Jasic Cut 80

Jasic Cut 80 Plasma Inverter

Instruction Manual

This manual provides essential information for the safe and efficient operation, setup, and maintenance of your Jasic Cut 80 Plasma Inverter. Please read this manual thoroughly before operating the equipment and retain it for future reference.

1. Safety Information

Operating plasma cutting equipment requires strict adherence to safety protocols to prevent injury and damage. Always prioritize safety.

1.1 General Safety Precautions

- Always wear appropriate personal protective equipment (PPE), including a welding helmet with suitable shade, flame-resistant gloves, and protective clothing.
- Ensure adequate ventilation in the work area to prevent the accumulation of fumes and gases.
- Do not operate the machine in damp or wet conditions, or in areas with flammable materials.
- Disconnect power before performing any maintenance, inspection, or changing consumables.
- Keep children and unauthorized personnel away from the operating area.

1.2 Electrical Safety

- Ensure the power supply voltage and frequency match the machine's requirements as specified on the rating plate.
- Never touch live electrical parts.
- Use properly grounded power outlets and ensure all connections are secure.

1.3 Plasma Arc Safety

- The plasma arc produces intense ultraviolet (UV) and infrared (IR) radiation. Protect eyes and skin from exposure.
- Hot metal and slag can cause severe burns. Handle cut materials with care and allow them to cool.

2. Product Overview



This image displays the Jasic Cut 80 Plasma Inverter. The front panel features a digital display for current settings, a pressure gauge for air supply, a current adjustment knob, and various connection ports for the plasma torch and earth clamp. The side panel shows the Jasic logo and ventilation grilles, indicating the robust design for cooling.

Key Components:

- **Digital Display:** Shows the current cutting amperage.
- **Current Adjustment Knob:** Used to set the desired cutting current (Amps).
- **Air Pressure Gauge:** Displays the incoming air pressure from the compressed air supply.
- **Plasma Torch Connection:** Port for connecting the plasma cutting torch.
- **Earth Clamp Connection:** Port for connecting the earth clamp cable.
- **Power Switch:** Typically located on the rear of the machine.
- **Air Inlet:** Connection point for the compressed air supply hose (usually on the rear).

3. Setup

1. **Unpacking and Inspection:** Carefully remove the machine and all accessories from the packaging. Inspect for any signs of shipping damage. Report any damage to your supplier immediately.
2. **Power Connection:** Connect the machine to a suitable power supply as specified on the machine's rating plate. Ensure the power outlet is properly grounded and capable of handling the machine's power requirements.
3. **Air Supply Connection:** Connect a clean, dry compressed air supply to the air inlet port on the rear of the machine. Ensure the air pressure is within the recommended operating range (typically 4.5-5.5 bar). An air filter/regulator with a water trap is highly recommended.
4. **Torch and Earth Clamp Connection:** Connect the plasma cutting torch to its designated port on the front panel. Securely tighten the connection. Connect the earth clamp cable to the earth clamp port on the front panel. Ensure a good electrical connection.

4. Operating Instructions

1. **Power On:** Turn on the main power switch, usually located on the rear of the machine. The digital display should illuminate.
2. **Set Air Pressure:** Adjust the air regulator (if external) to achieve the recommended air pressure as indicated on the machine's pressure gauge.
3. **Set Cutting Current:** Rotate the current adjustment knob on the front panel to set the desired cutting amperage. The value will be shown on the digital display. The appropriate current depends on the material type and thickness.
4. **Prepare Workpiece:** Ensure the workpiece is clean and free of rust, paint, or other contaminants. Securely attach the earth clamp to the workpiece, ensuring good electrical contact.
5. **Initiate Cut:** Position the plasma torch nozzle approximately 1-2mm from the edge of the workpiece. Press the torch trigger to initiate the pilot arc. Once the pilot arc is established, move the torch steadily across the material to perform the cut.
6. **Post-Cut:** Release the torch trigger. Allow the machine to cool down if operating continuously for extended periods, especially if the overheating indicator activates.

5. Maintenance

Regular maintenance ensures optimal performance and extends the lifespan of your plasma cutter.

1. **Consumables Inspection:** Regularly inspect the plasma torch consumables (nozzle, electrode, swirl ring, shield cup) for wear. Replace them when signs of wear are evident to maintain cut quality and prevent damage to the torch.
2. **Air Filter/Regulator:** Check and drain the water trap on the air filter/regulator assembly daily to prevent moisture from entering the machine, which can severely impact performance and lifespan.
3. **Cleaning:** Keep the machine clean and free of dust and metal particles. Use compressed air to blow out internal components periodically, ensuring the machine is disconnected from power before doing so.
4. **Cable Inspection:** Inspect all cables (power, torch, earth clamp) for damage, cuts, or fraying. Replace damaged cables immediately to prevent electrical hazards.

6. Troubleshooting

This section provides solutions to common operational issues. If the problem persists, contact a qualified technician or your supplier.

Problem	Possible Cause / Solution
No Power	Machine not plugged in, power switch off, circuit breaker tripped. Check power connections, ensure the power switch is on, and reset the circuit breaker if necessary.
No Arc / Pilot Arc	Earth clamp not properly connected, air pressure too low, worn torch consumables, machine fault. Check earth clamp connection, verify air pressure, inspect and replace consumables. If issues persist, consult a qualified technician.
Poor Cut Quality	Incorrect cutting current, incorrect air pressure, worn consumables, torch too far from workpiece, dirty material. Adjust settings, replace consumables, maintain proper torch distance, clean workpiece.
Overheating Indicator On	Machine has exceeded its duty cycle. Allow the machine to cool down with the power on (fan running) until the indicator turns off. Ensure adequate ventilation around the machine.

7. Specifications

The following table outlines key specifications for the Jasic Cut 80 Plasma Inverter. For detailed electrical specifications, please refer to the rating plate on your machine.

Feature	Detail
Manufacturer	JASIC
Model	Cut 80
ASIN	B07XVNX2Z9

Feature	Detail
Date First Available	19 Oct. 2020
Input Voltage	Refer to machine rating plate (typically 400V 3-Phase)
Output Current Range	Refer to machine rating plate (typically 20-80A)
Recommended Air Pressure	4.5 - 5.5 bar

8. Warranty and Support

For warranty information and technical support, please contact your authorized Jasic dealer or the seller from whom you purchased this product. For purchases made via Amazon, the seller is Oxford Welding Supplies Ltd. Please retain your proof of purchase for all warranty claims.

Return Policy: This product is subject to a 30-day refund/replacement return policy as per the seller's terms.

Ask a question about this manual

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Example: How do I reset this device or fix this error?

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