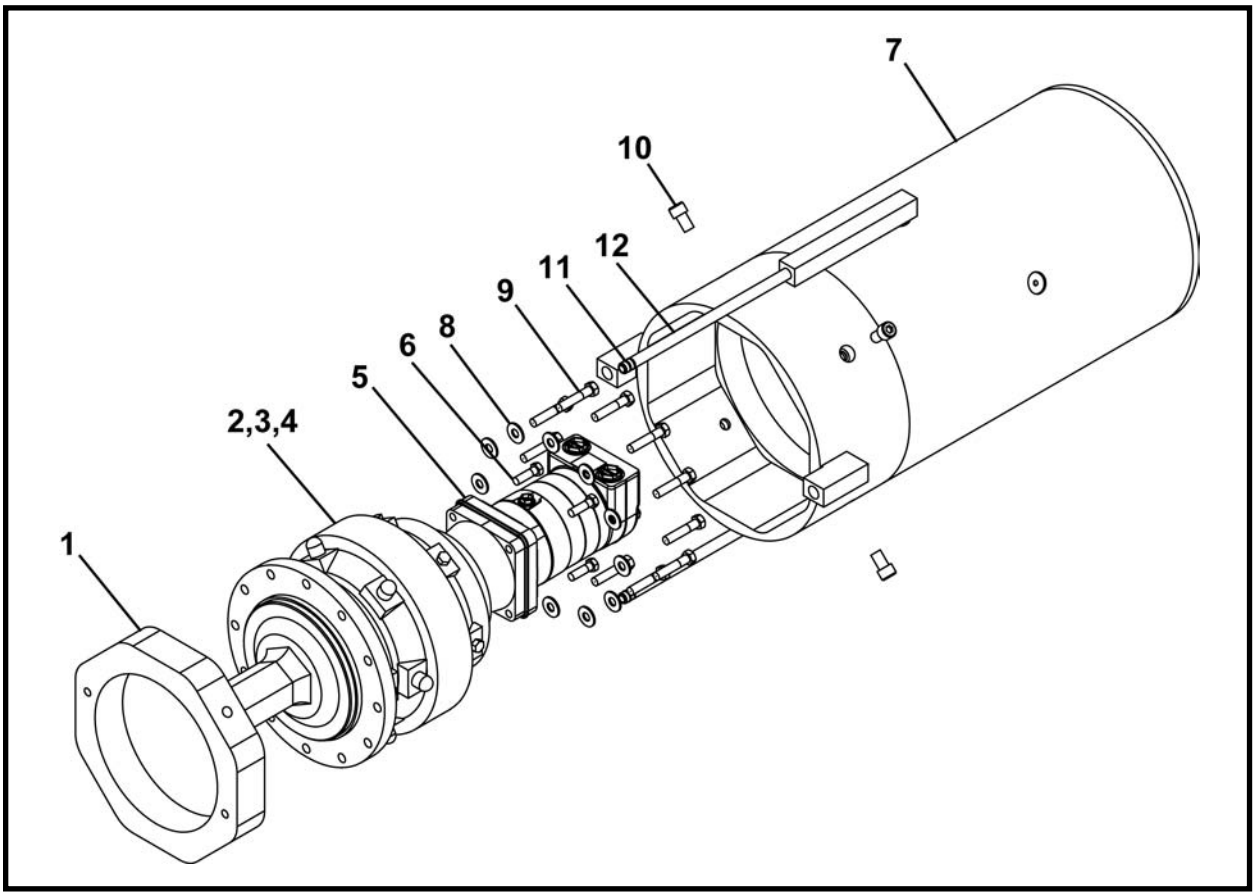
POWERED REAMING HEAD (SN FA45200F-5 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45201A	11” - 14” PRH FRONT SECTION ASSEMBLY
1	1	A45204A	WELDMENT, Front Section
2	1	A45205A	WELDMENT, Cutterhead
3	2	A45235A	WELDMENT, Periphery Cutter
4	2	P0080-035	SEAL
5	4	P0040-007	WASHER, Hardened Flat 7/16
6	4	P0001-07-006	BOLT, 7/16 UNC x 1.5

PRH REAR SECTION ASSEMBLY, A45202A

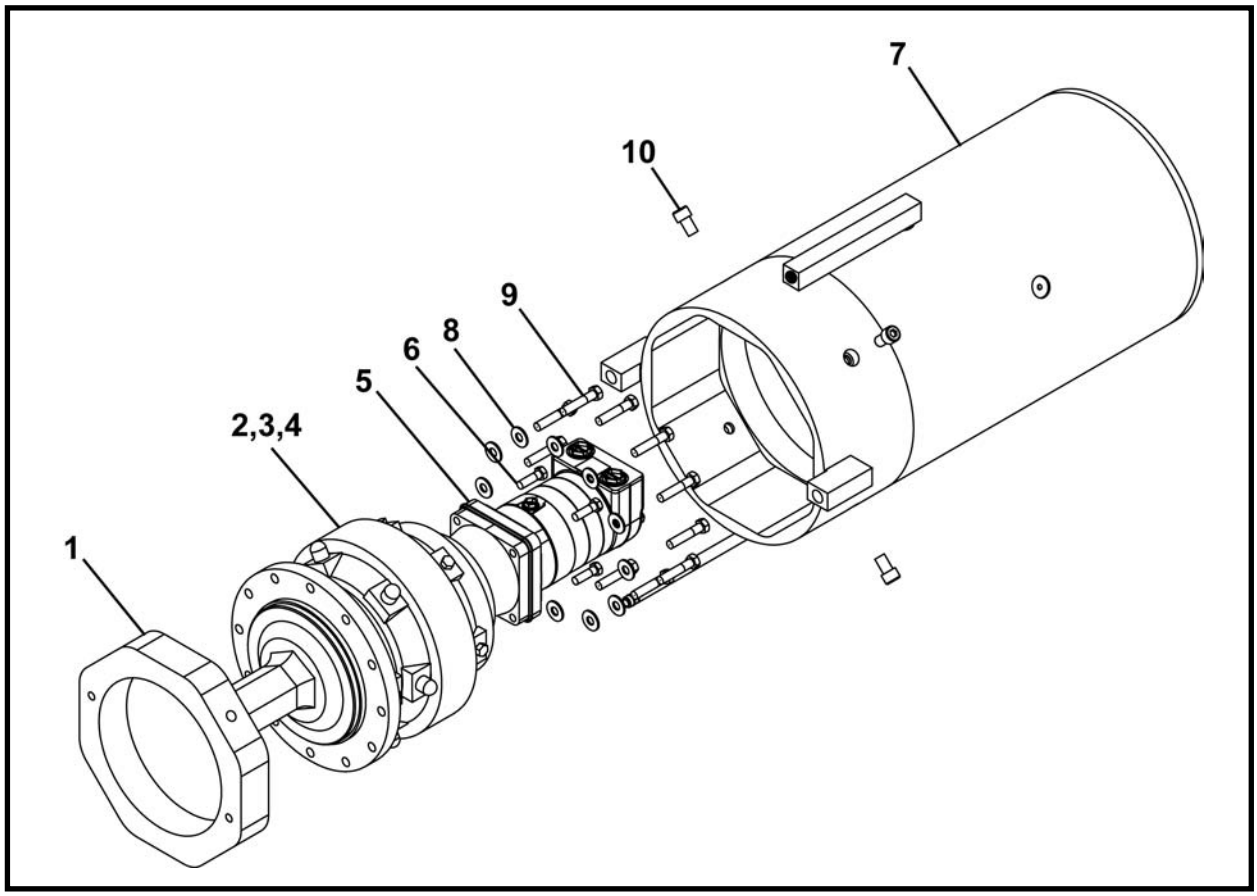
POWERED REAMING HEAD (SN FA45200F-2 & 3)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45202A	PRH REAR SECTION ASSEMBLY
1	1	A45225P	PLATE, Gearbox Mount
2	1	P0097-033	GEARBOX
3	1	P0097-033A	MOUNT, Tooth
4	1	P0097-33B	KIT, Adapter
5	1	P0304-172	MOTOR
6	4	PM12A-1.25-040	BOLT, Metric
7	1	A45207A	WELDMENT, 11” - 14” Rear Can
8	12	P0040-008	WASHER, Hardened Flat 1/2
9	12	P0001-08-008	BOLT, 1/2 UNC x 2
10	4	P0031-10-004	SCREW, Socket Head Cap 5/8 UNC x 1
11	2	A45230P	TUBE, Jetting
12	8	P0085-015	ORING

PRH REAR SECTION ASSEMBLY, A45202A

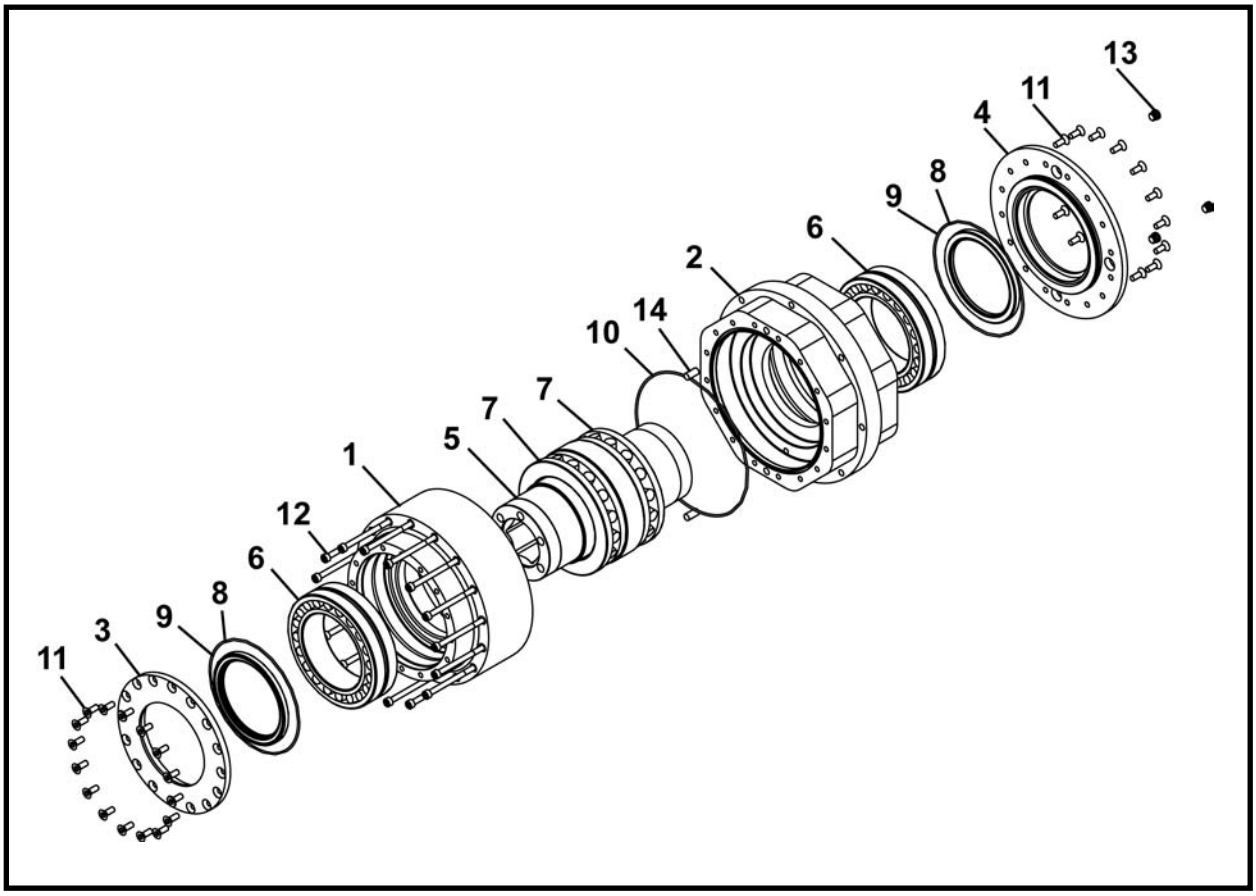
POWERED REAMING HEAD (SN FA45200F-4 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45202A	PRH REAR SECTION ASSEMBLY
1	1	A45225P	PLATE, Gearbox Mount
2	1	P0097-033	GEARBOX
3	1	P0097-033A	MOUNT, Tooth
4	1	P0097-33B	KIT, Adapter
5	1	P0304-172	MOTOR
6	4	PM12A-1.25-040	BOLT, Metric
7	1	A45207A	WELDMENT, 11” - 14” Rear Can
8	12	P0040-008	WASHER, Hardened Flat 1/2
9	12	P0001-08-008	BOLT, 1/2 UNC x 2
10	4	P0031-10-004	SCREW, Socket Head Cap 5/8 UNC x 1

PRH BEARING ASSEMBLY, A45203A

POWERED REAMING HEAD



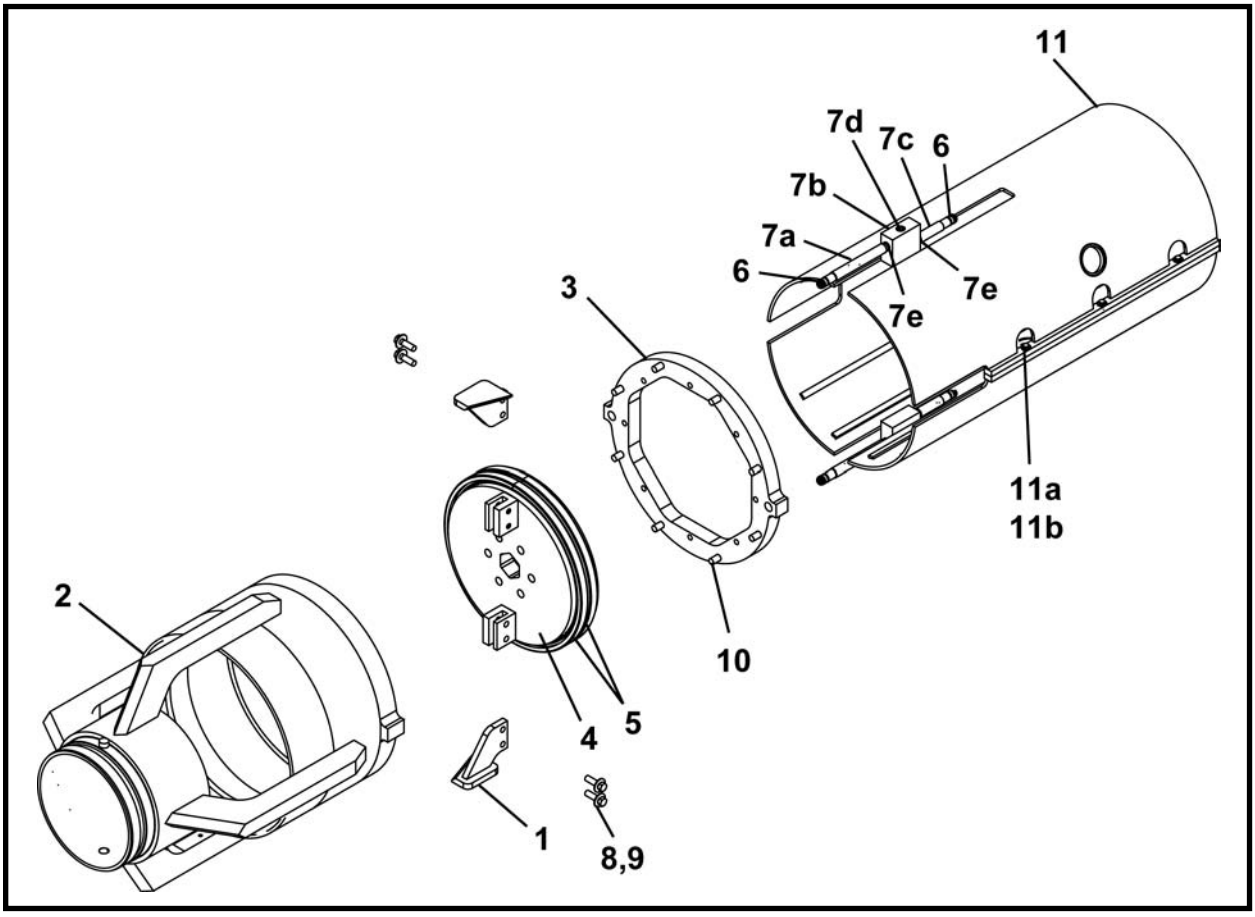
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45203A	PRH BEARING ASSEMBLY
1	1	A45218P	COVER, Front Bearing
2	1	A45219P	COVER, Rear Bearing
3	1	A45220P	RETAINER, Front Seal
4	1	A45221P	RETAINER, Rear Seal
5	1	A45222P	SHAFT
6	2	P0065-162	BEARING, Spherical Roller
7	2	P0065-160	BEARING, Cylindrical Roller
8	2	P0085-269	ORING
9	2	P0080-027	SEAL, Lip
10	1	P0085-276	ORING
11	32	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
12	16	P0031-06-018	SCREW, Socket Head Cap 3/8 UNC x 4.5
13	3	P0300-176	FITTING, 06MB-HHP
14	2	P0037-064	PIN, Dowel
15	3 QT	P0126-014	LUBE, Mobilgear 630

QT - Quart

NOTES

11” - 16” INCREASE KIT, A45265A

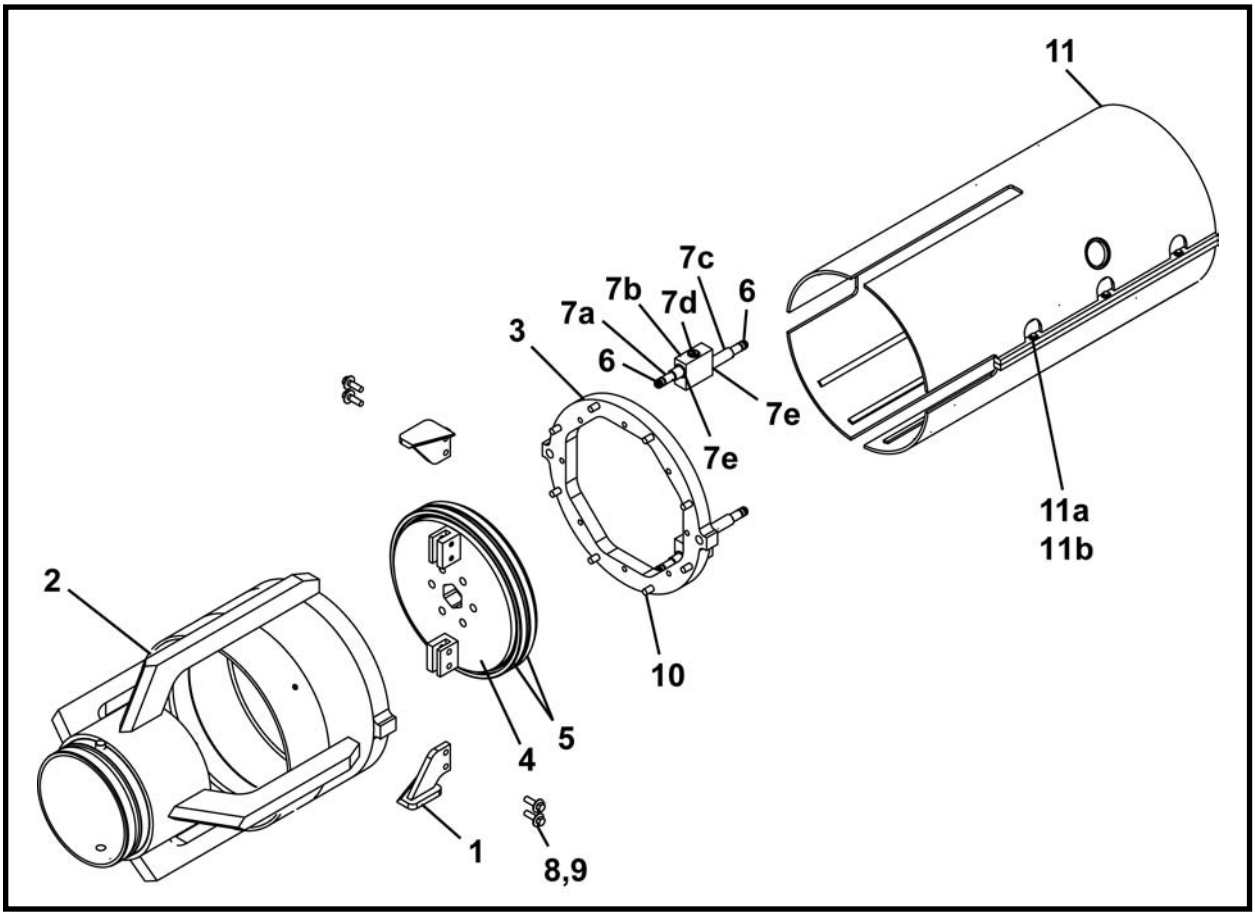
POWERED REAMING HEAD (SN FA45200F-2 & 3)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45265A	11” - 16” INCREASE KIT
1	2	A45235A	WELDMENT, Periphery Cutter
2	1	A45238A	HEAD
3	1	A45257P	ADAPTER, Bearing
4	1	A45258A	WELDMENT, CUTTERHEAD
5	2	P0065-254	SEAL
6	8	P0085-015	ORING
7	2	A45303A	BLOCK, Jetting (Includes items 7a - 7d)
7a	1	A45297P	TUBE
7b	1	A45302P	BLOCK, Offset
7c	1	A45457P	TUBE, Small Jetting
7d	1	P0300-015	FITTING, 06MP-HHP
8	4	P0040-007	WASHER, Hardened Flat 7/16
9	4	P0001-07-006	BOLT, 7/16 UNC x 1.5
10	8	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC 1.5
11	1	A45667A	ASSEMBLY, 11” - 16” Skin (Length: 32.4”) (Includes items 11a - 11b)
11a	3	P0040-004	WASHER, Hardened Flat 1/4
11b	3	P0001-04-004	BOLT, 1/4 UNC x 1

11” - 16” INCREASE KIT, A45265A

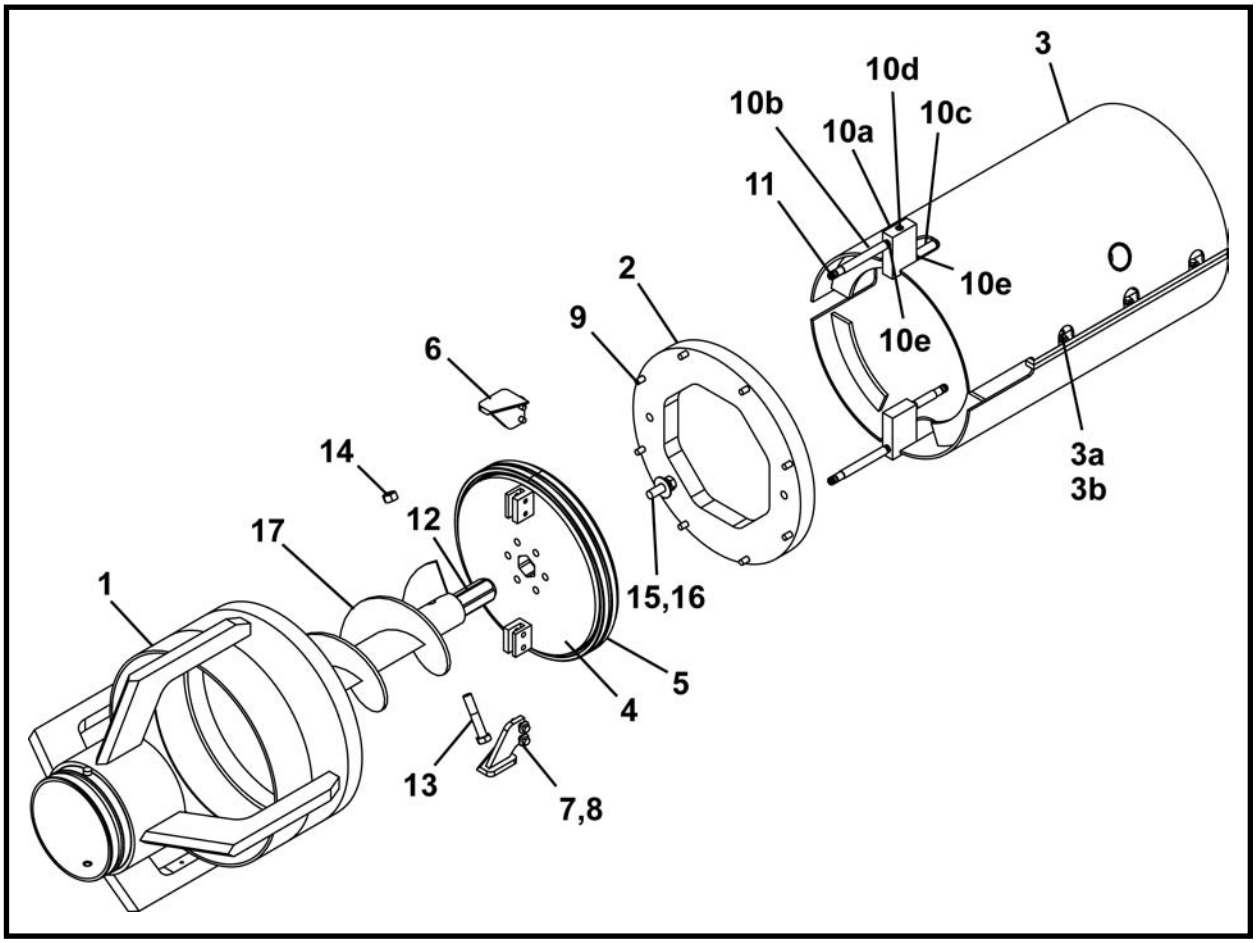
POWERED REAMING HEAD (SN FA45200F-4 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45265A	11” - 16” INCREASE KIT
1	2	A45235A	WELDMENT, Periphery Cutter
2	1	A45238A	HEAD
3	1	A45257P	ADAPTER, Bearing
4	1	A45258A	WELDMENT, Cutterhead
5	2	P0065-254	SEAL
6	8	P0085-015	ORING
7	2	A46515A	BLOCK, Jet (Includes items 7a - 7e)
7a	1	A46516P	TUBE
7b	1	A45302P	BLOCK, Jetting Offset
7c	1	A45457P	TUBE, Small Jetting
7d	1	P0300-176	FITTING, 06MB-HHP
7e	2	P0300-332	ORING, 08OR
8	4	P0040-007	WASHER, Hardened Flat 7/16
9	4	P0001-07-006	BOLT, 7/16 UNC x 1.5
10	8	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC 1.5
11	1	A45667A	ASSEMBLY, 11” - 16” Skin (Length: 35.4”) (Includes items 11a - 11b)
11a	3	P0040-006	WASHER, Hardened Flat 3/8
11b	3	P0001-06-004	BOLT, 3/8 UNC x 1

11” - 20” INCREASE KIT, A45266A

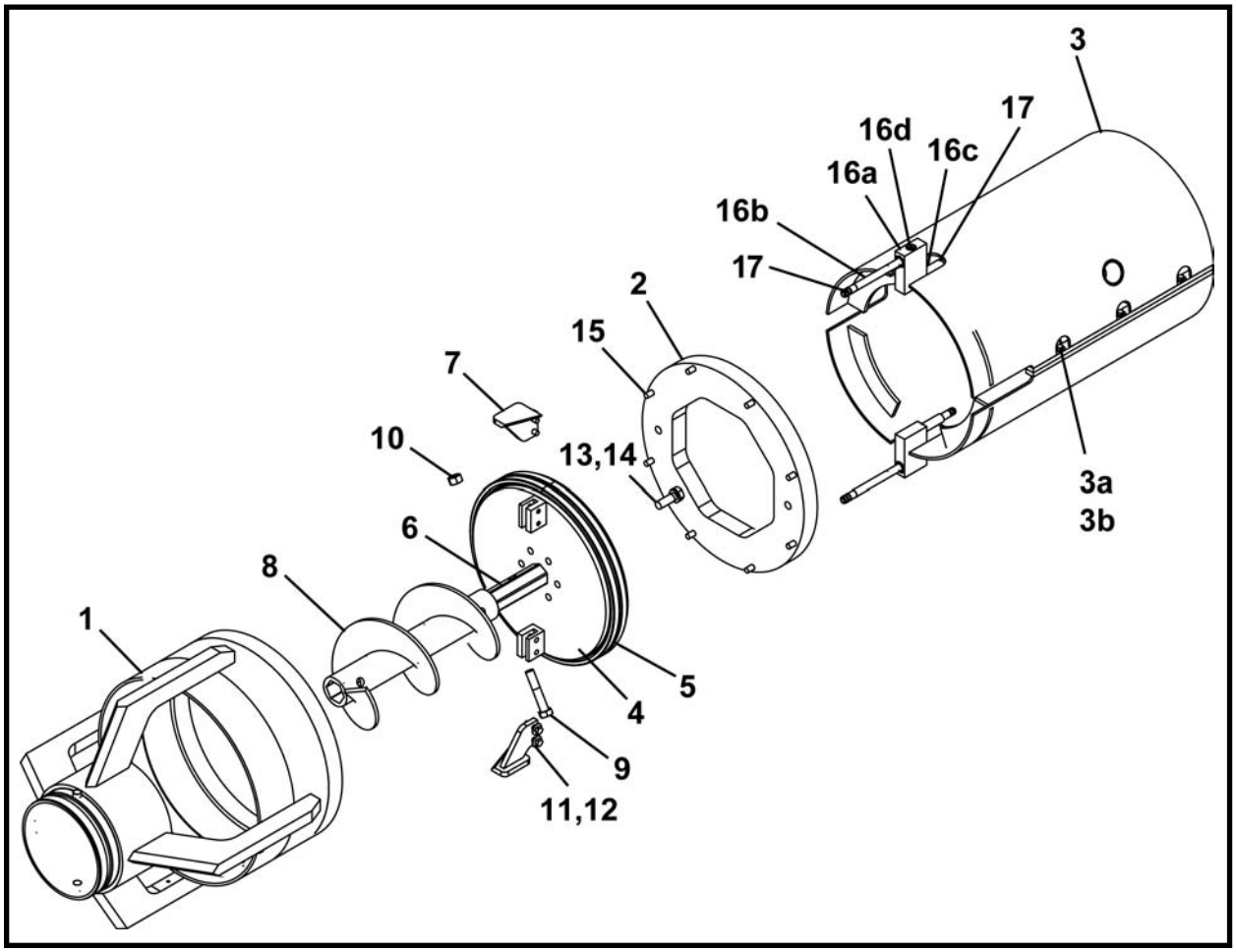
POWERED REAMING HEAD (SN FA45200F-2 & 3)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45266A	11” - 20” INCREASE KIT
1	1	A45267A	HEAD
2	1	A45285P	ADAPTER, Bearing
3	1	A45487A	ASSEMBLY, Skin (Includes items 3a - 3b)
3a	3	P0001-06-004	BOLT, 3/8 UNC x 1
3b	3	P0040-006	WASHER, Hardened Flat 3/8
4	1	A45286A	WELDMENT, Cutterhead
5	2	P0065-207	SEAL, Dirt
6	2	A45235A	WELDMENT, Periphery Cutter
7	4	P0040-007	WASHER, Hardened Flat 7/16
8	4	P0001-07-006	BOLT, 7/16 UNC x 1.5
9	8	P0031-08-008	SCREW, Socket Head Cap 1/2 UNC x 2
10	2	A45295A	BLOCK, Jetting (Includes items 10a - 10d)
10a	1	A45296P	BLOCK
10b	1	A45297P	TUBE
10c	1	A45457P	TUBE, Small Jetting
10d	1	P0300-015	FITTING, 06MP-HHP
11	8	P0085-015	ORING
12	1	A45214P	CONNECTOR, Hex
13	1	P0001-12-016	BOLT, 3/4 UNC x 4
14	1	P0003-12-000	NUT, 3/4
15	1	P0001-12-009	BOLT, 3/4 UNC x 2.25
16	1	P0040-012	WASHER, Hardened Flat 3/4
17	1	A45232A	AUGER, Coupling

11” - 20” INCREASE KIT, A45266A

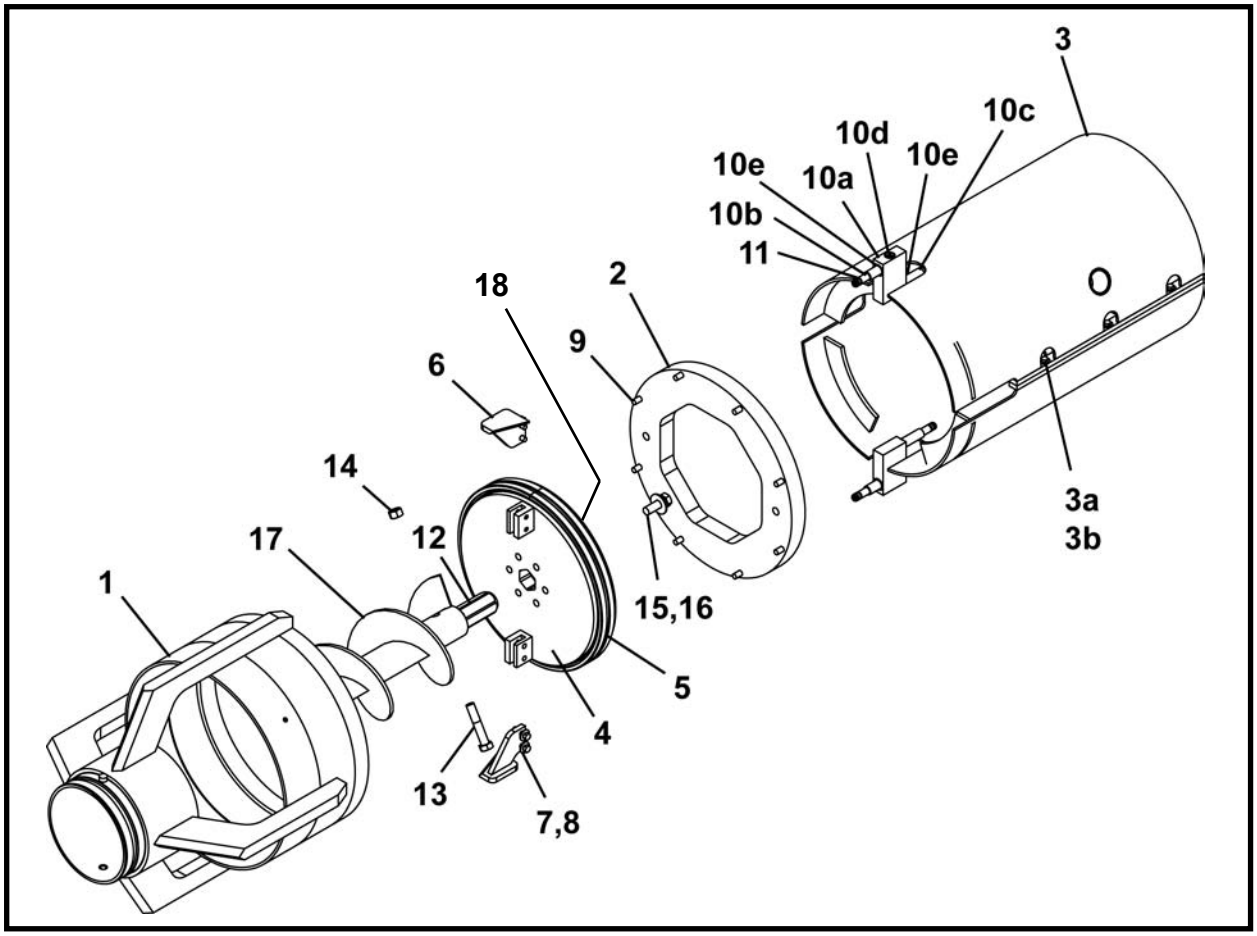
POWERED REAMING HEAD (SN FA45200F-4)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45266A	11” - 20” INCREASE KIT
1	1	A45267A	HEAD
2	1	A45285P	ADAPTER, Bearing
3	1	A45487A	ASSEMBLY, Bolt On Skin (Includes items 3a - 3b)
3a	3	P0001-06-004	BOLT, 3/8 UNC x 1
3b	3	P0040-006	WASHER, Hardened Flat 3/8
4	1	A45286A	WELDMENT, Cutterhead
5	2	P0065-207	SEAL, Dirt
6	1	A45214P	CONNECTOR, Hex
7	2	A45235A	WELDMENT, Periphery Cutter
8	1	A45232A	AUGER, Coupling
9	1	P0001-12-016	BOLT, 3/4 UNC x 4
10	1	P0003-12-000	NUT, 3/4
11	4	P0040-007	WASHER, Hardened Flat 7/16
12	4	P0001-07-006	BOLT, 7/16 UNC x 1.5
13	1	P0045-012	WASHER, Lock 3/4
14	1	P0001-12-009	BOLT, 3/4 UNC x 2.25
15	8	P0031-08-008	SCREW, Socket Head Cap 1/2 UNC x 2
16	2	A45295A	BLOCK, Jetting (Includes items 16a - 16b)
16a	1	A45296P	BLOCK
16b	1	A45297P	TUBE
16c	1	A45457P	TUBE, Small Jetting
16d	1	P0300-015	FITTING, 06MP-HHP
17	8	P0085-015	ORING

11” - 20” INCREASE KIT, A45266A

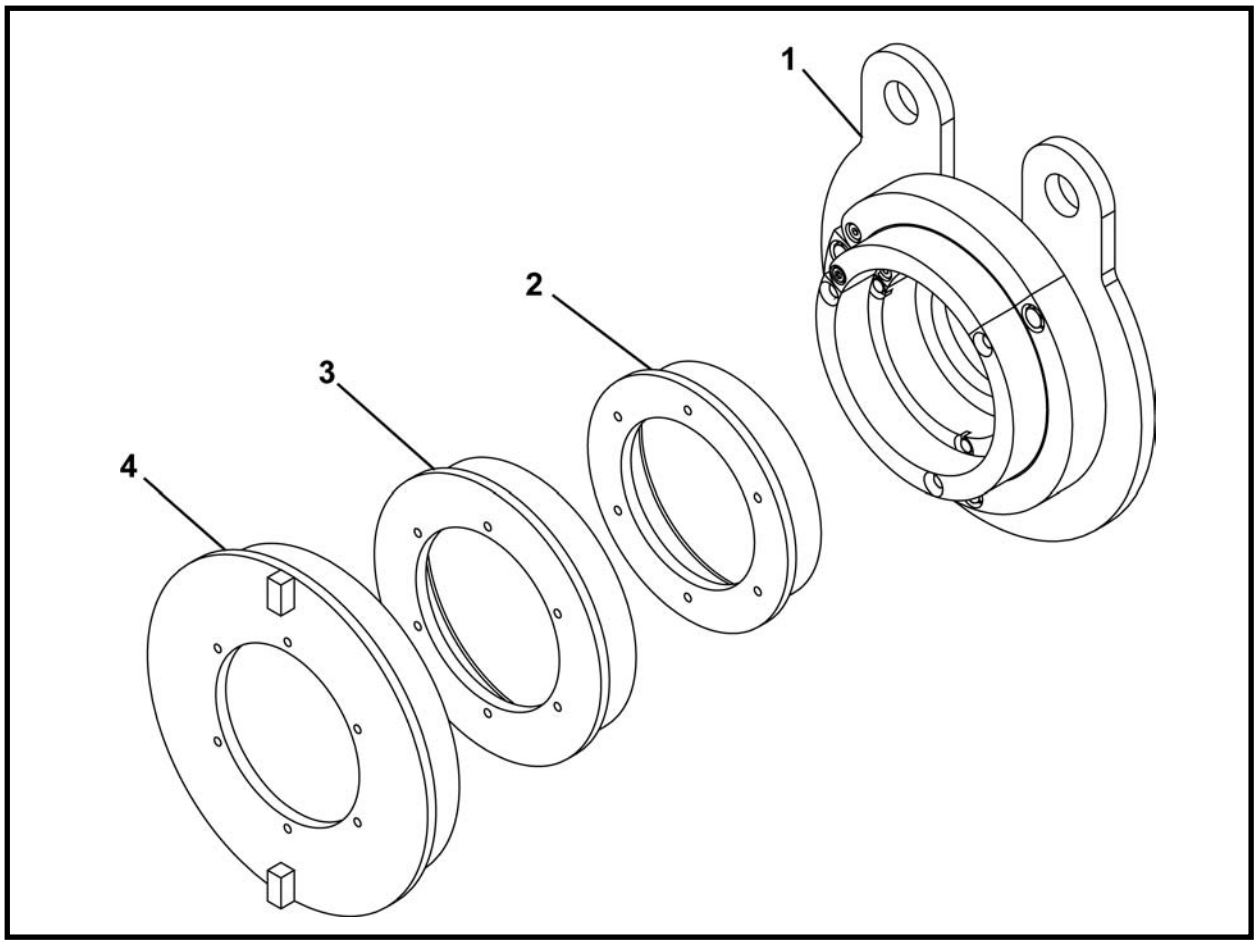
POWERED REAMING HEAD (SN FA45200F-5 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45266A	11” - 20” INCREASE KIT
1	1	A45267A	HEAD
2	1	A45285P	ADAPTER, Bearing
3	1	A45487A	ASSEMBLY, Skin (Includes items 3a - 3b)
3a	3	P0001-06-004	BOLT, 3/8 UNC x 1
3b	3	P0040-006	WASHER, Hardened Flat 3/8
4	1	A45286A	WELDMENT, Cutterhead
5	2	P0065-207	SEAL, Dirt
6	2	A45235A	WELDMENT, Periphery Cutter
7	4	P0040-007	WASHER, Hardened Flat 7/16
8	4	P0001-07-006	BOLT, 7/16 UNC x 1.5
9	8	P0031-08-008	SCREW, Socket Head Cap 1/2 UNC x 2
10	2	A46514A	BLOCK, Jetting (Includes items 10a - 10e)
10a	1	A45296P	BLOCK
10b	1	A46507P	TUBE
10c	1	A45457P	TUBE, Small Jetting
10d	1	P0300-176	FITTING, 06MB-HHP
10e	2	P0300-332	ORING, 08OR
11	8	P0085-015	ORING
12	1	A45214P	CONNECTOR, Hex
13	1	P0001-12-016	BOLT, 3/4 UNC x 4
14	1	P0003-12-000	NUT, 3/4
15	1	P0001-12-009	BOLT, 3/4 UNC x 2.25
16	1	P0040-012	WASHER, Hardened Flat 3/4
17	1	A45232A	AUGER, Coupling
18	1	A46063P	RING, Lock

PIPE ADAPTER SET 10 - 12 - 15 NO-DIG, FA45428F

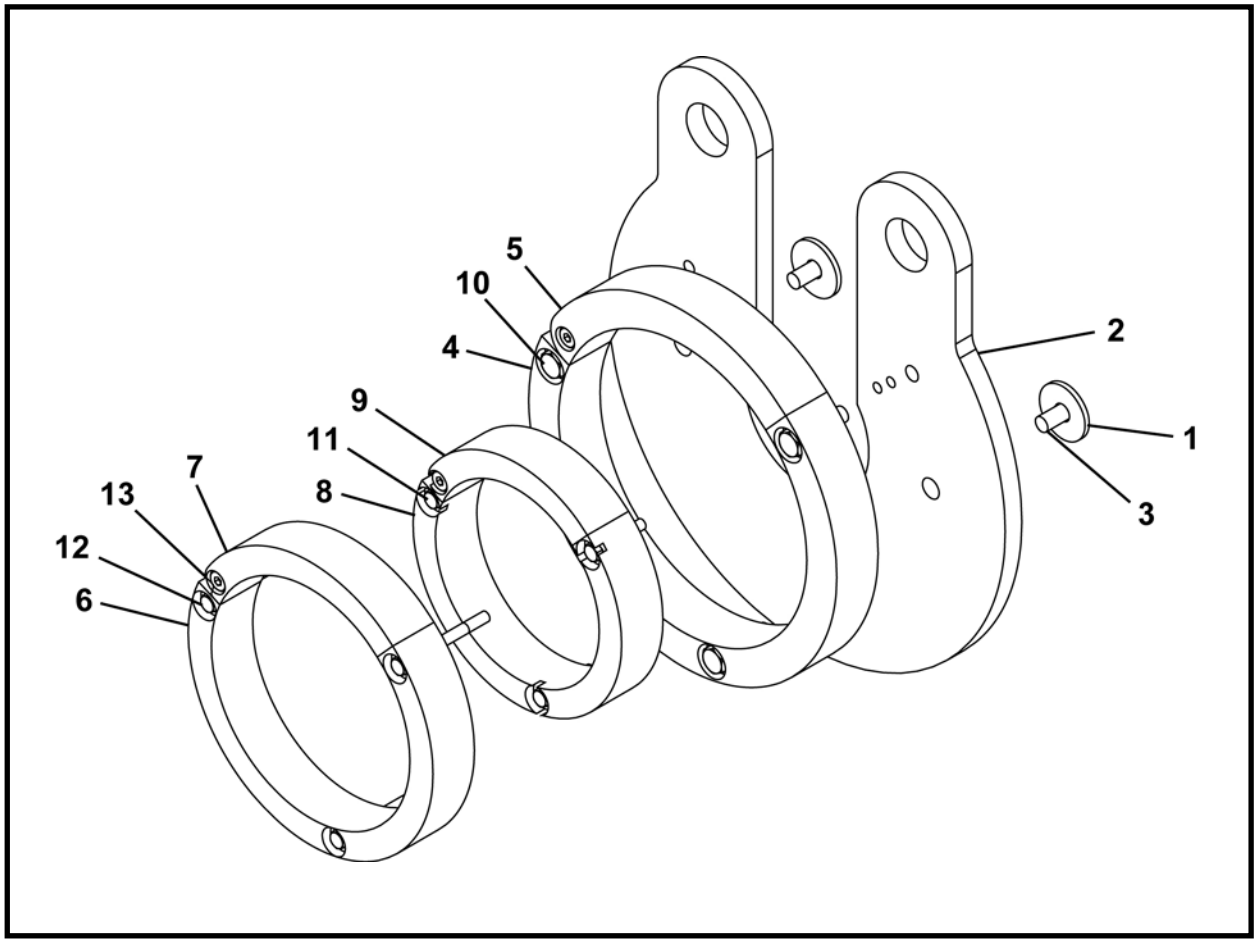
POWERED REAMING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45428F	PIPE ADAPTER SET 10 - 12 - 15 No-Dig
1	1	A45429A	ASSEMBLY, PRH Thrust Adapter
2	1	A45394A	ADAPTER, 10” No-Dig
3	1	A45397A	ADAPTER, 12” No-Dig
4	1	A45300A	ADAPTER, 15” No-Dig

PRH THRUST ADAPTER ASSEMBLY, A45429A

POWERED REAMING HEAD

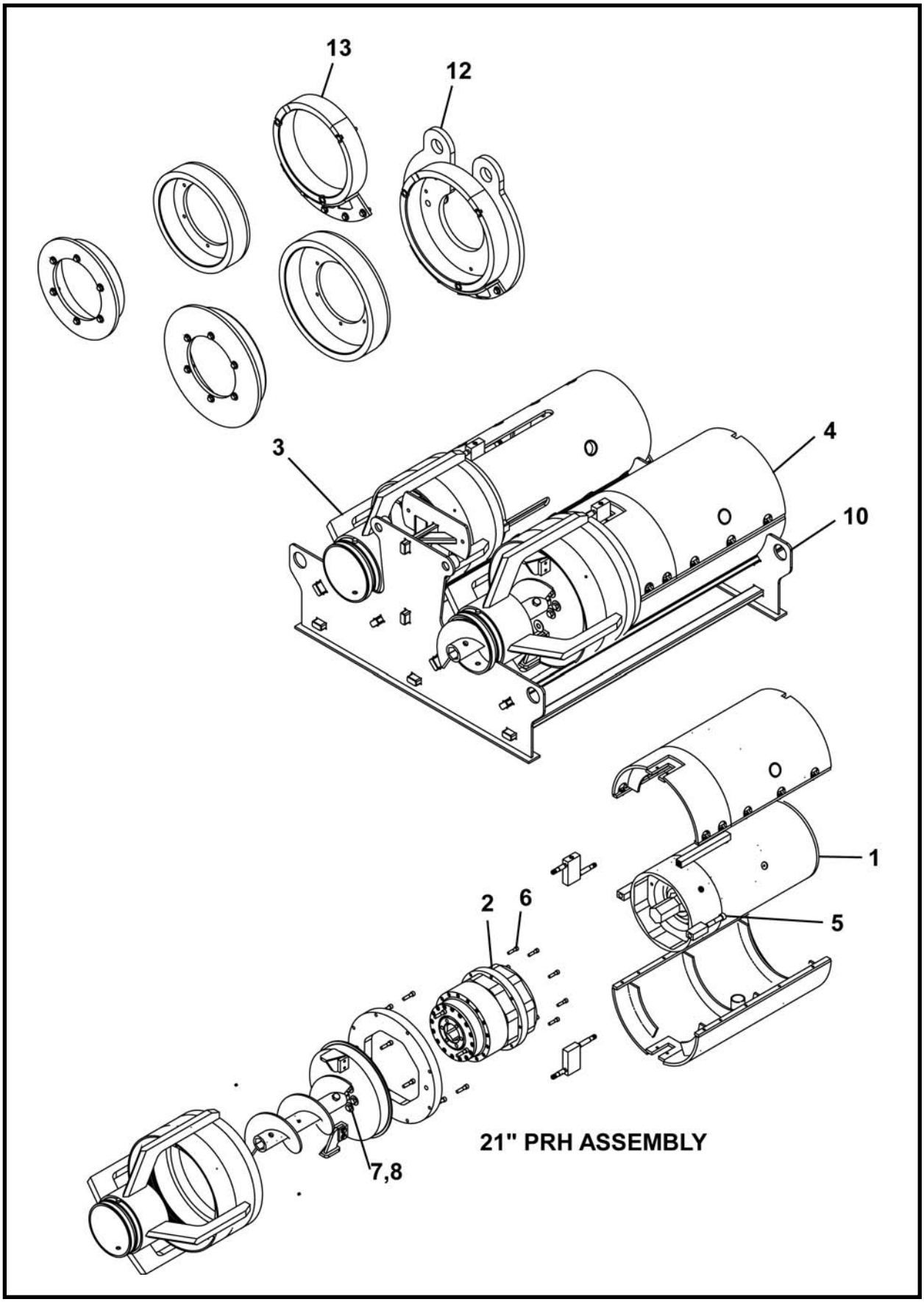


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45429A	ASSEMBLY, PRH Thrust Adapter
1	2	004124P01	WASHER
2	1	A45430A	ADAPTER, Thrust
3	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
4	1	A43171P	RING, 15” Fixed Thrust
5	1	A43172P	RING, 15” Hinged Thrust
6	1	A45432P	PUSH PLATE, 12” Hinged
7	1	A45433P	PUSH PLATE, 12” Fixed
8	1	A45434P	PUSH PLATE, 10” Hinged
9	1	A45435P	PUSH PLATE, 10” Fixed
10	3	P0001-12-011	BOLT, 3/4 UNC x 2.75
11	3	P0001-08-011	BOLT, 1/2 UNC x 2.75
12	3	P0001-08-020	BOLT, 1/2 UNC x 5
13	3	P0030S-12-007	BOLT, Shoulder 3/4 x 1.75
14	1	P0031-10-020	SCREW, Socket Head Cap 5/8 UNC x 5

NOTES

17.5” - 21” OD POWERED REAMING HEAD ASSEMBLY, FA45690F

POWERED REAMING HEAD



17.5” - 21” OD POWERED REAMING HEAD ASSEMBLY, FA45690F

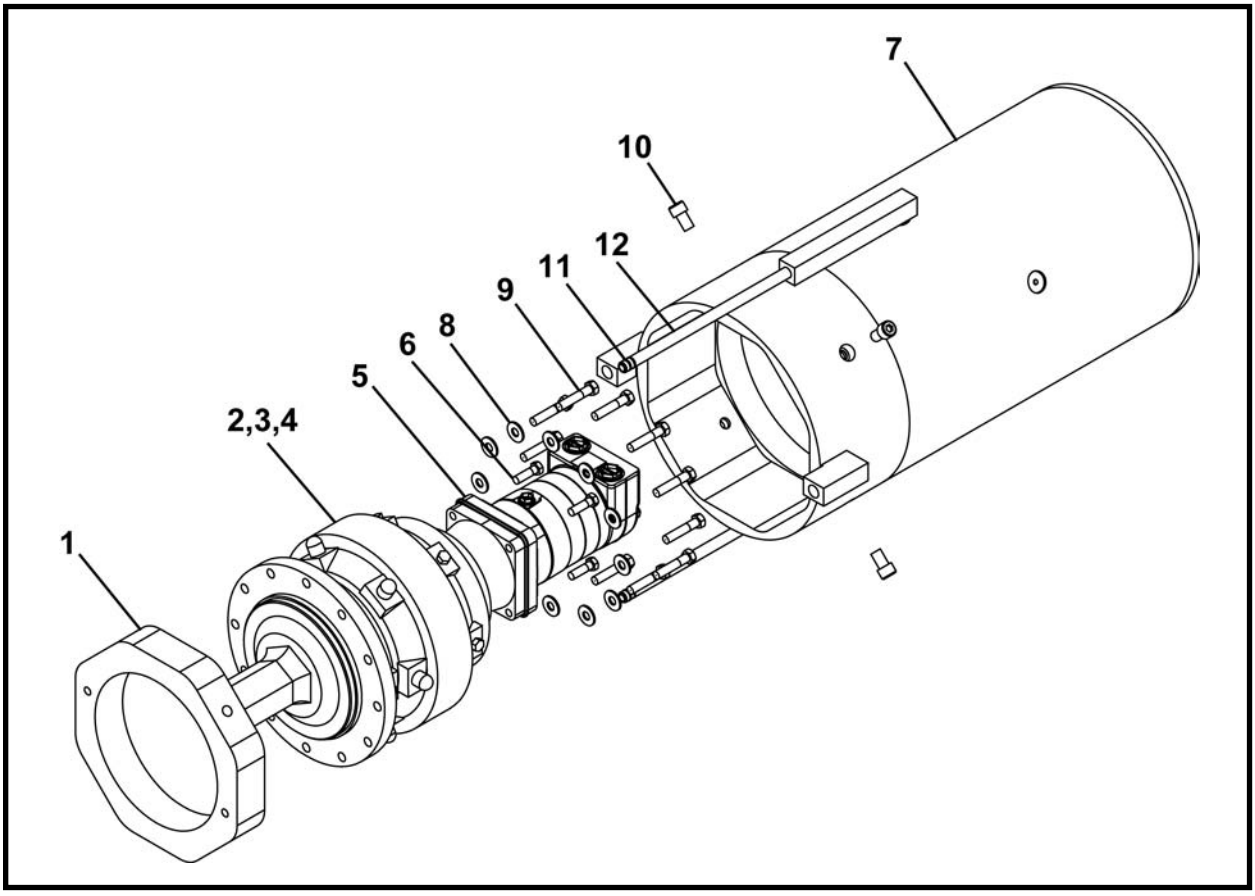
POWERED REAMING HEAD

ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45690F	POWERED REAMING HEAD ASSEMBLY, 17.5” - 21”
1**	1	A45202A	ASSEMBLY, Rear Section PRH 14”
2**	1	A45203A	ASSEMBLY, PRH Bearing
3**	1	A45708A	KIT, 11” - 17.5” Increase
4**	1	A45691A	KIT, 11” - 21” Increase
5	2	P0031-12-015	SCREW, Socket Head Cap 3/4 UNC x 3.5
6	8	P0031-07-007	SCREW, Socket Head Cap 7/16 UNC x 1.75
7	6	P0040-010	WASHER, Hardened Flat 5/8
8	6	P0001-10-008	BOLT, 5/8 UNC x 2
9	1	A45461A	EXTENSION, 14” PRH
10	1	A45465A	WELDMENT, Large PRH Cradle
11*	1	A45306A	ASSEMBLY, PRH Hydraulics
12**	1	A45724A	ADAPTER SET, 300MM RCP
13**	1	A45725A	ADAPTER SET, 375MM RCP

* For parts breakdown, refer to section 6, Hydraulics.
** For parts breakdown, refer to this section.

PRH REAR SECTION ASSEMBLY, A45202A

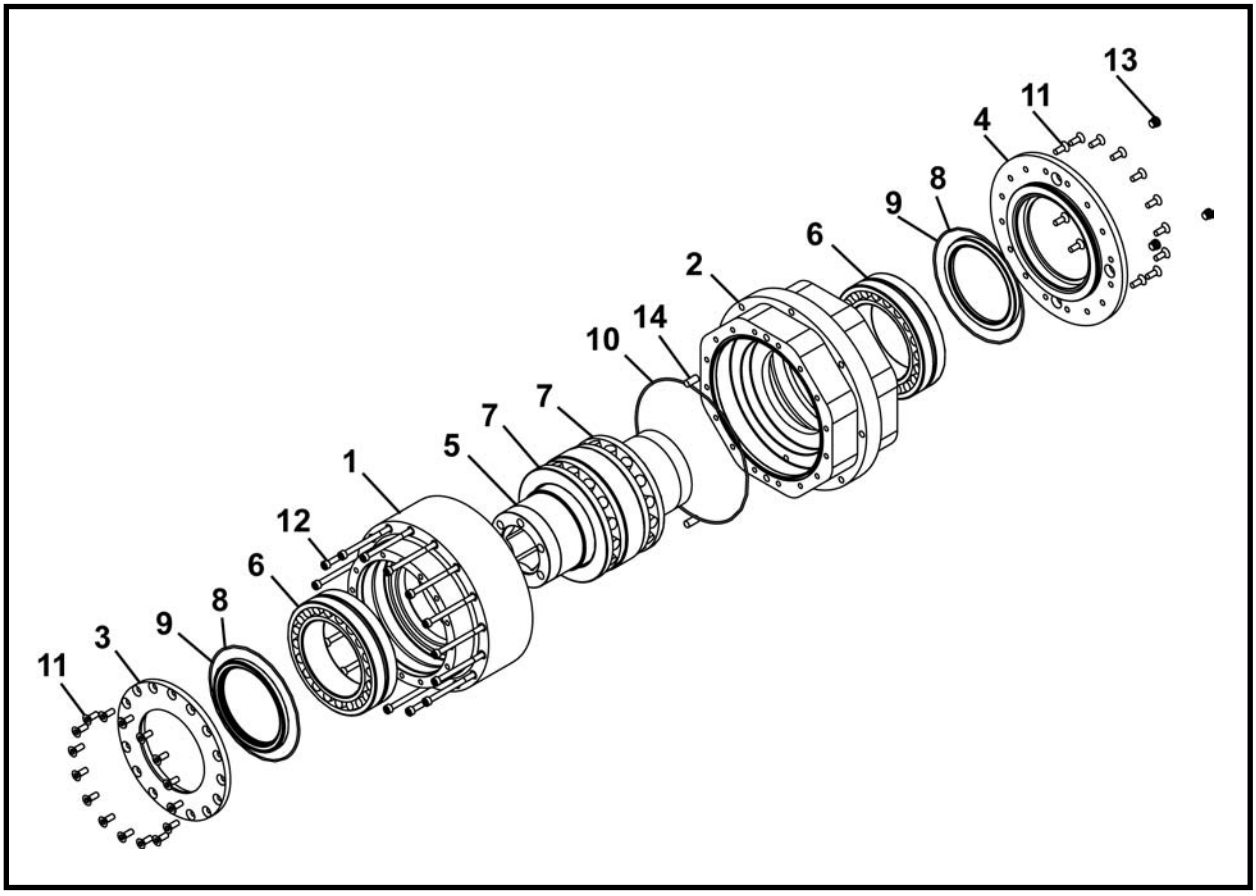
POWERED REAMING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45202A	PRH REAR SECTION ASSEMBLY
1	1	A45225P	PLATE, Gearbox Mount
2	1	P0097-033	GEARBOX
3	1	P0097-033A	MOUNT, Tooth
4	1	P0097-33B	KIT, Adapter
5	1	P0304-172	MOTOR
6	4	PM12A-1.25-040	BOLT, Metric
7	1	A45207A	WELDMENT, 11” - 14” Rear Can
8	12	P0040-008	WASHER, Hardened Flat 1/2
9	12	P0001-08-008	BOLT, 1/2 UNC x 2
10	4	P0031-10-004	SCREW, Socket Head Cap 5/8 UNC x 1

PRH BEARING ASSEMBLY, A45203A

POWERED REAMING HEAD

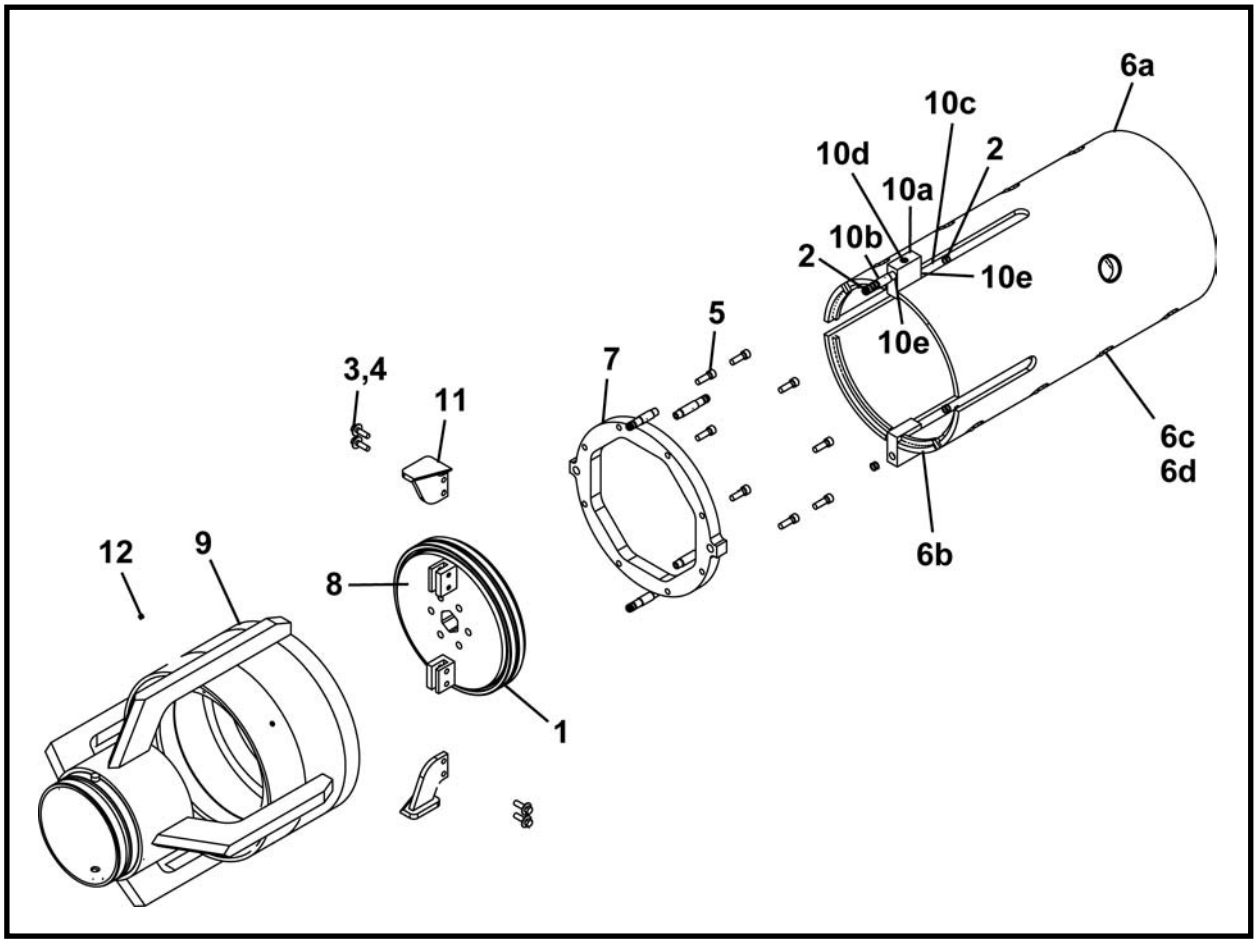


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45203A	PRH BEARING ASSEMBLY
1	1	A45218P	COVER, Front Bearing
2	1	A45219P	COVER, Rear Bearing
3	1	A45220P	RETAINER, Front Seal
4	1	A45221P	RETAINER, Rear Seal
5	1	A45222P	SHAFT
6	2	P0065-162	BEARING, Spherical Roller
7	2	P0065-160	BEARING, Cylindrical Roller
8	2	P0085-269	ORING
9	2	P0080-027	SEAL, Lip
10	1	P0085-276	ORING
11	32	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
12	16	P0031-06-018	SCREW, Socket Head Cap 3/8 UNC x 4.5
13	3	P0300-176	FITTING, 06MB-HHP
14	2	P0037-064	PIN, Dowel
15	3 QT	P0126-014	LUBE, Mobilgear 630

QT - Quart

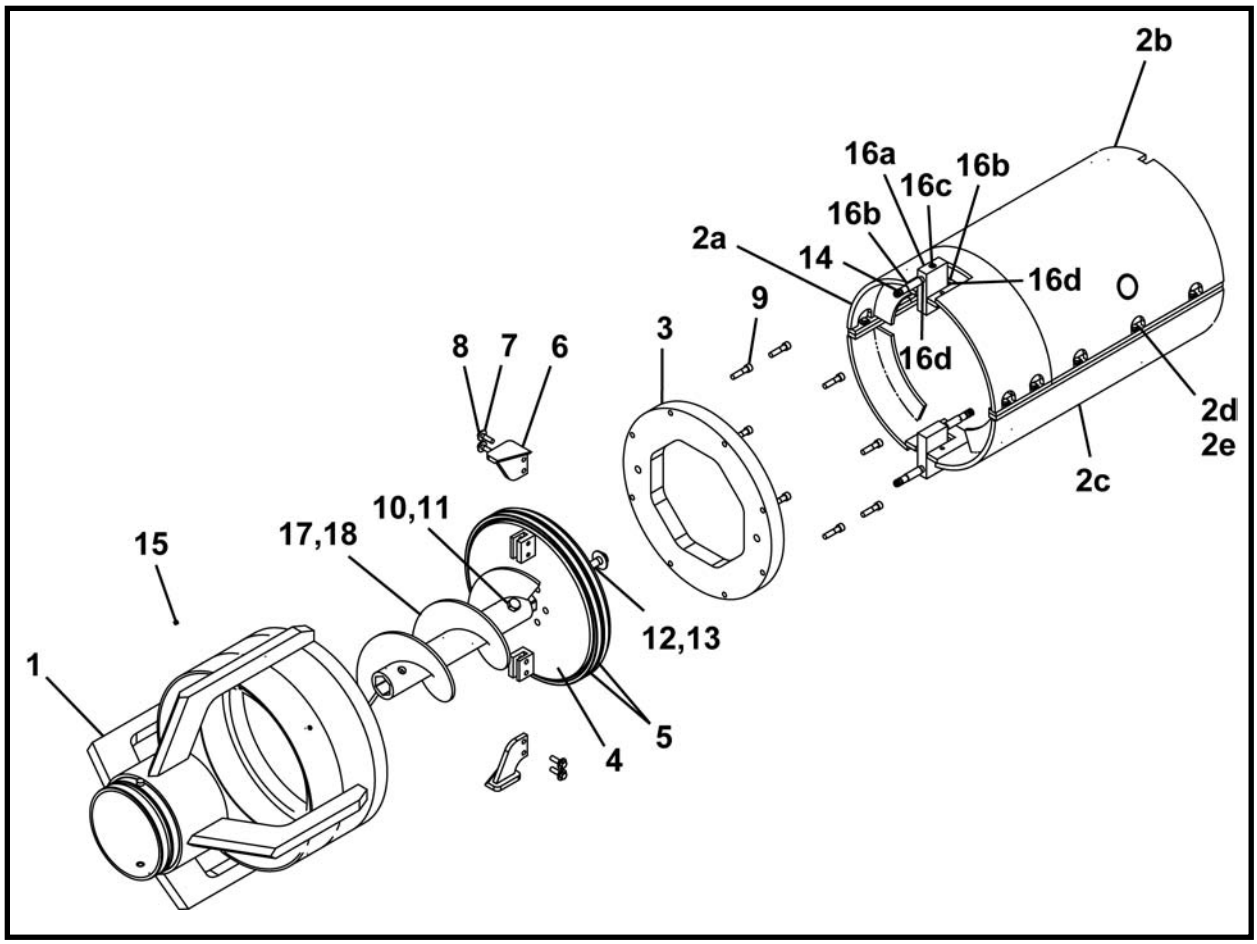
11” - 17.5” INCREASE KIT, A45708A

POWERED REAMING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45708A	11” - 17.5” INCREASE KIT
1	2	P0065-254	SEAL
2	8	P0085-015	ORING
3	4	P0040-007	WASHER, Hardened Flat 7/16
4	4	P0001-07-006	BOLT, 7/16 UNC x 1.5
5	8	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC x 1.5
6	1	A45247A	ASSEMBLY, Bolt On Skin (Includes items 6a - 6d)
6a	1	A45248A	WELDMENT, 16” Bolt On Skin Drilled
6b	1	A45277A	WELDMENT, 16” Bolt On Skin Tapped
6c	8	P0001-06-004	BOLT, 3/8 UNC x 1
6d	8	P0040-006	WASHER, Hardened Flat 3/8
7	1	A45257P	ADAPTER, Bearing
8	1	A45258A	WELDMENT, Cutterhead
9	1	A45709A	HEAD
10	2	A45719A	BLOCK, Jetting (Includes items 10a - 10e)
10a	1	A45720P	BLOCK
10b	1	A45721P	TUBE, 17.5”
10c	1	A45717P	TUBE, 21”
10d	1	P0300-176	FITTING, 06MB-HHP
10e	2	P0300-332	ORING, 08OR
11	2	A45722A	WELDMENT, Cutter
12	4	P0300-144	FITTING, 02MP-HHP

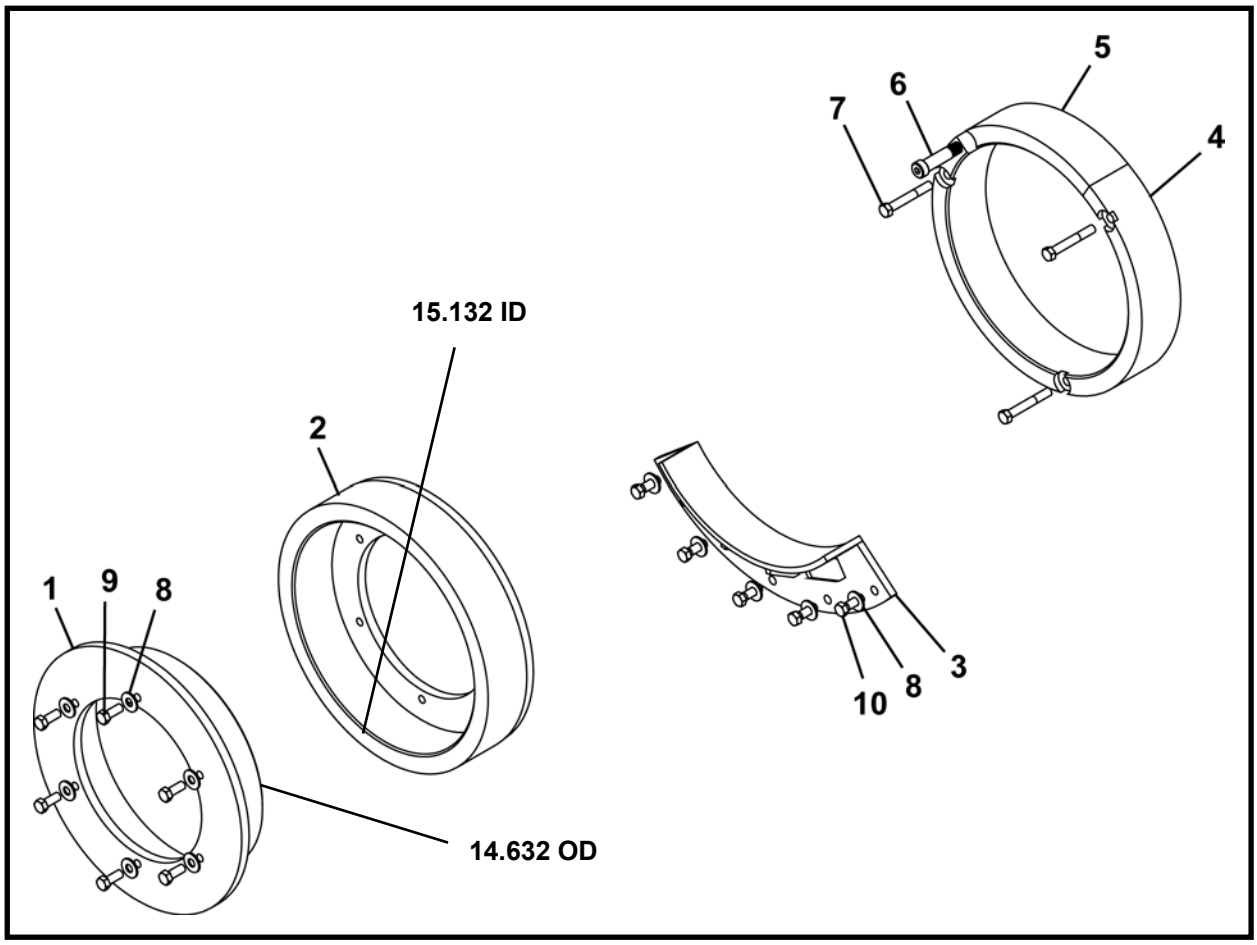
11” - 21” INCREASE KIT, A45691A
POWERED REAMING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45691A	11” - 21” INCREASE KIT
1	1	A45692A	HEAD
2	1	A45276A	ASSEMBLY, Bolt On Skin (Includes items 3a - 3e)
2a	1	A45278A	WELDMENT, Bolt On Skin Short
2b	1	A45279A	WELDMENT, Bolt On Skin Long
2c	1	A45280A	WELDMENT, Bolt On Skin Tapped
2d	10	P0040-006	WASHER, Hardened Flat 3/8
2e	10	P0001-06-004	BOLT, 3/8 UNC x 1
3	1	A45285P	ADAPTER, Bearing
4	1	A45286A	WELDMENT, Cutterhead
5	2	P0065-207	SEAL, Dirt
6	2	A45699A	WELDMENT, Cutter
7	4	P0040-007	WASHER, Hardened Flat 7/16
8	4	P0001-07-006	BOLT, 7/16 UNC x 1.5
9	8	P0031-08-008	SCREW, Socket Head Cap 1/2 UNC x 2
10	1	P0001-12-016	BOLT, 3/4 UNC x 4
11	1	P0003-12-000	NUT, 3/4
12	1	P0001-12-009	BOLT, 3/4 UNC x 2.25
13	1	P0040-012	WASHER, Hardened Flat 3/4
14	8	P0085-015	ORING
15	4	P0300-144	FITTING, 02MP-HHP
16	2	A45716A	BLOCK, Jetting (Includes items 16a - 16d)
16a	1	A45698P	BLOCK
16b	2	A45717P	TUBE
16c	1	P0300-176	FITTING, 06MB-HHP
16d	2	P0300-332	ORING, 08OR
17	1	A45232A	AUGER, Couping
18	1	A45214P	CONNECTOR, Hex

PIPE ADAPTER SET 300MM ID RCP, A45724A

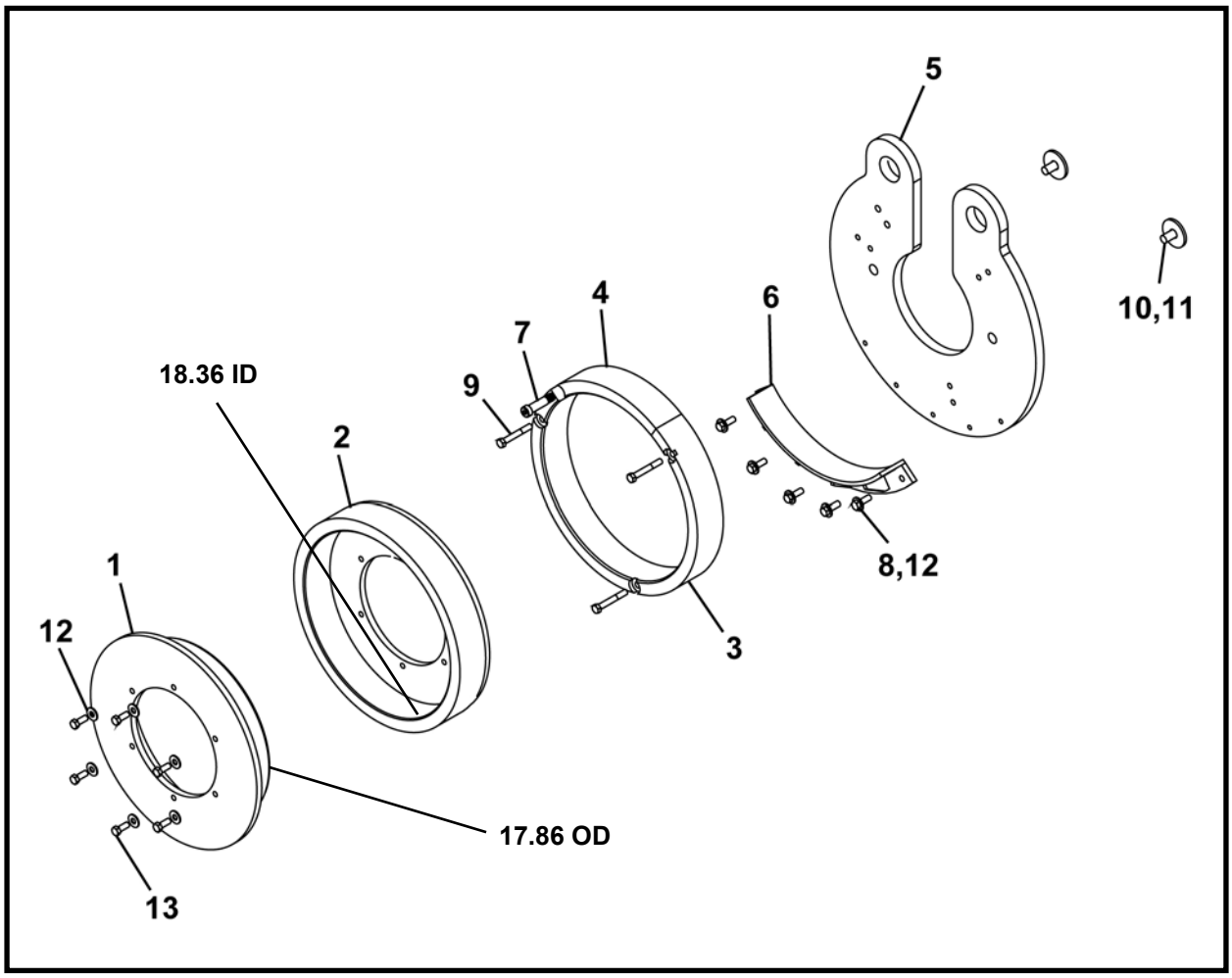
POWERED REAMING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45724A	PIPE ADAPTER SET 300MM ID RCP
1	1	A45726A	ADAPTER, Bell
2	1	A45729A	ADAPTER, Spigot
3	1	A45760A	ADAPTER, Thrust
4	1	A45746P	ADAPTER, Fixed Spigot
5	1	A45747P	ADAPTER, Hinged Spigot
6	1	P0030S-12-010	SCREW, Socket Head Shoulder
7	3	P0001-08-014	BOLT, 1/2 UNC x 3.5
8	11	P0040-008	WASHER, Hardened Flat 1/2
9	6	P0001-08-005	BOLT, 1/2 UNC x 1.25
10	5	P0001-08-006	BOLT, 1/2 UNC x 1.5

PIPE ADAPTER SET 375MM ID RCP, A45725A

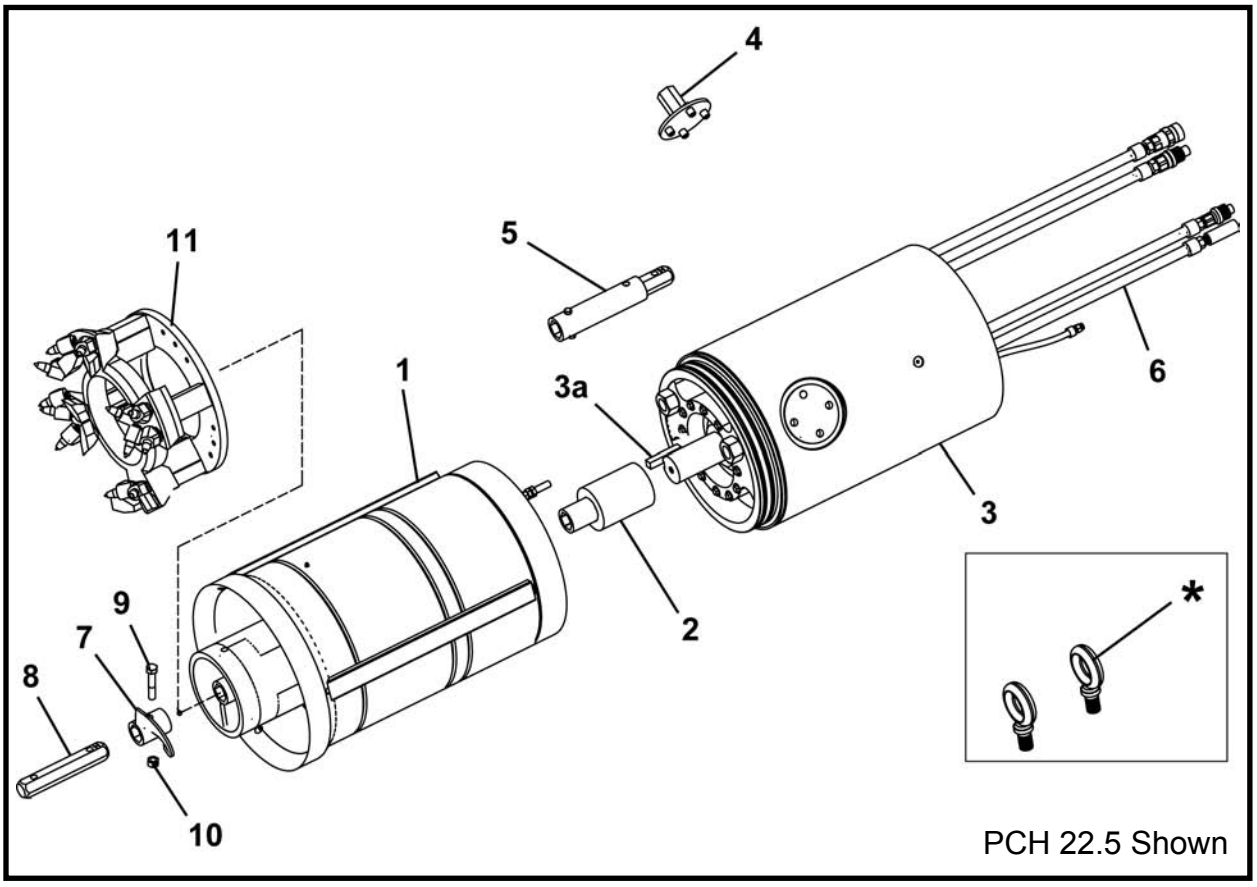
POWERED REAMING HEAD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45725A	PIPE ADAPTER SET 375MM ID RCP
1	1	A45733A	ADAPTER, Bell
2	1	A45736A	ADAPTER, Spigot
3	1	A45744P	ADAPTER, Fixed Spigot
4	1	A45745P	ADAPTER, Hinged Spigot
5	1	A45748A	PLATE, Thrust
6	1	A45749A	ADAPTER, Thrust
7	1	P0030S-12-010	SCREW, Socket Head Shoulder
8	5	P0001-08-006	BOLT, 1/2 UNC x 1.5
9	3	P0001-08-014	BOLT, 1/2 UNC x 3.5
10	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
11	2	004124P01	WASHER
12	11	P0040-008	WASHER, Hardened Flat 1/2
13	6	P0001-08-005	BOLT, 1/2 UNC x 1.25

POWERED CUTTER HEAD ASSEMBLY

PCH 20 - 22.5 - 28.5



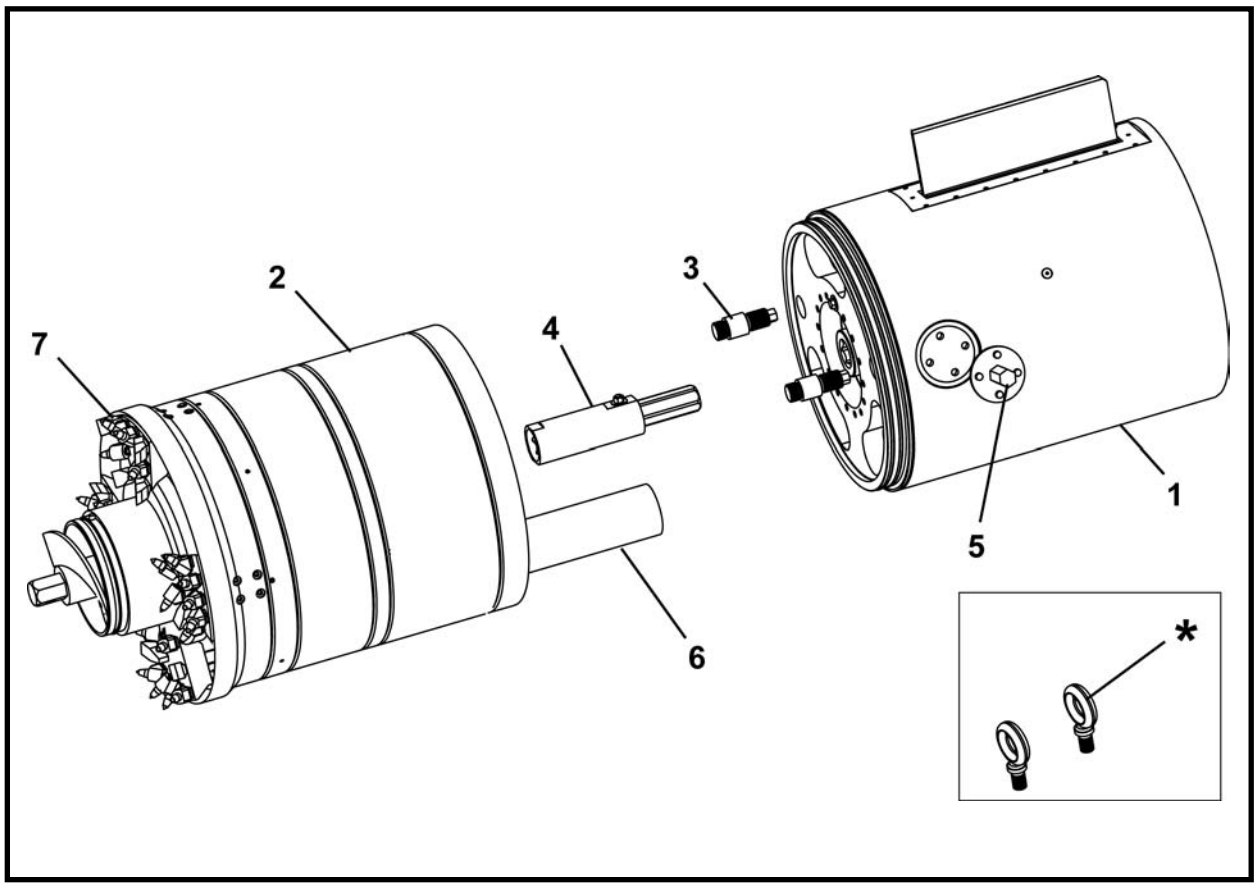
PCH 22.5 Shown

ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA43100F	POWERED CUTTER HEAD, PCH 20
0.2	1	FA42850F	POWERED CUTTER HEAD, PCH 22.5
0.3	1	FA43000F	POWERED CUTTER HEAD, PCH 28.5
1.1	1	A43160A	FRONT SECTION ASSEMBLY, PCH 20
1.2	1	A42900A	FRONT SECTION ASSEMBLY, PCH 22.5
1.3	1	A43641A	FRONT SECTION ASSEMBLY, PCH 28.5
2	1	A42954A	COUPLER
3.1	1	A43161A	REAR SECTION ASSEMBLY, PCH 20 (Includes item 3a)
3.2	1	A42901A	REAR SECTION ASSEMBLY, PCH 22.5 (Includes item 3a)
3.3	1	A43623A	REAR SECTION ASSEMBLY, PCH 28.5 (Includes item 3a)
3a	1	A43188P	KEY
4	1	A03150A	WRENCH, Port Hole
5	1	A42963A	EXTENSION, Hex Tube
6.1	1	A43162A	HYDRAULICS ASSEMBLY, PCH 20
6.2	1	A42902A	HYDRAULICS ASSEMBLY, PCH 22.5
6.3	1	A43654A	HYDRAULICS ASSEMBLY, PCH 28.5
7	1	A43311A	AUGER - 11 OD Casing
8	1	A43312P	CONNECTOR, Hex Head
9	1	P0001-12-016	BOLT, 3/4 UNC x 4
10	1	P0003-12-000	NUT, 3/4
11.1	1	A43154A	CUTTER HEAD ASSEMBLY, PCH 20
11.2	1	A42929A	CUTTER HEAD ASSEMBLY, PCH 22.50
11.3	1	A43610A	CUTTER HEAD ASSEMBLY, PCH 28.5

* Earlier units were equipped with two lift eyes, A02193P0 for lowering and lifting the rear section in and out of the shaft.
  Later models require the use of lifting straps for lowering and lifting the rear section in and out of the shaft. Use properly rated lifting straps for the weight of the PCH.

POWERED CUTTER HEAD ASSEMBLY PCH 36, FA44400F

PCH 36

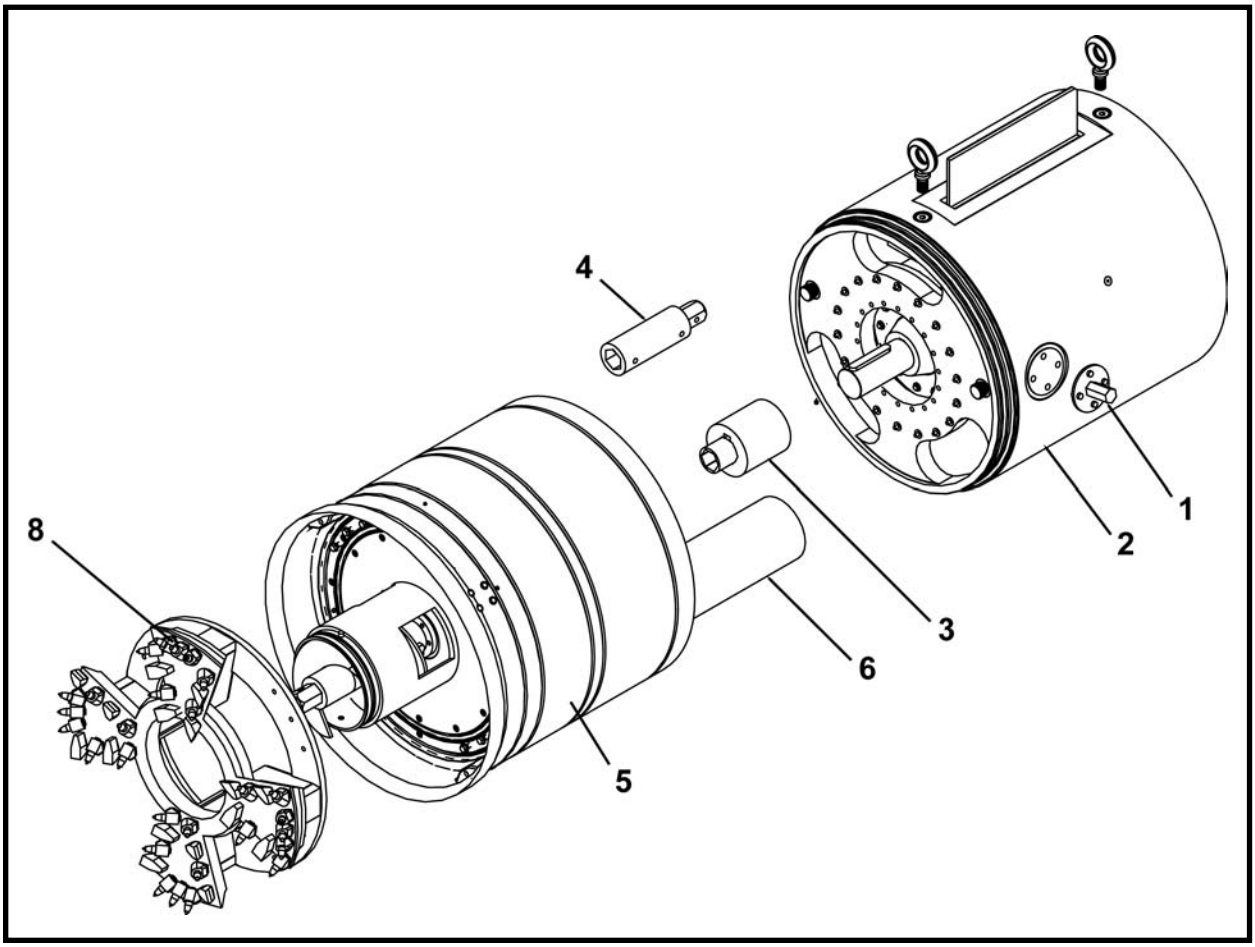


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44400F	POWERED CUTTER HEAD, PCH 36
1	1	A44065A	REAR SECTION ASSEMBLY, PCH 36
2	1	A44242A	FRONT SECTION ASSEMBLY, PCH 36
3	2	A42879P	ALIGNMENT PIN-22.5 PCH
4	1	A44388A	CONNECTOR ASSEMBLY, 3” Hex
5	1	A03150A	WRENCH, Port Hole
6	1	A44384A	HYDRAULICS ASSEMBLY, PCH 36
7	1	A44343A	CUTTER HEAD ASSEMBLY, PCH 36

* Earlier units were equipped with three lift eyes, A02193P0 for lowering and lifting the rear section in and out of the shaft.
  Later models require the use of lifting straps for lowering and lifting the rear section in and out of the shaft. Use properly rated lifting straps for the weight of the PCH.

POWERED CUTTER HEAD ASSEMBLY PCH 44, FA43400F

PCH 44

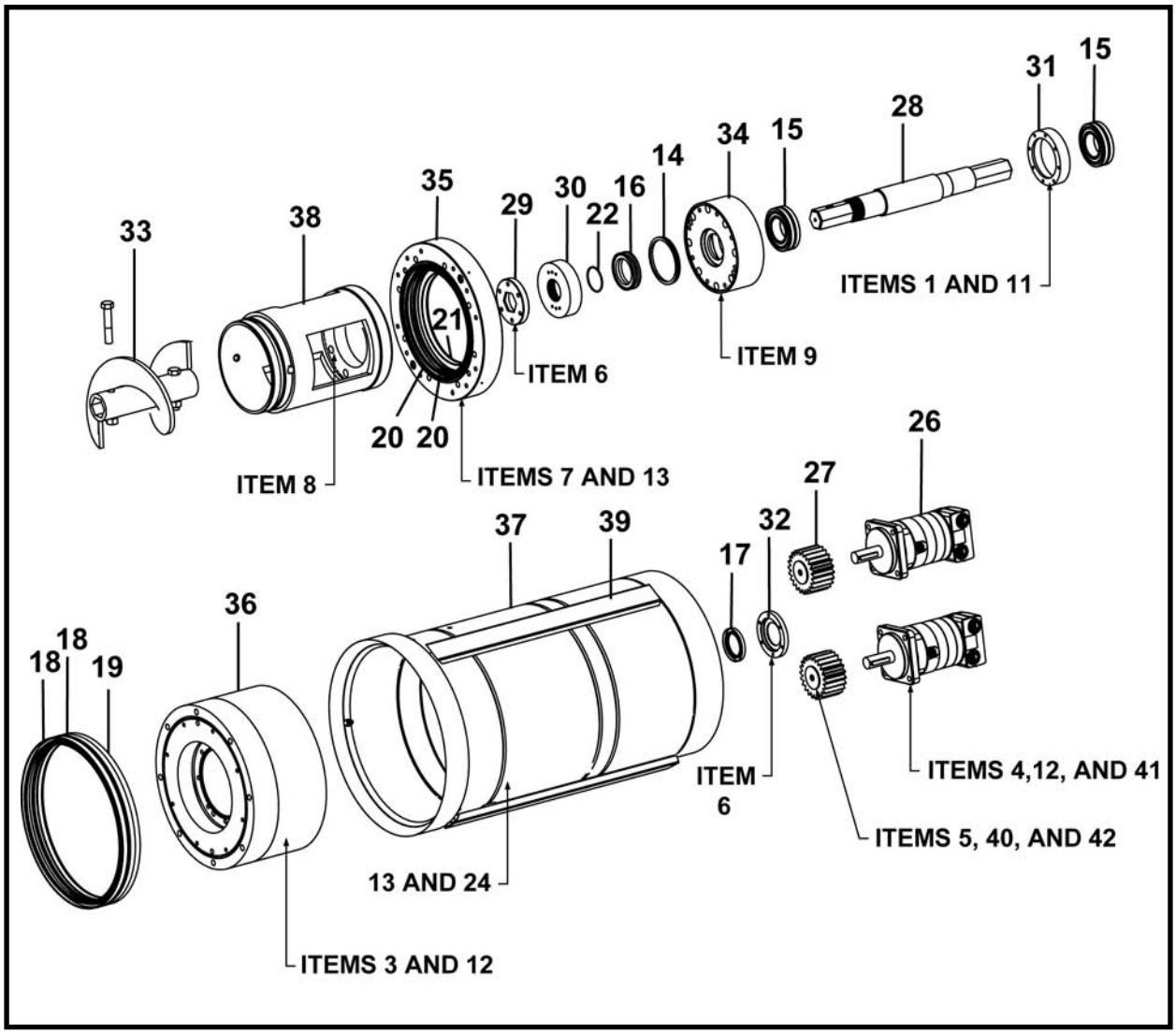


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43400F	POWERED CUTTER HEAD, PCH 44
1	1	A03150A	WRENCH, Port Hole
2	1	A43655A	REAR SECTION ASSEMBLY, PCH 44
3	1	A43691A	COUPLER
4	1	A43872A	EXTENSION, Hex Tube
5	1	A43873A	FRONT SECTION ASSEMBLY, PCH 44
6	1	A43878A	HYDRAULICS ASSEMBLY, PCH 44
7	2	A02193P0	LIFT EYE
8	1	A43857A	CUTTER HEAD ASSEMBLY, PCH 44

NOTES

PCH 20 FRONT SECTION ASSEMBLY, A43160A

PCH 20 (SN FA43100F-1 THRU 3)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43160A	ASSEMBLY, PCH 20 Front Section
1	8	P0001-04-007	BOLT, 1/4 UNC x 1.75
2	12	P0001-08-010	BOLT,1/2 UNC x 2.5
3	6	P0001-08-014	BOLT, 1/2 UNC x 3.5
4	16	P0003-08-000	NUT, 1/2
5	2	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
6	8	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
7	8	P0031-06-010	SCREW, Socket Head Cap 3/8 UNC x 2.5
8	8	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC x 1.5
9	8	P0031-08-014	SCREW, Socket Head Cap 1/2 UNC x 3.5
10	10	P0037-064	PIN, Dowel
11	8	P0040-004	WASHER, Hardened Flat 1/4
12	26	P0040-008	WASHER, Hardened Flat 1/2
13	4	P0063-004	FITTING, Grease 1/8 NPT
14	1	P0065-184	V SEAL
15	2	P0065-192	BEARING, Spherical Roller
16	1	P0065-193	SEAL, Shaft
17	1	P0065-194	SEAL, Oil
18	2	P0065-207	SEAL, Dirt Shaft 17.25
19	1	P0065-208	SEAL, Oil Shaft 17.25

PCH 20 FRONT SECTION ASSEMBLY, A43160A

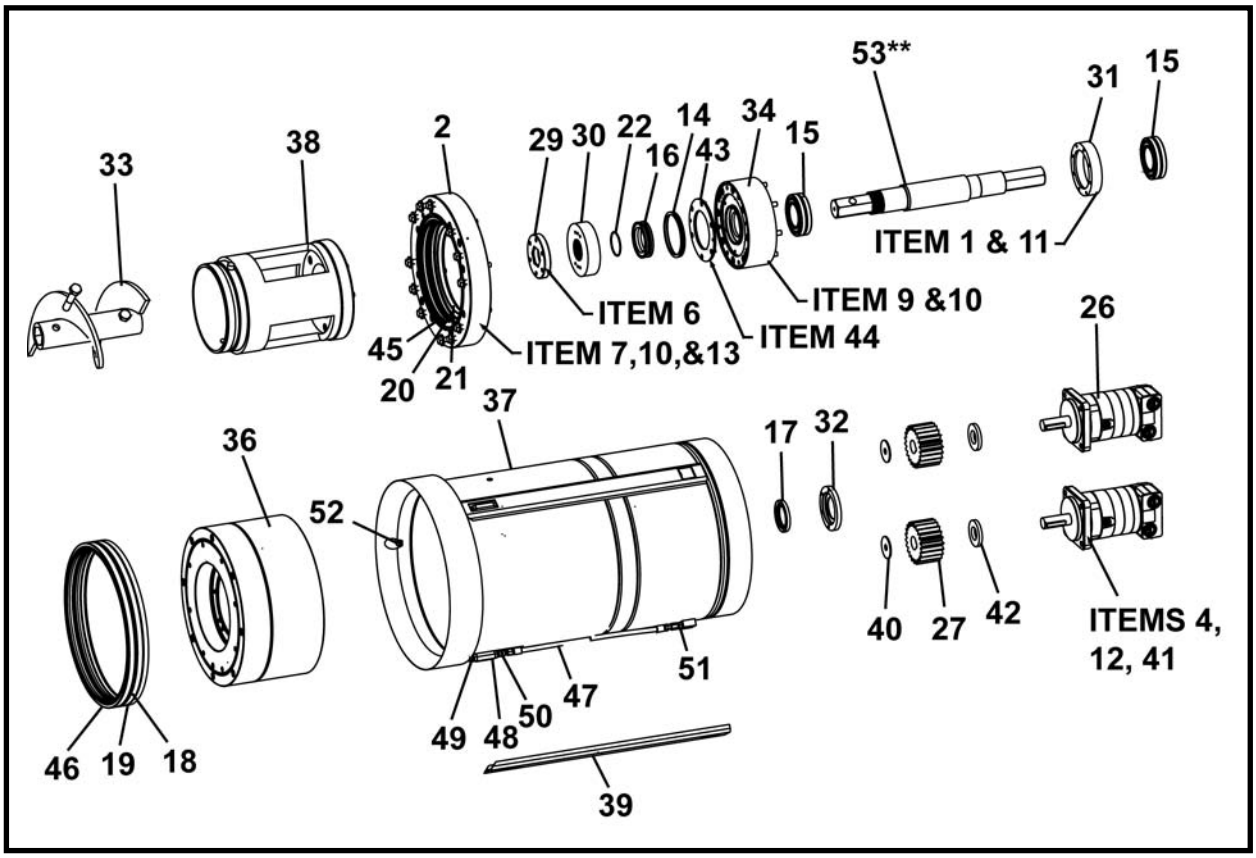
PCH 20 (SN FA43100F-1 THRU 3)

ITEM	QTY	PART NO.	DESCRIPTION
20	2	P0065-209	SEAL, Oil Shaft 11.25
21	1	P0065-210	SEAL, Dirt
22	1	P0085-145	ORING
23	20 QT	P0126-014	LUBE, Mobilgear 630 Gear
24	2	P0300-185	FITTING, 04MB-PLUG
25	2	P0300-193	FITTING, 08MB-PLUG
26	2	P0304-165	MOTOR, Hydraulic (Includes item 26a)
26a	1 each	P0304-165A	SEAL
27	2	A42880P	PINION
28.1	1	A42887P	SHAFT, Auger Drive (SN FA43100F-1)
28.2	1	A44822P	SHAFT, Auger Drive (SN FA43100F-2 & After)
29	1	A42888P	PLATE, Front Seal Retainer
30	1	A42890P	HOUSING, Front Auger Seal
31	1	A42891P	HOLDER, Auger Shaft Bearing
32	1	A42892P	PLATE, Rear Seal Retainer
33	1	A42931A	ASSEMBLY, Auger (Includes item 33a)
33a	2	P0001-12-016	BOLT, 3/4 UNC x 4
34	1	A43104P	BULKHEAD, Front
35	1	A43106P	SEAL RING
36.1	1	A43120A	ASSEMBLY, Drive Bearing (SN FA43100F-1)
36.2	1	A44556A	ASSEMBLY, Drive Bearing (SN FA43100F-2 & After)
37	1	A43124A	WELDMENT, Lead Section
38.1	1	A42930A	WELDMENT, Casing Adapter (SN FA43100F-1)
38.2	1	A43150A	WELDMENT, Casing Adapter (SN FA43100F-2 & After)
39	3	A43184P	COVER, Jetting
40	2	A43189P	WASHER, Pinion
41	8	A43190P	ROD, Threaded 1/2 x 3
42	2	A43191P	WASHER

QT - Quart

PCH 20 FRONT SECTION ASSEMBLY, A43160A

PCH 20 (SN FA43100F-4 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43160A	FRONT SECTION ASSEMBLY, PCH 20
1	8	P0001-04-007	BOLT, 1/4 UNC x 1.75
2	12	P0001-08-010	BOLT,1/2 UNC x 2.5
3	6	P0001-08-014	BOLT, 1/2 UNC x 3.5
4	16	P0003-08-000	NUT, 1/2
5	2	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
6	8	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
7	8	P0031-08-011	SCREW, Socket Head Cap 1/2 UNC x 2.75
8	8	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC x 1.5
9	8	P0031-08-014	SCREW, Socket Head Cap 1/2 UNC x 3.5
10	10	P0037-064	PIN, Dowel
11	8	P0040-004	WASHER, Hardened Flat 1/4
12	26	P0040-008	WASHER, Hardened Flat 1/2
13	4	P0063-004	FITTING, Grease 1/8 NPT
14	1	P0065-184	V SEAL
15	2	P0065-192	BEARING, Spherical Roller
16	1	P0065-193	SEAL, Shaft
17	1	P0065-194	SEAL, Oil
18	1	P0065-207	SEAL, Dirt Shaft 17.25
19	1	P0065-261	SEAL, Oil Shaft 17.25
20	1	P0065-209	SEAL, Oil Shaft 11.25
21	1	P0065-210	SEAL, Dirt
22	1	P0085-145	ORING
23	20 QT	P0126-014	LUBE, Mobilgear 630 Gear
24	2	P0300-026	FITTING, 04MB-HHP
25	2	P0300-079	FITTING, 08MB-HHP

PCH 20 FRONT SECTION ASSEMBLY, A43160A

PCH 20 (SN FA43100F-4 & AFTER)

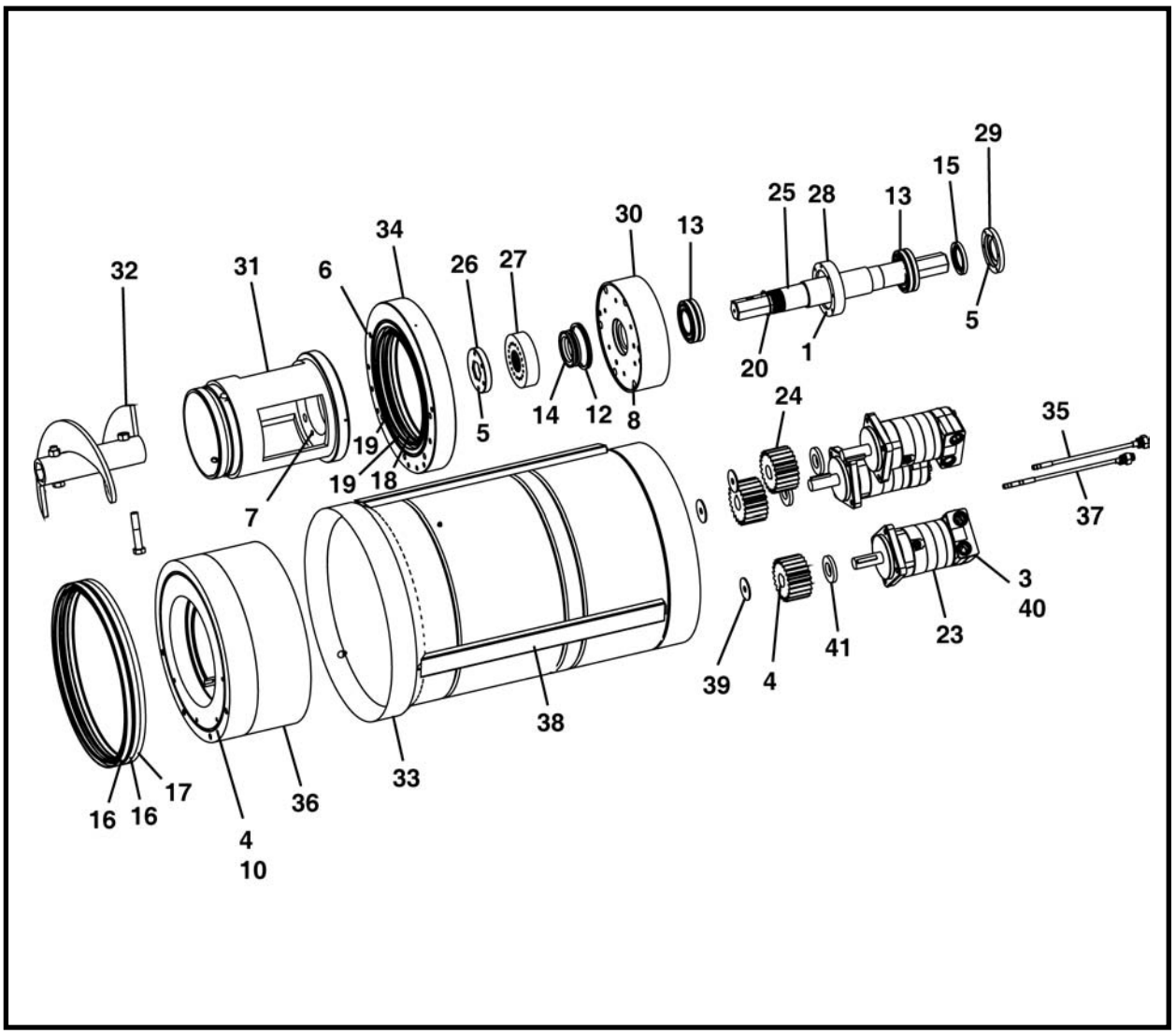
ITEM	QTY	PART NO.	DESCRIPTION
26	2	P0304-165	MOTOR, Hydraulic (Includes item 26a)
26a	1 each	P0304-165A	SEAL
27	2	A42880P	PINION
28*	1	A44822P	SHAFT, Auger Drive
29	1	A42888P	PLATE, Front Seal Retainer
30	1	A42890P	HOUSING, Front Auger Seal
31	1	A42891P	HOLDER, Auger Shaft Bearing
32	1	A42892P	PLATE, Rear Seal Retainer
33	1	A42931A	AUGER ASSEMBLY (Includes item 33a)
33a	2	P0001-12-016	BOLT, 3/4 UNC x 4
34	1	A43104P	BULKHEAD, Front
35	1	A43101P	RING, Seal
36	1	A44556A	BEARING ASSEMBLY, Drive
37	1	A43124A	LEAD SECTION WELDMENT
38	1	A43150A	CASING ADAPTER WELDMENT
39	3	A43184P	COVER, Jetting
40	2	A43189P	WASHER, Pinion
41	8	A43190P	ROD, Threaded 1/2 x 3
42	2	A43191P	WASHER
43	1	A45071P	PLATE, Wear
44	6	P0030-04-002	SCREW, Cap 1/4 UNC x .5
45	1	A46287A	SEAL
46	1	A46286A	SEAL
47	3	P0200-203	TUBE
48	3	P0302-474	VALVE, Check
49	3	P0300-227	FITTING, 02MP-02FPX
50	3	P0300-772	FITTING, 2NPTF-2NPTF
51	3	P0300-250	FITTING, 04MJ-04MB
52	3	A45763A	JETTING NOZZLE ASSEMBLY
53.1**	A/N	A46289P	SHIM, Drive Shaft .250
53.2**	A/N	A46290P	SHIM, Drive Shaft .260
53.3**	A/N	A46291P	SHIM, Drive Shaft .270
53.4**	A/N	A46292P	SHIM, Drive Shaft .280
53.5**	A/N	A46293P	SHIM, Drive Shaft .290

QT - Quart
A/N - As Needed

* In later models, the drive shaft is shorter to accommodate shims (item 53) to control shaft end play.
** Set drive shaft end play at .010” - .020” with appropriate shim.

PCH 22.5 FRONT SECTION ASSEMBLY, A42900A

PCH 22.5 (SN FA42850F-1 THRU 8)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42900A	ASSEMBLY, PCH 22.5 Front Section
1	8	P0001-04-007	BOLT, 1/4 UNC x 1.75
2	6	P0001-08-014	BOLT, 1/2 UNC x 3.5
3	24	P0003-08-000	NUT, 1/2
4	3	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
5	8	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
6	8	P0031-06-010	SCREW, Socket Head Cap 3/8 UNC x 2.5
7	6	P0031-08-005	SCREW, Socket Head Cap 1/2 UNC x 1.25
8	6	P0031-08-014	SCREW, Socket Head Cap 1/2 UNC x 3.5
9	9	P0037-064	PIN, Dowel
10	6	P0040-008	WASHER, Hardened Flat 1/2
11	2	P0063-004	FITTING, Grease 1/8 NPT
12	1	P0065-184	V SEAL
13	2	P0065-192	BEARING, Spherical Roller
14	1	P0065-193	SEAL, Shaft
15	1	P0065-194	SEAL, Oil
16	2	P0065-195	SEAL, Dirt Shaft 19.25
17	1	P0065-196	SEAL, Oil Shaft 19.25
18	1	P0065-198	SEAL, Oil Shaft 12.38

PCH 22.5 FRONT SECTION ASSEMBLY, A42900A

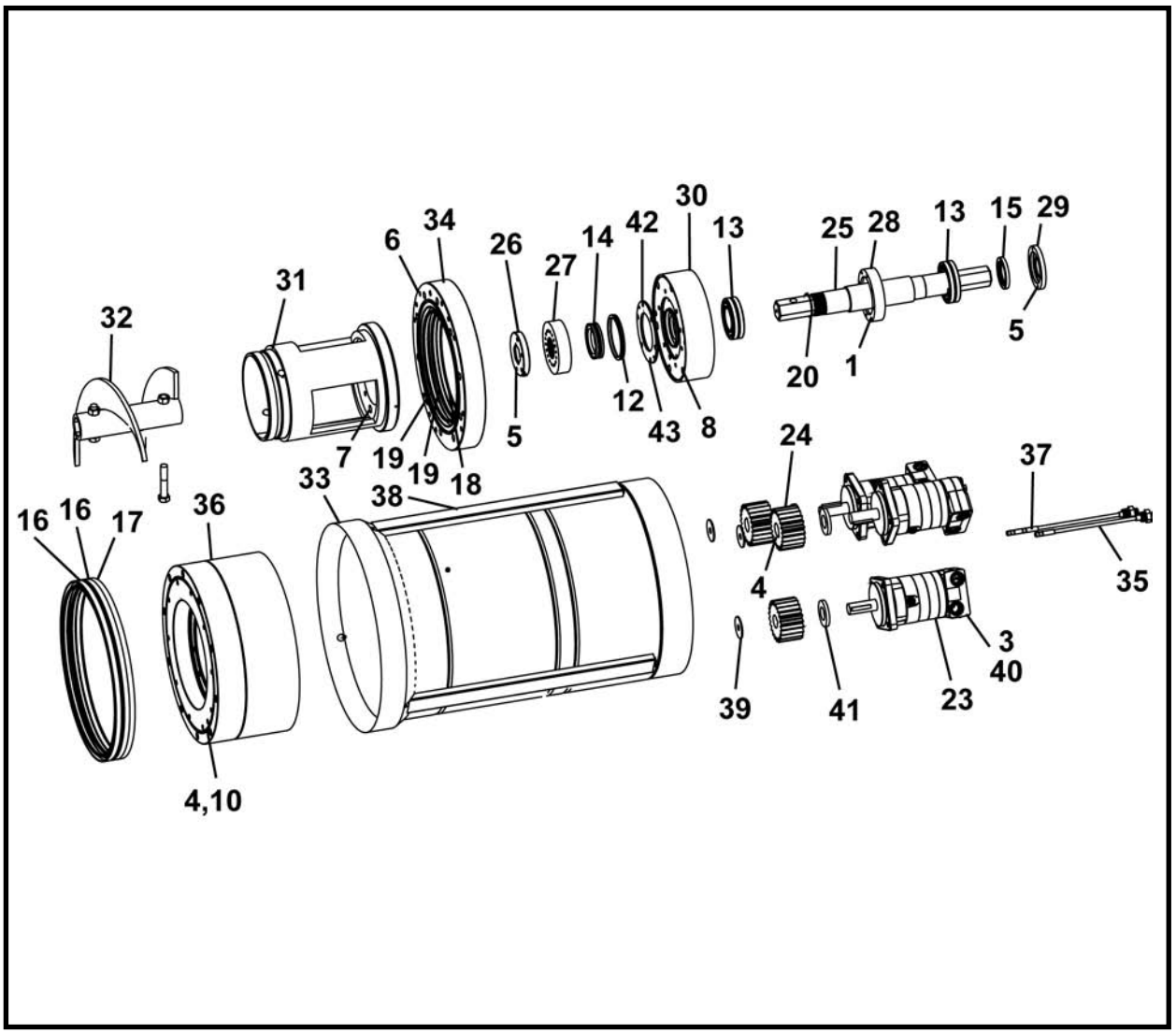
PCH 22.5 (SN FA42850F-1 THRU 8)

ITEM	QTY	PART NO.	DESCRIPTION
19	2	P0065-199	SEAL, Dirt
20	1	P0085-145	ORING
21	20 QT	P0126-014	LUBE, Mobilgear 630 Gear
22	2	P0300-185	FITTING, 04MB-PLUG
23	3	P0304-165	MOTOR, Hydraulic (Includes item 23a)
23a	1 each	P0304-165A	SEAL
24	3	A42880P	PINION
25.1	1	A42887P	SHAFT, Auger Drive (SN FA42850F-1 thru 5)
25.2	1	A44822P	SHAFT, Auger Drive (SN FA42850F-6 thru 8)
26	1	A42888P	PLATE, Front Seal Retainer
27	1	A42890P	HOUSING, Front Auger Seal
28	1	A42891P	HOLDER, Auger Shaft Bearing
29	1	A42892P	PLATE, Rear Seal Retainer
30	1	A42893P	BULKHEAD, Front
31	1	A42930A	WELDMENT, Casing Adapter
32	1	A42931A	ASSEMBLY, AUGER (Includes item 32a)
32a	2	P0001-12-016	BOLT, 3/4 UNC x 4
33	1	A42944A	WELDMENT, Lead Section
34	1	A42946P	SEAL RING
35	1	A42951A	ASSEMBLY, Grease Delivery Tube
36.1	1	A42955A	ASSEMBLY, Drive Bearing (SN FA42850F-1 thru 5)
36.2	1	A44557A	ASSEMBLY, Drive Bearing (SN FA42850F-6 thru 8)
37	1	A42956A	ASSEMBLY, Lube Delivery Tube
38	3	A43184P	COVER, Jetting
39	3	A43189P	WASHER, Pinion
40	12	A43190P	ROD, Threaded 1/2 x 3
41	3	A43191P	WASHER

QT - Quart

PCH 22.5 FRONT SECTION ASSEMBLY, A42900A

PCH 22.5 (SN FA42850F-9 THRU 11)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42900A	ASSEMBLY, PCH 22.5 Front Section
1	8	P0001-04-007	BOLT, 1/4 UNC x 1.75
2	6	P0001-08-014	BOLT, 1/2 UNC x 3.5
3	24	P0003-08-000	NUT, 1/2
4	3	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
5	8	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
6.1	8	P0031-08-011	SCREW, Socket Head Cap 3/8 UNC x 2.5 (SN FA48250F-9 & 10)
6.2	10	P0031-08-011	SCREW, Socket Head Cap 3/8 UNC x 2.5 (SN FA48250F-11)
7	6	P0031-08-005	SCREW, Socket Head Cap 1/2 UNC x 1.25
8	6	P0031-08-014	SCREW, Socket Head Cap 1/2 UNC x 3.5
9	9	P0037-064	PIN, Dowel
10	6	P0040-008	WASHER, Hardened Flat 1/2
11	2	P0063-004	FITTING, Grease 1/8 NPT
12	1	P0065-184	V SEAL
13	2	P0065-192	BEARING, Spherical Roller
14	1	P0065-193	SEAL, Shaft
15	1	P0065-194	SEAL, Oil
16	2	P0065-195	SEAL, Dirt Shaft 19.25
17	1	P0065-196	SEAL, Oil Shaft 19.25

PCH 22.5 FRONT SECTION ASSEMBLY, A42900A

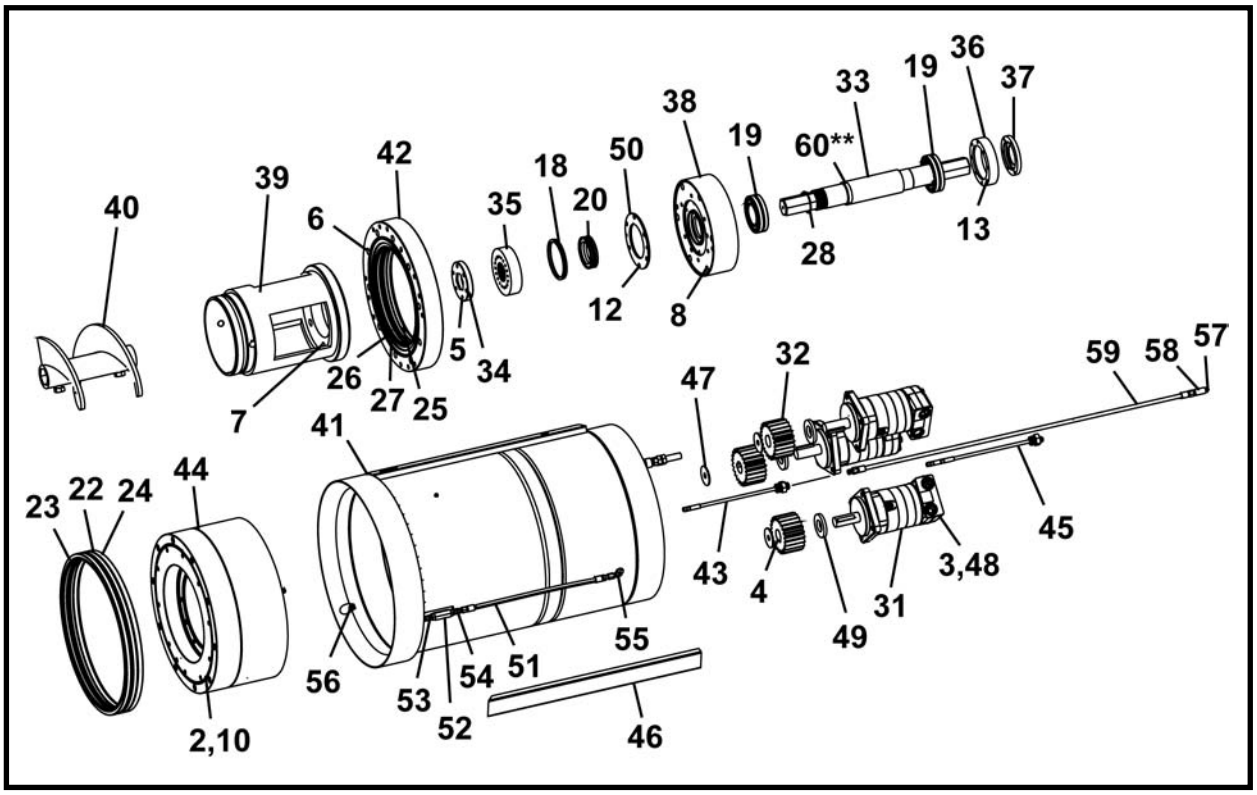
PCH 22.5 (SN FA42850F-9 THRU 11)

ITEM	QTY	PART NO.	DESCRIPTION
18	1	P0065-198	SEAL, Oil Shaft 12.38
19	2	P0065-199	SEAL, Dirt
20	1	P0085-145	ORING
21	20 QT	P0126-014	LUBE, Mobilgear 630 Gear
22	2	P0300-185	FITTING, 04MB-PLUG
23	3	P0304-165	MOTOR, Hydraulic
23a	2	P0304-165A	SEAL
24	3	A42880P	PINION
25	1	A44822P	SHAFT, Auger Drive
26	1	A42888P	PLATE, Front Seal Retainer
27	1	A42890P	HOUSING, Front Auger Seal
28	1	A42891P	HOLDER, Auger Shaft Bearing
29	1	A42892P	PLATE, Rear Seal Retainer
30	1	A42893P	BULKHEAD, Front
31	1	A42930A	WELDMENT, Casing Adapter
32	1	A42931A	ASSEMBLY, AUGER (Includes item 32a)
32a	2	P0001-12-016	BOLT, 3/4 UNC x 4
33	1	A42944A	WELDMENT, Lead Section
34.1	1	A45100P	SEAL RING (SN FA48250F-9 & 10) (8 bolt pattern)
34.2	1	A45097P	SEAL RING (SN FA48250F-11) (10 bolt pattern)
35	1	A42951A	ASSEMBLY, Grease Delivery Tube
36.1	1	A44557A	ASSEMBLY, Drive Bearing (SN FA42850F-9 & 10)
36.2	1	A45098A	ASSEMBLY, Drive Bearing (SN FA48250F-11)
37	1	A42956A	ASSEMBLY, Lube Delivery Tube
38	3	A43184P	COVER, Jetting
39	3	A43189P	WASHER, Pinion
40	12	A43190P	ROD, Threaded 1/2 x 3
41	3	A43191P	WASHER
42	1	A45071P	WEAR PLATE, Front Bulkhead
43	6	P0030-04-002	SCREW, Flat Head Cap 1/4 UNC x .5

QT - Quart

PCH 22.5 FRONT SECTION ASSEMBLY, A42900A

PCH 22.5 (SN FA42850F-12 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42900A	ASSEMBLY, PCH 22.5 Front Section
1	8	P0001-04-007	BOLT, 1/4 UNC x 1.75
2	6	P0001-08-014	BOLT, 1/2 UNC x 3.5
3	24	P0003-08-000	NUT, 1/2
4	3	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
5	8	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
6	10	P0031-08-011	SCREW, Socket Head Cap 3/8 UNC x 2.5
7	6	P0031-08-005	SCREW, Socket Head Cap 1/2 UNC x 1.25
8	6	P0031-08-014	SCREW, Socket Head Cap 1/2 UNC x 3.5
9	9	P0037-064	PIN, Dowel
10	6	P0040-008	WASHER, Hardened Flat 1/2
11	8	P0040-004	WASHER, Hardened Flat 1/4
12	6	P0030-04-002	SCREW, Flat Head Cap 1/4 UNC x 1/2
13	6	P0031-04-003	SCREW, Socket Head Cap 1/4 UNC x .75
14	2	P0001-06-010	BOLT, 3/8 UNC x 2.5
15	2	P0045-006	WASHER, Lock 3/8
16	2	P0040-006	WASHER, Hardened Flat 3/8
17	2	P0063-004	FITTING, Grease 1/8 NPT
18	1	P0065-184	V SEAL
19	2	P0065-192	BEARING, Spherical Roller
20	1	P0065-193	SEAL, Shaft
21	1	P0065-194	SEAL, Oil
22	2	P0065-195	SEAL, Dirt Shaft 19.25
23	1	A45764A	SEAL, With Stand Off 19.25
24	1	P0065-196	SEAL, Oil Shaft 19.25
25	1	P0065-198	SEAL, Oil Shaft 12.38
26	1	A45753A	SEAL, With Stand Off 12.38
27	2	P0065-199	SEAL, Dirt
28	1	P0085-145	ORING

PCH 22.5 FRONT SECTION ASSEMBLY, A42900A

PCH 22.5 (SN FA42850F-12 & AFTER)

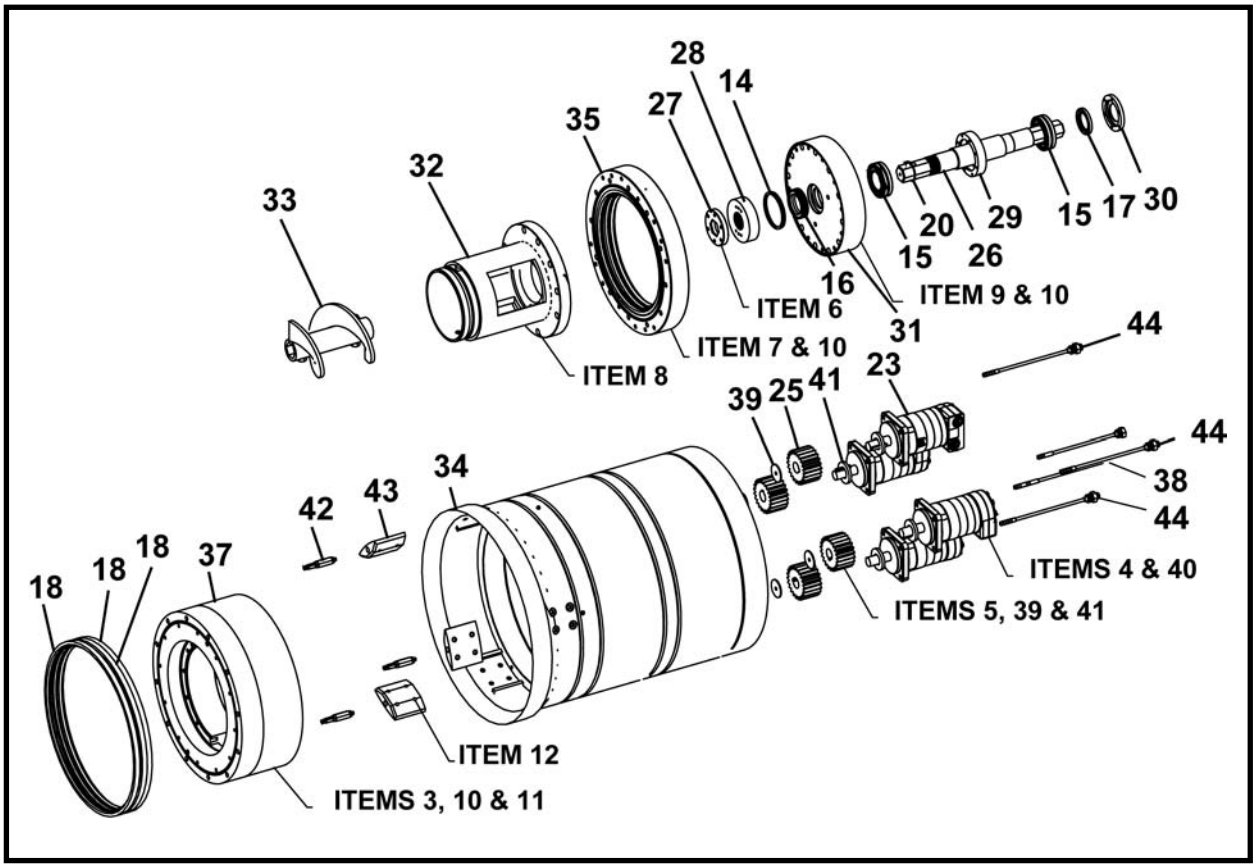
ITEM	QTY	PART NO.	DESCRIPTION
29	20 QT	P0126-014	LUBE, Mobilgear 630 Gear
30	2	P0300-185	FITTING, 04MB-PLUG
31	3	P0304-165	MOTOR, Hydraulic (Includes item 31a)
31a	1 each	P0304-165A	SEAL
32	3	A42880P	PINION
33*	1	A44822P	SHAFT, Auger Drive
34	1	A42888P	PLATE, Front Seal Retainer
35	1	A42890P	HOUSING, Front Auger Seal
36	1	A42891P	HOLDER, Auger Shaft Bearing
37	1	A42892P	PLATE, Rear Seal Retainer
38	1	A42893P	BULKHEAD, Front
39	1	A42930A	WELDMENT, Casing Adapter
40	1	A42931A	AUGER ASSEMBLY (Includes item 40a)
40a	2	P0001-12-016	BOLT, 3/4 UNC x 4
41	1	A42944A	WELDMENT, Lead Section
42	1	A45097P	RING, Seal
43	1	A45161A	ASSEMBLY, Grease Delivery Tube
44	1	A45098A	DRIVE BEARING ASSEMBLY
45	1	A45162A	LUBE DELIVERY TUBE ASSEMBLY
46	3	A43184P	COVER, Jetting
47	3	A43189P	WASHER, Pinion
48	12	A43190P	ROD, Threaded 1/2 x 3
49	3	A43191P	WASHER
50	1	A45071P	WEAR PLATE, Front Bulkhead
51	3	P0200-203	FITTING, 4GT7-2MP-4FJSX-21.75
52	3	P0302-474	VALVE, Check
53	3	P0300-227	FITTING, 02MP-02FPX
54	3	P0300-772	FITTING, 2NPTF-2NPTF
55	3	P0300-250	FITTING, 04MJ-04MB
56	3	A45763A	JETTING NOZZLE ASSEMBLY, PCH
57	1	P0063-016	FITTING, Grease 1/4 NPT
58	1	P0400-001	COUPLING, Pipe 1/4
59	1	P0201-282	ASSEMBLY, Tube 48”
60.1**	A/N	A46289P	SHIM, Drive Shaft .250
60.2**	A/N	A46290P	SHIM, Drive Shaft .260
60.3**	A/N	A46291P	SHIM, Drive Shaft .270
60.4**	A/N	A46292P	SHIM, Drive Shaft .280
60.5**	A/N	A46293P	SHIM, Drive Shaft .290

QT - Quart
A/N - As Needed

* In later models, the drive shaft is shorter to accommodate shims (item 60) to control shaft end play.
** Set drive shaft end play at .010” - .020” with appropriate shim.

PCH 28.5 FRONT SECTION ASSEMBLY, A43641A

PCH 28.5 (SN FA43000F-1 THRU 5)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43641A	ASSEMBLY, PCH 22.5 Front Section
1	8	P0001-04-007	BOLT, 1/4 UNC x 1.75
2	12	P0001-08-008	BOLT,1/2 UNC x 2
3	8	P0001-08-014	BOLT, 1/2 UNC x 3.5
4	32	P0003-08-000	NUT, 1/2
5	4	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
6	8	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
7	12	P0031-06-010	SCREW, Socket Head Cap 3/8 UNC x 2.5
8	10	P0031-08-005	SCREW, Socket Head Cap 1/2 UNC x 1.25
9	13	P0031-08-014	SCREW, Socket Head Cap 1/2 UNC x 3.5
10	10	P0037-064	PIN, Dowel
11	20	P0040-008	WASHER, Hardened Flat 1/2
12	12	P0001-08-006	BOLT, 1/2 x 1.5
13	2	P0063-004	FITTING, Grease 1/8 NPT
14	1	P0065-184	V SEAL
15	2	P0065-192	BEARING, Spherical Roller
16	1	P0065-193	SEAL, Shaft
17	1	P0065-194	SEAL, Oil
18	3	P0088-161	SEAL
19	3	P0088-162	SEAL
20	1	P0085-145	ORING
21	33 QT	P0126-014	LUBE, Mobilgear 630 Gear
22	2	P0300-185	FITTING, 04MB-PLUG
23	4	P0304-165	MOTOR, Hydraulic
23a	2	P0304-165A	SEAL
24	3	P0300-144	FITTING, 02MP-HHP
25	4	A42880P	PINION

PCH 28.5 FRONT SECTION ASSEMBLY, A43641A

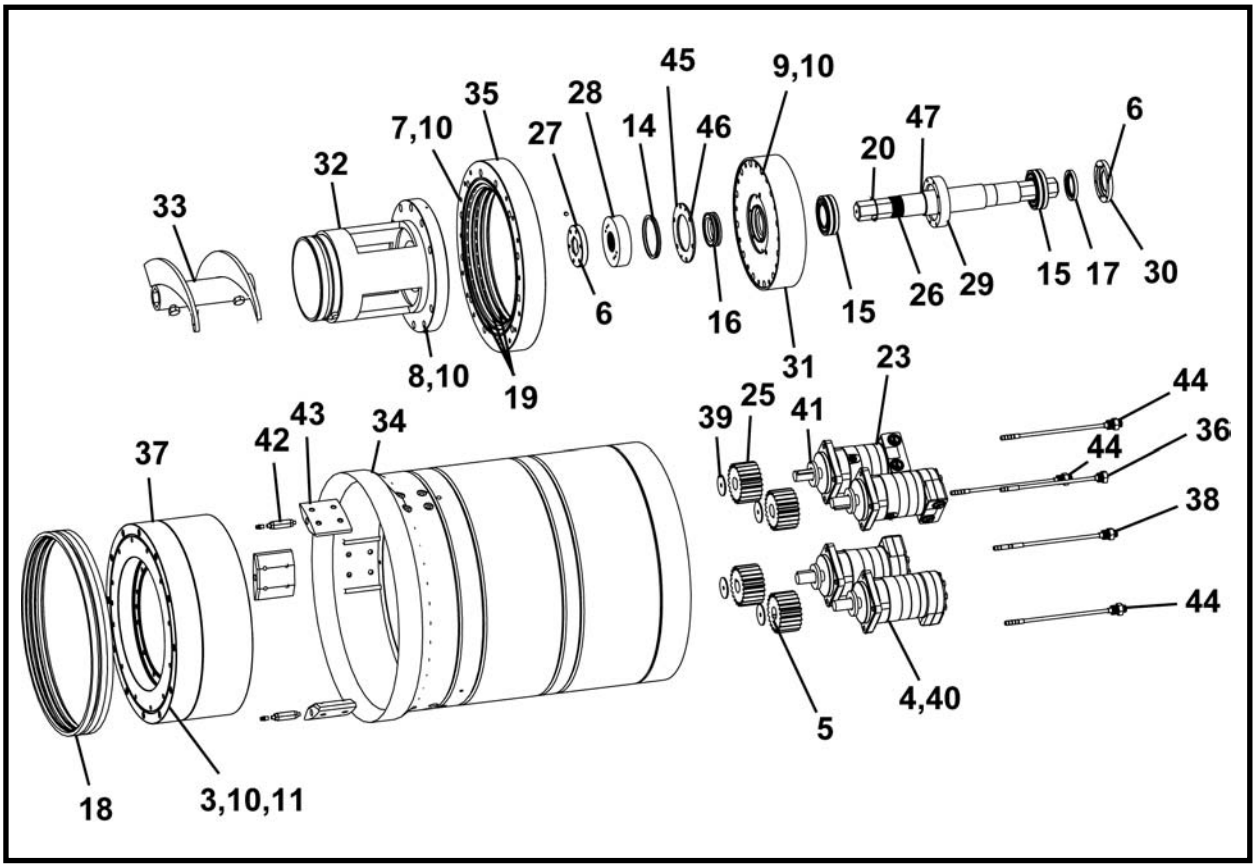
PCH 28.5 (SN FA43000F-1 THRU 5)

ITEM	QTY	PART NO.	DESCRIPTION
26.1	1	A42887P	SHAFT, Auger Drive (SN FA43000F-1 thru 4)
26.2	1	A44822P	SHAFT, Auger Drive (SN FA43000F-5)
27	1	A42888P	PLATE, Front Seal Retainer
28	1	A42890P	HOUSING, Front Auger Seal
29	1	A42891P	HOLDER, Auger Shaft Bearing
30	1	A42892P	PLATE, Rear Seal Retainer
31	1	A43611P	BULKHEAD, Front
32	1	A43630A	WELDMENT, Casing Adapter
33	1	A42931A	ASSEMBLY, AUGER (Includes item 33a)
33a	2	P0001-12-016	BOLT, 3/4 UNC x 4
34	1	A43631A	WELDMENT, Lead Section
35	1	A43609P	RING, Seal
36	1	A42951A	ASSEMBLY, Grease Delivery Tube
37.1	1	A43007A	ASSEMBLY, Drive Bearing (SN FA43000F-1 thru 4)
37.2	1	A44558A	ASSEMBLY, Drive Bearing (SN FA43000F-5)
38	1	A42956A	ASSEMBLY, Lube Delivery Tube
39	4	A43189P	WASHER, Pinion
40	16	A43190P	ROD, Threaded 1/2 x 3
41	4	A43191P	WASHER
42	3	A43640A	ASSEMBLY, Jetting Tube
43	3	A43629P	BLOCK, Nozzle Protecting
44	3	A43632A	ASSEMBLY, Chem. Delivery Tube

QT - Quart

PCH 28.5 FRONT SECTION ASSEMBLY, A43641A

PCH 28.5 (SN FA43000F-6 & AFTER)



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43641A	ASSEMBLY, PCH 28.5 Front Section
1	8	P0001-04-007	BOLT, 1/4 UNC x 1.75
2	12	P0001-08-008	BOLT,1/2 UNC x 2
3	8	P0001-08-014	BOLT, 1/2 UNC x 3.5
4	32	P0003-08-000	NUT, 1/2
5	4	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
6	8	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
7	12	P0031-08-012	SCREW, Socket Head Cap 1/2 UNC x 3
8	10	P0031-08-005	SCREW, Socket Head Cap 1/2 UNC x 1.25
9	13	P0031-08-014	SCREW, Socket Head Cap 1/2 UNC x 3.5
10	10	P0037-064	PIN, Dowel
11	20	P0040-008	WASHER, Hardened Flat 1/2
12	12	P0001-08-006	BOLT, 1/2 x 1.5
13	2	P0063-004	FITTING, Grease 1/8 NPT
14	1	P0065-184	V SEAL
15	2	P0065-192	BEARING, Spherical Roller
16	1	P0065-193	SEAL, Shaft
17	1	P0065-194	SEAL, Oil
18	3	P0088-161	SEAL
19	3	P0088-162	SEAL
20	1	P0085-145	ORING
21	33 QT	P0126-014	LUBE, Mobilgear 630 Gear
22	2	P0300-185	FITTING, 04MB-PLUG
23	4	P0304-165	MOTOR, Hydraulic
23a	1 each	P0304-165A	SEAL
24	3	P0300-144	FITTING, 02MP-HHP
25	4	A42880P	PINION

PCH 28.5 FRONT SECTION ASSEMBLY, A43641A

PCH 28.5 (SN FA43000F-6 & AFTER)

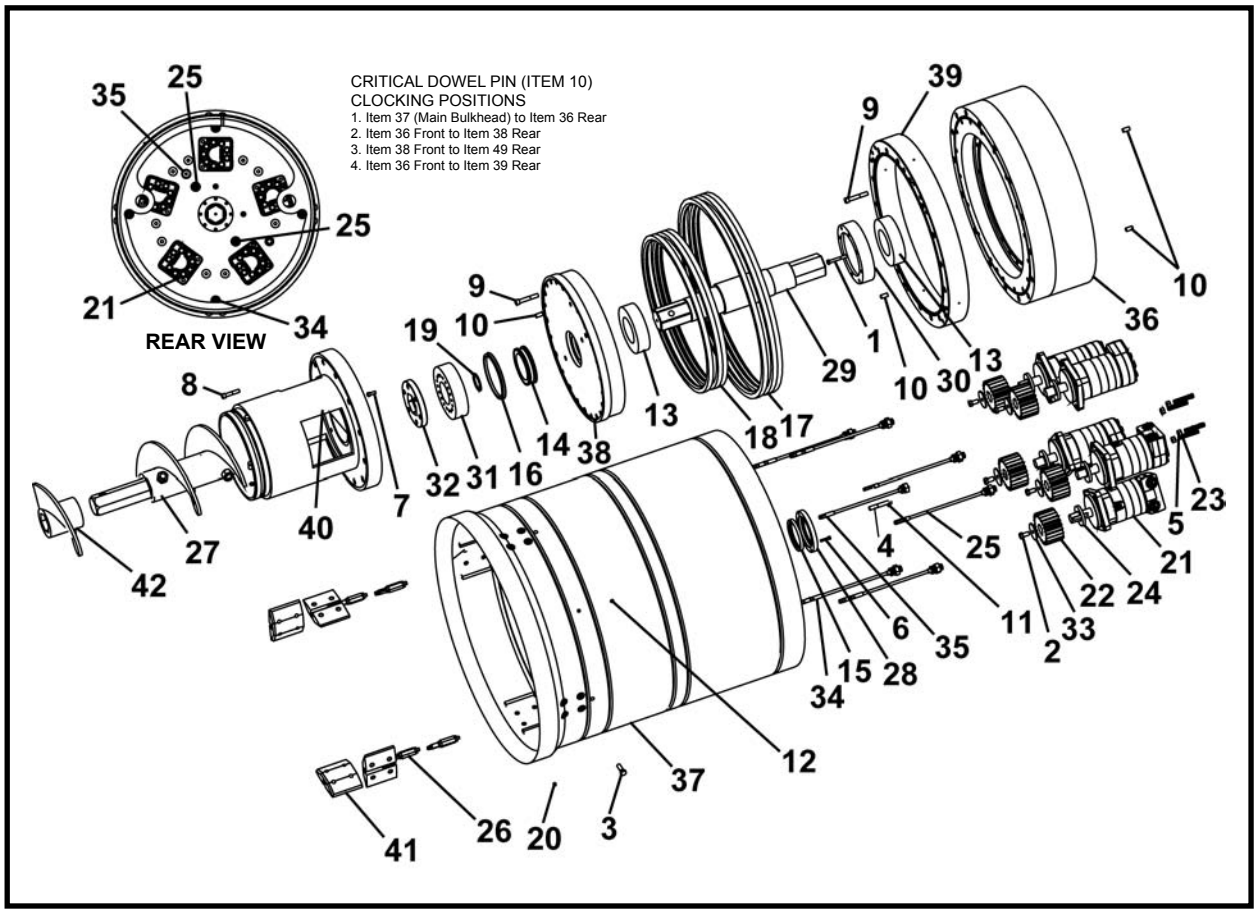
ITEM	QTY	PART NO.	DESCRIPTION
26*	1	A44822P	SHAFT, Auger Drive
27	1	A42888P	PLATE, Front Seal Retainer
28	1	A42890P	HOUSING, Front Auger Seal
29	1	A42891P	HOLDER, Auger Shaft Bearing
30	1	A42892P	PLATE, Rear Seal Retainer
31	1	A43611P	BULKHEAD, Front
32	1	A43630A	WELDMENT, Casing Adapter
33	1	A42931A	ASSEMBLY, AUGER (Includes item 33a)
33a	2	P0001-12-016	BOLT, 3/4 UNC x 4
34	1	A43631A	WELDMENT, Lead Section
35	1	A45102P	RING, Seal (with 1/2” bolts)
36	1	A42951A	GREASE DELIVERY TUBE ASSEMBLY
37	1	A44558A	BEARING ASSEMBLY, Drive
38	1	A42956A	LUBE DELIVERY TUBE ASSEMBLY
39	4	A43189P	WASHER, Pinion
40	16	A43190P	ROD, Threaded 1/2 x 3
41	4	A43191P	WASHER
42	3	A43640A	JETTING TUBE ASSEMBLY
43	3	A43629P	BLOCK, Nozzle Protecting
44	3	A43632A	CHEMICAL DELIVERY TUBE ASSEMBLY,
45	1	A45071P	WEAR PLATE, Front Bulkhead
46	6	P0030-04-002	SCREW, Flat Head Cap 1/2 UNC x .5
47.1**	A/N	A46289P	SHIM, Drive Shaft .250
47.2**	A/N	A46290P	SHIM, Drive Shaft .260
47.3**	A/N	A46291P	SHIM, Drive Shaft .270
47.4**	A/N	A46292P	SHIM, Drive Shaft .280
47.5**	A/N	A46293P	SHIM, Drive Shaft .290

QT - Quart
A/N - As Needed

* In later models, the drive shaft is shorter to accommodate shims (item 47) to control shaft end play.
** Set drive shaft end play at .010” - .020” with appropriate shim.

PCH 36 FRONT SECTION ASSEMBLY, A44242A

PCH 36



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44242A	FRONT SECTION ASSEMBLY PCH 36
1	8	P0001-06-011	BOLT, 3/8 UNC x 2.75
2	5	P0001-08-004	BOLT, 1/2 UNC x 1
3	16	P0001-08-006	BOLT, 1/2 UNC x 1.5
4	10	P0001-08-012	BOLT, 1/2 UNC x 3
5	20	P0003-08-000	NUT, 1/2
6	8	P0031-04-005	SCREW, Socket Head Cap 1/4 UNC x 1.25
7	6	P0031-06-004	SCREW, Socket Head Cap 3/8 UNC x 1
8	12	P0031-08-010	SCREW, Socket Head Cap 1/2 UNC x 2.5
9	32	P0031-08-012	NC 1/2 X 3-SOCKET HEAD CAP SCR
10	5	P0037-064	PIN, Dowel
11	10	P0040-008	WASHER, Hardened Flat 1/2
12	4	P0063-004	FITTING, Grease 1/8 Straight
13	2	P0065-219	BEARING, Self Aligning
14	1	P0065-220	SEAL
15	1	P0065-221	GREASE SEAL
16	1	P0065-222	SEAL
17	3	P0065-224	SEAL
18	3	P0065-225	SEAL
19	1	P0085-331	ORING
20	4	P0300-144	PLUG, 02MP-HHP
21	5	P0304-165	MOTOR, Hydraulic (Includes item 21a)
21a	1 each	P0304-165A	SEAL, Shaft
22	5	A42880P	PINION
23	20	A43190P	ROD, Threaded 1/2 x 3
24	5	A43191P	WASHER

PCH 36 FRONT SECTION ASSEMBLY, A44242A

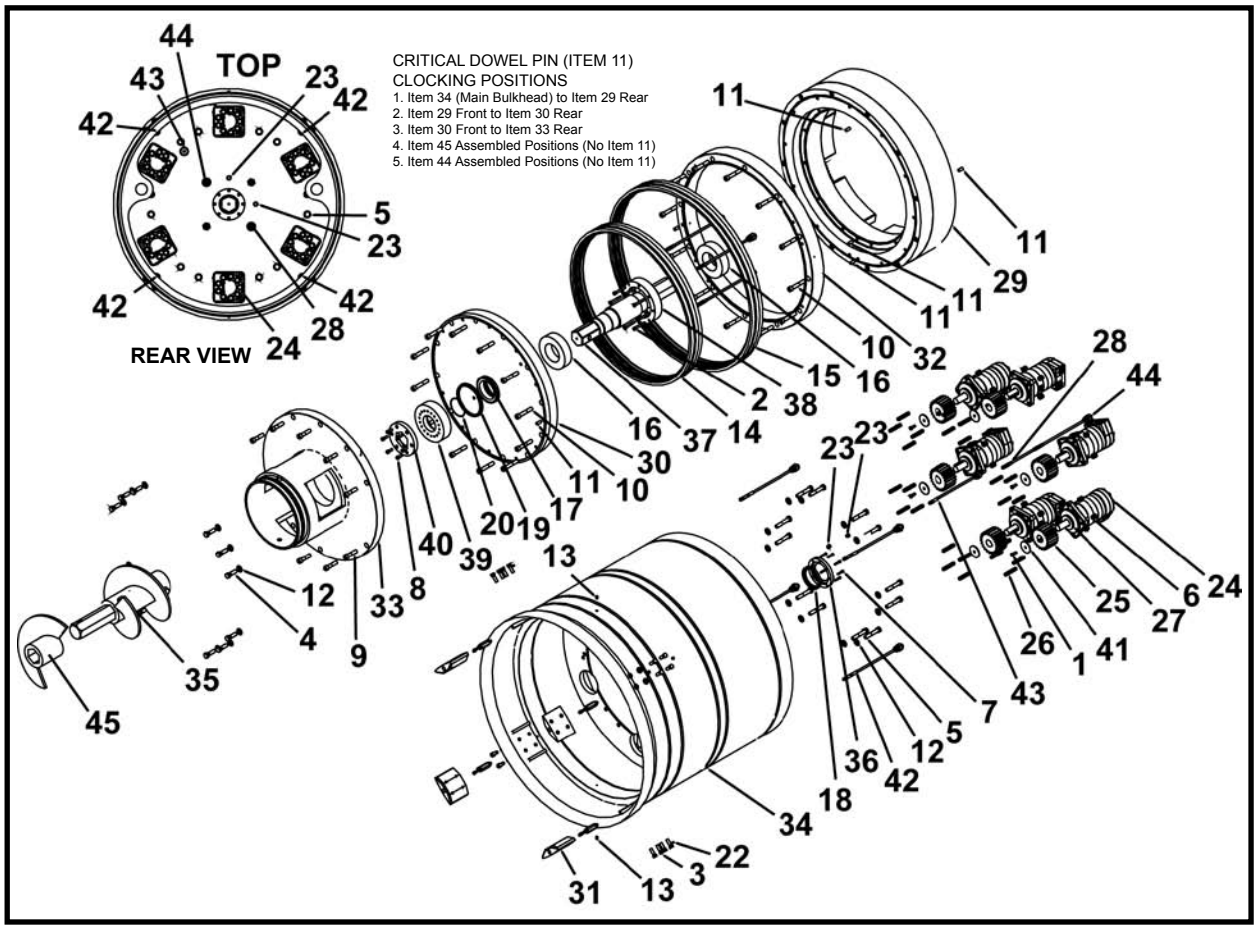
PCH 36

ITEM	QTY	PART NO.	DESCRIPTION
25	2	A43869A	TUBE ASSEMBLY, Delivery
26	4	A43640A	TUBE ASSEMBLY, Jetting
27	1	A45895A	AUGER ASSEMBLY, Auger
28	1	A43852P	RETAINER, Rear Seal
29	1	A43853P	SHAFT, Auger Drive
30	1	A43854P	HOLDER, Rear Bearing
31	1	A43855P	SEAL RING, Front Auger
32	1	A43856P	RETAINER, Front Auger Seal Ring
33	5	A43863P	WASHER, Pinion
34	4	A43864A	TUBE ASSEMBLY, Grease Delivery
35	1	A43867A	TUBE ASSEMBLY, Grease Delivery
36	1	A44100A	BEARING ASSEMBLY, Drive
37	1	A44243A	SECTION WELDMENT, Lead
38	1	A44255P	BULKHEAD, Front
39	1	A44256P	RING, Seal
40	1	A44257A	ADAPTER WELDMENT, Casing
41	4	A44259P	BLOCK, Nozzle Protecting
42	1	A45877A	AUGER, 3/4
43	46 QT	P0126-014	LUBE, Mobilgear 630 Gear

QT - Quart

PCH 44 FRONT SECTION ASSEMBLY, A43873A

PCH 44



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43873A	FRONT SECTION ASSEMBLY, PCH 44
1	6	P0001-06-004	BOLT, 3/8 UNC x 1
2	8	P0001-06-011	BOLT, 3/8 UNC x 2.75
3	16	P0001-08-006	BOLT, 1/2 UNC x 1.5
4	12	P0001-10-008	BOLT, 5/8 UNC x 2
5	12	P0001-10-014	BOLT, 5/8 UNC x 3.5
6	48	P0003-08-000	NUT, 1/2
7	8	P0031-04-005	SCREW, Socket Head Cap 1/4 UNC x 1.25
8	6	P0031-06-004	SCREW, Socket Head Cap 3/8 UNC x 1
9	10	P0031-10-010	SCREW, Socket Head Cap 5/8 UNC x 2.5
10	24	P0031-10-014	SCREW, Socket Head Cap 5/8 UNC x 3.5
11	6	P0037-064	PIN, Dowel
12	24	P0040-010	WASHER, Hardened Flat 5/8
13	2	P0063-004	FITTING, Grease 1/8 Straight
14	3	P0065-217	SEAL
15	3	P0065-218	SEAL
16	2	P0065-219	BEARING, Self Aligning
17	1	P0065-220	SEAL
18	1	P0065-221	GREASE SEAL
19	1	P0065-222	SEAL
20	1	P0085-239	ORING
21	79 QT	P0126-014	LUBE, Mobilgear 630 Gear
22	4	P0300-144	PLUG, 02MP-HHP
23	2	P0300-185	PLUG, 04MB-PLUG

PCH 44 FRONT SECTION ASSEMBLY, A43873A

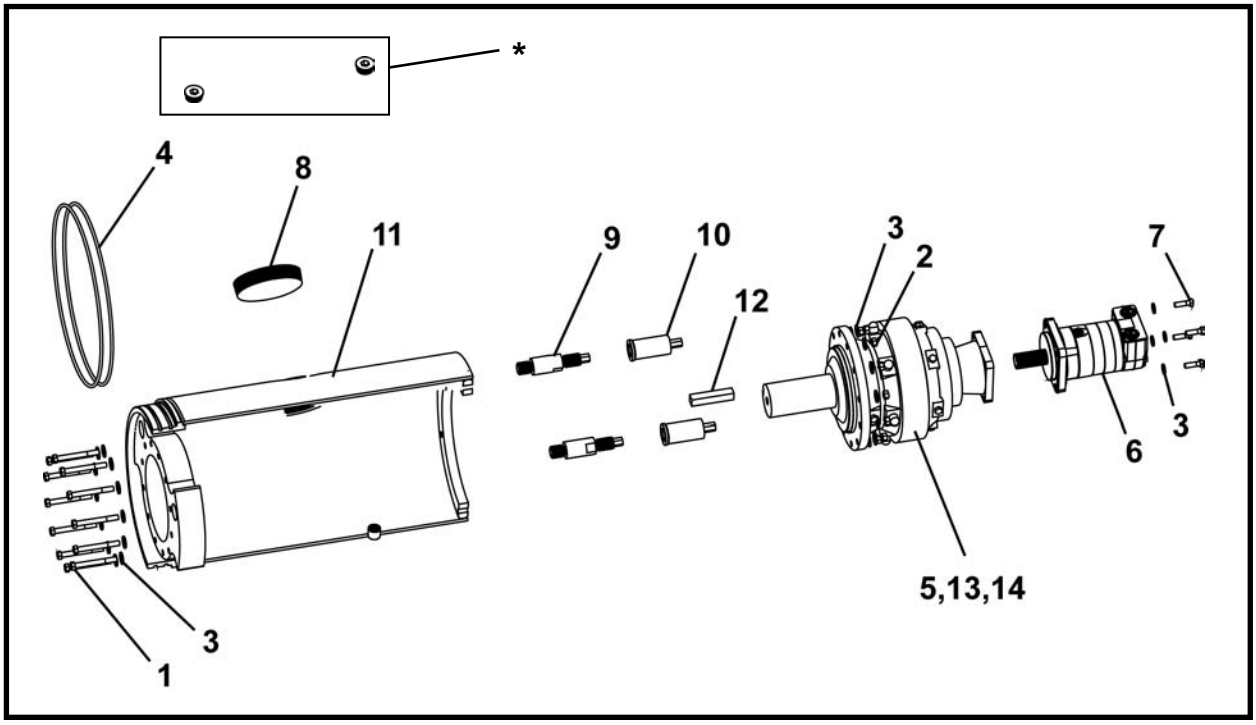
PCH 44

ITEM	QTY	PART NO.	DESCRIPTION
24	6	P0304-165	MOTOR, Hydraulic (Includes item 24a)
24a	1 each	P0304-165A	SEAL, Shaft
25	6	A42880P	PINION
26	24	A43190P	ROD, Threaded 1/2 x 3
27	6	A43191P	WASHER
28	4	A43640A	ASSEMBLY, Jetting Tube
29	1	A43649A	ASSEMBLY, Drive Bearing 44 PCH
30	1	A43653P	BULKHEAD, Front 44 PCH
31	4	A43658P	BLOCK, Nozzle Protecting 44 PCH
32	1	A43664P	SEAL RING 44 PCH
33	1	A43673A	WELDMENT, Casing Adapter 44 PCH
34	1	A43685A	WELDMENT, Lead Section 44 PCH
35	1	A45895A	ASSEMBLY, Auger 13.6 OD
36	1	A43852P	RETAINER, Rear Seal
37	1	A43853P	SHAFT, Auger Drive
38	1	A43854P	HOLDER, Rear Bearing
39	1	A43855P	SEAL RING, Front Auger
40	1	A43856P	RETAINER, Front Auger Seal Ring
41	5	A43863P	WASHER, Pinion
42	4	A43864A	ASSEMBLY, Grease Delivery Tube
43	1	A43867A	ASSEMBLY, Grease Delivery Tube
44	2	A43869A	ASSEMBLY, Delivery Tube
45	1	A45877A	AUGER, 3/4

QT - Quart

REAR SECTION ASSEMBLY PCH 20, A43161A

PCH 20



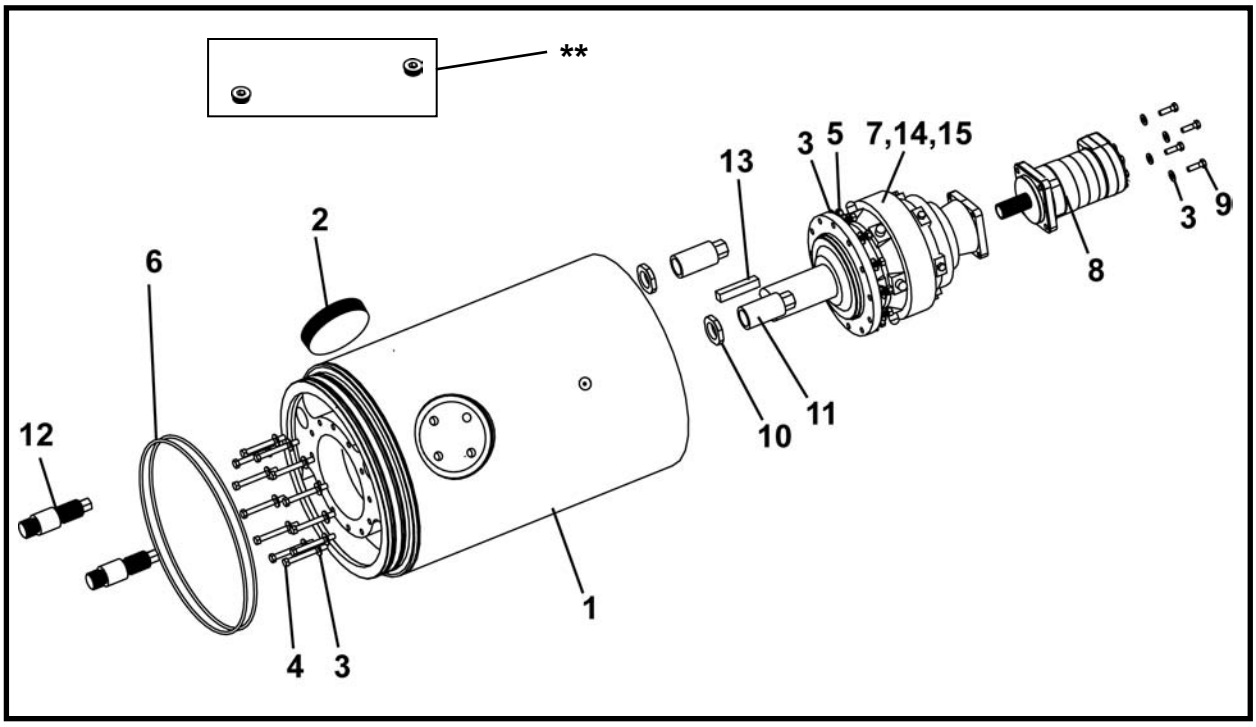
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43161A	REAR SECTION ASSEMBLY, PCH 20
1	12	P0001-08-018	BOLT, 1/2 UNC x 4.5
2	12	P0003-08-000	NUT, 1/2
3	28	P0040-008	WASHER, Hardened Flat 1/2
4	2	P0088-154	ORING
5	1	P0097-026	GEAR BOX
6	1	P0304-172	MOTOR, Hydraulic
7	4	PM12A-1.25-040	BOLT, Metric
8	2	A01199P0	PORT, Access
9	2	A43114P	PIN, ALIGNMENT
10	2	A43115P	PIN, Extension Alignment
11	1	A43131A	WELDMENT, Rear Section
12	1	A43188P	KEY
13	1	P0097-026A	KIT, Bolt Mount
14	1	P0097-026B	KIT, Universal Mount

NOTE:
The Water Filter Assembly, P0309-187 is located in the rear assembly. The water filter element part number is P0309-187A. For parts breakdown, refer to Hydraulic Assembly, A43162A in Section 6, Hydraulics.

* Earlier units were equipped with two lift eye plugs, P0300-239 for plugging the threaded lifting eye holes. Later models require the use of lifting straps for lowering and lifting the rear section in and out of the shaft. Use properly rated lifting straps for the weight of the PCH.

REAR SECTION ASSEMBLY PCH 22.5, A42901A

PCH 22.5



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42901A	REAR SECTION ASSEMBLY, PCH 22.5
1	1	A42864A	WELDMENT, Rear Section 22.5
2	2	A01199P0	PORT, Access
3	28	P0040-008	WASHER, Hardened Flat 1/2
4	12	P0001-08-018	BOLT, 1/2 UNC x 4.5
5	12	P0003-08-000	NUT, 1/2
6*	2	P0088-156	ORING
7	1	P0097-026	GEAR BOX
8	1	P0304-172	MOTOR, Hydraulic
9	4	PM12A-1.25-040	BOLT, Metric
10	2	A42885P	WASHER, Alignment Pin
11	2	A42884P	PIN, Extension Alignment
12	2	A42879P	PIN, ALIGNMENT
13	1	A43188P	KEY
14	1	P0097-026A	KIT, Bolt Mount
15	1	P0097-026B	KIT, Universal Mount

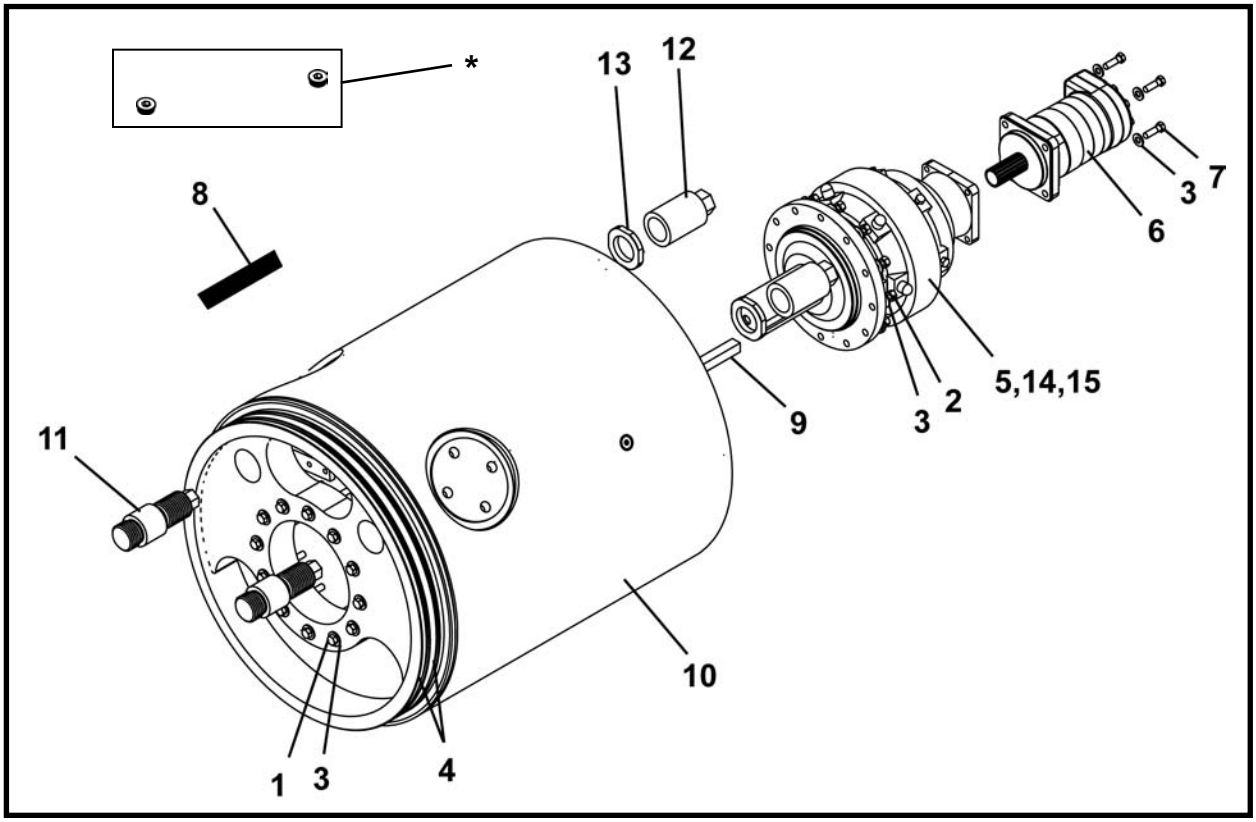
* Use P0088-148 ORING for PCH 22.5 FA42850F SN1.

NOTE:
The Water Filter Assembly, P0309-187 is located in the rear assembly. The water filter element part number is P0309-187A. For parts breakdown, refer to Hydraulic Assembly, A42902A in Section 6, Hydraulics.

** Earlier units were equipped with two lift eye plugs, P0300-239 for plugging the threaded lifting eye holes. Later models require the use of lifting straps for lowering and lifting the rear section in and out of the shaft. Use properly rated lifting straps for the weight of the PCH.

REAR SECTION ASSEMBLY PCH 28.5, A43623A

PCH 28.5



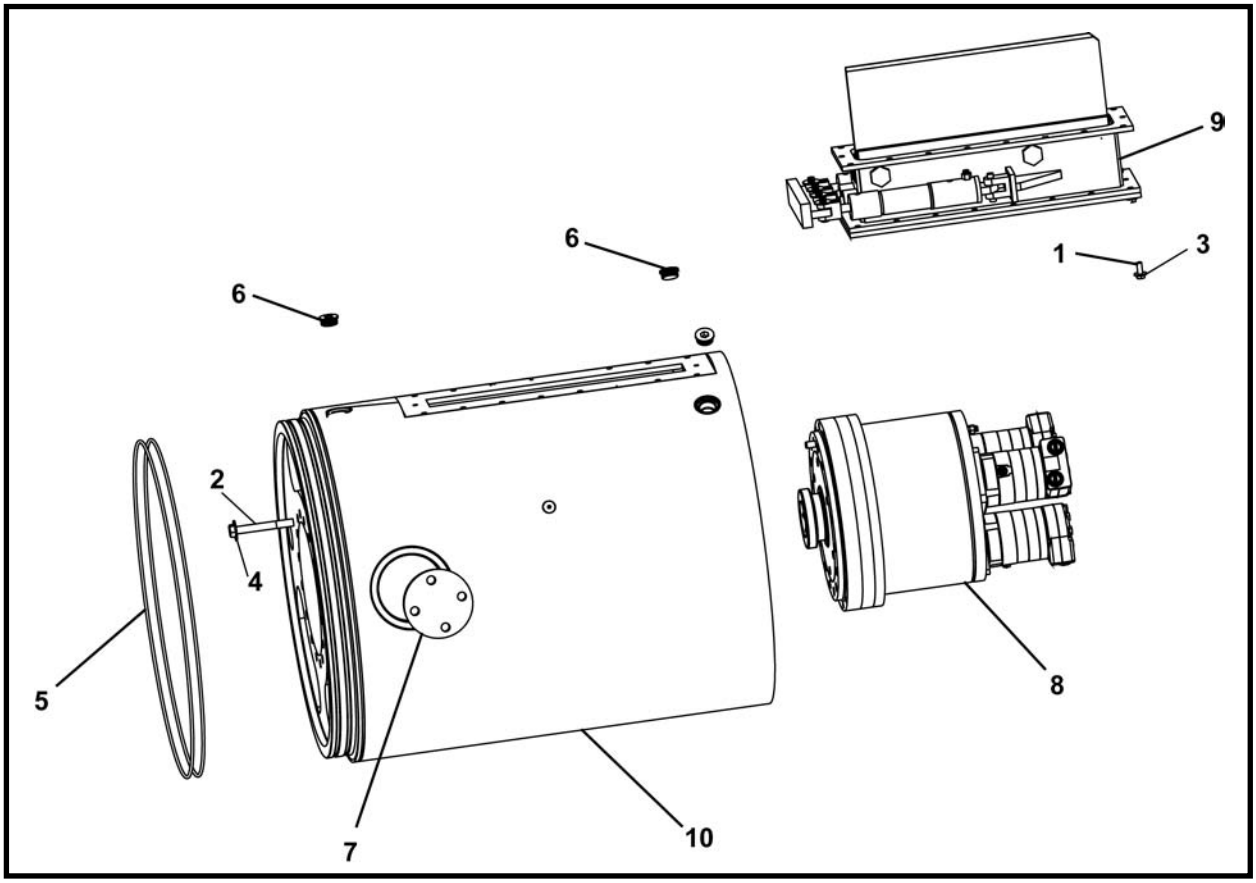
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43623A	REAR SECTION ASSEMBLY, PCH 28.5
1	12	P0001-08-018	BOLT, 1/2 UNC x 4.5
2	12	P0003-08-000	NUT, 1/2
3	28	P0040-008	WASHER, Hardened Flat 1/2
4	2	P0088-160	ORING
5	1	P0097-026	GEAR BOX
6	1	P0304-172	MOTOR, Hydraulic
7	4	PM12A-1.25-040	BOLT, Metric
8	2	A01199P0	PORT, Access
9	1	A43188P	KEY
10	1	A43604A	WELDMENT, Rear Section
11	2	A43608P	PIN, ALIGNMENT
12	2	A43638P	PIN, Extension Alignment
13	2	A43639P	WASHER, Alignment Pin
14	1	P0097-026A	KIT, Bolt Mount
15	1	P0097-026B	KIT, Universal Mount

NOTE:
The Water Filter Assembly, P0309-187 is located in the rear assembly. The water filter element part number is P0309-187A. For parts breakdown, refer to Hydraulic Assembly, A43654A in Section 6, Hydraulics.

* Earlier units were equipped with two lift eye plugs, P0300-239 for plugging the threaded lifting eye holes. Later models require the use of lifting straps for lowering and lifting the rear section in and out of the shaft. Use properly rated lifting straps for the weight of the PCH.

REAR SECTION ASSEMBLY PCH 36, A44065A

PCH 36

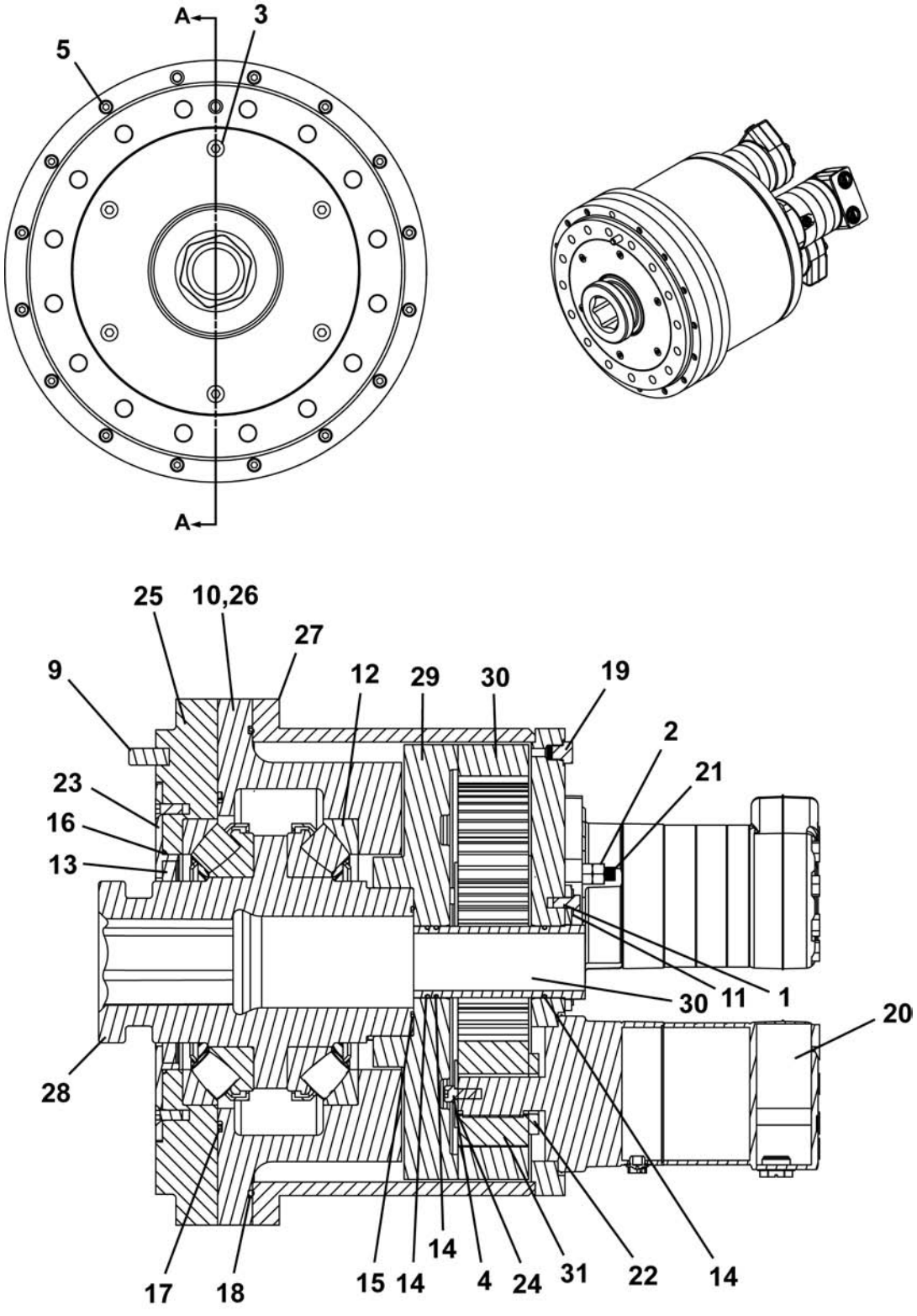


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44065A	ASSEMBLY, Rear Section PCH 36
1	18	P0001-08-005	BOLT, 1/2 UNC x 1.25
2	16	P0001-12-024	BOLT, 3/4 UNC x 6
3	18	P0040-008	WASHER, Hardened Flat 1/2
4	16	P0040-012	WASHER, Hardened Flat 3/4
5	2	P0088-169	ORING
6	3	P0300-239	FITTING, 20MB-HHP
7	2	A01199P0	PORT, Access
8	1	A44367A	ASSEMBLY, Auger Drive
9	1	A44145A	ASSEMBLY, Torque Wing
10	1	A44066A	WELDMENT, Rear Section 36 PCH

NOTE:
The Water Filter Assembly, P0309-187 is located in the rear assembly. The water filter element part number is P0309-187A. For parts breakdown, refer to Hydraulic Assembly, A44384A in Section 6, Hydraulics.

AUGER DRIVE ASSEMBLY, A44367A

PCH 36



SECTION A-A

AUGER DRIVE ASSEMBLY, A44367A

PCH 36

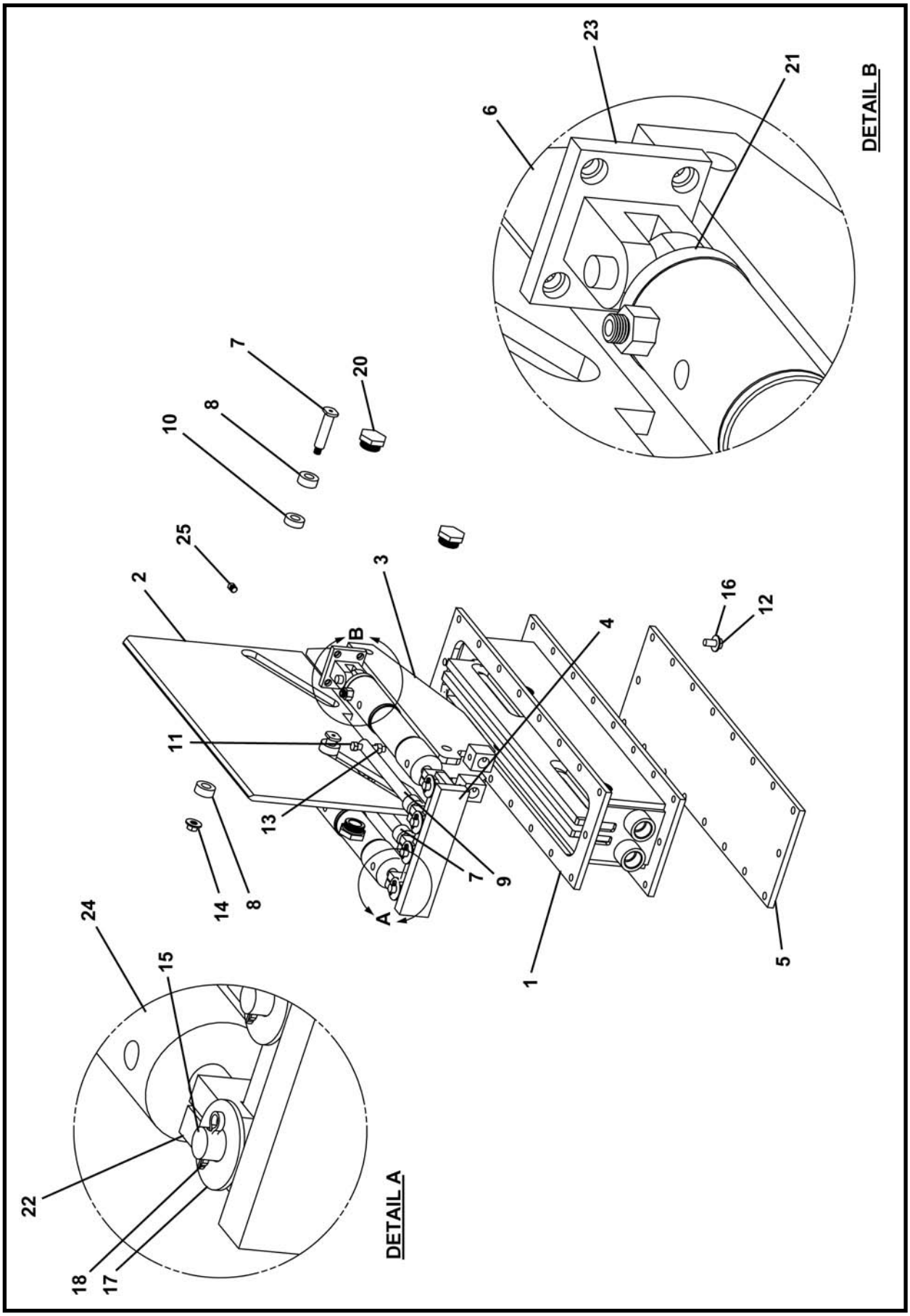
ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44367A	AUGER DRIVE ASSEMBLY
1	3	P0001-06-003	BOLT, 3/8 UNC x .75
2	3	P0003-08-000	NUT, 1/2
3	6	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
4	3	P0031-06-004	SCREW, Socket Head Cap 3/8 UNC x 1
5	16	P0031-06-012	SCREW, Socket Head Cap 3/8 UNC x 3
6	20	P0031-06-012	SCREW, Socket Head Cap 3/8 UNC x 3
7	6	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC x 1.5
8	2	P0037-025	PIN, Dowel
9	4	P0037-064	PIN, Dowel
10	1	P0037-076	PIN, Dowel
11	3	P0040-006	WASHER, Hardened Flat 3/8
12	2	P0065-213	BEARING, Thrust Block
13	1	P0065-216	SEAL
14	3	P0085-229	ORING
15	1	P0085-241	ORING
16	1	P0085-266	ORING
17	1	P0085-381	ORING
18	1	P0085-386	ORING
19	3	P0300-027	PLUG, 06MB
20	3	P0304-165	MOTOR, Hydraulic
21	12	A43190P	ROD, Threaded
22	3	A43191P	WASHER
23	1	A43261P	RETAINER, Seal
24	3	A43863P	WASHER, Pinion
25	1	A44368P	COVER, Front
26	1	A44369P	COVER, Rear
27	1	A44370A	WELDMENT, Bulkhead
28	1	A44371P	SHAFT, Auger Drive
29	1	A44372P	ADAPTER, Auger Drive
30	1	A44373P	RING, Gear
31	3	A44374P	PINION
32	1	A44375A	WELDMENT, Rear Seal
33*	8 QT	P0126-014	Lube, Mobilgear 630 Gear

* Not Shown

QT - Quart

TORQUE WING ASSEMBLY, A44145A

PCH 36



TORQUE WING ASSEMBLY, A44145A

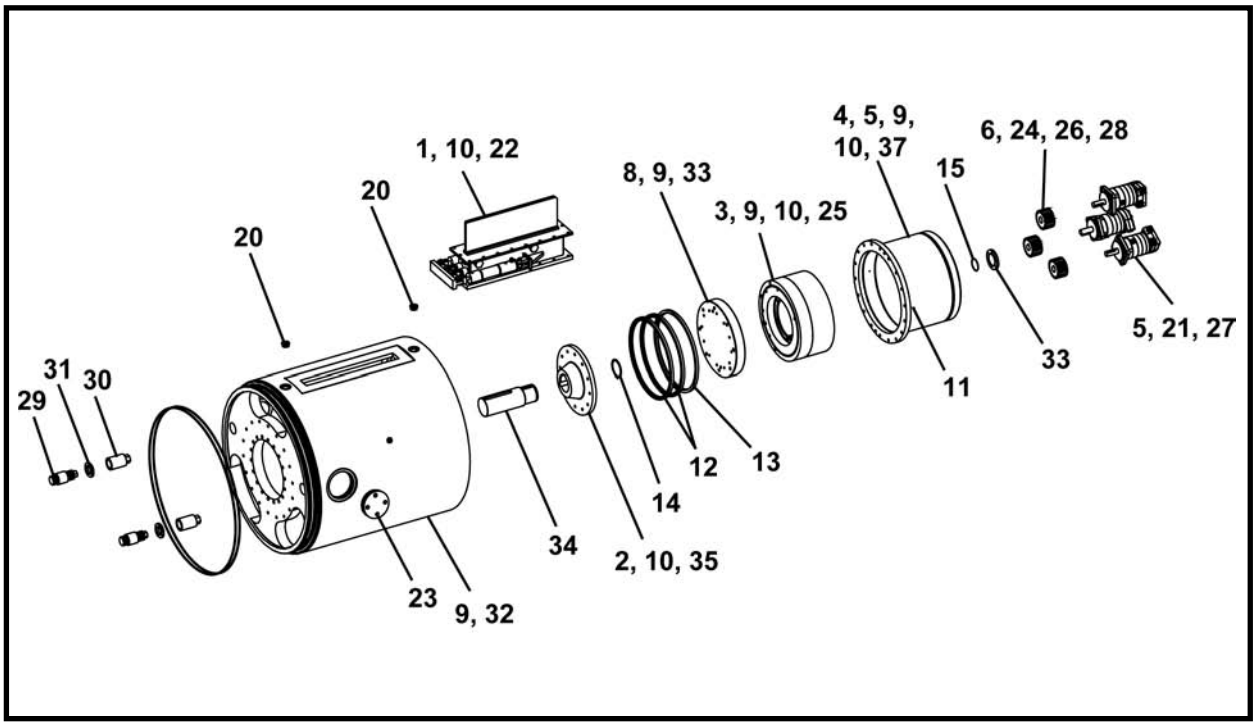
PCH 36

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44145A	TORQUE WING ASSEMBLY
1	1	A05306A0	FRAME, Torque Wing
2	1	A05307P1	BLADE, Standard Torque Wing
3	1	A05309A0	WELDMENT, Bar
4	1	A05310A0	WELDMENT, Thrust Bar
5	1	A05311P0	PLATE, Torque Wing Frame
6	2	A05312P0	BAR, Torque Wing
7	2	A05313P0	ROD, Torque Wing
8	2	A05314P0	ROD, Torque Wing
9	2	A05315P0	ROD, Torque Wing
10	2	007240P00	ROLLER
11	2	P0001-07-010	BOLT, 7/16 UNC x 2.5
12	36	P0001-08-004	BOLT, 1/2 UNC x 1
13	2	P0003-07-000	NUT, 7/16
14	36	P0003-08-000	NUT, 1/2
15	4	P0024-014	PIN
16	38	P0040-008	WASHER, Hardened Flat 1/2
17	4	P0040-010	WASHER, Hardened Flat 5/8
18	4	P0048-032	PIN, Cotter
19*	2	P0085-118	ORING
20	4	P0300-146	FITTING, 20MB-PLUG Hollow Back
21	0	P0307-136A	MOUNT, Cylinder Pivot
22	0	P0307-136B	KIT, Rod Clevis
23	0	P0307-136C	BRACKET, Clevis
24	2	P0307-204	CYLINDER
25	1	P0416-001	PLUG, Square Head 1/4

* Item 19, ORING is located between item 7 and item 9.

REAR SECTION ASSEMBLY PCH 44, A43655A

PCH 44



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43655A	ASSEMBLY, Rear Section PCH 44
1	18	P0001-08-004	BOLT, 1/2 UNC x 1
2	12	P0001-08-008	BOLT, 1/2 UNC x 2
3	6	P0001-08-014	BOLT, 1/2 UNC x 3.5
4	18	P0001-08-019	BOLT, 1/2 UNC x 4.75
5	24	P0003-08-000	NUT, 1/2
6	3	P0030-06-004	SCREW, Flat Head Cap 3/8 UNC x 1
7	6	P0031-04-004	SCREW, Socket Head Cap 1/4 UNC x 1
8	8	P0031-06-010	SCREW, Socket Head Cap 3/8 UNC x 2.5
9	9	P0037-064	PIN, Dowel
10	72	P0040-008	WASHER, Hardened Flat 1/2
11	2	P0063-004	FITTING, Grease Straight 1/8
12	2	P0065-195	SEAL, Dirt
13	1	P0065-196	SEAL, Oil
14	1	P0077-053	RING, Snap
15	1	P0085-151	ORING
16*	2	P0088-166	ORING
17*	20 QT	P0126-014	LUBE, Mobilgear 630 Gear
18*	2	P0300-145	FITTING, 12MB-PLUG
19*	2	P0300-185	FITTING, 04MB-PLUG
20	2	P0300-239	FITTING, 20MB-HHP
21	3	P0304-165	MOTOR, Hydraulic
21a	3	P0304-165A	SEAL, Shaft
22	1	A44145A	ASSEMBLY, Torque Wing
23	2	A01199P0	PORT, Access
24	3	A42880P	PINION
25	1	A42955A	ASSEMBLY, Drive Bearing
26	3	A43189P	WASHER, Pinion
27	12	A43190P	Rod
28	3	A43191P	WASHER
29	2	A43608P	PIN, Alignment

REAR SECTION ASSEMBLY PCH 44, A43655A

PCH 44

ITEM	QTY	PART NO.	DESCRIPTION
30	2	A43638P	PIN, Extension Alignment
31	2	A43639P	WASHER, Alignment Pin
32	1	A43656A	WELDMENT, Rear Section Can
33	1	A43667P	PLATE, Seal
34	1	A43669P	SHAFT
35	1	A43670P	HOUSING, Shaft
36*	2	A43671P	KEY
37	1	A43687A	BULKHEAD, Adapted Rear
38*	1	A43694P	KEY

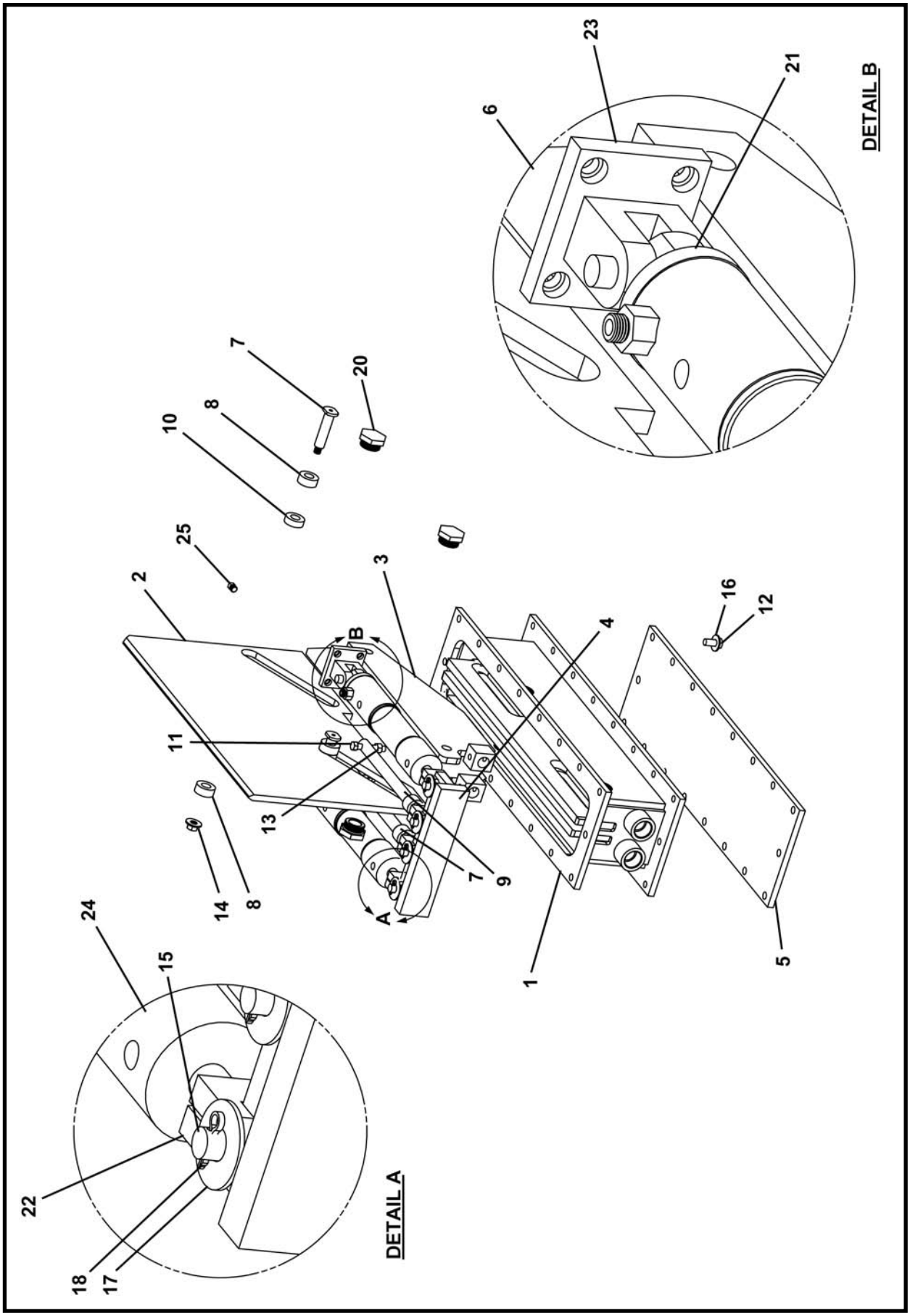
* Not Shown

QT - Quart

NOTE:
The Water Filter Assembly, P0309-187 is located in the rear assembly. The water filter element part number is P0309-187A. For parts breakdown, refer to Hydraulic Assembly, A43878A in Section 6, Hydraulics.

TORQUE WING ASSEMBLY, A44145A

PCH 44



TORQUE WING ASSEMBLY, A44145A

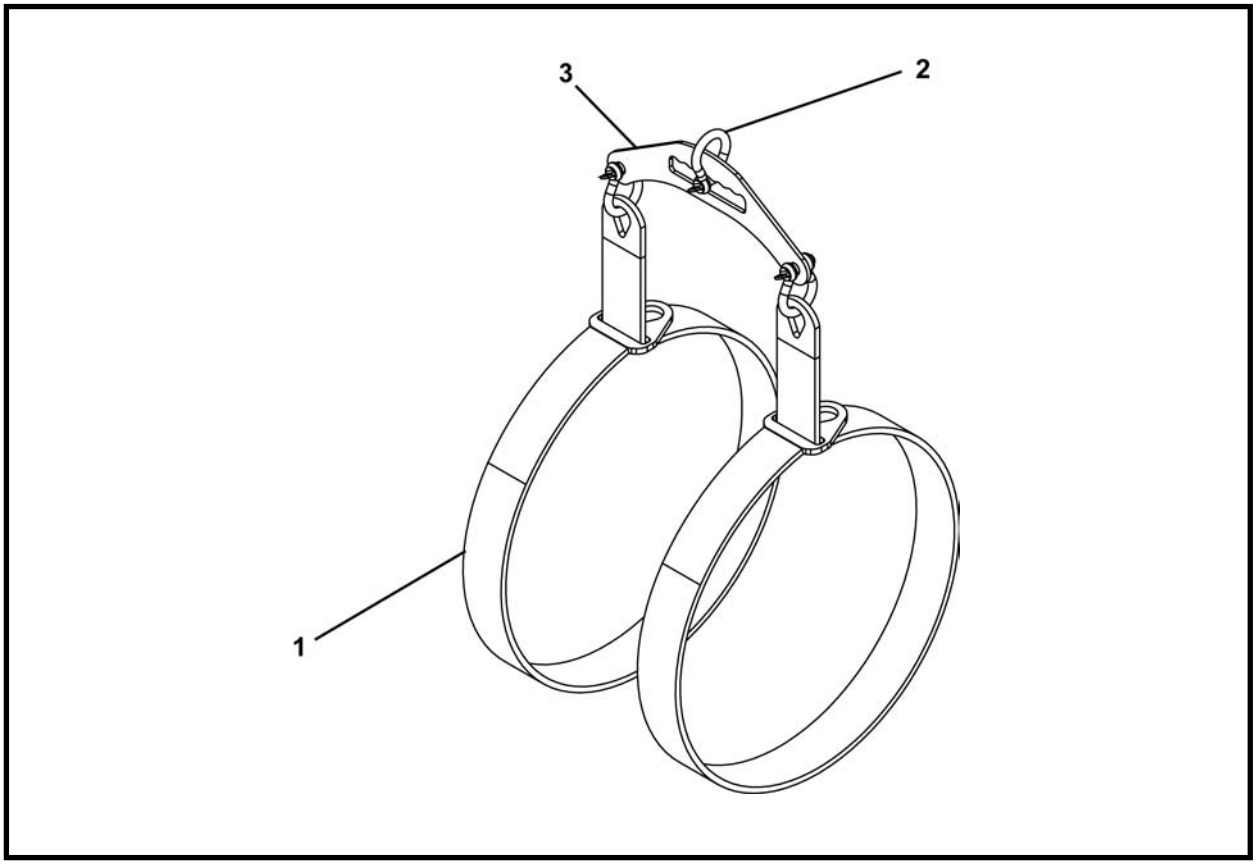
PCH 44

ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44145A	TORQUE WING ASSEMBLY
1	1	A05306A0	FRAME, Torque Wing
2	1	A05307P1	BLADE, Standard Torque Wing
3	1	A05309A0	WELDMENT, Bar
4	1	A05310A0	WELDMENT, Thrust Bar
5	1	A05311P0	PLATE, Torque Wing Frame
6	2	A05312P0	BAR, Torque Wing
7	2	A05313P0	ROD, Torque Wing
8	2	A05314P0	ROD, Torque Wing
9	2	A05315P0	ROD, Torque Wing
10	2	007240P00	ROLLER
11	2	P0001-07-010	BOLT, 7/16 UNC x 2.5
12	36	P0001-08-004	BOLT, 1/2 UNC x 1
13	2	P0003-07-000	NUT, 7/16
14	36	P0003-08-000	NUT, 1/2
15	4	P0024-014	PIN
16	38	P0040-008	WASHER, Hardened Flat 1/2
17	4	P0040-010	WASHER, Hardened Flat 5/8
18	4	P0048-032	PIN, Cotter
19*	2	P0085-118	ORING
20	4	P0300-146	FITTING, 20MB-PLUG Hollow Back
21	0	P0307-136A	MOUNT, Cylinder Pivot
22	0	P0307-136B	KIT, Rod Clevis
23	0	P0307-136C	BRACKET, Clevis
24	2	P0307-204	CYLINDER
25	1	P0416-001	PLUG, Square Head 1/4

* Item 19, ORING is located between item 7 and item 9.

PCH LIFTING STRAPS, A44241A

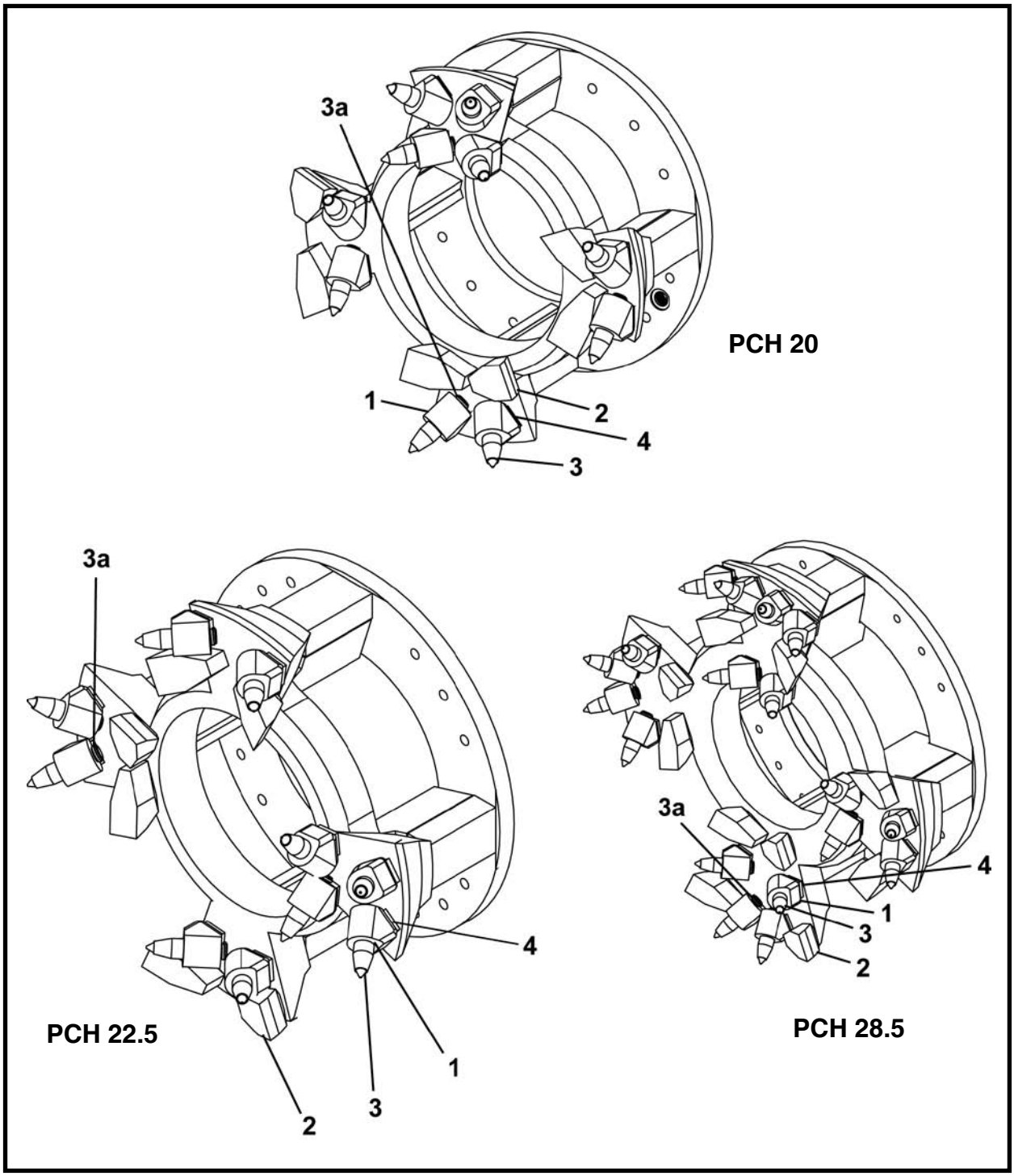
PCH 36 - PCH 44



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44241A	STRAPS, PCH Lifting
1	2	P0098-064	SLING, Mesh
2	3	P0091-006	PIN, Alloy Screw
3	1	A44157P	PLATE, Lifting

PCH CUTTER HEADS

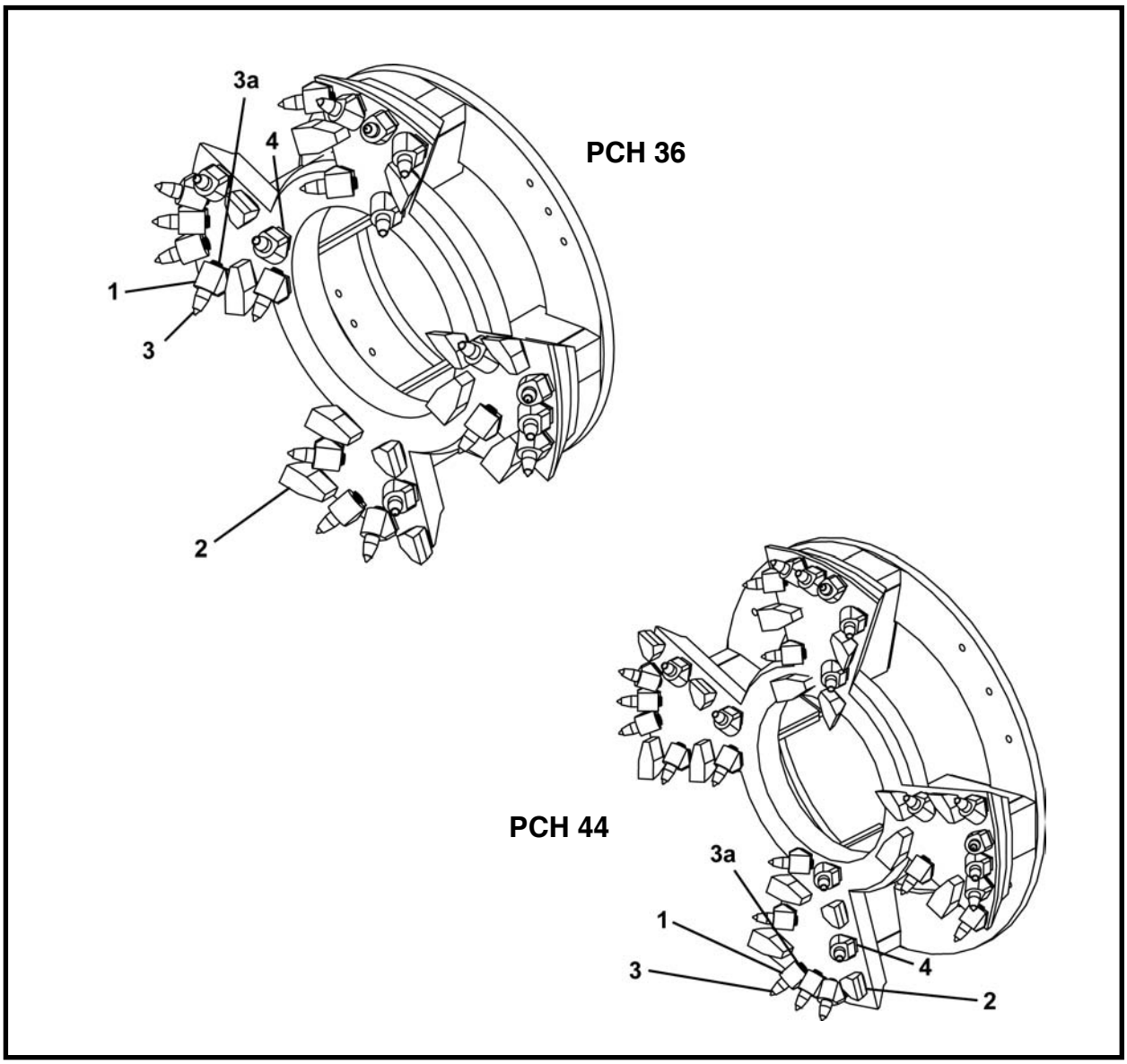
PCH 20 - PCH 22.5 - PCH 28.5



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	A43154A	ASSEMBLY, Cutter Head PCH 20
0.2	1	A42929A	ASSEMBLY, Cutter Head PCH 22.5
0.3	1	A43610A	ASSEMBLY, Cutter Head PCH 28.5
1	10/10/18	P0051-021	HOLDER, Bit
2	6/6/10	P0050-041A	TOOTH
3	10/10/18	P0050-045	CUTTER BIT (Includes item 3a)
3a	10/10/18	P0050-045A	LOCK RING
4	10/10/18	A43159P	PAD

PCH CUTTER HEADS

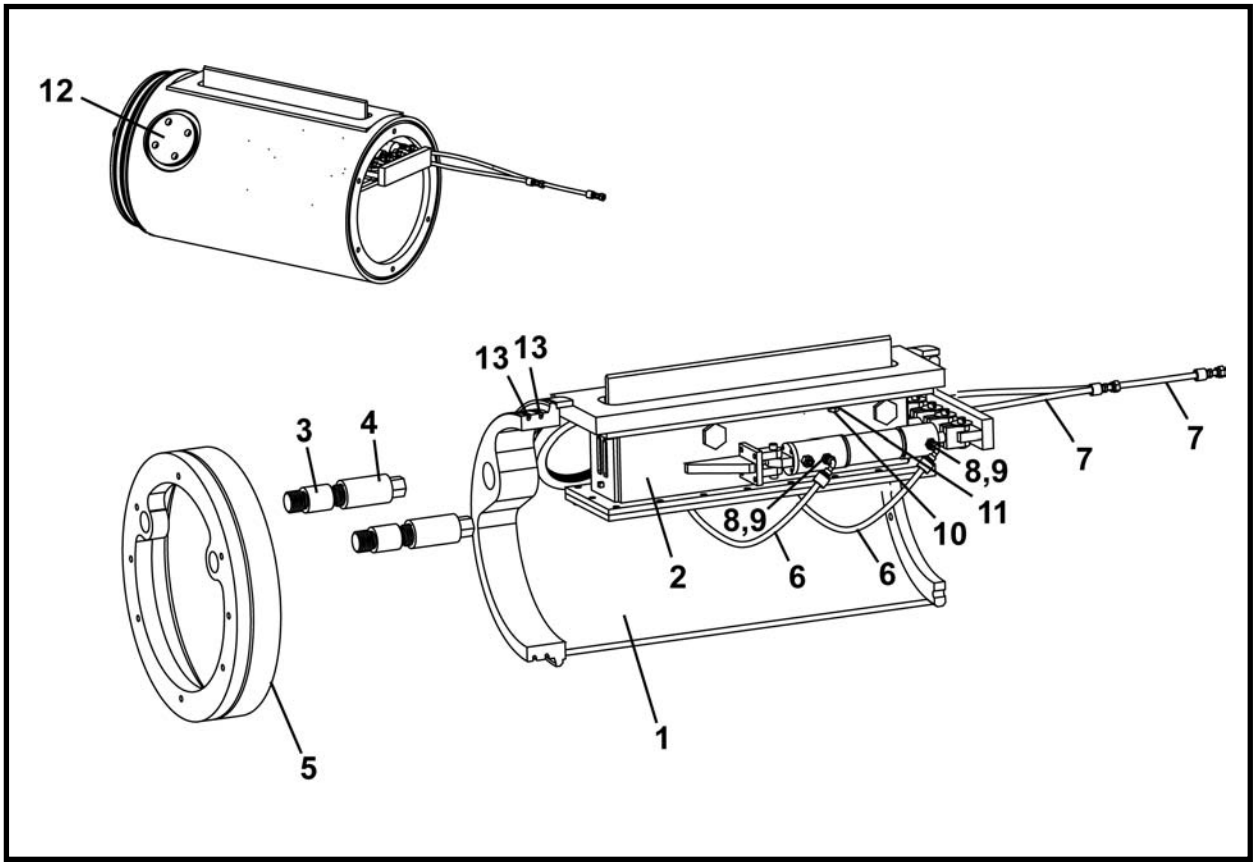
PCH 36 - PCH 44



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	A44343A	ASSEMBLY, Cutter Head PCH 36
0.2	1	A43857A	ASSEMBLY, Cutter Head PCH 44
1	22/28	P0051-021	HOLDER, Bit
2	12/16	P0050-041A	TOOTH
3	22/28	P0050-045	CUTTER BIT (Includes item 3a)
3a	22/28	P0050-045A	LOCK RING
4	22/28	A43159P	PAD

PCH DIRT WING CAN 22.5 OD, FA45824F

PCH 22.5

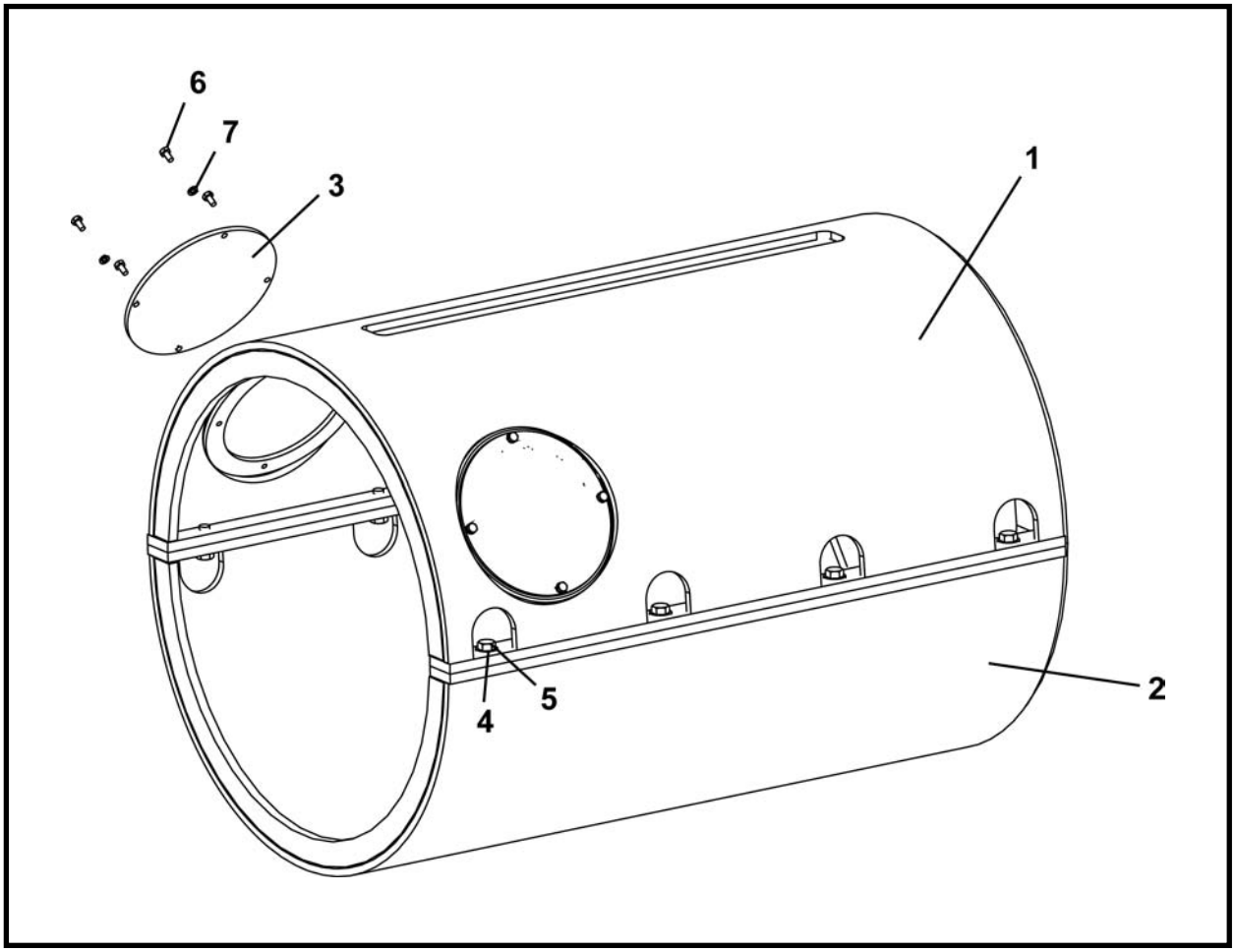


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45824F	PCH DIRT WING CAN 22.5 OD
1	1	A45833A	DIRT WING CAN
2	1	A44145A	TORQUE WING
3	2	A42879P	PIN, Alignment
4	2	A42884P	EXTENSION, Alignment Pin
5	1	A45853A	ADAPTER, Spigot
6	2	A10327A-027	HOSE ASSEMBLY 1/4 x 27
7	2	A10364A-093	HOSE ASSEMBLY 1/4 x 93
8	2	P0300-356	FITTING, 06MFOR-06MB
9	2	P0300-376	FITTING, 06MFOR-06MFOR-06MB
10	18	P0001-08-006	BOLT, 1/2 UNC x 1.5
11	18	P0040-008	WASHER, Hardened Flat 1/2
12	2	A01199P0	PORT, Access
13	2	P0088-156	ORING

NOTE: The dirt wing can is mounted after the PCH rear section.

PCH DIRT WING CAN SKIN 26 OD, A45825A

PCH 22.5 WITH DIRT WING INCREASE KIT TO 26 OD

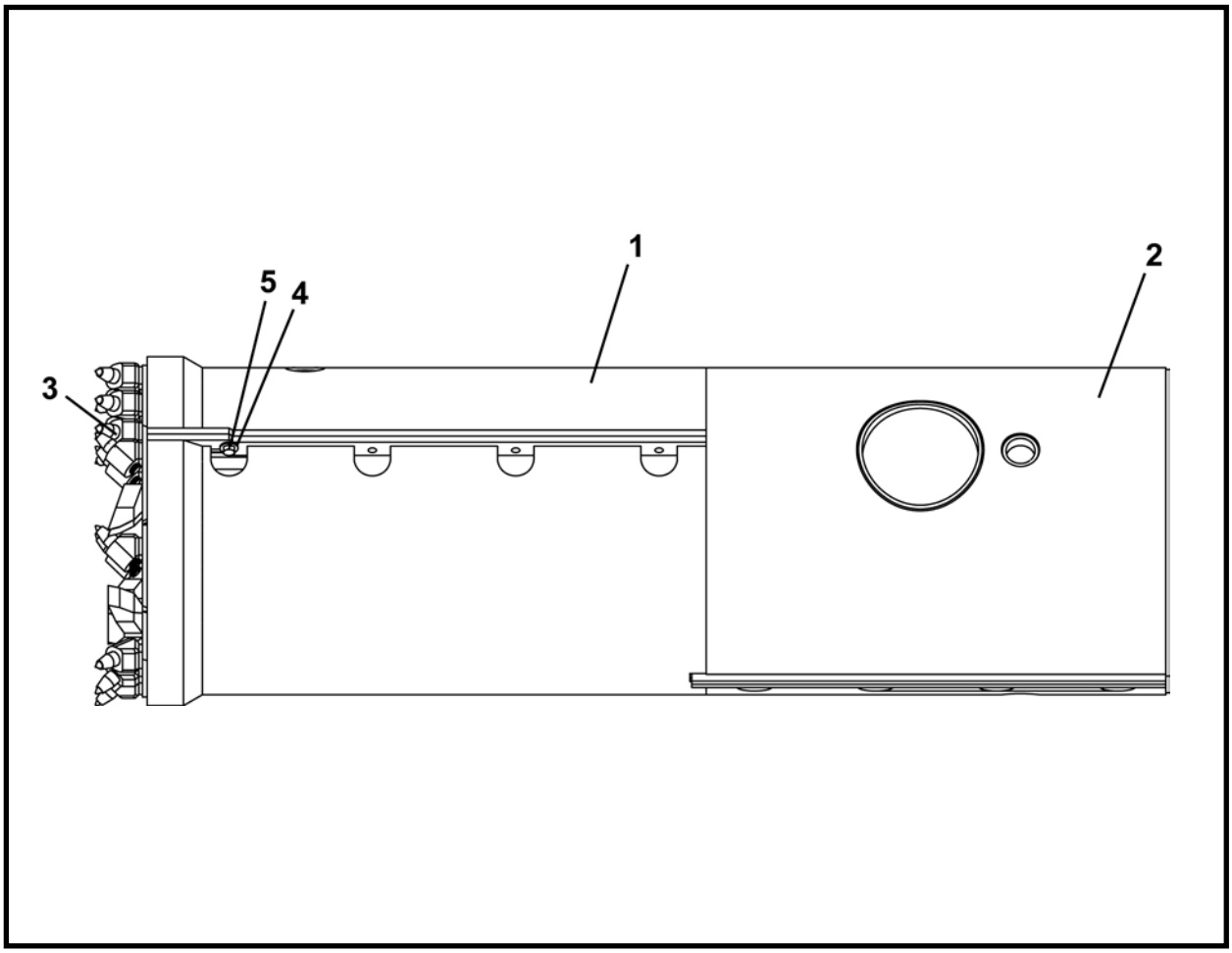


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45825A	SKIN, PCH Dirt Wing Can 26 OD
1	1	A45856A	SKIN, Dirt Wing Can, Top
2	1	A45857A	SKIN, Dirt Wing Can, Bottom
3	2	A43142P	COVER, Port
4	8	P0040-008	WASHER, Hardened Flat 1/2
5	8	P0001-08-005	BOLT, 1/2 UNC x 1.25
6	8	P0001-04-002	BOLT, 1/4 UNC x .5
7	8	P0045-004	WASHER, Lock 1/4

NOTE: Use PCH Dirt Wing Can 22.5 OD, FA45824F with this dirt wing can skin.

20 TO 22.5 PCH SKIN ASSEMBLY, FA43153F

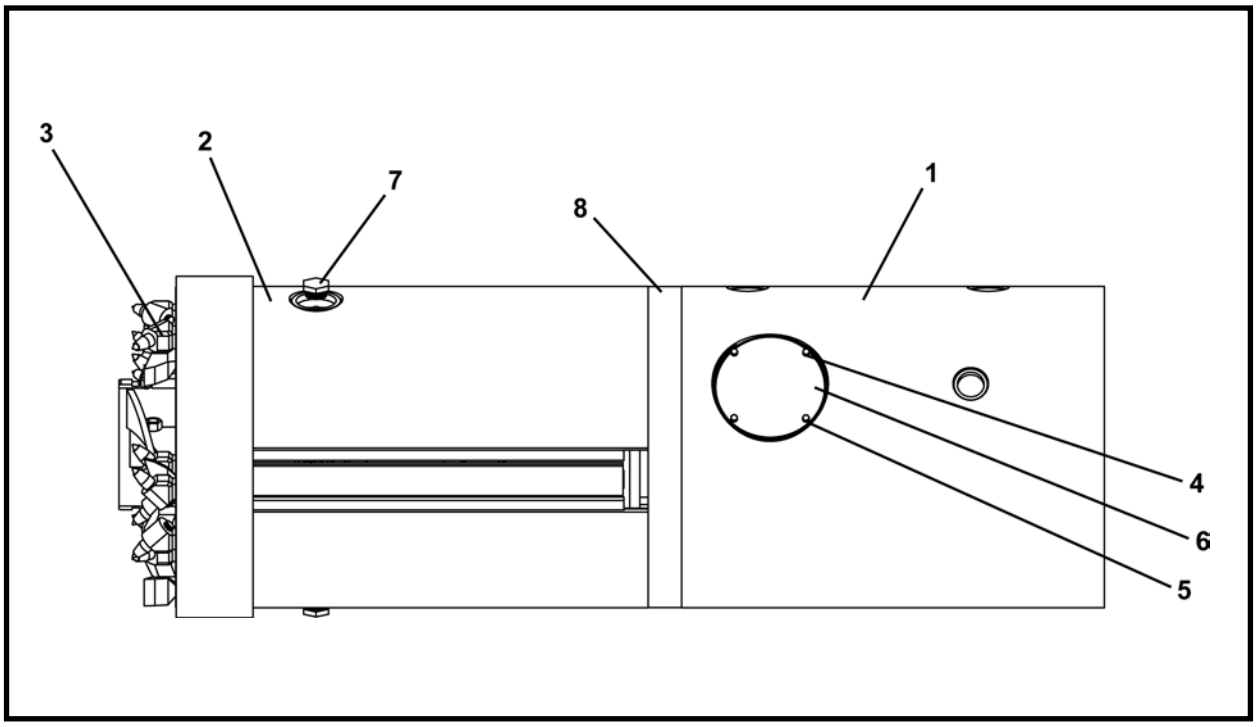
PCH 20 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43153F	ASSEMBLY, 20 To 22.5 PCH Skin
1	1	A44933A	WELDMENT, Front Bolted
2	1	A44934A	WELDMENT, Rear Bolted
3	1	A43177A	ASSEMBLY, Cutter Head
4	22	P0040-008	WASHER, Hardened Flat 1/2
5	16	P0001-08-005	BOLT, 1/2 UNC x 1.25

22.5 TO 24 PCH SKIN ASSEMBLY, FA43731F

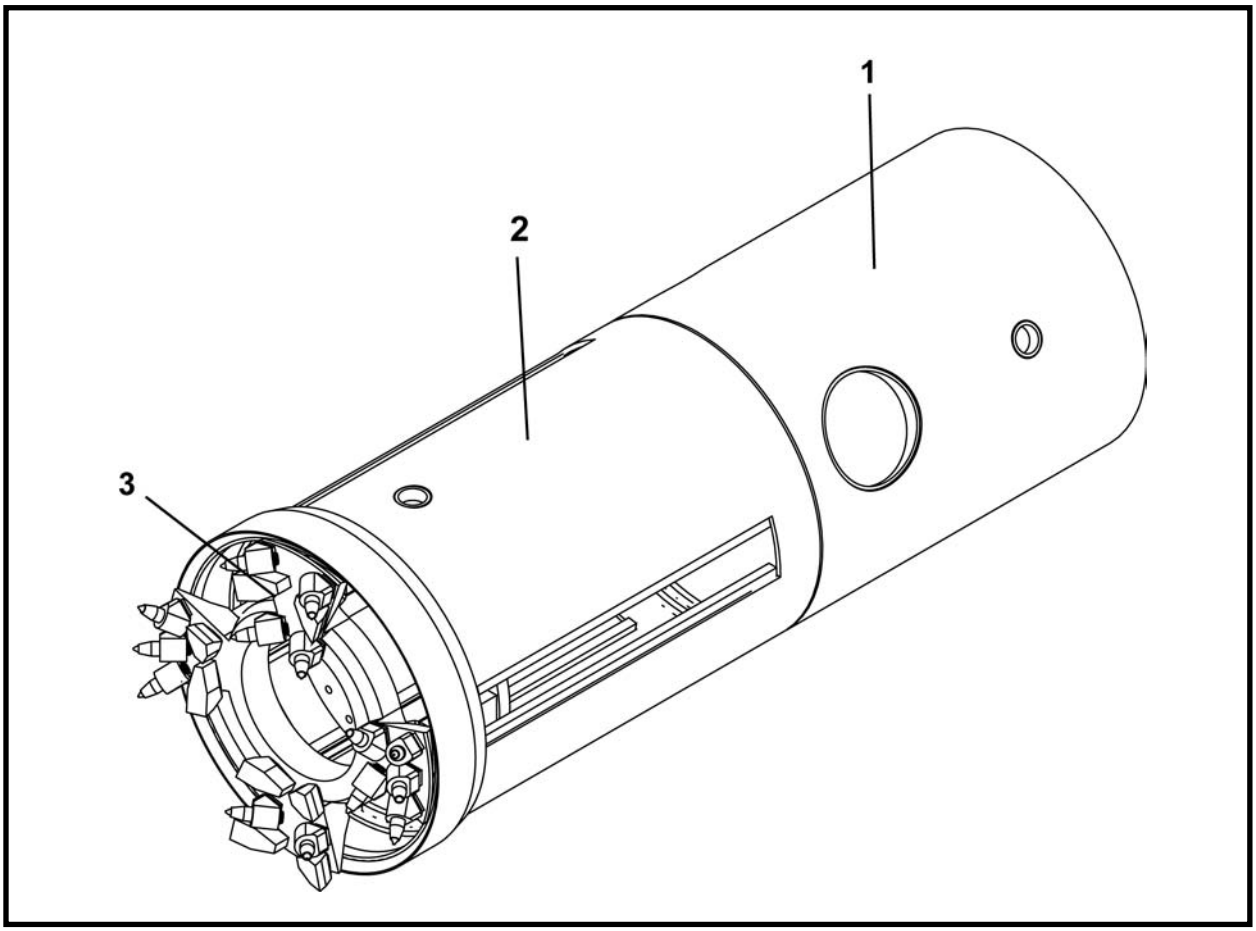
PCH 22.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43731F	ASSEMBLY, 22.5 To 24 PCH Skin
1	1	A43720A	WELDMENT, Rear
2	1	A43725A	WELDMENT, Front
3	1	A44563A	ASSEMBLY, Cutter Head
4	8	P0001-04-002	BOLT, 1/4 UNC x .5
5	8	P0045-004	WASHER, Lock 1/4
6	2	A43142P	COVER, Port
7	2	P0300-146	FITTING, 20MB-PLUG
8	1	A44610A	WELDMENT, Ring Cover

22.5 TO 24.5 PCH SKIN ASSEMBLY, FA46081F

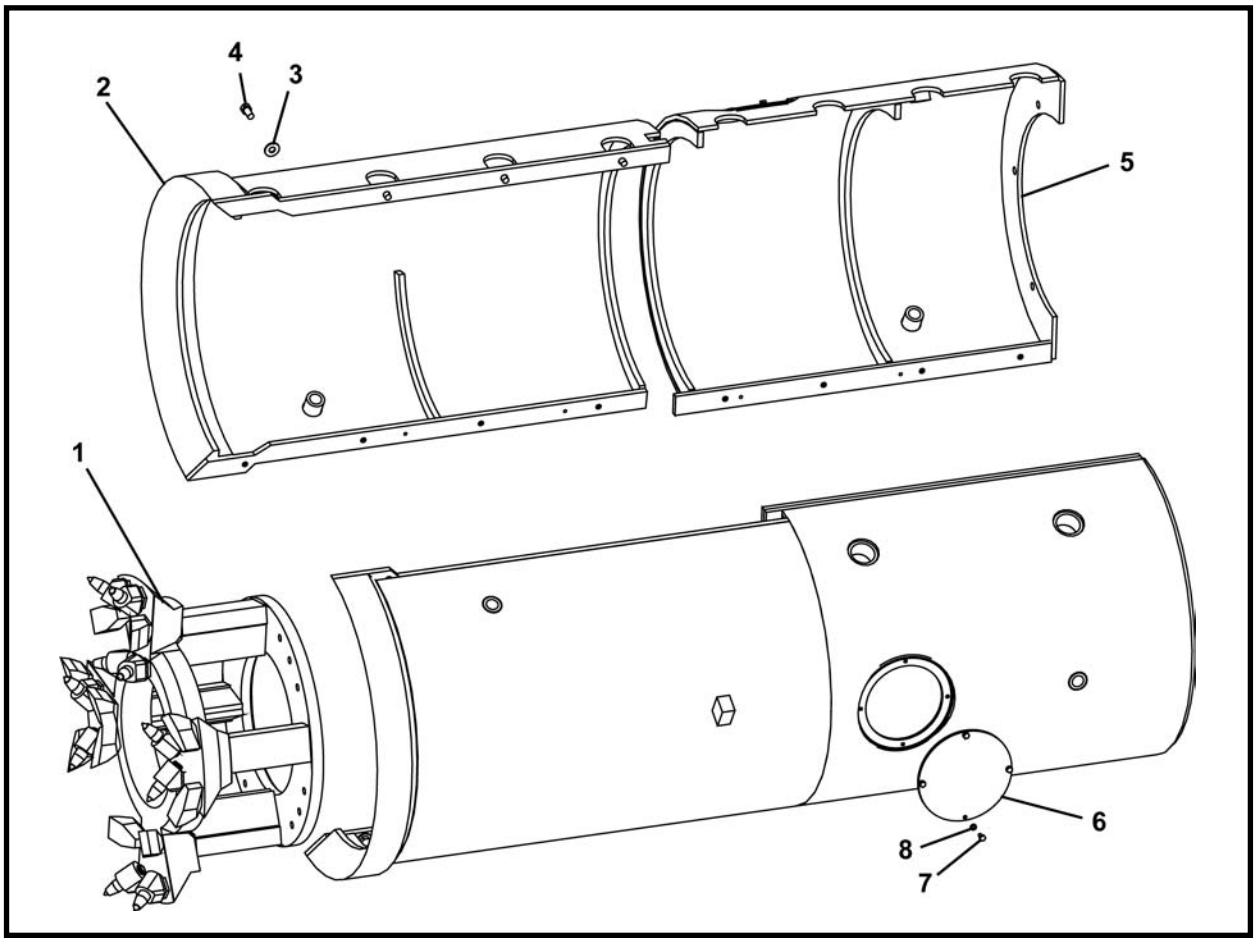
PCH 22.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA46081F	ASSEMBLY, 22.5 To 24.5 PCH Skin
1	1	A46098A	WELDMENT, Rear
2	1	A46099A	WELDMENT, Front
3	1	A46087A	ASSEMBLY, Cutter Head

22.5 TO 26 PCH SKIN ASSEMBLY, FA44888F

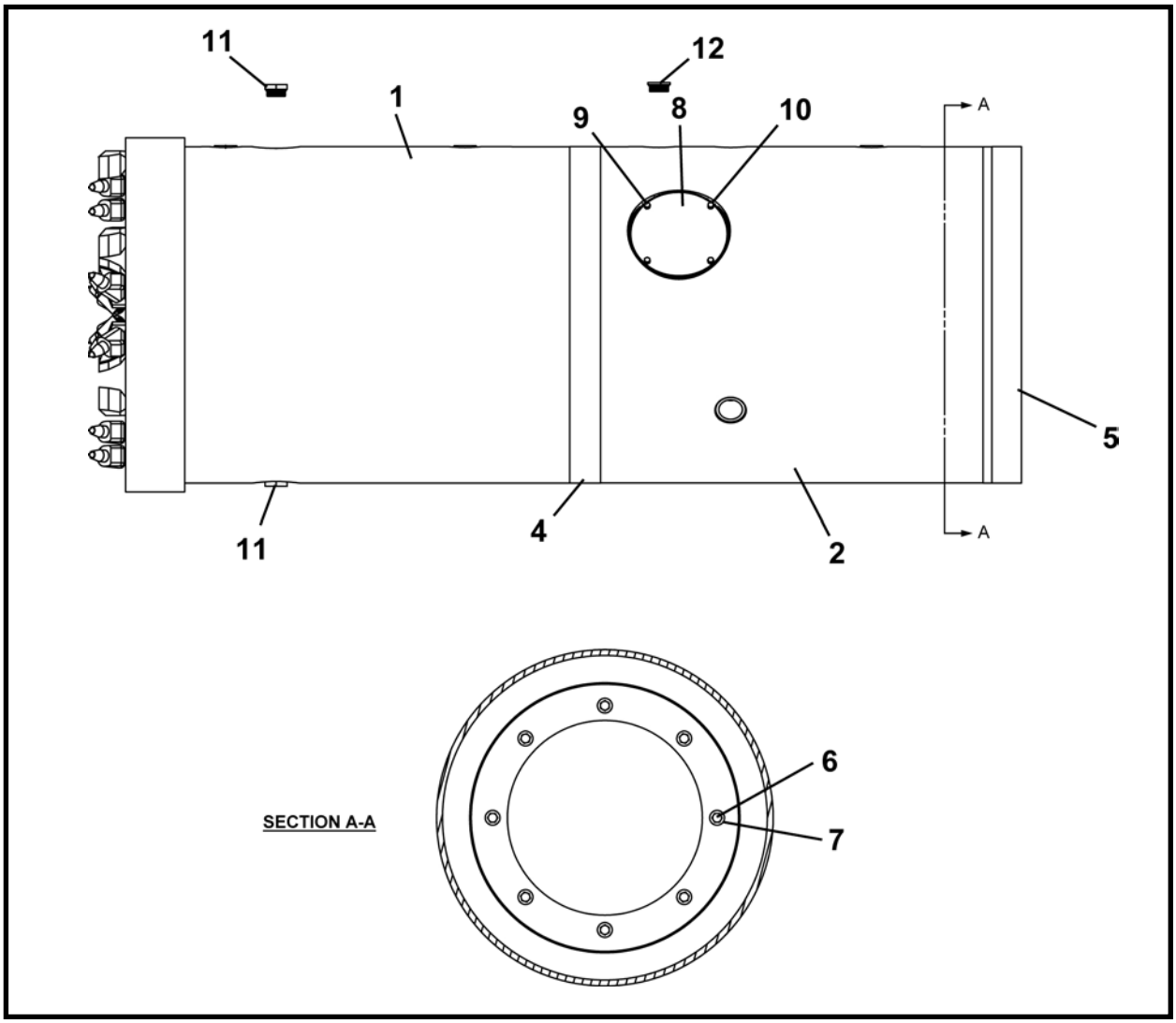
PCH 22.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44888F	ASSEMBLY, 22.5 To 26 PCH Skin
1	1	A44904A	ASSEMBLY, Cutter Head
2	1	A44906A	WELDMENT, Front
3	16	P0040-008	WASHER, Hardened Flat 1/2
4	16	P0001-08-004	BOLT, 1/2 UNC x 1
5	1	A44914A	WELDMENT, Rear
6	2	A43142P	COVER, Port
7	5	P0001-04-002	BOLT, 1/4 UNC x .5
8	5	P0045-004	WASHER, Lock 1/4

22.5 TO 28.5 PCH SKIN ASSEMBLY, FA43214F

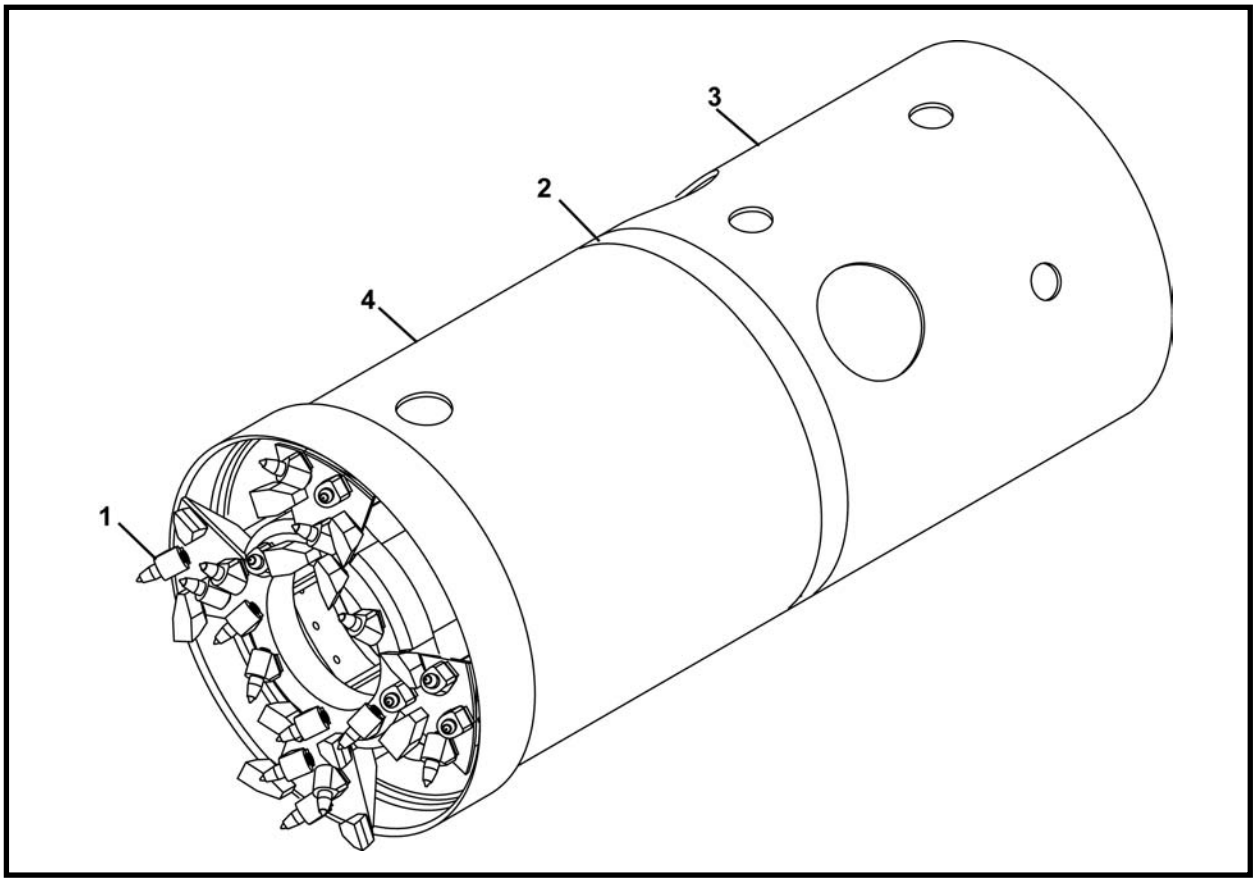
PCH 22.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43214F	ASSEMBLY, 22.5 To 28.5 PCH Skin
1	1	A43207A	WELDMENT, Front
2	1	A43204A	WELDMENT, Rear
3	1	A43210A	ASSEMBLY, Cutter Head
4	1	A43209A	WELDMENT, Ring Cover
5	1	A43222A	WELDMENT, Adapter
6	8	P0001-08-007	BOLT, 1/2 UNC x 1.75
7	8	P0040-008	WASHER, Hardened Flat 1/2
8	2	A43142P	COVER, Port
9	8	P0001-04-002	BOLT, 1/4 UNC x .5
10	8	P0045-004	WASHER, Lock 1/4
11	2	P0300-146	FITTING, 20MB-PLUG
12	4	P0300-239	FITTING, 20MB-HHP

28.5 TO 29.5 PCH SKIN ASSEMBLY, FA44290F

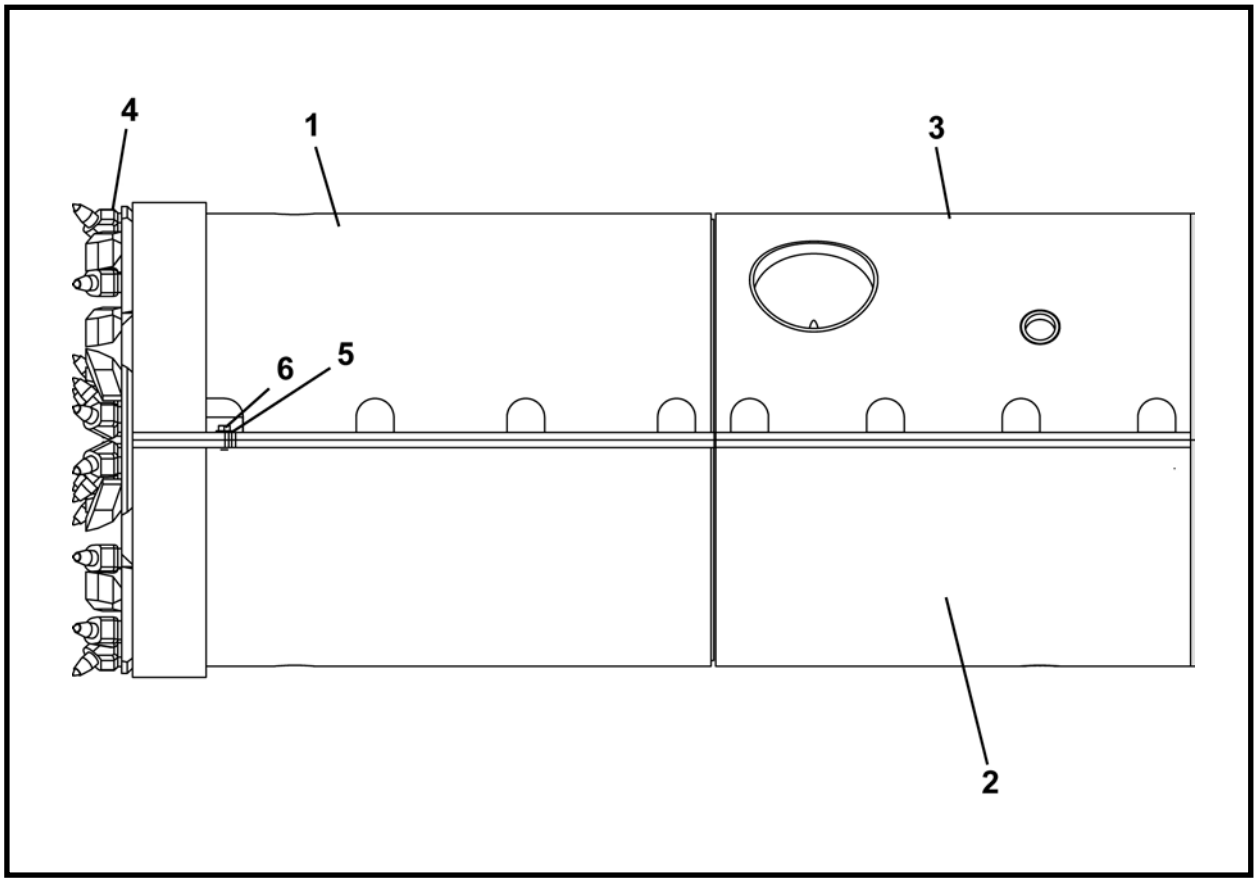
PCH 28.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44290F	ASSEMBLY, 28.5 To 29.5 PCH Skin
1	1	A44385A	ASSEMBLY, Cutter Head
2	1	A44292P	COVER, Ring
3	1	A44386P	CAN, Rear
4	1	A44291A	WELDMENT, Front

28.5 TO 30 PCH SKIN ASSEMBLY, FA46017F

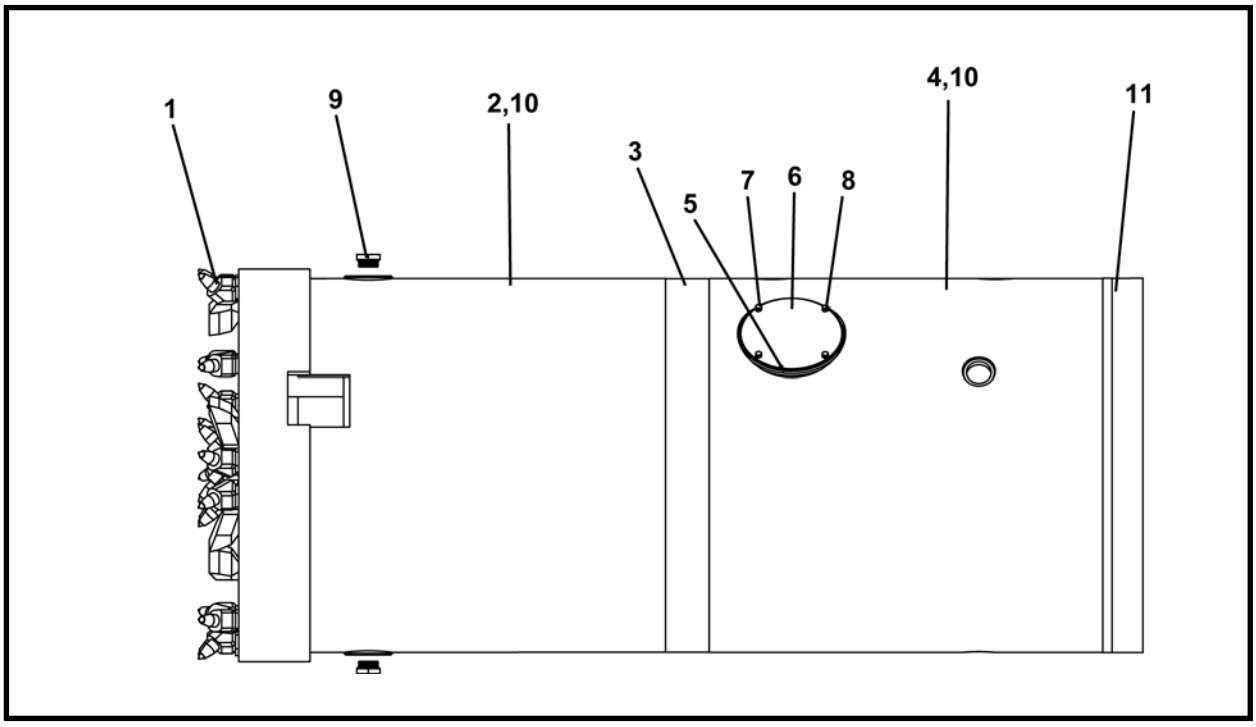
PCH 28.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA46017F	ASSEMBLY, 28.5 To 30 PCH Skin
1	2	A46009A	WELDMENT, Front
2	1	A46011A	WELDMENT, Bottom Rear
3	1	A46010A	WELDMENT, Top Rear
4	1	A46004A	ASSEMBLY, Cutter Head
5	16	P0040-008	WASHER, Hardened Flat 1/2
6	16	P0001-08-005	BOLT, 1/2 UNC x 1.25

28.5 TO 30.1 PCH SKIN ASSEMBLY, FA44576F

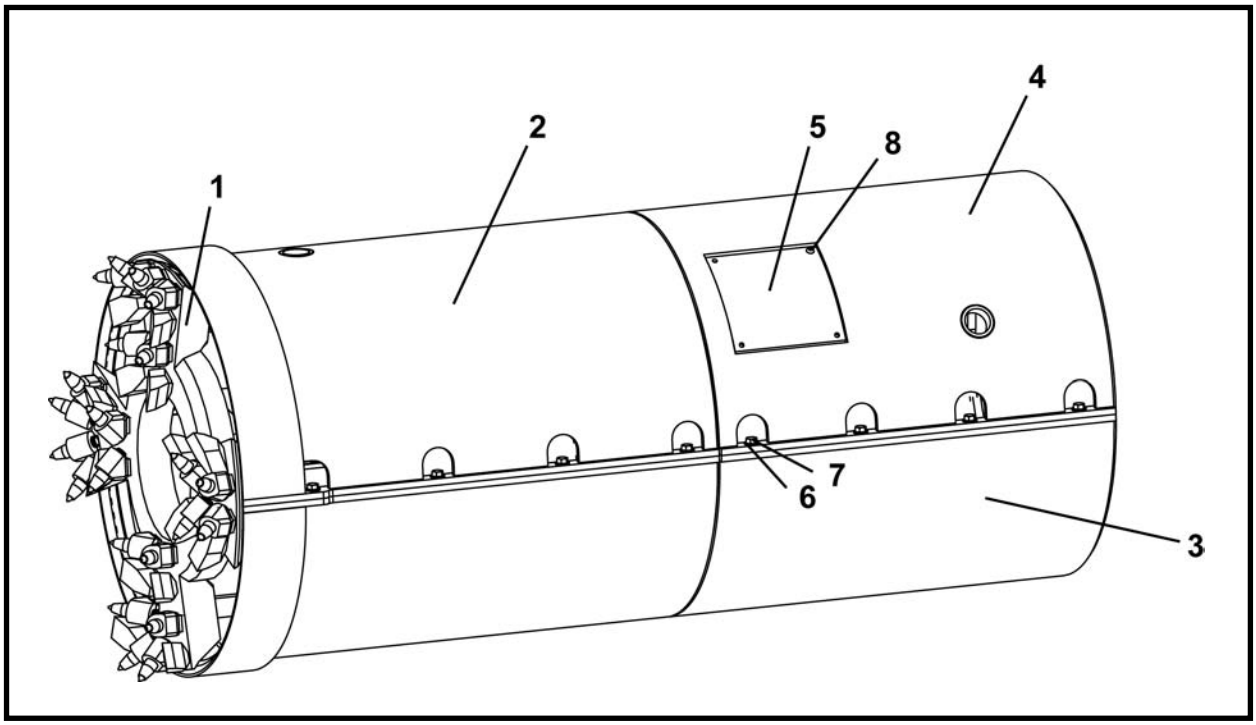
PCH 28.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44576F	ASSEMBLY, 28.5 To 30.1 PCH Skin
1	1	A44619A	ASSEMBLY, Cutter Head
2	1	A44621A	WELDMENT, Front
3	1	A44624A	WELDMENT, Ring Cover
4	1	A44620A	WELDMENT, Rear
5	2	A43141P	SKIN PORT
6	2	A43142P	COVER, Port
7	8	P0001-04-002	BOLT, 1/4 UNC x .5
8	8	P0045-004	WASHER, Lock 1/4
9	2	P0300-146	FITTING, 20MB-PLUG
10	6	A44622P	RIB INCREASER
11	1	A44631A	WELDMENT, Pipe Adapter

28.5 TO 30.5 PCH SKIN ASSEMBLY, FA43700F

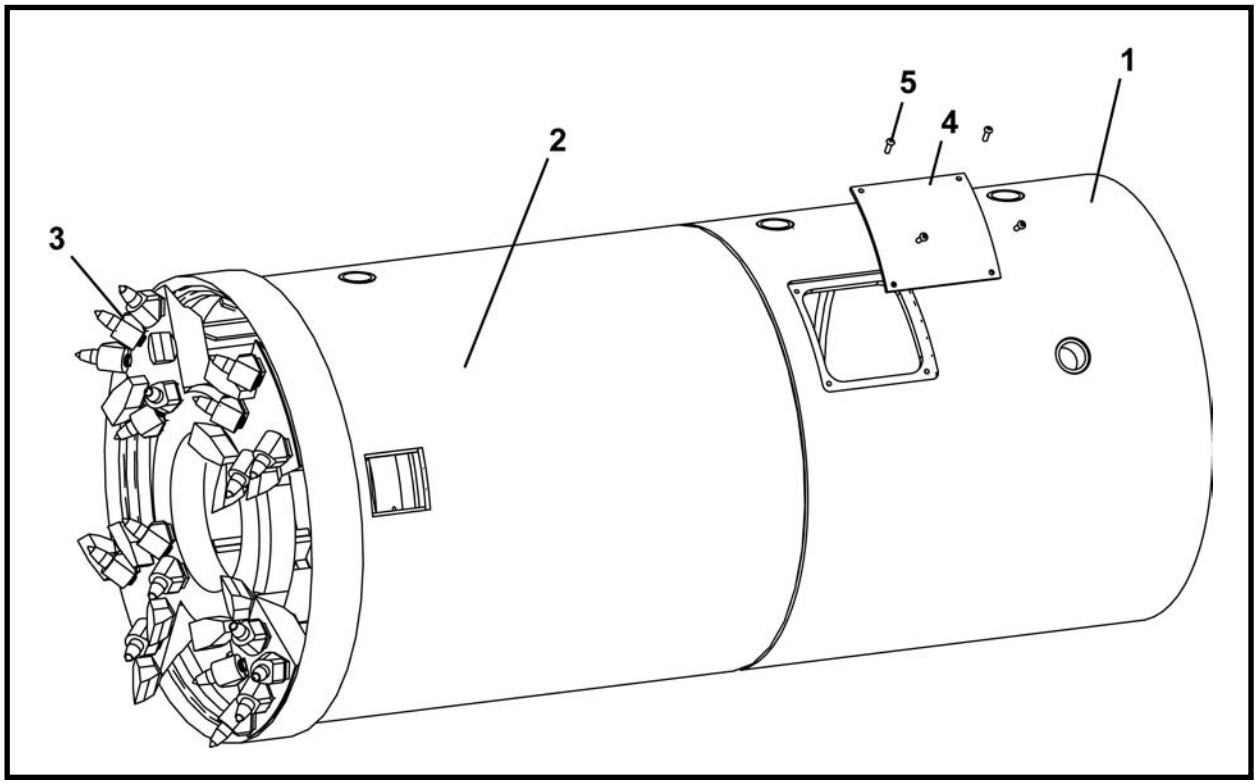
PCH 28.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43700F	ASSEMBLY, 28.5 To 30.5 PCH Skin
1	1	A43710A	ASSEMBLY, Cutter Head
2	2	A45926A	WELDMENT, Front Skin Half
3	1	A45930A	WELDMENT, Rear Skin Bottom
4	1	A45929A	WELDMENT, Rear Skin Top
5	0	A45368P	COVER
6	16	P0040-008	WASHER, Hardened Flat 1/2
7	16	P0001-08-005	BOLT, 1/2 UNC x 1.25
8	8	P0035-05-004	BOLT, Button Head 5/16 x 1

28.5 TO 31.5 PCH SKIN ASSEMBLY, FA45628F

PCH 28.5 INCREASE KIT

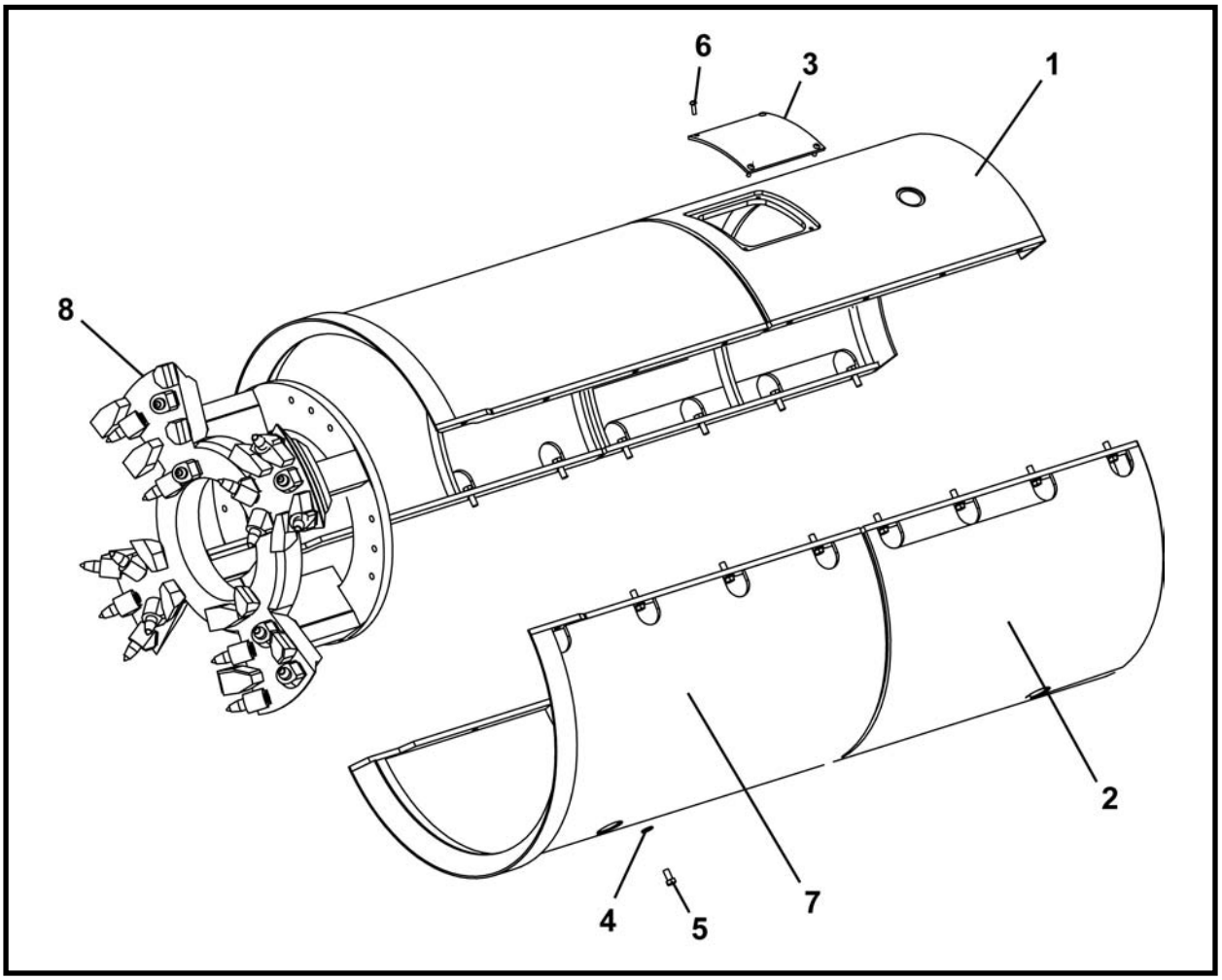


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45628F	ASSEMBLY, 28.5 To 31.5 PCH Skin
1	1	A45643A	SKIN, Rear
2	1	A45642A	SKIN, Front
3	1	A45644A	ASSEMBLY, Cutter Head
4	2	A45368P	COVER
5	8	P0035-05-004	BOLT, Button Head 5/16 x 1
6*	2	A45651A	CRADLE, Shipping

* Not Shown

28.5 TO 32 PCH SKIN ASSEMBLY, FA45323F

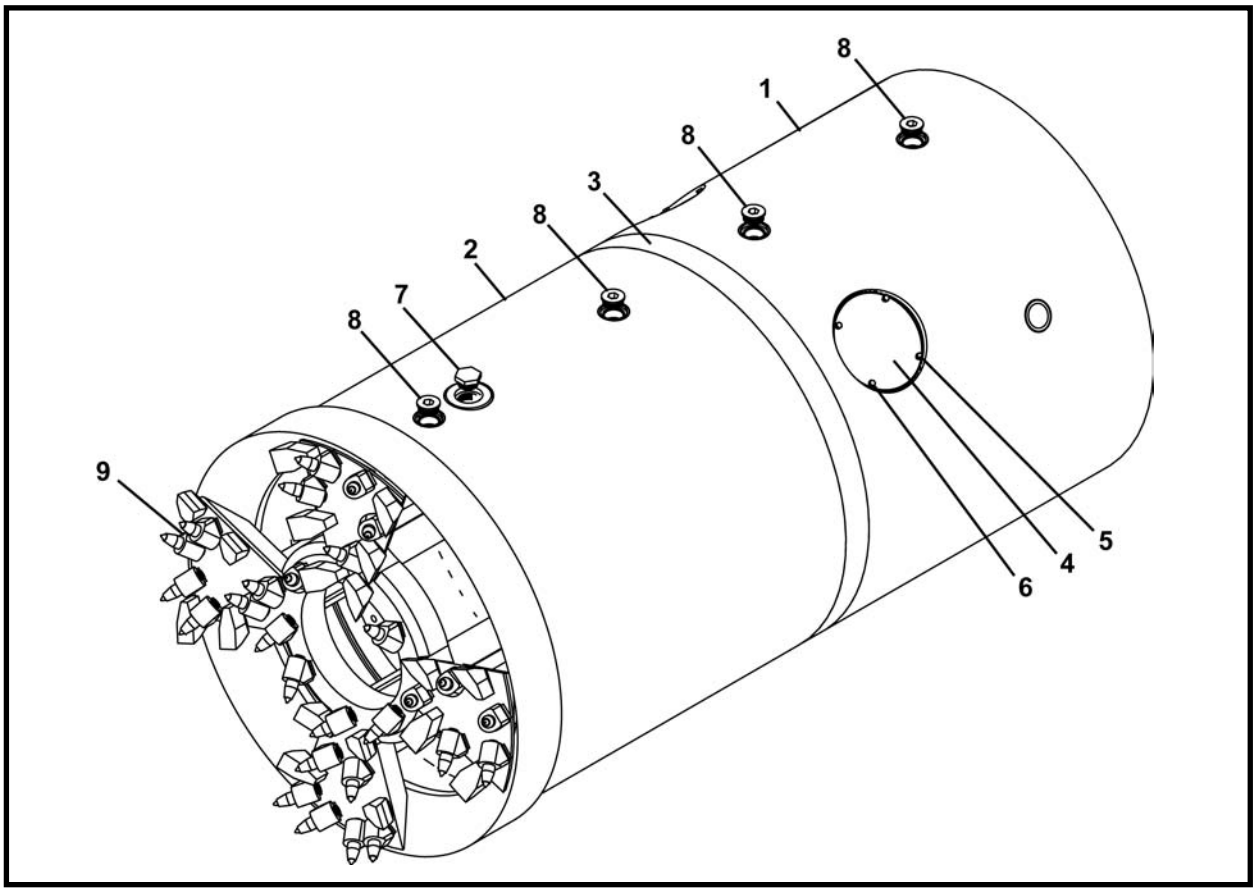
PCH 28.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45323F	ASSEMBLY, 28.5 To 32 PCH Skin
1	1	A45370A	WELDMENT, Rear Skin Top
2	1	A45371A	WELDMENT, Rear Skin Bottom
3	2	A45368P	COVER
4	16	P0040-008	WASHER, Hardened Flat 1/2
5	16	P0001-08-006	BOLT, 1/2 UNC x 1.5
6	8	P0035-05-004	BOLT, Button Head 5/16 x 1
7	2	A45369A	WELDMENT, Front Skin Half
8	1	A45362A	ASSEMBLY, Cutter Head

28.5 TO 36 PCH SKIN ASSEMBLY, FA44275F

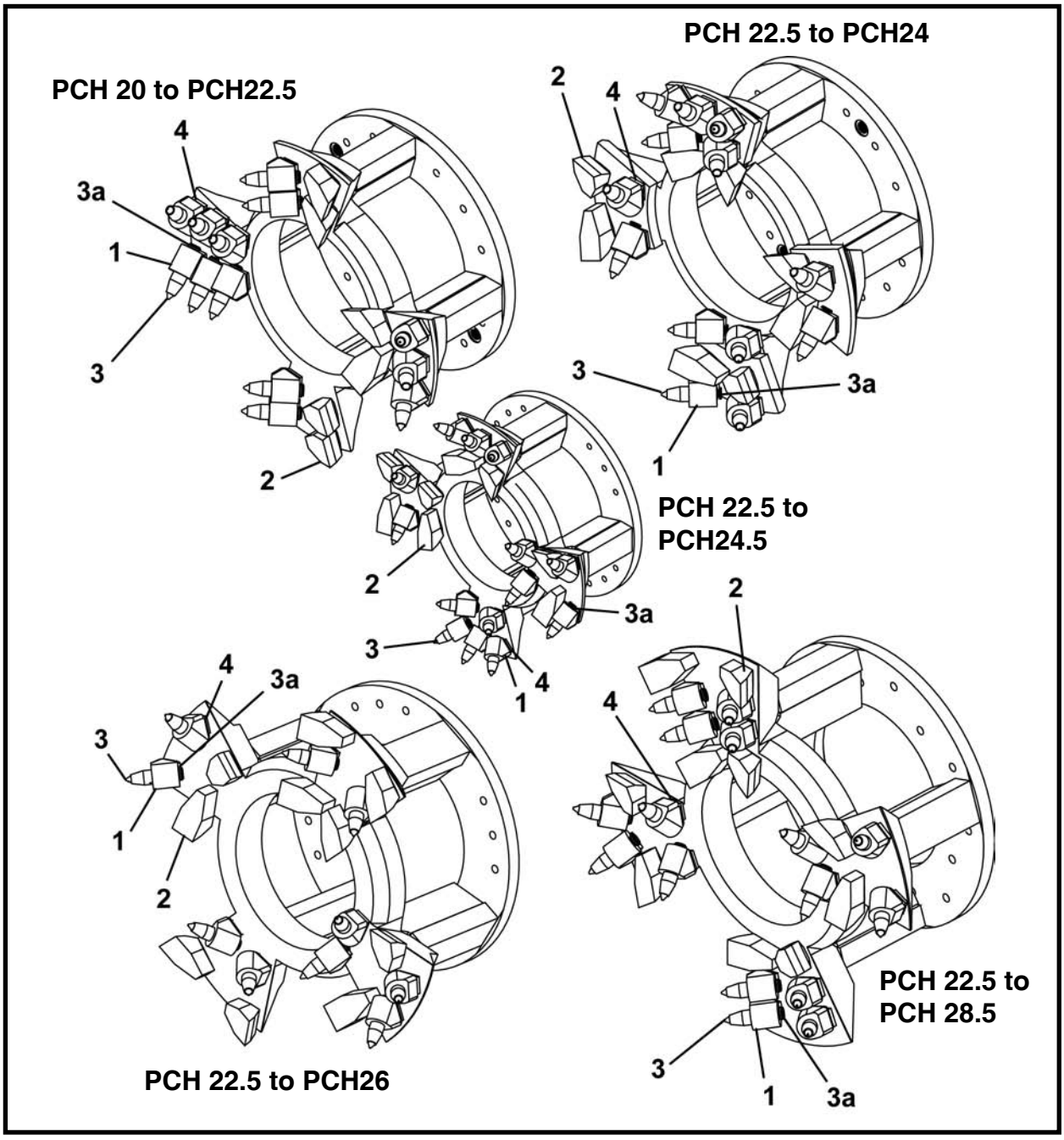
PCH 28.5 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44275F	ASSEMBLY, 28.5 To 36 PCH Skin
1	1	A44277A	WELDMENT, Rear
2	1	A44276A	WELDMENT, Front
3	1	A44279A	WELDMENT, Cover
4	2	A43142P	COVER, Port
5	8	P0001-04-002	BOLT, 1/4 UNC x .5
6	8	P0045-004	WASHER, Lock 1/4
7	2	P0300-146	FITTING, 20MB-PLUG
8	4	P0300-239	FITTING, 20MB-HHP
9	1	A44278A	ASSEMBLY, Cutter Head

PCH CUTTER HEADS

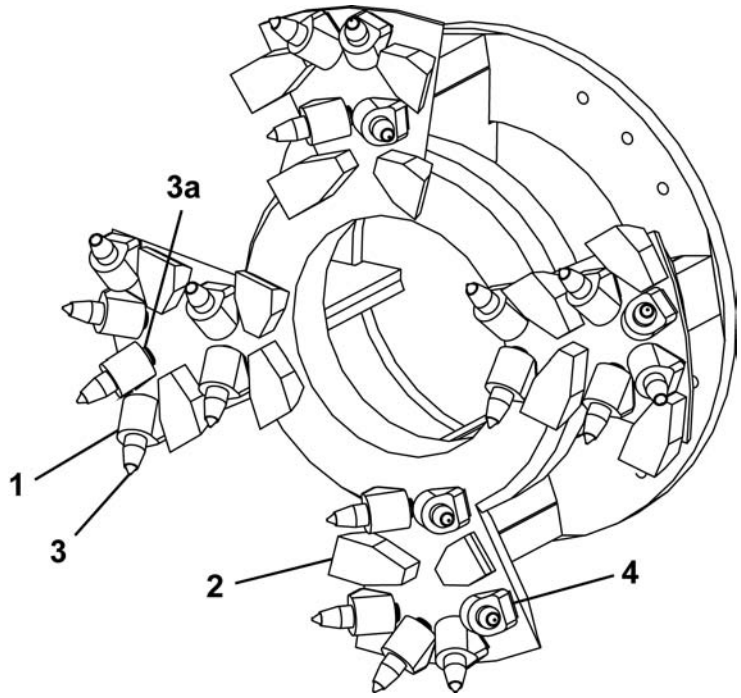
PCH 20 & PCH 22.5 INCREASE KITS



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	A43177A	ASSEMBLY, Cutter Head PCH 20 to PCH 22.5
0.2	1	A44563A	ASSEMBLY, Cutter Head PCH 22.5 to PCH 24
0.3	1	A46087A	ASSEMBLY, Cutter Head PCH 22.5 to PCH 24.5
0.4	1	A44904A	ASSEMBLY, Cutter Head PCH 22.5 to PCH 26
0.5	1	A43210A	ASSEMBLY, Cutter Head PCH 22.5 to PCH 28.5
1	13/13/14/10/16	P0051-021	HOLDER, Bit
2	6/8/8/10/10	P0050-041A	TOOTH
3	13/13/14/10/16	P0050-045	CUTTER BIT (Includes item 3a)
3a	13/13/14/1016	P0050-045A	LOCK RING
4	13/13/14/10/16	A43159P	PAD

PCH CUTTER HEADS

PCH 28.5 INCREASE KITS

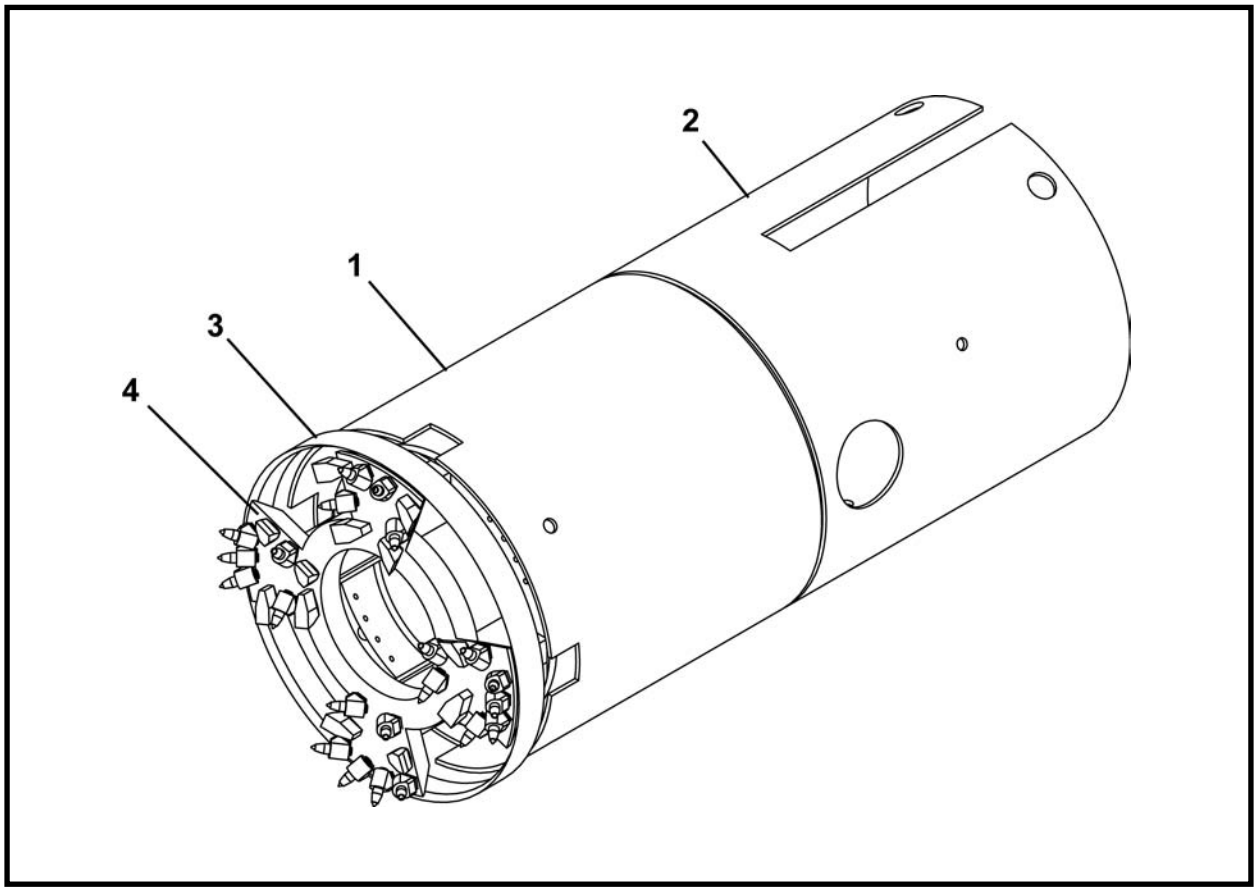


PCH 28.5 to PCH 30.5 Cutter Head Shown

ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	A44385A	ASSEMBLY, Cutter Head PCH 28.5 to PCH 29.5
0.2	1	A46004A	ASSEMBLY, Cutter Head PCH 28.5 to PCH 30
0.3	1	A44619A	ASSEMBLY, Cutter Head PCH 28.5 to PCH 30.1
0.4	1	A43710A	ASSEMBLY, Cutter Head PCH 28.5 to PCH 30.5
0.5	1	A45644A	ASSEMBLY, Cutter Head PCH 28.5 to PCH 31.5
0.6	1	A45362A	ASSEMBLY, Cutter Head PCH 28.5 to PCH 32
0.7	1	A44278A	ASSEMBLY, Cutter Head PCH 28.5 to PCH 36
1	19/22/18/22/15/16/28	P0051-021	HOLDER, Bit
2	12/14/10/14/14/14/18	P0050-041A	TOOTH
3	19/22/18/22/15/16/28	P0050-045	CUTTER BIT (Includes item 3a)
3a	19/22/18/22/15/16/28	P0050-045A	LOCK RING
4	19/22/18/22/15/16/28	A43159P	PAD

36 TO 37 PCH SKIN ASSEMBLY, FA45986F

PCH 36 INCREASE KIT

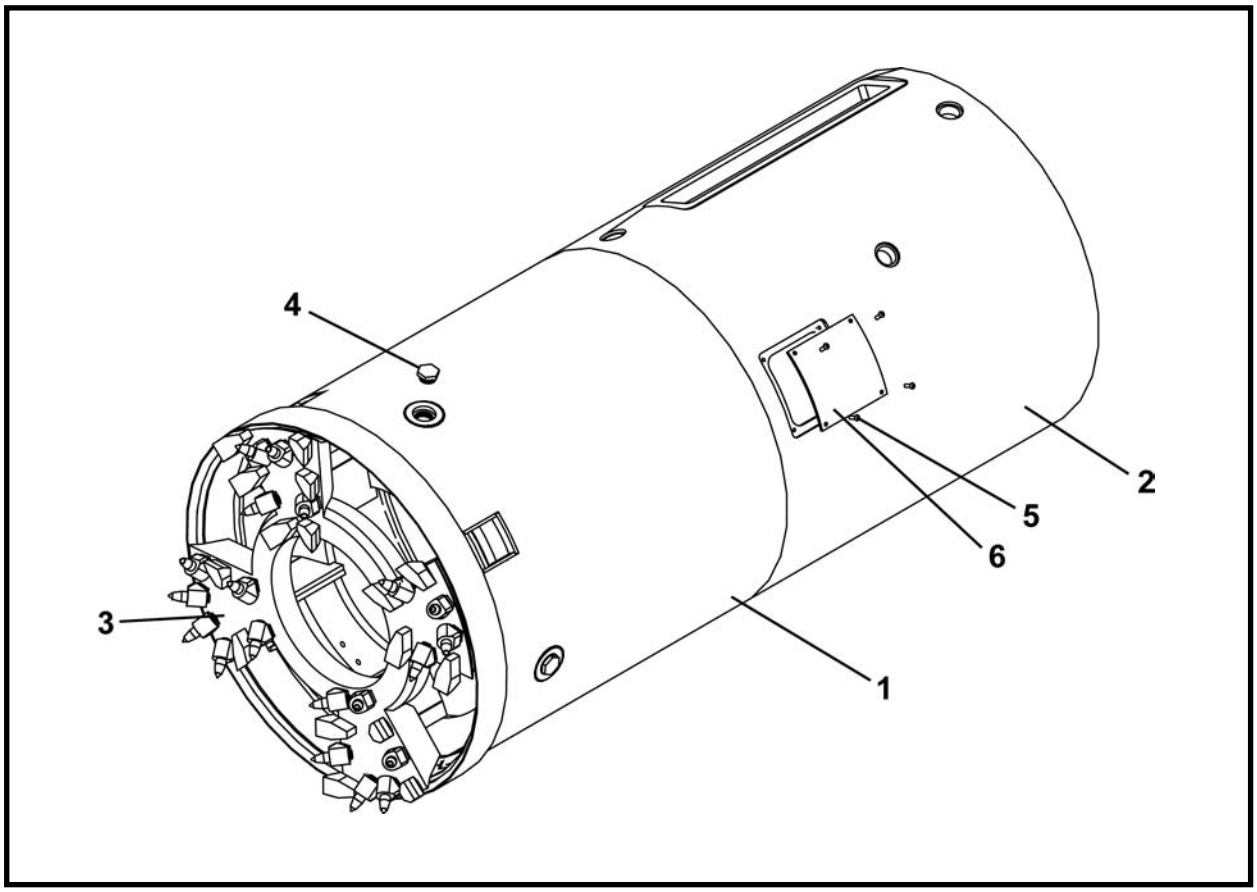


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45986F	ASSEMBLY, 36 To 37 PCH Skin
1	1	A45987P	CAN, Front Skin
2	1	A45988P	CAN, Rear Skin
3	1	A45989P	BAND
4	1	A45999A	ASSEMBLY, Cutter Head

NOTE: Split front and rear cans as needed to weld to PCH 36. Align cutouts over features on PCH 36.

36 TO 38.5 PCH SKIN ASSEMBLY, FA45510F

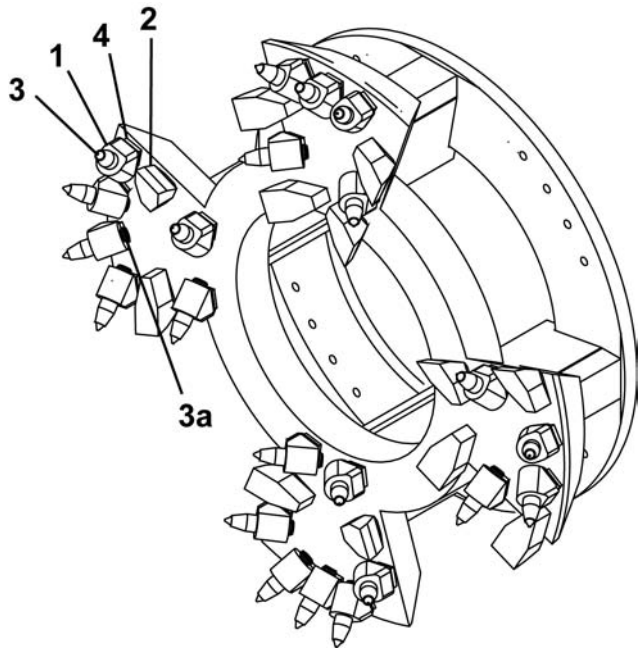
PCH 36 INCREASE KIT



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45510F	ASSEMBLY, 36 To 38.5 PCH Skin
1	1	A45518A	SKIN, Front
2	1	A45519A	SKIN, Rear
3	1	A45511A	ASSEMBLY, Cutter Head
4	4	P0300-146	PLUG, 20MB-Plug
5	8	P0035-05-004	BOLT, Button Head 5/16 x 1
6	2	A45368P	COVER

PCH CUTTER HEADS

PCH 36 INCREASE KIT

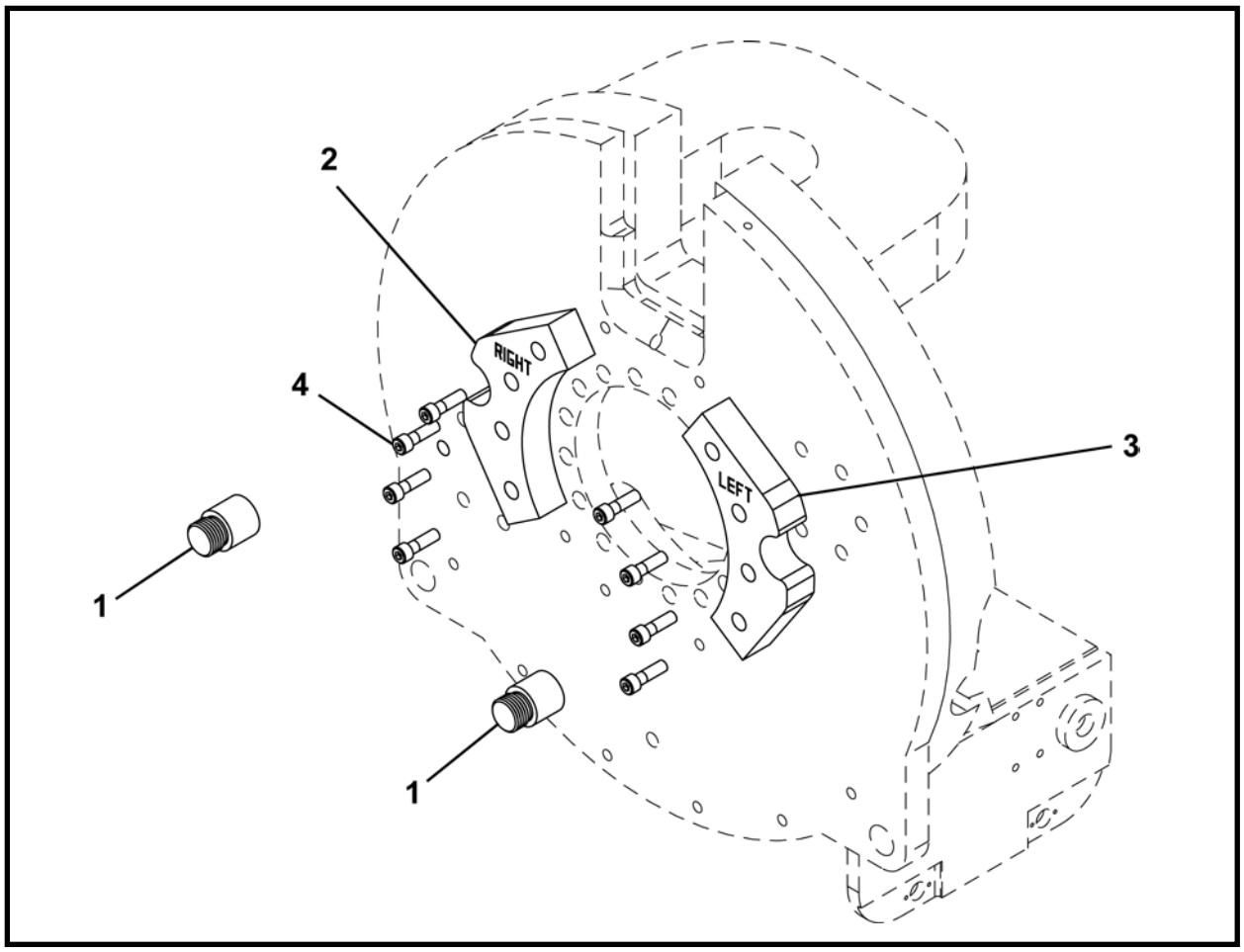


PCH 36 to PCH 37 Cutter Head Shown

ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	A45999A	ASSEMBLY, Cutter Head PCH 36 to 37
0.2	1	A45511A	ASSEMBLY, Cutter Head PCH 36 to 38.5
1	22/20	P0051-021	HOLDER, Bit
2	12/16	P0050-041A	TOOTH
3	22/20	P0050-045	CUTTER BIT (Includes item 3a)
3a	22/20	P0050-045A	LOCK RING
4	22/20	A43159P	PAD

TORQUE PLATE ASSEMBLY, FA46021F

PCH 36 (For 4812A SN FA40034F-3 & AFTER)

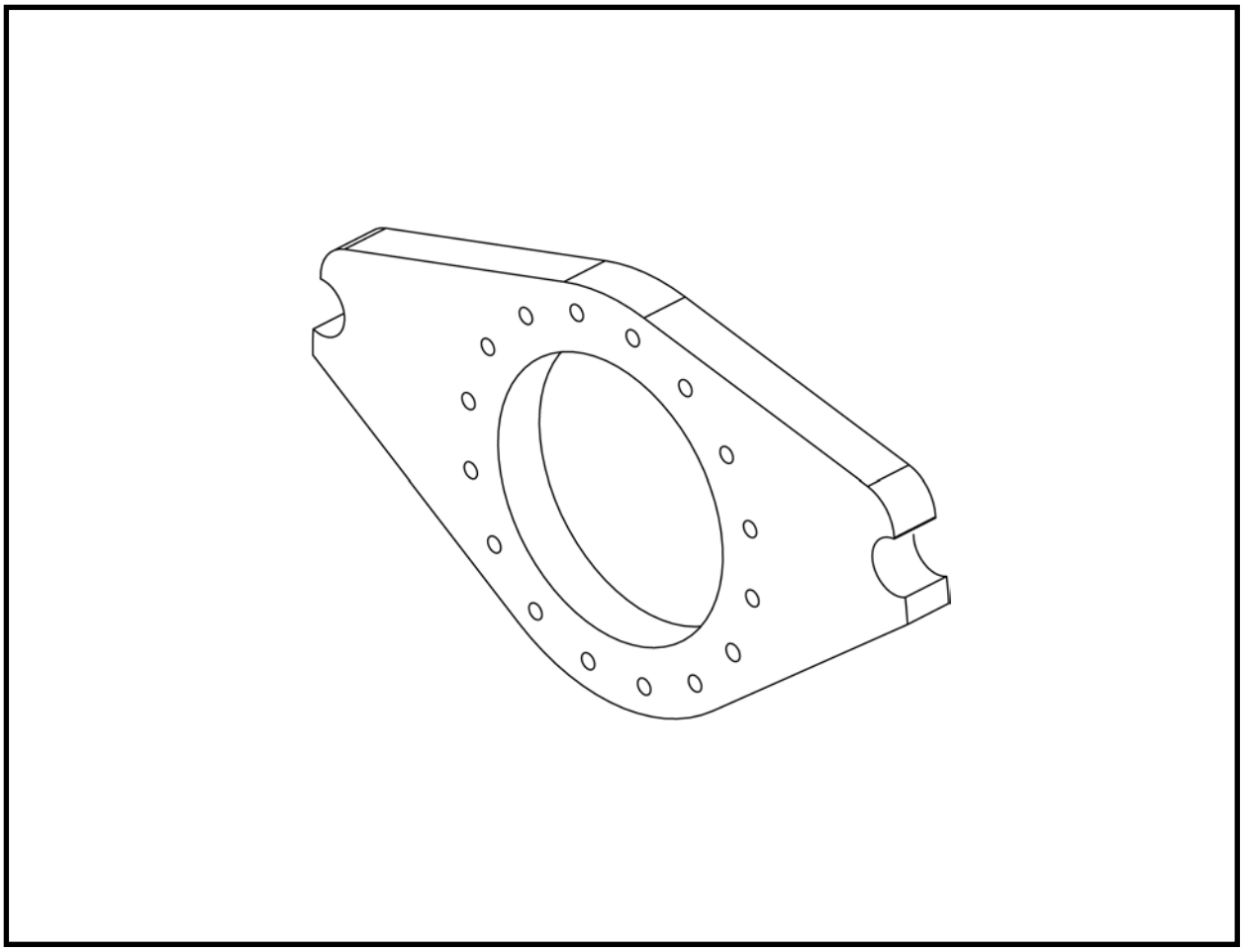


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA46021F	TORQUE PLATE ASSEMBLY
1	2	A44113P	PIN, Alignment
2	1	A46037P	PLATE, Torque, Right
3	1	A46038P	PLATE, Torque, Left
4	8	P0031-12-010	SCREW, Socket Head Cap 3/4 x 2.5

Note: Used to launch the PCH 36 on the 4812A frame (SN FA40034F-3 & After)

TORQUE PLATE, A44112P

PCH 44 (For 4812A SN FA40034F-1 & 2 Only)

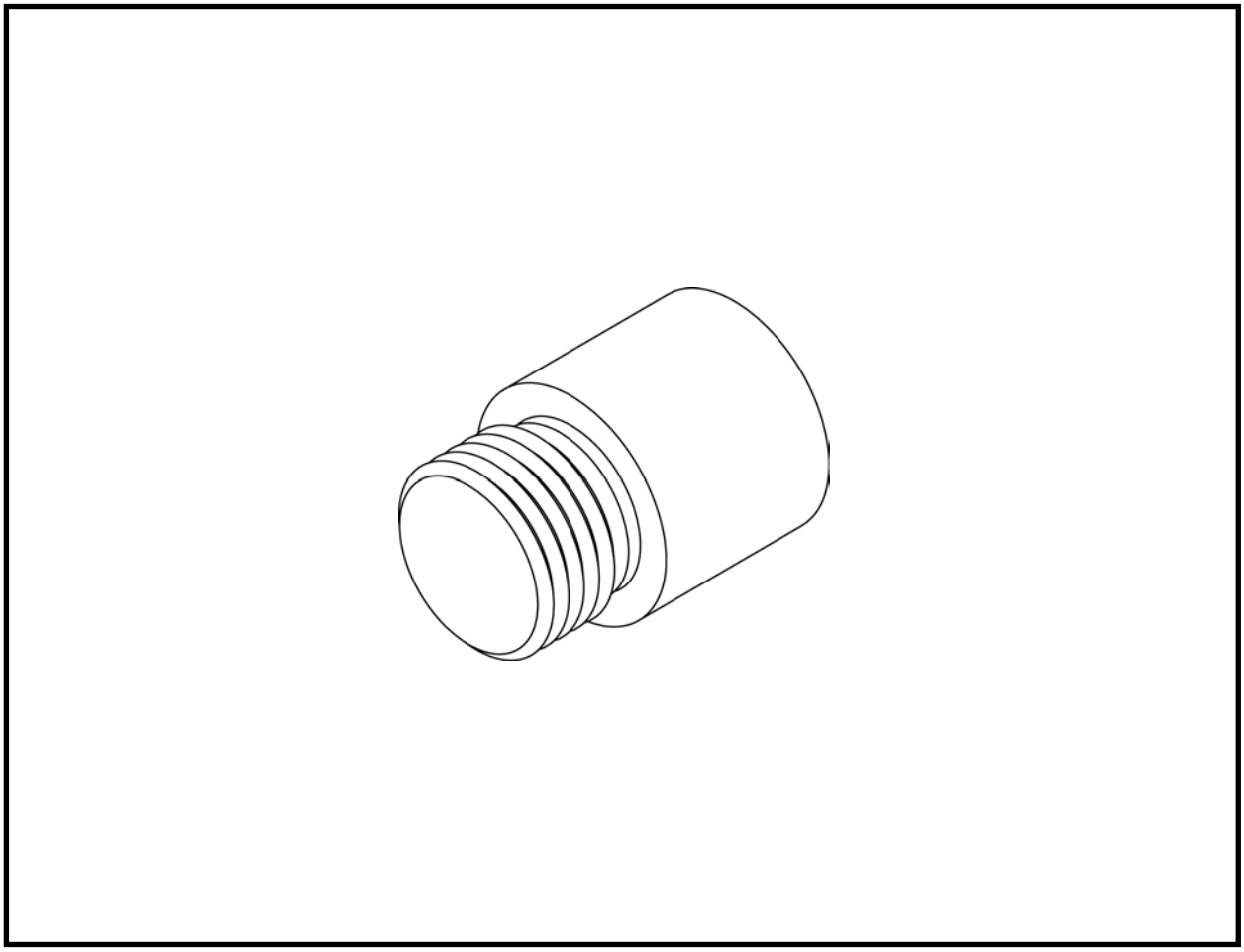


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44112P	TORQUE PLATE

Note: Used to launch the PCH 44 on the 4812A frame (SN FA40034F-1 and 2 only)

ALIGNMENT PIN, A44113P

PCH 36 - PCH 44

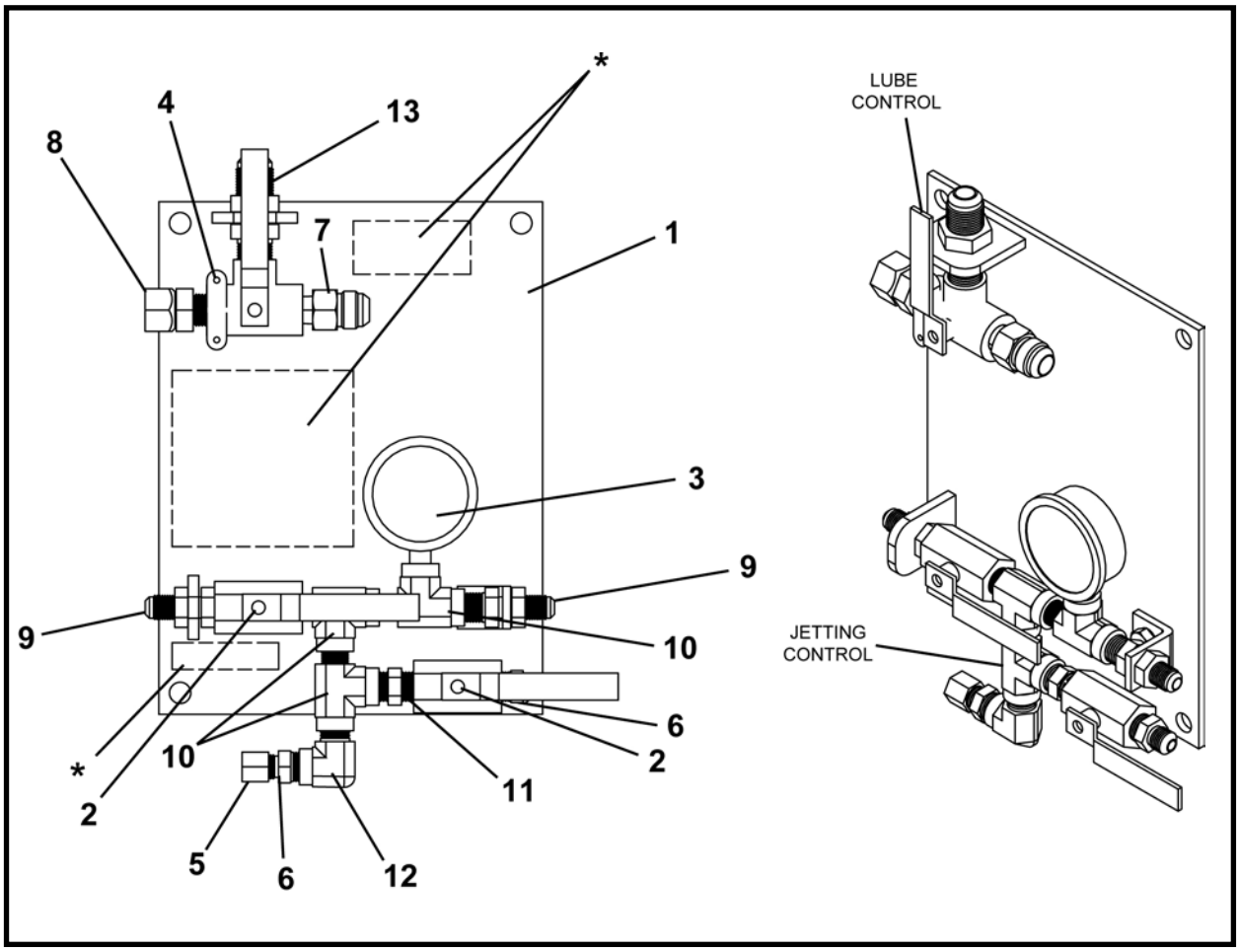


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A44113P	ALIGNMENT PIN

Note: Used with torque plate, A44112P to launch the PCH 44 on 4812A frame (SN FA40034F-1 & 2).

PCH JETTING & LUBE PIT CONTROL, A43749A

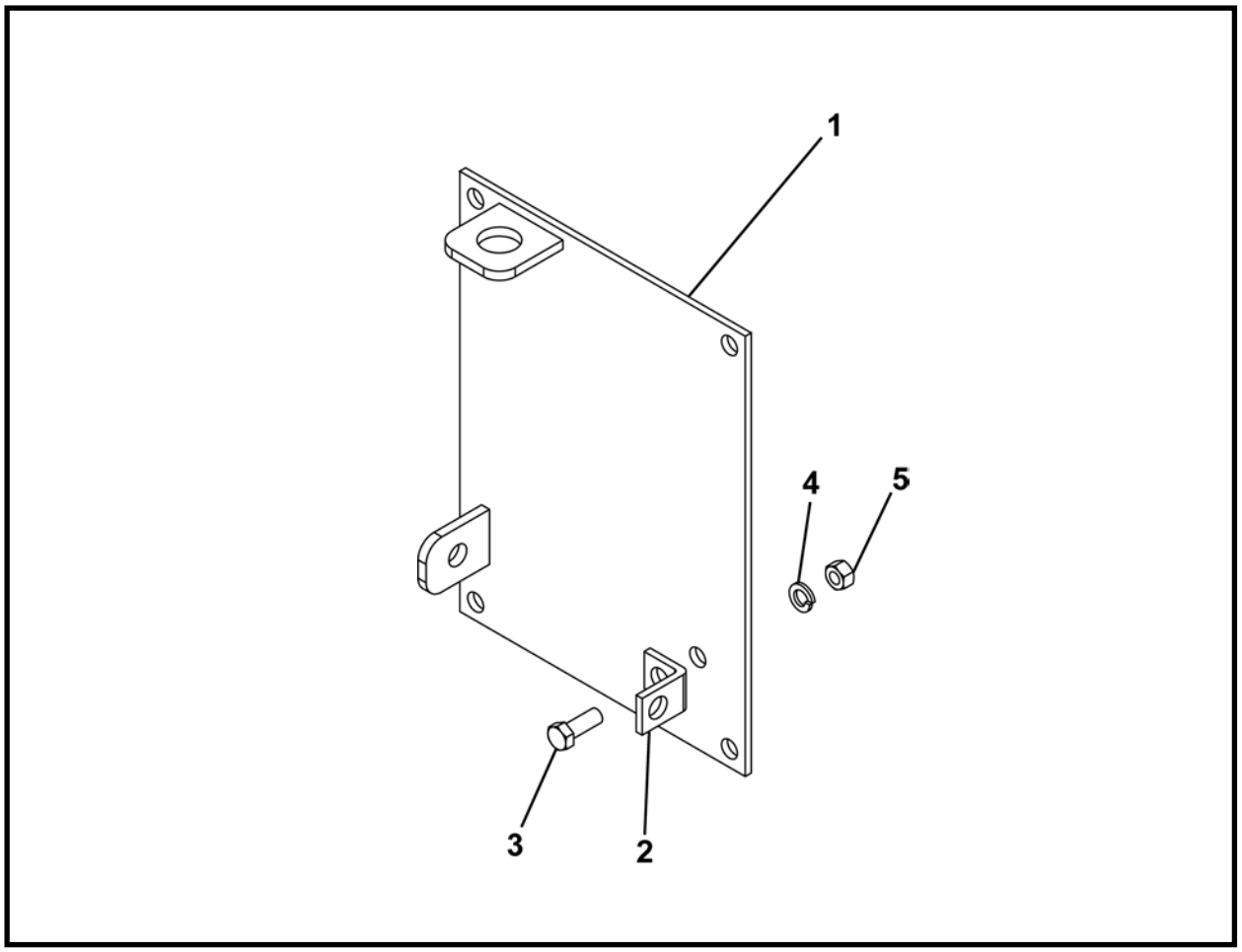
PCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43749A	PCH JETTING & LUBE PIT CONTROL
1	1	A43758A	ASSEMBLY, PCH PIT CONTROL MOUNT
2	2	P0302-507	VALVE, Ball 3/8” 2,000 PSI
3	1	P0301-100	GAUGE, Pressure 5000 PSI
4	1	P0302-512	VALVE, Ball 3-Way
5	1	P0300-126	FITTING, 06FJ-CAP
6	2	P0300-130	FITTING, 06MJ-06MP
7	1	P0300-142	FITTING, 10MJ-08MP
8	1	P0300-399	FITTING, 08MP-10FJX
9	2	P0300-568	FITTING, 6MJ-6MPBKHD
10	3	P0300-569	FITTING, 6MP-6FP-6FP
11	1	P0300-570	FITTING, 6MP-6MP
12	1	P0300-571	FITTING, 6MP-6FP90
13	1	P0300-567	FITTING, 10MJ-8MPKBHD

PCH PIT CONTROL MOUNT ASSEMBLY, A43758A

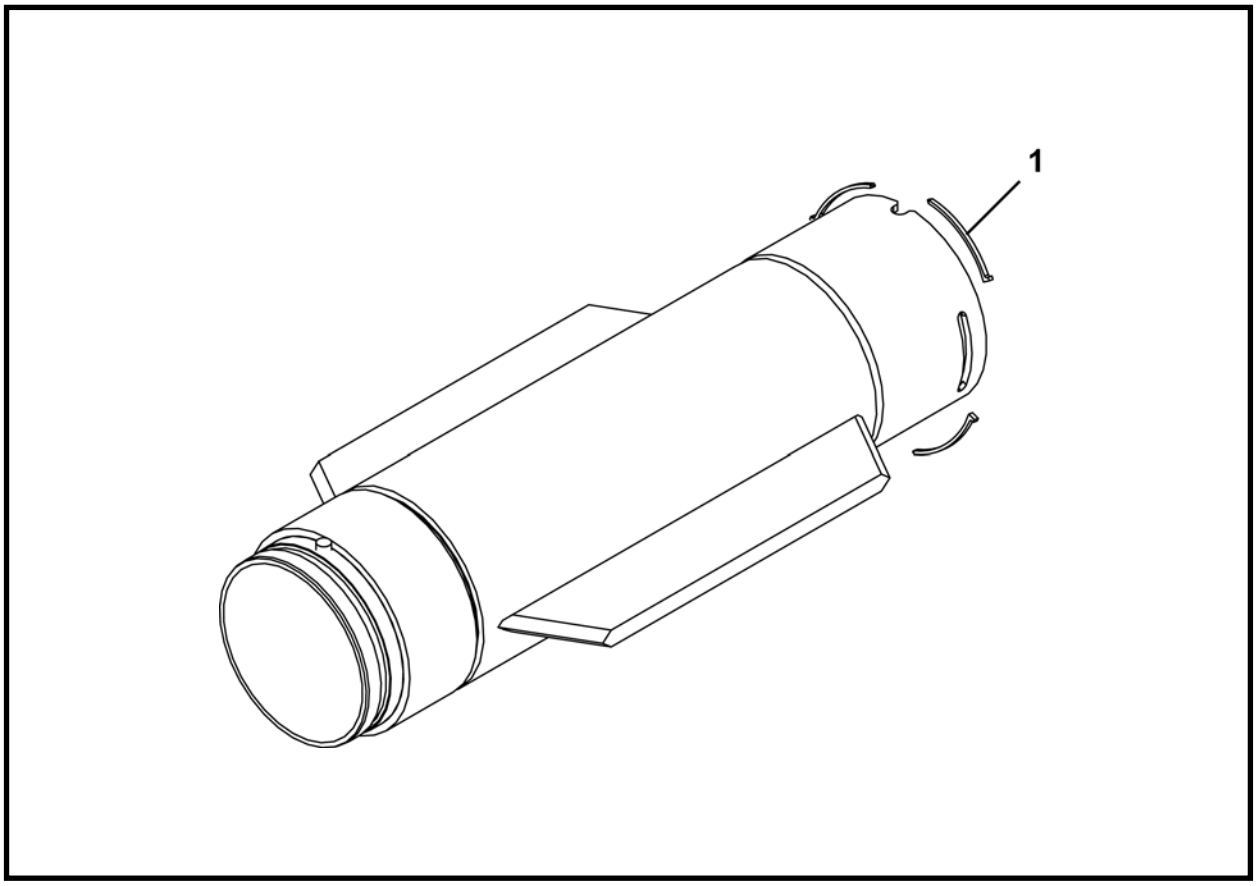
PCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A43758A	ASSEMBLY, PCH PIT CONTROL MOUNT
1	1	A43757A	WELDMENT, PIT CONTROL MOUNT
2	1	A43754P	BRACKET, Pipe Lube Control
3	1	P0001-06-004	BOLT, 3/8 UNC x 1
4	1	P0045-006	WASHER, Lock 3/8
5	1	P0003-06-000	NUT, 3/8

WINGED CASING 11” OD, FA43186F

PCH



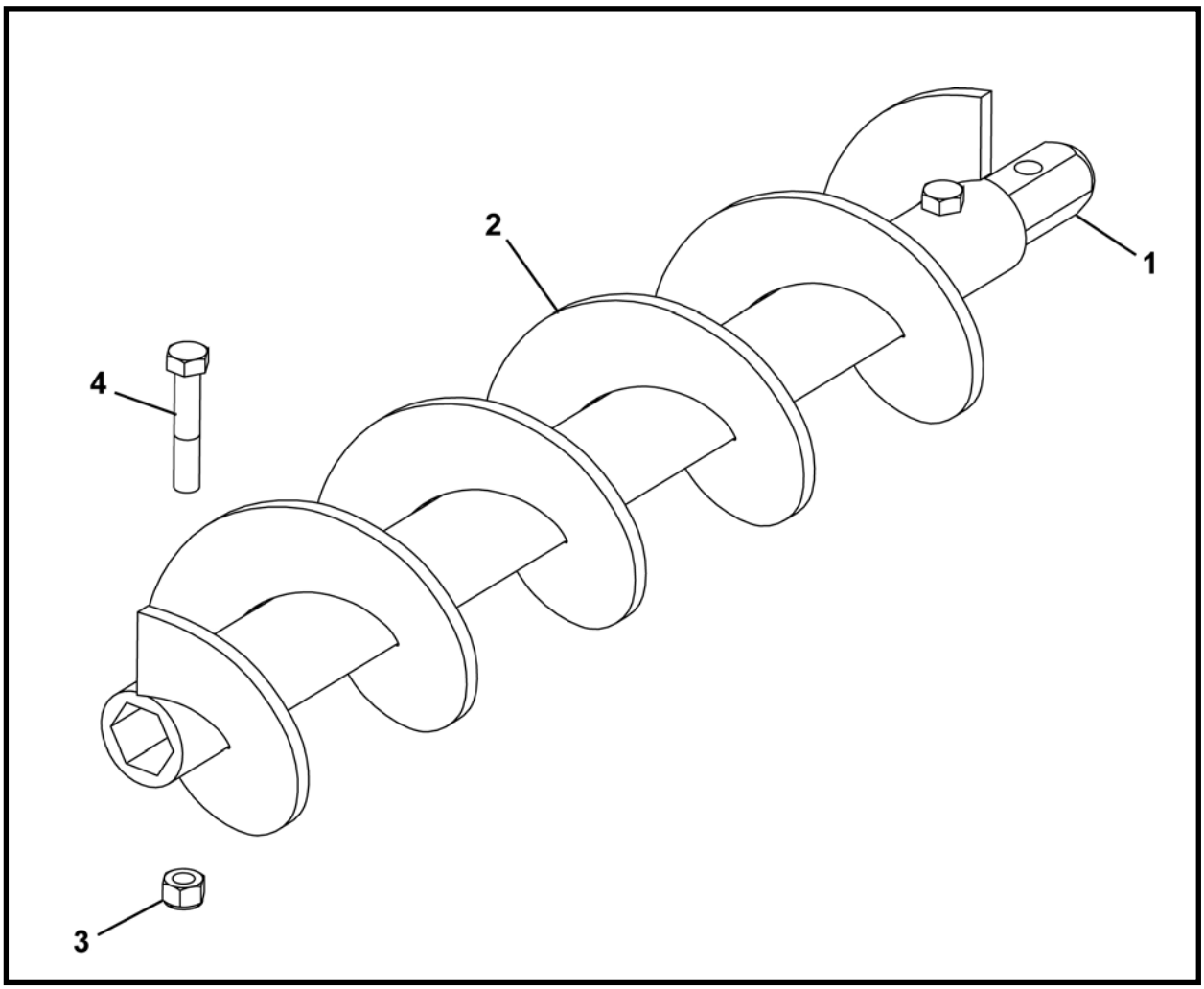
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43186F	CASING, Winged 11” OD
1*	4	A40602P	CLIP, Retaining 11” OD Casing

* Not included with Winged Casing FA43186F.

NOTE: Use Auger Assembly, FA42057F with Winged Casing FA43186F.

AUGER ASSEMBLY, 11” OD, FA42057F

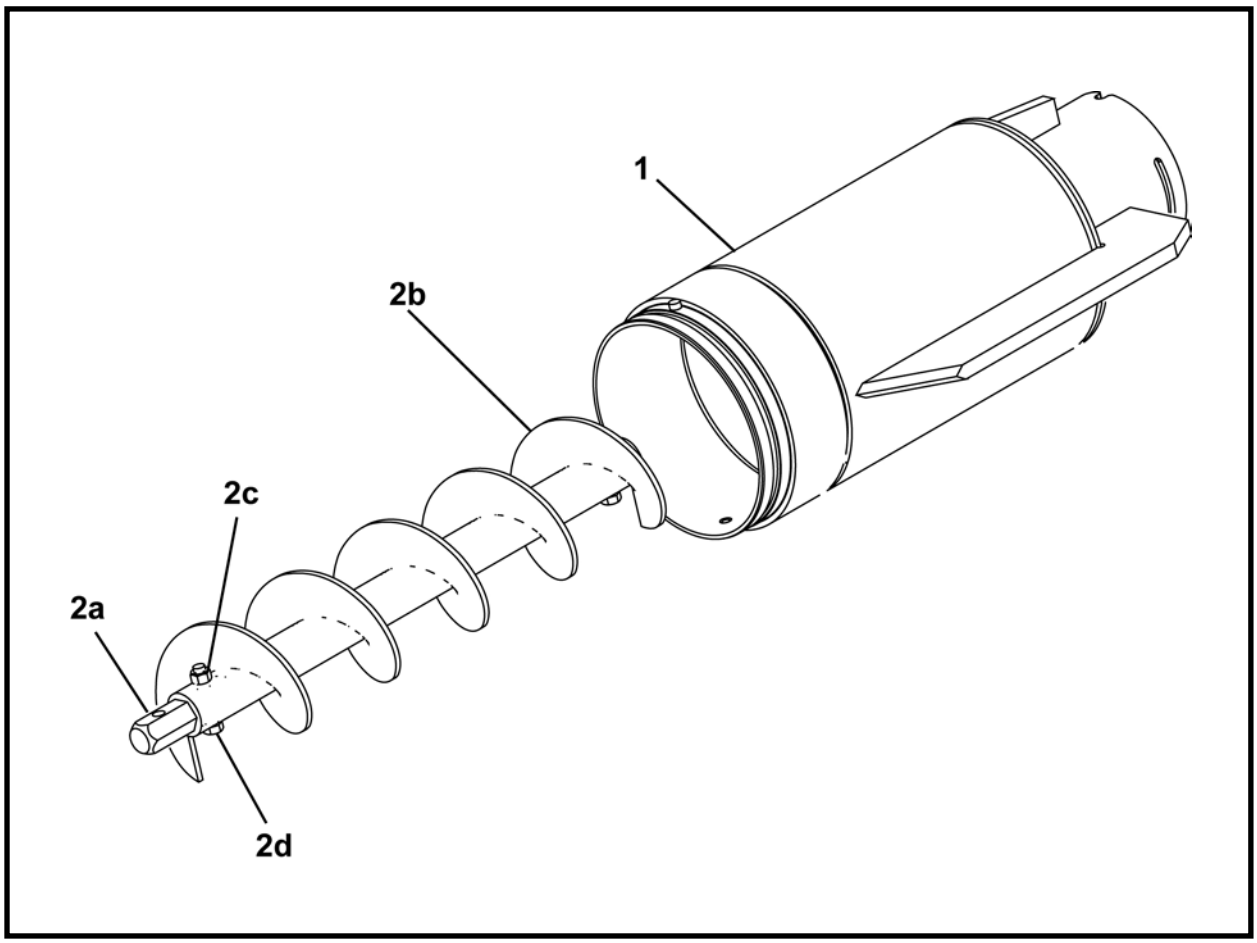
PCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42057F	AUGER ASSEMBLY, 11” OD Casing
1	1	A42135P	SHAFT, Hex End
2	1	A42058A	WELDMENT, Auger 9.25 OD
3	2	P0013-12A-000	NUT, Nylock Lock 3/4
4	2	P0001-12-016	BOLT, 3/4 UNC x 4

11” - 16” OD STEPPED CASING ASSEMBLY, A45386A

PCH

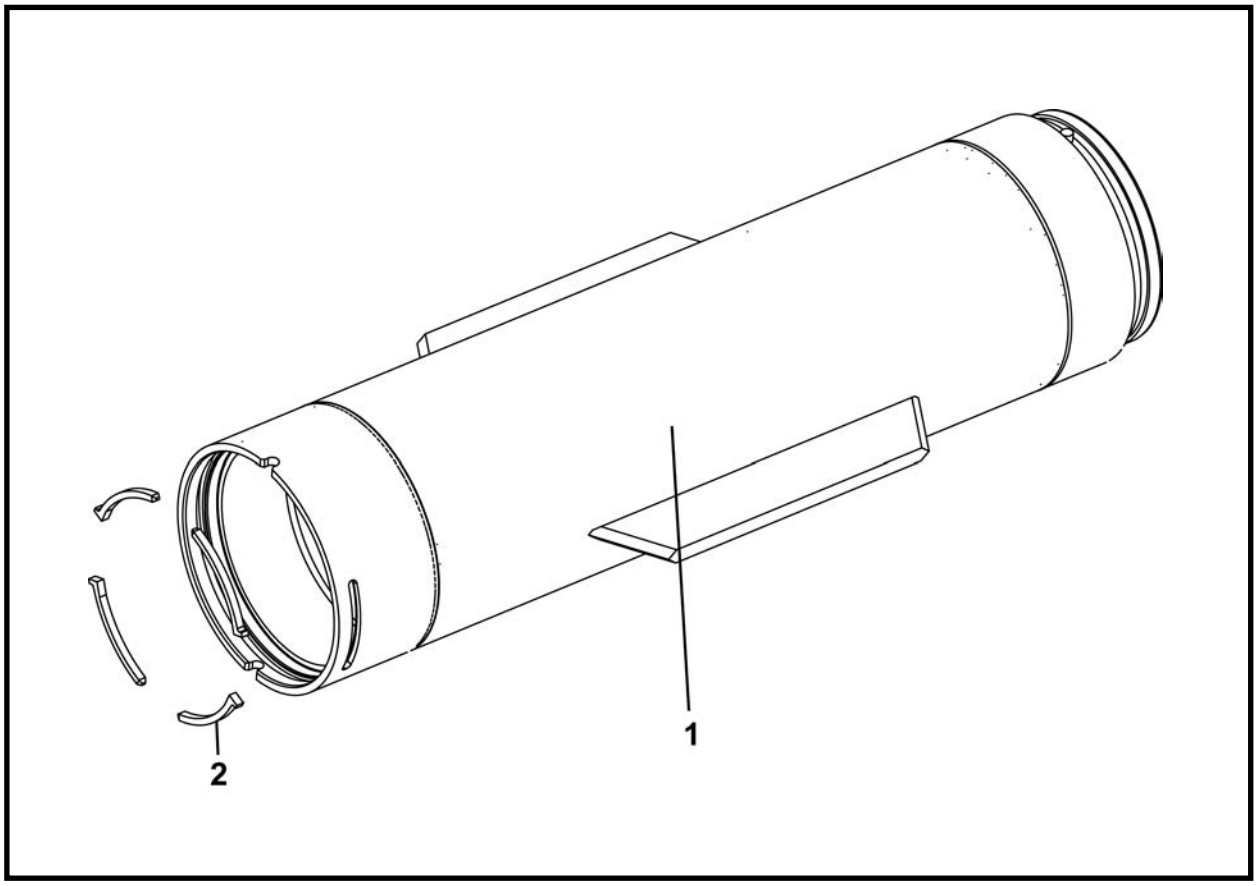


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45386A	STEPPED CASING ASSEMBLY, 11” - 16” OD
1	1	A45387A	CASING, Stepped
2	1	FA42057F	AUGER ASSEMBLY, 9.25 OD x 1M (Includes items 2a - 2d)
2a	1	A42135P	SHAFT, Hex End
2b	1	A42058A	WELDMENT, Auger 9.25 OD
2c	2	P0013-12A-000	NUT, Nylock Lock 3/4
2d	2	P0001-12-016	BOLT, 3/4 UNC x 4

NOTE: This assembly is installed behind the 16” OD casing (100 ton) and in front of the PCH.

WINGED CASING 16” OD HD, FA45525F

PCH

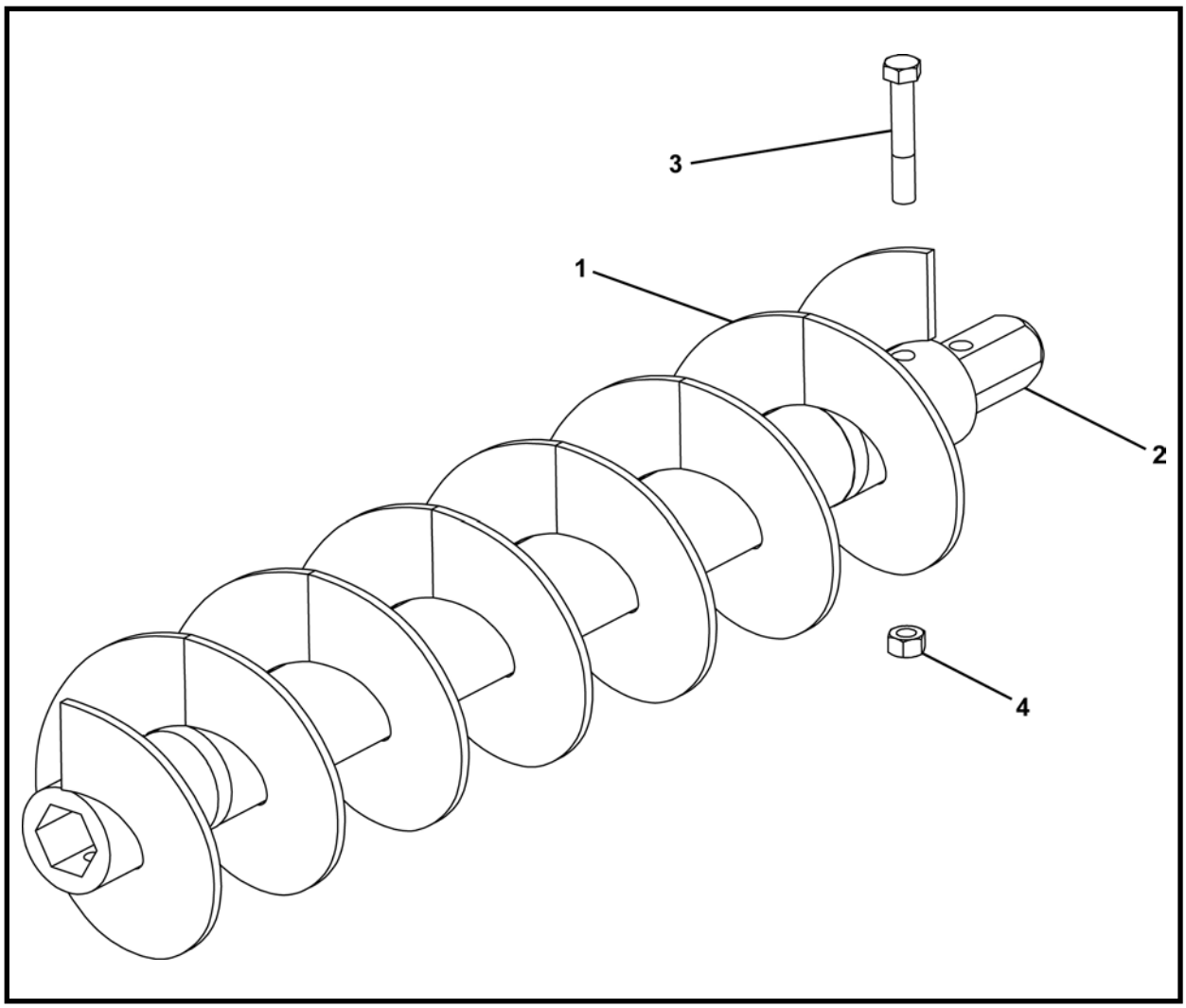


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45525F	CASING, Winged 16” OD HD
1	1	A45524A	CASING, Winged 16” HD
2	4	A43813P	CLIP, Retaining 16” OD HD Casing

NOTE: Use Auger Assembly, FA45809F with Winged Casing FA45525F.

AUGER ASSEMBLY 13.5 OD X 5 FT, FA45809F

FOR 5 FOOT HD CASING

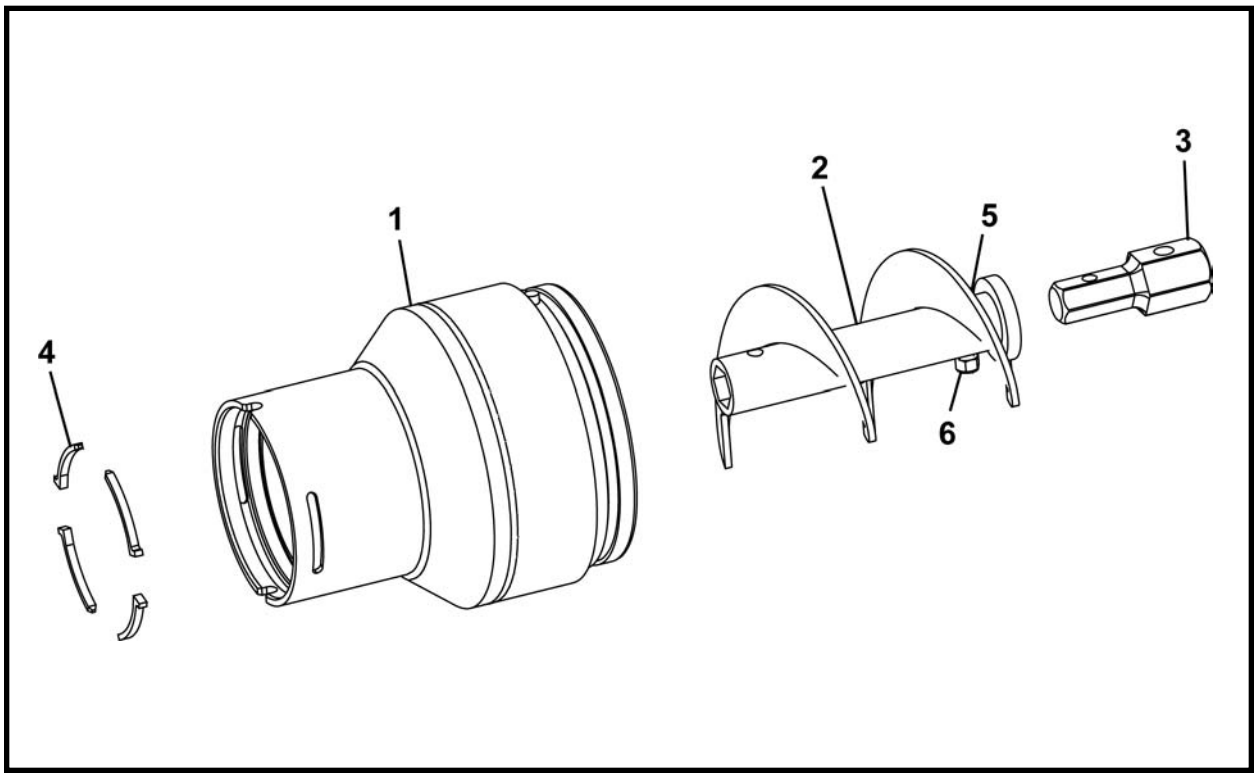


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45809F	AUGER ASSEMBLY, 13.5 OD x 5 FT
1	1	A45810A	AUGER 13.6 OD x 5 FT
2	1	A43807P	SHAFT, Hex End
3	1	P0001-16-024	BOLT, 1 UNC x 6
4	1	P0003-16-000	NUT, 1

NOTE: Use with 16” OD HD x 5 ft casings, FA43800F or winged casing, FA45525F.

TRANSITION CASING ASSEMBLY 16” HD TO 11” OD, FA45629F

PCH

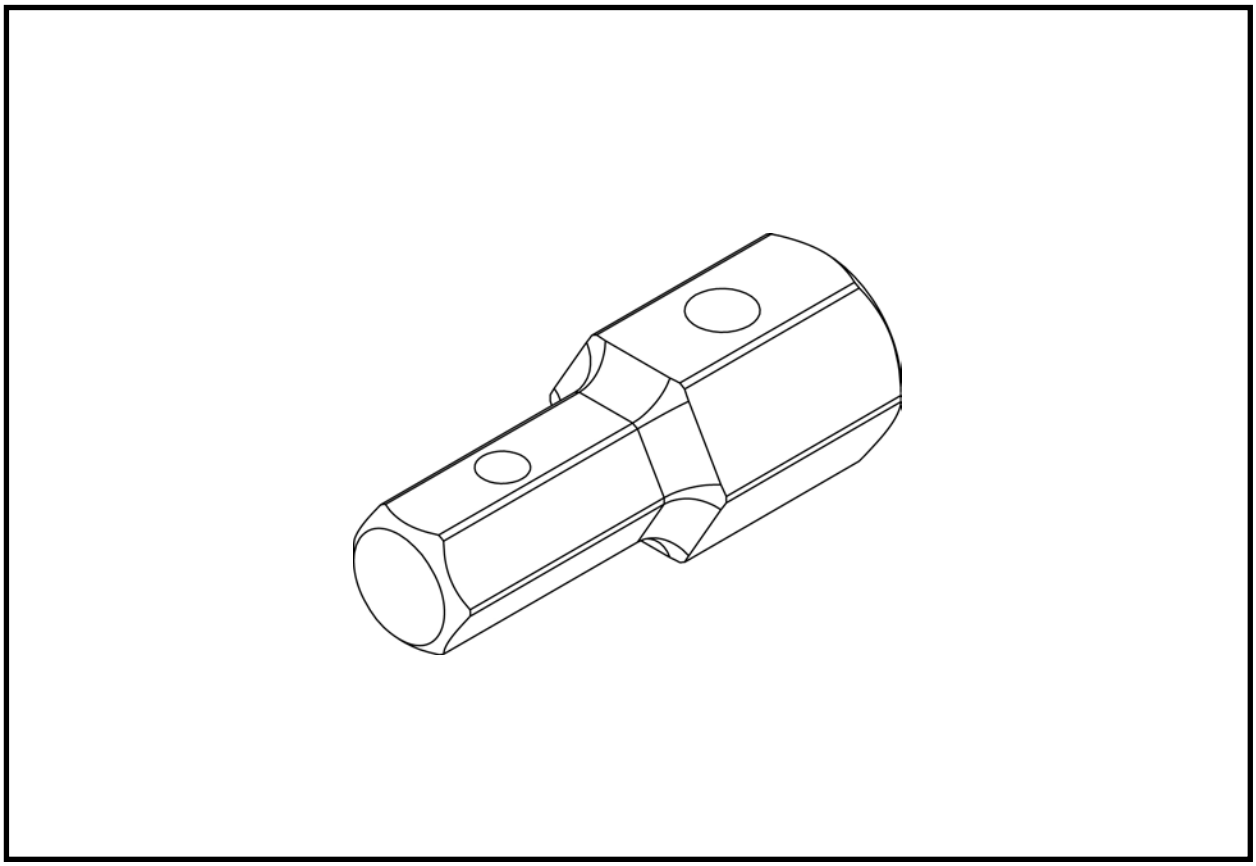


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45629F	TRANSITION CASING ASSEMBLY, 16” HD to 11” OD
1	1	A45663A	CASING, Transition
2	1	A45660A	AUGER, Transition
3	1	A46039P	CONNECTOR, 2 To 3 Inch
4	4	A40602P	CLIP, Retaining
5	1	P0001-12-016	BOLT, 3/4 UNC x 4
6	1	P0013-12A-000	NUT, Nylock 3/4

Note: Use this transition casing between the 16” OD HD casings and the PCH 20, 22.5, or 28.5. The 2” to 3” hex connector, A46039P must be used between the 16” HD auger and the transition auger (item 2).

HEX CONNECTOR 2” TO 3”, A46039P

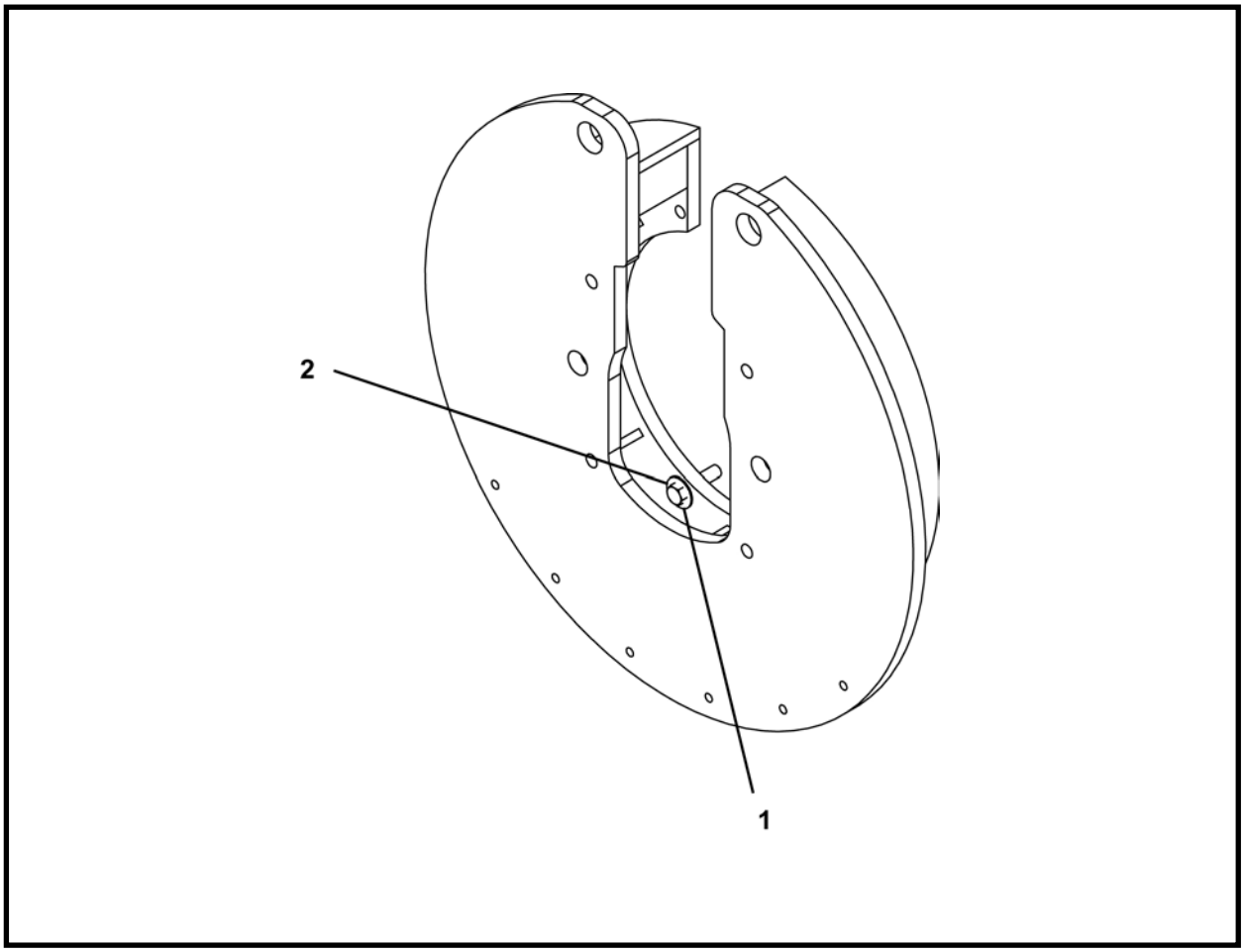
HEX CONNECTOR TO JOIN 2” TO 3” SHAFTS



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A46039P	HEX CONNECTOR, 2” TO 3”

THRUST PLATE EXTENSION ADAPTER, FA44359F

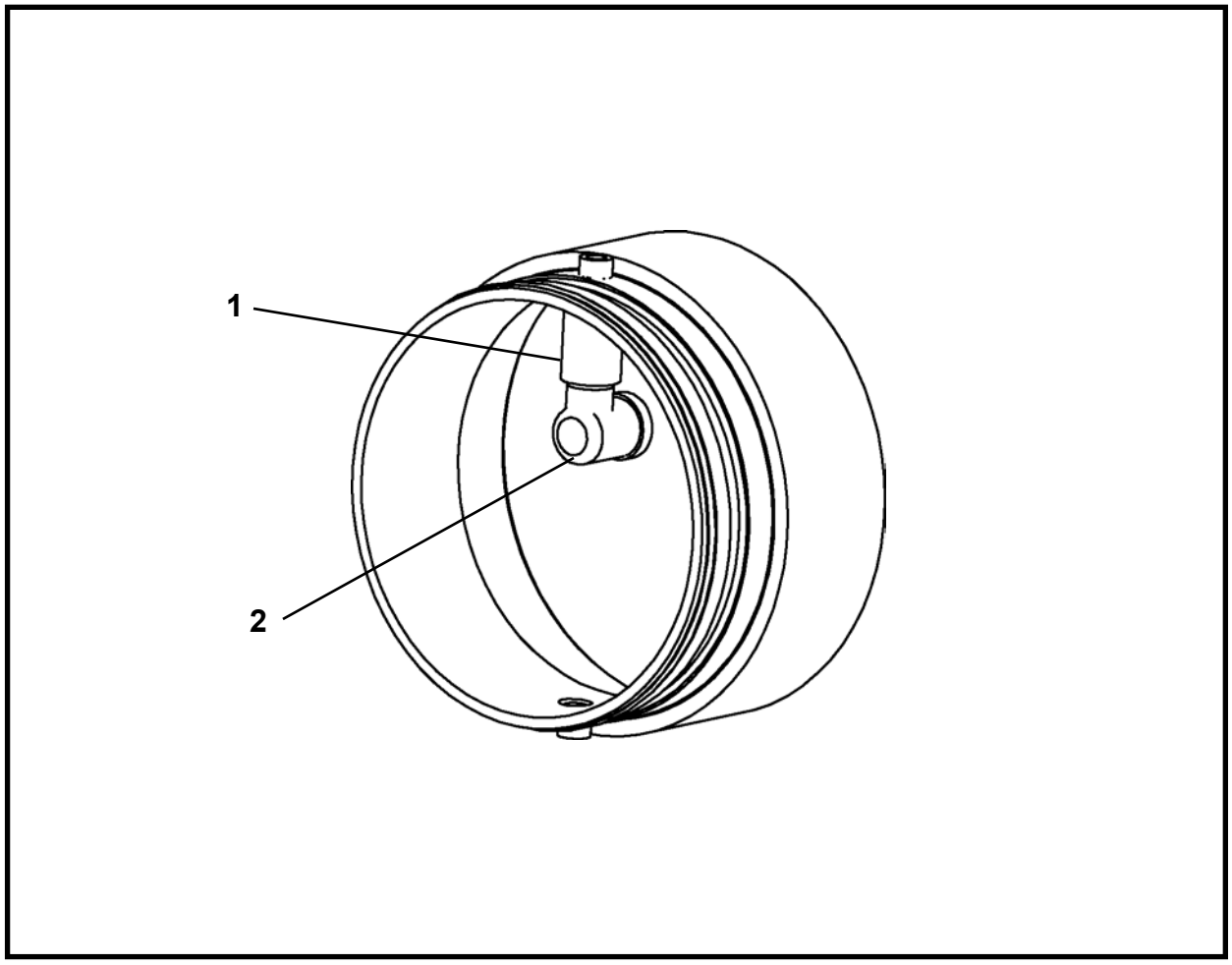
SMALL TOOLING PIPE ADAPTER



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44359F	THRUST PLATE EXTENSION ADAPTER
1	8	P0001-12-012	BOLT, 3/4 UNC x 3
2	8	P0040-012	WASHER, Hardened Flat 3/4

Note: Use with small tooling pipe adapters and PCH 20, PCH 22.5, and PCH 28.5.

PIPE CASING ADAPTER

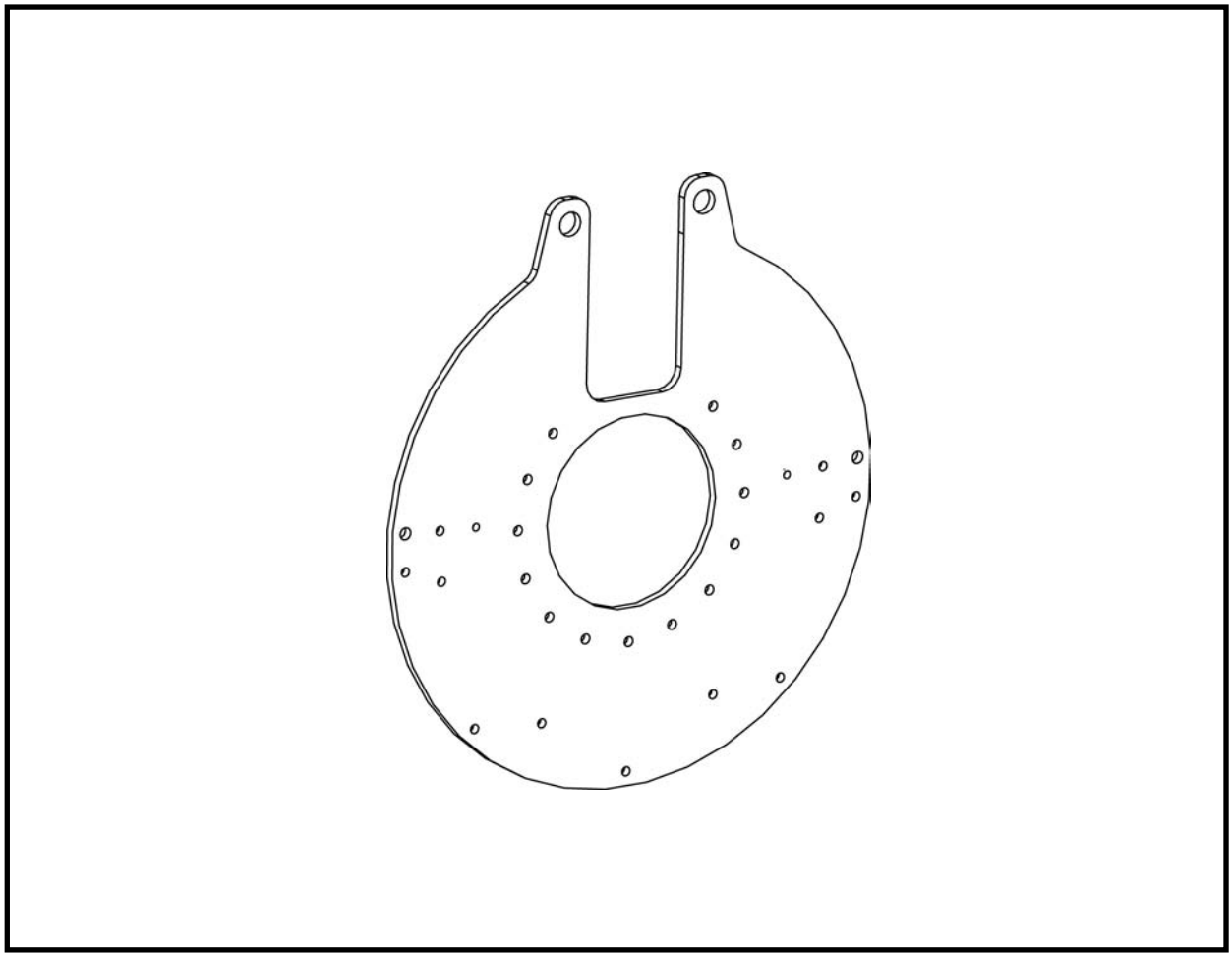


ITEM	QTY	PART NO.	DESCRIPTION
0.1*	1	FA40283F	CLAY PIPE TO CASING ADAPTER, 8” DENLOK VCP
0.2*	1	FA40295F	PIPE TO CASING ADAPTER, 293 MM OD x 225 ID DENLOK
0.3*	1	FA40303F	CLAY PIPE TO CASING ADAPTER, 8” NO DIG VCP
0.4**	1	FA40318F	CASING TO PIPE ADAPTER, 10” DUCTILE IRON PIPE
0.5*	1	FA40323F	CLAY PIPE TO CASING ADAPTER, 10” NO DIG VCP
0.6*	1	FA40335F	CLAY PIPE TO CASING ADAPTER, 10” DENLOK VCP
0.7*	1	FA40343F	CLAY PIPE TO CASING ADAPTER, 12” NO DIG VCP
0.8*	1	FA42294F	11” CASING TO 8” VCP
0.9***	1	FA42803F	20” CASING TO PIPE ADAPTER, 15” Mission (15” NO-DIG)
1	1	P0400-004	COUPLING, Pipe 3/4
2	1	P0412-004A	ELBOW, Street 90 Degree 3/4

Use the following pipe thrust adapters with the pipe casing adapters:
* A43305F
** FA43376F
*** FA42816F

RCP THRUST RING ADAPTER PLATE, A45625P

PCH

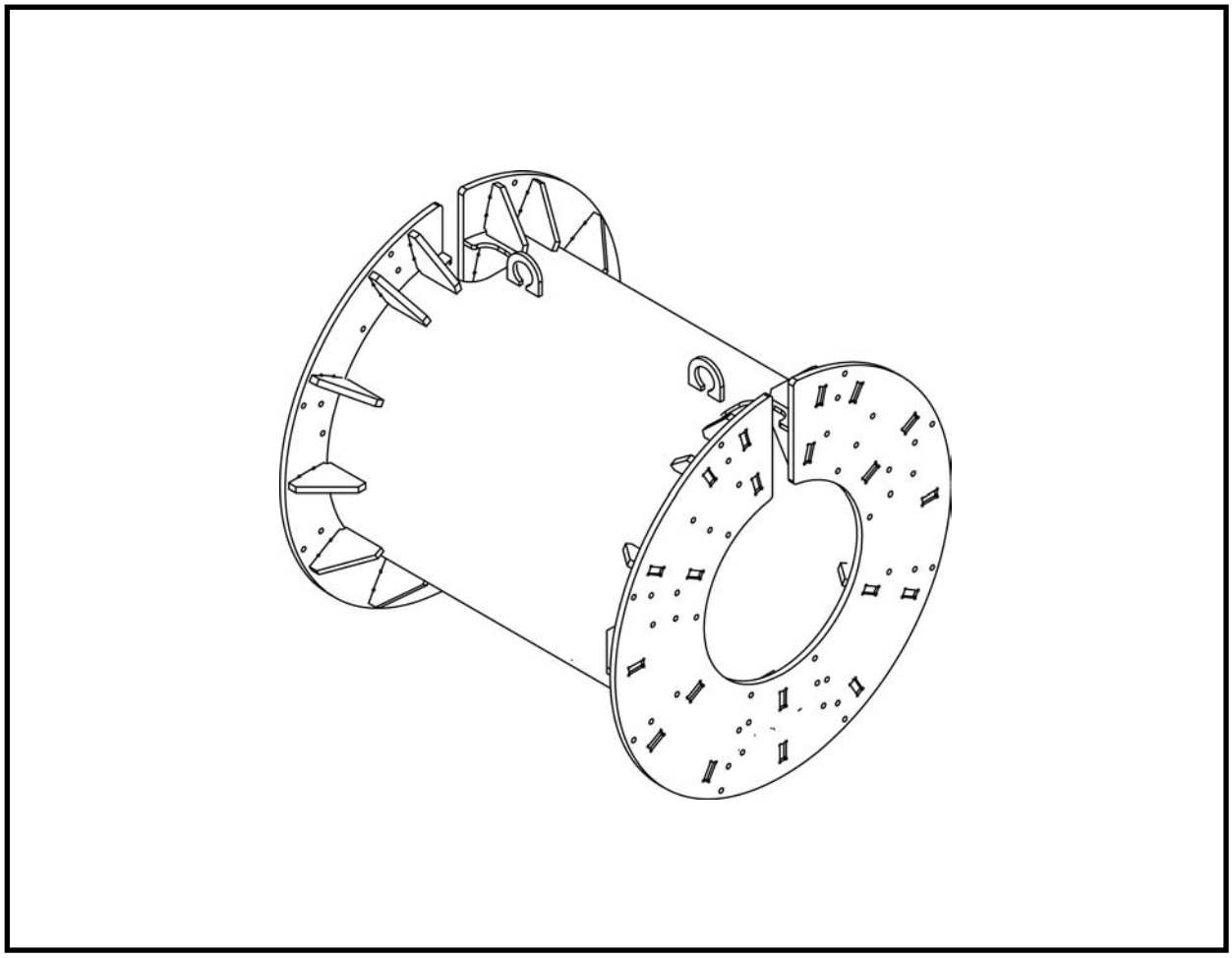


ITEM	QTY	PART NO.	DESCRIPTION
0	1	A45625P	PLATE, Thrust Ring Adapter

NOTE: Use with pipe adapter assemblies FA45599F, FA45620F, and FA45621F.

SPACER CAN, 36” OD X 48”, A45606A

PCH

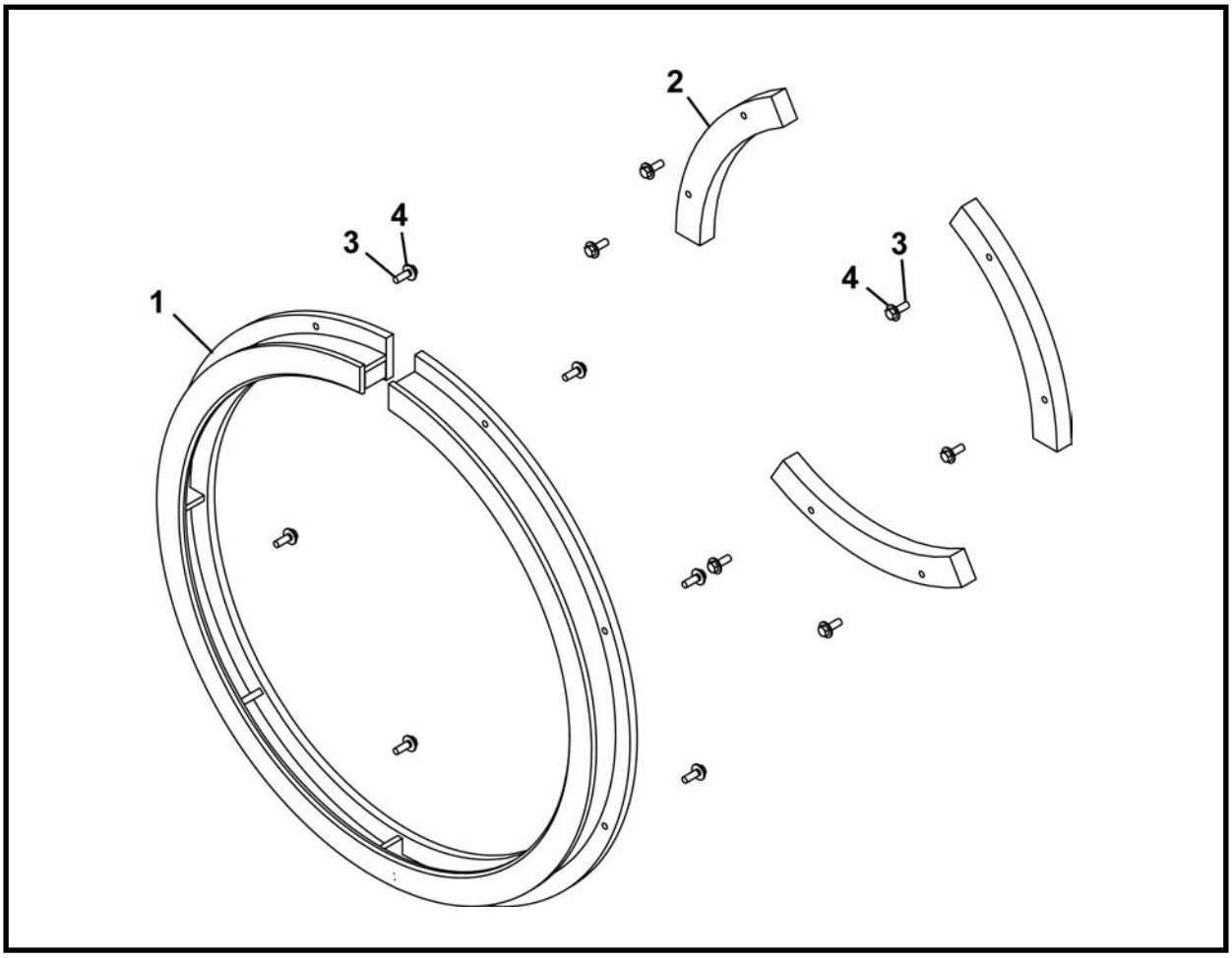


ITEM	QTY	PART NO.	DESCRIPTION
1	1	A45606A	SPACER, Thrust 36” OD x 48”

Note: Use with spacer can adapters A45657A, A45658A, or A45659A.

SPACER CAN ADAPTER

USE WITH SPACER CAN A45606A

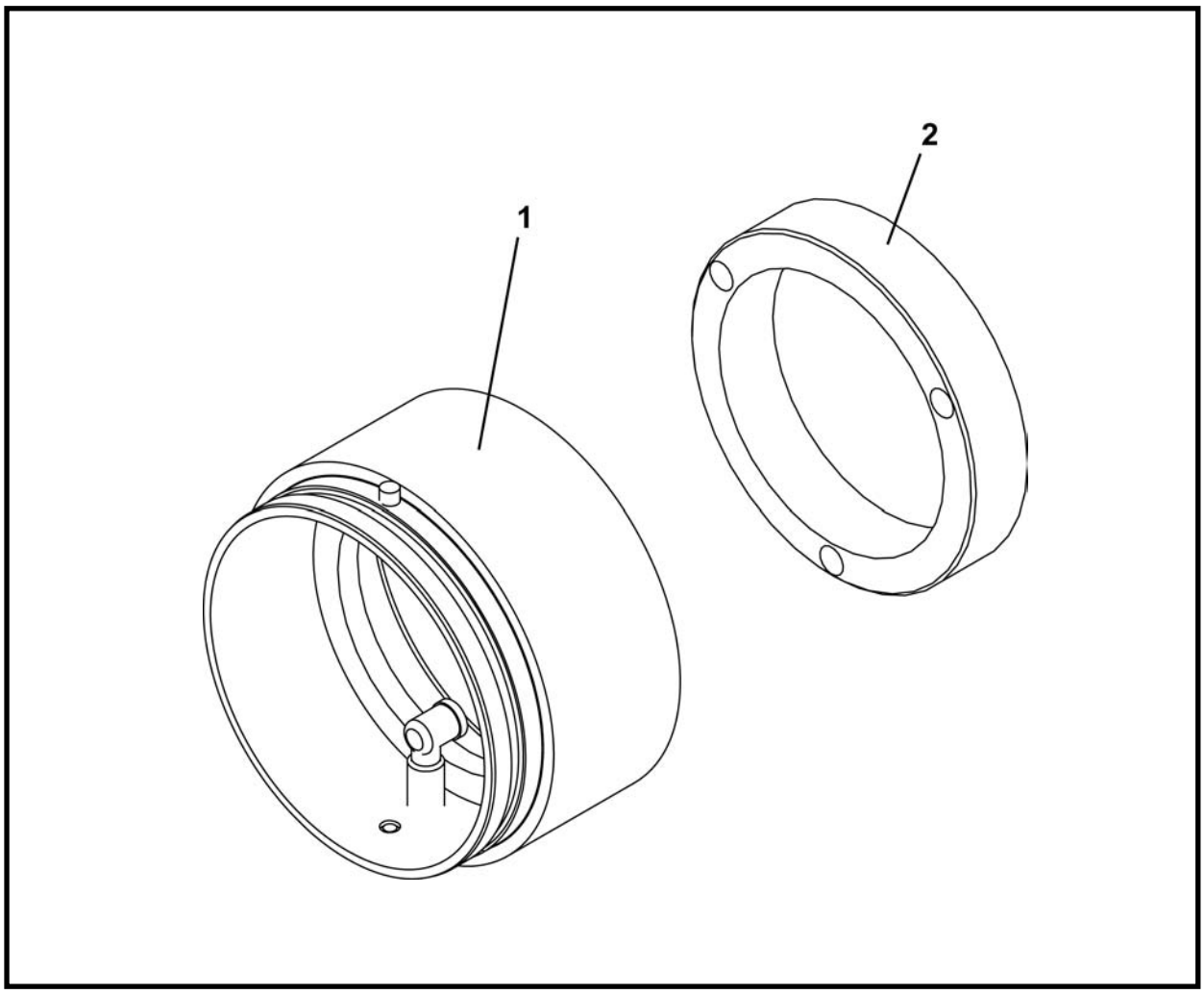


ITEM	QTY	PART NO.	DESCRIPTION
0.1*	1	A45657A	SPACER CAN ADAPTER, 36” ID
0.2*	1	A45658A	SPACER CAN ADAPTER, 30” ID
0.3*	1	A45659A	SPACER CAN ADAPTER, 600MM ID
1.1	1	A45609A	THRUST PLATE, 36” ID
1.2	1	A45614A	THRUST PLATE, 30” ID
1.3	1	A45619A	THRUST PLATE, 600MM ID
2.1	3	A45649P	PIPE GUIDE, 36” ID
2.2	3	A45648P	PIPE GUIDE, 30” ID
2.3	3	A45647P	PIPE GUIDE, 600MM ID
3	14	P0001-08-006	BOLT, 1/2 UNC x 1.5
4	14	P0040-008	WASHER, Hardened Flat 1/2

* Use with Spacer Can, A45606A

PIPE ADAPTER SET, WATANI DN300, FA45769F

16” CASING

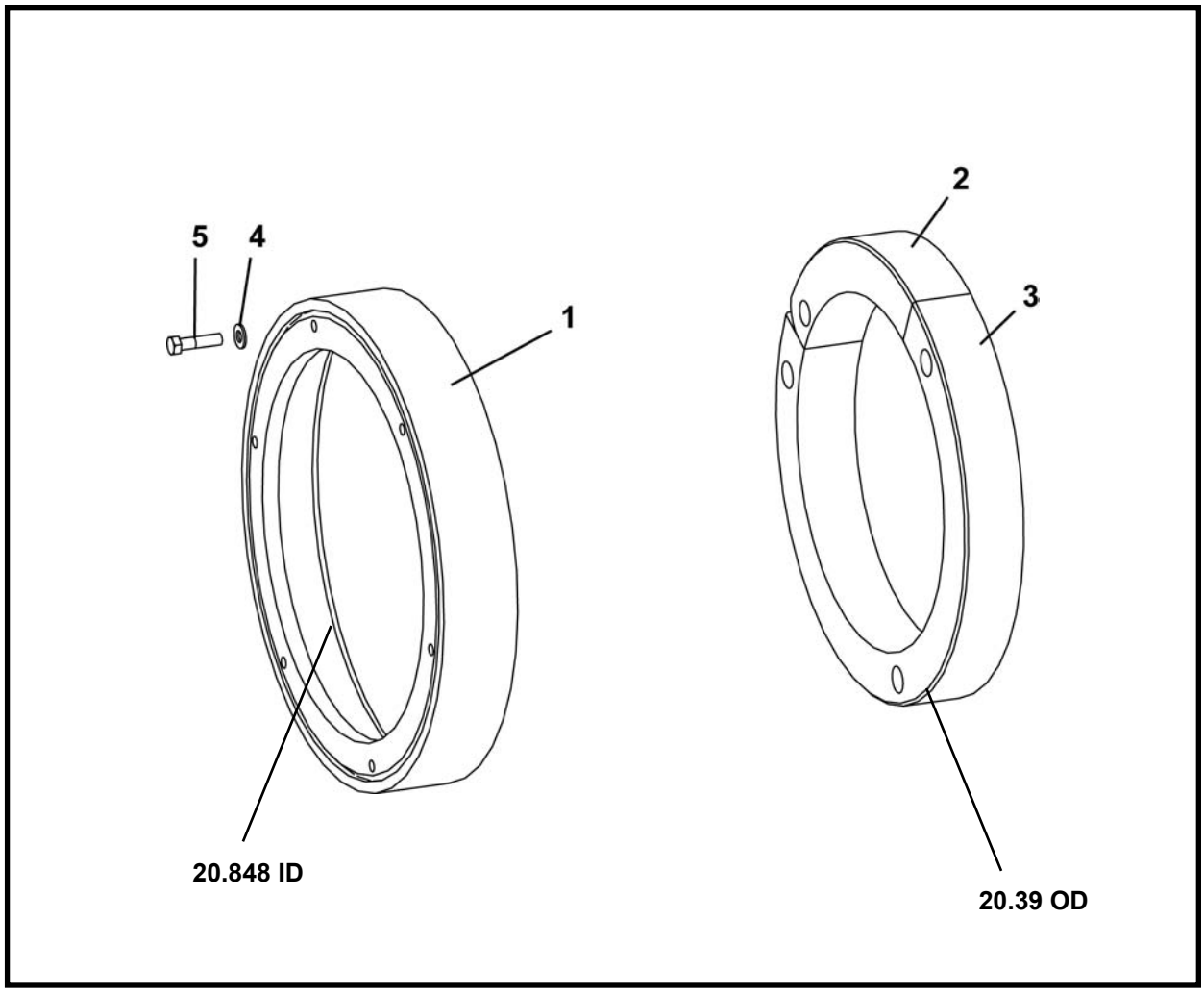


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45769F	PIPE ADAPTER SET, WATANI DN300
1	1	A45777A	ADAPTER, Pipe
2	1	A45772P	RING, Thrust

NOTE: Must use Thrust Adapter, FA45786F with this pipe adapter set.

PIPE ADAPTER SET, WATANI DN400, FA45790F

PCH 22.5

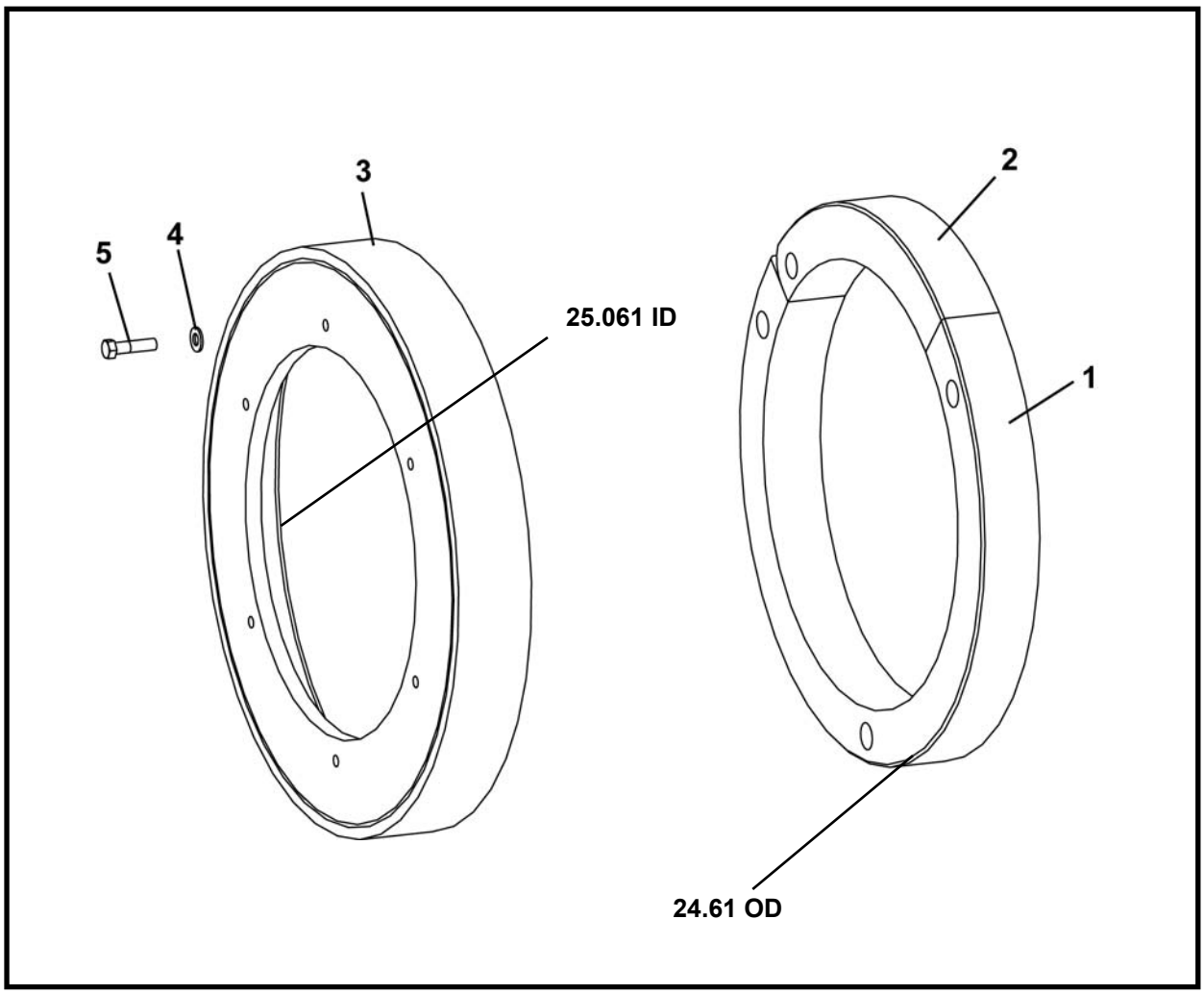


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45790F	PIPE ADAPTER SET, WATANI DN400
1	1	A45778A	ADAPTER, PCH Pipe
2	1	A45773P	RING, Hinged
3	1	A45774P	RING, Fixed
4	6	P0040-008	WASHER, Hardened Flat
5	6	P0001-08-007	BOLT, 1/2 UNC x 1.75

NOTE: Must use Thrust Adapter, FA45786F with this pipe adapter set.

PIPE ADAPTER SET, WATANI DN500, FA45791F

PCH 22.5 WITH 26" OD INCREASE KIT

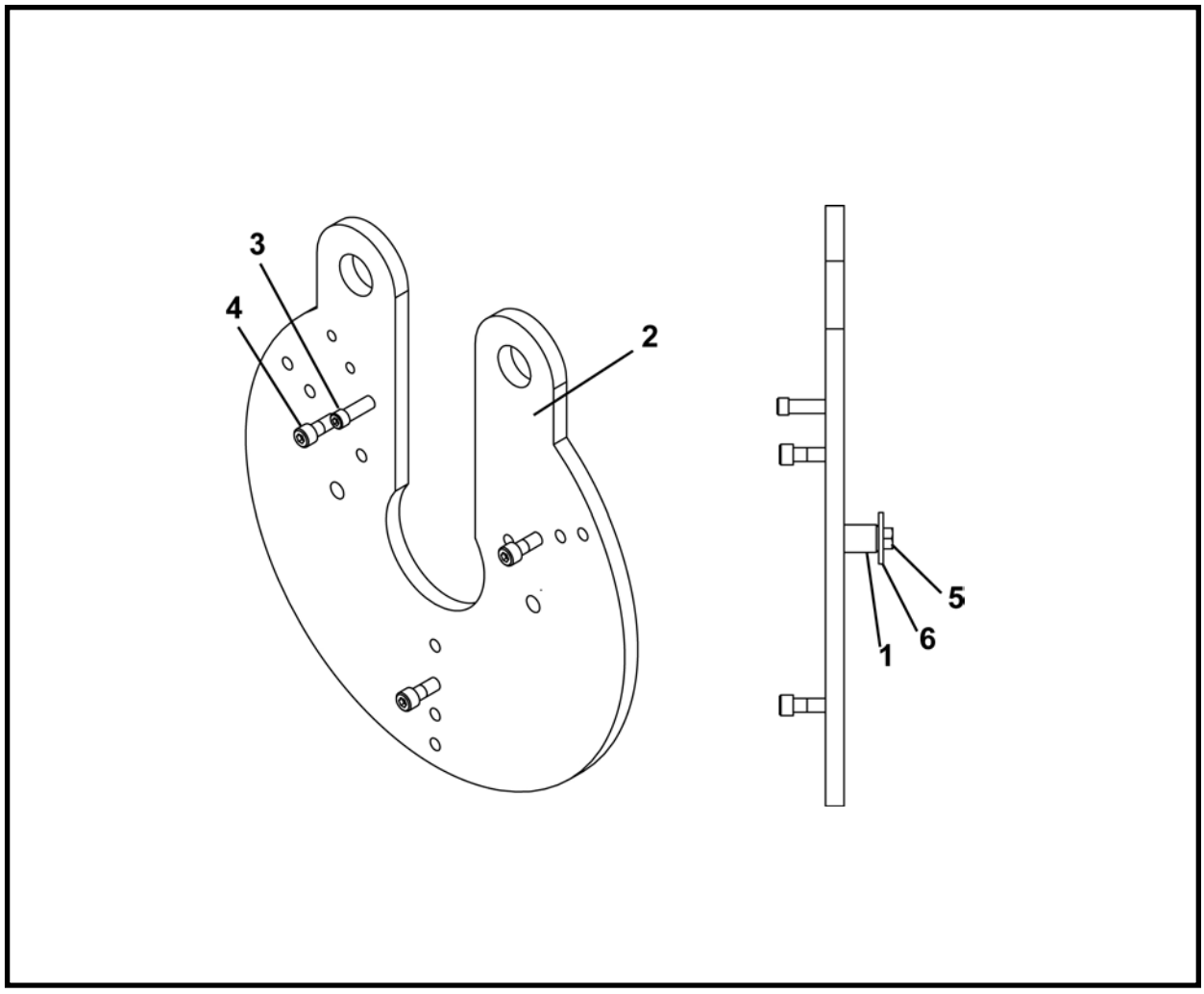


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45791F	PIPE ADAPTER SET, WATANI DN500
1	1	A45776P	RING, Fixed
2	1	A45775P	RING, Hinged
3	1	A45779A	ADAPTER, PCH Pipe
4	6	P0040-008	WASHER, Hardened Flat
5	6	P0001-08-007	BOLT, 1/2 UNC x 1.75

NOTE: Must use Thrust Adapter, FA45786F with this pipe adapter set.

THRUST ADAPTER, WATANI 300-600, FA45786F

PCH

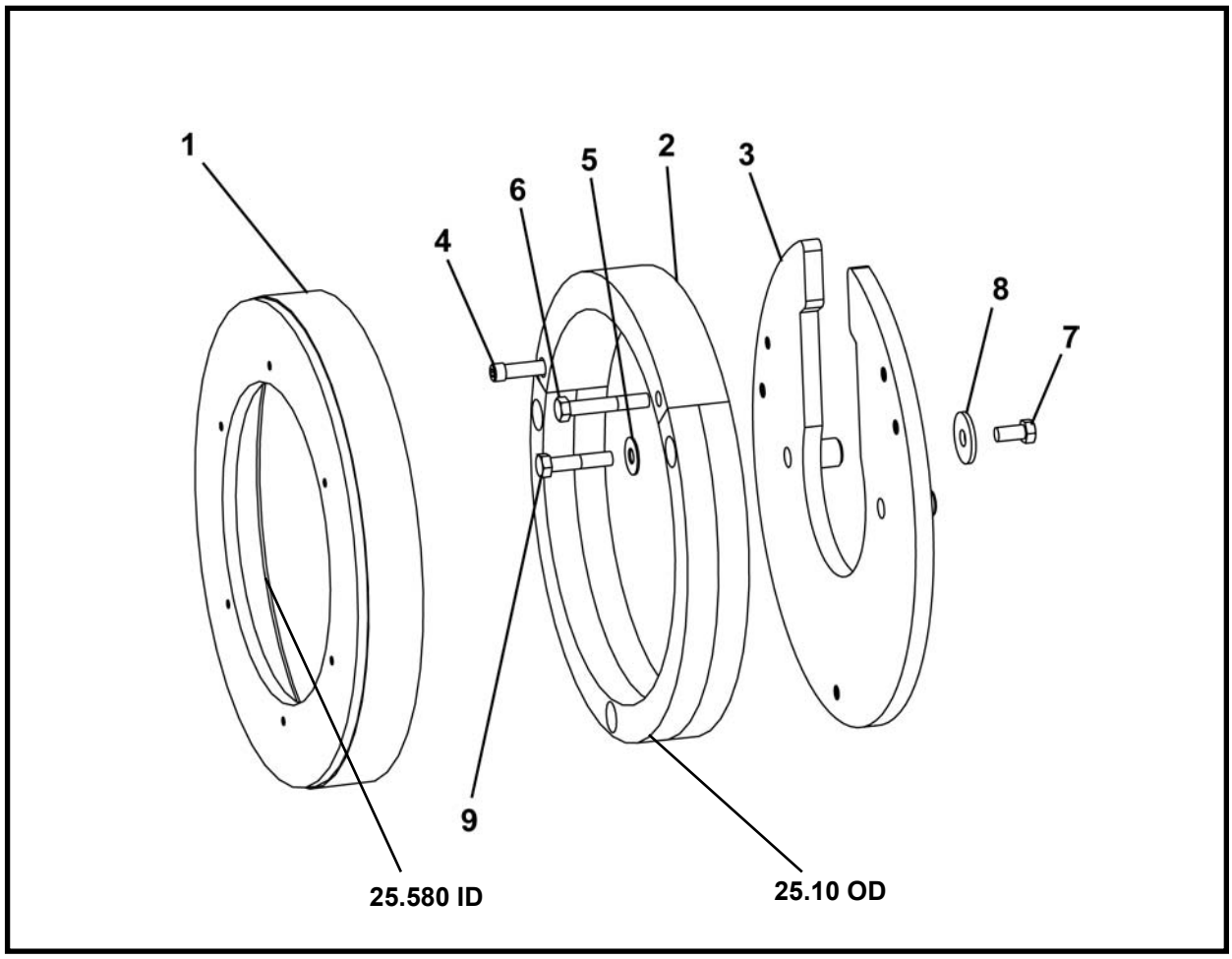


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45786F	THRUST ADAPTER, WATANI 300-600
1	2	A40608P	PIN
2	1	A45797P	PLATE, Adapter
3	1	P0030S-12-008	BOLT, Shoulder 3/4 x 2
4	3	P0031-12-010	SCREW, Cap 3/4 x 2.5
5	2	P0001-12-004	SCREW, 3/4-10 x 1.25
6	2	004124P01	WASHER

NOTE: Use Thrust Adapter, FA45786F with this pipe adapter sets, FA45769F (DN300), FA45790F (DN400), and FA45791F (DN500).

PIPE SET ASSEMBLY, 24” HOBAS, FA44889F

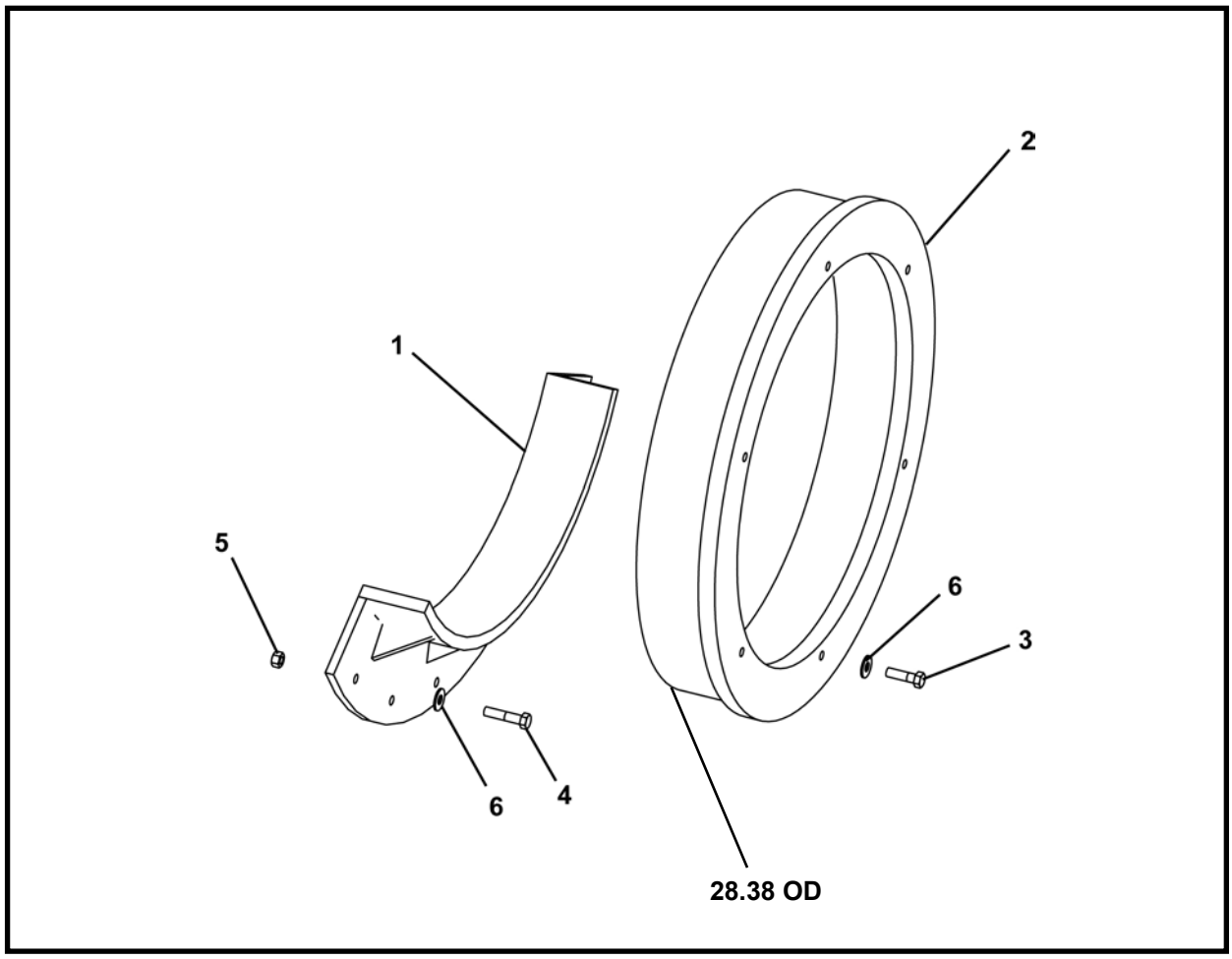
PCH 22.5 Increased



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44889F	PIPE SET ASSEMBLY, 24” Hobas
1	1	A44924A	ASSEMBLY, Pipe Adapter
2	1	A44925A	RING, Hinged Thrust 24 Hobas
3	1	A44920A	WELDMENT, Thrust Adapter 26 OD
4	1	P0030S-12-010	SCREW, Socket Head Shoulder
5	3	P0040-012	WASHER, Hardened Flat 3/4
6	2	P0001-12-018	BOLT, 3/4 UNC x 4.5
7	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
8	2	004124P01	WASHER
9	3	P0001-12-014	BOLT, 3/4 UNC x 3.5

PIPE ADAPTER SET ASSEMBLY, 24” COMPOSITE, FA44328F

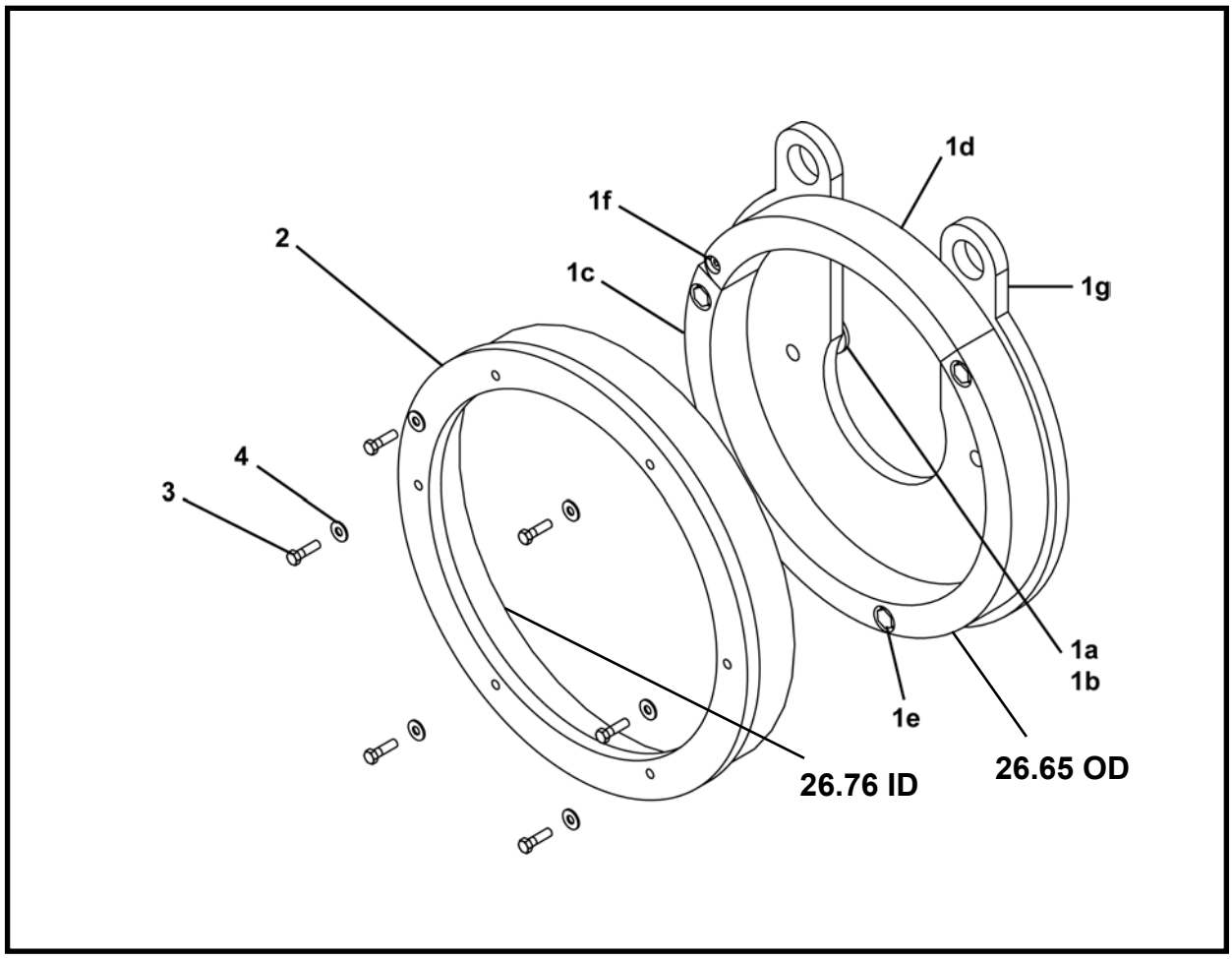
PCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44328F	PIPE ADAPTER SET ASSEMBLY, 24” COMPOSITE
1	1	A44329A	WELDMENT, Thrust Adapter
2	1	A44330A	WELDMENT, Pipe Adapter
3	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
4	6	P0001-08-009	BOLT, 1/2 UNC x 2.25
5	6	P0003-08-000	NUT, 1/2
6	12	P0040-008	WASHER, Hardened Flat 1/2

PIPE ADAPTER SET ASSEMBLY, 27” ID HOBAS, FA43792F

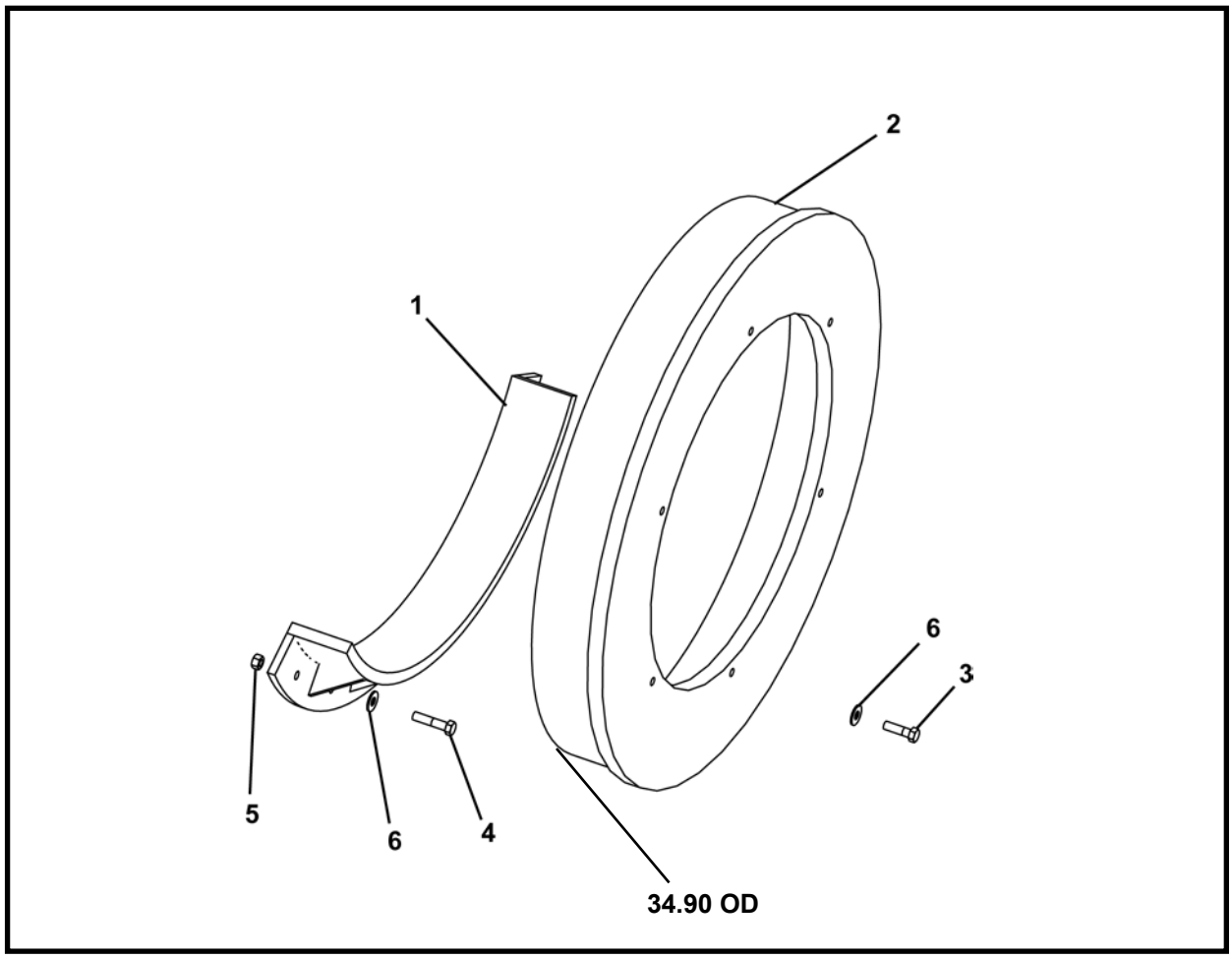
PCH 28.5



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43792F	PIPE ADAPTER SET ASSEMBLY, 27” ID Hobas
1	1	A43791A	ASSEMBLY, Thrust Adapter (Includes items 1a - 1g)
1a	2	004124P01	WASHER
1b	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
1c	1	A43789P	RING, Fixed Thrust
1d	1	A43790P	RING, Hinged Thrust
1e	3	P0001-12-014	BOLT, 3/4 UNC x 3.5
1f	1	P0030S-12-016	BOLT, Shoulder 3/4 x 4 x 5/8-11
1g	1	A43216A	WELDMENT, Thrust Adapter
2	1	A43788A	WELDMENT, Pipe Adapter
3	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
4	6	P0040-008	WASHER, Flat 1/2

PIPE ADAPTER SET ASSEMBLY, 30” COMPOSITE, FA44335F

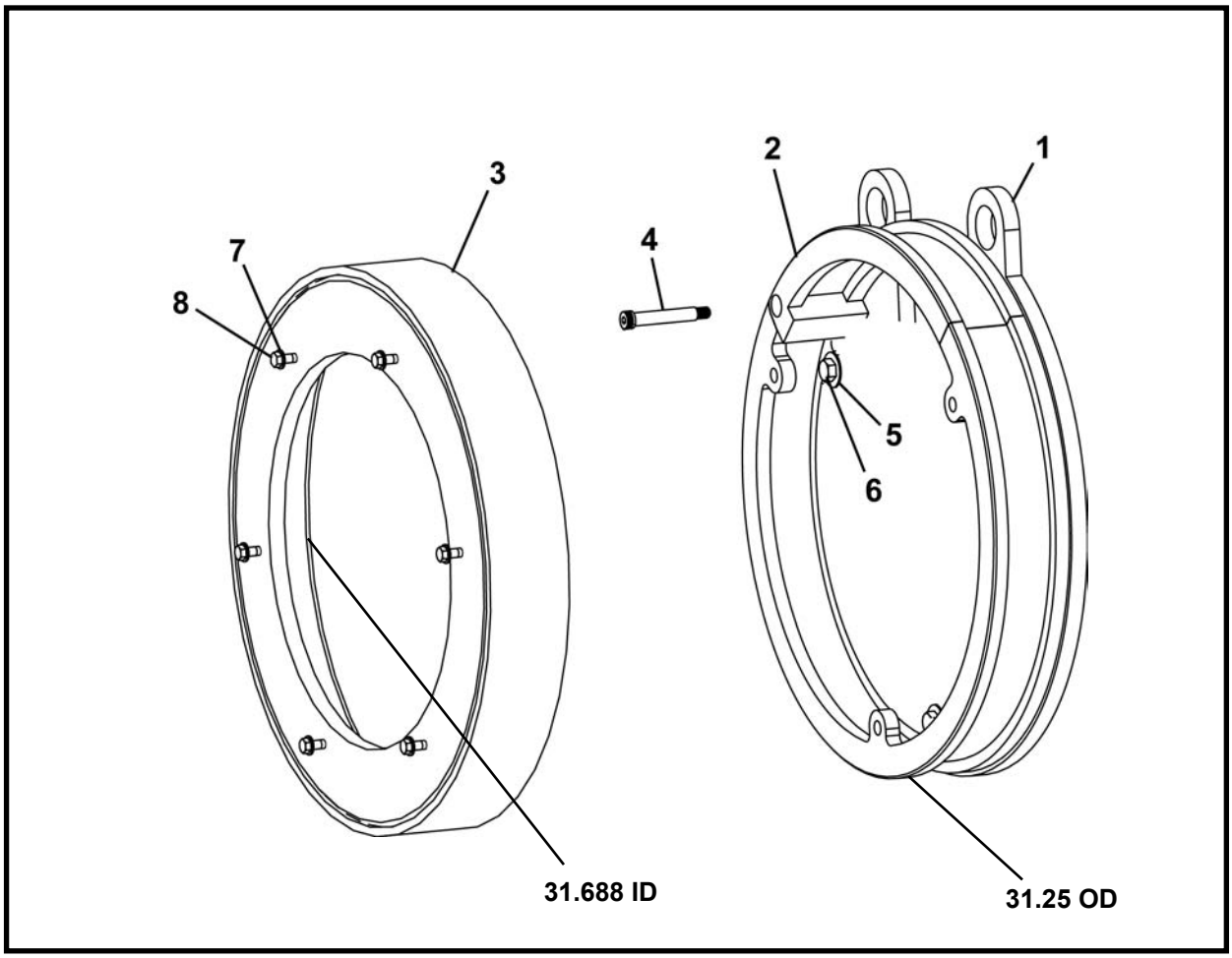
PCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44335F	PIPE ADAPTER SET ASSEMBLY, 30” COMPOSITE
1	1	A44336A	WELDMENT, Thrust Adapter
2	1	A44337A	WELDMENT, Pipe Adapter
3	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
4	6	P0001-08-009	BOLT, 1/2 UNC x 2.25
5	6	P0003-08-000	NUT, 1/2
6	12	P0040-008	WASHER, Hardened Flat 1/2

PIPE ADAPTER SET ASSEMBLY, 30” HOBAS, FA45681F

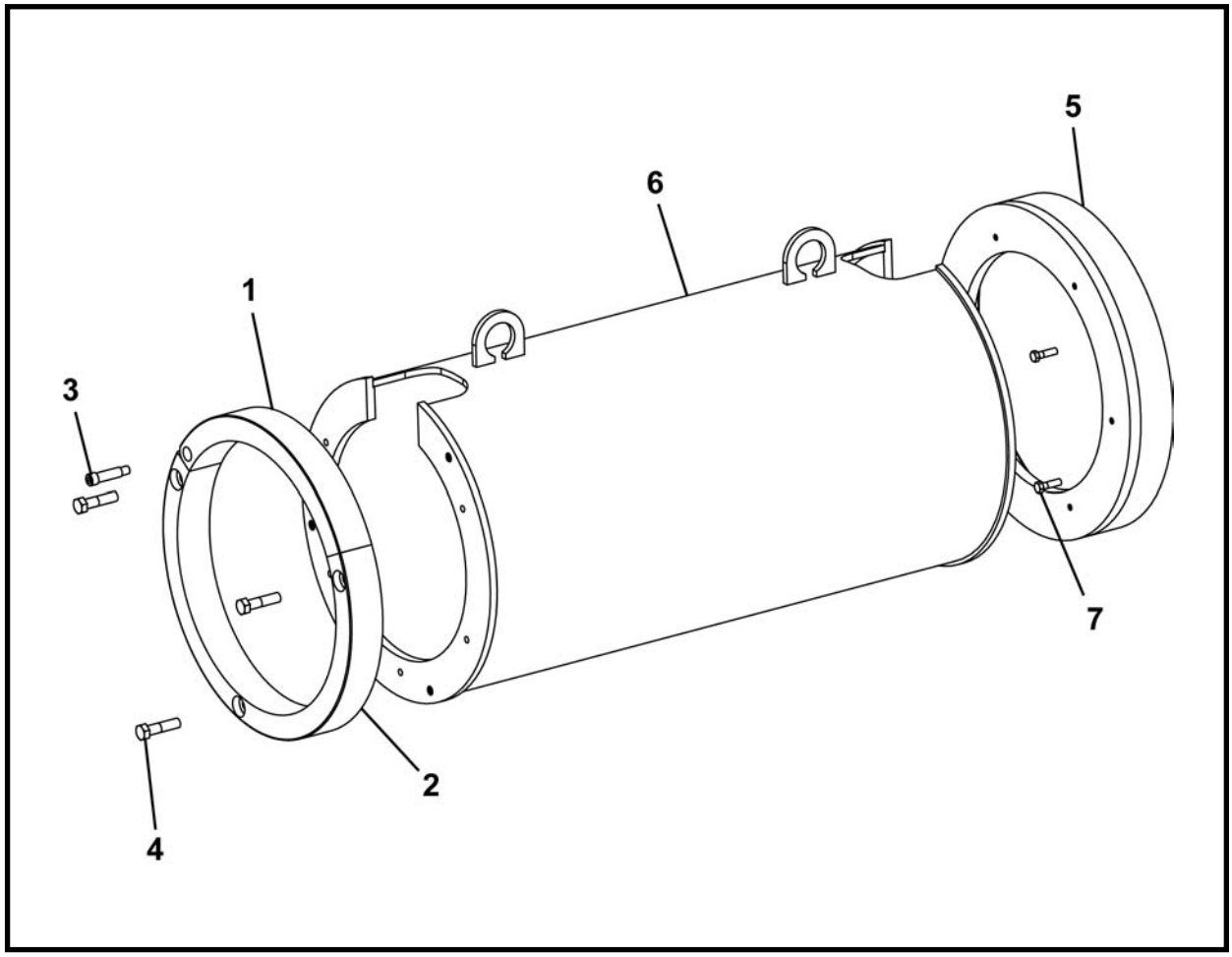
PCH 28.5 Increased



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45681F	PIPE ADAPTER SET ASSEMBLY, 30” Hobas
1	1	A45676A	MOUNT, Thrust Adapter
2	1	A45672A	ADAPTER, Thrust 30”
3	1	A45680A	ADAPTER, Pipe 30”
4	1	P0030S-12-016A	SCREW, Socket Head Shoulder 3/4 x 4
5	3	P0040-012	WASHER, Hardened Flat 3/4
6	3	P0001-12-008	BOLT, 3/4 UNC x 2
7	6	P0040-008	WASHER, Hardened Flat 3/4
8	6	P0001-08-008	BOLT, 1/2 UNC x 2

THRUST SPACER ASSEMBLY, 25.8 HOBAS, FA44635F

PCH

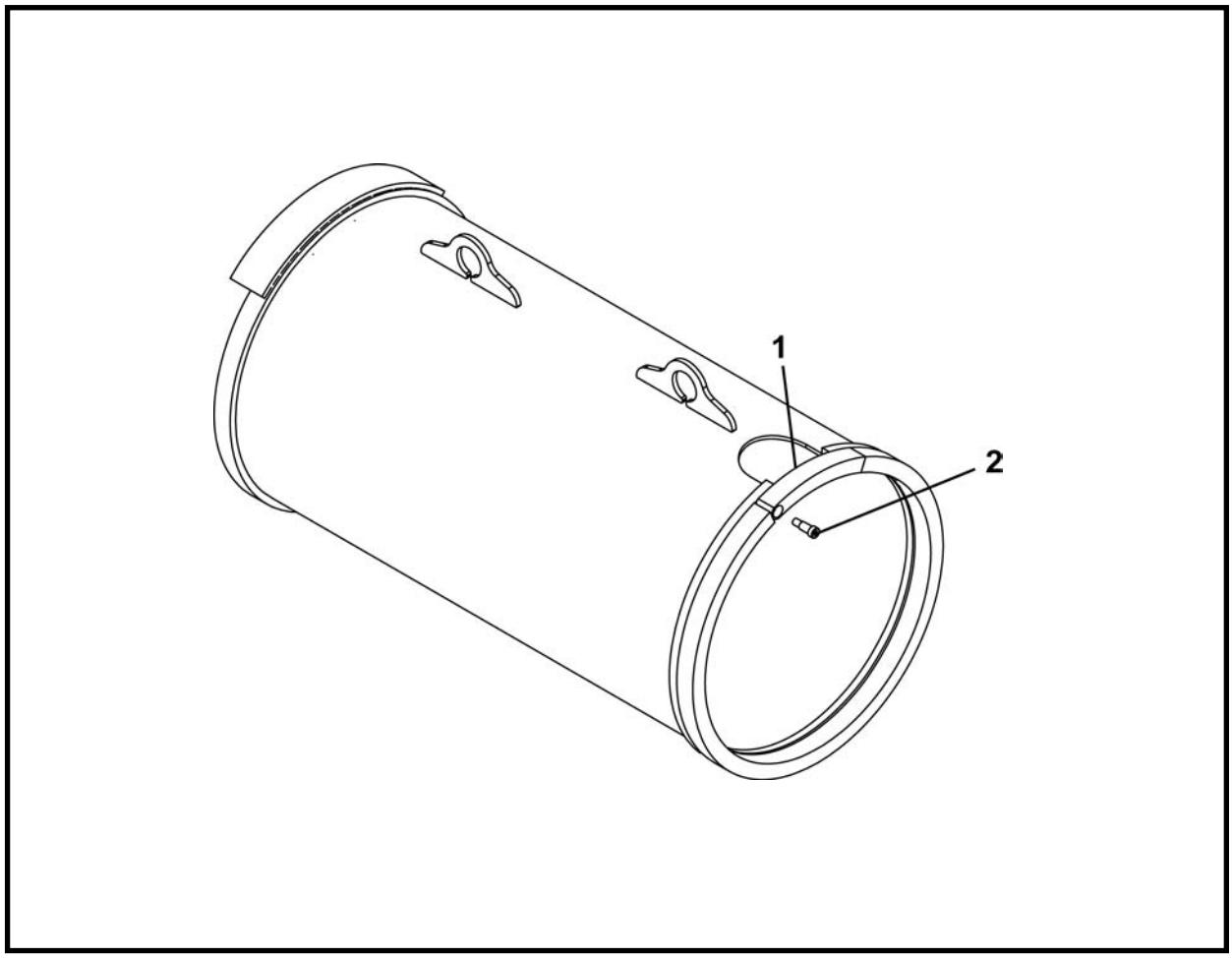


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44635F	THRUST SPACER ASSEMBLY, 25.8 Hobas
1	1	A44644P	RING, Hinged Thrust
2	1	A44643P	RING, Fixed Thrust
3	1	P0030S-12-010	SCREW, Socket Head Shoulder 3/4 x 2.25 Shoulder x 5/8 UNC
4	3	P0001-12-016	BOLT, 3/4 UNC x 4
5	1	A44639A	ADAPTER, Thrust Tube
6	1	A44636A	SPACER, Thrust 25” OD x 50”
7	5	P0001-08-007	BOLT, 1/2 UNC x 1.75

NOTE: Used for pushing pipe longer than 2 meters.

THRUST SPACER ASSEMBLY, 30” HOBAS, 60” LONG, FA46312F

PCH

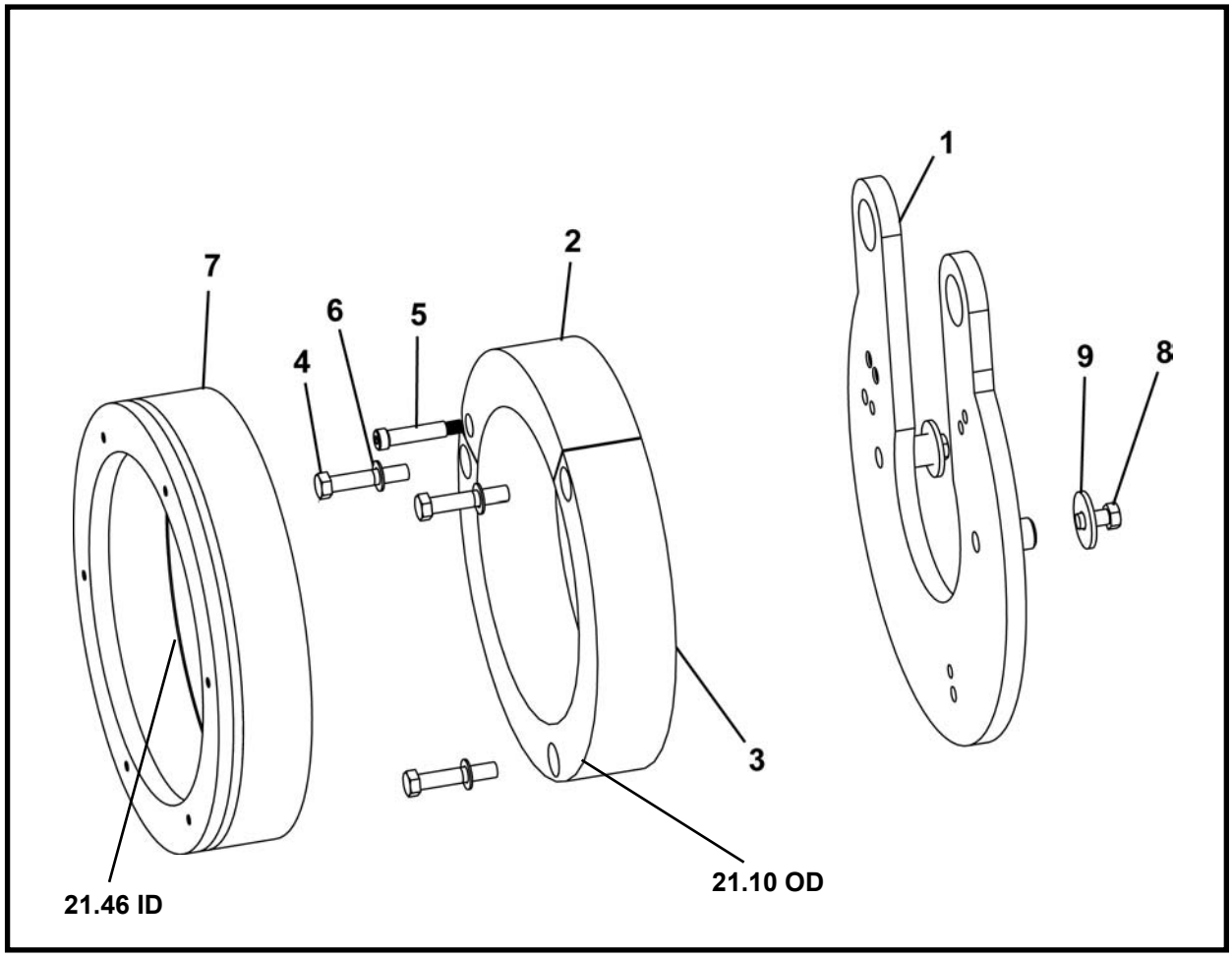


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA46312F	THRUST SPACER ASSEMBLY, 30 Hobas
1	1	A46308P	RING, Hinged Thrust
2	1	P0030S-12-004	BOLT, Shoulder 3/4 x 1-1/4 x 5-8/11

NOTE: Used for pushing pipe longer than 2 meters.

PIPE ADAPTER ASSEMBLY, 400MM RCP, FA44821F

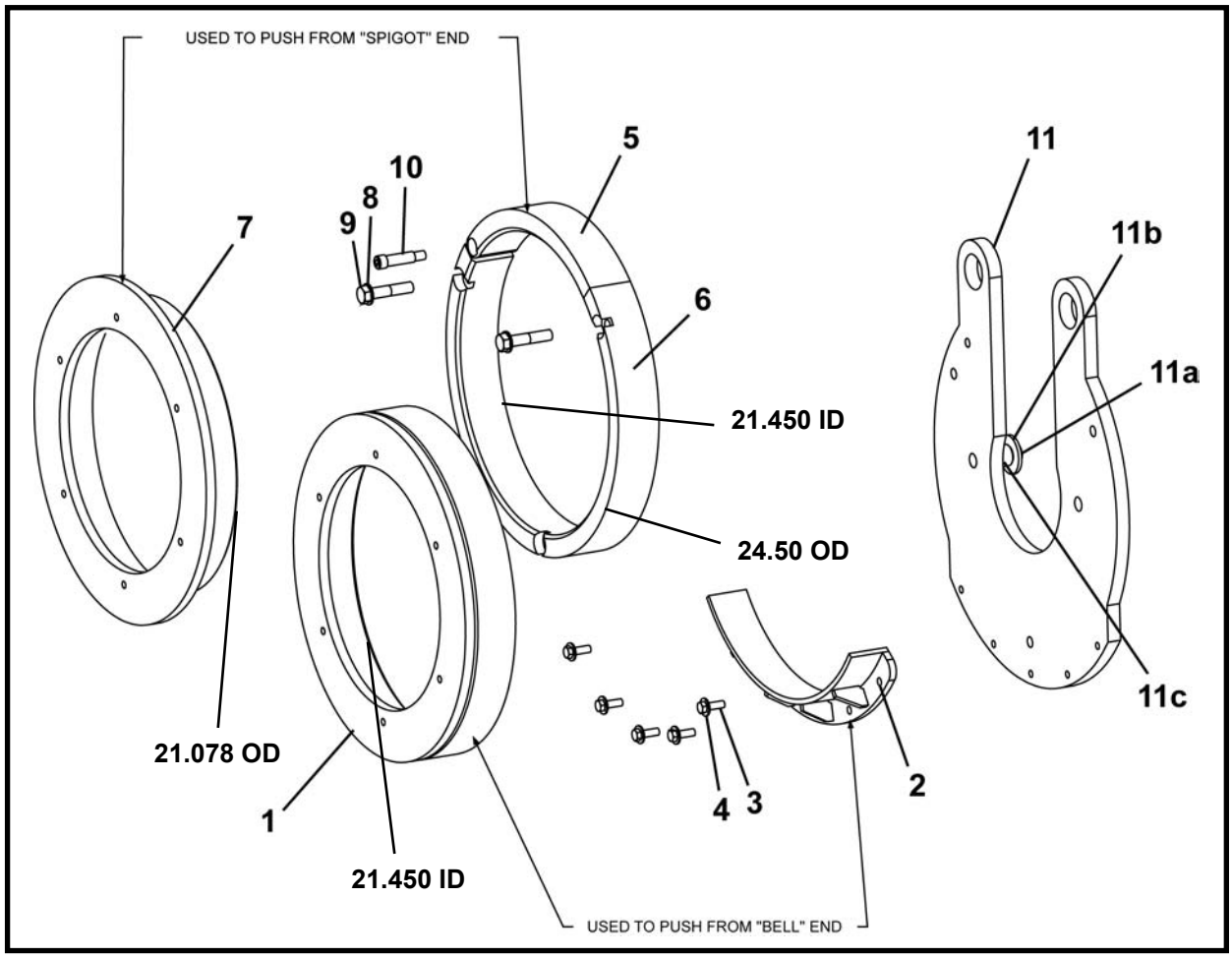
PCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44821F	PIPE ADAPTER ASSEMBLY, 400MM
1	1	A43170A	WELDMENT, Thrust Adapter
2	1	A44514P	RING, Hinged Thrust
3	1	A44513P	RING, Fixed Thrust
4	3	P0001-12-016	BOLT, 3/4 UNC x 4
5	1	P0030S-12-017	BOLT, Socket Head Shoulder 3/4 x 3
6	3	P0040-012	WASHER, Hardened Flat 3/4
7	1	A44511A	ASSEMBLY, Pipe Adapter
8	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
9	2	004124P01	WASHER

PIPE ADAPTER ASSEMBLY, 450MM RCP, FA46109F

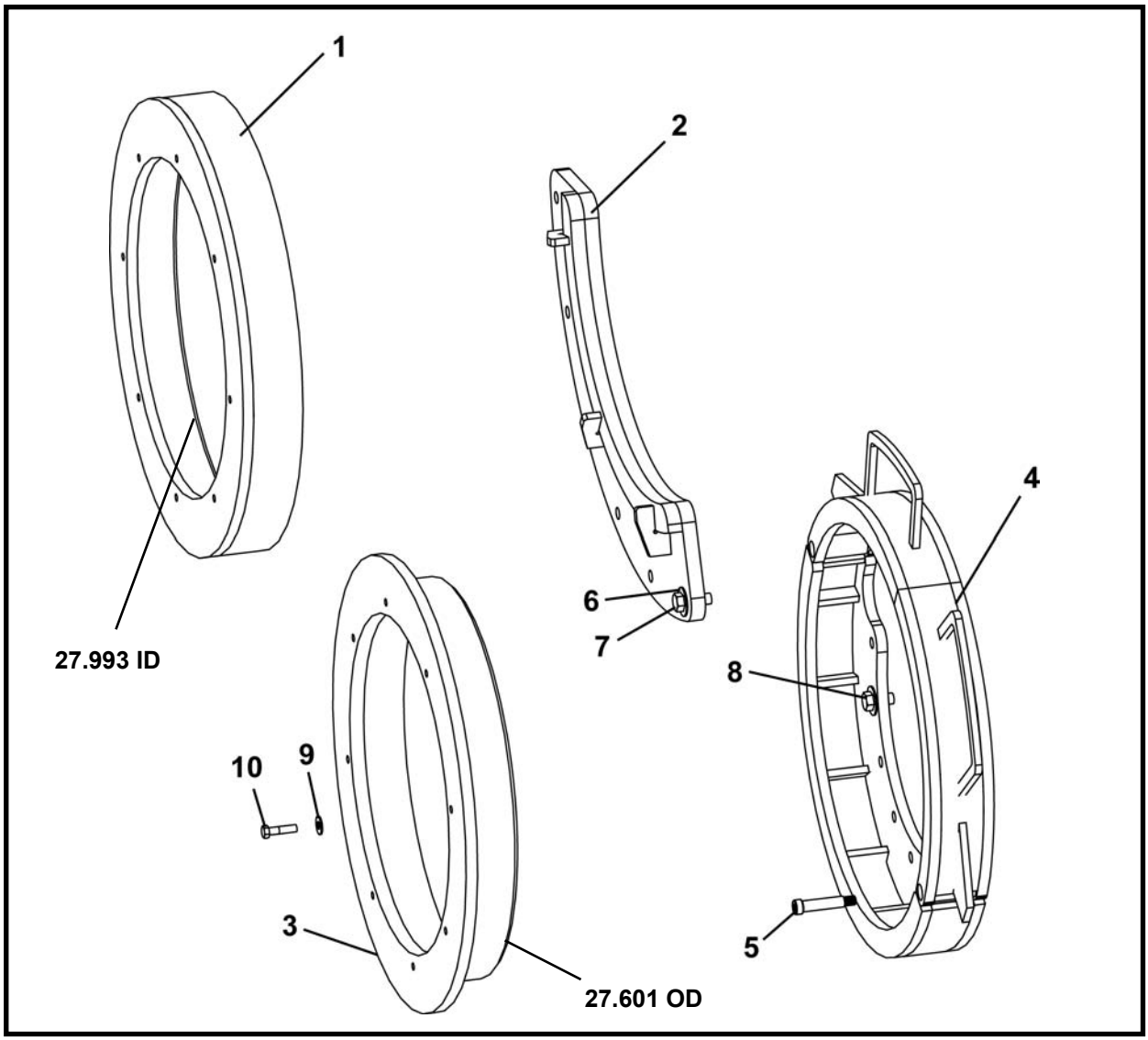
PCH 22.5 Increased To 24.5" OD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA46109F	PIPE ADAPTER ASSEMBLY, 450MM RCP
1	1	A46110A	ADAPTER, Spigot
2	1	A46118A	SUPPORT, Pipe
3	5	P0001-08-006	BOLT, 1/2 UNC x 1.5
4	5	P0040-008	WASHER, Hardened Flat 1/2
5	1	A46115P	RING, Hinged Thrust
6	1	A46114P	RING, Fixed Thrust
7	1	A46117A	ADAPTER, Bell
8	3	P0040-012	WASHER, Hardened Flat 3/4
9	3	P0001-12-014	BOLT, 3/4 UNC x 3.5
10	1	P0030S-12-010	SCREW, Socket Head Shoulder
11	1	A46122A	ADAPTER, Thrust (Includes items 11a - 11c)
11a	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
11b	2	004124P01	WASHER
11c	2	A40608P	PIN

PIPE ADAPTER ASSEMBLY, 600MM RCP, FA45621F

PCH

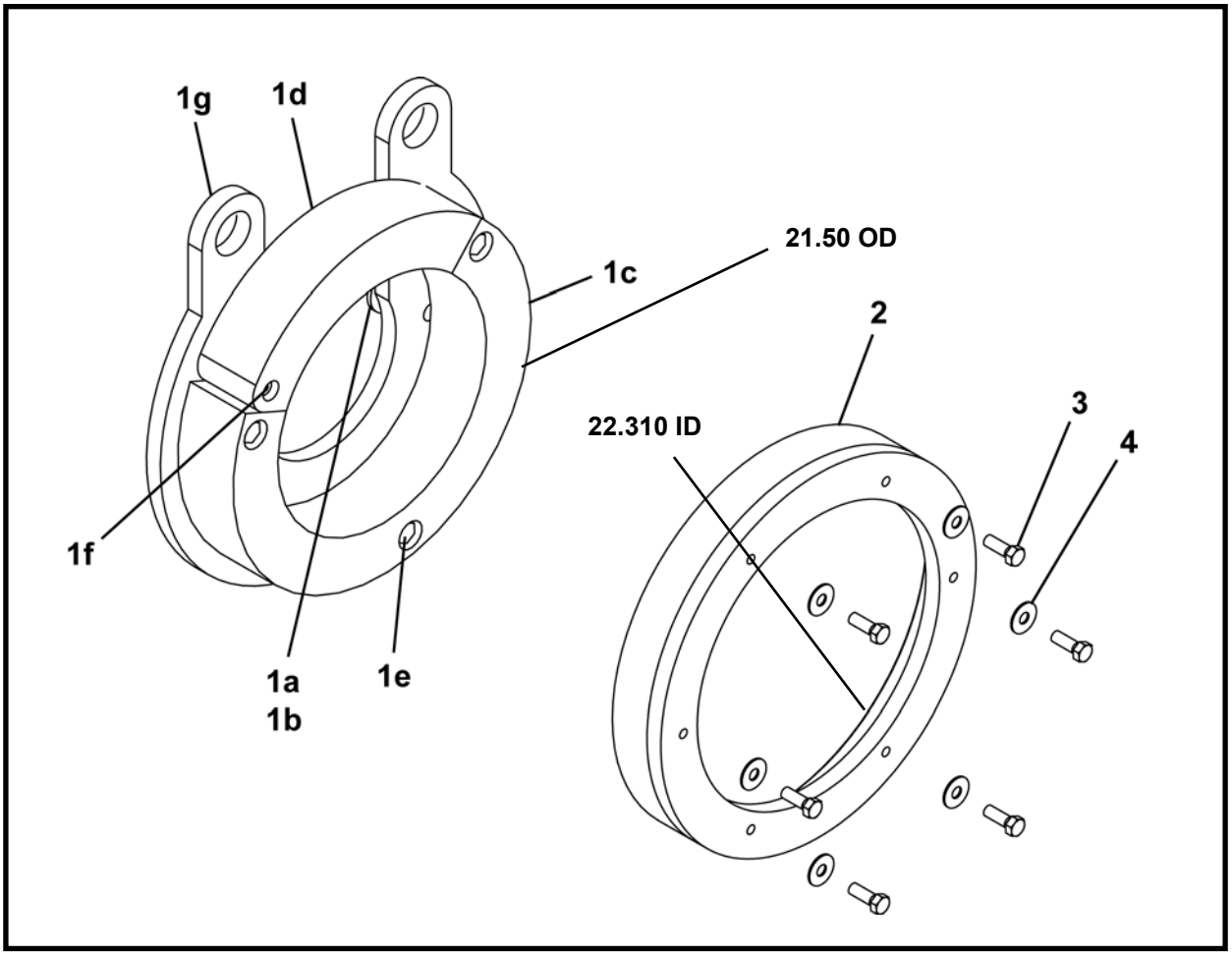


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45621F	PIPE ADAPTER ASSEMBLY, 600MM RCP
1	1	A45530A	PIPE ADAPTER, Spigot End
2	1	A45531A	SUPPORT, Pipe
3	1	A45533A	PIPE ADAPTER, Bell End
4	1	A45534A	THRUST ADAPTER
5	2	P0030S-12-017	BOLT, Socket Head Shoulder 3/4 x 3
6	13	P0040-012	WASHER, Hardened Flat 3/4
7	6	P0001-12-008	BOLT, 3/4 UNC x 2
8	7	P0001-12-006	BOLT, 3/4 UNC x 1.5
9	8	P0040-008	WASHER, Hardened Flat 1/2
10	8	P0001-08-008	BOLT, 1/2 UNC x 2

Note: Use thrust ring adapter plate, A45625P to mount this pipe adapter assembly.

PIPE ADAPTER ASSEMBLY, 22.28" TITAN, FA43199F

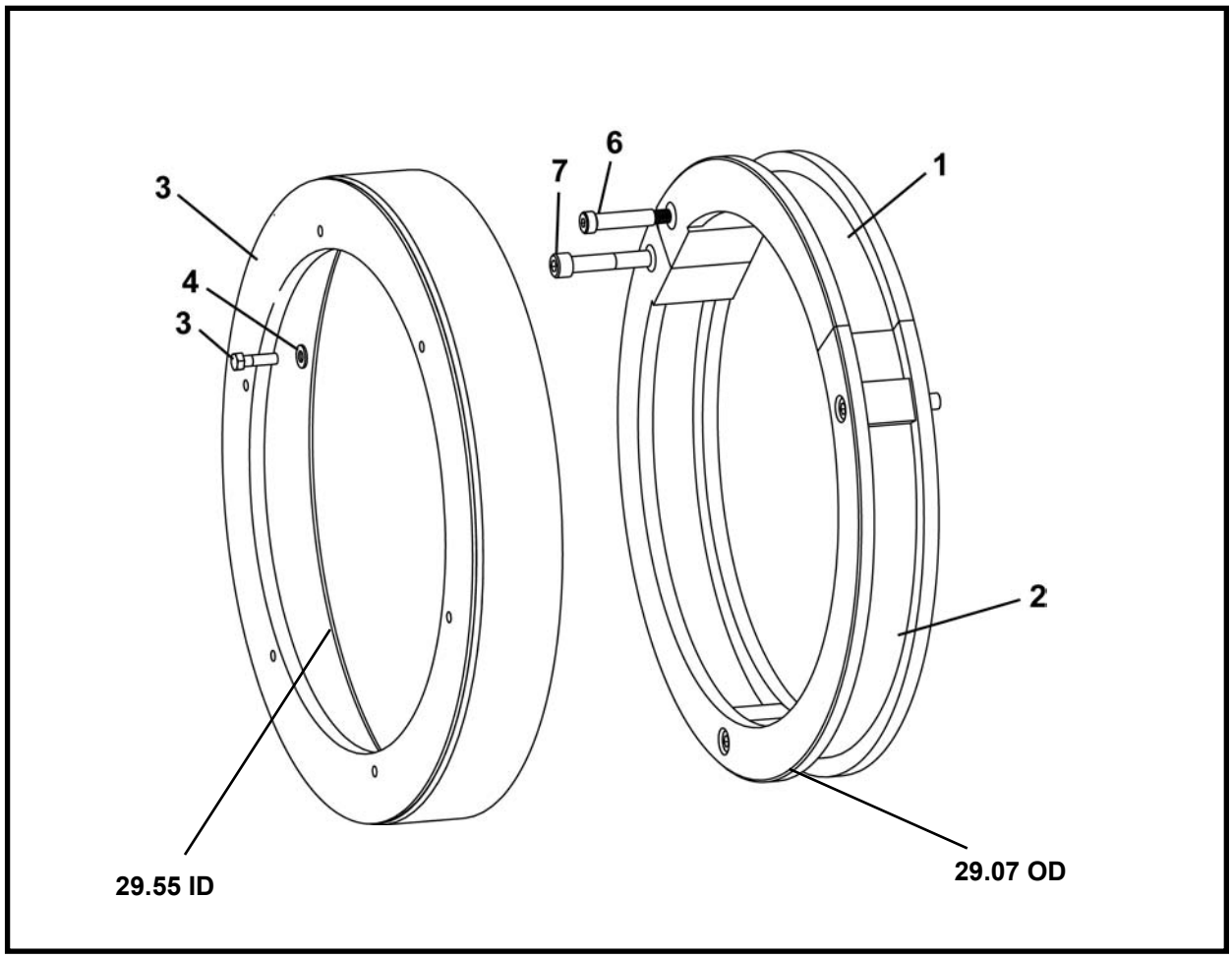
PCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43199F	PIPE ADAPTER ASSEMBLY, 22.28 TITAN
1	1	A43739A	ASSEMBLY, Thrust Adapter (Includes items 1a - 1g)
1a	2	004124P01	WASHER
1b	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
1c	1	A43737P	RING, Fixed Thrust
1d	1	A43738P	RING, Hinged Thrust
1e	3	P0001-12-016	BOLT, 3/4 UNC x 4
1f	1	P0030S-12-017	BOLT, Shoulder 3/4 x 3
1g	1	A43170A	WELDMENT, Thrust Adapter
2	1	A43736A	WELD, Pipe Adapter
3	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
4	6	P0040-008	WASHER, Flat 1/2

PIPE ADAPTER SET ASSEMBLY, 24” RCP, FA46034F

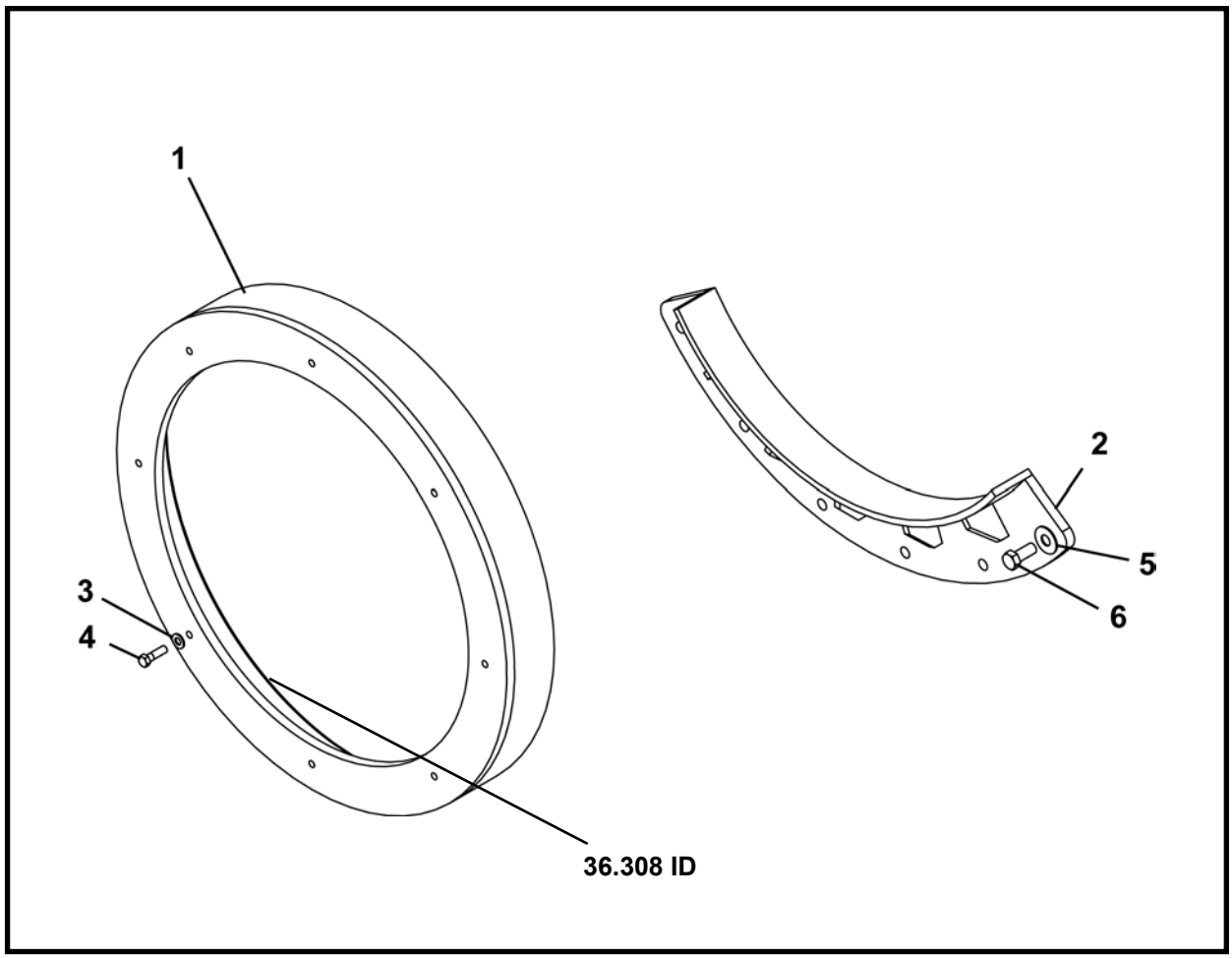
PCH 28.5 Increased To 30” OD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA46034F	PIPE ADAPTER SET ASSEMBLY, 24” RCP
1	1	A46029P	RING, Hinged Thrust
2	1	A46030P	RING, Fixed Thrust
3	1	A46033A	PIPE ADAPTER
4	6	P0040-008	WASHER, Hardened Flat 1/2
5	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
6	1	P0030S-12-017	SCREW, Socket Head Shoulder 3/4 x 3
7	3	P0031-12-016	SCREW, Socket Head Cap 3/4 UNC x 4

PIPE ADAPTER SET ASSEMBLY, 30” RCP, FA46019F

PCH 36 Increased To 37” OD

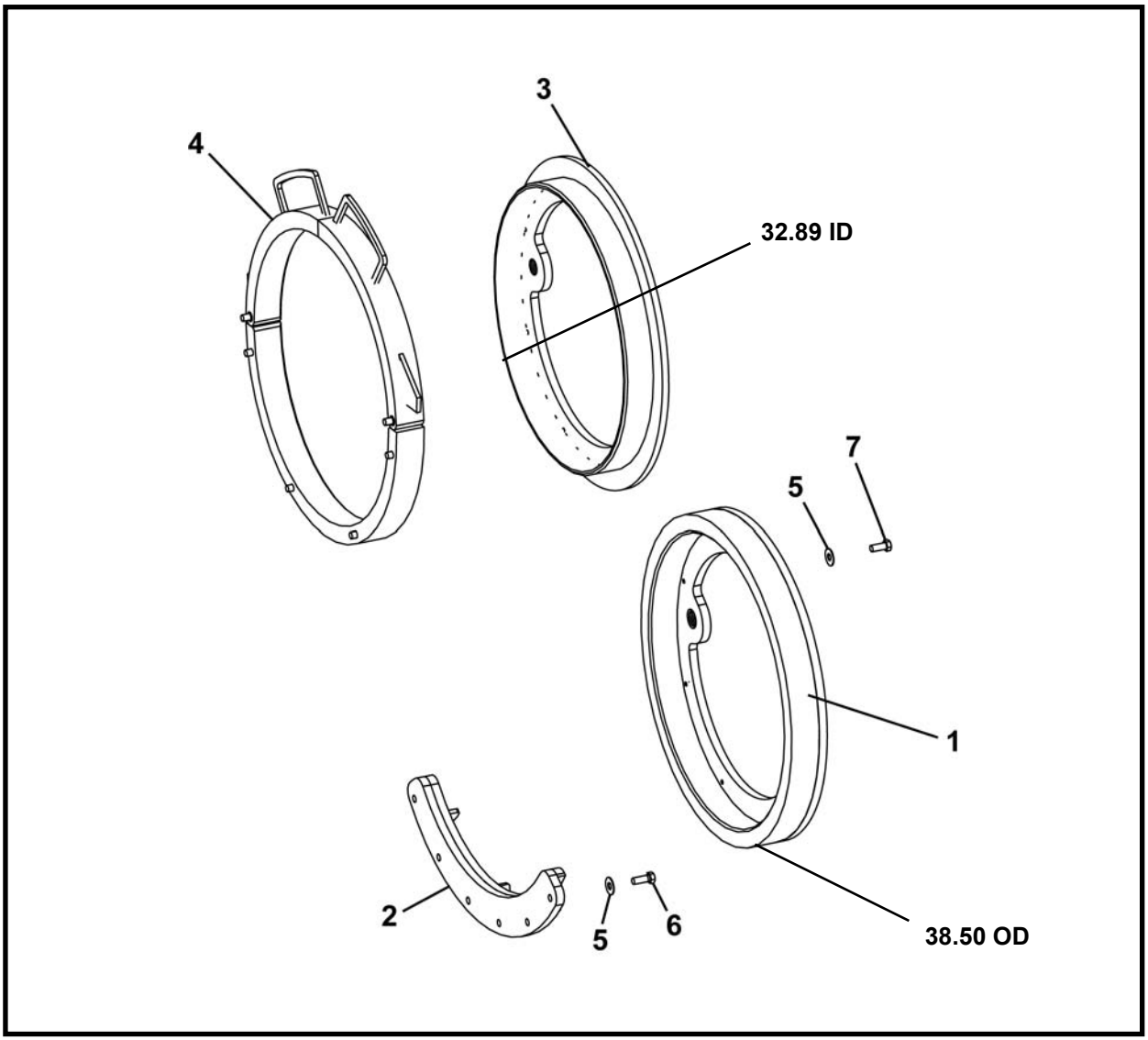


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA46019F	PIPE ADAPTER SET ASSEMBLY, 30” RCP
1	1	A45990A	PIPE ADAPTER
2	1	A45993A	SUPPORT
3	8	P0040-008	WASHER, Hardened Flat 1/2
4	8	P0001-08-007	BOLT, 1/2 UNC x 1.75
5	6	P0040-012	WASHER, Hardened Flat 3/4
6	6	P0001-12-007	BOLT, 3/4 UNC x 1.75

NOTE: Use this adapter when pushing from the spigot end.

PIPE ADAPTER ASSEMBLY, 30” ID RCP, FA45620F

PCH 36 Increased To 38.5” OD

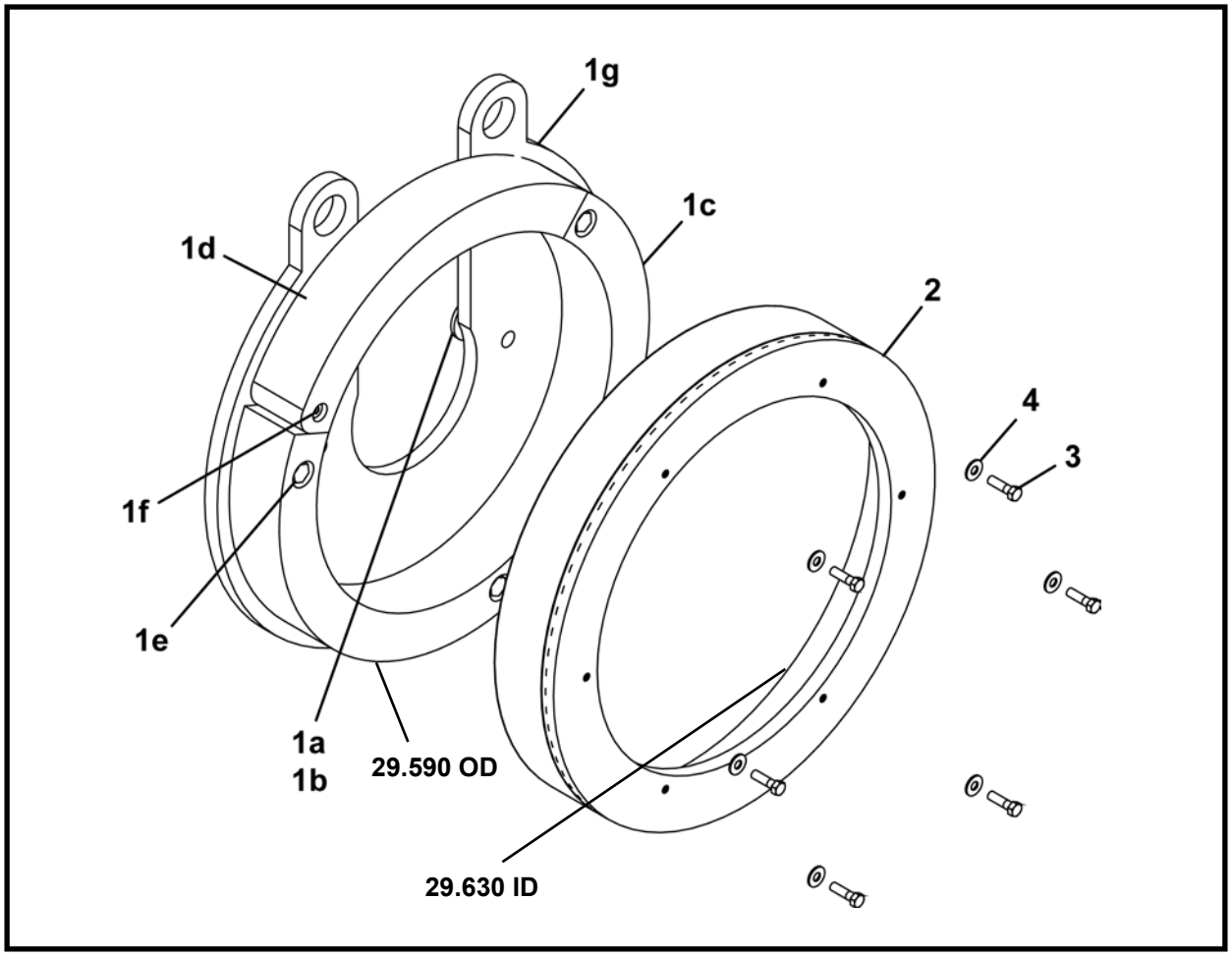


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45620F	PIPE ADAPTER ASSEMBLY, 30” RCP
1	1	A45541A	PIPE ADAPTER, Spigot End
2	1	A45544A	SUPPORT, Pipe
3	1	A45546A	PIPE ADAPTER, Bell End
4	1	A45547A	THRUST ADAPTER
5	14	P0040-012	WASHER, Hardened Flat 3/4
6	6	P0001-12-008	BOLT, 3/4 UNC x 2
7	8	P0001-12-007	BOLT, 3/4 UNC x 1.75

Note: Use thrust ring adapter plate, A45625P to mount this pipe adapter assembly.

PIPE ADAPTER ASSEMBLY, 30.31” TITAN, FA43750F

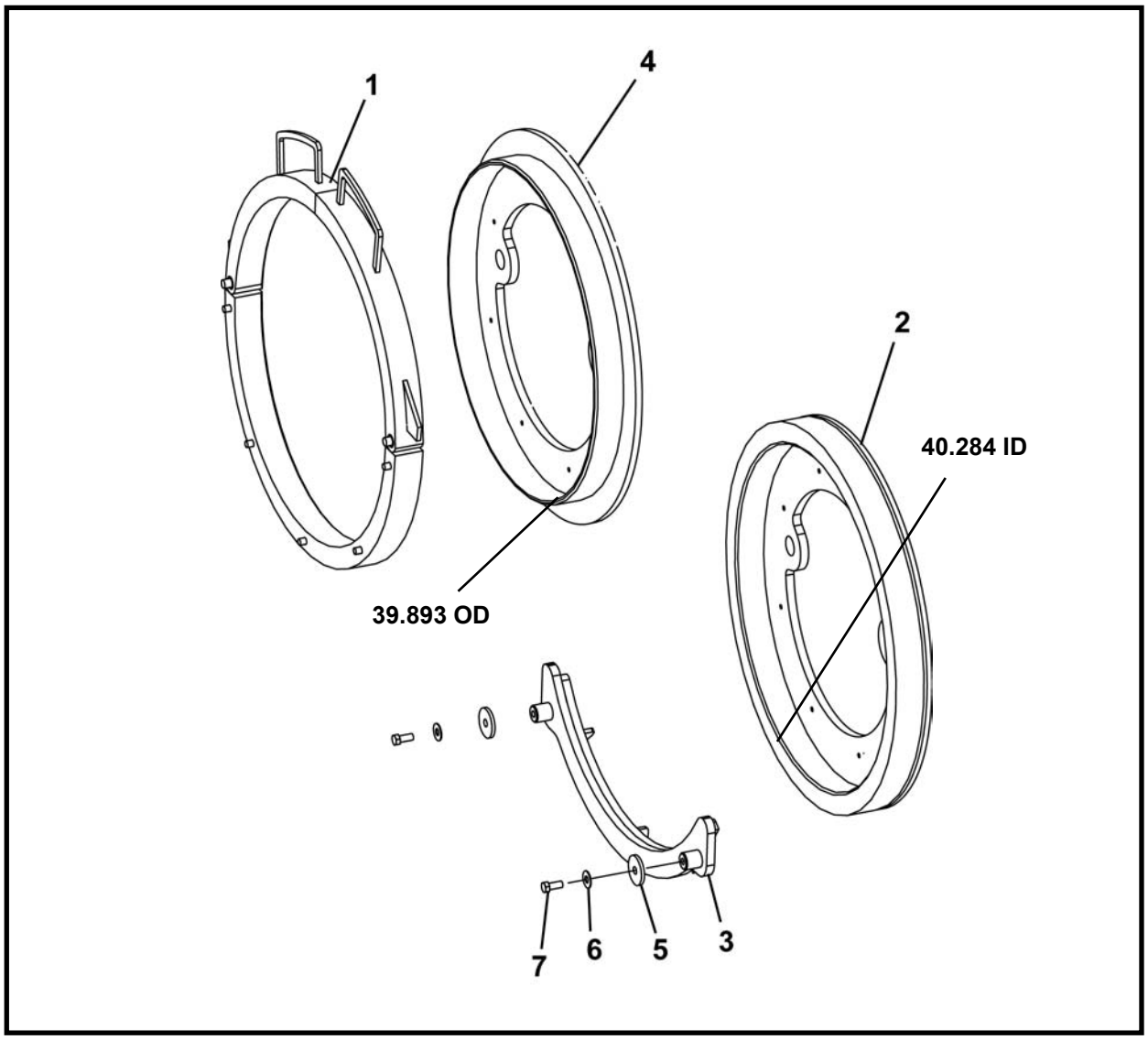
PCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43750F	PIPE ADAPTER ASSEMBLY, 30.31 TITAN
1	1	A43748A	ASSEMBLY, Thrust Adapter (Includes items 1a - 1g)
1a	2	004124P01	WASHER
1b	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
1c	1	A43744P	RING, Fixed Thrust
1d	1	A43745P	RING, Hinged Thrust
1e	3	P0001-12-016	BOLT, 3/4 UNC x 4
1f	1	P0030S-12-017	BOLT, Shoulder 3/4 x 3
1g	1	A43747A	WELDMENT, Thrust Adapter
2	1	A43716A	WELDMENT, Pipe Adapter
3	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
4	6	P0040-008	WASHER, Flat 1/2

PIPE ADAPTER ASSEMBLY, 36” ID RCP, FA45599F

PCH 36 Increased To 45.5” OD

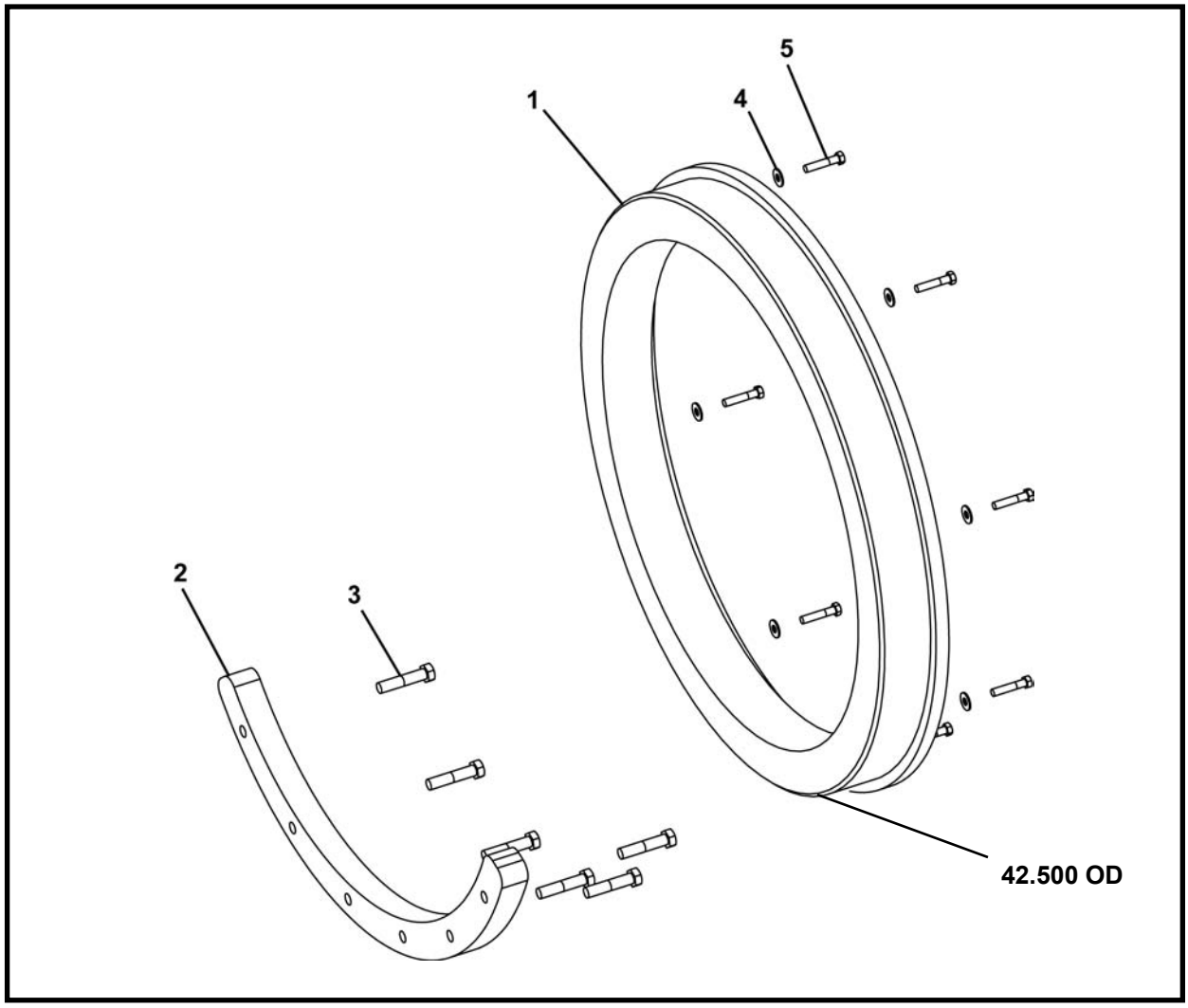


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45599F	PIPE ADAPTER ASSEMBLY, 36” RCP
1	1	A45558A	THRUST ADAPTER
2	1	A45568A	PIPE ADAPTER, Spigot End
3	1	A45566A	SUPPORT, Pipe
4	1	A45557A	PIPE ADAPTER, Bell End
5	2	A45624P	WASHER
6	2	P0040-012	WASHER, Hardened Flat 3/4
7	8	P0001-12-007	BOLT, 3/4 UNC x 1.75

Note: Use thrust ring adapter plate, A45625P to mount this pipe adapter assembly.

PIPE ADAPTER SET ASSEMBLY, 43.31” TITAN, FA43450F

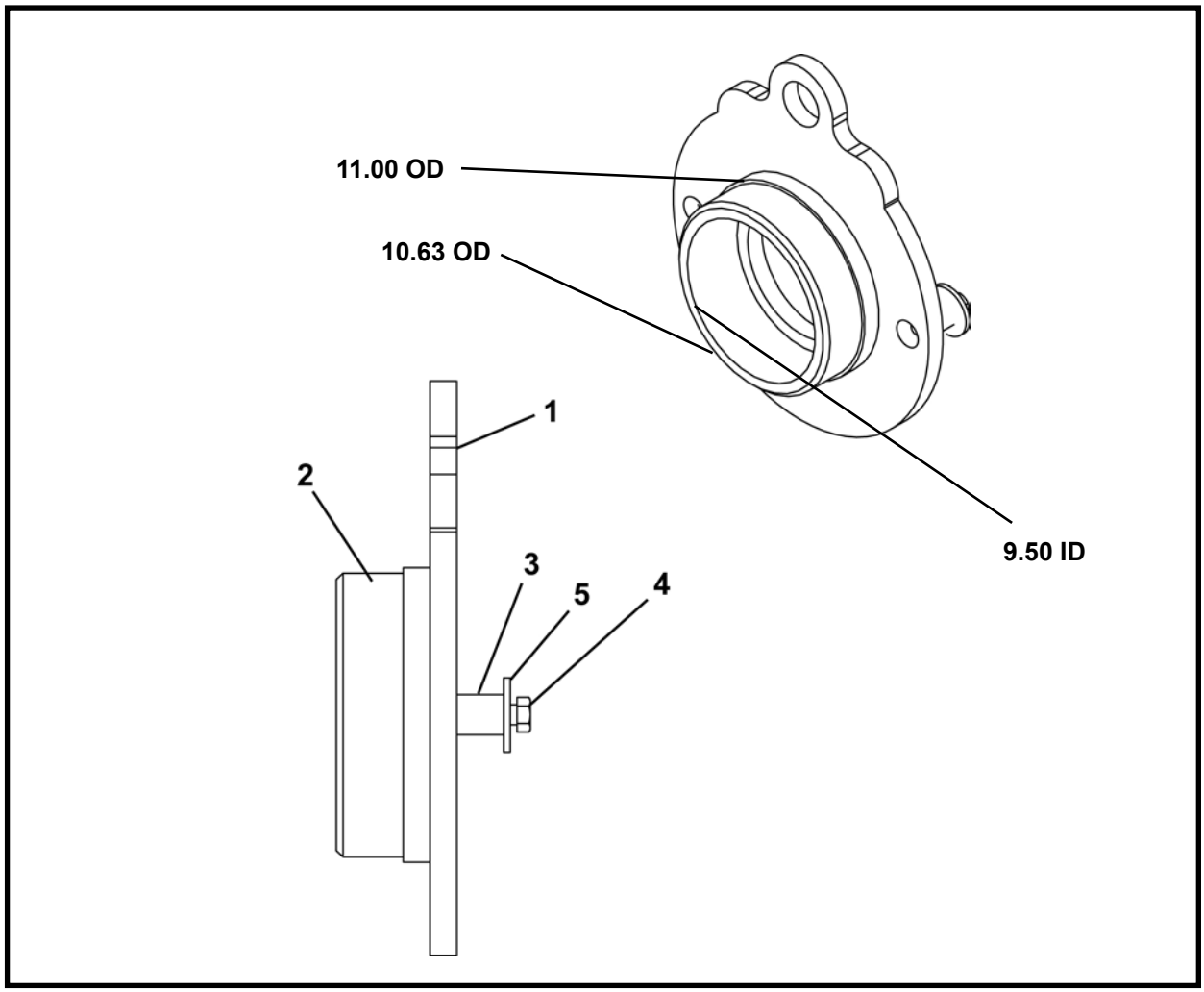
PCH 44



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43450F	PIPE ADAPTER SET ASSEMBLY, 43.31 TITAN
1	1	A43661A	WELDMENT, Pipe Adapter PCH 44
2	1	A43295P	SUPPORT, Pipe 1100 Titan
3	6	P0001-12-014	BOLT, 3/4 UNC x 3.5
4	8	P0040-008	WASHER, Hardened Flat 1/2
5	1	P0001-08-010	BOLT, 1/2 UNC x 2.5

PIPE THRUST PLATE ASSEMBLY, 10” DUCTILE, FA43376F

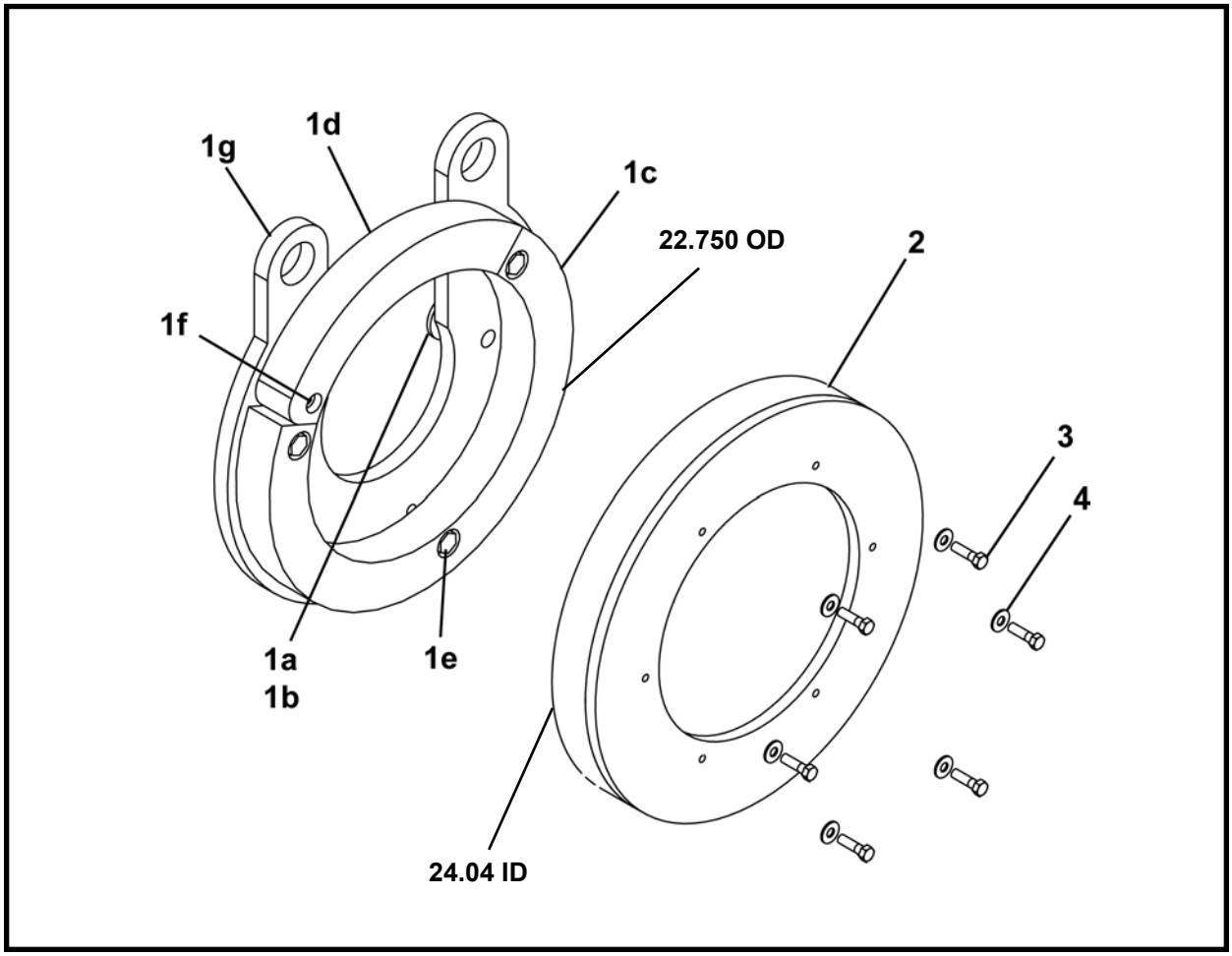
11” CASINGS



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43376F	THRUST PLATE ASSEMBLY, 10” DUCTILE
1	1	A43375P	THRUST PLATE
2	1	A43377P	RING
3	2	A40608P	ADAPTER, Thrust Pin
4	2	P0001-12-005	BOLT, 3/4 UNC x 1.25
5	2	004124P01	WASHER

PIPE ADAPTER ASSEMBLY, 24” OD STEEL, FA43743F

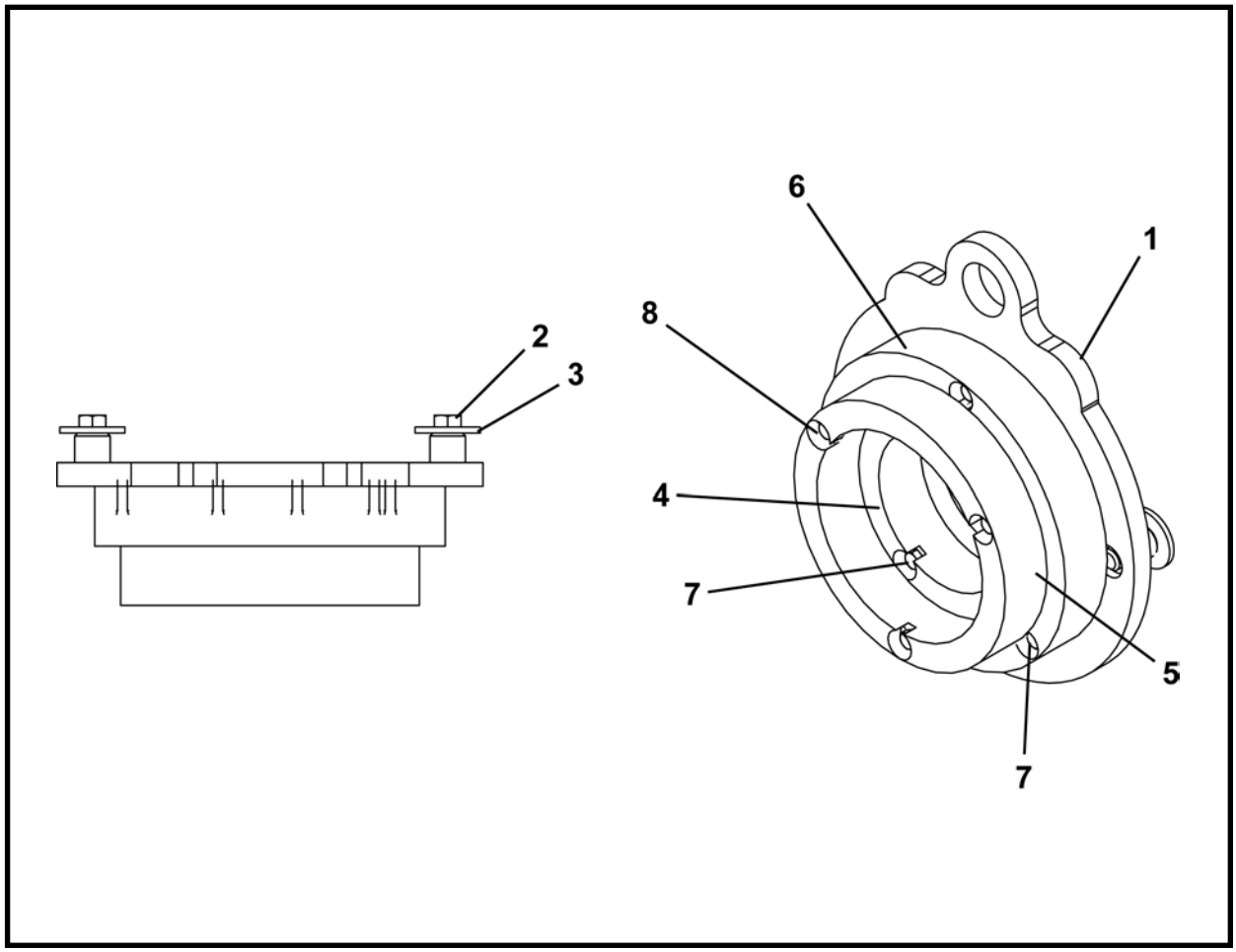
PCH



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43743F	PIPE ADAPTER ASSEMBLY, 24” OD STEEL
1	1	A43742A	ASSEMBLY, Thrust Adapter (Includes items 1a - 1g)
1a	2	004124P01	WASHER
1b	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
1c	1	A43740P	RING, Fixed Thrust
1d	1	A43741P	RING, Hinged Thrust
1e	3	P0001-12-011	BOLT, 3/4 UNC x 2.75
1f	1	P0030S-12-007	BOLT, Shoulder 3/4 x 1.75
1g	1	A43170A	WELDMENT, Thrust Adapter
2	1	A43733A	WELD, Pipe Adapter 24 OD STEEL
3	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
4	6	P0040-008	WASHER, Flat 1/2

PUSH PLATE - 8”, 10”, 12” ID NO-DIG, FA43305F

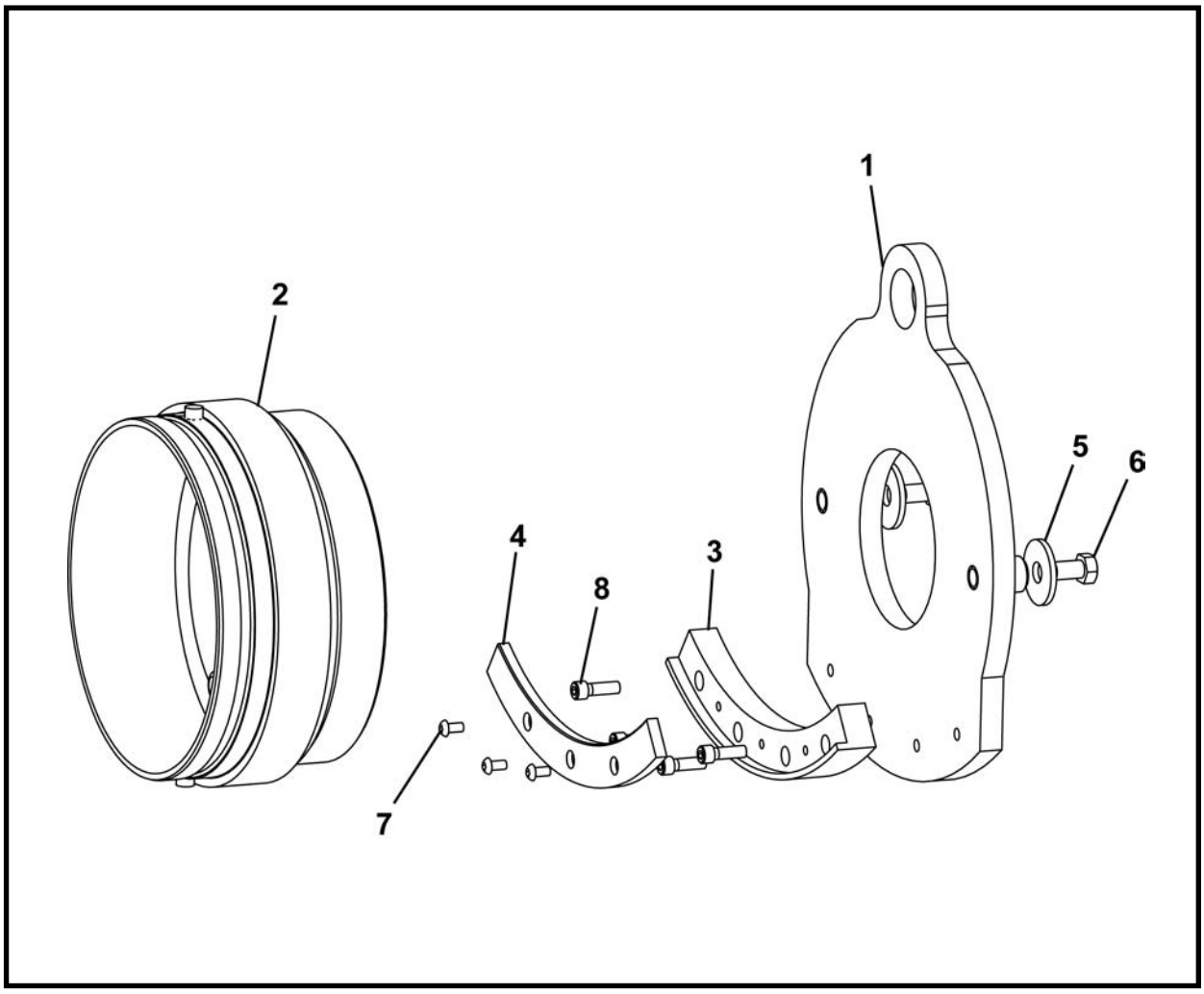
11” CASINGS - 14” CASINGS - 16” CASINGS



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43305F	PUSH PLATE - 8”, 10”, 12” ID
1	1	A43304A	WELDMENT, Push Plate
2	2	P0001-12-005	BOLT, 3/4 UNC x 1.25
3	2	004124P01	WASHER
4	1	A43301P	PUSH PLATE 8” ID
5	1	A43302P	PUSH PLATE 10” ID
6	1	A43303P	PUSH PLATE 12” ID
7	6	P0001-08-010	BOLT, 1/2 UNC x 2.5
8	3	P0001-08-020	BOLT, 1/2 UNC x 5

PIPE ADAPTER ASSEMBLY, STEINZUG CLAY DN300, FA45338F

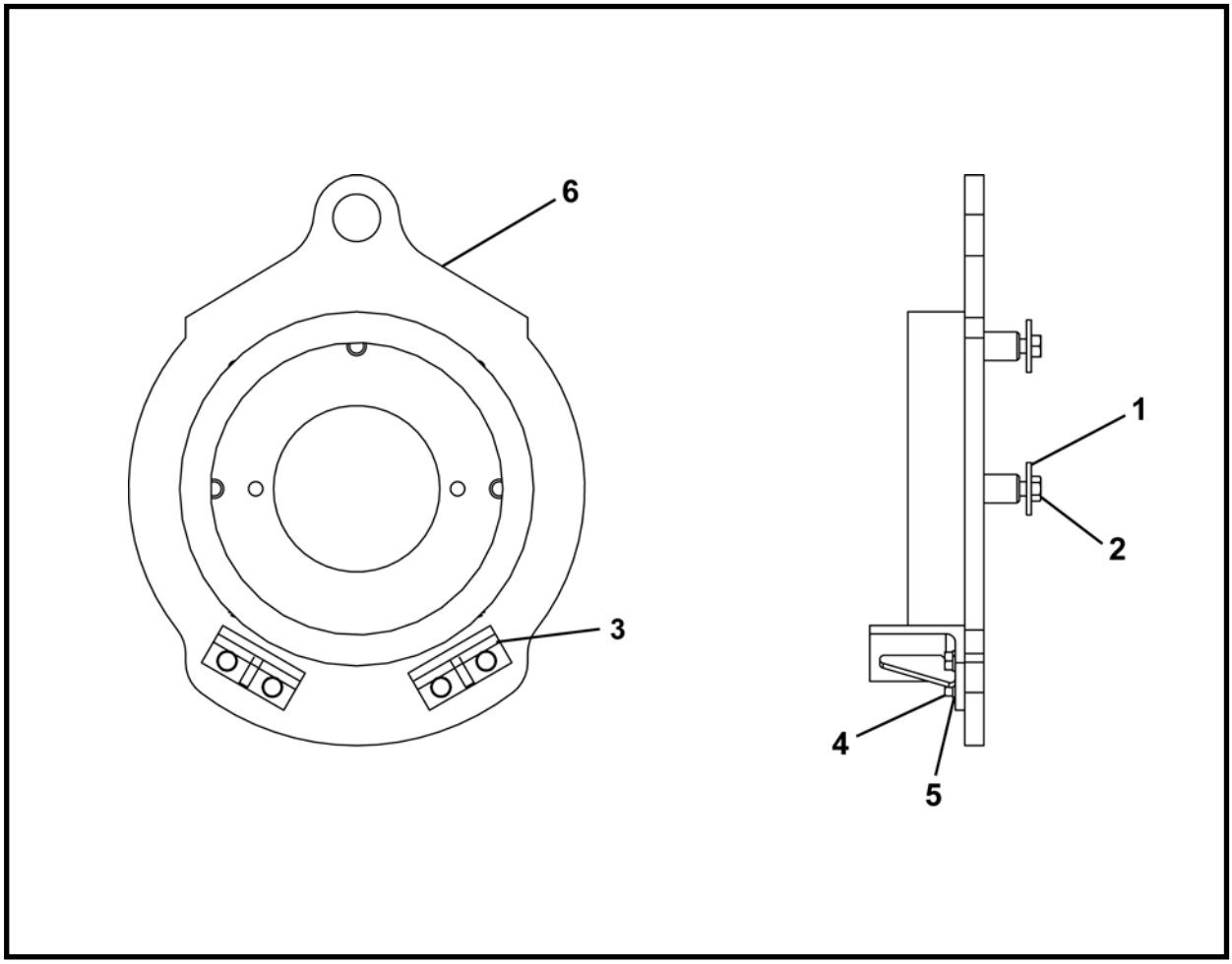
16” CASING



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45338F	PIPE ADAPTER ASSEMBLY, Steinzug Clay DN300
1	1	A45328A	ADAPTER, Pipe Thrust
2	1	A45324A	WELDMENT, Pipe To 16” Casing
3	1	A45342P	PLATE, Pipe Support
4	1	A45336P	GUARD, Pipe Support
5	2	004124P01	WASHER
6	2	P0001-012-005	BOLT, 3/4 UNC x 1.25
7	3	P0030-06-003A	SCREW, Button Head 3/8-16 x .75
8	4	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC x 1.5

PIPE THRUST ADAPTER - 15” MISSION VCP, FA42816F

20” CASING

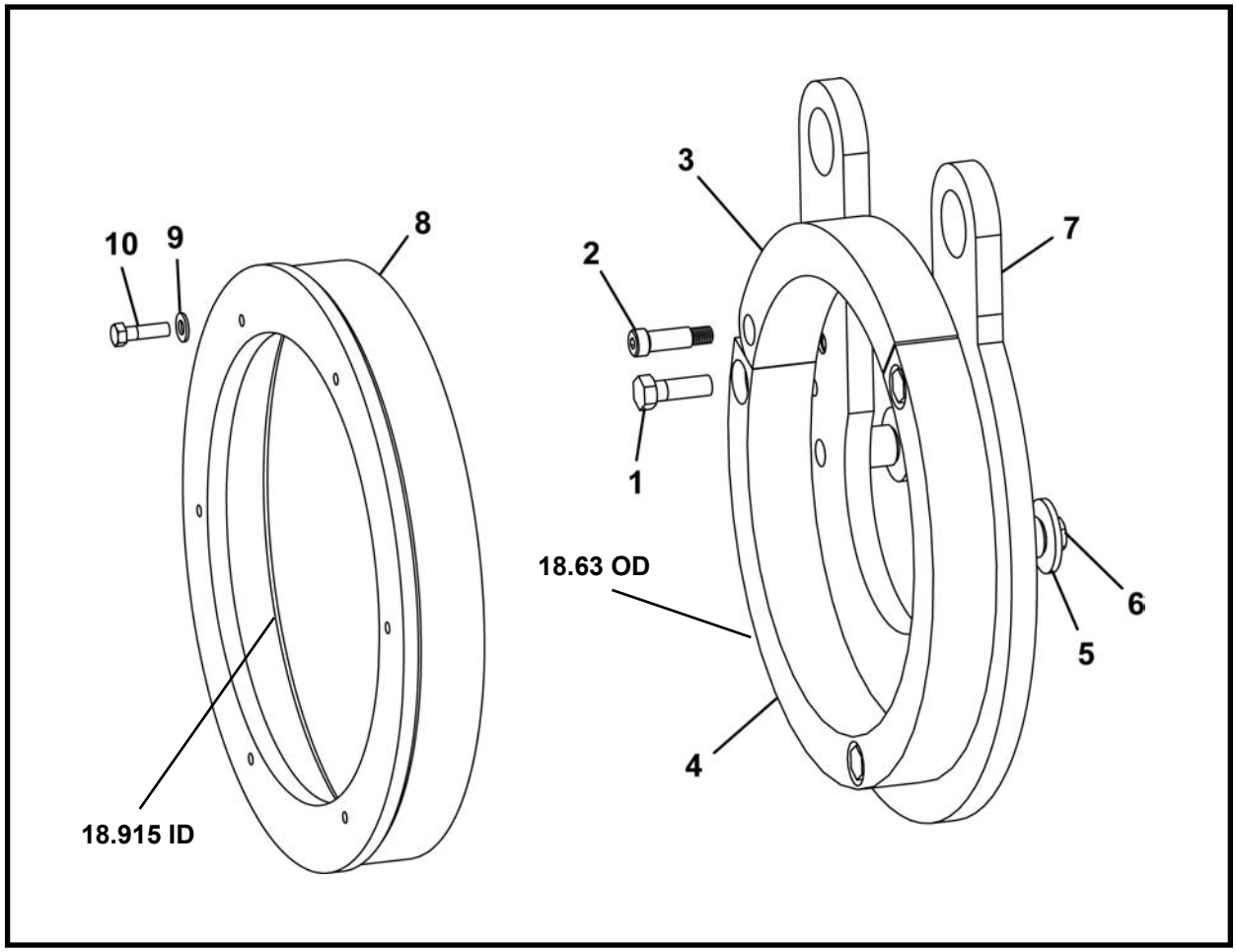


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42816F	ADAPTER, Pipe Thrust 15” ID Mission VCP
1	3	004124P01	WASHER
2	3	P0001-12-005	BOLT, 3/4 UNC x 1.25
3	2	A42210A	WELDMENT, Auger Tube Support
4	4	P0001-10-007	BOLT, 5/8-11 UNC x 1.75
5	4	P0045-010	WASHER, Lock
6	1	A42817A	WELDMENT, Pipe Thrust Adapter

NOTE: Use with 20” casing only.

PIPE ADAPTER ASSEMBLY, 15” NO-DIG, FA43173F

PCH 20

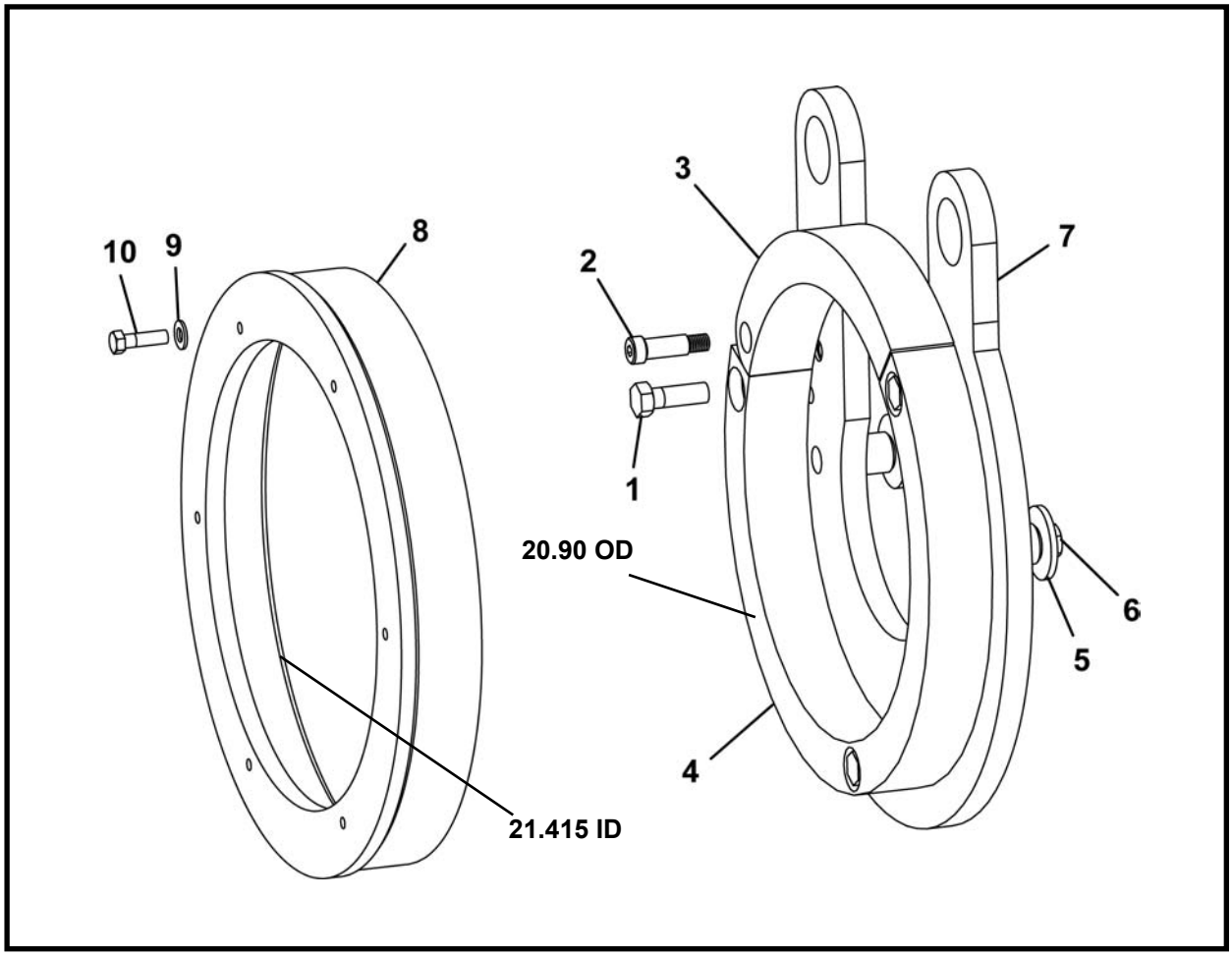


ITEM	QTY	PART NO.	DESCRIPTION
0*	1	FA43173F	PIPE ADAPTER ASSEMBLY, 15” No-Dig
1	3	P0001-12-011	BOLT, 3/4 UNC x 2.75
2	1	P0030S-12-007	BOLT, Shoulder 3/4 x 1.75
3	1	A43172P	RING, Hinged Thrust 15”
4	1	A43171P	RING, Fixed Thrust 15”
5	2	004124P01	WASHER
6	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
7	1	A43170A	WELDMENT, Thrust Adapter
8*	1	A43136A	ADAPTER, Pipe - 15” No-Dig
9*	6	P0040-008	WASHER, Hardened Flat 1/2
10*	6	P0001-08-007	BOLT, 1/2 UNC x 1.75

* Does not include items 8, 9 and 10. Items 8, 9 and 10 must be ordered separately.

PIPE ADAPTER ASSEMBLY, 18” NO-DIG

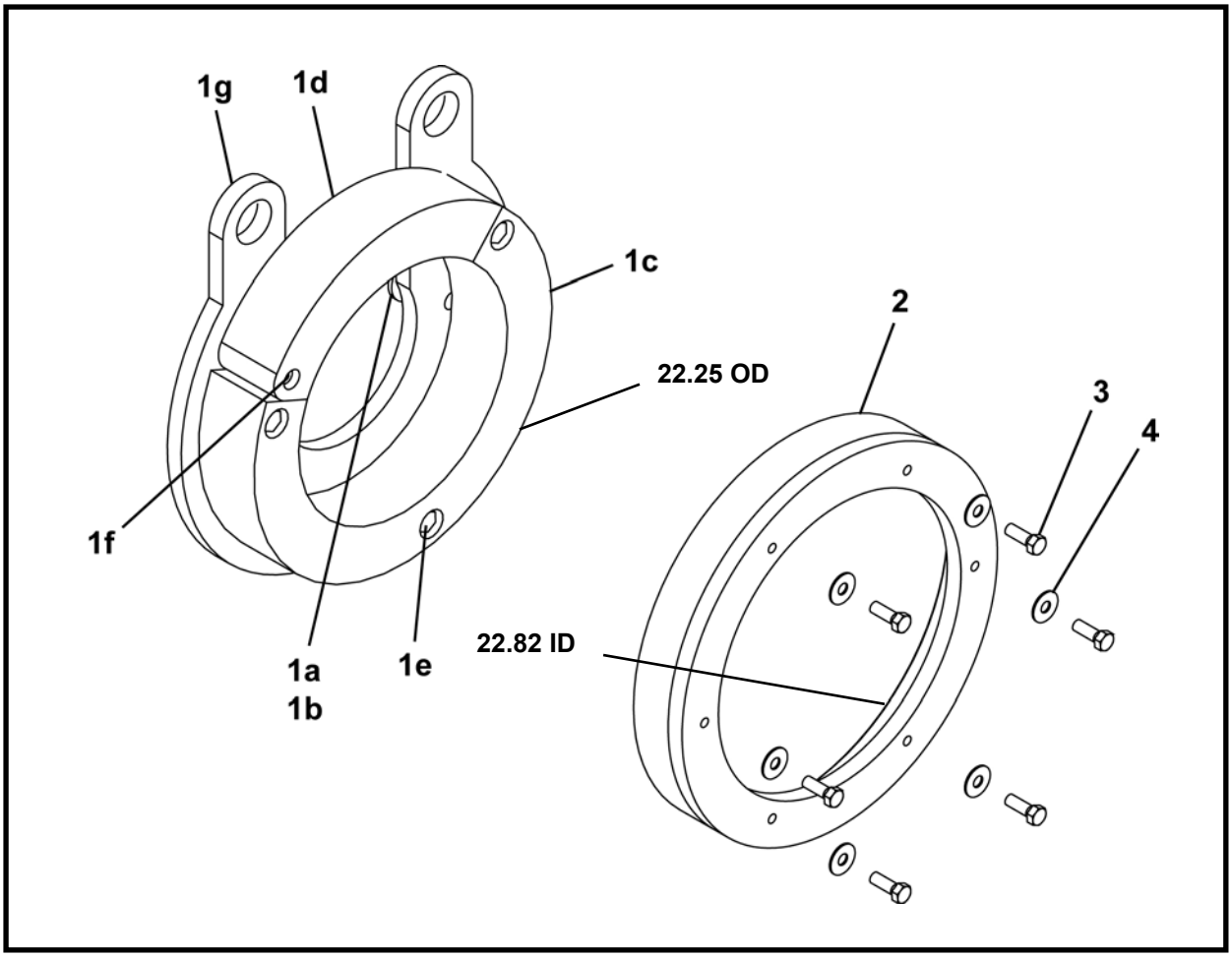
PCH 20 Increased



ITEM	QTY	PART NO.	DESCRIPTION
0	1	-	PIPE ADAPTER ASSEMBLY, 18 No-Dig
1	3	P0001-12-011	BOLT, 3/4 UNC x 2.75
2	1	P0030S-12-007	BOLT, Shoulder 3/4 x 1.75
3	1	A43169P	RING, Hinged Thrust
4	1	A43168P	RING, Fixed Thrust
5	2	004124P01	WASHER
6	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
7	1	A43170A	WELDMENT, Thrust Adapter
8	1	A43180A	PIPE ADAPTER
9	6	P0040-008	WASHER, Hardened Flat 1/2
10	6	P0001-08-007	BOLT, 1/2 UNC x 1.75

PIPE ADAPTER ASSEMBLY, DENLOK 450, FA44618F

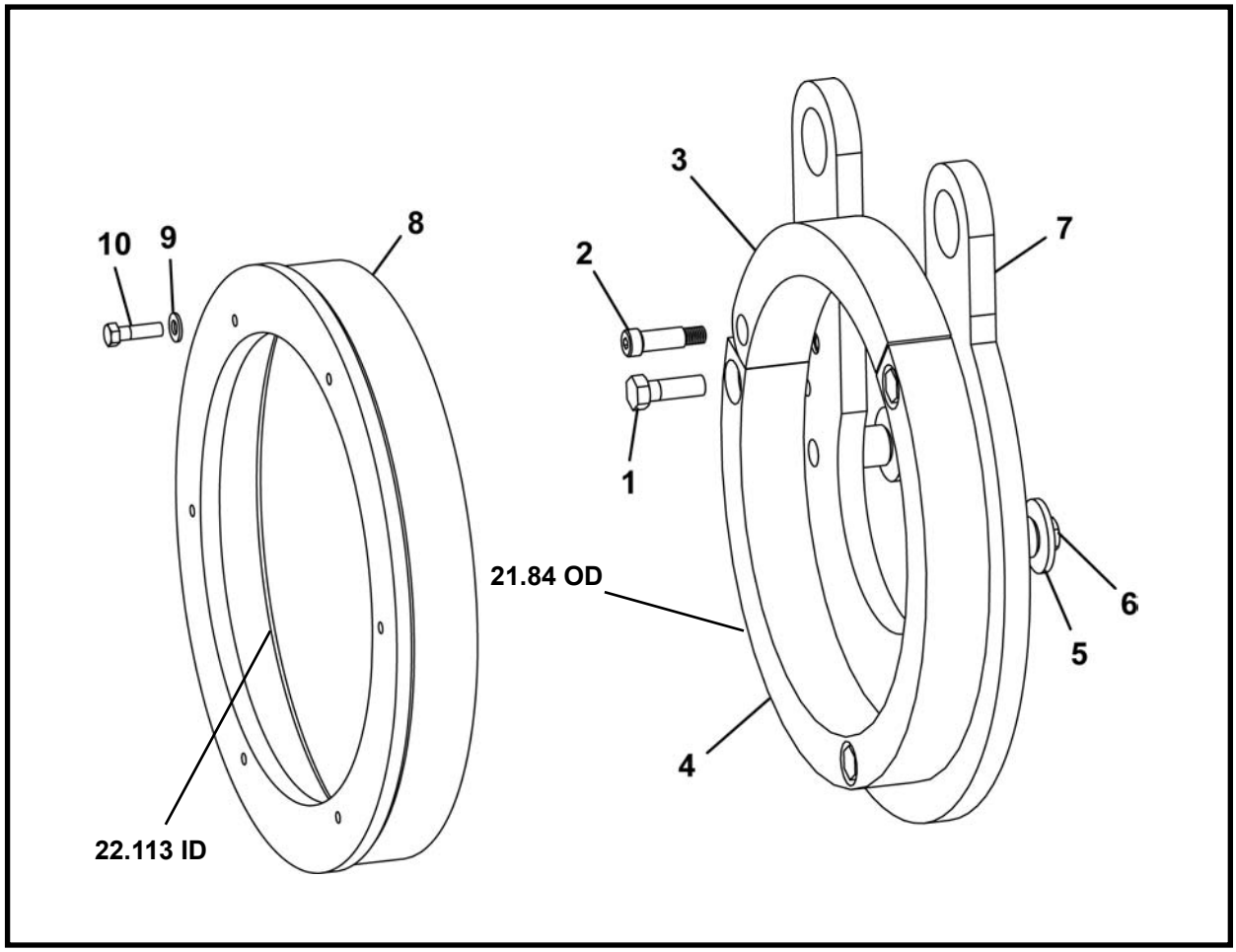
PCH 22.5 Increased To 24" OD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44618F	PIPE ADAPTER ASSEMBLY, DENLOK 450
1	1	A44614A	ASSEMBLY, Thrust Adapter (Includes items 1a - 1g)
1a	2	004124P01	WASHER
1b	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
1c	1	A44616P	RING, Fixed Thrust
1d	1	A44615P	RING, Hinged Thrust
1e	3	P0001-12-012	BOLT, 3/4 UNC x 3
1f	1	P0030S-12-008	BOLT, Shoulder 3/4 x 2
1g	1	A43170A	WELDMENT, Thrust Adapter
2	1	A44611A	ASSEMBLY, PCH 24 - Denlock 450 Adapter
3	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
4	6	P0040-008	WASHER, Flat 1/2

PIPE ADAPTER ASSEMBLY, 18” DENLOK, FA43385F

PCH 20 Increased To 22.5” OD - PCH 22.5

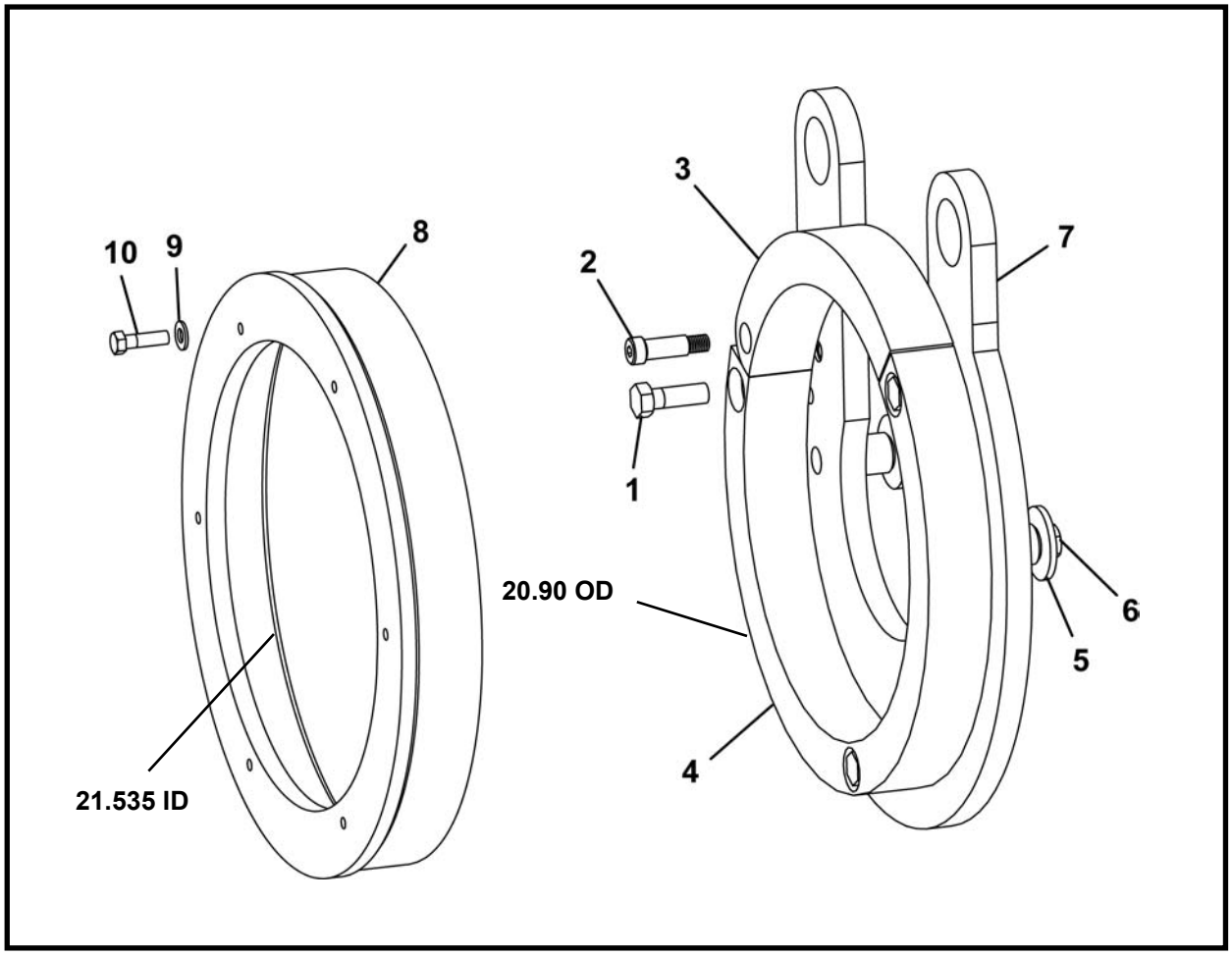


ITEM	QTY	PART NO.	DESCRIPTION
0*	1	FA43385F	PIPE ADAPTER ASSEMBLY, 18” Denlok
1	3	P0001-12-011	BOLT, 3/4 UNC x 2.75
2	1	P0030S-12-007	BOLT, Shoulder 3/4 x 1.75
3	1	A43384P	RING, Hinged Thrust 18” Denlok
4	1	A43383P	RING, Fixed Thrust 18” Denlok
5	2	004124P01	WASHER
6	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
7	1	A43170A	WELDMENT, Thrust Adapter
8	1	FA43388F	ADAPTER, Pipe - 18” Denlok
9	6	P0040-008	WASHER, Hardened Flat 1/2
10	6	P0001-08-007	BOLT, 1/2 UNC x 1.75

* Does not include items 8, 9 and 10. Items 8, 9 and 10 must be ordered separately.

PIPE ADAPTER ASSEMBLY, 18” MCP, FA43166F

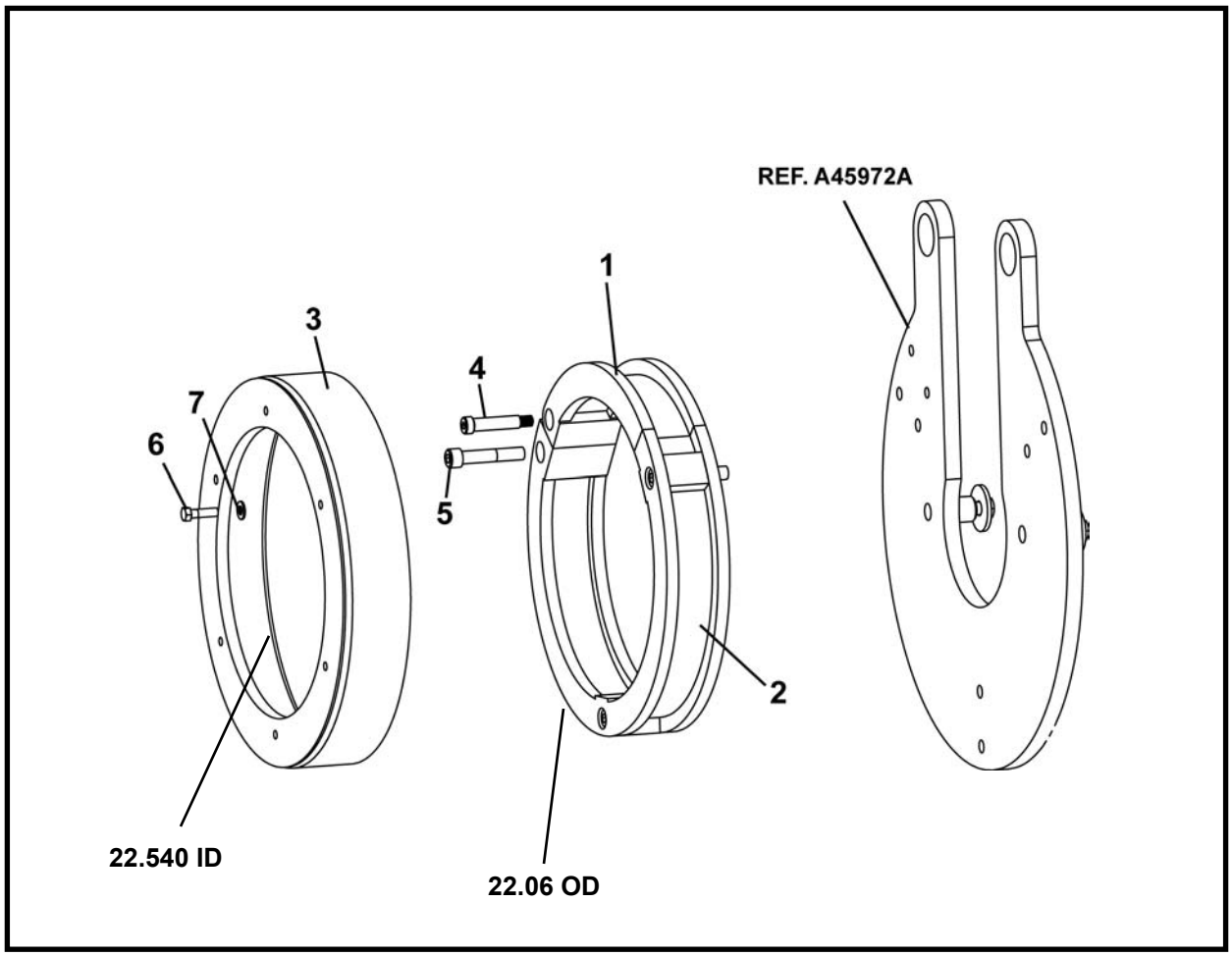
PCH 22.5



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA43166F	PIPE ADAPTER ASSEMBLY, 18 MCP
1	3	P0001-12-011	BOLT, 3/4 UNC x 2.75
2	1	P0030S-12-007	BOLT, Shoulder 3/4 x 1.75
3	1	A43169P	RING, Hinged Thrust
4	1	A43168P	RING, Fixed Thrust
5	2	004124P01	WASHER
6	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
7	1	A43170A	WELDMENT, Thrust Adapter
8	1	A42886A	PIPE ADAPTER
9	6	P0040-008	WASHER, Hardened Flat 1/2
10	6	P0001-08-007	BOLT, 1/2 UNC x 1.75

PIPE ADAPTER ASSEMBLY, 18” RCP, FA45983F

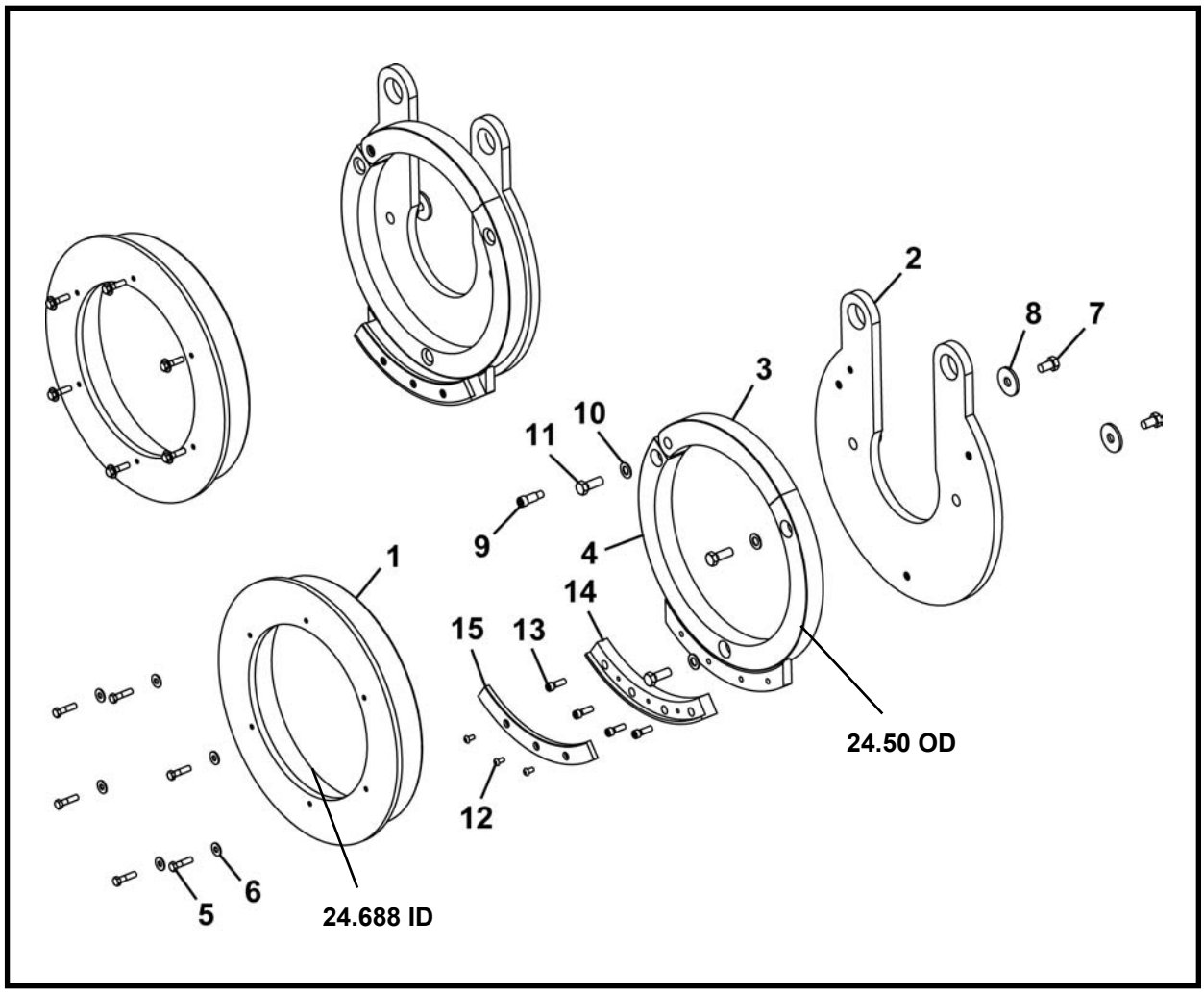
PCH 22.5 To 23” OD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45983F	PIPE ADAPTER ASSEMBLY, 18 RCP
1	1	A45978P	RING, Hinged Thrust
2	1	A45979P	RING, Fixed Thrust
3	1	A45982A	PIPE ADAPTER
4	1	P0030S-12-017	BOLT, Shoulder 3/4 x 3
5	3	P0031-12-016	SCREW, Socket Head Cap 3/4 UNC x 4
6	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
7	6	P0040-008	WASHER, Hardened Flat 1/2

PIPE ADAPTER ASSEMBLY, STEINZUG CLAY DN500, FA45337F

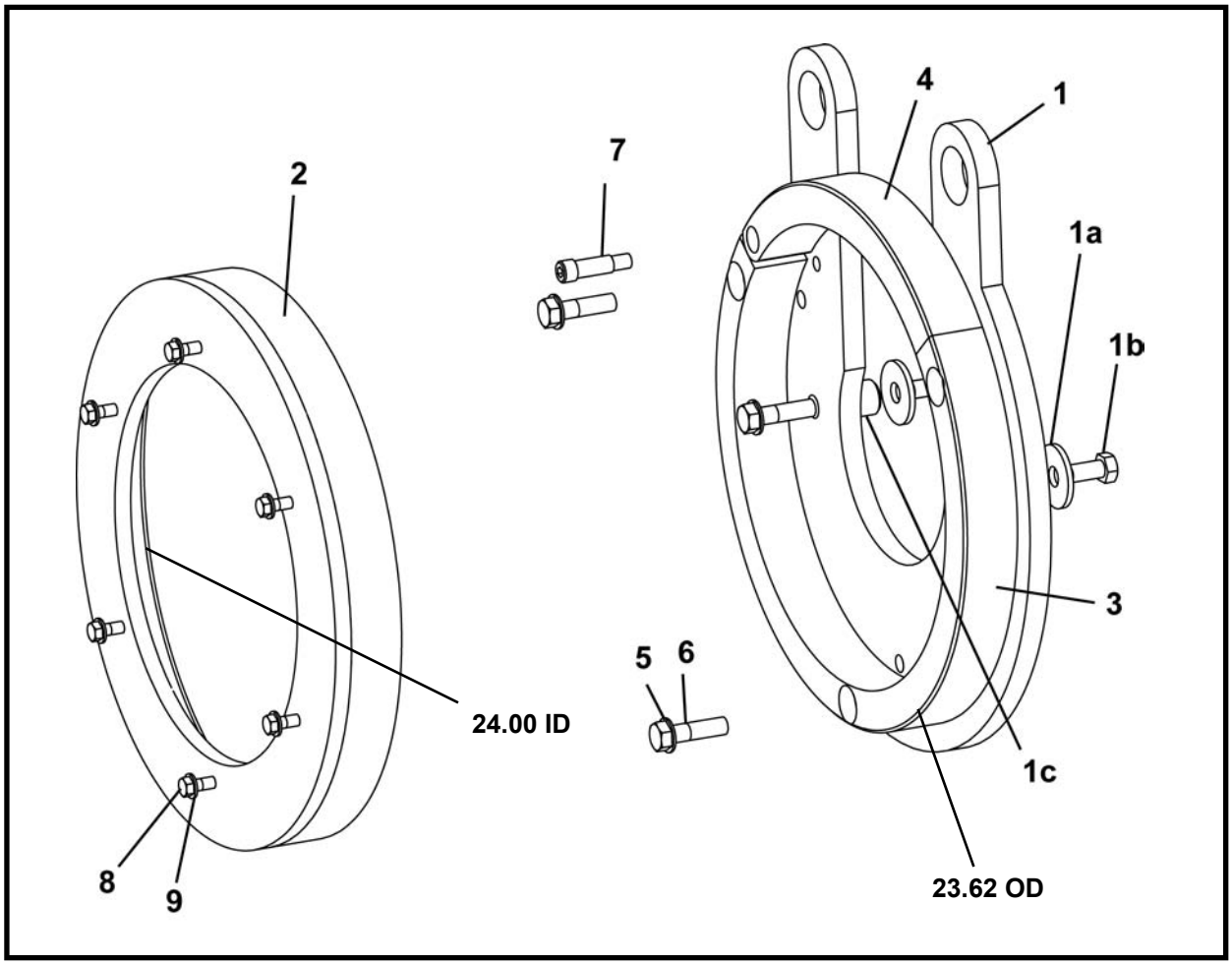
PCH 22.5 Increased To 26" OD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45337F	PIPE ADAPTER ASSEMBLY, Steinzug Clay DN500
1	1	A45330A	ADAPTER, Pipe
2	1	A45340A	MOUNT, Thrust Adapter
3	1	A45331P	RING, Hinged Thrust
4	1	A45341A	RING, Fixed Thrust
5	6	P0001-08-008	BOLT, 1/2 UNC x 2
6	6	P0040-008	WASHER, Hardened 1/2
7	2	P0001-12-005	BOLT, 3/4 UNC x 1.25
8	2	004124P01	WASHER
9	1	P0030S-12-004	BOLT, Shoulder 3/4 x 1.5 x 5-8-11
10	3	P0040-012	WASHER, Hardened Flat 3/4
11	3	P0001-12-008	BOLT, 3/4 UNC x 2
12	3	P0030-06-003A	SCREW, Button Head 3/8-16 x .75
13	4	P0031-08-006	SCREW, Socket Head Cap 1/2 UNC x 1.5
14	1	A45342P	PLATE, Pipe Support
15	1	A45336P	GUARD, Pipe Support

PIPE ADAPTER SET - 21” NO-DIG, FA46108F

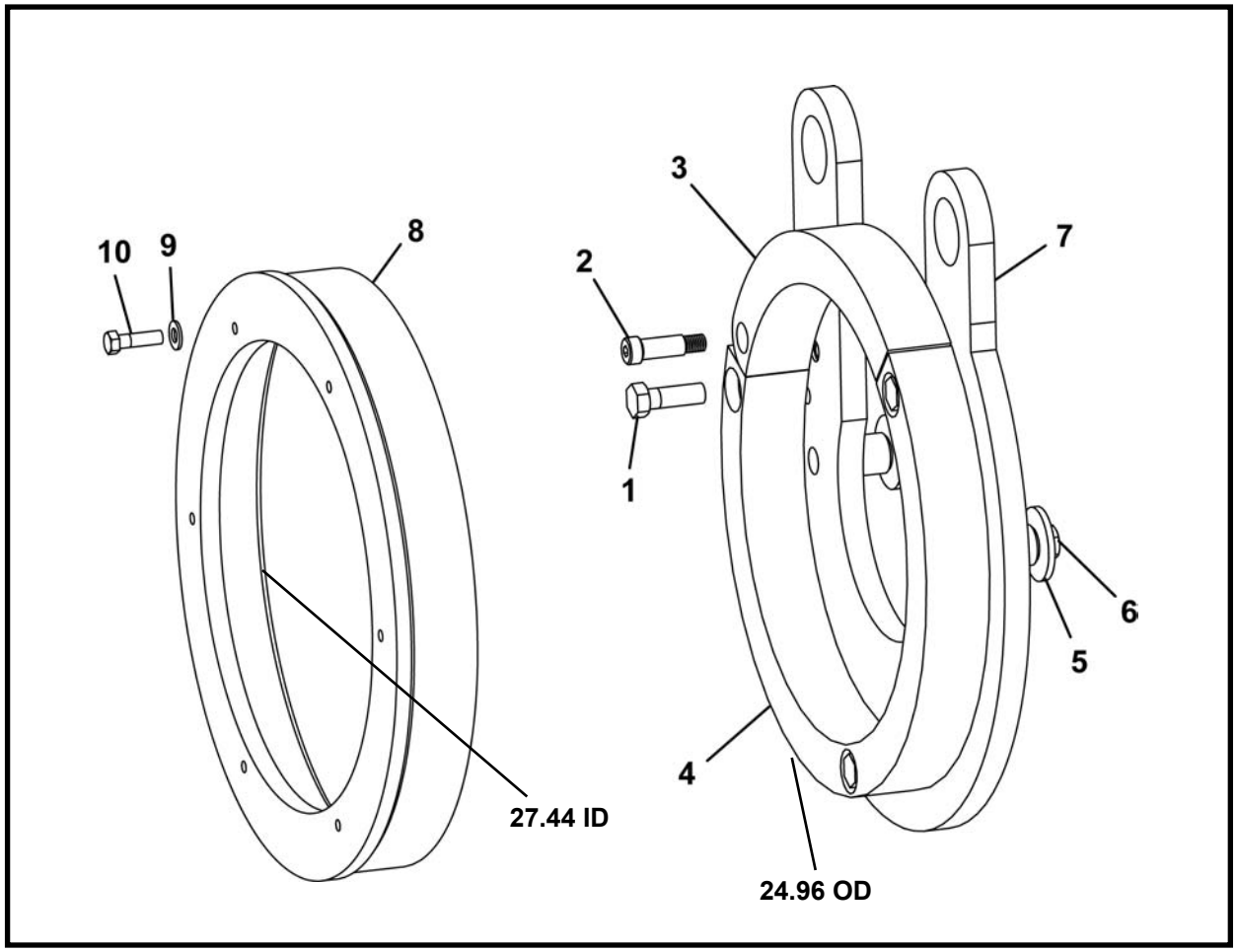
PCH 22.5 Increased To 24.5” OD



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA46108F	ADAPTER, Pipe 18” No-Dig
1	1	A46100A	ADAPTER, Thrust (Includes items 1a - 1c)
1a	2	004124P01	WASHER
1b	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
1c	2	A40608P	PIN
2	1	A46107A	ADAPTER, Pipe
3	1	A46103P	RING, Fixed
4	1	A46102P	RING, Hinged
5	3	P0040-012	WASHER, Hardened Flat 3/4
6	3	P0001-12-011	BOLT, 3/4 UNC x 2.75
7	1	P0030S-12-007	BOLT, Shoulder 3/4 x 1.75
8	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
9	6	P0040-008	WASHER, Hardened Flat 1/2

PIPE ADAPTER ASSEMBLY, 24” NO-DIG, FA43215F

PCH 22.5 - PCH 28.5



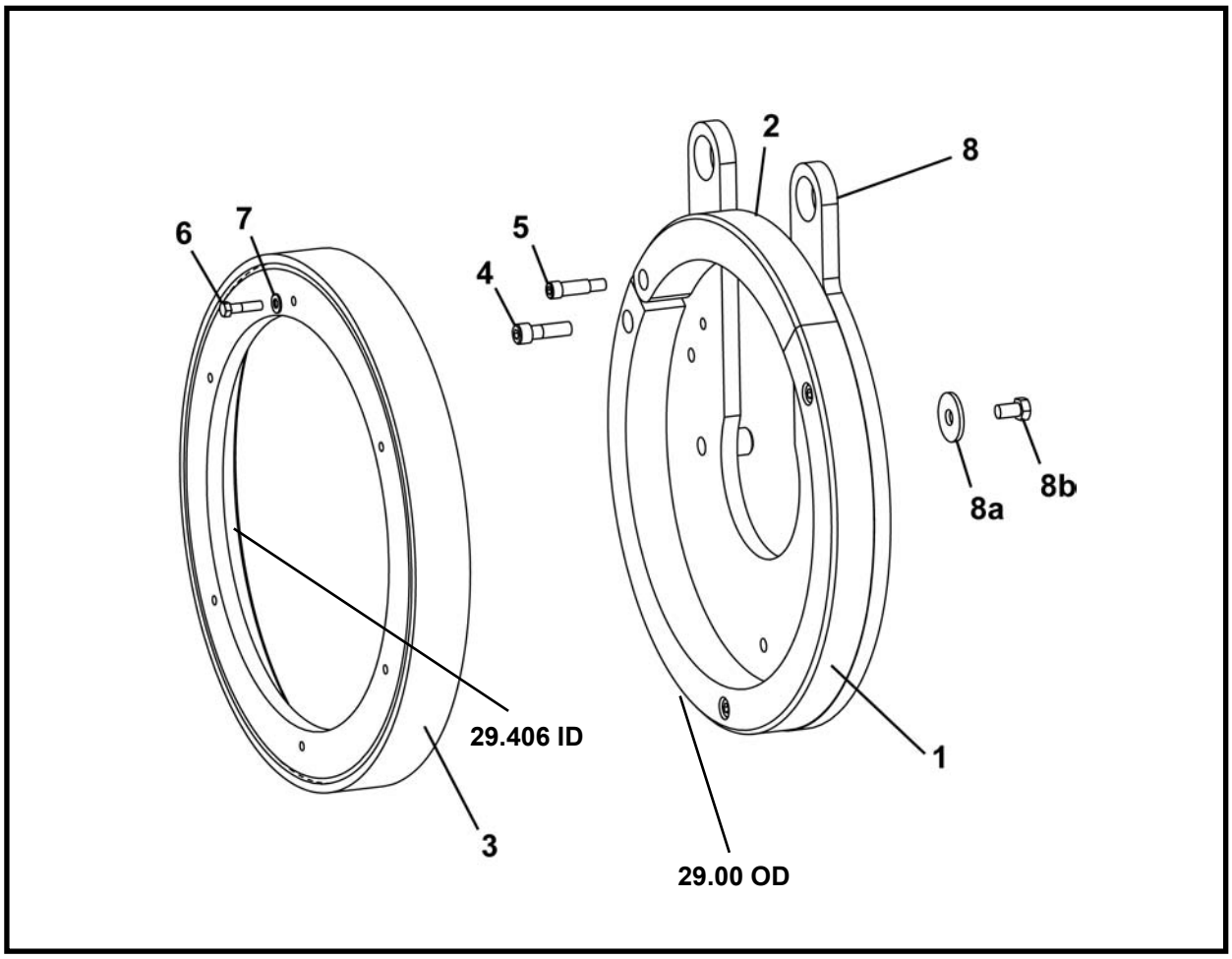
ITEM	QTY	PART NO.	DESCRIPTION
0*	1	FA43215F	PIPE ADAPTER ASSEMBLY, 24” No-Dig
1	3	P0001-12-011	BOLT, 3/4 UNC x 2.75
2	1	P0030S-12-007	BOLT, Shoulder 3/4 x 1.75
3	1	A43219P	RING, Hinged Thrust 24”
4	1	A43218P	RING, Fixed Thrust 24”
5	2	004124P01	WASHER
6	2	P0001-12-006	BOLT, 3/4 UNC x 1.5
7	1	A43216A	WELDMENT, Thrust Adapter
8**	1	A43222A	ADAPTER, Pipe - 24” No-Dig
9	6	P0040-008	WASHER, Hardened Flat 1/2
10	6	P0001-08-007	BOLT, 1/2 UNC x 1.75

* Does not include items 8, 9 and 10. Items 8, 9 and 10 must be ordered separately.

** Part of PCH 22.5 Increase Kit, FA43214F.

PIPE ADAPTER ASSEMBLY, 24” DENLOCK, FA45943F

PCH

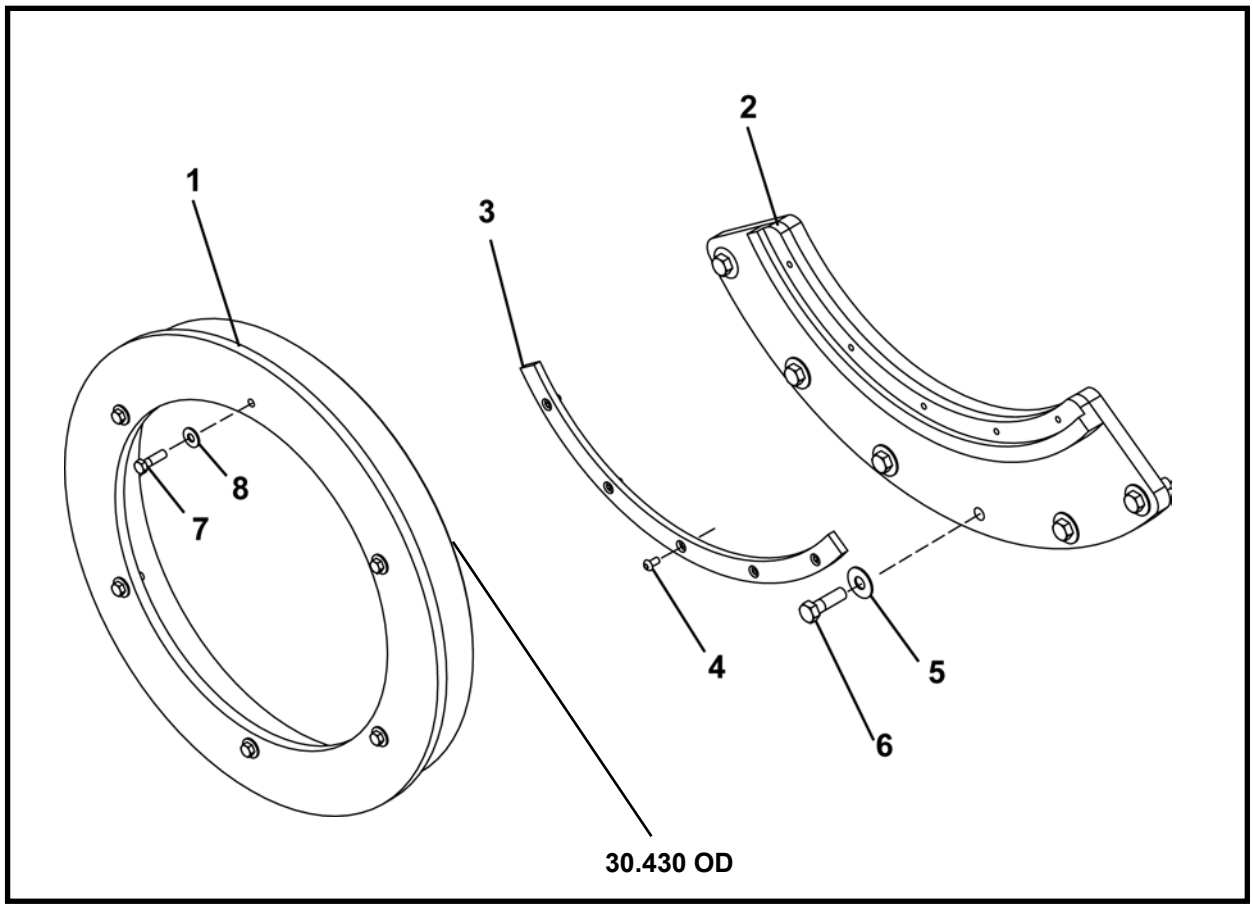


ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45943F	PIPE ADAPTER ASSEMBLY, 24” DENLOCK (Includes items 1 - 7)
1	1	A45937P	RING, Fixed Thrust
2	1	A45938P	RING, Hinged Thrust
3	1	A45939A	WELDMENT, Pipe Adapter
4	3	P0031-12-010	SCREW, Socket Head Cap 3/4 x 2.5
5	1	P0030S-12-007	BOLT, Shoulder 3/4 x 1.75
6	6	P0001-08-008	BOLT, 1/2 UNC x 2
7	6	P0040-008	WASHER, Hardened Flat
8	1	A45934A	MOUNT, Pipe Adapter (Includes 8a - 8b)
8a	2	004124P01	WASHER
8b	2	P0001-12-004	BOLT, 3/4 UNC x 1.25

NOTE: Pipe Adapter set FA45943F, requires the use of item 8, A45934A, Pipe Adapter Mount.

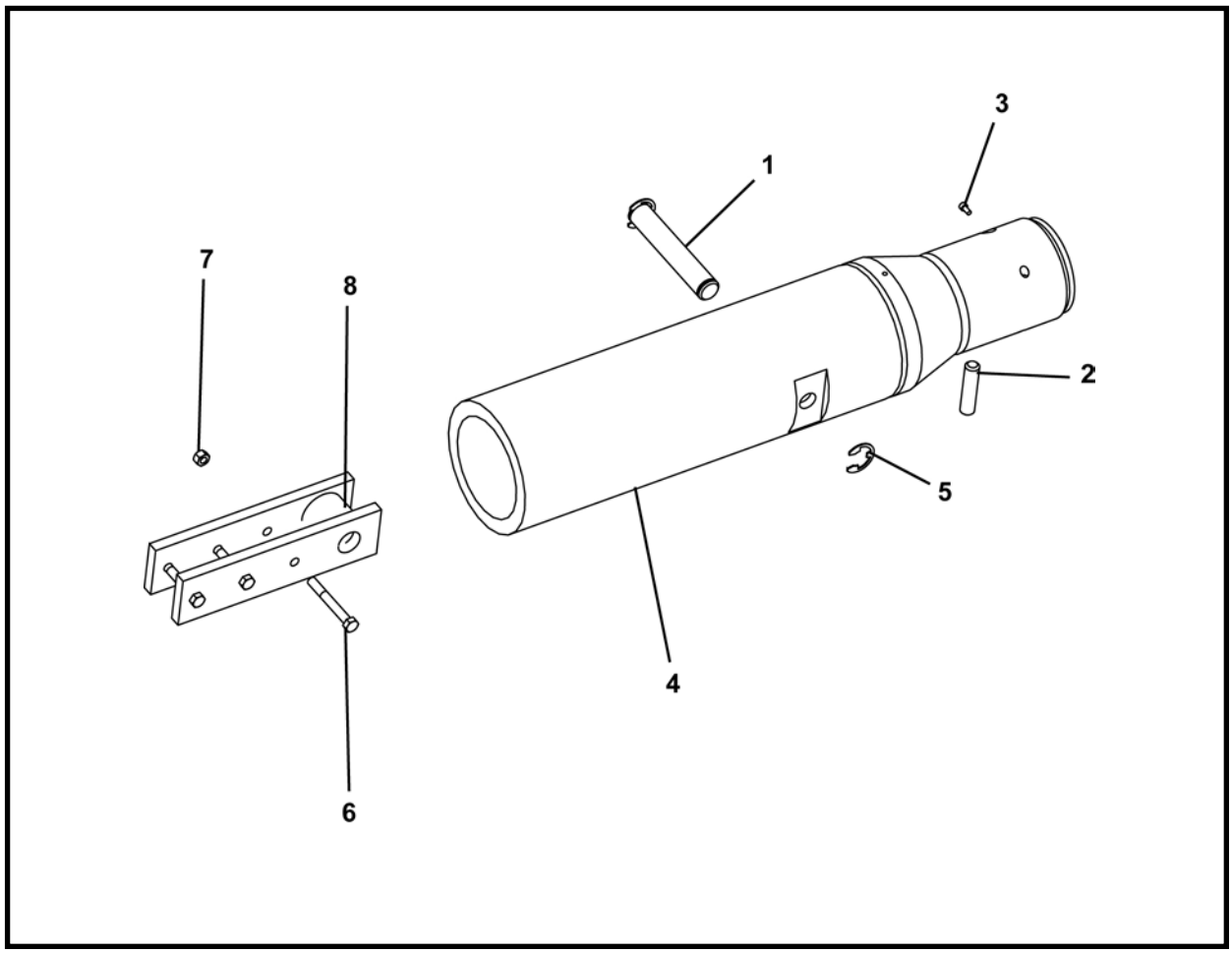
PIPE ADAPTER ASSEMBLY, 27” NO-DIG, FA45381F

PCH



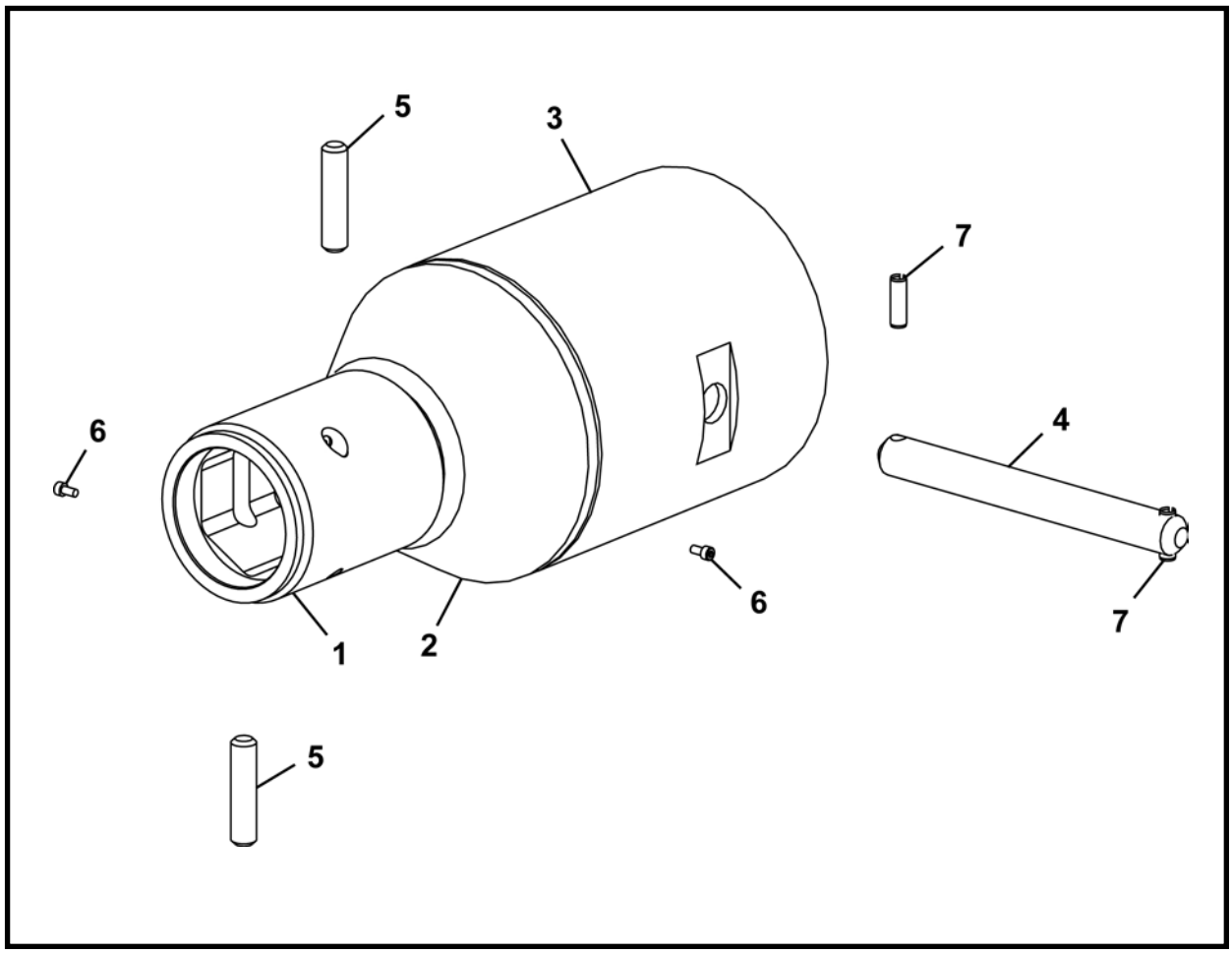
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45381F	PIPE ADAPTER ASSEMBLY, 27 NO-DIG
1	1	A45384A	PIPE ADAPTER
2	1	A45393A	SUPPORT, Pipe
3	1	A45385P	GUARD, Pipe Support
4	5	P0030-06-003A	SCREW, Button Head Cap 3/8 x .75
5	6	P0040-012	WASHER, Hardened Flat 3/4
6	6	P0001-12-010	BOLT, 3/4 x UNC x 2.5
7	6	P0001-08-007	BOLT, 1/2 UNC x 1.75
8	6	P0040-008	WASHER, Hardened Flat 1/2

PVC PULL TOOL, 4”, FA44782F



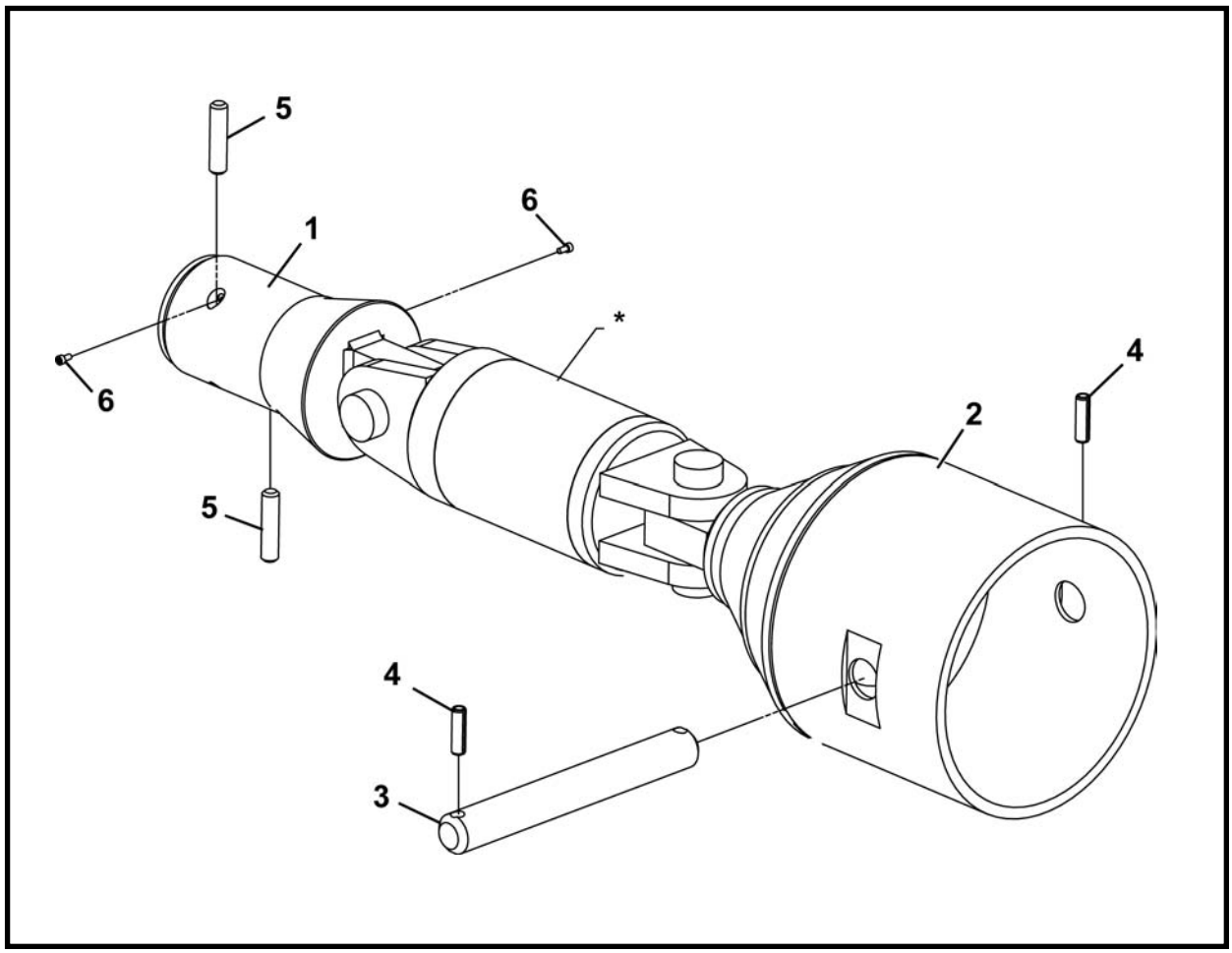
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44782F	PVC PULL TOOL, 4”
1	1	A44785P	PIN, 4” PVC Pull Tool
2	2	A40582P	CONNECTION PIN
3	2	P0031-1024-001.5	SCREW, Socket Head 10-24 x .38
4	1	A44786A	WELDMENT, Pull Tube
5	2	P0044-037	CLIP
6	3	P0001-06-012	BOLT, 3/8 UNC x 8
7	3	P0003-06-000	NUT, 3/8
8	1	A44810A	WELDMENT, Pull Bar Tool

PVC PULL TOOL, 6”, A42797A



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42797A	PVC PULL TOOL, 6”
1	1	A40577P	COUPLER, Female
2	1	A42798P	PLATE, Front
3	1	A42799P	TUBE
4	1	A42708P	PIN, Pull Tool
5	2	A40582P	PIN, Connector
6	2	P0031-1024-001.5	SCREW, Socket Head 10-24 x .38
7	2	P0049-158	PIN, Roll

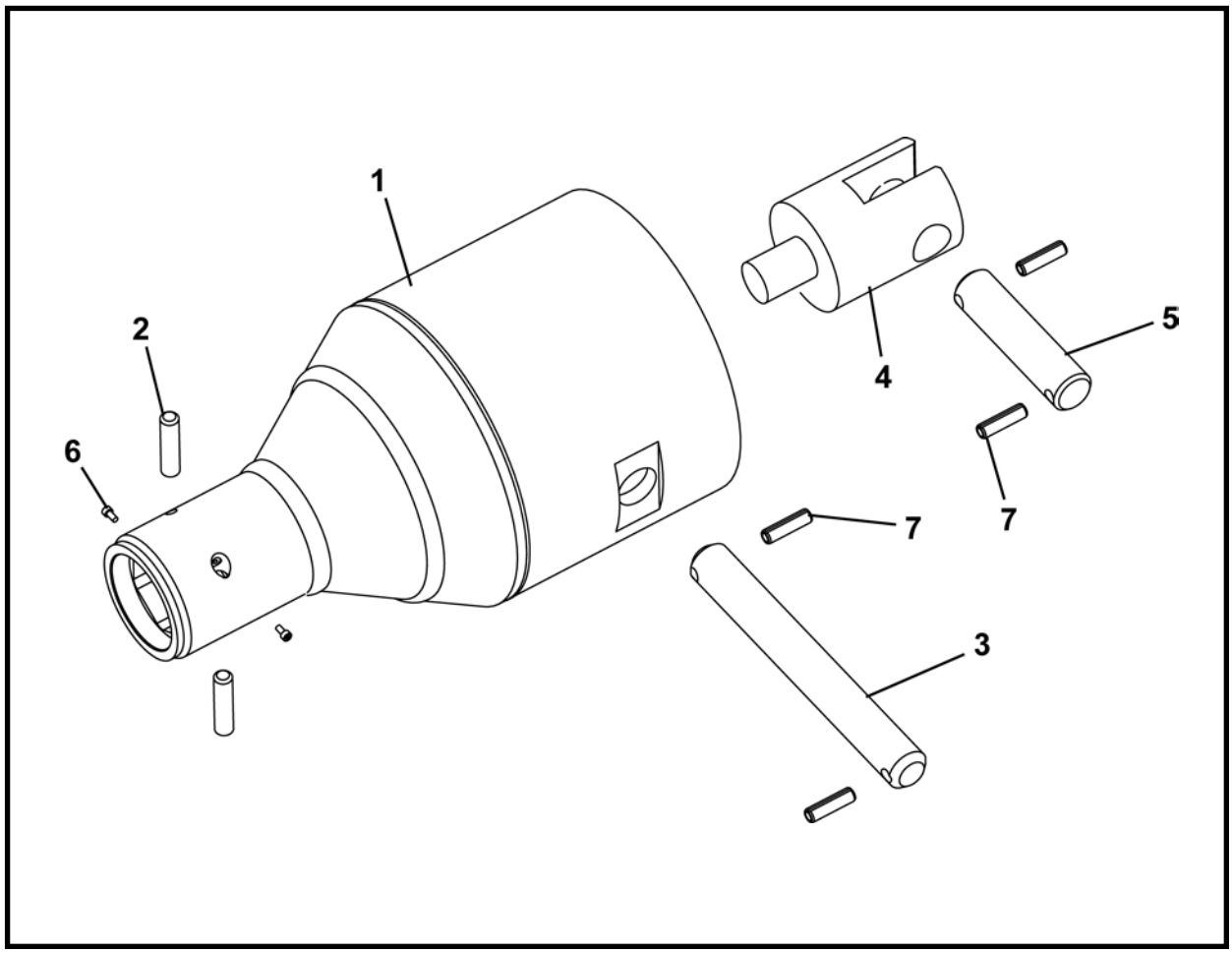
PVC PULL TOOL, 11”, FA42710F



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42710F	PVC PULL TOOL, 11”
1	1	A42718A	ADAPTER, Pilot Tube Swivel
2	1	A42715A	COUPLER, Upsizing 11”
3	1	A42714P	PIN, 11” PVC Pull Tool
4	2	P0049-174	SPRING PIN
5	2	A40582P	CONNECTION PIN
6	2	P0031-1024-001.5	SCREW, Socket Head 10-24 x .38

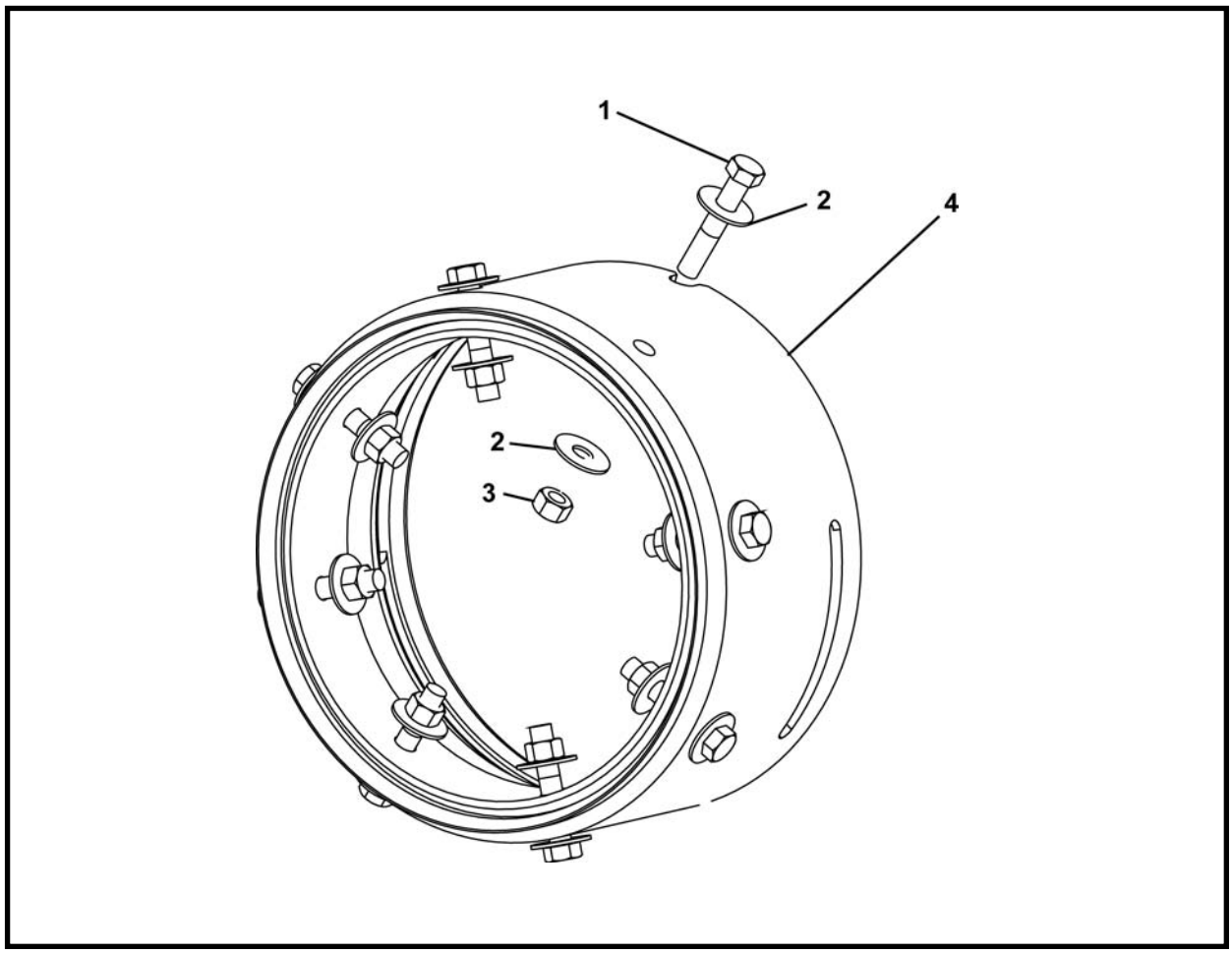
* Supplied by customer.

PULL TOOL W/CABLE, 11”, FA42722F



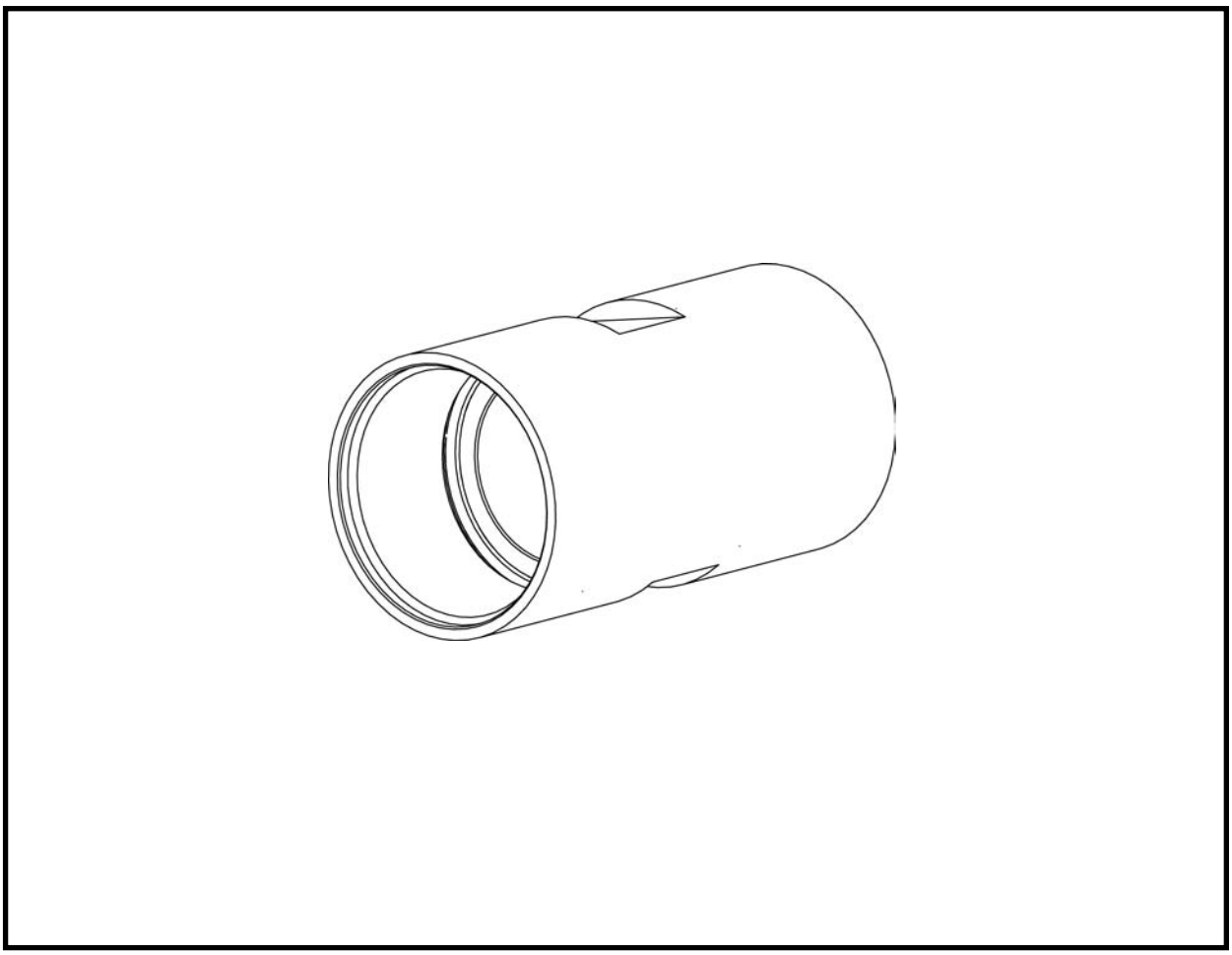
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42722F	PULL TOOL W/CABLE, 11”
1	1	A42723A	PULL BODY
2	2	A40582P	CONNECTION PIN
3	1	A42714P	PIN, 11” PVC Pull Tool
4	1	A42727P	CLEVIS, Cable Attach
5	1	A42728P	PIN, Pull Tool
6	2	P0031-1024-001.5	SCREW, Socket Head 10-24 x .38
7	4	P0049-174	SPRING PIN

PULL TOOL, 12” HDPE, FA44819F



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44819F	PULL TOOL, 12” HDPE
1	8	P0001-10-014	BOLT, 5/8 UNC x 3.5
2	16	P0040-010	WASHER, 5/8 Hardened Flat
3	8	P0003-10-000	NUT, 5/8
4	1	A44818A	ASSEMBLY, Pipe Adapter 12” HPDE

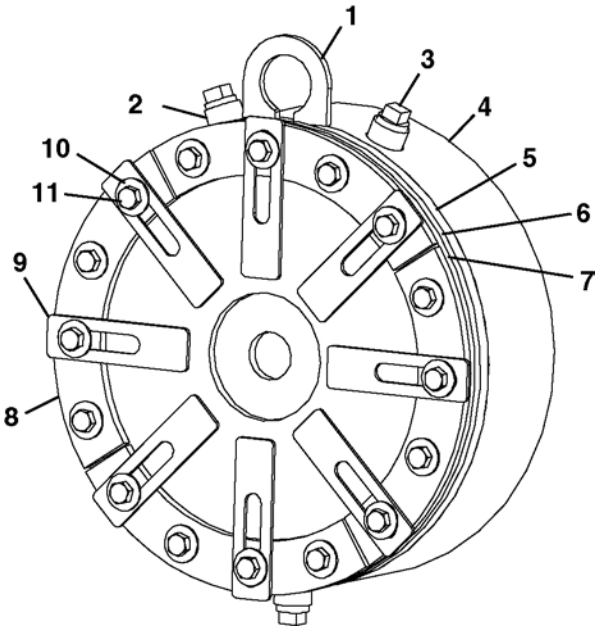
FEMALE PULL ASSIST CONNECTOR, A42373P



ITEM	QTY	PART NO.	DESCRIPTION
0	1	A42373P	FEMALE PULL ASSIST CONNECTOR

NOTE: This connector is used to connect two male pilot tube ends.

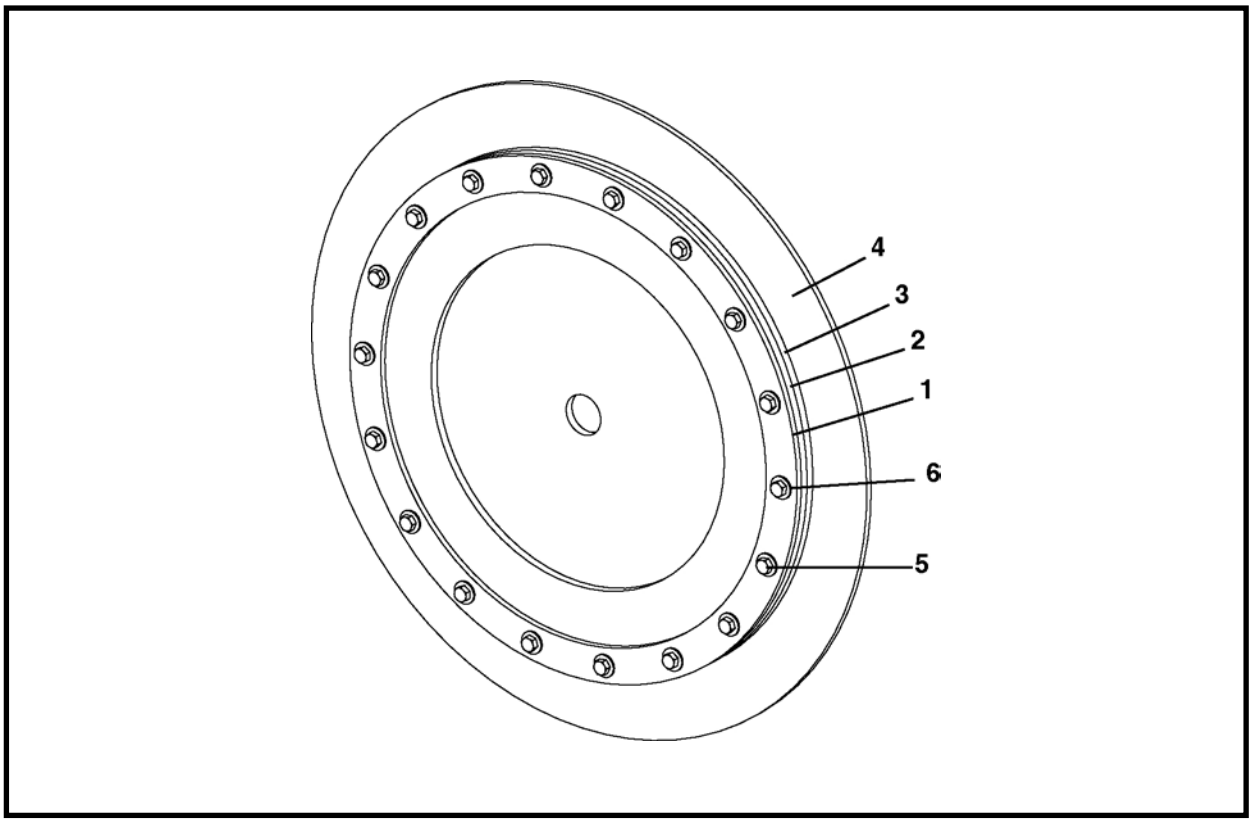
DRILLING SEAL - 11” & 12” OD



ITEM	QTY	PART NO.	DESCRIPTION
0.1	1	FA40314F	SEAL, Drilling 11” OD Thrust Casing
0.2	1	FA40294F	SEAL, Drilling 12” OD Thrust Casing
1	1	NSS	EYE, Lifting
2	3	NSS	COUPLER, Pipe
3	3	P0416-005	PLUG, Pipe
4	1	NSS	CASING
5	1	NSS	RING, Mounting
6	1	A40623P	SEAL, Inner (Use With Pilot Tubes)
7.1	1	A40624P	SEAL, Outer 11” OD Thrust Casing
7.2	1	A40683P	SEAL, Outer 12” OD Thrust Casing
8	4	A40625P	PLATE, Seal Retaining
9	8	A40626P	PLATE, Seal Supporting
10	16	P0040-010	WASHER, Flat 5/8
11	16	P0001-10-010	BOLT, 5/8-11 UNC x 2.5

NSS - Not Sold Separately

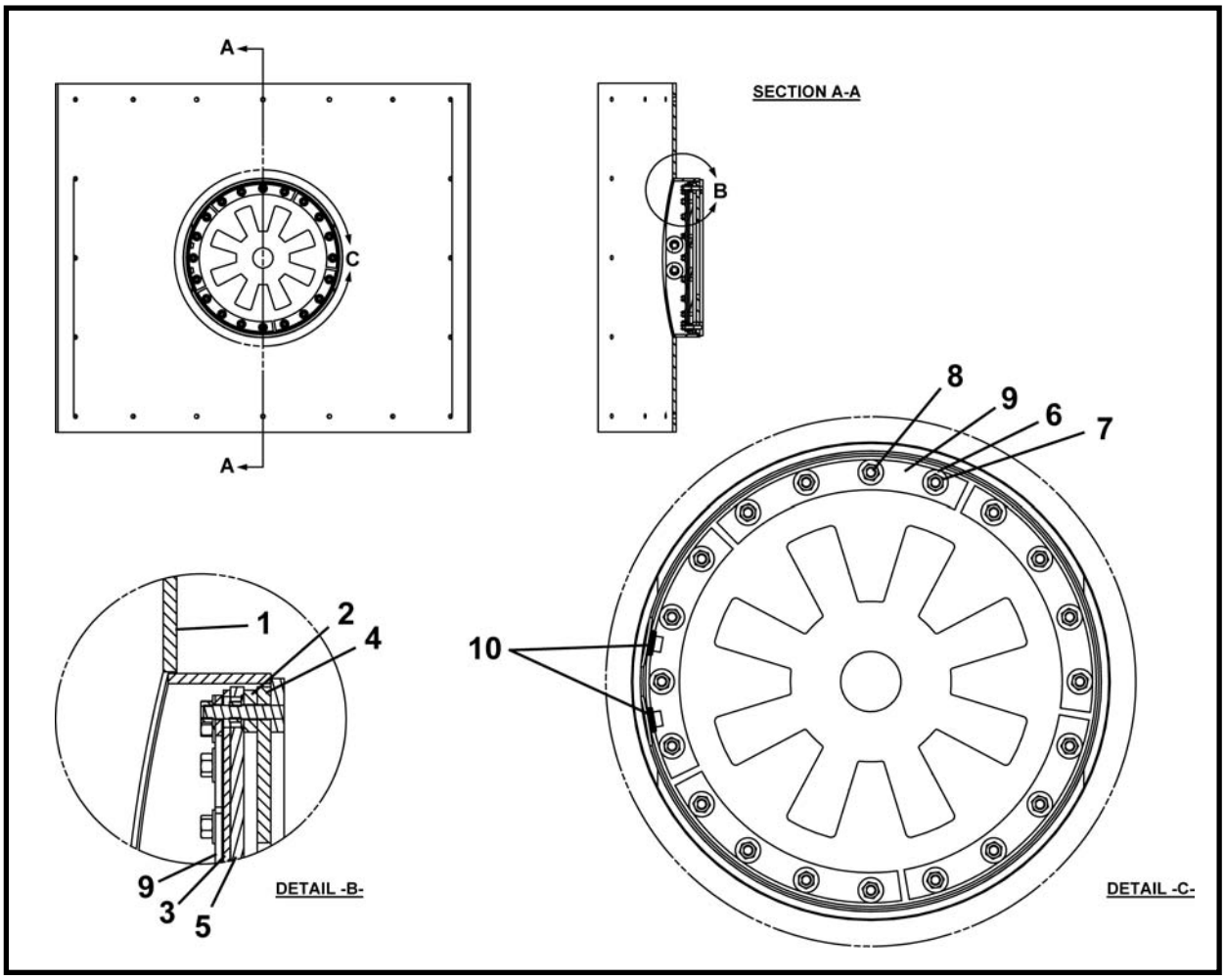
DRILLING SEAL ASSEMBLY - 18” VCP, F42214F



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA42214F	DRILLING SEAL ASSEMBLY - 18” VCP
1	1	A42216P	RING, STEEL SUPPORT
2	1	A42217P	SEAL, Drilling, Rubber-18” VCP
3	1	A42218P	SEAL, Drilling, Rubber-Pilot Tube
4	1	A42219P	PLATE, Drilling Seal Base
5*	18	P0001-08-006	BOLT, 1/2-13 x 1.5
6	18	P0040-008	WASHER, Flat 1/2

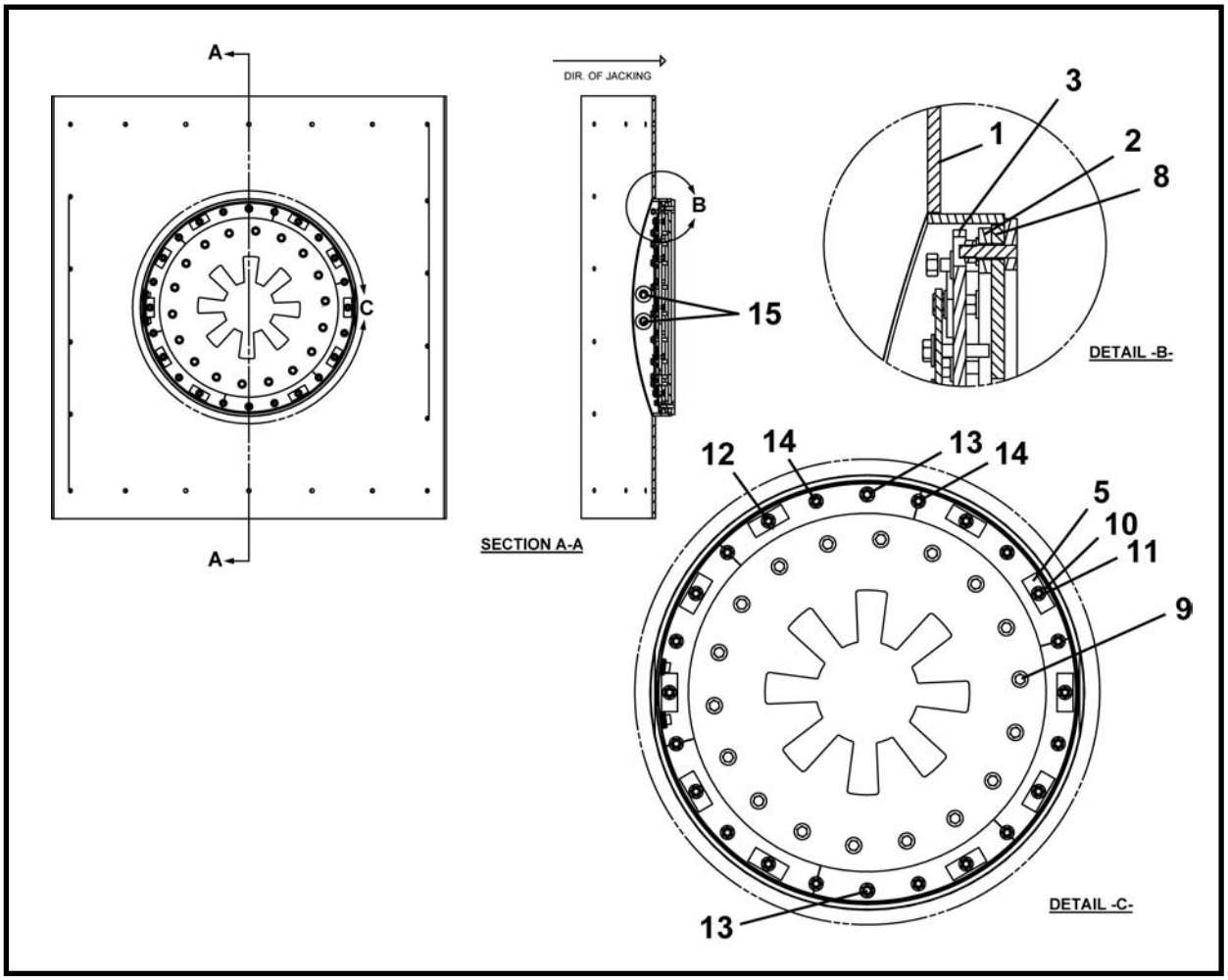
* Use anti-seize on all bolts.

PIT SEAL ASSEMBLY - DN300 PIPE, FA45196F



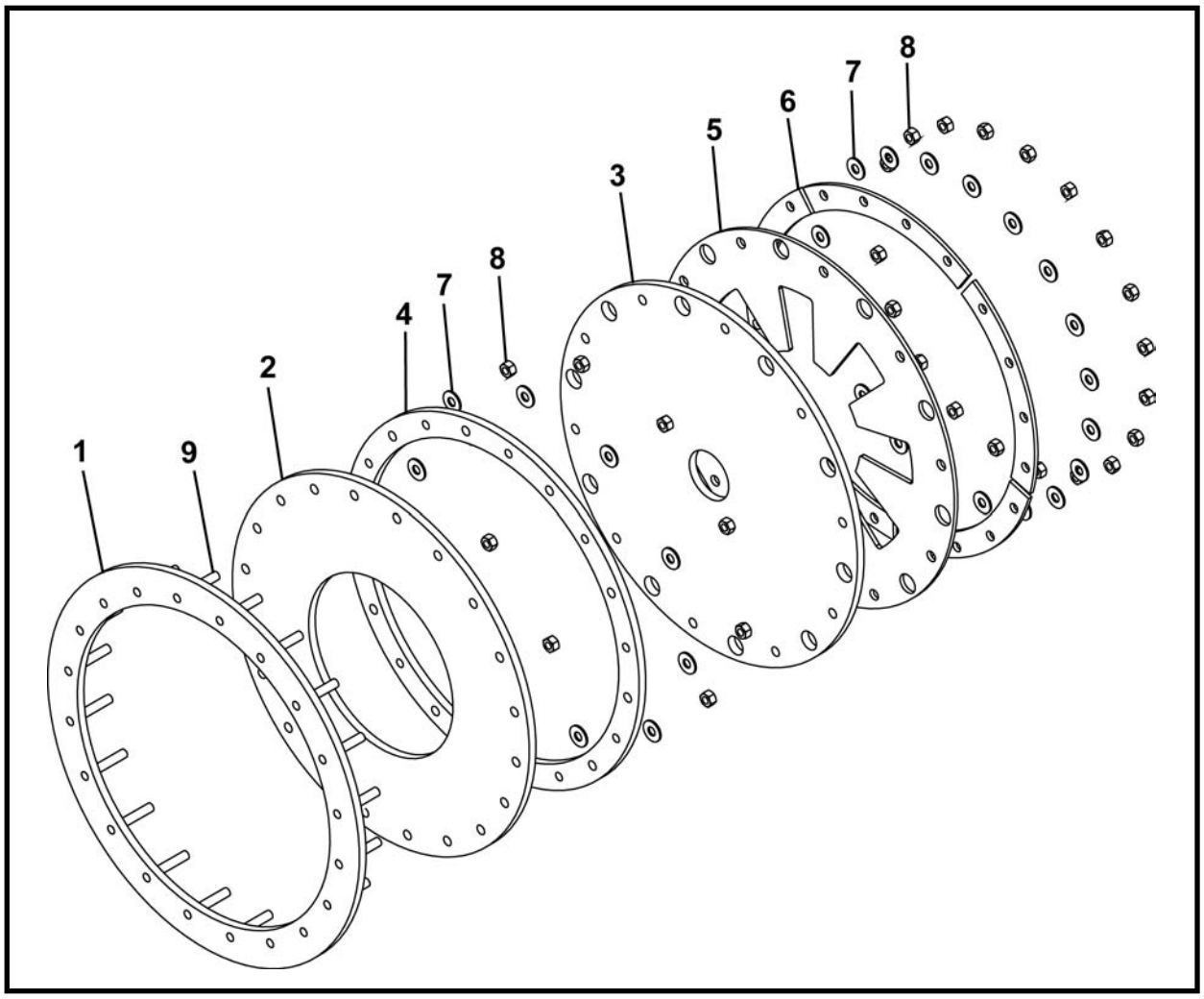
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45196F	PIT SEAL ASSEMBLY - DN300 PIPE
1	1	A45345A	SEAL, Pit
2	1	A45347P	RETAINER, Pipe Seal
3	1	A45346P	PLATE, Seal Support
4	1	A45312P	RUBBER
5	1	A45313P	RUBBER
6	30	P0040-008	WASHER, Hardened Flat 1/2
7	30	P0003-08-000	NUT, 1/2
8	20	P0025-005A	STUD
9	5	A45348P	PLATE, Seal Support Retainer
10	2	P0416-005	PLUG, 1

PIT SEAL ASSEMBLY - DN500 PIPE, FA45197F



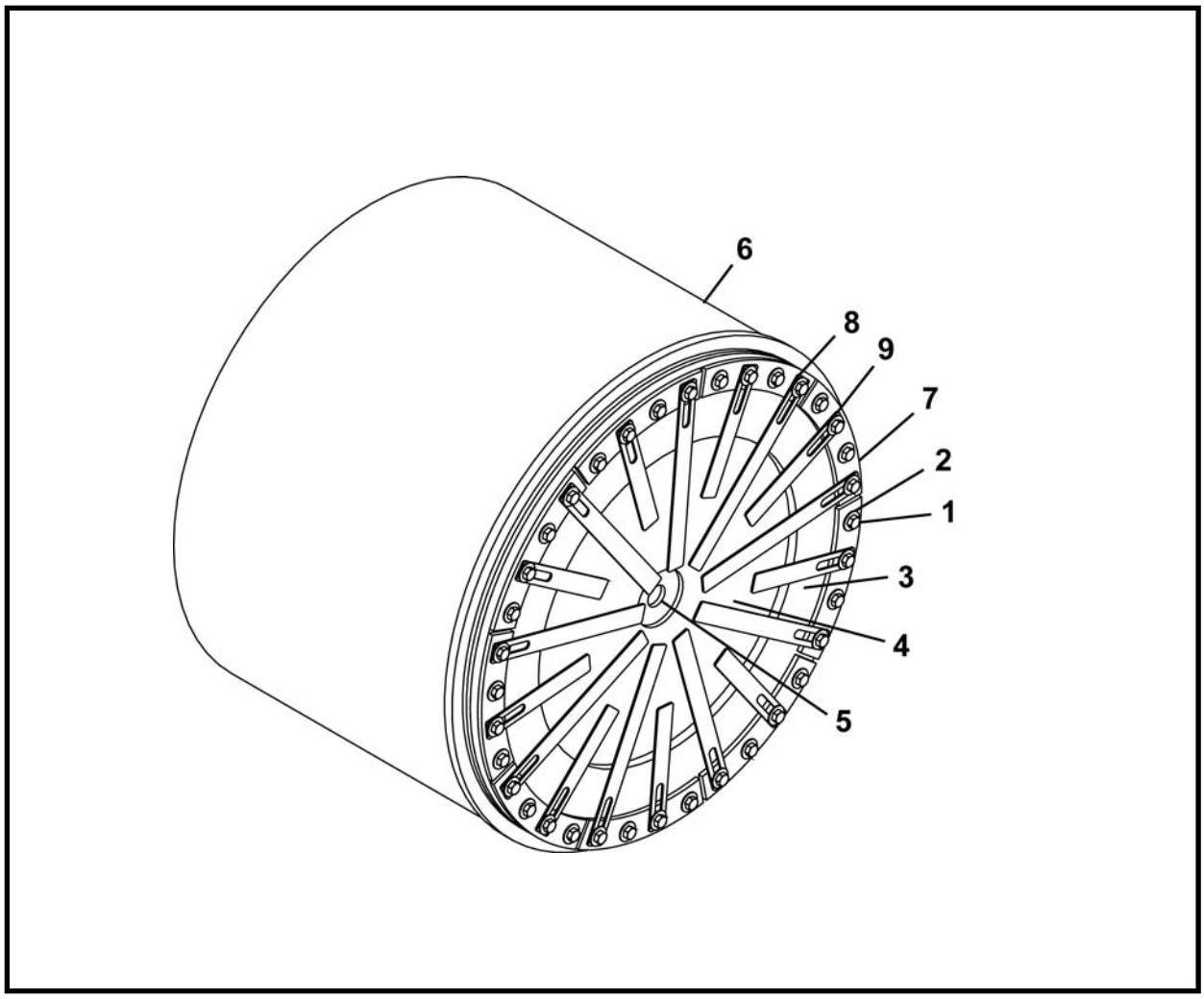
ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45197F	PIT SEAL ASSEMBLY - DN500 PIPE
1	1	A45319A	BODY, Pit Seal
2	1	A45317P	PLATE, Pipe Seal Retainer
3	1	A45311P	PLATE, Casing Seal Support
4	1	A45310P	PLATE, Seal Support
5	10	A45318P	PLATE, Pit Seal Retainer
6	1	A45314P	RUBBER
7	1	A45315P	RUBBER
8	1	A45316P	RUBBER
9	18	P0001-08-009	BOLT, 1/2 UNC x 2.25
10	54	P0040-008	WASHER, Hardened Flat 1/2
11	36	P0003-08-000	NUT, 1/2
12	10	P0025-005B	STUD
13	2	P0025-005	STUD
14	12	P0025-005A	STUD
15	2	P0416-005	PLUG

PIT SEAL ASSEMBLY, 16” CASINGS, FA45444F



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA45444F	PIT SEAL ASSEMBLY, 16” Casings
1	1	A45443P	PLATE, Threaded Ring
2	1	A45312P	RUBBER, Pit Seal
3	1	A45313P	RUBBER, Pilot Tube Seal
4	1	A45347P	RETAINER, Pipe Seal Plate
5	1	A45346P	SUPPORT, Seal Plate
6	5	A45348P	PLATE, Seal Support Retainer
7	30	P0040-008	WASHER, Hardened Flat 1/2
8	30	P0003-08-000	NUT, 1/2
9	20	P0025-005A	STUD

PIT SEAL ASSEMBLY, 36” OD PIPE, FA44391F



ITEM	QTY	PART NO.	DESCRIPTION
0	1	FA44391F	PIT SEAL ASSEMBLY, 36” OD Pipe
1	36	P0001-12-012	BOLT, 3/4 UNC x 3
2	36	P0040-012	WASHER, Hardened Flat 3/4
3	1	A44397P	SEAL, Seamless 1” x 50” OD
4	1	A44398P	SEAL, Outer
5	1	A44399P	SEAL, Inner
6	1	A44392A	WELDMENT, Pit Seal
7	9	A44394P	PLATE, Seal Retaining
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