Yokomo MDR-020

Yokomo MDR020 MD 2.0 Master Drift 1:10 Electric 2WD RWD Drift Car Kit Instruction Manual

Model: MDR-020

Introduction

This manual provides essential instructions for the assembly, operation, and maintenance of your Yokomo MDR020 MD 2.0 Master Drift 1:10 Electric 2WD RWD Drift Car Kit. Please read this manual thoroughly before beginning assembly or operation to ensure proper use and to maximize the performance and longevity of your drift car.
The MD 2.0 chassis is designed for high-performance drifting, featuring lightweight aluminum components and woven graphite for optimal rigidity and handling. It offers advanced adjustments for steering, traction, and balance.
Note: The finished kit shown in some images is for illustrative purposes only. This kit requires additional components such as a battery, motor, RC electronics (receiver, ESC, servo), wheels, and tires to be completed and operational.

Setup and Assembly

Careful assembly is crucial for the performance of your drift car. Follow the steps below, referring to the detailed assembly guide included in your kit for specific part numbers and diagrams. Ensure all screws are tightened appropriately, but avoid over-tightening.

1. Unpacking and Inventory

Carefully unpack all components and verify against the parts list. The kit includes:

- 1 x Carbon Fiber Chassis
- 2 x Differential Gear
- 4 x Shock Absorber
- 1 x Rear Wing
- Additional hardware and components as per the detailed parts list in your kit.

Figure 1: Overview of the Yokomo MD 2.0 Master Drift chassis kit. This image displays the main components of the chassis, including the carbon fiber frame, suspension, and drivetrain elements. Note that additional electronics, wheels, and body are not included in the kit.

2. Chassis Assembly

Begin by assembling the carbon fiber chassis plates. Attach the main chassis plate and upper deck, ensuring proper alignment. The bearing-mounted upper deck allows for torsional chassis flex while maintaining vertical stiffness, contributing to smoother handling.

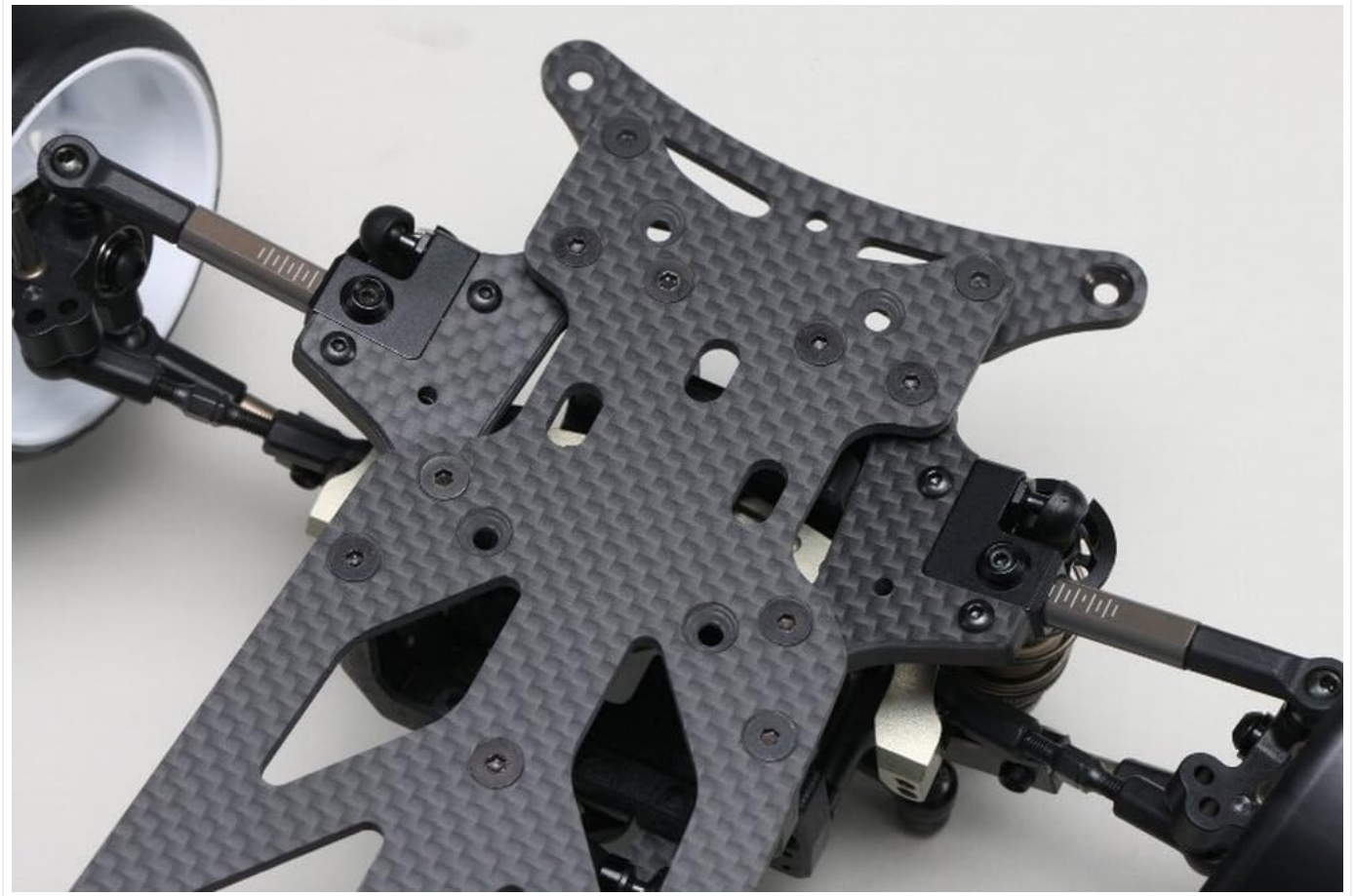

Figure 2: Bottom view of the assembled carbon fiber chassis. This perspective highlights the intricate design of the chassis plate and mounting points for various components.

Figure 3: Top view showing the upper deck and front suspension mounts. The woven graphite construction is visible, providing both strength and lightweight characteristics.

3. Suspension and Steering Installation

Install the four shock absorbers and suspension arms. The MD 2.0 features updated steering blocks for overwhelming cutting angles and a fully adjustable Ackermann ratio. Refer to the detailed guide for precise settings.

Figure 4: Close-up of the front suspension and steering components. This view shows the shock absorbers, suspension arms, and steering linkages, highlighting the adjustable nature of the system.

Figure 5: Detailed view of the front wheel hub and steering knuckle, illustrating the precision engineering for steering control.

4. Drivetrain and Differential Assembly

Assemble and install the differential gears. The MD 2.0 features a silky smooth 4-gear transmission. Ensure all gears are properly lubricated and aligned for optimal performance.

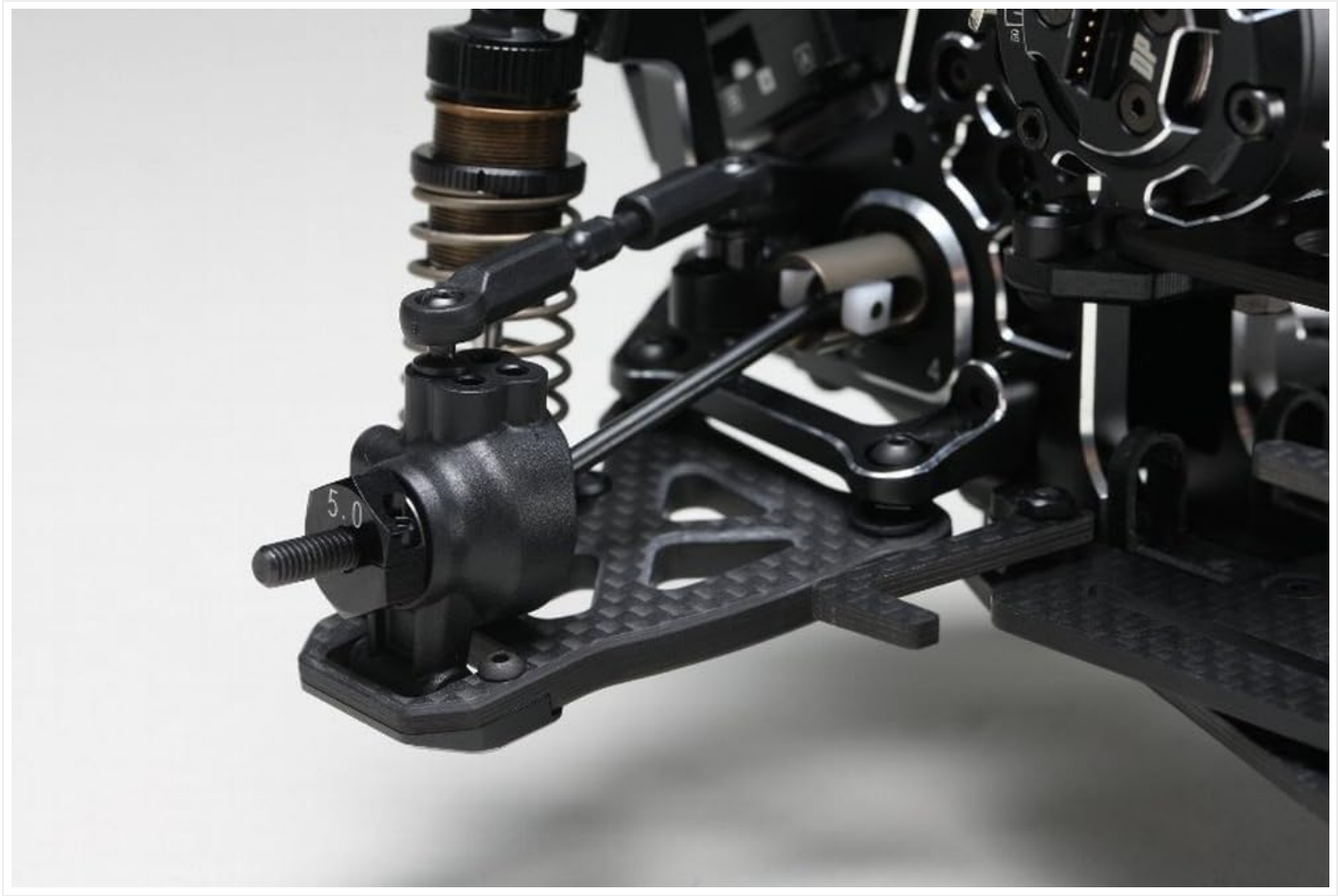

Figure 6: Rear suspension and drivetrain assembly. This image shows the rear differential area and associated components.

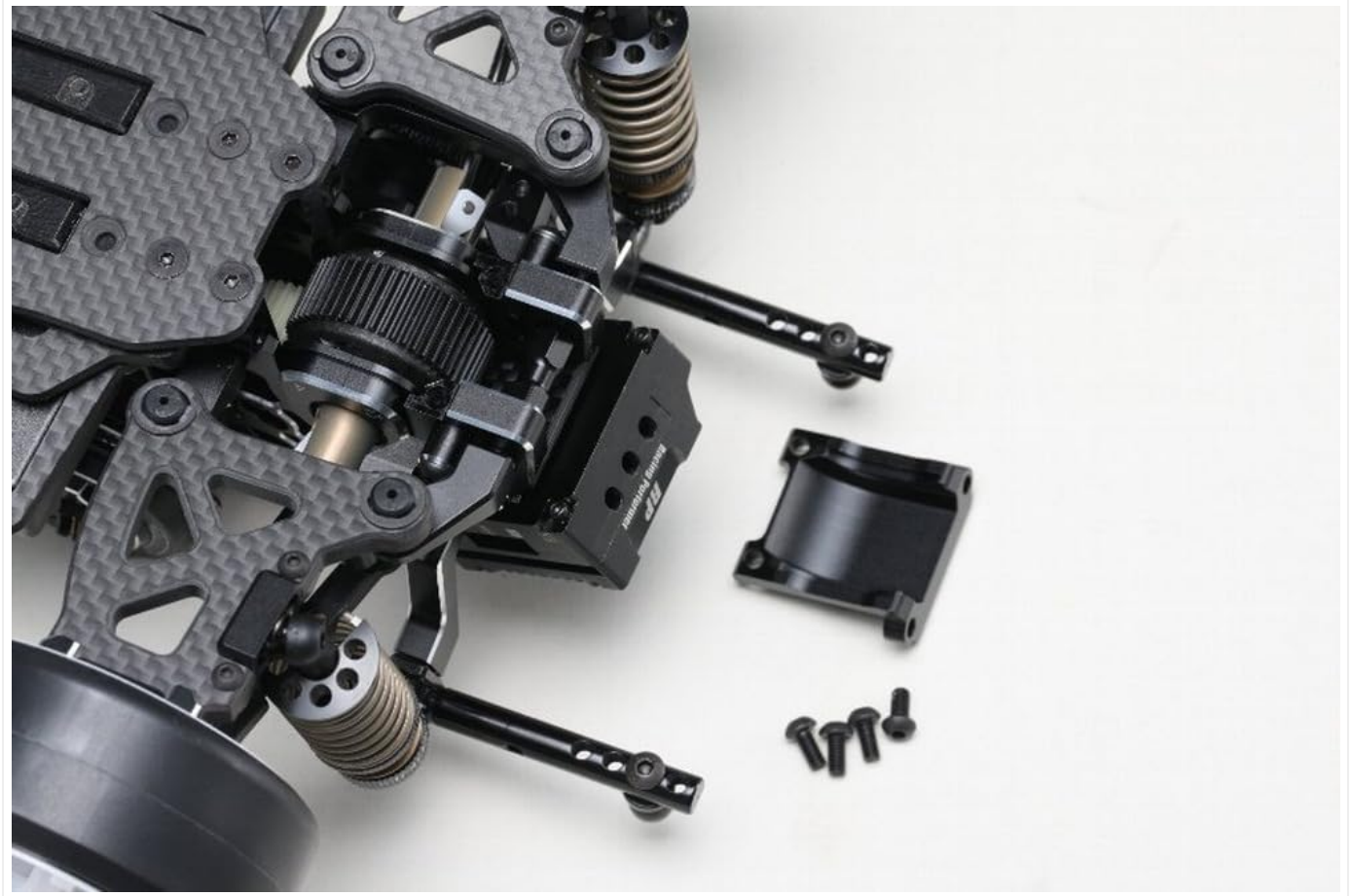

Figure 7: Close-up of the floating battery holder attached to the rear bulkhead. This design transfers battery weight directly to the rear axle for enhanced traction.

5. Electronics Installation (Not Included)

Install your chosen motor, Electronic Speed Controller (ESC), steering servo, and receiver. Ensure all wiring is neat and secure, avoiding interference with moving parts. The chassis is designed to accommodate various standard RC components.

6. Wheels, Tires, and Body (Not Included)

Mount your preferred drift wheels and tires. Finally, attach your chosen 1:10 scale drift car body. Ensure the body posts are adjusted for proper fitment and clearance.

Figure 8: Side profile of the fully assembled chassis, ready for electronics, wheels, and body. This view illustrates the overall low-profile design.

Operating Instructions

Once assembled and equipped with electronics, your Yokomo MD 2.0 is ready for operation. Always ensure your battery is fully charged and your radio system is properly bound and calibrated before use.

1. Pre-Run Checks

- Verify all screws are tight and no parts are loose.
- Check steering and throttle response from your transmitter.
- Ensure wheels spin freely and without obstruction.
- Confirm battery is securely mounted in the floating battery holder.

2. Driving Your Drift Car

The MD 2.0 is designed for RWD (Rear-Wheel Drive) drifting. Practice smooth throttle control and counter-steering to initiate and maintain drifts. Experiment with the adjustable Ackermann ratio and differential height adjustments to fine-tune

handling to your driving style and track conditions.

- **Steering:** Use the steering wheel on your transmitter to control the front wheels. The adjustable Ackermann ratio allows for precise tuning of steering angles during a drift.
- **Throttle:** Use the trigger on your transmitter to control forward and reverse motion. Smooth throttle input is key for maintaining drift angles.
- **Braking:** Braking is typically integrated with the throttle control. Pushing the trigger forward from neutral usually engages the brake.

3. Post-Run Procedures

- Disconnect the battery from the ESC.
- Turn off your transmitter and then the receiver.
- Inspect the car for any damage or loose parts.
- Clean the chassis and components as needed.

Maintenance

Regular maintenance will ensure the longevity and optimal performance of your Yokomo MD 2.0.

- **Cleaning:** After each use, clean the chassis and components to remove dust, dirt, and debris. Use a soft brush or compressed air. Avoid using harsh chemicals.
- **Inspections:** Periodically inspect all screws, nuts, and bolts for tightness. Check suspension components for wear or damage.
- **Lubrication:** Lubricate moving parts such as universal joints and differential gears with appropriate RC-grade lubricants.
- **Shock Absorbers:** Check shock absorber oil levels and seals regularly. Refill or replace as necessary to maintain consistent damping.
- **Bearings:** Inspect bearings for smooth operation. Replace any rough or seized bearings.

Troubleshooting

This section addresses common issues you might encounter with your MD 2.0 drift car.

Problem	Possible Cause	Solution
Car does not respond to controls.	◦ Battery discharged or disconnected. ◦ Transmitter/receiver not bound or powered off. ◦ ESC not armed or faulty.	◦ Charge/connect battery. ◦ Ensure transmitter and receiver are on and bound. ◦ Check ESC connections and arming procedure.
Poor steering response or inconsistent drifting.	◦ Incorrect Ackermann ratio setting. ◦ Loose steering linkages. ◦ Worn tires or incorrect tire compound.	◦ Adjust Ackermann ratio as per tuning guide. ◦ Inspect and tighten steering components. ◦ Replace worn tires or try different compounds.

Problem	Possible Cause	Solution
Excessive noise from drivetrain.	◦ Gears not meshing correctly. ◦ Lack of lubrication. ◦ Damaged gears or bearings.	◦ Check gear mesh and adjust. ◦ Lubricate gears. ◦ Inspect and replace damaged gears or bearings.

Specifications

Feature	Detail
Model Number	MDR-020
Scale	1:10
Drive Type	2WD RWD (Rear-Wheel Drive)
Chassis Material	Carbon Fiber, Aluminum
Steering	Adjustable Ackermann Ratio, Updated Steering Blocks
Transmission	4-Gear
Battery Mount	Floating Battery Holder (rear-biased)
Product Dimensions	16.93 x 7.87 x 10.24 inches
Item Weight	2.66 pounds
Manufacturer Recommended Age	14 months and up (Note: This is likely a general Amazon category age, actual RC hobby age is typically 14+ years for assembly and operation)
Manufacturer	Yokomo

Warranty and Support

For specific warranty information regarding your Yokomo MDR020 MD 2.0 Master Drift Kit, please refer to the documentation included in your product packaging or visit the official Yokomo website. Warranty terms and conditions may vary by region and retailer.
For technical support, spare parts, or further assistance, please contact Yokomo customer service or your authorized Yokomo dealer. Contact information can typically be found on the official Yokomo website:
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