



**SPYDER** *RTR*  
**SRX2**

*1/10 scale Ready To Race electro Buggy 2WD*

# INSTRUCTION MANUAL

& REFERENCE GUIDE

# SPYDER RTR SRX2

powered by





## Introduction

*Thank you very much for buying this Serpent rc car. You are now member of a large following of Serpent fans worldwide. This Serpent car will bring you many hours and weekends of racing excitement.*

*Serpent started as rc racing company in 1980, and has developed many modelcars since. This wealth of experience and know how is used in our todays cars and that shows!*

*The Serpent Spyder series of cars is the best entry in the world of rc racing. Affordable and a very good basis to start your racing carreer. The Serpent Spyder RTR is based on the high-end competition version of the Spyder and shares geometry and many parts. Still its easy to use, maintain and set up. The RTR Spyder is fully upgradable to high end competition spec. The details can be found in our website.*

*Designed, tested and raced by Billy Easton, USA. World Champion.*

*This manual contains a number of steps you need to follow to operate the Serpent cars in the right way. This manual also contains a quick-start section, a partslist and exploded views, and a FAQ section. A full assembly manual can be found online in the Serpent.com website. So read this manual with great attention before racing this car. For your own safety as well as for others, and to ensure you can enjoy your Serpent car a long time, even if you are an experienced user. Serpent is not only about the car itself. Serpent as company, and the worldwide network or distributors and dealers are here to help you out.*

*The Serpent website and social media are available for assistance and additional information as well.*

*Enjoy your Serpent, the racing experience!*

## Contents

Introduction	
Read this first	4
Safety matters	4
Quickstart	3
Required equipment	5
Model specs / overview	6
Basic Tuning	7
Default Set Up	8
Maintenance	9
Partslist	10
Exploded views	14

## Read this first

- This is a highly technical hobby product, intended to be used in a safe racing environment. This car is capable of speeds in excess of 70 km/h or 50mph.
- Please follow these guidelines when building and operating this model.
- Parental guidance is required when the builder/user of this car is under 16.
- Follow the building instructions. If in doubt, contact your dealer or importer.
- Be sure to use the proper tools when assembling the car. Always exercise caution when using electric tools, knives and other sharp objects.
- Be careful when using liquids like lubrication oil or glue.
- Do not swallow.
- Follow the manufacturer's instruction in case you experience irritation after using the product.
- Be careful when operating the car. Stay away from any rotating parts such as wheels, gears and transmission.
- Stay away from speedo during and immediately after use, as these parts may be very hot. We advise to use protective handgloves.
- Only operate this car in a safe environment, like a special racing track or a closed parking lot.
- Avoid using this car on public roads, crowded places or near infants.
- Before operating this car, always check the mechanical status of the car. Check that the batteries of the transmitter and receiver are fully charged. After use, always check all the mechanics of the car. We advise to clean the car immediately after use, and inspect the parts for wear or fractures. Replace when necessary. Do not use water, methanol, thinner or other solvents to clean the car.
- Store the car in a dry and heated place to avoid corrosion of metal parts.
- Avoid using this car in wet conditions as the water will cause corrosion on the metal parts and bearings and these parts will cease to function properly. If driven in the wet, ensure that all the electric equipment is waterproofed and after use, that all moving parts are dried immediately.

## Safety matters

All instructions in this manual must be followed to ensure safe use of the car. This model is not intended for use by children under 14 years .

### Important pre-cautions

- Only run the car in designated areas or areas with very few people, so no-one can get hurt.
- The car has a lot of power and the turning parts on the car can cause damage, also some parts of the car like transmission and motorparts can become very hot. So wear protective clothing both as driver and helper and be careful when picking up the car.
- Do not operate the car under dark conditions, as both you and others may not see the car properly and can get hurt, due to lack of car control.
- Use good common sense while operating the car so you can fully enjoy your car.

### Battery and battery-charging

- The battery and battery-charger are not included with this model. We advise to use good quality NimH or Lipo rechargeable battery-packs with 4000 mA or more. Check carefully to buy batteries with the correct connector for the speedcontroller, or also purchase and mount other fitting ones.
- Use proper battery-charger specifically designed for that type batteries and follow the instructions of the battery supplier and the charger correctly.
- Keep the battery and charger always in dry places only and never leave un-attended during charging.
- When the batteries are at their end of life, dispose them at a recycling-place, check [www.call2recycle.org](http://www.call2recycle.org) for more info.

## Quick-start

The quick-start section is not a replacement for the full instructions. To be able to use the model to its best take the time to read the full manual.

1. Read the manual and safety pre-cautions ( page 4)
2. Buy and install the batteries in the transmitter (see Transmitter manual)
3. Install the battery pack in the model, make sure the speedo is switched off, connect the cables (avoid reversed polarity) and securely fasten the battery-pack.
4. Turn on the transmitter (see Transmitter manual). Always turn on the transmitter first before to switch on the car and only turn off the transmitter after you switched off the car.
5. Check servo operation. Check that the servo works correctly and check that the car runs straight in neutral position, trim as needed. Perform a range test with the radio system
6. Personalise the body of your car by applying more decals if required.
7. Drive your modelcar.
8. Maintain your modelcar (page 9)

# Equipment



Included with your model:

- Serpent modelcar, factory assembled and set-up
- Dragon-RC DTS-1 transmitter (as shown or similar)
- Dragon-RC DESC speedcontroller
- Dragon-RC brushless motor
- Dragon-RC racing tyres, pre-mounts
- Dragon-Rc digital servo
- Serpent pretrained and pre-cut bodyshell



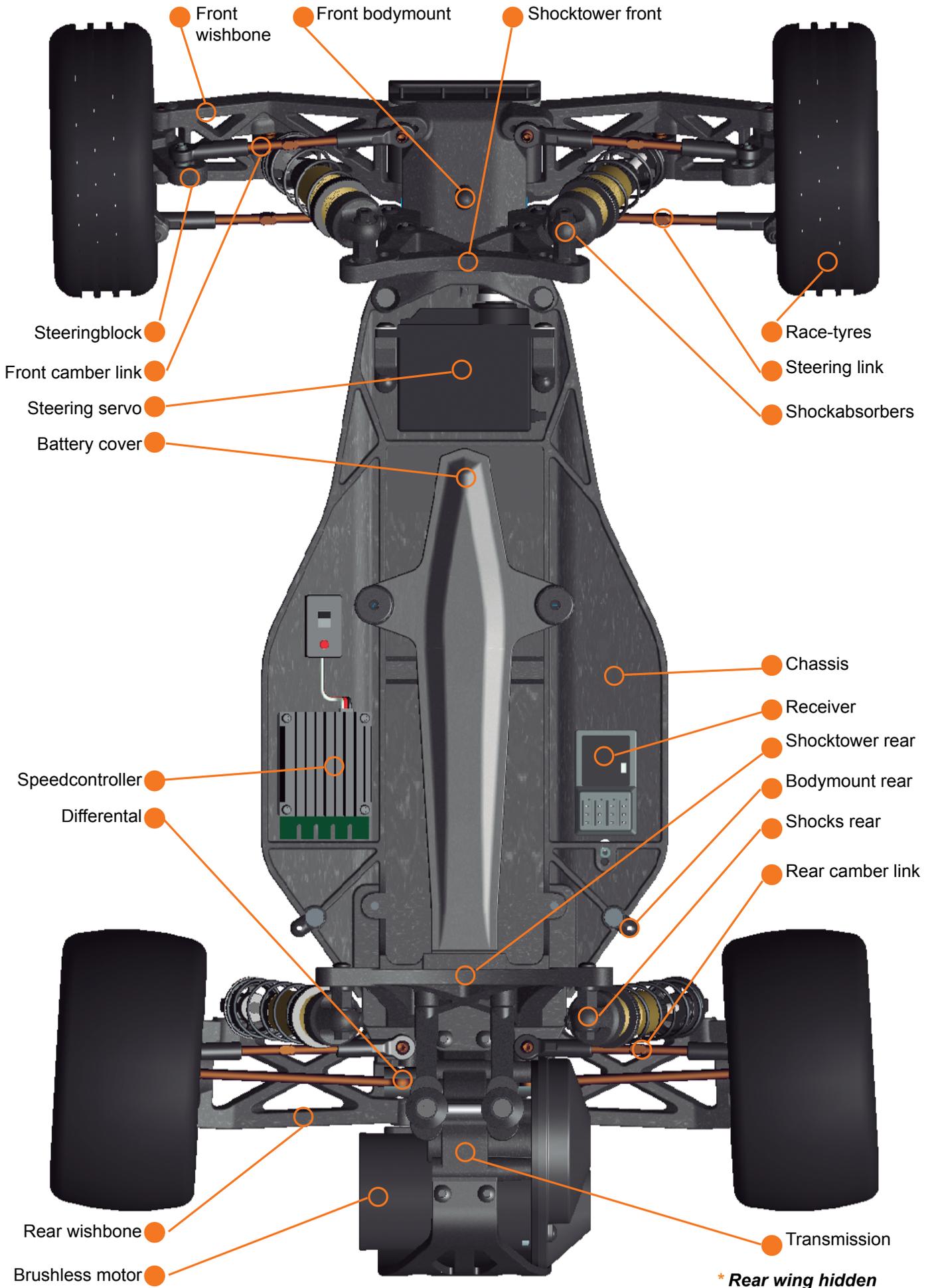
## Required for your model

- Multi Charger; to charge transmitter battery and car battery
- Battery pack 2-S Lipo
- Battery AA x 4 to operate the transmitter
- Tools: selection of allen tools and screw- drivers
- Hobby knife
- Camber gauge

## Recommended materials

- Side cutter and nose plier
- Cleaning brush and towel
- Safety glasses and gloves
- Cleaning gum
- Thin bearing oil
- Transmission grease
- CA glue
- Degreaser

# Model specs/overview



# Basic tuning

- **Springs:** by using a softer spring you will have more sag, more chassis roll/lean, more dive and a less responsive car this might be better on low-grip surfaces; by using a harder spring you have less sag, less body lean, less dive and a more responsive car. What to apply depends on driving style and grip-level surface. This is more suitable on high-grip surfaces.
- **Shock-angle:** the angle at which the shocks are mounted create a different suspension feel; the more vertical, the harder it feels, the more horizontal, the softer it feels.
- **Oil:** the viscosity of the shock-oil defines the dampening of the shockabsorber. Thinner oil will be softer, with slower response, thicker oil will be harder dampening with faster reponse. The dampening can also be fine-tuned by fitting other pistons with more or less holes, which is an optional.
- **Differential:** you can make the gear differential harder or softer by using a different oil viscosity. Lighter oil will create a looser diff which increases rear traction on acceleration, but also more understeer, and a harder differential will decrease rear traction on acceleration, but also more on-throttle steering
- **Toe adjustment:** Front: adjusted with the track-rods, make longer or shorter. More toe-in will create more steering, but less stability; toe-out will create a more stable car, with less steering.
- **Toe adjustment:** Rear: adjusted with suspension blocks (optional). More toe-in will create more traction, more stability, but less speed. Less toe in will create a less stable car, with less traction but higher speed.
- **Front camber:** using more negative camber in the front will give you more steering but also increases possible traction roll.
- **Rear camber:** using more negative camber in the rear will create more grip in the rear meaning also creating more understeer.
- **Front caster:** use optional caster blocks to change caster, more caster will create more steering but also increases possible traction roll. And less caster will create less steering but also decreases possible traction roll.
- **Wheel-base length:** a longer car will be more stable and react slower, a shorter car will be more nervous and more direct.
- **Gear-ratio:** spur and pinion: for correct gearmesh keep a piece of notebook paper at hand, to put between the spur and pinion for correct mesh.
- **Ride-height:** you can change the ride-height of the car, by applying more or less pre-load on the springs, turn the pre-load adjusters to set the desired height and keep left and right the same.

## Springs



## Shock angle



## Front Toe-out



## Rear Toe-in



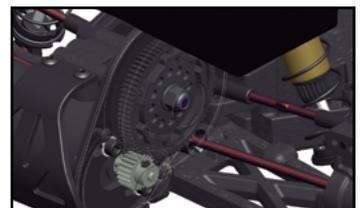
## Front camber



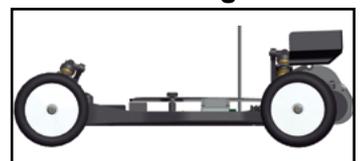
## Rear camber



## Gear-ratio



## Ride Height



# SPYDER SRX2

## Rear-Motor Set-up Sheet

Driver: \_\_\_\_\_ Event: Standard Kit set-up  
 Date: \_\_\_\_\_ Track: \_\_\_\_\_  
 Track-Temp \_\_\_\_\_ Air-Temp \_\_\_\_\_ Country/City/State: \_\_\_\_\_

Indoor  Tight  Medium  Smooth  Hard Packed  Grass  Astro-turf  Clay  Low Bite  High Bite  
 Outdoor  Open  \_\_\_\_\_  Rough  Blue Groove  Carpet  Multi-Surface  \_\_\_\_\_  Med Bite  \_\_\_\_\_

### Front Suspension

Sway Bar:  Yes Size \_\_\_\_\_ mm  No  
 Ride Height: 24.0 mm  
 Camber: 1.0 ° negative  
 Toe:  In  Out 1.0 °  
 Front Bulkhead:  Stock / 25°  Brass  Aluminum  
 Insert:  20°  25°  30°  
 Caster Block Inserts:  0 Deg  2.5 Deg  5 Deg  
 Bump Steer: \_\_\_\_\_ mm  
 Steering Ackerman:  Opt.1  Opt.2  Opt.3  
 Shims: \_\_\_\_\_ mm  
 Spindle Shims:  \_\_\_\_\_  \_\_\_\_\_

### Rear Suspension

Sway Bar:  Yes Size \_\_\_\_\_ mm  No  
 Ride Height: 24.0 mm  
 Camber: 2.0 ° negative  
 RR-FR-Toe-Block:  Stock  Brass  
 Wheel Base:  \_\_\_\_\_  \_\_\_\_\_  
 Bulkhead Weight:  Yes  No  
 Hex Adapter:  -0.75 mm  Stock  +0.75 mm  
 Outboard Toe-In:  0 deg  0.5 deg  1.0 deg  1.5 deg  2.0 deg  
 Toe-In: \_\_\_\_\_ °  
 Anti-Squat: \_\_\_\_\_ °  
 Shims: \_\_\_\_\_ mm

### Shocks

	Front	Rear
Shock Piston (1):	<u>1.60 mm X 2</u>	<u>1.60 mm X 2</u>
Shock Brand/Oil:	<u>300</u>	<u>300</u>
Shock Spring:	<u>Serpent Pink</u>	<u>Serpent Pink</u>
Shock Limiters (2):	<u>2.00 mm</u>	<u>2.00 mm</u>
Shock Length (3):	<u>86.5 mm</u>	<u>102.00 mm</u>
Rebound (4):	<u>2.50 mm</u>	<u>2.50 mm</u>
Bladder / Seal (5):	<u>Seal</u>	<u>Seal</u>
Spring Bucket:	<u>High</u>	<u>Low</u>

### Battery-Weight

"Weight Placement" Type the weight in grams at the Location it's placed on the chassis  
 Battery Location (Measured from inside Front cross brace): \_\_\_\_\_  
 Vehicle Weight: \_\_\_\_\_ Grams  
 Weight Bias - Front: \_\_\_\_\_ % Rear: \_\_\_\_\_ %  
 Standard Battery  Shorty Battery

### Gearing

Spur Gear (A): 78 T  
 Pinion Gear (B): 21 T  
 Gear Ratio (A/B)=C: 3.714  
 Final Drive (C\*2.43): 0.000  
 Differential:  High  Med  Low  
 Ball Differential  Gear Differential  
 Oil cst/wt: 7000

### Electrics

Radio: \_\_\_\_\_  
 ESC: \_\_\_\_\_  
 Motor: 8.5T  
 Servo: \_\_\_\_\_  
 Battery: \_\_\_\_\_  
 Body-Wing:  Serpent  Wing Rear: Serpent  
 Wing Width: 6.50 inch  
 Wing Lip: 5.00 mm  
 Wing Angle: 2 Degree  
 Wing Front: No

### Tires

	Front	Rear
Brand:	_____	_____
Model Name:	_____	_____
Compound:	_____	_____
Insert Type:	_____	_____
Wheels:	<u>Serpent</u>	<u>Serpent</u>
Tire Additive:	_____	_____

### Comments

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Maintenance

- **Shockabsorbers**

Check for smooth operation of the shockabsorbers, and check for airbubbles by pushing the shock up and down fast after removal of the spring. Clean the shockabsorbers as needed and refill with fresh 100% pure silicone oil as needed.

- **Tyres**

Replace tyres if case worn or damaged, and clean the surface in case dirty to obtain better grip.

- **Wheel-axes and driveshafts**

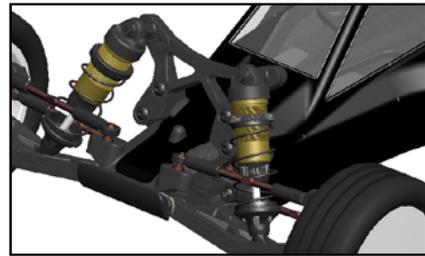
Remove the wheels, and check the wheel-axes, driveshafts and pins. Clean thoroughly as needed and lubricate the touching parts with a small amount of grease or oil.

- **Differential**

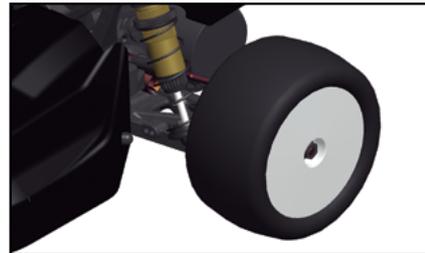
Check the differentials and gears for wear and dirt and clean as needed. Check the functioning of the diff by turning the wheels in opposite direction and feel if still smooth or 'gritty'. In case of gritty feel, the silicone oil may need replacement.

The full assembly manual of this model is available online; check on [www.serpent.com](http://www.serpent.com) and type your modelnumber, partnumber, or select your car from the car-page; go to the download section in the menu and download the full manual.

**Shockabsorbers**



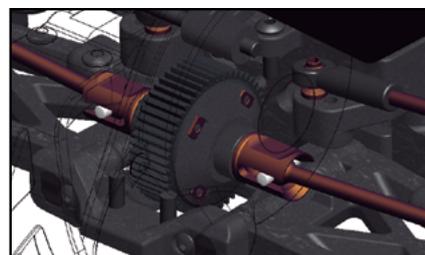
**Tyres**



**Wheel-axes and driveshafts**



**Differentials**



# Partlist and Optionals list

**Part no Description**  
500002 Serpent Spyder Buggy SXR-2 RM 2wd 1/10 RTR

## DECALS

1886 Decal serpent black/white 1/10 (2)  
1888 Decal serpent chrome 1/10 (2)  
500102 Decal sheet Spyder black/white (2)

## RADIO INSTALLATION / BATTERY

500188 Battery case inserts foam (6) SRX2 RM  
500360 Battery plate nut nylon (4) SRX2  
500373 Batteryplate nylon SRX2 RM RTR

## Optionals

500129 Speedcontroler mount SRX2 RM  
500141 Batteryplate carbon SRX2 RM  
500142 Battery plate foam SRX2 RM  
500165 Battery plate nut (4) SRX2

## SERVO SAVER AND STEERING

500117 Steeringarms L+R (3) SRX2  
500118 Servomount (2) SRX2  
500119 Servomount spacers (8) SRX2  
500120 Steeringlever (3) SRX2  
500121 Steeringrack (3) SRX2  
500369 Steeringrack bushing (8) SRX2 RTR

## Optionals

500197 Servomount alu (2) SRX2  
500236 Steeringrack alu (3) SRX2  
500287 Steering arm nr 1 brass L+R  
500288 Steering arm nr 2 brass L+R  
500289 Steering arm nr 3 brass L+R

## SHOCK ABSORBERS

500136 Shock parts frame (44) SRX2  
500137 Nut nylon M3 flanged (8)  
500152 Pivotball shock (4) SRX2  
500177 Shock cartridge spacer (4) SRX2  
500178 Shock cartridge spacer stepped (4) SRX2  
500181 Shock shaft fr (2) SRX2  
500182 Shock shaft rr (2) SRX2  
500183 Shock adjust nut / oring (2) SRX2  
500184 Shock bleeding oring (4) SRX2  
500185 Shock oring bottom (4) SRX2  
500362 Shock mount (4) SRX2 RM RTR  
500363 Shock top (2) SRX2 RTR  
500370 Shock body fr (2) SRX2 RTR  
500371 Shock body rr (2) SRX2 RTR  
500372 Shock top gasket (4) SRX2 RTR

## OPTIONALS

500174 Shock body fr (2) SRX2  
500175 Shock body rr (2) SRX2  
500176 Shock top (2) SRX2  
500179 Shock top gasket (4) SRX2  
500180 Shock membrame (4) SRX2  
500199 Shock top bushing delrin (4) SRX2  
500201 Shock shaft fr TiN coated (2) SRX2  
500202 Shock shaft rr TiN coated (2) SRX2  
500238 Shock piston conical 2 holes (4) SRX2  
500239 Shock piston conical 3 holes (4) SRX2  
500240 Shock piston conical 4 holes (4) SRX2

## SPRINGS

500222 Shock spring silver 2.5lbs fr (2) SRX2  
500223 Shock spring black 2.65 fr (2) SRX2  
500224 Shock spring orange 2.87lbs fr (2) SRX2  
500225 Shock spring red 3.0lbs fr (2) SRX2  
500226 Shock spring pink 3.15lbs fr (2) SRX2  
500227 Shock spring blue 3.4lbs fr (2) SRX2  
500228 Shock spring purple 3.5lbs fr (2) SRX2

500229 Shock spring green 3.7lbs fr (2) SRX2  
500230 Shock spring orange 2.0lbs rr (2) SRX2  
500231 Shock spring red 2.1lbs rr (2) SRX2  
500232 Shock spring pink 2.2lbs rr (2) SRX3  
500233 Shock spring blue 2.3lbs rr (2) SRX2  
500234 Shock spring purple 2.4lbs rr (2) SRX2  
500235 Shock spring green 2.5lbs rr (2) SRX2  
500354 Shock spring orange 1,8lbs astro (2) SRX2  
500355 Shock spring red 1,9lbs astro (2) SRX2  
500356 Shock spring pink 2,0lbs astro (2) SRX2  
500357 Shock spring blue 2,1lbs astro (2) SRX2  
500358 Shock spring purple 2,2lbs astro (2) SRX2  
500359 Shock spring green 2,3lbs astro (2) SRX2

## FRONT SECTION

500110 Front bulkhead-insert SRX2  
500111 Front bulkhead top SRX2  
500113 Wishbone fr L+R SRX2  
500115 C-hub L+R SRX2  
500116 Steeringblock L+R SRX2  
500117 Steeringarms L+R (3) SRX2  
500118 Servomount (2) SRX2  
500119 Servomount spacers (8) SRX2  
500120 Steeringlever (3) SRX2  
500121 Steeringrack (3) SRX2  
500128 Front bumper SRX2  
500132 C-hub insert (6) SRX2  
500133 Steeringrack bold (4) SRX2  
500138 Balljoint set (14) SRX2  
500144 Hinge pin fr inner / rr outer (2) SRX2  
500145 Hinge pin fr outer (2) SRX2  
500155 Wheel axle fr (2) SRX2  
500162 Track rod M3x50 (2) SRX2  
500163 Hinge pin brace 25 deg fr SRX2  
500363 Shock top (2) SRX2 RTR  
500364 Shock tower fr SRX2 RTR  
500366 Casterblock bushing (4) SRX2 RTR  
500367 Pivotball with shaft low (5) SRX2 RTR  
500368 Pivotball with shaft high (5) SRX2 RTR  
500369 Steeringrack bushing (8) SRX2 RTR

## Optionals

500103 1/10 buggy rim fr 2wd white (2)  
500104 1/10 buggy rim fr 2wd yellow (2)  
411187 Pivotball with shaft (2)  
500139 Shocktower fr SRX2  
500146 Shock mount (4) SRX2  
500147 Pivotball shim conical (10) SRX2  
500148 Pivotball with shaft low (4) SRX2  
500149 Pivotball with shaft med (5) SRX2  
500150 Pivotball with shaft high (4) SRX2  
500151 Casterblock bushing (4) SRX2  
500193 Front wing set SRX2  
500194 Antiroll bar set fr SRX2  
500198 Pivotball with shaft short (4) SRX2  
500200 Front bulkhead inserts alu (6) SRX2  
500203 Pivot pin brace 20 deg fr SRX2  
500204 Pivot pin brace 30 deg fr SRX2  
500208 Antiroll bar fr 0.9 SRX2  
500209 Antiroll bar fr 1.0 SRX2  
500210 Antiroll bar fr 1.1 SRX2  
500237 C-hub L+R alu SRX2  
500241 Front wing SRX2  
500243 Front bulkhead alu SRX2  
500250 Front bulkhead brass SRX2  
500258 Antirollbar balljoints (2+2) SRX2  
500262 Pivot pin fr inner / rr outer TiN coated (2) SRX2  
500263 Pivot pin fr outer TiN coated (2) SRX2  
500346 Antirollbar wire adaptors (2+2) SRX2  
500348 Antirollbar mount FR SRX2

## MIDDLE SECTION

500107 Chassis SRX2 RM  
500130 Bodymount (2) SRX2 RM  
500188 Battery case inserts foam (6) SRX2 RM  
500373 Batteryplate nylon SRX2 RM RTR  
500360 Battery plate nut nylon (4) SRX2

### Optionals

500129 Speedcontroler mount SRX2 RM  
500141 Batteryplate carbon SRX2 RM  
500142 Battery plate foam SRX2 RM  
500165 Battery plate nut (4) SRX2

## REAR SECTION

411553 Wheel hex 411-S (2)  
500108 Skidplate SRX2 RM  
500112 Wishbone rr L+R SRX2 RM  
500114 Upright L+R SRX2  
500126 Wingmount-set SRX2 RM  
500134 Rear suspension insert (24) SRX2  
500135 Upright inserts (10) SRX2  
500143 Pivot pin rr inner (2) SRX2 RM  
500156 Wheel axle rr (2) SRX2  
500161 Wing brace alu SRX2  
500162 Track rod M3x50 (2) SRX2  
500189 Rear wing 6.5" SRX2  
500190 Driveshaft rr (2) SRX2  
500191 Driveshaft rr set (2) SRX2  
500361 Suspension bracket rr fr SRX2 RM RTR  
500362 Shock mount (4) SRX2 RM RTR  
500365 Shock tower rr SRX2 RM RTR  
500368 Pivotball with shaft high (5) SRX2 RTR

### Optionals

401387 Wheelhexagon (2)  
500105 1/10 buggy rim rr white (2)  
500106 1/10 buggy rim rr yellow (2)  
500109 Suspension bracket rr fr SRX2 RM  
500131 Rear bulkhead SRX2 RM  
500140 Shocktower rr SRX2 RM  
500146 Shock mount (4) SRX2  
500147 Pivotball shim conical (10) SRX2  
500149 Pivotball with shaft med (5) SRX2  
500150 Pivotball with shaft high (4) SRX2  
500195 Antiroll bar set rr SRX2 RM  
500196 Upright L+R alu SRX2  
500198 Pivotball with shaft short (4) SRX2  
500205 Antiroll bar rr 1.1 SRX2  
500206 Antiroll bar rr 1.3 SRX2  
500207 Antiroll bar rr 1.5 SRX2  
500211 Wheelhexagon +0.75mm offset (2)  
500212 Wheelhexagon -0.75mm offset (2)  
500244 Rear bulkhead weight SRX2  
500245 Suspension bracket rr fr brass SRX2 RM  
500251 Rear wing 6.0" SRX2  
500252 Rear wing 7.0" SRX2  
500255 Suspension insert rr 3deg alu (2) SRX2  
500258 Antirollbar balljoints (2+2) SRX2  
500261 Pivot pin rr inner TiN coated (2) SRX2 RM  
500262 Pivot pin fr inner / rr outer TiN coated (2) SRX2  
500346 Antirollbar wire adaptors (2+2) SRX2  
500347 Antirollbar spacer (2) SRX2  
500349 Antirollbar mount RR SRX2 RM

## TRANSMISSION

500122 Transmissioncase SRX2 RM  
500123 Diffheight insert (4) SRX2  
500124 Transmissioncase insert (6) SRX2 RM  
500125 Motorguard rear SRX2 RM  
500127 Gear cover SRX2  
500154 Idler gear shaft SRX2  
500192 Geardiff set SRX2  
500246 Geardiff gears 14T(4)+28T(2) SRX2  
500247 Diff pin 14T (2) SRX2  
500248 Geardiff o-ring (4) SRX2

500249 Geardiff outdrive (2) SRX2  
500253 Geardiff cap L+R SRX2  
500254 Geardiff housing 51T SRX2  
500257 Geardiff nut (4) SRX2  
500343 Motor plate SRX2 RM standard  
500344 Idler gear 27T SRX2 steel  
500352 Top-shaft set 21T stock SRX2  
500353 Top-shaft 21T stock SRX2

## OPTIONALS

411069 Differential balls steel 1/8" (12)  
411107 Diff balls. 1/8 ceramic (12)  
500153 Top shaft 21T SRX2  
500157 Slipper plate alu (3) SRX2  
500158 Slipper pad yellow (3) SRX2  
500159 Slipper spring (2) SRX2  
500160 Slipper bolt topshaft (2) SRX2  
500164 Motor plate SRX2 RM  
500166 Idler gear 27T SRX2  
500167 Diff pully balldiff 51T (1) SRX2  
500168 Diff ring balldiff (2) SRX2  
500169 Balldiff outdrive male SRX2  
500170 Balldiff outdrive female SRX2  
500171 Balldiff spring (2) SRX2  
500172 Balldiff bolt (2) SRX2  
500173 Balldiff thrustbearing SRX2  
500186 Balldiff set SRX2  
500187 Balldiff T-nut (2) SRX2  
500242 Slipper plates vented alu (3) SRX2  
500256 Thrustbearing carbide balldiff SRX2  
500259 Differential balls carbide 1/8" (12)  
500260 Idler gear 27T alu SRX2  
600116 O-ring tank (4)

## BODY AND WING

170330 Body Spyder 2wd RM 1/10 orange  
500189 Rear wing 6.5" SRX2

### Optionals

170329 Body Spyder 2wd RM 1/10 semipainted  
170331 Body Spyder 2wd RM 1/10 blue  
170332 Body Spyder 2wd RM 1/10 red  
170333 Body Spyder 2wd RM 1/10 green  
500101 Body Spyder 2wd RM 1/10  
500241 Front wing SRX2  
500251 Rear wing 6.0" SRX2  
500252 Rear wing 7.0" SRX2

## SPURGEAR

500213 Spur gear 70T SRX2  
500214 Spur gear 72T SRX2  
500215 Spur gear 76T SRX2  
500216 Spur gear 78T SRX2  
500217 Spur gear 80T SRX2  
500218 Spur gear 82T SRX2  
500219 Spur gear 84T SRX2  
500220 Spur gear 86T SRX2  
500221 Spur gear 88T SRX2

## PINIONS

120156 Motor-pinion alu hard 48P / 18T  
120157 Motor-pinion alu hard 48P / 19T  
120158 Motor-pinion alu hard 48P / 20T  
120159 Motor-pinion alu hard 48P / 21T  
120160 Motor-pinion alu hard 48P / 22T  
120161 Motor-pinion alu hard 48P / 23T  
120162 Motor-pinion alu hard 48P / 24T  
120163 Motor-pinion alu hard 48P / 25T  
120164 Motor-pinion alu hard 48P / 26T  
120165 Motor-pinion alu hard 48P / 27T  
120166 Motor-pinion alu hard 48P / 28T  
120167 Motor-pinion alu hard 48P / 29T  
120168 Motor-pinion alu hard 48P / 30T

**BALL-BEARINGS**

1340 Ball-bearing 5x13 hs (2)  
 1311 Ballbearing 5x8x2.5 (2)  
 1315 Ballbearing 5x10x4 (2)  
 1344 Ball-bearing 10x15x4 hs (2)  
 401133 Ballbearing 4x8 (2)  
 500173 Balldiff thrustbearing SRX2

**Fastners**

110101 Screw allen countersunk m4x8 (10)  
 110102 Screw allen countersunk m4x10 (10)  
 110103 Screw allen countersunk m4x16 (10)  
 110104 Screw allen countersunk m3x8 (10)  
 110105 Screw allen countersunk m4x12 (10)  
 110106 Screw allen flanged roundhead m5x12 (10)  
 110107 Screw allen cilinderhead m3x16 (10)  
 110108 Screw allen roundhead m3x6 (10)  
 110109 Screw allen roundhead m3x10 (10)  
 110110 Screw allen roundhead m3x16 (10)  
 110111 Screw allen roundhead m3x14 (10)  
 110112 Screw allen roundhead m3x12 (10)  
 110113 Screw allen roundhead m4x8 (10)  
 110114 Setscrew allen m3x8 (10)  
 110115 Setscrew allen m3x4 (10)  
 110116 Setscrew allen m3x3 (10)  
 110117 Setscrew allen m3x12 (10)  
 110118 Setscrew allen m4x4 (10)  
 110119 Setscrew allen m4x6 (10)  
 110120 Setscrew allen m4x10 (10)  
 110121 Setscrew allen m5x6 (10)  
 110122 Screw allen countersunk m3x6 (10)  
 110123 Screw philips roundhead 3.5x13 (10)  
 110124 Screw allen roundhead m3x8 (10)  
 110125 Screw allen countersunk m3x20 (10)  
 110126 Screw allen countersunk m2.5x12 (10)  
 110127 Screw allen countersunk m3x12 (10)  
 110128 Screw allen roundhead m3x5 (10)  
 110129 Screw allen cilinderhead m3x10 (10)  
 110130 Screw allen roundhead m2.5x6 (10)  
 110131 Screw allen roundhead m2.5x10 (10)  
 110132 Screw allen countersunk m3x16 (10)  
 110133 Screw philipshead countersunk 2.5x8 wide (10)  
 110134 Screw philipshead countersunk 2.5x10 wide (10)  
 110135 Screw allen countersunk M2.5x10 (10)  
 110136 Screw allen countersunk M2.5x8 (10)  
 110137 Setscrew allen M3x6 (10)  
 110138 Screw allen countersunk M4x14 (10)  
 110139 Screw allen countersunk M3x40 (10)  
 110140 Screw allen roundhead M3x20 (10)  
 110141 Screw allen roundhead M3x22 (10)  
 110142 Screw allen roundhead M3x25 (10)  
 110143 Screw allen roundhead M4x18 (10)  
 110144 Screw allen roundhead M3x18 (10)  
 110145 Screw allen roundhead flanged M3x12 (10)  
 110146 Screw allen roundhead flanged M3x16 (10)  
 110147 Screw ph roundhead M2.5x5 (10)  
 110148 Setscrew allen M5x4 (10)  
 110149 Screw allen countersink M2x10 (10)  
 110150 Screw M6x12 nylon black (2)  
 110151 Screw allen cilinderhead M4x10 (10)  
 110152 Screw allen cilinderhead M3x8 (10)  
 110153 Screw allen roundhead M2.3x4(10)  
 110154 Setscrew allen M3x10 (10)  
 110155 Setscrew allen M3x5 (10)  
 110156 Screw allen countersunk M2.2x6 (10)  
 110157 Screw allen countersunk M3x5 (10)  
 110158 Screw allen countersunk M3x15 (10)  
 110159 Screw allen countersunk M3x18 (10)  
 110160 Screw allen cilinderhead M2.2x12 (10)  
 110161 Screw allen cilinderhead M2x6 (10)  
 110162 Setscrew allen M3x2.5 (10)  
 110163 Setscrew allen M3x2 (10)  
 110164 Screw allen roundhead M3x4 (10)  
 110165 Screw allen cilinderhead M2x5 (10)  
 110166 Screw allen countersunk M2.5x5 (10)

110167 Screw allen roundhead flanged M3x18 (10)  
 110168 Screw allen roundhead flanged M3.5x10 (10)  
 110169 Screw allen roundhead flanged M4x10 (10)  
 110170 Screw allen roundhead flanged M3x28 (10)  
 110171 Screw ph roundhead widethread 2.5x6 (10)  
 110172 Screw allen roundhead flanged M3X6 (10)  
 110173 Screw ph countersunk widethread 2.5x12 (10)  
 110174 Screw allen countersunk M4x6 (10)  
 110175 Screw allen cilinderhead M3x40 (10)  
 110176 Screw allen cilinderhead M3x18 (10)  
 110177 Screw allen roundhead M4x12 (10)  
 110178 Screw allen cilinderhead M3x14 (10)  
 110179 Screw allen roundhead M2.5x8 (10)  
 110180 Setscrew allen M5x10 (10)  
 110181 Screw M5x10 + Nut nylon black (4+4)  
 110182 Screw allen roundhead M2x4 (10)  
 110183 Screw allen countersunk M3x10 (10)  
 110184 Screw allen countersunk M3x14 (10)  
 110185 Screw allen cilinderhead M3x30 (10)  
 110186 Screw allen cilinderhead M3x35 (10)  
 110187 Setscrew allen M3x16 (10)  
 110188 Screw allen cilinderhead M2x10 (10)  
 110200 Pin 2.5x8 (10)  
 110201 Pin 3x12 (10)  
 110202 Pin 5x5 (10)  
 110203 Pin 3x14 (10)  
 110204 Pin 3x20 (10)  
 110205 Pin 3x22 (10)  
 110206 Pin 2.5x22 (10)  
 110207 Pin 2.5x12 (10)  
 110208 Pin nra 2x9.8 (4)  
 110209 Pin nra 2x18 (4)  
 110210 Pin 3x13 (10)  
 110211 Pin 2.5x13 (10)  
 110212 Pin 2.5x17 (10)  
 110213 Pin 2.5x10 (10)  
 110214 Pin 3x15 (10)  
 110215 Pin 2x12 (10)  
 110216 Pin 2.5x15 (10)  
 110217 Pin 2x9 (10)  
 110218 Pin 3x10 (10)  
 110219 Pin 2x14 (10)  
 110220 Pin 1.5x8 (10)  
 110221 Pin 1.7x7.6 (10)  
 110222 Pin 1.7x8.5 (10)  
 110300 E-clip 2.3 (10)  
 110301 E-clip 3.2 (10)  
 110302 E-clip 4.0 (10)  
 110303 E-clip 5.0 (10)  
 110304 E-clip 7.0 (10)  
 110305 Seger clip 12x1.0 (10)  
 110306 E-clip 6.0 (10)  
 110307 E-clip 9.0 (10)  
 110400 Shim 6.0x10x0.2(10)  
 110401 Shim3.2x7x0.5 (10)  
 110402 Nut nylock M3 (10)  
 110403 Nut nylock M4 (10)  
 110404 Shim 6x8x0.3 (10)  
 110405 Nut nylock M4 flanged (10)  
 110406 Nut nylock M2.2 (10)  
 110407 Nut M3 (10)  
 110408 Shim 3X5X0.3 (10)  
 110409 Shim 3X5X1 (10)  
 110410 Shim 3X5X2 (10)  
 110411 Shim 3X5X4 (10)  
 110412 Shim 3.5X8X1 (10)  
 110413 Shim 3.5X12X0.2 (10)  
 110414 Shim 3X6X0.1 (10)  
 110415 Shim 3X6X0.5 (10)  
 110416 Shim 3X6X0.8 (10)  
 110417 Shim 3X6X3 (10)  
 110418 Shim 4X8X0.1 (10)  
 110419 Shim 4X9.5X1 (10)  
 110420 Shim 4X9.5X2(10)  
 110421 Shim 4X9.5X4(10)

110422	Shim 4X10X0.3 (10)	190182	T-shirt Serpent Splash white (S)
110423	Shim 5X8X0.1 (10)	190183	T-shirt Serpent Splash white (M)
110424	Shim 5X8X0.3 (10)	190184	T-shirt Serpent Splash white (L)
110425	Shim 5X10X0.3 (10)	190185	T-shirt Serpent Splash white (XL)
110426	Shim 5X10X0.5 (10)	190186	T-shirt Serpent Splash white (XXL)
110428	Shim 6.5X8X0.25 (10)	190187	T-shirt Serpent Splash white (XXXL)
110429	Shim 6X11.75X0.2 (10)	190188	T-shirt Serpent Splash orange (S)
110431	Shim 8X11X0.1 (10)	190189	T-shirt Serpent Splash orange (M)
110432	Shim 8X11X0.2 (10)	190190	T-shirt Serpent Splash orange (L)
110433	Shim 12X15X0.25 (10)	190191	T-shirt Serpent Splash orange (XL)
110434	Shim 12X18X0.3 (10)	190192	T-shirt Serpent Splash orange (XXL)
110435	Shim 13X16X0.2 (10)	190193	T-shirt Serpent Splash orange (XXXL)
110436	Shim 3x5x3 (10)	190194	T-shirt Serpent Splash black (S)
110437	Nut M2.5 (10)	190195	T-shirt Serpent Splash black (M)
110438	Shim 2.5x6x0.5 (10)	190196	T-shirt Serpent Splash black (L)
110439	Shim 3x7.5x1 (10)	190197	T-shirt Serpent Splash black (XL)
110440	Shim 2.5x5x0.4 (10)	190198	T-shirt Serpent Splash black (XXL)
110441	Nut nylock M3 flanged (10)	190199	T-shirt Serpent Splash black (XXXL)
110442	Shim 4x8x0.6 (10)	190201	Hoody sweater Serpent black-zip (S)
110443	Shim 5x15x0.2 (10)	190202	Hoody sweater Serpent black-zip (M)
110444	Nut M4 nylon (10)	190203	Hoody sweater Serpent black-zip (L)
110445	Shim 4x10x0.2 (10)	190204	Hoody sweater Serpent black-zip (XL)
110446	Shim 5x15x0.2 (10)	190205	Hoody sweater Serpent black-zip (2XL)
110447	Shim 3x7x7 (10)	190206	Hoody sweater Serpent black-zip (3XL)
110448	Shim 3x6x6 (10)	190207	Hoody sweater Serpent black-zip (4XL)
110449	Shim 3x6x1 (10)	190215	T-shirt Serpent WC edition black (S)
110450	Nut M2 (10)	190216	T-shirt Serpent WC edition black (M)
110451	Nylock nut M4 flanged alu (10)	190217	T-shirt Serpent WC edition black (L)
110452	Nut M4 flanged knurled (10)	190218	T-shirt Serpent WC edition black (XL)
110453	Shim 3x7x3 (10)	190219	T-shirt Serpent WC edition black (XXL)
		190220	T-shirt Serpent WC edition black (XXXL)

#### TOOLS

190508	Toolset for offroad (20pcs) with tools bag
190509	Allen wrench 1.5 x 120mm
190510	Allen wrench 2.0 x 120mm
190511	Allen wrench 2.5 x 120mm
190512	Allen wrench 3.0 x 120mm
190513	Ball driver hex wrench 2.0 x 120mm
190514	Ball driver hex wrench 2.5 x 120mm
190515	Ball driver hex wrench 3.0 x 120mm
190516	Tool tip allen wrench 1.5 x 120mm
190517	Tool tip allen wrench 2.0 x 120mm
190518	Tool tip allen wrench 2.5 x 120mm
190519	Tool tip allen wrench 3.0 x 120mm
190520	Tool tip ball driver hex wrench 2.0 x 120mm
190521	Tool tip ball driver hex wrench 2.5 x 120mm
190522	Tool tip ball driver hex wrench 3.0 x 120mm
190523	Turnbuckle wrench 3mm
190524	Turnbuckle wrench 4mm
190525	Turnbuckle wrench 5mm
190526	Flat head screwdriver 3.0 x 150mm
190527	Flat head screwdriver 4.0 x 150mm
190528	Phillips screwdriver 2.0 x 45mm
190529	Phillips screwdriver 3.5 x 120mm
190530	Phillips screwdriver 5.8 x 120mm
190539	Nut driver 4.5 x 100mm
190531	Nut driver 5.0 x 100mm
190532	Nut driver 5.5 x 100mm
190533	Nut driver 7.0 x 100mm
190534	Reamer with end cap for lexan body

#### MERCHANDISING

1896	Cap serpent black-orange
190172	Winter jacket Serpent black-orange hooded (M)
190173	Winter jacket Serpent black-orange hooded (L)
190174	Winter jacket Serpent black-orange hooded (XL)
190175	Winter jacket Serpent black-orange hooded (2XL)
190176	Winter jacket Serpent black-orange hooded (3XL)
190208	Winter jacket Serpent black-orange hooded (4XL)
190156	Polo shirt Serpent black (S)
190157	Polo shirt Serpent black (M)
190158	Polo shirt Serpent black (L)
190159	Polo shirt Serpent black (XL)
190160	Polo shirt Serpent black (XXL)
190161	Polo shirt Serpent black (XXXL)



#### Transmitter, reciver,servo, parts

210004	Servo digital 0.14s/7,2kg
210006	Servo case for #210004
210008	Servo gear set for #210004
210009	Transmitter set DTS-2 with display 2.4 Ghz
210010	Transmitter DTS-2 with display 2.4Ghz
210011	Receiver DRS-2 on 2.4Ghz

#### Speed controller, motor, parts

211004	Motor brushless DL10 9T-3600kv
211008	Speedo DX-10 WP 45A
211011	Program card DX series

#### Tyres rubber offroad and wheels

214013	1/10 buggy rim fr 2wd white (2)
214014	1/10 buggy rim fr 2wd yellow (2)
214015	1/10 buggy rim rr white (2)
214016	1/10 buggy rim rr yellow (2)
214017	1/10 buggy Tyre mounted on white rim 2wd front (2)
214018	1/10 buggy Tyre mounted on white rim 4wd (2)

#### Additions / notes

---



---



---



---



---



---



---



---



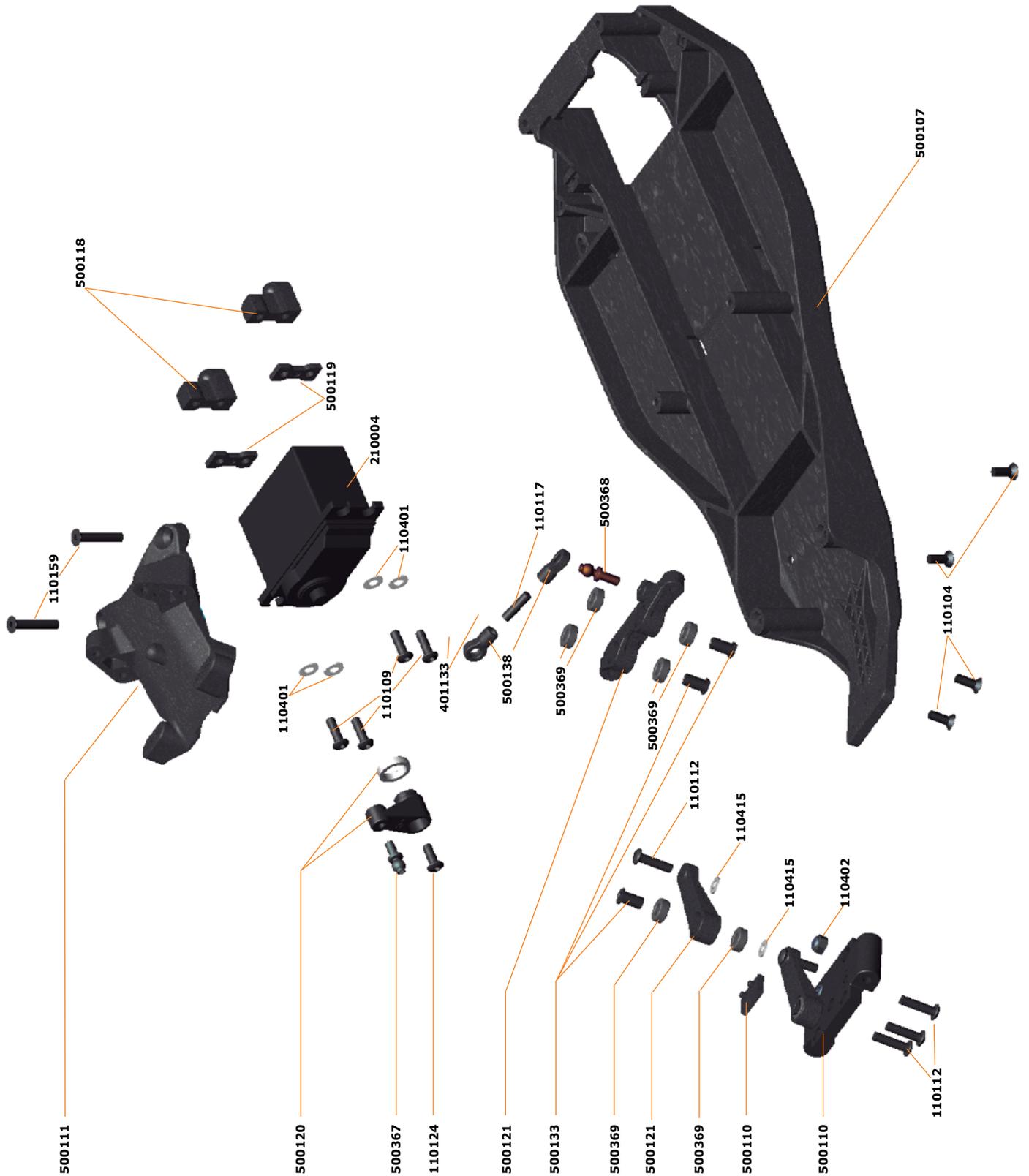
---



---

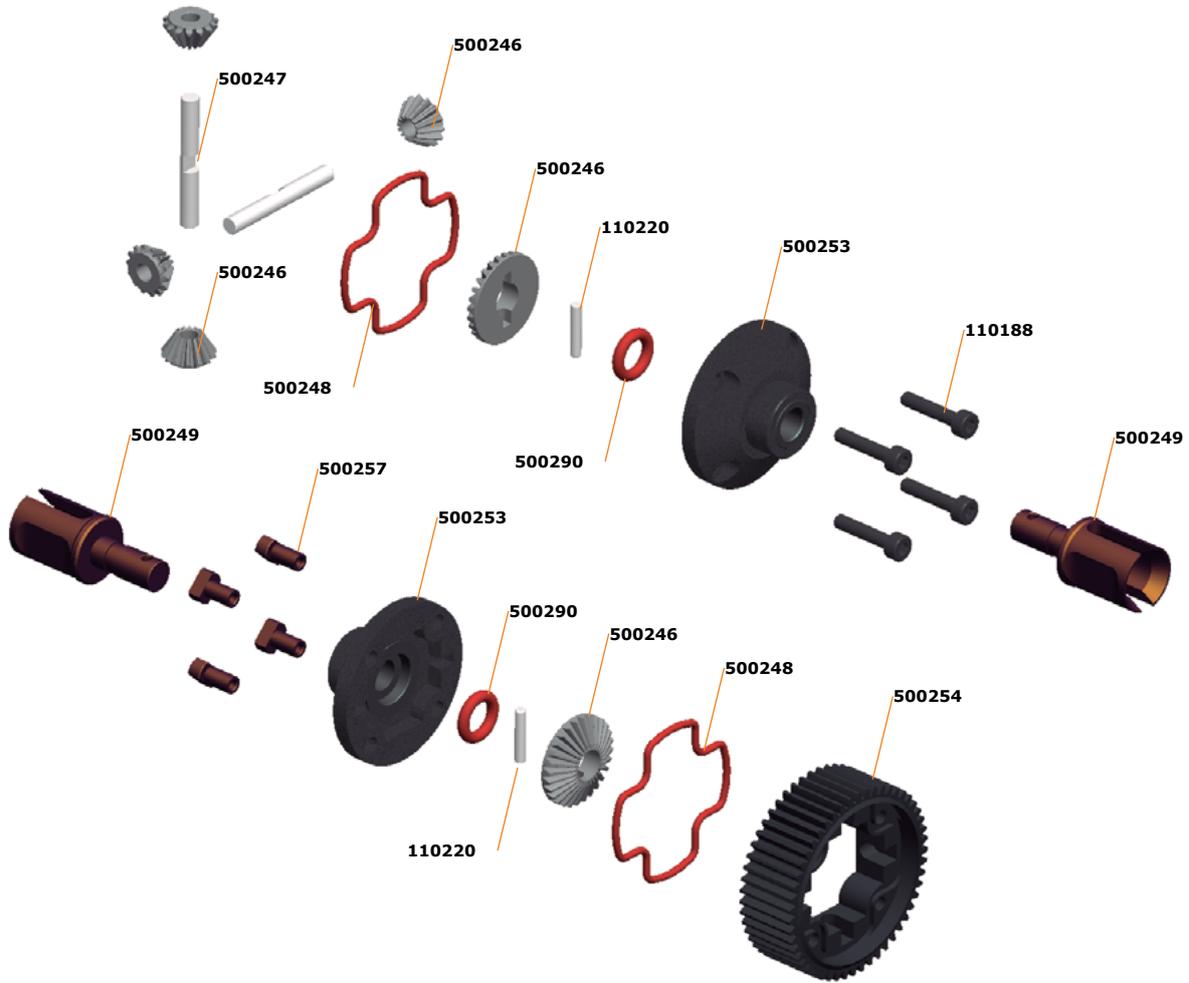
All rights reserved. Parts may change without prior notice.

# FRONT ASSEMBLY I





# GEAR-DIFF EXPLODED VIEW



# SHOCKS ASSEMBLY

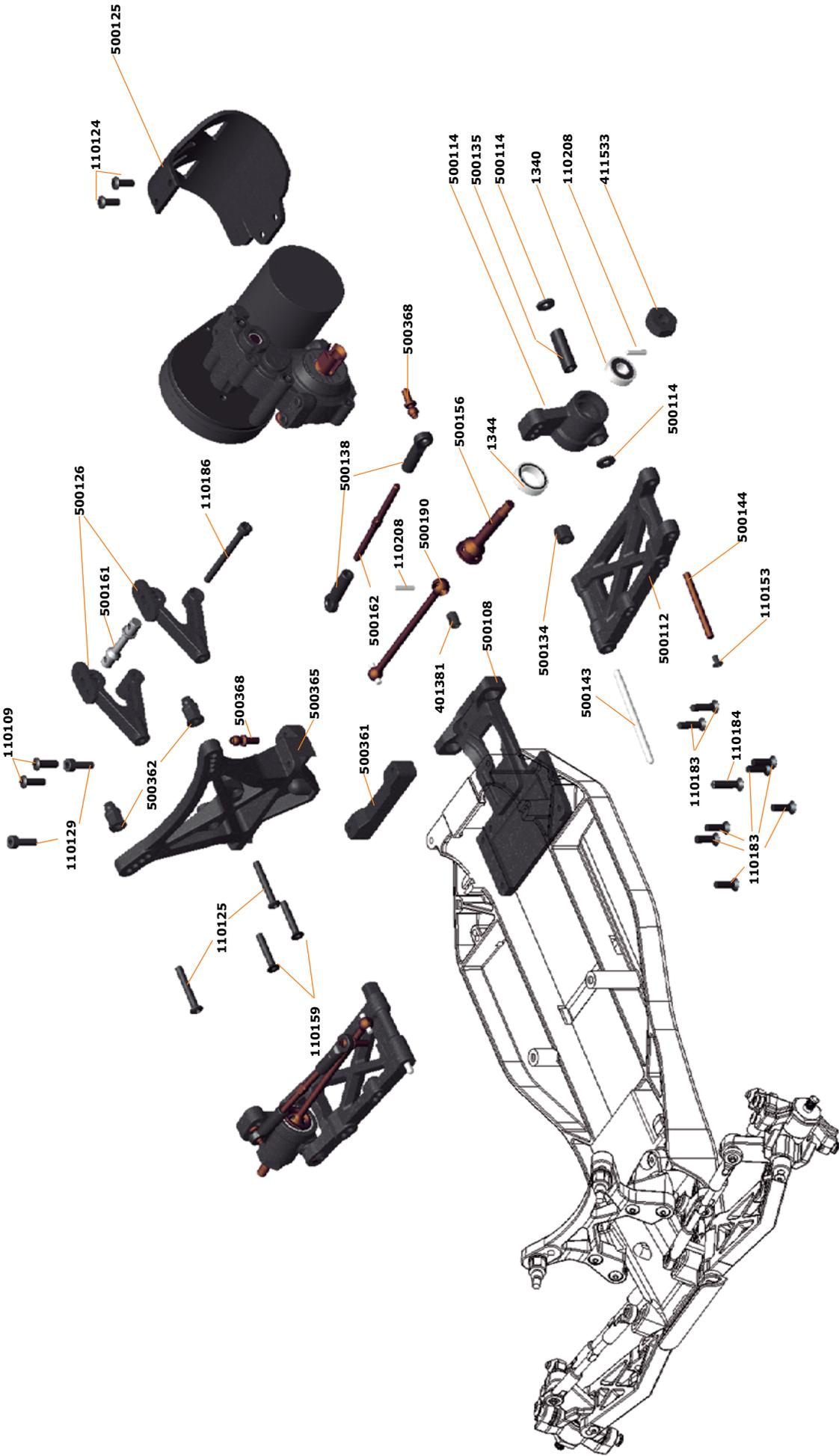


## SHOCK SPRINGS

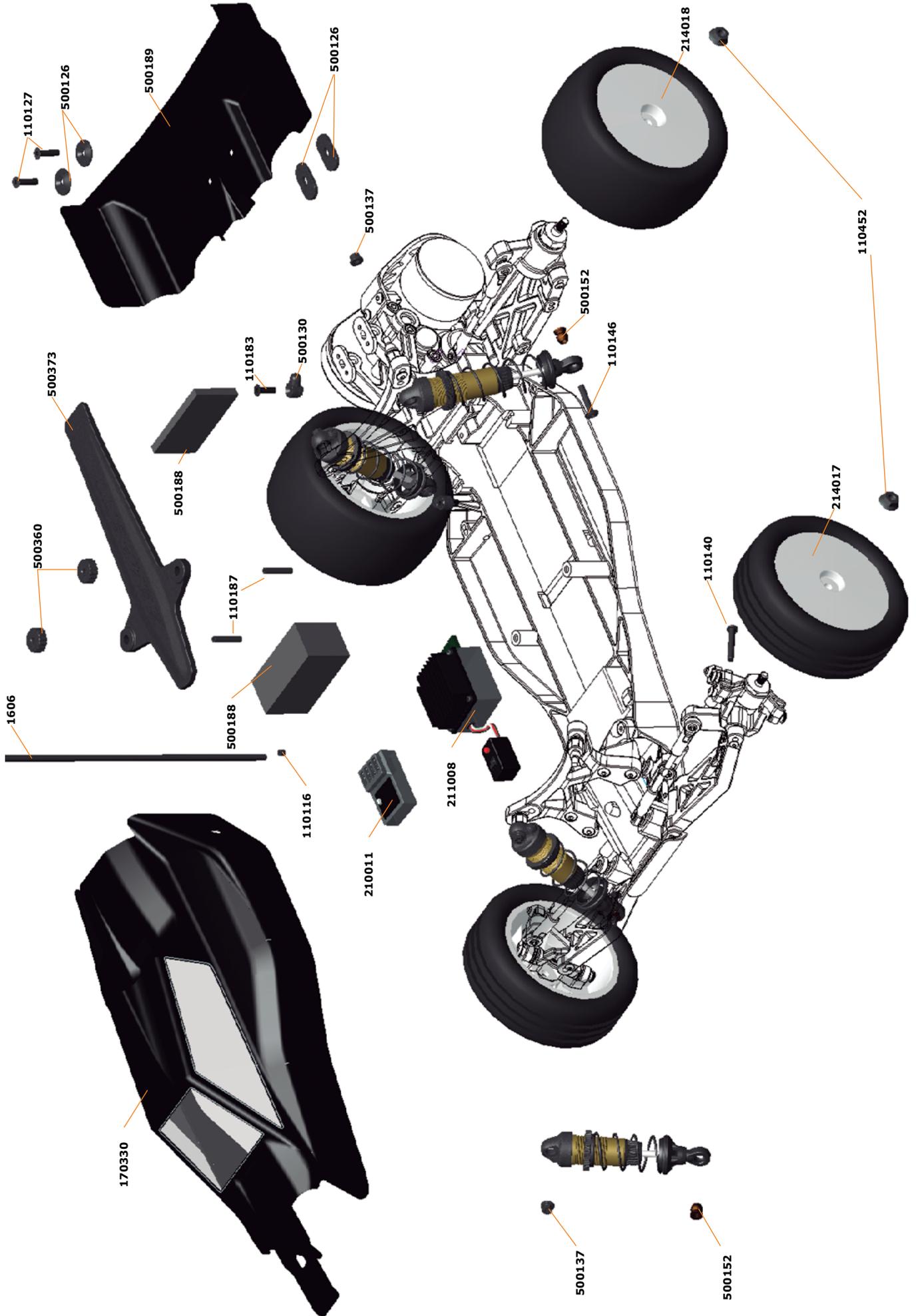
- 500222 Shock spring silver 2.5lbs fr (2) SRX2
- 500223 Shock spring black 2.65 fr (2) SRX2
- 500224 Shock spring orange 2.87lbs fr (2) SRX2
- 500225 Shock spring red 3.0lbs fr (2) SRX2
- 500226 Shock spring pink 3.15lbs fr (2) SRX2
- 500227 Shock spring blue 3.4lbs fr (2) SRX2
- 500228 Shock spring purple 3.5lbs fr (2) SRX2
- 500229 Shock spring green 3.7lbs fr (2) SRX2
- 500230 Shock spring orange 2.0lbs rr (2) SRX2
- 500231 Shock spring red 2.1lbs rr (2) SRX2
- 500232 Shock spring pink 2.2lbs rr (2) SRX3
- 500233 Shock spring blue 2.3lbs rr (2) SRX2
- 500234 Shock spring purple 2.4lbs rr (2) SRX2
- 500235 Shock spring green 2.5lbs rr (2) SRX2



# REAR ASSEMBLY



# FINAL ASSEMBLY



# SPYDER RTR SRX2



[www.serpent.com](http://www.serpent.com) - [info@serpent.com](mailto:info@serpent.com)

