

INSTRUCTION

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SERPEN

INTRODUCTION

Thank you very much for selecting this Serpent rc car and thus become a member of the ever growing worldwide Serpent racing family. Serpent started in 1980 and has been growing its product-line and fanbase ever since.

The Serpent Natrix 750 EVO is a state of the art gaspowered 1/10 scale onroad racing car. The assembly manual will guide youthrough all the steps to complete the car, so you can hit the track with a good base-set-up soonest. The Serpent design department succeeded to create a superbly performing car combined with eas of assembly and maintenance. The high quality standards of all parts and hardware will make racing your Serpent car a very rewarding activity !

Through our team, website and social media we will keep you up-to-date on all developments of the Serpent cars. We hope to meet you on the track and through our various media! Enjoy the drive !

Team Serpent Multiple World Champions

INSTRUCTIONS

Serpent's long tradition of excellence extends to the 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. Following the instructions will result in a well-built, high-performance race-car that will soon be able to unleash its full potential at the racetrack. 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.

PLASTIC PARTS

The Serpent moulded parts are very durable and hard. When assembling longer screws in new composite parts, make sure to use new hex bits in your (power) tools. Pre-threading also helps to avoid screw damage.

SETUP

In certain assembly steps you need to make basic adjustments, which will give you a good initial setup for your Serpent Natrix 750 EVO. Fine-tuning the initial setup is an essential part of building a high-performance racecar like your Serpent Natrix 750 EVO.

EXPLODED VIEWS AND PARTS LIST

The exploded views and parts lists for the Serpent Natrix 750 EVO are presented in the Reference Guide section in the back of this manual. The exploded views show all the parts of a particular assembly step along with the Serpent part number and hotlink to the Serpent website. Partnumbers in orange indicates that this part is an optional. Optionals part names and numbers are showed below.

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.

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.

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 80 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, fuel 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 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.

- Before operating this car, always check the mechanical status of the car. Also check that the transmitter and receiver frequencies correspond and are not used by any other racer at the same time. 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.

- Empty the fuel tank (depending on model) if needed and disconnect the receiver battery.
- 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.

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How to use the manual



LINES DESCRIPTION

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



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

Connect one item to another

Gap between two items



Each step contains a variety of symbols described below.



Carefull, read and check very well.



Apply a small amount of cyano glue. Use protection for eyes and hands.



Detail view to explain assembly or order of parts better.



Default set-up: This symbol indicates the default setup.



Grease: apply a small amount of grease to the parts shown.



Silicone grease: apply a small amount of grease to the parts shown.



Left and right parts should be assembled in the same way.



Thread lock: apply a small amount on the parts shown. Before applying the threadlock, make sure to degrease the parts very well, as otherwise the threadlock will not work.



Silicone oil: use the indicated silicone oil for the shocks and differentials.



Parts or items not included in the kit.

Optional part, not standard in the kit.

FRONT DIFF ASSEMBLY





3.1 Fill the differential with silicone oil 1 mm above the crosspin, do NOT overfill. For the correct cst value please check

<u>3.2</u>

/

Add the big gear.



STEP 4

M2.5x10



Mount the diff top-case on the lower case, make sure to follow below Detail View, and tighten the screws.

HOW TO CLOSE THE FRONT DIFF

The front diff top case has two protrusions (see below picture in red) to hold the geardiff shafts in the correct position. The two protrusions press on the upper shaft and thus secure the shafts in position.



STEP 5

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1- Allow the excess of oil to escape through the escape hole.

2- Close the hole with the 3x3 setscrew. Tighten carefully.

3- In case the diff feels too hard remove the M3x3 set screw and let some oil escape and close again. Tighten carefully.





REAR DIFF ASSEMBLY









1- Fit the o-ring (see detail view picture in yellow) in the slot of the bottom case using some silicone oil to hold it in position.

2- Mount the diff top-case on the lower case, make sure to follow below Detail View, and tighten the screws.

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M2.5x10

HOW TO CLOSE THE REAR DIFF

The rear diff top case has two protrusions (see below picture in red) to hold the geardiff shafts in the correct position. The protrusion should hold the upper shaft as it will hold the bottom shaft .







2- Close the holes with the 3x3 setscrews. Tighten carefully.

3- In case the diff feels too hard remove the M3x3 setscrews and let some oil escape and close again. Tighten carefully.

















L=R REAR REACTIVE STEERING SYSTEM

Serpent 750 EVO introduce the Active rear toe-in. It brings a new dimension to setup changing the toe-in characteristics of the rear tires under rolling effect. It allows to run less static toe-in and still have a good traction coming out of the corner. Serpent RRS System brings the possibility to fully adjust the amount of toe-change over the suspension travel even having the possibility of no toe-in change in droop and still have a toe-in raise under compression.

M3x25

M3x16

GEARBOX ASSEMBLY

STEP 30

M4x6

M3x6

R5

RADIO ASSEMBLY STEP 39 BAG 18 STEP 40 M2x6 M3x6 NI 1 M2x6 M3x10 M3x10 M3x16

P M3x6

П МЗх8

M

010

() M2.5x5

STEP 45

STEP 46

M3x8

2x10 Body clip mid

T

2x10

M3x10

2x10

О — М3х3

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DIFFERENTIAL EXPLODED NIEW

804374 Solid axle set front alu 804375 Solid axle front alu 804376 Solid axle outdrive (2) 804440 Diff set rr 750 arrowspace magnesium 804442 Diff housing rr 750 arrowspace magnesium 804444 Diff pulley 40T rr arrowspace magnesium 804450 Oneway diff fr S7XX 804451 Oneway diff housing fr 804452 Oneway diff outdrive (2) 804453 Oneway diff fr gear (2) 804454 Pully 33T fr S7XX 804455 Oneway diff housing o-ring (5) 804456 Oneway diff outdrive o-ring (5)

GEARBOX EXPLODED VIEW

804242 2-Speed gear 58T SL6 804244 2-Speed gear 60T SL6 804480 2-Speed gear 55T SL6 XLI Gen2 804481 2-Speed gear 56T SL6 XLI Gen2 804482 2-speed set SL6 XLI Gen2 804497 2-speed gear set SL6 XLI (6)

160301 Spring yellow160302 Spring orange160304 Spring Pink160305 Spring blue

160306 Spring purple160310 Spring-set L23 (5x2)160147 Shock onroad big bore bushing LF (4)

REAR EXPLODED VIEW

804344Antiroll bar 2.2 RR 748

sium

804489 Suspension bracket rr fr wide alu

804366 Servo lever steering alu 25T 748 804457 Screwset titanium S750 EVO (165)

FRONT I EXPLODED NIEW

OPT

804142 Anti-rollbar FR 2.2mm 804144 Anti-rollbar FR 2.8mm 804193 Radioplate support alu 804361 Servosaver bottom alu 804376 Solid axle outdrive (2) 804400 Suspension bracket FR brass 804450 Oneway diff fr S7XX

804453 Oneway diff fr gear (2) 804454 Pully 33T fr S7XX 804455 Oneway diff housing o-ring (5) 804456 Oneway diff outdrive o-ring (5) 804457 Screwset titanium S750 EVO (165)

804363 Steeringblock lever carbon 748 (2) 804404 Driveshaft CVD alu (2) 804446 Wheelaxle set CVD alu 0mm V2 (2) 804447 Wheelaxle CVD alu V2 (2) 804448 Wheel hexacon CVD 0mm V2 (2) 804449 Wheel hexacon CVD -1mm V2 (2) 804491 Steeringblock lever opt2 (2) S750 EVO

804283 Bumper 747 804293 Body support washers med + high (5+5) 804457 Screwset titanium S750 EVO (165) 804493 Heave bracket rr L+R alu S750 EVO 804494 Heave bracket fr L+R alu S750 EVO 804495 Heave demper set rear S750 EVO 804496 Heave demper set front S750 EVO

Centax True Motion clutch 1/10 #804250

1388 Thrust bearing 5x10 Ceramic 802508 Centax - 3 clutch shoe XP 804205 Centax-3 clutch shoe red 804381 Centax-3 gear-pinion alu 15t wc V2 804383 Centax-3 gear-pinion alu 17t wc V2
804384 Centax-3 gear-pinion alu 20t wc V2
804386 Centax-3 gear-pinion alu 22t wc V2
804387 Centax-3 gear-pinion alu set wc (6) V2

804439 Centax clutchbell 1/10 alu nickel coated V2 903647 Centax spring x-hard

FINAL ASSEMBLY EXPLODED WIEW

804291 Brake lever on-road alu 804457 Screwset titanium S750 EVO (165)

TEAM SERPENT NETWORK

750 EVO SPARE PARTS www.serpent.com/804012/spares/

750 EVO OPTIONALS PARTS www.serpent.com/804012/Optionals/

SERPENT TOOLS www.serpent.com/product/Tools/

SERPENT MERCHANDISING www.serpent.com/product/Merchandising/

SERPENT WEBSITE AND BLOG

www.serpent.com www.teamserpent.com www.dragon-rc.com

SERPENT PROMO PAGES http://promo.serpent.com SERPENT FACEBOOK GROUPS http://promo.serpent.com/indexfb.htm SERPENT ADVANCED MANUALS http://promo.serpent.com/sam/

SERPENT SOCIAL MEDIA

www.facebook.com/teamserpentrc

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www.plus.google.com/+SerpentModelcars/posts

www.weibo.com/teamserpent

Manual S750 EVO #62938-1

