# **∛**pliceMAX

### **Welding Kit Instructions**

### WARNINGS

- 1. Heater blade becomes extremely hot during operation. Use caution to prevent burns.
- 2. Remove batteries from welder and allow to cool before servicing or storing to prevent fire, burns, and unintentional activation.
- 3. Do not allow the welder to overheat belt material; doing so may produce hazardous fumes.
- 4. Do not use welder in the presence of highly flammable or explosive materials or gases.
- 5. Use the SpliceMAX butt welder with polyurothane vinyl belt mateial only.

#### About the Batteries and Charger

The SpliceMAX welder is a high current drain device and will not function with standard D size alkaline batteries. High power capacity rechargeable NiMH batteries are required for optimal performance. Most D size rechargeable NiMH batteries available in retail outlets typically have relatively low power capacities (2,500mAh). The SpliceMAX welder will function with these low power capacity batteries but you will only be able to achieve 4 welds or less. Your SpliceMAX welder kit is supplied with special high power capacity rechargeable NiMH batteries (10,000mAh) and a charger designed to quickly and effectively charge these batteries (see charger and battery instructions for details). While the exact number of welds you will achieve will vary based on belt size, ambient temperature, air circulation and your efficiency with the welder, you should realistically expect to make between 10 and 15 welds on a fully charged set of the supplied batteries.

A clean environment is necessary for a good weld. Make sure the area is well ventilated and free of dirt, dust and draft.

A proper butt weld will yield 100% of the non-reinforced belt's ultimate tensile strength.

Note: This welder is suitable for use with Polyurothane belting up to 18mm and 5/8" diameter round, B section Vee, Twin A Vee and 1.5" wide flat.





- Battery Charger
- (4) D Cell NiMH Batteries
- Tool Bag

Scan this QR code with your smart phone camera and watch the full demo video online.

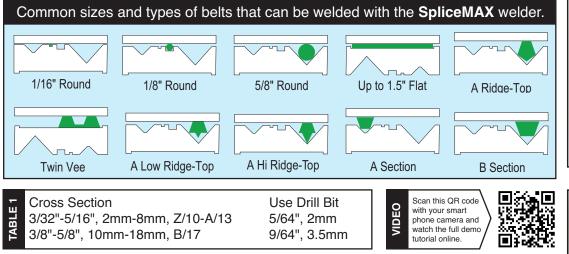
- Cutting Shears
- Flash Cutter
- Welder







## Step-by-Step Guide



Before you begin, examine the heater blade and remove any belt residue with a plastic scraper.

1. For optimum weld, ensure batteries are fully charged. Install the batteries into the welder by unscrewing the end cap and inserting batteries, positive end first, into the welder.

2. Using the cutting shears provided, cut each end of the belt perfectly square. If butt welding a reinforced belt, the reinforcement at each cut end must be drilled back 5mm – 7mm prior to welding. See Table 1 to determine the appropriate drill bit.

3. Completely retract the belt clamp lock screws. Using weld clamp knobs on both sides of the unit fully open the weld clamp. (Turn counter-clockwise with right-side knob)

4. Slide the battery compartment into unit to expose the heater blade.

5. While compressing the belt clamp springs (see Figure 1), place both belt ends into belt clamp and make sure there are no twists in the belt and the belt ends are flush against the heater blade. Tighten belt clamp lock screws. (see Figure 2).

6. Press the belt ends against the heater blade by tightening the weld clamp knobs. (Turn clockwise with right-side knob.) A small amount of pressure of the belt ends against the heater blade is required.

7. Switch the heater unit to the ON position by flipping the switch at the end of the end cap.

8. Allow the heater blade to melt the belt until the desired bead forms (see Figure 3). (1 to 1.5 minutes for 3/8" or 9.5mm belting)

#### STEPS 9-12 NEED TO BE DONE AS QUICKLY AS POSSIBLE TO ENSURE A QUALITY WELD.

9. Switch OFF heater with the flip switch.

10. Release the weld clamp knobs just far enough to allow clearance between the heater blade and belt.

11. Retract the heater blade back into handle.

12. Tighten weld clamp knobs to bring belt ends together to form the weld by turning the right-side knob clockwise to tighten weld clamp. Extreme over-compression of the belt ends together may result in a poor weld so tighten just enough to press hot melted belt ends together.

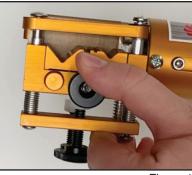
13. Allow the welded joint to cool and cure. Small cross section belts should be left in the welder for a minimum of one minute to allow for initial cooling. Belt cross sections over 1/4" or 6mm should be left in the welder a minimum of three minutes.

14. Loosen the belt clamp lock screws and compress the springs to release the welded belt. The top bars of the belt clamp will swing away to allow the welded belt to be removed (see Figure 5).

15. Using the flash cutters, remove the bead from the splice.

Allow the belt to cure for a minimum of  $\frac{1}{2}$  hour prior to installing or tensioning the belt weld.

16. Remove batteries from welder prior to storing.





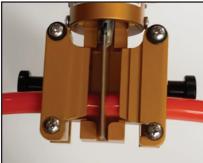


Figure 2

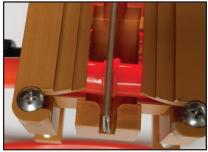


Figure 3



Figure 4

