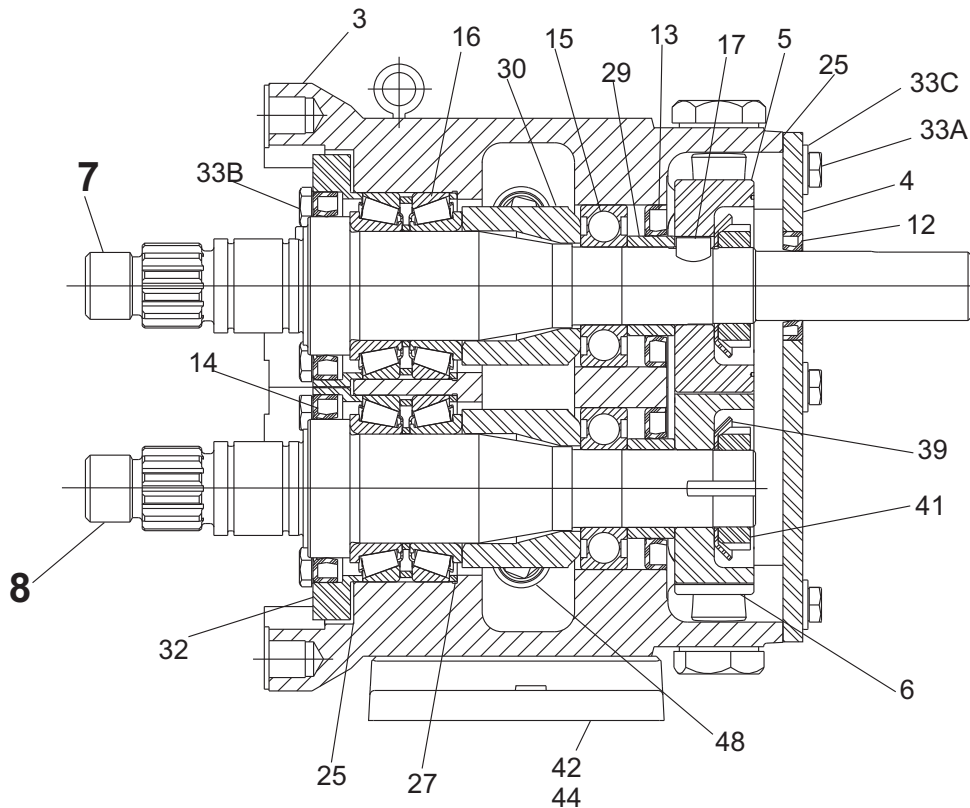
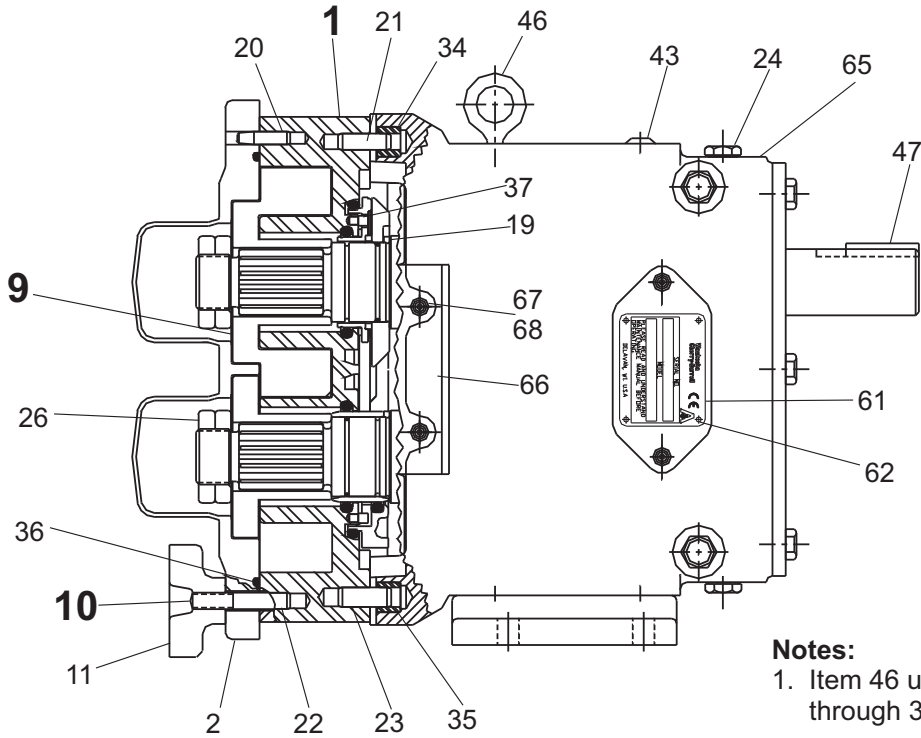


Parts Lists

006-014-015-018-024-UI Pump Parts



PD100-308

**006-014-015-018-024-UI Pump Parts**

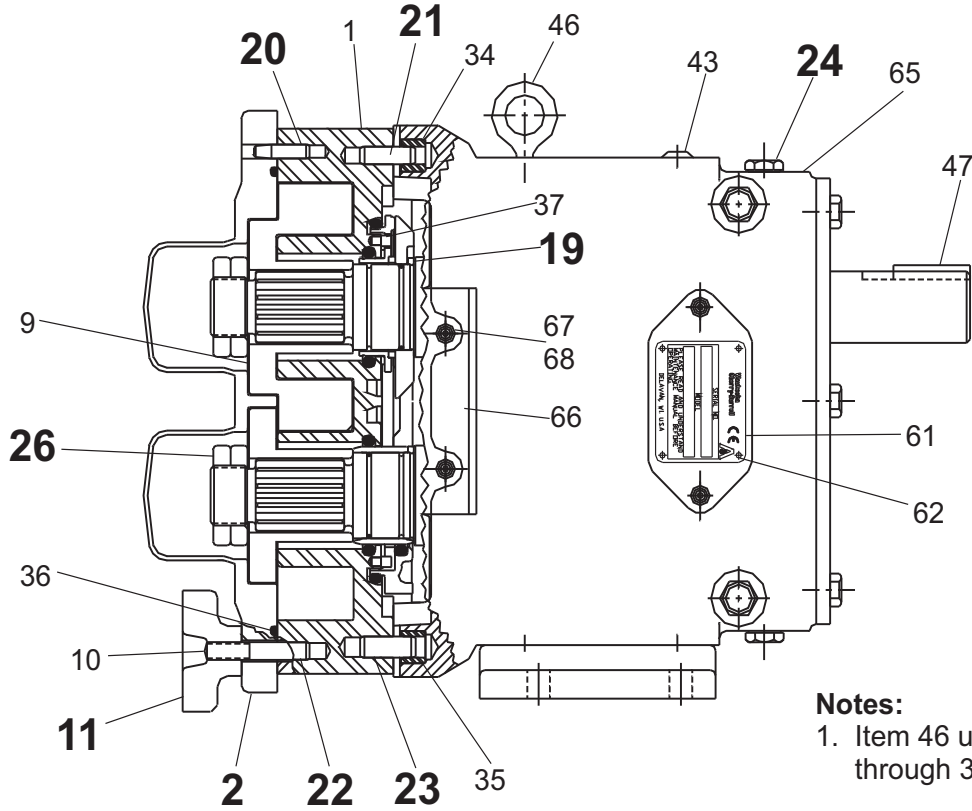
ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
	Pump Body	1	See Note 1	1
7	006-014-015-U1 Drive Shaft	1	015 008 000+	3
	006-014-015-U1 Drive Shaft	1	114642+	4
	018-024-U1 Drive Shaft	1	018 008 000+	3
	018-024-U1 Drive Shaft	1	114644+	4
8	006-014-015-U1 Short Shaft	1	015 009 000+	3
	006-014-015-U1 Short Shaft	1	114643+	4
	018-024-U1 Short Shaft	1	018 009 000+	3
	018-024-U1 Short Shaft	1	114645+	4
9	006-U1 Rotor, Twin Wing, Alloy 88	2	006 010 000+	2
	006-U1 Rotor, Twin Wing, 316SS	2	006 010 200+	2
	006-U1 Rotor, Single Wing, Alloy 88	2	117238+	2, 12
	014-015-U1 Rotor, Twin Wing, Alloy 88	2	015 010 000+	2
	014-015-U1 Rotor, Twin Wing, 316SS	2	015 010 200+	2
	015-U1 Rotor, Single Wing, Alloy 88	2	117255+	2, 12a, 13
	018-024-U1 Rotor, Twin Wing, Alloy 88	2	018 010 000+	2
	018-024-U1 Rotor, Twin Wing, 316SS	2	018 010 200+	2
	018-U1 Rotor, Single Wing, Alloy 88	2	117273+	2, 12b, 13
10A	006-015-U1 Stud	8	AD0 011 000	
10B	006-015-U1 Stud, Jacketed Cover	8	AD0 011 J00	
10C	014-U1 Stud	6	AD0 011 000	
	014-U1 Stud	2	35547+	
10D	014-U1 Stud, Jacketed Cover	6	AD0 011 J00	
	014-U1 Stud, Jacketed Cover	2	35548+	
10E	018-U1 Stud	8	018 011 000+	
10F	018-U1 Stud, Jacketed Cover	8	AD0 011 100	
10G	024-U1 Stud	6	018 011 000+	
	024-U1 Stud	2	35547+	
10H	024-U1 Stud, Jacketed Cover	6	AD0 011 100	
	024-U1 Stud, Jacketed Cover	2	35548+	
	Stud Retainer Assembly	1	020 064 000+	5

**NOTES:**

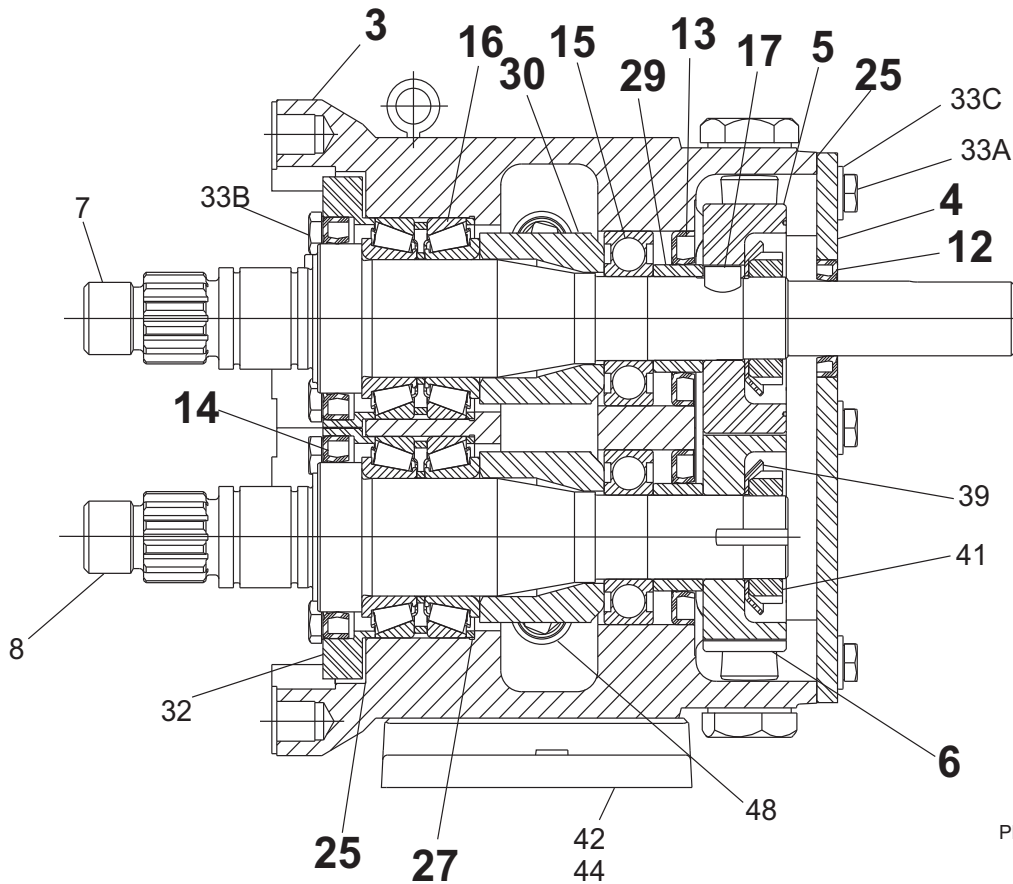
PL5060-CH31

1. Contact Factory with Serial Number of pump for Part Number.
2. Standard clearances and finishes for Rotor Part Numbers shown. Contact Factory for optional clearances and finishes.
3. Pumps shipped prior to July 30, 2001.
4. Pumps shipped starting July 30, 2001.
5. No longer manufactured, consult factory for upgrade of gear case subassembly.
12. Replaces 006 010 010 straight and 006 010 090 90° (degree) rotors.
- 12a. Replaces 015 010 010 straight and 015 010 090 90° (degree) rotors.
- 12b. Replaces 018 010 010 straight and 018 010 090 90° (degree) rotors.
13. Single wing rotors can not be used in Rectangular Flange Inlet pumps.

006-014-015-018-024-UI Common Parts



**Notes:**  
 1. Item 46 used on 60 through 320.



PD100-309

See also "Grease Seal, Bearing Retainer, O-Ring Seal Carrier Part Number Reference" on page 91.

## 006-014-015-018-024-UI Common Parts

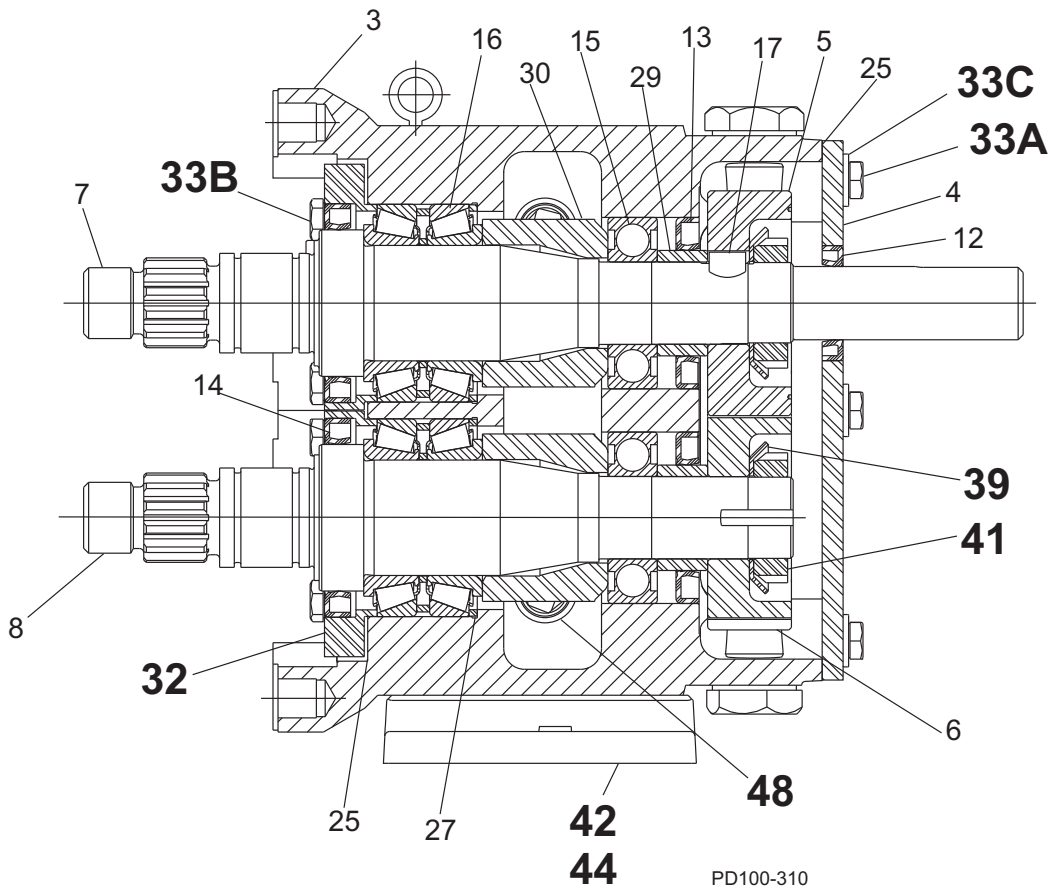
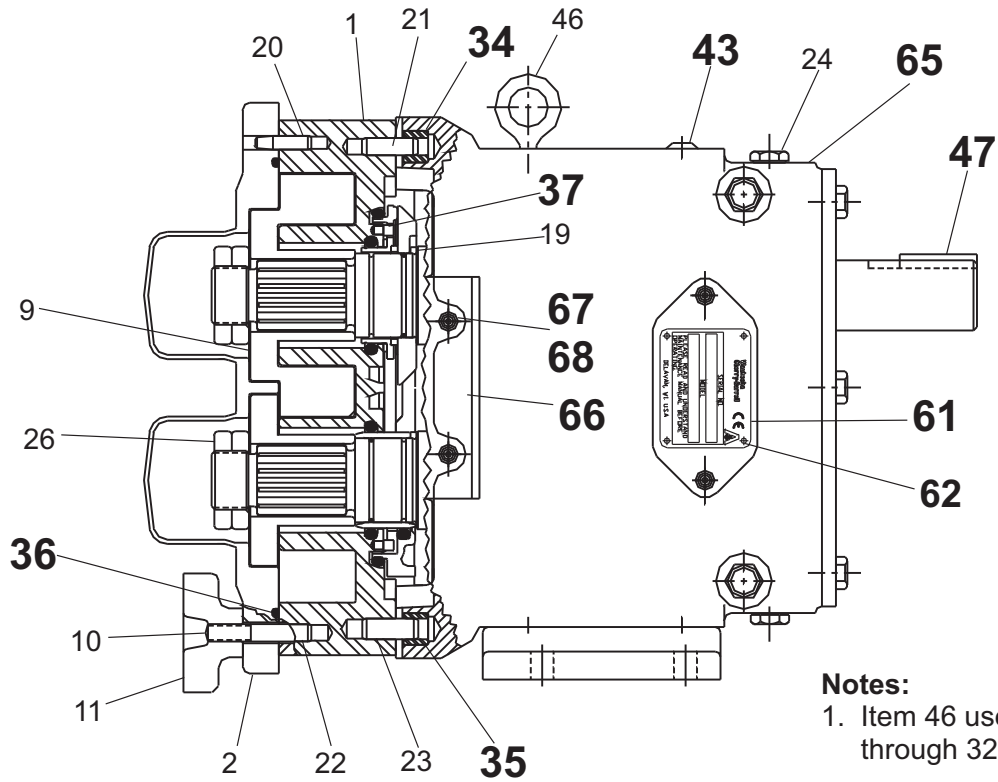
ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
2	Pump Cover	1	AD0 002 S00	
	Jacketed Cover	1	AD0 002 J10	
	<b>Pump Cover Vented - Complete Assembly</b>			
	Manual (over 150 PSI)	1	CVR00027	
	Manual (under 150 PSI)	1	CVR00006	
	Pneumatic	1	CVR00004	
	Piston	1	CVR00005	
3	006-015-U1 Gear Case Assembly, CI	1	115231-C	9
	006-015-U1 Gear Case Assembly, SS (Optional)	1	115243-C	9
	014-U1 Gear Case Assembly, CI	1	115467-C	9
	014-U1 Gear Case Assembly, SS (Optional)	1	115479-C	9
	018-U1 Gear Case Assembly, CI	1	115233-C	9
	018-U1 Gear Case Assembly, SS (Optional)	1	115245-C	9
	024-U1 Gear Case Assembly, CI	1	115469-C	9
	024-U1 Gear Case Assembly, SS (Optional)	1	115481-C	9
4	Gear Case Cover, Steel	1	020 106 000+	
	Gear Case Cover, SS; Optional	1	102280+	
5	Gear, Drive Shaft, Spur	1	107997+	
6	Gear, Short Shaft, Spur	1	107997+	
11	Wing Nut	8	105850+	
	Hex Nut, optional	8	108369+	
12	Oil Seal, Gear Case Cover	1	000 030 016+	
13	Oil Seal, Gear Case Rear	2	000 030 017+	
14	Grease Seal, Bearing Retainer	2	121679+	7
	Bearing Isolator Kit, includes Bearing Retainer	1	X06638-1	4
15	Bearing, Rear	2	015 035 000+	
16	Bearing, Front	2	101714+	4
17	Key, Gear	2	015 037 000+	
19	Drive Pin, Seal Seat and Sleeve	2	CD0 126 000	
20	Dowel Pin, Upper Cover Side	1	AD0 040 000	
21	Dowel Pin, Upper Gear Case Side	1	AD0 040 R00	
22	Dowel Pin, Lower Cover Side	1	AD0 040 100	
23	Dowel Pin, Lower Gear Case Side	1	AD0 040 R10	
24	Fill, Drain, Level Plug	6	115798+	8
25	Silicone Sealant	1	000 142 301+	
26	Jam Nut, Rotor	4	AD0 052 001	
27	Shim Kit	2	117889+	4
	Shim, Front Bearing, .002" thick	as req'd	015 054 002+	
	Shim, Front Bearing, .003" thick	as req'd	015 054 003+	
	Shim, Front Bearing, .005" thick	as req'd	015 054 005+	
	Shim, Front Bearing, .010" thick	as req'd	015 054 010+	
	Shim, Front Bearing, .049"-.051" thick	as req'd	015 054 050+	
29	Spacer, Gear to Rear Bearing	2	015 055 000+	
30	Bearing Spacer	2	101814+	4

## NOTES:

PL5060-CH32

4. Pumps shipped starting July 30, 2001.
7. Pumps shipped starting June 2004. Bearing retainer part # for 121679+ is 120332+.
8. The old sight glass plug part number was 000046002+. PD pumps changed approximately Oct. 2003. Please verify the date of manufacture of the pump to identify the correct part needed.
9. Pumps shipped starting July 30, 2001. Assembly includes shafts and timing gears.

006-014-015-018-024-UI Common Parts, cont'd



## 006-014-015-018-024-UI Common Parts, cont'd

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
32	Bearing Retainer, Front	2	120332+	4, 1
	Bearing Retainer, Front	2	015 080 000+	5, 3
	Bearing Retainer, Front (for SS Gearcase)	2	101810+	4, 2
33A, 33B	1/4-20 x .75" HHCS, Standard	14	30-287	
	1/4-20 x .75" HHCS, SS	14	30-58	
33C	1/4" Flat Washer, Gear Case Cover	6	43-108	
34	Dowel Bushing, Upper	1	AD0 116 000	
35	Dowel Bushing, Lower	1	AD0 116 100	
* * * * * *	<b>O-Ring, Pump Cover, Buna N</b>	1	N70252	
	<b>O-Ring, Pump Cover, EPDM</b>	1	E70252	
	<b>O-Ring, Pump Cover, FKM</b>	1	V70252	
	<b>O-Ring, Pump Cover, Silicone</b>	1	S75251	
* * *	<b>014-U1 O-Ring, Rectangular Flange</b>	1	N70241	
	<b>024-U1 O-Ring, Rectangular Flange</b>	1	N70241	14
	<b>024-U1 O-Ring, Rectangular Flange</b>	1	N70245	14
37	Stop Pin, Seal	2	015 126 000+	
39	Lockwasher, Gear	2	STD 136 005	
41	Locknut, Gear	2	STD 236 005	
42	Gear Case Shim, CI	1	020 110 000+	
	Gear Case Shim, SS; Optional	1	102284+	
	Pump Pedestal, 6.75"; Optional	1	014 110 675+	
43	Plastic Cap Plug	8	000 121 003+	
44	5/16-18 x 1" SHCS, Standard	4	30-343	
	5/16-18 x 1" SHCS, SS	4	30-525	
45	006-014-015-U1 Body Retaining Screw	2	30-523	
	018-024-U1 Body Retaining Screw	2	30-211	
47	Key, Coupling - 3/16 x 3/16 x 1-1/8"	1	000 037 001+	
48	Cleanout Plug	2	35824+	
61	Name Plate, Sanitary	1	001 061 002+	
62	#2 x .125" RHDS	4	30-355	
63	O-Ring Removal Tool	1	AD0 096 001	
64	Rotor Nut Wrench, SS	1	109895+	
	Rotor Nut Wrench, Jacketed Cover	1	AD0 019 001	
65	Caution Plate	2	121694+	
66	Warning Label	2	33-63	
67	006, 015, 018 - U1 Grease Fitting, 1/8" (straight)	4	BD0 092 000	
	014-024-U1 Grease Fitting, 1/8" (angled)	4	BD0 092 100	
68	Plastic Cap, Grease Fitting	4	BD0 093 000	

## NOTES:

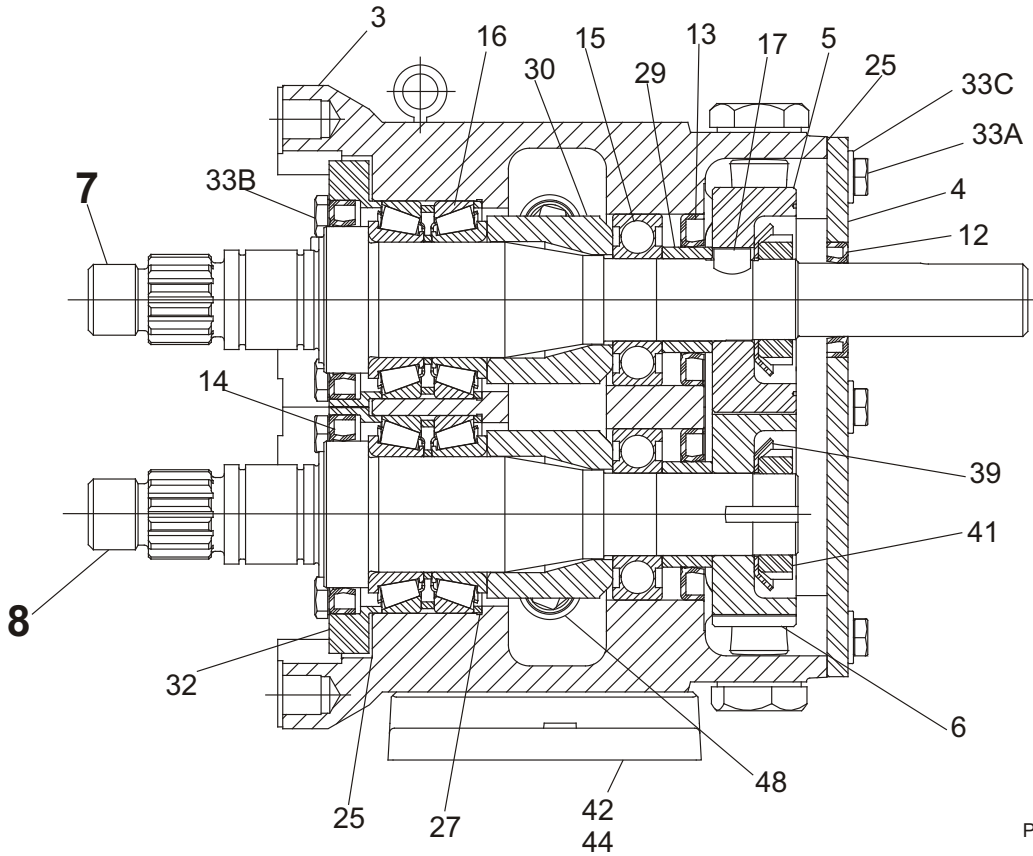
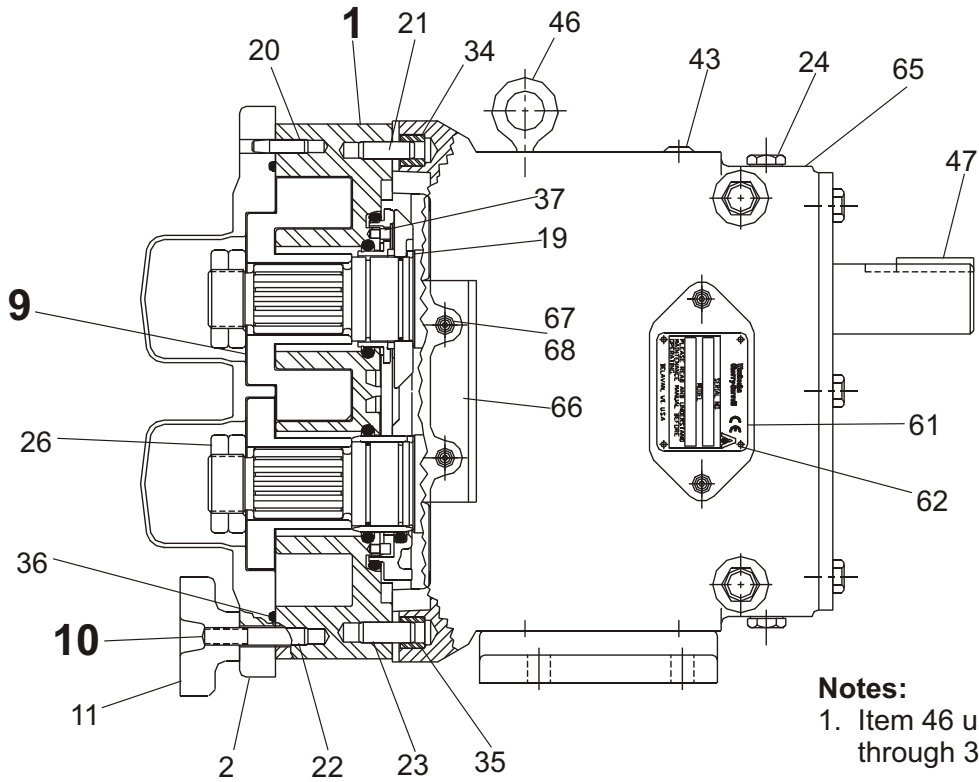
PL5060-CH33

- Used with seal part # 121679+
- For SS gearcase or bearing isolator; used with seal part # 101716+
- Used with seal part # 000039918+
- Pumps shipped starting July 30, 2001
- Pumps shipped prior to July 30, 2001
14. New O-Rings N70245 (024) introduced in 2001. Fits close to inlet opening.

## \* Recommended Spare Parts

See also "Grease Seal, Bearing Retainer, O-Ring Seal Carrier Part Number Reference" on page 91.

030-033A-034-040-UI Pump Parts



PD100-311

## 030-033A-034-040-UI Pump Parts

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
1	030-034-040-UI Pump Body	1	See Note 1	1
	033A-U1 Pump Aseptic Body	1	033 001 020+	
7	030-034-U1 Drive Shaft, Std.	1	030 008 000+	3
	030-034-U1 Drive Shaft, Optional 17-4PH	1	35341+	3
	030-034-U1 Drive Shaft, Std.	1	114646+	4
	030-034-U1 Drive Shaft, Optional 17-4PH	1	114779+	4
	033A-U1 Drive Shaft, Std.	1	033 008 000+	3
	033A-U1 Drive Shaft, Std.	1	114648+	4
	040-U1 Drive Shaft, Std.	1	118718+	
	040-U1 Drive Shaft, Optional 17-4PH	1	118812+	
8	030-034-U1 Short Shaft, Std.	1	030 009 000+	3
	030-034-U1 Short Shaft, Optional 17-4PH	1	35342+	3
	030-034-U1 Short Shaft, Std.	1	114647+	4
	030-034-U1 Short Shaft, Optional 17-4PH	1	114780+	4
	033A-U1 Short Shaft, Std.	1	033 009 000+	3
	033A-U1 Short Shaft, Std.	1	114649+	4
	040-U1 Short Shaft, Std.	1	118719+	
	040-U1 Short Shaft, Optional 17-4PH	1	118813+	
9	030-034-U1 Rotor, Twin Wing, Alloy 88	2	030 010 000+	2
	030-034-U1 Rotor, Twin Wing, 316SS	2	030 010 200+	2
	030-U1 Rotor, Single Wing, Alloy 88	2	117291+	2, 12, 13
	033A-U1 Rotor, Twin Wing, Alloy 88	2	33A 010 000	2
	033A-U1 Rotor, Single Wing, Alloy 88	2	117326+	2, 12A
	040-U1 Rotor, Twin Wing, Alloy 88	2	118728+	2
	040-U1 Rotor, Twin Wing, 316SS	2	118753+	2
	040-U1 Rotor, Single Wing, Alloy 88	2	122711+	2, 13
10A	030-033A-U1 Stud	8	108842+	
10B	030-033A-U1 Stud, Jacketed Cover	8	108845+	
10C	034-U1 Stud	6	108842+	
	034-U1 Stud	2	35555+	
10D	034-U1 Stud, Jacketed Cover	6	108845+	
	034-U1 Stud, Jacketed Cover	2	35549+	
10E	040-U1 Stud	8	118897+	
	040-U1 Stud, Jacketed Cover	8	118898+	
	Stud Retainer Assembly	1	Contact Factory	5

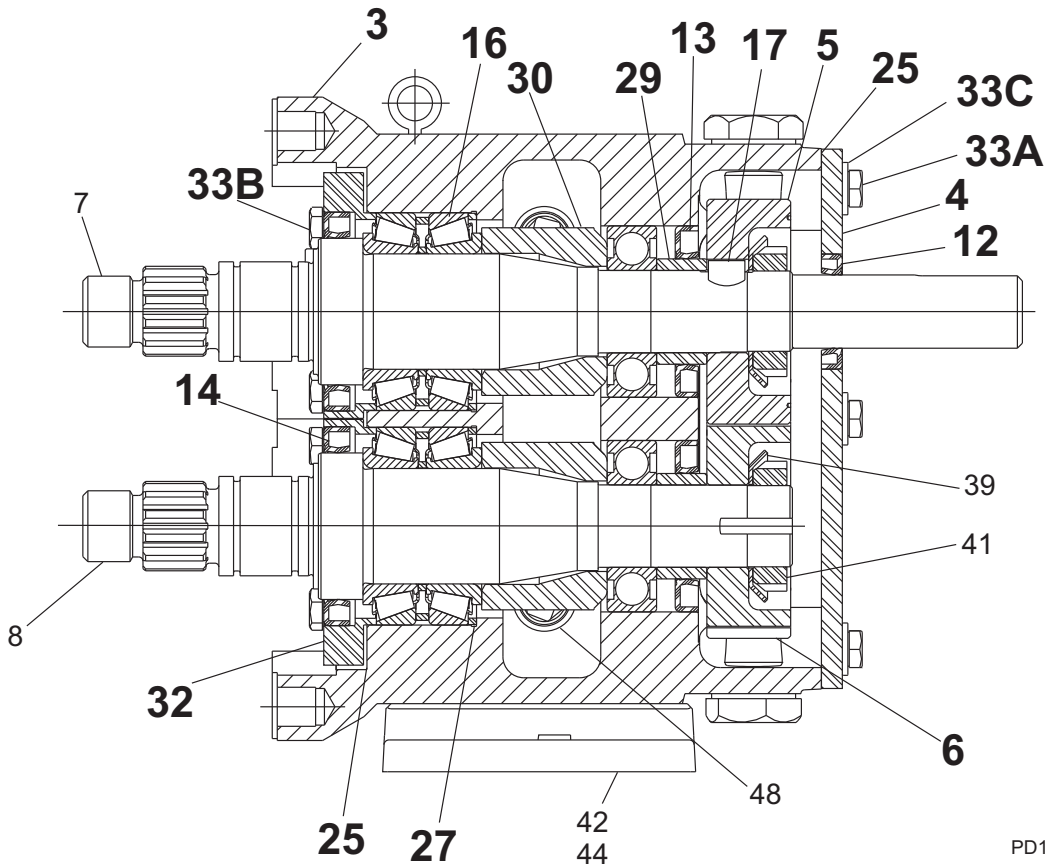
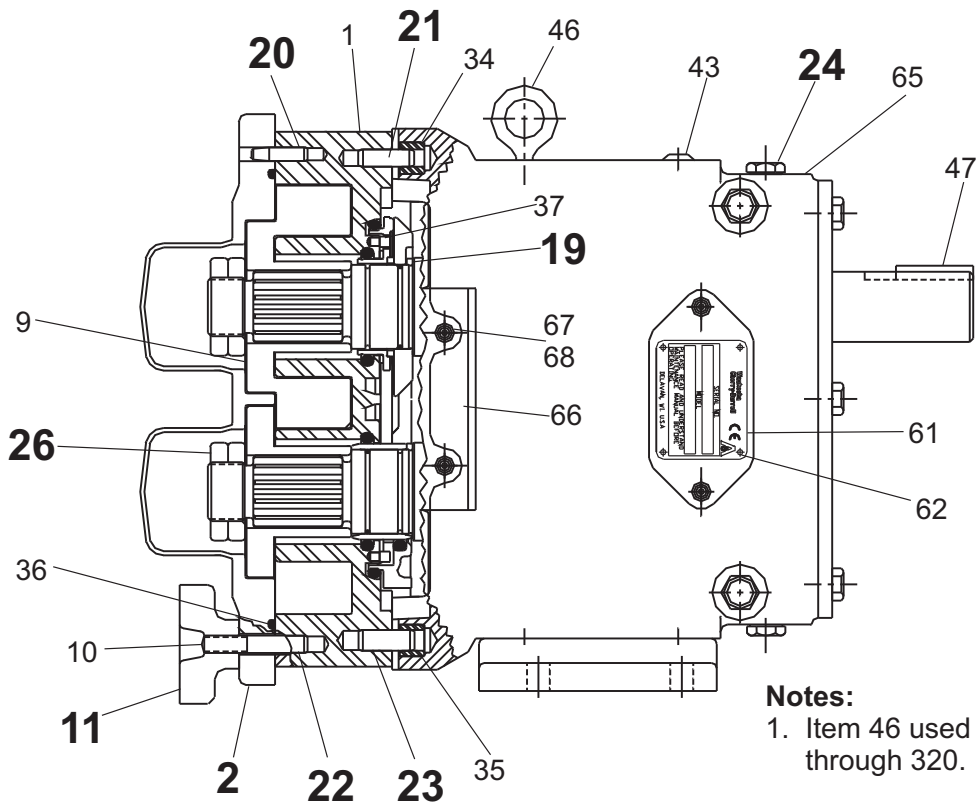
## NOTES:

PL5060-CH36a

1. Contact Factory with Serial Number of pump for Part Number.
2. Standard clearances and finishes for Rotor Part Numbers shown. Contact Factory for optional clearances and finishes.
3. Pumps shipped prior to July 30, 2001.
4. Pumps shipped starting July 30, 2001.
5. No longer manufactured, consult factory for upgrade of gear case subassembly.
12. Replaces 030 010 010 straight and 030 010 090 90° (degree) rotors.
- 12A. Replaces 33A 010 010 straight and 33A 010 090 90° (degree) rotors.
13. Single wing rotors cannot be used in Rectangular Flange Inlet pumps.



030-033A-034-040-UI Common Parts



PD100-312

## 030-033A-034-040-UI Common Parts

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES	
2	030-034-040-UI Pump Cover	1	BD0 002 S00		
	030-034-040-UI Jacketed Cover	1	BD0 002 J10		
	033A-UI Pump Cover	1	33A 002 020		
	<b>Pump Cover Vented - Complete Assembly</b>				
	030-034-040-UI Manual (over 150 PSI)	1	CVR00007		
	030-034-040-UI Manual (under 150 PSI)	1	CVR00014		
	030-034-040-UI Pneumatic	1	CVR00010		
3	030-UI Gear Case Assembly, CI	1	115235-C	6	
	030-Gear Case Assembly, SS; Optional	1	115247-C	6	
	033A-UI Gear Case Assembly, CI	1	115289-C	6	
	033A-UI Gear Case Assembly, SS; Optional	1	134061-C	6	
	034-UI Gear Case Assembly, CI	1	115471-C	6	
	034-UI Gear Case Assembly, SS; Optional	1	115483-C	6	
	040-UI Gear Case Assembly, CI	1	121660-C	6	
	040-UI Gear Case Assembly, SS; Optional	1	124125-C	6	
4	Gear Case Cover, Steel	1	040 106 000+		
	Gear Case Cover, SS; Optional	1	102281+		
5	Gear, Drive Shaft, Spur	1	107999+		
6	Gear, Short Shaft, Spur	1	107999+		
11	Wing Nut	8	105851+		
	Hex Nut, optional	8	108370+		
12	Oil Seal, Gear Case Cover	1	000 030 013+		
13	Oil Seal, Gear Case Rear	2	000 030 014+		
14	Grease Seal, Bearing Retainer	2	121680+		
	Bearing Isolator Kit, includes Bearing Retainer	1	X06639-1	8	
15	Bearing, Rear	2	030 035 000+		
16	Bearing, Front	2	101715+		
17	Key, Gear	2	BD0 037 000		
19	Drive Pin, Seal Seat and Sleeve	2	CD0 126 000		
20	Dowel Pin, Upper Cover Side	1	BD0 040 000		
21	Dowel Pin, Upper Gear Case Side	1	BD0 040 200		
22	Dowel Pin, Lower Cover Side	1	BD0 040 100		
23	Dowel Pin, Lower Gear Case Side	1	BD0 040 300		
24	Hex Capscrew; Fill, Drain, Level	6	115799+		
25	Silicone Sealant	1	000 142 301+		
26	Jam Nut, Rotor	4	BD0 052 001		
27	Shim Kit	2	117890+		
29	Spacer, Gear to Rear Bearing	2	030 055 000+		
30	Bearing Spacer	2	101815+		
32	Bearing Retainer, Front	2	120333+		

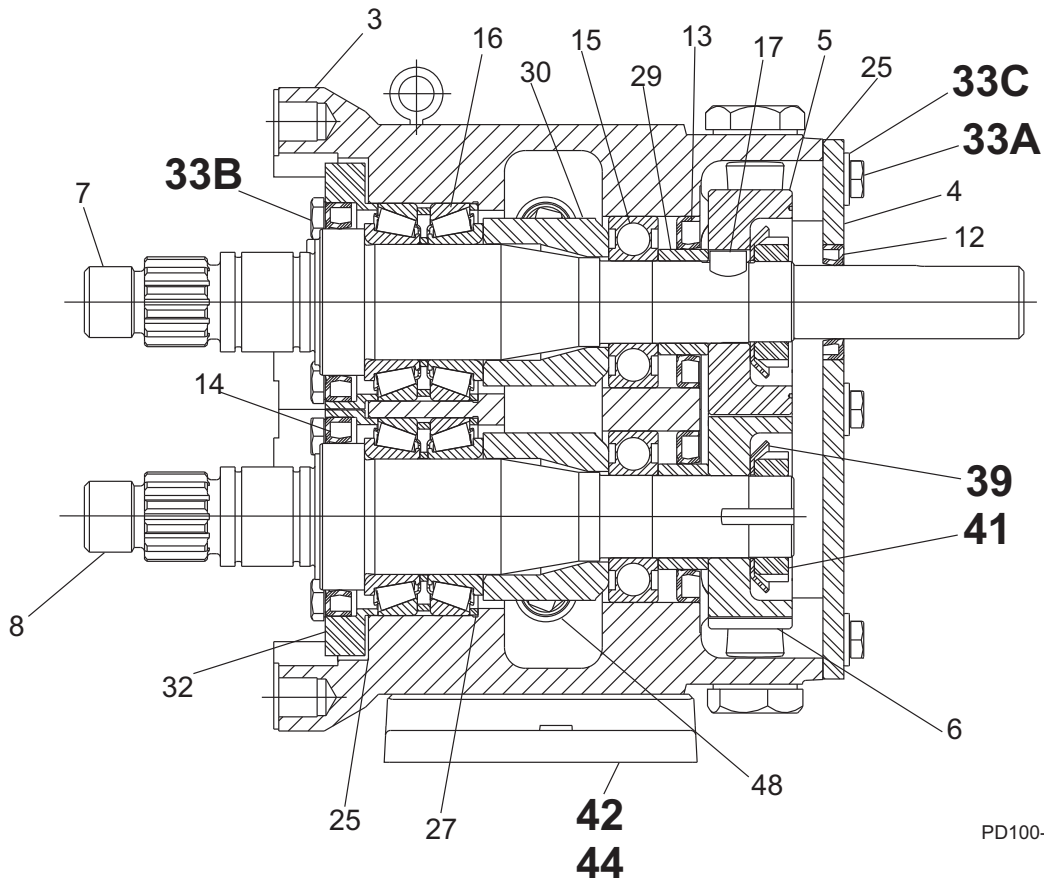
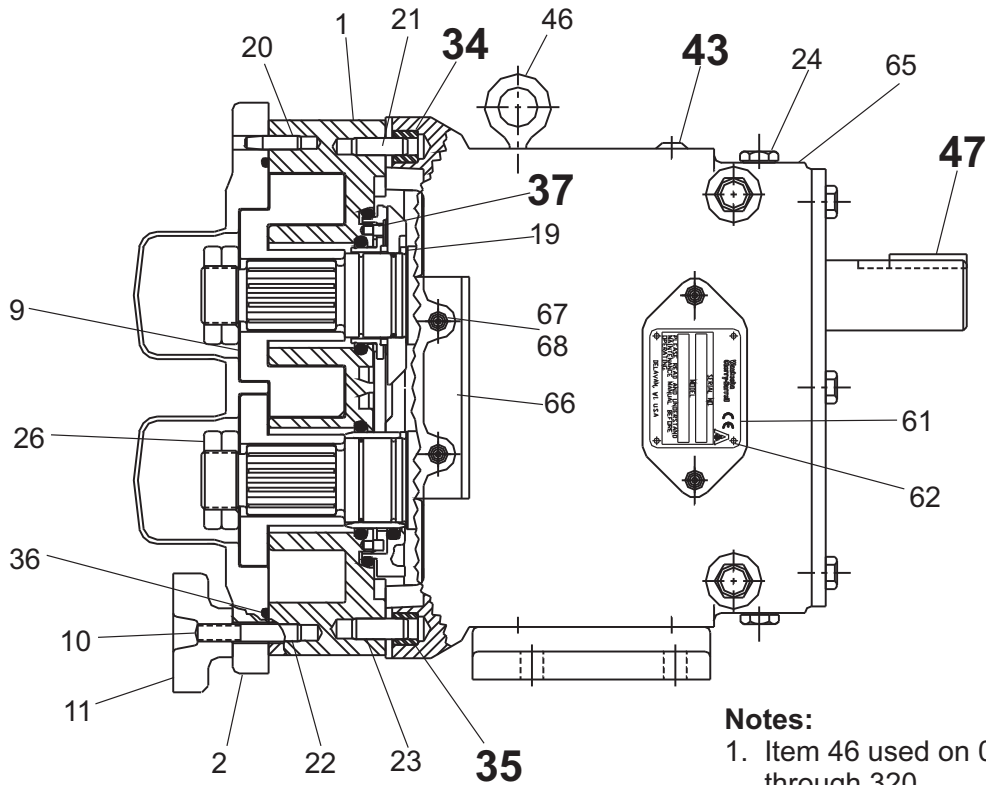
## NOTES:

PL5060-CH37a

- Gear case assembly includes timing gears and 316SS shafts. SS gearcase assy includes 316LSS bearing retainer.
- X06639-1 includes bearing retainer 122337+ (std for pumps manuf. after July 2004).

See also "Grease Seal, Bearing Retainer, O-Ring Seal Carrier Part Number Reference" on page 91.

030-033A-034-040-UI Common Parts, cont'd



PD100-315

## 030-033A-034-040-UI Common Parts, cont'd

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
33A	5/16-18 x .75" HHCS, Std gear case	6	30-283	
	1/2-20 x .50" HHCS, SS Gear case	6	30-526	
33B	5/16-18 x .75" SHCS, Brg Ret. Std gear case	8	30-296	
	5/16-18 x .75" SHCS, Brg Ret., SS Gear case	8	30-29	
33C	5/16" Flat Washer, Std gear case	6	43-194	
34	Dowel Bushing, Upper	1	BD0 116 000	
35	Dowel Bushing, Lower	1	BD0 116 100	
* 36	030-034-040-U1 O-Ring, Pump Cover, Buna N	1	N70261	
	030-034-040-U1 O-Ring, Pump Cover, EPDM	1	E70261	
	030-034-040-U1 O-Ring, Pump Cover, FKM	1	V70261	
	030-034-040-U1 O-Ring, Pump Cover, Silicone	1	S75261	
	033A-U1 O-Ring, Pump Cover, Outer, EPDM	1	033 117 012+	11
	033A-U1 O-Ring, Pump Cover, Outer, FKM	1	033 117 014+	11
	033A-U1 O-Ring, Pump Cover, Outer, Silicone	1	033 117 013+	11
* 36A	033A-U1 O-Ring, Pump Cover, Inner, EPDM	1	033 117 002+	11
	033A-U1 O-Ring, Pump Cover, Inner, FKM	1	033 117 004 +	11
	033A-U1 O-Ring, Pump Cover, Inner, Silicone	1	033 117 003+	11
* 36B	034-U1 O-Ring, Rectangular Flange	1	N70260	14
	034-U1 O-Ring, Rectangular Flange	1	N70357	14
37	Stop Pin, Seal	2	030 126 000+	
39	Lockwasher, Gear	2	CD0 036 W00	
41	Locknut, Gear	2	CD0 036 N00	
42	Gear Case Shim, Cl	1	040 110 000+	
	Gear Case Shim, SS	1	102285+	
	Pump Pedestal, 6.25"	1	BD0 110 SM0	
43	Plastic Cap Plug	8	000 121 002+	
44	3/8-16 x 1" SHCS, Std gear case	4	30-344	
	3/8-16 x 1" SHCS, SS gear case	4	30-189	
45	Body Retaining Screw (030,033,034-U1 only)	2	30-211	
	Body Retaining Screw (040-U1 only)	2	30-543	
46	Eye Bolt	2	30-360	
47	Key, Coupling - 1/4 x 1/4 x 1"	1	000 037 002+	
48	Cleanout Plug	2	41013+	
* 57	033A-U1 O-Ring, Port, Inner	2	S75223	11
* 58	033A-U1 O-Ring, Port, Outer	2	V70232	11
59	033A-U1 2-1/2" 131 "I" Line Clamp	2	0344223+	11
60	033A-U1 Aseptic Ferrule , 2-1/2"	2	BD0 267 230	11

## NOTES:

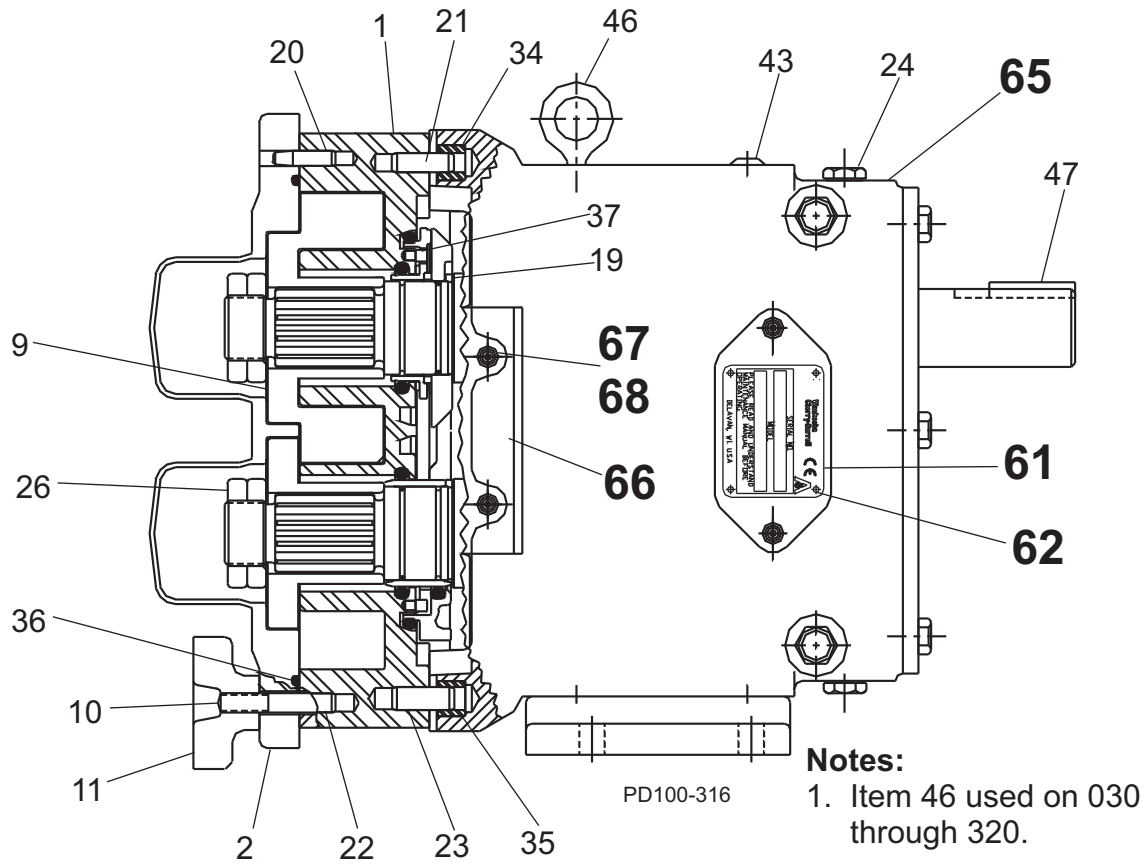
PL5060-CH38a

11. Used on 033A-U1 only.

14. New O-Ring N70357 introduced in 2001. Fits close to inlet opening.

\* Recommended Spare Parts

030-033A-034-040-UI Common Parts, cont'd

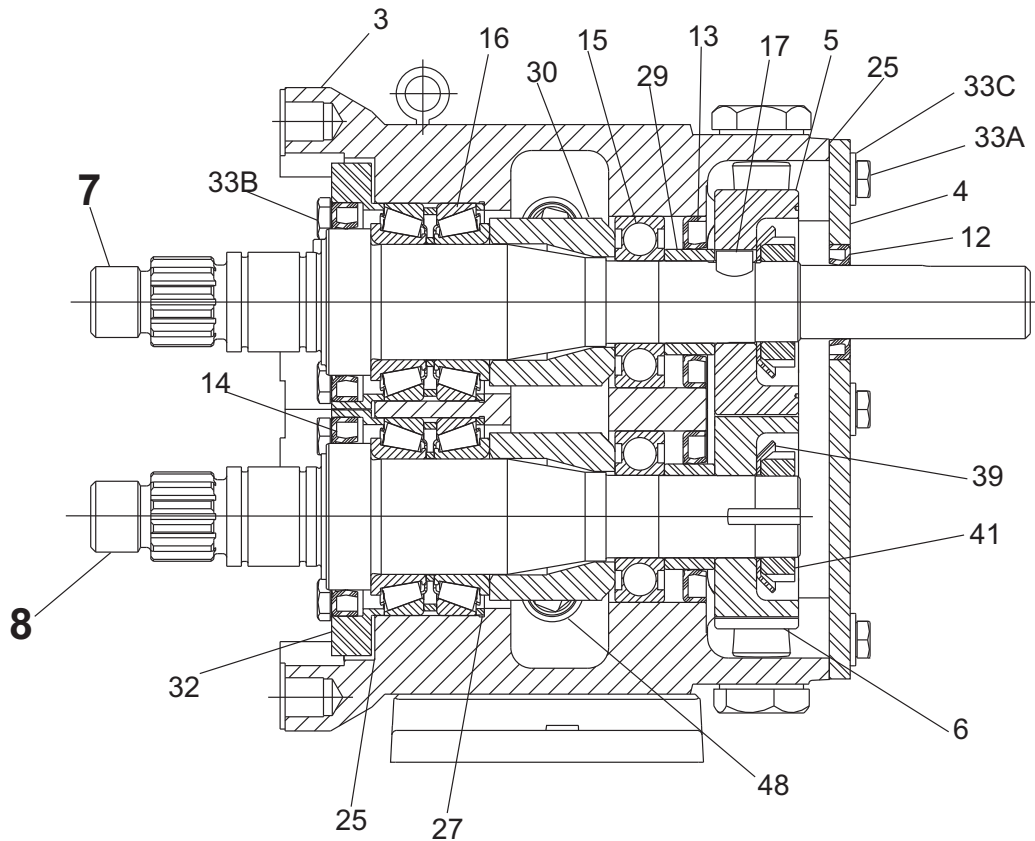
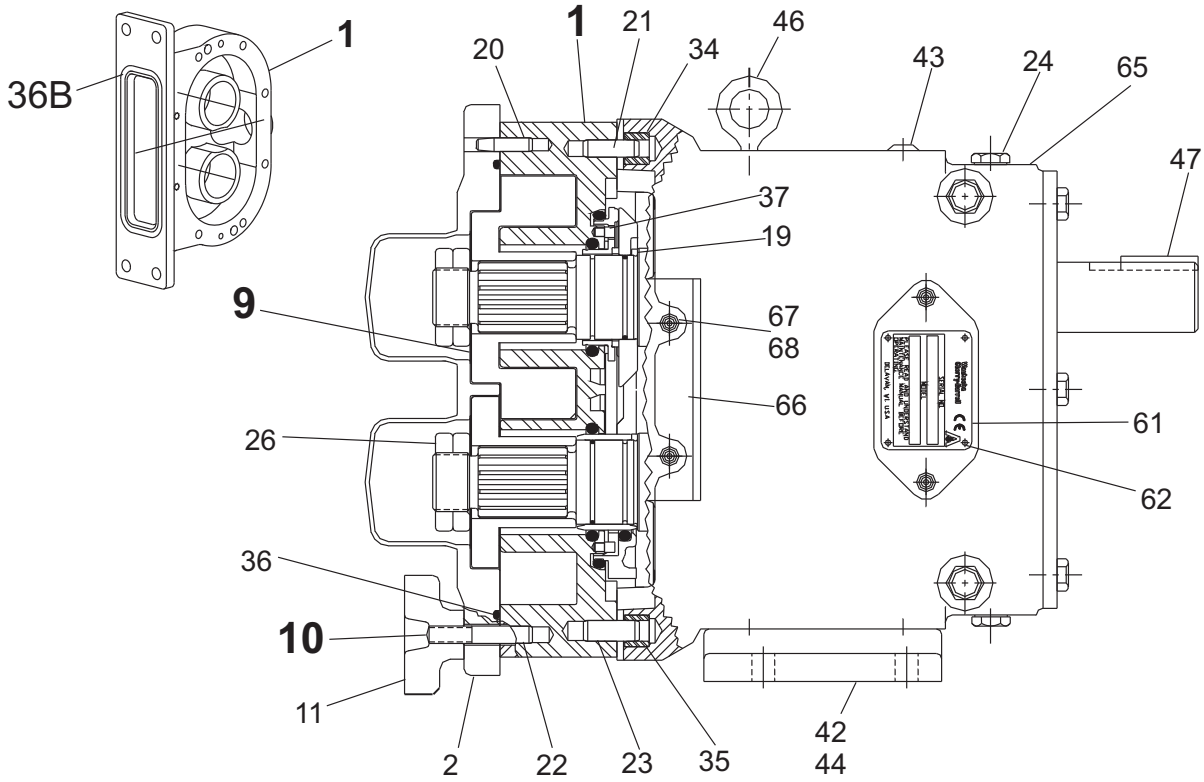


## 030-033A-034-040-UI Common Parts, cont'd

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
61	Name Plate, Sanitary	1	001 061 002+	
62	#2 x .125" RHDS	4	30-355	
63	O-ring Removal Tool	1	AD0 096 001	
64	Rotor Nut Wrench, SS	1	109896+	
	030-034-U1 Wrench, Jacketed Cover	1	CD0 019 001	
65	Caution Plate	2	33-62	
66	Warning Label	2	33-63	
67	030-033A-040-U1 Grease Fitting, 1/8"	4	BD0 092 000	
	034-U1 Grease Fitting, 1/8"	4	BD0 092 100	
68	Plastic Cap, Grease Fitting	4	BD0 093 000	

PL5060-CH39a

060-064-130-134-133A-UI Pump Parts



PD100-317

## 060-064-130-134-133A-UI Pump Parts

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
1	060-064-130-134-UI Pump Body	1	See Note 1	1
	133A-UI Pump Body with Flush	1	133 001 020+	
7	060-064-UI Drive Shaft	1	060 008 001+	
	060-064-UI Drive Shaft, Optional 17-4PH	1	35145+	
	130-134-UI Drive Shaft	1	130 008 001+	
	130-134-UI Drive Shaft, Optional 17-4PH	1	35394+	
	133A-UI Drive Shaft	1	133 008 001+	
	133A-UI Drive Shaft, Optional 17-4PH	1	34470+	
8	060-064-UI Short Shaft	1	060 009 001+	
	060-064-UI Short Shaft, Optional 17-4PH	1	35146+	
	130-134-UI Short Shaft	1	130 009 001+	
	130-134-UI Short Shaft, Optional 17-4PH	1	35392+	
	133A-UI Short Shaft	1	133 009 001+	
	133A-UI Short Shaft, Optional 17-4PH	1	34471+	
9	060-064-UI Rotor, Twin Wing, Alloy 88	2	060 010 000+	2
	060-064-UI Rotor, Twin Wing, 316SS	2	060 010 200+	2
	060-UI Rotor, Single Wing, Alloy 88	2	117343+	2, 12, 13
	130-134-UI Rotor, Twin Wing, Alloy 88	2	130 010 000+	2
	130-134-UI Rotor, Twin Wing, 316SS	2	130 010 200+	2
	130-UI Rotor, Single Wing, Alloy 88	2	117360+	2, 12A, 13
	133A-UI Rotor, Twin Wing, Alloy 88	2	133 010 020 +	2
	133A-UI Rotor, Single Wing, Alloy 88	2	117377+	2, 12B
10A	060-UI Stud	8	108843+	
10B	060-UI Stud, Jacketed Cover	8	108846+	
10C	060-UI Stud Retainer Assembly	1	070 064 000+	5
10D	064-UI Stud	6	108843+	
	064-UI Stud	2	0C1 050 000	
10E	064-UI Stud, Jacketed Cover	6	108846+	
	064-UI Stud, Jacketed Cover	2	35556+	
10F	130-133A-UI Stud	8	130 011 000+	
10G	130-UI Stud, Jacketed Cover	8	130 011 001+	
10H	130-133A-UI Stud Retainer Assembly	1	140 064 000+	5
10I	134-UI Stud	6	130 011 000+	
	134-UI Stud	2	0C1 050 000	
10J	134-UI Stud, Jacketed Cover	6	130 011 001+	
	134-UI Stud, Jacketed Cover	2	35556+	

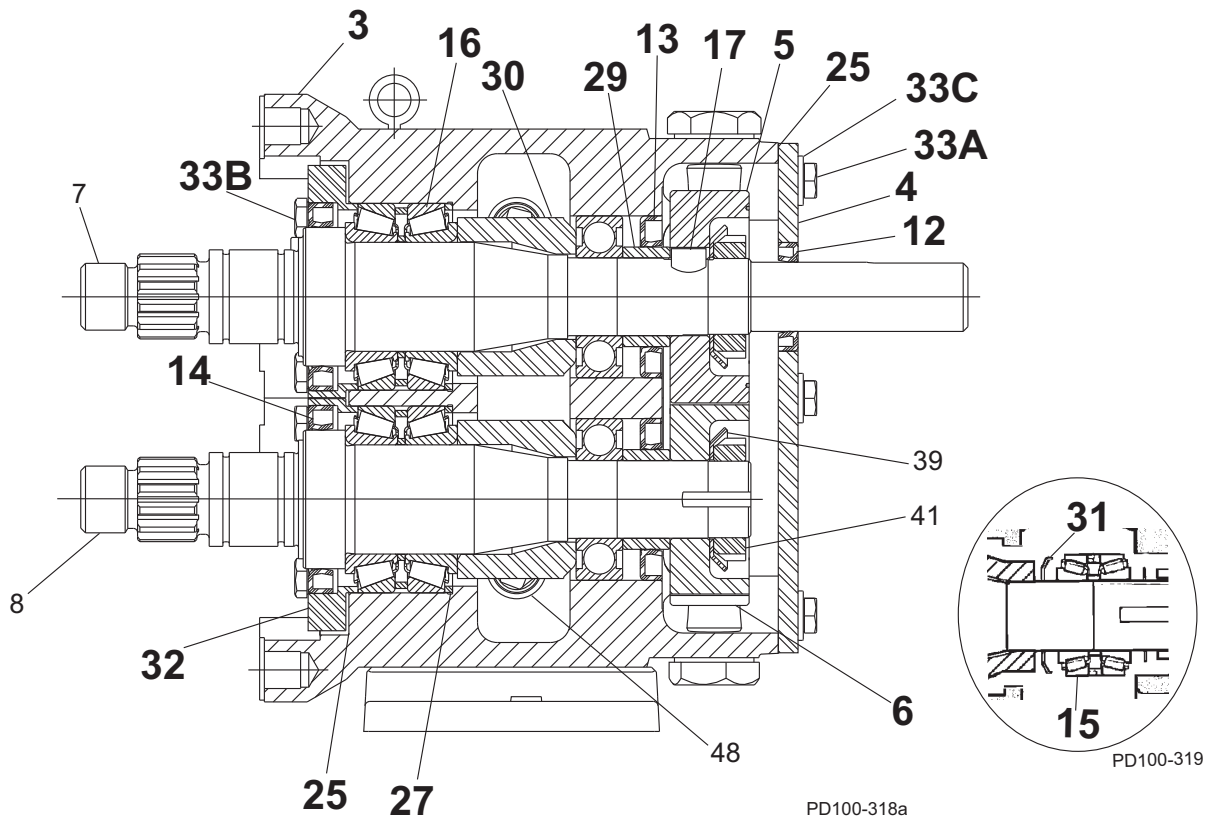
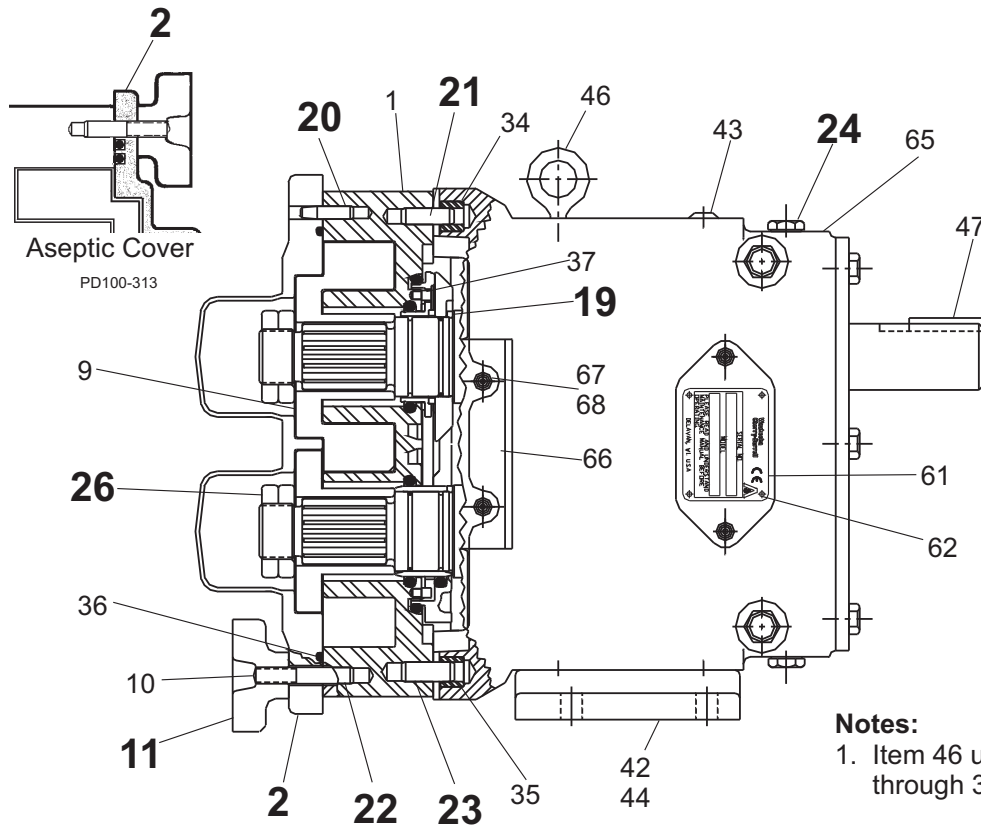
## NOTES:

PL5060-CH48

1. Contact Factory with Serial Number of pump for Part Number.
2. Standard clearances and finishes for Rotor Part Numbers shown.  
Contact Factory for optional clearances and finishes.
5. No longer manufactured, consult factory for upgrade of gear case subassembly.
12. Replaces 060 010 010 straight and 060 010 090 90° (degree) rotors.
- 12A. Replaces 130 010 010 straight and 130 010 090 90° (degree) rotors.
- 12B. Replaces 133 010 010 straight and 133 010 090 90° (degree) rotors.
13. Single wing rotors cannot be used in Rectangular Flange Inlet pumps.



060-064-130-134-133A-UI Common Parts



See also "Grease Seal, Bearing Retainer, O-Ring Seal Carrier Part Number Reference" on page 91.

## 060-064-130-134-133A-UI Common Parts

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
2	060-064-130-134-U1 Pump Cover	1	CD0 002 S00	
	060-064-130-134-U1 Jacketed Cover	1	CD0 002 J10	
	133A-U1 Pump Cover	1	133 002 020+	
	<b>Pump Cover Vented - Complete Assembly</b>			
	060-064-130-134-U1 Manual (over 150 PSI)	1	CVR00036	
	060-064-130-134-U1 Manual (under 150 PSI)	1	CVR00024	
	060-064-130-134-U1 Pneumatic	1	CVR00053	
	060-064-130-134-U1 Piston	1	CVR00054	
3	060-U1 Gear Case Assembly, CI	1	060 108 000-C	6
	060-U1 Gear Case Assembly, SS	1	060 108 004-C	6
	064-U1 Gear Case Assembly, CI	1	064 108 000-C	6
	064-U1 Gear Case Assembly, SS	1	064 108 004-C	6
	130-U1 Gear Case Assembly, CI	1	130 108 000-C	6
	130-U1 Gear Case Assembly, SS	1	130 108 004-C	6
	133A-U1 Gear Case Assembly, CI	1	133 108 000-C	6
	133A-U1 Gear Case Assembly, SS	1	133 108 004-C	6
	134-U1 Gear Case Assembly, CI	1	134 108 000-C	6
	134-U1 Gear Case Assembly, SS		134 108 004-C	6
4	Gear Case Cover, Steel	1	070 106 000+	
	Gear Case Cover, SS; Optional	1	102282+	
5	Gear, Drive Shaft, Spur	1	107404+	
6	Gear, Short Shaft, Spur	1	107404+	
11	Wing Nut	8	105852+	
	Hex Nut, Optional	8	108371+	
12	Oil Seal, Gear Case Cover	1	000 030 012+	
13	Oil Seal, Gear Case Rear	2	000 030 011+	
14	Grease Seal, Bearing Retainer	2	000 030 009+	
	Bearing Isolator Kit, Incl. STD Bearing Retainer	1	X06614-1	
	Bearing Isolator Kit, Incl. SS Bearing Retainer	1	X06614-2	
15	Bearing, Rear	2	107186+	
16	Bearing, Front	2	060 036 000+	
17	Key, Gear	2	060 037 000+	
19	Drive Pin, Seal Seat and Sleeve	2	CD0 126 000	
20	Dowel Pin, Upper Cover Side	1	CD0 040 000	
21	Dowel Pin, Upper Gear Case Side	1	CD0 040 R00	
22	Dowel Pin, Lower Cover Side	1	CD0 040 100	
23	Dowel Pin, Lower Gear Case Side	1	CD0 040 R10	
24	Oil Plug, M20 x 1.5"	5	115798+	41
	Oil Level Indicator, M20 x 1.5	1	115799+	41
	Plug w/ washer, 3/4-16	6	000 046 004+	40
25	Silicone Sealant	1	000 142 301+	
26	Jam Nut, Rotor	4	060 052 001+	
27	Shim Kit	2	117891+	
29	Spacer, Gear to Rear Bearing	2	107187+	
30	Bearing Spacer	2	060 055 003+	
31	Grease Retainer, Rear Bearing	2	STD 091 002	
32	Bearing Retainer, Front	2	123531+	
	Bearing Retainer, SS	2	101812+	

## NOTES:

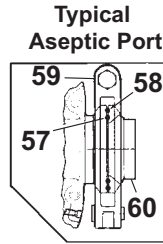
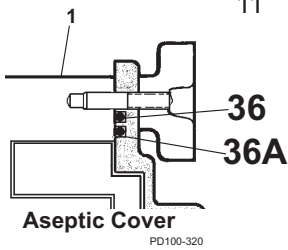
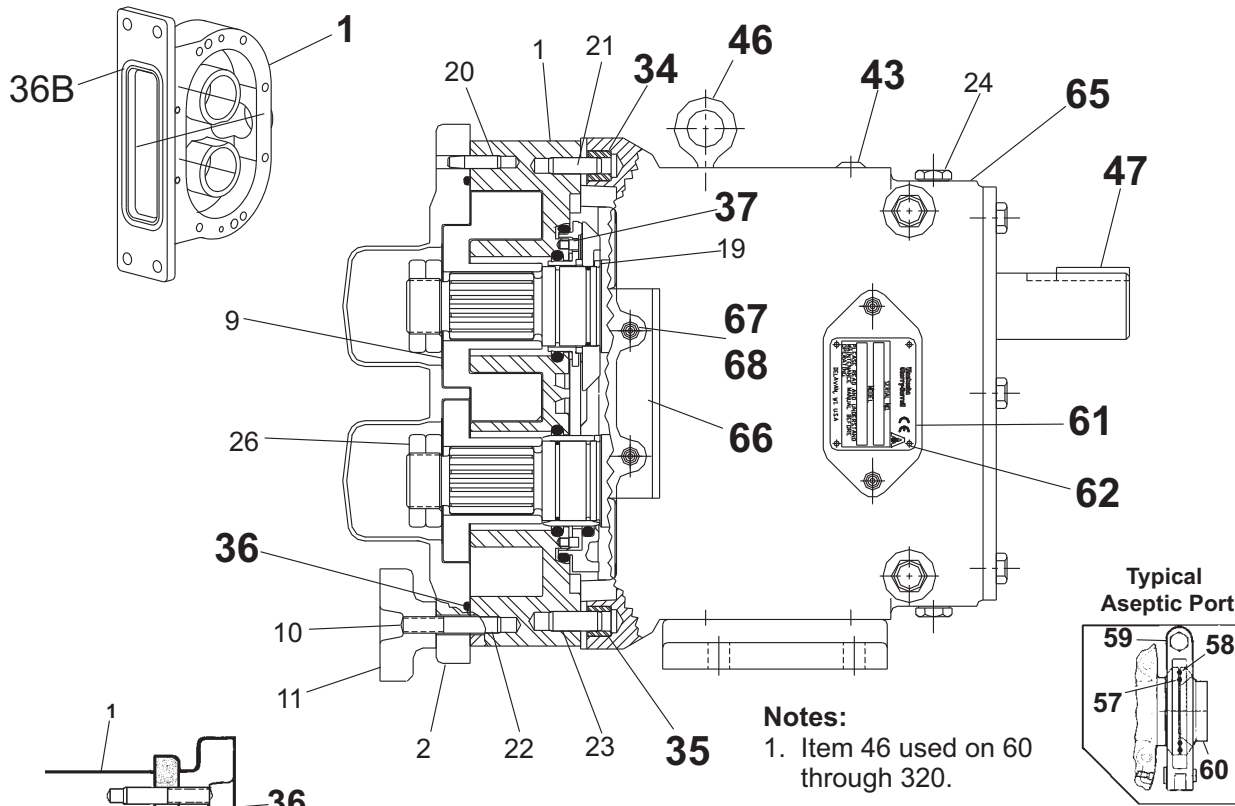
PL5060-CH49

6. Gear case assembly includes timing gears and 316SS shafts.

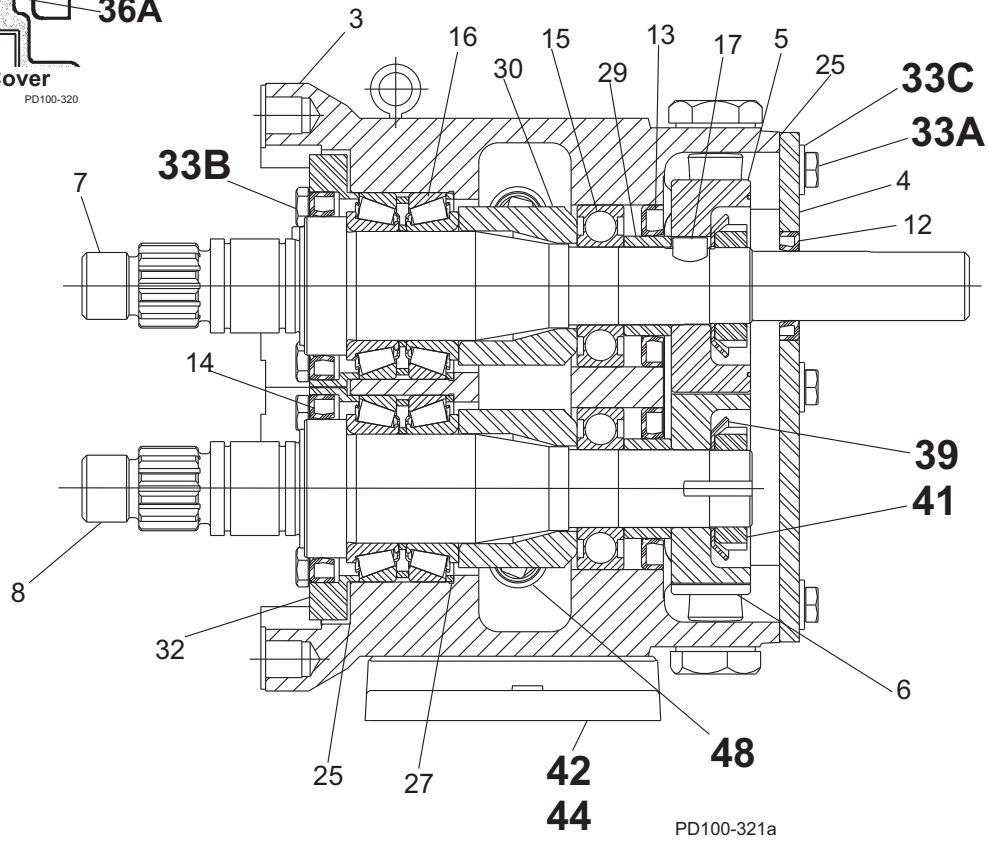
40. For pumps shipped prior to 5/15/03.

41. For pumps shipped after 5/15/03.

060-064-130-134-133A-UI Common Parts, cont'd



Notes:  
1. Item 46 used on 60 through 320.



**060-064-130-134-133A-UI Common Parts, cont'd**

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
33A	3/8-16 x .75" HHCS, STD Gear Case Cover	6	30-314	
	3/8-16 x .75" HHCS, SS Gear Case	6	30-50	
33B	3/8-16 x 1.25" HHCS, Brg. Ret., Std. Gear Case	8	30-351	
	3/8-16 x 1.25" HHCS, Brg. Ret. SS Gear Case	8	30-60	
33C	3/8" Flat Washer	6	43-189	
34	Dowel Bushing, Upper	1	CD0 116 000	
35	Dowel Bushing, Lower	1	CD0 116 100	
* 36	<b>O-Ring, Pump Cover, Buna N</b>	1	N70272	
	<b>O-Ring, Pump Cover, EPDM</b>	1	E70272	
	<b>O-Ring, Pump Cover, FKM</b>	1	V70272	
	<b>O-Ring, Pump Cover, Silicone</b>	1	S75272	
* 36A	<b>133A-U1 O-Ring, Pump Cover, Inner, EPDM</b>	1	133 117 002+	11
	<b>133A-U1 O-Ring, Pump Cover, Inner, FKM</b>	1	133 117 004+	11
	<b>133A-U1 O-Ring, Pump Cover, Inner, Silicone</b>	1	133 117 003+	11
* 36B	<b>064-U1 O-Ring, Rectangular Flange, Buna N</b>	1	35360+	14
	<b>064-U1 O-Ring, Rectangular Flange, Buna N</b>	1	N70366	14
	<b>134-U1 O-Ring, Rectangular Flange, Buna N</b>	1	N70272	14
	<b>134-U1 O-Ring, Rectangular Flange, Buna N</b>	1	N70369	14
37	Stop Pin, Seal	2	223 126 000+	
39	Lockwasher, Gear	2	STD 136 009	
41	Locknut, Gear	2	STD 236 009	
42	Gear Case Shim, CI	1	070 110 000+	
	Gear Case Shim, SS; Optional	1	102286+	
	Pump Pedestal, 5.5", Optional	1	CD0 110 SM5	
	Pump Pedestal, 10", Optional	1	CD0 110 SM1	
43	Plastic Cap Plug	6	000 121 001+	
44	5/16-18 x 1" SHCS	4	30-275	
45	060-064-U1 Body Retaining Screw	2	30-319	
	130-133A-134-U1 Body Retaining Screw	2	30-423	
46	Eye Bolt	2	30-360	
47	Key, Coupling - 3/8 x 3/8 x 1-5/8"	1	000 037 003+	
48	Cleanout Plug	2	41013+	
* 57	<b>133A-U1 O-Ring, Port, Inner, Silicone</b>	2	S75041	11
	<b>133A-U1 O-Ring, Port, Inner, EPDM</b>	2	E70041	11
* 58	<b>133A-U1 O-Ring, Port, Outer, Silicone</b>	2	S75043	11
	<b>133A-U1 O-Ring, Port, Outer, EPDM</b>	2	E70043	11
* 59	<b>133A-U1 3" 13l "I" Line Clamp</b>	2	0345223+	11
* 60	<b>133A-U1 Aseptic Ferrule, 3"</b>	2	133 267 000+	11
61	Name Plate, Sanitary	1	001 061 002+	
62	#2 x .125" RHDS	4	30-355	
63	O-Ring Removal Tool	1	AD0 096 001	
64	Rotor Nut Wrench, SS	1	109897+	
	060-064-130-134-U1 Wrench, Jacketed Cover	1	060 019 001+	
65	Caution Plate	2	121694+	
66	Warning Label	2	33-60	
67	060, 130, 133A-U1 Grease Fitting, 1/8" (straight)	4	BDO 092 000	
	064-134-U1 Grease Fitting, 1/8" (angled)	4	BDO 092 100	
68	Plastic Cap, Grease Fitting	4	BDO 093 000	

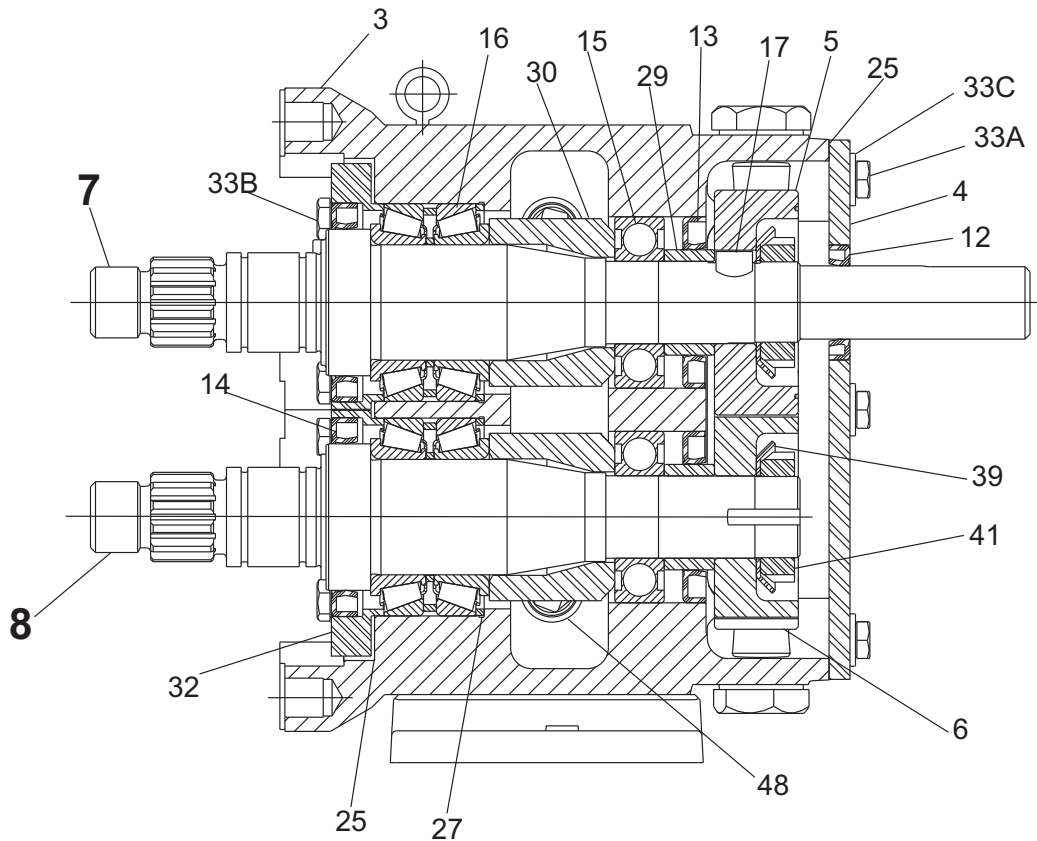
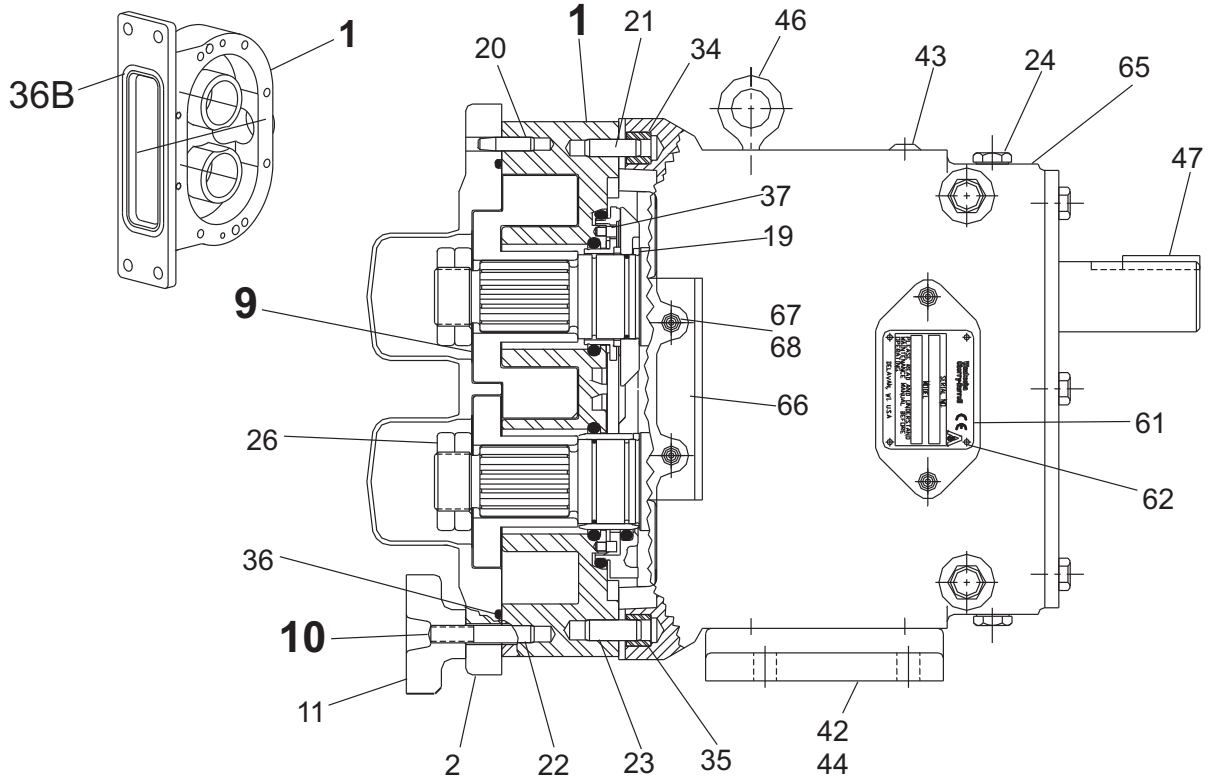
**NOTES:** \* Recommended Spare Parts

PL5060-CH50

11. Used on 133A-U1 only.

14. New O-Rings N70366 (064) and N70369 (134) introduced in 2001. Fits close to inlet opening.

220-223A-224-UI Pump Parts



PD100-317

## 220-223A-224-UI Pump Parts

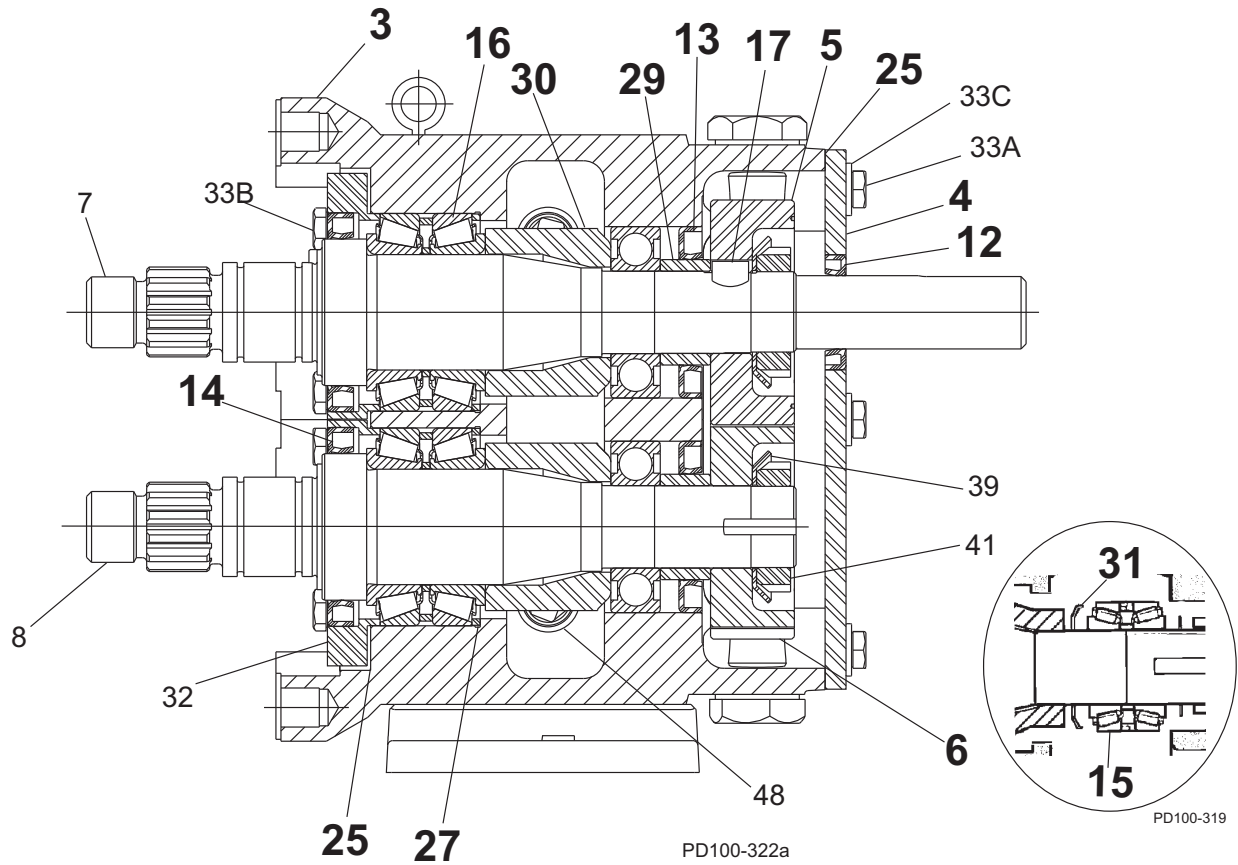
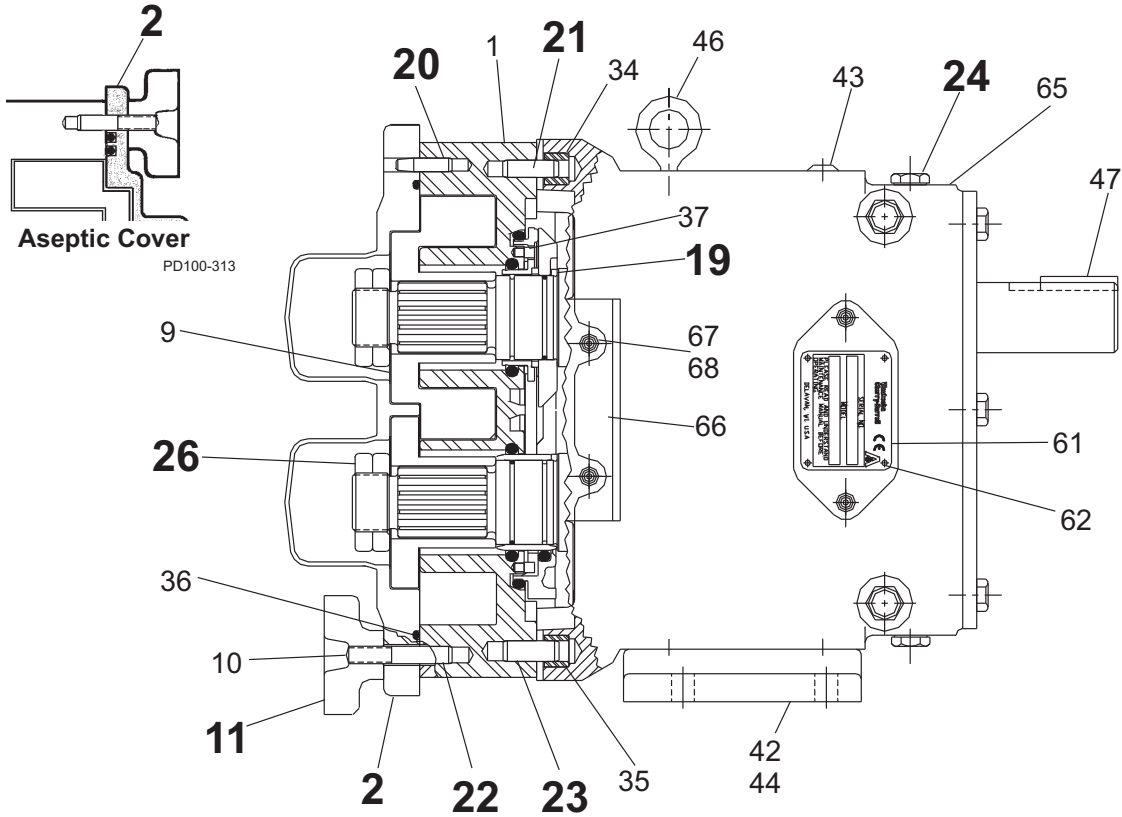
ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
1	220-U1 Pump Body	1	See Note 1	1
	220-U1 Pump Body with Flush	1	See Note 1	1
	224-U1 Rectangular Flange Inlet Body	1	See Note 1	1
	224-U1 Rect. Flange Inlet Body with Flus	1	See Note 1	1
	223A-U1 Pump Body	1	223 001 020+	
7	220-224-U1 Drive Shaft, Std.	1	220 008 001+	
	220-224-U1 Drive Shaft, Optional 17-4PH	1	35349+	
	223A-U1 Drive Shaft	1	223 008 001+	
	223A-U1 Drive Shaft, Optional 17-4PH	1	35726+	
8	220-224-U1 Short Shaft, Std.	1	220 009 001+	
	220-224-U1 Short Shaft, Optional 17-4PH	1	35350+	
	223A-U1 Short Shaft	1	223 009 001+	
	223A-U1 Short Shaft, Optional 17-4PH	1	35727+	
9	220-224-U1 Rotor, Twin Wing, Alloy 88	2	220 010 000+	2
	220-224-U1 Rotor, Twin Wing, 316SS	2	220 010 200+	2
	220-224-U1 Rotor, Single Wing, Alloy 88	2	117391+	2, 12, 13
	223A-U1 Rotor, Twin Wing, Alloy 88	2	223 010 020+	2
10A	220-U1 Stud	8	108844+	
10B	220-U1 Stud, Jacketed Cover	8	108847+	
10C	224-U1 Stud	6	108844+	
	224-U1 Stud	2	35550+	
10D	224-U1 Stud, Jacketed Cover	6	108847+	
	224-U1 Stud, Jacketed Cover	2	36144+	
	Stud Retainer Assembly	1	230 064 000+	5

PL5060-CH53

**NOTES:**

1. Contact Factory with Serial Number of pump for Part Number.
2. Standard clearance and finish Part Number shown. Contact Factory for optional clearances and finishes.
5. No longer manufactured, consult factory for upgrade of gear case subassembly.
12. Replaces 220 010 010 straight and 220 010 090 90° rotors.
13. Single wing rotors **cannot** be used in Rectangular Flange Inlet pumps.

220-223A-224-UI Common Parts



## 220-223A-224-UI Common Parts

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
2	220-224-UI Pump Cover	1	GD0 002 S00	
	220-224-UI Jacketed Cover	1	GD0 002 J10	
	223A-UI Pump Cover	1	223 002 020+	
	<b>Pump Cover Vented - Complete Assembly</b>			
	220-224-UI Manual (over 150 PSI)	1	CVR00106	
	220-224-UI Manual (under 150 PSI)	1	CVR00009	
3	220-224-UI Piston	1	CVR00008	
	220-UI Gear Case Assembly, CI	1	220 108 000-C	42
	220-UI Gear Case Assembly, SS; Optional	1	220 108 004-C	42
	223A-UI Gear Case Assembly, CI	1	223 108 000-C	42
	223A-UI Gear Case Assembly, SS; Optional	1	223 108 004-C	42
	224-UI Gear Case Assembly, CI	1	224 108 000-C	42
4	224-UI Gear Case Assembly, SS; Optional	1	224 108 004-C	42
	Gear Case Cover, Steel	1	230 106 000+	
5	Gear Case Cover, SS; Optional	1	102283+	
	Gear, Drive Shaft, Spur	1	110932+	
6	Gear, Short Shaft, Spur	1	110932+	
11	Wing Nut	8	105853+	
	Hex Nut, optional	8	108372+	
12	Oil Seal, Gear Case Cover	1	STD 030 006	
13	Oil Seal, Gear Case Rear	2	STD 119 002	
14	Grease Seal, Bearing Retainer	2	121681+	
	Bearing Isolator Kit, includes Bearing Retainer	1	X06634-2	
15	Bearing, Rear	2	200 035 000+	
16	Bearing, Front	2	200 036 000+	
17	Key, Gear	2	200 037 000+	
19	Drive Pin, Seal Seat and Sleeve	2	CD0 126 000	
20	Dowel Pin, Upper Cover Side	1	GD0 040 000	
21	Dowel Pin, Upper Gear Case Side	1	CD0 040 R00	
22	Dowel Pin, Lower Cover Side	1	GD0 040 100	
23	Dowel Pin, Lower Gear Case Side	1	CD0 040 R10	
24	Plug w/ washer, 3/4-16	6	000 046 004+	40
	Oil Plug, M20 x 1.5"	5	115798+	41
	Oil Level Indicator, M20 x 1.5"	1	115799+	41
25	Silicone Sealant	1	000 142 301+	
26	Jam Nut, Rotor	4	GD0 052 001	
27	Shim Kit	2	117892+	
29	Spacer, Gear to Rear Bearing	2	40878+	
30	Bearing Spacer	2	40752+	
31	Grease Retainer, Rear Bearing	2	STD091001	

## NOTES:

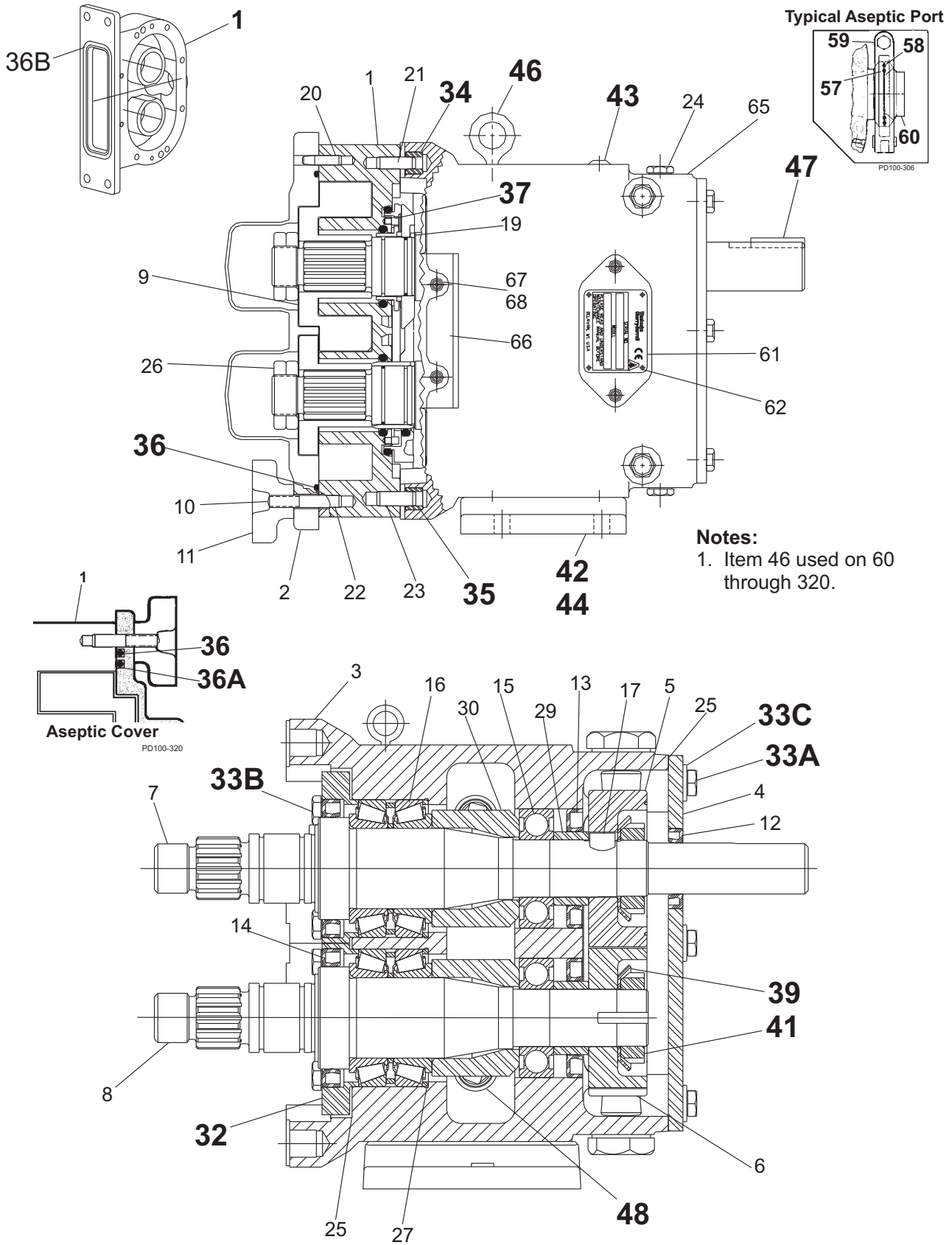
PL5060-CH54

40. Pumps shipped prior to 5/15/03  
 41. Pumps shipped after 5/15/03  
 42. For pumps shipped prior to 5/15/03: Consult factory and provide serial number for upgrade of gear case assembly.

See also "Grease Seal, Bearing Retainer, O-Ring Seal Carrier Part Number Reference" on page 91.



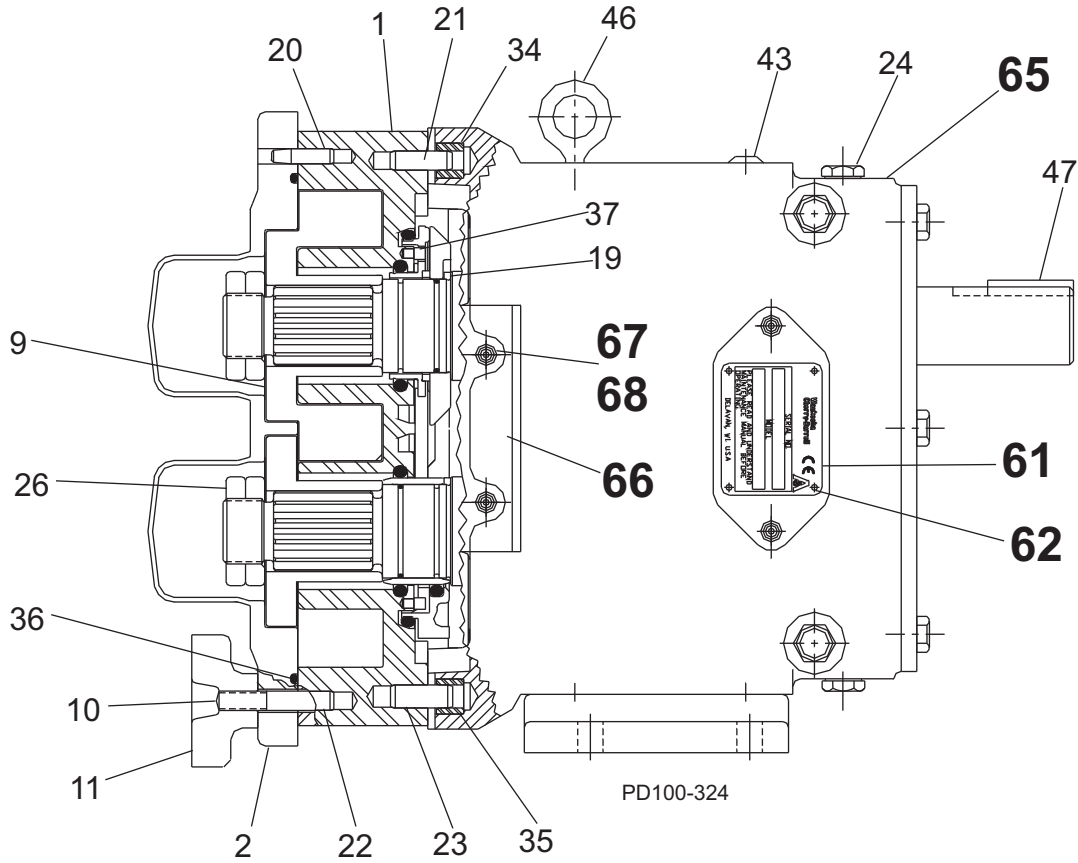
220-223A-224-UI Common Parts, cont'd



PD100-323a



220-223A-224-UI Common Parts, cont'd

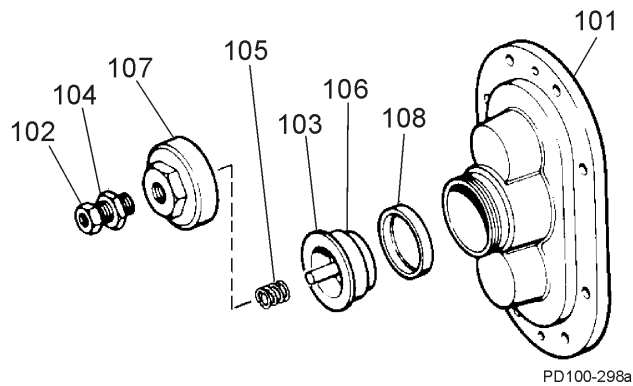


ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
61	Name Plate, Sanitary	1	001 061 002+	
62	#2 x .125" RHDS	4	30-355	
63	O-ring Removal Tool	1	AD0 096 001	
64	Rotor Nut Wrench, SS	1	109898+	
	220-224-U1 Wrench, Jacketed Cover	1	AD0 019 001	
65	Caution Plate	2	33-62	
66	Warning Label	2	33-60	
67	220-223A-U1 Grease Fitting, 1/8"	4	BD0 092 000	
	224-U1 Grease Fitting, 1/8"	4	BD0 092 100	
68	Plastic Cap, Grease Fitting	4	BD0 093 000	

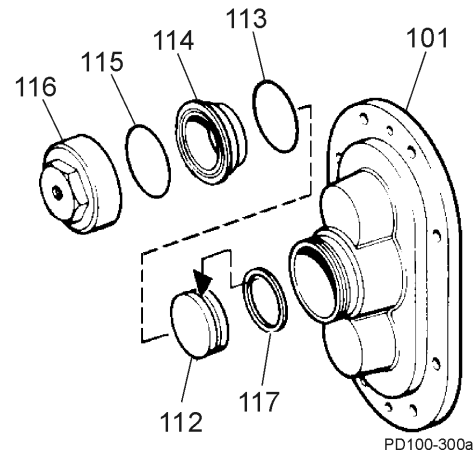
PL5060-CH56

Universal I PD Pump Vented Covers

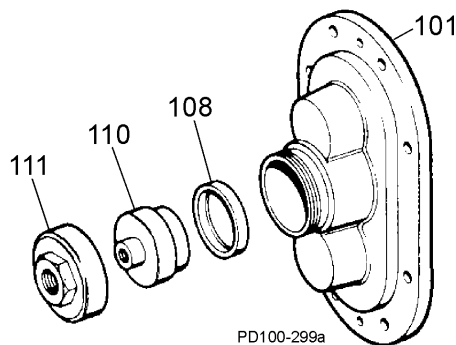
Manual Vented Cover



Piston Vented Cover



Pneumatic Vented Cover



ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.				NOTES
			006-014-015-018-024-UI	030-034-040-UI	060-064-130-134-UI	220-224-UI	
<b>MANUAL VENTED COVER</b>							
101	Vented Cover	1	AD0 002 VS0	BD0 002 VS0	CD0 002 VS0	GD0 002 VS0	
102	Adjusting Screw	1	AD0 072 000		113657+	GD0 072 100	
103	Spring Plunger	1	AD0 073 000		113397+	GD0 073 000	11
104	Locknut	1	AD0 074 000		GD0 074 000		
105	Spring, Medium (less than 150 PSI)	1	AD0 076 000		113523+	113400+	
	Spring, High (more than 150 PSI)	1	ABB 076 100		113400+	113524+	
106	Diaphragm Bushing	1	AD0 077 000		CD0 077 000	GD0 077 000	
107	Cover Nut	1	AD0 075 000		113398+	GD0 075 000	
* 108	Rubber Diaphragm, Buna N	1	AD0 078 000		CD0 078 000	GD0 078 000	
<b>PNEUMATIC VENTED COVER</b>							
101	Vented Cover	1	AD0 002 VS0	BD0 002 VS0	CD0 002 VS0	N/A	
* 108	Diaphragm, Buna N	1	AD0 078 000		CD0 078 000	N/A	
110	Diaphragm Bushing	1	AD0 077 P00		CD0 077 P00	N/A	
111	Cover Nut	1	AD0 075 P00		CD0 075 P00	N/A	
<b>PISTON VENTED COVER</b>							
101	Vented Cover	1	AD0 002 VS0	BD0 002 VS0	CD0 002 VS0	GD0 002 VS0	
112	Piston	1	AD0 073 P10		CD0 073 P10	GD0 073 P10	
* 113	O-Ring, Bushing Seal, Buna N	1	N70223		N70239	N70261	
114	Diaphragm Bushing	1	AD0 077 P10		CD0 077 P10	GD0 077 P10	
* 115	O-Ring, Nut Seal, Buna N	1	N70224		N70240	N70261	
116	Cover Nut	1	AD0 075 P10		CD0 075 P10	GD0 075 P10	
* 117	Piston Seal, Quad Ring	1	AD0 133 000		CD0 133 000	GD0 133 000	9
* 117	Piston Seal, O-Ring	1	N70218		N70236	N70258	9

NOTES: \* Recommended Spare Parts

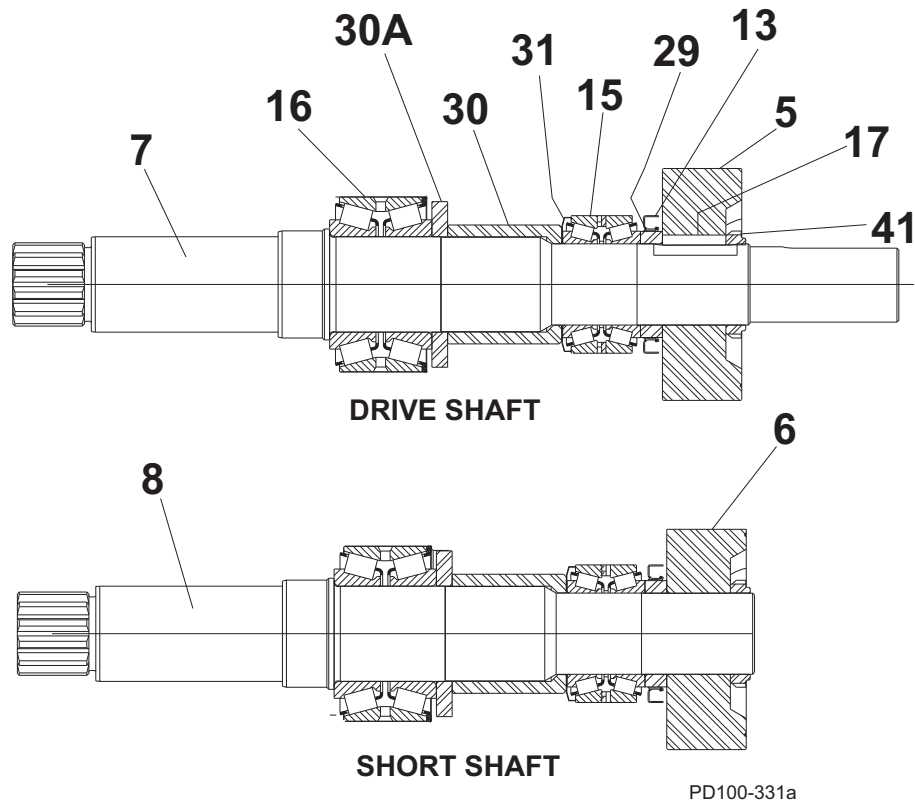
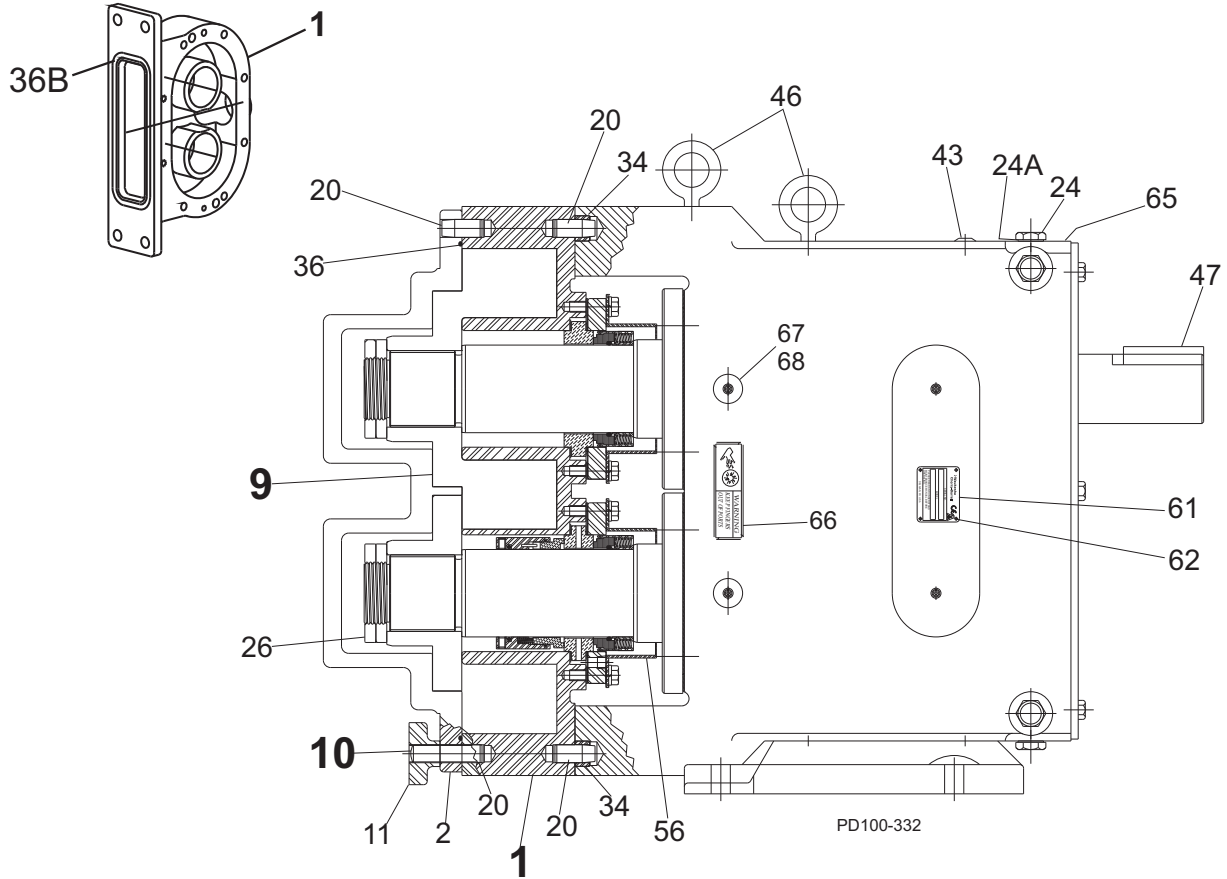
PL5060-CH115

9. Quad Ring and O-Ring can be interchanged.

10. Not used on the 033-UI, 133-UI, or 223-UI pump.

11. For 060-064-130-134, 113397+ is used in pumps manufactured after approx. 03/2000. Pumps manufactured prior to approx. 03/2000 used part # CD0073000.

320-323A-324-UI Pump Parts



## 320-323A-324-UI Pump Parts

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
1	320-324-U1 Pump Body	1	See Note 1	1
	323A-U1 Pump Body	1	323 001 020+	
7	Drive Shaft, Std.	1	113518+	4
	Drive Shaft, Optional 17-4PH	1	113520+	4
	Drive Shaft, Std.		OH1 008 002	3, 5
	Drive Shaft, Optional 17-4PH		33081+	3, 5
	Drive Shaft Kit, Std.	1	113611+	5A
	Drive Shaft Kit, Optional 17-4PH	1	113613+	5A
8	Short Shaft, Std.	1	113519+	4
	Short Shaft, Optional 17-4PH	1	113521+	4
	Short Shaft, Std.		OH1 009 002	3, 5
	Short Shaft, Optional 17-4PH		33204+	3, 5
	Short Shaft Kit, Std.	1	113612+	5A
	Short Shaft Kit, Optional 17-4PH	1	113614+	5A
9	320-324-U1 Rotor, Twin Wing, Alloy 88	2	320 010 000+	2
	320-324-U1 Rotor, Twin Wing, 316SS	2	320 010 200+	2
	323A-U1 Rotor, Twin Wing, Alloy 88	2	323 010 000+	2
10	320-323A-U1 Stud, Cover, Long	4	111291+	4
	324-U1 Stud, Long	4	111291+	
	324-U1 Stud, Short	4	40699+	
10A	Stud, Cover, Short	4	111292+	

**NOTES:**

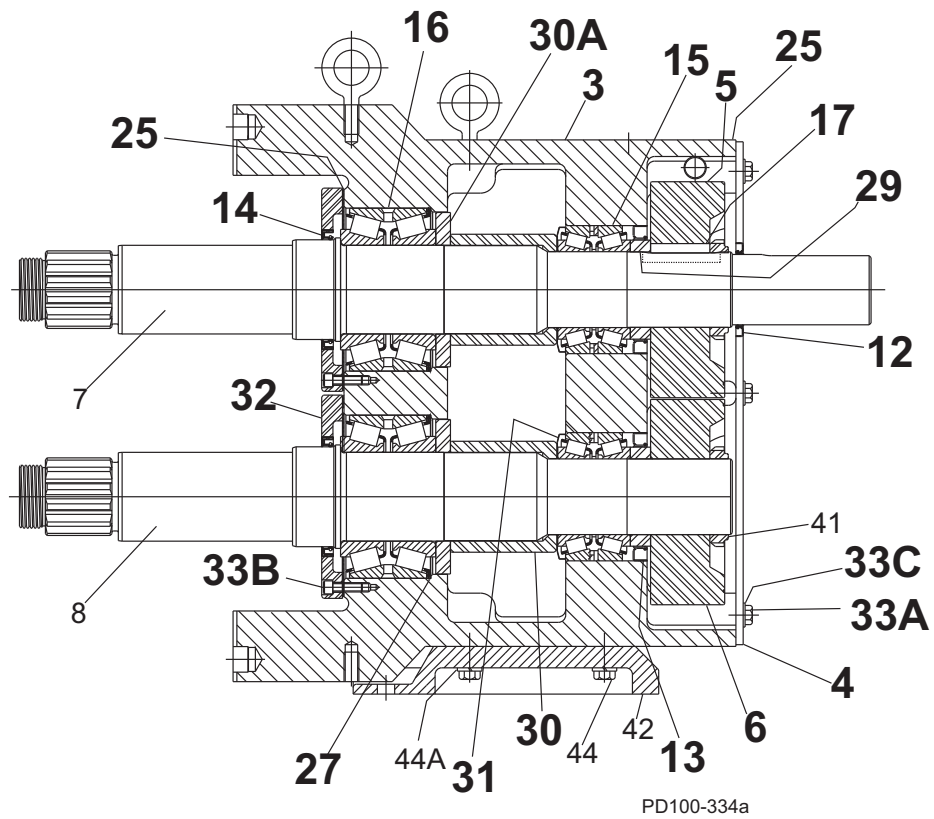
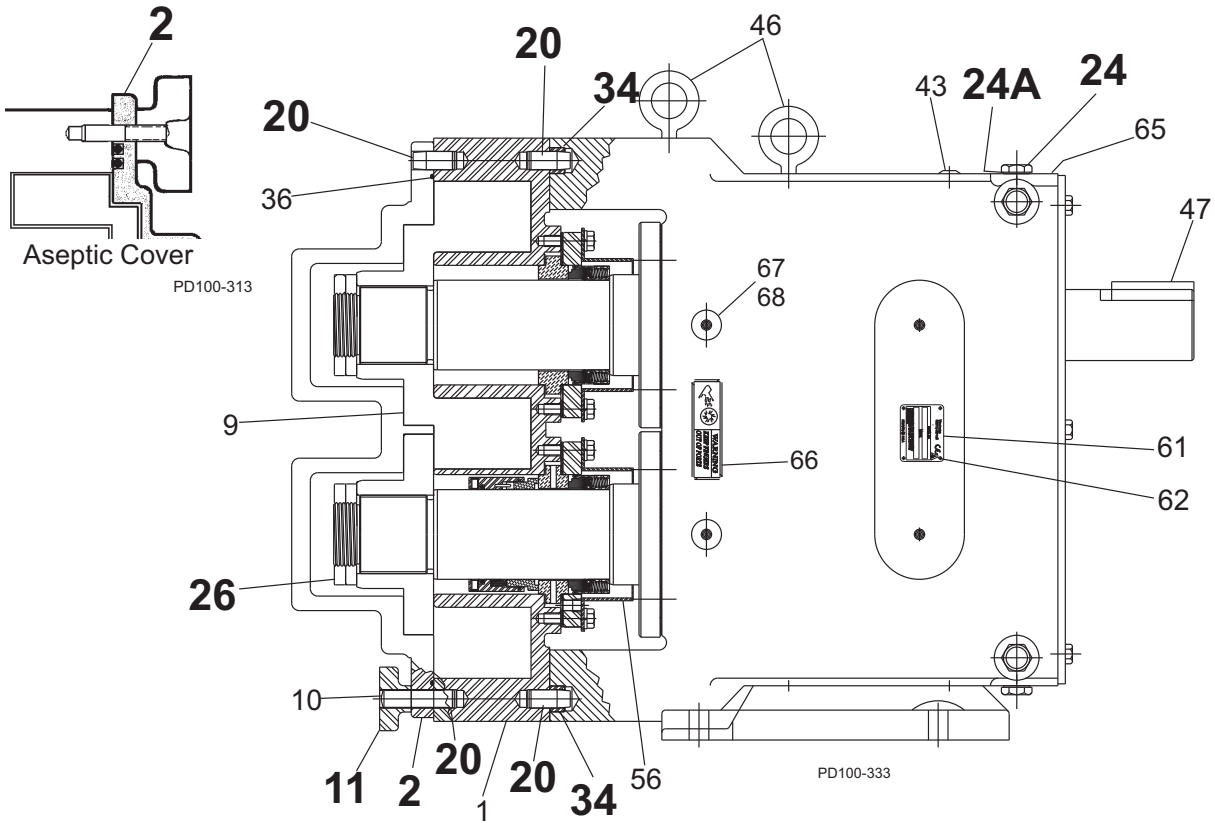
1. Contact Factory with Serial Number of pump for Part Number.
2. Standard clearance and finish Part Number shown. Contact Factory for optional clearances and finishes.
3. Pumps shipped prior to July 30, 2001
4. Pumps shipped starting July 30, 2001.
5. No longer manufactured, See shaft kits 113611+ and 113613+, 113612+ and 113614+.
- 5A. Kits replace obsolete shafts OH1 008 002, 33081, OH1 009 002, and 33204 used in obsolete gear case OH1 005 000, which was supplied for pumps shipped prior to July 30, 2001.

**Kits 113611+, 113612+, 113613+, and 113614+ Include:**

Item no.	Description	Item no.	Description
5,6	Gears P/N 102470+	17	Key, Gear P/N OH1 037 000
7	Drive Shaft P/N 113518+ or 113520+	29	Spacer, Gear P/N 117691+
8	Short Shaft P/N 113519+ or 113521+	30	Spacer Front Bearing P/N 102473+
13	Oil Seal, Case Rear P/N STD 119 000	30A	Bearing Spacer P/N 102472+
15	Bearing, Rear P/N OH1 036 000	31	Grease Retainer P/N STD 091 000
16	Bearing, Front P/N OH1 036 003	41	Locknut, Gear P/N 105697+

PL5060-CH59

320-323A-324-UI Common Parts



## 320-323A-324-UI Common Parts

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
2	320-324-U1 Pump Cover	1	OH1 002 002	
	323A-U1 Pump Cover	1	323 002 020+	
3	320-323-U1 Gear Case Assembly, CI	1	320 108 000-C	5
	324-U1 Gear Case Assembly, CI	1	324 108 000-C	5
4	Gear Case Cover, Steel	1	40669+	
5	Gear, Drive Shaft, Spur	1	102470+	
6	Gear, Short Shaft, Spur	1	102470+	
11	Wing Nut	8	110858+	
	Hex Nut, optional	8	108373+	
12	Oil Seal, Gear Case Cover	1	STD 030 004	
13	Oil Seal, Gear Case Rear	2	102475+	4
	Oil Seal, Gear Case Rear	2	STD 119 000	3
14	Grease Seal, Bearing Retainer	2	121681+	
	Bearing Isolator Kit, includes SS Bearing Retainer	2	X06634-3	
15	Bearing, Rear	2	OH1 036 000	
16	Bearing, Front	2	OH1 036 003	
17	Key, Gear	2	OH1 037 000	
20	Dowel Pins	4	OH1 040 000	
24	Oil Plug, M20 x 1.5"	5	115798+	41
	Oil Level Indicator, M20 x 1.5"	1	115799+	41
	Plug w/ washer, 3/4-16	6	000 046 004+	40
25	Silicone Sealant	1	000 142 301+	
26	Jam Nut, Rotor	4	OH1 052 003	
27	Shim Kit	2	117893+	
29	Spacer, Gear to Rear Bearing	2	102474+	4
	Spacer, Gear to Rear Bearing	2	117691+	3
30	Bearing Spacer	2	102473+	4
30A	Spacer Front Bearing	2	102472+	4
31	Grease Retainer, Rear Bearing	2	STD 091 000	
32	Bearing Retainer, Front	2	OH1 080 000	
33A	3/8-16 x .75" HHCS, Gear Case cover	6	30-314	
33B	5/16-18 x 1" SHCS, Bearing Retainer	8	30-343	
33C	3/8" Washer, Plain	6	43-189	
34	Dowel Bushings	2	OH1 116 000	

## NOTES:

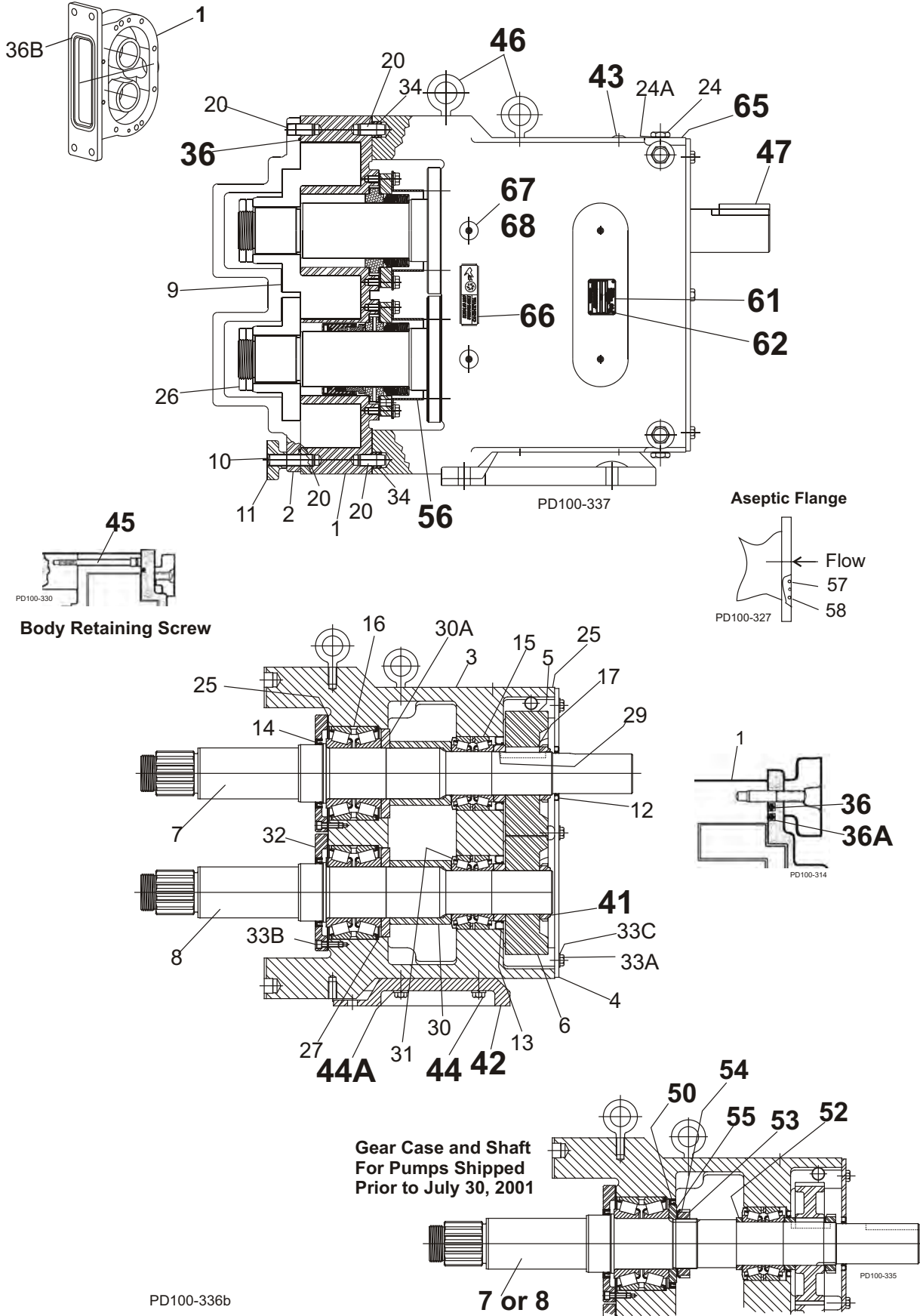
PL5060-CH60

3. Pumps shipped prior to July 30, 2001
4. Pumps shipped starting July 30, 2001.
5. For pumps shipped prior to 5/15/03: consult factory and provide serial # for upgrade of gear case subassembly.
40. Pumps shipped prior to 5/15/03
41. Pumps shipped after 5/15/03

See also "Grease Seal, Bearing Retainer, O-Ring Seal Carrier Part Number Reference" on page 91.



320-323A-324-UI Common Parts, cont'd



## 320-323A-324-UI Common Parts, cont'd

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
* 36	O-Ring, Pump Cover, Buna N	1	N70280	
* 36	O-Ring, Pump Cover, EPDM	1	E70280	
* 36	O-Ring, Pump Cover, FKM	1	V70280	
* 36	O-Ring, Pump Cover, Silicone	1	323 117 013+	
* 36A	323A-U1 O-Ring, Pump Cover, Inner, EPDM	1	323 117 002+	11
* 36A	323A-U1 O-Ring, Pump Cover, Inner, FKM	1	323 117 004+	11
* 36A	323A-U1 O-Ring, Pump Cover, Inner, Silicone	1	323 117 003+	11
36B	324-U1 O-Ring, Rectangular Flange	1	N70382	
41	Locknut, Gear	2	105697+	
42	Gear Case Shim, Cl	1	40288+	
42	Pump Pedestal, 22"	1	324 110 226+	
43	Plastic Cap Plug	6	000 121 001+	
44	1/2-13 x 1.75" SHCS	4	30-250	
44A	Lockwasher, 1/2"	4	43-177	
45	Body Retaining, 3/8-16 x 4" SHCS	2	30-323	
46	1/2-13 Eye Bolt	3	30-360	
47	Key, Coupling - 5/8 x 5/8 x 2"	1	000 037 005+	
48	Cleanout Plug	2	41013+	
56	Guard, Seal	2	113505+	
* 57	O-Ring, Port, Inner, Silicone	2	S75261	11
* 57	O-Ring, Port, Inner, EPDM	2	E70261	11
* 57	O-Ring, Port, Inner, FKM	2	V70261	11
* 58	O-Ring, Port, Outer, Silicone	2	S75265	11
* 58	O-Ring, Port, Outer, EPDM	2	E70265	11
* 58	O-Ring, Port, Outer, FKM	2	V70265	11
61	Name Plate	1	001 061 015+	
62	#2 x .125" RHDS	4	30-355	
63	O-ring Removal Tool	1	AD0 096 001	
64	Rotor Nut Wrench, SS	1	112829+	
65	Caution Plate	2	33-62	
66	Warning Label	2	33-60	
67	320-323A-U1 Grease Fitting, 1/8"	4	BD0 092 000	
67	324-U1 Grease Fitting, 1/8"	4	BD0 092 100	
68	Plastic Cap, Grease Fitting	4	BD0 093 000	

## NOTES:

\* Recommended Spare Parts

11. Used on 323A-U1 only.

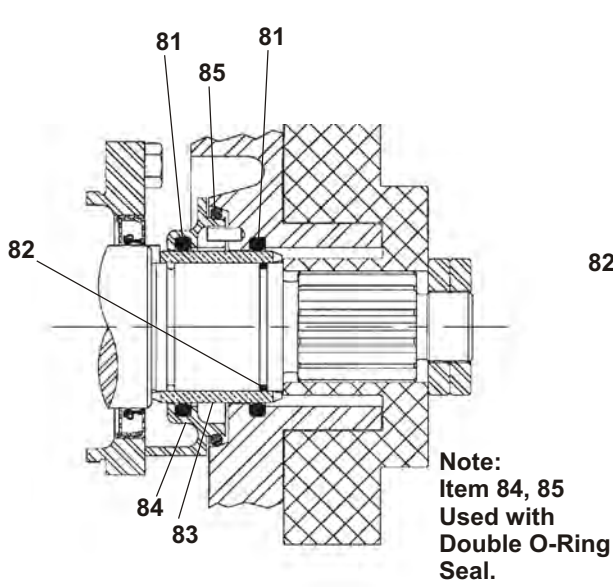
## Gear Case and shaft for pumps shipped prior to July 30, 2001

50	Grease Retainer, Gear Case, Front Bearing	2	STD 030 003	3
52	Spacer, Rear Bearing	2	OH1 055 002	3
53	Locknut, Front Bearing	2	OH1 236 001	3
54	Lockwasher, Front Bearing	2	OH1 136 001	3
55	Spacer, Front Bearing	2	OH1 055 001	3

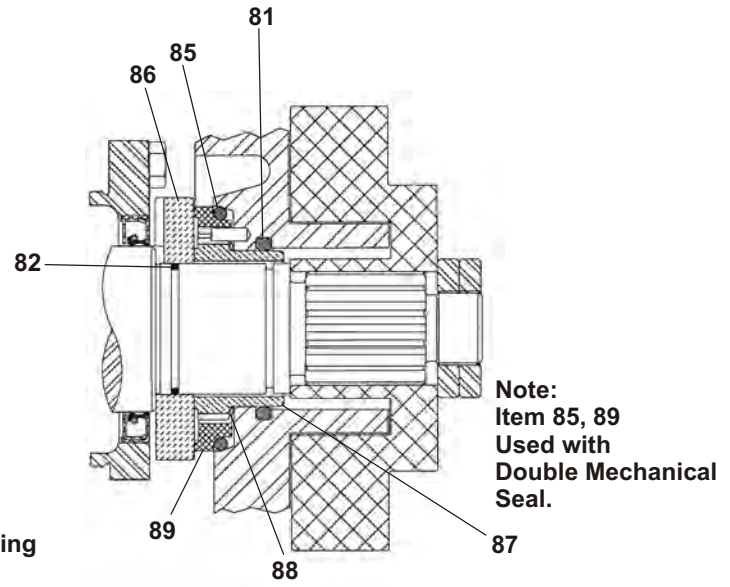
NOTES: 3. Pumps shipped prior to July 30, 2001

PL5060-CH61

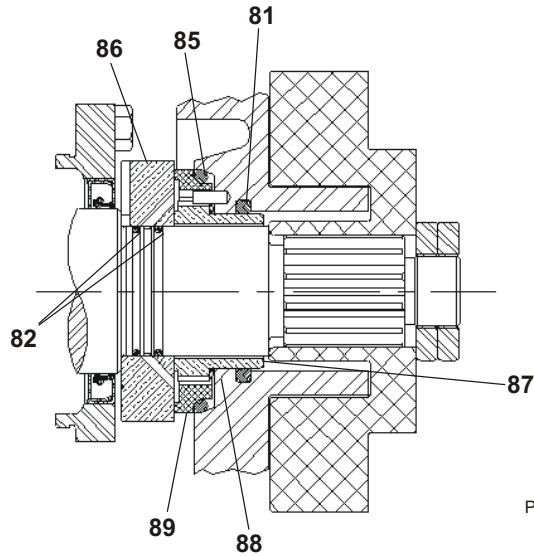
PD Pump Seals Model 006-014-015-018-024-030-034-040-UI



O-Ring Seal



Mechanical Seal



PD100-301-302-304

UI Aseptic Seal  
(models 033A-UI, 133A-UI, 223A-UI)

**PD Pump Seals Model 006-014-015-018-024-030-034-040-UI**

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO. BY MODEL		NOTES
			006-014-015-018-024-UI	030-033A-034-040-UI	
<b>O-RING AND MECHANICAL SEAL PARTS</b>					
* 81	O-Ring, Body, Buna N	2	AD0 079 000	N70327	6
* 81	O-Ring, Body, EPDM	2	AD0 079 002	E70327	6
* 81	O-Ring, Body, FKM	2	AD0 079 V00	V70327	6
* 81	O-Ring, Body, Silicone	2	AD0 079 SC0	S75327	6
* 82	O-Ring, Shaft, Buna N	2	N70022	N70028	
* 82	O-Ring, Shaft, EPDM	2	E70022	E70028	
* 82	O-Ring, Shaft, FKM	2	V70022	V70028	
* 82	O-Ring, Shaft, Silicone	2	S75022	S75028	
* 83	Sleeve, SS	2	015 098 000+	030 098 000+	
* 83	Sleeve, Zirconia	2	015 098 004+	030 098 004+	
* 83	Sleeve, Chrome Oxide	2	015 098 002+	030 098 002+	
84	O-Ring Seal Carrier (after 7/12/04 (NEW))	2	015 034 001+	030 034 001+	7, 10
84	O-Ring Seal Carrier (before 7/12/04 (OLD))	2	015 034 000+	030 034 000+	7, 9
* 85	O-Ring, Outer, Buna N - Seal Carrier	2	N50228	N50335	7, 8
* 85	O-Ring, Outer, EPDM - Seal Carrier	2	n/a	E50335	7, 8
* 85	O-Ring, Outer, FKM - Seal Carrier	2	n/a	V50335	7, 8
* 85	O-Ring, Outer, Silicone - Seal Carrier	2	n/a	S50335	7, 8
* 86	006-014-015-018-024-U1 Seal Seat, Ceramic	2	015 014 002+	n/a	
* 86	006-014-015-018-024-U1 Seal Seat, Chrome Oxide	2	015 014 001+	n/a	
* 86	006-014-015-018-024-U1 Seal Seat, Silicon Carbide	2	015 014 009+	n/a	
* 86	030-034-040-U1 Seal Seat, Ceramic	2	n/a	030 014 002+	
* 86	030-034-040-U1 Seal Seat, Chrome Oxide	2	n/a	030 014 001+	
* 86	030-034-040-U1 Seal Seat, Silicon Carbide	2	n/a	030 014 009+	
* 86	033A-U1 Seal Seat, Ceramic	2	n/a	033 014 002+	11
* 86	033A-U1 Seal Seat, Chrome Oxide	2	n/a	033 014 001+	11
* 86	033A-U1 Seal Seat, Silicon Carbide	2	n/a	033 014 009+	11
* 87	Seal Inner, Carbon (2 piece)	2	015 306 001 +	030 306 001+	
* 87	Seal Inner, Carbon (1 piece)	2	015 306 007+	030 306 007+	
* 87	Seal Inner, Ceramic	2	40635+	40821+	
* 87	Seal Inner, Chrome Oxide	2	015 306 002+	030 306 002+	
* 87	Seal Inner, Silicon Carbide	2	015 306 009+	030 306 009+	
88	Wave Spring	2	015 304 000+	030 304 000+	
* 89	Outer Seal, Carbon (1 piece)	2	015 206 007+	030 206 007+	8
* 89	Outer Seal, Chrome Oxide	2	n/a	030 206 002+	8

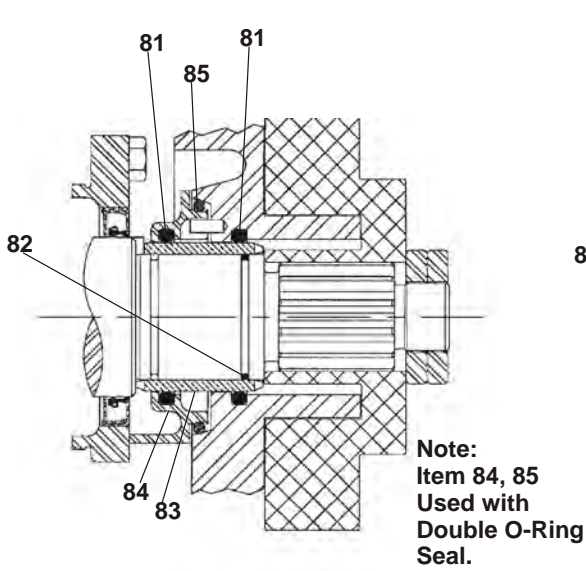
NOTES: \* Recommended Spare Parts

PL5060-CH34a

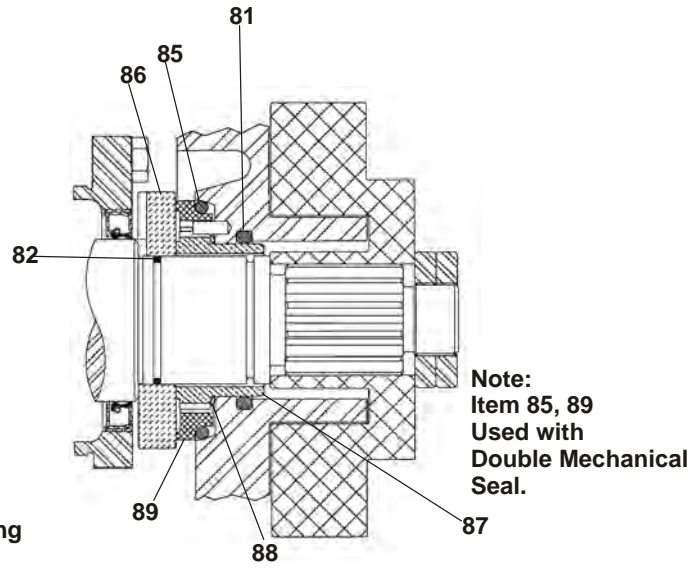
- 6. (4) needed per pump with double O-ring Seal.
- 7. Used with double O-Ring Seal.
- 8. Used with double Mechanical Seal.
- 9. Used in pumps manufactured prior to July 2004.
- 10. Used in pumps manufactured since July 2004.
- 11. Used on 033A-U1 only.

See also "Grease Seal, Bearing Retainer, O-Ring Seal Carrier Part Number Reference" on page 91.

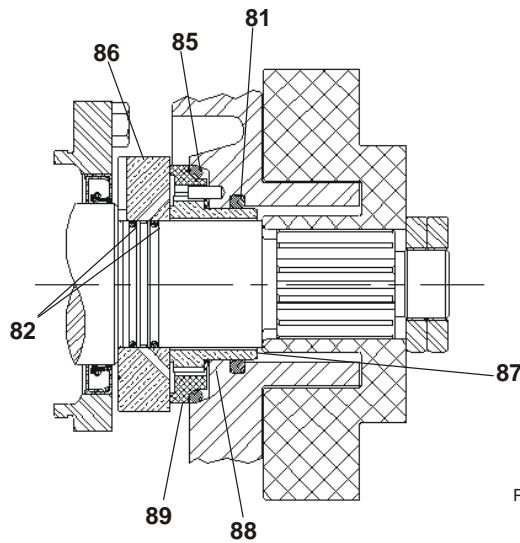
PD Pump Seals Model 060-064-130-133A-134-220-223A-224-UI



O-Ring Seal



Mechanical Seal



PD100-301-302-304

UI Aseptic Seal  
(models 033-UI, 133-UI, 223-UI)

**PD Pump Seals Model 060-064-130-133A-134-220-223A-224-UI**

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO. BY MODEL		NOTES
			060-064-130-133A-134-U1	220-223A-224-UI	
<b>O-RING AND MECHANICAL SEAL PARTS</b>					
* 81	O-Ring, Body, Buna N	2	N70331	N70338	6
	O-Ring, Body, EPDM	2	E70331	E70338	6
	O-Ring, Body, FKM	2	V70331	V70338	6
	O-Ring, Body, Silicone	2	S75331	S75338	6
* 82	O-Ring, Shaft, Buna N	2	N70131	N70144	16
	O-Ring, Shaft, EPDM	2	E70131	E70144	16
	O-Ring, Shaft, FKM	2	V70131	V70144	16
	O-Ring, Shaft, Silicone	2	S75131	S75144	16
* 83	Sleeve, SS	2	060 098 000+	220 098 000+	
	Sleeve, Zirconia	2	060 098 004+	220 098 004+	
	Sleeve, Chrome Oxide	2	060 098 002+	220 098 002+	
84	O-Ring Seal Carrier (after 7/12/04 (NEW))	2	060 034 001+	220 034 001+	7, 10
	O-Ring Seal Carrier (before 7/12/04 (OLD))	2	060 034 000+	220 034 000+	7, 9
* 85	O-Ring, Outer, Buna N - Seal Carrier	2	N50338	N50344	7, 8
	O-Ring, Outer, EPDM - Seal Carrier	2	E50338	E50344	7, 8
	O-Ring, Outer, FKM - Seal Carrier	2	V50338	V50344	7, 8
	O-Ring, Outer, Silicone - Seal Carrier	2	n/a	S50344	7, 8
* 86	060-064-130-134-U1 Seal Seat, Ceramic	2	060 014 002+	n/a	
	060-064-130-134-U1 Seal Seat, Chrome Oxide	2	060 014 001+	n/a	
	060-064-130-134-U1 Seal Seat, Silicon Carbide	2	060 014 009+	n/a	
	133A-U1 Seal Seat, Ceramic	2	133 014 002+	n/a	11a
	133A-U1 Seal Seat, Chrome Oxide	2	133 014 001 +	n/a	11a
	133A-U1 Seal Seat, Silicon Carbide	2	133 014 009+	n/a	11a
	220-224-U1 Seal Seat, Ceramic	2	n/a	220 014 002+	
	220-224-U1 Seal Seat, Chrome Oxide	2	n/a	220 014 001+	
	220-224-U1 Seal Seat, Silicon Carbide	2	n/a	220 014 009+	
	223A-U1 Seal Seat, Ceramic	2	n/a	223 014 002+	11b
	223A-U1 Seal Seat, Chrome Oxide	2	n/a	223 014 001+	11b
	223A-U1 Seal Seat, Silicon Carbide	2	n/a	223 014 009+	11b
* 87	Seal Inner, Carbon (2 piece)	2	060 306 001+	220 306 001 +	
	Seal Inner, Carbon (1 piece)	2	060 306 007+	220 306 007+	
	Seal Inner, Ceramic	2	40642+	40830+	
	Seal Inner, Chrome Oxide	2	060 306 002+	220 306 002+	
	Seal Inner, Silicon Carbide	2	060 306 009+	220 306 009+	
88	Wave Spring	2	060 304 000+	220 304 000+	
* 89	Outer Seal, Carbon (1 piece)	2	060 206 007+	220 206 007+	8
	Outer Seal, Chrome Oxide	2	060 206 002+	220 206 002+	8

NOTES: \* Recommended Spare Parts

PL5060-CH40a

- 6. (4) needed per pump with Double O-ring Seal.
- 7. Used with Double O-Ring Seal.
- 8. Used with Double Mechanical Seal.
- 9. Used in pumps manufactured prior to July 2004.
- 10. Used in pumps manufactured since July 2004.
- 11a. Used on 133A-U1 only.
- 11b. Used on 223A-U1 only.
- 16. (4) needed per pump on 033A-U1 and 133A-U1.

See also "Grease Seal, Bearing Retainer, O-Ring Seal Carrier Part Number Reference" on page 91.



## PD Pump Seals Model 320-323A-324-UI

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
	<b>OUTER SEAL</b>			
* 70	Crane #8B2 Outer Seal, Carbon	2	323 114 003+	30
* 70B	O-Ring, Outer Seal, Shaft, EPDM	2	E70234	
* 70B	O-Ring, Outer Seal, Shaft, FKM	2	V70234	
* 70B	O-Ring, Outer Seal, Shaft, Silicone	2	S75234	
* 72	"T" Seat, Plain, Ceramic	2	300 014 012+	
* 72	"T" Seat, Plain, Tungsten Carbide	2	300 014 013+	
* 72	"T" Seat, Plain, Silicon Carbide	2	300 014 016+	
* 72B, 72C	Gasket, Inner and Outer	4	300 042 001+	
73	Gland, Plain	2	300 034 001 +	
73B	3/8-16 x 1-1/4" HHCS	8	30-60	
73C	Lockwasher, 3/8"	8	43-28	
	<b>INNER SEAL</b>			
* 71	Waukesha HD Inner Seal, Silicon Carbide	2	40572+	16
* 71	Waukesha HD Inner Seal, Ceramic	2	40573+	16
* 71	Waukesha HD Inner Seal, Chrome Oxide	2	40574+	16
* 71A	Seal Face, Silicon Carbide	2	40754+	
* 71A	Seal Face, Ceramic	2	40755+	
* 71A	Seal Face, Chrome Oxide	2	40756+	
* 71A	Seal Face, Tungsten Carbide	2	109347+	
* 71A	Seal Face, Carbon	2	36027+	
* 71B	O-Ring, Inner Seal, Shaft, EPDM	2	E70234	
* 71B	O-Ring, Inner Seal, Shaft, FKM	2	V70234	
* 71B	O-Ring, Inner Seal, Shaft, Silicone	2	S75234	
* 71D	Spring	12	40875+	
* 71F	Set Screw	8	110038+	
* 71H	O-Ring, Inner Seal, Seal Face, EPDM	2	E70238	
* 71H	O-Ring, Inner Seal, Seal Face, FKM	2	V70238	
* 71H	O-Ring, Inner Seal, Seal Face, Silicone	2	S75238	
	<b>INNER - OUTER SEAL</b>			
71C	Carrier Inner Sub-Assembly	2	35284+	
* 72A	"T" Seat, Flushed, Ceramic	2	300 014 027+	
* 72A	"T" Seat, Flushed, Tungsten Carbide	2	300 014 028+	
* 72A	"T" Seat, Flushed, Chrome Oxide	2	300 014 029+	
* 72A	"T" Seat, Flushed, Silicon Carbide	2	300 014 031+	
* 72B	Gasket, Inner	2	300 042 001+	
* 72C	Gasket, Flushed Gland, Outer	2	300 042 002+	
73A	Gland, Flushed	2	300 034 001+	
73B	3/8-16 x 1-1/4" HHCS	8	30-60	
73C	3/8" Lockwasher	8	43-28	

## NOTES:

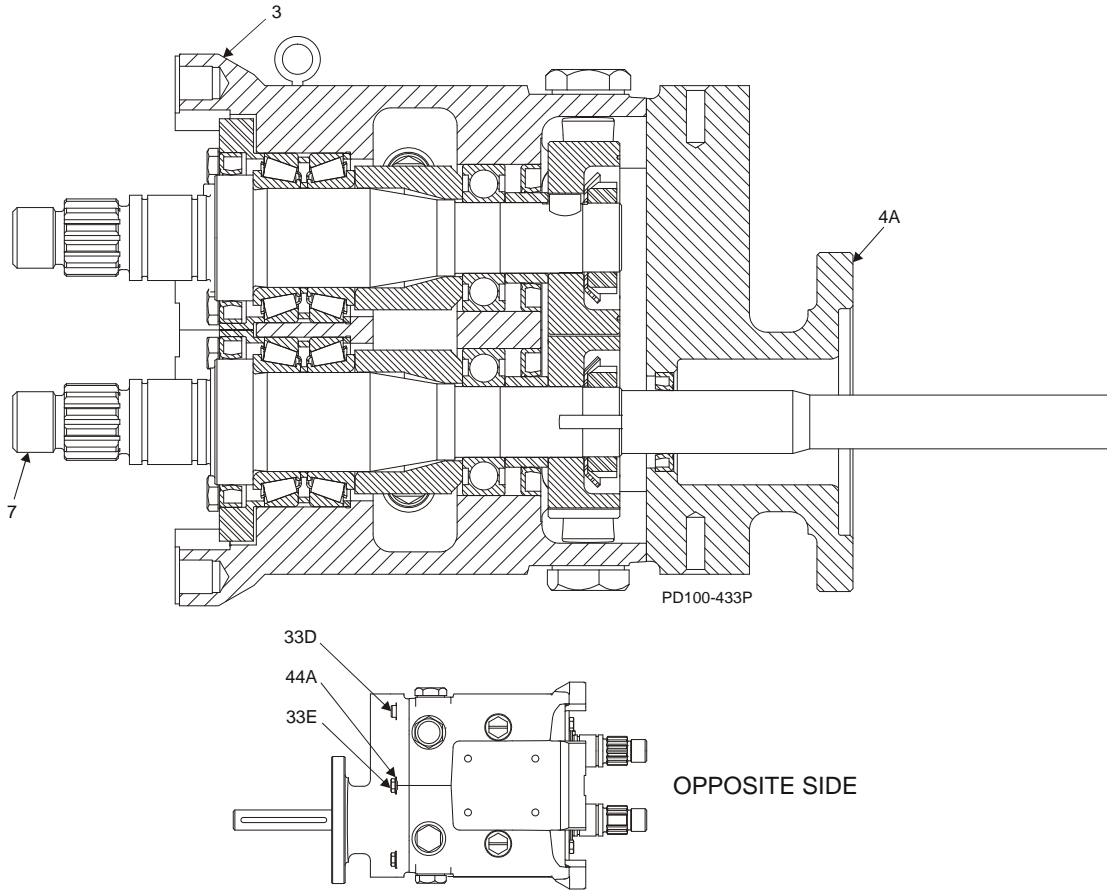
PL5060-CH62

16. Complete Inner Seal supplied with Silicon Rubber o-rings. Buna, EPDM, FKM O-Rings also available--contact factory for information.
30. Alternate materials available. Standard is listed. Contact factory for information.

## \* Recommended Spare Parts



**Tru-Fit™ Universal I PD Pumps Parts List**



ITEM NO.	DESCRIPTION	Pump Size			
		006, 014, 015	018, 024	030, 034	040
3	Gear Case, Cl	118986+		121687+	
4A	Gear Case Cover, Adapter	118982+		118678+	
7	Drive Shaft	119174+	119175+	119176+	119177+
33D	1/4-20 x 1" HHCS	30-93		N/A	
	5/16-18 x 1-1/8" HHCS	N/A		30-237	
33E	5/16" x 3/4" lg. SHSB	30-690		N/A	
	3/8" x 3/4" lg. SHSB	N/A		30-691	
44A	Flat Washer, 5/16"	43-246		N/A	
	Flat Washer, 3/8"	N/A		43-30	

ITEM NO.	DESCRIPTION	Pump Size			
		060, 064	130, 134	220, 224	320, 324
3	Gear Case, Cl	118987+		118988+	118989+
4A	Gear Case Cover, Adapter	118983+		S/N Req'd	
7	Drive Shaft	119178+	119179+	119180+	119181+
33D	3/8-16 x 1-1/2" HHCS	30-50			N/A
	1/2-13 x 1-1/2" HHCS	N/A			30-103
33E	1/2" x 1" lg. SHSB	30-692			N/A
	5/8" x 1" lg. SHSB	N/A			30-693
44A	Flat Washer, 1/2"	43-31			

**Note:** PL5060-CH65  
 Item 12 is not included with item 4A; it is re-used from the existing gearcase seal.  
 See Common Parts lists/diagrams on previous pages for the various pump models.

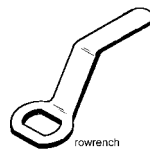
**Grease Seal, Bearing Retainer, O-Ring Seal Carrier Part Number Reference**

UI Model Number	Description	Part # before 7/12/04 (OLD)	Part # after 7/12/04 (NEW)
<b>006, 014, 015, 018, 024</b>			
	Grease Seal, Bearing Retainer	101716+	121679+
	Bearing Retainer, Front	101810+	120332+
	O-Ring Seal Carrier	015034000+	015034001+
<b>030, 034, 040</b>			
	Grease Seal, Bearing Retainer	N/A	121680+
	Bearing Retainer, Front	101811+	120333+
	O-Ring Seal Carrier	030034000+	030034001+
<b>060, 064, 130, 134</b>			
	Bearing Retainer, Front STD	N/A	123531+
	Bearing Retainer, Front SS	101812+	121828+
	O-Ring Seal Carrier	060034000+	060034001+
<b>220, 224</b>			
	Grease Seal, Bearing Retainer	N/A	121681+
	Bearing Retainer, Front STD	220080000+	123532+
	Bearing Retainer, Front SS	101813+	121829+
	O-Ring Seal Carrier	220034000+	220034001+
<b>320, 324</b>			
	Grease Seal, Bearing Retainer	N/A	121681+
	Bearing Retainer, Front STD	0H1080000	123533+
	Bearing Retainer, Front SS	118365+	123533+

PL5060-CH114

**Special Tools**

**Offset Rotor Wrench**



Model	Part Number
006-024-UI	AD0019001
030-040-UI	CD0019001
060-134-U1	060019001+