

# MDFI4

2016 EDITION

## INSTRUCTION MANUAL



MDRACINGRC.COM

# INTRODUCTION

The MDF14 is the result of hard work carried out by the MD Racing Rc engineers and pilots who have joined knowledge, effort and dedication resulting in a car that brings together everything we know about Formula; technology, knowledge, innovation, design and high performance.

The MDF14 is the end result of a well studied, well planned and well executed project, based on the use of criteria, high engineering skills and the use of high quality materials for the components of the parts.

The MDF14 was created by pilots for pilots, providing it with technical innovations that make it unique in its category and permitting the car to be adapted to the pilots needs without sacrificing the simplicity, speed and efficiency that makes the MDF14 a unique machine in its sector.

You must know.

MDF14 -The model is not a toy and should never be used by children under the age of 16 without adult supervision.

- THE MDF14 is a 1/10 scale Formula 1 car designed for use in competition or in specific areas where safety can be guaranteed.

- The use of the MDF14 in areas that are not specifically designed for these kinds of cars can lead to premature wear or even breakage.

- The MDF14 is a precision model. Incorrect assembly can cause malfunctions. We recommend you to follow the instructions of the assembly manual step by step at all times.

**You have purchased an MD Racing Rc product. It is registered and protected by copyright against total or partial plagiarism of its parts. The purchase, unpacking and assembly of the product hereby imply that the buyer commits to understanding and respecting the laws which protect the product.**

## General Warnings: Read carefully

### **Before assembly.**

- Keep out of reach of children as this product contains small parts.
- Do not put any of the components of this kit in the mouth or any other body orifices.
- This product is not suitable for children under the age of 16 without adult supervision.
- This product may contain sharp or cutting elements.
- Pay special attention to the use of assembly tools as these may be sharp or pointed and may result in personal harm or damage to other components.
- Always read the assembly instructions provided by the manufacturer before. If you do not understand any part of the assembly process, please ask your local dealer or consult MD Racing Team pilots Facebook profile.
- Always use original MD Rc racing components for the proper use of the product.

### **User Warnings.**

- Use this product in designated areas.
- Pay attention to the moving parts in the product as they can cause entrapment of fingers, hair or clothing.
- Once you have used the product please be aware to take special care that certain components might be at high temperatures and can cause burns.
- Be sure to use an exclusive transmitter for ground use and that the frequency is free and not being used to avoid interference.
- Before connecting the batteries make sure the switch is on OFF mode.
- Always connect the transmitter BEFORE the receiver.
- Before testing, please make sure that the four wheels of the product are in the air and all the elements of the car are perfectly assembled.
- Avoid using this product in public areas where it can cause damage to other people, animals or objects.
- Avoid using this product near areas such as; hospitals, schools, homes for the elderly or noise-sensitive areas.
- Always keep a good product visibility.
- Never store the product with the batteries connected.
- The use of non-original spare parts or MD Racing rc, may adversely affect the performance of the whole.

## WARRANTY

MD Racing Rc guarantees your product within 30 days from the date of acquisition on manufacturing defects or inability of assembly.

MD Racing Rc, will not guarantee any product if the original purchase document cannot be shown.

MD Racing Rc will not guarantee any product purchased outside the distribution network recognized by the sales department of MD rc racing.

MD Racing Rc will, under no circumstance, pay any amount in compensation guarantor.

MD Racing Rc will replace the defective parts through the dealer that conducted the initial sale provided that the guarantee conditions are met.

MD Racing Rc will not replace any part before inspection by designated professionals. Any complaints about defects in our products must be channeled through the dealer who made the initial sale which will always be credited with the receipt of purchase.

MD Racing Rc will not cover any poorly or carelessly assembled product.

MD racing rc not will not guarantee worn out parts, exposed to dust, water, use or exposed to weather.

MD Racing Rc will not guarantee any part that has been assembled on other models for which they have not been designed.

MD Racing Rc will not guarantee any part changed or manipulated in form and shape.

MD Racing Rc will not be held liable in any case of the use the purchasers make of the products as well as injuries or damages that may result of improper use. The user, by purchasing and assembling our products, voluntarily take responsibility for their actions and the consequences they entail.

## Quality certificate

All elements of the MD Racing Rc products are high quality products which undergo regular quality tests and strict controls in the manufacturing process and packaging.

MD Racing Rc reserves the right to make changes in the composition, shape or morphology of the product at any time.





# A FRONT SECTION

## Section

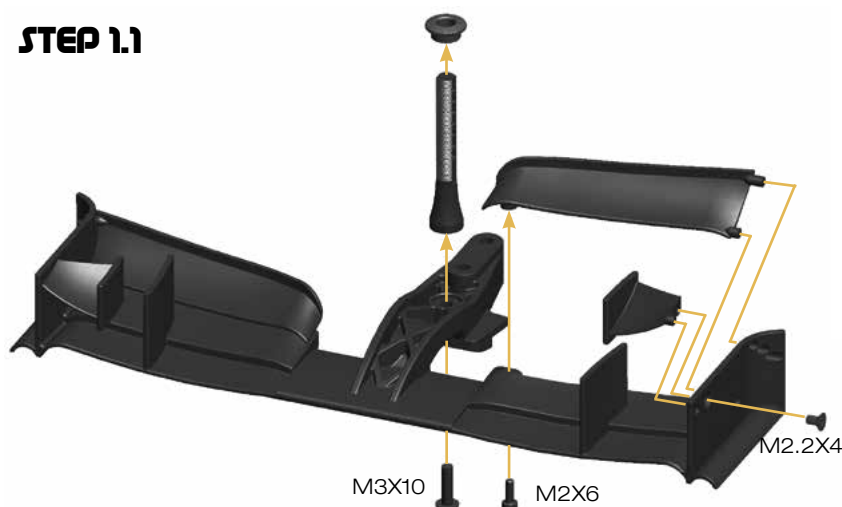
### A

#### Step

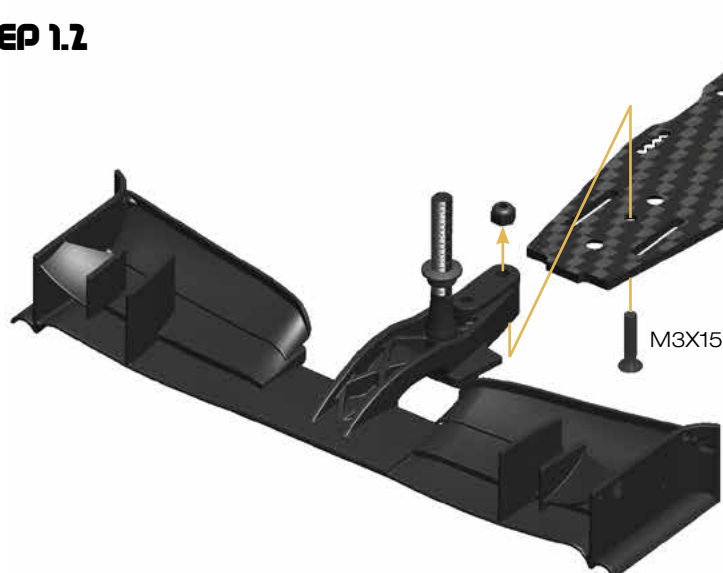
### 1

#### STARTING BAG

#### STEP 1.1



#### STEP 1.2



## Section

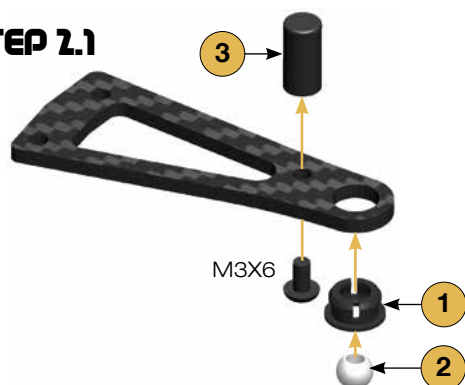
### A

#### Step

### 2

#### BAG 1 BAG 1.1 BAG 1.2

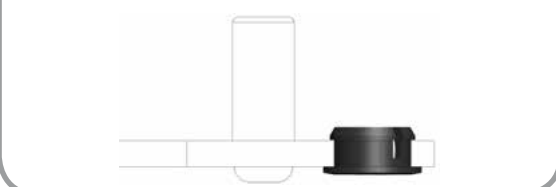
#### STEP 2.1



#### STEP 2.2



Attention: Please notice the orientation of the plastic joint. First assemble the plastic joint and then the pivot ball.

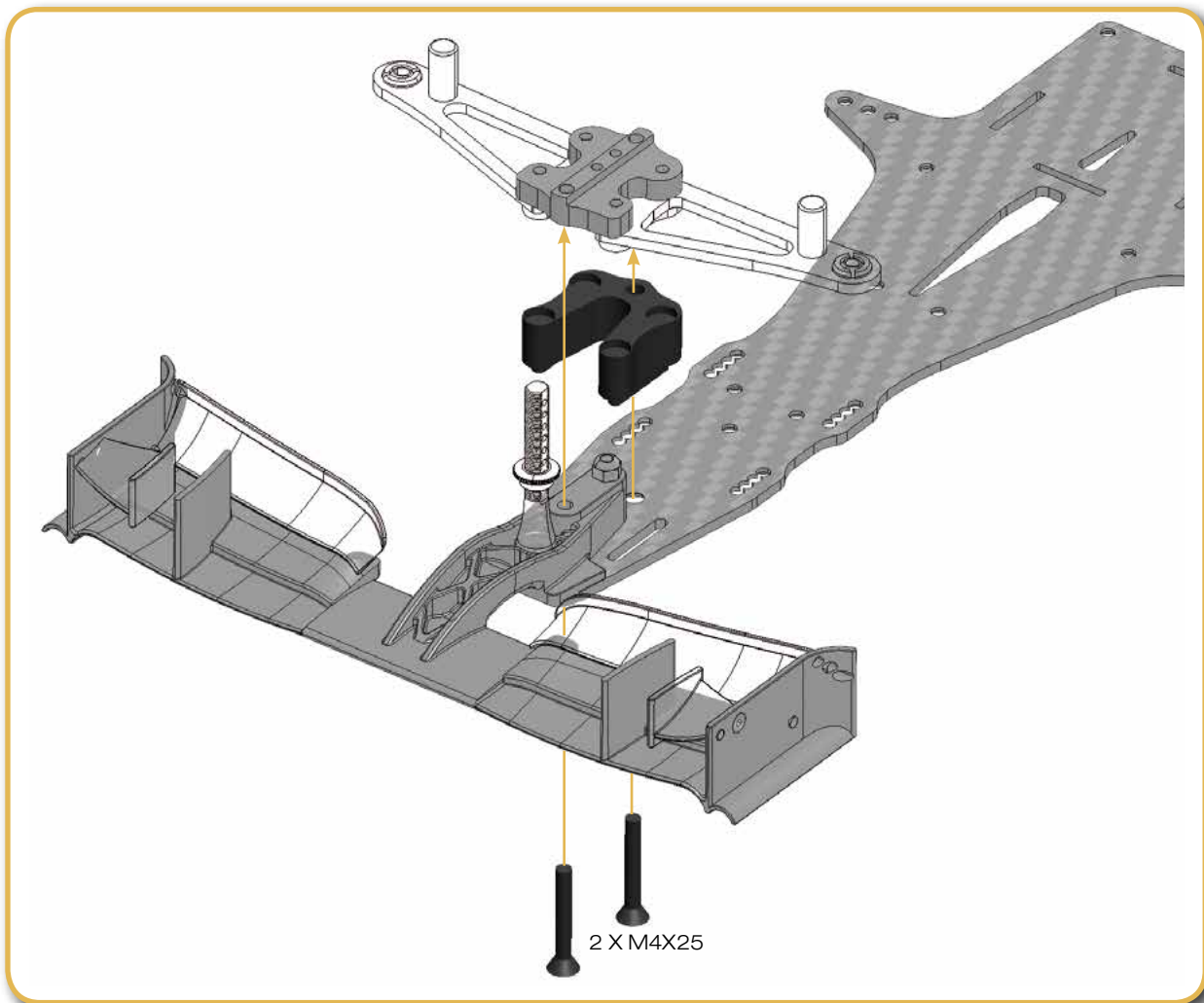


**Section**

**A**

**Step**

**3**



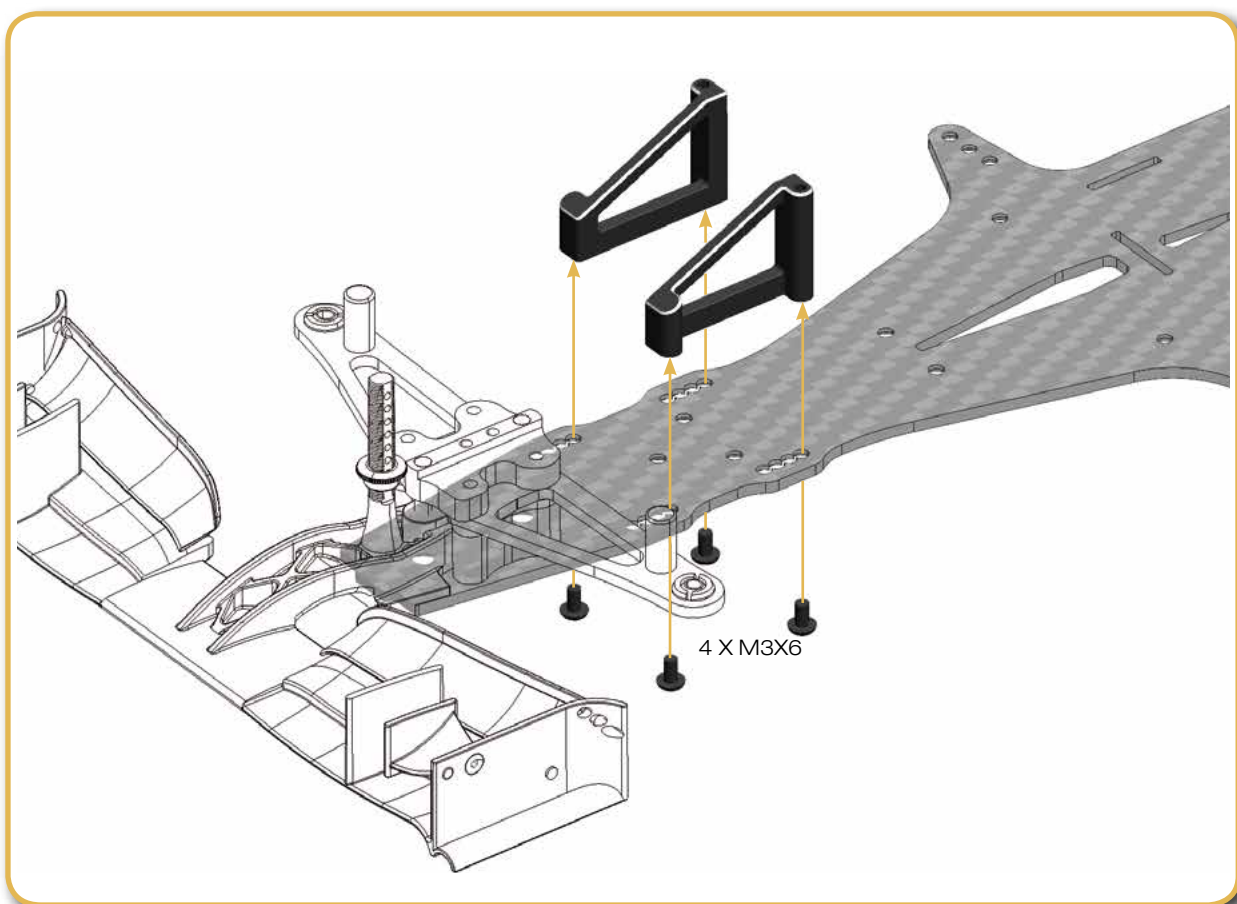
**Section**

**A**

**Step**

**4**

**BAG 1.3**



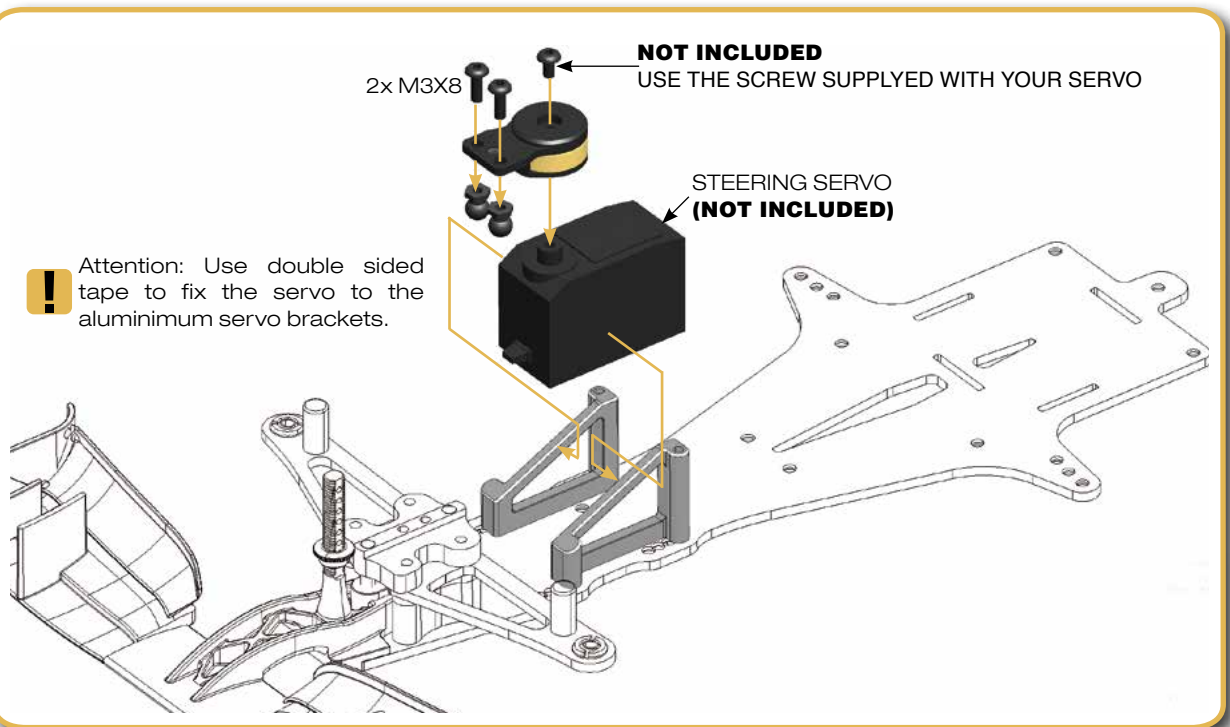
## Section

# A

## Step

# 5

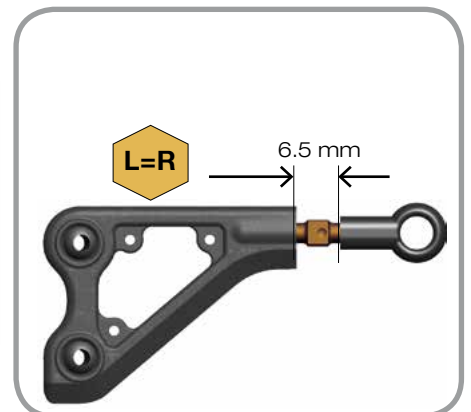
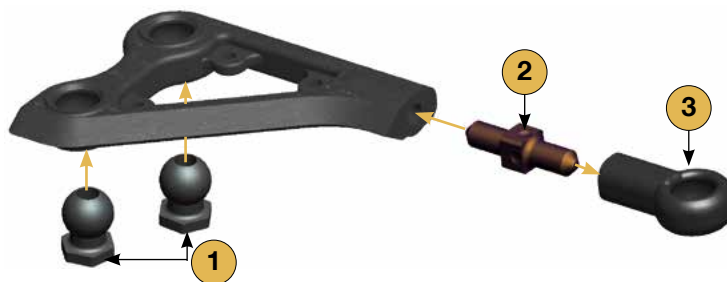
BAG 1.4



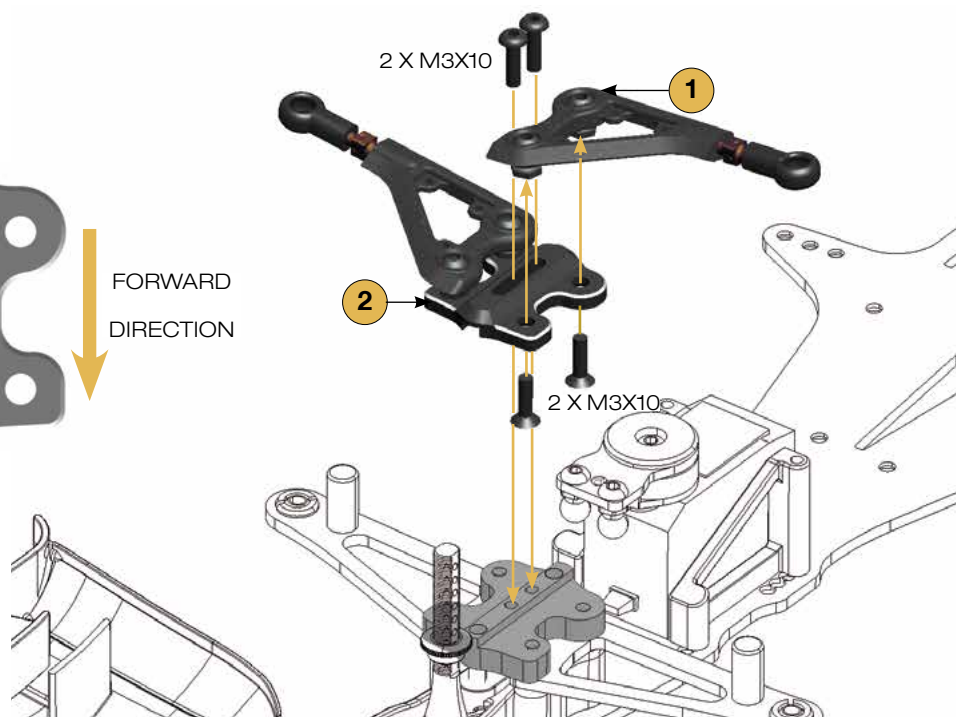
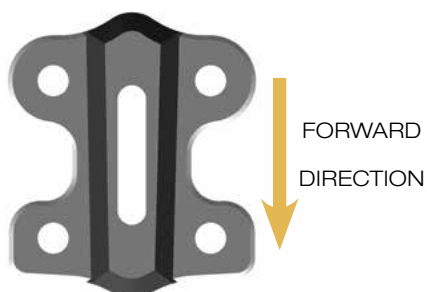
## STEP 6.1

**!** Attention: Please notice the orientation of the pivot balls.

2x LEFT



## STEP 6.2



# Section

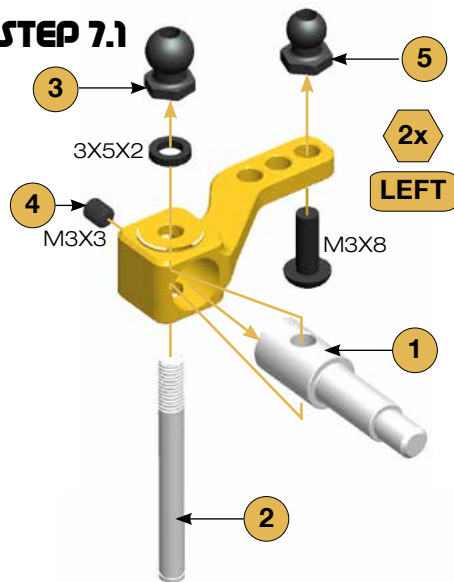
# A

## Step

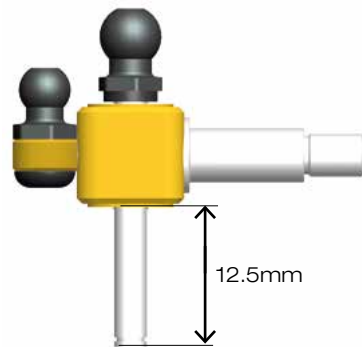
## 7

### BAG 2

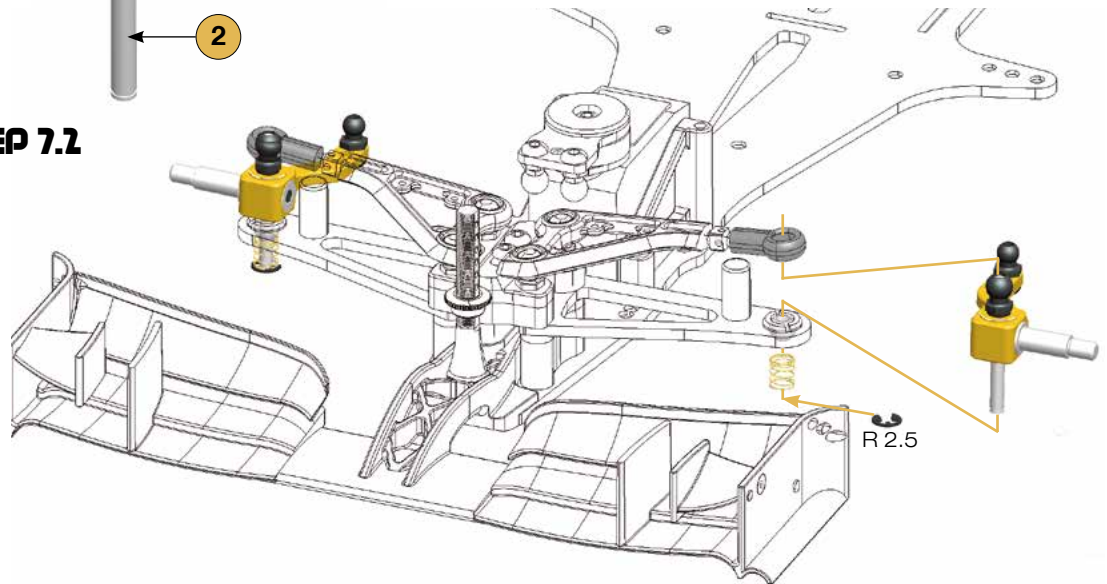
### STEP 7.1



Detail view



### STEP 7.2



# Section

# A

## Step

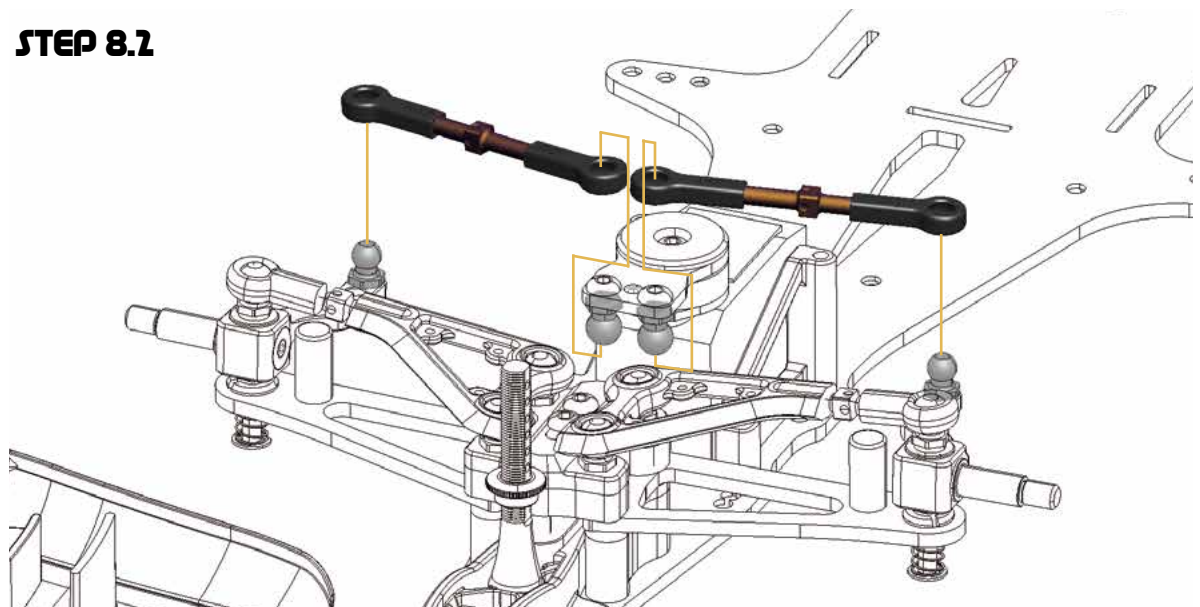
## 8

**NOTE:**  
Parts used  
in this  
step are  
included in  
the **BAG1.1**

### STEP 8.1



### STEP 8.2





# B REAR SECTION

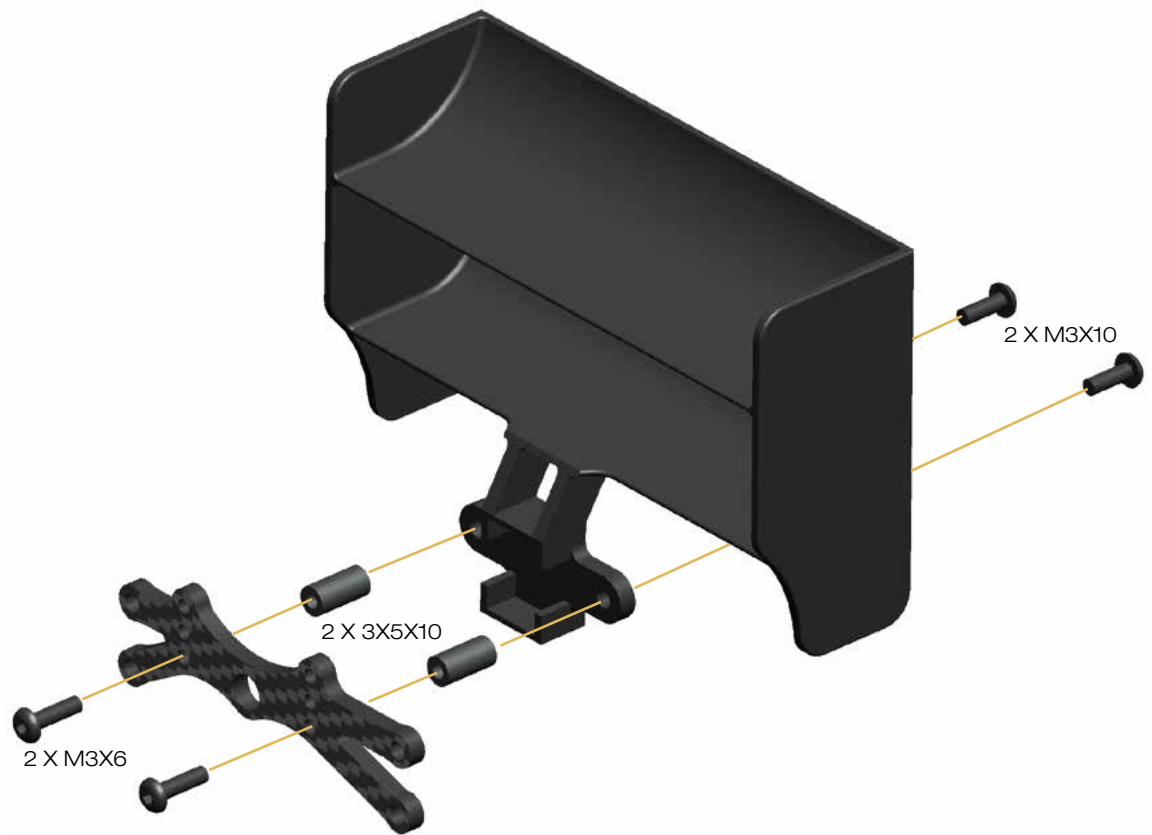
Section

B

Step

9

BAG 3

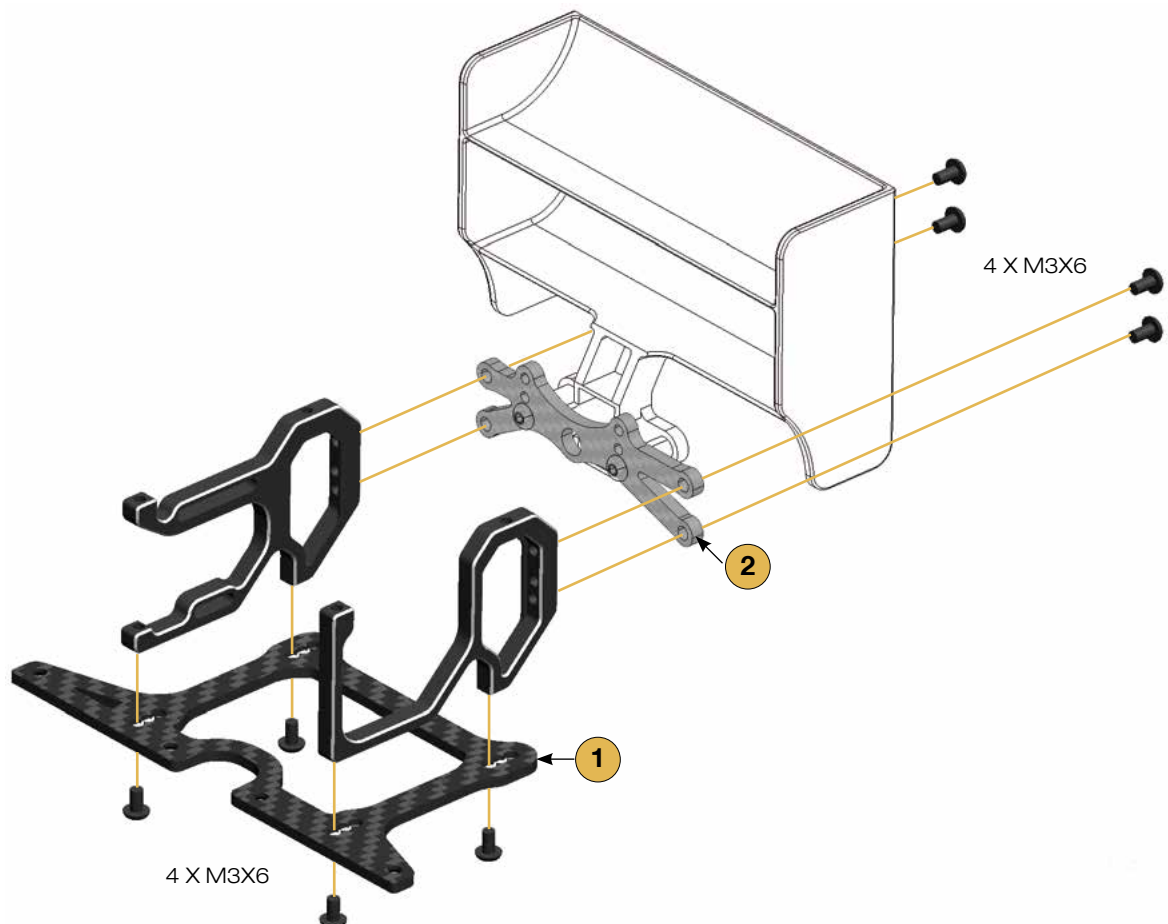


Section

B

Step

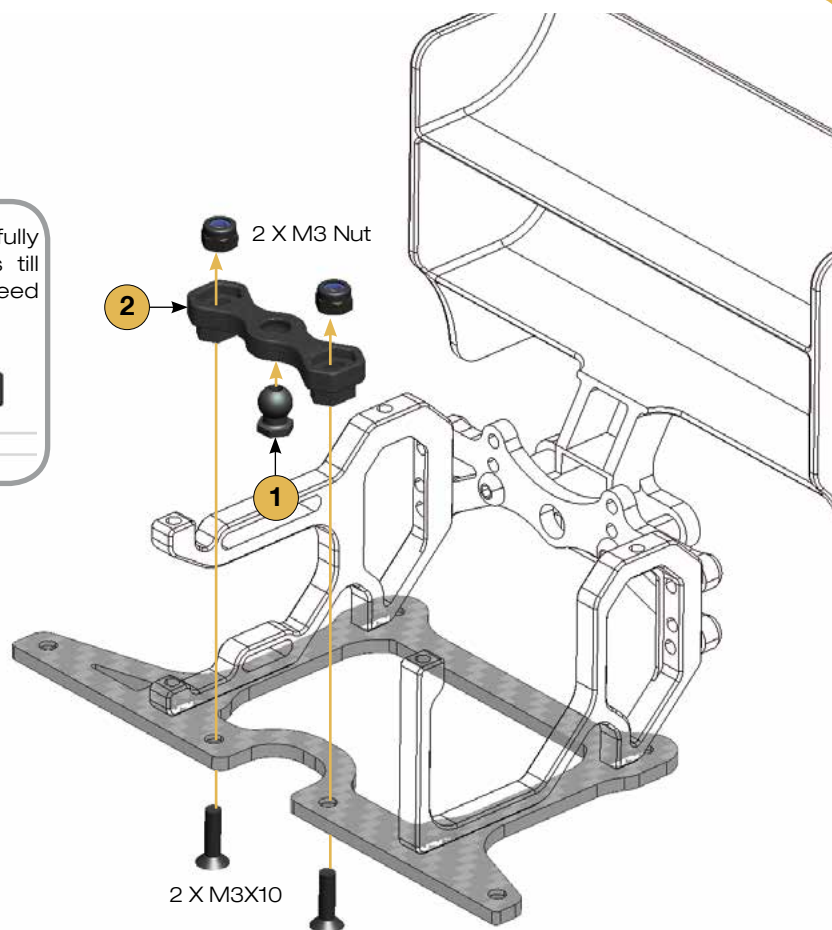
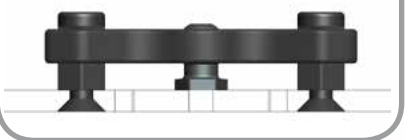
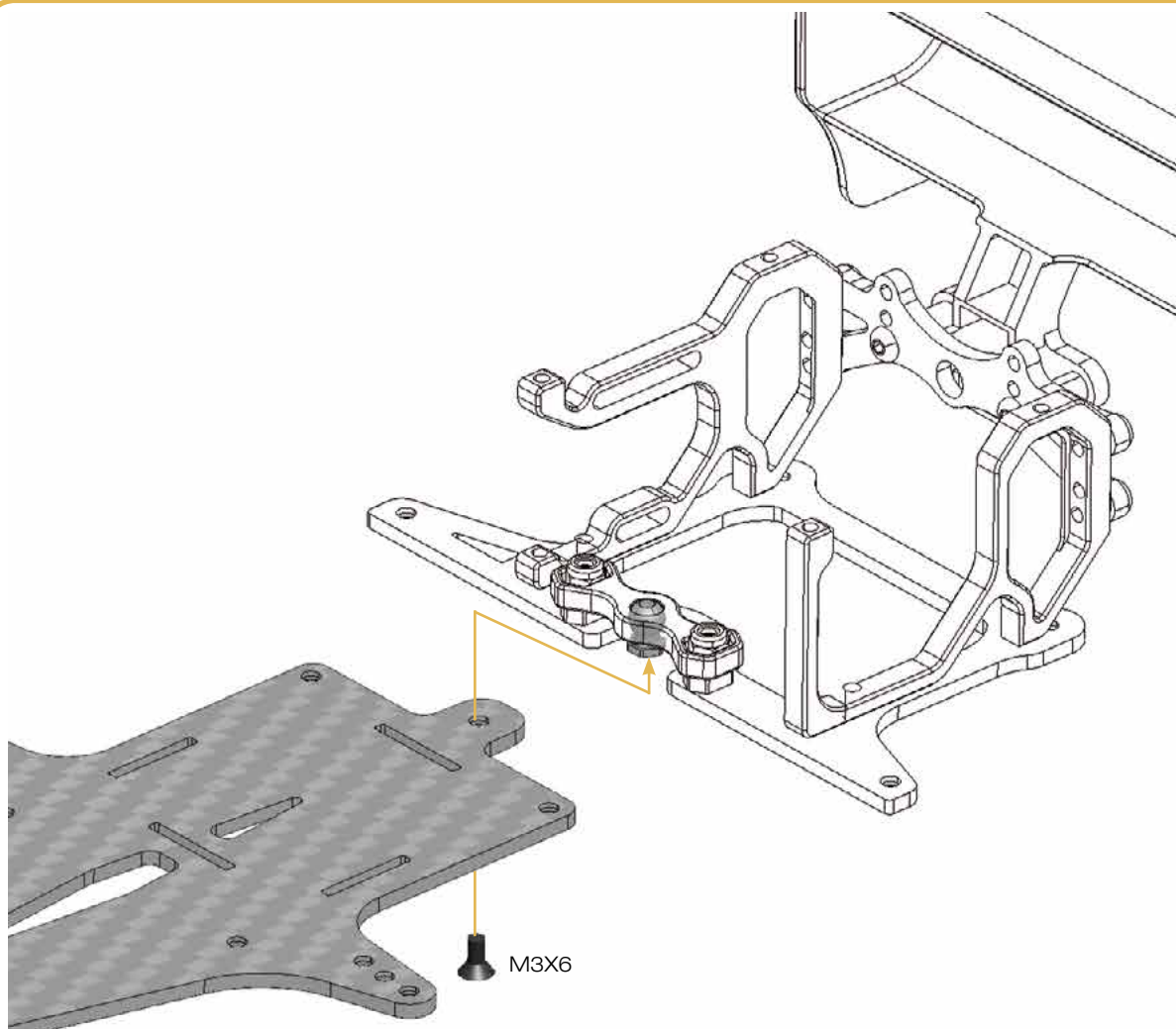
10





**Section****B****Step****11**

Attention: Please do not fully tighten 2x M3x10 screws till side carbon links had been assembled in Step 13.2

**Section****B****Step****12**

# C MIDDLE SECTION

## Section

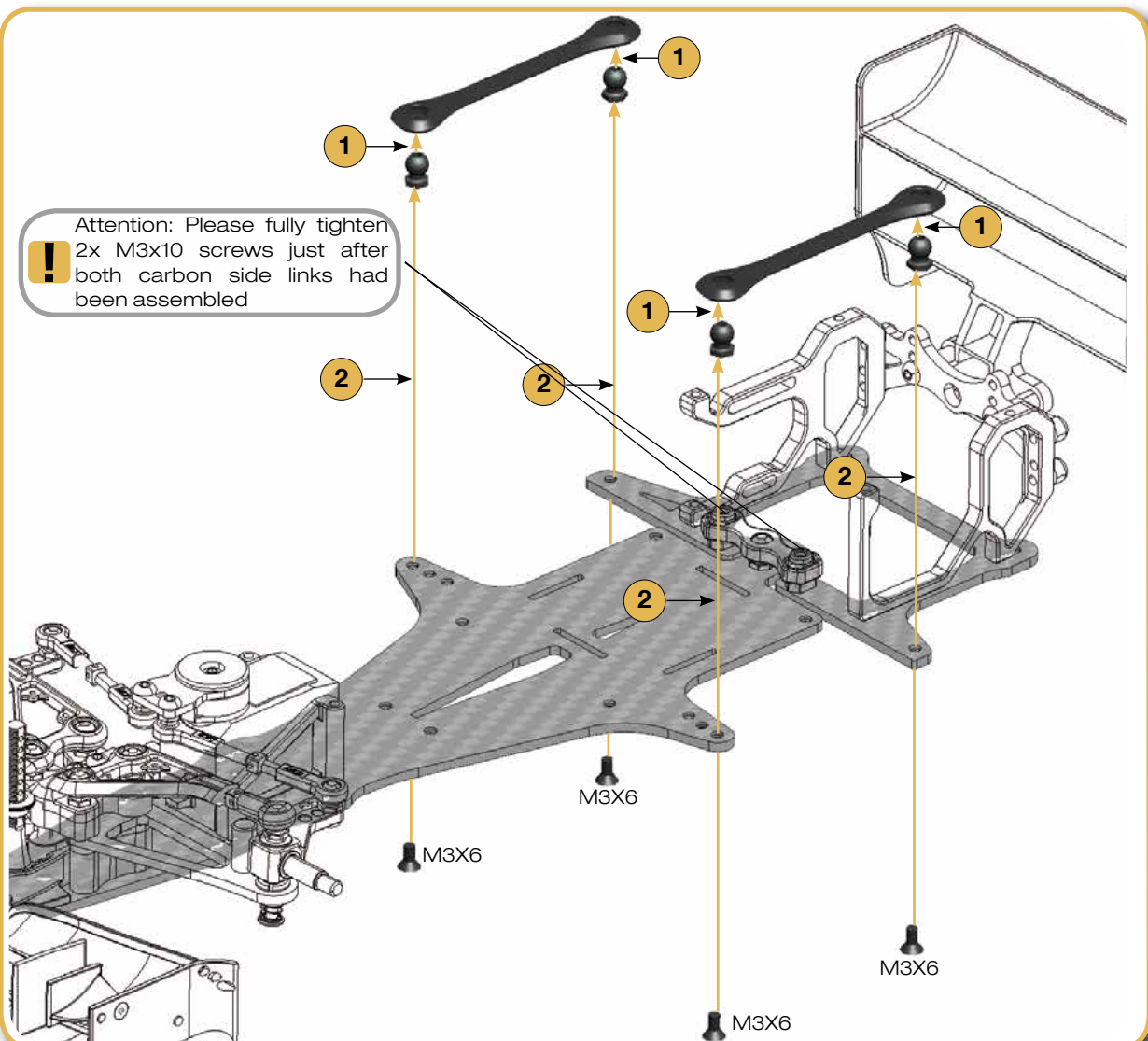
## C

## Step

## 13

BAG 4  
BAG 4.1  
BAG 4.2

**!** Attention: Please fully tighten 2x M3x10 screws just after both carbon side links had been assembled



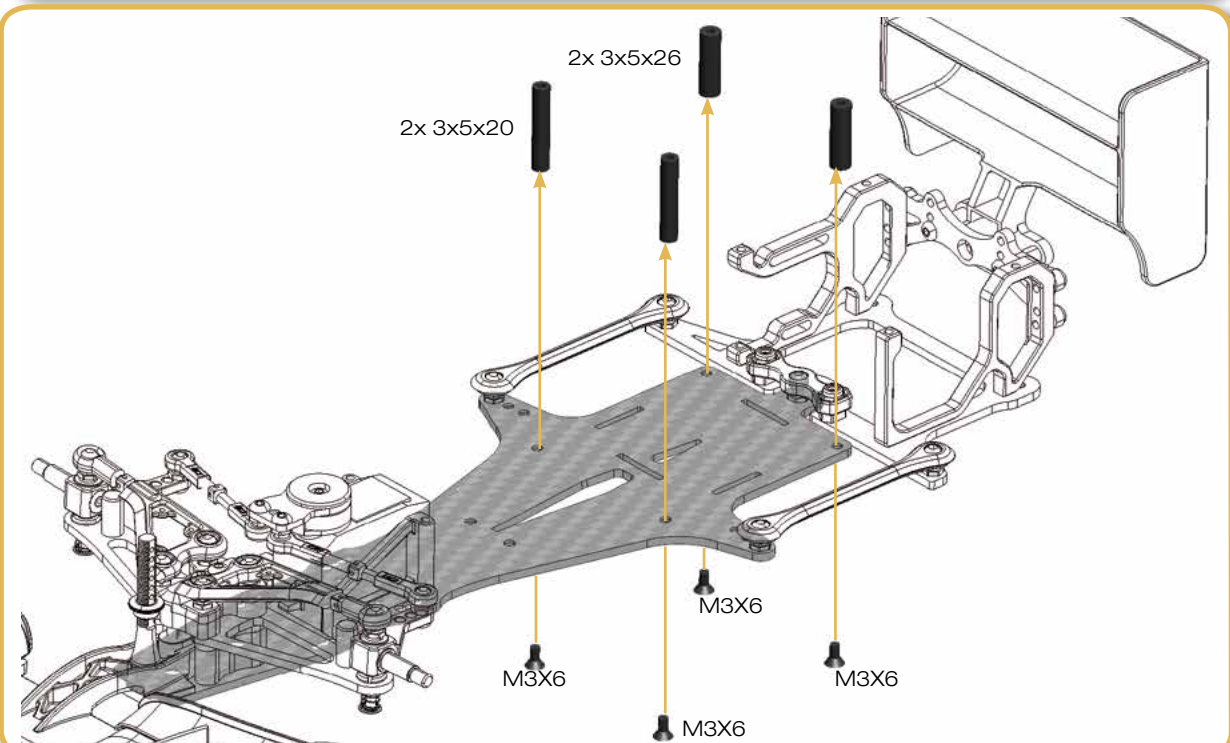
## Section

## C

## Step

## 14

BAG 4.3



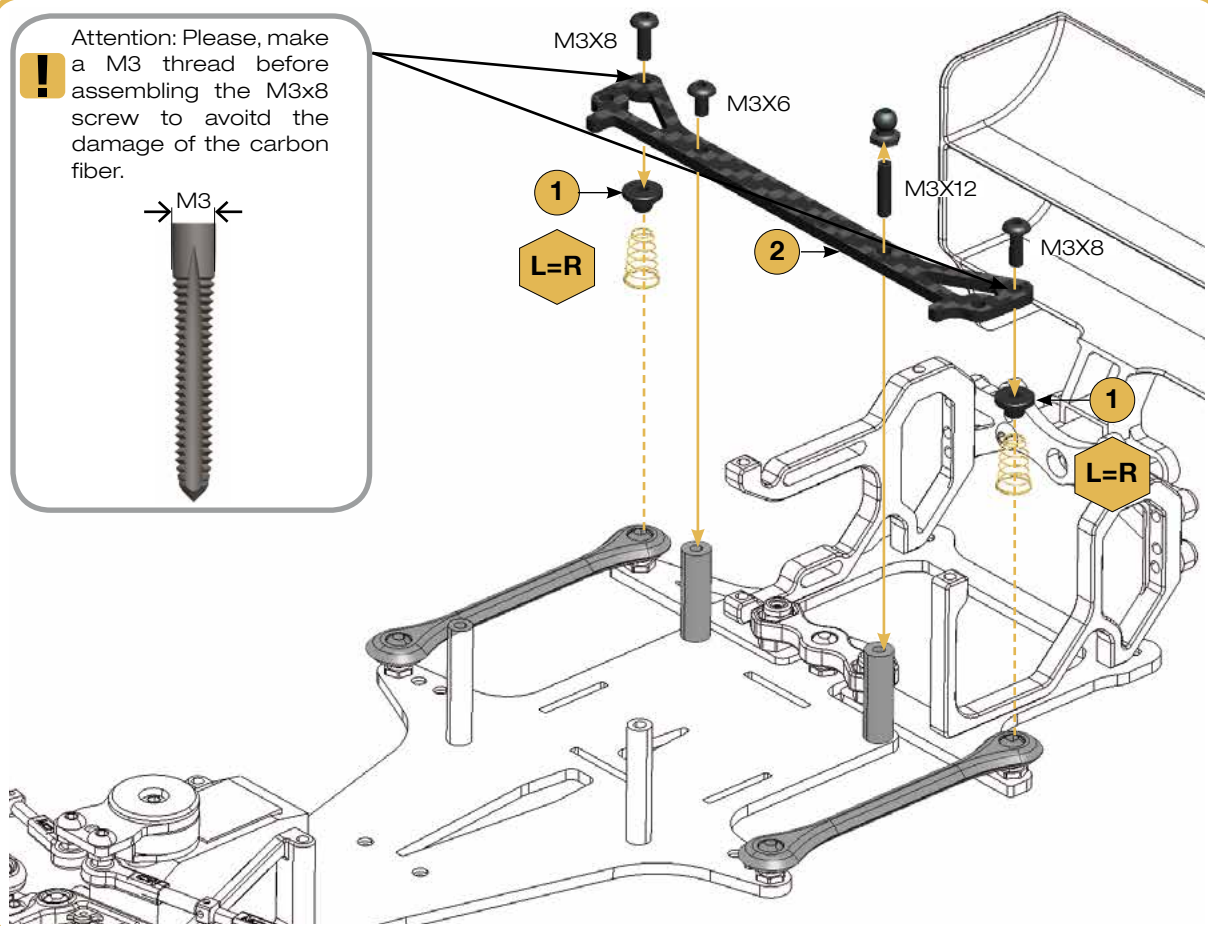
## Section

# C

## Step

# 15

**!** Attention: Please, make a M3 thread before assembling the M3x8 screw to avoid the damage of the carbon fiber.



## Section

# C

## Step

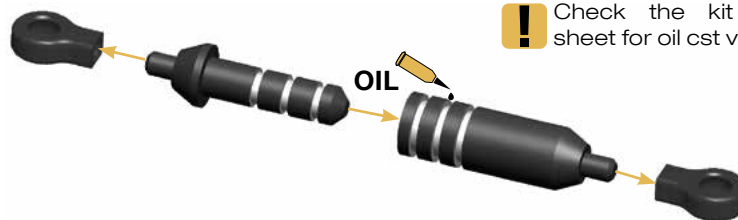
# 16

## BAG 4.5

**!** Attention: Please, cut 2mm the ball joints before assembling them in the lateral compensator.

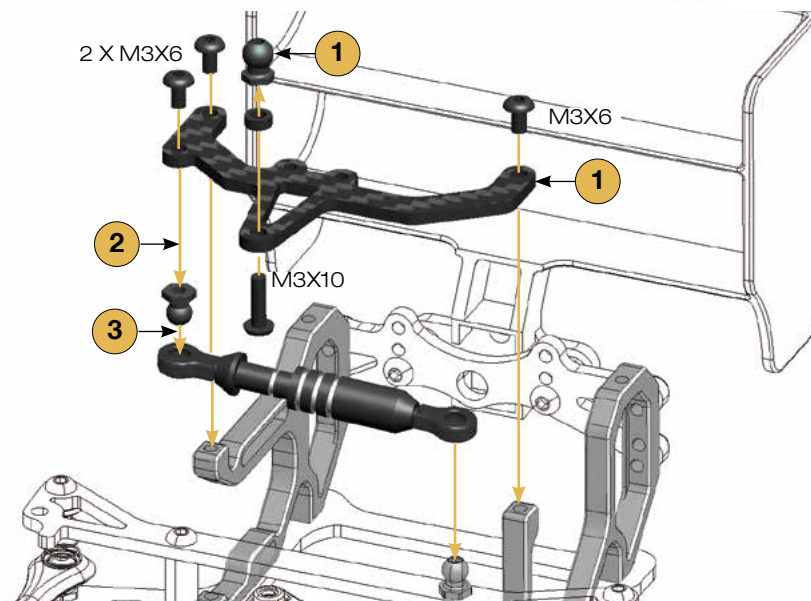


### STEP 16.1



**!** Check the kit setup sheet for oil cst value

### STEP 16.2





# D BALL DIFF SECTION

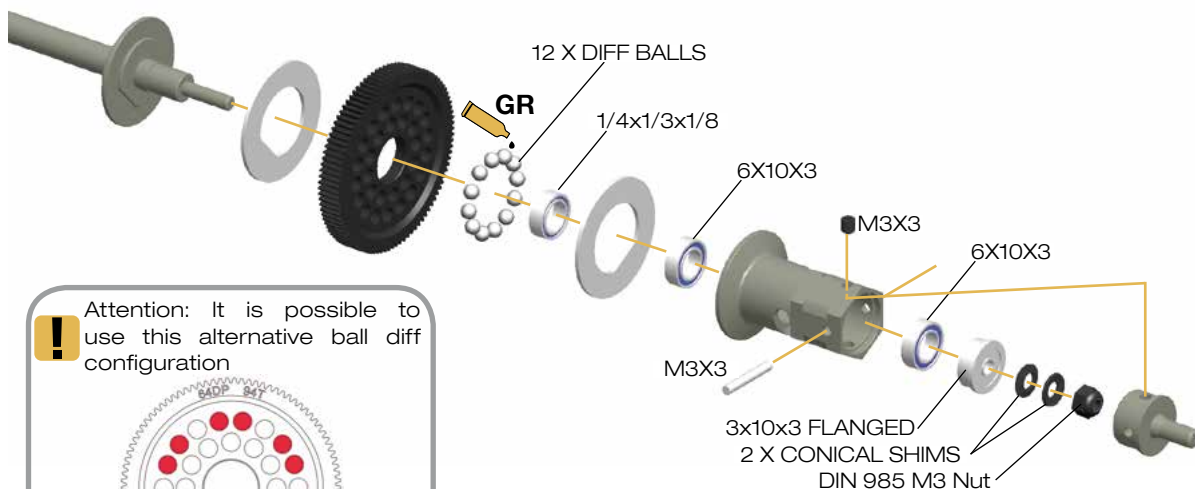
Section

D

Step

17

BAG 5

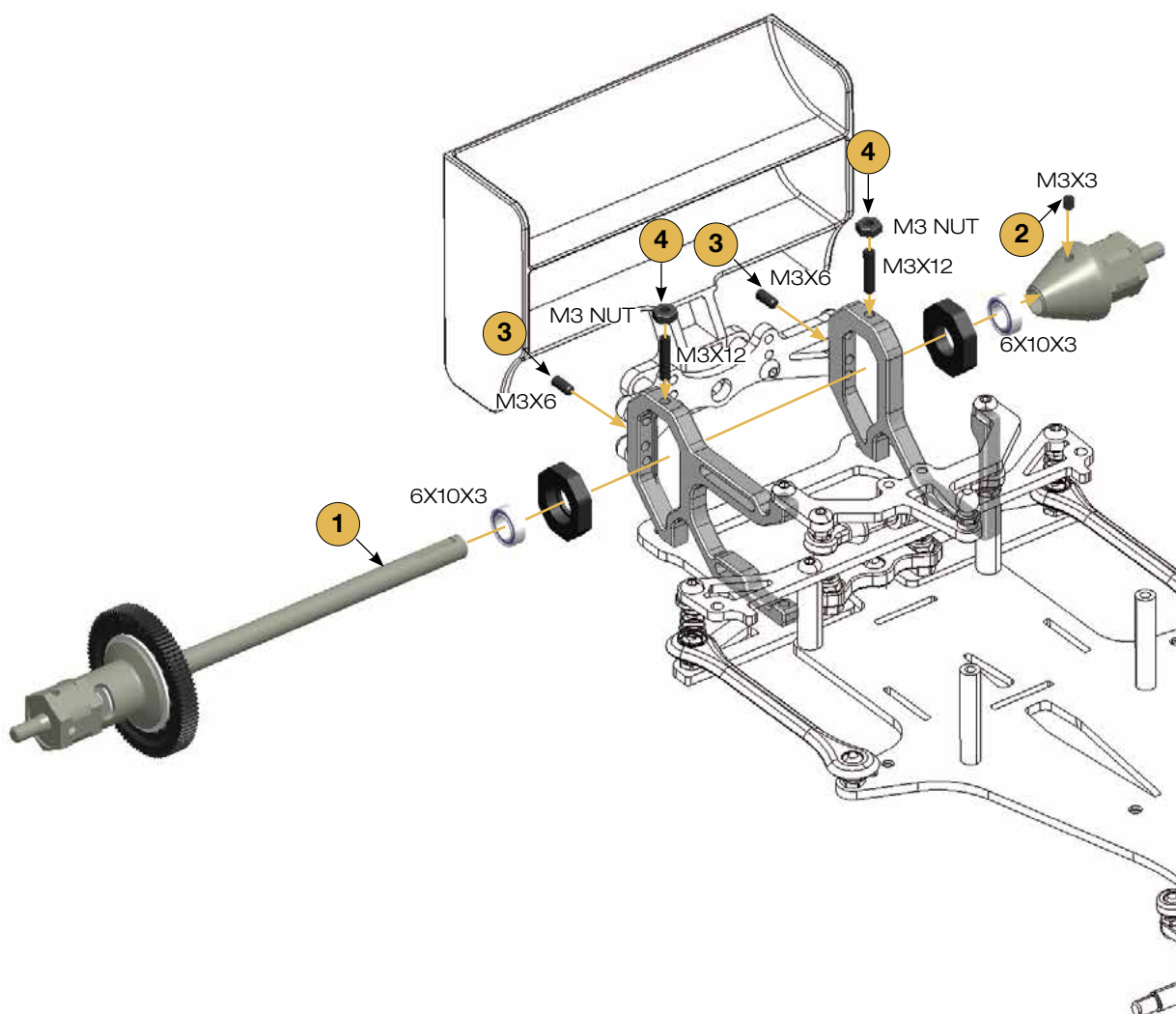


Section

D

Step

17





# E ELECTRONICS SECTION

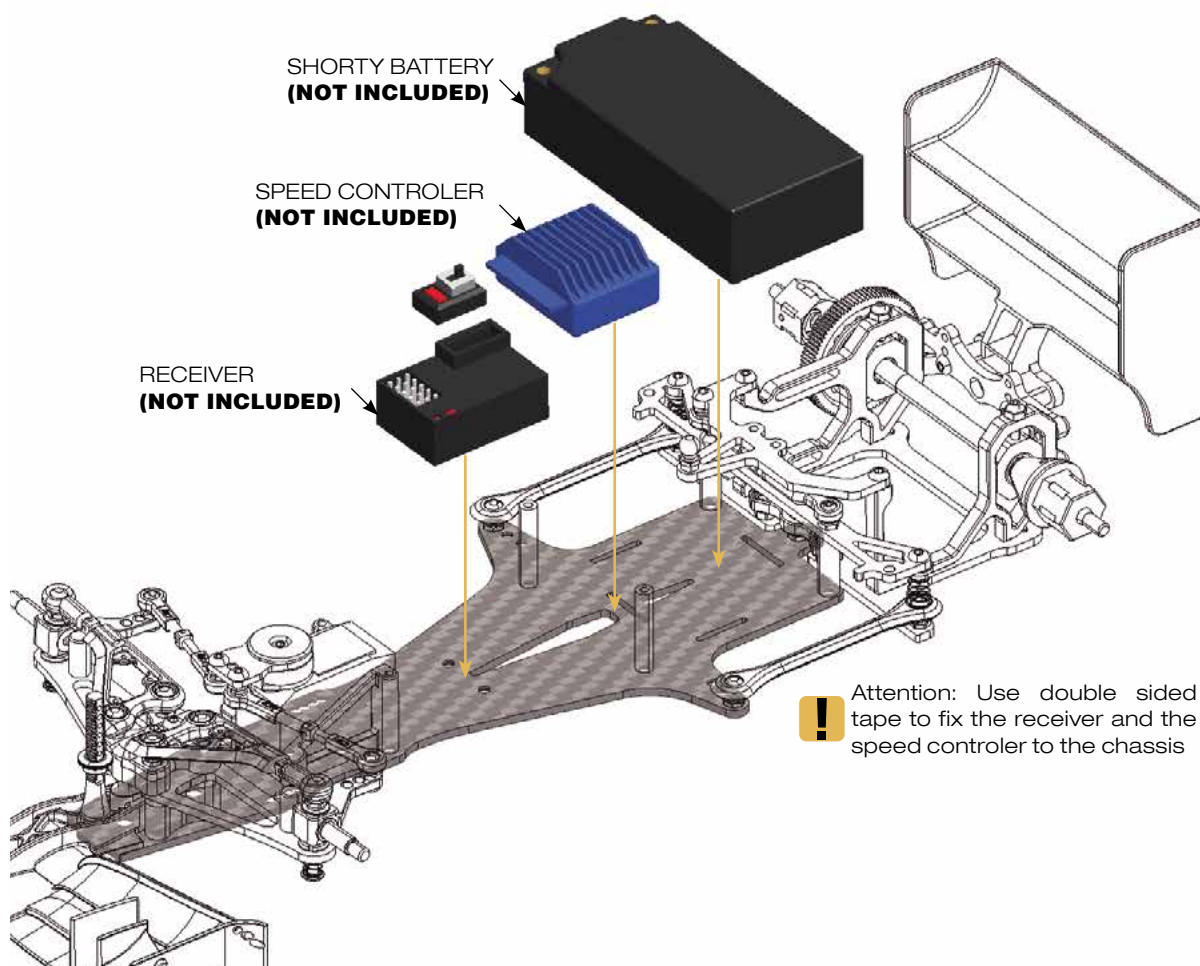
Section

E

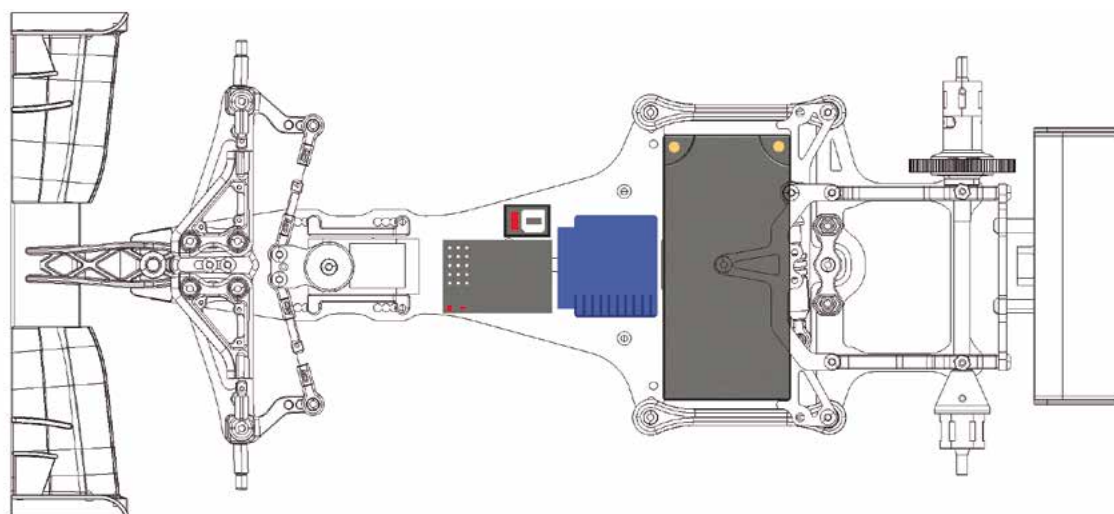
Step

20

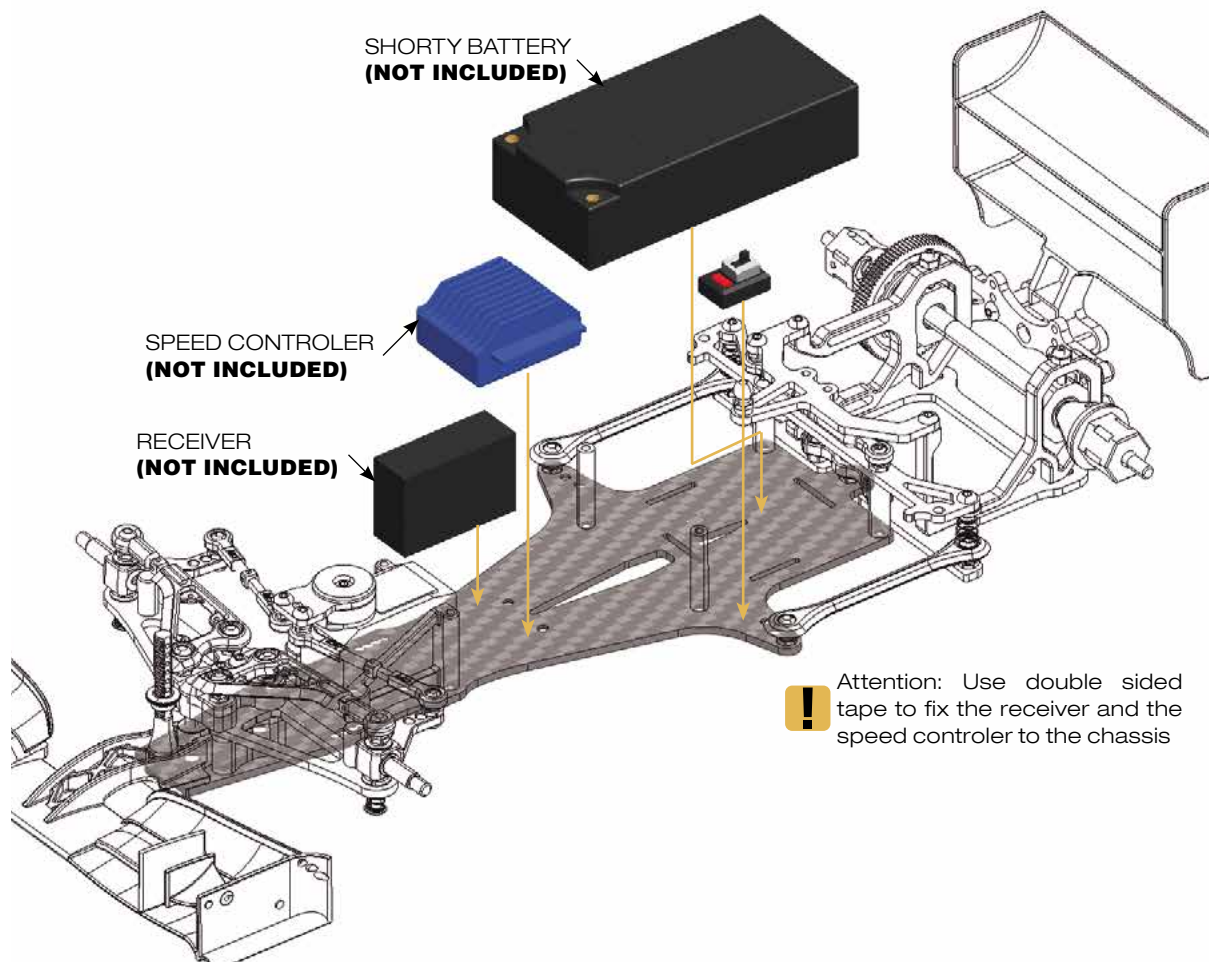
## ELECTRONICS CONFIGURATION 1: CROSSED BATTERY



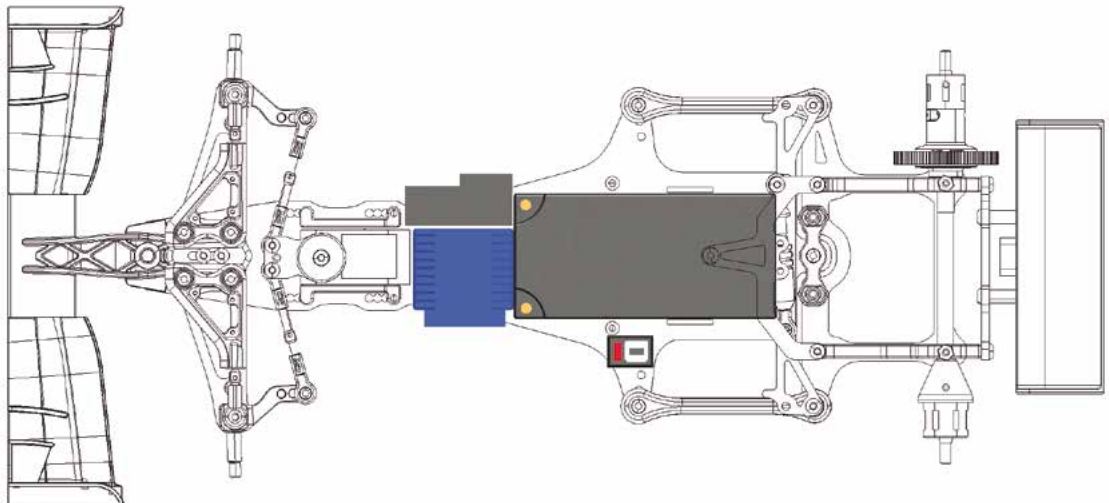
### DETAIL VIEW ELECTRONICS CONFIGURATION 1



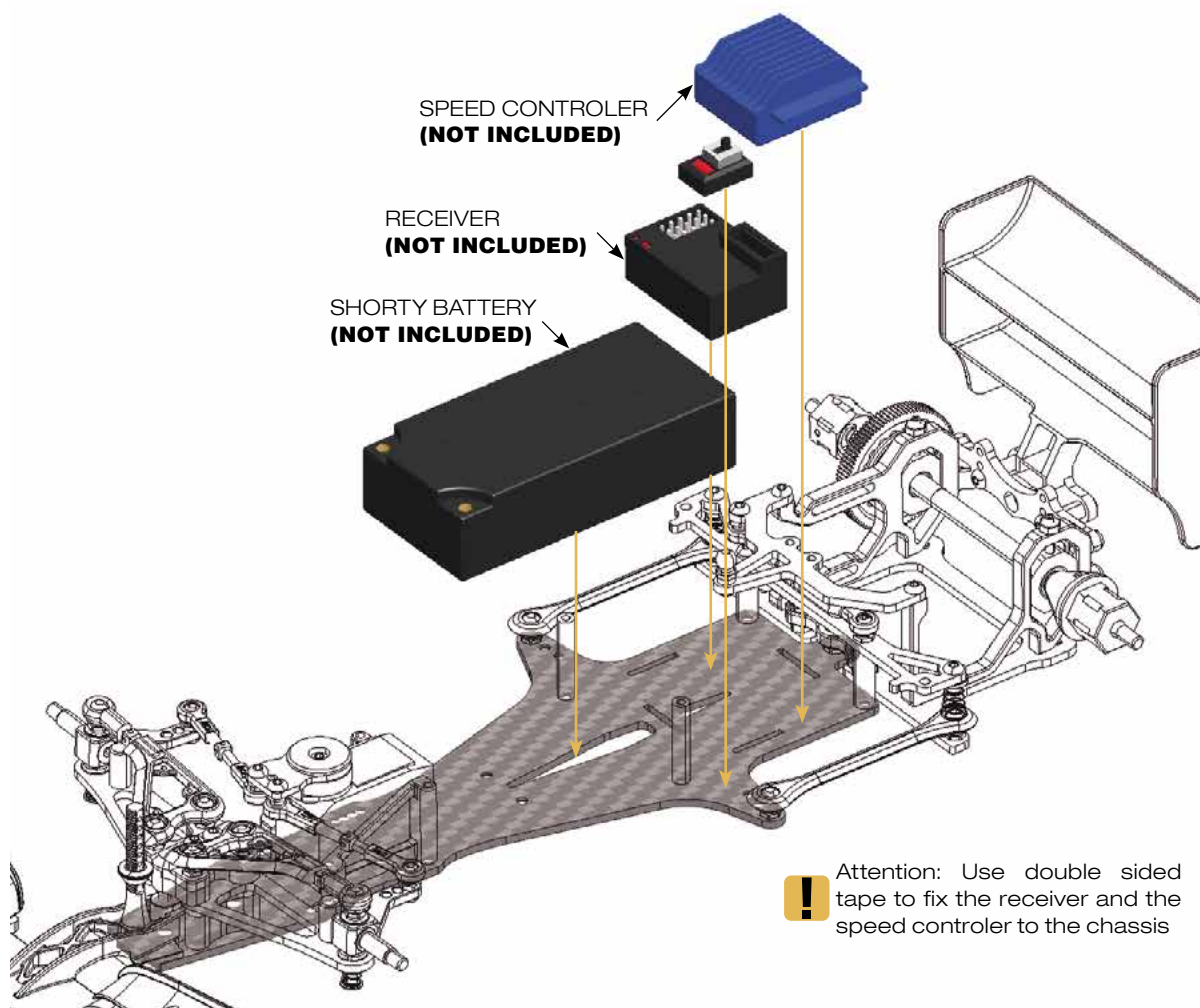
## ELECTRONICS CONFIGURATION 2: REARWARD BATTERY



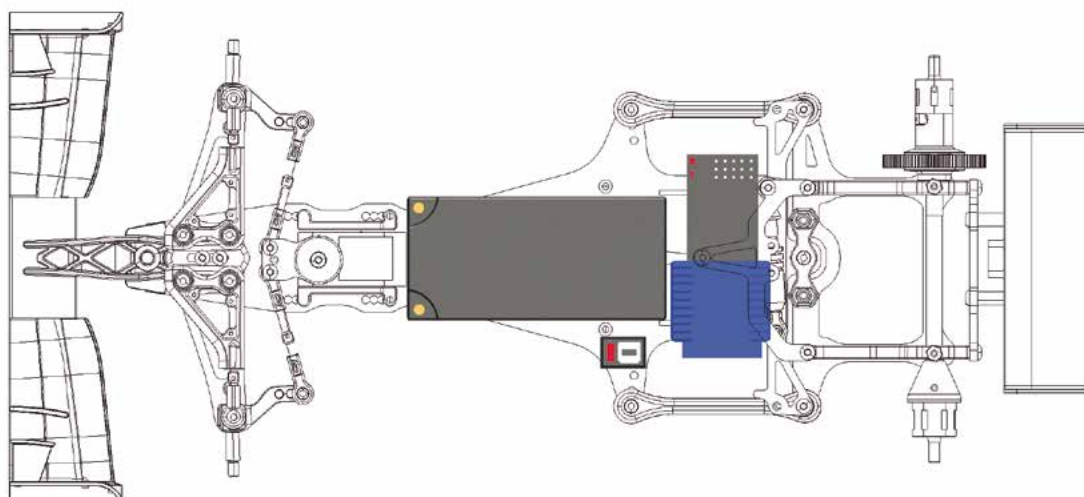
## DETAIL VIEW ELECTRONICS CONFIGURATION 2



## ELECTRONICS CONFIGURATION 3: FORWARD BATTERY



### DETAIL VIEW ELECTRONICS CONFIGURATION 3



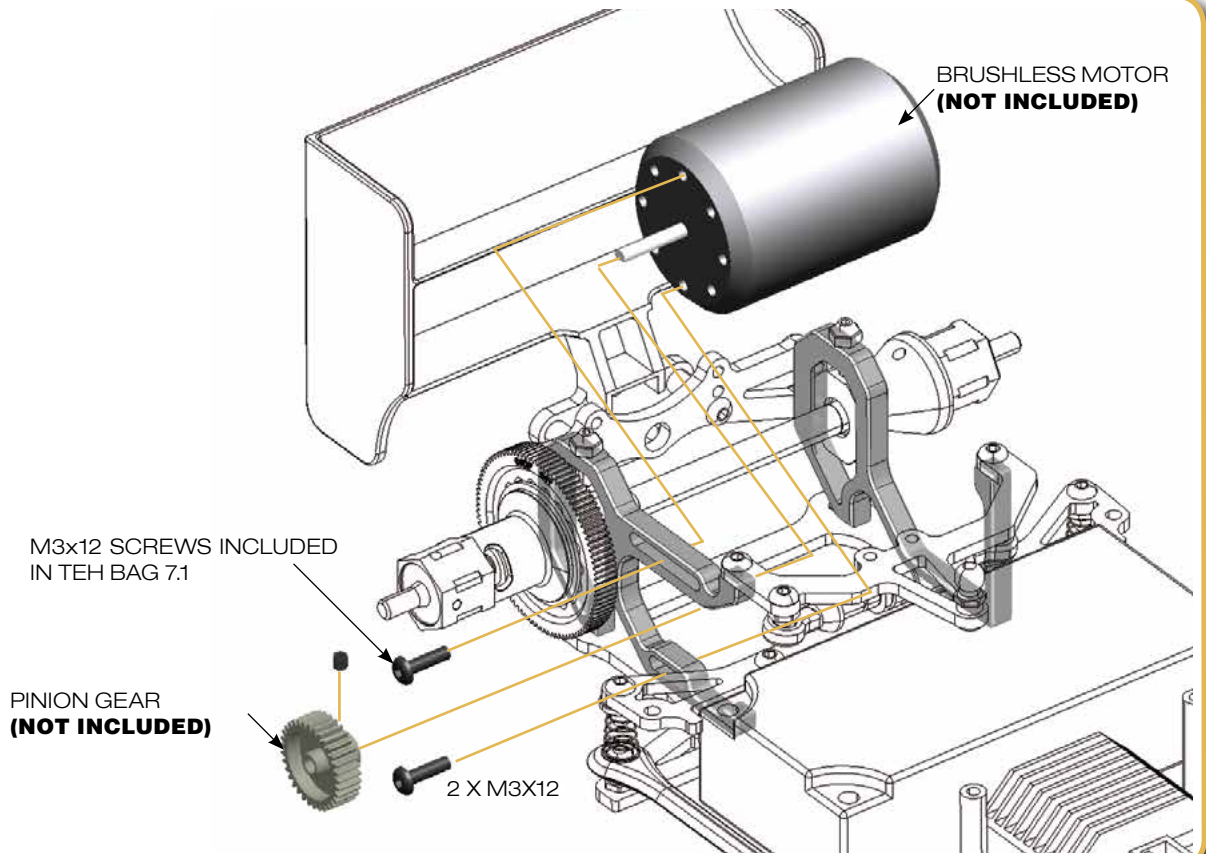


## Section

# E

## Step

# 21



# F SHOCKS SECTION

## Section

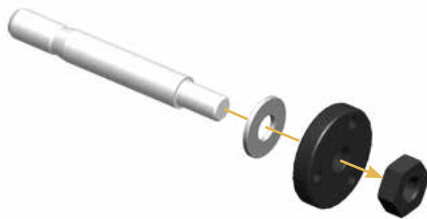
# F

## Step

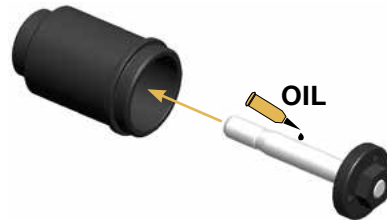
# 22

## BAG 6

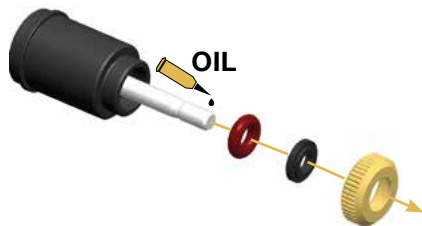
### STEP 22.1



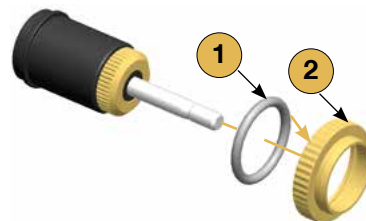
### STEP 22.2



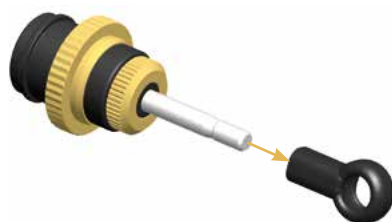
### STEP 22.3



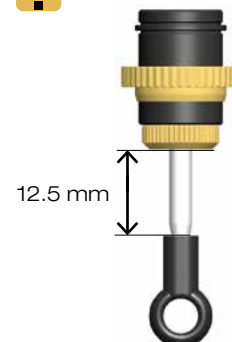
### STEP 22.4



### STEP 22.5



Detail view





### STEP 22.6

**!** Check the kit setup sheet for oil cst value

**!** ATTENTION

1) Extend the shock shaft completely. Fill the shock body with the shock oil.

2) Move the shock shaft up and down a few times to release the air bubbles trapped beneath the piston.

3) Orient the filled shock vertically for several minutes with the shock shaft fully extended. The remaining air bubbles will release.



### STEP 22.7



### STEP 22.8

**!** ATTENTION

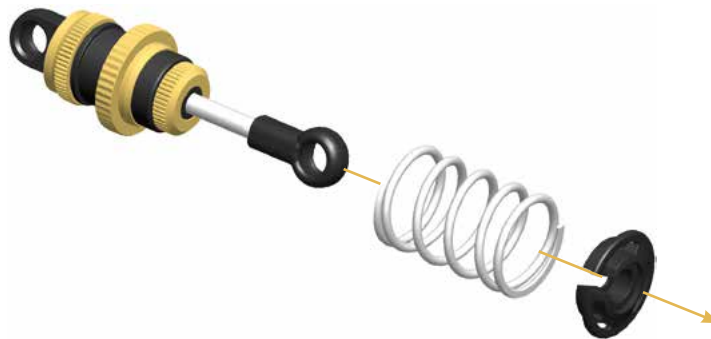
1) Screw the shock cap onto the body until some resistance is felt. Slowly push the shock shaft up bleeding excess oil from the shock.

2) Tighten the cap all the way down little by little.

3) Move the shock shaft up and down. The shaft should be easy to push up into the body of the shock. If increased pressure is felt towards the top, there is too much oil in the shock. Loosen the shock cap and "bleed" the shock as done previously.



### STEP 22.9



## G FINAL SECTION

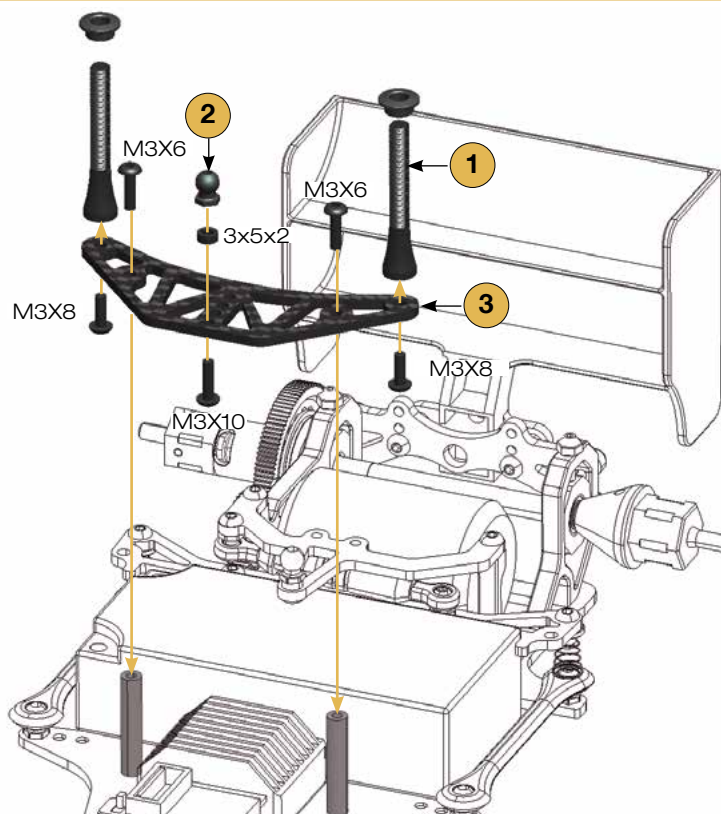
### Section

## G

### Step

## 23

BAG 7  
BAG 7.1  
BAG 7.2

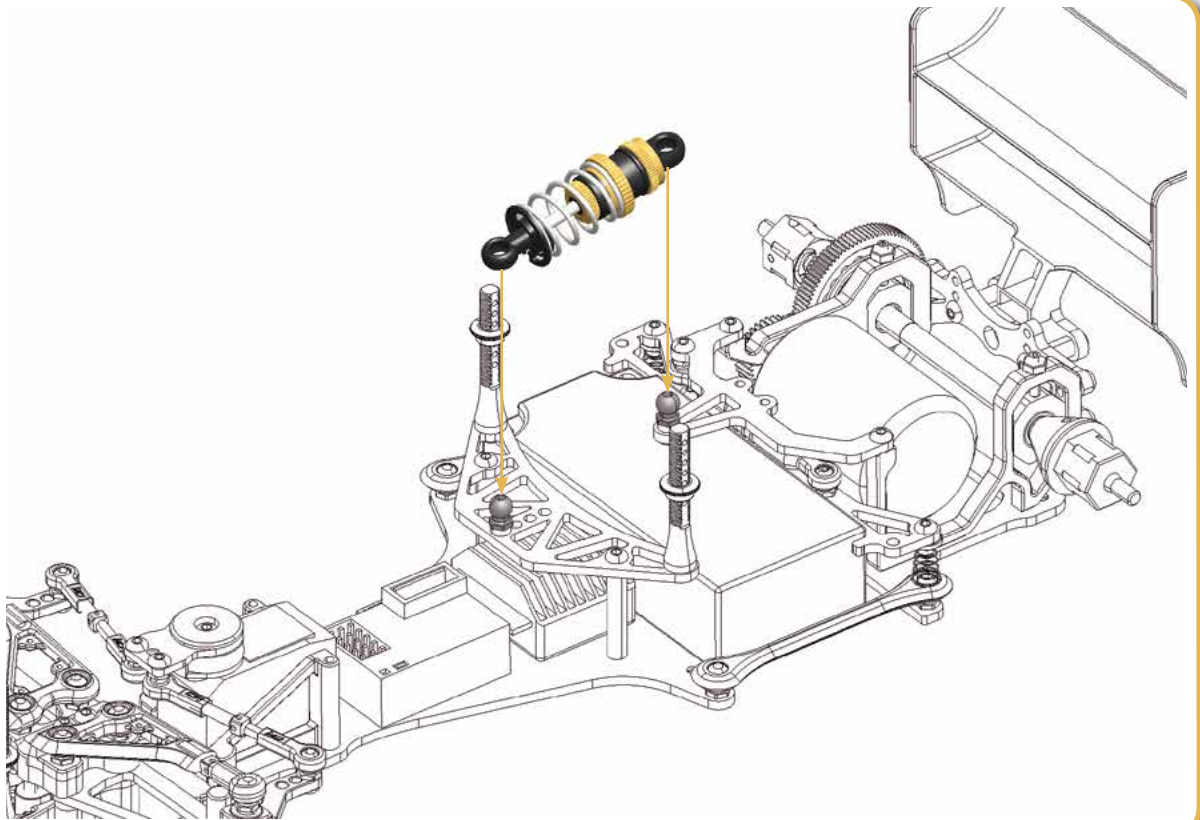


## Section

# G

## Step

# 24



## Section

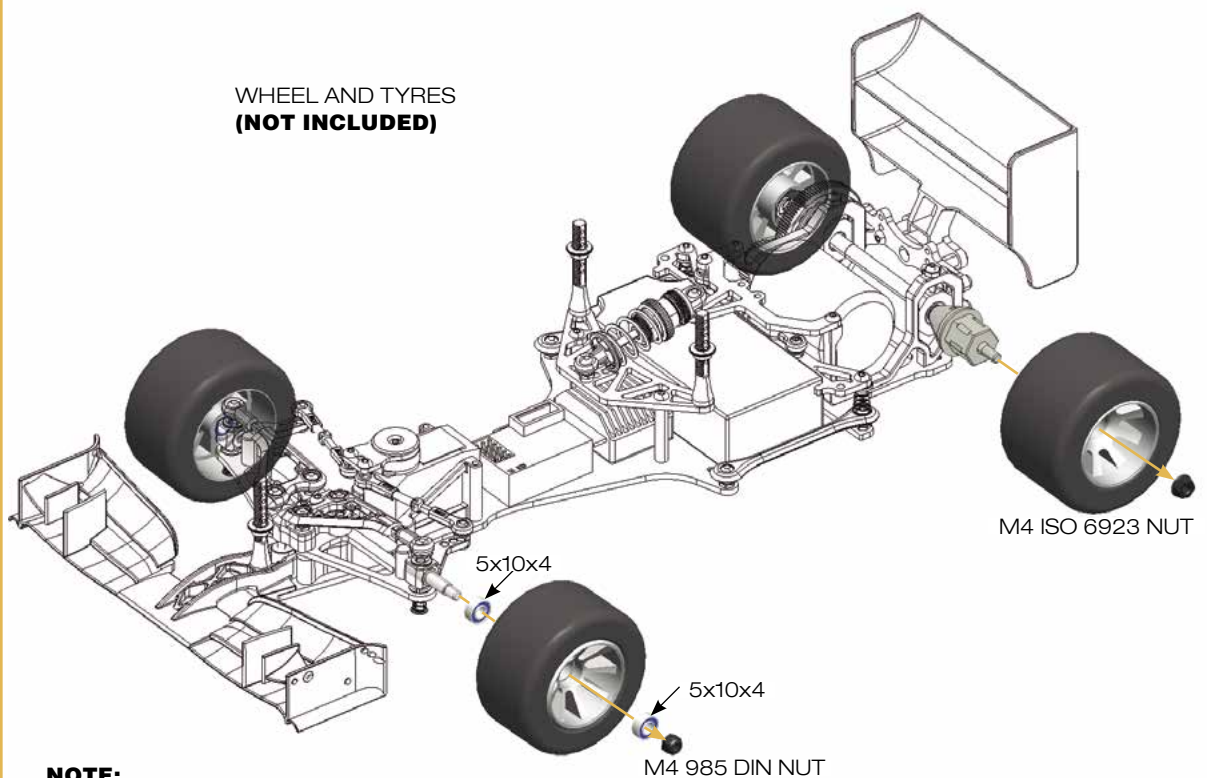
# G

## Step

# 25

## BAG 7.3

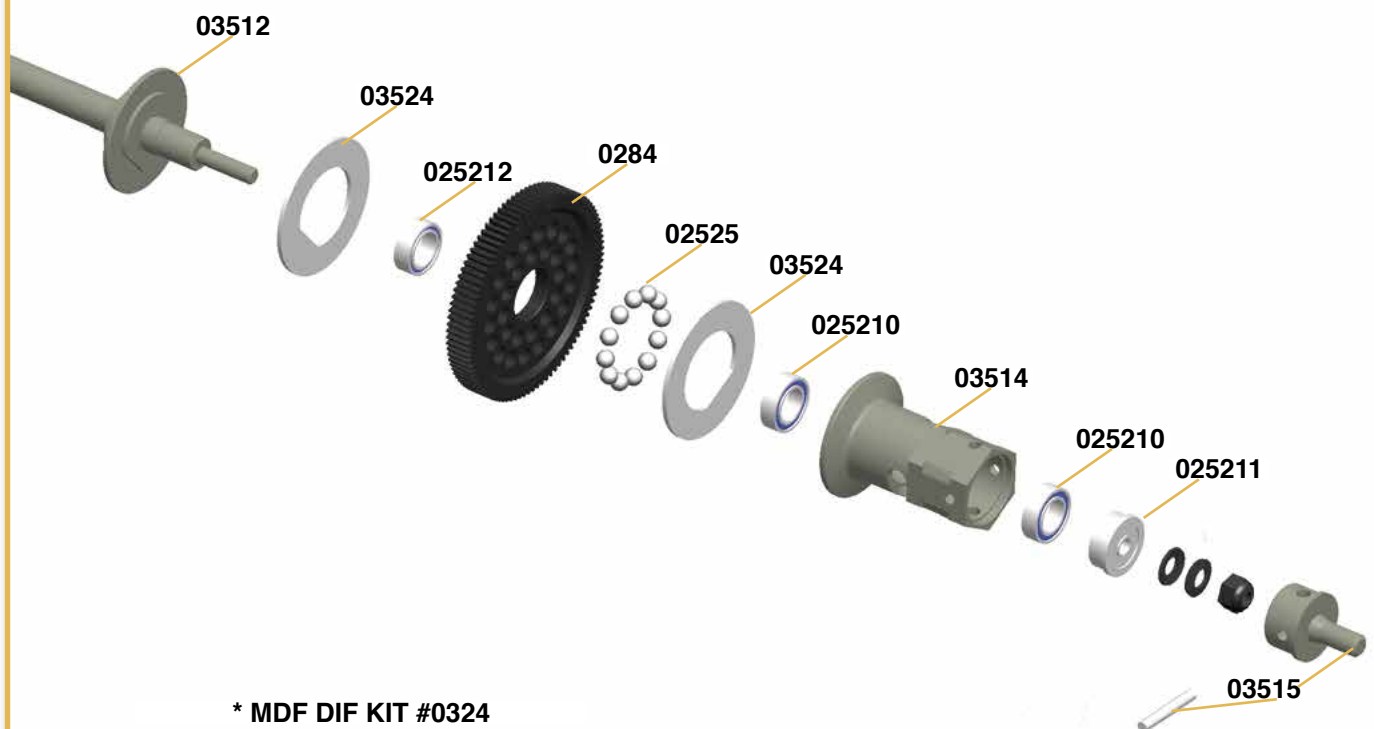
WHEEL AND TYRES  
(NOT INCLUDED)



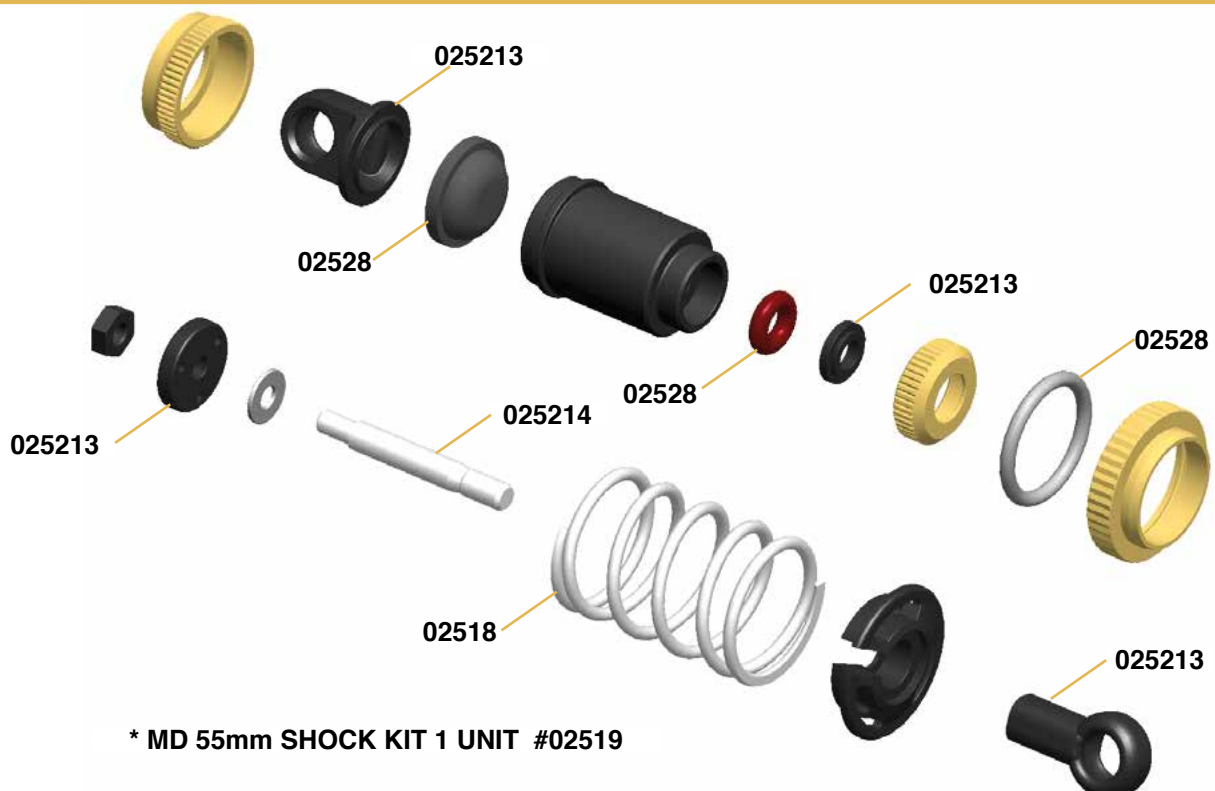
### NOTE:

The kit includes 6x 5x8x0.2 shims to use between the 5x10x4 ballbearing and the wheel-axle for being able to change the car trackwidth

# DIFF EXPLODED VIEW



# SHOCK EXPLODED VIEW

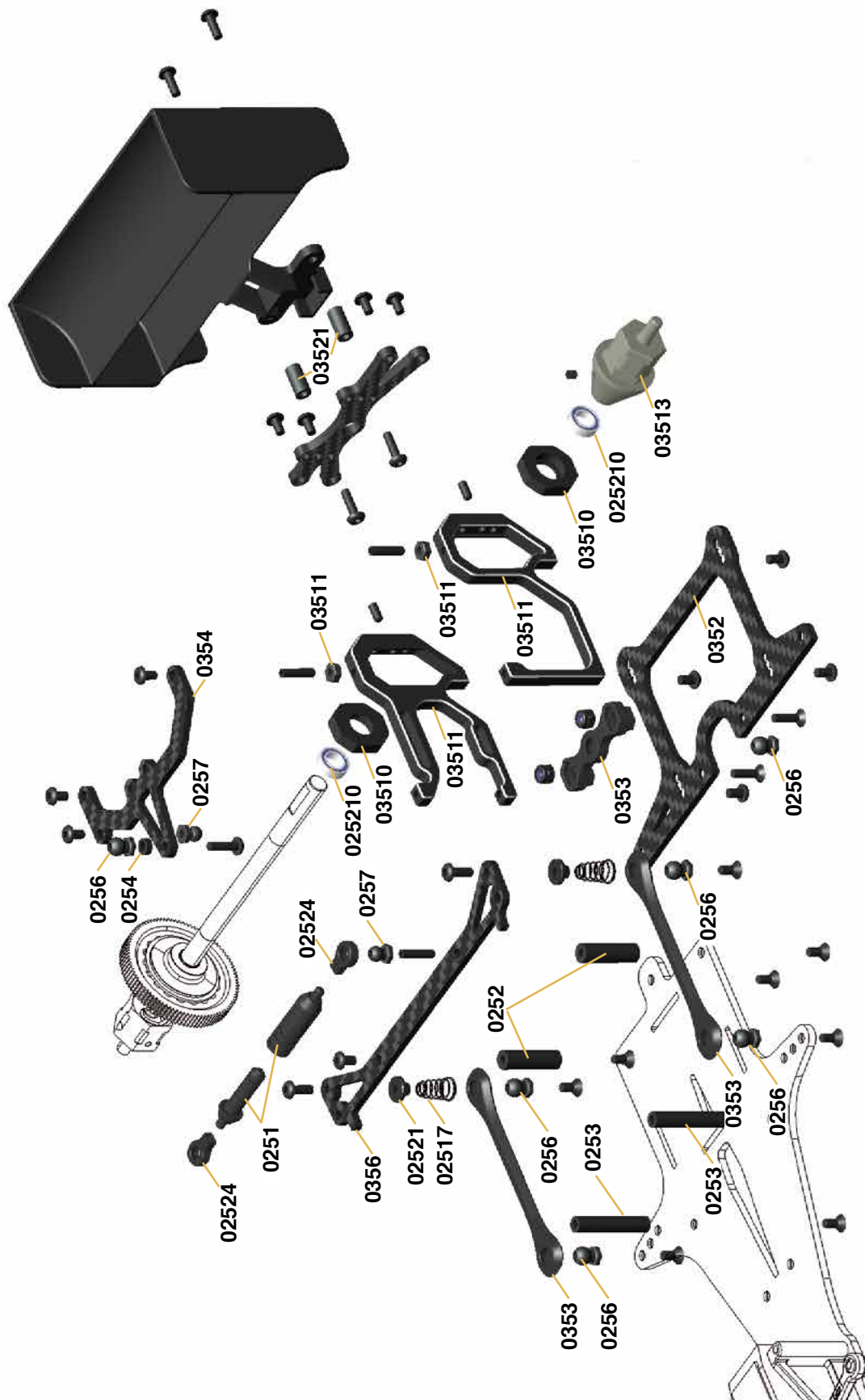


This diagram shows an exploded view of a mechanical assembly. The components are labeled with the following numbers:

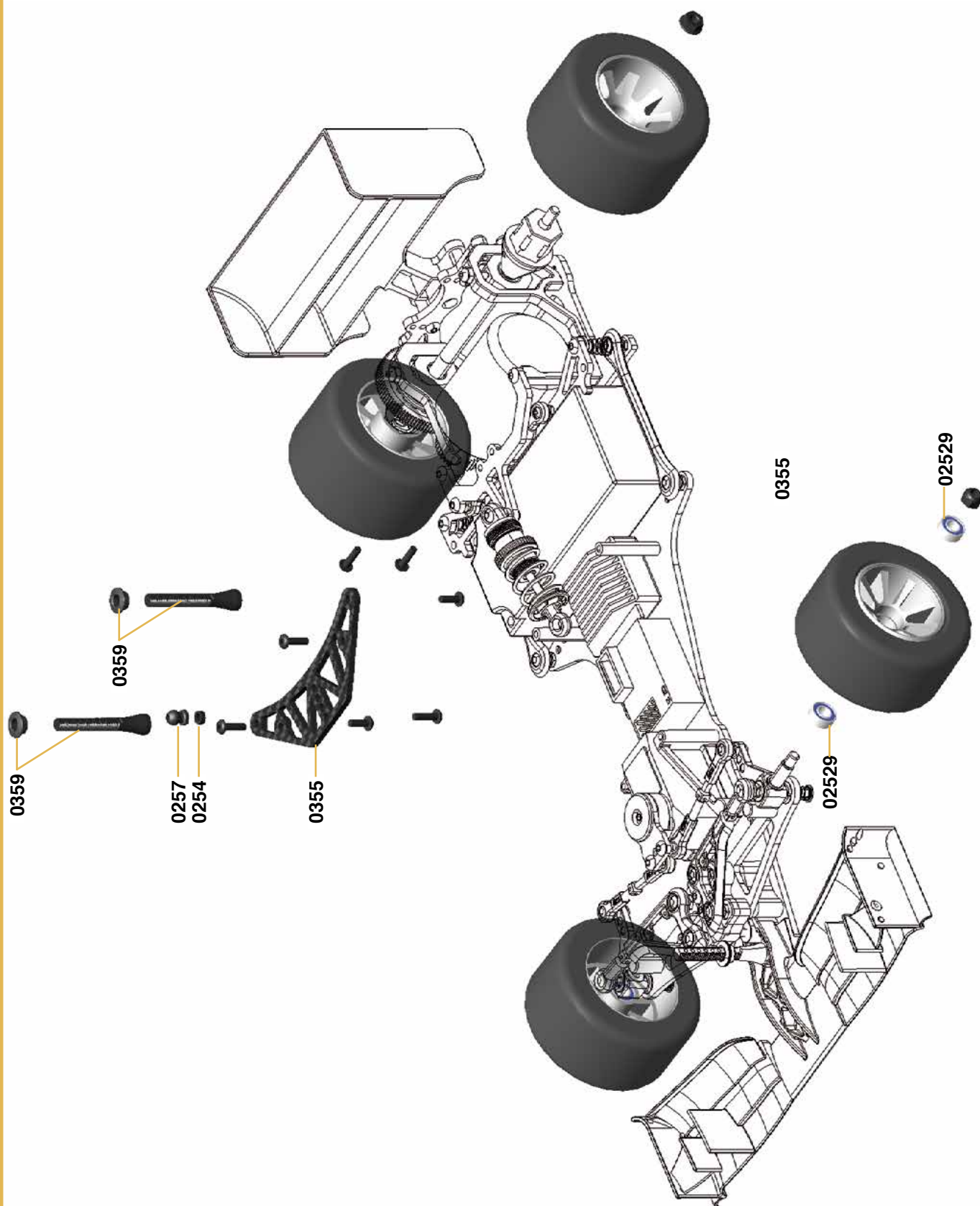
- 02512
- 02514
- 02515
- 02513
- 02523
- 02526
- 0257
- 03517
- 0351
- 0357
- 03523
- 02510
- 02516
- 02520
- 0259
- 03518
- 03520
- 0258
- 03526
- 03526
- 03526
- 03526
- 03526
- 03519
- 0256
- 0254
- 0256
- 03519
- 03519
- 0358
- 0256



**WELT**



# FINAL EXPLODED VIEW



# MDF14 SPARE PARTS

0251	MD compensator	02519	MD 55mm shock kit 1unit
0218	MD Lateral body compensator.	01222	MD Nut Din 936 M2,5
0241	MD lateral rod compensator	01629	MD steel shim 2,5x0,5mm
0251G	MD compensator Gold	01622	MD E clip 2,4mm
0218G	MD Lateral body compensator.	0268	MD Piston guide
0241	MD lateral rod compensator	0269	MD piston 3x0,75mm
0252	MD Shell 20x5 M3 kit 2 units	0266	MD Silicone o-ring 12,1x1,6
0217	MD Shell 20x5 M3	0267	MD silicone o-ring 3*2
0111	Screw Din-7991 M-3*6	02610	MD silicone shock cap
0253	MD Shell 26x5 M3 kit 2 units	01710	MD Spring 25*16 medium Gold
0221	MD Shell 26*5 M3	02612	MD Shock shaft
0111	Screw Din-7991 M-3*6	01312	MD Ball end 5,8*12mm
0254	MD aluminium flat washer M3 kit	0263	Ball end shock cap
0163	MD Aluminium M3 flat washer 2mm	0261	MD shock preload
0161	MD Aluminium M3 flat washer 0,5mm	0262	MD Shock body
0162	MD Aluminium M3 flat washer 1mm	0264	MD Shock cap
0255	MD aluminium flat washer M6 kit	0265	MD lower shock cap
0166	MD Aluminium M6 flat washer 1mm	02611	MD aluminium frame shock
0167	MD Aluminium M6 flat washer 2mm	02525	MD chrome steel 1/8 ball 14 Units.
0168	MD Aluminium M6 flat washer 3mm	0155	MD chrome steel 1/8 ball
0256	MD 5.8mm hex ball stud l=7 10units	02529	MD Bearing 5x10x4 4units
0145	MD 5,8mm hex ball stud L=7	0152	Bearing 5*10*4mm
0257	MD 4.8mm hex ball stud L=5 5 units	025210	MD Bearing 6x10x3 4units
0143	MD 4,8 hex ball stud L=5	0151	MD Bearing MR-106-2z 6x10x3mm
0258	MD Body post 30mm 2units	025211	MD Bearing F3x10x3 4units
0131	MD Body post 30mm	0153	MD Bearing F-623-2z 3x10x3+1mm
0225	MD post nut	025212	MD Bearing 1/4x3/8x1/8 4units
01122	Screw Iso-7380 M-3*8	0154	MD Bearing 1/4*3/8*1/8 (R-168zz)
0259	MD back stop kit 2 units	025213	MD Shock plastic parts
0219	MD back stop	0268	MD Piston guide
01121	Screw Iso-7380 M-3*6	0269	MD piston 3x0,75mm
02510	MD MD Ball end insert 10units	01312	MD Ball end 5,8*12mm
01320	MD MD Ball end insert	0263	MD Ball end shock cap
02512	MD Turnbuckle steel 20mm 2units	025214	MD shock shaft 2units
0182	MD 3mm turnbuckle 15mm	02612	MD Shock shaft
02513	MD Turnbuckle steel 32mm 2 units	03523	MD 5,8mm ball 10units set
0184	MD 3mm turnbuckle 32mm	0146	MD 5,8mm ball
02514	MD Ball end 5.8mm x 12mm 4 units	03524	MD Diff plate 2 units set
01312	MD Ball end 5,8*12mm	0195	MD Diff plate
02515	MD steering arm kit	03525	MD Barrette 2x14mm 10 units set
0220	MD Steering arm	0192	MD Barrette 2*14mm
0194	MD Whell axle	0351	MDF 14 chassis
01130	Screw Din-913 M-3*3	0311	MDF14 2,5mm chassis
02516	MD 6x4 springs kit	021012	MDF 2015 Left frontal flap
0172	MD Spring Medium 4*6mm Gold	021013	MDF 2015 Right frontal flap
0171	MD Spring Soft 4x6mm Black	021014	MDF 2015 Left mini flap
0173	MD Spring Hard 4*6mm Silver	021015	MDF 2015 Right mini flap
02517	MD conical springs kit.	01136	MD Screw Din-7991 2x4
0174	MD conical spring soft 7/8x10mm Black	01135	MD screw Din-952 2x8
0175	MD Conical spring medium 4/8x10mm	03526W	MDF 2015 Front Formula Wing white
0176	MD Conical spring hard 4/8x10mm Silver	021011W	MDF 2015 central front wing white
02518	MD shock springs kit.	021012W	MDF 2015 Left frontal flap white
01710	MD Spring 25*16 medium Gold	021013W	MDF 2015 Right Frontal Flap white
01711	MD Spring 25*16 hard Silver	021014W	MDF 2015 Left mini flap white
01712	MD Spring 25*16 soft Black	021015W	MDF 2015 Right mini flap white
02524	MD Ball end 4.8x7 set 4 units	01136	MD Screw Din-7991 2x4
01311	MD Ball end 4,8*7mm	01135	MD screw Din-952 2x8
03519	MDF14 Caster regulation kit	03520	MDF14 Lower arm support
0327	MDF14 Lower caster	0326	MDF14 Lower arms support
0328	MDF14 Top arms support	03526	MDF 2015 Front Formula Wing
01123	Screw Din-7991 M-3*10	021011	MDF 2015 central front wing
03521	MDF14 Shell 10x5 M3 kit	0354	MDF14 Shock support
0216	MD Shell 10*5 M3	0313	MDF14 Shock support
01121	Screw Iso-7380 M-3*6	0355	MDF14 Top Deck
01123	Screw Iso-7380 M-3*10	0314	MDF14 Top Deck
025251	MD Spur 64P 94T	0356	MDF14 Medium deck
0284	MD Diff gear 64P 94T	0317	MDF14 Medium deck
025253	MD Diff gear 64p 86T	0357	MDF14 Lower arms
0282	MD Diff gear 64p 86T	0316	MDF14 Lower arm

025254	MD Diff gear 64p 82T	0358	MDF14 Plastic Top arms
0281	MD Diff gear 64p 82T	0383	MDF14 Plastic top arm
025252	MD Diff gear 64p 90T	0359	MDF14 Wing support
0283	MD Diff gear 64p 90T	0318	MDF14 Wing Support
0352	MDF 14 Rear chassis	03510	MDF14 6mm diff axle hex
0312	MDF14 2,5 rear chassis	0213	MD 6mm diff axle hex.
02520	MD king pin set	03513	MDF14 Duraluminium 7075 T6 Hex hub 14mm
0191	MD King pin	0321	MDF14 Duraluminium 7075 T6 Hex hub 14mm
0145	MD 5,8mm hex ball stud L=7	01130	Screw Din-913 M-3*3
02521	MD Lateral preload set	03514	MDF14 Duraluminium 7075 T6 Hex diff hud 14mm
0132	MD Lateral preload	0322	MDF14 Duraluminium 7075 T6 Hex diff hub 14mm
01122	Screw Iso-7380 M-3*8	02526	MD servo Saver
02522	MD clip set 10 units black	01332	MD Servo Saver Bottom 23T
0196	MD clip	01333	MD Servo Saver Bottom 24T
02523	MD Ball end 4,8x 15 set 10 units	01334	MD Servo Saver Bottom 25T
01310	MD Ball end 4,8*15mm	01335	MD Servo Saver Top 1/10
02528	MD Shock silicone parts	01336	MD Servo Saver Cover
0266	MD Silicone o-ring 12,1x1,6	01337	MD Servo Saver Brushing 2x3
0267	MD silicone o-ring 3*2	0197	MD Servo Saver Spring inside
02610	MD silicone shock cap	0198	MD Servo Saver Spring mid
03511	MDF14 motor bench set.	0199	MD Servo Saver Spring outside
0214	MD Right engine bench	03511G	MDF14 motor bench set. GOLD
0215	MD Left engine bench	0214G	MD Right engine bench Gold
01121	Screw Iso-7380 M-3*6	0215G	MD Left engine bench Gold
01133	Screw Din-913 M-3*12	01121	Screw Iso-7380 M-3*6
0121	Nut Din-936 M-3	03512	MDF14 7075 T6 diff axle kit
03517	MDF14 Servo support kit	0211	MDF14 Duraluminium 7075 T6 diff axle
0325	MDF14 right servo Support	0212	MD Duraluminium 7075 T6 disc diff
0329	MDF14 Left Servo support	0193	MD Barrette 2*12mm
01121	Screw Iso-7380 M-3*6	03515	MDF14 Duraluminium 7075 T6 diff plug
03517G	MDF14 Servo support kit GOLD	0323	MDF14 Duraluminium 7075 T6 diff plug
0325G	MDF14 Right servo support Gold	01130	Screw Din-913 M-3*3
0329G	MDF14 Left servo support Gold	0192	MD Barrette 2*14mm
01121	Screw Iso-7380 M-3*6	03516	MDF14 Diff bearings kit
03518	MDF14 frontal Height regulation kit	0151	MD Bearing MR-106-2z 6x10x3mm
0319	MD height regulator 1mm	0153	MD Bearing F-623-2z 3x10x3+1mm
03110	MD height regulator 2mm	0154	MD Bearing 1/4*3/8*1/8 (R-168zz)
0353	MDF14 Links		
0243	MD Plastic lateral link		
0244	MD Plastic central pod		
03527	MDF14 Black and white Stickers		
0361	MDF14 black and white stickers 10x20 cm		
03519G	MDF14 Caster regulation kit GOLD		
0327G	MDF14 Lower caster Gold		
0328G	MDF14 Top arms support Gold		
0113	Screw Din-7991 M-3*10		



