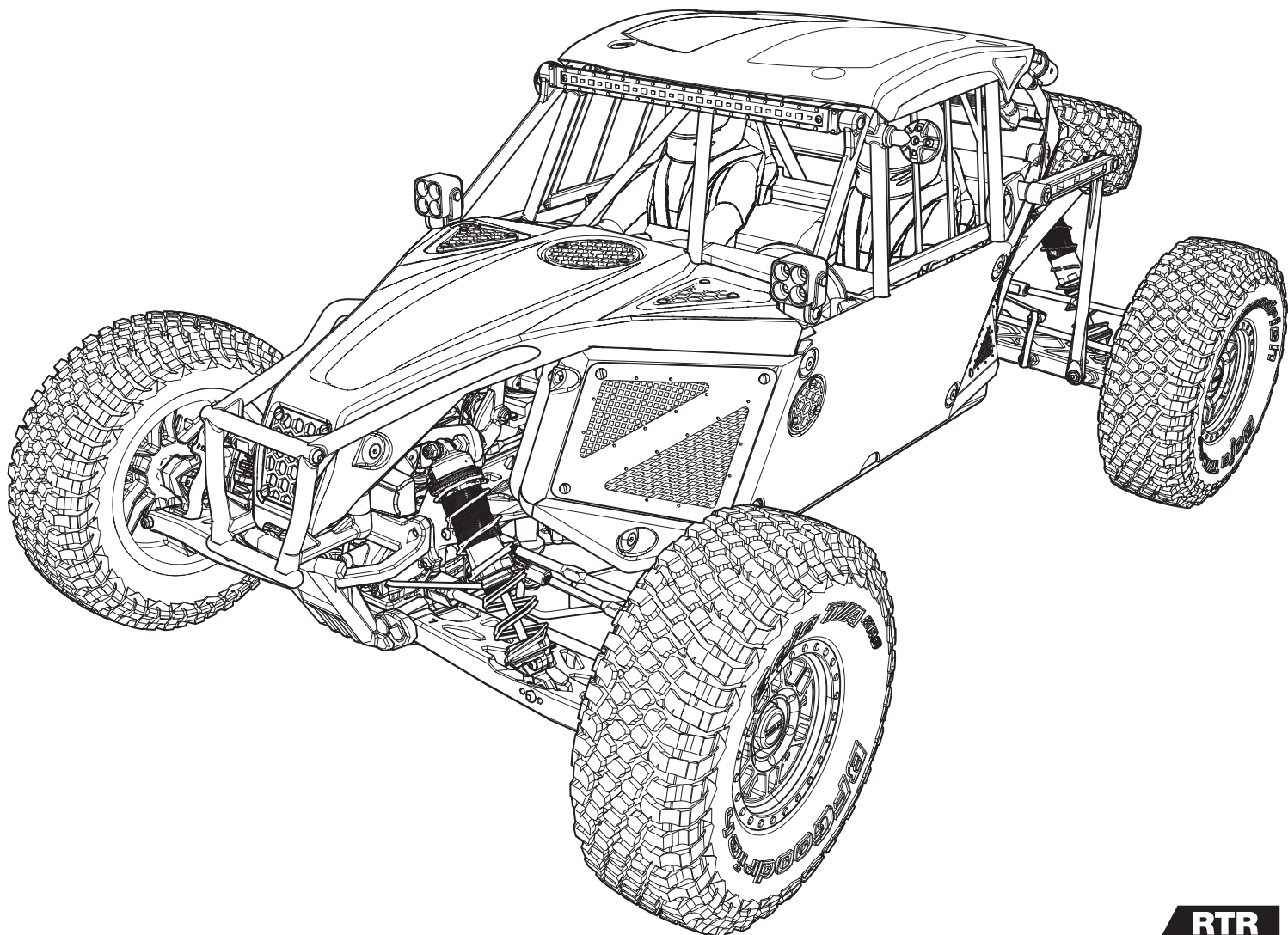




# BIGHT-X™

# LASERNUT

1/8-SCALE HIGH-PERFORMANCE 4WD ELECTRIC BUGGY RTR



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

Scan the QR code and select the Manuals & Support tab from the product page for the most up-to-date information.

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

Scannez le code QR et sélectionnez l'onglet Manuals and Support sur la page du produit pour obtenir les informations les plus récentes.

Scannerizzare il codice QR e selezionare la scheda Manuali e Supporto dalla pagina del prodotto per le informazioni più aggiornate.



LOS04019

**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 and click on the support 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.

 **WARNING AGAINST COUNTERFEIT PRODUCTS:** Always purchase from a Horizon Hobby 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.

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

**SAFETY PRECAUTIONS AND WARNINGS**

- Always keep a safe distance in all directions around your model to avoid collisions or injury. This model is controlled by a radio signal subject to interference from many sources outside your control. Interference can cause momentary loss of control.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Always carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.).
- Always keep all chemicals, small parts and anything electrical out of the reach of children.
- Always avoid water exposure to all equipment not specifically designed and protected for this purpose. Moisture causes damage to electronics.
- Never place any portion of the model in your mouth as it could cause serious injury or even death.
- Never operate your model with low transmitter batteries.

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**REGISTER YOUR LOSI PRODUCT ONLINE**

Register your vehicle now and be the first to find out about the latest option parts, product updates and more. Click on the Support tab at WWW.LOSI.COM and follow the product registration link to stay connected.

**TOOLS NEEDED**

- Needle-nose pliers
- Shock Shaft Pliers/Multi-Tool
- Quality .050, 1.5mm, 2.0mm, 2.5mm hex (Allen) drivers

**IMPORTANT:** Use only Dynamite® brand or other high-quality tools. Use of inferior grade tools can cause damage to the small screws and parts used on this model.

**TOOLS INCLUDED**

- 4 Way wrench
- Three (3) hex "L" wrench set: 1.5, 2.0, and 2.5
- Shock Bottom wrench

**NEEDED TO COMPLETE**

- **Battery:** Two Spektrum™ 5000mAh 3S 11.1V Smart G2 100C; IC5® (SPMX53S100H5)
- **Charger:** Spektrum™ S2100 G2 2x100W AC Smart Chargerr (SPMXC2000)

BOX CONTENTS	INCLUDED COMPONENTS	REQUIRED, NOT INCLUDED	RECOMMENDED SKU
Losi® 8IGHT-X Super Lasernut Ready-To-Run	Spektrum™ DX3™ SMART Transmitter (SPMR2340)	Two 50C or Higher 3S Hardcase LiPo with IC5®	Two Spektrum 5000mAh 3S 11.1V Smart G2 100C; IC5® (SPMX53S100H5)
	Spektrum SR315 3 Channel Telemetry Surface Receiver (SPMSR315)		
	Spektrum S905 Standard 40KG 15T Waterproof Metal Gear Surface Servo (SPMS905)	2S-4S Lipo Charger	Spektrum S2100 G2 2x100W AC Smart Chargerr (SPMXC2000)
	Spektrum Firma 150 Brushless Smart ESC 3S - 6S (SPMXSE2150)		
	Spektrum Firma 2050Kv 4074 Brushless Motor (SPMXSM1700)		
4 AA batteries (for transmitter)			

## SPEKTRUM SMART TECHNOLOGY

The 8IGHT-X Super Lasernut includes Spektrum Smart Technology in the ESC and receiver, which provides you with telemetry information like battery voltage from your vehicle. The included DX3 Smart transmitter features an LED display to show the battery level of your vehicle during operation.


For additional Smart functionality, consider upgrading to a more advanced Smart Technology compatible Spektrum transmitter like the DX5C (SPMR5115), or DX5 Pro (SPMR5025). Use Spektrum Smart batteries to power your vehicle to take full advantage of Smart Technology, which can communicate detailed battery data through the system as well.

Visit [www.SpektrumRC.com](http://www.SpektrumRC.com) for more information.

## 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.

## QUICK START

Please read the entire manual to gain a full understanding of the 8IGHT-X Super Lasernut buggy, fine-tuning the setup and performing maintenance.

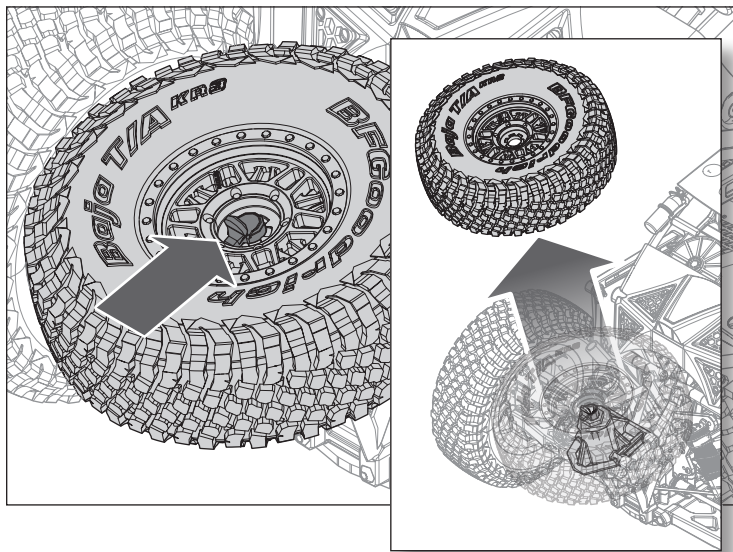
1. Read the safety precautions found in this manual.
2. Charge the battery pack you have chosen (NOT INCLUDED). Refer to the manufacturer-supplied instructions for battery charging information.
3. Install the AA batteries in the transmitter. Only use alkaline or rechargeable batteries.
4. Install a fully charged battery in the vehicle.
5. Power ON the transmitter and then the vehicle. Always power the transmitter ON before the vehicle and power it OFF after the vehicle has been powered OFF.
6. Check the steering and throttle control directions. Verify that the servo is moving in the correct direction.
7. Drive your vehicle.
8. Perform any necessary maintenance.
9. Ensure the batteries are disconnected from the ESC for storage.

## INSTALLING THE VEHICLE BATTERIES

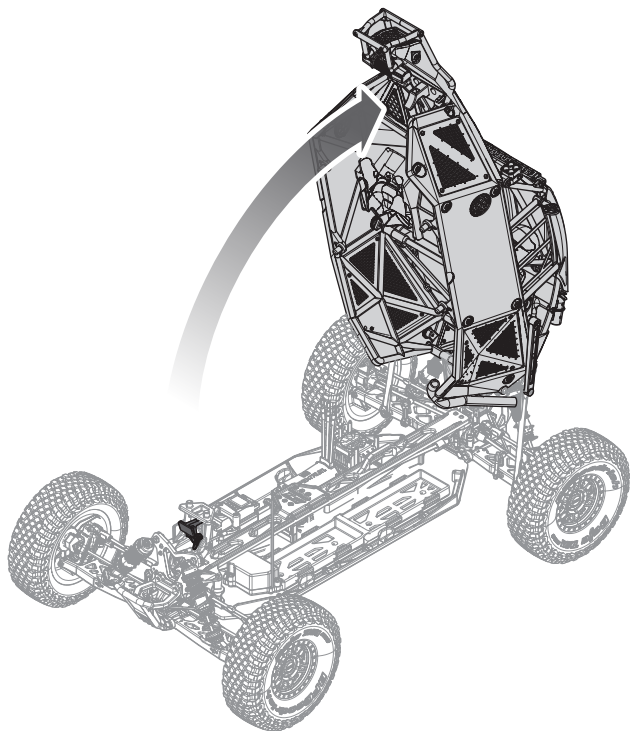
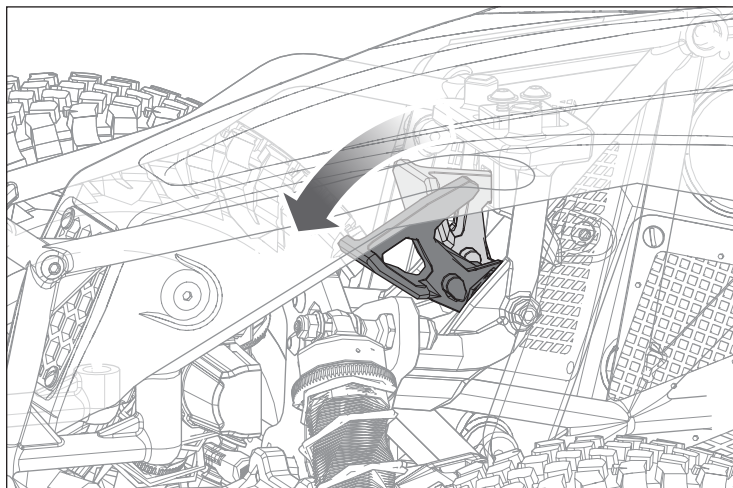
Your vehicle is powered by two 3S LiPo batteries. We recommend two Spektrum™ 5000mAh 3S 11.1V Smart G2 100C; IC5 (SPMX53S100H5).

To install the vehicle batteries:

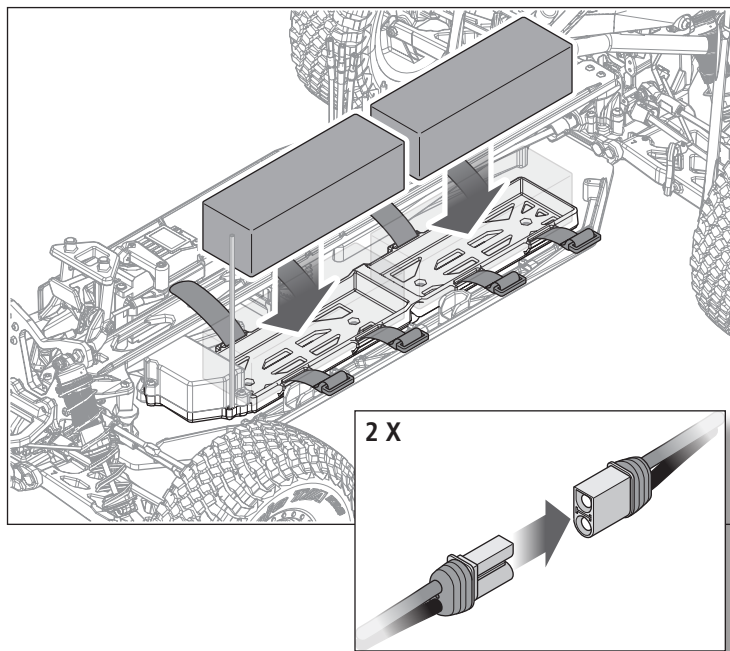
1. Push the lock on the spare tire forward and lift the spare tire to release it from the mount.



2. Press forward on the body lock while lifting on the front of the body.



3. Install two fully charged 3S batteries in the battery tray, and secure the batteries with the hook and loop straps.
4. Connect the batteries to the IC5 ESC power lead connectors.



5. Lower the body until it latches securely.

**IMPORTANT:** Ensure the sway bar arms pivot toward the rear of the chassis to prevent damage to the suspension components.

6. Install the spare tire by sliding the wheel over the latch, pushing the lock forward and pushing down on the spare tire. If necessary, rotate the spare tire until the hex on the wheel lines up with the hex on the mount. The wheel must be fully inserted on the post for the lock to fully engage.

**NOTICE:** Always disconnect the batteries from the ESC when you are done driving for the day. Failure to disconnect the batteries will cause the batteries to fully discharge and damage the batteries.

## SPEKTRUM DX3 RADIO SYSTEM

For more information on the transmitter, go to [www.horizonhobby.com](http://www.horizonhobby.com) and click on the support tab for the Spektrum DX3 to download the instruction manual.

### A/B. Channel 3 Button

#### 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%

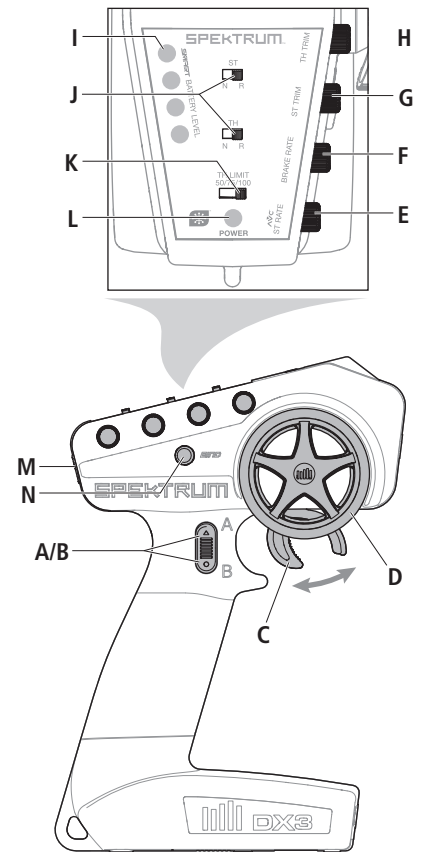
Select 50% or 75% for less experienced drivers or when you are driving the vehicle in a small area.

#### 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

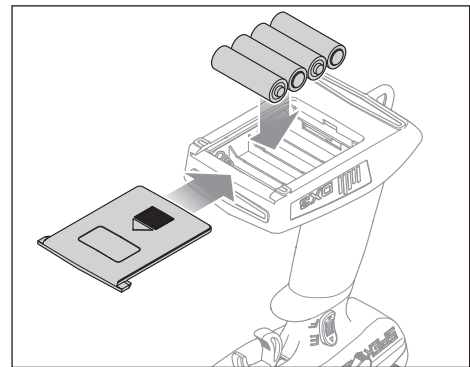


## TRANSMITTER BATTERY INSTALLATION

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.



## SR315 RECEIVER

### SPECIFICATIONS

**Type:** Dual Protocol 3 Ch Receiver (SLT/DSMR)

**Dimensions (LxWxH):** 32.5 x 21.5 x 12.4mm

**Antenna Length:** 90mm

**Channels:** 3

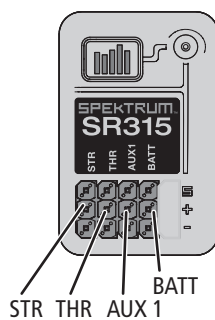
**Weight:** 6g

**Band:** 2.4GHz

**Voltage Range:** 3.5–9.6V

**Bind Type:** Bind Button

**Failsafe:** Hold the steering wheel and throttle trigger in the desired failsafe positions during binding.



## RECEIVER ANTENNA

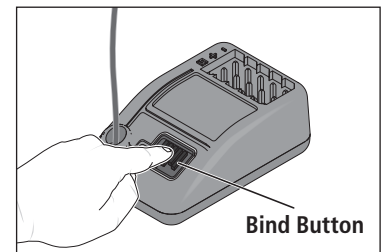
The SR315 receivers feature a coaxial antenna design for easy installation in almost any model. Think of the last 1 inch (32mm) on the tip of the antenna as the active portion of the antenna, the coaxial portion leading up to it is just an extension. Install the antenna so the active portion is positioned as high as possible in the vehicle, and not "in the shadow" of any carbon fiber or metal. The case of the receiver can accept an antenna tube directly, making optimal antenna placement easy (antenna tube not included).

- ⚠ **WARNING:** Do not kink, cut or damage the antenna wire. The antenna is made of a coaxial wire; if the outer sheath becomes damaged, the receiver will not work properly. If the antenna is damaged in any way, replace the antenna before attempting to use the receiver.

## BINDING THE RECEIVER

Binding is the process of programming the receiver to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. In the event of a loss of signal the receiver will default the servo outputs to the failsafe position. The failsafe positions are set during binding; Leave the throttle and steering at the neutral positions during binding.

1. Press and hold the bind button, and Power ON the receiver; the orange LED will begin to flash.
2. Set the trims and control positions at the desired failsafe settings, press and hold the bind button, and power ON the DX3 Smart transmitter.
3. When the orange LED on the DX3 Smart transmitter remains lit, it is connected to SR315 receiver.



You must rebind when:

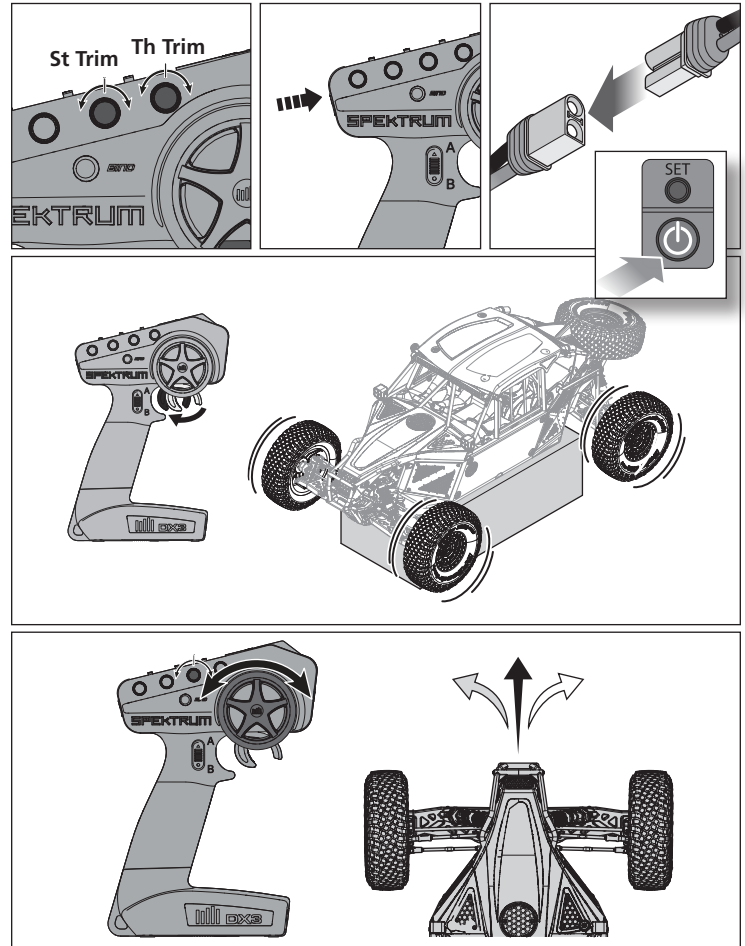
- Different failsafe positions are desired e.g., when throttle or steering reversing has been changed.
- Binding the receiver to a different transmitter.

## OPERATING THE VEHICLE

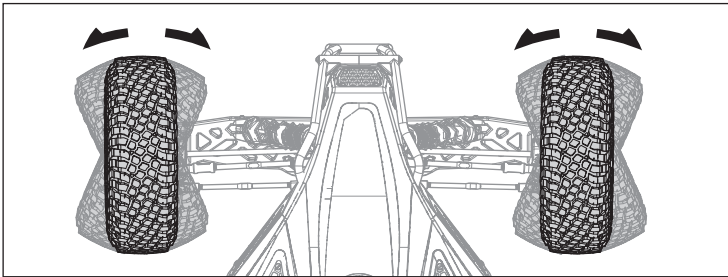
- ALWAYS turn on your transmitter before you turn on the receiver in the vehicle.
- ALWAYS power off the receiver before turning your transmitter off.
- ALWAYS operate your vehicle in a wide open area. Operating the vehicle in a small space or indoors can cause overheating at low speeds. Operating at low speed increases heat in the electronic speed control (ESC). Overheating can damage the vehicle and failure may result.

## POWERING ON THE VEHICLE

1. Center the ST TRIM and TH TRIM dials on the transmitter.
2. Power on the transmitter.
3. Open the body as described in the Installing the Vehicle Battery section.
4. Install and connect a fully charged battery pack to the ESC.
5. Power on the ESC.
6. Close and latch the body.
7. Perform a test of the transmitter's control of the vehicle with the vehicle's wheels off the ground.
8. Start driving slowly. If the vehicle does not go straight, adjust the ST dial on the transmitter.



## CONTROL TEST



Perform a control test with the vehicle wheels off the ground. If the wheels rotate after the vehicle is powered ON, adjust the TH TRIM until they stop. To make the wheels move forward, pull the trigger. To reverse them, wait for the wheels to stop, then push the trigger. When moving forward, the wheels should maintain a straight line without any steering wheel input. If not, adjust the ST TRIM knob so the wheels maintain a straight line without having to turn the steering wheel.

## DRIVING PRECAUTIONS

- Maintain sight of the vehicle at all times.
- Inspect the vehicle for loose wheel hardware.
- Inspect the steering assembly for any loose hardware. Driving the vehicle off-road can cause fasteners to loosen over time.
- Do not drive the vehicle in tall grass. Doing so can damage the vehicle or electronics.
- Stop driving the vehicle when you notice a lack of power. Driving the vehicle when the battery is discharged can cause the receiver to power off. You may lose control of the vehicle.
- Do not apply the throttle in forward or reverse if the vehicle is stuck. Applying throttle in this instance can damage the motor or ESC.
- After driving the vehicle, allow the electronics to cool to ambient temperature before using the next battery pack.

## BEFORE RUNNING YOUR VEHICLE

1. Break in the differentials. While holding the chassis with only the left side tires firmly on the ground, give the car about 1/8 throttle for 30 seconds. The right side tires should spin freely during this time. Repeat this with only the right side tires firmly on the ground, allowing the left side tires to spin freely. Repeat this 2–3 times.
2. Check for free suspension movement. All suspension arms and steering components should move freely. Any binds will cause the car to handle poorly.
3. Charge the battery.
4. Check the calibration of the ESC. If recalibration is required, refer to the 150A Brushless ESC section.
5. Adjust the transmitter settings to your desired configuration.

# SPEKTRUM™ FIRMA™ SMART 150A BRUSHLESS ESC (SPMXSE2150)

## SPECIFICATIONS

Type	Sensorless, SMART Throttle Compatible
Output	150A/950A
Function	Forward/Brake–Forward/Brake Reverse
Input Voltage	3-6S LiPo
BEC Output	6V-7.4V
Dimensions (LxWxH)	58mm x 47.5mm (59.5mm at tabs) x 38.5mm
Weight	238 g

## ESC LED STATUS

- No ESC LEDs will glow when there is no throttle input from the transmitter.
- The red ESC LED glows when there is any throttle input from the transmitter.

## AUDIBLE WARNING TONES

- 1. Input Voltage:** The ESC checks the input voltage when it is powered ON. If a voltage problem is detected, the ESC continuously sounds 2 beeps with a 1 second pause (xx-xx-xx). Power OFF the ESC and ensure the connections are secure and that the battery power is not too low for safe operation.
- 2. Radio Connection:** The ESC checks radio signal input when it is powered ON. If a problem is detected, the ESC continuously sounds 1 beep with a 2 second pause (x--x--x). Power OFF the ESC and ensure the radio system is operating correctly.

**NOTICE:** Always disconnect the battery from the ESC after operating your vehicle. The ESC's switch only controls power to the receiver and servos. The ESC will continue to draw current when connected to the battery, resulting in possible damage to the battery through over discharge.

## ESC CALIBRATION PROCEDURE

Complete the transmitter/receiver binding procedure prior to calibrating the ESC.

1. Set the transmitter throttle channel to 100% travel and center the throttle trim.
2. Connect a battery to the ESC battery lead.
3. Power on the transmitter.
4. Press and hold the SET button while turning on the ESC. Release the SET button when the red LED begins to flash, indicating the ESC is in calibration mode. The ESC will enter programming mode if the button is held for more than three seconds.  
**TIP:** The red LED should be flashing when the ESC enters calibration mode. If the green LED is flashing the ESC has entered programming mode. Power off the ESC and repeat step 4, releasing the SET button when the red LED begins to flash.
5. With the transmitter throttle trigger at the neutral position, press and release the ESC SET button. The red LED will stop flashing, the green LED will flash one time and the motor will make a tone to indicate the neutral position has been accepted.
6. While holding the throttle trigger at the full throttle position, press and release the ESC SET button. The green LED will flash twice and the motor will make two tones to indicate the full throttle position has been accepted.
7. While holding the throttle trigger at the full brake position, press and release the SET button. The green LED will flash three times and the motor will make three tones to indicate the full brake position has been accepted.

The motor will operate normally after calibration is completed.

## ESC FUNCTIONS AND MODES

The ESC includes programming options so you can adjust the way your vehicle performs. Refer to the programming table to adjust the ESC for your driving conditions.

## PROGRAMMING TABLE

■ Default Settings

PROGRAMMABLE ITEMS	PARAMETER OPTIONS								
	1	2	3	4	5	6	7	8	9
1. Running Mode	Forward w/ Brake	Forward/Reverse w/ Brake							
2. Drag Brake Force	0%	2%	4%	6%	8%	10%	12%	14%	16%
3. Low-voltage Cutoff	3.2V	3.3V	3.4V	3.5V	3.6V	3.7V			
4. Start Mode/Punch	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Level 9
5. Max Brake Force	25%	37.5%	50%	62.5%	75%	87.5%	100%	(disabled)	
6. Max Reverse Force	25%	50%	75%	100%					
7. Neutral Range	6% (Narrow)	9% (Normal)	12% (Wide)						
8. Timing (Degrees)	0.0	3.75	7.5	11.25	15.0	18.75	22.50	26.25	
9. Motor Rotation	CCW	CW							
10. BEC Voltage	6.0V	7.4V							

## ESC PROGRAMMING PROCEDURE

Programming is accomplished using the SET button on the ON/OFF switch\*.

1. Connect a fully charged battery to the ESC.
2. Power on the transmitter.
3. Power on the ESC.
4. Hold the SET button until the green LED flashes. Release the set button to enter programming mode.  
**TIP:** To reset all programming items to the default values, press and hold the set button for five seconds.
5. Press and release the set button as needed to cycle through the programming items. The number of times the green LED flashes equals the programming item number given in the programming table.
6. When at the desired programming item, press and hold the set button until the red LED flashes to select the item.
7. Press and release the SET button to cycle through the values available for the programming item based on the number of times the LED flashes. Refer to the programming table.
8. Save the setting by pressing and holding the SET button for 3 seconds.
9. Power off the ESC to exit programming mode or to change other programming items.

\* Other programming options include the Spektrum SMART Firma ESC Programming Box (SPMXCA200) and the SmartLink USB updating and programmer application. See SpektrumRC.com for more details about Spektrum SMART Firma ESCs.

## DESCRIPTIONS

### 1. Running Mode

- **Forward Only with Brake:** Intended for competition use, this mode allows only forward and brake controls.
- **Forward/Reverse with Brake:** This mode is the basic all-around mode, allowing forward, reverse and brake controls. To engage reverse while moving forward, apply the brake until the vehicle has come to a complete stop, release brake, then apply the brake again. While braking or in reverse, engaging the throttle will result in the vehicle immediately accelerating forward.

### 2. Drag Brake Force

Adjusts the amount of brake automatically applied when the throttle is returned to the neutral position. This simulates the engine braking effect of a full-scale vehicle, allowing improved turn-in and your vehicle's general response to controls.

### 3. Low Voltage Cutoff

This function helps to prevent battery over-discharge. The ESC continuously monitors the battery's voltage. If the voltage falls below the voltage threshold for 2 seconds, the output power shuts off and the red LED flashes twice repeatedly.

The cutoff threshold calculation is based on individual Li-Po cell voltage. For Ni-MH batteries, if the voltage battery pack is higher than 9.0V, it will be treated as a 3-cell Li-Po battery pack; if it is lower than 9.0V, it will be treated as a 2-cell Li-Po battery pack. Example: for a 8.0V Ni-MH battery pack used with a 2.6V/cell threshold, it will be treated as a 2-cell Li-Po battery pack and the low-voltage cut-off threshold will be 5.2V ( $2.6 \times 2 = 5.2$ ).

### 4. Start Mode (Punch)

Sets the initial throttle punch when the car accelerates. Level 1 gives a very soft initial acceleration and level 4 gives a stronger initial acceleration.

### 5. Max Brake Force

Adjusts the maximum braking force. A higher value provides stronger braking, but can also cause the wheels to lock, resulting in loss of control of the car.

### 6. Max Reverse Force

This parameter adjusts the maximum power when travelling in reverse.

### 7. Neutral Range

Adjusts the throttle sensitivity around the neutral point. A higher value results in the throttle having to be moved more for the vehicle to move forward, backward or brake.

### 8. Timing

Adjusts the motor drive current timing. More timing gives more performance, but can lower efficiency and cause damage to the motor and/or ESC by overload or overheating.

**NOTICE:** Always ensure the motor timing is set correctly. Failure to set the motor timing correctly can result in damage to the motor and ESC. Refer to the manufacturer instructions for recommended timing settings.

### 9. Motor Rotation

Allows you to make this change in the ESC so no wires need to be changed between the ESC and the motor.

### 10. BEC Voltage

Determines the output voltage of the BEC to the receiver and servo.

## SPEKTRUM™ FIRMA 2050KV 4-POLE BRUSHLESS MOTOR (SPMXSM1700)

### PRECAUTIONS

- Never touch moving parts.
- Never disassemble while the batteries are installed.
- Always let parts cool before touching.
- Rated for up to 8S batteries.

### GEARING

The stock pinion gear is a MOD 1,12 tooth, 5mm shaft pinion (LOSA3572). Installing a pinion gear with fewer teeth will provide greater torque but will reduce top speed. Likewise, a pinion gear with more teeth will reduce torque and increase top speed. Care should be taken when installing larger pinion gears as this can "overgear" the vehicle, resulting in overheating of the motor and ESC. When testing different gearing options, pay close attention to the temperature of the motor and speed control to ensure you are operating within the temperature range of the components. The motor or ESC should never be so hot that it cannot be touched. If temperatures are too hot, a different gearing combination with a lower pinion gear and/or higher spur gear is suggested.

### CHANGING THE PINION GEAR/GEAR RATIO

1. Loosen the two screws holding the motor in place, loosen the pinion gear set screw and remove the pinion gear.
2. Remove the motor mounting screws to remove the motor, or adjust the motor to the location for the corresponding pinion gear.
3. Install the new pinion gear on your motor. Place the pinion gear on the end of the motor shaft so that it lines up flush with the spur gear and the set screw is located over the flat on the shaft.
4. Tighten the pinion gear on the motor shaft and tighten motor mounting screws after ensuring proper gear mesh.

### RUN TIME

The largest factor in run time is the capacity of the battery pack. A larger mAh rating increases the amount of run time experienced.

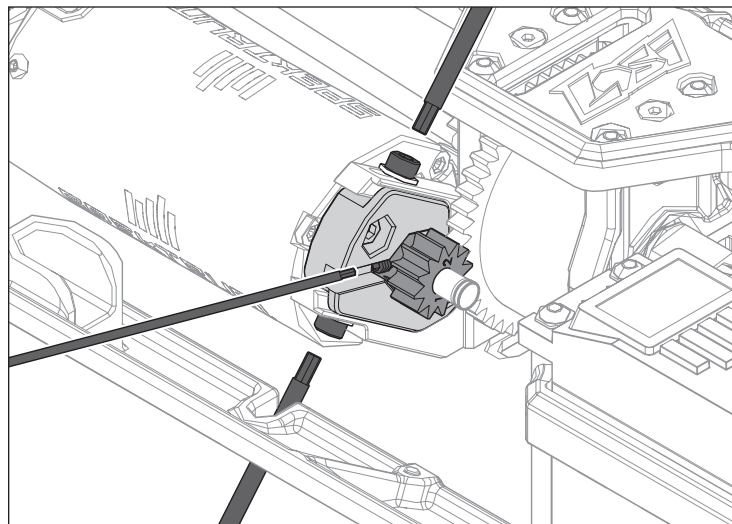
The condition of a battery pack is also an important factor in both run time and speed.

The battery connectors may become hot during driving. Batteries will lose performance and capacity over time.

Driving the vehicle from a stop to full speed repeatedly will damage the batteries and electronics over time. Sudden acceleration will also lead to shorter run times.

### TO IMPROVE RUN TIMES

- Keep your vehicle clean and well maintained.
- Allow more airflow to the ESC and motor.
- Change the gearing to a lower ratio. A lower ratio decreases the operating temperature of the electronics. Use a smaller pinion gear or larger spur gear to lower the gear ratio.
- Use a battery pack with a higher mAh rating.
- Use the optimum charger to charge battery packs (Visit your local hobby dealer for more information).





## VEHICLE MAINTENANCE

The following items require semi-frequent maintenance. Always clean screw threads and apply removeable thread locking compound when threading machine screws into metal parts.

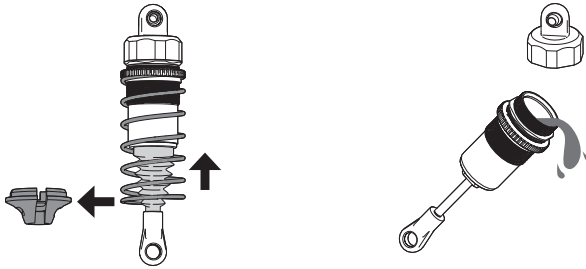
REQUIRED TOOLS
1.5mm Hex Driver
2.0mm Hex Driver
2.5mm Hex Driver
5.5mm Nut Driver
17mm Wheel Wrench

STOCK FLUIDS	
DIFF FLUIDS	
Front	15k
Rear	10k
Center	200k
SHOCK OIL	
Front	80wt (TLR74016)
Rear	80wt (TLR74016)

## SHOCK DISASSEMBLY/CLEANING

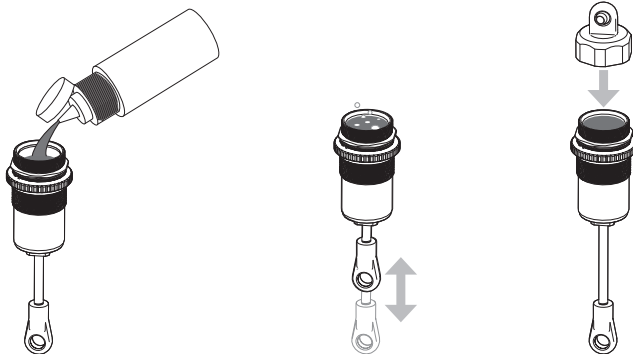
Remove the shocks and service as needed. Replace worn parts.

1. Remove shock cup screw. Pull the spring up and away from the lower cup. Slide the lower spring cup up and off of the shaft. Clean with a soft brush.
2. Use the shock tools to hold the shock body and remove the top cap.
3. Empty and discard the fluid from out of the shock.
4. Hold the shaft with a multi-wrench (DYNT1260) and remove the shock end.
5. Push the shaft into the shock body and remove through the top.
6. Remove the lower shock cap, dust cover, O-rings and spacer from the shock body.
7. Clean the shock body.
8. Install new O-rings, re-install the spacer, replace the O-ring and loosely install the lower shock cap. DO NOT TIGHTEN.
9. Install the shock shaft through the shock bottom and tighten the bottom cap.
10. Re-install the boot and shock end on the shaft.

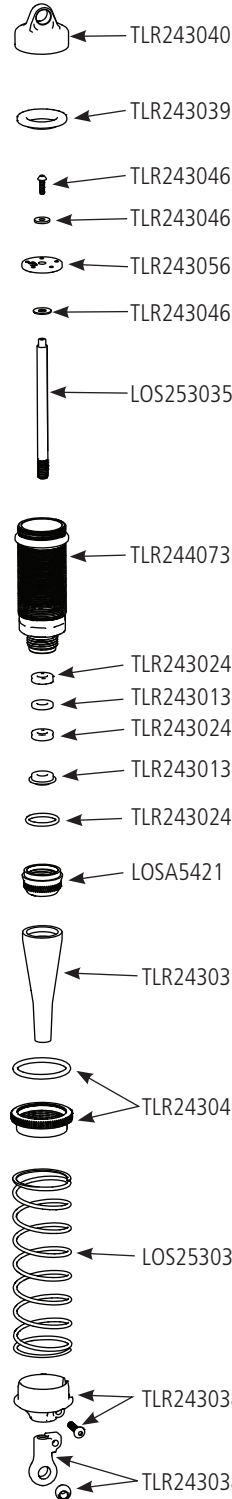


## REFILLING/BLEEDING SHOCKS

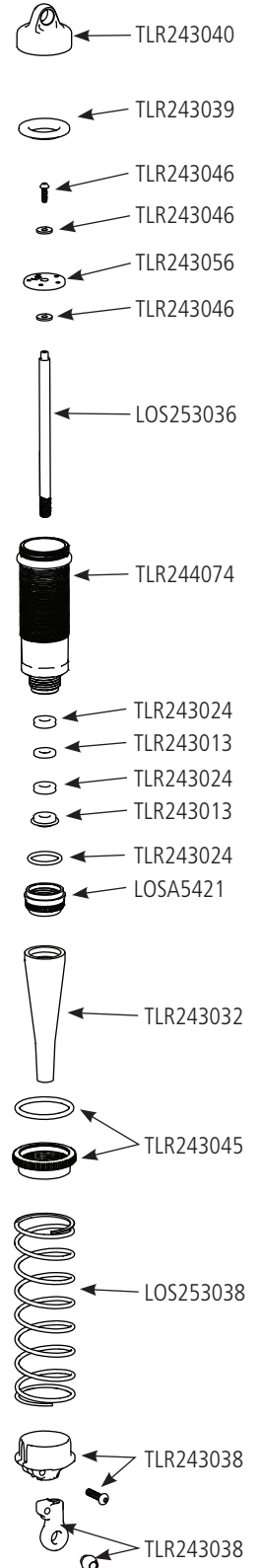
1. Fill the shock body to 5mm (0.2 in) from the top with silicone shock oil:  
**Front shocks:** 80wt (TLR74016)  
**Rear shocks:** 80wt (TLR74016)
2. Slowly move the piston up and down 5 times, allowing air to rise to the top.
3. Let the shock sit for 5 minutes.
4. With the piston all the way down, fill the shock body to 1mm (0.04 in) from the top.
5. Move piston to level with the top of the oil.
6. Replace the shock cap, spring, spring cup and spring cup screw.



### FRONT SHOCKS



### REAR SHOCKS



## TUNING, ADJUSTING & MAINTAINING YOUR VEHICLE

- Examine your vehicle on a regular basis.
- Use a brush to remove dirt and dust.
- Look for damage to the suspension arms and other molded parts.
- Re-glue the tires to the wheels, if necessary.
- Use suitable tools to tighten fasteners.
- Make sure the camber and steering linkages are not bent. Replace any bent linkages.
- Remove the shocks and inspect them for damage. Rebuild the shocks if oil is leaking.
- Inspect electronics and batteries for exposed wires. Repair exposed wires with shrink-wrap or replace the wire.
- Make sure the ESC and receiver are secure on the chassis. Replace the double-sided tape, if necessary.
- Power on the transmitter. If the green LED is dim or off, replace the AA batteries in your transmitter.
- Check the spur gear for wear.

## CHANGING THE TRAVEL ADJUST SETTINGS

**WARNING:** Unplug 2 of the 3 motor wires to prevent the car from running away when setting the EPA (travel).

1. Hold the trigger in the full brake position and the steering wheel full right while powering on the transmitter. The LED flashes rapidly, indicating the programming mode is active.
2. **Throttle End Point:** Hold the throttle trigger to full throttle while turning the TH TRIM knob clockwise until it stops. Turn the TH TRIM knob to adjust the full throttle end point.
3. **Brake End Point:** Hold the trigger in the full brake position. Turn the TH TRIM knob clockwise until it stops. Return the trigger to the center position.

4. **Left Steering End Point:** Hold the steering wheel in the full left position. Turn the ST TRIM knob to adjust the left end point.
5. **Right Steering End Point:** Hold the steering wheel in the full right position. Turn the ST TRIM knob to adjust the right end point. Return the steering wheel to the center position.
6. Power off the transmitter to save the travel adjust settings. The minimum Travel is 75%, and the Maximum travel is 150%.

## SERVICE/REPAIR

### RADIO/SPEED CONTROL & MOTOR

If any problems other than those covered in the troubleshooting section arise, please call the appropriate electronics service department. They will be able to give the problem additional specific attention and provide instructions for the solution.

### MAINTENANCE

If any questions other than those covered in the troubleshooting or maintenance sections arise, please call the appropriate Horizon product support department.

### CLEANING

Performance can be hindered if dirt gets in any of the moving suspension parts. Use compressed air, a soft paintbrush, or a toothbrush to remove dust or dirt. Avoid using solvents or chemicals as they can actually wash dirt into the bearings or moving parts, as well as cause damage to the electronics.

## TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
Vehicle does not operate	Battery not charged or plugged in	Charge battery/plug in
	ESC switch not "On"	Turn on ESC switch
	Transmitter not "On" or low battery	Turn on/replace batteries
Motor runs but wheels do not rotate	Pinion not meshing with spur gear	Adjust pinion/spur mesh
	Pinion spinning on motor shaft	Tighten pinion gear setscrew on motor shaft flat spot
	Transmission gears stripped	Replace transmission gears
	Drive pin broken	Check and replace drive pin
Steering does not work	Servo plug not in receiver properly	Make sure the steering servo plug is connected to the receiver steering channel, noting proper polarity
	Servo gears or motor damaged	Replace or repair servo
Will not turn one direction	Servo gears damaged	Replace or repair servo
Motor does not run	Motor wire solder joint is damaged	Resolder the motor wire with the proper equipment
	Motor wire broken	Repair or replace as needed
	ESC damaged	Contact Horizon Hobby Product Support
ESC gets hot	Motor over-gearred	Use smaller pinion or larger spur gear
	Driveline bound up	Check wheels and transmission for binding
Poor run time and/or sluggish acceleration	Battery pack not fully charged	Recharge battery
	Charger not allowing full charge	Try another charger
	Driveline bound up	Check wheels, transmission for binding
Poor range and/or glitching	Transmitter batteries low	Check and replace
	Vehicle battery low	Recharge battery
	Loose plugs or wires	Check all wire connections and plugs

## 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](http://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](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](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.

10/15

## WARRANTY AND SERVICE CONTACT INFORMATION

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


## FCC INFORMATION

Contains FCC ID: BRWKATY1T

FCC ID: BRWSRIRVINGV1

### SUPPLIER'S DECLARATION OF CONFORMITY

LOSI 8IGHT-X Super Lasernut Buggy RTR (LOS04019)

 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](mailto:compliance@horizonhobby.com)

Web: [HorizonHobby.com](http://HorizonHobby.com)

## IC INFORMATION

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

Contains IC: 6157A-KATY1T

IC: 6157A-SRIRVINGV1

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science, and Economic Development Canada's license-exempt RSS(s).

Operation is subject to the following 2 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.

## COMPLIANCE INFORMATION FOR THE EUROPEAN UNION



### EU COMPLIANCE STATEMENT

LOSI 8IGHT-X Super Lasernut Buggy RTR (LOS04019): Hereby, Horizon Hobby, LLC declares that the device is in compliance with the following: EU Radio Equipment Directive (RED) 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:

2402–2478MHz

17.7 dBm

#### Receiver:

2404–2476MHz

-1.33dBm

### 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

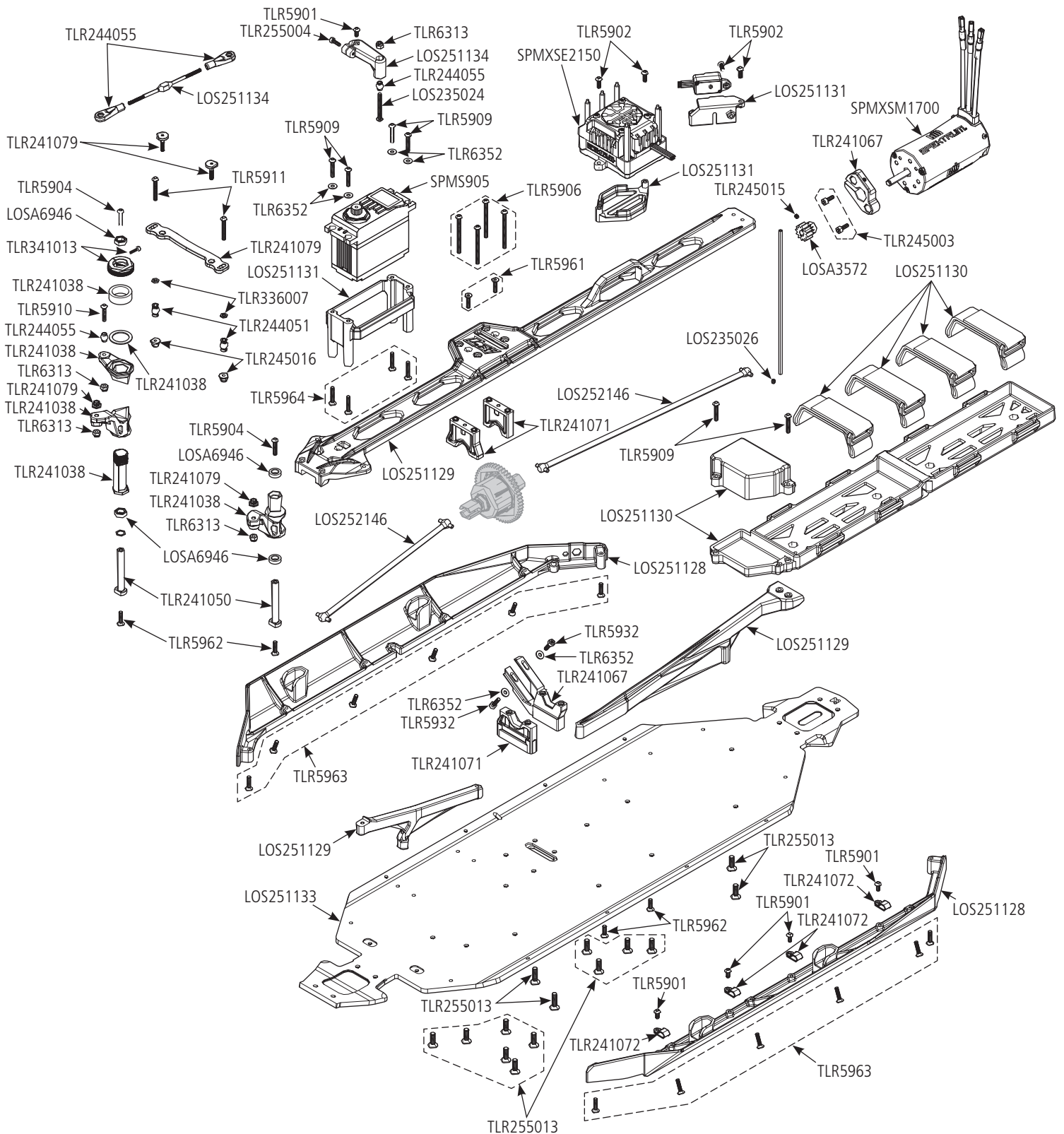
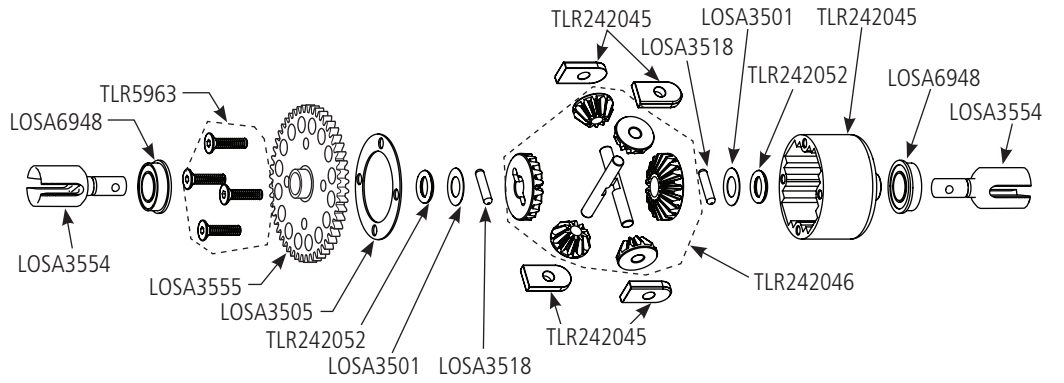


This appliance is labeled in accordance with European Directive 2012/19/EU concerning waste of electrical and electronic equipment (WEEE). This label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.

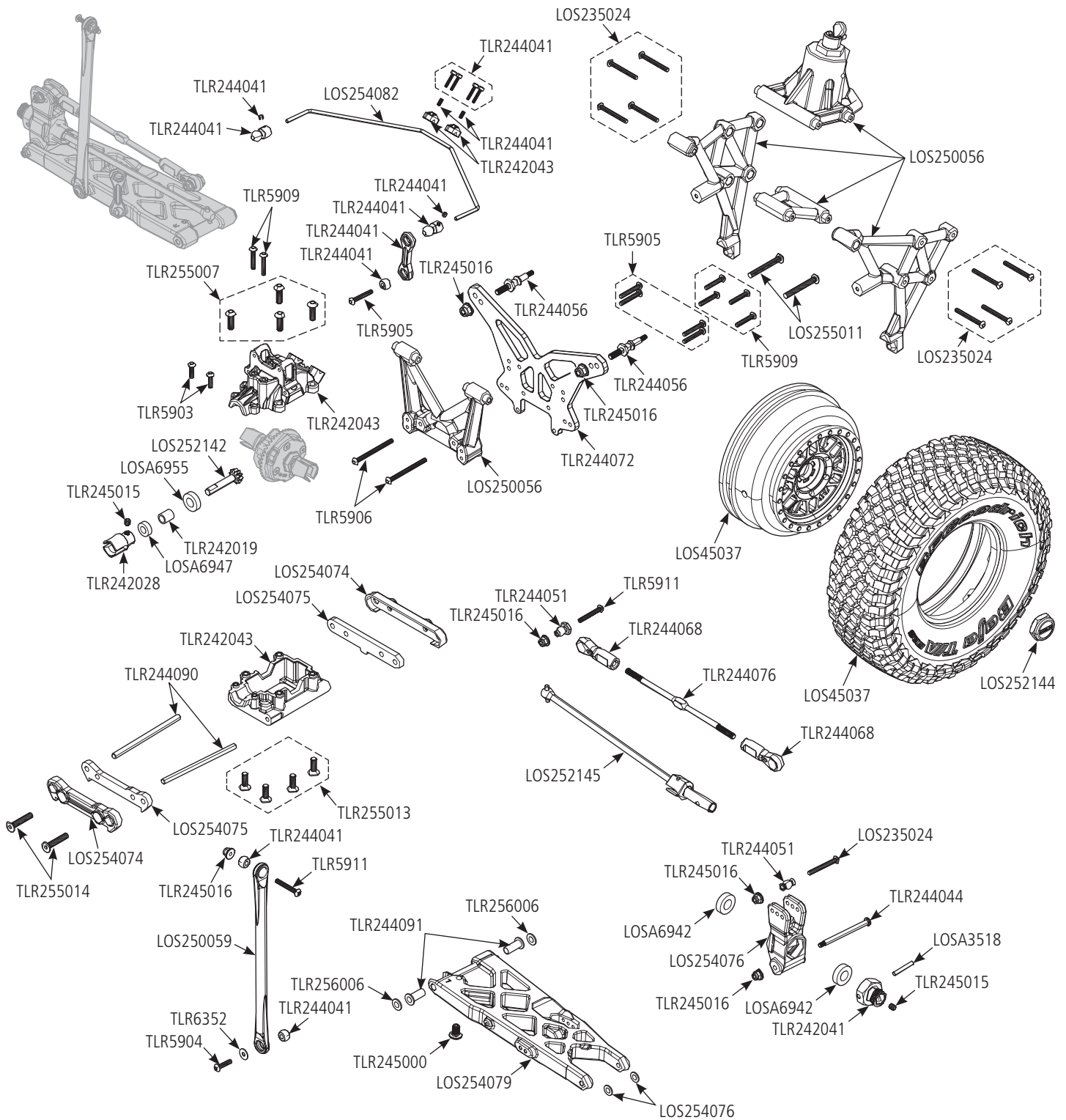
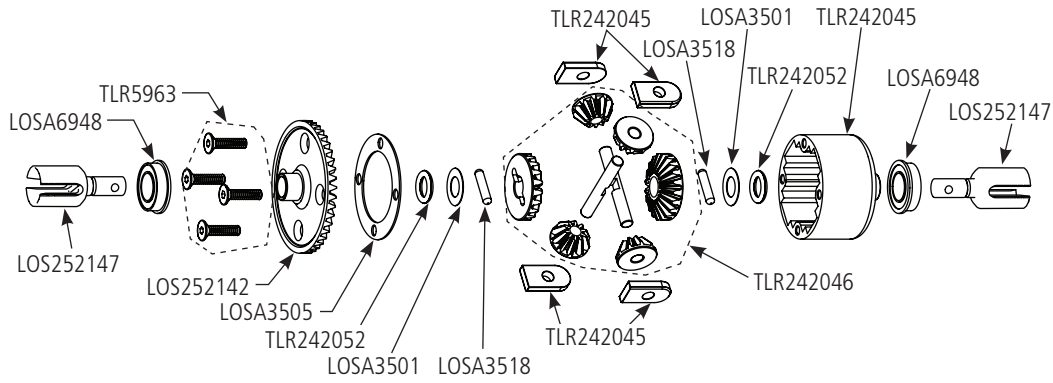


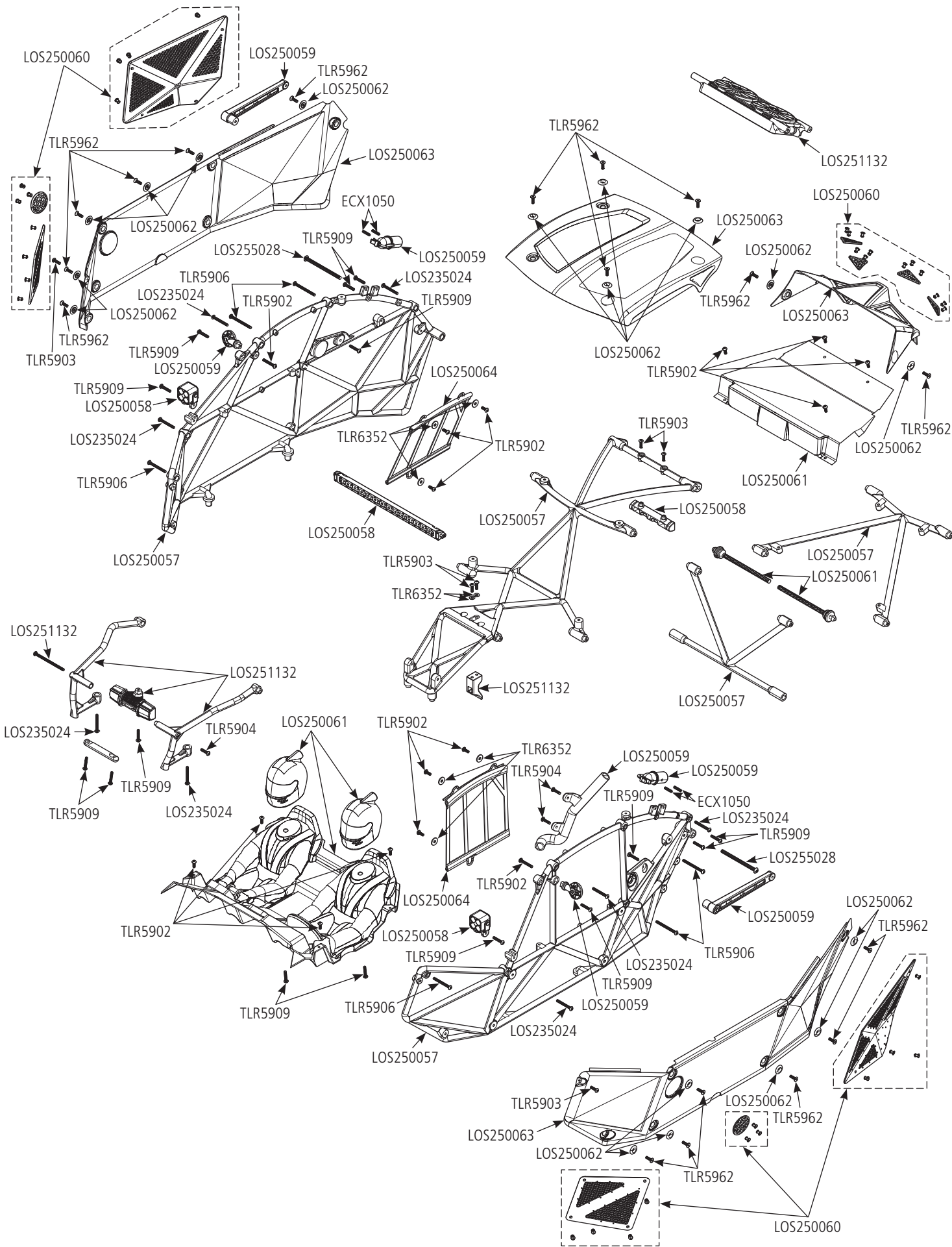


**CENTER DIFFERENTIAL // ZENTRALES DIFFERENTIAL // DIFFÉRENTIEL CENTRAL // DIFFERENZIALE CENTRALE**



**REAR DIFFERENTIAL // HINTERES DIFFERENTIAL // DIFFÉRENTIEL ARRIÈRE // DIFFERENZIALE POSTERIORE**







# REPLACEMENT PARTS // ERSATZTEILE // PIÈCES DE RECHANGE // PEZZI DI RICAMBIO

PART #	DESCRIPTION	BESCHREIBUNG	DESCRIPTION	DESCRIZIONE
ECX1050	3x12mm Set Screw (4)	Madenschrauben, 3 x 12 mm (4)	Vis de fixation, M3x12 mm (10)	Viti di fermo, M3x12 mm (4)
LOS235007	Button Head Screws M4 x 12mm (10)	Rundkopfschrauben, M4 x 12 mm (10)	Vis à tête bombée M4x12 mm (10)	Viti testa tonda, M4x12 mm (10)
LOS235011	Set Screws, M3 x 3mm Cup Point(10)	Stellschrauben, M3 x 3 mm Ringschneide (10)	Vis de pression M3 x 3 mm à bout cuvette (10)	Kit viti, M3x3 mm, senza testa (10)
LOS235012	Set Screw, M4 x 4mm Cup Point(10)	Stellschraube M4 x 4 mm Ringschneide (10)	Vis de pression M4 x 4 mm à bout cuvette (10)	Kit viti, M4x4 mm, senza testa (10)
LOS235018	Set Screw, M3 X 3mm (10)	Stellschraube, M3 x 3 mm (10)	Vis de fixation, M3x3 mm (10)	Viti di fermo, M3x3 mm (10)
LOS235024	Button Head Screws M3x25mm (10)	Rundkopfschrauben, M3 x 25 mm (10)	Vis à tête bombée M3x25 mm (10)	Viti testa tonda, M3x25 mm (10)
LOS236001	3.2mm x 7mm x .5mm Washer (10)	3,2 mm x 7mm x 0,5 mm Unterlegscheibe (10)	Rondelle, 3,2 mm x 7 mm x 0,5 mm (10)	Rondelle 3,2x7x0,5 mm (10)
LOS250056	Rear Cage: SLN	Hinterer Käfig: SLN	Cage arrière : SLN	Gabbia posteriore: SLN
LOS250057	Main Cage: SLN	Hautkäfig: SLN	Cage principale: SLN	Gabbia principale: SLN
LOS250058	Light Bars: SLN	Lichtleiste: SLN	Barre lumineuse: SLN	Barra luminosa: SLN
LOS250059	Cage Accessories: SLN	Käfigzubehör: SLN	Accessoires pour cages: SLN	Accessori per gabbie: SLN
LOS250060	Vent Set: SLN	Entlüftungsset: SLN	Trousse de ventilation: SLN	Kit di sfiato: SLN
LOS250061	Interior Set: SLN	Innenset: SLN	Ensemble intérieur: SLN	Insieme degli interni: SLN
LOS250062	Body Button (22): SLN	Körperknopf (22): SLN	Bouton du corps (22): SLN	Pulsante del corpo (22): SLN
LOS250063	Panel Set, Decorated: SLN	Panel-Set, dekoriert: SLN	Ensemble de panneaux, décoré	Set di pannelli, decorati: SLN
LOS250064	Window Net (2): SLN	Fensternetz (2): SLN	filet de fenêtre: SLN	rete per finestre: SLN
LOS251128	Side Guard Set: SLN	Seitenschutz-Set: SLN	Ensemble de protection latérale: SLN	Set protezioni laterali: SLN
LOS251129	Chassis Brace Set: SLN	Karosseriestrebensatz: SLN	Renforts de châssis: SLN	Set trapezio: : SLN
LOS251130	Battery Tray: SLN	Batterieträger: SLN	Support de batterie: SLN	Alloggiamento batteria: SLN
LOS251131	ESC & Servo Mount: SLN	Geschwindigkeitsregelung und Servohalterung: SLN	Contrôle de vitesse et support de servo: SLN	Controllo della velocità e supporto del servo: SLN
LOS251132	Bumper, Body Post: SLN	Stoßstange, Karosseriepfeiler: SLN	Pare-chocs, montant de carrosserie: SLN	Paraurti, montante del corpo: SLN
LOS251133	Chassis: SLN	Karosserie: SLN	Carrosserie: SLN	Telaio: SLN
LOS251134	Servo Horn & Steering Link: SLN	Servohorn und Lenkverbindung: SLN	Avertisseur de servo et biellette de direction: SLN	Servoavvisatore e collegamento dello sterzo: SLN
LOS252141	Front Ring & Pinion Gear: SLN	Triebling und Tellerrad Diff vorne: SLN	Pignon d'attaque et couronne de différentiel avant: SLN	Corona e pignone del differenziale anteriore: SLN
LOS252142	Rear Ring & Pinion Gear: SLN	Triebling und Tellerrad Diff hinten: SLN	Pignon d'attaque et couronne de différentiel arrière: SLN	Set anello e pignone posteriore: SLN
LOS252143	Front Universal (2): SLN	Vorderes Universalgelenk(2): SLN	Arbre de transmission universelle avant (2): SLN	Albero di trasmissione universale anteriore (2): SLN
LOS252144	Wheel Nut (4): SLN	Radmutter (4): SLN	Écrous de roue couverts (4)	Dadi ruota, ricoperti (4): SLN
LOS252145	Dog Bone & Axle (2): SLN	Universal-Antriebswelle (2): SLN	Arbre de transmission universelle avant (2): SLN	Albero di trasmissione universale anteriore (2): SLN
LOS252146	Center Driveshaft Set: SLN	Mittiger Antriebswellesatz: SLN	Dogbone central, arrière : SLN	Cardano centrale, Posteriore:: SLN
LOS252147	Front/Rear Outdrive (2): SLN	Vorn/Heck Antriebsatz (2): SLN	Kit de transmission avant/arrière(2): SLN	Kit trazione anteriore/posteriore(2): SLN
LOS253035	Front Shock Shaft (2): SLN	Kolbenstange, Vorn (2): SLN	Bras d'amortisseur, avant (2): SLN	Albero ammortizzatore, anteriore (2)
LOS253036	Rear Shock Shaft (2): SLN	Kolbenstange, Heck (2): SLN	Bras d'amortisseur, arrière (2): SLN	Albero ammortizzatore, posteriore (2): SLN
LOS253037	Front Spring Set: SLN	Federnsatz, Vorn: SLN	Ensemble ressort, avant : SLN	Kit molle, Anteriore: SLN
LOS253038	Rear Spring Set: SLN	Federnsatz, Heck: SLN	Ensemble ressort, arrière : SLN	Kit molle, posteriore: SLN
LOS254074	Pin Mount Cover Set: 8XE RTR	Abdeckungssatz Bolzen-Montage: 8XE RTR	Ensemble cache de support axe : 8XE RTR	Set coperchi montaggio perni: 8XE RTR
LOS254075	Pin Mount Set: SLN	Bolzen-Montagesatz: SLN	Ensemble de support axe : SLN	Set supporto perni: SLN
LOS254076	Rear Hub: 8XE RTR	Hinterere Nabe: 8XE RTR	Moyeu arrière : 8XE RTR	Mozzo posteriore: 8XE RTR
LOS254077	Spindle Set: 8XE RTR	Spindelsatz: 8XE RTR	Jeu d'axes : 8XE RTR	Set alberino: 8XE RTR
LOS254078	Front Arm Set: SLN	Vorderer Querlenker: SLN	Ensemble de bras avant : SLN	Set brac ant :
LOS254079	Rear Arm Set: SLN	Hinterer Querlenker: SLN	Ensemble bras arrière : SLN	Set brac post
LOS254080	Front Shock Tower: SLN	Vorderer Stoßdämpferturm: SLN	Support d'amortisseurs avant	Torre ammortizzatore anteriore
LOS254081	King Pin (4): 8XE RTR	Achsschenkelbolzen (4): 8XE RTR	Broche pivot (4) : 8XE RTR	Viti kingpin (4): 8XE RTR
LOS254082	Sway Bar Set: SLN	Stabilisator-Set: SLN	Ensemble de barre stabilisatrice	Set barra oscillante
LOS255011	Button Head Screws, Stl, BO, M4 x 30mm (10)	Rundkopfschrauben, Stl, BO, M4 x 30 mm (10)	Vis à tête bombée , Inoxydable, BO, M4x30 mm (10)	Viti testa tonda, inossidabili, BO, M4 x 30mm (10)
LOS255017	Flat Head Screws, Stl, BO, M4 x 16mm (10)	Flachkopfschrauben, Stl, BO, M4 x 16 mm (10)	Vis à tête plate, Inoxydable, BO, M4 x 16 mm (10)	Viti a testa piatta, inossidabili, BO, M4 x 16mm (10)
LOS255019	Flat Head Screws, Stl, BO, M4 x 14mm (10)	Flachkopfschrauben, Stl, BO, M4 x 14 mm (10)	Vis à tête plate, Inoxydable, BO, M4 x 14 mm (10)	Viti a testa piatta, inossidabili, BO, M4 x 14mm (10)

PART #	DESCRIPTION	BESCHREIBUNG	DESCRIPTION	DESCRIZIONE
LOS255028	Button Head Screws M4x60mm (10)	Rundkopfschrauben, M4 x 60 mm (10)	Vis à tête bombée M4x60 mm (10)	Viti testa tonda, M4x60 mm (10)
LOS350007	Panel Set, Clear: SLN	Panel-Set, klar: SLN	Ensemble de panneaux, transparent: SLN	Set pannelli, trasparente: SLN
LOS45037	Wheel, Tire, Mounted(2): SLN	Rad, Reifen, montiert(2)	Roue, pneu, monté (2): SLN	Ruota, pneumatico, montato(2): SLN
LOSA3501	Differential Shims, 6x11x.2mm: 8B 2.0 (12)	Differential-Ausgleichsscheiben, 6x11x.2mm: 8B 2.0 (12)	Cales de différentiel, 6 x 11 x 0,2 mm : 8B 2.0 (12)	Spessori differenziale, 6x11x0,2 mm: 8B 2.0 (12)
LOSA3554	Center HD Lightened Differential Outdrives (2)	Heavy Duty Antriebsklauen für Mitteldifferential, Leichtbau (2)	Entraînements extérieurs différentiels allégés ultra-résistants centraux (2)	Outdrive diff. leggeri HD centrali (2)
LOSA3555	Center Diff 50T Spur Gear, Lightweight: 8B/8T	Mitteldifferential Stirnrad 50T, Leichtbau: 8B/8T	Engrenage cylindrique 50T différentiel central, léger : 8B/8T	Ingr. cilindrico, diff. centrale, 50T, leggero: 8B/8T
LOSA3572	1.0 Module Pitch Pinion, 12T: 8E,SCTE	1.0 Modul Getrieberad, 12T	Pignon de pas de module 1.0, 12T	Pignone passo modulo 1.0, 12T
LOSA5421	15mm Shock Caps Bottom (2): 8B 8T	15 mm Stoßdämpferkappen unten (2): 8B 8T	Capuchons d'amortisseurs bas 15 mm (2) : 8B 8T	Tappi amm. inferiori 15 mm (2): 8B 8T
LOSA6350	#4 and 1/8 Hardened Washers	#4 und 1/8 gehärtete Unterlegscheiben	Rondelles renforcées #4 et 1/8	Rondelle indurite #4 e 1/8
LOSA6356	Shim Set, Metric 5mm/6mm	Unterlegscheibensatz, metrisch 5 mm/6 mm	Jeu de cales, métrique 5 mm/6 mm	Set di spessori, sistema metrico 5 mm/6 mm
LOSA6942	8x16x5mm Sealed Ball Bearing (4)	8 x 16 x 5 mm abgedichtetes Kugellager (4)	Roulement à billes hermétique 8 x 16 x 5 mm (4)	Cuscinetti a sfera sigillato 8x16x5 mm (4)
LOSA6946	6x10x3 Rubber Sealed Ball Bearing (4)	6 x 10 x 3 Kugellager m. Gummidichtung (4)	Roulement à billes hermétiques en caoutchouc 6 x 10 x 3 (4)	Cuscinetti a sfera sigillati in gomma 6x10x3 mm (4)
LOSA6947	5x11x4 Rubber Sealed Ball Bearing (4)	5 x 11 x 4 Kugellager m. Gummidichtung (4)	Roulement à billes hermétiques en caoutchouc 5 x 11 x 4 (4)	Cuscinetti a sfera sigillati in gomma 5x11x4 mm (4)
LOSA6948	8x14x4 Flanged Rubber Seal Ball Bearing (4)	8 x 14 x 4 Kugellager m. Flanschgummidichtung (4)	Roulement à billes hermétique en caoutchouc à collet 8 x 14 x 4 (4)	Cuscinetti a sfera sigillati in gomma flangiati 8x14x4 mm (4)
LOSA6955	5x13x4mm HD Clutch Bearings (2):8B/8T	5 x 13 x 4 mm HD Kupplungslager (2): 8B/8T	Roulements à embrayage ultra-résistants 5 x 13 x 4 mm (2) : 8B/8T	Cuscinetti frizione HD 5x13x4 mm (2):8B/8T
SPMR2340	DX3 TX Only - Service Item	Nur DX3 TX	DX3 TX Uniquement	DX3 TX solo
SPMS905	S905 Large Scale WP Servo 15T	S905 Großes wasserdichtes Servo 15T	Grand servo imperméable S905 15T	S905 Servo impermeabile di grandi dimensioni 15T
SPMSR315	SR315 DSMR 3 CH Receiver	SR315 DSMR 3-Kanal-Empfänger	Récepteur SR315 DSMR 3 canaux	Ricevitore SR315 DSMR 3 CH
SPMXSE2150	Firma 150 Brushless Smart ESC 3S - 6S	FIRMA 150 Brushless Smart Motorregler 3-6S	Variateur Smart ESC sans balais FIRMA 150, 3S - 6S	Firma 150 Brushless Smart ESC 3S - 6S
SPMXSM1700	Firma 2050Kv 4074 Brushless Motor	Firma 2050Kv 4074 Brushless Motor	Moteur sans balais FIRMA 2050Kv 4074	Firma Brushless Motore, 2050Kv 4074
SPMXSMH2	Motor Heatsink 4074	Motor Kühlkörper 4074	Dissipateur thermique du moteur 4074	Dissipatore di calore del motore 4074
TLR235012	Set Screw, M3 x 20mm (8)	Madenschrauben, M3 x 20 mm (8)	Vis de fixation, M3x20 mm (8)	Viti di fermo, M3x20 mm (8)
TLR241013	Battery Straps (3): 8E & 8TE 3.0	Akku-Klemmen (3): 8E & 8TE 3.0	Sangles de batterie (3) : 8E et 8TE 3.0	Fascette batteria (3): 8E & 8TE 3.0
TLR241038	Bellcrank Set: 8X	Umlenkhebelsatz: 8X	Ensemble de levier coudé : 8X	Set leva a squadra: 8X
TLR241050	Steering Post (2): 8X	Lenksäule (2): 8X	Colonne de direction (2) : 8X	Montante sterzo (2): 8X
TLR241067	Motor Mount w/Adapter: 8XT	Motorhalterung m. Adapter: 8XT	Support du moteur avec adaptateur : 8XT	Supporto motore con adattatore: 8XT
TLR241071	Battery Tray, Center Diff & Servo Mount: 8XE 2.0	Batterieträger, Mitteldifferential- und Servo-Halterung: 8XE 2.0	Support de batterie, support différentiel central et servo : 8XE 2.0	Supporto batteria, supporto servo e differenziale centrale: 8XE 2.0
TLR241079	Drag Link: 8X, 8XE 2.0	Lenkzwischenstange: 8X, 8XE 2.0	Barre d'accouplement : 8X, 8XE 2.0	Leva a squadra: 8X, 8XE 2.0
TLR242019	Spacer, Pinion Bearings (4): 8IGHT & 8T 4.0	Abstandhalter, Zahnradlager (4): 8IGHT & 8T 4.0	Entretoise, roulements à pignon (4) : 8IGHT et 8T 4.0	Distanziale, cuscinetti pignone (4): 8IGHT & 8T 4.0
TLR242025	Front Gear Box: 8X	Vorderes Getriebegehäuse: 8X	Boîte à engrenage avant : 8X	Scatola ingranaggi anteriore: 8X
TLR242028	Center Drive Coupler: 8X	Zentrale Antriebskupplung: 8X	Coupleur d'entraînement central : 8X	Attacco albero trasmissione: 8X
TLR242041	Wheel Hex, Front: 8XT	Sechskant, vorn: 8XT	Hexagone de roue avant : 8XT	Esagono ruota, Anteriore: 8XT
TLR242043	Rear Gear Box: 8XT	Hinteres Getriebegehäuse: 8XT	Boîte à engrenage arrière : 8XT	Riduttore posteriore: 8XT
TLR242045	Heavy Duty Differential Case, V2: 8X	Robustes Differentialgehäuse, V2: 8X	Boîtier de différentiel hautement résistant, V2 : 8X	Scatola diff. heavy duty V2: 8X
TLR242046	Differential Gear & Shaft Set: 8X, 8XE 2.0	Differentialgetriebe und -wellensatz: 8X, 8XE 2.0	Ensemble d'arbre et d'engrenage différentiel : 8X, 8XE 2.0	Kit albero e ingr. diff.: 8X, 8XE 2.0
TLR242052	Differential O-Rings, V2 (10): 8X	Differential O-Ringe, V2 (10): 8X	Joints toriques différentiels, V2 (10) : 8X	O-ring differenziale, V2 (10): 8X
TLR243013	Shock Guide & Bushing (8): 8IGHT Buggy 3.0	Stoßdämpferführung und Buchse (8): 8IGHT Buggy 3.0	Guide d'amortisseur et bague (8) : 8IGHT Buggy 3.0	Boccole e guide amm. (8): 8IGHT Buggy 3.0
TLR243024	X-Ring Seals (8), Lower Cap Seals (4): All 8IGHT	X-Ring Dichtungen (8), Stoßdämpfer-Endkappen unten (4): Alle 8IGHT	Joint torique X (8), Joints de couvercle inférieur (4) : 8IGHT (tout)	X-Ring (8), tenute tappo inf. (4): All 8IGHT
TLR243032	16mm Shock Boot Set (8): 8T 3.0	16mm Stoßdämpfermanschettesatz (8)	Jeu de soufflets d'amortisseur, 16mm (8)	Set cuffia ammortizzatore da 16 mm (8)
TLR243033	Shock Cap Bushing (4): 8IGHT & 8T 4.0	Stoßdämpferkappen (4): 8IGHT & 8T 4.0	Bague de capuchon d'amortisseur (4) : 8IGHT et 8T 4.0	Boccole tappi amm. (4): 8IGHT & 8T 4.0
TLR243038	Shock Plastics: 8X	Stoßdämpfer Kunststoff: 8X	Plastiques de l'amortisseur : 8X	Plastiche ammortizzatori: 8X
TLR243039	16mm Shock Seals, Emulsion (4): 8X	16 mm Stoßdämpfer-Dichtungen, Emulsion (4): 8X	Joints d'amortisseurs 16 mm, Émulsion (4) : 8X	Tenute amm. 16 mm, Emulsion (4): 8X

PART #	DESCRIPTION	BESCHREIBUNG	DESCRIPTION	DESCRIZIONE
TLR243040	16mm Bleeder Shock Cap, Aluminum (2): 8X	16 mm Stoßdämpfer-Entlüfterkappe Aluminium (2): 8X	Capuchon d'amortisseur avec purgeur 16 mm, aluminium (2) : 8X	Tappi sfiato amm., 16 mm, alu (2): 8X
TLR243045	16mm Shock Nuts & O-rings (4): 8X	16 mm Dicht- und O-Ringe (4): 8X	Écrous d'amortisseur et joints toriques 16 mm (4) : 8X	O-ring e dadi amm. 16 mm (4): 8X
TLR243046	Shock Washer, Screw (4): 8X	Unterlegscheibe Stoßdämpfer, Schraube (4): 8X	Rondelle d'amortisseur, vis (4) : 8X	Rondella amm., vite (4): 8X
TLR243056	16mm Shock Piston Set, Taper 5x1.5 V2: 8	16 mm Stoßdämpfer-Kolbensatz, konisch, 5 x 1,5 V2: 8	Ensemble de piston d'amortisseur conique 16 mm 5 x 1,5 V2 : 8	Set pistoni per ammortizzatori 16 mm, conici 5x1,5 V2: 8
TLR244041	Sway Bar Set: 8X	Schwingen-Set: 8X	Ensemble de barre stabilisatrice : 8X	Kit barra antirollio: 8X
TLR244042	Spindle Carrier Set, 17.5deg: 8X	Spindelträgersatz, 17,5°: 8X	Ensemble de support d'axe, 17,5° : 8X	Set porta albero, 17,5deg: 8X
TLR244044	Outer Hinge Pins, 3.5mm, Electro Nickel (2): 8X	Äußere Scharnierbolzen, 3,5 mm, Chemisch-Nickel (2): 8X	Broches de charnière externe, 3,5 mm, Électro Nickel (2) : 8X	Perni articolazione esterna, 3,5 mm, nichelatura elettrolitica (2): 8X
TLR244051	Suspension Ball, 6.8mm, Flanged (4): 8X	Kugelkopf mit Flansch, 6,8mm (4): 8X	Rotule de suspension, 6,8mm, à collet (4) : 8X	Sfera di sospensione, 6,8mm, flangiata (4): 8X
TLR244052	Suspension Ball, 6.8mm (4): 8X	Kugelkopf, 6,8 mm (4): 8X	Rotule de suspension, 6,8mm (4) : 8X	Sfera di sospensione, 6,8mm (4): 8X
TLR244055	Steering Link: 8X	Lenkstange: 8X	Tringlerie de direction : 8X	Tirante sterzo: 8X
TLR244056	Shock Stand Off (4): 8X	Stoßdämpfer-Standoff (4): 8X	Dispositif d'espacement d'amortisseur (4) : 8X	Distanziatore amm. (4): 8X
TLR244068	HD Rod End Set:8X	HD-Stangenkopfsatz: 8X	Ensemble embout de bielle ultrarésistant : 8X	Set teste a snodo HD: 8X
TLR244072	Shock Tower, Rear: 8XT	Stoßdämpferbrücke, Heck: 8XT	Tour d'amortisseur, arrière : 8XT	Torre ammortizzatore, Posteriore: 8XT
TLR244073	Shock Body, Front(2): 8XT	Stoßdämpfergehäuse, Front (2) 8XT	Carrosserie d'amortisseur, avant (2) : 8XT	Corpo ammortizzatore, anteriore (2): 8XT
TLR244074	Shock Body, Rear(2): 8XT	Stoßdämpfergehäuse, Heck (2): 8XT	Carrosserie d'amortisseur, arrière (2) : 8XT	Corpo ammortizzatore, posteriore (2): 8XT
TLR244075	Turnbuckle, Front(2): 8XT	Spannschraube, vorn (2): 8XT	Ridoir, avant (2) : 8XT	Tenditore, Anteriore (2): 8XT
TLR244076	Turnbuckle, Rear(2): 8XT	Spannschraube, Heck (2): 8XT	Ridoir, arrière (2) : 8XT	Tenditore, Posteriore (2): 8XT
TLR244077	Turnbuckle, Steering(2): 8XT	Spannschraube, Lenkung (2): 8XT	Ridoir, pilotage (2) : 8XT	Tenditore, Timone (2) : 8XT
TLR244090	Hinge Pins, 4 x 68mm, Elec Nickel (2): 8X, 8XE 2.0	Scharnierbolzen, 4 x 68 mm, Chemisch-Nickel (2)	Broche de charnière, 4 x 68 mm, Électro Nickel (2) : 8X, 8XE	Perno arti, 4x68 mm el nich (2): 8X, 8XE
TLR245000	Droop Screw (4): 8B 3.0	Ausfederungsbegrenzer (4): 8B 3.0	Vis d'abaissement (4) : 8B 3.0	Viti abbassamento (4): 8B 3.0
TLR245006	Left Hand Button Head Screws, M3x20mm (4)	Rundkopfschrauben m. Linksgewinde, M3 x 20 mm (4)	Vis à tête bombée, côté gauche, M3 x 20 mm (4)	Viti testa tonda lato sinistro, M3x20 mm (4)
TLR245008	Cap Head Screws, M2x10mm (10)	Inbusschrauben, M2x10mm (10)	Vis d'assemblage creuses, M2x10 mm (10)	Viti testa cilindrica M2x10 mm (10)
TLR245016	M3 Flanged Lock Nuts (10)	M3 Sicherungsmuttern mit Flansch (10)	Contre-écrous à collet M3 (10)	Dadi flangiati M3 (10)
TLR245017	M4 Flanged Lock Nuts (10)	M4 Sicherungsmuttern mit Flansch (10)	Contre-écrous à collet M4 (10)	Dadi flangiati M4 (10)
TLR255002	Button Head Screws, M2.5x10mm (10)	Rundkopfschrauben, M2,5 x 10 mm (10)	Vis à tête bombée, M2,5 x 10 mm (10)	Viti testa tonda, M2,5x10 mm (10)
TLR255004	Cap Head Screws, M2.5x8mm (10)	Inbusschrauben, M2,5x8mm (10)	Vis d'assemblage creuses, M2,5x8 mm (10)	Viti testa cilindrica M2,5x8 mm (10)
TLR255013	Flat Head Screws, M4x12mm (10)	Flachkopfschrauben, M4 x 12 mm (10)	Vis à tête plate, M4x12 mm (10)	Viti testa piana, M4x12 mm (10)
TLR255014	Flat Head Screws, M4x20mm (10)	Flachkopfschrauben, M4 x 20 mm (10)	Vis à tête plate, M4 x 20 mm (10)	Viti testa piana, M4x20 mm (10)
TLR256005	Nylock Nut, M4 (10)	Nylock-Mutter, M4 (10)	Écrou nyloc, M4 (10)	Dado Nylock, M4 (10)
TLR336007	M3 x 6.5mm Aluminum Washer Set, Black (4ea)	M3 x 6,5 mm Unterlegscheiben-Satz, Alu, schwarz (je 4)	Ensemble de rondelles en aluminium M3 x 6,5 mm, noir (4 ea)	Rondelle alu M3x6,5 mm, nero (4ea)
TLR5901	Button Head Screws, M3 x 6mm (10)	Rundkopfschrauben, M3 x 6 mm (10)	Vis à tête bombée, M3 x 6 mm (10)	Viti testa tonda, M3x6 mm (10)
TLR5902	Button Head Screws, M3 x 8mm (10)	Rundkopfschrauben, M3 x 8 mm (10)	Vis à tête bombée, M3 x 8 mm (10)	Viti testa tonda, M3x8 mm (10)
TLR5903	Button Head Screws, M3 x 10mm (10)	Rundkopfschrauben, M3 x 10 mm (10)	Vis à tête bombée, M3 x 10 mm (10)	Viti testa tonda, M3x10 mm (10)
TLR5904	Button Head Screws, M3 x 12mm (10)	Rundkopfschrauben, M3 x 12 mm (10)	Vis à tête bombée, M3 x 12 mm (10)	Viti testa tonda, M3x12 mm (10)
TLR5905	Button Head Screws, M3 x 18mm (10)	Rundkopfschrauben, M3 x 18 mm (10)	Vis à tête bombée, M3 x 18 mm (10)	Viti testa tonda, M3x18mm (10)
TLR5906	Button Head Screws, M3 x 35mm (10)	Rundkopfschrauben, M3 x 35 mm (10)	Vis à tête bombée, M3 x 35 mm (10)	Viti testa tonda, M3x35mm (10)
TLR5909	Button Head Screws, M3 x 16mm (10)	Rundkopfschrauben, M3 x 16 mm (10)	Vis à tête bombée, M3 x 16 mm (10)	Viti testa tonda, M3x16mm (10)
TLR5910	Button Head Screws, M3 x 14mm (10)	Rundkopfschrauben, M3 x 14 mm (10)	Vis à tête bombée, M3 x 14 mm (10)	Viti testa tonda, M3x14mm (10)
TLR5911	Button Head Screws, M3 x 20mm (10)	Rundkopfschrauben, M3 x 20 mm (10)	Vis à tête bombée, M3 x 20 mm (10)	Viti testa tonda, M3x20 mm (10)
TLR5930	Cap Head Screws, M3 x 8mm (10)	Inbusschrauben, M3 x 8 mm (10)	Vis d'assemblage creuses, M3x8 mm (10)	Viti testa cilindrica, M3x8 mm (10)
TLR5932	Cap Head Screws, M3 x 10mm (10)	Inbusschrauben, M3 x 10 mm (10)	Vis d'assemblage creuses, M3x10 mm (10)	Viti testa cilindrica, M3x10 mm (10)
TLR5934	Cap Head Screws, M3 x 16mm (10)	Inbusschrauben, M3 x 16 mm (10)	Vis d'assemblage creuses, M3x16 mm (10)	Viti testa cilindrica, M3x16 mm (10)
TLR5962	Flathead Screws, M3 x 10mm (10)	Flachkopfschrauben, M3 x 10 mm (10)	Vis à tête plate, M3x10 mm (10)	Viti testa piana, M3x10 mm (10)
TLR5963	Flathead Screw, M3 x 12mm (10)	Flachkopfschrauben, M3 x 12 mm (10)	Vis à tête plate, M3x12 mm (10)	Viti testa piana, M3x12 mm (10)
TLR5964	Flathead Screw, M3 x 16mm (10)	Flachkopfschrauben, M3 x 16 mm (10)	Vis à tête plate, M3x16 mm (10)	Viti testa piana, M3x16 mm (10)
TLR5965	Flathead Screw, M3 x 20mm (10)	Flachkopfschrauben, M3 x 20 mm (10)	Vis à tête plate, M3x20 mm (10)	Viti testa piana, M3x20 mm (10)
TLR6313	Locknut, M3 x .5 x 5.5mm (10)	Kontermutter, M3 x 0,5 x 5,5 mm (10)	Contre-écrou, M3x0,5x5,5 mm (10)	Controdadi M3x0,5x5,5 mm (10)

## RECOMMENDED PARTS // EMPFOHLENE TEILE // PIÈCES RECOMMANDÉES // PARTI CONSIGLIATE

PART #	DESCRIPTION	BESCHREIBUNG	DESCRIPTION	DESCRIZIONE
DYNT2010	Machined Nut Driver Set (4) Metric	Set gefräste Steckschlüssel (4) metrisch	Jeu de clés à douille fraisées (4) métriques	Serie di chiavi a bussola fresate (4) metriche
DYNT2030	Machined Hex Driver Set (4) Met	Bearbeiteter Sechskantschlüssel-Satz (4) metrisch	Jeu de clés hexagonales usinées (4) métrique	Set di chiavi esagonali lavorate (4) metrico
SPMX52S100H5	5000mAh 2S 7.4V SmartG2100C IC5	5000 mAh 2S 7,4 V SmartG2100C IC5	5000 mAh 2S 7,4 V SmartG2100C IC5	5000 mAh 2S 7,4 V SmartG2100C IC5
SPMX53S100H5	5000mAh 3S 11.1V G2 100C HC IC5	5000mAh 3S 11,1 V G2 100C HC IC5	5000mAh 3S 11,1 V G2 100C HC IC5	5000mAh 3S 11,1 V G2 100C HC IC5
SPMXC2040	Smart S1400 G2 AC Charger, 1x400	Smart S1400 G2 AC Ladegerät, 1x400	Smart S1400 G2 AC chargeur, 1x400	Smart S1400 G2 AC caricabatterie, 1x400
SPM5025	DX5 Pro 2021 DSMR TX w/SR2100	DX5 Pro 2021 DSMR Sender m. SR2100	DX5 Pro 2021 DSMR Émetteur w/ SR2100	DX5 Pro 2021 DSMR Trasmettitore w/SR2100
SPMXC2020	Smart S1200 G2 AC Charger; 1x200W	Smart S1200 G2 AC Ladegerät; 1x200W	Smart S1200 G2 AC chargeur, 1x200	Smart S1200 G2 AC caricabatterie, 1x200
TLR74004	SIL SHOCK OIL, 25WT, 250CST, 2OZ	Stoßdämpfer-Silikonöl, 25 WT, 250 cST, 2 oz. (59 ml)	Huile silicone pour amortisseur, 25 WT, 250 cST, 2 oz. (59 ml)	Olio silconico per ammortizzatori, 25 WT, 250 cST, 2 oz. (59 ml)
TLR75004	Silicone Diff Fluid, 100,000CS	Differential-Silikonflüssigkeit, 100.000CS	fluide silicone différentiel, 100.000CS	fluido silconico differenziale, 100.000CS
TLR75009	Silicone Diff Fluid, 500000CS	Differential-Silikonflüssigkeit, 500000CS	fluide silicone différentiel, 500000CS	fluido silconico differenziale, 500000CS

## OPTIONAL PARTS // OPTIONALE TEILE // PIÈCES OPTIONNELLES // PARTI OPZIONALI

PART #	DESCRIPTION	BESCHREIBUNG	DESCRIPTION	DESCRIZIONE
DYN5505	Nitro Force: Nitro Car Cleaner	Nitro Force Nitro-Autoreiniger	Nitro ForceNettoyant voiture nitro	Nitro ForceDetergente per auto Nitro
DYNT1260	Shock Shaft Pliers/Multi-Tool	Kolbenstangenzange/ Multifunktionswerkzeug	Pincas de bras d'amortisseurs/Outil multifonctions	Pinze multiutensili per albero ammortizzatore
LOSA99172	Camber Gauge	Sturzmesser	Jauge de carrossage	Misuratore camber
LOSA99173	Ride Height Gauge	Fahrzeughöhenmesser	Cale de mesure de garde au sol	Misuratore di altezza
LOSA99174	Car Stand: 8IGHT/T	Autoständer	Support de voiture	Supporto auto
SPMR5025	DX5 Pro 2021 DSMR TX Only	DX5 Pro 2021 DSMR Sender	DX5 Pro DSMR Émetteur Uniquement	DX5 Pro DSMR Trasmettitore
SPMXC2020	Smart S1200 G2 AC Charger; 1x200W	Smart S1200 G2 AC 1x200W Ladegerät	Smart S1200 G2 AC chargeur, 1x200	Smart S1200 G2 AC caricabatterie, 1x200
TLR336004	M3 Aluminum Lock Nuts, Black (10)	M3 Aluminum Stopmmuttern Schwarz (10)	Écrou auto-freiné M3 en aluminium, noir (10)	Dadi autobloccanti allum. M3, neri (10)
TLR336005	M3 Flanged Aluminum Lock Nuts, Black (10)	M3 Aluminium Stopmmutter mit Bund Schwarz (10)	Écrou auto-freiné épaulé M3 en aluminium, noir (10)	Dadi autobloccanti allum. fl angiate M3, neri (10)
TLR341011	Servo Saver Arm, Aluminum: 8X	Servo-Saver-Arm, Aluminium: 8X	Bras économiseur de servo, aluminium : 8X	Braccio salva servo, alluminio: 8X
TLR341025	Front Brace, Aluminum: 8X, 8XE 2.0	Frontstrebe, Aluminium: 8X, 8XE 2.0	Support avant, aluminium : 8X, 8XE 2.0	Supporto anteriore, alluminio: 8X, 8XE 2.0
TLR344051	Aluminum Spindle Carrier Set, 17.5, V2: 8X	Aluminium-Spindelträgersatz, 17,5, V2: 8X	Ensemble de support d'axe en aluminium, 17.5 V2: 8X	Set guida fuso in alluminio, 17,5 V2: 8X
TLR344052	Aluminum Spindle, V2 Incline: 8X	Aluminiumspindel, V2 Neigung: 8X	Axe en aluminium, inclinaison V2 : 8X	Fuso alluminio, V2 Incline: 8X
TLR344053	Rear Hub, Aluminum: 8X, 8XE 2.0	Hintere Nabe, Aluminium: 8X, 8XE 2.0	Moyeu arrière, aluminium : 8X, 8XE 2.0	Mozzo posteriore in alluminio: 8X, 8XE 2.0
TLR3501	Differential Shaft Set, Aluminum (6): 8B, 8T 2.0	Differentialwellensatz, Aluminium (6): 8B, 8T	Ensemble d'arbre de différentiel, aluminium (6) : 8B, 8T	Set albero differenziale in alluminio (6): 8B, 8T
TLR70003	17mm Magnetic Wheel Wrench	17mm Magnetischer Radschraubenschlüssel	Clé de roue magnétique 17mm	Chiave ruote, magnetica, 17mm
TLR76009	TLR Lok, Threadlock, Blue	TLR Lok, Schraubensicherung, blau	Frein fi let TLR Lok, bleu	TLR Lok, frenafi letti, blu
TLR99102	Turnbuckle Wrench, 22,8B, 8T	Stellschlüssel für Gewindestift, 3,5, 4, 5mm	Clé à biellettes 3.5mm, 4mm, 5mm	Chiave per tenditore, 22, 8ight



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US 9,320,977. US 10,528,060. US 9,930,567. US 10,419,970. Other patents pending.

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