

EAGLE Taper Edge Band – Welding Instructions

POLYURETHANE BELTING & O-RINGS

Using the tools provided and following these instructions will yield a weld that is 100% of the band's tensile strength.

Note: A clean environment contributes toward ensuring a proper weld. Make sure the area is well ventilated and free of dirt, dust and draft.

In addition to the welding kit, the following items will be required: heat resistant gloves, compressed air, marker, putty knife and utility knife.

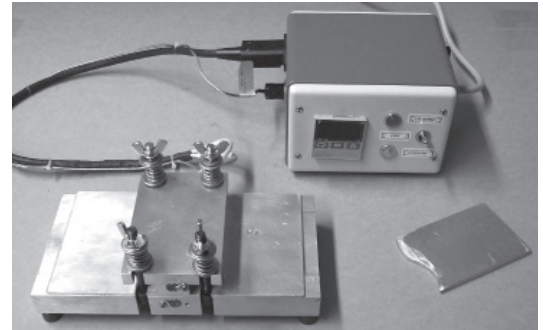


Fig. 1

Warning: Heat-resistant gloves should be worn while working with this welder due to extremely high temperatures. Failure to do so could result in serious burns.

Warning: Cut-resistant gloves are highly recommended when using any type of cutting tool.


1. Test welds should be performed in the area where the actual welding will take place.

Warning: Welding clamp gets extremely hot. Do not place on item that may be damaged. Place clamp on a flat piece of wood, scrap sheetrock, etc.



Fig. 2

2. On the front side of the control box is an on/off and heat/cool switch and a temperature indicator readout. On the left side of the control box is a thermocouple and ground wire. Plug the thermocouple and ground wire into the control box. On the right side of the control box is a fuse holder and the main power cord that should be plugged into a 110/120 V or a 240 V electric power source, depending on unit.

3. On the control box, move the temperature control switch to the "Cool" position. The orange indicator light will come on. The temperature readout will show the ambient work area temperature. Press the  button and set the temperature to 210°C/410°F for green band, 205°C/400°F for all other colours.

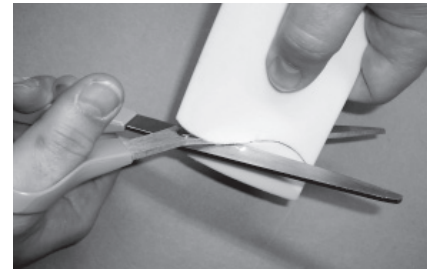


Fig. 3

4. On one end of the band, place the template on the top (tapered) side of the band and equally align template with end and sides of band. Securely holding the template and band, use a marker to trace the outline onto the band. See Fig.2.

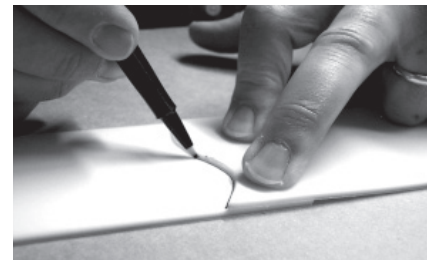


Fig. 4

5. Using good quality scissors, cut out the 'S' shaped splice outline on the band. See Fig. 3.
6. Take the band end containing the 'S' shaped splice and place it on top of the other band end. Align the sides and end. Use a marker to trace the outline. See Fig. 4.
7. Use the scissors and cut out the 'S' splice outline on the band. See Fig. 3. The two ends should now fit together.
8. From one end of band, measure 4½ inches in from the 'S' splice end and using a marking pen put an indicator mark on the band. See Fig. 5. The indicator mark on the band gives a visual reference for centering the band end in the welding fixture.



Fig. 5

continued on reverse

Note: The welding block has a taper to match that of the Taper Edge Band. The smooth side of the band is the tapered side and must be facing up. See Fig. 6. Match the thick edge of the band with the deep side of the welding block.

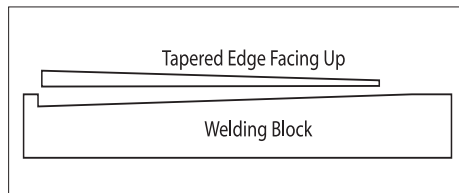


Fig. 6

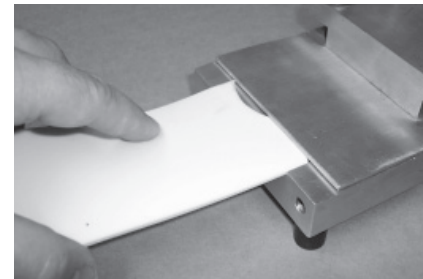


Fig. 7

9. Insert the end of the band with the indicator mark into the welding fixture. See Fig. 7. Make sure the indicator mark lines up with the end of the welding fixture and tighten wing nuts until band is held in place.

Note: Do not completely tighten wing nuts at this time.

10. Insert the other end of the band into the opposite end of the welding fixture, making sure the two band ends contact. Tighten the wing nuts until band is secured and then tighten all four wing nuts evenly until the coil springs are completely compressed. See Fig. 8.

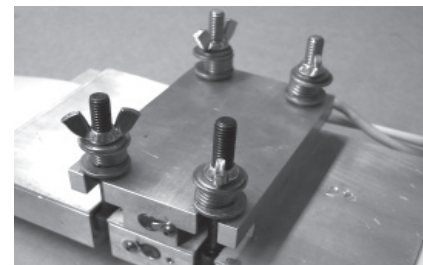


Fig. 8

11. On the control box, move the temperature control switch to "Heat" position. The red indicator light will come on.

12. **For Green Band:** When the temperature on the control box reaches 210°C/410°F, begin timing the 50 second dwell time. After 50 seconds, move the temperature control switch to the "Cool" position. The yellow indicator light will come on.

For All Other Band Colours: When the temperature on the control box reaches 205°C/400°F move the temperature control switch to the "Cool" position. The yellow indicator light will come on.

Note: Depending on the environment where the band is being installed, a higher weld temperature or longer dwell time may be needed.

13. Position the compressed air nozzle at the front of the welder between the two slots and blow air on it until the welding fixture cools to a temperature of 82°C/180°F as indicated on the control box. See Fig. 9.

Note: Compressed air must be used to allow for rapid cooling of the welding fixture. Allowing the welding fixture to "ambient air cool" will result in extreme band warping.

14. Loosen all wing nuts and rotate the front studs (with wing nuts) downward. Lift top heating plate and remove Taper Edge Band from the welding fixture. See Fig. 10. Note: a putty knife may be needed to assist in removing the band.

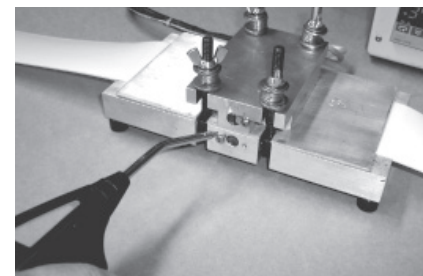


Fig. 9

15. If necessary, trim any excess flash from band with a utility knife. Finished weld is shown in Fig. 11.

Note: Estimated total welding time is 10 – 15 minutes.

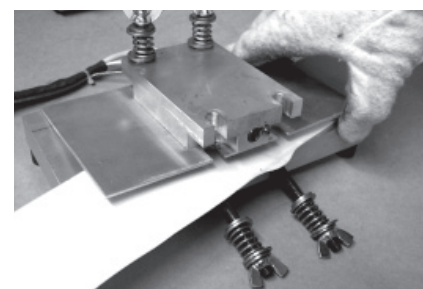


Fig. 10



Fig. 11