WARNING!
Read this Operator’s Manual carefully before using this tool. Failure to understand and follow the contents of this manual may result in electrical shock, fire and/or serious personal injury.
Table of Contents

Recording Form for Machine Serial Number ..............................................................................................................1
Safety Symbols ..............................................................................................................................................................2

General Safety Rules
- Work Area Safety ..........................................................................................................................................................2
- Electrical Safety ............................................................................................................................................................2
- Personal Safety ............................................................................................................................................................2
- Tool Use and Care ........................................................................................................................................................2
- Service ........................................................................................................................................................................3

Specific Safety Information
- Pipe Freezing Unit Safety ................................................................................................................................................3

Description, Specifications and Standard Equipment
- Description .......................................................................................................................................................................3
- Specifications ................................................................................................................................................................4
- Standard Equipment ....................................................................................................................................................4
- Accessories .................................................................................................................................................................4

Machine Inspection ........................................................................................................................................................4

Machine and Work Area Set Up ...................................................................................................................................5

Operating Instructions
- Freezing Times .............................................................................................................................................................8

Cleaning and Storage
- Cleaning .........................................................................................................................................................................9
- Machine Storage ..........................................................................................................................................................9

Service and Repair .........................................................................................................................................................10

Troubleshooting ..........................................................................................................................................................11

Lifetime Warranty ..........................................................................................................................................................Back Cover
Super Freeze™
SF-2500
Pipe Freezing Unit
Safety Symbols

In this operator’s manual and on the product, safety symbols and signal words are used to communicate important safety information. This section is provided to improve understanding of these signal words and symbols.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠️ **DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠️ **WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠️ **CAUTION** indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

⚠️ **NOTICE** indicates information that relates to the protection of property.

This symbol means read the operator’s manual carefully before using the equipment. The operator’s manual contains important information on the safe and proper operation of the equipment.

This symbol means always wear safety glasses with side shields or goggles when handling or using this equipment.

This symbol indicates the risk frostbite from a cold surface.

This is the electrical shock symbol.

General Safety Rules

⚠️ **WARNING**

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.

**SAVE THESE INSTRUCTIONS!**

Work Area Safety

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.

- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

- Keep children, and bystanders away while operating a power tool. Distractions can cause you to lose control.

Electrical Safety

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.

- Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.

- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.

- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

- If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter current device (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.

Personal Safety

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
• Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.

• Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

Tool Use and Care

• Do not force the tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it was designed.

• Do not use the power tool if the switch does not turn it ON and OFF. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

• Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.

• Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

• Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool’s operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

• Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Service

• Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

• When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electrical shock or injury.

Specific Safety Information

![WARNING]

This section contains important safety information that is specific to this tool.

Read these precautions carefully before using the SF-2500 Pipe Freezing Unit to reduce the risk of electrical shock or other serious personal injury.

SAVE THESE INSTRUCTIONS!

The SF-2500 Pipe Freezing Unit includes space within the unit to keep this manual with the machine for use by the operator.

Contact the Ridge Tool Company, Technical Service Department at (800) 519-3456 or TechServices@ridgid.com if you have any questions.

Pipe Freezing Unit Safety

• Tool is used to freeze a plug into copper, steel or other heat conductive metallic tubes or pipes. Do not use on plastic pipe or tube. Follow instructions on proper use. Other uses may increase the risk of injury.

• Do not touch the freeze heads while frosted. Touching the freeze heads while frosted can cause frostbite. Wear gloves if handling during use.

• Always test the piping system for pressure before opening it. Opening a pressurized line could result in burns or other serious injuries from exposure to the pipe contents.

• Do not twist or pull hoses. Do not open refrigerant piping. This can lead to refrigerant leaks and cause frostbite, asphyxiation and other serious injury. If a leak occurs, leave the area until the refrigerant dissipates.

Description, Specifications and Standard Equipment

Description

The SuperFreeze™ Pipe Freezing unit is used to freeze plugs in water piping systems to allow maintenance of the system without shutting down or draining the system. The SF-2500 is a self-contained refrigeration unit that circulates refrigerant to the aluminum freeze heads. The freeze heads are attached to the piping system and can freeze a plug in metallic tubing up to 2½” and metallic pipe up to 2”. Once the work is complete, the superfreeze unit is turned off and the ice plugs melt, returning the system to operation.

The Superfreezer does not use CO₂ or Nitrogen, and does not require the release of refrigerants. It uses a specially de-
signed compressor with quick restart capabilities and overload protection. The freeze head hoses are leak-free flexible rubber. The entire unit is in a portable steel carry case.

**Specifications**

**SF-2500**

**Capacity**
- Copper Tube: \(\frac{1}{2}'' - 2\frac{1}{2}''\) 10mm – 65mm
- Steel Pipe (Nominal): \(\frac{1}{2}'' - 2''\)

**Power Source**
- 115V 230V
- 1ph, 60 Hz 1ph, 50 Hz

**Compressor Type**
- Rotary, Hermetic, Low Back Pressure

**Compressor Motor**
- Input Power: 627W 505W
- Locked Rotor Amps: 46.5A 19.5A
- Input Amperage: 6.02A 2.4A

**Fan Motor**
- Input Power: 18W x 2 17W x 2
- Current Amps: 0.21A x 2 0.11A x 2

**Refrigerant**
- R-507

**Hose Length**
- 8.5 ft. (17 ft. span)

**Design Pressure**
- Low Side: 300 Psig 21 bar
- High Side: 500 Psig 34 bar

**Dimensions**
- \(W = 11''\) 28 cm
- \(L = 24\frac{1}{2}''\) 62 cm
- \(H = 14\frac{1}{2}''\) 37 cm

**Weight**
- 69 lbs. 31 kg.

**Standard Equipment**

The RIDGID® Pipe Freezing unit comes complete with features and accessories to make pipe freezing easy. These items include (See Figure 1).

- Quick Grip Clamp Catalog No. 65942
- Velcro Straps 1" x 16" (25mm x 40cm) with D-Ring Catalog No. 69707
- Water Bottle Catalog No. 60776
- Freeze Gel 8 oz. Catalog No. 74946
- Adapter Bushings:
  - \(\frac{3}{4}''\) CTS 1” OD x \(\frac{3}{8}''\) ID (38mm x 25mm) Catalog No. 69712
  - 1\(\frac{1}{4}''\) CTS 1\(\frac{1}{2}''\) OD x 1\(\frac{1}{4}''\) ID (38mm x 32mm) Catalog No. 70652
  - 2” CTS 2\(\frac{1}{2}''\) OD x 2” ID (63mm x 50mm) Catalog No. 69717

**Accessories (Optional)**

- SF-2500 End Adapters
  - \(\frac{1}{2}''\) CTS Catalog No. 68857
  - \(\frac{3}{4}''\) CTS Catalog No. 68862

**Machine Inspection**

**WARNING**

Before each use, inspect your pipe freeze unit and correct any problems to reduce the risk of serious injury from electrical shock and other causes and prevent freeze unit damage.

1. Make sure that the Pipe Freeze Unit is unplugged and inspect the power cord and plug for damage. If the plug has been modified, is missing the grounding prong, or if the cord is damaged, do not use the machine until the cord has been replaced.

2. Clean any oil, grease or dirt from all equipment and controls.

3. Inspect the Pipe Freeze Unit for any broken, worn,
missing, mis-aligned or binding parts or any other condition which may affect the safe and normal operation of the machine. The flexible hoses can be coiled and flexed when not frosted. Care must be taken not to force hoses to twist or kink. This prevents hose damage. Check the hoses to the freeze heads for cracks, kinks, breaks or other issues. If any of these conditions are present, do not use the machine until any problems found have been repaired.

4. Check to make sure that the warning and instruction labels are present and firmly attached. Do not operate the Pipe Freeze Unit without the warning label. (See Figure 2.)

5. Inspect the fan grille and louvers into the condenser housing to make sure that nothing is blocking the airflow. Lack of airflow through the unit can cause performance issues or damage the unit.

6. Make sure that the ON/OFF switch is set to the OFF position. With dry hands, plug cord into properly grounded outlet, Move the ON/OFF switch into the ON position, Confirm that the compressor motor starts and that the fan runs. Move the switch to OFF position and unplug the unit.

### Machine and Work Area Set-Up

**WARNING**

Set up the Pipe Freezing Unit and work area according to these procedures to reduce the risk of burns, electrical shock and other injuries and prevent machine damage.

1. Check work area for:
   - Adequate lighting.
   - Flammable liquids, vapors or dust that may ignite. If present, do not work in area until sources have been identified and corrected. The Pipe Freeze Unit is not explosion proof and can cause sparks.
   - Clear, level, stable, dry place for machine and operator. Do not use the machine while standing in water.
   - Properly grounded electrical outlet. A three-prong or GFCI outlet may not be properly grounded. If in doubt, have outlet inspected by a licensed electrician.
   - Clear path to electrical outlet that does not contain any potential sources of damage for the power cord.
   - Clear path for access to the work area.

2. Inspect the system and determine if the Pipe Freeze Unit will work.
   - Determine the system fluid – the Pipe Freeze Unit will only work on systems containing water. Know what additives are in the water. Additives can change liquid freeze temperature and make freezing difficult or impossible.
   - Determine the system material and size – the Pipe Freeze Unit will only work on metallic piping systems, and can only freeze pipes smaller than 2" and tubes smaller than 2½" nominal size.
   - Determine the system temperature – if the system temperature is greater than 125°F, the system will need to be shut off and allowed to cool to less than 125°F. Removing the piping system insulation will speed up this cooling.
   - Determine if there is flow in the system – the Pipe Freeze Unit will not work on flowing water. If there is flow in the section of pipe to be frozen, the flow needs to be stopped by shutting a valve, turning off a circulating pump, or other appropriate means.
   - Determine the air temperature in the area of the piping system. The Pipe Freeze Unit cannot be used in areas where the air temperature exceeds 100°F.
   - Determine where the piping system needs to be broken for the work that needs to be done.
   - Determine if the piping is filled with water. A plug cannot be frozen into partly filled pipes.

3. Determine location for freeze plug(s).
   - The location must allow access with at least one freeze head, and if only a single plug is required, it is preferred that there be enough space for both freeze heads.
• If the system will be soldered, brazed, welded, or other heat adding processes, the freeze plug(s) must be located as far away from the repair as possible. Excess heat can prematurely thaw the ice plug and allow water to flow while the system is open. The freeze plugs should be a minimum of one foot away from the heat for each inch of diameter for steel pipe or tube. For all other materials, the plug should be at least three feet away for each inch of pipe or tube diameter.

• Ice plugs must be more than one foot away from end caps, elbows and closed valves. Placing an ice plug closer than one foot can cause splitting of the pipe or tube.

• Do not place ice plugs closer than 5 feet from a circulating hot water (water hotter than ambient air but cooler than 125°F) main for pipe sizes 1” and smaller or closer than 8 feet from a circulating hot water main 1¼” or larger. Plugs placed closer to a circulating hot water main can prevent plug formation or can cause plug thawing.

4. Prepare the freeze plug locations. Remove all insulation and coatings from the pipe down to bare metal. If needed, remove any corrosion with a wire brush. Coatings and corrosion insulate the pipe and can slow or prevent the freezing process.

5. Place unit so freeze heads can reach desired plug points. Locate SuperFreeze on a solid, level surface, in an upright position. If the unit is not upright and level, it can cause damage to the compressor. Make sure the air inlet/outlet to condenser are not blocked. Blocked condenser openings will slow or prevent the freezing process. Be sure to locate the Pipe Freeze Unit away from where the repair will occur and not under the freeze heads. This will help prevent the entry of water into the freeze unit and help prevent electrical shock.

6. Uncoil the hoses to the freeze heads. Use care not to twist or kink the hoses, this can damage the hose and prevent proper operation.

7. Choose the appropriate freeze head cavity for the size of pipe or tube to be froze. The capacities for copper tube and steel pipe are listed in the chart that follows. Adapter bushings are required in some applications.

8. Apply freeze gel to the freeze head cavity. If using adapter bushings, apply freeze gel between the freeze head and the adapter and to the adapter surface that contacts the pipe. The freeze gel improves the thermal conductivity between the freeze head and the pipe and decreases the time required to freeze a plug. If freeze gel is not available, proceed to the next step.

9. Attach the freeze heads to the pipe.

   • Single freeze plug applications – In single freeze plug applications, both freeze heads should be applied directly opposite each other to form the plug. This will decrease the time required to freeze the plug. If there is enough room, use the Quick Grip clamp to secure the freeze heads to the pipe. By using the clamp and applying pressure to the freeze heads on the pipe, freezing time can be reduced. See Figure 3. If the Quick Grip Clamp cannot be used, tightly strap the freeze heads on the pipe with the Velcro strap. See Figure 4. If using the Quick Grip clamp do not over tighten the clamp and deform the pipe.

---

### Chart: Cavity and Adapter Requirements

<table>
<thead>
<tr>
<th>Copper Tube</th>
<th>Steel Pipe</th>
<th>Cavity</th>
<th>Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>½”</td>
<td>—</td>
<td>4</td>
<td>—</td>
</tr>
<tr>
<td>¾”</td>
<td>½”</td>
<td>2</td>
<td>¾” CTS</td>
</tr>
<tr>
<td>1”</td>
<td>¾”</td>
<td>2</td>
<td>—</td>
</tr>
<tr>
<td>1¼”</td>
<td>1”</td>
<td>3</td>
<td>1¼ CTS</td>
</tr>
<tr>
<td>1½”</td>
<td>—</td>
<td>3</td>
<td>—</td>
</tr>
<tr>
<td>—</td>
<td>1¼”</td>
<td>1</td>
<td>2 CTS</td>
</tr>
<tr>
<td>2”</td>
<td>1½”</td>
<td>1</td>
<td>2 CTS</td>
</tr>
<tr>
<td>2½”</td>
<td>2”</td>
<td>1</td>
<td>—</td>
</tr>
</tbody>
</table>

---

Figure 3 – Attaching Freeze Heads Using Quick Grip Clamp
Figure 4 – Applying Freeze Head with Velcro Strap

This is the preferred method for use on more difficult applications (higher temperatures, larger pipe sizes, etc.). If two freeze plugs are required in a difficult application, it may be necessary to use two pipe freeze units, one for each plug.

- Two freeze plug applications – When two separate freeze plugs are required to isolate a section of the system, one freeze head is attached at each point. Tightly secure the freeze heads to the pipe with either the Quick Grip clamp or the Velcro straps. If using the Quick Grip clamp do not over tighten the clamp and deform the pipe. See Figure 5.

- If the standard freeze head cannot be used, optional end adapters are available for 1/2" or 3/4" copper tube. Freeze gel (if being used) is applied to the back of the end adapter and to the surface that contacts the tube. Tightly secure the freeze heads to the tube with either the Quick Grip clamp or the Velcro straps. If using the Quick Grip clamp do not over tighten the clamp and deform the tube. See Figures 6a, 6b and 6c.

Figure 6 – Two Freeze Plug Application

10. Make sure spray bottle is filled with water.

11. Run cord along previously identified clear path. With dry hands, plug the SuperFreeze into the previously identified properly grounded outlet. If the power cord is not long enough, use an extension cord that

- Is in good condition
• Has a three prong plug similar to that supplied on the Pipe Freezing Unit.
• Is no longer than 50 feet long
• Has sufficient wire size (16 AWG minimum). Under-sized wires can overheat, melting the insulation or causing a fire or other damage.

Operating Instructions

Follow operating instructions to reduce the risk of injury from burns, frostbite, electrical shock and other causes.

Opening the piping system before a complete plug is frozen or allowing the plug to thaw while the system is open could cause burns or other serious injury. Before opening system, test for pressure to confirm that the ice plugs are fully formed and stable. Make sure the machine is properly set up and do not allow the Pipe Freeze Unit to shut off during use.

The freeze heads and hoses get extremely cold and can cause frostbite if touched during operation. Wear gloves if handling during use.

Always wear eye protection to protect your eyes from dirt and other foreign objects. Always wear appropriate protective equipment for the piping contents.

1. Confirm that the machine set up is correct.
2. Turn machine ON.
3. Allow machine to run for 2-3 minutes. Freeze heads should start to frost. Use spray bottle to slowly spray water between freeze heads and pipe. See the Figure 7. The water will freeze and fill any gaps between the freeze head, pipe and any adapters used. This improves thermal conductivity and will improve freeze times, while gaps between the freeze head and pipe will prevent freeze plug formation. Make sure that any dripping water does not cause a hazard.

If the freeze heads do not become cold and covered with ice and frost after approximately 7 minutes, turn the unit OFF for 3 minutes and restart. If the freeze heads still do not become cold, see the trouble shooting section.

4. Once the freeze heads are frozen to the pipe, allow the ice plug to form. If the ambient temperature is high (but not above 100°F), the freeze heads can be wrapped with pipe insulation or other insulation to improve freeze times.

Do not leave the unit unattended. Pipes can freeze and split during the freezing process and monitoring can minimize the hazard and damage. If for some reason the power to the freeze unit is interrupted, turn the ON/OFF switch to off and do not restart for at least 30 seconds to prevent compressor damage.

Time to freeze a fully formed ice plug depends on a variety of factors, including water temperature, ambient temperature, distance from heat sources, pipe size and wall thickness, pipe material, number of freeze heads, quality of contact between freeze heads and pipe, and other conditions. The following table of freeze times is based on water temperature being the same as room temperature, use on copper tube, and use of two Freeze heads. Freeze times for steel pipe will be longer. These are only provided as a general guide.

5. Carefully test the system to make sure that the plugs are complete and there is no flow before opening the system. This can be done by opening a valve downstream of the plug and verifying that there is no flow. Another method is to use a saddle tap valve (similar to those used to install ice makers) to pierce a copper tube and check for water flow. If there is flow, close the system back up and continue the freezing process.
Wait at least five more minutes after confirmation that there is no water flow to proceed with opening the system for work. On higher temperature applications (water temperature over 100°F but under 125°F) wait at least 15 minutes. Do not shut off the freeze unit.

6. Once the ice plug has been completely formed and enough time has passed since confirmation that there is no flow in the pipe, the pipe can be opened. When opening the system, be prepared for the possibility of liquid coming out of the line and wear proper protective gear in case a plug fails. Be sure to follow the guidelines in the set up section for distance from plug to heating of system for soldering, brazing, etc. Do not shut off the freeze unit while making repairs. This will help insure that the plug does not melt while the system is open.

7. Once the repair is complete and system is closed, shut off and unplug Pipe Freeze unit, and allow ice and frost to melt off the freeze heads and hoses.

**NOTE** Do not try to remove the freeze heads from the pipe or coil the hoses until they are completely thawed. This can result in damage to the hoses and freeze heads.

If freeze heads and hoses must be removed more quickly, a heat gun can be used to thaw them.

### Cleaning and Storage

**WARNING**

Disconnect the plug before starting any kind of maintenance work on the unit.

Do not open the refrigerant circuit. Refrigerant release can cause frostbite, asphyxiation and other serious injury. In case of refrigerant release, leave the area until the refrigerant dissipates. Do not inhale the refrigerant.

**Cleaning**

After each use, the freeze heads should be cleaned, Wiped dry, and properly stored.

**Machine Storage**

1. Wipe frost/water from the fully thawed freeze heads and lines. The Pipe Freeze Unit can now be stored by coiling the hoses in the compartments adjacent to the hose and adding the other equipment (Figure 8). Do not cross the hoses to the compartment.

2. The aluminum freeze heads should be protected from impact, sharp objects and rough handling.

### Freezing Times

<table>
<thead>
<tr>
<th>Pipe Diameter</th>
<th>Room Temperature °F</th>
<th>Approx. Freezing Times Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inches mm</td>
<td>°C</td>
<td></td>
</tr>
</tbody>
</table>

| 1/2 13        | 70 21                | 6                             |
| 3/4 19        | 70 21                | 8                             |
| 1 25          | 70 21                | 10                            |
| 1-1/4 31      | 70 21                | 12                            |
| 1-1/2 38      | 70 21                | 19                            |
| 2 50          | 70 21                | 23                            |
| 2-1/2 62      | 70 21                | 40                            |

**NOTE!** Times are for Copper Tubing. Steel Pipe will take slightly longer. Assumes water same temperature as room temperature and use of both freeze heads to form plug.
Store machine indoors in a dry, locked area out of reach of children and people unfamiliar with the use of the machine.

Do not store the pipe freezing unit on a service truck. Excessive vibration and shock can damage the unit. Firmly secure the unit when transporting.

**Service and Repair**

**WARNING**

Improper service or repair can make machine unsafe to operate.

The SF-2500 contains refrigerant which requires certification by persons servicing this product. If the “Trouble Shooting” section does not identify the problem, the unit will need to be returned for service and repair to Ridge Tool Company or a RIDGID Authorized Service Center.

When servicing this machine, only identical replacement parts should be used. Use of other parts may create a risk of electrical shock or other serious injury.

If you have any questions regarding the service or repair of this machine, call or write to:

Ridge Tool Company
Technical Service Department
400 Clark Street
Elyria, Ohio 44036-2023
Tel: (800) 519-3456
E-mail: TechServices@ridgid.com
# Chart 1 Troubleshooting

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE REASONS</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeze heads do not become frost covered after 3-5 minutes.</td>
<td>Unit has been stored in a cold location, unit has not been used for long time.</td>
<td>If the freeze heads are not cold to the touch after 7-10 minutes, turn the unit OFF. Keep the unit OFF for 2-3 minutes, then restart.</td>
</tr>
<tr>
<td></td>
<td>No power supply.</td>
<td>Make sure of proper power supply without any interruption &amp; compressor fan running.</td>
</tr>
<tr>
<td></td>
<td>No air circulation to the condenser unit.</td>
<td>Check that there is unrestricted air circulation to the condenser unit. Check the condenser unit's inlet air ports. If they are dirty or blocked; clean them with shop air while the unit is running.</td>
</tr>
<tr>
<td></td>
<td>Pipe Freeze unit has lost its charge.</td>
<td>Contact Technical Service Department at Ridge Tool. (See Service and Repair).</td>
</tr>
<tr>
<td>The freeze heads get cold and frost covered but the pipe will not freeze.</td>
<td>Water may be flowing inside the pipe.</td>
<td>Check for water flow. If this exists, stop the flow. Use the water spray bottle to build an ice bridge and provide the contact for heat transfer. The slightest air gap will prevent freezing. Make sure system is full of water. Pipe freeze unit will not work. Allow system to cool off or freeze heads are too close to circulating main-stop circuit. After freeze head is frozen to pipe, wrap with insulation.</td>
</tr>
<tr>
<td></td>
<td>Poor contact between heads and pipe.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pipe is not completely full of water.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>System is filled with something other than water.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Water temperature is too high.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Air temperature is too high.</td>
<td></td>
</tr>
<tr>
<td>Tripping of the unit.</td>
<td>Over loading of compressor.</td>
<td>The compressor is thermally protected, It will take time for automatic restart.</td>
</tr>
</tbody>
</table>

---

**PROBLEM POSSIBLE REASONS SOLUTION**

Chart 1 Troubleshooting