



Stainless Steel Adjustable Chemical Injector

Models 7711, 7712
7713, 7714

FEATURES

- Durable stainless steel orifice and body.
- Convenient adjustment collar with nylon handle for adjusting chemical draw.
- Lightweight, compact unit for optimum space utilization.
- Simple pump discharge line installation or mount directly to the unloader discharge port.

SELECTION: Select the Chemical Injector that meets the flow requirements of the system.

INSTALLATION: The Adjustable Chemical Injector should be mounted downstream from the system regulating device or directly onto the discharge port of one of the various unloaders.

OPERATION: The Chemical Injector is designed to **draw chemical only under low pressure**. It should be used with a double lance fitted with a low and high pressure nozzle.

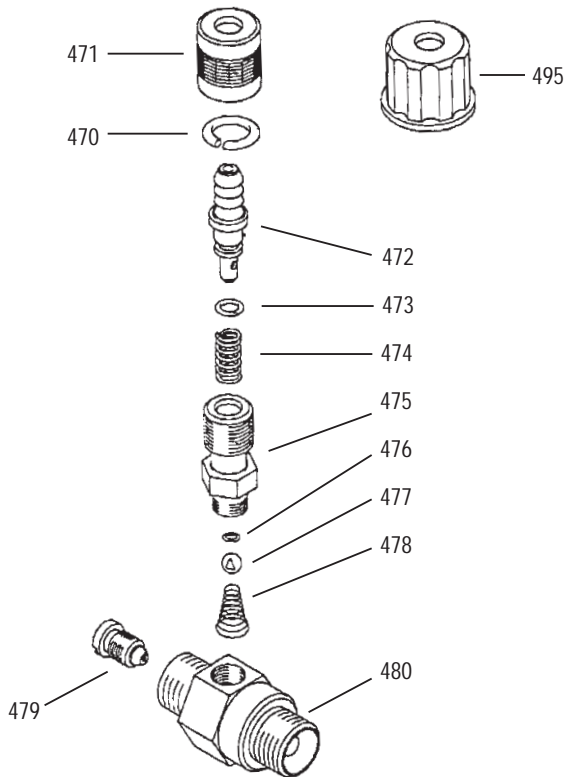
SPECIFICATIONS

| | U.S. Measure | Metric Measure |
|------------------------------|--------------|-------------------|
| MODELS 7711 | | |
| Flow | 2-3 GPM | (7.5-11 L/M) |
| Nozzle Orifice | 1.5 mm | (1.5 mm) |
| MODELS 7712 | | |
| Flow | 2-4 GPM | (7.5-15 L/M) |
| Nozzle Orifice | 1.8 mm | (1.8 mm) |
| MODELS 7713 | | |
| Flow | 4-5 GPM | (15-19 L/M) |
| Nozzle Orifice | 2.1 mm | (2.1 mm) |
| MODELS 7714 | | |
| Flow | 5-6 GPM | (19-23 L/M) |
| Nozzle Orifice | 2.3 mm | (2.3 mm) |
| COMMON SPECIFICATIONS | | |
| Max. Pressure | 3145 PSI | (235 BAR) |
| Max. Temperature | 180°F | (82°C) |
| Barb Hose | 1.4" | (1.4") |
| Inlet Port | 3/8" NPTM | (3/8" NPTM) |
| Discharge Port | 3/8" NPTM | (3/8" NPTM) |
| Weight | 6.3 oz. | (.18 kg) |
| Dimensions | 2" x 1" x 3" | (51 x 39 x 76 mm) |

When chemical is desired, the system must be switched over to the low pressure nozzle to draw chemical. The amount of chemical draw may be varied by turning the adjustment collar completely into the body to stop draw and approximately 1-1/2 turns counterclockwise for maximum chemical draw. During normal high pressure operation there will be a pressure drop across the injector. See performance chart.

“Customer confidence is our greatest asset”

EXPLODED VIEW



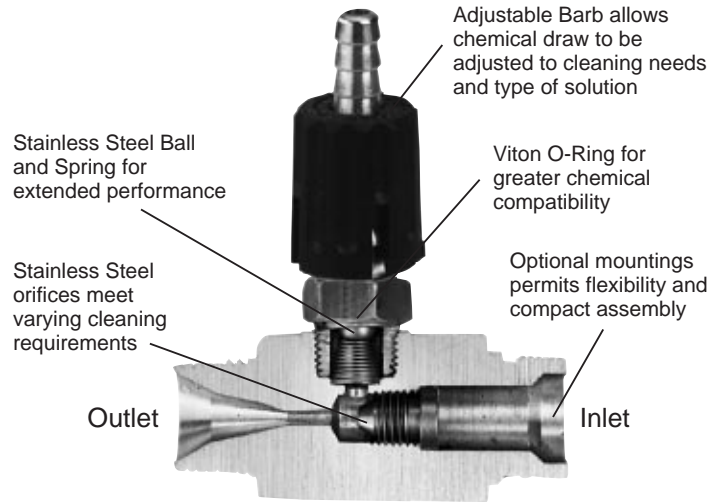
PARTS LIST

| ITEM | PART NO | MATL | DESCRIPTION | MODEL USED | QTY |
|------|---------|------|---------------------------|------------|-----|
| 470 | 33943 | S | Snap Ring | All | 1 |
| 471 | 33940 | S | Collar, Adjustment | All | 1 |
| 472 | 33941 | SSS | Barb, Adjustable | All | 1 |
| 473 | 33955 | FPM | O-Ring | All | 1 |
| 474 | 33500 | S | Spring | All | 1 |
| 475 | 33906 | S | Retainer, Ball Seat | All | 1 |
| 476 | 33956 | PTFE | O-Ring | All | 1 |
| 477 | 34620 | SS | Ball | All | 1 |
| 478 | 33501 | SS | Spring | All | 1 |
| 479 | 32071 | SSS | Injector Orifice (1.5 mm) | 7711 | 1 |
| | 32072 | SSS | Injector Orifice (1.8 mm) | 7712 | 1 |
| | 32073 | SSS | Injector Orifice (2.1 mm) | 7713 | 1 |
| | 32074 | SSS | Injector Orifice (2.3 mm) | 7714 | 1 |
| 480 | — | | Body | All | 1 |
| 495 | 33911 | NY | Handle, Adjustment | All | 1 |

MATERIAL CODES (Not Part of Part Number):

FPM=Fluorocarbon (Viton) NY=Nylon PTFE=Polytetrafluoroethylene (Teflon)
S=304SS SS=316SS SSS=416SS

CUTAWAY



CAUTION:

Deduct the pressure drop shown in the performance chart from your desired system pressure to arrive at the maximum high pressure nozzle rating. This is essential to avoid over-pressurizing the pump.

Example:

$$\left[\begin{array}{l} \text{System - 4 GPM, 2000 PSI} \\ \text{Injector - 7713} \\ \text{Pressure Drop - 375 PSI} \end{array} \right] = \left[\begin{array}{l} \text{Low Pressure Nozzle - 250 PSI} \\ \text{Max. High Pressure Nozzle - 1625 PSI} \end{array} \right]$$

Flush system after chemical application to prevent clogging and to prolong life.

PERFORMANCE CHART

| Model | Desired Flow | Orifice Size (mm) | Low PSI Nozzle (max. injecting pressure less hose friction loss) | Max. Chemical Draw (oz/min) | Pressure Drop across nozzle (deduct from Hi-Pressure) |
|-------|--------------|-------------------|--|-----------------------------|---|
| 7711 | 2 GPM | 1.5 | 240 psi | 59 | 375 |
| 7712 | 2 GPM | 1.8 | 225 psi | 60 | 150 |
| 7712 | 3 GPM | 1.8 | 275 psi | 60 | 300 |
| 7712 | 4 GPM | 1.8 | 450 psi | 60 | 500 |
| 7713 | 3 GPM | 2.1 | 225 psi | 54 | 150 |
| 7713 | 4 GPM | 2.1 | 375 psi | 54 | 250 |
| 7713 | 5 GPM | 2.1 | 600 psi | 54 | 400 |
| 7714 | 3 GPM | 2.3 | 150 psi | 50 | 125 |
| 7714 | 4 GPM | 2.3 | 225 psi | 50 | 220 |
| 7714 | 5 GPM | 2.3 | 300 psi | 50 | 350 |
| 7714 | 6 GPM | 2.3 | 340 psi | 50 | 500 |

Optimum performance of chemical injector occurs with a 35 ft. high pressure hose and a minimum 3/8 I.D. The type of hose, extended lengths, reduced I.D. and fittings may create back pressure in excess of the low pressure nozzle rating and prevent the injector from drawing chemical. Deduct hose friction loss from the above PSI nozzle. See High Pressure Guide. Consult factory for assistance with other options.

TROUBLESHOOTING

| | |
|----------------------------------|---|
| No Chemical Draw: | <ul style="list-style-type: none"> • Low pressure nozzle sized for too high pressure. • Air leak in suction line. • Worn injector orifice. |
| Leaking Around Adjusting Collar: | <ul style="list-style-type: none"> • O-ring worn. • Foreign material in injector. |

WARRANTY

90 Day Warranty

Refer to complete Cat Pump Warranty for further information.

Products described hereon are covered by one or more of the following U.S. patents 3558244, 3652188, 3809508, 3920356, 3930756 and 5035580

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