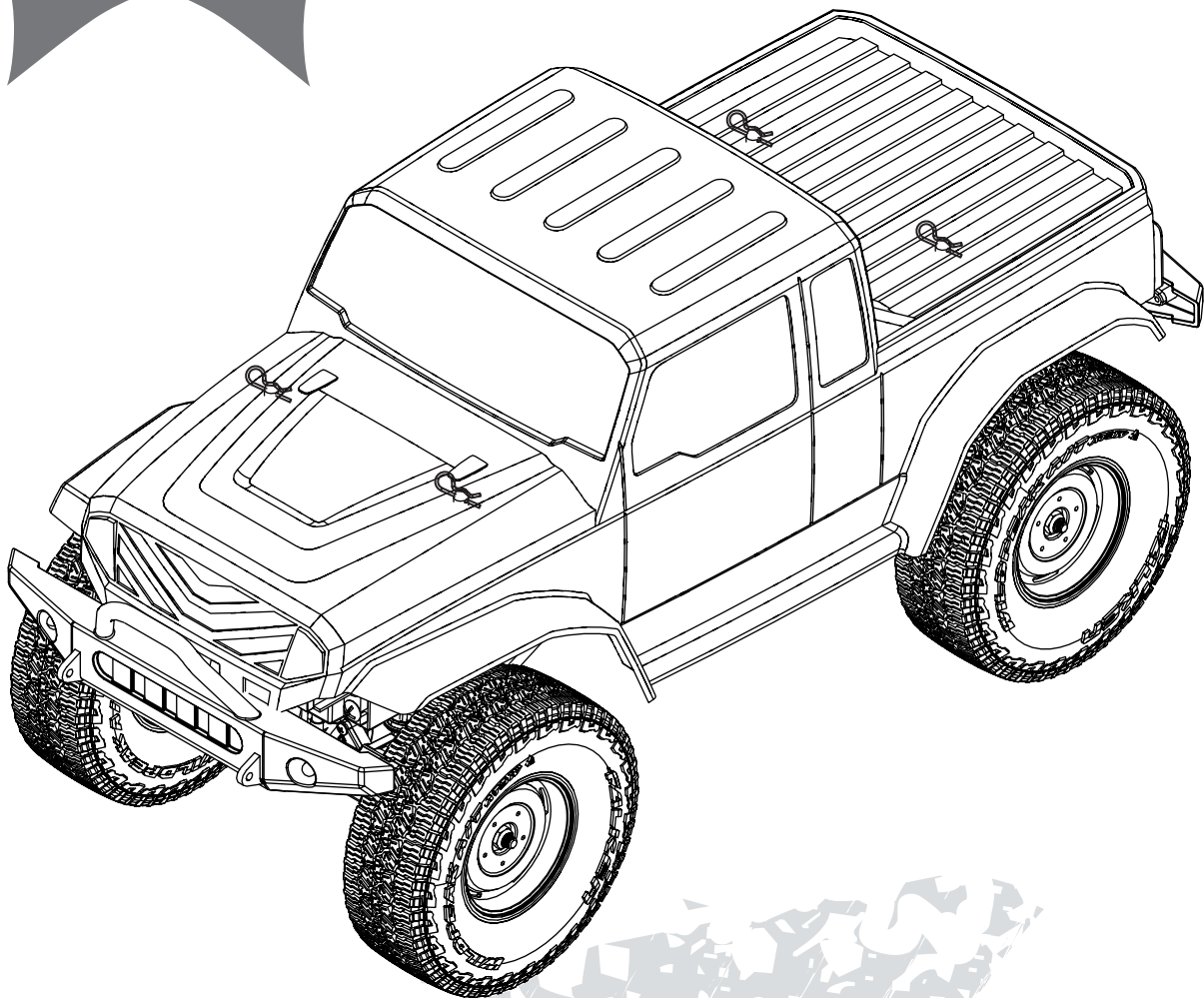




ECX®



BARRAGE®

1.9 4WD ELECTRIC SCALE CRAWLER BUILD-TO-DRIVE™ KIT

ECX01011

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

Congratulations on your purchase of the ECX® Barrage® 1.9 4WD Electric Scaler. This model introduces you to the sport of RC driving.

Herzlichen Glückwunsch zum Kauf des ECX Barrage 1.9 4WD Electric Scaler. Dieses Modell ist der gelungende Einstieg in die Welt des RC Cars Sports.

Nous vous félicitons pour l'achat de l'ECX Barrage 1.9 4WD électrique. Ce modèle vous permettra de découvrir l'univers du RC.

Congratulazioni per l'acquisto dell'ECX Barrage 1.9 4WD Electric Scaler. Questo modello dà accesso al mondo degli automodelli radiocomandati.

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.

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

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



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

This is a sophisticated hobby product 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), servo(s) and receiver are waterproof, however, most of the mechanical components are water-resistant and should not be submerged.

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



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

General Precautions

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

excessively wet, apply very light throttle until the water is mostly removed from the motor. Running a wet motor at high speeds may rapidly damage the motor.

- Driving in wet conditions can reduce the life of the motor. The additional resistance of operating in water causes excess strain. Alter the gear ratio by using a smaller pinion or larger spur gear. This will increase torque (and motor life) when running in mud, deeper puddles, or any wet conditions that will increase the load on the motor for an extended period of time.

Wet Conditions Maintenance

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



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

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

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

- Use an air compressor or a can of compressed air to dry the vehicle and help remove any water that may have gotten into small crevices or corners.
- Spray the bearings, drive train, fasteners and other metal parts with a water-displacing light oil 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
Battery	AA x 4

Servo

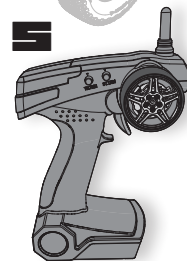
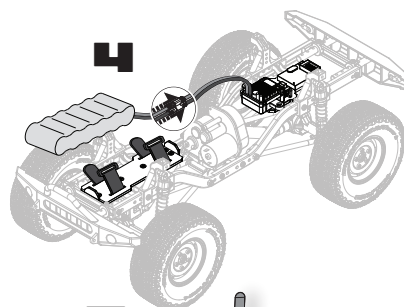
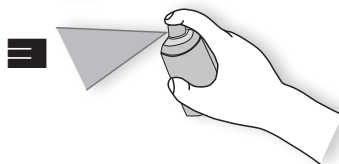
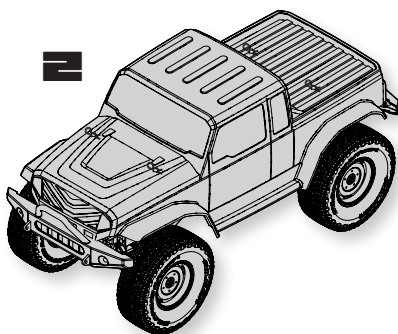
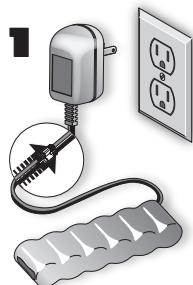
Power Supply	4.8V~6V
Output Torque	44 oz-in @ 4.8V (54 oz-in @ 6.0V)
Operating Speed	.18 sec/60 degrees @ 4.8V (15 sec/60 degrees @ 6.0V)
Size	40 x 20.3 x 38mm

Electronic Speed Control (ESC)

Input Voltage	6.0–8.4V
Electric Capacity	60A ESC
PWM Frequency	1kHz
BEC Voltage	5V/2A
Size	35.6mm x 34mm x 18mm
Weight	65 g

GETTING STARTED

- 1 Charge the battery
- 2 Assemble the chassis
- 3 Paint the body
- 4 Install the battery
- 5 Setup the transmitter
- 6 Drive!



CHARGING WARNINGS



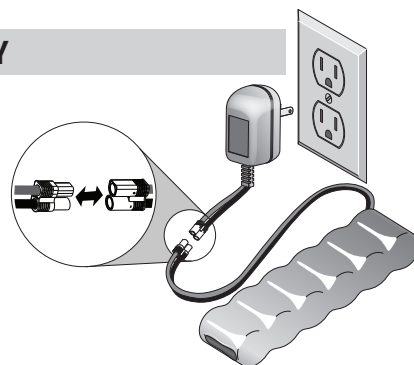
WARNING: Failure to exercise caution while using this product and comply with the following warnings could result in product malfunction, electrical issues, excessive heat, FIRE, and ultimately injury and property damage.

- **NEVER LEAVE CHARGING BATTERIES UNATTENDED.**
- **NEVER CHARGE BATTERIES OVERNIGHT.**
- Read all safety precautions and literature prior to use of this product.
- Never allow children under 14 years of age to charge batteries.
- Never attempt to charge dead or damaged batteries.
- Never charge a battery if the cable has been pinched or shorted.
- Never allow the 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” batteries.
- 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 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.

STEP 1: CHARGE THE VEHICLE BATTERY

1. Connect the Dynamite® Speedpack® Ni-MH battery to the 100mA charger.
2. Connect the charger to an AC wall outlet.
3. Allow the battery pack to charge for **9 hours**.



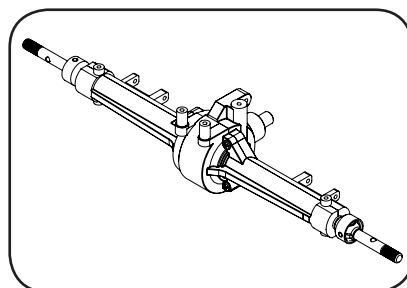
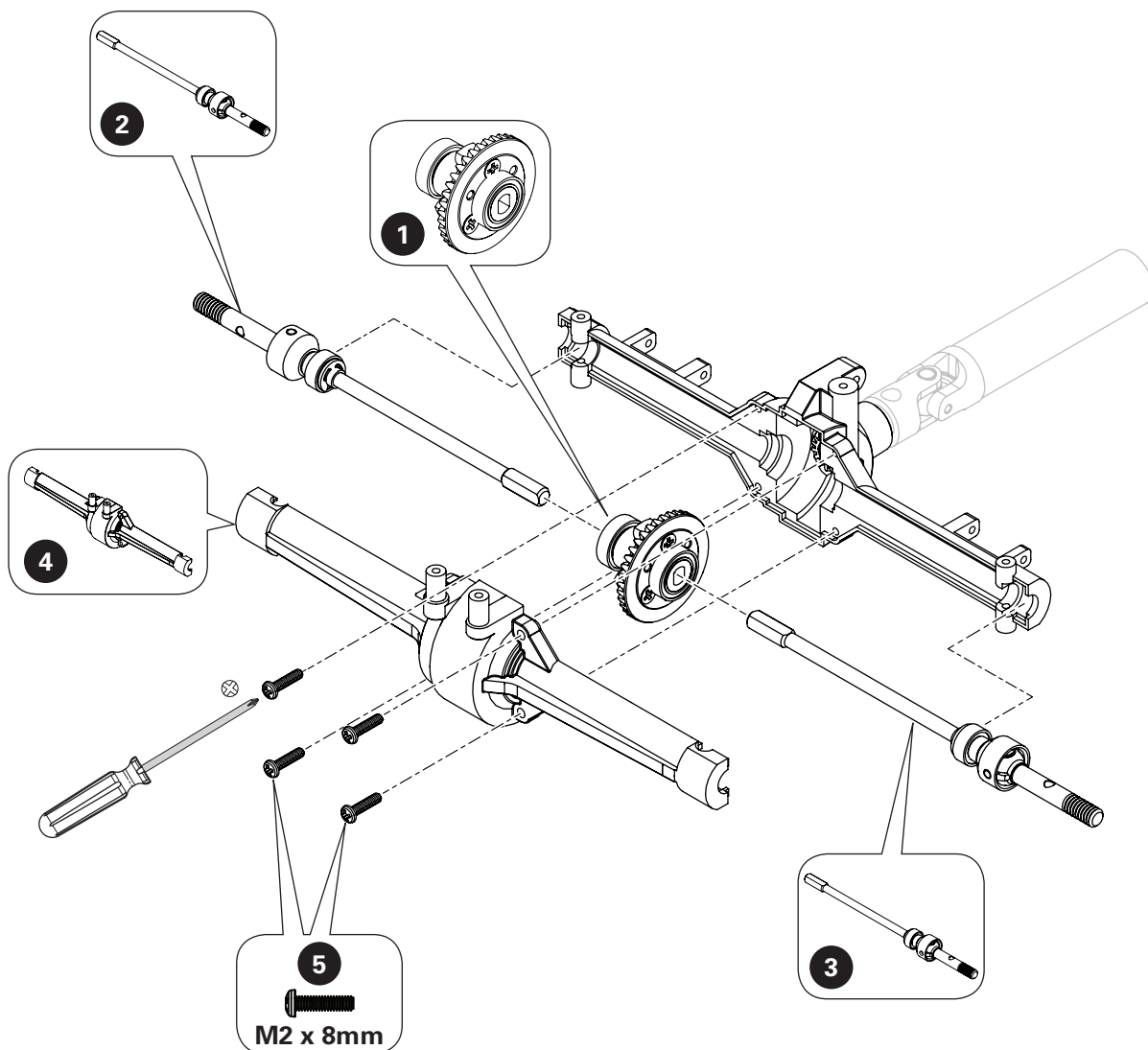
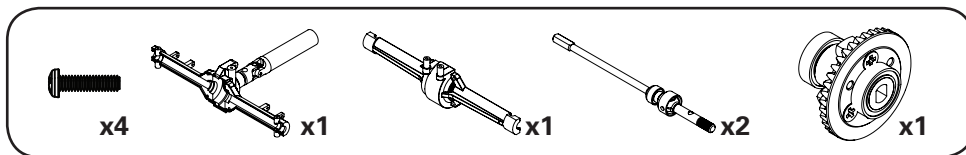
STEP 2: ASSEMBLE THE BARRAGE SCALER

Thank you for purchasing the Barrage® Scaler Build-To-Drive™ Kit. The kit includes:

- Dynamite® 100mA 9V AC charger with EC3™ connector
- Dynamite® Speedpack® 900mAh NiMH battery with EC3™ connector
- Dynamite® Tazer™ 390 motor
- Dynamite® 60A WP FWD/REV Brushed ESC
- ECX® 2.4GHz 2-CH receiver
- ECX® 2.4GHz 2-CH transmitter
- Spektrum™ S602 digital servo

The kit also includes 12 bags: the main bag containing the decal sheet, window mask, tools, AA batteries, and 11 build bags (A–K). Each bag contains secondary bags labeled with the corresponding assembly step numbers. Open the main bag first. Then open the part bags, one at a time. Follow the assembly steps in order!

a1



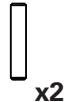
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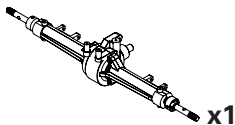
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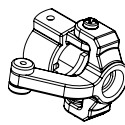
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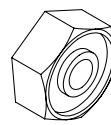
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x1



x2



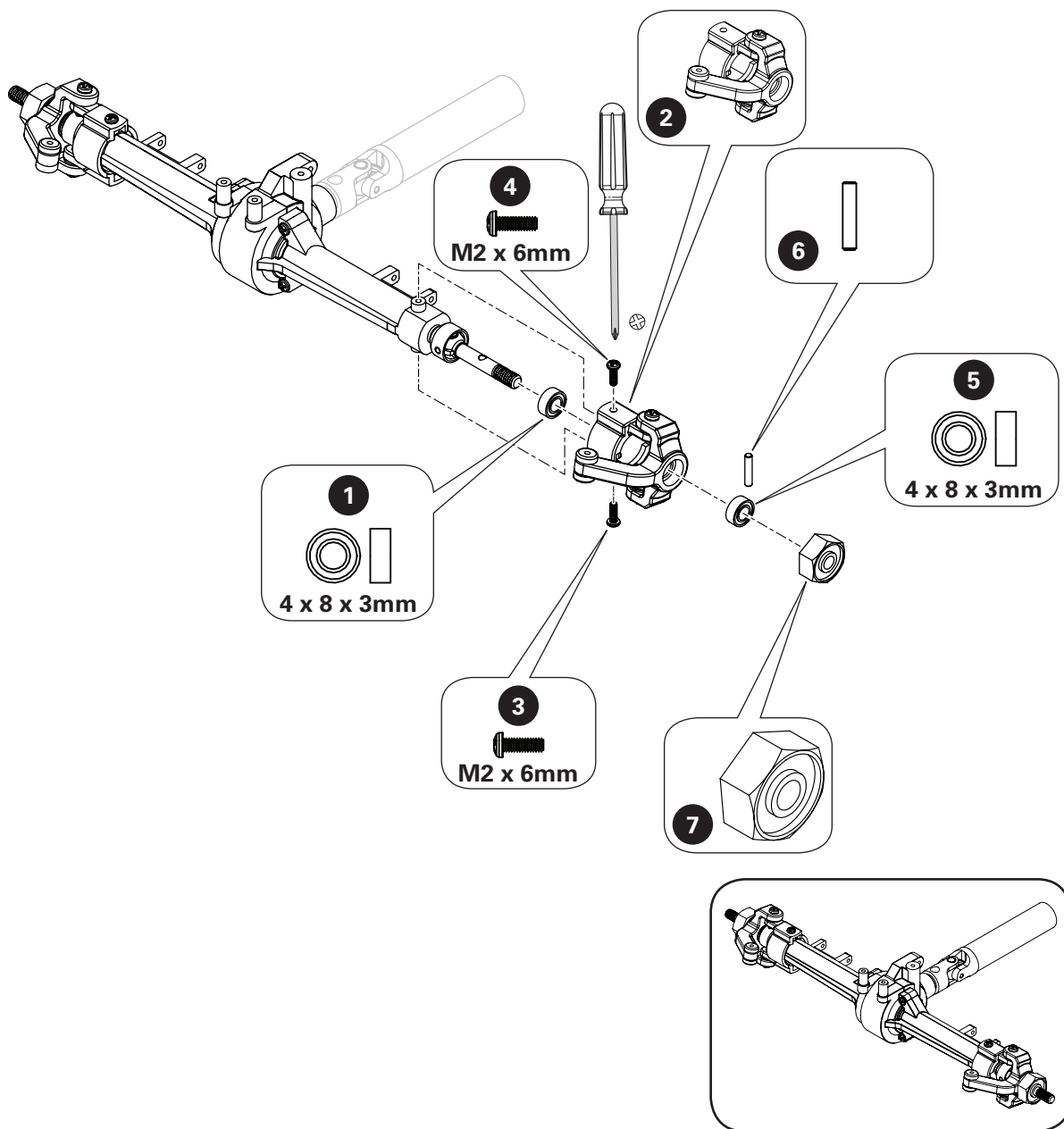
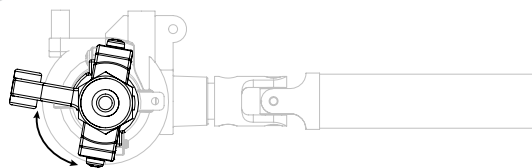
x2

NOTICE: The spindles have positive castor (see image, right).

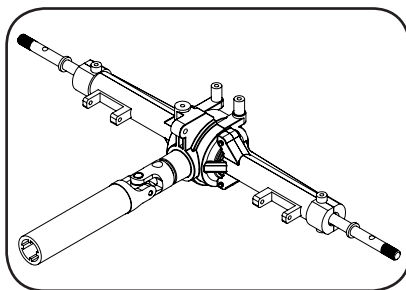
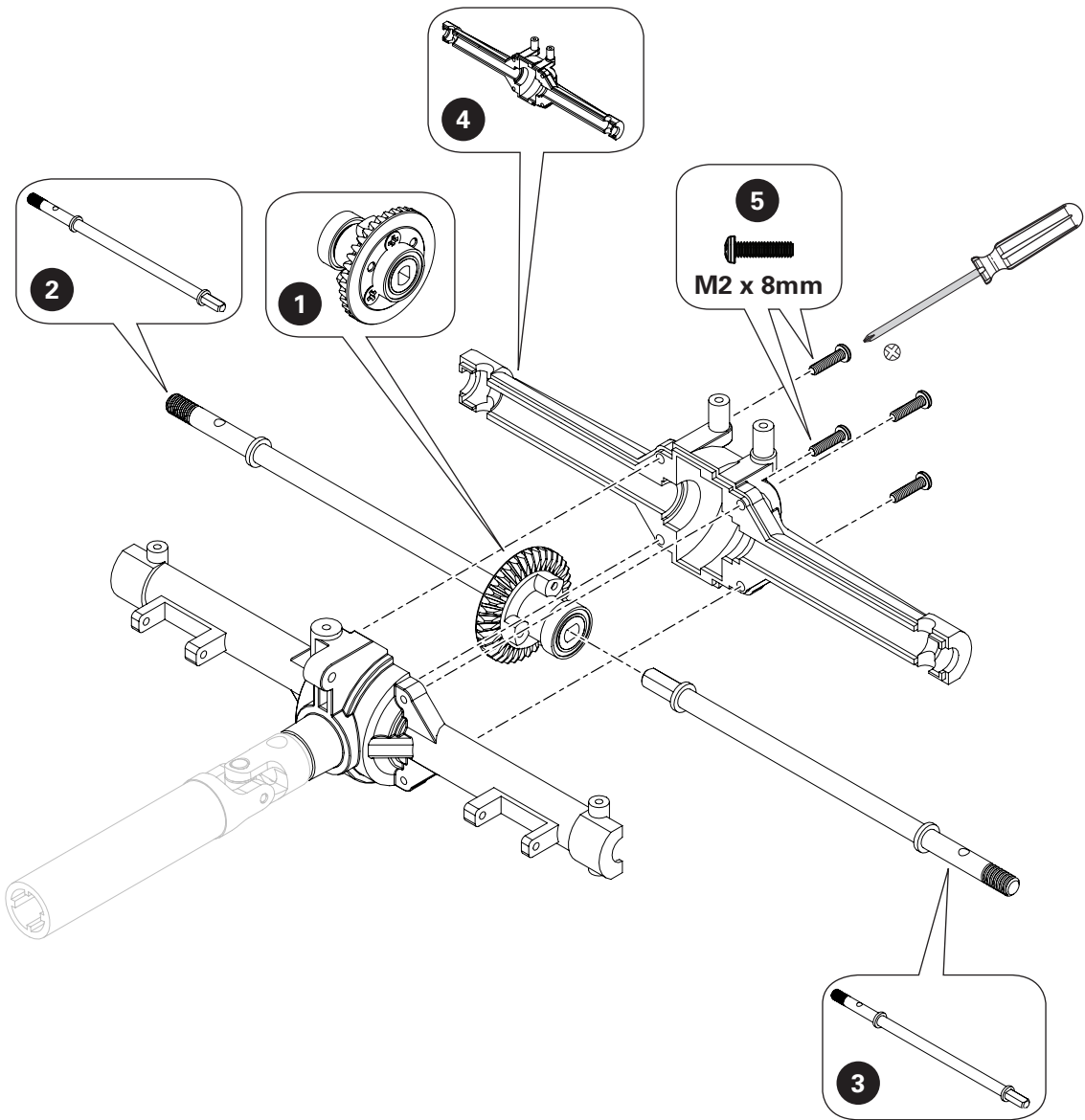
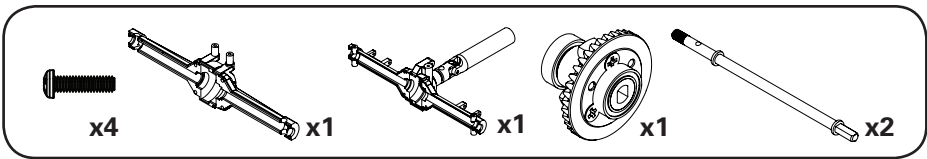
HINWEIS: Die Spindeln haben positiven Nachlauf (siehe Bild rechts).

REMARQUER : Les fusées possèdent une chasse positive (voir l'image de droite).

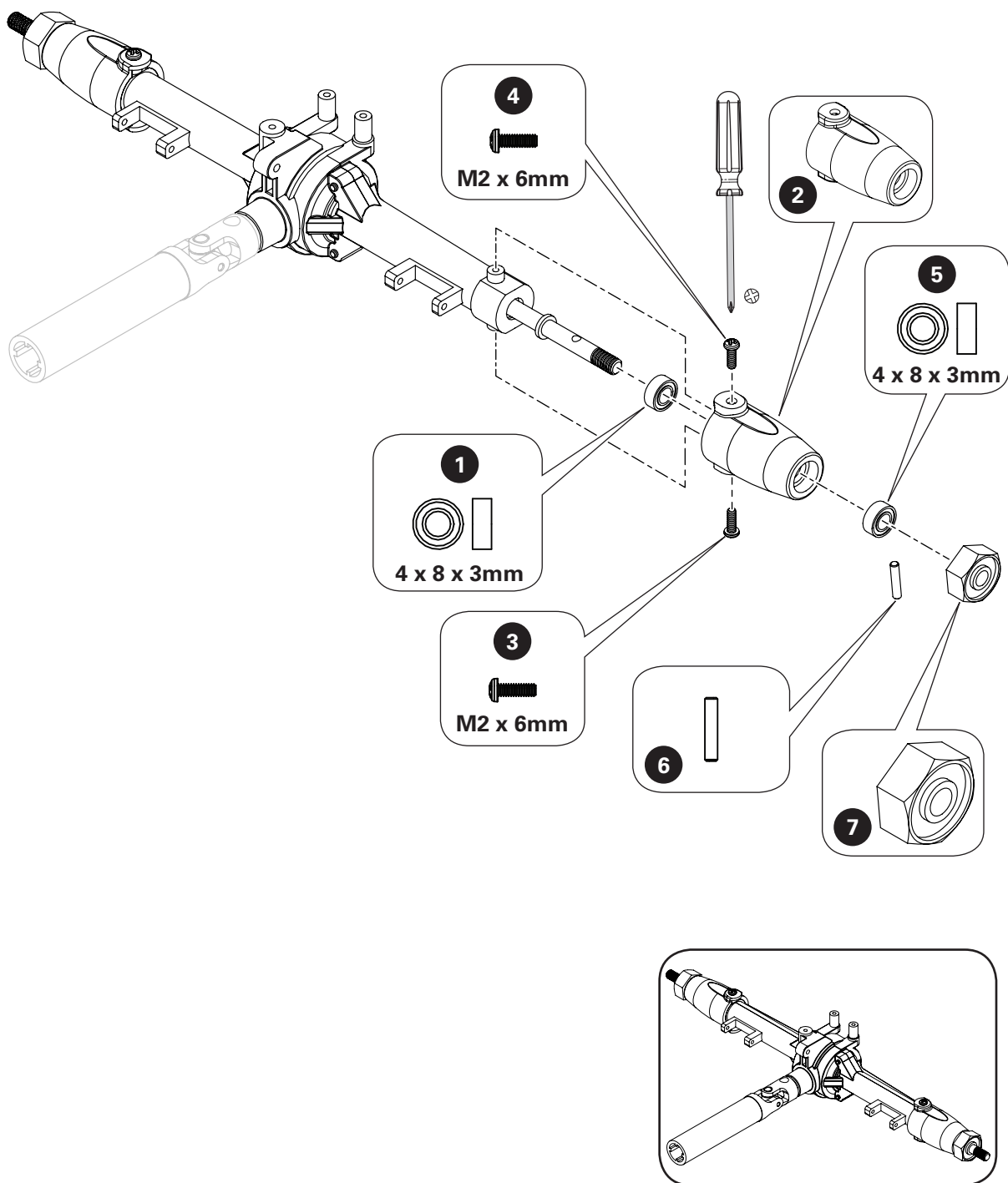
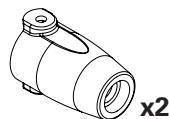
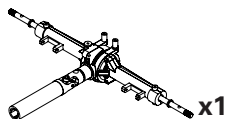
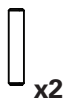
AVVISO: i fuselli hanno incidenza positiva (v. figura a destra).



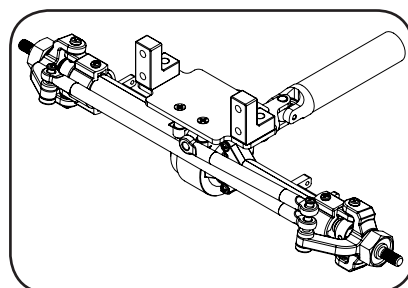
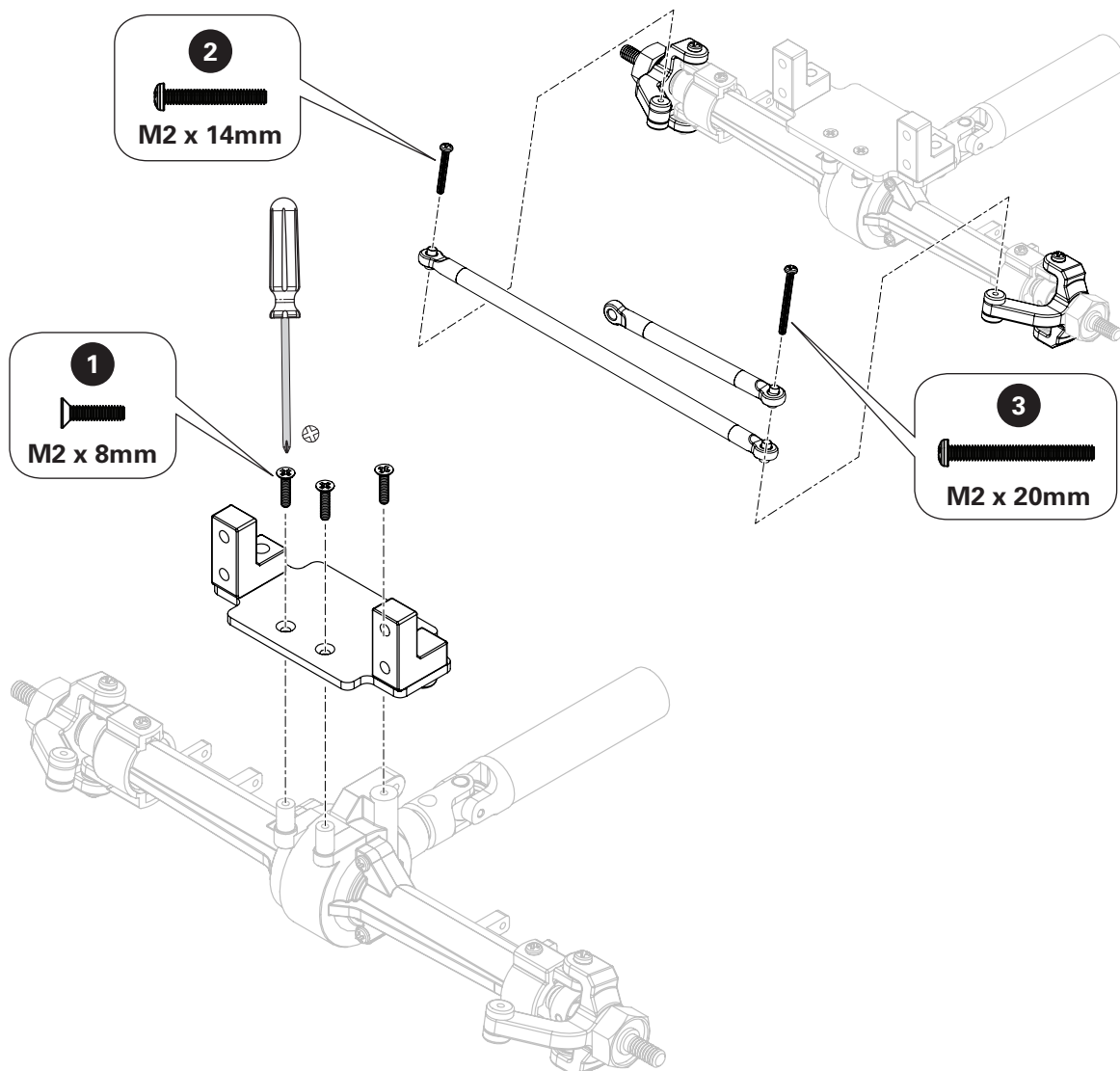
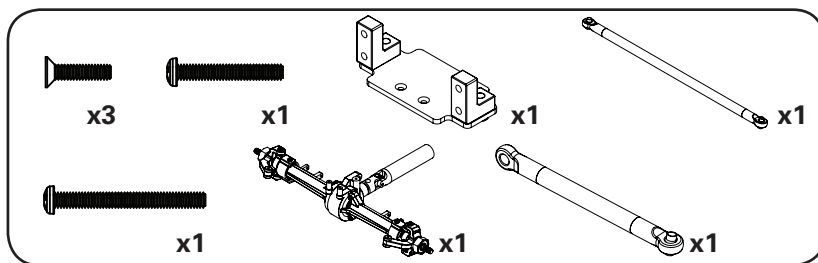
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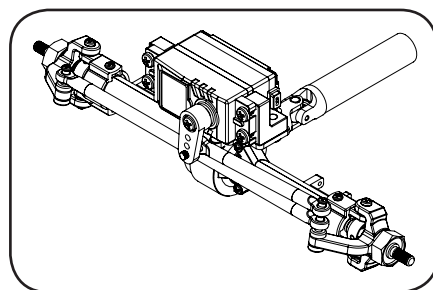
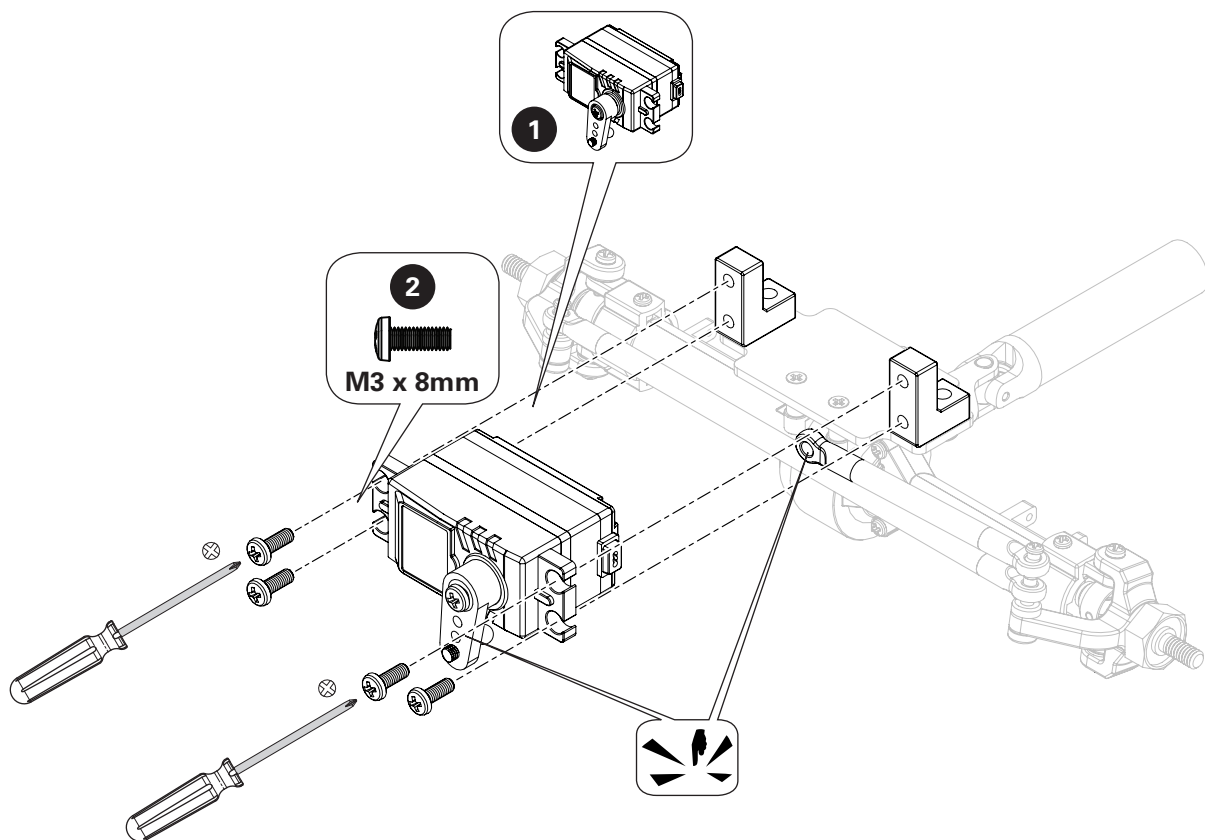
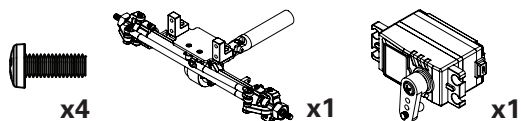
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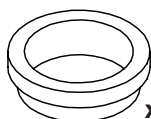
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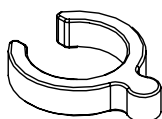
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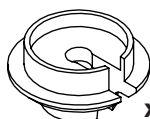
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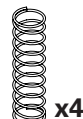
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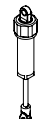
x4



x4



x4



x4

NOTICE: Spacer is optional.

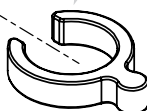
HINWEIS: Das Distanzstück ist optional.

REMARQUER : L'utilisation d'une entretoise est optionnelle.

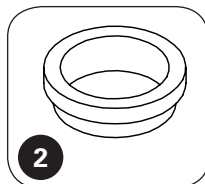
AVVISO: il distanziale è opzionale.



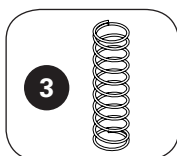
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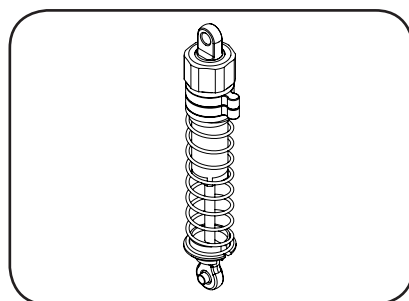
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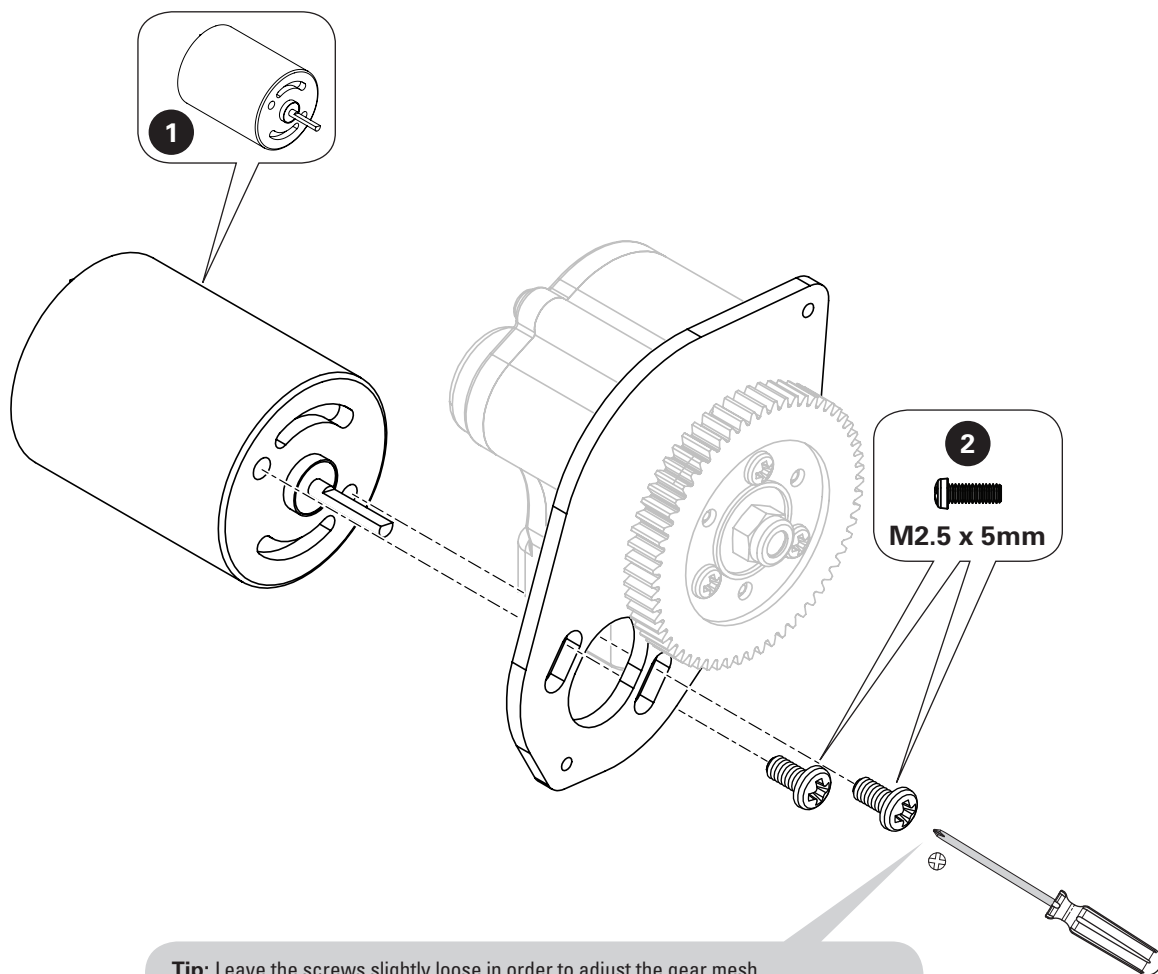
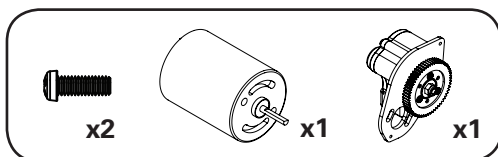
2



3



e1

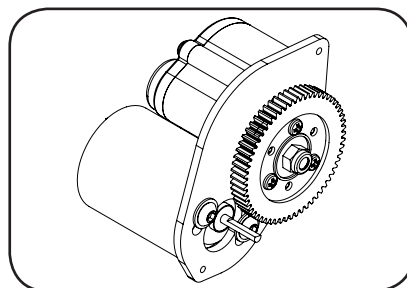


Tip: Leave the screws slightly loose in order to adjust the gear mesh.

Tipp: Schrauben leicht gelöst belassen, um die Verzahnung anzupassen.

Conseil : laissez les vis légèrement desserrées afin d'ajuster le maillage de rouages.

Consiglio: lasciare le viti leggermente allentate per regolare gli ingranaggi.



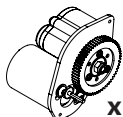
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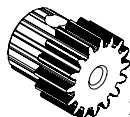
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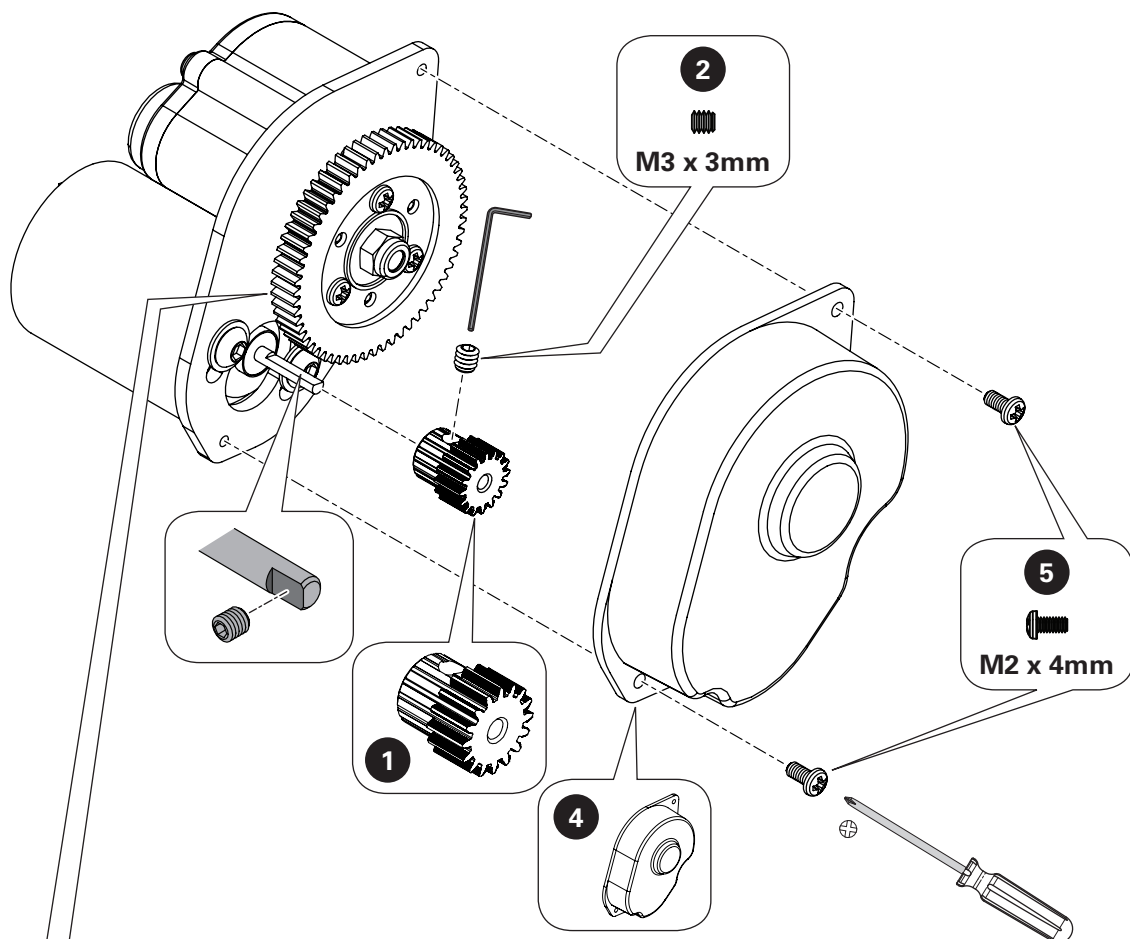
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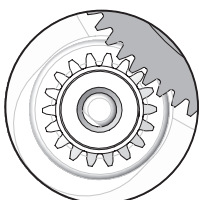
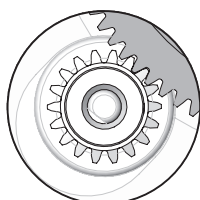
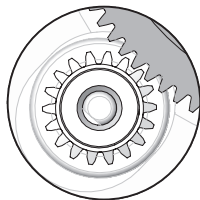
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x1



3

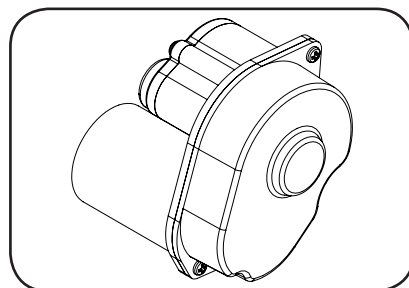


See: **SETTING THE GEAR MESH**, page 30.

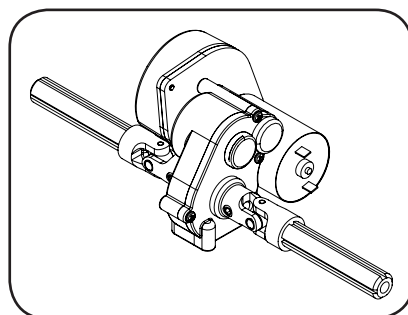
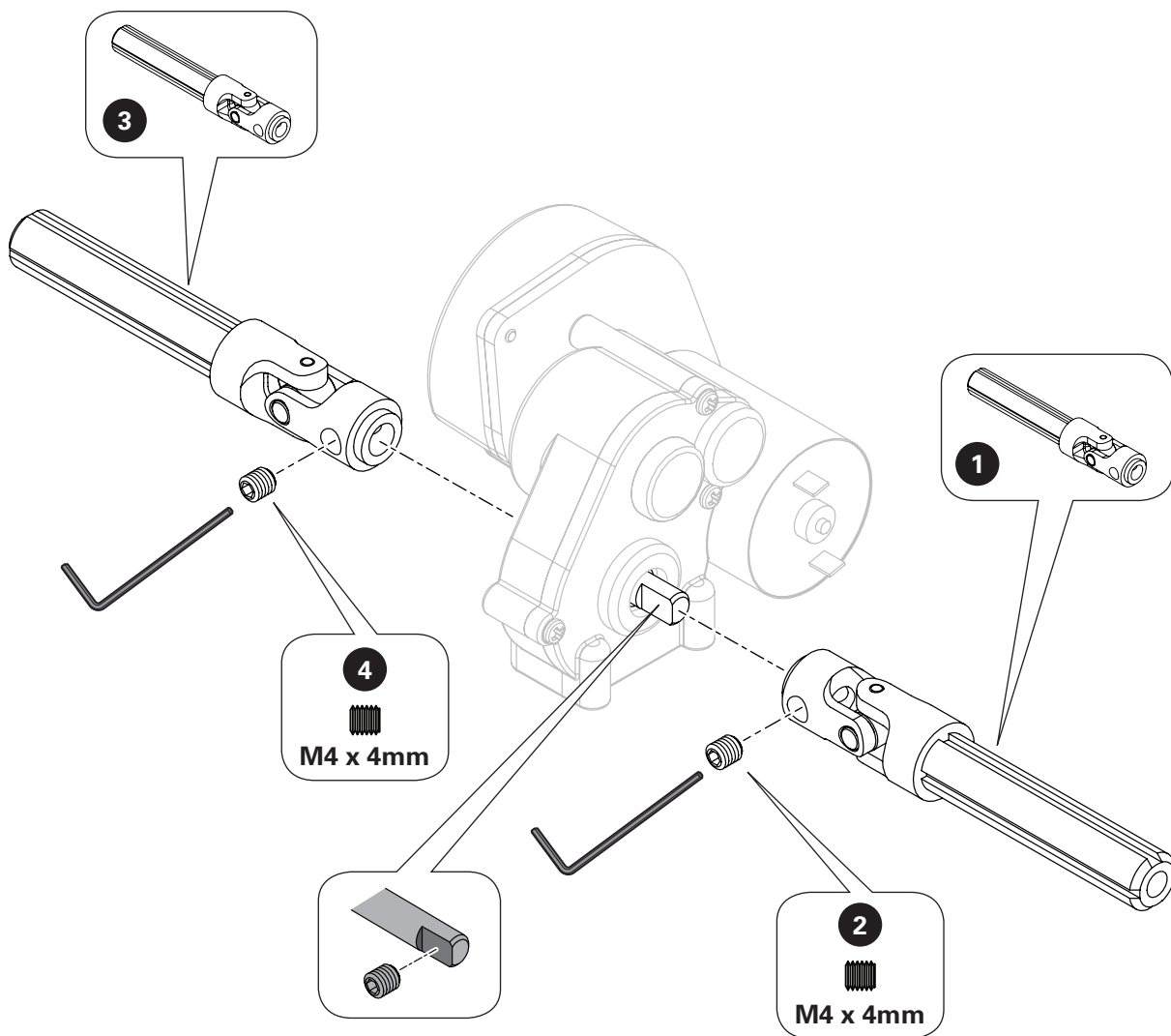
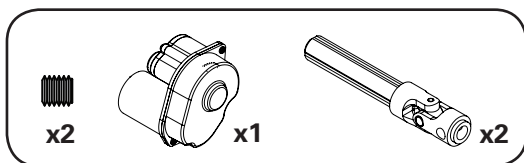
Siehe: **EINSTELLEN DES ZAHNEINGRIFFS**, Seite 30.

Voir la section: **MONTAGE DE L'ENGRENEMENT DE LA ROUE DENTÉE**, page 30.

V.: **IMPOSTAZIONE DEL RAPPORTO DEGLI INGRANAGGI**, pagina 30.



e3



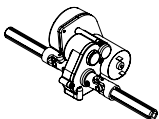
f1



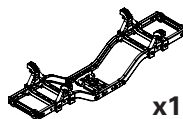
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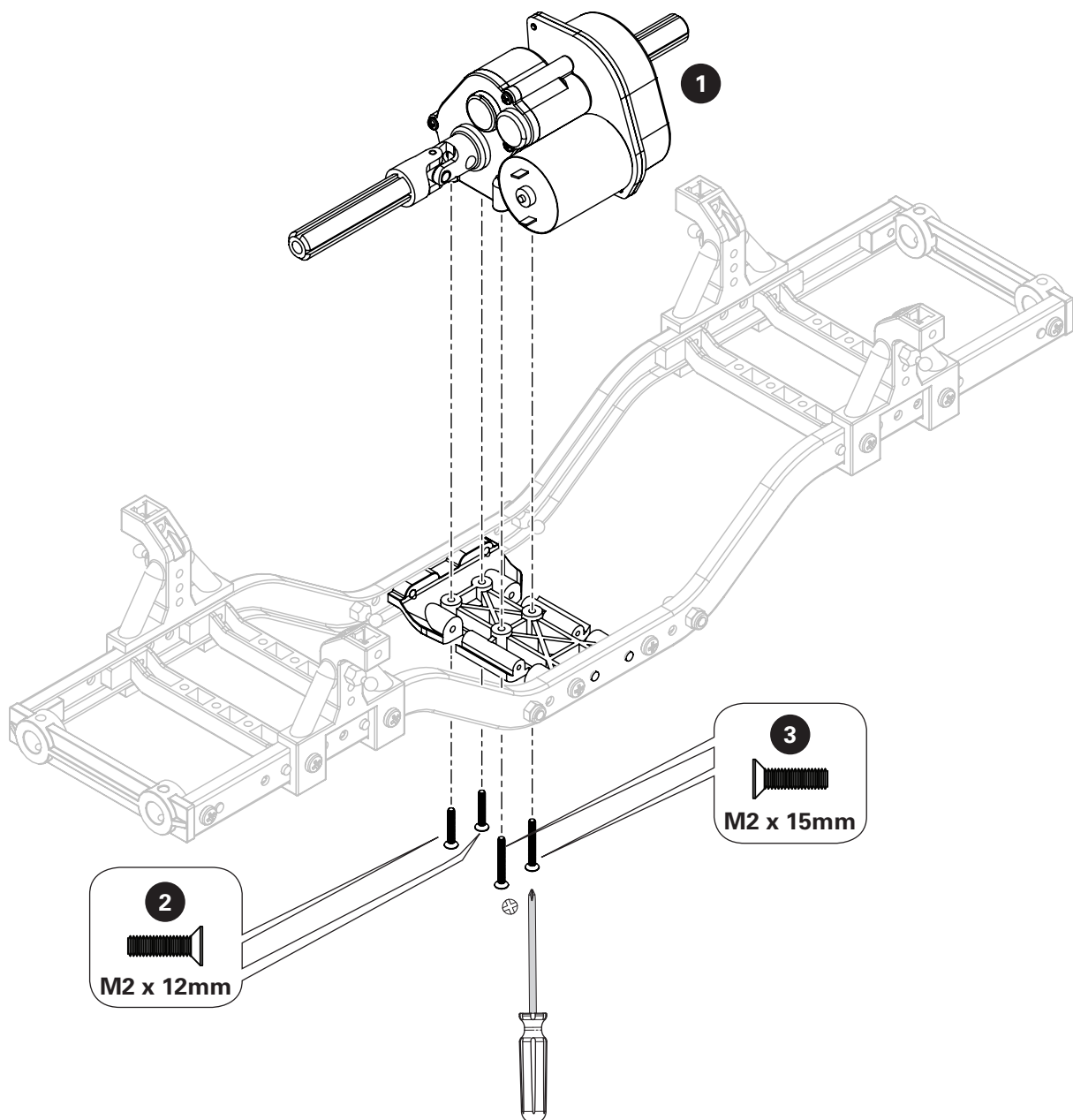
x2



x1



x1



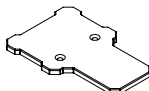
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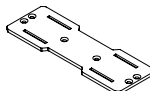
x5



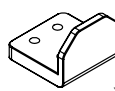
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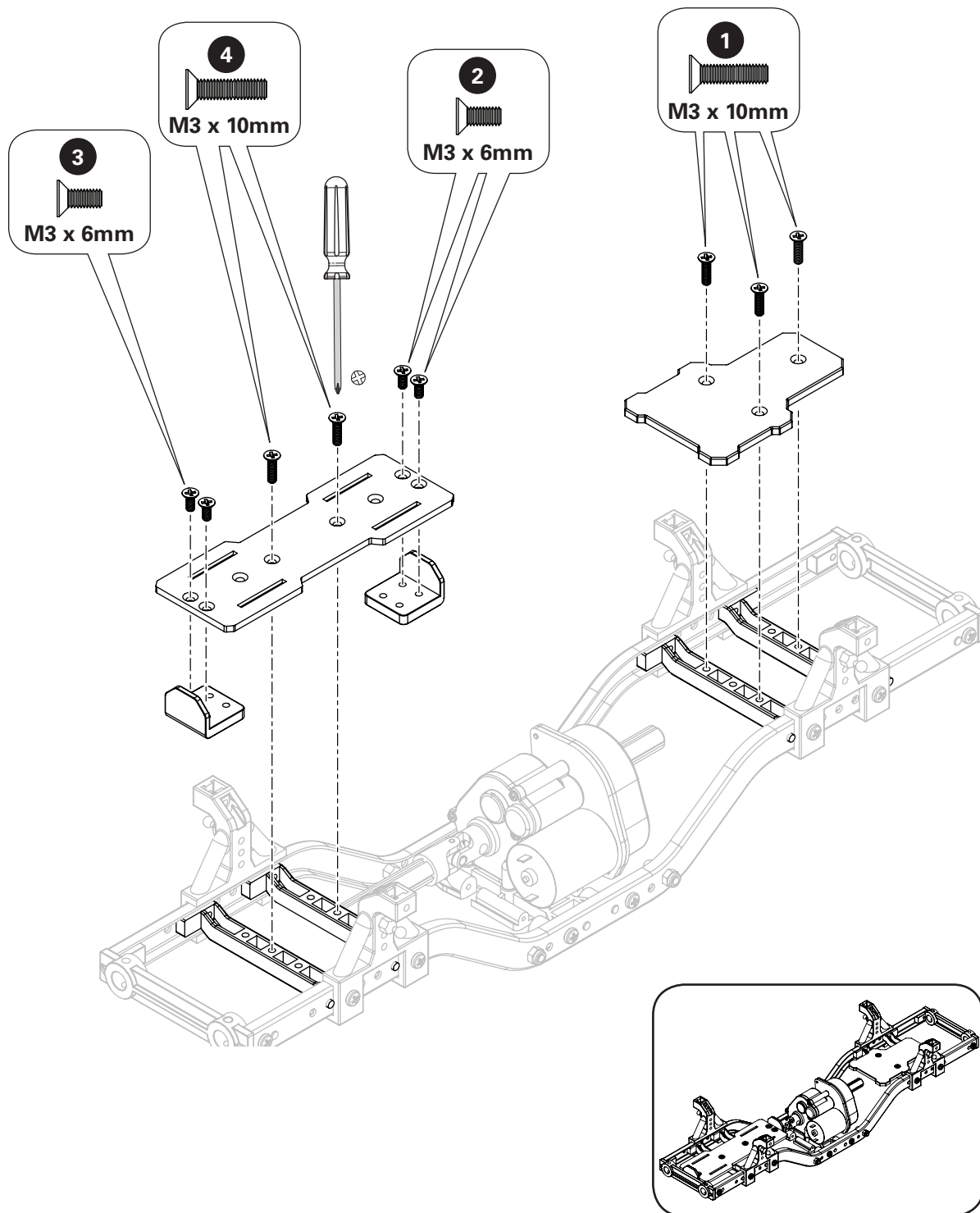
x1



x1



x2



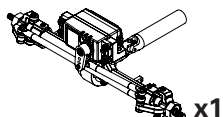
g1



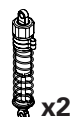
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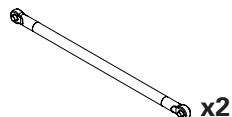
x2



x1



x2



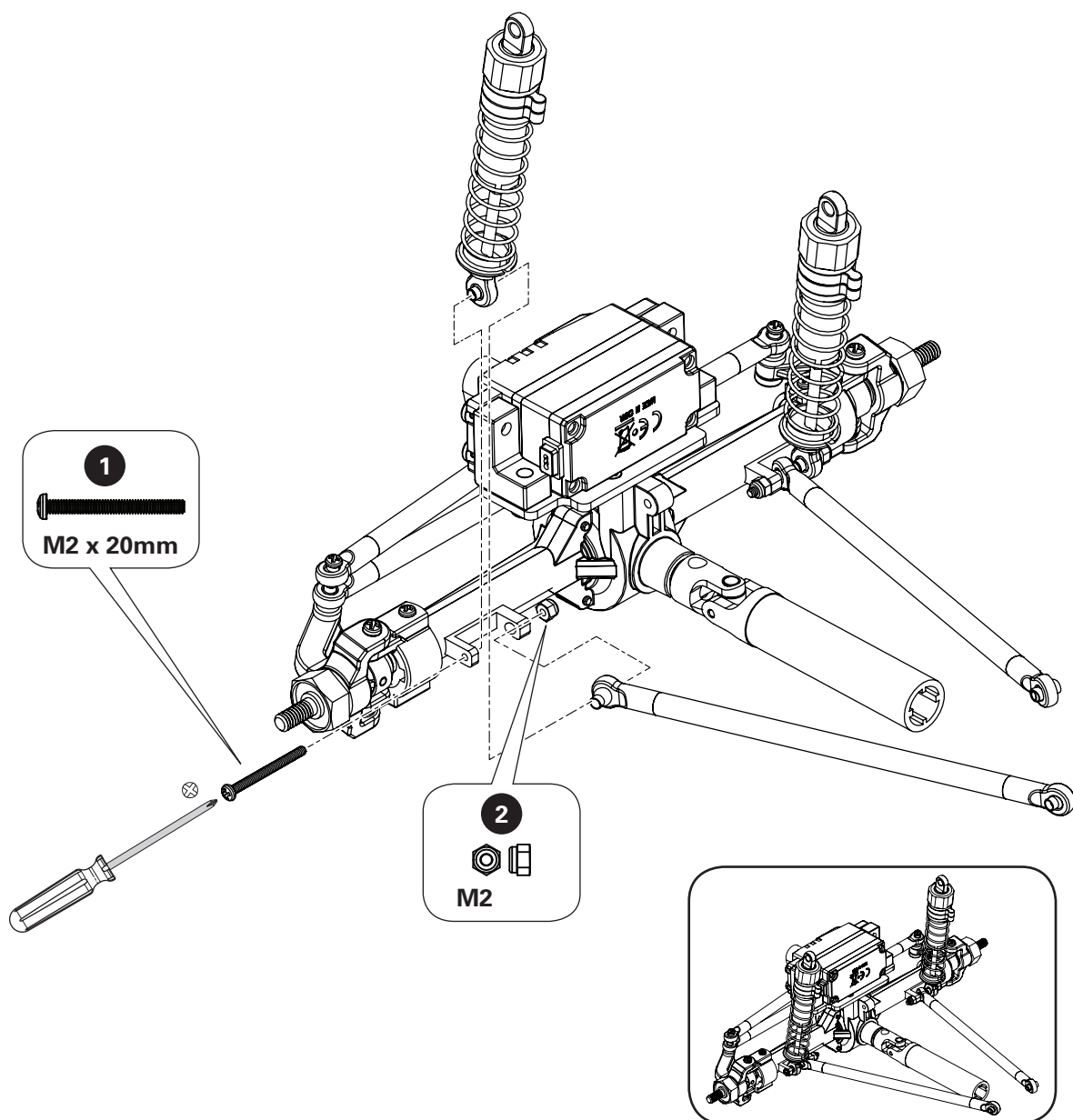
x2

Tip: Hold the shock and link in place while pushing the screw through the mount, shock, and link. Do not over tighten. There should be space and minimal movement between the shock and the link.

Tipp: Halten Sie den Dämpfer und die Verbindungsstange in Position, während Sie die Schraube durch den Befestigungspunkt, den Dämpfer und die Verbindungsstange schieben. Nicht zu fest anziehen. Zwischen Dämpfer und Verbindungsstange sollte ein geringes Spiel bestehen.

Conseil : Maintenez l'amortisseur et la biellette en place tout en poussant la vis à travers la coupelle, l'amortisseur et la biellette. Ne serrez pas trop. Vous devez laisser de l'espace et un léger mouvement entre l'amortisseur et la biellette.

Consiglio: tenere l'ammortizzatore e il leveraggio in posizione spingendo la vite attraverso il supporto, l'ammortizzatore e il leveraggio. Non stringere eccessivamente. Tra l'ammortizzatore e il leveraggio deve esserci spazio e movimento minimo.



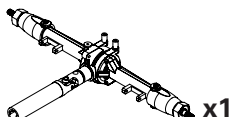
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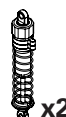
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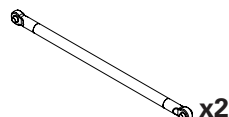
x2



x1



x2



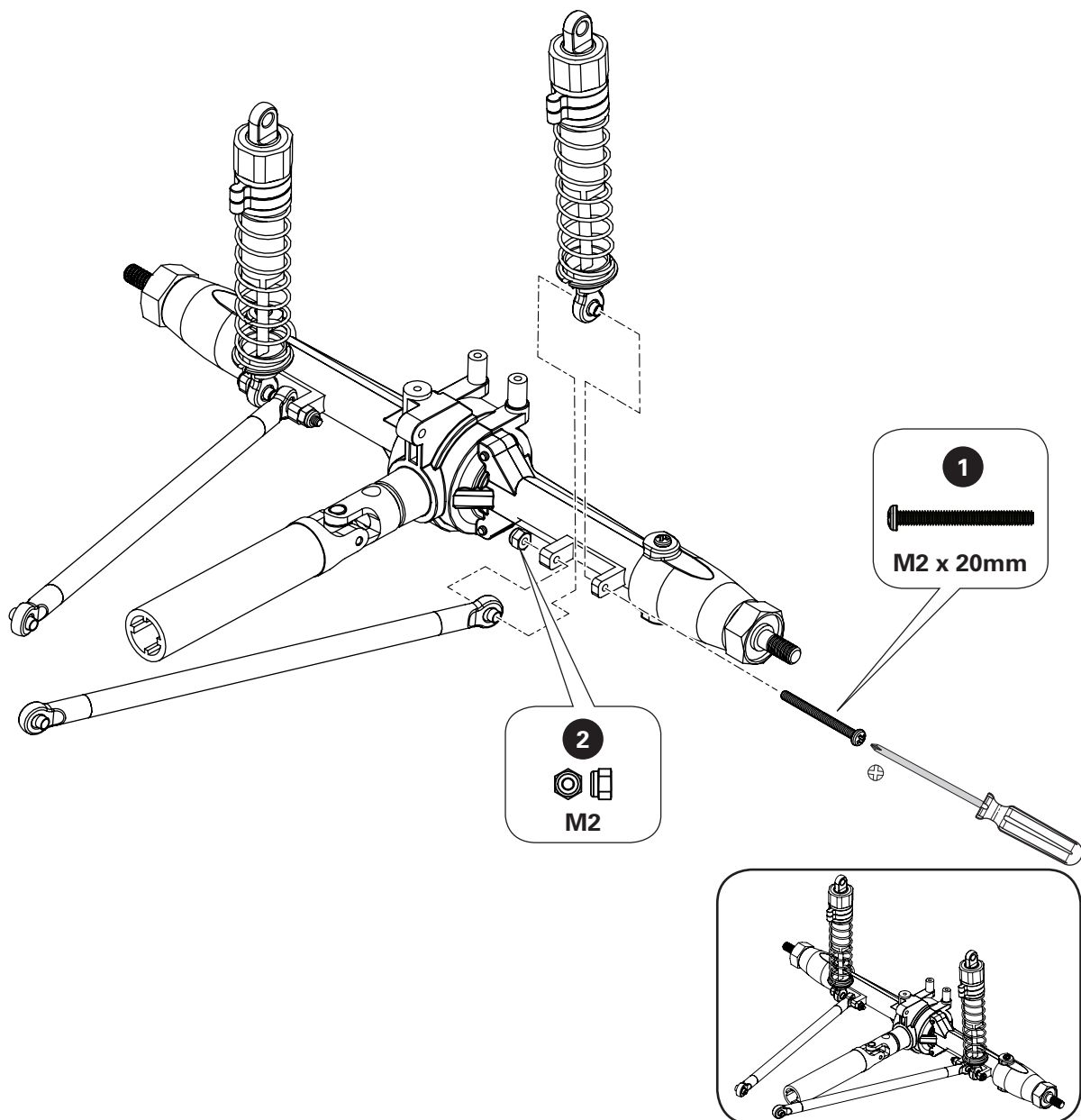
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Tip: Hold the shock and link in place while pushing the screw through the mount, shock, and link. Do not over tighten. There should be space and minimal movement between the shock and the link.

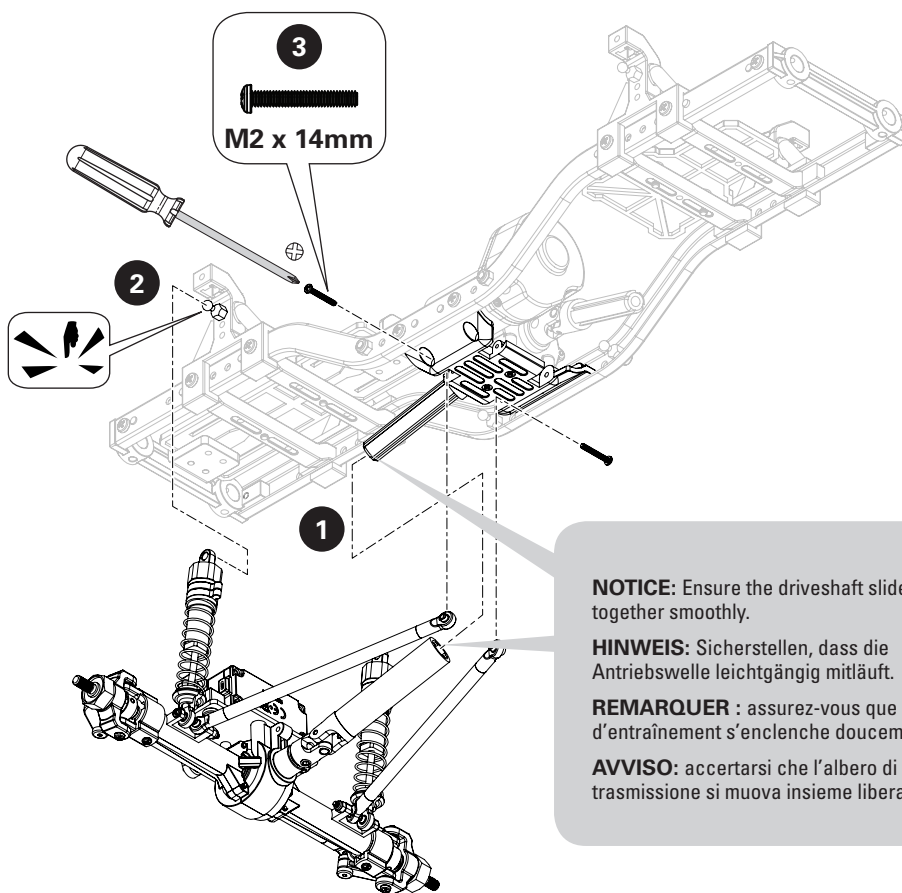
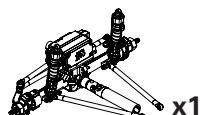
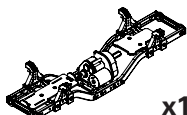
Tipp: Halten Sie den Dämpfer und die Verbindungsstange in Position, während Sie die Schraube durch den Befestigungspunkt, den Dämpfer und die Verbindungsstange schieben. Nicht zu fest anziehen. Zwischen Dämpfer und Verbindungsstange sollte ein geringes Spiel bestehen.

Conseil : Maintenez l'amortisseur et la biellette en place tout en poussant la vis à travers la coupelle, l'amortisseur et la biellette. Ne serrez pas trop. Vous devez laisser de l'espace et un léger mouvement entre l'amortisseur et la biellette.

Consiglio: tenere l'ammortizzatore e il leveraggio in posizione spingendo la vite attraverso il supporto, l'ammortizzatore e il leveraggio. Non stringere eccessivamente. Tra l'ammortizzatore e il leveraggio deve esserci spazio e movimento minimo.



g3a



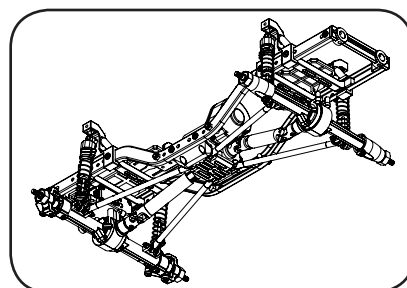
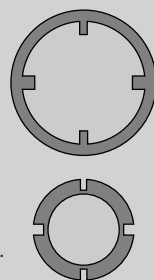
3
M2 x 14mm

NOTICE: Ensure the driveshaft slides together smoothly.

HINWEIS: Sicherstellen, dass die Antriebswelle leichtgängig mitläuft.

REMARQUER : assurez-vous que l'arbre d'entraînement s'enclenche doucement.

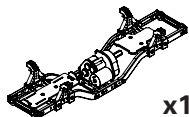
AVVISO: accertarsi che l'albero di trasmissione si muova insieme liberamente.



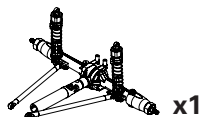
g3b



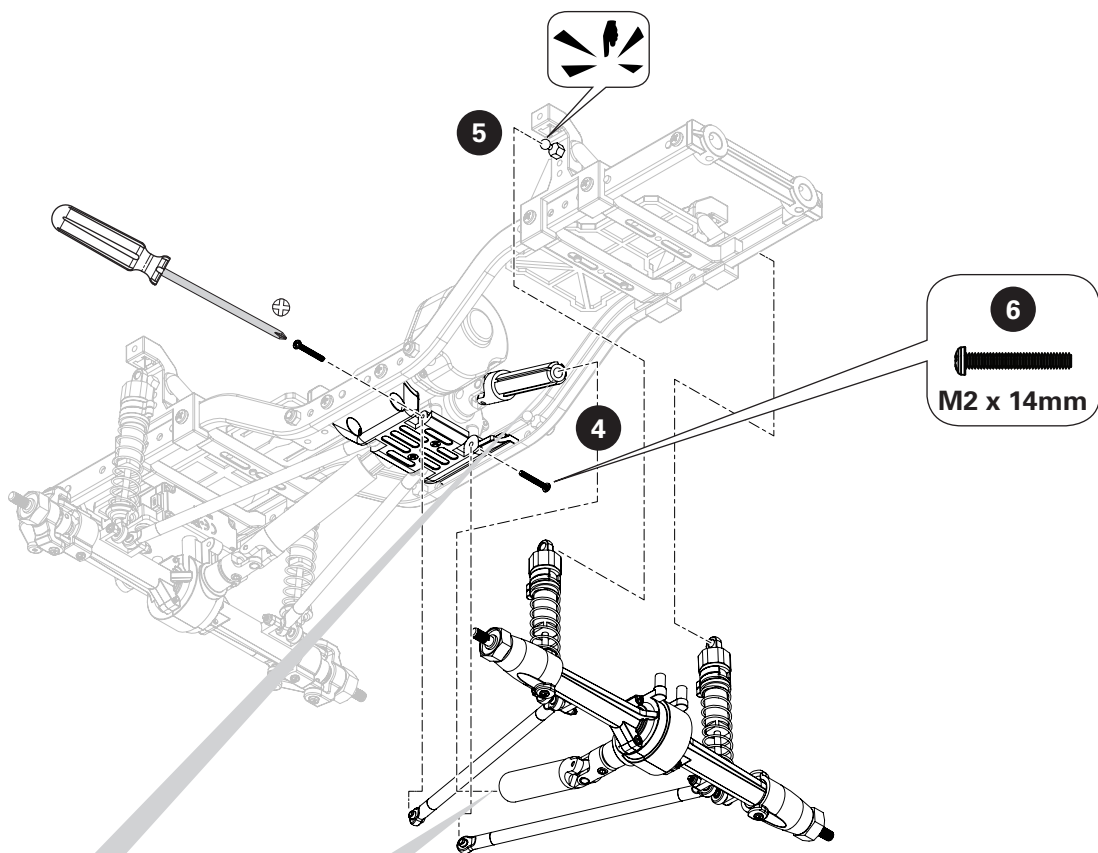
x2



x1



x1

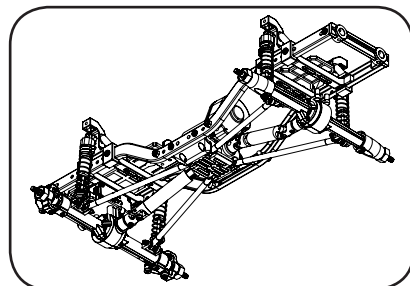
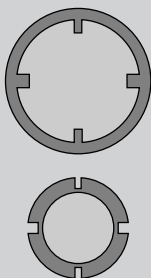


NOTICE: Ensure the driveshaft slides together smoothly.

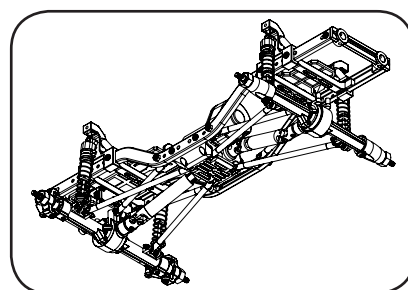
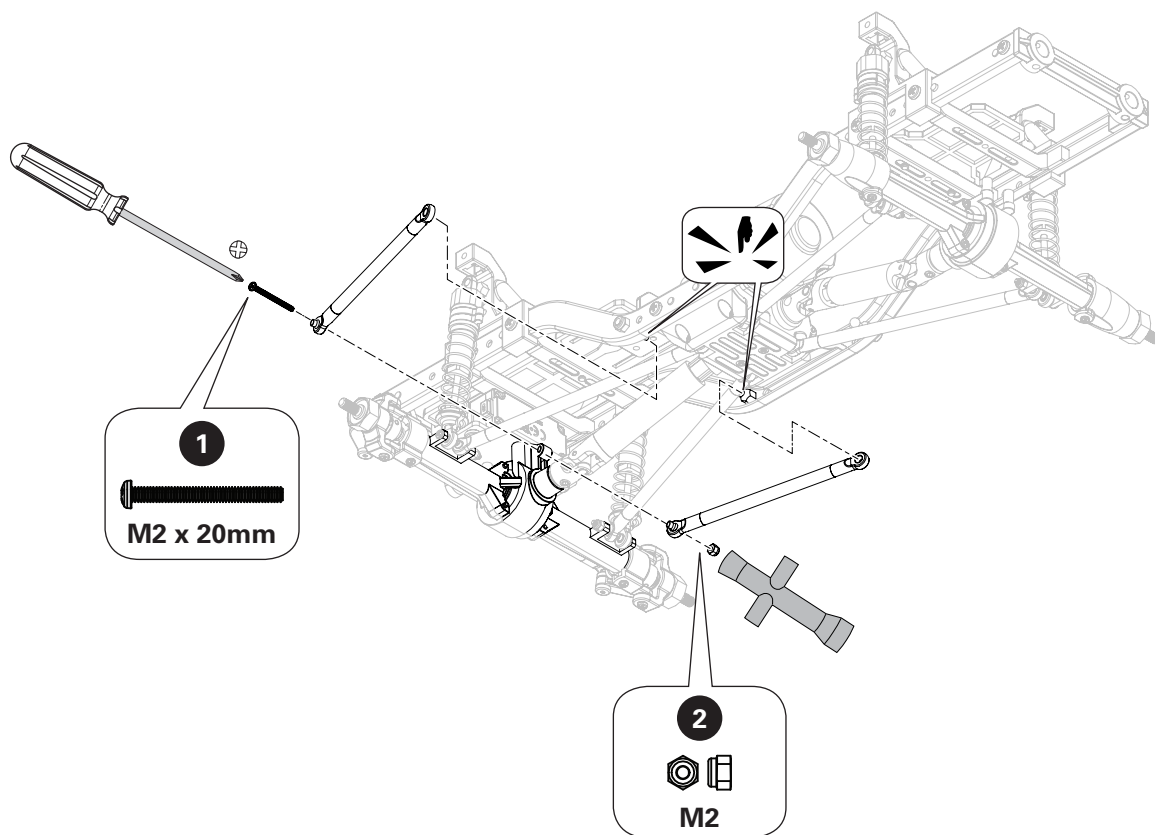
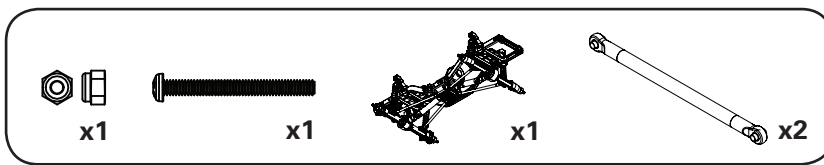
HINWEIS: Sicherstellen, dass die Antriebswelle leichtgängig mitläuft.

REMARQUER : assurez-vous que l'arbre d'entraînement s'enclenche doucement.

AVVISO: accertarsi che l'albero di trasmissione si muova insieme liberamente.



g4a



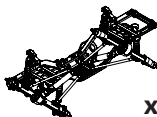
g4b



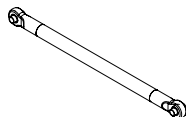
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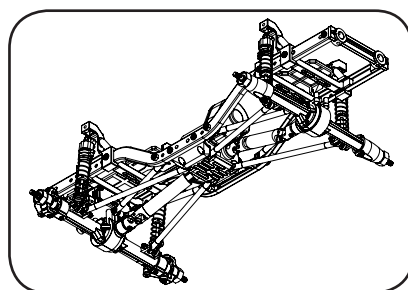
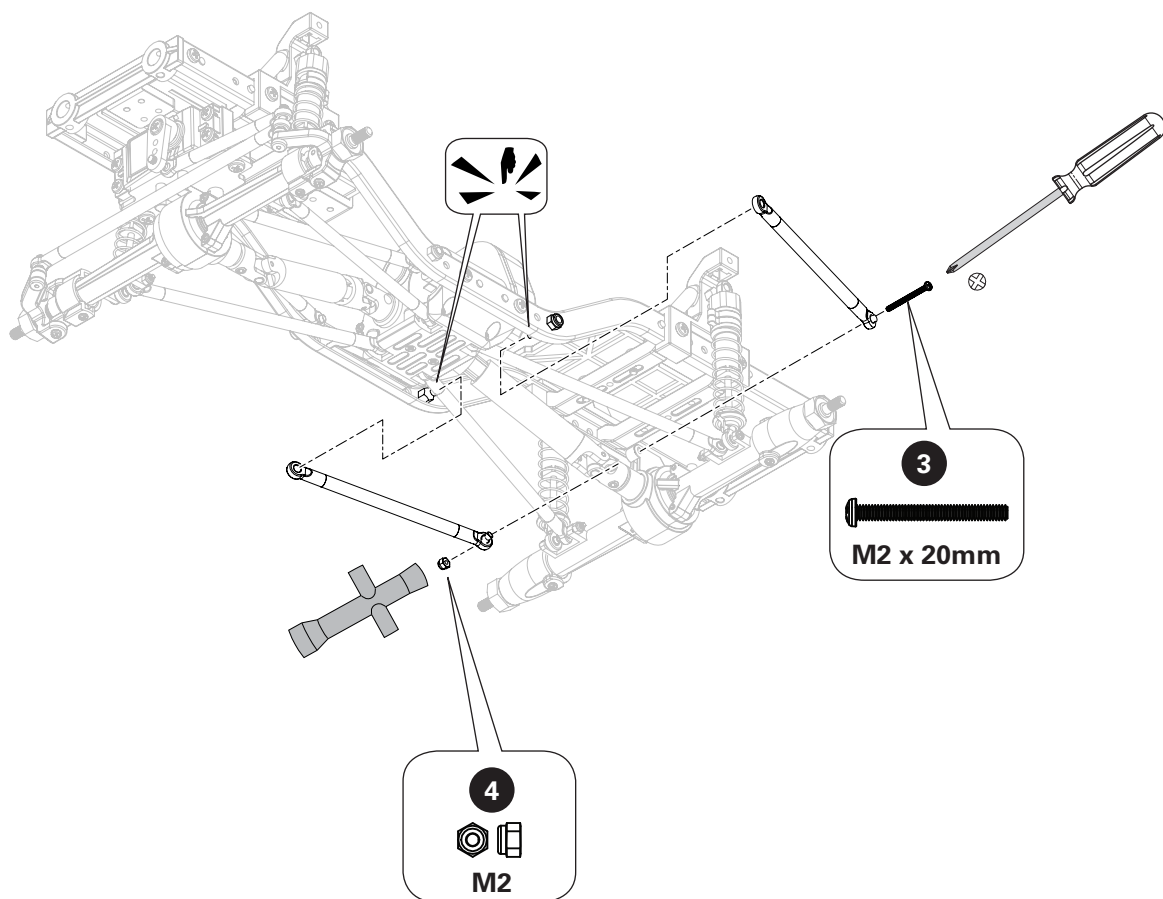
x1



x1



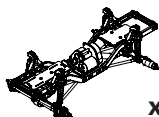
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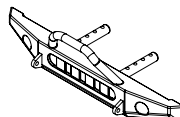
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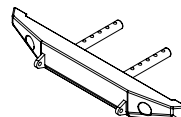
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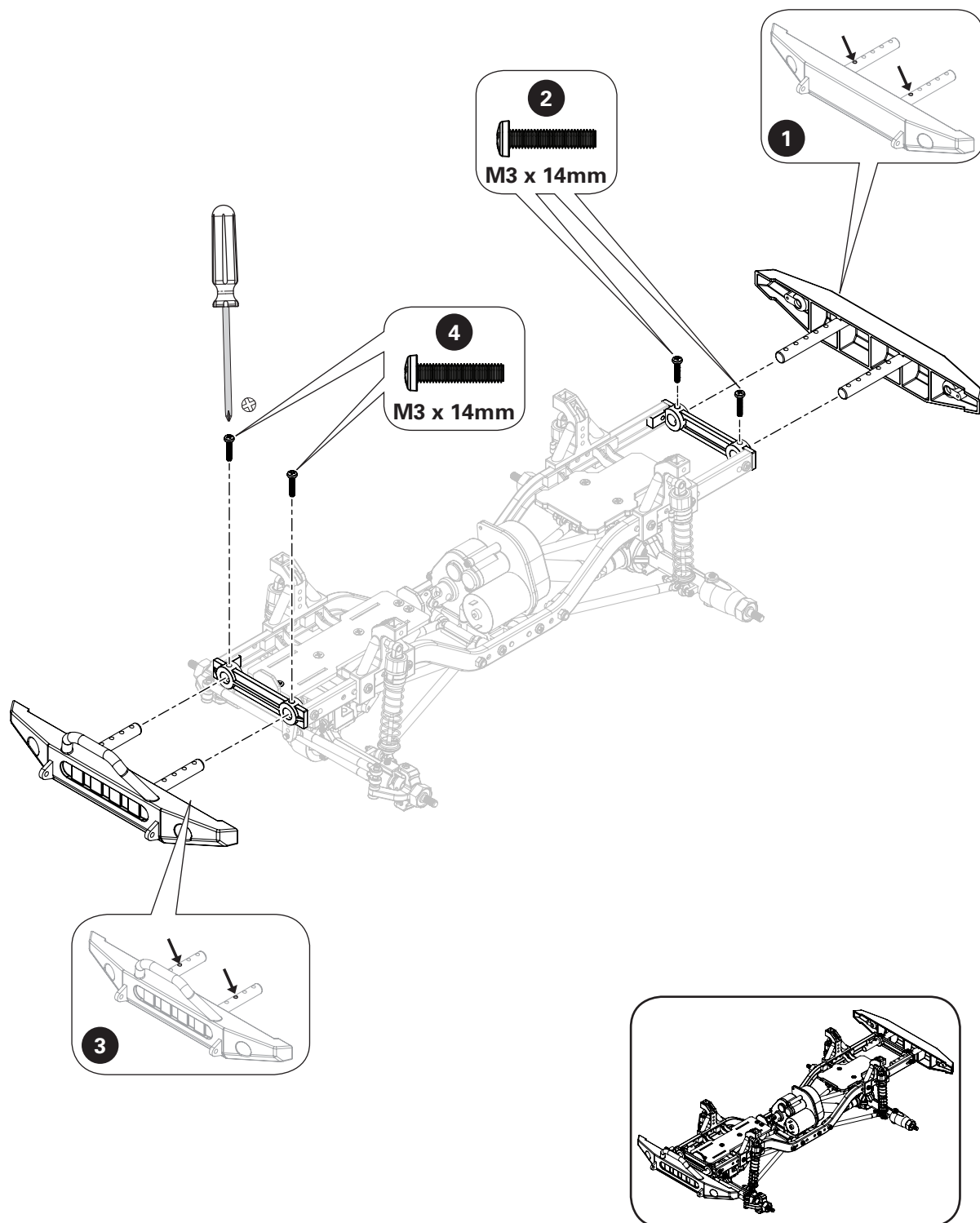
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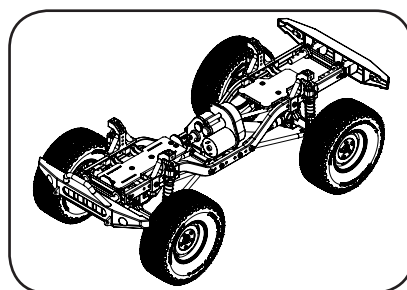
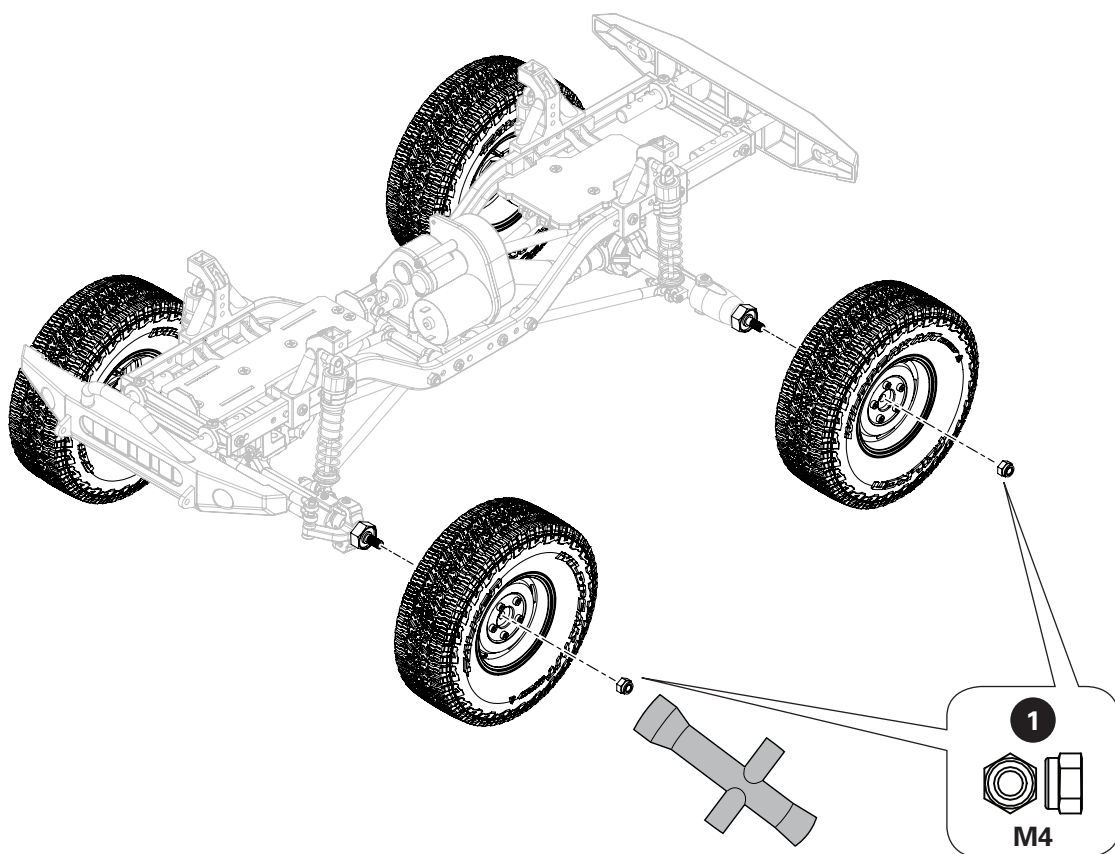
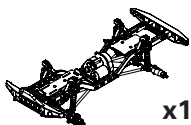
x1



x1



h2



i1



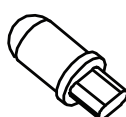
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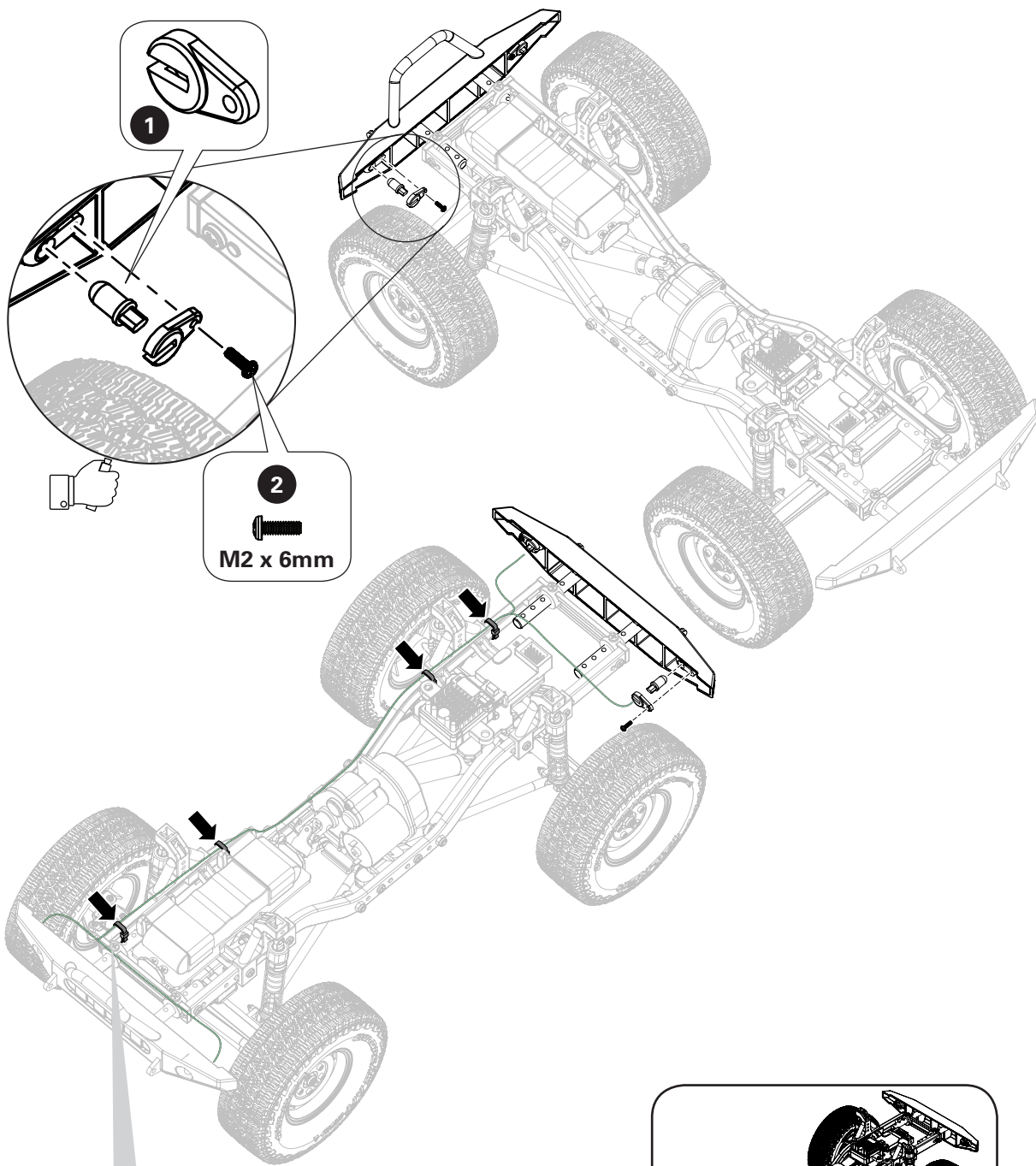
x1



x4



x4

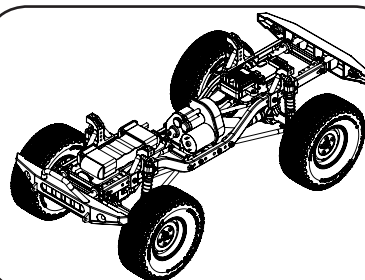


Tip: Use zip ties to secure the excess wiring to the chassis.

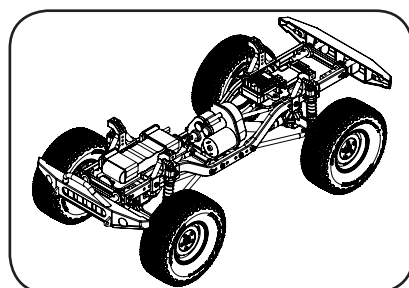
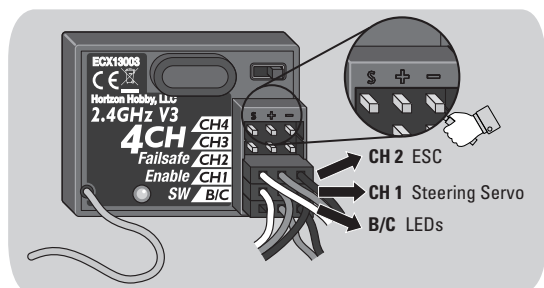
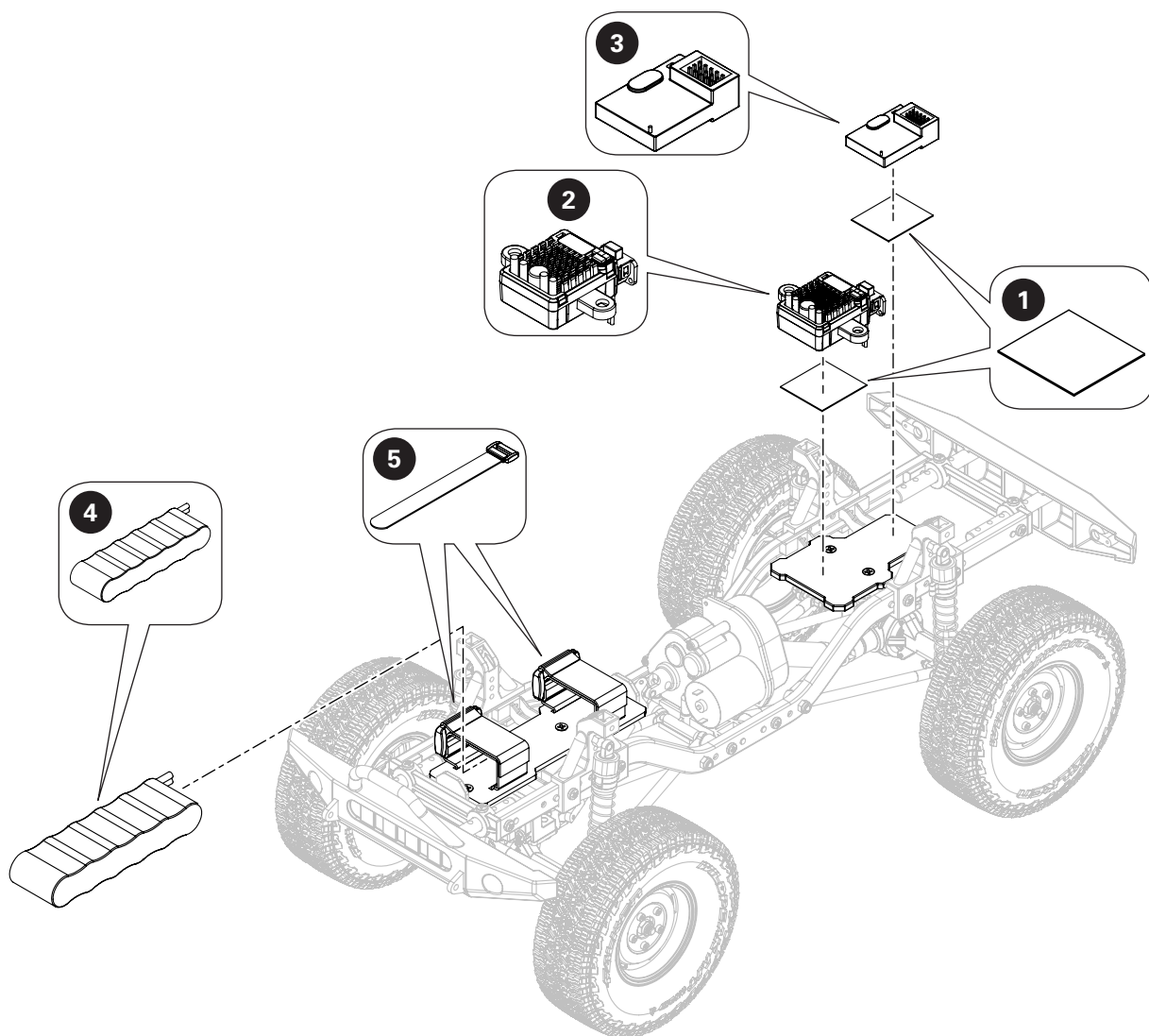
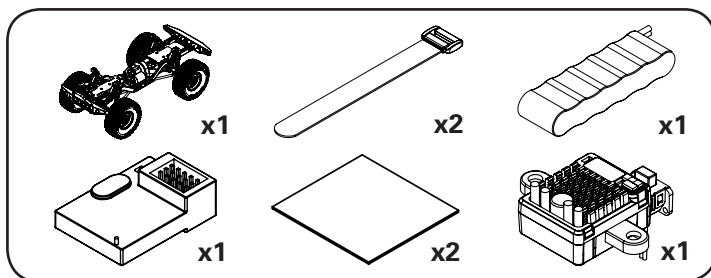
Tipp: Kabelbinder zum Sichern der überschüssigen Kabel an der Karosserie verwenden.

Conseil : utilisez des colsons pour fixer l'excédent de câble au châssis.

Consiglio: utilizzare fascette per assicurare i cavi in eccesso al telaio.



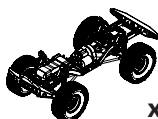
i2



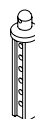
j1



x4



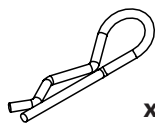
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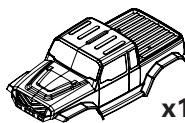
x2



x2

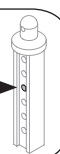


x4

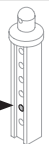


x1

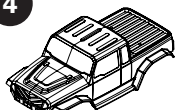
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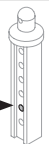
2



4



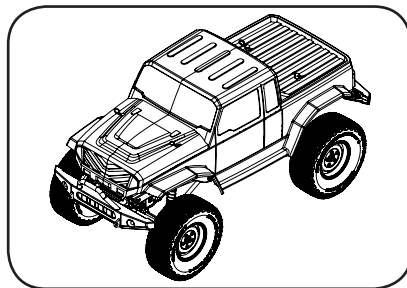
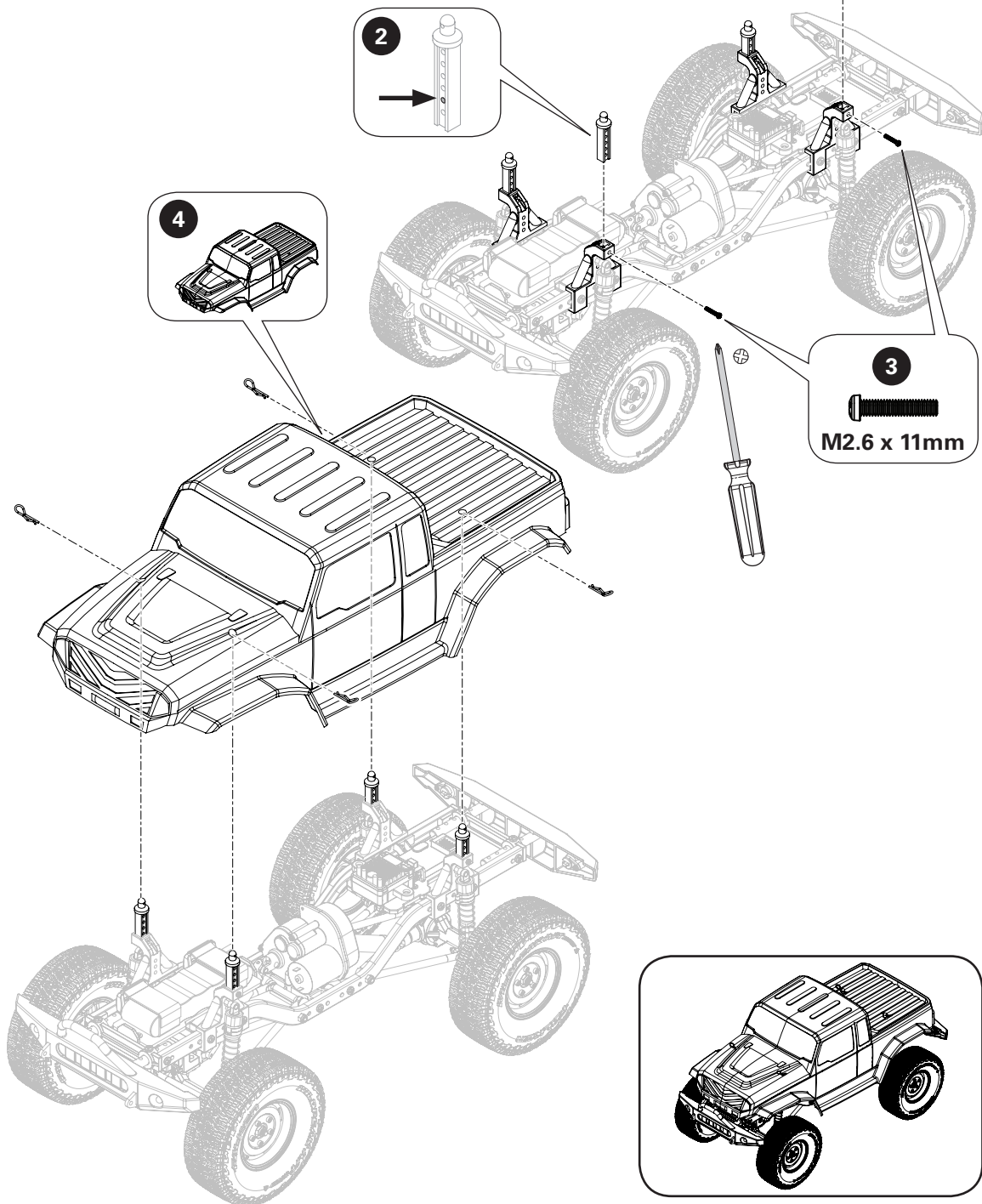
2



3



M2.6 x 11mm



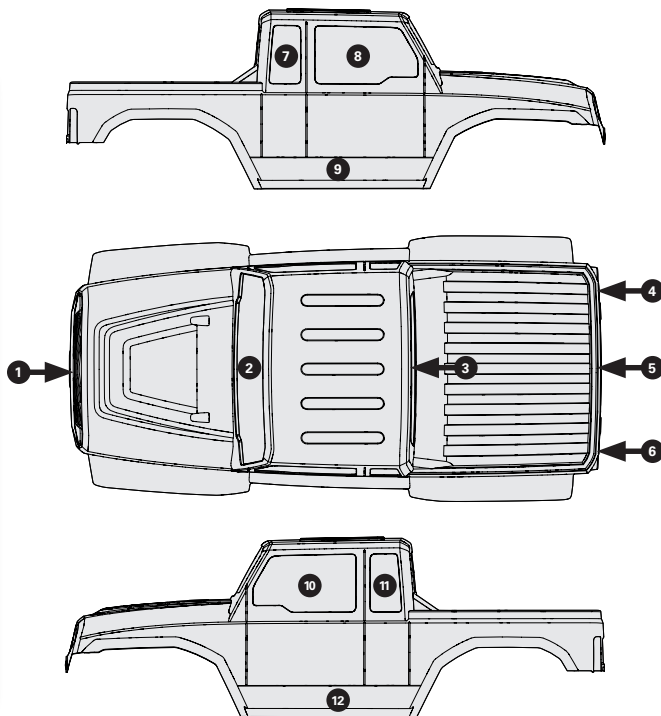
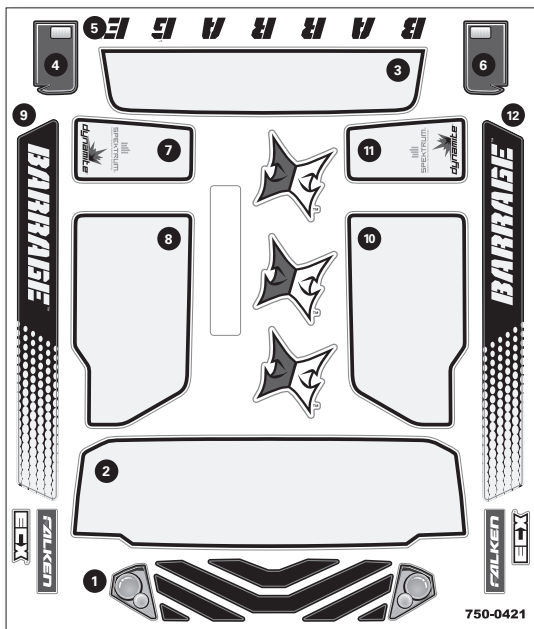
STEP 3: PAINT AND STICKER THE BARRAGE BODY SHELL

1. Clean the inside of the Barrage® body shell using a small amount of water and dish soap. Thoroughly rinse and dry the body shell with a cloth towel.

Tip: Do not use paper towels.

2. Place window masks inside the body shell.

3. Paint the **inside** of the Barrage body shell.
4. Once the paint is completely dry, remove the over-spray film from the outside of the body and the window masks from inside the body.
5. Using the chart below, apply the windows, grill, head lights, and tail lights. Apply additional stickers to customize the Barrage body.

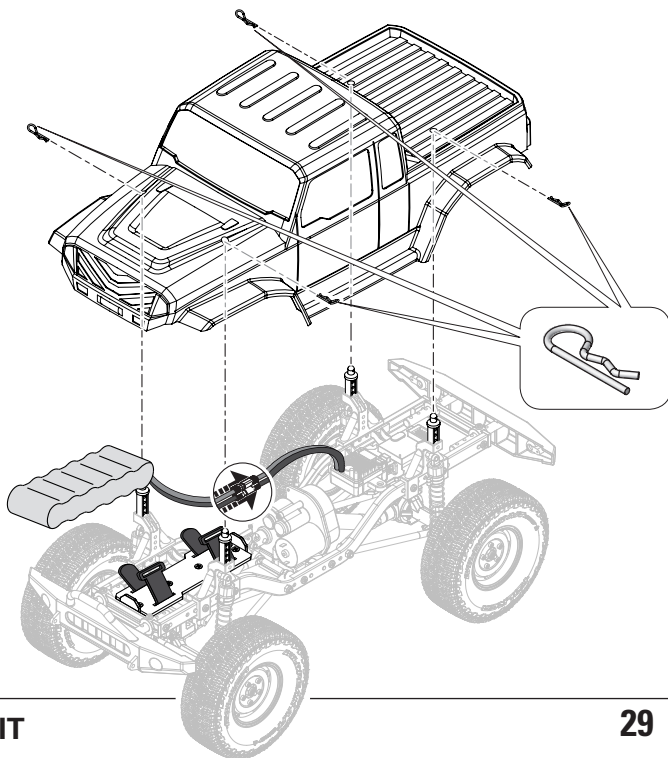


STEP 4: INSTALL THE VEHICLE BATTERY

When the battery is charged, install it into the Barrage chassis.

1. Secure the battery pack using the hook and loop straps.
2. Plug the EC3™ battery connector into the EC3 ESC connector. They will only plug together in one direction.
3. Install the body shell and secure it with the four body clips.

CAUTION: Connecting the battery to the ESC with reversed polarity will cause damage to the ESC, the battery or both. Damage caused by incorrectly connecting the battery is not covered under warranty.



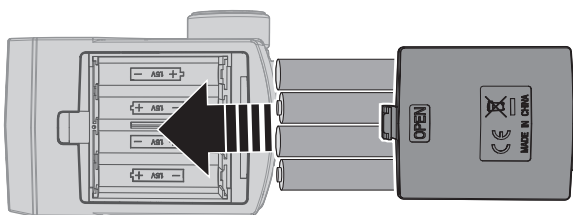
STEP 5: SET UP THE RADIO SYSTEM

1. Remove the battery cover from the transmitter.
2. Install four AA batteries as shown.
3. Re-install the battery cover.
4. Review the transmitter controls (below).

The transmitter and ESC are bound at the factory. If you need to rebind, follow the **BINDING** instructions.

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.

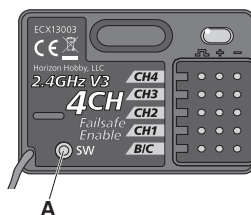
CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to national regulations.



BINDING

The included transmitter and receiver are bound at the factory. If you need to rebind, follow the instructions below.

1. Power off the transmitter and ESC.
2. Connect a fully charged battery pack to the ESC.
3. Power on the ESC. The RED LED on the receiver flashes.
4. Press and release the bind button (A) on the receiver.
The RED LED on the receiver flashes rapidly.
5. Power on the transmitter.
6. The RED LED on the receiver turns solid when the radio system is bound.

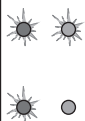


You must rebind when binding the receiver to a different transmitter.

NOTICE: Do not attempt to bind the transmitter and receiver if there are other compatible transmitters in bind mode within 400 feet. Doing so may result in unexpected binding.

TRANSMITTER CONTROLS

Battery Level Indicator



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

Solid Red: Battery voltage is critically low (below 4V). Replace transmitter batteries.

Throttle Dual Rate



Adjusts the maximum amount of throttle the vehicle can be given

Steering Dual Rate



Adjusts the amount the steering wheel moves when the steering wheel is turned left or right

Throttle Trim

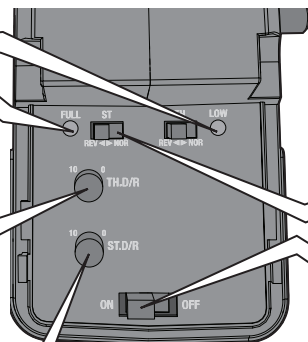


Adjusts the neutral point of the electronic speed control

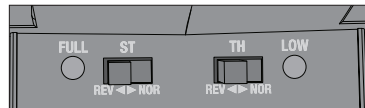
Steering Trim



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



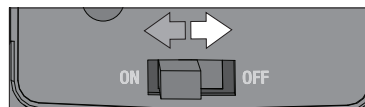
Reverse Switch



Allows you to change the direction of steering (ST. REV) and throttle (TH. REV) controls (Ensure proper function with a radio system test).

Power Switch

Power on or off the transmitter

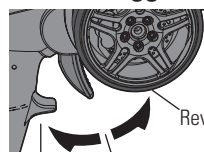


Steering Wheel



Controls right and left steering

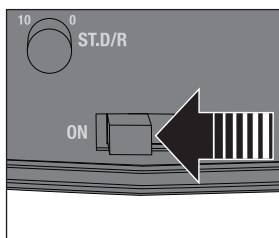
Throttle Trigger



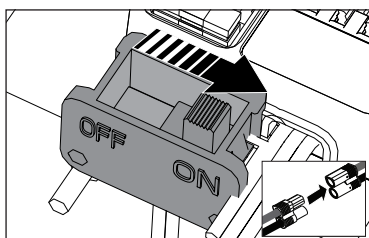
Controls power to the motor for forward or reverse

STEP 6: DRIVE

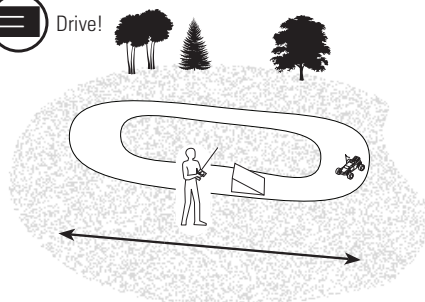
- 1** Power on the transmitter.



- 2** Power on the ESC.

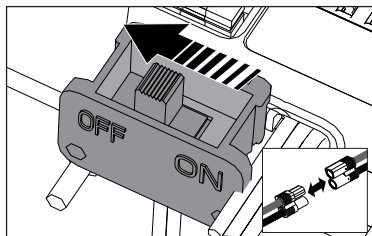


- 3** Drive!

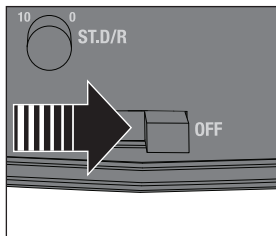


WHEN YOU ARE FINISHED

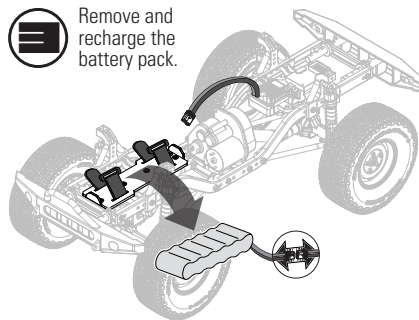
- 1** Power off the ESC.



- 2** Power off the transmitter.



- 3** Remove and recharge the battery pack.



ELECTRONIC SPEED CONTROL (ESC)

Connecting

1. Connect the RED (+) ESC wire to the RED (+) motor wire.
2. Connect the BLACK (-) ESC wire to the BLACK (-) motor wire.

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

Calibrating

Ensure proper ESC function by calibrating the ESC to your transmitter inputs.

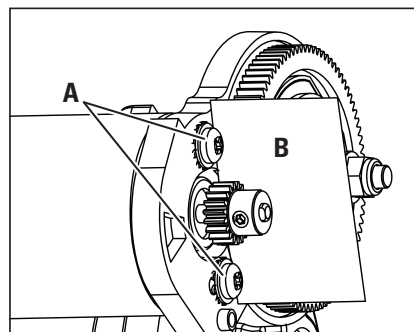
1. Power OFF the ESC.
2. Ensure your transmitter is powered ON, the throttle is not reversed, the throttle trim is neutral and the throttle travel range is at 100%.
3. Keep the throttle at neutral and power ON the ESC.
4. The ESC automatically calibrates the throttle range after 3 seconds.
5. One long beep will sound when the ESC is ready to run.

SETTING THE GEAR MESH

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 can be damaged by the motor pinion gear. If the mesh is too tight, speed can be limited and the motor and ESC will overheat.

Set the gear mesh by following these simple steps:

1. Loosen the 2 motor screws (**A**).
2. Put a small piece of paper (**B**) 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. Install the gear cover.



TROUBLESHOOTING GUIDE

Problem	Possible Cause	Solution
Short Run Time	<ul style="list-style-type: none"> Battery damaged/not charged Motor dirty 	<ul style="list-style-type: none"> Check/change battery Check/clean
Sluggish Action	<ul style="list-style-type: none"> Motor dirty Bind in drivetrain Vehicle battery is not charged 	<ul style="list-style-type: none"> Check/clean Clean/adjust Replace/recharge
Controls Reversed	<ul style="list-style-type: none"> ST. REV or TH. REV 	<ul style="list-style-type: none"> Change switch position
Motor/ESC overheat	<ul style="list-style-type: none"> Over-geared for the driving environment 	<ul style="list-style-type: none"> Install smaller pinion on the motor
Does Not Operate	<ul style="list-style-type: none"> Transmitter batteries low Transmitter powered off ESC powered off Vehicle battery is not charged Dual-rate (D/R) steering and/or throttle knobs on transmitter are turned to zero 	<ul style="list-style-type: none"> Replace/recharge Power on Power on Replace/recharge Adjust dual-rate (D/R) steering and/or throttle knobs to 10
Poor Range	<ul style="list-style-type: none"> Transmitter batteries low Receiver antenna damaged 	<ul style="list-style-type: none"> Replace/recharge Check/repair/replace
The system will not connect	<ul style="list-style-type: none"> Transmitter and receiver too near each other Transmitter and receiver too near large metal objects (vehicles, etc.) Throttle trim out of center on transmitter Receiver accidentally put in bind mode so receiver is no longer bound 	<ul style="list-style-type: none"> Move transmitter 3.3–9.8ft (1–3m) from receiver Move away from large metal objects (vehicles, etc.) Set throttle trim on transmitter to zero. Turn off and on transmitter and vehicle Rebind transmitter and receiver
The receiver goes into failsafe mode a short distance away from the transmitter	<ul style="list-style-type: none"> Check the receiver antenna to be sure it is not cut or damaged 	<ul style="list-style-type: none"> Make sure the antenna is in the antenna tube Contact Horizon Product Support
The receiver quits responding during operation	<ul style="list-style-type: none"> Low battery voltage Loose or damaged wires or connectors between battery and receiver 	<ul style="list-style-type: none"> Completely recharge battery 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	<ul style="list-style-type: none"> Transmitter accidentally put in bind mode, ending bind to receiver 	<ul style="list-style-type: none"> Bind transmitter to receiver
Vehicle moves forward or backward without input from user	<ul style="list-style-type: none"> Throttle trim on transmitter not centered 	<ul style="list-style-type: none"> Adjust throttle trim to set neutral point
Car does not drive straight	<ul style="list-style-type: none"> Steering trim on transmitter not centered 	<ul style="list-style-type: none"> Adjust steering trim so vehicle drives straight
No steering or lack of steering	<ul style="list-style-type: none"> Steering dual-rate (D/R) not adjusted correctly Servo failed 	<ul style="list-style-type: none"> Adjusts steering dual-rate (D/R) knob on transmitter to desired steering throw Contact Horizon Product Support
No throttle or lack of throttle	<ul style="list-style-type: none"> Throttle dual-rate (D/R) not adjusted correctly ESC failed Motor failed 	<ul style="list-style-type: none"> Adjust the throttle dual-rate (D/R) knob on transmitter to desired steering throw Contact Horizon Product Support Contact Horizon Product Support
Clicking noise in transmission area	<ul style="list-style-type: none"> Dirt or rocks in spur gear Motor moved away from spur gear 	<ul style="list-style-type: none"> Remove gear cover and inspect. If necessary, replace 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 LiPo batteries to Horizon. If you have any issue with a LiPo 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 unserviced 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
United States of America	Horizon Service Center (Repairs and Repair Requests)	servicecenter.horizonhobby.com/RequestForm/	4105 Fieldstone Rd Champaign, Illinois 61822 USA
	Horizon Product Support (Product Technical Assistance)	productsupport@horizonhobby.com 877-504-0233	
	Sales	websales@horizonhobby.com 800-338-4639	
European Union	Horizon Technischer ServiceHorizon Sales: Horizon Hobby GmbH	service@horizonhobby.eu +49 (0) 4121 2655 100	Hanskampring 9 D 22885 Barsbüttel, Germany

FCC Statement

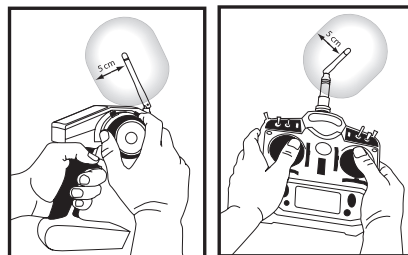
FCC ID: BRWECX13002 This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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 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: 6157A-ECX13002 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.

CE 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, EMC, and LVD 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.

Replacement Parts List • Teileliste

Part Number	English	Deutsch
DYNS1206	Tazer 390 Motor	Motor: Tazer 370
DYNS2210	WP 60A FWD/REV Brushed ESC	WP 60A Bürstenregler Vorwärts/rückwärts
ECX13002	2.4GHz Transmitter, 2-Channel V3	2.4GHz 2 Kanal Sender V3
ECX13003	2.4GHz Receiver WP, 4-Channel V3	2.4GHz 2 Kanal Empfänger wasserfesten V3
ECX210010	Body Set, Clear	Karoseriesatz, farblos
ECX211014	FR/R Bumper Set	Stoßfänger Vorne/Hinten
ECX211015	Bumper Mount	Stoßfängerhalter
ECX211016	Chassis Set	Chassis
ECX211017	Skid Plate	Unterfahrschutz
ECX211018	Shock Tower	Dämpferbrücke
ECX211019	Body Post	Karosseriehalter
ECX211020	Chassis Brace (2)	Chassishalter (2)
ECX211021	ESC & Battery Tray	Regler und akkuhalter
ECX212009	Spool 38T	Spool 38T
ECX212010	Axle Pinion Gear 14T	Ritzel 14T
ECX212018	Spur Gear 48P 60T	Hauptzahnrad 48P 60T(1)
ECX212020	Transmission Outdrive	Antriebsklauen
ECX212021	Driveshaft (2)	Antriebswelle (2)
ECX212022	Rear Hub (2)	Radträger Hinten (2)
ECX212027	Steering Spindle V2	Lenkspindel V2
ECX212028	F/R Hub Set, V2	Träger Set Vorne/Hinten, V2
ECX213002	F/R Shocks Assembled (2)	Dämpfer montiert Vorne/Hinten (2)
ECX216003	Complete Hardware Set	Kompletter Hardwaresatz
ECX217001	Spindle/Hub Bearing Set	Spindelset/Lagerset
ECX220009	LED Replacement	LED-Austausch
ECX221000	Servo Mount, Wheel Hex & Pin	Servohalterung, Sechskantrad und Stift
ECX222000	Front/Rear Axle Housing, 132mm	Vorder-/Heck-Achsgehäuse, 132 mm
ECX222001	390 Motor Plate	Motorplatte 390
ECX222002	Front/Rear Axles	Front/Heck Hinterachse
ECX222003	Complete Transmission	Komplettes Getriebe
ECX224000	Link Set	Lenkgestänge
ECX41004	1.9 Wheel (2) Black	1.9 radkranz schwarz (2)
ECX41006	1.9 Falken Wildpeak AT3W Tire (2)	Reifen 1.9 Falken Wildpeak AT3 W (2)
ECX1048	Body Clips	Body Clips
ECX1060	Wheel Nut	Radmutter
SPMS602	Replacement S602 Digital Servo	Ersatz-Digitalservo S602

Optional Parts • Optionale Teile

Part Number	English	Deutsch
DYN1471	7.2V 1750mAh NiMH 6C Flat Battery, EC3: Minis	Flache Akkus Ni-MH 7,2V 1750mA, EC3: Mini
DYN1473	7.2V 1200mAh Ni-MH Battery, Long w/EC3: Minis	Lange Akkus Ni-MH 7,2V 1200mA, EC3: Mini
DYN1476	7.4V 2000mAh 2S 30C LiPo, Long, EC3	Lange Akkus LiPo 7,4V 2000mA, EC3
DYNC2000CA	Prophet Sport NiMH 35W AC Charger	Prophet Sport NiMH 35W AC-Ladegerät
ECX41005	1.9 Wheel (2) White	1.9 radkranz weiß (2)
ECX210011	Body Set, Painted	Karosserie lackiert
ECX312005	Rear Hub Carrier, Alum	Radträger hinten, Alum
ECX314005	Steering Spindle Alum	Lenkspindel, Alu

Liste des pièces de rechange • Elenco dei ricambi

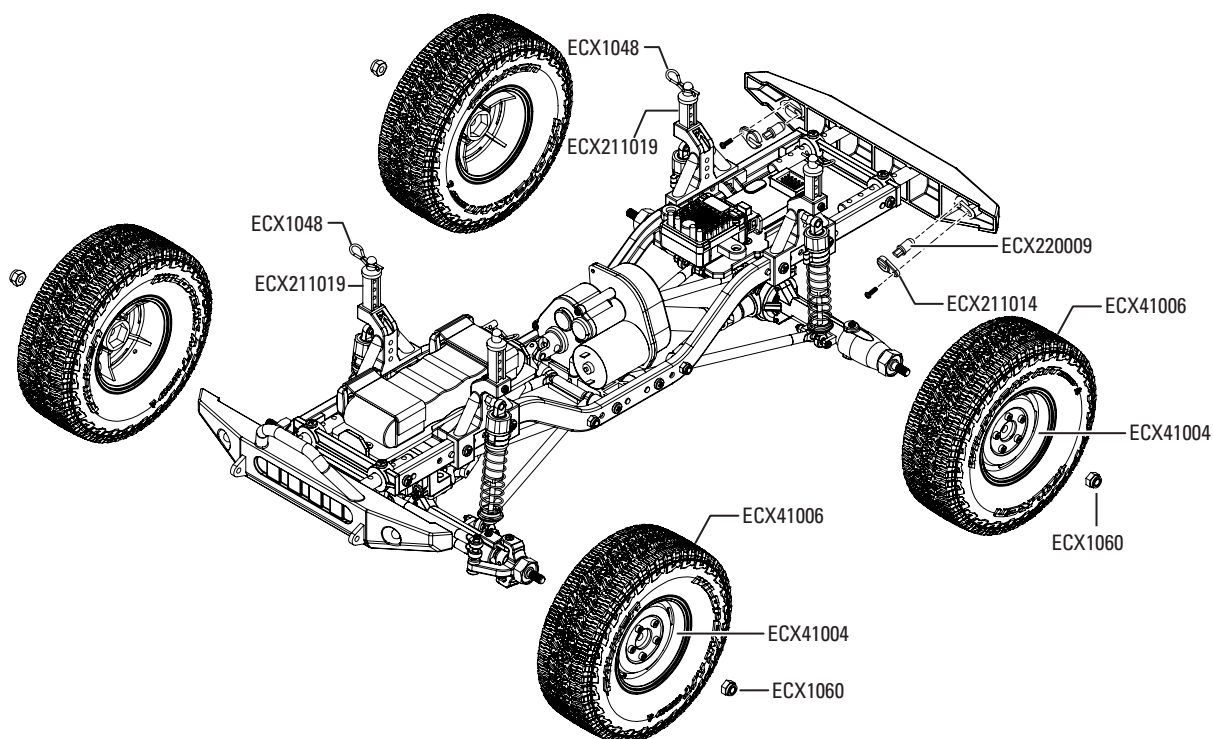
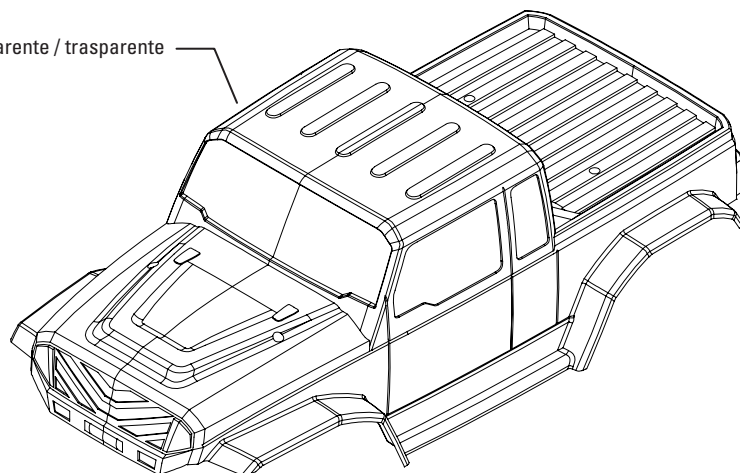
Part Number	Français	Italiano
DYNS1206	Moteur: Tazer 370	Motore: Tazer 370
DYNS2210	WP 60A Contrôleur à balais avant/arrière	WP 60A ESC con spazzole avanti/indietro
ECX13002	2.4GHz Emetteur 2 voies, V3	2-Ch trasmettitore, V3
ECX13003	2.4GHz Récepteur étanche 2 voies V3	2.4GHz ricevitore impermeabile 2Ch, V3
ECX210010	Carrosserie, transparente	Set carrozzeria, trasparente
ECX211014	Set de pare-choc Av/Arr	Set paraurti ant/post
ECX211015	Support de pare-choc	Supporto paraurti
ECX211016	Châssis	Set telaio
ECX211017	Plaques de protection	Piastra di protezione
ECX211018	Support d'amortisseurs	Torre ammortizz.
ECX211019	Supports de carrosserie	Supporti carrozzeria
ECX211020	Renforts de châssis (2)	Rinforzo telaio (2)
ECX211021	Support de batterie et contrôleur	Supporto batteria e ESC
ECX212009	1/18 4WD Temper	Corona 38T
ECX212010	1/18 4WD Temper	Pignone 14T
ECX212018	Couronne 48P 60T(1)	Corona 48P 60T(1)
ECX212020	Noix de sortie de transmission	Bicchierini trasmissione
ECX212021	Cardan (2)	Albero trasmissione (2)
ECX212022	Fusée arrière (2)	Mozzo posteriore (2)
ECX212027	Set de fusées V2	Fusello sterzo V2
ECX212028	Set d'étriers Av/Arr, V2	Set hub ant/post, V2
ECX213002	Amortisseurs Av/Arr assemblés (2)	Ammortizzatori montati ant/post (2)
ECX216003	Matériel de fixation complet	Set minuteria completo
ECX217001	Set de roulements de fusées	Set supporto fusello/hub
ECX220009	DEL de rechange	LED sostitutivi
ECX221000	Support de servo, hexagone de roue et broche	Supporto servocomando, ruota esagonale e perno
ECX222000	Carter d'essieu avant/arrière, 132 mm	Alloggiamento dell'assale anteriore/posteriore, 132 mm
ECX222001	Plaque moteur 390	Piastra motore 390
ECX222002	Essieu avant / arrière	Asse posteriore anteriore
ECX222003	Transmission complète	Trasmissione completa
ECX224000	Tringlerie de direction	Organi di sterzo
ECX41004	Jante 1,9 noire (2)	Ruota (2) 1.9 nero
ECX41006	Pneu 1.9 Falken Wildpeak AT3 W (2)	Pneumatico 1.9 Falken Widepeak AT3 W (2)
ECX1048	Body Clips	Body Clips
ECX1060	Écrou de roue	Dado ruota
SPMS602	Servo numérique de rechange S602	Servo digitale sostitutivo S602

Liste des options • Elenco parti opzionali

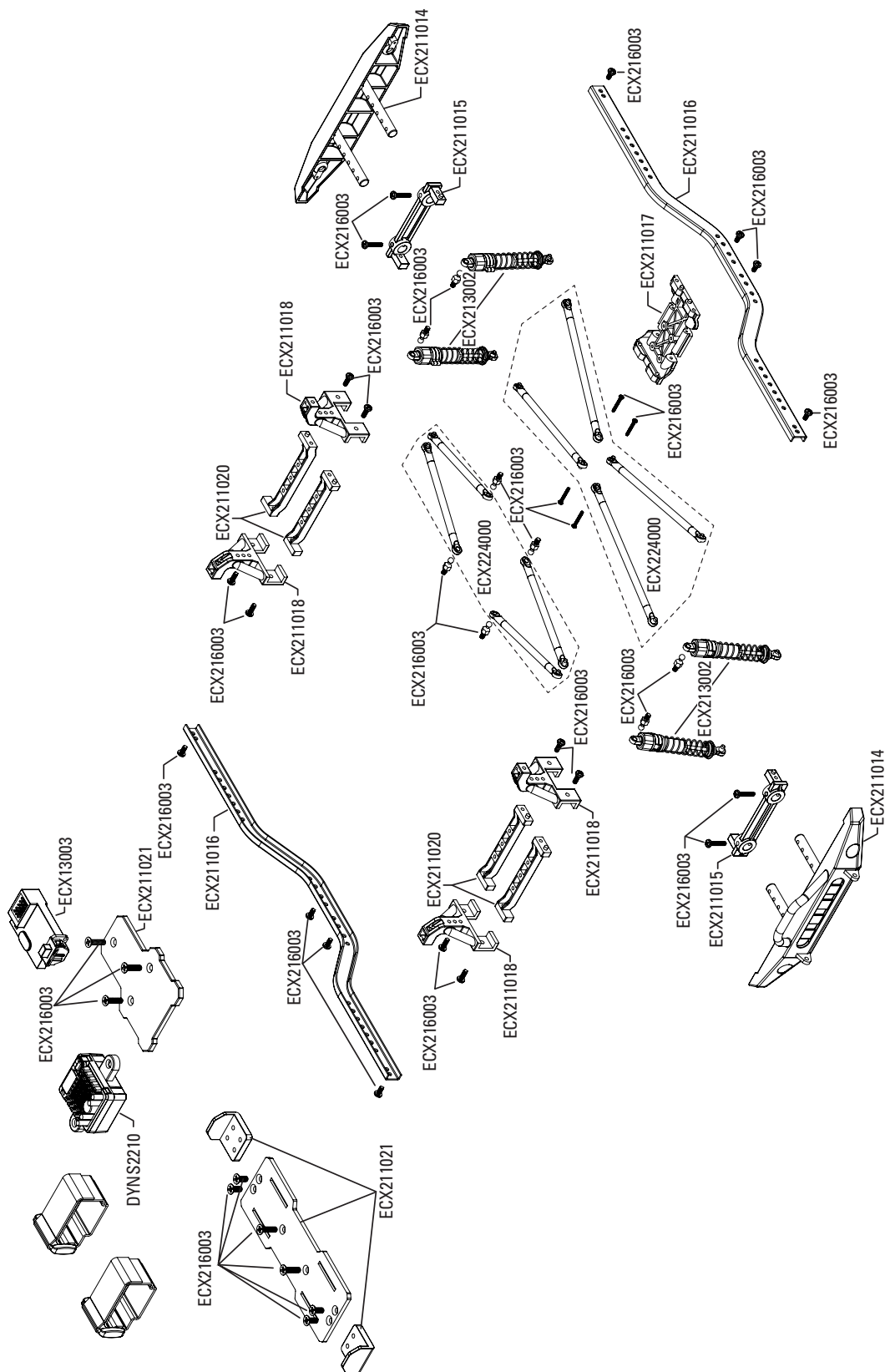
Part Number	Français	Italiano
DYN1471	Mini 1/18: Batterie plate Ni-MH 7,2V 1750mA, prise EC3	Batteria piatta 6C NiMH 1750 mAh 7,2 V, EC3: Minis
DYN1473	Mini 1/18: Batterie longue Ni-MH 7,2V 1200mA, prise EC3	Batteria lunga NiMH 1200 mAh 7,2 V EC3: Minis
DYN1476	Batterie longue LiPo 7,4V 2000mA, prise EC3	Batteria lunga LiPo 2000 mAh 7,4 V EC3: Minis
DYNC2000CA	Chargeur Prophet Sport AC Ni-MH 35W	Caricabatteria AC Prophet Sport NiMH 35 W
ECX41005	Jante 1,9 blanche (2)	Ruota (2) 1.9 bianca
ECX210011	Carrosserie peinte	Carrozzeria, verniciata
ECX312005	Set d'étriers arrière, aluminium	Supporto hub posteriore, allum.
ECX314005	Fusée de direction alu	Fusello dritto alluminio

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

ECX210010 - Clear / transparent / trasparente / trasparente

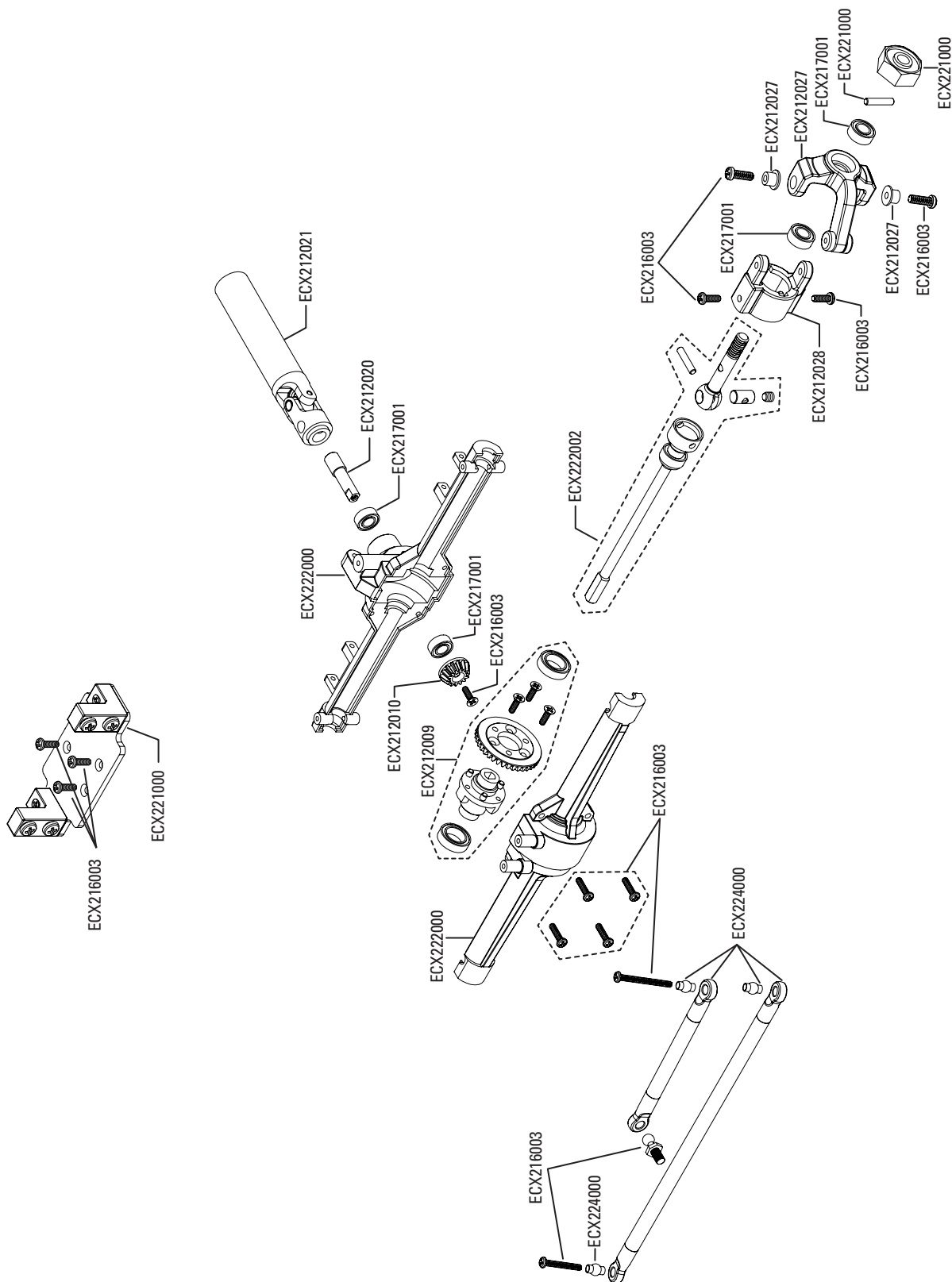


**PARTS DIAGRAM | EXPLOSIONSZEICHNUNG | VUE ÉCLATÉE DES PIÈCES |
ESPLOSO DEL MODELLO CON REFERENZA PEZZI**

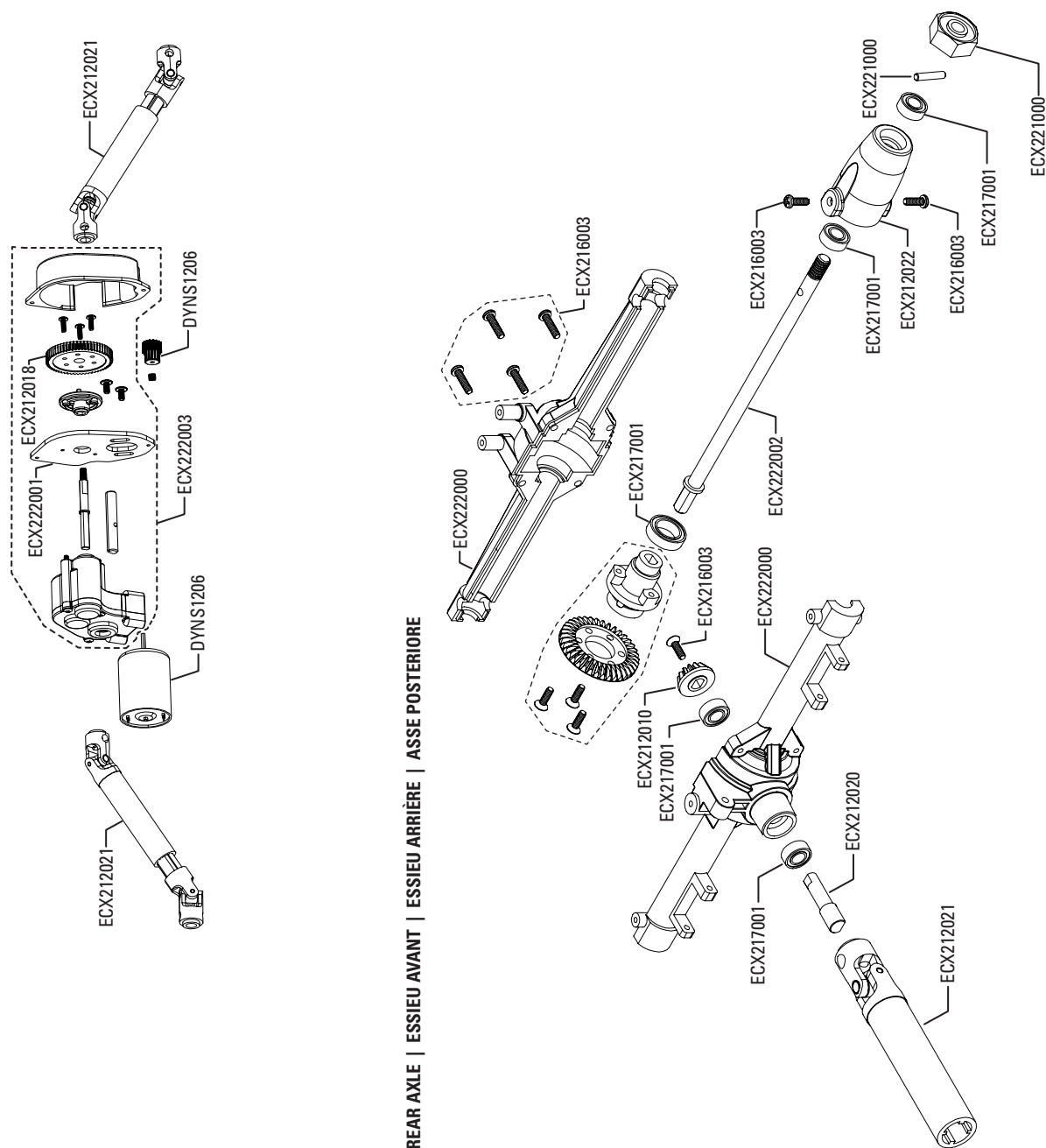


**PARTS DIAGRAM | EXPLOSIONSZEICHNUNG | VUE ÉCLATÉE DES PIÈCES |
ESPLOSO DEL MODELLO CON REFERENZA PEZZI**

FRONT AXLE | VORDERACHSE | HINTERACHSE | ASSE ANTERIORE



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





ECX01011

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