COMPRESSOR DRAINER KIT

Model 46960

SET UP AND OPERATING INSTRUCTIONS

Visit our website at: http://www.harborfreight.com

Read this material before using this product. Failure to do so can result in serious injury.

SAVE THIS MANUAL.

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For technical questions or replacement parts, please call 1-800-444-3353.

Revised Manual 03i; 09i
### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Liquid Discharge</strong></td>
<td>Automatically at startup and stop; air load/unload</td>
</tr>
<tr>
<td><strong>Compatibility</strong></td>
<td>Can be installed on most electric and gas powered air compressors, where there is access to the:</td>
</tr>
<tr>
<td></td>
<td>1. Pilot valve with intake unloader line (electric or gas)</td>
</tr>
<tr>
<td></td>
<td>2. Pilot valve with throttle airline (gas)</td>
</tr>
<tr>
<td></td>
<td>3. Pilot valve with “Bullwhip throttle control” (gas)</td>
</tr>
<tr>
<td></td>
<td>4. Pressure Switch (electric)</td>
</tr>
<tr>
<td><strong>Fittings</strong></td>
<td>Brass</td>
</tr>
<tr>
<td><strong>Tubing</strong></td>
<td>8’ 1/4”, 250 PSI Polyurethane (145 PSI Working Pressure)</td>
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</tbody>
</table>

**Note:** The Drainer Kit is designed to be used on compressors that have poly or nylon “unloader” tubing and not with compressors with “unloader” tubing made of Copper or Aluminum.

**Note:** In order to use the Compressor Drainer Kit with compressors that use a “Pilot Valve”, parts that are not included with this kit may need to be purchased.

### Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

### SAFETY WARNINGS AND PRECAUTIONS

**WARNING:** When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

**Read all instructions before using this product!**

1. **Avoid working alone.** If an accident happens, an assistant can bring help.
2. **Keep work area clean.** Cluttered areas invite injuries.
3. **Keep children away.** Children must never be allowed in the work area.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles.
6. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across electrical cables or frames.
7. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
8. **Check for damaged parts.** Before using any kit, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged
should be properly repaired or replaced by a qualified technician.

9. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.

10. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.

11. **Make sure all equipment is rated to the appropriate capacity.** Make sure that regulator is set at least 10 PSI lower than the lowest rated piece of equipment you are using. **The maximum air pressure rating for this accessory is 145 PSI; NEVER MOUNT THIS KIT ON ANY TOOL THAT MAY EXCEED THIS PRESSURE.**

12. **Avoid explosions and fire.** Never place flammable objects near the compressor. Never spray water or any flammable liquids towards the compressor.

13. **Avoid personal injury.** Never direct the air outlet at persons or animals.

14. **Warning:** The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (California Health & Safety code § 25249.5, *et seq.*)

15. The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.
When unpacking, make sure the parts shown above are included. If any parts are missing or broken, please call Harbor Freight Tools at 1-800-444-3353.

**UNPACKING**

**INSTALLATION**

1. On electric compressors, the pressure switch should be put in the off position and the electrical cord disconnected from its power source.

2. On gas powered compressors, the throttle control or engine switch and air service (pilot) valve should all be placed in the off position.

3. Open the drain valve (Petcock) and bleed all the air from the compressor tank.

4. Completely remove the drain valve (Petcock) from under the compressor tank.

5. Install the supplied T-fitting (4) and Petcock (3) where the drain valve was removed.

6. Install the Auto Drain Valve Assembly onto the T-fitting (4) and then attach the Tubing (2) to the Auto Drain Valve Assembly.

7. Locate the pressure switch on the compressor. The line from the pressure switch to the fitting on the tank is the “pressure switch unloader line”. The unloader line needs to be cut approximately half way between

**Note:** The T-fitting may be too small to fit in some compressor drain valve holes. In this instance, a reducing bushing will need to be purchased to properly install the T-fitting and Petcock.

**Note:** In some instances there may not be enough clearance between the bottom of the compressor tank and the ground, to install the Auto Drain Valve Assembly. If there is not at least 2-1/2” of clearance, it will be necessary to install a 1/4” NPT, 90° pipe elbow and nipple or 90° street elbow (all not included) to gain the proper clearance for the installation of the T-fitting and Petcock. The parts mentioned above are not included with this kit and will need to be purchased.

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the pressure switch and the fitting on the tank.

8. Install the "T" tube fitting (1) where the "pressure switch unloader line" was cut and attach the Tubing (2) coming from the Auto Drain Valve assembly.

9. Check and close all valves on the compressor, then connect and turn on the power.

10. Check for leaks and tighten fittings as necessary.

**OPERATION**

1. The Auto Compressor Drainer kit is pressure actuated. It will eject tank condensation each time air pressure is applied or removed from the Auto Drain Valve Assembly. This occurs when the compressor loads or unloads air, or when turned on or off.

2. Fitting (Valve) on Tank Photo showing hard line from pump to tank and soft line from pressure switch on tank.

3. Auto Drain Valve Assembly, installed on the bottom of the tank.

4. Compressor Pressure Switch
5. Photo shows Part #1, "T" Tube Fitting installed between the pressure switch and fitting (valve) on the tank.

6. Nylon tubing coming from the "T" Tube Fitting (#1) and installed on the Auto Drain Valve Assembly.
# Parts List and Assembly Diagram

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&quot;T&quot; Tube Fitting</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>8' x 1/4&quot; Tubing</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Petcock</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>&quot;T&quot; Fitting</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Adapter</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>O-ring</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Spring</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Valve</td>
<td>1</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Qty</th>
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<tbody>
<tr>
<td>9</td>
<td>Body</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Valve Stem</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Diaphragm</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Cover</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>Filter</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>Fitting</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>Fitting Nut</td>
<td>1</td>
</tr>
</tbody>
</table>

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**Record Product's Serial Number Here:**

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

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**PLEASE READ THE FOLLOWING CAREFULLY**

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.
**LIMITED 90 DAY WARRANTY**

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

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

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