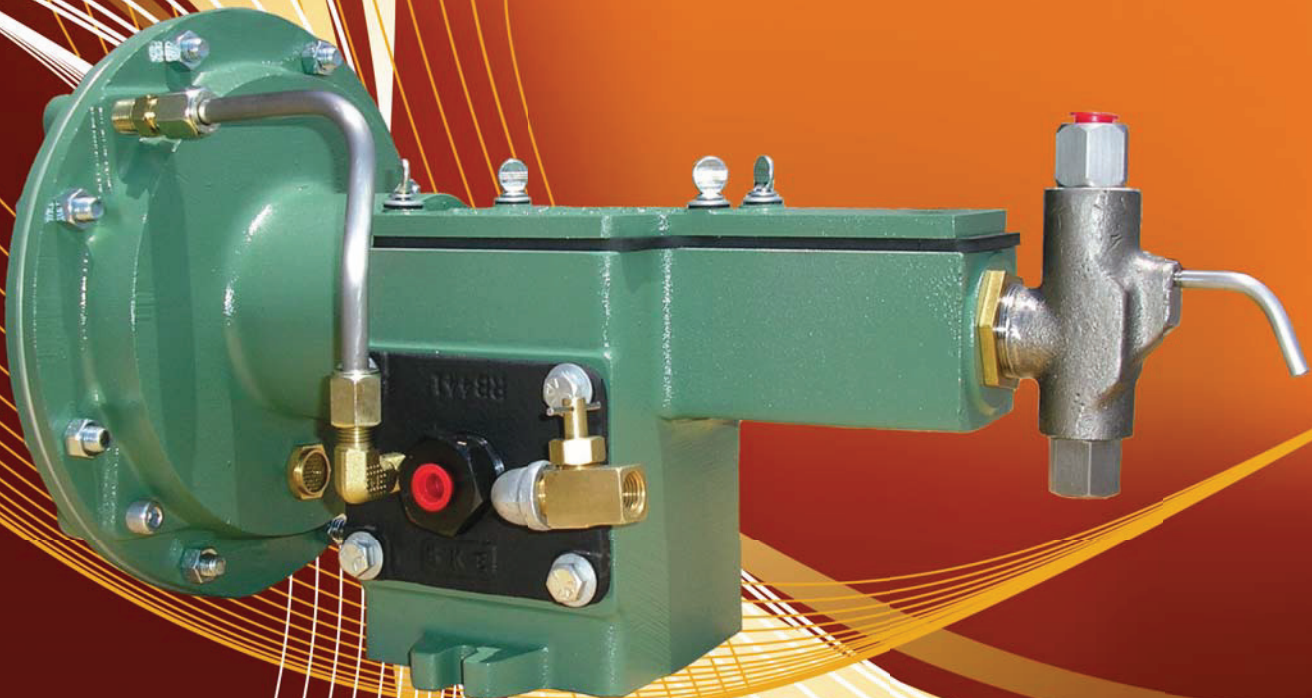


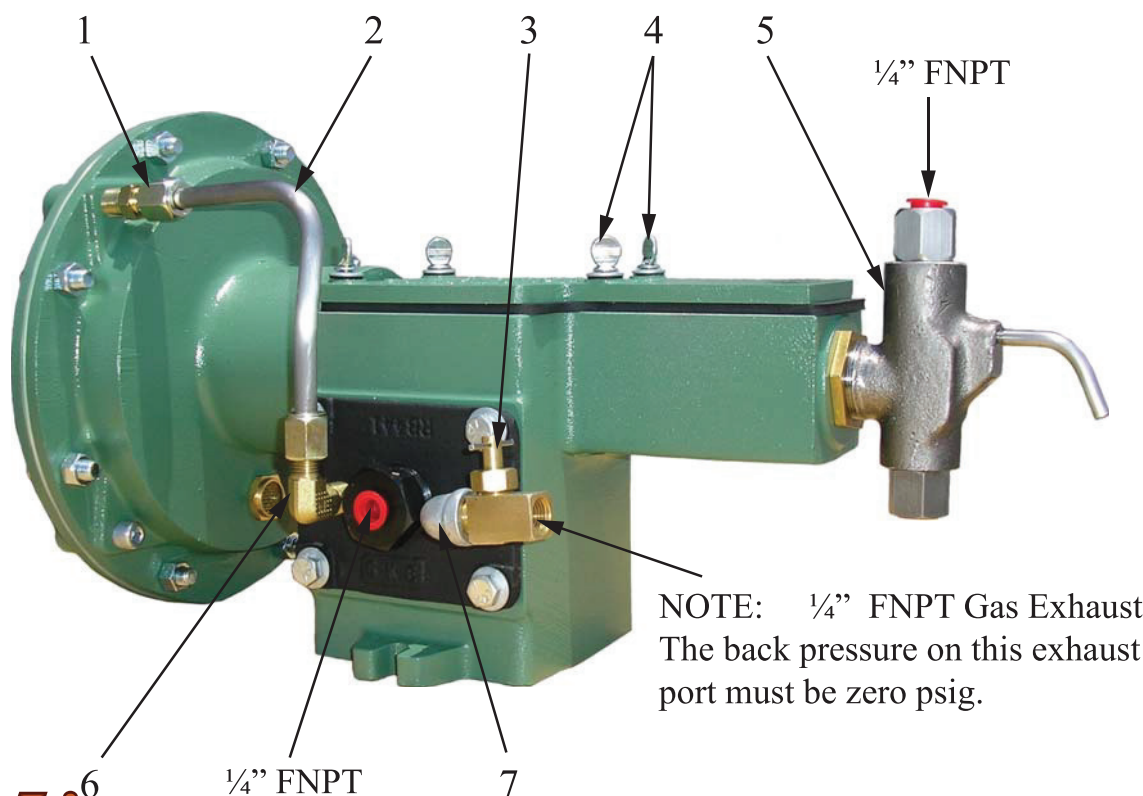
***FLOMORE***

*Different By Design*

# *5200 Series Injector*



# 5200 Series Injector



NOTE: 1/4" FNPT Gas Exhaust  
The back pressure on this exhaust  
port must be zero psig.

## Parts List

| Item # | Part #     | # Req'd. | Description                                  | Material                                                   |
|--------|------------|----------|----------------------------------------------|------------------------------------------------------------|
| 1      | A-4015     | 1        | Male Connector and Compression Nut Assembly  | Cadmium Plated Carbon Steel                                |
| 2      | B-1193     | 1        | Pilot Valve Line Assembly                    | 303 Stainless Steel Tubing with<br>Cadmium Plated Fittings |
| 3      | A-2489     | 1        | Gas Exhaust Valve                            | Nickle Plated Brass                                        |
| 4      | A-0136     | 4        | Wing Screws                                  | Cadmium Plated Steel                                       |
| 5      | See Page 8 | 1        | Injector Head                                | See Page 8                                                 |
| 6      | A-4016     | 1        | Elbow Connector and Compression Nut Assembly | Cadmium Plated Carbon Steel                                |
| 7      | A-0075     | 1        | Street Ell                                   | Cadmium Plated Carbon Steel                                |
| 8      | A-0664     | 1        | 5 Gallon Tank                                | 304 Stainless Steel                                        |
|        | A-1539     |          | 10 Gallon Tank                               |                                                            |
| 9      | A-3118     | 1        | Connector                                    | Polypropylene                                              |
| 10     | A-3116     | 1        | Elbow Connector and Compression Nut Assembly | Polypropylene                                              |
| 11     | A-0950     | 1        | Base                                         | Steel                                                      |
| 12     | A-3123     | 1        | 3/8" x 22" Suction Line                      | Polypropylene                                              |
| 13     | A-0167     | 4        | Cut Washer                                   | Steel                                                      |
| 14     | A-0425     | 2        | Lock Washer                                  | Steel                                                      |
| 15     | A-0144     | 1        | Hex Nut                                      | Steel                                                      |
| 16     | A-0142     | 1        | Hex Head Cap Screw                           | Cadmium Plated Steel                                       |
| 17     | F-0871     | 1        | 5 Gallon Tank Gauge                          | ♦                                                          |
|        | A-1285     |          | 10 Gallon Tank Gauge                         |                                                            |

\*Parts not pictured

# *Installation and Operating Instructions*

First check for the following items shipped loose, not installed on the pump: (1) ¼" male x female line check, (1) A-0315 packing gland wrench, and (1) A-1497 priming valve.

1. Blow or clean dirt or other objects from gas supply line, if pressure exceeds 35 PSI reduce with regulator at pump. Do not connect to the small ¼" valve (A-2489) this is the gas exhaust.
2. Install the furnished line check at the point of injection noting the flow arrow on the valve. Connect the discharge line into the ¼" FNPT in both the line check and the top discharge bushing (A-1496) of the head assembly. (Make sure this line is clear of debris.)
3. If pumping from a liquid source other than our 5 gallon reservoir (A-0664) we recommend the use of our liquid level drum gauge (F-0871). This will allow you to conserve costly chemicals by accurately setting the pumping rate desired. It further gives a visual check that the pump is functioning properly. Connect the suction line to the drum gauge and to the bottom suction bushing. It is important this line be clear of any foreign material.
4. Install the "L" shaped priming valve (A-1497) into the small threaded hole in the injection head, leave it partially open.
5. Add a lightweight SAE 5 oil to that portion of the reservoir that contains the spring (A-1820) you can see after removing the top cover (B-0548) and gasket (A-1546). Pour oil on top of the thrust rod and fill to the bottom of this rod.
6. Open the main gas shut-off valve and the small gas exhaust (A-2489). The pump will start automatically. Keep hands and fingers away from the moving parts.
7. Check priming valve (A-1497) opening for air bubbles in liquid being pumped. As soon as bubbles stop, close priming valve and adjust pump for desired SPM and pumping rate. A quick check of packing gland nut (A-4104) to see if there is packing leakage, if so tighten slightly with wrench furnished. **Do not overtighten** because it may stall pump and/or cause excessive packing wear.
8. Replace cover and gasket with thumb screws.

## *Applications*

- The introduction of de-emulsifiers, solvents, corrosion inhibitors, de-scaling agents and oxygen scavengers.
- Water treatment
- Injection of methanol in gas pipelines
- Injection of surfactant (soap) into low pressure gas wells with high water content.

## *Accessories & Optionals*

- Teflon or Viton Packing
- Slow Speed Controller
- Microswitch Valve Controller
- CxC Non-packing Head Assembly

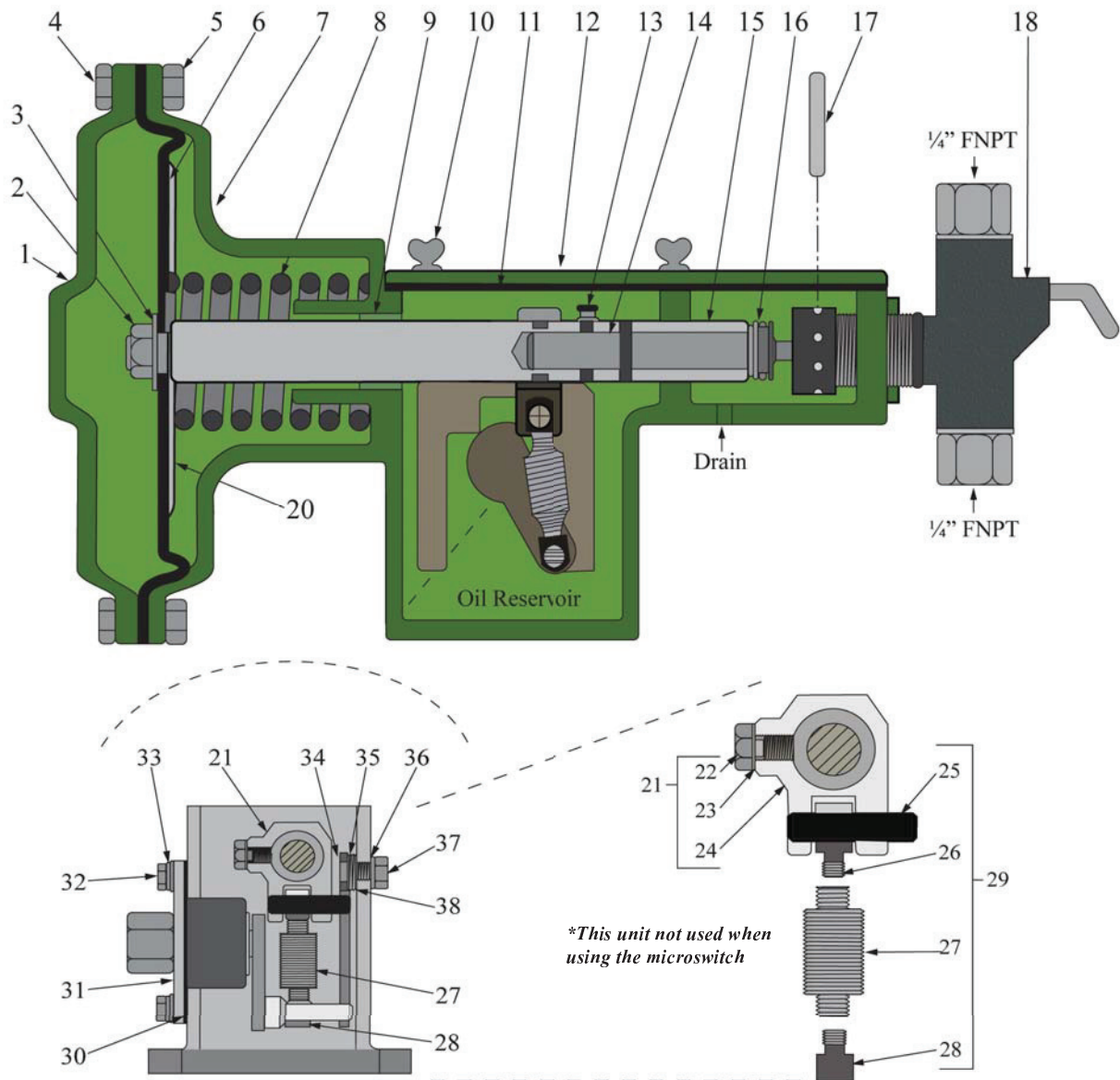
## *Sour Gas Trim*

5200 Series Injectors are furnished with sour gas trim as standard.



# 5200 Series Injector

## Cross Section



# 5200 Series Injector

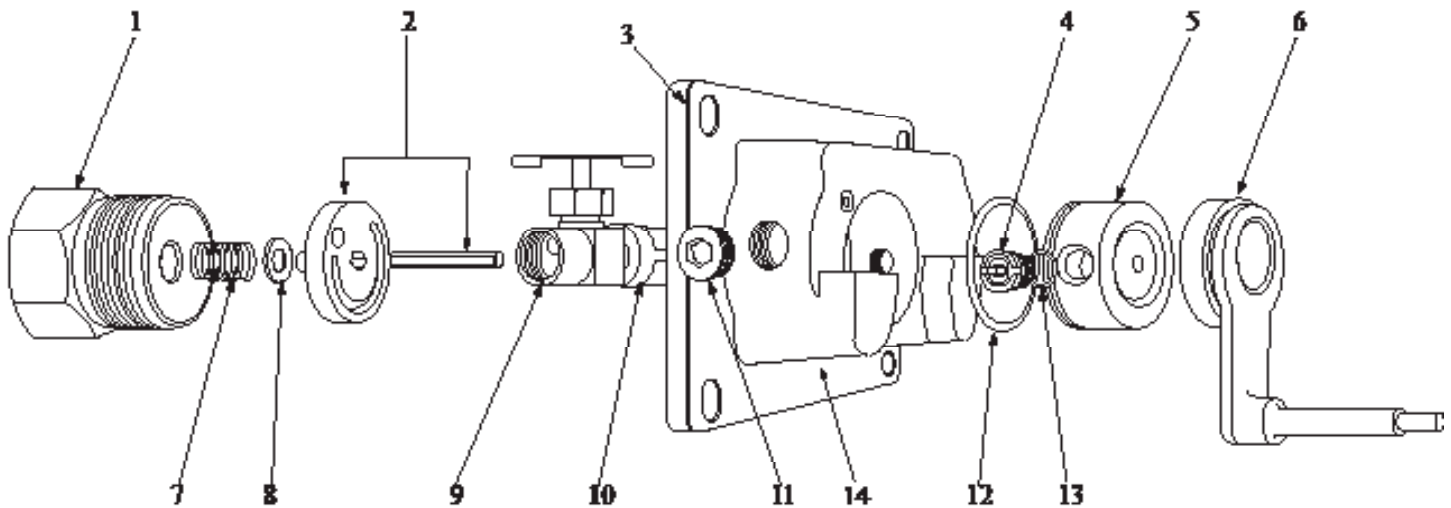
## Parts List

| Item # | Part #     | # Req'd. | Description               | Material                        |
|--------|------------|----------|---------------------------|---------------------------------|
| 1      | C-0252     | 1        | Diaphragm Cover           | Aluminum                        |
| 2      | A-3320     | 1        | Locknut                   | Cadmium Plated Steel            |
| 3      | A-3321     | 1        | Washer                    | Cadmium Plated Heavy Steel      |
| 4      | A-0139     | 8        | Hex Head Cap Screw        | Steel                           |
| 5      | A-2207     | 8        | Hex Nut                   | Steel                           |
| 6      | C-0290     | 1        | Molded Diaphragm          | Buna-N, Nylon                   |
| 7      | D-0251     | 1        | Housing                   | Aluminum                        |
| 8      | A-1821     | 1        | Return Spring             | Cadmium Plated Carbon Steel     |
| 9      | B-0001     | 1        | Bearing                   | Bronze                          |
| 10     | A-0136     | 4        | Wing Screws               | Cadmium Plated Steel            |
| 11     | A-1546     | 1        | Gasket                    | Buna-N                          |
| 12     | B-0548     | 1        | Cover                     | Aluminum                        |
| 13     | A-1828     | 1        | Adjusting Pin             | Steel                           |
| 14     | B-0447SS   | 1        | Rod Adapter               | 303 Stainless Steel             |
| 15     | B-0444SS   | 1        | Thrust Rod                | 303 Stainless Steel             |
| 16     | A-0290     | 1        | Pin                       | Steel                           |
| 17     | A-0315     | 1        | Gland Wrench              | Steel                           |
| 18     | See Page 8 | 1        | Injector Head             | See Page 8                      |
| 19     | A-1835     | 1        | Air Vent                  | Brass                           |
| 20     | B-0438     | 1        | Diaphragm Plate           | Steel                           |
| 21     | A-1832     | 1        | Stirrup Sub-Assembly      | Aluminum and Steel              |
| 22     | A-1829     | 1        | Hex Head Screw            | Steel                           |
| 23     | A-3406     | 1        | Internal Tooth Lockwasher | Cadmium Plated Carbon Steel     |
| 24     | B-0471     | 1        | Trip Stirrup              | Aluminum                        |
| 25     | A-2355     | 1        | Roll Pin                  | Steel                           |
| 26     | A-1838     | 1        | Spring Adapter (top)      | Steel                           |
| 27     | A-1820     | 1        | Flipper Spring            | Steel                           |
| 28     | A-1838     | 1        | Spring Adapter (bottom)   | Steel                           |
| 29     | A-1831     | 1        | Stirrup Assembly          | ♦                               |
| 30     | A-0058     | 1        | Pilot Valve Gasket        | Fiber                           |
| 31     | C-0446     | 1        | Pilot Valve               | ♦                               |
| 32     | A-0141     | 4        | Hex Head Machine Screw    | Cadmium Plated Carbon Steel     |
| 33     | A-0425     | 4        | Lockwasher                | Cadmium Plated Steel            |
| 34     | A-1827     | 1        | Bumper Plate Screw        | Steel                           |
| 35     | A-1823     | 1        | Bumper Plate              | Steel                           |
| 36     | A-0459     | 1        | Light Lockwasher          | Cadmium Plated Steel            |
| 37     | A-3323     | 1        | Hex Nut                   | Cadmium Plated Semifinish Steel |
| 38     | A-0746     | 5        | Washer                    | Steel                           |

\* Recommended Spare Parts

\*\*Parts packaged separately

# 5200 Series Replaceable Seat



**NOTE:** Using small amount of grease, lubricate Items #12 and #13, o'rings, before and after installation on Item #5. This will keep o'rings in place and facilitate the pressing of the valve seat into position.

## Parts List

| Item # | Part # | # Req'd. | Description            | Material        |
|--------|--------|----------|------------------------|-----------------|
| 1      | C-0495 | 1        | Disc Retainer          | Steel           |
| 2      | C-4147 | 1        | Valve Disc and Pin     | Stainless Steel |
| 3      | C-0441 | 1        | Pilot Valve Body       | Ductile Iron    |
| *4     | C-0463 | 2        | Seat Seal Screw        | Steel           |
| 5      | C-0451 | 1        | Valve Seat             | Steel           |
| 6      | B-0440 | 1        | Flipper Arm Assembly   | Steel           |
| 7      | A-0077 | 1        | Spring                 | Steel           |
| 8      | A-0579 | 1        | Washer                 | Stainless Steel |
| 9      | A-2489 | 1        | Valve                  | Brass           |
| 10     | A-0075 | 1        | Street Elbow           | Steel           |
| 11     | C-3386 | 1        | Flush Seal Plugs       | Steel           |
| 12     | C-0485 | 1        | Seat Seal O'Ring       | Buna-N          |
| *13    | C-0474 | 2        | Seat Seal Screw O'Ring | Buna-N          |
| 14     | A-0058 | 1        | Gasket                 | Fiber           |

\* Recommended Spare Parts

\*\*Items make up a C-0500 Pilot Valve Seat and Disc Assembly

# 5200 Series Components

## A-0675 & A-0676 Line Check

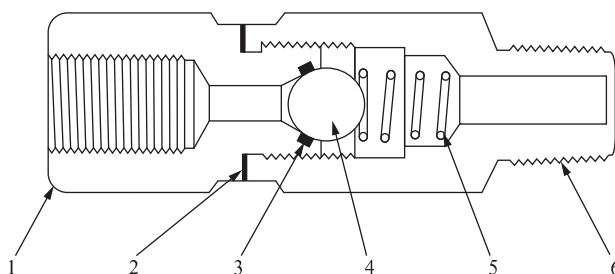
### Parts List

| Item # | Part # | # Reqd. | Description | Material            |
|--------|--------|---------|-------------|---------------------|
| 1      | A-0678 | 1       | Inlet Body  | Brass               |
|        | A-1297 | 1       | Inlet Body  | 303 Stainless Steel |
| 2      | A-1574 | 1       | Washer      | 304 Stainless Steel |
| 3      | A-0479 | 1       | O'Ring      | Buna-N              |
|        | A-2580 | 1       | O'Ring      | Viton               |
| 4      | A-0054 | 1       | 3/8" Ball   | 316 Stainless Steel |
| 5      | A-0391 | 1       | Spring      | Steel               |
| 6      | A-0679 | 1       | Outlet Body | Brass               |
|        | A-1296 | 1       | Outlet Body | 303 Stainless Steel |

\* Recommended Spare Parts

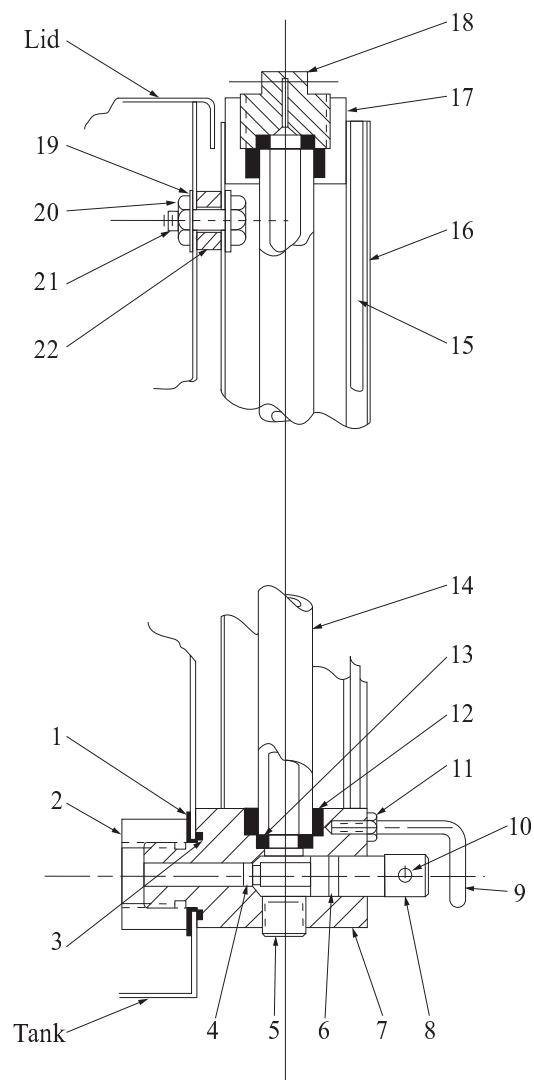
\*\*A-0675 Only

\*\*\*A-0676 Only



## F-0871 Model 2000 Tank Gauge

### Parts List



| Item # | Part #    | # Reqd. | Description         | Material        |
|--------|-----------|---------|---------------------|-----------------|
| 1      | A-0306    | 1       | Washer              | Teflon          |
| 2      | F-0871.01 | 1       | 3/4-16" Nut         | Stainless Steel |
| 3      | F-0871.03 | 1       | 2-019 O'Ring        | Viton           |
| 4      | F-0871.04 | 1       | 2-006 O'Ring        | Viton           |
| 5      | A-0138    | 2       | 1/4" NPT Pipe Plug  | Steel           |
| 6      | F-0871.06 | 1       | 2-011 O'Ring        | Viton           |
| 7      | F-0871.07 | 1       | Valve Body          | Stainless Steel |
| 8      | F-0871.08 | 1       | Valve Stem          | Stainless Steel |
| 9      | F-0871.11 | 1       | Valve Stop          | Stainless Steel |
| 10     | F-0871.09 | 1       | 1/8" x 2" Roll Pin  | Stainless Steel |
| 11     | F-0871.10 | 1       | Valve Stop Nut      | Stainless Steel |
| 12     | 15470     | 2       | Tube Gasket         | Buna-N          |
| 13     | D-0013    | 2       | Tube End Seal       | Viton           |
| 14     | A-3102    | 1       | Glass Tube          | Glass           |
| 15     | F-0871.15 | 1       | Scale               | Acrylic         |
| 16     | F-0871.16 | 1       | Housing             | Stainless Steel |
| 17     | F-0871.17 | 1       | Top Block           | Aluminum        |
| 18     | F-0871.18 | 1       | Vent Plug           | Stainless Steel |
| 19     | A-4092    | 2       | Stat-O-Seal         | Steel           |
| 20     | F-0871.20 | 1       | 1/4-20" Nut         | Stainless Steel |
| 21     | F-0871.21 | 1       | 1/4-20" x 3/4" Bolt | Stainless Steel |
| 22     | A-0987    | 1       | Spacer              | Stainless Steel |

# Injector Heads

## Alternate Construction

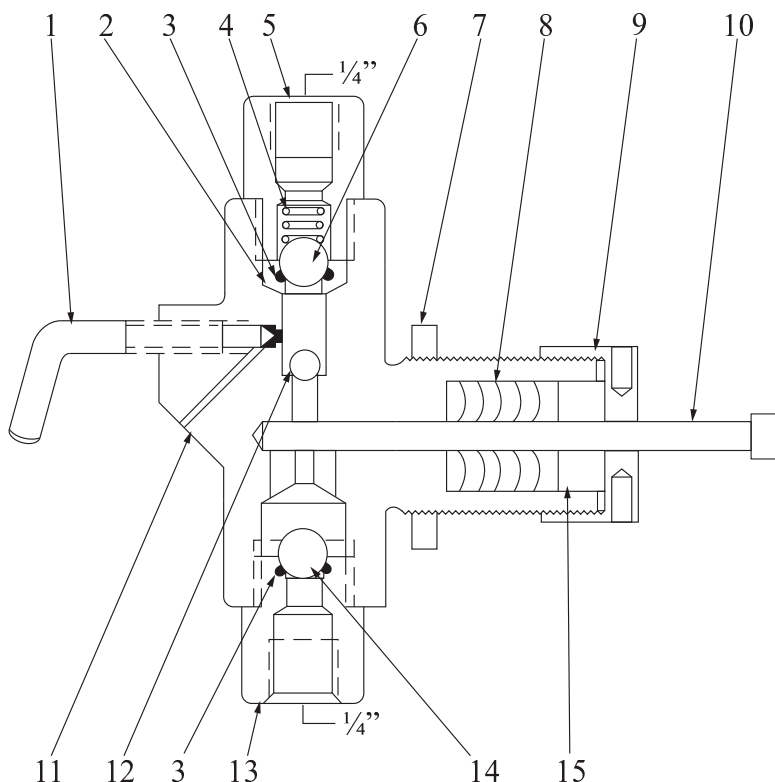
| Item # | Part # | Description                           | Material            |
|--------|--------|---------------------------------------|---------------------|
| 2      | A-0806 | Top Seat Assembly (Metal-to-Metal)    | 303 Stainless Steel |
| 3      | A-2580 | O'Ring                                | Viton               |
| 8      | ◆      | 3/16" Plunger Packing                 | Hard                |
|        | A-3967 |                                       | Viton               |
|        | A-3966 |                                       | Teflon              |
|        | A-2295 |                                       | Hard                |
|        | A-4102 | 1/4" Plunger Packing                  | Viton               |
|        | A-1642 |                                       | Teflon              |
|        | A-1875 |                                       | Hard                |
|        | A-4101 | 3/8" Plunger Packing                  | Viton               |
|        | A-1234 |                                       | Teflon              |
|        | A-1874 | 1/2" Plunger Packing                  | Hard                |
|        | A-4103 |                                       | Viton               |
|        | A-1012 |                                       | Teflon              |
| * 13   | A-0771 | Bottom Seat Assembly (Metal-to-Metal) | 316 Stainless Steel |
| * 14   | A-0053 | 1/2" Suction Ball                     | 316 Stainless Steel |

\*Recommended Spare Parts

\*\*Items must be used together

## Plunger Packing Chart

| Material | Maximum Discharge Pressure (PSIG) |      |      |      |
|----------|-----------------------------------|------|------|------|
|          | 3/16"                             | 1/4" | 3/8" | 1/2" |
| Buna-N   |                                   | 1500 | 1500 | 1500 |
| Viton    |                                   | 3500 | 3500 | 3500 |
| Hard     |                                   | 6000 | 6000 | 3500 |
| Teflon   |                                   | 1500 | 1500 | 1500 |



## Parts List

| Item # | Part # |        |        |        | # Req'd. | Description                    | Material                               |
|--------|--------|--------|--------|--------|----------|--------------------------------|----------------------------------------|
|        | 3/16"  | 1/4"   | 3/8"   | 1/2"   |          |                                |                                        |
| ◆      | ◆      | B-0166 | B-0203 | B-0496 | 1        | Head Assembly                  | Ductile Iron with Stainless Steel Trim |
|        | B-1299 | B-0755 | B-0756 | B-0732 |          |                                | All Stainless Steel                    |
| 1      | A-4027 | A-1497 |        |        | 1        | Priming Valve                  | 303 Stainless Steel                    |
| * 2    | B-0737 |        |        |        | 1        | Top Seat Assembly              | 303 Stainless Steel                    |
| * 3    | A-0479 |        |        |        | 1        | Suction & Discharge O'Ring     | Buna-N                                 |
| 4      | A-0077 |        |        |        | 1        | Ball Check Spring              | 316 Stainless Steel                    |
| 5      | A-1496 |        |        |        | 1        | Top Bushing                    | 303 Stainless Steel                    |
| 6      | A-0054 |        |        |        | 1        | 3/8" Large Top Ball            | 316 Stainless Steel                    |
| 7      | A-0225 |        |        |        | 1        | Locknut                        | Brass                                  |
| * 8    | A-3969 | A-1461 | A-1456 | A-0959 | 1        | Plunger Packing                | Buna-N                                 |
| 9      | A-4104 |        |        |        | 1        | Plunger Packing Gland Nut      | 303 Stainless Steel                    |
| 10     | A-4747 | A-1312 | A-1745 | A-1876 | 1        | Plunger                        | 17-4 pH Stainless Steel                |
| 11     | ◆      | C-0275 | C-0276 | C-0272 | 1        | Body                           | Ductile Iron                           |
|        | C-2040 | C-0291 | C-0425 | C-0349 |          |                                | Stainless Steel                        |
| 12     | ◆      | A-0126 |        |        | 1        | 1/4" Small Top Ball            | 316 Stainless Steel                    |
| * 13   | B-1216 | B-0736 |        |        | 1        | Bottom Seat Assembly           | 303 Stainless Steel                    |
| * 14   | A-0054 |        |        |        | 1        | 3/8" Suction Ball              | 316 Stainless Steel                    |
| 15     | A-4332 | A-1463 | A-0957 | A-1219 | 1        | Plunger Packing Gland          | 303 Stainless Steel                    |
| 16     | A-0126 | ◆      |        |        | 1        | 1/4" Ball                      | 316 Stainless Steel                    |
| 17     | A-4394 | ◆      |        |        | 1        | Suction Bushing Sealing Washer | 304 Stainless Steel                    |

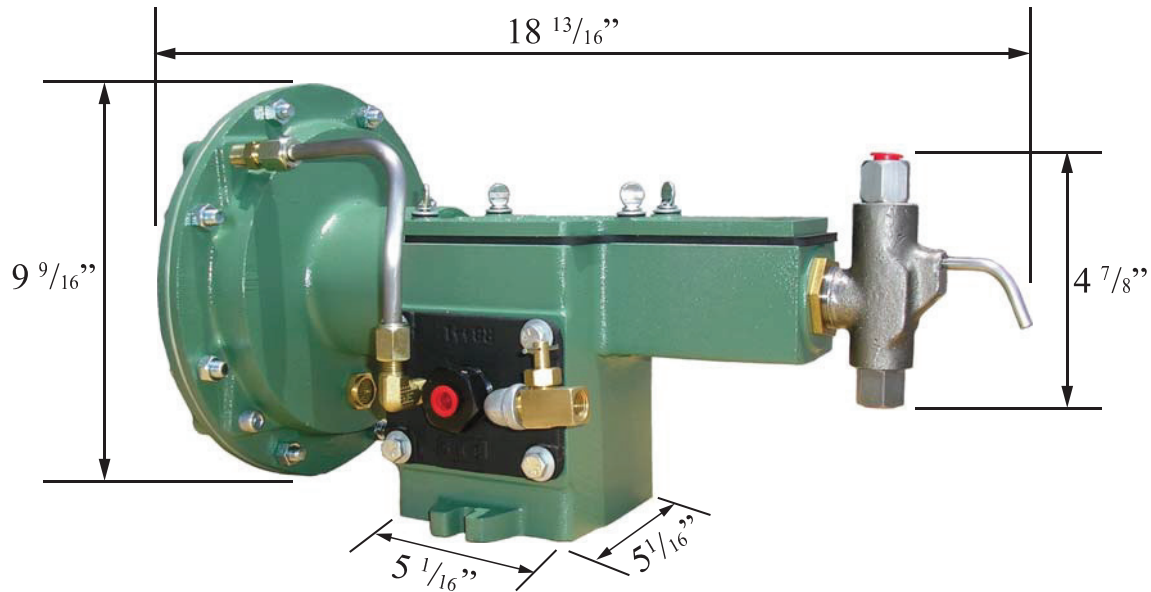
\*Recommended Spare Parts

\*\* Alternate construction available see chart above

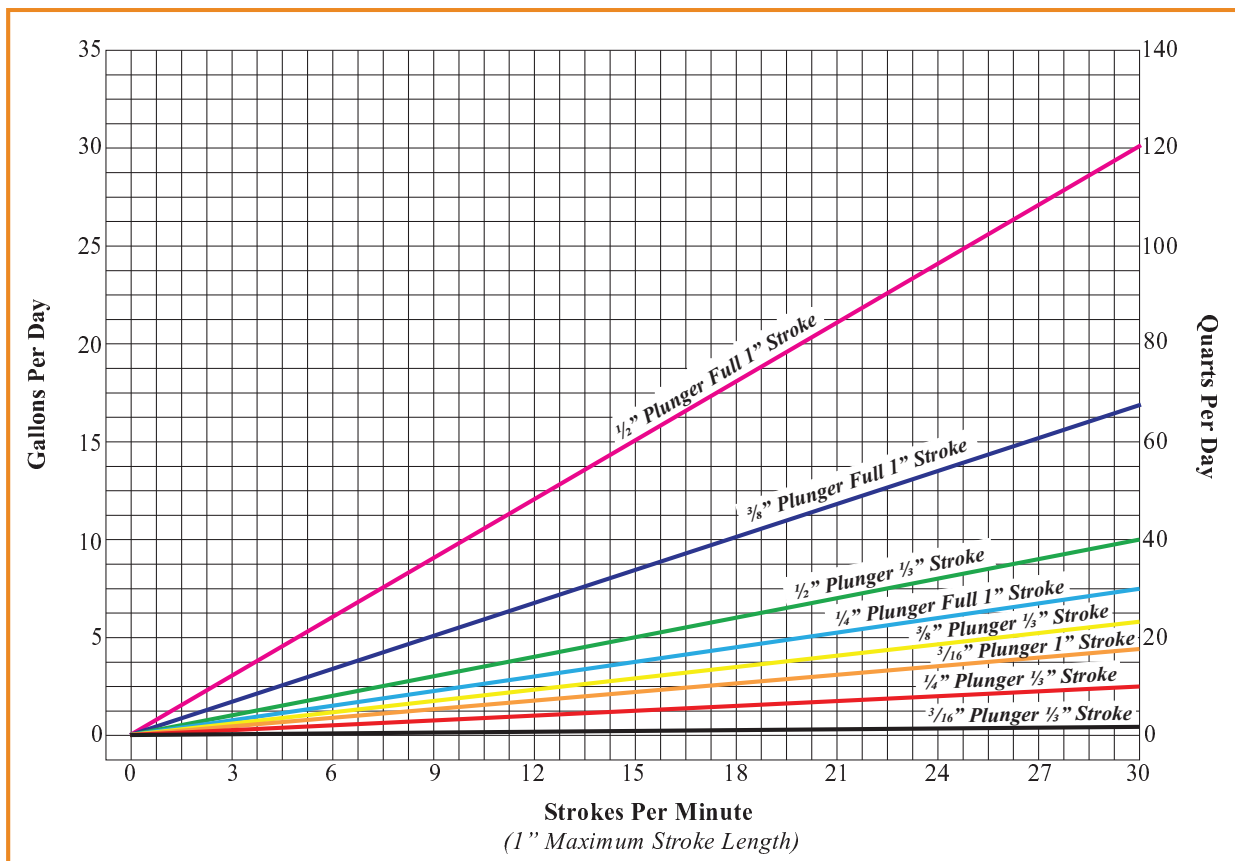


# ***Dimensions and Performance Data***

## ***Dimensions***



## ***5200 Series Gallons Per Stroke***



# Performance Data

## Gas Consumption Chart

| Stroke Length | Piston Size | Injection Pressure (PSI) |      |      |      |      |      |      |      |      |      |      |
|---------------|-------------|--------------------------|------|------|------|------|------|------|------|------|------|------|
|               |             | 100                      | 200  | 500  | 1000 | 1500 | 2000 | 3000 | 3500 | 4000 | 5000 | 6000 |
| 1/3 Stroke    | 3/16"       | 1371                     | 1374 | 1386 | 1407 | 1428 | 1590 | 1635 | 1665 | 1680 | 1725 | 1776 |
|               | 1/4"        | 732                      | 735  | 744  | 810  | 864  | 924  | 1020 | 1065 | 1107 | 1215 | 1491 |
|               | 3/8"        | 360                      | 378  | 444  | 492  | 531  | 555  | 729  | 834  | 942  | 1065 | 1122 |
|               | 1/2"        | 159                      | 162  | 171  | 186  | 213  | 228  | 252  | 285  | ♦    | ♦    | ♦    |
| Full Stroke   | 3/16"       | 457                      | 458  | 462  | 469  | 476  | 530  | 545  | 555  | 560  | 575  | 589  |
|               | 1/4"        | 244                      | 245  | 248  | 270  | 288  | 308  | 340  | 355  | 369  | 405  | 497  |
|               | 3/8"        | 120                      | 126  | 148  | 164  | 177  | 185  | 243  | 278  | 314  | 355  | 374  |
|               | 1/2"        | 53                       | 54   | 57   | 62   | 71   | 76   | 84   | 95   | ♦    | ♦    | ♦    |

## Maximum Recommended Speed Above 1500 PSI Injection Pressure

| Plunger Size | Strokes Per Minute |
|--------------|--------------------|
| 3/16"        | 28                 |
| 1/4"         | 26                 |
| 3/8"         | 14                 |
| 1/2"         | 14                 |

## Power End to Fluid End Ratio

| Plunger Size | Operating Ratio<br>Fluid/Gas |
|--------------|------------------------------|
| 3/16"        | 1200/1                       |
| 1/4"         | 750/1                        |
| 3/8"         | 300/1                        |
| 1/2"         | 180/1                        |

## Pressure / Volume Chart

| Series             | Plunger Size | Maximum Discharge Pressure (PSI) | For Operation Off Air or Gas Pressure to 35 PSI (constant) |                 |                      |                 |
|--------------------|--------------|----------------------------------|------------------------------------------------------------|-----------------|----------------------|-----------------|
|                    |              |                                  | Power Unit *                                               |                 | Chemical Injector ** |                 |
|                    |              |                                  | Model #                                                    | Max. Vol. (GPD) | Model #              | Max. Vol. (GPD) |
| 5200 Standard      | 3/16"        | 1500                             | 52-04                                                      | 4.2             | 52-04T               | 4.2             |
|                    | 1/4"         | 1500                             | 52-01                                                      | 7.5             | 52-01T               | 7.5             |
|                    | 3/8"         | 1500                             | 52-03                                                      | 16.8            | 52-03T               | 16.8            |
|                    | 1/2"         | 1500                             | 52-05                                                      | 32              | 52-05T               | 32              |
| 5210 High Pressure | 3/16"        | 6000                             | 52-14                                                      | 3.65            | 52-14T               | 3.65            |
|                    | 1/4"         | 6000                             | 52-11                                                      | 6.5             | 52-11T               | 6.5             |
|                    | 3/8"         | 6000                             | 52-13                                                      | 7.9             | 52-13T               | 7.9             |
|                    | 1/2"         | 3500                             | 52-15                                                      | 14              | 52-15T               | 14              |

\* Basic pump no tank, base, regulator or gauge (Shipping weight: 22lbs)

\*\* Furnished with 5 gallon stainless steel tank mounted on heavy galvanized steel base with level gauge and suction line, no regulator or gauge (Shipping weight: 32lbs)

# ***Maintenance and Troubleshooting***

## **Oil Thrust Rod**

Put oil on top of thrust rod occasionally, then replace cover.

## **Packing Leakage**

Check for packing leakage, tighten or replace as needed, overtightening will shorten life and may score the plunger which will need to be replaced.

## **Use Correct O'Rings**

Any Flomore pump used to pump methanol or alcohol to prevent freezing must be equipped with buna-n o'rings. Pumps used to pump chemicals should be equipped with viton o'rings, these are located in the top seat (B-0737) and suction bushing (B-0736).

## **Pump Stopped Running and Gas is Escaping**

Should pump stop running but you can hear gas escaping from vent (A-1835) remove diaphragm cover (C-0252) and inspect diaphragm for hole or tear, replace as needed. At this time, visually inspect larger turning spring (A-1821) for breakage. When installing a new diaphragm, put a sealant line Permatex "Form a Gasket" around the center hole on both sides of the diaphragm. This will prevent gas leak in that area. Reinstall diaphragm making sure the small hole on outer edge of diaphragm and diaphragm cover line up with pilot valve gas line that brings gas to the diaphragm chamber.

## **No Gas is Venting from Gas Exhaust Valve**

If you do not hear gas venting, check gas supply and pressure (35PSI max), overpressure and underpressure can cause pump to stall.

## **Pump Stalls in Forward Discharge Position**

Turn off gas supply, check flipper arm spring (A-1820), if it is intact then loosen packing gland nut, packing may be too tight. If pump still does not make return stroke suspect broken return spring (A-1821). (See Pump Stopped Running and Gas is Escaping)

## **Pump Still Stalled**

Check oil reservoir for gas bubbles, a small amount of leakage can be tolerated, however larger amounts of leakage can cause pump to stall. Check supply pressure (35 PSI max), if pressure is within limits the pilot valve (C-0442) may have to be replaced. However, with our replaceable seat and disc assembly (Page 6) only the disk (C-4147) or seat assembly (C-0500) may have to be replaced.

## **Pump is Running but Not Pumping**

There could be air in the injection head, open priming valve (A-1497) until air bubbles in fluid subside. If still not pumping, it is probably the o'ring in the suction bushing is not the correct material (See Use Correct O'Rings).

## **Flipper Arm Spring (A-1820) is Broken**

Drain oil into suitable container and save to replace in reservoir. Remove (C-0446) pilot valve assembly, then remove broken spring from flipper arm (B-0440). Loosen (A-1829) hex screw on the (A-1832) stirrup assembly, rotate assembly, remove (A-2355) rollpin, install new (A-1820) spring slide pilot valve assembly partially in and reattach (A-1838) spring adapter, retighten (A-1829) making sure it is in the groove on the thrust rod, rebolt (C-0446), replace oil and restart pump (See Pump Stalls in Forward Discharge Position and Pump Still Stalled).



## ***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

### ***Kilgore Branch***

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

### ***Weatherford Branch***

2041 FM 920  
Weatherford, TX 76088  
(817) 599-9630  
Fax: (817) 599-9167  
Mike.Mayes@flomore.com

### ***Louisiana Branch***

### ***Cardon Sales Company, LLC***

806 East Main Street, Building I  
Broussard, LA 70518  
(337) 839-1704  
Fax: (337) 839-1706  
bcardon@cardonsales.com