



## Stainless Steel Chemical Injector

**Adjustable Models** 7721, 7722  
7723, 7724

**Fixed Models** 7732, 7733  
7734

### FEATURES

- Durable stainless steel orifice and body.
- Convenient adjustment collar for adjusting chemical draw.
- Lightweight, compact unit for optimum space utilization.
- Simple pump discharge line installation.

**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.

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

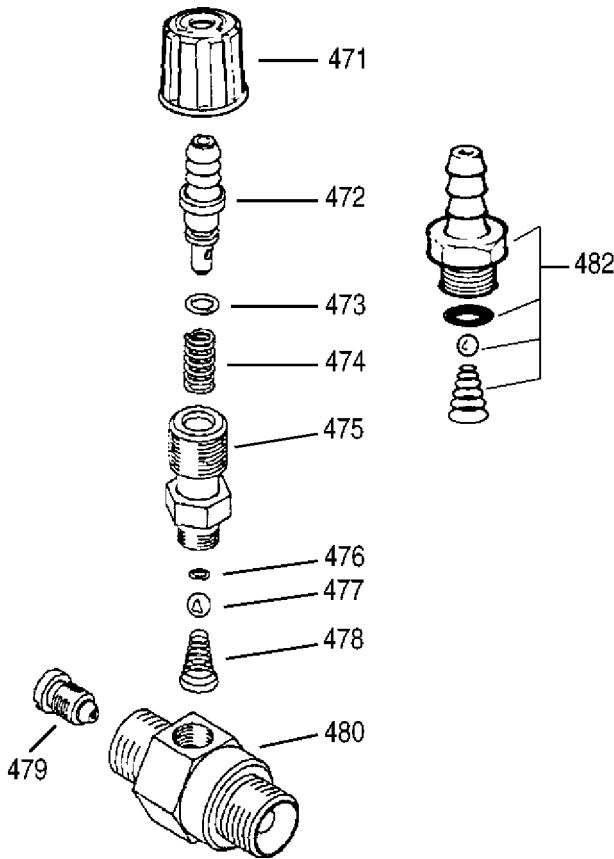
**When chemical is desired, the system must be switched over to the low pressure nozzle to draw chemical.** The amount of chemical draw may be varied by turning the adjustment collar completely into the body to stop draw and approximately 1-1/2 turns counterclockwise for maximum chemical draw. During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

### SPECIFICATIONS

	U.S. Measure	Metric Measure
<b>MODEL 7721</b>		
Flow.....	2-3 GPM	(7.6-11.4 L/M)
Nozzle Orifice .....	1.5 mm	(1.5 mm)
<b>MODELS 7722 AND 7732</b>		
Flow.....	2-4 GPM	(7.6-15 L/M)
Nozzle Orifice .....	1.8 mm	(1.8 mm)
<b>MODELS 7723 AND 7733</b>		
Flow.....	4-5 GPM	(15-19 L/M)
Nozzle Orifice .....	2.1 mm	(2.1 mm)
<b>MODELS 7724 AND 7734</b>		
Flow.....	5-6 GPM	(19-23 L/M)
Nozzle Orifice .....	2.3 mm	(2.3 mm)
<b>COMMON SPECIFICATIONS</b>		
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)	

*“Customer confidence is our greatest asset”*

## EXPLODED VIEW



## PARTS LIST

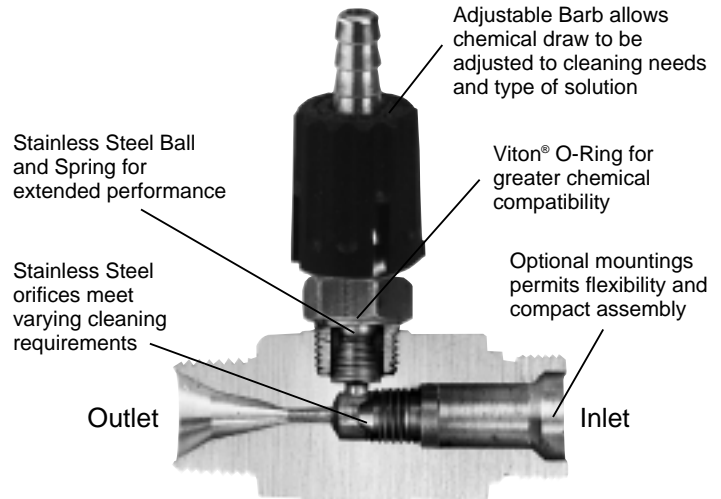
ITEM	P/N	MATL	DESCRIPTION	MODEL USED	QTY
471	33949	NY	Handle, Adjustable	All	1
472	33941	SSS	Barb, Adjustable	All	1
473	33955	FPM	O-Ring, Hose Barb	All	1
474	33500	S	Spring	All	1
475	39906	S	Retainer, Ball/Seat	All	1
476	33956	PTFE	O-Ring, Retainer	All	1
477	33502	SS	Ball, 11/32"	All	1
478	33501	SS	Spring	All	1
479	32071	SSS	Injector Orifice (1.5 mm)	7721	1
	32072	SSS	Injector Orifice (1.8 mm)	7722, 7732	1
	32073	SSS	Injector Orifice (2.1 mm)	7723, 7733	1
	32074	SSS	Injector Orifice (2.3 mm)	7724, 7734	1
480	—	S	Body	All	1
482	31480		Assy, Barb, Fixed	All	1

*Italics are optional items.*

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:

$$\left[ \begin{array}{l} \text{System - 4 GPM, 2000 PSI} \\ \text{Injector - 7723} \\ \text{Pressure Drop - 375 PSI} \end{array} \right] = \left[ \begin{array}{l} \text{Low Pressure Nozzle - 250 PSI} \\ \text{Max. High Pressure Nozzle - 1625 PSI} \end{array} \right]$$

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)
7721	2 GPM	1.5	240 psi	59	375
7722, 7732	2 GPM	1.8	225 psi	60	150
7722, 7732	3 GPM	1.8	275 psi	60	300
7722, 7732	4 GPM	1.8	450 psi	60	500
7723, 7733	3 GPM	2.1	225 psi	54	150
7723, 7733	4 GPM	2.1	375 psi	54	250
7723, 7733	5 GPM	2.1	600 psi	54	400
7724, 7734	3 GPM	2.3	150 psi	50	125
7724, 7734	4 GPM	2.3	225 psi	50	220
7724, 7734	5 GPM	2.3	300 psi	50	350
7724, 7734	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"> <li>• Low pressure nozzle sized for too high pressure.</li> <li>• Air leak in suction line.</li> <li>• Worn injector orifice.</li> </ul>
Leaking Around Adjusting Collar:	<ul style="list-style-type: none"> <li>• O-Ring worn.</li> <li>• Foreign material in injector.</li> </ul>

## 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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