

[Manuals.plus](#) /

› [Mould King](#) /

› Mould King Tank V8 Engine Building Set 10182 Instruction Manual

Mould King 10182

Mould King Tank V8 Engine Building Set 10182 Instruction Manual

Model: 10182

1. INTRODUCTION

This instruction manual provides detailed guidance for assembling and operating your Mould King Tank V8 Engine Building Set, model 10182. This STEM DIY kit is designed for individuals aged 14 and above, offering an engaging experience in mechanical engineering through its 2250-piece construction. Upon completion, the model accurately replicates tank engine mechanics with realistic piston motion and features a functional motor for interactive operation.

2. SAFETY INFORMATION

- **Age Recommendation:** This product contains small parts and is recommended for ages 14 and up. Keep out of reach of younger children to prevent choking hazards.
- **Small Parts:** Exercise caution during assembly to avoid misplacing small components.
- **Electrical Components:** The kit includes a motor. Ensure proper battery installation and handling according to instructions to prevent damage or malfunction.
- **Supervision:** Adult supervision is recommended for younger builders.

3. PACKAGE CONTENTS

Your Mould King Tank V8 Engine Building Set 10182 includes the following:

- Approximately 2250 building pieces.
- 1 x Electric Motor unit.
- 1 x Detailed color instruction manual.
- Various mechanical components for engine assembly.

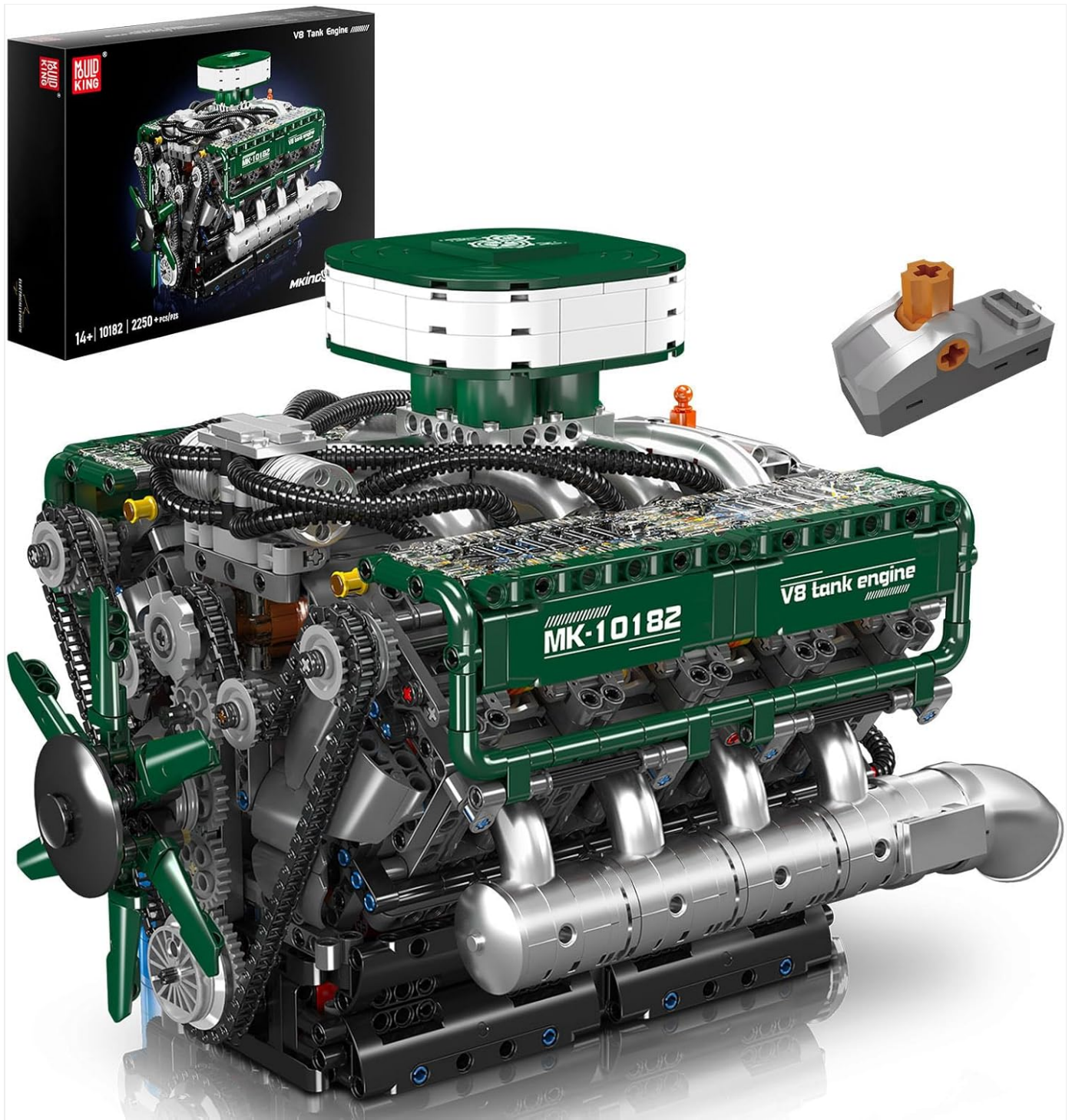


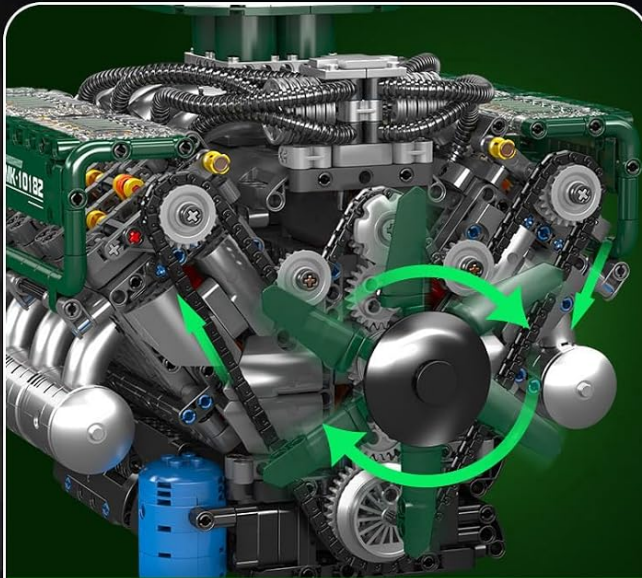
Image: The Mould King Tank V8 Engine Building Set 10182, showing the assembled model and its retail packaging.

4. ASSEMBLY INSTRUCTIONS

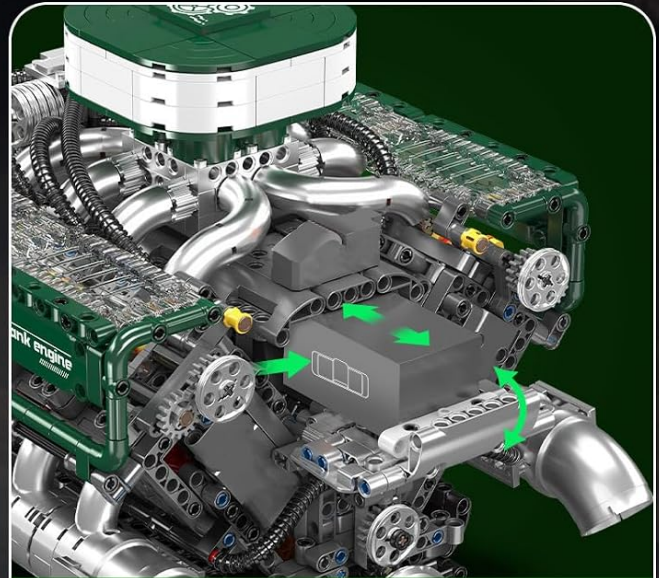
Follow the included detailed color instruction manual step-by-step for proper assembly. The manual provides visual guides for each stage of construction. Organize your pieces before starting to ensure a smooth building process.

Key Assembly Features:

- **Rotatable Fan Blades:** The engine features functional fan blades that rotate as part of the engine's operation.
- **Removable Power Unit:** The motor unit is designed to be integrated and can be removed for maintenance or battery replacement.
- **Detailed Engine Components:** Assemble realistic engine exhaust pipes and intricate engine hoses, contributing to the model's authentic appearance.



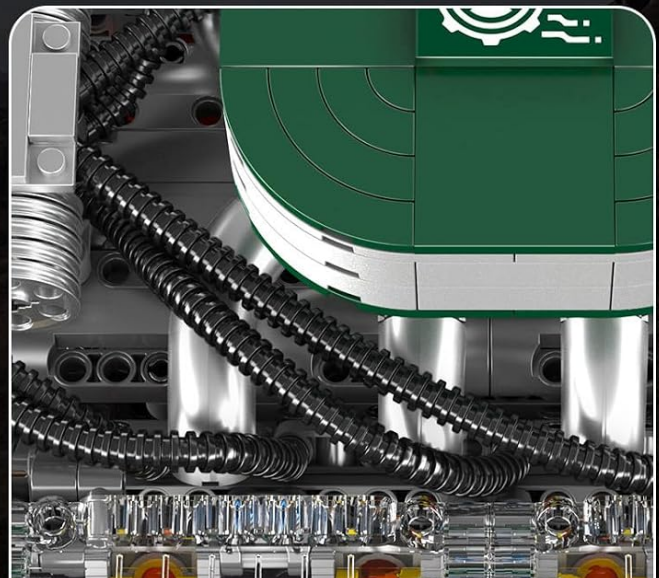
Rotatable fan blades



Remove power unit



Engine exhaust



Engine hoses

Image: Close-up views illustrating the rotatable fan blades, the removable power unit, the detailed engine exhaust system, and the intricate engine hoses of the V8 model.

Component Identification:

Familiarize yourself with the main components during assembly:

- **Intake Manifold:** Directs air into the engine cylinders.
- **Control Switch:** Activates and controls the motor's direction.
- **Timing Chain:** Synchronizes the rotation of the crankshaft and camshafts.
- **Exhaust Manifold:** Collects exhaust gases from the cylinders.
- **Flywheel:** Stores rotational energy and smooths engine operation.

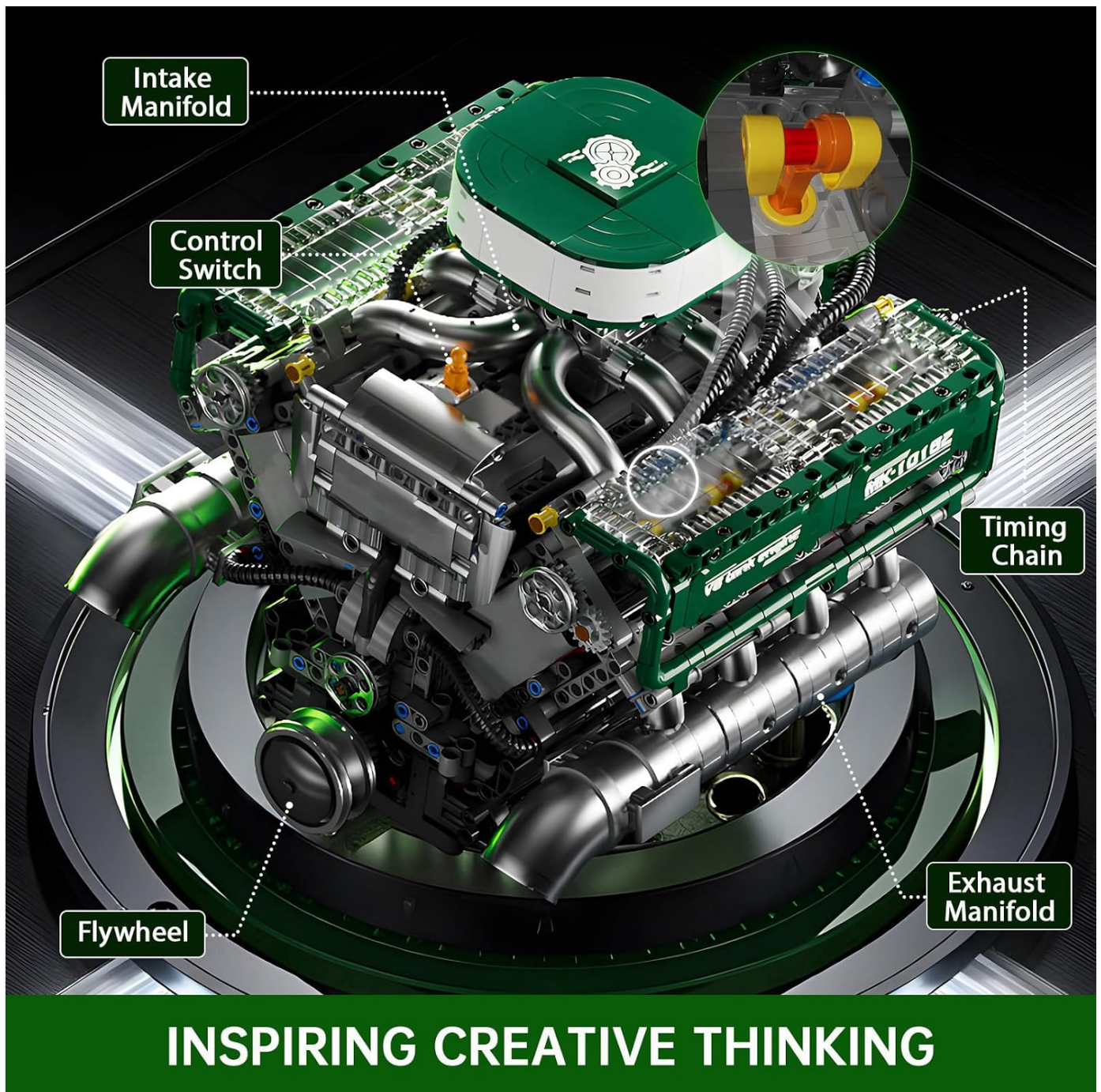


Image: An annotated diagram of the V8 engine model, pointing out the Intake Manifold, Control Switch, Timing Chain, Exhaust Manifold, and Flywheel.

5. OPERATING INSTRUCTIONS

Once assembled, the Mould King Tank V8 Engine model can be operated using its integrated electric motor.

1. **Battery Installation:** Ensure batteries are correctly installed in the motor unit as per the manual's instructions.
2. **Power On:** Locate the control switch on the model.
3. **Directional Control:** The control switch allows for bidirectional rotation (clockwise/counter-clockwise) of the engine components. Select the desired direction.
4. **Observation:** Observe the realistic piston motion, timing chain movement, and fan blade rotation as the engine operates.



Electric
drive



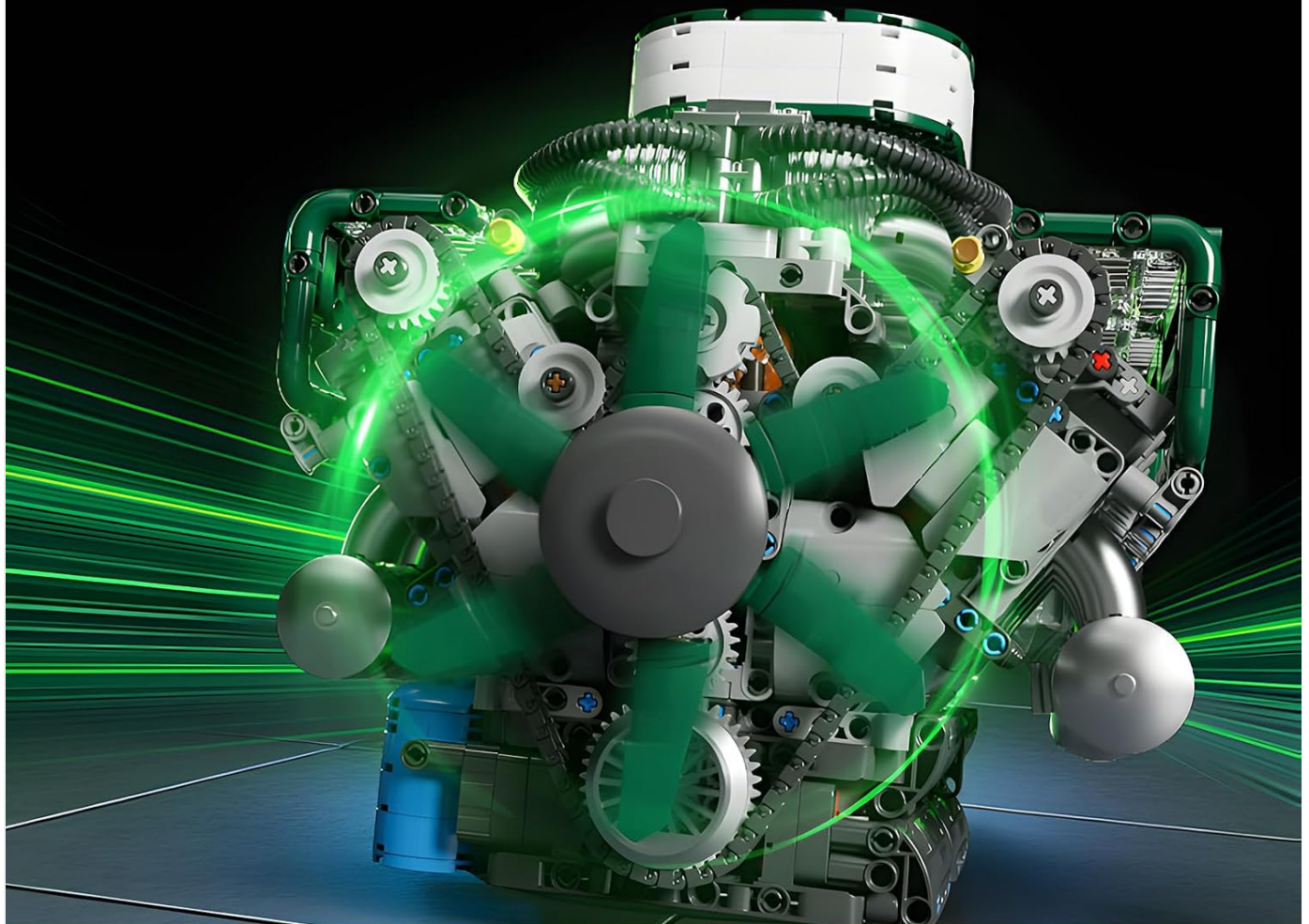
Dual rotation
direction



Electroplating
parts



Transparent
cylinder head



V8 TANK ENGINE

Image: Visual representation of the V8 engine's electric drive, dual rotation capability, electroplating parts, and transparent cylinder head design.

6. MAINTENANCE

To ensure the longevity and proper function of your Mould King Tank V8 Engine model, follow these maintenance guidelines:

- **Cleaning:** Dust the model regularly with a soft, dry cloth. Avoid using harsh chemicals or abrasive materials.
- **Storage:** Store the model in a cool, dry place away from direct sunlight and extreme temperatures to prevent material degradation.
- **Battery Care:** If the model will not be used for an extended period, remove the batteries from the motor unit to prevent leakage.
- **Component Check:** Periodically inspect connections and moving parts to ensure they are secure and free from obstruction.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Motor does not operate.	◦ Batteries are dead or incorrectly installed. ◦ Loose connection to the motor. ◦ Motor unit not properly seated.	◦ Replace batteries or ensure correct polarity. ◦ Check all electrical connections. ◦ Re-seat the motor unit firmly.
Engine parts do not move smoothly.	◦ Incorrect assembly of gears or linkages. ◦ Obstruction in moving parts. ◦ Pieces are too tight or too loose.	◦ Review the assembly manual for the affected section. ◦ Inspect for any foreign objects or misaligned pieces. ◦ Adjust connections as needed.
Missing pieces during assembly.	◦ Pieces may be misplaced or overlooked. ◦ Manufacturing error.	◦ Carefully re-check all packaging and sorting trays. ◦ Contact Mould King customer support for replacement parts.

8. SPECIFICATIONS

Feature	Detail
Model Number	10182
Brand	Mould King
Number of Pieces	2250+
Recommended Age	14 years and up
Product Dimensions (Assembled)	30.1 × 24.1 × 23.5 cm (11.9 × 9.5 × 9.2 inches)
Item Weight	4 pounds
Motor Type	Electric, Bidirectional Control



Image: The assembled V8 engine model with an overlay indicating its physical dimensions.

9. WARRANTY AND SUPPORT

For warranty information, missing parts, or technical support, please refer to the contact details provided in the product packaging or visit the official Mould King website. Ensure you have your model number (10182) and proof of purchase available when contacting support.

