

AIR HYDRAULIC PUMP

### IMPORTANT RECEIVING INFORMATION

Visually inspect all parts for shipping damage. If you find shipping damage, notify the carrier at once. Shipping damage is not covered by your warranty. The carrier is responsible for all costs of replacement or repair caused by shipping damage.

### CONTENTS

Parts List for 10590, 10592, 10594 Instructions for retainer replacement

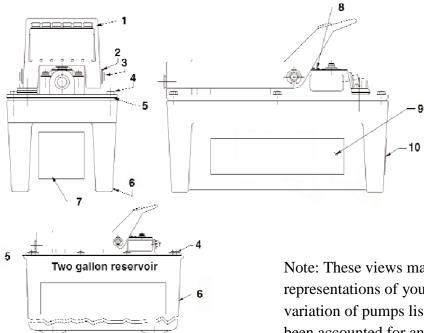




## **Parts List For**

## Air Hydraulic Pump Model 10590, 10592, 10594

### **AIR HYDRAULIC PUMP**



Note: These views may not be exact representations of your pump due to the variation of pumps listed, but all parts have been accounted for and are in this parts list.

Item No.	Part No.	No. Req'd	Description	Item No.	Part No.	No. Req'd	Description
1	41322	1	Foot Pedal	7	*305494	1	Decal (For 10592, 10594)
2	*11032	2	Retaining Ring	8	302466	1	Spring Clip
3	28386	1	Pin Screw(#9-15 X 1" Lg.;	9	260154	1	Trade Name Decal
4	211060	6	Torque to 25/35 in. lbs.; For 10590)	10	251762	1	Warning Decal
	252168	10	Screw (Torque to 35/45 in. lbs.; For 10594)		PARTS IN	ICLUDED	BUT NOT SHOWN
5	*33853	1	Reservoir Gasket (For 10590)		211060	4	Screw (#9-15 X 1" Lg.; Torque to 25/35 in. lbs.; For pump mounting purposes only; For 10590)
	*46271	1	Reservoir Gasket (For 10592)		252168	4	Screw (1/4-10 X 1 Lg.; For pump mtg. purposes only; For 10594)
	*47409	1	Reservoir Gasket (For 10594)				
6	61243	1	Reservoir (Plastic; For 10590)				ed with an asterisk (*) are air Kit see sheet 5 of 6 for
	64153OR9	1	Reservoir (For 10592)				information.
	61165	1	Reservoir (2 gal. plastic; For 10594)				



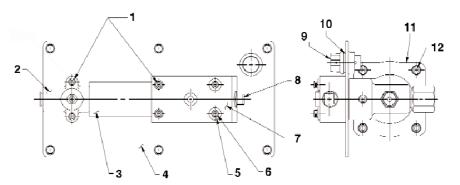


### Parts List For

### Air Hydraulic Pump Model 10590, 10592, 10594

#### **TOP & END VIEWS**

Note: These views may not be exact representations of your pump due to the variation of pumps listed, but all parts have been accounted for and are in this parts list.



ltem No.	Part No.	No. Req'd	Description	ltem No.	Part No.	No. Req'd	Description
1	11151	4	Cap Screw (10-24 UNC X 1-1/4 Lg.; Torque to 50/60 in. lbs.;	10	*10273	1	O-ring (13/16 X 5/8 X 3/32; Nitrile)
2	37199	1	Intake Air Valve Body	11	64767	1	Pump Body
3	*29992	1	Foam Tube	12	17428	4	Soc. Hd. Cap Screw (1/4-20 UNC X 3-1/2 Lg.; Torque to 85/95 in. lbs. oiled.
4	420965BK2	1	Cover Plate (For 10590)				Note: Cross torque in increments
	58688BK2	1	Cover Plate (For 10592)				of 30 in. lbs.) Relief Valve (When ordering a
	58706BK2	1	Cover Plate (For 10594)				replacement relief valve refer to stamped number on the outside of the relief valve. See note
5	11089	2	Washer (#10 bolt)				below. Apply loctite 592 or equiv.
6	11435	2	Soc. Hd. Cap Screw (10- 24 UNC x				& torque to 150/170 in. lbs.)
7	58563	1	Release Valve Body		NOTE: Sta	andard re	lief valves are set at
8	11127	1	Pressure Plug (3/8 NPTF)				Relief valves pre-set at
9	251689	1	Breather/Filler Cap		special se model nur	•	e available. Refer to your pump

Refer to operating instructions Form No. 103544 for detailed information about operation, testing, disassembly, reassembly, and preventive maintenance.

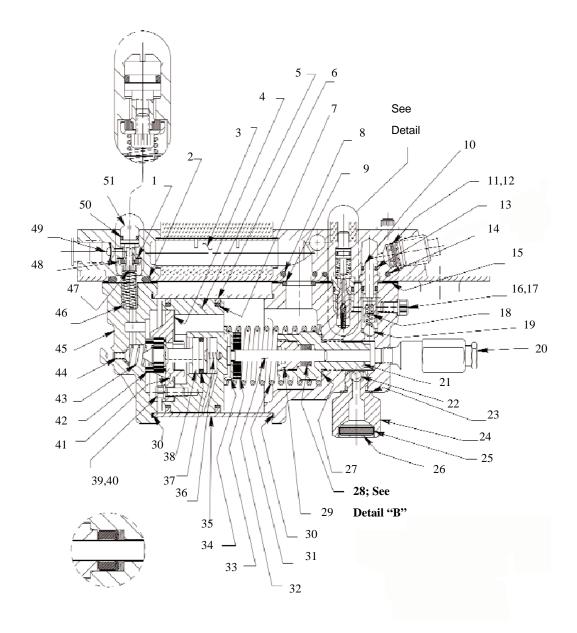




### Air Hydraulic Pump Model 10590, 10592, 10594

### **BASIC PUMP ASSEMBLY**

Note: These views may not be exact representations of your pump due to the variation of pumps listed, but all parts have been accounted for and are in this parts list.







### Air Hydraulic Pump Model 10590, 10592, 10594

### **BASIC PUMP ASSEMBLY**

1	*28182	1	Air Valve Poppet	26	2
2 3	*251717 28387	1 1	O-ring (1" x 5/8 x 3/16) Muffler	27 28	*
4	*28239	1	Gasket	29	*
5	52390	1	Piston Body	30	*
6	*14265	2	Piston Ring	31	*
7 8 9	*251835 *10276 *10272	2 1 1	O-ring (2-5/16 x 2-1/8 x 3/32) O-ring (1" X 3/4 X 1/8) O-ring (3/4 X 9/16 X 3/32)	32 33 34	2 2 2
10	34378	1	Check Valve Body	35	3
11	*250638	1	Filter Disc	36	*
12 13 14	*11088 *12522 *11841	2 2 1	Retaining Ring (9/16 hole) O-ring (3/8 X 1/4 X 1/16; Urethane) O-ring (1-5/8 x 1-3/8 x 1/8)	37 38 39	*: 3 *
15	*351021	1	Gasket	40	2
16	*10442	1	Washer (3/8 X 1/4 X 1/32)	41	3
17	10002	1	Cap Screw (1/4-20 UNC X 3/8 Lg.; Torque to 90/110 in. lbs.)	42	*
18	*10445	1	Compression Spring	43	*
19	*10423	1	Steel Ball (9/32 Dia.; For 10590, 10592)	44	*
	*10423	2	Steel Ball (9/32 Dia.; For 10594) Relief Valve (When ordering a replacement	45	5
20		-	relief valve refer to stamped number on the outside of the relief valve. See note below. Apply loctite 592 or equiv. & torque to 150/170 in. lbs.)	46	1
21	45278	1	Piston Cylinder (Torque to 90/100 ft. lbs. oiled.)	47	1
22	*10375	1	Steel Ball (1/4 Dia.; For 10590, 10592)	48	2
23	*10261	1	Copper Washer (3/4 X 19/32 X 1/32)	49	*
24	308893	1	Filter Adapter (Torque to 40/50 ft. lbs. oiled.; For 10590, 10592)See sheet 5 of 6 for pumps with 2 gal. reservoirs.)	50	*
25	214578	1	Filter (For all reservoir sizes except 2 gal. reservoirs built after June 1, 1998)		_

Part numbers marked with an asterisk (\*) are contained in a Repair Kit see sheet 5 of 6 for individual repair kit information.

214586	1	Retaining Ring (Internal; For all reservoir sizes except 2 gal. Reservoirs built after June 1, 1998)
*10263	1	Copper Washer (1" X .765 X 1/32)
*13934	1	U-cup & Backup
*304295	1	Retainer (Note:See "INSTRUCTIONS FOR RETAINER REPLACEMENT" sheet 6 of 6)
*17429	2	Backup Washer (2-15/16 X 2-3/4 X .045)
*13938	1	Compression Spring (1.452 O.D. X 4-7/16 Lg.)
28226	1	Piston
203143	1	Bumper
210994	1	Spring Guide
37434	1	Air Cylinder (Note: Locate groove on upper half (top) of pump with chamfered tube end towards rear head as shown.)
*12692	1	Compression Spring (3/16 O.D. X 1-11/16 Lg.)
*211052	1	O-ring (.900 X .706 X .097)
305475	1	Exhaust Valve Stem
*10241	3	Lockwasher (For #10 bolt)
211054	3	Screw (#10-24 X 1/2 Lg.; Torque to 50/55 in. lbs.)
33822	1	Piston End Plate
*28183	1	Piston Poppet
*205679	1	Compression Spring (.485 O.D. X .915 Lg.)
*205674	1	Screw (8-32 UNC X 3/8 Lg.; Torque to 12/18 in. lbs.)
51480	1	Rear Head
12691	1	Compression Spring (3/8 O.D. X 1- 1/2 Lg.)
13936	1	Soc. Hd. Cap Screw (8-32 UNC X 1/4 Lg.)
28198	1	Seal Guide
*216296	1	Filter Disc
* * * * * * *		
*10267	1	O-ring (7/16 X 5/16 X 1/16)

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.





### **Parts List For**

# Air Hydraulic Pump Model 10590, 10592, 10594

### **BASIC PUMP ASSEMBLY**

1	*28182	1	Air Valve Poppet	26	2
2 3	*251717 28387	1 1	O-ring (1" x 5/8 x 3/16) Muffler	27 28	,
4	*28239	1	Gasket	29	,
5	52390	1	Piston Body	30	,
6	*14265	2	Piston Ring	31	,
7 8 9	*251835 *10276 *10272	2 1 1	O-ring (2-5/16 x 2-1/8 x 3/32) O-ring (1" X 3/4 X 1/8) O-ring (3/4 X 9/16 X 3/32)	32 33 34	
10	34378	1	Check Valve Body	35	
11	*250638	1	Filter Disc	36	
12	*11088	2	Retaining Ring (9/16 hole)	37	
13 14	*12522 *11841	2 1	O-ring (3/8 X 1/4 X 1/16; Urethane) O-ring (1-5/8 x 1-3/8 x 1/8)	38 39	
15	*351021	1	Gasket	40	
16	*10442	1	Washer (3/8 X 1/4 X 1/32)	41	
17	10002	1	Cap Screw (1/4-20 UNC X 3/8 Lg.; Torque	42	,
18	*10445	1	to 90/110 in. lbs.) Compression Spring	43	,
19	*10423	1	Steel Ball (9/32 Dia.; For 10590, 10592)	44	,
	*10423	2	Steel Ball (9/32 Dia.; For 10594)	45	ļ
20		-	Relief Valve (When ordering a replacement relief valve refer to stamped number on the outside of the relief valve. See note below. Apply loctite 592 or equiv. & torque to 150/170 in. lbs.)	46	
21	45278	1	Piston Cylinder (Torque to 90/100 ft. lbs. oiled.)	47	
22	*10375	1	Steel Ball (1/4 Dia.; For 10590, 10592)	48	2
23	*10261	1	Copper Washer (3/4 X 19/32 X 1/32) Filter Adapter (Torque to 40/50 ft. lbs.	49	1
24	308893	1	oiled.; For 10590, 10592)See sheet 5 of 6 for pumps with 2 gal. reservoirs.)	50	,
25	214578	1	Filter (For all reservoir sizes except 2 gal. reservoirs built after June 1, 1998)		

Part numbers marked with an asterisk (\*) are contained in a Repair Kit see sheet 5 of 6 for individual repair kit information.

		Retaining Ring (Internal; For all reservoir
214586	1	sizes except 2 gal. Reservoirs built after June 1, 1998)
*10263	1	Copper Washer (1" X .765 X 1/32)
*13934	1	U-cup & Backup
*304295	1	Retainer (Note:See "INSTRUCTIONS FOR RETAINER REPLACEMENT" sheet 6 of 6)
*17429	2	Backup Washer (2-15/16 X 2-3/4 X .045)
*13938	1	Compression Spring (1.452 O.D. X 4-7/16 Lg.)
28226	1	Piston
203143	1	Bumper
210994	1	Spring Guide
37434	1	Air Cylinder (Note: Locate groove on upper half (top) of pump with chamfered tube end towards rear head as shown.)
*12692	1	Compression Spring (3/16 O.D. X 1-11/16 Lg.)
*211052	1	O-ring (.900 X .706 X .097)
305475	1	Exhaust Valve Stem
*10241	3	Lockwasher (For #10 bolt)
211054	3	Screw (#10-24 X 1/2 Lg.; Torque to 50/55 in. lbs.)
33822	1	Piston End Plate
*28183	1	Piston Poppet
*205679	1	Compression Spring (.485 O.D. X .915 Lg.)
*205674	1	Screw (8-32 UNC X 3/8 Lg.; Torque to 12/18 in. lbs.)
51480	1	Rear Head
12691	1	Compression Spring (3/8 O.D. X 1- 1/2 Lg.)
13936	1	Soc. Hd. Cap Screw (8-32 UNC X 1/4 Lg.)
28198	1	Seal Guide
*216296	1	Filter Disc
210200		
*10267	1	O-ring (7/16 X 5/16 X 1/16)

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.

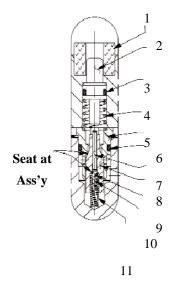






## Air Hydraulic Pump

Model 10590, 10592, 10594

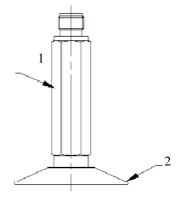


### **BASIC PUMP ASSEMBLY**

ltem No.	Part 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.)

Part numbers marked with an asterisk (\*) are contained in a Repair Kit see below for individual repair kit numbers.

### FILTER ADAPTER ASSEMBLY AFTER 6/1/98 For 2 Gallon Reservoirs Only (Reference Part Number 48007)



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

No	. 300805
10	590

REPAIR KITSNo. 300831No. 3008481059210594





## Parts List For

### Air Hydraulic Pump Model 10590, 10592, 10594

### **INSTRUCTIONS FOR RETAINER REPLACEMENT**

Your pump's retainer is locked into place by one of the following methods. Determined which method was used on your pump's retainer. Then followed the appropriate steps to remove the old and install and stake the new.

### Method 1 – Retainer shows no sin of stake marks

- 1. This retainer has been locked in place with a Locite 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 Locite 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 Locite 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 removes. Using 1/8" or larger diameter drill bit, remove the exiting stakes by drilling a short distance into the stale marks. Remove the retainer.
- 2. Install the new retainer into the cylinder nut and torque to 80/100 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.

