

INJECT-a-CURE

Turf Solution Injection System

by SDI

Owner's Set-Up and Operations Manual



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Inject-a-Cure

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Table of Contents

General Overview -----	2
Features and Specifications -----	3
Pre-Installation -----	4
Installation -----	5
Daily Operation -----	7
Calibration Chart and Load Capacity -----	8
Gypsum Treatment Rate -----	9
Amendments Compatibility Chart -----	11
Freshwater Bypass Operation -----	12
Trouble Shooting -----	13
Safety -----	14
Maintenance -----	15
Warranty -----	18

General Overview

The “*Inject-a-Cure*” Solution Injection System is designed to allow a variety of soil amendments to be thoroughly blended and then injected directly into irrigation water. It works great in all types of irrigation systems including flood, sprinklers, micro-sprinklers, drip and sub-surface tape. A high pressure diaphragm pump is standard on all models for flexibility in injection pressure adjustment.

Its’ simplicity, durability and virtually maintenance-free design makes this unit unique among other injection systems. With its thicker agitation bar and patented super strength bearings, the “*Inject-a-Cure*” system is the only injector of its kind that does not require frequent grease and maintenance.

In normal use, the heavy-duty fiberglass main tank is first filled with water. The fresh water source can either be an existing pressurized irrigation line or with an optional fill pump, water may be pumped from a ditch, pond or other similar source. With the machine running, solution gypsum is then added to the water. Gypsum and other amendments may be conveniently added by 50 pound bag, 1 - ton bag or self-feeding silo.

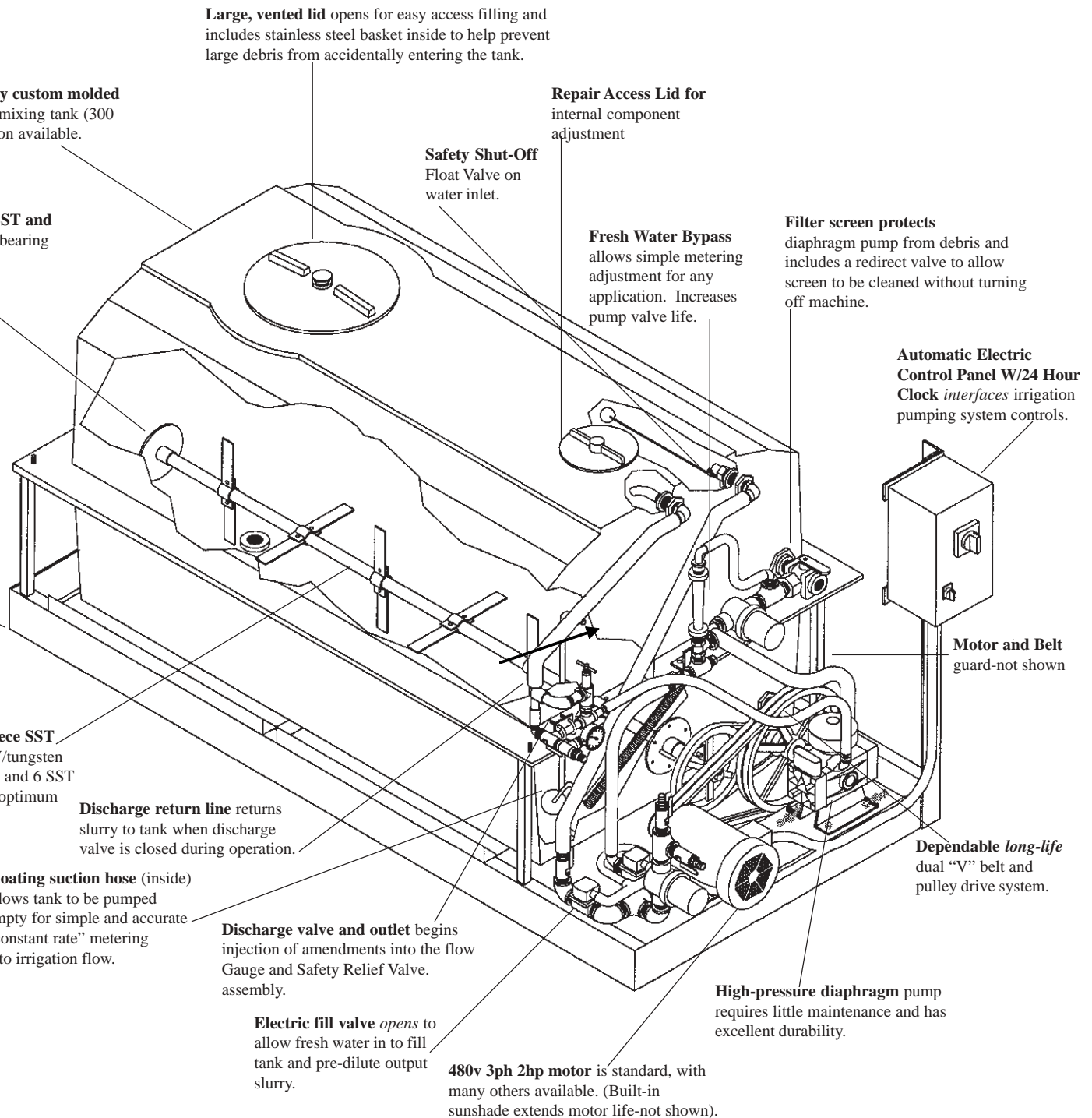
The stainless steel agitation blades near the bottom of the tank mix the solution thoroughly to form a uniform slurry. The high-pressure diaphragm pump injects the mixture into the irrigation flow at a predetermined rate throughout the irrigation set.

Another unique feature of the “*Inject-a-Cure*” injection system is its ability to inject a solution either on a declining curve basis or at a fixed or flat rate, without additional equipment. Each model is equipped with a ball float valve and a floating suction intake. Controlled irrigation users can simply leave the fresh water intake valve open thereby maintaining a constant fluid level in the tank.

Anyone desiring a specific dilution rate may shut the fill valve. The slurry will then be output at a constant rate without dilution throughout the irrigation set as the level in the main tank is drawn down. Install a simple timer and the machine will automatically refill itself and be ready for the next use.

Inject-a-Cure Equipment Features:

Turf Model IC300 and IC600-6E2M-Turf Automatic Control System



600 Gallon

300 Gallon

Dimensions:	109"	Long	84"
	51"	Wide	44"
	53"	High	44"
Weight	850	Pounds	430

Pre-Installation

Important Safety Information

Please read carefully before operating pump.

- Use of a pressure relief device on the discharge side of the pump is included and required to prevent damage from pressure build-up if the discharge is closed or blocked while the power source is still running.
- **Warning: DO NOT pump corrosive or hazardous chemicals or flammable/explosive fluids. DO NOT use in explosive atmospheres.** The pump should be used only with liquids compatible with the pump component materials. **DO NOT** pump any amendments/chemicals not shown on the Approved Amendments Chart enclosed. **Personal injury or property damage may result and the warranty will be void.** If you have any questions about using the pump please call.
- Do not operate pump above set rpm. If a pulley must be replaced for any reason, be certain the replacement is the same diameter as the original factory pulley.
- Do not pump at pressures higher than 200 psi (150 psi maximum continuous).
- Operate the pump between a temperature range of 45 to 140° F.
- Make certain the power source conforms to the requirements of your equipment and that the motor is wired to turn in the proper direction (note arrow on belt guard).
- Never operate the pump and motor without the belt guard mounted in place.
- Always disconnect all power before repairing or servicing the pump.
- Release all pressure within the system before servicing any component.
- Drain all liquids from the system before servicing.
- Secure the discharge lines before starting the pump. An unsecured discharge line may whip, causing personal injury and/or property damage.
- Check hoses for weak or worn condition before each use. Make certain that all connections are tight and secure.
- Periodically inspect the pump and the system components. Perform routine maintenance as required.
- When wiring an electrically driven pump, follow all electrical and safety codes, as well as the most recent National Electrical Code (NEC) and the Occupational Safety and Health Act(OSHA).
- **WARNING: Because of risk of electrical shock, all wiring should be done by a qualified electrician.**
- **WARNING: Do not handle a pump or pump motor with wet hands or when standing on a wet or damp surface or in water.**
- Do not operate a gasoline engine in an enclosed area. Be sure the area is well ventilated.
- Use only pipe, hose and fittings rated for maximum rated pressure of pump or pressure at which pressure relief valve is set. **DO NOT USE “USED” PIPE OR HOSE!**
- Do not use this system for pumping anything intended for human or animal consumption.

Installing the Inject-a-Cure Injection System:

1. Select a Location

- a. Locate the injector on a smooth hard surface. Keep in mind you will need to tap into a pressurized line to fill the solution tank.
- b. If your irrigation system has a main filter, the tap for the solution injection port should be located before the filter.
- c. You will also need to allow access to the machine for filling and maintenance.

2. Pre-Operation Set-Up:

- a. Check the ball float located on the inside of the main tank at the fresh water inlet fitting. Adjust the ball arm by bending it so that it does not come in contact with the top of the tank when in the fully closed (up) position.
- b. If your model has a lower level float valve near the bottom, make certain the fitting is tight and that the ball float moves freely in a vertical plane.
- c. Insert the stainless steel filter basket into top hatch opening.

3. Fresh Water Supply:

- a. Locate or install a 3/4" NPT fitting at the pressurized fresh water source. To minimize air getting into the unit, the water supply fitting should be located at 3 or 9 o'clock and downstream of any filters. Also, install a water pressure regulator set at 20-50 psi. Install a shut-off valve (not included) and attach a 3/4" hose barb.
NOTE: You must install a valve to

shut off the water supply to the injection system for maintenance and safety. A shut off valve is also required in order to use the pump-down capability of the Inject-a-Cure unit.

- b. Attach a length of hose from the hose barb to the fresh water inlet located on front of the main tank, down at the bottom near the vertical sight glass. Be sure to use hose rated for the highest pressure in your irrigation system and attach each end with two hose clamps.
- c. If filtered water is not already available, splice a debris screen into the filter hose near the fresh water inlet fitting.

4. Solution Injection Hook-Up:

- a. Locate or install a 1/2" NPT fitting (not included) into the irrigation system at a point *after* any main filters. For best results, solution should be injected at about a 45° angle, pointing in the direction of the flow of water and at least 2 feet downstream of the inlet water supply to solution unit.
- b. Attach a 1/2" hose barb and one end of the high-pressure hose (included) to the injection tap.
- c. Attach the other end of the 1/2" hose to the discharge outlet located on the front of the Inject-a-Cure unit.

5. Electrical Connection

- a. The electric motor that drives the pump and agitation bar is pre-wired to a mag starter in a weather tight control box to turn the unit on and off. Ensure the supply voltage is correct

for the motor (i.e., 110, 240/480 volt, single or 3 phase). A breaker must be in place to automatically disconnect the power at the source in case of accidental contact or downed lines.

Inject-a-Cure Electrical Requirements:

Electricity - Check rotation of motor

Phase	HP	Volts	AMPS Max. Draw	KVA former Minimum	Trans-	Fuses
Single Phase Motor	1.5	110 (Low Voltage)	17.2	3.0		30amp
	1.5	220 (High Voltage)	8.6	3.0		15amp

To change the motor rotation to clock-wise, check motor plate to see which wires need to be switched.

Phase	HP	Volts	AMPS Max. Draw	KVA former Minimum	Trans-	Fuses
Three Phase Motor	2.0	220 (Low Voltage)	6.5	N/A		10amp
	2.0	480 (High Voltage)	3.2	N/A		6amp

To change the motor rotation, change any two of the three incoming power lines.

Voltage: Observe the voltage number on the electricity meter.

Flexible cord should not be any longer than 25' for either single or three phase.

Follow all state and local electrical safety codes as well as the most recent National Electrical Code (NFC) and the Occupational Safety and Health Act (OSHA).

WARNING: Because of risk of electrical shock, all wiring should be done by a qualified electrician.

DO NOT handle pump or pump motor with wet hands or when standing on a wet or damp surface or when standing in water.

6. Final Equipment Check:

- a. Take time to check over all fittings, clamps and connections to make sure all are secure. Check that the belt is tight and the belt guard is mounted securely in place.
- b. Double check to make sure all ball floats are mounted and adjusted correctly inside the tank.
- c. Be certain the oil is visible half way up the clear sight tube on the diaphragm pump. (Fill with 30W non-detergent motor oil as necessary).



Oil Sight Tube. Oil should be visible approximately half way up the clear fill tube.

Daily Operation:

1. Fill the main tank with water.

- a. With irrigation system pressurized, open the fresh water fill valve to begin filling the holding tank with water. As the tank nears full, the internal ball float will automatically shut off the flow of incoming water.

- b. For constant rate output, close the fill valve once the tank is full. This will allow the tank to empty, injecting a consistent, non-diluted solution.



Turn the System on:

- a. Check that the redirect valve located adjacent to the pump inlet debris screen is in the **closed** position, to draw liquid from the tank. (The handle should be turned to the point at the debris screen). If left open, the pump will only draw air and no injection will take place.
- b. The discharge outlet valve should be turned to the **closed** position. (Handle should be at 90° angle to the discharge flow). This allows the pump to start up under no-load conditions to increase motor or engine life.

Discharge Valve in Closed Position

- c. Place selector valve into INJECT position.
- d. Place meter bypass valve as to turn water through the ELECTRONIC METER.
- e. Adjust Electronic Meter with needle valve to desired gpm.
- f. Once adjusted, place meter bypass valve into the position so the water runs through the PLASTIC INLINE FLOW METER.
- g. Load machine
- h. Always adjust meter *before loading* the equipment.

Loading:

- a. Place selector valve into BYPASS position
- b. Turn panel to HAND position and turn equipment on.
- c. Once finished loading, turn machine “off” and switch panel to AUTO
- d. Place selector valve into INJECT position

Daily Maintenance

- a. Check pump FILTER for trash

Monthly Maintenance

- a. Check all three FILTERS. There are two different mesh sizes (pump filter-20 mesh, electronic meter filter-40 mesh and incoming water filter-20 mesh)
- b. Check oil in pump (30W non-detergent)

Inject-a-Cure Calibration Chart

Inject-a-Cure 600/300 Gallon floating suction assembly.

Loading Capacity: 4500#/2250#

Clean Out: 90 Minutes/24 Hours

Set Time
(Hours)

Water Meter Flow
(G.P.M.)

2	1.03
3	2.48
4	3.21
5	3.65
6	3.94
7	4.15
8	4.31
9	4.43
10	4.53
11	4.60
12	4.67
13	4.73
14	4.78
15	4.82
16	4.85
17	4.89
18	4.91
19	4.94
20	4.96
21	4.98
22	5.00
23	5.02
24	5.04

<u>Gypsum Treatment Rate</u>			2.0/meq/l	<u>Gypsum Treatment Rate</u>			3.0/meq/l
<u>Gallons</u>	<u>Pounds</u>	<u>Bags</u>		<u>Gallons</u>	<u>Pounds</u>	<u>Bags</u>	
100,000	150	3		100,000	200	4	
150,000	200	4		150,000	300	6	
200,000	300	6		200,000	450	9	
250,000	350	7		250,000	550	11	
300,000	450	9		300,000	650	13	
350,000	500	10		350,000	750	15	
400,000	550	11		400,000	850	17	
450,000	650	13		450,000	950	19	
500,000	700	14		500,000	1100	22	
550,000	800	16		550,000	1200	24	
600,000	850	17		600,000	1300	26	
650,000	950	19		650,000	1400	28	
700,000	1000	20		700,000	1500	30	
750,000	1050	21		750,000	1600	32	
800,000	1150	23		800,000	1750	35	
850,000	1200	24		850,000	1850	37	
900,000	1300	26		900,000	1950	39	
950,000	1350	27		950,000	2050	41	
1,000,000	1450	29		1,000,000	2150	43	

<u>Gypsum Treatment Rate</u>			2.5/meq/l	<u>Gypsum Treatment Rate</u>			3.5/meq/l
<u>Gallons</u>	<u>Pounds</u>	<u>Bags</u>		<u>Gallons</u>	<u>Pounds</u>	<u>Bags</u>	
100,000	200	4		100,000	300	6	
150,000	250	5		150,000	400	8	
200,000	350	7		200,000	500	10	
250,000	450	9		250,000	650	13	
300,000	550	11		300,000	750	15	
350,000	650	13		350,000	900	18	
400,000	700	14		400,000	1000	20	
450,000	800	16		450,000	1150	23	
500,000	900	18		500,000	1250	25	
550,000	1000	20		550,000	1400	28	
600,000	1050	21		600,000	1500	30	
650,000	1150	23		650,000	1650	33	
700,000	1250	25		700,000	1750	35	
750,000	1350	27		750,000	1900	38	
800,000	1450	29		800,000	2000	40	
850,000	1550	31		850,000	2150	43	
900,000	1600	32		900,000	2250	45	
950,000	1700	34		950,000	2400	48	
1,000,000	1800	36		1,000,000	2500	50	

<u>Gypsum Treatment Rate</u>			4.0/meq/l	<u>Gypsum Treatment Rate</u>			5.0/meq/l
<u>Gallons</u>	<u>Pounds</u>	<u>Bags</u>		<u>Gallons</u>	<u>Pounds</u>	<u>Bags</u>	
100,000	300	6		100,000	350	7	
150,000	450	9		150,000	550	11	
200,000	550	11		200,000	700	14	
250,000	700	14		250,000	900	18	
300,000	850	17		300,000	1100	22	
350,000	1000	20		350,000	1250	25	
400,000	1150	23		400,000	1450	29	
450,000	1300	26		450,000	1600	32	
500,000	1450	29		500,000	1800	36	
550,000	1600	32		550,000	2000	40	
600,000	1750	35		600,000	2150	43	
650,000	1850	37		650,000	2350	47	
700,000	2000	40		700,000	2500	50	
750,000	2150	43		750,000	2700	54	
800,000	2300	46		800,000	2900	58	
850,000	2450	49		850,000	3050	61	
900,000	2600	52		900,000	3250	65	
950,000	2750	55		950,000	3400	68	
1,000,000	2900	58		1,000,000	3600	72	

Compatible Amendments - Application Chart:

**** The following dry materials are compatible with the “Inject-a-Cure” Solution Injection System.**

Always put gypsum into mixing tank first
 Never combine Phosphate based products with Calcium

<u>600 Gallon Unit/300 Gallon Unit</u>		
Solution Grade Gypsum, alone: 3,000 lbs./1500 lbs. Max.**		
<u>Description</u>	<u>Mixed With Gypsum</u> <u>Lbs.</u>	<u>Without Gypsum</u> <u>Lbs.</u>
Ammonium Nitrate	1000/500	3600/1800
Ammonium Sulfate	400/200	2000/1000
Calcium Nitrate	400/200	4000/2000
Humic Acid	35 gal	35 gal
Milled Limestone**	- Do Not Mix -	400/200
Magnesium Sulfate	100/50	100/50
Potassium Sulfate (Potash)	- Do Not Mix -	1200/600
Potassium Nitrate	400/200	1200/600
Zinc Sulfate	100/50	100/50
10-62-0	- Do Not Mix -	2400/1200

***Caution:** The above amendments are compatible with the construction of the “Inject-a-Cure” injection machine only when purchased in a form appropriate for direct injection. Always be sure to confirm with the amendment supplier, that what you are buying is suitable for injection directly into irrigation water.

Failure to do so may cause improper operation and/or damage to the injection machine which is not covered by the manufacturer’s warranty. Use of a sub-standard quality of solution grade gypsum can reduce the maximum by as much as 25%. **Limestone must be ground to at least 325 mesh minus. Consult your supplier for details.

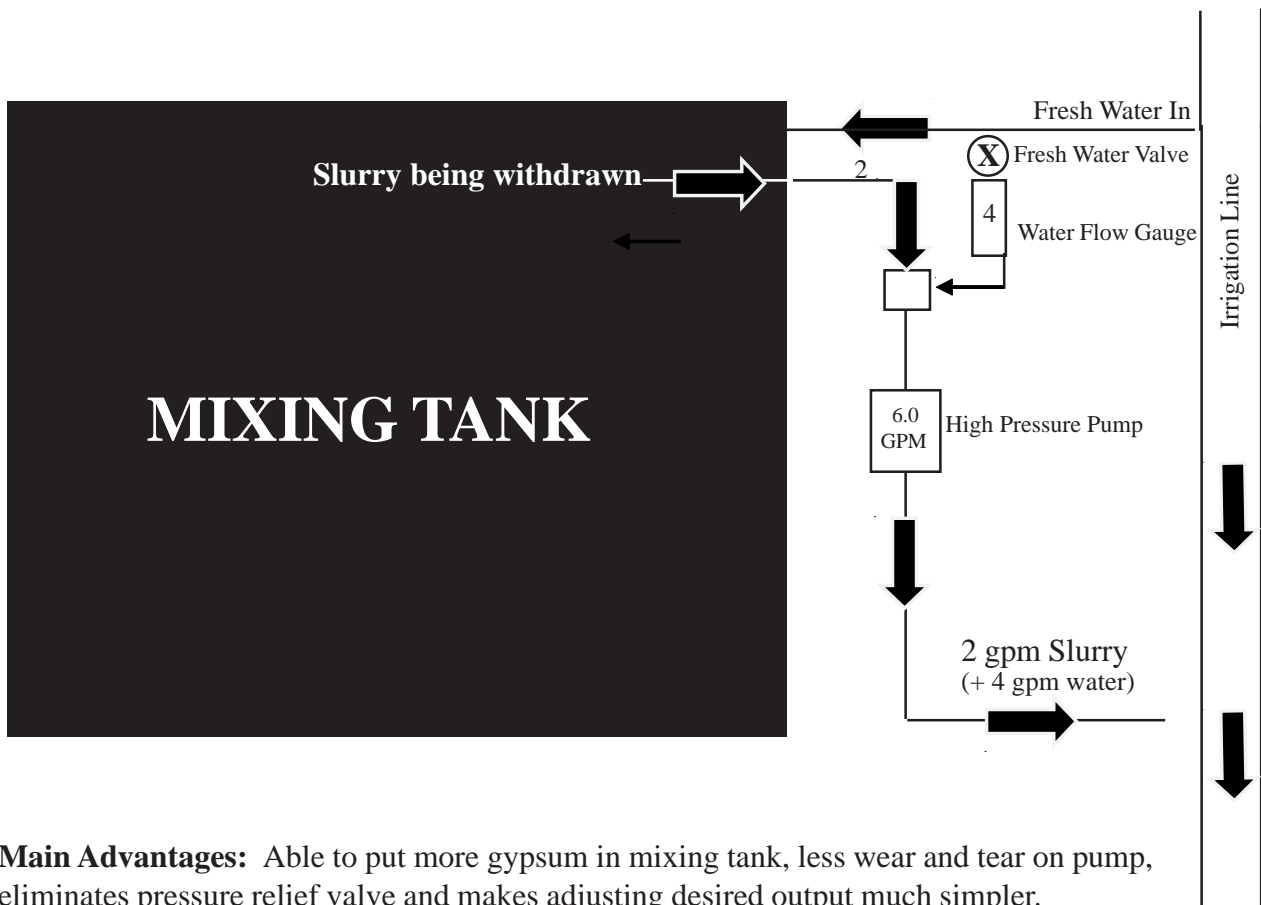
Fresh Water Bypass Operation:

The high-pressure pump will first draw from the fresh water line. The amount of slurry injected is determined simply by setting the fresh water flow to the pump's maximum capacity, then reducing the fresh water gpm by the amount of slurry desired. The pump will then automatically withdraw the difference from the Mixing Tank.

Maximum Pump Capacity - Fresh Water Flow = Net Amount of gypsum slurry injected.

Example: Desired slurry output is determined to be 2 gpm. Maximum pump capacity is 6 gpm.

1. With the machine running, the fresh water valve is opened until the pump's maximum gpm rate is achieved (6 gpm in this example).
2. Since the desired slurry output is 2 gpm, slowly close the fresh water valve until the fresh water flow meter reads 2 gpm *less* (6-2=4 gpm in this example).
3. With the fresh water restricted to only 4 gpm, the positive displacement pump will automatically make up the difference by withdrawing 2 gpm from the Mixing Tank.



Main Advantages: Able to put more gypsum in mixing tank, less wear and tear on pump, eliminates pressure relief valve and makes adjusting desired output much simpler.

Trouble Shooting Guide

SYMPTON	PROBABLE CAUSE	CORRECTIVE ACTION
The pump does not draw fluid.	<p>Pump is drawing air</p> <p>One or more pump valves are not seating properly</p> <p>Suction line is plugged or collapsed Clogged debris filter</p>	<p>Turn redirect valve handle 90°.</p> <p>Remove valve(s) and check for debris.</p> <p>Examine suction hose for blockage Clean debris filter.</p>
The liquid flow is erratic.	<p>The charge in the pulsation dampener is incorrect</p> <p>One or more pump valves are not seating properly</p>	<p>Check pressure in pulsation dampener(20-40% working pressure).</p> <p>Remove valve(s) and check for debris. Check and clean valve seats.</p>
Output drops, and pump is noisy.	Oil level is too low	Add 30W motor oil to bring level half way up sight glass.
Oil comes out the discharge port or oil is a milky color.	One or more diaphragms split	Replace diaphragm(s). (Refer to Maintenance Section).
Pump seems to operate in reverse.	Electric motor wired backwards	Have a certified electrician check and repair wiring.
Agitation shaft bearing leaking.	<p>Packing gland loose</p> <p>Worn out packing material</p>	<p>Tighten packing nut on front.</p> <p>Replace with 1/4" Teflon packing.</p>
Irrigation filters plugging or requiring frequent flushing.	<p>Injecting too thick of slurry</p> <p>Poor quality gypsum</p> <p>Fresh water is contaminated</p>	<p>Increase fresh water bypass gpm.</p> <p>Install a screen on the incoming fresh water line.</p>

Safety Instructions

- To avoid electrical shock hazard, disconnect the machine from the electrical power supply before doing any maintenance/service.
- Read Operating Manual before putting machine in operation.
- Carefully observe all safety cautions and warnings.
- All electrical service equipment should be installed by a qualified electrician.
- The automatic Tank Refill Control Panel contains high voltage electrical equipment and should only be accessed by certified electricians or qualified personnel.
- The machine must be grounded. Make sure all green ground wires are properly attached.
- Do not use an extension cord.
- Do not operate the machine unless the pulley guard is in place.
- All hoses and the power cord should be carefully located to minimize any hazard to the machine operator.
- Machine must be completely stopped before any maintenance/service.
- Keep all parts of the body and clothing away from driven parts.
- Keep all others away from machine while in operation.
- Load machine with solution grade gypsum only.

Maintenance:

You have selected the most user-friendly, maintenance free injection system available for gypsum and other powdered amendments. Care in selecting and using only true high-grade solution gypsum (and other compatible amendments) will help keep your injector running smoothly with minimal attention.

Your **Inject-a-Cure** unit was designed with common, brand name components wherever possible, to reduce replacement costs and insure parts availability when maintenance is required.

For parts pricing or orders, call your SDI dealer.

The following outlines the steps necessary to service and maintain your **Inject-a-Cure** injection system to keep it running at its peak performance.

Before each start-up:

- a. Check that the oil is visible half way up the clear sight tube on the diaphragm pump. (Fill with 30W non-detergent motor oil as required).
- b. Turn the redirect valve to close off the fluid in the main tank and clean the debris filter located on the front of the machine, and any other debris screens that may be installed. Remember to turn the valve back on before starting the machine.
- c. Check that the internal ball float valve(s) are adjusted and working properly.

- d. Take time to check over all fittings, clamps and connections to make sure all are secure and not leaking. Check that the belt is tight and the belt guard is in place.
- e. If agitation shaft front bearing is leaking, simply tighten the adjusting nuts until the leak stops. **DO NOT** overtighten the adjusting nuts. Only about 1/4 to 1/2 turn on each of the adjusting nuts should be required to stop any leak.

Overtightening will lead to rapid wear of the packing material and possibly the shaft. Occasional small adjustments are required to maintain the integrity of the seal. **DO NOT** attempt to avoid the regular interval by overtightening on the packing nuts. If one or more turns of the adjusting nuts do not stop the leak, replace the packing material.

Every 500 Hours:

- a. Change the oil every 500 hours or three months, whichever comes first. To drain the oil, follow these procedures:

Pump: Remove the drain plug and oil sight glass covers and rotate shaft until the oil stops flowing out. Install the drain plug.

Slowly pour new oil into sight tube while turning the pump shaft. (Turning the pump shaft purges all the air out of the crankcase). Always change oil when replacing diaphragms.

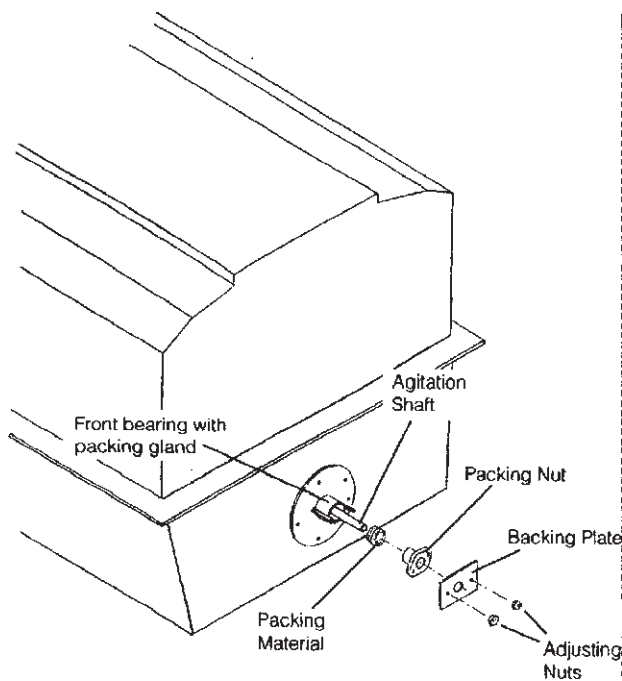
Safety Note: The bypass return outlet on the discharge valve and pressure relief valve **must be** connected directly to the main tank without any restrictions or valves.

Annually or as Needed:

Replace Packing Material

The packing gland is located on the front of the machine where the main agitator shaft extends out of the mixing tank. Once or twice a year (or whenever excessive leaking occurs that routine tightening of adjustment nuts will not stop), the packing material in the packing gland must be replaced as follows:

- a. Turn off injector and secure against accidental start-up.
- b. Remove fiberglass belt guard. Loosen both adjusting nuts and slide the backing plate and packing nut out away from the packing gland.
- c. Dig out and discard any remaining pieces of the old packing material.



- d. Wind new packing material around the shaft; use a screwdriver to push the packing material firmly down into the packing gland. Continue this process until the packing gland is full; cut the packing rope off.
- e. Slide the packing nut and backing plate back towards the packing gland; tighten the adjusting nuts down hand tight.
- f. Replace the belt guard and start the injection machine. If the packing is leaking, turn off the machine and tighten the adjustment nuts approximately 1/4 turn each. Continue this procedure until the leaking stops. **DO NOT overtighten!**

Valve Replacement

Occasionally, debris can build up and cause improper seating of the valves and/or damage to the o-rings, causing the pump to pulsate. To check for damage, follow these steps:

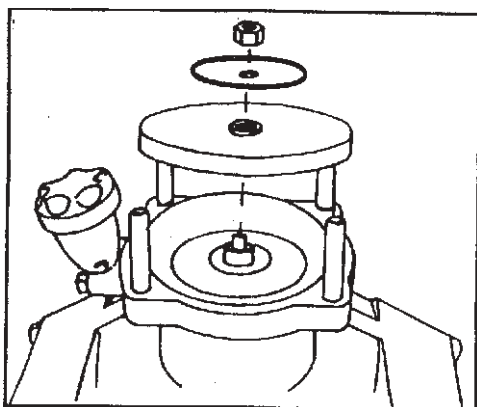
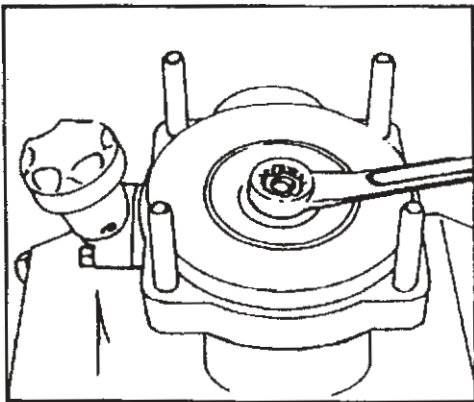
Remove the pump manifolds (heads). With the manifolds removed, valves can easily be removed and inspected for debris and wear. Replace valves, o-rings and manifolds as necessary.

Diaphragm Replacement

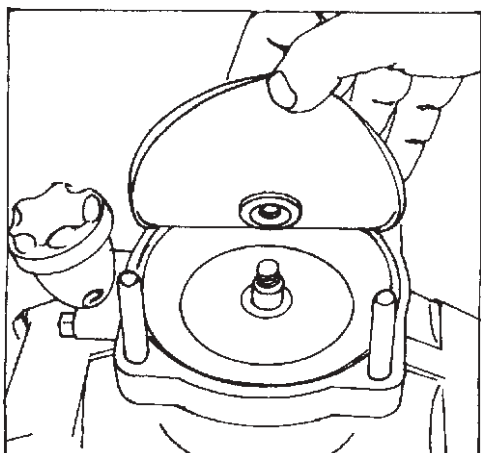
If pump oil becomes milky or it comes out the discharge outlet, one or more of the diaphragms have ruptured. The diaphragm material does age and should also be replaced annually or more often under heavy use. To change the diaphragms:

- a. Drain the oil as instructed previously.

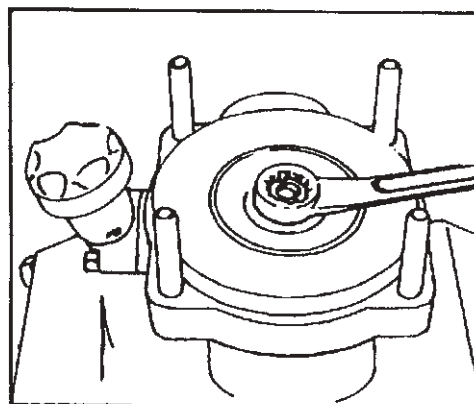
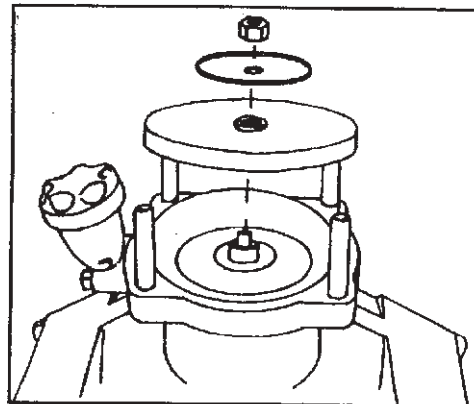
- b. Remove the pump manifolds and valves.
- c. Remove the pump head retaining nuts and heads.
- d. Turn the crankshaft to bring the diaphragm to the top of its stroke. Remove the retaining nut, retaining washer and the diaphragm.



- e. Turn the crankshaft to bring the piston to the bottom of its stroke and seat the new diaphragm into the sleeve groove. Install the retaining washer and tighten the retaining nut.



- g. Clean any excess oil from the area and install the heads, valves and manifolds.



- h. Refill crankcase with 30W motor oil. Rotate shaft to distribute oil and fill to proper level.

Pulsation Diaphragm Replacement

Replace the pulsation dampener diaphragm by first bleeding the air from the dampener. Remove the cover retaining bolts from the dampener cover and replace the diaphragm. Reassemble the cover and bolts in place and charge the dampener to 20% of operating pressure with a minimum of 10 psi.

Winter Storage/Freezing Conditions

- a. Drain water from main tank.
- b. Open all valves.
- c. Flush pump with a 50/50 mixture of water and antifreeze while rotating crankshaft.

Inject-a-Cure Limited Warranty

This **Inject-a-Cure** brand solution injection system is warranted by the original manufacturer to be free from defects in material and workmanship under normal use and service for a period of: **One(1) year** on fiberglass tank, steel frame, fittings, agitation shaft and bearings, mixing blades and general assembly and **One(1) year** on pumps and electric motors.

Wear Warranty: This **Inject-a-Cure** solution injection system also carries a warranty against excessive wear on the agitator bearings, packing bearing and shaft for **Three (3) years** from date of purchase. This does not include the packing material which is a normal wear item. Excessive wear is defined as wear that prohibits the agitation assembly from functioning properly. Contact the factory for specifics.

This warranty covers only the original retail purchaser (not purchased for resale) of the injector. Warranty period begins on the date of purchase (invoice date), or the date of delivery, whichever is sooner.

All warranties, expressed and implied are provided by the original equipment manufacturer of each of the major components and by Spraying Devices, Inc.

What is not covered under this warranty:

- A. Normal wear and tear. Failures resulting from the use of abrasive amendments and/or normal operating wear and tear is not covered under this warranty; *excluding* wear warranty as specified above.
- B. This warranty does not cover belts, hoses, pump valves and diaphragms, ball valves, orifices, tires, wheel bearings, oil, lubricants, filters and all other normal maintenance items.
- C. Any failure that results from an accident, abuse, neglect or failure to operate the system in accordance with normal operating procedures as described in the Owner's Manual.
- D. Any failure that results from introducing non-compatible amendments, chemicals or other substances into the tank, OR introducing compatible amendments and chemicals (including solution gypsum), in a form or in an amount that exceeds the limitations set forth in the "Compatible Amendments" section of the Owner's Manual.

Limitations of this warranty: Any incidental, indirect or consequential loss, damage or expense that may result from any defect, failure or malfunction or any of the components comprising the injection system are not covered under this warranty. Implied warranties, including those of merchantability and fitness for a particular purpose are limited to one(1) year from date of original purchase. Some states do not allow limitations or exclusions on incidental and consequential loss or implied warranties, so this paragraph may not apply to you.

Manufacturer's sole liability under this warranty is limited to the repair or replacement, at manufacturer's option, of covered products or components which have failed during the term of their respective warranty period upon return freight prepaid to place of manufacture.

Who to contact: Hypro pump warranty information (800)468-3428. For all other warranty repair work including the fiberglass tank and general materials and workmanship, contact your local SDI dealer.



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