1. Always wear protective safety glasses and gloves while working with CADWELD® exothermic products.

2. Prepare the proper materials and equipment for the type of connection you are making. The CADWELD® PLUS ONE SHOT system requires a CADWELD® ONE SHOT ceramic mold, CADWELD® PLUS welding material, wire brush for cleaning/preparing conductors, control unit and propane torch.

   NOTE: Additional materials may be required for your specific application. Refer to your mold instructions.

3. Check to ensure the ceramic mold is not worn or broken, which could cause leakage of molten weld metal during the reaction.

   Inspect the CADWELD PLUS ONE SHOT box label to ensure that it corresponds to the application indicated by the:
   - CADWELD PLUS ONE SHOT part number
   - Conductor size
   - Welding material required
   - Other materials required

   The mold must be correct for the conductor size and application. DO NOT MODIFY MOLDS.
4. The conductor should be clean and dry before the connection is made. Use a propane torch to dry wire conductors and remove remaining cleaning residue solvent or water before making the CADWELD® connection.

5. Next, use a wire brush to further prepare the surface of the conductors and ground rod. Scrape the outer surface to remove dirt and oxidation. You will notice a slight colour change.

6. Each CADWELD PLUS ONE SHOT contains a copper wire at bottom of the mold.

   Place the mold onto the ground rod until the ground rod reaches the wire stopper and cannot go any further.

7. Insert the conductors and position them for connection.
8. Inspect the cup to ensure it is tightly sealed and the ignition strip is securely attached to the seal.

9. Place the welding material cup into the top of the mold. Make sure the ignition strip nests into the recess on the top edge.

10. Place the ceramic lid onto the mold.

11. Battery powered control unit.
12. Place the ignition strip into the control unit connector. Remove or protect fire hazards in close proximity to the connection. Advise nearby personnel of welding operations in the area.

13. Using the control unit, press the button and hold, while you observe the “ready” indicator light. A green light will blink for a few seconds and then will change to a constant light. At this time, the unit will send a charge to the ignition strip. The ignition strip will spark inside the metal cup, activating the CADWELD® PLUS exothermic reaction.

14. Remove and dispose of the used CADWELD® PLUS weld metal cup.

15. Break the ceramic CADWELD ONE SHOT mold off of the connection. Avoid contact with hot materials.

16. You are ready to make another CADWELD® connection.