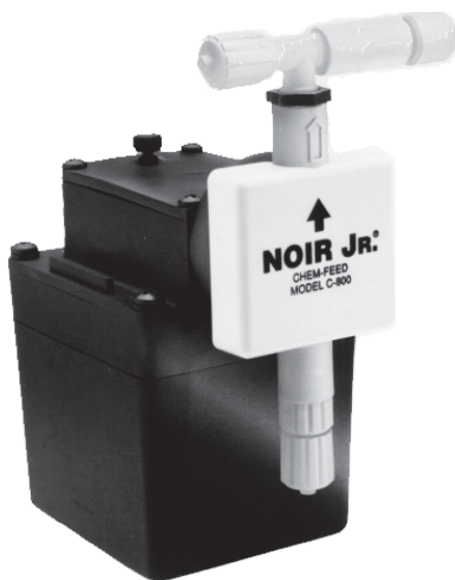


Chem-Feed Installation Instructions



C-800 Series Positive Displacement Injector Pump

**IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS**

Website: www.Blue-White.com

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Blue-White
Industries, Ltd.

5300 Business Drive
Huntington Beach, CA 92649

80000-211

09/18/2012

IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed.

READ AND FOLLOW ALL INSTRUCTIONS

CAUTION

This Pump Has Been Evaluated by ETL testing laboratories for Use With Water Only.

WARNING

Risk of electric shock - This pump is supplied with a grounding conductor and grounding-type attachment plug. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding-type receptacle.”

Motor Wiring Color Codes

Voltage	Hot	Common	Ground
115V	Black	Blue	N/A
230V	Black	Red	N/A
24V	Blue	White	N/A

Introduction

Thank you for purchasing the C-800 positive displacement metering pump. The C-800 is designed to inject chemicals into piping systems. All models are equipped with a top mounted mechanical feed rate adjustment knob.

Specifications

Maximum Working Pressure	80 psig / 5.5 bar*
Maximum Fluid Temperature	130° F / 54°C
Output Accuracy	+/- 10% of maximum (water @ 70° F, 0 psig, and 5' suction lift)
Ambient Temperature Range	14 to 110° F / -10 to 43°C
Duty Cycle	Continuous
Maximum Viscosity	1,000 Centipoise
Maximum Suction Lift	up to 6 ft. water
Power Requirements	115V60Hz 20 Watts 230V60Hz 20 Watts 24V60Hz 20 Watts

C-800 Features

- All ball bearing motor (permanently lubricated).
- Built-in priming valve.
- Maximum outlet pressure capability of 80 PSIG.
- Pumphead material = Polypropylene
- Diaphragm material = PTFE coated EP
- O-ring material = Viton
- Corrosion and weather resistant Valox housing.
- Includes:
 - Foot valve & strainer
 - Weight (for suction tube)
 - 5' suction tubing
 - 5' discharge tubing
 - Injection fitting with internal back-flow check valve
 - mounting hardware.

Model Number	Strokes Per Minute	GPH	ML/Min	Oz/Min	Max PSI
C8101	30	.40	25	.85	80
C8201	45	.50	37	1.25	80
C8301	65	.80	50	1.70	80

Feed rates shown are at 0 PSI.

As pressure increases maximum feed rate will decrease.

How To Install the C-800

CAUTION: PROPER EYE AND SKIN PROTECTION MUST BE WORN WHEN INSTALLING AND SERVICING THE C-800

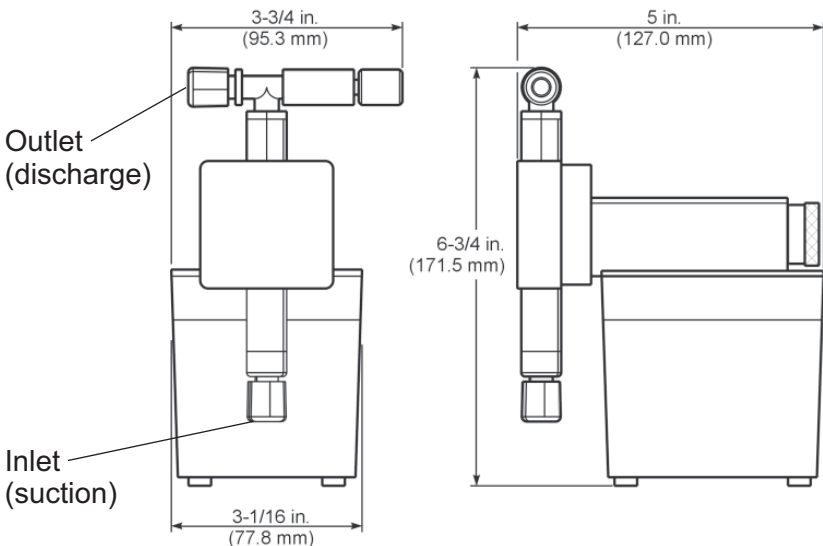
Note: All diagrams are strictly for guideline purposes only. Always consult an expert before installing the **C-800** into specialized systems. The **C-800** should be **serviced by qualified persons only.**

Mounting Location

Choose an area located near the chemical supply tank, chemical injection point and electrical supply. Although the pump is designed to withstand outdoor conditions, a cool, dry, well ventilated location is recommended. Install the pump where it can be easily serviced.

- Mount the pump to a secure surface or wall using the enclosed hardware. Wall mount to a solid surface only. Mounting to drywall with anchors is not recommended.
- Keep the outlet (discharge) tubing as short as possible. Longer tubing increases the back pressure at the pump tube.
- Do not mount the pump directly over your chemical container. Chemical fumes may damage the unit. Mount the pump off to the side or at a lower level than the chemical container.
- Mounting the pump lower than the chemical container will gravity feed the chemical into the pump. This “flooded suction” installation can reduce the time required to prime the pump. Install a shut-off valve, pinch clamp or other means to halt the gravity feed to the pump during servicing.
- Your solution tank should be sturdy. Keep the tank covered to reduce fumes.
- Be sure your installation does not constitute a cross connection with the drinking water supply. Check your local plumbing codes.

C-800



Fluid Connections

Caution: Be sure your installation does not constitute a cross connection. Check your local plumbing codes.

- A. Connect the suction tubing (from chemical supply) to the inlet valve on the pumphead (bottom valve).
- B. A strainer assembly should be used if particles, which can clog the pumphead valves, are present in the solution being injected.
- C. Connect the discharge tubing to the outlet valve on the pumphead (top valve).
- D. Trim the discharge tubing leaving only enough slack to connect it to the injection point. Note: for best results, install the discharge tubing in a continual up slope.

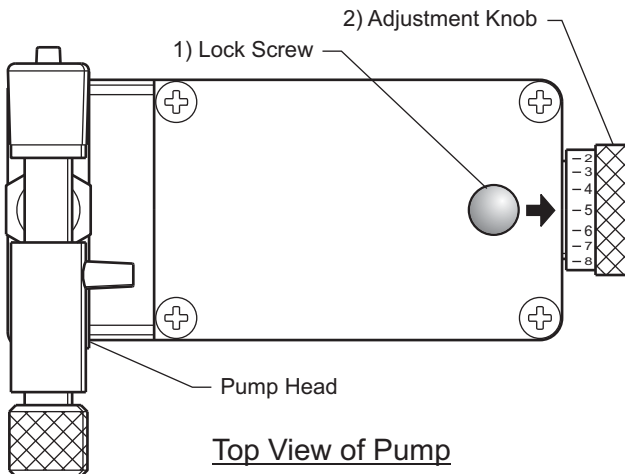
Priming

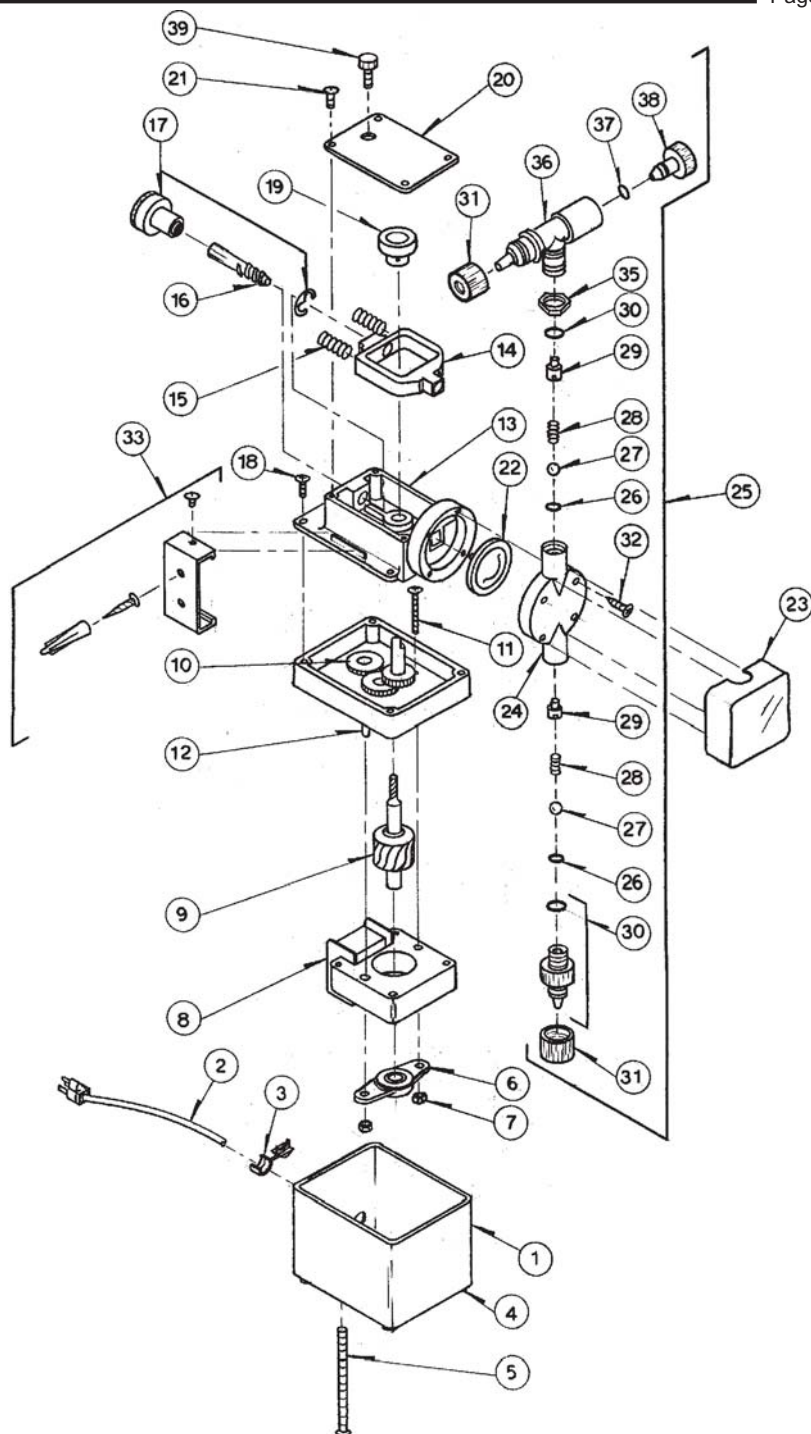
Caution: The use of protective clothing and goggles is recommended.

- A. To aid in priming and to reduce vapor lock, hold the discharge tubing in a continual upward slope **AWAY FROM YOUR FACE AND BODY.**
- B. Loosen the Lock Screw (1) and then turn the Adjustment Knob (2) to "MAX".
- C. Turn on the injector.
- D. When the fluid nears the injection end of the discharge tubing, turn OFF the injector and connect the tubing to the injection point.
- E. Check all connections for leaks.
DO NOT OVER TIGHTEN.

Adjusting the Feed Rate.

- A. Turn the pump ON.
- B. Loosen the Lock Screw (1) and then turn the Adjustment Knob (2) to desired setting.
- C. Tighten the Lock Screw (1)





C-800 Parts List

Key	Part No.	Catalog No.	Description	Amt.
1.	70000-751	C-808-115	Cover S/A W/Cord and feet 115v	1
	70000-752	C-808-230	Cover S/A W/Cord and feet 230v	
	70000-757	C-808-24	Cover S/A W/Cord and feet 24v	
2.	90010-130	C-823-115	Power cord 115v	1
	90010-133	C-823-230	Power cord 230v	
	70000-645	C-823-24	Power cord 24v	
3.	90008-027	C-833	Cord connector 115v	1
	90008-050	A-033	Cord connector 230v/24v	
4.	90003-513	C-1517	Rubber cover feet	4
5.	90011-134	C-825N	Screw, cover, 6-32 x 2.00 phil hd	2
6.	70000-028	C-612PB	Bearing bracket with bracket 1	
7.	90011-001	C-830	Nut, bearing bracket, 8-32 Hex	2
8.	70000-742	C-815P-1	Stator S/A M-31 115v Blue/Black	1
	70000-743	C-815P-2	Stator S/A M-31 230v Red/Black	
	70000-744	C-815P-4	Stator S/A M-31 24v Blue/White	
9.	70000-741	C-816PN	Rotor M-31 with shaft and spacers	1
10.	72000-091	C-818K-30	Kit, gear replace, 30 RPM	1
	72000-092	C-818K-45	Kit, gear replace, 45 RPM	
	72000-093	C-818K-60	Kit, gear replace, 60 RPM	
11.	90011-133	C-825	Screw, motor, 8-32 x 2.25 phil hd	1
12.	70000-760	C-818	Gear-case body with bearing and pins	1
13.	70000-740	C-801	Gear-case cover with bearing	1
14.	90002-119	C-813	Stirrup .125 stroke	1
15.	90006-006	C-1514N	Spring, stirrup return	2
16.	76000-595	C-805N	Adjusting rod .125 stroke	1
17.	70000-753	C-802	Knob S/A with spring and retainer	1
18.	90011-130	C-824	Screw, gear-case cover #10 x .5	4
19.	70000-131	C-1507A	Drive cam S/A with bearing .125	1
20.	76000-855	C-803N	Cover, drive assembly	1
21.	90011-132	C-819	Screw, drive cover,#8 x .375 4	
22.	70000-750	C-806ET	Diaphragm S/A EP-PTFE	1
23.	70004-067	C-825L	Pump head faceplate	1
24.	90002-124	C-825-1	Pump head	1
25.	70001-167		Pump head S/A complete ceramic/vit	1
26.	90003-099	C-807V	O-ring, valve seat, viton	2
	90003-102	C-807E	O-ring, valve seat, EP	
	90003-103	C-807S	O-ring, valve seat, silicone	
27.	90008-185	C-808C	Ball valve, ceramic	2
	90008-189	C-808T	Ball valve, PTFE	
28.	90006-018	C-854	Spring, valve	1
29.	90002-126	C-810	Cartridge valve insert	2
30.	70000-761	C-827-4V	Adapter with O-ring, viton	2
	70000-762	C-827-4E	Adapter with O-ring,EP	
	70000-763	C-827-4S	Adapter with O-ring, silicone	
31.	90002-130	C-830-4	Tube nut 1/4" OD tubing	2
32.	90011-131	C-820	Screw, pump head #10 x .750	4
33.	72000-094	C-822K	Wall mounting kit	1
35.	76000-848		Lock nut	1
36.	76000-825		Pressure relief valve body	1
37.	90003-004	2-010	O-ring / viton	1
38.	76000-846		Pressure relief valve stem	1

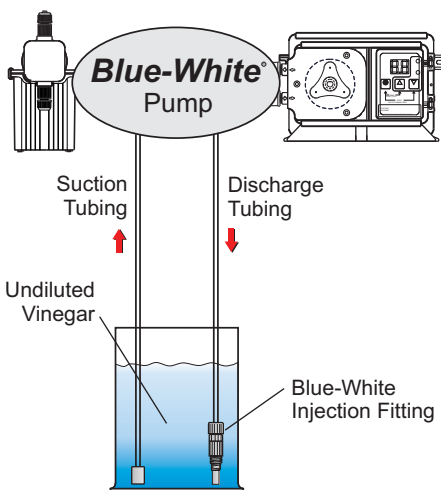
How to clean your pump and fittings

Periodically clean the injection fitting / check valve assembly, especially when injecting fluids that calcify such as sodium hypochlorite.

These lime deposits and other build ups can clog the fitting, which will increase the back pressure and interfere with the pump accuracy. **Warning:** Severe cases can physically damage the injection fitting and the increase back pressure can cause increased wear on the pump components; gears, bearings and tubes.

Cleaning your injection fitting / check valves.

1. Wash the pump, tubing and fittings out with clean water.
To do this, place the "suction tubing" and "discharge tubing" (injection fitting too) in a container full of clean water.
2. Let the pump run in the clean water for a couple of minutes to remove all traces of chemical.
3. Remove the lime deposits with undiluted vinegar.
To do this, place the "suction tubing" and "discharge tubing" in a container full of undiluted vinegar. See image to the right.
4. Let the pump run in the undiluted vinegar for 5 to 10 minutes (longer if needed).
5. Flush out your pump, tubing and fittings to remove any excess vinegar.
To do this, repeat **steps 1 and 2**.



Tip: If you have a diaphragm pump head that needs cleaning, follow the same steps above. Refer to the exploded view in your instruction manual when assembling the pump head.

Tip: Follow the same steps above to clean a foot valve.

Tip: Standard Injection Fittings are made of Polypropylene. PVDF Injection Fittings are recommended for use with aggressive chemicals which are not compatible with Polypropylene.

PVDF Injection Fittings should be considered for use with chlorine at elevated temperatures.

Tip: Blue-White recommends that you purchase a spare Injection Fitting for your pump. This is commonly the most neglected part of most pump installations. You can purchase a spare Injection Fitting for around \$30 (US).

Go to our website for more information. <http://www.Blue-White.com>

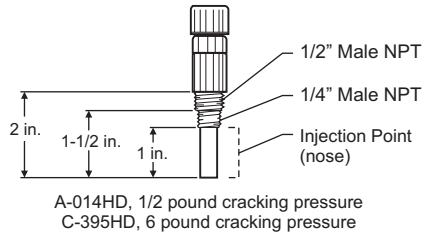
Injection Fitting (check Valve) installation.

The Injection Fitting is designed to install directly into either 1/4" or 1/2" female pipe threads (NPT).

You can trim the injection point (nose) if needed. See image to the right.

The nose section is designed to inject the chemical away from the wall of your pipe.

We do offer another Injector Fitting for smaller pipe sizes (such as 1/2" and 1/4"). This fitting does not have the same length at the injection point (nose). See images to the right.

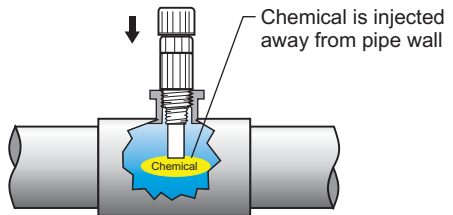


A-014PHD, 1/2 pound cracking pressure
C-395PHD, 6 pound cracking pressure

Install the Injection Fitting directly into a tee fitting. The solution must inject directly into the flow stream.

Use PTFE® thread sealing tape on the pipe threads of the Injection Fitting.

This illustration shows the Injection Fitting installed in a tee fitting using the 1/2" threads.

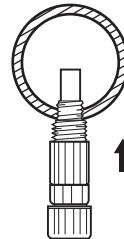


You can install the Injection Fitting directly into your pipe.

Drill the correct size hole and then tap the hole for 1/4" or 1/2" NPT.

Use PTFE thread sealing tape on the pipe threads of the Injection Fitting.

This illustration shows the Injection Fitting installed directly into pipe using the 1/4" threads.



Exploded View (ball check valve)

Cut an appropriate length of discharge tubing (opaque tube). Push one side of the tubing onto the compression barb of the Injection Fitting. Use the tube nut to secure the tube. Hand tighten only.

The exploded view drawing above shows the "tube nut" on the far right hand side.

The part to the left side of the "tube nut" is the "compression fitting" that the tube must fit onto.

Cleaning:

The Injection Fitting (check valve) will require periodic cleaning, especially when injecting fluids that calcify such as sodium hypochlorite.



Note: All diagrams are strictly for guideline purposes only. Always consult an expert before installing the Chem-Feed/FlexFlo pump on specialized systems. The Chem-Feed/FlexFlo should be serviced by qualified persons only.

Caution: Always wear protective clothing, face shield, safety glasses and gloves when working on or near your metering pump. Additional precautions should be taken depending on the solution being pumped. Refer to MSDS precautions from your solution supplier.

Authorized Service Centers
ARKANSAS**BT Environmental, Inc**

Bill Thomason
225 Castleberry Street
Hot Springs, AR 71902
501-624-3837

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company****(Repair Center)**

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Penryn, CA 95663

Pool-Tech, Inc.

3471 Mt. Diablo Blvd.
Lafayette, CA 94549
415-284-1400

Swimco Electric Co.

753 Camden Avenue
Campbell, CA 95008
408-378-2607

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(SOUTHERN)****Blue-White Industries
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5422 Business Drive
Huntington Bch. CA
92649
714-893-8529

COLORADO**Denver Winpump**

655 Depew Street
Lakewood, CO 80214-
2494
303-233-1121

CONNECTICUT**Cronin-Cook &
Associates**

24 West Road
Vernon, CT 06066
203-875-0544

FLORIDA**AAA Electric Motor
Services**

1131 N.E. 45th Street
Ft. Lauderdale, FL 33334
305-772-7501

**All American Pool &
Patio**

2021 Curry Ford Road
Orlando, FL 32806
407-898-8722

**Rice Pump & Motor
Repair**

5788 N. Powerline Road
Ft. Lauderdale FL 33309
305-776-6049

American Pump

7580-A W. Tennessee St.
Tallahassee, FL 32304
904-575-9618

Del Ray Electric

11 N.E. 2nd Avenue
Del Ray Beach, FL
33444
407-278-3976

Jerry Lee Chemical Co.

3407 W. Old Fairfield
Drive
Pensacola, FL 32505
904-432-9929

Picard Chemical

1670 S. Congress
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W. Palm Beach, FL
33406
407-965-3434

V.J. Mini & Son, Inc.

1581 N. Dixie Highway
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305-946-0920

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Alsip, IL 60658
708-597-5558

MARYLAND**Century Pool Service,
Inc**

5020 Nicholson Court,
#201
Kensington, MD 20895
301-231-8999

NEVADA**Swim-In Enterprises,
Inc.**

1314 S. Main Street
Las Vegas, NV 89104
702-384-4223

NEW YORK**Sherwood Specialties,
Inc.**

412 Smith Street
Rochester, NY 14608
716-546-1211

NORTH CAROLINA**Southern Industrial
Sales**

1903 Herring Avenue
Wilson, NC 27893
919-237-2500

PENNSYLVANIA**Armor Electric, Inc.**

1425 Selinger Avenue
Erie, PA 16505
814-838-2034

SOUTH DAKOTA**Son-Aqua Distributing**

Jim Robinson
2447 W. Main Street
Rapid City, SD 57702
605-343-7716

TENNESSEE**Rock City Machine**

307 3rd Avenue South
Nashville, TN 37201
615-244-1371

TEXAS**Alamo Water Refiners**

13700 Hwy. 90 West
San Antonio, TX 78245
512-677-8400

EGCO Industries

8505 Director Row
Dallas, TX 75247
214-631-6885

**Miracle Water
Conditioning Co.**

Robert Shelton
1011 Oakmead Drive
Arlington, TX 76011
817-640-6188

LIMITED WARRANTY

Your new pump is a quality product and is warranted to be free of defects as set down in this policy. All parts, including rubberized goods, and labor are covered under warranty for 90 days from the date of purchase. Used peristaltic pump tube assemblies are not warranted. Parts, excluding rubberized goods, are covered under warranty for 12 months from the date of purchase.

Warranty coverage does not include damage to the pump that results from misuse, carelessness, abuse or alteration. Only the repair or the replacement of the pump is covered. Blue-White Industries does not assume responsibility for any other loss or damage.

Warranty status is determined by the pump's serial label and the sales invoice or receipt. The serial label must be on the pump and the pump must be accompanied by the sales invoice or receipt to obtain warranty coverage. The warranty status of the pump will be verified by Blue-White or a factory authorized service center.

Please be advised that although safety tested by independent testing laboratories, **Caution - This Pump Has Been Evaluated For Use With Water Only. *Installers and operators of these devices must be well informed and aware of the precautions to be taken when injecting various chemicals -especially those considered hazardous or dangerous.***

Should it become necessary to return an injector for repair or service, you must attach information regarding the chemical used as some residue may be present within the unit which could be a hazard to service personnel.

Blue-White Industries will not be liable for any damage that may result by the use of chemicals with their injectors and it's components. Thank you.

PROCEDURE FOR IN WARRANTY REPAIR

Carefully pack the pump to be repaired. To assist in troubleshooting, please include the foot strainer and injection/check valve fitting if possible. Enclose a brief description of the problem as well as the original invoice or sales receipt showing the date of purchase. The receipt will be returned with the unit. Prepay all shipping costs. COD shipments will not be accepted. Warranty service must be performed by the factory or an authorized service center. Damage caused by improper packaging is the responsibility of the sender.



Users of electrical and electronic equipment (EEE) with the WEEE marking per Annex IV of the WEEE Directive must not dispose of end of life EEE as unsorted municipal waste, but use the collection framework available to them for the return, recycle, recovery of WEEE and minimize any potential effects of EEE on the environment and human health due to the presence of hazardous substances. The WEEE marking applies only to countries within the European Union (EU) and Norway. Appliances are labeled in accordance with European Directive 2002/96/EC.

Contact your local waste recovery agency for a *Designated Collection Facility* in your area.

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