

Eastwood

DO THE JOB RIGHT.

Part #13901

SPOT WELDING KIT

INSTRUCTIONS



Spot Welding in the past had primarily been done by large resistance welders but can now be achieved with your MIG welder and this **Spot Welding Kit** from Eastwood. Spot welding is accomplished by clamping two panels together and fusing them with a number of welds sequentially-placed rather than a continuous bead to hold the panels together. This kit is designed to be used with Tweco® Style MIG torches.

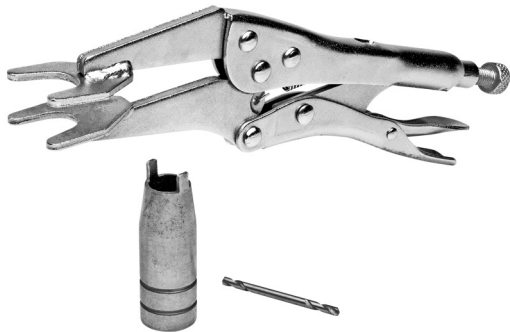
WARNINGS

- Follow all safety measures outlined in your welder’s instruction manual.
- Do not touch nozzle or pliers while welding.
- Use caution when touching pliers as they may be hot and could cause burns.
- Always use a minimum Shade 10 welding helmet, welding gloves, long sleeve shirt and pants.

SPECIFICATIONS

Spot Weld Kit includes:

- Spot Weld Pliers
- Spot Weld Nozzle
- 3/16” Double-Ended Drill Bit
- Instructions



SET UP

1. Unplug MIG welder and remove gas nozzle on the end of the torch.
2. Install the supplied Spot Weld Nozzle. Once the Nozzle is installed the welder can be plugged back in. **NOTE:** This Nozzle is designed to fit the Eastwood MIG Welders but will also work on any other Tweco Style Torch. The Spot Weld Nozzle “standoffs” do not have to be oriented in any particular position to function properly.
3. 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 MIG Welders, but you may have to fine-tune the voltage or wire speed to achieve perfect spot welds.

Eastwood MIG135 Suggested Settings

Material Thickness	18 Ga.	20 Ga.
Arc Volts	J	I
Wire Speed	7	7

Eastwood MIG175 Suggested Settings

Material Thickness	18 Ga.	20 Ga.
Arc Volts	J	J
Wire Speed	9	6

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 surfaces which will be in contact with a flap disc. Be sure to remove all paint, scale, oil, etc.
2. If using a MIG135 or most other 110V welders, it is necessary to drill or punch a hole in the top panel being spot welded. Use the included 3/16” drill bit to drill a hole through the TOP PANEL ONLY. If using a MIG175 or most other 220V welders in most cases you will not need to drill or punch a hole in the top panel.
3. 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. If using the MIG135, center the U shape around the hole drilled in the previous step. See the image at right for reference.
4. Place the “standoffs” of the Spot Weld Nozzle in the ‘U’ of the clamp.
5. Hold the trigger to activate the arc for 2-3 seconds. Adjust the time accordingly after trying on test panels.
6. Release and pull back the torch to reveal the spot weld. If possible make sure that the spot weld fully penetrated before continuing on.
7. 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.
 - If using the MIG135 make sure a hole is drilled or punched in the top panel.
 - Turn up the Volt setting. If this causes the wire to burn back before hitting the panel, increase the wire speed also.
 - Make sure the metal is clean. The use of a flap disc on all surfaces in contact and being welded is highly recommended.
- The weld bead is too high.
 - Decrease the weld time.
 - Decrease the wire speed.
- The weld bead is too large in diameter.
 - Decrease time of welding. Be sure not to 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"

For more accessories and supplies, visit Eastwood.com >> **KEYWORD: SPOT WELD**

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

The Eastwood Technical Assistance Service Department:
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