Please completely read and understand the entire manual before using, assembling and/or disassembling your remote controlled car.

## 1/16TH SCALE 4WD ELECTRIC POWERED TRUGGY/MONSTER TRUCK

2.4GHz RADIO SYSTEM

INSTRUCTION MANUAL



	NAME	LENGTH	WIDTH	HEIGHT	WHEELBASE	WHEEL SIZE	GEAR RATIO	MOTOR & BATTERY
ŀ	TREMOR SG	265mm	205mm	110mm		70mm(Dia.) 40mm(Width)		RC 380 Motor, Li-ion Battery Pack (7.4V, 800mAH)
	TREMOR ST	270mm	215mm	135mm		80mm(Dia.) 45mm(Width)	1.11 44	

#### Notification: This data is subject to change without notice.

The Redcat Racing Tremor 1/16h Scale series are Ready to Run and include a Li-Ion 7.4V, 800mAH battery pack, charger.and charger adapter. Please use the included charger to charge your Li-Ion battery pack. These vehicles feature a 3-in-1 unit (ESC/receiver/5 wire servo) and a 2.4GHz radio system, which are considered entry-level hobby grade products and suitable for R/C beginners. Ball bearings and brass bushings are installed throughout the vehicles.

Many optional parts are available to upgrade your vehicle. Please refer to the part lists or visit www.redcatracing.com. If you perform a drive train upgrade, you must replace the entire system (such as motor, ESC, receiver, ball bearings) so that all components are properly matched. Any malfunction incurred by custom modification or incorrect operation of your vehicle will void your warranty.

- This product is not a toy. It is not intended for persons under 14 years of age, unless closely supervised by an adult.
- This manual is subject to change without notice.

#### **GENERAL INFORMATION**

- This user's manual contains the instructions you will need to assemble, operate and maintain your vehicle. We know you are anxious to start driving, but it is very important that you take time to read the manual even if you are an experienced R/C driver.
- Carefully read and follow all instructions in the manual. Failure to follow the instructions will be considered abuse and/or neglect and may void the warranty.
- Your vehicle is designed to run on uneven or rough terrain. However, dust, sand, water and carpet fibers can lodge in any moving parts and can damage your vehicle if not removed promptly. Your warranty does not cover damage due to outside elements including sand, dirt, water or any other debris. You are responsible for the maintenance and safe operation of this vehicle.
- This product is not a toy. It is not suitable for users under 14 years old unless supervised by an adult.
- Never attempt to re-assemble any electronic components. These have been carefully calibrated at the factory.
- Only use Redcat Racing manufactured parts to upgrade your car. If you perform a drive train upgrade, replace the entire system (Such as motor, ESC/receiver unit and the like) so that all components are properly matched. Any malfunction incurred by custom modification will void your warranty.
- Before driving your vehicle, please read this manual completely and examine your vehicle for any defects. Test your remote control to make sure it functions properly and at the range you plan to run your vehicle.
- For best performance, some adjustments may be necessary.
- This vehicle requires one battery pack, which is included with the car. The radio controller requires three AA size batteries (not included). Make sure the vehicle's batteries have a sufficient charge before driving or possible loss of control may result.
- Always remove batteries from the vehicle and the radio controller when not in use.
- Please operate your vehicle in an open area free of obstacles. Never operate your vehicle in crowded street
- This product is fully assembled at factory. Redcat Racing is not responsible for damage and/or accidents that occur as the result of custom modifications and/or incorrect operation.

#### **SAFETY INFORMATION**

We want you to enjoy your R/C vehicle and to operate it with care. Failure to operate your vehicle in a safe and responsible manner may result in injury to yourself and others and may cause damage to property.

- Read and understand all instructions carefully before use and assembly/disassembly.
- Do not run your vehicle on public roads or any area where
   you may encounter pedestrian or vehicle traffic.
- Do not operate in a congested area or in crowds.
- Do not operate your vehicle with obstructed line of sight,
   at night, or near water.
- Your vehicle is radio controlled. Radio waves are subject to interference. Radio interference can cause loss of control of your vehicle.
- Take care not to injure yourself while using tools to adjust or upgrade your vehicle.
- Since the model contains many small parts, keep out of reach of children while assembling and/or disassembling.
- When turning off your model, always turn off the receiver
   (3-in-1 unit) first, before turning off the remote control.
- Always remove the batteries from your vehicle and the remote control when not in use.
- If your vehicle becomes stuck, release the throttle, then retrieve it by hand.
- Do not continue to apply the throttle or you may damage the motor and/or the ESC/receiver unit.
- Turn off your vehicle and discontinue use if it runs erratically. Do not run it again until the issue has been found and resolved.









#### FAMILIARIZING YOURSELF WITH YOUR 2.4GHz RADIO SYSTEM

Your car is equipped with the new 2.4GHz radio system. Please read and understand all instructions below before operating.



A: Steering Wheel 1: Steering Trim 4: Power Switch 7: Throttle Reverse
B: Trigger 2: Steering Reverse 5: Steering Dual Rate 8: Green Indicator
C: Battery Case 3: Red Indicator 6: Throttle Trim 9: Bind(Pair) button

**Steering Wheel:** Proportionally operates the models right and left steering control.

Battery Case: Requires 3pcs of AA size batteries.

Power Switch: Used to turn the radio controller ON/OFF

**Steering Dual Rate Dial:** Allows you to change the amount of steering servo travel compared to the amount of physical movement of the steering wheel.

Throttle /Steering Trims: Used to adjust the center trim of the throttle/steering channel.

**Steering Reverse:** Allows you to electronically switch the direction of steering servo travel. For example, if you move the steering wheel to the right and the steering servo moves to the left, flip the Steering Reverse Switch to make the steering servo move to the left.

**Throttle Reverse:** Allows you to electronically switch the direction that the motor operates in relation to the throttle trigger. For example, if you pull the throttle trigger to accelerate forward, but the model goes in reverse,

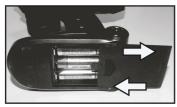
flip the Throttle Reverse Switch to make the model accelerate forward.

**Trigger:** Controls the speed and braking ability of your car. Pull it to accelerate, release it to decelerate, and push it to brake. Pushing it a second time activates the reverse feature.

**Indicators:** Shows battery power level. Green indicator flashing means battery power is low. If both red and green indicators are flashing then the radio controller battery is too low to control the model and you must replace with fresh batteries immediately.

Bind(Pair) button: It is used to bind your 2.4GHz radio system.

#### **BATTERY INSTALLATION**



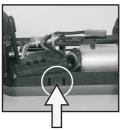
- Slide the battery cover as shown and install 3pcs of AA size batteries, positioning the polarity as indicated.
   Replace the battery cover after batteries are installed.

#### NOTES:

- -Use batteries of same type.
- -Remove batteries from the case if not in use.
- -Always check the battery power.
- -Dispose of exhausted batteries properly.

#### TO BIND THE RECEIVER TO THE RADIO CONTROLLER

Before running, make sure that the radio controller is bound with the receiver, which has been done at factory. If the model is not responding to the controller, it is possible that the controller and receiver are not bound, and you must perform the binding procedure following the instructions below.



1) Turn on the receiver (3-in-1 unit) using the power switch located on the side of the car. (Note: Receiver and ESC are combined inside the 3-in-1 unit.)



3) The green indicator should flash, meaning that the binding process is being performed.



2) Hold the Bind(Pair) key and switch on the power on the controller. You must Hold the Bind(Pair) within 5 seconds of turning on the receiver.

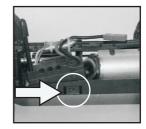


4) Once both red and green indicator are lit and not flashing, then your receiver is bound to your radio controller. The binding process is complete.

## **RUNNING YOUR CAR**









#### CAUTION

- Before using your car, make sure the radio controller has sufficient battery power. If the battery power is too low it can lead to the loss of control of your car.
- Always turn on the remote controller FIRST, and then the receiver.

#### 3 CHECK STEERING PERFORMANCE

• Ensure good steering performance.



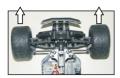
1) To keep the car running in a straight line, do not move the control wheel. (Keep it centered)



2) Turn the control wheel left to allow your vehicle to turn left.



3) Turn the control wheel right to allow your vehicle to turn right.





#### 4 CHECK TRIGGER RESPONSE









- A. Pull the trigger back to accelerate, release it to decelerate and push it forward to brake.
- B. To stop accelerating your car, release the trigger to Neutral.
- C. Pushing the trigger forward a second time activates the reverse feature.

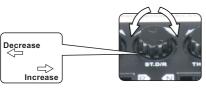
## 5 TO TUNE THE STEERING TRIM





Gently pull the trigger to allow your car to accelerate slowly. Meantime, tune the steering trim to align the front wheels.

#### 6) TO TUNE THE STEERING DUAL RATE CONTROL DIAL







This dial adjusts the overall travel of the steering servo. Push the dial forward for maximum steering. Pull the dial back to reduce the steering level.

- Set the Steering Dual Rate Control Dial to Minimum first. To set the desired steering level increase it again whilst decelerating your vehicle.

## **BATTERY INSTALLATION**





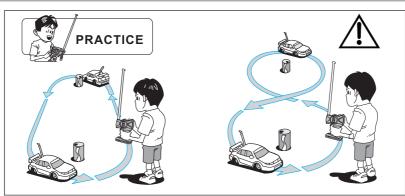




Following the illustrations above to install the Li-Ion battery pack to your car.

- 1) Remove the battery cover and install the battery pack in place.
- 2) Replace the battery cover
- 3) Lock the battery cover with small body clip. (See figure 3)
- 4) Connect battery to your radio system. (See figure 4)

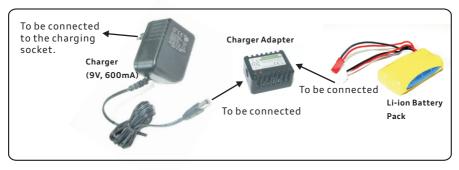
## **RUNNING PRACTICE**



Once you become conformable driving the vehicle, practice driving on the tracks as shown in the illustration. Keep practicing until you feel comfortable with the steering, throttle and brake at low speeds.

Once you are feeling comfortable try operating on another track. When you have mastered the basics you will be able to drive at higher speeds with more control.

## **CHARGING THE BATTERY PACK**



- -Use only the specified charger (9V,600mA) to charge the Li-Ion battery pack.
- You must use the charger adapter during charging. Connect one side to the charger and the other side to the battery pack.
- Never charge the battery pack unattended.
- Always remove the battery pack from the car before charging.
- Always use the battery pack after it is fully charged.
- -Charging time is normally around 2.5 hours. Green Indicator
- When the red indicator on the adapter is lit, the battery is charging.





Red Indicator

## STOPPING YOUR CAR

## 1 TURN OFF THE RECEIVER ON YOUR CAR









• Always switch off the receiver , and then the radio controller.

### 3 REMOVE BATTERIES

• Do not forgot to remove batteries from your car and radio controller when not in use.

#### **MAINTAINING YOUR CAR**

After running your car, perform the following procedures regularly to maintain your car's performance.

- Inspect your car for any obvious damage.
- Check the gears for wear, debris or broken/slipping teeth.
- Check the wheels and tighten the wheel screws properly.
- Check for loose screws in the chassis.
- Check the wiring for frayed or damaged wires or connectors.
- Check the steering servo which will wear out over time and require replacement.
- Check all batteries.
- Keep the chassis clean and free of sand, dust, moisture and any other debris.
   Remove and clean the motor if necessary. (Never attempt to re-assemble the motor, you will damage it and void the warranty).
- Clean the car body with a soft lint-free cloth.
- Remove all batteries from the car when not in use.

### **TROUBLESHOOTING** 1. Check to see if transmitter and car are on. 2. Check to see if transmitter and receiver are properly bound. A. The vehicle does not work at all. 3. Adjust throttle trim on transmitter 4. Replace batteries. 1. Replace or charge the battery pack and/or the radio batteries. 2. Make sure the vehicle is geared properly and the pinion and spur gear are over tightened. B. The vehicle runs slow. 3. Clean all bushings or ball bearings. 4. Check for stripped or dirty gears. 1. Check if the servo feels jammed, try centering carefully it by hand. C. The throttle works, but not the steering. 2. Check all the steering linkage for any damage. 1. Adjust the throttle trim. D. It steers. but no throttle control. 2. Replace or charge the battery pack and/or the radio batteries. 1. Check gear mesh between spur gear and pinion. E. The vehicle runs 2. Check for stripped and/or dirty gears. noisily. 3. Clean and oil bushings or ball bearings.

Diff. Assembly- Complete

(Fr./Rr.)



Steering Knuckles (Left/Right)

+Rear Hub Carriers (Left/Right) | Front Hub Carriers (Left/Right) | Ball Joint Set (Φ3.8mm)

## PARTILIST=2

#### 1:16 FOUR WHEEL DRIVE VEHICLES



clutch)

(2.6\*15mm)

Screw 2\*8mm

(3\*3mm)

# PART LIST-3 1-16 FOURWHEELDRIVE VEHICLES



Body Posts (Fr./Rr.) ITEM NO.: 16042K TRUGGY | MONSTER TRUCK

ONLY

Truck)

ITEM NO.:16093

Slipper Clutch Pads/Disks

ITEM NO.: 16030









ITEM NO.:16094

Slipper Clutch Spring/Ball Bearing/Locks + O-ring + Shim

Front Shock Tower+Rear Shock

ITEM NO.: 16043

Flame Tires +Sponge (Truggy)

ITEM NO.: \$153

Countersunk Screw

2.5\*5mm

TRUGGY

ONLY

ITEM NO.: 16033





Wheel Hex. ITEM NO.: 16034





Front Bumper(Buggy), which can be an optional part to truck or truggy

Rear Bumper(Truggy/Monster Truck)



Wheels Complete(Truggy) ITEM NO.: 16053 AMERICA STANDARD



12PCS Charger (AMERICA STANDARD), 9V, 600mA





TIRES+SPONGE (MonsterTruck)

Tremor ST truck Body (Blue)

ITEM NO.: 17002



Tremor ST truck Body (Red)

ITEM NO.:17001



Tremor SG truggy Body (Blue)

ITEM NO.: 17004



Tremor SG truggy Body (Green)

# **OPTIONAL PARTS**

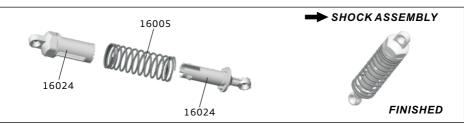
#### 1-16 FOUR WHEEL DRIVE VEHICLES

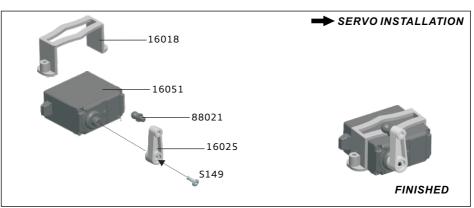


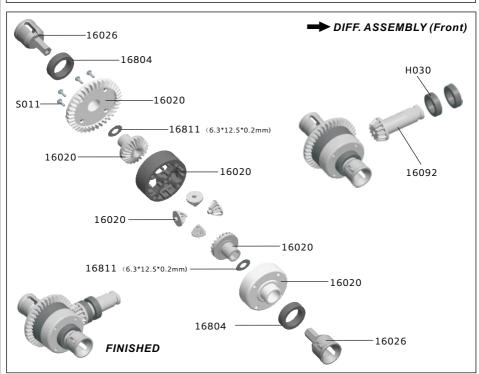
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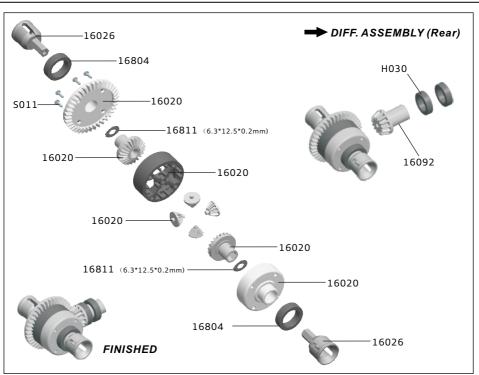
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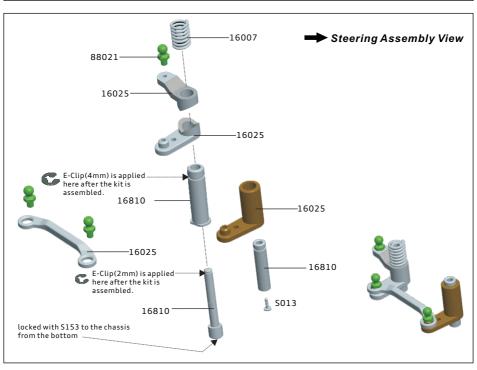
# **UNITS ASSEMBLY VIEW**



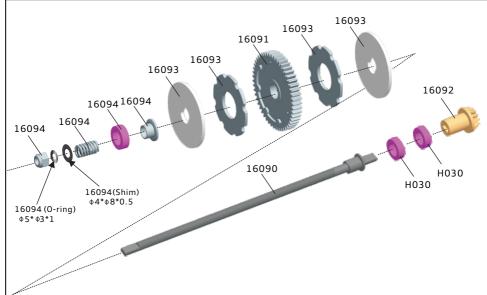


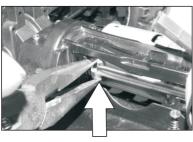






# SLIPPERCLUTCHSETASSEMBLY

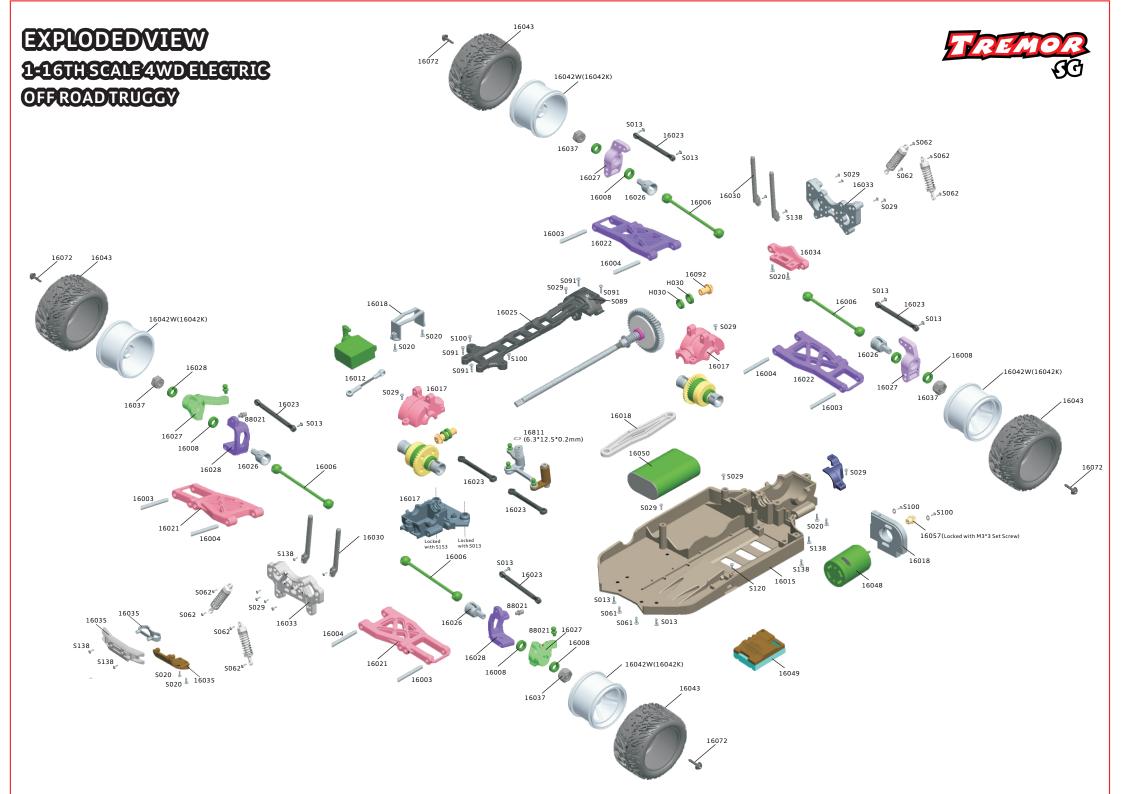


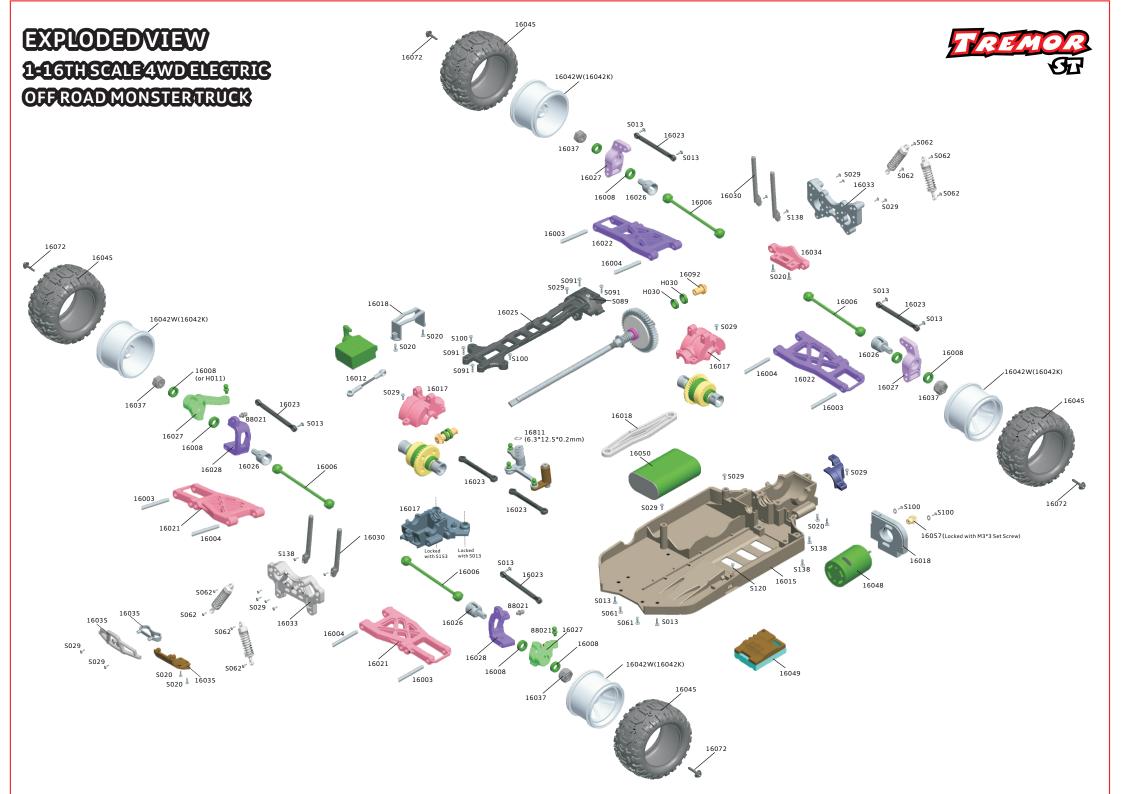


#### TIPS:

Use needle-nose pliers to adjust the slipper clutch set as shown in the picture. Place the car with its four wheels landing on the ground.

- 1) Hold the nut by the pliers (as shown in the picture), moving the car backwards gently by hand to loosen the slipper clutch.
- 2) Hold the nut by the pliers (as shown in the picture), moving the car forward gently by hand to tighten the slipper clutch.





Please completely read and understand the entire manual before using, assembling and/or disassembling your remote controlled car.

This product is not a toy. It is not suitable for users under 14 years old unless supervised by an adult.

Never attempt to re-assemble any electronic components. These have been carefully calibrated at the factory.



## **WARNINGS**

- -Read and understand all instructions carefully before use and assembly/disassembly.
- -Do not run your vehicle on public roads or any area where you may encounter pedestrian or vehicle traffic.
- -Do not operate in a congested area or in crowds.
- -Do not operate your vehicle with obstructed line of sight, at night, or near water.
- -Your vehicle is radio controlled. Radio waves are subject to interference. Radio interference can cause loss of control of your vehicle.
- -Take care not to injure yourself while using tools to adjust or upgrade your vehicle.