

OPERATING INSTRUCTIONS



WARNING

- Have an electrician install and service this equipment.
- Turn the input power off at the fuse box before working on equipment.
- Do not touch electrically hot parts.

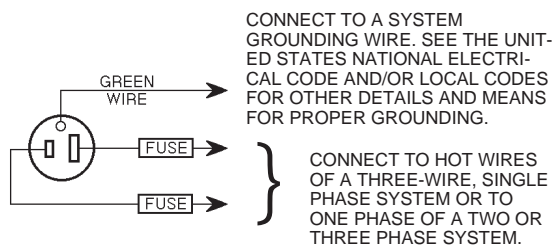
Input Power and Grounding Connections

Before starting the installation, check with the power company to be sure your power supply is adequate for the voltage, amperes, phase and frequency specified on the welder nameplate. Also, be sure the planned installation will meet the United States National Electrical Code and local code requirements. This welder may be operated from a single phase line or from one phase of a two or three phase line.

All models designed to operate on less than 250 volt input lines are shipped with the input cable connected to the welder.

Place the welder so there is free circulation of air in through the louvers in the back and sides of the case and out of the bottom on all four sides. Mount a NEMA Type 6-50R receptacle in a suitable location. Be sure it can be reached by the plug on the input cable attached to the welder.

Using the following instructions, have a qualified electrician connect this receptacle (NEMA 6-50R Type) to the power lines at the fuse box. Three #10 or larger copper wires are required if conduit is used. For long cable runs over 100'(31m), #8 or larger wire in conduit will be needed to prevent excessive voltage drops. Fuse the two hot lines with 50 ampere super lag type fuses as shown in the following diagram. The center contact in the receptacle is for the grounding connection. A green wire in the input cable connects this contact to the frame of the welder. This insures proper grounding of the welder frame when the welder plug is inserted into the receptacle. If a separate disconnect switch is used, it should have two poles for the two hot lines and both should be fused for 50 amperes.



Attaching Electrode Cable to Holder



WARNING

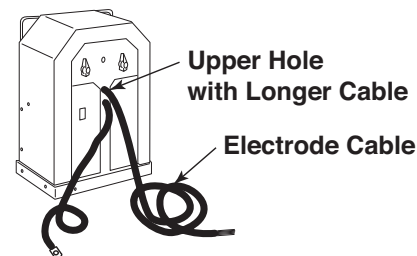
Before attaching the electrode cable to the electrode holder or the work cable to clamp, be certain the welder is turned off or the input power is disconnected.

Identify the holder type before installing.

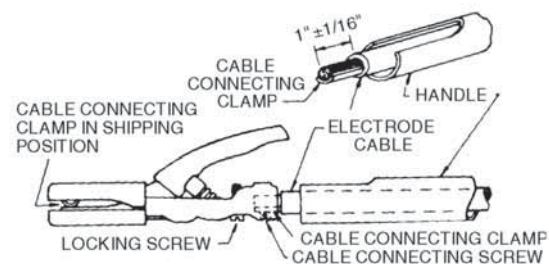
Type A - Holder with Octagon shaped handle and Clamp in Jaws

1. Loosen locking screw and slide handle off holder. Place handle over electrode cable. The longer cable is used for the Electrode Cable and is located in the front of machine upper hole as shown in **FIGURE 1A**.

FIGURE 1A

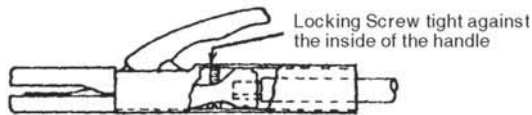


2. Remove insulation from electrode cable $1" \pm 1/16"$ (25.4mm \pm 1.6mm) from end.
3. Back out cable connecting screw until end is flush with inside surface of jaw body.
4. Remove cable connecting clamp from holder jaws. Place clamp over bare end of electrode cable and insert into holder with clamp centered against connecting screw.



5. Tighten cable connecting screw securely against clamp.

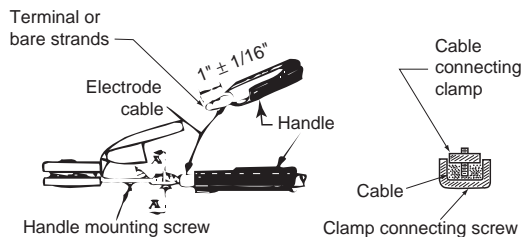
- Slide handle into position and secure by turning the locking screw in until it is tight. The threaded end of the screw will then pass against the inside of the handle and the head of the screw will be completely inside the handle.



Important Safety Note: Make sure insulation is secure and that screws are tight and cannot be touched. If screw can be touched, DO NOT USE HOLDER, contact your distributor.

Type B - Holder with Round, Ribbed Handle

- Remove handle mounting screw and slide handle off holder. Place handle over electrode cable. The longer cable is used for the Electrode Cable and is located in the front of machine upper hole as shown in Figure 1A.
- If electrode cable does not have a terminal on it, remove insulation from electrode cable $1" \pm 1/16"$ (25.4mm \pm

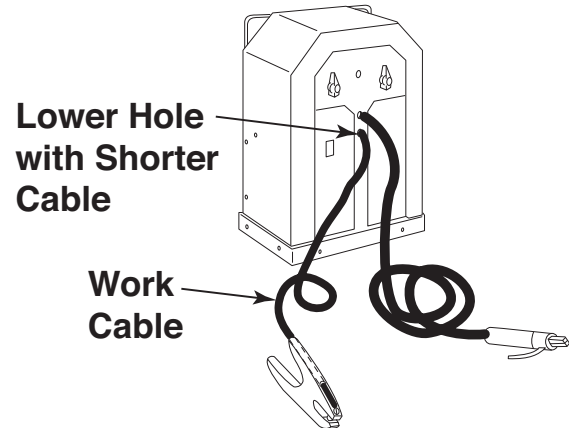


1.6mm) from end.

- Back out clamp connecting screw and remove cable connecting clamp.
- If electrode cable has a terminal attached (#10 clearance hole), place terminal over cable connecting screw. Otherwise, place bare end of electrode cable into holder with cable strands divided equally on both sides of clamp connecting screw.
- Tighten cable connecting screw securely into clamp so clamp holds cable in place.
- Slide handle into position and secure with handle mounting screw.

Attaching Work Cable to Clamp

Insert work cable (with 5/16" clearance hole terminal) through strain relief hole in work clamp and fasten securely with bolt and nut provided. The shorter cable is used for the Work Cable and is located in the front of the machine lower hole as shown below.



Electrode and Work Cable Replacement

Substitution of cables with larger sizes requiring connections to be made internally is not recommended. Connections for additional lengths or larger sizes should be properly made externally. Lincoln Electric QD (Quick Disconnect) connectors are available for this purpose.

If either cable requires replacement for other reasons, they should be replaced with the appropriate Lincoln parts— and only by qualified personnel.