

# ST2.2

NEW GENERATION RC CAR

1/10 ONROAD FWD ELECTRIC  
RC PROFESSIONAL TOURING CAR



INSTRUCTION MANUAL

**WRC**  
PROFESSIONAL RC CAR

[WWW.WRC-RACING.COM](http://WWW.WRC-RACING.COM)



## INTRODUCTION

ST2 is a new generation high quality 1/10 scale electric touring car.  
ST2 is supplied in a box equipped with Instruction Manual.  
Its use is intended for more than 16 years old persons with experience on rc model car field.  
Children and all the persons without this requirement **MUST** have direct supervision of a knowledgeable adult responsible.

## SAFETY PRECAUTIONS

Instruction Manual **MUST** be read and fully understood before to start building and operating functions.  
Always keep Instruction Manual in safety place, ready to be consulted for any reference you need.  
Use only original WRC spare parts.

## GENERAL INFORMATION

Assemble the kit only away from the reach of children.  
Follow the building and operating instructions using the utmost care.  
Don't put any part of your body inside rotating and moving elements as this may cause damage or serious injury.  
Check and clean the model before putting it away.  
Don't use your model car in public places or in roads and areas where it could generate conflict with person or vehicular traffic.  
The model car is controlled by radio: you **MUST** put great care to avoid loss of radio control always keeping a safety margin all around your model in order to prevent any collision.  
Operating frequency: check and be sure it is clear and not shared with anybody at same time; it could cause loss of control of the RC model.  
Always turn on your transmitter before you turn on the receiver in the car and always turn off the receiver before you turn off your transmitter.  
Keep the wheels of the model off the ground when checking the operation of the radio equipment.  
Disconnect the battery pack before storing your model.

## WARRANTY

WRC guarantees this model kit to be free from defects in both material and workmanship within 30 days of purchase.  
The total monetary value under warranty will in no case exceed the cost of the original kit purchased.  
This warranty doesn't cover any components damaged by use or modification or as result of wear.  
Part or parts missing from this kit must be reported within 30 days of purchase.  
No part or parts will be sent under warranty without proof of purchase.  
If you find a defective or missing part, contact the local distributor.  
Customer service and support will be provided through local hobby store.  
No warranties are expressed or implied that cover damage caused by what is considered normal use or cover or imply how long any model cars' components or electric components will last before requiring replacement.  
Due to the high performance level of this model car you will need to periodically maintain and replace consumable components; any and all warranty coverage will not cover replacement of any part or component damaged by neglect, abuse or improper or unreasonable use.  
This includes but is not limited to damage from crashing, excessive moisture, improper use or no maintenance or user modifications which compromise the integrity of components.  
Warranty will not cover components that are considered consumable on RC model car.  
WRC doesn't pay nor refund on any component sent from WRC or its distributor for warranty.  
WRC reserves the right to make final determination of the warranty status of any component or part  
Use only original WRC spare part:

## CUSTOMER SUPPORT

Please don't hesitate to contact WRC support at [info@wrc-racing.com](mailto:info@wrc-racing.com) for any problem or question.  
Also kindly visit our website [www.wrc-racing.com](http://www.wrc-racing.com) to find last updates, set-up information, option parts and other information.

### **W.R.C. world racing car s.r.l.**

Via A. Volta, 2 bis  
36040 Brendola (VI)  
**ITALY**

Phone: 0039 0 444 1792263  
E-mail: [info@wrc-racing.com](mailto:info@wrc-racing.com)  
Website: [www.wrc-racing.com](http://www.wrc-racing.com)



## TECHNICAL INFORMATION

- TRANSMISSION: 2 WHEEL DRIVE
- BODY: TOURING MODEL (NOT INCLUDED)
- ADJUSTABLE FRONT TOE, CAMBER AND CASTER
- ADJUSTABLE REAR TOE AND CAMBER
- BUMPER /FRONT BACKSTOP
- CARBON CHASSIS
- FULL BALL BEARING
- DIFFERENTIAL GEAR
- LENGHT ..... 373 MM.
- WIDTH .....187 MM.
- ADJUSTABLE WHEEL BASE .....MIN. 250 MM. - MAX 256 MM.

## ADDITIONAL ITEMS NEEDED FOR COMPLETION (REQUIRED BUT NOT INCLUDED IN THE KIT)



ELECTRIC MOTOR  
PINION GEAR



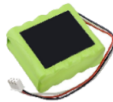
TRANSMITTER



RECEIVER



LOW PROFILE STEERING SERVO



BATTERIES  
FOR TRANSMITTER



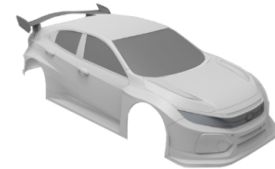
WHEEL - TYRES - INSERTS



LIPO BATTERY



SPEED CONTROLLER



LEXAN BODY  
**NOT INCLUDED**

## TOOLS REQUIRED

THESE TOOLS ARE NOT INCLUDED IN THE KIT BUT ARE REQUIRED FOR PROPER ASSEMBLY



ALLENS:  
1.5 mm  
2 mm  
3 mm



SOCKET  
5mm  
7mm



SIDE CUTTERS



COMBINATION PLIERS



SCISSORS



TOOL FOR  
TURNBUCKLES/NUTS



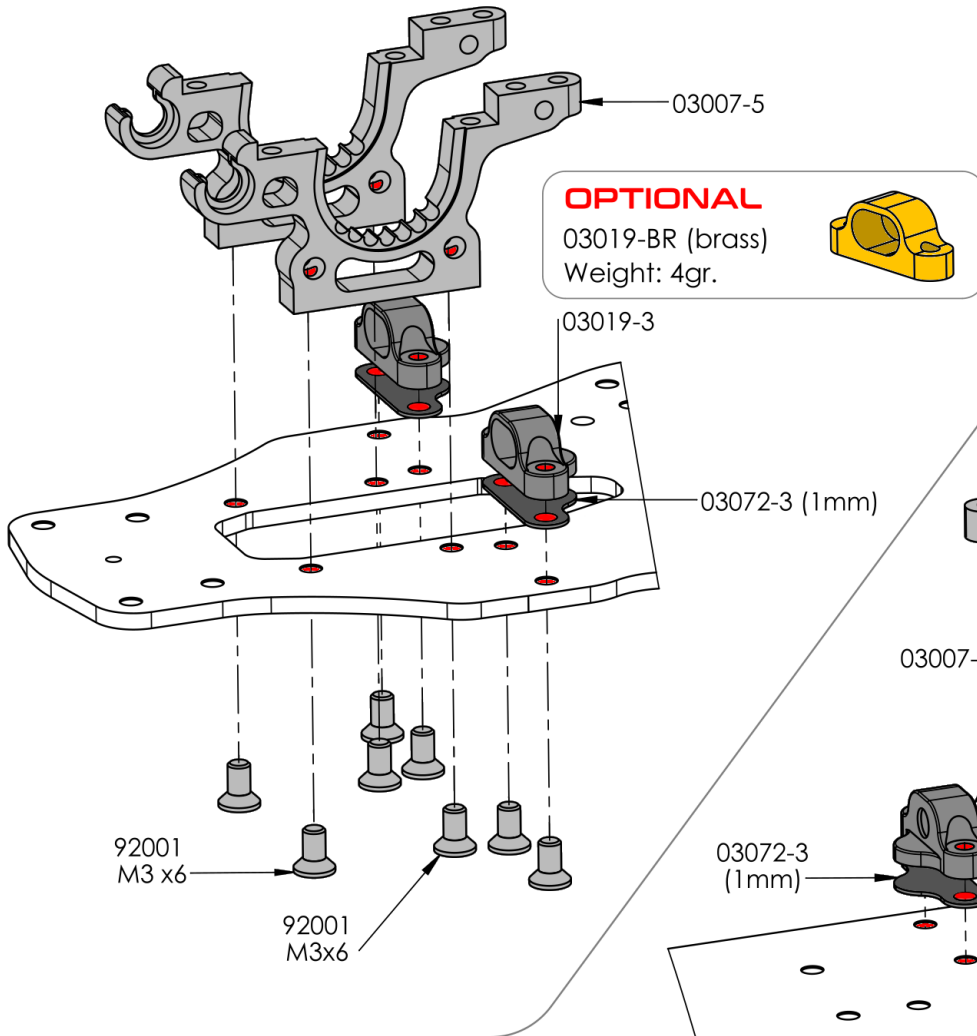
GREASE



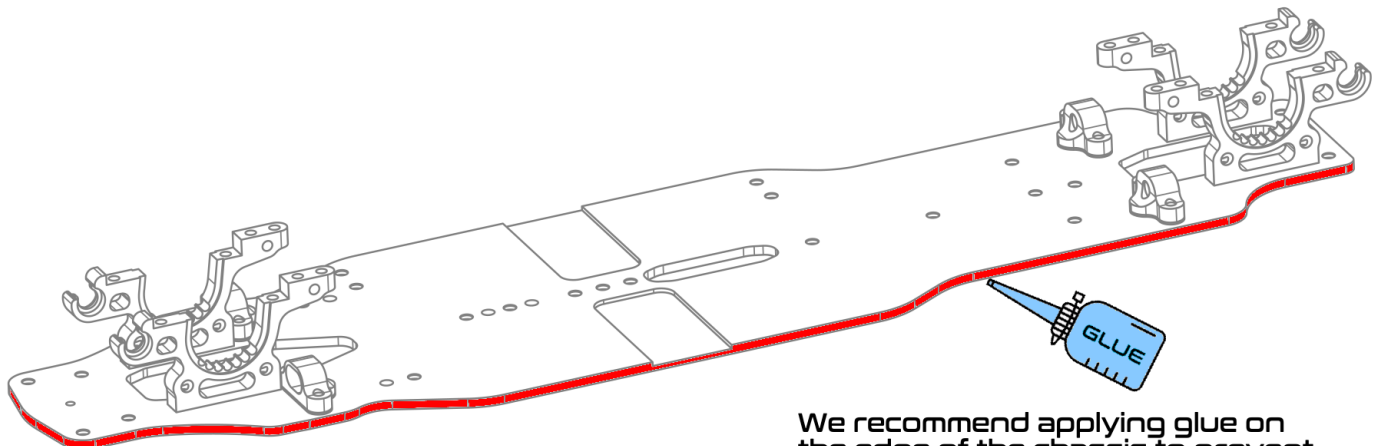
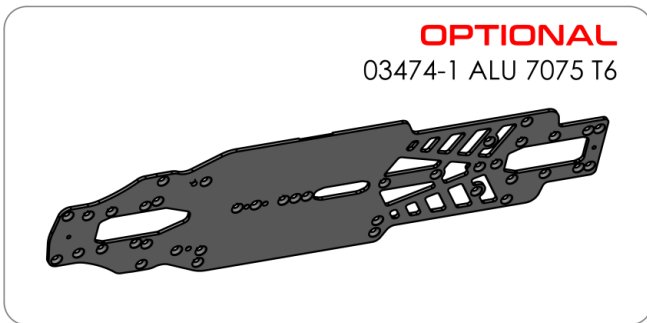
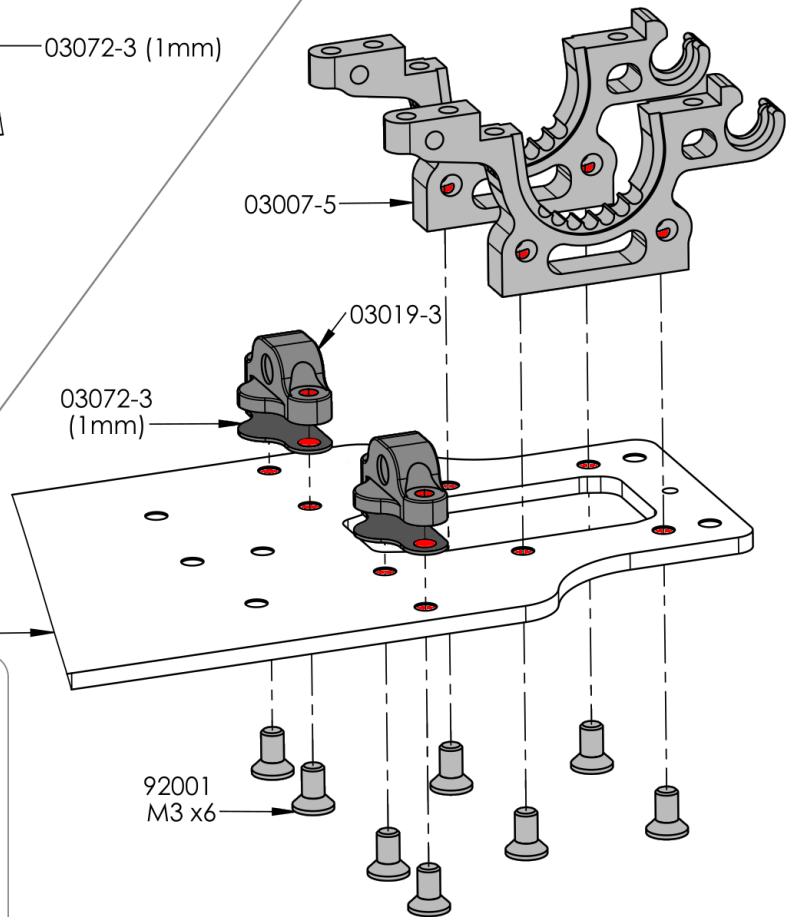
OILS:  
BEARING OIL  
SILICONE OIL

## NOTICE:

THE FOLLOWING ITEMS ARE NEEDED FOR COMPLETION OF THE ST2 ; THEY ARE NOT INCLUDED IN THIS KIT (UNLESS NOTED) AND SHOULD BE OBTAINED FROM YOUR LOCAL HOBBY SHOP.  
BE SURE TO READ THE INSTRUCTION COMPLETELY PRIOR TO ASSEMBLY



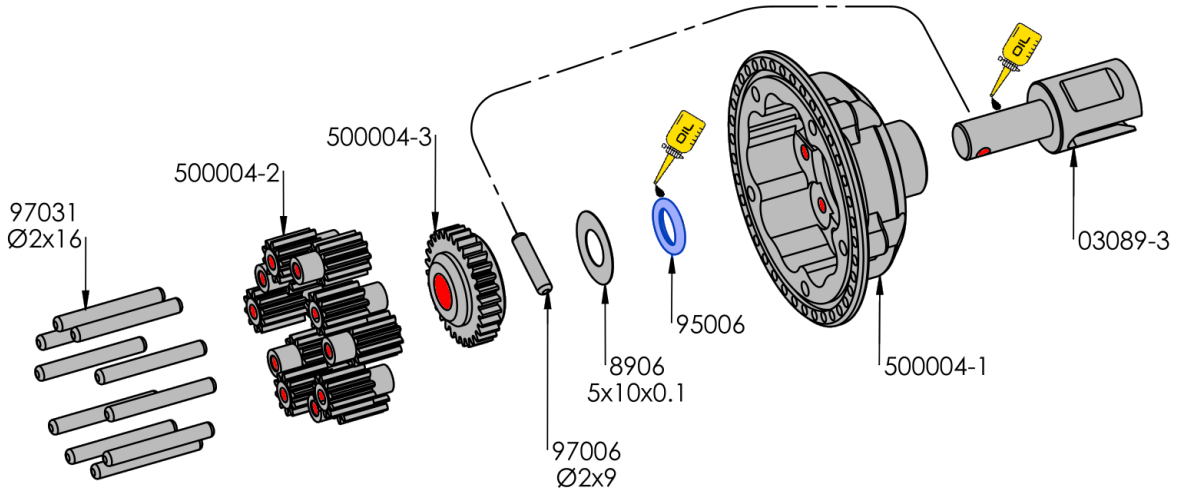
## Rear Bulkheads



We recommend applying glue on the edge of the chassis to prevent the carbon layers to split.

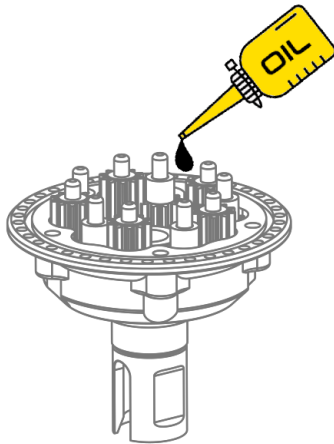
**FOLLOW CLOSELY THE INSTRUCTIONS, THIS DIFF GEAR HAS TO BE MOUNTED CORRECTLY TO WORK WELL**

**1**

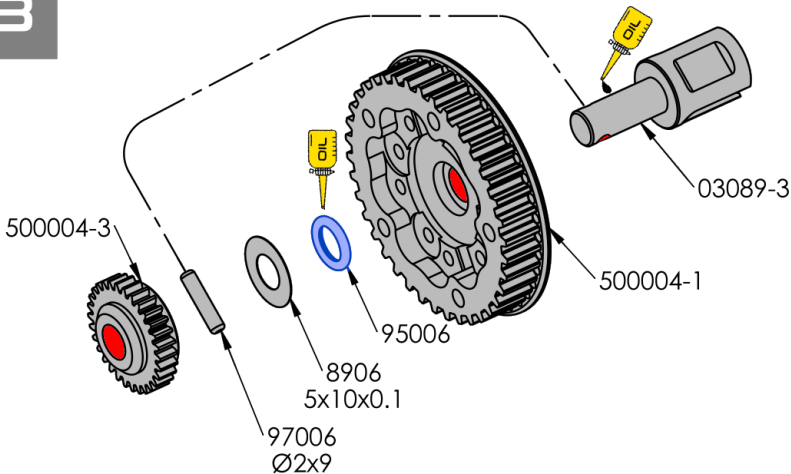


**2**

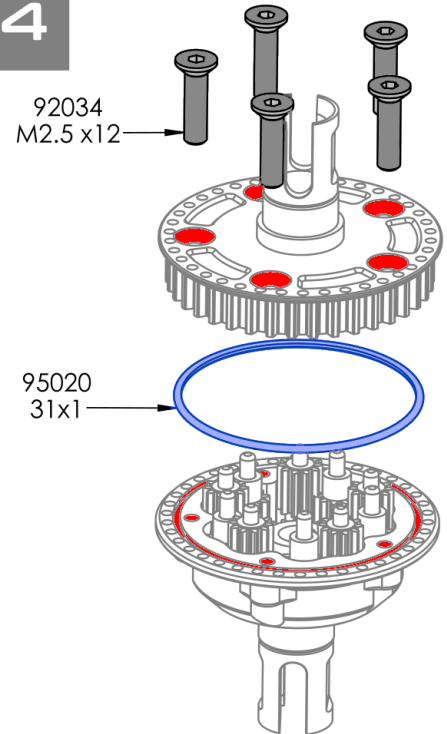
**SILICONE OIL 1000 Q.ty 1g**



**3**

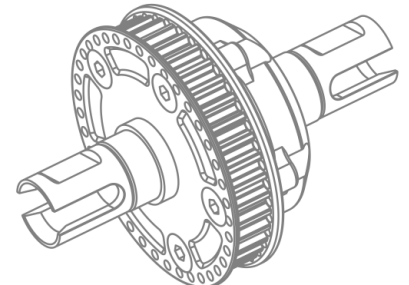


**4**



If the gears are aligned the 2 sides of the Diff should close easily.

**DON'T FORCE IT TO CLOSE**



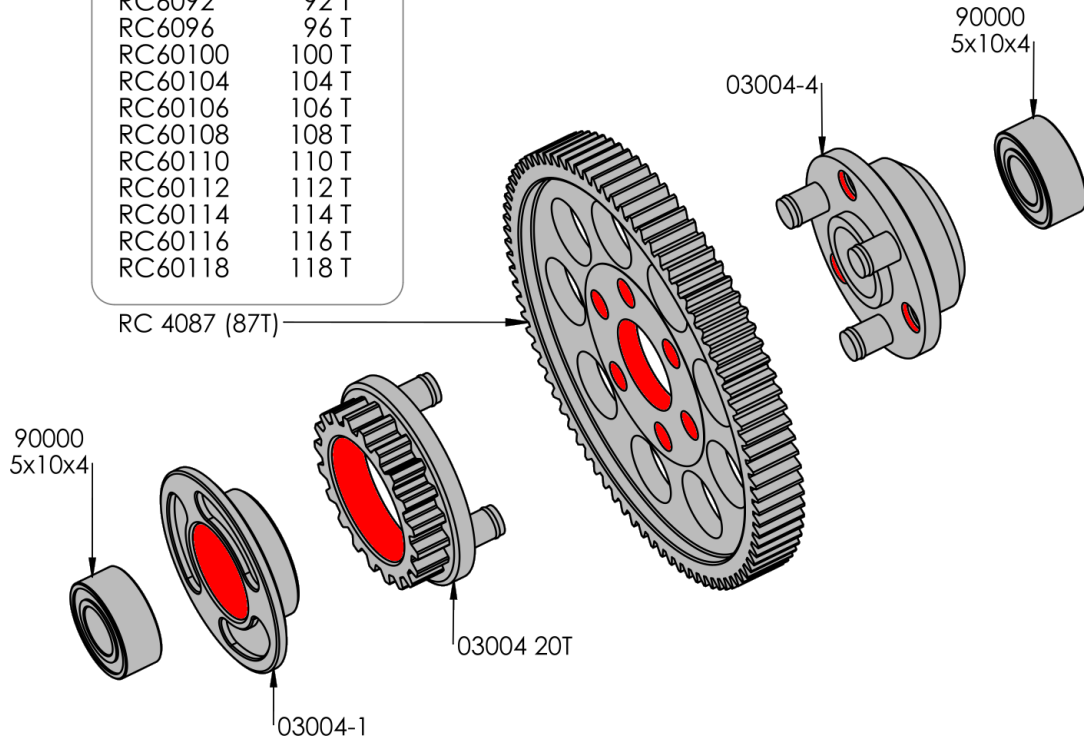
**OPTIONAL**

**SPUR GEAR P48**

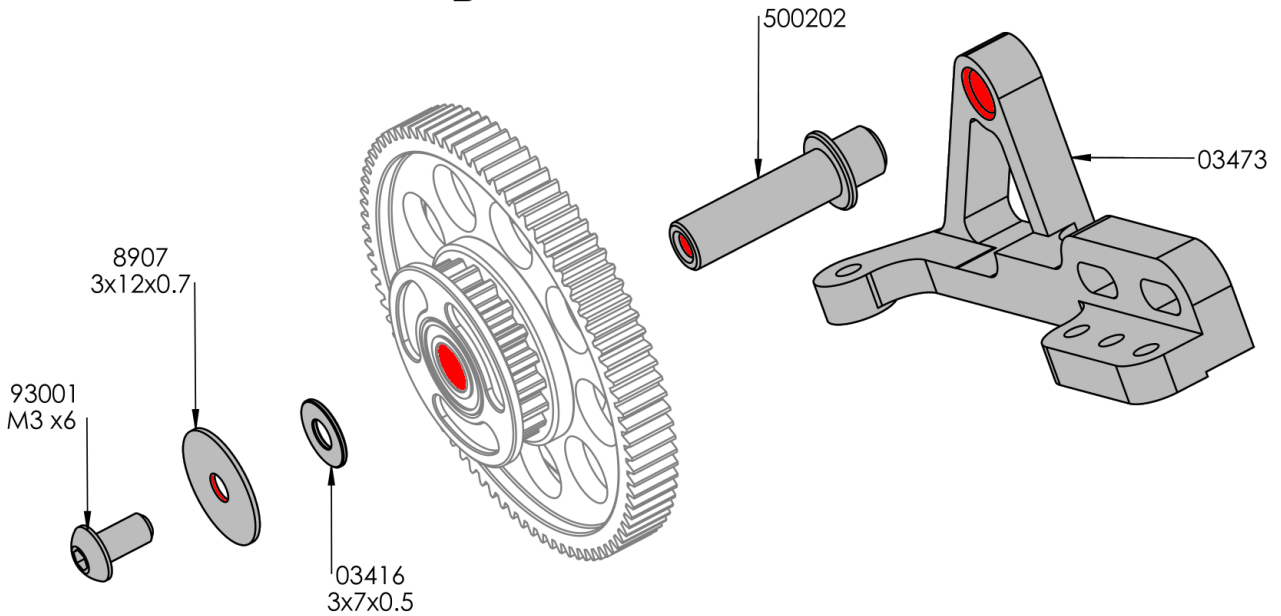
RC4078	78 T
RC4084	84 T
RC4087	87 T

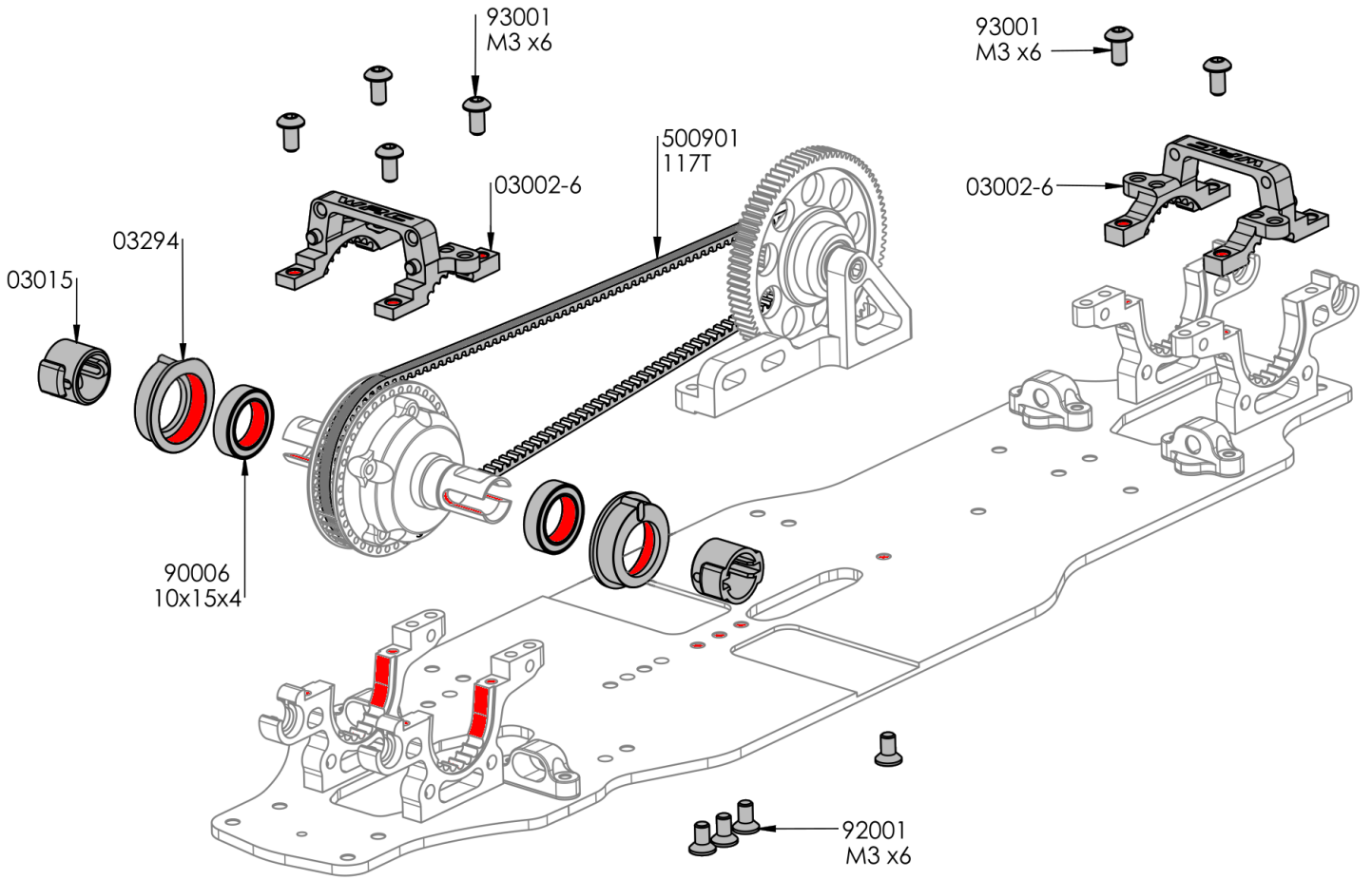
**SPUR GEAR P64**

RC6092	92 T
RC6096	96 T
RC60100	100 T
RC60104	104 T
RC60106	106 T
RC60108	108 T
RC60110	110 T
RC60112	112 T
RC60114	114 T
RC60116	116 T
RC60118	118 T

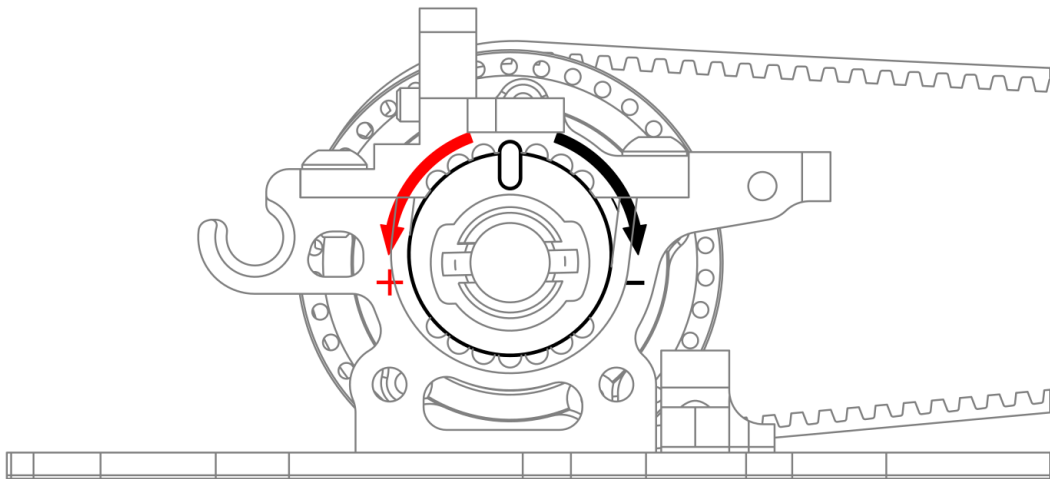


This side towards bearing



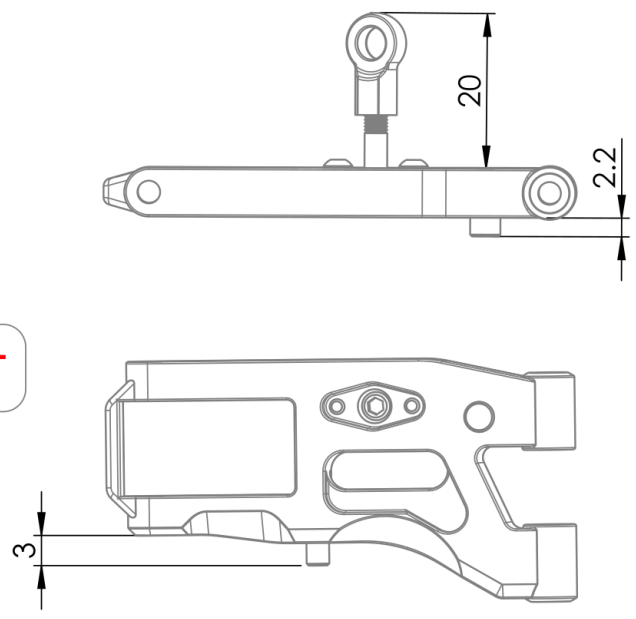
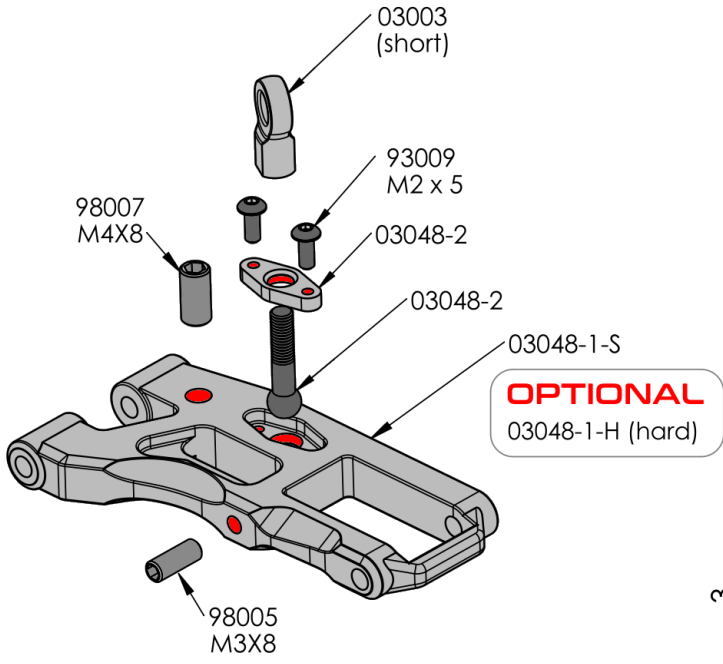


**FRONT BELT ADJUSTMENT**



## Front Lower Arms

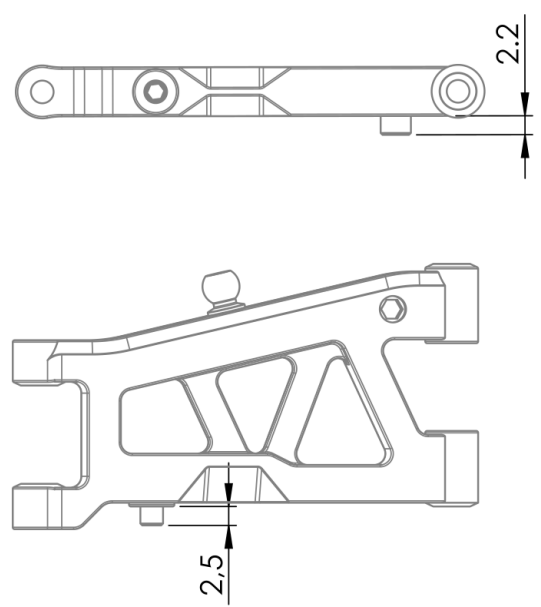
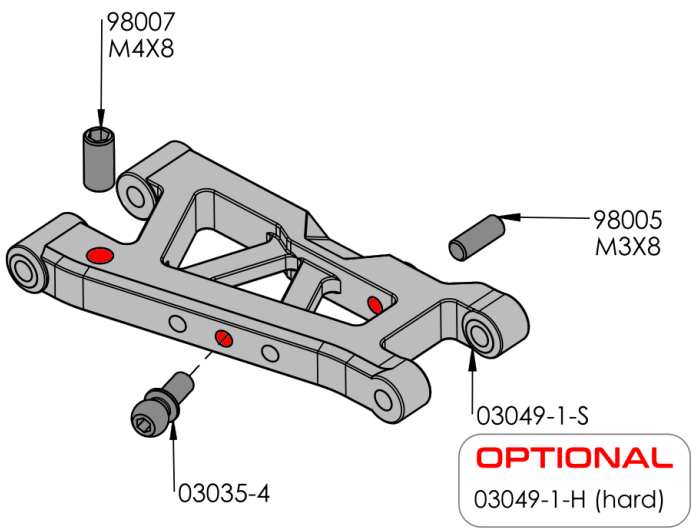
### X2



**LEFT SIDE SHOWN ABOVE**

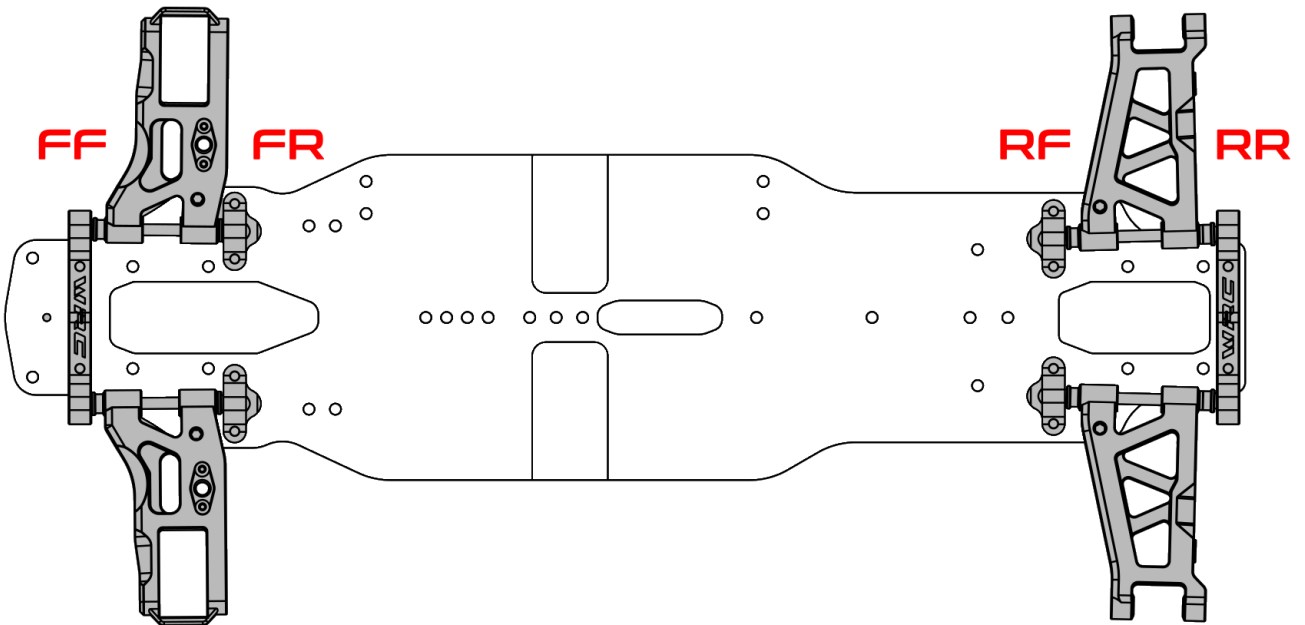
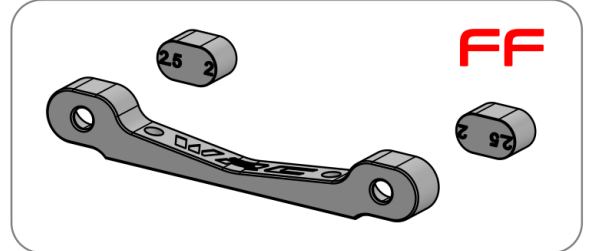
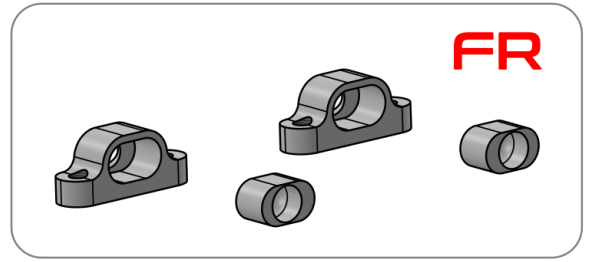
## Rear Lower Arms

### X2

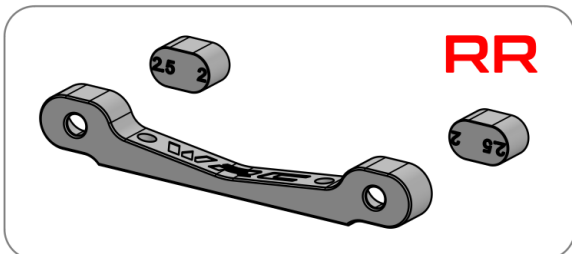
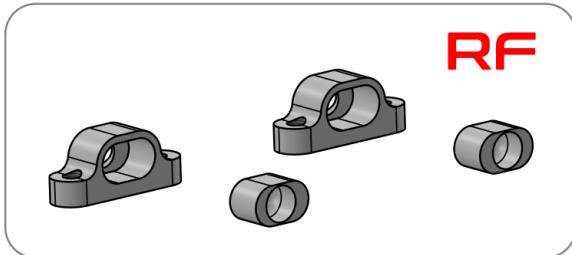


## Front Arm Angles Diagram

		FR MOUNT					
		43,5	44,5	45	46	47	47,5
FF MOUNT		0°	0,5°	1°	1,5°	2°	3°
		-0,5°	0°	0,5°	1°	1,5°	2°
		-1°	-0,5°	0°	0,5°	1°	1,5°
		-1,5°	-1°	-0,5°	0°	0,5°	1°
		-2°	-1,5°	-1°	-0,5°	0°	0,5°
		-3°	-2°	-1,5°	-1°	-0,5°	0°

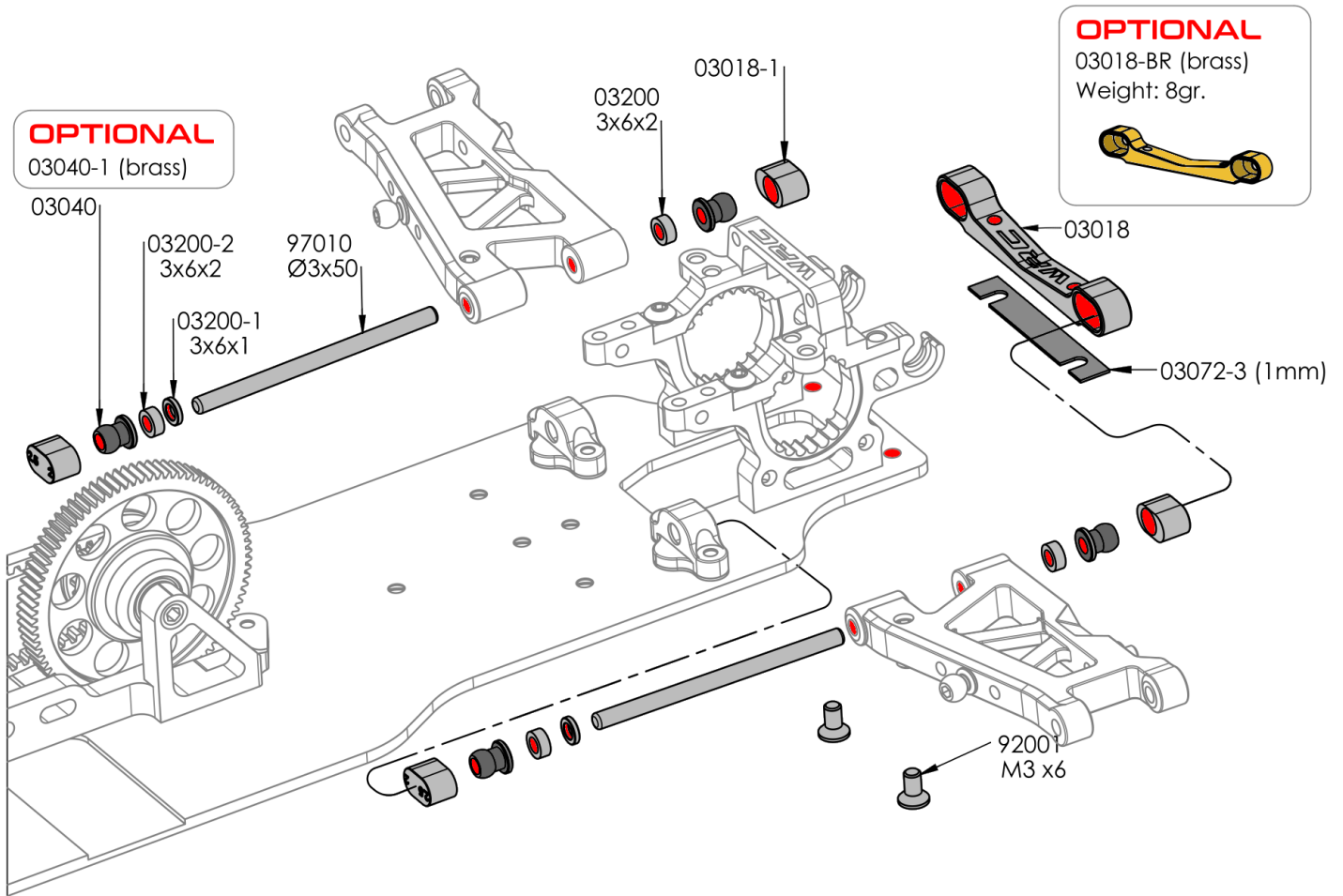


## Rear Arm Angles Diagram



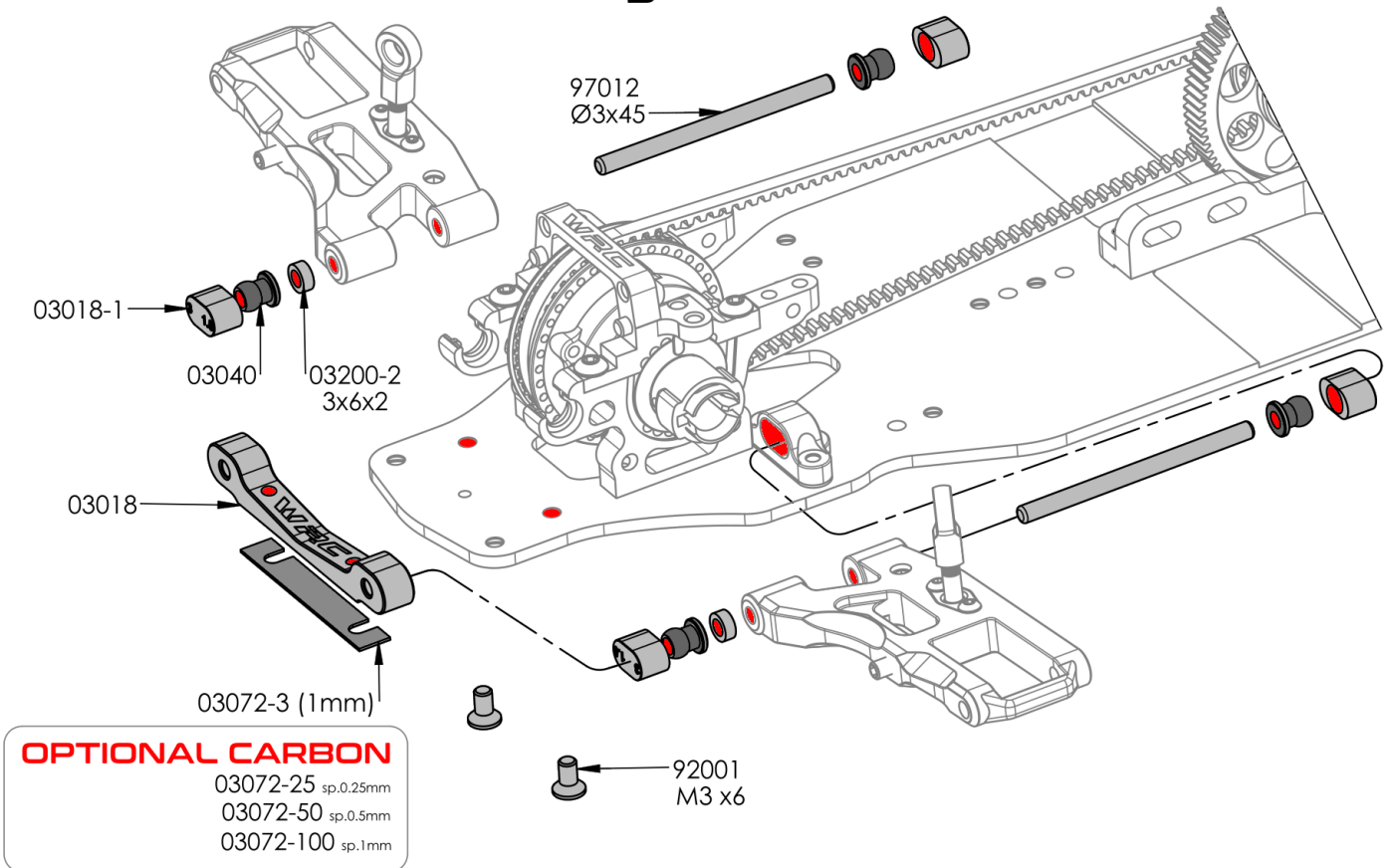
		RF MOUNT					
		39,5	40,5	41	42	43	43,5
RR MOUNT		2,5°	2°	1,5°	1°	0,5°	0°
		3°	2,5°	2°	1,5°	1°	0,5°
		3,5°	3°	2,5°	2°	1,5°	1°
		4°	3,5°	3°	2,5°	2°	1,5°
		4,5°	4°	3,5°	3°	2,5°	2°
		5°	4,5°	4°	3,5°	3°	2,5°

## Rear Lower Arms Mounting



**OPTIONAL**  
03018-BR (brass)  
Weight: 8gr.

## Front Lower Arms Mounting

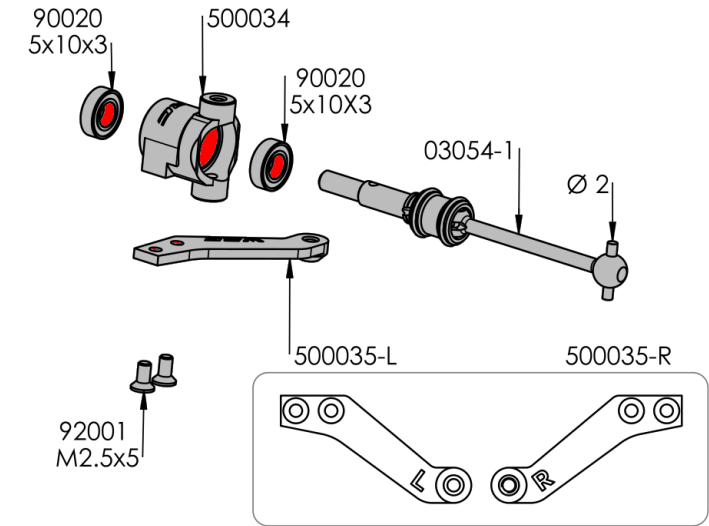


**OPTIONAL CARBON**

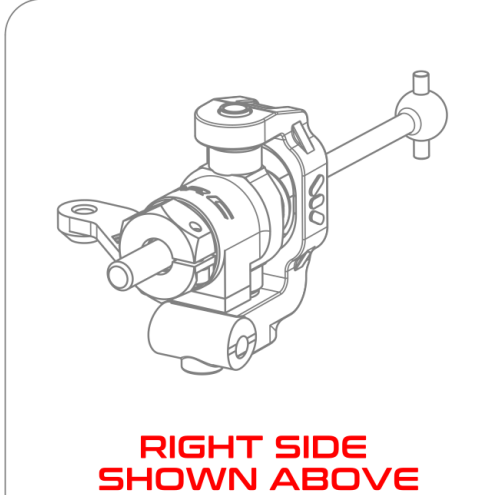
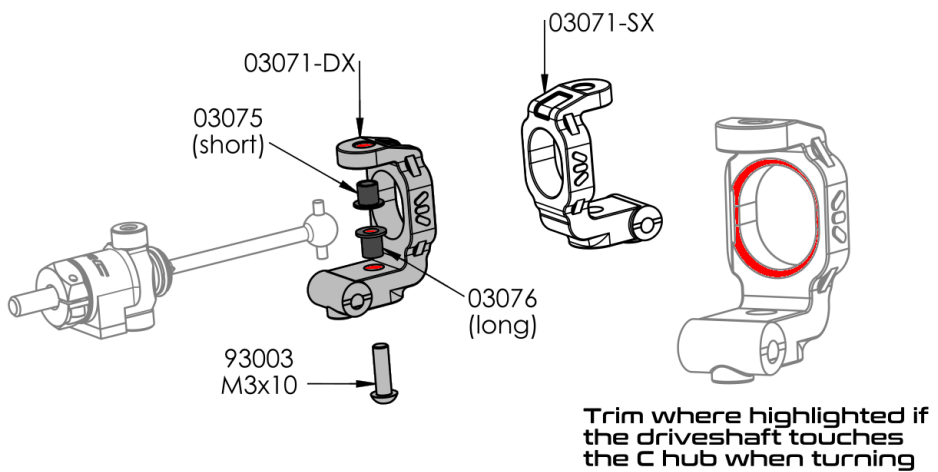
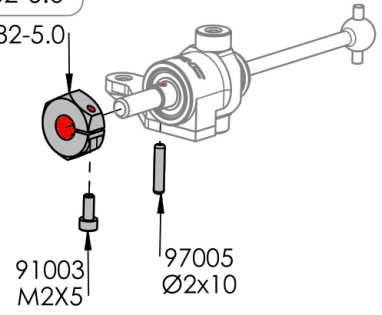
03072-25 sp.0.25mm  
03072-50 sp.0.5mm  
03072-100 sp.1mm

## Left & Right Front Hub

### X2

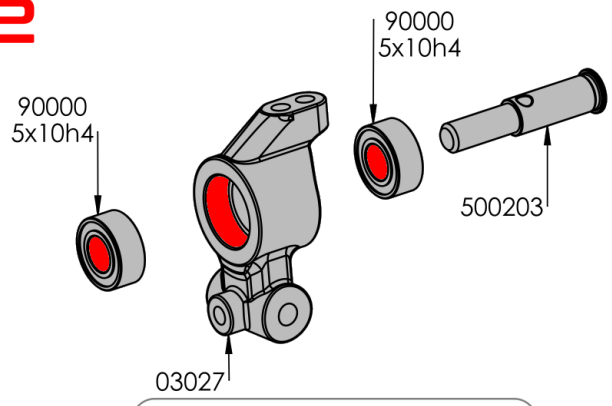


**OPTIONAL**  
03082-5.5  
03082-6.0  
03082-5.0



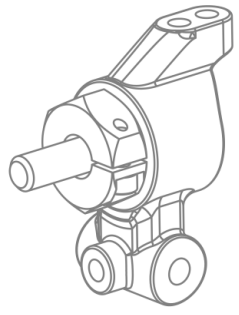
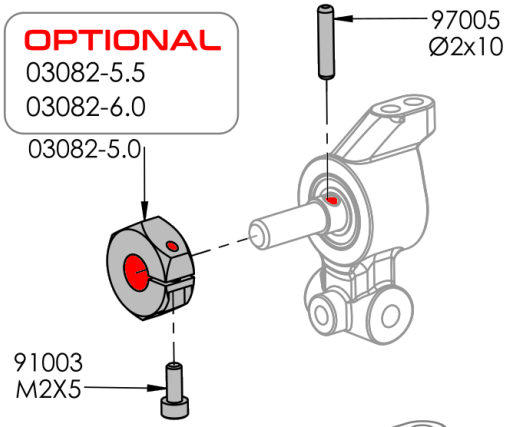
## Rear Hub

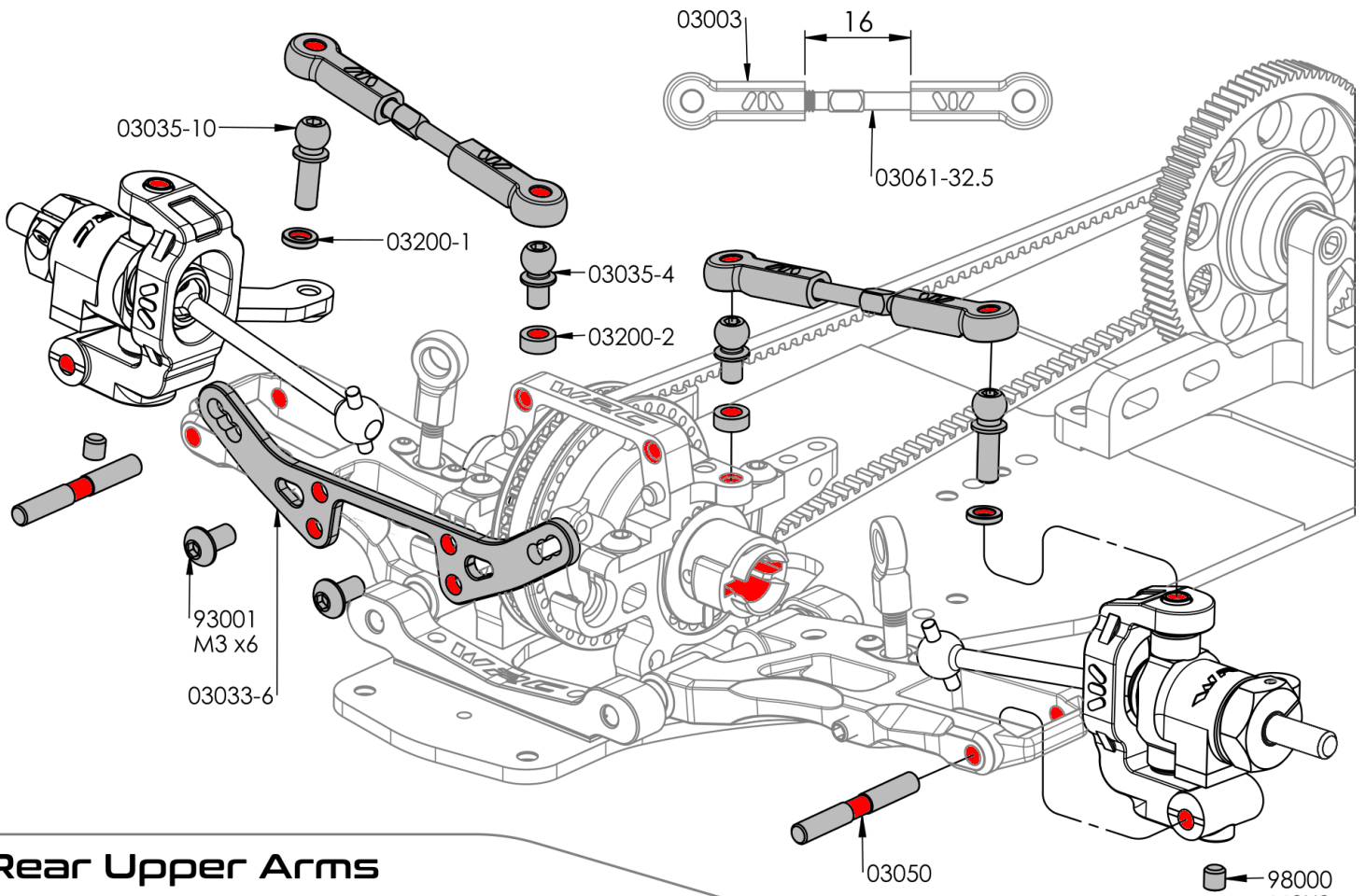
### X2



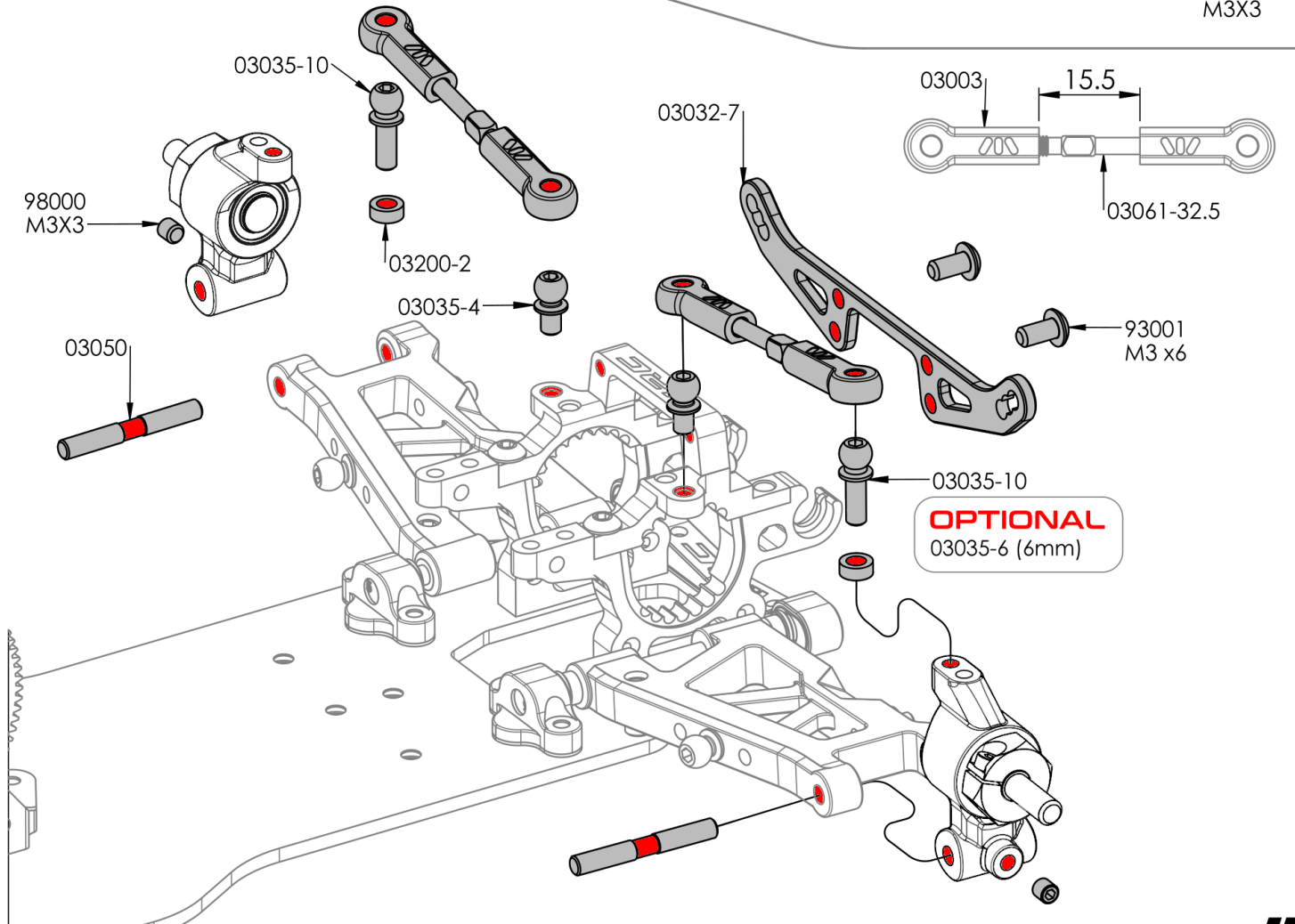
**OPTIONAL**  
500036  
ALU 7075 T6

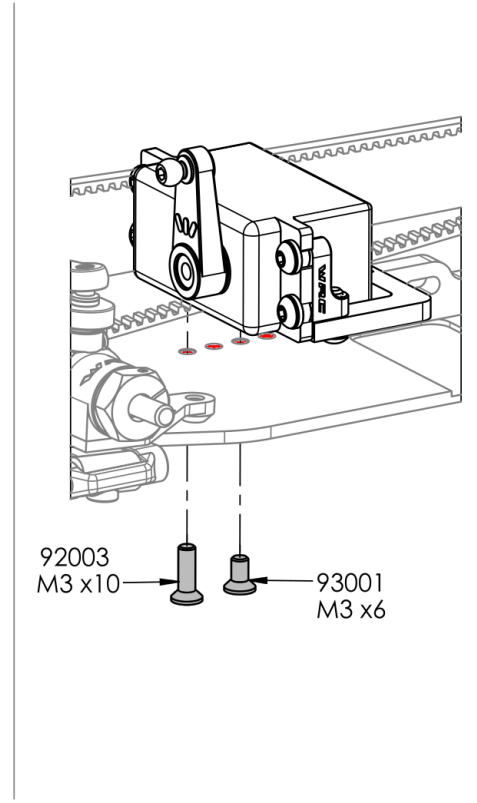
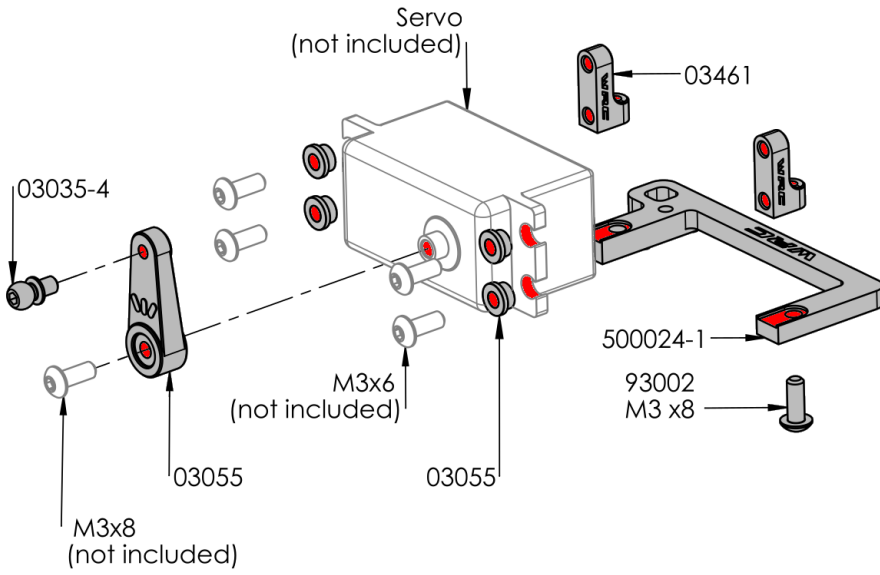
**OPTIONAL**  
03082-5.5  
03082-6.0  
03082-5.0



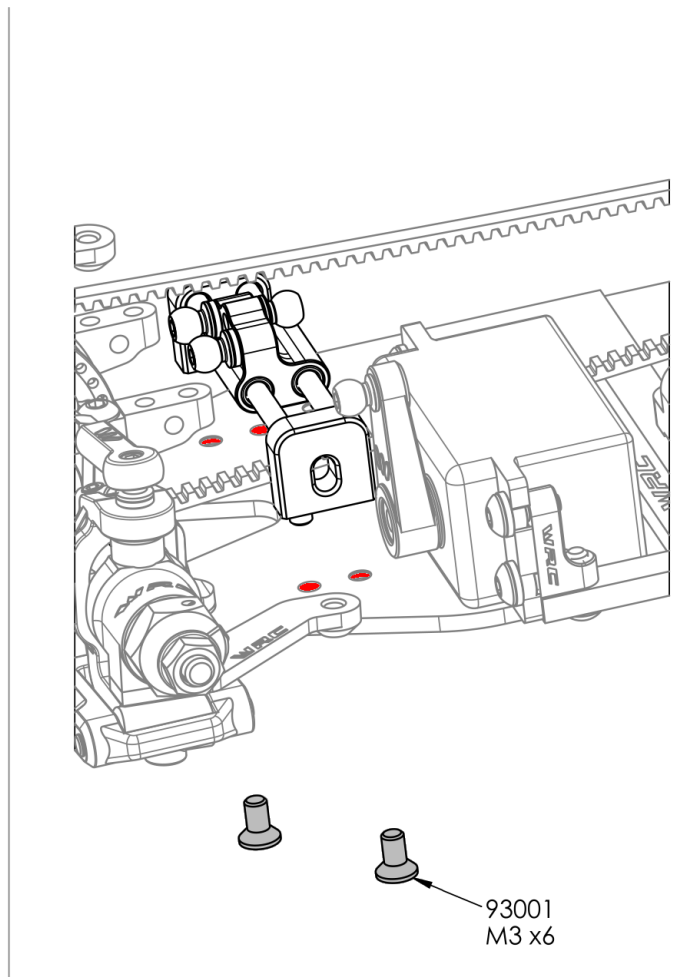
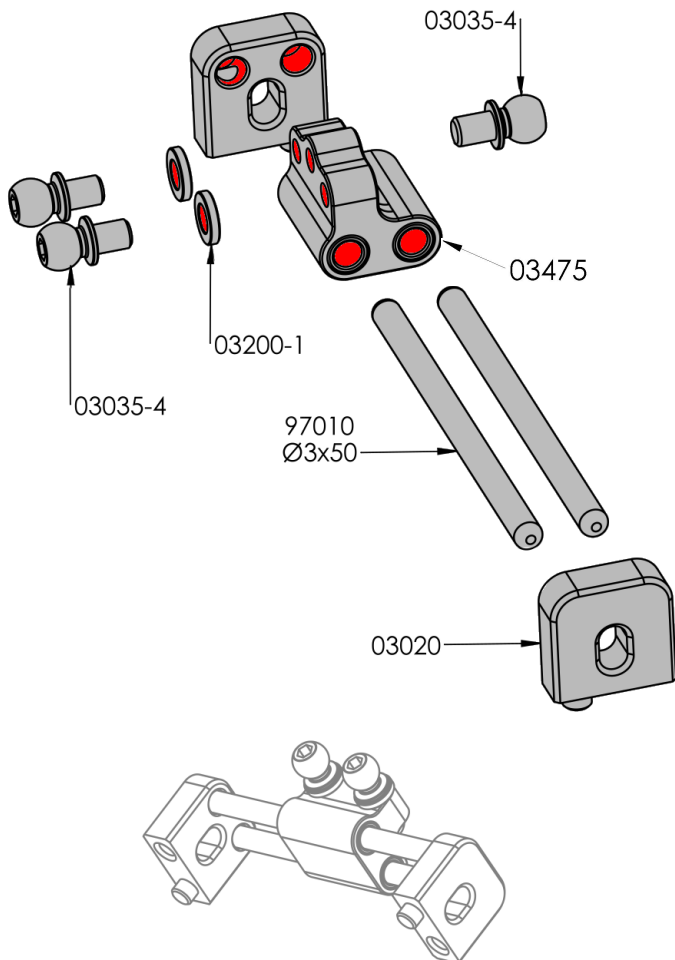


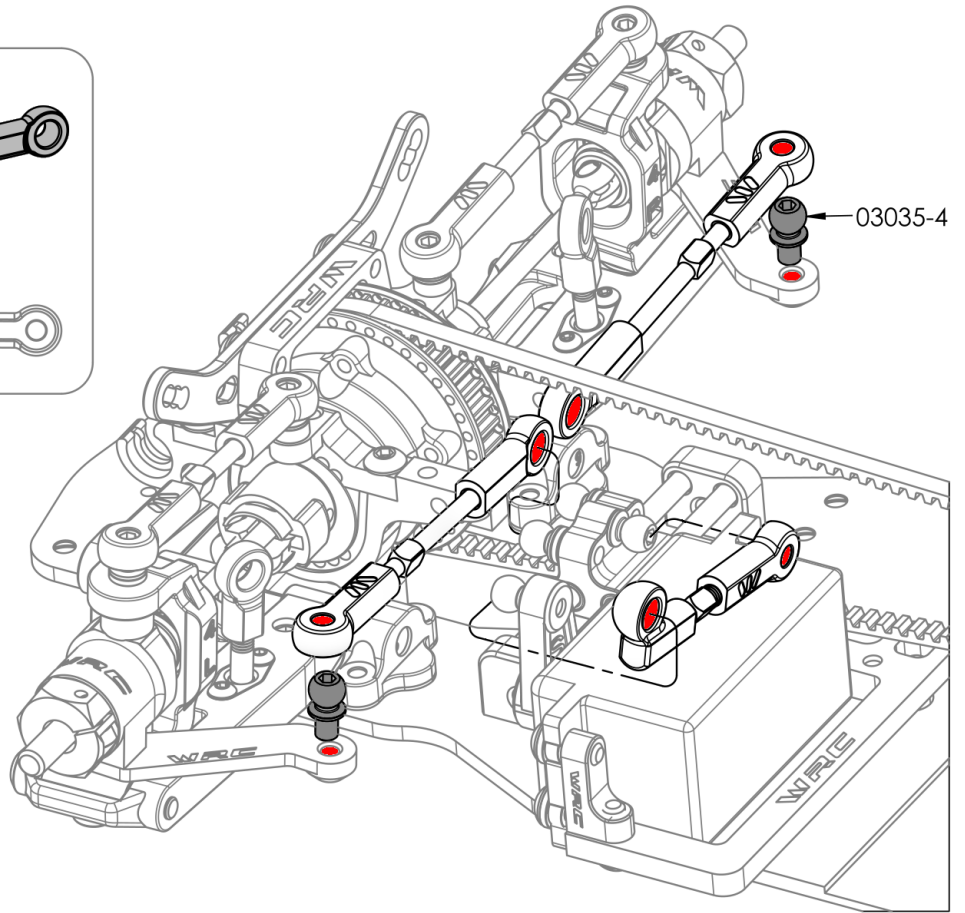
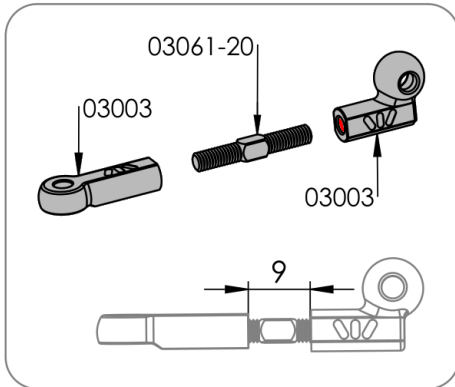
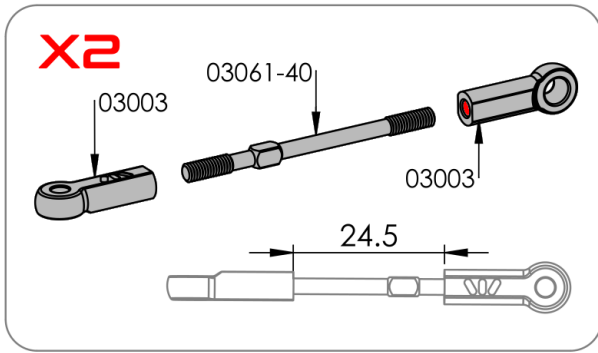
## Rear Upper Arms



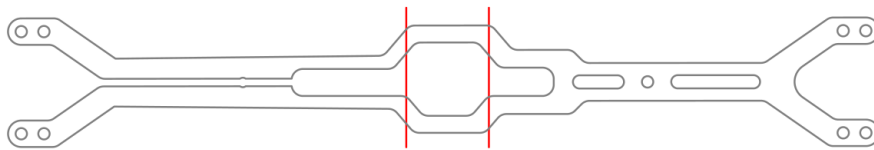


## Steering Levers



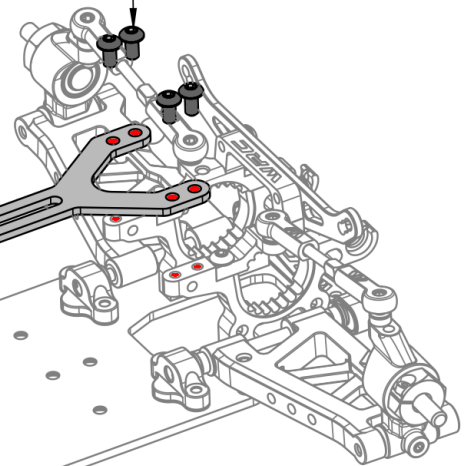


## Upperdeck



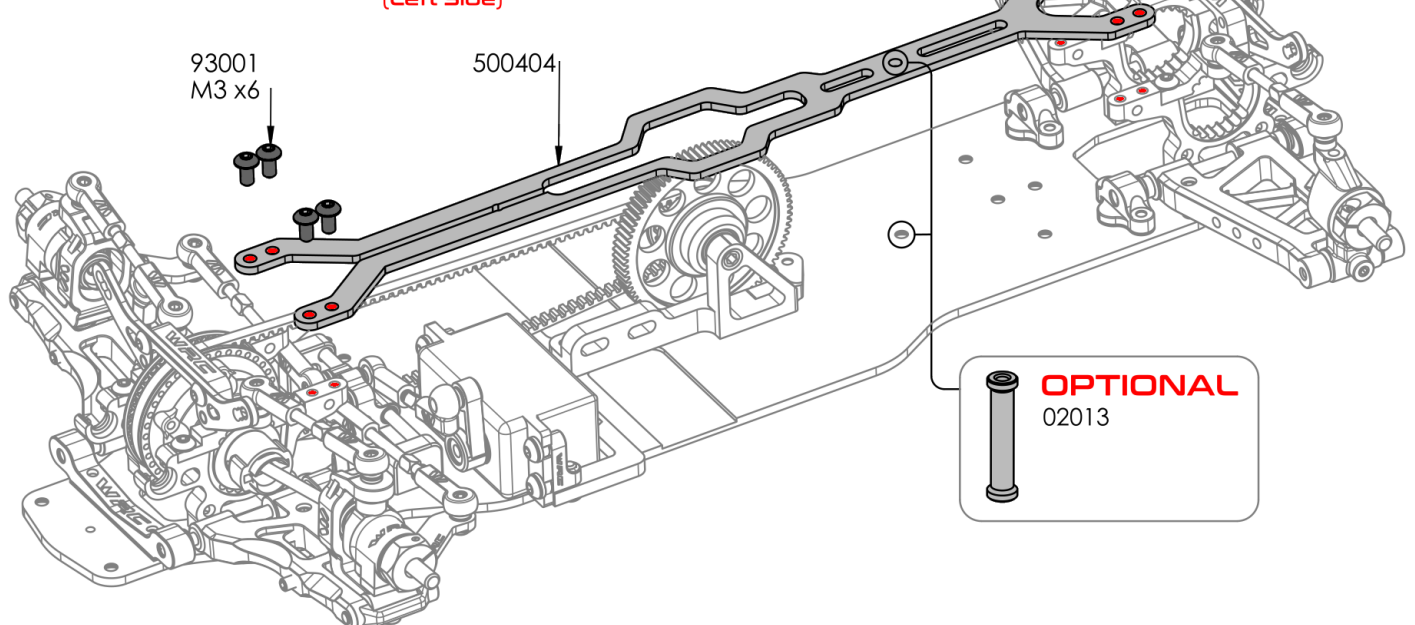
**Check Orientation:  
Tighter Side towards Engine  
(Left Side)**

93001  
M3 x6



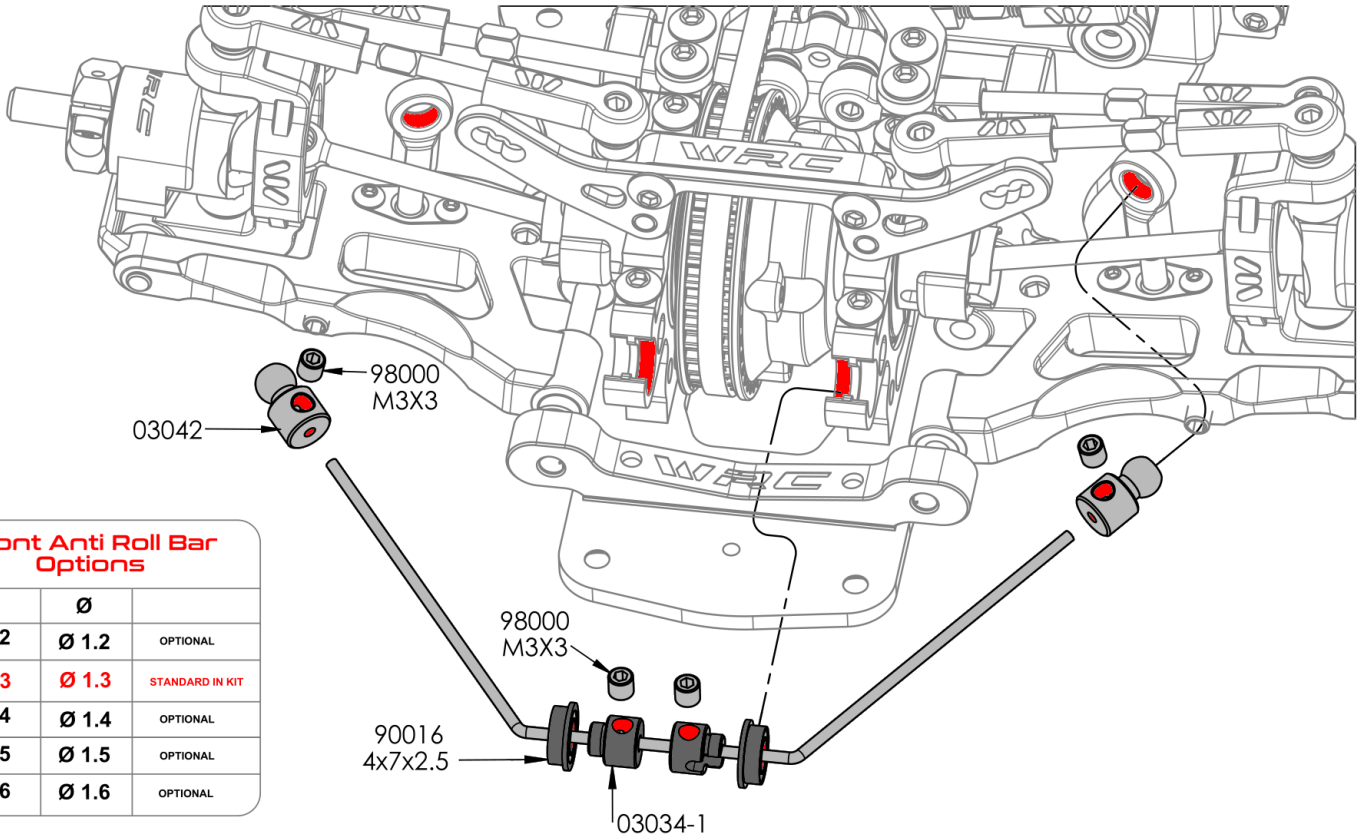
93001  
M3 x6

500404



**OPTIONAL**  
02013

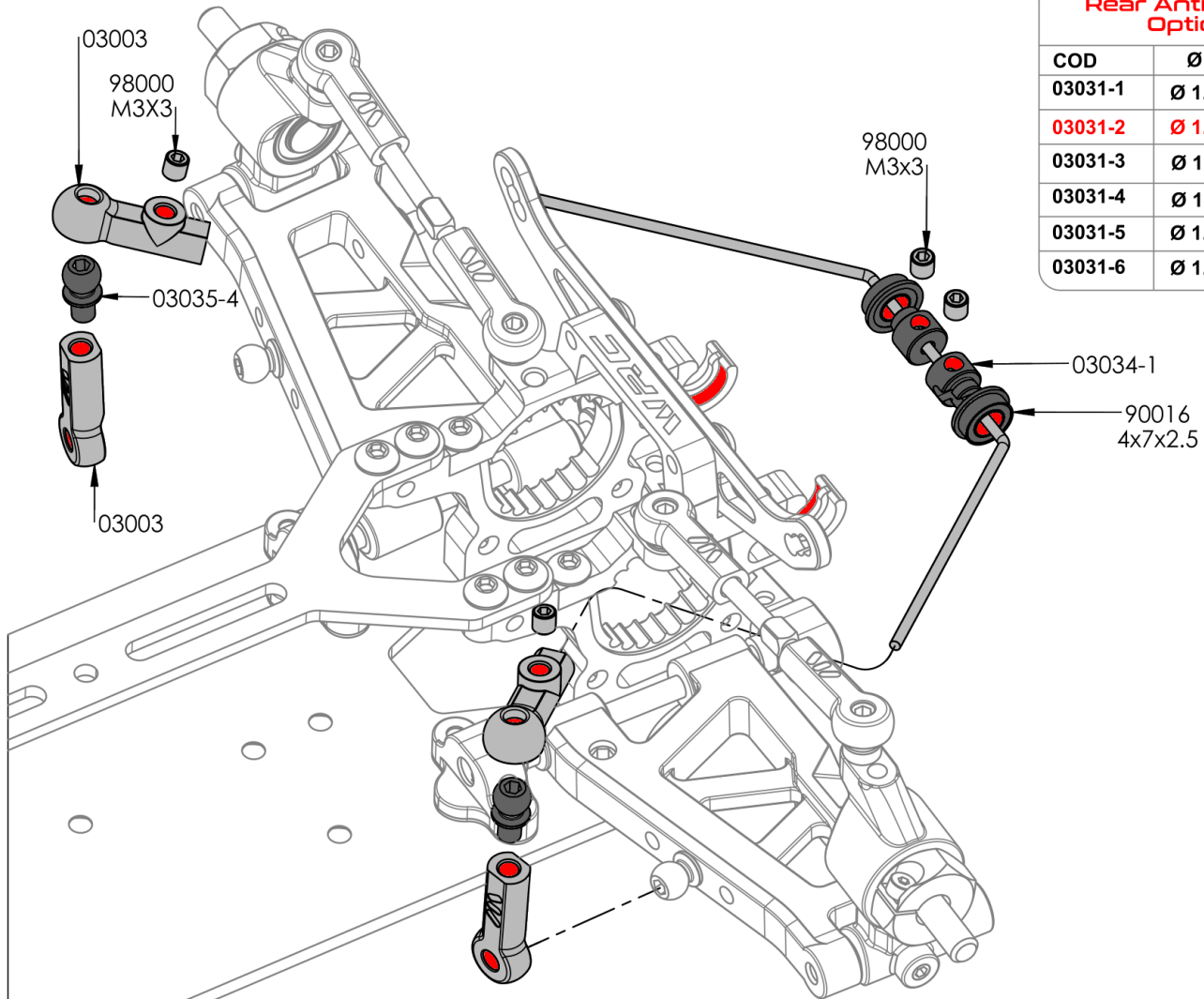
## Front Anti Roll Bar



### Front Anti Roll Bar Options

COD	Ø	
03031-2	Ø 1.2	OPTIONAL
<b>03031-3</b>	<b>Ø 1.3</b>	<b>STANDARD IN KIT</b>
03031-4	Ø 1.4	OPTIONAL
03031-5	Ø 1.5	OPTIONAL
03031-6	Ø 1.6	OPTIONAL







## Rear Anti Roll Bar

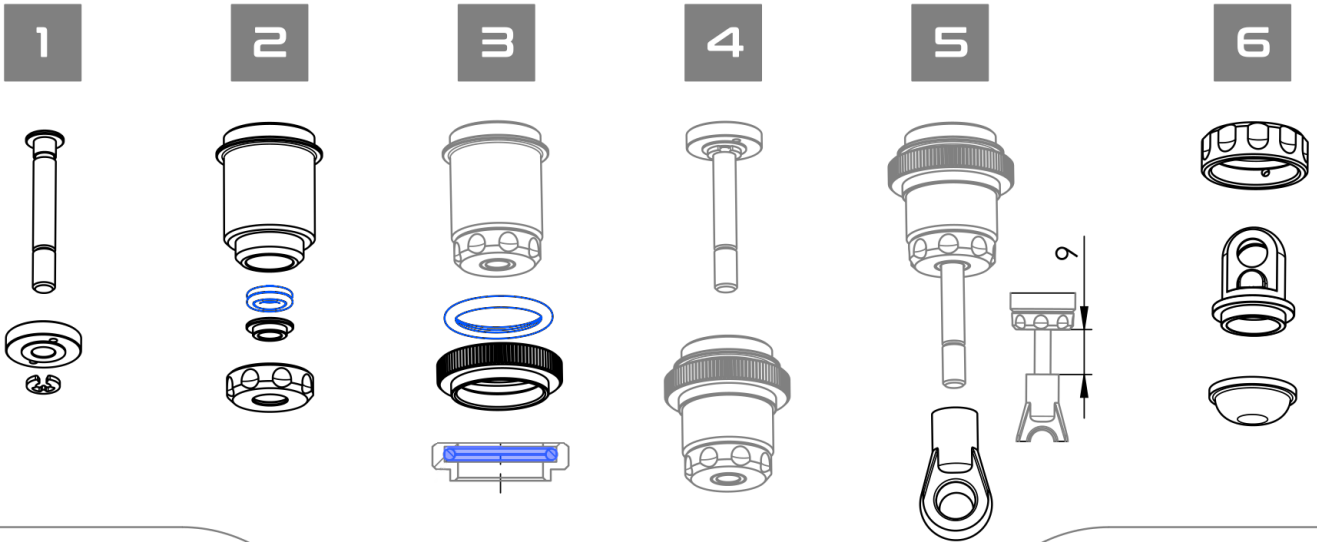
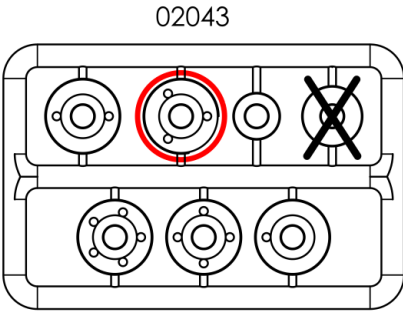
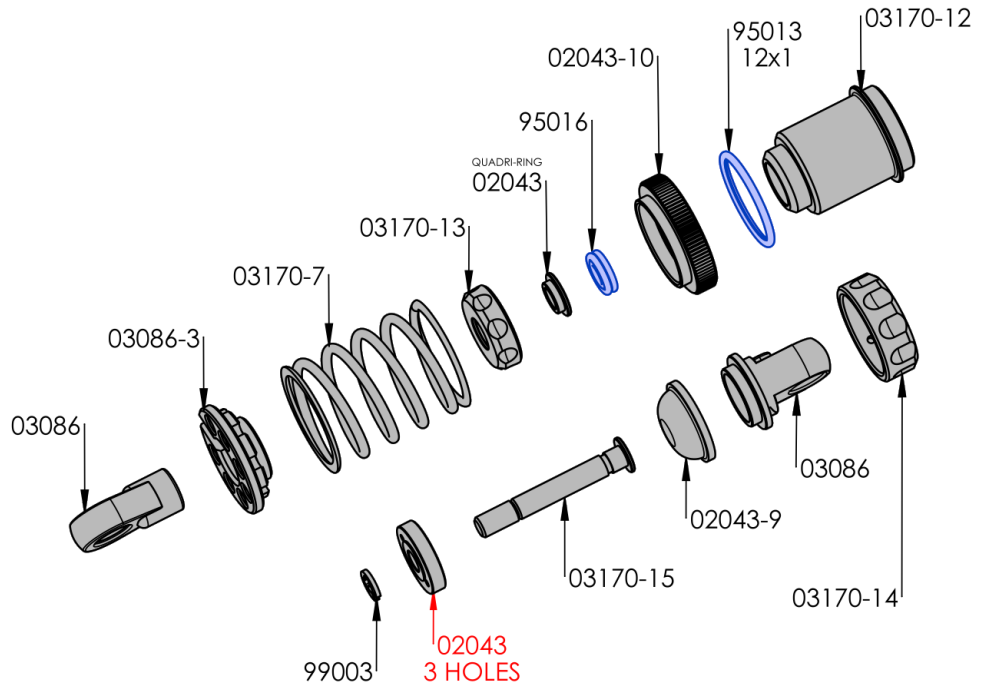


### Rear Anti Roll Bar Options

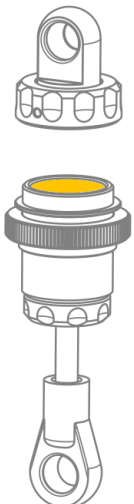
COD	Ø	
03031-1	Ø 1.1	OPTIONAL
<b>03031-2</b>	<b>Ø 1.2</b>	<b>STANDARD IN KIT</b>
03031-3	Ø 1.3	OPTIONAL
03031-4	Ø 1.4	OPTIONAL
03031-5	Ø 1.5	OPTIONAL
03031-6	Ø 1.6	OPTIONAL

## Shock Absorbers

SPRINGS			
COD.	Force (lb)	COLOUR	
03170-5	2.1	BLACK	
03170-6	2.2	YELLOW	
03170-7	2.3	RED (IN KIT)	
03170-8	2.6	BLUE	
PROGRESSIVE SPRINGS			
03170-9	1.3-2.9	FUCHSIA	
03170-10	1.4-3.5	GREEN	



7



### SHOCK FILLING

Fully extend the piston rod so the piston is at the bottom of the shock body.

Hold the shock upright and fill the shock body with shock oil as in the picture.

Let the oil settle and allow air bubbles to rise to the top. Slowly move the piston up and down until no more air bubbles appear.

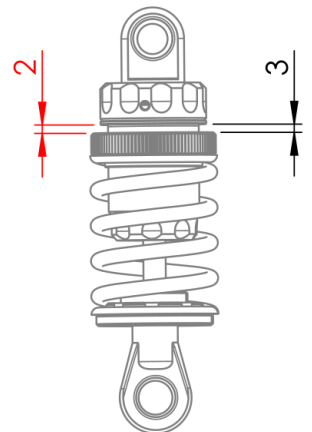
Add shock oil as necessary. Pull the piston rod most of the way out of the shock bod.

Let the shock rest for 5 minutes to allow the air bubbles to scape.

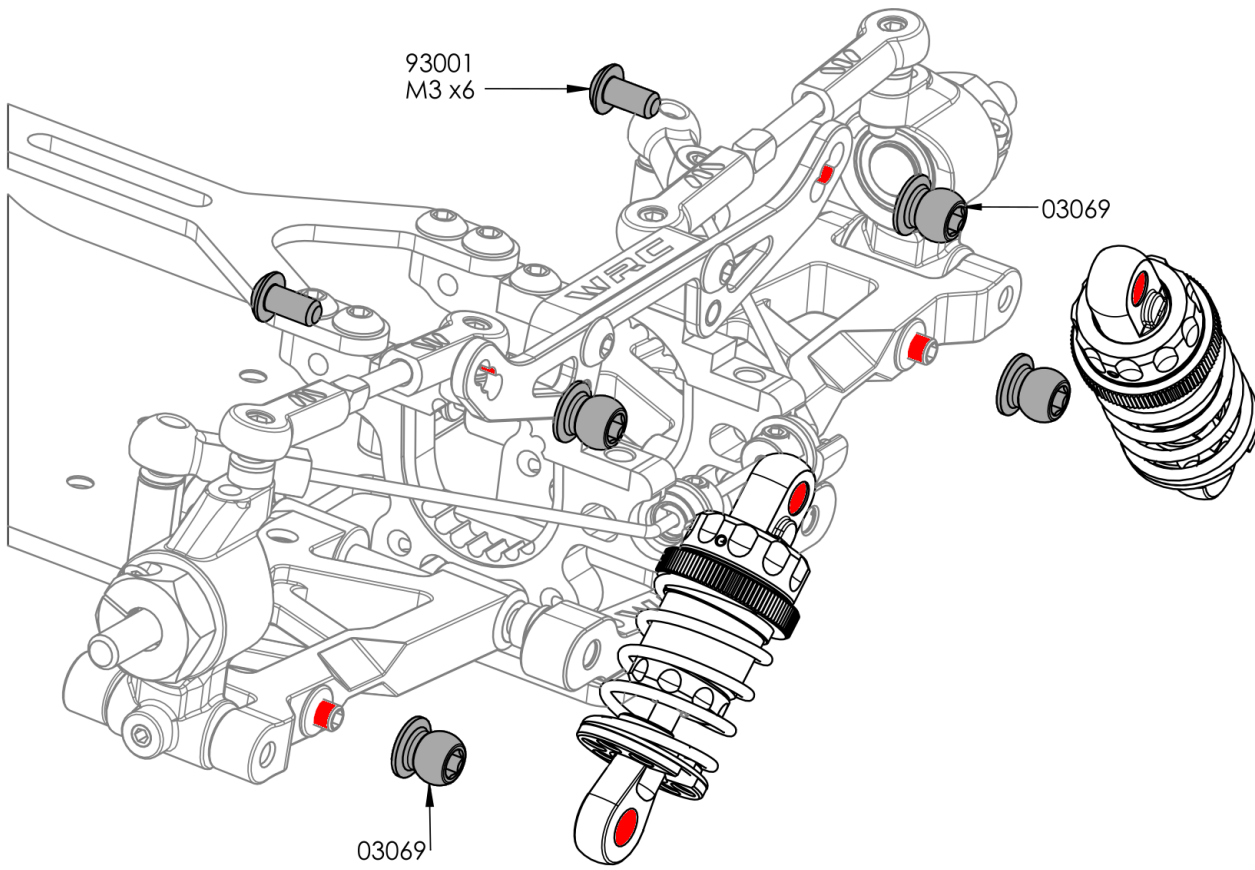
P. ONE HIGH PERFORMANCES SHOCKS OIL	
CODE	CST
SO-350	350
SO-400	400 (IN KIT)
SO-450	450
SO-500	500
SO-550	550
SO-600	600
SO-650	650
SO-700	700
SO-800	800

8

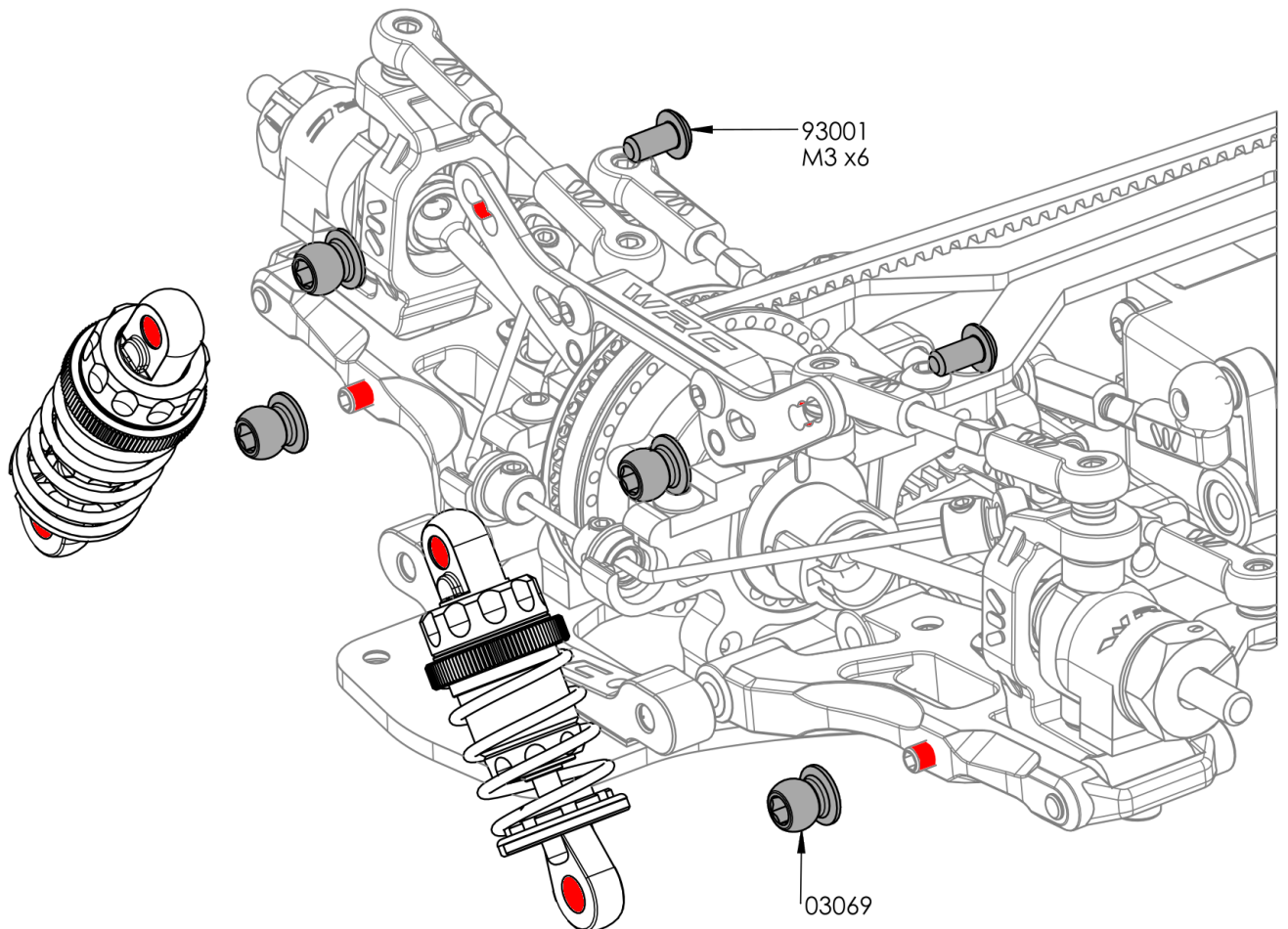
FRONT REAR

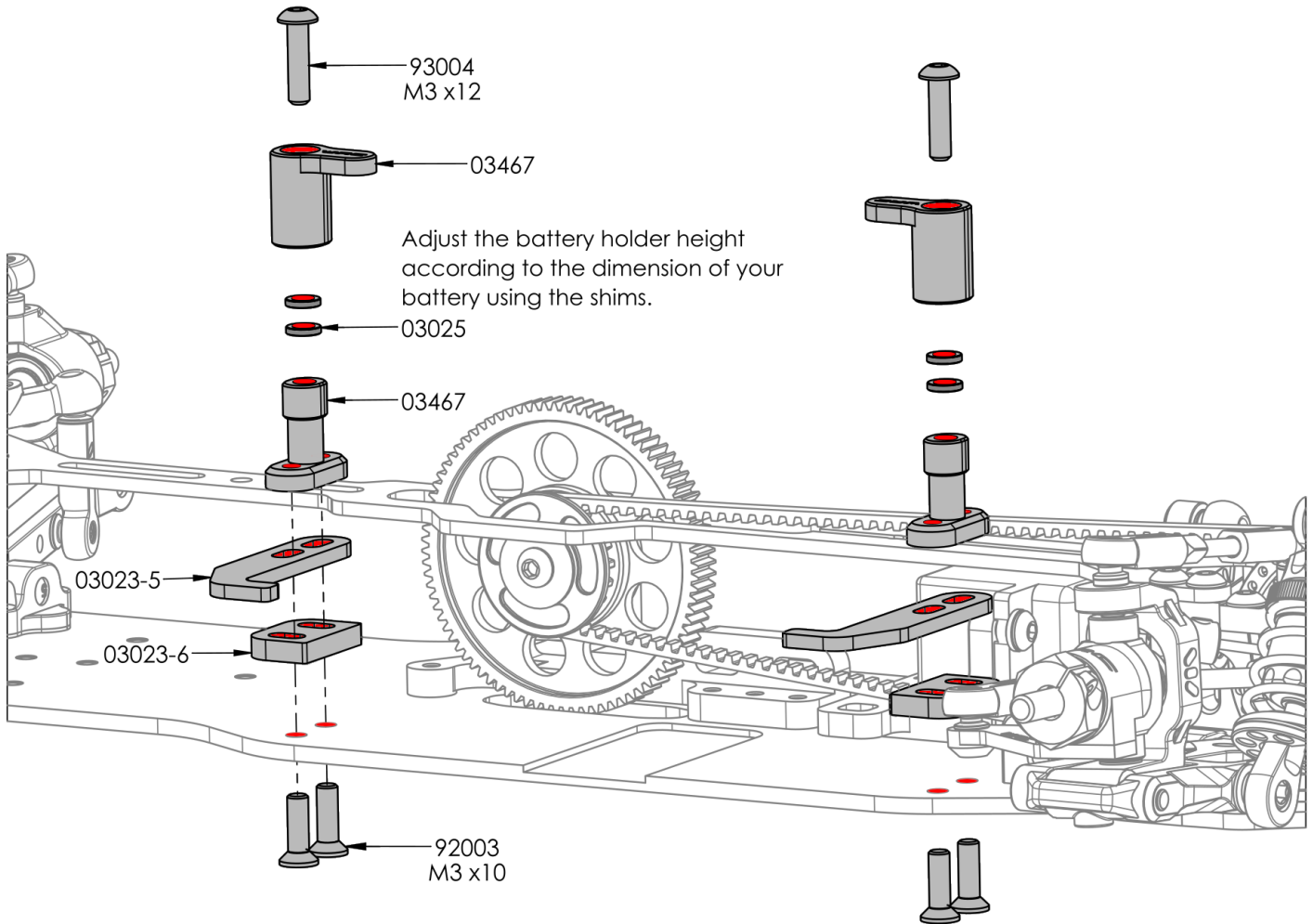


## Rear Suspensions

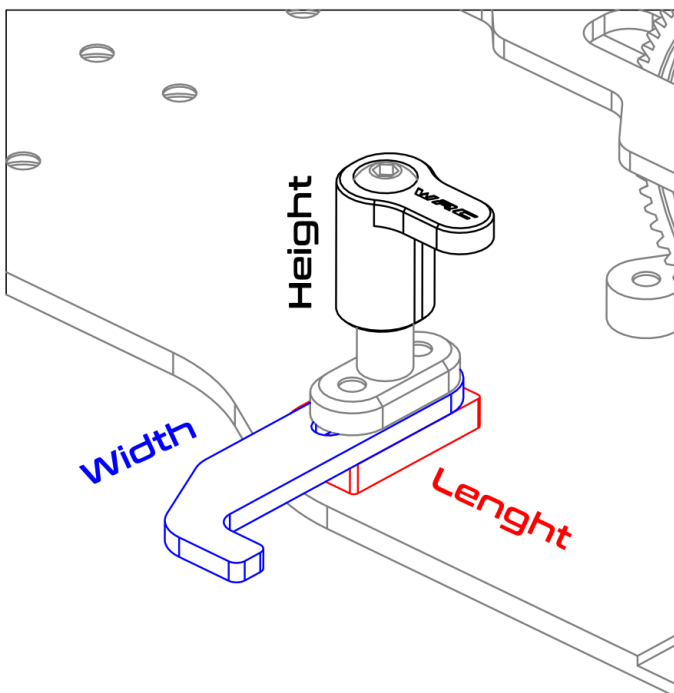


## Front Suspensions





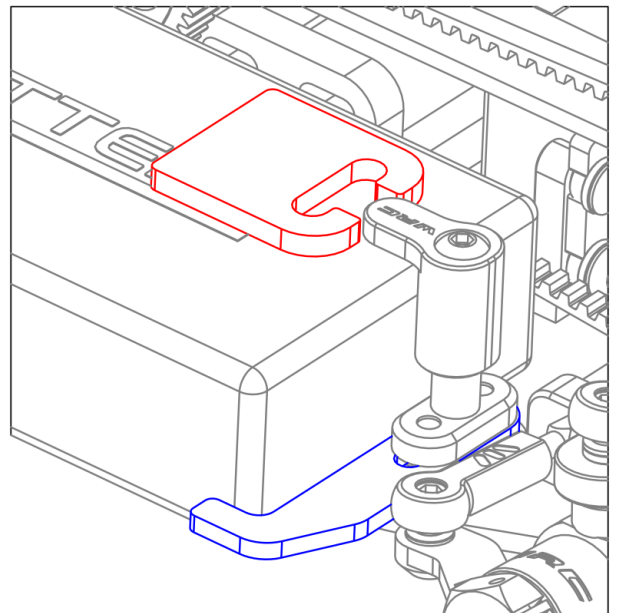
## Battery Holder Adjustments



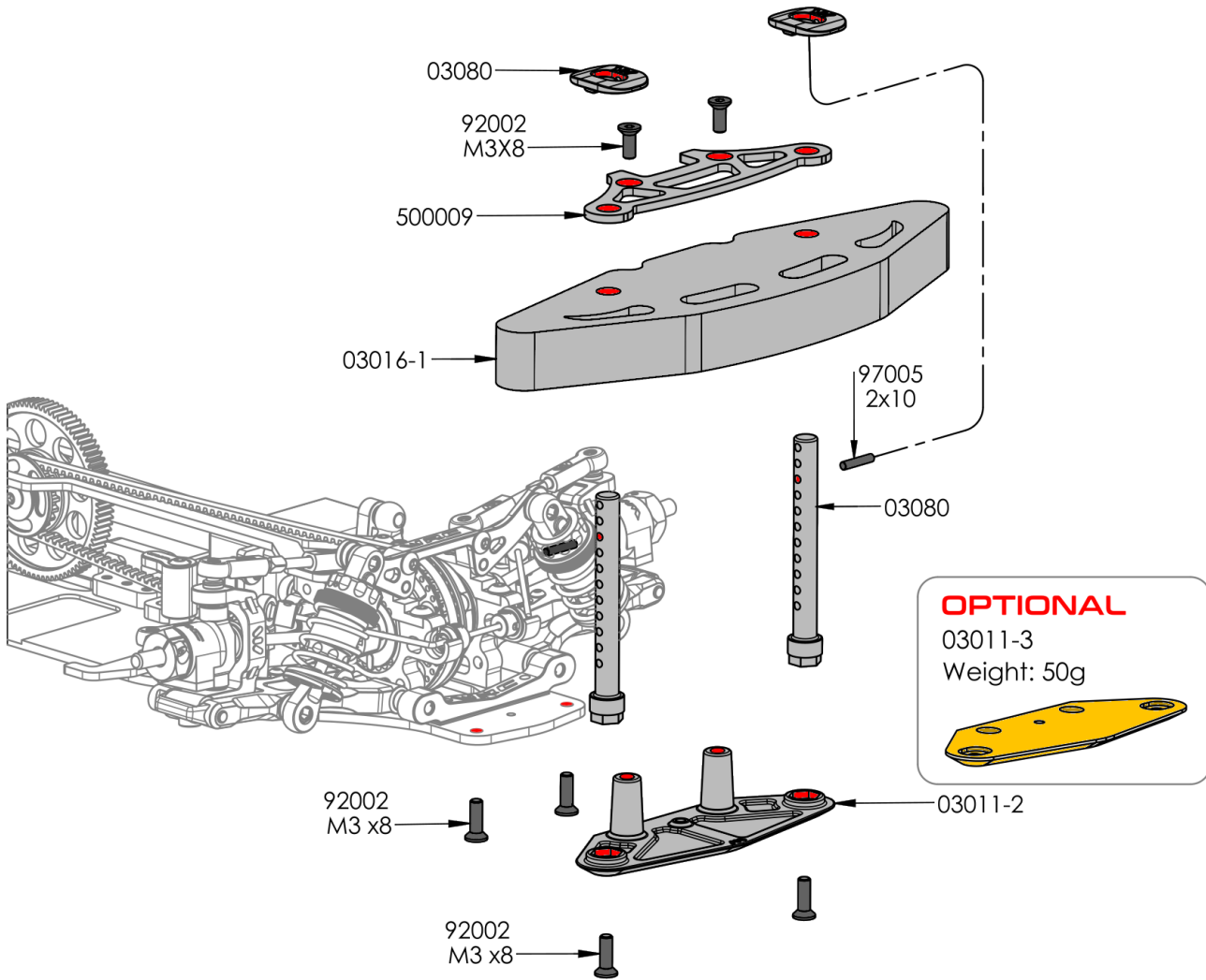
## OPTIONAL

COD. 500407

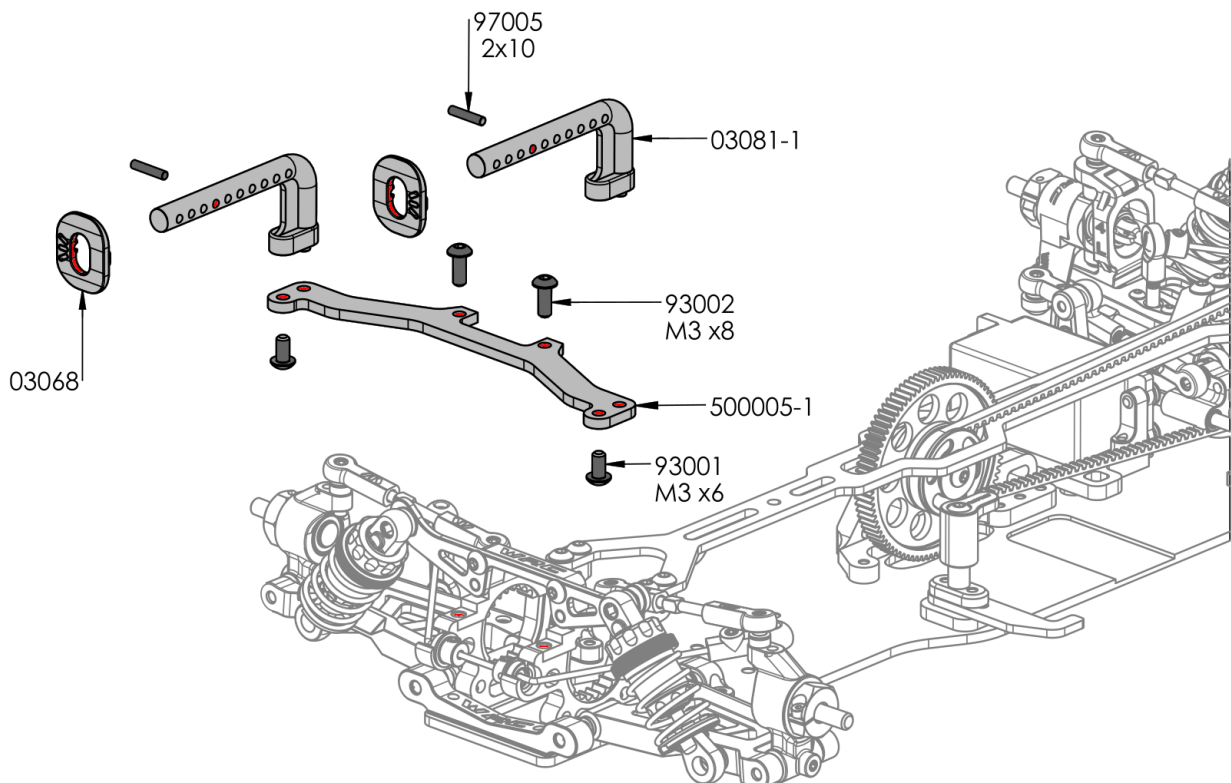
This **optional battery holder** is designed to hold the battery laterally, it's fixed to the battery using double side tape. By using this part you can delete the **lateral battery holder**.

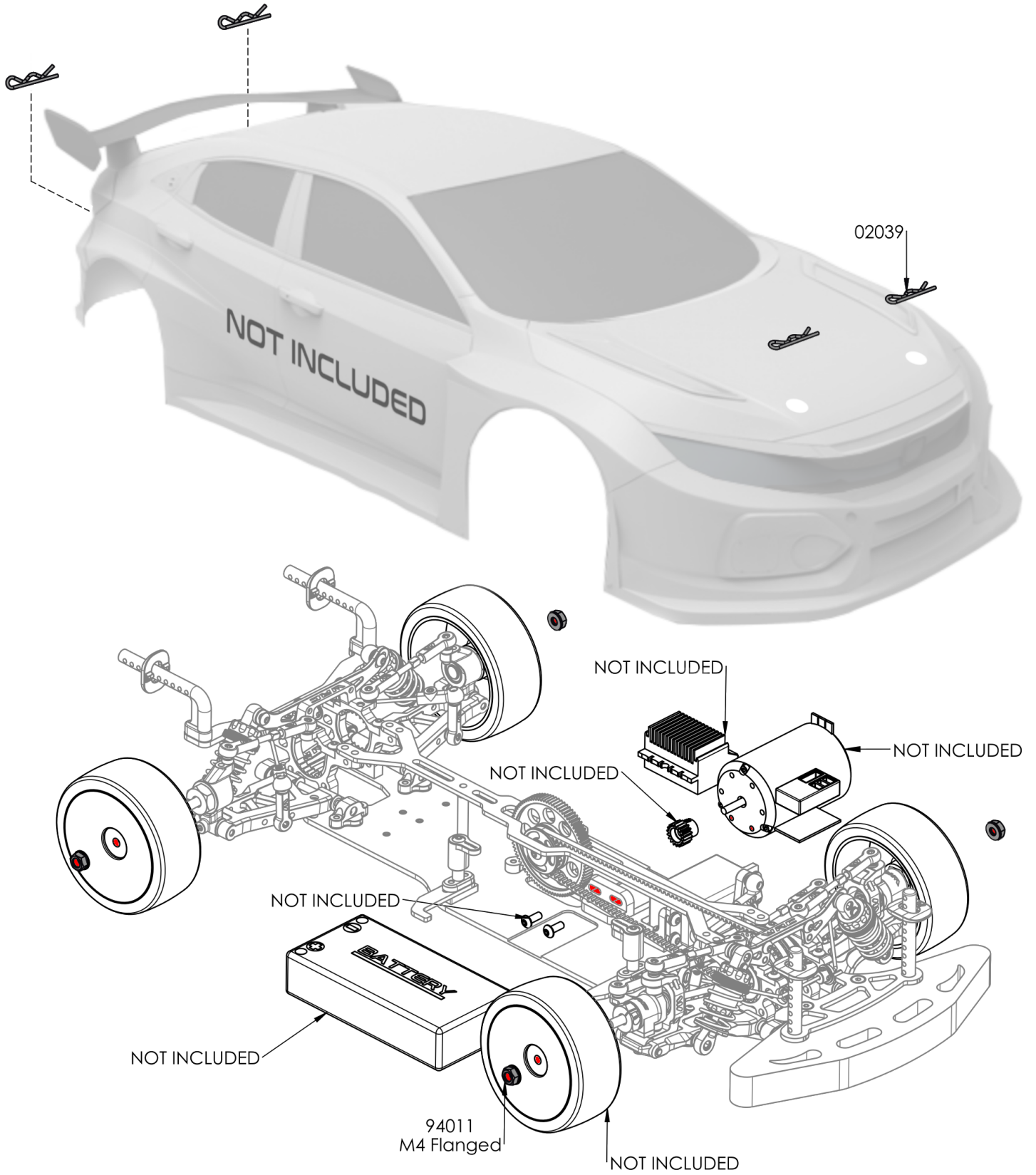


## Front Body Support and Bumper



## Rear Body Support





NAME \_\_\_\_\_  
 DATE \_\_\_\_\_  
 TRACK \_\_\_\_\_

### TRACK CONDITION

SURFACE	<input type="checkbox"/> SMOOTH	<input checked="" type="checkbox"/> MEDIUM	<input type="checkbox"/> BUMPY
SIZE	<input type="checkbox"/> TIGHT	<input checked="" type="checkbox"/> MEDIUM	<input type="checkbox"/> FAST
TRACTION	<input type="checkbox"/> LOW	<input checked="" type="checkbox"/> MEDIUM	<input type="checkbox"/> HIGH

### TRANSMISSION

DIFFERENTIAL OIL	200'000		
PINION	40	SPUR GEAR	87
FINAL DRIVE RATIO	4.078		

### SHOCKS

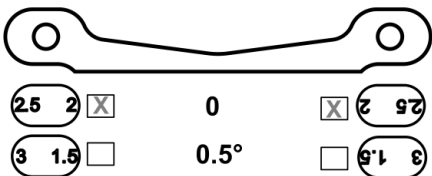
	FRONT	REAR
SPRING:	RED	RED
OIL:	400	400
PISTON:	3	3
LENGHT /mm	9	9

### ANTI-ROLL BAR

FRONT	1.3	mm
REAR	1.2	mm

### ECCENTRIC BUSHINGS

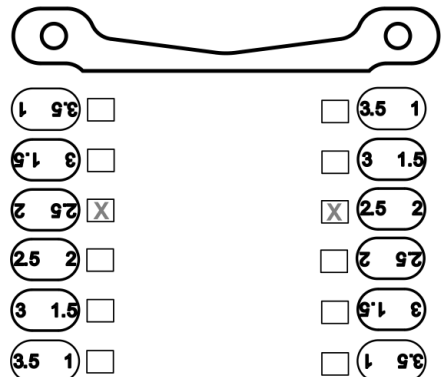
#### FRONT - FRONT



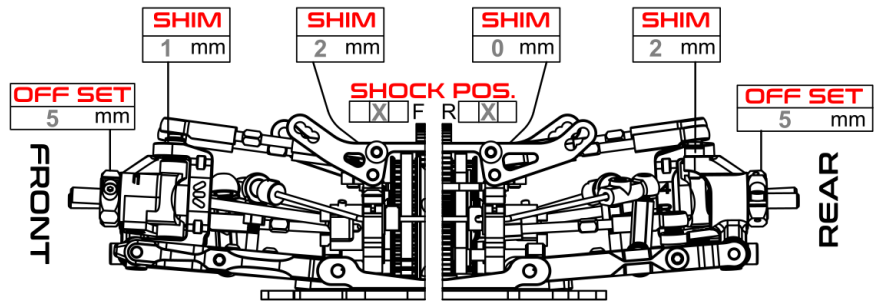
#### REAR - FRONT



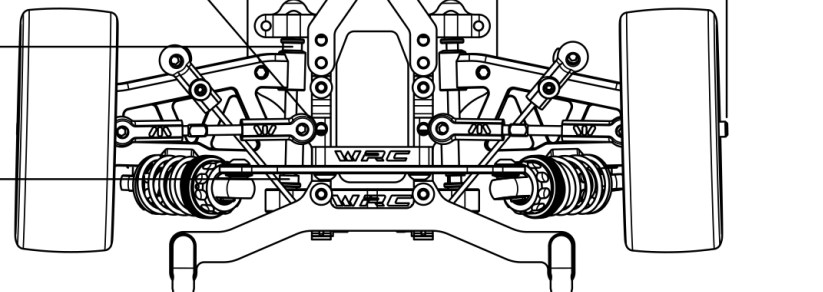
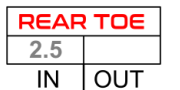
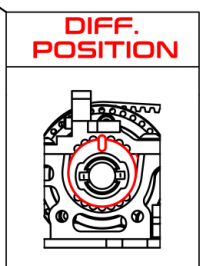
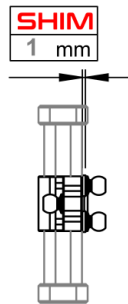
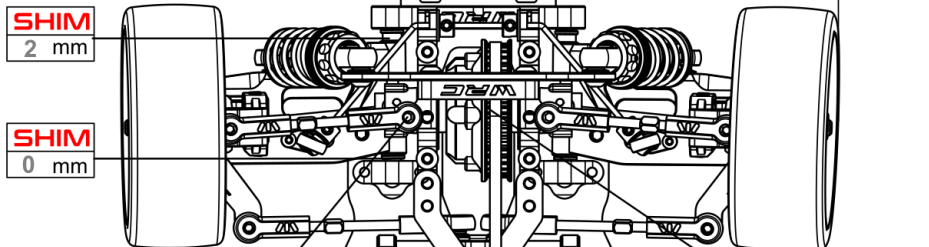
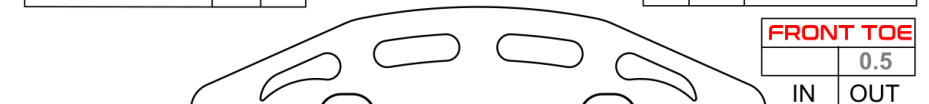
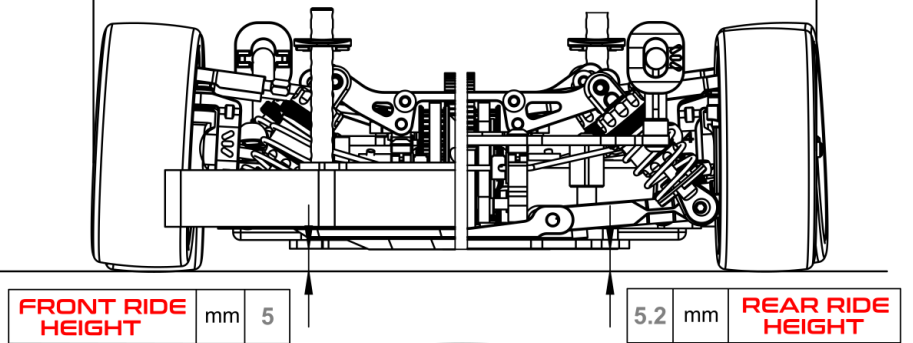
#### REAR - REAR



#### REAR - FRONT



2.2 mm	DOWNSTOP	2.2 mm
+ -0.5	FRONT	REAR -0.5 +
<b>CAMBER</b>		



**WRC**  
*PROFESSIONAL RC CAR*

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