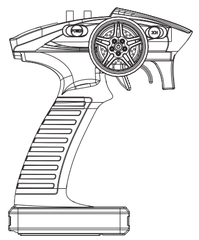
RGT 1/10 Rock Hammer Instruction Manual

LENGTH	WIDTH	HEIGHT	WHEEL BASE	GROUND CLEARANCE	DIAMETER OF WHEEL	WIDTH OF WHEEL	GEAR RATIO
505mm	280mm	235mm	345mm	95mm	142mm	54mm	48:1

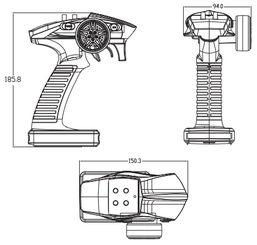
INSTRUCTION MANUAL



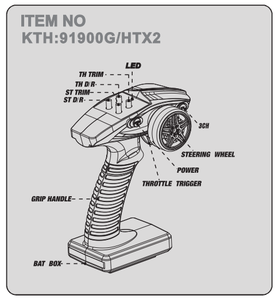
Install the batteries

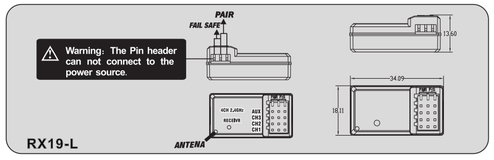
(1) Remove the battery compartment cover.
(2) Replace the used batteries with new AA size batteries.

Please replace batteries when the power indicator blinks or the buzzer beeps.

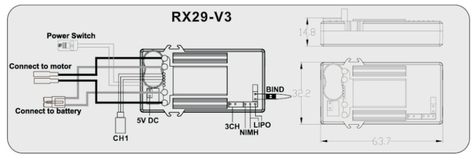


Function

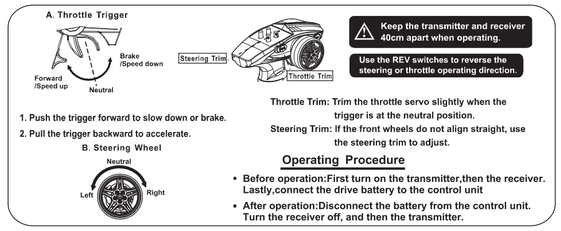




2 IN 1 ESC/RX



Transmitter Adjustment



Keep the transmitter and receiver 40cm apart when operating.

Use the REV switches to reverse the steering or throttle operating direction.

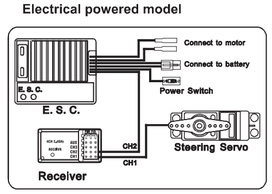
1. Push the trigger forward to slow down or brake.
2. Pull the trigger backward to accelerate.

Throttle Trim: Trim the throttle servo slightly when the trigger is at the neutral position.
Steering Trim: If the front wheels do not align straight, use the steering trim to adjust.

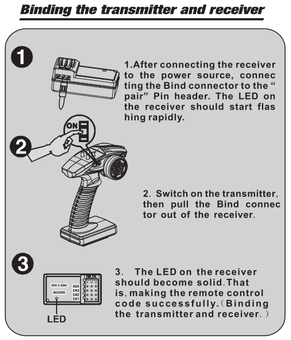
Operating Procedure

- Before operation:First turn on the transmitter,then the receiver. Lastly,connect the drive battery to the control unit
- After operation:Disconnect the battery from the control unit. Turn the receiver off, and then the transmitter.

Electrical powered model



Binding the transmitter and receiver



1.After connecting the receiver to the power source, connecting the Bind connector to the "pair" Pin header. The LED on the receiver should start flashing rapidly.

2. Switch on the transmitter, then pull the Bind connector out of the receiver.

3. The LED on the receiver should become solid.That is, making the remote control code successfully.(Binding the transmitter and receiver.)

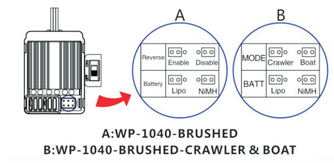
【BEEP SOUND AND LED STATUS】

The Meaning of Beep Sound	LED Status
⌘ 1 short Beep: The battery is NiMH/NiCd ⌘ 2 short Beeps: The battery is 2S Lipo ⌘ 3 short Beeps: The battery is 3S Lipo ⌘ 4 short Beeps: The battery is 4S Lipo ⌘ 1 long Beep: Self-test and throttle calibration is OK, the ESC is ready to run	⌘ When the throttle stick is in neutral range, red LED is off ⌘ Forward, brake or reverse at partial throttle, red LED blinks ⌘ Forward, brake or reverse at full throttle, red LED is solid

【THROTTLE STICK POSITION】

【SET THE ESC】

The ESC is programmed by the jumpers
(Tweezers is recommended to plug and unplug the jumper).



【PROTECTION FUNCTIONS】

1. Low voltage Cut-off (LVC) protection: If the voltage of battery pack is lower than the threshold for 2 seconds, the ESC will enter the protection mode.
   When the car stops, the red LED blinks to indicate the low voltage cut-off protection has been activated.

Table A: LVC protection for WP-1040-BRUSHED, (F/B/Ror F/B mode).

2S Lipo
Output reduces 50% at 6.5V Output cuts off at 6.0V, cannot be recovered

Table B: LVC protection for WP-1040-BRUSHED -Crawler&Boat,

2S Lipo
Output cuts off at 6.5V. If the throttle stick moves to neutral and then up again, the output can be recovered to 50%. If the voltage drops to 6.5V again, the above process repeats in circles.

2. Over-heat protection: When the internal temperature of the ESC is higher than 100 Celsius degree or 212 Fahrenheit degree for 5 seconds, the ESC will reduce and cut off the output power.
   When the car stops, the red LED blinks to indicate the over-heat protection has been activated. If the ESC cools down to 80 Celsius degree (176 Fahrenheit degree) the output power is recovered to normal state.
3. Throttle signal loss protection: The ESC will cut off the output power if the throttle signal has been lost for 0.1 second. The "Fail Save" function of the radio system is strongly recommended to be activated.

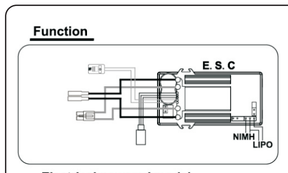
【THE DIFFERENCE BETWEEN "BRUSHED" AND "BRUSHED-CRAWLER& BOAT" ESC】

1. "Brushed" and "Brushed-Crawler& Boat" ESCs have different backward-running modes.
   "Brushed" ESC 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 ESC begins to brake the motor, the motor speeds down but still running, so the backward action is NOT happened at this moment. 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 be activated. The "Double-Click" method prevents mistakenly reverse when the brake function is frequently used in steering.
   "Brushed-Crawler& Boat" ESC 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 common for the Rock Crawler and tank.
2. The maximum reverse force (for backward running) is 50% for the general "Brushed" ESC, 100% for the "Crawler" mode of a "Brushed-Crawler & Boat" ESC, and 25% for the "Boat" mode of a "Brushed-Crawler & Boat" ESC.
3. The Low Voltage Cut-off Protection modes are different (Please check the instructions in the section of "PROTECTION FUNCTIONS").

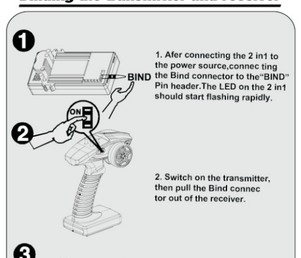
【TROUBLE SHOOTING】

Trouble	Possible Reason	Solution
After power on, motor can't work, no sound is emitted, and LED is off.	The ESC doesn't get its working voltage; Connections between battery pack and ESC are broken.	Check the battery wires connection or replace the defective connectors.
	Switch is damaged.	Replace the switch.
After power on, motor can't work; red LED blinks.	Throttle signal is abnormal.	Check the throttle wire connection; make sure it is plugged into the throttle channel of the receiver.
	Automatic throttle range calibration is failed.	Set the "TRIM" of throttle channel to 0 or turn the knob to its neutral position.
The car runs backward while giving throttle. (The motor runs in the opposite direction)	The wire connections between ESC and the motor need to be changed.	Swap two wire connections between the ESC and the motor.
The car can't go backward.	The jumper position is wrong.	Check the jumper and plug it to the correct position.
	The neutral point of throttle channel is changed or drifted.	Set the "TRIM" of throttle channel to 0 or turn the knob to its neutral position.
The car can't go forward, but can go backward.	The direction of throttle channel is not correct.	Reset the direction of throttle channel from original "NOR" to "REV", or from original "REV" to "NOR".
The motor doesn't work, but the LED in the ESC works normally.	The connections between motor and ESC are broken.	Check the connections and replace the defective connectors.
	Motor is damaged.	Replace the motor.
The motor suddenly stops running while in working state	The throttle signal is lost.	Check the transmitter and the receiver. Check the throttle wire connection.
	Low voltage cut-offprotection or Over-heat cut-off protection has been activated.	Replace the battery pack, or cool down the ESC.
The car cannot get top speed and the red LED doesn't solid on at full throttle	Some setting in the transmitter are incorrect.	Check the settings. Set D/R, EPA, ATL to 100% or turn the knobs to maximum value. Set TRIM to 0 or turn the knob to its neutral position.
Motor is cogging when accelerated quickly.	The battery has limited discharge ability.	Use battery with better discharge ability.
	Motor RPM is too high, the gear ratio is too aggressive.	Use motor with lower RPM, or use smaller pinion to get softer gear ratio.
	Something wrong in the driving system of the car.	Check the driving system of the car.

Function



Binding the transmitter and receiver

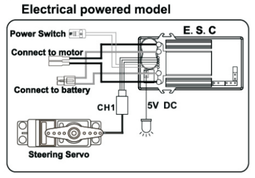


1. Afer connecting the 2 in1 to the power source,connec ting the Bind connector to the"BIND" Pin header.The LED on the 2 in1 should start flashing rapidly.

2. Switch on the transmitter, then pull the Bind connec tor out of the receiver.

3. The LED on the 2 in 1s houuld become solid. that is,making the remote control code success fully. (Binding the trans mitter and 2 in 1).

Electrical powered model



ESC Instruction

The power system for RC model can be very dangerous, 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.

【FEATURES】

1. Water-proof and dust-prooffor all weather races.
2. Small size with built-in capacitor module.
3. Automatic throttle range calibration, easy to use.
4. Multiple protections: Low voltage cut-off protection for Lipo or NiMH battery / Over-heat protection / Throttle signal loss protection.
5. Easily programmed with the jumpers.

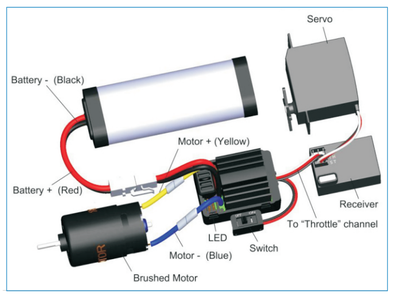
【SPECIFICATIONS】

Model		WP-1040-BRUSHED WP-1040-BRUSHED-Crawler& Boat *
Cont. / Burst Current		Forward: 40A / 180A Backward: 20A / 90A
Input		2-3S Lipo, 5-9 Cells NiMH
Cars Applicable		1:10 Crawler, Boat
Motor Limit	2S Lipoor 5-6 cells NiMH	540 or 550 size motor ≥12T or RPM < 30000 @7.2V
	3S Lipo or 7-9 cells NiMH	540 or 550 size motor ≥18T or RPM < 20000 @7.2V
Resistance		Fwd: 0.002 Ohm, Bwd: 0.004 Ohm
Built-in BEC		2A/6V (Linear mode BEC)
Dimension& Weight		WP-1040-BRUSHED: 46.5*34*28.5, 65g WP-1040-BRUSHED-CRAWLER: 46.5*34*28.5, 70g

【BEGIN TO USE】

1. Connect the ESC, motor, receiver, battery and servo according to the following diagram

"+" and "-" wires of the ESC are connected to the battery pack.
Attention: The incorrect polarity will damage the ESC immediately.



The control cable of the ESC (trio wires with black, red and white color) is connected to the throttle channel of the receiver (Usually CH2). The "Motor +" and "Motor –" wires are connected to ESC without any order. If the motor runs in the opposite direction, please swap these two wire connections.

2. Set the Transmitter

Please set the "D/R", "EPA" and "ATL" to 100% for throttle channel (for transmitter without LCD, please turn the knobs to the maximum value), and set the "TRIM" of the throttle channel to 0 (for transmitter without LCD, please turn the TRIM knob to its neutral position).
For Futaba™ and the similar transmitters, the direction of throttle channel shall be set to "REV", while other radio systems shall be set to "NOR".
The "Fail Save" function of the radio system is strongly recommended to be activated. Please make sure that the motor can be stopped when the "Fail Save" happens.

3. Throttle Range Setting (Throttle Range Calibration)

In order to make the ESC match the throttle range of different transmitters, the calibrationof the ESC is necessary.
To calibrate the ESC, please turn on the transmitter, keep throttle stick at its neutral position, wait for 3 seconds to let the ESC execute self-test and automatic throttle calibration. When the ESC is ready to run, a long beep sound is emitted from the motor.
Note: Please calibrate the throttle range again when using a new transmitter or changing the settings of the neutral position of throttle channel, D/R, ATV, ATL or EPA parameters,otherwise the ESC may not work properly.

Spare Part

18110-Front And Rear Axle Cover	18003-Center Link Mount	18004-Steering Spindle With Bushing Included	18006-Front Steering Hub
18010-Aluminum Servo Plate With Mount	18018-Chassis Skid Plate	18120-Front & Rear Universal Main Drive Shaft	03200-Battery (NI-MH 7.2V 2000mAH)
18170 -Complete Built Transmission Set (whole part)	(20T) (10*42mm) (28T) (5*18mm) (2*9mm) (87T) (53T) (10*35mm) (2.5*17mm) (include the above parts)		18128-87T Main Gear Set
18129-Transmission Gear Set(20T+28T+53T)	18130-Transmission Gear Housing Set With 3x24mm Screw 3pcs	18165-Front/Rear Axle Pinion And Ring Gear Set (Metal Gear 38T+13T)	18131-Front/Rear Solikd Axle Hub
18166-Transmission Gear Hardware Set (Shaft & Pin)	18141-Front Bumper With Winch Mount Ready & LED Light Holder Included	18142-Body Post Set	18143-Front Bumper Mount And Chassis Holder Set
18144-Chassis Brace Set	18145-Electronics And Battery Tray Set With Battery Strap	18146-Rear Straight Axle Cover	18160-Shock Absorber
18161-Shock Spring (Medium)	18147-Suspension Linkage Ball Cup Set (20pcs 4pcs)	18148-Shock Plastics Parts Set 24P (×4P)	18156-Aluminum Anodize Chassis Plate Set

Spare Part

18171-Aluminum Motor Mount With Mounting Bushing	18164-Front Wheel Outdrive	18154-Aluminum Machine 12mm Wheel Hub	18157-Nickel Coated Steel Center Link Rod 72mm
18158-Nickel Coated Steel Axle Link Rod 109mm	18159-Nickel Coated Steel Steering & Servo Link (128mm & 50mm)	18162-Front Wheel Drive Shaft (Left :84mm Right: 75.5mm)	18163-Rear Wheel Drive Shaft (120mm)
18127-14T 48P Motor Gear	03011-Motor(Rc540)	18149-Build Roll Cage Set	18153-Finished Cockpit Set
18132-Grey Wheel Set	18133-Black Wheel Set	18134-Chrome Wheel Set	18135-2.2 Inch High Performance All Terrain Tire Set
18136-2.2 Inch Tire Memory Foam	18137-2.2 Inch High Performance All Terrain Tire Set With Memory Foam Included	18138-2.2 Inch Preglue Tire & Wheel Set (Grey)	18139-2.2 Inch Preglue Tire & Wheel Set (Black)
18140-2.2 Inch Preglue Tire & Wheel Set(Chrome)	18005-King Pin Bushing	18030-Ball Stand⌀5.9 (Long)	18052-Ball Stand⌀5.9 (Short)
02053-Body Clip	18167-LED Light	18169-RGT-WARHEAD RX29-V3 2in1 Receiver Built In Brushed ESC (Waterproof)	18029-RGT-HWWP1040 Brushed ESC(Waterproof)

Spare Part

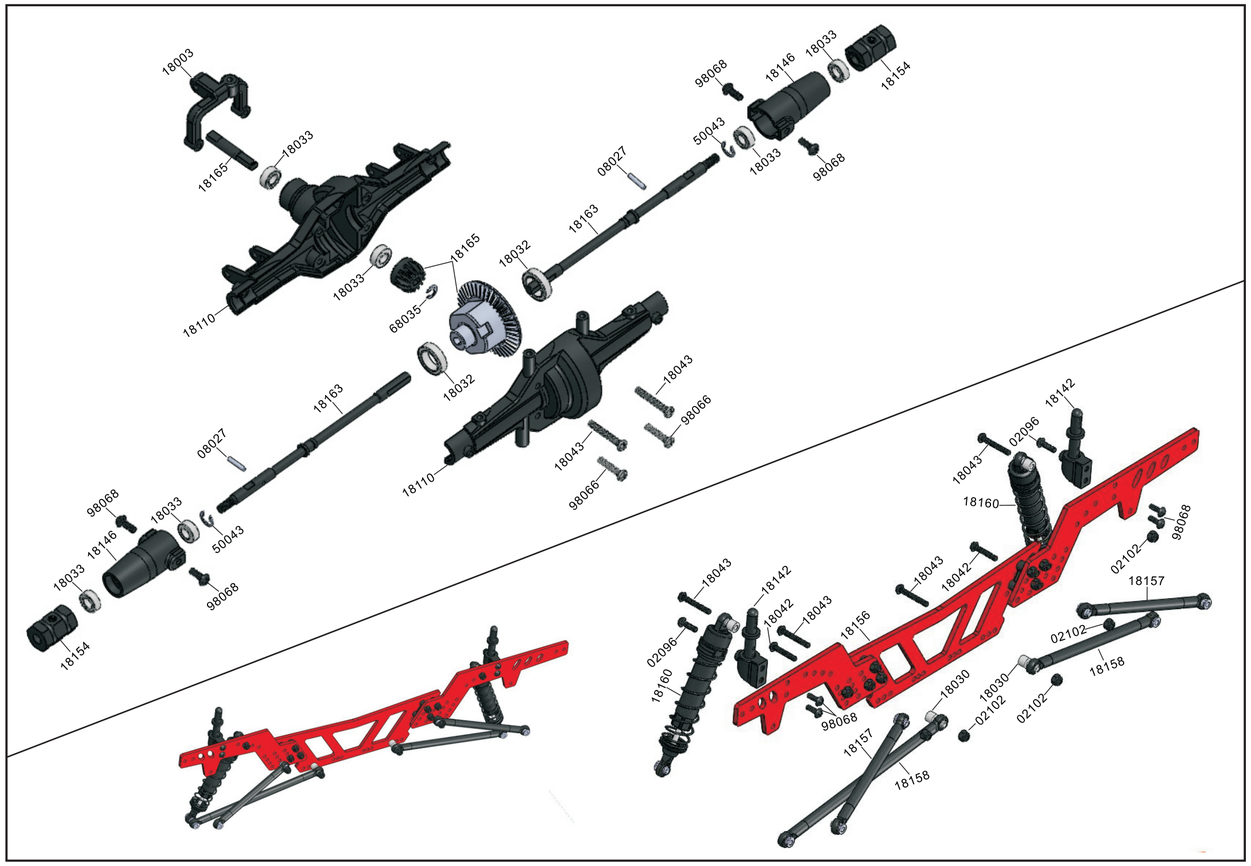
68182-RGT HTX-2 2.4ghz 3 Channel Radio Transmitter	68179-RGT RX19-L 3 Channel Waterproof Receiver	03221-O -Travel Charger	SP1501-15kg Metal Gear Waterproof Servo
13660-Finished Body Panel (Red)	13660-1-Finished Body Panel(Yellow)	13660-2-Finished Body Panel(Blue)	13660-3-Pre-Cut Transparent Body (Transparent LEXAN)

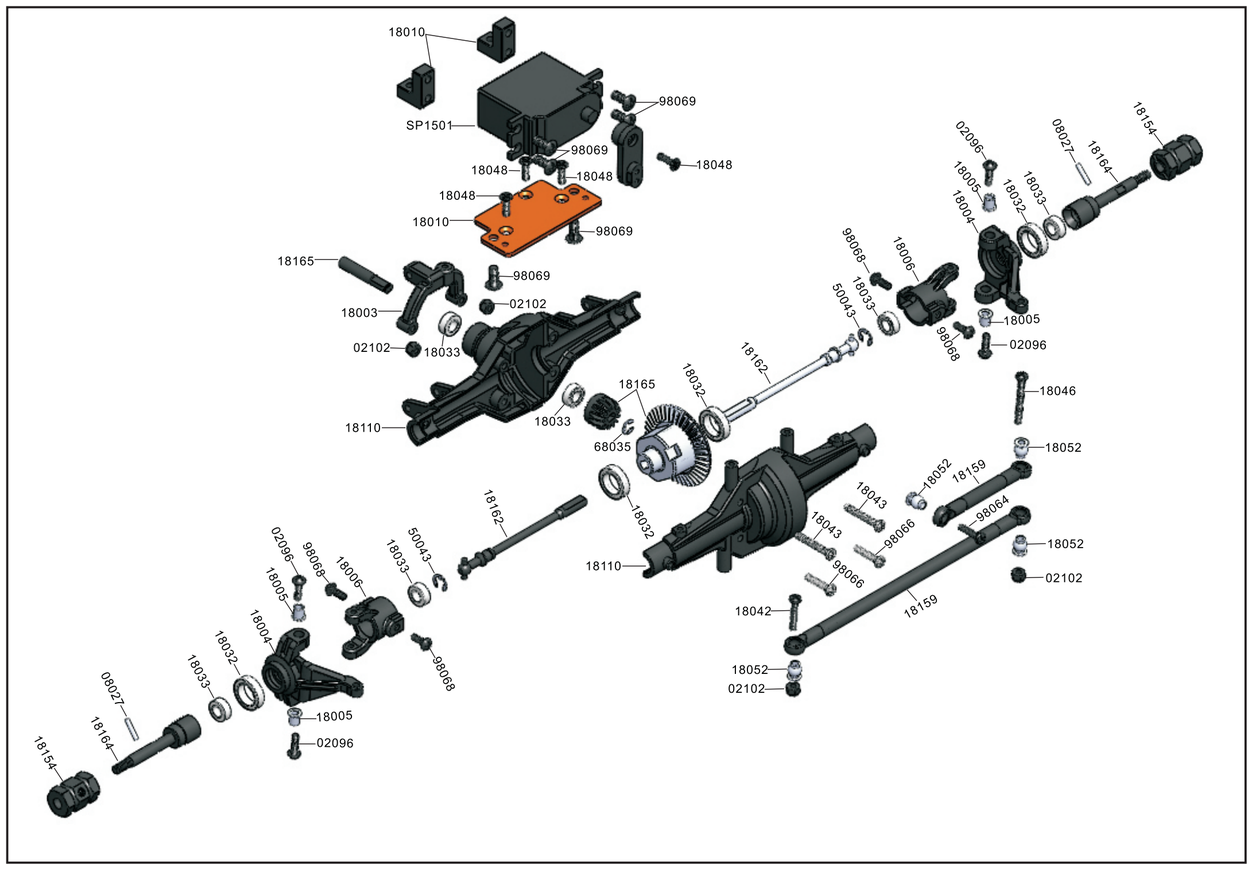
18168-Vehicle Hardware & Screw Bag

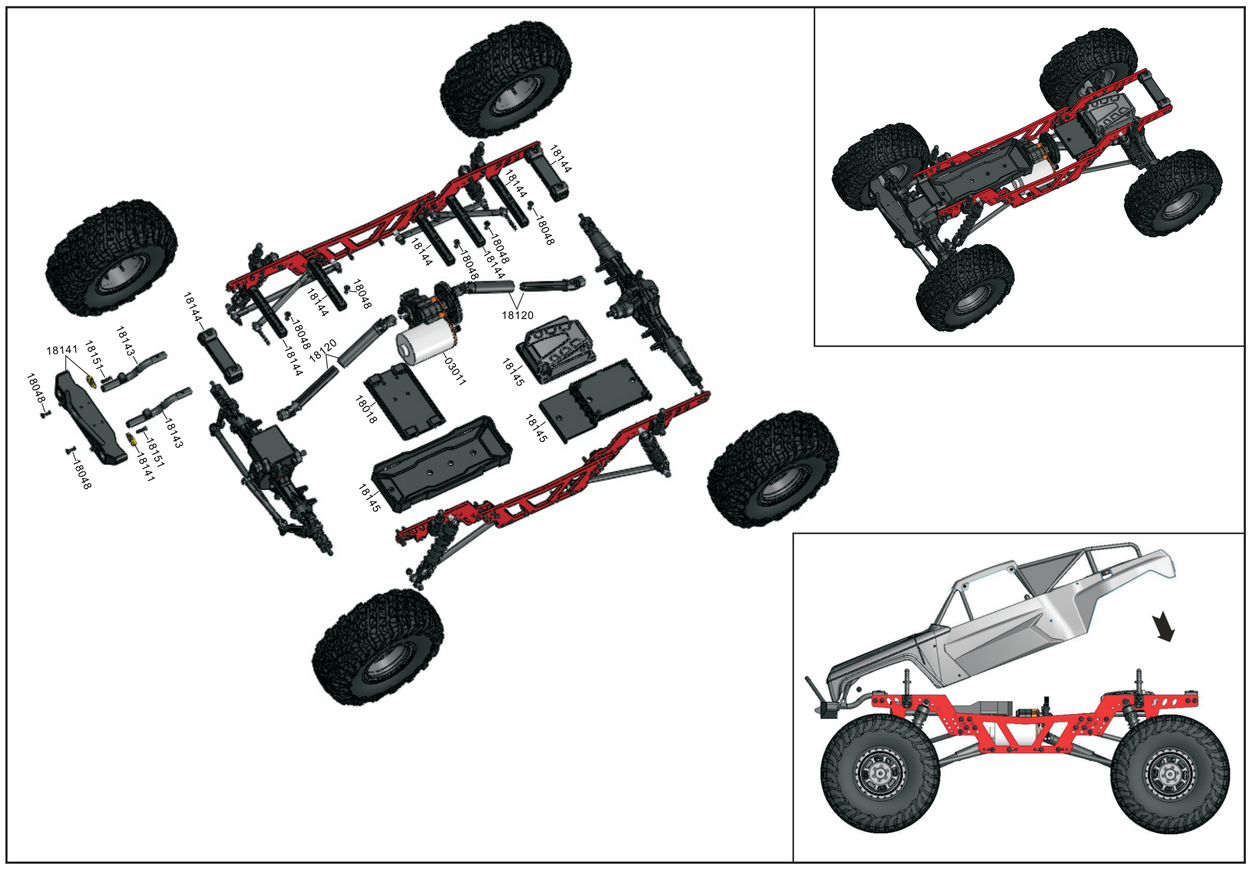
08027-Pin 2*10 X4	18150-Oring Locker X4	68035-E-Clips ф 3.2 X2	50043-E-Clipsф4.0 X4	18033-Ball Bearings (5*10*4) X17
18032-Ball Bearings (10*15*4) X10	02102-Nylon Nuts M3 X39	02055-Nylon Nuts M4 X1	14598-Wheel Locknut M4 X4	68055-Column Head Self- Tapping Screw 2*5mm X24
18151-Round Head Self-Tapping Screw 2.5*10mm X8	98068-Cap Head Machine Screw M3*8 X21	02096-Cap Head Machine Screw M3*10 X20	98064-Cap Head Machine Screw M3*12 X7	98066-Cap Head Machine Screw M3*14 X4
18042-Cap Head Machine Screw M3*16 X17	18043-Cap Head Machine Screw M3*20 X19	18046-Cap Head Machine Screw M3*26 X5	98069-Cap Head Machine Screw M4*8 X2	18048-Countersink Head Machine Screw M3*10 8P X12
02099-Grub Hex. Screw M4*4 X4	86081-Grub Hex. Screw M3*3 X5			

Upgradable Optional

180001-Center Link Ball Mounts (AL.)	180002-Steering Arm Mounts (AL.)	180003-Caster Mounts (L/R) (AL.)	180006-Chassis(AL.)
180009-Connect Box (W/Gear 38T) (AL.)	180010-Servo Mount (AL.)	180013-Gear Box (Shell Only) (AL.)	180016-Wheel Hex Mount W/Pins (2*10) (AL.)







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