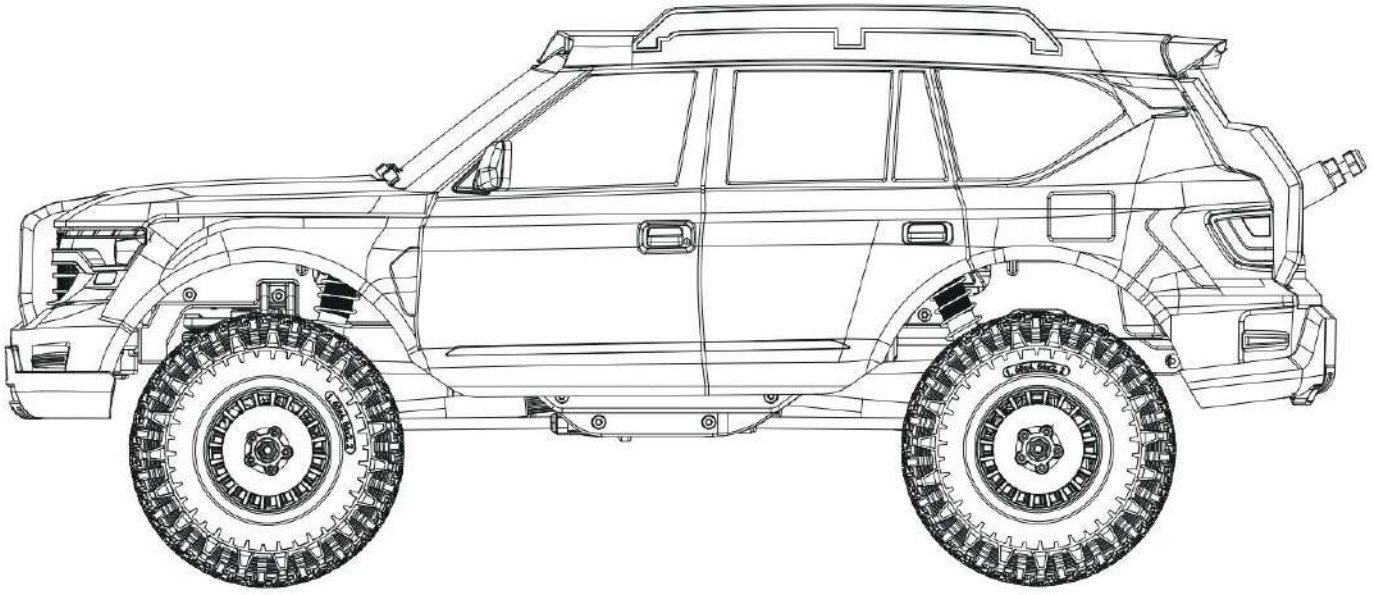
FMS

1/10 CANYON



Instruction Manual

操作手册

Disclaimer and Warning 免责声明与警告

Thank you for purchasing our product. This product is composed of precision components and is not a toy. It is not suitable for use by individuals under the age of 14. Please do not allow children to come into contact with this product. Exercise extra caution when operating this product in the presence of children. This product is a remote-controlled model and will provide a smooth and easy operating experience when the power is functioning correctly, and all components are undamaged. Visit www.fmshobby.com to access the latest product manual and related supplementary instructions and warnings. We reserve the right to update this manual. If there are updates to this manual, they will not be notified separately.

Before using the product, please carefully read this product manual to understand your legal rights, responsibilities, and safety instructions. Failure to do so may result in property damage, safety incidents, and personal safety risks. Once you use this product, it is considered that you have understood, accepted, and agreed to all the terms and content of this manual. Users are responsible for their actions and all consequences arising from them. Users commit to using this product only for legitimate purposes and agree to all the terms and content in this manual as well as any relevant policies or guidelines that our company may establish. Our company and distributors are not liable for any losses caused by users not following the product manual. In compliance with laws and regulations, our company reserves the final interpretation of this manual. Our company has the right to update, revise, or terminate these terms without prior notice.

This manual is intended to assist you in correctly operating, maintaining, and repairing the vehicle. Since most of the components involved in this product are unique parts, please keep this manual for future reference.

感谢您购买我们的产品。本产品由精密部件组成，并非玩具，因此不适合 14 岁以下的人士使用。 请勿让儿童接触本产品。在有儿童出现的场景操作时请务必特别小心注意。本产品是一款遥控模型产品，在电源正常工作及各部件未损坏的情况下将提供轻松自如的操作体验。请访问以下网址www.fmshobby.com获取最新的产品手册及相关附加说明与警告。我司保留更新本手册的权力。本手册如有更新，恕不另行通知。

请务必在使用产品之前仔细阅读本产品手册，了解您的合法权益、责任和安全说明，否则，可能带来财产损失、安全事故和人身安全隐患。一旦使用本产品，即视为您已理解、认可和接受本手册全部条款和内容。使用者承诺对自己的行为及因此而产生的所有后果负责。使用者承诺仅出于正当目的使用本产品，并且同意本手册内的全部条款和内容及我司可能制定的任何相关政策或者准则。我司及分销商不承担因用户未按产品手册使用产品所引发的一切损失。在遵从法律法规的情况下，我司享有对本手册的最终解释权。我司有权在不事先通知的情况下，对本条款进行更新改版或终止。

本手册旨在帮助您正确操作、维护和修理车辆。由于本品所涉部件多数为特有部件，请保留本手册作为未来参考之用。

Safety, precautions and warnings 安全、预防措施及警告

- Replace damaged components with original factory-parts. Pay special attention to the polarity of all vehicle wiring.
- Use common sense when selecting the environment to operate your vehicle. Do not operate near power cables, cellular/radio towers, deep water or unstable terrain. The operator is solely responsible for their actions.
- The product is composed of precision electrical components. It is critical to keep the product away from moisture and other contaminants.
- Always check the radio range of the vehicle prior to operation in order to prevent radio loss or interference.
- Operate this product within your ability. If the vehicle is dangerous to retrieve, it never worth the risk.
- Always turn on the transmitter before connecting the battery on the model. When turning off the model, always disconnect the battery first, and then turn off the transmitter. If this order is reversed, the model may become uncontrollable and cause serious damage.
- Never allow transmitter batteries to run low as it may cause loss of vehicle control.
- Plastics on the vehicle are susceptible to damage or deformation due to extreme heat and cold climate.

Do not store the model near any source of heat such as oven or heater. Store the model indoors, in a climate-controlled, room temperature environment.

- 请使用原厂部件更换损坏的部件。特别注意所有车辆接线的正负极。
- 务必选择合适的环境操作遥控模型，所选环境需远离电缆、无线电塔、深水及不稳定地形。本品操作者对其行为全权负责。
- 本品由精密电子部件构成。请勿将本品暴露于潮湿的环境或者其他污染物中。
- 确保每次操作前检查车辆的无线接收范围，以防止无线信号丢失或受干扰。

Safety Precautions 安全保障措施

• 在您的能力范围内操作此产品。在任何时候，如果车辆操作有危险，则绝对不值得冒险。
• 通电方式：务必先开遥控器再将车子通电。断电方式：务必先将车子断电再关遥控器。以上顺序如逆转，则可能引起遥控模型失控，导致人身伤害或财产损失。
• 遥控器电池低电时，请勿操作模型车，以免出现失控。
• 模型产品上的塑胶件容易因极冷或极热气候出现变形或损坏的状况。所以请将模型产品存放在气候受控的室温环境中，切勿靠近任何热源，如烤箱或加热器等。

This product is not a toy! (14+) Recommended for ages 14 and up. Adult supervision required for ages under 14 years old. Contains small parts, keep out of reach of children 3 years of age and younger.

使用前请仔细阅读本手册。我们不对任何故意损坏或不当使用负责。这个产品不是玩具！建议14岁及以上者使用。14岁以下的用户，需要在成年人监督下使用。本产品部分包含小零件，请务必保证3岁及以下儿童不能接触本产品。

Safety symbols 安全符号

Pay close attention to the following symbols and their meanings. Failure to follow these warnings could cause damage, injury or death.

仔细阅读以下符号及其相关说明，如不按照以下指引进行操作，可能会导致设备损坏或人员伤亡。

Danger 危险	**Not following these instructions may lead to serious injuries or death.** 如果使用者不按照说明方法操作，有可能导致操作者或他人受到严重受伤，甚至遭受生命危险。
Warning 危险	**Not following these instructions may lead to major injuries.** 如果使用者不按照说明方法操作，有可能导致操作者或他人受到轻微伤害。
Caution 危险	**Not following these instructions may lead to minor injuries.** 如果使用者不按照说明方法操作，可能导致操作者或他人轻微伤害。

Safety guide 安全信息

Prohibited 禁止

• Do not use the product at night or in bad weather like rain or thunderstorm. It can cause erratic operat- ion or loss of control.
• Do not use the product when visibility is limited.
• Do not use the product on rain or snow days. Any exposure to moisture (water or snow)may cause err- atic operation or loss of control.
• Interference may cause loss of control. To ensure the safety of you and others, do not operate in the fol- lowing places:
1、Near any site where other radio control activity may occur
2、Near power lines or communication broadcasting antennas
3、Near people or roads
4、On any body of water when passenger boats are present
• Do not use this product when you are tired, uncomfortable, or under the influence of alcohol or drugs. Doing so may cause serious injury to yourself or others.
• The 2.4GHz radio band is limited to line of sight. Always keep your model in sight as a large object can block the RF signal and lead to loss of control.
• Do not touch any part of the model that may generate heat during operation, or immediately after use. The engine, motor or speed control, may be very hot and can ause serious burns.
• Please ensure that the magnetic connectors on the chassis and car shell do not come into contact with metal objects to prevent any potential electronic short circuits!

• 请不要在夜晚或雷雨天气使用本产品，恶劣的天气环境有可能导致遥控设备失灵。
• 请不要在能见度有限的情况下使用本产品。
• 请不要在雨雪或有水的地方使用本产品。如果有液体进入到系统内部，可能会导致运行不稳定或失灵。

Safety Precautions 安全保障措施

• 信号干扰可能导致设备失控。为保证您和他人的安全，请不要在以下地点使用本产品：
1、通信基站附近或其他无线电活跃的地方
2、人多的地方或道路附近
3、水域附近
4、高压电线或通信广播天线附近

• 当您感到疲倦、不舒服，或在摄入酒精或服食导致麻醉或兴奋的药物后，不要操作本产品。否则可能对自己或他人造成严重的伤害。

• 2.4GHz无线电波段完全不同于之前所使用的低频无线电波段。使用时请确保模型产品在您的视线范围内，大的障碍物将会阻断无线电频率信号从而导致遥控失灵模型失控。

• 请勿在操作过程中或使用后立即触摸模型可能产生热量的任何部分。发动机、电机或速度控制器可能非常热，并可能导致严重烧伤。

• 请务必确保底盘和车壳上的磁体结合件不与金属物品接触，以免引发电子短路！

Mandatory 强制

• Misuse of this product may lead to serious injury or death. To ensure the safety of you and your equipment, read this manual and follow the instructions.

• Make sure the product is properly installed in your model. Failure to do so may result in serious injury.v

• Make sure to disconnect the receiver battery before turning off the transmitter. Failure to do so may lead to unintended operation and cause an accident.

• Ensure that all servos operate in the correct direction. If not, adjust the direction first.

• Make sure the model stays within the systems maximum range to prevent loss of control.

• 遥控设备使用不恰当可能导致操作者或他人严重受伤，甚至死亡。为保证您和设备的安全，请仔细阅读使用说明书并按照要求进行操作。

• 使用前必须确保本产品与模型安装正确，否则可能导致模型发生严重损坏。

• 关闭时，请务必先关闭接收机电源，然后关闭发射机。如果关闭发射机电源时接收机仍然在工作，将有可能导致遥控设备失控或者引擎继续工作而引发事故。

• 操控时，请先确认模型所有舵机的动作方向与操控方向一致。如果不一致，请调整好正确的方向。

• 当遥控距离较远时，有发生失控的可能，请适当缩短遥控距离。

Certifications 认证相关

DoC Declaration

Hereby, [Flysky Technology Co., Ltd.] declares that the Radio Equipment [FS-MG11-BS]、[FS-R11P-BS]、[FS-DB01] is in compliance with RED 2014/53/EU.
The full text of the EU DoC is available at the following internet address: www.flyskytech.com/info_detail/10.html

CE Warning

The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

Certifications 认证相关

FCC Statement

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 interfer- ence to radio communications. However, there is no guarantee that interference will not occur in a parti- cular installation. If this equipment does cause harmful interference to radio or televison 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.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Caution!

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

1. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-lacated or operating in conjunction with any other transmitter.End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

2. Move all your channels to the desired position.

3. Select [All channels] and then [Yes] in the confirmation box.

Environmentally friendly disposal

Old electrical appliances must not be disposed of together with the residual waste, but have to be disposed of separately. The disposal at the communal collecting point via private persons is for free. The owner of old appliances is responsible to bring the appliances to these collecting points or to similar collection points. With this little personal effort, you contribute to recycle valuable raw materials and the treatment of toxic substances.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

About Model 产品介绍

FMS has launched its new rugged off-road vehicle, CANYON, which is inspired by the latest police car model in Dubai and has undergone meticulous replication. The original model was meticulously designed for rigorous police duties and is recognized as one of the most advanced police cars in the world.

The body shell is made from high-quality PC material and comes standard with a hard nylon roof, door handles, front and rear bumpers, and side mirrors. The transparent windows offer a clear view of the highly realistic figurines and exquisite dashboard and cockpit interior.

The vehicle is pre-installed with front headlights, front and rear turn signal lights, and tail lights, and the entire lighting system supports synchronized operation. Additionally, it includes customized light cups for players to modify as they wish.

For body fixation, the FMS-exclusive knob-type magnetic structure (patented design) is employed, which cleverly integrates the power and signal wires of the light groups to connect seamlessly with the body.

The chassis frame is constructed from sturdy nylon material and incorporates a modular design with mortise and tenon joints, ensuring overall rigidity and toughness suitable for daily climbing needs. The vehicle is equipped with a low-profile two-speed transmission and a transfer case with reverse gear, along with metal gears, ball bearings, and front and rear portal axles throughout, allowing it to simulate the driving characteristics of various off-road vehicles with an ultra-low center of gravity. To better protect the steering servo, a steering gear buffer protection device is also included. Both sides of the rear axle are equipped with wire clamps and brake discs, enabling a tank-like turn where one wheel is locked while the other three rotate (DIG).

FMS推出的全新硬派越野车——黑豹，其设计灵感源自迪拜最新型的警车，并进行了精细还原。原款车型是为了严苛的警用任务而精心打造，被公认为全球最先进的警车之一。
车身外壳选用高质量的PC材料打造，并标配硬质尼龙制成的车顶、门把手、前后防撞装置以及后视镜。透明的车窗设计使得内部的高仿真度人偶和精致的仪表盘座舱内饰一览无余。

车辆出厂时已经预装了前大灯、前后转向灯和尾灯，且全车灯光系统支持联动效果。此外，还特别预留了灯杯，供玩家根据个人喜好进行自由改造。

在车身固定方面，继续沿用了FMS特有的旋钮式磁吸结构（专利设计），该结构巧妙地将灯组的供电线和信号线与车身完美融合。

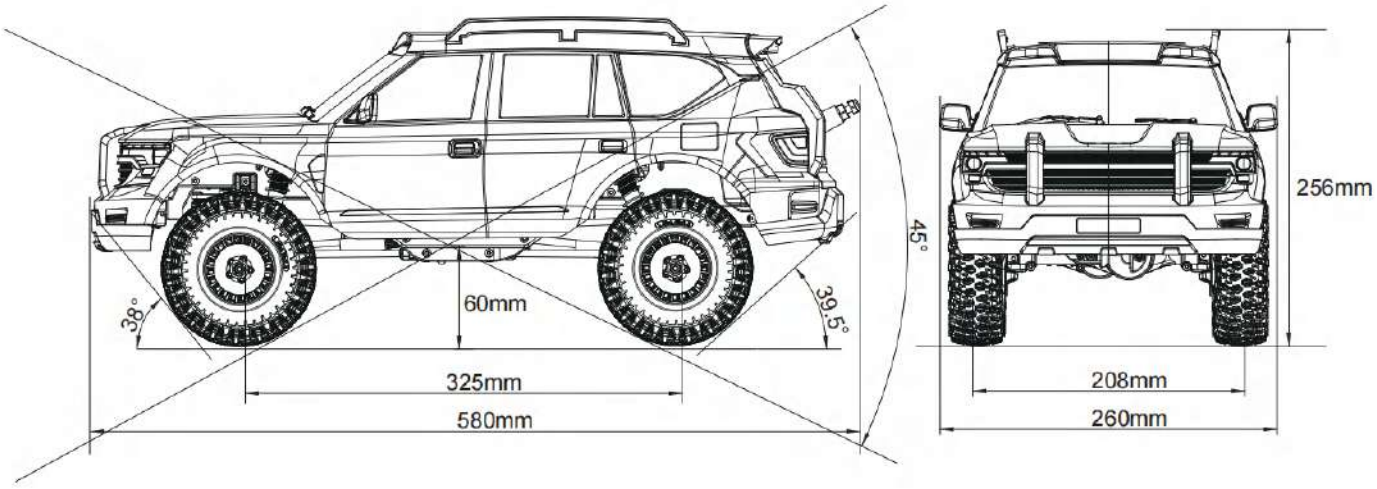
底盘部分，大梁采用了坚固的尼龙材质，并结合榫卯结构的模块化设计理念，确保了整体的刚性和韧性完全满足日常攀爬需求。车辆配备了扁平化的双速变速箱，以及带有反向传动功能的分动箱，再加上全车采用的金属齿轮和滚珠轴承，以及前后门桥设计，使得车辆能够以超低重心模拟各种越野车的行驶特性。为了更有效地保护舵机，还特别配备了仿真阻尼液压转向拉杆。后桥两侧均装有拉线卡钳和刹车碟，能够实现1轮锁死、3轮旋转的坦克掉头功能。

Features 特点

- New LCG chassis design
- Front & rear portal axles
- Remote-control full LED light system
- New design steering gear buffer protection device
- Innovative DIG function (Patented design)
- Remote-control locking front & rear differential
- Two-speed transmission
- Counter rotating driveshafts
- Quick Release structure (patented)
- Oil-filled and all-metal shock set
- Competition-grade crawler tires
- Full-metal gear with plastic spur gear
- Full set of ball bearings

- LCG底盘设计
- 前后门桥设计
- 丰富全车遥控灯光
- 仿真内饰驾驶舱
- 创新型DIG功能
- 全新设计舵机缓冲保护装置
- 遥控前后差速锁
- 变速箱二档变速（高低速档）
- 反向传动
- 专利快拆结构
- 全金属油压避震
- 攀爬专业级轮胎
- 全车金属齿轮

Specification 产品参数



- Transmitter: MG11
- Receiver: FS-R11P-BS
- Light Control: DB01
- Recommend Battery: 2-3S
- Motor Type:550 Brushed Motor 32T
- Motor Gear Pinion:14T
- Motor Gear Pitch: M0.6
- Spur Gear Pinion: 33T
- Spur Gear Pitch: M0.6
- ESC: Hobbywing 1060
- Steering Servo: 25KG Steering Servo*1
- Shift/Differential Servo: High/low speed servo*1、Front/Rear Diff Servo*2、DIG servo*1
- Product Size: 580*260*256mm
- Wheelbase: 325mm
- Tread: 208mm

- 发射型号: MG11
- 接收/电调型号: FS-R11P-BS
- 灯控型号: DB01
- 推荐电池: 2-3S
- 电机: 550 有刷电机 32T
- 马达齿齿数: 14T
- 马达齿模数: M0.6
- 正齿轮齿数: 33T
- 正齿轮模数: M0.6
- 电调型号及规格: 好盈1060
- 转向舵机（需写数量）: 25KG转向舵机*1
- 换挡/锁差/驱动舵机（需写数量）: 高低速换挡舵机*1、前后锁差舵机*2、坦克掉头舵机*1
- 整车尺寸（长宽高）: 580*260*256mm
- 轴距: 325mm
- 轮距: 208mm

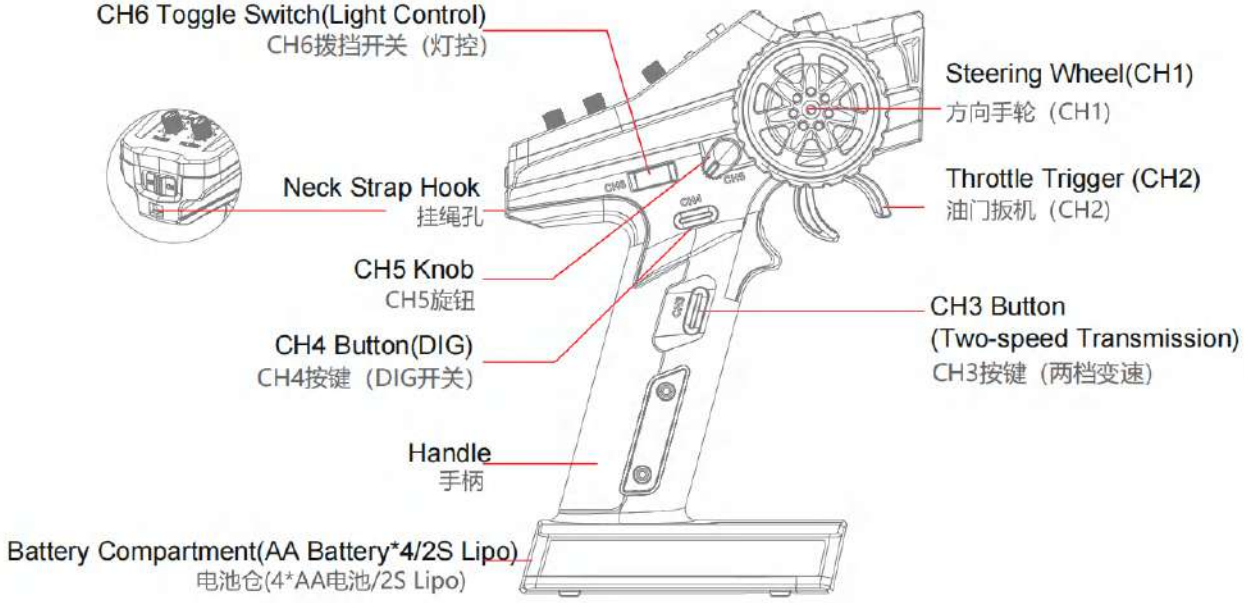
- Approach Angle: 38°
- Departure Angle: 39.5°
- Breakover Angle: 45°
- Ground Clearance: 60mm
- Steering Type:2WS
- Maximum steering angle: 42°
- Maximum Climbing Angle: 40°
- Tire Size（Diameter & Width）: 116*42mm
- Wheelhub Size（Diameter & Width）: 56*32mm
- Wheelhub Adaptor Size : 12mm
- Bearing: 36pcs
- Drive System: 4WD
- Waterproof Class: Splash-proof
- Battery Compartment Size: 156*48mm
- Maximum Speed: 15KM/h
- Maximum Control Distance: 150m

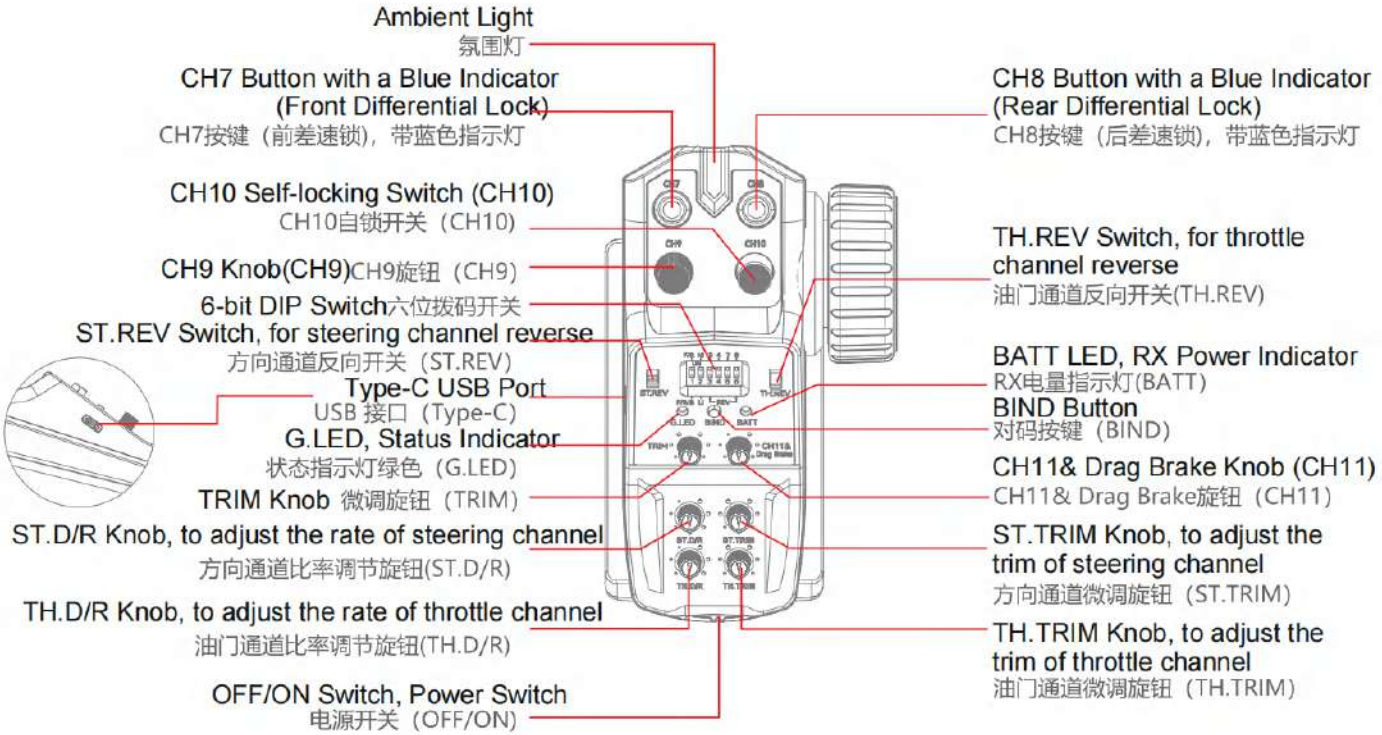
- 接近角: 38°
- 离去角: 39.5°
- 纵向通过角: 45°
- 离地距离: 60mm
- 转向: 前轮转向
- 最大转向角: 42°
- 最大爬坡角度: 40°
- 轮胎（直径和宽度）: 116*42mm
- 轮毂（直径和宽度）: 56*32mm
- 轮毂接合器尺寸: 12mm
- 轴承: 36pcs(胶盖滚珠轴承)
- 驱动形式: 四轮驱动
- 是否防水: 防溅水
- 电池舱尺寸: 156*48mm
- 最大速度: 15KM/h
- 最大遥控距离: 150米

Transmitter instruction 发射机介绍

The FS-MG11-BS is a 11-channel transmitter that adopts the 2.4GHz 2A-BS Automatic Frequency Hopping Digital System. The transmitter is lightweight and compact in design, comfortable and ergonomic. The transimtter supports ESC parameters setting and compatible with variety of car models.

MG41-BS是一款采用2.4GHz 2A-BS协议自动跳频数字系统的简版4通道双向发射机，外观设计轻便小巧，手感舒适，符合人体工程学，可通过发射机设置电调参数。该款发射机还具备初学者模式方便入门玩家使用。





Before operation, install the battery and connect the system as instructed below.
开始操作前，请按照本章的顺序和指引安装电池、连接设备。

Transmitter Antenna 发射机天线

The transmitter has a built-in antenna. When the transmitter starts to work, the antenna automatically operate, without additional operations.

本发射机天线为内置天线，发射机开始工作，天线自动工作。

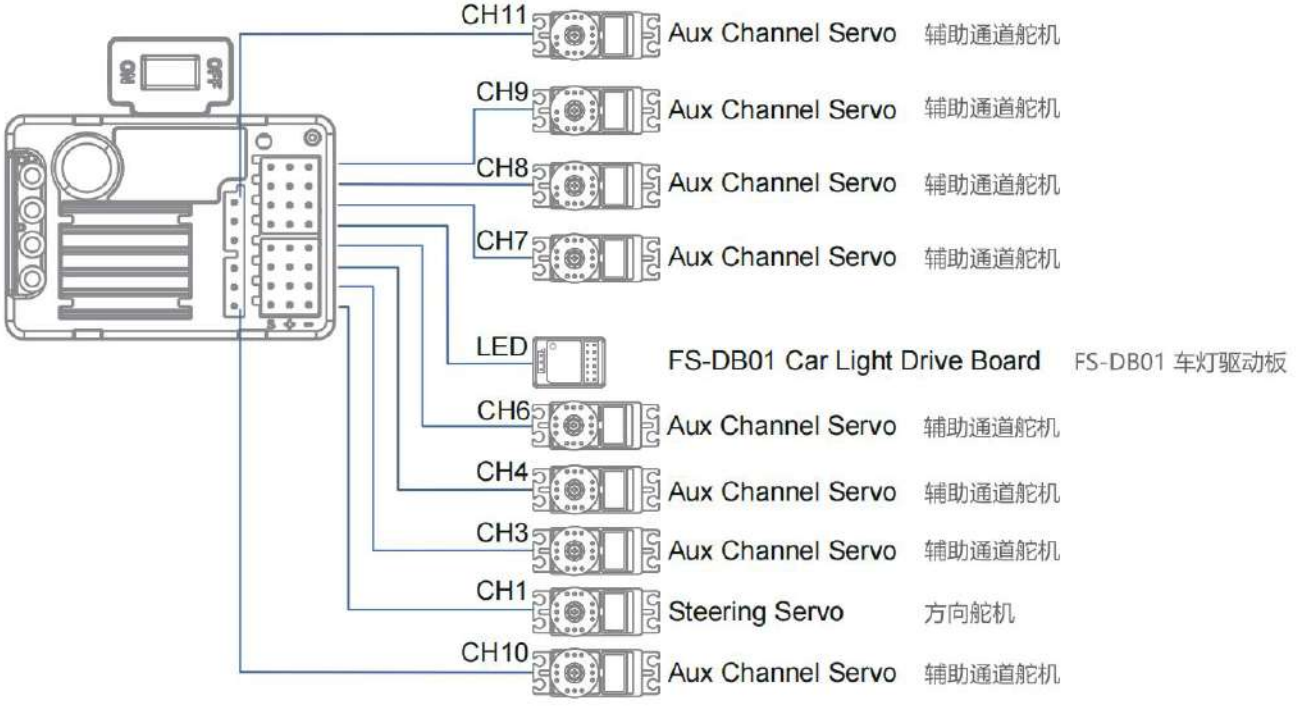
Receiver and Servo Installation 接收机与舵机安装

Make sure that the receiver is mounted in an appropriate location within the model, to ensure a stable signal, maximum range and to mitigate external interference, follow these guidelines:
Pay attention to the following when installing the receiver:
1. Make sure the receiver is not installed near motors or sources of electrical noise.
2. Keep the receiver's antenna away from conductive materials such as carbon or metal. To ensure normal function, make sure there is a gap of at least 1cm between the antenna and the conductive material.

请结合相应模型的结构选择合适的位置安装接收机，同时为了确保接收机的性能和遥控距离的稳定，并防止外界干扰，请注意以下操作事项：
安装过程中请注意以下事项：
1. 确保接收机安装在远离电机，或电子噪声过多的区域。
2. 接收机天线需远离导电材料，例如金属棒和碳纤物质。为了避免影响正常工作，请确保接收机和导电材料之间至少有 1 厘米以上的距离。

⚠ Caution 注意	To prevent damage do not power on the receiver during installation. 准备过程中，请勿连接接收机电源，避免造成不必要的损失

Connect the servos/car light drive board to the receiver according to the digram below
请参考如下图示来连接接收机与舵机 / 灯板：



Transmitter Battery Installation 发射机电池安装

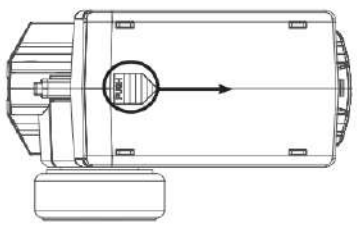
Danger 注意	Only use specified battery (X4 AA batteries). 仅使用厂家指定的电池。
Danger 注意	Do not open, disassemble, or attempt to repair the battery. 请勿打开、拆卸或自行维修电池。
Danger 注意	Do not crush/puncture the battery, or short the external contacts. 请勿挤压、刺穿或接触电池的金属端子。
Danger 注意	Do not expose to excessive heat or liquids. 准请勿将电池置于高温环境或液体中。
Danger 注意	Do not drop the battery or expose to strong shocks or vibrations. 请注意防止电池跌落、碰撞或振动。
Danger 注意	Always store the battery in a cool, dry place. 请将电池存放在干燥阴凉的环境中。
Danger 注意	Do not use the battery if damaged. 如果电池损坏，请立即停止使用。

Installing the AA Battery
Follow the steps below to install the AA batteries:
1. Open the battery compartment cover as illustrated.
2. Insert 4 fully-charged AA batteries into the compartment. Make sure that the batteries are well set according to the polarities marked on the battery compartment.
3. Replace battery compartment cover.

Installing the LiPo Battery
Follow the steps below to install the LiPo battery:
1. Open the battery compartment cover.
2. Insert 2S fully-charged LiPo battery into the compartment.
3. Plug the cable of LiPo battery into the JST Jack. Make sure to connect correctly according to the polarities marked on the battery compartment.
4. Replace battery compartment cover. Be careful not to pinch the cable.

AA 电池安装
请按照以下步骤安装 AA 电池：
1. 打开电池仓盖（如图所示）；
2. 将 4 颗电量充足的电池按标注的极性方向装入电池仓内；
3. 盖好电池仓盖。

LiPo 锂电池安装
请按照以下步骤安装锂电池：
1. 打开电池仓盖。
2. 将 2S 电量充足的锂电池放入电池仓内，
3. 将电池连接线接入 JST 接口，确保正确连接正负极；
4. 盖好电池仓盖，注意不要夹到电池连接线。



Press to slide the cover as illusrtated. Then remove the cover.
按住此处并向前滑动，取下电池舱盖。

After setting up, follow the instructions below to operate the system.
准备操作完成后，您可以按照本章指引开始使用本产品。

Power On 开机

Follow the steps below to turn on the transmitter:
1. Check to make sure that the batteries are fully charged and installed correctly.
2. Toggle the Power Switch to the ON position. The G.LED will be solid on, both the ambient light and the BATT LED will be on for 3 seconds, and then will be off.
Note: For safety, always power on the transmitter before the receiver.

请按照以下步骤进行开机：
1. 检查系统状态，确保电池电量充足且安装正确
2. 将电源开关拨到 [ON] 位置，G.LED 指示灯常亮，氛围灯和 BATT 指示灯亮 3 秒后灭。
注：为保障模型及人员安全，使用时请先打开发射机再给接收机通电。

⚠ Warning 警告	Operate with caution in order to avoid damage or injury. 此时系统已启动，请谨慎操作，否则可能导致产品损坏或人员伤亡。

LED Indicator LED 指示

The G.LED of the transmitter is used to indicate the functional status of the transmitter; The ambient light and BATT LED are used to indicate the power status of the transmitter and the power status of the receiver, the details are as follows.
1. G.LED: The green status indicator
• When the transmitter is in binding state, the G.LED will flash rapidly.
• When the transmitter voltage is low, the G.LED will flash slowly.
• When the transmitter is in idle alarm state, the G.LED will be in gradual light state.
• When the transmitter is in end point adjustment status, the G.LED will work in two-flash-one-off state.
2. BATT Indicator: The battery power indicator for the transmitter or the 2-in-1 receiver
• When the battery power is high, the BATT LED will be solid on in green.
• When the battery power is medium, the BATT LED will be solid on in yellow.
• When the battery power is low, the BATT LED will be solid on in red.
• When the battery power is ultra low, the BATT LED will flash slowly in red.
Note: In three seconds after the power-on of the transmitter, the ambient light and BATT LED indicate the transmitter battery power status. When the transmitter is powered on for 3 seconds, the transmitter battery power status is indicated in case of binding a standard receiver. The receiver battery power status is indicated in case of binding 2-in-1 receiver.
• When the transmitter does not receive the return signal, the ambient light and BATT LED will be off.
• When the receiver is de-bound, the ambient light and BATT LED will maintain in the state when the receiver is de-binding.

本发射机的 G.LED 用于指示发射机功能状态；氛围灯与 BATT 指示灯用于指示发射机电池电量状态及接收机回传的电池电量状态，具体如下：
1. G.LED：绿色状态指示灯
• 快闪：对码状态 • 慢闪：电压低 • 呼吸灯：闲置状态 • 二闪一灭：舵量设置
2. 氛围灯；BATT：发射机 / 二合一接收机电池电量状态指示灯
• 绿色常亮：电压高 • 黄色常亮：电压中 • 红色常亮：电压低 • 红色慢闪：电压超低
注：发射机开机后前 3 秒，氛围灯和 BATT 指示灯指示发射机电池电量状态；当发射机开机 3 秒后，若对码标准接收机则指示发射机电池电量状态；若对码二合一接收机，则指示接收机电池电量状态：
• 未收到接收机回传信号时，氛围灯和 BATT 指示灯灭
• 接收机掉码时，氛围灯和 BATT 指示灯则保持掉码时状态

Binding 对码

The transmitter and the receiver have been pre-bound before delivery. If you are going to use another receiver, follow the steps below to rebind. The transmitter supports two-way binding, the steps are as following:
1. Turn on the transmitter while holding the BIND button, then the transmitter will enter the binding mode. At this time, the G.LED will flash quickly. Once in bind mode release the BIND button.

2. Turn on the receiver, and it will wait for 1 second for connection. If without connection, the receiver will enter the binding mode automatically.
3. Once the binding is successful, the receiver LED and the G.LED of the transmitter will be solid on.
4. Verify that the transmitter and the receiver are working properly. If you need to re-bind, repeat the above steps.

Notes:
1. Applicable to the FS-MG11-BS transmitter and the FS-R11D-ESC-BS receiver.
2. The FS-MG11-BS transmitter complies with the 2A-BS protocol and is only compatible with receivers conforming to this protocol.
3. Different receivers have different bind procedures. For more information, visit the FLYSKY website for manuals and other related information.

本发射机的 G.LED 用于指示发射机功能状态；氛围灯与 BATT 指示灯用于指示发射机电池电量状态及接收机回传的电池电量状态，具体如下：
1. G.LED：绿色状态指示灯
• 快闪：对码状态 • 慢闪：电压低 • 呼吸灯：闲置状态 • 二闪一灭：舵量设置
2. 氛围灯；BATT：发射机 / 二合一接收机电池电量状态指示灯
• 绿色常亮：电压高 • 黄色常亮：电压中 • 红色常亮：电压低 • 红色慢闪：电压超低

注：发射机开机后前 3 秒，氛围灯和 BATT 指示灯指示发射机电池电量状态；当发射机开机 3 秒后，若对码标准接收机则指示发射机电池电量状态；若对码二合一接收机，则指示接收机电池电量状态：
• 未收到接收机回传信号时，氛围灯和 BATT 指示灯灭
• 接收机掉码时，氛围灯和 BATT 指示灯则保持掉码时状态

Stick Calibration 摇杆校准

Use this function to correct for the mechanical deviation of the throttle trigger, steering wheel and CH5 knob, for example, deviation occurred in the self-centering or maximum minimum travel, the steps are as following:
1. Turn and hold the steering wheel clockwise to the max travel point and push the throttle trigger forwards as far as possible, and at the same time turn on the transmitter, the transmitter will be in calibration mode, meanwhile, the buzzer will sound three times for prompt.
2. Steering Wheel Calibration: Turn the steering wheel to the max and min travel point clockwise/counterclockwise respectively, and the buzzer will sound two times for prompt.
3. Throttle Trigger Calibration: Push/pull the throttle trigger to forward/backward as far as it will go, and the buzzer will sound once for prompt.
4. CH5 Knob Calibration: Turn the CH5 knob to its max and min travel point clockwise/counter-clockwise respectively, and the buzzer will give a long beep.
5. Press the BIND button to save and exit in case of the calibration is successful, and the buzzer will give a long beep.
*If the calibration fails, pressing the BIND button is invalid. Repeat the steps above.

当油门、手轮和 CH5 旋钮发生机械性偏离，如回中或最大 / 最小行程出现偏差时，使用此功能修正。步骤如下：
1. 同步将手轮顺时针打到最大、扳机往前推到底并开机，进入校准模式，发射机蜂鸣器响 3 声提示；
2. 手轮校准：将手轮分别按顺时针和逆时针方向转至最大和最小行程，发射机蜂鸣器响 2 声提示；
3. 扳机校准：将扳机分别向前和向后推至最大和最小行程，发射机蜂鸣器响 1 声提示；
4. CH5 旋钮校准：将 CH5 旋钮分别按顺时针和逆时针方向转到最大和最小行程，发射机蜂鸣器长响 1 声提示；
5. 按 BIND 键退出并保存校准数据，发射机蜂鸣器长响 1 声提示 。
*若校准失败，按 BIND 键无反应，请重复以上校准步骤。

Power Off 关机

Follow the steps below to turn off the system:
1. Turn off the receiver first.
2. Toggle the transmitter's power switch to the [OFF] position.

请按以下步骤关闭发射机：
1. 先断开接收机电源；
2. 将电源开关拨到 [OFF] 位置，关闭发射机。

Instructions 操作指引

⚠ Danger 危险	Make sure to disconnect the receiver power before turning off the transmitter. Failure to do so may lead to damage or serious injury. 关闭时，请务必先关闭接收机电源，再关闭发射机，否则可能导致模型损坏、人员受伤。

System Functions 系统功能

This section focuses on the functions and how to use them.

此章节主要介绍系统各项功能操作。

Channel Description 通道说明

The transmitter outputs a total of 11 channels, which are assigned as below, as well as the functions.

该发射机共输出 11 个通道，控件分配及相关功能如下：

Channel 通道	Assigned Control 已分配的控件	Function 功能
CH1	Steering Wheel 方向手轮	Steering, to make the model car to turn right or left.Turn the steering wheel in clockwise or counterclockwise to control the left/right steering. 方向，控制车子左右转向。沿顺时针或逆时针方向旋转手轮，可控制车子左右转向。
CH2	Throttle Trigger 油门扳机	Throttle, to control the model car to move forward or backward. Push or pull the throttle trigger to control the model car forward or backward. 油门，控制车子前后行驶。推或扣油门扳机控制车子前进或后退。
CH3	CH3 Button CH3 按键	Two-speed Transmission 两档变速
CH4	CH4 Button CH4按键	DIG 坦克掉头功能
CH5	CH5 Knob CH5旋钮	User can customize the channel function 可自定义通道功能
CH6	CH6 Toggle Switch CH6拨杆开关	Light Control 灯控
CH7	CH7Front Differential Lock CH7 前差速锁	Front Differential Lock 前差速锁
CH8	CH8 Rear Differential Lock CH8 后差速锁	Rear Differential Lock 后差速锁
CH9	CH9 Knob CH9 旋钮	User can customize the channel function. For example, function as a fast / slowposition servo channel. 可自定义通道功能，如可作为快慢档舵机通道。
CH10	CH10 Self-locking Switch CH10 自锁开关	
CH11	CH11& Drag Brake Knob CH11& Drag Brake 旋钮	For the 2-in-1 receiver, it is used to set the ESC drag brake, and for the standard receiver, it can be customized the channel function. 设置电调刹车力度（二合一接收机），也可自定义通道功能（标准接收机）。

Channel Reverse 通道反向

This function reverses the motion direction of steering channel, throttle channel, CH3, CH4, CH7 and CH8 servos.The ST.REV and TH.REV switches are reverse setting switches of steering channel and throttle channel respectively. Switches 3, 4, 5 and 6 of the 6-bit DIP switch are the reverse setting switches of CH3, CH4, CH7, and CH8, respectively. A switch on the upper side indicates that the servo output is normal; a switch on the lower side indicates that the servo output is reverse.

Setup:
Toggle the corresponding setting switch to the upper side, the buzzer will have one beep. Toggle the switch to the lower side, the buzzer will have two beeps.

该功能可将方向通道、油门通道、通道 3、通道 4、通道 7 和通道 8 舵机的动作方向反转。
ST.REV 开关和 TH.REV 开关分别为方向通道、油门通道反向设置开关。六位拨码开关第 3、4、5 和 6 位开关分别为通道 3、通道
4、通道 7 和通道 8 反向设置开关。开关在上侧，表示舵机输出为正向；开关在下侧，表示舵机输出为反向。
功能设置：
将对应的设置开关拨至上侧，蜂鸣器响一声提示；将开关拨至下侧，蜂鸣器响两声提示。

Trims 微调

This function can set the trims of steering channel, throttle channel, channel 4 and channel 6.
CH6 Trim Adjustment
To adjust the trim of channel 6. The step is 5us, and setting range is from -120us to +120us.
Setup:
1. In the power-on state, rotate the steering wheel clockwise to its maximum point, and at the same time press BIND twice (within 1S) to enter the channel 6 trim setting state.
2. Press the CH7 button to decrease the trim value, when pressing CH7 once, the buzzer will sound once for prompt, and when it reaches the minimum value of -120us, the buzzer will be turned off.
3. Press the CH8 button to increase the trim value, when pressing CH8 once, the buzzer will sound once for prompt, and when it reaches the maximum value of 120us, the buzzer will be turned off.
4. Long press BIND for 1 second or restart the transmitter to exit the trim setting state. At this time, the buzzer will give a long beep.

Trim Adjustment for Steering Channel, Throttle Channel and CH4
To adjust the trims of steering channel, throttle channel and channel 4.
The ST.TRIM, TH.TRIM and TRIM knobs correspond to the trim adjustments of the steering channel, throttle channel and CH4, respectively. When the knob is centered by default, the trim value is zero. When adjusting counterclockwise, the trim value increases to a maximum of 120us. When adjusting clockwise, the trim value decreases to a minimum of -120us. Note that when the channel is set in reverse, the trim is reversed at the same time, that is, the trim value decreases in the counterclockwise adjustment, and the trim value increases in clockwise adjustment.

Setup:
Turn the trim knobs corresponding to the channel clockwise or counterclockwise for trim adjustment. The buzzer will have one beep when the position is reached to the center.
Note: After the throttle trim is changed, the receiver needs to be re-powered on to recognize the new throttle neutral. Otherwise, an exception may occur during vehicle reversing.

该功能可设置方向通道、油门通道、通道 4 和通道 6 的微调。
通道 6 微调调节
调节通道 6 微调。设置步进 5us，设置范围 -120us~+120us。
功能设置：
1. 开机状态下，顺时针旋转方向手轮至最大，同时双击 BIND 键（1S 内）即进入通道 6 微调设置状态；
2. 按 CH7 按键减小微调值，按一下则蜂鸣器响一声提示，至最小值 -120us 时，蜂鸣器关闭；
3. 按 CH8 按键增大微调值，按一下则蜂鸣器响一声提示，至最大值 120us 时，蜂鸣器关闭；
4. 长按 BIND 键 1S 或重启发射机即可退出微调设置状态，此时，蜂鸣器长响一声提示。

方向通道、油门通道和通道 4 微调调节
调节方向通道、油门通道和通道 4 微调。
ST.TRIM、TH.TRIM 和 TRIM 旋钮分别对应方向通道、油门通道和通道 4 微调调节。默认旋钮居中时，微调值为 0。逆时针调
节时，则增大微调值，最大为 120us；顺时针调节时，则减少微调值，最小为 -120us。注意当通道设置反向后，微调同步反向，即逆时针调节时减少微调值，顺时针调节时增大微调值。

功能设置：
顺时针或逆时针旋转通道对应的微调旋钮调节。过中位时，蜂鸣器响一声提示。

注：CH2 油门微调调整后，接收机须重新通电以识别新的油门中位，否则可能会出现倒车异常的现象。

D/R 比率设置

This function is used to adjust the rate of steering channel and throttle channel, so that the servo actions tend to be sensitive.
ST.D/R is used to adjust the steering channel rate. TH.D/R is used to adjust the throttle channel rate. Turning the knob anticlockwise will increase the value. Turning the knob clockwise will decrease the value. Smaller values indicate finer adjustment. The range is 0~100%.
Setup:
Turn the D/R switches corresponding to the channel clockwise or counterclockwise for D/R adjustment. The buzzer will have one beep when the position is reached to the center.

该功能用于调节方向通道和油门通道的比率，使舵机动作趋于灵敏。
ST. D/R 和 TH.D/R 旋钮分别对应方向通道和油门通道比率调节。逆时针调节数值增大，反之减小。数值越小调节越细腻，调节范围为 0~100%。
功能设置：顺时针或逆时针旋转通道对应的比率调节旋钮调节。过中位时，蜂鸣器响一声提示。

End Point Adjustment 舵量设置

This function is used to adjust the end points of all channels, i.e. left and right angle of steering channel, forward and brake of throttle channel, and servo travel amount of CH3-CH11.
By default, it is used to set the steering channel end points. The end points setting of the others can be triggered by operating the control corresponding to this channel.

Steering Channel End Point Adjustment
Adjust the end points of steering channel (the control of steering channel is steering wheel).
Setup:
1. In the power-on state, press BIND twice, then the transmitter enters the end point setting mode. At this time, G.LED will work in two-flash-one-off mode repeatedly, and the buzzer will prompt with beeping twice cyclically.
2. Rotate the steering wheel to the appropriate travel point and hold it. Press BIND. The buzzer will prompt with beeping once cyclically.
3. Take the center of the steering wheel as the reference, reverse the rotation of the steering wheel to the appropriate travel point and hold it. Press BIND. The buzzer will be turned off at this time.
4. Press BIND for one second to save the setting and exit the end point setting mode. The buzzer will give a long beep,and the G.LED will be solid on. The end points setting of the steering channel is finished.

CH6 End Point Adjustment
Adjust the end points of CH6 .
Setup:
1. In the power-on state, press BIND twice, then the transmitter enters the end point setting mode. At this time, G.LED will work in two-flash-one-off mode repeatedly, and the buzzer will prompt with beeping twice cyclically.
2. Toggle CH6 Toggle Switch to one position. The buzzer will prompt with beeping three times cyclically.
3. Rotate the steering wheel to the appropriate travel point and hold it. Press BIND. The buzzer will prompt with beeping twice cyclically. The setting of this position is completed.
4. Toggle CH6 Toggle Switch to another position. Rotate the steering wheel to the appropriate travel point and hold it. Press BIND. The buzzer will prompt with beeping once cyclically. The setting of this position is finished.
5. Toggle CH6 Toggle Switch to the last position. Rotate the steering wheel to the appropriate travel point and holdit. Press BIND. The buzzer will be off at this time. The setting of this position is finished.
6. Press BIND for one second to save the setting and exit the end point setting mode. The buzzer will give a long beep, and the G.LED will be solid on. The end points setting of CH6 is finished.
Note: The end point values of at least two positions should be set.

Other Channels End Point Adjustment
Adjust the end points of the other channels.
Setup:
1. Refer to previous content, to put the transmitter into the end point setting mode.
2. Oprate the control corresponding to the channel which you want to set.
3. Rotate the steering wheel to the appropriate travel point and hold it. Press BIND. The buzzer will prompt with beeping once cyclically.
4. Rotate the steering wheel to the appropriate travel point and hold it. Press BIND. The buzzer will be off at this time.

5. Press BIND for one second to save the setting and exit the end point setting mode. The buzzer will give a long beep. and the G.LED will be solid on. The end points setting of this channel is finished.
Notes:
1. If there is no response from the transmitter when a control is operated during the setup process, it means that the setup fails. In this case, you need to set it again.
2. Except the steering channel and throttle channel, you can operate the corresponding control to trigger the end points settings of other channels after completing the settings of one channel. For example, in the end points setting of CH3, you can press the CH4 button after the buzzer is turned off. At this time, the buzzer prompts with beeping wice cyclically. You can continue the end points setting of CH4. If you want to set the end points of the steering channel or throttle channel after setting other channels, the transmitter needs to re-enter the end point setting mode.
3.Throttle channel will maintain normal output during the end point setting of other channels.

该功能用于所有通道的行程大小，即方向通道左、右角度调整，油门通道前进、刹车以及通道 3 到通道 11 的行程量的调整。默认设置方向通道舵量。可通过操作其他通道所对应的控件触发此通道的舵量设置。

方向通道舵量调节
调节方向通道（控件为方向手轮）舵量。
功能设置：
1. 开机状态下，双击对码按键（BIND）使发射机进入舵量设置模式，此时 G.LED 指示灯为二闪一灭状态，蜂鸣器响 2 声循环提示；
2. 旋转手轮至合适的行程处并保持，按下对码按键 (BIND），蜂鸣器变为响 1 声循环提示；
3. 以手轮中位点为基准，反向旋转手轮至合适的行程处并保持，按下对码按键 (BIND），此时蜂鸣器关闭；
4. 长按对码按键（BIND）一秒保存设置并退出舵量设置模式，此时蜂鸣器长响一声提示，G.LED 指示灯变为常亮，方向通道舵量设
置完成。

通道 6 舵量调节
调节通道 6舵量。
功能设置：
1. 开机状态下，双击 BIND 键，使发射机进入舵量设置模式，此时 G.LED 指示灯为二闪一灭状态，蜂鸣器响 2 声循环提示；
2. 将 CH6 拨档开关拨至一处档位，蜂鸣器变为响 3 声循环提示；
3. 旋转方向手轮至合适的行程处并保持，按下对码按键（BIND），蜂鸣器变为响 2 声循环提示，此档位位置舵量设置完成；
4. 将 CH6 拨档开关拨至另一档位，旋转方向手轮至合适的行程处并保持，按下对码按键 (BIND），蜂鸣器变为响 1 声循环提示，此档位位置舵量设置完成；
5. 将 CH6 拨档开关拨至最后一个档位，旋转方向手轮至合适的行程处并保持，按下对码按键 (BIND），此时蜂鸣器关闭，此档位位置舵量设置完成；
6. 长按对码按键 （BIND）一秒保存设置并退出舵量设置模式，此时蜂鸣器长响一声提示，G.LED 指示灯变为常亮。CH6通道舵量设置完成。
注：舵量设置过程中至少要设置两个档位舵量数值。

其他通道舵量调节
调节其他通道行程量。
功能设置：
1. 参照前面内容，使发射机进入舵量设置模式；
2. 操作要设置的通道所对应的控件；
3. 旋转手轮至合适的行程处并保持，按下对码按键 (BIND），蜂鸣器变为响 1 声循环提示；
4. 再一次旋转手轮至合适的行程处并保持，然后按下对码按键 (BIND），此时蜂鸣器关闭；
5. 长按对码按键（BIND）一秒保存设置并退出舵量设置模式，此时蜂鸣器长响一声提示，G.LED 指示灯变为常亮。此通道舵量设完成。
注：
1. 若设置过程中按操作控件时发射机无响应则表示设置失败， 请按功能设置重新设置。
2. 除方向通道和油门通道外，其他通道可在设置完上一通道舵量后，操作相应的控件触发其它通道的舵量设置。如当设置 CH3 通道舵量，在蜂鸣器关闭后，可按下 CH4 按键，此时蜂鸣器变为响 2 声循环提示，即可继续设置 CH4 通道舵量。若设置完其他通道后再设置方向通道或油门通道舵量，则须使发射机重新进入舵量设置模式后方可设置。
3. 在非油门通道舵量设置过程中，油门通道将保持正常输出。

ESC Parameters Setting 电调参数设置

The function is adapted to a 2-in-1 receiver. The ESC parameters can be set by the 6-bit DIP Switch of the transmitter, that is, the DIP switch is located at different positions and the corresponding parameter values are different. There are three parameters can be set for the ESC, which are "Running Mode", "Battery Type" .

Running Mode
Forward/Reverse(F/R): This mode adopts "one click" reverse mode, that is, when the throttle trigger is pushed from neutral range to the reverse area, the motor immediately generates reverse action, which is generally applied to rock crawler.
Defaults to forward/reverse mode and does not support switching on this model car.

Battery Type
There are LiPo and NiMH cells. It can be set according to the actual use.
The switch marked 2 of 6-bit DIP switch is used to set the battery type. The switch on the upper side indicates that the battery type is NiMH cells; and the switch on the lower side indicates that the battery type is LiPo.
Setup:
Toggle the switch 2 to the upper side, the buzzer will have one beep. Toggle the switch to the lower side, the buzzer will have two beeps.

此功能适配二合一接收机使用。可通过发射机的拨码开关设置电调参数，即拨码开关位于不同位置对应参数值不同。有三个参数项可以设置，分别是“运行模式”、“电池类型”。

运行模式
正转 / 反转：此模式采用“单击式”倒车方式，即油门扳机从中点区域推至反向区域时，电机立即产生倒车动作，该模式一般用于攀爬车等特种车辆。
该车辆默认为正转/反转模式，暂不支持切换

电池类型
有锂电和镍氢两种选择，根据实际使用情况设置即可。
六位拨码开关第 2 位开关用于设置电调电池类型，开关在上侧，表示电池类型为镍氢；开关在下侧，表示电池类型为锂电。
功能设置：
将拨码开关 2 拨至下侧，蜂鸣器响两声提示；将拨码开关 1 拨至 上侧，蜂鸣器响一声提示。

Failsafe 失控保护

The failsafe function is used to protect the model and personnel when the receiver is out-of-control.
By default, it is not set, and the PWM interfaces will maintain the last output in case of out-of-control. The setting steps are as following.
Setup:
In the normal power-on state, set the control corresponding to the channel to be configured with failsafe to the preset position, meanwhile, press and hold the BIND button for 3 seconds to set the output value as the failsafe value. And the
buzzer will giver a long beep indicating that the setting is successful.
Notes:
1. When a 2-in-1 receiver has connected, the failsafe for CH2 is enabled by default, the ESC will enter the brake state when the receiver is out-of-control.
2. Restore to the default setting in case of re-binding.

此功能用于当接收机无法正常收到发射机的信号不受控制时，保护模型和操作人员的安全。
本发射机默认未设置时接收机通道保持最后输出。
功能设置：
开机正常状态下，操作需要设置失控保护的通道对应的控件至预设的位置，再长按对码按键（BIND） 三秒，将当下输出的通道值设
置为失控保护值。设置成功时，蜂鸣器长响一声提示。
注：
1. 若对码的是二合一电调接收机，失控后接收机自动进入刹车模式。
2. 重新对码时恢复默认设置。

Idle Alarm 闲置报警

The transmitter will go into idle alarm state when there is no operation over 10 minutes.
When the transmitter is in idle alarm state, the G.LED will be in gradual light state, and the buzzer will prompt with beeping twice cyclically. Operate steering wheel or throttle trigger to cancel the idle alarm.

当发射机未操作时间大于 10 分钟时，即进入闲置报警状态。
在此状态下，发射机 G.LED 指示灯为呼吸灯状态且蜂鸣器响 3 声循环提示。闲置报警状态下，操作发射机的手轮或扳机可退出闲置报警状态。

Sleep Mode 休眠模式

When the transmitter has been in idle alarm state over 2 minutes, it will enter the sleep mode.
In this mode, the G.LED will be in gradual light status, other indicators will be off, and the buzzer and RF will turn off.
To exit the sleep mode, power off the transmitter and restart it.

当发射机处于闲置报警状态时间大于 2 分钟时，即进入休眠模式。
在此模式下，发射机 G.LED 指示灯为呼吸灯状态提示，其他指示灯灭，蜂鸣器关闭，RF 关闭。
须重启发射机才可退出休眠模式。

Transmitter Voltage Alarm 发射机电压报警

When the system detects a low voltage, it will give an alarm. Avoid accidents caused by long-term operation under low voltage.
When the voltage is detected below 4.2V/7.0V (AA battery/LiPo battery), there is an alarm due to low voltage. At this time, the G.LED will flash slowly, and the buzzer prompts with beeping once cyclically.
When the voltage is detected below 3.5V (ultra-low), the transmitting function is disabled. The G.LED will be in gradual light state.

当系统检测到低电压时，即发出报警。避免控制系统在低电压状态下长时间运行造成意外。
当检测到电压低于 4.2V/7.0V（AA 电池 /LiPo 电池），即进入低电报警状态，此时 G.LED 指示灯慢闪状态，蜂鸣器响 1声循环提示。
当检测到电压超低时（低于 3.5V 时），发射功能关闭，G.LED 指示灯为呼吸灯状态提示。

Data Reset 数据复位

This function is used to restore the end point value set to the default value.
Setup:
To restore to the default value, press the BIND and CH4 buttons of the transmitter at the same time, and power the transmitter on. At this time, the buzzer will give a long beep.
Note: This function is only applicable to resetting the end point value set to the default value.

此功能用于将设置的舵量数值恢复为默认值。
功能设置：
同时按住对码按键（BIND）和 CH4 按键后，并通电开机，即恢复成默认值，蜂鸣器长响一声提示。
注：此功能仅适用于复位舵量至默认值。

Transmitter Specifications 发射机规格

Product Model	FS-MG11-BS	产品型号	FS-MG11-BS
Compatible Receivers	FS-R11D-ESC-BS、FS-R11P-BS	适配接收机	FS-R11D-ESC-BS、FS-R11P-BS
Compatible Models	Model car	适配模型	遥控车
Number of Channels	11	通道个数	11
RF	2.4GHz ISM	无线频率	2.4GHz ISM
Maximum Power	<20dBm (e.i.r.p.)（EU）	发射功率	<20dBm (e.i.r.p.) （EU）
2.4GHz Protocol	2A-BS	无线标准	2A-BS
Distance	>150m(Ground Distance without Interference)	遥控距离	不低于 150m（空旷无干扰地面距离）
Resolution	4096	通道分辨率	4096
Input Power	AA*4 or 2S LiPo	输入电源	AA*4 或 2S 锂电池
Working Current	About 60mA/6V	工作电流	60mA 左右 /6V
Transmitter Voltage Alarm	AA Battery: ＜4.2V LiPo Battery: ＜7.0V	低电压报警	AA 电池：<4.2V； LiPo 电池：<7.0V
Antenna	Single Built-in Antenna	天线类型	内置单天线
Charging Interface	None (The Type-C USB port is only used for power supply.)	充电接口	无（USB 接口仅做供电使用）
Online Update	None	在线更新	无
Temperature Range	-10℃ ~ +60℃	温度范围	-10℃ ~ +60℃
Humidity Range	20% ~ 95%	湿度范围	20% ~ 95%
Color	Black	外观颜色	Black
Dimensions	135.7*189.5*82.7mm	外形尺寸	135.7*189.5*82.7mm
Weight	225g	机身重量	225g
Certifications	CE, FCC ID: 2A2UNMG1100	认证	CE, FCC ID： 2A2UNMG1100

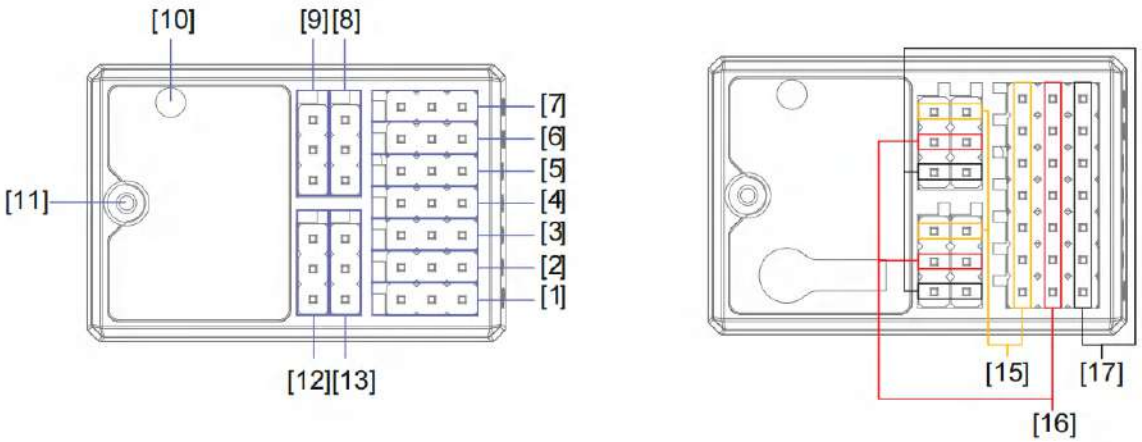
Receiver Instruction 接收机概览

Receiver 接收机

FS-FMS-R11D-BS based on 2A-BS protocolis a receiver which provides 11-channel and bidirectional transmission, featuring an external antenna, PWM signal output and LED lights signal output It can be adapted to a variety of RC cars.

FS-FMS-R11D-BS 是一款采用 2A-BS 通信协议，提供11 通道的双向接收机，外置单天线，输出 PWM 信号和车灯信号，可适配多种模型车使用。

Receiver Instruction 接收机概览



[1] CH1	[5] LED Light Connector	[9] CH11	[13] CH8
[2] CH2	[6] CH6	[10] LED	[14] S (Signal Pin of CH Connector)
[3] CH3	[7] CH7	[11] Antenna	[15] "+" (Anode of CH Connector)
[4] CH4	[8] CH10	[12] CH9	[16]"-" (Cathode of CH Connector)

[1] CH1 通道接口	[5] LED 车灯接口	[9] CH11 通道接口	[13] CH8 通道接口
[2] CH2 通道接口	[6] CH6 通道接口	[10] LED 指示灯	[14] S（通道接口信号端）
[3] CH3 通道接口	[7] CH7 通道接口	[11] 天线	[15] "+"（通道 / 车灯接口正极）
[4] CH4 通道接口	[8] CH10通道接口	[12] CH9 通道接口	[16] "- "（通道 / 车灯接口负极）

Note: The LED Light Connector is used to connect the FS-DB01 car light drive board.

注：LED 车灯接口用于连接 FS-FMS-DB01 车灯驱动板。

Binding 对码

This receiver supports the two-way binding the transmitter will display the information returned from the receiver after the two way binding is finished).
The receiver will automatically enter binding status upon power-on. The operation steps are as follows:
1.Putthe transmitter into binding mode (The transmitter may enter binding mode in diferent ways, please follow the transmitter's manual).
2.Turn on the receiver, and it will wait 2 seconds for connection. fwithout connection, the receiver will enter the binding mode automatically. At this time, the receiver LED will be flashing fast.
3.The receiver LED will be solid on after the binding process is successful.
4.Check to make sure the transmitter and receiver functions are operating correctly, repeat steps 1 to 3 (binding process) if any problems arise.
Note: During the binding mode, put the transmitter into binding mode first, then put the receiver into binding mode, If the binding process is not finished within 10 seconds, then the receiver LED will enter a slow flashing status.

本接收机支持双向对码，双向对码完成后发射机将显示接收机回传的信息。
本接收机上电即自动进入对码状态。如需对码接收机与发射机，操作步骤如下：
1.将发射机进入对码状态（发射机进入对码状态的方式可能不同，请根据发射机的使用说明书进行操作）；
2.接收机上电等待 2 秒没有连接将自动进入对码；
3.对码成功后，接收机 LED 指示灯常亮；
4. 检查发射机、接收机是否正常工作。如需重新对码，请重复以上步骤。
注：对码时请先将发射机进入对码状态，再将接收机进入对码状态，若 10 秒内对码没有完成，接收机指示灯进入慢闪状态。

Failsafe 失控保护

The failsale function is used when radio signal connection is ost between the transmitter and receiver. The receiver performs channel output according to the set fail-safe value to protect the safety of the model and personnel.
• It is not set by default, After out-of-control, no matter whether the CH2 channel is set or not, there will be always no output and the other channels (CH1, CH3-CH4, CH6-CH11) will keep the last output, if the other channels have been set at the transmitter side, it will output according to the set value.
• The turn signal left and right lights will flash slowly and simultaneously.

失控保护功能用于当接收机无法正常收到发射机的信号不受控制时，保护模型和操作人员的安全。
• 默认未设置。失控后，无论是否设置 CH2 通道始终无输出，接收机其他通道CH1、CH3-CH4、CH6-CH11)保持最后输出。若其他通道已在发射机端设置，则按照设置值输出。
• 左、右车灯同步慢闪提示。

Attention: **注意事项**

• Make sure the product is installed and calibrated correctly, failure to do so may result in serious injury.
• Make sure the receiver s battery is disconnected before turning off the transmitter, failure to do so can result out of contro.
• Unreasonable setting of the Failsafe may cause accidents.
• Make sure the receiver is mounted away from motors, el ectronic speed controllers or any device that emits excessive electrical noise.
• Keep the receiver's antenna at least 1cm away from conductive materials such as carbon or metal.
• Do not power on the receiver during the setup process to prevent loss of control.

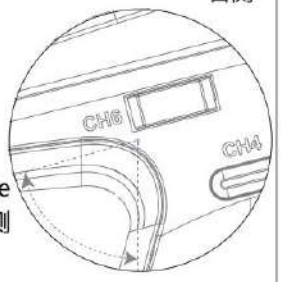
• 使用前必须确保本产品与模型安装正确，否则可能导致模型发生严重损坏。
• 关闭时，请务必先关闭接收机电源，然后关闭发射机。如果关闭发射机电源时，接收机仍然在工作，将会导致遥控设备失控。失控保护设置不合理可能引起事故。
• 确保接收机安装在远离电机或电子噪声过多的区域。
• 接收机天线需远离导电材料，例如金属棒和碳物质。为了避免影响正常工作,请确保接收机天线和导电材料之间至少有1厘米以上的距离。
• 准备过程中，请勿连接接收机电源，避免造成不必要的损失。

Car Light Control 车灯控制

This receiver features six sets of LED lights: Turn signal left light, turn signal right light, davtime running light, headlight, brake light and reverse light. And these six sets of LED lights are connected to this receiver through the FS-FMS-DB01 car light drivei board.
The status of all the LED lights is controlled by the corresponding controls of the FS-FMS-MG11-BS transmitter. The turn signal left light and turn signal right light are controled by steering wheel. The daytime running lights and headlights are controlled by CH5 knob. The brake and reverse lights are controlled by throttle trigger. Details are as follows:

本接收机支持 6 组车灯:左转灯、右转灯、日行灯、前大灯、刹车灯和倒车灯(此 6 车灯通过 FS-FMS-DB01 车灯驱动板与本接收机建立连接)。
车灯状态由 FS-FMS-MG11-BS 发射机的相应控件控制。左、右转向灯亮灭状态由手轮控制，日行灯和前大灯亮灭状态由 CH5 旋纽控制:刹车灯和倒车灯亮灭状态由扳机控制。具体有如下所述:

Receiver Instruction 接收机概览

Car Lights 车灯	Car Light State 车灯状态	Control State 控制状态	Control 控件	Trigger Condition 触发条件	Notes 备注
Left Turn Signal Light 左转灯	Slow Flash 慢闪	Turn Left 左转	Steering Wheel 手轮	Turn the sterring wheel counter clockwise. 逆时针打手轮	If you set the steering channel in reverse, the trigger condition for left and right turn signal lights will not be affected. 方向通道设置反向后对左、右转向灯无影响。
Right Turn Signal Light 右转灯	Slow Flash 慢闪	Turn Right 右转	Steering Wheel 手轮	Turn the sterring wheel clockwise. 顺时针打手轮	
Daytime Running Light 日行灯	OFF 常灭	/	CH6 Toggle Switch CH6 旋钮	CH6 Knob is located at the left side. CH6 旋钮位于左侧	Right Side 右侧  Lift Side 左侧
	OFF 常灭			CH6 Knob is located in the middle. CH6 旋钮位于中间	
	Solid ON 常亮			CH6 Knob is located at the right side CH6 旋钮位于右侧	
Headlight 前大灯	OFF 常灭	/	CH5 Knob CH5 旋钮	Same as the DRL above 触发条件同日行灯	
	OFF 常灭				
	Solid ON 常亮				
Brake Light 刹车灯	Solid ON 常亮	Brake 刹车	Trigger 扳机	Push the throttle trigger forward. 前推扳机	/
Reverse Lights 倒车灯	Solid ON 常亮	Back up 倒车	Trigger 扳机	Push the throttle trigger forward. 前推扳机	/

Notes:

1.After the receiver is turned on, all the LED lights will be on for one second and then go out.

2.The steering CH1 channel and throttle CH2 channel are capable of automatic neutral identifying, after the trim is adjusted, the receiver should be powered to recognize the neutral positions of these two channels automatically.

注:

1.接收机开机后，所有车灯常亮一秒后灭;

2.方向通道 CH1 和油门通道 CH2 具有自动识别中位的功能，当调过微调后，需重新给接收机上电以完成中位自动识别。

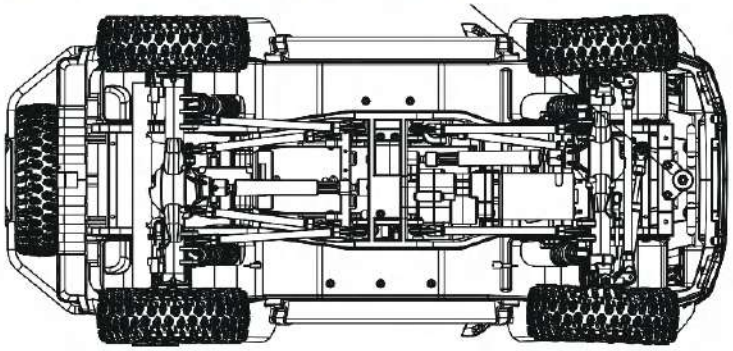
Receiver Specifications 接收机规格

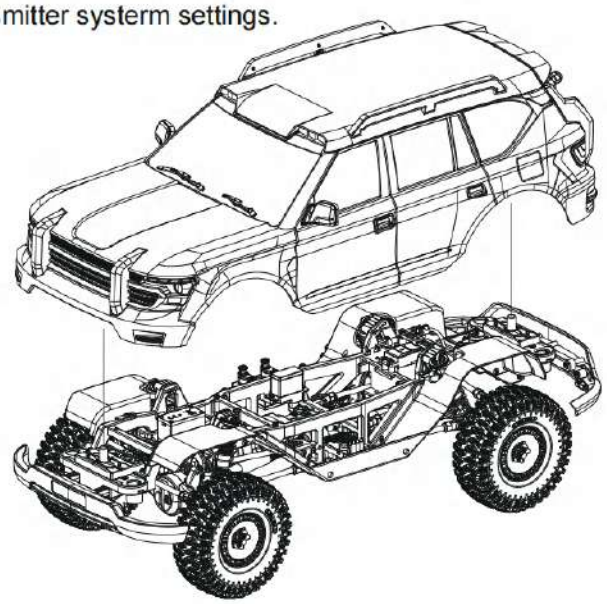
Product Model	FS-FMS-R11P-BS	产品型号	FS-FMS-R11P-BS
Adaptive Transmitters	FS-FMS-MG11-BS	适配发射机	FS-FMS-MG11-BS
Number of Channels	Model car	适配模型	遥控车
Compatible Models	11	通道个数	11
Number of Car Light Interfaces	6 (The LED Light connector connects to the FS-FMS-DB01)	车灯组数	6（LED 车灯接口连接 FS-FMS-DB01 车灯驱动板）
Compatible Models	2.4GHz ISM	无线频率	2.4GHz ISM
Maximum Power	<20dBm (e.i.r.p.) （EU）	发射功率	<20dBm (e.i.r.p.) （EU）
Antenna	Single External Antenna (Coaxial Antenna)	天线类型	外置单天线（同轴天线）
Distance	>150m(Ground Distance without Interference)	遥控距离	不低于 150m（空旷无干扰地面距离）
2.4GHz Protocol	2A-BS	无线协议	2A-BS
Resolution	4096	通道分辨率	4096
Data Output	PWM	数据输出	PWM
Operating Voltage	3.5 ~ 8.4V/DC	工作电压	3.5 ~ 8.4V/DC
Online Update	None	在线更新	无
Temperature Range	-10℃ ~ +60℃	温度范围	-10℃ ~ +60℃
Humidity Range	20% ~ 95%	湿度范围	20% ~ 95%
WaterProof	PPX4	防水等级	PPX4
Dimensions	35.0mm*23.3mm*13.3mm	外形尺寸	35.0mm*23.3mm*13.3mm
Weight	8g	机身重量	8g

Driving Precautions 操作模型车

Turm the knob counterlockwise at the middle postion fo front bumpe.
Step into the fingers from both sides of the car and turn the car shell up slightly.
1. After turning the bodyshell back.
2. Install fully charged battery in the battery box, then tighten battery strap.
3. Make sure the ESC is off, plug in the battery cable and the ESC cable.
4. Turn on the ESC, cover the bodyshell, and prepare the Transmitter systerm settings.

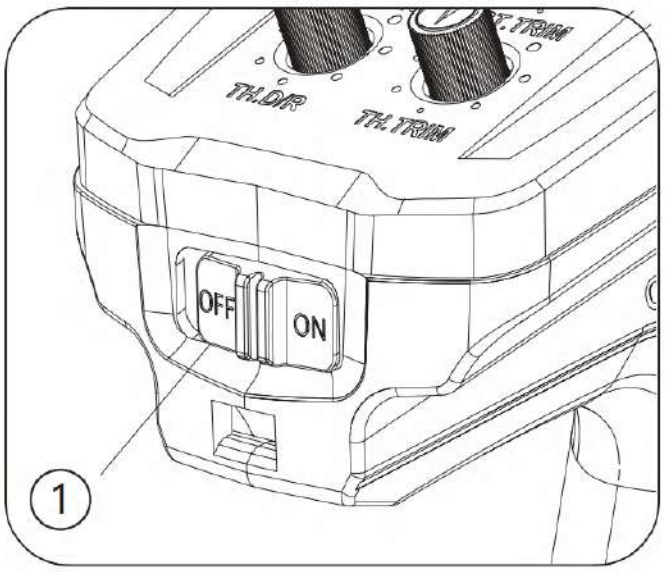
从车底前杠中间位置，逆时针拧开旋钮。
从车头两边伸入手指,稍用力往上翻开车壳。
1. 向后上翻开车壳后。
2. 将充满电的电池装入电池盒，拉紧电池绑带。
3. 确保电调关闭，插入连接好电池线和电调线。
4. 打开电调开关，盖好车壳，准备遥控器设置。

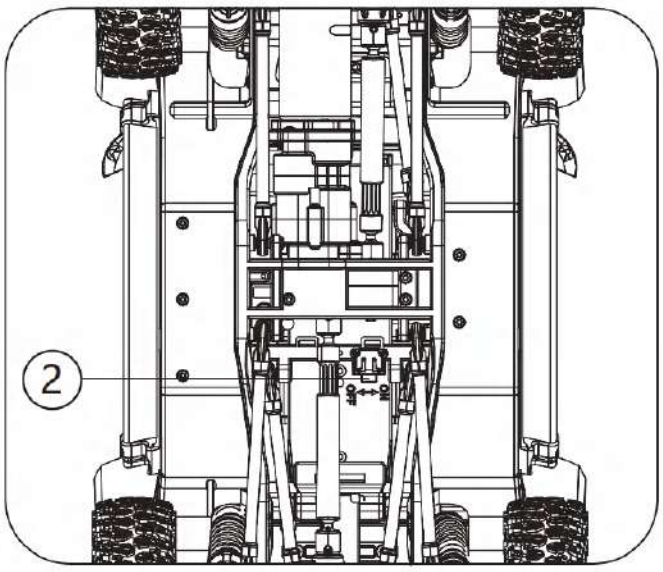




1. Power ON the transmitter, the battery Indicator lights.
2. Turn on ESC Power Switch, the LED Lights, indicating control system entersworking status.

1. 打开遥控器电源开关，遥控器电源指示灯点亮。
2. 打开电调电源开关，电调指示灯点亮控制系统进入工作状态。

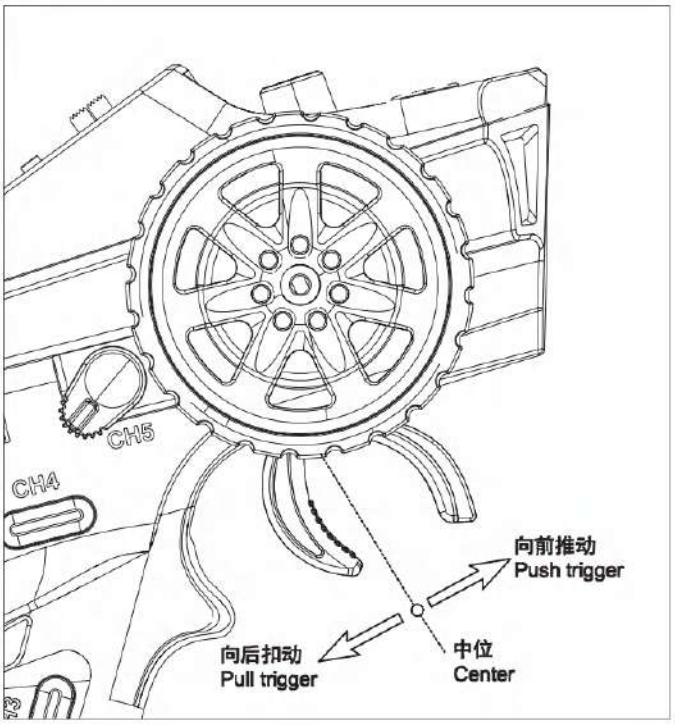


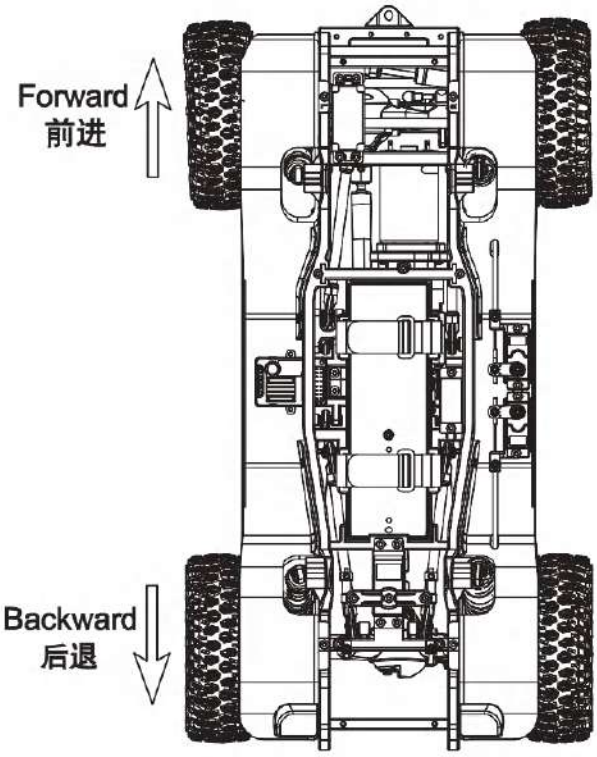


Driving Precautions 操作模型车

To move the vehicle forward, pull the Throttle trigger To reverse the vehicle, push the transmittertrigger one time is brake, pause, then returnthe trigger to center. Push again is Reverse.

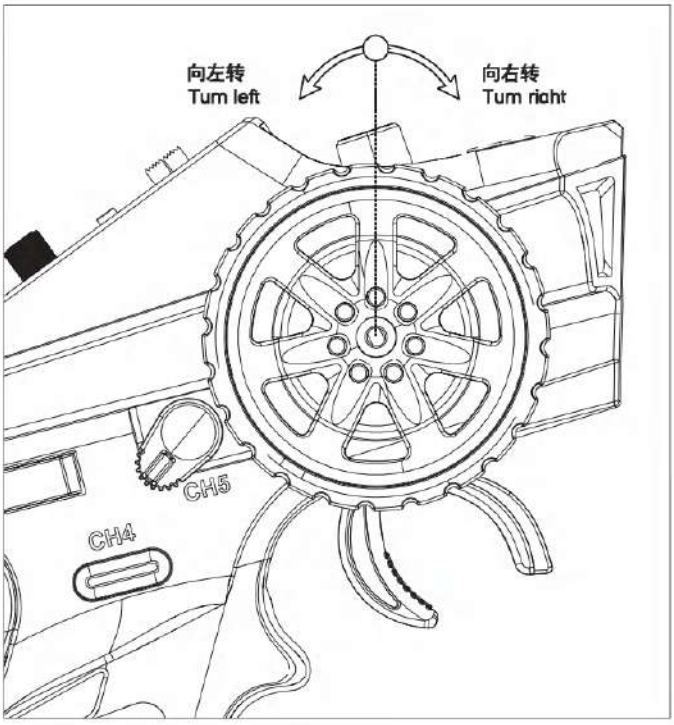
用手指向后扣动遥控器扳机，车将向前行驶用手指向前推动扳机一次为刹车，松开手指待扳机回到中位后再向前推动则为倒车。

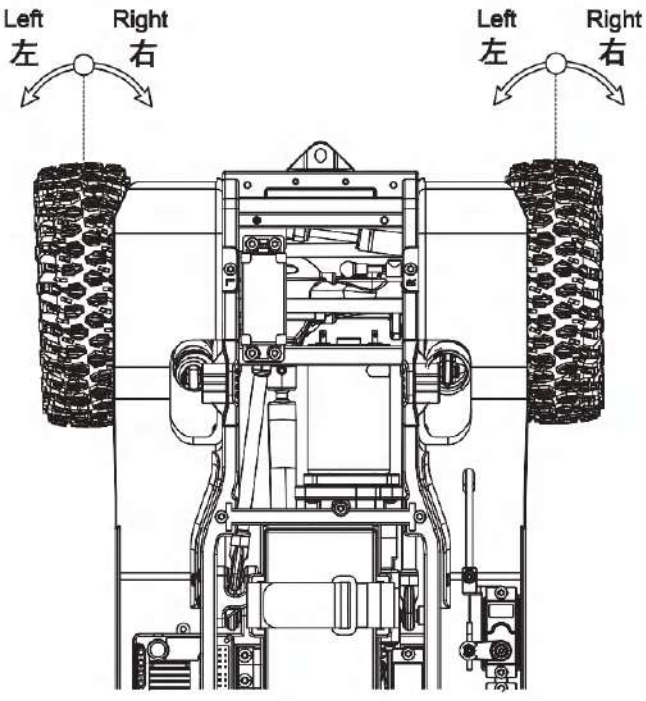


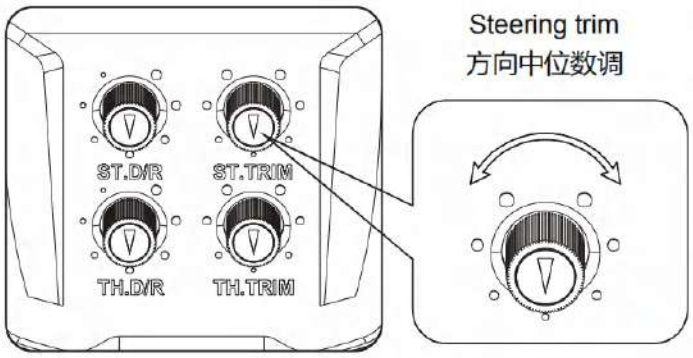


The front wheel movement is controlled bytransmitter steering wheelTurn transmitter steering wheel left, the vehiclefront wheels turns left.Turn transmitter steering wheel right, the vehiclefront wheels turns right.

车前轮的运动是随遥控器转向轮的调整而改变的。遥控器转向轮向左转，车前轮也是左转。遥控器转向轮向右转，车前轮也是右转。



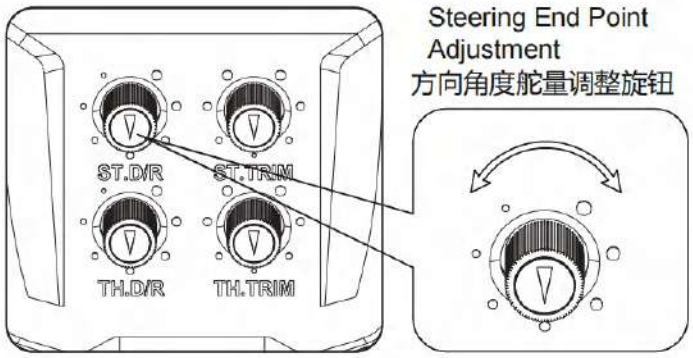




Steering trim
方向中位数调

Without turning transmitter steering,the vehicle front wheels should maintain a straight line. If not, adjust ST Trim knob until the vehicle tracks straight. If the front wheel is tilted to the left, fine tuning ST Trim knob clockwise. If the front wheel is tilted to the right, fine tuning ST Trim knobcounterclockwise.

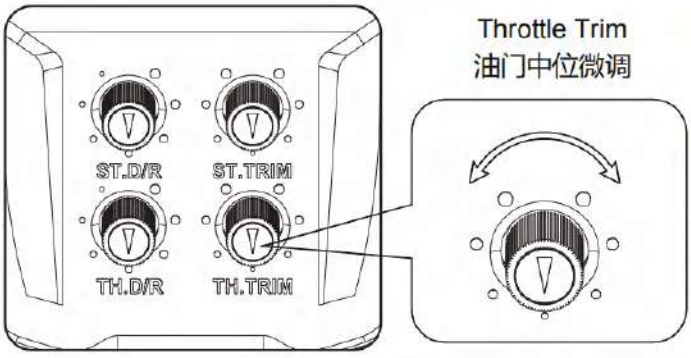
在没有操控转向轮的情况下，车辆前轮应该处于中心位置。如果前轮偏向左侧，请顺时针转动方向微调旋钮进行微调。
如果前轮偏向右侧，请逆时针转动方向微调旋钮进行微调。



Steering End Point Adjustment
方向角度舵量调整旋钮

Adjust Steering End Point to help adapt to different terrains.
Clockwise twist this knob: adjust to the maximum steering angles.
Counterclockwise twist this knob: adjust to the minimumsteering angles.

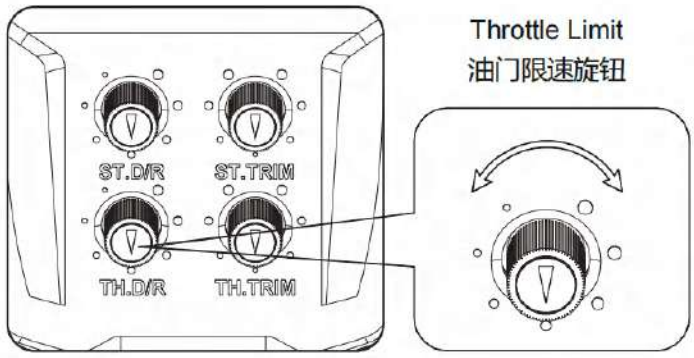
调整方向角度舵量大小，来适应不同弯角路面的行使需要。
顺时针转动该微调旋钮，可以将方向角度调整到最大。
逆时针转动该微调旋钮，可以将方向角度调整到最小。



Throttle Trim
油门中位微调

Without operting throttle trigger, the vehicle should be motionless.
If vehicle moves forward, counterclockwise adjust Throttle Trim knob.
If vehicle moves backward, clockwise adjust Throttle Trim knob.

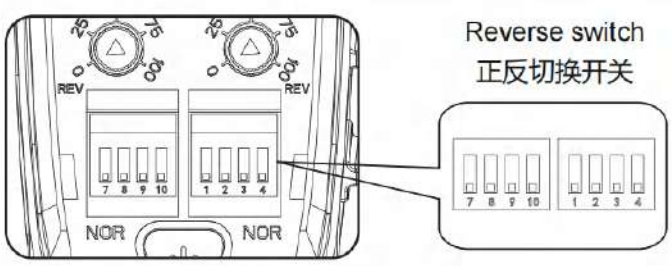
在没有操控油门扳机的情况下，车辆应该处于静止状态。
如果车子自行前进，请逆时针转动油门中位微调旋钮进行微调。
如果车子自行后退，请顺时针转动油门中位微调旋钮进行微调。



Throttle Limit
油门限速旋钮

Set Throttle limit knob to limits throttle output. Counterclockwise Throttle Limit knob to reduce the limit output(minimum 0%), Clockwise adiust Throttle limit knob to increase the limit output(maximum 100% is for normal).
Suggest the less experienced select Throttle Limit to reduce speed.

设定遥控油门限速旋钮控制量大小，逆时针旋转是降低控制量(最低可以降到0%)，顺时针旋转是加大控制量(最高值为100%正常油门控制量)。
对于初学者而言，可以先尝试调低油门控制量来适应车辆。

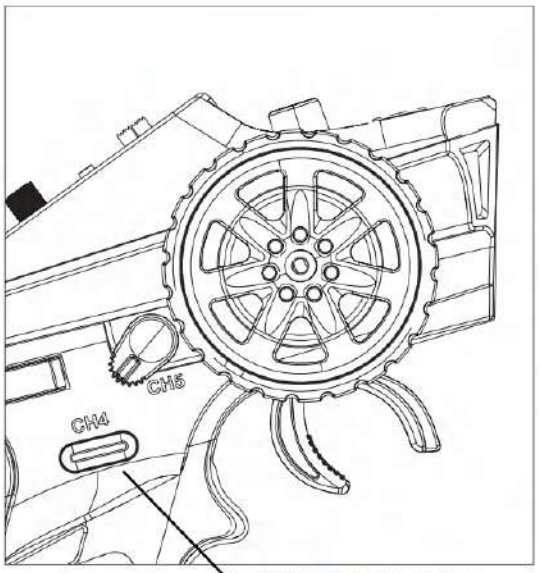


Reverse switch
正反切换开关

If the operation on transmitter is inconsistent with the vehicle actual performs (forward/backward, left/right), please adjustthis switch to correct.

如果遥控的操作与车辆动作不一致，请调整此正反切换开关，直至遥控操作和车辆动作一致。

Driving Precautions 操作模型车

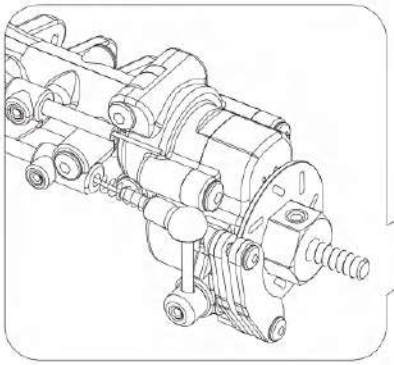


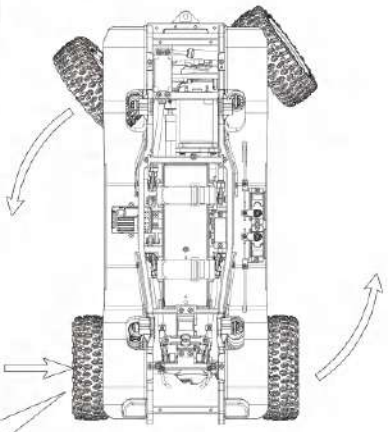
CH4 for DIG mode
坦克掉头模式开关(CH4)

Pressing the CH4 button on the transmitter, blue LED illuminates, accompanied by a brief, intermittent two-tone sound from the buzzer, indicating that the system is in the rear inner wheel lock mode. If the rear differential is currently locked, the system automatically keeps the rear differential unlock.When steering left, the left rear wheel simultaneously is locked/braked; similarly, when steering right, the right rear wheel simultaneously is locked/braked.
This feature facilitates precise vehicle turning in narrow spaces, within small circles, and over short distances. Additionally, it allows for executing sharp tums at high speeds on low-grip roads.

按下CH4通道按键，指示灯点亮，系统进入坦克掉头模式，此时如果后差速器是锁止状态,控制系统会强制解除后差速锁,此时打方向左转，左后轮会同步完成刹车;打方向右转，右后轮会同步完成刹车。
此时就可以在小空间、小角度、小距离内实现调头或转弯在低抓地力路面高速行驶可以实现原地掉头。

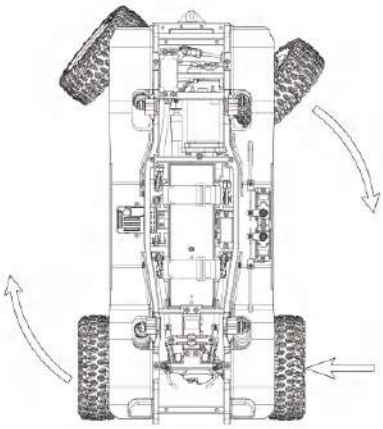
Rear wheel brakemechanism
后轮刹车机构





In this mode, the rear left wheel is locked/braked when turn left

坦克掉头模式下，左转时左后轮同步进入刹车状态



In this mode, the rear right wheel is locked/braked when turn right

坦克掉头模式下，右转时右后轮同步进入刹车状态

Repair Service 维修服务

1. Periodic maintenance in order to ensure the vehicle best performance, especially the running parts. Remove chassis free of dirt and debris after every driving. Keep your vehicle clean and well maintained.
2. Regularly check the screws on the car and tighten them if necessary.
3. Always check for wear/broken/bent parts, and replace it if necessary
4. All parts listed on the exploded view. Damages can be ordered at the retailer. If you have any questions, you can ask for help at the retailer.

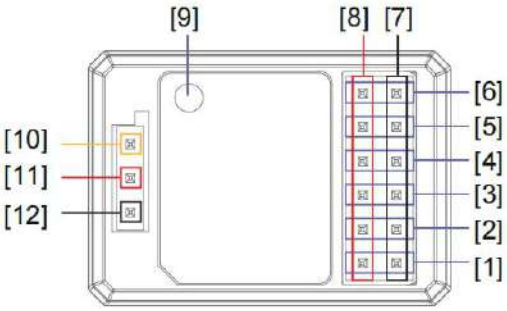
1、车辆需要经常保养，以保持其性能，特别是活动的零件部位，每次跑车完及时清除上面的尘土杂物。保持车辆清洁和良好的保养。
2、定期检查车上有螺丝的地方，有必要就拧紧加固。
3、经常检查车上面磨损/弯曲/坏掉的部件，有必要就换掉。
4、所有的零件都可以作为散件在爆炸图上找到编号，有损坏可以在零售商订购更换。有任何问题，都可以在零售商寻求帮助。

Car Light Drive Board 车灯驱动板

FS-DB01 is a car light driver board for the FS-R11D-ESC-BS receiver.This light board has 6 sets of car light interfaces, and each set of car light can be independently controlled. The waterproof rate is PPX4.

FS-DB01 是一款适配 FS-R11D-ESC-BS 接收机使用的车灯驱动板。本灯板具有 6 组车灯接口，且各组车灯可独立制，防水性能达 PPX4 级。

Car Light Drive Board Overview 车灯驱动板概览



[1] Left Turn Signal Light Interface
[2] Right Turn Signal Light Interface
[3] Daytime Running Light Interface
[4] Headlight Interface
[5] Brake Light Interface
[6] Reversing Light Interface
[7] "- " (Car Light Interface Cathode)
[8] "+ " (Car Light Interface Anode)
[9] LED
[10] S (Signal Input Interface Signal Pin)
[11] "+" (Signal Input Interface Anode)
[12] "-" (Signal Input Interface Cathode)

[1] 左转灯接口
[2] 右转灯接口
[3] 日行灯接口
[4] 前大灯接口
[5] 刹车灯接口
[6] 倒车灯接口
[7] "-" (车灯接口负极)
[8] "+ "(车灯接口正极)
[9] LED 指示灯
[10] S（信号输入接口信号端）
[11] "+"（信号输入接口正极）
[12] "-"（信号输入接口负极）

Notes:
1.All car light interfaces are 2.54mm*2 Pin standard pins, and the signal input interface is 2.54mm*3 Pin standard pins.
2.The signal input interface is used to connnect FS-R11D-ESC-BS receiver.

注:
1.所有车灯接口均采用标准 2.54mm*2 Pin 排针，信号输入接口采用标准2.54mm*3 Pin 排针;
2.信号输入接口用于连接 FS-R11D-ESC-BS 接收机。

Functions 功能相关

Connection between car light drive board and receiver
Connect the car light drive board to the LED interface of the FS-R11D-ESC-BS receiver through the signal input interface.

LED Status
•When the LED is solid on, the car light driver board is in normal working state.
•When the LED flashes slowly, the car light driver board does not receive valid signals.

车灯驱动板与接收机连接
将车灯驱动板通过信号输入接口与 FS-R11D-ESC-BS 接收机的 LED 灯接口相连接。

LED 状态说明
•LED 指示灯常亮，车灯驱动板为正常工作状态
•LED 指示灯慢闪，车灯驱动板未收到有效信号

Car Light Drive Board 车灯驱动板

Car Light Drive Board Specifications 车灯驱动板信息

Product Model	FS-DB01	产品型号	FS-DB01
Adaptive Receivers	FS-R11P-BS	适配接收机	FS-R11P-BS
Adaptive Model	RC Car	适配模型	RC Car
Number of Car Light Interfaces	6	车灯组数	6
Input Power	3.5~8.4V/DC	输入电源	3.5~8.4V/DC
Working Current	20mA/5V	工作电流	20mA/5V
Temperature Range	-10℃ ~ +60℃	温度范围	-10℃ ~ +60℃
Humidity Range	20% ~ 95%	湿度范围	20% ~ 95%
WaterProof	PPX4	防水等级	PPX4
Dimensions	27.0mm*19.0mm*13.5mm	外形尺寸	27.0mm*19.0mm*13.5mm
Weight	4.2g	机身重量	4.2g
Certifications	CE, FCC	认证	CE, FCC

Attention 注意事项

- Make sure the product is installed and calibrated correctly, failure to do so may result in serious injury.
- Please carefully check each power device and car frame instructions to ensure the power matching is reasonable before use. Avoid damaging power system due to incorrect matching.
- Do not let the external temperature of the system exceed 90℃ /194 ℉ , because high temperature will damage the power system.
- Make sure the receiver's battery is disconnected before turning off the transmitter, failure to do so can result out of control.Unreasonable setting of the Failsafe may cause accidents.
- After use, remember to disconnect the battery and the ESC. If the battery isn't disconnected, the ESC will consume electric energy all the time even if it is off. It will discharge completely if connect the battery for a long time, thus resulting in the failure of the battery or the ESC. We are not responsible for any damage caused by this!
- Make sure the receiver is mounted away from motors or any device that emits excessive electrical noise.
- Keep the receiver's antenna at least 1cm away from conductive materials such as carbon or metal.
- Do not power on the receiver during the setup process to prevent loss of control.
- If the throttle trim is changed on the transmitter side, the receiver needs to be re-powered to recognize the new throttle neutral.Otherwise, an exception may occur during vehicle reversing

- 使用前必须确保本产品与模型安装正确，否则可能导致模型发生严重损坏。
- 请查看各动力设备以及车架说明书，确保动力搭配合理，避免因错误的搭配导致动力系统损坏。
- 勿使系统的外部温度超过 90℃ /194 °F，高温将会毁坏动力系统。
- 关闭时，请务必先关闭接收机电源，然后关闭发射机。如果关闭发射机电源时接收机仍然在工作，将导致遥控设备失控。失控保护设置不合理可能引起事故。
- 使用完毕后，若长时间不玩车，切记断开电池与电调的连接。如电池未断开，即使电调开关处于关闭状态，电调也会一直消耗电能（只是非常小），长时间连接电池最终会被过放，进而导致电池或电调出现故障。我们不对因此而造成的任何损害负责！
- 确保接收机安装在远离电机或电子噪声过多的区域。
- 接收机天线需远离导电材料，例如金属棒和碳物质。为了避免影响正常工作，请确保接收机天线和导电材料之间至少有 1 厘米以上的距离。
- 准备过程中，请勿连接接收机电源，避免造成不必要的损失。
- 若在发射机端调整油门通道微调后，接收机须重新通电以识别新的油门通道中位，否则可能会出现倒车异常的现象。

Troubleshooting 故障快速处理

Troubles 故障现象	Possible Causes 可能原因	Solutions 解决方法
The motor cannot start and the LED is not on after power-on. 上电后，指示灯不亮，电机无法启动	1. The ESC has no working voltage. 2. The switch of ESC or ESC itself is damaged. 1. 电调没有得到工作电压；2. 接收机开关或电调损坏。	1. Check whether there is any connection problem between the battery and ESC and whether there is faulty welding of the relevant plug.2. Return to factory for inspection and treatment. 1. 检查电池与电调有无连接问题以及相关插头是否有虚焊情况 ;2. 返厂检测处理。
The motor cannot start after power-on. 上电后，电机无法启动	The throttle channel neutral of the transmitter is shift or changed. 发射机油门通道的中点偏移或改变。	1. Ensure that the transmitter trigger is in its natural state when re-powering the transmitter.2. Adjust the throttle channel of the transmitter by trim function to match the existing neutral position of ESC. 1. 重新上电时，确保发射机扳机处于自然状态；2. 调节发射机油门通道微调使之匹配电调现有中立点。
When forward the car by the transmitter, it reverse. 发射机做前进操作，车子反而倒退	1. It may cause by the connection sequence between output line of ESC and motor line.2.The throttle direction of transmitter is wrongly set. 1. 电调输出线和电机线的连接线序错误；2. 发射机油门方向设置错误。	1. Exchange the position of two lines of motor.2. Set throttle direction of transmitter to the opposite direction. 1. 将电机的两条线互换位置即可 ;2. 将发射机油门方向设置为相反方向。
When forward the car by the transmitter, it reverse. 电机转动过程中，突然停转	1. It may cause by the connection sequence between output line of ESC and motor line.2.The throttle direction of transmitter is wrongly set. 1. 油门信号丢失 ;2. 电调进入电池低压保护或过热保护。	1. Exchange the position of two lines of motor.2. Set throttle direction of transmitter to the opposite direction. 1. 检查发射机和接收机 ;2. 请检查电池电压以及电调温度。
When the motor starts, it accelerates rapidly, and the motor is stuck or stops. 电机启动时急加速，电机有卡住或停顿的现象	1. Battery discharge capacity is insufficient.2. The rotation speed of motor is too fast, the gear ratio is not reasonable. 1. 电池放电能力不够 ;2. 电机转速过高，齿轮比搭配不合适。	1. Replace battery with strong discharge capacity.2. Replace low speed motor, or increase the reduction ratio. 1. 更换放电能力强的电池 ;2. 更换低速电机，或将减速比提高。

ESC User Manual 电调说明书

Congratulations and thanks for purchasing Hobbywing QUICRUN series electronic speed controller (ESC) for brushed motor. The power system for RC model can be very dangerous, so please read this manual carefully. Since we have no control over the installation, application, use or maintenance of this product, in no case shall we be liable for any damages, losses or costs.

感谢您购买 HOBBYWING 公司 QUICRUN(酷跑)有刷车用电子调速器！由于模型动力系统功率强大，错误的使用可能造成人身伤害和设备损坏。我们强烈建议您在使用设备前仔细阅读本说明书，并严格遵守规定的操作程序。我们不承担因使用本产品而引起的任何责任，包括但不限于对附带损失或间接损失的赔偿责任；同时，我们不承担因擅自对产品进行修改所引起的任何责任。我们有权在不经通知的情况下变更产品设计、外观、性能及使用要求。

Features 特点

- Water-proof and dust-proof, suitable for all-weather condition races.
- Small size with built-in capacitor module.

- Three running modes: Fwd/Br, Fwd/Rev/Br and Fwd/Rev, fits for various vehicles.

Note 1: Fwd =Forward, Br=Brake, Rev=Reverse.
Note 2: QUICRUN-WP-1625-BRUSHED ESC only has the Fwd / Rev / Br mode.

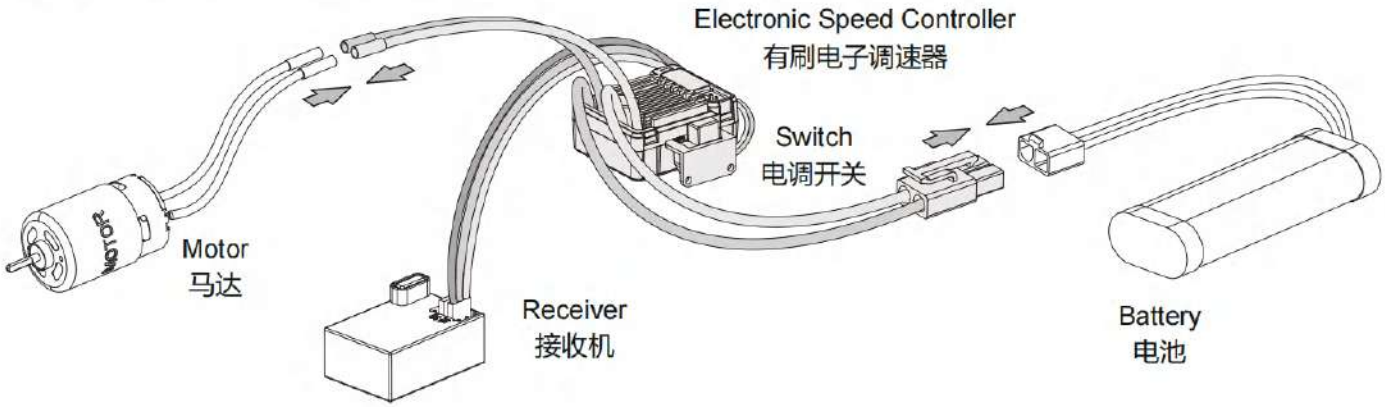
- Great current endurance capability.
- Automatic throttle range calibration, easy to use.
- Easy to set the ESC parameters with jumpers.
- Multiple protections: Low voltage cut-off protection for battery / Over-heat protection / Throttle signal loss protection.

- 完全防水防尘，适应各种气候环境；
- 具有“单向 / 双向 / 攀爬”三种运行模式，适用各种车型；
  备注：QUICRUN-WP-1625仅有双向运行模式；
  QUICRUN-WP-860-DUAL除上述三种模式之外，还具有船用模式。
- 高品质用料，具有强大的耐电流能力；
- 自动油门行程校调，简便易用，尤其适合新手；
- 采用跳线帽设置电调参数，简单明了；
- 具有锂电低压保护、过温保护、油门信号丢失保护等多重保护功能。

Begin to Use the New Brushed ESC 首次使用车用有刷电子调速器

Turn off the ESC switch, wire the battery, motor, ESC, servo, receiver according to the following diagram. Recheck the wiring to ensure all connections are correct before getting into the next step.
1. Once the power is wrongly connected (that means the battery polarity is mistakenly reversed), irreparable damage may occur to the ESC and batteries. Therefore, please pay close attention to the battery polarity.
2. Please swap the two motor wire connections if the motor rotate in the opposite direction.

1、此电调不具备电源反接保护功能。如果电源反接，瞬间将可能对电调及电池造成不可恢复的损坏，请使用时特别注意电池极性。建议使用具有防呆功能的电池插头。
2、若电机转向不对，请将电机两条线互换。



Specification 产品规格

Mode 型号	QuicRun-WP-1625-BRUSHED	QuicRun-WP-1060-BRUSHED	QuicRun-WP-860-DUAL-BRUSHED
Fwd. Cont. / Peak Current Rev. Cont. / Peak Current 正向: 持续电流/峰值电流 反向: 持续电流/峰值电流	25A/100A 25A/100A	60A/360A 30A/180A	60A/360A 30A/180A
Voltage Range 支持电压范围	2-3S Lipo or 5-9 NiMH 2-3节锂电(Lipo)或5-9节镍氢(NiMH)电池		2-4S Lipo or 5-12 NiMH 2-4节锂电(Lipo)或 5-12节镍氢(NiMH)电池

	Cars Applicable 主要适用车型	1/18 &1/16: Touring Car, Buggy, Monster, Truggy 1/18及1/16：电房、电越、大脚车、卡车	1/10: Touring Car, Buggy, Short Course Truck, Monster, Truggy, Rock Crawler and Tank 1/10：电房、电越、短卡、大脚车、卡车、攀爬车、坦克	1/8: Touring Car, Buggy, Short Course Truck, Monster, Truggy, Rock Crawler and Tank 1/8：电房、电越、短卡、大脚车、卡车、攀爬车、坦克
Motor Limit * 支持电机T数*	2S Lipo or 6 NiMH 2节锂电或6节镍氢	280, 370 or 380 Size Motor: RPM<30000 @7.2V 280、370或380尺寸电机: RPM低于30000@7.2V	540 or 550 Size Motor: ≥12T or RPM<30000 @7.2V 540或550尺寸电机: ≥12T或RPM低于30000@7.2V	550, 775 Size Motor: ≥12T or RPM<30000 @7.2V 550、775尺寸电机: ≥12T或RPM低于30000@7.2V
	3S Lipo or 9 NiMH 3节锂电或9节镍氢	280, 370 or 380 Size Motor: RPM<20000 @7.2V 280、370或380尺寸电机: RPM低于 20000@7.2V	540 or 550 Size Motor: ≥18T or RPM< 20000 @7.2V 540或550尺寸电机: ≥18T或RPM低于20000@7.2V	550, 775 Size Motor: ≥18T or RPM<20000 @7.2V 550、775尺寸电机: ≥18T或RPM低于20000@7.2V
	4S Lipo or 12 NiMH 4节锂电或12节镍氢	Not Available 不支持		550, 775 Size Motor: ≥24T or RPM<15000 @7.2V 550、775尺寸电机: ≥24T或RPM低于15000@7.2V
	BEC Output BEC 输出	1A / 6V (Linear Mode) 1A / 6V (线性稳压模式)	3A / 6V (Switch Mode) 3A / 6V（开关稳压模式）	3A / 5V (Switch Mode) 3A / 5V (开关稳压模式)
	Dimension / Weight 尺寸 / 重量	34x24x14mm / 23.5g 34x24x14mm / 23.5 克	36.5x32x18mm / 39 g 36.5x32x18mm / 39 克	46x36x26.3mm / 73g 46x36x26.3mm / 73克
	Cooling Fan 风扇工作电压	Without cooling fan 无风扇		With cooling fan. It is supplied from receiver 有风扇，风扇从接收机取电
	Running Modes 运行模式	Forward / Reverse / Brake 双向	Forward / Reverse / Brake, Forward / Brake, Forward / Reverse 单向 / 双向 / 攀爬	Forward / Reverse / Brake, Forward / Brake, Forward / Reverse, Boat 单向 / 双向 / 攀爬 / 船用

*Note: WP-860-DUAL-BRUSHED has two outputs to drive 2 motors. When driving 2 motors simultaneously, the Turns of the motors need to be increased.

备注：QUICRUN-WP-860-DUAL-BRUSHED具有2对电机输出线，可驱动2个电机。当同时驱动两个电机时，所支持的电机T数需要增加。这种情况常见于低速双电机攀爬车。

Detecting the Throttle Range 识别油门行程

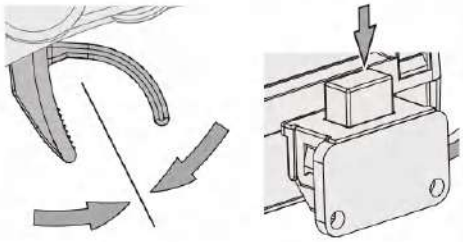
Turn on the transmitter, and set parameters (of the throttle channel) like "D/R, "EPA", "ATL" to 100% (if there is no LCD display on the transmitter, please adjust the corresponding knob to its limit). Set the throttle trim to 0 (if there is no display, then adjust the knob to the neutral position). For FUTABATM and similar transmitters, set the throttle direction to "REV", while the throttle direction of others to "NOR". Please disable the built-in ABS brake function in your transmitter.
Besides, we strongly recommend users to set the "F/S" of the throttle channel to the Shutdown mode or set the protection value to the neutral position, so the car can be stopped if the receiver fails to get the radio signals from the transmitter.

Detecting the throttle range: Place the throttle trigger in the neutral position first, then turn on the ESC and wait for 3 seconds, the esc will complete thethrottle detection. Please refer to the chart on the right for the beeping phenomenon after startup.

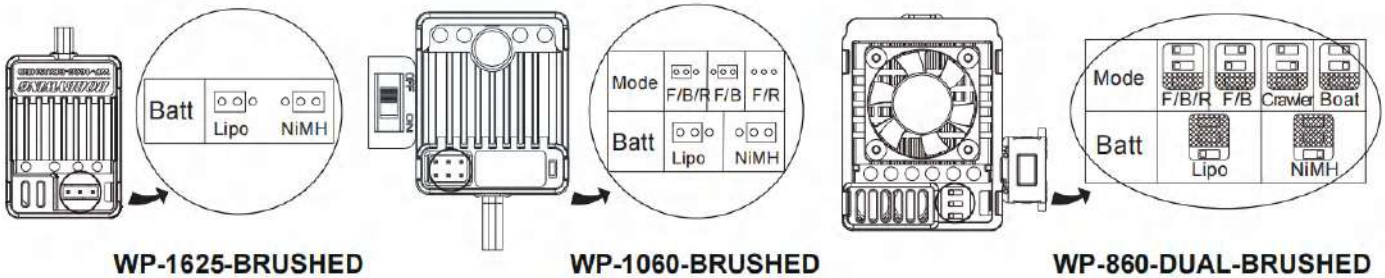
打开遥控器，将油门通道的"D/R"、"EPA"、"ATL"等参数调到100%(如遥控器无显示屏，则将对应旋钮调到最大位置)，油门通道的中点微调"TRIM"调为0(如遥控器无显示屏，则将对应旋钮调到中间位置)。
FUTABA及类似的遥控器需要将油门通道方向设为"REV"，其它品牌遥控器的油门通道方向应设为"NOR"。

我们建议将遥控器油门通道的无信号保护（“F/S”）功能设置为关闭输出方式或将保护值设置为中点位置，使得当接收机无法收到遥控器信号后，电机能够停止运转。

将遥控器油门扳机置于**中点位置**，最后打开电调开关，等待电调自检和自动油门校正过程结束(3秒内完成)，听到自检成功鸣音后即可正常运行。

The Meaning of Beep Sound **电池节数及自检鸣叫音说明**	**LED Status (in Running)** **行驶过程中指示灯(LED)状态说明**	**Throttle Trigger Position** **遥控器油门扳机位置状态图示说明**
• 1 short Beep: The battery is NiMH • 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 rangecalibration is OK, the ESC is ready to run • 鸣叫1声短音，表示镍氢镍镉电池 • 鸣叫2声短音，表示2S锂电 • 鸣叫3声短音，表示3S锂电 • 鸣叫4声短音，表示4S锂电 • 鸣叫1声长音，表示油门自检校调成功	• When the throttle stick is in neutral range, red LED is off • Partial throttle forward, partial brake or partial reverse, red LED blinks • Full throttle forward, maximum brake or full throttle reverse,redLED is solid on • 当油门扳机处于中点区域时，红色LED熄灭 • 非全油门前进、刹车、倒车时，红色LED闪烁 • 全油门前进、刹车、倒车时，红色LED恒亮	Neutral point 扳机置于中点 Turn on the switch 打开电调开关 

ESC Setup 参数设定和编程项目说明



WP-1625-BRUSHED **WP-1060-BRUSHED** **WP-860-DUAL-BRUSHED**

How to Set Parameters:

1. QUICRUN-WP-1625 / 1060-BRUSHED ESC uses the jumper cap to set running mode & battery type.
(Note: The “running mode” is not programmable for the QUICRUN-WP-1625-BRUSHED ESC.)
For example, if want set the battery type to the “LiPo” mode, you only need to plug the jumper cap into left two pins of the "Batt" pin header,if want set the running mode to the “F/R”mode,you need to remove the jumper and do not plug it into any pins of the " Mode" pin header.
2. QUICRUN-WP-860-DUAL-BRUSHED ESC uses the dial switch to set running mode & battery type, you can use a screwdriver or tweezers to change the position of the dial switch.
For example, if want to set the battery type to the “NiMH” mode, you only need to push the dial switch "Batt" (the dial switch marked as number 1) to the right position; If you want to set the running mode to F/B/R, you can push both dial switch 2 and dial switch 3 to the left position simultaneously.

Programmable Items:

1. Running Mode
"F/B/R"=Forward/Brake/Reverse, which means forward and reverse with brake. This mode uses“Double-click”method to make the vehicle reverse, the vehicle only brakes on the first time you push the throttle trigger to the reverse/brake zone, if the motor stops when the throttle trigger return to the neutral position and then re-push the trigger to reverse zone, the vehicle will reverse, if the motor does not completely stop, then your vehicle won't reverse but still brake. This method is for preventing vehicle from being accidentally reversed. In this mode, the maximum forward force is 100%, the maximum reverse force is 50%, and the maximum brake force is 100%.
"F/B"=Forward/Brake, which means forward with brake. The vehicle can only move forward and has brake function. This is also commonly acceptable at races. In this mode, the maximum forward force is 100% and the maximum brake force is 100%.

"F/R"=Forward/Reverse, which means forward and reverse directly. When the throttle trigger is pushed to reverse zone, the motor reverses immediately. This mode is generally used for special vehicles such as crawler,so it's often called a crawler mode. In this mode, the maximum forward force is 100%, the maximum reverse force is 100%, and the drag brake force is 100%.
"Crawler", same to the F/R mode mentioned above.
"Boat", which also uses forward/reverse running mode.In this mode, the maximum forward force is 100%,but the maximum reverse force is 25%, and there are no brakes.
Note: For QUICRUN WP 1625/1060 BRUSHED escs, the default running mode is F/B/R; For QUICRUN WP 860 DUAL BRUSHED esc, the default running mode is Crawler.

2. Battery Type
There are two options: "Lipo" and "NiMH". Different battery types will result in different low voltage protection values for esc. Please set them correctly according to the actual use of the battery.
Note: For QUICRUN WP 1625/1060 BRUSHED escs, the default battery type is NiMH. For QUICRUN WP 860 DUAL BRUSHED esc, the default battery type is Lipo.

参数设定方式:
1. QUICRUN WP 1625 / 1060 BRUSHED采用跳线帽设定方式，通过拔插跳线帽来改变其位置从而达到设定参数的目的。
QUICRUN WP 1625 BRUSHED：该电调有一项参数可调，即电池类型。如上图，跳线帽插入左侧两Pin排针时表示锂电模式，插入右侧两Pin排针时表示镍氢模式，不插跳线帽时表示锂电模式。
QUICRUN WP 1060 BRUSHED：该电调有两项参数可调，即运行模式和电池类型。如上图，“Batt”对应的跳线帽插入左侧两Pin排针时表示锂电模式，插入右侧两Pin排针时表示镍氢模式，不插跳线帽时表示锂电模式。 “Mode”对应的跳线帽插入左侧两Pin排针时表示F/B/R模式，插入右侧两Pin排针时表示F/B模式，不插跳线帽时表示F/R模式。
2. QUICRUN WP 860 DUAL BRUSHED电调采用拨码开关来实现参数的设定，可以通过螺丝刀或镊子等工具来拨动拨码开关。该电调有两项参数可调，即运行模式和电池类型。如下图，“Batt”对应的拨码开关（即标记为1的拨码开关）打在左边位置时表示锂电模式，打在右边位置时表示镍氢模式。“Mode”对应的拨码开关（即标记为2和3的两个拨码开关）同时打在左边位置时表示F/B/R模式，当拨码开关2打在左边位置而拨码开关3打在右边位置时表示F/B模式，当拨码开关2打在右边位置而拨码开关3打在左边位置时表示Crawler模式，当拨码开关2和3同时打在右边位置时表示Boat模式。

编程项目说明:
1. 运行模式（Running Mode）
F/B/R表示Forward/Brake/Reverse，即前进后退带刹车。此模式采用双击式倒车方式，即油门扳机第一次推至反向区域时，电机只是刹车，不会产生倒车动作，当油门扳机回到中点区域并第二次推至反向区域时(即所谓的“双击”)，如果此时电机已停止，则产生倒车动作，如果电机未停止，则不会倒车，仍是刹车。这样做的目的是防止车辆行驶过程中因多次点刹而造成误倒车。该模式下，前进力度为100%，倒车力度为50%，刹车力度为100%。
F/B表示Forward/Brake，即前进带刹车。此模式下，车辆仅能前进和刹车，不能倒车，该模式通常用于竞赛。该模式下，前进力度为 100%，刹车力度为100%。
F/R表示Forward/Reverse，即直接正反转。此模式下，当油门扳机推至反向区域时，电机会立即产生倒车动作。当油门扳机回到中点时会产生拖刹。该模式一般用于攀爬等特种车辆。该模式下，前进力度为100%，倒车力度为100%，拖刹力度为100%。
Crawler表示攀爬模式，和上述F/R模式一样。
Boat表示船用模式，也是采用直接正反转。此模式下，当油门扳机推至反向区域时，电机会立即产生倒车动作。该模式下，前进力度为100%，倒车力度为25%。
备注：对于QUICRUN WP 1625 / 1060 BRUSHED电调，默认运行模式为F/B/R。
对于QUICRUN WP 860 DUAL BRUSHED电调，默认运行模式为Crawler。

2. 电池类型（Battery Type）
有“锂电（Lipo）”和“镍氢（NiMH）”两种可调。不同的电池类型将导致电调低压保护值不同，请根据实际使用电池来设定，不可 设置错误。
备注：对于QUICRUN WP 1625 / 1060 BRUSHED电调，默认电池类型为镍氢。
对于 QUICRUN WP 860 DUAL BRUSHED电调，默认电池类型为锂电。

Protection Features 保护功能说明

1. Low Voltage Cutoff Protection: In lipo mode, when the battery voltage is below 3.25V/Cell for 2 seconds (if using 2S, the total battery voltage is 3.25*2=6.5V,and if using 3S,it is 3.25*3=9.75V), the esc will reduce the output power;

When the battery voltage is below 3.0V/Cell, the esc will turnoff the output power.In nimh mode,when the battery voltage is below 4.5V (total battery voltage) for 2 seconds, the esc will reduce the output power; When the battery voltage is below 4.0V,the esc will turn off the output power.After triggering the low voltage protection,the red light continuously flashes when the throttle is at the neutral position.
*Note: For Crawler mode (F/R) and boat mode,when the battery voltage is below the protection value (3.25V/cell in Lipo mode and 4.5V in nimh mode) for 2 seconds,the esc will directly turn off the output.After the throttle trigger returns to the neutral position,it can resume operation for 2 seconds,and then turn off the output,and so on.
2. Overheat protection: When the internal temperature of the esc is higher than 105C,the output power will be reduced,and the red light will continue to flash. When the temperature is below 65C, the full power output can be automatically restored.
3. Throttle signal loss protection: When the esc fails to detect the throttle signal for 0.1 seconds continuously, the output will be turned off,and normal operation will resume immediately after the signal is restored.It is recommended to set the fail safe protection "F/S" of the transmitter to turn off the output mode or set the protection value to the neutral position.

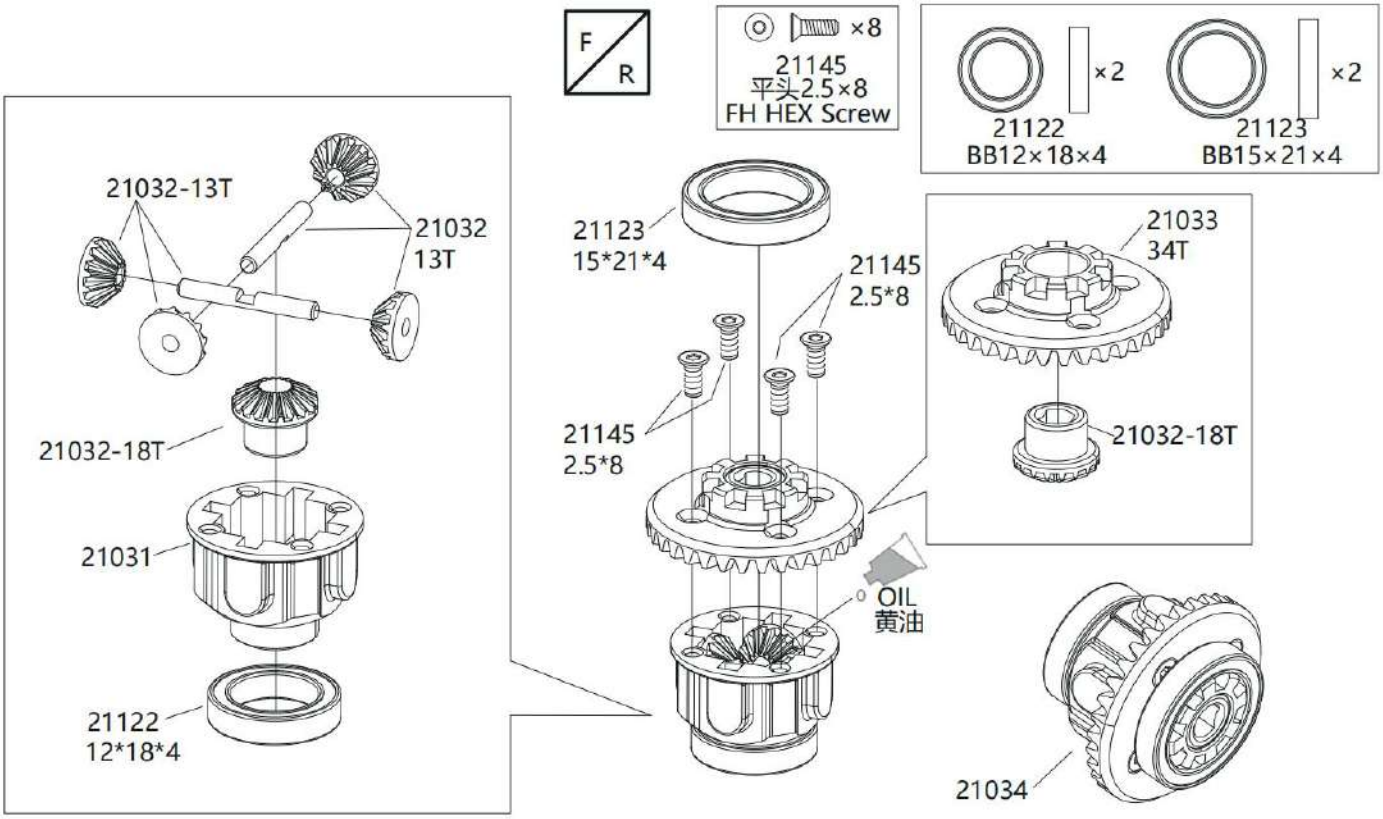
1. 低压保护：
锂电模式下，当电池电压低于3.25V/节持续2秒后（如使用2S，则电池总电压为3.25*2=6.5V，使用3S时则为3.25*3=9.75V），电调将降低输出功率；当电池电压低于3.0V/节时，电调将关闭输出。触发低压保护后，油门处于中点位置时电调红灯持续闪灯。
镍氢模式下，当电池电压低于4.5V（电池总电压）持续2秒后，电调将降低输出功率；当电池电压低于4.0V时，电调将关闭输出。触发低压保护后，油门处于中点位置时电调红灯持续闪灯。
备注：对于攀爬模式（F/R）和船用模式，当电池电压低于保护值（锂电模式下为3.25V/节，镍氢模式下为4.5V）持续2秒后，电调将直接关闭输出，油门扳机回到中点后，可以恢复运行2秒钟，然后又关闭输出，如此循环。
2. 过热保护
当电调内部温度高于105°C时将会降低输出功率，油门处于中点位置时电调红灯持续闪烁，待温度低于65度后可自动恢复全功率输出。
3. 油门信号丢失保护
当电调连续0.1秒没有检测到油门信号将会关闭输出，信号恢复后立即恢复正常运行。建议将遥控器的失控保护“F/S”设置为关闭输出方式或将保护值设置为中点位置。

Troubleshooting 故障快速处理

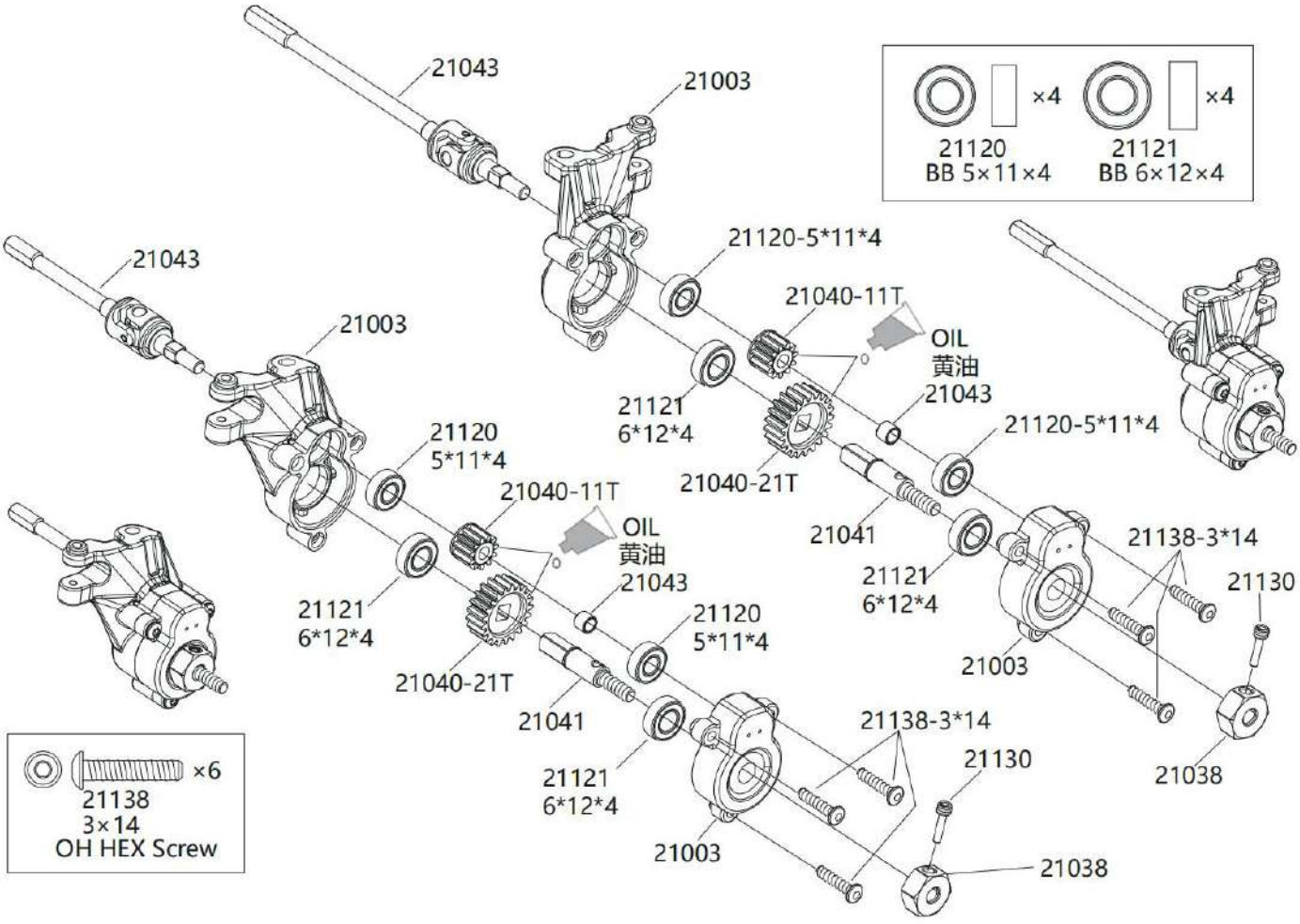
Troubles 故障现象	Possible Causes 可能原因	Solutions 解决方法
After power on, no LED lights up, no self-test and no beep sound. 上电后指示灯不亮，不自检，无鸣音。	No power is drawn to the ESC; The switch of the ESC is broken. 电调无工作电源；电调开关损坏。	Check the connections between battery and ESC. Re-solder the connectors if needed; Change the ESC switch. 检查电池到电调的电源输入通路是否有焊接不良情况，并重新焊好；更换电调开关。
After turn on, the RED LED blinks but the motor doesn't work. 上电后红色LED闪烁，电机无法启动。	Throttle wire is wrongly plugged or into the incorrect channel; The ESC can't successfully complete the throttle range self-calibration. 电调油门线插反或通道插错；电调无法成功完成油门自检校调过程。	Plug the throttle signal wire correctly (in right direction) into the throttle channel (usually Ch2) of the receiver; Set the "TRIM" of throttle channel to 0 or turn the knob to its neutral position. 将电调的油门排线按正确方向插到接收机的油门通道(Throttle，通常为第二通道Channel 2); 将遥控器的油门通道的中点微调“TRIM”调为0或将相应旋钮调到中点位置。
The car runs backwards when accelerating forward onthe transmitter.	The direction setting of the throttle channel is incorrect in the transmitter or the motor wires are wrongly connected.	Reverse the direction of the throttle channel, from the original "NOR" to "REV" or "REV" to "NOR"; Swap the wires between the ESC and motor.

Troubles 故障现象	Possible Causes 可能原因	Solutions 解决方法
遥控器做前进操作，车子反而倒退。	遥控器油门通道方向设置错误或电机接线错误。	将电机的两条线互换；将遥控器油门通道反向，从原“NOR”换为“REV”或从原“REV”换为“NOR”。
The vehicle can't reach to the full speed even at the full throttle, and the RED RED LED doesn't keep lighting. 车子无法达到全速，油门扳机打到最大位置，红灯不恒亮。	There are some incorrect settings in the transmitter. 遥控器设置错误。	Set D/R, EPA, ATL to 100% for the throttle channel or turn the knobs to maximum value. Set TRIM to 0 or turn the knob to its neutral position. 将遥控器油门通道的“D/R”、“EPA”、“ATL”等参数调到100%或相应旋钮调到最大位置，油门通道的中点微调“TRIM”调为0或相应旋钮调到中点位置。
Vehicle can't reverse. 车子无法倒车。	The corresponding jumper is plugged into the wrong position; Neutral point of the throttle is drifted or deviated. “运行模式”跳线帽位置错误；遥控器油门中点偏移。	Insert the jumper into the right location; Set the “TRIM”of the throttle channel to 0 or turn the knob to its neutral point. 将“运行模式”跳线帽插入正确位置；将遥控器的油门通道的中点微调“TRIM”调为0或相应旋钮调到中点位置。
Motor suddenly stops running. 电机转动过程中，突然停转。	The throttle signal is lost; The low voltage cutoff protection or thermal protection (i.e. over heat protection) of the ESC is activated. 油门信号丢失；电调进入电池低压保护或过热保护状态。	Check the connections between ESC and receiver. Check the transmitter and receiver. Check whether the battery voltage of the transmitter is too low; The RED LED on the ESC blinks, denoting the ESC is under low voltage cutoff protection or over-heat protection. Please check the ESC temperature, if it is too hot, please let the ESC cool down. If the battery voltage is low, please change the battery. 检查遥控器电池电压是否过低，接收机是否工作正常； 电调红灯闪烁表示低压或过热保护，请更换电池组或检查电调温度。
The vehicle neither go forward no reverse, but the LED indicators work normally. 车子无法前进也无法倒车，指示灯正常。	The connection between ESC and motor is interrupted; The motor is damaged. 电调和电机之间的连接中断；电机损坏。	Check the connectors between the motor and ESC to ensure all connections are firm and reliable;Replace a new motor. 检查电机和电调之间的连接，确保连接可靠；更换新电机。
The motor accelerates rapidly at the startup moment, but has lockout or cogging problem. 电机启动时急加速，电机有卡住或停顿的现象。	The discharge capacity of the battery is not strong enough; The motor rotates too fast, and the gear ratio is too aggressive; Something wrong with the driveline of the vehicle. 电池放电能力不够；电机转速过高,齿轮比搭配过于激进；车子传动系统有问题。	Change a battery with better discharge capability; Use a motor with lower RPM, or smaller pinion to soften the gear ratio; Check the driveline of the vehicle. 更换放电能力强的电池；更换低速电机，或将减速比提高；检查车架传动系统是否顺畅。

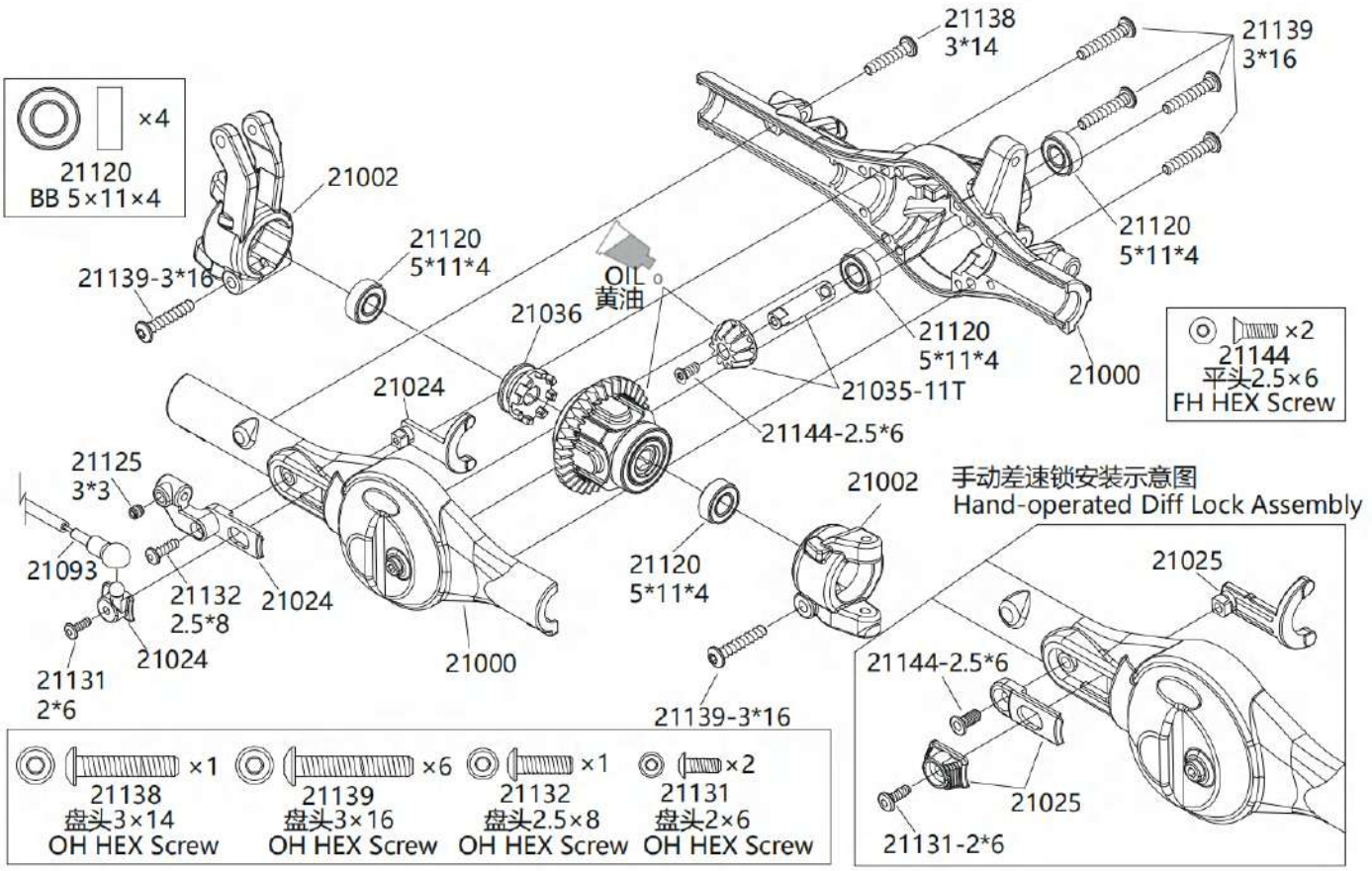
Differential Gear Assembly 差速器组 前/后

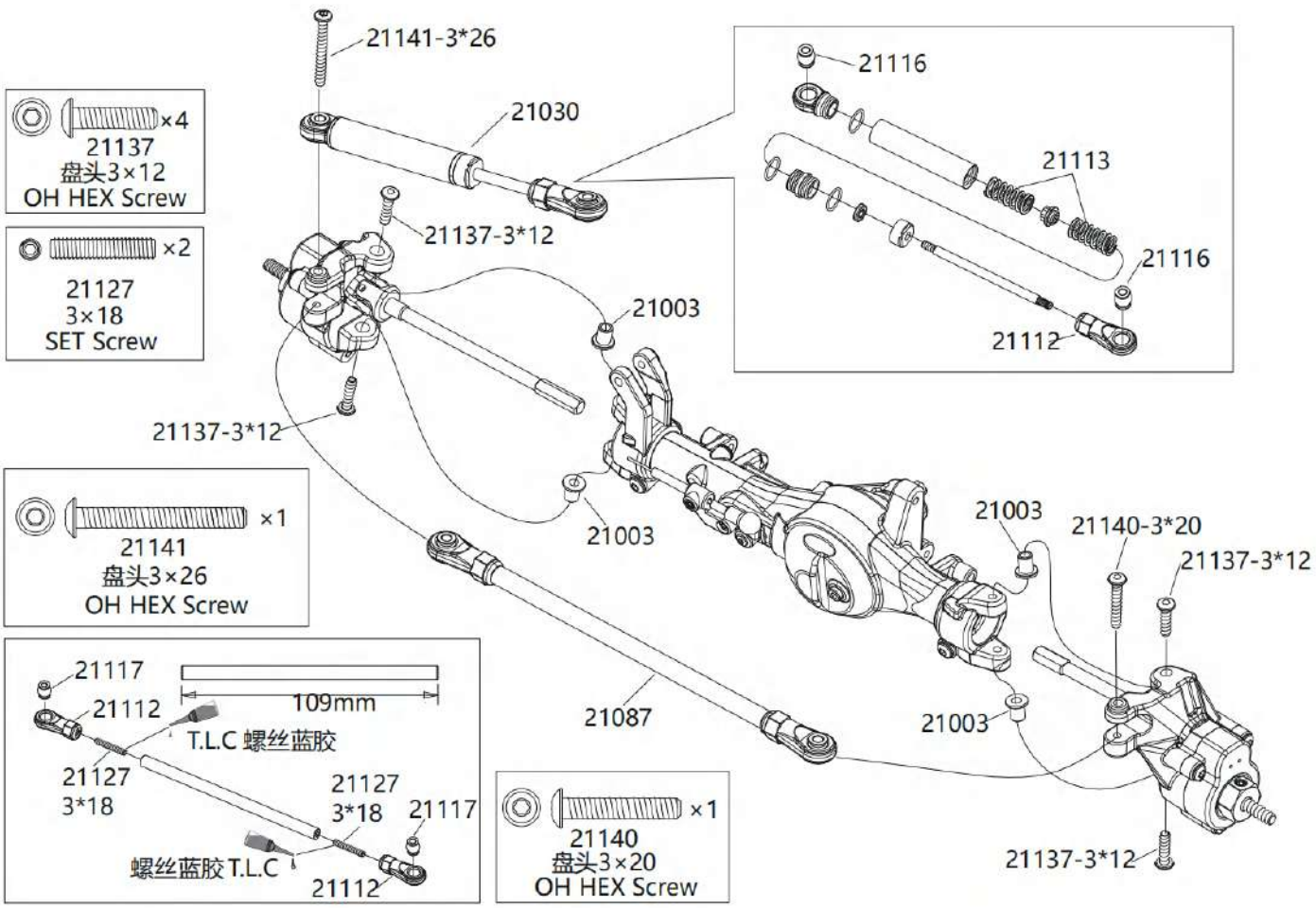


Spindle Set 转向臂组 左/右

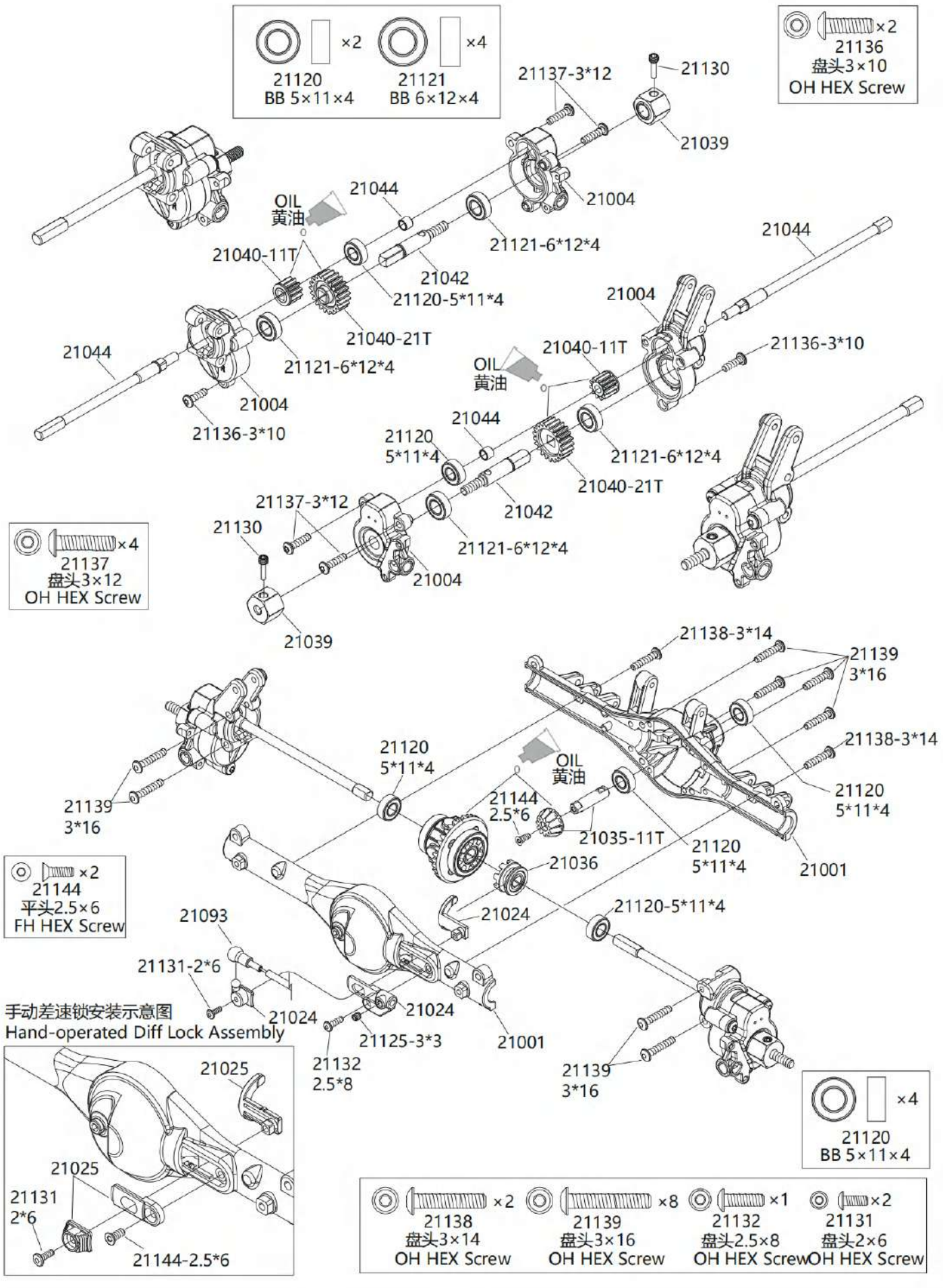


Front Portal Assembly 前桥组

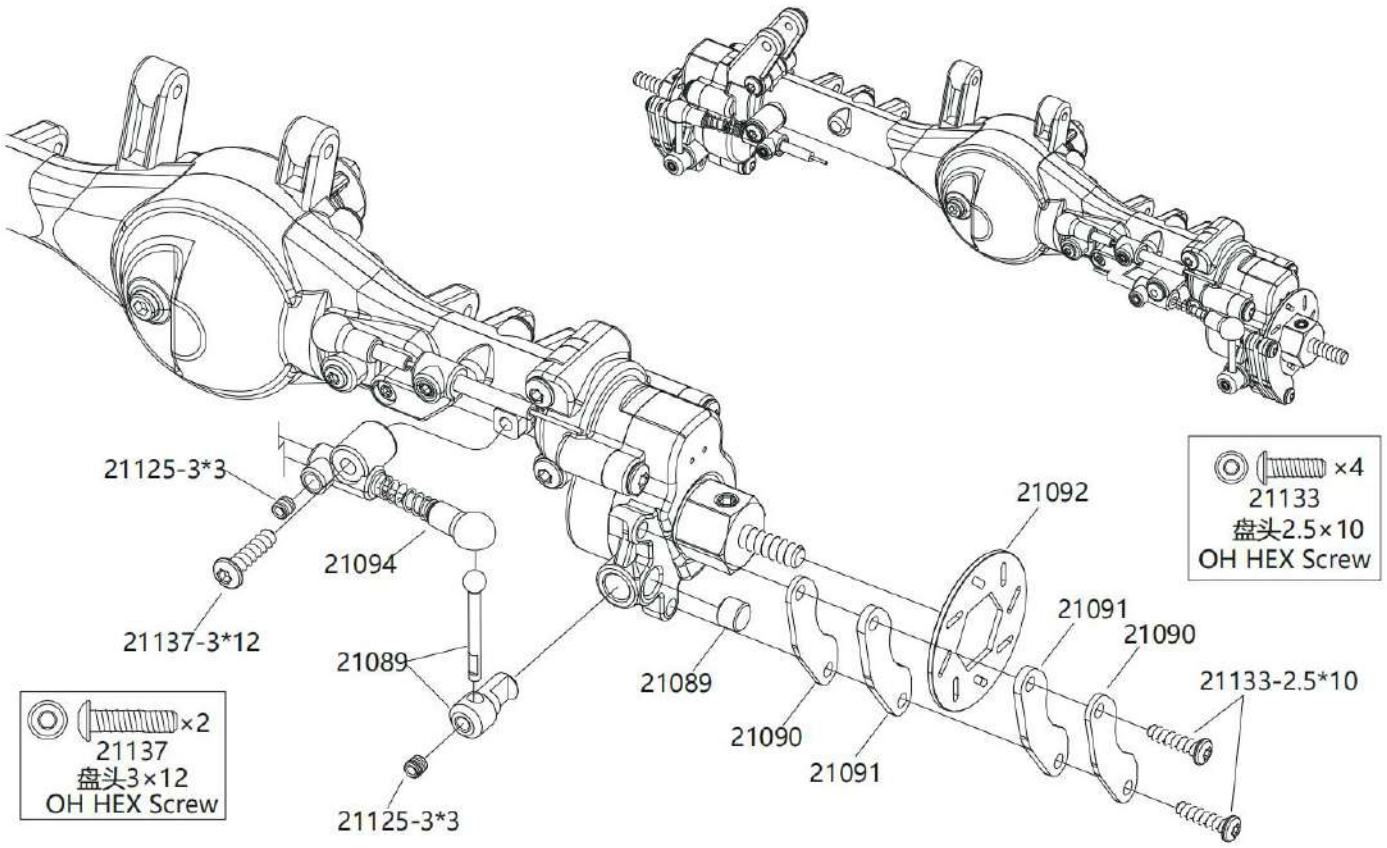




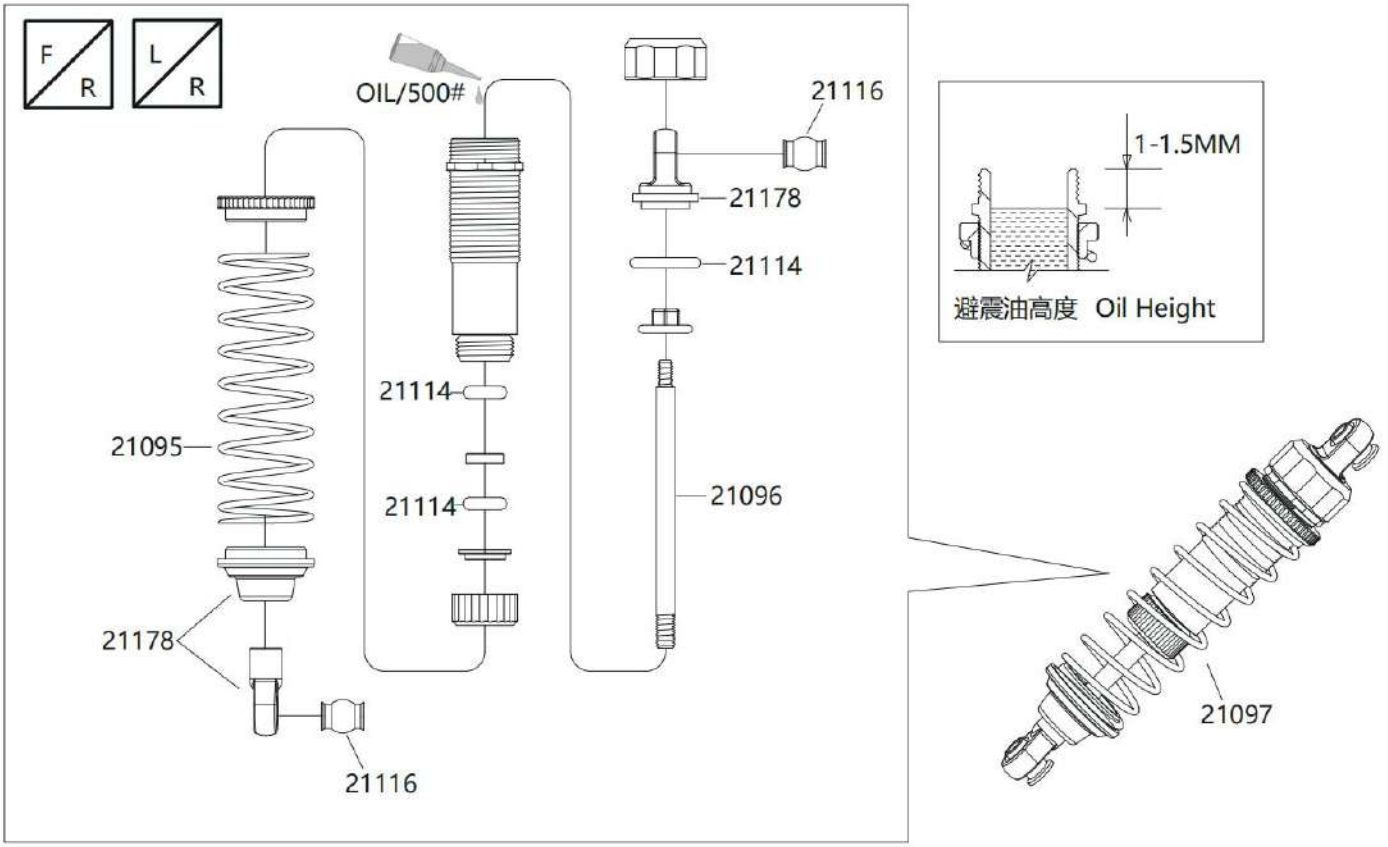
Rear Portal Assembly 后桥组



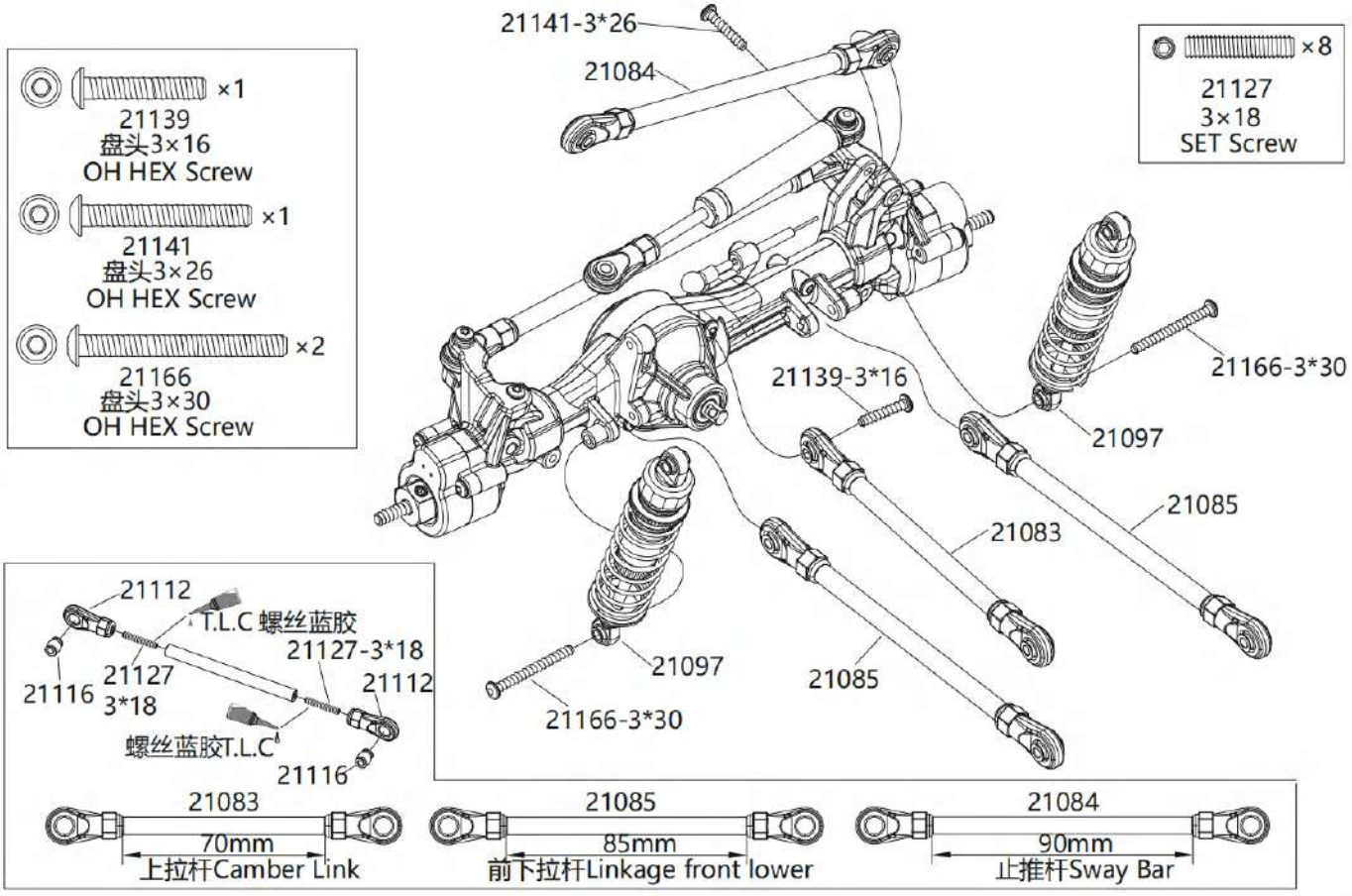
Rear Portal Assembly 后桥刹车组装



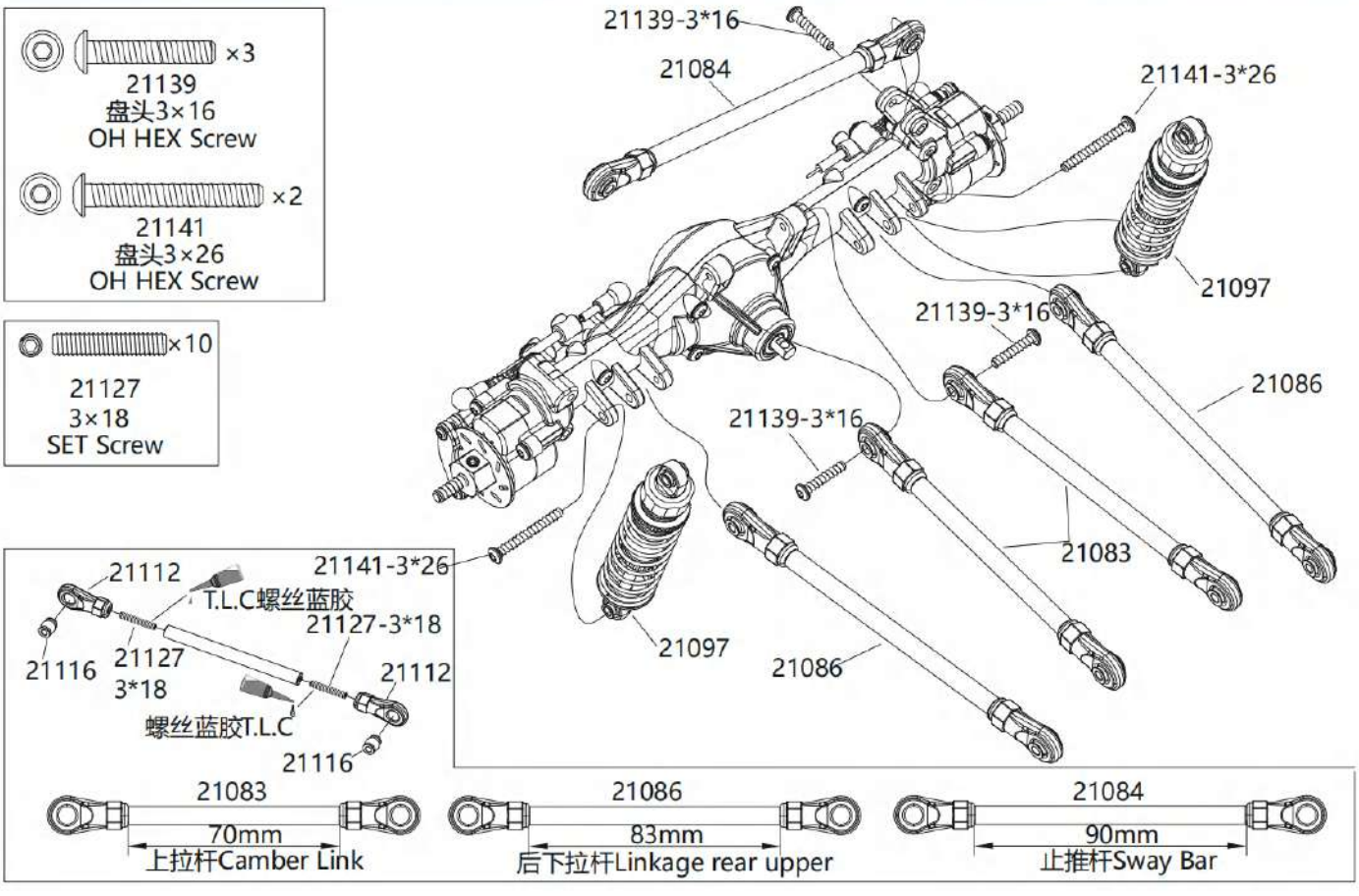
Shock Absorber Front&Rear 避震器 前/后



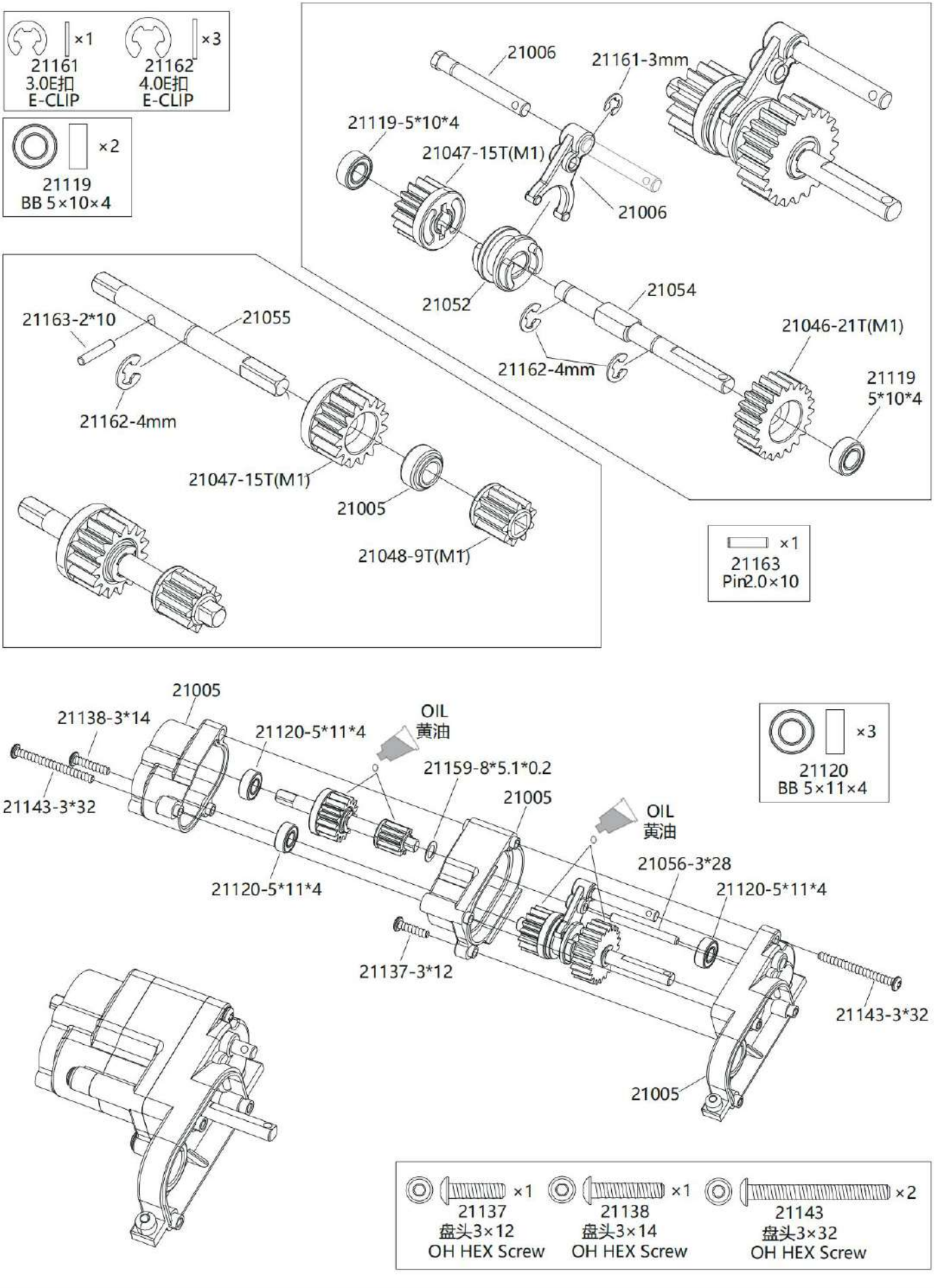
Front Portal Assembly Linkage Shock Installation 前桥组拉杆、避震器安装



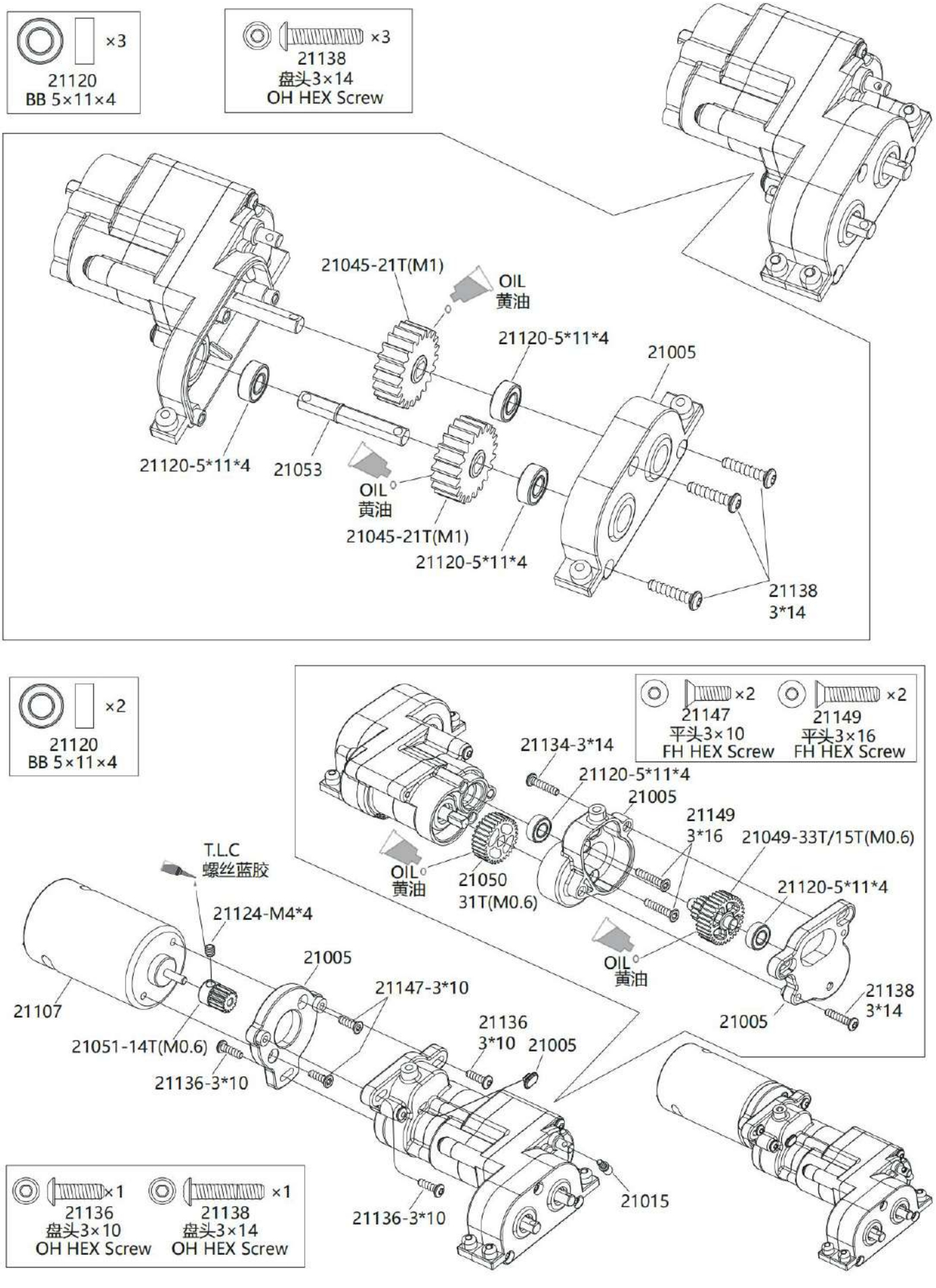
Rear Portal Assembly Linkage Shock Installation 后桥组拉杆、避震器安装



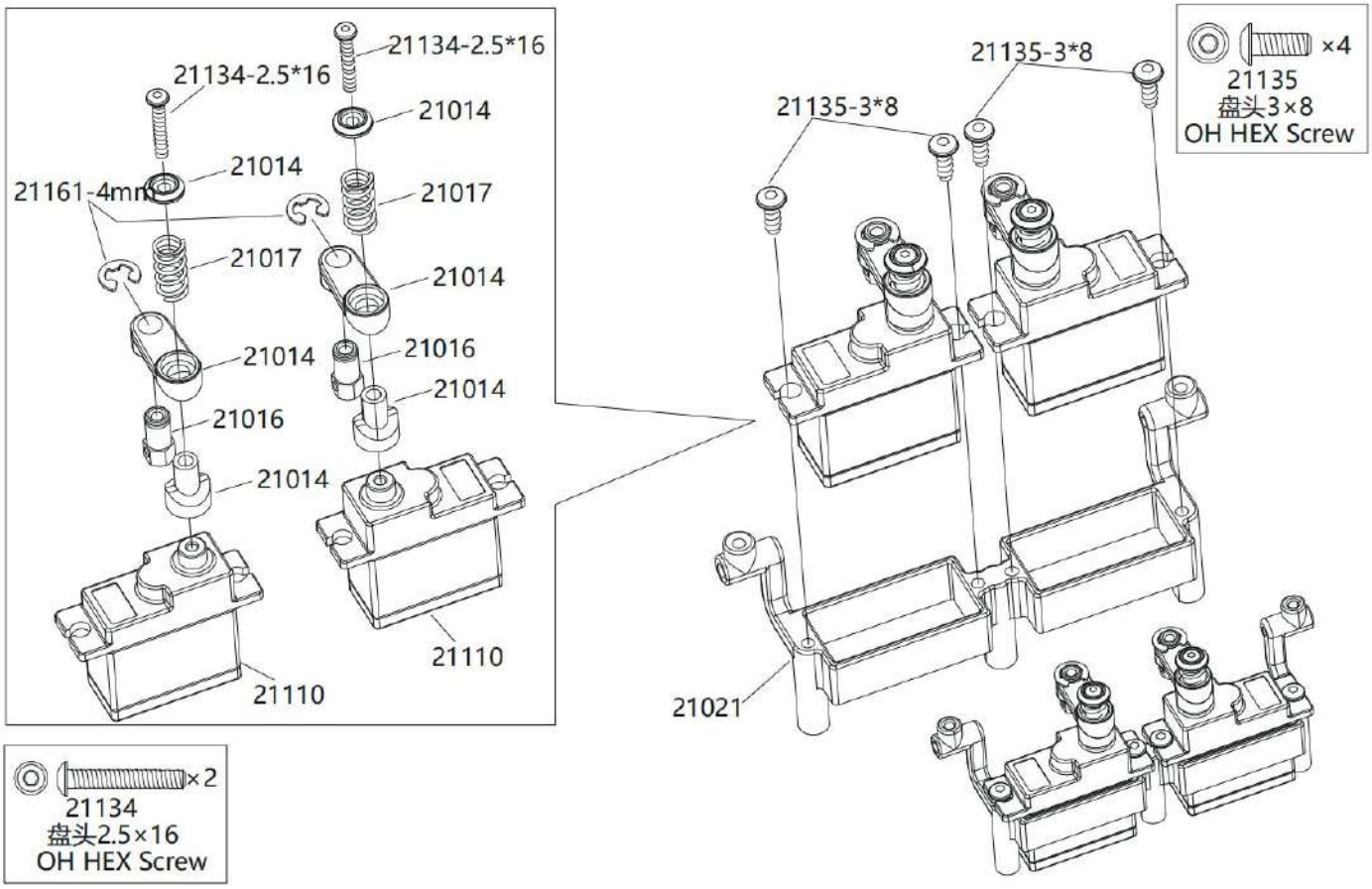
Gearbox Assembly 波箱组装



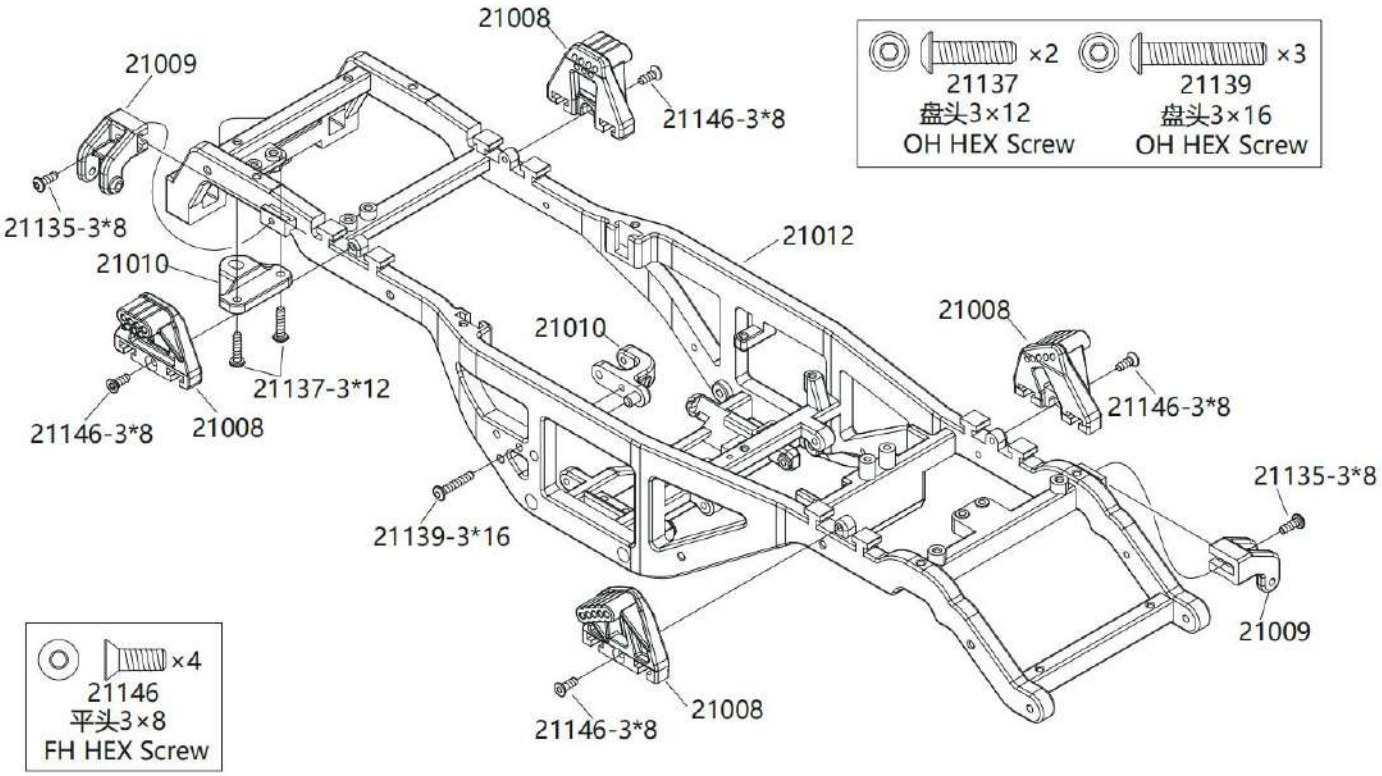
Gearbox Assembly 波箱组装



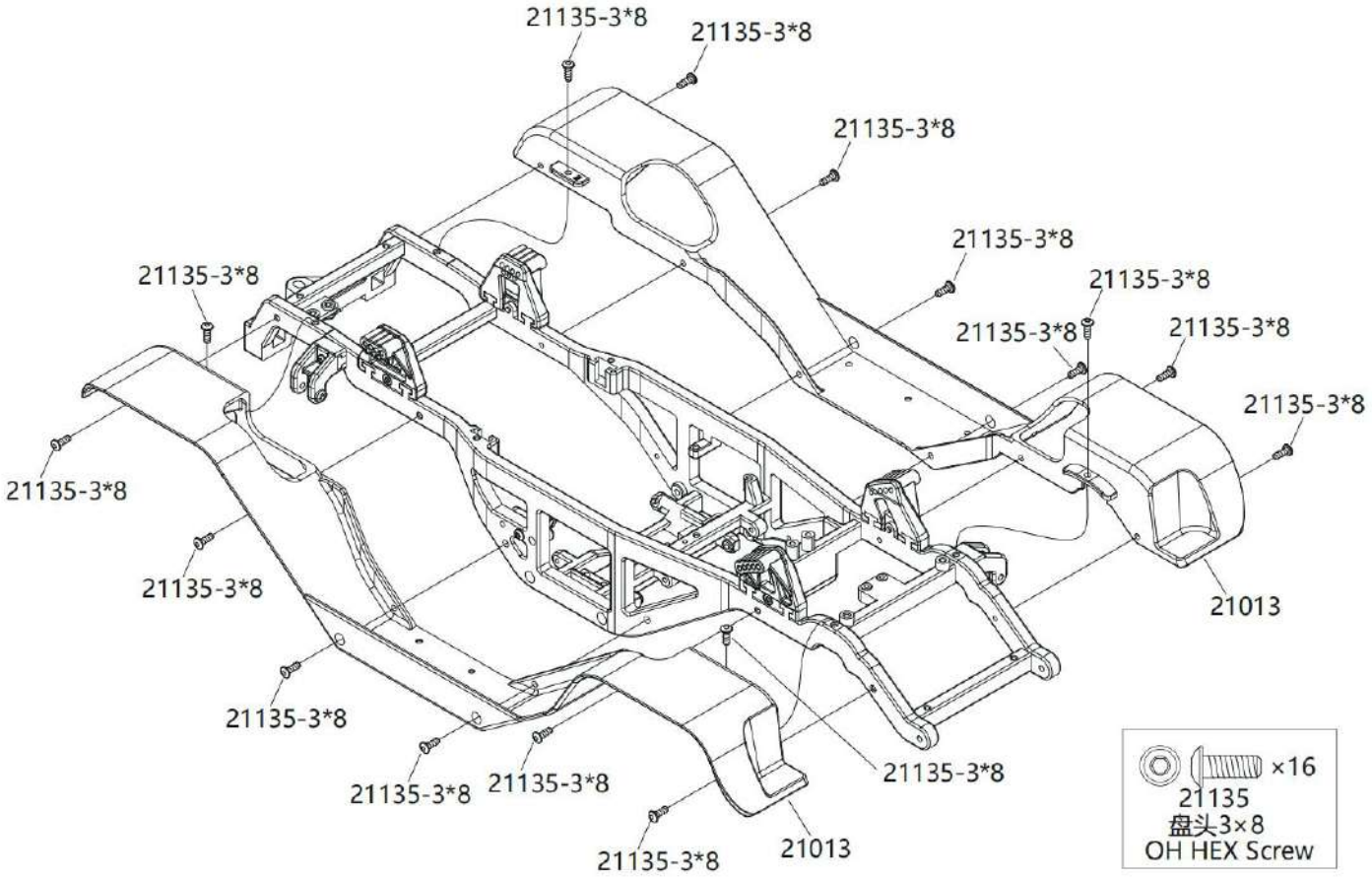
Differential Lock Servo Assembly 差速锁舵机组装

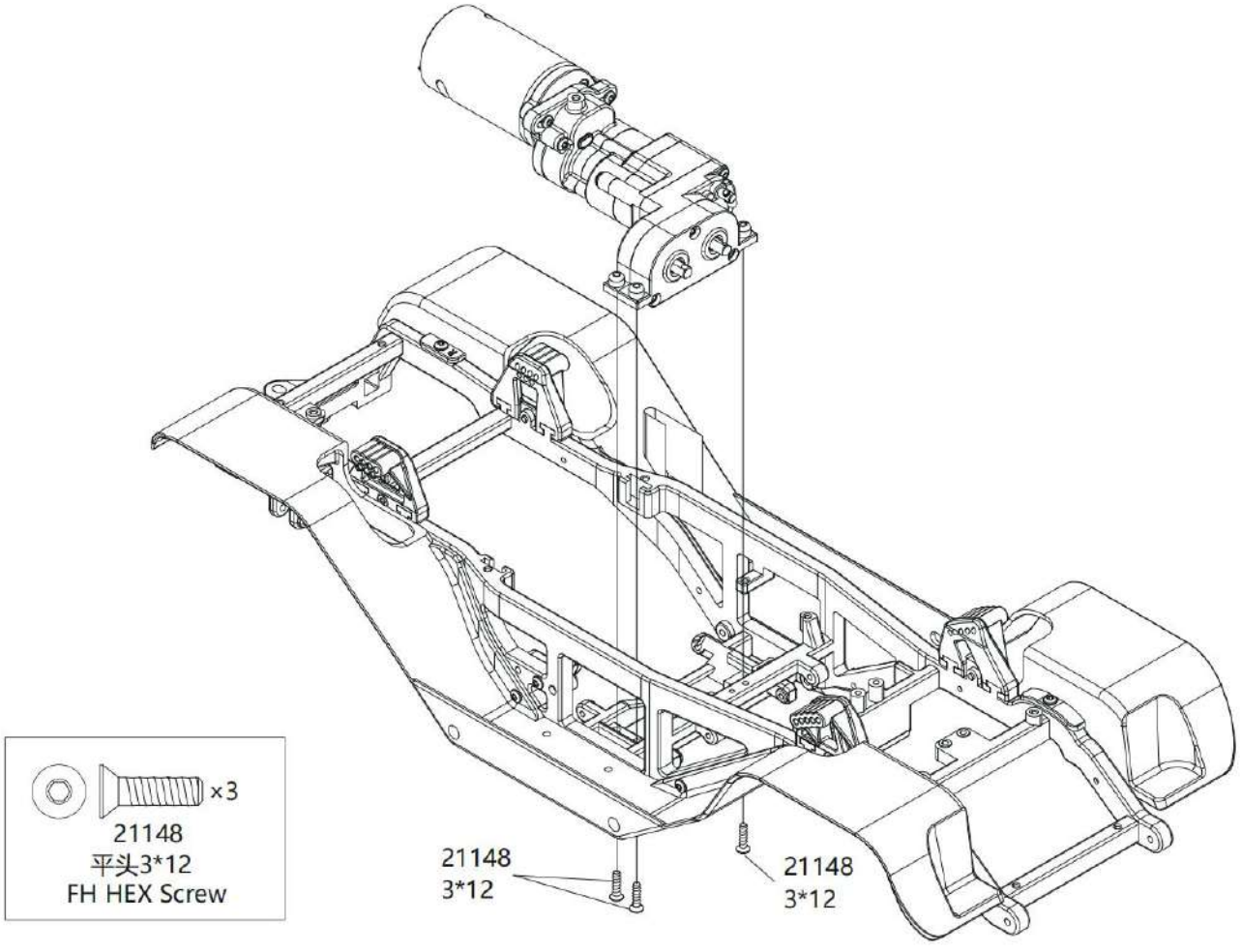


Chassis Assembly 车架中段组装

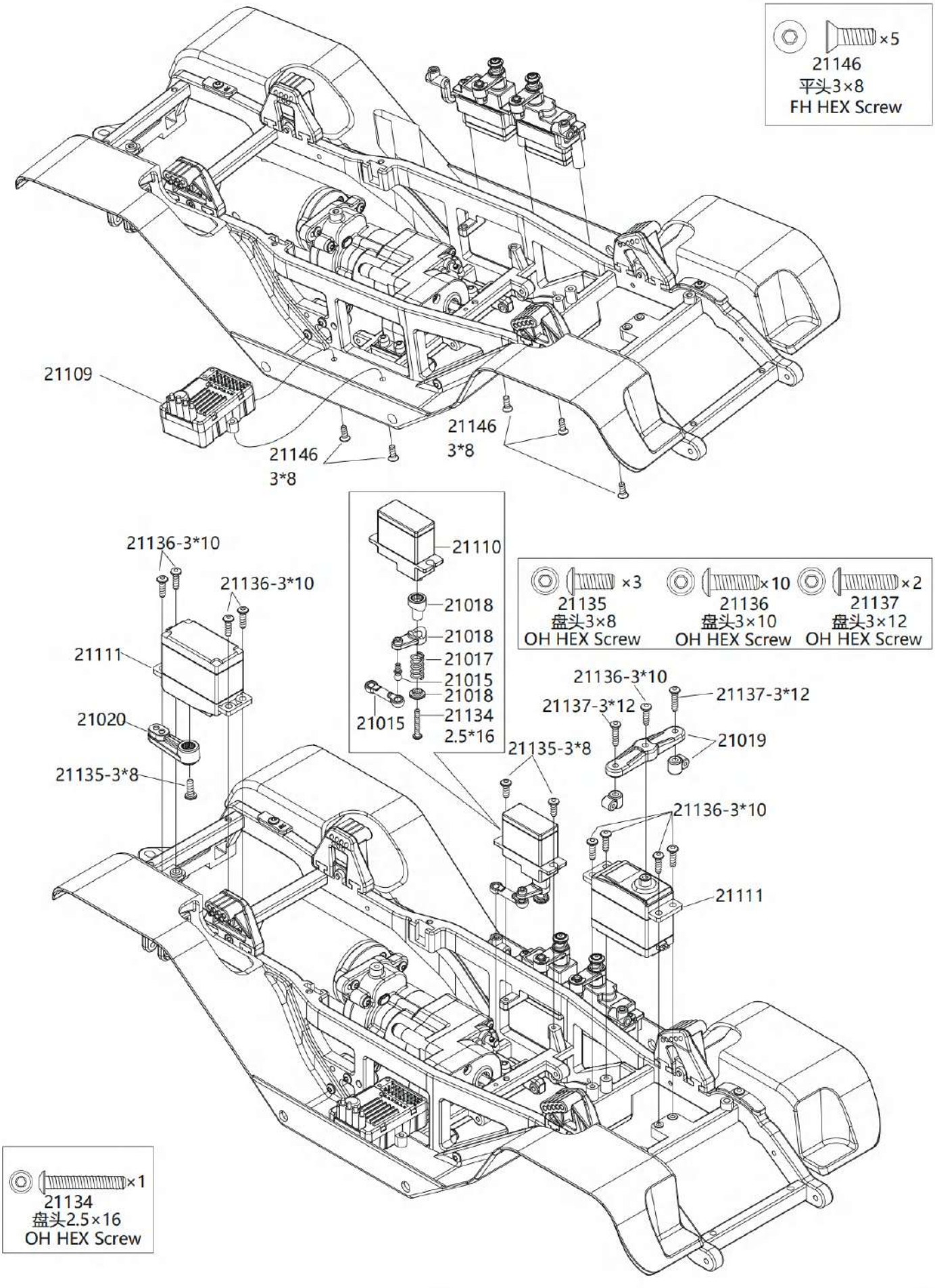


Chassis Assembly 车架中段组装

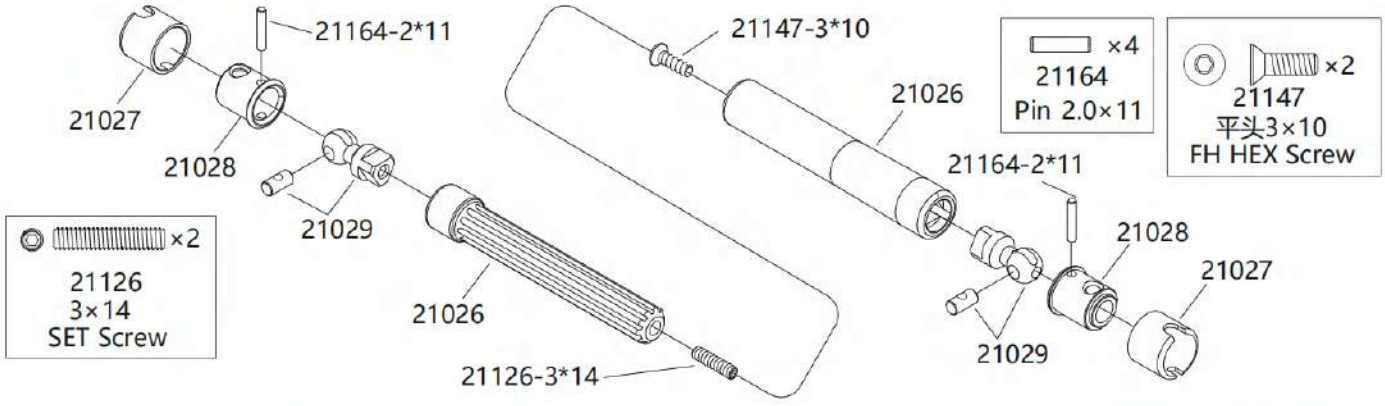




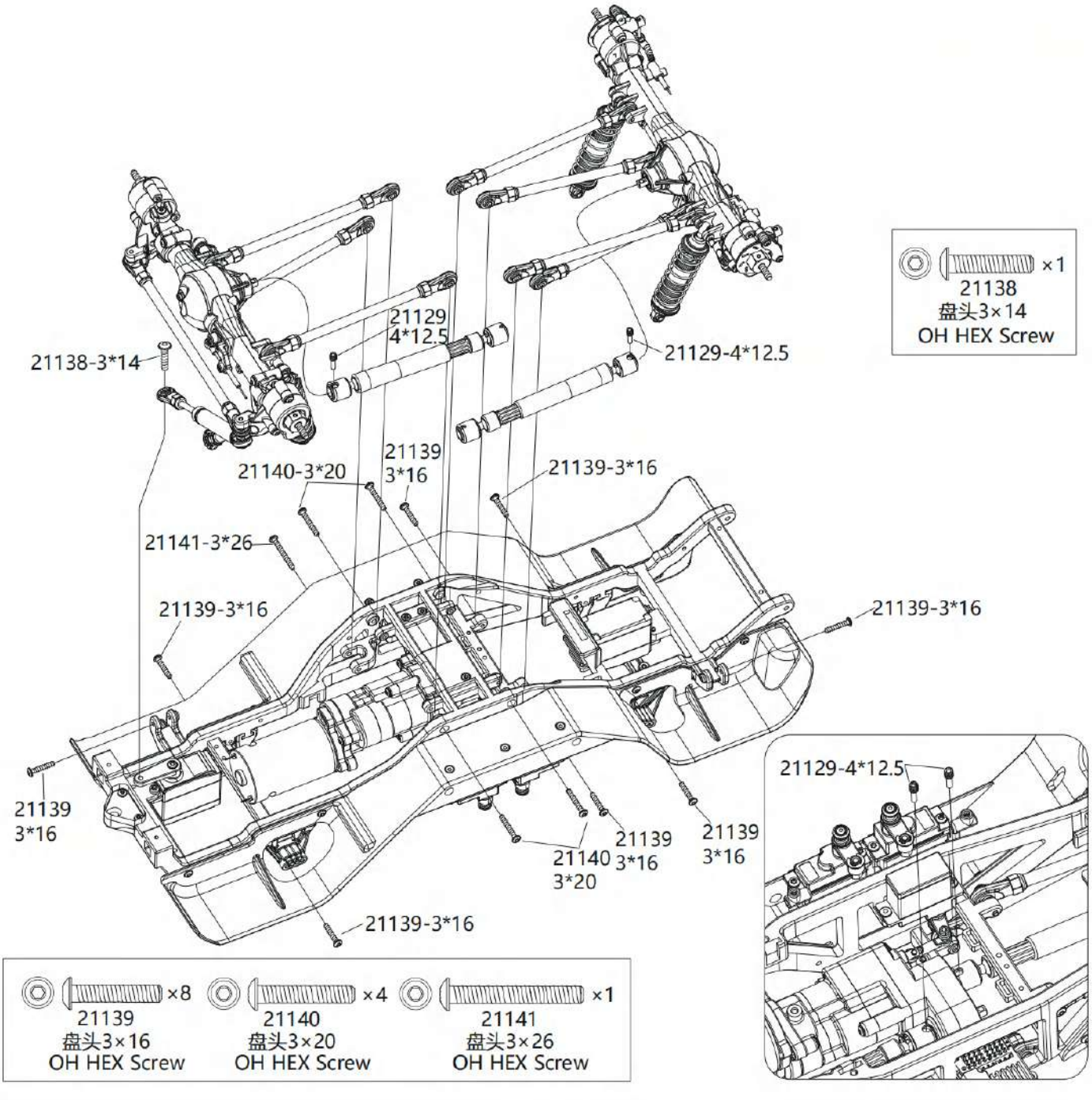
Chassis Assembly 车架中段组装



Vertical Universal Shaft Assembly 纵万向轴组装 前/后



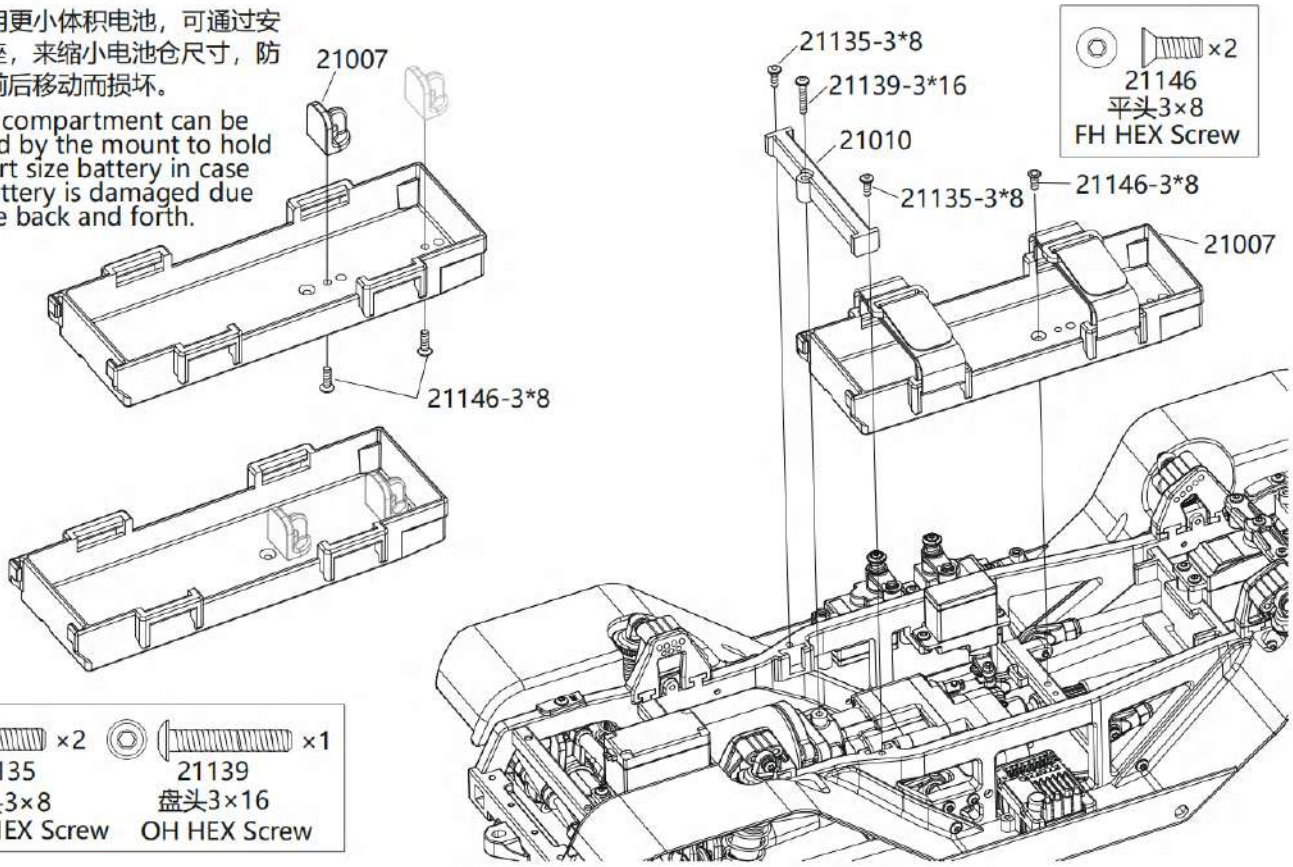
Modular Assembly 前后桥总组装



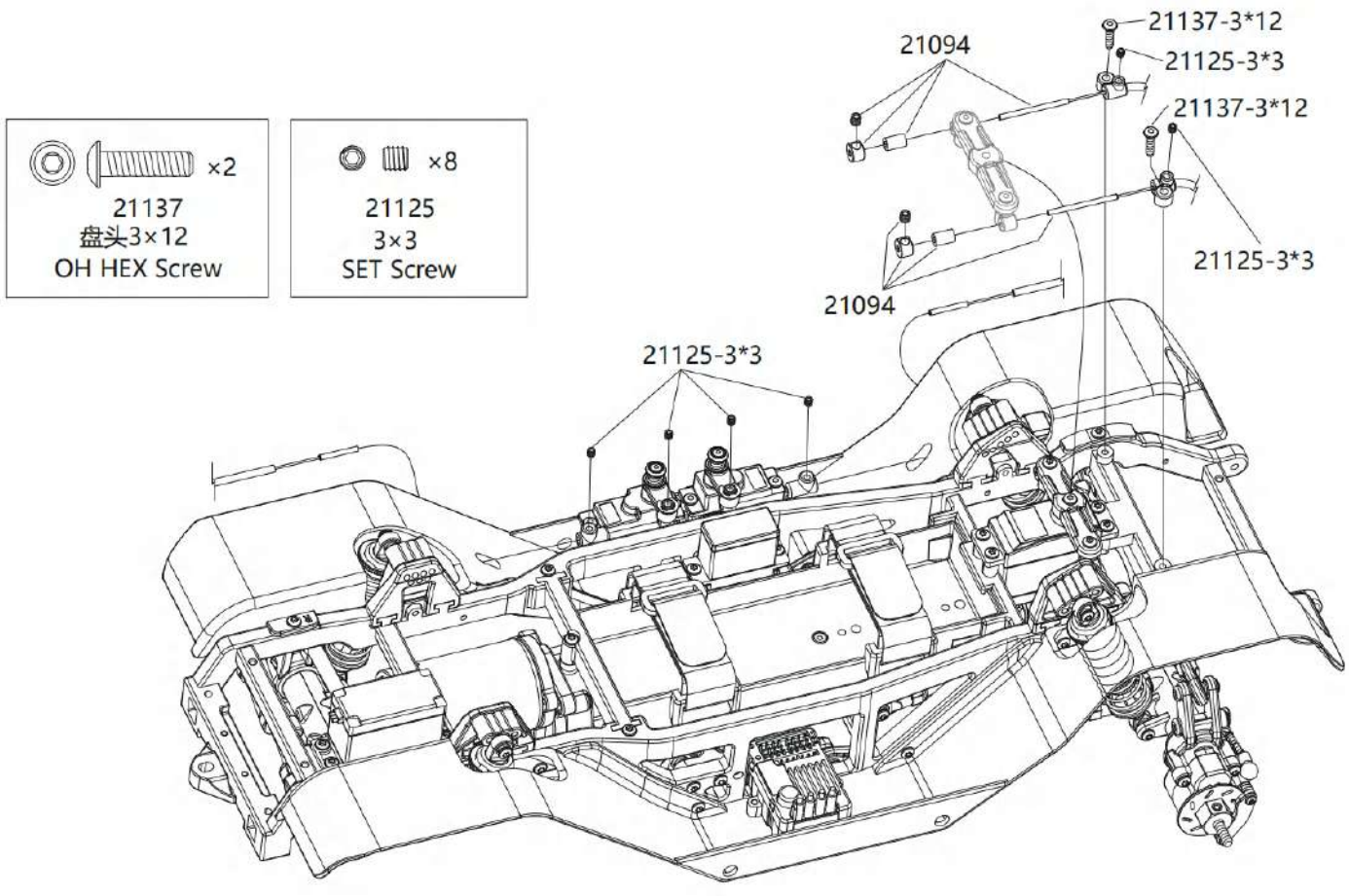
Battery Box Assembly 电池盒组装

如果使用更小体积电池，可通过安装固定座，来缩小电池仓尺寸，防止电池前后移动而损坏。

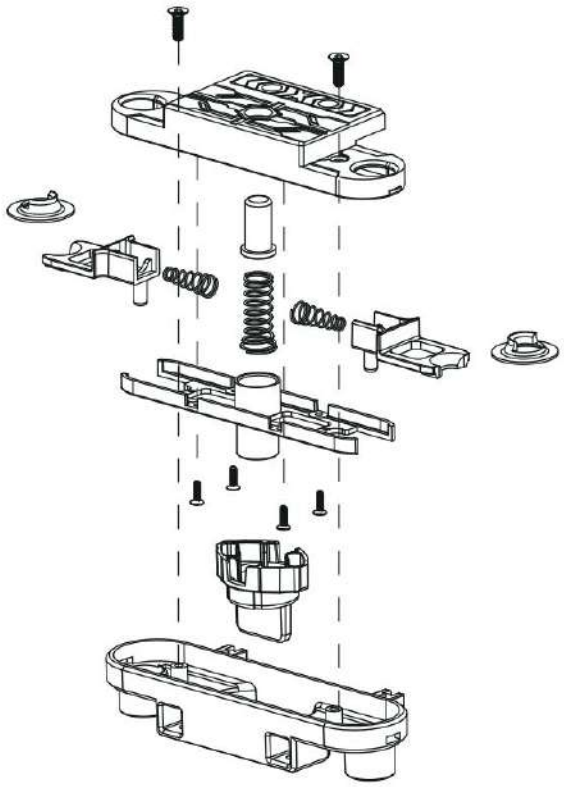
Battery compartment can be adjusted by the mount to hold the short size battery in case your battery is damaged due to move back and forth.



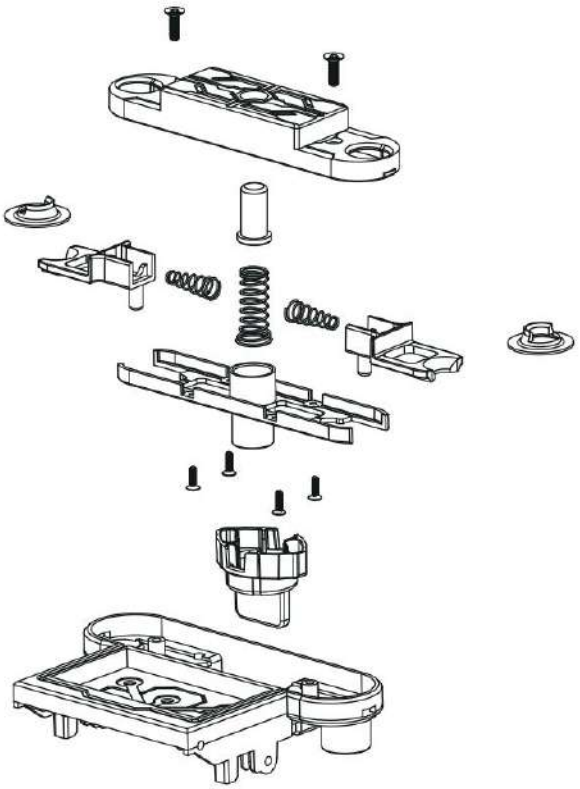
Differential Lock Wires Fixure 差速锁拉绳安装



Quick Release Assembly 前后快拆装置组装

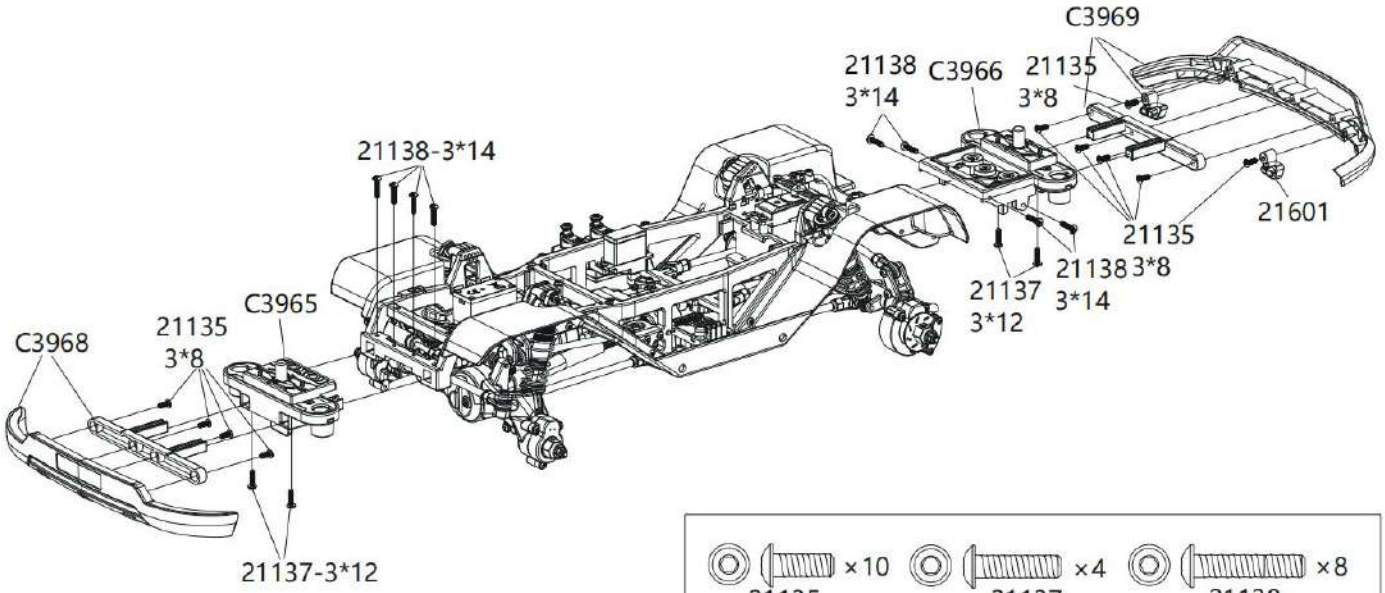


C3965



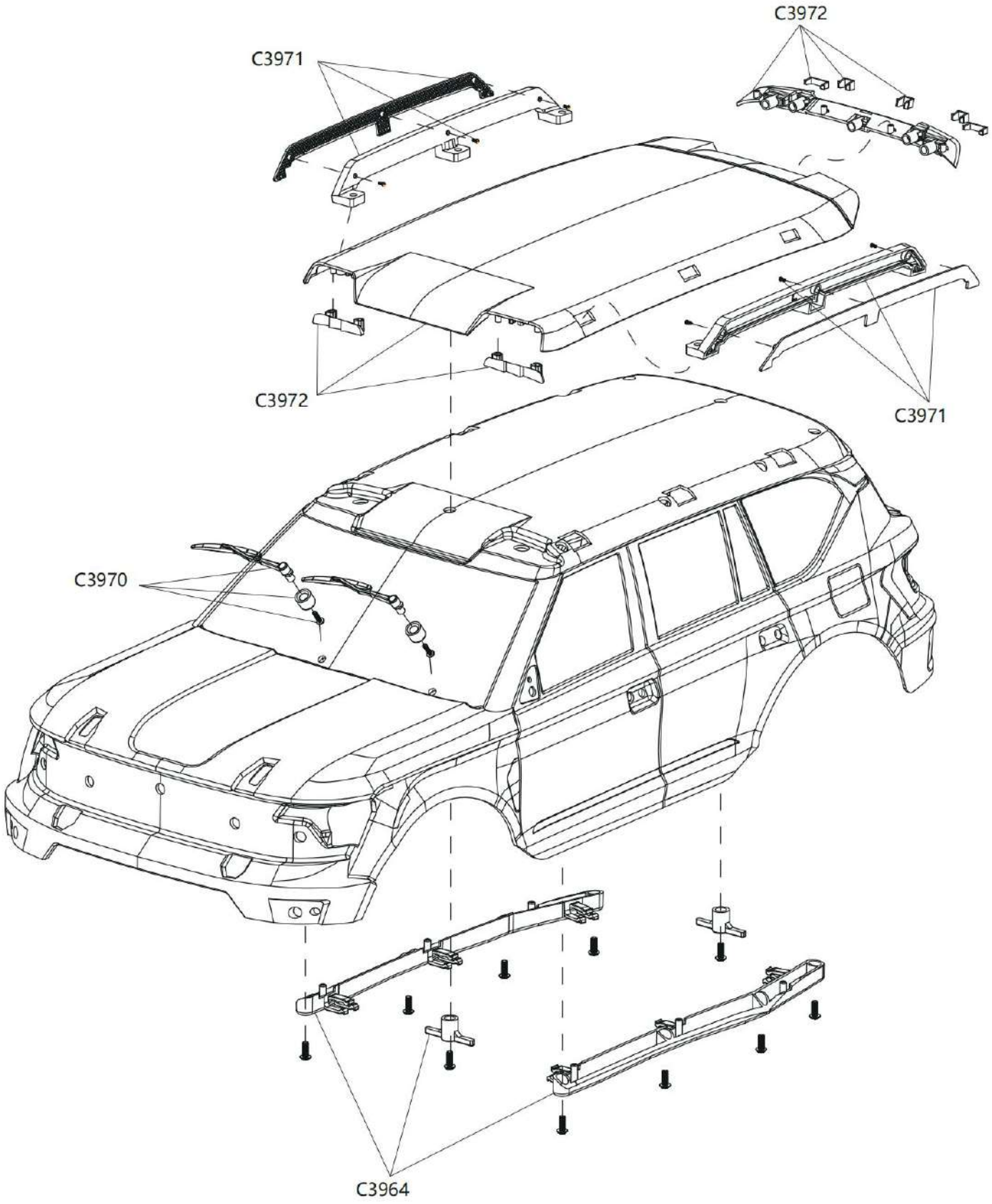
C3966

Front/Rear Bumper Assembly 前后防撞安装

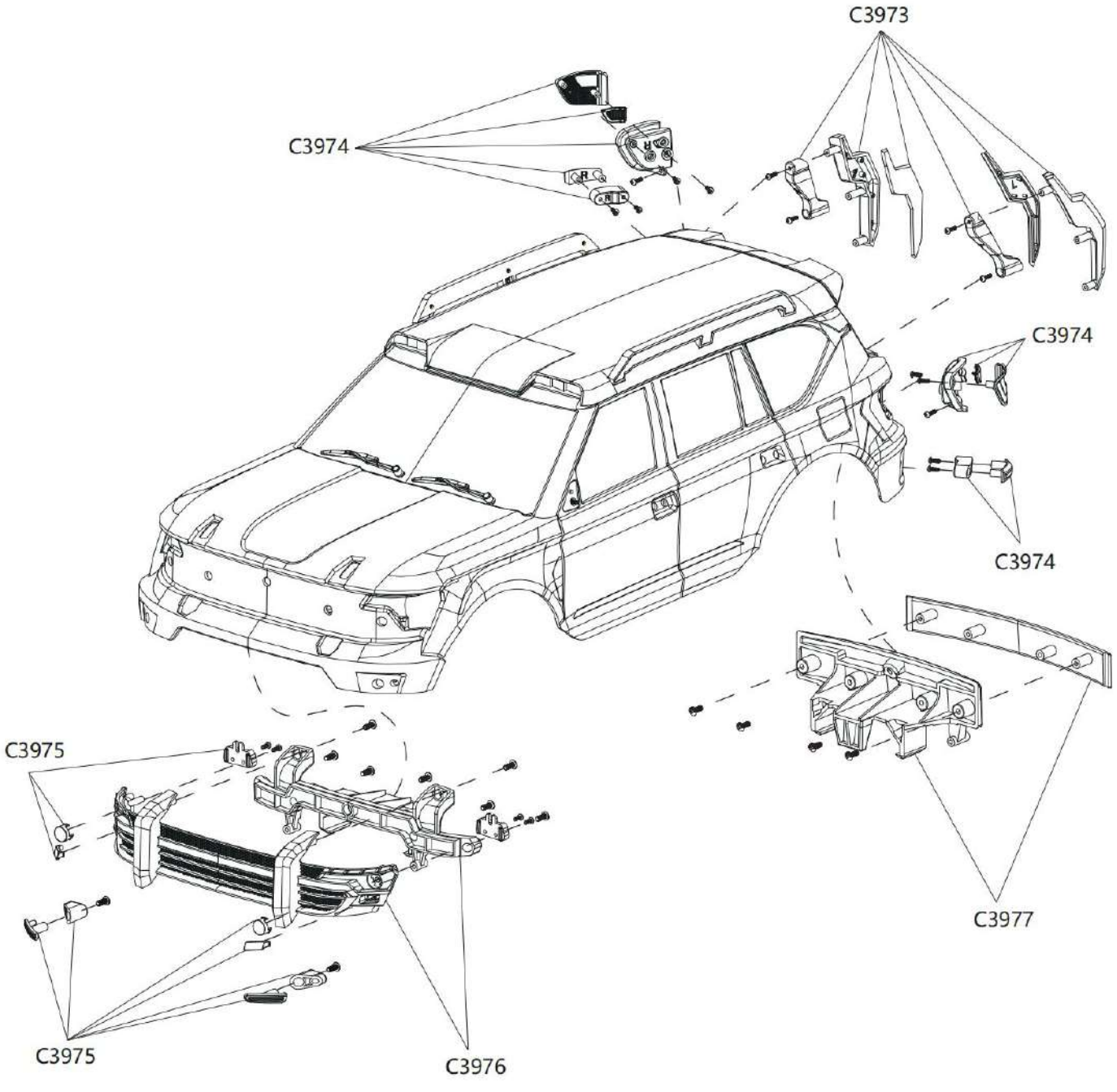


×10	×4	×8
21135	21137	21138
盘头3×8	盘头3×12	盘头3×14
OH HEX Screw	OH HEX Screw	OH HEX Screw

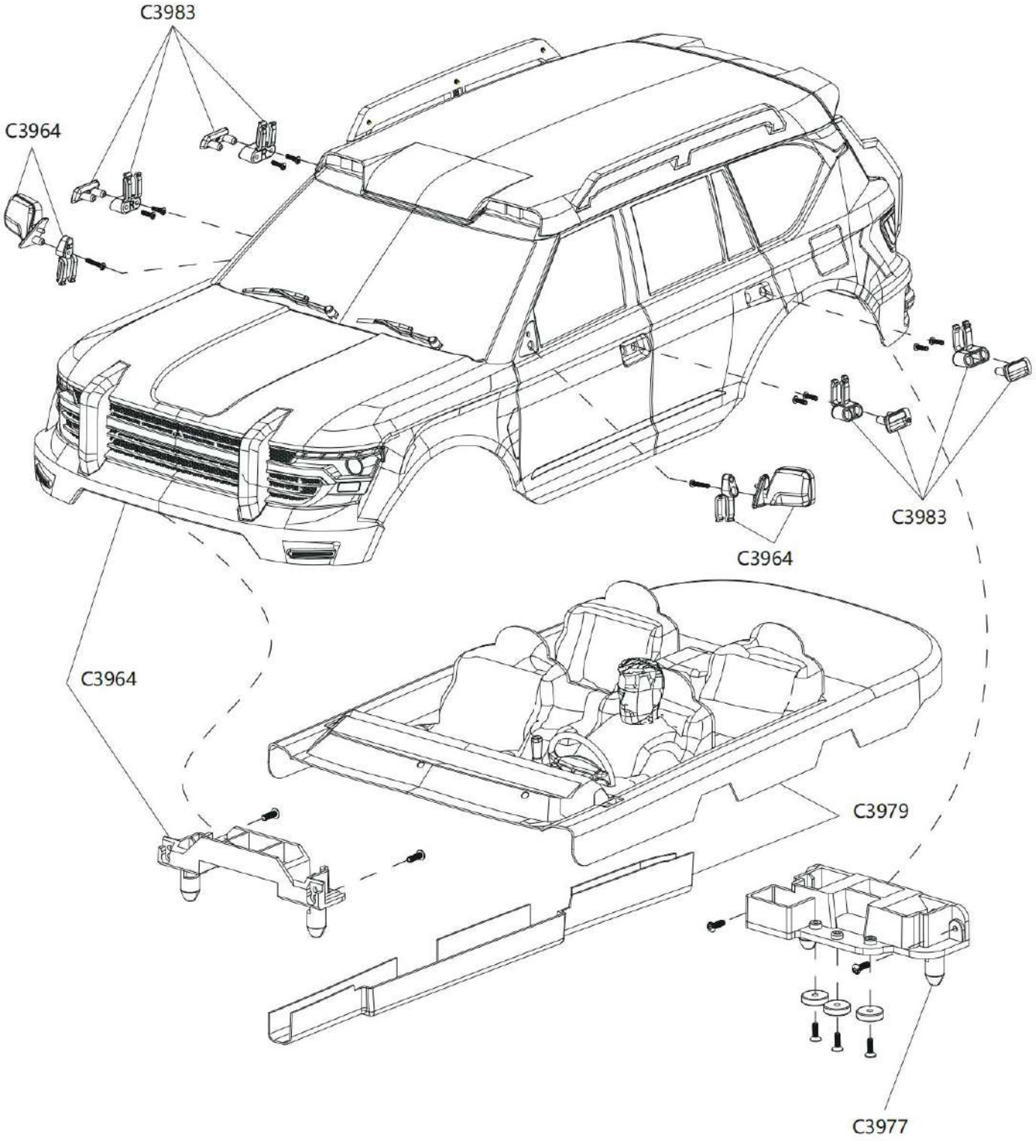
Semi-finished Shell Body Set A 车壳半成品A



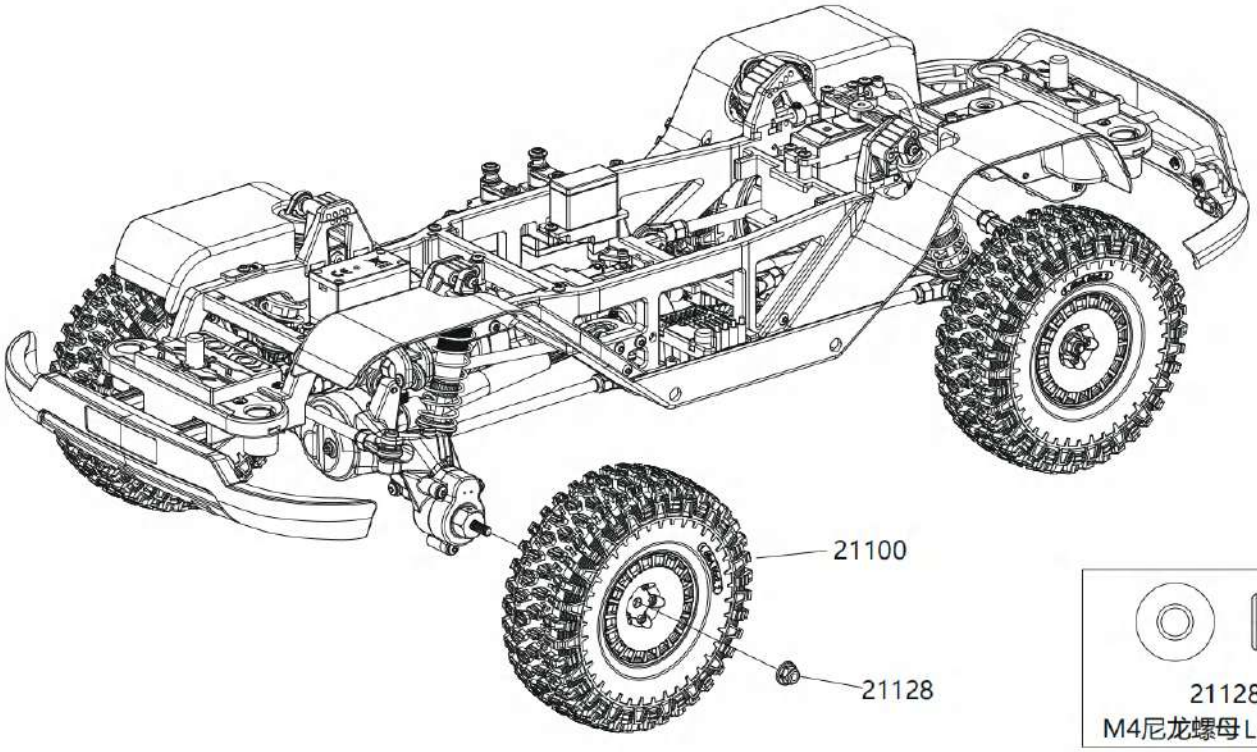
Semi-finished Shell Body Set B 车壳半成品B



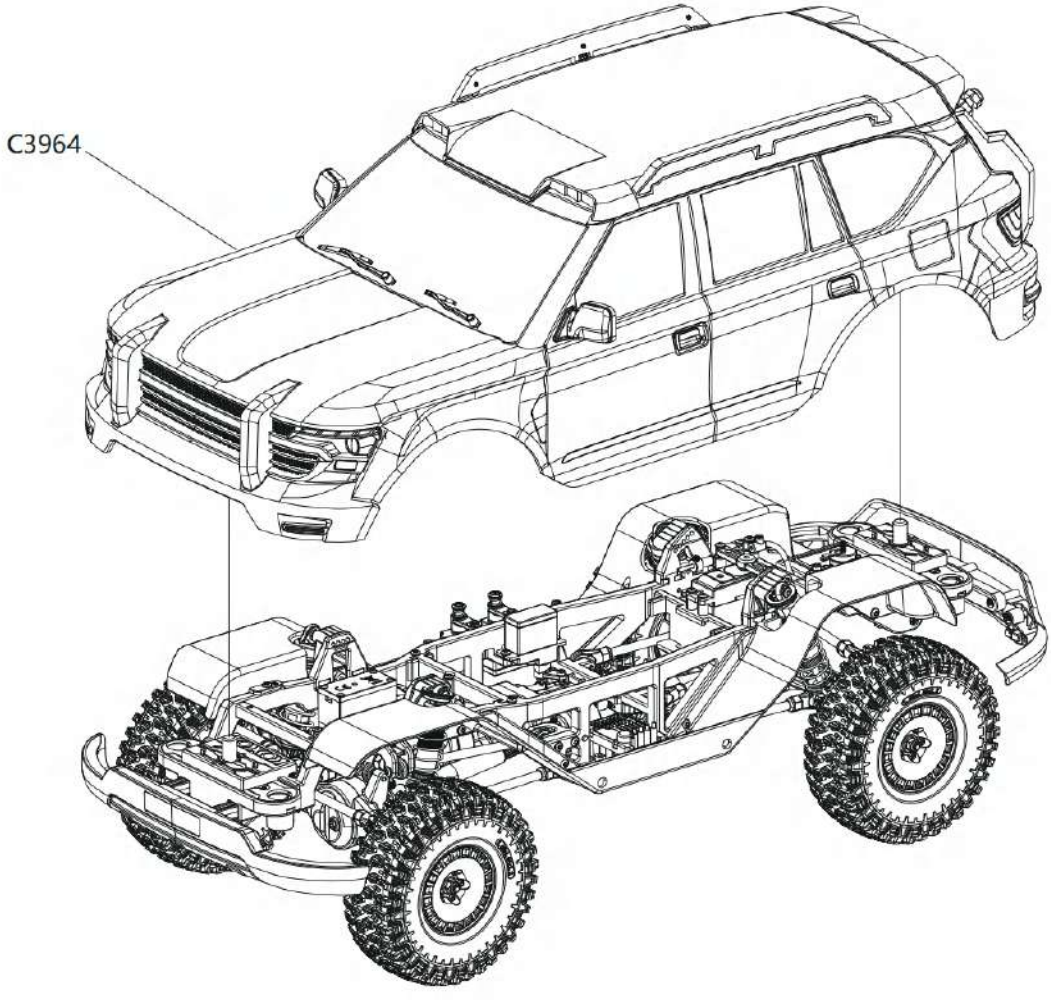
Finished Shell Body Set 车壳成品



Rear Portal Assembly 后桥刹车组装



Body Assembly 车壳组装



Parts List 配件表

21000

前桥管
Front Portal Housing

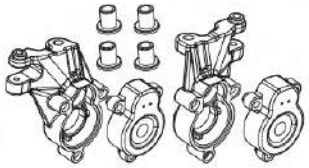
21001

后桥管
Rear Portal Housing

21002

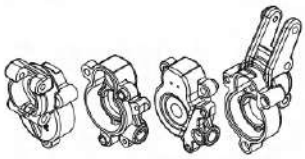
C座
C Hub set

21003



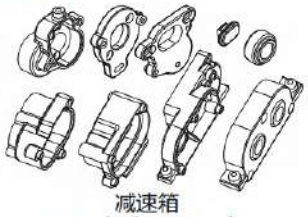
转向座左/右
Spinde Lefs/Right

21004



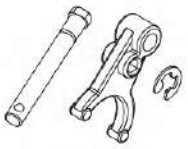
后轮轴座
Rear Hub

21005



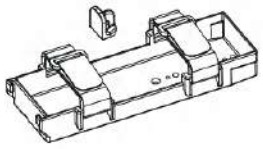
减速箱
Transmission Gearbox

21006



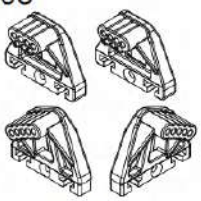
高低速拨叉
Speed Conversion Paddles

21007



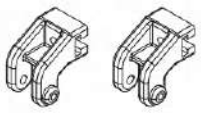
电池盒
Battery Case

21008



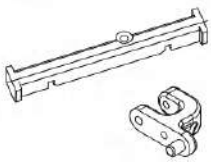
避震架
Shock Absorber Mount

21009



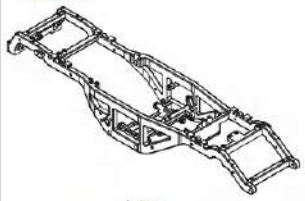
止推杆固定座
Panhard Bar Mount

21010



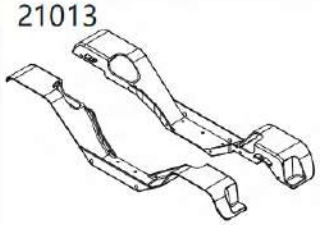
大梁支撑/固定座
Chassis Frame Support/Mount

21012



大梁
Chassis Frame

21013



左右侧板
Left and Right Guard Board

21014

差速锁伺服臂组
Differential lock Servo Horn set

21015

高低速球头拉杆
High-Low speed pull rod link

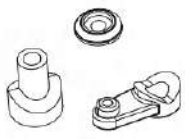
21016

拉线固定座
Differential Lock Wire Fixed Post

21017

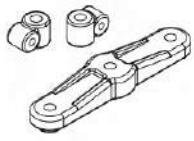
舵保弹簧
Servo Saver Spring

21018



高低速伺服臂
High-Low Speed Servo Horn

21019

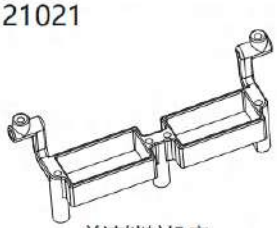


后刹车伺服臂
Rear Brake Servo Horn

21020

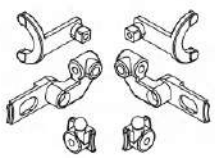
转向伺服臂25T
Steering Servo Horn 25T

21021



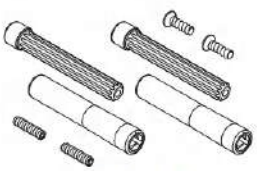
差速锁舵机座
Differential Lock Servo Mount

21024



差速锁配件组
Differential Lock Accessory set

21026



纵万向轴
Plastic Vetical Universal Shdft

21027

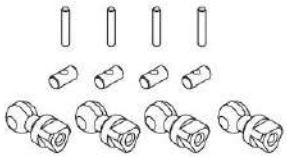
纵万向轴套
Center Universal Drive shaft Bushing

Parts List 配件表

21028

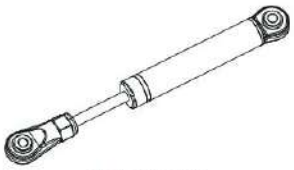
纵万向接杯
Center Universal Drive Cup

21029



纵万向接头
Center Universal Joint Coupler

21030



转向减震器
Steerung Shock Absorber

21031

差速壳
Differential Case

21032

差速齿轮组18T/13T
Differential Gears

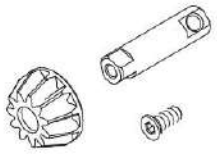
21033

从动齿轮34T
34T Gear

21034

差速器
Differential Set

21035

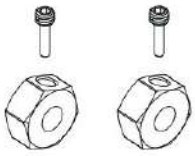


主动齿轮11T
11T Gear

21036

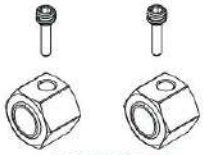
差速锁块
Differential Lock Mounting

21038



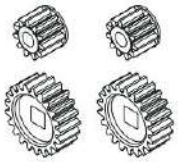
六角轮座-前
Front Wheel Hex

21039



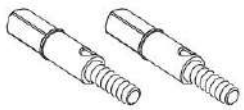
六角轮座-后
Rear Wheel Hex

21040



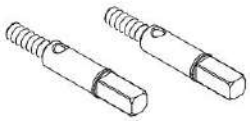
门桥齿轮11T/21T
Portal Axle Gears 11T/21T

21041



输出轮轴-前
Front Portal Axle Output Shaft

21042



输出轮轴-后
Rear Portal Axle Output Shaft

21043

横万向传动轴
Horizontal Universal Shaft

21044

后直轴
Rear Straight Axle Shaft

21045

波箱齿轮21T-M1.0（扁孔）
Gearbox 21T Gear

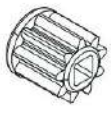
21046

波箱齿轮21T-M1.0（圆孔）
Gearbox 21T Gear

21047

波箱齿轮15T-M1.0
Gearbox 15T Gear

21048



波箱齿轮9T-M1.0
Gearbox 9T Gear

21049

波箱齿轮33T/15T-M0.6
Gearbox 33T/15T Gear

21050

波箱齿轮31T-M0.6
Gearbox 31T Gear

21051

马达齿14T-M0.6
14T pinion Gear

21052

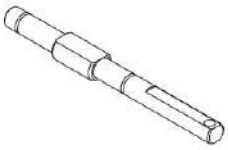
高低速换挡锁块
Speed Conversion Lock Block

Parts List 配件表

21053

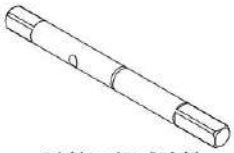
波箱输出轴
Gearbox Output Shaft

21054



波箱变速轴
Gearbox speed shift shaft

21055



波箱二级减速轴
Gearbox Secondary Reduction Shaft

21056

波箱销子3*28
Pins for Gearbox 3*28

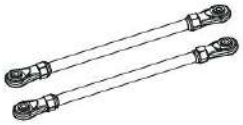
21083

上拉杆-70mm
Camber Link

21084

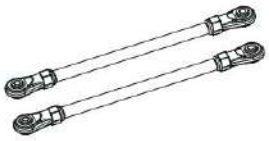
止推杆-90mm
Sway Bar

21085



前下拉杆-85mm
Linkage front lower

21086



后下拉杆-83mm
Linkage rear upper

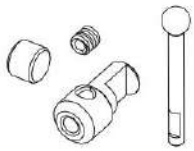
21087

转向拉杆-109mm
Steering Linkage

21088

伺服拉杆
Servo Linkage

21089

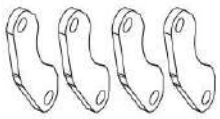


刹车凸轮轴组
Brake Cam Shaft Set

21090

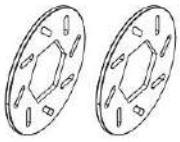
刹车夹片
Brake Pad Plates

21091



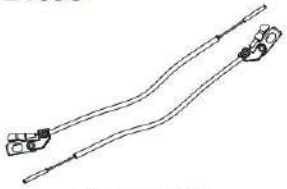
刹车摩擦片
Brake Pad

21092



刹车碟
Brake Dis

21093



差速锁拉线组
Differntial Lock Wiresf

21094

后刹车拉线
Rear Brake Cable

21095

避震弹簧
Shock Absorber Springs

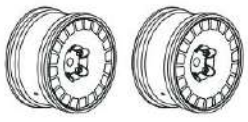
21096

避震轴
Shock Absorber Shaft

21097

避震器组
Shock Absorber Set

21098



轮框
Gray Rims

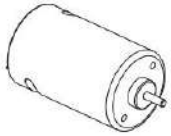
21099

轮胎皮/海绵
Tires/Foams

21100

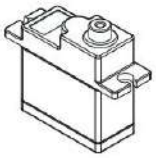
轮胎组
Wheels

21107



550碳刷马达
Brushed Motor

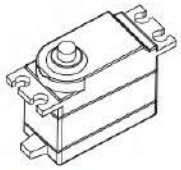
21110



17G舵机
Servo

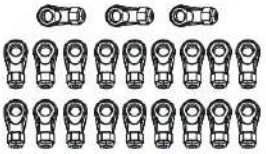
Parts List 配件表

21111



15KG舵机
Servo

21112

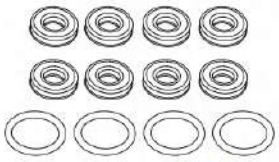


拉杆球头座组
Ball Linkage Ends

21113

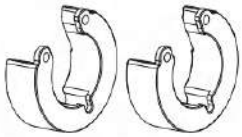
转减弹簧
Steering Shock Spring

21114



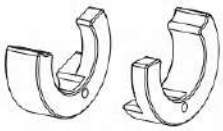
避震器密封圈
Shock Absorber Seal O-Ring X-Ring

21174



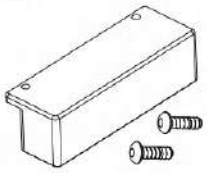
前桥配重
Front Axle Counterweight

21175



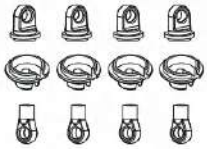
后桥配重
Rear Axle Counterweight

21176



大梁前后配重
Chassis Beam F/R Counterweights

21178



避震配件包
Shock parts pack

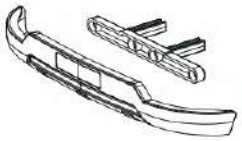
21179

遥控/接收机
Transmitter/Receiver

21180

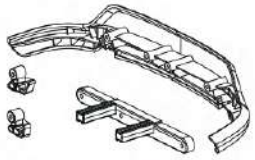
电调60A
ESC 60A

C3968



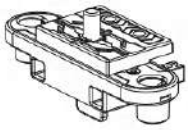
前防撞组件
Front Bumper Set

C3969



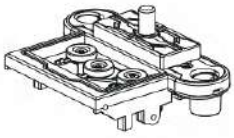
后防撞组件
Rear Bumper Set

C3965



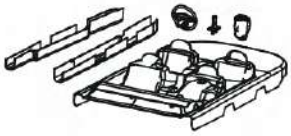
前快拆锁止装置
Front Body Lock Set Assembly

C3966



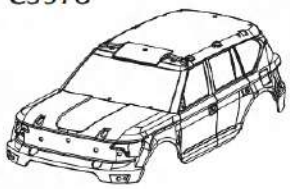
后快拆锁止装置
Rear Body Lock Set Assembly

C3979



驾驶舱组件
Cockpit Set

C3978

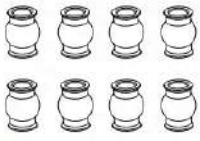


透明车壳
Clear Car Body

C3964

车壳组
Car Body Assembly

21116



球头5.8-7.4
Hollow Steel Pivot Balls 5.8-7.4

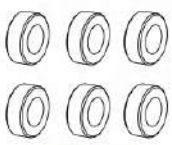
21117

球头6.8-7.4
Hollow Steel Pivot Balls 6.8-7.4

21118

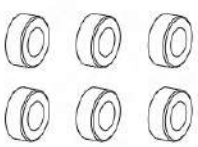
球头6.8-7.9
Hollow Steel Pivot Balls 6.8-7.9

21119



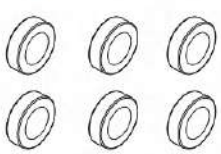
轴承5*10*4
Ball Bearing

21120



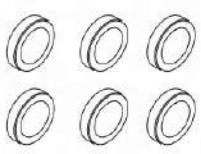
轴承5*11*4
Ball Bearing

21121



轴承6*12*4
Ball Bearing

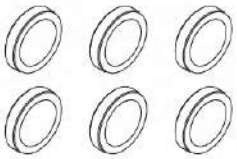
21122



轴承12*18*4
Ball Bearing

Parts List 配件表

21123



轴承15*21*4
Ball Bearing

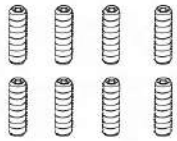
21124

机米4*4
Headless Screws

21125

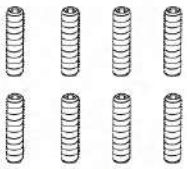
机米3*3
Headless Screws

21126



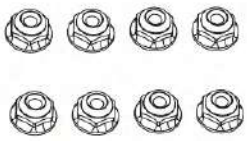
机米3*14
Headless Screws

21127



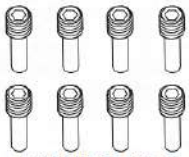
机米3*20
Headless Screws

21128



M4法兰螺母
Flange Lock Nuts

21129

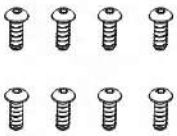


螺丝轴M4-12.5
Screw Axle

21130

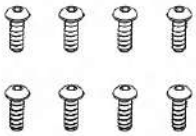
螺丝轴M4-11.5
Screw Axle

21131



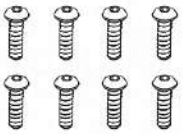
盘头内六角螺丝M2*6
Button Head Screws

21132



盘头内六角螺丝M2.5*8
Button Head Screws

21133



盘头内六角螺丝M2.5*10
Button Head Screws

21134

盘头内六角螺丝M2.5*16
Button Head Screws

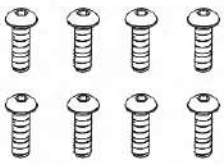
21135

盘头内六角螺丝M3*8
Button Head Screws

21136

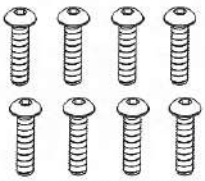
盘头内六角螺丝M3*10
Button Head Screws

21137



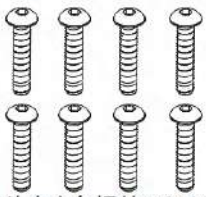
盘头内六角螺丝M3*12
Button Head Screws

21138



盘头内六角螺丝M3*14
Button Head Screws

21139



盘头内六角螺丝M3*16
Button Head Screws

21140

盘头内六角螺丝M3*20
Button Head Screws

21141

盘头内六角螺丝M3*26
Button Head Screws

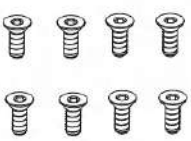
21142

盘头内六角螺丝M3*28
Button Head Screws

21143

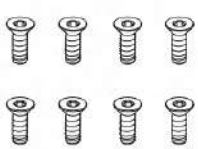
盘头内六角螺丝M3*32
Button Head Screws

21144



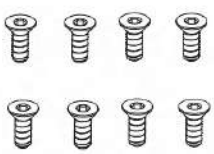
平头内六角螺丝M2.5*6
Flat Head Screws

21145



平头内六角螺丝M2.5*8
Flat Head Screws

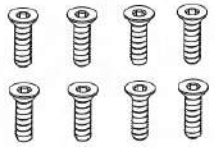
21146



平头内六角螺丝M3*8
Flat Head Screws

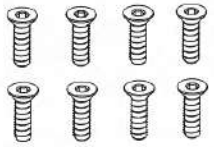
Parts List 配件表

21147



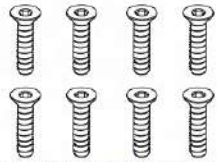
平头内六角螺丝M3*10
Flat Head Screws

21148



平头内六角螺丝M3*12
Flat Head Screws

21149

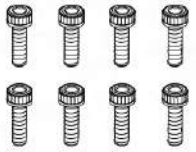


平头内六角螺丝M3*16
Flat Head Screws

21150

杯头内六角螺丝M2.5*8
Cap Head Screws

21151



杯头内六角螺丝M3*14
Cap Head Screws

21152

杯头内六角螺丝M4*40
Cap Head Screws

21153

盘头十字自攻牙螺丝ST2*6
Button head Self-tapping screws

21154

盘头十字自攻牙螺丝ST2.5*6
Button head Self-tapping screws

21155

盘头十字自攻牙螺丝ST2.5*8
Button head Self-tapping screws

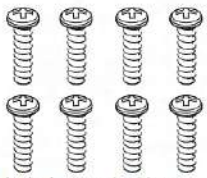
21156

盘头十字自攻牙螺丝ST3*6
Button head Self-tapping screws

21157

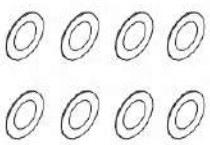
盘头十字自攻牙螺丝ST3*8
Button head Self-tapping screws

21158



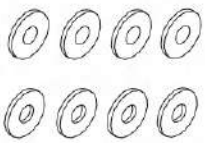
盘头十字自攻牙螺丝ST3*10
Button head Self-tapping screws

21159



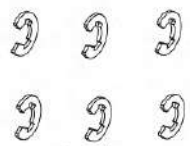
垫片8*5.1*0.2
Shims

21160



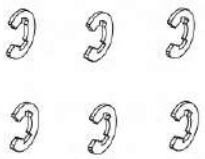
垫片8*3.1*0.5
Shims

21161



3.0E扣
E Clip

21162

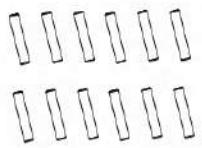


4.0E扣
E Clip

21163

2*10销子
Pins

21164

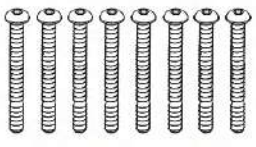


2*11销子
Pins

21165

盘头内六角螺丝M2*4
Button Head Screws

21166

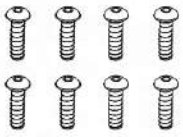


盘头内六角螺丝M3*30
Button Head Screws

21172

避震弹簧
Shock Absorber Springs

21616



盘头内六角螺丝M2*8
Button Head Screws

21617

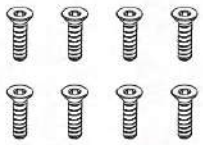
盘头内六角螺丝M2*12
Button Head Screws

21618

盘头十字螺丝M2*3
Button Head Taping Screw

Parts List 配件表

21619



平头内六角螺丝M2*8
Button Head Screws

APSC21000	Front Portal Housing	前桥管
APSC21001	Rear Portal Housing	后桥管
APSC21002	C Hub set	C座
APSC21003	Spinde Lefs/Right	转向座左/右
APSC21004	Rear Hub	后轮轴座
APSC21005	Transmission Gearbox	减速箱
APSC21006	Speed Conversion Paddles	高低速拨叉
APSC21007	Battery Case	电池盒
APSC21008	Shock Absorber Mount	避震架
APSC21009	Panhard Bar Mount	止推杆固定座
APSC21010	Chassis Frame Support/Mount	大梁支撑/固定座
APSC21012	Chassis Frame	大梁
APSC21013	Left and Right Guard Board	左右侧板
APSC21014	Differential lock Servo Horn set	差速锁伺服臂组
APSC21015	High-Low speed pull rod link	高低速球头拉杆
APSC21016	Differential Lock Wire Fixed Post	拉线固定座
APSC21017	Servo Saver Spring	舵保弹簧
APSC21018	High-Low Speed Servo Horn	高低速伺服臂
APSC21019	Rear Brake Servo Horn	后刹车伺服臂
APSC21020	Steering Servo Horn 25T	转向伺服臂25T
APSC21021	Differential Lock Servo Mount	差速锁舵机座
APSC21024	Differential Lock Accessory set	差速锁配件组
APSC21026	Plastic Vetical Universal Shdft	纵万向轴
APSC21027	Center Universal Drive shaft Bushing	纵万向轴套
APSC21028	Center Universal Drive Cup	纵万向接杯
APSC21029	Center Universal Joint Coupler	纵万向接头
APSC21030	Steerung Shock Absorber	转向减震器
APSC21031	Differential Case	差速壳
APSC21032	Differential Gears	差速齿轮组18T/13T
APSC21033	34T Gear	从动齿轮34T
APSC21034	Differential Set	差速器
APSC21035	11T Gear	主动齿轮11T
APSC21036	Differential Lock Mounting	差速锁块
APSC21038	Front Wheel Hex	六角轮座-前
APSC21039	Rear Wheel Hex	六角轮座-后
APSC21040	Portal Axle Gears 11T/21T	门桥齿轮11T/21T
APSC21041	Front Portal Axle Output Shaft	输出轮轴-前
APSC21042	Rear Portal Axle Output Shaft	输出轮轴-后
APSC21043	Horizontal Universal Shaft	横万向传动轴
APSC21044	Rear Straight Axle Shaft	后直轴
APSC21045	Gearbox 21T Gear	波箱齿轮21T-M1.0(扁孔)
APSC21046	Gearbox 21T Gear	波箱齿轮21T-M1.0(圆孔)
APSC21047	Gearbox 15T Gear	波箱齿轮15T-M1.0
APSC21048	Gearbox 9T Gear	波箱齿轮9T-M1.0
APSC21049	Gearbox 33T/15T Gear	波箱齿轮33T/15T-M0.6
APSC21050	Gearbox 31T Gear	波箱齿轮31T-M0.6
APSC21051	14T pinion Gear	马达齿14T-M0.6
APSC21052	Speed Conversion Lock Block	高低速换挡锁块
APSC21053	Gearbox Output Shaft	波箱输出轴
APSC21054	Gearbox speed shift shaft	波箱变速轴
APSC21055	Gearbox Secondary Reduction Shaft	波箱二级减速轴
APSC21056	Pins for Gearbox 3*28	波箱销子3*28
APSC21083	Camber LinkCamber Link	上拉杆-70mm
APSC21084	Sway Bar	止推杆-90mm
APSC21085	Linkage front lower	前下拉杆-85mm
APSC21086	Linkage rear upper	后下拉杆-83mm
APSC21087	Steering LinkageSteering Linkage	转向拉杆-109mm
APSC21088	Servo Linkage	伺服拉杆
APSC21089	Brake Cam Shaft Set	刹车凸轮轴组
APSC21090	Brake Pad Plates	刹车夹片
APSC21091	Brake Pad	刹车摩擦片
APSC21092	Brake Dis	刹车碟
APSC21093	Differntial Lock Wiresf	差速锁拉线组
APSC21094	Rear Brake Cable	后刹车拉线
APSC21095	Shock Absorber Springs	避震弹簧
APSC21096	Shock Absorber Shaft	避震轴
APSC21097	Shock Absorber Set	避震器组
APSC21098	Gray Rims	轮框
APSC21099	Tires/Foams	轮胎皮/海绵
APSC21100	Wheels	轮胎组
APSC21107	Brushed Motor	550碳刷马达
APSC21110	Servo	17G舵机
APSC21111	Servo	15KG舵机
APSC21112	Ball Linkage Ends	拉杆球头座组
APSC21113	Steering Shock Spring	转减弹簧
APSC21114	Shock Absorber Seal O-Ring X-Ring	避震器密封圈
APSC21174	Front Axle Counterweight	前桥配重
APSC21175	Rear Axle Counterweight	后桥配重
APSC21176	Chassis Beam F/R Counterweights	大梁前后配重
APSC21178	Shock parts pack	避震配件包
APSC21179	Transmitter/Receiver	遥控/接收机
APSC21180	ESC 60A	电调60A
APSC21116	Hollow Steel Pivot Balls 5.8-7.4	球头5.8-7.4
APSC21117	Hollow Steel Pivot Balls 6.8-7.4	球头6.8-7.4

Parts List 配件表

APSC21118	Hollow Steel Pivot Balls 6.8-7.9	球头6.8-7.9
APSC21119	Ball Bearing	轴承5*10*4
APSC21120	Ball Bearing	轴承5*11*4
APSC21121	Ball Bearing	轴承6*12*4
APSC21122	Ball Bearing	轴承12*18*4
APSC21123	Ball Bearing	轴承15*21*4
APSC21124	Headless Screws	机米4*4
APSC21125	Headless Screws	机米3*3
APSC21126	Headless Screws	机米3*14
APSC21127	Headless Screws	机米3*20
APSC21128	Flange Lock Nuts	M4法兰螺母
APSC21129	Screw Axle	螺丝轴M4-12.5
AOSC21130	Screw Axle	螺丝轴M4-11.5
APSC21131	Button Head Screws	盘头内六角螺丝M2*6
APSC21132	Button Head Screws	盘头内六角螺丝M2.5*8
APSC21133	Button Head Screws	盘头内六角螺丝M2.5*10
APSC21134	Button Head Screws	盘头内六角螺丝M2.5*16
APSC21135	Button Head Screws	盘头内六角螺丝M3*8
APSC21136	Button Head Screws	盘头内六角螺丝M3*10
APSC21137	Button Head Screws	盘头内六角螺丝M3*12
APSC21138	Button Head Screws	盘头内六角螺丝M3*14
APSC21139	Button Head Screws	盘头内六角螺丝M3*16
APSC21140	Button Head Screws	盘头内六角螺丝M3*20
APSC21141	Button Head Screws	盘头内六角螺丝M3*26
APSC21142	Button Head Screws	盘头内六角螺丝M3*28
APSC21143	Button Head Screws	盘头内六角螺丝M3*32
APSC21144	Flat Head Screws	平头内六角螺丝M2.5*6
APSC21145	Flat Head Screws	平头内六角螺丝M2.5*8
APSC21146	Flat Head Screws	平头内六角螺丝M3*8
APSC21147	Flat Head Screws	平头内六角螺丝M3*10
APSC21148	Flat Head Screws	平头内六角螺丝M3*12
APSC21149	Flat Head Screws	平头内六角螺丝M3*16
APSC21150	Cap Head Screws	杯头内六角螺丝M2.5*8
APSC21151	Cap Head Screws	杯头内六角螺丝M3*14
APSC21152	Cap Head Screws	杯头内六角螺丝M4*40
APSC21153	Button head Self-tapping screws	盘头十字自攻牙螺丝 ST2*6
APSC21154	Button head Self-tapping screws	盘头十字自攻牙螺丝 ST2.5*6
APSC21155	Button head Self-tapping screws	盘头十字自攻牙螺丝 ST2.5*8
APSC21156	Button head Self-tapping screws	盘头十字自攻牙螺丝 ST3*6
APSC21157	Button head Self-tapping screws	盘头十字自攻牙螺丝 ST3*8
APSC21158	Button head Self-tapping screws	盘头十字自攻牙螺丝 ST3*10
APSC21159	Shims	垫片8*5.1*0.2
APSC21160	Shims	垫片8*3.1*0.5
APSC21161	E Clip	3.0E扣
APSC21162	E Clip	4.0E扣
APSC21163	Pins	2*10销子
APSC21164	Pins	2*11销子
APSC21165	Button Head Screws	盘头内六角螺丝M2*4
APSC21166	Button Head Screws	盘头内六角螺丝M3*30
APSC21172	Shock Absorber Springs	避震弹簧
APSC21616	Button Head Screws	盘头内六角螺丝M2*8
APSC21617	Button Head Screws	盘头内六角螺丝M2*12
APSC21618	Button Head Taping Screw	盘头十字螺丝M2*3
APSC21619	Button Head Screws	平头内六角螺丝M2*8
C3964	Rsbk Car Body Assembly Painted (Black)	车壳总成 黑色
C3965	Front Body Lock Set Assembly	前车壳固定组件总成
C3966	Rear Body Lock Set Assembly	后车壳固定组件总成
C3968	Front Bumper Set	前防撞
C3969	Rear Bumper Set	后防撞
C3970	Windshield Wiper	雨刷
C3971	Rooftop Rack Set	顶灯架
C3972	Top Cover	顶盖
C3973	Rear Wing	尾翼
C3974	Rear Light Set	尾灯
C3975	Front Light Set	前灯
C3976	Exhaustion Plate And Bracket	车面罩
C3977	Rear Body Mount	后固定座
C3978	Rsbk Clear Car Body	透明车壳
C3979	Cockpit Set	吸塑驾舱
C3980	Front Body Mount	前固定座
C3981	Magnet Set	圆磁铁
C3982	Light Control Connection Set	灯控接驳套件
C3983	Handle	门拉手
C3984	Decal Sheet	贴纸