

# 6 Maintenance

## Pump Maintenance Winterization (Optional)

The abrasive vessel, fire pump and plumbing system are equipped with an optional winterization kit which includes a filling system and valves to permit the introduction of an anti-freeze liquid into the complete system. The anti-freeze kit includes a header tank, 3-way control valve and related plumbing.

The unit must be **immediately** winterized when temperatures are below 32°F (0°C) to avoid freezing. Total system displacement is approximately 10 Gallons (40 L), excluding the hose reels.

**NOTE: Use only RV type (- 50°F) undiluted anti-freeze solution.**

**To winterize the PyroBlitz Power Unit, follow these steps:**

### **STEP #1: Anti-Freeze Filling Procedure**

Following this procedure will ensure all the critical system components exposed to water are filled with anti-freeze solution:

1. Pull out the Emergency Stop Button so that the module is in the **ON** position. The electric switch on the pump panel should be moved from the TANK TO PUMP VALVE OPEN position to WINTERIZATION OPEN position.
2. Run the unit until anti-freeze solution is discharging in full color (without water) out the end of the hose.
3. Disengage PTO on pump panel.
4. Quickly re-attach the Blitz nozzle to the hose and then rewind the hose onto the reel.

### **STEP #2: Re-Activation of System for Normal Operations**

1. Activate the tank to pump control switch (valve located between the apparatus water tank and the PyroBlitz power unit) by moving the three-way valve from "anti-freeze open" position to the "water tank open" position.
2. Start the unit and operate per the Operation section of this manual.

# 7 Troubleshooting

## Hydraulic Pump Problems

Refer to REXROTH Pump website:  
[www.boschrexroth.com](http://www.boschrexroth.com)

## Pump and Plumbing Problems

- 1. PUMP IS UNDER PRESSURE AND WILL NOT TURN.**
  - a) Check that the bypass/relief valve is not stuck in the closed position.
  - b) Check that the EZ-Start valve is in operation.
- 2. PUMP IS CAVITATING OR WATER IS SURGING.**
  - a) Check water tank level.
  - b) Check that tank to pump valve is in fully open position.
  - c) Check that bypass/relief valve is not stuck.
  - d) Check that pump water is not overheating by observing thermal relief valve discharge port.
- 3. BYPASS/RELIEF VALVE CONTINUOUSLY CYCLING.**
  - a) Check for water leaks in plumbing system.
  - b) Check for blocked water filter strainer.
  - c) Check pump-to-tank valve is fully open.

## Anti-Freeze Loading Problems

### (OPTIONAL)

- 1. ANTI-FREEZE SYSTEM DOES NOT LOAD OR WORK PROPERLY.**
  - a) Check tank-to-pump valve and ensure it is in the anti-freeze position.
  - b) Check anti-freeze container for contents.
  - c) Check that UHP pump is primed.

## Hose Reel Problems

- 1. THE REEL DOES NOT REWIND.**
  - a) Check if battery is connected.
  - b) Check if the fuse reel electrical box is operational.
  - c) Check wiring connections in power unit electrical box and reel electrical box for loose connections.
  - d) Check the reel rewind button on the front panel for proper operation.

## PyroFoam System Problems

- 1. Foam does not exit the nozzle**
  - a) Ensure that foam selector valve is in either class A or B mode.
  - b) Ensure those foam tank to pump valves are open.
  - c) Ensure that foam pump master switch is activated.
  - d) Ensure that foam proportioner is adequately set.
  - e) Ensure that there is foam in tanks.
- 2. Foam pump master switch is on but foam pump is not working**
  - a) Ensure that foam tank level switch is not activated by ensuring that adequate foam in tanks and that the red low foam warning lights are not illuminated.
  - b) Ensure that micro switch located at throttle controller is operating properly.
- 3. Foam pump does not switch off when engine goes to idle**
  - a) Faulty micro switch at throttle controller. Isolate pump using foam pump master switch and replace micro switch as soon as possible.
- 4. Foam pump cavitates**
  - a) Adjust foam proportioning system to lower level until cavitation stops.
  - b) Check viscosity of foam concentrate.
- 5. Foam quality poor**
  - a) Adjust foam proportioner until proper foam quality is achieved.
  - b) Ensure that correct type of foam compound is in relevant tanks.
- 6. Winterization**
  - a) Ensure that foam tank to pump valves are closed.
  - b) Flush foam system completely.
  - c) Select either class A or B system and run foam pump for no longer than 15 seconds dry.