

# RUCKUS® TORMENT™

1/10 2WD ELECTRIC MONSTER TRUCK 1/10 2WD ELECTRIC SHORT COURSE TRUCK

ECX03431T1 | ECX03431T2 ECX03433T1 | ECX03433T2 | ECX03433T3

INSTRUCTION MANUAL BEDIENUNGSANLEITUNG MANUEL D'UTILISATION MANUALE DI ISTRUZIONI

Congratulations on your purchase of the ECX® Ruckus® Monster Truck or Torment™ Short Course Truck. This 1/10-scale model introduces you to the sport of RC driving.

Herzlichen Glückwunsch zum Kauf des ECX Ruckus® Monster Truck oder Torment™ Short Course Truck. Dieses 1/10 Scale Model öffnet Ihnen die Welt des RC Car Sports.

Nous vous félicitons pour l'achat de l'ECX Ruckus® Monster Truck ou Torment™ Short Course Truck ou. Ce modèle 1/10 vous initie à la conduite RC.

Congratulazioni per l'acquisto di questo Ruckus<sup>®</sup> Monster Truck o Torment<sup>™</sup> Short Course Truck. Questa vettura in scala 1/10 vi introdurrà nel mondo dei modelli RC.



#### 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 http://www.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.

<u>CAUTION:</u> Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury. **NOTICE:** Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.

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**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 and NOT a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use with incompatible components or alter this product in any way outside of the instructions provided by 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.

### 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) and servo(s) 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. Do not use Li-Po batteries in wet conditions.
- The included transmitter is not waterproof or water-resistant. If using a different transmitter than the one included, 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**

- 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 or lubricant. Do not spray the motor.
- Let the vehicle air dry before you store it. Water (and oil) may continue to drip for a few hours.
- Increase the frequency of disassembly, inspection and lubrication of the following:
  - · Front and rear axle hub assembly bearings.
  - All transmission cases, gears and differentials.
  - Motor—clean with an aerosol motor cleaner and re-oil the bushings with lightweight motor oil.

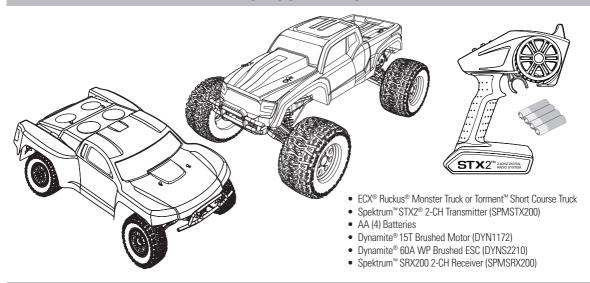
QD	ECI	CAT	IO	NIG
ЭF	LU	CAI	IU	CVI

<b>Transmitter</b> Frequency	2.4GHz
Power Output (EIRP)	≤10 dBm
Battery	AA x 4
Servo	
Power Supply	4.8V~6V
Output Torque	41.66 oz (3 kg-cm)
Operating Speed	0.23sec/60 degrees of travel
Size	55.6 x 18 x 30mm

### **Electronic Speed Control (ESC)**

Input Voltage	2–3S LiPo; 5–9 cell NiMH/NiCd
Electric Capacity	Forward 60A/360A
BEC Voltage	6V
Size	35.6mm x 34mm x 18mm
Weight	1.41 oz (40 g)

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### **QUICK START**

Please read the entire manual to gain a full understanding of the vehicle, fine-tuning the setup and performing maintenance.

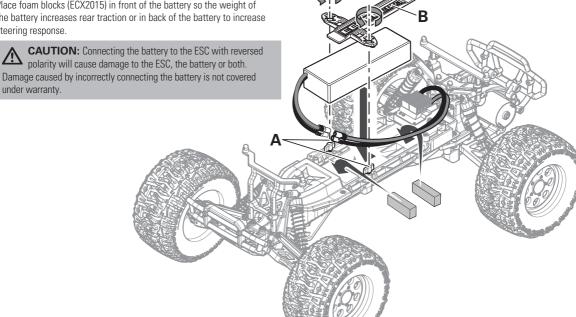
- 1. Read the safety precautions found in this manual.
- 2. Charge a battery for the vehicle. Refer to the included charging warnings and instructions for battery charging information.
- 3. Install the AA batteries in the transmitter. Only use alkaline or rechargeable batteries.
- 4. Install the fully charged battery in the vehicle.
- 5. Power ON the transmitter and then the vehicle. Wait 5 seconds for the ESC to initialize. Always power the transmitter ON before the vehicle and power it OFF after the vehicle has been powered OFF.
- Check the steering and throttle control directions. Verify that the servos are moving in the correct direction.
- 7. Drive your vehicle.
- 8. Perform any necessary maintenance.

#### VEHICLE PREPARATIONS

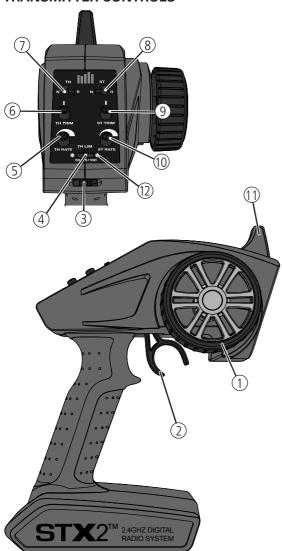
#### INSTALLING THE BATTERY

- 1. Turn the battery clips (A) clockwise to remove the battery strap (B).
- Install a fully charged battery.
- Install the battery strap.
- **4.** Turn the battery clips counterclockwise to secure the battery strap.

Place foam blocks (ECX2015) in front of the battery so the weight of the battery increases rear traction or in back of the battery to increase steering response.

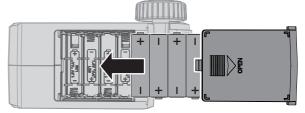


#### TRANSMITTER CONTROLS



- 1. Steering Wheel Controls direction (left/right) of the model
- Throttle Trigger Controls speed and direction (forward/brake/reverse) of the model
- 3. **ON/OFF Switch** Turns the power ON/OFF for the transmitter
- **4. Throttle Limiting Switch** Adjusts the throttle limit from 50%, 75%, and 100%
- **5. TH Rate** Adjusts the end point of the throttle
- 6. TH Trim Adjusts the throttle neutral point
- 7. TH REV Reverses the function of the speed control when pulled back or pushed forward
- 8. ST REV Reverses the function of the steering when the wheel is turned left or right
- 9. ST Trim Adjusts the steering center point
- 10. ST Rate Adjusts the end point of the steering
- 11. Antenna Transmits the signal to the model
- 12. Indicator Lights
  - Solid red lights—indicates radio connectivity and adequate
  - Flashing red lights—indicates the battery voltage is critically low. Replace batteries

#### **INSTALLING TRANSMITTER BATTERIES**



This transmitter requires 4 AA batteries.

- 1. Remove the battery cover from the transmitter.
- 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.

#### **BINDING**

Binding is the process of programming the receiver to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. The STX2® transmitter and SPMSRX200 receiver are bound at the factory. If you need to rebind, follow the instructions below.

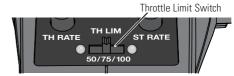


- With the vehicle on a flat, level surface, insert the Bind Plug in the BIND port on the receiver.
- 2. Connect a fully charged battery pack to the ESC.
- 3. Power on the ESC. The red LED flashes, indicating the receiver is in hind mode.
- 4. Center the ST TRIM and TH TRIM dials on the transmitter.
- 5. Turn the steering wheel to Full Right. Power the transmitter on while holding the steering wheel to the Right.
- 6. Release the steering wheel when the receiver LED stops flashing.
- Remove the Bind Plug, then power off the receiver to save the settings.
- 8. Power off the transmitter.
- **9.** Remove the bind plug and store it in a convenient place.

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.

#### CHANGING THE THROTTLE LIMIT



#### **Beginner Mode**

Throttle Limiting Switch: 50%

- Best for learning the basic functions of left, right, stop, brake and reverse
- · For use in smaller areas
- · Longest battery life

#### **Best Overall Performance (Default)**

Throttle Limiting Switch: 75%

- Great top speed and acceleration
- Easier to accelerate in desired direction, especially on loose surfaces when compared to Maximum Speed setup
- Run time is greatly increased over Maximum Speed setup with minimal impact to top speed

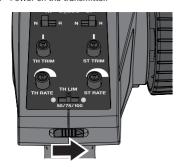
#### **Maximum Speed**

Throttle Limitina Switch: 100%

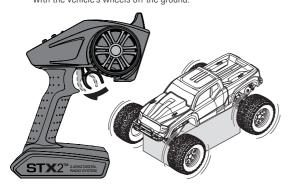
- More capable of popping and holding wheelies
- Higher top speeds and maximum acceleration

#### **GETTING STARTED**

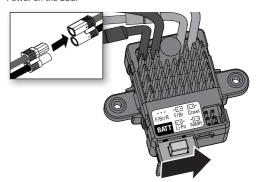
1. Power on the transmitter.



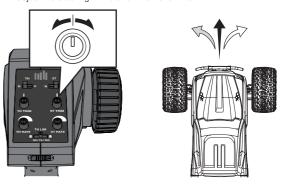
**3.** Perform a test of the transmitter's control of the vehicle with the vehicle's wheels off the ground.



2. Power on the ESC.



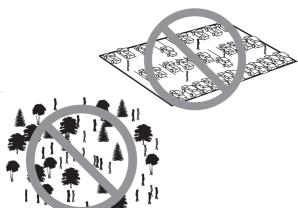
Start driving slowly, and, if the vehicle does not go straight, adjust the steering trim dial on the transmitter.



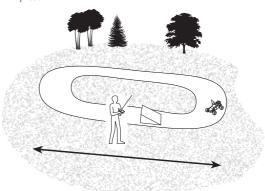
**IMPORTANT:** Seat the motor brushes by driving smoothly on a flat surface during use of the first battery charge. Properly seating the motor brushes will increase the life and performance of the motor.

## **OPERATION**

 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.

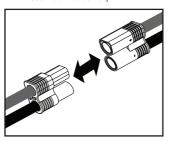


## WHEN YOU ARE FINISHED

1. Power off the ESC.



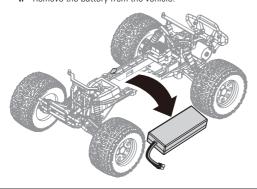
2. Disconnect the battery.



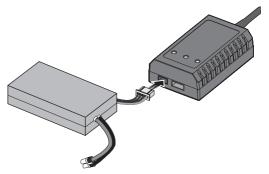
3. Power off the transmitter.



4. Remove the battery from the vehicle.



Recharge the battery.



## **MOTOR CARE**

- Seat the motor brushes by driving smoothly on a flat surface during use of the first battery charge. Failing to do so can greatly reduce motor performance and functional life.
- Prolong motor life by preventing overheating conditions.
   Undue motor wear results from frequent turns, stops and starts, pushing objects, driving in deep water and tall grass, and driving
- continuously up hill. Allow the motor to cool completely before running the vehicle.
- Over-temperature protection is installed on the ESC to prevent circuit damage, but cannot protect the motor from driving against heavy resistance.

## **MAINTENANCE**

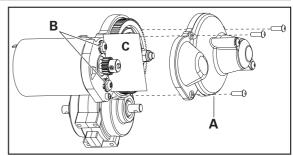
#### SETTING THE GEAR MESH

The gear mesh has already been set at the factory. Setting the gear mesh is only necessary when changing motors or gears.

You must remove the vehicle's gear cover (A) to make this adjustment.

Proper gear mesh (how the gear teeth meet) is important to the performance of the vehicle. When the gear mesh is too loose, the spur gear could be damaged by the pinion gear of the motor. If the mesh is too tight, speed could be limited and the motor and ESC will overheat. Set the gear mesh by following these simple steps:

- 1. Loosen the 2 motor screws (B).
- 2. Put a small piece of paper (C) between the pinion and spur gears.
- **3.** Push the gears together while tightening the motor screws.



- Rotate the gears to remove the paper. The gearing should move a small amount.
- 5. Reinstall the gear cover.

#### **ELECTRONIC SPEED CONTROL (ESC)**

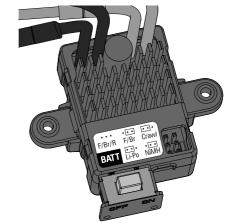
**Programming:** The ESC comes with one jumper pre-installed: BATT: Li-Po configuration.

The throttle setting without the jumper indicates Throttle/Brake/Reverse. Always use this setting for this vehicle.

To change the battery type to Ni-MH, disconnect the jumper from the default port and connect it to the Ni-MH port. If the jumper is removed from the BATT port, the default setting is Li-Po mode. Power off the ESC, then power it back on.

If the jumpers are lost or not installed, the ESC will default to REV: ON and BATT: Li-Po.

**NOTICE:** Only use the Ni-MH port when using Ni-MH batteries. Using the Ni-MH port with a Li-Po battery can cause serious damage to the battery and is unsafe.



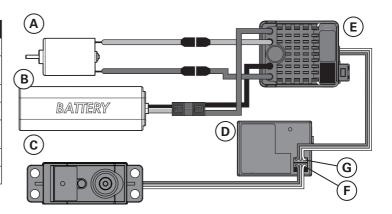
Operation	Tone
Start up	One short tone, followed by one long tone.
Low Voltage Cut-Off	When low voltage cuttoff is reached, the vehicle will slow and emit a continuous tone.
Low Voltage at Start Up	When a low battery is plugged in and powered on, the vehicle will emit two low tones and power off.

#### **ELECTRICAL LAYOUT**

	Part #	Description
А	DYN1172	Motor
В	Needed to complete	Battery 7.4V
С	SPMS603*	Waterproof Steering Servo
D	SPMSRX200	Receiver
Е	DYNS2210	Waterproof Electronic Speed Control (ESC)
F		Channel 1
G		Channel 2

\*OEM part only. Replacement, please use part SPMSS6170.

For correct operation, Channels 1 and 2 must be used as shown in the wiring diagram. The motor can be disconnected from the ESC at the connectors in the wiring.



#### SHOCK CLEANING

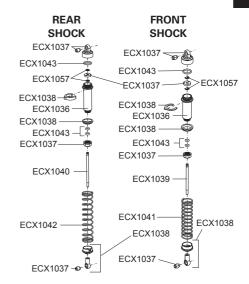
Oil-filled shocks require regular maintenance because oil breaks down and/or gets dirty. Perform this maintenance every 3–5 hours of use, depending on useage conditions.

- · Remove the shock from the vehicle.
- · Remove the cap from the shock body and dispose of fluid.
- Disassemble the shock. Clean thoroughly with a plastic- and electronic-safe degreaser (DYNE50001). Dry parts before assembly.
- Re-assemble the shock and refill the shock body with silicone fluid (30 weight recommended).
- Slowly move the shaft and piston up and down to remove air bubbles.
- Move the piston to the midway point of the body and install the cap.
- · Wipe off any overflowing fluid.
- When properly filled, the piston should rebound about 3/8 in (9.5mm) after being pushed in fully.
- · Re-install the shock on the vehicle.

#### **RIDE HEIGHT ADJUSTMENT**

Ride height is an adjustment that affects the way the vehicle jumps, turns and goes over bumps. Drop one end of the vehicle from approximately 6 inches (152 mm) in height onto a flat surface. When dropping the front of the vehicle, after the vehicle settles, make sure the front arms are equal and parallel to the flat surface. Do the same with the rear to make sure both arms are parallel with the flat surface.

Lowering the front ride height increases steering, but decreases traction. Lowering the rear ride height increases traction, but decreases steering.



Part #	Description	
ECX1036	Shock Body Set	
ECX1037	Shock Caps, Pistons	
ECX1038	Shock Parts Set	
ECX1039	Front Shock Shaft (2)	
ECX1040	Rear Shock Shaft (2)	
ECX1041	Front Shock Springs (2)	
ECX1042	Rear Shock Springs (2)	
ECX1043	Shock O-Ring Set	

#### **FASTENERS**

No. Des	scription	No. Descr	iption	No.	Description	No. E	Description
1 mm	TAPPING BINDER HEAD M3x10mm	Dimini	TAPPING FLAT HEAD M2x16mm		STEP SCREW M3x0.5x7.4mm		WASHER 5x7x0.5mm
<b>Annun</b>	TAPPING BINDER HEAD M3x12mm		BINDER HEAD M3x8mm		STEP SCREW M3x0.5x13.4mm	0	WASHER 3x8x0.5mm
(himinin	TAPPING BINDER HEAD M3x16mm		BINDER HEAD M3x12mm		STEP SCREW M3x0.5x10.5mm	$\odot$	WASHER 2x7x0.5mm
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TAPPING BINDER HEAD M3x18mm		BINDER HEAD M3x20mm		SETSCREW M3x3mm		FLANGED LOCK NUT M4
Dimmin	TAPPING FLAT HEAD M3x10mm	<b>1</b>	BINDER HEAD M3x25mm		SETSCREW M3x12mm		LOCK NUT M3
Dimini	TAPPING FLAT HEAD M3x12mm	{}	BUTTON HEX M2.5x4mm		SET SHAFT SCREW M3x13mm		E-CLIP E2.5
Diminin	TAPPING FLAT HEAD M3x15mm	{}	BUTTON HEX M2.5x8mm				LOCK WASHER



## TROUBLESHOOTING GUIDE

Problem	Possible Cause	Solution	
01:	Battery damaged/not charged	Check/change battery	
Short run time	Motor dirty	Check/clean	
	Motor dirty	Check/clean	
Sluggish action	Bind in drivetrain	Clean/adjust	
	Vehicle battery is not charged	Replace/recharge	
Controls reversed	ST. REV or TH. REV	Change switch position	
Motor/ESC overheat	Over-geared for the driving environment	Install smaller pinion on the motor	
	Transmitter batteries low	Replace/recharge	
	Transmitter powered off	Power on	
Does not operate	ESC powered off	Power on	
Docs not operate	Vehicle battery is not charged	Replace/recharge	
	Dual-rate (D/R) steering and/or throttle knobs on transmitter are turned counterclockwise	Adjust dual-rate (D/R) steering or throttle knobs clockwise to desired setting	
D	Transmitter batteries low	Replace/recharge	
Poor range	Receiver antenna damaged	Check/repair/replace	
	Transmitter and receiver too near each other	Move transmitter 3.3–9.8ft (1–3m) from receiver	
	Transmitter and receiver too near large metal objects (vehicles, etc.)	Move away from large metal objects (vehicles, etc.)	
The system will not connect	Throttle trim out of center on transmitter	Set throttle trim on transmitter to zero. Turn off and on transmitter and vehicle	
	Receiver accidentally put in bind mode so receiver is no longer bound	Rebind transmitter and receiver	
The receiver goes into failsafe mode a short distance away from the transmitter	Check the receiver antenna to be sure it is not cut or damaged	Make sure the antenna is in the antenna tube Contact Horizon Product Support	
The access of the second secon	Low battery voltage	Completely recharge battery	
The receiver quits responding during operation	Loose or damaged wires or connectors between battery and receiver	Do a check of the wires and connection between battery and receiver. Repair or replace wires and/or connectors	
Receiver and transmitter are not bound	Transmitter accidentally put in bind mode, ending bind to receiver	Bind transmitter to receiver	
Vehicle moves forward or backward without input from user	Throttle trim on transmitter not centered	Adjust throttle trim on transmitter to neutral point	
Car does not drive straight	Steering trim on transmitter not centered	Adjust steering trim on transmitter so the vehicle drives straight	
No steering or lack of steering	Steering dual-rate (D/R) on transmitter not adjusted correctly	Adjust steering dual-rate (D/R) knob on transmitter clockwise to desired steering throw	
	Servo failed	Contact Horizon Product Support	
N. d. of the control	Throttle dual-rate (D/R) on transmitter not adjusted correctly	Adjust throttle dual-rate (D/R) knob on transmitter clockwise to desired steering throw	
No throttle or lack of throttle	ESC failed	Contact Horizon Product Support	
	Motor failed	Contact Horizon Product Support	
Clicking noise in transmission	Dirt or rocks in spur gear	Remove gear cover and inspect. If necessary, replace gear	
area	Motor moved away from spur gear Reset gear mesh		

#### 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 at 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 ½ 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.

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#### WARRANTY AND SERVICE CONTACT INFORMATION

Country of Purchase	Horizon Hobby	Contact Information	Address	
	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/ RequestForm/		
United States	Horizon Product Support	productsupport@horizonhobby.com	1608 Interstate Drive	
of America	(Product Technical Assistance)	877-504-0233	Champaign, Illinois, 61822 USA	
	Sales	websales@horizonhobby.com		
	Sales	800-338-4639		
European Union	Horizon Technischer Service	service@horizonhobby.eu	Hanskampring 9	
Luropean Omon	Sales: Horizon Hobby GmbH	+49 (0) 4121 2655 100	D 22885 Barsbüttel, Germany	

<sup>\*</sup>For the most up-to-date customer service contact information, please visit: www.horizonhobby.com/content/service-center-render-service-center

## **FCC INFORMATION**

**FCC ID: 2AI3D-SS0001** This equipment has been tested and found to comply with the limits for 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 to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

**NOTICE:** Modifications to this product will void the user's authority to operate this equipment.

#### Antenna Separation Distance

When operating your Spektrum transmitter, please be sure to maintain a separation distance of at least 5 cm between your body (excluding fingers,





hands, wrists, ankles and feet) and the antenna to meet RF exposure safety requirements as determined by FCC regulations.

The following illustrations show the approximate 5 cm RF exposure area and typical hand placement when operating your Spektrum transmitter.

#### IC INFORMATION

IC ID: 21682-SSTC9202 This device complies with Industry Canada licenseexempt 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.

EU Compliance Statement: Horizon Hobby, LLC hereby declares that this product is in compliance with the essential requirements and other relevant provisions of the RED and EMC directives.

A copy of the EU Declaration of Conformity is available online at: http://www.horizonhobby.com/content/support-render-compliance.



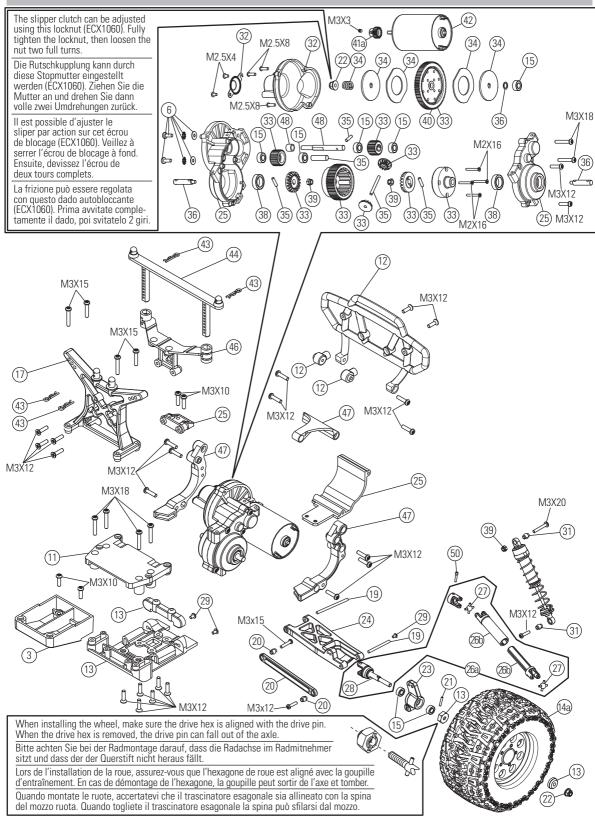
## Instructions for disposal of WEEE by users in the European Union

This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment

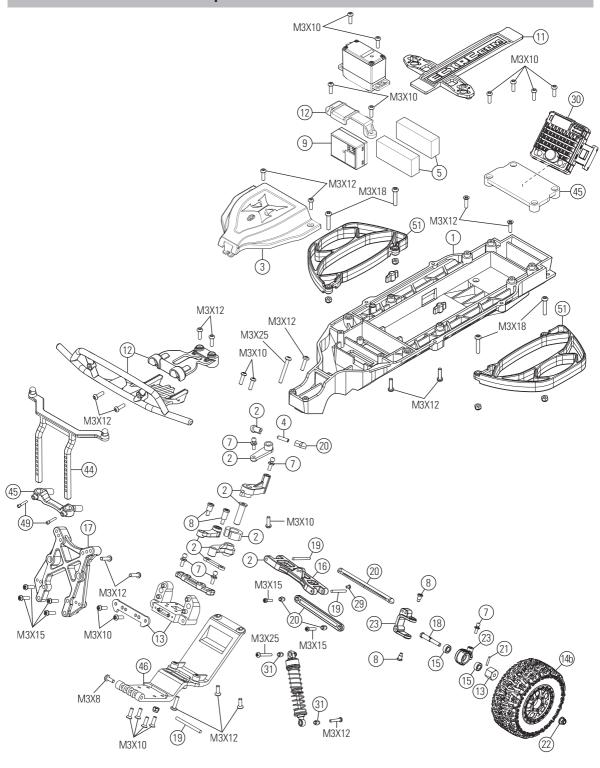
by handing it over to a designated collections point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.



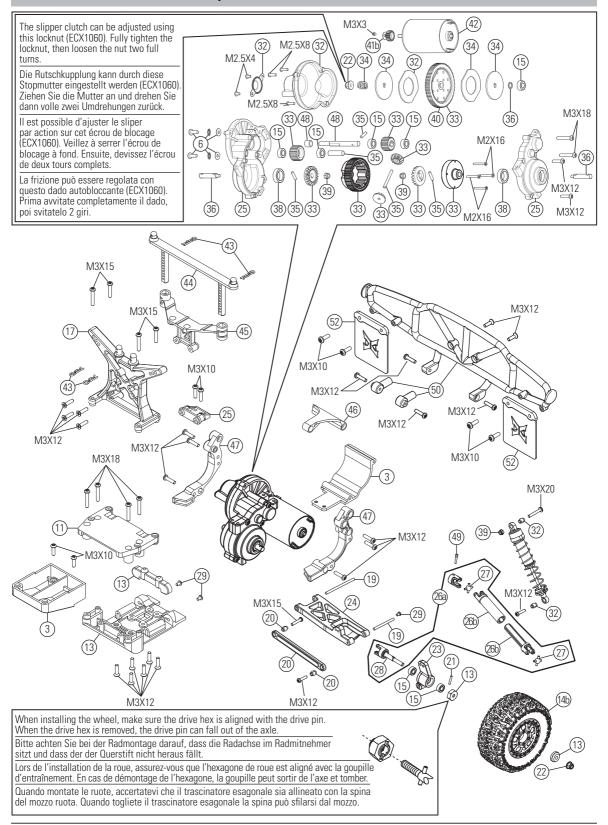
## RUCKUS PARTS DIAGRAM | EXPLOSIONSZEICHNUNG | VUE ÉCLATÉE DES PIÈCES | ESPLOSO DEL MODELLO CON REFERENZA PEZZI



## TORMENT PARTS DIAGRAM | EXPLOSIONSZEICHNUNG | VUE ÉCLATÉE DES PIÈCES | ESPLOSO DEL MODELLO CON REFERENZA PEZZI



## TORMENT PARTS DIAGRAM | EXPLOSIONSZEICHNUNG | VUE ÉCLATÉE DES PIÈCES | ESPLOSO DEL MODELLO CON REFERENZA PEZZI



## Replacement Parts / Ersatzteile / Pièces de rechange / Pezzi di ricambio

	Part #	Description	Beschreibung	Description	Descrizione
1	ECX2008	Main Chassis	Chassis	Châssis principal	Telaio principale
2	ECX1028	Servo Saver Set	Servo Saver Set	Sauve servo	Set salvaservo
3	ECX2011	Cover and Rear Mount Set	Abdeckung und hinterer Halter Set	Capot et fixations arrières	Copertura e set di montaggio posteriore
4	ECX1050	Setscrew M3 x 12 (4)	Schrauben Set M3 x 12 (4)	Jeu de vis M3 x 12 (4)	Grani M3 x 12 (4)
5	ECX1053	Foam Block	Schaum Block	Bloc de mousse	Spugna distanziale batteria
6	ECX1098	Motor Screw/Washer Set	Motor Screw/Washer Set	Set vis/rondelles moteur	Viti per il motore/set di rondelle
7	ECX1058	Ball Stud (6)	Kugelkopf (6)	Rondelle (6)	Sfere uniball (6)
8	ECX1065	Shoulder Screw Set (8)	Passschrauben Set (8)	Jeu de vis épaulées (8)	Set viti a doppio stadio (8)
9	SPMSRX200	2-Ch Receiver	2 Kanal Empfänger	Récepteur 2 voies	Ricevitore
11	ECX231003	Battery Strap, ESC Plate	Akkugurt, ESC-Platte	Sangle de batterie, plaque du variateur ESC	Fascetta batteria, piastra ESC
12	ECX231002	Rear Bumper Set	Hintere Stossstange	Pare-choc arrière	Set paraurti posteriore
13	ECX2006	Suspension Arm Mount Set	Querlenker Set hinten	Jeu de renfort de suspension	Supporti braccetti sosp.
14a	ECX43008	FR/RR Wheel/Tire, Premount, Black (2)	Vorder-/Hinterreifen/-rad, vormontiert, Schwarz (2)	Volant/Pneu avant/arrière, prémonté, noir (2)	Ruota/pneumatico ant/post, premontato, nero (2)
14b	ECX4003	FR/RR Wheel/Tire, Premount, Black (2)	Vorder-/Hinterreifen/-rad, vormontiert, Schwarz (2)	Volant/Pneu avant/arrière, prémonté, noir (2)	Ruota/pneumatico ant/post, premontato, nero (2)
15	ECX1015	Ball Bearing 5 x 10 x 4mm (8)	Kugellager 5 x 10 x 4 mm (8)	Roulement à billes 5 x 10 x 4 mm (8)	Cuscinetto a sfera, 5 x 10 x 4 mm (8)
16	ECX1018	Front Suspension Arm Set	Querlenker Set vorne	Jeu de bras de suspension avant	Braccetti delle sospensioni anteriori
17	ECX1020	Shock Tower Set	Dämpferbrücke	Jeu de support d'amortisseur	Supporto ammortizzatori posteriori
18	ECX1035	Front Axle (2)	Radachse vorne (2)	Axe de roue avant (2)	Mozzi ruota anteriori (2)
19	ECX1044	Hinge Pin Set	Querlenkerbolzen Set	Jeu d'axes de suspension	Set perni sospensioni
20	ECX1046	Camber, Toe Link Set	Spur- Sturzstangenset	Jeu de biellettes de carrossage et de pincement	Set tiranteria Camber e convergenza
21	ECX1049	Wheel Pins (4)	Radmitnehmerstifte (4)	Goupilles d'entraînement (4)	Spine trascinatori ruote (4)
22	ECX1060	M4 Locknut (4)	M4 Stopmutter (4)	Ecrous auto-freinés M4 (4)	Dadi autobloccanti M4 (4)
23	ECX234000	Caster Block, Steer Block, RR Hub (2)	Radblock, Steuerblock, Hinterradnabe (2)	Blocs de roulettes, Bloc de direction, Corps de fusées arrière (2)	Blocco ruota anteriore, blocco sterzo, mozzo posteriore (2)
24	ECX1019	Rear Suspension Arm Set	Querlenker Set hinten	Jeu de bras de suspension arrière	Braccetti delle sospensioni posteriori
25	ECX1021	Transmission Case Set	Getriebegehäuse	Ensemble carter de transmission	Set scatola trasmissione
26a	ECX232000	Long Driveshaft Set, Complete HD (2)	Lange Antriebswelle, HD (2)	Long arbre de transmission, HD (2)	Albero di trasmissione lungo, HD (2)
26b	ECX232002	Long Driveshaft, Plastic Only HD (2)	Lange Antriebswelle, nur Kunststoff HD (2)	Long arbre de transmission, uniquement en plastique ultra-résistant (2)	Albero di trasmissione lungo, solo plastica HD (2)
27	ECX232005	Driveshaft Pivot Ball (4)	Antriebswellen Kugelkopf (4)	Croisillon de cardan (4)	Attacco a sfera semiasse (4)
28	ECX232001	Rear Axle (2)	Wellenmitnehmer hinten (2)	Axe de roue arriere	Attacco a sfera semiasse (4)
29	ECX1045	Button Head Screw 2.5 x 4mm (8)	Rundkopfschraube 2,5 x 4 mm (8)	Vis à tête bombée, 2,5 x 4 mm (8)	Vite a testa tonda, 2,5 x 4 mm (8)
30	DYNS2210	WP 60A FWD/REV Brushed ESC (ESC)	Elektrischer Fahrtenregler (ESC)	Variateur 60A marche av/arr étanche pour moteur à charbon	Regolatore elettronico di velocità (ESC) WP
31	ECX1037	Shock Caps, Pistons, Pivot Ball Set	Stoßkappe, Kolben, Schwenkkugel-Set	Ensemble de Capuchons d'amortisseurs, Pistons, Rotule	Set articolazione a rotula, pistoni, tappi ammortizzatore
32	ECX1027	Gear Cover	Gear Cover	Carter de Réducteur	Copertura per ingranaggi
33	ECX1022	Transmission Gear Set	Getriebe	Couronne et pignons intermédiaires, corps et pignons de différentiel	set ingranaggi trasmissione
34	ECX1024	Slipper Clutch Plates, Pads, Spring	Rutschkupplung Teilesatz	Garnitures, plateaux et ressort de slipper	Piattelli frizione, disco, molla
35	ECX1025	Transmission Idler Shaft, Drive Pins	Hauptgetriebewelle Set	Arbre secondaire de transmission avec goupilles d'entraînement	Alberino intermedio con spina
36	ECX1026	Transmission Drive Shaft (2)	Getreibeausgangswelle (2)	Axe de sortie de différentiel (2)	Mozzi Differenziale (2)
37	ECX1052	Washer/Shim Set	Unterlegscheiben/Shim Set	Jeu de rondelles/Shim	Set rondelle/Shim
38	ECX1055	Bearings 10 x 15 x 4mm (2)	Lager 10 x 15 x 4mm (2)	Roulements 10 x 15 x 4mm (2)	Cuscinetti 10 x 15 x 4mm (2)
39	ECX1059	M3 Locknut (4)	M3 Stopmutter (4)	Ecrou auto-freiné M3 (4)	Dadi autobloccanti M3 (4)
40	ECX1076	Spur Gear 48P, 87T	Hauptzahnrad 48P, 87T	Couronne 48P, 87T	Corona 48P, 87T
41a	ECX232029	17T, 48P Pinion Gear	17T, 48P Pinion Gear	Pignon 17T, 48P dents	Pignone a 17T, 48P denti
41b	ECX1073	19T, 48P Pinion Gear	19T, 48P Pinion Gear	Pignon 19T, 48P dents	Pignone a 19T, 48P denti
42	DYN1172	Dynamite 15T 540 Brushed Motor	Dynamite 15T 540 Bürstenmotor	Moteur Dynamite 15T 540 Brushed	Motore a spazzole Dynamite 540 15T
43	ECX1048	Body Clip (8)	Body Clip (8)	Clips Carrosserie (8)	Clips per carrozzeria (8)
44	ECX2010	Body Post Set	Body Post Set	Set Plots Carrosserie	Set di sostegni per la carrozzeria
		· · ·		1	

## Replacement Parts / Ersatzteile / Pièces de rechange / Pezzi di ricambio

	Part #	Description	Beschreibung	Description	Descrizione
45	ECX2009	Body Mount Set	Aufnahme Karosseriehalter	Set Montage Carrosserie	Set di montaggio per la carrozzeria
46	ECX2007	Skid Plate Set	Skid Plate Set	Set Plaque Chassis	Set pistre di protezione
47	ECX2013	RR Bump Mount	Heckstoßstangenhalterung	Support de pare-chocs arrière	Supporto bumper posteriore
48	ECX1023	Top Shaft/Spacer	Top Shaft/Spacer	Set de Goupilles	Set di spessori
49	ECX1033	Setscrew M3 x 10	Feststellschraube M3 x 10	Vis de fixation M3 x 10	Vite di arresto M3 x 10
50	ECX231001	Front Bumper Set	Vordere Stossstange	Pare-choc avant	Set paraurti anteriore
	ECX230023	Body: 1/10 K&N Torment	Karosserie: 1/10 K&N Torment	Carrosserie: 1/10 K&N Torment	Carrozzeria: 1/10 K&N Torment
	ECX230038	Body, Black/Yellow	Karosserie, schwarz/gelb	Carrosserie, Noire/Jaune	Carrozzeria, nero/giallo
	ECX230039	Body, Orange	Karosserie, orange	Carrosserie, Orange	Carrozzeria, arancione
	ECX230040	Body, Yellow/Blue	Karosserie, gelb/blau	Carrosserie: Jaune/Bleu	Carrozzeria, giallo/blu
	ECX230041	Body, Lucas Oil	Karosserie, Lucas Oil	Carrosserie, Lucas Oil	Carrozzeria, Lucas Oil
	SPMSTX200	STX2 2CH Transmitter	STX2 2-Kanal Fernsteuerung	Émetteur STX2 2 voies	Trasmittente STX2 2 canali

## Optional Parts / Optionale Teile / Liste des options / Elenco parti opzionali

Part #	Description	Beschreibung	Description	Descrizione
DYN1400	LiPo Charge Protection Bag,Small	LiPo Ladeschutztasche, klein	Sac de protection du chargeur de batterie Li-Po, petit	Borsa di protezione per carica batterie LiPo, piccola
DYN1405	LiPo Charge Protection Bag, Large	LiPo Ladeschutztasche, groß	Sac de protection du chargeur de batterie Li-Po, grand	Borsa di protezione per carica batterie LiPo, grande
DYNG4810	Pinion Gear Set: 17T. 18T, 19T, 20T, 21T x 48P	Dynamite Ritzelset: 17/18/20/21 Zähne 48P	Set de pignons - 17T,18T, 19T, 20T, 21T 48P	Set pignoni: 17T, 18T, 19T, 20T, 21T x 48P
DYNH1040	Stainless Steel Screw Set	Dynamite Edelstahlschraubenset	Kit de visserie acier inox	Set viti in acciaio inossidabile
DYNS0600	Tazer 1/10 3300Kv ESC/Motor Combo	Tazer 1/10 3300Kv Geschwindig- keitsregler-/Motor-Kombi	Variateur ESC/Moteur combinés Tazer 1/10 3 300 Kv	Tazer 1/10 3300 Kv combo ESC/motore
DYNT0500	Startup Tool Set	Werkzeug Set	Set d'outils de démarrage	Set attrezzi start up
ECX1061	Screw Set (64)	ECX Blechschraubenset (64 Stk)	Set de vis (64)	Set viti (64)
ECX1095	Aluminum Shock Set Front:	ECX Aluminium-Dämpferset vorne	Set d'amortisseurs avant en aluminium	Set ammortizzatore ant. in allu.
ECX1096	Aluminum Shock Set Rear	ECX Aluminium-Dämpferset hinten	Set d'amortisseurs arrière en aluminium	Set ammortizzatore post. in allu
ECX1097	Universal Battery Strap (1)	ECX Electrix-Akkuhalteband: 7-Zellen-Akku	Sangle universelle pour batterie	Velcro fissaggio batteria universale (1)
ECX330001	Body, Clear: 1:10 2WD Ruckus	ECX Karosserie, unlackiert: Ruckus	1/10 2WD Ruckus - Carrosserie transparente	Carrozzeria trasparente: 1:10 2WD Ruckus
ECX331000	Front Shock Tower, Aluminum	ECX Aluminium-Dämpferbrücke vorne	Support d'amortisseurs avant aluminium	Torre ammortizzatore ant. in allu.
ECX331001	Rear Shock Tower, Aluminum	ECX Aluminium-Dämpferbrücke vorne	Support d'amortisseurs arrière	Torre ammortizzatore post. in allu
ECX331005	Servo Arm 23T, Aluminium	Servoarm 23T, Aluminium	Palonnier de servo 23T, Aluminium	Squadretta servo 23T, alluminio
ECX331006	Servo Arm 24T, Aluminium	Servoarm 24T, Aluminium	Palonnier de servo 24T, Aluminium	Squadretta servo 24T, alluminio
ECX331008	Steering w/Servo Saver, Aluminium	Lenkung mit Servosaver, Aluminium	Direction avec sauve-servo, Aluminium	Sterzo con salvaservo, alluminio
ECX332000	Wheel Hex, Aluminum	ECX Aluminium Radmitnehmer	Hexagones de roue en aluminium	Esagono ruota, allu.
ECX334000	Rear Hubs, Aluminum	ECX Aluminium-Radträger hinten	Fusées arrière aluminium	Mozzi post., allu.
ECX334001	Caster Block, Aluminum	ECX Aluminium-Achsschenkelträger	Étriers porte fusée aluminium	Caster Block, allu.
ECX334002	Steering Block, Aluminum	ECX Aluminium-Lenkträger	Fusées avant aluminium	Fusello dello sterzo, allu.
ECX9001	Metal Gear Set	ECX Metallgetriebeset	Set de pignons métal	Set ingranaggio in metallo
KXSB9501	LiPo Charge Bag14 x 6.5 x 8cm	LiPo Ladetasche 14 x 6,5 x 8 cm	Sac du chargeur de batterie Li-Po 14x6,5x8 cm	Borsa caricabatteria LiPo 14 x 6,5 x 8 cm
KXSB9502	LiPo Charge Bag 18 x 8 x 5.5cm	LiPo Ladetasche 18 x 8 x 5,5 cm	Sac du chargeur de batterie Li-Po 18 x 8 x 5,5 cm	Borsa caricabatteria LiPo 18 x 8 x 5,5 cm
KXSB9503	LiPo Storage and Carry Bag	LiPo Aufbewahrungs- und Tragetasche	Sac de stockage et transport de Li-Po	Custodia da trasporto LiPo
KXSS0500	1/10 4P 3000Kv ESC/Motor Combo	1/10 4P 3000Kv Geschwindig- keitsregler-/Motor-Kombi	Variateur ESC/Moteur combinés 1/10 4P 3 000 Kv	1/10 4P 3000 Kv combo ESC/motore
KXSS0501	1/10 4P 4000Kv ESC/Motor Combo	1/10 4P 4000Kv Geschwindig- keitsregler-/Motor-Kombi	Variateur ESC/Moteur combinés 1/10 4P 4 000 Kv	1/10 4P 4000 Kv combo ESC/motore
RPM70462	RR A-arms (2), Black	RR A-Arm (2), Schwarz	Bras de commande A arrière (2), noirs	Bracci di controllo, posteriori (2), nero
RPM70582	FR A-arms (2), Black	FR A-Arm (2), Schwarz	Bras de commande A avant (2), noirs	Bracci di controllo, anteriori (2), nero
RPM70672	Sealed Gear Cover, Black	Abgedichtete Getriebeabdeckung, Schwarz	Couvercle de l'engrenage hermétique, noir	Coperchio pignone sigillato, nero
RPM73292	FR Spindle Blocks (2), Black	FR Spindelblöcke (2), Schwarz	Blocs d'axe avant (2), noirs	Blocchi alberino, anteriore (2), nero
RPM73442	HD Caster Blocks, Black	HD Radblock, Schwarz	Blocs de roulettes ultra-résistants, noirs	Blocchi ruota anteriore HD, nero
RPM73492	SX-Saver Bellcrank, Black	SX-Saver-Umlenkhebel, Schwarz	Levier coudé SX-Saver, noir	Leva a squadra SX-Saver, nero
RPM73572	Rear Axle Carriers, Black	Hinterachsträger, Schwarz	Supports d'essieu arrière, noirs	Porta asse posteriore, nero



## ECX03431T1 | ECX03431T2 ECX03433T1 | ECX03433T2 | ECX03433T3

www.ecxrc.com

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