

REDCAT-RACING

1/8 BRUSHLESS BUGGY

MODEL NO.:BACKDRAFT 8E THREE DIFF



Product Size:

Length:458mm

Width:305mm

Height:165mm

Wheelbase:335mm

*Tires size:110*43mm*

Ground clearance:30mm

Motor:RC 540 KV:2230

ESC:EZRUN-80A

Instruction Manual

Highlights:

- 4 Wheel Drive System
- Ready Assemble Ready to Run
- High Performance RC 540 KV: 2230 Type Brushless Motor, More Power!
- Brushless ESC EZRUN-80A
- 3200 Mah 2x7.4V 20C Li-Po battery
- Assembled Chassis
- Full Function Control
- Colored Coil Spring Damped Suspension System
- Waterproof and Dustproof Sealed Gearbox
- Fast and Easy Assembly and Disassembly of Receiver and Battery Cover
- Quality Differential with Four Bevel Gears
- Precise Sealed Ball Bearing for the Whole Model
- Aluminum Alloy Drive shafts
- The fastest and best brushless EP buggy in China!

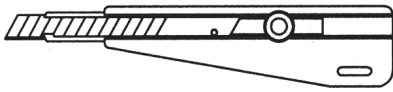
⚠ SAFETY PRECAUTIONS

- This radio controlled racing car is not a toy!
- This high-performance R/C model is recommended for ages 14 and older.
- First-time builders should seek the advice of experienced modellers before commencing assembly.
- Take enough safety precautions prior to operating this model.
You are responsible for this model's assembly and safe operation!

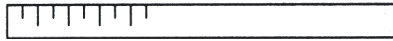
www.redcatracing.com

Required equipment for operation

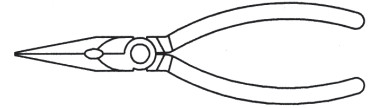
1. Tools required for building and maintenance:



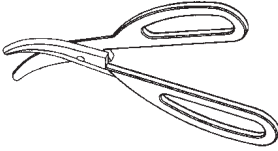
● Hobby knife



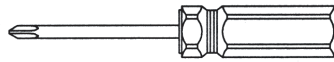
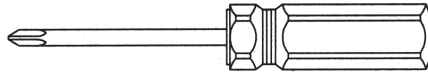
● Precision ruler



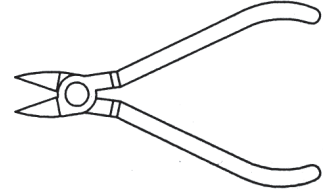
● Needle nose pliers



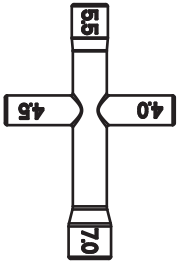
● Lexan scissors



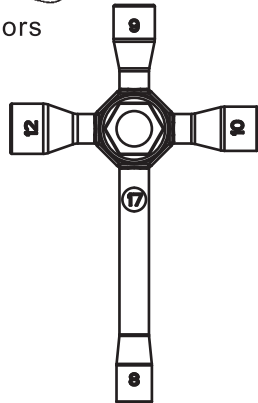
● Flat and Philips screwdriver



● Wire cutters



● Cross wrench



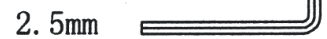
● Cross wrench



● CA glue & rubber cement



● Thread locking compound

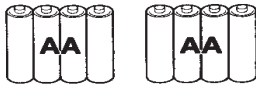


● Hex wrench

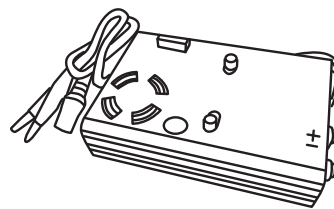
WARNING!

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:



8pcs AA alkaline batteries for transmitter



B7004-F

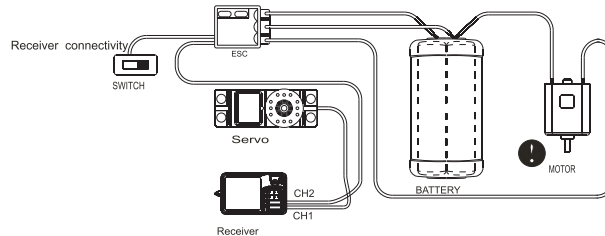
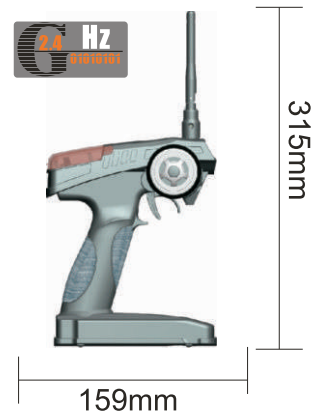
7.2V Ni-Mh battery & 2-4 cells
7.4V Li-Po battery charger

IMPORTANT!!!

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

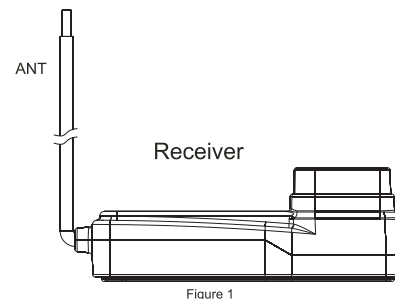
Transmitter Specifications :

Channels: 2 channels
 Model Type: Car/boat
 RF Power: Less than 20dbm
 Modulation: GFSK
 Code Type: Digital
 Sensitivity: 1024
 Low Voltage Warning: Yes (less than 9V)
 DSC Port: Yes (3.5mm)
 Charger Port: Yes
 Power: 12vdc (1.5AA*8)
 Weight: 328g
 ANT Length: 26mm
 Size: 159*99*315mm
 Color: Black
 Certificate: CE FCC



Note:

Place the antenna of the receiver vertically, and do not have contact with metal component. (See Figure1)



Binding:

The transmitter and receiver should already be bound by the factory by default .

1. Install batteries into the transmitter and shut it down.
2. Insert the bind cable on to the bind channel (Ch3) on the receiver. (Figure.2)
3. Connect the receiver battery to the VCC port on the receiver .The two LEDs on the receiver should flash rapidly, indicating the receiver is in binding state .
4. Press and hold the bind button on the transmitter , and then turn on the transmitter.
5. The LED on the receiver should stop flashing when the binding process completed (about 5 second)
6. Release the bind button on the transmitter , remove the bind cable from the receiver.
7. Install the servo and then test.
8. If the test succeeds , then remove the power supply from the VCC port.
9. The binding process completed.

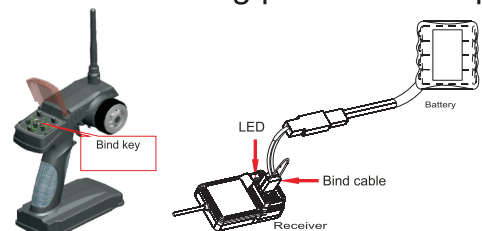
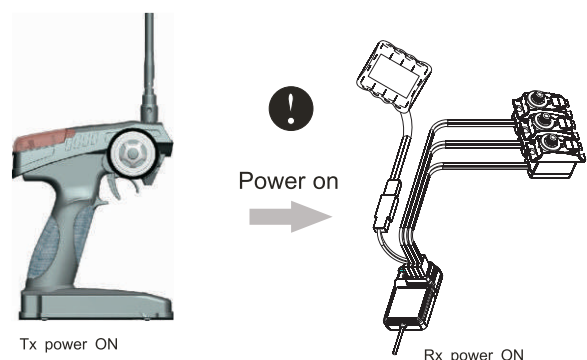


Figure 2

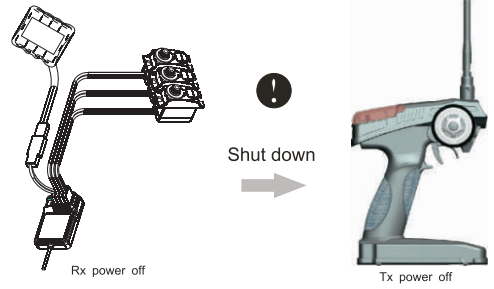
Turn On:

1. Turn on the transmitter.
2. Connect the power supply of the receiver.
3. Receiver LED light should turn solid.
4. Ready to use.

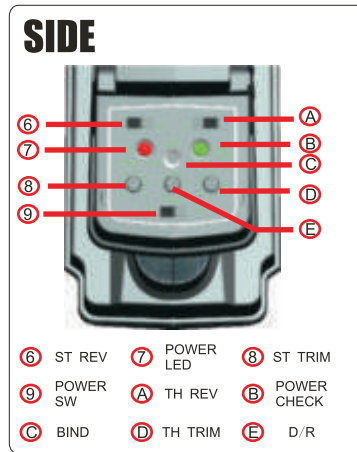
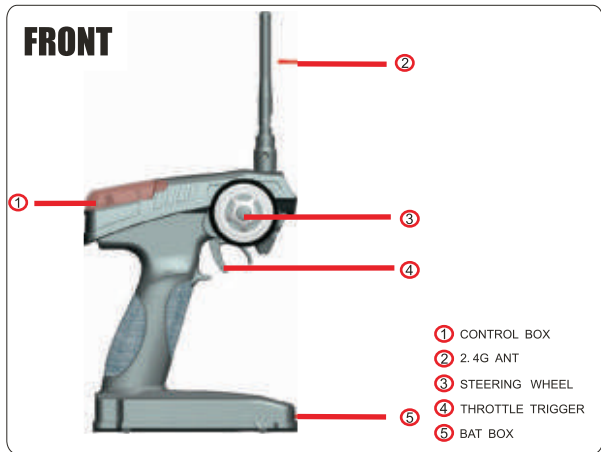


Shut Down:

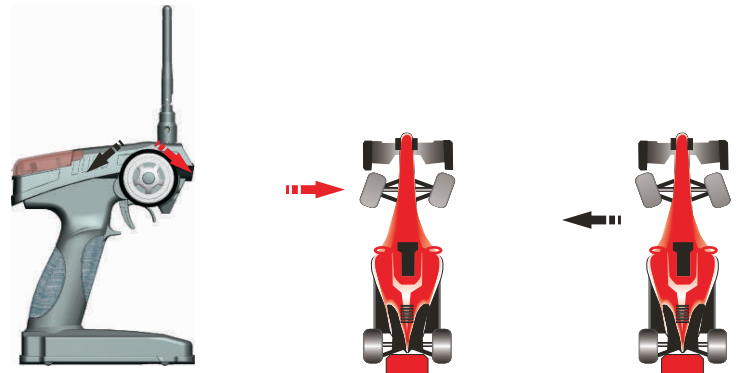
1. Disconnect the receiver's power supply.
2. Turn off the transmitter .



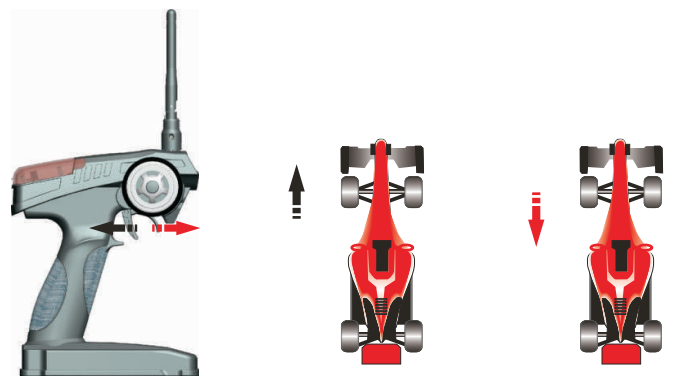
Transmitter Functions:



This function is to control the direction of the vehicle



This function is to control the throttle speed of the vehicle



PARTS LIST

Item No.	Description	Item No.	Description
BS903-003	Shock absorber unit(plastic) 2pcs	BS903-089	Pin (2*9.5) 12pcs
BS903-004	Shock absorber unit(alum.) 2pcs	BS903-091	Washer A (5.2*10*0.2) 12pcs
BS903-005	Brace 1pcs	BS903-092	Washer B (4.2*8*0.2) 12pcs
BS903-007	Body pin 6pcs	BS903-094	Double way ball end 6pcs
BS903-008	Upper susp. Arm set	BS903-095	M4*4 set screw 6pcs
BS903-009	Fr.bumper 1pcs	BS903-097	Diff.gearbox
BS903-010	Suspension arm mount block 2pcs	BS903-098	Diff.gearbox bulkhead-upper/lower
BS903-011	Upper susp.arm mount-Fr/Rr	BS903-106	Screw pin (M3*9.5) 12pcs
BS903-014	Ball bearing(6*12*4) 2pcs	BS903-107	Screw (M2.5*13) 12pcs
BS903-016	Ball bearing(10*15*4) 2pcs	BS903-109	Diff.outdrive A/Pin(2*10)
BS903-017N	Fr/Rr C-carrier	BS903-110	Diff.outdrive B/Pin(2*10)
BS903-018	Fr.lower susp.arm-Lf/Rt	BS903-111	Kunckle Arm-L/R(metal)
BS903-019	Transverse driver shaft set	BS933-006	Centre diff.box
BS903-023	O-washer 4pcs	BS933-012	Spur gear(46T)
BS903-024	Front suspension arm pin-short 4pcs	BS701-031	Tail wing mount
BS903-025	Suspension arm pin-long 4pcs	BS701-032	Rollcage post set
BS903-026	Fr.chassis	BS701-033	Body post-Fr
BS903-028	Lower susp.mount block-Fr/Rr	BS701-034	Body post-Rr
BS903-030	Steering linkage set 2pcs	BS702-049	Rollcage beam 2pcs
BS903-058	Hub rear carrier	BS901-066	M3 locknut 5pcs
BS903-059	Rr.lower susp.arm-L/R	BS901-067	Antenna pipe w/cap
BS903-061	Rear suspension arm pin-short	BS902-051	BT3*10 B-head cross screw 12pcs
BS903-065	TPF2.6*10 flat cross screw 12pcs	BS905-001	Rear chassis 1pcs
BS903-067	TPF3*10 flat cross screw 12pcs	BS905-006	Tail wing 1pcs
BS903-068	TPF3*14 flat cross screw 12pcs	BS936-001	Tire unit 2pcs
BS903-069	TPF3*16 flat cross screw 12pcs	BS936-002	Nut M12
BS903-070	ISO3*10 flat cross screw 12pcs	BS936-003	Rim hub pin(2*16)/O-Ring
BS903-072	BT3*8 B-head cross screw 12pcs	BS936-004	Axle
BS903-073	BT3*12 B-head cross screw 12pcs	BS803-001	Chassis 1pc
BS903-074	BT3*14 B-head cross screw 12pcs	BS803-002	Side guard plate-L/R
BS903-075	BT3*16 B-head cross screw 12pcs	BS803-003	Silk-screened body 1pc
BS903-076	BT3*20 B-head cross screw 12pcs	BS803-004	(ISO3*8) Flat cross screw 12pcs
BS903-079	BM3*10 B-head cross screw 12pcs		
BS903-081	HM3*10 Cap head hexagon screw 6pcs		
BS903-083	Diff.outdrive D/set screw		
BS903-086	Ball bearing (5*10*4) 2pcs		
BS903-087	Ball bearing (12*18*4) 2pcs		

PARTS LIST

Item No. Description

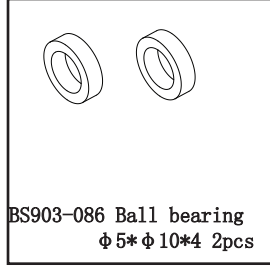
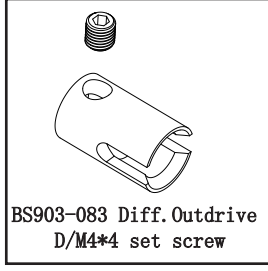
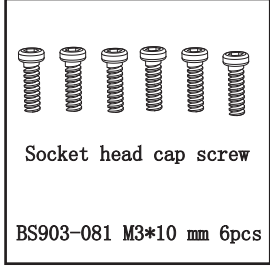
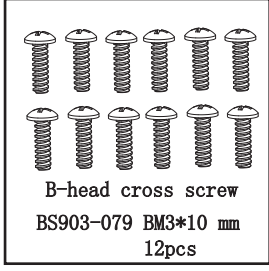
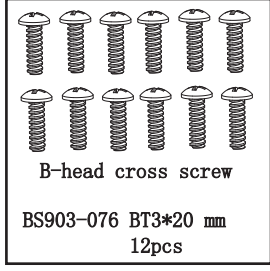
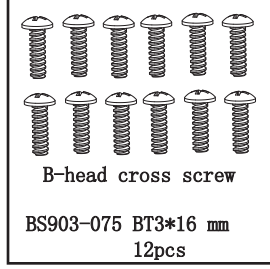
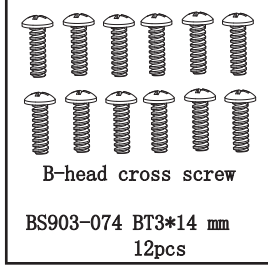
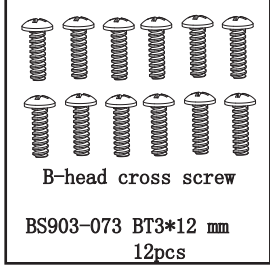
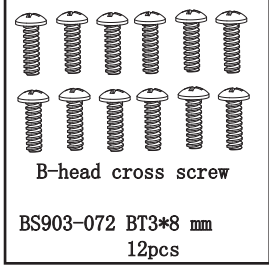
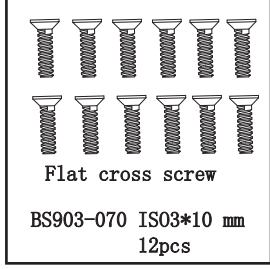
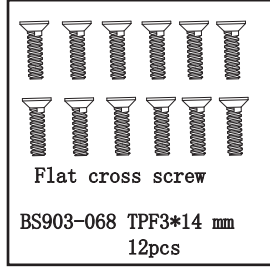
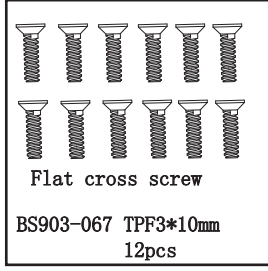
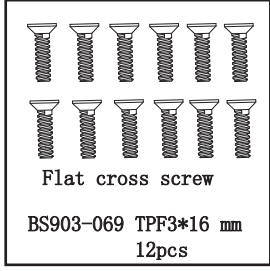
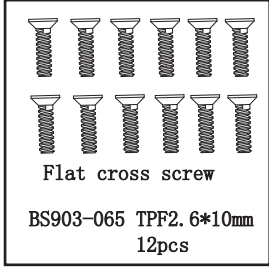
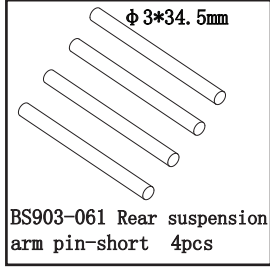
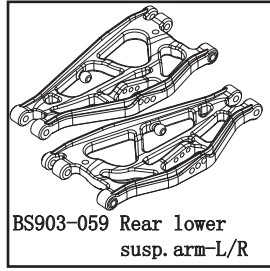
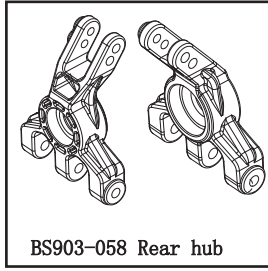
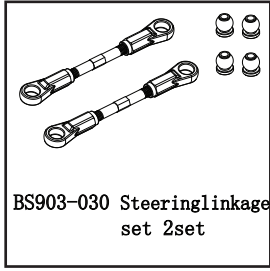
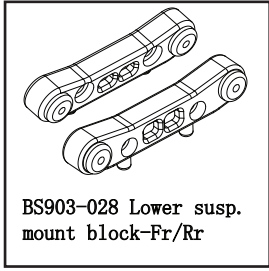
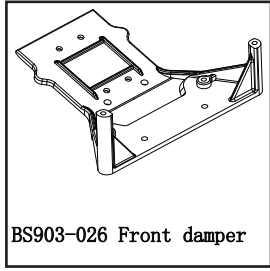
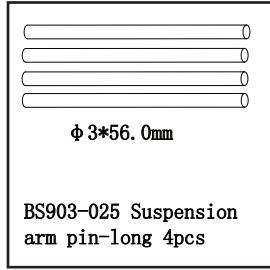
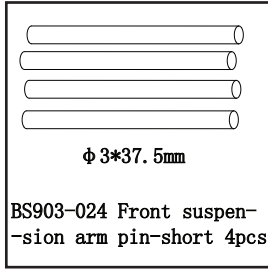
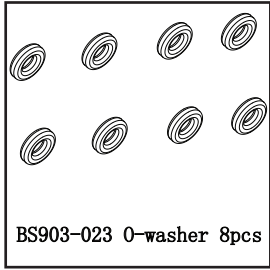
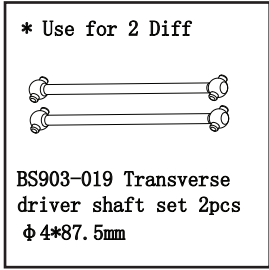
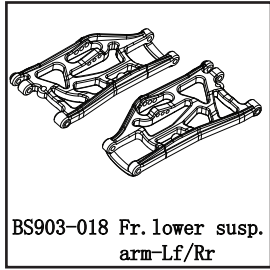
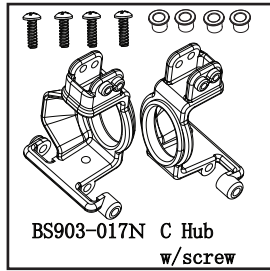
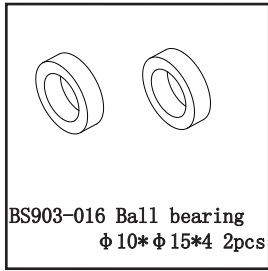
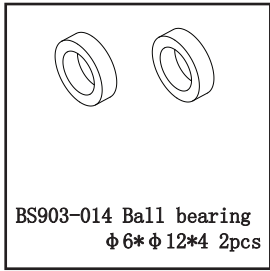
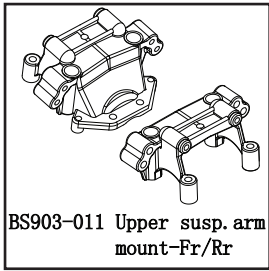
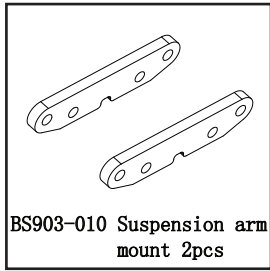
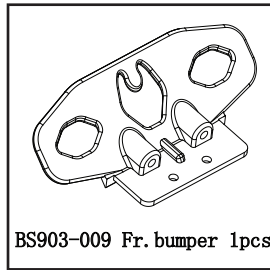
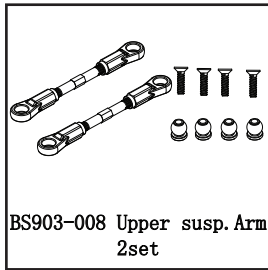
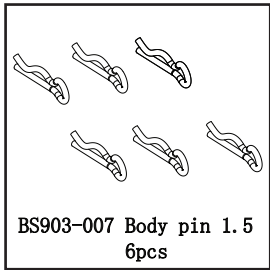
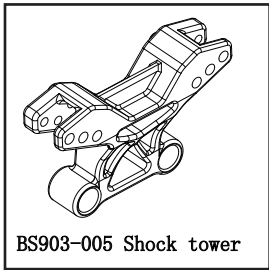
BS803-005	Steering servo mount-A/B
BS803-006	Steering servo horn linkage lset
BS803-007	Battery base-L
BS803-008	Battery base-R
BS803-009	Left/right battery cover
BS803-010	Servo saver unit
BS803-011	Upper deck-Fr
BS803-012	Centre drive shaft-Fr 1pc
BS803-013	Centre drive shaft-Rr 1pc
BS803-040	(BM3*14) B-head cross screw 12pcs
BS803-015	Receiver case-Upper/Lower
BS803-016	Front/rear upper deck mount
BS803-017	Upper deck-Fr/Rr
BS803-018	Wire mount
BS803-019	Centre diff.Unit

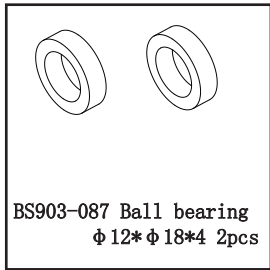
Item No. Description

BS803-020	Centre diff mount
BS803-021	Centre Diff Cover
BS803-022	Motor mount
BS502-020	Motor gear 13 T/M3 Grub screw
BS803-024	Brushless motor KV:2230
BS803-025	Diff. gearbox unit
BS803-026	Diff. Unit
BS803-027	Driving/Driven Gear, Diff. Gear/Bevel gears
BS803-028	7.4V/20C LiPo battery
B7053	Transmitter complete
B7054W	Receiver
B7018W	Servo (9Kg)
B7055W	Brushless ESC 80A

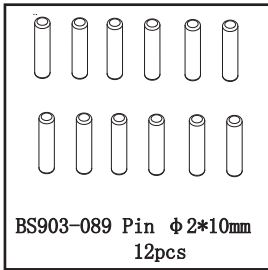
Optional parts/Upgrade parts

BS903-021	Anti-roll bar set
BS903-029	Anti-roll bar fixation set 2pcs
BS903-096	(M4*8) Set Screw 6pcs
BS905-009	Rear Anti-roll bar set
BS701-035	Charger for 7.2V Ni-Mh battery
BS701-036	7. 2V Ni-Mh battery
BS803-029	Motor heat sink
BS803-030	Motor cooling fan
B7004-F	7.2V Ni-Mh battery & 2-4 cells 7.4V Li-Po battery charger
MP0-01	Wheel hex set
MP0-02	C hub/c hub w/pin
MP0-04	Rear hub set
MP0-05	Shock stay mount
MP0-06	Front suspension mount
MP0-07	Rear suspension mount
MP0-11	Steering link

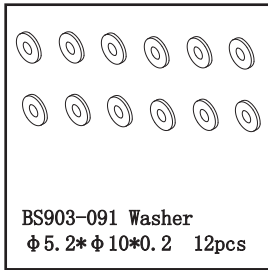




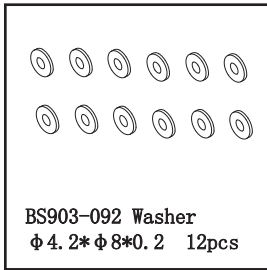
BS903-087 Ball bearing
φ 12*φ 18*4 2pcs



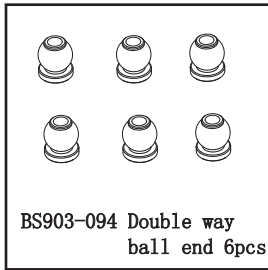
BS903-089 Pin φ 2*10mm
12pcs



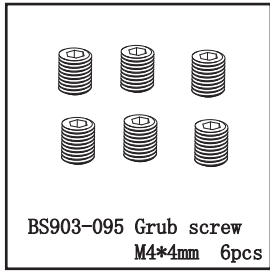
BS903-091 Washer
φ 5.2*φ 10*0.2 12pcs



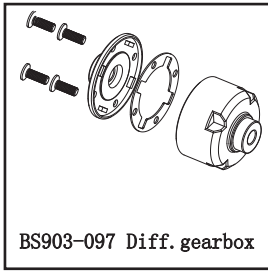
BS903-092 Washer
φ 4.2*φ 8*0.2 12pcs



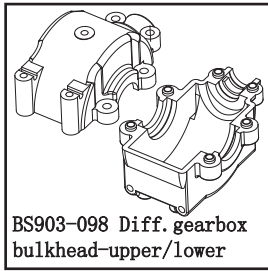
BS903-094 Double way
ball end 6pcs



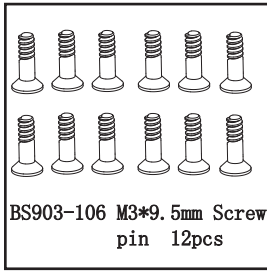
BS903-095 Grub screw
M4*4mm 6pcs



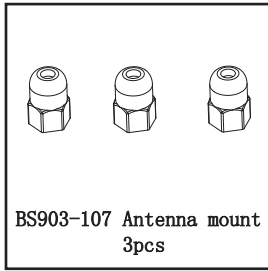
BS903-097 Diff. gearbox



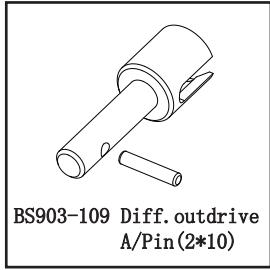
BS903-098 Diff. gearbox
bulkhead-upper/lower



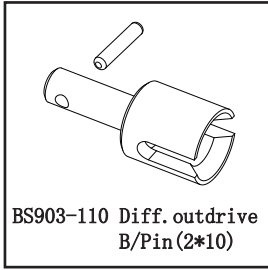
BS903-106 M3*9.5mm Screw
pin 12pcs



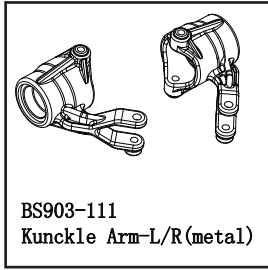
BS903-107 Antenna mount
3pcs



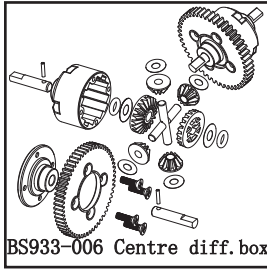
BS903-109 Diff. outdrive
A/Pin(2*10)



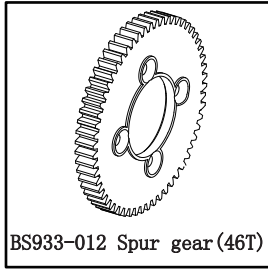
BS903-110 Diff. outdrive
B/Pin(2*10)



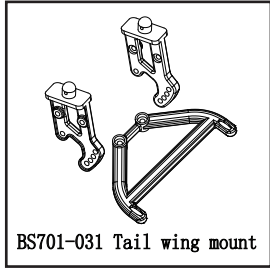
BS903-111
Kunckle Arm-L/R(metal)



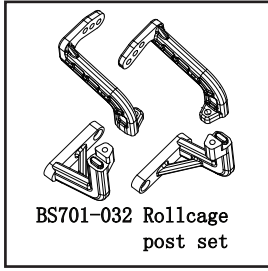
BS933-006 Centre diff. box



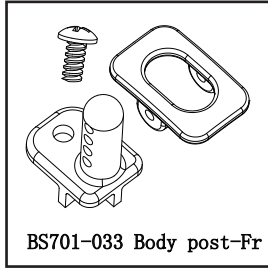
BS933-012 Spur gear(46T)



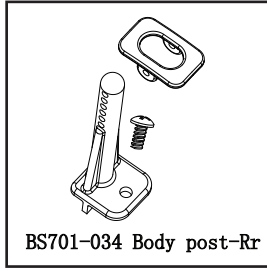
BS701-031 Tail wing mount



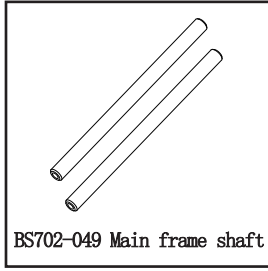
BS701-032 Rollcage
post set



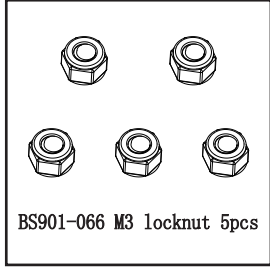
BS701-033 Body post-Fr



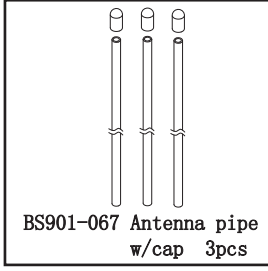
BS701-034 Body post-Rr



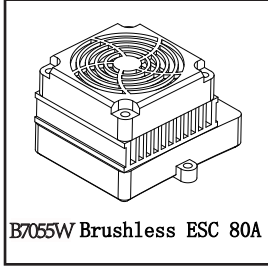
BS702-049 Main frame shaft



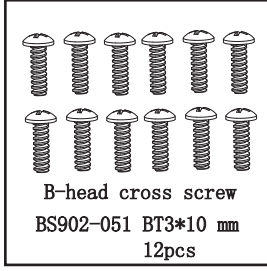
BS901-066 M3 locknut 5pcs



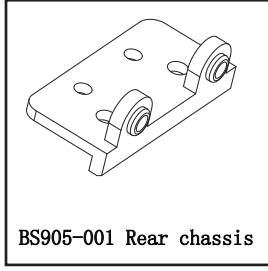
BS901-067 Antenna pipe
w/cap 3pcs



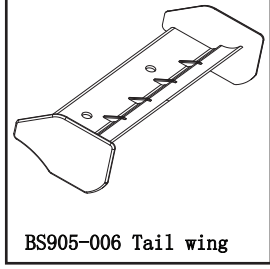
B7055W Brushless ESC 80A



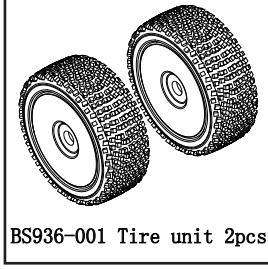
B-head cross screw
BS902-051 BT3*10 mm
12pcs



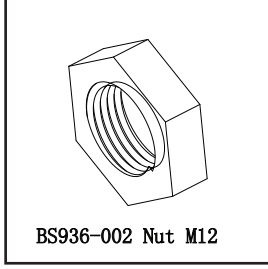
BS905-001 Rear chassis



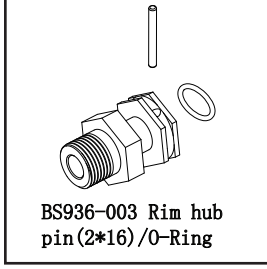
BS905-006 Tail wing



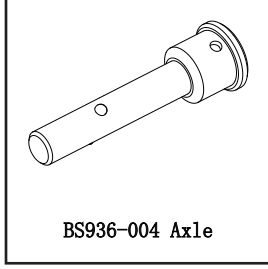
BS936-001 Tire unit 2pcs



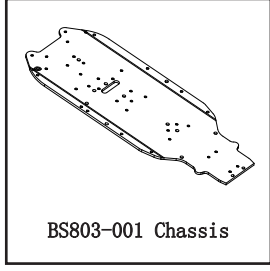
BS936-002 Nut M12



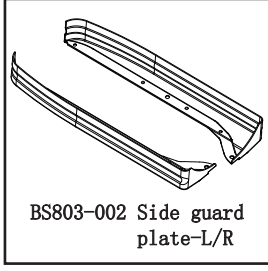
BS936-003 Rim hub
pin(2*16)/O-Ring



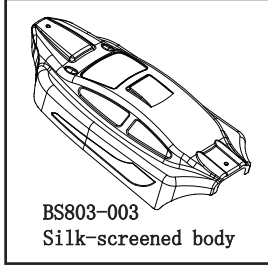
BS936-004 Axle



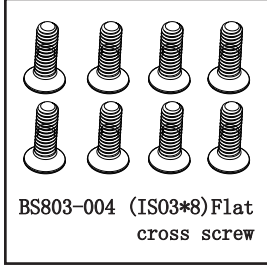
BS803-001 Chassis



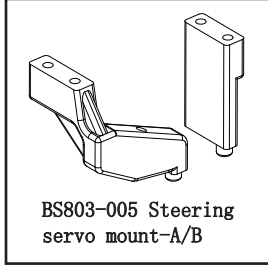
BS803-002 Side guard
plate-L/R



BS803-003
Silk-screened body



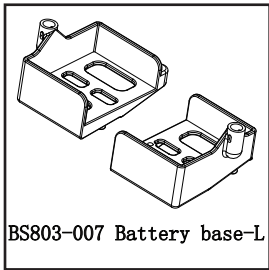
BS803-004 (IS03*8) Flat
cross screw



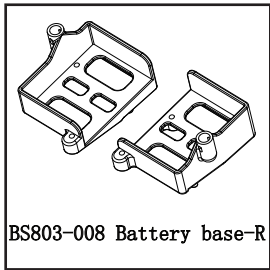
BS803-005 Steering
servo mount-A/B



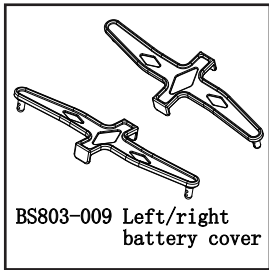
BS803-006 Steering servo horn linkage 1set



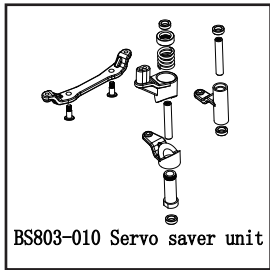
BS803-007 Battery base-L



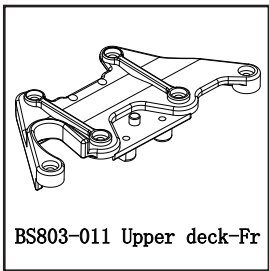
BS803-008 Battery base-R



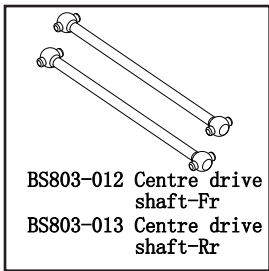
BS803-009 Left/right battery cover



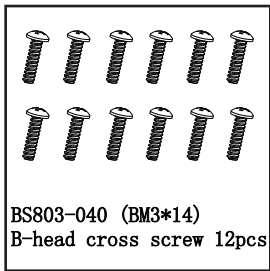
BS803-010 Servo saver unit



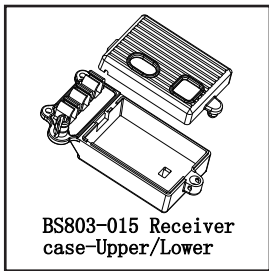
BS803-011 Upper deck-Fr



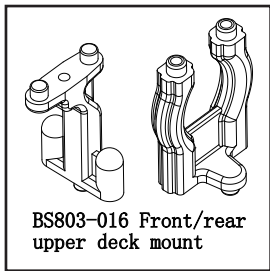
BS803-012 Centre drive shaft-Fr
BS803-013 Centre drive shaft-Rr



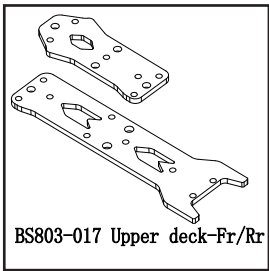
BS803-040 (BM3*14)
B-head cross screw 12pcs



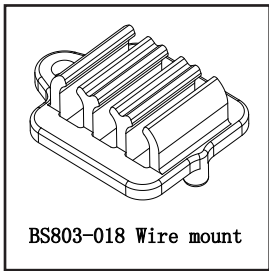
BS803-015 Receiver case-Upper/Lower



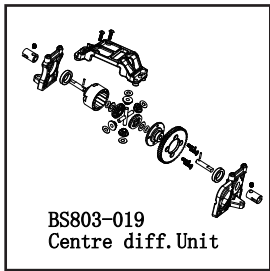
BS803-016 Front/rear upper deck mount



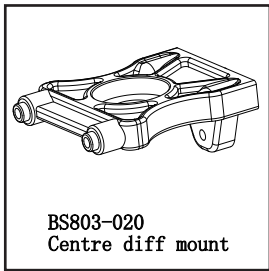
BS803-017 Upper deck-Fr/Rr



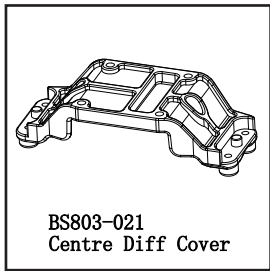
BS803-018 Wire mount



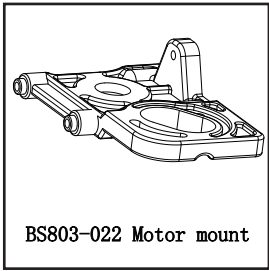
BS803-019 Centre diff. Unit



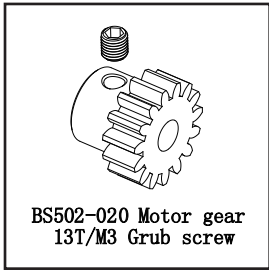
BS803-020 Centre diff mount



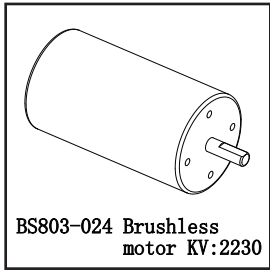
BS803-021 Centre Diff Cover



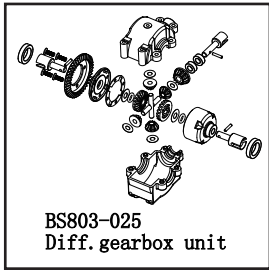
BS803-022 Motor mount



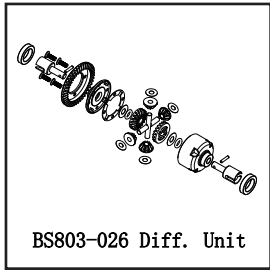
BS502-020 Motor gear
13T/M3 Grub screw



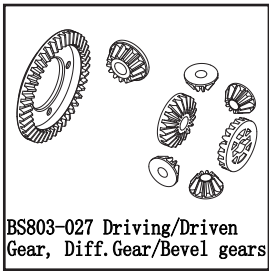
BS803-024 Brushless motor KV:2230



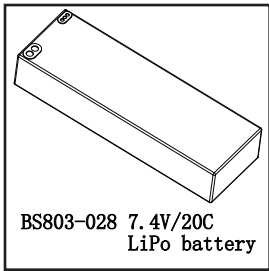
BS803-025 Diff. gearbox unit



BS803-026 Diff. Unit



BS803-027 Driving/Driven Gear, Diff. Gear/Bevel gears



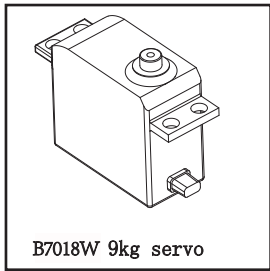
BS803-028 7.4V/20C LiPo battery



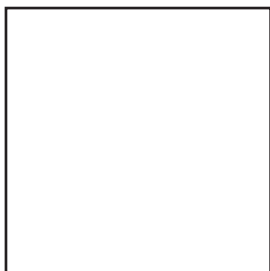
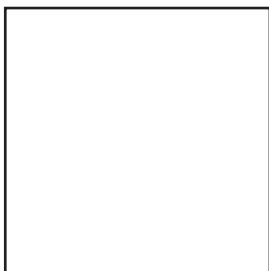
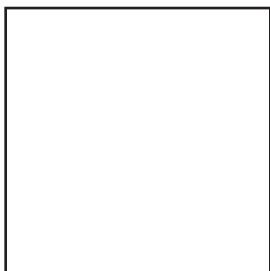
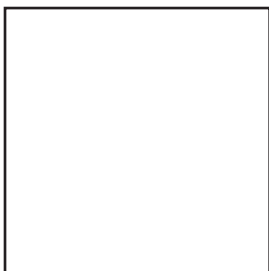
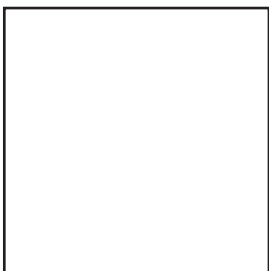
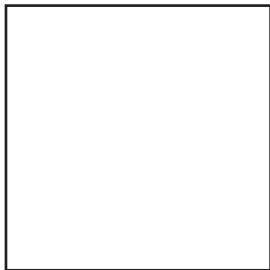
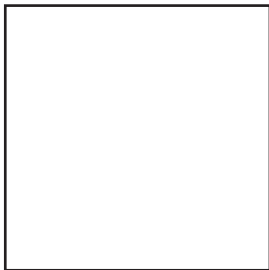
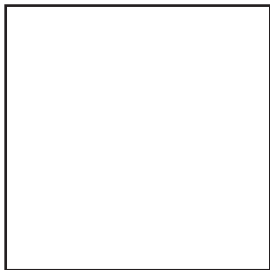
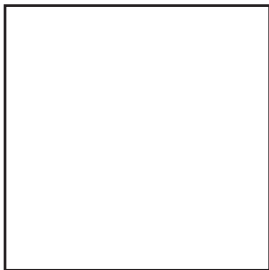
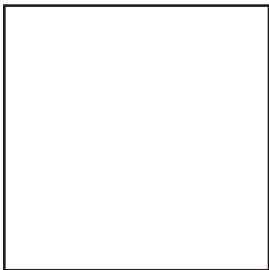
B7053 Transmitter complete



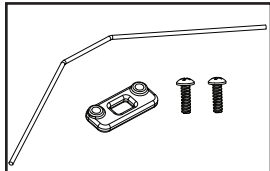
B7054W Receiver 1pcs



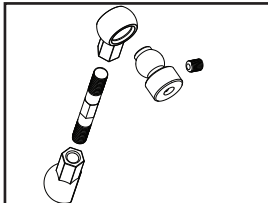
B7018W 9kg servo



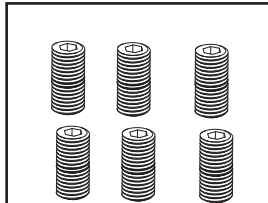
OPTIONAL PARTS/UPGRADE PARTS



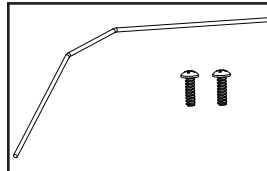
BS903-021 Anti-roll bar set



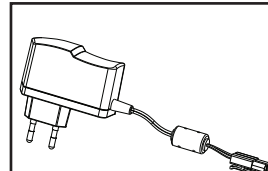
BS903-029 Anti-roll bar fixation set



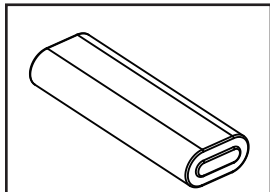
BS903-096 Grub screw
M4*8mm 6pcs



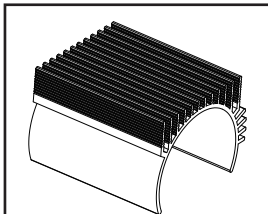
BS905-009 Rear Anti-roll bar set



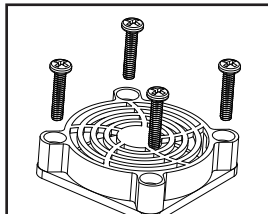
BS701-035 Charger for 7.2V Ni-Mh battery



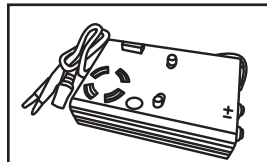
BS701-036
7.2V Ni-Mh battery



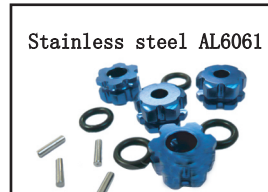
BS803-029 Motor heat sink



BS803-030 Cooling fan



B7004-F 7.2V Ni-Mh battery & 2-4 cells 7.4V Li-Po battery charger



Stainless steel AL6061

MPO-01 Wheel Hex Set



Stainless steel AL6061

MPO-02 C HUB C HUB W/Pin



Stainless steel AL6061

MPO-04 Rear Hub set



Stainless steel AL6061

MPO-05 Shock stay mount



Stainless steel AL6061

MPO-06 Front suspension mount



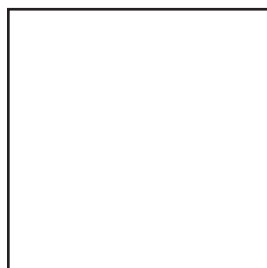
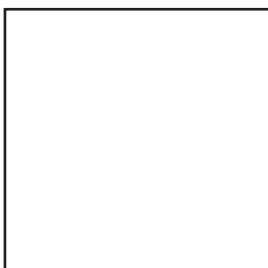
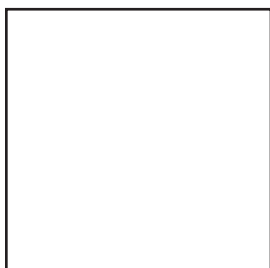
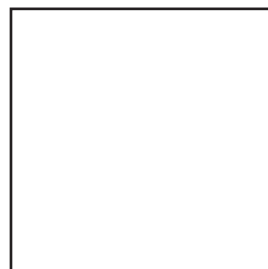
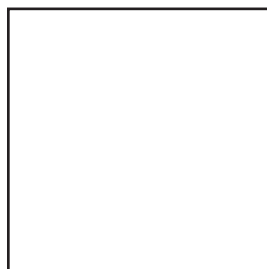
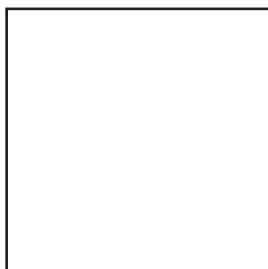
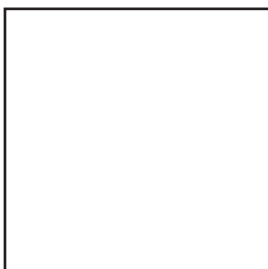
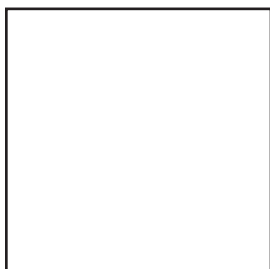
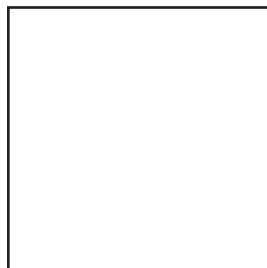
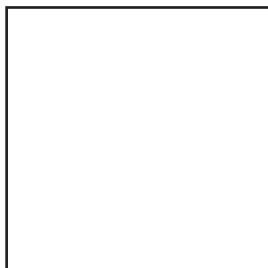
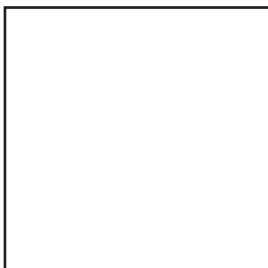
Stainless steel AL6061

MPO-07 Rear suspension mount



Stainless steel AL6061

MPO-11 Steering link



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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