

Riaario



Supercar INSTRUCTION MANUAL

N° AK-917



MADE IN CHINA
HERGESTELLT IN CHINA
FABRIQUÉ EN CHINE
HECHO EN CHINA

MODEL NO.: AK-917B(C) / AK-917R(C)

EC | REP
Company: Like Sun GmbH
Address: Planckstr. 59, 45147 Essen,
Nordrhein-Westfalen, Germany
Email: ec-connection@web.de

UKCA | REP
Company: KOVA ASSOCIATES LTD
Address: 72a Kingston Road,
Portsmouth, Hampshire, PO2 7PA,
United Kingdom
Email: KOVA.Compliance@outlook.com

IMPORTER
Company: Leaxianyecao maoyiyouxianongsi
Address: Room 1203, Unit 2, Building A6, Wuzhou
Jiayuan Northside of the Political Center, Lean
Country, Fuzhou, Jiangxi, 344300, CN
Contact Person: Chahua He
Email: yecao_g@163.com

MANUFACTURER
Company: Shenzhen Riaario Intelligent Technology
Co., Ltd
Address: Room 1902, Block AB, Youcheng North,
Minqiang Community, Minzhi Street, Longhua
District, Shenzhen, Guangdong, China

WARNING
Not suitable for children under
36 months. Small parts.



2.4GHz
RADIO SYSTEM

FOUR WHEEL DRIVE
4WD
RACING CAR

RTR

WARNING: PLEASE READ THE INSTRUCTION MANUAL CLEARLY BEFORE OPERATING THE PRODUCT

Riaario

| | | |
|----|---|---------|
| 01 | WARNING STATEMENT | 03 - 05 |
| | 01-1 DEFINITION OF SPECIAL LANGUAGE | 03 |
| | 01-2 SAFETY PRECAUTIONS AND WARNINGS | 03 |
| | 01-3 WATER-RESISTANT VEHICLE WITH WATERPROOF ELECTRONICS | 03 |
| | 01-3.1 GENERAL PRECAUTIONS | 04 |
| | 01-3.2 WET CONDITIONS MAINTENANCE | 04 |
| | 01-4 BATTERY CHARGER SAFETY PRECAUTIONS AND WARNINGS | 04 - 05 |
| | 01-5 FCC STATEMENT | 05 |
| | 01-6 WEEE COMPLIANCE | 05 |
| 02 | VEHICLE PARAMETER | 06 |
| 03 | PACKAGE INCLUDING | 07 |
| 04 | HOW TO USE THE TRANSMITTER | 08 - 11 |
| | 04-1 TRANSMITTER SPECIFICATION | 08 |
| | 04-2 TRANSMITTER & RECEIVER FUNCTION | 08 |
| | 04-2.1 TRANSMITTER FUNCTION | 08 |
| | 04-2.2 RECEIVER FUNCTION | 09 |
| | 04-2.3 STEERING DUAL RATE | 09 |
| | 04-2.4 STEERING TRIM | 10 |
| | 04-2.5 THROTTLE LIMITER | 10 |
| | 04-2.6 THROTTLE TRIM | 10 |
| | 04-2.7 CH3 BUTTON | 10 |
| | 04-2.8 CH4 BUTTON | 10 |
| | 04-2.9 HOW TO ACTIVATE THE BACKFIRE LIGHTS & BRAKING/BACK UP LIGHTS | 10 |
| | 04-3 CALIBRATION OF THE FUNCTION | 10 |
| | 04-3.1 ENTER THE SETTING MODE BEFORE CALIBRATION | 10 |
| | 04-3.2 CALIBRATE THE FUNCTIONS | 11 |
| | 04-3.3 CALIBRATING PROBLEM SHOOTING | 11 |
| 05 | QUICK START | 12 - 14 |
| | 05-1 STEP 1 - CHARGE THE LI-BATTERY BEFORE PLAYING | 12 |
| | 05-2 STEP 2 - OPEN THE CAR BODY | 12 |
| | 05-3 STEP 3 - INSTALL THE TRANSMITTER BATTERIES | 14 |
| | 05-4 STEP 4 - CONNECT THE ESC AND POWER ON | 14 |
| | 05-5 STEP 5 - POWER OFF | 14 |
| 06 | EXPLOSION VIEW | 15 - 18 |
| 07 | REPLACEMENT PARTS | 19 - 25 |
| 08 | OPTIONAL PARTS | 26 - 27 |
| 09 | TROUBLESHOOTING | 28 - 30 |

REF.: WI-RLA-AK917-IM VERSION.: V00



IF YOU HAVE ANY QUESTIONS OR INQUIRIES, PLEASE FEEL FREE TO CONTACT US, WE ARE WILLING TO RESOLVE THE PROBLEM FOR YOU.

AK-917 SERIES | RLAARLO.COM | INSTRUCTION MANUAL

PAGE
02






IF YOU HAVE ANY QUESTIONS OR INQUIRIES, PLEASE FEEL FREE TO CONTACT US, WE ARE WILLING TO RESOLVE THE PROBLEM FOR YOU.


AK-917 SERIES | RLAARLO.COM | INSTRUCTION MANUAL

PAGE
03

01-1 DEFINITION OF SPECIAL LANGUAGE

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

-  **WARNING** Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.
-  **CAUTION** Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.
-  **NOTICE** Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.

 **WARNING** Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate product correctly can result in damage to the product, personal property and cause serious injury.


This is a hobby product and NOT a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by us. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.


01-2 SAFETY PRECAUTIONS AND WARNINGS

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or property of others.

This model is controlled by a radio signal subject to interference from many sources outside your control. This interference can cause momentary loss of control, so it is advisable to always keep a safe distance in all directions around your model as this margin will help avoid collisions or injury.

- Never operate your model with low transmitter batteries.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Never operate the model in the street or in populated areas for any reason.
- Carefully follow the directions and warnings for this and any support equipment (chargers, rechargeable battery packs, etc.) you use.
- Keep all chemicals, small parts and anything electrical out of the reach of children. Never lick or place any portion of the model in your mouth as it could cause serious injury or even death.
- Exercise caution when using tools and sharp instruments.
- Take care during maintenance as some parts may have sharp edges.
- Immediately after using your model, do NOT touch equipment such as the motor, electronic speed control and battery, because they generate high temperatures. You may burn yourself seriously when touching them.
- Do not put fingers or any objects inside rotating and moving parts, as this may cause damage or serious injury.
- Always turn on your transmitter before you turn on the receiver in the car. Always turn off the receiver before turning your transmitter off.
- Keep the wheels of the model off the ground when checking the operation of the radio equipment.

 **WARNING** **AGAINST COUNTERFEIT PRODUCTS:** Always purchase from a RLAARLO authorized dealer to ensure authentic high-quality product. RLAARLO disclaims all support and warranty with regards, but not limited to, compatibility and performance of counterfeit products.

 **CAUTION** This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

01-3 WATER-RESISTANT VEHICLE WITH WATERPROOF ELECTRONICS

Your RLAARLO vehicle has been designed and built with a combination of waterproof and water-resistant components to allow you to operate the product in many "wet conditions", including puddles, creeks, wet grass, snow and even rain. While the entire vehicle is highly water-resistant, it is not completely waterproof and your vehicle should NOT be treated like a submarine. The various electronic components used in the vehicle, such as the Electronic Speed Control (ESC) servo (s) and receiver are waterproof, however, most of the mechanical components are water-resistant and should not be submerged.

Metal parts, including the bearings, hinge pins, screws and nuts, as well as the contacts in the electrical cables, will be susceptible to corrosion if additional maintenance is not performed after running in wet conditions. To maximize the long-term performance of your vehicle and to keep the warranty intact, the procedures described in the "Wet Conditions Maintenance" section below must be performed regularly if you choose to run in wet conditions. If you are not willing to perform the additional care and maintenance required, then you should not operate the vehicle in those conditions.

REF.: WI-RLA-AK917-IM VERSION.: V00



Failure to exercise caution while using this product and complying with the following precautions could result in product malfunction and/or void the warranty.

01-3.1 General Precautions

- Read through the wet conditions maintenance procedures and make sure that you have all the tools you will need to properly maintain your vehicle.
- Not all batteries can be used in wet conditions. Consult the battery manufacturer before use. Caution should be taken when using Li-po batteries in wet conditions.
- Most transmitters are not water-resistant. Consult your transmitters manual or the manufacturer before operation.
- Never operate your transmitter or vehicle where lightning may be present.
- Do not operate your vehicle where it could come contact with salt water (ocean water or water on salt covered roads), contaminated or polluted water. Salt water is very conductive and highly corrosive, so use caution.
- Even minimal water contact can reduce the life of your motor if it has not been certified as water-resistant or waterproof. If the motor becomes excessively wet, apply very light throttle until the water is mostly removed from the motor. Running a wet motor at high speeds may rapidly damage the motor.
- Driving in wet conditions can reduce the life of the motor. The additional resistance of operating in water causes excess strain. Alter the gear ratio by using a smaller pinion or larger spur gear. This will increase torque (and motor life) when running in mud, deeper puddles, or any wet conditions that will increase the load on the motor for an extended period of time.

01-3.2 Wet Conditions Maintenance

- Remove the battery pack(s) and dry the contacts. If you have an air compressor or a can of compressed air, blowout any water that may be inside the recessed connector housing.
- Remove the tires/wheels from the vehicle and gently rinse the mud and dirt off with a garden hose. Avoid rinsing the bearings and transmission.



Never use a pressure washer to clean your vehicle.

- Use an air compressor or a can of compressed air to dry the vehicle and help remove any water that may have gotten into small crevices or corners.
- Spray the bearings, drive train, fasteners and other metal parts with a water-displacing light oil or lubricant. Do not spray the motor.
- Let the vehicle air dry before you store it. Water (and oil) may continue to drip for a few hours.
- Increase the frequency of disassembly, inspection and lubrication of the following:
- Front and rear axle hub assembly bearings.
- All transmission cases, gears and differentials.
- Motor-clean with an aerosol motor cleaner and re-oil the bushings with lightweight motor oil.
- Drain any water that has collected in the tires by spinning them at high speed. With the body removed, place the vehicle upside down and pull full throttle for a few short bursts until the water has been removed.

01-4 BATTERY CHARGER SAFETY PRECAUTIONS AND WARNINGS



To reduce the risk of fire or electric shock, carefully follow these instructions. Before charging, read the instructions. Failure to follow all instructions may result in excessive heat, FIRE, and ultimately injury and property damage.

- For indoor use, do not expose to rain.
- Do not leave charging batteries unattended. Disconnect charger if batteries become hot or puff.
- Do not charge batteries overnight.
- Do not leave batteries near fire, water, or in extreme temperature.
- Do not impact or alter the batteries.
- Do not leave the charger and battery unattended during use.
- Do not attempt to charge dead, damaged or wet battery packs.
- Do not attempt to charge a battery pack containing different types of batteries.
- Do not allow children under 8 years of age to charge battery packs.
- Do not charge batteries in extremely hot or cold places or place in direct sunlight.
- Do not charge a battery if the cable has been pinched or shorted.
- Do not connect the charger if the power cable has been pinched or shorted.
- Do not attempt to dismantle the charger or use a damaged charger.
- Do not attach your charger to both an AC and a DC power source at the same time.
- Do not connect the input jack (DC input) to AC power.
- Always use only rechargeable batteries designed for use with this type of charger in the correct programming mode.
- Always inspect the battery before charging.



- Always keep the battery away from any material that could be affected by heat.
- Always monitor the charging process and have a fire extinguisher available at all times.
- Always end the charging process if the battery becomes hot to the touch or starts to change form (swell) during the charge process.
- Always connect the charge cable to the charger first then connect the battery to avoid short circuit between the charge leads. Reverse the sequence when disconnecting.
- Always connect the positive red leads (+) and negative black leads (-) correctly.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always charge in a well-ventilated area.
- Always terminate all processes and contact us if the product malfunctions.
- Charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.
- The socket-outlet shall be installed near the equipment and shall be easily accessible.



Never leave charger unattended, exceed maximum charge rate, charge with non-approved batteries or charge batteries in the wrong mode. Failure to comply may result in excessive heat, fire and serious injury.



Use only with compatible batteries in the correct program mode. Not doing so can result in excessive heat and other related product malfunctions, which can lead to user injury or property damage. Please contact us or an authorized retailer with compatibility questions.

01-5 FCC STATEMENT



Changes or modifications of this product is not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.



01-6 WEEE Compliance (CE Compliance for Users in the European Union)

Please help the environment by disposing of your product responsibly at the end of its life. The wheeled bin symbol indicates that this product should not be disposed of in your household waste containers. Instead, the product should be disposed of by using a designated collection point for the recycling of waste electrical and electronic equipment. The Waste of Electrical and Electronic Equipment (WEEE) Directive (2002/96/EC) requires that the best available recycling techniques be employed to minimize the impact on the environment. Recycling electronics helps by keeping harmful chemicals out of the environment, and also saves money by reusing precious metals. Remove any batteries and dispose of them and the product at your local authority's recycling facility. For more information about where you can drop off your waste equipment for recycling, please contact your local city office your household waste disposal service, or the location where you purchased this product.



| | |
|----------------------------|---|
| For All AK-917 Version | |
| Vehicle Size L*W*H (mm) | 460*195*118 mm |
| Wheelbase | 260 mm |
| Ground Clearance (mm) | 11.5 mm |
| Front & Rear Tire (mm) | Width 190 mm |
| Battery Tray Size (mm) | 142*49*32 mm |
| Lipo Battery | 2S 3300mAh Lipo Battery 35C |
| Shock Absorber | Adjustable Aluminum Oil-filled Shock Absorber |
| Suspension Mount | 7mm 6061 Aluminum |
| Steering Linkage | 2.5mm 6061 Aluminum |
| Motor Mount | Adjustable 6mm 6061 Aluminum |
| Front Upper Suspension Arm | 3-Stage Adjustable Arm |
| Rear Upper Suspension Arm | Adjustable |
| Front & Rear Driveshaft | Steel Driveshaft |
| Pinion Gear | CNC Steel |
| Differential | 13T Metal Input Gear / 39T Metal Main Differential Gear / 16T Metal Planetary Gear / 10T Metal Satellite Gear |
| Car Body | PC Material |

| | |
|---|--|
| Brushless Supercar (Carbon Fiber Version) | [FOR AK-917R(C) / AK-917B(C)] |
| Chassis | Carbon Fiber |
| Upper Deck | Carbon Fiber |
| Front & Rear Shock Tower | Carbon Fiber |
| Wheel | Aluminium |
| Wheel Hub Hex | Metal Brake Disc & Piston Calipers |
| Center Driveshaft | Split Transmission with 2 Steel Driveshafts |
| ESC | 120A RLAARLO Waterproof Brushless ESC |
| Motor | 3660 3900KV Brushless Motor, 1300W |
| Servo | 9KG, Metal Gear |
| Light System | Head lights, Tail light, Turn Light, Exhaust Back Fire Light |
| Transmitter with Receiver | Yes, receiver includes light controlled system |
| Package | Carbon Fiber Pattern EVA Case |

| | |
|--------------------------------|--|
| 120A RLAARLO ESC | |
| Auto Shutoff | 10 minutes without any operation |
| Thermal Protection Temperature | 120 degrees, cannot move forward or backward |
| Over-Voltage Protection | 2 stages, on 3.5V the light will flash for 1st stage; on 3.3V the speed will decrease 50% and power off after 10 seconds |
| Waterproof | Yes |
| Programmable | No |
| Support Battery | 2-4S Lipo |

1 SUPERCAR CHASSIS WITH BODY *1



[AK-917R(C)]

OR



[AK-917B(C)]

3 EVA CASE *1



6 INSTRUCTION MANUAL *1



9 HEX WRENCH *3

12 78T NYLON SPUR GEAR *1

15 40T STEEL PINION GEAR *1

4 LIPO BATTERY *1



7 INTRODUCTION BOOKLET*1



10 CROSSING WRENCH *1

13 63T NYLON SPUR GEAR *1

16 DOUBLE-SIDED TAPE FOR ESC *2

2 TRANSMITTER WITH RECEIVER *1



5 USB CHARGING CABLE *1



8 BADGE STICKER *1



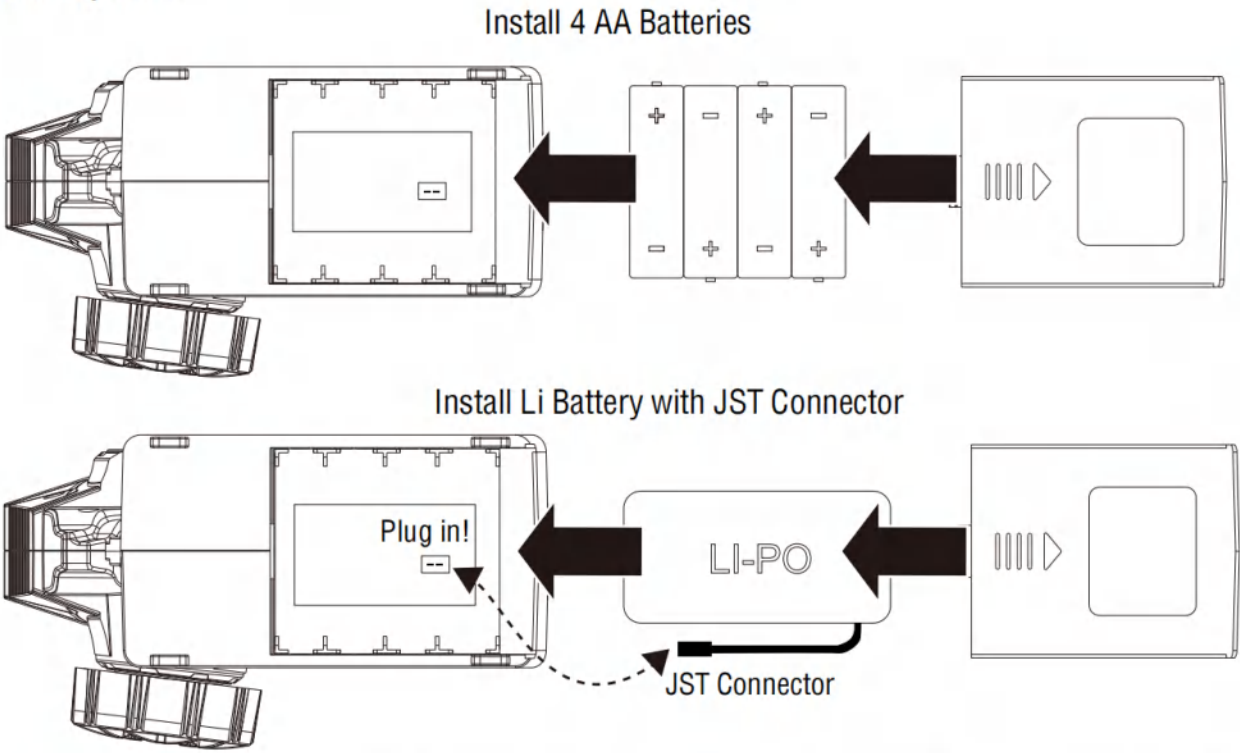
11 BATTERY VELCRO STRAP *1

14 52T NYLON SPUR GEAR *1



05-3 STEP 3 - INSTALL THE TRANSMITTER BATTERIES

- This transmitter requires 4 AA batteries or Li Battery.
1. Remove the battery cover from the transmitter.
 2. Install 4 AA batteries (not included) or Li battery (not included) with JST connector as below.
 3. Install the battery cover.



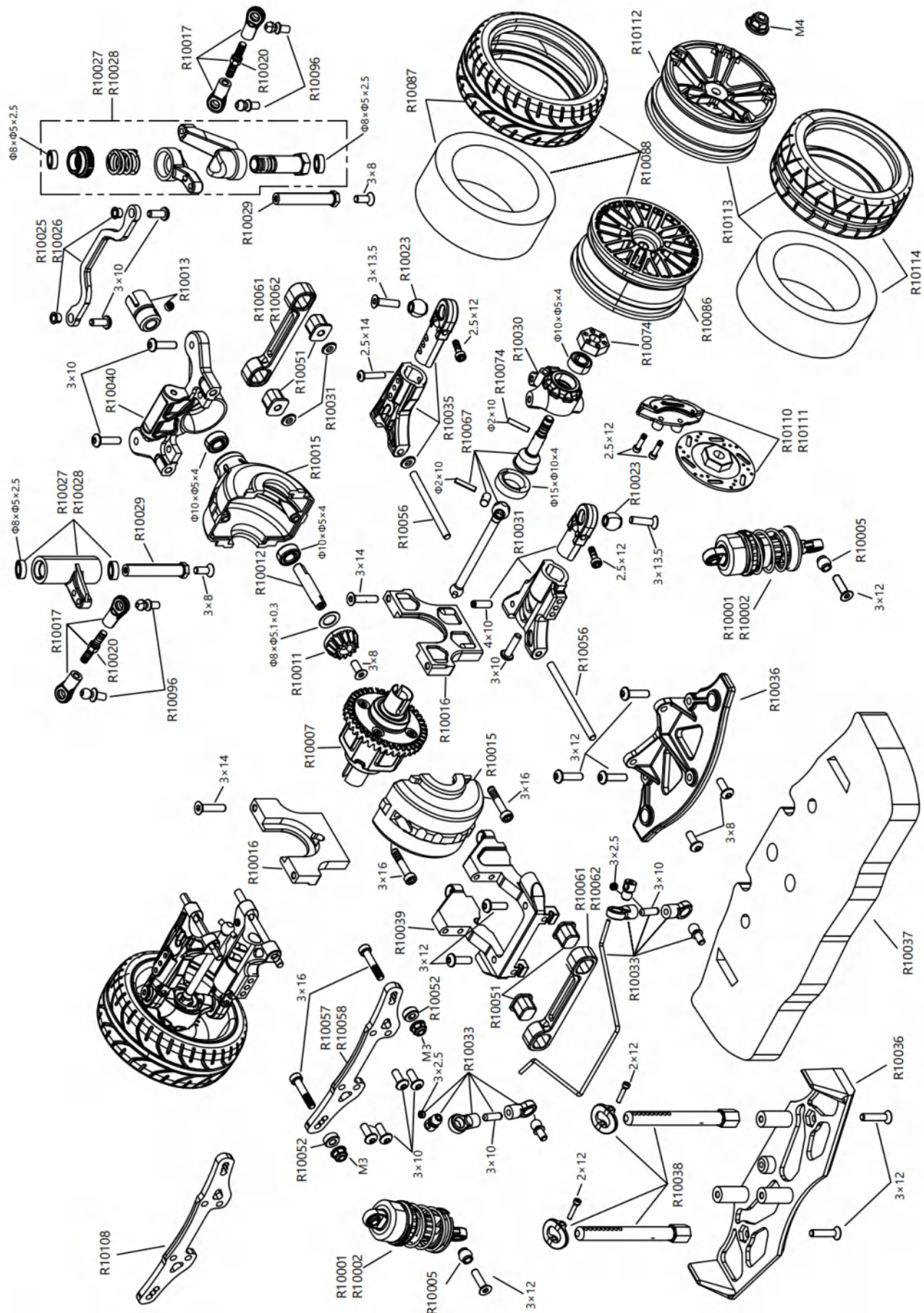
- NOTICE** (1)The working voltage range of the transmitter is 4.8-12V, it has the function of automatic voltage identification for different battery types, there is three-stage low-voltage alarm at 4.4V for 1S battery, 7.1V for 2S battery, 10.8V for 3S battery.(2) When the transmitter is powered by 4 AA batteries, please check if the JST cable inside battery compartment has been plug into the pins on the inner bottom or not; if the JST port is not plug in properly, AA batteries cannot be powered to transmitter.
- CAUTION** (1) If using rechargeable batteries, charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.
(2) Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to national regulations.

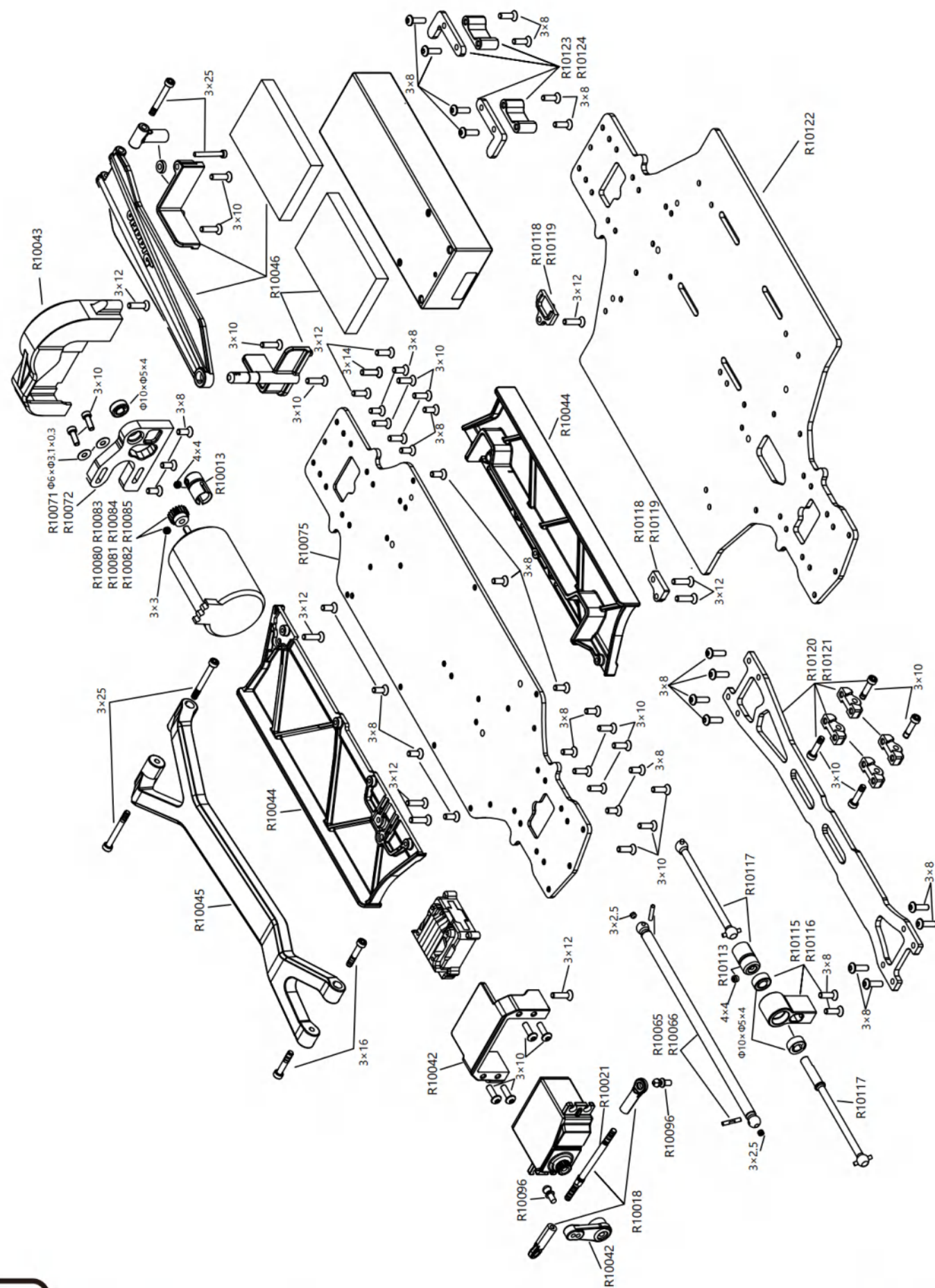
05-4 STEP 4 - CONNECT THE ESC AND POWER ON

1. First connect the ESC and the battery.
2. Power on the transmitter.
3. Press the ESC Power Switch to power on the car.
4. Now get shredding!

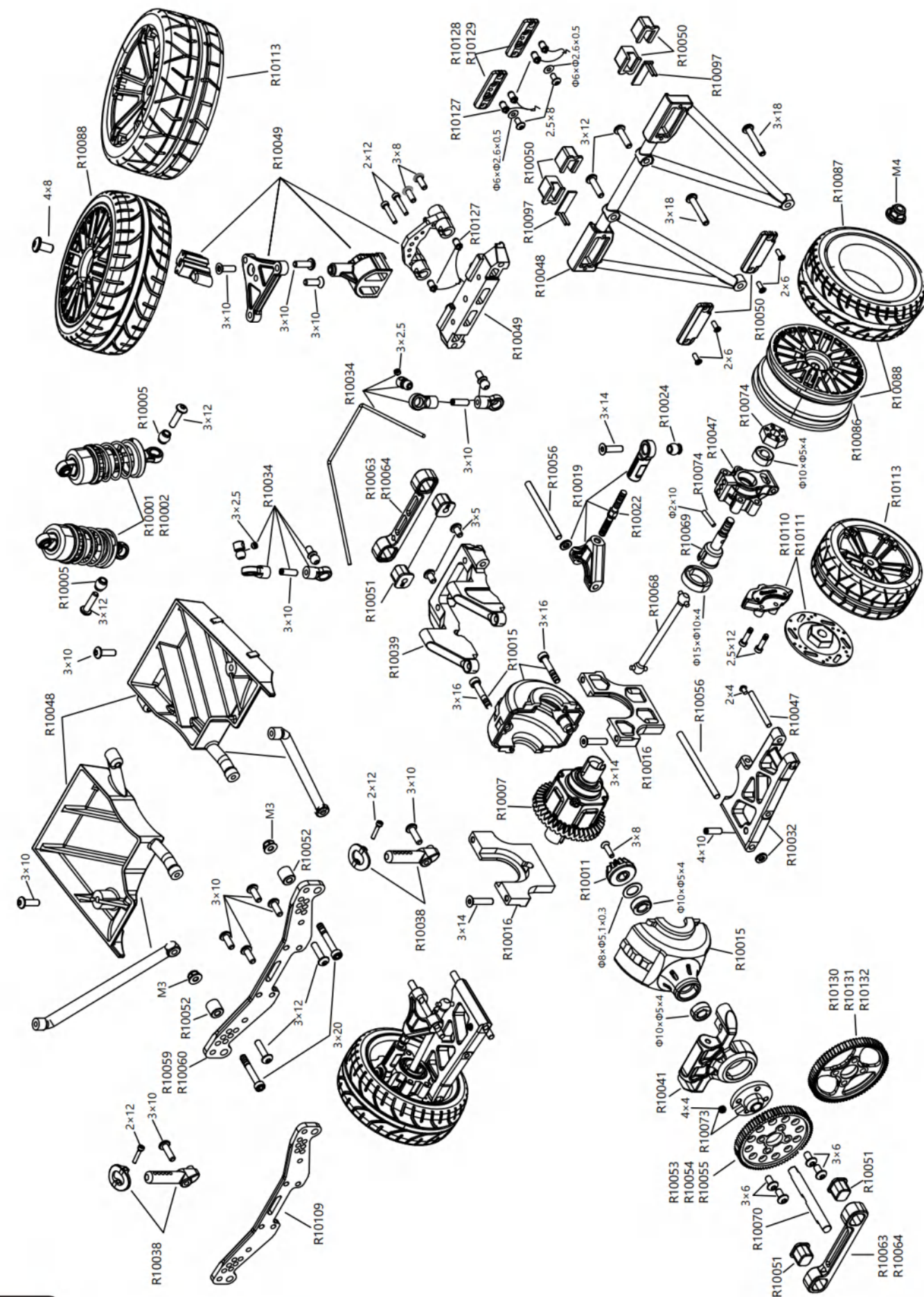
05-5 STEP 5 - POWER OFF

1. First, to power off the vehicle, press down the button on ESC of the car;
2. Second, press down the power switch on the transmitter for 3 seconds to shut off the transmitter.
3. When power off the vehicle and transmitter successfully, they will come with a sound.
4. Finally disconnect the battery and storage.



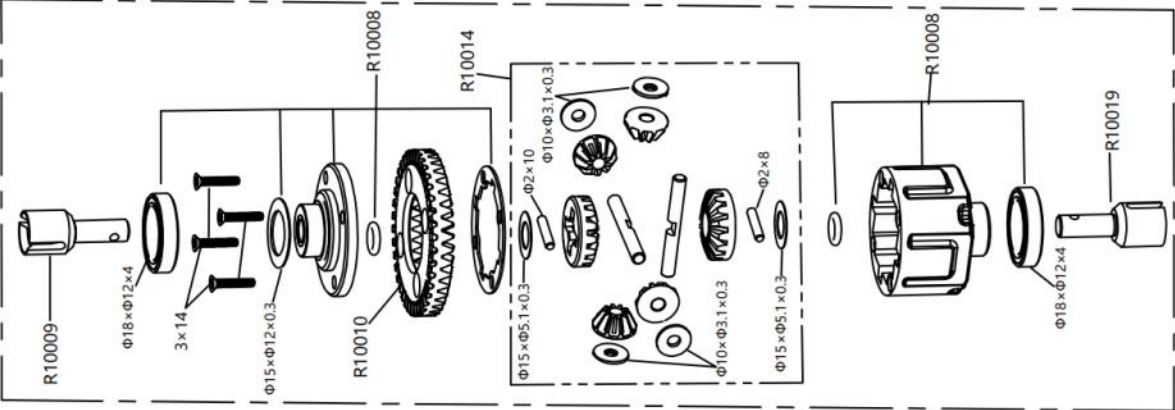
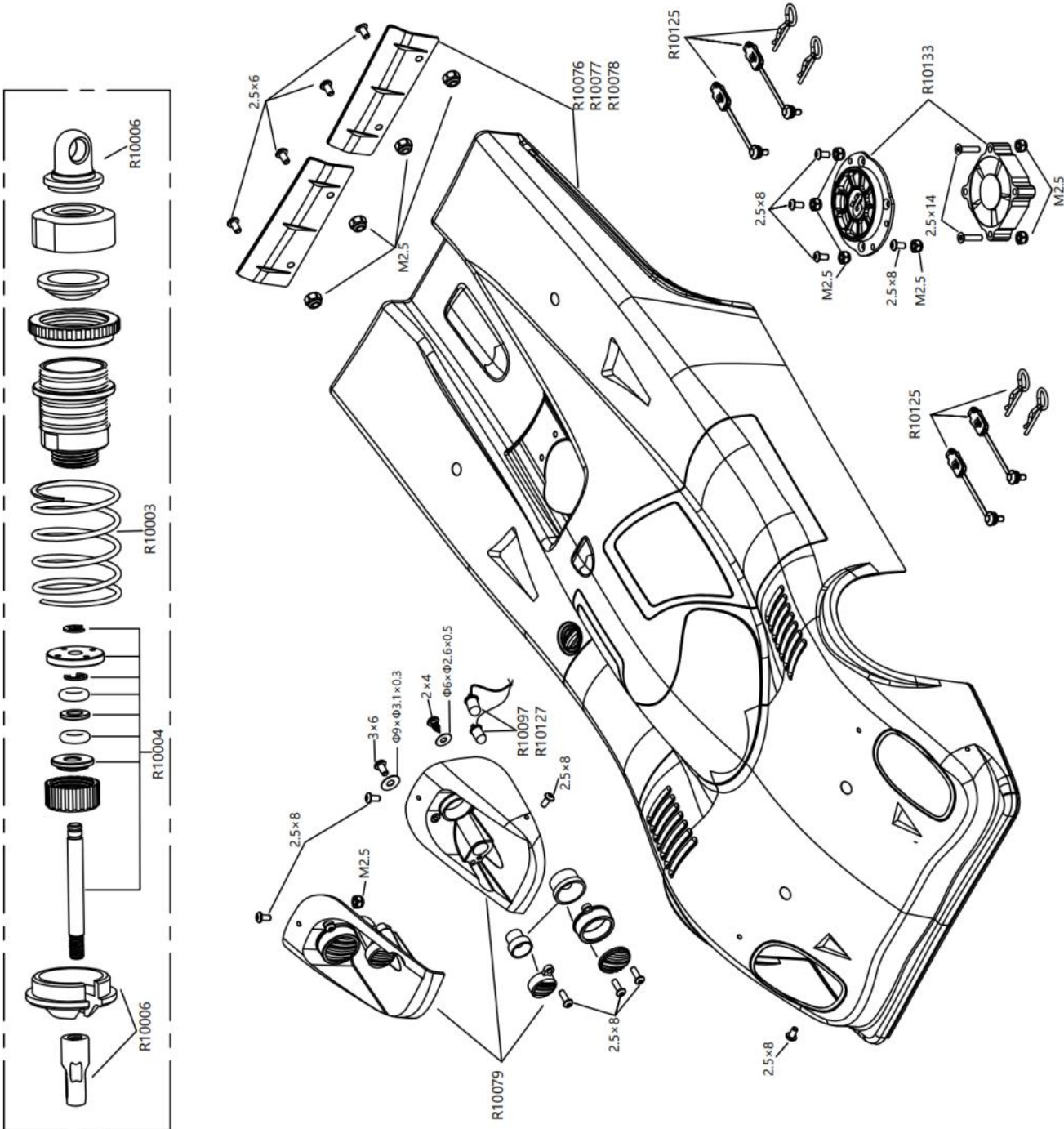


REF.: WI-RLA-AK917-IM VERSION.: V00

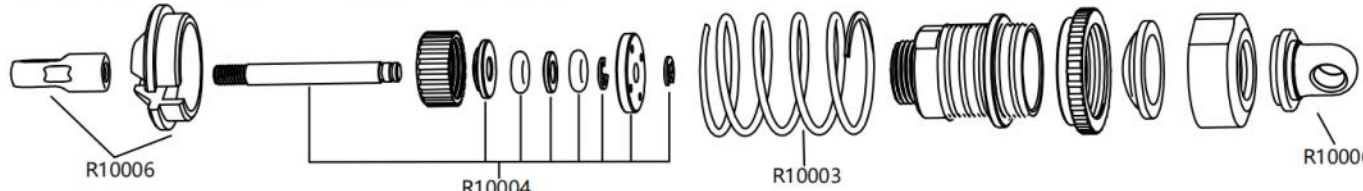


REF.: WI-RLA-AK917-IM VERSION.: V00





FRONT AND REAR SHOCK ABSORBER - REPLACEMENT PARTS



OIL-FILLED SHOCK ABSORBER, RED (2)



OIL-FILLED SHOCK ABSORBER, ORANGE (2)



SHOCK SPRING, 28MM, 65MM (2)

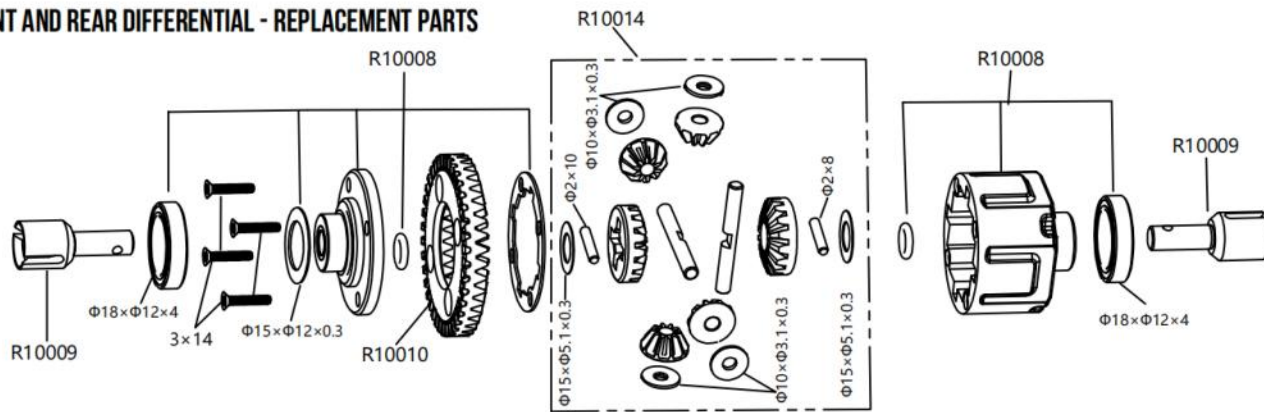


SHOCK SHAFT SET (2)



SHOCK CAP SET (4)

FRONT AND REAR DIFFERENTIAL - REPLACEMENT PARTS



FRONT / REAR DIFFERENTIAL



DIFFERENTIAL CASE SET



GEAR DIFFERENTIAL OUTDRIVE,
DIA.5°DIA.10°24.1MM, BLACK (2)



39T MAIN DIFFERENTIAL GEAR



DIFFERENTIAL GEAR SET



R10005

SHOCK BALL END, DIA. 5.8* DIA. 3* 5.7MM, SILVER (8)



R10011

13T METAL INPUT GEAR (2)



R10012

INPUT GEAR SHAFT
DIA. 5*24.5MM, BLACK (2)



R10013

INPUT SHAFT CUP
DIA. 10* 16.5MM, BLACK (2)



R10015

GEARBOX



R10016

GEARBOX SUPPORT, BLACK (2)



R10017

ASSEMBLED STEERING LINK (2)



R10018

ASSEMBLED SERVO LINK (2)



R10019

REAR UPPER SUSPENSION ARM (2)



R10020

STEERING TURNBUCKLE, SILVER (2)



R10021

SERVOTURNBUCKLE, SILVER (2)



R10022

REAR UPPER TURNBUCKLE, SILVER (2)



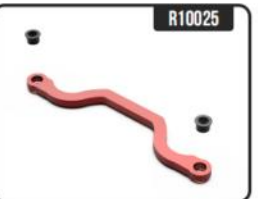
R10023

BALL END FOR SUSPENSION ARM
DIA. 8* DIA. 3.2* 7.2MM, SILVER



R10024

STEERING BALL END
DIA. 5.8* DIA. 3* 6MM, SILVER (8)



R10025

2.5MM 6061 ALUMINUM STEERING LINK,
72.5* 14.5* 2.5MM, RED



R10026

2.5MM 6061 ALUMINUM STEERING LINK,
72.5* 14.5* 2.5MM, ORANGE



R10027

STEERING SERVO SAVER SET, RED



R10028

STEERING SERVO SAVER SET, ORANGE



R10029

STEERING POST, DIA. 6* 32MM, BLACK (2)



R10030

FRONT STEERING HUB (2)



R10031

FRONT LOWER SUSPENSION ARM SET (2)



R10032

REAR LOWER SUSPENSION ARM SET (2)



R10033

FRONT NARROW SWAY BAR SET



R10034

REAR NARROW SWAY BAR SET



R10035

FRONT UPPER SUSPENSION ARM SET (2)



R10036

FRONT BUMPER



R10037

FRONT FOAM BUMPER



R10038

BODY POST SET



R10039

GEARBOX SUPPORT



R10040

UPPER DECK FRONT MOUNT



R10041

UPPER DECK REAR MOUNT



R10042

SERVO MOUNT AND HORN



R10043

MOTOR GEAR COVER



R10044

SIDE EXPANDING GUARD



R10045

NYLON UPPER DECK



R10046

BATTERY COMPARTMENT SET



R10047

REAR STEERING HUB SET (2)



R10048

TAIL LIGHT BRACKET SET



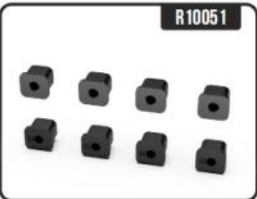
R10049

SPARE WHEEL BRACKET SET



R10050

TAIL LIGHT COVER SET



R10051

SUSPENSION MOUNT INSERT



R10052

SHOCK STAND, BLACK



R10053

78T MOD. 53/ 48P NYLON SPUR GEAR



R10054

63T MOD. 53/ 48P NYLON SPUR GEAR



R10055

52T MOD. 53/ 48P NYLON SPUR GEAR



R10056

SUSPENSION HINGE PIN SET



R10057

6061 ALUMINUM FRONT SHOCK TOWER, RED



R10058

6061 ALUMINUM FRONT SHOCK TOWER, ORANGE



R10059

6061 ALUMINUM REAR SHOCK TOWER, RED



R10060

6061 ALUMINUM REAR SHOCK TOWER,
ORANGE





6061 ALUMINUM FRONT SUSPENSION MOUNT, RED (2)



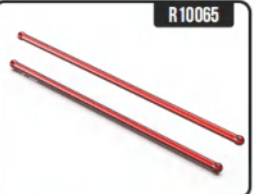
6061 ALUMINUM FRONT SUSPENSION MOUNT, ORANGE (2)



6061 ALUMINUM REAR SUSPENSION MOUNT, RED (2)



6061 ALUMINUM REAR SUSPENSION MOUNT, ORANGE (2)



ALUMINUM CENTER DRIVESHAFT, RED (2)



ALUMINUM CENTER DRIVESHAFT, ORANGE (2)



STEEL CVD DRIVESHAFT, DIA. 3.5*54.8MM, BLACK (2)



STEEL DOG BONE, DIA. 3.4*50MM, BLACK (2)



WHEEL AXLE, DIA. 11*Dia. 5*29.5MM, BLACK (2)



SPUR GEAR CENTER SHAFT, BLACK (2)



6061 ALUMINUM MOTOR MOUNT, RED



6061 ALUMINUM MOTOR MOUNT, ORANGE



ALUMINUM SPUR GEAR FIXED DISC



WHEEL HEX SET (4)



6061 ALUMINUM CHASSIS



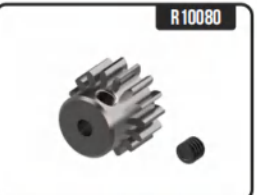
PC CAR BODY, RED



PC CAR BODY, ORANGE



HEADLIGHT LED MOUNT SET



30T MODO.53 / 48P STEEL PINION GEAR



34T MODO.53 / 48P STEEL PINION GEAR



40T MODO.53 / 48P STEEL PINION GEAR



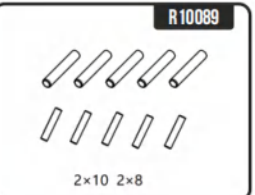
FRONT / REAR NYLON WHEEL SET, DIA. 65MM, BLACK (4)



TIRE AND FOAM INSERT SET (4)



ASSEMBLED NYLON WHEEL & TIRE (4)



STEEL PIN SET, 2*1062*8



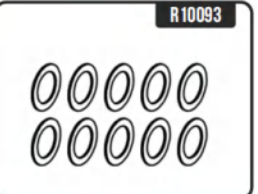
8*5*2.5 BALL BEARING (8)



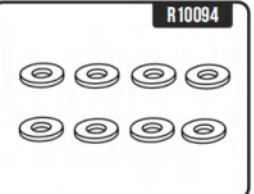
15*10*4 BALL BEARING (6)



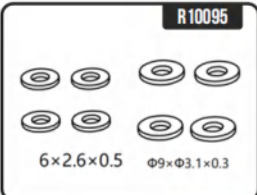
10*5*4 BALL BEARING, SILVER (8)



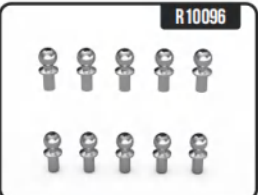
8*5.1*0.3 SHIM (10)



8*5.1*0.3 SHIM (8)



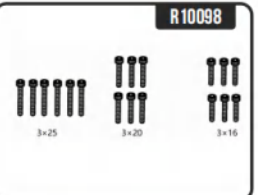
6*2.6*0.5 SHIM (8)



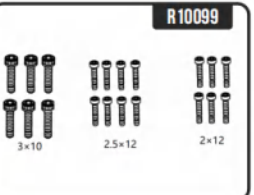
4.8*9.7MM PIVOT BALL (10)



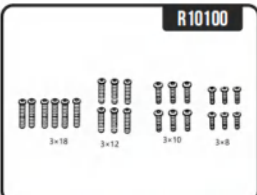
STANDARD LIGHT SET



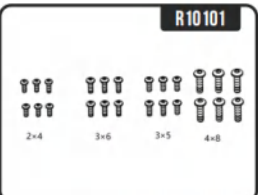
CAP HEAD HEX MACHINE SCREW SET, M3*16 & M3*20 & M3*25MM, BLACK



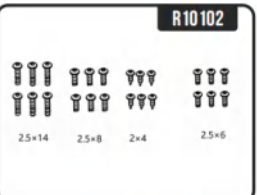
CAP HEAD HEX MACHINE SCREW SET, M2*12 & M2.5*12 & M3*10MM, BLACK



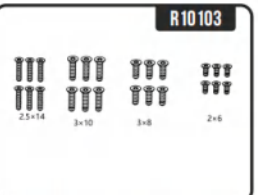
BUTTON HEAD HEX MACHINE SCREW, M3*8 & M3*10 & M3*12 & M3*16MM, BLACK



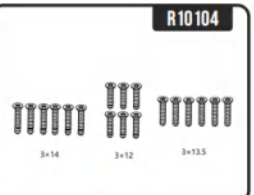
BUTTON HEAD HEX MACHINE SCREW, M2*4 & M2*5 & M2*6 & M2*8MM, BLACK



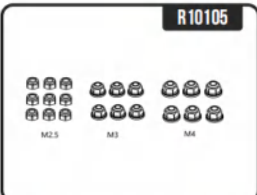
BUTTON HEAD HEX MACHINE SCREW, M2*4 & M2*5 & M2*6 & M2*8MM, BLACK



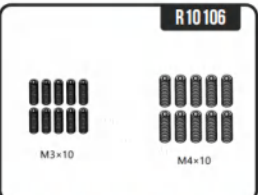
FLAT HEAD HEX MACHINE SCREW, M2*6 & M2.5*14 & M3*8 & M3*10MM, BLACK



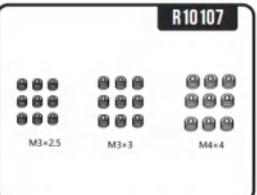
FLAT HEAD HEX MACHINE SCREW, M3*12 & M3*13.5 & M3*14MM, BLACK



LOCK NUT SET, M2.5 & M3 & M4, BLACK



SET SCREWS, M3*10 & M4*10, BLACK



SET SCREWS, M3*2.5 & M3*3 & M4*4, BLACK



CARBON FIBER FRONT SHOCK TOWER



CARBON FIBER REAR SHOCK TOWER



ALUMINUM BRAKE DISC AND CALLIPER SET, RED (2)



ALUMINUM BRAKE DISC AND CALLIPER SET, ORANGE (2)



ALUMINUM WHEEL, DIA. 52*Dia. 4*25.4MM (2)



ASSEMBLED ALUMINUM WHEEL & TIRE (2)



TIRE LAYERED WITH CARBON FIBER CLOTH



ALUMINUM CENTER DRIVESHAFT SUPPORT SET, RED



ALUMINUM CENTER DRIVESHAFT SUPPORT SET, ORANGE



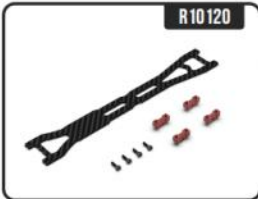
STEEL CENTER DRIVESHAFT SET, BLACK



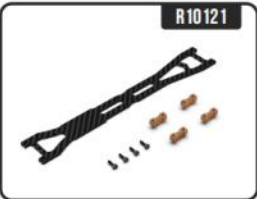
ALUMINUM SERVO BLOCK SET, RED



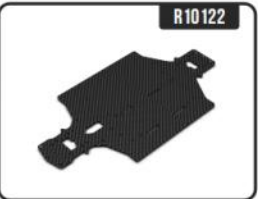
ALUMINUM SERVO BLOCK SET, ORANGE



CARBON FIBER UPPER DECK SET, RED



CARBON FIBER UPPER DECK SET, ORANGE



CARBON FIBER CHASSIS, 341.9*184*3MM



CARBON FIBER BATTERY MOUNT SET, RED



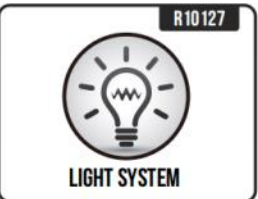
CARBON FIBER BATTERY MOUNT SET, ORANGE



BODY CLIP RETAINER, BLACK



6061 ALUMINUM SERVO HORN



LIGHT SYSTEM
LEDS WITH CABLE FOR HEADLIGHT, TAIL LIGHT, TURN LIGHT, EXHAUST BACKFIRE LIGHT



ALUMINUM TAIL LIGHT COVER, RED



ALUMINUM TAIL LIGHT COVER, ORANGE



63T MODO.53 / 48P STEEL SPUR GEAR



CAR BODY FAN WITH CABLE



60A WATERPROOF BRUSHLESS ESC



120A WATERPROOF BRUSHLESS ESC



3650-4300KV BRUSHLESS MOTOR WITH SENSING TEMPERATURE PORT



3660-3900KV BRUSHLESS MOTOR WITH SENSING TEMPERATURE PORT



3300MAH 2S 35C LIPO BATTERY



1:10 EVA CARBON FIBER PATTERN CASE



80A WATERPROOF BRUSHED ESC



550 13T BRUSHED MOTOR, 50K RPM



RECEIVER WITH LIGHT CONTROL SYSTEM, 4.8-10V DC



RECEIVER, 4.8-10V DC



TRANSMITTER WITH RECEIVER (WITH LIGHT CONTROL), 150 METERS RANGE, 4 CHANNEL TRANSMITTER, 2.4GHZ



TRANSMITTER WITH RECEIVER (WITHOUT LIGHT CONTROL), 150 METERS RANGE, 4 CHANNEL TRANSMITTER, 2.4GHZ





PC TRANSPARENT CAR BODY



37T MODO.53 / 48P STEEL PINION GEAR



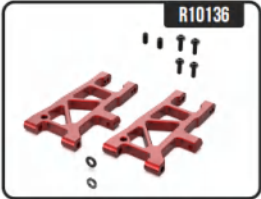
45T MODO.53 / 48P STEEL PINION GEAR



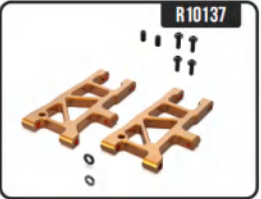
50T MODO.53 / 48P STEEL PINION GEAR



78T MODO.53 / 48P STEEL SPUR GEAR



REAR LOWER SUSPENSION ARM SET,
ALUMINUM, RED



REAR LOWER SUSPENSION ARM SET,
ALUMINUM, ORANGE



FRONT UPPER SUSPENSION ARM SET,
ALUMINUM, RED



FRONT UPPER SUSPENSION ARM SET,
ALUMINUM, ORANGE



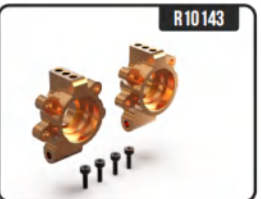
FRONT LOWER SUSPENSION ARM SET,
ALUMINUM, RED



FRONT LOWER SUSPENSION ARM SET,
ALUMINUM, ORANGE



REAR STEERING HUB SET, ALUMINUM, RED



REAR STEERING HUB SET, ALUMINUM,
ORANGE



FRONT STEERING HUB SET, ALUMINUM, RED



FRONT STEERING HUB SET, ALUMINUM,
ORANGE



GEARBOX SUPPORT, ALUMINUM, RED



GEARBOX SUPPORT, ALUMINUM, ORANGE



ASSEMBLED WHEEL & TIRE, ALUMINUM (2)



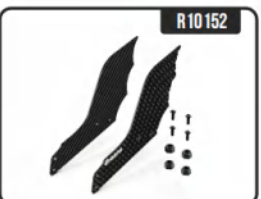
WHEEL RIM, ALUMINUM (2)



ADJUSTABLE MOTOR MOUNT, ALUMINUM,
RED



ADJUSTABLE MOTOR MOUNT, ALUMINUM,
ORANGE



CARBON FIBER WINGS (2)



52T MODO.53 / 48P STEEL SPUR GEAR



REAR UPPER SUSPENSION ARM SET,
ALUMINUM, RED



REAR UPPER SUSPENSION ARM SET,
ALUMINUM, ORANGE



TRANSMITTER WITH RECEIVER,
350METERS, 6 CHANNEL, 2.4GHZ,
WITH GYRO, INPUT 4.8-12V



23KG STEERING SERVO, METAL GEAR,
120-DEGREE ANGLE, OPERATING
SPEED(6V/8.4V): 0.18/0.16SEC,
TORQUE(6V/8.4V): 19.2/23KG.CM.
WEIGHT: 62G



46KG STEERING SERVO, METAL GEAR,
180-DEGREE ANGLE, OPERATING
SPEED(6V/7.4V): 0.13/0.11SEC,
TORQUE(6V/7.4V): 38.6/46.8KG.CM.
WEIGHT: 72G



5000 MAH 3S 30C LIPO BATTERY



ASSEMBLED WHEEL & TIRE, ALUMINUM



ALUMINUM WHEEL HUB, BLACK (2)



ALUMINUM WHEEL HUB, RED(2)



ALUMINUM WHEEL HUB, ORANGE(2)



ALUMINUM WHEEL HUB, GOLD(2)



ALUMINUM WHEEL HUB, GREEN(2)



ALUMINUM WHEEL HUB, RED(2)



ALUMINUM WHEEL HUB, ORANGE(2)



ALUMINUM WHEEL HUB, GOLD(2)



ALUMINUM WHEEL HUB, GREEN(2)



F3650-3700KV WATERPROOF BRUSHLESS
MOTOR, SUPPORT BATTERY: 4S,
MAX.VOLTAGE: 16V, MAX.CURRENT: 56A,
900W, MAX.RPM: 60K, SHAFT DIA.:
3.175MM



F3650-4600KV WATERPROOF BRUSHLESS
MOTOR, SUPPORT BATTERY: 3S,
MAX.VOLTAGE: 13V, MAX.CURRENT: 69A,
900W, MAX.RPM: 60K, SHAFT DIA.:
3.175MM



F3660-2460KV WATERPROOF BRUSHLESS
MOTOR, SUPPORT BATTERY: 6S,
MAX.VOLTAGE: 24V, MAX.CURRENT: 56A,
1350W, MAX.RPM: 60K, SHAFT DIA.: 5MM



F3660-3570KV WATERPROOF BRUSHLESS
MOTOR, SUPPORT BATTERY: 4S,
MAX.VOLTAGE: 16.8V, MAX.CURRENT: 80A,
1350W, MAX.RPM: 60K, SHAFT DIA.: 5MM



F3670-1950KV WATERPROOF BRUSHLESS
MOTOR, SUPPORT BATTERY: 7S,
MAX.VOLTAGE: 30V, MAX.CURRENT: 60A,
1800W, MAX.RPM: 60K, SHAFT DIA.: 5MM



F3670-2200KV WATERPROOF BRUSHLESS
MOTOR, SUPPORT BATTERY: 6S,
MAX.VOLTAGE: 27V, MAX.CURRENT: 66A,
1800W, MAX.RPM: 60K, SHAFT DIA.: 5MM



F3670-2830KV WATERPROOF BRUSHLESS
MOTOR, SUPPORT BATTERY: 4S,
MAX.VOLTAGE: 21V, MAX.CURRENT: 85A,
1800W, MAX.RPM: 60K, SHAFT DIA.: 5MM



04-1 TRANSMITTER SPECIFICATION

| | |
|---------------------------------------|--|
| Channels | 4 |
| Control Distance | 150 Meters / 500 Feet |
| RF | 2.4GHz |
| Transmitter Battery Required (Type 1) | 6V DC 1.5AA *4 (Not included) |
| Transmitter Battery Required (Type 2) | Li-Battery 4.8V-12V (Connect with JST Port) (Not included) |
| Auto Shut Off for Transmitter | Alarm after 12 minutes, auto shut off after 15 minutes without any operation |
| Low Voltage Warning on Transmitter | Lower than 4.4V for 1S battery, 7.1V for 2S battery, 10.8V for 3S battery |
| Working Voltage Range on Receiver | 4.8-10V |

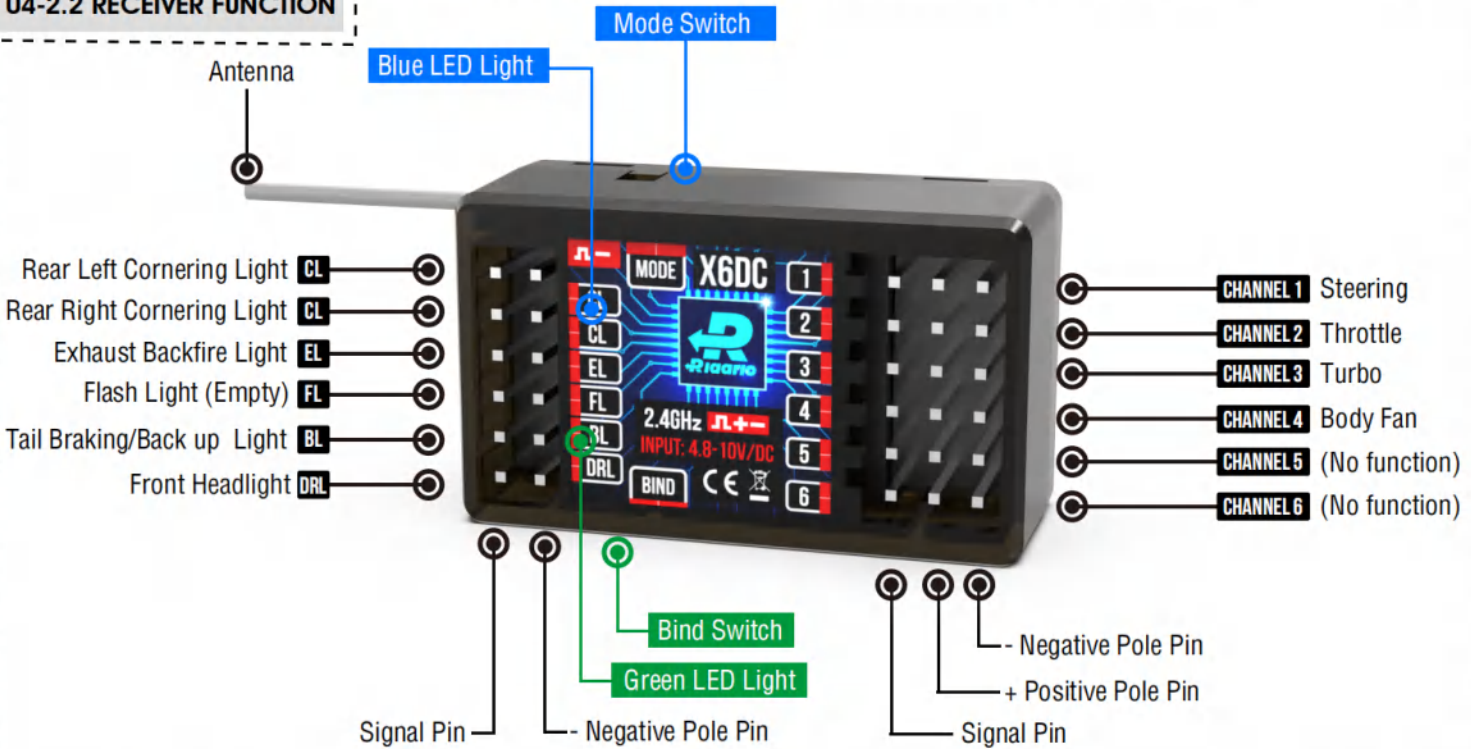
04-2 TRANSMITTER & RECEIVER FUNCTION

04-2.1 TRANSMITTER FUNCTION



| | |
|---|--|
| 01 Power Switch: | Press the switch once to power on; Press down the switch for 3 seconds to power off. |
| 02 Steering Reverse Switch for Channel 1: | Reverse the steering function. |
| 03 Throttle Reverse Switch for Channel 2: | Reverse the throttle function. |
| 04 Reverse Switch for Channel 3: | Reverse the function for Channel 3. |
| 05 Reverse Switch for Channel 4: | Reverse the function for Channel 4. |
| 06 Battery Compartment: | Install 4 AA batteries or Li battery. |
| 07 Throttle Limiter: | Limits throttle output to 0-25%-50%-75%-100%. Select 0% to 75% for less experienced drivers or when you are driving the vehicle in a small area. |
| 08 Steering Dual Rate: | It can be set to control the steering throw. |
| 09 Steering Trim: | Adjust the steering center point. Normally, the steering trim is adjusted until the vehicle tracks straight. |
| 10 Throttle Trim: | Adjust the throttle neutral point. |
| 11 Channel 3 Button: | Press down to activate or deactivate the function of Channel 3 - Turbo Function. |
| 12 Channel 4 Button: | Press down to activate or deactivate the function of Channel 4 - Body Fan. |
| 13 Hanging Hook: | Tie a string (not included) on the hook when necessary. |
| 14 Throttle / Braking Trigger (CH2): | Control the vehicle to move forward, backward, or brake. |
| 15 Steering Wheel (CH1): | Control the vehicle to turn right / left. |

04-2.2 RECEIVER FUNCTION



Bind Switch When long pressing the Bind Switch for 3 seconds, the Green Led Light will flash, that means it tries to pair the transmitter again; when pairing successfully, the green light will be stable.

Mode Switch Press the Mode button to change the control of Braking Light and Back up Light.

NOTICE If the Dupont connector is plugged in the ESC pins reversely, the corresponding function cannot work, correct it and then it can work again.

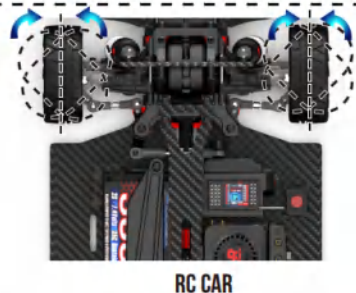
04-2.3 STEERING DUAL RATE

Steering Dual Rate knob can be set to control the steering throw: (1) Turning the knob clockwise to increase the steering throw. (2) Turning the knob anticlockwise to reduce the steering throw.



04-2.4 STEERING TRIM

Trim adjustment allows you to finely tune the inputs from your transmitter. It's the dial you reach for when your RC car isn't tracking straight. The steering trim is what helps navigate the RC car in a straight line.



If your vehicle veers to the left or right, dial the Steering Trim knob to the right or left.

04-2.5 THROTTLE LIMITER



The knob limits throttle output to 0-25%-50%-75%-100%. Select 0% to 75% for less experienced drivers or when you are driving the vehicle in a small area.

04-2.7 CH3 BUTTON

Activate and deactivate the Channel 3 Turbo Button for increasing or cancelling 30% accelerated speed, however, the top speed will not be increased when turbo function is on.

04-2.8 CH4 BUTTON

Activate and deactivate the Channel 4 Button to power on the fan or power off the fan on the body.

04-2.9 HOW TO ACTIVATE THE BACKFIRE LIGHTS & BRAKING/BACK UP LIGHTS

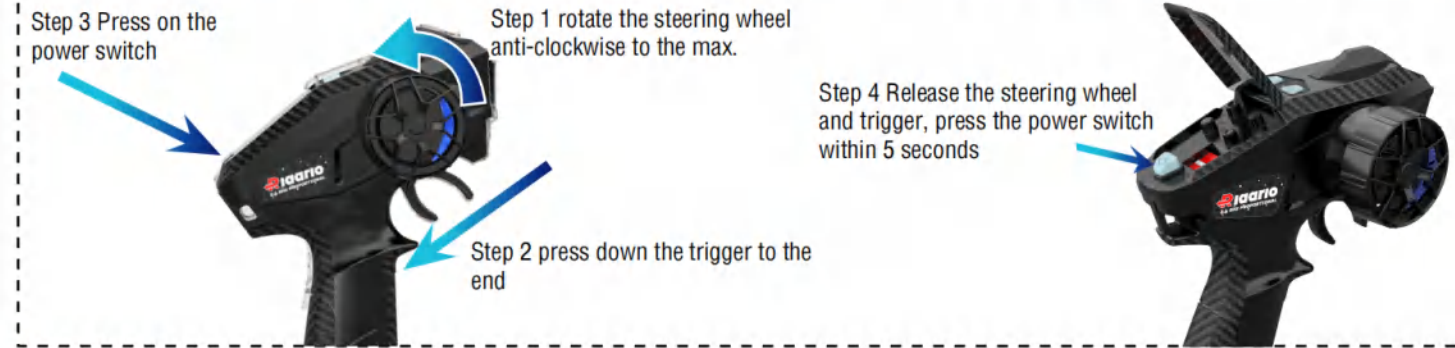
The backfire lights and braking/back up lights will not flash when pressing down the trigger to increase the speed. When pressing down the trigger of 60% throttle and back to the neutral of throttle, the backfire lights flash twice; when applying 60-100% throttle and back to neutral, it will flash 4 times. When pushing upper the trigger of 60% throttle and back to neutral of throttle, the back up lights flash twice; when pushing upper 60-100% throttle and back to neutral, it will flash 4 times.

04-3 CALIBRATION OF THE FUNCTION

04-3.1 ENTER THE SETTING MODE BEFORE CALIBRATION

NOTICE We have calibrated the channels in the factory. Normally, player needn't to calibrate again except any problem.

1. Rotate the steering wheel anti-clockwise to the max., press down the trigger to the end, and press down the power switch until there is the sound "DuDu....." at the same time;
2. Release the steering wheel and trigger, press the power switch within 5 seconds.
3. The blue light on the power switch flashes, and you have entered the setting mode.



REF.: WI-RLA-AK917-IM VERSION.: V00

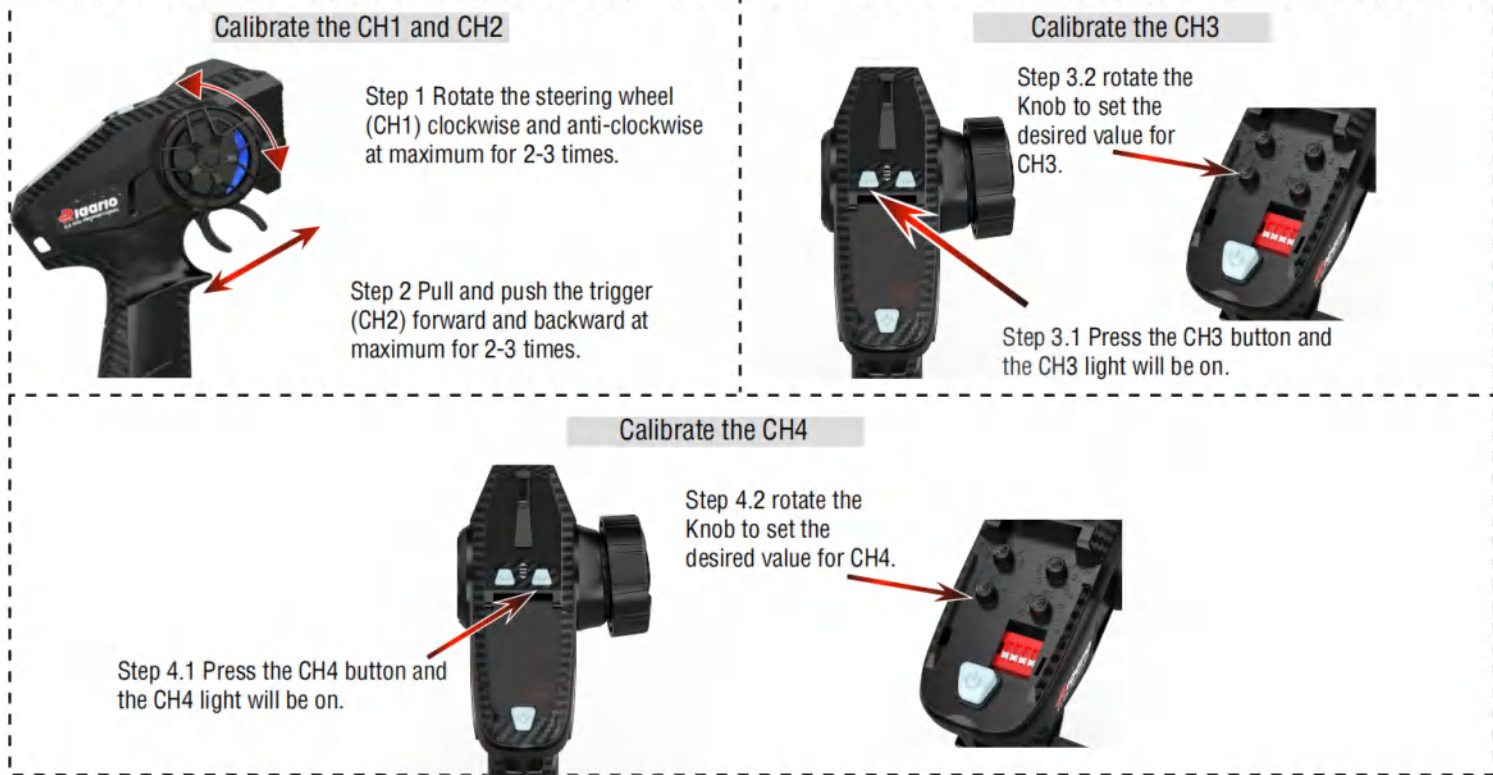


IF YOU HAVE ANY QUESTIONS OR INQUIRIES, PLEASE FEEL FREE TO CONTACT US, WE ARE WILLING TO RESOLVE THE PROBLEM FOR YOU.

AK-917 SERIES | RLAARLO.COM | INSTRUCTION MANUAL

04-3.2 CALIBRATE THE FUNCTIONS

1. Rotate the steering wheel (CH1) clockwise and anti-clockwise at maximum for 2-3 times.
2. Pull and push the trigger (CH2) forward and backward at maximum for 2-3 times.
(At this time, the calibration of CH1 and CH2 is completed.)
3. Press the CH3 button and the CH3 light will be on; rotate the Steering Dual Rate Knob to set the desired value for CH3.
4. Press the CH4 button and the CH4 light will be on; rotate the Steering Dual Rate Knob to set the desired value for CH4.
(At this time, the calibration of CH3 and CH4 is completed.)
5. Finally, press the power switch to confirm all the settings with the sound prompt.

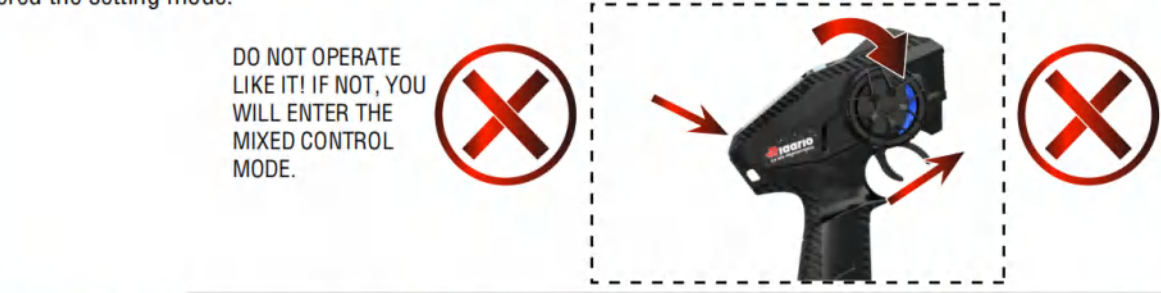


04-3.3 CALIBRATING PROBLEM SHOOTING

Our transmitter includes 2 modes, one mode is Normal Operated Mode; another mode is Mixed Control Mode. MixedControl mode is not suitable for our buggy, but only for the toys with 2 motors, do not enter this mode.

In case of you have entered the Mixed Control Mode accidentally, on this mode, the power switch always indicates red light, you can operate the following steps to quit the mode:

1. First enter the mode setting: rotate the steering wheel clockwise to the max., push the trigger to the uppest position, long press the power switch, the blue and red light will flash on the power switch;
2. Press the power switch once within 5 seconds, the blue light on power switch will flash;
3. At this time, you can choose the mode in turn by the operation of pushing the trigger uppest and pulling it to lowest position; when the flashed blue light is on the switch, press the switch, which means you choose the Normal Operated Mode.



NOTICE Please contact us by email or detaier when you have any problem on the Mode alternation, we will reply and resolve it within 24 hours.



IF YOU HAVE ANY QUESTIONS OR INQUIRIES, PLEASE FEEL FREE TO CONTACT US, WE ARE WILLING TO RESOLVE THE PROBLEM FOR YOU.

AK-917 SERIES | RLAARLO.COM | INSTRUCTION MANUAL

REF.: WI-RLA-AK917-IM VERSION.: V00

05-1 STEP 1 - CHARGE THE LI-BATTERY BEFORE PLAYING

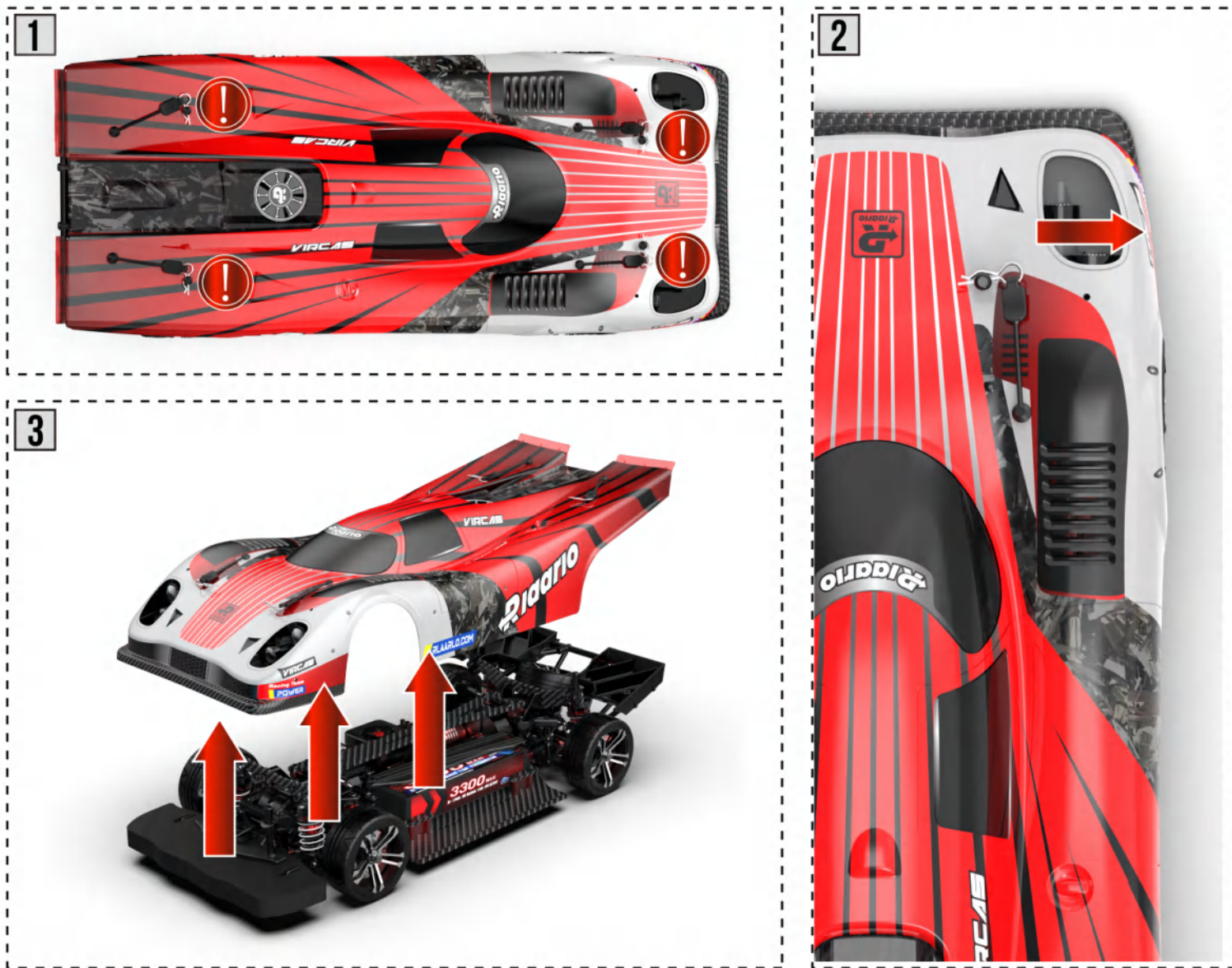
- 1. When recharging the battery after playing the vehicle, switch off the car and unplug the battery from ESC.
- 2. Cool down the battery for 20 minutes before charging.
- 3. Connect Li-po battery to USB cable first.
- 4. Connect the USB cable with battery to USB port of your computer or USB adaptor (output 5V 1A) (not included).
- 5. Plug the adaptor to the power supply.
- 6. When charging, the green LED will flash, and will become stable after fully charged. The charging process takes approximately 4-5 hours.
- 6. Disconnect the battery from the charger and reconnect the battery to the ESC.



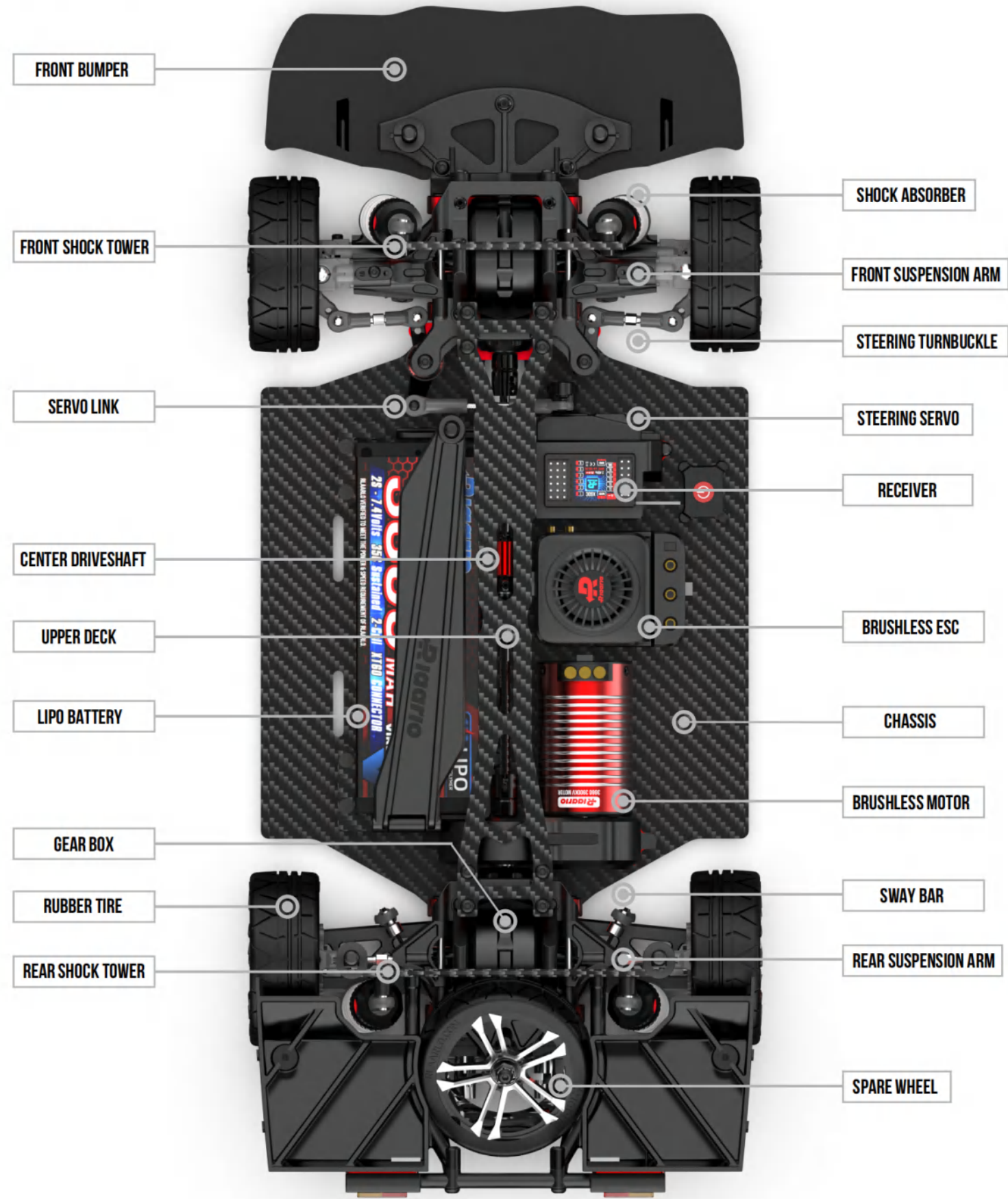
NOTICE Do not leave the battery unattended during the charging process. Charge times will be varied depending on remaining battery capacity inside the battery.

05-2 STEP 2 - OPEN THE CAR BODY

05-2.1 REMOVE THE CAR BODY



05-2.2 CHASSIS REVIEW



| PROBLEM | SOLUTION |
|---|--|
| Steering not working properly | <ol style="list-style-type: none"> 1. Replace the batteries of the remote with brand new ones and fully charge the car battery. 2. Turn off the switch on the remote controller, and pair again; Do not touch the throttle when pairing. 3. Make sure the steering arms are still connected properly. 4. Unplug the wires connected the ESC and servo, then pair the car with the transmitter again. <p>Above are to check the defective part; if the car pairs with the remote controller, then the servo might be the problem.</p> |
| Steering not working properly | <ol style="list-style-type: none"> 1. Inspect all the pieces are in place and no foreign objects were blocked inside. 2. Check the front and rear differentials if they works properly with both the axels and main drive shaft. <p>Make sure the gears of the differential and main driving shaft are not stripped.</p> |
| Wheels are not spinning properly | <ol style="list-style-type: none"> 1. Tighten the locknuts hold the wheels in place. 2. If all parts are intact, the differentials may be broken and needs to be replaced. |
| Battery/USB cable not working | <ol style="list-style-type: none"> 1. Use the adaptor of output 5V 1A to to connect the USB cable and charge the battery. 2. Solid red light on the USB cable – charger is plugged in. 3. Green light on the USB cable is blinking – battery is under charging. 4. The green light on the USB cable is become solid – battery is fully charged. 5. Blinking green light after 3-4hrs of charging – battery is defective. |
| Rebinding the remote control with the car | Turn on the remote control first and within 3 seconds turn on the car for rebinding them; if not successful, repeat the action 2-3 times, or press the switch on the receiver for 3 seconds to restart the receiver; If the pairing is still not successful, the remote controller and ESC or receiver needs to be replaced. |

| PROBLEM | POSSIBLE REASON | SOLUTION |
|----------------------|--|--|
| Vehicle can not move | Batteries are incorrectly assembled in remote controller | Check transmitter batteries and refitsee model/ transmitter manual |
| | Weak or damage battery in the car | Install fully charged batteries |
| | Worn or broken ESC wires or motor | Check condition, reconnect and insulate |
| | ESC shut down due to overheating | Stop driving, ESC or motor has to cool down |
| | Motor is damaged | Replace with new unit |
| | ESC or Receiver is damaged | Replace with new unit |
| | Possible problem on transmission | Check components and replace |
| | Low voltage cutoff function on ESC is activated to protect battery | Remove, cool down and re-charge the battery |

| PROBLEM | POSSIBLE REASON | SOLUTION |
|--|--|---|
| Vehicle can not reverse | ESC / Receiver is damaged | Replace with new unit |
| Short runtime | Battery damaged or not fully charged | Check condition, replace or recharge |
| | Motor is dirty or damaged | Check condition, replace or recharge |
| | Terrain resistance causes excessive power consumption | Play on other kinds of terrain |
| Limited steering angle | The button of Transmitter Steering Rate is set incorrectly | Adjust Transmitter Steering Rate button per the manual |
| | Damaged steering components | Check components and replace |
| Sluggish performance | Battery damaged or not fully charged | Check condition, replace or recharge |
| | Transmitter Throttle Trim is incorrectly set | Throttle trim needs to be set to zero |
| | Motor is dirty or damaged | Clean , check condition or replace |
| | Drivetrain is dirty or damaged | Clean , check condition or replace |
| Short range or no control on vehicle | Transmitter battery is weak or installed incorrectly | Check transmitter batteries |
| | Servo wires of receiver loose or connected incorrectly | Reinstall signal wires to ESC receiver |
| | Transmitter and ESC receiver are not paired correctly | Transmitter and ESC receiver need to be repaired per manual |
| Steering / Throttle works intermittent | ESC shuts down due to overheating | Stop driving, ESC or motor has to cool down |
| | Transmitter and ESC receiver are not paired correctly | Check if any interference sources, or repair the transmitter and ESC receiver |
| Vehicle wanders left / right | Steering trim set out | Adjust steering trim |
| | Steering components are damaged | Check and replace components |
| | Drivetrain is dirty or damaged | Clean, check, or replace |



| PROBLEM | POSSIBLE REASON | SOLUTION |
|--|--|---|
| Steering / Throttle operation reversed | “TH.REV” or “ST-REV” on the transmitter is set reversely | Adjust the “TH.REV” or “ST-REV” on the transmitter per the manual |
| | Check the wires from ESC to the motor are connected correctly | Disconnect and reconnect |
| Warning Alarm on Transmitter | Low Voltage Warning, lower than 4.4V for 1S battery, 7.1V for 2S battery, 10.8V for 3S battery | Fully charge the battery, or change the new one |
| | High Voltage Warning, total voltage of 4 batteries exceed 6V. | Use one old battery to instead of the new one |
| The speed is lower than claimed | Use the lower speed level on Throttle Limiter | Choose the higher speed level on Throttle Limiter |
| | No function on partial travel when pressing the throttle trigger | Adjust the Throttle Trim to patch it. |
| | The Pinion Gear was jamming against the Motor Mount. | Disassemble Motor Mount to adjust the Pinion Gear. |

