

Mould King 10088

Mould King 10088 V8 Engine Building Kit: Instruction Manual

Model: 10088 | Brand: Mould King

1. INTRODUCTION

Thank you for choosing the Mould King 10088 V8 Engine Building Kit. This kit allows you to construct a detailed and functional model of an eight-cylinder inline gasoline engine. Designed to provide an immersive and educational experience, this model features an electric drive, precise piston movement, and a transparent cylinder head to observe internal mechanics. It's an excellent tool for understanding mechanical engineering principles and developing critical thinking skills.

2. SAFETY INFORMATION

WARNING: CHOKING HAZARD – Small parts. Not for children under 3 years.

- Keep all small parts away from young children to prevent choking.
- Adult supervision is recommended during assembly and operation.
- Ensure the battery box is correctly installed and batteries are inserted with the correct polarity.
- Do not attempt to modify the electrical components of the kit.

3. PACKAGE CONTENTS

Your Mould King 10088 V8 Engine Building Kit includes:

- Over 535 building block pieces for the V8 engine model.
- 1 x L-shaped electric motor.
- 1 x 9V battery box (batteries not included; requires 6 x AA batteries).
- 1 x Detailed, full-color instruction manual.

All components are sorted and carefully packaged to ensure no parts are missing. Please verify all parts against the list in the included manual before beginning assembly.

4. ASSEMBLY INSTRUCTIONS

Follow the step-by-step instructions provided in the included full-color manual. Each step is clearly illustrated to guide you through the construction process.

4.1. General Assembly Tips

- Organize your pieces before starting.
- Pay close attention to the orientation of each block.
- Ensure all connections are firm and secure.
- If a part seems difficult to fit, double-check the instructions to ensure you have the correct piece and orientation.

4.2. Visual Guide to Assembly



Image 1: The completed Mould King V8 Engine model, showcasing its intricate design and functional components. This image provides an overview of the final product you will assemble.

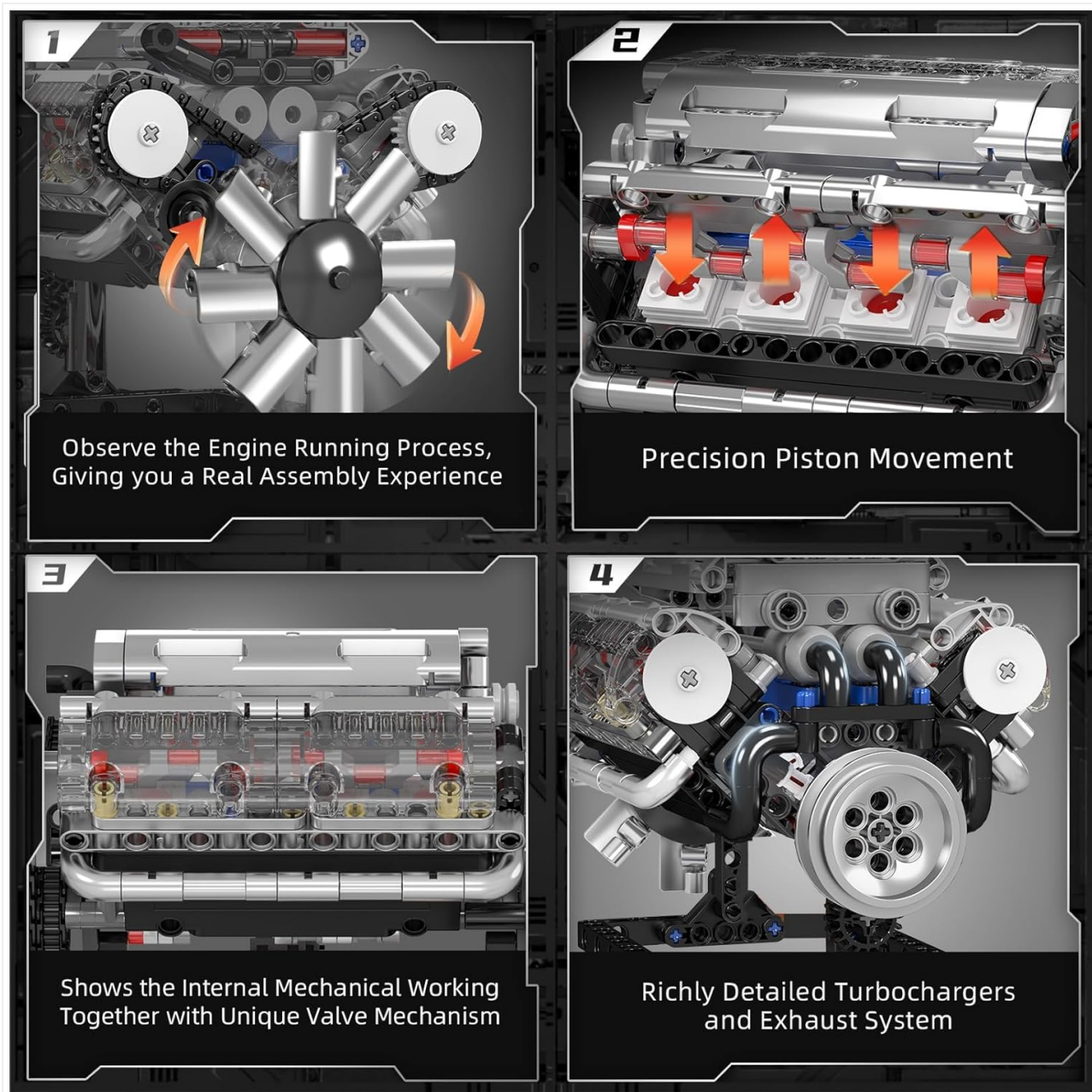


Image 2: A closer look at the engine's internal workings, highlighting the precision piston movement, unique valve mechanism, and detailed turbochargers and exhaust system. This illustrates the functional aspects of the model.

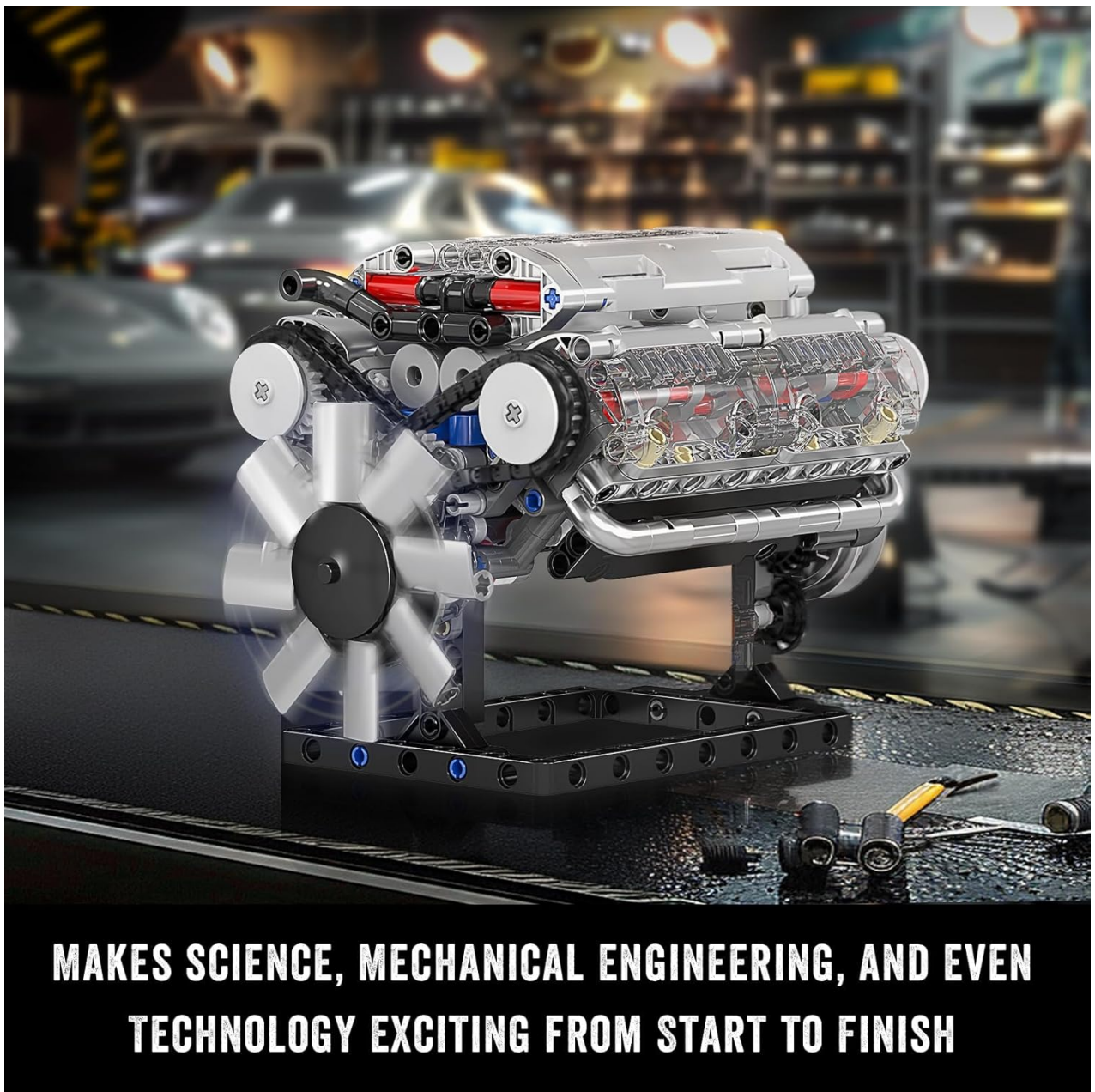


Image 3: The non-rechargeable battery case, which powers the electric motor. Please note that 6 AA batteries are required and must be purchased separately.



DEVELOP THEIR CRITICAL THINKING SKILLS

Image 4: An example of the assembly process, showing the engagement and educational value of building the V8 engine model. This kit is designed to develop critical thinking skills.



**MAKES SCIENCE, MECHANICAL ENGINEERING, AND EVEN
TECHNOLOGY EXCITING FROM START TO FINISH**

Image 5: The assembled engine in operation, with the fan spinning, demonstrating the activation of its motorized functions and moving components.



Image 6: Product dimensions of the assembled V8 engine model, providing a clear understanding of its size.

4.3. Assembly Video



Video 1: This video demonstrates the assembly process for the Mould King 10087 and 10088 MOC Engine Cylinder Blocks Kit, showing key steps and the final functional model.

5. OPERATING INSTRUCTIONS

Once fully assembled, your Mould King V8 engine model is ready for operation. It features an electric drive that brings the mechanical components to life.

5.1. Powering the Engine

1. Insert 6 x AA batteries (not included) into the 9V battery box, ensuring correct polarity.
2. Connect the L-shaped electric motor to the battery box as shown in the assembly manual.
3. Locate the power switch on the battery box and turn it ON.

5.2. Observing Engine Functionality

With the power on, you will observe the following:

- **Piston Movement:** The transparent cylinder head design allows you to see the precise movement of the pistons within the cylinders, simulating a real V8 engine's operation.
- **Valve Mechanism:** The collaborative work of internal mechanics and unique valve mechanics will be visible.
- **Turbocharger and Exhaust System:** The detailed turbocharger and fine exhaust system components will also be in motion, enhancing the realistic simulation.
- **Cooling Fan:** The engine's cooling fan will spin, driven by the electric motor.

5.3. Operation Videos



Video 2: This video showcases the Mould King V8 Engine Building Blocks Set in operation, highlighting the moving parts and electric drive.



Video 3: A demonstration of the V8 Engine Building Kits, showing the functional aspects and mechanical movement.



Video 4: Another view of the Mould King V8 Engine Building Blocks Set in action, emphasizing the realistic simulation.



Video 5: This video features the Mould King 10182 Electrical V8 Tank Engine Motor, demonstrating similar V8 engine functionality. While a different model number, the operational principles are comparable.

6. MAINTENANCE

To ensure the longevity and optimal performance of your Mould King V8 engine model, follow these simple maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to gently wipe down the model. Avoid using harsh chemicals or abrasive materials.
- **Storage:** Store the model in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Care:** Remove batteries from the battery box if the model will not be used for an extended period to prevent leakage.
- **Component Check:** Periodically inspect all connections and moving parts to ensure they are secure and free from obstruction.

7. TROUBLESHOOTING

If you encounter any issues with your Mould King V8 engine model, please refer to the following troubleshooting tips:

- **Engine Not Starting:**
 - Ensure batteries are correctly installed in the battery box with the correct polarity.
 - Check if the batteries are fresh and have sufficient charge.
 - Verify that the motor is securely connected to the battery box.
 - Confirm the power switch on the battery box is in the 'ON' position.
- **Parts Not Moving Smoothly:**
 - Inspect for any misaligned or incorrectly assembled blocks that might be causing friction.
 - Ensure all gears and belts are properly seated and not obstructed.

- Check for any foreign objects caught within the moving mechanisms.

- **Missing Parts:**

- If you find any missing parts during assembly, please contact Mould King customer support for assistance.

8. SPECIFICATIONS

Feature	Detail
Product Dimensions	3.12 x 7.41 x 11.31 inches
Item Weight	1.52 pounds
Model Number	705736700049
Recommended Age	14 months - 8 years (Note: Product description states 14+ years, please refer to product packaging for definitive age recommendation)
Number of Pieces	535+
Power Source	9V Battery Box (requires 6 x AA batteries, not included)
Manufacturer	MOULD KING

9. WARRANTY AND SUPPORT

Mould King is committed to providing high-quality products. If you have any questions, concerns, or require assistance with your Mould King 10088 V8 Engine Building Kit, please contact Mould King customer support through the retailer where you purchased the product. Please retain your proof of purchase for warranty claims.