- **4.** Hold the trigger to activate the arc and count to the appropriate time. Adjust the time accordingly after trying on test panels.
- **5.** Release the trigger to stop the arc and pull back the torch to reveal the spot weld. If possible make sure that the spot weld fully penetrated before continuing on.
- 6. Continue on to finish all of the predetermined spots for the welds. It is beneficial to move around when welding rather than doing the spot welds all consecutively as it could overheat the panel and causing warping.

### TROUBLESHOOTING

- THE WELD DID NOT PENETRATE TO THE REAR PANEL
  - Turn up the Amp setting.
  - Allow for a longer arc time.
  - Assure spot weld pliers are achieving a secure clamping force.
  - Make sure the metal is clean. The use of a flap disc on all contact surfaces being welded is highly recommended.
- THE WELD BEAD IS TOO LARGE IN DIAMETER
  - Decrease time of welding. Be sure not the decrease the time too much which could cause poor penetration.

### **OPTIONAL ACCESSORIES**

- **#31018** Flanger and Hole Punch Combination Tool
- **#31015** Pneumatic Flanger and Hole Punch Combination Tool
- #19017 Spot Weld Drill 3/8"
- #19003 Spot Weld Drill 1/2"
- #14150A TIG Spot Weld Nozzle (2 Pack)
- **#13899** Spot Weld Pliers

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 at eastwood.com
The Eastwood Company 263 Shoemaker Road, Pottstown, PA 19464, USA
800.343.9353 eastwood.com

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# TIG SPOT WELDING KIT INSTRUCTIONS



Spot Welding in the past had primarily been done by large resistance welders but can now be achieved with your TIG welder and this **EASTWOOD SPOT WELDING KIT.** This kit is designed to be used with #17 TIG Torches.

## CONTENTS

- (1) Spot Weld Pliers
- (2) TIG Spot Weld Nozzles
- (1) Instructions

## **SAFETY INFORMATION**

#### 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, will result in death or serious injury.

#### **A** READ INSTRUCTIONS

Thoroughly read and understand the manuals for both this tool and the TIG welder before using the TIG Spot Weld Kit. Save for future reference.



#### A DANGER ELECTRIC SHOCK CAN KILL

The electrode and work (ground) circuits are electrically "hot" when the welder is on (this includes the spot weld pliers). Do not touch these "hot" parts with your bare skin or wet clothing.



#### WARNING ARC RAYS CAN BURN!

- Use a shield with the proper filter (a minimum of #13) to protect your eyes from sparks and the rays of the arc when welding or observing open arc welding (see ANSI Z49.1 and Z87.1 for safety standards).
- Wear safety glasses with side shields under the welding helmet.
- If other persons are in the welding area, use welding screens to protect them from sparks and arc rays.



#### A WARNING HOT METAL WILL BURN!

- Electric welding operations cause sparks and heat metal to temperatures that will cause severe burns!
- Use protective gloves and clothing when preforming welding operations.

## SET UP

- 1. Unplug TIG welder and remove gas nozzle on the end of the torch.
- 2. Install one of the supplied Spot Weld Nozzles. Once the Nozzle is installed the welder can be plugged in. NOTE: This Nozzle is designed to fit the Eastwood TIG Welders but will also work on any other #17 Size TIG Torch. The Spot Weld Nozzle "standoffs" do not have to be oriented in any particular position to function properly.
- **3.** Install the proper electrode (3/32" is recommended) and set the electrode to workpiece distance to 1/8" so that the electrode sticks out of the nozzle but does not contact the workpiece when the standoffs are in contact with the workpiece.
- **4.** If using the Eastwood TIG200, set the welder to 'Panel Control' and make the appropriate cable plug changes to utilize the torch switch if previously using the foot pedal.
- 5. Before using on your project it is necessary to test technique and machine settings on scrap metal. The following suggestions are recommendations for the initial settings on the Eastwood TIG Welders, but you may have to fine-tune the Amperage or Arc time to achieve perfect spot welds. To identify if the weld is properly penetrating you should see the puddle beginning to fall through on the back side of the back panel. Once you believe you have the amperage and time dialed in it is recommended to try and pull some of the spot welds apart to ensure you are getting proper penetration.

Material	Steel	
Material Thickness	18 Ga.	20 Ga.
Amps	130 Amps	110 Amps
Arc Time	5 Seconds	5 Seconds
Electrode Size	3/32"	3/32"
Electrode Type	2% Thoriated	2% Thoriated
Polarity	DC	DC

## **OPERATION**

- 1. Determine a plan of action and use a scribe to mark where each spot weld should be placed on the top panel. Clean all metal contact surfaces with a flap disc. Be sure to remove all paint, scale, oil, etc.
- 2. Use the supplied Spot Weld Pliers to clamp the top and bottom panels being spot welded together. Put the U shape of the pliers around the area to be spot welded.
- **3.** Place the "standoffs" of the Spot Weld Nozzle in the 'U' of the clamp. *(cont.)*

