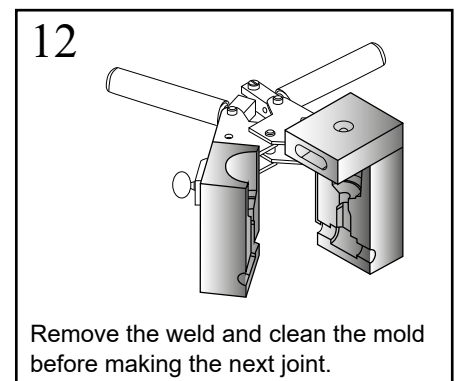
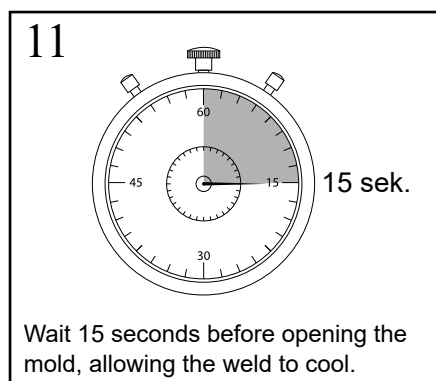
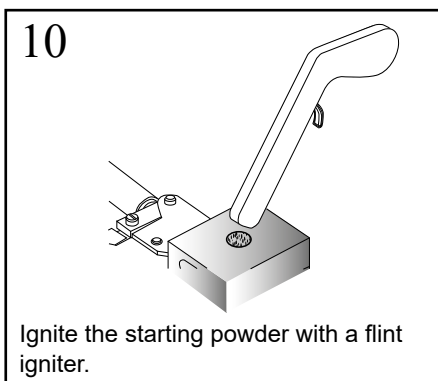
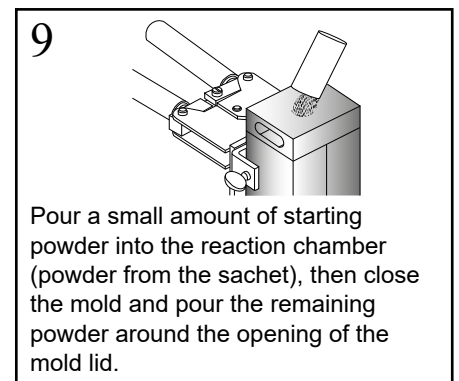
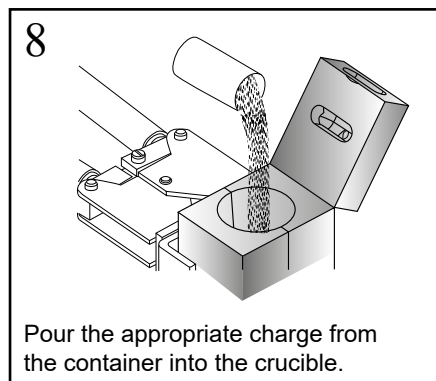
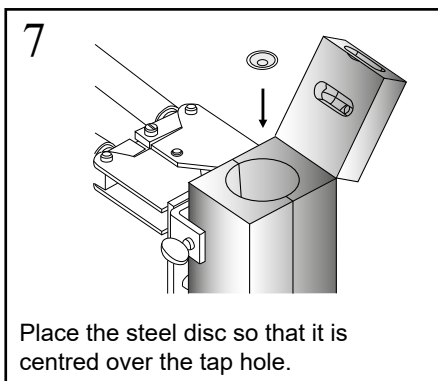
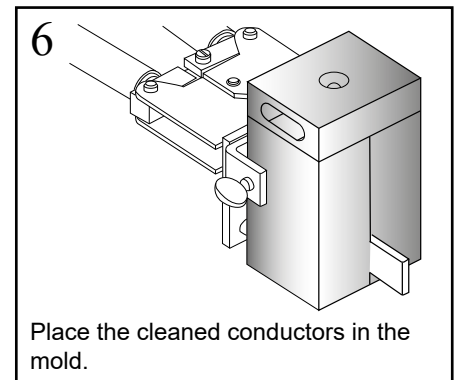
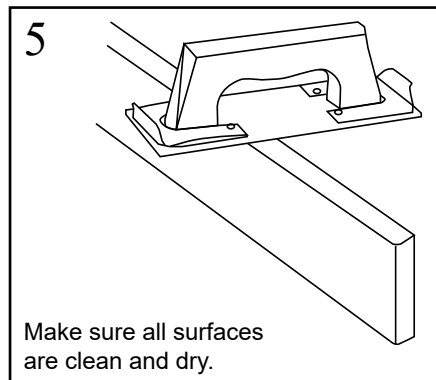
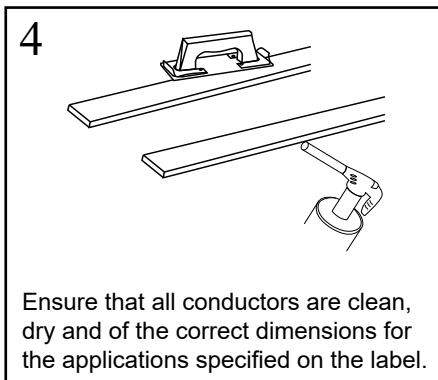
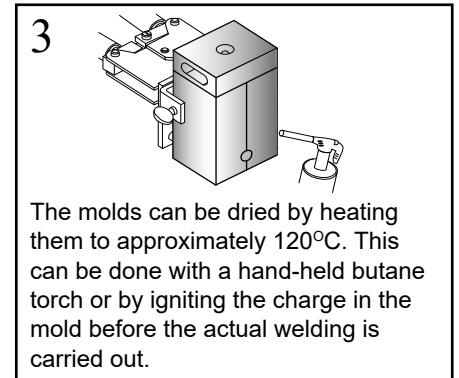
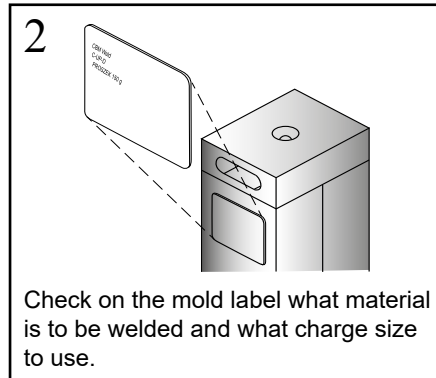
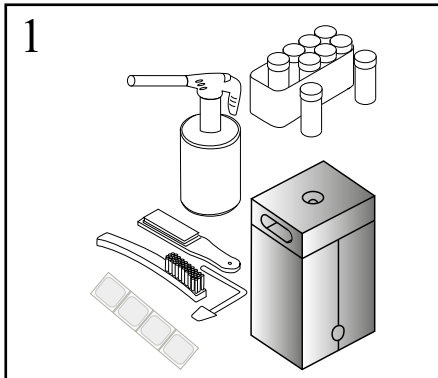


## Instructions for use with flint igniter



## Safety instructions for use with flint igniter

1. Always wear appropriate clothing, safety glasses and gloves when performing exothermic welding.
2. Perform welding of parts only with molds properly designed for them.
3. Do not use worn or damaged molds from which molten metal may leak.
4. Make sure that the welding material fits into the mold and allows it to be closed tightly.
5. Do not modify molds and accessories without the manufacturer's approval.
6. Avoid inhaling smoke in high concentrations as it can be harmful to health.
7. Avoid contact with hot materials.
8. Remove or secure materials that pose a fire hazard from the welding area.
9. Do not allow the mold and welding materials to become damp and contaminated. Contact of the weld metal with moisture or contaminants can cause it to rapidly escape from the mold.
10. When performing welding with pipes or containers, consider:
  - a. the effect that welding can have on structural components or thin-walled pipes and containers,
  - b. the need to check pipes or containers under pressure or containing (also in the past) flammable, explosive or hazardous materials for punctures caused by welding or the hot weld metal coming into contact with flammable, explosive or hazardous materials.
11. Failure to follow the above instructions and the welding instructions may result in incorrect welds, damage to the material to be welded or dangerous situations.

### PREPARATION OF BUSBARS, TAPE, ROD ENDS AND COPPER PLATES

1. Copper busbars, tape and rod ends need to be light-coloured, clean and dry over the entire surface in the welding area of the mold. Sections of parts to be placed in the mold which are made of solid copper should be heated using a gas burner flame before being placed in the mold. This will reduce the risk of increasing the volume of the copper element during the exothermic process and prevent damage to the mold.
2. Use a file or wire brush to remove oxidation marks.

### WELDING PROCEDURE

1. Check if the material to be welded complies with the information on the mold label.
2. Ensure all surfaces and conductors are clean, dry and of the correct dimensions for the molds specified on the label.
3. The molds can be dried by heating them to approximately 120°C. This can be done with a hand-held butane torch or by igniting the charge in the mold before the actual welding is carried out.
4. Place the mold on the conductors. The first page of this sheet shows how to place the conductors in the mold. Close the mold using handle clamp or optionally with a frame.
5. Place the steel disk so that it is centred over the tap hole. Failure to place the disk in the mold or incorrect placement may result in an improper weld and rapid release of weld metal from the mold.
6. Pour the charge from the container into the crucible. Using the wrong charge may result in an incorrect weld or damage to the mold.
7. Pour a small amount of starting powder into the reaction chamber (powder from the sachet), then close the mold and pour the remaining powder around the opening of the mold lid.
8. Before ignition, check the position of the conductor and make sure the lid is completely closed.
9. Ignite the starting powder with a flint igniter. Move the igniter away from the starting powder as soon as you pull the trigger to avoid contamination (move any uncovered parts of your body away from the lid or from the hole made in it).
10. Wait 15 seconds before opening the mold, allowing the weld metal to cool.
11. Clean the mold with a natural bristle brush, soft cloth or soft paper before performing the next weld. Use a small diameter rod or screwdriver to remove scale from the tap hole in horizontally folded molds. When cleaning the molds, be careful not to get burned.

**DO NOT USE A WIRE BRUSH TO CLEAN THE MOLDS!**

### NOTE:

1. A dirty flint igniter can be cleaned by immersing it in an ammonia solution.
2. The correct charge size is indicated on the mold label and the bottom of the container with the charge.
3. The charge size is the approximate weight of the powder in grams. If a charge of a particular size is not available, two or more smaller charges or part of a larger charge may be used. Do not allow the starting powder to mix with the combined charges.
4. To adjust the handle clamp, remove the pin with cotter and turn the eye bolt one turn clockwise to tighten the clamp or one turn counterclockwise to loosen the clamp.