



A proper butt weld will yield 100% of the non-reinforced belt's ultimate tensile strength. Note: A clean environment is necessary for a good weld. Make sure the area is well ventilated and free of dirt, dust and draft. Note: This mini clamp is suitable for use with round belts up to and including 8mm or 5/16" diameter and 3L, Z/10 and A/13 cross section V-belts. For larger profiles, use Fenner Drives heavy-duty butt welding clamp.

Using the Mini Butt Welding Kit

1. Examine the coated hot knife blade for scratches. A damaged hot knife can negatively affect weld results.
2. Plug the hot knife into 110/120V outlet and preheat for approximately ten minutes. Once hot, use a clean, dry cloth and gently remove any residue on the blade from previous welding. **Warning: Do not use a hard object to scrape polyurethane from hot knife blade.**
3. Using the cutting shears provided, cut each end of the belt perfectly square. Note: Consult Fenner Drives for instructions on determining correct belt length.
4. Loosen the nut on the side of the mini welder to provide some space between the two hold-down clamps.
5. Loosen the clamp nuts on top of the mini welder and place the belt ends into each of the clamping grooves. **Warning: Make sure there are no twists in the belt.** Position each belt end in the clamping groove, leaving approximately 1/8" belt overhang in clamp (see Figure 1) and a 5/32" gap between the two belt ends (see Figure 2).
6. Insert the hot knife blade between the two belt ends and then squeeze the spring-loaded sides together until firm resistance is felt (see Figure 3). Continue to close the sides of the mini clamp until approximately a 1/8" melted bead appears on both ends. Hold the hot knife in place for the required heating time; refer to Table 1.
7. Release the pressure on the mini clamp sides, quickly remove the hot knife blade and then quickly squeeze the two mini clamp sides back together. **Important: This sequence must be done very quickly.**
8. Tighten the nut on the side of the mini clamp to secure the belt tightly and allow the welded joint to cure for a minimum of three minutes. **Warning: Allow the belt to cure for a minimum of ½ hour prior to installing, tensioning or straining the belt weld.** Note: While the belt is cooling, use a clean, dry cloth to remove any residue from the hot knife blade. When finished, unplug the hot knife.
9. Loosen the clamp nuts on top of the mini welder and remove belt from clamp. Using the flash cutters, remove the bead from the splice; see Figure 4.

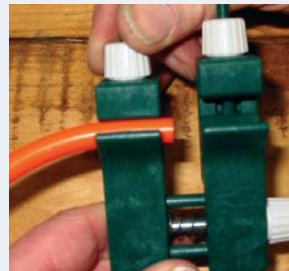


Figure 1

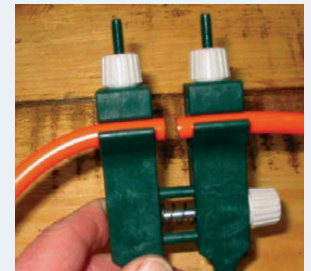


Figure 2

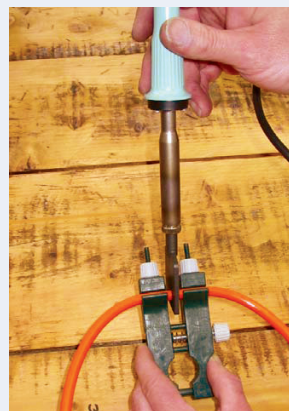


Figure 3



Figure 4

Belt Size	Estimated Heating Time
2mm – 6mm; 3/32" – 1/4"	10 seconds
7mm – 8mm; 5/16"	10 – 20 seconds
3L & Z/10 section	10 – 20 seconds
A/13 section	21 – 30 seconds

Table 1

If you have any questions, just call us at 1-800-243-3374. One of our Inside Sales Specialists will be happy to assist you.

Fenner Drives accepts no responsibility for damage or injury caused by the misuse of this equipment.



311 West Stiegel Street
Manheim, PA 17545-1747 USA
800-243-3374
717-665-2421

Hudson Road
Leeds, LS9 7DF UK
+44 (0) 870 7577007
+44 (0) 113 2493486

www.fennerdrives.com

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