

## TORMENT

ECX03033T1 | ECX03026AU | ECX03033IT1 ECX03033T2 | ECX03027AU | ECX03033IT2

INSTRUCTION MANUAL
BEDIENUNGSANLEITUNG
MANUEL D'UTILISATION
MANUALE DI ISTRUZIONI

# 1/10 ELECTRIC SHORT COURSETRUCK

Congratulations on your purchase of the ECX®

Torment™ Short Course Truck. This 1/10-scale
model introduces you to the sport of RC driving.

Herzlichen Glückwunsch zum Kauf des ECX 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 Torment Short Course Truck. Ce modèle 1/10 vous initie à la conduite RC.

Congratulazioni per l'acquisto di questo Torment Short Course Truck ECX. 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: **NOTICE**: Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury. **CAUTION**: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

**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.



**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.

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#### 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.

### **SPECIFICATIONS**

Transmitter	
Frequency	2.4GHz
Modulation	DSMR, DSM2
Battery	AA x 4
Servo	
Power Supply	4.8V~6V (shared with receiver)
Output Torque	41.66 oz (3 kg-cm)
Operating Speed	0.23sec/60 degrees of travel
Size	55.6 x 18 x 30mm

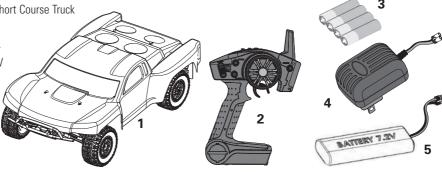
#### **Electronic Speed Control (ESC)**

Input Voltage	6.0-8.4 V
Electric Capacity (FET)	Forward 40A/180A
Electric Capacity (FET)	Reverse 20A/90A
PWM Frequency	1kHz
BEC Voltage	5V/2A
Size	46.5 x 34 x 28.5mm
Weight	65 g

#### **COMPONENTS**



- 3. AA (4) Batteries
- 4. 200mA Peak Battery Charger
- 5. Dynamite® Speedpack™ 7.2V Ni-MH battery (DYN1050EC)

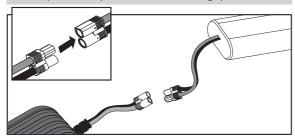


#### **VEHICLE PREPARATIONS**

#### **CHARGING THE VEHICLE BATTERY**

- 1. Connect the battery pack to the charger.
- 2. Connect the charger to an AC power source.
- 3. Allow the battery pack to charge for 9 hours.

**CAUTION:** If at any time during the charge process the battery pack(s) becomes hot to the touch, unplug the battery immediately and discontinue the charge process.



The vehicle battery charger produces 200 milliAmps per hour. Divide the mAh capacity on the label of a battery by 200 to know how long battery charging will require. For example, a fully discharged 1800mAh battery requires 9 hours to charge.

#### **INITIAL CHARGE**

Your Dynamite peak voltage detection charger includes safety circuitry and programming allowing the charger to stop charging after 15 minutes, if it senses any issues that have come up in charging. The high electrical resistance commonly found in new, unconditioned, Ni-MH batteries can cause this safety circuit to activate turning the charger off before a full charging cycle is complete. This is commonly known as a "false peak" in your battery charge.

Should this occur during your first charge cycle, it does not necessarily indicate a failure of either your charger or battery. Instead it shows that the charger is functioning properly and that the battery is not yet fully conditioned.

To complete your first full charging cycle in the event of a false peak, restart the charger by pressing the Start button again. Repeat this process until the charge cycle continues to charge past 15 minutes. It may take as many as 2 to 4 restarts to complete your first one or two full charge cycles. Once your charger completes a charge cycle longer than 15 minutes, your battery will be fully charged. A typical first full charge cycle should run for 9 hours, depending on the self-discharge condition of the battery since it was shipped from the factory.

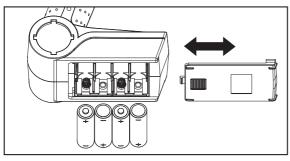
Once your battery is properly conditioned through a few full charge and discharge cycles, you will see normal operation of the charger and a 9 hour charge cycle.

#### **CHARGING WARNINGS**

**WARNING:** Failure to exercise caution while using this product and comply with the following warnings could result in product malfunction, electrical issues, excessive heat, FIRE, and ultimately injury and property damage.

- Read all safety precautions and literature prior to use of this product
- Never leave the battery and charger unattended during use.
- Never allow children under 14 years of age to charge battery packs.
- Never attempt to charge dead or damaged batteries.
- Never charge a battery if the cable has been pinched or shorted.
- Never allow batteries or charger to come into contact with moisture at any time.
- Never charge batteries in extremely hot or cold places (recommended between 50–80°F (10–26°C)) or place in direct sunlight.
- Always use only Ni-MH rechargeable batteries. This charger cannot charge batteries such as "heavy duty", "alkaline", "mercury" or "lithium" battery.
- Always connect to the charger correctly.
- Always disconnect the battery and charger after charging and let them cool between charges.
- Always inspect the battery before charging.
- Always terminate all processes and contact Horizon Hobby if the product malfunctions.
- Always make sure you know the specifications of the battery to be charged or discharged to ensure it meets the requirements of this charger.
- Always constantly monitor the temperature of the battery pack while charging.
- Always end the charging process if the charger or battery becomes hot to the touch or starts to change form during the charge process.
- Always charge in a well ventilated area.

#### **INSTALLING TRANSMITTER BATTERIES**



We recommend using only alkaline AA batteries in the transmitter, however, it is possible to use rechargeable NiMH batteries

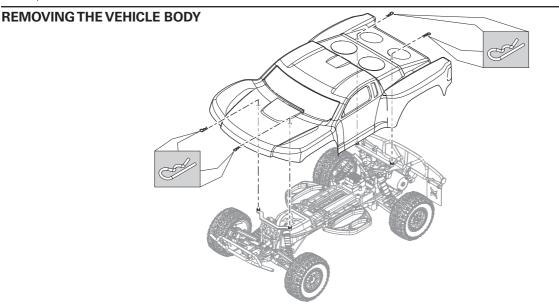
**CAUTION:** If using rechargeable batteries, charge only rechargeable batteries. Charging non-rechargeable batteries may cause the batteries to burst, resulting in injury to persons and/or damage to property.

- 1. Slide the panel open on the bottom of the transmitter.
- 2. Obey the battery plus (+) and minus (-) diagram in the transmitter to install 4 AA batteries.
- 3. Slide the panel closed.

#### TRANSMITTER BATTERY SAFETY PRECAUTIONS

- Never install damaged batteries.
- Never install batteries of mixed types or of different ages in the transmitter.
- Always remove exhausted batteries.

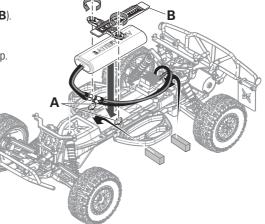
- Always remove batteries before storing the transmitter.
- Low battery power can result in loss of control of the RC vehicle.



#### INSTALLING THE BATTERY IN THE VEHICLE

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

If desired, you can put 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



Allows you to change the direction of steering (ST. REV) and throttle (TH. REV) controls (default settings are "N" for steering and "N" for throttle).

#### **STEERING TRIM**



Adjust to make the vehicle drive straight with no input at the steering wheel.

#### THROTTLE TRIM



Adjusts the neutral point of the electronic speed control.

#### **POWER SWITCH**



Power on or off the transmitter.

### BATTERY LEVEL INDICATOR



Solid Green: Battery voltage is good (above 4V)

Flashing Green: Battery voltage is critically low (below 4V). Replace batteries.

### STEERING RATE



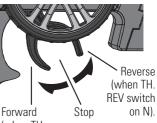
Adjusts the amount the front wheels move when the steering wheel is turned left or right.

#### STEERING WHEEL



Control steering. Right and Left steering with ST. REV Switch on N (see ST. REV switch).

#### THROTTLE TRIGGER



(when TH. REV switch on N).

Controls power to motor for forward or reverse (see TH. REV switch).

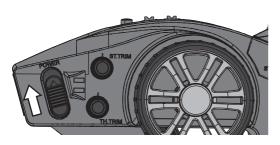
#### CHANGING THE TRAVEL ADJUST SETTINGS

The travel function supports precise endpoint adjustments in each direction for the steering and throttle channels.

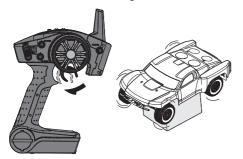
- Hold the trigger in the full brake position while powering on the transmitter. The LED flashes rapidly, indicating the programming mode is active.
- 2. Throttle End Point: Hold the trigger in the full throttle position. Turn the TH TRIM knob to adjust the full throttle end point.
- 3. Brake End Point: Hold the trigger in the full brake position. Turn the TH TRIM knob to adjust the full brake end point. 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%. The default travel settings are 125% steering and 100% throttle.

#### **GETTING STARTED**

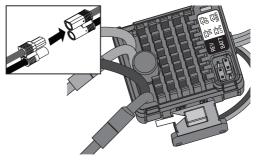
1. Power on the transmitter.



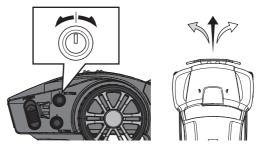
3. Do a test of the transmitter's control of the vehicle with the vehicle's wheels off the ground.



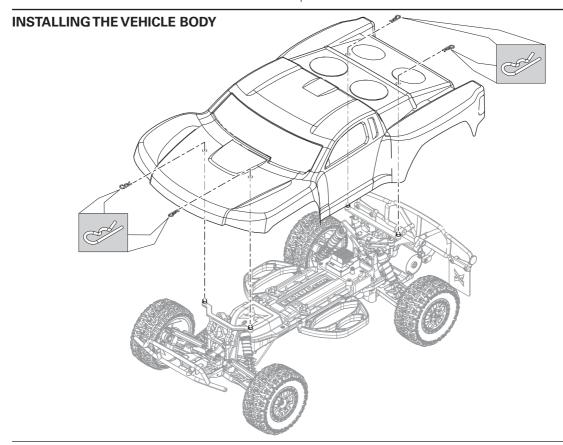
2. Power on the ESC.



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

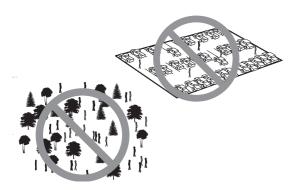


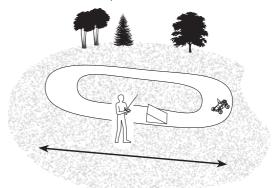
**IMPORTANT:** Seat the motor brushes by driving smoothly on a flat surface during use of the first battery charge. Properly seating the motor brushes will increase the life and performance of the motor.



#### **OPERATION**

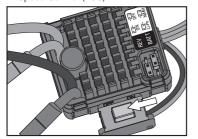
- ALWAYS turn on your transmitter before you turn on the receiver in the vehicle. Always power off the receiver before turning your transmitter off.
- ALWAYS operate your vehicle in a wide open area. Operating
  the vehicle in a small space or indoors can cause overheating
  at low speeds. Operating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



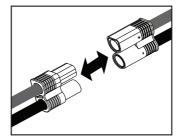


#### WHEN YOU ARE FINISHED

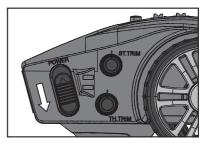
1. Power off the Electronic Speed Control (ESC).



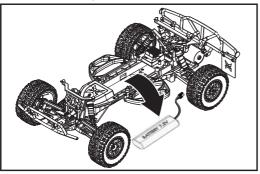
2. Disconnect the battery.



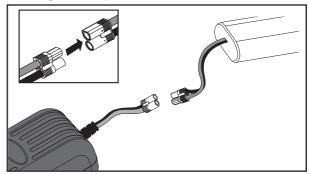
3. Power off the transmitter.



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.
- 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

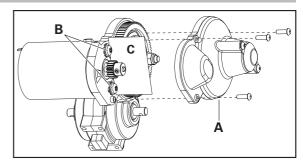
The gear mesh has already been set at the factory. Setting the gear mesh is only necessary when changing motors or gears.

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).
- Put a small piece of paper (C) between the pinion and spur gears.



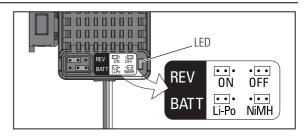
- 3. Push the gears together while tightening the motor screws.
- 4. Rotate the gears to remove the paper. The gearing should move a small amount.
- 5. Reinstall the gear cover.

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

**Programming:** The ESC comes with two jumpers pre-installed in the REV: ON and BATT: Ni-MH configurations.

To disable reverse or change battery type to Li-Po, disconnect the jumper from the default port and connect it to the desired port. 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.

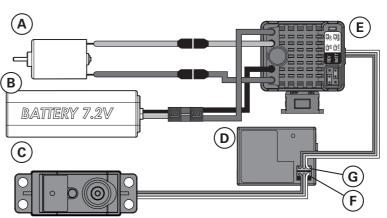


Operation	LED Status	Sound at Power UP
Stop	OFF	
Forward	Blinks	
Forward (full speed)	Solid	
Reverse	Blinks	
Brake	Blinks	
Brake (full brake)	Solid	
Ni-MH/Ni-Cd Battery		1 Short Beep
2S Li-Po Battery		2 Short Beeps
ESC Ready		1 Long Beep
Battery Low Voltage	Blinks	
Overheat	Blinks	

#### **ELECTRICAL LAYOUT**

	Part #	Description
Α	DYN1172	Motor
В	DYN1050EC	Battery 7.2V
С	SPMS603	Waterproof Steering Servo
D	SPMSR310	Receiver
E	DYNS2211	Waterproof Electronic Speed Control (ESC)
F		Channel 1
G		Channel 2

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

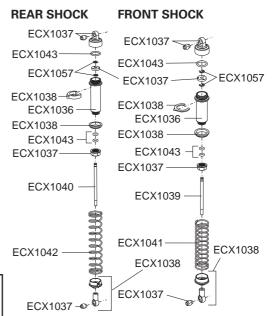
Oil-filled shocks will require regular maintenance due to the oil breaking down or getting dirty. This maintenance should be performed after about every 3 to 5 hours of use, depending on the conditions that the vehicle is used in.

- Remove the shock from the vehicle.
- Remove the cap from the shock body and dispose of fluid.
- Disassemble the shock. Clean thoroughly with DYN5505. 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	cription	No. Descri	ption	No.	Description	No. D	escription
(Jumm	TAPPING BINDER HEAD M3x10mm		TAPPING FLAT HEAD M2x16mm		STEP SCREW M3x0.5x7.4mm		WASHER 5x7x0.5mm
<b>Amm</b>	TAPPING BINDER HEAD M3x12mm		BINDER HEAD M3x8mm		STEP SCREW M3x0.5x13.4mm	$\bigcirc$	WASHER 3x8x0.5mm
(hinnininin	TAPPING BINDER HEAD M3x16mm		BINDER HEAD M3x12mm		STEP SCREW M3x0.5x10.5mm	$\odot$	WASHER 2x7x0.5mm
<b>Diminim</b>	TAPPING BINDER HEAD M3x18mm		BINDER HEAD M3x20mm		SETSCREW M3x3mm		FLANGED LOCK NUT M4
<u> </u>	TAPPING FLAT HEAD M3x10mm	<b>1</b>	BINDER HEAD M3x25mm		SETSCREW M3x12mm		LOCK NUT M3
Dimini	TAPPING FLAT HEAD M3x12mm	{\bu_{\text{max}}}	BUTTON HEX M2.5x4mm		SET SHAFT SCREW M3x13mm		E-CLIP E2.5
Dimini	TAPPING FLAT HEAD M3x15mm	{}	BUTTON HEX M2.5x8mm				LOCK WASHER

#### **BINDING**

Binding is the process of programming the receiver to recognize the GUID (Globally Unique Identifier) code of a single specific transmitter. The DX2E and SR310 are bound at the factory. If you need to rebind, follow the instructions below.

- With the receiver off, insert the bind plug into the BIND port on the receiver.
- Power the receiver through any other port. The orange LED will flash continuously, indicating the receiver is in bind mode.
- 3. With the steering wheel and throttle trigger in the failsafe positions, normally full brakes and straight steering (see the Failsafe section on this page for more information), press and hold the bind button and turn on the transmitter. The green LED on the front of the transmitter will flash within three seconds, indicating the transmitter is in bind mode.
- Release the bind button when the green LED flashes.
   Continue to hold the steering wheel and throttle trigger in the failsafe positions until the LED on the receiver glows solid.

5. The LED on the receiver will glow solid when the transmitter and receiver are bound.

6. Remove the bind plug and store it in a convenient place.

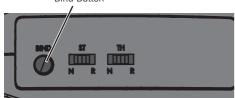
You must rebind when:

- Different failsafe positions are desired e.g., when throttle or steering reversing has been changed.
- Changing receiver types e.g., changing from a DSMR™ receiver to a DSM2® receiver.
- Binding the receiver to a different transmitter.

#### **FAILSAFE**

In the unlikely event that the radio link is lost during use, the receiver will drive the servos to their preprogrammed failsafe positions (normally full brakes and straight steering). If the receiver is turned on prior to turning on the transmitter, the receiver will enter failsafe mode, driving the servos to their preset failsafe positions. When the transmitter is turned on, normal control is resumed. Failsafe servo positions are set during binding (see binding a receiver above).





#### TROUBLESHOOTING GUIDE

Problem	Possible Cause	Solution
Short Run Time	Battery damaged/not charged     Motor dirty or brushes worn	Check/change battery     Check/clean/replace
Sluggish Action	<ul><li>Motor dirty or brushes worn</li><li>Bind in drivetrain</li><li>Vehicle battery is not charged</li></ul>	<ul><li>Check/clean/replace</li><li>Clean/adjust</li><li>Replace/recharge</li></ul>
Controls Reversed	ST. REV or TH. REV	Change switch position
Motor/ESC overheat	Over-geared for the driving environment	Install smaller pinion
Doesn't Operate	<ul> <li>Transmitter batteries low</li> <li>Transmitter powered off</li> <li>ESC powered off</li> <li>Vehicle battery is not charged</li> </ul>	<ul><li>Replace/recharge</li><li>Power On</li><li>Power On</li><li>Replace/recharge</li></ul>
Poor Range	Transmitter batteries low Transmitter antenna is damaged or loose Receiver antenna damaged	<ul><li>Replace/recharge</li><li>Check/tighten</li><li>Check/repair/replace</li></ul>
The system will not connect	Transmitter and receiver too near each other Transmitter and receiver too near large metal objects (vehicles, etc.) Receiver accidentally put in bind mode so receiver is no longer bound	Move transmitter 8–12 feet (2.4–3.6m) from receiver     Move away from large metal objects (vehicles, etc.)     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	Contact Horizon Product Support     Make sure receiver antenna is in an antenna tube and is above vehicle
The receiver quits responding during operation	Low battery voltage     Loose or damaged wires or connectors between battery and receiver	Completely recharge battery     Do a check of the wires and connection between battery and receiver. Repair or replace wires and/or connectors
Receiver loses its bind	Transmitter accidentally put in bind mode, ending bind to receiver	Bind transmitter to receiver

#### LIMITED WARRANTY

What this Warranty Covers - Horizon Hobby, LLC (Horizon) warrants to the origicall the toll free telephone number referenced in the Warranty and Service Contact nal purchaser that the product purchased (the "Product") will be free from defects Information section to speak with a Product Support representative. 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.

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 WAR-RANTIES 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 REQUIRE-MENTS 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 WAR-RANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY.

Limitation of Liability - HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDI-RECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRO-DUCTION 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

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. Nonwarranty 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/ servicecenter\_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.

#### **CONTACT INFORMATION**

Country of Purchase	Horizon Hobby	Contact Information	Address
	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/ RequestForm/	
United States of America	Horizon Product Support (Product Technical Assistance)	www.quickbase.com/db/ bghj7ey8c?a=GenNewRecord	4105 Fieldstone Rd
	(Froduct recilifical Assistance)	888-959-2306	Champaign, Illinois, 61822 USA
	Sales	sales@horizonhobby.com	
	Sales	888-959-2306	
	Service/Parts/Sales:	sales@horizonhobby.co.uk	Units 1-4, Ployters Rd, Staple Tye
United Kingdom	Horizon Hobby Limited	+44 (0) 1279 641 097	Harlow, Essex, CM18 7NS, United Kingdom

Country of Purchase	Horizon Hobby	Contact Information	Address	
Cormony	Horizon Technischer Service	service@horizonhobby.de	Christian-Junge-Straße 1	
Germany	Sales: Horizon Hobby GmbH +49 (0) 4121 2655 1		25337 Elmshorn, Germany	
F	Service/Parts/Sales:	infofrance@horizonhobby.com	11 Rue Georges Charpak	
France	Horizon Hobby SAS	+33 (0) 1 60 18 34 90	77127 Lieusaint, France	
China	Service/Parts/Sales:	info@horizonhobby.com.cn	Room 506, No. 97 Changshou Rd.	
Cillia	Horizon Hobby – China	+86 (021) 5180 9868	Shanghai, China 200060	

#### **FCC INFORMATION**

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.

This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400GHz to 2.4835GHz frequency range.

#### **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

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.





#### COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

### **Declaration of Conformity** (in accordance with ISO/IEC 17050-1)

No. HH2014121009

Product(s): Torment 1:10 Silver/Blue RTR; Torment 1:10 Black/Green

RTR (Spektrum DX2E Transmitter and SR310 Receiver

included)

Item Number(s): ECX03033IT1, ECX03033IT2

Equipment class:

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC, EMC Directive 2004/108/ EC and LVD Directive 2006/95/EC:

EN 300-328 V1.8.1

EN 301 489-1 V1.9.2: 2012 EN 301 489-17 V2.1.1: 2009

EN 60950-1:2006+A11:2009+A1:2010+A12: 2011

EN 62311: 2008

EN 55022:2010 + AC:2011

EN 55024:2010

EN 61000-3-2:2006+A1:2009+A2:2009

EN 61000-3-3:2008

Signed for and on behalf of:

Horizon Hobby, LLC Champaign, IL USA

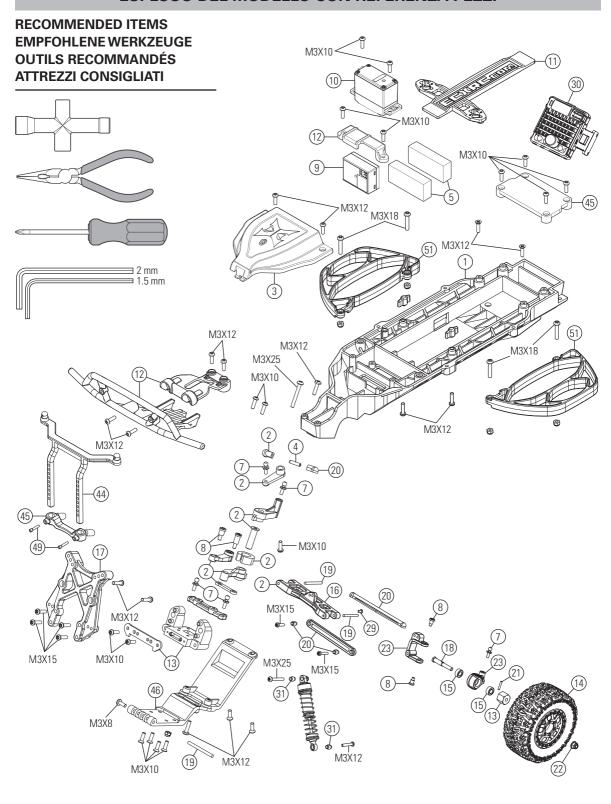
Mike Dunne

12.10.2014 Executive Vice President Product Divisions, Horizon Hobby, LLC

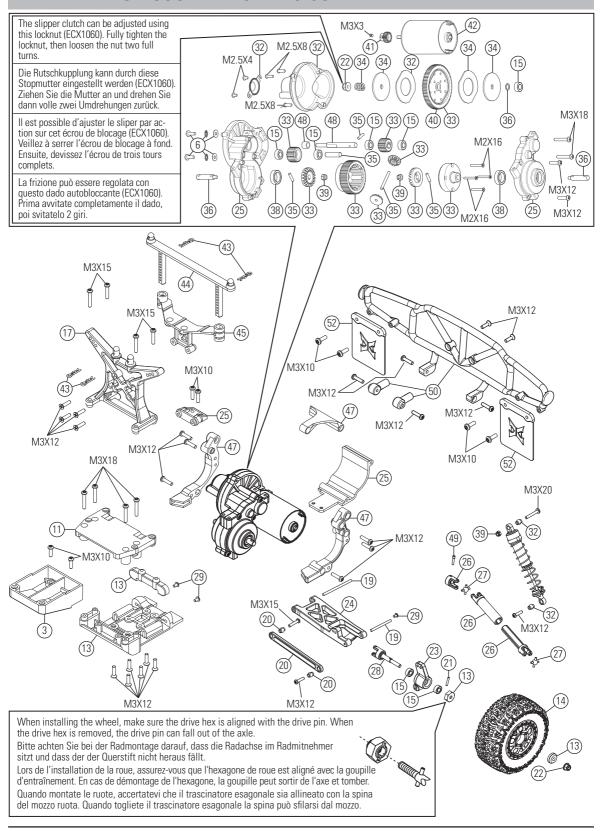
#### Instructions for disposal of WEEE by users in the European Union

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.

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



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



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

	Part #   Nummer Numéro   Codice	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 montaggio posteriore
4	ECX1050	Setscrew M3x12 (4)	Schrauben Set M3x12 (4)	Jeu de vis M3x12 (4)	Grani M3x12 (4)
5	ECX2015	Foam Block	Schaum Block	Bloc de mousse	Spugna distanziale batteria
6	ECX1098	Motor Screw/Washer Set	Set Motorschrauben/ Unterlegscheiben	Vis Moteur/Set Rondelles	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	SPMSR310	3-Ch DSM Sport Receiver (Coated)	3 Kanal DSM Sport Empfänger (beschichtet)	Récepteur DSM 3 voies étanche	Ricevitore Sport (con rivestimento protettivo)
10	SPMSS6170	Standard Digital Surface Servo, WP	Standard Digital Surface Servo Spritzwasserge- schützt	Servo digital standard surface, étanche	Servo standard digitale car, WP
11	ECX231003	Battery Hold Down	Akkuhalter	Fixation pour batterie	Piastra fermabatteria
12	ECX4005	Front Bumper Set	Vordere Stossstange	Jeu de pare-chocs avant	Set paraurti ant
13	ECX2006	Suspension Arm Mount Set	Querlenker Set hinten	Jeu de renfort de suspension	Supporti braccetti sosp.
14	ECX4003	Mounted Wheel/Tire (2)	Rad montiert (2)	Pneu monté /jante (2)	Ruote e gomme montate (2)
15	ECX1015	Wheel Bearing Set	Radlagersatz Set	Jeu de roulement de roue	Set cuscinetti ruote
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 de roues M4 (4)	Dadi autobloccanti M4 (4)
23	ECX234000	Steering Block, Rear Hub Set	Lenk- und Rädträger hinten	Jeu de fusées avant et arrière avec étriers portes fusées avant	Set blocco sterzo, mozzo posteriore
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
26	ECX232000	Driveshafts (2)	Antriebswellen (2)	Cardan (2)	Semiasse (2)
27	ECX232005	Driveshaft Pivot Ball (4)	Antriebswellengelenk (4)	Croisillon de cardan (4)	Snodi semiassi (4)
28	ECX232001	Rear Axle (2)	Wellenmitnehmer hinten (2)	Axe de roue arrière	Attacco a sfera semiasse (4)
29	ECX1045	Hinge Pin Screws (8)	Querlenkerbolzen Schrauben (8)	Vis de fixation de renfort (8)	Viti per perni sospensioni (8)
30	DYNS2210	60A FWD/REV Brushed ESC	60A Vorwärts/Rückwärts Bürstenregler	Variateur 60A Marche Av/Arr pour moteur brushed	60A FWD/REV regolatore a spazzole
31	ECX1037	Shock Caps, Pistons	Stoßdmämpferkappen Kolben	Bouchon, piston et rotules d'amortisseur	Set tappi e pistoni ammortizzatori
32	ECX1027	Gear Cover	Getriebeabdeckung	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 trans- mission avec goupilles d'entraînement	Alberino intermedio con spina

	Part #   Nummer				
	Numéro   Codice	Description	Beschreibung	Description	Descrizione
36	ECX1026	Transmission Drive Shaft (2)	Getreibeausgangswelle (2)	Axe d'arbre de transmission (2)	Mozzi Differenziale (2)
37	ECX1052	Washer Set	Unterlegscheiben Set	Jeu de rondelles	Set rondelle
38	ECX1055	Bearings 10x15x4 (2)	Lager 10x15x4 (2)	Roulements 10x15x4 (2)	Cuscinetti 10x15x4 (2)
39	ECX1059	M3 Locknut (4)	M3 Stopmutter (4)	Ecrou auto-freiné M3 (4)	Dadi autobloccanti M3 (4)
40	ECX1076	Spur Gear	Hauptzahnrad	Couronne	Corona
41	ECX1073	19-Tooth Pinion Gear	Ritzel 19 Zähne	Pignon 19 dents	Pignone a 19 denti
42	DYN1172	Motor	Motor	Moteur	Motore
43	ECX1048	Body Clip	Body Clip	Clips Carrosserie	Clippe per carrozzeria
44	ECX2010	Body Post Set	Karosseriehalterset	Set Plots Carrosserie	Set di sostegni per la carrozzeria
45	ECX2009	Body Mount Set	Aufnahme Karosseriehalter	Set Montage Carrosserie	Set di montaggio per la carrozzeria
46	ECX2007	Skid Plate Set	Unterfahrschutz Set	Set Plaque Chassis	Set pistre di protezione
47	ECX2013	Rear Holder Set	Set Halter hinten	Set de Maintien Arrière	Set supporto posteriore
48	ECX1023	Top Shaft/Spacer	Getriebewelle oben	Set de Goupilles	Set di spessori
49	ECX1033	Setscrew M3x10	Sicherungsschrauben (4)	Vis (4)	Viti (4)
50	ECX4006	Rear Bumper Set	Hinterer Stoßfänger Set	Set de pare-choc arrière	Set paraurti posteriore
51	ECX4004	Nerf Bar Set	Seitenaufprallschutz	Set de protection latérales	Set protezione laterale
52	ECX4007	Mud Flap Set	Schmutzfängerset	Set de bavettes	Set paraspruzzi
	ECX230006	Body, Silver/Blue: Torment	ECX Torment Karosserie Silber / Blau	Carrosserie argent/bleue - Torment	Carrozz. Blu/Arg Torment
	ECX230007	Body, Black/Green: Torment	ECX Torment Karosserie Schwarz/ Grün	Carrosserie noire/verte - Torment	Carrozz. Nero/Verde Torment
	SPM2322	DX2E 2-Channel DSM Surface Radio	DX2E 2-Kanal DSM Fernsteuerung	DX2E 2 voies DSMR	DX2E 2-canali DSM radiocomando car
	DYNC2000CA	Prophet <sup>™</sup> Sport Ni-MH 35W AC Charger	Prophet Sport 35W Peak Ni-MH Ladegerät	Prophet Sport 35W Chargeur à détection de pics	Prophet Sport 35W Cari- cabatterie a rilevamento di picchi
	DYN1050EC	Ni-MH battery	Ni-MH akku	Batterie Ni-MH	Batteria Ni-MH



ECX03033T1 | ECX03026AU | ECX03033IT1 ECX03033T2 | ECX03027AU | ECX03033IT2

www.ecxrc.com

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