# INSTRUCTION MANUAL

# 1/8 Scale 4WD Electric Buggy RTR



NO.RH816 BLAST BX Congratulations on your purchase of the VRX Racing 4WD electric cars.

This 1/8th scale model has been factory assembled and all electrics installed and set up to make it the easiest possible. introduction to the sport of driving RC cars.

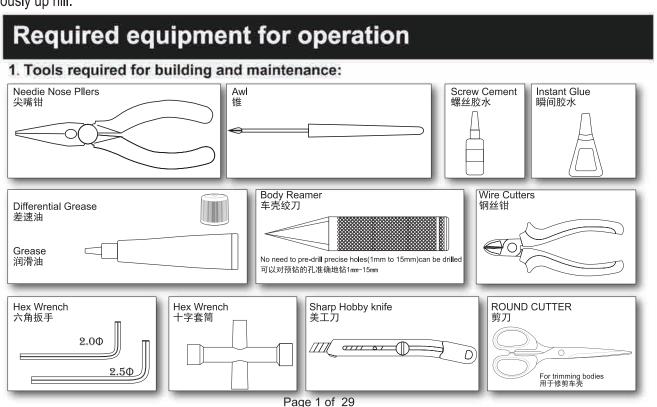
WARNNING: Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and serious injury. This is not a toy and must be operated with caution and common sense. Failure to operate this product in a safe and responsible manner could result in damage, injury or damage to other property. This product is not intended for use by children without direct adult supervision. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, set-up or use, in order to operate correctly and avoid damage and serious injury

#### Safety Precautions and Warnings

You are responsible for operating this model such that it does not endanger yourself and others, or result in damage to the product or the property of others. This model is controlled by a radio which is possibly subject to interference which can cause momentary loss of control so it is advisable to always keep a safe distance to avoid collisions and injury. Age Recommendation: 14 years or over. This is not a toy. This product is not intended for use by children without direct adult supervision.

Carefully follow these directions and warnings, plus those any additional equipment associated with the use of this model, chargers, ESC and motors, radio etc.

- Never operate your model with low transmitter batteries.
- Always operate your model in an open area away from cars, traffic or people.
- Never operate the model in the street or in populated areas.
- Always keep the vehicles in direct line of sight, you cannot control what you cannot see!
- Keep all chemicals, small parts and anything electrical out of the reach of the children.
- Avoid water exposure, moisture causes damage to electronics and may result in the loss of control or permanent damage.
- Avoid injury from high speed rotating parts, gears and axles etc.
- Novices should seek advice from more experienced people to operate the model correctly and meets its performance potential.
- Exercise caution when using tools and sharp instruments.
- Do not put fingers or any objects inside rotating or moving parts.
- Take care when carrying out repairs or maintenance as some parts may be sharp.
- Do NOT touch equipment such as motor electronic speed control and battery, immediately after using your model because they can generate high temperatures.
- Always turn on your transmitter before you turn on the receiver in the car Always turn off the receicer before turming your transmitter off.
- Keep the wheels of the model off the ground, keep your hands away from the wheels when checking the operation of the radio equipment.
- Prolong motor life by preventing overheat conditions. Undue motor wear can result from frequent turns, rapid change of direction forwards/backwards, continuous stop/starts, pushing/pulling objects, driving in deep sand and tall grass, or driving continuously up hill.



#### WARNING!

Do not use a power screw driver to install screws into nylon or plastic materials. The fast locking may heat up the screws being installed that may break the molded parts or strip the threads during installation.

2.Additional items needed for operation:





8 pcs AA Alkaline batteries for transmitter

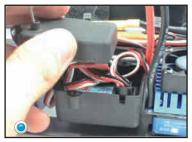
#### IMPORTANT!

Check that all screws and nuts are tight before each use.

## **Aerial Assembly**

As the aerial wire on 2.4GHz system is so short you do not need to protrude through the body shell and it can be left to stand directly from the receiver. If you want the security of an aerial tube away simply cut it short, and insert in the usual way but do NOT bend over the last 5mm of aerial wire to retain it under the rubber cap, last two inches of aerialwire need to be straight with no kinks for maximum range and control with 2.4GHz system.

First be sure to insert the wire up through the receiver cover hole as below. Push the wire all the way through the aerial tube until the first 5mm of wire shows out of the other end. Finally make aerial tube firmly seated.









## **Charging/Installing the Battery**

Always store your model with the battery pack unplugged and removed. Always charge your battery away from the vehicle.

#### WARNING! NEVER LEAVE THE BATTERY UNATTENDED WHILE ON CHARGE.

The supplied charger can charge either 2s or 3s (cell number) Lipo batteries. The supplied battery is a 3s ensure you plug it into the correct 3s balance port.

When the charger is connected to the mains powers the power LED will turn green. Once your connect your balance connector to the charge the status LED will turn red indicating that charging is in progress. Once the battery is fully charged the status LED will turn green. If you experience the LED blinking red then there is an error with either the battery or charger.

When charging a completely discharged battery, the charger can become hot to touch. NEVER LEAVETHE BATTERY CHARGE UNATTENDED. Always disconnect the charger from the mains supply and the battery pack when not in use.

To install a charged battery, firstly remove the body shell and insert the battery into the battery case, then fasten the two Velcro straps to fix the battery stably. When connecting battery and turning car on, ensure it is off ground with wheels away from objects.





## **Notes on Battery use:**

Always allow the battery cool after use, before recharging.

Always inspect the battery before charging.

Any bare wires, split heat shrink or leakage is a sure sign of abuse.

Never attempt to charge dead or damaged batteries.

Do not disassemble the battery or cut the connector wires.

If the battery connector, battery case or cable insulation get hot enough to melt or split there is most likely a serious problem with your model, battery wires or speed controller. Find and correct the problem before installing another charged battery pack.

NEVER charge the battery unattended incase of overcharging, you need to be able to monitor the battery during charging.

Charge away from flammable objects and on a non-flammable surface incase the battery becomes too hot.

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### **Getting Started**

Refer to 2.4ghz binding manual for radio set-up.

Switch on transmitter

Hold vehicle clear of the ground, connect battery pack and switch on receiver.

Test the transmitter to check control of the vehicle with wheels off the ground.

Start driving slowly and if the vehicle does not go straight ,adjust steering trim dial on Transmitter.

For the very first run use the throttle gently, to help the driver become accustomed to the vehicles behaviour and controls.

Although this vehicle features waterproof electronics they are not designed to be submerged in water.

Potential damage can still occur to vehicles components if you do so.

#### After Run.

Switch off the receiver power, switch off the transmitter. Disconnect the battery and remove it from the vehicle, allow it to cool before recharging. If you have a second charged battery all ready to use, still allow the vehicle to cool slightly before continuing.

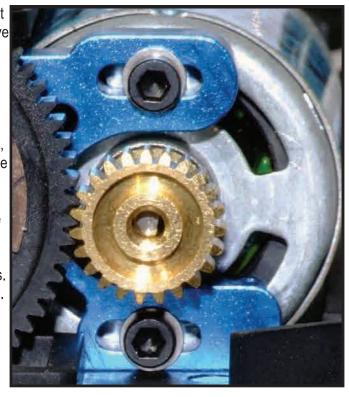
## Regular maintenance.

# Frequently check the whole vehicle for loose or missing fixings. Use thread lock on any replacement screws into metal threads.

Frequently check rotating parts are free from grass, stringetc. that might bind their motion and over stress the motor or speed controller. Remove the wheels occasionally and check behind the mounting hex for obstructions oranything that might have been wrapped around the axleand caused extra drag.

Check the gear mesh frequently and remove any stones or grit from gear teeth to prevent premature wear and damage. If the motor moves, or is removed for maintenance/exchange, the gear mesh will need to be set. Simply slacken the motor retaining screws and adjust the motor until there is just discemable backlash between pinion and spur teeth. If the gear is too tight or too loose the gears will be noisy and could be damaged.

Shock absorbers will wear prematurely if used in dirty dusty conditions. Replace oil and seals as required to keep a smooth dampening action.



## Trouble shooting guide.

Short Runtime:
Battery damaged/not charged.
Motor dirty or brushes worn.
Drivetrain binding.

Sluggish Action: Motor damaged. Bind in drive train. Battery running low on power.

Motor/ESC overheat: Over-geared Binding transmission. Seized axle bearing. Motor binding.

Motor spins but vehicle refuses to move:
Gears damaged.
Gears loose on shaft.
Magnets debonded from motor armature.
Slipper clutch too loose.
Drive shaft broken or missing.

Poor Range or fails to operate:
Transmitter batteries low.
Vehicle Battery Low.
Transmitter switched off.
Transmitter/receiver aerial not extended.
ESC switched off or battery not connected.
Loose connectors/wires.
2.4ghz binding with
-receiver lost

#### LIPO BATTERY-USER SAFETY AND HANDLING INSTRUCTIONS.

Read all safety instructions before charging or using your batteries for the first time.

Lipo batteries require completely different charging and care than Nicd and NIMH batteries. Misuse can result in fire, personal injury and/or damage to property. The buyer assumes all Liability and risk associated with the use of Lithium-Polymer (Li-Po) batteries. Immediately return the battery, unused, if you do not agree with these terms.

## General guidelines and warnings:

- 1.Use a Lithium Polymer specific chargers only!Do not use a NiCd or NiMH charger.
- 2.NEVER charge unattended. Always charge in safety sack or metal tin with lid and away from other flammable materials.
- 3. During the charge process watch for swollen or ballooning cells. If this happens immediately disconnect the charger and move the battery to a fire proof place for 15 minutes. Do not attempt to charge again.
- 4.A short circuit can cause a rapid discharge of high currents. Avoid short circuits, and be aware of short circuits on jewelery.
- 5. Any Lithium Polymer battery involved in a crash should be removed and observed in a fireproof space for 15 minutes before continuing to use or charge the battery.
- 6.If rewiring the battery pack, rewire the leads one at a time .Do not cut both leads.Do not short circuit on tools.
- 7. Do not expose battery packs to direct sunlight for extended periods.
- 8.Do not attempt to tamper with or open the LiPo Hardcase. The case is protection against possible battery swelling.

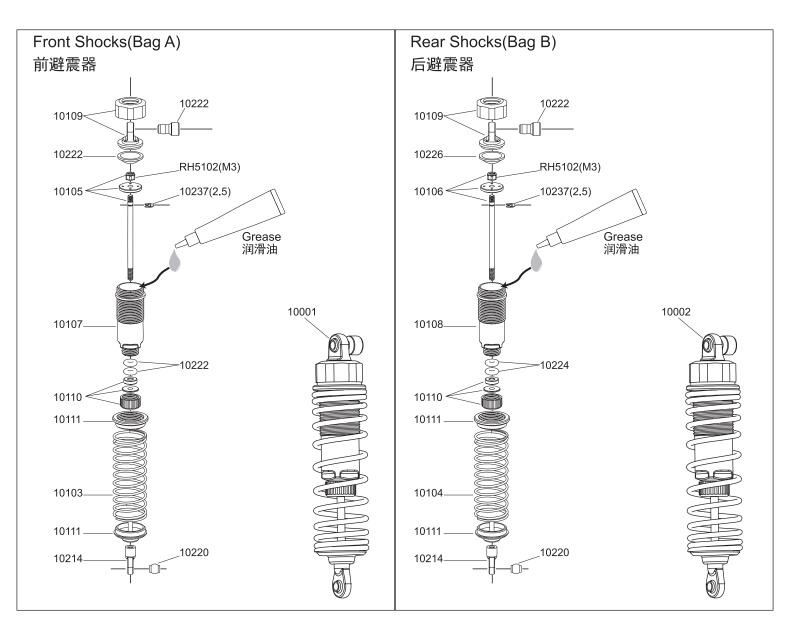
#### Before charging:

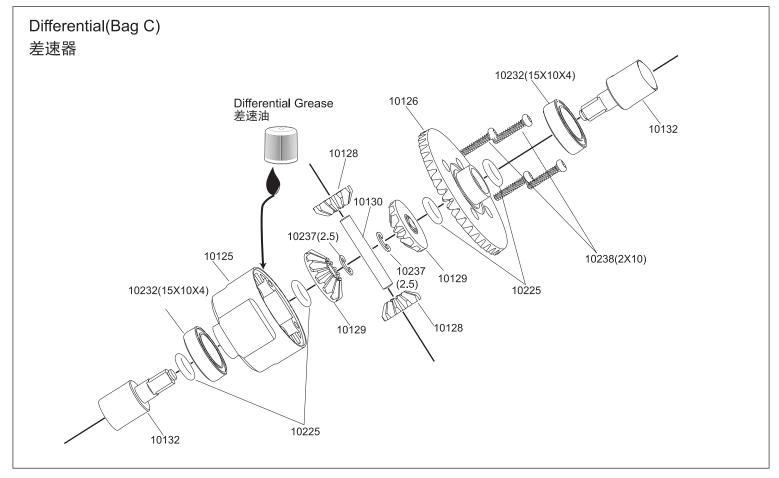
Visually inspect the pack checking for damaged leads, connectors, cracked heat shrink covering, swelling or other abnormalities. Do not charge if the pack is damaged.

### **Charging process:**

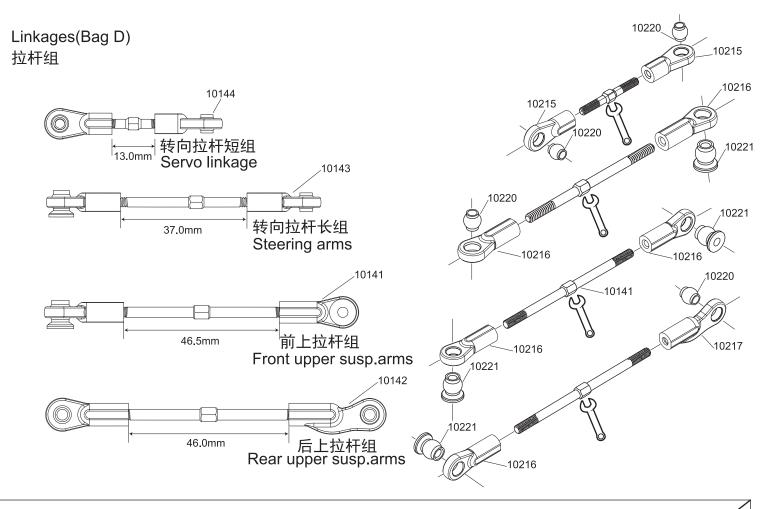
- 1.NEVER charge unattended.
- 2. Charge away from flammable materials and inside a Lipo safe sack or metal tin with lid.
- 3. Allow battery to cool before charging.
- 4. Use the battery label for setting charger cell count and voltage.
- 5.Do not exceed 5C MAX charge rate (Example, charge a 1000mAH pack at 5A MAX)
- If disposing of a Lipo battery proceed as follows:

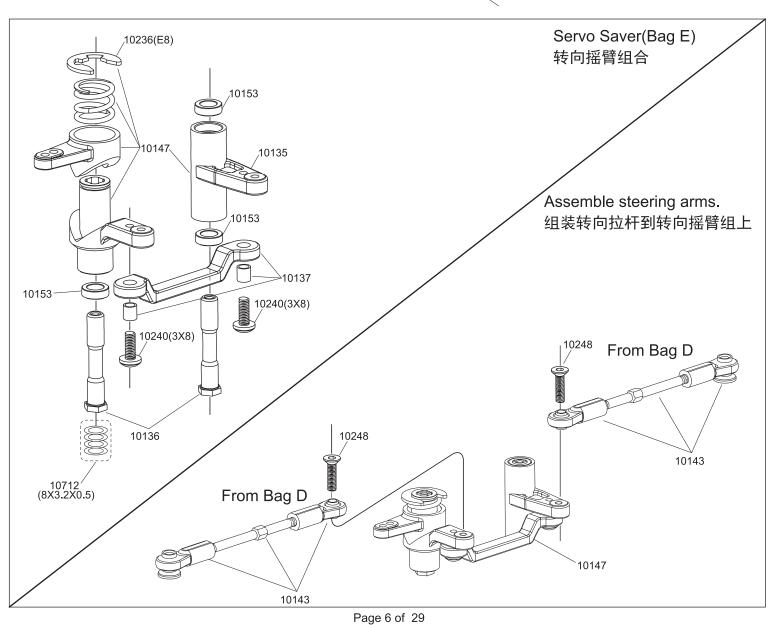
Submerse the battery into a container filled with about 10 litres of salt water(one cup of salt in 10L). Leave the battery submerged for 2 weeks, this will slowly and safely discharge the battery until the voltage has dropped to zero volts which eliminates the risk of any chemical reaction. It can then be disposed off in the general waste collection.

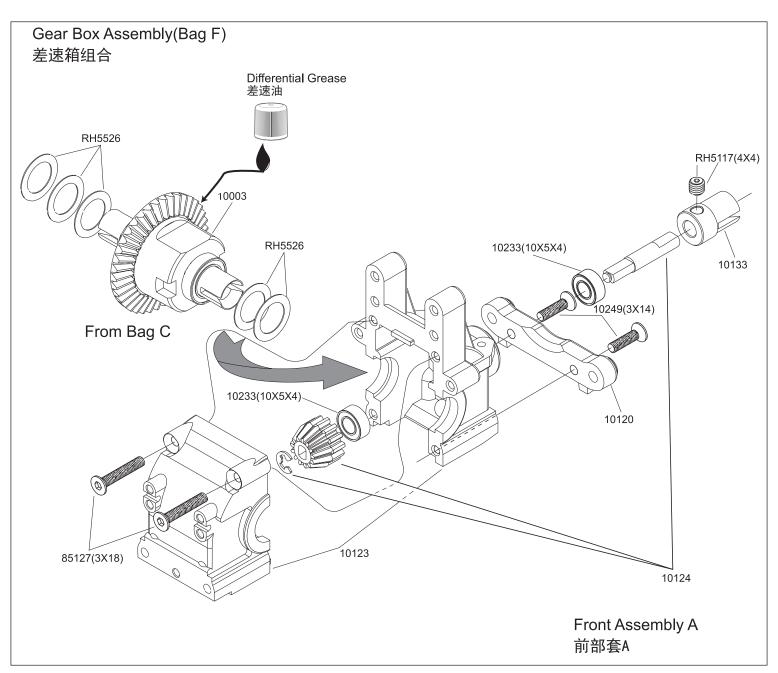


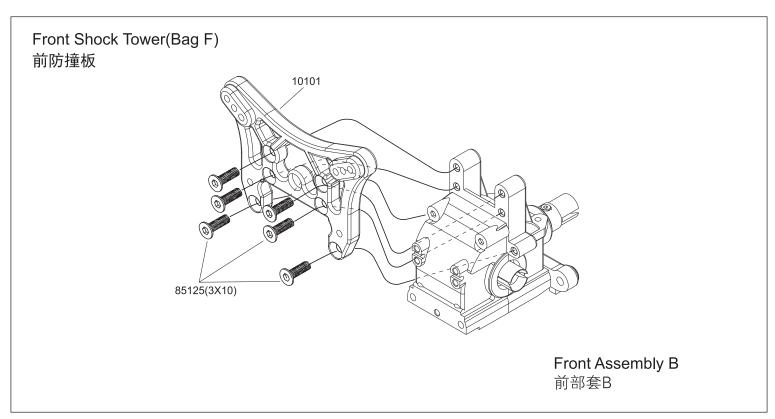


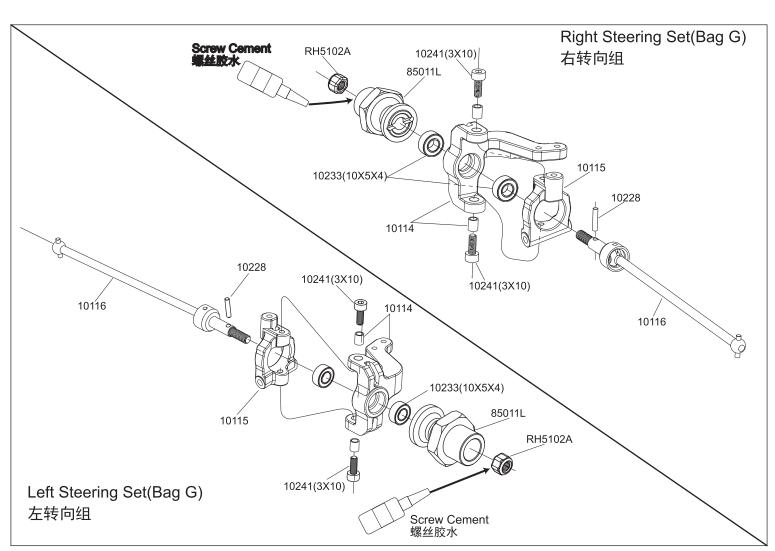
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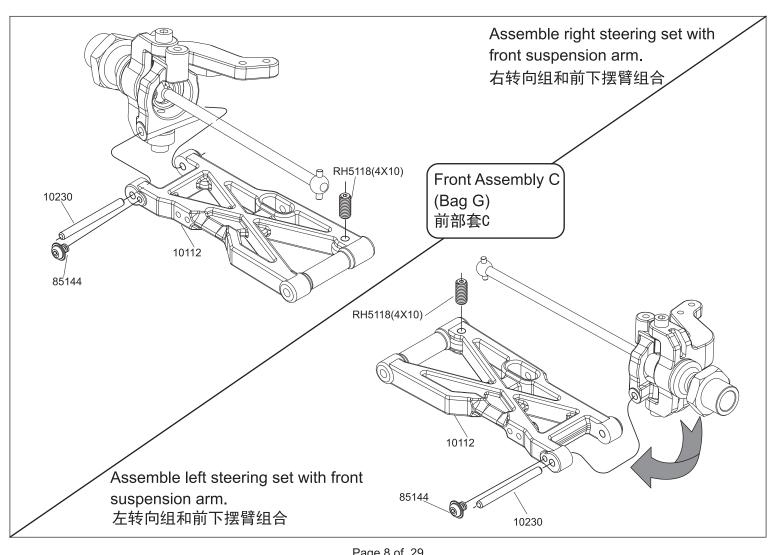




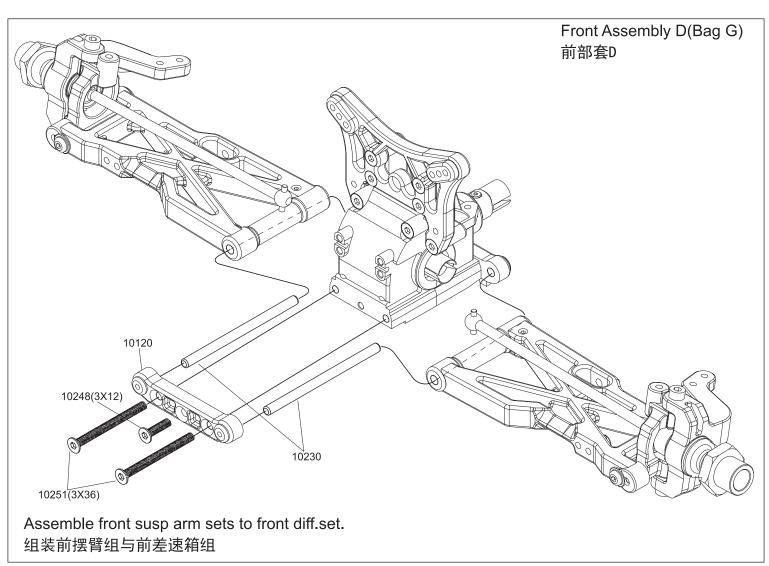


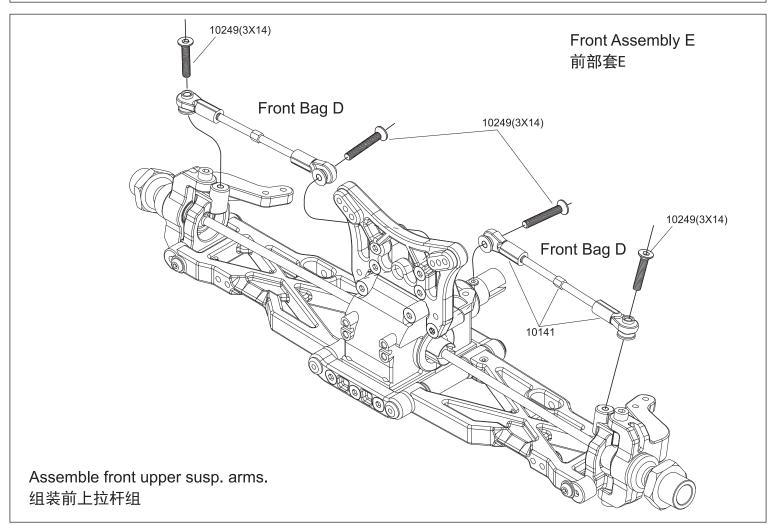


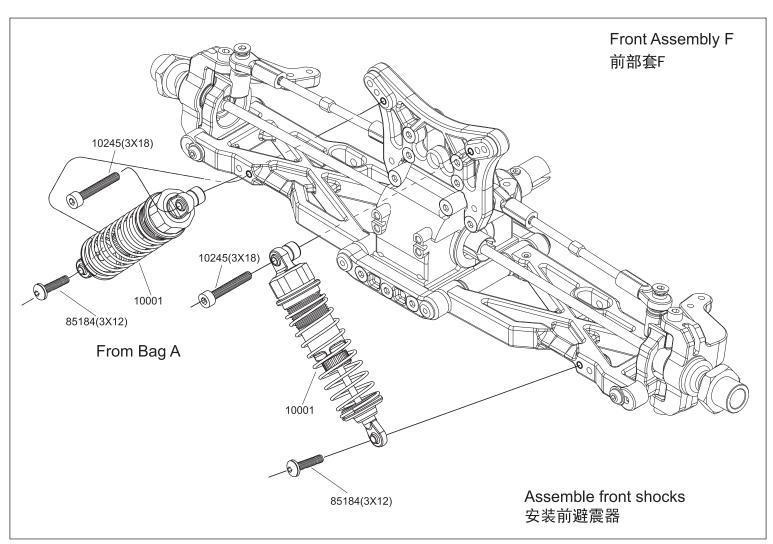


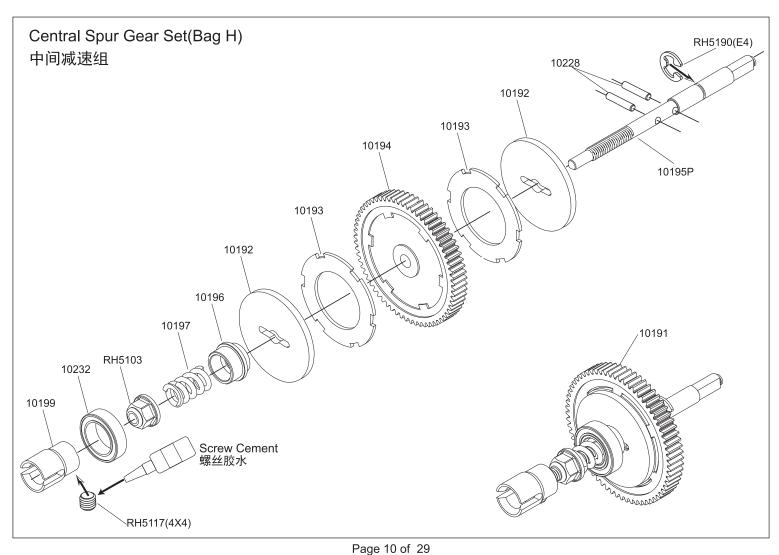


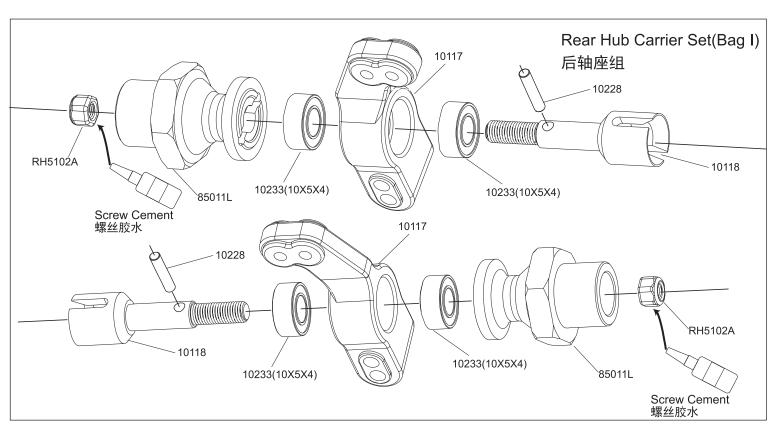
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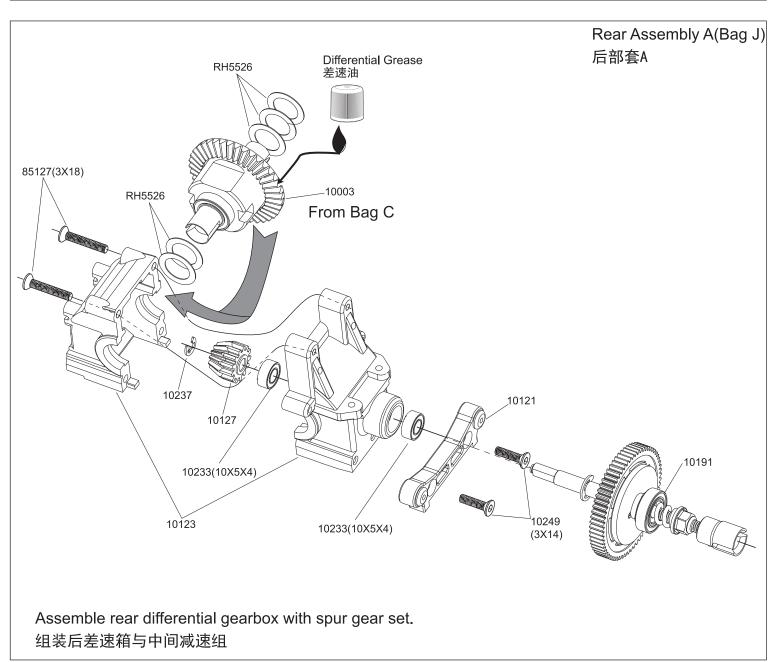


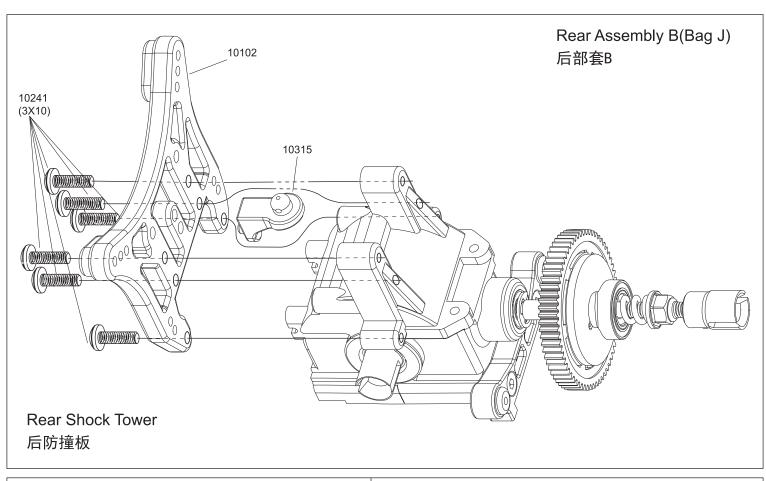


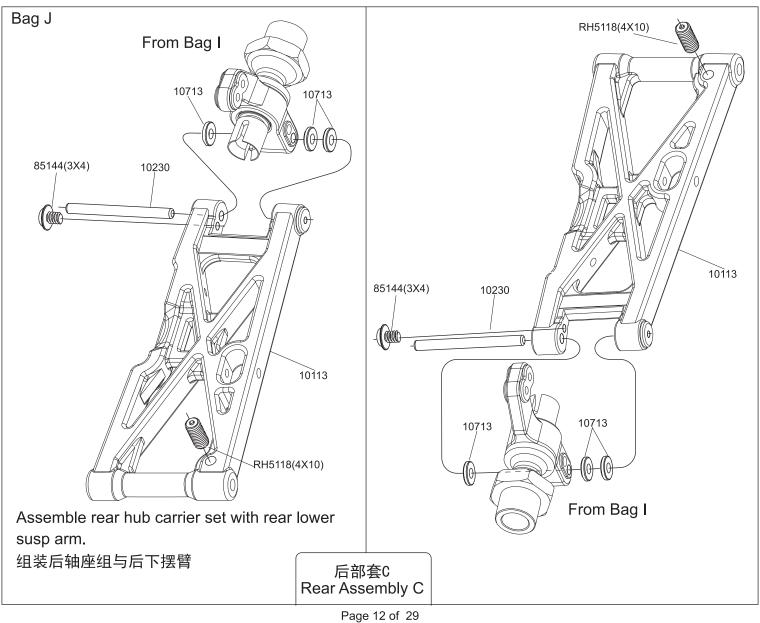


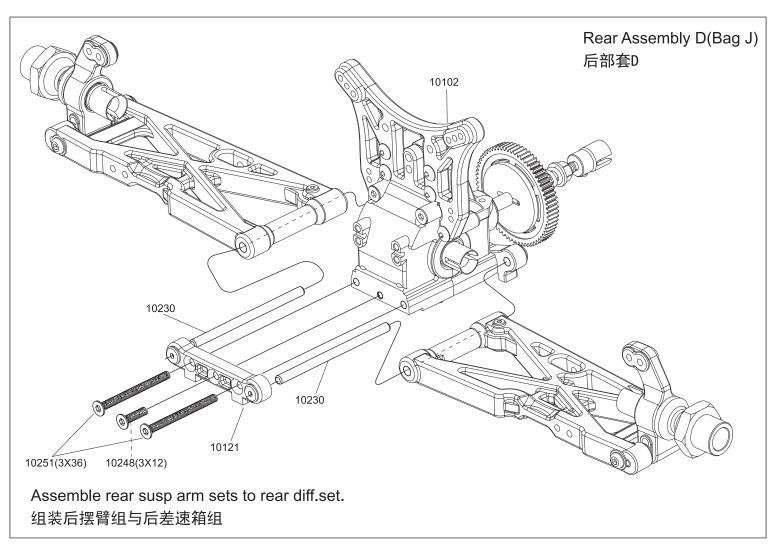


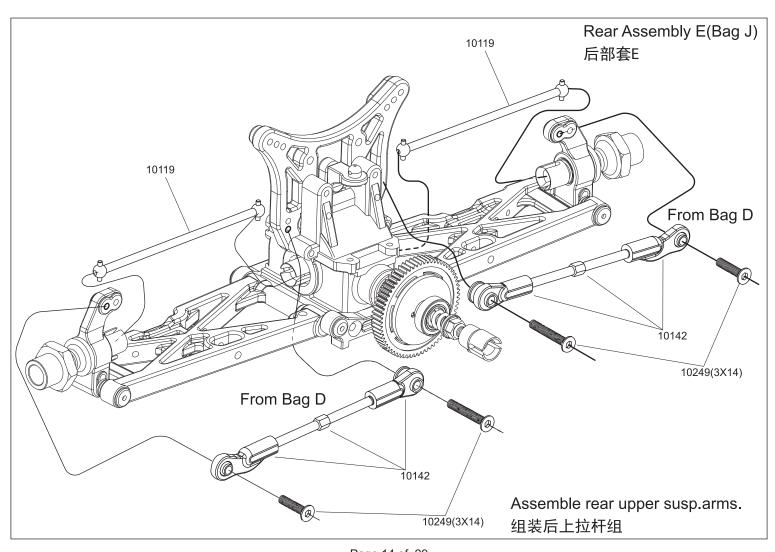




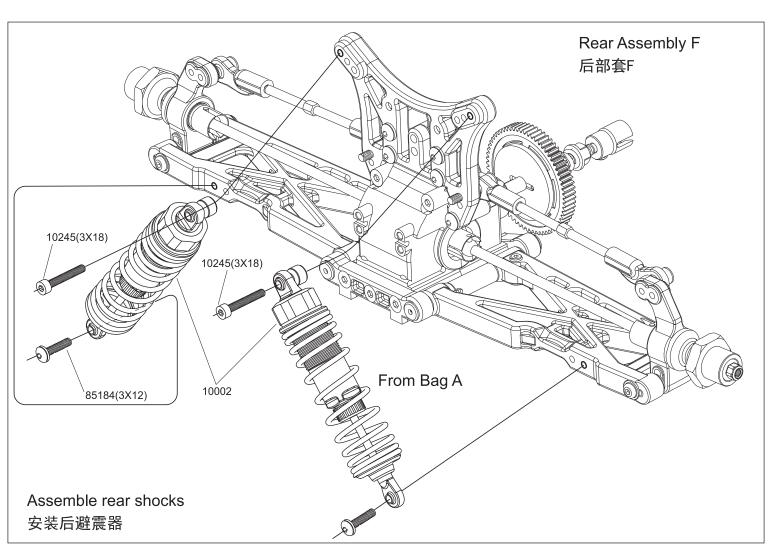


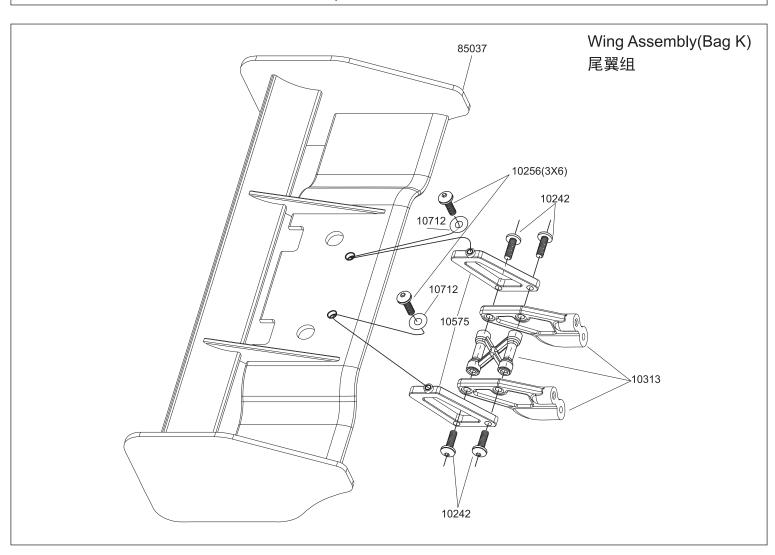




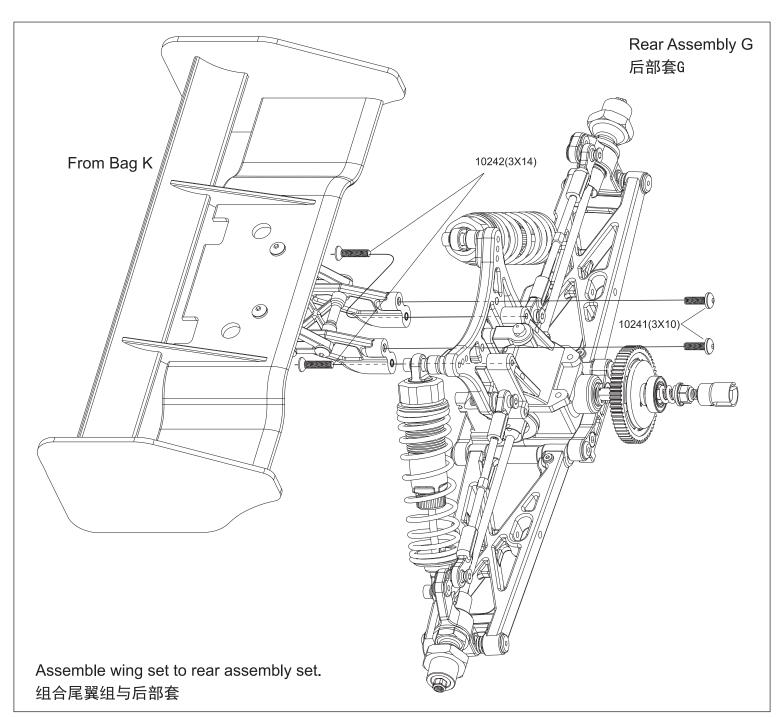


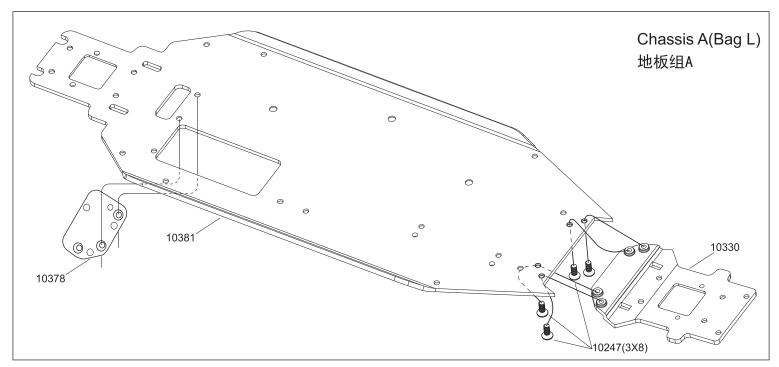
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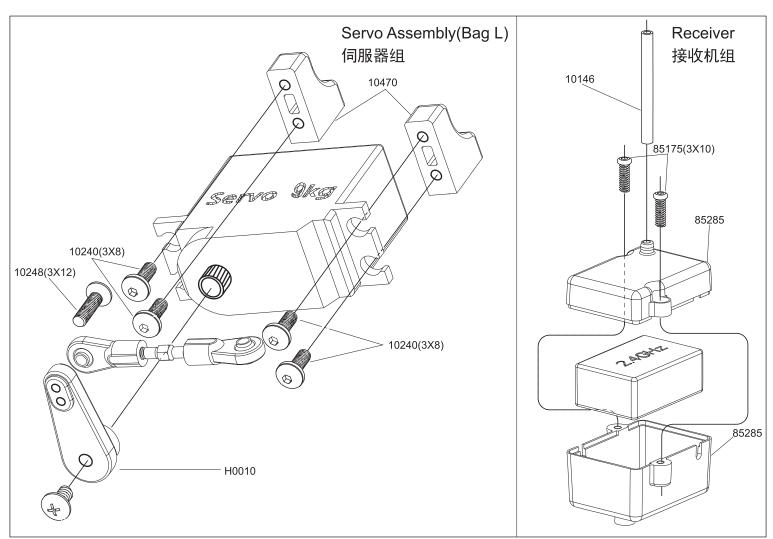


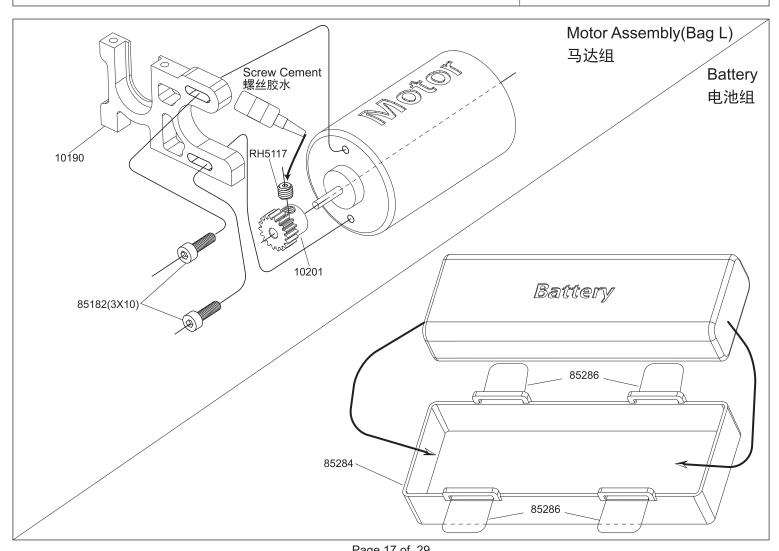


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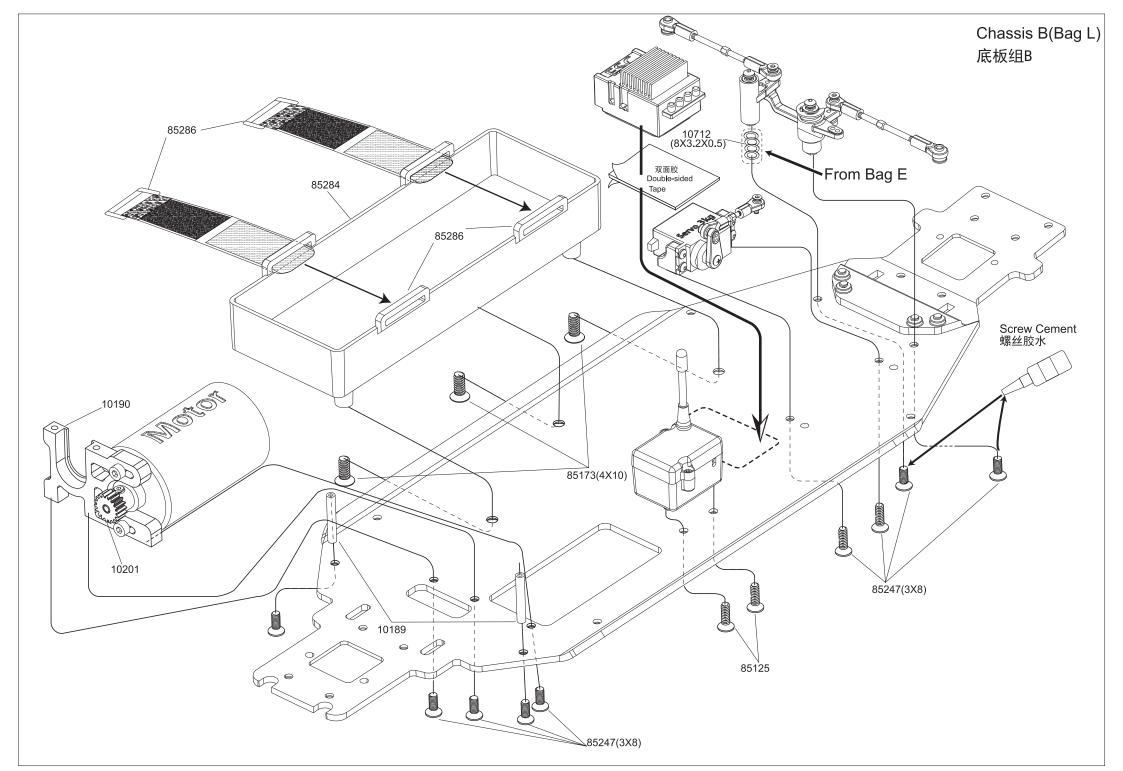




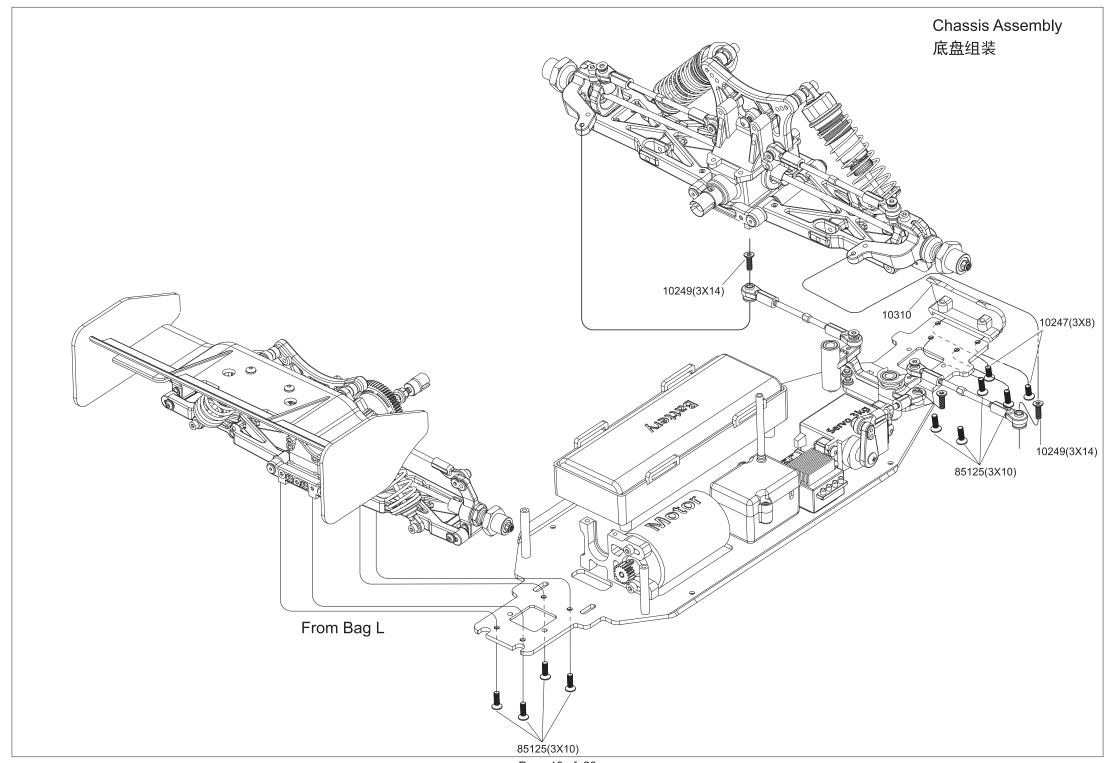




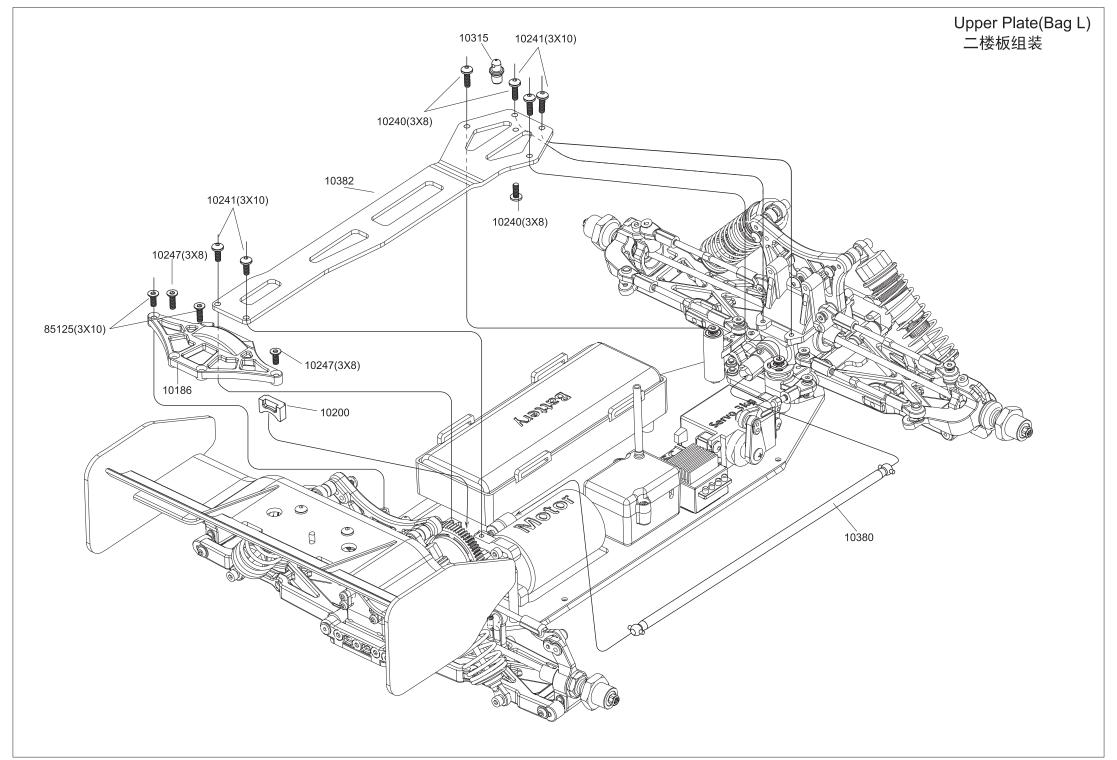
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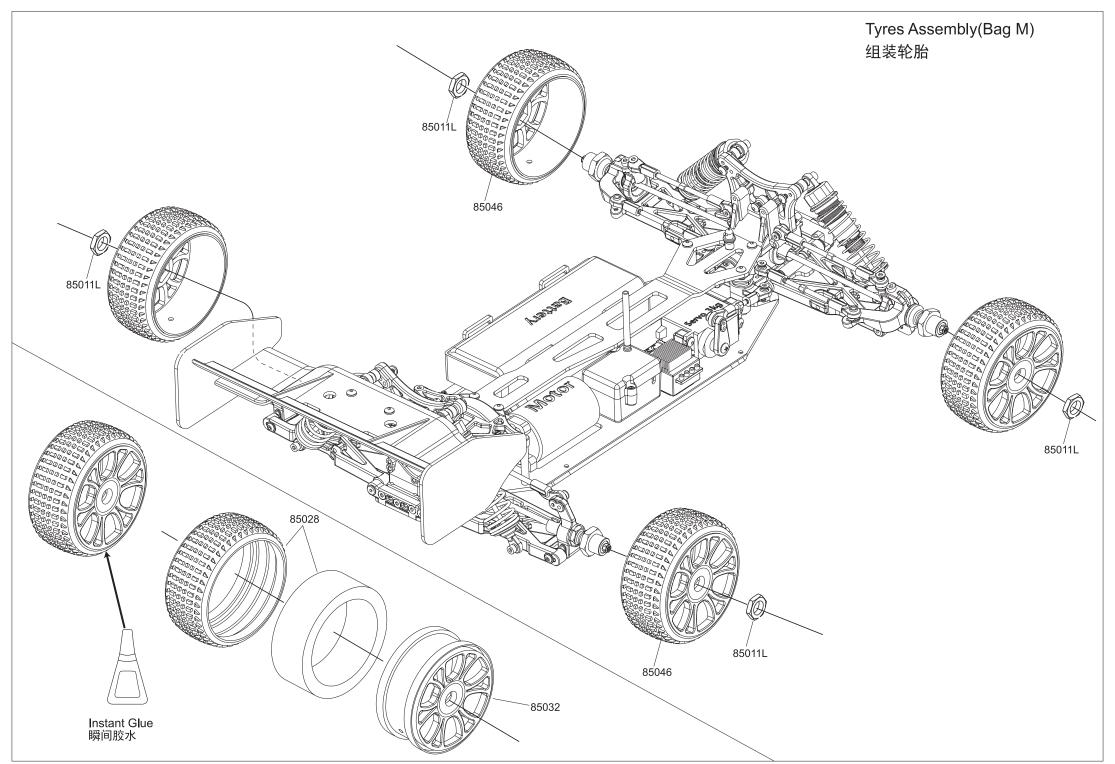
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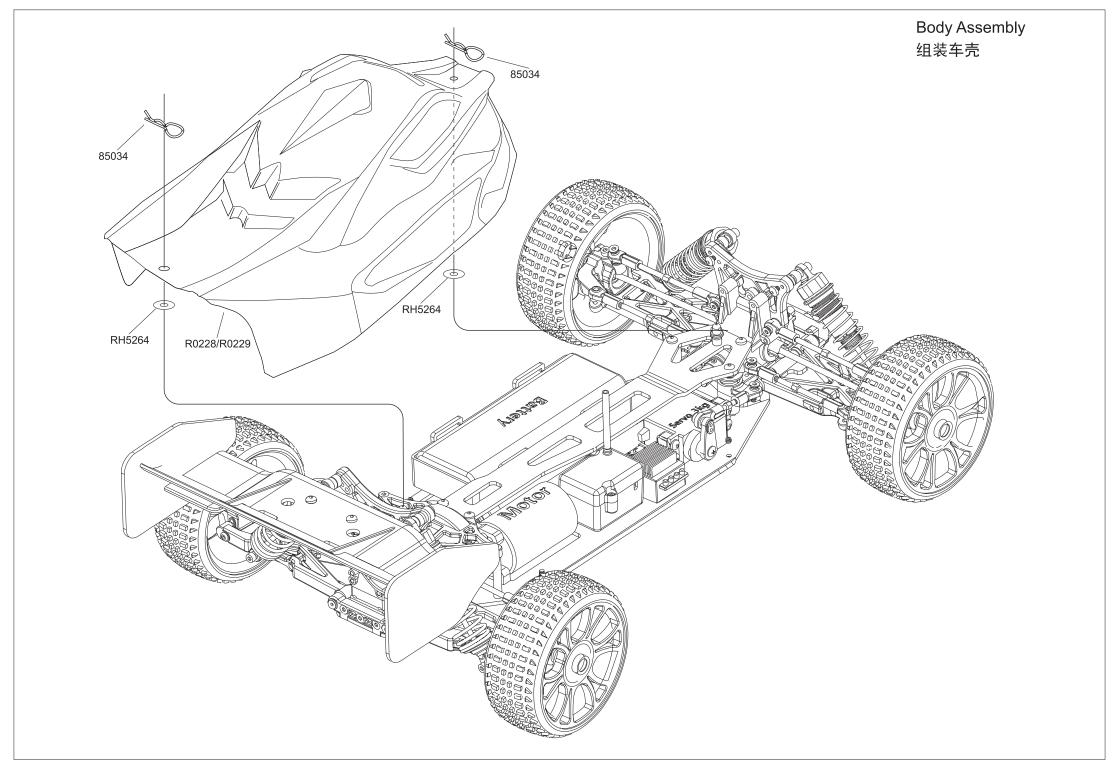
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10101 - Front Shock Tower 1po	10102 -Rear Shock Tower 1pc	10001-Front Shocks 2pc	10002 - Rear Shock Tower 2pc
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10103-Front Shock Spring 2pc	10104-Rear Shock Spring 2pc	10105-Front Shock Shaft & Piston Set 2sets	10106-Rear Shock Shaft & Piston Set 2sets
10107-Front Shock Body 2pc	10108-Rear Shock body 2pc	10109-Shock Upper Cap 2sets	10110-Shock Lower Caps 2sets
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10111-Shock Lower holder & Adjust	10112-Front Lower Susp. Arm 2pc	10113-Rear Lower Susp. Arm 2pc	10114-Steering Knuckle Arm 1set
Ring 2sets		AA	<b>(2 9)</b>
10115-Uprights 2pc	10116-Front CVD 2pc	10117-Rear Hub Carrier 2pc	10118-Rear Drive Shaft 2pc
86			AA
10119-Rear Dogbones 2pc	10123-Gearbox Housing Set 2pcs	RH5526-Diff 16T Gear Washer 6pcs	10124-Diff Drive Gear w/pin 2sets
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10125-Diff Case 2pcs	10126-Diff Drive Spur Gear 2pcs	10127-Diff Drive Gear 2pcs	10128-Diff Bevel Gear S. 4pcs
		• •	3 3 8
10129-Diff Bevel Gear B. 4pcs	10130-Diff Pin 2pcs	10132-Diff Drive Cup 4pcs	10133-Center Coupler 3pcs
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10136-Servo Saver Post 2pcs	10137-Steering Ackerman	10141-Front Upper Susp. Arm 2sets	10142-Rear Upper Susp. Arm 2sets
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10143-Steering Arm 2sets	10144-Servo Linkage 1pc	10146-Antenna Pipe Set 2sets	10147-Servo Saver (EP) 1set
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10310-Front bumper 1pc	10313-Wing bracket 1set	10315-Body Post 2pcs	10330-Chassis Front Part 1pc
	M	<b>₽</b>	
85028-Tyre set 2pcs	85032-Rim 2pcs	85046-Pre-mounted tyre set 2pcs	10003-Diff Gearbox Set 1set
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10189-Post for Rear Spur Gear Cover 2pc	10190-Motor Mount(EP) 1pc	10191-Slipper Complete(EP) 1set	10192-S1 ipper Pad (EP) 2pc
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10193-Slipper Gasket(EP) 2pc	10194-65T Spur Gear (EP) 1pc	10195P - Slipper Shaft(EP) lpc	10196-Slipper Spring Bracket (EP) 1pc
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10197-Slipper Spring (EP) 1pc	10199-Slipper Drive Cup 1pc	10200-BEARING BRACKET (EP)   1pc	10201-Pinion Gear 17T 1pc
	ħ		
10380-Certer Drive Shaft 1pc	10381-Chassis plate 1po	10382-Upper plate 1pc	85034-Body Clip (Medium Size) 6pcs
		a constant	
10214-Shock Ball End 6pcs	10215-Servo Link Ball End Opcs	10216-Steering Linkage Ball End 6pcs	10217-Rear Upper Linkage Ball End Spcs
999	888	200	
10220-Ball A épcs	10221-Bali B 6pcs	10222-Ball C ópcs	10224-Shock 0-ring(Lower) 6pcs
		888	000

10225-Diff O-ring Seal opcs	10226-Shock Seal Cover 4pcs	10228-Pin #2*10 Spcs	10230-Hinge Pins(long & short) 2sets
0000			
10232-Ball Bearing 15*10*4 6pcs	10233-Ball Bearing 10*5*4 ópcs	10153-Metal Bushing 8.5*2.5 6pcs	10236-E clip-8mm 4pc
9	000	000	33
RH5190-E clip-4mm 6pc	10237-E clip-2.5mm 6pc	RH5103-Nylon Lock Nut-M4 6pc	10238-Round Head Self Tapping Hex Screw 2*10 6pc
000	000		
85175-Button Head Hex Tapping Screws.3*10 8P	10240-Button Head Hex Screw M3*8 6pc	10241-Button Head Hex Screw M3*10 6pc	85184-Button Head Hex Screw M3*12 6pc
	TTTTTT	TTTTTT	IIIIIII
10242-Button Head Hex Screw M3*14 6pc	85144-Ring Self Tapping Screw 3*4 4pc	10256-Ring Self Tapping Screw 3*6 fipc	RH5117-Set Screw M4*4 6pc
	TTTT	TTTT TT	
10378-Gear Cover	85182-Cap Head Hex Screw M3*10 6pc	10245-Cap Head Hex Screw M3*18 6pc	RH5118-Button Head Hex Screw M4*10 6pc
	TTTTTT		

10247-Flat Head Hex M3+8 6pc	85125-Flat Head Hex Screw M3*10 8p	10248-Flat Head Hex Screw M3*12 6p	10249-Flat Head Hex Screw M3*14 6p
85127-Flat Head Hex Screw M3*18 3p	10251-Flat Head Hex Sorew M3*36 6p	85173-Flat Head Hex Screw M4*10 6p	85284-Battery case 1pc
85286 Velco Tape 2pcs	85285 RX case 1set	10575-Wing bracket 2pcs	85011L Wheel Hub Set 2set
10470-Servo post 2po	10120-Front Susp. Holders 2pa	10121-Rear Susp. Holders 2pc	RH5102A-Nylon Look Nut M3 6pc
R0228-Clear Buggy body W/decal 1pc	R0229-Printed Buggy body W/decal	10712-Washer 8*3.2*0.5 6P	10713-Washer 6.9*3.5*1.1 6P
85037-Rear Wing	10186-Rear Spur Gear Cover(EP) 1pc	RH5264-Washer 5.1*16*0.1 6P	H0079-V3 Lipo Charger

	I		
H0082-60A KS ESC	H0028-3650 3000KV Motor	85260-11.1V 3250mAH	H0010-9kg/cm Servo
		967	

# Upgrade Parts List

	1	•	İ
10902 - Front Shock Plate (Carbon) 1Set	10903 - Rear Shock Plate (Carbon) 1Set	10907-Front Shocks (AL) 2pc	10908-Rear Shocks (AL.) 2pc
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10909 - Front Lower Susp. Arm (AL) 2pc	10910 -Rear Lower Susp. Arm (AL) 2pc	10911 - Steering Ackerman (AL) 1pc	10915 - Rear Hub Carrier (AL) 2pc
A.	A. C.		
10917 - Steering Knuckle Arm (AL) 2Set	10918 - Wheel Hub (AL) 4pc	10923 - Alum Steering Arm 2pc	10924 - Alum Knuckle Arm 2pc
		3865	\$ 8
10969 - Front Susp. Holders (Alloy) ISet	10970 - Rear Susp. Holders (Alloy) 1Set	85265 - Heatsink Tpc	10258- Dirtproof cover w/clips
			500
10932-Chassis Front Part 1pc (AL)	10210-Sway Bar 2Sets		