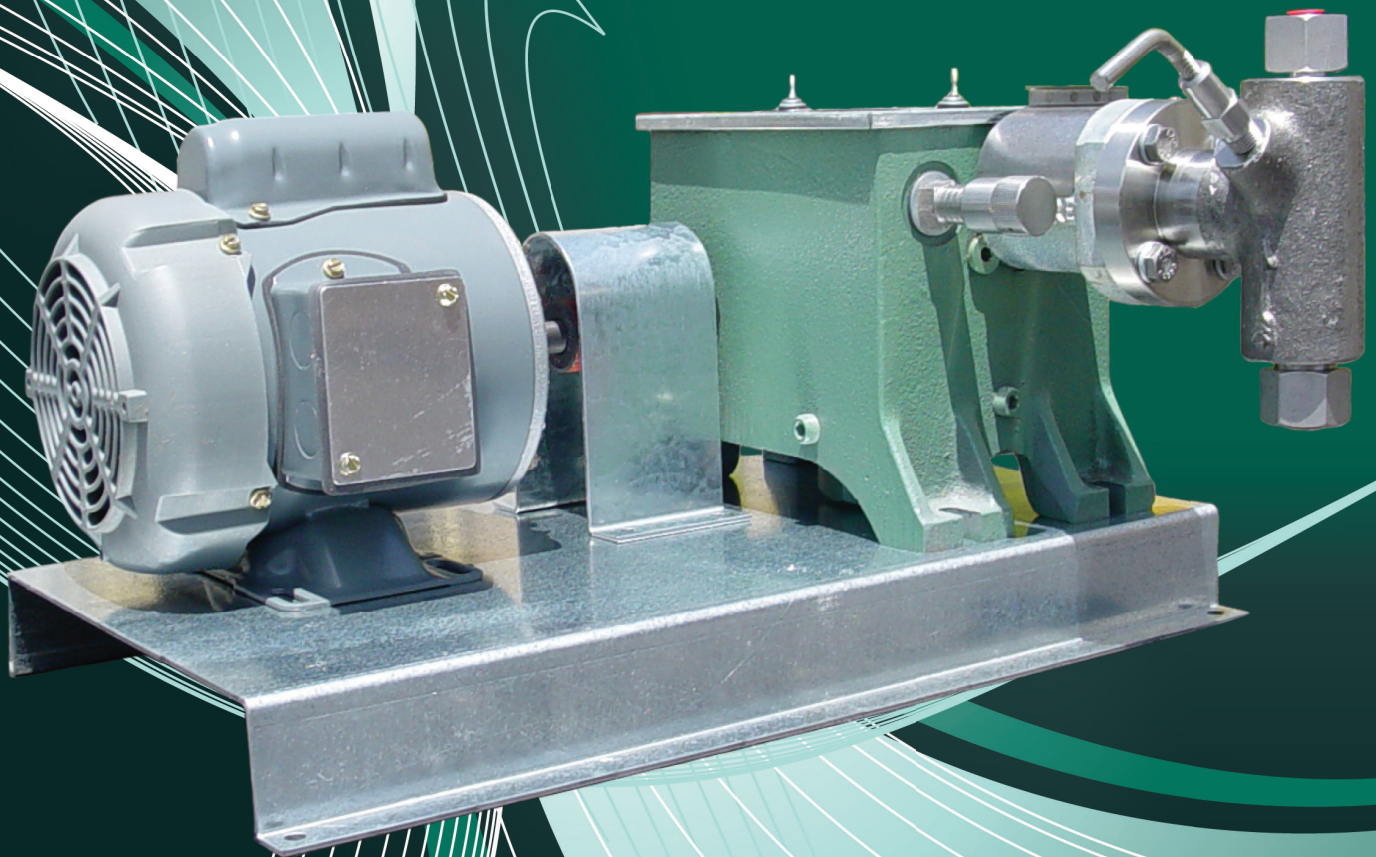


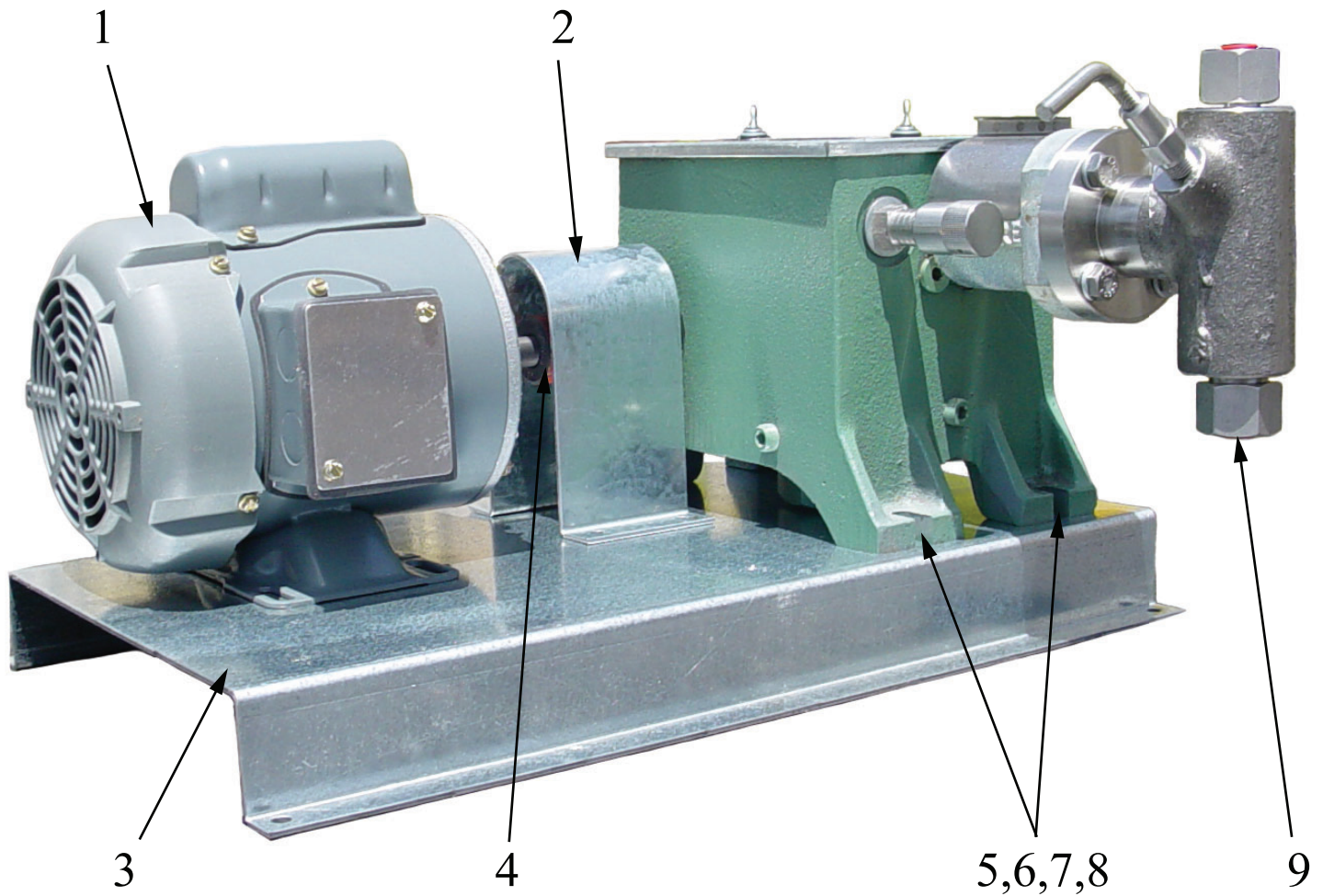
FLOMORE

Different By Design

4500 Series Injector



4500 Series Injector



Parts List

Item #	Part #	# Req'd.	Description
1	A-2264	1	1/115/230 TEFC Electric Motor
	A-2268		3/230/460 TEFC 1/3 HP Electric Motor 3 Phase
	A-2265		1/3 HP Electric Motor Single Phase Explosion Proof
	A-2271		3/220/460 TEFC 1/3 HP Electric Motor 3 Phase Explosion Proof
2	B-1167	1	Coupling Guard
3	B-0437	1	Base
4	A-1653	1	1/2" x 5/8" Coupling
5	A-0164	1	Nut
6	A-3303	1	Split Lockwasher
7	A-0167	1	Flat Washer
8	A-0163	1	Hex Head Bolt
9	See Page 6	See Page 6	Head Assembly

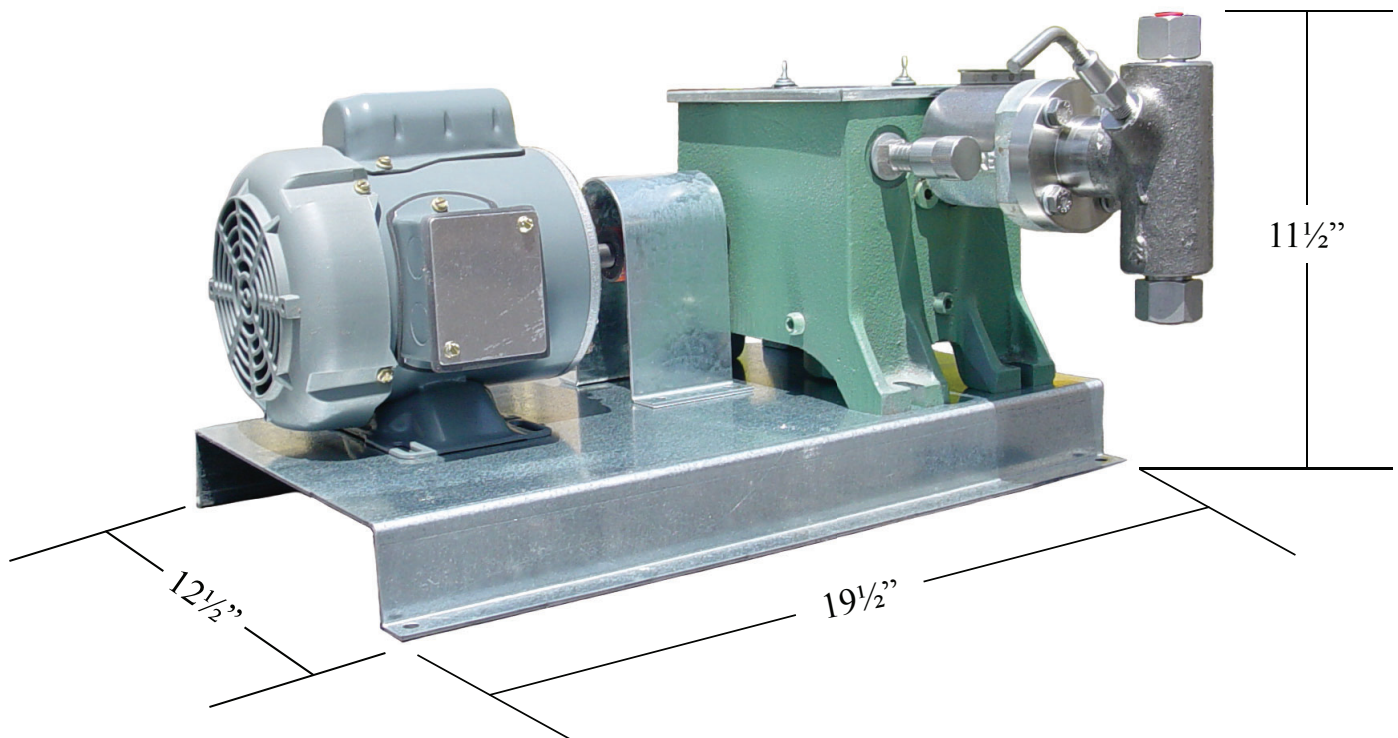
Performance Data

Pressure Volume Range

# of Heads	Plunger Size	Maximum Discharge Pressure	100:1 Ratio (17.5 SPM)			50:1 Ratio (35 SPM)			25:1 Ratio (70 SPM)					
			Part #	Min.*	Max.*	Part #	Min.*	Max.*	Part #	Min.*	Max.*			
				60 Hz Motor	50 Hz Motor		60 Hz Motor	50 Hz Motor		60 Hz Motor	50 Hz Motor			
Single Head	¾"	300 PSI	45-25	4.6	46	38.0	45-05	9.1	91	75.5	45-35	18.2	182	151
	1"	150 PSI	45-26	8.1	81	97.5	45-06	16.3	163	135.2	45-36	32.5	325	269.7
Double Head	¾"	300 PSI	45-25DH	9.2	92	76.3	45-05DH	18.2	182	151	45-35DH	36.4	364	302.1
	1"	150 PSI	45-26DH	16.2	162	134.4	45-06DH	32.6	326	270.5	45-36DH	65.0	650	539.5

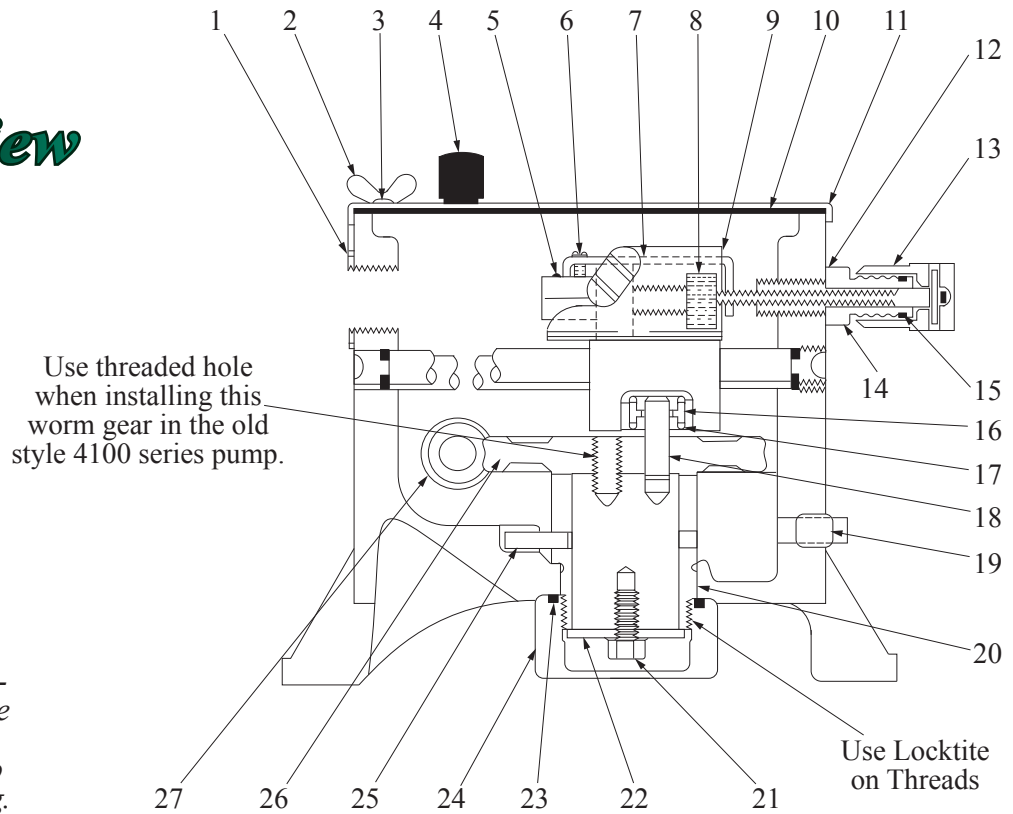
*Volume expressed in U.S. Gallons Per Day

Dimensions



Gear Box Assembly

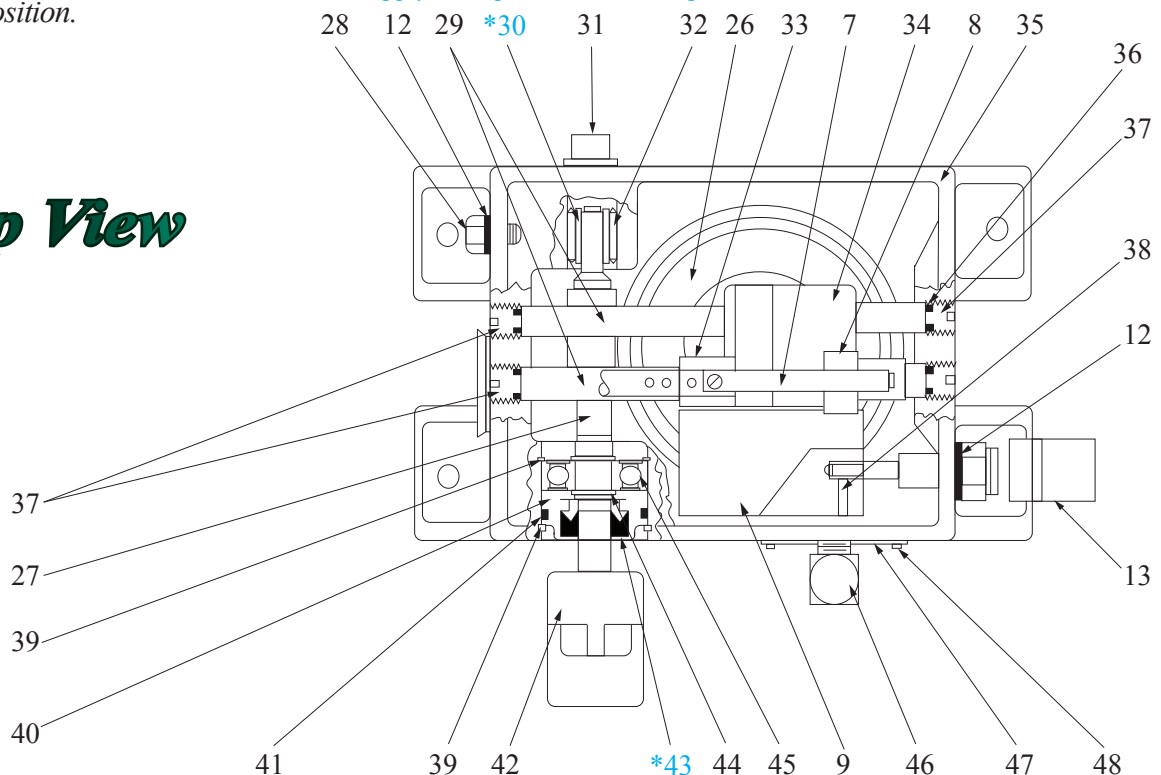
Side View



Flow Rate Adjustment
 Turn knob, Item #13, clockwise to decrease flow. Each complete turn of the knob results in 10% change in stroke setting. Each groove on the spindle, Item #15 is equal to 25% change in stroke setting. To adjust pump while stopped, make sure plunger is in the full forward position.

** Apply Lubriplate 630 AA or equal*

Top View



Parts List

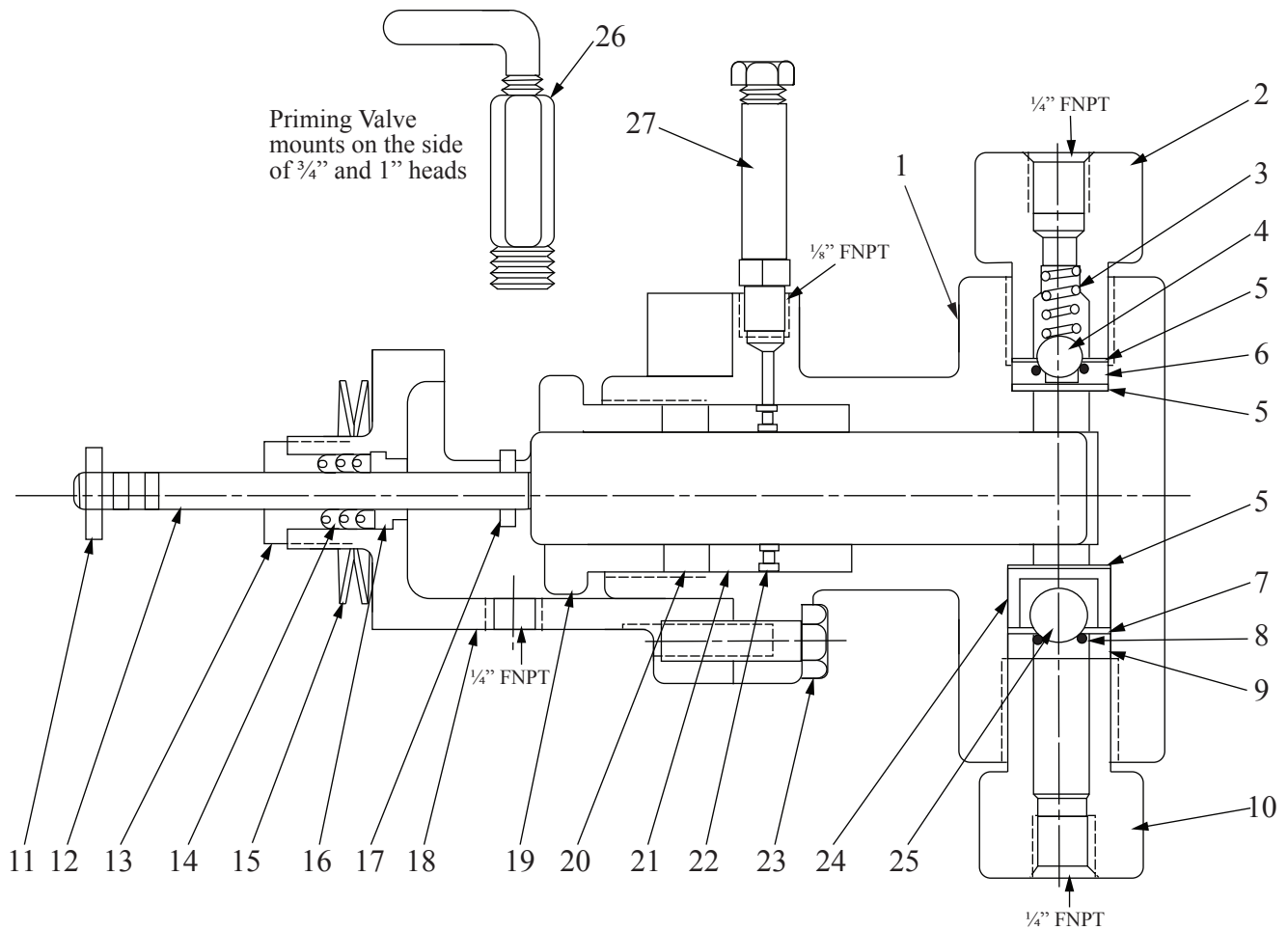
Item #	Part #	# Reqd.	Description	Material
1	A-4256	2	Belleville Washer	302 Stainless Steel
2	A-2970	2	Wing Screw	Cadmium Plated Carbon Steel
* 3	A-4092	2	¼" Stat-O-Seal	Buna-N
4	A-2600	2	Breather	◆
* 5	A-0290	1	Plunger Pin	Carbon Steel
* 6	A-3312	1	Lockwasher	Zinc Plated Steel
	A-4753		Round Head Screw	Zinc Plated Steel
7	A-4756	1	Guide Bar	Zinc Plated Steel
8	A-4757	1	Stroke Adjustment Gear	Steel
9	A-4758	1	Stroke Adjustment Drive Gear	Steel
10	A-4814	1	Cover Gasket	Neoprene
11	C-1576	1	Cover	Galvanized Carbon Steel
12	A-4759	1	Gasket	Buna-N
13	A-4805-A	1	Stroke Adjustment Knob & Screw Assembly	Steel
14	A-4761	1	Stroke Adjustment Spindle	303 Stainless Steel
15	A-1957	1	O'Ring	Buna-N
16	A-4065	1	Crosshead Bearing	Carbon Steel
17	A-4058	1	Washer	Carbon Steel
18	A-4064	1	Bearing Stud	Carbon Steel
19	A-0138	1	Pipe Plug	Zinc Plated Steel
20	B-0619	1	Lower Bearing	Ductile Iron
* 21	A-2501	1	Machine Screw	Zinc Plated Steel
	A-0459		⅜" Spring Lockwasher	Zinc Plated Steel
* 22	A-1930	1	Bottom Thrust Washer	Carbon Steel
* 23	A-2457	1	O'Ring	Buna-N
* 24	A-1921	1	Cap	Carbon Steel
* 25	A-2337	1	Roll Pin	Cadmium Plated Carbon Steel
* 26	B-0621	1	Worm Gear (25:1 Ratio)	Cast Iron
	B-0616		Worm Gear (50:1 Ratio)	Cast Iron
	B-0623		Worm Gear (100:1 Ratio)	Cast Iron
* 27	A-1871	1	Worm & Shaft Assembly (25:1 Ratio)	Carbon Steel
	A-2250		Worm & Shaft Assembly (50:1 Ratio)	Carbon Steel
	A-1755		Worm & Shaft Assembly (100:1 Ratio)	Carbon Steel
◆	B-0270	1	Thru-Shaft Assembly (25:1 Ratio)	Carbon Steel
	B-0469		Thru-Shaft Assembly (50:1 Ratio)	Carbon Steel
	B-0452		Thru-Shaft Assembly (100:1 Ratio)	Carbon Steel
28	A-4795	1	Bolt	Siinc Plated Steel
29	A-4229	2	Crosshead Guide Bar	Carbon Steel
* 30	A-2287	1	Inner Race Bearing	Carbon Steel
31	A-3309	1	Pipe Plug	Galvanized Malleable Iron
* 32	A-2286	1	Bearing Needle	Carbon Steel
33	A-4755	1	Adjustment Bolt	Carbon Steel
34	B-1333	1	Crosshead	Cast Iron
35	D-0492	1	Housing	Cast Iron
36	A-3849	4	O'Ring	Buna-N
37	A-4228	4	Rod Retainer	Carbon Steel
38	A-4894	1	Set Screw	Steel
* 39	A-3311	2	Truarc Ring	Carbon Steel
40	A-4045	1	Seal Cartridge	Carbon Steel
41	A-1961	1	O'Ring	Buna-N
◆ * 42	A-1653	1	½" x ⅝" Coupling (56 Frame Motor)	Carbon Steel
	A-1836		½" x ½" Coupling (48 Frame Motor)	Carbon Steel
◆ * 43	A-2064	1	Seal	Buna-N
* 44	A-3310	2	Truarc Ring	Carbon Steel
* 45	A-2285	1	Ball Bearing	Carbon Steel
46	A-4066	1	Oil Gauge Assembly	Brass with Glass Tube
47	A-0172	1	Name Plate	Aluminum
48	A-0171	2	Escutcheon Pin	Brass
◆	A-2036	1	Bearing	Brass

Recommended Spare Parts

*Directly interchangeable with Series 4400 Pumps

◆Use when a common motor is used to drive more than one gear box assy.

Injector Head



Alternative Construction

Item #	Part #	# Reqd.	Description	Material
* 4	A-4657	1	3/4" Plunger Packing	Viton
	A-2988			Teflon
	A-2772			Hard
	A-4658		1" Plunger Packing	Viton
	A-1013			Teflon
	A-4135			Hard
* 6	A-2184	1	O'Ring	Viton
* 12	A-0157	1	Top Seat Metal-to-Metal	303 Stainless Steel
* 19	A-0051	1	Bottom Seat Metal-to-Metal	303 Stainless Steel

Recommended Spare Parts

* Interchangeable with Series 4400 Pump head

Injector Head

Parts List

Item #	Part # ¾"	Part # 1"	# Req'd.	Description	Materials
*	C-0188	C-1886	1	Head Assembly	Ductile Iron with Stainless Steel Trim
	C-1887	C-1885			All Stainless Steel
♦ * 1	C-0333	C-0020	1	Body	Ductile Iron
	C-0340	C-0138			Stainless Steel
* 2	A-0152		1	Top Bushing	302 Stainless Steel
* 3	A-0077		1	Ball Check Spring	316 Stainless Steel
* 4	A-0054		1	¾" Large Top Ball	316 Stainless Steel
5	A-2350		3	Gasket	304 Stainless Steel
* 6	B-0368		1	Top Seat Assembly with Buna-N O'Ring	303 Stainless Steel
* 7	A-2338		1	Gasket	304 Stainless Steel
* 8	A-0612		1	O'Ring	Buna-N
* 9	B-0698		1	Bottom Seat	303 Stainless Steel
10	A-0153		1	Bottom Bushing	303 Stainless Steel
* 11	A-0290		1	Pin Plunger	Carbon Steel
* 12	B-1351	B-1352	1	Plunger	17-4 pH Stainless Steel
♦ 13	A-4094		1	Yoke Packing Nut	Brass
♦ 14	A-4127		1	Yoke Packing Set	Buna-N
♦ 15	A-4256		2	Belleville Washer	Carbon Steel
♦ 16	A-4095		1	Plunger Wiper Ring	Buna-N
♦ 17	A-4095		1	Plunger Drip Ring	Buna-N
♦ 18	C-1884		1	Yoke	Malleable Iron
* 19	A-2768	A-0047	1	Plunger Packing Gland Nut	316 Stainless Steel
20	A-2769	A-0043	1	Plunger Packing Gland	303 Stainless Steel
* 21	A-2771	A-0050	1	Plunger Packing Set	Buna-N
22	A-2770	A-0448	1	Lantern Ring	303 Stainless Steel
23	A-4452		1	Bolt	303 Stainless Steel
24	A-0444		1	Ball Cage	303 Stainless Steel
* 25	A-0053		1	Suction Ball	316 Stainless Steel
* 26	A-0123		1	Priming Valve	303 Stainless Steel
27	A-0558		1	Grease Jack Assembly	Carbon Steel

Recommended Spare Parts

*Directly interchangeable with Series 4400 Pumps

♦Items must be used together to convert old 4000 heads to new 4500 heads.

FLOMORE®

Richart Distributors, Inc.

Corporate Office

3415 South I-35 Service Road
Oklahoma City, OK 73129
1-866-843-5654
Fax: (405) 619-3007
Richart@flomore.com

Dickinson Branch

533 East Villard Suite B
Dickinson, ND 58601
(701) 483-8267
Fax: (701) 483-8268

Kilgore Branch

Cardon Sales Company, LLC

820 South Commerce Street
Kilgore, TX 75662
(903) 984-3070
Fax: (903) 984-7901
THunt@cardonsales.com

Louisiana Branch

Cardon Sales Company, LLC

213 Cummings Road
Broussard, LA 70518
(337) 839-1704
Fax: (337) 839-1706
bcardon@cardonsales.com

Odessa Branch

Patterson Equipment Sales, Inc.

1610 S. Regal Avenue
Odessa, TX 79763
(432) 332-3345
Fax: (432) 332-3348
chad@pattersononequipsalesinc.com

