

**1/10TH SCALE ELECTRIC ROCK CRAWLER**

ITEM NO.: 5628

**4 WHEEL DRIVE****+ 4 WHEEL STEERING**

The two engine setup and FM digital 3 channel remote gives the user many options.

4 Steering modes to tackle the roughest of all terrains are easily switchable by one button on the remote control.



Rock crawling is an extreme form of off road driving using vehicles anywhere from stock to highly modified to overcome obstacles.

The rock crawler is about slow-speed, careful and precise driving. It often drives up, down and across obstacles that would appear impassable.

Note: The images may vary from the actual received model.

★ Please read this manual carefully before use.

**FULLY ASSEMBLED!**

## 1. Getting ready to know our crawler...

Thank you for purchasing our product.

This product is an authentic controlled vehicle(RC vehicle) and it is not a toy. Read and understand this instruction manual thoroughly before the model. If you are not familiar with RC vehicles, we recommend that you ask RC experts for advice.

Never run RC models near crowded people or animals, or on public streets or highways. This could cause serious accidents, personal injuries, and/or property damage.

## 2. Technical Data

-Length: 450mm ( Replacing shock locations will change the length.)

-Width: 268mm

-Height: 148mm

-Wheelbase: 320mm ( Replacing shock locations will change the wheelbase.)

-Motor: two RC380 motors

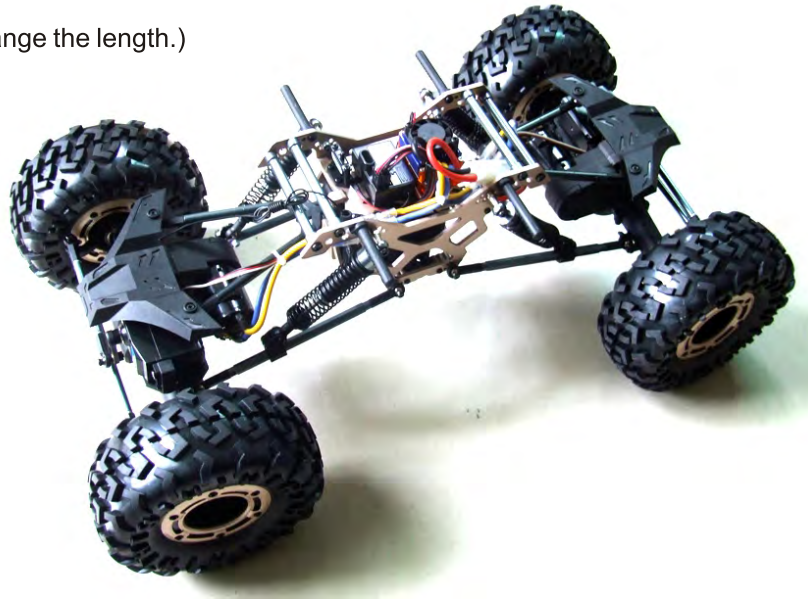
-Wheel Dia: 130mm

-Wheel Width: 55mm

-Servo: two servos, 6kgs, large steering angle

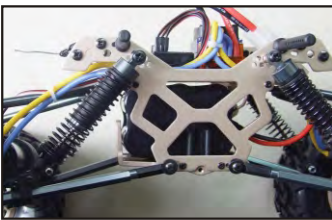
-Gear Ratio: 1:38.6

-Battery: 7.2v, 1500mAh

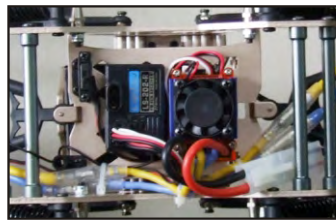


**This data is subject to change without notice in advance as result of product improvement.**

## 3. Main Features



Aluminum side plate and aluminum battery tray allow for durability. Aluminum capped shocks are all oil-filled.



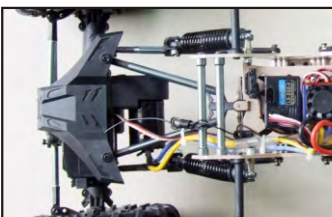
Aluminum radio tray offers ESC and receiver reliable installation. High precision ESC w/ cooling fan works good for your crawler.



Both front and rear unit can be twisted to a large angle. It allows for smooth crawling on uneven surface.



Crawling tyre of high grip is suitable to drive any tough terrain. Zinc alloy wheel frame is locked to the wheel rim.



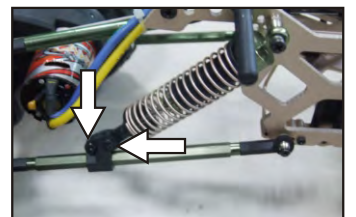
Compact front/rear front top mount provides good protection for the receiver. Two RC 380 motors which are installed to both on front and on rear are of high quality.



Skillful front/rear steering linkage set and servo linkage set. Two 6kg servos are installed to both on front and on rear do a good job for steering.



Solid front/rear axle mount and skillful front/rear steering hubs offer smooth crawling and steering. All ball bearings are throughout the entire crawler.



To replace locations of shocks, unscrew the two screws that on the shock lower mount locked to the lower linkage bar as shown in the figure.

## 4. Using of the FM radio to your crawler

### General information

- This FM LCD radio controller is the latest version.
- It is in use for the crawler only.
- It contains various steering modes which makes the crawler perfect for crawling on roads or rocks.
- Fully extend its antenna while using it.
- Always remove batteries from this product if not in use.
- Various frequencies of FM crystals are available at factory.
- This radio control is a high-precision product and allowed itself to be used with your good care.



### Preparation before using



Slide out the battery holding tray to expose the empty battery compartment.

Insert eight AA size batteries into the marked spaces. Please note the correct direction of the batteries.



Insert the antenna into the hole and turn clockwise until it is tightly secured. Make sure you never over extend the antenna as this will cause it to break. Extend the antenna while using.

### Full function FM radio controller



1	Antenna
2	LCD screen
3	Steering Control Wheel
4	Steering Trim / Reverse Switch
5	Throttle Trim
6	Power Switch ( Slide it to turn on/off)
7	Steering Dual Rate Control Dial (D/R)
8	Trim Switch (for rear wheels)
9	Trigger
10	Steering Mode Switch
11	SEL function button



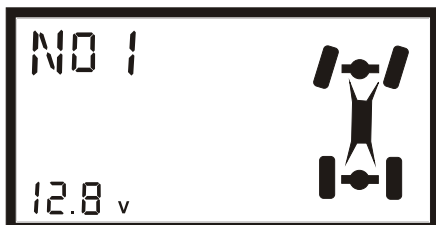
## Full function steering modes

This FM radio controller contains various steering modes which are perfect for the rock crawler.



Press this switch to exchange steering modes.

### LCD Screen on FM radio controller



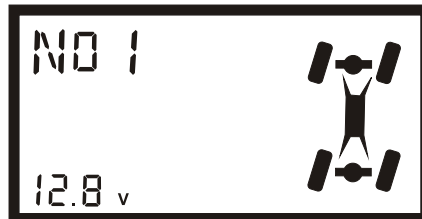
#### MODE 1

Your crawler will work like so:



This illustration is your crawler in the situation by performing the first mode on the radio control. Front steering is to turn to the left or right but rear steering remains aligned.

### LCD Screen on FM radio controller



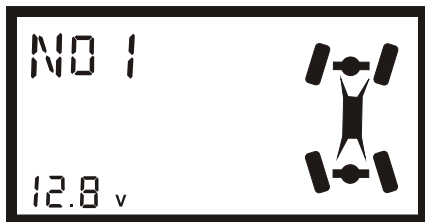
#### MODE 2

Your crawler will work like so:



This illustration is your crawler in the situation by performing the second mode on the radio control. Front steering is to turn to the left and rear steering is to do likewise.

### LCD Screen on FM radio controller



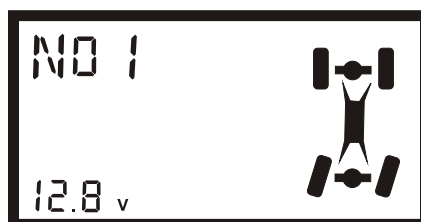
#### MODE 3

Your crawler will work like so:



This illustration is your crawler in the situation by performing the third mode on the radio control. Front steering is to turn to the left but rear steering is to turn right.

### LCD Screen on FM radio controller



#### MODE 4

Your crawler will work like so:

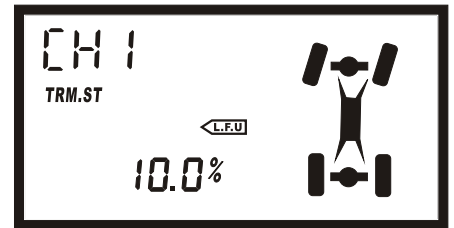
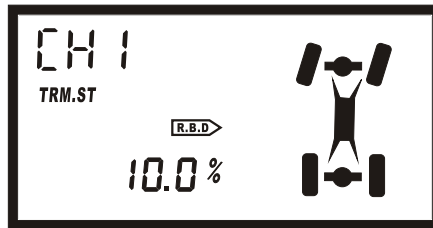


This illustration is your crawler in the situation by performing the fourth mode on the radio control. Rear steering is to turn to the left or right but front steering remains aligned.

## Steering Trim / Steering Reverse Function



LCD Screen on FM radio controller



TRM.ST (Steering Trim) range is around 0-10.0% for both left and right steering on front wheels. Tune this switch to select your desired steering trim volume.

### To switch to Steering Reverse program:

Press **SEL** ( Select Button) on your radio once, this LCD display appears Channel 1(NOR.)

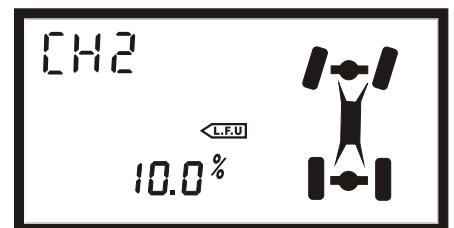
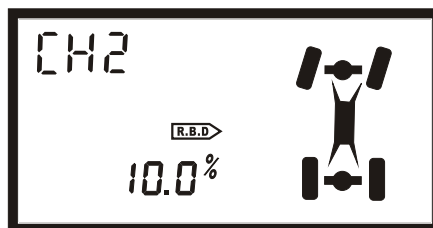
Tune the SWITCH ( Steering Trim /Reverse Switch) to change NOR into REV as shown below:.



## Throttle Trim / Throttle Reverse Switch



LCD Screen on FM radio controller



TRM. TH (Throttle Trim) range is around 0-10.0%. Tune this switch to select your desired throttle trim volume.

### To switch to Throttle Reverse program:

Press **SEL** ( Select Button) on your radio once, this LCD display appears Channel 1(NOR.)

Tune the SWITCH ( Steering Trim /Reverse Switch) to change NOR into REV as shown below:.

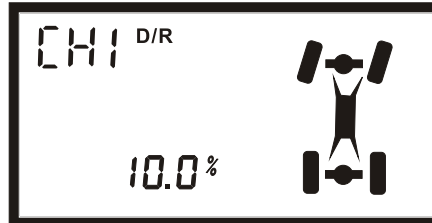


## Steering Dual Rate Control Dial(D/R)

This dial adjusts the overall travel of the steering servo , push the dial forward for maximum steering. Pull the dial back to reduce steering travel. D/R adjustable range is around 5-10%.



### LCD Screen on FM radio controller

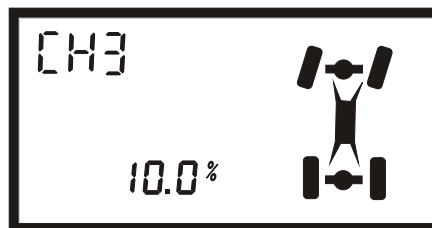


## Trim Switch (For rear wheels)

This dial is to centre the rear wheels. The range is around 0-10% on the left or right rear wheel.



### LCD Screen on FM radio controller



## Steering Control Wheel



It controls the steering of your rock crawler. Turn the wheel to the right and your crawler turns right. Turn the wheel to the left and your crawler turns left.

## Throttle/Brake Trigger



It controls the speed and braking ability of your rock crawler. Pull the trigger to speed up, release the trigger to decelerate, and push the trigger to brake. Pushing the trigger a second time activates the reverse function.

## SEL function button

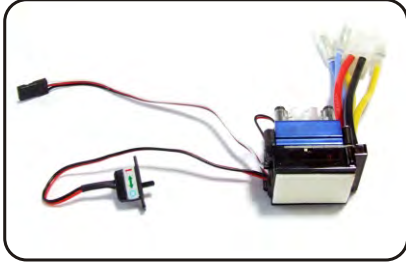
This FM radio controller contains a variety of select functions. Once you press SEL button, different functions will come up in turn with LCD indicators on.

## 5. Installing electronic components to your crawler

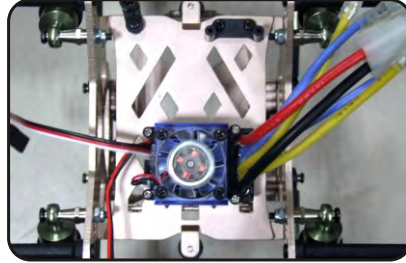
Your crawler is fully assembled at factory. The following is about installing receiver and ESC...

### To install the ESC

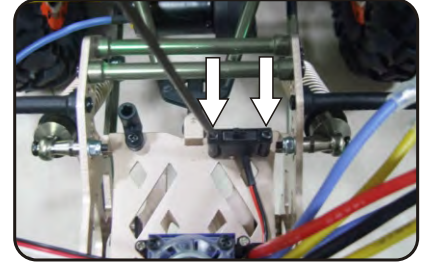
Attach adhesive tape to your ESC...



Install your ESC to the radio tray on your crawler...

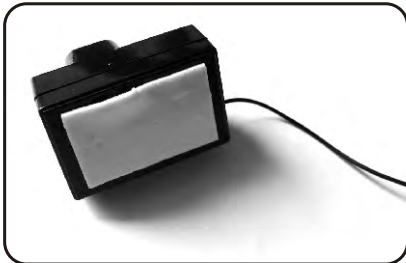


Secure the power switch by using two round head screws(2\*8)...

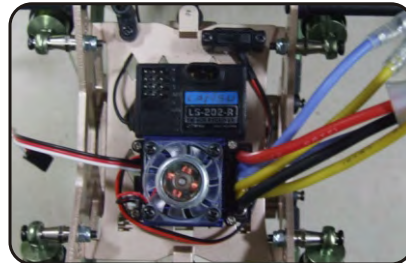


### To install the receiver

Attach adhesive tape to your receiver...

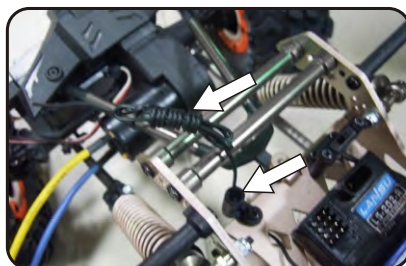


Install your receiver in place as shown below...

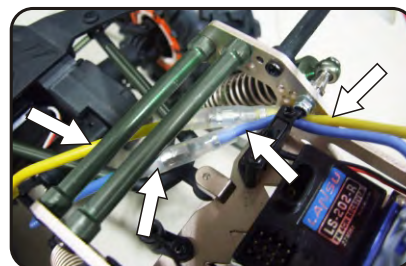


### To place all wires

Insert receiver antenna into the antenna retainer...  
Tie up the antenna wire.

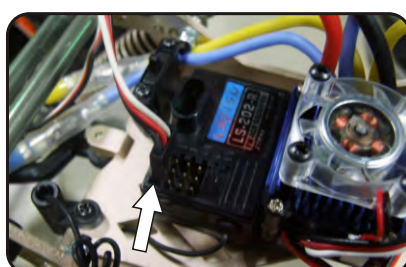


Connect motor connectors (front /rear motor) to ESC. Yellow line to yellow line, blue line to blue line.

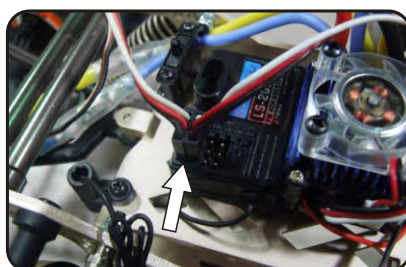


### To connect radio system

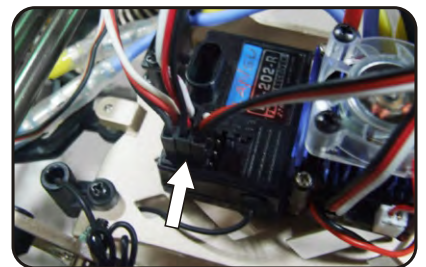
Insert the front servo connector to Channel 1 on the receiver.



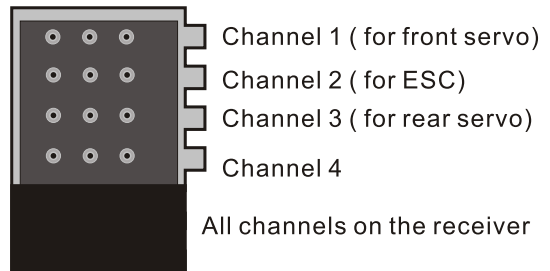
Insert the ESC connector to Channel 2 on the receiver.



Insert the rear servo connector to Channel 3 on the receiver.

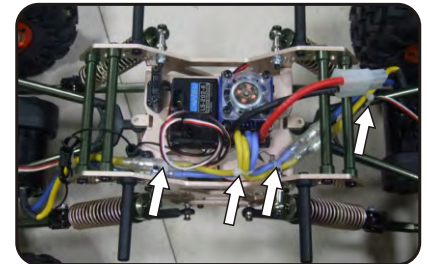
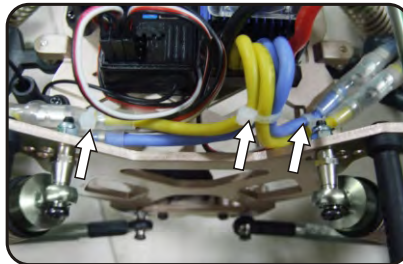






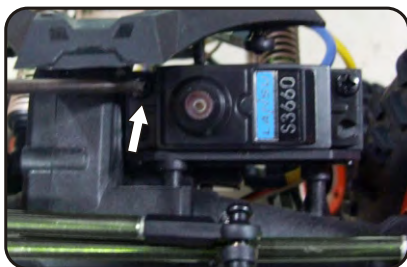
**To tie up all wires/connectors**

Tie up all wires and connectors by using zip ties.



**To remove servo easily**

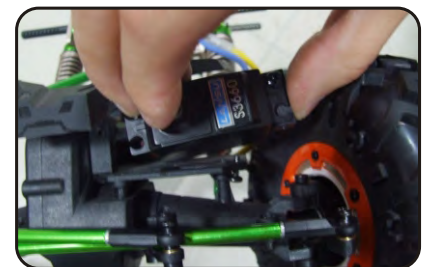
The following illustrations allow for easily removing of the servo from your crawler. ( Tips )  
 You are no need to remove all screws which are used for the servo. Please see the following carefully...



Unscrew the round head self tapping 3\*10 as shown in the figure.



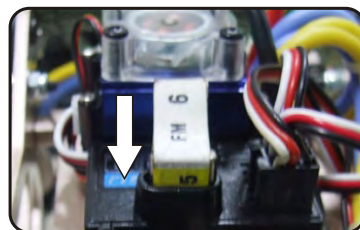
Unscrew the round head self tapping 3\*8 as shown in the figure.



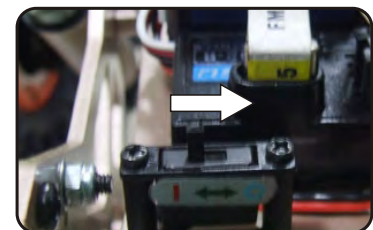
You can remove the servo smoothly from your crawler.

**6.To start /stop crawling...**

Fully extend radio antenna when using the radio.



Insert the crystal into your receiver.



Power switch on ESC.

To start crawling:

- 1.Switch on the radio control and fully extend the antenna.
2. Switch on the power switch on ESC.

To stop crawling:

- 1.Switch off the power switch on ESC.
- 2.Switch off the radio control and retract the antenna.

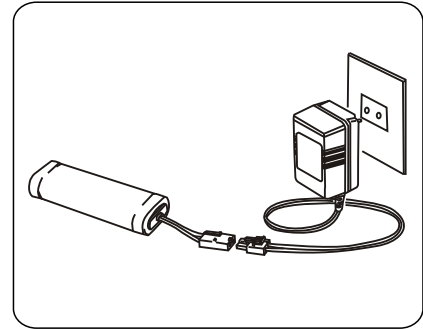


## 7. Charging your battery for the rock crawler

### WARNING

Never tempt to use this charger to charge the batteries of your transmitter.

- Use only the specified charger (7.2V,500mA) to charge your battery pack.
- For better battery performance please discharge your battery before charging it.
- Never charge your battery over 5-6 hours.
- Never charge the battery pack unattended.
- Always use the battery after it is fully charged.



## 8. Troubleshooting List

Problem	Cause	Remedy
The rock crawler fails to move.	<ol style="list-style-type: none"> <li>1) Radio controller or receiver is off.</li> <li>2) Batteries are not placed correctly in the radio.</li> <li>3) The battery is flat.</li> </ol>	<ol style="list-style-type: none"> <li>1) Turn on both radio and receiver.</li> <li>2) Place batteries in the radio controller properly.</li> <li>3) Charge your battery pack.</li> </ol>
Servo does not operate normally	<ol style="list-style-type: none"> <li>1) Transmitter and/or receiver batteries are low.</li> <li>2) Servo gear stripped or otherwise damaged.</li> <li>3) Receiver battery is flat.</li> </ol>	<ol style="list-style-type: none"> <li>1) Replace/recharge radio controller and/or receiver batteries</li> <li>2) Replace with new gear set</li> <li>3) Recharge receiver battery</li> </ol>
Whilst driving the rock crawler, radio system operates erratically.	<ol style="list-style-type: none"> <li>1) Receiver crystal is loose.</li> <li>2) Someone operates on same radio frequency.</li> <li>3) Damage to receiver after a crash</li> </ol>	<ol style="list-style-type: none"> <li>1) Remove and reinstall the receiver crystal</li> <li>2) Change crystals or relocate and try again</li> <li>3) Contact your local distributor for repair information</li> </ol>
Operating range is short.	<ol style="list-style-type: none"> <li>1) Radio antenna is retracted.</li> <li>2) Receiver antenna is not extended.</li> <li>3) Radio or receiver battery is low.</li> </ol>	<ol style="list-style-type: none"> <li>1) Extend radio antenna fully.</li> <li>2) Extend receiver antenna fully.</li> <li>3) Replace/recharge the batteries</li> </ol>
Motor does not work.	<ol style="list-style-type: none"> <li>1) Motor wires loose or damaged.</li> <li>2) Receiver battery is weak.</li> </ol>	<ol style="list-style-type: none"> <li>1) Double-check motor wires. Repair/replace as necessary.</li> <li>2) Recharge receiver batteries.</li> </ol>
The crawler moves when turned on.	<ol style="list-style-type: none"> <li>1) Throttle Trim out of adjustment</li> </ol>	<ol style="list-style-type: none"> <li>1) Adjust throttle trim again</li> </ol>
Steering works, but throttle does not work	<ol style="list-style-type: none"> <li>1) Motor wires are loose or damaged.</li> <li>2) ESC is plugged into wrong receiver slot.</li> </ol>	<ol style="list-style-type: none"> <li>1) Double-check motor wires. Repair/replace as necessary.</li> <li>2) Plug ESC into the correct receiver slot.</li> </ol>

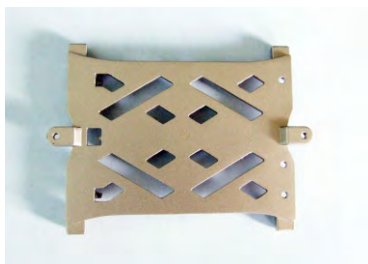
**PART LIST-1**

**PART NO.: RCT-H001**



Aluminum Side Plate(Left/right)

**PART NO.: RCT-H002**



Aluminum Radio Tray

**PART NO.: RCT-H003**



Aluminum Battery Tray

**PART NO.: RCT-H004**



**2PCS**

Drive Shaft ( Front/rear)  
L=62.5mm

**PART NO.: RCT-H005**



**2PCS**

Wheel Shaft ( Front/rear)

**PART NO.: RCT-H006**



**2PCS**

Motor Pinon Gear(10T)  
+Grub Screw 2.5\*2.5

**PART NO.: RCT-H007**



**2PCS**

Optional Motor Pinon  
Gear(8T) +Grub Screw 2.5\*2.5

**PART NO.: RCT-H008**



Wheel Frame ( Zinc Alloy)  
+ Cap Head Screw 2\*8(12pcs)

**PART NO.: RCT-H009**



**4PCS**

Aluminum Wheel Hex. +  
Wheel Pin2\*10+Grub Screw 3\*3

**PART NO.: RCT-H010**



**2PCS**

Aluminum Side Plate Post

**PART NO.: RCT-H011**



Battery Clasp

**PART NO.: RCT-H012**



**2PCS**

Gear Pin-1( Dia.=5mm, L=41mm)

The images may vary from the actual received parts.

**PART LIST-2**

**PART NO.: RCT-H013**



**4PCS**

Gear Pin-2 ( Dia.=4mm, L=21.6mm)

**PART NO.: RCT-H014**



**8PCS**

Front/Rear Upper Linkage Ball Bolt ( Dia.=6.3mm)

**PART NO.: RCT-H015**



**8PCS**

Shock Set Bush

**PART NO.: RCT-H016**



**8PCS**

Front/Rear Upper Linkage Ball Stud ( Dia.=5.8mm)

**PART NO.: RCT-H017**



**8PCS**

Front/Rear Lower Linkage Ball Stud( Dia.=5.8mm)

**PART NO.: RCT-H018**



**6PCS**

Front/Rear Spur Gear Mount Pin 2\*12

**PART NO.: RCT-H019**



**8PCS**

Steering Hub Bush

**PART NO.: RCT-H020**



Linkage Bar Bolt + Linkage Bar Gasket

**PART NO.: RCT-H021**



**8PCS**

Spring Pad (Inner Dia. 2.5mm)  
(To install Motor with screws)

**PART NO.: RCT-H022**



Washers (2.5\*5.5\*0.5) **8PCS**  
Washers(3.1\*6\*0.5) **8PCS**

**PART NO.: 3338-H016**



**2PCS**

Gear Shaft Outdrive Cup  
(Front/rear)

**PART NO.: H007**



**6PCS**

Ball Bearing 5\*11\*4

The images may vary from the actual received parts.



**PART LIST-3**

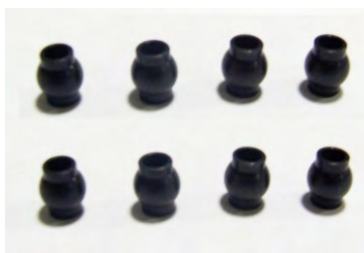
**PART NO.: H009**



**4PCS**

Ball Bearing 10\*15\*4

**PART NO.: H016**



**8PCS**

Steering Linkage Ball Stud. ( Dia.= 5.8mm)

**PART NO.: H032**



**6PCS**

Ball Bearing 4\*7\*2.5

**PART NO.: H036**



**6PCS**

Ball Bearing 8\*16\*5

**PART NO.: H049**



**6PCS**

Ball Bearing 4\*9\*4

**PART NO.: RCT-T001**



**2PCS**

Front/Rear Lower Linkage Set + Ball Stud.

**PART NO.: RCT-T002**



Front/Rear Upper Linkage Set + Ball Stud.

**PART NO.: RCT-T003**



**2PCS**

Front/Rear Steering Linkage Set +Ball Stud.

**PART NO.: RCT-T004**



**2PCS**

Front/Rear Servo Linkage Set +Ball Stud.

**PART NO.: RCT-T005**



**2PCS**

Front/Rear Shock Set

**PART NO.: RCT-T006**



Front/Rear Spur Gear Complete

**PART NO.: RCT-P001**



Front/Rear Top Mount

The images may vary from the actual received parts.

**PART LIST-4**

**PART NO.: RCT-P002**



Servo Plate+Servo Mount+  
Shock Lower Retainer 2P  
( to be locked to lower linkage bars)

**PART NO.: RCT-P003**



Front/rear Gear Box Housing  
+ Guard Cover

**PART NO.: RCT-P004**



Front/Rear Axle Assembly

**PART NO.: RCT-P005**



Spur Gear(47T)+Driven  
Gears+Gear Gasket +Gear  
Seal Set + Gear Casing

**PART NO.: RCT-P006**



Front/rear Steering Hub(left/right)  
+Linkage Set Kit

**PART NO.: RCT-P007**



Servo Arm+Battery Mount+Power  
ESC Switch Mount+  
Antenna Mount

**PART NO.: RCT-P008**



**2PCS**  
Body Post

**PART NO.: RCT-P009**



**2PCS**  
Spoke Wheel Rim

**PART NO.: RCT-P010**



Available to  
front or rear **One Pair**  
Tires(Left +Right) w/ Sponge Insert

**PART NO.: RCT-P011**



Available to  
front or rear **One Pair**  
Wheel Complete(left+Right)

The images may vary from the actual received parts.

**PART LIST-5**

**PART NO.: RCT-P012**



Optional Use

Optional Body Post +Mount

**PART NO.: H002**



**6PCS**

Lock Nut M3

**PART NO.: H003**



**6PCS**

Flange Lock Nut M4

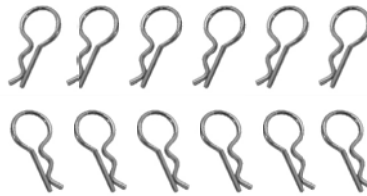
**PART NO.: H017**



**6PCS**

Lock Nut M2.5

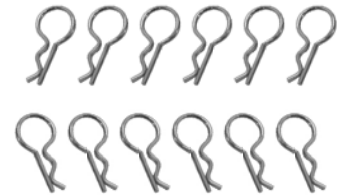
**PART NO.: H020**



**12PCS**

Body Clip A/B- Big

**PART NO.: H021**



**12PCS**

Body Clip A/B- Small

**PART NO.: H153**



**8PCS**

E-Clip(2MM)

**PART NO.: P010**



**8PCS**

Zip Tie(Big)

**PART NO.: P011**



**8PCS**

Zip Tie(Small)

**PART NO.: P019**



**2PCS**

Receiver Antenna Pipe

**PART NO.: P100**



**12PCS**

Body Post Pad

**PART NO.: E003**



Receiver (FM 40Mhz)

The images may vary from the actual received parts.



**PART LIST-6**

**PART NO.:E003A**



Receiver (FM 27Mhz)

**PART NO.: E020**



Optional use 7.2V  
500mA-600mA  
Charger  
(America Standard)

**PART NO.: E021**



Optional use 7.2V  
500mA-600mA  
Charger  
(Europe Standard)

**PART NO.: E022**



Optional use 7.2V  
500mA-600mA  
Charger  
(Australia Standard)

**PART NO.: E023**



Optional use 7.2V  
500mA-600mA  
Charger  
(UK Standard)

**PART NO.:E039T**



Front Motor ( Yellow wiring is to negative,  
Blue wiring is to positive)  
RC 380 Motor (Casing in black)

**PART NO.:E039R**



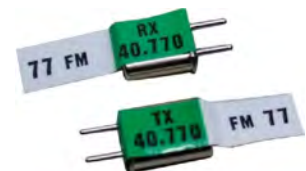
Rear Motor ( Blue wiring is to negative,  
Yellow wiring is to positive)  
RC 380 Motor (Casing in black)

**PART NO.: E040**



Rechargeable Battery Pack  
7.2V, 1500mAH

**PART NO.:E120**



Optional Use  
Crystals (Radio/Receiver)-FM40MHz

**PART NO.:E121**



Optional Use  
Crystals (Radio/Receiver)-FM27MHz

**PART NO.:E207**

(For the crawler Only)



Optional Use  
LCD Radio Control (FM 40MHz)

**PART NO.:E208**

(For the crawler Only)



Optional Use  
LCD Radio Control (FM 27MHz)

The images may vary from the actual received parts.

**PART LIST-7**

**PART NO.: E401**



High -precision ESC

**PART NO.: E403**



Torque:6kg  
Steering Angle up to 110 degrees or so  
Servo Unit

**PART NO.: S007**



**12PCS**

Round Head Screw (2\*8mm)

**PART NO.: S016**



**12PCS**

Grub Screw (M3\*3)

**PART NO.: S018**



**12PCS**

Round Head Self Tapping Screw (2.6\*8mm)

**PART NO.: S028**



**12PCS**

Round Head Screw(2.5\*14mm)

**PART NO.: S029**



**12PCS**

Round Head Self Tapping Screw (2.6\*10mm)

**PART NO.: S030**



**12PCS**

Round Head Self Tapping Screw (3\*10mm)

**PART NO.: S031**



**12PCS**

Cap Head Screw(2\*8mm)

**PART NO.: S059**



**12PCS**

Round Head Screw (3\*8mm)

**PART NO.: S060**



**12PCS**

Round Head Screw (2.5\*12mm)

**PART NO.: S063**







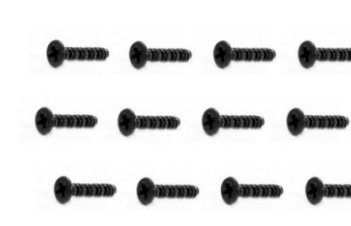






**12PCS**

Round Head Screw (2.5\*17mm)

The images may vary from the actual received parts.

**PART LIST-8**

<p><b>PART NO.: S089</b></p>  <p><b>12PCS</b></p> <p>Round Head Self Tapping Screw (2.6*6mm)</p>	<p><b>PART NO.: S096</b></p>  <p><b>12PCS</b></p> <p>Round Head Screw (3*24mm)</p>	<p><b>PART NO.: S098</b></p>  <p><b>12PCS</b></p> <p>Round Head Screw (3*21mm)</p>
<p><b>PART NO.: S099</b></p>  <p><b>12PCS</b></p> <p>Round Head Screw (3*14mm)</p>	<p><b>PART NO.: S100</b></p>  <p><b>12PCS</b></p> <p>Round Head Screw (2.5*8mm)</p>	<p><b>PART NO.: S101</b></p>  <p><b>12PCS</b></p> <p>Round Head Screw (2.5*6mm)</p>
<p><b>PART NO.: S102</b></p>  <p><b>12PCS</b></p> <p>Countersunk Self Tapping Screw (2*6mm)</p>	<p><b>PART NO.: S103</b></p>  <p><b>12PCS</b></p> <p>Grub Screw (M2.5*2.5)</p>	<p><b>PART NO.: S104</b></p>  <p><b>12PCS</b></p> <p>Round Head Screw (3*10mm)</p>
<p><b>PART NO.: T002</b></p>  <p> <math>\Phi</math>2mm  <math>\Phi</math>2.5mm  <math>\Phi</math>3mm  <math>\Phi</math>4mm         </p> <p>Small Cross Wrench</p>	<p><b>PART NO.: RCT-T007</b></p>  <p>             2*10mm    2.5*22mm    5*6.8*1.3mm              5*17*0.3mm              2.5*10*0.3mm         </p> <p>Optional Use Optional Front/rear Diff. Assembly</p>	

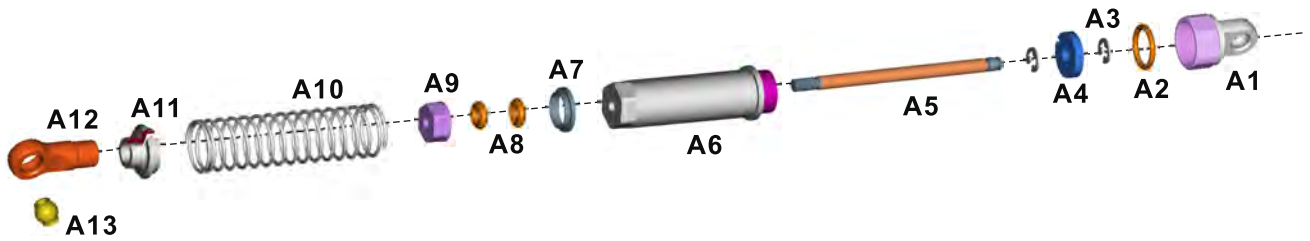
The images may vary from the actual received parts.



# Assembly Diagram-1

## Shock Assembly (A)

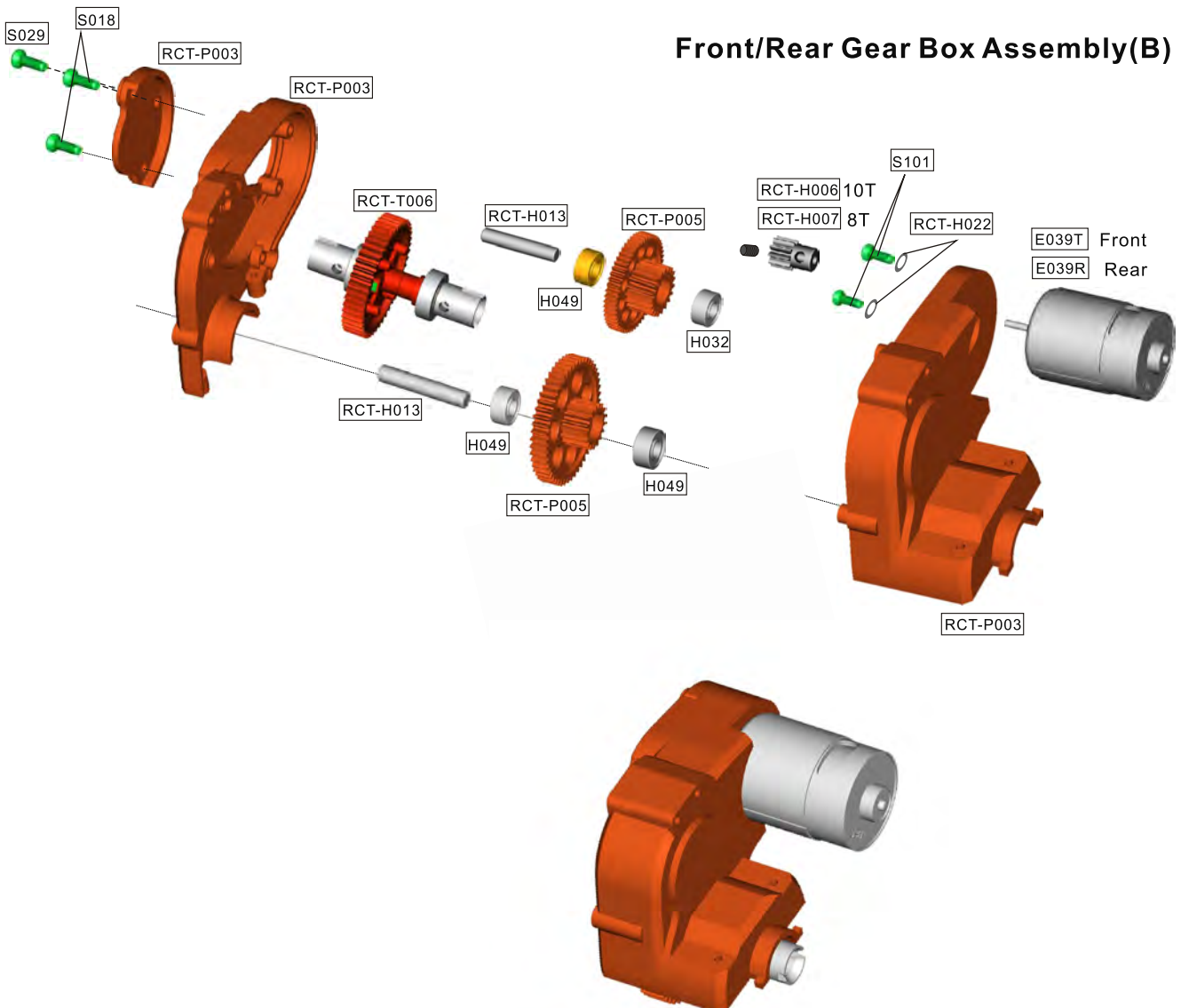
RCT-T005



### Tips:

Changing the shock oil ( the oil inside the shocks) will change their damping characteristics. Typically, if you are running on smooth surfaces, use a heavier weight oil. If you are running on rough surfaces, use a lighter weight oil. We recommend using only 100% silicone shock oil.

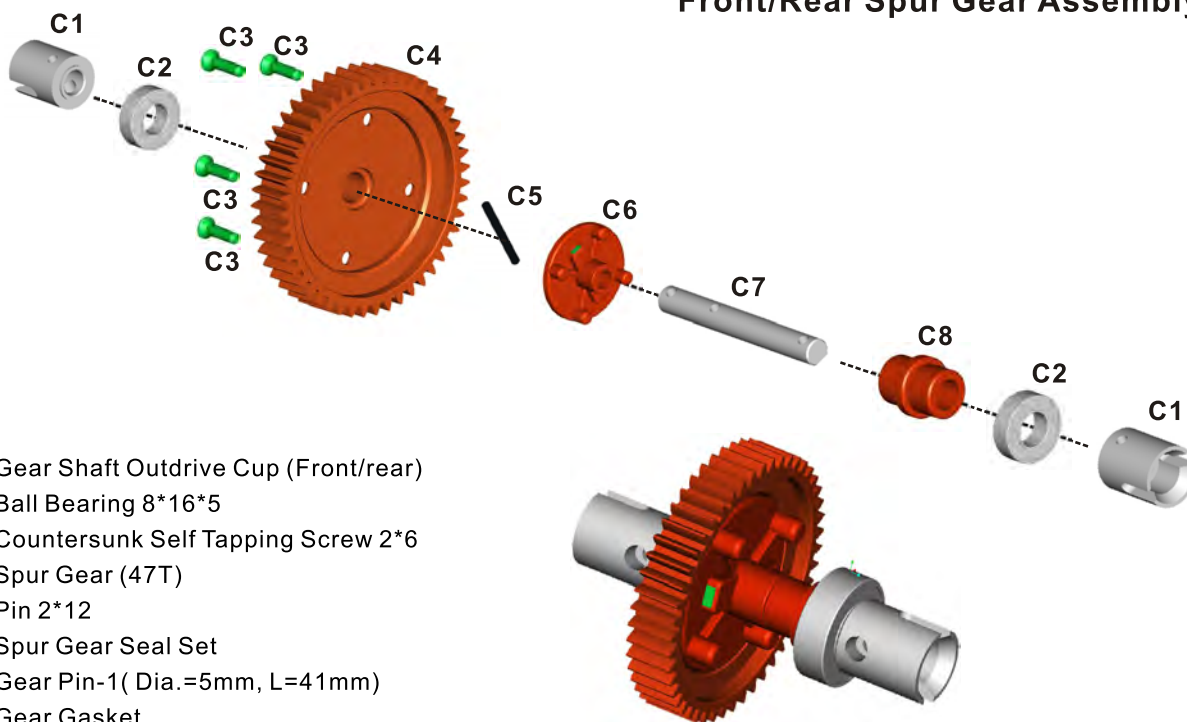
## Front/Rear Gear Box Assembly(B)



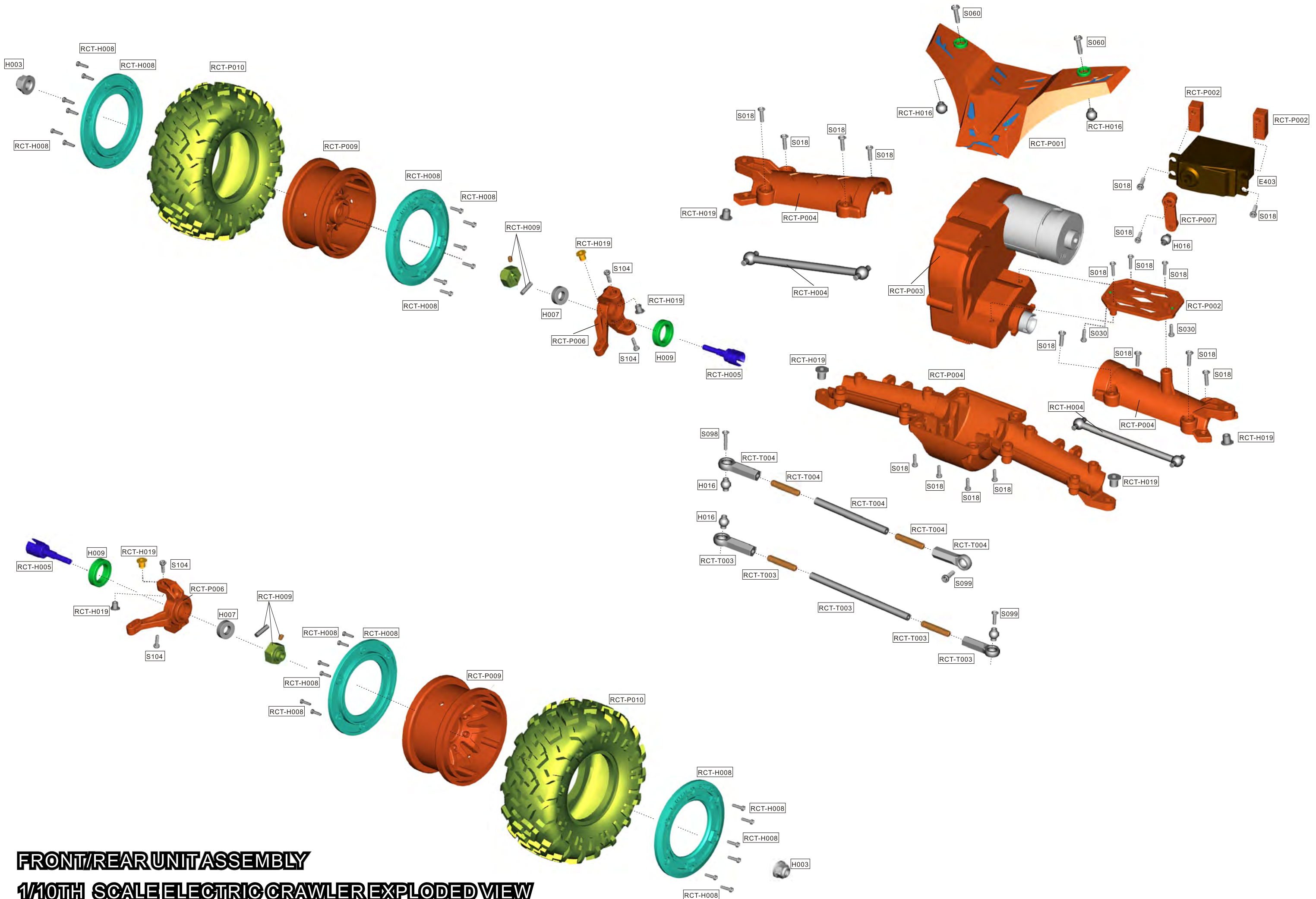
The images may vary from the actual received parts.

## Assembly Diagram-2

### Front/Rear Spur Gear Assembly(C)

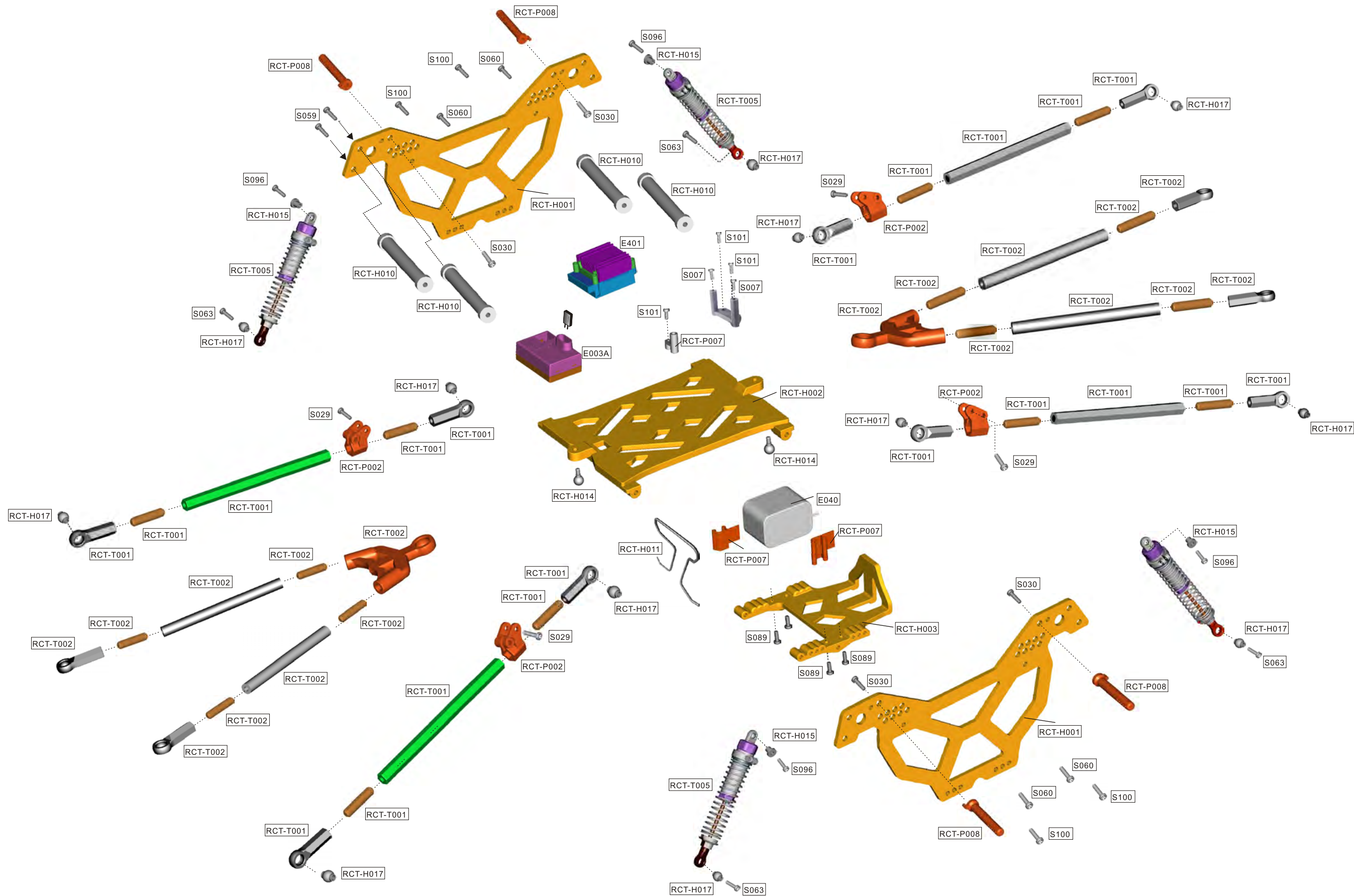


The images may vary from the actual received parts.



**FRONT/REAR UNIT ASSEMBLY**  
**1/10TH SCALE ELECTRIC CRAWLER EXPLODED VIEW**





**CENTRE UNIT ASSEMBLY**

**1/10TH SCALE ELECTRIC CRAWLER EXPLODED VIEW**



- Please read and understand all instructions in the manual before running and assembling or disassembling this product. A novice user should seek help from experienced hobby operators or local hobby shop staff.
- Always disconnect your battery pack before attempting to re-install your radio system.
- Keep away from children when you are assembling or disassembling the vehicle as it contains many small parts that might be dangerous to children.
- Always turn off your radio when it is not in use for a long period of time.
- In order to prevent battery leakage please remove all battery from your radio if not in use.
- Do not share the same frequency with somebody else when they are using RC products. If it is the case, keep away from them. Otherwise, it will cause signal confusion and do damage to your models and/or your body.
- For better radio performance fully extend the antenna on your radio controller.
- Never charge your rechargeable battery pack unattended.
- Always dispose of damaged parts into the recycle center.



## **1/10TH SCALE ROCK CRAWLER**

Thank for purchasing our product.

This product is an authentic controlled vehicle(RC vehicle) and it is not a toy. Read and understand this instruction manual thoroughly before the model. If you are not familiar with RC vehicles, we recommend that you ask RC experts for advice.