AUTOMATIC CHLORINE/BROMINE* FEEDER
MODEL #320

(* Using Bromine tablets with this device is not NSF certified)

Features:
- No special venting required.
- Completely enclosed-no escaping gases.
- Positive external no-clog control valve.
- When used with timer, feeder is designed to automatically lower the water level so tablets are not soaking during off period of pump. This allows more efficient use of tablets.
- No equipment damage.
- Feeds sanitizer directly to pool or spa.
- All parts replaceable.
- To prevent over chlorination during use, completely close the control valve and the built in check valve will prevent chemical from being fed into pool or spa.

YOUR FEEDER IS THE MOST EFFICIENT AND TROUBLE-FREE AUTOMATIC FEEDER YOU CAN BUY, BUT IT CAN ALSO BE DANGEROUS TO YOU AND YOUR EQUIPMENT. PLEASE FOLLOW INSTRUCTIONS EXACTLY AND HEED ALL CAUTIONS. YOUR SAFETY AND THE PROTECTION OF YOUR EQUIPMENT IS OUR FIRST CONCERN.

It is important to read all information before proceeding with the installation. The information will guide you in installing your feeder properly and to avoid problems due to improper installation.

IF YOUR POOL OR SPA HAS COPPER PLUMBING ... STOP!
Never install the feeder into copper plumbing as pipe damage will occur. (See Equipment Safety CAUTION sheet enclosed). NOTE: If heaters are used, a Fireman’s Switch or equivalent must be installed after the heater, pool cleaner, valves, etc. If your pool does not have a heater, then it must be installed after the filter or any other piece of equipment. DAMAGE TO THE HEATER OR OTHER EQUIPMENT COULD RESULT IF HIGHLY CHLORINATED WATER FLOWS THROUGH IT.

INSTALLATION INSTRUCTIONS MODEL #320

Note: Make sure all pumps and timer switches are in the OFF position.

WHERE TO INSTALL YOUR FEEDER

The #320 feeder is designed for permanent installation in the return line of your new pool or spa and must always be installed after the heater, pool cleaner, valves, etc. If your pool does not have a heater, then it must be installed after the filter or any other piece of equipment.

DO NOT INSTALL FEEDER INTO COPPER PLUMBING AS PIPE DAMAGE WILL OCCUR. (See Equipment Safety CAUTION sheet enclosed). NOTE: If heaters are used, a Fireman’s Switch or equivalent must be installed after the heater, pool cleaner, valves, etc. If your pool does not have a heater, then it must be installed after the filter or any other piece of equipment.

If your pool is equipped with a solar system it may be necessary to install a HI FLOW KIT. This kit can be installed if your feeder is not getting adequate flow and/or pressure through the system. Refer to information on sheet enclosed. Your feeder may be installed in existing PVC plumbing but will require a union and/or other fittings. The feeder comes complete for installation with 2” or 1½” PVC plumbing. Choose a site in the return line where feeder can be installed in a vertical position. Always install as far from any metal equipment as practical since fumes, etc. can corrode them. If optional corrosion resistant check valve is required refer to installation instructions before next step.

BASIC PLUMBING INSTALLATION INSTRUCTIONS

2” OR 1½” PVC PIPE: If feeder is being installed on a pool, spa or pool/spa combination, correct plumbing procedures must be followed to insure proper flow through feeder. If pool or spa is plumbed with 2” PVC, the current 2” feeder flow and heater all have 2” inlet and outlet fittings. If any part of the equipment has less than 2” fittings or pipe, then a minimum of 6” x 1½” reducer bushings must be installed directly into the inlet side of the feeder using the 2” x 1½” reducer bushings supplied. This will build pressure directly into the feeder and also prevent any possible damage to equipment. Continue with 2” PVC pipe and feeder.

3. Turn on pump and timer switches for a minimum of 6 to 8 hours.

4. Exercise extreme caution when opening or servicing feeder. Do not inhale fumes.

5. Drain feeder before removing cap. CAUTION SHOULD BE USED WHEN REMOVING CAP. DO NOT INHALE FUMES.

6. Open control valve to original setting. Inspect inlet line below control valve each time feeder is recharged. Replace lines yearly if necessary.

7. Turn on pump and timer switches.

8. Set control valve to #1. Turn on pump and timers. Check residual daily to determine proper setting. Small gradual changes are imperative for control.

HOW TO RECHARGE FEEDER

1. Turn control valve to the closed position. SHUT OFF PUMP.

2. Shutoff feeder. Allow water and fumes to drain from feeder.

3. Place a clean container under drain and open drain valve.

4. Remove control valve. If nipple stays in valve, carefully remove by using pliers at the center of nipple. There is no need to remove the 90° tube fittings.

5. Wrap a 3” section of 1½” Schedule 40 PVC into the nipple with the fumes being drawn into the feeder. This will create vacuum to allow the feeder to shut off.

6. Place nipple back into the feeder. Hand tighten only.

7. Place container under valve and turn on pump.

8. Set control valve to #1. Turn on pump and timer switches.

9. Complete recharging procedure. Check residual daily to determine proper setting. Small gradual changes are imperative for control.

BELOW WATER LEVEL INSTALLATION

Feeder should be installed above water level whenever practical. If installed below water level, a drain valve must be installed to prevent spillage and dangerous splash back of high chlorinated water during recharging. Drain and tap a ¾” MPT hole at the same level the feeder will be installed. Make sure there is no water or tablets inside the feeder before draining. Install optional drain valve, Part R172060, or suitable chemical resistant drain valve.

BELOW WATER LEVEL RECHARGING INSTRUCTIONS

1. Shut off pump and timer switches.

2. Shut off control valve.

3. Place a clean container under drain and open drain valve.

4. Exercise extreme caution when opening or servicing feeder. Do not inhale fumes.

5. Remove cap and fill with proper size tablets or sticks. (See Operating Instructions #1)

6. Making sure O-ring is clean, lubricated with Lifegard silicone and is in place, replace cap. Hand tighten only.

7. Turn on pump and timer switches.

8. Reset control valve to original setting. Inspect inlet and outlet line each time feeder is recharged. Replace lines yearly if necessary.

DANGER

READ CAREFULLY

This feeder is designed to use only CLEAN Trichlor-s-trizineetrione OR CLEAN Bromine tablets - slow dissolving type. Never use dirty tablets. UNDER NO CIRCUMSTANCES MIX Trichlor or Bromine with Calcium HyPOCHLORITE, with other forms of concentrated chlorine or with other chemicals. Keep inside of feeder clean of dirt and debris at all times. FIRE OR EXPLOSION MAY RESULT.

NEVER use oils or grease to lubricate o-ring. Oil in contact with Trichlor OR Bromine may result in FIRE. Lubricate o-ring with Lifegard Silicone Oil—Lubricant ONLY, available at your dealers. If shock treatments or Algaecides containing chemicals other than sanitizers tablets in feeder must be used, turn off Feeder OR remove tablets until the shock or Algae treatment is complete and all granules have dissolved. Failure to do so may result in granules mixing in feeder causing FIRE AND/OR EXPLOSION. The shock or algae treatment dissolved in water is safe with tablets. If you are not the original owner of this feeder, not sure which chemicals was used, or if dirt or debris inside feeder, be SAFE and flush thoroughly with fresh water. CAUTION SHOULD BE USED WHEN REMOVING CAP. DO NOT INHALE FUMES.

CALCIUM HYPOCHLORITE IS NOT TO BE USED IN ANY FORM. Use of chemicals other than listed by manufacturer may be hazardous.

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P/N R24290. F 7/2020
Bromine Standpipe Installation
To increase erosion of small bromine tablets, install Bromine Standpipe as follows:
1. Remove screen from bottom of chamber exposing check valve (F)
2. Insert adapter (T) into check valve opening.
3. Cut supplied 5/8" black tube (Q) to 6" length and push tube into adapter opening.

Optional Spa Chamber:
For use on spas and hot tubs only. Use 1" diameter tube. Insert into feeder slotted end down. Available from your dealer.

Important Option:
See corrosion caution sheet.

CAUTION
Do not install feeder into copper plumbing. Pipe damage could occur. Never install feeder before heater. Heater damage could occur.

#320 CHLORINE / BROMINE FEEDER PARTS BREAK DOWN DRAWING

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>R172009</td>
<td>Cap wrench</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>R172008</td>
<td>3&quot; Threaded cap</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>R172009</td>
<td>3&quot; O-Ring</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>R172331</td>
<td>#320 Body only (new)</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>R01052</td>
<td>Lock screw</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>R172248</td>
<td>Check valve</td>
</tr>
<tr>
<td>G</td>
<td>1</td>
<td>R172317</td>
<td>Diverter tee</td>
</tr>
<tr>
<td>H</td>
<td>1</td>
<td>R172256</td>
<td>1/2&quot; x Short MPT nipple</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>R172086</td>
<td>1/2&quot; Chlorine control valve</td>
</tr>
<tr>
<td>J</td>
<td>2</td>
<td>R172272</td>
<td>1/2&quot; NPT x tube fitting w/nut</td>
</tr>
<tr>
<td>K</td>
<td>1</td>
<td>R172091</td>
<td>5/8&quot; OD Chlorinator tube</td>
</tr>
<tr>
<td>K1</td>
<td>1</td>
<td>R171097</td>
<td>Tube support spring</td>
</tr>
<tr>
<td>L</td>
<td>2</td>
<td>R172210</td>
<td>2&quot; x 1 1/2&quot; x 1/2&quot; bushing</td>
</tr>
<tr>
<td>M</td>
<td>1</td>
<td>R172037</td>
<td>Spa chamber</td>
</tr>
<tr>
<td>N</td>
<td>1</td>
<td>R172036</td>
<td>Silicone lubricant</td>
</tr>
<tr>
<td>**O</td>
<td>1</td>
<td>210396</td>
<td>Screen</td>
</tr>
<tr>
<td>P</td>
<td>1</td>
<td>R172134</td>
<td>1/2&quot; MPT PVC plug</td>
</tr>
<tr>
<td>Q</td>
<td>1</td>
<td>R172253</td>
<td>5/8&quot; OD 18&quot; tube (optional top feed)</td>
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<tr>
<td>R</td>
<td>1</td>
<td>R172319</td>
<td>Bottom O-ring</td>
</tr>
<tr>
<td>S</td>
<td>1</td>
<td>R172228</td>
<td>1 1/2&quot; Corrosion resistant check valve</td>
</tr>
<tr>
<td>T</td>
<td>1</td>
<td>R172048B</td>
<td>Standpipe adapter</td>
</tr>
</tbody>
</table>

*Not used with 2" PVC, for 1 1/2" PVC only.

**Be sure screen has not come loose in shipment—If loose: Simply snap over 4 posts in bottom of chlorinator to replace.

NOTE: To service check valve F, Remove lock screw E, and unscrew (counter-clockwise) D chlorinator body from G diverter tee.

Typical Installation #320 with heater.

Typical Installation #320 without heater.

YOU MAY SUBSTITUTE BROMINE TABLETS OR STICKS FOR TRICHLOR IN THIS FEEDER. DO NOT MIX.
CALCIUM HYPOCHLORITE IS NOT TO BE USED IN ANY FORM.

NSF 50 Certified for public or residential use in Swimming Pools, Spas or Hot Tubs using 1"Trichlor Tablets and when used with a flow indicating device such as Model# R172276. Output rating for Bromine is not NSF 50 Certified.

Technical Support: (800) 831-7133

PENTAIR
**HI FLO FEEDER KIT #R1099**
**FOR MODELS #320 & #322**

**DIRECTIONS**
1. Turn off pump and timer switches.
2. Loosen compression nut and remove Feeder tube and 90° elbow from the diverter tee at base of Feeder.
3. Using thread seal tape as thread sealant, wrap ½” MPT plug threads (1) with several turns of the tape only. Install in place of 90° elbow on diverter tee.
4. Disconnect other end of Feeder tube from control valve 90° elbow, by loosening compression nut. Use the compression nuts from old tube to attach new 6’ section (2).
5. Push compression nut over tubing end, then push tubing onto tapered end of elbow. Tighten nut firmly by hand.
6. Connect other end of plumbing. IF POOL/SPA HAS A HEATER, INSTALL BETWEEN FILTER AND HEATER. IF YOUR POOL/SPA HAS A SOLAR SYSTEM, INSTALL BEFORE SOLAR SYSTEM INLET LINE. IF NO HEATER, INSTALL BETWEEN PUMP AND FILTER. Drill ¾” hole in plumbing, remove burrs, and install saddle clamp assembly. (See illustration) Tighten clamp with screwdriver. Slide small stainless steel clamp #3 over tubing #2 and slide tubing over saddle tube fitting #4. Secure tubing to fitting by tightening clamp with screwdriver. Make sure clamp is below rib at end of saddle tube fitting.
7. To install ½” CHECK VALVE, cut tube approximately 6” away from plumbing connection. Remove compression nuts from check valve. Slide nuts over both ends of tube. Insert check valve ends into both pieces of tubing and tighten compression nuts firmly by hand. Be sure arrow “FLOW” is pointing toward the Feeder.

**HI FLO FEEDER KIT #R171099**
**PARTS BREAKDOWN DRAWING**

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>R172134</td>
<td>Plug, ½” MPT</td>
</tr>
<tr>
<td>2</td>
<td>6”</td>
<td>R172093</td>
<td>Tube, ½” ID Chlorinator</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>R175013</td>
<td>Clamp, S.S. Tubing</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>R171162</td>
<td>Fitting, Saddle Tube</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>R172263</td>
<td>Gasket, Saddle</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>R172264</td>
<td>Clamp, Saddle</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>R172324</td>
<td>Valve, ½” Tube check</td>
</tr>
</tbody>
</table>

**NOTE:**
When using this kit with a pool/spa combination (to prevent draining spa) shut off Feeder control valve when only the spa is in use.

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Technical Support: (800) 831-7133
EXTENSIONS

- Going on vacation?
- Need more chlorine?
- Filling Chlorinator/Brominator too frequently?

LIFEGARD CHLORINATOR EXTENSIONS SOLVE THE ABOVE PROBLEMS BY:
1. Increasing tablet capacity.
2. Larger chamber size allows more erosion of tablets. (See special instructions below)

The 10" extension doubles and the 20" extension triples (approximately) the capacity and time between refills. *AVAILABLE THROUGH DEALERS ONLY.
NOTE: On free standing #300 series chlorinators, the base of the chlorinator should be secured to prevent the possibility of the chlorinator tipping over due to increased height.

INSTALLATION INSTRUCTIONS
1. Follow recharging instructions to the point of filling with tablets
2. Making sure O-Ring is clean, lubricated with silicone and in place, screw on extension tightly and secure with lock screw. (You may wish to wait until back in operation before tightening screw to insure against leaks).
3. Fill with tablets and continue with normal recharging procedure.

SPECIAL INSTRUCTIONS:
The large chamber size will result in more chlorine being dispensed at the same valve setting, therefore, once installed, several days monitoring will be necessary to readjust chlorinator output.

*Does not apply to large capacity #300-19 or #300-29.

Parts Breakdown Drawing

<table>
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<tr>
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<th>Part No.</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>R172078</td>
<td>Lockscrew (bottom collar)</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>R172009</td>
<td>O-Ring</td>
</tr>
</tbody>
</table>

#R172087 10" Chlorinator extension complete
#R172283 20" Chlorinator extension complete
#R172288 1½" & 2" SLIP SPRING CHECK VALVE

- Special corrosion resistant 1½" & 2" slip spring check valve can be used to check back flow of fluids, air, etc.
- Full free flow design
- Special Spring and Seal for corrosive applications.
- Enclosed spring insuring free operation.
- Very effective when used in conjunction with chlorinator to check back flow of chemicals to pool/spa equipment, preventing corrosion problems and damage.
- Can be mounted in any position.

Typical check valve installation

NOTE: If heaters are used, a Fireman's Switch or other safety device must be installed to prevent possible damage and improper operation of Check Valve and other equipment subject to heat damage.

Technical Support: (800) 831-7133
EQUIPMENT SAFETY
CAUTION!
PLEASE READ CAREFULLY

Since most pool’s plumbing is not airtight, and a mixture of air and chlorine is highly corrosive to metals, it is important to protect these items from corrosion in the OFF period when no circulation is taking place. (There is no chance for chlorine corrosion when the circulating system is in operation.)

Of course, corrosion or erosion of metal components can still occur independently of any chlorinator installation for the following reasons:

1. Water velocity too high.
2. Water pH less than 7.2.
3. Total alkalinity less than 100 PPM.

If your pool or spa has any of the following equipment, special plumbing procedures must be followed for safe operation:

1. Brass or bronze gate, rotary or backwash valves.
2. The preceding valves constructed of PVC or other plastic material with metallic shafts.
3. Filters, heaters, heat exchanges or other items with metallic tanks, shafts, coils or tubes.
4. NOT FOR USE IN COPPER PLUMBING.

Installation of the OPTIONAL #R172288 positive seal, corrosion resistant check valve SHOWN ON REVERSE SIDE will prevent the backflow of corrosive liquids and gases that can damage equipment containing metallic components. Examples listed above.

WARNING: If your pool is equipped with a permanent built in pool-cleaning system, damage could occur to that system if materials are not compatible with low pH Tri-Chloro feeders. Check with manufacturer for compatibility.

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