



[Manuals.plus](#) /

› [Mould King](#) /

› Mould King 10088 V8 Engine Building Blocks Kit Instruction Manual

Mould King 10088

Mould King 10088 V8 Engine Building Blocks Kit

Instruction Manual

1. INTRODUCTION

Thank you for choosing the Mould King 10088 V8 Engine Building Blocks Kit. This kit provides an engaging and educational experience, allowing you to construct a functional V8 engine model. This manual contains essential information for assembly, operation, maintenance, and troubleshooting to ensure a successful and enjoyable building process.



Figure 1: The Mould King 10088 V8 Engine Building Blocks Kit in progress.

2. SAFETY INFORMATION

- **Small Parts Warning:** This kit contains small parts which may pose a choking hazard for children under 3 years of age. Keep all components out of reach of young children.
- **Age Recommendation:** This kit is recommended for ages 14 and up due to the complexity of assembly and small components.
- **Battery Safety:** The kit requires 6 AAA batteries (not included) for the battery box. Ensure batteries are inserted with correct polarity. Do not mix old and new batteries, or different types of batteries. Remove batteries if the model will not be used for an extended period.
- **Electrical Components:** Handle the L motor and battery box with care. Do not expose to water or extreme temperatures.
- **Supervision:** Adult supervision is recommended during assembly and operation, especially for younger builders.

3. PACKAGE CONTENTS

Before beginning assembly, please verify that all components are present in your kit. The Mould King 10088 V8 Engine Building Blocks Kit includes 535 pieces. Your package should contain:

- Building blocks (535+ pieces)
- 1 x L Motor
- 1 x Battery Box (requires 6 AAA batteries, not included)
- 1 x Instruction Manual



Figure 2: Included components: Packaging box, L Motor, Battery Box, and Instruction Manual.

4. ASSEMBLY INSTRUCTIONS

Follow the detailed, step-by-step picture instructions provided in the included manual. Organize your pieces by type and size to facilitate the building process. Pay close attention to the illustrations, as many pieces may appear similar.

4.1 Key Assembly Stages

1. **Base Structure:** Begin by constructing the foundational frame of the engine model.
2. **Cylinder Block and Pistons:** Assemble the cylinder block, ensuring the pistons are correctly oriented for smooth movement. The transparent cylinder head design allows for observation of the internal mechanical structure.
3. **Crankshaft and Connecting Rods:** Integrate the crankshaft and connecting rods, connecting them to the pistons. Ensure all connections are secure to prevent separation during operation.
4. **Chain Drive System:** Install the simulated mechanical chain drive system, which connects various moving parts of the engine.
5. **Motor and Battery Box Integration:** Connect the L motor to the designated points on the engine. Install 6 AAA batteries (not included) into the battery box and connect it to the L motor.
6. **Finishing Details:** Add the remaining external components, including the fan, exhaust systems, and any decorative elements.



Figure 3: Detailed views of the engine's internal mechanisms and chain drive system.

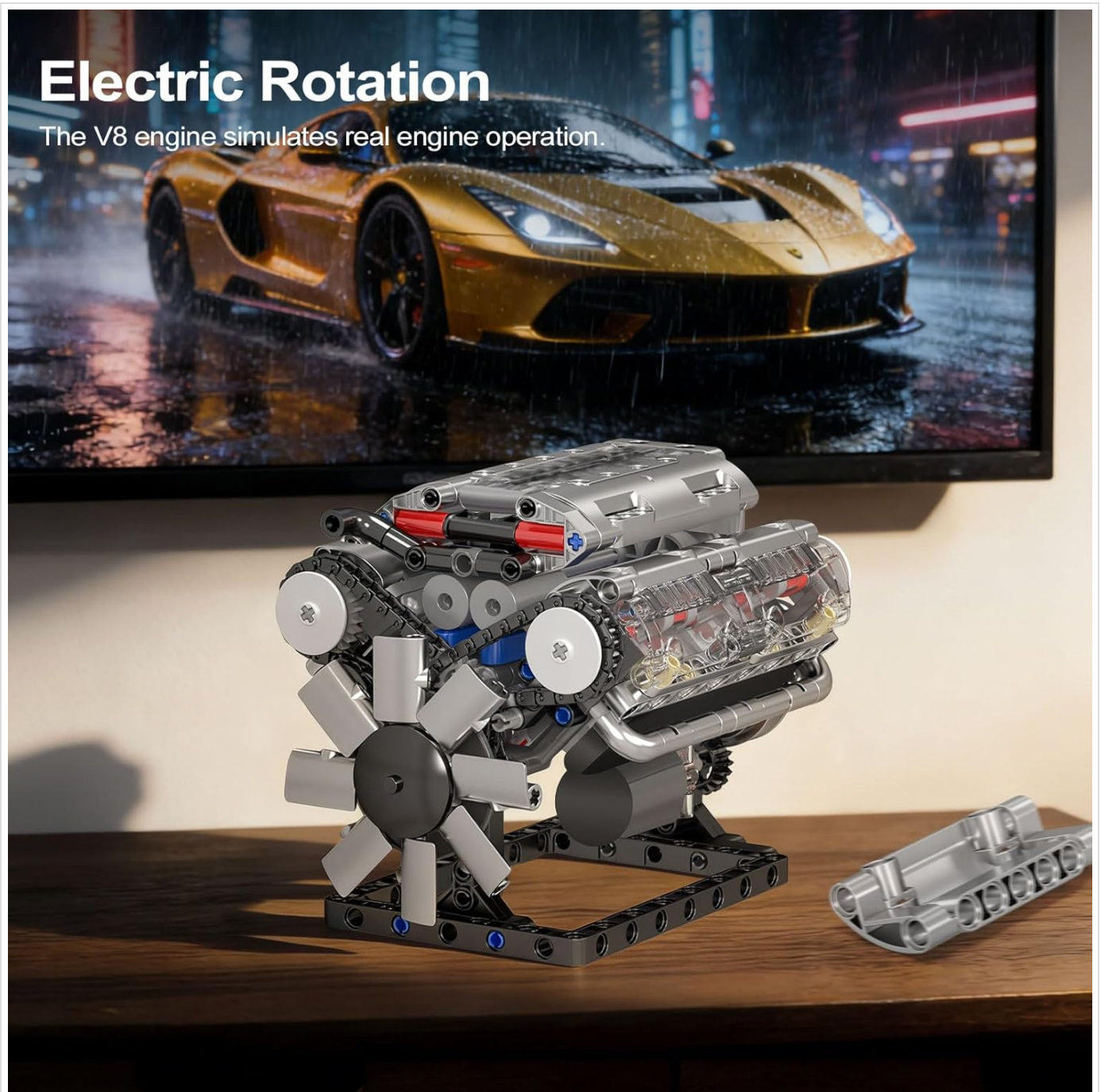


Figure 4: Front view of the assembled V8 engine model.

5. OPERATING INSTRUCTIONS

Once assembly is complete and batteries are installed in the battery box, your Mould King V8 engine model is ready for operation.

1. **Power On:** Locate the switch on the battery box. Flip the switch to the 'ON' position.
2. **Observe Operation:** The L motor will activate, driving the internal mechanisms. Observe the simulated mechanical chain drive system, the rapid movement of the pistons within the transparent cylinders, and the spinning fan. The model is designed to simulate realistic engine operation and sounds.
3. **Power Off:** To stop the engine, flip the switch on the battery box to the 'OFF' position.

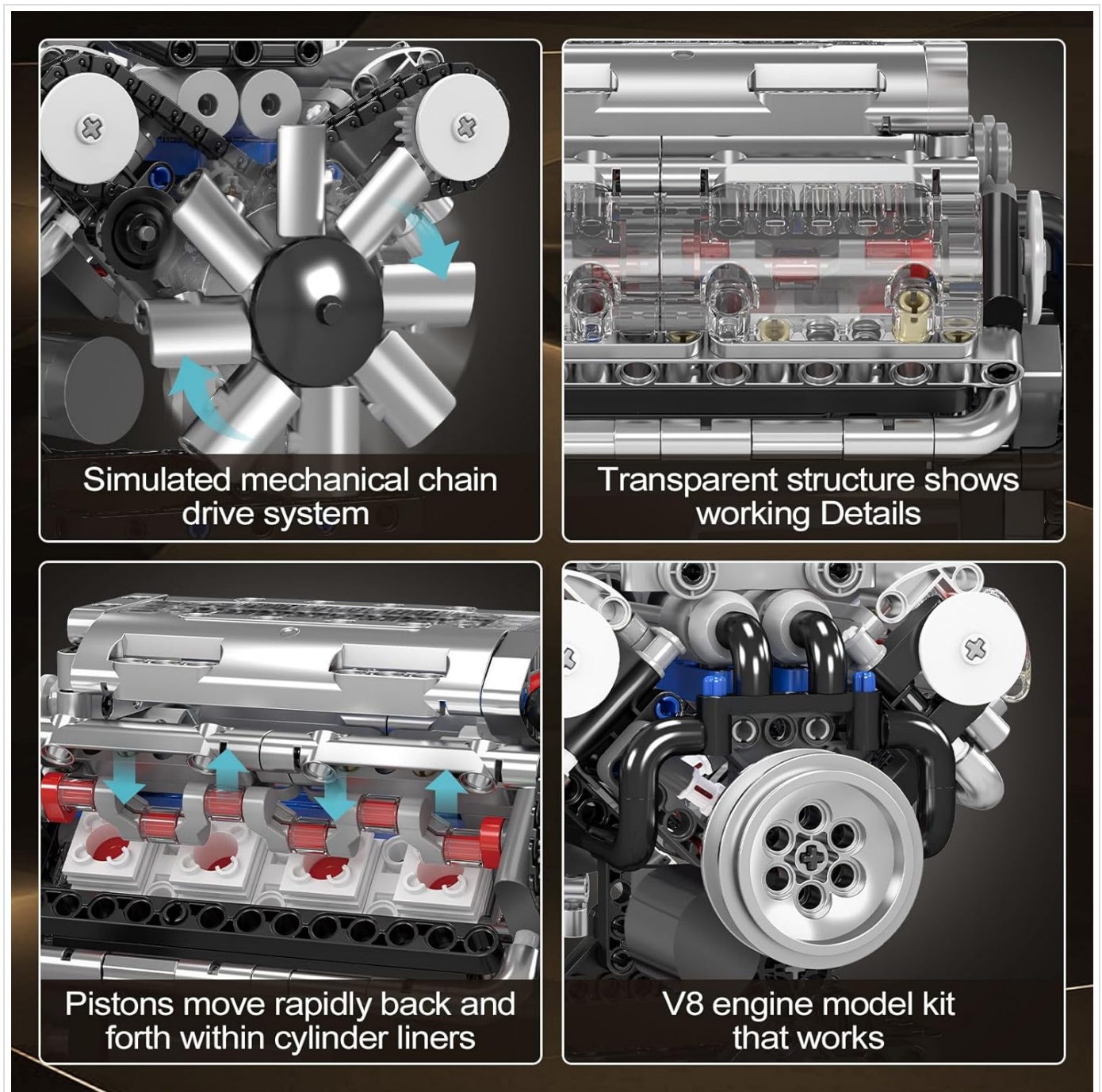


Figure 5: The V8 engine model in operation, demonstrating electric rotation.

For a visual guide on operation, please check the product page or the manufacturer's official website for any available videos.

6. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to gently wipe dust from the model. Avoid using water or cleaning solutions, as these can damage the electrical components or plastic.
- **Storage:** Store the model in a cool, dry place away from direct sunlight and extreme temperatures to prevent material degradation.
- **Battery Replacement:** Replace batteries when the motor's performance diminishes. Always replace all 6 AAA batteries at the same time.
- **Lubrication:** If pistons or gears experience resistance, a small drop of silicone-based lubricant (not included) can be applied to moving parts to ensure smooth operation. Avoid petroleum-based lubricants.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Engine does not start or runs weakly.	Batteries are low or incorrectly installed. Loose connection to L motor.	Check battery polarity and replace with fresh AAA batteries. Ensure the L motor is securely connected to the battery box.
Gears or crankshaft separate during operation.	Components not fully secured during assembly. Excessive friction.	Carefully re-examine the assembly steps for the affected area, ensuring all pieces are firmly pressed together. Apply a small amount of silicone lubricant if friction is high.
Pistons are sticking or not moving smoothly.	Friction between pistons and cylinder liners. Misalignment.	Apply a small drop of silicone lubricant to the piston shafts and cylinder walls. Verify that pistons and connecting rods are correctly aligned and not binding.
Missing pieces during assembly.	Pieces misplaced or overlooked.	Thoroughly check all packaging materials and your workspace. If pieces are genuinely missing, contact Mould King customer support.
Difficulty understanding instruction manual steps.	Complex step or small details in illustrations.	Use a magnifying glass to examine detailed illustrations. Review previous steps to ensure no errors were made. Online communities or videos may offer additional visual guidance.

8. SPECIFICATIONS

Feature	Detail
Model Number	10088
Number of Pieces	535
Product Dimensions (L x W x H)	19.3 x 12.7 x 12.7 cm (7.6 x 5.0 x 5.0 inches)
Weight	621 g
Material	Plastic
Power Source	1 x Battery Box (requires 6 AAA batteries, not included)
Motor Type	L Motor
Recommended Age	14+ years (Manufacturer Recommended Age: 8-80 years)
Educational Objective	Critical Thinking, STEM learning
Assembly Required	Yes

Demonstrate How The Engine Works

The transparent cover has a transparent exterior, allowing for close observation and research.

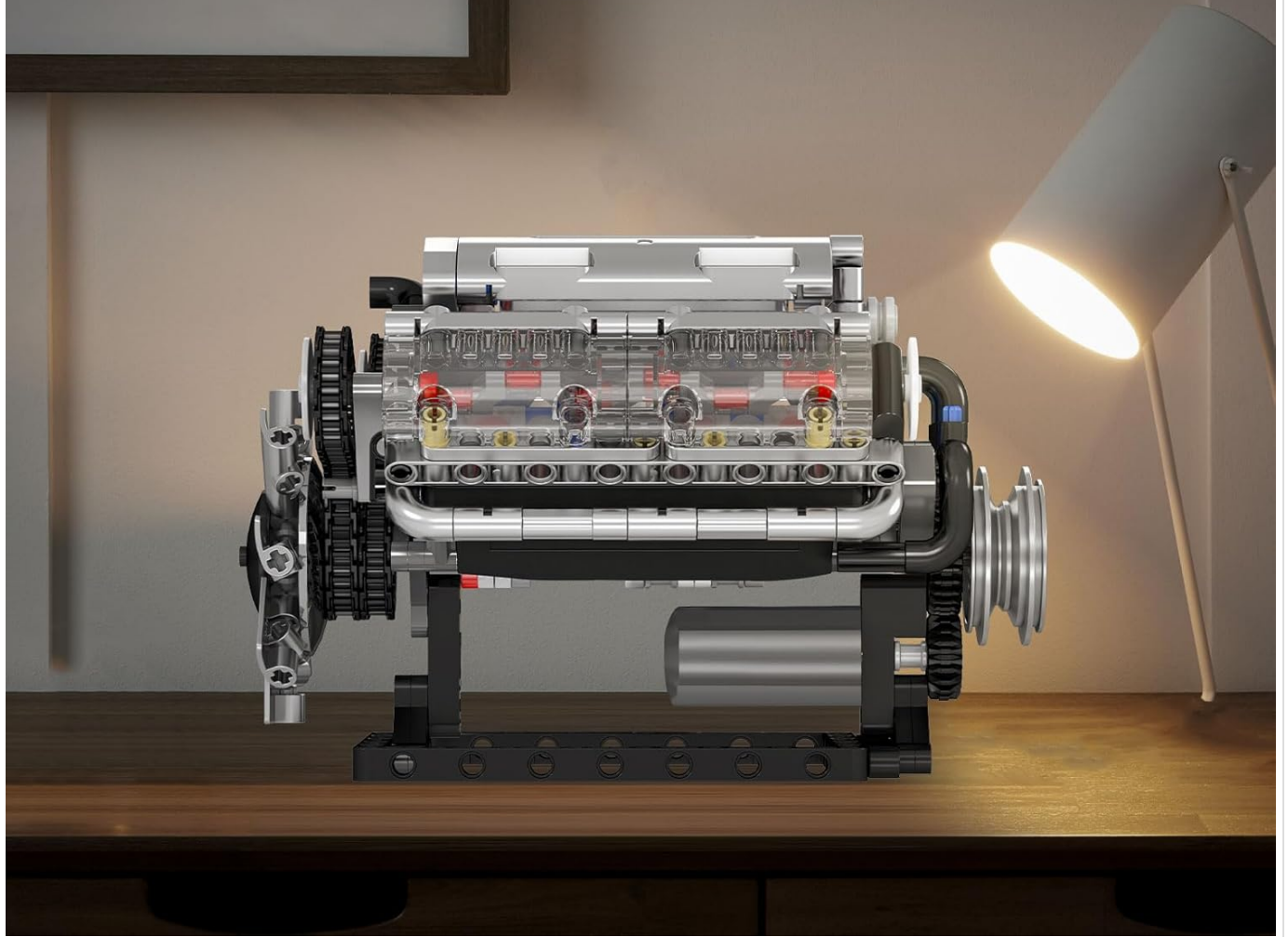


Figure 6: Dimensions of the assembled V8 engine model.

9. WARRANTY AND SUPPORT

Mould King provides a **2-year manufacturer's warranty** for this product. This warranty covers defects in materials and workmanship under normal use.

For any issues encountered during assembly or operation, or if you require replacement parts, please contact our professional service team. We are committed to ensuring your satisfaction with our products.

Contact Information: Please refer to the product packaging or the official Mould King website for the most current customer support contact details.

