

TB-4 Frog Welders

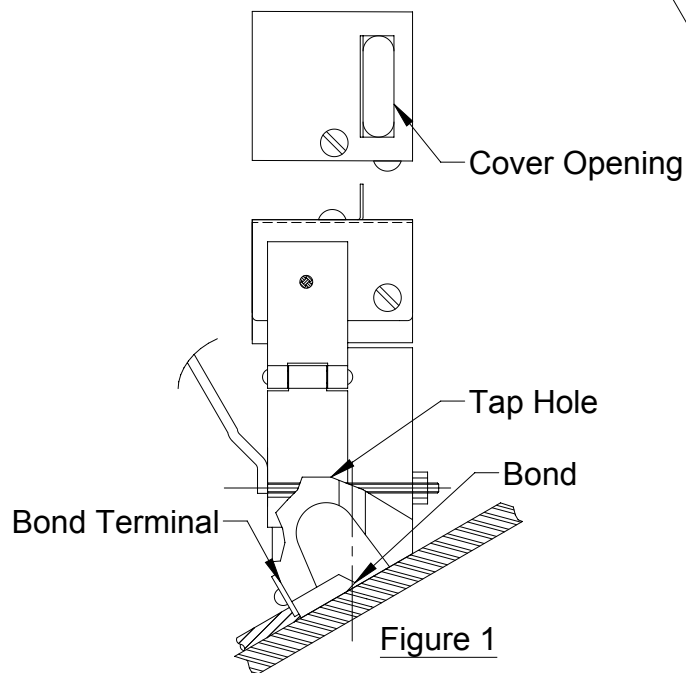


Figure 1

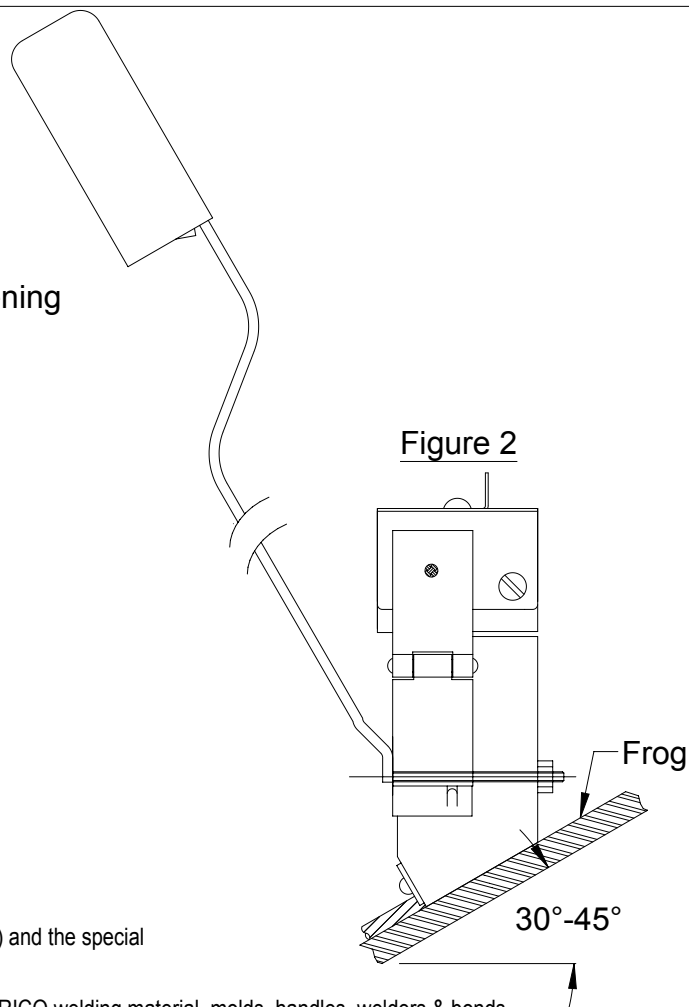


Figure 2

Prior to making a connection, read and follow the full instruction sheets IPP, IPX, IPRNS (included only with molds used on rail property not to rail) and the special instructions below.

Preparation:

- A. System: To insure proper installation the ERICO system should be used, i.e. ERICO welding material, molds, handles, welders & bonds.
 B. Rail: Surface must be clean and dry to insure a good weld. Frog surface at weld area must have bare (base) metal exposed. Prepare surface with ERICO approved methods (reference IPRNS).
 C. Bonds: Bond terminals must be bright, clean and dry. Be sure bond terminal is properly inserted in dry, clean mold. Fully engage bond clip where provided.

Welding Procedure:

- Place bond in welder with angled mold surface against frog. Position end of terminal against bond clip, while the end of terminal should be centered under tap hole (See Figure 1 & 2). Bond size and welding material information is located on mold tag.
- Insert one steel disk, dished (concave) side up, in crucible to cover tap hole. Then dump contents of one weld metal container into crucible being careful not to upset disk.
- Tap welding material container to loosen starting material. Place a portion of the starting material on top of welding material; close the "FX" cover and place remaining material near opening in top of cover (See Figure 1).
- Use handle to hold mold firmly against surface (As shown in figure 1 & 2). Ignite starting material on cover edge with flint igniter. Withdraw igniter quickly to prevent fouling.
- After approx. 10-15 seconds, open cover and break up slag using mold cleaner (ERICO part number SBB163D).
- Clear tap hole of slag with curved end of mold cleaner. Then check the mold for breakage or residual slag before proceeding with next weld.

Rail Preparation:

- Remove grease, oil and moisture from rail before grinding. Only use grinding/cleaning wheels approved by ERICO for ERICO[®] CADWELD[®] applications. Avoid using wheels designed for cutting as they can damage the rail.
- It is important to grind off any lipped rail to ensure proper fitting of the mold against the rail when making head rail bonds. Avoid making connections to the web of the rail over the rail brand.

Connection preparation:

- Dry the molds before the first connection of the day. Then check bond terminals and disks for rust or corrosion. Clean and or replace accordingly. Check mold conditions (cracks, wear, chipped corners, etc.) replace accordingly.
- Use the welder height adjustment screws to position the bond wire in the proper position on the rail. Welders should be clamped firmly to the rail, but not so tight the clamps are difficult to close thus avoiding breaking or damaging the molds.
- Make sure the proper ERICO CADWELD welding material is being used. Use only F80 material for connections to rail (SB or PB prefix part number; i.e., SB25) (Yellow cap).
- Place the disk in the mold, dished side up. Dump (don't pour) the welding material into mold. Remember 1/2 of the starting material in mold, 0.5" [13 mm] cover on lip of mold.

WARNING:

- ERICO products shall be installed and used only as indicated in ERICO product instruction sheets and training materials. Instruction sheets are available at www.erico.com and from your ERICO customer service representative.
- ERICO products must never be used for a purpose other than the purpose for which they were designed or in a manner that exceeds specified load ratings.
- All instructions must be completely followed to ensure proper and safe installation and performance.
- Improper installation, misuse, misapplication or other failure to completely follow ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.

SAFETY INSTRUCTIONS:

All governing codes and regulations and those required by the job site must be observed.
 Always use appropriate safety equipment such as eye protection, hard hat, and gloves as appropriate to the application.

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