

DO THE JOB RIGHT.

Item #21316

# 5PC DIMPLE DIE KIT INSTRUCTIONS



The **EASTWOOD 5 PIECE DIMPLE DIE SET** includes both Male and Female Dies to form clean, 45° flares in up to 1/8" thick mild steel. This set is machined to close tolerances of high-strength Chrome Moly tool steel which will provide years of reliable service.

## INCLUDES

- (1) Set of 1/2" Dies
- (1) Set of 1" Dies
- (1) Set of 1-1/2" Dies
- (1) Set of 2" Dies
- (1) Set of 2-1/2" Dies

# **METAL FLARING CAPACITY**

| Mild Steel:      | 1/8"  |
|------------------|-------|
| Aluminum:        | 1/8"  |
| Stainless Steel: | 3/32" |

## TOOLS REQUIRED (not included)

- A set of sharp, high-quality metal saws in sizes corresponding to those in the Die Set.
- A 20 Ton Hydraulic Shop Press or equivalent.

# 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 iniury.

## **A** 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.



#### **PINCH HAZARD!** CAUTION

Keep hands and fingers away from moving components.



### CAUTION

### **EYE INJURY HAZARD!**

Metal components under great pressure may release chips. Wear ANSI Z87 approved eve protection while using.

## A WARNING SHARP METAL EDGES CAN CUT!



Always wear protective work gloves while handling. •

# **CREATING FLARES**

#### PREPARING PANEL:

• Cut a clean hole of the size corresponding to the Die Set to be used. **Example:** 1/2" Hole for 1/2" Dies, 2" Hole for 2" Dies, etc.

### **A** NOTICE

The cut hole must be clean-edged and round. Any unevenness or out of round condition will negatively affect the results of the flare.

• File any remaining burrs from the edge of the sawed hole.

#### **USING A SHOP PRESS:**

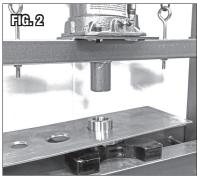
• Set Male Die with beveled feature up on lower plate of Shop Press (not included) (FIG 1).

### **A** NOTICE

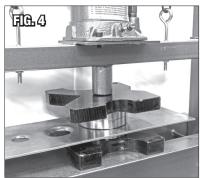
Be sure the lower plate and Male Die are centered under the ram of the hydraulic press jack. Any offcenter application of pressure will cause uneven loading, poor flares and possible tool failure.

- Place the metal panel with sawed hole over the center pilot of the Male Die (FIG 2).
- Set the Female Die with the beveled feature facing down and over the Male Die and metal panel. (FIG 3).
- Center the shop press upper plate over the Female Die (FIG 4).









- Slowly activate the jack of the shop press exerting pressure on the Female Die until the metal panel is pushed fully down against the face of the Male Die (FIG 5).
- Release pressure on dies and inspect finished flare (FIGS 6 & 7).

#### USING A THROUGH BOLT:

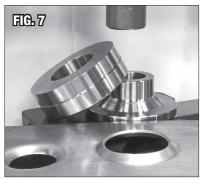
### **A** NOTICE

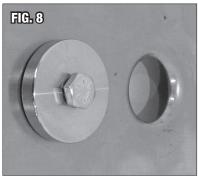
This method is recommended only for use with 1/2"& 1" dies and/or thinner gauge metal. Use Grade 8 Bolts only.

- Set Male and Female Dies on opposite side of panel to be flared and insert a through bolt and attach nut (FIG 8).
- Tighten bolt to draw the Dies together and create Flare. When the Male Die inner face is drawn up to touch the panel, the flare is completed and the bolt can be removed.









# NOTES

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## **ADDITIONAL ITEMS**

- #20028 Eastwood's 7 Piece Hole Saw Kit
- #28038 Sheet metal gauge
- **#13475** Electric Metal Cutting Shears
- #28187 Bead Roller Kit
- #51088 Shrinker/Stretcher Set

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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/21316manual 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 #21316Q Rev 1