



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

# INSTRUCTION MANUAL

## & REFERENCE GUIDE

# SPYDER<sup>RTR</sup> 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!*

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## 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 prepainted and pre-cut bodyshell



## Required for your model

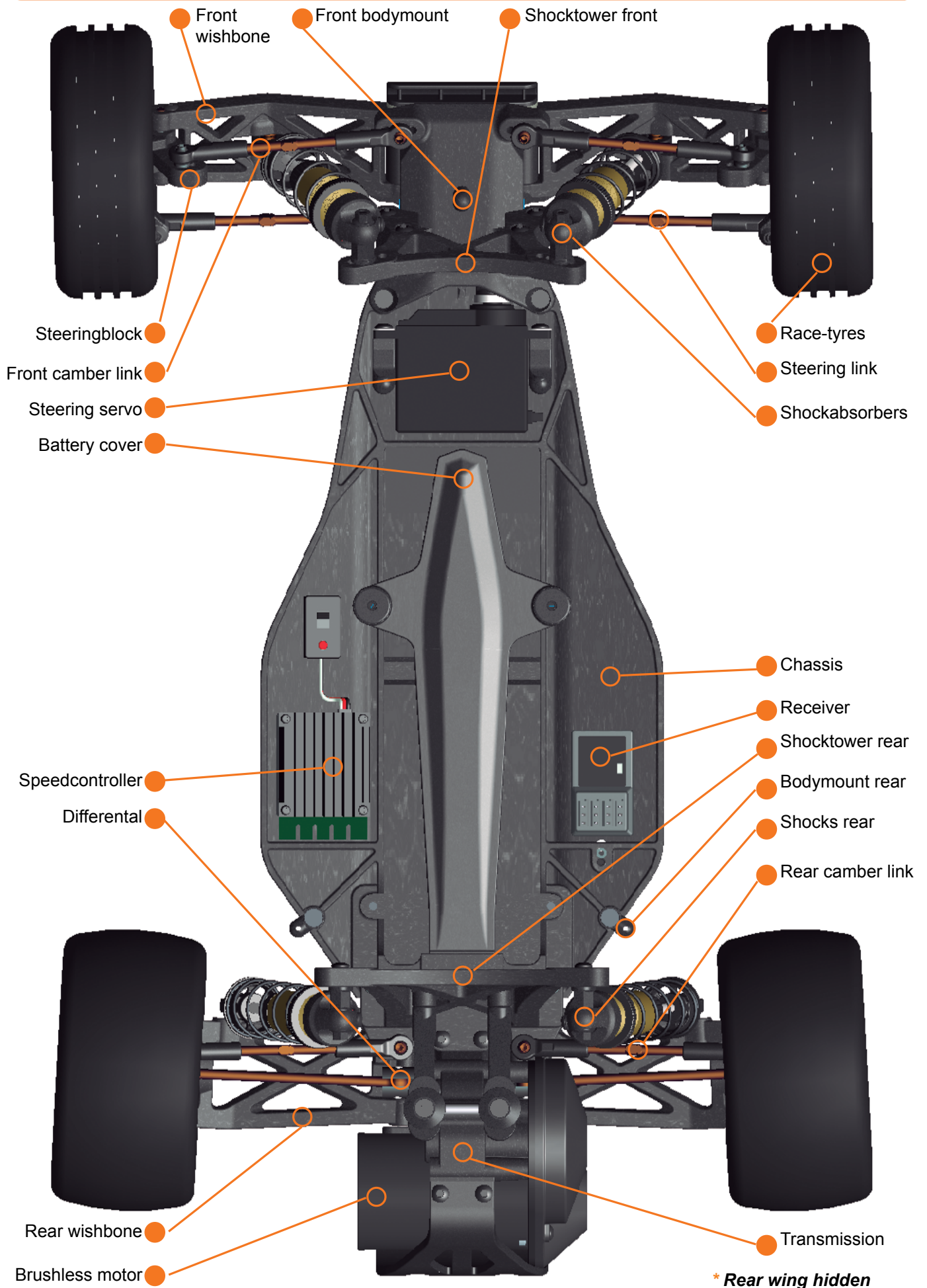
- Multi Charger; to charge transmitter battery and car battery
- Battery pack 2-S Lipo
- Battery AA x 4 to operate the transmitter
- Tools: selection of allen tools and screw- drivers
- Hobby knife
- Camber gauge

## 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 decreases 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 stabile 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 stabile 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 stabile and react slower, a shorter car will be more nervous and more direct.
- **Gear-ratio:** spur and pinion: for correct gearmesh keep a pieces 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**



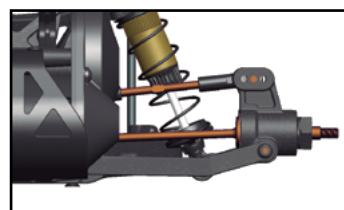
**Rear Toe-in**



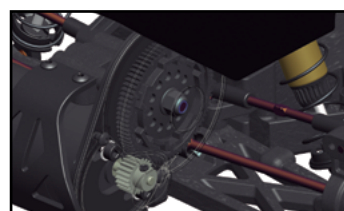
**Front camber**



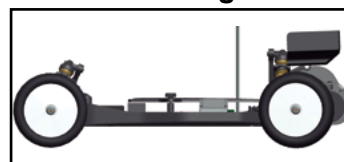
**Rear camber**



**Gear-ratio**



**Ride Height**





# SPYDER SRX2

## Rear-Motor Set-up Sheet

Driver: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Event: Standard Kit set-up  
 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 ☐ \_\_\_\_\_

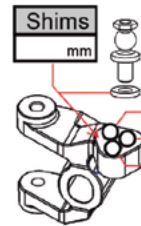
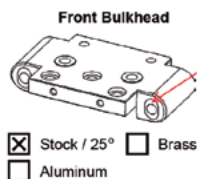
### Front Suspension

Sway Bar: ☐ Yes Size \_\_\_\_\_ mm ☒ No

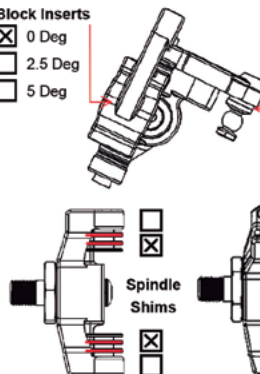
Ride Height: 24.0 mm

Camber: 1.0 ° negative

Toe: ☐ In ☒ Out 1.0 °



Caster Block Inserts  
☒ 0 Deg  
☐ + ☐ 2.5 Deg  
☐ - ☐ 5 Deg



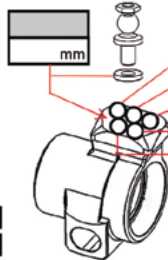
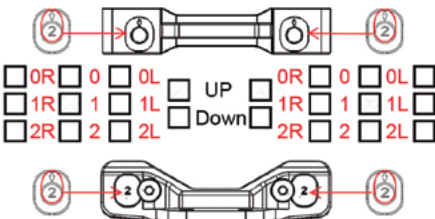
### Rear Suspension

Sway Bar: ☐ Yes Size \_\_\_\_\_ mm ☒ No

Ride Height: 24.0 mm

Camber: 2.0 ° negative

RR-FR-Toe-Block ☒ Stock ☐ Brass

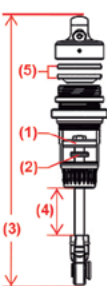


Outboard Toe-In  
☒ 0 deg  
☐ 0.5 deg  
☐ 1.0 deg  
☐ 1.5 deg  
☐ 2.0 deg

Hex Adapter  
☐ - 0.75 mm  
☒ Stock  
☐ + 0.75 mm

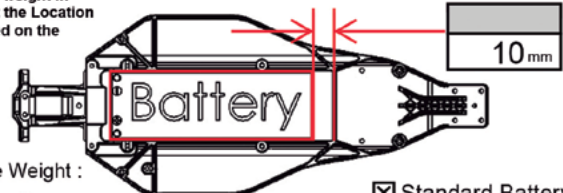
### Shocks

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



### Battery-Weight

"Weight Placement"  
 Type the weight in grams at the Location it's placed on the chassis



Vehicle Weight: \_\_\_\_\_ Grams ☒ Standard Battery ☐ Shorty Battery

Weight Bias - Front: \_\_\_\_\_ % Rear: \_\_\_\_\_ %

### 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  
 Body: Serpent  
 Wing Rear: Serpent  
 Wing Width: 6.50 inch  
 Wing Lip: 5.00 mm  
 Wing Angle: 2 Degree  
 Wing Front: No

### Tires

Brand: \_\_\_\_\_  
 Model Name: \_\_\_\_\_  
 Compound: \_\_\_\_\_  
 Insert Type: \_\_\_\_\_  
 Wheels: Serpent Serpent  
 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-axles and driveshafts**

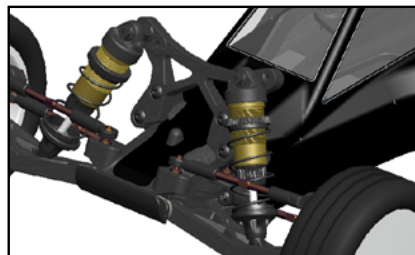
Remove the wheels, and check the wheel-axles, driveshafts and pins. Clean thoroughly as needed and lubricate the touching parts with a small amount of grease or oil.

- **Differential**

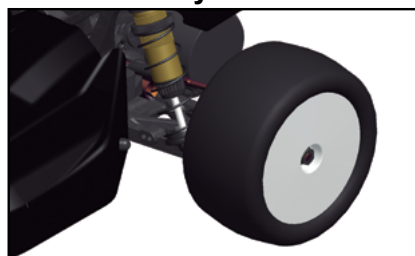
Check the differentials and gears for wear and dirt and clean as needed. Check the functioning of the diff by turning the wheels in opposite direction and feel if still smooth or 'gritty'. In case of gritty feel, the silicone oil may need replacement.

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**



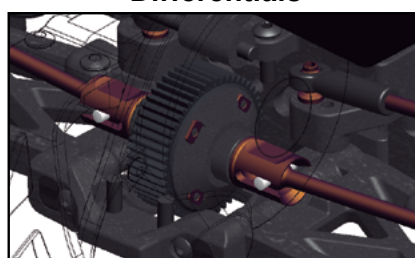
**Tyres**



**Wheel-axles and driveshafts**



**Differentials**



# Partslist 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 membrane (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	Speedcontroller 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	Seeger 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)  
 110423 Shim 5X8X0.1 (10)  
 110424 Shim 5X8X0.3 (10)  
 110425 Shim 5X10X0.3 (10)  
 110426 Shim 5X10X0.5 (10)  
 110428 Shim 6.5X8X0.25 (10)  
 110429 Shim 6X11.75X0.2 (10)  
 110431 Shim 8X11X0.1 (10)  
 110432 Shim 8X11X0.2 (10)  
 110433 Shim 12X15X0.25 (10)  
 110434 Shim 12X18X0.3 (10)  
 110435 Shim 13X16X0.2 (10)  
 110436 Shim 3x5x3 (10)  
 110437 Nut M2.5 (10)  
 110438 Shim 2.5x6x0.5 (10)  
 110439 Shim 3x7.5x1 (10)  
 110440 Shim 2.5x5x0.4 (10)  
 110441 Nut nylock M3 flanged (10)  
 110442 Shim 4x8x0.6 (10)  
 110443 Shim 5x15x0.2 (10)  
 110444 Nut M4 nylon (10)  
 110445 Shim 4x10x0.2 (10)  
 110446 Shim 5x15x0.2 (10)  
 110447 Shim 3x7x7 (10)  
 110448 Shim 3x6x6 (10)  
 110449 Shim 3x6x1 (10)  
 110450 Nut M2 (10)  
 110451 Nylock nut M4 flanged alu (10)  
 110452 Nut M4 flanged knurled (10)  
 110453 Shim 3x7x3 (10)

#### 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  
 190531 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)

190182 T-shirt Serpent Splash white (S)  
 190183 T-shirt Serpent Splash white (M)  
 190184 T-shirt Serpent Splash white (L)  
 190185 T-shirt Serpent Splash white (XL)  
 190186 T-shirt Serpent Splash white (XXL)  
 190187 T-shirt Serpent Splash white (XXXL)  
 190188 T-shirt Serpent Splash orange (S)  
 190189 T-shirt Serpent Splash orange (M)  
 190190 T-shirt Serpent Splash orange (L)  
 190191 T-shirt Serpent Splash orange (XL)  
 190192 T-shirt Serpent Splash orange (XXL)  
 190193 T-shirt Serpent Splash orange (XXXL)  
 190194 T-shirt Serpent Splash black (S)  
 190195 T-shirt Serpent Splash black (M)  
 190196 T-shirt Serpent Splash black (L)  
 190197 T-shirt Serpent Splash black (XL)  
 190198 T-shirt Serpent Splash black (XXL)  
 190199 T-shirt Serpent Splash black (XXXL)  
 190201 Hoody sweater Serpent black-zip (S)  
 190202 Hoody sweater Serpent black-zip (M)  
 190203 Hoody sweater Serpent black-zip (L)  
 190204 Hoody sweater Serpent black-zip (XL)  
 190205 Hoody sweater Serpent black-zip (2XL)  
 190206 Hoody sweater Serpent black-zip (3XL)  
 190207 Hoody sweater Serpent black-zip (4XL)  
 190215 T-shirt Serpent WC edition black (S)  
 190216 T-shirt Serpent WC edition black (M)  
 190217 T-shirt Serpent WC edition black (L)  
 190218 T-shirt Serpent WC edition black (XL)  
 190219 T-shirt Serpent WC edition black (XXL)  
 190220 T-shirt Serpent WC edition 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

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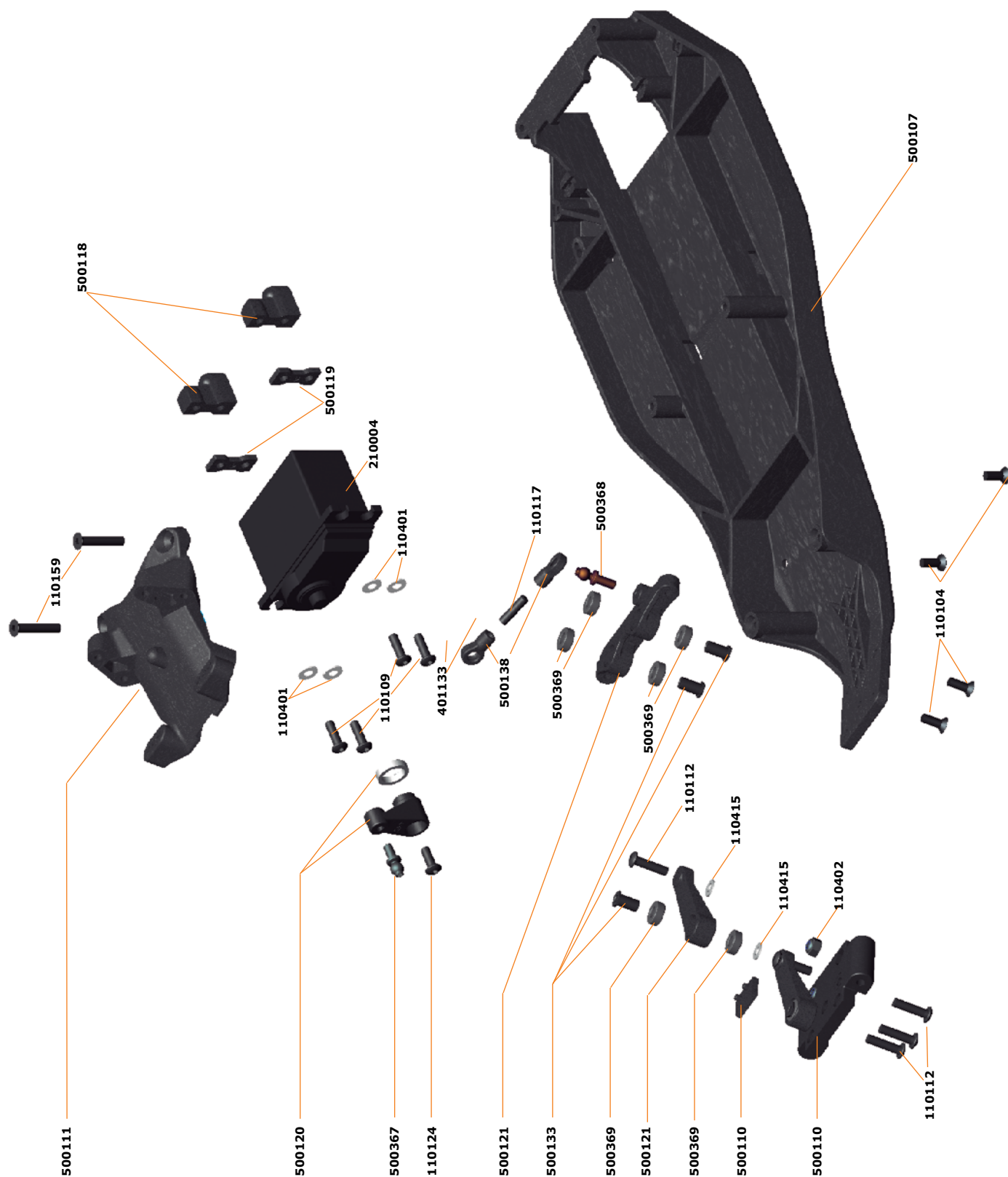
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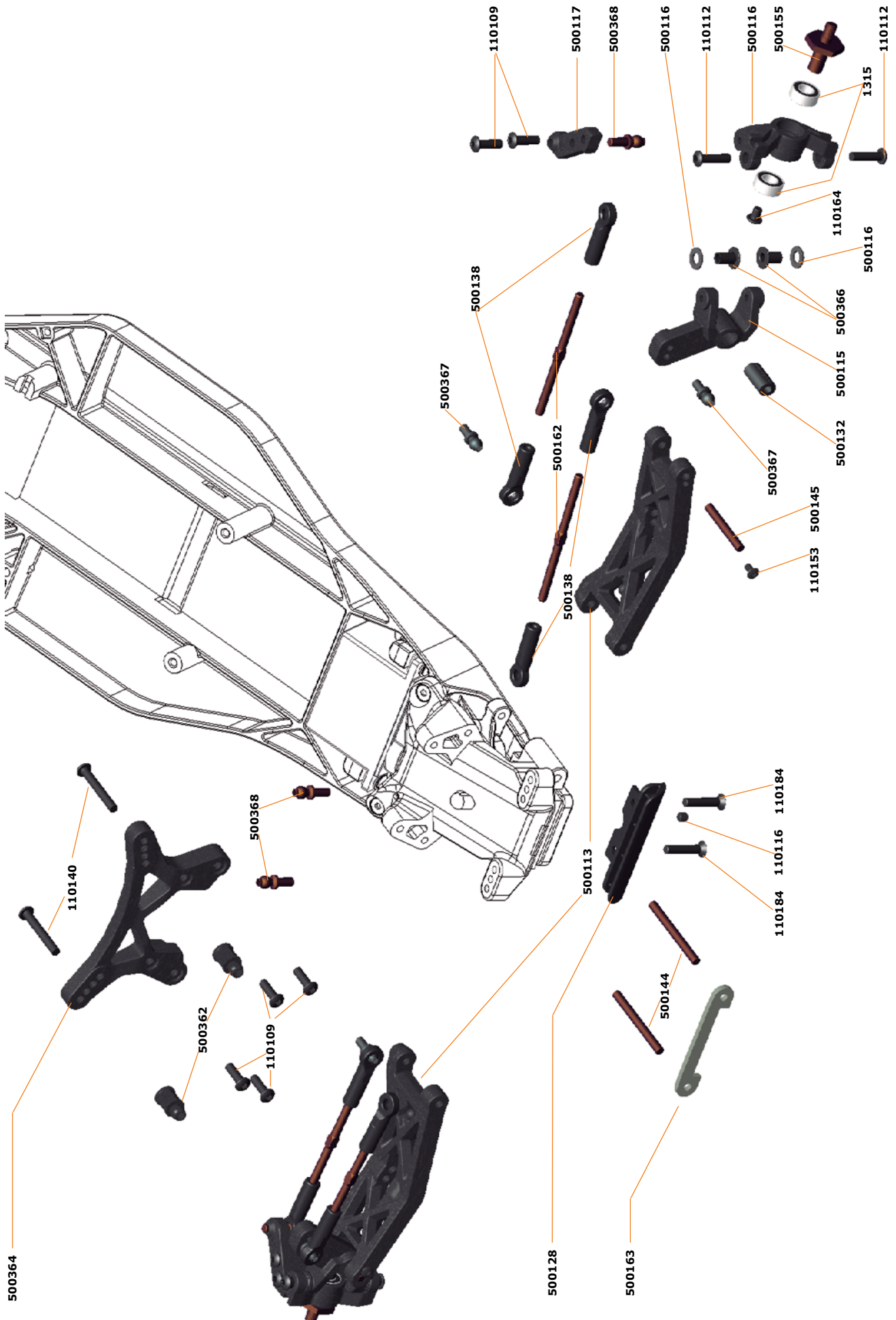
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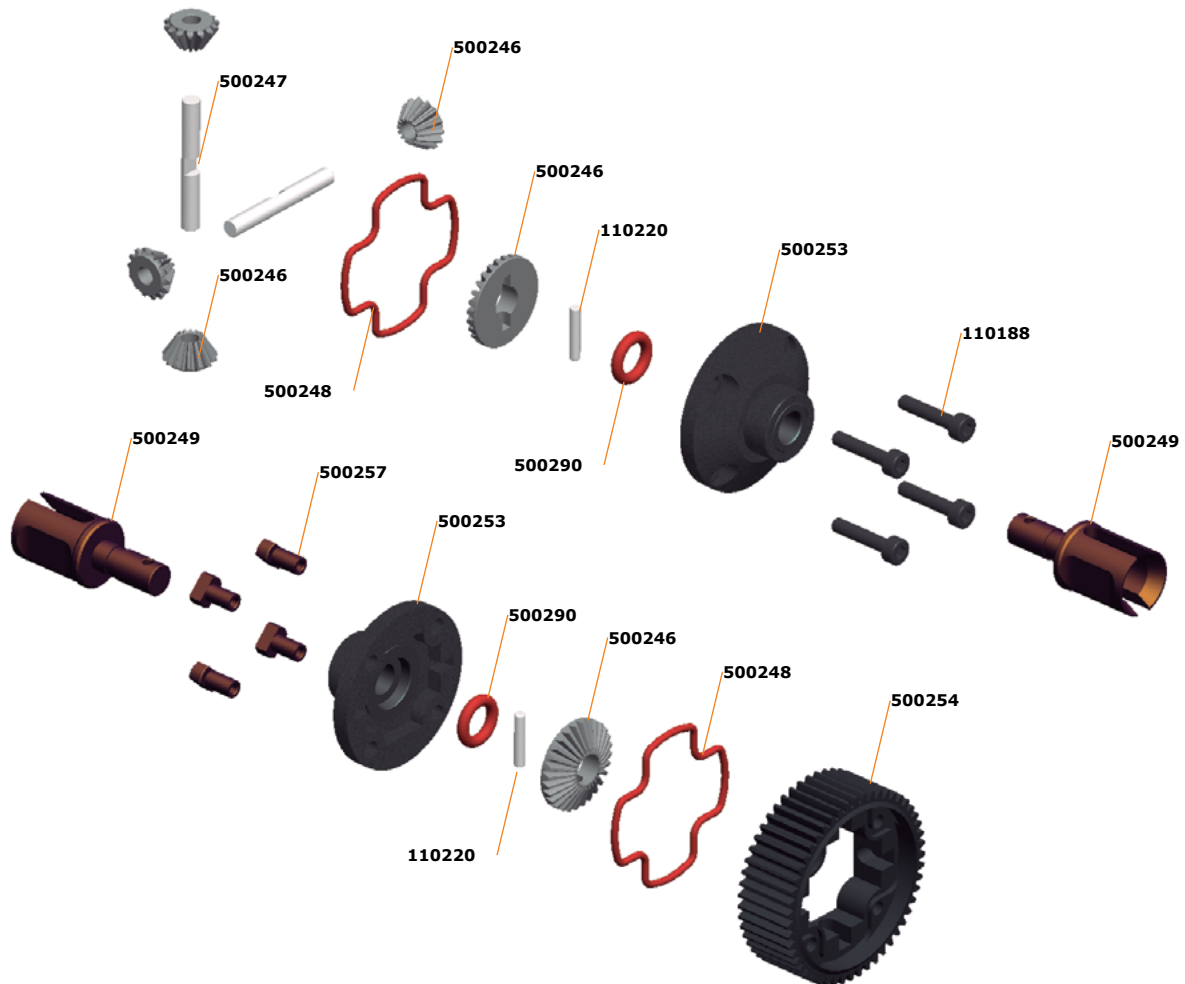
# FRONT ASSEMBLY I



# FRONT ASSEMBLY II



## GEAR-DIFF EXPLODED VIEW



## SHOCKS ASSEMBLY

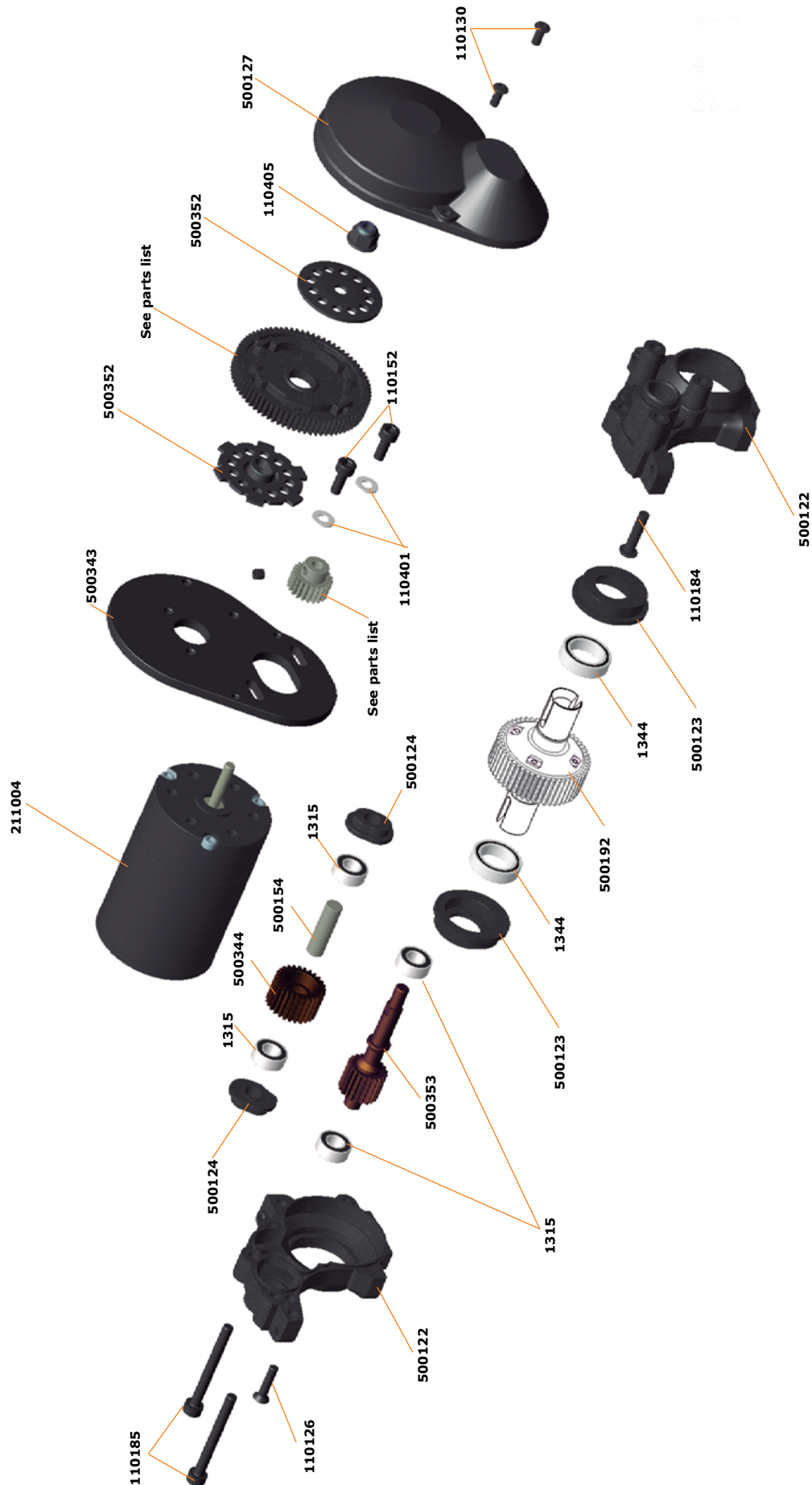


### SHOCK SPRINGS

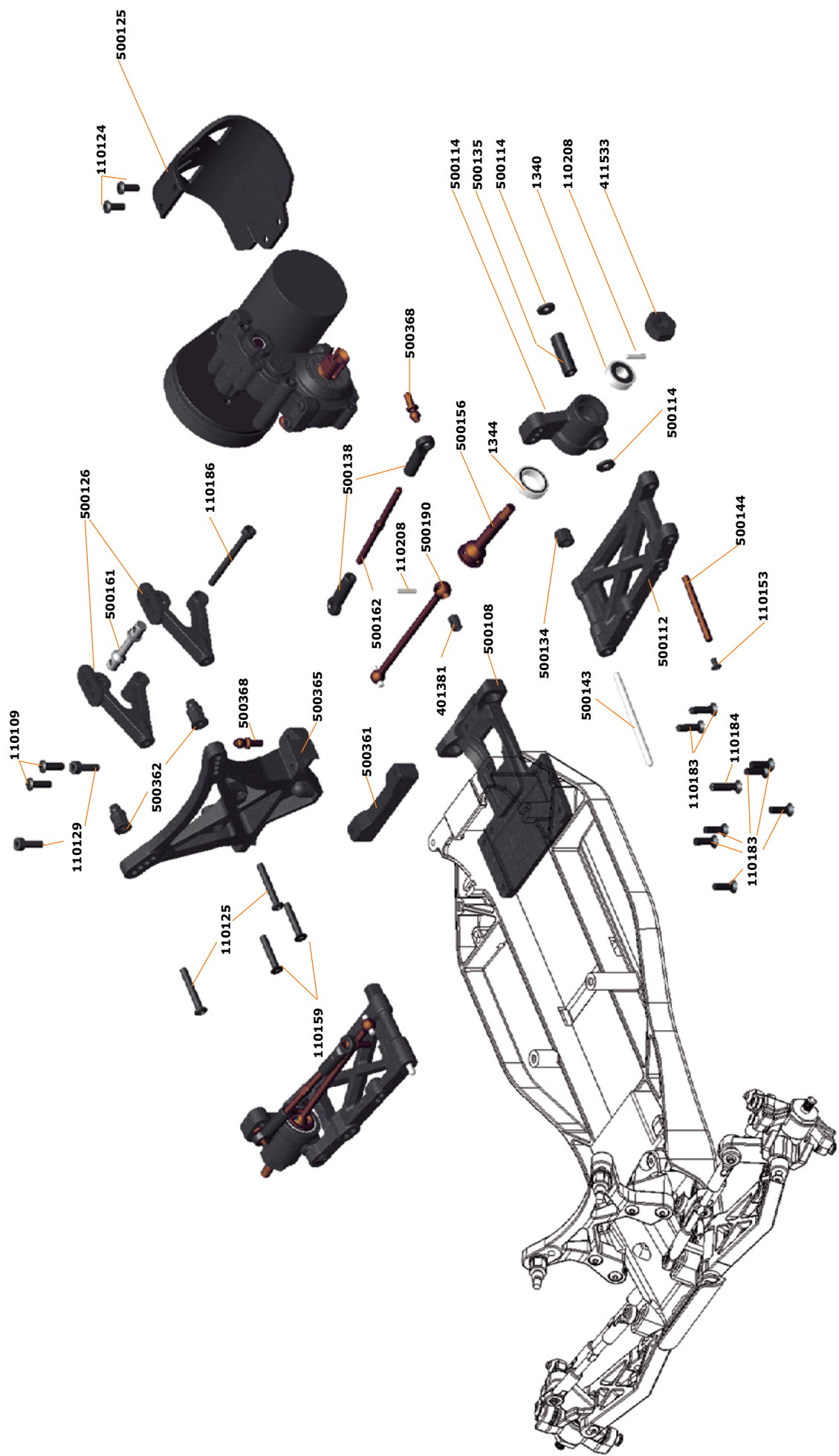
- 500222 Shock spring silver 2.5lbs fr (2) SRX2
- 500223 Shock spring black 2.65 fr (2) SRX2
- 500224 Shock spring orange 2.87lbs fr (2) SRX2
- 500225 Shock spring red 3.0lbs fr (2) SRX2
- 500226 Shock spring pink 3.15lbs fr (2) SRX2
- 500227 Shock spring blue 3.4lbs fr (2) SRX2
- 500228 Shock spring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



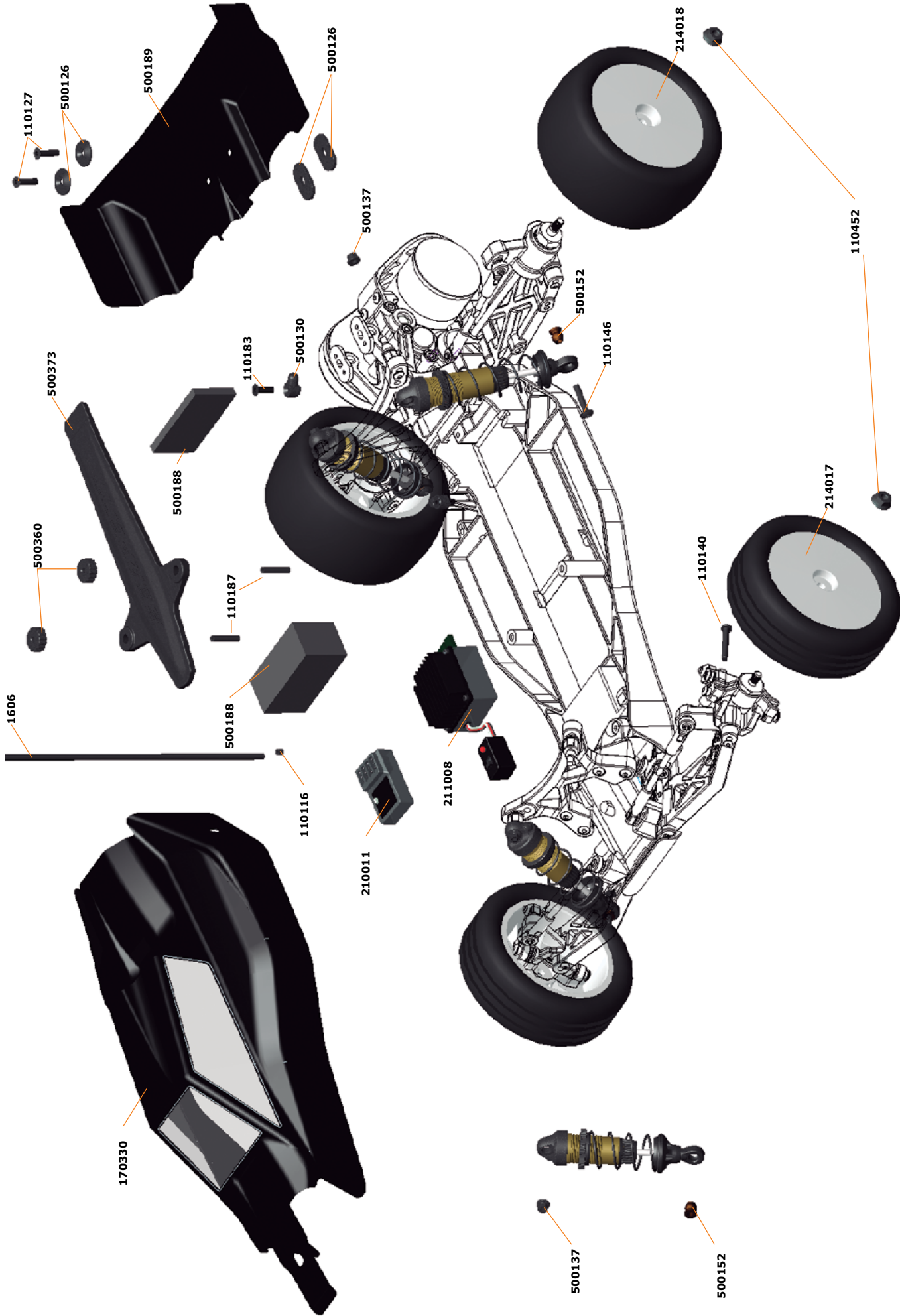
# TRANSMISSION ASSEMBLY



REAR ASSEMBLY



FINAL ASSEMBLY



# SPYDER<sup>RTR</sup> SRX2



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