

axial[®]
www.axialracing.com

1/6th SCALE READY-TO-RUN

SCX6 JEEP® JLU WRANGLER



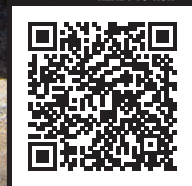
Scan the QR code and select the Manuals and Support quick links from the product page for the most up-to-date manual information.

Scannen Sie den QR-Code und wählen Sie auf der Produktseite die Quicklinks Handbücher und Unterstützung, um die aktuellsten Informationen zu Handbücher.

Scannez le code QR et sélectionnez les liens rapides Manuals and Support sur la page du produit pour obtenir les informations les plus récentes sur le manuel.

Scannerizzare il codice QR e selezionare i Link veloci Manuali e Supporto dalla pagina del prodotto per le informazioni manuali più aggiornate.

RTR
READY-TO-RUN



AXI05000T1/T2

**INSTRUCTION MANUAL
BEDIENUNGSANLEITUNG
MANUEL D'UTILISATION
MANUALE DI ISTRUZIONI**

Before operating this vehicle, please read all printed materials thoroughly.
Horizon Hobby is not responsible for inadvertent errors in this manual.

HORIZON[®]
H O B B Y

NOTICE

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, LLC. For up-to-date product literature, visit horizonhobby.com or towerhobbies.com and click on the support or resources tab for this product.


MEANING OF SPECIAL LANGUAGE

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

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND a little or no possibility of injury.

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

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

Age Recommendation: Not for children under 14 years. This is not a toy.

SAFETY PRECAUTIONS AND WARNINGS

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

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

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


 **WARNING AGAINST COUNTERFEIT PRODUCTS:** Always purchase from a Horizon Hobby, LLC authorized dealer to ensure authentic high-quality Spektrum product. Horizon Hobby, LLC disclaims all support and warranty with regards, but not limited to, compatibility and performance of counterfeit products or products claiming compatibility with DSM® or Spektrum technology.

TABLE OF CONTENTS


Water-Resistant Vehicle With Waterproof Electronics.....	3	Vehicle Maintenance	9
Box Contents.....	4	ESC Operation.....	10
Required Equipment	4	ESC Programming	10
Recommended Tools	4	Gear Ratios.....	11
Getting Started Checklist.....	5	Troubleshooting.....	11
Vehicle Parts.....	5	Limited Warranty.....	12
Charge the Vehicle Battery	6	Warranty and Service Contact Information	13
Install the Transmitter Batteries.....	6	FCC Information.....	13
Transmitter Functions.....	6	IC Information.....	13
Adjusting the Vehicle Battery Tray.....	7	Compliance Information for the European Union	14
Install the Vehicle Battery	7	Exploded Views.....	54
Binding.....	8	Parts List.....	59
Range-Checking the Radio System	8	Electronics	61
Using the Two Speed transmission.....	8		

WATER-RESISTANT VEHICLE WITH WATERPROOF ELECTRONICS

Your new Horizon Hobby vehicle has been designed and built with a combination of waterproof and water-resistant components to allow you to operate the product in many “wet conditions,” including puddles, creeks, wet grass, snow and even rain.

While the entire vehicle is highly water-resistant, it is not completely waterproof and your vehicle should NOT be treated like a submarine. The various electronic components used in the vehicle, such as the Electronic Speed Control (ESC), servo(s) and receiver are waterproof, however, most of the mechanical components are water-resistant and should not be submerged.

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

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

GENERAL PRECAUTIONS

- Read through the wet conditions maintenance procedures and make sure that you have all the tools you will need to properly maintain your vehicle.
- Not all batteries can be used in wet conditions. Consult the battery manufacturer before use. Caution should be taken when using Li-Po batteries in wet conditions.
- Most transmitters are not water-resistant. Consult your transmitter’s manual or the manufacturer before operation.
- Never operate your transmitter or vehicle where lightning may be present.
- Do not operate your vehicle where it could come in contact with salt water (ocean water or water on salt-covered roads), contaminated or polluted water. Salt water is very conductive and highly corrosive, so use caution.

- Even minimal water contact can reduce the life of your motor if it has not been certified as water-resistant or waterproof. If the motor becomes excessively wet, apply very light throttle until the water is mostly removed from the motor. Running a wet motor at high speeds may rapidly damage the motor.
- Driving in wet conditions can reduce the life of the motor. The additional resistance of operating in water causes excess strain. Alter the gear ratio by using a smaller pinion or larger spur gear. This will increase torque (and motor life) when running in mud, deeper puddles, or any wet conditions that will increase the load on the motor for an extended period of time.

WET CONDITIONS MAINTENANCE

- Drain any water that has collected in the tires by spinning them at high speed. With the body removed, place the vehicle upside down and pull full throttle for a few short bursts until the water has been removed.



CAUTION: Always keep hands, fingers, tools and any loose or hanging objects away from rotating parts when performing the above drying technique.

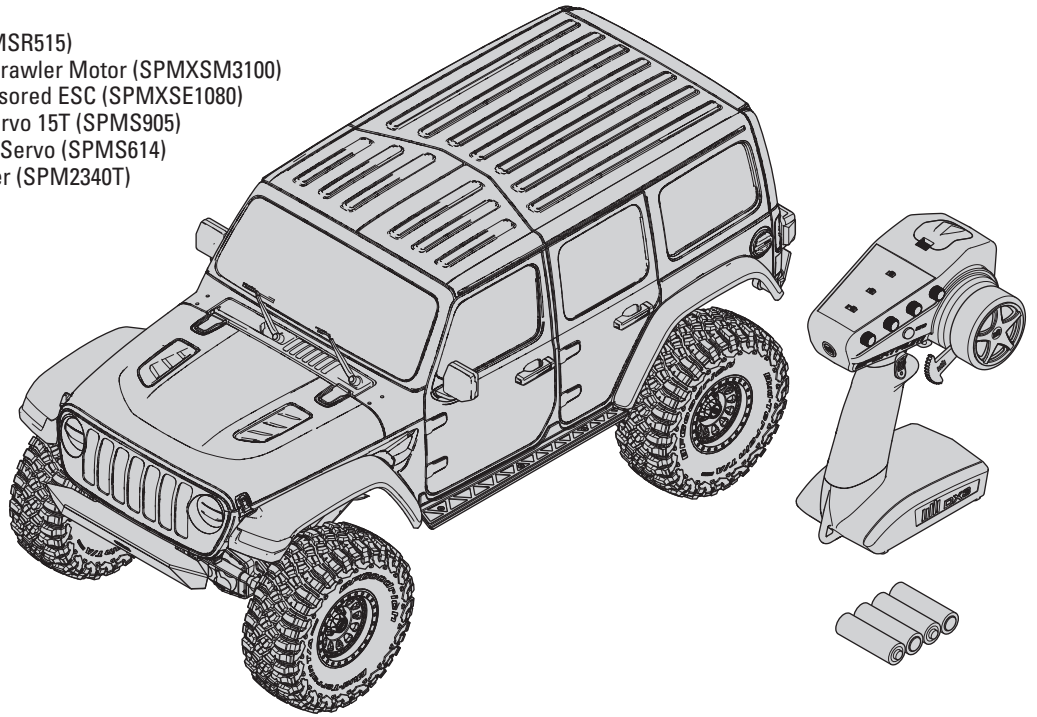
- Remove the battery pack(s) and dry the contacts. If you have an air compressor or a can of compressed air, blow out any water that may be inside the recessed connector housing.
- Remove the tires/wheels from the vehicle and gently rinse the mud and dirt off with a garden hose. Avoid rinsing the bearings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

NOTICE: Never use a pressure washer to clean your vehicle.

- Use an air compressor or a can of compressed air to dry the vehicle and help remove any water that may have gotten into small crevices or corners.
- Spray the bearings, drive train, fasteners and other metal parts with a water-displacing light oil. Do not spray the motor.
- Let the vehicle air dry before you store it. Water (and oil) may continue to drip for a few hours.
- Increase the frequency of disassembly, inspection and lubrication of the following:
 - Front and rear axle hub assembly bearings.
 - All transmission cases, gears and differentials.
 - Motor—clean with an aerosol motor cleaner and re-oil the bushings with lightweight motor oil.

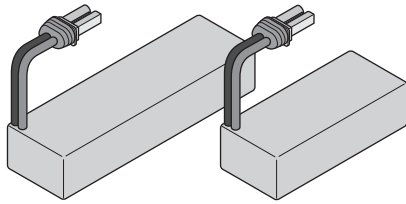
BOX CONTENTS

- SCX6™ 1/6 Jeep JLU Wrangler RTR
 - SR515 DSMR 5 CH Receiver (SPMSR515)
 - 1200Kv 1/6 Brushless Sensored Crawler Motor (SPMXSM3100)
 - 120A Crawl Smart Brushless Sensored ESC (SPMXSE1080)
 - Water Proof S905 Large Scale Servo 15T (SPMS905)
 - Water Proof Metal Gear Surface Servo (SPMS614)
- Spektrum™ DX3™ 2.4GHz Transmitter (SPM2340T)
- 4 AA Batteries

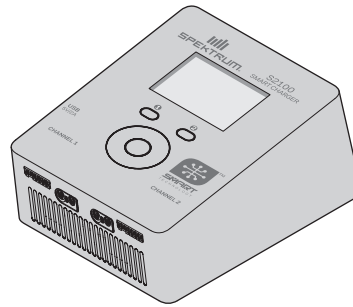


REQUIRED EQUIPMENT

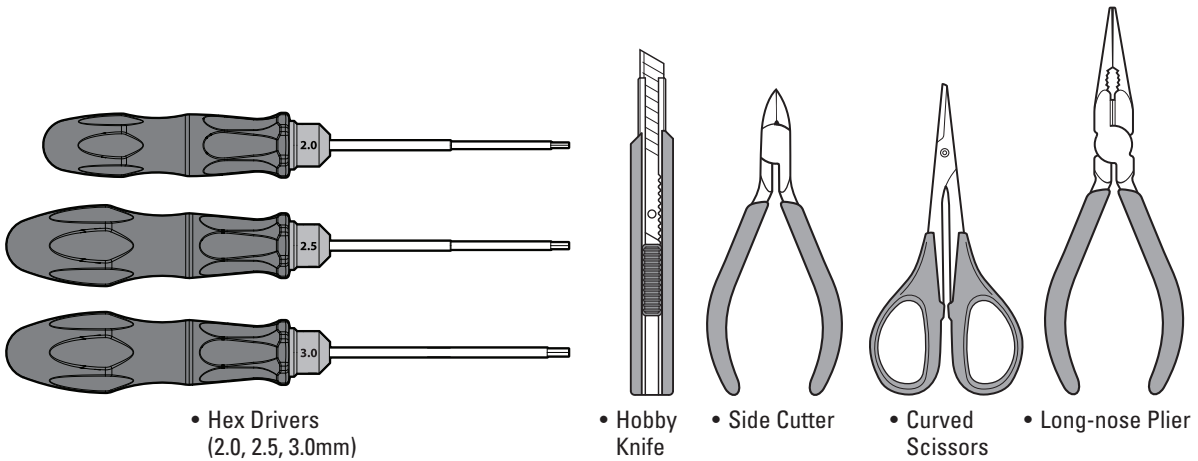
- 3S Standard or "Shorty" LiPo Battery (IC5® Connector Required)



- Battery charger compatible with the chosen vehicle battery type



RECOMMENDED TOOLS



- Hex Drivers (2.0, 2.5, 3.0mm)

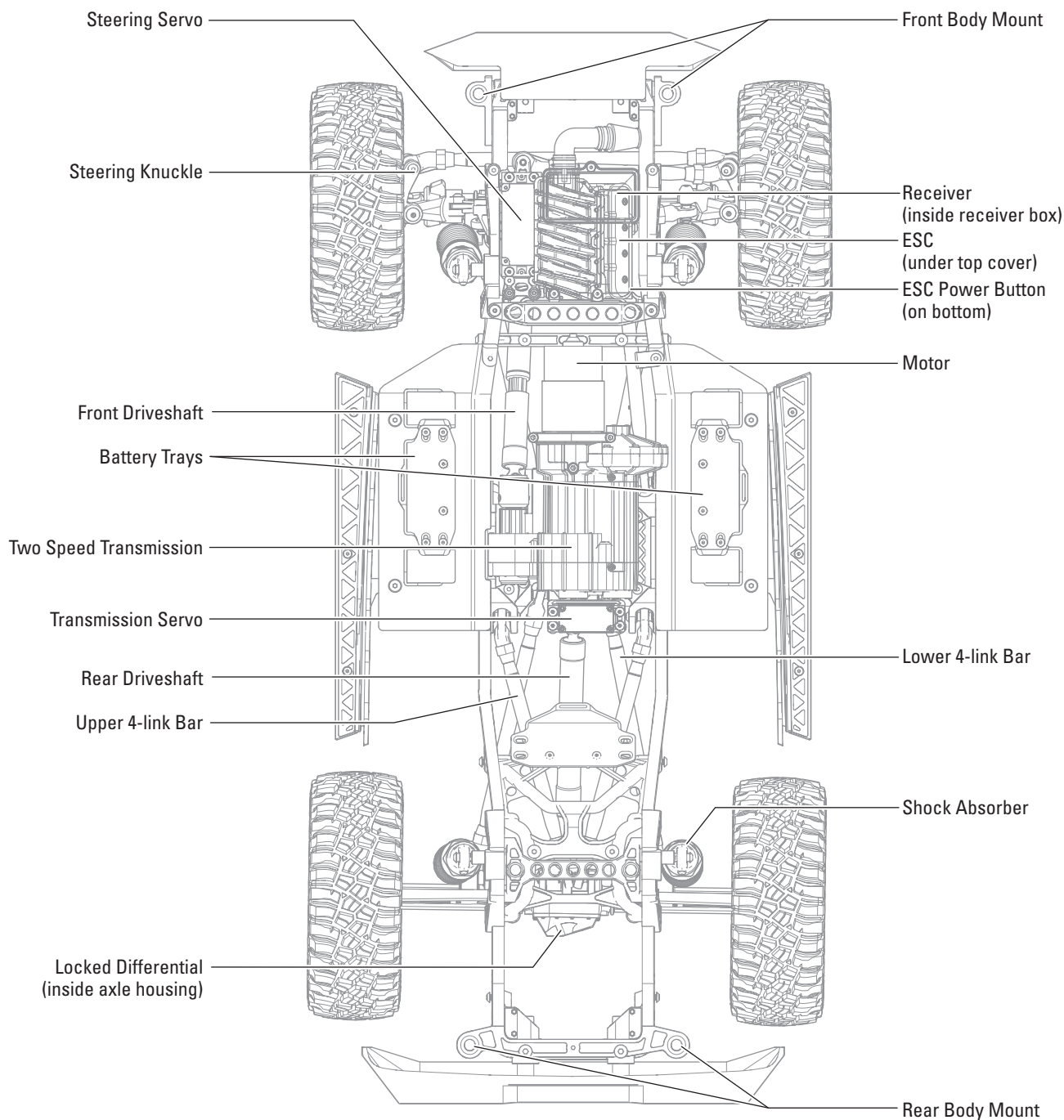
- Hobby Knife
- Side Cutter
- Curved Scissors
- Long-nose Plier

GETTING STARTED CHECKLIST

Read the manual
Familiarize yourself with the vehicle and its components
Check all screws, especially the driveshaft setscrews, for tightness from the factory
Charge the vehicle battery
Install 4 AA batteries in the transmitter

Power on the transmitter
Install the vehicle battery in the vehicle
Check for proper function of the throttle and steering
Range check the radio system
Drive the vehicle, challenge yourself and have FUN!
Perform any necessary vehicle maintenance

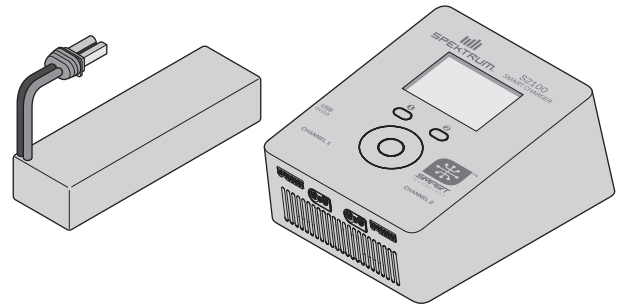
VEHICLE PARTS



CHARGE THE VEHICLE BATTERY

Follow the manufacturer's directions for your charger to properly charge the vehicle battery.

CAUTION: Only use chargers designed to charge the chosen battery type. Using an incorrect charger or incorrect charger settings could cause the battery to catch fire or explode.



INSTALL THE TRANSMITTER BATTERIES

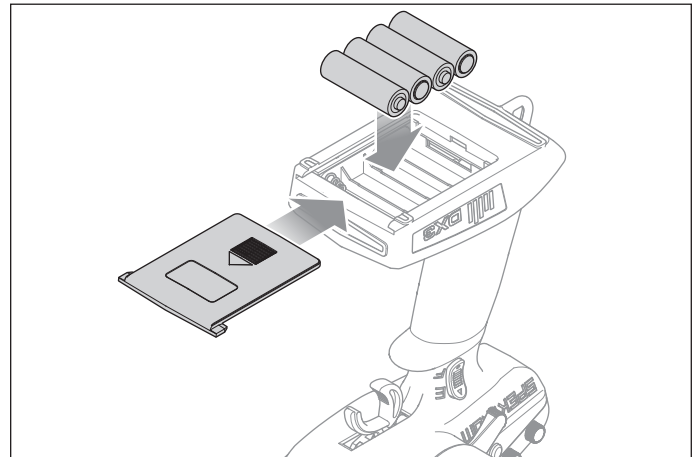
This transmitter requires 4 AA batteries.

1. Remove the battery cover from the transmitter.
2. Install the batteries as shown.
3. Install the battery cover.

CAUTION: NEVER remove the transmitter batteries while the model is powered on. Loss of model control, damage, or injury may occur.

CAUTION: If using rechargeable batteries, charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to national regulations.



TRANSMITTER FUNCTIONS

A/B. Channel 3 Button (Two-Speed Function)

C. Throttle/Brake

D. Steering Wheel

E. Steering Rate

Adjusts the end point of the steering

F. Brake Rate

Adjusts the braking end point.

G. Steering Trim

Adjusts the steering center point. Normally, the steering trim is adjusted until the vehicle tracks straight.

H. Throttle Trim

Adjusts the throttle neutral point

I. SMART Battery Level Indicator

J. Servo Reversing

To reverse the Throttle (TH) or Steering (ST) channel, switch the position of the correlating switch—"N" is for normal, "R" is for reverse.

K. Throttle Limit

Limits throttle output to 50/75/100%

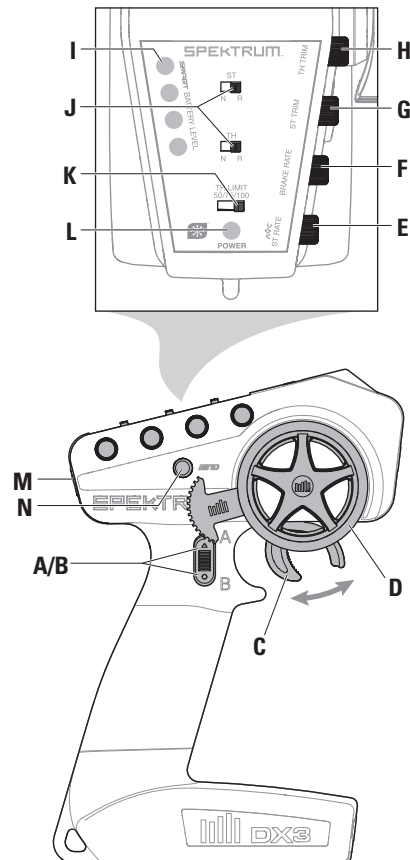
Select 50% or 75% for less experienced drivers or when you are driving the vehicle in a small area.

L. Power LED

- **Solid red lights:** Indicates radio connectivity and adequate battery power
- **Flashing red lights:** Indicates the battery voltage is critically low. Replace batteries

M. Power Button

N. Bind Button

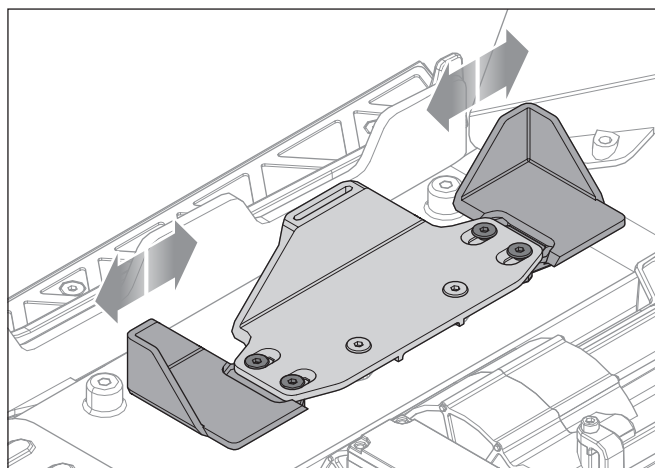


ADJUSTING THE VEHICLE BATTERY TRAY

The battery trays may be adjusted to fit a wide range of battery sizes.

To adjust the battery tray:

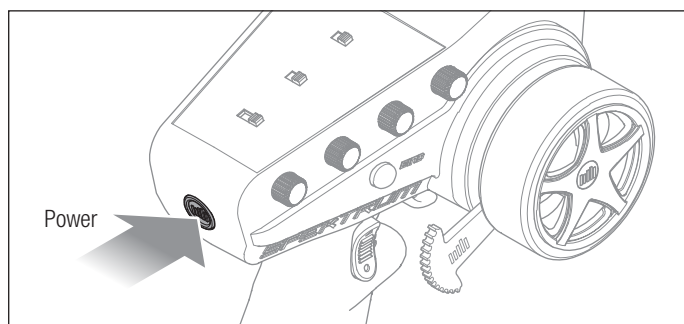
1. Loosen the four flathead screws shown in the illustration.
2. Slide the ends of the battery tray in or out to fit the desired battery.
3. Tighten the four flathead screws. Do not over-tighten the screws.



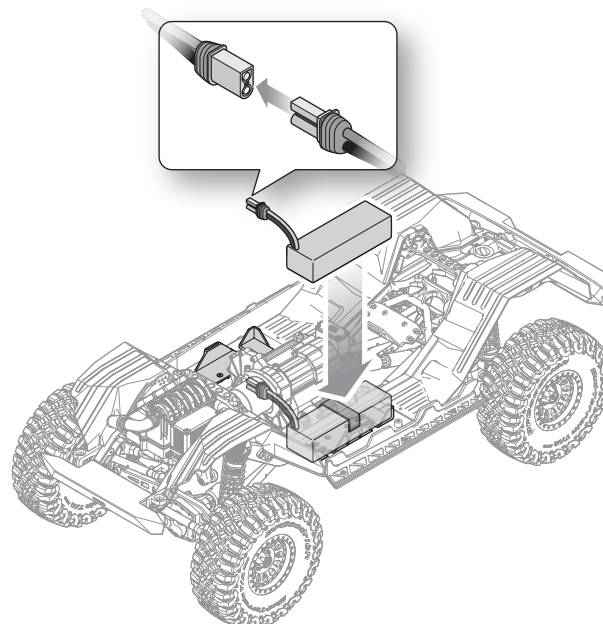
INSTALL THE VEHICLE BATTERY

The following steps show the installation of a single standard size battery in the left battery tray of the vehicle.

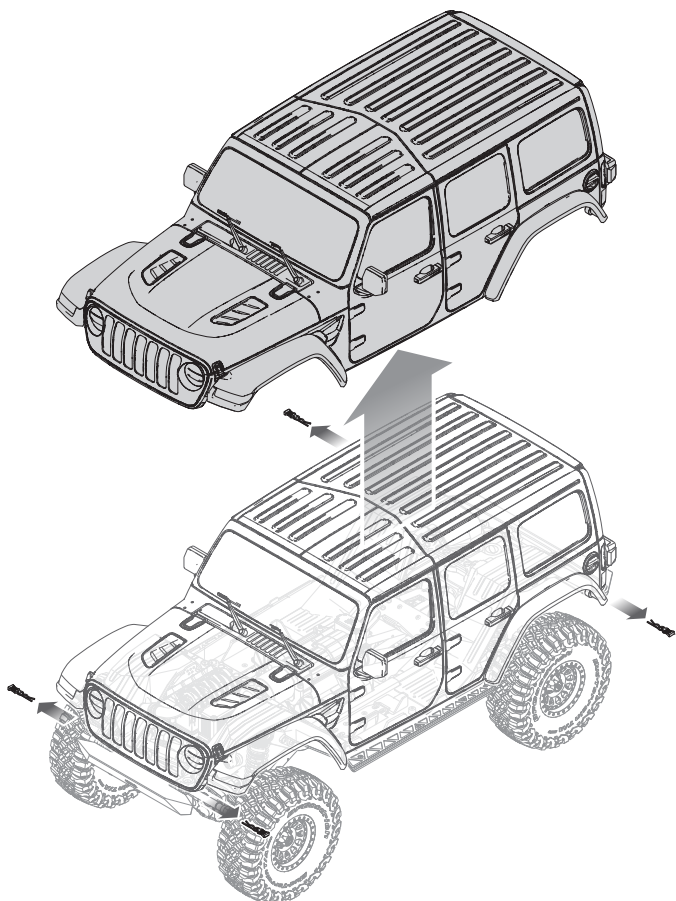
Vehicle run time can be extended by installing a second battery pack in the opposite side battery tray, using a parallel y-harness (SPMXCA509). The other pack should be installed in the opposite side battery tray.



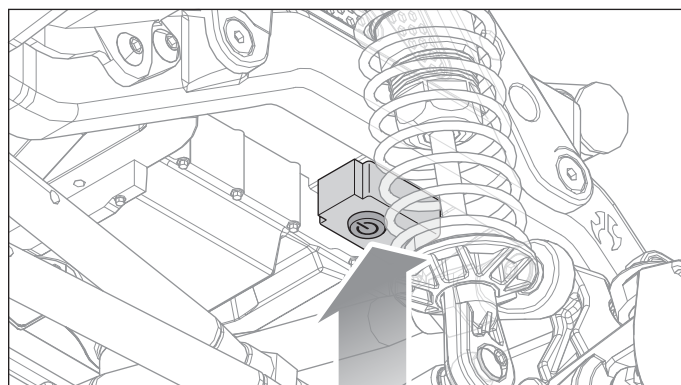
1. Power on the transmitter.



4. Place the battery in the battery tray. The battery tray length may be adjusted to fit the battery as described in the previous section.
5. Secure the battery to the tray with the hook and loop strap.
6. Connect the battery to the ESC.
7. Re-install the body and four body clips to the chassis.



2. Remove the four body clips from under the body.
3. Lift the body from the chassis.



8. Power on the receiver/ESC by pressing the power button located on the bottom of the chassis, opposite the steering servo.

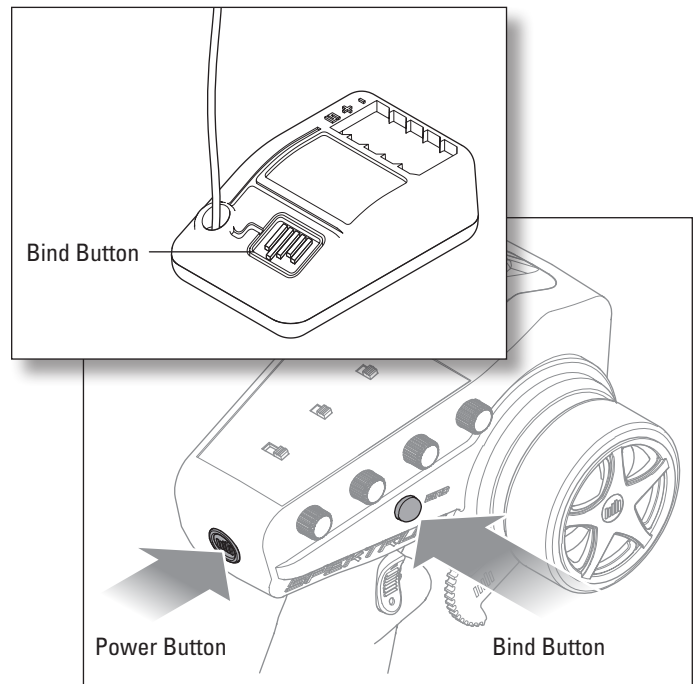
NOTICE: Always power off the ESC and disconnect the battery from the ESC before powering off the transmitter. Loss of vehicle control may result.

BINDING

Binding is the process of programming the receiver to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. The transmitter and receiver are bound at the factory. If you need to rebind, follow the instructions below.

1. Connect a fully charged battery pack to the ESC/receiver.
2. Disconnect the two-speed transmission servo lead from the receiver.
3. Push and hold the receiver bind button.
4. Power on the vehicle.
5. Release the bind button after the receiver goes into bind mode, indicated by the flashing LED.
6. With the throttle trigger at neutral, press and hold the transmitter bind button while powering on to put the transmitter in bind mode. The throttle should be at neutral to set failsafe.
7. The bind process is complete when the LED on the receiver remains lit.
8. Connect the two-speed transmission servo lead to the receiver.

You must rebind when different failsafe positions are needed e.g., when throttle or steering reversing has been changed.



RANGE-CHECKING THE RADIO SYSTEM

The radio system should be checked before operating the vehicle to ensure proper operation and adequate range.

1. Turn on the transmitter.
2. Connect the battery in the vehicle.
3. Have a friend hold the vehicle while keeping hands and loose clothing away from moving parts.
4. Walk away until you are at the maximum planned operating distance from the vehicle.
5. Turn the steering wheel side to side and operate the throttle, both forward and reverse, checking for any erratic behavior.
6. If any erratic behavior is exhibited, DO NOT operate the vehicle. Call customer service for assistance.



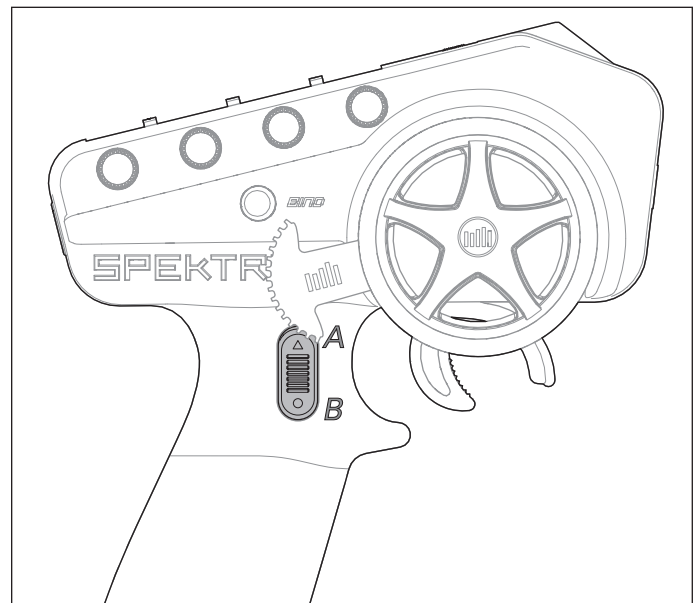
USING THE TWO SPEED TRANSMISSION

The vehicle includes an installed two speed transmission, capable of changing speeds with the A/B switch on the transmitter.

To operate the two speed transmission:

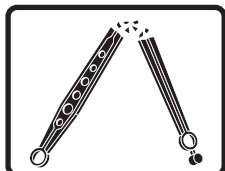
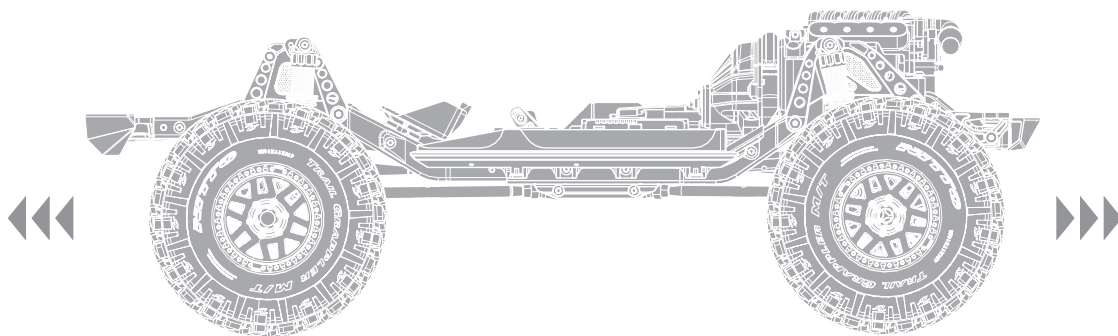
1. Slow the vehicle to approximately 1 mph.
2. Toggle the A/B switch on the transmitter to change gears.

NOTICE: Do not attempt to change gears while the vehicle is either not moving or moving at a high rate of speed. Damage to the transmission gears or the transmission servo will result.

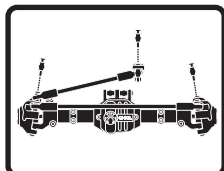


VEHICLE MAINTENANCE

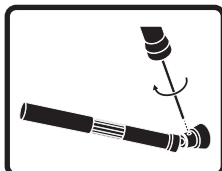
Just like a full size car or truck your RC vehicle must undergo periodic maintenance in order to ensure peak performance. Preventative maintenance will also help avoid needless breakages which could result in costly repairs. Below are some suggestions to properly maintain your vehicle.



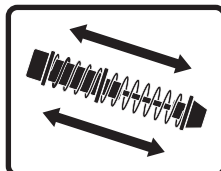
Replace any noticeable bent or broken parts



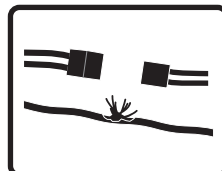
Check for wear on the ball joints in the steering and suspension links (replace if necessary)



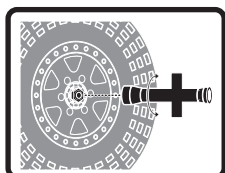
Check driveshaft set screws and apply thread locking compound if necessary



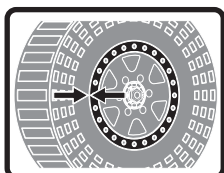
Inspect shock absorbers for smooth damped operation



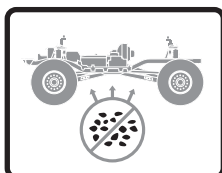
Check for any loose connections or frayed wiring



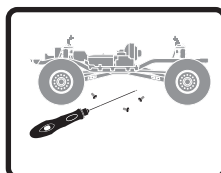
Check the wheel nuts for tightness



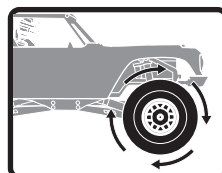
Ensure the wheel beads are still firmly bonded around the entire circumference of the rim



Keep the chassis free of dirt and debris



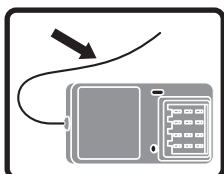
Check for loose screws on the chassis, especially the knuckle, C-hub and axle lockout screws



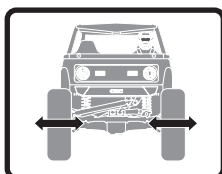
Check the driveline for smooth, bind free operation



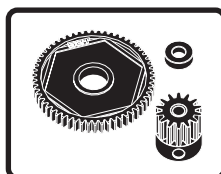
If applicable, check the slipper clutch for proper operation



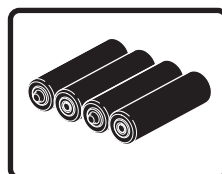
Check the receiver antenna for damage



Check the steering operation for any binding



Inspect the spur and pinion gears for damage



Replace the transmitter batteries when indicated by the transmitter, as described in the Transmitter Functions section

ESC OPERATION

SPECIFICATIONS

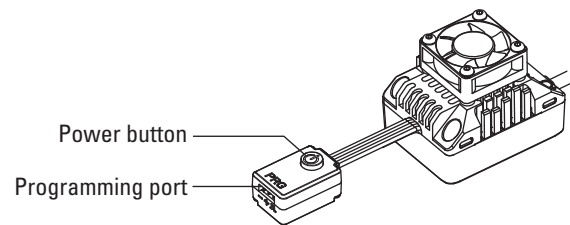
Dimensions (L x W x H)	47mm x 36mm x 24mm
Weight	4 oz (113.4g)
Max Current	120A
Voltage Range	Voltage Range 2-4S Lipo
Servo Output Voltage (BEC)	6 or 7.4V selectable, Continuous current of 6A
Battery Input Connector	IC5® (EC5™ compatible)
Motor Connectors	5mm Bullet

*Default setting for low voltage cutoff is Li-Po.

LED STATUS

INDICATION

	LED STATUS	INDICATION
Normal Operation	Red and Green LEDs off	Throttle is at neutral
	Red LED glows solid	Throttle is moved away from neutral, either forward or reverse/brake
Error Codes	Red LED single flashes continuously	Low voltage cutoff activated
	Green LED single flashes continuously	ESC thermal protection activated
	Green LED double flashes continuously	Motor thermal protection activated
	Red and Green LEDs flash continuously	Sensor error. Check the motor sensor wire connection



ESC MOTOR PAIRING

In the event the motor has been subjected to a severe impact, is overheating or has abnormal power output, use the following process to automatically pair the motor to the ESC:

1. Disconnect the throttle lead from the receiver.
2. Remove the pinion gear from the motor.

NOTICE: Do not attempt to pair the ESC and motor without removing the pinion gear from the motor. Failure to remove the gear may result in the vehicle accelerating unexpectedly as well as incorrect pairing.

3. Connect a fully charged battery to the ESC.
4. Press and hold the power button. The red LED on the power button will flash, followed by a short double flash that repeats after approximately eight seconds.
5. Release the power button.
6. The motor will automatically rotate and the green LED on the ESC will flash. When the motor stops, the green LED will glow solid, indicating the pairing process is complete.
7. Power off the ESC.
8. Install the pinion gear to the motor.
9. Connect the throttle lead to the receiver.

TRANSMITTER AND ESC CALIBRATION

The transmitter throttle neutral, forward and brake/reverse positions must be calibrated prior to ESC operation. To calibrate the transmitter and ESC:

1. Power on the transmitter.
2. Connect a fully charged battery to the ESC.
3. Press and hold the ESC power button.
4. Release the button when the red LED on the button flashes. The red LED on the ESC will start to flash.
5. With the transmitter trigger in the neutral position, press the ESC power button to store the neutral position. The green LED on the ESC will flash once and the motor will emit a single tone, indicating the neutral position has been stored.
6. Pull the transmitter trigger to full throttle, and press the ESC power button. The green LED on the ESC will flash twice, and the motor will emit two tones, indicating the full throttle position has been stored.
7. Push the transmitter trigger fully forward to the full brake/reverse position, and press the ESC power button. The green LED on the ESC will flash three times and the motor will emit three tones, indicating the brake/reverse position has been stored.

The ESC and motor can now be operated normally.

ESC PROGRAMMING

PROGRAMMING THE ESC WITH THE OPTIONAL SPMXCA200 SMART PROGRAMMER BOX

1. Connect the programming box to the switch.
2. Connect a battery to the ESC.
3. Power on the box and select the parameter with the SELECT button.
4. Change the values of the selected parameter with the EDIT button
5. Press the SAVE button to save the changes. The ESC requires a power cycle to implement the saved changes.

Programmable Item	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Option 10
1. Running Mode	F/R	F/R/B								
2. Cutoff Voltage	Disabled	Low	Medium	High						
3. RPM/ Throttle Matching	Low	Medium	High							
4. Max. Forward Force	25%	37.5%	50%	62.5%	75%	87.5%	100%			
5. Max. Reverse Force	25%	37.5	50%	62.5%	75%	87.5%	100%			
6. Turbo Timing	0° – 10°, Adjustable in 1° Increments (0° Default)									
7. Turbo Delay	Off	0.1s	0.2s	0.3s	0.4s	0.5s				
8. Drag Brake Force	50% – 200%, Adjustable in 5% Increments (Default: 80%)									
9. Drag Brake Rate	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	Auto
10. Neutral Range	6% – 17%, Adjustable in 1% Increments (Default: 10%)									
11. Start Mode (Punch)	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9	
12. BEC Voltage	6.0V	7.4V								
13. Motor Rotation	CW	CCW								

Blacked out cells with white lettering represent the default settings.

- 1. Running Mode:** Select your running mode, Forward and Reverse without brake (F/R) is the preferred rock crawler mode. Select Forward Reverse and Brake (F/R/B) if you want to use reverse throttle input to control brakes.
- 2. Cutoff Voltage:** Low Voltage Cutoff (LVC) for Lipo Protection. This item is mainly for preventing LiPo packs from being over-discharged. If the LVC is enabled, the ESC will reduce the output to 50% and cut power 10 seconds later when the voltage goes below the cutoff threshold. The red LED will begin a repeating single flash when the ESC enters LVC.
If the LVC is disabled, the ESC will not cut off the power when the voltage is low. We don't recommend setting the LVC to "Disabled" when using a LiPo pack. Without LVC it is easy for a LiPo battery to be damaged due to over-discharge.
 - NIMH - For a NiMH pack, we recommend setting this item to "Disabled."
 - Cutoff Voltage - The ESC will set the cutoff for the pack based on the voltage the battery is at when the battery is connected.
- 3. RPM / Throttle Matching:** The motor RPM will change when the vehicle encounters obstacles or terrain changes (RPM is based on the loads on the vehicle). This setting manages how aggressively the ESC will change the RPM under load.
When the throttle input remains unchanged, setting this item to "Low" provides the feeling of a brushed motor. Setting it to "High" provides a strong sense of speed-governing, making the vehicle maintain speed at a given throttle setting regardless of the resistance.
The default setting is medium. This feature is only available in "Forward and Reverse (rock crawler)" mode.
- 4. Max. Forward Force:** The power applied to the motor when the throttle trigger is at the full throttle position. You can reduce the value for better driving feel/control when you drive a crawler over difficult terrain.
- 5. Max. Reverse Force:** The power applied to the motor when the throttle trigger is at the full reverse position. We recommend using a low value for most drivers.
- 6. Turbo Timing:** This item is adjustable from 0 degree to 10 degrees, the value you select will initiate at full throttle. It's usually activated on long straightaways and makes the motor unleash its maximum potential. Turbo timing adds a margin of power at full throttle.
- 7. Turbo Delay:** When "Turbo Delay" is set to "Instant", the Turbo Timing will be activated immediately when the throttle trigger is moved to the full throttle position. Turbo Delay values will delay the application of the selected Turbo Timing value.
- 8. Drag Brake Force:** Braking power when the throttle is at the neutral position. Higher drag brake values are used to provide a stronger hold or hill brakes.
IMPORTANT: Drag brakes will consume more power and heat will be increased, start with small values and use with caution. Improve ventilation to ESC if heat is excessive.
- 9. Drag Brake Rate:** This feature manages how rapidly the ESC applies drag brakes. Choose the drag brake rate from level 1 (very soft) to level 9 (very aggressive); lower values ramp the brakes slower and prevent sudden stops or jerky stopping movements. In Auto mode, the ESC adjusts the Drag Brake Rate automatically based on the current speed and can be helpful to prevent the vehicle from flipping over or from sustaining drivetrain damage from harsh braking, but also provides a sensitive braking feel at low speeds;
 - The higher the current speed, the lower the drag brake rate.
 - The lower the current speed, the higher the drag brake rate.
- 10. Neutral Range:** Adjust this parameter to your preference to account for deadband in the throttle response. If you notice inconsistent drag brakes, increase your Neutral Range value.
- 11. Start Mode/(Punch):** Set the punch from level 1 (very soft) to level 9 (very aggressive). This feature is very useful for preventing tires from spinning. Punch levels 7 and above require high discharge capable batteries. If the car stutters or suddenly loses power when accelerating it may indicate the battery does not have adequate discharge capabilities for the application. Reduce the punch value, pinion gear size, or change to a higher C rated battery.
- 12. BEC Voltage:** Option 1: 6.0V Appropriate for most standard servos. Not recommended for High Voltage (HV) servos.
 - Option 2: 7.4V Appropriate for high voltage servos. Do not use this option with standard servos; it's possible a standard 5 – 6 Volt rated servo will be damaged at this voltage setting.
- 13. Motor Rotation:** Change this setting to reverse the motor rotation. Do not change wiring order with this motor/ESC combo.

GEAR RATIOS

SPUR/PINION GEAR RATIO CHART

Pinion Size	11	12	13	14	15	16	17
Low Speed	81.47	74.68	68.94	64.01	59.75	56.01	52.72
High Speed	44.85	41.11	37.95	35.24	32.89	30.83	29.02

Standard Pinion

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
The system will not connect	Your transmitter and receiver are too close together	Move transmitter 8 to 12 feet away from receiver
	You are near metal objects	Move to an area with less metal
	The receiver is bound to a different model memory	Make sure the correct model memory is active in your transmitter
	Your transmitter was placed into bind mode and is no longer bound to your receiver	Rebind your transmitter and receiver, and then re-calibrate
The receiver goes into failsafe a short distance away from the transmitter	Check for damage on the receiver antenna	Make sure your receiver antenna is protected and located as high as practical Replace the receiver or contact Horizon Product Support
	Low receiver battery voltage. If the battery voltage is low, it may drop below 3.5V momentarily, causing the receiver to brown-out, then reconnect	Charge the receiver or vehicle battery. Spektrum receivers require at least 3.5V to operate
The receiver stops responding during operation	Loose or damaged wires or connectors between battery and receiver	Check the wires and connection between the battery and receiver. Repair or replace wires and/or connectors
	Batteries are not installed properly in the transmitter	Ensure the transmitter batteries are properly installed
Vehicle does not move	Weak or no battery in the vehicle	Install a freshly charged vehicle battery
	Damaged motor	Replace the motor
	Frayed or broken wiring	Replace any damaged wiring
	ESC is shut down by heat protection circuit	Allow the ESC to cool down completely

PROBLEM	POSSIBLE CAUSE	SOLUTION
Loss of vehicle control	Improper antenna placement	Ensure the transmitter antenna is not blocked and the receiver antenna is located properly
	Weak or no batteries in the transmitter or vehicle	Install a freshly charged vehicle battery and new transmitter batteries
	Neutral or trim position is incorrect	Adjust the steering trim
	Receiver and/or battery not connected properly	Check all receiver and battery connections
Steering and/or throttle function is reversed	Servo travel is reversed at the transmitter	Set the transmitter servo reversing switch to the correct position
	Motor wires are not connected properly	Check all motor wires for correct polarity and secure connection
ESC ON - No motor function, audible tone or LED	Battery/connection issue	Recharge/replace battery. Secure all connections
	Damaged ESC/switch	Repair/replace ESC switch/ESC
	Damaged motor	Repair/replace
Motor- Stops and LED blinks	Low voltage protection	When the ESC LED blinks, recharge/replace battery
	Overheat protection	When the LED blinks, let motor/ESC cool, change set up or gearing to avoid overheating
Motor- Accelerates irregularly	Battery issue	Repair damaged wiring/replace battery
	Incorrect gearing	Adjust/replace gearing
	Worn or damaged motor	Repair/replace motor
Motor- Does not turn continuously in response to throttle	ESC/motor damaged	Repair/replace wiring or motor/ESC
Motor- Slows but will not stop	Incorrect transmitter/ESC calibration	Adjust throttle travel/other throttle settings on the transmitter/ESC. Repeat the ESC Calibration Procedure
Steering servo- Operates; motor does not run	Damaged motor	Test the motor apart from the vehicle system, repair/replace motor as needed
	Incorrect transmitter/ESC calibration	Adjust throttle travel/other throttle settings on the transmitter/ESC. Repeat the ESC Calibration Procedure
Steering/motor- not functioning	Low battery voltage	Recharge/replace
	Wrong model memory selected on transmitter	Select correct model settings on your transmitter, refer to transmitter and/or receiver manual
	Receiver not bound to transmitter	Bind transmitter to receiver, refer to transmitter and/or receiver manual
Vehicle- Does not operate at full speed	Battery issue	Recharge/replace
	Incorrect transmitter/ESC calibration	Adjust throttle travel/other throttle settings on the transmitter/ESC. Repeat the ESC Calibration Procedure

LIMITED WARRANTY

What this Warranty Covers

Horizon Hobby, LLC, (Horizon) warrants to the original purchaser that the product purchased (the "Product") will be free from defects in materials and workmanship for a period of 2 years from the date of purchase.

What is Not Covered

This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vi) Product not compliant with applicable technical regulations or (vii) use that violates any applicable laws, rules, or regulations.

OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

Purchaser's Remedy

Horizon's sole obligation and purchaser's sole and exclusive remedy shall be that Horizon will, at its option, either (i) service, or (ii) replace, any Product determined by Horizon to be defective. Horizon reserves the right to inspect any and all Product(s) involved in a warranty claim. Service or replacement decisions are at the sole discretion of Horizon. Proof of purchase is required for all warranty claims. SERVICE OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

Limitation of Liability

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT,

NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase.

Law

These terms are governed by Illinois law (without regard to conflict of law principals). This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Horizon reserves the right to change or modify this warranty at any time without notice.

WARRANTY SERVICES

Questions, Assistance, and Services

Your local hobby store and/or place of purchase cannot provide warranty support or service. Once assembly, setup or use of the Product has been started, you must contact your local distributor or Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please visit our website at www.horizonhobby.com, submit a Product Support Inquiry, or call the toll free telephone number referenced in the Warranty and Service Contact Information section to speak with a Product Support representative.

Inspection or Services

If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship

via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Service Request is available at http://www.horizonhobby.com/content/service-center_render-service-center. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

NOTICE: Do not ship Li-Po batteries to Horizon. If you have any issue with a Li-Po battery, please contact the appropriate Horizon Product Support office.

Warranty Requirements

For Warranty consideration, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be serviced or replaced free of charge. Service or replacement decisions are at the sole discretion of Horizon.

Non-Warranty Service

Should your service not be covered by warranty, service will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of 1/2 hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashier's checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for service, you are agreeing to Horizon's Terms and Conditions found on our website http://www.horizonhobby.com/content/service-center_render-service-center.

ATTENTION: Horizon service is limited to Product compliant in the country of use and ownership. If received, a non-compliant Product will not be serviced. Further, the sender will be responsible for arranging return shipment of the un-serviced Product, through a carrier of the sender's choice and at the sender's expense. Horizon will hold non-compliant Product for a period of 60 days from notification, after which it will be discarded.

WARRANTY AND SERVICE CONTACT INFORMATION

COUNTRY OF PURCHASE	HORIZON HOBBY	CONTACT INFORMATION	ADDRESS
United States of America	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/RequestForm/	2904 Research Rd Champaign, IL 61822
	Horizon Product Support (Product Technical Assistance)	productsupport@horizonhobby.com 877-504-0233	
	Sales	websales@horizonhobby.com 800-338-4639	
European Union	Horizon Technischer Service	service@horizonhobby.eu	Hanskampring 9 D 22885 Barsbüttel, Germany
	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	

FCC INFORMATION

BRWSRIRVINGV1

Contains FCC ID: BRWKATY1T

This equipment complies with FCC and IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and/or antenna and your body (excluding fingers, hands, wrists, ankles and feet). This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

SUPPLIER'S DECLARATION OF CONFORMITY

Axial SCX6 Jeep JLU Wrangler (AXI05000)

FC This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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.

Horizon Hobby, LLC
2904 Research Rd.,
Champaign, IL 61822
Email: compliance@horizonhobby.com
Web: HorizonHobby.com

IC INFORMATION

CAN ICES-3 (B)/NMB-3(B)

6157A-SRIRVINGV1

Contains IC: 6157A-KATY1T

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

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

COMPLIANCE INFORMATION FOR THE EUROPEAN UNION



EU COMPLIANCE STATEMENT:

Axial SCX6 Jeep JLU Wrangler (AXI05000)

Hereby, Horizon Hobby, LLC declares that the device is in compliance with the following: EU Radio Equipment Directive 2014/53/EU; RoHS 2 Directive 2011/65/EU; RoHS 3 Directive - Amending 2011/65/EU Annex II 2015/863.

The full text of the EU declaration of conformity is available at the following internet address: <https://www.horizonhobby.com/content/support-render-compliance>.

NOTE: This product contains batteries that are covered under the 2006/66/EC European Directive, which cannot be disposed of with normal household waste. Please follow local regulations.

Wireless Frequency Range and Wireless Output Power

Transmitter

2402.0 - 2478.0 MHz
17.7 dBm

Receiver

2404-2476 MHz
-1.33 dBm

EU Manufacturer of Record:

Horizon Hobby, LLC
2904 Research Road
Champaign, IL 61822 USA

EU Importer of Record:

Horizon Hobby, GmbH
Hanskampring 9
22885 Barsbüttel Germany

WEEE NOTICE:



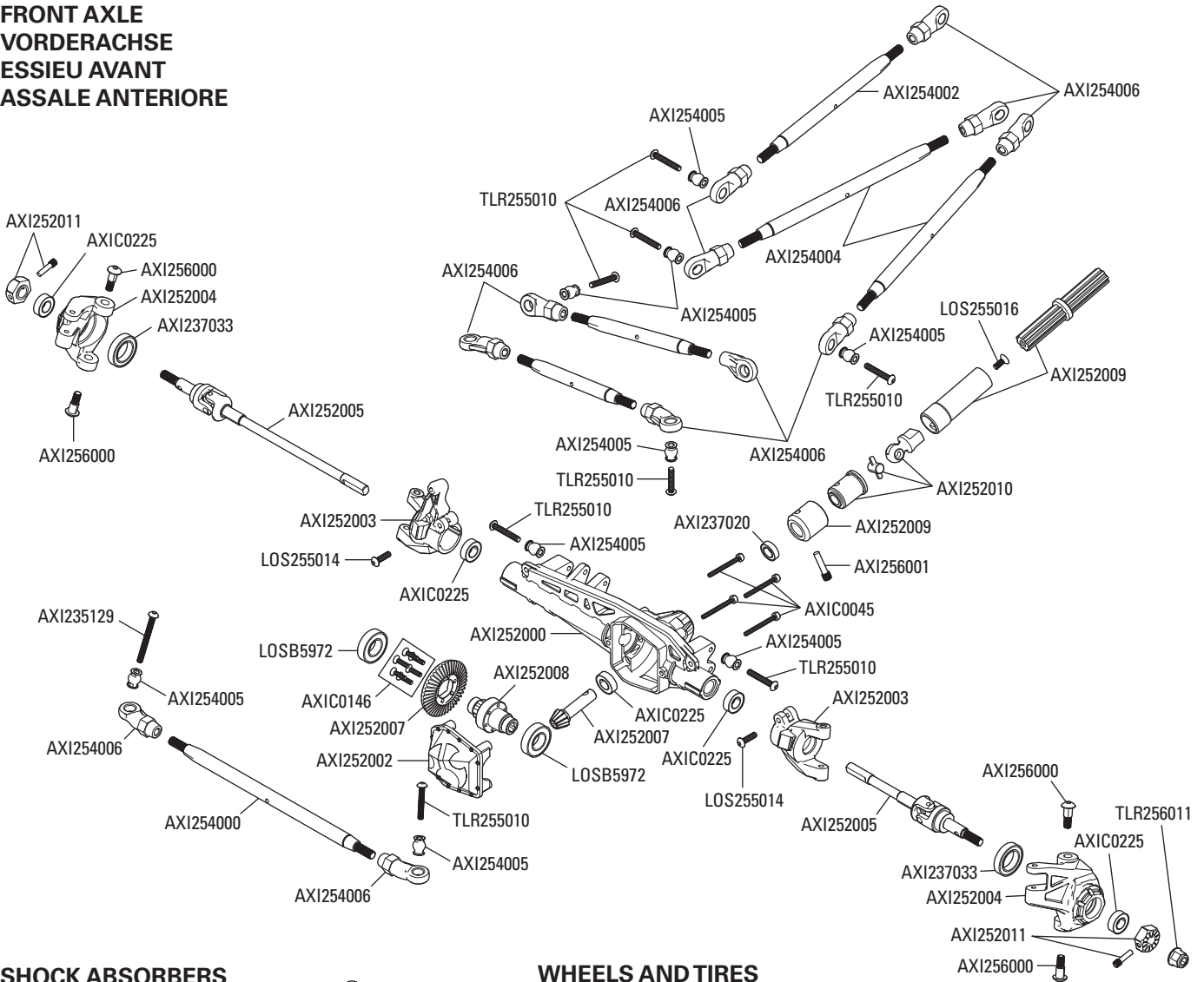
This appliance is labeled in accordance with European Directive 2012/19/EU concerning waste of electrical and electronic equipment (WEEE). This label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.



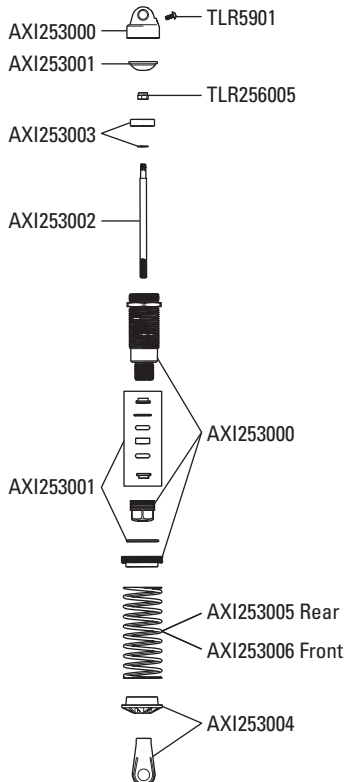
E328

EXPLODED VIEWS // EXPLOSIONSZEICHNUNGEN // VUES ÉCLATÉES // VISTE ESPLOSE

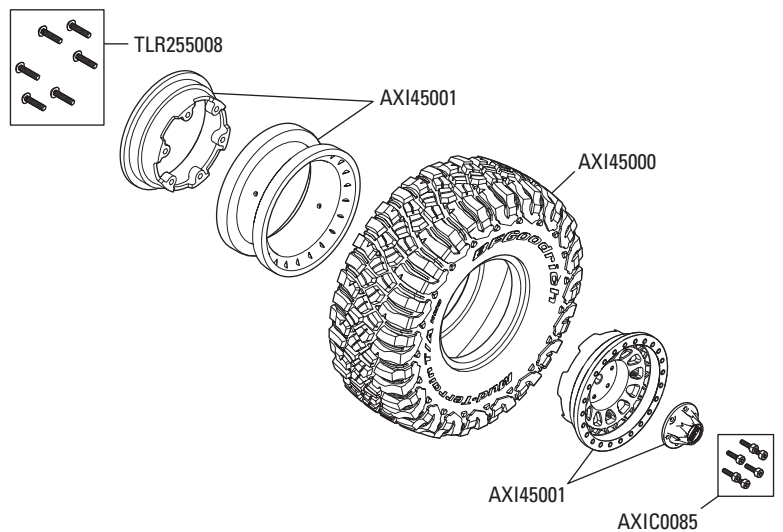
**FRONT AXLE
VORDERACHSE
ESSIEU AVANT
ASSALE ANTERIORE**



**SHOCK ABSORBERS
STOSSDÄMPFER
AMORTISSEURS
AMMORTIZZATORI**

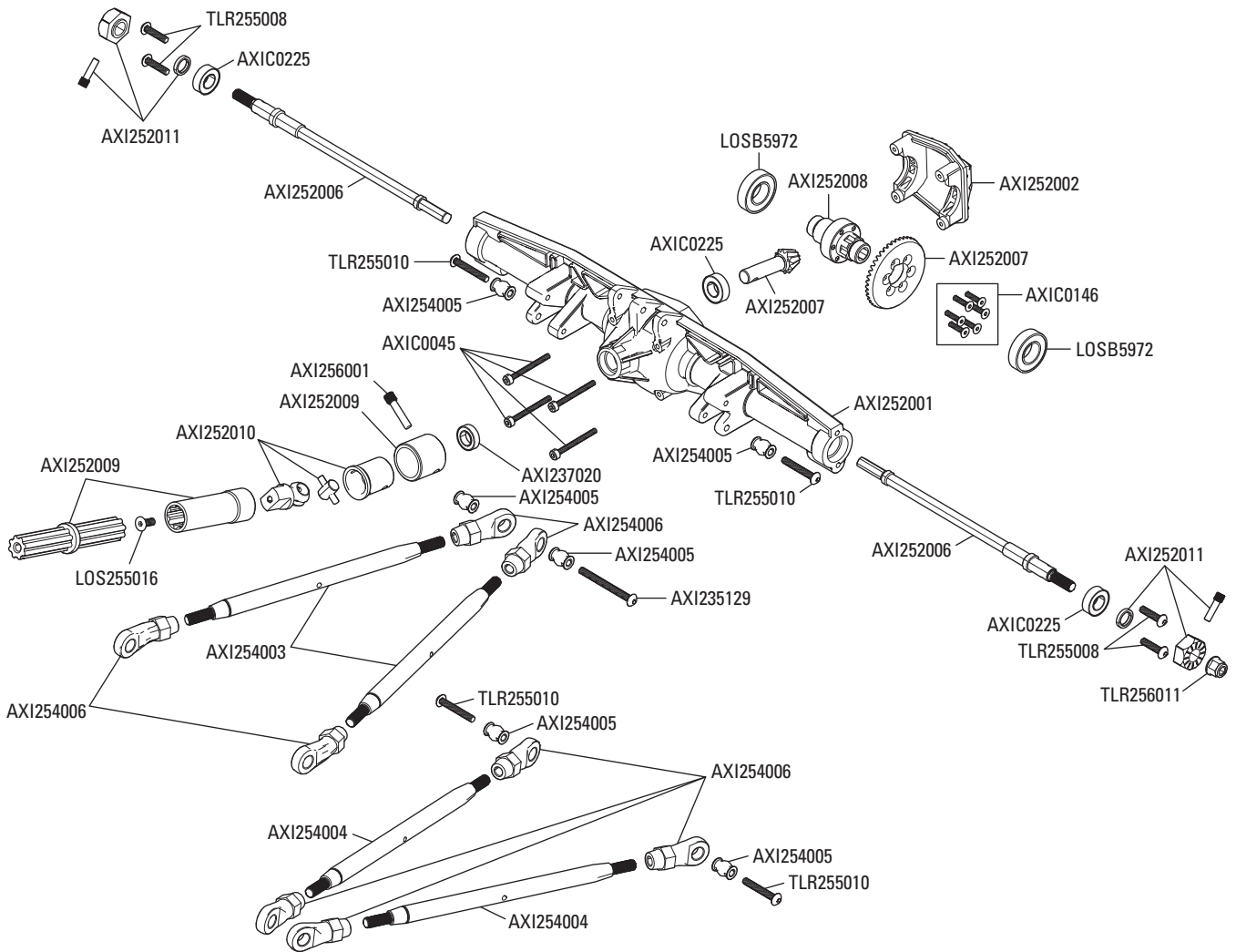


**WHEELS AND TIRES
REIFEN UND RÄDER
ROUES ET PNEUS
RUOTE E PNEUMATICI**



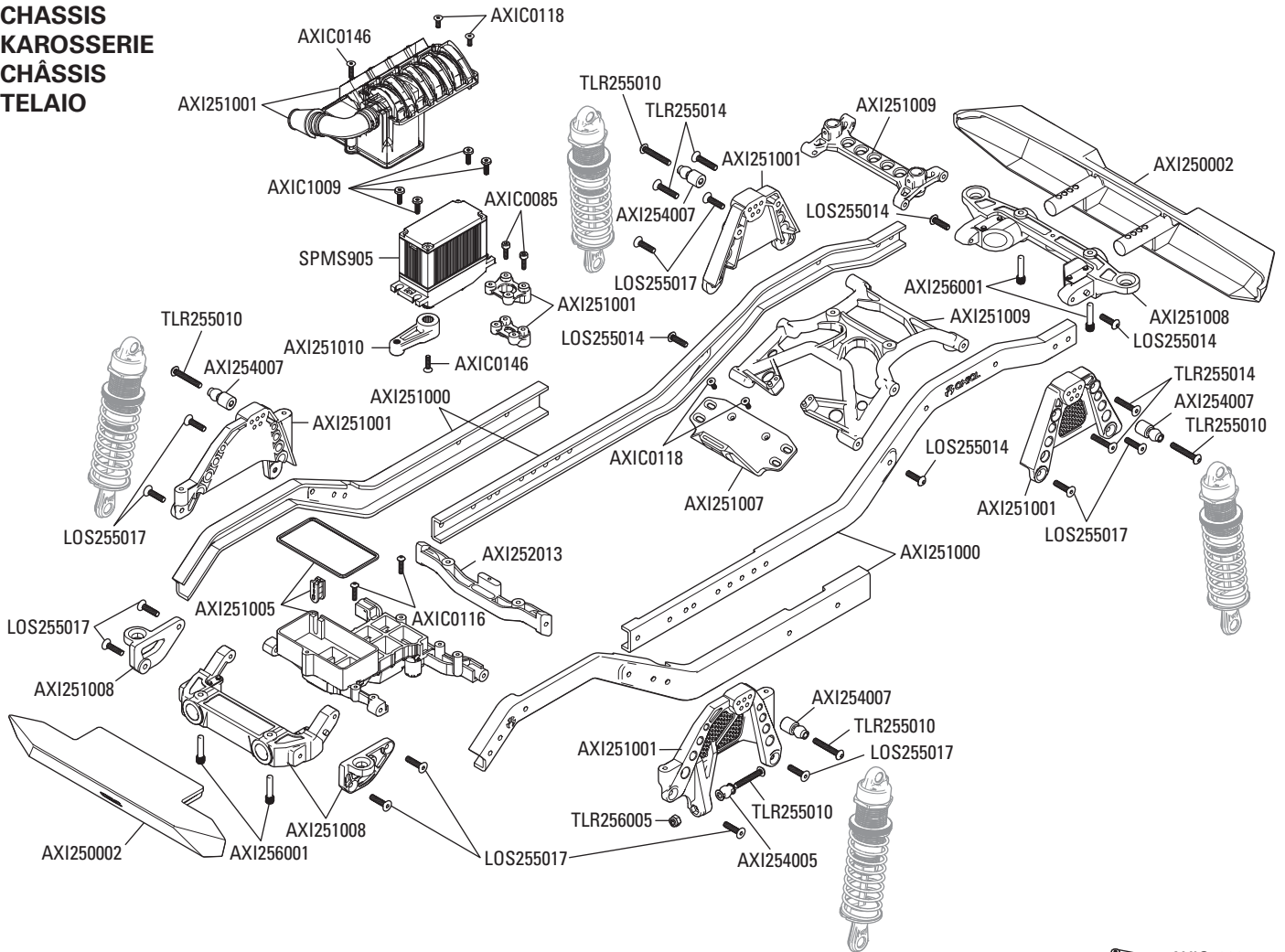
EXPLODED VIEWS // EXPLOSIONSZEICHNUNGEN // VUES ÉCLATÉES // VISTE ESPLOSE

**REAR AXLE
HINTERACHSE
ESSIEU ARRIÈRE
ASSALE POSTERIORE**

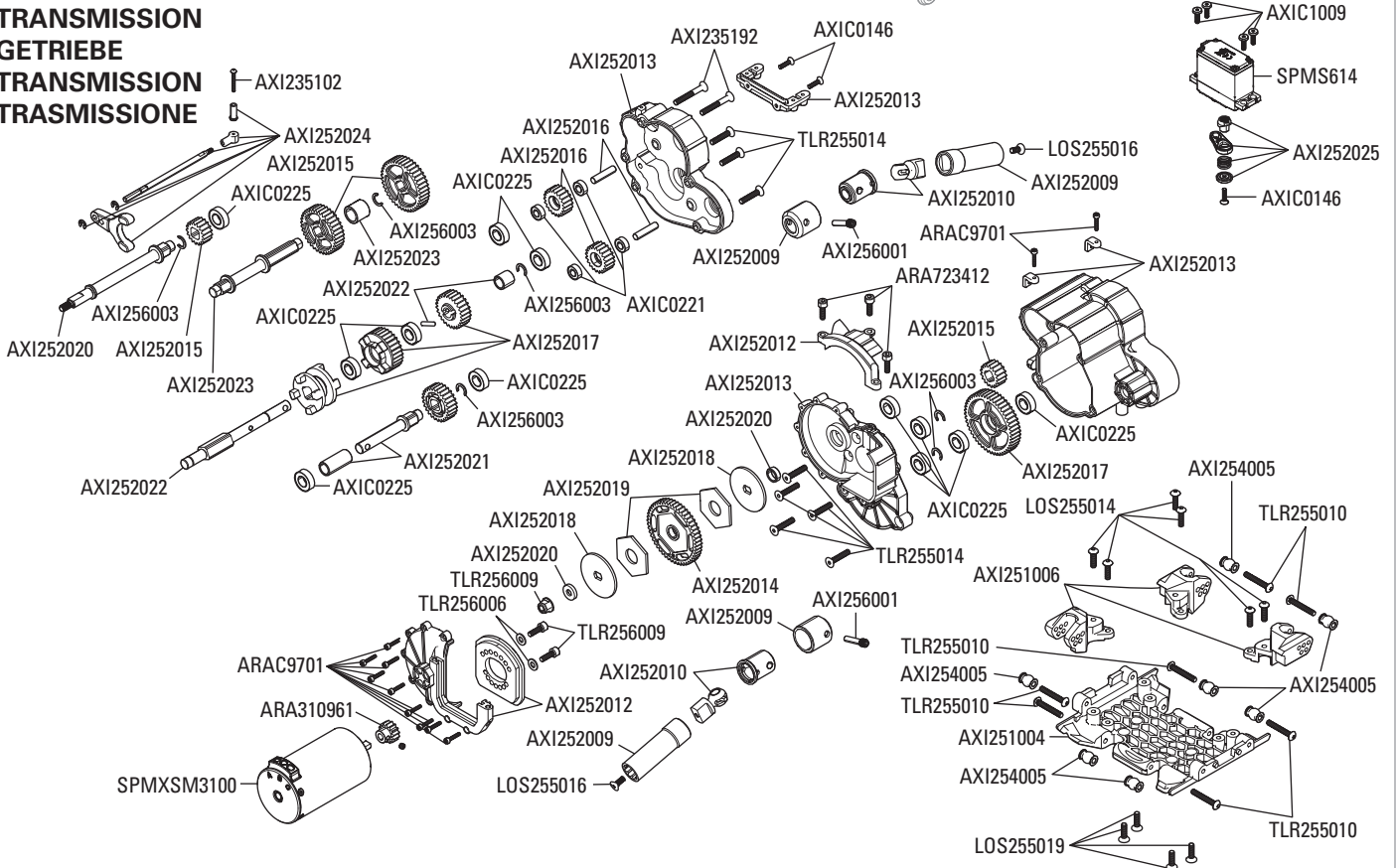


EXPLODED VIEWS // EXPLOSIONSZEICHNUNGEN // VUES ÉCLATÉES // VISTE ESPLOSE

**CHASSIS
KAROSSERIE
CHÂSSIS
TELAIO**

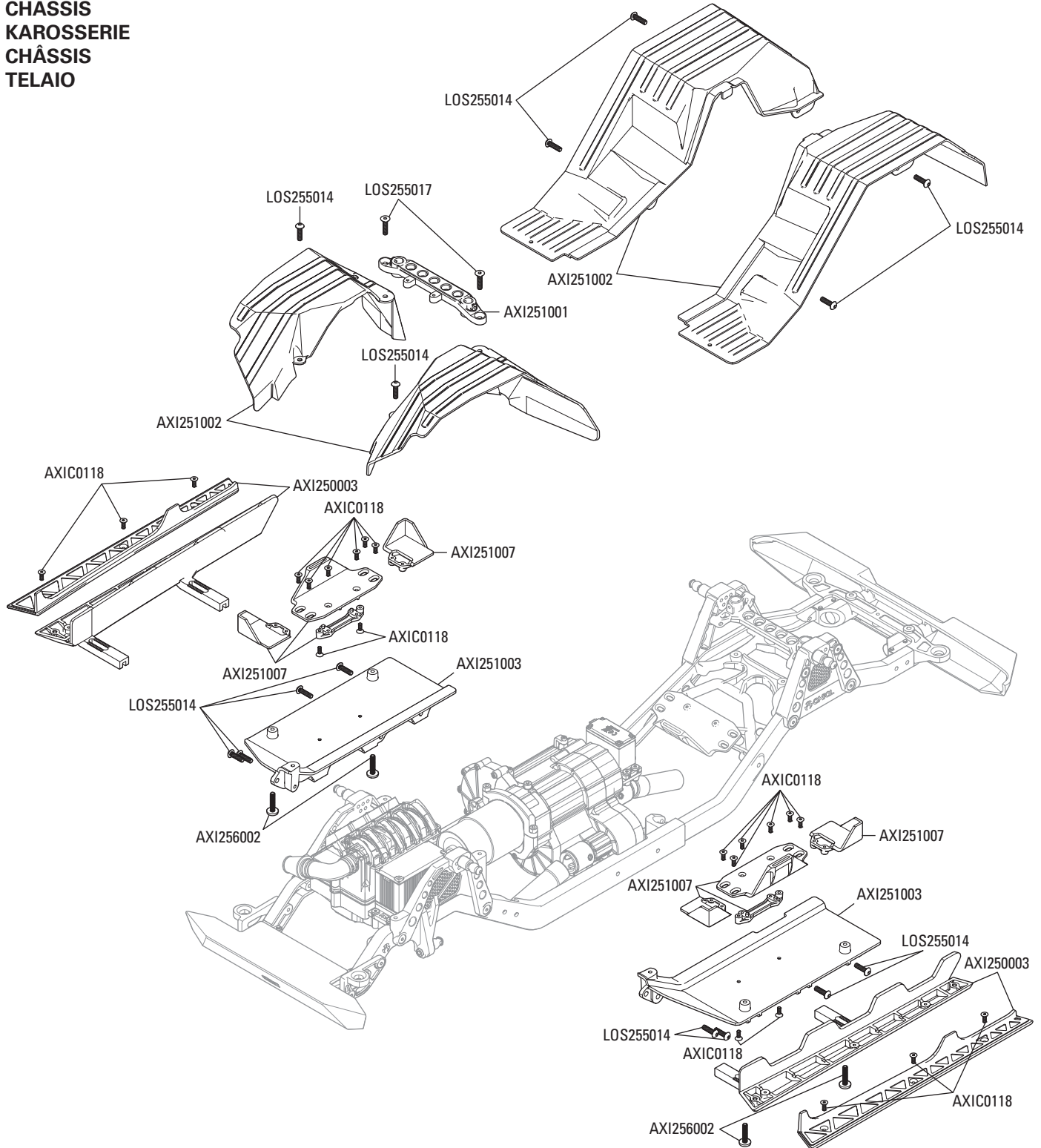


**TRANSMISSION
GETRIEBE
TRANSMISSION
TRASMISSIONE**



EXPLODED VIEWS // EXPLOSIONSZEICHNUNGEN // VUES ÉCLATÉES // VISTE ESPLOSE

CHASSIS
KAROSSERIE
CHÂSSIS
TELAIO



EXPLODED VIEWS // EXPLOSIONSZEICHNUNGEN // VUES ÉCLATÉES // VISTE ESPLOSE

**BODY ASSEMBLY
KAROSSERIEMONTAGE
ENSEMBLE DE CARROSSERIE
GRUPPO CARROZZERIA**

