

RCmall T2306A

RCmall DIY MOC 4WD RC Car Chassis Kit

MODEL: T2306A

Instruction Manual

1. Introduction and Product Overview

The RCmall DIY MOC 4WD RC Car Chassis Kit is a technical building set designed for enthusiasts aged 14 and up. This kit allows for the construction of a fully functional 4WD crawler chassis, emphasizing mechanical principles and engineering. It features an independent suspension system, differential gear mechanism, steering axle, and robust off-road wheels, providing a comprehensive building and learning experience.

Key Features:

- **Complete Kit:** Includes all necessary components for a 4WD chassis, such as independent suspension, differential gear, steering axle, and off-road wheels.
- **Independent Suspension System:** Equipped with four-wheel independent suspension, shock absorbers, and articulating arms for enhanced ground contact and stability on varied terrains.
- **Advanced Drive System:** Features a 4WD system with differential gearing for smooth power distribution and improved maneuverability.
- **Educational Construction:** A technical building kit ideal for learning mechanical principles through hands-on assembly.
- **Off-Road Wheels:** Comes with four large off-road tires featuring an aggressive tread pattern, compatible with the integrated suspension and steering system.

2. What's in the Box

Your RCmall DIY MOC 4WD RC Car Chassis Kit includes the following components:

- Bricks and Wheels (various sizes and types for chassis construction)

Please note: Batteries are not included and are not required for the basic mechanical functions of this chassis

kit, as it operates manually. If you plan to integrate power functions, these must be acquired separately.

3. Assembly Instructions

Follow these steps carefully to assemble your RC car chassis. It is recommended to sort all components before beginning assembly.

1. **Install Suspension Components:** Begin by assembling the independent suspension system for each wheel. This involves connecting the shock absorbers and articulating arms to the main chassis frame.
2. **Connect Differential Gears:** Integrate the differential gear mechanisms into the front and rear axles. Ensure all gears are properly aligned and move freely.
3. **Mount Wheels:** Attach the off-road wheels to the assembled axles, ensuring they are securely fastened and can rotate without obstruction.
4. **Attach Steering Mechanism:** Install the steering axle and connect it to the front suspension components, following the technical building guidelines provided in the detailed manual (accessible via QR code).

Visual Guide for Assembly:



Figure 3.1: Overview of various components and initial assembly stages.



Figure 3.2: Demonstrating the independent shock absorption for smooth driving.



Figure 3.3: The chassis is designed to easily cross obstacles.

- ▶ **VACLUM LINER**
- ▶ **COMPRESSION AND WEAR RESISTANCE**
- ▶ **CONCAVE CAM PATTERN**
- ▶ **STRENGTHEN THE GRIP**



OFF-ROAD



SAND



GRASSLAND



Figure 3.4: Details of the vacuum liner, compression, wear resistance, and concave cam pattern of the tires for enhanced grip.

Additional Assembly Resources:

For a comprehensive digital manual, including quick setup, installation guide, and troubleshooting tips, scan the QR code below:



Figure 3.5: Scan this QR code for the complete digital instruction manual.

Assembly Videos:

Watch these official seller videos for visual guidance on key assembly aspects:

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Video 3.1: RCmall DIY MOC 4WD RC Car Chassis Kit Assembly Overview. This video provides a general overview of the assembly process for the chassis kit.

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Video 3.2: Rear Suspension System Assembly. Detailed instructions for assembling the rear suspension components.

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Video 3.3: Front Suspension System Assembly. Detailed instructions for assembling the front suspension components.

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Video 3.4: Instructional Video on How to Use the Pullback Motor. This video demonstrates the use of a pullback motor, which can be integrated with the chassis.

4. Operating Instructions

The RCmall DIY MOC 4WD RC Car Chassis Kit is designed for manual operation, allowing users to explore its mechanical functions directly. The independent suspension and differential gears enable smooth movement and adaptability over various surfaces.

- **Manual Movement:** Gently push or pull the assembled chassis to observe the functionality of the 4WD system, independent suspension, and steering.
- **Suspension Testing:** Press down on different parts of the chassis to see how the independent shock absorbers respond, simulating rough terrain.
- **Steering Function:** Manipulate the steering axle to understand how the wheels turn and guide the chassis.

For advanced functionality, the chassis is compatible with various power functions (e.g., motors, remote controls) which can be purchased separately and integrated according to their respective instructions.

5. Maintenance

To ensure the longevity and optimal performance of your RCmall DIY MOC 4WD RC Car Chassis Kit, follow these simple maintenance guidelines:

- **Cleaning:** Regularly wipe down the chassis with a dry, soft cloth to remove dust and debris. For stubborn dirt, a slightly damp cloth can be used, ensuring all parts are thoroughly dried afterward.
- **Inspection:** Periodically check all connections and moving parts for looseness or damage. Tighten any loose connections and replace damaged components as needed.
- **Storage:** Store the kit in a cool, dry place away from direct sunlight and extreme temperatures to prevent material degradation.

6. Troubleshooting

If you encounter any issues during assembly or operation, consider the following troubleshooting steps:

- **Parts Not Fitting:** Double-check the instruction manual (including the digital version via QR code) to ensure you are using the correct parts for each step. Some pieces may look similar but have subtle differences.
- **Stiff Movement:** If parts are not moving smoothly, verify that all connections are correctly aligned and not overly tightened. Ensure no foreign objects are obstructing the gears or suspension.
- **Missing Parts:** In the rare event of missing components, please contact RCmall customer support with your purchase details.
- **Stability Issues:** Ensure all suspension components are correctly installed and functioning symmetrically. Uneven assembly can affect the chassis's stability.

7. Specifications

Attribute	Detail
Brand Name	RCmall
Model Name	T2306A
Manufacturer Part Number	10088
Material Type	Plastic

Power Source	Manual
Operation Mode	Manual
Age Range Description	14 Years And Up
Manufacturer Minimum Age (MONTHS)	168
Manufacturer Maximum Age (MONTHS)	720
Is Assembly Required	Yes
Indoor Outdoor Usage	Indoor
Educational Objective	Engineering
Item Weight	3.68 ounces
Item Dimensions	9.84 x 7.87 x 3.15 inches

8. Warranty and Support

RCmall stands behind the quality of its products. For any questions, concerns, or support needs regarding your DIY MOC 4WD RC Car Chassis Kit, please refer to the contact information provided with your purchase or visit the official RCmall store on Amazon.

This product is covered by a standard manufacturer's warranty against defects in materials and workmanship. Please retain your proof of purchase for warranty claims.