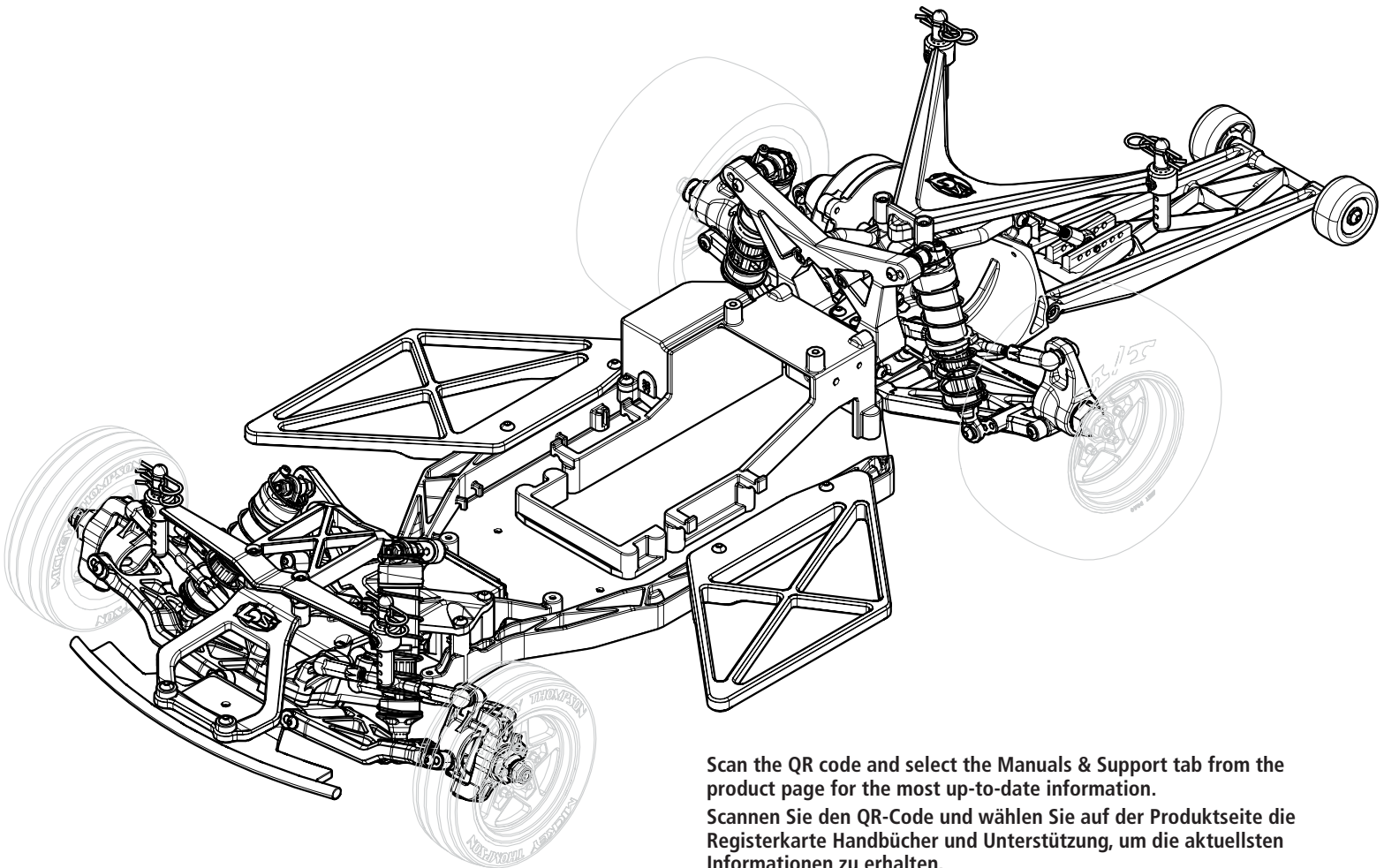




LOS03041

# PPS™

**1/10-SCALE 2WD NO PREP DRAG ROLLER**



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

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

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

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

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

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

Battery, charger, electronics not included.

**HORIZON**  
H O B B Y

**NOTICE**

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

**MEANING OF SPECIAL LANGUAGE**

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

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

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

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

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

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

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

**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.

**TABLE OF CONTENTS**

<b>BOX CONTENTS</b> .....	<b>2</b>	<b>DRIVING PRECAUTIONS</b> .....	<b>7</b>
<b>QUICK START</b> .....	<b>3</b>	<b>POWERING ON THE VEHICLE</b> .....	<b>7</b>
<b>INSTALL THE MOTOR</b> .....	<b>3</b>	<b>BEFORE RUNNING YOUR VEHICLE</b> .....	<b>7</b>
<b>SETTING THE GEAR MESH</b> .....	<b>3</b>	<b>RUN TIME</b> .....	<b>7</b>
<b>INSTALL THE SERVO</b> .....	<b>3</b>	<b>TO IMPROVE RUN TIMES</b> .....	<b>7</b>
<b>INSTALL THE ESC</b> .....	<b>4</b>	<b>PERFORMING A CONTROL DIRECTION TEST</b> .....	<b>7</b>
<b>INSTALL THE RECEIVER</b> .....	<b>4</b>	<b>TROUBLESHOOTING GUIDE</b> .....	<b>7</b>
<b>INSTALL THE BATTERY</b> .....	<b>5</b>	<b>2-YEAR LIMITED WARRANTY</b> .....	<b>8</b>
<b>WHEELIE BAR ADJUSTMENT</b> .....	<b>5</b>	<b>WARRANTY AND SERVICE CONTACT INFORMATION</b> .....	<b>8</b>
<b>ROUGH TUNING</b> .....	<b>5</b>	<b>COMPLIANCE INFORMATION FOR THE EUROPEAN UNION</b> .....	<b>8</b>
<b>FINE TUNING</b> .....	<b>5</b>	<b>EXPLODED VIEW</b> .....	<b>29–33</b>
<b>CAMBER ADJUSTMENT</b> .....	<b>5</b>	<b>REPLACEMENT PARTS</b> .....	<b>34–35</b>
<b>TOE ADJUSTMENT</b> .....	<b>5</b>	<b>RECOMMENDED PARTS</b> .....	<b>35</b>
<b>REAR DIFFERENTIAL REMOVAL</b> .....	<b>6</b>	<b>OPTIONAL PARTS</b> .....	<b>36–37</b>

**BOX CONTENTS**

INCLUDED	REQUIRED COMPONENTS	RECOMMENDED COMPONENTS	PART NUMBER	REQUIRED TOOLS
Losi® Brushless 22S No Prep Drag Roller	2+ Channel Radio Control System	Spektrum DX5C DSMR 5CH TX Only, SR315 Receiver	SPM5115 SPMSR315	1.5mm Hex Driver
	High Torque Steering Servo	Spektrum 6KG Waterproof Servo	SPMS606	2.0mm Hex Driver
	ESC	Spektrum Firma 100 Amp Smart ESC	SPMXSE1100	2.5mm Hex Driver
	Motor	Spektrum 3652 4-Pole Brushless Motor 6500Kv	SPMXSM2800	5.5mm Nut Driver
	Pinion	16T	Elenco componenti	7.0mm Nut Driver
	2S Hardcase LiPo Battery	50C or Higher Spektrum 2S Smart Hardcase LiPo with IC5	SPMX50002S100H5	
	Charger	Spektrum SMART S1200 DC Charger, 1x200W	SPMXC1000	

## QUICK START

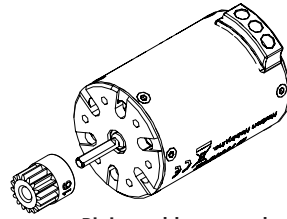
Please read the entire manual to gain a full understanding of the 22S Roller, fine-tuning the setup and performing maintenance.

1. Read the safety precautions found in this manual.
2. Install the motor, receiver, ESC, and steering servo.\*
3. Connect the steering drag link to the servo saver.
4. Route the servo and ESC wires, and connect them to the receiver.
5. Charge a battery\* for the vehicle. Refer to your charger\* manual for important charging warnings and instructions.
6. Install the fully charged battery in the vehicle.
7. Bind the receiver to the transmitter. Verify the controls are centered.
8. Mount the servo saver to the servo with steering centered.
9. Adjust the servo direction and travel as needed in the transmitter.
10. Calibrate the ESC.
11. Install the cover on the receiver.
12. Verify the steering and throttle control directions. Reverse the servo in the transmitter if the steering is reversed. Reverse the motor with the wire connections or ESC settings if the throttle is backward.
13. Install the wheels.
14. Drive your vehicle.
15. Disconnect the battery when done driving.

\*Electronics not included

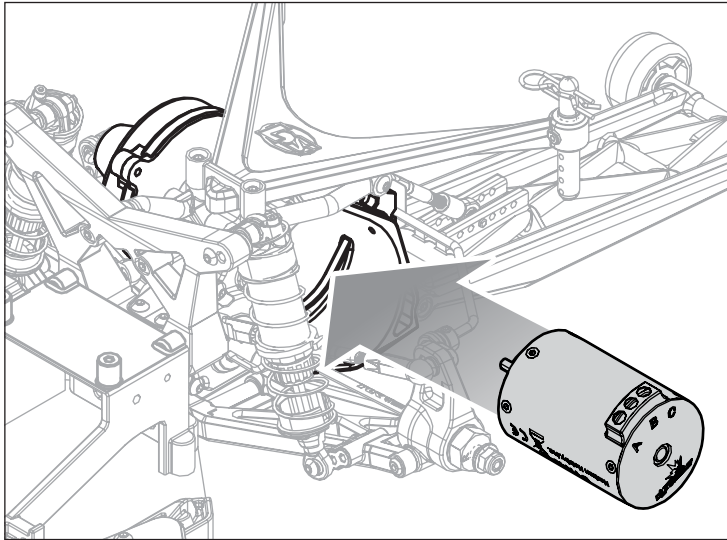
## INSTALL THE MOTOR

1. Install the pinion gear on the motor. Place the pinion on the end of the motor shaft so the set screw is located over the flat on the shaft.
2. Position it so the teeth line up with the spur gear and secure the pinion by tightening the set screw.
3. Install the motor. Two slots will line up with the motor mounting holes. The motor can slide forward or back to obtain proper gear mesh.



Pinion sold separately

**CAUTION:** It is important to set the gear mesh properly. Failure to do so will result in stripped gears.

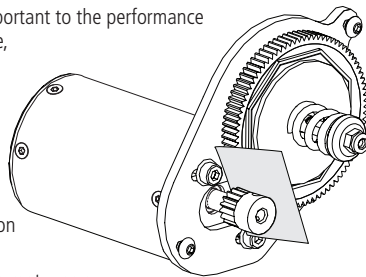


4. Install the gear cover.

## SETTING THE GEAR MESH

Proper gear mesh (how 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.

1. Loosen the motor screws and slide the motor back.
2. Put a small piece of paper between the pinion and spur gears.
3. Push the gears together while tightening the motor screws.
4. Remove the paper. Check the mesh at 3–5 different locations around the spur gear for a small amount of movement.



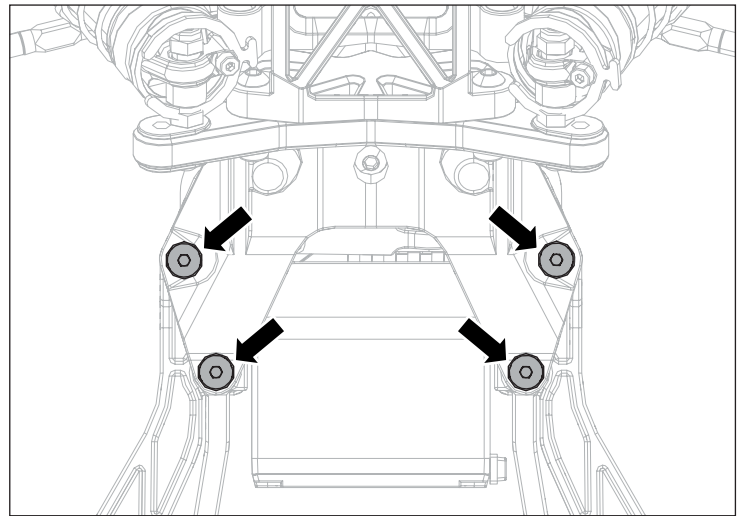
## INSTALL THE SERVO

If you use a different servo other than the recommended servo (SPMS606), purchase a servo horn with the correct number of teeth.

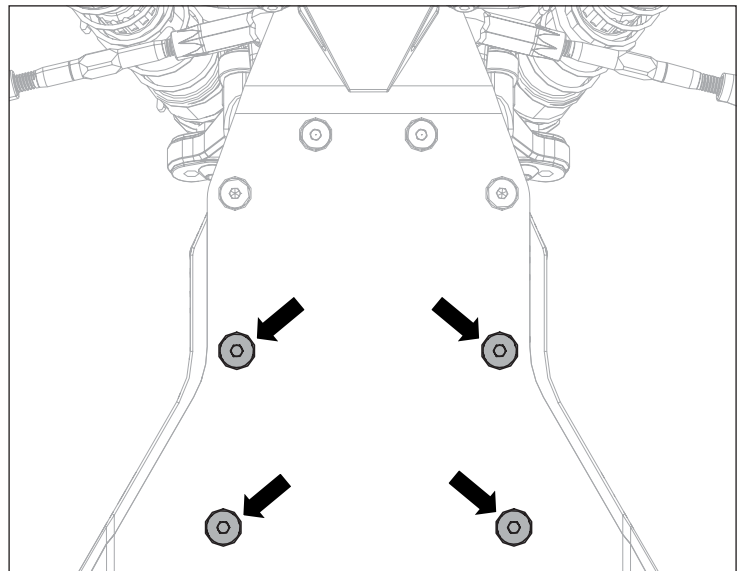
LOS331013 (Clamping Servo Horn, Aluminum, 23T: 22S)

LOS331014 (Clamping Servo Horn, Aluminum, 25T: 22S)

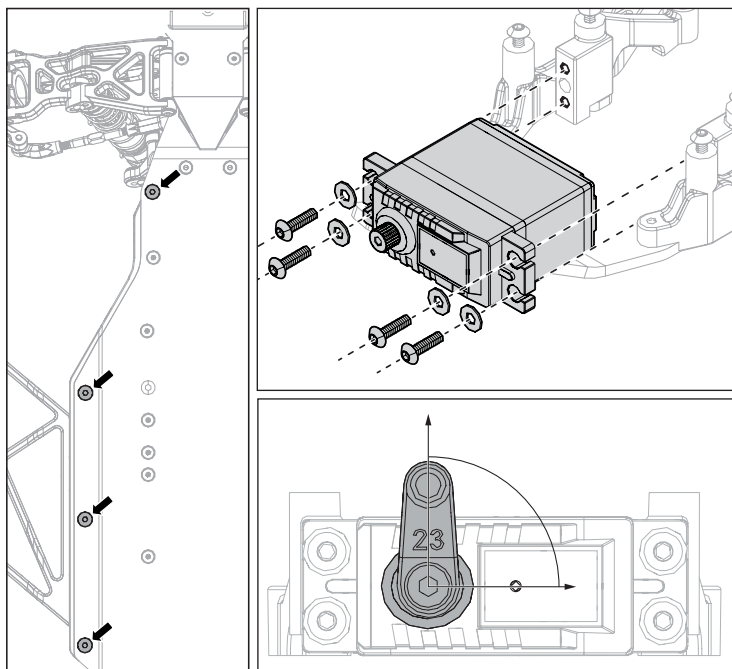
1. Using a 2mm hex driver, remove the four (4) screws on the top of the front-end brace.



2. Remove the four (4) screws that secure the servo mounting bracket to the chassis.



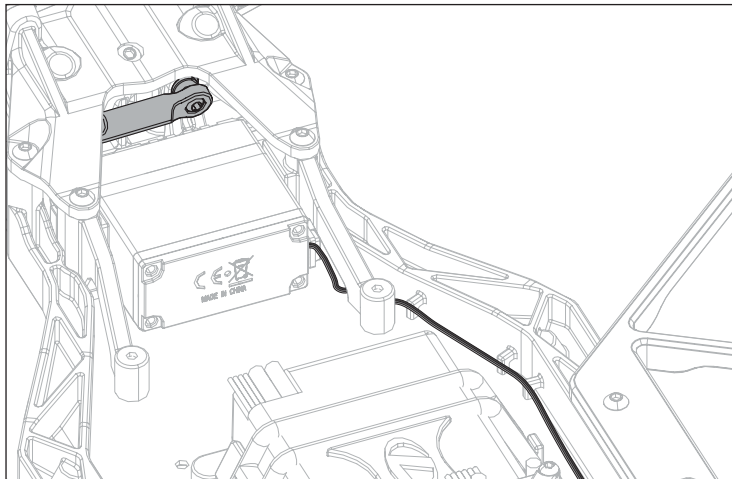
- Remove the four (4) screws that hold the right-side mud guard.
- Remove the servo brackets from the chassis, and mount the servo with the output shaft toward the right side of the chassis.



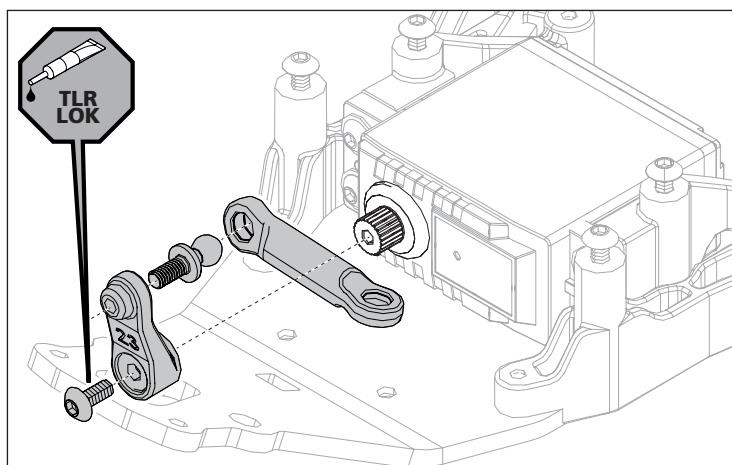
- Remove the servo horn from the steering link.
- Center the steering servo by plugging the servo into the receiver, or using a servo checker. Install the servo horn so the ball is 90°.

**NOTE:** Before installing the servo horn, verify the transmission servo trim is centered.

- Slide the servo into position on the chassis, and loosely secure the assembly to the chassis using the two (2) rear screws.
- Route the servo wire down the right mud guard using the supplied hooks to guide the wire to the receiver box. Then secure the mud guard using the four (4) screws from underneath.
- Replace all the screws that were removed during the disassembly.

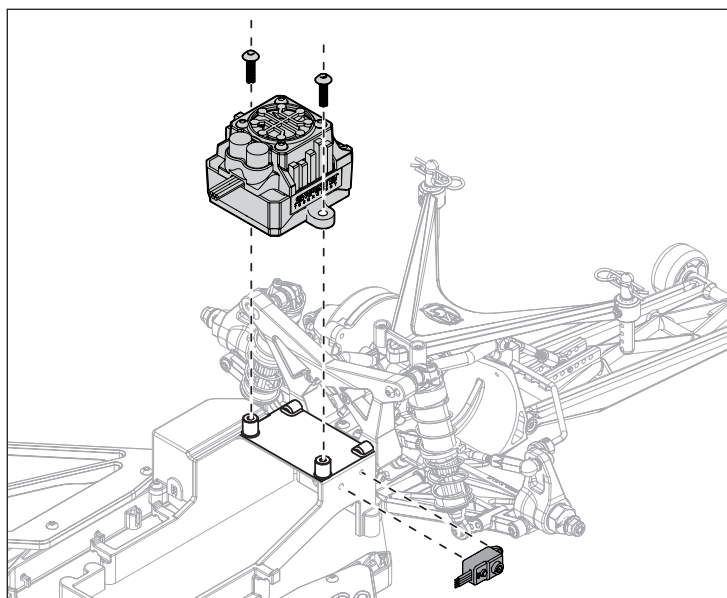


- Secure the steering link to the servo horn ball to complete the servo installation.



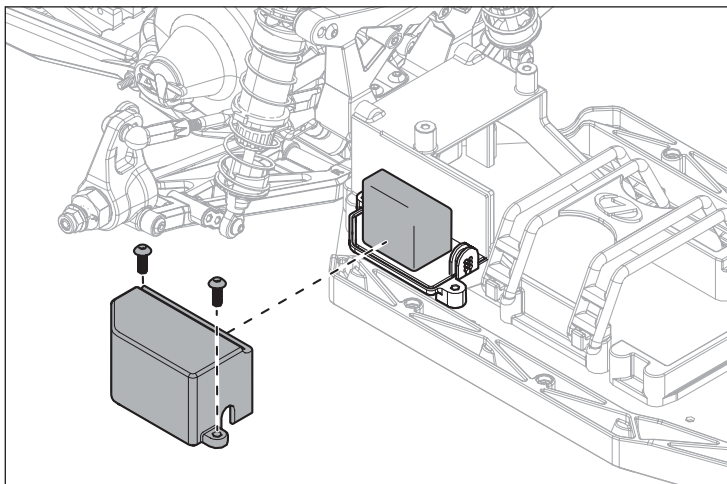
## INSTALL THE ESC

- Install the ESC. Connect the motor wires to the ESC. Refer to the ESC manual for more information.
- Run the throttle lead to the receiver box.
- To power auxiliary options such as lights, run the leads into the receiver box.



## INSTALL THE RECEIVER

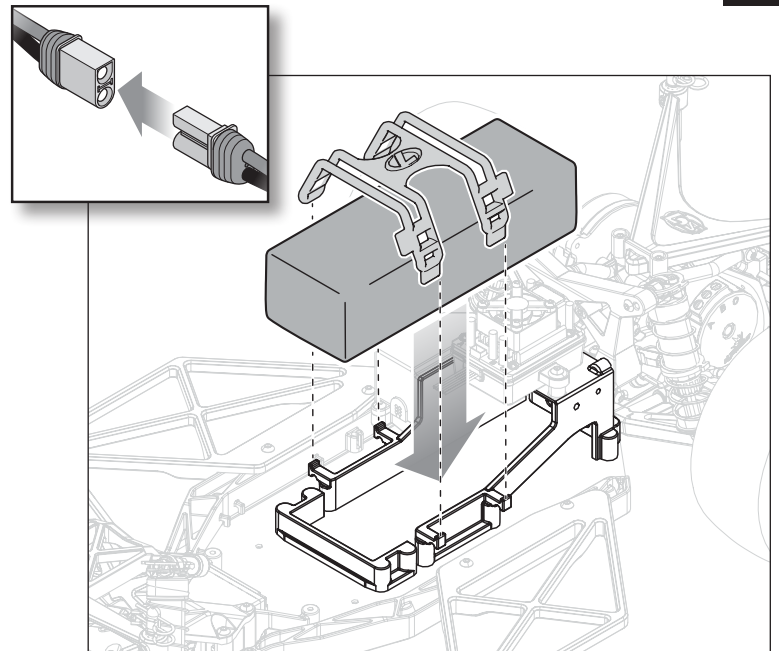
- Remove the two receiver box lid screws, and install the receiver with double-sided or hook and loop tape.



- Insert the servo and ESC connectors into the appropriate ports on the receiver.
- Connect the steering drag link to the servo saver (not yet connected to the servo).
- Verify the steering servo is centered and traveling in the correct direction.
- With the steering linkage centered, connect the servo saver to the servo, and install the included servo screw.
- Check the steering direction and travel, and fine tune the center point using the transmitter settings. See the transmitter manual for additional information.

## INSTALL THE BATTERY

1. Ensure the ESC is powered OFF.
2. Remove one side of the elastomer strap from the battery posts.
3. Slide a fully charged battery in through the vehicle front until the battery drops into place.
4. Resecure the elastomer straps to the battery posts.
5. Connect the battery to the ESC noting the correct polarity.
6. Power ON the transmitter, then the vehicle.



## WHEELIE BAR ADJUSTMENT

The Losi 22S drag car wheelie bar is designed to provide optimal adjustment. There are two adjustment options, allowing for height fine tuning, as well as easy adjustment.

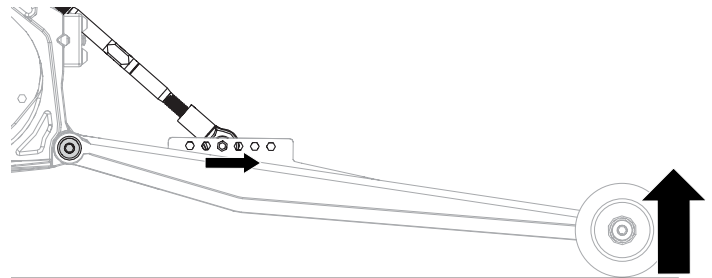
### ROUGH TUNING

1. Move the lower turnbuckle attachment point forward or backward to set the wheelie bar to the required height.
2. Move the attachment point back to raise the wheelie bar and to provide more support to the wheelie bar rear.

### FINE TUNING

Adjust the turnbuckle to fine tune the wheelie bar height, precisely controlling the height of the wheelie bar wheels from the ground.

**TIP:** Wheelie bar wheels ½ inch from the ground provides appropriate clearance and adequate rear wheel traction during full acceleration.



## CAMBER ADJUSTMENT

Camber is the angle of the wheel top from straight up and down. *Leaning in* is Negative Camber; *leaning out* is Positive Camber.

As the vehicle turns, the chassis rolls. As the vehicle rolls, the tires lean toward the turn, causing less tire surface to come in contact with the ground (at 0° camber). To compensate for this, a few degrees of negative camber are added at the factory.

**Front Camber Effects:** Adding approximately -1 to -2 negative camber provides optimal contact to the ground, allowing for adequate front end traction. Adding additional camber decreases steering traction. If the steering feels loose, remove a degree of camber.

**Rear Camber Effects:** Camber affects two things on rear suspension. In a straight line, maximum acceleration is achieved using 0° of camber. Adding camber reduces forward traction, but increases steering stability. If the vehicle is loose, add rear camber to keep the vehicle going straight.

1. To adjust the front and rear camber, select one of several hole positions on both hubs as well as the camber blocks. The rear camber block is integrated into the shock tower.
2. Adjust the turnbuckle for fine tuning.

### TOE ADJUSTMENT

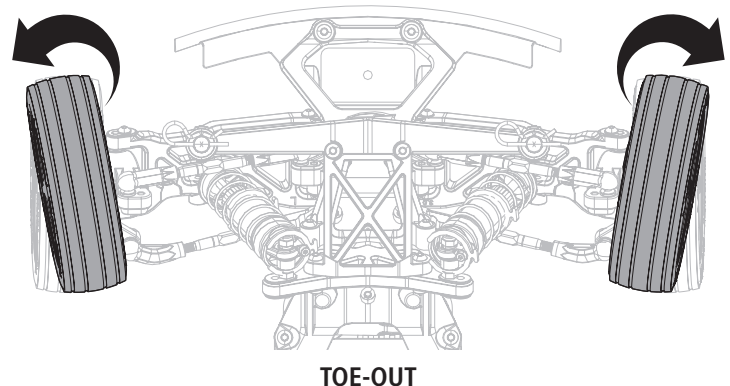
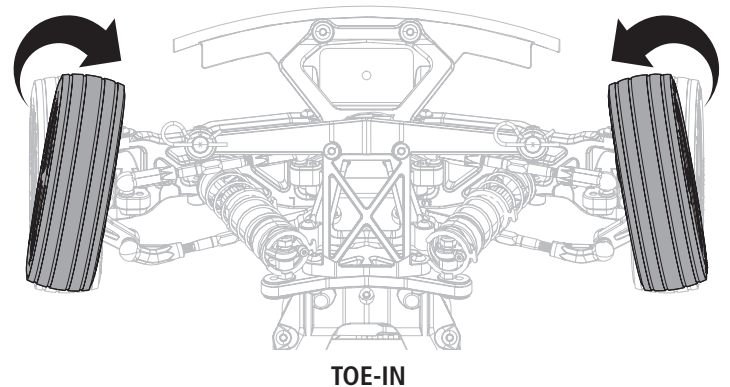
#### FRONT

Adding Toe-In will increase on-power steering and provide a more directing steering feel. Adding Toe-Out will decrease on-power steering and may provide the feel of more rear traction.

#### REAR

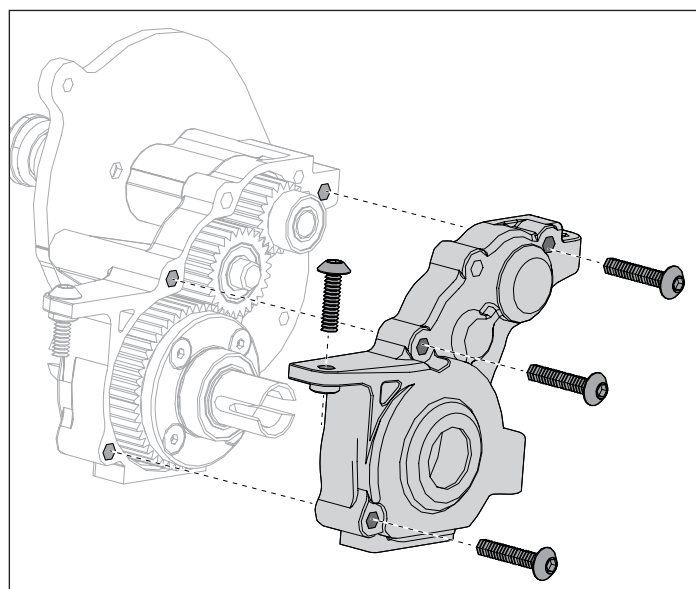
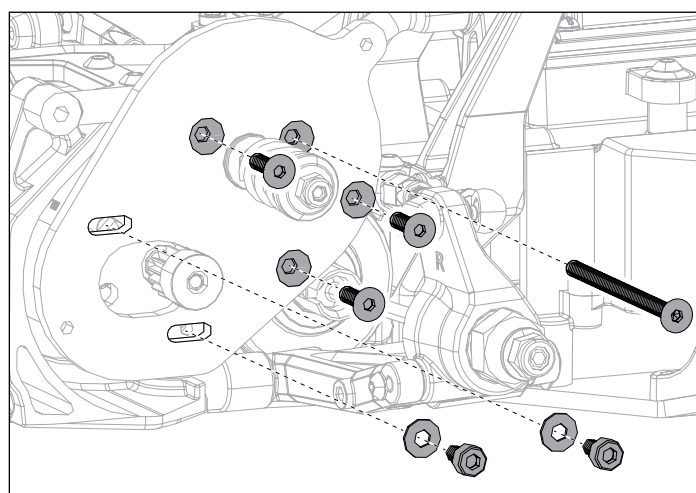
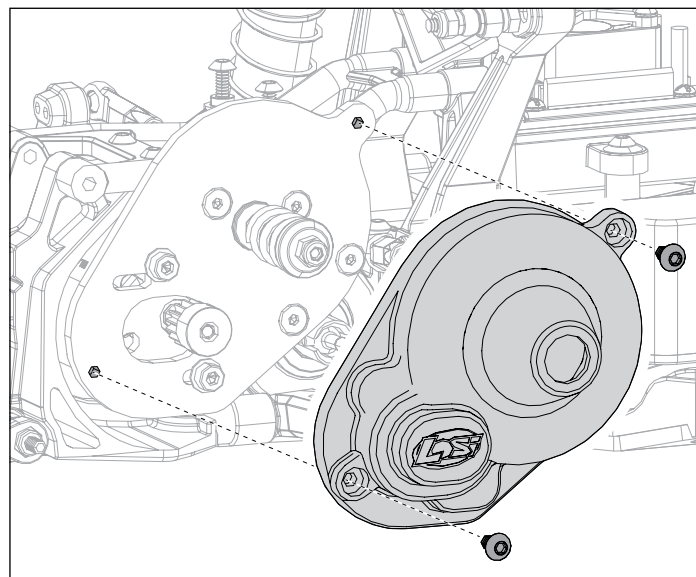
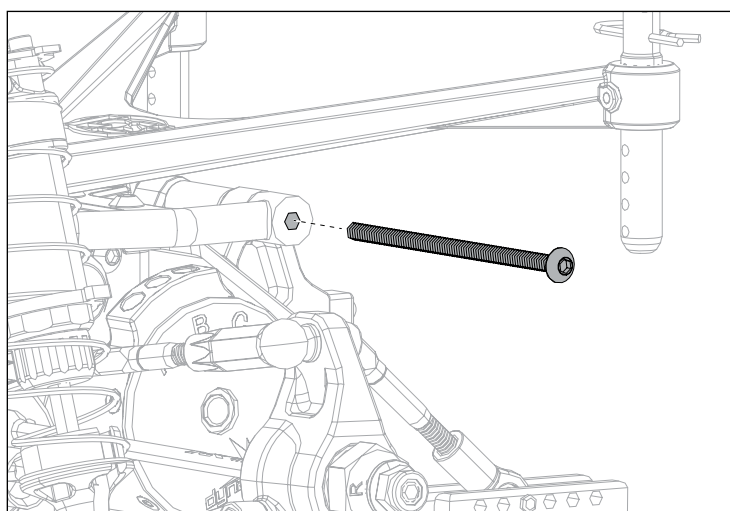
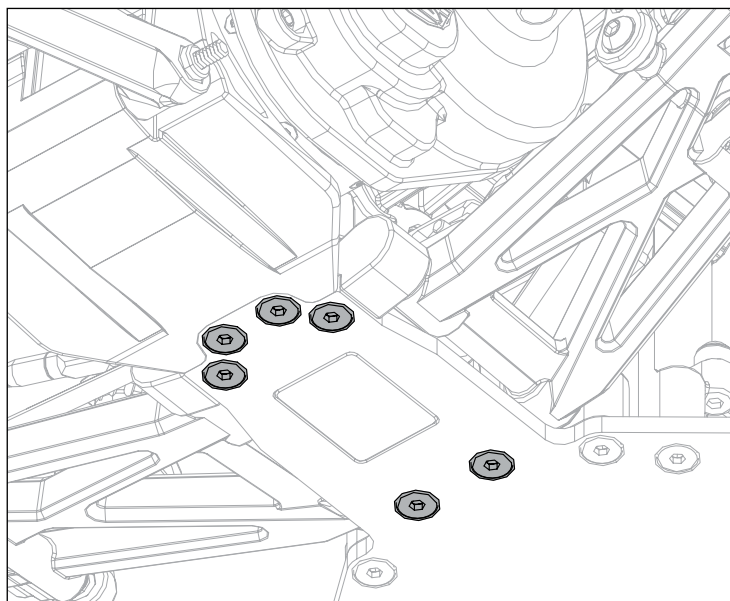
More Toe-In: Increased forward traction. Increase toe-in on lower traction surfaces.  
Less Toe-In: Decreased forward traction. Decrease toe-in on higher traction surfaces. To adjust the rear toe:

The stock rear toe on the 22S Roller is 3 Degrees. Adjust the rear toe using the Rear Pivot Block Set (LOS234048) which includes 1.5, 3, and 4.5-degree pivot blocks.



## REAR DIFFERENTIAL REMOVAL

1. To remove the rear differential, start by removing the two (2) rear tires using a 7mm nut driver.
2. Remove the two (2) rear camber links.
3. Using a 2.0mm allen driver, remove the six (6) screws holding the transmission and rear motor guard to the aluminum chassis.
4. Using a 2.0mm allen driver, remove the wheelie bar upper attachment.
5. Remove the rear body mount.
6. Remove the four (4) screws securing the transmission to the chassis, then remove the motor guard and wheelie bar.
7. Remove the gear cover, spur gear, and slipper plates on the left side of the chassis.
8. Disconnect the three brushless motor wires from the ESC.
9. Remove the rear pivot block and rear arms.
10. Remove the transmission pass through screw, and slide the transmission out of the chassis (lift up and back).
11. Use a 2.5mm driver to remove the motor from the transmission.
12. Remove the three (3) screws on the left side of the transmission, and remove the side cover.
13. Slide the differential out of the transmission.



## DRIVING PRECAUTIONS

- Maintain sight of the vehicle at all times.
- Routinely inspect the vehicle for loose wheel hardware.
- Routinely inspect the steering assembly for any loose hardware. Driving the vehicle off-road can cause fasteners to loosen over time.
- Do not drive the vehicle in tall grass. Doing so can damage the vehicle or electronics.
- Stop driving the vehicle when you notice a lack of power. Driving the vehicle when the battery is discharged can cause the receiver to power off. If the receiver loses power, you will lose control of the vehicle. Damage due to an over-discharged Li-Po battery is not covered under warranty.

**CAUTION:** Do not discharge a Li-Po battery below 3V per cell. Batteries discharged to a voltage lower than the lowest approved voltage may become damaged, resulting in loss of performance and potential fire when batteries are charged.

- Do not apply forward or reverse throttle if the vehicle is stuck. Applying throttle in this instance can damage the motor or ESC.
- After driving the vehicle, allow the electronics to cool before driving the vehicle again.

**IMPORTANT:** Keep wires away from all moving parts.

## BEFORE RUNNING YOUR VEHICLE

1. Check for free suspension movement. All suspension arms and steering components should move freely. Any binds will cause the vehicle to handle poorly.

**Tip:** To increase the ride height and ground clearance of your vehicle, install the included shock spacers.

2. Charge a battery pack. Always charge the battery pack as per the battery and/or charger manufacturers' instructions.
3. Set the transmitter steering trim. Follow the instructions to set the steering trim/subtrim so that the vehicle drives straight with no input to the steering.
4. Perform a Control Direction Test.

## RUN TIME

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

The condition of a battery pack is also an important factor in both run time and speed. The battery connectors may become hot during driving. Batteries will lose performance and capacity over time.

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

### TO IMPROVE RUN TIMES

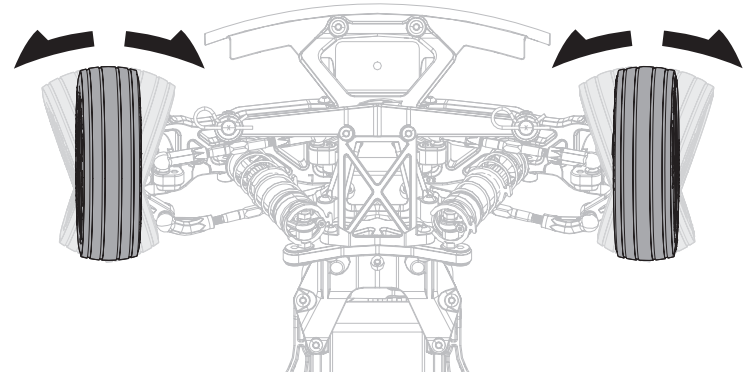
- Keep your vehicle clean and well maintained.
- Allow more airflow to the ESC and motor.
- Change the gearing to a lower ratio. A lower ratio decreases the operating temperature of the electronics. Use a smaller pinion gear or larger spur gear to lower the gear ratio.
- Use a battery pack with a higher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

## POWERING ON THE VEHICLE

1. Center the ST TRIM and TH TRIM dials on the transmitter.
2. Power on the transmitter.
3. Install a fully charged battery pack per the *Installing the Battery* section.
4. Power on the ESC.

**IMPORTANT:** The vehicle **MUST** remain on a flat, level surface and motionless for at least 5 seconds.

## PERFORMING A CONTROL DIRECTION TEST



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

## TROUBLESHOOTING GUIDE

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

## 2-YEAR 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 2-years from the date of purchase.

### What is Not Covered

This warranty is not transferable and does not cover (i) cosmetic damage, (ii) damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or due to improper use, installation, operation or maintenance, (iii) modification of or to any part of the Product, (iv) attempted service by anyone other than a Horizon Hobby authorized service center, (v) Product not purchased from an authorized Horizon dealer, or (vi) Product not compliant with applicable technical regulations or (vii) use that violates any applicable laws, rules, or regulations. OTHER THAN THE EXPRESS WARRANTY ABOVE, HORIZON MAKES NO OTHER WARRANTY OR REPRESENTATION, AND HEREBY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

### Purchaser's Remedy

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

### Limitation of Liability

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY, REGARDLESS OF WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY OR ANY OTHER THEORY OF LIABILITY, EVEN IF HORIZON HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability. If you as the purchaser or user are not prepared to accept the liability associated with the use of the Product, purchaser is advised to return the Product immediately in new and unused condition to the place of purchase.

### Law

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

### WARRANTY SERVICES

#### Questions, Assistance, and Services

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

### Inspection or Services

If this Product needs to be inspected or serviced and is compliant in the country you live and use the Product in, please use the Horizon Online Service Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Service Request is available at [http://www.horizonhobby.com/content/service-center\\_render-service-center](http://www.horizonhobby.com/content/service-center_render-service-center). If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for service. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

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

### Warranty Requirements

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

### Non-Warranty Service

**Should your service not be covered by warranty, service will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost.** By submitting the item for service you are agreeing to payment of the service without notification. Service estimates are available upon request. You must include this request with your item submitted for service. Non-warranty service estimates will be billed a minimum of 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](http://www.horizonhobby.com/content/service-center_render-service-center).

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

10/15

## WARRANTY AND SERVICE CONTACT INFORMATION

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

\*For the most up-to-date customer service contact information, please visit: [www.horizonhobby.com/content/service-center-render-service-center](http://www.horizonhobby.com/content/service-center-render-service-center)

## COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

### EU Manufacturer of Record:

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

### EU Importer of Record:

Horizon Hobby, GmbH  
Hanskampring 9  
22885 Barsbüttel Germany

### WEEE NOTICE:



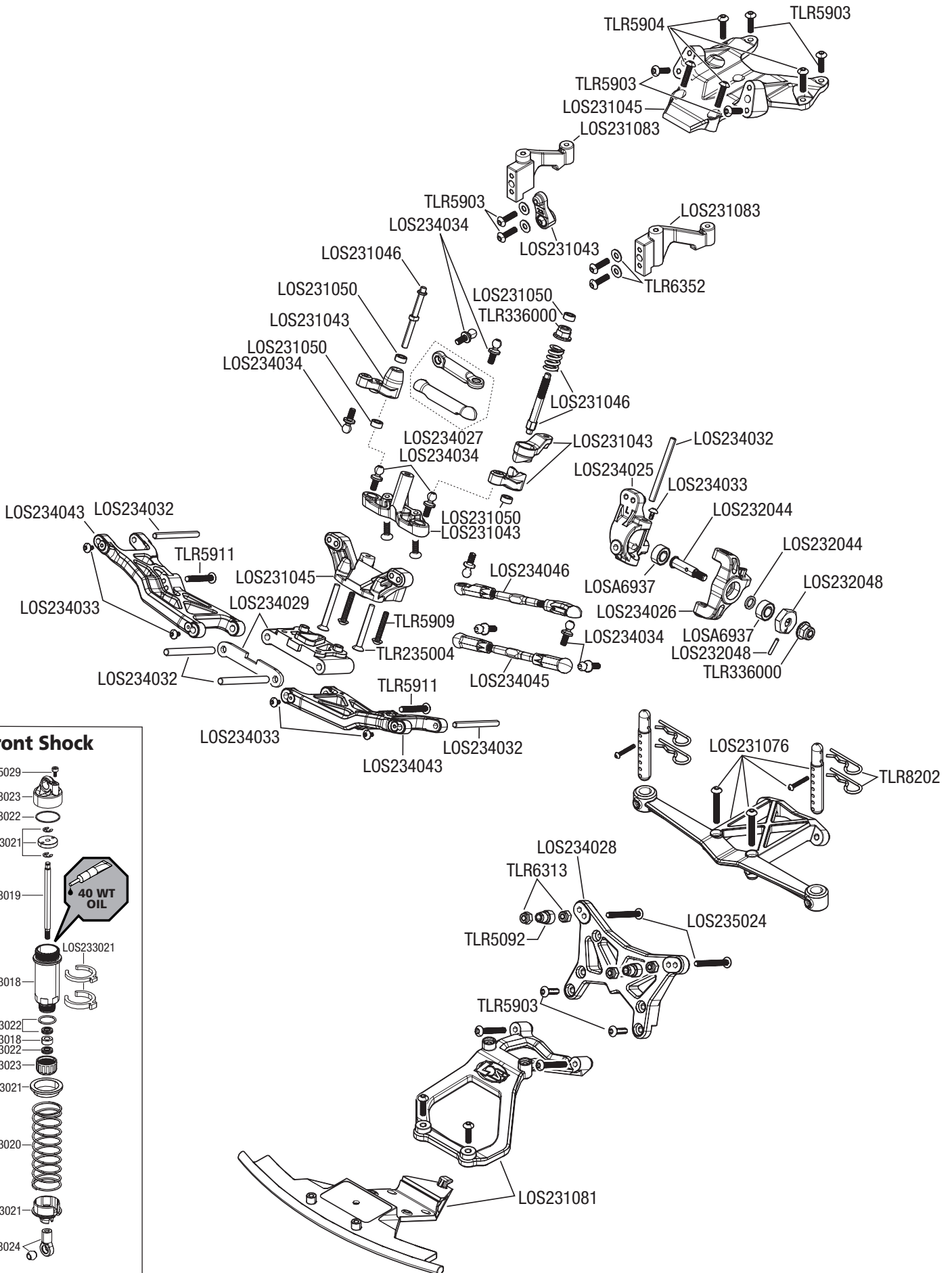
This appliance is labeled in accordance with European Directive 2012/19/EU concerning waste of electrical and electronic equipment (WEEE). This label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.





# 22S 1/10TH-SCALE 2WD NO PREP DRAG ROLLER

EXPLODED VIEW // EXPLOSIONSZEICHNUNG // VUE ÉCLATÉE DES PIÈCES // VISTA ESPLOSA DELLE PARTI



### Front Shock

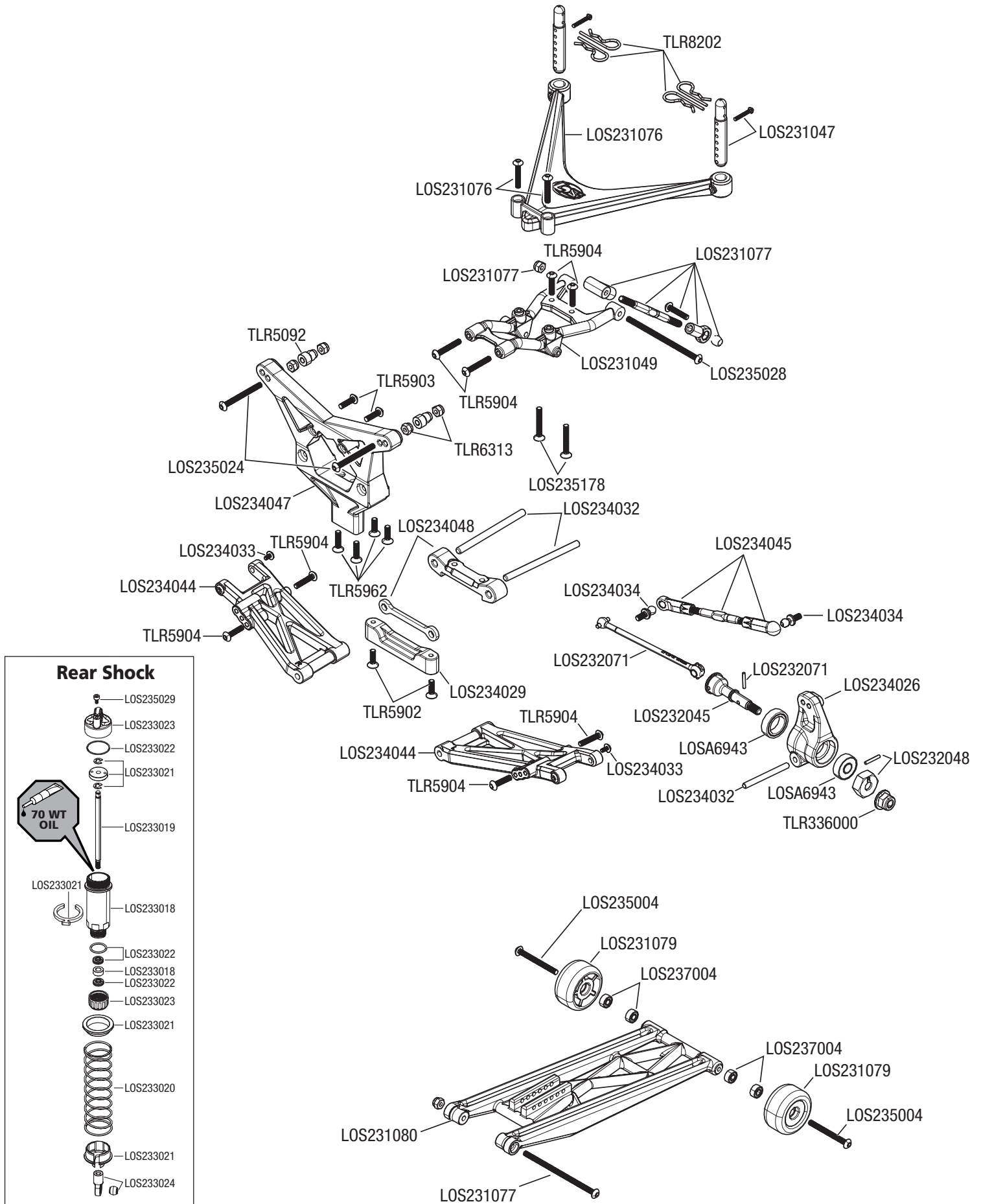
- LOS235029
- LOS233023
- LOS233022
- LOS233021
- LOS233019
- LOS233021
- LOS233018
- LOS233022
- LOS233018
- LOS233022
- LOS233023
- LOS233021
- LOS233020
- LOS233021
- LOS233024

40 WT OIL



# 22S 1/10TH-SCALE 2WD NO PREP DRAG ROLLER

EXPLODED VIEW // EXPLOSIONSZEICHNUNG // VUE ÉCLATÉE DES PIÈCES // VISTA ESPLOSA DELLE PARTI

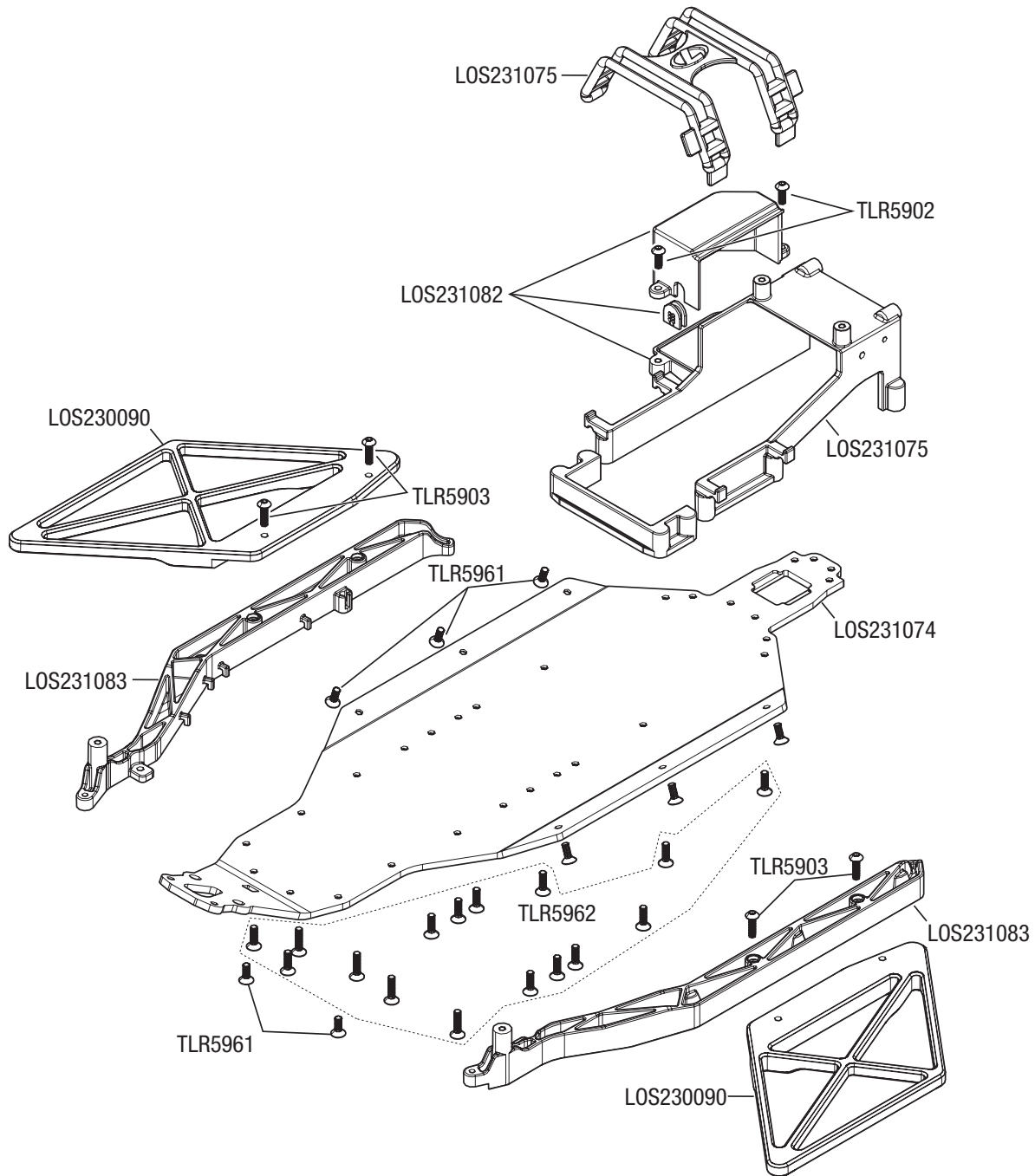






# 22S 1/10TH-SCALE 2WD NO PREP DRAG ROLLER

EXPLODED VIEW // EXPLOSIONSZEICHNUNG // VUE ÉCLATÉE DES PIÈCES // VISTA ESPLOSA DELLE PARTI



# REPLACEMENT PARTS // TEILELISTE // LISTE DES PIÈCES DE RECHANGE // ELENCO DEI RICAMBI

PART #	ENGLISH	DEUTSCH	FRANÇAIS	ITALIANO
LOS43047	Front Wheel, Satin (2)	Hinterrad, Satin (2)	Roue arrière, satinée (2)	Ruota posteriore, satinata (2)
LOS43048	Rear Wheel, Satin (2)	Vorderrad, Satin (2)	Roue avant, satinée (2)	Ruota anteriore, satinata (2)
LOS43051	Front Tire, M/T (2)	Vorderreifen, M/T (2)	Pneu avant, M/T (2)	Ruota anteriore, M/T (2)
LOS43052	Rear Tire, M/T (2)	Hinterreifen, M/T (2)	Pneu arrière, M/T (2)	Ruota posteriore, M/T (2)
LOS230090	Body Support Sets, Short & Long	Body Gehäuse Sets, kurz und lang	Ensembles de Support carrosserie, courts et longs	Set di supporti per carrozzeria, corti e lunghi
LOS231043	Composite Steering Set	Komposit-Lenkungssatz	Ensemble de direction composite	Set sterzo, composito
LOS231045	Bulkhead Camber Block & Servo Mount	Spritzwandsturz schwarz und Servoalterung	Cale de carrossage à cloison et support du servo	Paratia, blocco camber, supporto servo
LOS231046	Steering Hardware Set	Hardwaresatz Lenkung	Ensemble de matériel de direction	Set accessori sterzo
LOS231047	Body Mount Set	Gehäusehalterungssatz	Ensemble de montage de carrosserie	Set supporti carrozzeria
LOS231049	Rear Bumper Set	Heckstoßstangensatz	Ensemble de pare-chocs arrière	Set paraurti posteriore
LOS231050	Steering Bearing Set	Lenklagersatz	Ensemble de roulement de direction	Set cuscinetti sterzo
LOS231074	Chassis, Aluminum	Karosserie, Aluminium	Châssis, aluminium	Telaio, alluminio
LOS231075	Battery Mount Set, Aluminum Chassis	Akkualterungssatz, Aluminiumkarosserie	Ensemble support de batterie, châssis en aluminium	Set supporto batteria, telaio alluminio
LOS231076	Body Mount Set	Gehäusehalterungssatz	Ensemble de montage de carrosserie	Set supporti carrozzeria
LOS231077	Wheelie Bar Set, Complete	Wheelie-Stangensatz, vollständig	Ensemble de barre de cabré, complet	Set Wheelie Bar, completo
LOS231078	Wheelie Bar Mount	Wheelie-Halterungssatz	Montage de barre de cabré	Supporto Wheelie Bar
LOS231079	Wheelie Bar Wheel Set (2)	Wheelie-Stangen-/Reifensatz (2)	Ensemble de roues avec barre de cabré (2)	Set ruote Wheelie Bar (2)
LOS231080	Wheelie Bar Truss	Wheelie-Stangenträger	Barre de cabré inclinée	Travatura Wheelie Bar
LOS231081	Front Bumper Set	Stoßstangensatz, Front	Jeu de pare-chocs avant	Set ammortizzatore anteriore
LOS231082	Rear Bulkhead, Aluminum Chassis	Hintere Spritzwand, Aluminiumchassis	Cloison arrière, châssis en aluminium	Paratia posteriore, telaio alluminio
LOS231083	Side Guard Set Aluminum Chassis	Seitenschutz-Set Aluminiumchassis	Ensemble de protections latérales, châssis en aluminium	Set paracolpi laterali, telaio alluminio
LOS232036	Gear Cover and Motor Guard	Getriebeabdeckung und Motorschutz	Cache de l'engrenage et protection moteur	Coperchio pignone e protezione motore
LOS232037	Transmission Case	Getriebeabdeckung	Boîtier de transmission	Scatola del cambio
LOS232038	Spur Gear and Slipper Pad 48P 84T	Stirnrad und Gleitkissen 48P 84T	Engrenage cylindrique et sabot de piston 48P 84T	Corona e pattino scorrevole 48P 84T
LOS232039	Complete Gear Differential	Komplettes Getriebe Differential	Engrenage différentiel complet	Differenziale pignone completo
LOS232040	Gear Set, Gear Differential	Getriebebesatz, Getriebe Differential	Ensemble d'engrenages, engrenage différentiel	Set pignone, differenziale pignone
LOS232041	Motor Plate	Motorplatte	Plaque moteur	Piastra motore
LOS232042	Idler Gear and Shaft	Zwischenrad und Welle	Axe de pignon intermédiaire	Ingranaggio e albero folle
LOS232043	Layshaft and Gear	Zwischenwelle und Getriebe	Arbre intermédiaire et engrenage	Albero secondario e ingranaggio
LOS232044	Front Axle	Vorderachse	Essieu avant	Assale anteriore
LOS232046	Gear Differential Rebuild Set	Nachbausatz Getriebe Differential	Ensemble de reconstruction de l'engrenage différentiel	Set differenziale pignone rigenerato
LOS232047	Slipper Hardware Set	Hardwaresatz Gleiter	Ensemble de matériel du sabot	Set bulloneria scorrevole
LOS232048	Wheel Hex Set	Radsechskantsatz (4)	Hexagones de roues (4)	Set esagoni ruote (4)
LOS232071	CVA Driveshaft, Complete	CVA-Antriebswelle, komplett	Arbres de transmission CVA, complet	Albero di trasmissione CVA completo
LOS233016	Front Shock Set, Complete	Kompletter Vorderer Stoßdämpfersatz	Lot d'amortisseurs avant, complet	Set ammortizzatore anteriore completo
LOS233018	Shock Body Set	Stoßdämpfergehäusesatz	Carrosserie amortisseurs	Set corpo ammortizzatore
LOS233019	Shock Shaft Set	Kolbenstangensatz	Lot de bras d'amortisseurs	Set albero ammortizzatore
LOS233020	Spring Set	Federsatz	Ressort	Set molle
LOS233021	Spring Cups and Clip Set	Satz mit Federtellern und Clips	Lot de coupelles de ressort et d'attaches	Set molle, coppe e clip
LOS233022	Shock Seal Set	Stoßdämpferdichtungssatz	Lot de joints d'amortisseurs	Set guarnizioni ammortizzatore
LOS233023	Shock Caps (2)	Stoßdämpferkappen (2)	Capuchons d'amortisseurs (2)	Tappi ammortizzatore (2)
LOS233024	Shock Ends	Stoßdämpferenden	Extrémités d'amortisseurs	Terminali ammortizzatore
LOS234025	Front Caster Block Set	Vorderradblocksatz	Lot de blocs de roulettes avant	Set blocco ruota anteriore
LOS234026	Hub and Spindle Set	Satz aus Nabe und Spindel	Lot de moyeux et de fusées	Set mozzo e fuselli
LOS234027	Camber and Steering Link Set	Spurstange- und Lenklenkersatz	Ensemble de bras de carrossage et de direction	Set camber e braccetti sterzo
LOS234028	Shock Tower Set	Stoßdämpfersatz	Support d'amortisseurs	Set Torre Ammortizzatore
LOS234029	Pivot Set	Drehgelenksatz	Lot pivot	Set perni
LOS234032	Hinge Pin Set	Scharnierbolzensatz	Lot de charnière	Set piastrine per perni
LOS234033	Hinge Pin Lock Screws	Scharnierbolzen-Sicherungsstifte	Vis de blocage de charnière	Viti di supporto piastrine per perni
LOS234034	Ball Stud, 4.8mm x 6mm (4)	Kugelzapfen, 4,8 mm x 6 mm (4)	Piton à rotule, 4,8 mm x 6 mm (4)	Viti a sfera, 4,8 mm x 6 mm (4)
LOS234043	Front Arm Set	Vorderarmsatz	Ensemble bras avant	Set bracci anteriori
LOS234044	Rear Arm Set	Hinterarmsatz	Ensemble bras arrière	Set bracci posteriori
LOS234045	Camber Link Set, Front & Rear	Spurstange, Front und Heck	Ensemble de bras de carrossage, avant et arrière	Set braccetti camber, ant e post
LOS234046	Steering Link Set	Lenkgliedset: 22S Drag	22S - Drag Ensemble de timonerie de direction	Set braccetti sterzo
LOS234047	Rear Shock Tower: 22S Drag	Hintere Stoßdämpferbrücke	Tour d'amortisseur arrière	Torre ammortizzatore posteriore: 22S Drag
LOS234048	Rear Pivot Block Set	Hinterer Drehblocksatz	Ensemble de blocs de pivot arrière	Set blocco perno posteriore
LOS235003	Cap Head Screws M3 x 6mm (10)	Inbusschrauben M3 x 6 mm (10)	Vis à tête bombée, M3 x 6 mm (10)	Viti a testa cilindrica, M3 x 6 mm (10)
LOS235018	Set Screws, M3 X 3mm (10)	Stellschrauben, M3 x 3 mm (10)	Vis de fixation, M3 x 3 mm (10)	Viti di fermo, M3 x 3 mm (10)

# REPLACEMENT PARTS // TEILELISTE // LISTE DES PIÈCES DE RECHANGE // ELENCO DEI RICAMBI

PART #	ENGLISH	DEUTSCH	FRANÇAIS	ITALIANO
LOS235024	Button Head Screws M3 x 25mm (10)	Halbrundsrauben, M3 x 25 mm (10)	Vis à tête bombée M3 x 25mm (10)	Viti a testa tonda, M3 x 25 mm (10)
LOS235028	Flat Head Screws M3 x 45mm (6)	Flachkopfschrauben, M3 x 45 mm (6)	Vis à tête fraisée, M3 x 45mm (6)	Viti a testa piatta, M3 x 45 mm (6)
LOS235029	Cap Head Screws M2 x 4mm (10)	Inbusschrauben M2 x 4 mm (10)	Vis à tête bombée, M2 x 4 mm (10)	Viti a testa cilindrica, M2 x 4 mm (10)
LOS235178	Flat Head Screws, M3 x 14mm (10)	Flachkopfschrauben, M3 x 14 mm (10)	Vis à tête fraisée, M3 x 14mm (10)	Viti a testa piatta, M3 x 14 mm (10)
LOS237004	3 x 7 x 3mm Ball Bearing (4)	3 x 7 x 3 mm, Kugellager (4)	Roulement à billes 3 x 7 x 3mm (4)	Cuscinetti a sfera 3x7x3 mm (4)
LOSA6937	5 x 10mm Shielded Ball Bearing (2)	5 x 10 mm abgedichtetes Kugellager (2)	Roulement à billes blindé 5 x 10 mm (2)	Cuscinetti a sfera schermati 5 x 10 mm (2)
LOSA6943	10 X 15mm Sealed Ball Bearings (2)	10 x 15 mm abgedichtete Kugellager (2)	Roulements à Billes Scellés 10 X 15mm (2)	Cuscinetti a sfere sigillati 10 x 15 mm (2)
LOSA6955	5 x 13mm HD Clutch Bearings (2)	5 x 13 mm HD Kupplungslager (2)	Roulements à embrayage ultra-résistant 5 x 13 mm (2)	Cuscinetti frizione HD 5 x 13mm (2)
LOSA6957	10 x 15 x 4mm BB (2) w/ Nylon Retainer	10 x 15 x 4 mm BB (2) mit Nylon-Halter	Roulements à billes 10 x 15 x 4 mm (0) avec bague de retenue en nylon	Cuscinetto a sfera 10 x 15 x 4mm (2) con fermo in nylon
TLR235004	Flat Head Screws, M3 x 25mm (10)	Flachkopfschrauben, M3 x 25 mm (10)	Vis à tête fraisée, M3 x 25mm (10)	Viti a testa piatta, M3 x 25 mm (10)
TLR235007	Flat Head Screws M2.5 x 10mm (10)	Flachkopfschrauben, M2.5 x 10 mm (10)	Vis à tête fraisée, M2.5 x 10mm (10)	Viti a testa piatta, M2.5 x 10 mm (10)
TLR5092	Upper Shock Bushing (4)	Oberes Dämpferlager (4)	Bague d'amortisseurs supérieurs (4)	Boccole ammortizzatore superiore (4)
TLR5900	Button Head Screws, M3 x 5mm (10)	Halbrundsrauben, M3 x 5 mm (10)	Vis à tête bombée M3 x 5mm (10)	Viti a testa tonda, M3 x 5 mm (10)
TLR5901	Button Head Screws, M3 x 6mm (10)	Halbrundsrauben, M3 x 6 mm (10)	Vis à tête bombée M3 x 6mm (10)	Viti a testa tonda, M3 x 6 mm (10)
TLR5902	Button Head Screws, M3 x 8mm (10)	Halbrundsrauben, M3 x 8 mm (10)	Vis à tête bombée M3 x 8mm (10)	Viti a testa tonda, M3 x 8 mm (10)
TLR5903	Button Head Screws, M3 x 10mm (10)	Halbrundsrauben, M3 x 10 mm (10)	Vis à tête bombée M3 x 10mm (10)	Viti a testa tonda, M3 x 10 mm (10)
TLR5904	Button Head Screws, M3 x 12mm (10)	Halbrundsrauben, M3 x 12 mm (10)	Vis à tête bombée M3 x 12mm (10)	Viti a testa tonda, M3 x 12 mm (10)
TLR5906	Button Head Screws, M3 x 35mm (10)	Halbrundsrauben, M3 x 35 mm (10)	Vis à tête bombée M3 x 35mm (10)	Viti a testa tonda, M3 x 35 mm (10)
TLR5909	Button Head Screws, M3 x 16mm (10)	Halbrundsrauben, M3 x 16 mm (10)	Vis à tête bombée M3 x 16mm (10)	Viti a testa tonda, M3 x 16 mm (10)
TLR5910	Button Head Screws M3 x 14mm (10)	Halbrundsrauben, M3 x 14 mm (10)	Vis à tête bombée M3 x 14mm (10)	Viti a testa tonda, M3 x 14 mm (10)
TLR5911	Button Head Screws, M3 x 20mm (10)	Halbrundsrauben, M3 x 20 mm (10)	Vis à tête bombée M3 x 20mm (10)	Viti a testa tonda, M3 x 20 mm (10)
TLR5912	Button Head Screws, M3 x 54mm (2)	Halbrundsrauben, M3 x 54 mm (2)	Vis à tête bombée M3 x 54mm (2)	Viti a testa tonda, M3 x 54 mm (2)
TLR5914	Button Head Screws, M2 x 12mm (10)	Halbrundsrauben, M2 x 12 mm (10)	Vis à tête bombée M2 x 12mm (10)	Viti a testa tonda, M2 x 12 mm (10)
TLR5961	Flat Head Screws, M3 x 8mm (10)	Flachkopfschrauben, M3 x 8 mm (10)	Vis à tête fraisée, M3 x 8mm (10)	Viti a testa piatta, M3 x 8 mm (10)
TLR5962	Flat Head Screws, M3 x 10mm (10)	Flachkopfschrauben, M3 x 10 mm (10)	Vis à tête fraisée, M3 x 10mm (10)	Viti a testa piatta, M3 x 10 mm (10)
TLR5963	Flat Head Screws, M3 x 12mm (10)	Flachkopfschrauben, M3 x 12 mm (10)	Vis à tête fraisée, M3 x 12mm (10)	Viti a testa piatta, M3 x 12 mm (10)
TLR6105	E-Clips, 3mm Shaft (12)	E-Clips 3 mm (12)	E-Clips 3mm (12)	E-clip 3 mm (12)
TLR6288	Set Screws, M3 x 2.5mm (10)	Stellschraube, M3 x 2,5 mm (10)	Vis de fixation, M3 x 2,5 mm (10)	Set viti, M3 x 2,5 mm (10)
TLR6313	Locknut, M3 x .5 x 5.5mm (10)	Einstellmutter, M3 x .5 x 5.5 mm (10)	Écrou auto-freiné, M3 x .5 x 5.5mm (10)	Dado Nylock, M3 x .5 x 5.5 mm (10)
TLR6352	Washers, M3 (10)	Unterlegscheiben, M3 (10)	Rondelles, M3 (10)	Rondelle, M3 (10)
TLR8202	Body Clips, Black (12)	Karosseriekammern, Schwarz (12)	Clips de carrosserie noirs (12)	Clip carrozzeria, nero (12)
VTR235178	Flat Head Screws, M3 x 14mm (10)	Flachkopfschrauben, M3 x 14 mm (10)	Vis à tête fraisée, M3 x 14mm (10)	Viti a testa piatta, M3 x 14 mm (10)

## RECOMMENDED PARTS // EMPFOHLENE TEILE // PIÈCES RECOMMANDÉES // PEZZI RACCOMANDATI

PART #	ENGLISH	DEUTSCH	FRANÇAIS	ITALIANO
SPMXPS2	Smart Powerstage Bundle 2S	Smart Leistungsteilpaket 2	Lot à étage de puissance Smart 2S	Smart Bundle Powerstage 2S
SPMS606	S606 Standard Waterproof Surface Servo	S606 wasserdichter Standard-Oberflächenservo	Servo de surface étanche standard S606	S606, servo di sup impermeabile std
SPMXSE1100	Firma 100A Brushless Smart ESC, 3S	Firma 100A bürstenloser Smart-Geschwindigkeitsregler, 3S	Variateur ESC Smart sans balais 100A Firma, 3S	Smart ESC Firma 100A Brushless, 3S
SPMXSM2800	Spektrum 3652 4-Pole Brushless Motor 6500Kv	Spektrum 3652 4-poliger Bürstenloser-Motor 6.500 kv	Moteur Spektrum 3652 4 pôles sans balais 6 500 kv	Motore Spektrum 3652 4 poli Brushless 6500 Kv
SPMXC1000	Smart S1200 DC Charger, 1x200W	Smart S1200 Wechselstrom-Ladegerät, 1 x 200 W	Chargeur Smart S1200, 1x200 W	Caricabatterie Smart S1200 CC 1x200 W
SPMX50002S100H5	7.4V 5000mAh 2S 100C LiPo, Smart Hardcase: EC5	7,4 V 5.000 mAh 2S 100C Smart-Hartschalen-LiPo-Akku mit IC5-Stecker	Batterie Li-po 7,4 V 5 000 mAh 2S 100C Smart avec connecteur IC5	Batteria 7,4 V 5000 mAh 2S 100C Smart Hardcase LiPo con connettore IC5

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

PART #	ENGLISH	DEUTSCH	FRANÇAIS	ITALIANO
DTXC2390	Pit Tech Deluxe Tool Stand Blue	Pit Tech Deluxe-Werkzeugständer, blau	Porte-outils Pit Tech Deluxe bleu	Stand attrezzi Pit Tech Deluxe
DYN2950	8-in-1 Hex Wrench Kit	8-in-1 Sechskantschlüsselsatz	Kit de clés hexagonales 8-en-1	Kit chiave esagonale 8 in 1
DYN4403	GPS Speed Meter	GPS-Tachometer	Indicateur de vitesse GPS	Tachimetro GPS
LOS43049	Front Wheel Black Chrome (2)	Vorderrad, schwarz Chrom (2)	Roue avant, noire chromée (2)	Ruote anteriori, nera cromate (2)
LOS43050	Rear Wheel, Black Chrome (2)	Hinterrad, schwarz Chrom (2)	Roue arrière, noire chromée (2)	Ruote posteriori, nera cromate (2)
LOS230086	69 Camaro Body, Clear	69 Camaro-Karosserie, transparent	Carrosserie Camaro 69, transparente	69 Camaro, carrozzeria, trasparente
LOS230088	69 Chevy Camaro Drag Car Body Set, Summit	69 Chevy Camaro Drag-Car-Karosserie-Set, Summit	Ensemble de carrosserie pour voiture Chevy Camaro 69 de dragster	69 Chevy Camaro Drag Car, Set carrozzeria, Summit
LOS230092	69 Chevy Camaro Drag Body	69 Chevy Camaro Drag-Karosserie	Carrosserie Chevy Camaro 69 de dragster	69 Chevy Camaro Drag, carrozzeria,
TLR232009	HDS Spur Gear 76T 48P Kevlar®	HDS Stirnrad 76T 48P Kevlar	Engrenage HDS 76T 48P Kevlar	Corona HDS 76T 48P Kevlar
TLR232010	HDS Spur Gear 78T 48P Kevlar®	HDS Stirnrad 78T 48P Kevlar	Engrenage HDS 78T 48P Kevlar	Corona HDS 78T 48P Kevlar
LOS233004	FR/RR Shock Seal/Limiter Set: BR	FR/RR Stoßdämpfer/Stoßbegrenzer-Set: BR	Ensemble de joints d'amortisseur/limiteur avant/arrière : BR	Set limitatori/tenute amm ant/pst: BR
LOS233020	Spring Set	Federsatz	Ensemble ressort	Set molle
LOS234048	Rear Pivot Block Set	Zapfenlager-Set, hinten	Ensemble de blocs pivots arrière	Set blocco pivot posteriore
LOS331013	Clamping Servo Horn Aluminum, 23T	Klemm-Servohorn, Aluminium, 23T	Renvoi de commande du servo de serrage, aluminium, 23T	Squadretta servo blocc, allum, 23T
LOS331014	Clamping Servo Horn Aluminum, 25T	Klemm-Servohorn, Aluminium, 25T	Renvoi de commande du servo de serrage, aluminium, 25T	Squadretta servo blocc, allum, 25T
LOS332005	Clamping Front Wheel Hex Aluminum	Aluminium Klemmvorderrad Sechskant	Serrage de roue avant hexagonale en aluminium	Esagono serraggio ruote allum ant
LOS332006	Clamping Rear Wheel Hex Aluminum	Aluminium Klemmhinterrad Sechskant	Serrage de roue arrière hexagonale en aluminium	Esagono serraggio ruote allum pst
LOS333000	Front Shocks, Aluminum Assembly	Vordere Stoßdämpfer, Aluminiumgehäuse	Assemblage d'amortisseurs avant, aluminium	Ammortizzatori ant, gruppo allum
LOS334014	Rear Hub Set, Aluminum	Nabensatz, hinten, Aluminiumgehäuse	Ensemble de moyeu arrière, aluminium	Set mozzo posteriore, alluminio
LOS334015	Front Pivot, Aluminum	Vorderes Drehgelenk, Aluminium	Pivot avant, aluminium	Pivot anteriore, alluminio
LOS334016	Front Spindle Set, Aluminum	Front-Spindelsatz, Aluminium	Ensemble d'axe avant, aluminium	Set fusello anteriore, alluminio
LOS334017	Caster Block Set, Aluminum	Radblock-Set, Aluminium	Ensemble de blocs de rondelle, aluminium	Set caster block, alluminio
LOS334018	Front Camber Block, Aluminum	Vorderer Radsturzblock, Aluminium	Cale de carrossage avant, aluminium	Blocco camber anteriore, alluminio
LOS334019	Rear Pivot Set, Aluminum	Zapfenlager-Set, vorn, Aluminium	Ensemble de pivot arrière, aluminium	Set pivot posteriore, alluminio
LOS334021	Rear Sway Bar Set	Heck Schwingen-Satz	Ensemble barre stabilisatrice arrière	Set barra antirullo posteriore
LOSA99174	Car Stand	Fahrzeugständer	Socle	Supporto automodello
PRO277503	Pomona Drag Spec 2.2", Black: Slash Front	Pomona Drag Spec 2.2", schwarz: Slash Front	Pomona de dragster Spec 2,2", noir : Oblique avant	Pomona Drag Spec 2.2", nero: Slash ant
PRO277603	Pomona Drag Spec 2.2 3.0", Black: Slash 2WD Rear, 4x4 F/R	Pomona Drag Spec 2.2 3.0", schwarz: Slash 2WD Rear, 4x4 F/R	Pomona de dragster Spec 2,2 3,0", noir : 2 roues motrices obliques arrière, 4x4 avant/ arrière	Pomona Drag Spec 2.2 3.0", nero: Slash 2WD post, 4x4 F/R
PRO352300	Clear Body, Super J Pro-Mod: 1/10 Slash 2WD, Drag Car	Transparente Karosserie, Super J Pro-Mod: 1/10 Slash 2WD, Drag Car	Carrosserie transparente, Super J Pro-Mod : Voiture de dragster, 2 roues motrices Slash 1/10	Carrozzeria trasparente, Super J Pro-Mod: 1/10 Slash 2WD, Drag Car
PRO353100	Clear Body, 1969 Chevrolet Nova: 1/10 Slash 2WD, Drag Car	Transparente Karosserie, 1969 Chevrolet Nova: 1/10 Slash 2WD, Drag Car	Carrosserie transparente, Chevrolet Nova 1969 : Voiture de dragster, 2 roues motrices Slash 1/10	Carrozzeria trasparente, 1969 Chevrolet Nova: 1/10 Slash 2WD, Drag Car
PRO354900	1978 Chevrolet Malibu Body: Slash 2WD Drag & DR10	1978 Chevrolet Malibu-Karosserie: Slash 2WD Drag und DR10	Carrosserie Chevrolet Malibu 1978 : Slash 2 roues motrices de dragster et DR10	Carrozzeria, 1978 Chevrolet Malibu: Slash 2WD Drag & DR10
PRO355000	Clear Body, 1972 Plymouth Barracuda Slash 2WD Drag	Transparente Karosserie, 1972 Plymouth Barracuda Slash 2WD Drag	Carrosserie transparente, Slash 2 roues motrices de dragster Plymouth Barracuda 1972	Carrozzeria trasparente, 1972 Plymouth Barracuda Slash 2WD Drag
PRO636800	No Prep Drag Racing Hood Scoops & Blowers (8)	Ohne Vorbereitung, Drag Racing Hood-Schaukeln und -Gebläse (8)	Souffleries de capot pour course de dragster sans préparation (8)	No Prep Drag, prese dinamiche e di aspirazione da gara (8)
PRO1015717	Hoosier Drag Slick SC MC Drag Racing Tires, SC Rear (2)	Hoosier-Schleppseil SC MC Drag-Rennreifen, SC hinten (2)	Pneus slick SC MC pour course de dragster Hoosier, SC arrière (2)	Ruote da gara Hoosier Drag Slick SC MC Drag, SC posteriori (2)
PRO1015817	Hoosier Drag 2.2" 2WD MC Drag Racing Front Tires (2)	Hoosier-Schleppseil 2.2" 2WD MC Drag-Rennreifen, vorn (2)	Pneus avant pour course de dragster MC 2 roues motrices 2.2" Hoosier (2)	Ruote da gara Hoosier Drag 2.2" 2WD MC Drag, anteriori (2)
PRO10157203	Hoosier Drag Slick SC S3 Drag Racing Tires, SC Rear (2)	Hoosier-Schleppseil SC S3 Drag-Rennreifen, SC hinten (2)	Pneus slick SC S3 pour course de dragster Hoosier, SC arrière (2)	Ruote da gara Hoosier Drag Slick SC S3 Drag, SC posteriori (2)
PRO10158203	Hoosier Drag 2.2" 2WD S3 Drag Racing Front Tires (2)	Hoosier-Schleppseil 2.2" 2WD S3 Drag-Rennreifen, vorn (2)	Pneus avant pour course de dragster S3 2 roues motrices 2.2" Hoosier (2)	Ruote da gara Hoosier Drag 2.2" 2WD S3 Drag, anteriori (2)
PRO10170203	Reaction HP S3 (Soft) Drag Belted Rear Short Course Tires (2)	Reaction HP S3 (weich) Drag Belted Short Course-Hinterreifen (2)	Pneus Short Course arrière ceinturés de dragster Reaction HP S3 (souples) (2)	Ruote cinturate Reaction HP S3 (morbide), SC posteriori (2)
SPM2340	DX3 Smart 3-Channel Transmitter with SR315 Receiver	DX3 Smart 3-Kanal-Sender mit SR315-Empfänger	Émetteur DX3 Smart 3 canaux avec récepteur SR315	Trasmittente DX3 Smart 3 canali con ricevitore SR315
SPMR5115	DX5C Smart 5-Channel DSMR Transmitter Only	DX5C Smart 5-Kanal-DSMR, nur Sender	Émetteur DSMR Smart 5 canaux DX5C uniquement	DX5C Smart 5 canali DSMR solo trasmittente
SPMR52000	DX5 Rugged DSMR Transmitter Only, Orange	Nur DX5 Rugged DSMR-Sender, Orange	Émetteur DX5 robuste DSMR uniquement, orange	DX5 Rugged DSMR solo trasmittente, arancione
SPMSR6100AT	SR6100AT DSMR 6-Channel AVC Telemetry Surface Receiver	SR6100AT DSMR AVC-Telemetrie-Oberflächenempfänger mit 6 Kanälen	Récepteur de surface de télémétrie AVC 6 canaux SR6100AT DSMR	Ricevitore di superficie SR6100AT DSMR 6 canali AVC con telemetria
SPMX50002S100H5	7.4V 5000mAh 2S 100C Smart Hardcase LiPo Battery: IC5	7,4 V 5.000 mAh 2S 100C Smart Li-Po-Akku, Hartschale: IC5	Batterie Li-Po Smart 7,4 V 5 000 mAh 2S 100C, boîtier rigide : IC5	Batteria 7,4 V 5000 mAh 2S 100C Smart Hardcase LiPo: IC5
SPMX50002S100HT	7.4V 5000mAh 2S 100C Smart Race Shorty Hardcase LiPo Battery: Tubes, 5mm	7,4 V 5.000 mAh 2S 100C Smart Race Li-Po-Akku, Shorty-Hartschale: Rohre, 5 mm	Batterie Li-Po Smart Race Shorty 7,4 V 5 000 mAh 2S 100C, boîtier rigide : Tubes, 5 mm	Batteria 7,4 V 5000 mAh 2S 100C Smart Hardcase LiPo, da gara, corta: Tubi, 5 mm
SPMX50002S50H5	7.4V 5000mAh 2S 50C Smart Hardcase LiPo Battery: IC5	7,4 V 5.000 mAh 2S 50C Smart Li-Po-Akku, Hartschale: IC5	Batterie Li-Po Smart 7,4V 5 000 mAh 2S 50C, boîtier rigide : IC5	Batteria 7,4 V 5000 mAh 2S 50C Smart Hardcase LiPo: IC5
SPMXBC100	XBC100 Smart LiPo Battery Checker & Servo Driver	XBC100 Smart-LiPo-Akkuprüfer und Servotreiber	Contrôleur pour batterie Li-Po Smart XBC100 et servomoteur	Tester per batterie LiPo Smart e servomotore XBC100
SPMXC1010	Smart S2100 AC Charger, 2x100W	Smart S2100 Wechselstrom-Ladegerät, 2 x 100 W	Chargeur c.a. Smart S2100, 2 x 100 W	Caricabatterie Smart S2100 CA, 2x100 W

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

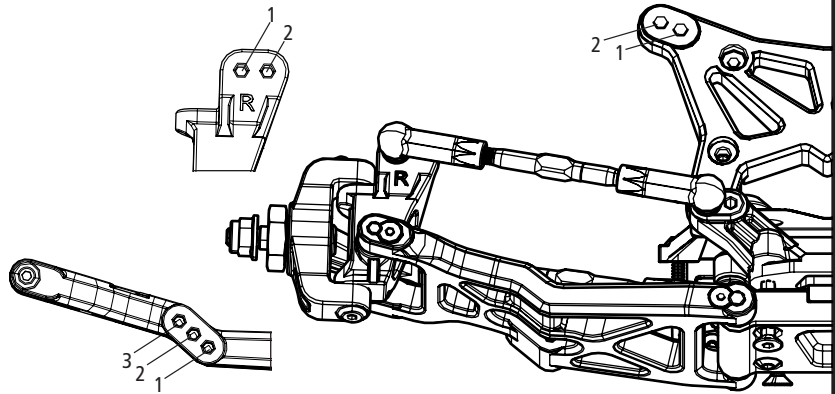
PART #	ENGLISH	DEUTSCH	FRANÇAIS	ITALIANO
SPMXC1070	S150 AC/DC Smart Charger, 1x50W	S150 Smart-Wechsel-/Gleichstrom-Ladegerät, 1 x 50 W	Chargeur Smart S150 CA/CC, 1x50 W	Caricabatteria S150 CA/CC Smart, 1x50 W
SPMXCA200	Smart ESC Programming Update Box: Avian and Firma	Smart Geschwindigkeitsregler Programmier-box: Avian und Firma	Boîte de programmation de mise à jour pour variateur ESC Smart : Avian et Firma	Box programmazione e aggiornamento ESC Smart: Avian e Firma
SPMXSE1120	Firma 120A Brushless Smart ESC, 4S	Firma 120A bürstenloser Smart-Geschwindigkeitsregler, 4S	Variateur ESC sans balais Smart Firma 120A, 4S	Smart ESC Firma 120A Brushless 4S
TLR332016	48P Aluminum Pinion Gear, 16T	48P Aluminium Zahnradgetriebe, 16T	Engrenage à pignons en aluminium 48P, 16T	Pignone alluminio 48P, 16T
TLR332017	48P Aluminum Pinion Gear, 17T	48P Aluminium Zahnradgetriebe, 17T	Engrenage à pignons en aluminium 48P, 17T	Pignone alluminio 48P, 17T
TLR332018	48P Aluminum Pinion Gear, 18T	48P Aluminium Zahnradgetriebe, 18T	Engrenage à pignons en aluminium 48P, 18T	Pignone alluminio 48P, 18T
TLR332019	48P Aluminum Pinion Gear, 19T	48P Aluminium Zahnradgetriebe, 19T	Engrenage à pignons en aluminium 48P, 19T	Pignone alluminio 48P, 19T
TLR332020	48P Aluminum Pinion Gear, 20T	48P Aluminium Zahnradgetriebe, 20T	Engrenage à pignons en aluminium 48P, 20T	Pignone alluminio 48P, 20T
TLR332021	48P Aluminum Pinion Gear, 21T	48P Aluminium Zahnradgetriebe, 21T	Engrenage à pignons en aluminium 48P, 21T	Pignone alluminio 48P, 21T
TLR332022	48P Aluminum Pinion Gear, 22T	48P Aluminium Zahnradgetriebe, 22T	Engrenage à pignons en aluminium 48P, 22T	Pignone alluminio 48P, 22T
TLR332023	48P Aluminum Pinion Gear, 23T	48P Aluminium Zahnradgetriebe, 23T	Engrenage à pignons en aluminium 48P, 23T	Pignone alluminio 48P, 23T
TLR332024	48P Aluminum Pinion Gear, 24T	48P Aluminium Zahnradgetriebe, 24T	Engrenage à pignons en aluminium 48P, 24T	Pignone alluminio 48P, 24T
TLR332025	48P Aluminum Pinion Gear, 25T	48P Aluminium Zahnradgetriebe, 25T	Engrenage à pignons en aluminium 48P, 25T	Pignone alluminio 48P, 25T
TLR336000	4mm Aluminum Serrated Lock Nuts, Black (6)	4 mm Aluminium Rändelmutter, schwarz (6)	Contre-écrous en aluminium à embase striée 4 mm, noir (6)	Controdado dentato in alluminio 4 mm, nero (6)
TLR336001	4mm Aluminum Serrated Lock Nuts, Blue (6)	4 mm Aluminium Rändelmutter, blau (6)	Contre-écrous en aluminium à embase striée 4 mm, bleu (6)	Controdado dentato in alluminio 4 mm, blu (6)
TLR74004	Silicone Shock Oil, 25 wt, 2 oz	Stoßdämpfer-Silikonöl, 25 wt, 59 ml (2 oz)	Huile de silicone pour amortisseurs, 25 wt, 2 oz	Olio di silicone ammortizzatore, 25 wt, 2 oz
TLR74005	Silicone Shock Oil, 27.5 wt, 2 oz	Stoßdämpfer-Silikonöl, 27,5 wt, 59 ml (2 oz)	Huile de silicone pour amortisseurs, 27,5 wt, 2 oz	Olio di silicone ammortizzatore, 27,5 wt, 2 oz
TLR74006	Silicone Shock Oil, 30 wt, 2 oz	Stoßdämpfer-Silikonöl, 30 wt, 59 ml (2 oz)	Huile de silicone pour amortisseurs, 30 wt, 2 oz	Olio di silicone ammortizzatore, 30 wt, 2 oz
TLR74008	Silicone Shock Oil, 35 wt, 2 oz	Stoßdämpfer-Silikonöl, 35 wt, 59 ml (2 oz)	Huile de silicone pour amortisseurs, 35 wt, 2 oz	Olio di silicone ammortizzatore, 35 wt, 2 oz
TLR74009	Silicone Shock Oil, 37.5 wt, 2 oz	Stoßdämpfer-Silikonöl, 37,5 wt, 59 ml (2 oz)	Huile de silicone pour amortisseurs, 37,5 wt, 2 oz	Olio di silicone ammortizzatore, 37,5 wt, 2 oz
TLR74020	Shock Oil, 6Pk, 20, 25, 30, 35, 40, 45, 2oz	Schock öl, 20, 25, 30, 35, 40, 45; 6er Pack: 2 Unzen	Huile d'amortisseur, 20, 25, 30, 35, 40, 45; Paquet de 6: 2 onces	Olio shock, 20, 25, 30, 35, 40, 45; Confezione da 6: 2 once
TLR74021	Shock Oil, 6Pk, 50, 60, 70, 80, 90, 100, 2oz	Schock öl, 50, 60, 70, 80, 90, 100; 6er Pack: 2 Unzen	Huile d'amortisseur, 50, 60, 70, 80, 90, 100; Paquet de 6: 2 onces	Olio shock, 50, 60, 70, 80, 90, 100; Confezione da 6: 2 once
TLR75001	Silicone Diff Fluid, 40,000 CS	Differenzial-Silikonflüssigkeit, 40.000 CS	Liquide silicone pour différentiel, 40 000 CS	Fluido silicónico diferencial, 40.000 CS
TLR75002	Silicone Diff Fluid, 60,000 CS	Differenzial-Silikonflüssigkeit, 60.000 CS	Liquide silicone pour différentiel, 60 000 CS	Fluido silicónico diferencial, 60.000 CS
TLR75003	Silicone Diff Fluid, 80,000 CS	Differenzial-Silikonflüssigkeit, 80.000 CS	Liquide silicone pour différentiel, 80 000 CS	Fluido silicónico diferencial, 80.000 CS
TLR75004	Silicone Diff Fluid, 100,000 CS	Differenzial-Silikonflüssigkeit, 100.000 CS	Liquide silicone pour différentiel, 100 000 CS	Fluido silicónico diferencial, 100.000 CS
TLR75009	Silicone Diff Fluid, 500,000 CS	Differenzial-Silikonflüssigkeit, 500.000 CS	Liquide silicone pour différentiel, 500 000 CS	Fluido silicónico diferencial, 500.000 CS
TLR76004	TLR Lok, Threadlock, Blue	Reifenklebemittel, Standard	Colle à pneus, standard	Colla pneumatici, standard
TLR76007	Tire Glue, Standard	TLR Lok, Schraubensicherung, blau	Verrou TLR, frein-filet, bleu	TLR Lok, frenafili, blu
TLR331041	Rear Brass Weight Set, 16g & 25g: 22 5.0	Heck Gewicht, Satz, Messing, 16 g & 25 g: 22 5.0	Ensemble de poids arrière en laiton, 16 et 25 g : 22 5.0	Set peso ottone posteriore, 16 e 25 g: 22 5.0



Name:	Date:	Event:	Track:
<b>Track Conditions</b>			
<input type="checkbox"/> Unprepped Asphalt	<input type="checkbox"/> Unprepped Concrete	<input type="checkbox"/> Smooth	<input type="checkbox"/> Rough
<input type="checkbox"/> Swept	<input type="checkbox"/> Prepped Launch	<input type="checkbox"/> Flashlight	<input type="checkbox"/> Christmas Tree
<b>Tire Type:</b>			Notes: _____
<input type="checkbox"/> Belted <input type="checkbox"/> Drag Radial <input type="checkbox"/> Modified			_____

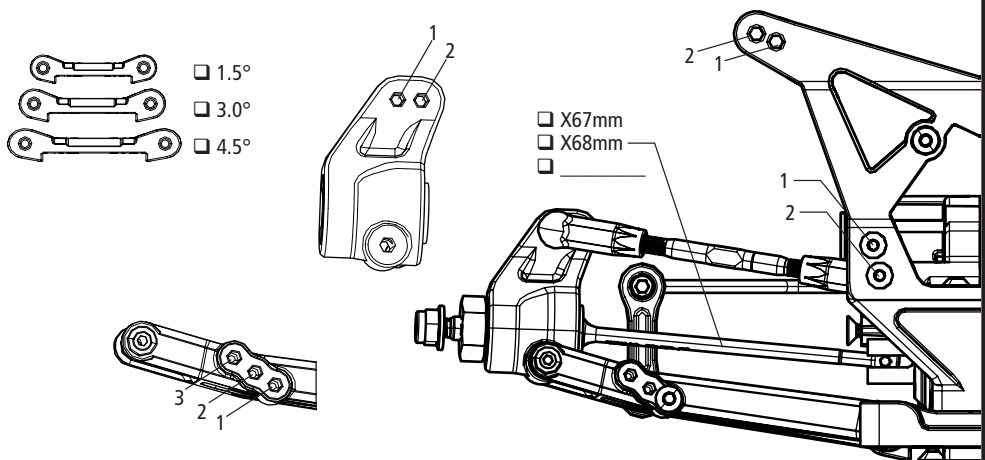
**Front Suspension**

Ride Height		mm
Camber	°	
Toe	°	
Notes:	_____	
	_____	
	_____	
	_____	
	_____	



**Rear Suspension**

Ride Height		mm
Camber	°	
Sway Bar	mm	
Notes:	_____	
	_____	
	_____	
	_____	

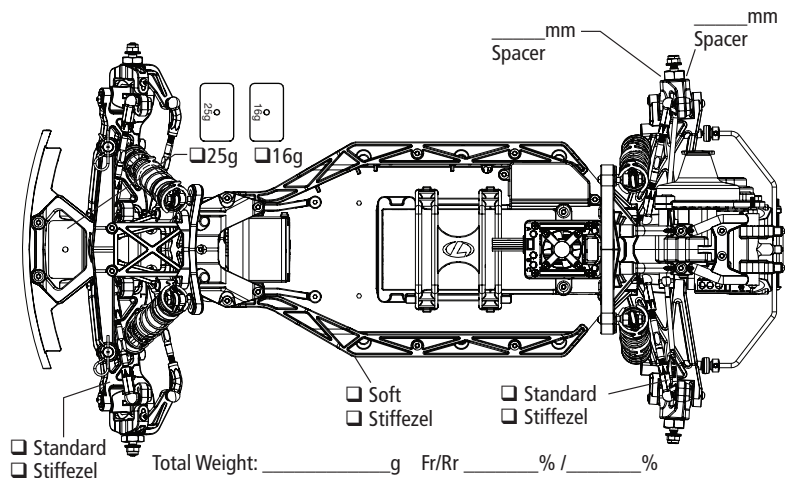


**Chassis**

Differentials		Aerodynamics		Tires		
	Rear	Body			Front	Rear
Fluid		Fr Scoop		Brand		
Int Gears	<input type="checkbox"/> Stl <input type="checkbox"/> Comp	Rr Wing		Tread		
Weight	g	Wheelie Bar		Compound		
Ring/Pin	<input type="checkbox"/> Stl <input type="checkbox"/> Comp	Wheelie Bar Height	°	Insert		
Slipper Pads		Notes		Sauce		
				Wheel		
				Notes		

**Shocks**

	Front	Rear
Shock Caps		
Oil		
Piston	<input type="checkbox"/> Thin	<input type="checkbox"/> Thin
Limiters, Int	mm	mm
Shaft Dia	<input type="checkbox"/> 3.0mm <input type="checkbox"/> 3.5mm	<input type="checkbox"/> 3.0mm <input type="checkbox"/> 3.5mm
Limiters, Ext	mm	mm
Stroke	mm	mm
Eyelet	<input type="checkbox"/> Std <input type="checkbox"/> +2mm	<input type="checkbox"/> Std <input type="checkbox"/> +2mm
Spring		
Spring Cup	<input type="checkbox"/> Low <input type="checkbox"/> Mid <input type="checkbox"/> High	<input type="checkbox"/> Low <input type="checkbox"/> Mid <input type="checkbox"/> High



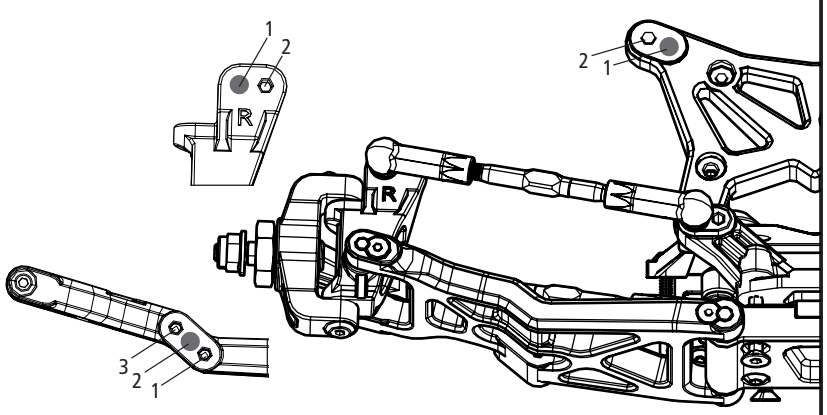
Standard  Stiffezel  
 Stiffezel

Total Weight: \_\_\_\_\_ g Fr/Rr \_\_\_\_\_ % / \_\_\_\_\_ %

Name:	Date:	Event:	Track:
<b>Track Conditions</b>			
<input type="checkbox"/> Unprepped Asphalt	<input type="checkbox"/> Unprepped Concrete	<input type="checkbox"/> Smooth	<input type="checkbox"/> Rough
<input type="checkbox"/> Swept	<input type="checkbox"/> Prepped Launch	<input type="checkbox"/> Flashlight	<input type="checkbox"/> Christmas Tree
<b>Tire Type:</b> <input type="checkbox"/> Belted <input checked="" type="checkbox"/> Drag Radial <input type="checkbox"/> Modified			Notes: _____

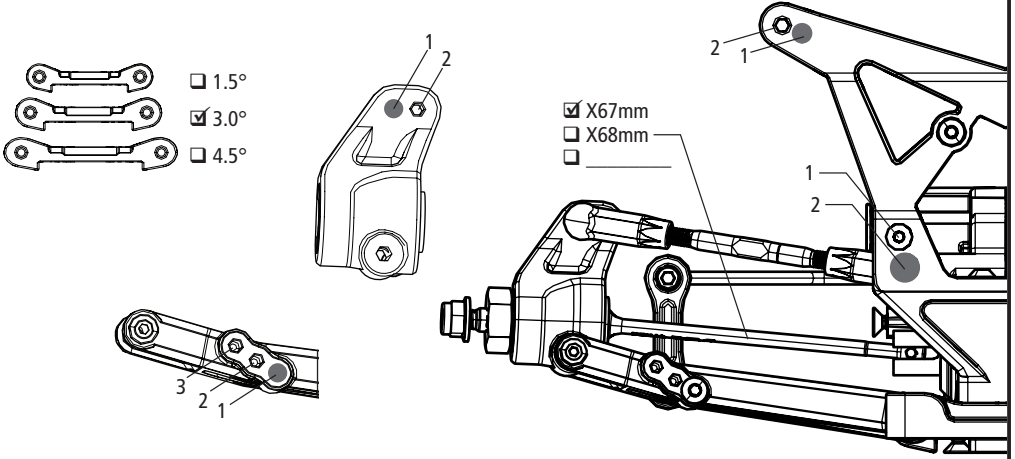
**Front Suspension**

Ride Height	<b>12</b>	mm
Camber	<b>0°</b>	
Toe	<b>-2°</b>	
Notes: _____		



**Rear Suspension**

Ride Height	<b>20</b>	mm
Camber	<b>1°</b>	
Sway Bar	<b>Not Used</b>	mm
Notes: _____		

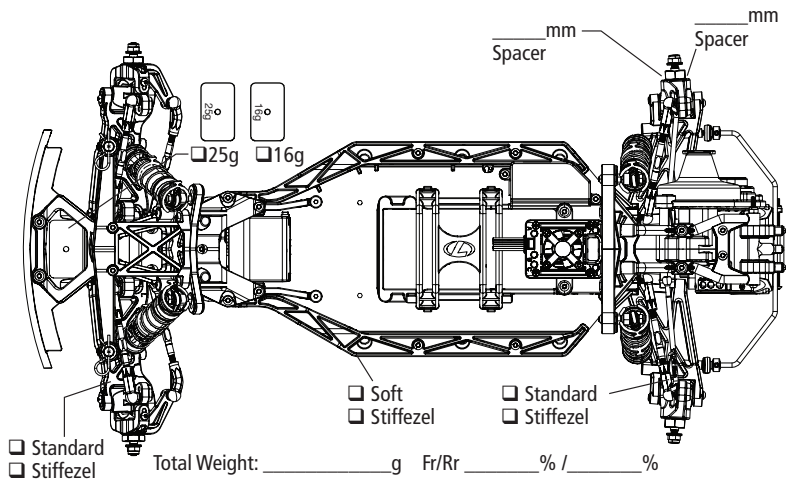


**Chassis**

Differentials	Rear	Aerodynamics	Tires	
Fluid	<b>500,000wt</b>	Body	Front	Rear
Int Gears	<input type="checkbox"/> Stl <input type="checkbox"/> Comp	Fr Scoop	<b>Losi</b>	<b>Losi</b>
Weight	g	Rr Wing	<b>MT Drag Radial Grooved</b>	
Ring/Pin	<input type="checkbox"/> Stl <input type="checkbox"/> Comp	Wheelie Bar	<b>MT Drag Radial</b>	
Slipper Pads		Wheelie Bar Height	<b>Losi Drag</b>	
		Notes	<b>Compound</b>	
			<b>Insert</b>	
			<b>Sauce</b>	
			<b>Wheel</b>	
			<b>Notes</b>	

**Shocks**

	Front	Rear
Shock Caps	<b>Plastic</b>	<b>Plastic</b>
Oil	<b>40wt</b>	<b>70wt</b>
Piston	<b>2x1.6mm</b> <input type="checkbox"/> Thin	<b>2x1.6mm</b> <input type="checkbox"/> Thin
Limiters, Int	<b>12</b> mm	<b>15</b> mm
Shaft Dia	<input type="checkbox"/> 3.0mm <input checked="" type="checkbox"/> 3.5mm	<input type="checkbox"/> 3.0mm <input checked="" type="checkbox"/> 3.5mm
Limiters, Ext	<b>None</b> mm	<b>None</b> mm
Stroke	mm	mm
Eyelet	<input checked="" type="checkbox"/> Std <input type="checkbox"/> +2mm	<input checked="" type="checkbox"/> Std <input type="checkbox"/> +2mm
Spring		
Spring Cup	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Mid <input type="checkbox"/> High	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Mid <input type="checkbox"/> High



Standard  Stiffezel  
 Stiffezel  Standard  Stiffezel  
 Total Weight: \_\_\_\_\_ g Fr/Rr \_\_\_\_\_ % / \_\_\_\_\_ %



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