

# LightWELD™ 2000 XR

## **Wiring the AC Line Cord Pigtail**

This bulletin replaces user guide section "Connect Electrical Power"

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### **SERVICE BULLETIN**

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# 1 Service Bulletin

## 1.1 Introduction

**Purpose**

This service bulletin includes installation instructions for wiring the AC line cord pigtail, electrical specifications and installation precautions. The user guide section "Connect Electrical Power" which describes the Harting connector wiring is obsolete and not applicable for your LightWELD 2000 XR device.

**IMPORTANT**

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**Keep this service bulletin with the user guide.**

The content of this service bulletin replaces the user guide sections 5.7 and 5.7.1. Do not discard this document. It should be kept for future reference.

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**Contact IPG Service**

For product technical assistance, contact IPG Service.

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**Audience**

This service bulletin is intended for equipment owners, electricians, and personnel knowledgeable in electrical safety practices who are responsible for installing the laser device.

**Language**

The language of the original instructions is English.

## 1.2 Electrical Specifications

**Personnel Qualifications:** Electrician

Please refer to the laser welder's *PRODUCT SPECIFICATION* for power requirements. An AC line cord with pigtail is provided with your laser welder.

▼ Table 1. Wiring AC Line Input

Characteristic	Specification
Input AC Voltage	208-240 V, single phase
Full Load Current	32 A
Input AC Frequency	50/60 Hz
Maximum Rated Power	6000 VA
AC Connection	<p>The AC line cord has a pigtail that can be wired to one of the following options:</p> <ol style="list-style-type: none"> <li>1. Disconnect Device (refer to section 1.3 [▶4])</li> <li>2. Connector that is compliant to IEC60309 standard</li> <li>3. Connector that is not compliant to IEC60309 standard</li> </ol> <p>For Option #3: Must connect PE Ground that is located on the rear panel of the device (above AC line cord). The PE Ground is a threaded hole for a #12-24 screw. Use 10 AWG copper wire for PE ground connection.</p> <p>Wire the power input to the voltage, phase and frequency indicated.                      L1 Line Voltage = black                      L2 (or N in EU) = white                      PE Ground = green</p>
Cordage Specification	10.5ft (3.2m) cord with pigtail is provided. Portable Cordage 3 Conductor Type SOOW 600V 10AWG (104x30) 90°C. General cable 2728 or equivalent.



## 1.3 Wiring Cord to Disconnect Device

### NOTICE

**Incorrect voltage and wiring can damage the welder system.**

Ensure the voltage and wiring is correct prior to turning ON the power.

- ▶ See rating label on unit and check input voltage available at site. Ensure that the incoming voltage is equal to the level specified.
- ▶ Installation must meet all National and Local Codes.
- ▶ Disconnect and lockout/tagout input power before connecting input conductors from unit. Follow established procedures regarding the installation and removal of lockout/tagout devices.
- ▶ Always connect green conductor to supply grounding terminal first and never to a line terminal.
- ▶ The electrical connection to the unit must be connected to an individual branch circuit with a circuit breaker or fuse that does not exceed 40 Amps. This must be in close proximity to the unit and within easy reach of the operator and marked as the disconnecting device for the unit.

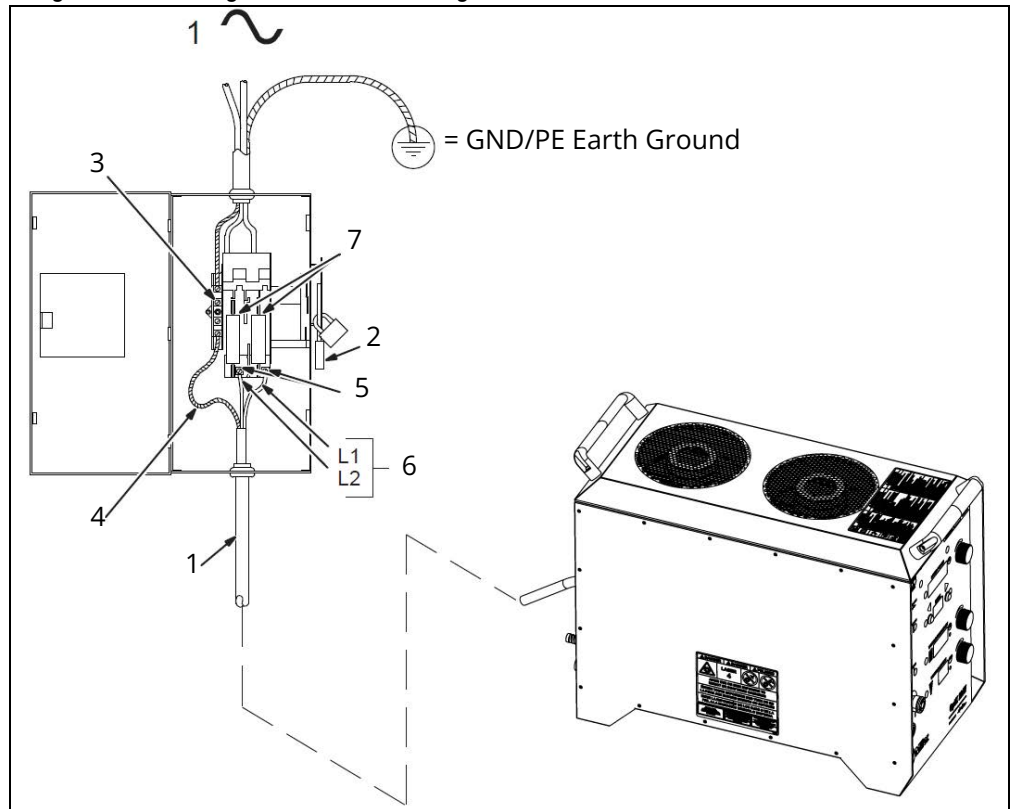
**⚠ DANGER**

**Exposed electrical components. Danger to life due to electrical shock.**

- Installation exclusively by qualified personnel that are knowledgeable in electrical safety practices.

Refer to Figure 1 [▶ 5].

1. Input Power Conductors.
2. Disconnect Device. The switch is shown in the OFF position.
3. Disconnect Device (Supply) Grounding Terminal.
4. Connect green grounding conductor to disconnect device grounding terminal.
5. Disconnect Device Line Terminals.
6. Connect input conductors L1 and L2 to disconnect device line terminals.
7. Over-Current Protection.
  - Circuit breaker or fuse rating must not exceed 40 amperes (fused disconnect switch shown).
8. Close and secure door on disconnect device.
9. Follow established lockout/tagout procedures to put unit in service.

 ▼ Figure 1. *Wiring the AC Line Cord Pigtail to the Disconnect Device*




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ORIGINAL INSTRUCTIONS IN ENGLISH

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