SAVE THIS MANUAL

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

GENERAL SAFETY RULES

When unpacking, check to make sure all the parts shown in the Parts List on page 8 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the front cover of this manual as soon as possible.

GENERAL SAFETY RULES

IMPORTANT SAFETY INSTRUCTIONS

⚠️ WARNING!

READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions detailed in this manual may result in serious personal injury.

SAVE THESE INSTRUCTIONS

WORK AREA

1. Keep your work area clean and well lit. Cluttered and dark work areas invite accidents.
2. **Keep bystanders, children, and visitors away while operating the Shrinker/Stretcher.** Distractions can cause you to lose control. Keep this product away from children.

3. **PERSONAL SAFETY**

   3. **Stay alert.** Watch what you are doing, and use common sense when operating tools and equipment. Do not use tools and equipment while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating tools and equipment may result in serious personal injury.

   4. **Dress properly.** Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

   5. **Do not overreach.** Keep proper footing and balance at all times. Proper footing and balance enables better control of the Shrinker/Stretcher in unexpected situations.

   6. **Always wear eye and hand protection.** Wear ANSI-approved safety impact goggles and heavy duty work gloves when assembling and using this product.

4. **TOOL USE AND CARE**

   7. **Do not force the Shrinker/Stretcher.** Use the correct product for your application. The correct product will do the job better and safer at the rate for which it is designed.

   8. **Store idle tools and equipment out of reach of children and other untrained people.** Tools and equipment are dangerous in the hands of untrained users.

   9. **Maintain the Shrinker/Stretcher with care.** Keep this product clean. A properly maintained tool is easier to control. Do not use damaged tools and equipment. Tag damaged tools and equipment “Do not use” until repaired.

   10. **Check for misalignment or binding of moving parts, loose or broken parts, and any other condition that may affect the Shrinker/Stretcher’s operation.** If damaged, have the product serviced before using. Many accidents are caused by poorly maintained tools and equipment.

   11. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one product may become hazardous when used on another product.
SERVICE

12. **Product service must be performed only by qualified service technician.** Service or maintenance performed by unqualified personnel could result in a risk of injury.

13. **When servicing the Shrinker/Stretcher, use only identical replacement parts.** Follow instructions in the “Inspection, Maintenance, And Cleaning” section of this manual.

**SPECIFIC SAFETY RULES**

1. **Maintain labels and nameplates on the Shrinker/Stretcher.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

2. **Use the right product for the job.** There are certain applications for which this product was designed. Do not use small tools, equipment, or attachments to do the work of larger industrial tools, equipment, or attachments. Do not use this product for a purpose for which it was not intended.

3. **Avoid moving parts during operation.** Keep fingers and hands away from all moving parts.

4. **The Shrinker/Stretcher is designed for use only with the following materials:**
   
   A. Aluminum up to 16 gauge thickness.
   
   B. Mild steel up to 18 gauge thickness.
   
   C. Stainless steel up to 20 gauge thickness.

5. **Always remove the Handles (4) from the Shrinker/Stretcher when not in use to avoid accidental pressing.**

6. **Industrial applications must follow OSHA requirements.**

7. **Store idle tools.** When not in use, store the Shrinker/Stretcher in a clean, dry, safe location out of reach of children.

8. **WARNING!** The warnings and cautions discussed in this 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.
INSTALLATION AND ASSEMBLY INSTRUCTIONS

1. Make sure the Shrinker and Stretcher are bolted to a flat, level, sturdy workbench capable of supporting the weight of the Shrinker and Stretcher, workpieces, and any additional tools.

2. Select a location on the workbench that provides sufficient room to operate the Handles (4) of the Shrinker and Stretcher.

3. Located at the bottom of the Shrinker and Stretcher Bodies (6) are two 3/8” diameter, threaded, mounting holes. The mounting holes are 2-1/2” apart on center. (See Figure A.)

4. Once the desired location for the Shrinker and Stretcher are obtained, drill two 3/8” holes, 2-1/2” apart on center, through the workbench to mount the Shrinker. Then repeat this Step to mount the Stretcher. (See Figure A.)

5. Once the holes are drilled through the workbench, align the threaded mounting holes of the Shrinker and Stretcher with the holes in the workbench. Secure the Shrinker and Stretcher to the workbench, using the four 3/8” Mounting Bolts (19) provided. NOTE: Use 3/8” washers (not included) with the Mounting Bolts if the workbench is constructed of thin metal or wood material.

6. Once the Body (6) of the Shrinker and Stretcher have been secured to the workbench, insert the Handles (4) of the Shrinker and Stretcher into the Pressure Arms (3) of the units. (See Figure B.)
1. **NOTE:** The Shrinker tool shrinks metal for *inside* angles. Whereas the Stretcher tool stretches metal for *outside* angles.

2. It is recommended to first practice with the Shrinker and Stretcher tools, using pieces of scrap metal to get the “feel” of the tools and how they operate.

3. When ready to operate, insert the metal material in the Cover (18) of the Shrinker or Stretcher. *(See Figure C.)*

4. When forming metal, work the leading edge first. This breaks down the maximum resistance of the metal and permits easy and accurate forming of the metal thereafter.

5. Move the metal back and forth as you apply pressure to the Handle (4) until the desired radius (up to 3 inches) is obtained. The control of the Shrinker and Stretcher lies in the pressure exerted in the Handles as the metal is moved back and forth between the Jaws (13, 14, 13B, 14B) of the tools.

6. The Jaws (13, 14, 13B, 14B) of both tools are “toothed” in order to exert a firmer grip on the metal. These teeth leave light markings on the metal, depending on the hardness of the metal, and can be quickly removed with either abrasive cloth or an abrasive wheel (neither included).

7. When finished forming the metal, remove the metal from the tool carefully to avoid personal injury. Then, remove the Handle (4) from the tool to avoid accidental pressing of the Jaws (13, 14, 13B, 14B). **IMPORTANT:** Never press the Handle down without a separator between the Jaws to avoid damaging the Jaws. Always insert scrap metal or other material between the Jaws when the tool is not in use.
INSPECTION, MAINTENANCE, AND CLEANING

1. **Before each use**, inspect the general condition of the Shrinker/Stretcher. Check for misalignment or binding of moving parts, damaged or loose parts, and any other condition that may affect the tools’ safe operation. If a problem occurs, have the problem corrected before further use.

   **Do not use damaged equipment.**

2. **Periodically**, use machine oil to lubricate all moving parts of the Shrinker/Stretcher.

3. **To clean**, use a clean cloth and mild detergent or non-flammable solvent. Then dry.

4. **CAUTION!** All maintenance, service, and repairs not discussed in this manual should only be performed by a qualified service technician.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER 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 RISKS 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.
### PARTS LIST AND ASSEMBLY DIAGRAM

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Qty.</th>
<th>Part #</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vinyl Grip (For Handle)</td>
<td>1</td>
<td>13</td>
<td>Stretcher Jaw (Spring Slide)</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Rivet</td>
<td>2</td>
<td>14</td>
<td>Stretcher Jaw</td>
<td>2</td>
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<tr>
<td>3</td>
<td>Pressure Arm</td>
<td>1</td>
<td>15</td>
<td>Upper Pressure Block (Stretcher)</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Handle</td>
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<td>16</td>
<td>Suspension Wire (Stretcher)</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Fulcrum Arm</td>
<td>1</td>
<td>17</td>
<td>Lower Pressure Block (Stretcher)</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Body</td>
<td>1</td>
<td>18</td>
<td>Cover</td>
<td>2</td>
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<td>7</td>
<td>Fulcrum Arm Pin</td>
<td>1</td>
<td>13B</td>
<td>Small Jaw (Shrinker)</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Pressure Arm Pin</td>
<td>1</td>
<td>14B</td>
<td>Large Jaw (Shrinker)</td>
<td>2</td>
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<td>9</td>
<td>Machine Screw (8-32 x 5/8&quot;)</td>
<td>6</td>
<td>15B</td>
<td>Upper Pressure V Block (Shrinker)</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Pressure Arm Release Spring</td>
<td>1</td>
<td>16B</td>
<td>Suspension Wire (Shrinker)</td>
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<tr>
<td>11</td>
<td>Machine Screw (8-32 x 1&quot;)</td>
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<td>17B</td>
<td>Lower Pressure V Block (Shrinker)</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Pressure Spring</td>
<td>2</td>
<td>19</td>
<td>Mounting Bolt</td>
<td>4</td>
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</tbody>
</table>

19: Mounting Bolts not shown.

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