

SPX Corporation 655 Eisenhower Drive Owatonna, MN 55060-0995 USA Phone: (507) 455-7000 Tech. Services: (800) 533-6127 Fax: (800) 955-8329

Order Entry: (800) 533-6127 Fax: (800) 283-8665

International Sales: (507) 455-7290

Fax: (507) 455-7063

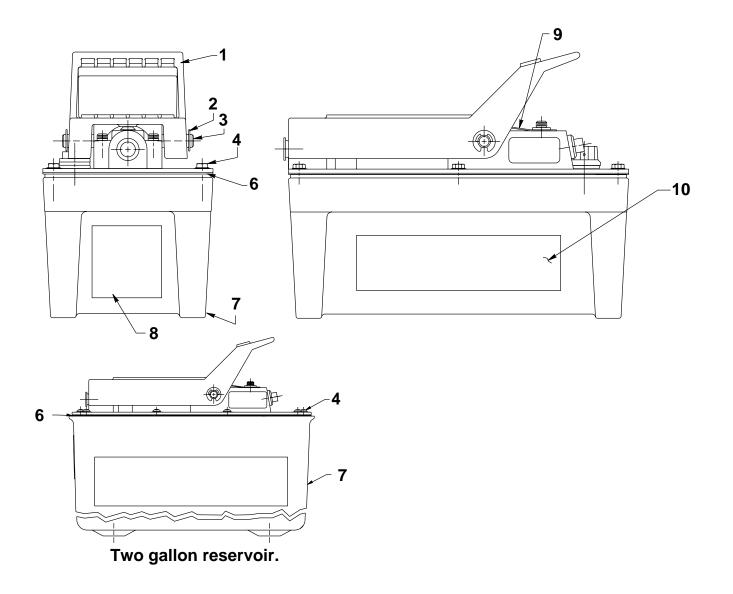
Form No. 101695

**Parts List for:** 

4020C 203398 4022 4020 4025

4020AMH 4025C

# MODEL F AIR HYDRAULIC PUMP



Sheet No. 1 of 4

Rev. 9 Date: 3 April 2001

# Parts List, Form No. 101695, Back sheet 1 of 4

Item		No.	Description
NO.	No.	Req'd	Description
1	41322	1	Foot Pedal
2	*11032	2	Retaining Ring (.30 X .035)
3	28386	1	Pin
4	211060	6	Screw (#9-15 X 1" Lg.; Torque to 25/35 in. lbs.; For 203398, 4020, 4020AMH & 4020C)
	215952	6	Screw (10-24 X 5/8; Self-Tapping; Torque to 25/35 in. lbs.; For 4025)
	252168	10	Screw (1/4-10 X 1; Torque to 35/45 in. lbs.; For 4022)
6	*33853	1	Reservoir Gasket (For all except 4022)
	*47409	1	Reservoir Gasket (For 4022)
7	61243	1	Reservoir (Plastic; For 203398, 4020, 4020AMH & 4020C)
	41300WH2	1	Reservoir (Metal; For 4025)
	61165	1	Reservoir (2 gal. plastic; For 4022)
8	*305494	1	Decal (For 203398, 4020AMH & 4022)
9	302466	1	Spring Clip (For all except 203398)
10	305495	1	Trade Name Decal (For 4020, 4020C & 4025)
	350126	2	Trade Name Decal (For 4022)

#### PARTS INCLUDED BUT NOT SHOWN

252168 4 Screw (1/4-10 X 1 Lg.; Torque to 35/45 in. lbs.; For pump mounting purposes only; For 4022)

Part numbers marked with an asterisk (\*) are contained in a Repair Kit see back sheet 1 of 4 for individual repair kit information.

Refer to any operating instructions included with this product for detailed information about operation, testing, disassembly, reassembly, and preventive maintenance.

Items found in this parts list have been carefully tested and selected. **Therefore: Use only genuine replacement parts!** 

Additional questions can be directed to our Technical Services Department.

### **REPAIR KITS**

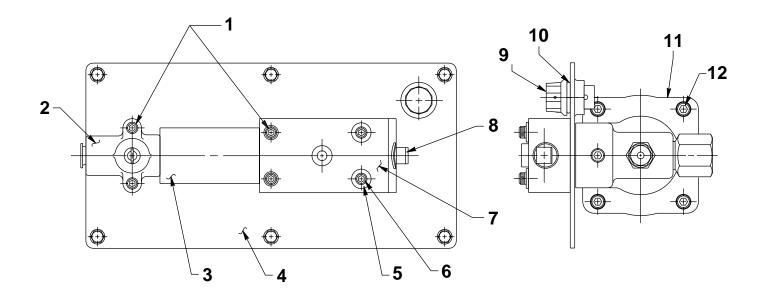
**No. 300837** 203398 4020AMH

**No.** 300871 4020 4020C 4025 No. 300874

4022

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# **TOP & END VIEWS**

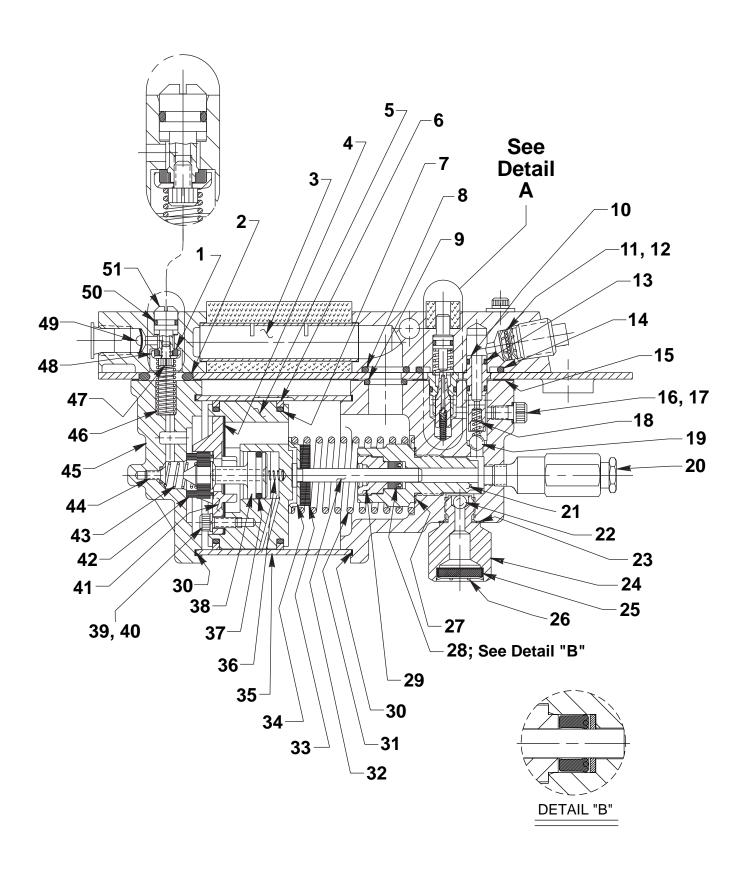


Iten No.		No. Reg'd	Description
			2001.[5.10.1
1	11151	4	Cap Screw (10-24 X 1-14"; Torque to 50/60 in. lbs)
2	37199	1	Intake Air Valve Body
3	*29992	1	Foam Tube
4	420965BK2	1	Cover Plate (For all except 4022)
	58706BK2	1	Cover Plate (For 4022)
5	11089	2	Washer (.51 X .22)
6	11435	2	Soc. Hd. Cap Screw (10-24 UNC x 1-3/4" Lg.;
			Torque to 50/60 in. lbs.)
7	58563	1	Release Valve Body
8	11127	1	Pressure Plug (3/8 NPTF)
9	251689	1	Breather/Filler Cap
10	*10273	1	O-ring (.81 X .62)
11	64767	1	Pump Body
12	17428	4	Soc. Hd. Cap Screw (1/4-20 X 3-1/2 Torque to 85/95 in. lbs.
			oiled. Note: Cross torque in increments of 30 in. lbs.)

Part numbers marked with an asterisk (\*) are contained in a Repair Kit see back sheet 1 of 1 for individual repair kit information.

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# **BASIC PUMP ASSEMBLY**



Parts List Form No. 101695

Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	*28182	1	Air Valve Poppet	26	214586	1	Internal Retaining Ring (.63 x
2	*251717	1	O-ring (1.0 X .62)				.015; For all reservoir sizes except 2
3	28387	1	Muffler	07	*40000	4	gal. reservoirs built after June 1, 1998)
4	*28239	1	Gasket	27	*10263	1	Copper Washer (1.0 X .77)
5	52390	1	Piston Body	28	*13934		U-cup & Backup
6	*14265	2	Piston Ring (2.77 X 2.54)	29	*304295	1	Retainer (See "INSTRUCTIONS FOR
7	*251835	2	O-ring (2-1/2" X 2-5/16" X 3/32; Nitrile)				RETAINER REPLACEMENT" on sheet 4 of4.)
8	*10276	1	O-ring (1.00 X .75)	30	*17429	2	Backup Washer (2.94 X 2.75)
9	*10272	1	O-ring (.75 X .56)	31	*13938		Compression Spring
10	34378	1	Check Valve Body				(1.452 O.D. X 4.4)
11	*250638	1	Filter Disc	32	28226	1	Piston (1/4")
12	*11088	2	Internal Retaining Ring	33	203143		Bumper
			(.31 X .010)	34	210994	1	Spring Guide
13	*12522	2	O-ring (3/8 X 1/4 X 1/16; Urethane)	35	37434	1	Air Cylinder (Note: Locate groove on
14	*11841	1	O-ring (1.62 X 1.37)				upper half (top) of pump with
15	*351021	1	Gasket				chamfered tube end towards rear
16	*10442	1	Washer (.37 X .25)		***	4	head as shown.)
17	10002	1	Cap Screw (1/4-20 X 3/8; Torque to 90/110 in. lbs.)	36	*12692	1	Compression Spring (.18 O.D. X 1.70)
18	*10445	1	Compression Spring	37	*211052	1	O-ring (.90 X .70)
			(.16 O.D. X .72)	38	305475	1	Exhaust Valve Stem
19	*10423	1	Steel Ball (9/32 Dia.)	39	*10241	3	Lockwasher (.33 X .20)
20		-	Relief Valve (When ordering a replacement relief valve refer to	40	211054	3	Screw (#10-24 X 1/2; Torque to 50/55 in. lbs.)
			stamped number on the outside of	41	33822	1	Piston End Plate
			the relief valve. See note below. Apply loctite 592 [Power Team	42	*28183	1	Piston Poppet
			#905516] or equiv. & torque to 150/170 in. lbs.)	43	*205679	1	Compression Spring (.49 O.D. X .92)
21	45278	1	Piston Cylinder (Torque to 90/100 ft. lbs. oiled.)	44	*205674	1	Screw (8-32 X 3/8; Torque to 12/18 in. lbs.)
22	*10375	1	Steel Ball (1/4 Dia.; For all except	45	51480	1	Rear Head
	*10423	1	4022) Steel Ball (9/32 Dia.; For 4022)	46	12691	1	Compression Spring (.36 O.D. X 1.5)
23	*10261	1	Copper Washer (.75 X .60)	47	13936	1	Soc. Hd. Cap Screw (8-32 X 1/4)
24	308893	1	Filter Adapter (Torque to 40/50 ft.	48	28198	1	Seal Guide
			lbs. oiled.; For all except 4022)	49	*216296	1	Filter Disc
25	214578	1	Filter (For all reservoir sizes except 2	50	*10267	1	O-ring (.43 X .31)
			gal. reservoirs built after June 1, 1998)	51	33841	1	Actuator Button

Part numbers marked with an asterisk (\*) are contained in a Repair Kit see back sheet 1 of 4 for individual repair kit information.

#### NOTE:

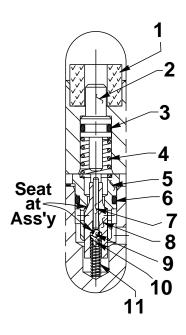
Standard relief valves are set at 10,100/10,700 PSI.
Relief valves pre-set at special settings are available.
Refer to your pump model number or contact OTC Technical Services.

Note: Shaded areas reflect last revision(s) made to this form.

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## Detail "A"

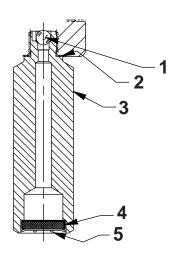


Item No.	Part No.	No.	Description
NO.	NO.	Req'd	Description
1	*206504	1	Foam Tube
2	28227	1	Release Valve Button
3	*10266	1	O-ring (3/8 X 1/4 X 1/16)
4	*13944	1	Compression Spring (3/8 O.D. X 1/2 Lg.)
5	34377	1	Poppet Retainer
6	*15279	1	O-ring (1/2 X 3/8 X 1/16)
7	13937	1	Dowel Pin (Note: Place tapered end toward ball.)
8	29037	1	Release Valve Poppet
9	*14443	1	Steel Ball (3/32 Dia.)
10	209736	1	Ball Retainer
11	*13959	1	Compression Spring (1/8 O.D. x 1/2 Lg.)

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#### FILTER ADAPTER ASSEMBLY BEFORE 6/1/98

For 2 Gallon Reservoirs Only

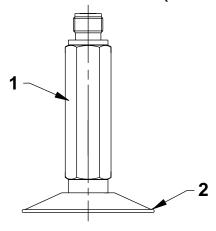


Item No.	Part No.	No. Req'd	Description
1	*10423	1	Ball (9/32 Dia.)
2	*10261	1	Special Washer (3/4 x 19/32 x 1/32)
3	48007	1	Filter Adapter (Torque to 40/50 ft. lbs. oiled.; For 4022)
4	214578	1	Filter
5	214586	1	Retaining Ring (.63 x .015)

Part numbers marked with an asterisk (\*) are contained in a Repair Kit see sheet 1 of 4 for individual repair kit information.

# FILTER ADAPTER ASSEMBLY AFTER 6/1/98

For 2 Gallon Reservoirs Only (Reference Part Number 48007)



 em lo.	Part No.	No. Req'd	Description
1	422016	1	Filter Adapter
2	29682	1	Filter

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#### INSTRUCTIONS FOR RETAINER REPLACEMENT

Your pump's retainer is locked into place by one of the two following methods. Determine which <u>method</u> was used on your pump's retainer, then follow the appropriate steps to remove the old and install and stake the new.

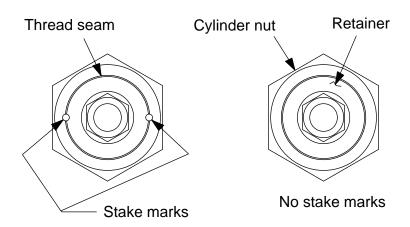
#### Method 1 - Retainer shows no sign of stake marks

- 1. This retainer has been locked in place with a Loctite product. To replace it, a moderate amount of heat needs to be applied to the cylinder nut (in the area of the retainer) to soften the existing Loctite allowing it to be removed.
- 2. Install the new retainer into the cylinder nut and torque to 80/100 in. lbs. **Note: Do not use a Loctite product** this time but stake the new retainer in place according to instructions in Step 3.
- 3. To lock retainer into place, use a center punch positioned in the seam between the retainer and the cylinder nut and stake the new retainer in two places approximately 180° apart.

# Method 2 - Retainer has two stake marks in the seam between the retainer and the cylinder nut

- 1. For replacement of this retainer, the stake marks must be removed. Using a 1/8" or larger diameter drill bit, remove the existing stakes by drilling a short distance into the stake marks. Remove the retainer.
- 2. Install the new retainer into the cylinder nut and torque to 80/100 in. lbs.
- 3. To lock retainer into place, use a center punch positioned in the seam between the retainer and the cylinder nut and stake the new retainer in two places approximately 180° apart.

NOTE: Do not stake in the old stake marks.



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