

INSTRUCTION
MANUAL

9900
1/8 ON ROAD SCALE **VIPER R**

GP  **GAS POWERED**

SERPENT

INTRODUCTION

The Serpent Viper 990R is designed to be a world champion, while still being easy to use, assemble, and set up. The Serpent Viper 990R offers state of the art specifications and leads the way in chassis design, using all the knowledge we have from 1/8 scale racing into this design too. Continuously pushing the performance envelope, Serpent's engineers have added new and innovative features that help take your Serpent Viper 990R into the winner's circle.

Designed by Michael Salven

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 bag numbers, 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 later on 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 Viper 990R. Fine-tuning the initial setup is an essential part of building a high-performance racecar like your Serpent Viper 990R.

EXPLODED VIEWS AND PARTS LIST

The exploded views and parts lists for the Serpent Viper 990R are presented in the Reference Guide section in the back of this manual. The exploded views show all the 990R parts of a particular assembly step along with the Serpent part number and hotlink to the Serpent website. Part numbers 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 gloves.
- 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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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.



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



Connect one item to another



Gap between two items



Press/Insert one item into another

ICONS DESCRIPTION

Each step contains a variety of symbols described below.



Carefull, read and check very well.



Apply a small amount of cyano glue. Use wear 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.



Thread lock: apply a small amount on the parts shown. Before to apply 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.



Oil: apply a small amount of oil to the parts shown.



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




Parts or items not included in the kit.







Optional part, not standard in the kit.

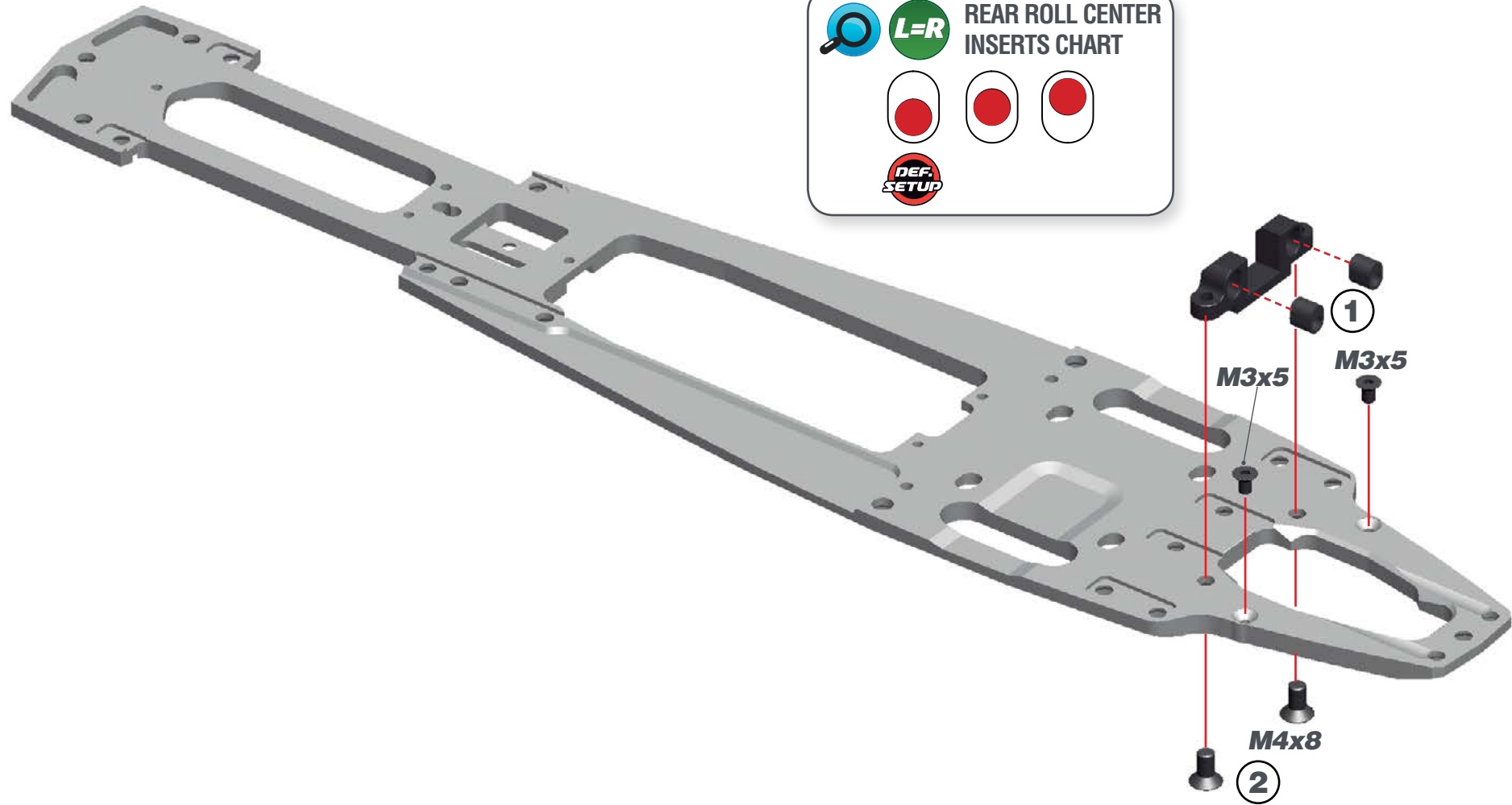
STEP 1

BAG 1

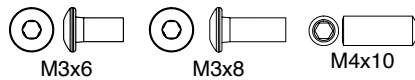
 **L=R** REAR ROLL CENTER INSERTS CHART

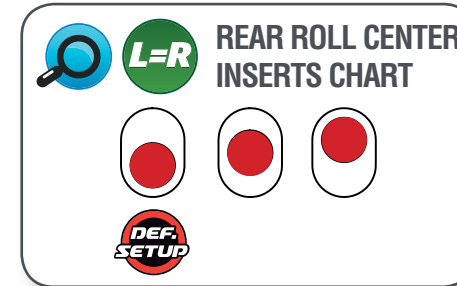
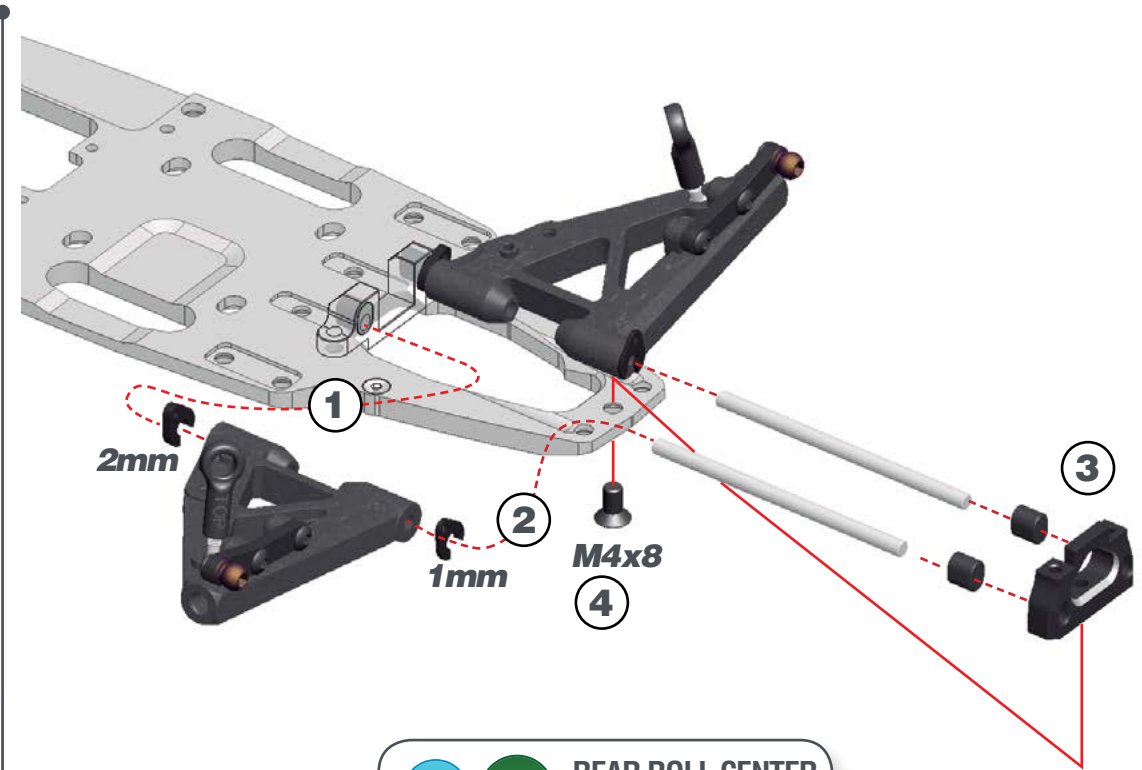




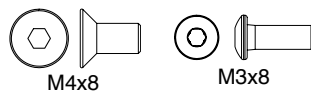
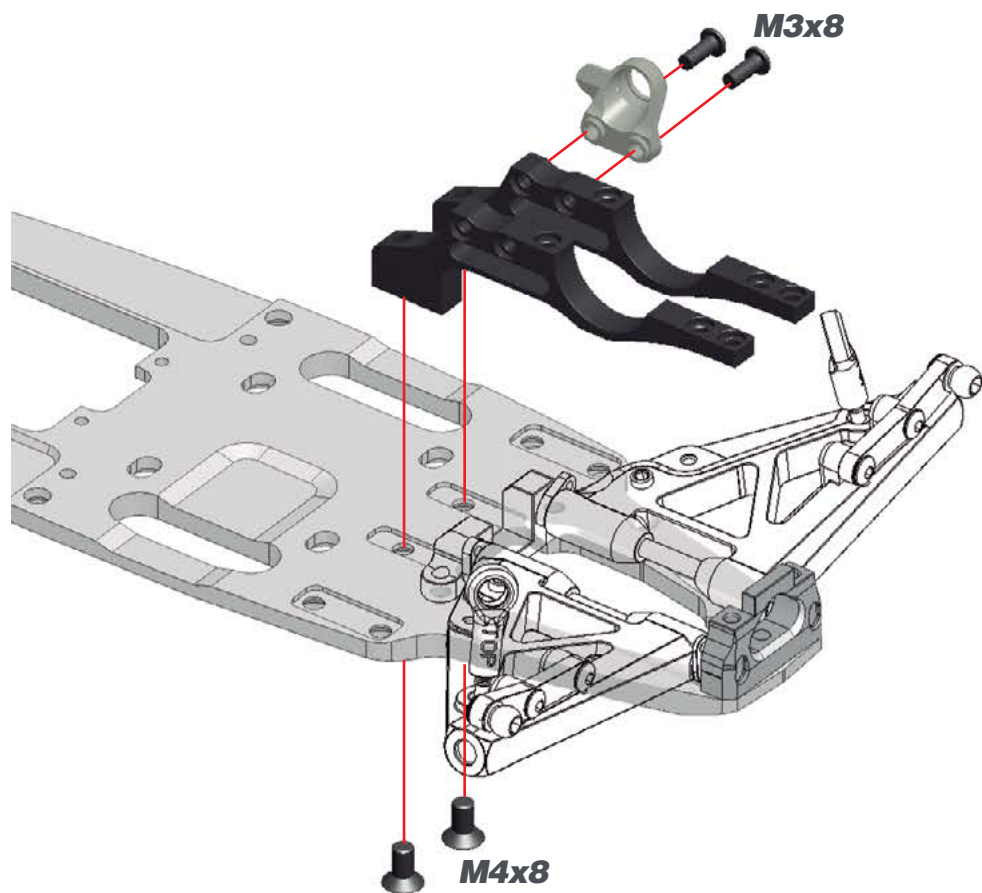
STEP 2



STEP 3

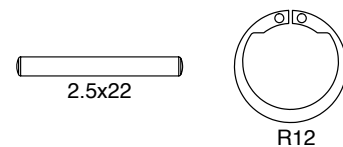
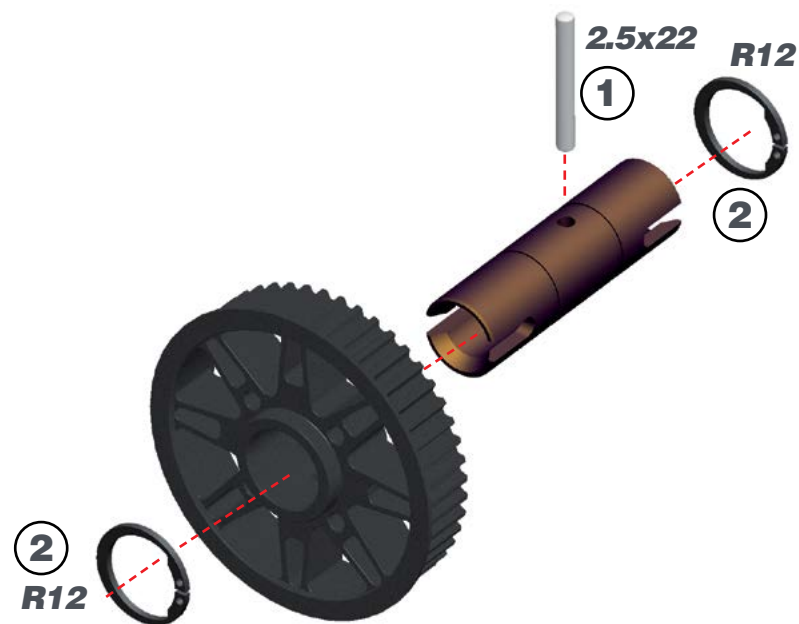


STEP 4



STEP 5

BAG 2



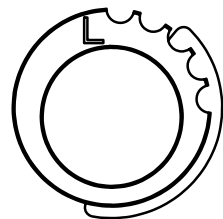
STEP 6



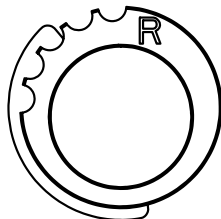
REAR SOLID AXLE EXCENTERS

Note that the rear solid axle excenters are not symmetrical and are marked with L (=left) and R (=right).

LEFT

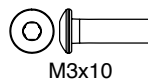
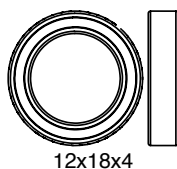
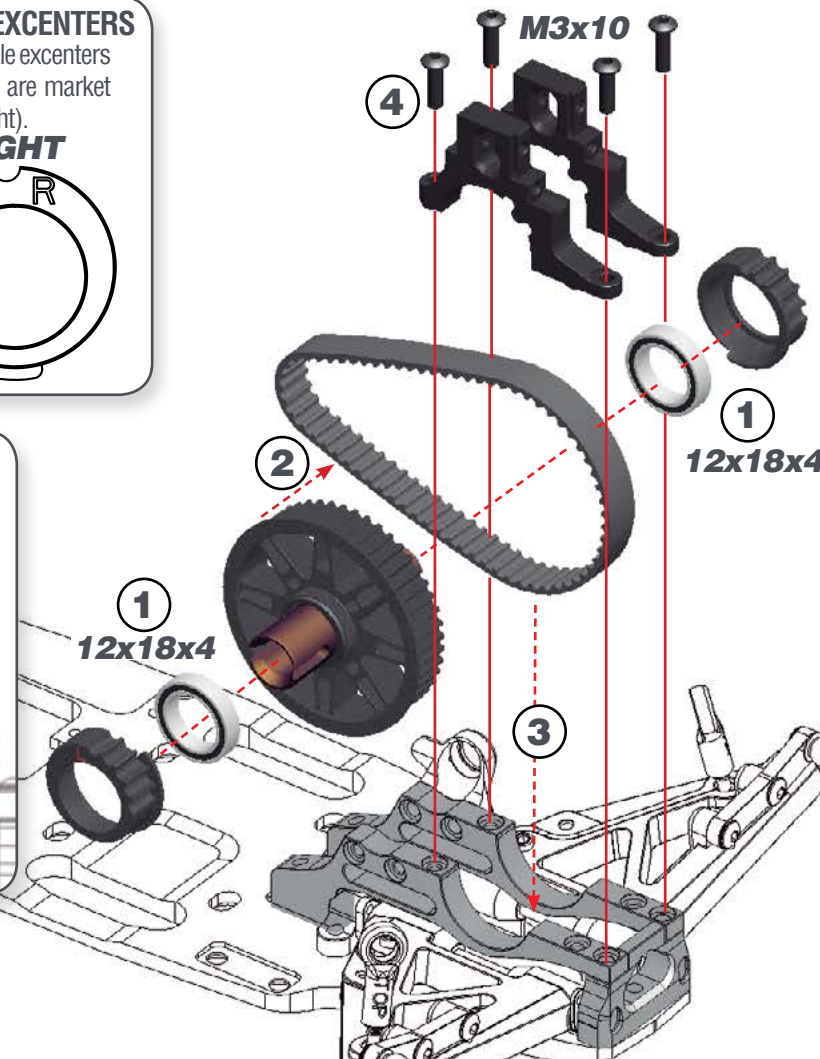
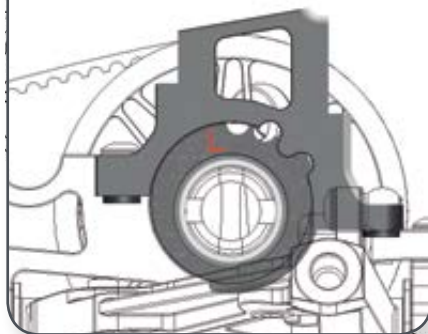


RIGHT

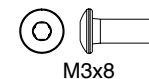
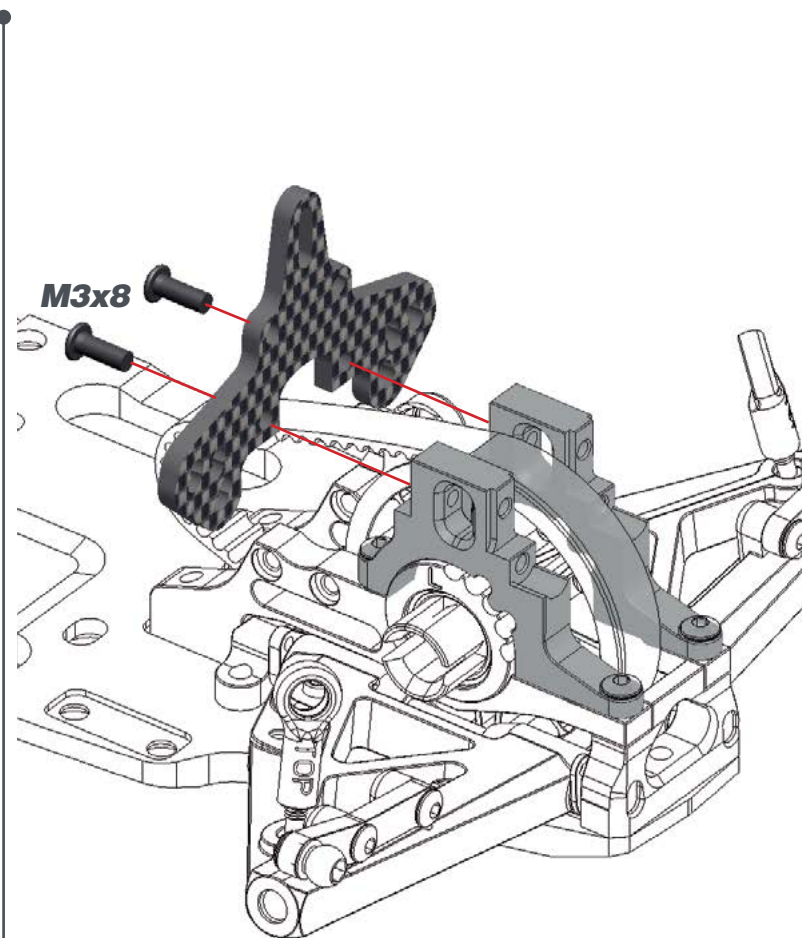


REAR BELT TENSION

Use the central slot as starting position



STEP 7

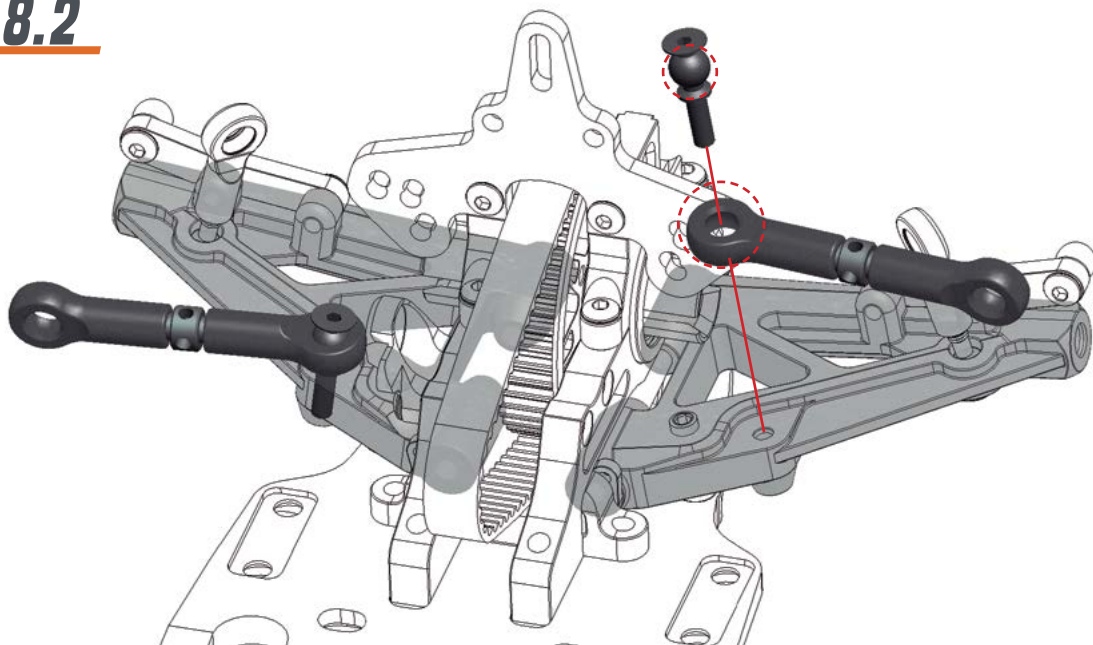


STEP 8

8.1



8.2



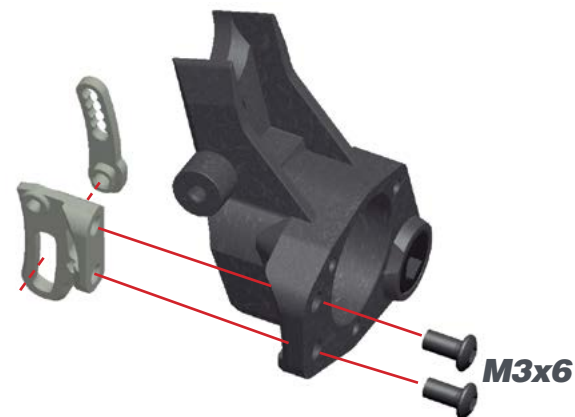
STEP 9

BAG 3

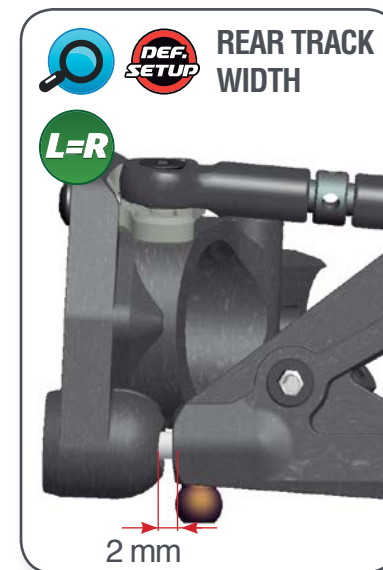
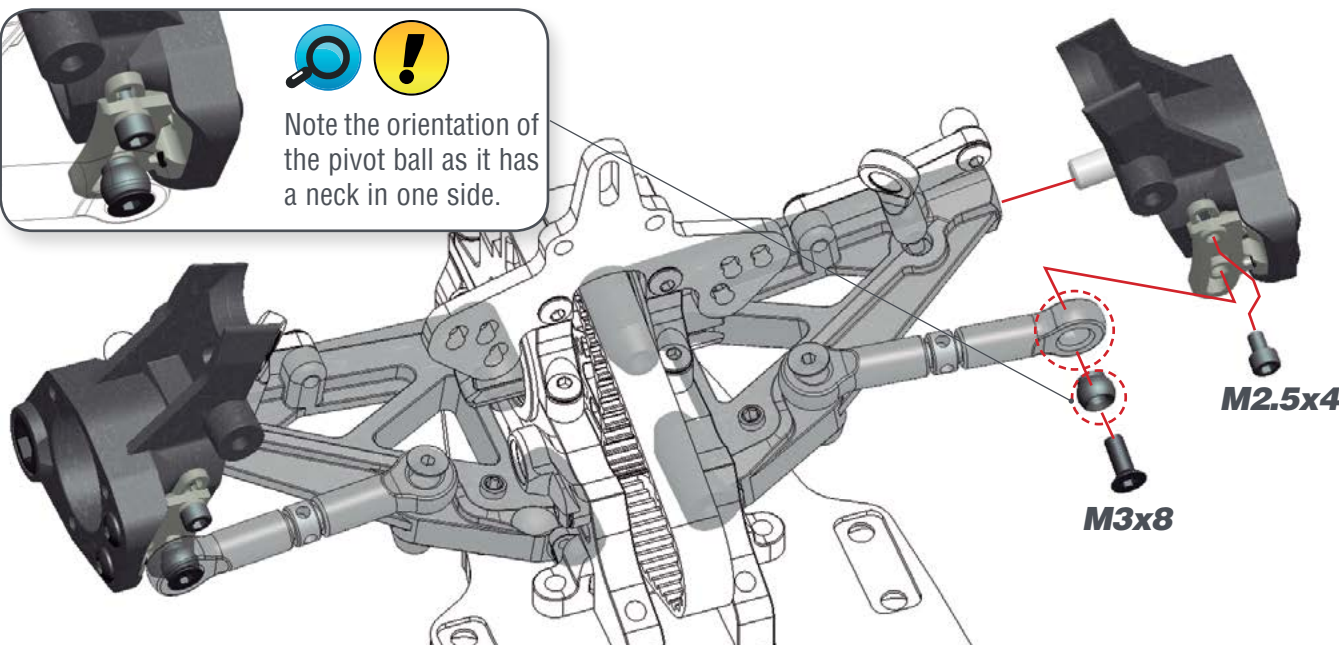
9.1



9.2



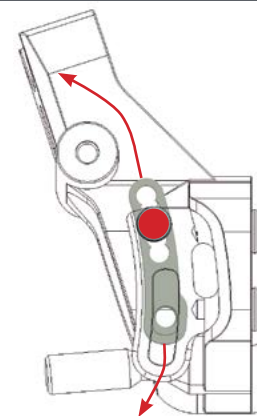
STEP 10



L=R REAR REACTIVE STEERING SYSTEM

DEFINITION: The RRS system was introduced on the 990 and has been refined for the 990 R. Serpent RRS System brings the possibility to adjust the amount of toe-change over the suspension travel. 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. In the 990 R the adjustment steps are much finer, making it a far more precise tuning option.

HOW TO ADJUST: To adjust the position, unscrew the top screw three turns, then loosen the bottom screw by half a turn. You can now move the toe slide to the desired position. Finally, tighten both screws back into their fixed positions



Toe in will increase under acceleration (compression) and will decrease under braking (extension).



Toe in will not change over the suspension travel.

Toe in will decrease under acceleration (compression) and will increase under braking (extension).

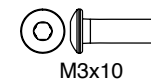
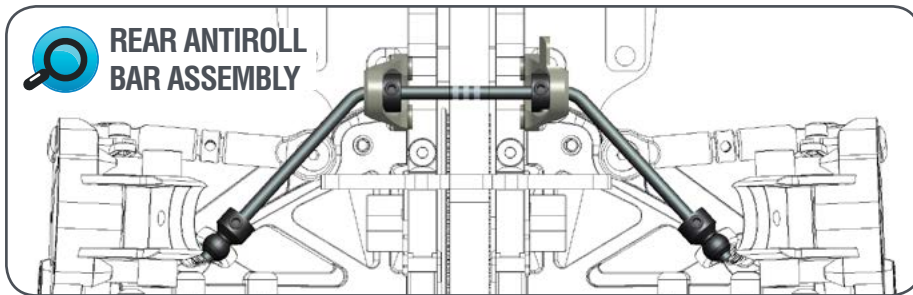
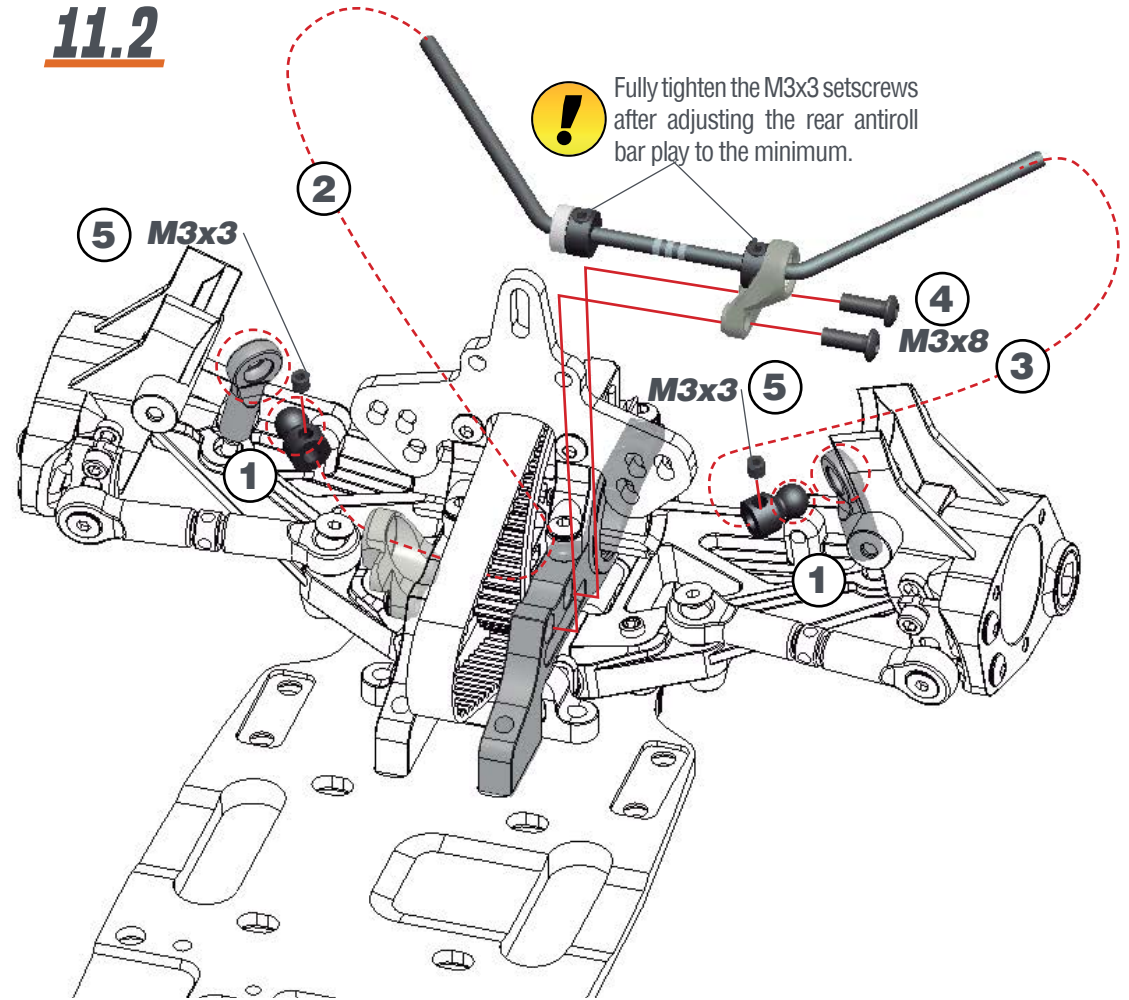


STEP 11

11.1

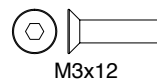
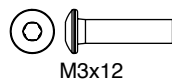
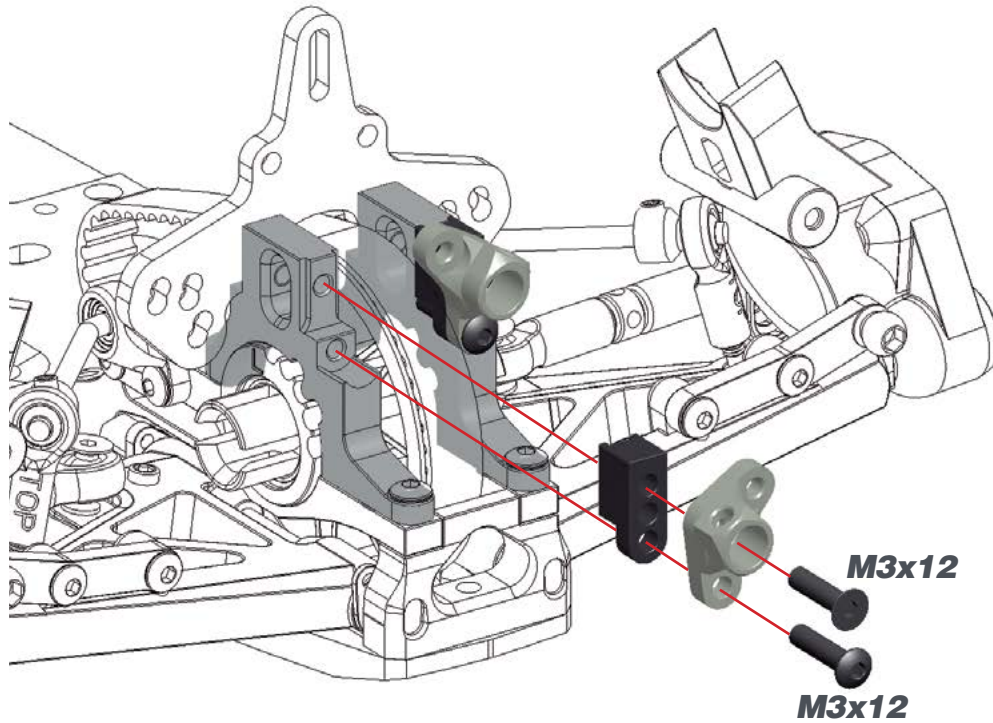


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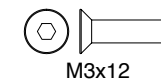
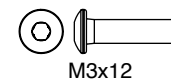
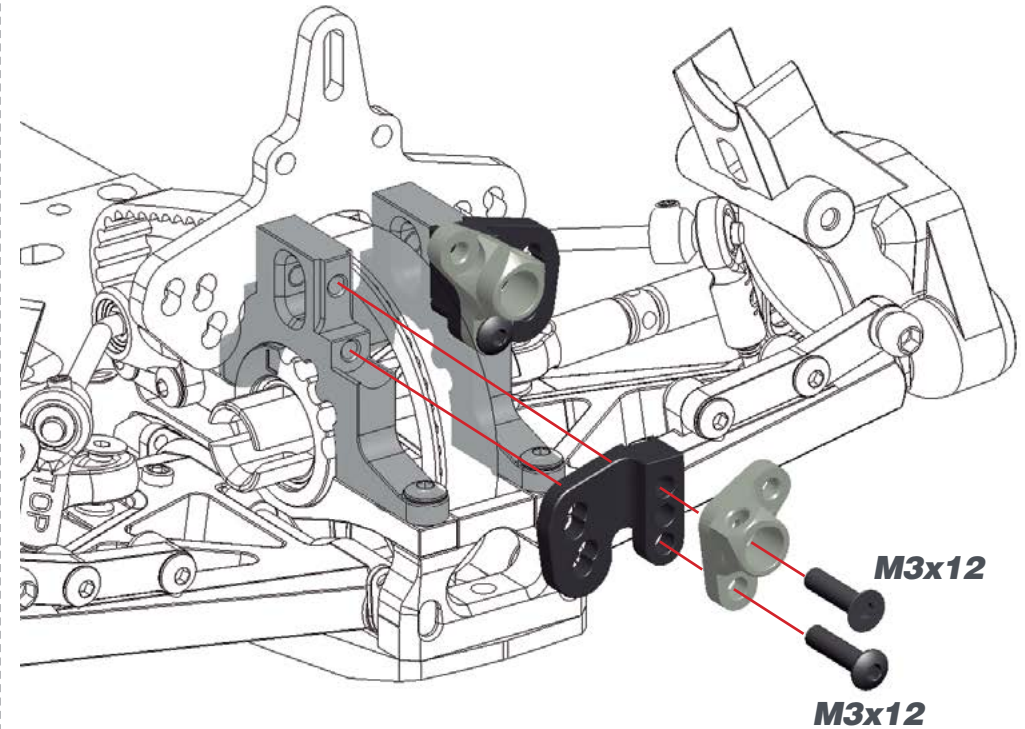


STEP 12

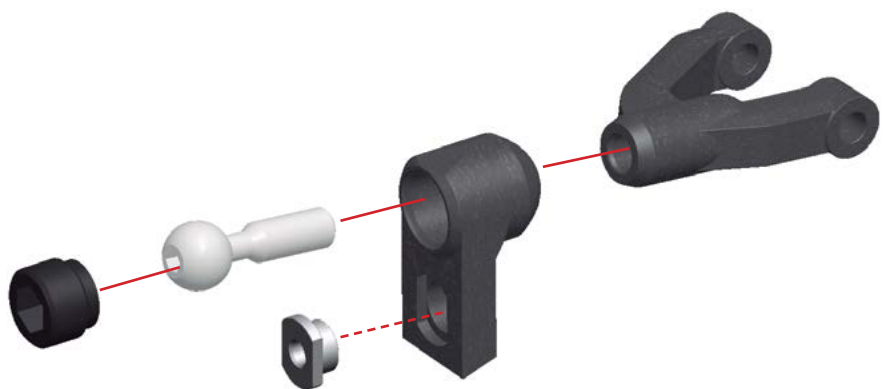
SINGLE SUPPORT CONFIGURATION **DEFAULT**



DOUBLE SUPPORT CONFIGURATION **OPTIONAL**



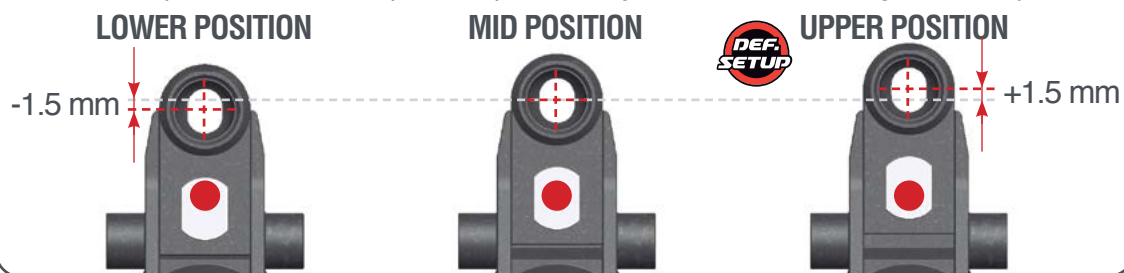
STEP 13



REAR UPPER WISHBONE ANGLE

L=R

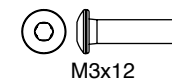
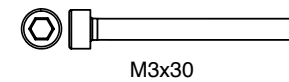
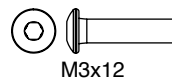
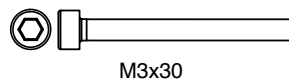
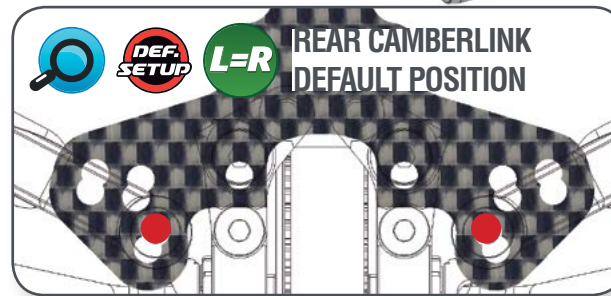
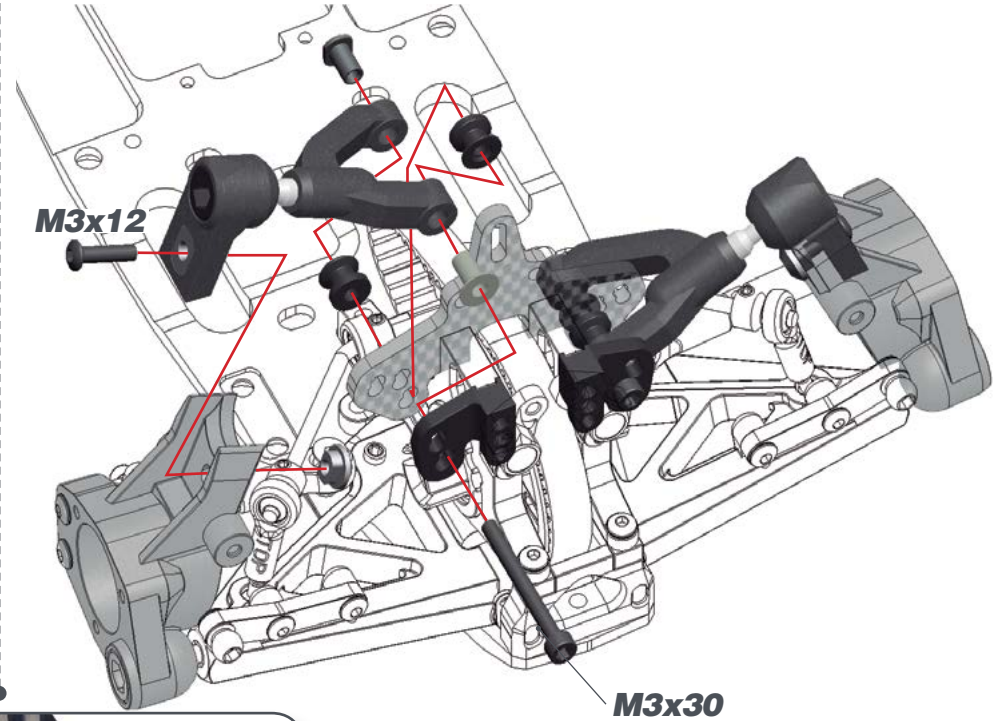
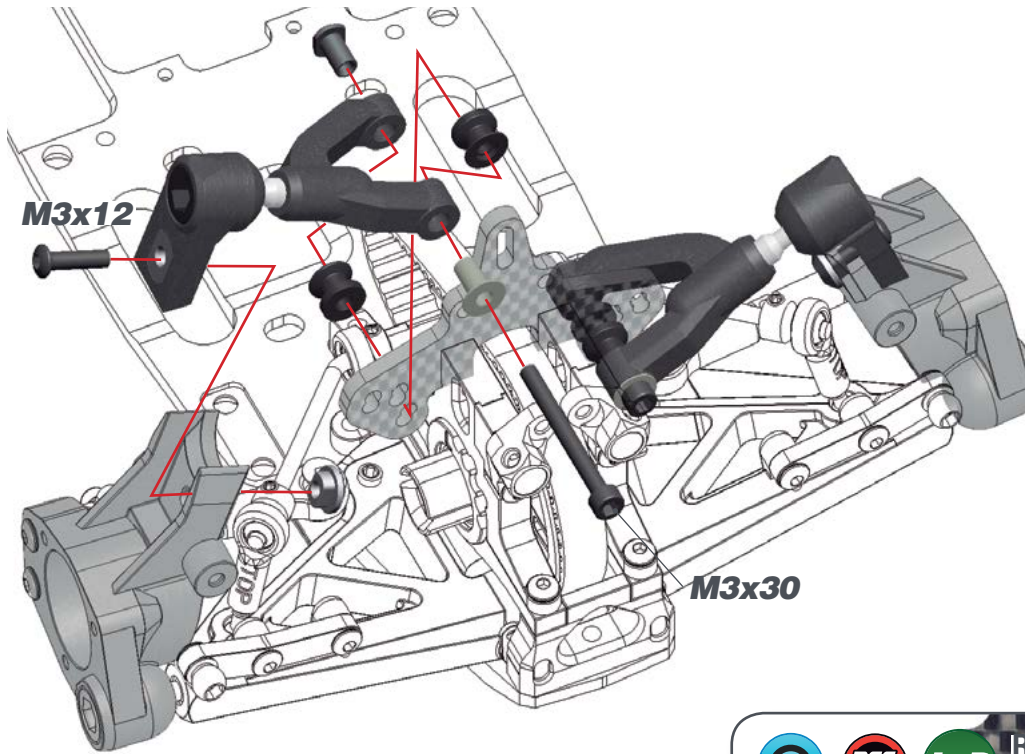
Serpent introduces a new way to adjust the height of the upper pivot on the upright. By changing the excenter, it is possible to move the position up or down by 1.5mm as well as using a "neutral" position.



STEP 14

SINGLE SUPPORT CONFIGURATION *DEFAULT*

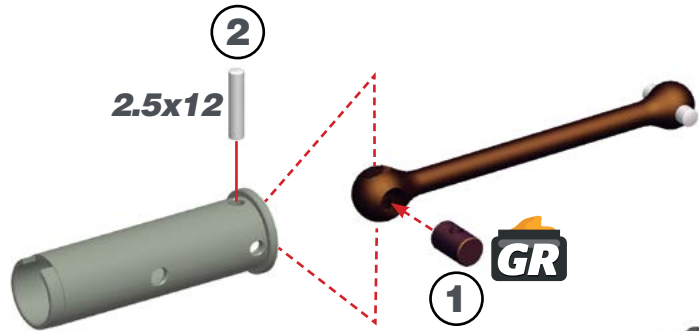
DOUBLE SUPPORT CONFIGURATION *OPTIONAL*



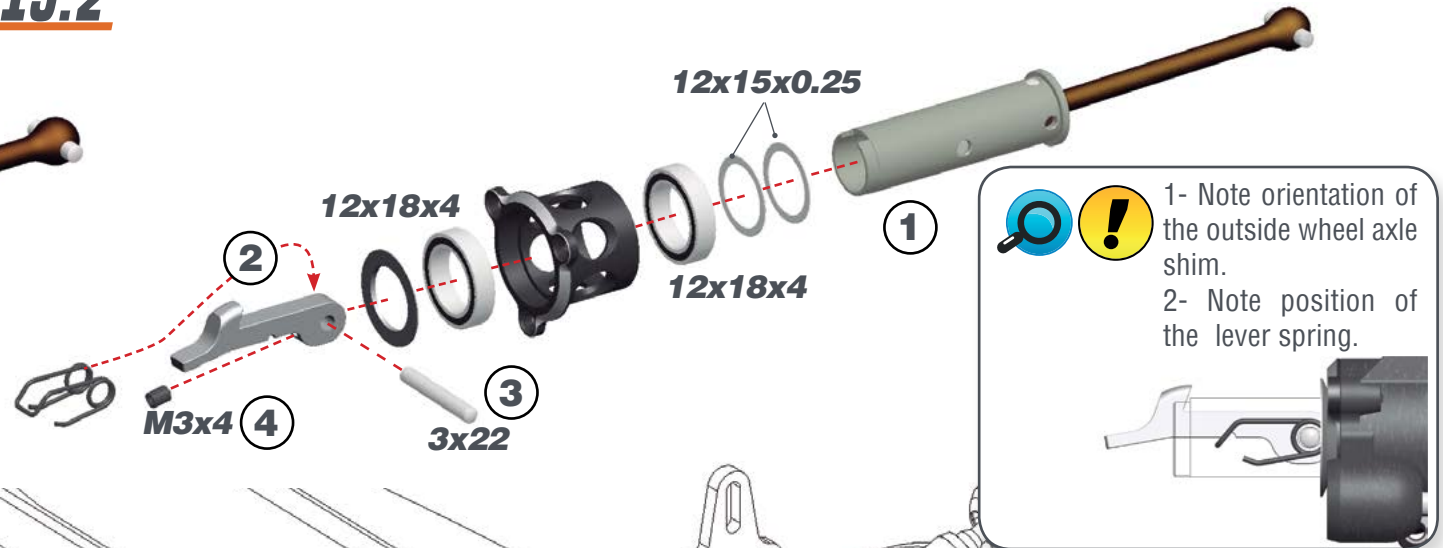
STEP 15

BAG 4

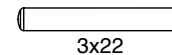
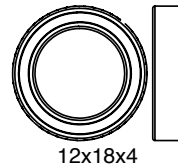
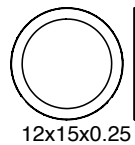
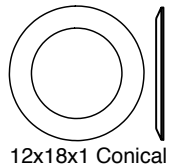
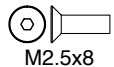
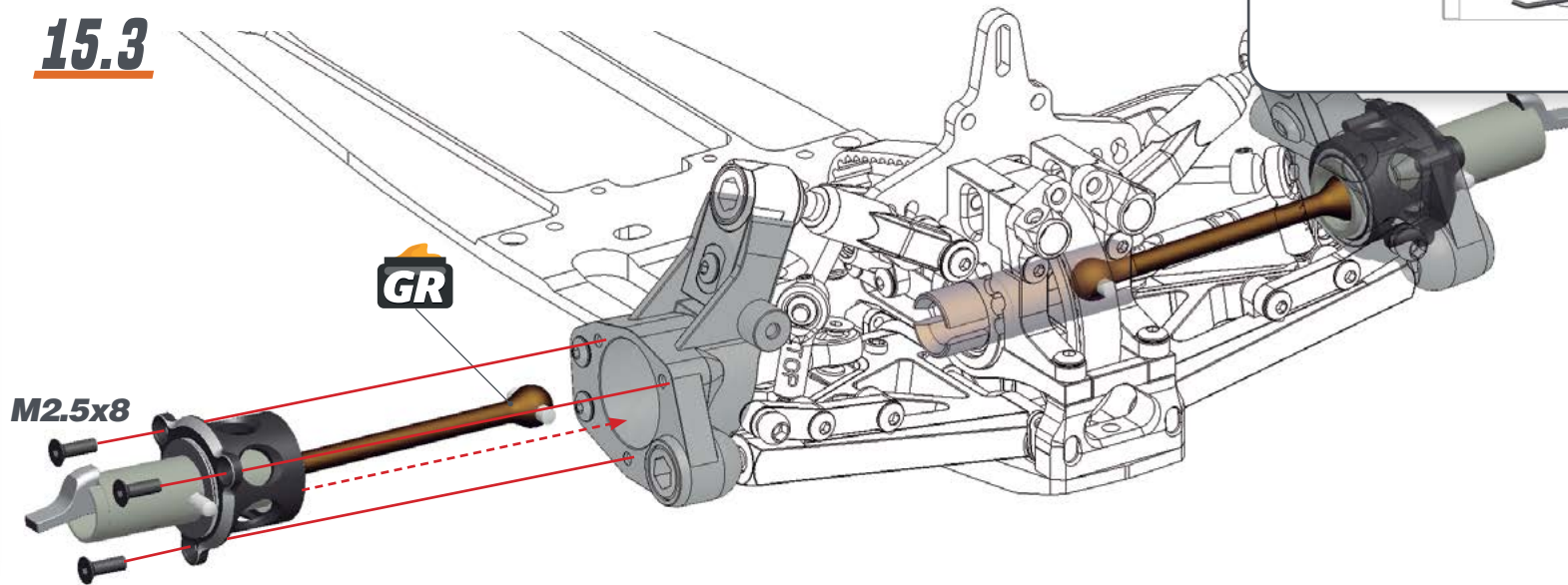
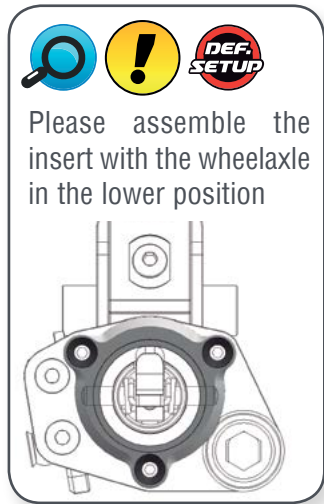
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15.2



15.3



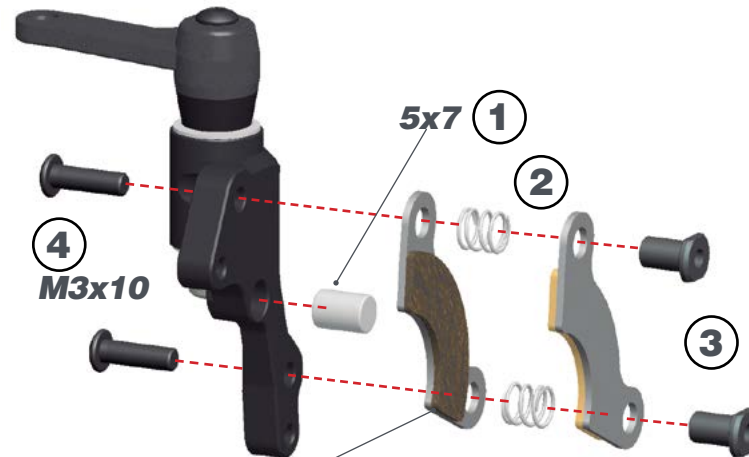
STEP 16

BAG 5

16.1

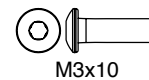
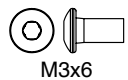
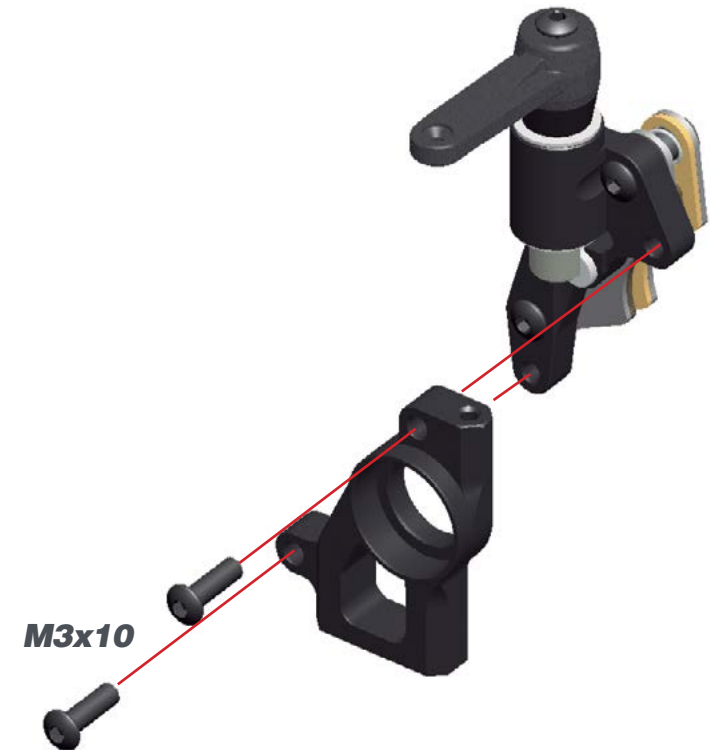


16.2

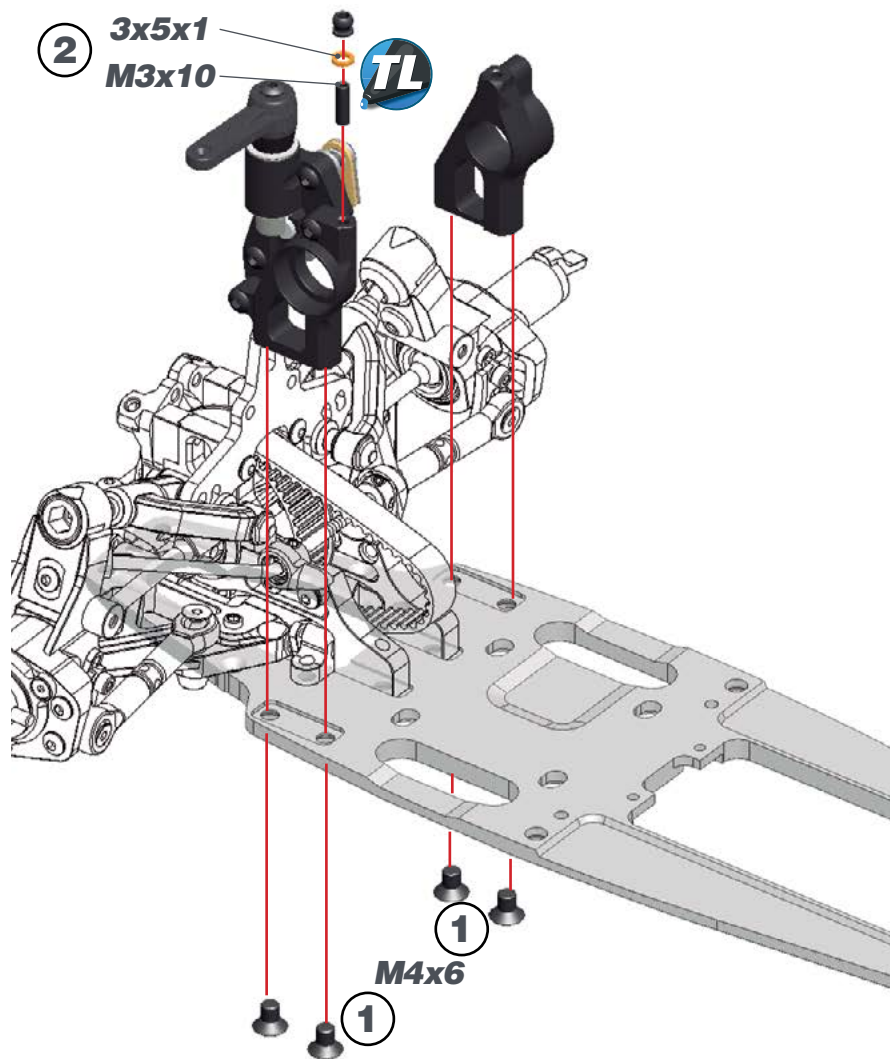


! After tightening the M3x10 screws check that the brake pads slide easy over the bushings.

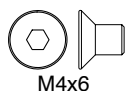
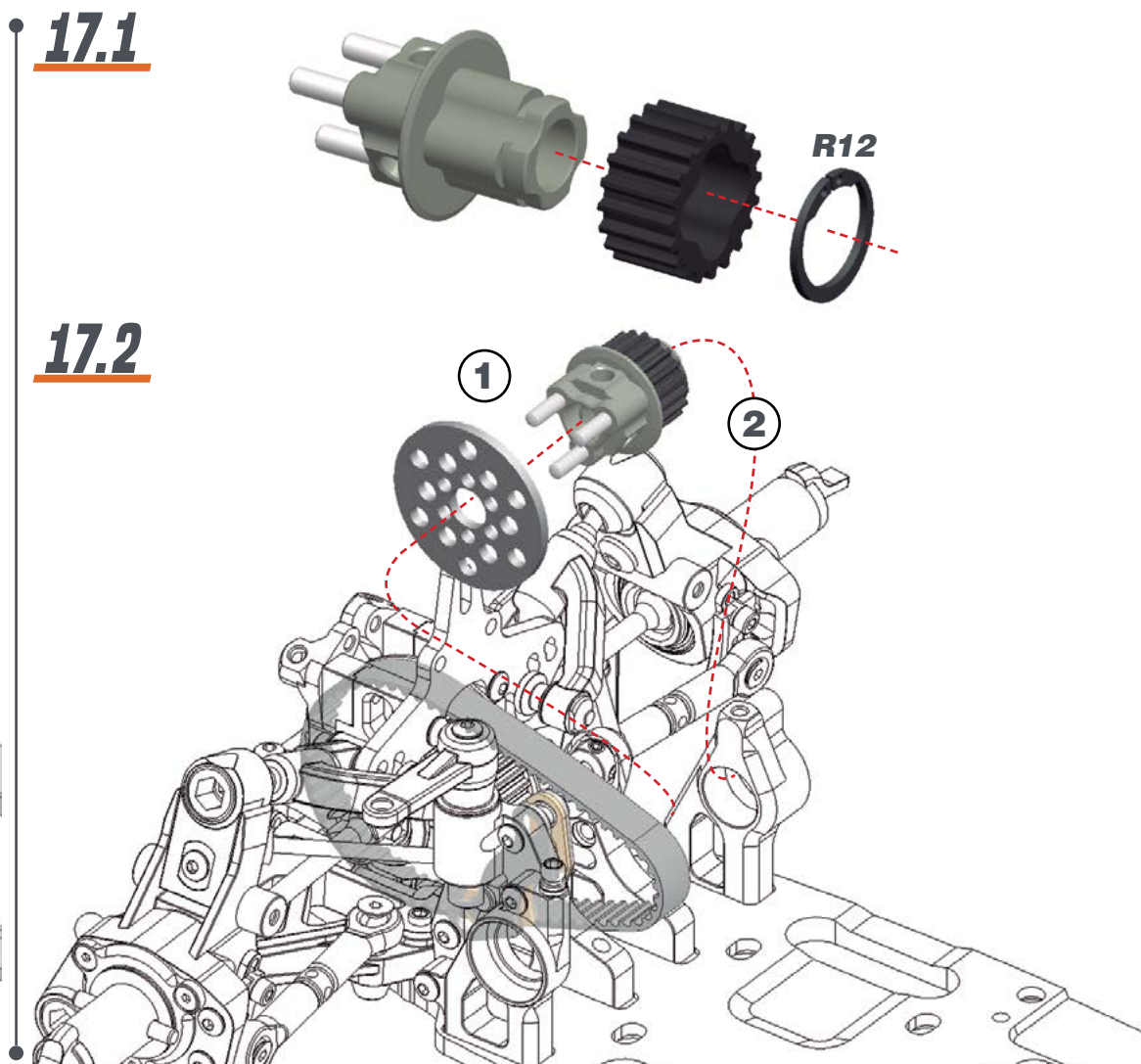
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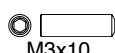
STEP 17



STEP 18



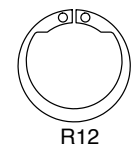
M4x6



M3x10



3x5x1



R12

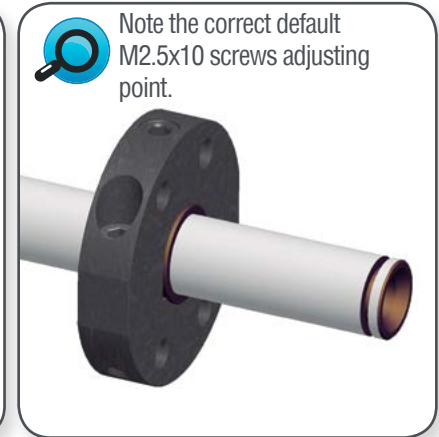
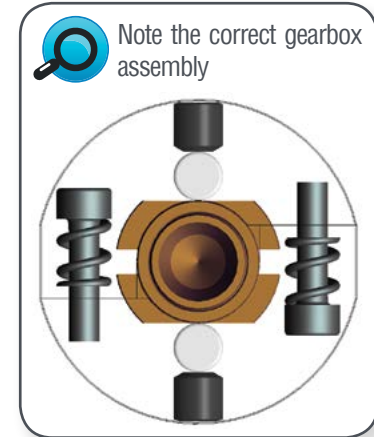
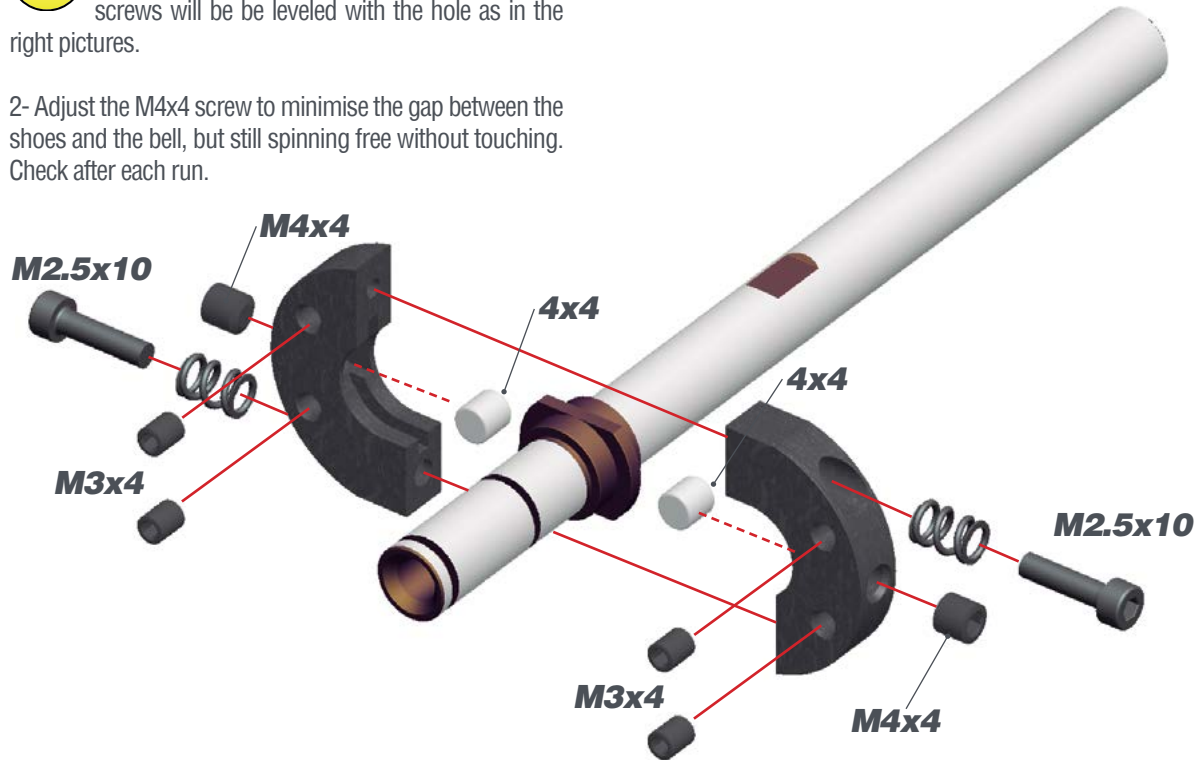
STEP 19

BAG 6



1- The M2.5x10 screws adjust the SHIFT POINT. As default adjustment screw them until the screws will be leveled with the hole as in the right pictures.

2- Adjust the M4x4 screw to minimise the gap between the shoes and the bell, but still spinning free without touching. Check after each run.



4x4



M4x4



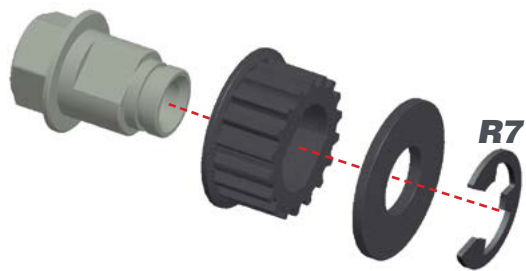
M2.5x10



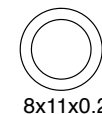
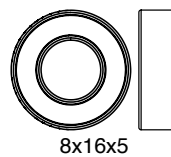
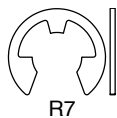
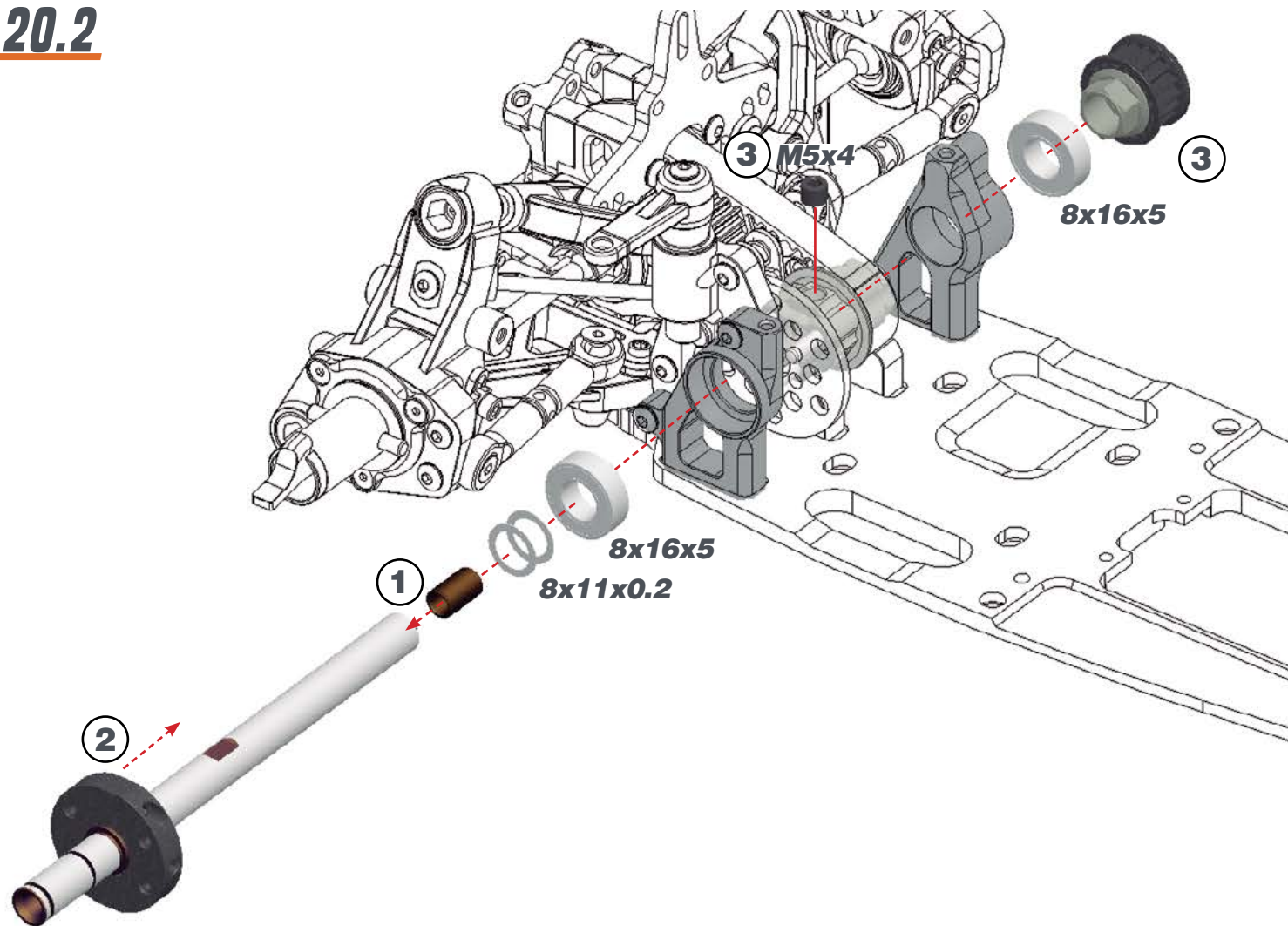
M3x4

STEP 20

20.1

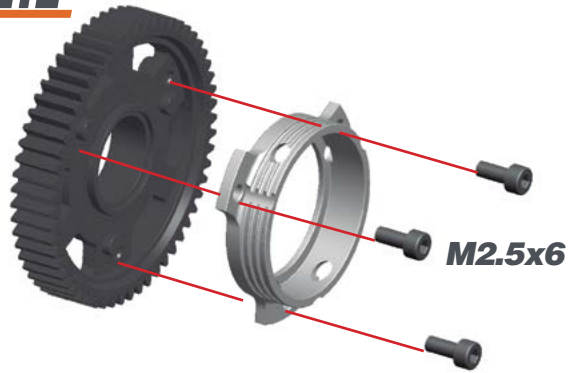


20.2

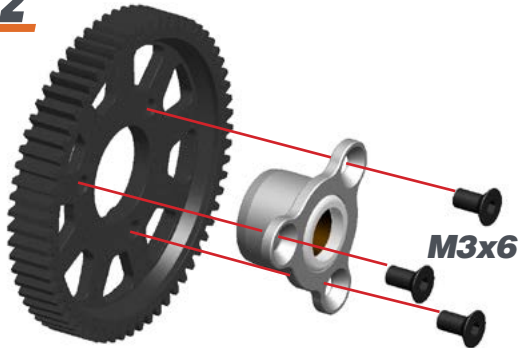


STEP 21

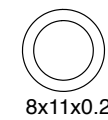
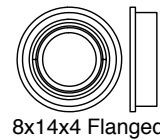
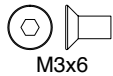
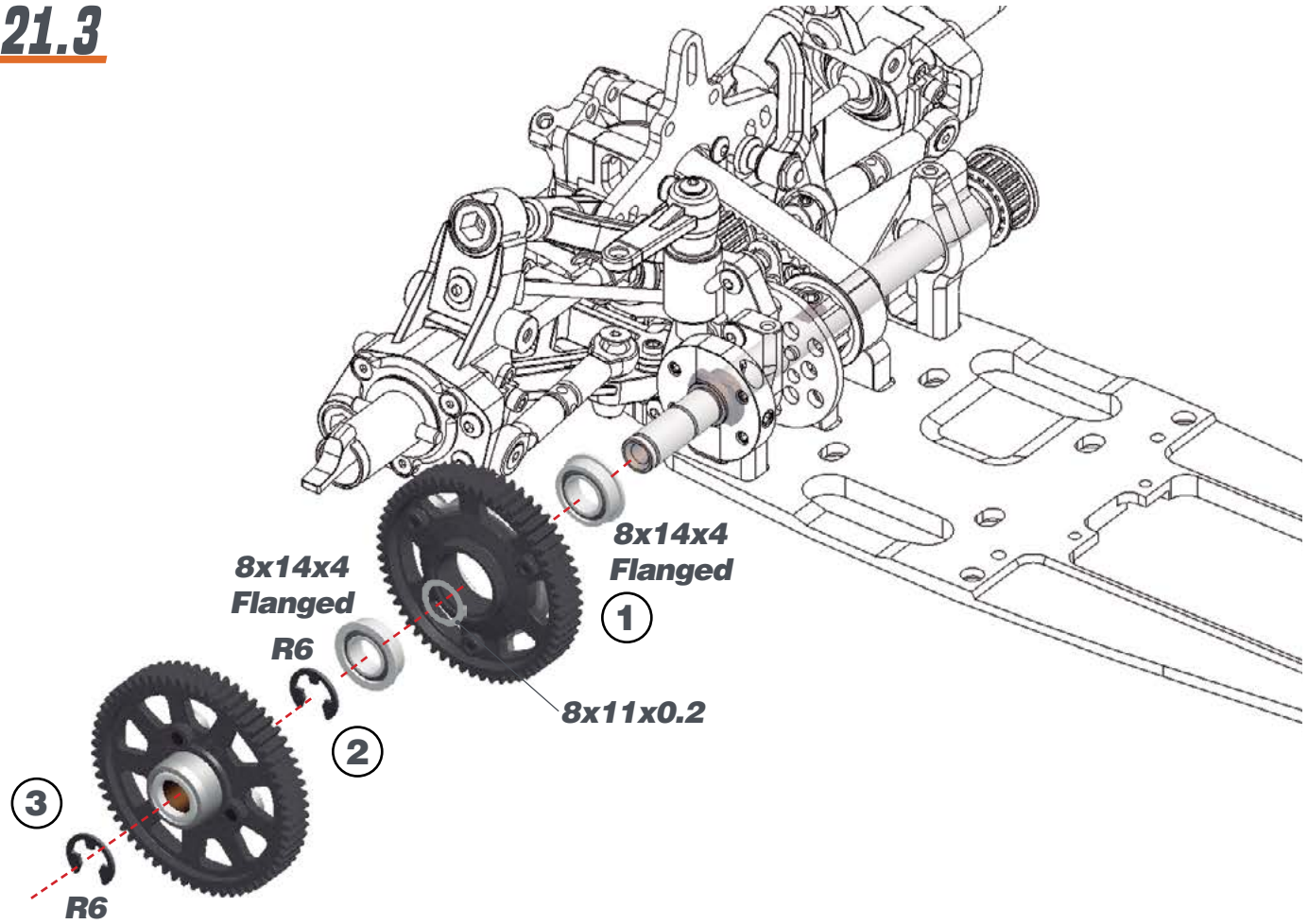
21.1



21.2

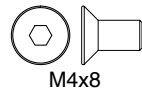
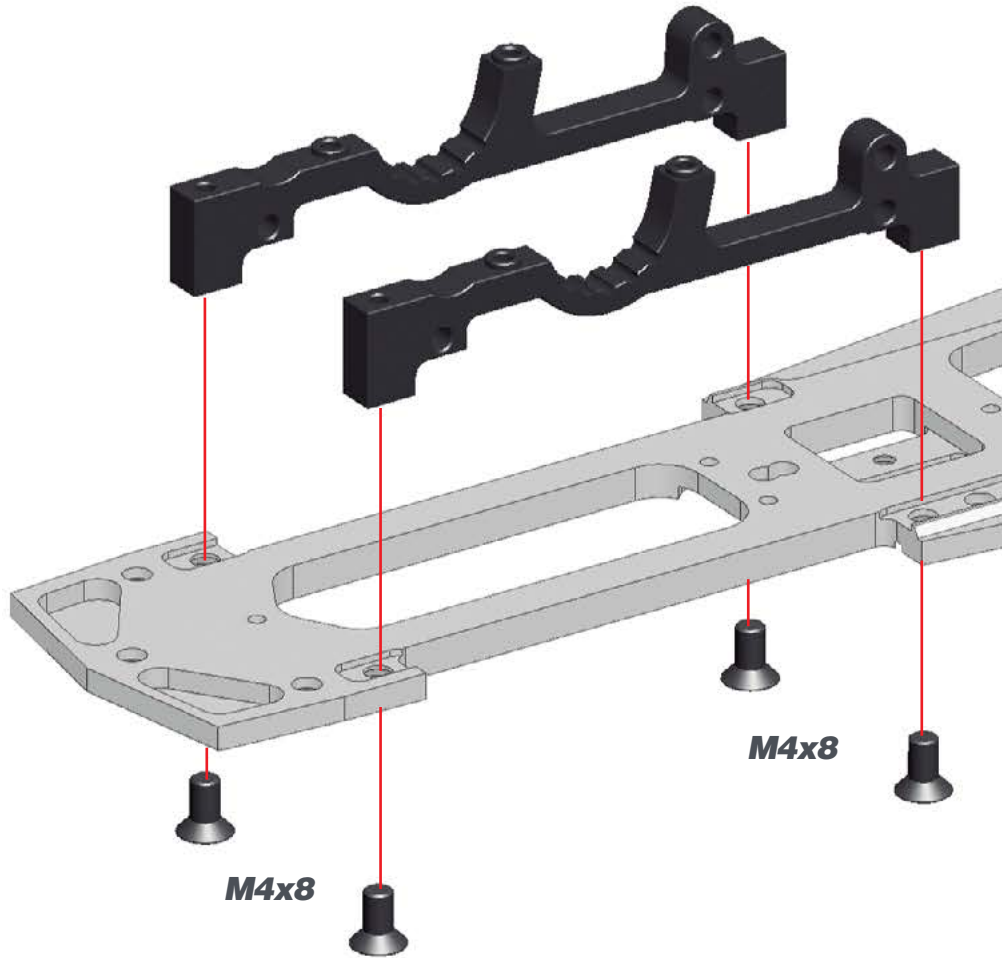


21.3



STEP 22

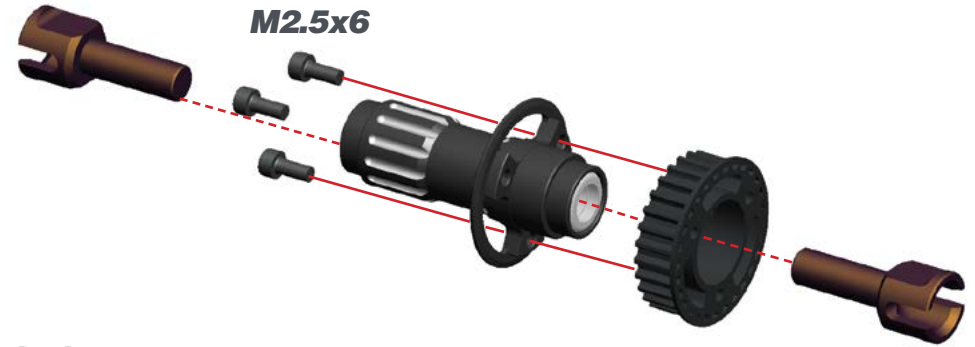
BAG 7



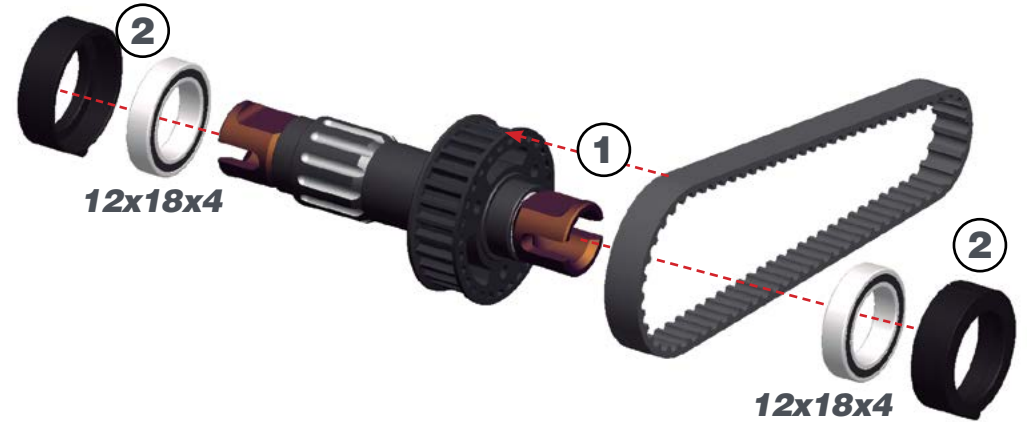
M4x8

STEP 23

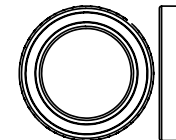
23.1



23.2

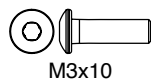
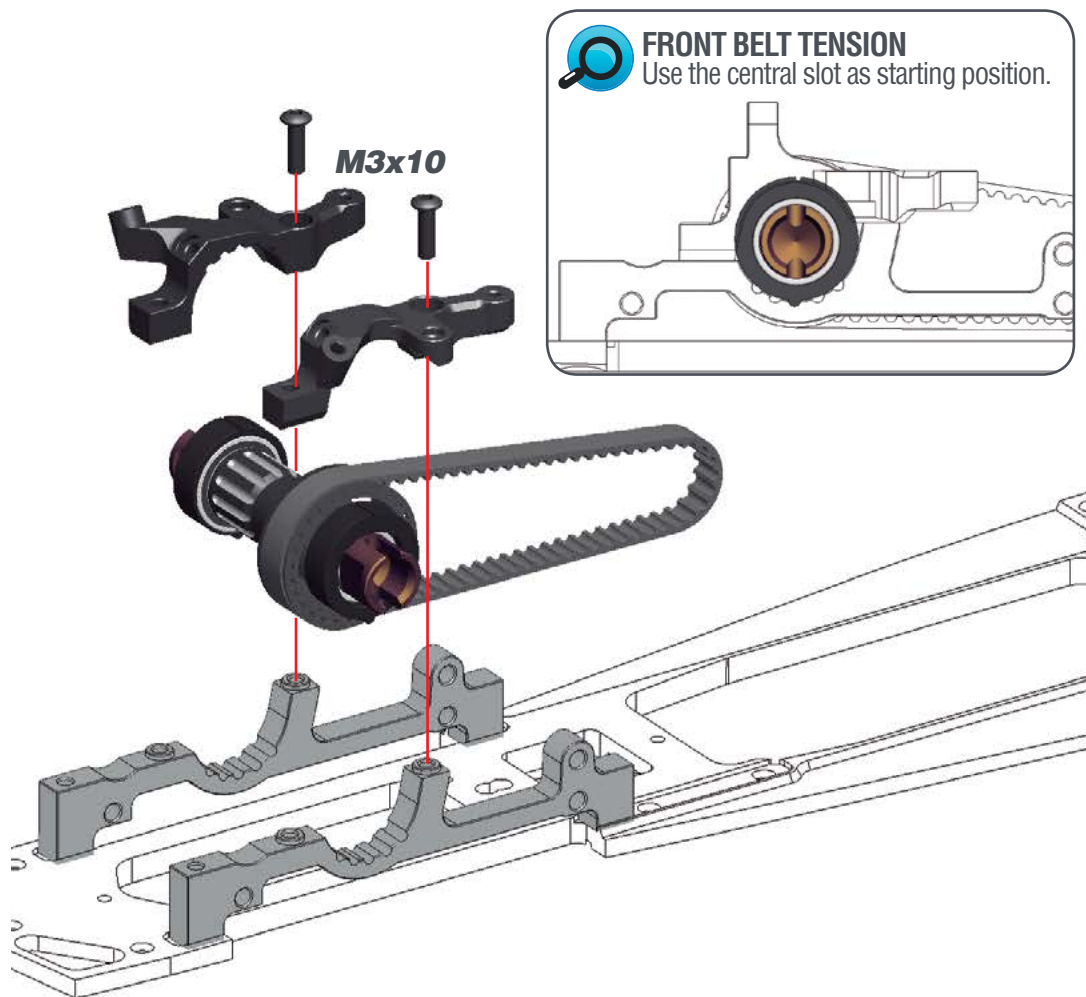


M2.5x6

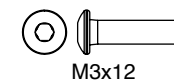
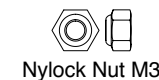
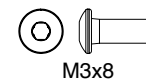
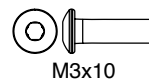
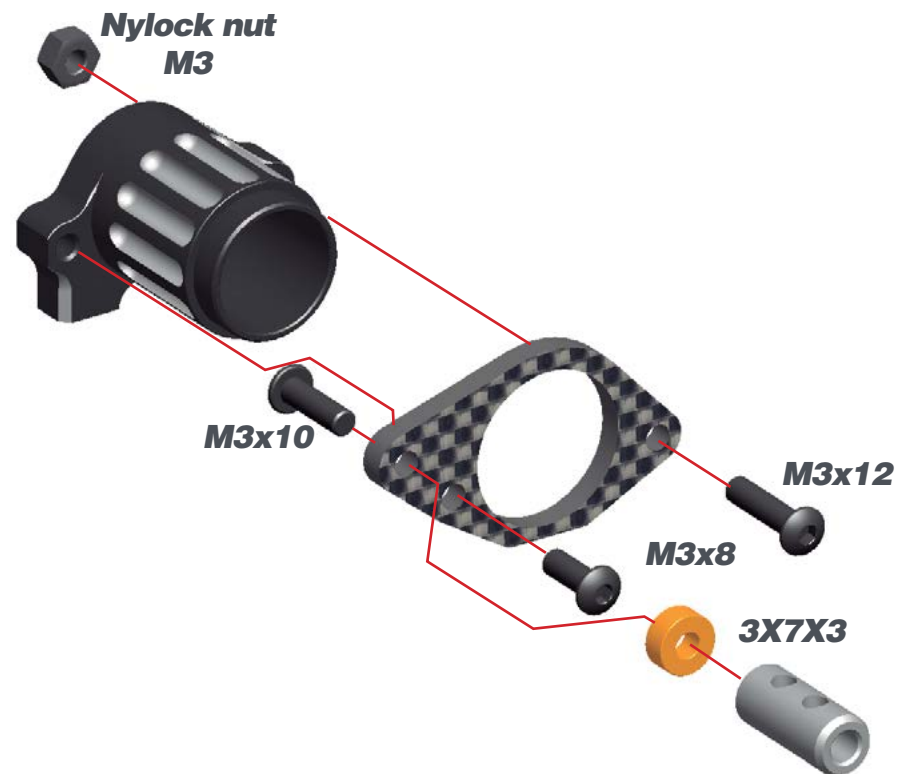


12x18x4

STEP 24

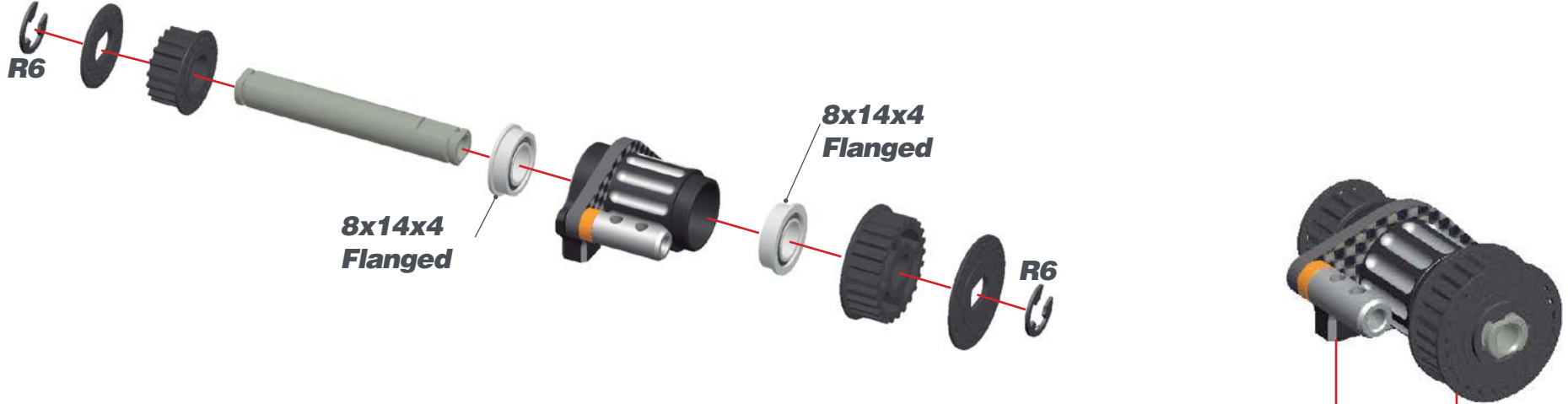


STEP 25

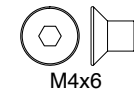
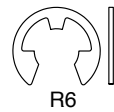
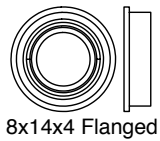
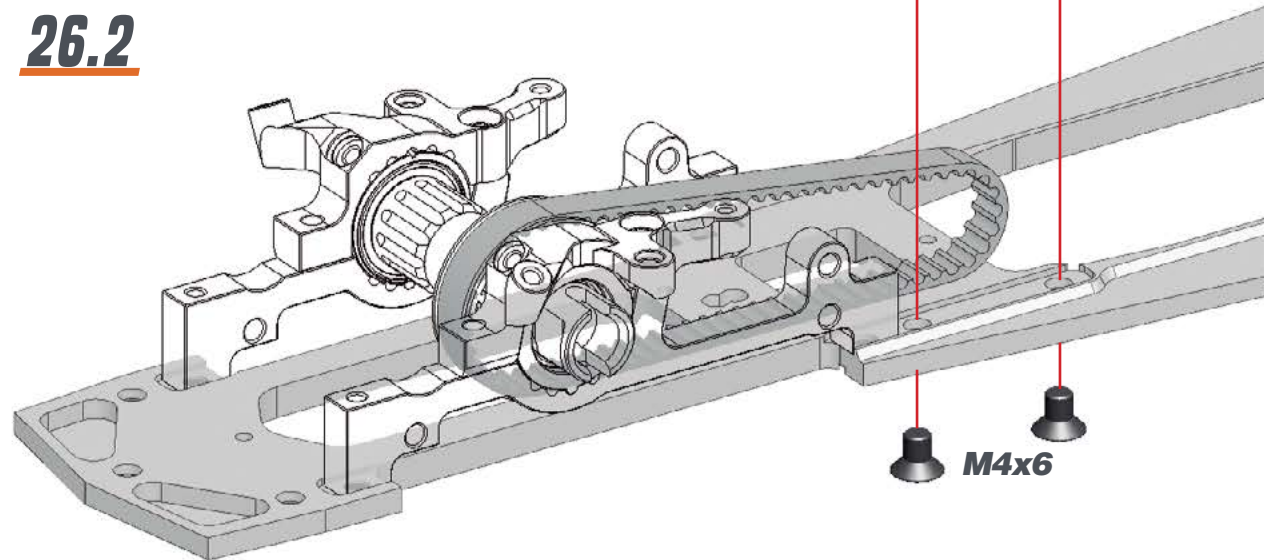


STEP 26

26.1



26.2



STEP 27

BAG 8

27.1 L=R

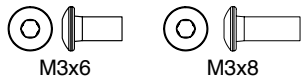


27.2



L=R FRONT ANTIROLL BAR ROD LENGTH

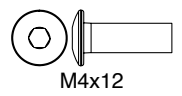
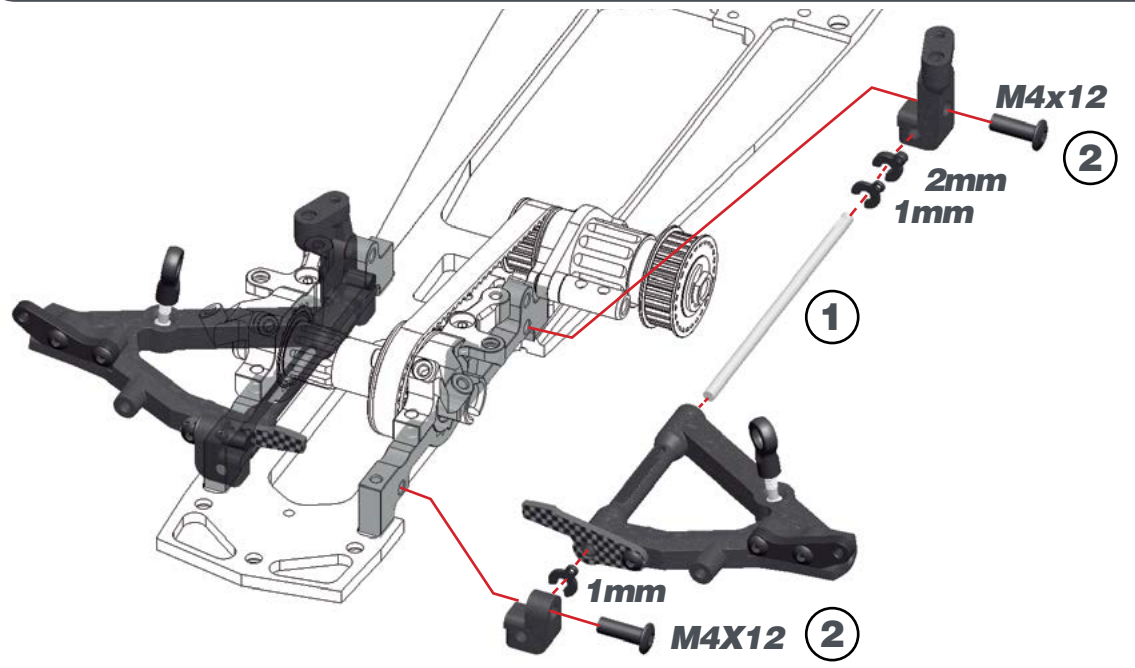
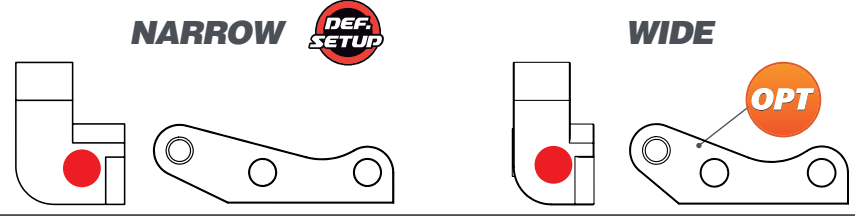
29 mm



27.3

L=R FRONT LOWER SUSPENSION AND SHOCK BRACKETS

Serpent 990 allows to move front bottom arms 3 mm in (NARROW) and out (WIDE). To maintain the same shock angle, use the suspension bracket and shock bracket as shown here.

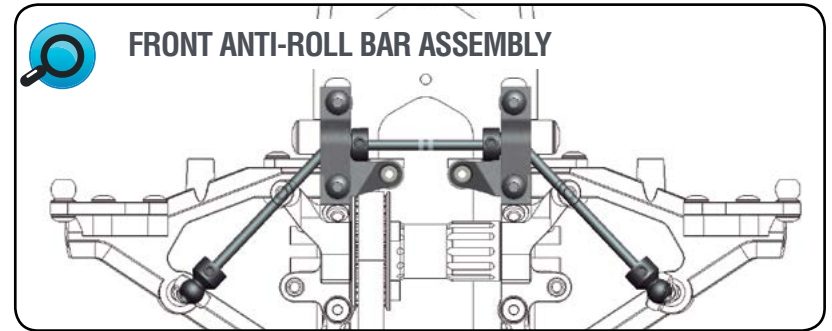


STEP 28

28.1



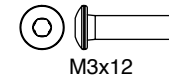
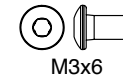
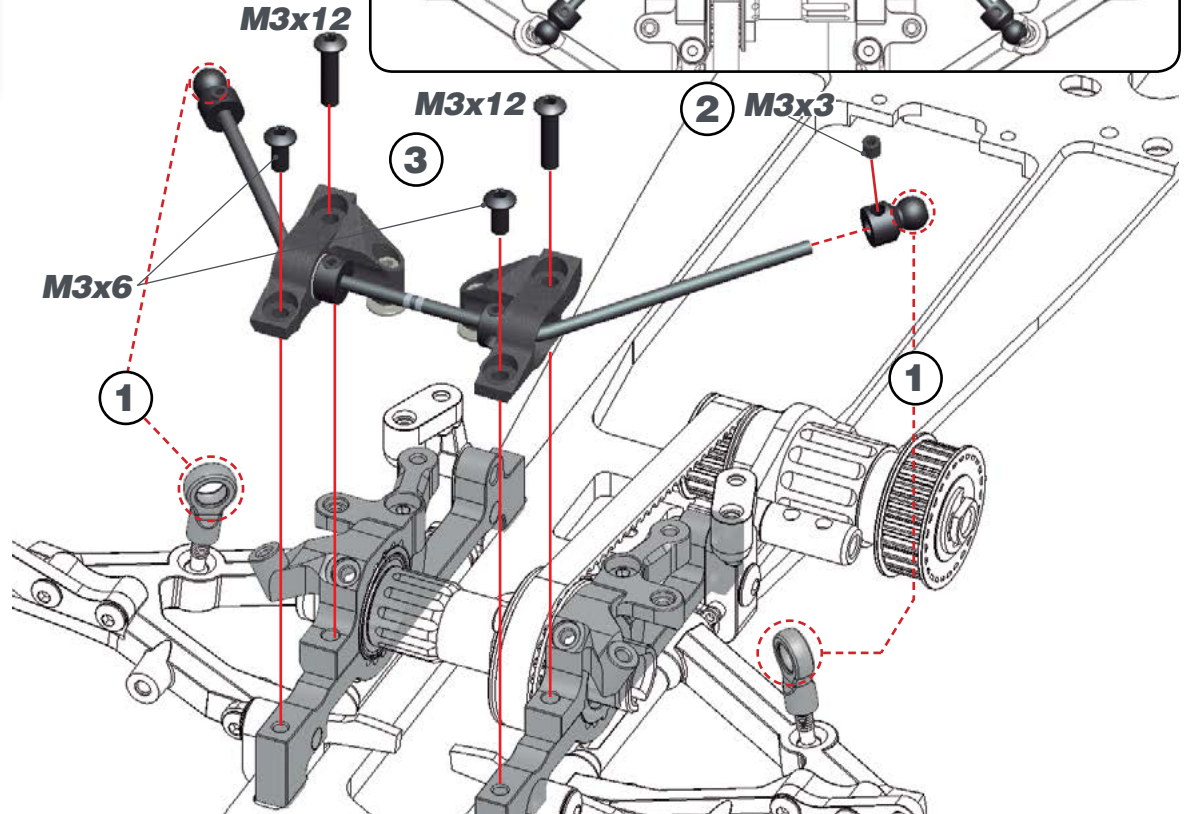
28.3



28.2



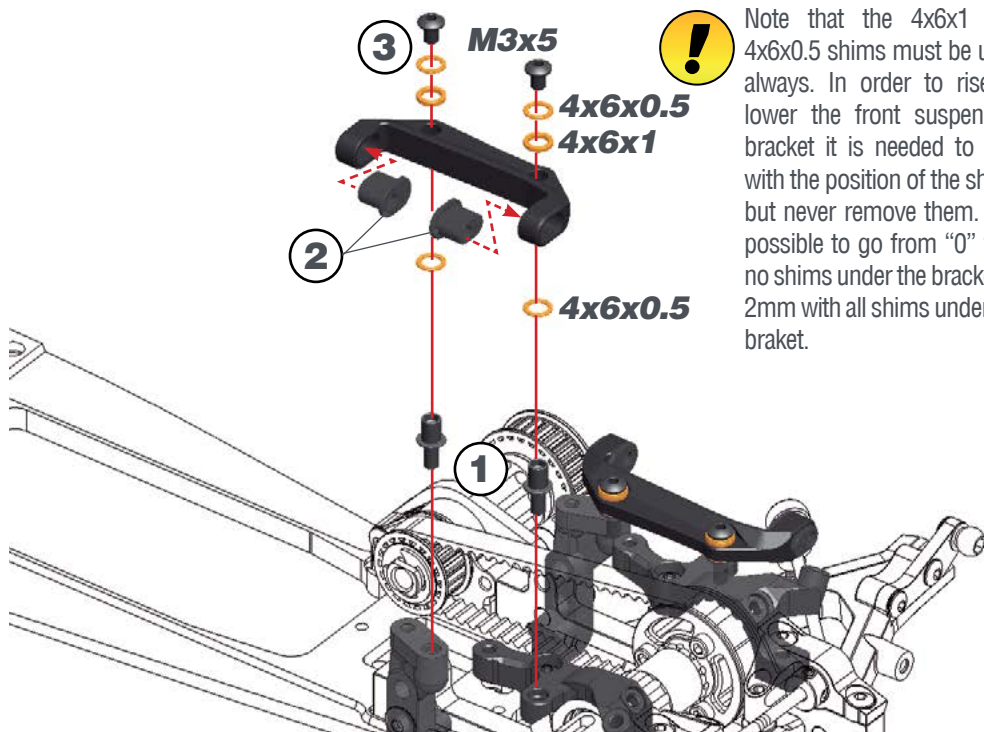
Measure the length of the anti-roll bar included in the kit. Maximum length must be 48mm. Please cut both sides it accordingly.



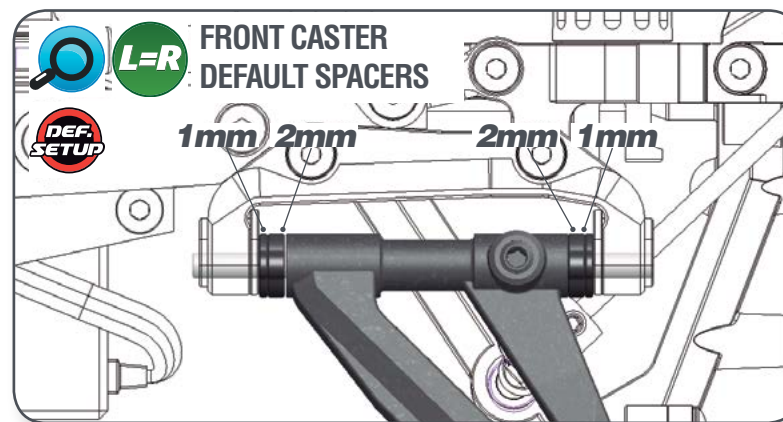
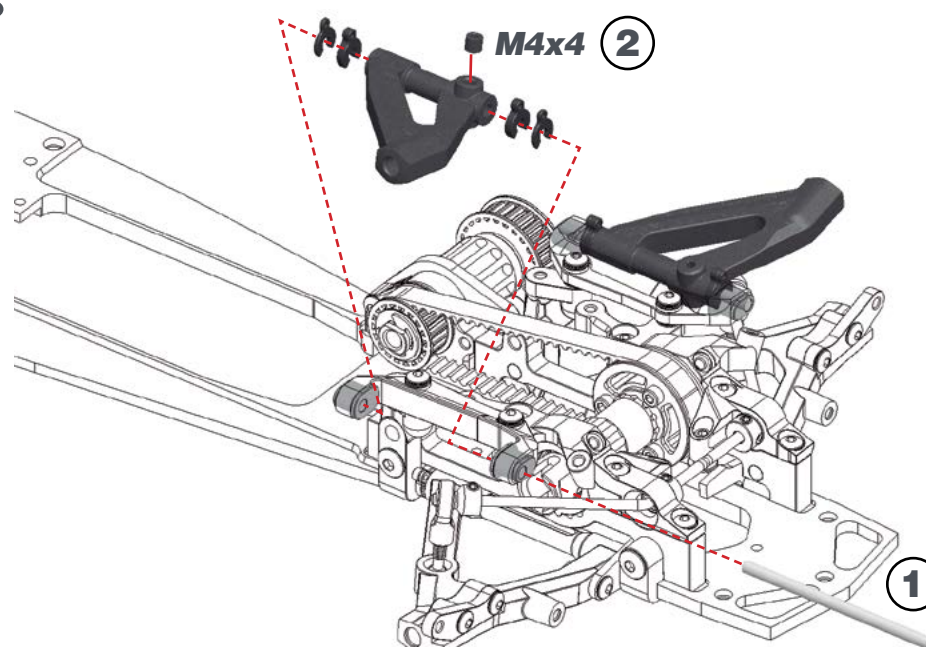
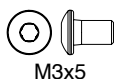
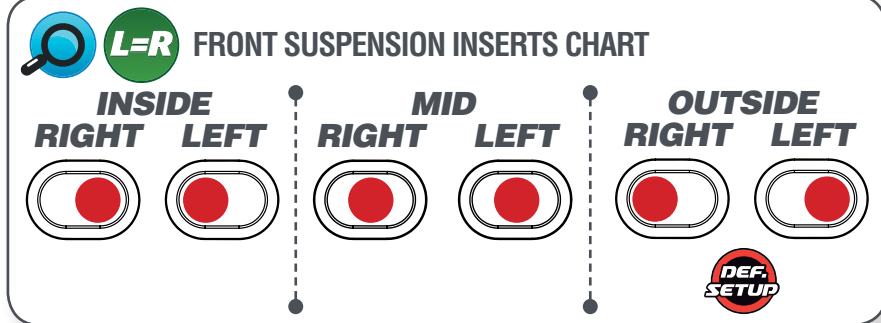
STEP 29

BAG 9

STEP 30

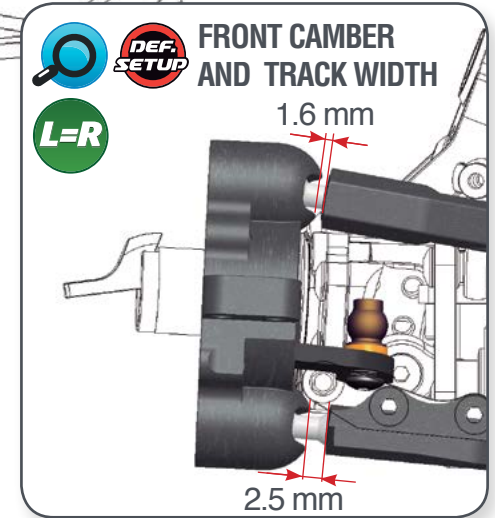
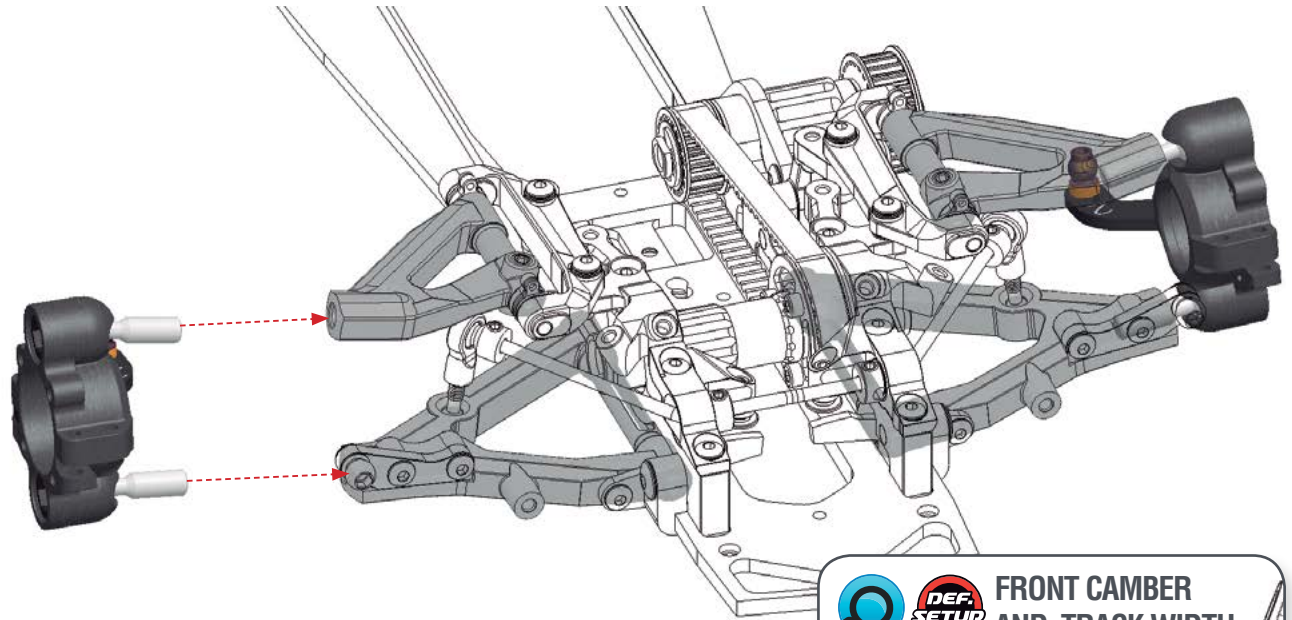
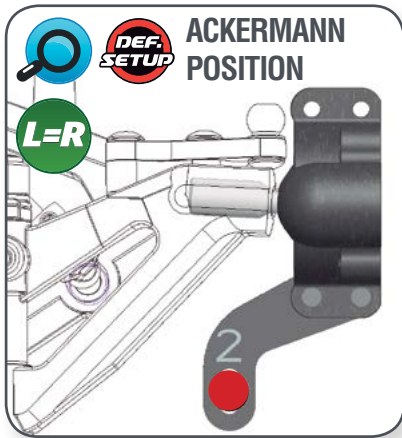
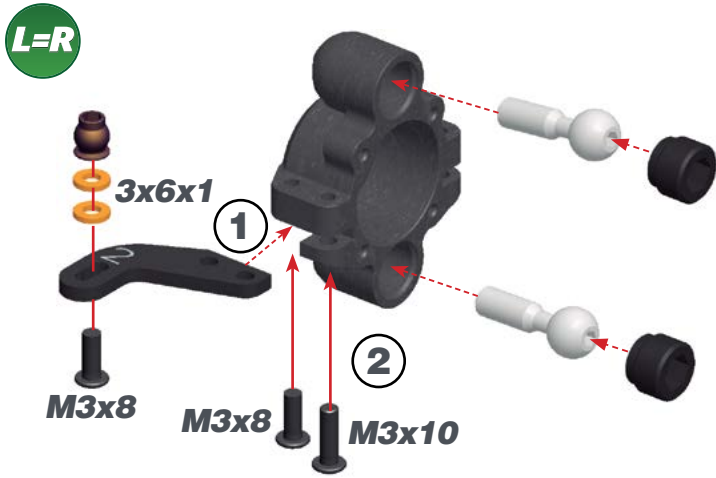


! Note that the 4x6x1 and 4x6x0.5 shims must be used always. In order to rise or lower the front suspension bracket it is needed to play with the position of the shims but never remove them. It is possible to go from "0" with no shims under the bracket to 2mm with all shims under the bracket.



STEP 31

STEP 32



STEP 35

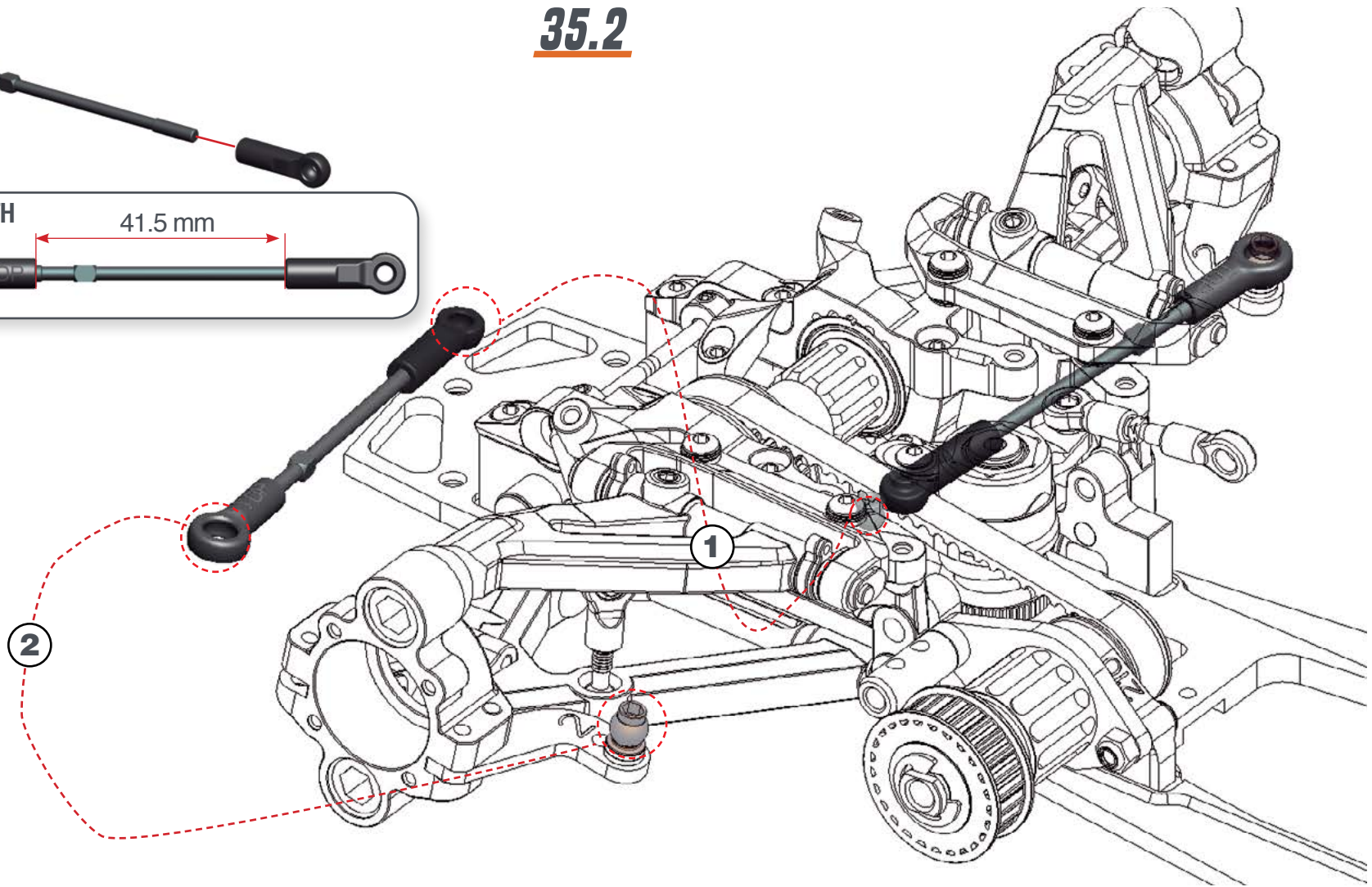
35.1



35.2

STEERING TRACKROD LENGTH

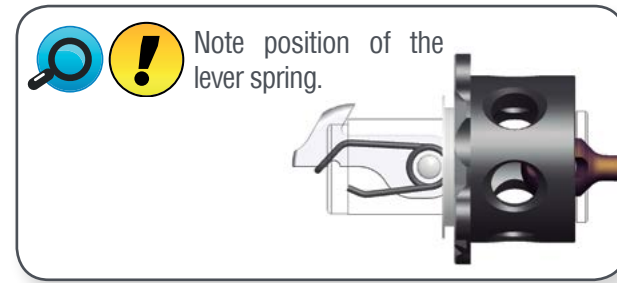
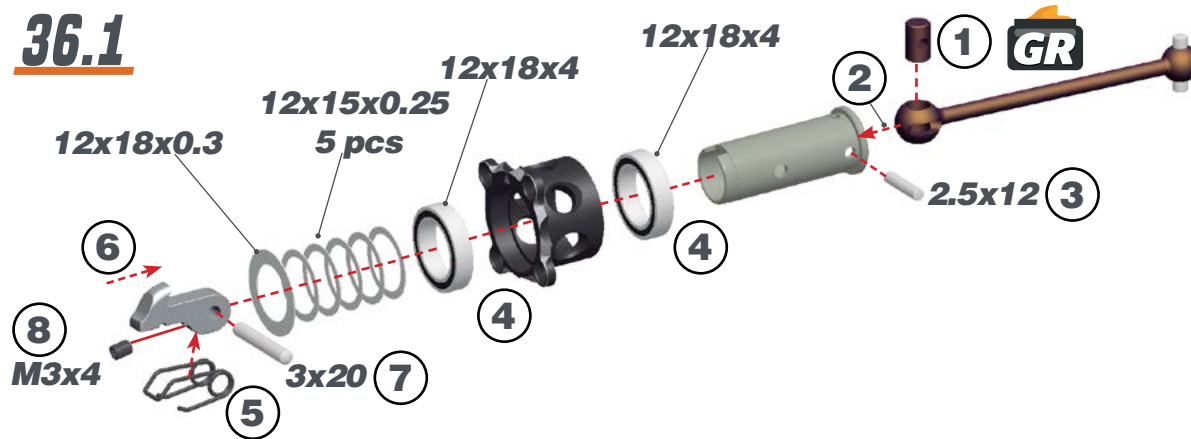
41.5 mm



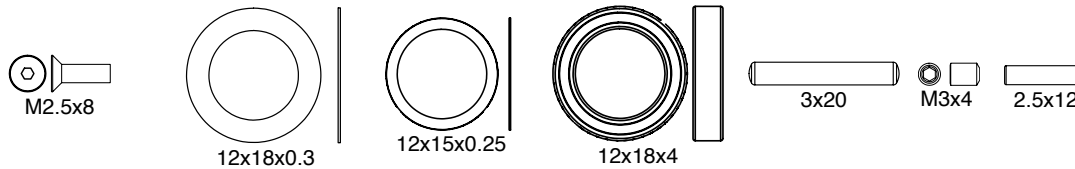
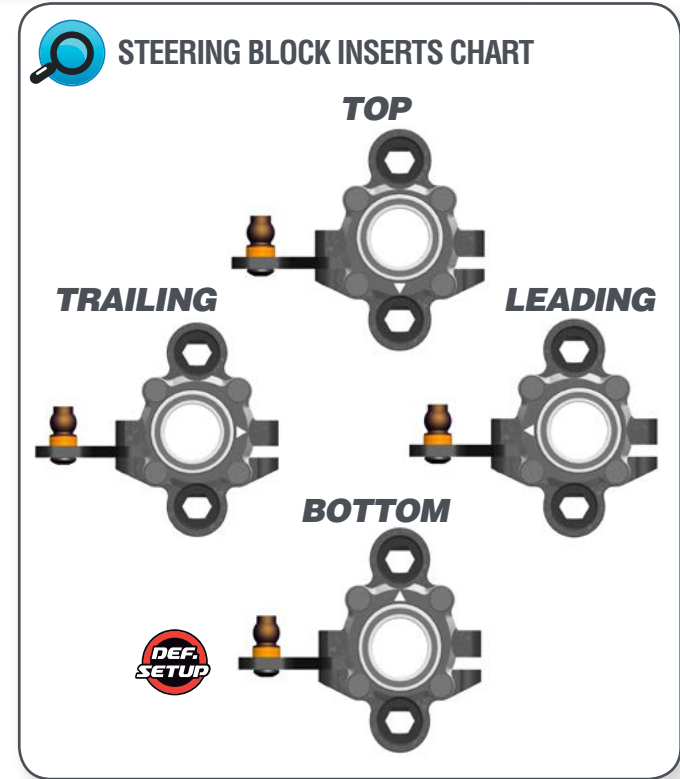
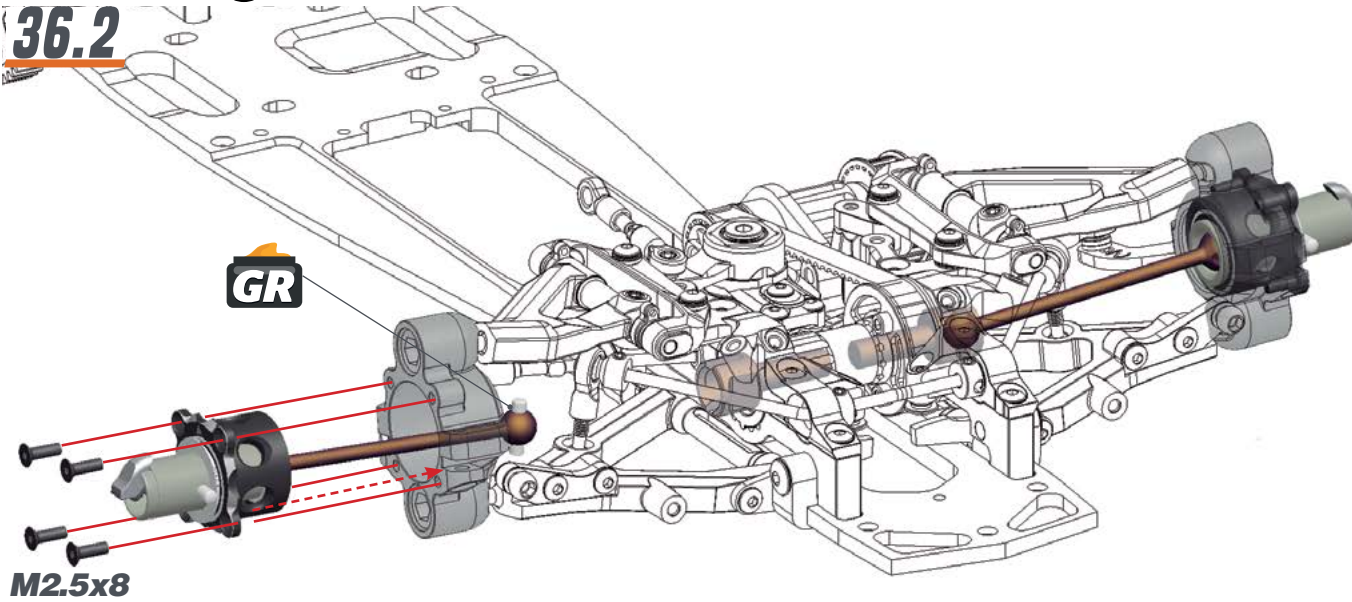
STEP 36

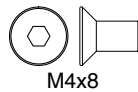
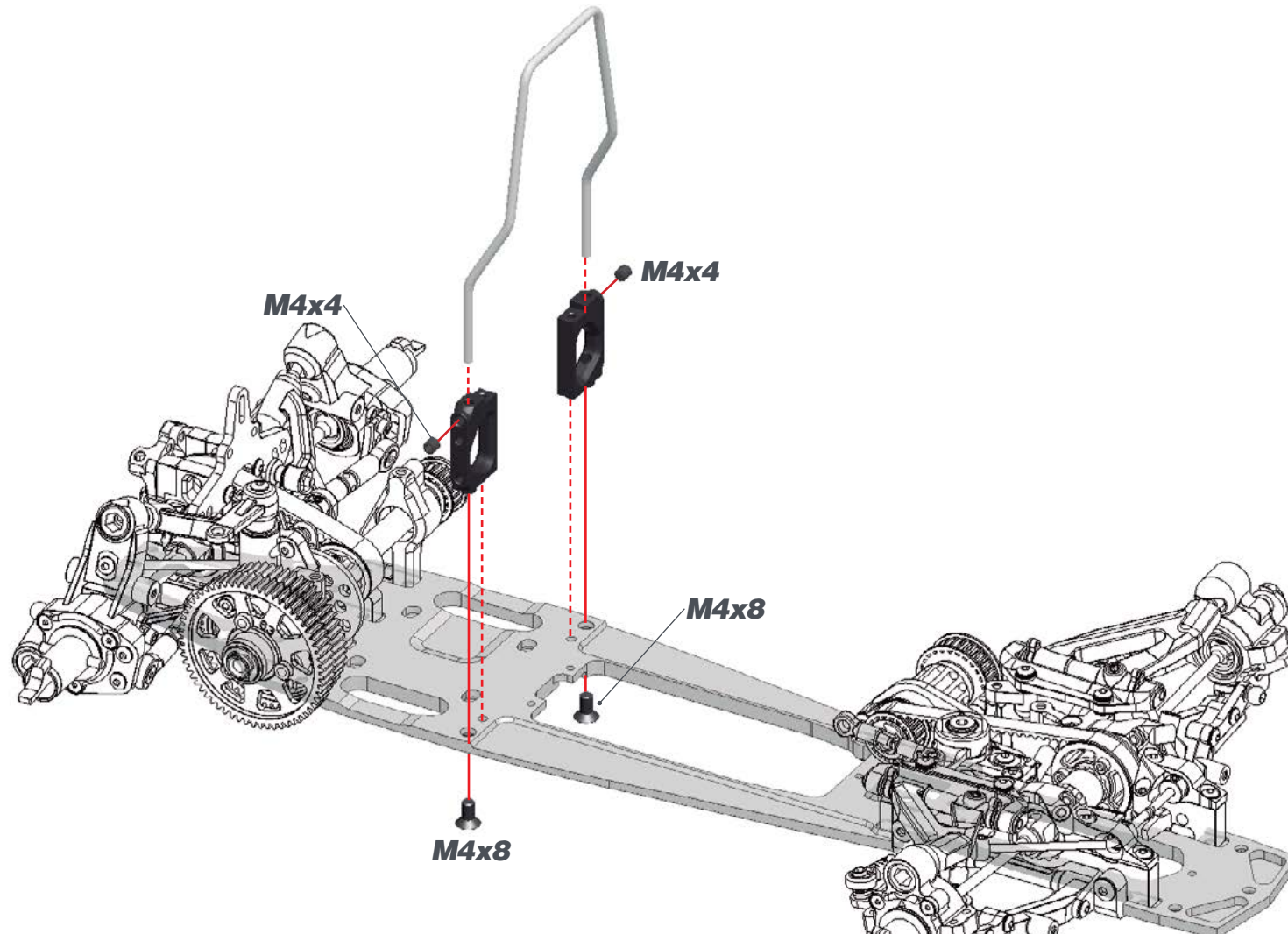
BAG 10

36.1

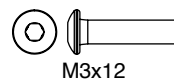
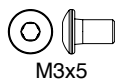
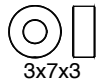
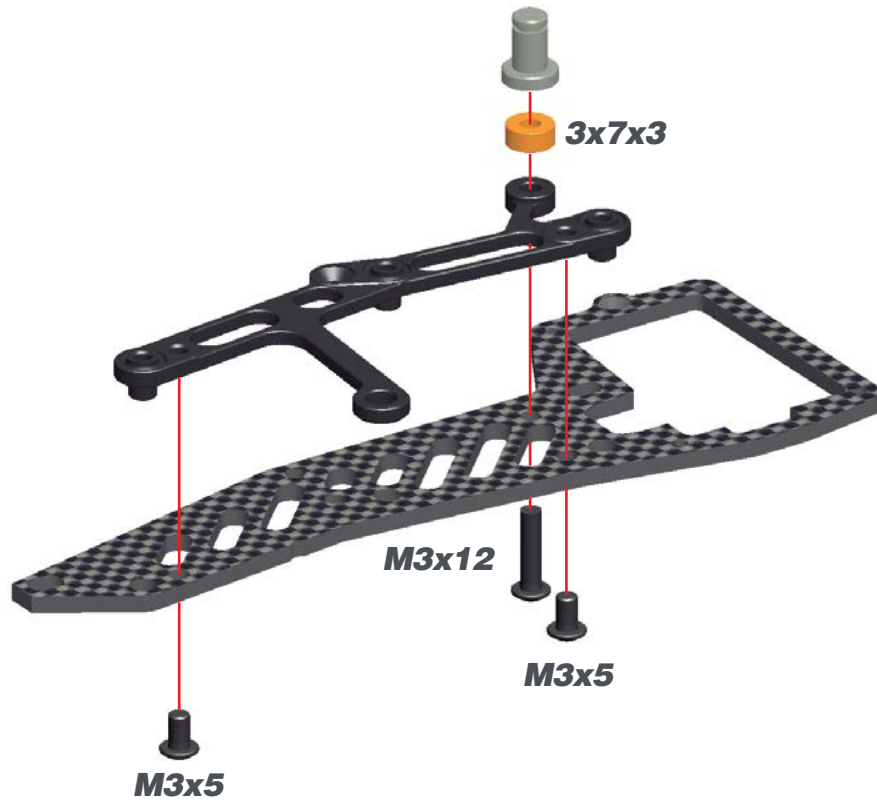


36.2

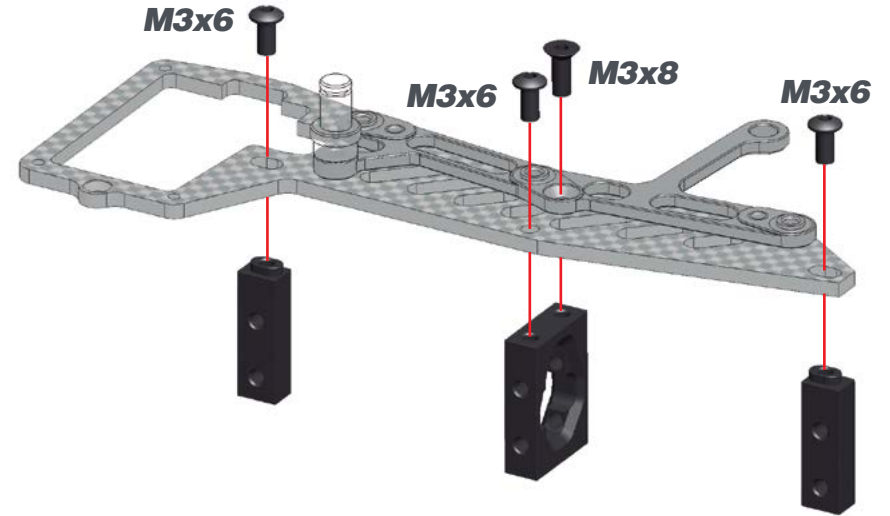




STEP 38

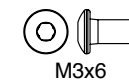
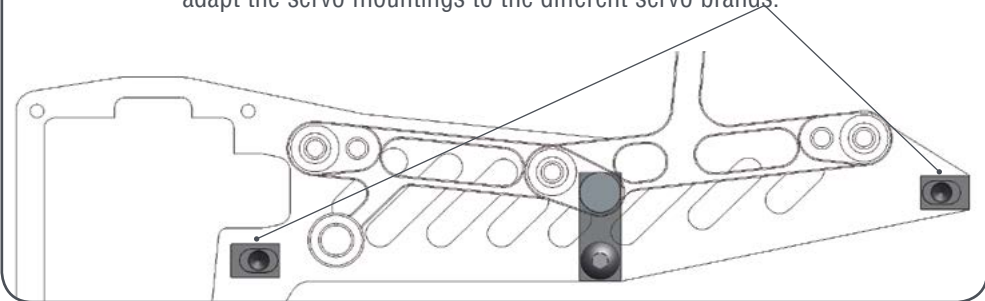


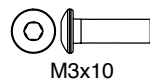
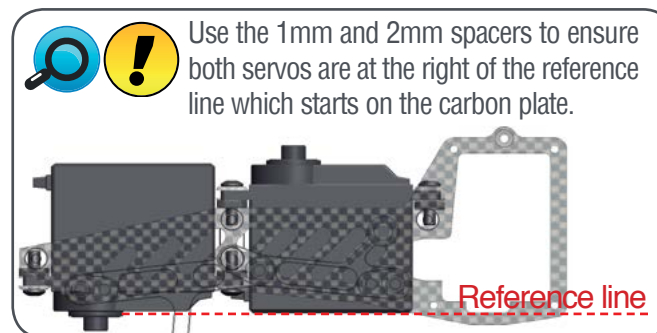
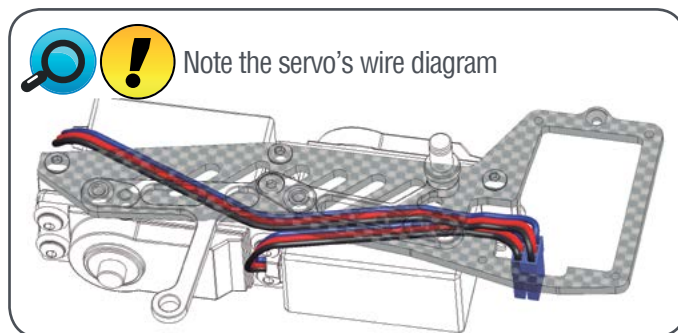
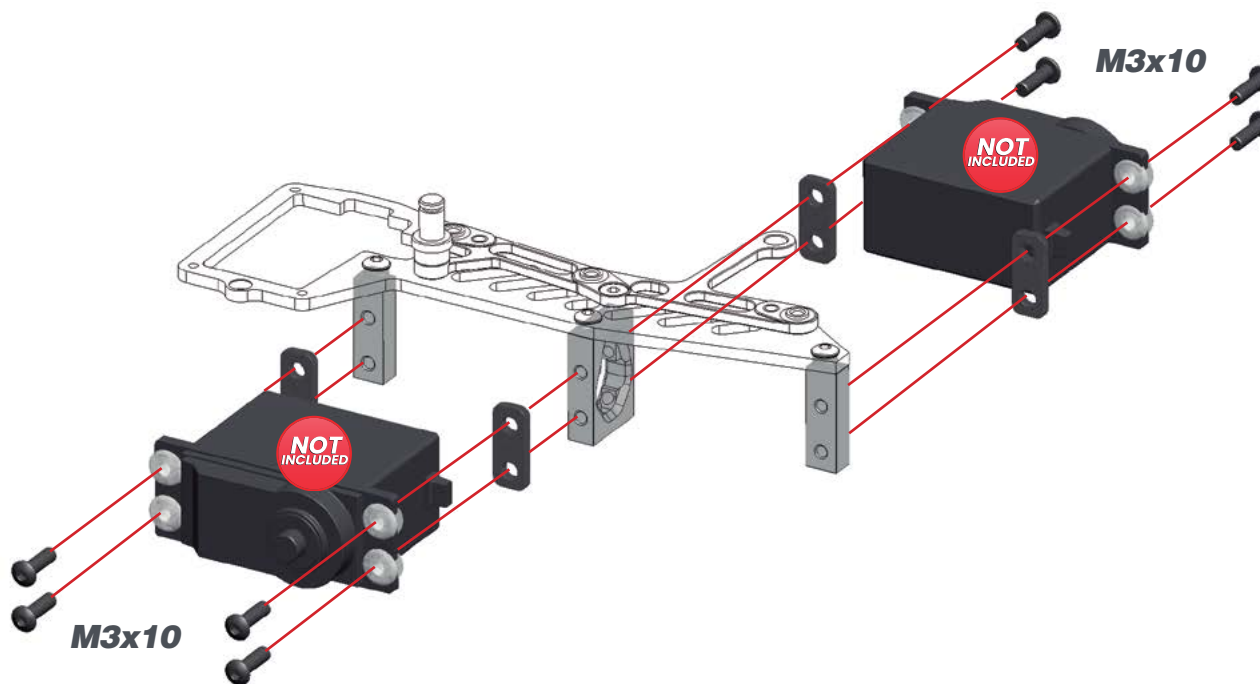
STEP 39



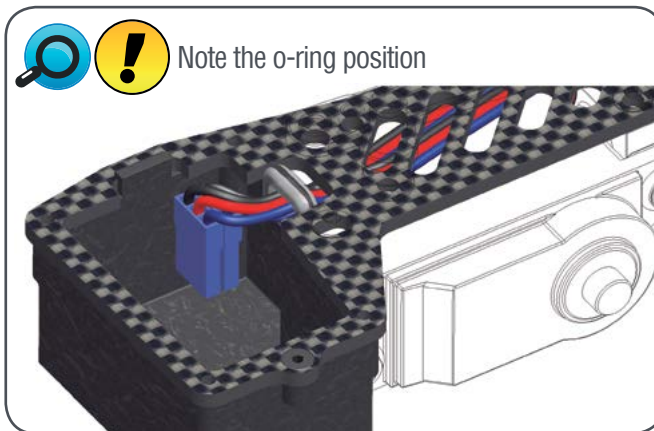
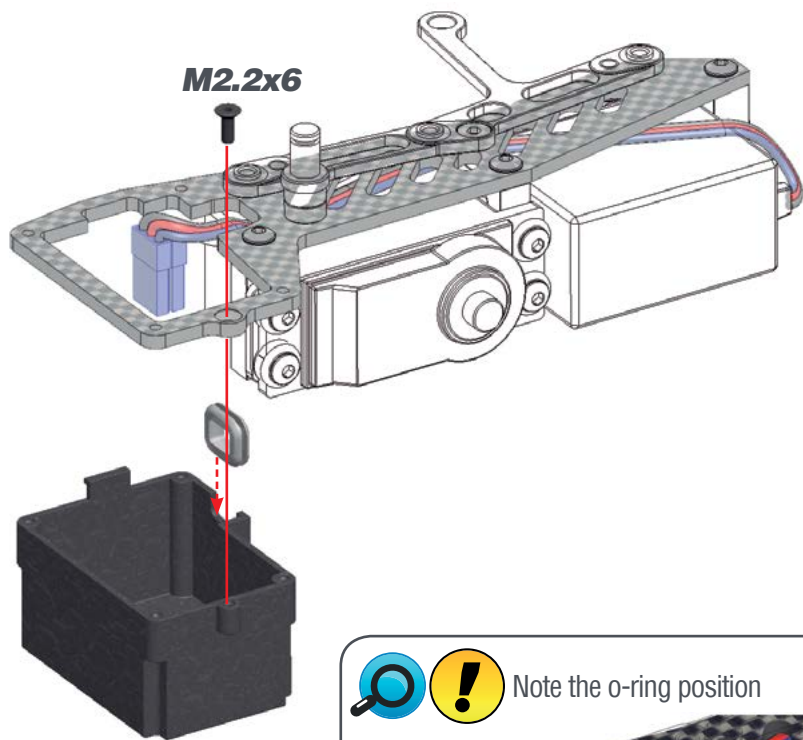
RADIO BOX ASSEMBLY

The small servo mountings have a fixing protrusion which is excentric. Therefore it is possible to assemble them in two different ways in order to adapt the servo mountings to the different servo brands.



STEP 40

STEP 41

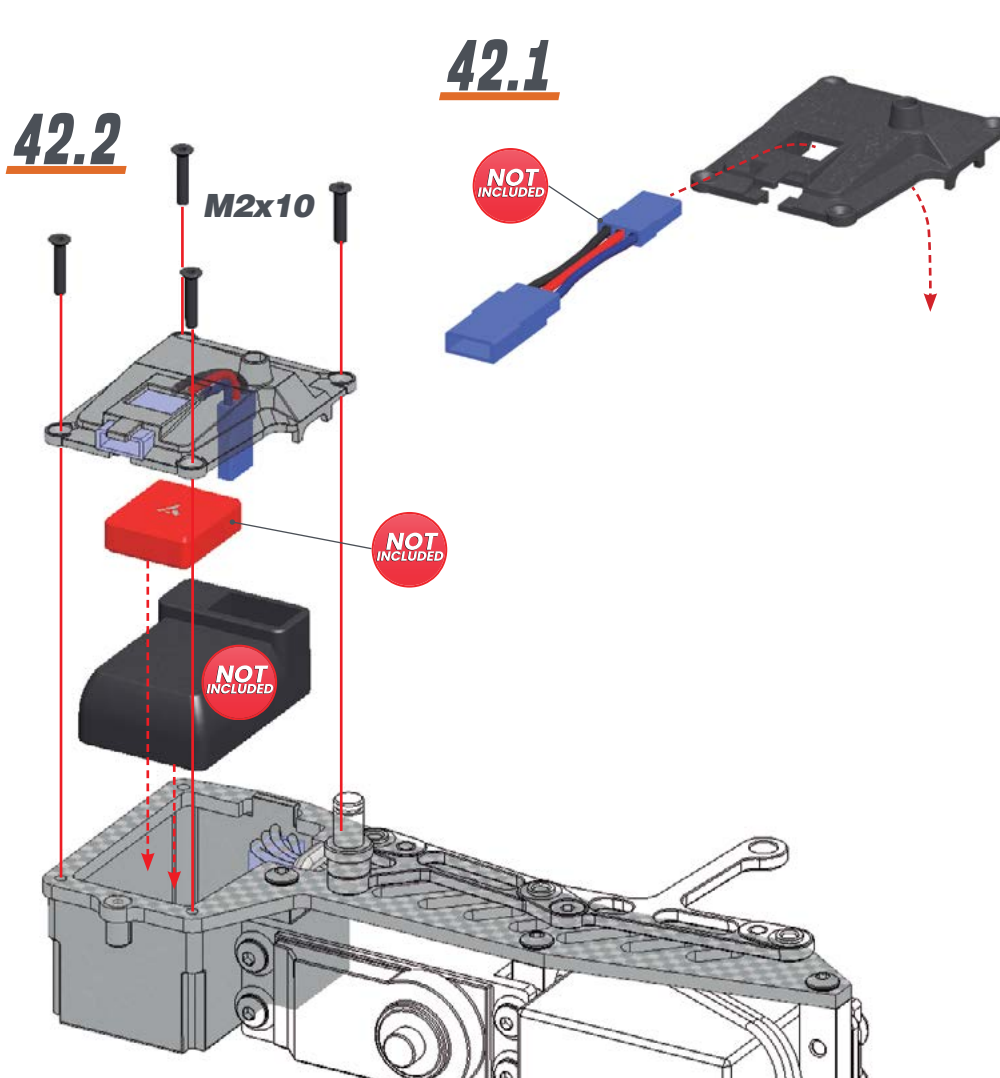


Note the o-ring position



M2.2x6

STEP 42



42.1

42.2

M2x10

NOT INCLUDED

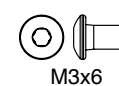
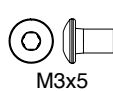
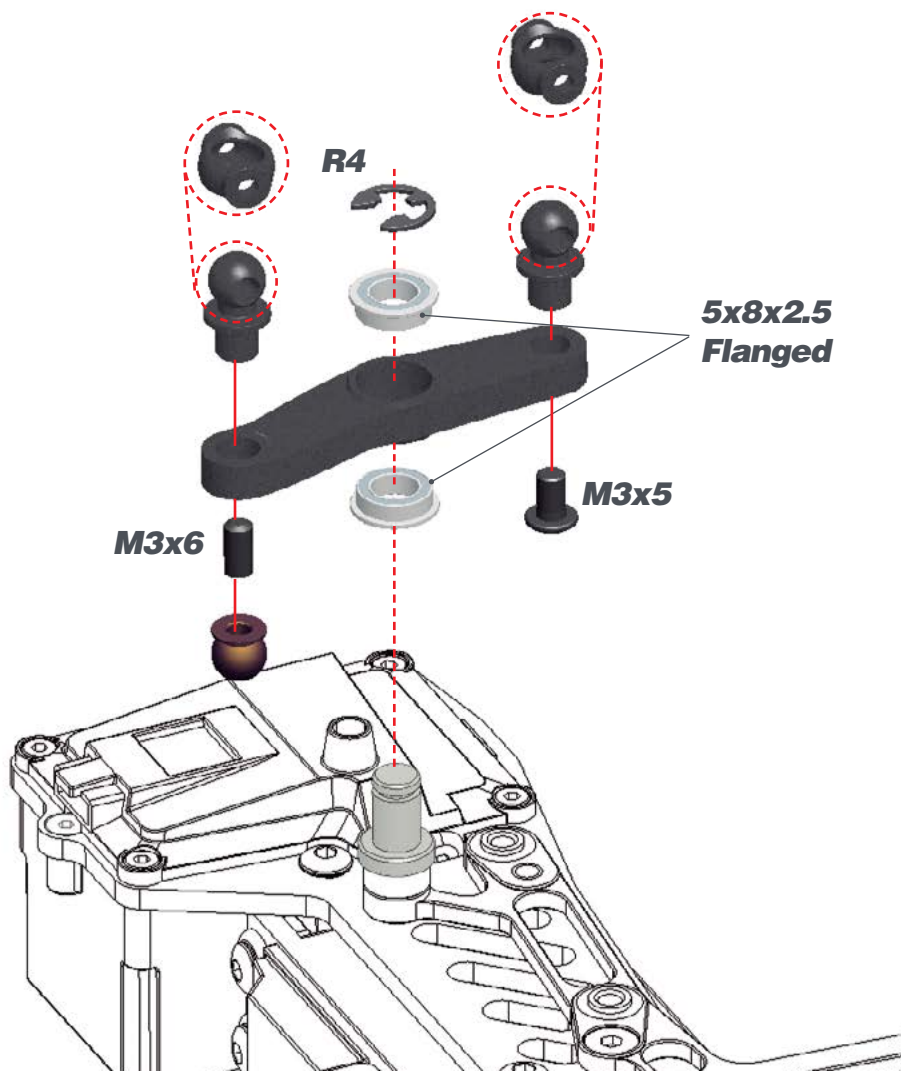
NOT INCLUDED

NOT INCLUDED



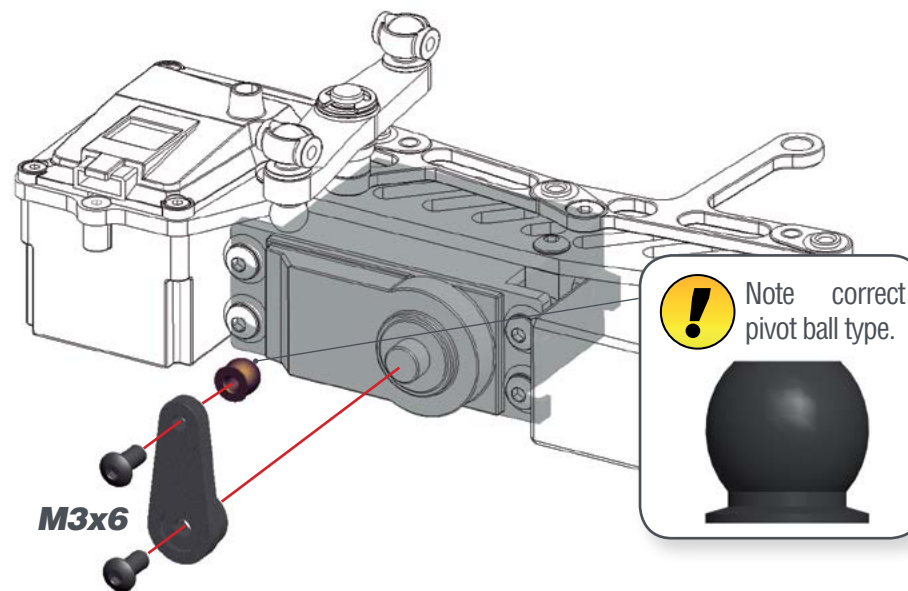
M2x10

STEP 43

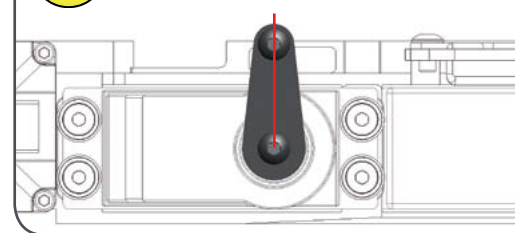


STEP 44

! Check how many teeth your servo spline has (23, 24 or 25) and use the right lever.

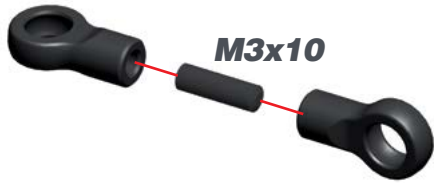


! Note orientation of the throttle servo lever.

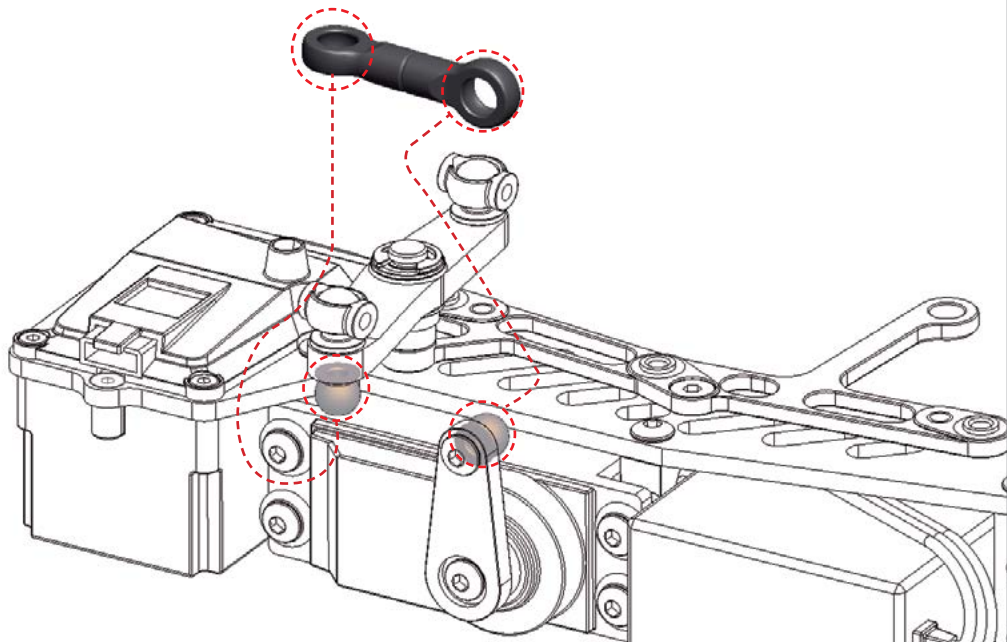


STEP 45

45.1

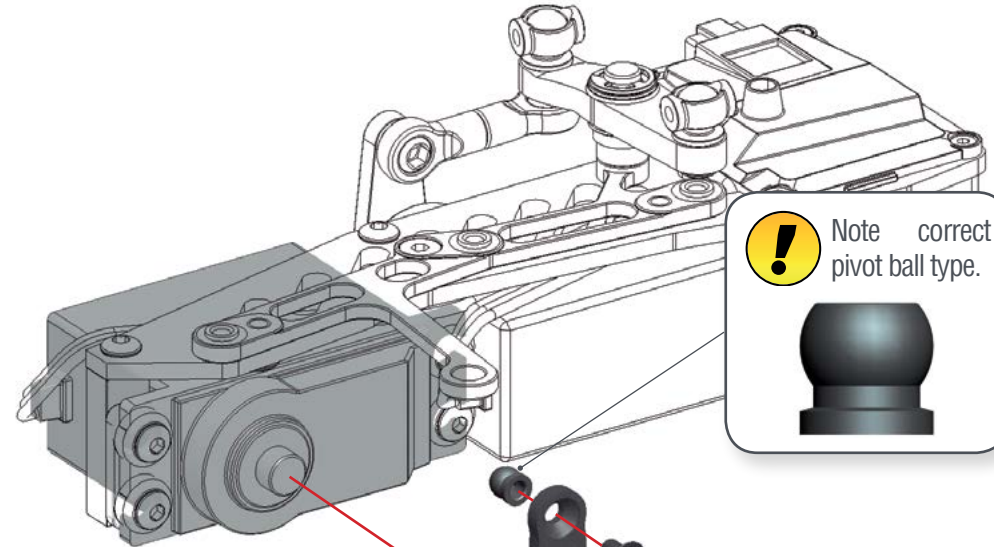


45.2



STEP 46

! Check how many teeth your servo spline has (23, 24 or 25) and use the right lever.



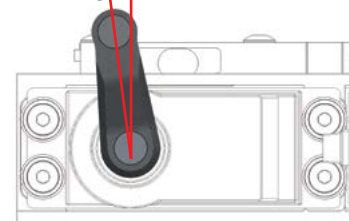
! Note correct pivot ball type.



M3x5

M3x8

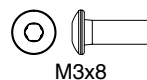
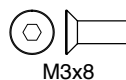
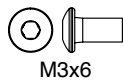
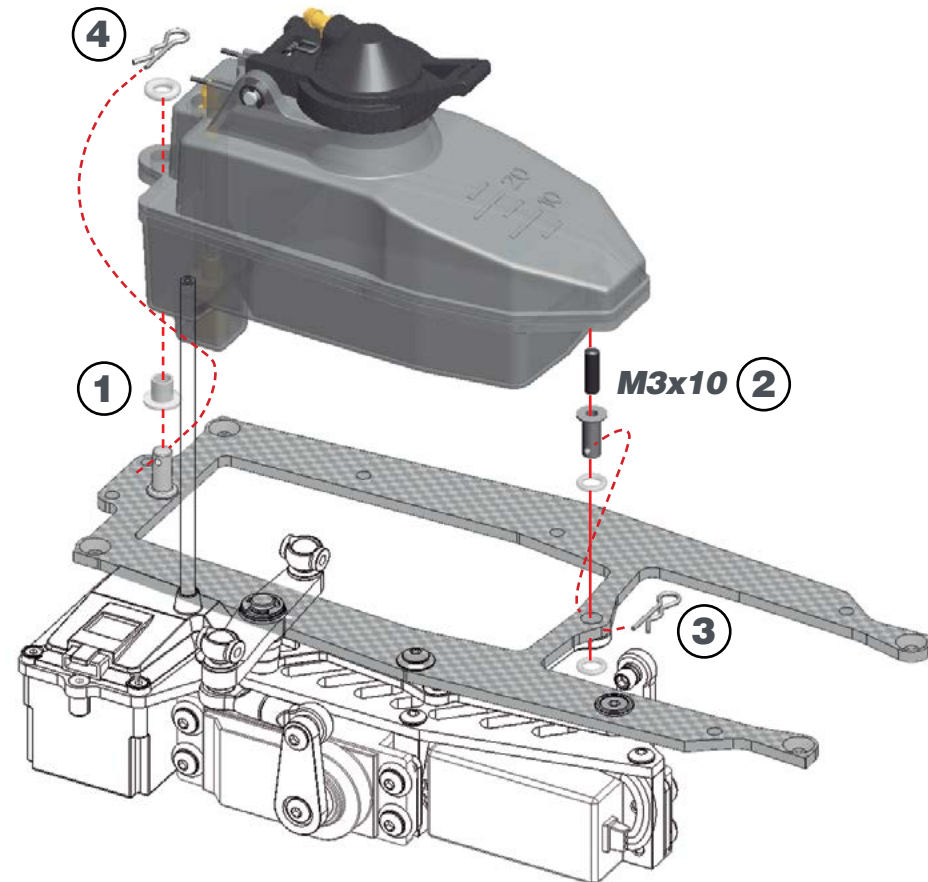
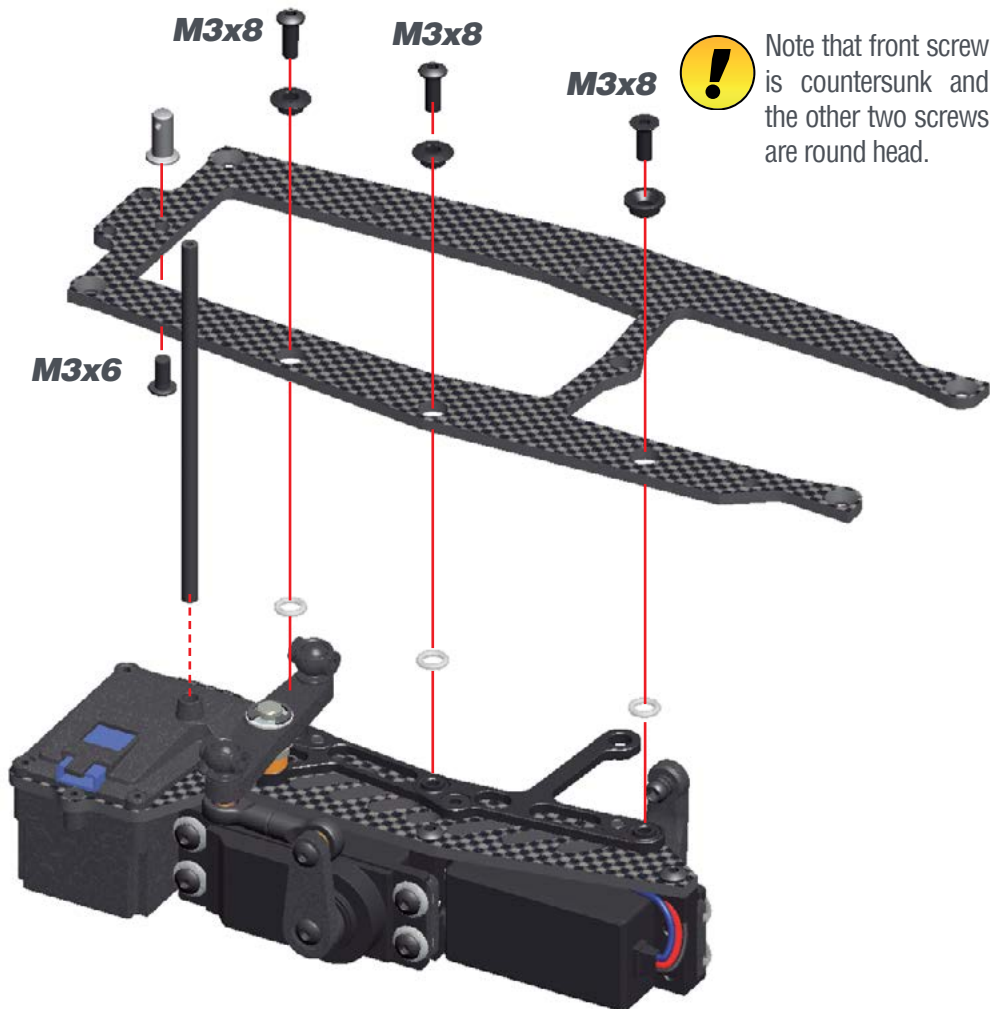
! Note orientation of the steering servo lever.



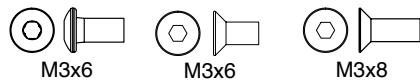
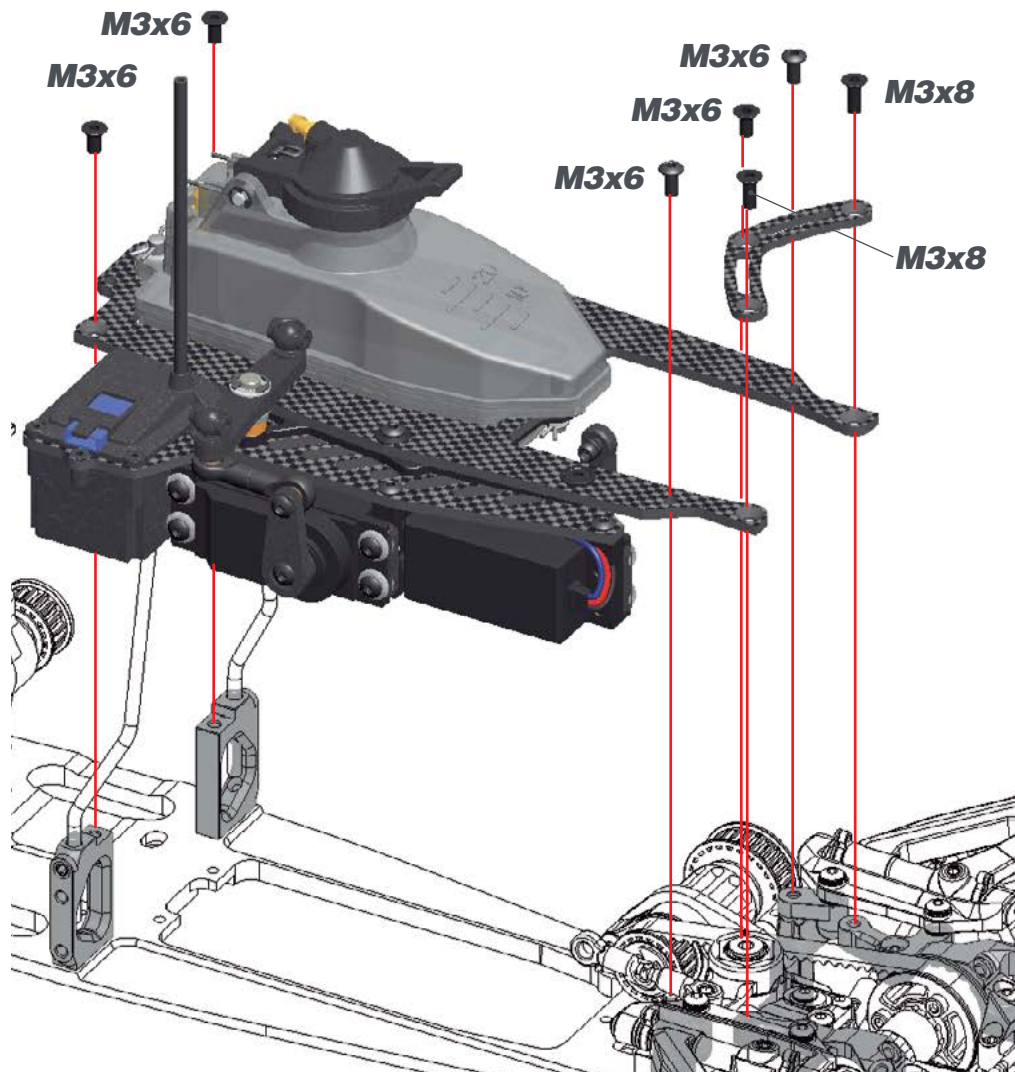
STEP 47

BAG 12

STEP 48

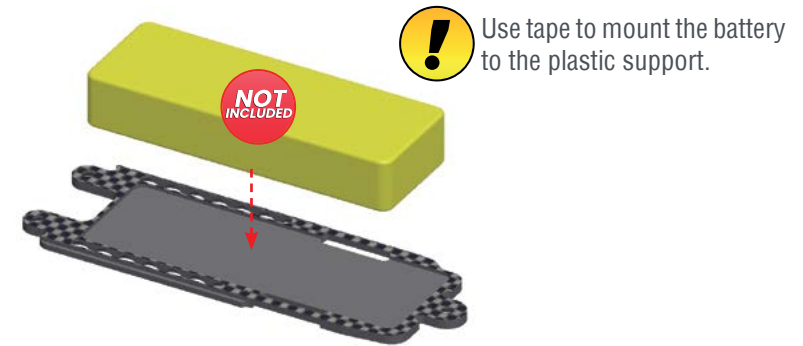


STEP 49

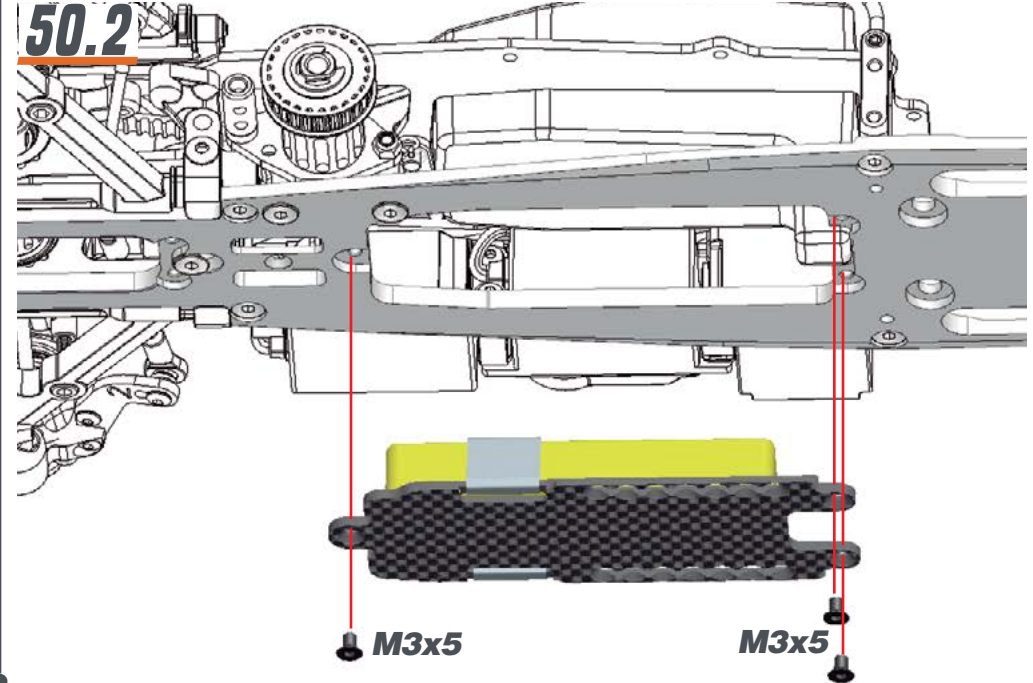


STEP 50

50.1



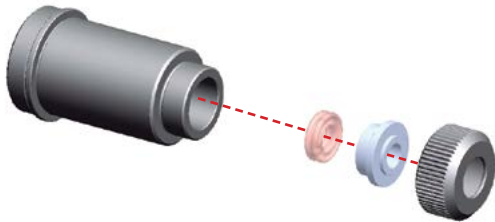
50.2



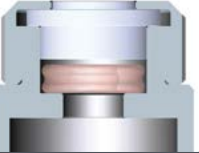
STEP 51 SHOCKS BAG

51.1

Use some silicone oil during the assembly.

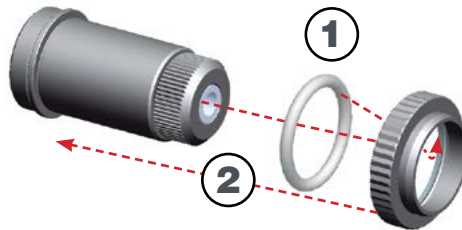


Note the correct orientation of the shock spacers.

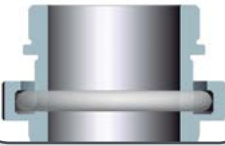


51.2

Insert the o-ring inside the spring collar.

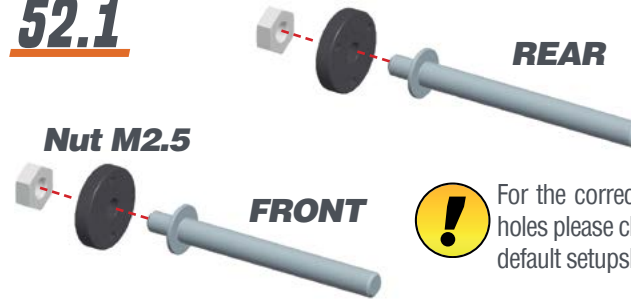


Note the correct position of the o-ring.



STEP 52

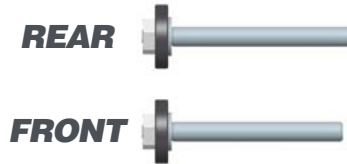
52.1



For the correct piston holes please check the default setupsheet.

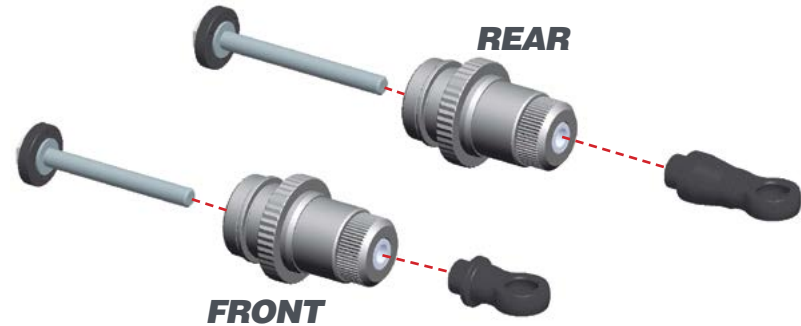


Use the shorter shock shaft in the front and the longer one in the rear shock absorber.



52.2

Use some silicone oil during the assembly.



Nut M2.5

STEP 53**53.1**

Push the shock top and the membrane into the shock cap.

**53.2**

1- Fill up with silicone oil fully using the silicone oil supplied in the kit. For the correct cst value please check the default setupsheet.

2- Extend the shockrod fully

3- Move the shockrod slowly up and down to let ALL air bubbles escape.

4- Close top only 3/4.

**53.3**

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

2- Close the shock cap completely.



SHOCKS LENGTH: Measure the shock length fully extended.

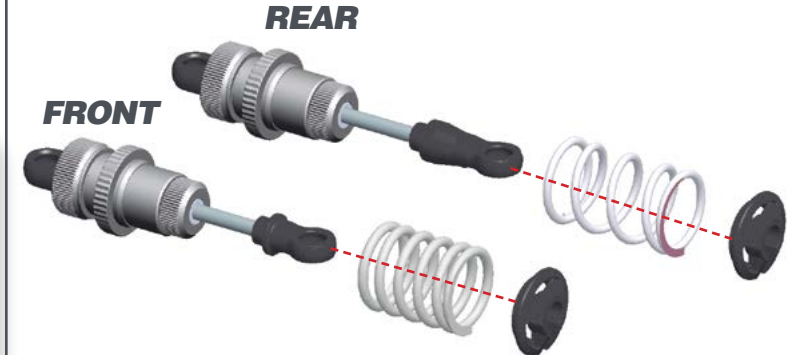
FRONT
14
mm



REAR
15.5
mm

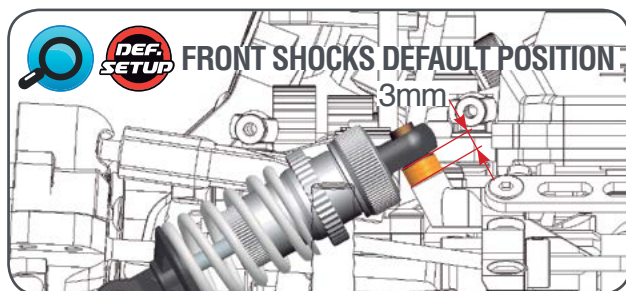
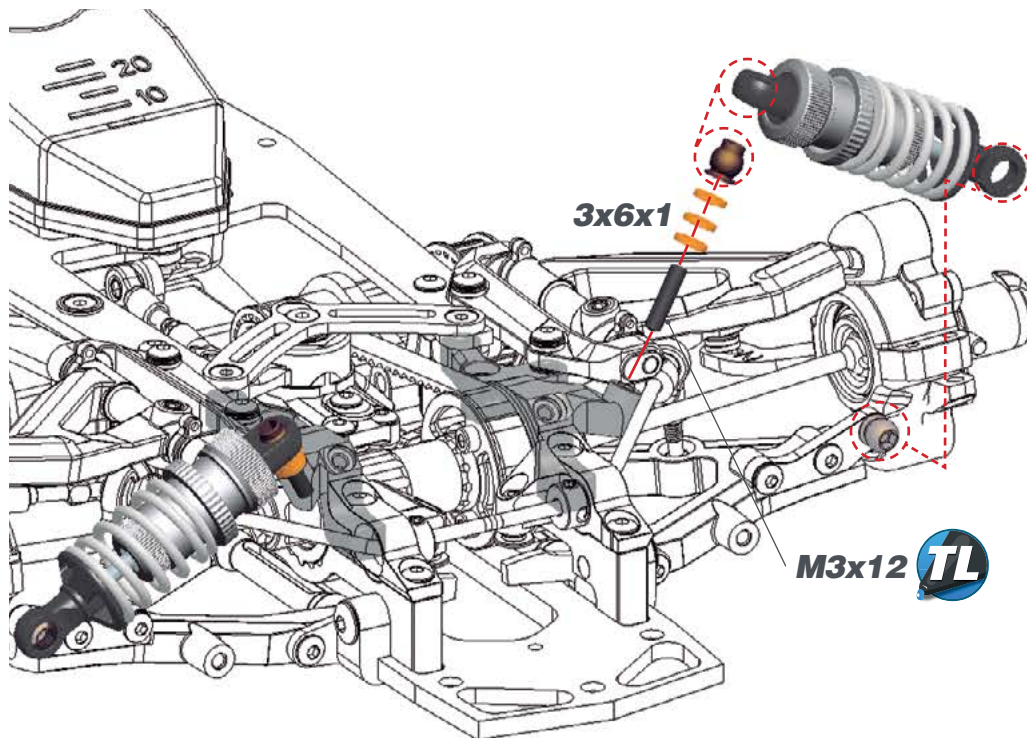
**STEP 55**

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

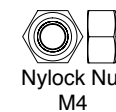
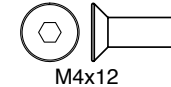
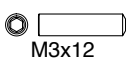
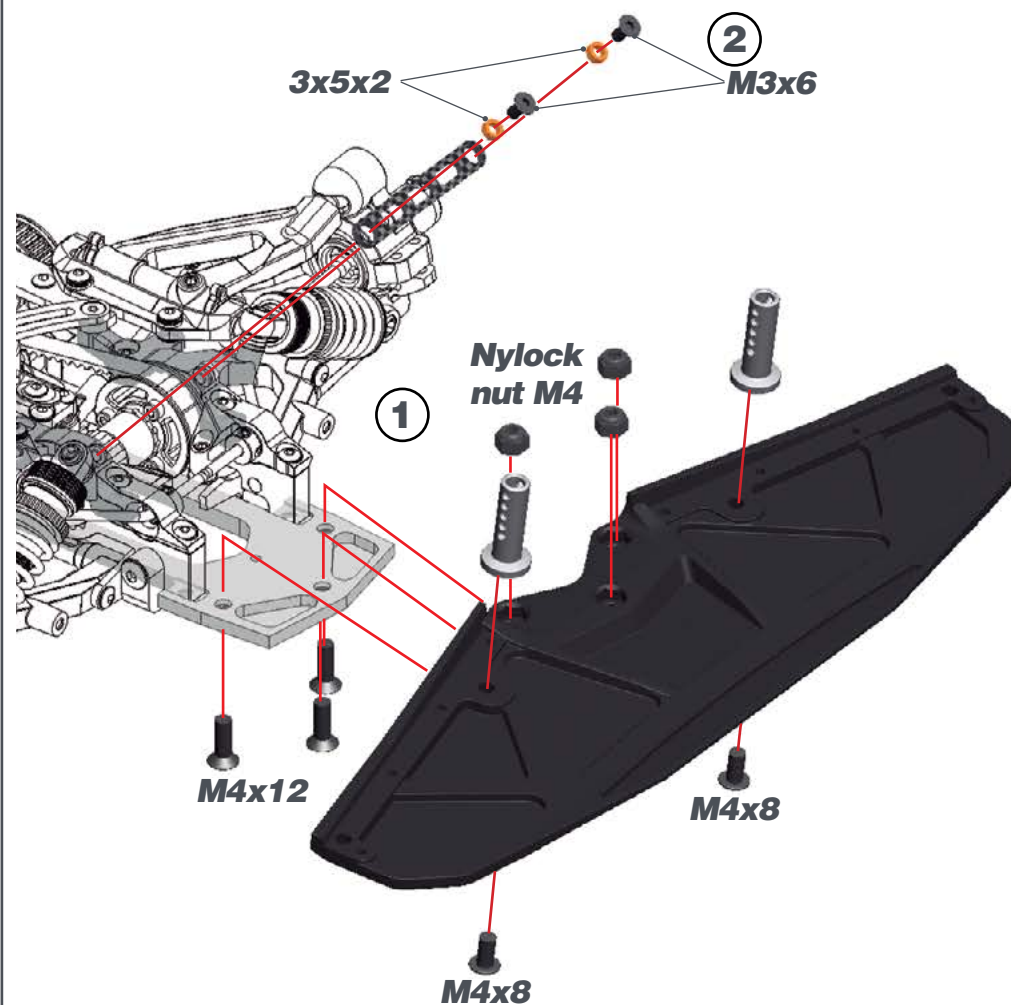


STEP 55

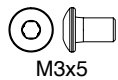
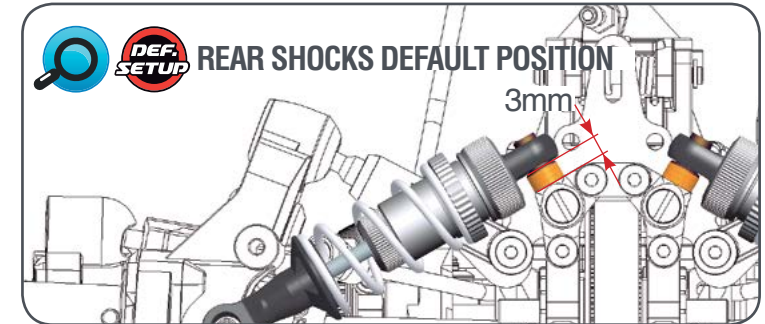
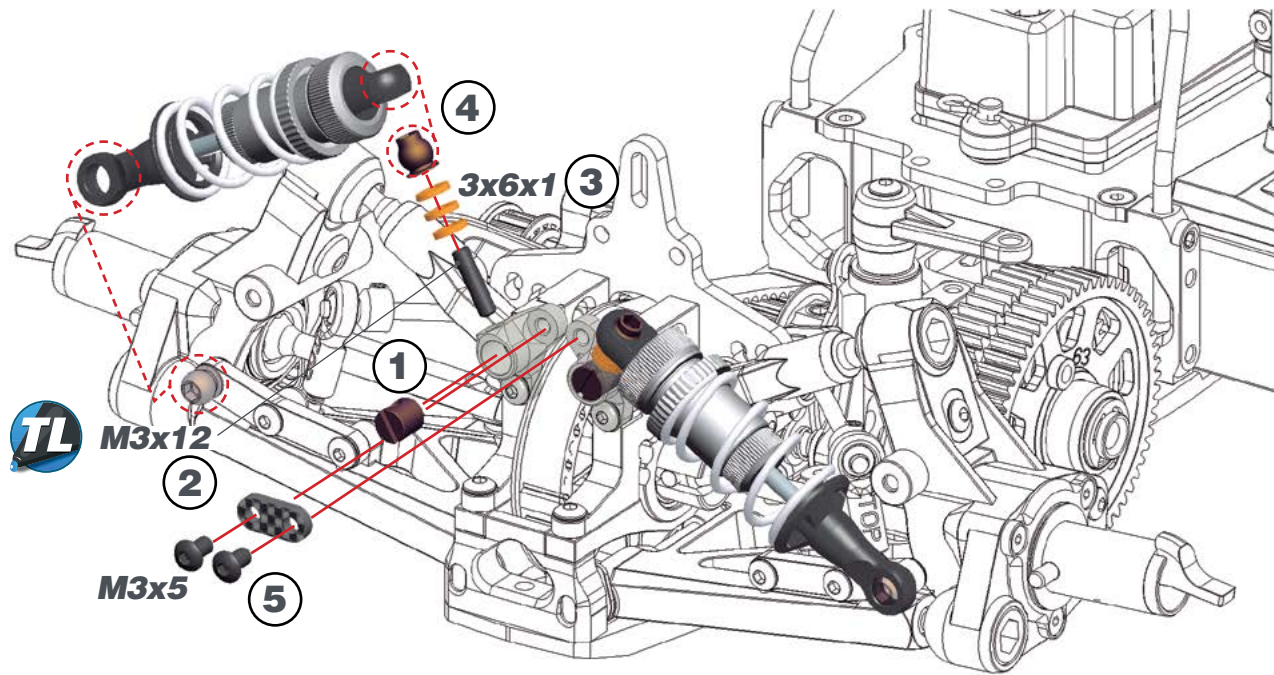
BAG 13



STEP 56

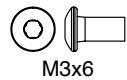
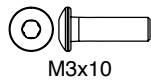
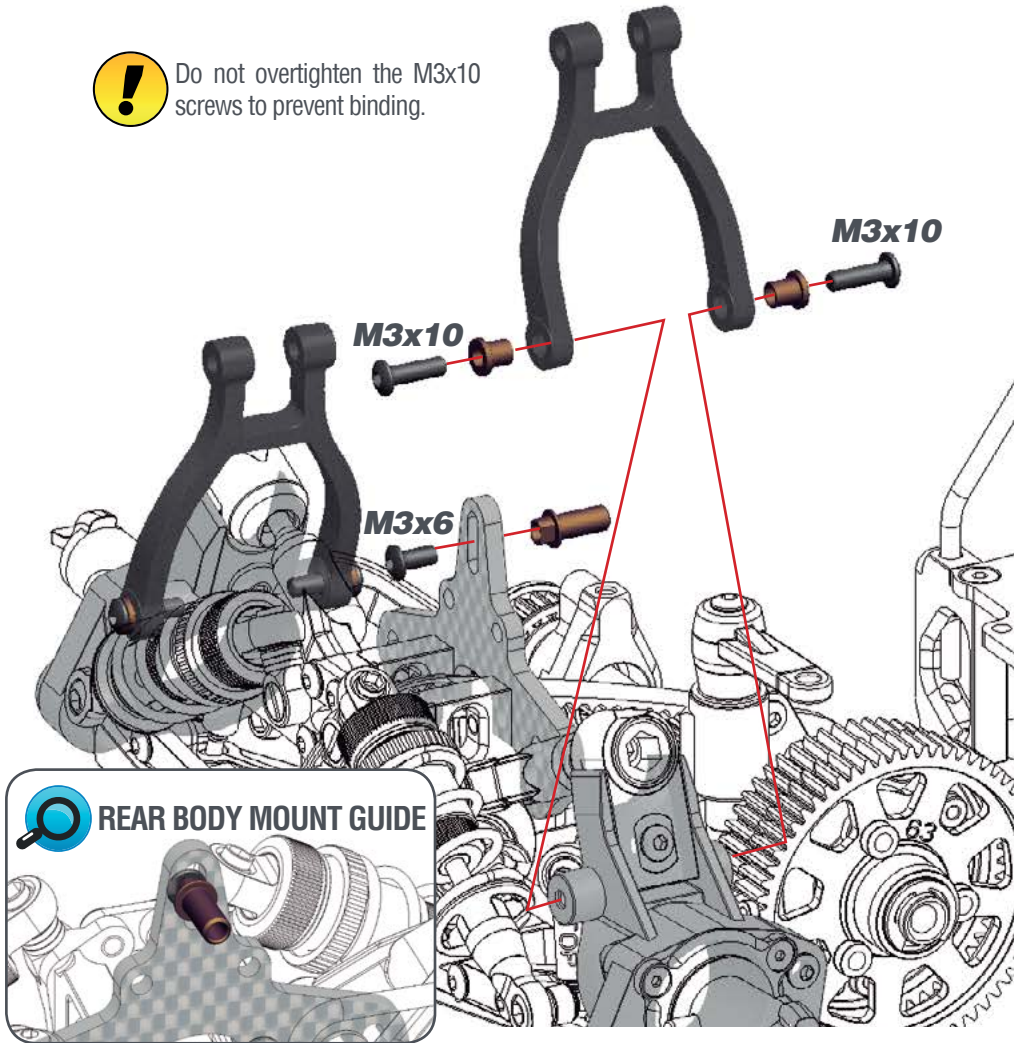


STEP 57



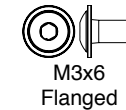
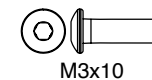
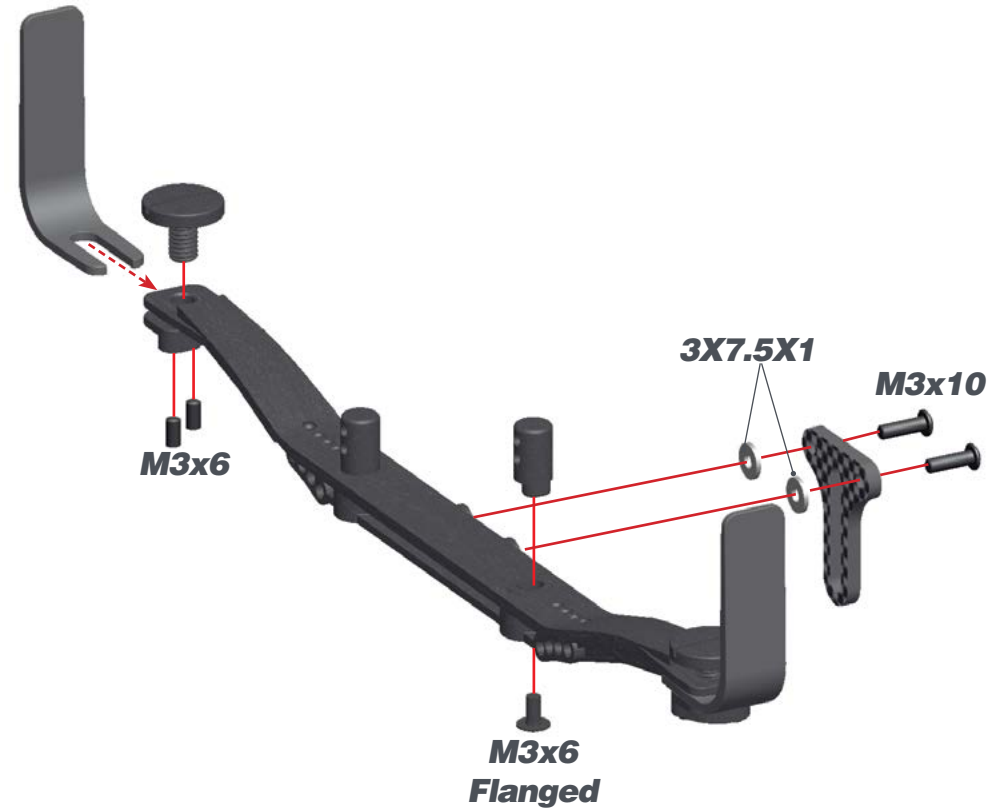
STEP 58

! Do not overtighten the M3x10 screws to prevent binding.

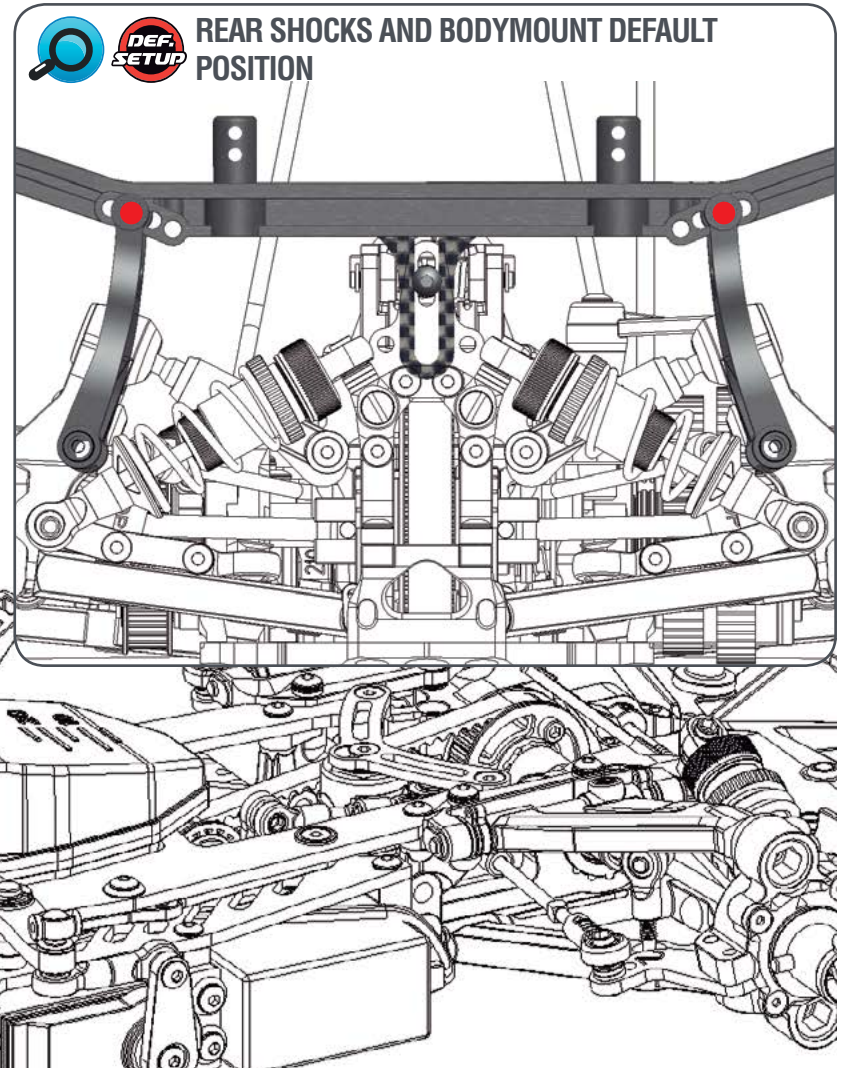
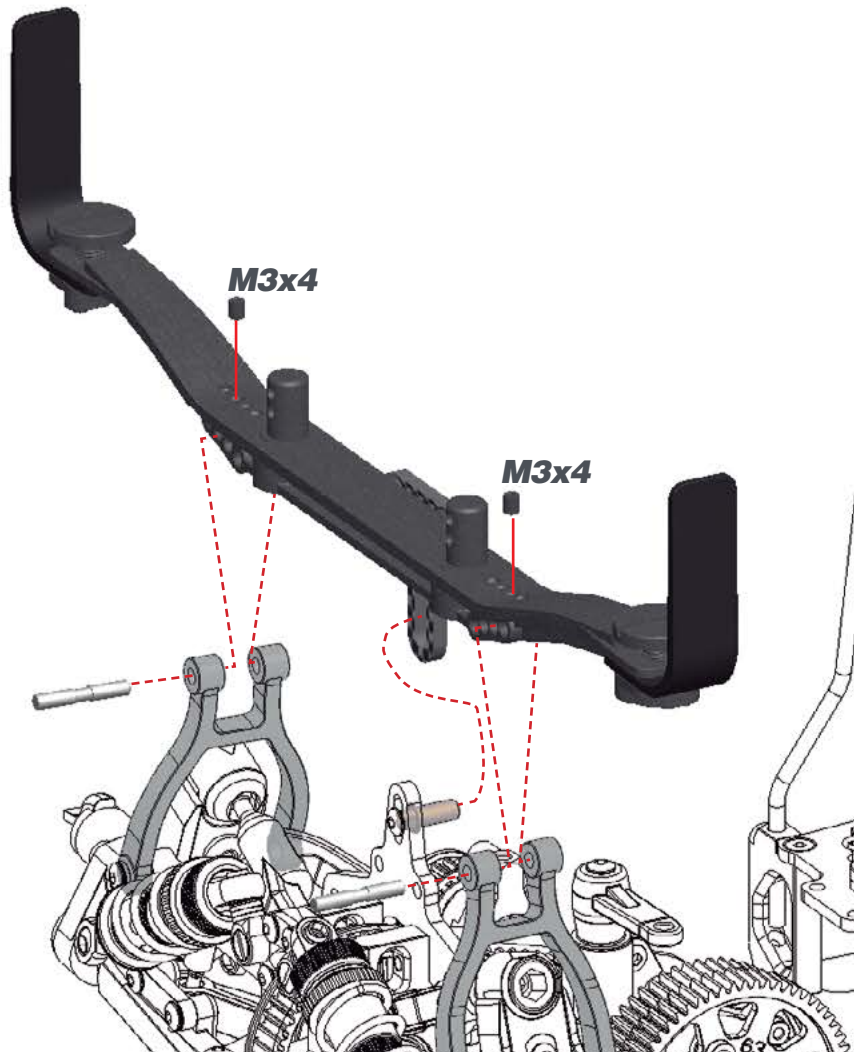


STEP 59

! Do not overtighten M3x6 Flanged screws.



STEP 60

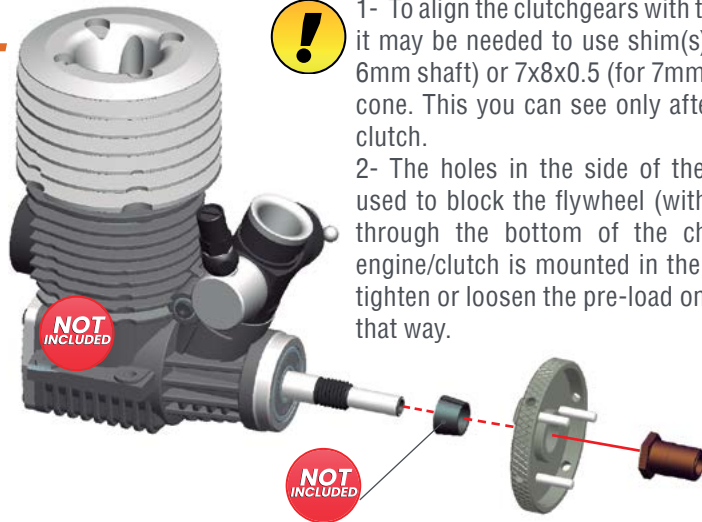


○ □
M3x4

STEP 61

CLUTCH BAG

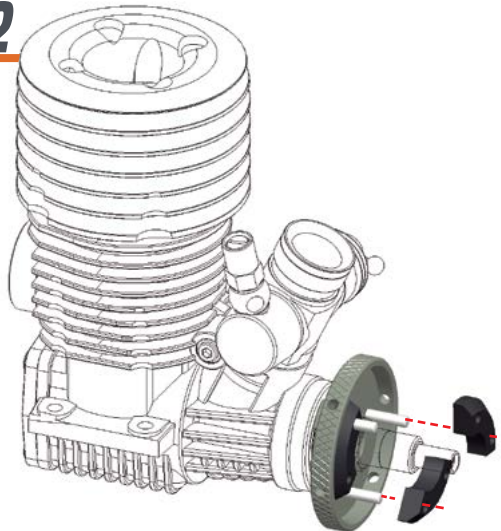
61.1



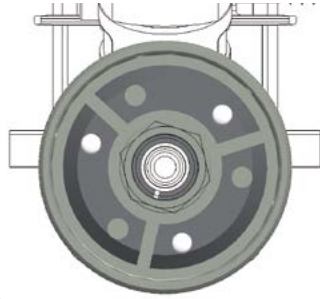
1- To align the clutchgears with the 2-speed gears, it may be needed to use shim(s) 6x8x0.5mm (for 6mm shaft) or 7x8x0.5 (for 7mm shaft) behind the cone. This you can see only after assembling the clutch.

2- The holes in the side of the flywheel can be used to block the flywheel (with short allen tool) through the bottom of the chassis, when the engine/clutch is mounted in the car. It's easier to tighten or loosen the pre-load on the clutch spring that way.

61.2

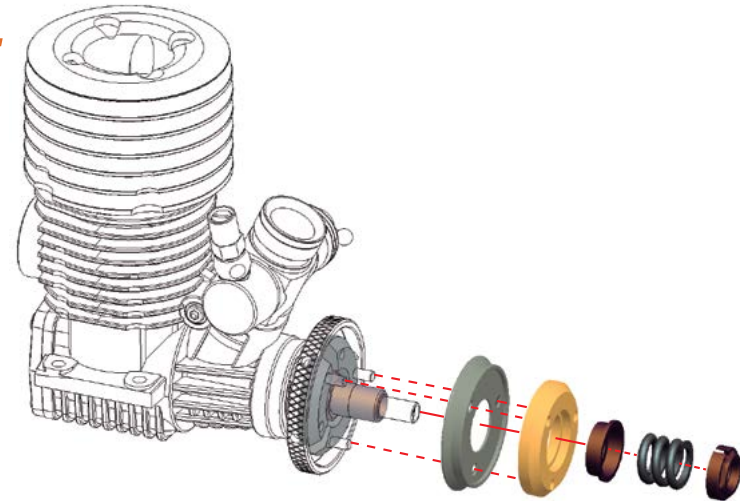


Note the orientation of the flyweights. Use the right hole for having a more aggressive clutch



STEP 62

62.1

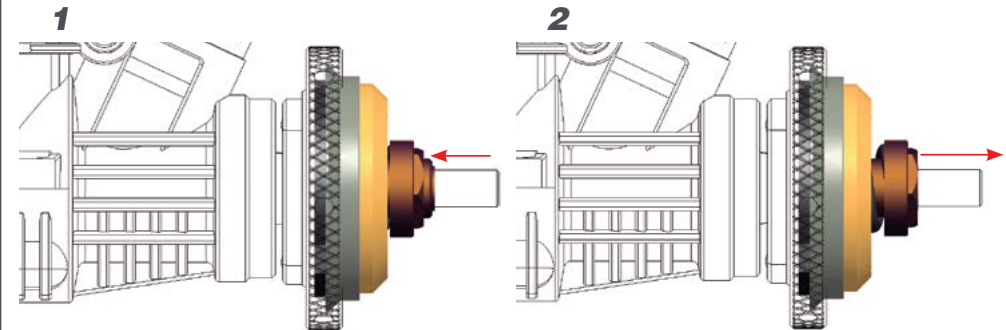


62.2



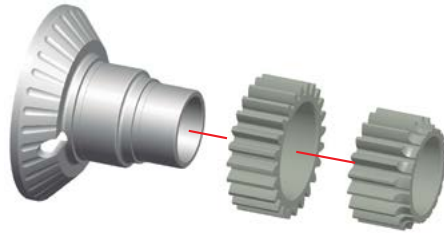
For adjusting the default clutch spring tension:

- 1- Screw in the adjusting nut all the way.
- 2- Unscrew it one and a half turns.
- 3- Fine tune the setup of your clutch on the track according to your driving style, track and weather conditions.



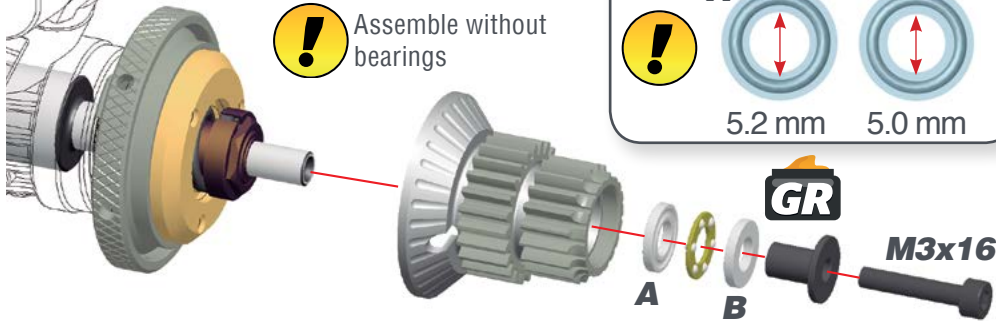
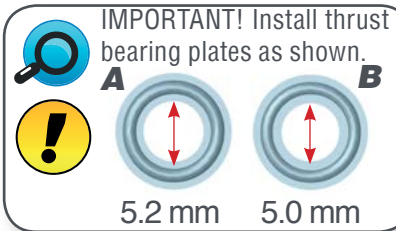
STEP 63

63.1



63.2 SETTING THE CLUTCH GAP

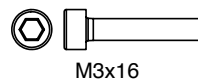
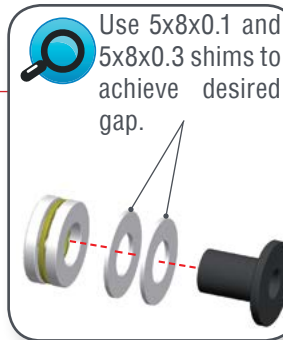
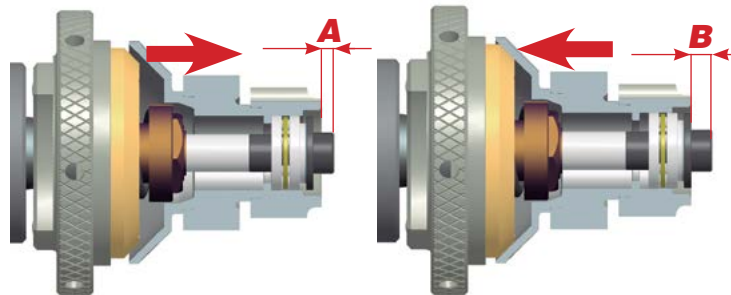
! Assemble without bearings



63.2 Clutch gap is calculated taking A and B measurements showed below.
GAP = B - A. The advised gap is between 0.6 and 0.8mm

Pull the clutch bell forward

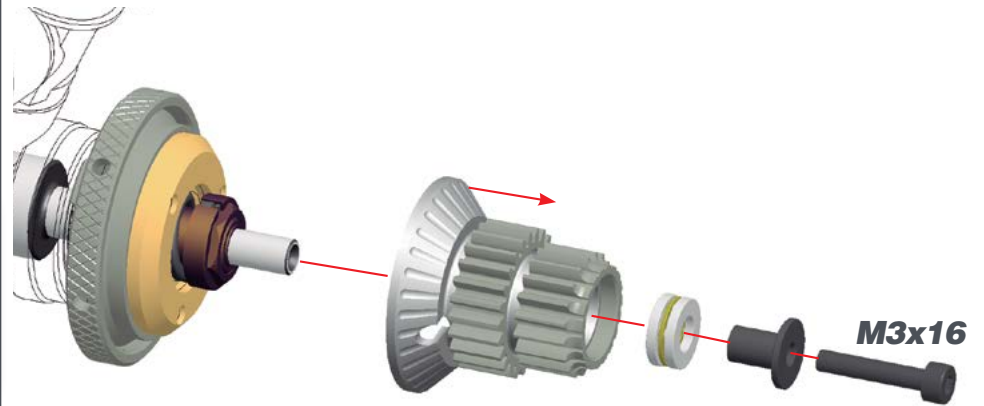
Push the clutchbell back



STEP 64

64.1

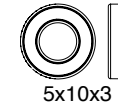
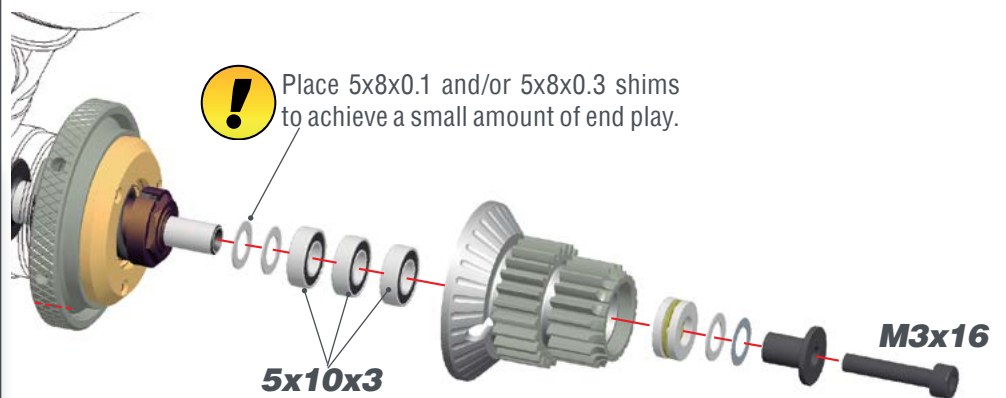
Disassemble the clutch bell.



64.2

SETTING THE CLUTCH END PLAY

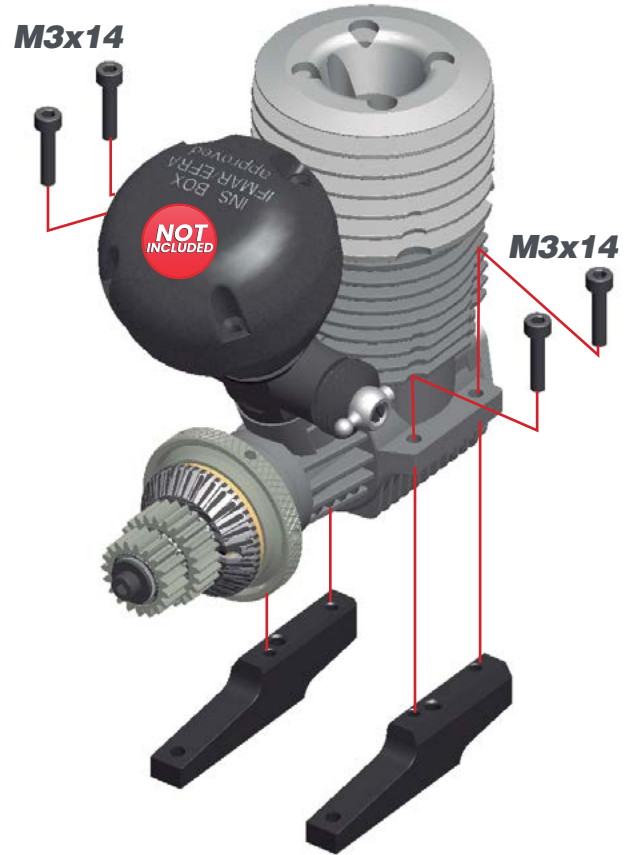
! Place 5x8x0.1 and/or 5x8x0.3 shims to achieve a small amount of end play.



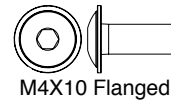
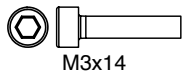
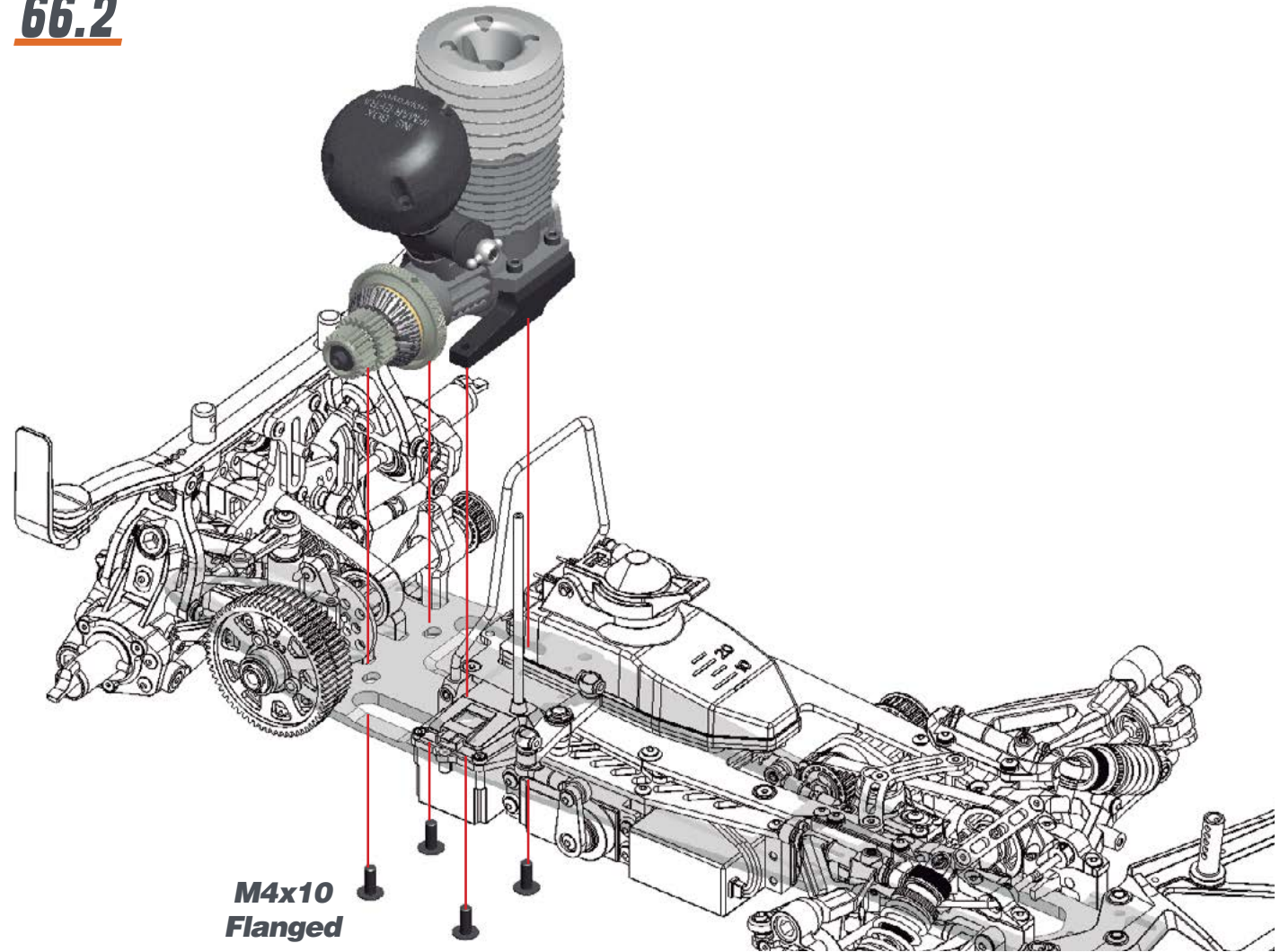
STEP 66

BAG 14

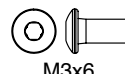
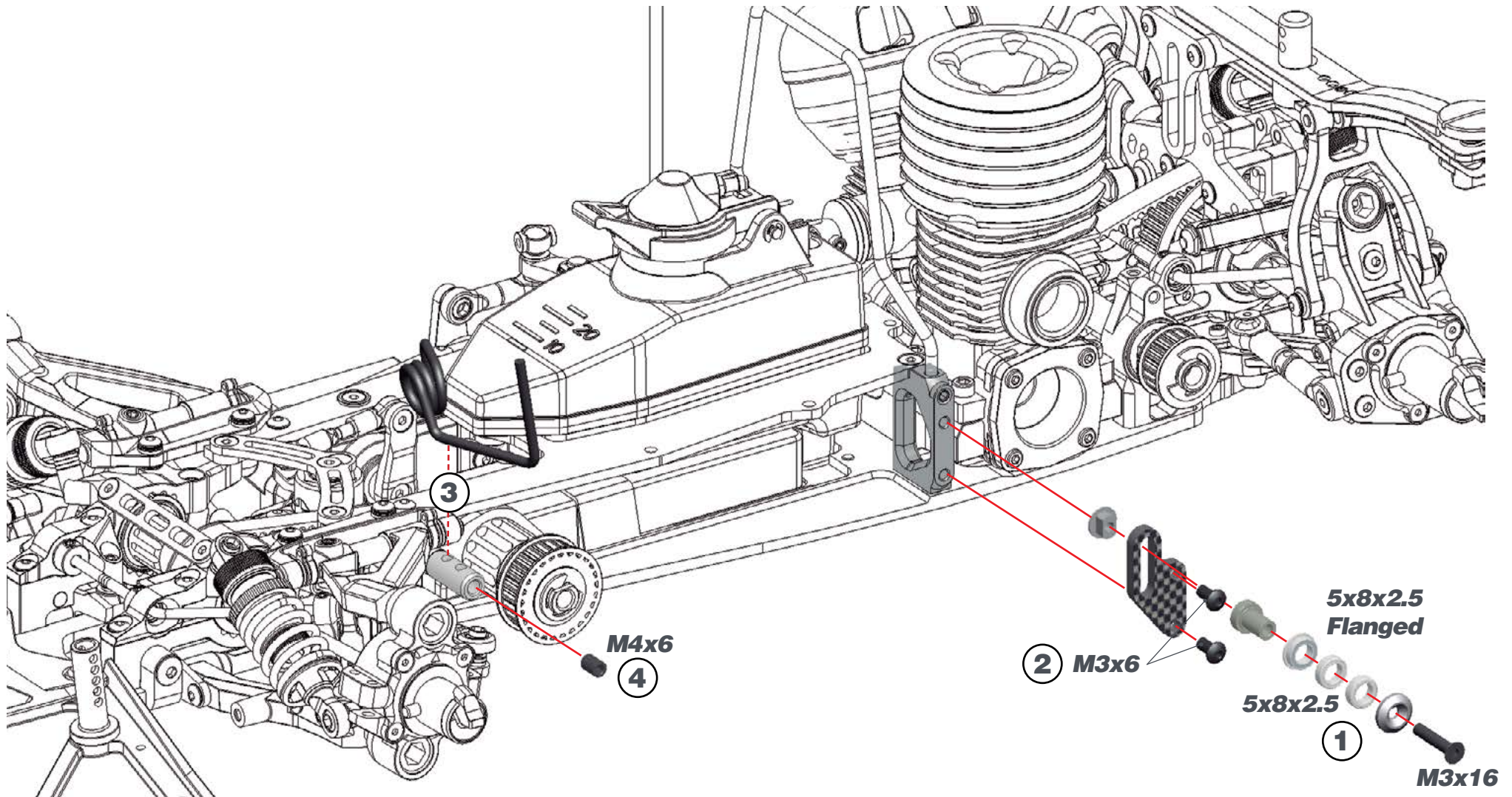
66.1



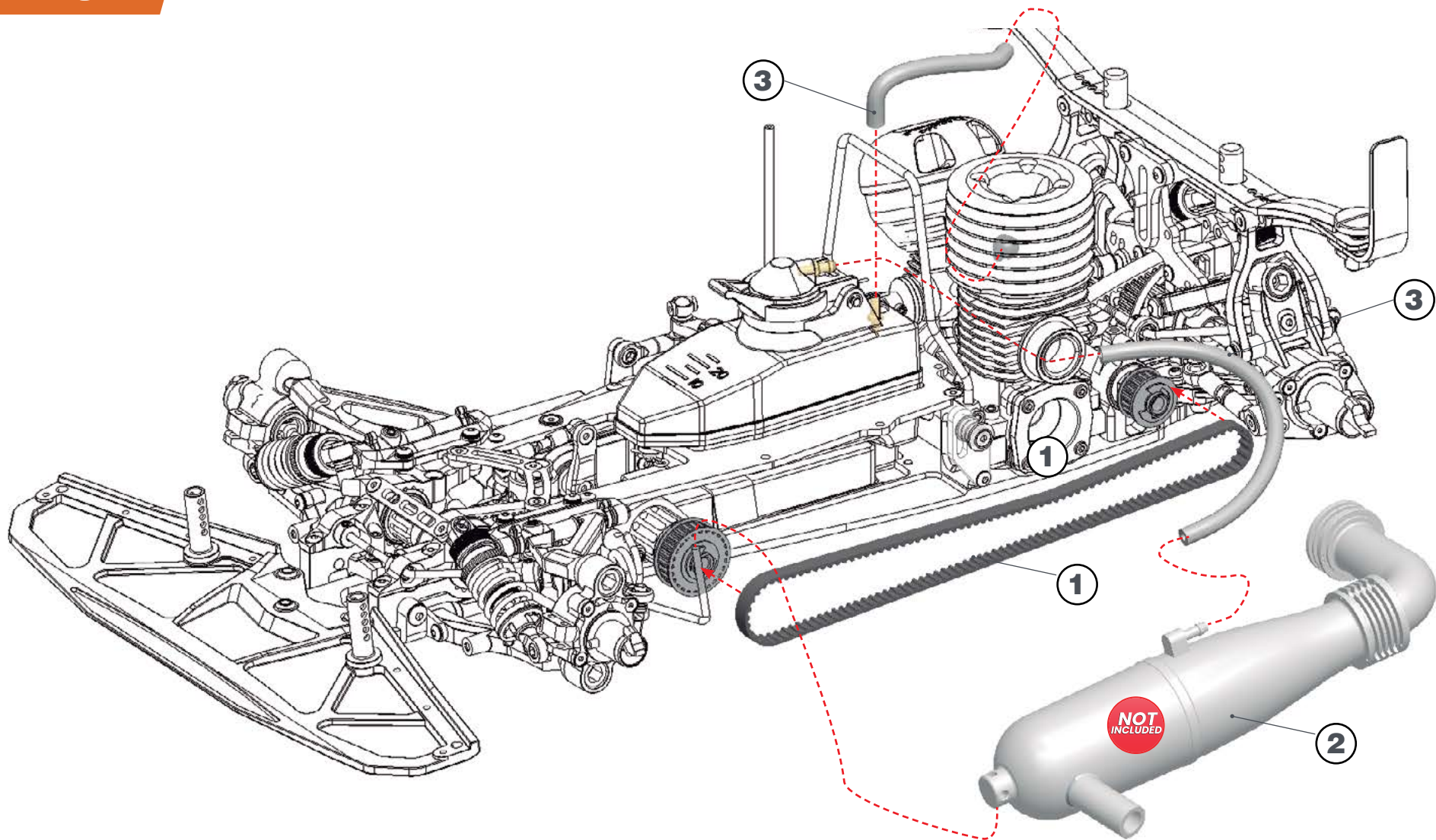
66.2



STEP 67

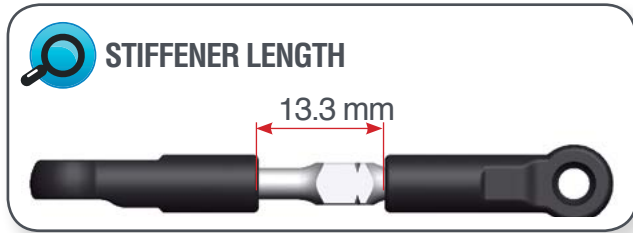
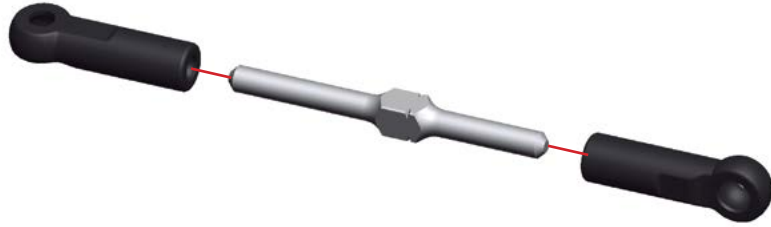


STEP 67

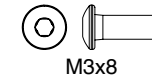
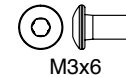
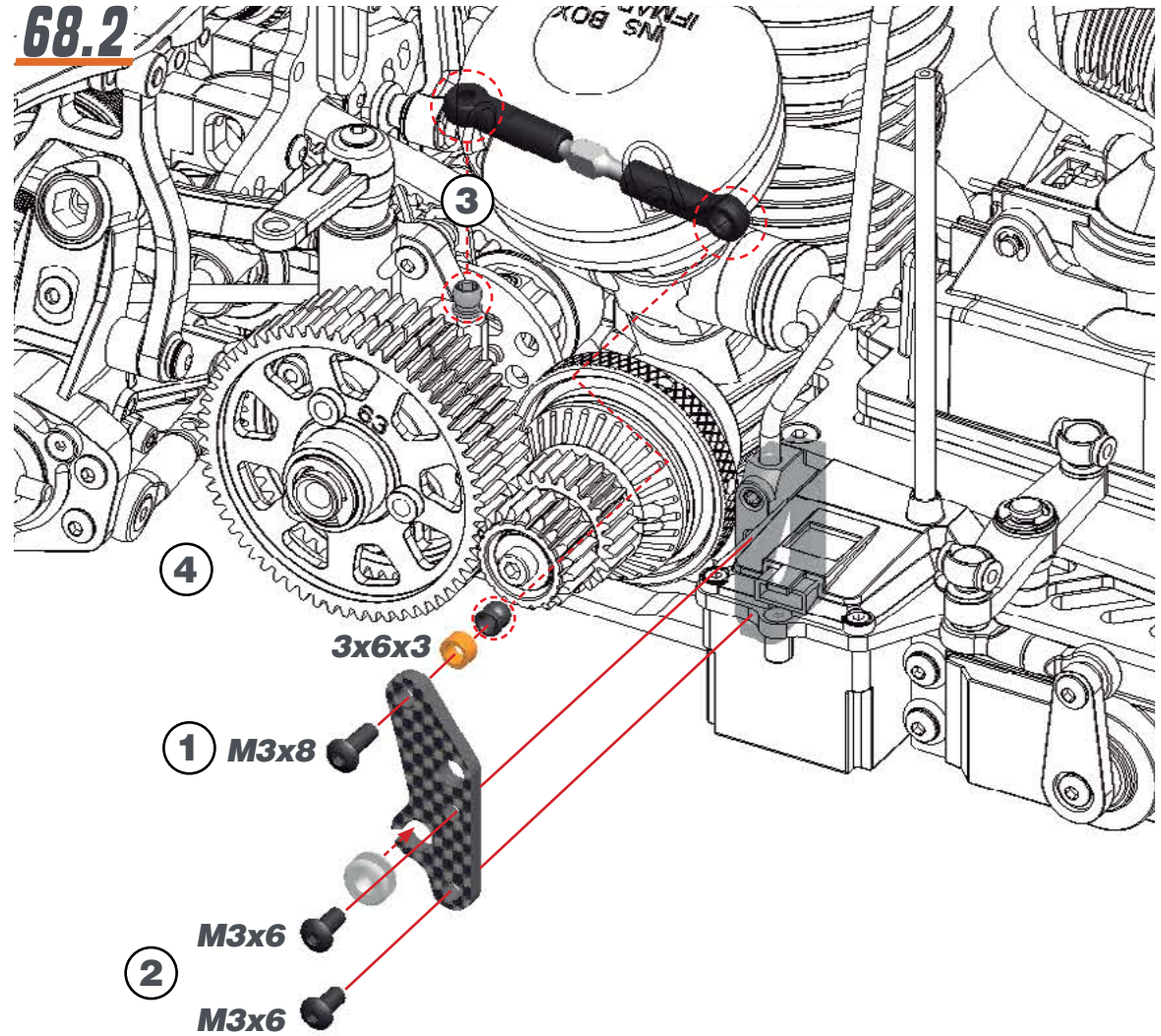


STEP 68

68.1

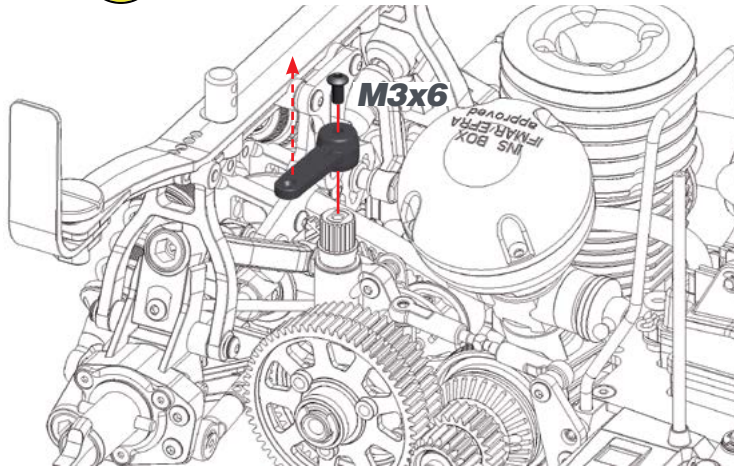


68.2

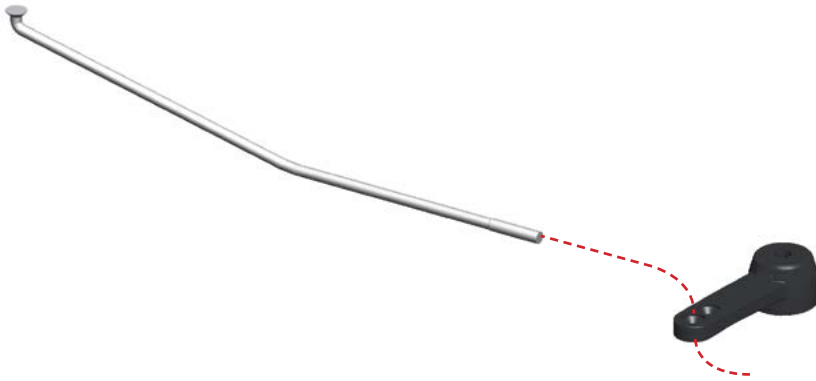


STEP 69

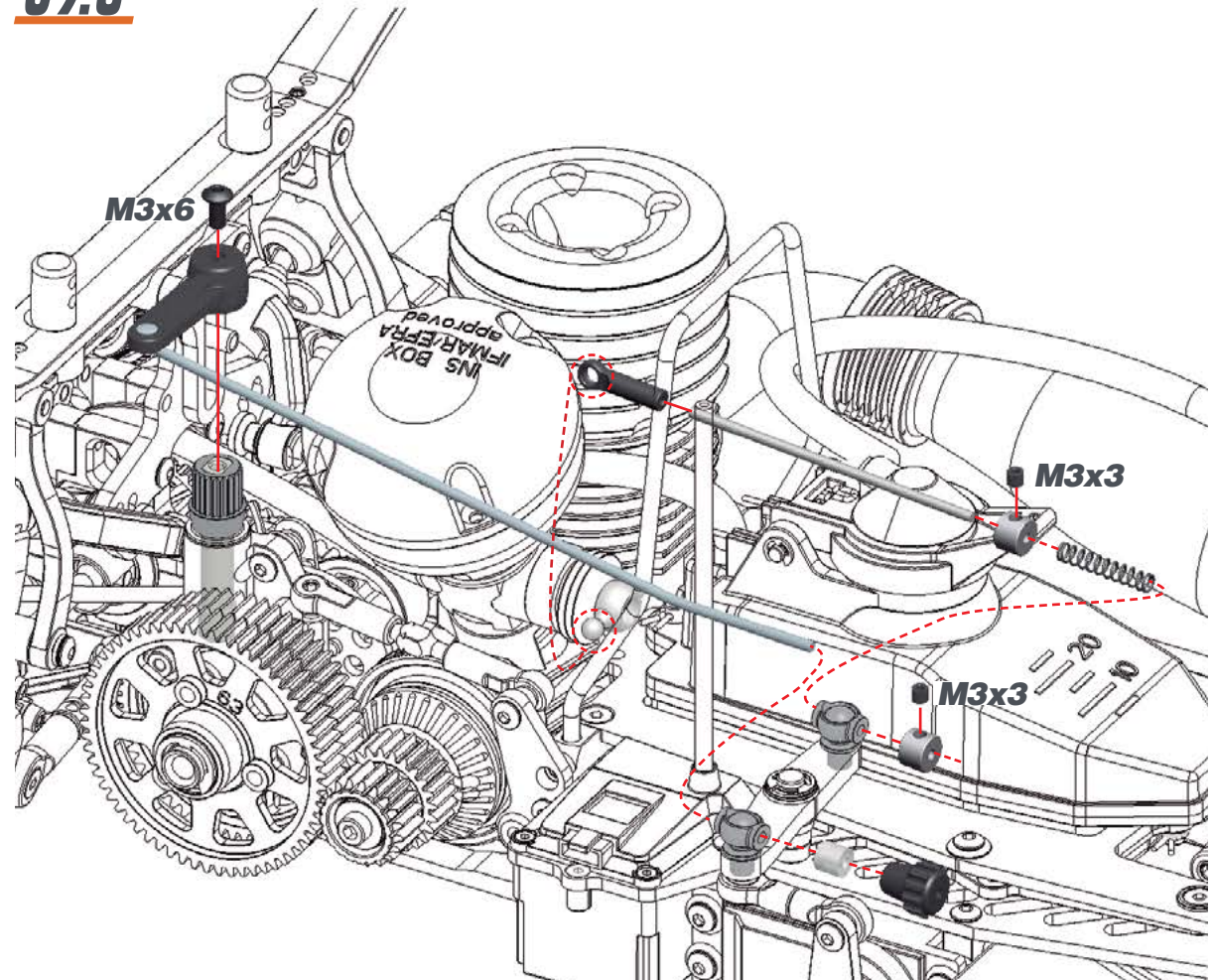
69.1  Disassemble the plastic brake lever.



69.2  Pass the brake linkage through the plastic brake lever.

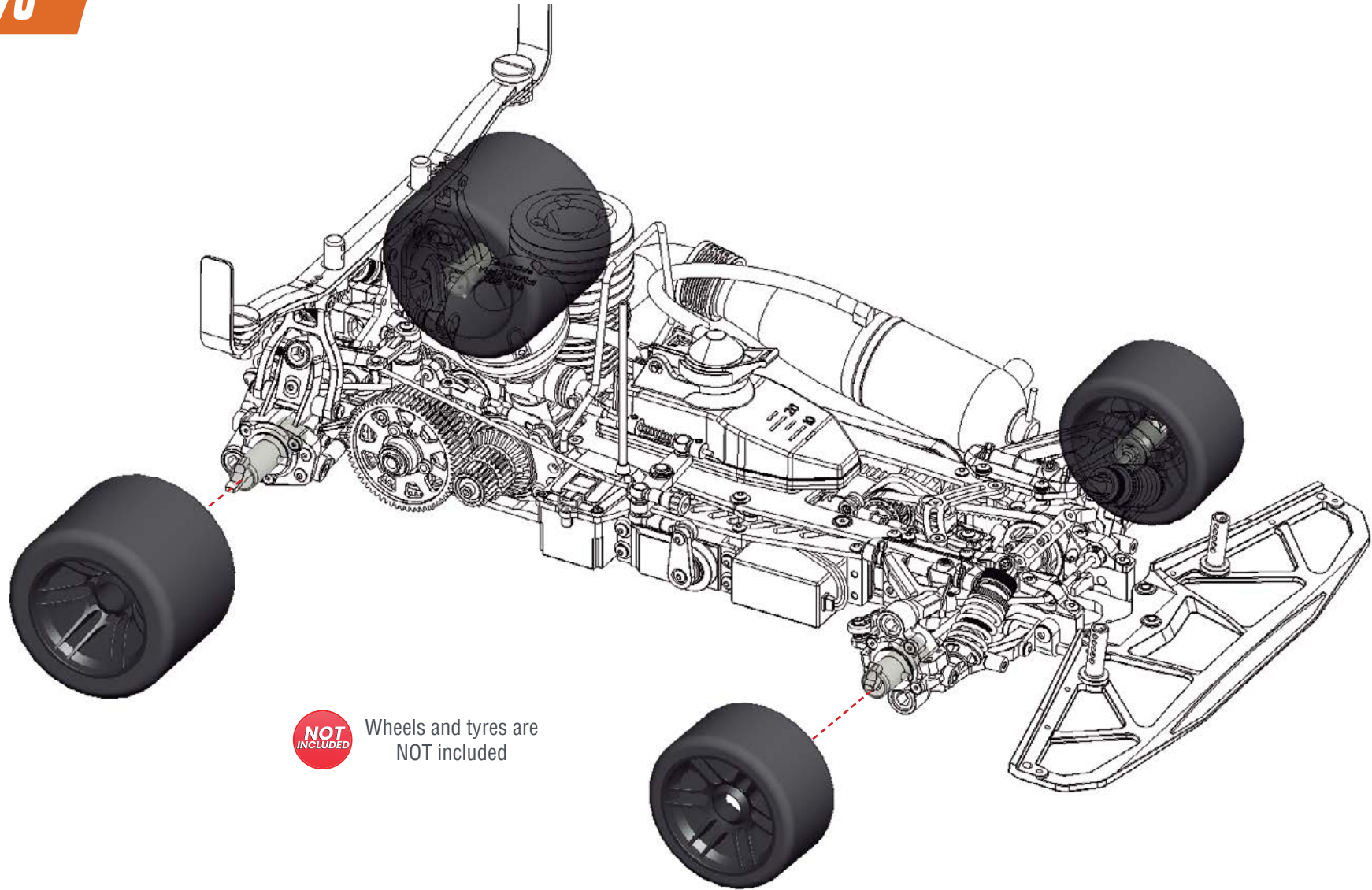


69.3



 
M3x3

STEP 70

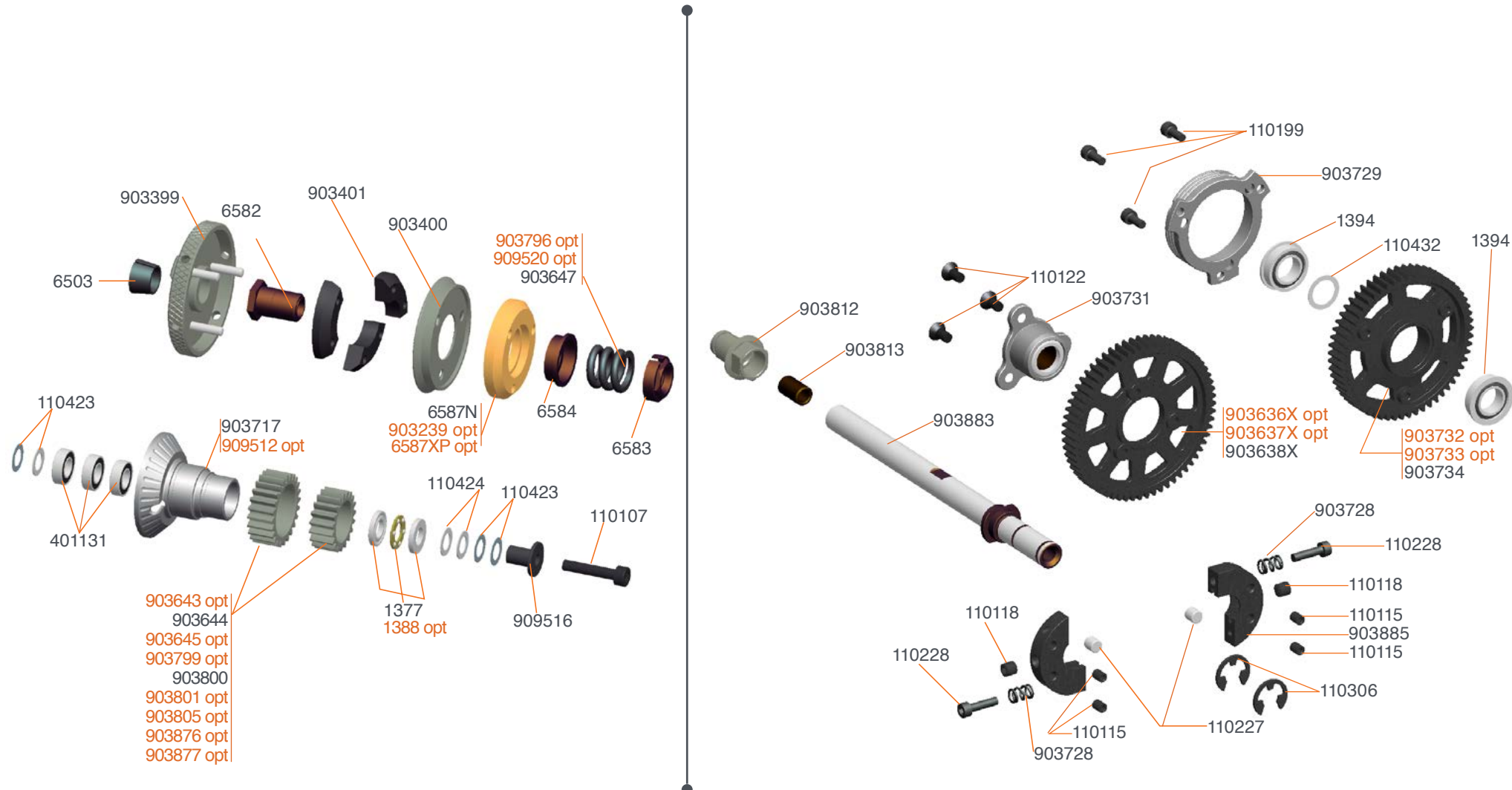


Wheels and tyres are
NOT included

INDEX

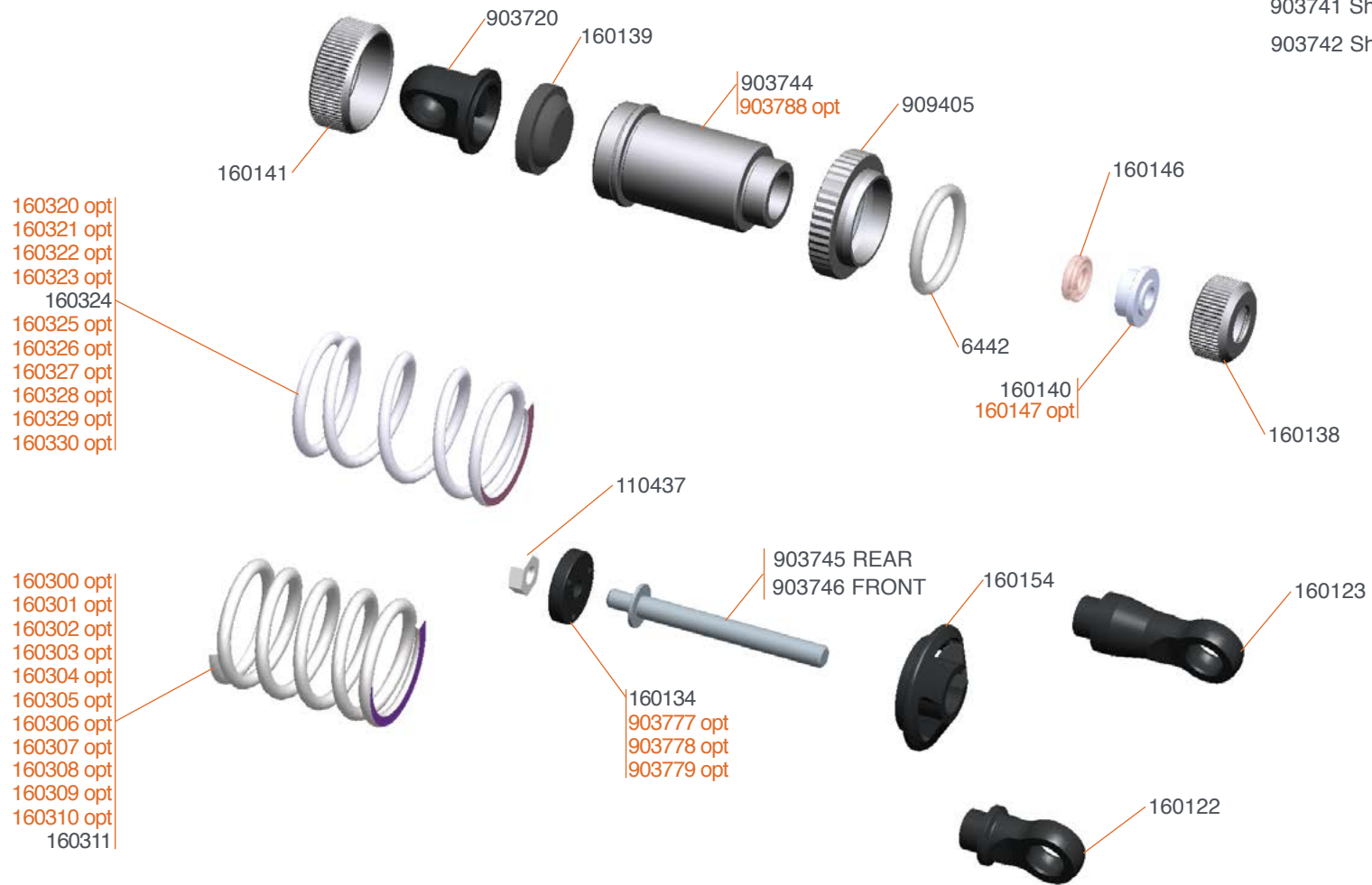
CLUTCH AND GEARBOX EXPLODED VIEW	53
SHOCKS EXPLODED VIEW	54
RR UPRIGHTS ANB FR STEERING BLOCKS EXP. VIEW	55
REAR EXPLODED VIEW	56
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FRONT 2 EXPLODED VIEW	58
RADIO 1 EXPLODED VIEW	59
RADIO 2 EXPLODED VIEW	60
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CLUTCH AND GEARBOX EXPLODED VIEW



6587XP	Centax clutch shoe XP	903637X	2-speed gear 62T SL8 XLI V2	903796	Centax spring XX-hard
903239	Centax-2 clutch shoe red	903732	2-speed gear 56T XLI Gen2	903799	Centax gear-pinion alu 18T XLI Gen2
903643	Centax gear-pinion alu 23T XLI	903733	2-speed gear 57T XLI Gen2	903801	Centax gear-pinion alu 20T XLI Gen2
903645	Centax gear-pinion alu 25T XLI	903771	2-speed gear set (6) XLI Gen2	903805	Centax gear-pinion alu set XLI Gen2 (6)
903646	Centax gear-pinion alu set XLI (6)	903805	Centax gear-pinion alu set XLI Gen2 (6)	903876	Centax gear-pinion steel 17T XLI
903636X	2-speed gear 61T SL8 XLI V2	909512	Centax II clutch-housing universal	903877	Centax gear-pinion steel 22T XLI





903741 Shockset XLV short (2)

903742 Shockset XLV long (2)

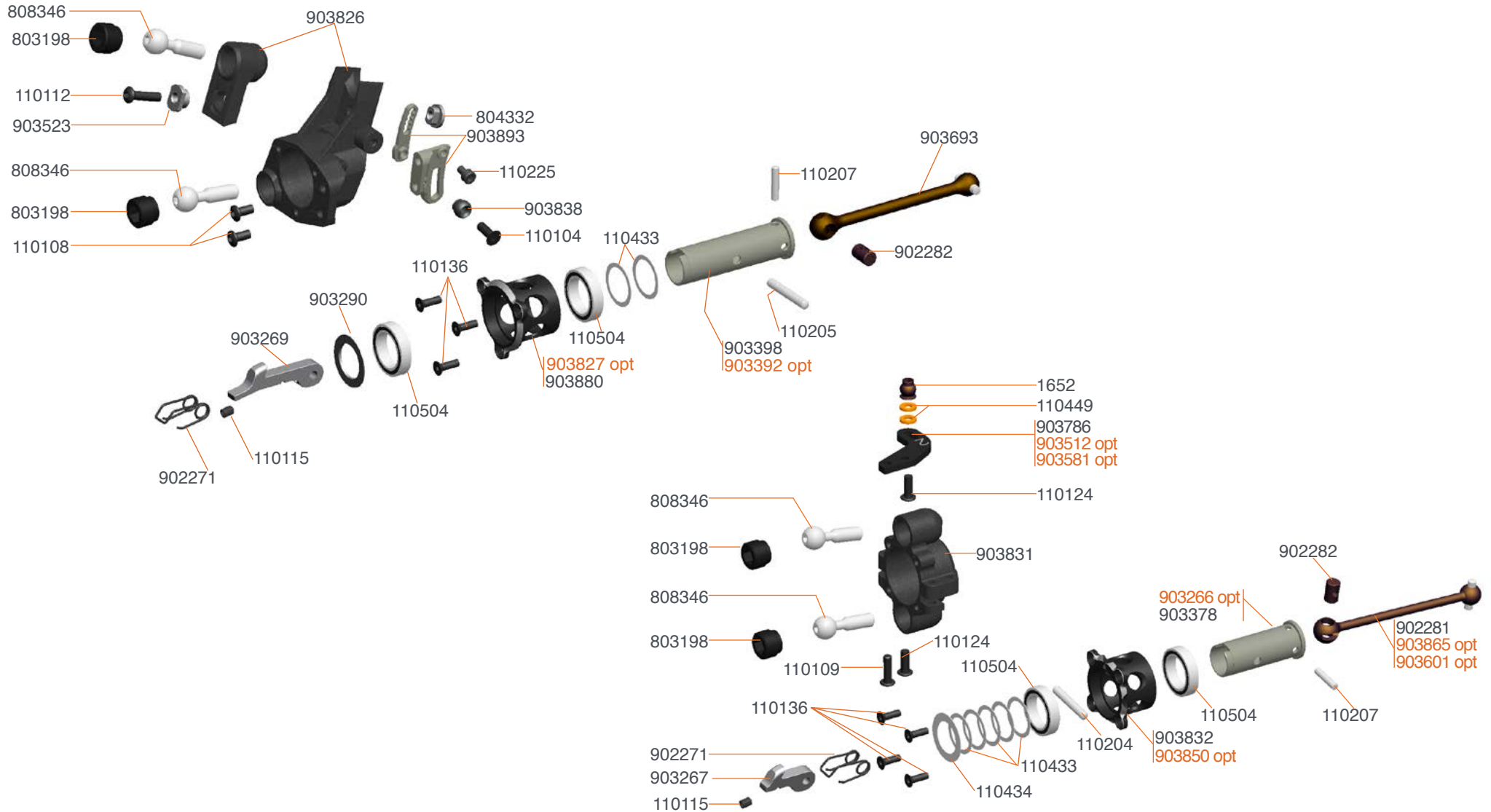
- 160147 Shock onroad big bore bushing LF (4)
- 160300 Spring white L23 (2.3/13) (2)
- 160301 Spring yellow L23 (2.8/16) (2)
- 160302 Spring orange L23 (3.4/19.5) (2)
- 160303 Spring red L23 (4.1/23.5) (2)
- 160304 Spring pink L23 (4.0/28) (2)
- 160305 Spring blue L23 (5.8/33) (2)
- 160306 Spring purple L23 (6.8/39) (2)
- 160307 Spring green L23 (8/45.5) (2)
- 160308 Spring grey L23 (9/51.5) (2)

- 160309 Spring black L23 (10/57) (2)
- 160310 Spring-set short (5x2)
- 160320 Spring white L27 (2.3/13) (2)
- 160321 Spring yellow L27 (2.8/16) (2)
- 160322 Spring orange L27 (3.4/19.5) (2)
- 160323 Spring red L27 (4.1/23.5) (2)
- 160325 Spring blue L27 (5.8/33) (2)
- 160326 Spring purple L27 (6.8/39) (2)
- 160327 Spring green L27 (8/45.5) (2)
- 160328 Spring grey L27 (9/51.5) (2)

- 160329 Spring black L27 (10/57) (2)
- 160330 Spring-set L27 (5x2)
- 903777 Shock piston XLV 1 hole (4)
- 903778 Shock piston XLV 2 hole (4)
- 903779 Shock piston XLV 3 hole (4)
- 903780 Heave demper set rear
- 903781 Heave demper set front
- 903788 Shockbody XLV short NiCoated (2)



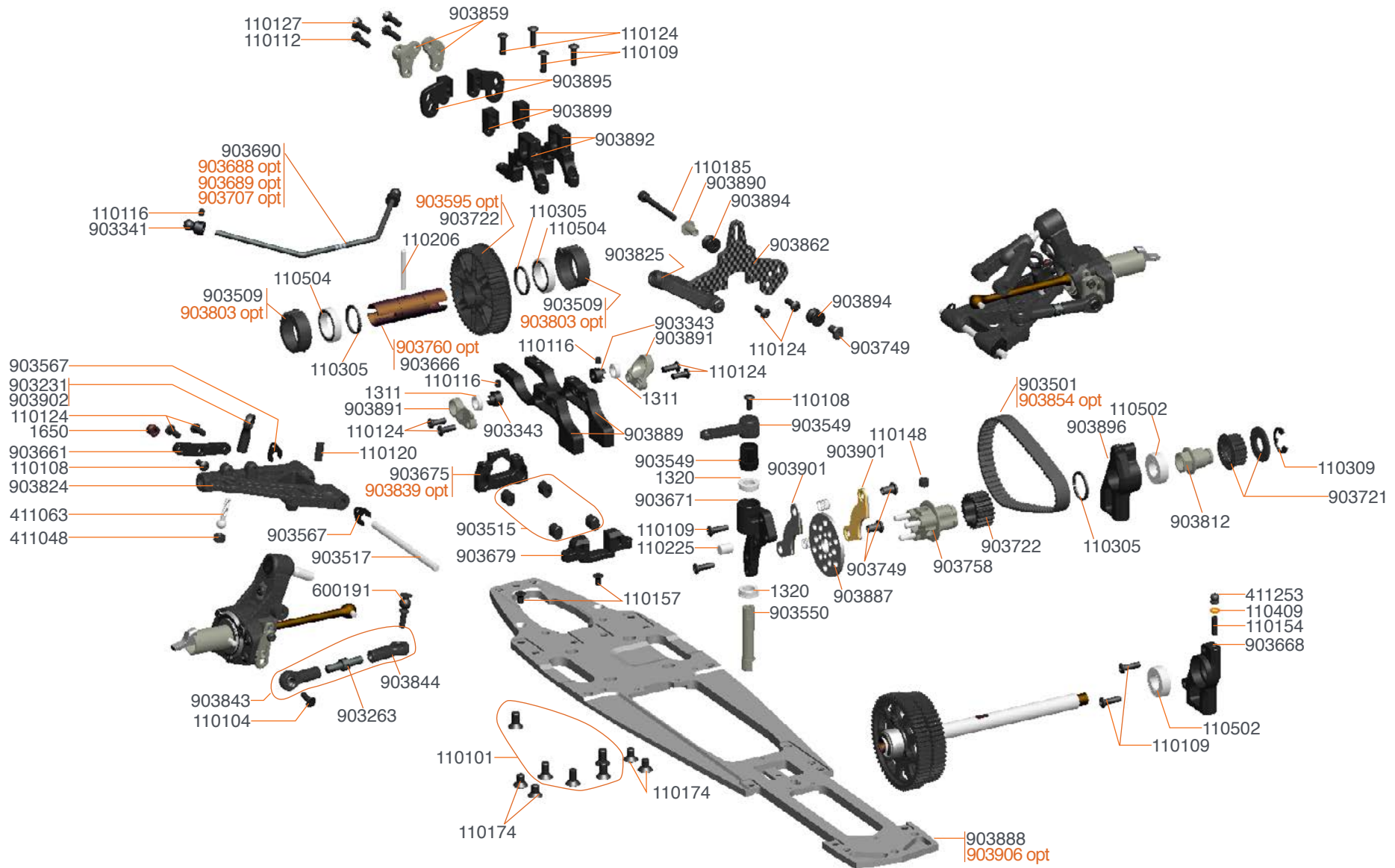
RR UPRIGHTS AND FR STB. EXPLODED VIEW



- 903392 Wheel-axle CVD RR (2)
- 903266 Wheel-axes cvd OS2 FR (2)
- 903512 Steeringblock lever alu (2)
- 903581 Steeringblock lever carbon (2)
- 903601 Driveshaft cvd FR alu (2)

- 903827 Upright insert alu (2) S990
- 903850 Steering block excenter 990 double X (2) S990
- 903851 Offset shim excenters 0.5mm (4) S990
- 903865 Driveshaft cvd FR alu short (2)





903688 Antiroll bar FR/RR soft S988
 903689 Antiroll bar FR/RR medium S988
 903707 Antiroll bar FR/RR X-hard S988
 903759 Chassis weight 14gr brass S989
 903803 Excenter set rr alu L+R S9XX

903839 Rearplate flex S990
 903840 Weight bridge fr carbon S990
 903841 Weight bottom brass 32gr S990
 903854 Belt 90S3M201 MBL competition S9XX
 903871 Battery plate carbon 990 EVO

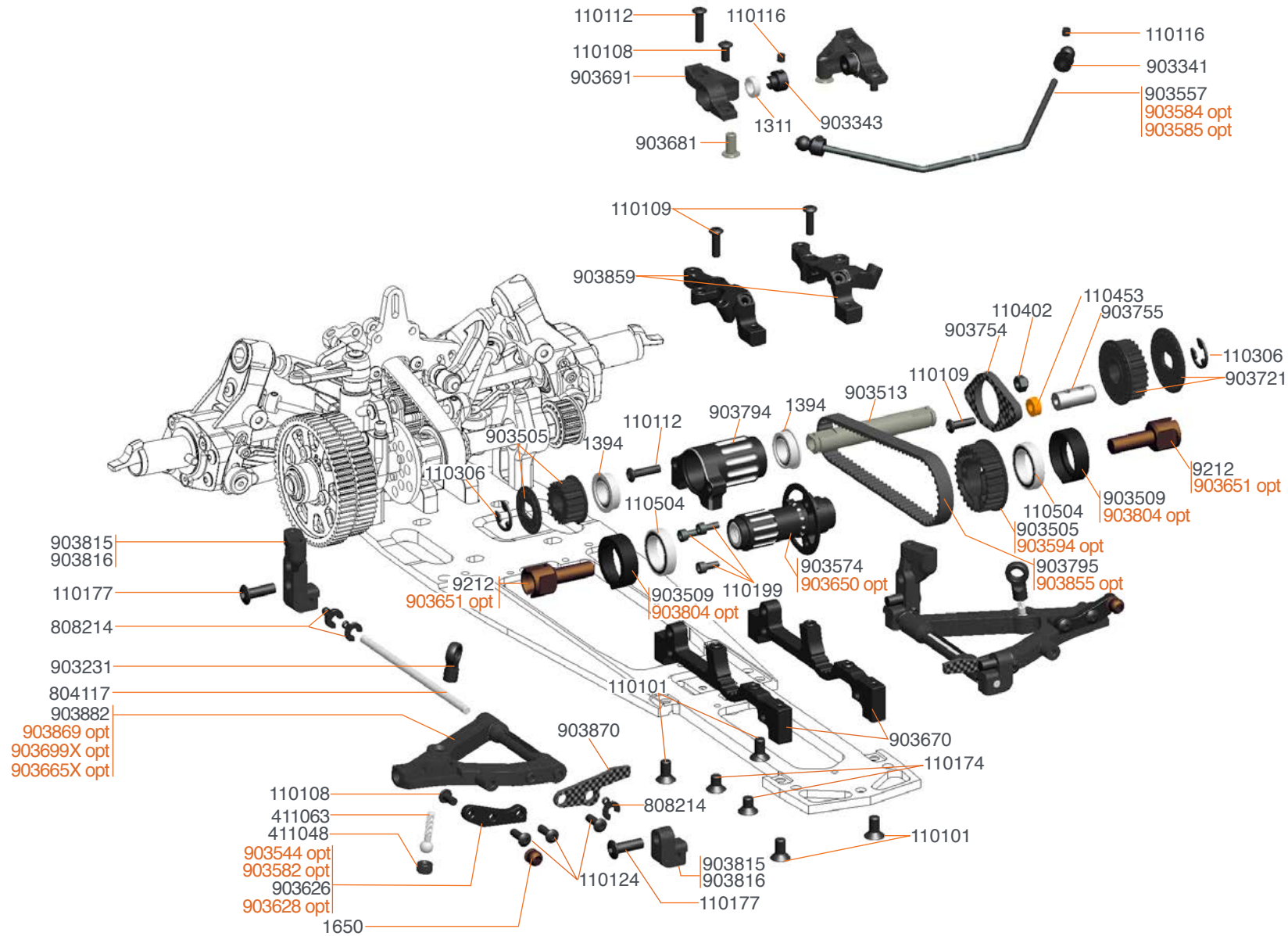
903872 Battery plate weight 15gr (2) 990 EVO
 903879 Battery plate brass 53gr 990 EVO
 903906 Chassis 990R flex



FRONT 1 EXPLODED VIEW

990 VIPER R

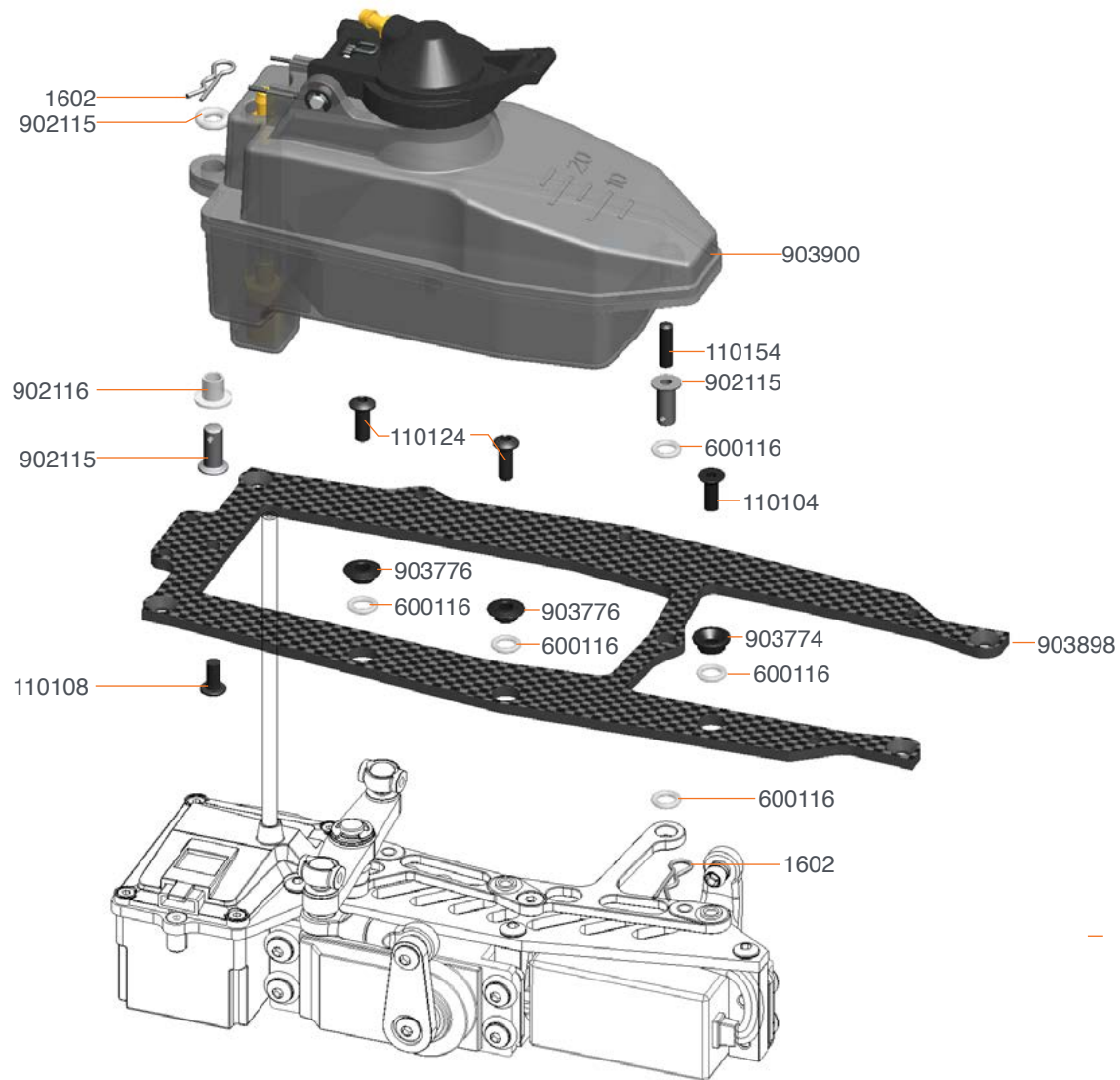
SERPENT



- 903544 Shock extension bracket FR alu (2)
- 903584 Antirroll bar FR soft S989
- 903585 Antirroll bar FR hard S989
- 903582 Shock extension bracket FR carbon (2)

- 903628 Shock extension bracket FR wide carbon (2)
- 903650 Oneway front axle Hard anodized
- 903651 Inner driveshaft adapter light
- 903665X Wishbone FR lw V2 L+R S988

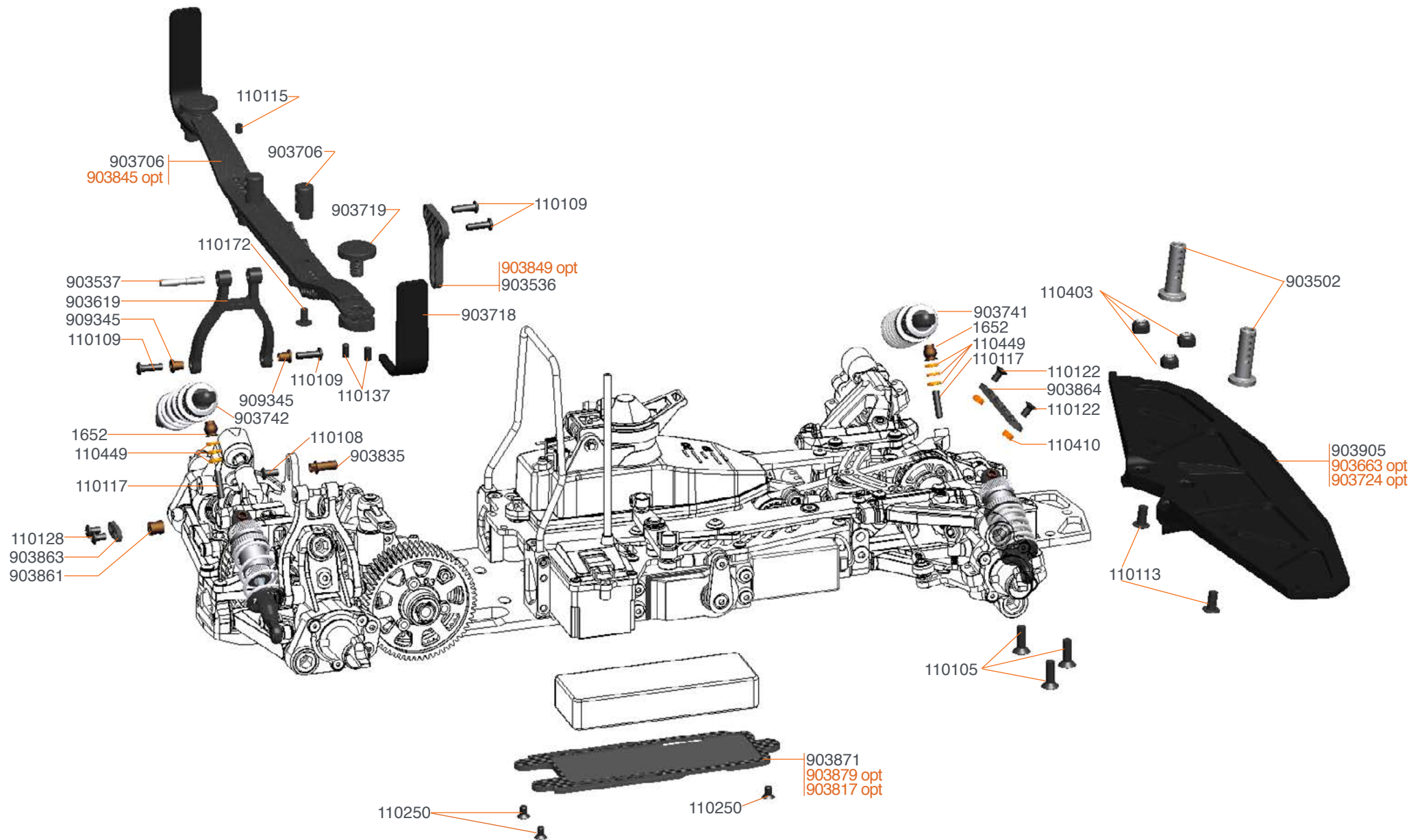
- 903695 Wishbone insert carbon FR lw (2)
- 903699X Wishbone FR lw V2 L+R hard S988
- 903855 Belt 60S3M210 MBL competition S9XX
- 903869 Wishbone FR lw L+R 990 EVO



BUMPER AND BODYMOUNT EXPLODED VIEW

990
VIPER R

SERPENT

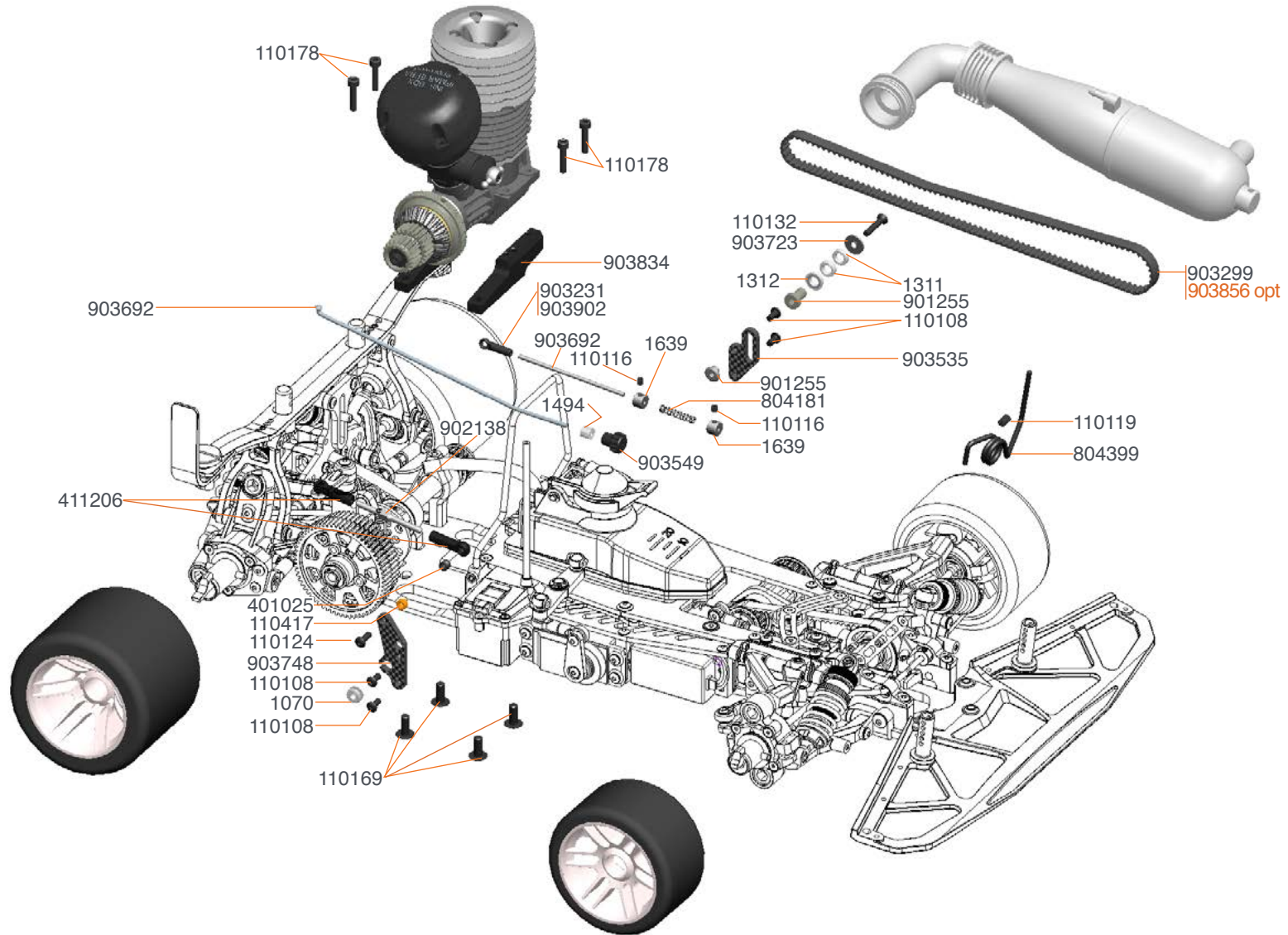


903663 Bumper 1/8 FLOW
 903664 Bumper insert set (2+2) FLOW
 903724 Bumper light S989
 903817 Weight bridge carbon S990

903845 Bodymount carbon set S9XX
 903849 Bodymount centerplate BB S9XX
 903904 Bumper stiffener set 990R
 903841 Weight bottom brass 32gr S990

903872 Battery plate weight 15gr (2) 990 EVO
 903879 Battery plate brass 53gr 990 EVO





903852 Double belt tensioner set S990
 903856 Belt 60S3M432 MBL competition S9XX
 903873 Chassis stiffener set 990 EVO

903903 Side stiffener set 990R

NOTES:

A series of horizontal dashed lines for writing notes.

TEAM SERPENT NETWORK

990R SPARE PARTS



990R OPTIONALS PARTS



SERPENT TOOLS



SERPENT MERCHANDISING



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www.teamserpent.com

www.dragon-rc.com

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990

1/8 ON ROAD SCALE **VIPER** *R*



Manual Viper 990R #57758-1

SERPENT