



# **INSTRUCTION MANUAL** & REFERENCE GUIDE





#### Welcome to Serpent

You are now part of the worldwide network of Serpent drivers, which gives you superior technical support and access to many benefits that only Serpent drivers can eniov.

The Serpent Spyder offers state of the art specifications and leads the way in 1/10 buggy design, using all the knowledge we have gathered since 1980. Continuously pushing the performance envelope, Serpent's engineers have added many new and innovative features that can help take your Serpent Spyder into the winner's circle.

#### **INSTRUCTIONS**

Serpent's long tradition of excellence extends to their instruction manuals, and this instruction manual is no exception. The easy-to-follow layout is richly illustrated with 3D-rendered full-color images to make your building experience quick and easy. A default set-up sheet is added to have a good base set-up. Following the instructions will result in a well-built, high-performance racecar that will soon be able to unleash its

This instruction manual has been divided into sections that will logically lead you through the assembly process of your Serpent Spyder. Follow the assembly steps in the order presented to ensure that no problems occur during assembly. Each

full potential at the racetrack.

step indicates all the fasteners and small

parts used. Bag numbers identify the kit bag(s) that contains the appropriate parts.

#### **EXPLODED VIEWS AND PARTS LIST**

In the back of this manual it is possible to find the exploded views for the Serpent Spyder. These exploded views show the standard parts of a particular assembly step along with the Serpent part number.

The parts list include the optionals, hardware and merchandising. It indicates the part number and name of each part for easy reference when ordering.

A full partslist in excel can be downloaded from the car-page on www.serpent.com.

Below you will find some information on safety; read those well before using the car. Also some info on how to use the manual best.

The worldwide network of Serpent drivers, dealers and distributors will help you to get the maximum out of your Serpent Spyder.

Join the free Serpent forum for support, use our social media like Twitter and Facebook to follow all info and meet other Serpent drivers, watch the Serpent Youtube channel for video's, the Serpent Teamblog for racereports around the globe and the Serpent website for all other info and news.

Enjoy racing !

Team Serpent

#### SAFETY

Read and take note of the 'Read this First section' before proceeding to assemble the car-kit. This car-kit is intended for persons aged 16 or older.

#### **CUSTOMER SERVICE**

Serpent has made a strong effort to make this manual as complete and clear as possible.

Additional info may be published in our website: www.serpent.com or you may ask your dealer or the Serpent distributor for advice, or email Serpent direct: info@ serpent.com

The Serpent Facebook, Twitter and Youtube pages give additional means of support and communications.

### INSTRUCTIONS, HOW TO USE

The kit includes bags, with bagnumbers, which refer to the same step in the manual. Open only the indicated bag(s) per step and finish that part of the assembly.

Remaining parts will be needed lateron in the assembly process.

#### SETUP

In many assembly steps you mount specific parts that suit the default set-up. We advice to keep the seperate default set-up sheet alongside the manual, during all assembly.

Other finetuning of the set-up, must be done at the track.

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### **Read this first!**

- Parental guidance is required when the and receiver are fully charged. builder/user of this car is under 16.

oil, fuel or glue. Do not swallow.

you experience irritation after using the product.

- Avoid using this car in wet conditions as - Be careful when operating the car. Stay away from any rotating parts such as wheels, gears and transmission. Stay away from motor, engine and exhaust pipe system or speedo during and immediately after use, as these parts may be very hot. We advise to use protective hand cloves.

- 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.

- This is a highly technical hobby product, - Before operating this car, always check intended to be used in a safe racing environment. This car is capable of speeds in excess of 80 check that the transmitter and receiver km/h or 50mph. Please follow these guidelines when building and operating this model.

- After use, always check all the mechanics - Follow the building instructions. If in doubt, of the car. We advise to clean the car contact your dealer or importer. - Be sure to use the proper tools when necessary. Do not use water, methanol, assembling the car. Always exercise caution thinner or other solvents to clean the car. when using electric tools, knives and other sharp objects.

sharp objects. - Empty the fuel tank (depending on model) if needed and disconnect the oil, fuel or alue. Do not swallow

- Store the car in a dry and heated place Follow the manufacturer's instruction in case to avoid corrosion of metal parts.

# USING THE MANUAL

Each step contains a variety of numbers, lines, and symbols. The numbers represent the order in which the parts should be assembled. The lines and symbols are described below.

	Step number; the order in which you should assemble the indicated parts Length after assembly
	Assembly path of one item into another
	Group of items (within lines) should be assembled first
	Direction the item should be moved
	Glue one item to another
	Press/Insert one item into another
OO	Connect one item to another
↓ 	Gap between two items
Apply graphite grease (Grey),	Apply silicone grease (Orange),
Apply threadlock (Blue),	Apply silicone oil,



























38.2















### 46.5

Fill the shockbody with silicone oil fully.

Move the shockrod up and down slowly to let airbubles escape





### 46.6

Apply the gasket and cap and close fully.

Bleed: push the shockrod all the way in slowly, to allow excessive oil to escape.



## 46.7





46.8

Assemble the spring and spring-cup (align correctly) to complete the shock.

Assemble the SHORT springs in the front shocks and the LONG springs in the rear shocks.

















STEP 53

#### BODYSHELL:

1) Apply the masking sheet provided and paint the body on the inside.

2) Cut the body along the provided cuttinglines on the body for a perfect fit. Same for the body mounting holes. 3) Remove the body

protection film on the outside of the body.

4) Apply the provided Serpent and Spyder decals, and mount the body on the bodyposts, with the provided bodyclips.

NOTE:

Wing platforms (2degrees) default orientation detail view.



STEP

54





# **REF GUIDE:**

# EXPLODED VIEWS and PARTS-LIST

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### FRONT & REAR GEAR-DIFF EXPLODED VIEW



### MID TRANSMISSION EXPLODED VIEW





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### **TRANSMISSION EXPLODED VIEW**











# FRONT ASSEMBLY EXPLODED VIEW





# FINAL ASSEMBLY I EXPLODED VIEW



## FINAL ASSEMBLY II EXPLODED VIEW



### **OPTIONALS AND MERCHANDISING**

### Part no Description

500010 Serpent Spyder Buggy SRX-4 4wd 1/10

### DECALS

1886	Decal Serpent black/white 1/10 (2)
1888	Decal Serpent chrome 1/10 (2)
500389	Decal sheet SRX4 black/white (2)

### **RADIO INSTALLATION / BATTERY**

1606Antenna rod black (2)500463Battery plate carbon (2) SRX4

### SERVO SAVER AND STEERING

- 500462 Bellcrank alu L+R SRX4
- 500464 Bellcrank post alu (2) SRX4

### SHOCK ABSORBERS

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
500450	Shock bottom cap alu (4) SRX
500488	Shock piston square machined 2-hole 1.3 (4)
500489	Shock piston square machined 3-hole 1.2 (4)
500490	Shock piston square machined 4-hole 1.1 (4)

### 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 rr astro (2) SRX2
500355	Shock spring red 1,9lbs rr astro (2) SRX2
500356	Shock spring pink 2,0lbs rr astro (2) SRX2
500357	Shock spring blue 2,1lbs rr astro (2) SRX2
500358	Shock spring purple 2,2lbs rr astro (2) SRX2
500359	Shock spring green 2,3lbs rr astro (2) SRX2

### FRONT SECTION

500261 Pivot pin rr inner TiN coated (2) SRX2 RM Wheelhexagon +0.75mm offset (2) 500211 500392 1/10 buggy rim fr 4wd yellow (2) 500397 1/10 buggy rim fr 4wd 61mm white (2) 500398 1/10 buggy rim fr 4wd 61mm yellow (2) 500455 Antiroll bar fr 1.2 SRX4 500456 Antiroll bar fr 1.3 SRX4 500457 Antiroll bar fr 1.4 SRX4 500458 Antiroll bar mount fr SRX4 500470 Antirollbar adaptor / balljoint fr (2+2) SRX4 500473 Wheelhexagon fr EOS (2) SRX4 500474 Wheelaxle fr EOS (2) SRX4

### MIDDLE SECTION

500461	Chassis alu SRX4
500463	Battery plate carbon (2) SRX4

### REAR SECTION

REAR SE	CTION
500106	1/10 buggy rim rr yellow (2)
500205	Antiroll bar rr 1.1 SRX2
500206	Antiroll bar rr 1.3 SRX2
500207	Antiroll bar rr 1.5 SRX2
500251	Rear wing 6.0" SRX2
500252	Rear wing 7.0" SRX2
500252	Suspension insert rr 3deg alu (2) SRX2
500258	Antirollbar balljoints (2+2) SRX2
500262	Pivot pin fr inner / rr outer TiN coated (2) SRX2
500281	Antiroll bar set rr SRX2 MM
500286	Bumper rear brass SRX2 MM
500350	Antirollbar mount RR SRX2 MM
500375	Rear wing 7" (2) SRX
500393	1/10 buggy rim rr 61m white (2)
500394	1/10 buggy rim rr 61mm yellow (2)
500475	Antiroll bar rr 1.7 SRX
TRANSM	ISION
411069	Differential balls steel 1/8" (12)
411107	Diff balls. 1/8 ceramic (12)
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
500254	Geardiff housing 51T SRX2
500256	Thrustbearing carbide balldiff SRX2
500259	Differential balls carbide 1/8" (12)
500376	Slide drive set SRX
500378	Slide drive set SIX
	Balldiff outdrive slide drive male
500380	
500381	Balldiff outdrive slide drive female
500382	Diff sliders (2)
500388	Geardiff outdrive slide drive (2)
500432	Slipper spacer SRX4
500441	Slipper shaft pulley 20T SRX4
500442	Top shaft pulley 20T SRX4
500447	Slipper shaft pulley 24T SRX4
500452	Clicker spring soft SRX4
500453	Clicker spring medium SRX4
500454	Clicker spring hard SRX5
500459	Oneway pulley 34T fr SRX4
500460	Balldiff pulley 34T fr SRX4
500465	Overdrive 34T gear mid SRX4
500466	Overdrive Slippershaft 21T SRX4
500467	Full time 4wd 20T slipper shaft SRX4
500468	Front oneway axle SRX4
500469	Front oneway outdrives (2) SRX4
500470	Antirollbar adaptor / balljoint fr (2+2) SRX4
500471	Full time 4wd 20T slipper pulley SRX4
500472	Front oneway axle set SRX4
500477	Solid slipper plate inner SRX4
500478	Belt side 45S3M174 SRX4
500479	Gear mid 30T SRX4
500480	Clicker SRX4
500482	Slipper trust bearing SRX4
500483	Slipper set SRX4
600116	O-ring tank (4)

### BODY AND WING

500251	Rear wing 6.0" SRX2
500252	Rear wing 7.0" SRX2
500375	Rear wing 7" (2) SRX





SPURGEA	R
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

120156	iviotor-pinion alu nard	48P / 181
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

### 190500 Pit-caddy

190500	Pit-caddy
190501	Tool-bag
190502	Pit-bag medium. 3 drawers
190504	Ballcup tool
190506	Toolset for onroad (17pcs) with tools bag
190507	Toolset for ep (16pcs) with tools bag
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)

190207 Hoody sweater Serpent black-zin (4XI))	190207 Hoody sweater Serpent black-zip (4XL) )	190157 190158 190159 190160 190161 190182 190183 190184 190185 190186 190187 190188 190189 190190 190191 190192 190193 190194 190195 190196 190197 190198 190199 190201 190202 190203 190204 190205 190206	Polo shirt Serpent black (M) Polo shirt Serpent black (L) Polo shirt Serpent black (XL) Polo shirt Serpent black (XXL) Polo shirt Serpent black (XXL) T-shirt Serpent Splash white (S) T-shirt Serpent Splash white (L) T-shirt Serpent Splash white (L) T-shirt Serpent Splash white (XL) T-shirt Serpent Splash white (XL) T-shirt Serpent Splash white (XXL) T-shirt Serpent Splash white (XXL) T-shirt Serpent Splash orange (S) T-shirt Serpent Splash orange (L) T-shirt Serpent Splash orange (L) T-shirt Serpent Splash orange (XL) T-shirt Serpent Splash orange (XLL) T-shirt Serpent Splash orange (XXL) T-shirt Serpent Splash orange (XXLL) T-shirt Serpent Splash black (S) T-shirt Serpent Splash black (L) T-shirt Serpent Splash black (L) T-shirt Serpent Splash black (XLL) T-shirt Serpent Splash black (XLL) T-shirt Serpent Splash black (XXLL) T-shirt Serpent Splash black (XXLL) T-shirt Serpent Splash black (XXLL) T-shirt Serpent Splash black (XXLL) T-shirt Serpent Splash black (XXLL) Hoody sweater Serpent black-zip (S) Hoody sweater Serpent black-zip (L) Hoody sweater Serpent black-zip (XLL) Hoody sweater Serpent black-zip (XLL) Hoody sweater Serpent black-zip (XLL) Hoody sweater Serpent black-zip (XLL) Hoody sweater Serpent black-zip (XLL)
	<b>7 1 1 1 1 1</b>	190206 190207	Hoody sweater Serpent black-zip (3XL) Hoody sweater Serpent black-zip (4XL))









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