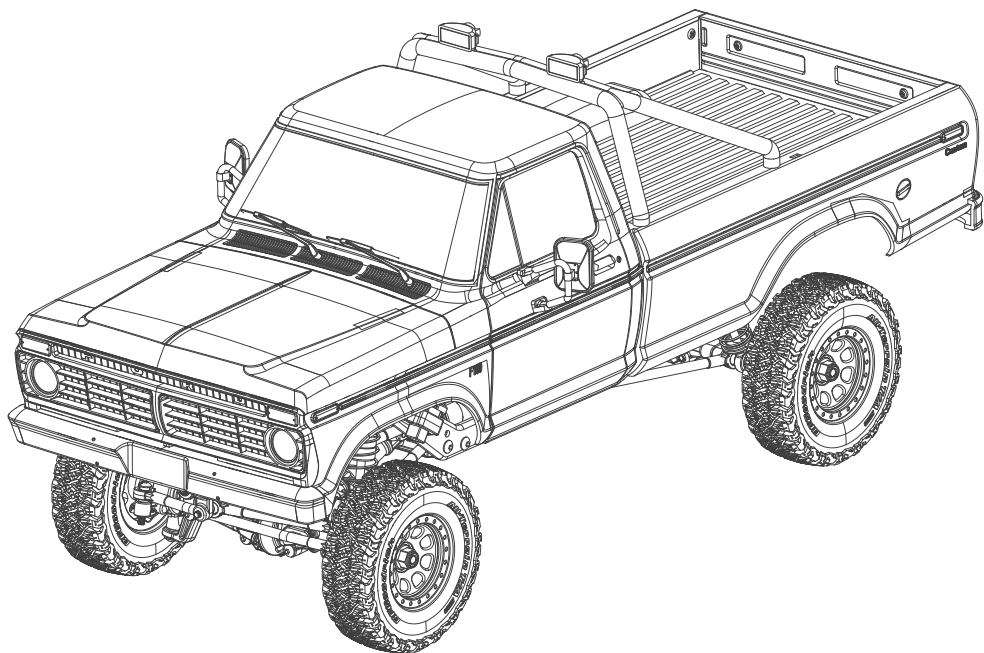




1/18 FORD F-100



FCX18 II

MAN-118L01BD

Instruction manual

Rev A

操作手册

INTRODUCTION 指引

Thank you for purchasing this FMS product.

This manual will help you operate, maintain, and enjoy your vehicle safely.

Please read all instructions before use and retain this manual for future reference.

This product contains precision electronic components and is **not a toy**.

Recommended for users **14 years of age and older**.

Minors must operate under adult supervision.

FMS and its distributors are not responsible for injury or property damage resulting from misuse of this product.

感谢您购买此款 FMS 产品。

本手册旨在帮助您正确操作、维护和修理车辆。

使用前请务必阅读所有说明，并将本手册留存以备日后参考之用。

本产品由精密部件组成，并非玩具。

推荐给 14 岁及以上用户。未成年人必须在成人的监督下进行操作。

FMS 及其经销商对因不当使用本产品而导致的人员受伤或财产损失不承担任何责任。

SAFETY, PRECAUTIONS AND WARNINGS 安全、预防措施及警告

- Always operate the vehicle in open areas away from people, animals, traffic, and obstacles.
- Do not operate near deep water, power lines, or radio interference sources.
- Keep the vehicle away from moisture, heat, and extreme temperatures.
- Do not touch moving parts while the vehicle is powered on.
- Disconnect the battery after use.
- Always turn on the transmitter before connecting the vehicle battery.
- When shutting down, disconnect the vehicle battery first, then turn off the transmitter.
- Never operate a damaged vehicle.
- Do not leave batteries charging unattended.
- Charge only on a fire-resistant surface.
- 始终在远离人群、动物、交通和障碍物的开阔区域驾驶车辆。
- 切勿在深水区、电力线附近或无线电干扰源附近操作车辆。
- 保持车辆远离潮湿、高温和极端温度环境。
- 在车辆通电时切勿触摸运动部件。
- 使用完毕后请断开电池连接。
- 在连接车辆电池前务必先开启发射器。
- 关闭车辆时，应先断开车辆电池，然后再关闭发射器。
- 切勿操作损坏的车辆。
- 切勿让电池无人看管地自行充电。
- 仅在防火材料表面充电。

SAFETY PRECAUTIONS**安全保障措施**

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。

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.

发射机的天线必须距离所有人员或其他发射机至少20厘米的间隔距离。必须将天线安装说明和满足射频讯号辐射的发射机操作规范提供给终端用户和安装人员。

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 interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

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-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.
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



FCC ID: 2A2UNR3D00

FCC ID: N4ZMG400

IC STATEMENT

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence.

L'exploitation est autorisée aux deux conditions suivantes :

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC: 25584-MG4BS00

RADIO SYSTEM

无线电系统

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。
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 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。
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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 operation 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 erratic operation or loss of control.
- Interference may cause loss of control. To ensure the safety of you and others, do not operate in the following 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 cause serious burns.
- 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。
- 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话活跃的地方
 - 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。



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.
- 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。

BACKGROUND 产品背景

Ford F-100: A Foundation of American Pickup Culture

Produced from 1961 to 1983, the Ford F-100 went through six generations of evolution. Among them, the 1973–1979 F-100 stands out as a defining symbol of American pickup truck culture. This generation marked a pivotal transition for the Ford F-Series—from a purely work-focused vehicle to a more versatile, multi-purpose pickup—and helped lay the groundwork for the long-term success of the F-150.

The F-100 is widely regarded as the pioneer of the modern F-Series, establishing the balance of comfort, practicality, and durability that would come to define American pickup trucks. Deeply rooted in U.S. culture, it represents a classic symbol of American automotive values: hard work, reliability, and versatility. More than just transportation, the F-100 became an integral part of everyday American life, reflecting economic growth and the nation's industrial development.

Throughout its history, the F-100 served multiple roles:

A working vehicle – A dependable tool for farms, construction sites, and small businesses, earning its reputation as a true workhorse.

A family vehicle – For many American households, the F-100 was the only vehicle, capable of hauling trailers on weekends while handling school runs and errands during the week.

A cultural icon – Frequently featured in movies, television, and country music, the F-100 became a symbol of blue-collar pride, self-reliance, and the pioneering American spirit.

The sixth-generation F-100, introduced in 1973, emerged during a period shaped by the oil crisis, market segmentation, and advancing automotive technology. While maintaining the F-Series tradition of strength and utility, it adapted to changing consumer needs through thoughtful updates. It expanded beyond freight duties to become a popular choice for family use, off-road recreation, and personal customization—setting the direction for future generations of Ford pickups.

Design-wise, the sixth-generation F-100 retained classic elements such as square body lines, a flat hood, and straight bumpers, reinforcing its rugged American pickup identity. It was the first to feature a dual silver grille design with aluminum accents, with the bold FORD lettering centered on the front fascia. Straight body-side trim with integrated reflectors, the iconic “dented side” styling, and the clamshell hood became defining visual traits that remain highly recognizable today.

Built on the fourth-generation platform, this generation emphasized lighter weight and increased durability. Extensive use of galvanized steel helped improve corrosion resistance while reducing overall weight to support better fuel efficiency—an important consideration of the era. Practical upgrades included front disc brakes, relocation of the fuel tank beneath the cargo bed, and a well-designed cargo box optimized for hauling.

In terms of performance, the F-100 continued Ford's strong powertrain tradition, offering inline six-cylinder and V8 engine options to meet a wide range of driving needs. Whether for daily driving, light off-road use, or work applications, the F-100 delivered dependable performance.

Thanks to its timeless styling and proven mechanical reliability, the Ford F-100 has remained a lasting presence in American popular culture. It continues to appear in films, television, and music, and remains a favorite among classic truck collectors and restoration enthusiasts. Even today, a dedicated community continues to restore, modify, and celebrate the F-100, keeping its legacy alive in the classic vehicle market.

BACKGROUND 产品背景

福特 F-100：美国皮卡文化的基石

福特 F-100 从 1961 年生产至 1983 年，历经了六代的演变。其中，1973 年至 1979 年的 F-100 版本尤为突出，它是美国皮卡文化的一个标志性象征。这一代标志着福特 F 系列车从纯粹的实用型车辆向更具多功能性的多用途皮卡的重大转变，并为 F-150 的辉煌奠定坚实的基础。

F-100 被公认为是现代 F 系列的开创者，它确立了舒适性、实用性与耐用性的平衡，这一平衡后来成为了美国皮卡的典型特征。它深深扎根于美国文化之中，代表着美国汽车价值观的经典象征：努力工作、可靠耐用和多功能性。它不仅仅是一种交通工具，而是成为了美国日常生活不可或缺的一部分，反映了经济的增长和国家的工业发展。

在其整个历史进程中，F-100 承担了多种任务：

一款实用的工具车——它是农场、建筑工地以及小型企业不可或缺的工具，也因此赢得了“真正的劳力车”这一美誉。

一款家用汽车——对于许多美国家庭而言，F-100 是他们唯一能够使用的车辆。它在周末能够运载拖车，而在平日则可用于接送孩子上学以及处理日常事务。

文化符号——在电影、电视以及乡村音乐中经常出现的 F-100，成为了蓝领阶层自豪感、自力更生精神以及美国开拓精神的象征。

第六代 F-100 于 1973 年推出，当时正值石油危机、市场细分以及汽车技术不断进步的时期。它在延续 F 系列坚固实用传统的同时，通过精心的改进适应了不断变化的消费者需求。它不再仅用于运输任务，而是发展成为一款适合家庭使用、越野休闲以及个性化定制的理想选择——为未来几代福特皮卡的发展指明了方向。

在设计方面，第六代 F-100 保留了诸如方形车身线条、平直的引擎盖以及笔直的保险杠等经典元素，进一步强化了其美国重型皮卡的独特形象。它是首款采用双银色格栅设计（带有铝质装饰）的车型，醒目的“福特”字样位于前脸中央。车身侧面笔直的装饰条搭配两端嵌入反光板、标志性的“凹痕侧”（Dent Side）造型以及蛤壳式引擎盖成为了至今仍极具辨识度的标志性外观特征。

基于第四代平台打造，这一代车型着重于减轻重量和提高耐用性。大量使用镀锌钢有助于增强抗腐蚀能力，同时降低整体重量，以实现更好的燃油效率——这是那个时代的重要考量因素。实用的升级包括前盘式制动器、将燃油箱移至货厢下方以及设计精良的货箱，使其更适合运输任务。

在性能方面，F-100 继承了福特强大的动力系统传统，提供了直列六缸和 V8 发动机供选择，以满足各种驾驶需求。无论是日常驾驶、轻度越野使用还是工作用途，F-100 都能提供可靠的性能表现。

由于其永恒的造型设计和经久不衰的机械性能可靠性，福特 F-100 一直深深扎根于美国的流行文化之中。它不断出现在电影、电视和音乐作品中，并且依然是经典卡车收藏者和修复爱好者的最爱。即便在今天，一个专门的社群仍在致力于对 F-100 进行修复、改造和庆祝，让其传奇得以在经典车辆市场中延续下去。

ABOUT MODEL 产品介绍

Authorized by Ford Motor Company, the FMS model is built on the all-new FCX18 second-generation low center of gravity (LCG) chassis and introduces the classic Ford F-100 in scale form. The Ford F-100 body features a durable hard-shell construction, with FMS meticulously replicating the original vehicle's proportions and design lines. The iconic "dented side" styling is highlighted by a high-quality electroplated trim strip running from the front to the rear of the body. Nickel-plated FORD logos appear on both the front and rear, restoring the truck's simple, rugged character. Additional scale details include electroplated front and rear bumpers, grille, rear door handles, soft-touch silver mirror frames, door handles, windshield wipers, and a roll cage. To support personalization, the model also includes a removable surfboard accessory and multiple decal sets.

The vehicle features a fully molded scale interior, complete with mirrors and steering wheel, integrated with a synchronized lighting control system. Factory-installed headlights, taillights, turn signals, and roof-mounted spotlights are all individually controllable with linked lighting functions. A 2-in-1 brushed motor and ESC system with a selectable switching function allows easy replacement and future upgrades. Hidden wiring within the body and chassis simplifies installation, storage, and customization. Officially licensed BFGoodrich KO3 tires deliver an aggressive appearance while accurately replicating the driving posture and traction characteristics expected of a scale crawler.

In terms of power and handling, the Ford F-100 features a full-time 4WD drivetrain. A high-performance 180-size brushed motor is mounted at the front of the chassis to provide strong, consistent power output. The LCG layout combined with the magnetic quick-release body system is a key feature of the second-generation FCX18 platform, improving climbing stability and vehicle posture while reducing rollover risk on technical terrain. Different Painted body shells can be swapped in approximately two seconds, and the magnetic interface automatically supplies power to the body-mounted lighting system, allowing full lighting activation directly from the transmitter.

To meet customer demand for greater authenticity, the model is equipped with a new straight (non-portal) axle setup, delivering the scale-correct appearance enthusiasts have been asking for while maintaining reliable trail performance. For durability in demanding conditions, the chassis is reinforced with metal frame rails, metal links, and metal steering rods. The centrally mounted drivetrain further lowers the center of gravity and integrates the two-speed transmission, transfer case, and brushed motor into a compact, efficient power module.

由福特汽车公司授权，FMS模型基于全新 FCX18 第二代低重心（LCG）底盘打造，并以比例形式再现了经典的福特 F-100 车型。福特 F-100 的车身采用坚固的硬壳结构，FMS 精心复制了原车的比例和设计线条。标志性的“凹陷侧”造型通过一条从车头延伸至车尾的高品质电镀装饰条得以凸显。车头与车尾的镀铬福特标志清晰可见，还原了卡车简洁、硬朗的风格。其他比例细节包括电镀的前、后保险杠、格栅、后门把手、软质手感的银色的倒后视镜架、门把手、雨刮器和防滚架。为了满足个性化需求，此模型车还附赠了可拆卸的冲浪板心情片和多种贴纸套装。

该模型车拥有全尺寸一体成型的内饰，配置有后视镜和方向盘，配合与真车效果同步的灯控系统。出厂预装的前大灯、尾灯、转向灯和车顶射灯，独立灯控与带联动功能。配备2合一的电调和 ESC 系统，且具有可选切换功能的灯控，便于更换和未来升级。车身和底盘内的隐藏线路简化了安装、存储和个性化设置。官方授权的 BFGoodrich KO3 轮胎展现出强烈的外观风格，还能精准地重现大型履带车应有的驾驶姿态和牵引特性。

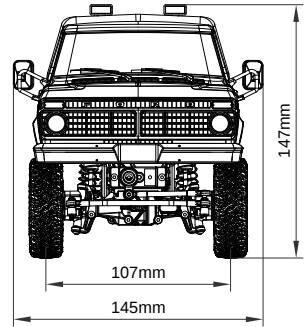
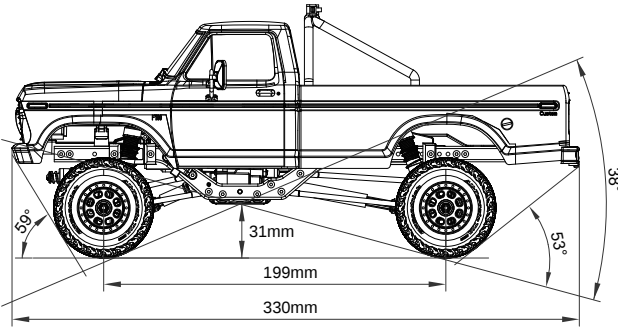
在动力和操控方面，福特 F-100 采用了4WD驱动系统，高性能的180有刷电机被安置到底盘的前部，以确保强劲的动力输出。低重心（LCG）设计与磁吸快拆的结构是第二代 FCX18 底盘的关键特点，它提高了攀爬的稳定性和车辆姿态，同时降低了在技术地形上的翻车风险。不同涂装的车壳可以2秒内快速互换，而磁吸接口会自动为车身安装的灯控供电，遥控器一键唤醒全车灯光表达。

为了满足客户对更高真实感的需求，该车型配置了全新的直桥（非门桥）结构，实现了爱好者们所期待的与实际尺寸相符的外观，同时还能保持可靠的越野性能。确保极端环境下的稳定性，底盘采用了金属大梁、金属拉杆和金属转向拉杆。中置的动力总成重心低，并将两档变速机构、分动箱和有刷电机整合成一个紧凑高效的动力模型。

FEATURES 特点

- Ready to run model
- Officially licensed Ford F-100 body
- Officially licensed BFGoodrich KO3 tires
- Magnetic quick-release body mount
- Detailed scale interior and exterior components
- Plated scale trim and accessories
- FCX18 II low center-of-gravity chassis
- 180 brushed motor
- Metal chassis rail
- Metal links
- Oil-filled shocks
- Two-speed transmission
- Four-link suspension
- Metal gears
- Metal-gear steering servo
- Full lighting system with multiple modes
- Roll cage and roof lights
- Painted body with decal set
- Three color options
- Surfboard accessory included
- Original personalized stickers
- 2. 4GHz radio system
- RTR组装完成品
- 官方授权的福特F-100车身
- 官方授权的BFGoodrich KO3轮胎
- 磁吸快拆结构车身与底盘的固定
- 仿真内饰
- 像真电镀细节部件
- 全新FCX18二代低重心(LCG)底盘
- 180有刷电机
- 金属大梁
- 金属拉杆
- 油压避震
- 两档变速
- 4连杆悬挂
- 金属齿
- 金属齿转向舵机
- 仿真车灯与多种灯效
- 防滚架与顶射灯
- 喷涂完成车壳(赠送有拉花)
- 三款涂装可选
- 赠送冲浪板
- 原创个性化贴纸
- 2.4GHz遥控控制

SPECIFICATION 产品参数



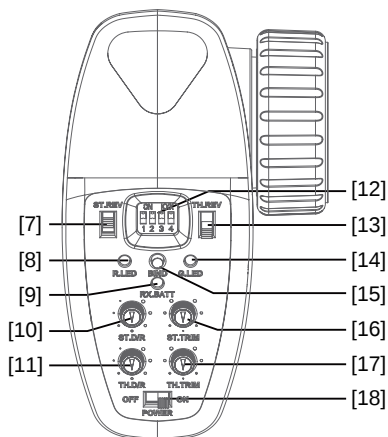
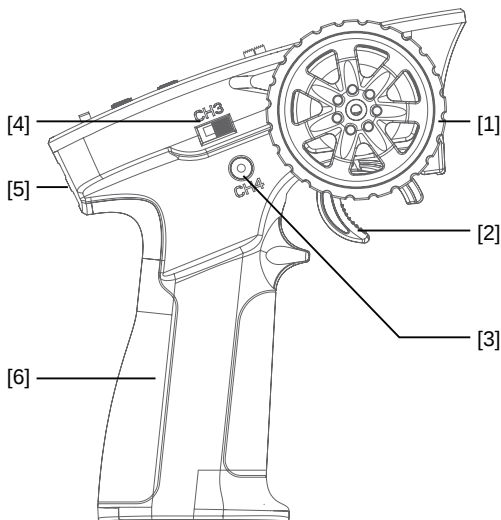
- Length: 330 mm
- Width: 145 mm
- Height: 147 mm
- Wheelbase: 199 mm
- Tire size: Φ 58*19 mm
- Ground clearance: 31 mm
- Approach angle: 59°
- Departure angle: 53°
- Gear ratio:
High gear: 17.7
Low gear: 94.2
- Motor: 180 brushed motor
- Battery : 2S LiPo 7.4V 900mAh
- Radio range: approx. 80m
- Run time: approx. 15-20 minutes
- Radio system: FS-MG44 transmitter
- Receiver/ESC: FMS R3D-BS 2-in-1 unit

- 车长: 330 mm
- 车宽: 145 mm
- 车高: 147 mm
- 轴距: 199 mm
- 轮胎尺寸: Φ 58*19 mm
- 离地间隙: 31 mm
- 接近角: 59°
- 离去角: 53°
- 减速比:
高速挡: 17.7
低速挡: 94.2
- 电机: 180有刷电机
- 电池: 2S LiPo 7.4V 900mAh
- 遥控距离: 大约 80 m
- 续航: 大约15-20mins
- 遥控: FMS-R3D-BS接收机/电调 (二合一)

TRANSMITTER INSTRUCTION 发射机介绍

The MG44-BS is a 4-channel 2.4GHz transmitter using automatic frequency hopping technology. It is lightweight, ergonomic, and easy for beginners to operate. Includes beginner mode for smoother throttle response.

MG44-BS 是一款采用了自动跳频技术数字系统的4通道、工作频率为 2.4GHz 的双向发射机。它重量轻、符合人体工程学设计，而且对于初学者来说操作起来也很容易。包含入门模式，可使油门响应更加平稳。



[1] Steering wheel: left/right steering (CH1)
方向手轮：控左/右转向 (CH1)

[2] Throttle trigger: forward / brake / reverse(CH2)
油门板机：控制前进，刹车，后退 (CH2)

It is a flipping type button:
auxiliary functions(CH4)
按键开关(CH4):按键功能为翻转式，辅助功能

[4] Three-position toggle switch:
auxiliary functions (CH3)
三档拨动开关,辅助功能(CH3)

[5] Lanyard hole
挂绳孔

[6] Handle: 4*AAA Battery compartment
手柄，4*AAA电池仓

[7] ST.REV: steering reverse
方向通道转向反向开关 (ST.REV)

[8] R.LED: power indicator
电源指示灯红色 LED (R.LED)

[9] RX.BATT: ESC Battery power indicator
电调电池电量显示指示灯 (RX.BATT)

[10] ST.D/R: steering dual rate
转向比率微调 (ST.D/R)

[11] TH.D/R: throttle dual rate
油门比率微调 (TH.D/R)

[12] Toggle switch: to set the related function of ESC
拨码开关 (切换电调的工作模式)

[13] TH.REV: throttle reverse
油门反向开关 (TH.REV)

[14] G.LED, Status Indicator
状态指示灯绿色 LED (G.LED)

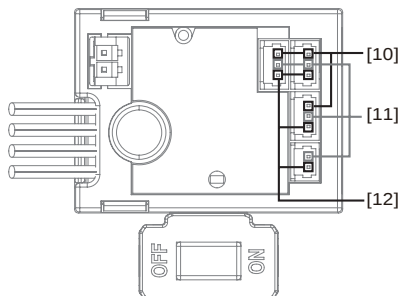
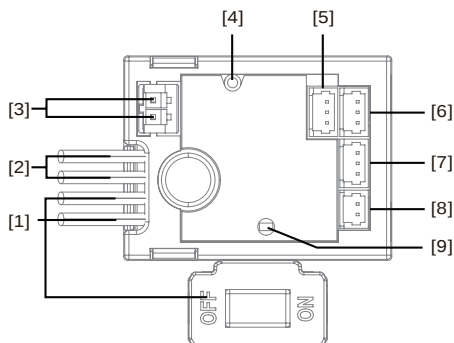
[15] Bind button: receiver pairing
对码按键 (BIND)

[16] ST.TRIM: steering trim
方向中位微调 (ST.TRIM)

[17] TH.TRIM: throttle trim
油门中位微调 (TH.TRIM)

[18] Power switch: ON/OFF
电源开关 (POWER OFF/ON)

OVERVIEW 接收机



[1] Power Switch

[2] Battery Interface

[3] Motor Interface

[4] Antenna

[5] LED Light Expansion Interface

[6] CH3

[7] CH1

[8] LED Light Interface

[9] LED (Status Indicator)

[10] S (Signal Pin of LED Light Expansion Interface/CH Interface)

[11] + (Anode of LED Light Expansion Interface/LED Light Interface/CH Interface)

[12] - (Cathode of LED Light Expansion Interface/LED Light Interface/CH Interface)

[1] 电源开关

[2] 电池接口

[3] 电机接口

[4] 天线

[5] 车灯扩展接口

[6] CH3

[7] CH1

[8] 车灯接口

[9] LED

[10] S (通道接口/车灯扩展接口信号端)

[11] + (通道接口/车灯接口/车灯扩展接口正极)

[12] - (通道接口/车灯接口/车灯扩展接口负极)

* Note: The specification of the motor interface is a PH2.0 female connector. The specification of the battery interface is a Molex 51005 female connector. The specification of the CH1, CH3, and LED light expansion interfaces is a standard 1.25mm 3-Pin connector. The specification of the LED light interface is a standard 1.25mm 2-Pin connector.

*注：电机接口为 PH2.0 母座端子；电池接口为 Molex51005 母座接口；CH1、CH3和车灯扩展接口为标准1.25mm*3Pin端子座；车灯接口为标准1.25mm*2Pin端子座。

RECEIVER LED 接收机指示灯

The LED status indicates the power supply state of the receiver and its working state.

Off: The receiver is not powered on.

Solid on in red: The receiver is connected to the power supply. It works normally.

Fast flashing: The receiver is in the bind mode.

Slow flashing: The LED flashes slowly when the transmitter is powered off, unbound, or no signal.

接收机状态指示灯用于指示接收机的电源及工作状态。

灭：接收机电源未接通。

红灯常亮：接收机已连接电源，并正常工作。

快速闪烁：接收机处于对码状态中。

慢速闪烁：发射机未开机或未对码，无信号情况。

TRANSMITTER BATTERY INSTALLATION 发射机电池安装

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。

	Danger 危险	Do not mix old and new batteries. 切勿将旧电池与新电池混用。
	Danger 危险	Remove depleted batteries promptly. 及时更换已耗尽电量的电池。
	Danger 危险	Do not attempt to recharge non-rechargeable batteries. 切勿尝试给不可充电的电池充电。
	Danger 危险	Do not open, disassemble, or attempt to repair the battery. 请勿打开、拆卸或自行维修电池。
	Danger 危险	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 危险	Do not expose to excessive heat or liquids. 请勿将电池置于高温环境或液体中。
	Danger 危险	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 危险	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 危险	Do not use the battery if damaged. 如果电池损坏，请立即停止使用。

Battery type: 4 X AAA batteries

- 1.Open the battery compartment on the bottom of the transmitter.
 - 2.Insert four AAA batteries, observing correct polarity.
 - 3.Close the battery cover securely.
- Remove batteries if the transmitter will not be used for an extended period.

Low battery alarm: When the battery is lower than 4.2V, the transmitter will give a alarm with the LED flashing slowly.

*Note: When installing the batteries, be careful to handle the positive and negative poles. (As shown in the picture on the right)

电池类型使用：AAA 电池

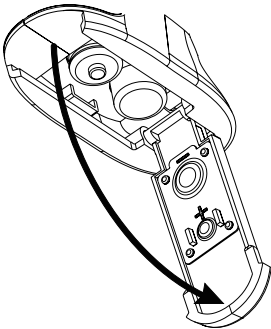
请按照以下步骤安装发射机电池：

- 1. 打开电池仓盖。
- 2. 将 4 颗电量充足的 AAA 电池装入电池仓内，注意正负极方向并确保电池上的金属端子与电池仓内的金属端子接触。
- 3. 盖好电池仓盖。

如果发射机长时间不使用，请取出电池。

低电量报警：当电量低于 4.2V 时，发射机即发出声音报警同时 LED 慢闪

*注：安装电池时，请留意电池正负极，避免安装错误。（如右图所示）



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 that battery is fully charged and installed correctly.
 - 2. Toggle the switch to the [ON] position. When active the R.LED will be lit.
 - 3. Connect the receiver to power.
- 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，R.LED 灯常亮。
 - 3、连接接收机电源。
- 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上电

 Note 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。
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 Note 警告	Make sure that the throttle trigger is at its neutral position and the switches are set to their proper position. 为了您的安全请将发射机开关和油门打到安全位置。
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LED INDICATOR LED指示

1. R.LED: The red power indicator;
 2. G.LED: The green status indicator;
 3. RX.BATT: ESC battery power indicator.
- When the power is high, the RX.BATT LED will be solid on in green.
 - When the power is medium, the RX.BATT LED will be solid on in orange.
 - When the power is low, RX.BATT LED will be solid on in red.
 - When the power is ultra low, the RX.BATT LED will be flash slow in red.
 - When the receiver is not connected, "the RX.BATT LED will maintain the last indicated state.

- 1、R.LED: 红色电源指示灯;
 - 2、G.LED: 绿色状态指示灯;
 - 3、RX.BATT: 电调电池电量指示灯
- 电量高: 指示灯绿色常亮
 - 电量中: 指示灯橙色常亮
 - 电量低: 指示灯红色常亮
 - 电量过低: 指示灯红色慢闪
 - 接收机掉码: 指示灯保持最后的指示状态

BINDING 对码

The transmitter and receiver have already been bound at the factory.

However if the receiver needs to be replaced or additional receivers bound follow these steps:

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 start flashing quickly. Once in binding 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.

Note: When binding, put the transmitter into bind mode first, then the receiver. If the binding is not completed within ten seconds, the LED of the receiver will enter its slow flashing state.

发射机和接收机在出厂前已对码成功。

如需更换其他的发射机或接收机, 请按照如下步骤进行对码:

- 1、将发射机按住对码按键 (BIND) 开机即进入对码状态, 此时 G.LED 快闪, 松开对码按键;
- 2、接收机上电等待 1 秒没有连接即自动进入对码状态;
- 3、对码成功后, 接收机及发射机指示灯常亮;

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 LED 指示灯进入慢闪状态。

CHANNEL CALIBRATION 通道校正

This function is used to set the neutral position for throttle and wheel.

Every transmitter is calibrated before leaving the factory, however if recalibration is required, please follow these steps:

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.
 - The R.LED and G.LED will work in two-flash-one-off mode.
 - The RX.BATT LED will be solid on in yellow.
2. Calibrate steering wheel: Turn the steering wheel to max and min travel point in clockwise and counter-clockwise.
 - The R.LED will be off.
 - The RX.BATT LED will be solid on in red.
3. Throttle trigger calibration: Push/pull the throttle trigger to forward/backward as far as it will go.
 - When the calibration is completed, the G.LED will be off.
 - The RX.BATT LED will be solid on in green.
4. Both steering wheel and throttle trigger have finished the calibration.
 - The RX.BATT LED will be off.
5. Once the calibration is finished, press the BIND button to save and exit.

该功能可以用于方向手轮和油门扳机的中位角度修正。

发射机在出厂前已校准完成，如需要重新校准，请按照以下步骤执行。

- 1、同步将手轮顺时针打到最大、扳机往前推到底并开机，进入校准模式功能；
 - R.LED 指示灯和 G.LED 指示灯二闪一灭
 - RX.BATT 指示灯黄色常亮
- 2、方向手轮校准:将手轮顺时针和逆时针转到最大最小；
 - R.LED 指示灯灭
 - RX.BATT 指示灯红色常亮
- 3、油门扳机校准：将扳机向前向后推到最大和最小；
 - G.LED 指示灯灭
 - RX.BATT 指示灯绿色常亮
- 4、方向手轮油门扳机均校准通过；
 - RX.BATT 指示灯灭
- 5、校准完成后按“BIND”键退出并保存数据。

POWER OFF 关机

Follow the steps below to turn off the system:

1. Turn off the receiver.
2. Toggle the transmitter's power switch to the [OFF] position.

请按照以下步骤进行关机：

- 1、断开接收机电源；
- 2、将电源开关拨到 [OFF] 位置，使发射机关闭。



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。

CHANNEL DESCRIPTION 通道说明

The transmitter outputs a total of 4 channels, which are assigned as below, as well as the functions.

- CH1 Channel: The assigned control is the steering wheel. CH1 controls the steering to enable a car to turn left or right.
- CH2 Channel: The control is the throttle trigger. CH2 controls the throttle to enable a car to move forward or backward.
- CH3 Channel: The control is the CH3 three-position switch. Users can customize the channel function. For example, function as a fast /slow-position servo channel.
- CH4 Channel: The control is the CH4 button switch. Users can customize the channel function. For example, control the car lights (short-press to switch the car light mode).

该发射机共输出 4 个通道，控件分配和相应功能如下：

- CH1 通道：控件为方向手轮，功能为方向，控制车子左右转向。
- CH2 通道：控件为油门扳机，功能为油门，控制车子前后行驶。
- CH3 通道：控件为 CH3 三档开关，可自定义通道功能，如可作为快慢档舵机通道。
- CH4 通道：控件为 CH4 按键开关，可自定义通道功能，如可控制车灯（短按切换车灯工作模式）。

CHANNEL REVERSE 通道反向

This function is used to adjust the action direction of the servo or motor

The ST.REV / TH.REV switches are the reverse buttons for CH1 and CH2. If the switch is in the upper position it indicates reverse, and the down indicates normal.

该功能用于调整通道的动作方向。

旋钮 ST.REV/TH.REV 分别为 CH1、CH2 通道反向按键，开关上拨表示反向，下拨表示正常。

TRIMS 微调

The ST.TRIM switch is used to adjust the trim for CH1 (steering), and can also adjust the trim for CH3 as multiplexing mode. The TH.TRIM switch is used to adjust the trim for CH2(throttle), and can also adjust the trim for CH4.

Refer to [Mode Switching] for multiplexing switching mode.

Adjustment range: -120us ~ +120us;

ST.TRIM/TH.TRIM: Counterclockwise adjustment to increase the trim value. The maximum value is 120us.

ST.TRIM/TH.TRIM: Clockwise adjustment to decrease the trim value. The minimum value is -120us.

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.

ST.TRIM 为 CH1 方向微调，可复用为 CH3 通道微调；

TH.TRIM 为 CH2 油门微调，可复用为 CH4 通道微调；

以上具体复用切换方式见 [模式切换]。

调节范围：-120us ~ +120us；

ST.TRIM/TH.TRIM：逆时针调节，增大微调值，最大为 120us；

ST.TRIM/TH.TRIM：顺时针调节，减少微调值，最小为 -120us。

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 舵量调节

The ST. D/R switch is used to adjust the servo travel amount CH1(Steering Trim), and can also adjust the travel amount for CH3 as multiplexing mode.

The TH.D/R switch is used to adjust the servo travel amount for CH2(Throttle), and can also adjust the travel amount for CH4 as multiplexing mode.

Refer to [Mode Switching] for multiplexing switching mode.

Adjustment range: 0-120%;

ST.D/R: Counterclockwise adjustment to increase the servo travel amount. The maximum value is 120%.

ST.D/R: Clockwise adjustment to decrease the servo amount. The minimum value is 0%.

TH.D/R: Counterclockwise adjustment to increase the servo amount. The maximum value is 120%.

TH.D/R: Clockwise adjustment to decrease the servo amount. The minimum value is 0%.

ST.D/R 为 CH1 方向舵量调节, 可复用为 CH3 舵量调节;

TH.D/R 为 CH2 油门舵量调节, 可复用为 CH4 舵量调节;

调节范围: 0 ~ 120%;

ST.D/R: 逆时针调节, 增加舵量, 最大为 120%;

ST.D/R: 顺时针调节, 减小舵量最小为 0%。

TH.D/R: 逆时针调节, 增加舵量, 最大为 120%;

TH.D/R: 顺时针调节, 减小舵量最小为 0%。

MODE SWITCHING 模式切换

This function is for reusing the ST.TRIM and ST.D / R buttons for different channels setting:

Under normal power-on condition, press the BIND button twice (within 1S) to switch between mode 1 and mode 2. By default, mode 1 is used.

Mode 1: The R.LED is solid on, and the G.LED is off. The ST.TRIM switch is for CH1 trim adjustment, the ST.D/R switch is for CH1 D/R adjustment. The TH.TRIM switch is for CH2 throttle trim adjustment, and the TH.D/R switch is for the CH2 D/R adjustment.

Mode 2: The R.LED and the G.LED are flashing alternately. The ST.TRIM switch is for CH3 trim adjustment, the ST.D/R is for CH3 D/R adjustment. The TH.TRIM switch is for CH4 trim adjustment, and the TH.D/R switch is for CH4 D/R adjustment.

此功能用于将 ST.TRIM 及 ST.D/R 旋钮复用于 CH3、CH4 通道 (详见 [微调]、[舵量调节])

功能设置: 正常开机状态下快速短按两下对码按键 (BIND) (1 秒内) 即可循环切换模式一、二, 开机默认为模式一。

模式一: R.LED 指示灯常亮, G.LED 示灯不亮, ST.TRIM 调节 CH1 微调, ST.D/R 调节 CH1 舵量;

TH.TRIM 调节 CH2 油门微调, TH.D/R 调节 CH2 油门舵量;

模式二: R.LED 指示灯和 G.LED 指示灯交替闪烁, ST.TRIM 调节 CH3 微调, ST.D/R 调节 CH3 舵量;

TH.TRIM 调节 CH4 微调, TH.D/R 调节 CH4 舵量。

FAILSAFE 失控保护

The failsafe function is used to protect the model and personnel when the receiver is out-of-control. The failsafe for CH2 is enabled by default, the ESC will enter the brake state when the receiver is out-of-control. By default, the failsafe for CH1, CH3 and CH4 channels have not set, and can be set at the transmitter side, and these three channels will maintain the last output in case of out-of-control.

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 if the G.LED flashes for 2 seconds, it indicates that the setting is successful. Then the failsafe value set will output in case of out-of-control.

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。

接收机 CH2 通道默认开启失控保护，失控后电调进入刹车模式；而 CH1 通道、CH3 通道 和 CH4 通道，可在发射机端设置相应的失控保护值。默认未设置，未设置时 PWM 接口保持最后输出。

功能设置：发射机开机正常通信状态下，将需要设置的通道保持在需要设定的失控保护值位置保持不动，同时长按对码键 (BIND) 3 秒，G.LED 指示灯闪烁 2 秒表示设置成功，即当接收机无法接收信号后，将按照设定的失控值输出。

BEGINNER MODE 初学者模式

Beginner mode is designed for people new to the hobby.

In this mode the throttle channel has been limited to output 50 percent, the channel range defaults has been set to 1250~1500~1750us. By default, the mode is normal mode.

Setup: To switch between beginner mode and normal mode, press and hold the CH4 button while turning the steering wheel completely counterclockwise as far as it can, and at the same time, power on the transmitter. When the G.LED works in two-flash-one-off mode for 3 seconds, then the beginner mode has switched. In case of the G.LED is off, the normal mode is switched.

此初学者模式比较适合入门级玩家，通过对油门幅度的控制来提高操作的安全性。

初学者模式油门输出仅为 50%，即 CH2 通道范围默认为1250~1500~1750us。出厂默认为正常模式。

功能设置：切换初学者模式和正常模式：按住 CH4 按键，同时将方向手轮逆时针打到底，并开机，当 G.LED 指示灯二闪一灭持续3 秒时，表明切换到初学者模式；正常模式时，G.LED 指示灯灭。

TWO-SPEED TRANSMISSION 两档变速

Use the transmitter switch to select:

Low gear: crawling and technical driving

High gear: trail driving and speed

Shift only when the vehicle is stopped.

使用发射机开关进行选择：

低速档：爬行和技术驾驶

高速档：越野行驶和高速行驶

只有在车辆停止时才进行换挡。

DIFFERENTIAL LOCKS (IF EQUIPPED) 差速锁（若配备则可启用）

Selectable front and rear differential locks improve traction on rough terrain.

Use locked mode for crawling and open mode for turning.

可选的前、后差速锁可提高在崎岖地形中的牵引力。

使用锁定模式进行爬行，使用开启模式进行转弯。

DRIVING CONTROLS 驱动控制

Pull trigger: forward
Push trigger: brake
Push again: reverse
Steering wheel: left/right
Use throttle smoothly when learning to drive.
Avoid full throttle immediately from a stop.

后拉板机：向前
前推板机：向后
再次前推板机：刹车
方向手轮：左/右
在学习操作时要平稳地使用油门。
从停车状态起步时切勿立即全速前进。

ESC PARAMETERS SETTING 电调参数设置

Running Mode	Battery Type	Drag Brake	
 FWD/REV/BRK	 Lipo	 0%	 75%
 FWD/REV	 NiMH	 50%	 100%

Toggle Switch Sign 拨码开关标识

The Toggle Switch on the transmitter is used to set ESC parameters, that is, the Toggle 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" and "Drag Brake". There are slide switches numbered 1, 2, 3, 4 on the transmitter panel. The above parameters can be set by toggling up and down.

发射机上的拨码开关用于设置电调参数，即拨码开关位于不同位置对应参数值不同。
该电调有三个参数项可以设置，分别是“运行模式 (Running Mode)”、“电池类型 (Battery Type)”、“拖刹力度 (Drag Brake)”。发射机面板上有一列编号为 1 2 3 4 的拨码开关，通过上下拨动可以实现对上述参数项的设置。

Running Mode
FWD/REV/BRK(Forward/Reverse/Brake): This mode adopts "double click" reverse mode, that is, when the throttle trigger is pushed from natural range to the reverse area for the first time, the motor is only braking and will not reverse; when the throttle trigger is moved back to the natural range and pushed to the reverse area for the second time, it will reverse. This mode is applicable to general models.
FWD/REV(Forward/Reverse): This mode adopts "one click" reverse mode, that is, when the throttle trigger is pushed from natural range to the reverse area, the motor immediately generates reverse action, which is generally applied to rock crawler.

Setup:

Toggle the No. 1 slide switch to the lower position, then the running mode is set to FWD / REV / BRK.

Toggle the No. 1 slide switch to the upper position, then the running mode is set to FWD/REV.

Battery Type

There are LiPo and NiMH cells. It can be set according to the actual use.

Setup:

Toggle the No. 2 slide switch to the lower position, then the battery type is set to Lipo. Toggle the No. 2

slide switch to the upper position, then the battery type is set to NiMH.

Drag Brake Force

The drag brake means that when the throttle trigger moves from the forward or reverse area to natural range, it will produce certain braking force to the motor, the larger the value is, the greater the drag brake force is. Select proper braking force according to the actual situation.

Setup:

Toggle both the No. 3 and the No.4 slide switches to the lower position, then the drag brake force is set

to 0%. Toggle the No. 3 slide switch to the lower position and the No.4 slide switch to the upper position,

then the drag brake force is set to 50%. Toggle the No. 3 slide switch to the upper position and the No.4 slide switch to the lower position,

then the drag brake force is set to 75%. Toggle both the No. 3 and the No.4 slide switches to the upper position, then the drag brake force is set to 100%.

运行模式 (Running Mode)

前进后退带刹车 (FWD/REV/BRK)：此模式采用的是“双击式倒车”，即油门扳机在第一次从中点区域推至反向区域时，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，则产生倒车动作。此模式适用于一般车型。

直接正反转 (FWD/REV)：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。

功能设置：

将发射机面板上编号为 1 的拨码开关拨至下侧，运行模式即设置为前进后退带刹车 (FWD/REV/BRK)。

将发射机面板上编号为 1 的拨码开关拨至上侧，运行模式即设置为直接正反转 (FWD/REV)。

电池类型 (Battery Type)

有锂电和镍氢两种选择，根据实际使用情况设置即可。

功能设置：

将发射机面板上编号为 2 的拨码开关拨至下侧，电池类型即设置为锂电池。将发射机面板上编号为 2 的拨码开关拨至上侧，电池类型即设置为镍氢。

拖刹力度 (Drag Brake)

拖刹是指当油门扳机从正向区域或反向区域转入中点区域内时，对电机产生一定的刹车力，这样可以模拟有刷电机的碳刷对电机转子的阻力，适合减速入弯及攀爬车应用。

功能设置：

将发射机面板上编号为 3 的拨码开关和编号为 4 的拨码开关拨至下侧，拖刹力度即设置为 0%；将发射机面板上编号为 3 的拨码开关拨至下侧，编号为 4 的拨码开关拨至上侧，拖刹力度即设置为 50%；将发射机面板上编号为 3 的拨码开关拨至上侧，编号为 4 的拨码开关拨至下侧，拖刹力度即设置为 75%；将发射机面板上编号为 3 的拨码开关和编号为 4 的拨码开关拨至上侧，拖刹力度即设置为 100%。

ATTENTIONS 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°C /194°F, 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°C /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。
- 用完后，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微调后，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。

PROTECT FUNCTION 保护功能

The receiver supports low voltage protection and high voltage protection function.

- Low Voltage Protection: When the receiver enters the low voltage protection state in case of detecting low voltage, CH2 motor channel has no output. Channels of CH1, CH3 and CH4 output normally, and all the lights flash slowly for prompt.
- High Voltage Protection: When the receiver enters the high voltage protection state, all channels have no output. All car lights flash quickly for prompt.

The receiver supports the overheating protection and the blocking protection function.

- Overheating Protection: The receiver will enter the overheating protection state in case of the high internal temperature of the ESC, the CH2 motor channel won't output, but the other channels will output normally. All car lights flash quickly for prompt. The CH2 motor channel will output normally when the temperature is normal.
- Blocking Protection: When the external motor is blocked, it enters the blocking protection state, to protect the ESC and the motor. The CH2 motor channel won't output, but the other channels will output normally. The CH2 motor channel will output normally when there is no blocking.

本接收机具有电池电压过低和过高保护功能。

- 电压过低保护：当检测到电池电压过低时，CH2 马达通道无输出，CH1 通道、CH3 通道、CH4 通道正常输出，所有车灯慢闪提示。
- 电压过高保护：当检测到电池电压过高时，所有通道无输出，所有车灯快闪提示。

本接收机电调具有过热保护和堵转保护功能。

- 过热保护：当检测到整机温度过高时，CH2 马达通道无输出，CH1 通道、CH3 通道、CH4 通道正常输出，所有车灯快闪提示；当温度正常后，CH2 马达通道恢复输出。
- 堵转保护：当外部马达堵转时，进入堵转保护状态，用于保护电调和马达，CH2 马达通道无输出，CH1 通道、CH3 通道、CH4 通道正常输出；待无堵转时，CH2 马达通道恢复正常输出。

LIGHTING SYSTEM 车灯控制

This receiver supports seven sets of LED lights: One set is connected directly to the LED light interface. The remaining six sets—comprising the front turn signal left light, front turn signal right light, roof lights, headlight, and left and right brake lights (which also function as rear turn signals)—are connected to the receiver via the LED light unit. (Note: The left and right brake lights share the same physical lights with the rear left and right turn signals respectively; The brake function has priority if both are activated simultaneously).

The status of all the LED lights is controlled by the corresponding controls on the transmitter (e.g., FS-FMS-MG44-BS).
One set directly connected (via the LED Light interface)
The on/off state of this light set is controlled by the CH4 button (or by the BIND button when bound with an FMS-G3 transmitter).

The remaining six sets (via the LED light expansion interface)

- Mode Switching: Briefly press the CH4 button on the transmitter to switch between control modes. Each press changes to the next mode in sequence: Default Mode, Mode A, and Mode B. Each time the system is powered on, the LED light control mode defaults to Default Mode.
- Turn Signal Function: If the turn signal function is enabled, all turn signals will operate in their preset mode; if the function is disabled, they remain off. The turn signal function is enabled by default. Rotating the steering wheel will activate the corresponding left or right turn signal.

Turn Signal Switch Settings:

- Default State: Enabled by default. Turning the steering wheel will automatically activate the corresponding left or right turn signals.
- Quick Toggle (On/Off): When normally connected, turn the steering wheel fully clockwise (full right lock) and simultaneously long-press the CH4 button to toggle the turn signals on or off.
- Power-Off Memory: The system automatically saves the settings and will retain the previous on/off state upon the next power-up.

The specific working states of the six sets of LED lights are described as follows:

LED Lights	Default Mode		Mode A	Mode B	Notes
Front Turn Signal Left Light	The light flashes slowly on a left turn. (Rotate steering wheel counterclockwise to trigger.)				The turn signal function can be set to "Off." When set to "Off," the turn signals will not flash when the vehicle turns.
Front Turn Signal Right Light	The light flashes slowly on a right turn. (Rotate steering wheel clockwise to trigger.)				
Roof lights	OFF	OFF	Solid ON	/	
Headlight	OFF	Solid ON	Solid ON	/	
Right Brake Light/Rear Turn Signal Right Light	• Braking (trigger pushed): High brightness • Not braking & right turn inactive: Off • Not braking & right turn active: High brightness and slow flash		• Braking: High brightness • Not braking & right turn inactive: Low brightness • Not braking & right turn active: High brightness and slow flash		When the running mode of ESC is set to Forward/Reverse mode (no brake), the Brake Light will not on when pushing the throttle trigger forward.
Left Brake Light/Rear Turn Signal Left Light	• Braking (trigger pushed): High brightness • Not braking & left turn inactive: Off • Not braking & left turn active: High brightness and slow flash		• Braking: High brightness • Not braking & left turn inactive: Low brightness • Not braking & left turn active: High brightness and slow flash		

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 channel (CH1) and throttle channel (CH2) are capable of automatic neutral identifying, after the trim is adjusted, the receiver should be powered again to recognize the neutral positions of these two channels automatically.
- 3. If you have set the steering channel in reverse, the trigger condition for turn signal left light and turn signal right light will not be affected.

本接收机支持 7 组车灯：1 组直接连接（车灯接口），另外 6 组（前左转灯、前右转灯、顶射灯、前大灯、左刹车灯 / 后左转灯和右刹车灯 / 后右转灯）通过车灯驱动板与本接收机建立连接（注意：左 / 右刹车灯分别与后左 / 右转向灯复用同一组灯；当刹车与转向同时触发时，则优先作为刹车灯）。

车灯亮灯状态及亮灯模式的转换由发射机的相应控件控制，以 FS-FMS-MG44-BS 发射机为例：

直接连接的 1 组车灯（车灯接口）

此组车灯：亮灭状态由 CH4 按键控制（若对码 FMS-G3 发射机，则由 BIND 按键控制）。

另外 6 组车灯（车灯扩展接口），此款接收机对此 6 组灯的控制预设了三种模式：

- 模式切换：短按发射机上的 CH4 按键可切换控制模式，每按一次，切换一个模式（默认模式、模式 A 和模式 B 依次切换）；每次开机时，车灯控制模式为默认模式。
- 转向灯功能：左右转向灯（包括前左转灯、前右转灯、后左转灯、后右转灯）在转向灯功能开启状态下按预设模式工作，反之则为关闭状态。默认情况下，转向灯功能为开启状态，旋转手轮即可触发左右转向灯。

5.转向灯开关设置：

默认状态：默认开启，转动手轮即可联动左右转向灯。

快捷切换(开启/关闭)：在正常连接下，将手轮顺时针打到底(右满舵)，同时长按 CH4 键，即可切换转向灯的开启或关闭。

断电记忆：系统会自动保存设置，再次开机时保持上次的开关状态。

6 组车灯工作状态具体如下所述：

车灯	默认模式	模式A	模式B	备注
前左转灯	左转时慢闪 (逆时针打手轮)			转向功能可以设置为关闭，当设置为关闭时，车辆在转向时转向灯不会闪亮。
前右转灯	右转时慢闪 (顺时针打手轮)			
顶射灯	常灭	常灭	常亮	/
前大灯	常灭	常亮	常亮	/
右刹车灯 / 后右转向灯	刹车时（前推扳机）高亮； 非刹车且右转向时高亮慢闪； 非刹车、非右转向时灭。	刹车时高亮； 非刹车且右转向时高亮慢闪； 非刹车、非右转向时低亮。	当电调运行模式设置为正转 / 反转模式时（无刹车），前推扳机刹车灯不亮。	
左刹车灯 / 后左转向灯	刹车时（前推扳机）高亮； 非刹车且左转向时高亮慢闪； 非刹车、非左转向时灭。	刹车时高亮； 非刹车且左转向时高亮慢闪； 非刹车、非左转向时低亮。		

- 注：
- 1. 接收机开机后，所有车灯长亮 1 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；

ESC FUNCTION INSTRUCTIONS 电调功能使用说明

Connect Related Equipments

Make sure the receiver is off before connection. Then connect the motor with M+ and M- of the receiver and connect the servo to the 3Pin interface("–", "+" and "S" are connected correspondingly). Finally, connect the battery to the power cable interfaces of the receiver correspondingly.

Calibrate the Throttle Neutral Position

- 1. After connecting related equipment as above, turn on the transmitter first, then move the throttle trigger to the neutral position.
- 2. Turn on the switch of receiver at last. The receiver will automatically recognize the battery type when it is powered on again. Then it can run it.

Notes:

1. The ESC can be run after completing self-inspection (about 3 seconds) if power on, otherwise it cannot be operated normally.
2. If there is no power output, please check whether the throttle trim of the transmitter is set to the neutral position, the receiver will automatically recognize the neutral position of the trim throttle after restarting;
3. If the rotation direction is not correct during running, exchange the two cables connecting motor and receiver.
4. To make sure everything is ok, please turn on the transmitter first and then the receiver, and power off the receiver first and then the transmitter.

连接相关设备

连接前请确认接收机电源开关处于关闭 (OFF) 状态, 将电机与接收机马达接口 M+/M- 相连接, 舵机接到接收机 3Pin 排针接口上 ("-"+"S" 相对应), 电池与电池线接口相接, 注意对应极性。

校准油门中点

1. 按如上步骤将相关设备连接好后, 先打开发射机, 并将发射机油门扳机置于中位位置 (自然状态);
2. 接收机通电, 待自动识别电池类型后方可运行。

注:

1. 电调功能必须等到自检完成后方可运行 (大约 3 秒), 否则可能无法正常动作;
2. 若开机后无动力输出, 请查看发射机油门微调是否置于中位位置, 接收机重启可自动识别微调油门中位;
3. 若运行时发现电机转向不对, 将接收机接电机的两根线互换位置即可;
4. 为了一切正常, 请养成先开发射机通电再接收机通电以及先接收机断电再关闭发射机的习惯。

ESC DRAG BRAKE FORCE 电调拖刹力度

The receiver supports the function of setting drag brake force at the transmitter side. Refer to ESC Parameters Setting for details.

本接收机支持在发射机端设置电调力度。功能设置请查看 [电调拖参数设置]。

ESC RUNNING MODE 电调运行模式

The running mode of the ESC can be adjusted via the transmitter. It can be set tow modes: FWD/REV and FWD/REV/BRK, and the default mode is FWD/REV/BRK, refer to Parameter Setting for details.

本接收机支持在发射机端设置电调运行模式。可设置为直接正反转或正反转带刹车, 默认为正反转带刹车。功能设置请查看 [电调拖参数设置]。

ESC BATTERY TYPE 电调电池类型

The receiver supports the function of setting battery type at the transmitter side. It can be set tow types: LiPo and NiMH, and the default type is LiPo, refer to Parameter Setting for details.

本接收机支持在发射机端设置电调电池类型。可设置为锂电池或镍氢电池, 默认为锂电池。功能设置请查看 [电调拖参数设置]。

FAILSAFE 失控保护

The failsafe function is used to protect the model and personnel when the receiver is out-of-control. Refer to [Failsafe] for details.

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。功能设置参考 [失控保护]。

TRANSMITTER SPECIFICATIONS 发射机规格

Product Model : FS-MG44 V6	Life time : According to Battery Type
Channels : 4	Low Voltage Warning : <4.2V
Model Type : Car or Boat	Antenna Type : Single Built-in Antenna
RF : 2.4GHz ISM	Data Interface : None
Maximum Power : <20dBm (e.i.r.p.) (EU)	Temperature Range : -10℃ ~ +60℃
2.4GHz Protocol : 2A-BS	Humidity Range : 20% ~ 95%
Resolution : 1024	Online Update : None
Input Power : 6V/DC or 1.5AAA*4	Dimensions : 118*73*145mm
Charging Interface : None	Weight : 130g
	Certifications : CE, FCC ID: N4ZMG400, MIC:R210-167762, IC: 25584-MG4BS00

产品型号：FS-MG44 V6	续航时间：依电池类型
通道个数：4	低电压报警：< 4.2V
适配模型：车、船	天线类型：内置单天线
无线频率：2.4GHz ISM	数据接口：无
发射功率：<20dBm	温度范围：-10℃ ~ +60℃
无线协议：2A-BS	湿度范围：20% ~ 95%
通道分辨率：1024 级	在线更新：无
输入电源：6V/DC or 1.5AAA*4	外形尺寸：118mm*73mm*145mm
充电接口：无	机身重量：130g
	认证：CE, FCC ID:N4ZMG400, MIC:R210-167762, IC:25584-MG4BS00

RECEIVER SPECIFICATIONS 接收机规格

Product Model: FMS-R3D	Distance: > 100m (Ground Distance without Interference)
Compatible Transmitters: FS-FMS-MG44-BS	Data Output: PWM
Applicable Motors: 180 Brushed Motor	Resolution: 4096
RF: 2.4GHz ISM	Temperature Range: -10℃ ~ +60℃
Maximum Power: <20dBm (e.i.r.p.) (EU)	Humidity Range: 20% ~ 95%
RF Protocol: 2A-BS	Waterproof: PPX4
Antenna: Single External Antenna	Firmware Update: Not Supported
Operating Voltage: 2S LiPo	Dimensions: 32.0*24.4*12.0mm
BEC Output: 5V/1A	Weight: 11.0g
Continuous/Peak Current: 10A/40A	Certifications: CE, FCC ID: 2A2UNR3D00
Number of Channels: 4 (Including: 2 PWM channels, 1 motor output channel, and 1 LED light expansion interface)	Number of LED Lights: 7 (Including: 1 LED light interface + 1 LED light expansion interface. The LED light unit connects to the expansion interface.)
Compatible RC Models: 1/18 Scale, 1/24 Scale RC Models, and RC Crawlers	

PRODUCT SPECIFICATIONS

产品规格

产品型号: FMS-R3D	遥控距离: > 100米 (空旷无干扰地面距离)
适配发射机: FS-FMS-MG44-BS	数据输出: PWM
适配电机: 180有刷电机	通道分辨率: 4096级
无线频率: 2.4GHz ISM	温度范围: -10°C ~ +60°C
发射功率: <20dBm	湿度范围: 20% ~ 95%
无线协议: 2A-BS	防水等级: PPX4
天线类型: 外置单天线	固件更新: 不支持
工作电压: 2S LiPo	外形尺寸: 32.0*24.4*12.0mm
BEC 输出: 5V/1A	机身重量: 11.0g
持续 /峰值电流: 10A/40A	认证: CE, FCC ID: 2A2UNR3D00
通道个数: 4 (2个 PWM通道 +1个电机输出通道 +1个车灯扩展接口)	车灯组数: 7 (1车灯接口 +1车灯扩展接口; 车灯扩展接口连接车灯驱动板)
适合模型: 1/18、1/24仿真、攀爬车	

VEHICLE SETUP

车辆设置

Battery Charging 锂电池充电

Vehicle Battery: 2S LiPo 7.4 V 900 mAh.

Charger: USB balance charger.

- 1.Connect charger to a USB power source.
- 2.Connect the battery to the balance port.
- 3.Red LED = Charging.
- 4.Green LED = Fully charged.

Typical charge time: 30–45 minutes.

Never charge unattended.

Always verify that the charging area is free of flammable materials.

车辆电池: 2S 型锂电池, 电压7.4 V, 容量 900 mAh.

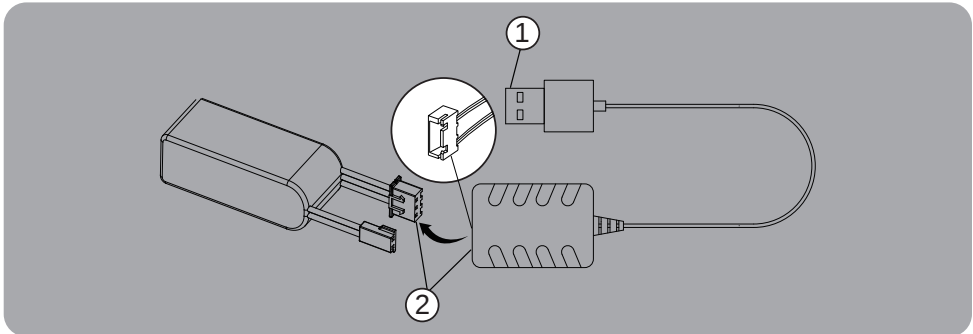
充电器: USB 平衡充电器。

- 1.将充电器连接到 USB 电源上。
- 2.将电池连接到充电器上。
- 3.充电时, LED灯状态为红色。
- 4.充电完成时, LED灯状态为绿色。

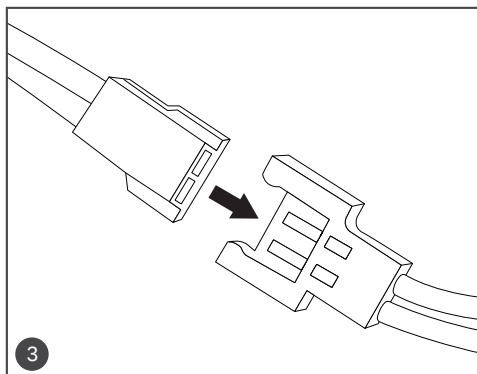
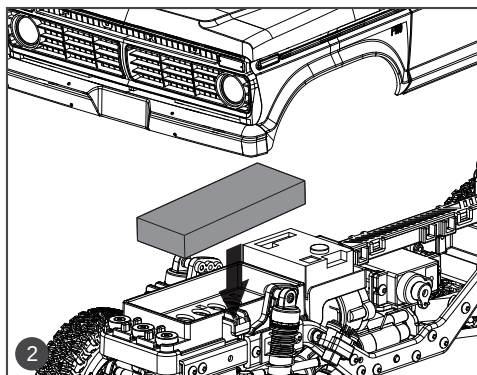
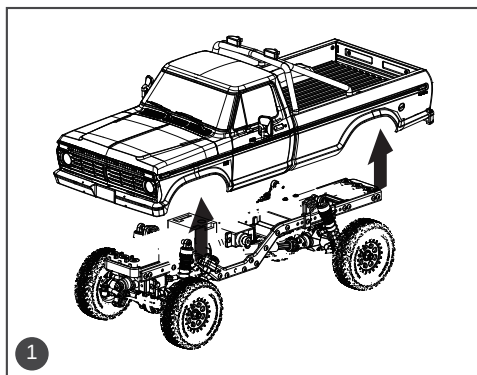
充电时间: 30 至 45 分钟。

切勿在无人看管的情况下充电。

充电时务必确保周围没有易燃物品。



CHARGING THE BATTERY 连接电池



SPARE PARTS LIST

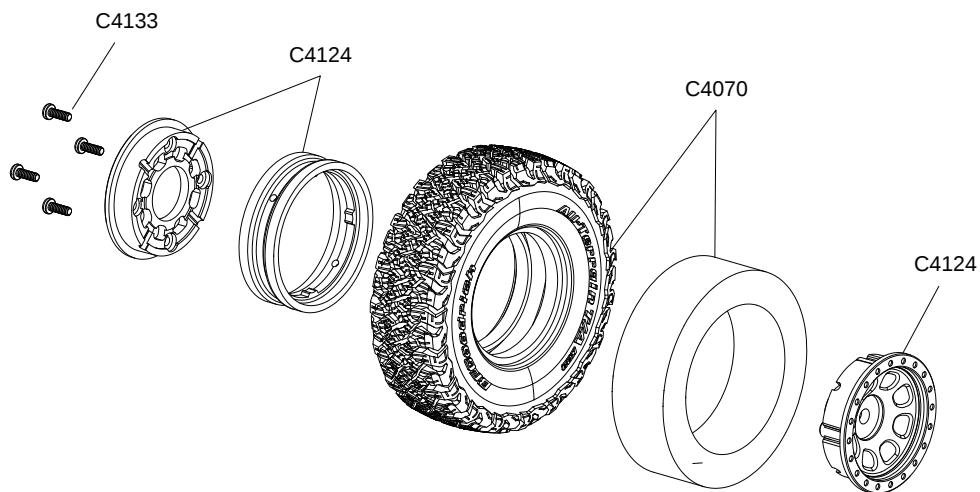
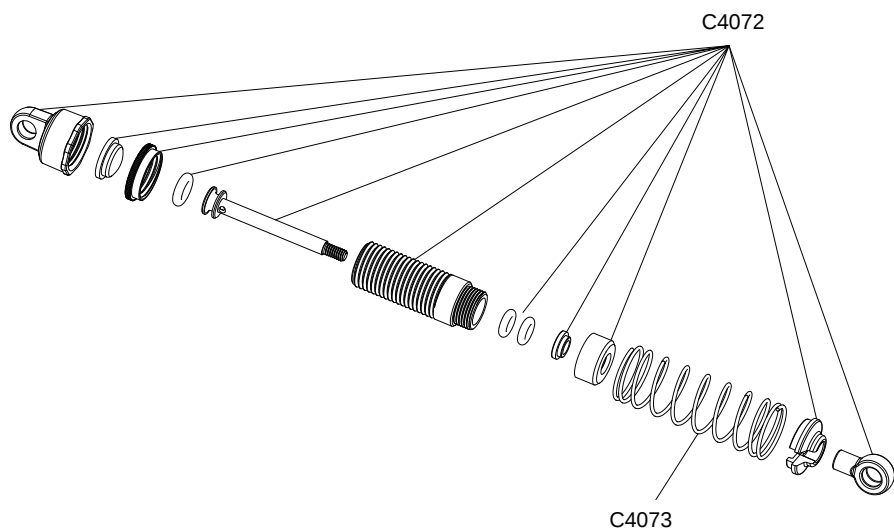
配件列表

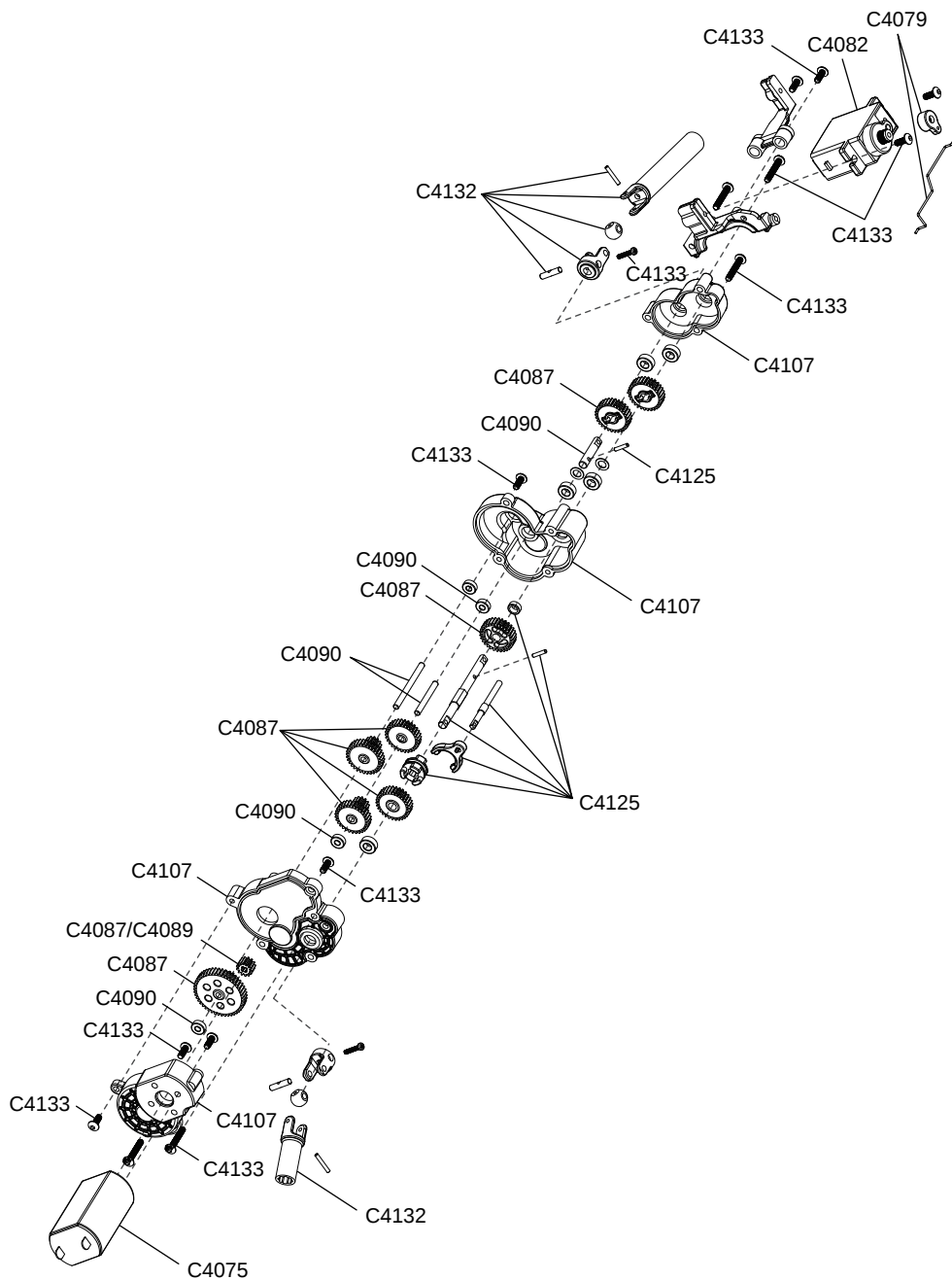
C4101	Car Body Assembly With Painted Blue/White	车壳总成(蓝白色)
C4102	Car Body Assembly With Painted Cerulean	车壳总成(蔚蓝色)
C4103	Car Body Assembly With Painted Red	车壳总成(红色)
C4104	Car Body Parts Without Painted	车壳散件(素材)
C4105	Body Mount Set	车壳快拆固定件
C4106	Exterioe Mirror Frame, Wiper And Handle	后视镜(架),雨刮及门把手
C4111	Decorative Bar	装饰条
C4112	Rear Light Set	尾灯
C4113	Front Light Set	前灯
C4114	Exhaustion Plate Electroplate	车面罩 电镀
C4115	Exhaustion Plate White	车面罩 白
C4116	Window	车窗 透明浅茶
C4117	Bumper Set	前后防撞
C4118	Cockpit Assembly	座驾总成
C4119	Rooftop Rack Set	防滚架
C4120	Main Body Parts Red	车壳主体件 红
C4121	Main Body Parts Blue-white	车壳主体件 蓝白
C4122	Main Body Parts Cerulea	车壳主体件 蔚蓝
C4123	Wheel Assembly Set	车轮套装总成
C4070	Tires Set	轮胎套装
C4124	Wheel Set	轮毂(一对)
C4072	Oil Shock Absorbers Parts 1pair (W/O Spring)	避震器散件一对(不带弹簧)
C4073	Shock Absorbers Spring	避震 压力弹簧
C4125	Transmission Gear Box Assembly Brushed	驱动牙箱总成 有刷
C4107	Transmission Gear Box Housing	驱动牙箱壳胶件
C4075	180 Brushed Motor	180有刷电机
C4126-199	Front Axle Assembly Brushed	前桥套装总成 有刷
C4127	Rear Axle Assembly	后桥套装总成
C4078	Ball Head	波头套装
C4079	Variable Speed Servo Horn Set	换挡舵机臂套装
C4080	Mg44 V6 + R3d Transmitter Receiver Set BS Version	MG44 V6 + R3D 发射器/电调接收器 BS
C4081	Steering 13g Metal Servo Jst 1.25	转向 13克 金属舵机 JST 1.25
C4082	Variable Speed 9g Servo Jst 1.25	换挡 9克 舵机 JST 1.25
C3927B	Mini Light System Control	DB03-B MINI 灯控
C4128	Light Wire Set	灯线组
C4129	Wheelbase199 Rod Set	WB199 连杆组
C4130	Metal Girder	金属大梁
C4131	Wheelbase199 Chassis Bracket	WB199 大梁连接件
C4132	Wheelbase199 Universal Joint Drive Shaft	WB199 传动轴
C4087	Gear Set For Transmission Gear Box	变速箱齿轮包
C4088	Gear Set For Front/rear Axle	直桥齿轮包
C4089	Pinion Gear	电机齿
C4090	Pin And Bearing Set	轴针及轴承
C4091	Ball Head And Washer Set	波球及垫片
C4133	Screw Set	螺丝包

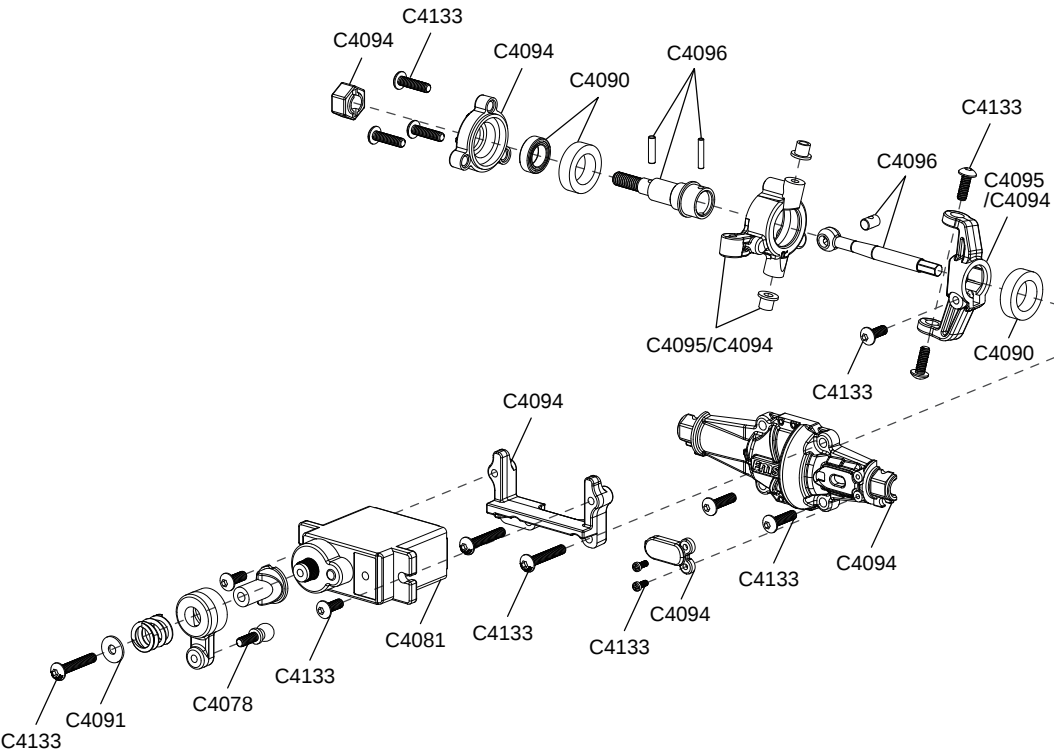
SPARE PARTS LIST

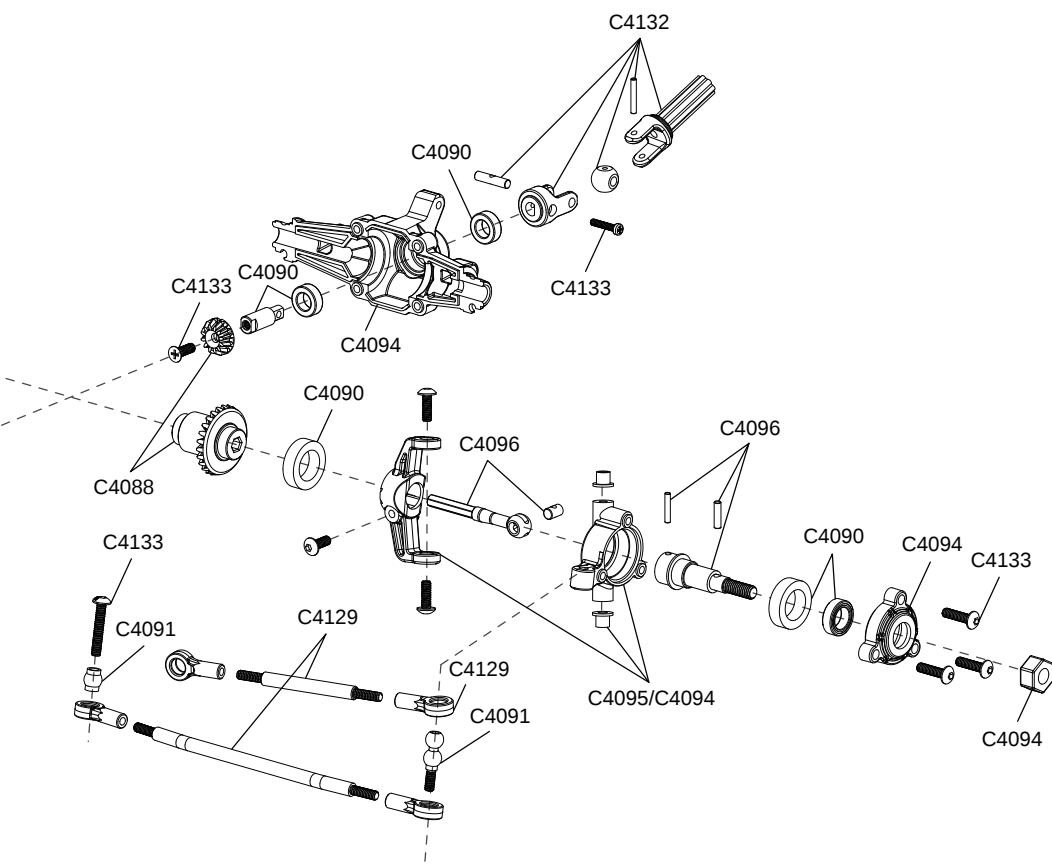
配件列表

C4093	Rear Axle Plastic Parts	后直桥胶件
C4094	Front Axle Plastic Parts	前直桥胶件
C2259	Lipo Battery 2s 7.4v 900mah	电池7.4V 2S 900mAh
C2267	USB 2s Lipo Quick Charger Cable	USB 平衡充电器 7.4V 2000mA
C4095	C-HUB SET	C座
C4096	199 Wheel Shaft Set	199 轮轴 套装
C4098	Shock Absorbers Tower	避震架
C4099	Gear Box Mount	驱动牙箱座
C4100	Power Switch Mount	开关座
C4126PRO-199	Front Axle Assembly Brushed (Diff + Portal Axle)	前桥套装总成 有刷 (差速 + 门桥)
C4126DIFF-199	Front Axle Assembly Brushed (Diff)	前桥套装总成 有刷 (差速)
C4126PLX-199	Front Axle Assembly Brushed (Portal Axle)	前桥套装总成 有刷 (门桥)
C4127PRO	Rear Axle Assembly (Diff + Portal Axle)	后桥套装总成 (差速 + 门桥)
C4127DIFF	Rear Axle Assembly (Diff)	后桥套装总成 (差速)
C4127PLX	Rear Axle Assembly (Portal Axle)	后桥套装总成 (门桥)
C4155	Front/rear Differential Parts	前/后差速件
C4156	Rear Portal Axle Parts	后门桥组件
C4157	Front Portal Axle Parts	前门桥组件
C4164	R3D Receiver / Esc 2 In 1 Set BS Version	R3D 电调接收器 2 IN1 BS
C4076	Car Body Decal Sheet Full Set	车身贴纸套装
C4223	Steering Servo Mount (Aluminium Black)	转向舵机座 铝件 黑
C4224	Steering Parts (Aluminium Black)	转向组 铝件 黑
C4225	Shock Absorber Tower (Aluminium Black)	避震架 铝件 黑
C4226	Gear Box Mount (Aluminium Black)	变速箱配件 铝件 黑
C4222	Oil Shock Absorbers Assembly 1pair (With Spring)	避震器总成一对(带弹簧)

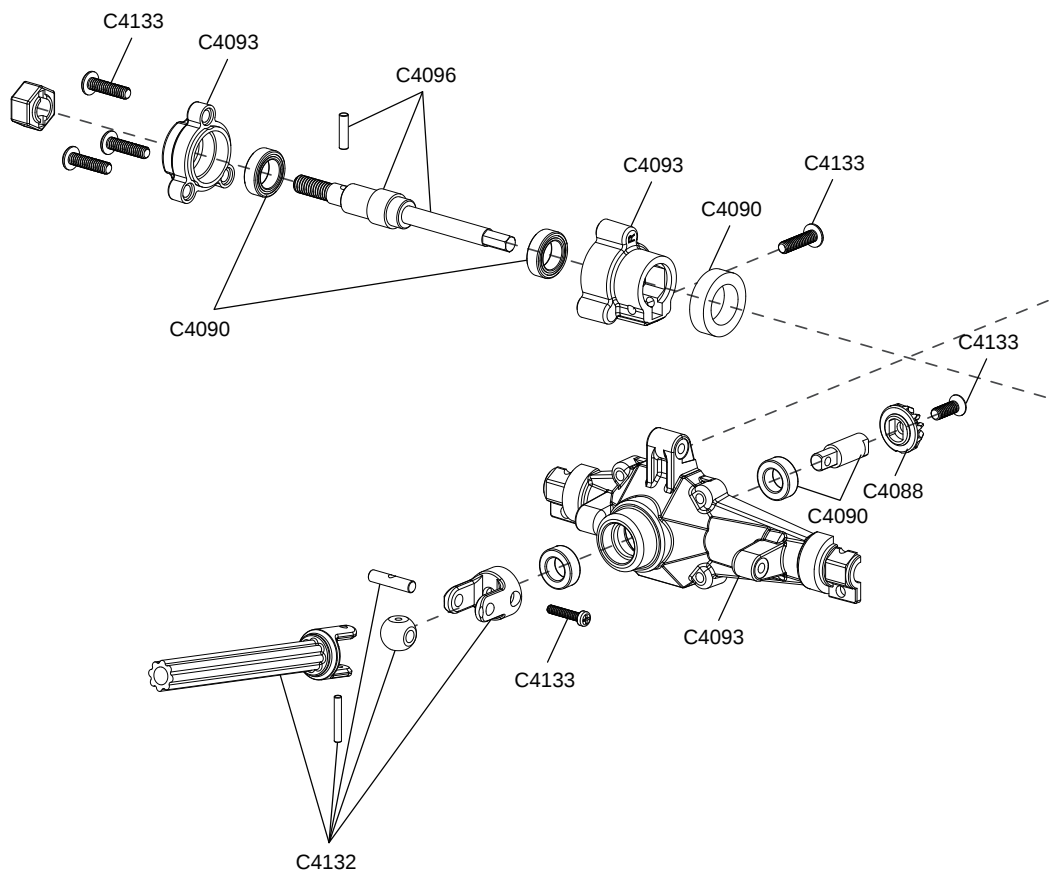


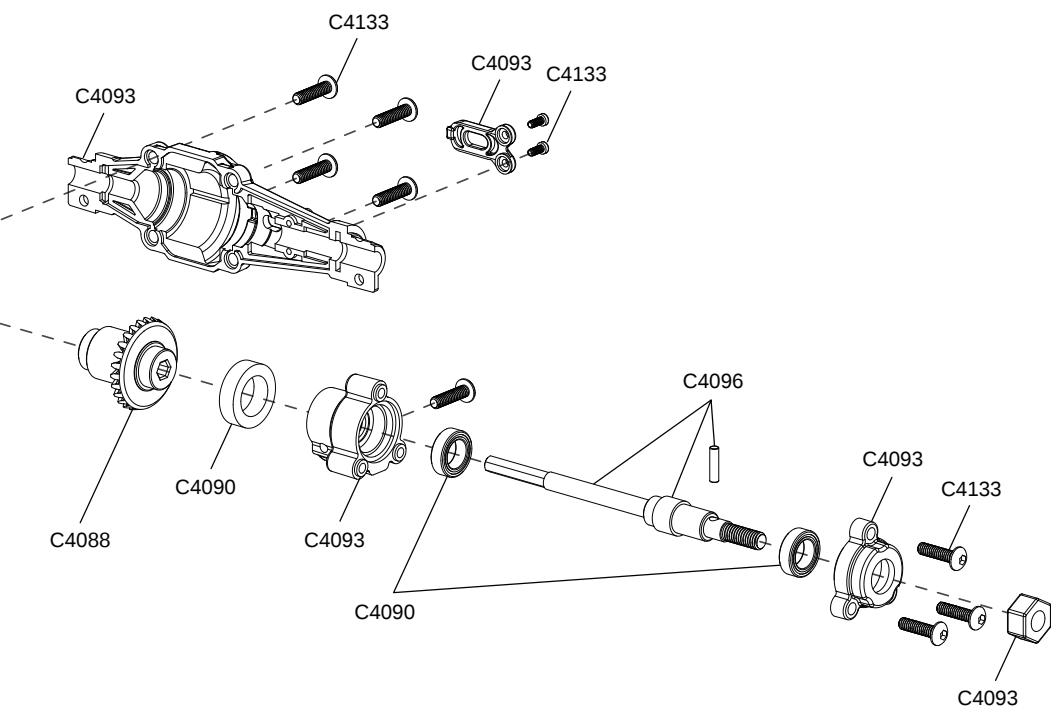


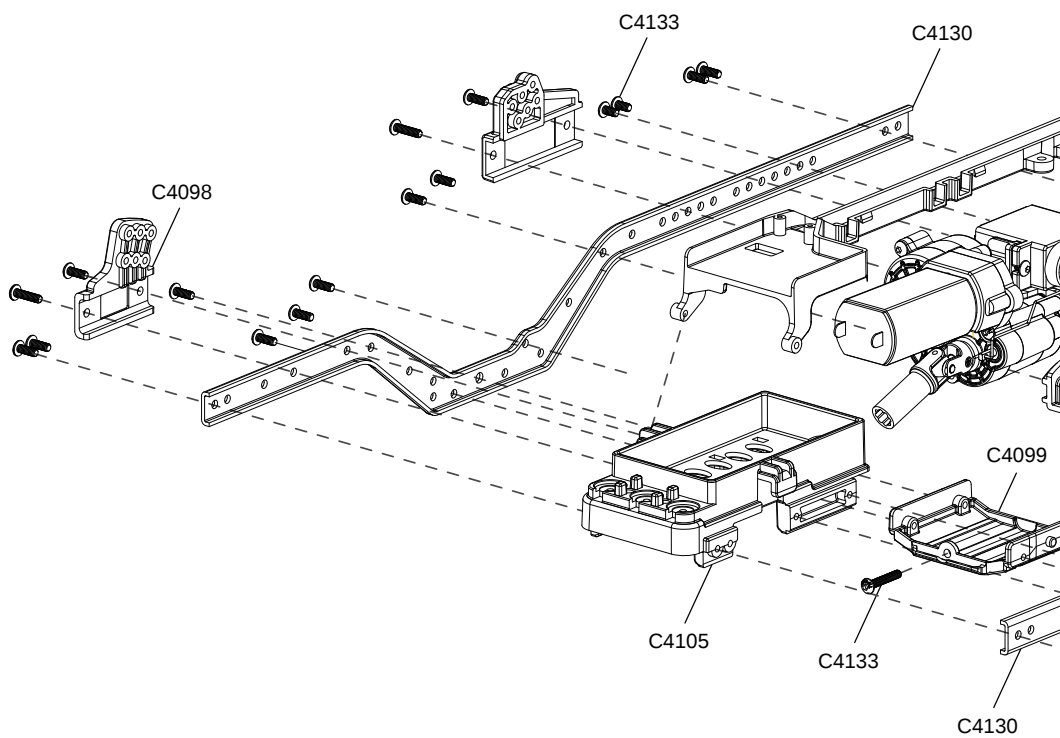


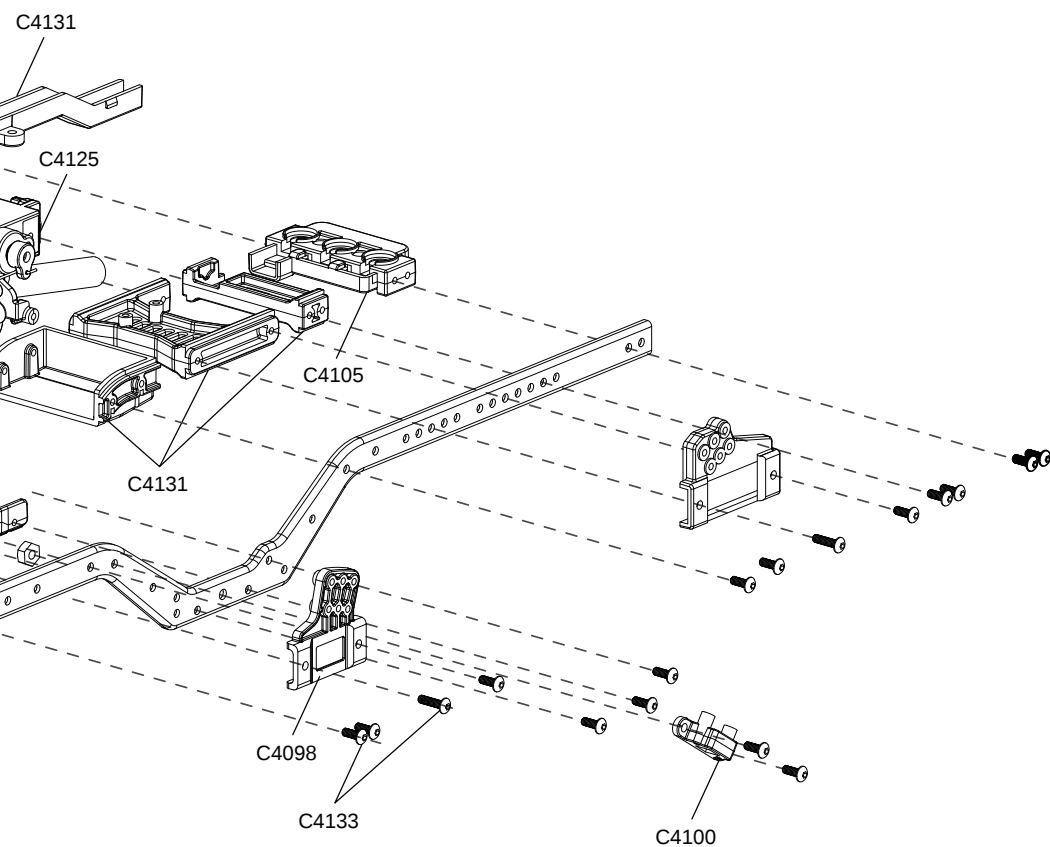


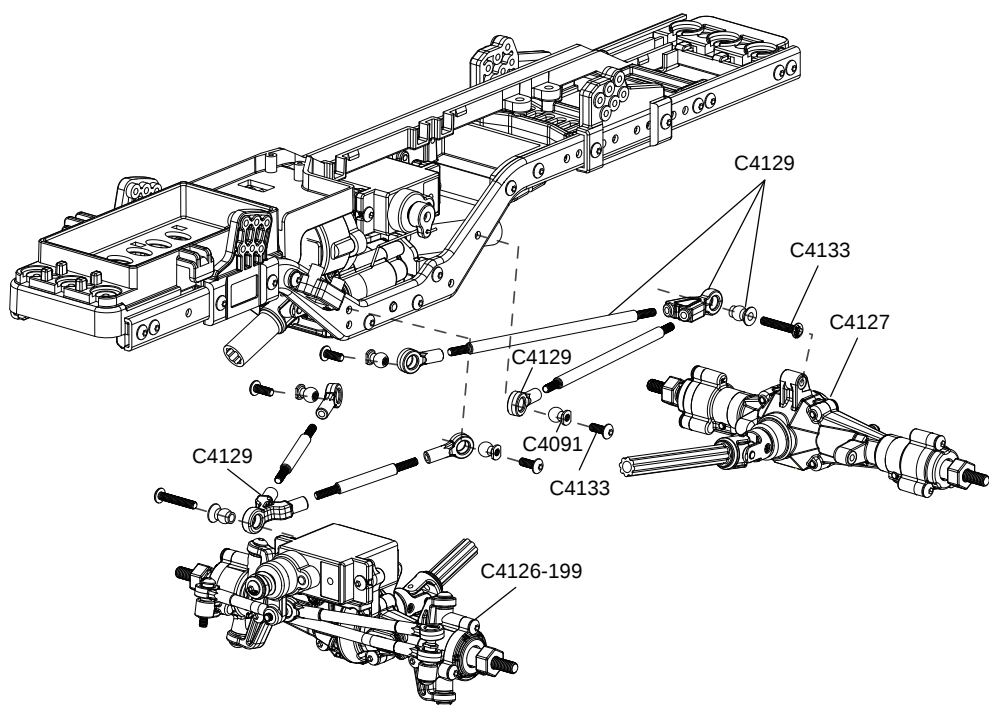
EN:REAR AXLE ASSEMBLY

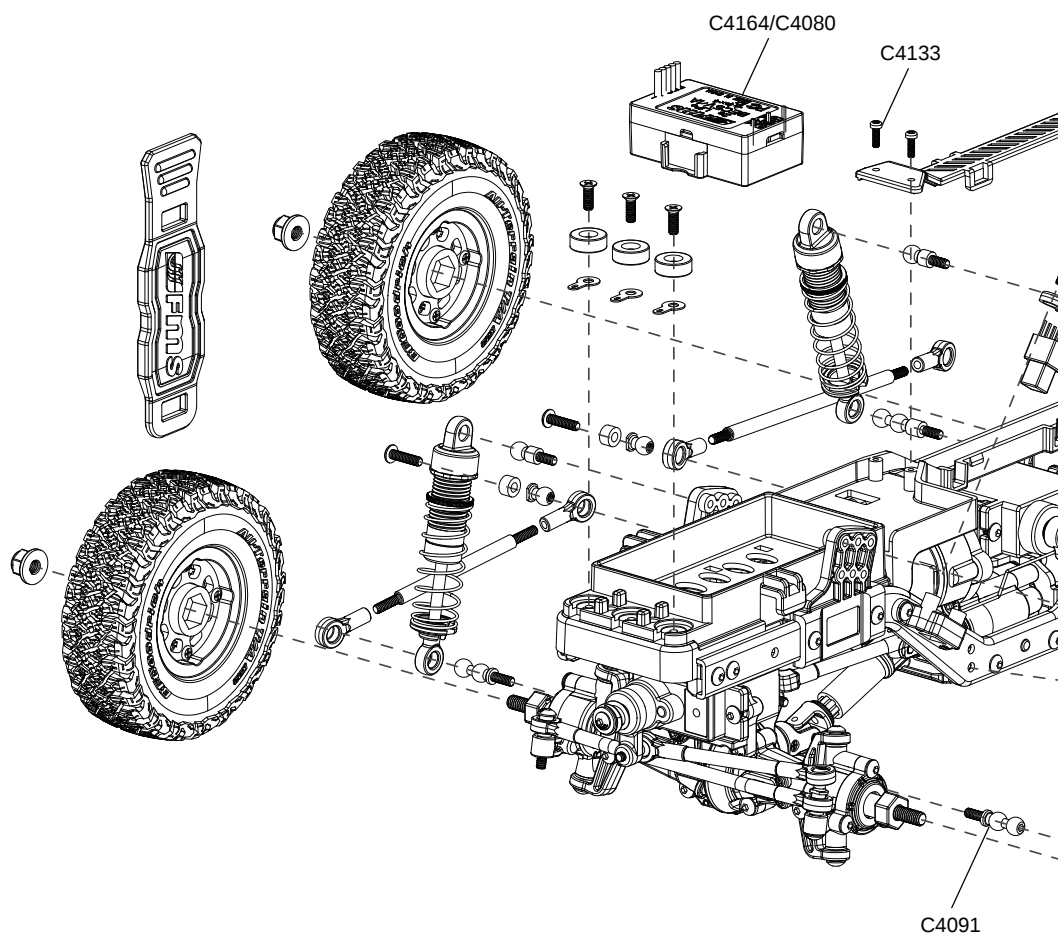


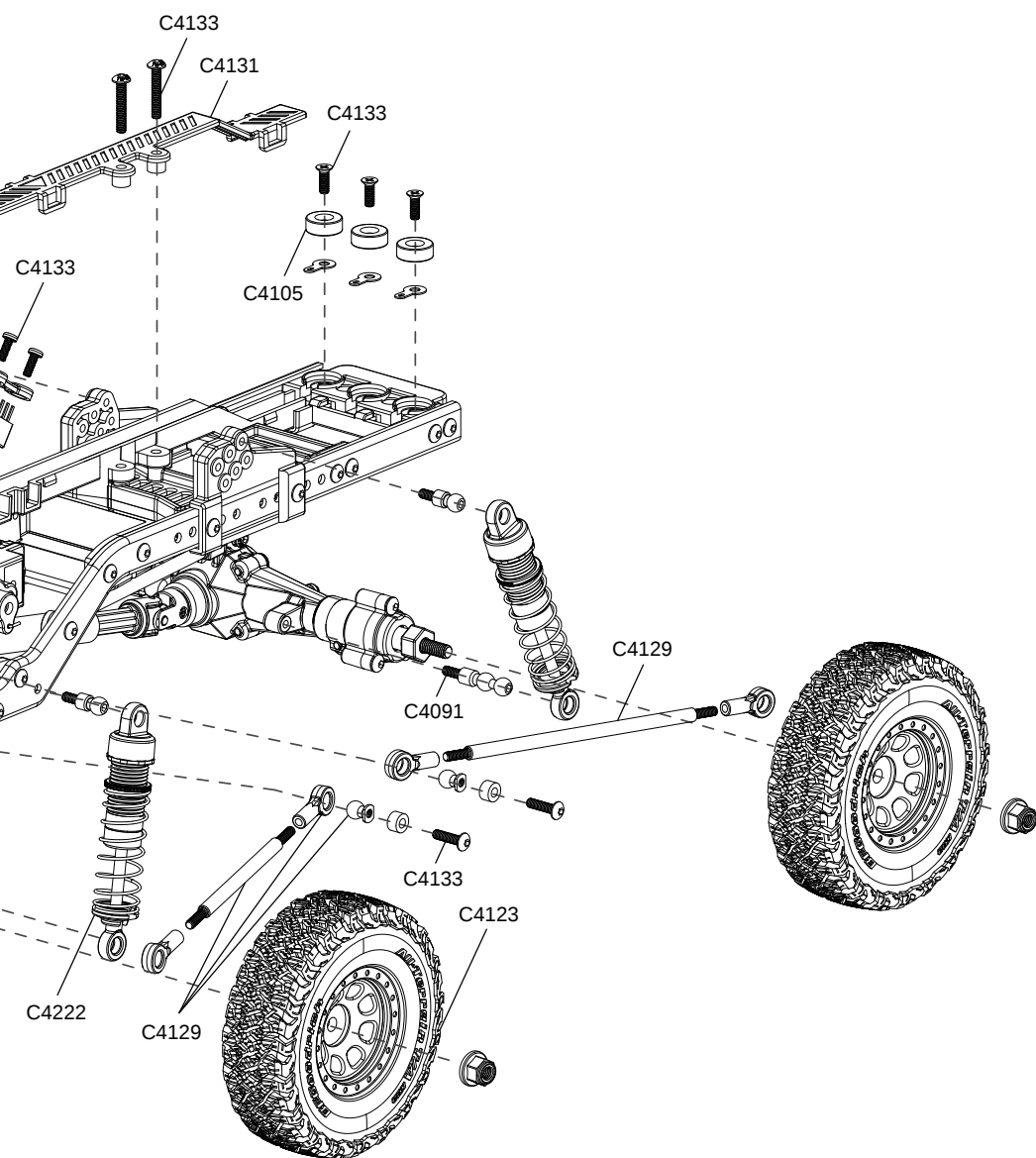




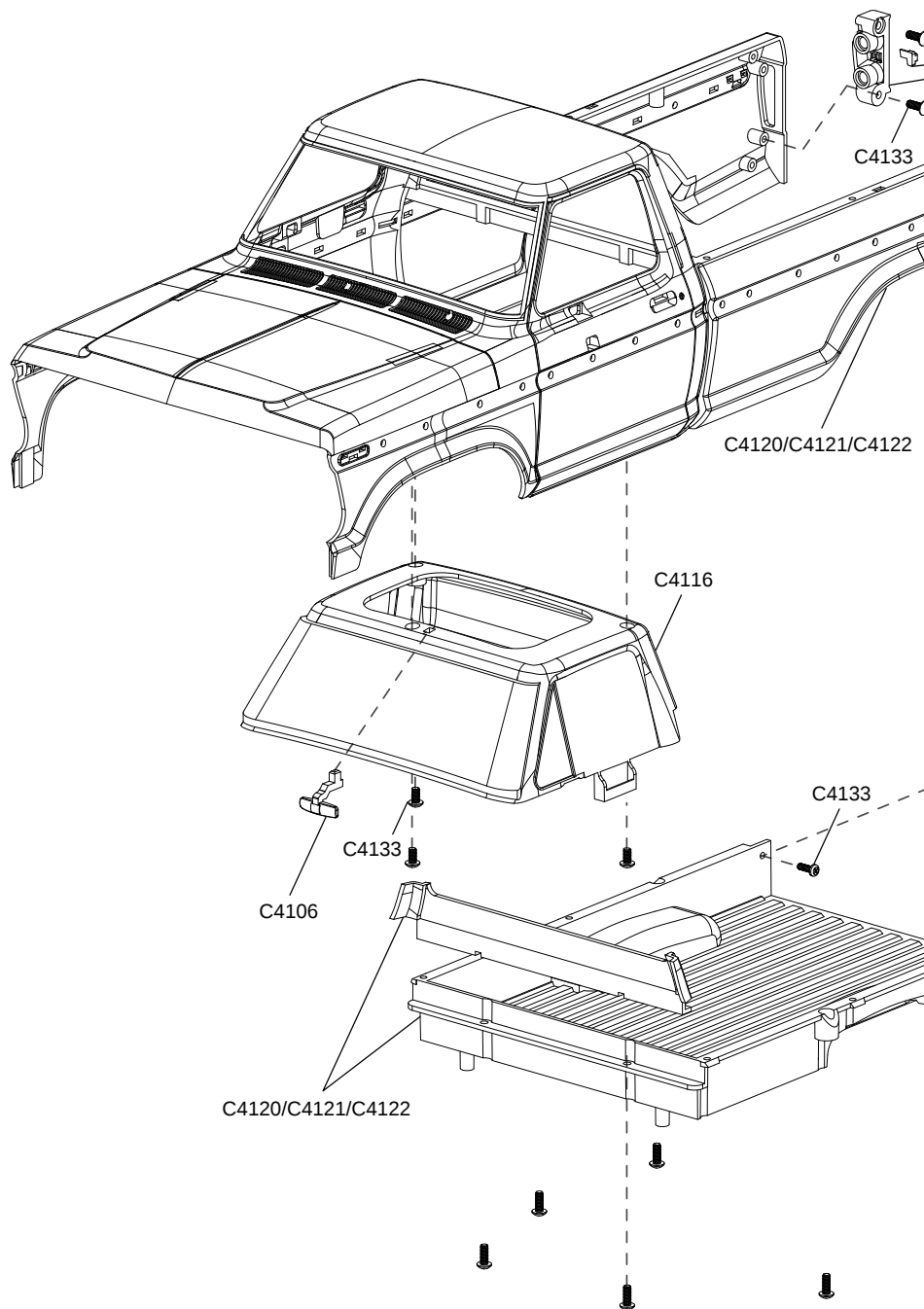


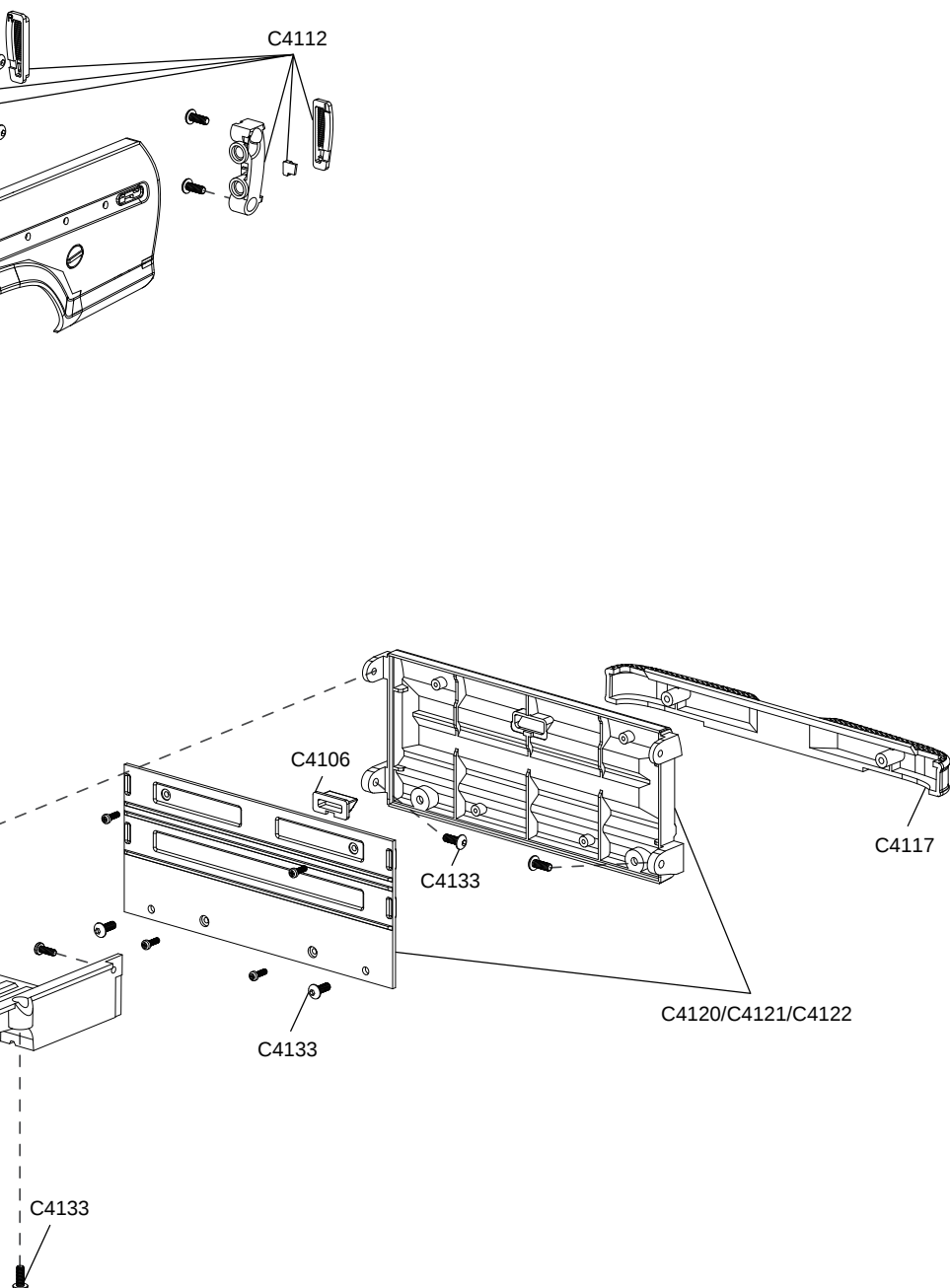


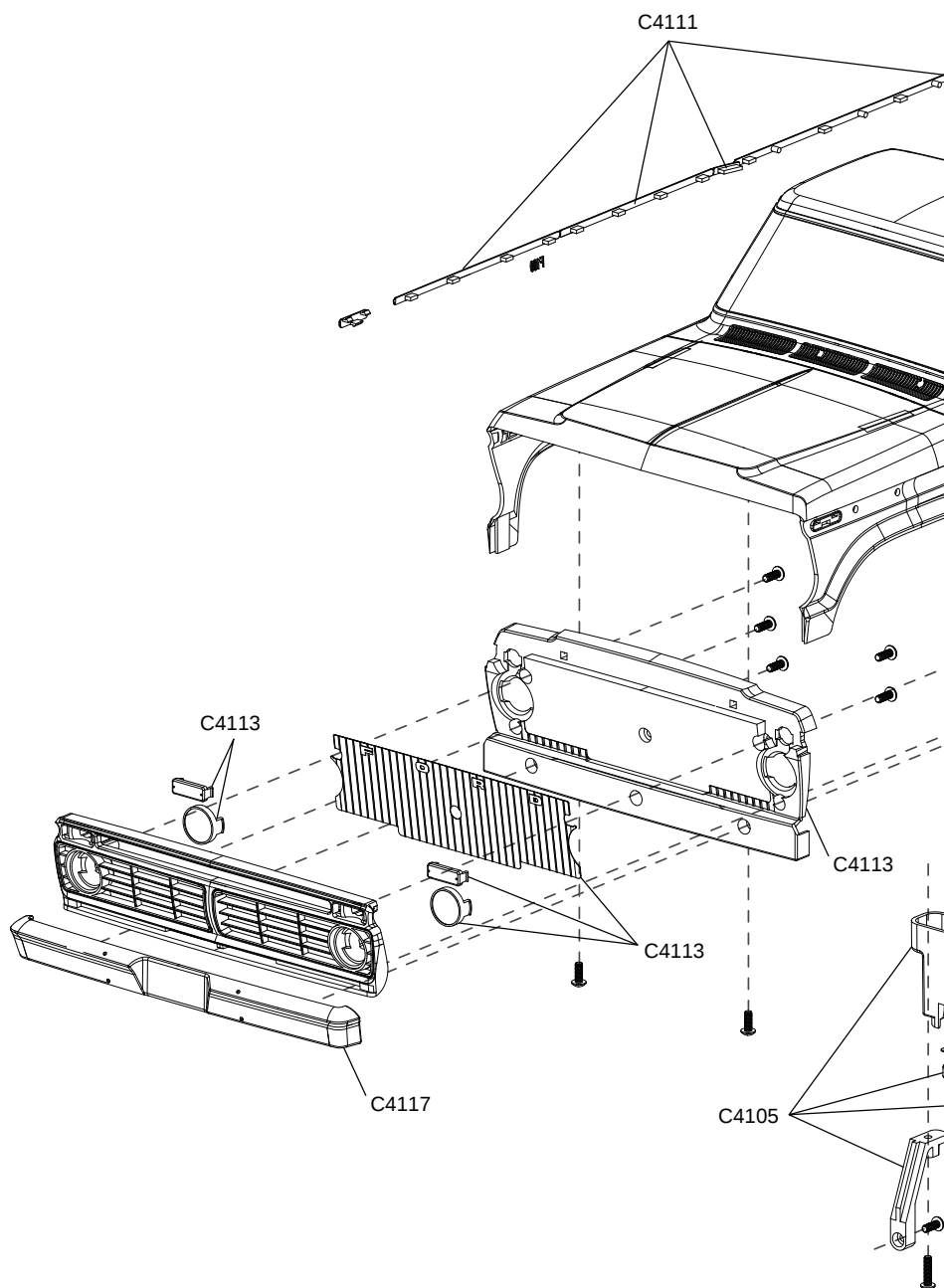


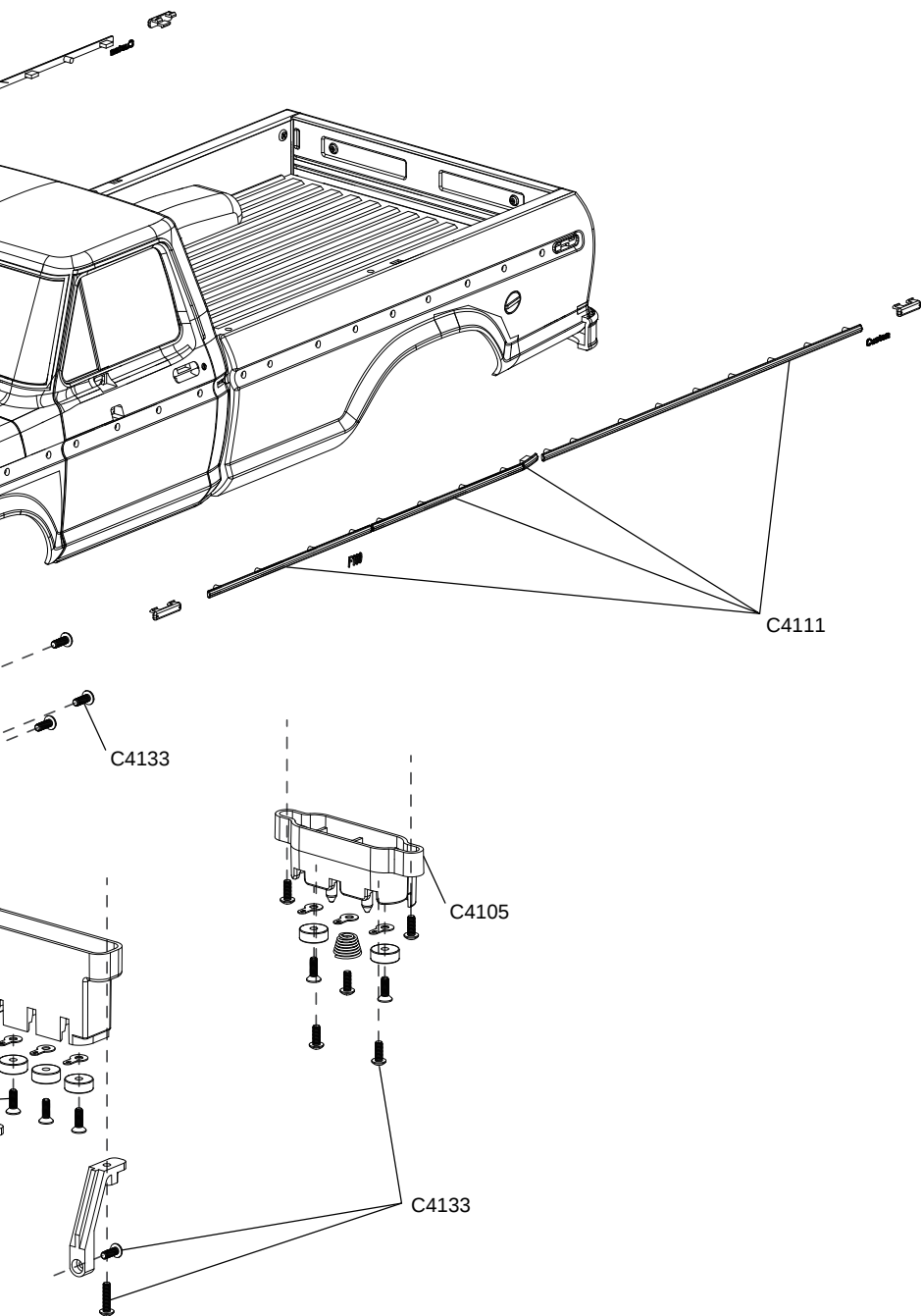


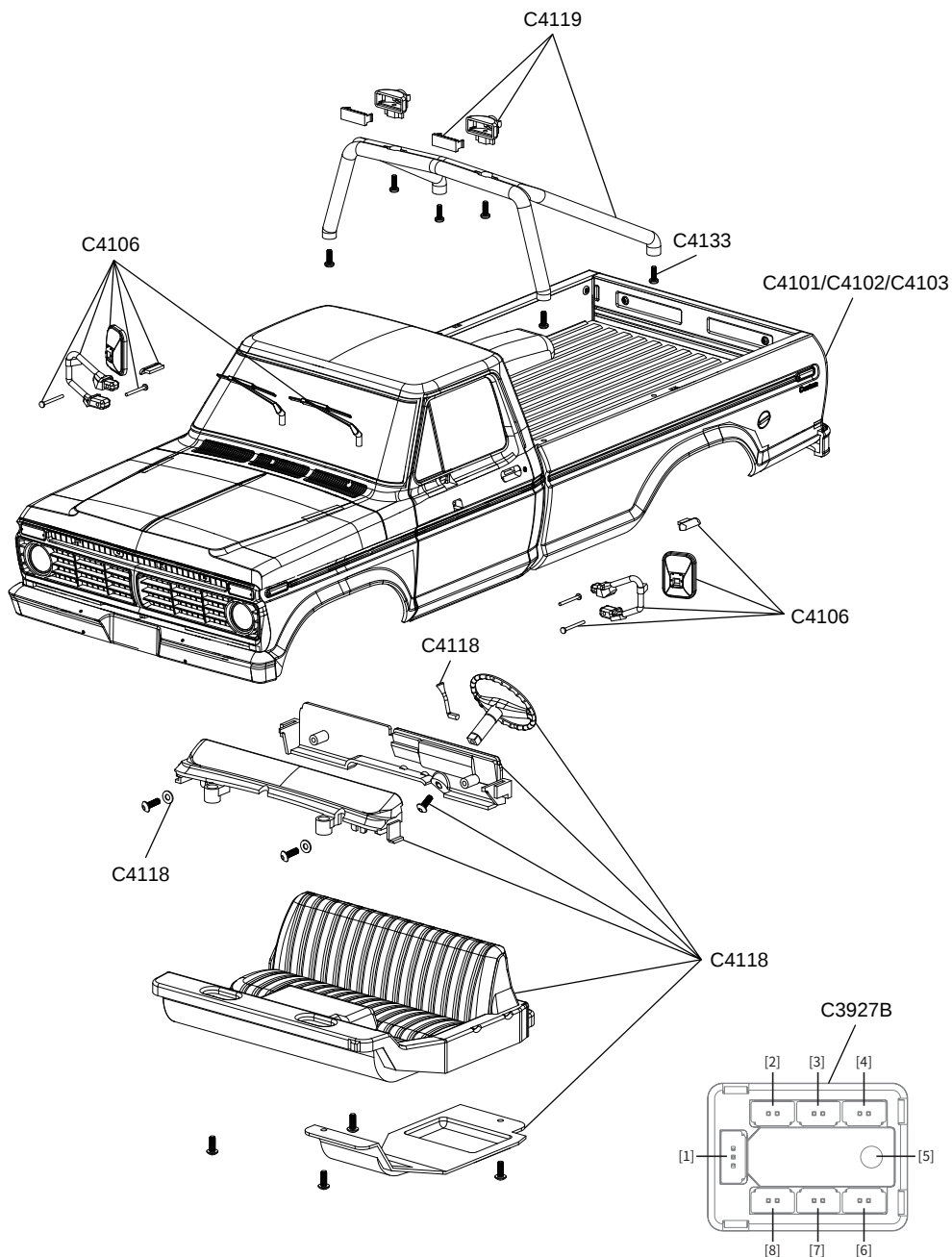
EN:SEMI-FINISHED SHELL BODY SET A



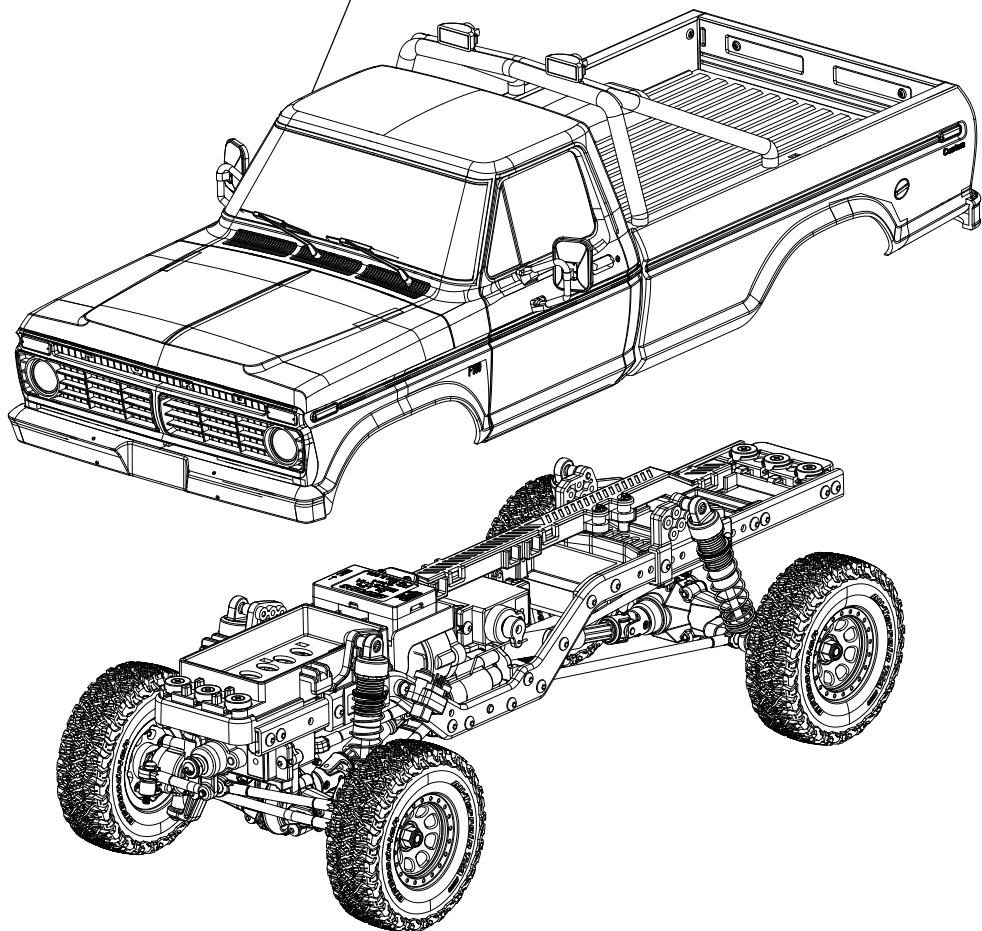








C4101/C4102/C4103/C4104



MAINTENANCE

维护&保养

- Before and after each use, inspect the model car' s battery, wiring, screws, gears, and other components; promptly tighten any loose parts; and remove dust, dirt, and debris from between the wheels and the chassis.
 - After using the battery, allow it to cool to room temperature before recharging. Avoid overcharging and over-discharging (do not let the voltage of lithium batteries drop below 3.7V).
 - Avoid prolonged use in hot, humid, or dusty environments; prevent the vehicle from getting wet, being hit, or dropped; and keep the drive system away from sand and water.
 - Store indoors at room temperature.
 - Regularly apply special lubricating oil to the motor bearings, gears, and steering mechanism to extend the service life of the parts.
 - Pair and calibrate the transmitter with the model car regularly to prevent signal interference.
 - If the transmitter will not be used for an extended period of time, be sure to remove the batteries.
 - Keep spare commonly used parts (such as batteries, screws, servos, and motors) on hand so that faulty parts can be replaced promptly.
- 每次使用前后，检查模型车的电池、接线、螺丝、齿轮等，及时拧紧松动的零件，清理灰尘、泥土，车轮与底盘间的杂物。
- 电池使用后，待冷却至室温再充电，避免过度充电、过度放电（锂电池避免低于 3.7V）。
- 避免在高温、潮湿、多尘的环境长时间使用，避免车辆进水、碰撞、摔落，保持传动系统远离沙子和水。
- 在室内常温下存放。
- 定期给电机轴承、齿轮、转向机构添加专用润滑油，延长零件使用寿命。
- 发射机（遥控器）与模型车定期配对校准，避免信号异常。
- 发射机长时间不使用，请务必取出电池。
- 备用常用零件（如电池、螺丝、舵机、电机），方便及时更换故障零件。

TROUBLESHOOTING

故障排除

Refer to the complete "Troubleshooting Guide" for detailed troubleshooting instructions.

有关详细的故障排除说明，请参阅完整的《故障排除指南》。

PARTS & SUPPORT

配件支持

Use only genuine FMS replacement parts.
Visit the FMS website or contact your distributor for support.

仅使用原装的 FMS 更换部件。
请访问 FMS 网站或联系您的经销商以获取支持。

CONTACT

联系方式



Scan the QR code to access the official website of FMS.

FMS Model

Email: support@fmsmodel.com



MADE IN CHINA

