

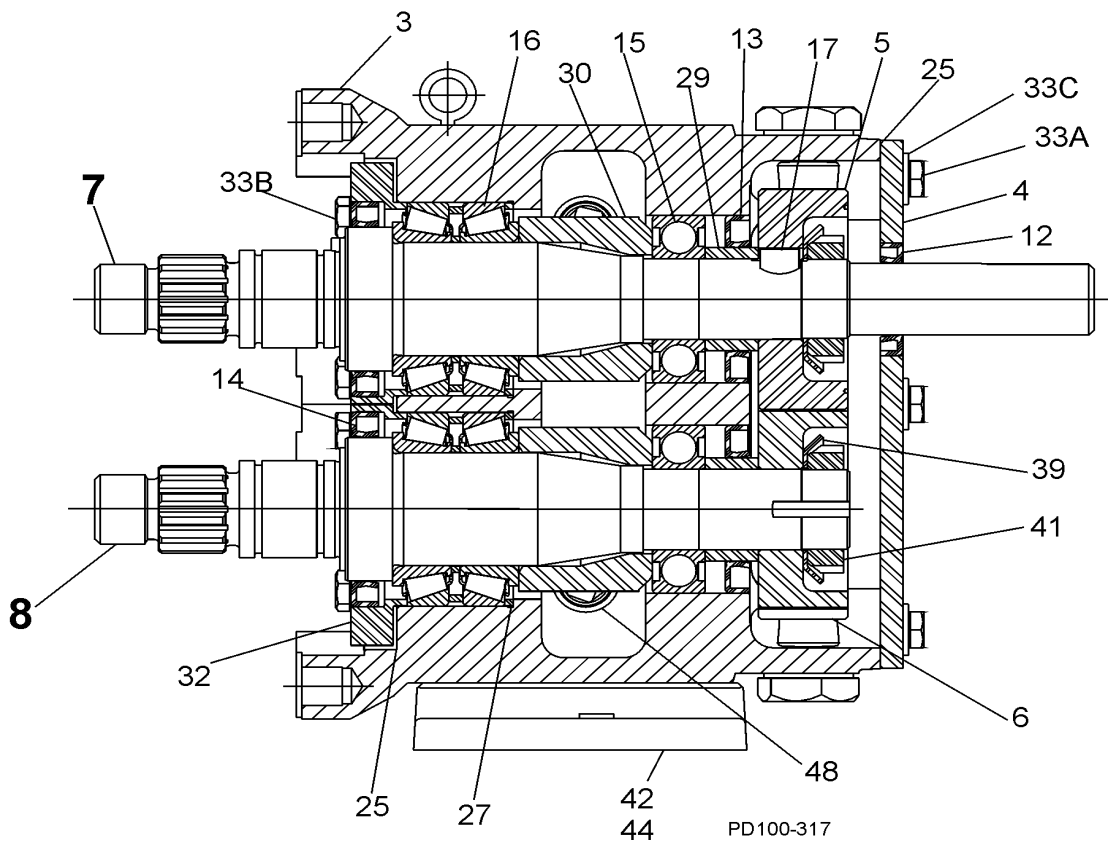
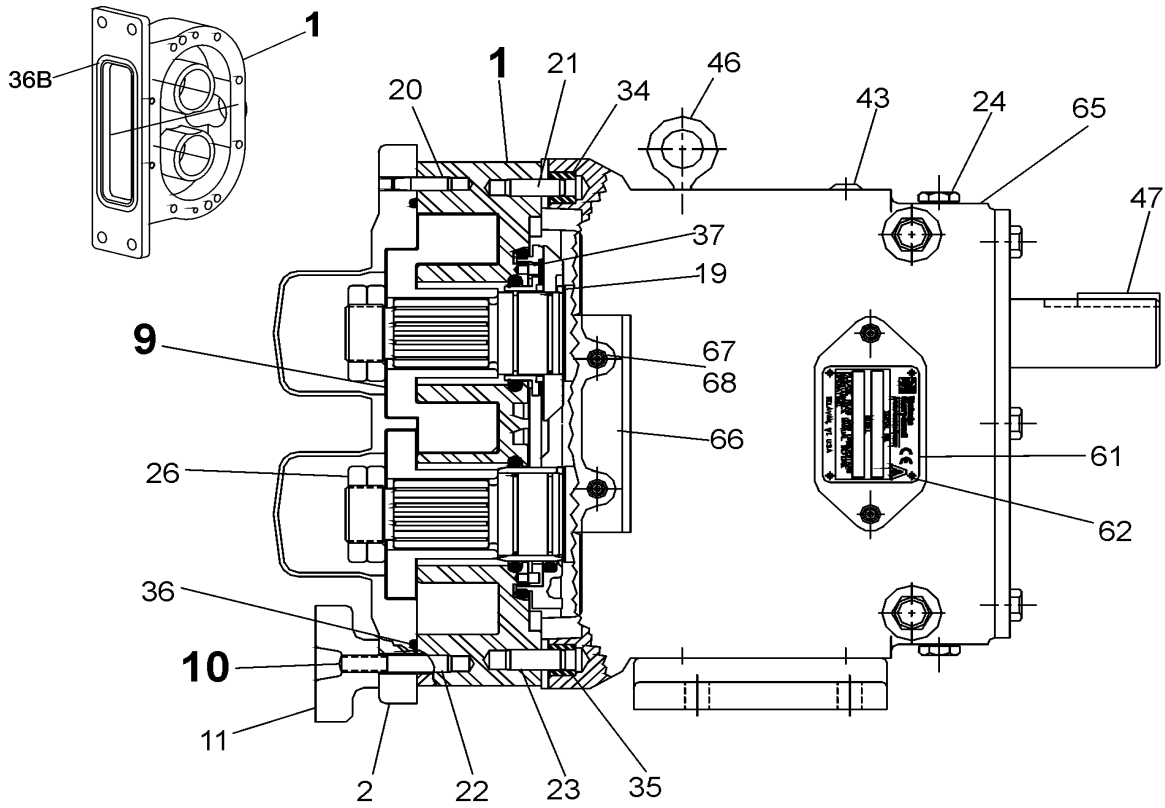
220 - 224 - 223-U1 PUMP PARTS PRICE LIST

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 Flush	1	See Note 1	1
	223-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	
	223-U1 Drive Shaft	1	223 008 001	
	223-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	
	223-U1 Short Shaft	1	223 009 001	
	223-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
	223-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

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° (degree) rotors.
13. Single wing rotors can **not** be used in Rectangular Flange Inlet pumps.

220 - 224 - 223-U1 Common Parts Diagram



PD100-317

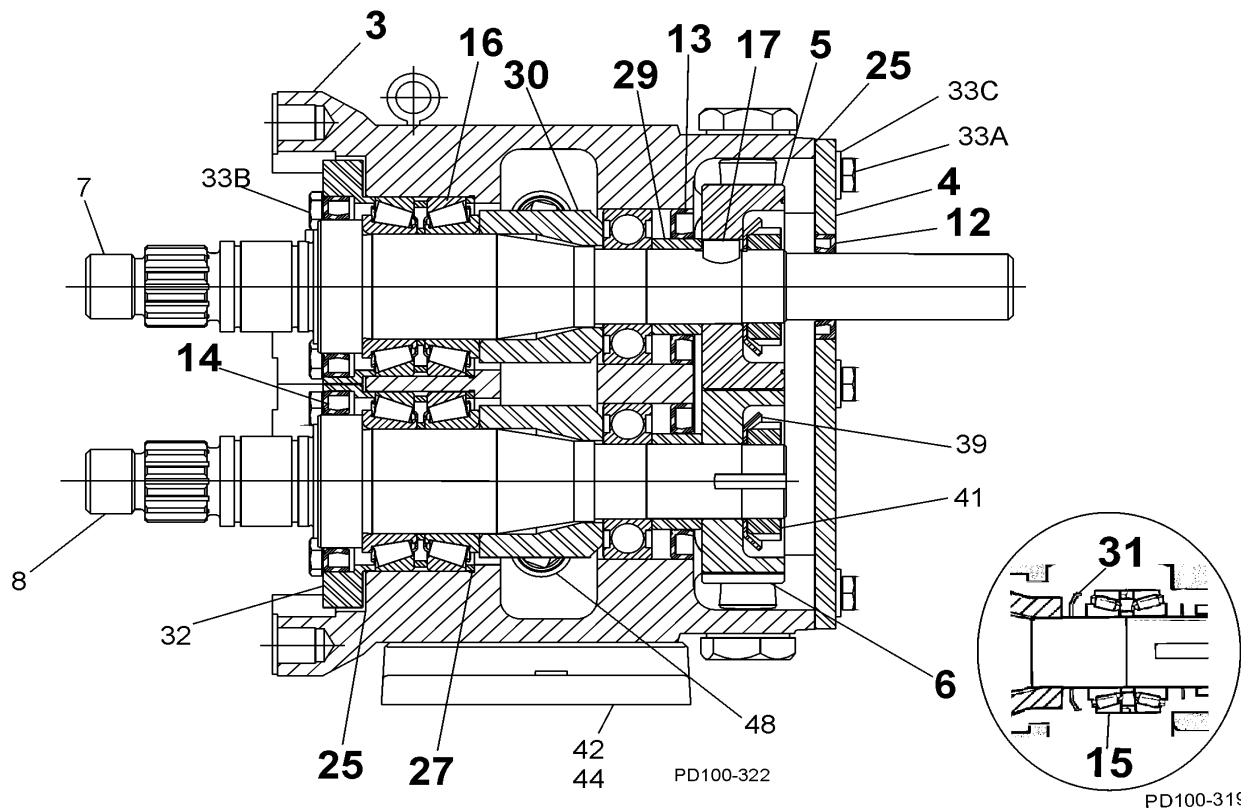
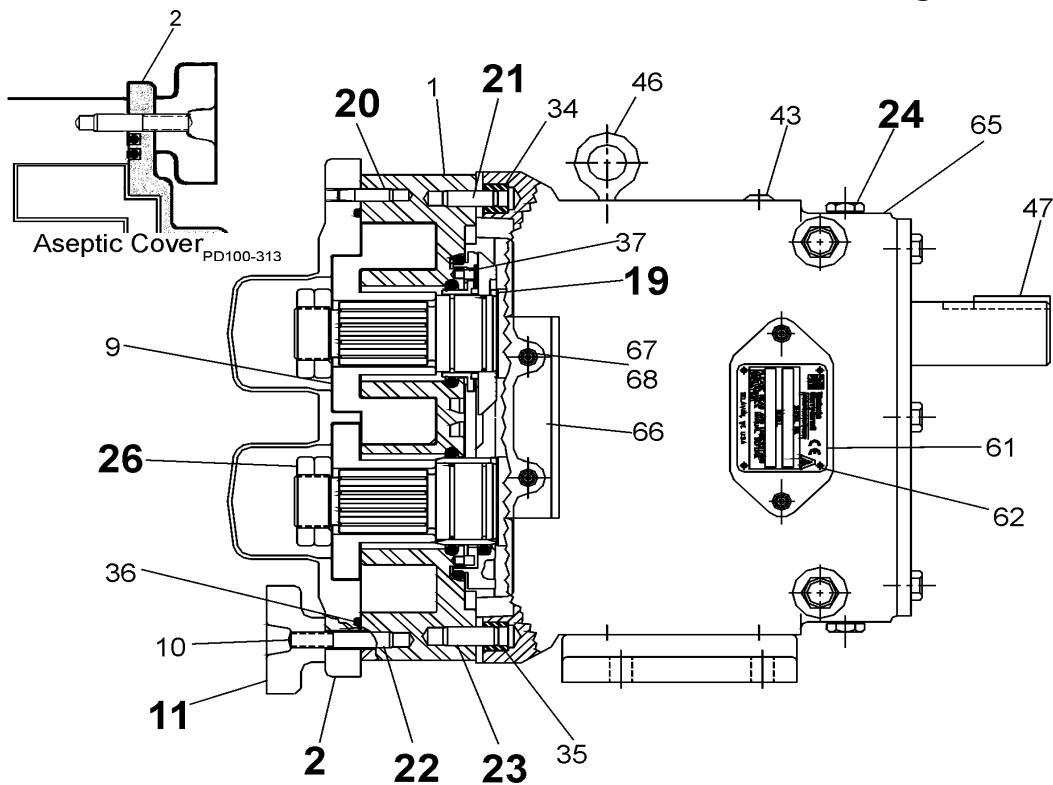
220 - 224 - 223-U1 COMMON PARTS PRICE LIST

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
2	220-224-U1 Pump Cover	1	GD0 002 S00	
	220-224-U1 Jacketed Cover	1	GD0 002 J10	
	223-U1 Pump Cover	1	223 002 020	
	Pump Cover Vented - Complete Assembly			
	220-224-U1 Manual (over 150 PSI)	1	CVR00106	
	220-224-U1 Manual (under 150 PSI)	1	CVR00009	
	220-224-U1 Piston	1	CVR00008	
3	Gear Case, CI	1	230 005 000	
	Gear Case, SS; Optional	1	101836	
4	Gear Case Cover, Steel	1	230 106 000	
	Gear Case Cover, SS; Optional	1	102283	
5	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	STD 030 002	
	Bearing Isolator, includes STD. Bearing Retainer	2	X06634-1	
	Bearing Isolator, includes SS Bearing Retainer	2	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	

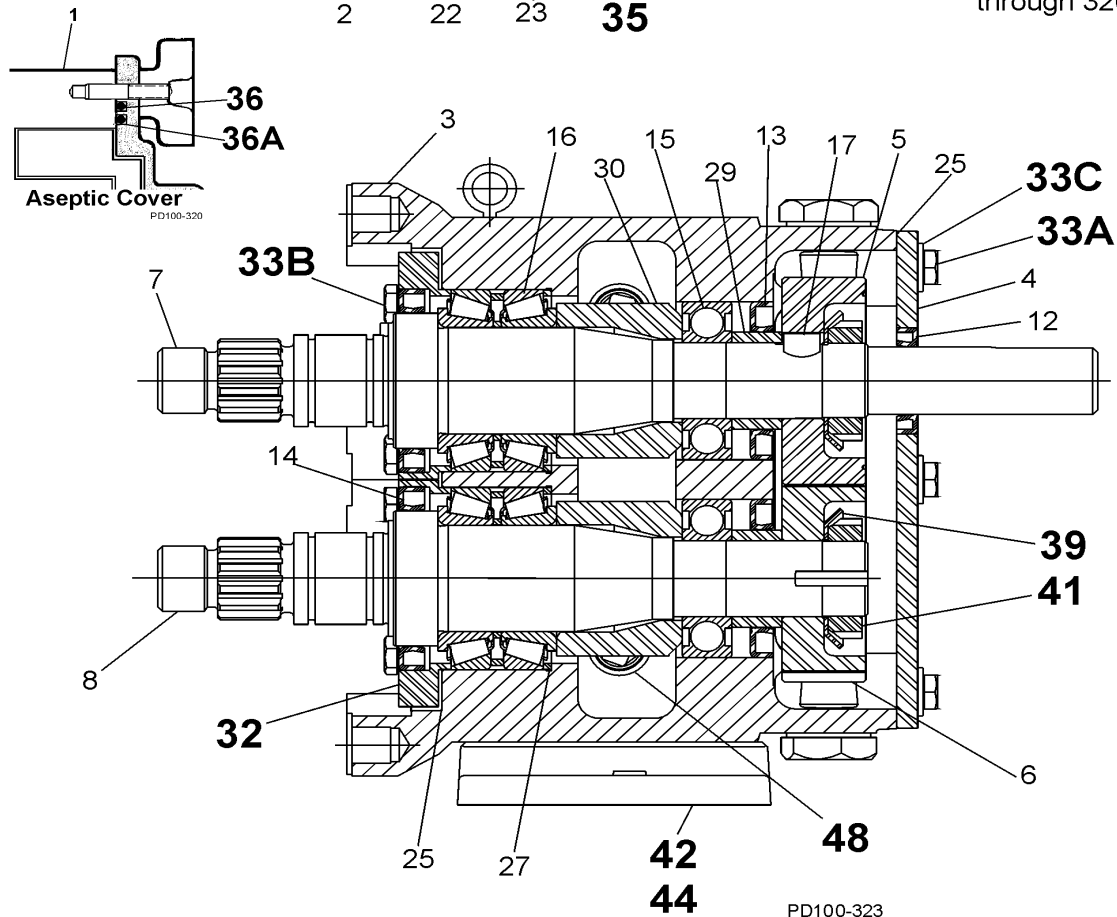
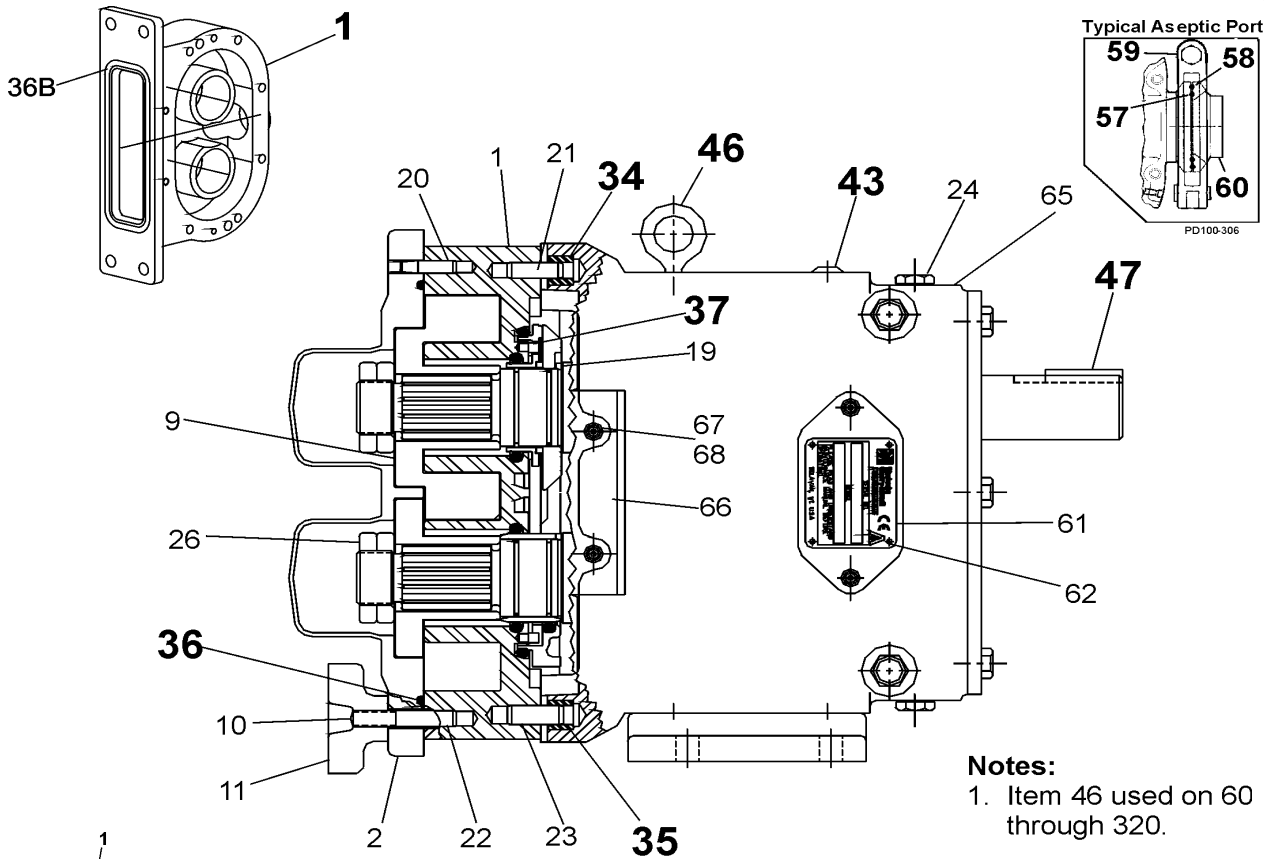
NOTES:

- 40. Pumps shipped prior to 5/15/03
- 41. Pumps shipped after 5/15/03

220 - 224 - 223-U1 Common Parts Diagram



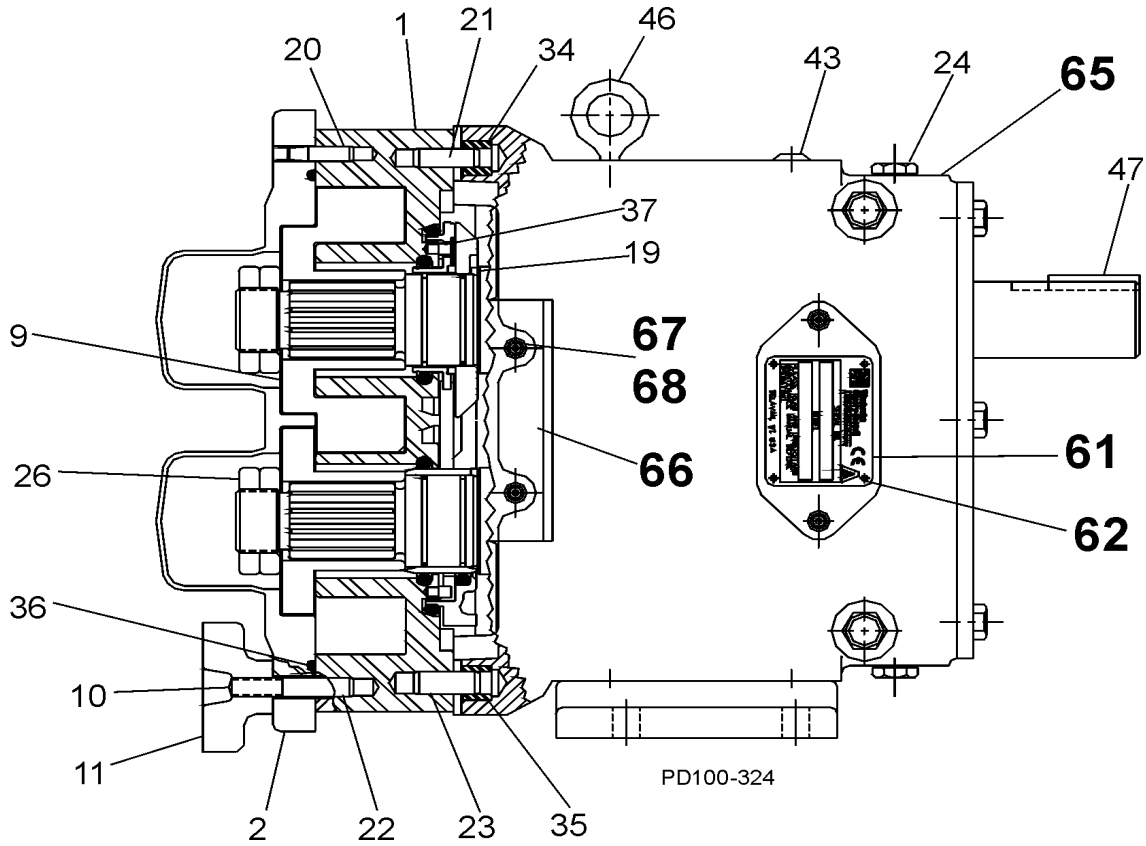
220 - 224 - 223-U1 Common Parts Diagram



220 - 224 - 223-U1 COMMON PARTS PRICE LIST

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	220-223-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	

220 - 224 - 223-U1 Common Parts Diagram



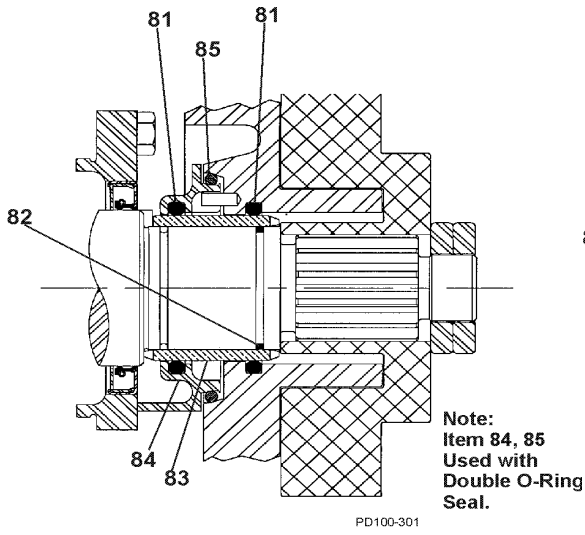
220 - 224 - 223-U1 SEAL PARTS PRICE LIST

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
O-RING AND MECHANICAL SEAL PARTS				
* 81	O-Ring, Body, Buna N	2	N70338	6, 25
* 81	O-Ring, Body, EPDM	2	E70338	6
* 81	O-Ring, Body, FKM	2	V70338	6
* 81	O-Ring, Body, Silicone	2	S75338	6
* 82	O-Ring, Shaft, Buna N	2	N70144	16, 25
* 82	O-Ring, Shaft, EPDM	2	E70144	16
* 82	O-Ring, Shaft, FKM	2	V70144	16
* 82	O-Ring, Shaft, Silicone	2	S75144	16
* 83	Sleeve, SS	2	220 098 000	
* 83	Sleeve, Zirconia	2	220 098 004	
* 83	Sleeve, Chrome Oxide	2	220 098 002	
* 84	O-Ring Seal Carrier	2	220 034 000	7
* 85	O-Ring, Outer, Buna N - Seal Carrier	2	N50344	7, 8
* 85	O-Ring, Outer, EPDM - Seal Carrier	2	E50344	7, 8
* 85	O-Ring, Outer, FKM - Seal Carrier	2	V50344	7, 8
* 85	O-Ring, Outer, Silicone - Seal Carrier	2	S50344	7, 8
* 86	220-224-U1 Seal Seat, Ceramic	2	220 014 002	
* 86	220-224-U1 Seal Seat, Chrome Oxide	2	220 014 001	
* 86	220-224-U1 Seal Seat, Silicon Carbide	2	220 014 009	
* 86	223-U1 Seal Seat, Ceramic	2	223 014 002	11
* 86	223-U1 Seal Seat, Chrome Oxide	2	223 014 001	11
* 86	223-U1 Seal Seat, Silicon Carbide	2	223 014 009	11
* 87	Seal Inner, Carbon (2 piece)	2	220 306 001	
* 87	Seal Inner, Carbon (1 piece)	2	220 306 007	
* 87	Seal Inner, Ceramic	2	40830	
* 87	Seal Inner, Chrome Oxide	2	220 306 002	
* 87	Seal Inner, Silicon Carbide	2	220 306 009	
* 88	Wave Spring	2	220 304 000	
* 89	Outer Seal, Carbon (1 piece)	2	220 206 007	8
* 89	Outer Seal, Chrome Oxide	2	220 206 002	8

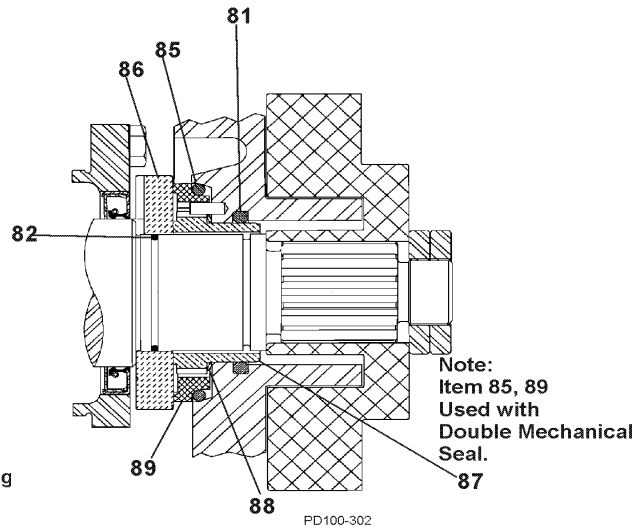
NOTES:

- 6. (4) needed per pump with double O-ring Seal.
- 7. Used with double O-Ring Seal.
- 8. Used with double Mechanical Seal.
- 11. Used on 223-U1 only.
- 16. (4) needed on pump on 223-U1.
- 25. Sold in packages of 25 only.
- * **Recommended Spare Parts**

220 - 224-U1 Seals Parts Diagram

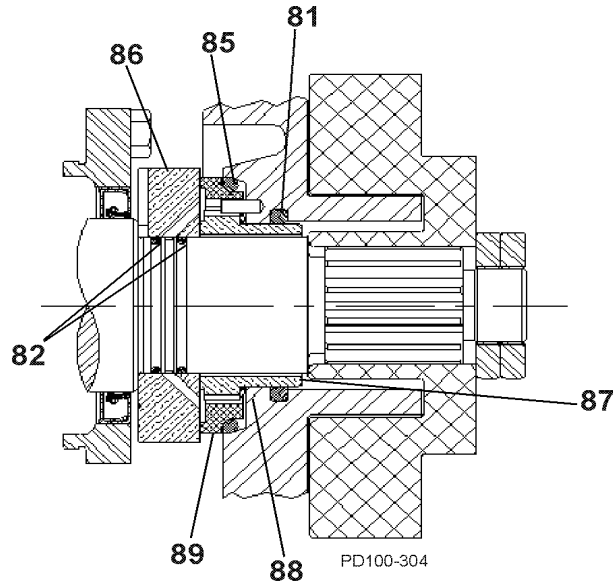


O-Ring Seal



Mechanical Seal

223-U1 Aseptic Seal



220 - 224-U1 VENTED COVER PARTS PRICE LIST

ITEM NO.	DESCRIPTION	QTY. PER PUMP	PART NO.	NOTES
MANUAL VENTED COVER				
101	Vented Cover	1	GD0 002 VS0	
102	Adjusting Screw	1	GD0 072 100	
103	Spring Plunger	1	GD0 073 000	
104	Locknut	1	GD0 074 000	
105	Spring, Medium (less than 150 PSI)	1	113400	
	Spring, High (more than 150 PSI)	1	113524	
106	Diaphragm Bushing	1	GD0 077 000	
107	Cover Nut	1	GD0 075 000	
* 108	Rubber Diaphragm, Buna N	1	GD0 078 000	
PISTON VENTED COVER				
101	Vented Cover	1	GD0 002 VS0	
112	Piston	1	GD0 073 P10	
* 113	O-Ring, Bushing Seal, Buna N	1	N70261	
114	Diaphragm Bushing	1	GD0 077 P10	
* 115	O-Ring, Nut Seal, Buna N	1	N70261	
116	Cover Nut	1	GD0 075 P10	
* 117	Piston Seal, Quad Ring	1	GD0 133 000	9
	Piston Seal, O-Ring	1	N70258	9

NOTES:

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

* **Recommended Spare Parts**

220 - 224-U1 Vented Cover Diagram (Not Used on 223-U1 Pump)

