



*Draft water in shallows & weeds*

# Operating, Maintenance & Safety Booklet

**IMPORTANT: READ AND FOLLOW ALL INSTRUCTIONS**



*Note: Product may not be exactly as shown*



**BearsPaw ProtectaPump**

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**SAVE THESE INSTRUCTIONS AND SHARE WITH ALL USERS**

## WARNINGS

Before using this product, read and follow all warning notices and instructions accompanying this Fire Ceptor. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage.

### Important Notice - Attention User

The Fire Ceptor O & M booklet contains operation and safe use of this product. This information should be given to the owner/operator of this equipment and made available to all new users.

#### **WARNING - EXTREME HAZARD - One-Way Valve (foot valve):**

The valves are for single direction (suction) flow only. **Never apply reverse load to units fitted with foot valves - EXPLOSION RISK.**

One-way valves installed in Fire Ceptors are designed **only** for use with **Portable Pumps. Do not use 'foot valve' equipped units with Truck Pumps.**

**IMPORTANT:** The Fire Ceptor is pre-assembled for your convenience and ease of installation. Check to make sure the unit is intact, undamaged and all parts have been supplied. Never substitute parts for those supplied, as doing so may cause product failure.

**WARNING - DANGER:** Be sure that the working area is free from such hazards and always use proper precautions.

**Notice:** BearsPaw ProtectaPump Ltd. products must be used in compliance with applicable federal, provincial, local, laws and regulations. Product selection should be based on physical specifications and limitations, compatibility with the environment and material to be handled. All illustrations and specifications in this literature are based on the latest production information available at the time of publication. Materials and specifications are subject to change, and models may be discontinued at any time without notice or obligation.



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# **Part One :**

# **Operating & Maintenance**

# **Booklet**

**IMPORTANT: READ AND FOLLOW ALL INSTRUCTIONS**

# Table of Contents for Operating & Maintenance

**A. HOW YOUR FIRE CEPTOR WORKS**

**B. INSTALLATION**

**C. INITIAL START-UP & RESTART INSTRUCTIONS**

**D. ONE PIECE V-GUARD - GUIDE TO REMOVE & REPLACE**

**E. CLEANING FIRE CEPTOR, BIO-BELT, AND V-GUARD**

## TECHNICAL DATA

**Suction Separator Diameter and Flow\* Rates** (*\* Based on the results observed during various tests with numerous rural fire departments in Canada*)

<b>Fire Ceptor Model</b>	<b>Size</b>	<b>LPM</b>	<b>Imp. GPM</b>	<b>US GPM</b>
2.3 HPC	2"	427	94	113
25.3	2.5"	1200	264	317
	3" (camlock)	1345	296	355
4.3	4"	4546	1000	1200
6.1	5"	4448	978	1175
6.3		4637	1020	1225
6.1	6"	5110	1124	1350
6.3		5867	1291	1550

## A. HOW YOUR 'SUCTION SEPARATOR' WORKS

Your Fire Ceptor is designed to protect suction pumps by separating particulate matter from water and operate for long periods with a minimum of maintenance when installed, operated, and maintained in accordance with these instructions.

**No flotation or suspension is required** as the Separator is designed to rest on the bottom in gravel & sand (in as little as 8 inches of water) while functioning at capacity and protecting the pump. During the suction process, sediment, sand, etc. are instantly separated from the water at source, allowing clean water to flow to the pump while returning the sediment, sand, etc. to nature.

After a period of time, biologics may accumulate in the Fire Ceptor causing a resistance to the flow of water. This resistance may result in a diminished flow of water. As such, the Bio-belt must be cleaned following each use of the Fire Ceptor.

**See Section E: Cleaning the Fire Ceptor, Bio-belt, and V-Guard.**

## B. FIRE CEPTOR INSTALLATION

1. Verify that the Fire Ceptor Model is optimal for your environment and equipment.
2. Carefully remove the equipment from the carton and check for any evidence of damage due to rough handling or shipping. If any of the equipment is damaged, immediately notify the manufacturer.
3. Prepare the site bed/base for the Fire Ceptor out of gravel/sand. The separator should be placed upright on its base in 8 or more inches of water depth on top of sand or gravel. The Fire Ceptor is **not** to be used as a shovel.
4. Attach the Fire Ceptor and pump connector assemblies together.

## C. INITIAL START-UP AND RESTART INSTRUCTIONS

1. Be sure all connections have been made and are secure.
2. Ensure the Bio-belt has been cleaned as per Section E: "Cleaning the Fire Ceptor, Bio-belt, and V-Guard".
3. Ensure that the V-Guard is securely attached as per Section D.
4. For site preparation, create a site bed/base for the Ceptor out of gravel / sand.

## D. ONE PIECE V-GUARD - (OPTIONAL ATTACHMENT) - GUIDE TO REMOVE & REPLACE

1. **To Remove:** Rest the unit on a flat surface and apply **downward pressure** with one hand on the centre top of the Fire Ceptor while **applying quick upward pressure** to the V-Guard with your other hand placed under the frame at the front end (adjacent to the BearsPaw Logo). This action will release the V-Guard from its catches, so it can then be easily removed (see images below). While removing the V-Guard, note the obvious differences of the front and rear for easy reattachment. For reference, see images below:



Lift up to release



Tilt up to rear



Lift up & off

2. **To Replace:** Reverse the procedure by tipping up the larger end of the V-Guard as you reposition it in place, starting at suction connector end (rear). Place under connector and then lower the front and align with the ball pins / connection points. When aligned, snap in place with a sudden balanced downward pressure simultaneously with both hands on each side. You should immediately hear/feel the V-guard snap into position. Then inspect to make sure it is securely

in place all around. **Note:** It is important to check for snugness so it will not unexpectedly separate during use. If you are unable to achieve a snug and secure fit, do not use the unit and seek help or contact Bears paw ProtectaPump for assistance. For reference see images below:



Position under connector



Shift forward



Position & snap

## E. CLEANING FIRE CEPTOR, BIO-BELT, AND V-GUARD

<b>Notice - IMPORTANT Change: Bio-belts and One piece V-Guard</b>	
<b>Stainless steel Bio-belt</b>	Permanently installed and can't be removed - Must be cleaned/flushed in place. To enable clear visibility for proper flushing and removal of biologics from the Bio-belt & unit, the optional V-Guard must be removed prior to flushing the Bio-belt.
<b>One piece V-Guard</b>	See <b>Section D</b> for removal and re-attachment instructions.

1. Cleaning frequency will vary from situation to situation with other factors such as contaminants.
2. Turn the pump off. Shut off any automatic controls to assure that the system is not inadvertently started during servicing.
3. Disconnect the Fire Ceptor safely and remove it from the environment.
4. Remove optional V-Guard to gain clear access to Bio-belt (sect. E).

5. Flush, steam, pressure wash, etc. the Fire Ceptor as required.
6. Stainless steel Bio-belt requires flushing after each use to remove biologics.
7. Clean and remove debris from inside the body of the Fire Ceptor by rotating to an upside down position while flushing.
8. Follow Section C. **Initial Start-up and Restart Instructions.**





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# **Part Two :**

# **Safety Booklet**

**IMPORTANT: READ AND FOLLOW ALL INSTRUCTIONS**

# Table of Contents for Safety

**A. FIRE CEPTOR SAFETY INSTRUCTIONS**

**B. GENERAL INSTRUCTIONS**

**C. HOSE AND FITTING MAINTENANCE & REPLACEMENT  
INSTRUCTIONS**

**D. LIMITED WARRANTY**

## A. FIRE CEPTOR SAFETY INSTRUCTIONS

When using this Fire Ceptor, basic safety precautions should always be followed, including the following:

1. **READ AND FOLLOW ALL INSTRUCTIONS.**
2. **WARNING:** To reduce the risk of injury, do not permit unauthorized personnel to use this product at all times.
3. **FITTING SAFETY PROCEDURES SHOULD BE FOLLOWED.**
4. **ENSURE PROPER PPE IS FOLLOWED AS PER YOUR INDUSTRY/ENVIRONMENTS REGIONAL SAFETY STANDARDS:**  
*In addition, personal protective equipment (PPE) suitable to any identified chemical, physical, biological or ergonomic hazard must be worn. Jewelry, watches and rings, etc. shall be removed if wearing them interferes with the protection offered by the PPE selected or if they have the potential to constitute a hazard during the work or job task. Fire Ceptor is placed on top of sand or gravel and is not to be used as a shovel.*
5. **WARNING - EXTREME HAZARD - One-Way Valve (foot valve):**  
The valves are for single direction (suction) flow only. **Never apply reverse load to units fitted with foot valves - EXPLOSION RISK.** One-way valves installed in Fire Ceptors, designed **only** for use with **Portable Pumps. Do not use 'foot valve' equipped units with Truck Pumps.**

## B. GENERAL INSTRUCTIONS

1. **FAIL SAFE:** Quick action couplings or the hose they are attached to can fail without warning for many reasons. Design all systems and equipment in a fail-safe mode so that failure of the quick action coupling or hose will not endanger persons or property.
2. **DISTRIBUTION:** Provide a copy of the safety guide to each person that is responsible for selection or using quick action coupling products. Do not select or use quick action couplings without

thoroughly reading and understanding this safety guide.

3. **USER RESPONSIBILITY:** Due to the wide variety of operating conditions and applications for the Fire Ceptor, BearsPaw ProtectaPump does not represent or warrant that any particular Hose or Fitting is suitable for any specific end use system. This safety guide does not analyze all technical parameters that must be considered in selecting a product. The user, through its own analysis and testing, is solely responsible for:
  - Making the final selection of the Products.
  - Assuring that the user's requirements are met and that the application presents no health or safety hazards.
  - Providing all appropriate health and safety warnings on the equipment on which the Products are used.
  - Assuring compliance with all applicable government and industry standards.
4. **ADDITIONAL QUESTIONS:** Contact the appropriate BearsPaw technical service department if you have any questions or require any additional information at [info@ProtectaPump.com](mailto:info@ProtectaPump.com).
5. **FLUID COMPATIBILITY:** Quick action couplings selection must assure compatibility of the body and seal materials with the fluid media used.
6. **TEMPERATURE:** Be certain that fluid and ambient temperatures, both steady and transient, do not exceed the limitations of the quick action couplings. Use caution and hand protection when connecting or disconnecting quick action couplings that are heated or cooled as they are conducted by their environment.
7. **ENVIRONMENT:** Care must be taken to ensure that couplings are either compatible with or protected from the environment to which they are exposed. Environmental conditions including but not limited to ultraviolet radiation, ozone, moisture, water, salt water, chemicals, and air pollutants can cause degradation, freezing, and premature failure.

## C. HOSE AND FITTING MAINTENANCE & REPLACEMENT INSTRUCTIONS

1. **VISUAL INSPECTION OF FIRE CEPTOR AND FITTING:** Any of the following conditions require immediate shut down and replacement of the Fire Ceptor or Fitting:

- Fitting slippage on the Fire Ceptor
- Damaged or cracked housing
- Cracked, damaged, or corroded Fittings
- Leaks at Fitting
- Kinked, crushed, flattened or twisted Hose

Confirm the following:

- That the user's requirements are met and that the application presents no health or safety hazard
- That all appropriate health and safety warnings on the equipment on which the Products are used have been provided
- That all applicable government and industry standards have been complied with

2. **VISUAL INSPECTION OF ALL OTHER:** It is recommended that your Fire Ceptor be serviced by your BearsPaw ProtectaPump Ltd. Representative

- 2", 2.5", 4" & 6" models should be serviced every year or 50,000 m<sup>3</sup> or 11,000,000 imperial gallons
- All other models: refer to website for operating and maintenance schedule

3. **STORAGE:** Stored Fire Ceptor must not be subjected to damage that could reduce their expected service life and must be placed in a dry area. The Fire Ceptor must not be exposed to ozone, oils, corrosive liquids or fumes, solvents, rodents, insects, ultraviolet light, electromagnetic fields, or radioactive materials.

## D. LIMITED WARRANTY

BearsPaw ProtectaPump Ltd. warrants the original purchase of its Fire Ceptors to be free from manufacturing defects in material and workmanship for a period of two years from the date of shipment, subject to the limitations as numbered below. BearsPaw Separators are designed to operate sitting upright on their base at all times.

After each use, the Bio-belt is to be cleaned. **Note: Failing to adequately clean the bio-belt between uses of the Separator constitute misuses of the Fire Ceptor, rendering the warranty void.** If the purchaser believes a product is defective, the purchaser shall:

1. Notify the manufacturer, state the alleged defect and request approval to return the product.
2. If approved, return the product. If the product is accepted for return and found to be defective, the manufacturer will, at its discretion, either repair or replace the product within 30 days.

Other than to repair or replace as described above, the purchaser agrees that the manufacturer shall not be liable for any losses, costs, expenses or damages of any kind arising out of the product's use, installation or technical data of any kind, description of product use, sample or model, warnings or lack of foregoing. This warranty is intended to cover defects in manufacturing and does not apply to any defects caused by negligence, misuse, wear, unauthorized repair, improper assembly or lack of or improper maintenance. No other warranties, written or oral, expressed or implied, including the warranties for fitness for particular purpose and merchantability, are made or authorized. No affirmation of fact, promise, and description, of product use or sample or model shall create any warranty from the manufacturer, unless signed by the president or vice-president. These products are manufactured, sold and intended for fire use only.

**BearsPaw ProtectaPump Ltd.**

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# Notes

A blank sheet of lined paper with a vertical margin line on the left side. The page is ruled with horizontal dashed lines for the main body of text and a solid vertical line for the margin.



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