

YIDOFENG 210-750W

YIDOFENG Mini Metal Lathe Motor 750W 110V Instruction Manual

Model: 210-750W

Brand: YIDOFENG

1. INTRODUCTION

This manual provides essential information for the safe and efficient use of your YIDOFENG 750W 110V Mini Metal Lathe Motor. This brushed DC spindle motor is designed as a replacement part for various mini lathes, including 210, 8x16, 220x400, 220x600, and 220x750 models. Please read this manual thoroughly before installation and operation to ensure proper function and longevity of the motor.



Figure 1: YIDOFENG 750W 110V Mini Metal Lathe Motor.

2. PRODUCT FEATURES

- **High Performance:** Features a maximum speed of 6000 RPM and high torque for efficient operation.
- **Stable and Quiet Operation:** Engineered for stable performance with low operational noise.
- **Durable Construction:** Manufactured from high-quality iron material, ensuring high hardness, resistance to deformation, and good durability.
- **Easy Replacement:** Designed with standard dimensions (M10 shaft, 40mm length) for direct replacement in compatible mini lathes.
- **Internal Quality Components:** Includes precision bearings for durability and wear resistance, copper wire windings, a commutator, a steel output shaft, and silicon steel sheets for optimal performance.

ADVANTAGE



6000rpm
Large Torque



Excellent
Iron Material



Low Noise
and Stable

Figure 2: Key advantages of the motor, highlighting high speed, torque, material quality, and low noise.

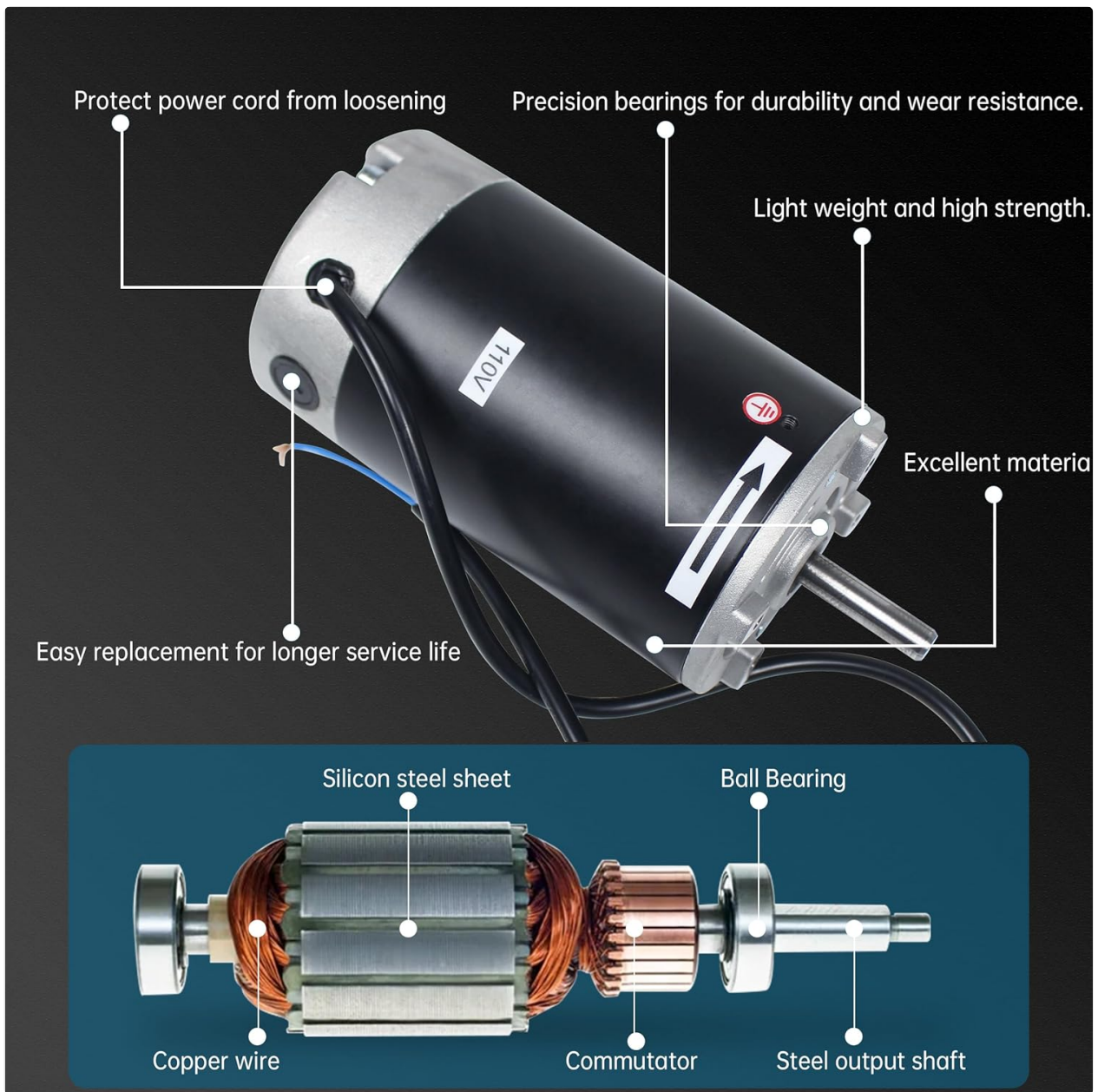


Figure 3: Detailed view of the motor's internal components and construction.

3. SPECIFICATIONS

Parameter	Value	Parameter	Value
Product Name	Mini Lathe Motor	Total Length of Motor	164mm / 6.5 inches
Voltage	110V	Shaft Length	40mm / 1.6 inches
Power	750W	Shaft Diameter	M10
Maximum Speed	6000 RPM/min	Hole Distance	73mm / 2.9 inches
Motor Diameter	108mm / 4.25 inches	Material	Iron
Item Weight	8.78 pounds	Package Dimensions	8.9 x 3.86 x 3.82 inches

PRODUCT SIZE



PRODUCT PARAMETER

Item Type	Mini Lathe Motor	Total Length of Motor	164mm/6.5inch
Material	Iron	Shaft Length	40mm/1.6inch
Power	750W	Shaft Diameter	M10
Maximum Speed	6000RPM/min	Hole Distance	73mm/2.9inch
Motor Diameter	108mm/4.25inch		

Figure 4: Product dimensions and key parameters.

LOW NOISE & HIGH TORQUE

This motor is made of high-quality iron material



SPECIFICATION

Manufacturer	YIDOFENG	Horsepower	750 Watts
Item Weight	8.92 pounds	Item Package Quantity	1
Package Dimensions	9 x 6.3x5 inches	Speed	6000 RPM
Color	110v	AccessoryConnection Type	Default
Voltage	110 Volts		

Figure 5: Additional specifications for the motor.

4. PACKAGE CONTENTS

The package includes the following items:

- 1 x YIDOFENG 750W Mini Lathe Motor

5. SAFETY INFORMATION

Always prioritize safety when working with power tools and electrical components. Failure to follow safety guidelines can result in serious injury or damage to equipment.

- **Disconnect Power:** Always ensure the lathe is disconnected from the power source before performing any installation, maintenance, or inspection.
- **Proper Wiring:** Ensure all electrical connections are correctly wired and securely fastened according to local electrical codes and the lathe's wiring diagram. If unsure, consult a qualified electrician.
- **Ventilation:** Ensure adequate ventilation around the motor during operation to prevent overheating.
- **Personal Protective Equipment (PPE):** Wear appropriate PPE, including safety glasses, gloves, and

hearing protection, when operating machinery.

- **Stable Mounting:** Ensure the motor is securely mounted to the lathe to prevent vibration and movement during operation.
- **Avoid Overload:** Do not overload the motor beyond its specified capacity.

6. SETUP AND INSTALLATION

This motor is designed as a direct replacement for compatible mini lathes. The installation process typically involves removing the old motor and securing the new one in its place. Refer to your specific lathe's service manual for detailed instructions on motor replacement.

6.1 Pre-Installation Checks

- Verify that the new motor's specifications (voltage, power, shaft dimensions) match the requirements of your lathe.
- Ensure the lathe is unplugged from the power supply.
- Gather necessary tools for removal and installation (e.g., wrenches, screwdrivers).

6.2 Installation Steps (General Guide)

1. Carefully disconnect and remove the old motor from the lathe. Note the wiring connections.
2. Position the new YIDOFENG motor in the designated mounting area on the lathe.
3. Align the motor's mounting holes with the lathe's mounting points.
4. Secure the motor using appropriate fasteners. Ensure it is firmly attached and stable.
5. Connect the motor's electrical wires to the lathe's power supply, matching the previous connections. Double-check all wiring for correctness and security.
6. Ensure the power cord is protected from loosening and strain.



Figure 6: Various views of the motor, useful for understanding mounting points and connections.

APPLICATION SITUATION



750W 8x16" Mini Lathe Machine



9"×30"750W Mini Lathe Machine

Figure 7: Examples of the motor's application in different mini lathe models.

7. OPERATING INSTRUCTIONS

Once the motor is correctly installed and all safety checks are complete, you can begin operating your lathe. Always refer to your lathe's specific operating manual for detailed instructions.

- **Power On:** Connect the lathe to a 110V power source.
- **Start Motor:** Use the lathe's control panel to start the motor. Observe for any unusual noises or vibrations.
- **Speed Control:** Adjust the lathe's speed control as needed. The motor is capable of reaching up to 6000 RPM.
- **Monitor Performance:** During operation, monitor the motor for signs of overheating or abnormal behavior.
- **Power Off:** Always turn off the motor and disconnect the power when not in use or before making any adjustments.

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Video 1: Overview of the YIDOFENG 110V Mini Metal Lathe Motor, showcasing its design and features.

8. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your motor.

- **Cleaning:** Keep the motor free from dust, metal shavings, and debris. Use compressed air or a soft brush for cleaning.
- **Inspection:** Periodically inspect the motor for any signs of wear, damage, or loose connections. Check the power cord for fraying or damage.
- **Bearing Check:** Listen for unusual noises from the bearings, which may indicate a need for lubrication or replacement.
- **Brush Inspection (if applicable):** As this is a brushed DC motor, periodically inspect the carbon brushes for wear and replace them if they are significantly worn down.

9. TROUBLESHOOTING

If you encounter issues with your motor, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Motor does not start	No power supply Loose wiring connection Overload protection tripped	Check power outlet and circuit breaker Inspect and secure all wiring connections Reduce load, allow motor to cool, reset protection if applicable
Unusual noise or vibration	Loose mounting Worn bearings Foreign object in motor	Tighten mounting bolts Inspect and replace bearings if necessary Disconnect power and carefully inspect motor for obstructions
Motor overheats	Insufficient ventilation Continuous overload Internal fault	Ensure proper airflow around motor Reduce load or operating time Contact support if problem persists
Reduced speed or power	Voltage drop Worn carbon brushes Excessive load	Check power supply voltage Inspect and replace carbon brushes Reduce the load on the lathe

If the problem persists after attempting these troubleshooting steps, please contact YIDOFENG customer support.

10. WARRANTY AND SUPPORT

YIDOFENG is committed to providing quality products and customer satisfaction. If you encounter any issues or have questions regarding your Mini Metal Lathe Motor, our customer service team is ready to assist you.

For support, please refer to the contact information provided with your purchase or visit the official YIDOFENG store on Amazon.

