

SaberTooth

1/8th Brushless 4WD Truggy

INSTRUCTION MANUAL



BASHER.

BASHER SABERTOOTH MANUAL

BEFORE YOU RUN YOUR CAR

Required equipment for operation

1. Tools required for building and maintenance:



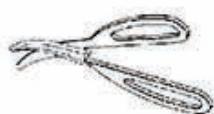
Hobby knife



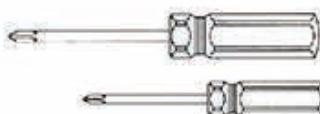
Precision ruler or caliper



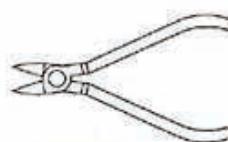
Needle nose pliers



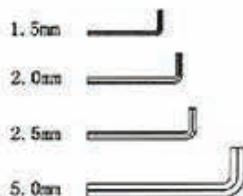
Hobby scissors



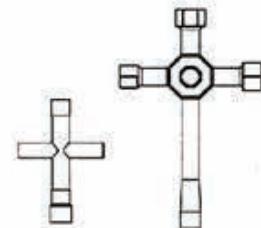
Phillips screwdriver



Wire cutters



Hex wrench



Cross wrench



Thread locking compound



CA glue & rubber cement

IMPORTANT!!!

Check all the screws are tight before using the car!
Check all the screws are still tight after every battery pack used in the car!



RECOMMENDED

Use thread lock on all screws that work loose.

PLEASE READ BEFORE STARTING!

Thank you for selecting our racing product ! This vehicle is designed to be fun to drive and uses good quality parts for durability and performance. The instruction manual you are reading was designed to be easy to follow yet thorough in its explanations. We want you to enjoy driving your new R/C car. Well, before you throw down this manual and unleash your new vehicle, please continue reading for just a few short minutes.

SAFETY GUIDELINES

The vehicle is not intended for use by children without direct supervision of a responsible, knowledgeable adult. We shall not be liable for any loss or damages, whether direct or indirect, special, incidental, or consequential, arising from the use, misuse, or abuse of this product and/or any product or accessory required to operate this product.

BASHER SABERTOOTH MANUAL

IMPORTANT POINTS TO REMEMBER

Always, turn on your transmitter first before turning on your vehicle receiver switch. When turning an R/C vehicle off, the order is just the opposite: Turn the receiver switch off first and then turn the transmitter off. Just remember that when your vehicle is turned ON, your transmitter should always be turned ON. If not, your vehicle will no longer be under the control of your transmitter, and could unexpectedly take off on its own, causing damage to itself and other people.

Never use old, worn out batteries in your transmitter or vehicle. Use only fresh batteries or fully charged rechargeable batteries to ensure that you will not exceed the range of your radio system while driving your vehicle. It is also very important to stop your vehicle immediately when you begin to see that it is slowing down. This means the batteries in your vehicle are close to being fully discharged, and if you continue to run your vehicle after it has slowed, it may run "out of control" since it does not have sufficient voltage left to receive the signals from your transmitter.

Only run your vehicle in safe, open areas that will not put anything or anyone in danger of a collision. Use common sense when driving your vehicle to ensure that you are not causing a potential hazard to anyone(crowds of people and confined areas should be avoided). Although the model is small and light weight, it can still hurt when it runs into your ankle height. It can also startle someone who is not expecting it, so it is extremely important to ALWAYS keep a safe distance between any people and the path of your vehicle(don't forget this includes yourself)!

Never run your vehicle through puddles, wet grass, snow or any other type of moisture. Also never use any liquid cleaners around the electronic components on your vehicle. Any small amount of moisture can cause severe damage to your electronics.

If you be running your vehicle with other R/C vehicles, always confirm before turning your transmitter on, that no one else is using your same frequency channel. If neccessary, you may change frequencies(certainly this is not related to 2.4G radio use).

Always let your motor and battery cool down completely between runs. The motor needs to cool completely at the end of a charge before using again. Heat is a big enemy of electric motors. Overheating the motor will shorten its life and can cause it to fail. Prolonged running on high drag surfaces like grass, carpet etc.can heat the motor up and cause possible failure.

WHAT ELSE IS NEEDED

4 "AA" alkaline batteries(for the radio transmitter)

GETTING STARTED

1. INSTALLING TRANSMITTER BATTERIES

Install 4 new "AA" batteries into your vehicle transmitter.

Check the life and proper installation of your batteries by switching the transmitter to ON. On vehicle transmitters, you should see all three LED'S light up(Red, yellow, and green). If you do not, your batteries may be low on voltage or you may not have installed them all correctly.

As the life of your transmitter batteries begins to decline, the green LED will no longer light. When you notice that you are down to only the yellow and red lights, this is a caution sign that it is time to install new batteries. If you continue operating your vehicle, and see that the yellow light goes out(and only the red light is lit), STOP IMMEDIATELY! Your vehicle may easily travel out of range causing you to lose all control, which could result in a collision causing damage to the vehicle or other property.

BASHER SABERTOOTH MANUAL

2. CHARGING YOUR VEHICLE

Charge your vehicle's battery pack. Connect the charger in the box to your battery pack(it will only plug in one direction) and then plug the charger into a standard wall outlet. Charging takes approximately 2-3 hours. When the battery is fully charged, unplug the charger and connect the battery to your speed control.

Your vehicle charger will safely charge your battery pack and not over charge it. Be careful when using after market chargers that you do not overcharge the battery pack and ruin it. By the way, this charger is only for the vehicle, not for the radio control.

3. ASSEMBLING THE ANTENNA

Locate the plastic antenna tube.

Run the antenna wire up through the rear antenna mount hole in the upper chassis plate and begin feeding it into the plastic antenna tube until it comes out the other side. Pull the remaining wire through the tube, and then press the tube into the antenna mount in the upper chassis plate. Bend the antenna wire down around the tube and install the black rubber antenna cap on the top of the tube. You may then wrap the remaining wire around the tube. DO NOT cut the antenna wire off! This could shorten the range of your radio system.

Special Instruction About Batteries

Contents:

1. Keep batteries/storage batteries out of reach of children.
2. Do not let batteries lie around openly, There is a risk of batteries being swallowed by children or pets. In such case, seek instant medical care!
3. Batteries/Rechargeable batteries must never be short-circuited, taken apart or thrown into fire. They might explode!
4. Leaking or damaged batteries/rechargeable batteries might cause acid burns when getting into contact with skin. Therefore, use suitable protective gloves.
5. Conventional batteries must not be recharged. Danger of fire and explosion! Only charge rechargeable batteries which are intended for this purpose, use suitable rechargeable battery chargers.
6. Please observe correct polarity of batteries/rechargeable batteries and the connection of a re-chargeable battery pack(note plus/+ and minus/-) when inserting the batteries.
7. If the device is not used for a longer period of time(eg storage), take out the inserted batteries/rechargeable batteries of the remote control to avoid damage from leaking batteries/rechargeable batteries.
Recharge the rechargeable battery about every 3 months, because otherwise there may be a so called deep discharge because of the self discharge, which makes the rechargeable batteries useless.
8. Always exchange the entire set of batteries or rechargeable batteries. Do not mix full batteries/rechargeable batteries with half-full ones. Always use batteries or rechargeable batteries of the same type and manufacturer.
9. Never mix batteries and storage batteries. Either use eight batteries or eight rechargeable batteries for the remote control/transmitter.

Please Note:

Before the rechargeable battery pack delivers its maximum power, several complete discharge and charge cycles are necessary.

Always drive the rechargeable battery pack empty, since recharging a "half-full" rechargeable battery pack can cause a so called memory effect. That means that the rechargeable battery pack loses its capacity, it no longer releases all of its saved energy, drive time is decreased.

If you are using several rechargeable battery packs or rechargeable batteries, purchasing a high quality charger maybe worthwhile.

They are normally also suitable for fast charging of rechargeable batteries.

BASHER SABERTOOTH MANUAL

For this purpose, proceed as follows:

If the rechargeable battery pack was taken directly from the vehicle and is still hot, wait until the rechargeable battery pack has cooled down before you recharge.(min. of 5-10 minutes)
Connect the plug-in charge with a proper mains socket.
Connect the rechargeable battery pack with correct polarity with the plug-in charger.
Normally the special design of the two plugs avoids the incorrect connection of the rechargeable battery.

Attention:

Do not use any force when plugging in it!

For reason of safety place the rechargeable battery pack on a non-flammable surface, eg. a tiled floor.
Keep the rechargeable battery pack away from flammable objects.

Never leave the rechargeable battery pack unattended.

The rechargeable battery pack gets warm during charging, this is normal.

Separate the rechargeable battery pack from the plug-in charger after charging, pull the plug-in charger from the mains socket.

Before using the rechargeable battery pack in the vehicle, wait until it has completely cooled down.
After your playing, please do not forget to cut the connections of battery and ESC!

Disposal:

The user is legally obliged(battery regulation) to return used batteries and storage batteries.

Do not dispose of used batteries via the household rubbish!
Batteries/storage batteries containing harmful substances which been disposed via the household rubbish is prohibited.

You can return used batteries/accumulators free of charge to any collecting point in your local authority, so that you comply with your legal obligations and make your contribution to environmental protection.

BASHER SABERTOOTH MANUAL

【DECLARATION】

Thanks for purchasing our Electronic Speed Controller (ESC). The power system for RC model can be very dangerous, so please read this manual carefully. In that we have no control over the correct use, installation, application, or maintenance of our products, no liability shall be assumed nor accepted for any damages, losses or costs resulting from the use of the product. Any claims arising from the operating, failure of malfunctioning etc. will be denied. We assume no liability for personal injury, consequential damages resulting from our product or our workmanship.

【FEATURES】

- ★ Completely water-proof and dust-proof. The ESC works properly even under water. (Please remove the cooling fan when running car in water, and after running, please make the ESC clean and then dry it to avoid the oxidation of copper connectors)
- ★ Excellent start-up, acceleration and linearity features, suitable for truggy (especially short course trucks) and buggy.
- ★ The built-in switching mode BEC has powerful output to supply all electronic equipments.
- ★ There is a mounting stand for installing the ESC on chassis easily and firmly.
- ★ Proportional ABS brake function with 5 steps of maximum brake force adjustment, 8 steps of drag-brake force adjustment. Also compatible with the mechanical disc-brake system.
- ★ Multiple protection features: Low voltage cut-off protection/over heat protection/ Throttle signal protection/Motor blocked protection.
- ★ Easily programmed with the SET button of the ESC, and also compatible with pocket-sized program card.
- ★ External programming port (EPP), easy to connect with program card, and also works as power port for cooling fan.

【SPECIFICATIONS】

Model	WP-SC10-RTR	WP-SC8-RTR	WP-SC8-ADV-RTR	WP-S8A-RTR	WP-S8B-RTR
Cont./Burst Current	80A / 520A	80A/520A	120A/760A	100A/650A	150A/950A
Motor Supported	Sensorless brushless motors				
Cars Applicable	1/10 SCT/Truggy/ Buggy/Monster	1/10 SCT/Truggy/Buggy/Monster 1/8 SCT/Buggy Incl. Traxxas 1/10 Truggy/Buggy	1/8 SCT/Buggy/Truggy Incl. Traxxas 1/10 Truggy/Buggy	1/8 Truggy/Monster	
Motor Limit	2S Lipo: KV≤6000 3S Lipo: KV≤4000		2S Lipo: KV≤6000 3S Lipo: KV≤4000 4S Lipo: KV≤2600		4S Lipo: KV≤3000 6S Lipo: KV≤2400
Resistance	0.0007 ohm		0.0004 ohm	0.0005 ohm	0.00035 ohm
Battery	6-9 cells NiMH 2-3S Lipo		6-12 cells NiMH 2-4S Lipo		6-18 cells NiMH 2-6S Lipo
BEC Output <small>Note 1</small>	6V/3A Linear mode			6V/3A Switch mode	
Dimension	59.3(L) × 38.4(W) × 33.6(H)			59.5(L)×48(W)×42(H)	
Weight (With Wires)	110g		113g	173g	178g

1/8th Scale Electric Truggy

BASHER SABERTOOTH MANUAL

NOTE1 : The cooling fans of ESC is supplied by the built-in BEC, so it is always working under 6V.

【BEGIN TO USE THE NEW ESC】

WARNING! For safety, please always keep the wheels away from the track when switching on the ESC.

1. Connect The ESC, Motor, Receiver, Battery And Servo

The #A, #B, #C wires of the ESC can be connected with the motor wires freely (without any sequence) If the motor runs in the opposite direction, please swap any two wire connections.

2. Throttle Range Setting (Throttle Range Calibration)

In order to make the ESC match the throttle range, you must calibrate it when you begin to use a new ESC, or a new transmitter, or change the settings of the neutral position of the throttle stick, ATV or EPA parameters, etc.

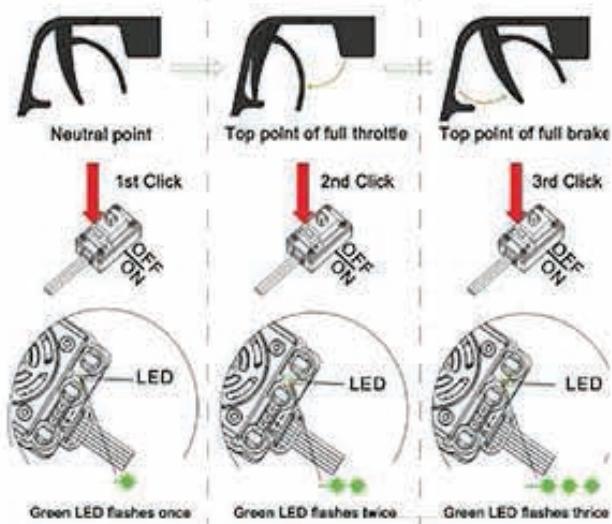
The following pictures show how to set the throttle range with a **Futaba™** transmitter.

- A) Switch off the ESC, turn on the transmitter, set the direction of throttle channel to "REV", set the "EPA/ATV" value of throttle channel to "100%", and disable the ABS function of your transmitter
- B) Hold the "SET" key and then switch on the ESC, and release the "SET" key as soon as possible when the red LED begins to flash. (**Note2**)



Note2: If you don't release the "the SET" key as soon as the red LED begins to flash, the ESC will enter the program mode, in such a case, please switch off the ESC and re-calibrate the throttle range again from step A to step D.

- C) Set the 3 points according to the steps shown in the pictures on the right side.
 - 1) **The neutral point**
Move the throttle stick at the neutral point, and then click the SET key, the green LED flashes 1 time.
 - 2) **The end point of forward direction**
Move the throttle stick at the end point of forward direction, and then click the SET key, the green LED flashes 2 times.
 - 3) **The end point of backward direction**
Move the throttle stick at the end point of backward direction, and then click the SET key, the green LED flashes 3 times.
- D) Throttle range is calibrated; motor can be started after 3 seconds.



BASHER SABERTOOTH MANUAL

Check LED Status In Normal Running

- ▶ Normally, if the throttle stick is located in the neutral range, neither the red LED nor the green LED lights.
- ▶ The red LED lights when the car is running forward or backward and it will flash quickly when the car is braking.
- ▶ The green LED lights when the throttle stick is moved to the top point of the forward zone.

【PROGRAMMABLE ITEMS LIST】

(The *Italics texts* in the following form are the default settings)

Programmable Items	Programmable Value								
	1	2	3	4	5	6	7	8	9
1. Running Mode	Forward with Brake	Forward/Reverse with Brake	Forward and Reverse						
2.Drag Brake Force	0%	5%	10%	20%	40%	60%	80%	100%	
3.Low Voltage Cut-Off Threshold	Non-Protection	2.6V/Cell	2.8V/Cell	3.4V /Cell	3.2V /Cell	3.4V /Cell			
4.Start Mode(Punch)	Level1	Level2	Level3	Level4	Level5	Level6	Level7	Level8	Level9
5.Max Brake Force	25%	50%	75%	100%	Disable				

1. Programmable Values

- 1.1. **Running Mode:** In "Forward with Brake" mode, the car can go forward and brake, but cannot go backward, this mode is suitable for competition; "Forward/Reverse with Brake" mode provides backward function, which is suitable for daily training.

Note: "Forward/Reverse with Brake" mode uses "Double-click" method to make the car go backward. When you move the throttle stick from forward zone to backward zone for the first time (The 1st "click"), the ESC begins to brake the motor, the motor speeds down but it is still running, not completely stopped, so the backward action is not happened immediately. When the throttle stick is moved to the backward zone again (the 2nd "click"), if the motor speed is slowed down to zero (i.e. stopped), the backward action will happen. The "Double-Click" method can prevent mistakenly reversing action when the brake function is frequently used in steering.

By the way, in the process of braking or reversing, if the throttle stick is moved to forward zone, the motor will run forward at once.

"Forward/Reverse" mode uses "Single-click" to make the car go backward. When you move the throttle stick from forward zone to backward zone, the car will go backward immediately. This mode is usually used for the Rock Crawler.

- 1.2. **Drag Brake Force:** Set the amount of drag brake applied at neutral throttle to simulate the slight braking effect of a neutral brushed motor while coasting.

- 1.3. **Low Voltage Cut-Off:** The function prevents the lithium battery pack from over discharging. The ESC detects the battery's voltage at any time, if the voltage is lower than the threshold for 2 seconds, the output power will be cut off, and the red LED flashes in such a way: "☆-☆-, ☆☆-, ☆-☆-".

- 1.4. **Start Mode (Also called "Punch"):** Select from "Level1" to "Level9" as you like. Level1 has a very soft start effect, while level9 has a very aggressive start effect. From Level1 to Level9, the start force is increasing. Please note that if you choose "Level7 to Level9" mode, you must use good quality battery with powerful discharge ability, otherwise these modes cannot get the burst start effect as you want. If the motor cannot run smoothly (that means the motor is trembling), it may be caused by the weak discharge ability of the battery, Please choose a better one or a softer gear ratio.

BASHER SABERTOOTH MANUAL

- 1.5. **Maximum Brake Force:** The ESC provides proportional brake function. The brake force is related to the position of the throttle stick. Maximum brake force refers to the force when the throttle stick is located at the end point of the backward zone. A very large brake force can shorten the brake time, but it may damage the gears. The "Disable" option inhibits the inherent brake function of the speed controller. When this option is selected, the brake function is realized by a traditional mechanical disc-brake system driven by a servo.

2. Reset All Items To Default Values

At any time when the throttle is located in neutral zone (except in the throttle calibration or parameters program process), hold the "SET" key for over 3 seconds, the red LED and green LED will flash at the same time, which means each programmable item has be reset to its default value.

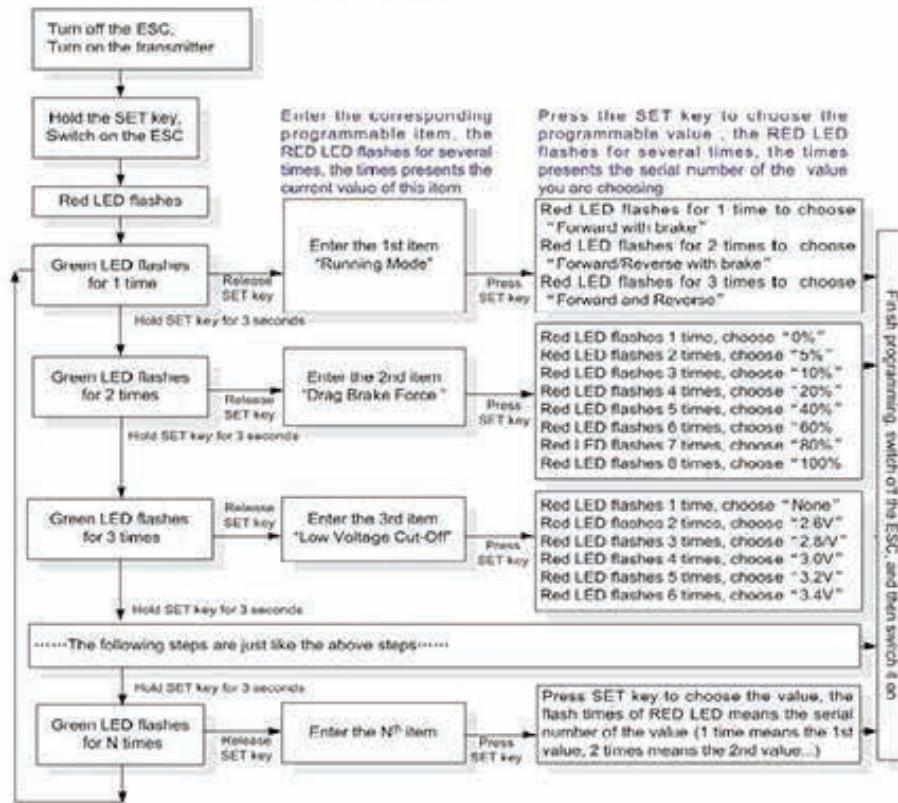
Trouble	Possible Reason	Solution
After power on, motor doesn't work, and the cooling fan doesn't work	The connections between battery pack and ESC are not correct	Check the power connections. Replace the connectors.
After power on, motor can't work, but emits "beep-beep-, beep-beep-" alert tone. (Every "beep-beep-" has a time interval of 1 second)	Input voltage is abnormal, too high or too low	Check the voltage of the battery pack
After power on, red LED always lights, the motor doesn't work	Throttle signal is abnormal	Plug the control wire into the throttle channel of the receiver correctly.
The motor runs in the opposite direction when it is accelerated	The wire connections between ESC and the motor are not correct	Swap any two wire connections between the ESC and the motor.
The motor suddenly stops running while in working state.	The throttle signal is lost	Check the transmitter and the receiver Check the signal wire from the throttle channel of your receiver
	The ESC has entered the Low Voltage Protection Mode or Over-heat Protection Mode	Red LED flashing means Low Voltage. Green LED flashing means Over-heat
When accelerating quickly, the motor stops or trembles	1) The battery has a bad discharge performance 2) Gear ratio is too aggressive 3) The "Start Mode (Punch)" of the ESC is too aggressive	1) Use a better battery 2) Use lower KV motor or softer gear ratio 3) Set the "Start Mode (Punch)" to a softer value
When the throttle stick is in the neutral range, the red LED and the green LED flashes synchronously	Over current protection, motor demagnetization, or motor is over load	1) Reduce the load (Use softer gear ratio or reduce the input voltage) 2) Change the motor
Cannot connected with the LED Program Card or LCD Program Box	Mistakenly uses the Rx wire to connect to the program card/box.	Connect the program card/box to the special programming port of the ESC, don't use the Rx wire.
Trouble	Possible Reason	Solution
After power on, motor doesn't work, and the cooling fan doesn't work	The connections between battery pack and ESC are not correct	Check the power connections. Replace the connectors.
After power on, motor can't work, but emits "beep-beep-, beep-beep-" alert tone. (Every "beep-beep-" has a time interval of 1 second)	Input voltage is abnormal, too high or too low	Check the voltage of the battery pack
After power on, red LED always lights, the motor doesn't work	Throttle signal is abnormal	Plug the control wire into the throttle channel of the receiver correctly.
The motor runs in the opposite direction when it is accelerated	The wire connections between ESC and the motor are not correct	Swap any two wire connections between the ESC and the motor.
	The throttle signal is lost	Check the transmitter and the receiver Check the signal wire from the throttle channel of your receiver
The ESC has entered the Low Voltage Protection Mode or Over-heat Protection Mode	The ESC has entered the Low Voltage Protection Mode or Over-heat Protection Mode	Red LED flashing means Low Voltage. Green LED flashing means Over-heat
	1) The battery has a bad discharge performance 2) Gear ratio is too aggressive 3) The "Start Mode (Punch)" of the ESC is too aggressive	1) Use a better battery 2) Use lower KV motor or softer gear ratio 3) Set the "Start Mode (Punch)" to a softer value
When the throttle stick is in the neutral range, the red LED and the green LED flashes synchronously	Over current protection, motor demagnetization, or motor is over load	1) Reduce the load (Use softer gear ratio or reduce the input voltage) 2) Change the motor
Cannot connected with the LED Program Card or LCD Program Box	Mistakenly uses the Rx wire to connect to the program card/box.	Connect the program card/box to the special programming port of the ESC, don't use the Rx wire.

BASHER SABERTOOTH MANUAL

【TROUBLE SHOOTING】

【PROGRAM THE ESC】

1. Program the ESC with the SET button on the ESC



Note:

- In the program process, the motor will emit "Beep" tone when the LED is flashing.
- We use a long time flash and long "Beep---" tone to represent number "5" for easily identify the items of the big number.
"A long time flash" (Motor sounds "B---") = the No.5 item
"A long time flash + a short time flash" (Motor sounds "B---B") = the No.6 item
"A long time flash + 2 short times flash" (Motor sounds "B---BB") = the No.7 item
"A long time flash + 3 short times flash" (Motor sounds "B---BBB") = the No.8 item
"A long time flash + 4 short times flash" (Motor sounds "B---BBBB") = the No.9 item

2. Program the ESC with the LED program box (Optional equipment)

Note3: The Rx wire of the ESC (for connecting receiver) CANNOT be used to connect with the LED Program Card. Please only use the special port between the terminals ABC to connect with the Program Card.



BASHER SABERTOOTH MANUAL

2.4GHz radio manual

1) Transmitter

Before turning on your vehicle, please familiarize yourself with the controls of the radio transmitter.

You may use the following diagram to confirm the location and function of each of these features.

- A. ON/OFF Switch: Controls power to the transmitter.
- B. Steering Wheel: Steering the vehicle left and right.
- C. Throttle Trigger: Control the speed and the Forward/Reverse direction of the vehicle.
- D. Throttle Trim: Adjusts the neutral position of the throttle so your vehicle responds correctly to the trigger.
- E. Steering Trim: Adjusts the neutral position of the throttle so your vehicle travels straight.
- F. Throttle Reverse Switch: Reverse the forward/reverse direction of steering wheel.
- G. Steering Reverse Switch: Reverse the left/right direction of steering wheel.
- H. Antenna: Transmits radio signals to your receiver.
- I. Start button: Channel 3.
- K. Steering Knob: Adjusts the steering angle.



Pin Jumper



2) 2.4GHz Frequency Pin Setup

1. Switch on the transmitter.
2. Turn on the receiver power (you can choose any channel), plug the jumper into "BIND/BATT" of receiver. When the indicator starts flashing, that means the receiver comes into the set code mode. At this point, pull out the jumper immediately.
3. The receiver can automatically find the nearest transmitter to match with. Once they match successfully, the indicator would keep lighting (at this moment please plug the jumper into "BIND/BATT" again). And if the indicator continuously flashes, that means they haven't matched successfully.

Declaration Of Using Our Products

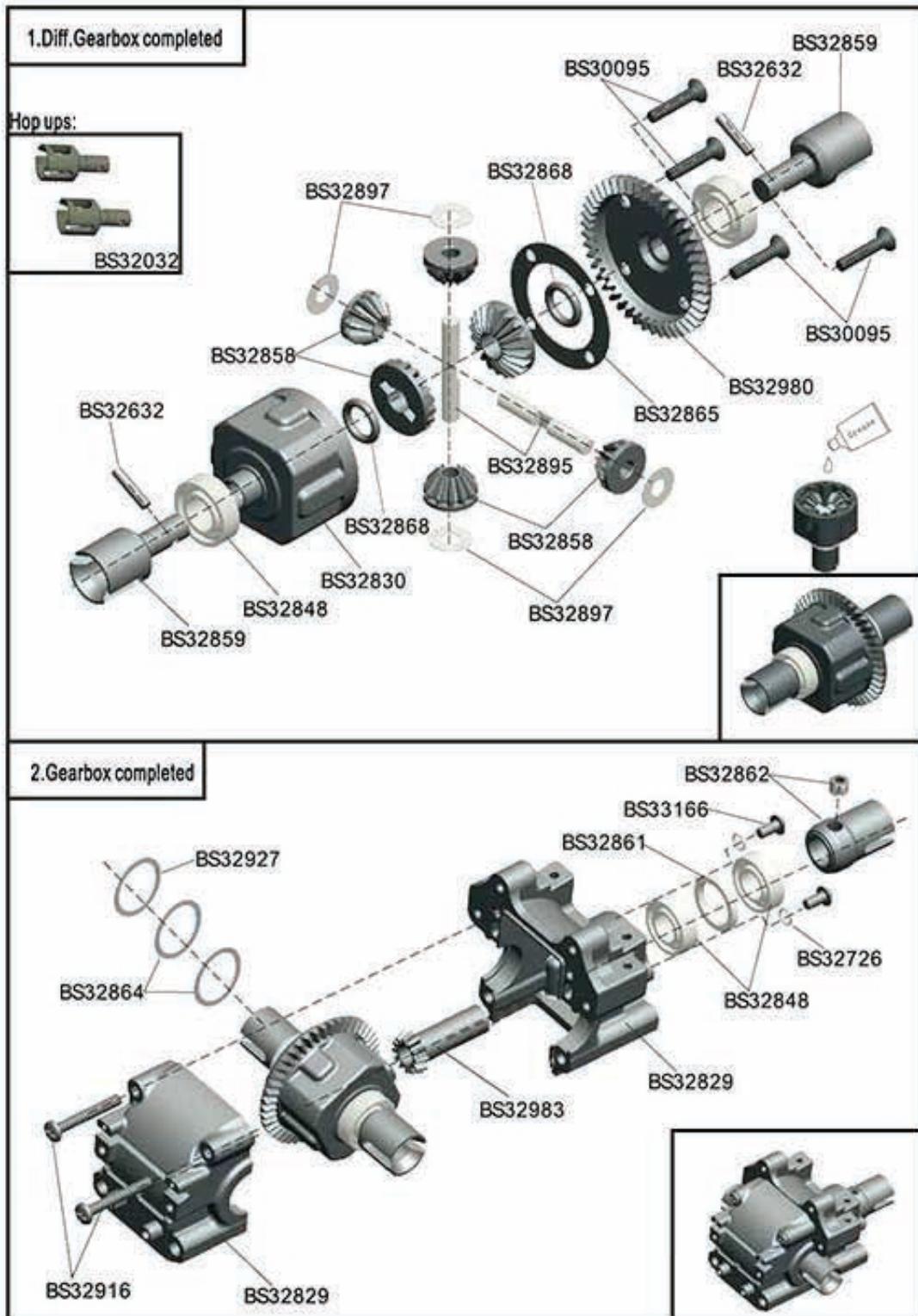
Even if the vehicle is quite small at the first glance, there is risk of injuries in the case of crash with people (or animals), because of the high acceleration capacity and the high achievable speed. Sharp edges and rotating parts also present a high danger!

This is why you should drive very responsibly and carefully, this is especially the case for inexperienced drivers.

So, here we declaration as below:

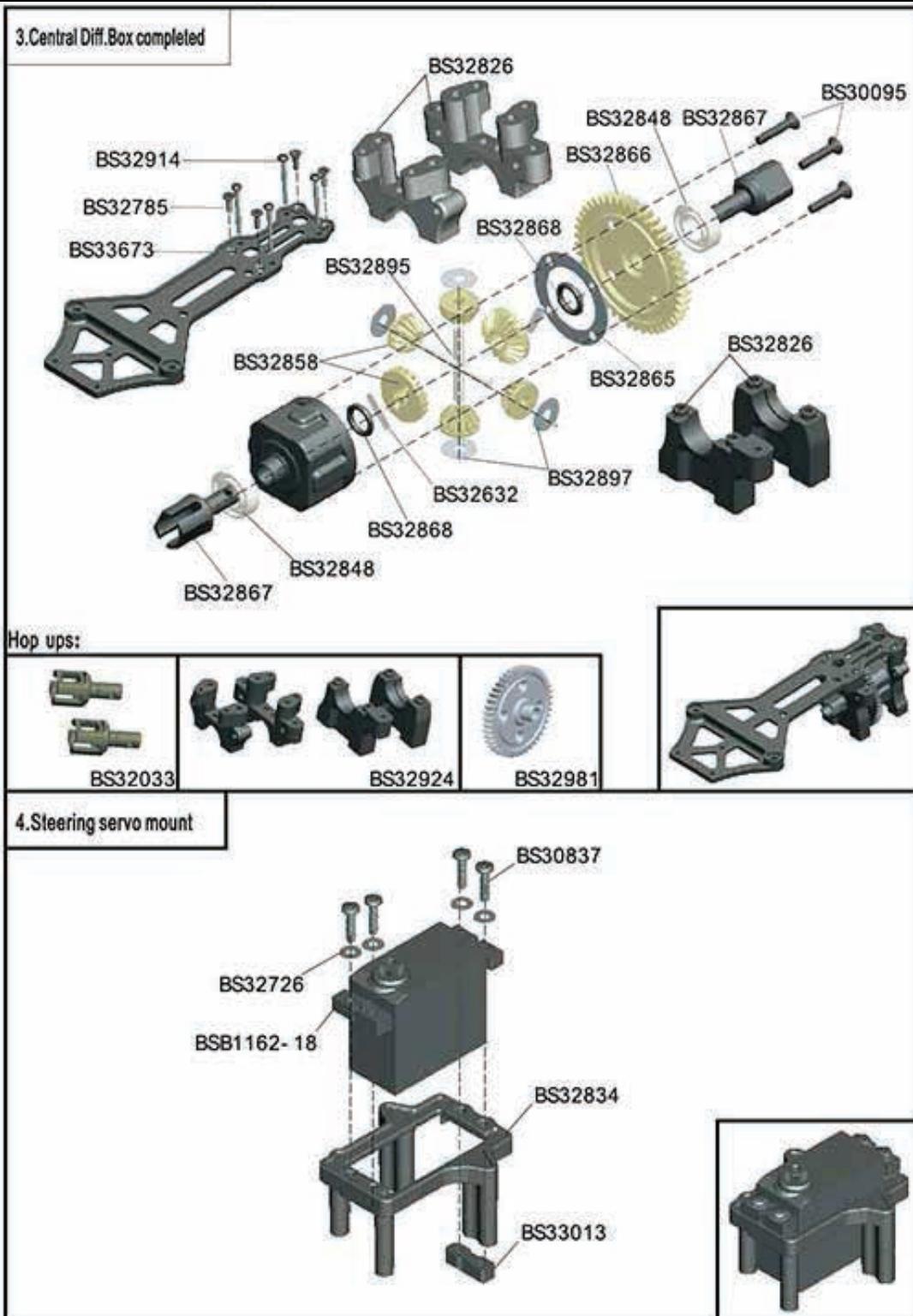
1. Please do note this manual carefully, especially the attention parts and if you are a new player without enough experience, we will not take any responsibility for the car damages or injuries caused by incorrect operation!
2. Please do not change the matches of the brushless ESC, motor and the Li-Po battery casually, if you want to make a change, please do ask for ideas of professional people, incorrect and unsuitable matches will affect the functions and the car's high performance, even it will cause the damages of the electronic parts and the crash of the car! We do not take the responsibility of car damages and injuries of unsuitable matches or equipment changes!
3. We have the right to change the specification and parameter of the model and without notice in advance pls take the material object as the standard!

BASHER SABERTOOTH MANUAL



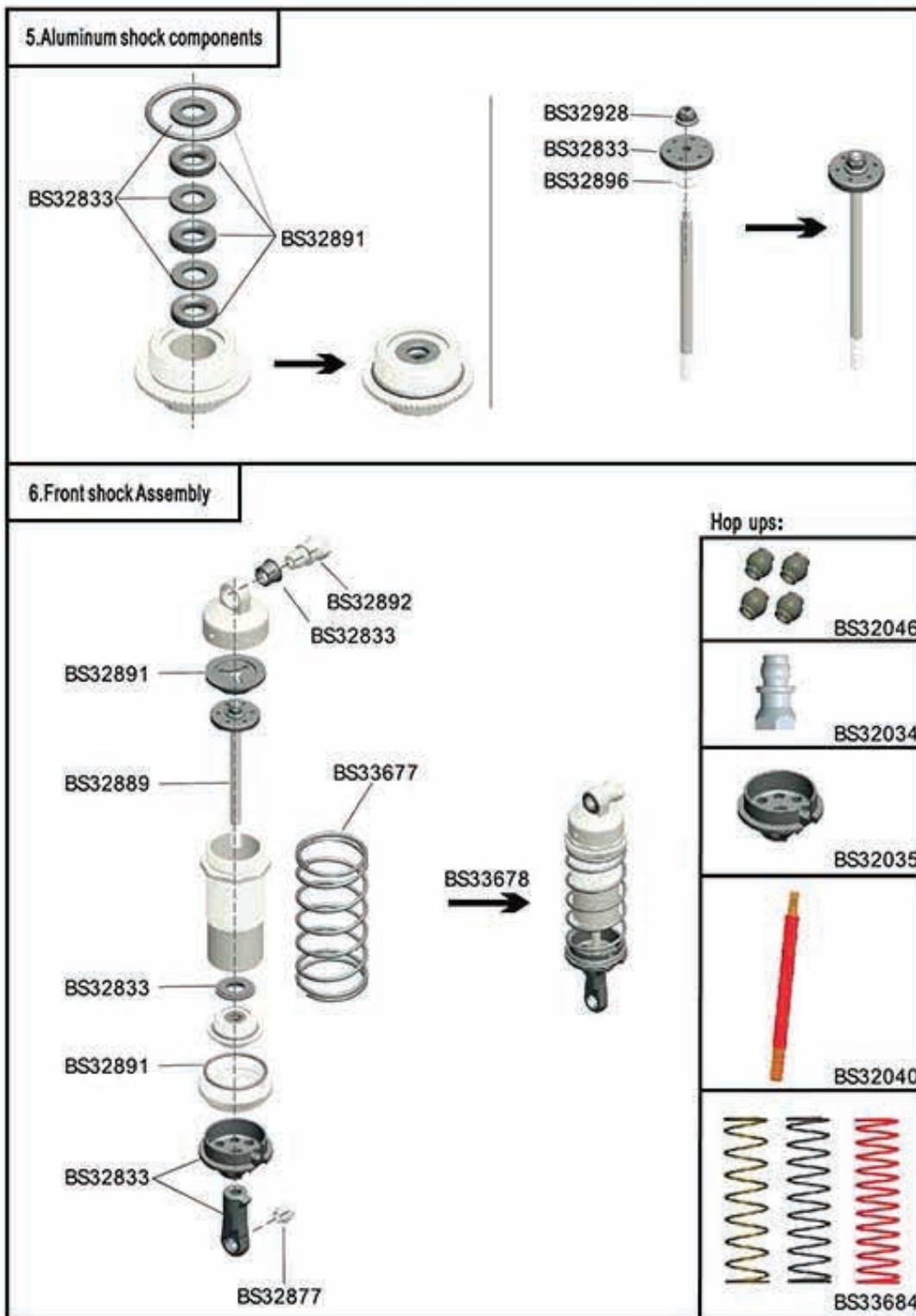
1/8th Scale Electric Truggy

BASHER SABERTOOTH MANUAL



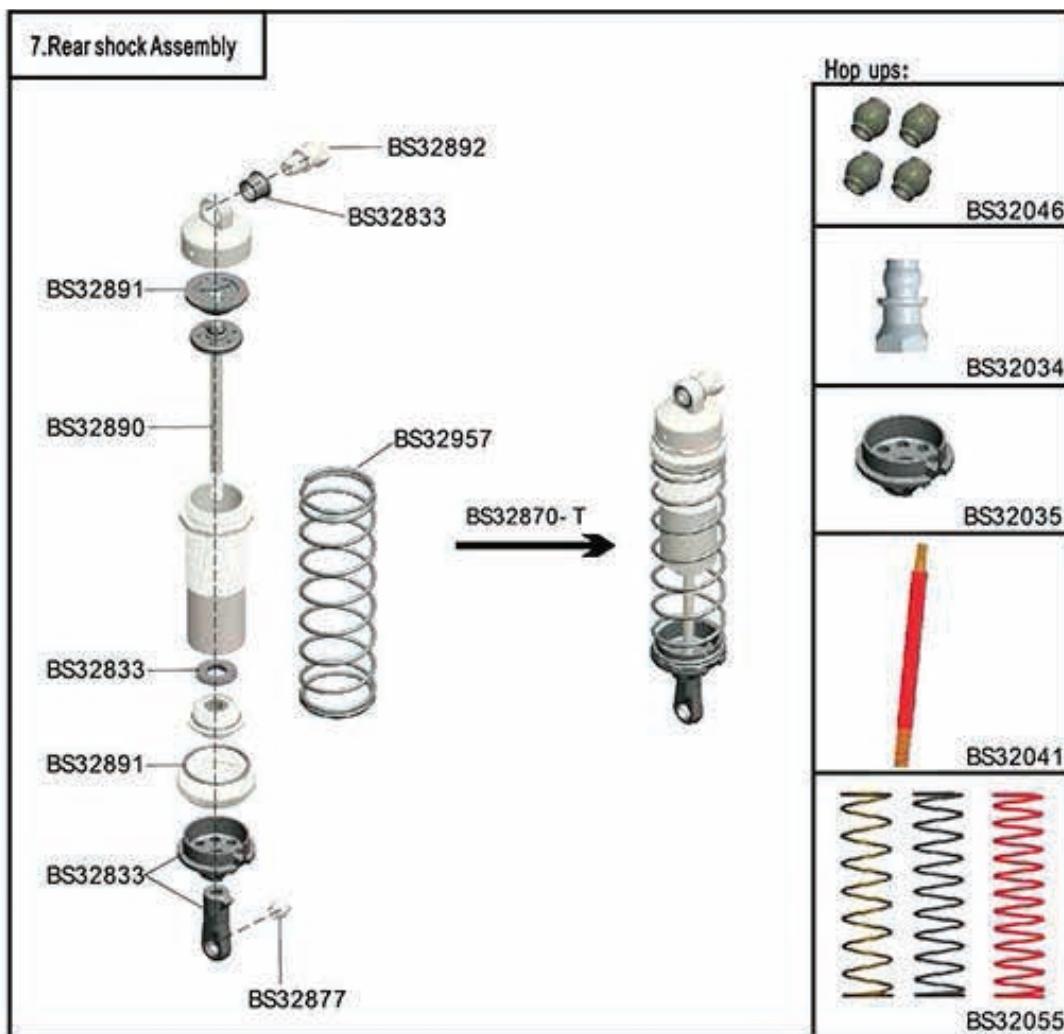
1/8th Scale Electric Truggy

BASHER SABERTOOTH MANUAL

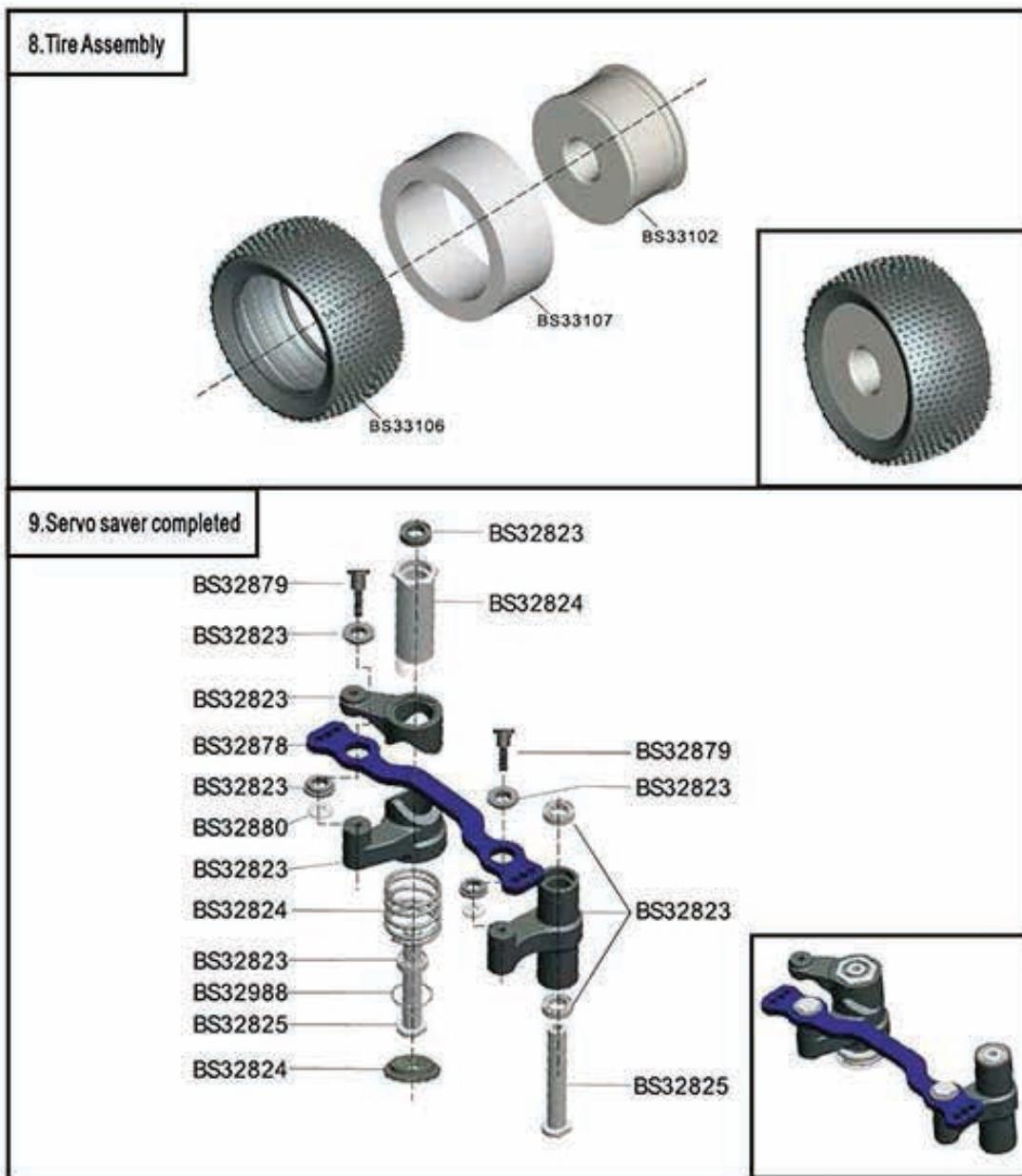


1/8th Scale Electric Truggy

BASHER SABERTOOTH MANUAL

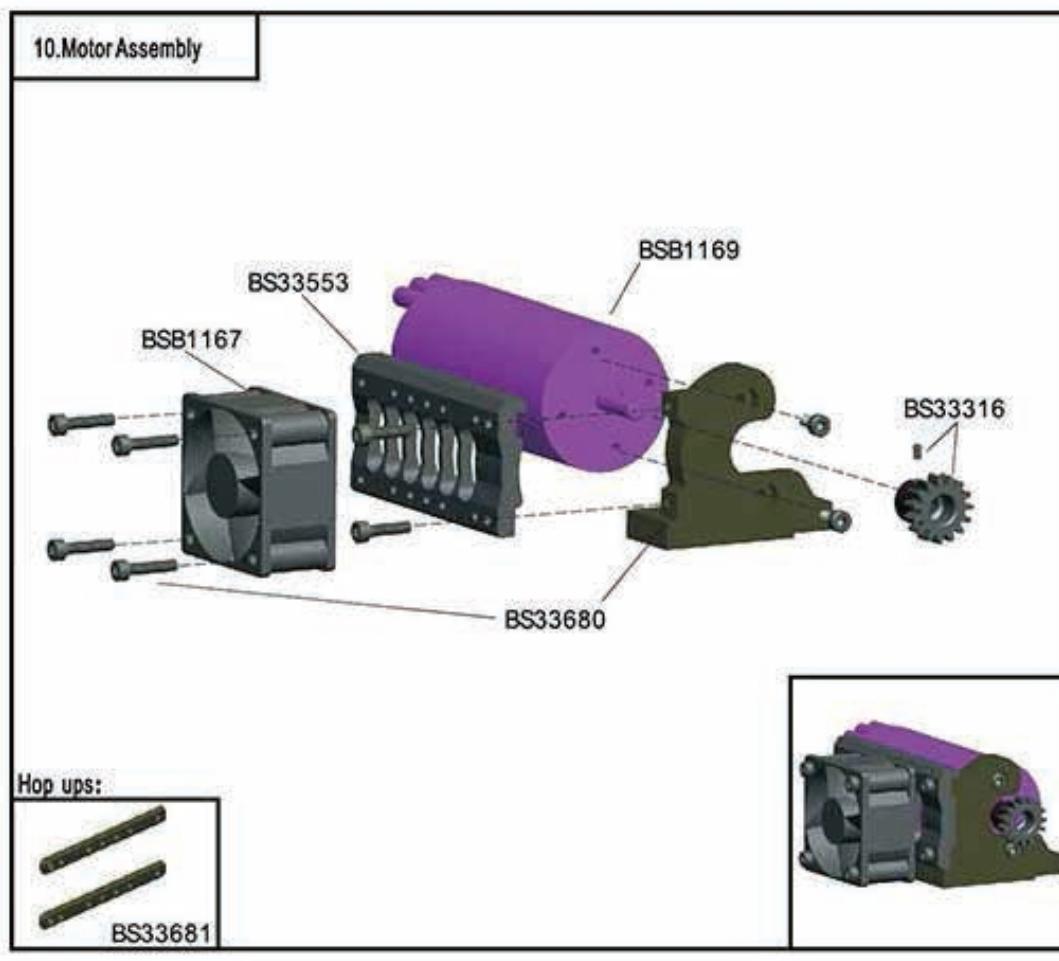


BASHER SABERTOOTH MANUAL



1/8th Scale Electric Truggy

BASHER SABERTOOTH MANUAL



1/8th Scale Electric Truggy

BASHER SABERTOOTH MANUAL

SaberTooth Spare Parts List

BS30030-Adjusting ring A,B,C for susp.arms (sku:)	BS30083-M3 nylon nut 10pcs (249000442)	BS30085-inner hexagon set screw M3*3 10pcs (249000443)	BS30087-M4*4 grub screw 10pcs (249000444)	BS30095-ISO3*15 FH screw 10pcs (249000444)	BS30099-BT3*10 BH screw 10pcs (249000445)
BS30103-BM3*6 screw 10pcs (249000447)	BS30104-BM3*12 screw 10pcs (249000448)	BS30105-BM3*15 (1/2T) BH screw 10pcs (249000449)	BS30180-inner hexagon set screw M3*10 5pcs (249000449)	BS30184-Double tape 3pcs	BS30240-FH screws ISO3*12 10pcs (249000450)
BS30245-BH screws BM3*18 10pcs (249000451)	BS30791-FH screws TPF2.6*8 10pcs (249000452)	BS30837-BT3*12 screws 10pcs (249000452)	BS30841-inner hexagon set screw M3*5 10pcs (249000453)	BS30860-BM3*20.5 BH screw 10pcs (249000454)	BS32612-Pin B 10pcs
BS32616-Ball Pad 4pcs (249000456)	BS32632-clutch dowel pin 4pcs (249000457)	BS32726-Shock Washer Φ3.2*Φ7*0.5 10pcs (249000458)	BS32785-TPF3*10 FH screw 10pcs (249000459)	BS32801-battery cover & post	BS32821-front bracket C L/R (249000459)
BS32822-front steering knuckle arms/ rear bearing holder (249000460)	BS32823-servo saver arms set (249000461)	BS32824-buffer spring/sleev/ adjustable ring, O ring (249000462)	BS32825-steering tube shaft (249000463)	BS32826-central diff.bearing mount	BS32829-gear box housing F/R (249000465)
BS32830-diff.case (249000466)	BS32832-ball cup set (249000467)	BS32833-shocks components (249000468)	BS32834-servo mount set	BS32835-bumper and susp.arm holder	BS32838-pin for susp.arms
BS32839-pin for bracket C (249000469)	BS32841-screws for sway bar ball end (249000470)	BS32842-ball end for sway bar 4pcs (249000471)	BS32843 blg hexagon screws 4pcs (249000472)	BS32844 wheel hub 2pcs (249000473)	BS32846-hexagon ball end 6pcs (249000474)

1/8th Scale Electric Truggy

BASHER SABERTOOTH MANUAL

SaberTooth Spare Parts List

BS32847-ball end 6pcs (249000475)	BS32848-ball bearing(ø8*ø16.5) 4pcs (249000476)	BS32849-ball bearing(ø15*ø21*4) 4pcs (249000477)	BS32850-king pins 4pcs (249000478)	BS32851-front sway bar (249000479)	BS32852-rear sway bar
BS32853-T-front sus.arm bracket 1pcs	BS32854-T-rear sus.arm bracket 1pcs	BS32855-bearing holder pins 4pcs (249000480)	BS32857-rear outdrive shaft 2pcs (249000481)	BS32858-diff.gear set (249000482)	BS32859-outdrive 2pcs (249000483)
BS32861-aluminum washers 4pcs (249000484)	BS32862-dogbones cup with screws M5*5 (249000485)	BS32864-outdrive washers Ø13.2*Ø16*0.5 10pcs (249000486)	BS32865-diff.box washers 6pcs (249000487)	BS32866-spur gear 44T (249000488)	BS32867-central diff.outdrive 2pcs (249000489)
BS32868-O-ring for diff.box 6pcs (249000490)	BS32870-T-rear shock assy	BS32876-ball end(ø6.8mm) 6pcs (249000491)	BS32877-ball end(ø6mm) 6pcs (249000492)	BS32878-T-steering linkage plate (249000493)	BS32879-screw shaft 4pcs (249000494)
BS32880-washer (ø3.3*ø8*0.8) 10pcs (249000495)	BS32887-central diff.box completed (249000496)	BS32889-front shock's central shaft 2pcs	BS32890-rear shock's central shaft 2pcs (249000497)	BS32891-shock seals (249000498)	BS32892-shock holder (249000499)
BS32895-diff.gear shaft (249000500)	BS32896-piston washer(ø2.6*ø6.5*0.5) 10pcs (249000501)	BS32897-washer (ø4.2*ø10*0.2) 10pcs (249000502)	BS32898-washer (ø3.2*ø10*0.8) 10pcs (249000503)	BS32899-M5*5 grub screws 10pcs (249000504)	BS32900-ISO3*18 FH screw 10pcs (249000505)
BS32903-socket screw M3*14 10pcs (249000507)	BS32905-M4*10 grub screws 10pcs (249000508)	BS32906-BT3*14L BH screws 10pcs (249000509)	BS32907-BT 4*12 BH screw 10pcs (249000510)	BS32908-BT 4*35 BH screw 10pcs (249000511)	BS32909-BM 4*25L BH screw 10pcs (249000512)

1/8th Scale Electric Truggy

BASHER SABERTOOTH MANUAL

SaberTooth Spare Parts List					
BS32910-BM4*45L BH screw 10pcs (249000513)	BS32911-Hexagon Socket screw M3*25 4pcs (249000514)	BS32912-ISO4*12 FH screw 10pcs (249000515)	BS32913-M4*12 hex screws 4pcs (249000516)	BS32914-BM3*36 BH screw 10pcs (249000517)	BS32916-BM3*22 BH screw 10pcs (249000517)
BS30839-BH screw BM3*17 10pcs (249000518)	BS32919-wheel axle pins 8pcs (249000518)	BS33556-socket screw M3*10 10pcs (249000519)	BS32927-output shaft spacer ø13.2*ø16*0.2 (249000520)	BS32928-M2.5 nylon lock nut 10pcs (249000521)	BS32957-spring for rear shock ø20.5*83*1.6(d) 2pcs (249000522)
BS32980-arch spur.gear with outdrive shaft (249000522)	BS32983-arch main drive gear (249000523)	BS32988-O-ring for servo saver ø11.6*ø0.8 10pcs (249000524)	BS33013-Servo mount battery clamping piece (249000525)	BS33101-front/rear lower susp.arms (249000526)	BS33102-B-wheel 2pcs (249000527)
BS33103-body support 4pcs (249000528)	BS33106-tire 2pcs (249000529)	BS33107-inner sponge (249000530)	BS33109-T-front shock tower 1pcs (249000531)	BS33110-T-rear shock tower 1pcs (249000532)	BS33111-upper/ steering linkage rod (249000525)
BS33166-BM3*8 BH screw 10pcs (249000526)	BS33316-Motor gear 15T w/M4*4 grub screw (249000533)	BS33522-CVD (249000554)	BS33553-the fixed plate for fan (249000555)	BS33672-Rear dogbone (249000556)	BS33673-upper plate supporting plate (249000557)
BS33674-Front propeller shaft (249000558)	BS33675-Chassis (249000559)	BS33676- Instruction manual (249000560)	BS33677-Spring for front shock 2pcs ø20.5*75*1.6(d) (249000561)	BS33678- Front shocks (249000562)	BS33679-Rear propeller shaft (249000563)
BS33680-Motor mount w/fixed plate for fan (249000564)	BS33682-Rear wing w/spacer, decal (249000565)	BS33683-Rear wing holder set (249000566)	BS33685-BM4*25 BH screws 10pcs (249000567)	BS33686-ball end(ø6*5) 6pcs (249000568)	BSB1169-3674 Brushless motor KV1845 waterproof (249000569)

1/8th Scale Electric Truggy

BASHER SABERTOOTH MANUAL

SaberTooth Spare Parts List					
BSB1167-motor fan(5V)M3*14 screw 4pcs	BSB1168-100A waterproof Brushless Esc	BSB0050P-H-Body shell			
					
SaberTooth Hop up parts					
BS32021-front susp. Arm's stop plate 1pc	BS32022-rear susp. Arm's stop plate 1pc	BS32029-Wheel hub 2pcs	BS32030-rear wing mount 1pc	BS32032-Outdrive shaft 2pcs	BS32033-central differential output shaft 2pcs
					
BS32034-shock mounts 2pcs	BS32035-damper lower seat 2pcs	BS32038-Rear wing spacer 2pcs	BS32039-Rear wing support rod 3pcs	BS32040-Front shock central axis 2pcs	BS32041-Rear shock central axis 2pcs
				//	//
BS32045-suspension arm ball head 10pcs	BS32046-ball stud 6-10pcs	BS32050-Φ8mm hex ball stud 10pcs	BS32052-Three different front sway bar	BS32053-Three different rear sway bar	BS32055-Springs for rear shocks (Yellow,black,red)
					
BS32969-Rear lower l arm mount 1pc	BS32973-Front lower l arm mount 1pc	BS33681-The fixed plate for fan 2pcs	BS33684-Springs for front shocks (Yellow,black,red)		
					

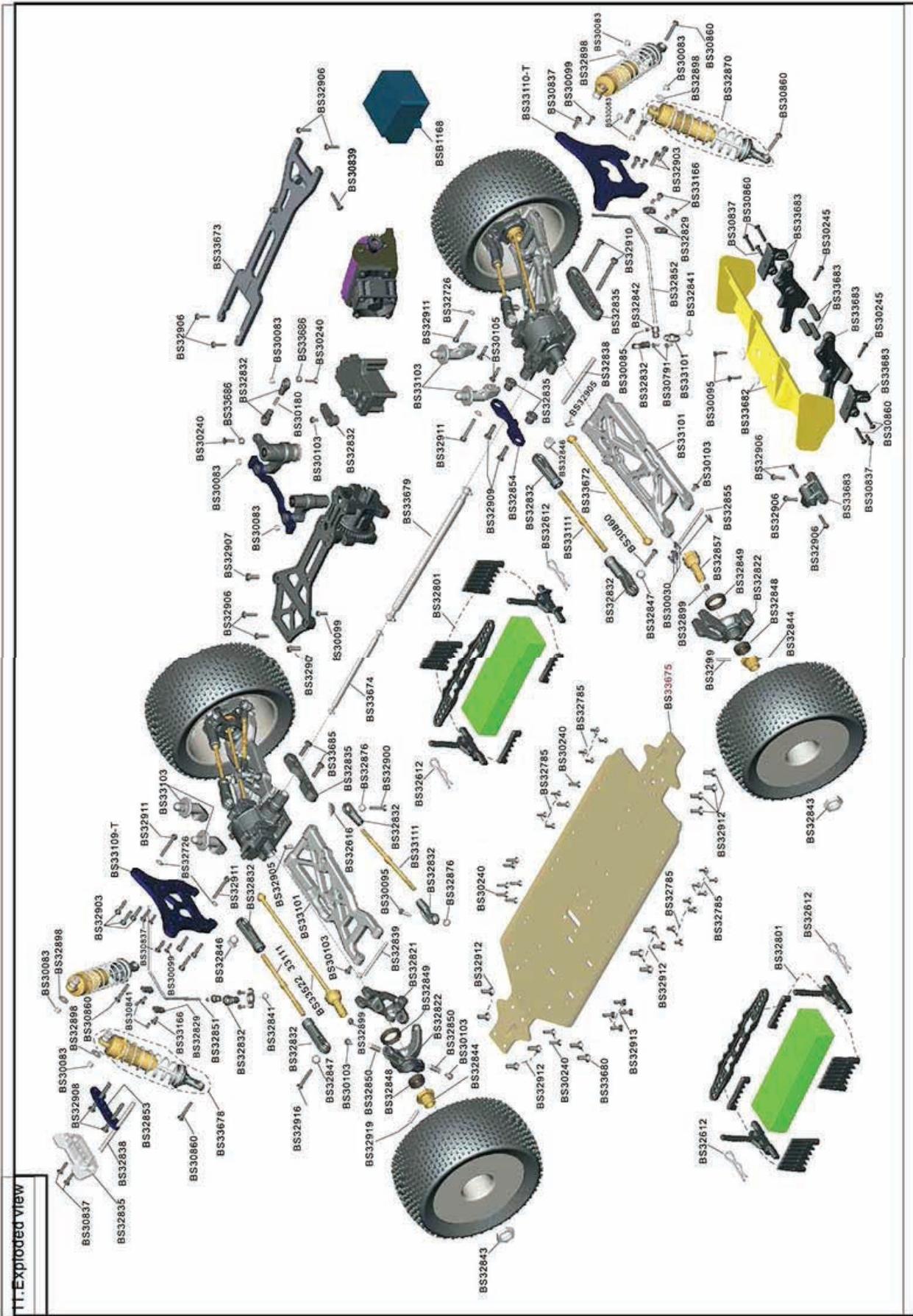
2013-10

BASHER SABERTOOTH MANUAL

SAFETY PRECAUTIONS

- THIS RADIO CONTROLLED RACING CAR IS NOT A TOY!
- THIS HIGH-PERFORMANCE R/C MODEL IS RECOMMENDED FOR AGES 14 AND OLDER.
- THIS IS ONLY FOR YOUR REFERENCE BEFORE YOU OPERATE THE MODEL CAR.
- PLEASE DO NOT CHANGE THE EQUIPMENT OF THE BRUSHLESS ESC, MOTOR AND LI-PO BATTERY CASUALLY, WE WILL NOT TAKE ANY CHARGE OF THE DAMAGES OR INJURIES CAUSED BY YOUR CHANGES!
- ASSEMBLE THIS KIT ONLY IN PLACES OUT OF CHILDREN'S REACH!
- TAKE ENOUGH SAFETY PRECAUTIONS PRIOR TO OPERATING THIS MODEL. YOU ARE RESPONSIBLE FOR THIS MODEL'S ASSEMBLY AND SAFE OPERATION!

III. Exploded view



12. Upgraded exploded view

