

Model:

**DUNE RACER / DUNE RACER PRO
DUNE RACER XB / DUNE RACER XB PRO
DUNE RACER XT / DUNE RACER XT PRO**

Features:

4 Wheel Drive.

Ball Differential Box.

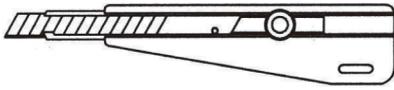
Completely waterproof, driving all whether!

Buggy, Truck, Rollage three different bodies.

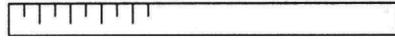
Instruction Manual

Required equipment for operation

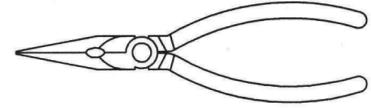
1. Tools required for building and maintenance:



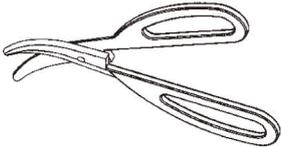
● Hobby knife



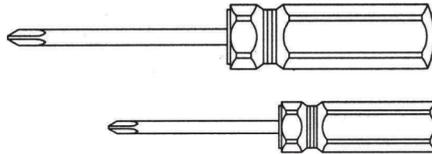
● Precision ruler



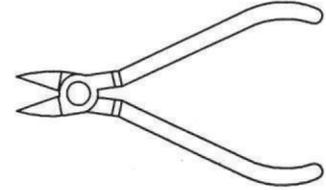
● Needle nose pliers



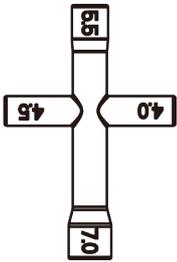
● Lexan scissors



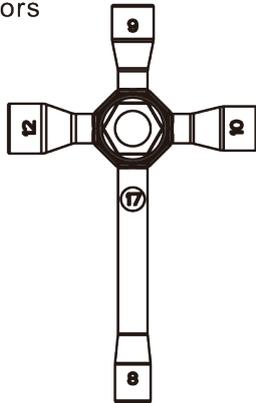
● Flat and Philips screwdriver



● Wire cutters



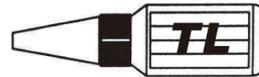
● Cross wrench



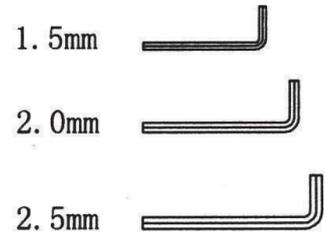
● Cross wrench



● CA glue & rubber cement



● Thread locking compound

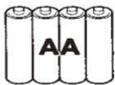


● Hex wrench

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:



4pcs AA alkaline batteries
for transmitter

IMPORTANT!

Check all the screws are tight before playing the vehicle!
Use thread lock on all screws that work loose.

Please read the instruction carefully before starting the assembly.

1. Please assemble and install this car without children's reach. As it includes small and sharp parts.
2. Do not run the car on public streets or highways. As it might cause serious accidents, personal injuries and property damage etc.
3. During the middle of racing and after operation, the engine and exhaust will become HOT. Therefore please do not touch them before cooling down.
4. Please make sure everyone is using different frequencies while racing the car in the same area.

2.4GHz radio instructions

Special symbols

Please pay attention to the following symbols, and read them carefully.

 **Danger:** If the operator does not operate according to the instructions, it may lead to serious injuries, even mortal danger.

 **Warning:** If the operator does not operate according to the instructions, it may lead to serious injuries, even mortal danger.

 **Attention:** If the operator does not operate according to the instructions, it may lead to serious injuries, even mortal danger. but generally it will not cause serious injuries to the operator.

Safety guidelines

Don't drive the truck at night, bad weather such as rainy or thundering days. It will interfere the transmitter signal. Thereby it will cause out of control and unexpected accident.

Before you drive, please make sure the movement of servo corresponds with the direction of joysticks. If inconsistent, please adjust before drive.

You need to turn the throttle channel(ch2) and inching switch to the lowest before use. Then switch on the transmitter power, finally connect the receiver.

The sequence to shutdown is to turn off the receiver power first, and then the transmitter power.

If the above operations are reversed, it might lead to out of control and cause accident.

Battery charging

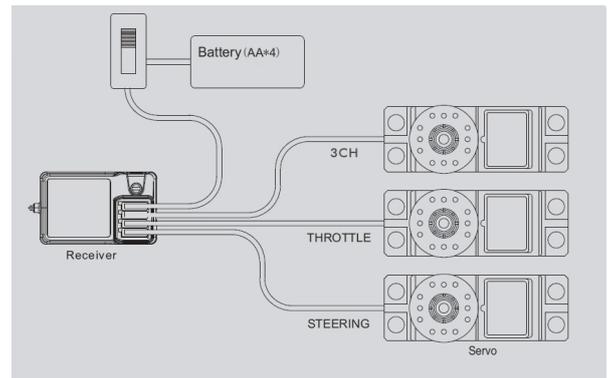
 If your transmitter, receiver use a nickel-cadmium, nickel-metal hydride rechargeable battery, you have to check it before use. If lack of electricity, it could cause inadequate control or out of control, resulting in accident. So please charge it immediately when the battery power is low.

TRANSMITTER SPECIFICATIONS

TR TYPE: MADGEAR-TRV1
Channel: 3CH
Frequency: 2.4GHz
Use DC: (4.0V-8.6V); $\leq 110\text{mA}$
N.W.: 320g

RX TYPE: MADGEAR-RXV1
Channel: 3CH
Frequency: 2.4GHz
DC: (4.0V-8.6V); $\leq 20\text{mA}$
N.W.: 8g

R/F Power: $< 20\text{dBm}$; Sensitivity: 1024
Modulation: 2-FSK; Frequency Signal: FHSS
Specifications: One Set(200*165*105mm)



NOTE:

1. Install the batteries in correct polarity.
2. Using 4*AA batteres.

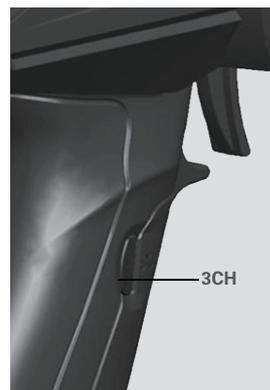
BINDING PROCESS:

1. Turn on the transmitter, press and hold the CH3 button, the LED on the transmitter should flash in blue color, beeper should sounds B-B-B. Release the CH3 button. The transmitter is ready for the binding process.
2. Connect power to the receiver, the receiver LED should flash slowly in green color.
3. Place the receiver near the transmitter and press and hold the BIND button on the receiver until the receiver LED flashes rapidly for several times then flash slowly again. This indicates the binding process is completed successfully. Release the BIND button.
4. Turn off and turn on the transmitter, the receiver's LED should stay solid in green color. This indicates the transmitter and receiver are bonded.

SERVO DIRECTION:

Reverse the throttle servo direction by pressing the TH R/N button for 2 seconds until the beeper beeps once.

Reverse the steering servo direction by pressing the ST R/N button for 2 seconds until the beeper beeps once.

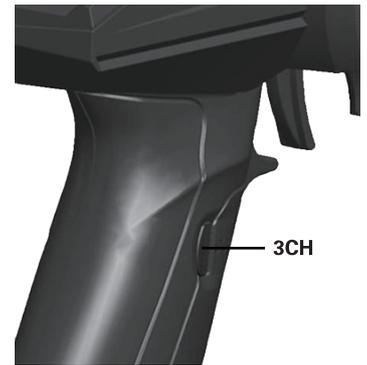


AUX CHANNEL(3CH)

Press the CH3 button once, servo turns 90 degrees, press again, servo turns back 90 degrees.

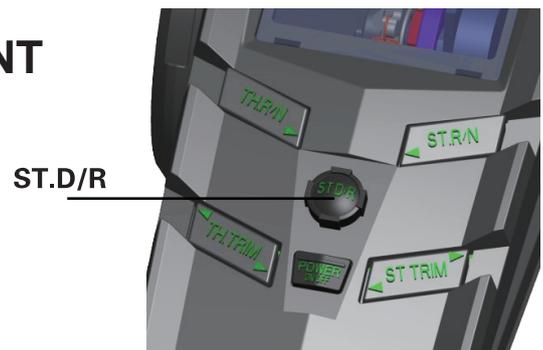
NOTE:

During the binding process, the CH3 button functions as a bind button and does not provide channel 3 functionality.



STEERING DUAL RATES ADJUSTMENT (ST.D/R)

Adjust the dual rate for steering by turning the ST D/R knob.



FAIL SAFE SETUP(S/F)

The fail safe function set the throttle to the lowest position automatically when the radio signal is weak or lost.

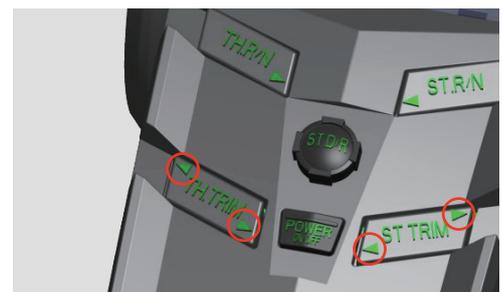
1. Receiver should memorize the setting once it is setup.
2. For electrical powered model, the F/S functions is setup by default.
3. For gas powered model, put the throttle trigger at the brake position, press and hold the F/S button on the receiver until the LED flashes rapidly in green color for several times, then turns solid. release the F/S button. the F/S setup is completed.
4. Redo the F/S setup after each binding process.

Caution: Verify the F/S setup before operation.

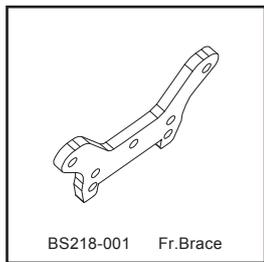
TH.TRIM AND ST.TRIM ADJUSTMENT

Adjust the throttle trim with the TH TRIM button, adjust the steering trim with the ST TRIM button.

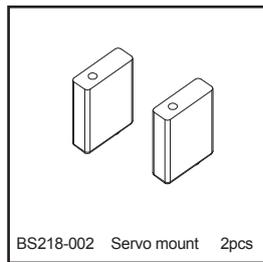
Caution: after each binding process, need to manually adjust the TH TRIM to the lowest position.



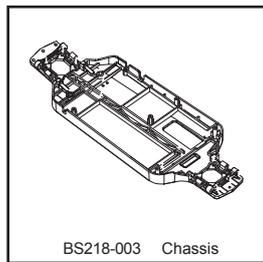
COMMON PARTS



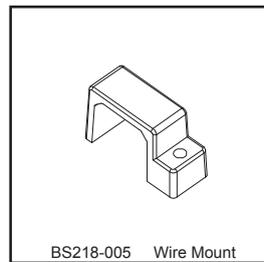
BS218-001 Fr. Brace



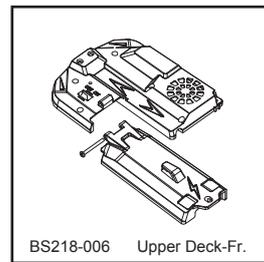
BS218-002 Servo mount 2pcs



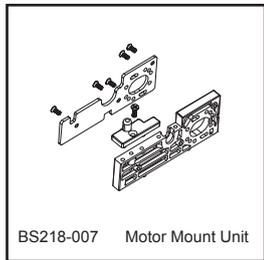
BS218-003 Chassis



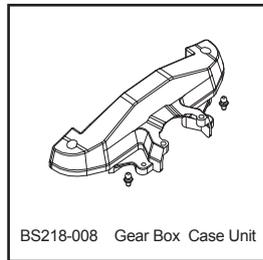
BS218-005 Wire Mount



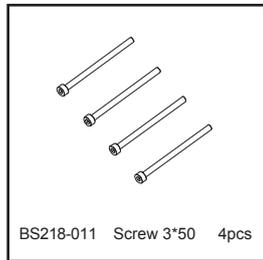
BS218-006 Upper Deck-Fr.



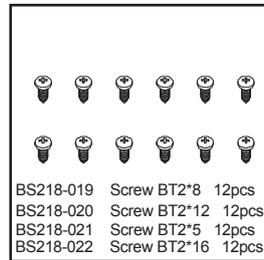
BS218-007 Motor Mount Unit



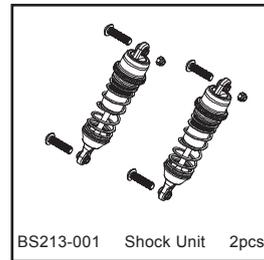
BS218-008 Gear Box Case Unit



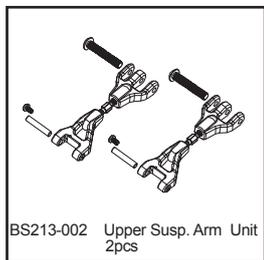
BS218-011 Screw 3*50 4pcs



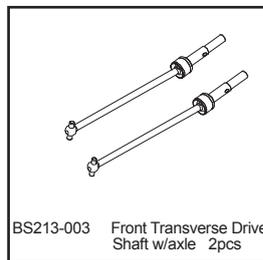
BS218-019 Screw BT2*8 12pcs
BS218-020 Screw BT2*12 12pcs
BS218-021 Screw BT2*5 12pcs
BS218-022 Screw BT2*16 12pcs



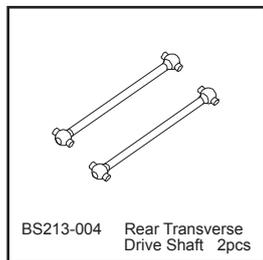
BS213-001 Shock Unit 2pcs



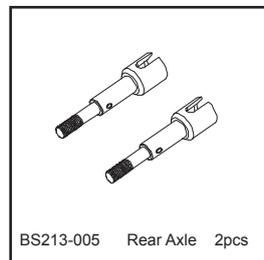
BS213-002 Upper Susp. Arm Unit 2pcs



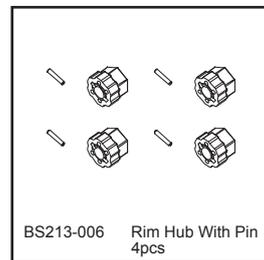
BS213-003 Front Transverse Drive Shaft w/axle 2pcs



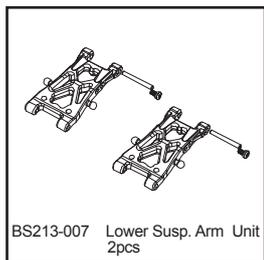
BS213-004 Rear Transverse Drive Shaft 2pcs



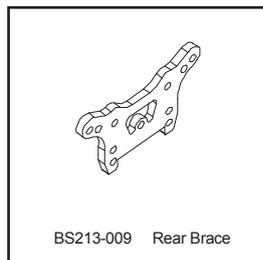
BS213-005 Rear Axle 2pcs



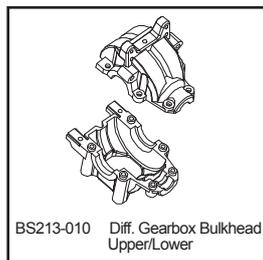
BS213-006 Rim Hub With Pin 4pcs



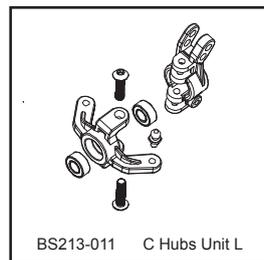
BS213-007 Lower Susp. Arm Unit 2pcs



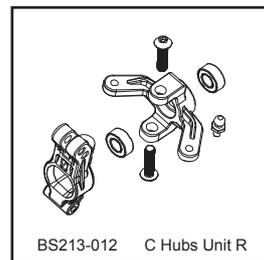
BS213-009 Rear Brace



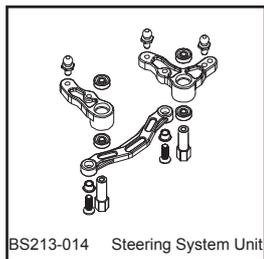
BS213-010 Diff. Gearbox Bulkhead Upper/Lower



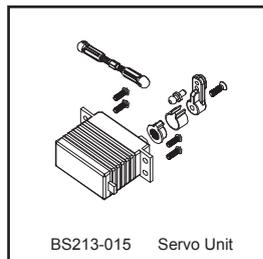
BS213-011 C Hubs Unit L



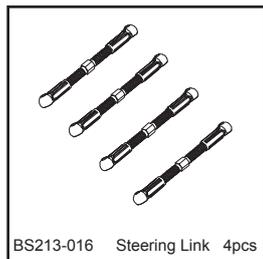
BS213-012 C Hubs Unit R



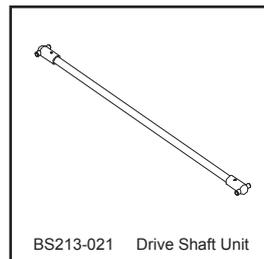
BS213-014 Steering System Unit



BS213-015 Servo Unit



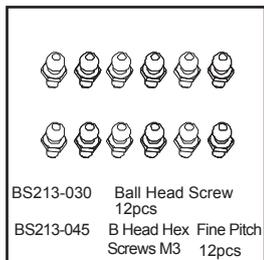
BS213-016 Steering Link 4pcs



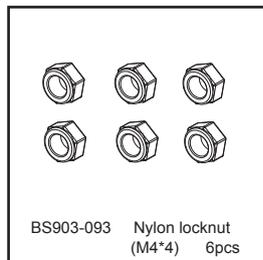
BS213-021 Drive Shaft Unit



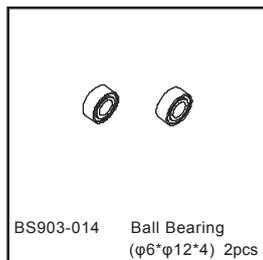
BS213-026 Spur Gear 55T



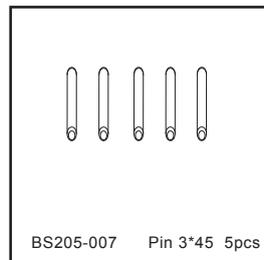
BS213-030 Ball Head Screw 12pcs
BS213-045 B Head Hex Fine Pitch Screws M3 12pcs



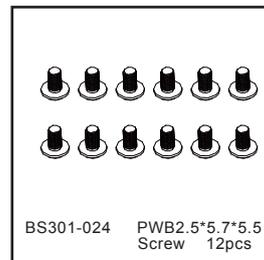
BS903-093 Nylon locknut (M4*4) 6pcs



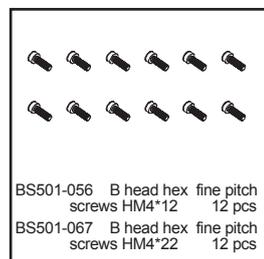
BS903-014 Ball Bearing (φ6*φ12*4) 2pcs



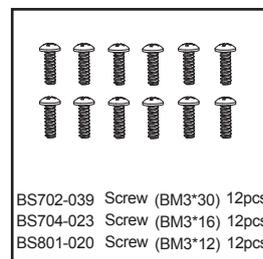
BS205-007 Pin 3*45 5pcs



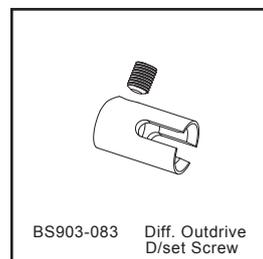
BS301-024 PWB2.5*5.7*5.5 Screw 12pcs



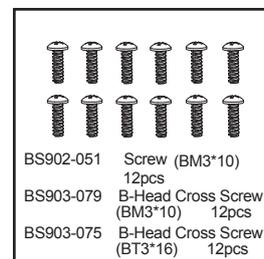
BS501-056 B head hex fine pitch screws HM4*12 12 pcs
BS501-067 B head hex fine pitch screws HM4*22 12 pcs



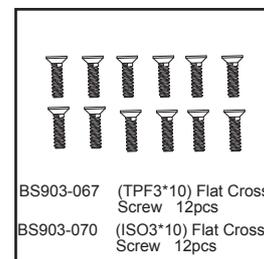
BS702-039 Screw (BM3*30) 12pcs
BS704-023 Screw (BM3*16) 12pcs
BS801-020 Screw (BM3*12) 12pcs



BS903-083 Diff. Outdrive D/set Screw

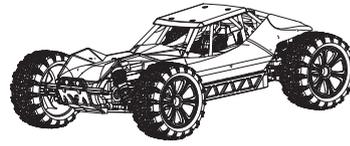


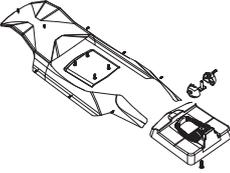
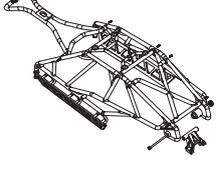
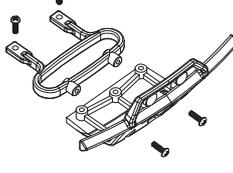
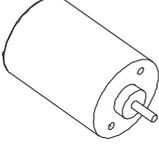
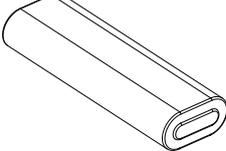
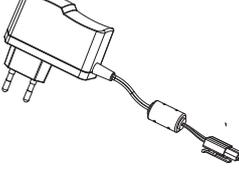
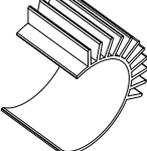
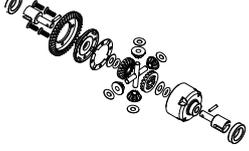
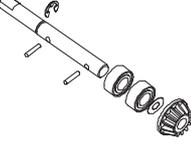
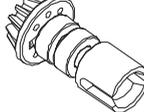
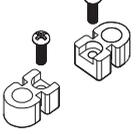
BS902-051 Screw (BM3*10) 12pcs
BS903-079 B-Head Cross Screw (BM3*10) 12pcs
BS903-075 B-Head Cross Screw (BT3*16) 12pcs



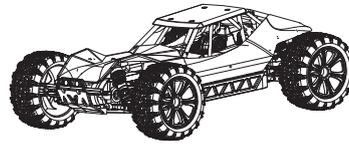
BS903-067 (TPF3*10) Flat Cross Screw 12pcs
BS903-070 (ISO3*10) Flat Cross Screw 12pcs

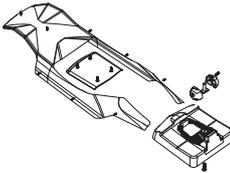
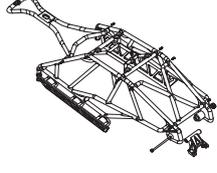
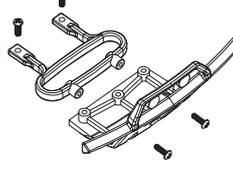
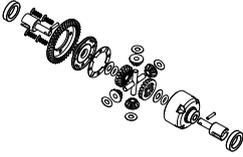
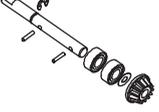
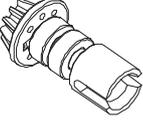
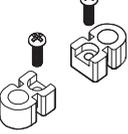
DUNE RACER PARTS



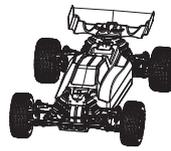
 BS218-009 Body	 BS218-010 Roll cage set	 BS214-001 Bumper Unit	 BS214-009 Tire Unit 2pcs	 BS218-015 1/10 Brushed Waterproof Esc
 BS701-007 550 Motor	 BS701-036C 7.2V 1800MAH Battery	 BS701-035 Charger	 BS701-008 Motor Heat Sink	 BS903-104 Diff. Gear Box Unit (zinc alloy)
 BS213-025 Gear Shaft Unit (zinc alloy)	 BS213-035 Motor Gear 20T (plastic)	 BS903-116 Master Gear Unit (Zinc Alloy)	 BS213-032 Body Mount 2pcs	 BS218-004 Rollage / Yount 2pcs

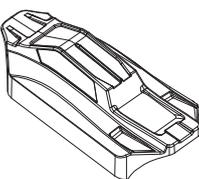
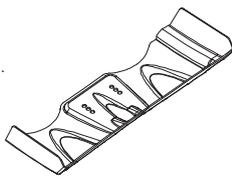
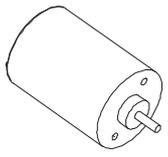
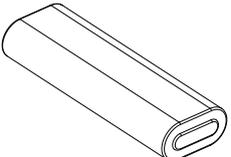
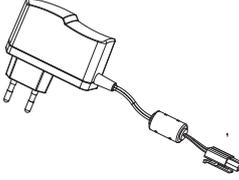
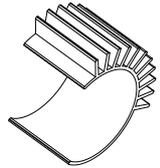
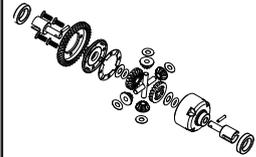
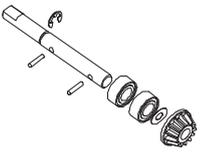
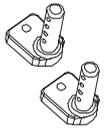
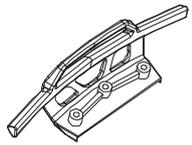
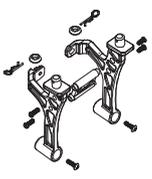
DUNE RACER PRO PARTS



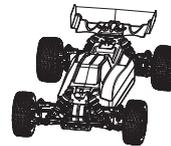
 BS218-009 Body	 BS218-010 Body Mount	 BS214-001 Bumper Unit	 BS214-009 Tire Unit 2pcs	 BS218-014 45A Brushless Waterproof Esc
 BS213-027 Motor Gear 20T (metal)	 BS701-007R 540 Brushless Motor KV3421	 BS803-028 7.4V 3200 mAh Battery	 BS803-026A Diff. Gear Box Unit(steel)	 BS213-025A Gear Shaft unit (steel)
 BS903-117 Master Gear Unit (steel)	 BS213-032 Body Mount 2pcs	 BS218-004 Rollage / Yount 2pcs		

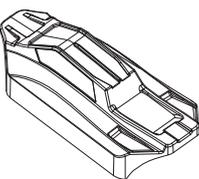
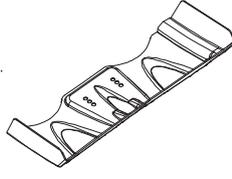
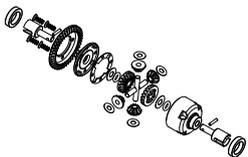
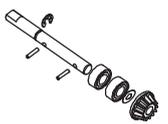
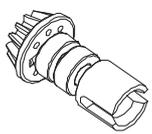
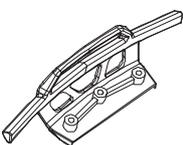
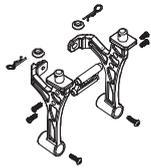
DUNE RACER XB PARTS



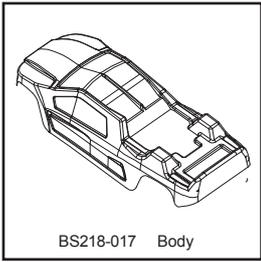
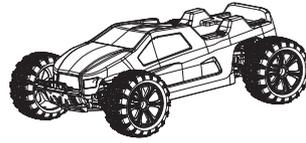
 BS213-033 Front Tires Unit 2pcs	 BS709-002 Rr Tires Unit 2pcs	 BS218-016 Body	 BS218-018 Tail wing	 BS218-015 1/10 Brushed Waterproof Esc	
 BS701-007 550 Motor	 BS701-036C 7.2V 1800MAH Battery	 BS701-035 Charger	 BS701-008 Motor Heat Sink	 BS903-104 Diff. Gear Box Unit (zinc alloy)	
 BS213-025 Gear Shaft Unit (zinc alloy)	 BS213-035 Motor Gear 20T (plastic)	 BS213-032 Body Mount 2pcs	 BS903-116 Master Gear Unit (Zinc Alloy)	 BS213-031 Front Chassis	 BS213-034 Tail Wing Mount Unit

DUNE RACER XB PRO PARTS

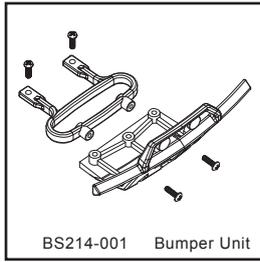


 BS213-033 Front Tires Unit 2pcs	 BS709-002 Rr Tires Unit 2pcs	 BS218-016 Body	 BS218-018 Tail wing	 BS218-014 45A Brushless Waterproof Esc
 BS213-027 Motor Gear 20T (metal)	 BS701-007R 540 Brushless Motor KV3421	 BS803-028 7.4V 3200 mAh Battery	 BS803-026A Diff. Gear Box Unit(steel)	 BS213-025A Gear Shaft unit (steel)
 BS903-117 Master Gear Unit (steel)	 BS213-031 Front Chassis	 BS213-034 Tail Wing Mount Unit	 BS213-032 Body Mount 2pcs	

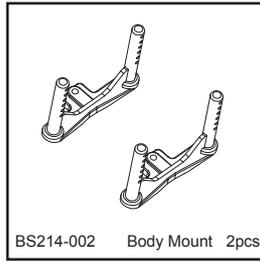
DUNE RACER XT PARTS



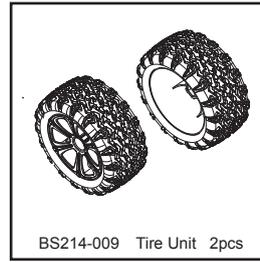
BS218-017 Body



BS214-001 Bumper Unit



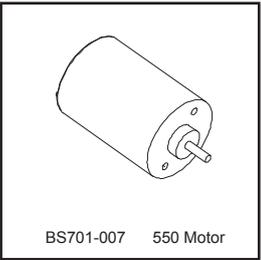
BS214-002 Body Mount 2pcs



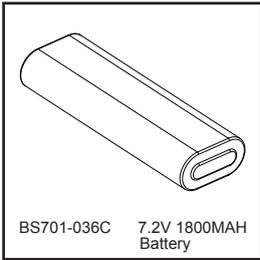
BS214-009 Tire Unit 2pcs



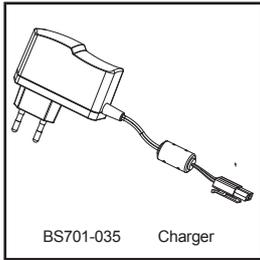
BS218-015 1/10 Brushed Waterproof Esc



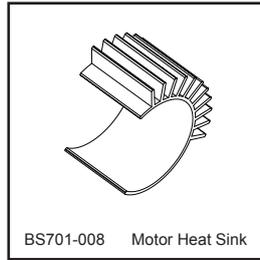
BS701-007 550 Motor



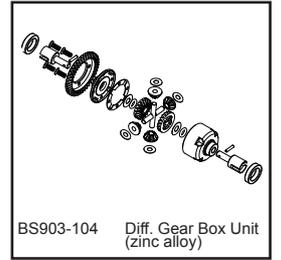
BS701-036C 7.2V 1800MAH Battery



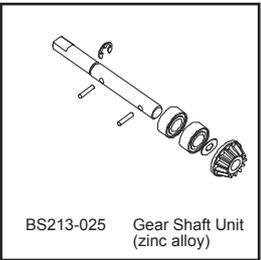
BS701-035 Charger



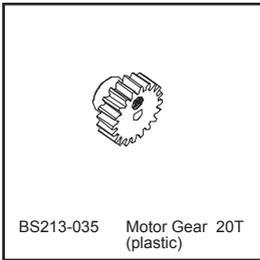
BS701-008 Motor Heat Sink



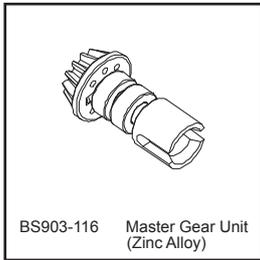
BS903-104 Diff. Gear Box Unit (zinc alloy)



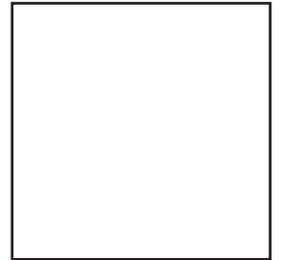
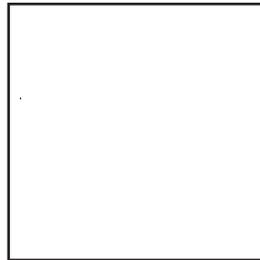
BS213-025 Gear Shaft Unit (zinc alloy)



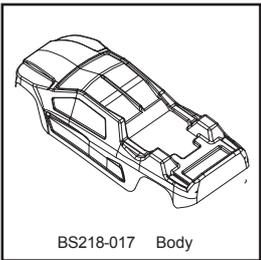
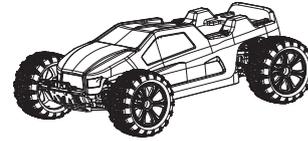
BS213-035 Motor Gear 20T (plastic)



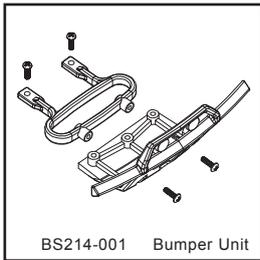
BS903-116 Master Gear Unit (Zinc Alloy)



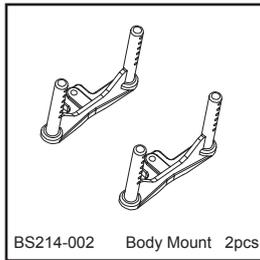
DUNE RACER XT PRO PARTS



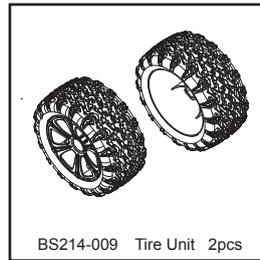
BS218-017 Body



BS214-001 Bumper Unit



BS214-002 Body Mount 2pcs



BS214-009 Tire Unit 2pcs



BS218-014 45A Brushless Waterproof Esc



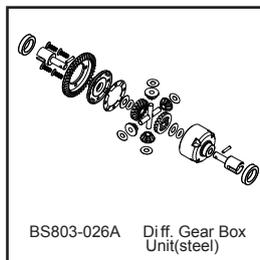
BS213-027 Motor Gear 20T (metal)



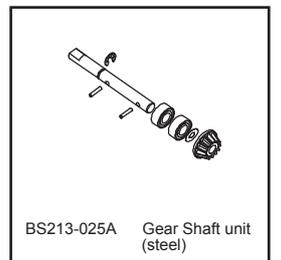
BS701-007R 540 Brushless Motor KV3421



BS803-028 7.4V 3200 mAh Battery



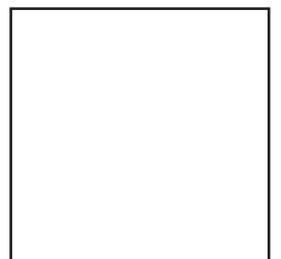
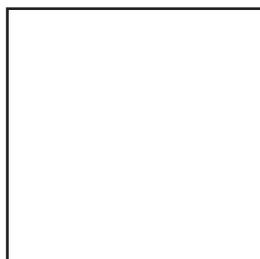
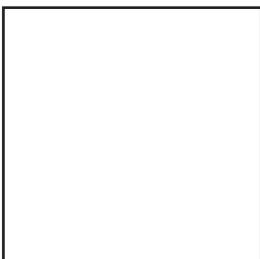
BS803-026A Diff. Gear Box Unit(steel)



BS213-025A Gear Shaft unit (steel)



BS903-117 Master Gear Unit (steel)



Precautions and Warnings for Use and Handling of Lithium Polymer Battery

Preface

In order to get the optimum performance and reliable safety, consumers shall read and take the following instructions and precautions when use and handle the Lithium Polymer (Li-Po) batteries.

1. Charging

1-1 Charging current should not be more than the maximum charge current specified in the Product Specification (normally 0.5C-1.0C or lower). Charging with higher current may damage the cell or even lead to safety problem, e.g. overheating or leakage.

1-2 Charging voltage shall not be more than that specified in the Product Specification (4.2V/cell). 4.25V is the maximum charging voltage for each cell. Never charge the battery in series and be sure that each single cell has a separated charging circuit with a max. charging voltage of 4.25V. Or the battery may be overcharged, and lead to fire or explosion. The user is fully responsible to the result of misusing the battery.

1-3 Charging temperature: The cell should be charged within the range of temperatures specified in the Product Specification. Stop charging immediately when the surface temperature of the battery is over 50°C.

1-4 Reverse charging: Please make sure the polarities of cells are connected properly before charging. Reverse charging is strictly prohibited. Reverse charging cannot charge the cells but will deteriorate their charging/discharging and safety characteristics, or even lead to fire or explosion.

2. Discharging

2-1 Discharging current: The cell shall be discharged at the current no more than the maximum discharging current specified in the Product Specification. Over current discharging may damage the battery and cause over-heat.

2-2 Operation temperature: Use the battery within the temperature range specified in the Product Specification. Stop using when temperature is over 70°C.

2-3 Over-discharging: Over-discharging will deteriorate the cell's performance and characteristics. Do not over-discharge a battery below 2.75V/cell.

3. Storage

If you intend to keep the battery for a long time (3 months or longer), it is strongly recommended that the battery shall be stored under the environment with temperature 10-25°C, low humidity and without corrosive gas. The battery should be charged every six months to ensure that each cell's storage voltage is 3.6~3.9V.

Others

>The aluminum packing foil is very soft that it will be easily left scratches. Please do not hit the cell with any sharp edge parts.

>Don't fall, hit or bend the battery. It may cause fire or explosion.

>Short circuit the battery is strictly prohibited, it may damage the battery seriously.

>Never disassemble the battery. It may cause fire.

>Never dispose of the battery in fire. It is very dangerous and strictly prohibited.

>To place the battery into liquid such as water is strictly prohibited.

>Always remove battery from car when charging. Charging the battery in a car is forbidden and is dangerous.

>Avoid vibration, shock or extruding the battery. Handle carefully when moving it.

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