

Item #31679

# PUNCH / FLANGE TOOL INSTRUCTIONS



**ROCKWOOD PUNCH/FLANGE TOOL** helps make quick work of seamless repairs by flanging and punching, utilizing the power of compressed air. One side of the double-action head produces 0.063" offset flanges on 16-gauge metal or thinner for flush seams when joining panels. The other side produces perfectly clean 0.19"-diameter holes that are ideal for plug welding. Unique swivel-head design lets you work from almost any angle.

## CONTENTS

- (1) Rockwood Pneumatic Panel Flanging/Punch Tool
- (1) 5mm Hex Key

### **SPECIFICATIONS**

| Maximum capacity:                   | 16 Gauge Mild Steel / 18 Gauge Stainless Steel |
|-------------------------------------|--|
| Air Consumption:                    | MINIMUM, 4 CFM @ 90 PSI                        |
| Air Pressure:                       | MAXIMUM, 90 PSI                                |
| Throat Depth:                       | 0.88" [22mm]                                   |
| Flange Width:                       | 0.88" [22mm]                                   |
| Flange Offset:                      | 0.063"   |
| Punched Hole Diameter:              | 0.19"  |
| Punch Hole Center Distance to Edge: | 0.28"  |

### REQUIRED

- The inlet air supply must have a moisture separator capable of removing all moisture and impurities from the air supply. Moisture in the air supply will cause corrosion and failure of the Flange/Punch Tool.
- A suitable regulator must be used to limit incoming air pressure to 90 PSI maximum, 80 PSI is ideal. Excessive air pressure can cause permanent damage to the unit and possible serious personal injury from bursting.
- For best results, a compressor capable of providing a minimum of 4 CFM @ 90 PSI is required. Less available CFM will not provide sufficient force to allow the Flange Tool to adequately form the Flange.

## SAFETY INFORMATION

The following explanations are displayed in this manual, on the labeling, and on all other information provided with this product:

#### A DANGER

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

#### A WARNING

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

#### A CAUTION

CAUTION used with the safety alert symbol, indicates a hazardous situation which, if not avoided. could result in minor or moderate injury.

#### NOTICE

NOTICE is used to address practices not related to personal injury.



- ▲ READ INSTRUCTIONS
  - Thoroughly read and understand this manual before using.











#### Save for future reference. A WARNING INJURY HAZARD!

- This tool can quickly start up when handling while connected to an air supply causing serious personal injury. Always disconnect the Panel Flanging/ Punch Tool from the air supply before cleaning Jaws or other maintenance.
- Wear ANSI approved eve protection at all times when operating tool for protection from possible ejected metal chips.

#### WARNING BURST HAZARD!

Excessive air pressure can cause tool to explode resulting in tool damage and personal injury. Do not exceed 90 psi [6.3 bar] of tool inlet air pressure.

### WARNING PINCH HAZARD!

This tool can pinch fingers causing serious injury. Keep fingers away from moving parts of the Panel Flanging/Punch Tool.

### A WARNING CUT HAZARD!

Handling sharp metal can cause cuts. Wear thick work gloves and long sleeves when using Panel Flanging/Punch Tool.

#### NOTICE

Avoid operating the tool freely without a work load or permanent Jaw damage could occur.

## ASSEMBLY

 Thread a 1/4" MNPT Air Inlet Fitting (NOT INCLUDED) into the Air Inlet Port on the bottom of the Flange/Punch Tool (FIG 1).
NOTE: The use of thread sealing tape (not Included) is recommended.

## **FLANGING OPERATION**

- Be sure the metal to be flanged is straight and free of burrs or jagged edges.
- Place the open Jaws of the Flange Tool over the sheet metal edge with the edge against the back surface of the upper Jaw (FIG 2) and the lower jaw forming the Flange upward. NOTE: The flange will be formed in the panel in the upward direction toward the top of the Tool (FIG 3). Be sure to plan your work carefully before beginning.

**A WARNING** PINCH HAZARD! This tool uses pneumatic pressure to greatly amplify clamping forces which can pinch fingers causing serious injury. Keep fingers away from moving parts of the Punch/Flange Tool.

- Carefully depress paddle to close jaws to form the flange in the metal edge.
- Release paddle to open jaws to check flange (FIG 3).
- Move tool along the metal edge forming the entire flanged edge (FIG 4).
- Be sure to check the weld-prep bend profile as you progress along the metal edge.

#### **A** NOTICE

As with any metal working tool, this tool requires a learning curve to achieve proficiency. Always practice on scrap material before using on an actual project.



### **PUNCH OPERATION**

 Place the open Jaws of the Punch over the sheet metal edge with the edge against the back surface of the upper Jaw (FIG 5).

> A WARNING PINCH HAZARD! This tool uses pneumatic pressure to greatly amplify clamping forces which can pinch fingers causing serious injury. Keep fingers away from moving parts of the Punch/Flange Tool.

• Carefully depress paddle to actuate the Punch.



• Release paddle to open Jaws.

### MAINTENANCE

- Add 3-5 drops of air tool oil to air inlet before each use.
- If tool is to be unused for an extended period, add 10 drops of air tool oil to inlet then store tool with the air inlet facing upward and plugged to keep debris and moisture out.
- Every 30 minutes of operation, fill the tool's hydraulic system with oil by removing the oil fill plug located at the upper side of the main tool body with the included 5mm hex key and fill with good quality air tool oil then replace the oil fill plug (FIG 6).
- Periodically add several drops of light machine oil to the sliding surfaces of the Jaws and Punch. Wipe off excess oil.
- Keep Jaw and Punch surfaces clean of grit, metal chips excess oil and debris.



### TROUBLESHOOTING

| PROBLEM  | CAUSE  | CORRECTION  |
|--|--|---|
| Tool Will<br>Not Form an<br>Adequate<br>Flange of<br>Punch | Insufficient<br>Air to Flange/<br>Punch Tool | Compressor inadequate. For best results, a compressor capable of at least 4 CFM @ 90 PSI is recommended. Lesser output will result in diminished performance.   |
|  |  | Air line from compressor too small. Use air supply line of 3/8" or larger.  |
|  |  | Air line from compressor too long. An air line of 25' maximum is recommended.   |
|  | Tool's Hydraulic<br>System is Low<br>on Oil  | Fill the tool's hydraulic system with oil by remov-<br>ing the oil fill plug located at the upper side of the<br>main tool body with the included 5mm hex key<br>and fill with air tool oil then replace the oil fill plug. |
| Tool is Slow<br>To Release                                 | Insufficient Air<br>to Tool                  | Compressor inadequate. For best results, a compressor capable of at least 4 CFM @ 90 PSI is recommended. Lesser output will result in diminished performance.   |
|  |  | Air line from compressor too small. Use air supply line of 3/8" or larger.  |
|  |  | Air line from compressor too long. An air line of 25' maximum is recommended.   |
| Moveable Jaw<br>Binding                                    | Sliding<br>Surface Lacks<br>Lubrication      | Add several drops of light machine oil to the sliding surfaces of the Jaws.   |

### NOTES

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### **ADDITIONAL ITEMS**

| #30180 | Gloves                         |
|--------|--------------------------------|
| #31523 | 1/4" MNPT Type-M Coupler       |
| #21130 | Eastwood Manual Weld Prep Tool |

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If you have any questions about the use of this product, please contact

The Eastwood Technical Assistance Service Department: 800.343.9353 >> email: techelp@eastwood.com PDF version of this manual is available online >> eastwood.com/31679manual The Eastwood Company 263 Shoemaker Road, Pottstown, PA 19464, USA US and Canada: 800.343.9353 Outside US: 610.718.8335 Fax: 610.323.6268 eastwood.com © Copyright 2017 Easthill Group, Inc. 2/17 Instruction item #31679Q Rev 1