Hypertherm 120667

Hypertherm 120667 Electrode User Manual

Model: 120667

Introduction

This manual provides essential information for the proper installation, operation, and maintenance of the Hypertherm 120667 Electrode. This electrode is a critical consumable component designed for use in Hypertherm plasma cutting systems, specifically rated for 200 Amp applications. Adhering to these instructions will ensure optimal performance, longevity, and safety during plasma cutting operations.

Product Overview

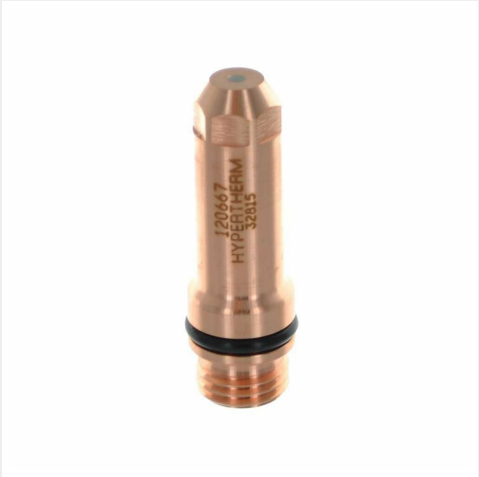

Figure 1: Hypertherm 120667 Electrode. This image displays the copper-colored electrode with visible threading at the base, a black O-ring, and the model number "120667 HYPERTHERM 32815" engraved on its side. The tip features a small, precise opening for plasma arc generation.

The Hypertherm 120667 Electrode is a precision-engineered consumable part essential for generating the plasma arc in compatible Hypertherm plasma cutting torches. It is designed for high-amperage cutting, providing consistent arc stability and cut quality. Regular inspection and timely replacement of the electrode are crucial for maintaining cutting performance and extending the life of other torch components.

Setup and Installation

Proper installation of the electrode is vital for safe and effective operation. Always refer to your specific plasma torch's user manual for detailed instructions on component replacement.

1. **Safety First:** Ensure the plasma cutting system is powered off and disconnected from the main power supply before handling any torch components. Allow the torch to cool down if it has been recently used.
2. **Disassembly:** Carefully unscrew and remove the retaining cap, nozzle, and swirl ring from the plasma torch head. The old electrode will typically be visible and accessible at this point.
3. **Inspection:** Inspect the torch body and other reusable components for any signs of damage, wear, or debris. Clean as necessary.
4. **Install New Electrode:** Gently insert the new Hypertherm 120667 Electrode into its designated position within the torch body. Ensure it seats correctly and is aligned. Do not force it.
5. **Reassembly:** Reinstall the swirl ring, nozzle, and retaining cap in the correct order. Hand-tighten the retaining cap firmly to ensure proper electrical contact and gas sealing. Avoid over-tightening.
6. **Final Check:** Verify that all components are securely in place before reconnecting power to the plasma system.

Operating Guidelines

The Hypertherm 120667 Electrode functions as part of a complete plasma cutting system. Optimal performance depends on correct system settings and proper cutting techniques.

- **System Compatibility:** Ensure the 120667 electrode is compatible with your specific Hypertherm plasma torch and power supply model. Refer to your system's manual for recommended consumables.
- **Amperage Settings:** This electrode is rated for 200 Amp applications. Always set your plasma cutter's amperage within the recommended range for the material thickness and cutting speed. Incorrect amperage can lead to premature electrode wear or poor cut quality.
- **Gas Pressure:** Maintain the correct gas pressure as specified by your plasma system's manual. Insufficient or excessive gas pressure can affect arc stability and consumable life.
- **Cutting Technique:** Use proper standoff distance, travel speed, and torch angle for the material being cut. Consistent technique helps maximize electrode life and cut quality.
- **Duty Cycle:** Adhere to the duty cycle limitations of your plasma cutting system to prevent overheating and damage to components, including the electrode.

Maintenance

Regular inspection and maintenance of the electrode and other torch consumables are crucial for consistent performance and safety.

- **Daily Inspection:** Before each use, inspect the electrode tip for signs of wear, pitting, or damage. A worn electrode will have a noticeable pit in the center of the tip.
- **Replacement:** Replace the electrode when the pit depth reaches approximately 0.040 inches (1 mm) or as recommended by your plasma system's manual. Continuing to use a worn electrode can damage other torch components and degrade cut quality.
- **Cleanliness:** Keep all torch components, including the electrode, clean and free of dust, debris, and moisture. Contaminants can interfere with electrical conductivity and gas flow.
- **Storage:** Store spare electrodes in a clean, dry environment to prevent contamination and corrosion.

Troubleshooting

If you experience issues with your plasma cutting system, consider the electrode as a potential factor. Below are common issues and their relation to the electrode:

Problem	Possible Cause (Electrode Related)	Solution
Poor Cut Quality / Rough Cut	Worn or damaged electrode tip.	Inspect and replace the electrode if worn.
Short Consumable Life	Incorrect amperage settings; improper gas pressure; poor cutting technique; contaminated electrode.	Verify system settings; ensure proper technique; replace contaminated electrode.
No Arc / Intermittent Arc	Electrode not seated correctly; poor electrical contact; severely worn electrode.	Re-seat electrode; check for debris; replace if severely worn.

Specifications

Attribute	Detail
Model Number	120667
Brand	Hypertherm
Amperage Rating	200 Amp
Item Weight	1.6 ounces (approx. 45 grams)
Product Dimensions	1 x 1 x 6 inches (approx. 2.54 x 2.54 x 15.24 cm)
Package Quantity	5 electrodes per pack
Manufacturer	Hypertherm
ASIN	B012Y5P8AA
First Available	October 4, 2018

Warranty Information

As a consumable item, the Hypertherm 120667 Electrode typically does not carry a long-term warranty against wear and tear. However, it is warranted against defects in material and workmanship at the time of purchase. For specific warranty details, please refer to the official Hypertherm warranty policy or contact Hypertherm customer support directly. Keep your purchase receipt as proof of purchase.

Customer Support

For technical assistance, product inquiries, or to report issues, please contact Hypertherm customer support. You can find contact information, including phone numbers and online resources, on the official Hypertherm website. When contacting support, please have your product model number (120667) and any relevant system information ready.

Official Hypertherm Website: www.hypertherm.com