This is the safety-alert symbol. When you see this symbol on your equipment or in this manual, look for one of the following signal words and be alert to the potential for personal injury or death.

⚠️ WARNING Warns about hazards that **could** cause serious personal injury or, death, and or major property damage and if ignored presents a potential hazard.

⚠️ CAUTION Warns about hazards that **will** or **can** cause minor or moderate personal injury and/or property damage and if ignored presents a potential hazard. It can also make consumers aware of actions that are unpredictable and unsafe.

The **NOTICE** label indicates special instructions that are important but not related to hazards.

**SAVE THIS INSTRUCTION MANUAL**

Hayward Pool Products  
One Hayward Industrial Drive, Clemmons, NC 27012  
Phone: 336-712-9900  
www.haywardnet.com
**READ, UNDERSTAND, AND FOLLOW ALL SAFETY AND OPERATION INSTRUCTIONS.** FAILURE TO FOLLOW SAFETY AND OPERATION INSTRUCTIONS CAN RESULT IN SEVERE PERSONAL INJURY OR DEATH.

**CAUTION** To reduce risk of injury, do not permit children to use or climb on this product. Closely supervise children at all times. The ANSI/APSP-4 Standard (above-ground and on-ground pools) advises that components such as the filtration system, pumps, and heaters be positioned to prevent their being used as a means of access to the pool by young children.

**WARNING  COMPONENT SEPARATION HAZARD**

Pool and spa water circulation systems operate under hazardous pressure during start up, normal operation, and possibly after pump shut off. Pressure in system can cause explosive component separation of the upper filter body if safety and operation instructions are not followed. Severe personal injury or death can result.

This product should be installed and serviced only by a qualified pool professional.

**TO AVOID COMPONENT SEPARATION**

- Follow all safety and operation instructions.
- Do not operate water circulation system if a system component is assembled improperly, damaged, missing, or not a genuine Hayward component.
- Before performing maintenance on the water circulation system, verify all system and pump controls are in OFF position and filter manual air relief valve is in the OPEN position.
- Always tighten nut until spring coils touch each other, never only hand tighten.
- Before starting the system pump, verify that all system valves are set in a position to allow water from the filter to return back to the pool.
- Before starting the system pump, the manual air relief valve must be in the OPEN position.
- When starting pump, do not stand over or near filter.
- Return to filter to close manual air relief valve only when a steady stream of water (Not air or air and water mix) is discharged from the manual air relief valve.

**WARNING  EXCESS PRESSURE HAZARD**

Pressure testing of the pump and filter system in excess of the 45 PSI can cause explosive separation of the components. Component separation can result in severe personal injury or death.

**WARNING  ELECTROCUTION HAZARD**

High Voltage electricity is present in the pool and spa equipment. High voltage electricity can cause shock and electrocution. Shock and electrocution can result in severe personal injury or death.

- All electrical wiring MUST be in conformance with applicable local codes, regulations and the National Electrical Code (NEC).
- Before performing any service or maintenance on electrical equipment turn off all electrical power.
- Contact a licensed electrician or building inspector for information on local electrical codes for bonding requirements.
- Verify water discharge from the filter manual air relief valve is directed away from electrical devices.

Do not locate pump controls over or near filter.
WARNING – SUCTION ENTRAPMENT HAZARD.

Suction in suction outlets and/or suction outlet covers that are, damaged, broken, cracked, missing, or unsecured can cause severe injury and/or death due to the following entrapment hazards:

- **Hair Entrapment**: Hair can become entangled in suction outlet cover.
- **Limb Entrapment**: A limb inserted into an opening of a suction outlet sump or suction outlet cover that is damaged, broken, cracked, missing, or not securely attached can result in a mechanical bind or swelling of the limb.
- **Body Suction Entrapment**: A negative pressure applied to a large portion of the body or limbs can result in an entrapment.
- **Evisceration/Disembowelment Entrapment**: A negative pressure applied directly to the intestines through an unprotected suction outlet sump or suction outlet cover that is, damaged, broken, cracked, missing, or unsecured can result in evisceration/disembowelment entrapment.
- **Mechanical Entrapment**: There is potential for jewelry, swimsuit, hair decorations, finger, toe or knuckle to be caught in an opening of a suction outlet cover resulting in mechanical entrapment.

**TO REDUCE THE RISK OF ENTRAPMENT HAZARDS:**

- A minimum of two functioning suction outlets per pump must be installed. Suction outlets in the same plane (i.e. floor or wall), must be installed a minimum of three feet (3’) [1 meter] apart, as measured from near point to near point.
- Dual suction outlets shall be placed in such locations and distances to avoid “dual blockage” by a user.
- Dual suction outlets shall not be located on seating areas or on the backrest for such seating areas.
- The pool or spa circulation system shall be designed to comply with ANSI/APSP-7 2006.
- Suction outlet covers shall conform to ANSI/ASME A112.19.8.
- Never use Pool or Spa if any suction outlet component (cover/grate) is damaged, broken, cracked, missing, or not securely attached.
- Immediately replace damaged, broken, cracked, missing, or not securely attached suction outlet components.
- The CPSP as well as the ICC *International Residential Code* Part IX, Appendix G, Section AG106 specifies the installation of a safety vacuum release system conforming to ASME A112.19.17, or an approved gravity drain system.
- Failure to remove pressure test plugs and/or plugs used in winterization of the pool/spa from the suction outlets can result in an increased potential for suction entrapment.
- Failure to keep suction outlet components clear of debris, such as leaves, dirt, hair, paper and other material can result in an increased potential for suction entrapment.

Suction outlet covers and grates have a finite life. They should be inspected frequently and replaced within specified life.

**KEEP SAFETY LABELS IN GOOD CONDITION AND REPLACE IF MISSING OR DAMAGED.**
The Hayward-Perflex is a high performance swimming pool filter with a filtration rating of 3,000 gallons (11 KL) per hour. Manufactured from durable, corrosion-proof materials, it is designed for continuous operation, for installation above or below, the pool water line. It may be used on fresh or salt water swimming pools.

The Perflex filter uses diatomite filter powder (commonly called D.E.). D.E. is the most efficient dirt remover known. It is normally fed into the system through the skimmer when the filter is initially started; then drained from the filter when it can no longer efficiently remove dirt from the water. Through the Perflex’s exclusive "BUMP" action, the D.E. is periodically regenerated and the filter cycle extended without changing the powder. When the filter powder is totally used, the “BUMP” action makes it possible to drain the used diatomite without backwashing or dismantling the filter. The EC-50AC is equipped with a special, polished stainless steel clamp, designed for easy access to the internals of the filter.

**PUMP SELECTION**

To power your Perflex filter, select a continuous duty pump designed for swimming pool service. The filter may be used with a variety of Hayward bases and plumbing connections, or may be mounted on other suitable surfaces.

It is important to determine whether the pump will be located above or below the normal pool water line. If the pump is going above the water line, a self-priming centrifugal pump must be used. Self-priming pumps can lift water from a lower level and prime automatically. There is another type of pump simply called the centrifugal. Unlike self-priming centrifugals which can lift water from a lower level, a centrifugal must be located below the water line for dependable priming.

Select a pump with an output rating of between 30 and 65 GPM (114-246 LPM). Since 50 GPM (189 LPM) is the desired maximum filter flow, a flow controller (part number ECX1055) is furnished with each unit for use with pumps rated between 40 and 65 GPM (150-246 LPM). Install the flow controller in the filter body as illustrated with an elbow adapter, union connector, or adapter. The adapter both secures the controller in its proper position, and completes the hydraulic balance of the system.

**FILTER LOCATION**

1. Though the filter is designed for outdoor use, it is advisable to protect electrical components from the weather. Select a well-drained area, one that will not flood when it rains. Locate the filter as close to the pool as practical, keeping the number of fittings to a minimum.
2. Set the filter on a level mounting platform or base. Keep the filter bump handle, drain outlet, and pressure gauge accessible for convenient operation.
3. Position the system so that the filter tank can drain by gravity.

**PLUMBING & INSTALLATION**

1. To facilitate servicing of the filter system and to allow for indoor storage during the winter months, installing union connections at the suction and outlet ports is recommended.
2. Use 1-1/4" or 1-1/2" I.D. flexible plastic pipe, or hose, joined with insert fittings and stainless steel clamps.
3. All plumbing connections on the system are 1-1/2" N.P.T. When making connections, use plastic male-end adapters. Apply three turns of Teflon tape or plastic pipe sealant compatible with ABS to the male threads. Screw the fitting into the thread hand tight; then, using a wrench, tighten one more full turn. Additional tightening is unnecessary-and-could result in damage to components.
4. Refer to the diagrams for suggested valving. Ball-type valves are recommended where needed.

USE ONLY HAYWARD GENUINE REPLACEMENT PARTS
5. Tighten pump base mounting bolts, if loose.
6. Securely **hand tighten** the union nut between the filter and pump.
7. Connect the pool suction plumbing between the skimmer, pool outlet, and the pump.
8. Connect the pool return (inlet) plumbing.
9. If the pressure gauge is not installed, apply Teflon tape to the gauge threads, and **carefully screw** the gauge into the threaded hole in the side of the filter body.
10. A filter drain plug, with gasket, is furnished with each filter and is all that is needed for complete filter draining. If desired however, drain piping may be extended from the filter by using the optional Drain Valve Kit (Model SP0723) and an appropriate length of 1-1/2" pipe. Piping must slope away from the filter so the tank can drain by gravity.
11. All electrical connections should be made in accordance with applicable electrical codes.
12. Check for joint leaks before operating system.
13. Refer to pump instruction booklet for pump information.

**BEFORE STARTING THE FILTER**

1. Obtain a supply of operating chemicals, D.E., and a pool test kit. Use only the swimming pool grades of D.E., such as:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>CELATOM</td>
<td>Eagle-Picher Industries, Inc.</td>
</tr>
<tr>
<td>AQUA-CEL</td>
<td>Johns-Manville Products Corporation</td>
</tr>
<tr>
<td>DICALITE 4200</td>
<td>Greco Inc.</td>
</tr>
<tr>
<td>WITCO</td>
<td>Witco Corporation</td>
</tr>
</tbody>
</table>

2. Superchlorinate the pool water by adding unstabilized granular or liquid chlorine. Stabilized forms of chlorine are recommended for normal daily use after the initial clean up of the water. Follow chemical manufacturer's recommendations for superchlorination and daily use.

**INITIAL SET-UP**

1. Always turn off pump and relieve tank pressure by opening Air Relief Valve before loosening Center Clamp or servicing filter.

**WARNING-SEPARATION HAZARD**

Tighten nut until spring coils touch each other.

2. To re-assemble Clamp on filter, make sure Clamp is located and centered properly over the filter flange. If Clamp is tight, tap Clamp with rubber mallet or block of wood to help seat it.

The end of the T-bolt must extend through the trunnion, slide a (1) Washer ECX500J4 over the end of the T-Bolt followed by the (2) Spring ECX500JS, then the (3) Washer ECX500J3. (4) Thread the Nut ECX360JN onto the end of the T-Bolt. Tighten the nut with a using a wrench and 9/16” socket until the spring coils all touch and then an additional 2 turns.

3. To re-start system, open all in-line valves. Open Air Relief Valve before starting pump. Stand clear of filter and prime and start the pump per the manufacturer’s instructions. When a steady flow of water emerges from the Air relief Valve, close Air Relief Valve.

**STARTING THE FILTER**

Close the filter drain and the vent valve.

**CAUTION** All suction and discharge valves must be open when starting the pump. Failure to do so could cause severe personal injury and/or property damage.

Prime and start the pump following the manufacturer's instructions. Air trapped in the system will automatically vent to the pool. When there is a steady flow of water returning to the pool, the filter is ready for precoating. **DO NOT** operate the filter for more than one minute without the precoat charge.
PRECOATING
Scoop 5 lbs. (2.3 kgs.) of diatomite into the system through the skimmer as fast as the plumbing will take it. Note and record the pressure gauge reading after the diatomite has been added. This is the "precoat pressure."

FILTERING
Filtration starts as soon as the filter has been precoated. As the filter removes dirt from the pool water, the accumulated dirt causes a resistance to flow. As a result, the gauge pressure will rise and the flow will decrease. When the pressure rises 7-10 psi (.49-.70 Bar) above the precoat pressure, regenerate the filter.

REGENERATION (Extending the Cycle)
Stop the pump. Move the bump handle down slowly, then up briskly. Repeat 3 times. Restart the pump and filtration will resume at near the original flow and pressure.
After each regeneration, and until the filter is cleaned, there may be a slight increase in the starting pressure. This is the result of dirt accumulating within the filter and is completely normal.

CLEANING
Cleaning is recommended when the gauge pressure rises more than 10 psi (.70 Bar) in less than a 24 hour period or when cloudy water returns to the pool for more than 30 seconds after regeneration. To clean, first stop the pump; then move the bump handle down slowly, then up briskly. Repeat 8 times. Open the vent valve (under bump cover), open the filter drain (Note: if the filter is installed below the pool water line, close the suction and return valves) and allow water and-dirt-to-empty completely.
After the filter has drained, and with the drain still open, run the pump for a few seconds to flush out any dirt remaining in the bottom of the filter. (Note: If the filter is installed below the pool water line, close the suction and return valves) and allow water and-dirt-to-empty completely.
Close the filter drain and the vent valve. Open the suction and return valves (when used). Start the pump and let the filter fill with water and repeat the CLEANING procedure. This completes the cleaning phase. The filter is now ready for recharging. Proceed as in STARTING THE FILTER and PRECOATING.

VACUUMING
Vacuuming can be performed directly into the filter whenever needed. For fastest results, regenerate the filter before and after each vacuuming operation.

TO CHANGE BUMP HANDLE POSITION
1. Remove the bump handle grip. Push in tab at base of handle. Carefully pry the bump cover from the retaining groove and slide the cover off the handle.
2. Using a drift (or 10 penny nail), tap the pivot pin out of the filter head anchor point, freeing the end of the handle.
3. Rotate the bump handle to the alternate position and align the handle and the head anchor holes. Tap the pivot pin in place.
4. Reinstall the bump cover and grip.

GAUGE/INSPECTION PORT ADAPTER
The gauge/inspection port adapter provides an easy way to look into the filter, at the top area of the tube nest assembly. It gives a quick inspection capability to check tube nest conditions (algae, calcium or D.E. build-up, ect.) without requiring the removal of the filter head. It also allows you to wash off trapped debris and excess D.E. from between the Flex-Tubes; and from under the tube sheet, by spraying with a garden hose, or utilizing Hayward’s Jet-Action Cleaning Wand (EC2024) that attaches to the end of a garden hose.

To remove adapter- shut off the pump and valves. Open the air relief. Drain the water in the filter to a level below the adapter port. Unscrew the adapter, with the pressure gauge, counterclockwise.

To Reinstall the adapter - thread the adapter, with the adapter o-ring in place, securely into the filter housing.

PREVENTIVE MAINTENANCE
While Perflex filters are basically resistant to the difficulties often encountered as a result of chemical build-up in swimming pools, it is important to keep in mind that the mineral content in a pool increases every day as a result of the chemicals and the normal water evaporation process. If the concentration of minerals is allowed to get too high, the minerals will form deposits on the Flex-Tubes inside the filter, and will eventually result in shortened filter cycles.
The filter elements can be cleaned by washing with a garden hose. For best results, carefully brush the surface to remove fine particles. Do Not Pressure wash as it can damage the filter elements.
You may find some debris on the filter elements, which may not be removed with hosing.
After cleaning, thoroughly flush all affected parts with cold water.
<table>
<thead>
<tr>
<th>REF. NO.</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>NO. REQ'D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ECX5000D</td>
<td>Bump Mechanism Cover</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>ECX1322A</td>
<td>Vent Valve with O-ring</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>ECX5000BP</td>
<td>Filter Head with Vent Valve</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>ECX5000C</td>
<td>Clamp Assembly with Spring</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>ECX1002Z9</td>
<td>Pivot Pin (long)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>ECX4236</td>
<td>Shoulder Screw</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>ECX1040</td>
<td>Bump Handle</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>ECX1037B</td>
<td>Bump Handle Grip</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>ECX360JN</td>
<td>Nickel Plated Sleeve Nut, 5/16&quot; Must be used with clamp spring assembly</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>ECX4249</td>
<td>Locknut</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>ECX5000F</td>
<td>Bump Shaft, 1/2&quot;</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>SPX1500NYA</td>
<td>Tube Sheet Bolt Set</td>
<td>12</td>
</tr>
<tr>
<td>13</td>
<td>ECX1004A</td>
<td>Tube Sheet Top</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>ECX5000G</td>
<td>Diaphragm Gasket</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>ECX1004</td>
<td>Tube Sheet Bottom</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>ECX1014A</td>
<td>Bump Shaft Kit (Includes 17,18, &amp; 19)</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>O-Ring</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>Retainer</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>Thrust Washer</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>ECX1032</td>
<td>Flex-Tube Assembly</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>ECX5000AP</td>
<td>Filter Body wiFlow Diffuser</td>
<td>1</td>
</tr>
<tr>
<td>22</td>
<td>ECX27091</td>
<td>Pressure Gauge, back mount</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>ECX12866</td>
<td>Gauge/Inspection Port Adapter</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>ECX1287</td>
<td>O-ring for Gauge Adapter</td>
<td>1</td>
</tr>
<tr>
<td>25</td>
<td>ECX5029</td>
<td>Decal -Operation</td>
<td>1</td>
</tr>
<tr>
<td>26</td>
<td>SPX1055</td>
<td>Flow Controller</td>
<td>1</td>
</tr>
<tr>
<td>27</td>
<td>ECX4077B1</td>
<td>Check Valve</td>
<td>1</td>
</tr>
<tr>
<td>28</td>
<td>ECX1256</td>
<td>Flow Diffuser with Check Valve</td>
<td>1</td>
</tr>
<tr>
<td>29</td>
<td>SP1022C</td>
<td>Drain Plug with Gasket</td>
<td>1</td>
</tr>
<tr>
<td>30a</td>
<td>ECX50034</td>
<td>Spring washer (Small hole)</td>
<td>1</td>
</tr>
<tr>
<td>30b</td>
<td>ECX50035</td>
<td>Spring</td>
<td>1</td>
</tr>
<tr>
<td>30c</td>
<td>ECX50033</td>
<td>Spring Washer (Large hole)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>SP0723</td>
<td>Ball-Type Drain Valve with Nipple</td>
<td>1</td>
</tr>
</tbody>
</table>
WINTERIZING
In areas where sub-freezing temperatures can be expected, the filter should be drained and removed from its operating location and stored indoors. Prior to removal, cycle the filter as described under CLEANING.

SERVICE & REPAIRS
Consult your local authorized Hayward-Perflex dealer or service center. No returns may be made directly to the factory without the expressed written authorization of Hayward Pool Products, Inc.

ALGAE CONTROL
Algae is a form of plant life which can vary in size from a few thousandths of an inch to the size of a small tree. Of the many forms of algae, those most frequently found in swimming pool water are microscopic in size and green in color.

Algae readily grows in sunlight and can, under favorable conditions, quickly overgrow a swimming pool turning it completely green in just a few hours. On the other hand, swimming pool water can be kept unfavorable to algae growth simply by maintaining a chlorine level of at least 0.5 ppm in the water at all times. The chlorine level should be checked at least once a day using a suitable test kit.

If an algae condition develops and the pool water “blooms” green, superchlorination of the pool will be necessary to clear it. Add unstabilized granular chlorine, or liquid chlorine.

Follow chemical manufacturer’s recommendation for superchlorination. The algae will quickly become inactive and can then be removed by the filter. Live algae, on the other hand, multiplies so fast that the filter cannot keep up with its growth rate. In an active algae situation, it may be necessary to regenerate the Perflex filter as frequently as every 2 to 3 hours.

When correctly used, commercial algaecides are effective against algae, though algaecides should be used in conjunction with, and not as a substitute for, regular chlorination or superchlorination.

Maintaining a chlorine level of at least 0.5 ppm in the pool water at all times is the most effective way to prevent algae growth in swimming pools.

<table>
<thead>
<tr>
<th>SUGGESTED POOL CHEMISTRY LEVELS</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
</tr>
<tr>
<td>TOTAL ALKALINITY</td>
</tr>
<tr>
<td>CHLORINE (UNSTABILIZED)</td>
</tr>
<tr>
<td>CHLORINE (STABILIZED)</td>
</tr>
<tr>
<td>CHLORINE STABILIZER (Cyanuric Acid)</td>
</tr>
</tbody>
</table>

PRODUCT REGISTRATION
(Retain for Your Records)

DATE OF INSTALLATION_________________
PURCHASED FROM _____________________
MODEL ___________________________
SERIAL NUMBER ______________________
▲Retain this Warranty Certificate in a safe and convenient location for your records.

USE ONLY HAYWARD GENUINE REPLACEMENT PARTS
<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>PROBABLE CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
</table>
| Running at high pressures. | 1. D.E. coated with normal accumulation of pool dirt, algae, etc.  
2. Overcharge of D.E.  
3. Restriction in return line caused by small eyeball fitting.  
2. Bump-Drain-Recharge.  
3. Change to larger size fitting.  
4. Open valve. |
| Drop off of return flow. | 1. D.E. coated with normal accumulation of pool dirt, algae, etc.  
2. Pump strainer basket clogged.  
3. Skimmer basket clogged.  
4. Pump impeller vanes clogged.  
5. Air leak on suction side of pump.  
2. Clean.  
3. Clean.  
4. Cleaning with a stiff wire thru the pump strainer opening will usually work. Alternate would be to disassemble-and clean.  
5. Check cover gasket, hand knobs, hose, clamps, etc. Replace or tighten as necessary.  
6. Consult pump and motor trouble shooting guide. |
| Short cycles. | 1. D.E. loaded to capacity with pool dirt, algae, etc.  
2. Bumping incorrectly.  
3. Bump handle bent.  
4. Pump output exceeds design flow rate of filter.  
2. Slow down stroke - brisk upstroke. Repeat 6 times.  
3. Check and straighten or replace.  
5. Super-chlorinate; Bump-Drain-Recharge as needed. |
| Short cycles -- even after proper bumping, draining, and recharging | Contaminated (clogged) Flex-Tube braids caused by:  
a. Natural accumulation of chemical deposits (accelerated if chemicals are fed thru skimmer).  
b. Running D.E. charge too long with excessive amount of live algae present in pool.  
c. Operating filter without D.E.  
d. Operating too long without D.E. after starting pump. D.E. must be added as soon as filter is full of water and pump is putting out a steady stream.  
**IMPORTANT** — Testing a new pool plumbing system without adding D.E. will cause this type of clogging. | Clean Tube Nest  
  
  a) Cleaning: Remove tube nest and hose down with forceful stream of clean water. Brush to remove fine particles.  
  
  b) Detergent Cleaning: Remove tube nest and hose down with forceful stream of clean water. Soak tube nest in strong solution of laundry detergent (such as **Cheer**) and warm water. Hose down again. |
<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>PROBABLE CAUSE</th>
<th>REMEDY</th>
</tr>
</thead>
</table>
| D.E. leaking to pool via the return lines.  | 1. Opening or tear in one or more Flex-Tubes.  
2. Rip or hole in diaphragm gasket.  
3. Worn or loose fitting diaphragm gasket (chemicals fed thru suction lines may shorten life of this part).  
4. Loose bolts on tube nest plates. | 1. Replace Flex-Tube.  
2. Replace gasket.  
3. Replace gasket.  
4. Tighten bolts. |
| Hard bumping.                               | 1. Caking of D.E. under tube sheet. Sometimes caused by accumulation of sun tan oils, hair or floating particles that bind together in a clay-like form.  
2. Overloaded with D.E. Sometimes happens when last charge of dirty D.E. was not properly drained.  
3. Filter runs too long between bumping. | 1. Bump-Drain-Recharge more often and reduce the use of oils.  
2. Bump-Drain-Recharge with proper amount of D.E.  
3. Bump more frequently. |
| D.E. leaking back to pool via skimmer or main drain. | Filter check valve worn or stuck open. | Clean and/or replace. |
| Very short cycles when vacuuming.           | Normal if pool contains:  
1. Very dirty water.  
2. Presence of live, vigorously growing algae.  
3. Presence of alum or flocing agents, which will clog filter. | 1. Bump-Drain-Recharge more often.  
2. Add enough chlorine to control this growth — then vacuum.  
3. Vacuum so as to by-pass filter.  
Avoid using flocing agents. |
HAYWARD® LIMITED WARRANTY

This equipment was inspected before shipment from our plant. To original purchasers of this equipment, Hayward Pool Products, Inc., 620 Division Street, Elizabeth, New Jersey, warrants its products free from defects in materials and workmanship for a period of ONE (1) year from the date of purchase.

Parts which fail or become defective during the warranty period, except as a result of freezing, negligence, improper installation, use, or care, shall be repaired or replaced, at our option, without charge, within 90 days of the receipt of defective product, barring unforeseen delays.

To obtain warranty replacements or repair, defective components or parts should be returned, transportation paid, to the place of purchase, or to the nearest authorized Hayward service center. For further Hayward dealer or service center information, contact Hayward customer service department. No returns may be made directly to the factory without the express written authorization of Hayward Pool Products, Inc.

To original purchasers of this equipment, Hayward Pool Products, Inc. warrants its vacuum release systems to be free from defects in materials and workmanship for a period of ONE (1) year from the date of purchase.

Filters which become defective during the warranty period, except as a result of freezing, negligence, improper installation, use or care, shall be repaired or replaced, at our option, without charge.

All other conditions and terms of the standard warranty apply.

Hayward shall not be responsible for cartage, removal and/or reinstallation labor or any other such costs incurred in obtaining warranty replacements.

The Hayward Pool Products warranty does not apply to components manufactured by others. For such products, the warranty established by the respective manufacturer will apply.

Some states do not allow a limitation on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Hayward Pool Products, Inc.
620 Division Street
Elizabeth, NJ 07207

*Supersedes all previous publications.
Get the Scoop on Achieving Optimum D.E. Filter Performance with Hayward’s D.E. Pre-Measure Scoop!

With Hayward’s D.E. Pre-Measure Scoop, you can now accurately measure and add the correct amount of diatomaceous earth powder to your pool filter ensuring optimum performance and crystal clear, sparkling water. Hayward’s D.E. Pre-Measure Scoop is the only scoop that provides an exact measure of 1 lb. or 1/2 lb. of D.E. Needless guesswork is eliminated. Adding D.E. is accurate, easy, and fast—all with no mess. The D.E. Pre-Measure Scoop doubles as a broadcaster for distributing granular chlorine to your pool. It can also be used for scooping out those hard-to-remove final gallons of water from your spa. Plus, there are hundreds of other uses. Hayward’s D.E. Pre-Measure Scoop is available at your pool dealer. Just look for the bright orange display.

Watch it on Video!

Now that you’ve got the filter that provides the cleanest, clearest pool water...Get the video that keeps maintenance at a minimum and pool enjoyment at a maximum! That’s right. Hayward Pool Products has an easy, stress-free way for you to learn about how to operate and maintain your Perflex filter—by video. The new twelve minute Perflex video includes easy-to-follow how-to’s, on achieving and maintaining proper pool water chemistry, initial start-up and operation of your Perflex filter, cleaning your Perflex, plus vacuuming, preventative maintenance, and winterizing. Perflex — the video. It keeps maintenance at a minimum and pool equipment at a maximum!

Just order “Operation and Maintenance” Video Part Number EC-OM-Video-90 and include your check or money order for $9.95* (+ $2.50 for shipping and handling) and mail to: Hayward Pool Products Inc.
620 Division Street
Elizabeth, NJ 07207
Attn: Marketing Communications

DETACH HERE: Fill out bottom portion completely and mail within 10 days of purchase/installation or register online.

PERFLEX™ Warranty Card Registration

Register online at www.haywardnet.com

Please Print Clearly:

First Name___________________________ Last Name:___________________________________
Street Address________________________________________________ ______________________
City____________________________________ State_______________ Zip___________________
Phone Number:_______________________________ Purchase Date:________________________
E-mail________________________
Address,____________________________________________________________________

Serial Number ____________________________ (10-17 digit number)

Model________________________

Pool Capacity ___________(U.S. Gallons)

□ Please include me on all e-mail communications regarding Hayward Equipment or promotions.

Mail to: Hayward Pool Products, 620 Division Street, Elizabeth, NJ 07207
Attn: Warranty Dept
or REGISTER YOUR WARRANTY ON-LINE AT WWW.HAYWARDNET.COM.