

1/12TH SCALE ELECTRIC POWERED OFF-ROAD VEHICLES

INSTRUCTION MANUAL

ITEM NO.:12881  
OFF-ROAD BUGGY



ITEM NO.:12885  
SHORT-COURSE TRUCK



ITEM NO.:12882  
OFF-ROAD TRUGGY



ITEM NO.:12883  
MONSTER TRUCK



ITEM NO.	LENGTH	WIDTH	HEIGHT	WHEELBASE	WHEEL DIA.	WHEEL SPAN	GEAR RATIO
12881	338mm	214mm	109mm	240mm	74mm	30mm(Fr.) 37mm(Rr.)	11.1:1
12882	366mm	251mm	135mm	240mm	88mm	43mm	12:1
12883	338mm	265mm	150mm	240mm	98mm	48mm	12:1
12885	408mm	213mm	148mm	240mm	76mm	30mm	11.1:1

- 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 prior notice.

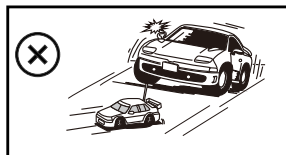
## GENERAL INFORMATION

- This user's manual is designed for use with your vehicles and contains the instructions you will need to assemble, operate and maintain your vehicles.
- 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 fibres can lodge in the working parts of your cars and can damage your vehicle if not removed promptly. We do not warranty your vehicle from damage due to outside elements including sand, dirt or water. The users 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 they are supervised by adults.
- Never attempt to re-assemble any electronic components. These have been carefully calibrated at the factory.
- Only use 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 and radio control for any defects.
- For better performance, some adjustment may be necessary.
- This vehicle requires one battery pack ( included in the car or in the packaging). Make sure the vehicle's batteries have a sufficient charge before driving or possible loss of control may result. The radio controller requires two AA size batteries (not include in the packaging).
- Always remove batteries from the vehicle and the radio controller when not in use.
- Please operate your vehicle in a spacious area. Never operate your vehicle in crowded street.
- This product is fully assembled at factory. We do not take any responsibility for damage and/or accidents that occur as the result of custom modifications and/or incorrect operation.

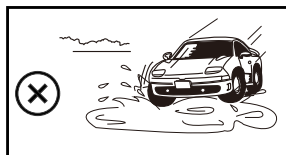
## SAFETY INFORMATION

We want users to enjoy our RC vehicles and to operate them with care. Failure to operate your vehicle in a safe and responsible manner may result in injury to yourself, others or damage to property around you.

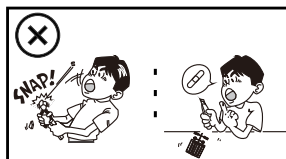
- Read and understand all instructions carefully before use and assembly/disassembly.
- Do not run your vehicle on public roads or any area where you may encounter pedestrian or vehicle traffic.



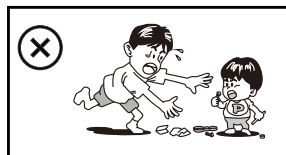
- Do not operate in a congested area or in crowds.
- Do not operate your vehicle with obstructed line of sight, at night, or near water.



- 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 cut 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.



- 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. Not do you run it again until the issue has been found and resolved.

## GETTING FAMILIARIZED 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.



**Steering Wheel:** It proportionally operate the right and left steering control of the model.

**Battery Case:** It requires 2pcs of AA size batteries.

**Power Switch:** It is applied to turn ON/OFF the radio controller.

**Steering Trim:** It is applied to adjust the centre trim of the steering channel.

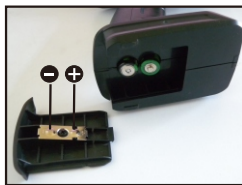
**Steering Reverse:** It allows you to switch the directions of the steering servo travel.

### **Power Indicator:**

When the radio controller is turned on, LED flashes sharply which indicates that the radio controller is seeking the receiver's signal and binding is in process.

When the power is enough, LED is solid on.

When the power is not enough, LED will have two flashes in turn. If it is the case, you are required to replace with the new batteries.



Slide the battery cover as shown in the photos, install two AA size batteries into the battery compartment, and replace the battery cover.

( NOTE: Do not insert the batteries with incorrect polarities.)

## **! Operation Precautions:**

1) Do NOT mix new and old batteries.

2) Use batteries of same brand.

3) Do NOT use batteries that are not allowed to power the radio controller.

(This radio controller ONLY requires AA size batteries which is individually 1.5V)

4) Always remove the batteries from the radio controller if the radio controller is not in use.

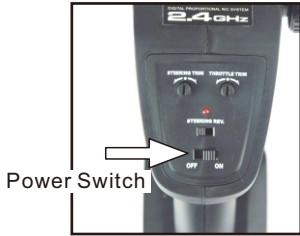
This operation is to prevent the damage from leaking batteries.

5) Do not attempt to disassemble the radio controller as it contains many electronic components.



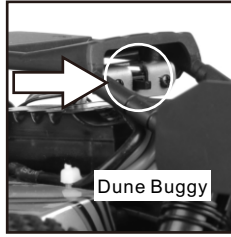
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### 1 TURN ON THE RADIO CONTROLLER

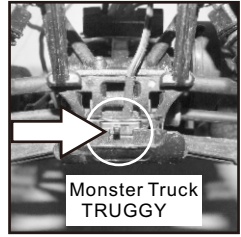


Power Switch

### 2 TURN ON THE RECEIVER ON YOUR CAR



Dune Buggy



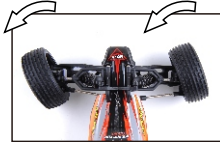
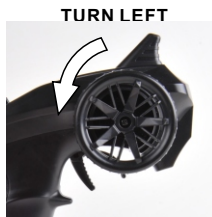
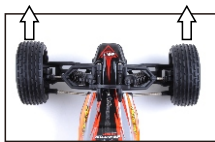
Monster Truck TRUGGY

The receiver switch is located under the roof of the dune buggy. The receiver switch is located on the rear suspension of the monster truck and truggy.

NOTE: To run your car, switch on the radio controller, and then the receiver. To stop your car, switch off the receiver first, and then the radio controller. (Your car is automatically bound with the radio controller when both are switched on.)

### 3 CHECK STEERING PERFORMANCE

- Ensure good steering performance.



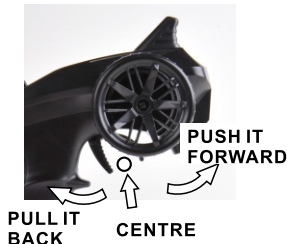
1)Place the steering wheel at Center to enable the vehicle to run straightly in line.

(NOTE: Flipping to trim the steering wheel is occasionally needed. It largely depends on the conditions of the terrains on which the vehicle runs.

2)Turn the steering wheel to the left, and the car turns left.

3)Turn the steering wheel to the right, and the car turns right.

### 4 CHECK TRIGGER RESPONSE



A. Pull the trigger back to accelerate, release it to decelerate and push it to brake.



B. To stop running your car, release the trigger to Centre.



C. Pushing the trigger a second time activates the reverse feature.

## RUNNING YOUR CAR

### 5 TO TUNE THE STEERING TRIM



STEERING TRIM



The trigger is unmoved and the vehicle is static. Tune the steering trim to enable the front wheels to be aligned. Under this case, the steering Center Point is set. You can tune this switch to obtain your desired Left/Right steering angles.

### 6 TO TUNE THE THROTTLE TRIM



THROTTLE TRIM



Place the vehicle with four wheels off ground. Trim the switch and you will see the wheels run either forwards or backwards. When the wheels are trimmed to stop, this point is throttle Center Point.

### 7 TO REVERSE THE STEERING MODE

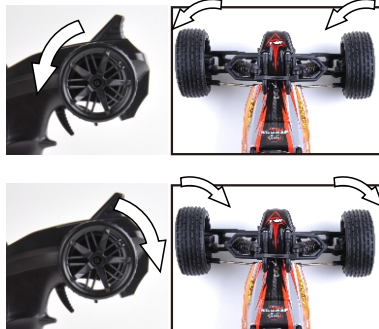
It enables you to switch the direction of the steering servo's travel.

One way is Normal position, and the other is Reverse position. Please refer to the photos below:

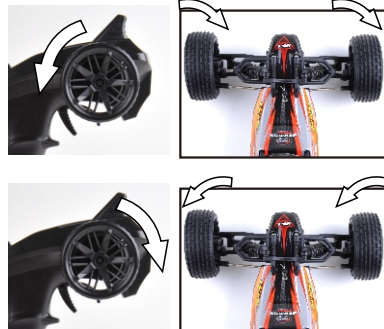


STEERING REVERSE SWITCH

Normal Position



Reverse Position

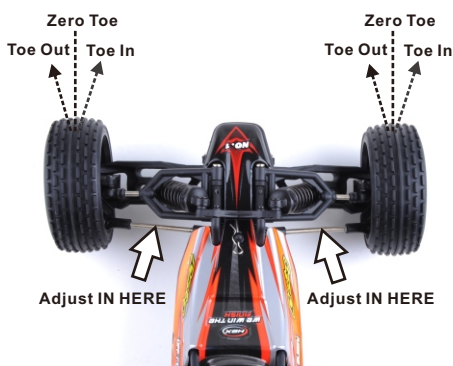


## ADJUSTING TOE ANGLE AND CAMBER ANGLE

Your model can be customized to enhance speed and performance. Simple adjustment and easily maintained setting will assure optimum operation and performance. When making adjustments, do so only in small increments and always check for other parts of the vehicle that are affected. Many after market options are available to make your R/C vehicle faster and stronger. Please read the section carefully and it always make sure you write down your base settings in case you need to refer to them at a later date.

### Front Steering Toe Angle Adjustment

The front steering toe angle has a dramatic on how your car performs and how your tires wear. You can have toe-in, zero toe or toe-out. This can be adjusted by tuning the length of the steering linkage screwbolts as shown in the figure below. Before tuning , the steering linkage screwbolts should be removed from the vehicle. Measure the desired length by unscrewing or screwing in. After adjustment is complete, re-install them to the car.



Toe-in will be less reactive and cause the vehicle to under steer(the front wheels push straight on while turning).

This can be advantageous for operators struggling to get to grips with the driving of the vehicle.

Toe-out will be more aggressive on the steering response especially on small steering inputs. This will make the car want to over steer(rear wheels slide on small steering inputs). This is useful as a race tuning aid to gain extra steering.

Zero toe will make the front wheels run straight and make the car very neutral. Tire wear will also be reduced and the vehicle will feel easier to drive.

### Camber Adjustment

Camber can be adjusted on all 4 wheels of the car. You can have negative camber or positive camber which will affect the contact patch of the tire both statically and while cornering. Camber is mainly used to control the wear of the tire.

You should adjust the camber to equal the wear all across the surface of the tire.

Camber is adjusted by the upper linkage screwbolts.

Note: Before tuning, the screwbolts should be removed from the vehicle.

Measure the desired length by unscrewing or screwing in. After adjustment is complete, re-install them to the car.



This is an example of positive camber. This is when the bottom of the wheel is closer to the centre of the car compared to the top of the wheel.

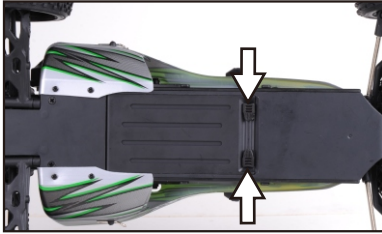
Positive camber will give less contact area in the corner and less grip. Excessive amounts will cause less grip and uneven wear.

This is an example of negative camber.

This is when the top of the wheel is closer to the centre of the car compared to the bottom of the wheel.

Negative camber will give more contact area in the corner and more grip. Excessive amounts will cause less grip and uneven wear.

## CHARGING BATTERY PACK



The battery cover is located on the bottom of the chassis.

- 1) Pinch the battery cover blocks as shown to open the battery cover.
- 2) Remove the battery pack.



- 3) Connect your battery to the charger with the help of the balancer. (as shown in the picture above.)

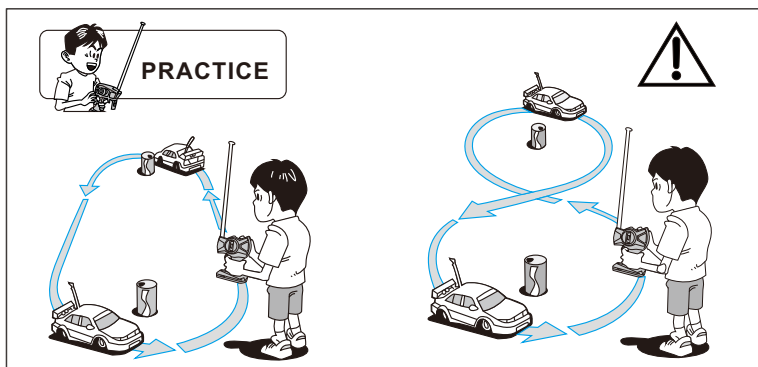
During Charging: both Red and Green LED is solid on.  
Charging is complete: Red LED goes off and Green LED remain solid on.

The charging time is around 2.5-3 hours.

### NOTE:

- Disconnect the battery when charging is finished.
- Do not charge the battery unattended.
- Do not handle charging operation close to any source of heat and water.

## RUNNING PRACTICE



Once you become conformable driving the vehicle, perform driving practice on the tracks as shown in the figure. Keep practising 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 in a more controlled fashion.

## MAINTAINING YOUR CAR

We warmly recommend that you check the car after each times' running. Please follow the list below to check the items.

- Check 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 the electronic units for no obvious sign of damage.
- Keep the chassis clean and free of sand, dust and moisture.
- 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 when not in use.

## TROUBLESHOOTING

A. The vehicle does not work at all.

1. Check to see if transmitter and car are on.

2. Replace batteries.

3. Check if there are damaged parts.

B. The vehicle runs slow.

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.

3. Clean all bushings or ball bearings.

4. Check for stripped or dirty gears.

C. The throttle works, but not the steering.

1. Check if the servo feels jammed, try centering it by hand.

2. Check the whole steering system.

D. It steers, but throttle is uncontrollable.

1. Check if there are damaged parts.

2. Replace or charge the battery pack and/or the radio batteries.





















E. The vehicle runs noisily.

1. Check gear mesh between spur gear and pinion.








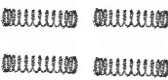








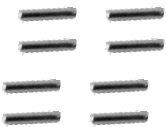

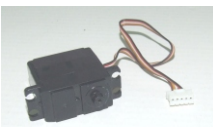
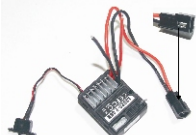
2. Check for stripped and/or dirty gears.

3. Clean and oil bushings or ball bearings.

## REPLACEMENT PART LIST-1

12001P	12002P	12003	12004
 <p>Bottom Chassis</p>	 <p>Servo Cover + Motor Guard + Chassis Side Plates A</p>	 <p>Front Upper Arms+Rear Upper Arms+Drive Shafts+ Steering Linkage set +Servo Linkage Set</p>	 <p>Front Lower Arms+Rear Lower Arms</p>
12005P	12006	12007	12008
 <p>Gear Case+ Suspension Mount</p>	 <p>Chassis Side Plates B+ Shock Towers</p>	 <p>Front Shock Set</p>	 <p>Rear Shock Set</p>
12009P	16027N	16028	12010
 <p>Steering Assembly+Servo Saver Assembly+ Battery Door Block/Lock</p>	 <p>Steering Hubs ( L/R) Rear Hub Carriers(L/R)</p>	 <p>Front Hub Carriers(L/R)</p>	 <p>Wheel Hex. (8P)</p>
12011P	12012	12013	12014
 <p>Slipper Clutch Gear + Diff. Gears Assembly</p>	 <p>Battery Door+ Motor/Gear Cover</p>	<p>FOR DUNE BUGGY/ TRUGGY ONLY</p>  <p>Body Posts (Dune Buggy only)+ Off Road Wing</p>	<p>FOR DUNE BUGGY ONLY</p>  <p>Braces Assembly+ Light Mounts(Dune Buggy only)</p>
12015	12016	12202P	12516P
<p>FOR DUNE BUGGY ONLY</p>  <p>Roll Rage (Dune Buggy Only)</p>	 <p>Shock Tower Braces</p>	 <p>Front Axles 2P</p>	 <p>Rear Axles 2P</p>

## REPLACEMENT PART LIST-2

12019P	12020	12021	12022
 <p>Diff. Pinion Gears</p>	 <p>Front Lower Suspension Hinge Pins 3.3*37mm (4P)</p>	 <p>Front Upper Suspension Hinge Pins 3.3*30mm (4P)</p>	 <p>Rear Upper Suspension Hinge Pins 2.5*38mm (4P)</p>
12023	12024	16003	12025
 <p>Rear Lower Suspension Hinge Pins 2.5*37.6mm (4P)</p>	 <p>Battery Door Hinge Pins 2.5*56mm (2P)</p>	 <p>Front/rear Hub Carrier Pins(4P)</p>	 <p>Battery Door Springs (4P)</p>
12026	H013	12028	12029
<p><b>FOR DUNE BUGGY/ Short-Course Truck</b></p>  <p>Motor Pinion Gears 13T + Set Screws 3*3mm(2P)</p>	 <p>Ball Stud. <math>\phi</math> 4.8 (8P)</p>	 <p>Gear Posts (4P)</p>	 <p>Washers <math>\phi</math> 2.5*5.5*0.5mm (12P)</p>
79513	59300	H003	H021
 <p>Ball Bearing 7.95x13x3.5mm(8P)</p>	 <p>Ball Bearing 5x9x3mm(8P)</p>	 <p>Flange Lock Nut M4</p>	 <p>Body Clip A/B- Small</p>
H022	P011	12030	12031N
 <p>Wheel Hex. Pins (2*10mm) 8P</p>	 <p>Zip Ties - Small ( 8P)</p>	 <p>5-wire Steering Servo</p>	 <p>ESC/Receiver Unit</p>























## REPLACEMENT PART LIST-3

12032N	12033N	12043	12206X
 <p>Battery Pack ( 7.4V, 850mAH)</p>	 <p>RC 390 motor</p>	 <p>Flange Lock Nut M3 ( 6P)</p>	 <p>Rear Diff. Outdrive Cups</p>
12036	12039	12056	12059
<p>FOR DUNE BUGGY ONLY</p>  <p>Front Wheels Complete (Dune Buggy) 2P</p>	<p>FOR DUNE BUGGY ONLY</p>  <p>Rear Wheels Complete (Dune Buggy) 2P</p>	<p>FOR TRUGGY ONLY</p>  <p>Truggy Wheels Complete(Fr./Rr.)</p>	<p>FOR MONSTER TRUCK ONLY</p>  <p>Truck Wheels Complete(Fr./Rr.)</p>
12050	12051	12052	12053
<p>FOR TRUGGY ONLY</p>  <p>Wing Stay + Brace</p>	<p>FOR TRUGGY ONLY</p>  <p>Side Plate Braces</p>	<p>FOR MONSTER TRUCK ONLY</p>  <p>Front Body Post+Rear Body Posts</p>	<p>FOR MONSTER TRUCK ONLY</p>  <p>Bumpers Assembly</p>
12044	12060	12040	12041
<p>FOR DUNE BUGGY</p>  <p>Switch Mount</p>	<p>FOR MONSTER TRUCK /TRUGGY</p>  <p>Motor Pinion Gears 12T + Set Screws 3*3mm(2P)</p>	<p>FOR DUNE BUGGY ONLY</p>  <p>Dune Buggy Body ( Red )</p>	<p>FOR DUNE BUGGY ONLY</p>  <p>Dune Buggy Body ( Green )</p>
S011	S016	S018	S020
 <p>Countersunk Self Tapping Screw 2*15mm (12P)</p>	 <p>Set Screw 3*3mm (12P)</p>	 <p>Round Head Self Tapping Screw 2.6*8mm(12P)</p>	 <p>Countersunk Self Tapping Screw 2.6*8mm (12P)</p>



## REPLACEMENT PART LIST-4

<b>S029</b>	<b>S038</b>	<b>S061</b>	<b>S062</b>
 <p>Round Head Self Tapping Screw 2.6*10mm(12P)</p>	 <p>Countersunk Self Tapping Screw 2*9mm (12P)</p>	 <p>Countersunk Self Tapping Screw 2.6*6mm (12P)</p>	 <p>Countersunk Screw 3*10mm (12P)</p>
<b>S071</b>	<b>S089</b>	<b>S093</b>	<b>S100</b>
 <p>Round Head Self Tapping Screw 3*6mm(12P)</p>	 <p>Round Head Self Tapping Screw 2.6*6mm(12P)</p>	 <p>Round Head Self Tapping Screw 2*6mm(12P)</p>	 <p>Round Head Screw 2.5*8mm(12P)</p>
<b>S138</b>	<b>S152</b>	<b>S160</b>	<b>S161</b>
 <p>Countersunk Self Tapping Screw 2.6*10mm (12P)</p>	 <p>Step Screws 3.5*4.5-3*4.6mm(12P)</p>	 <p>Flange Head Self Tapping Screws 2.6*8mm (12P)</p>	 <p>Round Head Self Tapping Screws 2.6*12mm (12P)</p>
<b>S162</b>	<b>S163</b>	<b>S164</b>	<b>S165</b>
 <p>Countersunk Self Tapping Screw 2.6*18mm (12P)</p>	 <p>Round Head Self Tapping Screws 2.6*18mm (12P)</p>	 <p>Flange Head Self Tapping Screws 2*6mm (12P)</p>	 <p>Cap Head Screws 2*6mm (12P)</p>
<b>S166</b>	<b>S167</b>	<b>P100</b>	<b>16014</b>
 <p>Round Head Self Tapping Screws 2.3*16mm (12P)</p>	 <p>Flange Head Self Tapping Screws 2.3*8mm (12P)</p>	 <p>Body Post Pads (12P)</p>	 <p>Steering Hub Step Screws(8P)</p>

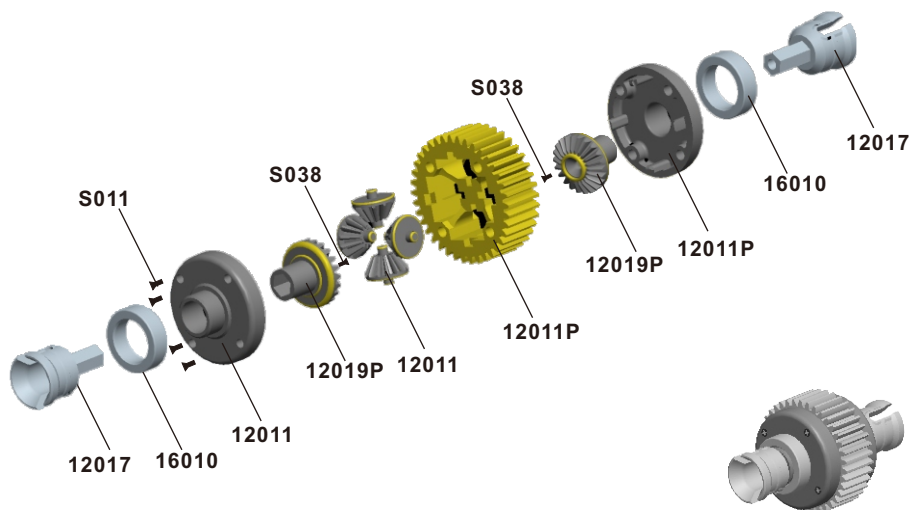
## REPLACEMENT PART LIST-5

12900	12901	12902	12903
Charger (UL STANDARD)	Charger (EU STANDARD)	Charger (UK STANDARD)	Charger (SAA AUSTRALIA STANDARD)
12904	12061	12062	12063
Charger Balancer	Short-Course Bumpers	Short-Course Body Posts	Short-Course Tires
12064	12065	12090	12091
Short-Course Wheel Rims	Short-Course Wheels Complete	Short Course Truck Body (Red)	Short Course Truck Body (Green)
12070	12071	12080	12081
FOR TRUGGY ONLY	FOR TRUGGY ONLY	FOR MONSTER TRUCK ONLY	FOR MONSTER TRUCK ONLY
Truggy Body ( Red)	Truggy Body ( Green)	Truck Body ( Red)	Truck Body ( Green)
12228XP			
Slipper Pads/Load Spring			

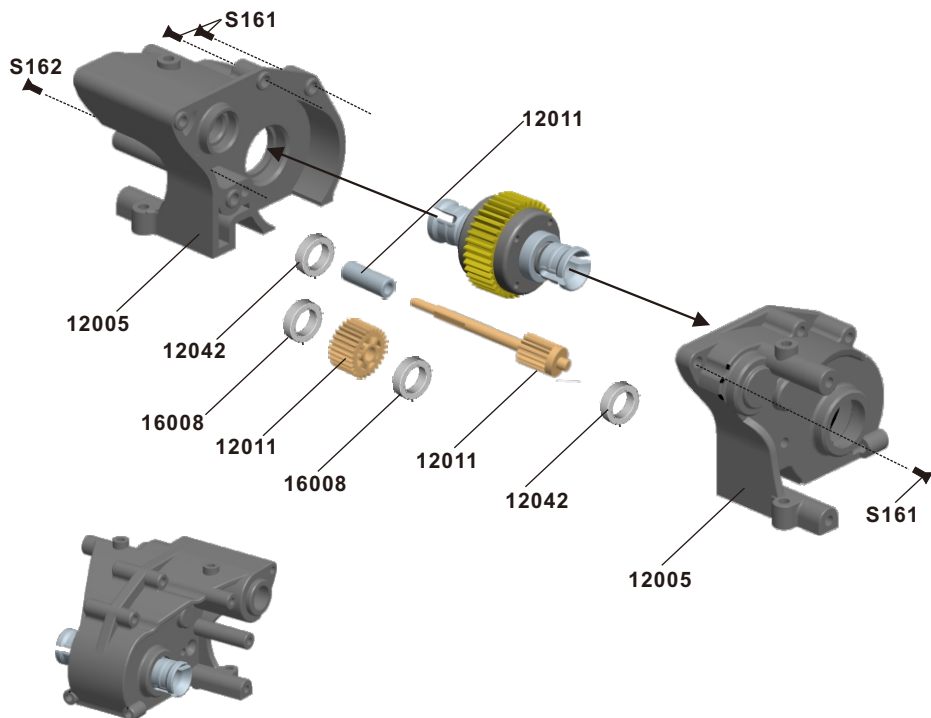
## OPTIONAL PART LIST

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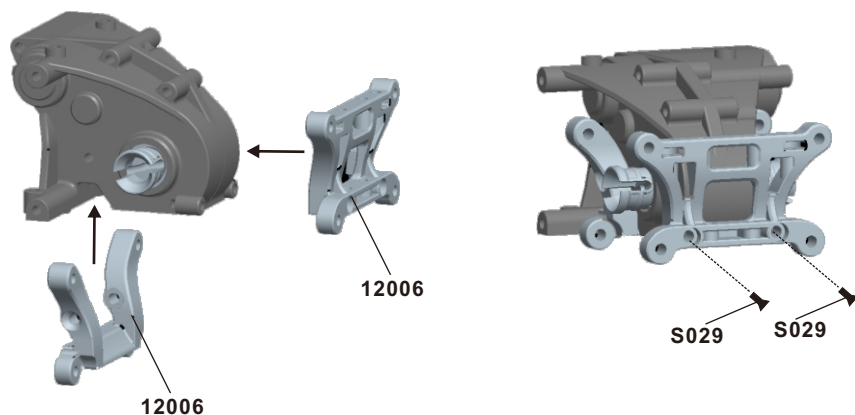
## REAR DIFF. ASSEMBLY-1



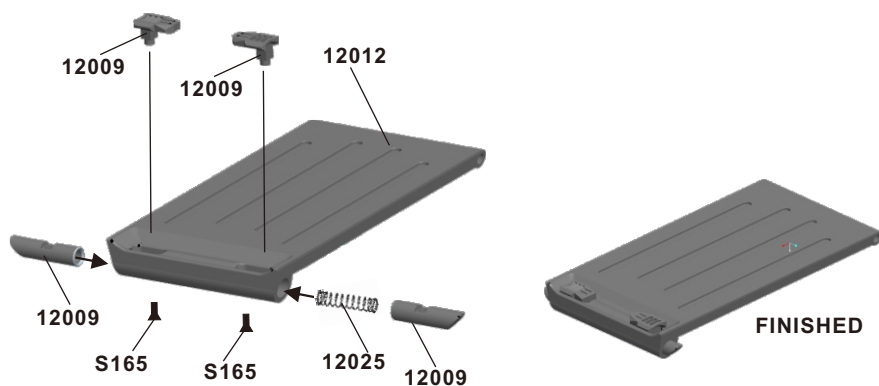
## REAR DIFF. ASSEMBLY-2



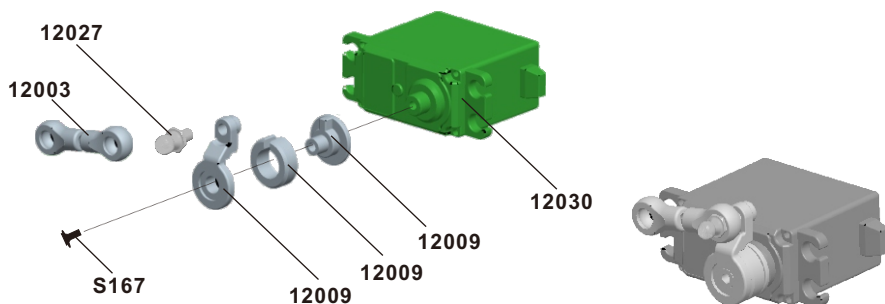
## REAR DIFF. ASSEMBLY-3



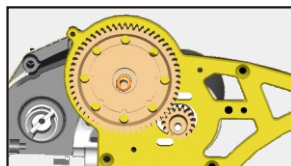
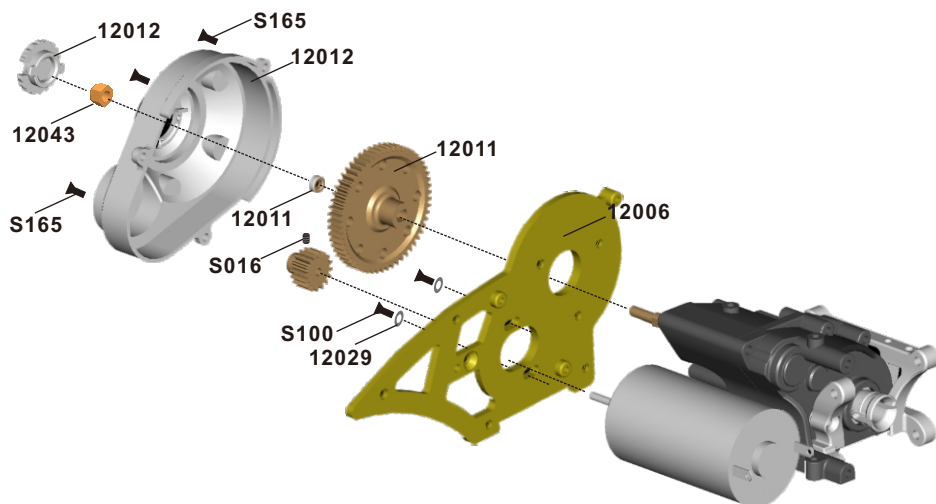
## BATTERY COVER ASSEMBLY



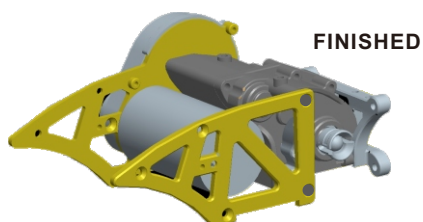
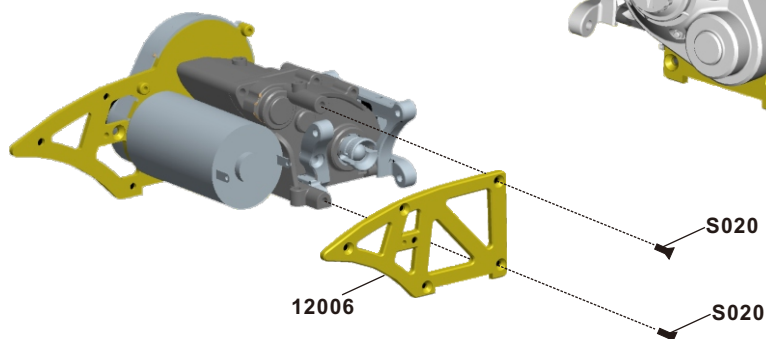
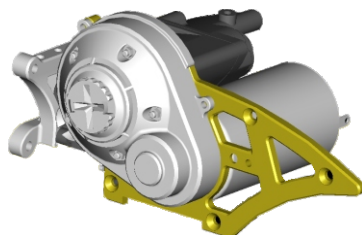
## SERVO ASSEMBLY



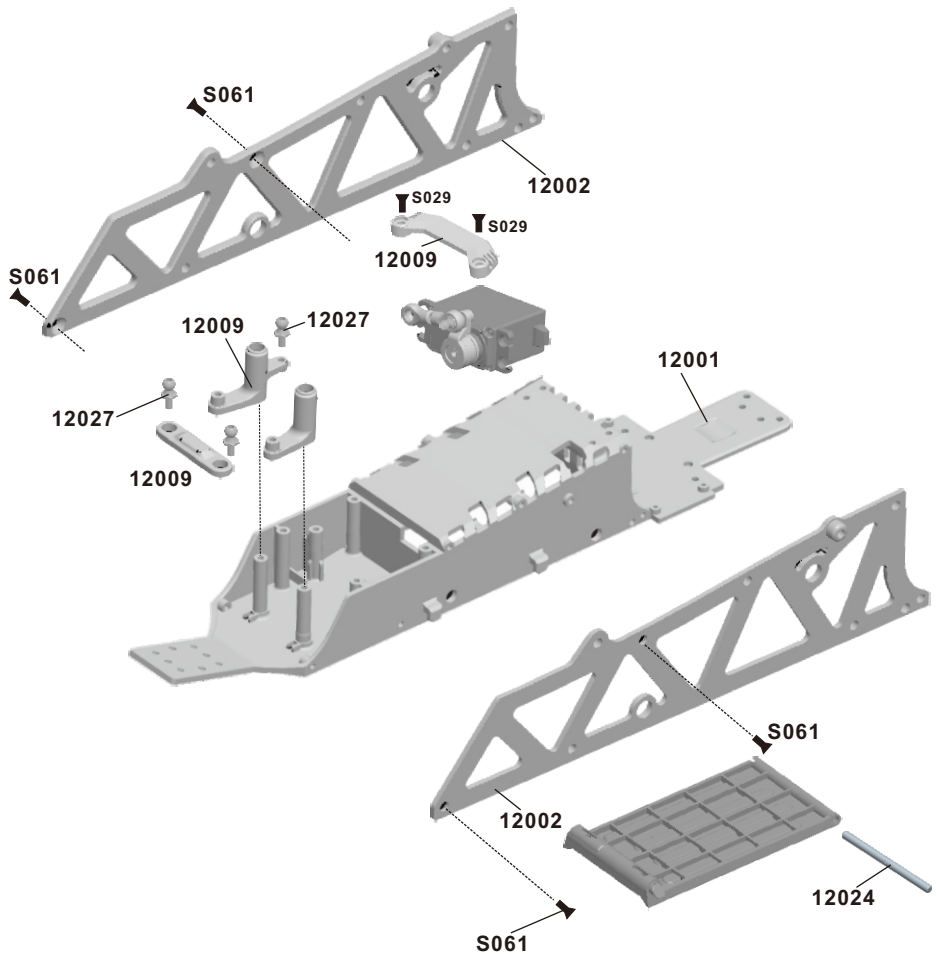
## MOTOR/SPUR GEAR INSTALLATION



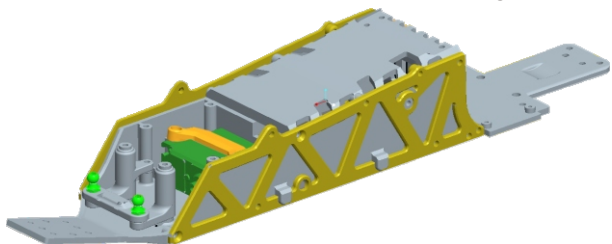
Make sure the gear mesh is set properly. Double-check the motor pinion screw and the spur gear nut are tightened firmly.



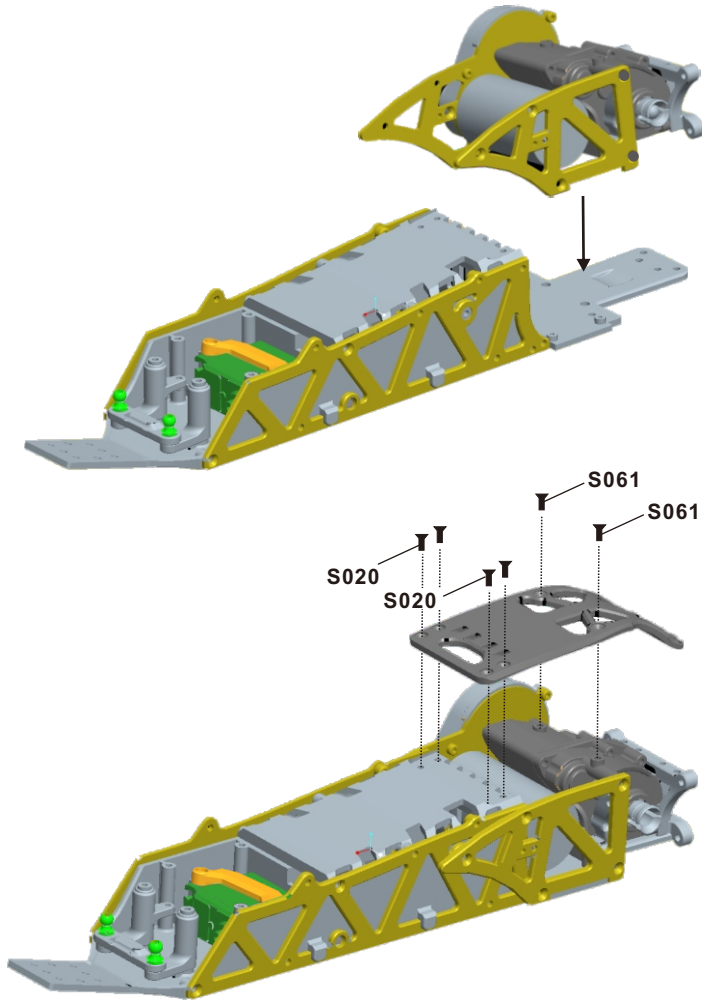
## MAIN UNIT ASSEMBLY-1



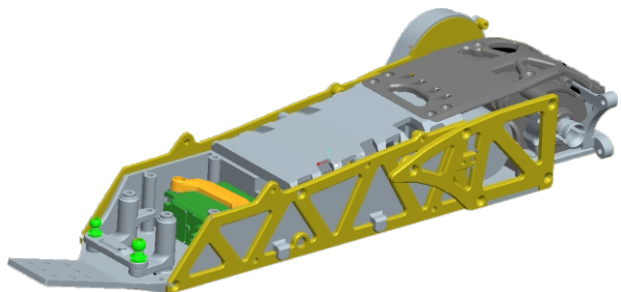
**FINISHED**



## MAIN UNIT ASSEMBLY-2



**FINISHED**













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

Thank you for purchasing our product.

This product is an authentic remote controlled vehicle (RC vehicle). It is not a toy.

Read and understand this instruction manual thoroughly before operating the vehicle.

If you are not familiar with RC vehicles, we recommend that seek out RC experts for reliable advice.



## WARNINGS

- This R/C vehicle is intended for persons over 14 years of age. Children under 14 years of age should only operate this car under supervision by an adult.
- To avoid losing control of your car, do not operate near other electric remote controlled products.
- Please operate your vehicle in a spacious area. Never operate your vehicle in crowded street.
- This product is fully assembled at factory. We do not take any responsibility for damage and/or accidents that occur as the result of custom modifications and/or incorrect operation.