Team Associated 30142

Team Associated RC10 TC8 1/10 Touring Car Kit User Manual

Model: 30142

1. Introduction

The Team Associated RC10 TC8 is a revolutionary 1:10th scale 4WD electric touring car kit, engineered to conquer the ever-intensifying world of competitive touring car racing. This isn't merely an evolution; it's a complete reimagining of on-road performance, built from the ground up by Area-51's engineers.

This manual provides essential information for the assembly, operation, maintenance, and troubleshooting of your RC10 TC8 kit to ensure optimal performance and longevity.

2. Product Overview



Image: The Team Associated RC10 TC8 1/10 Touring Car Kit, Steel Spec. This image displays the assembled touring car from a front-side angle, showcasing its sleek white body with red and black accents, racing decals, and white wheels.

The TC8's entirely new geometry represents a paradigm shift in on-road performance. It features a mid-motor

configuration with symmetrical belts for consistent power delivery and balanced performance. The split top deck design optimizes chassis flex characteristics for enhanced handling, complemented by a centralized ultra-short shock design that enhances cornering speed and promotes ideal weight distribution.
Further enhancements include long-arm pivot ball suspension geometry for superior grip and predictable handling, adjustable KPI steering blocks for precise tuning, and a floating one-piece servo and bell crank mount for maximized responsiveness. The TC8 Steel-Spec Chassis lowers the center of gravity (CG) and optimizes chassis flex for high-grip surfaces. Other notable features are the pillow ball lower arm design for easy track width adjustments, DCV drive shafts front and rear for maximum cornering efficiency, a flexible TPU front bumper for durability, and a horizontal rear body mount for improved aerodynamic efficiency.

3. Setup and Assembly

The RC10 TC8 is a kit that requires complete assembly. It is crucial to follow the detailed, step-by-step instructions provided in the separate assembly manual included with your kit. Ensure all components are present and accounted for before commencing assembly.

3.1 Tools and Materials Required

- Metric Hex Wrenches (1.5mm, 2.0mm, 2.5mm, etc.)
- Nut Drivers (4.0mm, 5.5mm, 7.0mm, etc.)
- Hobby Knife or Side Cutters
- Thread-Locking Compound (Blue, medium strength)
- Shock Oil (various weights) and Grease
- Body Reamer and Scissors
- Polycarbonate Body Paint (optional, for body finishing)
- Digital Calipers (for precise measurements)

3.2 Pre-Assembly Checks

Before starting assembly, carefully inspect all components for any manufacturing defects, missing parts, or shipping damage. Organize parts by step as indicated in the assembly manual to streamline the building process and prevent errors.

3.3 Chassis and Drivetrain Assembly

Pay close attention to the mid-motor configuration and the precise installation of the symmetrical belts. Ensure belts are properly tensioned to avoid slippage or excessive drag. When assembling the split top deck, adhere strictly to the torque specifications to optimize chassis flex characteristics. Assemble the high-volume rear differential carefully, ensuring proper lubrication and sealing.

3.4 Suspension and Steering System

Assemble the long-arm pivot ball suspension geometry with precision. Proper assembly of the adjustable KPI steering blocks and the floating one-piece servo and bell crank mount is crucial for achieving the responsive and precise steering the TC8 is designed for. Ensure all pivot points move freely without binding.

3.5 Electronics Installation

Install your chosen motor, electronic speed controller (ESC), receiver, and steering servo according to their respective manufacturer's manuals. Ensure all wiring is neat, secure, and routed away from moving parts to prevent damage. Position components to maintain the vehicle's balanced weight distribution, which is critical for optimal performance.

4. Operating Instructions

4.1 Battery Charging and Safety

Always use a compatible charger specifically designed for your battery type (e.g., LiPo, NiMH). Follow the battery and charger manufacturer's instructions for safe charging procedures. Never leave charging batteries unattended. Store batteries in a cool, dry place, away from flammable materials and direct sunlight.

4.2 Pre-Run Checklist

- Ensure all screws and fasteners are tight and secure.
- Check tire condition, inflation (if applicable), and secure mounting.
- Verify that the vehicle's battery and transmitter battery are fully charged and securely installed.
- Test steering and throttle response before placing the vehicle on the ground.
- Confirm radio signal strength and range, especially in new operating environments.
- Inspect all moving parts for freedom of movement and absence of binding.

4.3 Driving Tips

Begin with gentle throttle inputs to familiarize yourself with the car's response and handling characteristics. Practice smooth steering and controlled braking. The RC10 TC8 is designed for on-road surfaces; avoid rough terrain, obstacles, or water to prevent damage. Experiment with suspension settings, tire compounds, and tire pressure to optimize performance for different track conditions and driving styles.

5. Maintenance

Regular and thorough maintenance is crucial for preserving the performance, reliability, and longevity of your RC10 TC8.

5.1 Post-Run Cleaning

After each run, especially on dusty or dirty tracks, clean dirt, dust, and debris from the chassis, suspension components, and drivetrain using a soft brush, compressed air, or a damp cloth. Inspect for any loose screws, damaged parts, or signs of wear.

5.2 Drivetrain Inspection and Lubrication

Regularly check the symmetrical belts for wear, fraying, or proper tension. Inspect the DCV drive shafts, pulleys, and gears for excessive play, signs of wear, or foreign objects. Lubricate moving parts, such as universal joints and bearings, as recommended by the assembly manual. The high-volume rear differential requires periodic inspection and fluid replacement to maintain consistent performance; refer to the assembly manual for specific maintenance intervals and fluid types.

5.3 Suspension and Steering Maintenance

Check shock absorbers for leaks and ensure proper damping action. Inspect all pivot balls, suspension arms, and linkages for smooth movement and absence of binding. Ensure the steering mechanism operates freely and that the servo saver (if applicable) is functioning correctly. Periodically check and adjust the adjustable KPI steering blocks as needed.

5.4 General Inspection

Periodically inspect the entire vehicle for any cracks in the chassis, body, or suspension components. Check all electrical connections for corrosion or looseness. Ensure tires are in good condition and securely glued to the wheels.

6. Troubleshooting

Problem	Possible Cause	Solution
Car does not respond to controls.	Low battery (vehicle or transmitter), loose wiring, binding issues in drivetrain/steering, radio interference.	Charge/replace batteries, check all electrical connections, ensure no parts are binding, change operating frequency or location.
Poor or inconsistent steering response.	Steering servo issue, loose steering linkages, incorrect KPI setting, worn tires, improper steering trim.	Check servo operation and connections, tighten linkages, adjust KPI settings, replace worn tires, adjust steering trim on transmitter.
Excessive noise or grinding from drivetrain.	Worn or damaged gears, debris in drivetrain, loose motor mount, incorrect belt tension, differential issues.	Inspect and replace worn/damaged gears, clean drivetrain thoroughly, secure motor mount, adjust belt tension, service differential.
Car pulls to one side during acceleration/braking.	Uneven suspension setup (shock oil, springs), bent suspension arm, tire issues (wear, pressure), differential binding.	Check shock oil levels and spring rates, inspect suspension components for damage, verify tire pressure/wear, service differential.
Motor/ESC overheating.	Incorrect gearing, excessive load, poor ventilation, faulty electronics.	Adjust gearing (smaller pinion/larger spur), ensure adequate airflow, check for binding in drivetrain, consult electronics manual.

7. Specifications

Attribute	Detail
Model	RC10 TC8 1/10 Touring Car Kit, Steel Spec
Part Number	30142
Power Source	Electric
Terrain	On-Road
Body Style	Touring Car
Scale Size	1:10 Scale
Assembly Level	Kit (requires assembly)
Length	360mm (14.17in)
Internal Gear Ratio	1.90:1
Drive	4WD
Product Dimensions	15 x 8 x 2.5 inches
Item Weight	2.39 pounds

Attribute	Detail
Manufacturer Recommended Age	12 months - 8 years (Note: This age range is typically a general Amazon categorization. The complexity of this RC kit suggests an actual recommended age for assembly and operation is generally 14+ or requires adult supervision.)

8. Warranty and Support

8.1 Warranty Information

Team Associated products are manufactured to high standards of quality and performance. For specific warranty terms and conditions, including coverage details and duration, please refer to the warranty card or documentation included with your product. Alternatively, visit the official Team Associated website for the most up-to-date warranty policy. Typically, warranties cover manufacturing defects but do not extend to damage resulting from misuse, accidents, unauthorized modifications, or normal wear and tear.

8.2 Customer Support

For technical assistance, inquiries regarding replacement parts, troubleshooting guidance beyond this manual, or any other support needs, please contact Team Associated customer support. Contact information, including phone numbers, email addresses, and support hours, can usually be found on their official website or in the product packaging.
Official Website: www.associatedelectrics.com

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