

Mini Butt Welding Kit

Usage Instructions

Warning: This equipment contains sharp and hot components and should be used with caution. Fenner Drives accept no responsibility for damage or injury caused by the misuse of this equipment.

The Mini-Kit provides a simple and cost effective means of joining smaller section non-reinforced PU and Polyester belts. Used correctly the kit will provide a joint which gives 90% of the belt's tensile strength. This kit is suitable for round belts up to 8mm and Z & A Vee section belts.

Before Starting

- 1) Check all the components are included in the kit.

This kit includes:- (see fig 1)

- A) Hand Clamping Tool
- B) Hot Knife
- C) Belt Cutters
- D) Flash Cutters

- 2) Ensure that the area you have allocated to join the belts in is well ventilated, clean and dry.
- 3) Ensure that the belt you are joining is suitable to be joined by this kit.



fig 1

Using the Mini-Butt Welding Kit

- 1) Examine the Hot Knife for scratches on the surface of the coated blade. A scratched or damaged surface can adversely affect welding results. If damaged the blade may need to be replaced. Contact Fenner Drives for more details.
- 2) Plug the Hot Knife into a 240v (or 110/120v as appropriate) socket and preheat for 10 minutes. Once hot, use a clean, dry cotton cloth to gently remove any urethane residue from previous welding from the Teflon surface. Do not use a hard object to scrape the surface as this can damage the Teflon coating.

Warning: the surface temperature is 220°C please alert others in the workplace and do not leave unguarded. Fenner Drives accept no responsibility for injury or damage caused by the misuse of this equipment.

- 3) Using the belt cutters provided cut the belt to the required length (see belt tensioning details in the Fenner Drives product brochure), ensure each end of the belt is cut perfectly square. fig 2



fig 2

Mini Butt Welding Kit

- 4) On the Hand Clamping Unit tighten thumb nut located on the side of the mounting clamp, to leave a 12mm gap between the 2 sides.

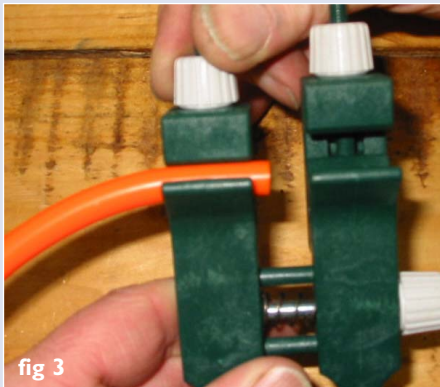


fig 3

- 5) Loosen the clamp nuts on top of the unit and place the ends of the belt in the clamping grooves. Position the belt ends to leave a 4mm gap. Re-tighten clamp nuts to hold the belt in position.(see fig 3 and 4)

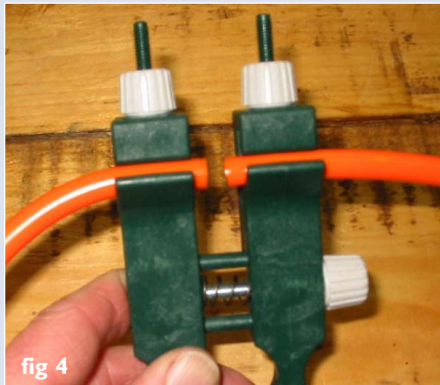


fig 4

- 6) Insert the Hot Knife blade between the 2 belt ends and then bring the two spring loaded sides together until firm resistance is met.

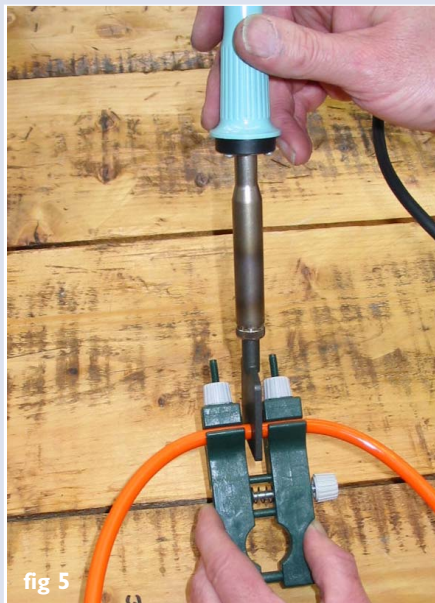


fig 5

- 7) Continue to close the sides until approx a 3mm high melted bead appears on both belt ends. Then hold in place. Leave the hot knife in place for the required "dwell" time. (see table below for guidance) to ensure the material reaches the required temperature.
- 8) Release the hold on the two sides , quickly withdraw the Hot Knife blade and then quickly bring the two sides back together.
- 9) Tighten the thumb nut on the right to clamp the belt tightly and allow the welded joint to cure for approximately 2 minutes. After the required cooling period loosen the clamp nuts and remove the belt from the clamp. (fig 6)

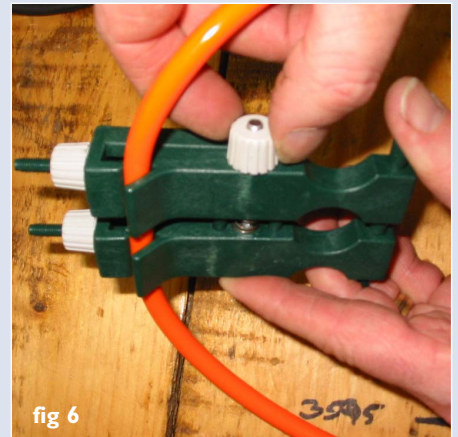


fig 6

- 10) Use the Flash Cutters included to trim off the excess material around the join. (fig 7)

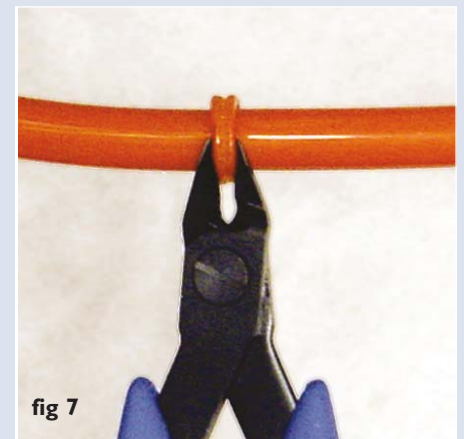


fig 7

- 11) Once removing from the Clamp it is advisable to allow the belt to cure for a minimum of 30 minutes before installing or tensioning.

BELT SIZE	ESTIMATED "DWELL" TIME
2mm - 6mm	10 seconds
7mm - 8mm, Z section	10 - 20 seconds
A section	21 - 30 seconds

If you require any further information please contact us:



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