

[Manuals.plus](#) /

› [Ingco](#) /

› Ingco ING-MMAC2503 Welding Machine User Manual

Ingco ING-MMAC2503

Ingco ING-MMAC2503 Welding Machine Instruction Manual

Model: ING-MMAC2503

1. PRODUCT OVERVIEW

The Ingco ING-MMAC2503 is a robust 250A welding machine designed for various arc welding applications. This manual provides essential information for safe and efficient operation, maintenance, and troubleshooting of your welding machine.



This image displays the Ingco ING-MMAC2503 Welding Machine. It features a silver-colored metal casing with ventilation grilles on the side. The front panel is black, housing a red power button, a rotary knob for current adjustment (marked 1-5 and OFF), and various indicators. A black handle is positioned on top for portability.

2. SAFETY INSTRUCTIONS

Always prioritize safety when operating welding equipment. Failure to follow these instructions can result in serious injury or death.

- **Electric Shock:** Welding current can cause fatal electric shock. Ensure proper grounding, wear dry gloves, and avoid contact with live electrical parts.
- **Fumes and Gases:** Welding fumes and gases can be hazardous to your health. Work in a well-ventilated area or use a fume extractor.
- **Arc Rays:** Arc rays can burn eyes and skin. Always wear a welding helmet with appropriate shade filter and protective clothing.
- **Fire and Explosion:** Welding sparks and hot metal can cause fires. Keep flammable materials away from the welding area. Have a fire extinguisher readily available.
- **Burns:** Hot metal and slag can cause severe burns. Wear protective gloves, long sleeves, and other appropriate clothing.

- **Maintenance:** Disconnect power before performing any maintenance or service.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- 1 x Ingco ING-MMAC2503 Welding Machine
- 1 x Electrode holder with cable
- 1 x Earth clamp with cable
- 1 x Wire brush
- 1 x Helmet (basic protective shield)
- 1 x Instruction Manual (this document)

4. SETUP

1. **Power Connection:** Connect the welding machine to a suitable power supply (220-240V or 380-400V, 50/60Hz single phase) as indicated on the machine's rating plate. Ensure the power outlet is properly grounded.
2. **Earth Clamp Connection:** Attach the earth clamp cable securely to the workpiece. Ensure good electrical contact to prevent poor arc stability.
3. **Electrode Holder Connection:** Connect the electrode holder cable to the appropriate terminal on the welding machine.
4. **Electrode Insertion:** Insert the desired electrode (diameter 2.0-5.0mm) into the electrode holder. Ensure it is held firmly.

5. OPERATING INSTRUCTIONS

1. **Power On:** Turn the main power switch to the "ON" position. The machine's indicator light should illuminate.
2. **Current Adjustment:** Use the rotary knob on the front panel to select the desired welding current. The range is 60-250A. Refer to electrode manufacturer guidelines for appropriate current settings based on electrode type and diameter, and material thickness.
3. **Welding Process:**
 - **Prepare Workpiece:** Clean the workpiece thoroughly to remove rust, paint, or grease.
 - **Strike an Arc:** With the welding helmet on, lightly scratch the electrode tip against the workpiece to initiate an arc.
 - **Maintain Arc:** Once the arc is struck, maintain a consistent arc length and travel speed.
 - **Observe Weld Pool:** Monitor the molten weld pool to ensure proper penetration and bead formation.
4. **Power Off:** After welding, turn the main power switch to the "OFF" position. Allow the machine to cool down before storage.

6. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your welding machine.

- **Cleaning:** Periodically clean the machine's exterior with a dry cloth. Use compressed air to clear dust from ventilation openings. Ensure the machine is unplugged before cleaning.
- **Cable Inspection:** Regularly inspect all cables (power, electrode, earth) for cuts, fraying, or damaged insulation.

Replace damaged cables immediately.

- **Connection Points:** Ensure all electrical connections are tight and free from corrosion.
- **Storage:** Store the welding machine in a dry, clean environment, away from direct sunlight and extreme temperatures.

7. TROUBLESHOOTING

This section addresses common issues you might encounter:

Problem	Possible Cause	Solution
Machine does not power on	No power supply; Faulty power cable; Internal fuse blown	Check power outlet and circuit breaker; Inspect power cable; Contact qualified service personnel.
Poor arc stability or difficulty striking arc	Poor earth connection; Incorrect current setting; Damp or old electrodes; Dirty workpiece	Ensure good earth contact; Adjust current; Use fresh, dry electrodes; Clean workpiece.
Machine overheats and shuts down	Exceeded duty cycle; Blocked ventilation; High ambient temperature	Allow machine to cool down; Ensure clear ventilation; Operate in a cooler environment.

8. TECHNICAL SPECIFICATIONS

Specification	Value
Model Number	ING-MMAC2503
Input Voltage (V)	220-240 / 380-400
Frequency (Hz)	50/60
Phase	Single
Rated Input Capacity (KVA)	14
No Load Voltage (V)	55
Output Current (A)	60-250
Max Output Current (A)	250
Duty Cycle (%)	250A at 20%
Electrode Size (mm)	2.0-5.0
Net Weight (Kg)	26.5
Product Dimensions	10 x 20 x 37 cm
Manufacturer	Ingco

9. WARRANTY AND SUPPORT

For warranty information, please refer to the warranty card included with your product or contact your retailer. For technical support or service inquiries, please visit the official Ingco website or contact their customer service department.
Note: Keep your purchase receipt as proof of purchase for warranty claims.

© 2023 Ingco. All rights reserved. Information in this manual is subject to change without notice.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

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

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page
<https://manuals.plus/asin/B0922XTQW2>

More documents and user manuals: <https://manuals.plus/>