

ARC WELDER

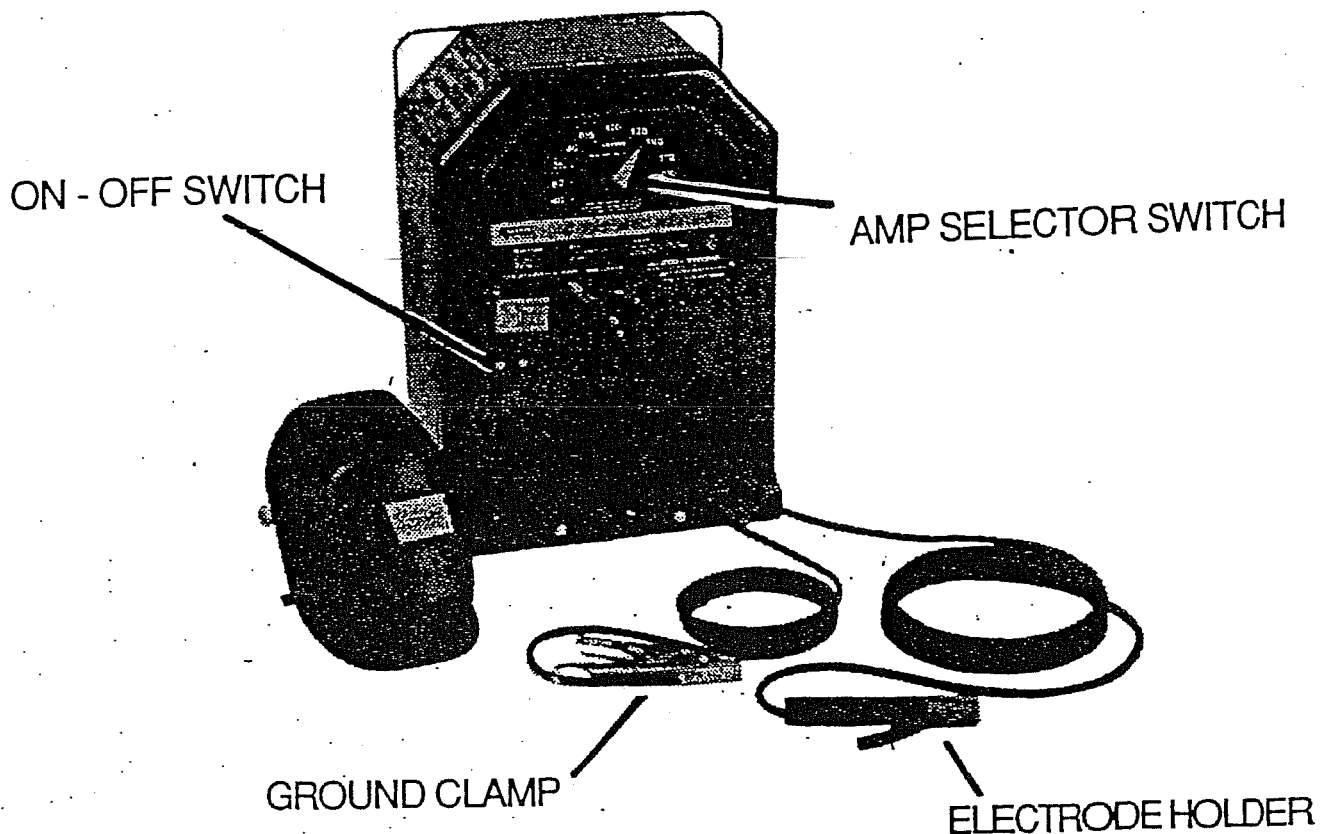
To certify on the arc welder you will need to know:

1. The safety rules.
2. The parts of the arc welder.
3. Be able to answer the questions of lesson #1 of the arc welder.
4. Strike an arc and run a bead. (Ask your instructor for help with this.)

Arc welder safety rules

1. A welding helmet must be worn when welding.
2. Proper ventilation must be available.
3. Goggles must be worn when chipping slag.
4. Others in the area must be warned prior to striking an arc.
5. Gloves and proper clothing must be worn when welding.
6. Closed containers should not be welded without the instructor's permission.
7. Do not stand in wet areas while welding.
8. Screens to protect others must be in place before welding is started.

Arc welder parts



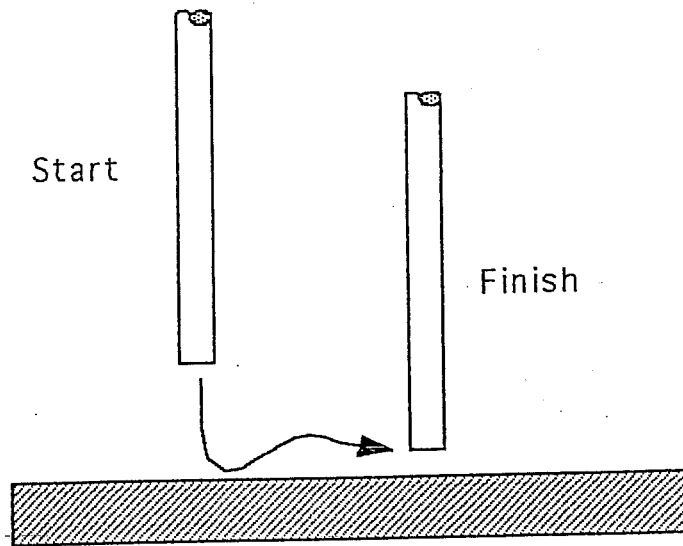


Fig. 2 "Tapping" Method of Arc Starting

The principal difficulty encountered in striking the arc is "freezing"; that is, the electrode sticks or fuses to the work. This is caused by the current melting the electrode tip and sticking it to the cold base metal before it is withdrawn from contact. The extra high current drawn by the "short circuit" will soon overheat an electrode and melt it or the flux - unless the circuit is broken. Giving the electrode holder a quick snap backwards from the direction of travel will generally free the electrode. If it does not, it will be necessary to open the circuit by releasing the electrode from the holder.

CAUTION : Never remove the shield from the face if the electrode is frozen. Free the electrode with the shield in front of your eyes as it will "flash" when it comes loose.

To strike a arc

1. Assume a natural position and grasp the holder firmly but comfortably by using either one or both hands. Using both hands helps to steady the electrode and reduce the fatigue. To use both hands, rest the left elbow on the work table and with the left hand steady the right hand by holding the right wrist.
2. Hold the electrode above the plate and move it down until it is about an inch above the plate. Hold it perpendicular to the plate - Inclined at an angle of 20 to 25 degrees in the direction of travel. (Fig. 3)