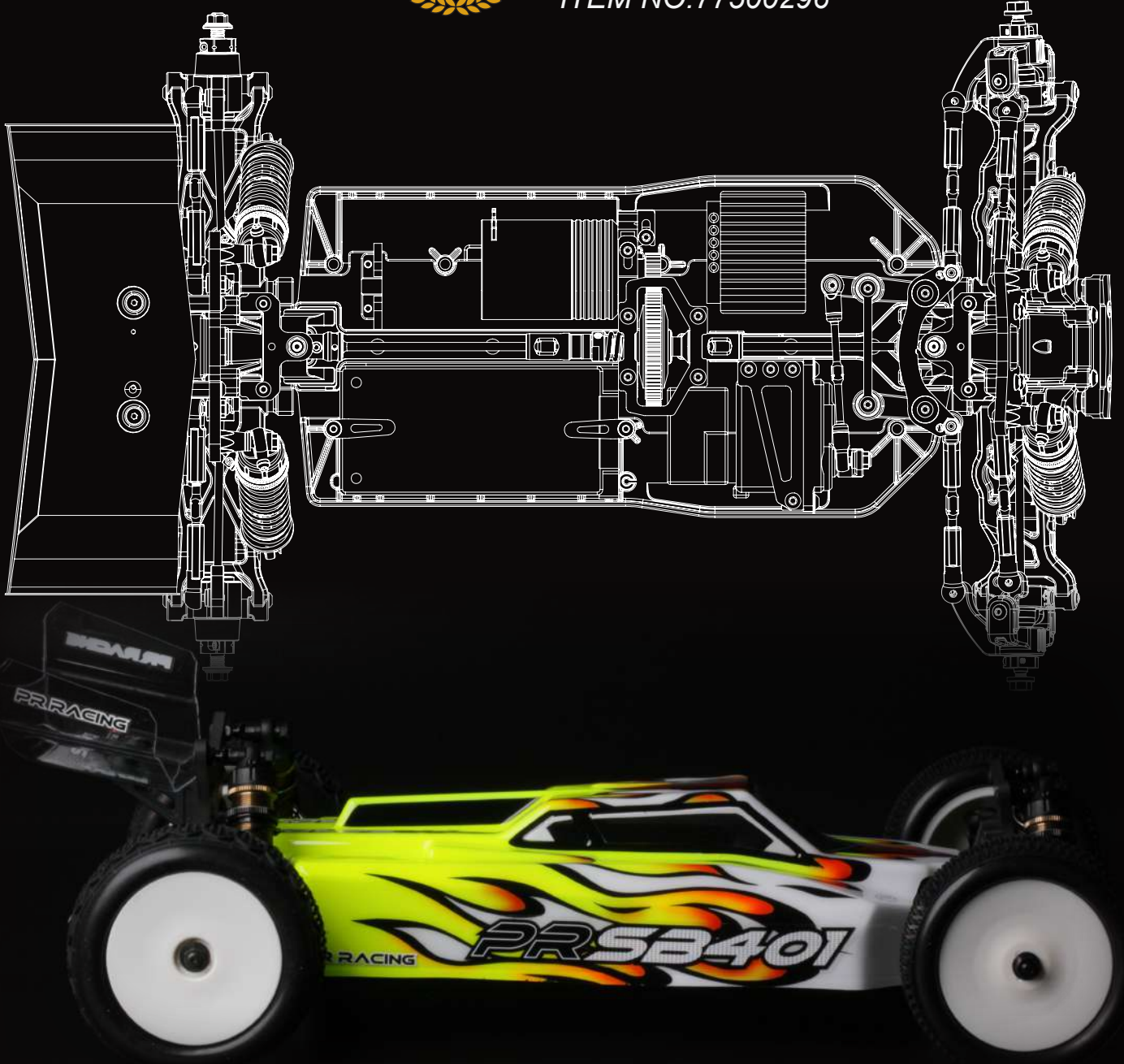


PR SB401



PR RACING
TYPE **R**

ITEM NO:77500296



2023 PR SB401-R 1/10 Electric 4wd Off Road Buggy Kit (Centre Slipper/Diff Version)



PR RACING

PR Racing is excited to finally announce the release of our latest 1/10 electric four-wheel-drive offroad buggy – the 2023 SB401R. We at PR Racing have been working behind the scenes carefully and patiently to refine our products for optimum performance. So quickly, 4 years have passed since the release of our last SB401 chassis and we apologize to our supporters for the wait. The design and performance of the SB401R platform has continued to be competitive at all levels, so we have seen no need to replace the design and introduce a new kit every year. The 2023 SB401R has been extensively tested in three major racing territories– the United States, Europe and Japan, after which all the data and feedback from drivers are carefully studied to refine our designs. All this ensures that the kit and its stock setup out of the box is the best baseline for a high-performance buggy that is easy to drive fast for drivers on a broad range of track conditions. There are more than 30 updates in this new kit that include not only those visible at a glance but also changes in materials for various parts to optimize the car’s handling.

Shock Absorbers: The smooth operation of shocks with minimum ‘stiction’ is critical for performance. After extensive testing, the test teams have identified new O rings that are now included in the new shock package that also includes revised shock towers. The new towers feature new geometry and setup options that have proven to increase stability on flat or bumpy tracks.

Wishbones: New wishbones made from fiber composite are durable and provide the ideal flex characteristics for better track handling. These are matched with new rod ends on the upper suspension links that are made with a new material that has been tested to be more sturdy and with less slop for a more precise handling car.

Transmission: The team also looked at how to refine the bullet-proof transmission. The driveshafts and main drive gears are made of all new materials that not only give more positive acceleration, they also result in a more direct drive feel.

Chassis: Chassis flex has been a key area of our testing, research and refinement. Too much flex impacts the car’s ability to corner precisely and too little flex results in a car that is too sensitive and hard to drive. Our designers carefully studied and tested chassis flex and developed new softer chassis braces and a re-designed gearbox brace that received very positive feedback from our test drivers in all three countries. Our engineers have also incorporated into the new gearbox brace different setting options so flex can be further fine-tuned for a broad variety of track conditions.

Steering: The previous SB401 chassis was known for its stable handling characteristics, especially on loose dirt tracks. Our drivers racing on carpet or astro-turf tracks felt that the car could further be optimized for these high-grip conditions. Our latest car features a re-designed steering plate with geometry that has unlocked more of the car’s potential. This new geometry combines with the included 8-degree C-hubs to produce a steering response that, according to one Japanese test driver, allows the driver to be very connected to the car. We hope this info highlights some of the key changes you can find in the new 2023 SB401R and explains the careful thought behind each update. MIT’s (Made In Taiwan) PR has built a strong reputation across the world for excellent products. The RC community in Taiwan is fortunate as they have not been impacted by raw material supply issues and have a helpful family of racers to readily provide support. Once again, we apologize for the long wait, but we are happy to announce we are now accepting pre-orders for the all new 2023 SB401R.

ITEM NO:77500296

Name: 77500296-2023 PR SB401-R 10TH Electric 4wd Off Road Buggy Kit (Centre Slipper/Diff Version)

A number of key components have been totally redesigned to produce a better handling and more forgiving car to drive. The main focus has been on the all new narrow 2.5mm chassis and plastic side-pods which utilizes a carbon fibre reinforced spine to control torsional and longitudinal flex. The additional flex has proved to increase grip, and make the car feel more balanced and easier to drive leading to faster, more consistent laps.

Chassis

Hard anodized 2.5mm Narrow chassis with side-pods
 Plastic/carbon chassis spine with CNC alloy bulkheads
 Alloy/Carbon floating servo mount
 Type R ultra-low CofG Body

Transmission

New stronger/quieter pinions and ring gears
 New vented slipper assembly with ultra-hard shafts and cups for long life
 Top loading slipper/centre diff mount for easy access
 Longer diff cups to allow for more droop

Suspension and Steering

12.8mm Smooth Coated 2023 Type R shocks
 Suspension hangers with inserts for toe and anti-squat adjustment
 Revised Ackermann geometry for improved steering feel
 8 Degree CNC caster blocks
 CNC alloy rear hubs
 Hard wishbones
 New shorter black ball cups
 New high tensile steel turnbuckles

Specifications

Type: 1/10th 4wd Off Road
 Power Source: Electric
 Wheelbase:287mm (variable)
 Width:245mm-248mm
 Gear Ratio: 2.6:1
 Weight:1680g-1720g race ready (varies)
 Hardware: Full metric
 Bearings: Sealed Metal Ball Bearings
 Wheels:12mm hex
 Kit: Assembly required



Manual connection

Items Required to Complete

2 Channel surface frequency radio s system
 2S LiPo battery & compatible lipo charger
 1/10 ESC, motor & pinion gear
 High Speed Servo
 1/10 tire and inserts

- **BEFORE INSTALLATION** ----- 01
- **BAG A** ----- 03-08 ● **BAG E** ----- 21-23
 - A1-Main Chassis Assembly-Chassis Brace Installation
 - A2-Gear Diff Assembly
 - A3-Slipper Assembly
 - A4-Gear Box Assembly
 - A5 Rear Central Transmission
 - E1-Front & Rear Shock Assembly-R
 - E2-Front & Rear Shock Installation
 - E3-Motor Installation
 - E4-Mounting Tires, Wheel Installation
- **BAG B** ----- 09-13
 - B1-Suspension Mount Installation
 - B2-Front Hub Carrier Assembly(Left Right Side)
 - B3-Suspension Mount Installation-Sway Bar Installation
 - B4-Front Upper Turnbuckle Assembly
 - B5-Gearbox-Reinforcement - Front
- **BAG C** ----- 14-17
 - C1 Rear Assembly RF Suspension Mount
 - C2-C3-Rear Left Hub Carrier Assembly
 - C4-Rear Upper Rod -Turnbuckle Assembly
 - C5-Sway Bar Installation
- **BAG D** ----- 18-20
 - D1-Bell Crank Installation
 - D2-Steering
 - D3-Turnbuckle Assembly-Steering Rod -Servo Rod
 - D4-Steering Servo
 - D5-Center Mount Plate
 - D6-Battery Plate Installation

- **Upgrade Parts** ----- 24
- **Setup Sheet** ----- 25
- **Pinion Spur Gear** ----- 26

BEFORE INSTALLATION

- 1 Read through the instruction manual before installation in order to have an overview of what to do.
- 2 Check if there are any missing bags or defective parts, if there are, please contact our local dealer or our PR Distributor.
- 3 Symbols used throughout the instruction manual, comprises of:



Part bags used.



Assemble as many times as specified (here: twice).



Tighten securely.



Note the direction.



True-to-scale diagram.



Do not over tighten.



Must be purchased separately.



Apply threadlocker (screw cement)



Ensure smooth non-binding movement while assembling.



Assemble in the specified order.



Apply grease.



Cut off shaded portion.



Assemble left and right sides the same way.



Apply oil.

- 4 This kit contains screws and hardware in different metric sizes and shapes. Before using them, check the screws on the true-to-scale diagrams on the left side in each assembly step. Some screw are extras.

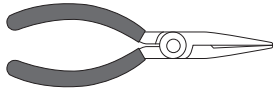
HEALTH WARNING

This model is a high performance radio controlled racing product that is designed for use on R/C car race tracks. If it is misused it could cause injury to the operator or others. Many of the items in this kit are small enough to be accidentally swallowed; therefore, it is not suitable for young children. All items, inclusive of liquids, contained in this kit are not intended for human consumption. Rotating parts of the car may cause injury if not handled with care.

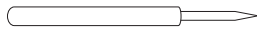
TOOLS REQUIRED

CAUTION: Handle tools carefully!

- Needle Nose Pliers



- Awl



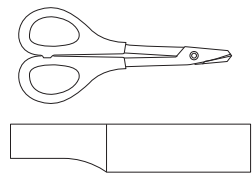
- Grease



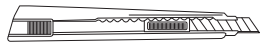
- Screw Cement



- Round Cutter & Sander



- Sharp Hobby Knife

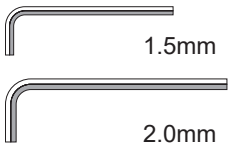


- Wire Cutters



For trimming bodies Cutting along curved lines was never so easy!

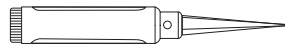
- Hex Wrench



- Ball Differential Grease

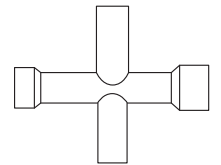


- SP Knife Edge Reamer



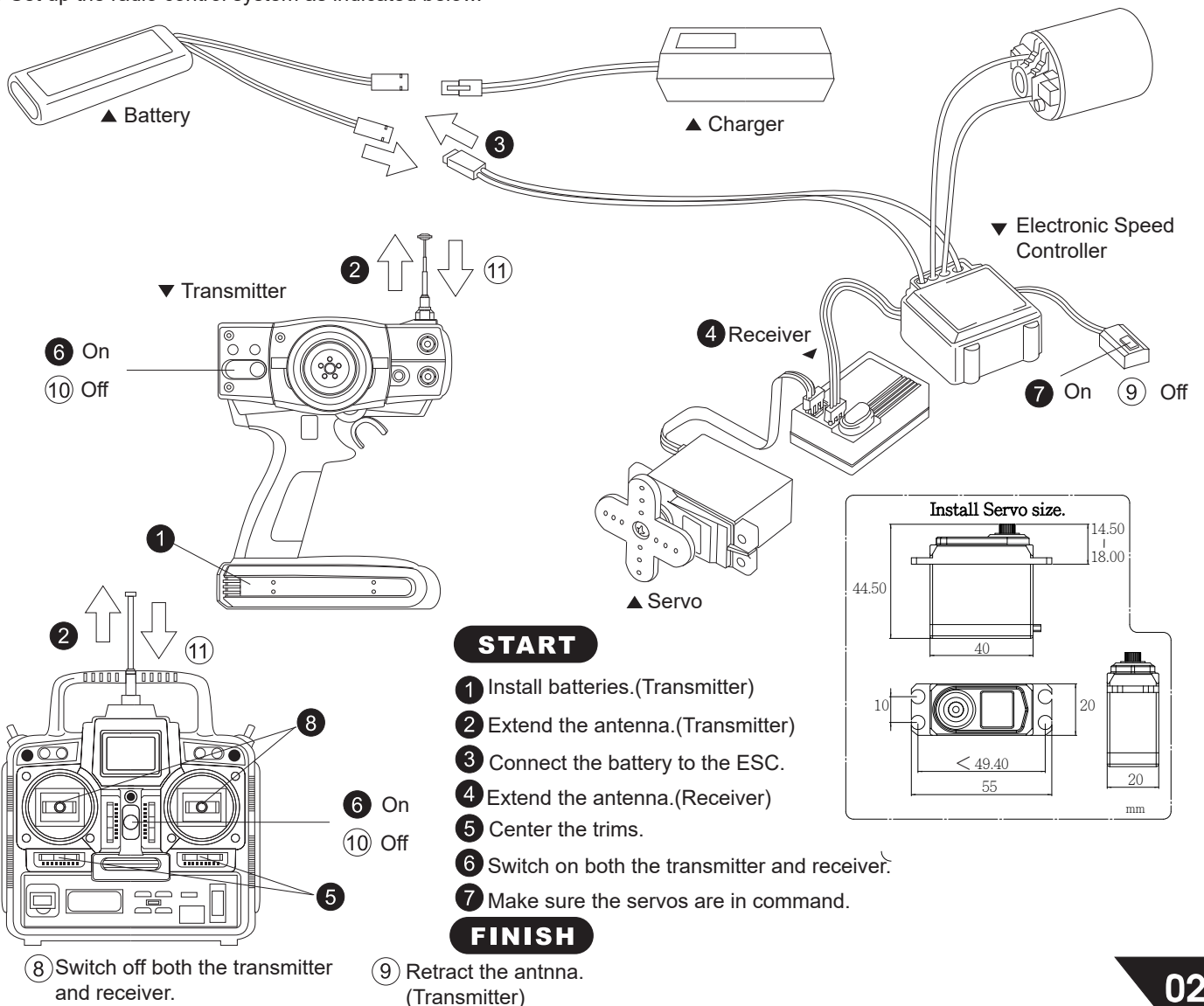
Do not pre-drill as precise drilling of 1mm to 15mm holes can be performed after body shell painted.

- Cross Wrench
- 5.0mm-5.5mm
- 7.0mm



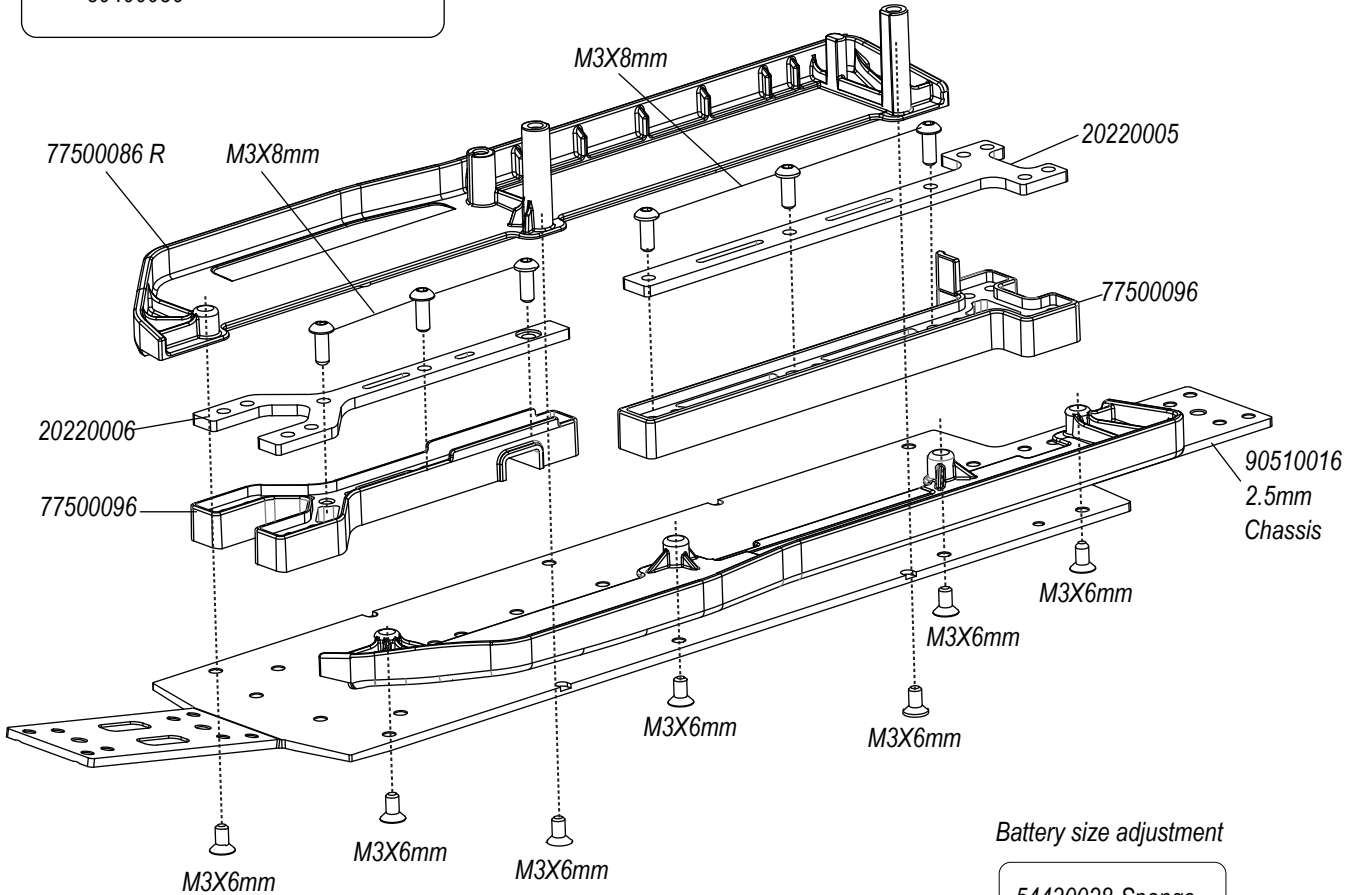
RADIO PREPARATION

- A new battery must be charged before it is used. Refer to the charger instruction manual for charging.
- Set up the radio control system as indicated below.



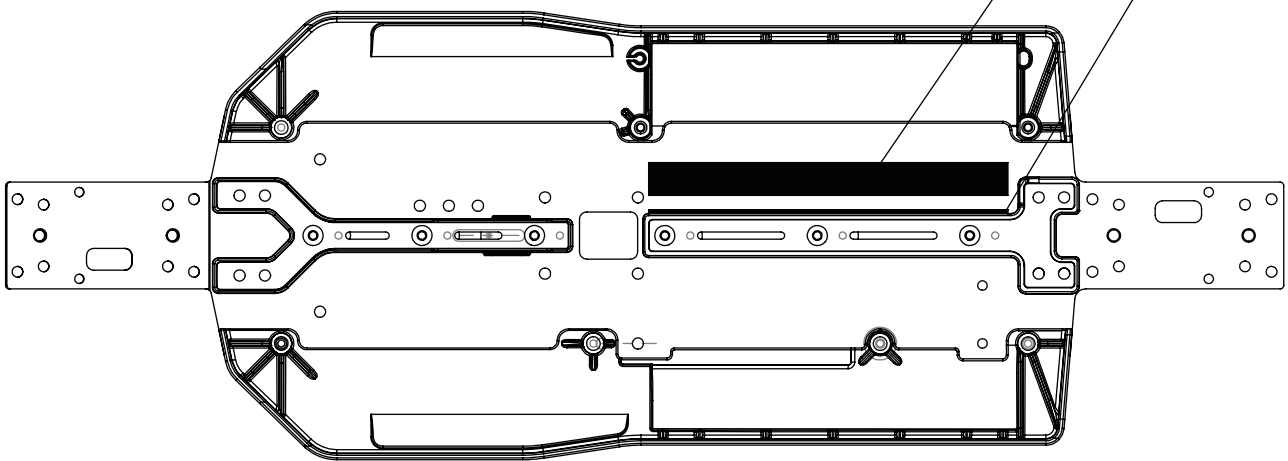
A1.1 Chassis Brace Installation

- 7
M3x6mm Flat Head Screws
82400016
- 6
M3x8mm Button Head Cap Screw
80400036



Battery size adjustment

- 54430028-Sponge
10x99x1mm or 3 mm
- 54430028-Sponge
10x99x1 or 3 mm



A1.2 Main Chassis Assembly

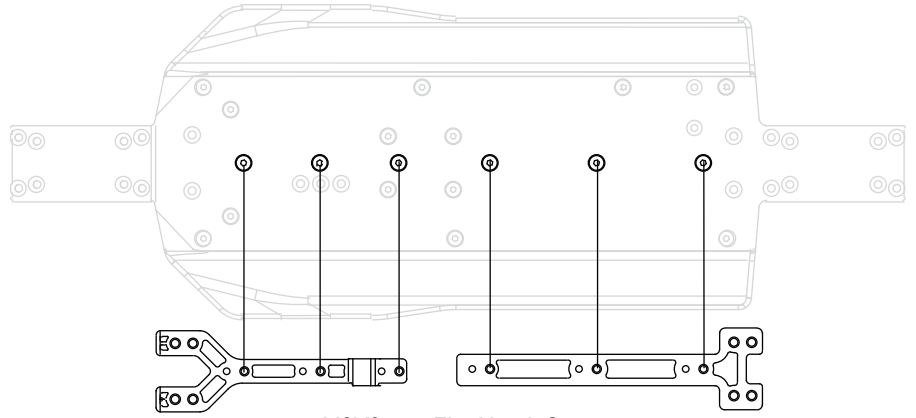
6
M3x6mm Flat Head Screws
82400016

6
M3x8mm Flat Head Screws
82400026

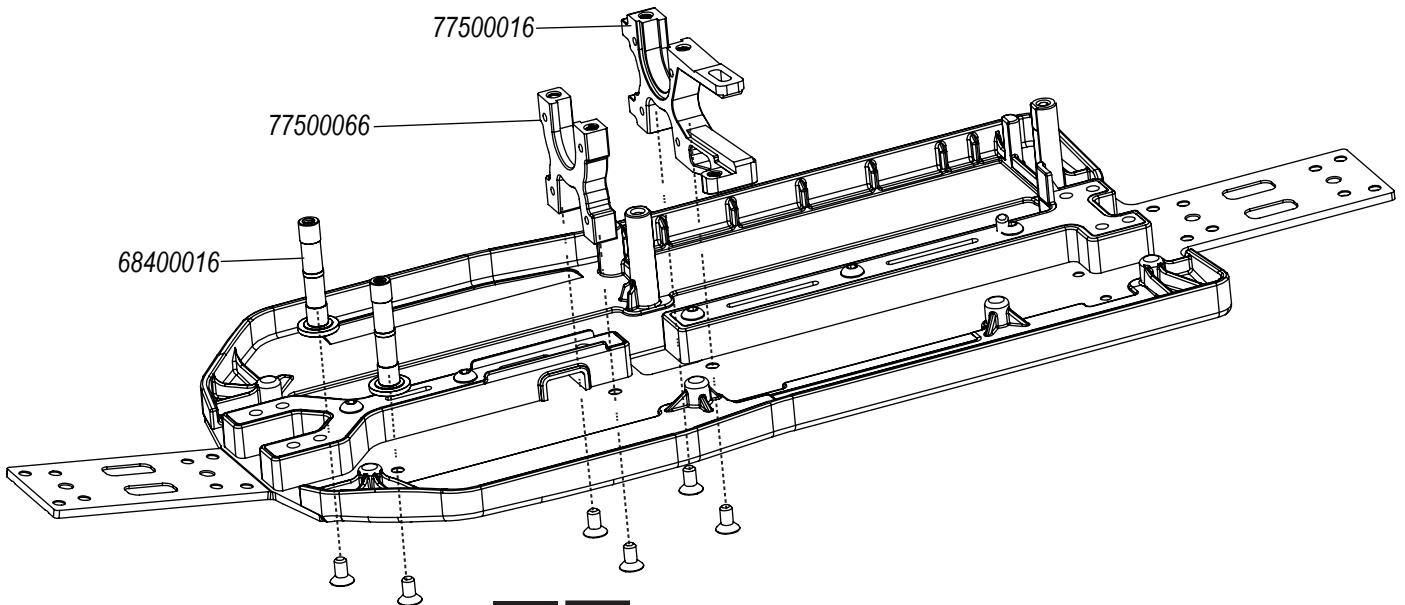
1
77500016

1
77500066

2
68400016



M3X8mm Flat Head Screws
Chassis rib screw position



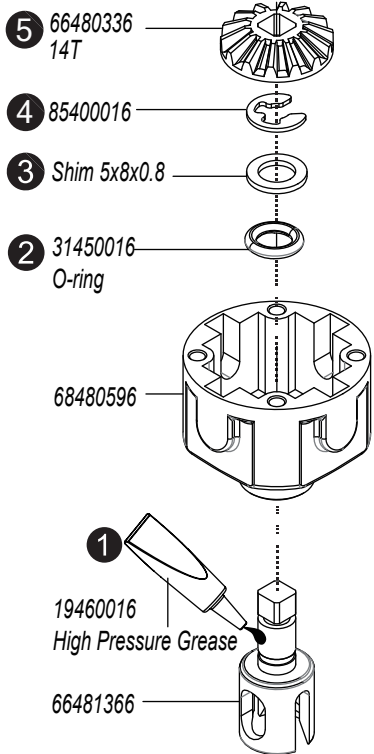
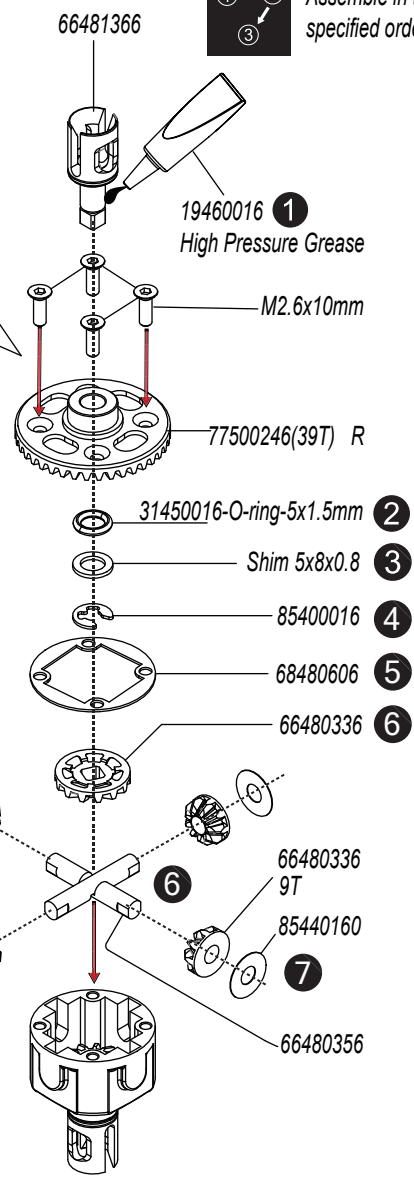
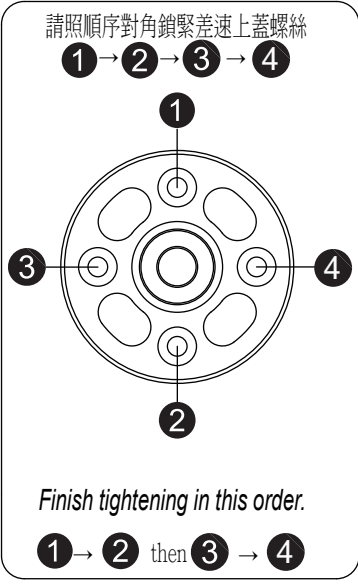
  M3X6mm
Tighten securely.

A2 Gear Diff Assembly

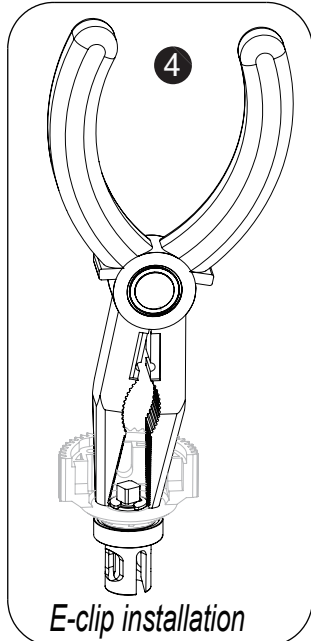
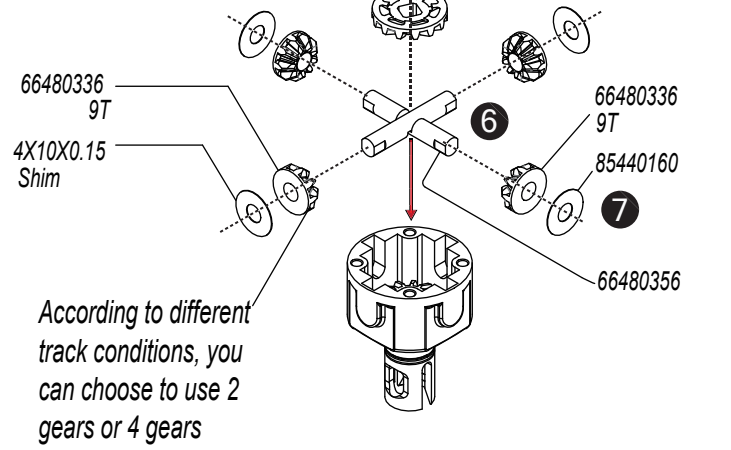
Assemble 1 front and 1 rear

Assemble in the specified order.

- 8
M2.6x10mm Flat Head Screw
82400166
- 4
5x8x0.8mm Shim
85440170
- 8
4x10x0.15mm Shim
85440160
- 4
3.5mm
85400016



x2



Diff Oil Silicon Oil

Fill to top of the cross pins
80% oil max

Initial Setting	
Front Diff	Rear Diff
Dirt 7000 Cst	Dirt 5000 Cst
Carpet 10000 Cst	Carpet 7000 Cst

A3 Slipper Assembly

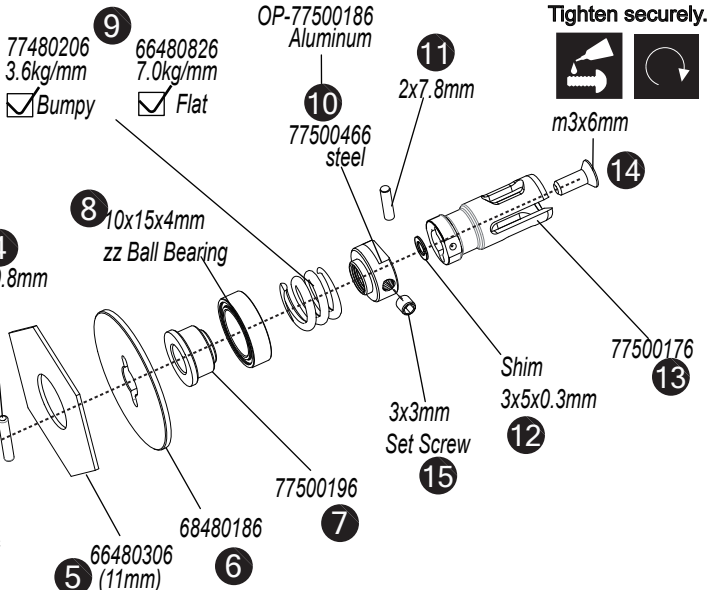


Assembly Video

① → ②
③ Assemble in the specified order.

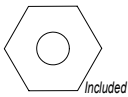
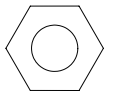
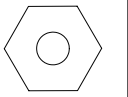
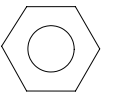
- 1 M3x3mm Set Screw -87400016
- 1 M3x6mm Flat Head Screw 82400016
- 1 Pin - 2 x 7.8mm -79400096
- 2 Pin - 2 x 10.8mm -79400016
- 2 10x15x4mm-zz Ball Bearing 89430030
- 1 Shim 3x5x0.3mm -85440290

- 68000100-73T (Motor 17.5t)
- 68400196-75T 68400206-77T (Motor 13.5t)
- 68400216-81T (Motor 5.5-6.5t)

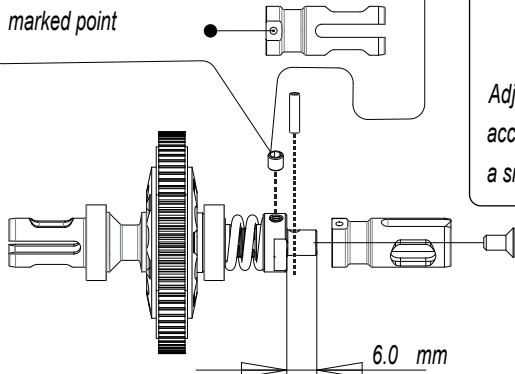


Tighten securely.

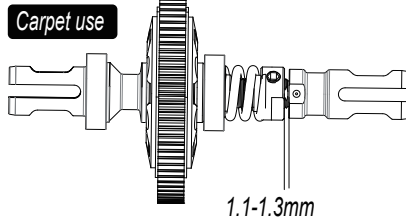


Option	PR RACING TEAM Slipper Pad		
 <small>Included</small>			
Carpet use	Dirt use	Carpet use	Dirt use
66480306 Slipper Pad 11mm (White)	68430016 Slipper Pad 19mm (White)	66481386 LCF Slipper Pads 11mm (Yellow)	66481396 LCF Slipper Pads 19mm (Yellow)

The set screw used to secure the slipper nut is tightened onto the flat area of the slipper shaft *Do not tighten onto the threaded area. Please tighten the area on the marked point



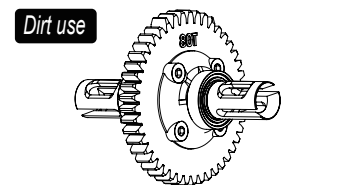
77500306-PR SB401-R Slipper Clutch Set





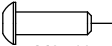
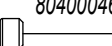





Adjust the slipper so that when the car accelerates from a dead stop, there is a small amount of slip.

77480106

PR SB401-R 80T Central Differential Set

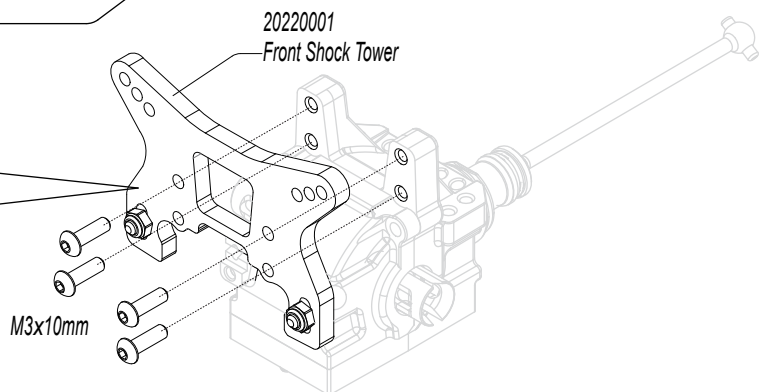
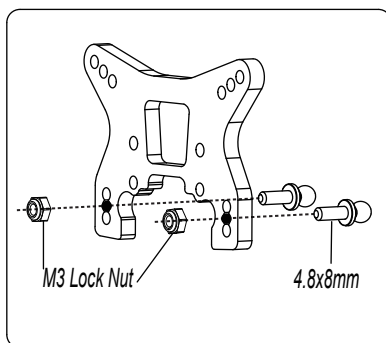
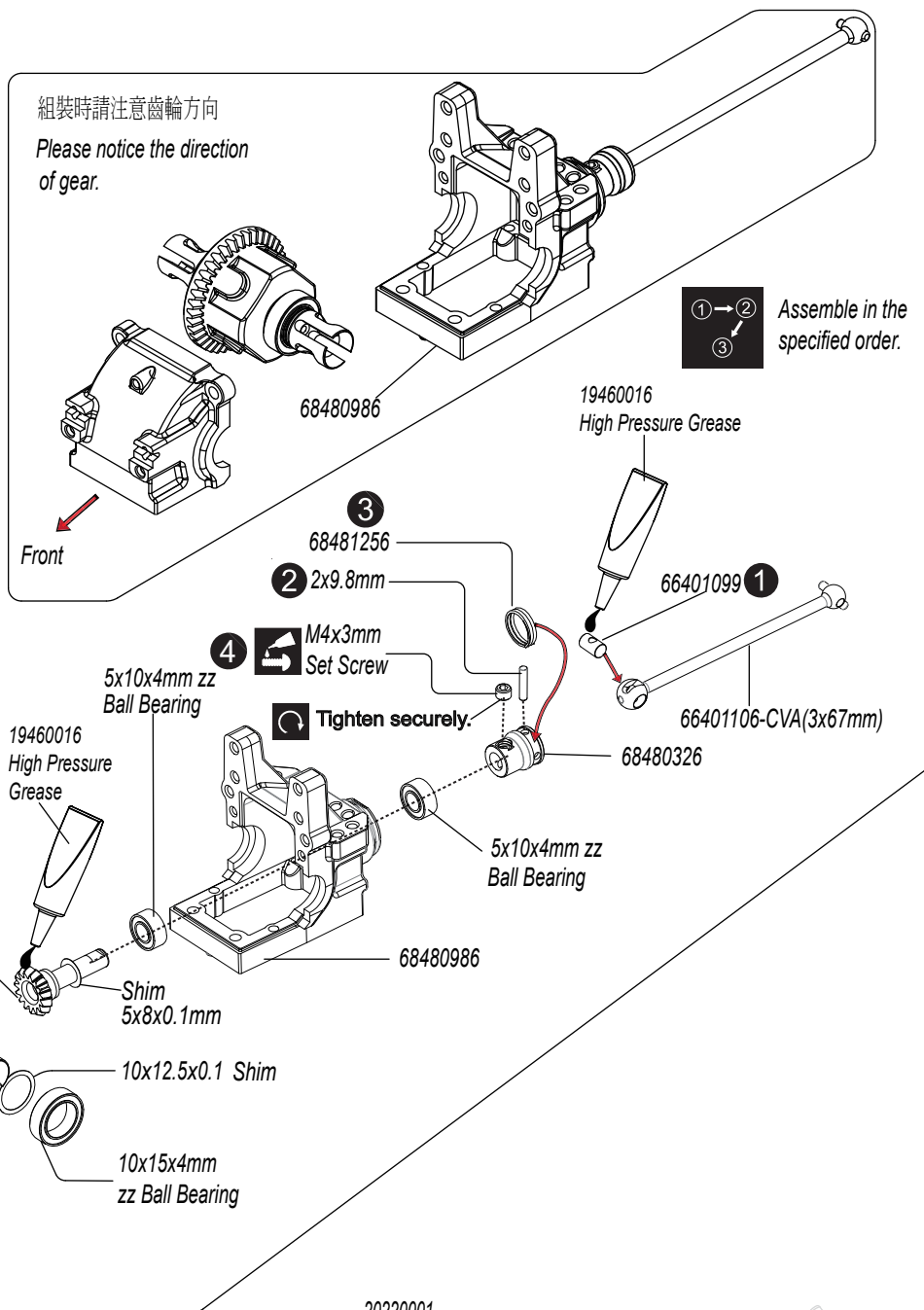
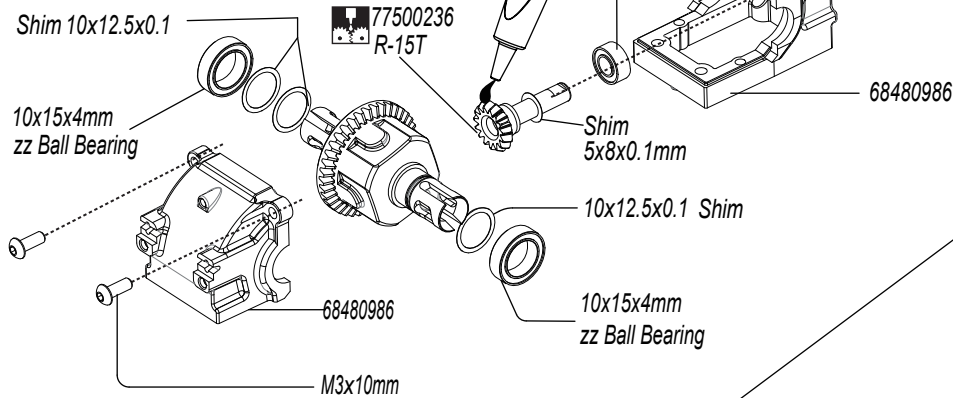


Track Conditions (Traction)	
Very-High	Oil 5000 Cst
Medium	Oil 10000 Cst
Very-Low	Oil 7000 Cst

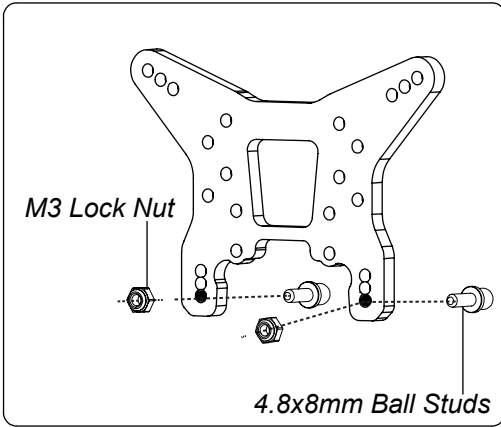
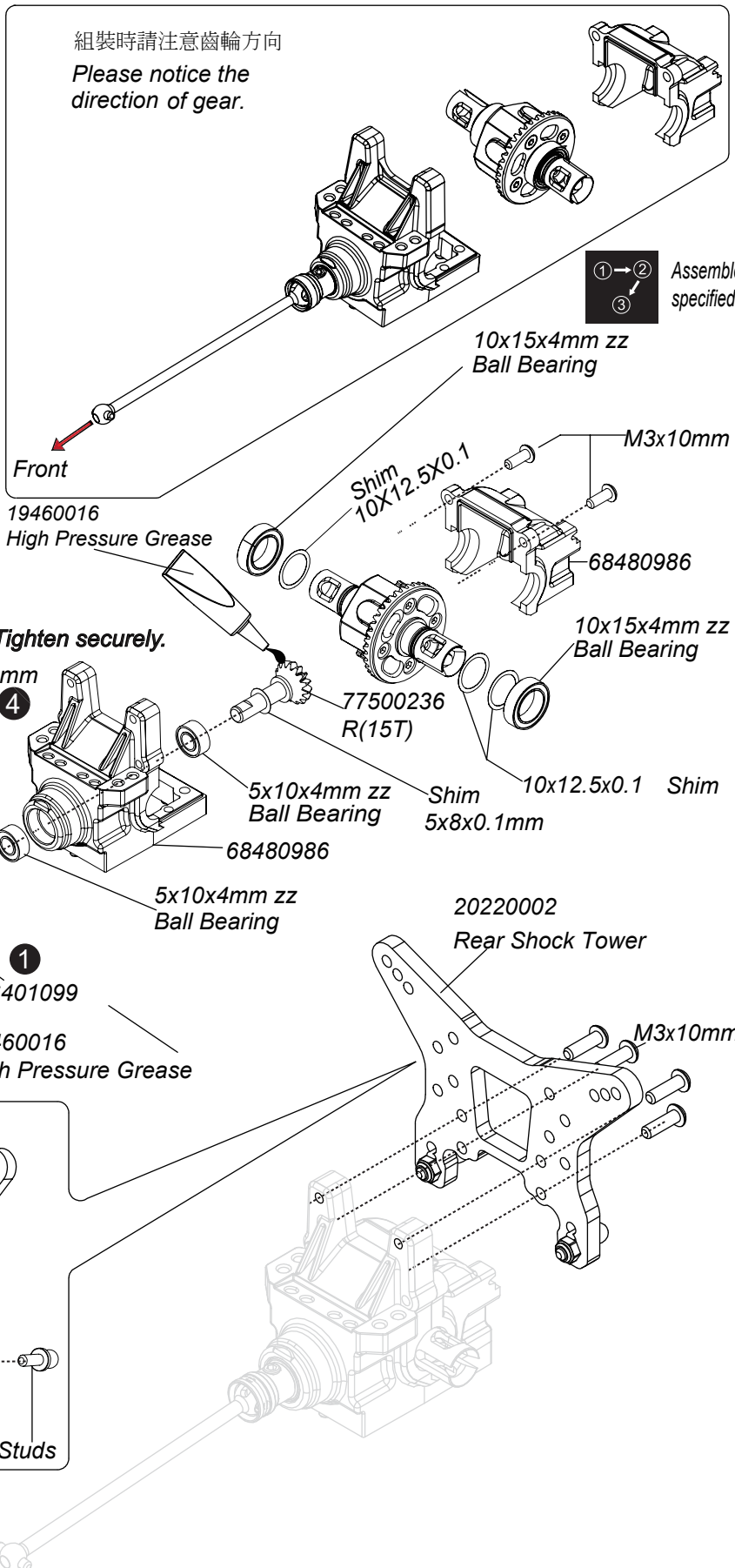
-  2
4.8x8mm Ball Studs-68430046
-  2
M3 Lock Nut -83400106
-  6
M3x10mm Button Head Cap Screw 80400046
-  1
M4x3mm Set Screw-78400016
-  1
5x8x0.1mm-Shim-85440090
-  3
10x12.5x0.1-Shim-85440230
-  2
5x10x4mm zz Ball Bearing-89430010
-  2
10x15x4mm zz Ball Bearing-89430030
-  1
79400086(2x9.8mm)

組裝時請注意齒輪方向
Please notice the direction of gear.

 Assemble in the specified order.






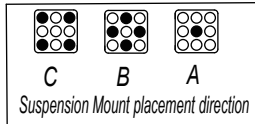
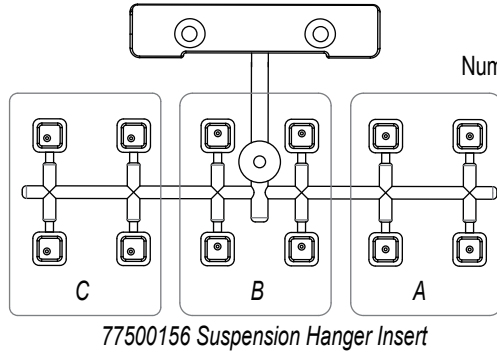
- 2
4.8x8mm Ball Studs-68430046
- 2
M3 Lock Nut -83400106
- 6
M3x10mm Button Head Cap Screw
80400046
- 1
M4x3mm Set Screw-78400016
- 1
5x8x0.1mm-85440090
Shim
- 3
10x12.5x0.1-85440230
Shim
- 2
5x10x4mm Ball Bearing
89430010
- 2
89430030
10x15x4mm Ball Bearing
- 1
2x9.8mm-79400086



BAG
B

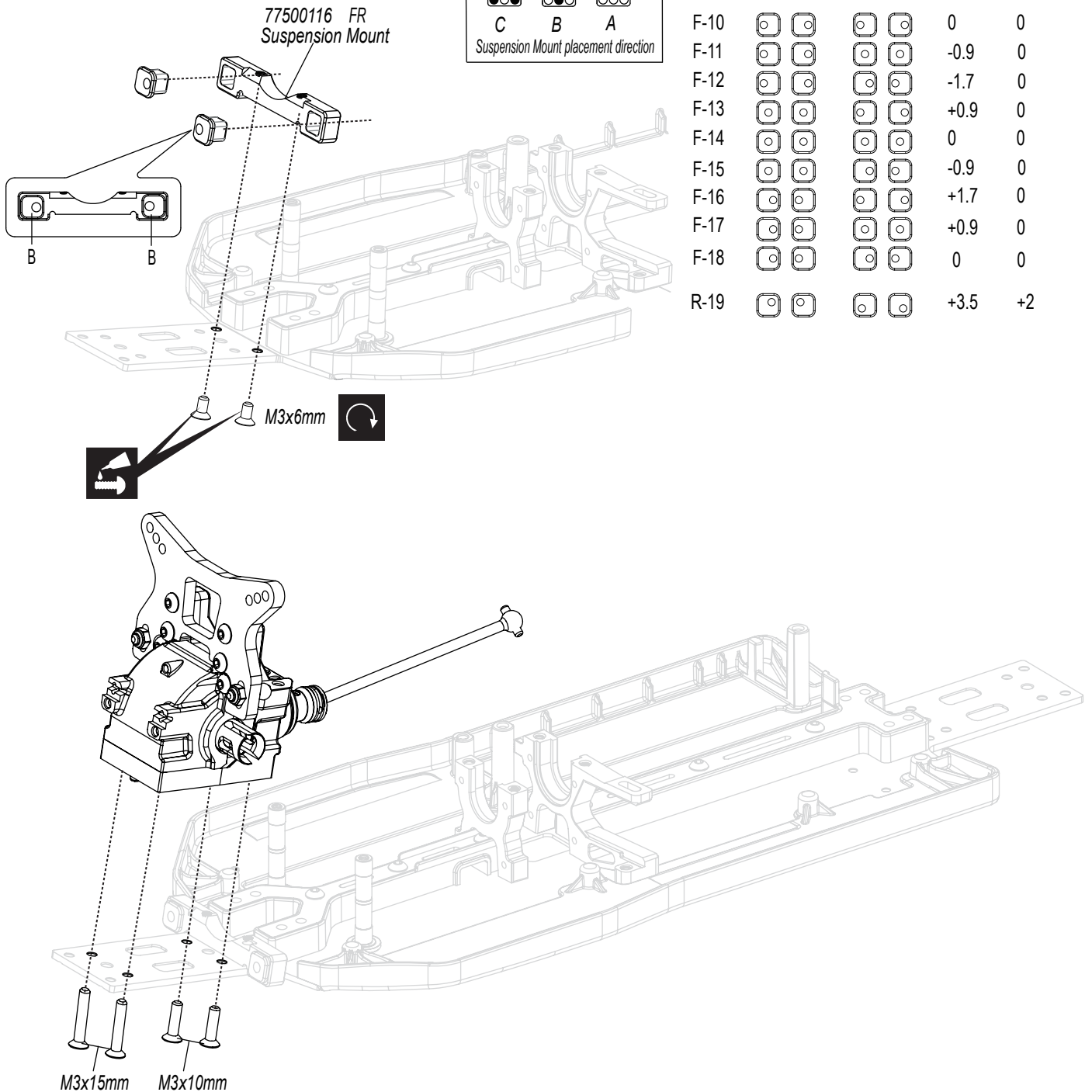
B1 Suspension Mount Installation

-  2
M3x6mm Flat Head Screw
82400016
-  2
M3x10mm Flat Head Screw
82400106
-  2
M3x15mm Flat Head Screw
82400176



FRONT HANGER INSERTS

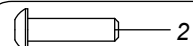
Numbering	FF	FR	TOE	SQUAT
F-1			0	0
F-2			0	+0.7
F-3			0	+1.4
F-4			0	-0.7
F-5			0	0
F-6			0	+0.7
F-7			0	-1.4
F-8			0	-0.7
F-9			0	0
F-10			0	0
F-11			-0.9	0
F-12			-1.7	0
F-13			+0.9	0
F-14			0	0
F-15			-0.9	0
F-16			+1.7	0
F-17			+0.9	0
F-18			0	0
R-19			+3.5	+2



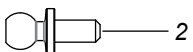
B2.1 Front Hub Carrier Assembly (Left Side)

Left Side

BAG B



2
Button Head Cap-80400206
Screw M3x12mm



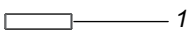
2
4.8mmx6mm-68430036
Ball Studs



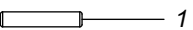
1
5x10x4mm zz Ball Bearing
89430010



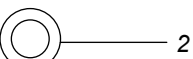
1
5x13x4mm zz Ball Bearing
89430020



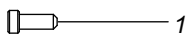
1
Pin2x9.8mm-79400086



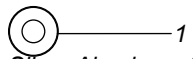
1
Pin 2 x10.8mm-79400086



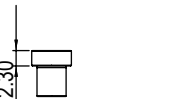
2
Shim 5x8x0.1mm-85440090



1
m2x5mm-87400066



1
Silver Aluminum Spacer -1mm
3x6.5x1mm-85440310



(Brown)
2.3mm-7500267

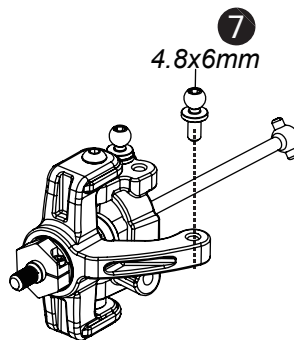
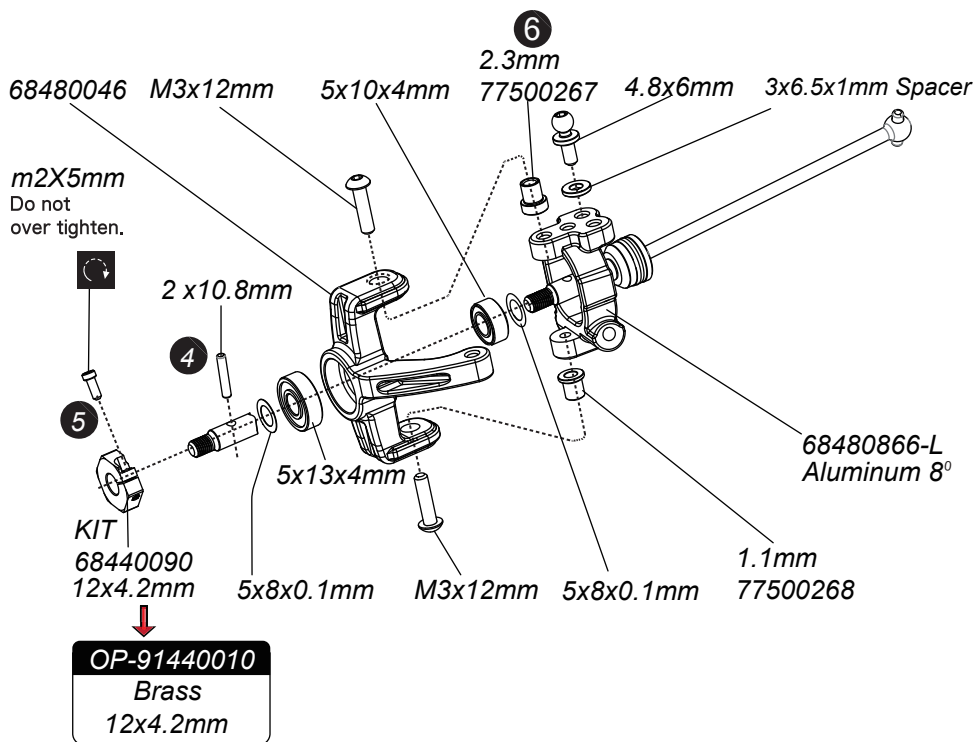
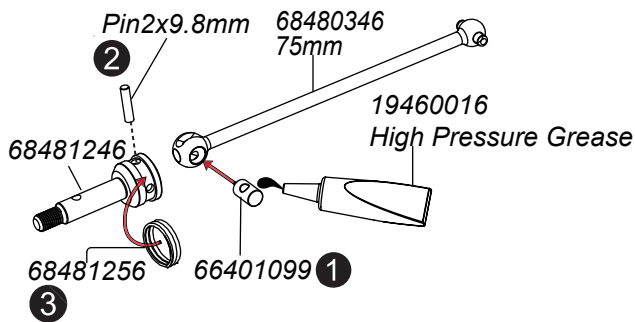


(Brown)
1.1mm-77500268



(Silver)
0.8mm-77500216
77480160 Alu Steering Knuckles
uses
68480046 plastic 5 Degree
Caster Block uses

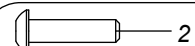
1 → 2 → 3
Assemble in the
specified order.



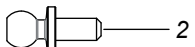
Corner Speed	
Stable	Sensitive
Nylon plastic	Aluminum

B2.2 Front Hub Carrier Assembly (Right Side)

Right Side



2
Button Head Cap-80400206
Screw M3x12mm



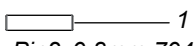
2
4.8mmx6mm-68430036
Ball Studs



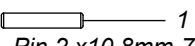
1
5x10x4mm zz Ball Bearing
89430010



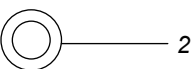
1
5x13x4mm zz Ball Bearing
89430020



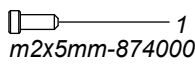
1
Pin 2x9.8mm-79400086



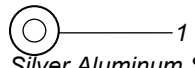
1
Pin 2 x10.8mm-79400086



2
Shim 5x8x0.1mm-85440090



1
m2x5mm-87400066



1
Silver Aluminum Spacer -1mm
3x6.5x1mm-85440310



2.30
(Brown)
2.3mm-77500267



1.10
(Brown)
1.1mm-77500268



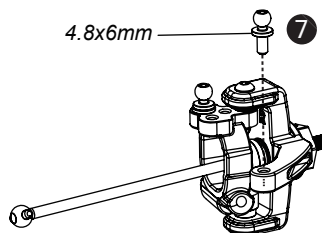
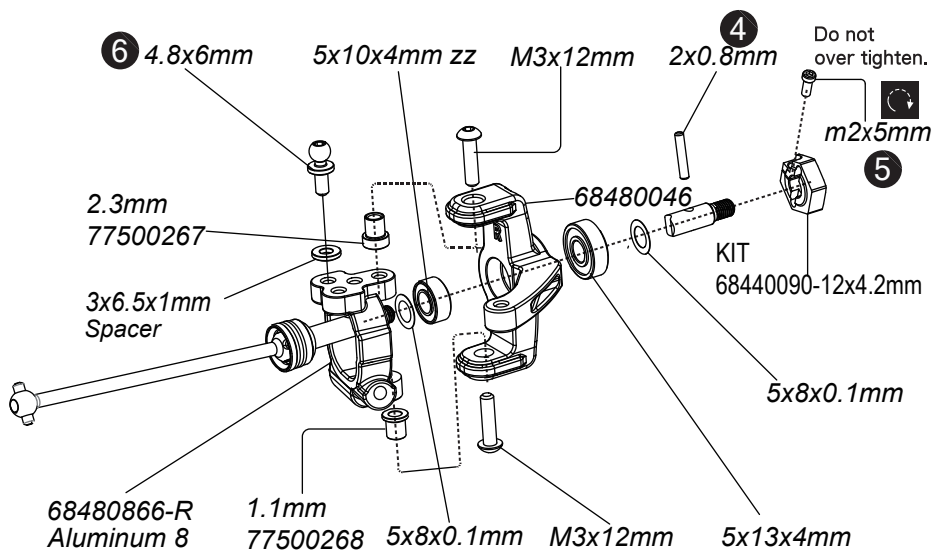
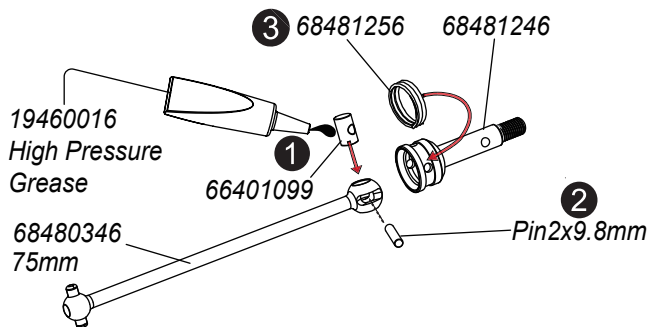
0.8
(Silver)
0.8mm-77500216

77480160 Alu Steering Knuckles
uses

68480046 plastic 5 Degree
Caster Block uses

①→②
③ Assemble in the
specified order.

Corner Speed	
Stable	Sensitive
Nylon plastic	Aluminum





B3 Suspension Mount Installation- Sway Bar Installation

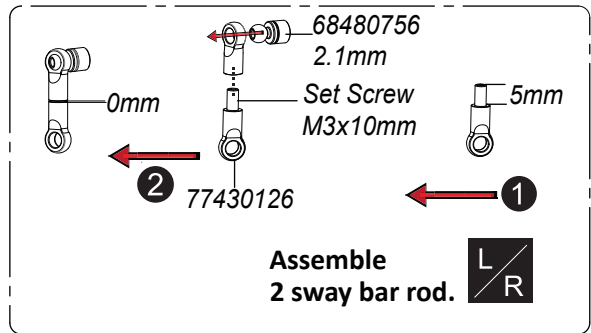
- 4
M3x6mm Flat Head Screw
82400016
- 2
M2.5x5.5mm
80400016
- 2
M3x8mm Button Head Cap Screw
80400036
- 2
M3x3mm Set Screw
87400016
- 2
M3x6mm Set Screw
78400026
- 2
M3x10mm Set Screw
87400026

- 2
Shim
3x8x0.15mm
85440320

	Wishbone (Graphite) Hard	<input type="checkbox"/>
	Wishbone Medium Hard	<input checked="" type="checkbox"/>

Pin 3x36.8mm-79400036—2

Pin 3x52mm-79480036—2

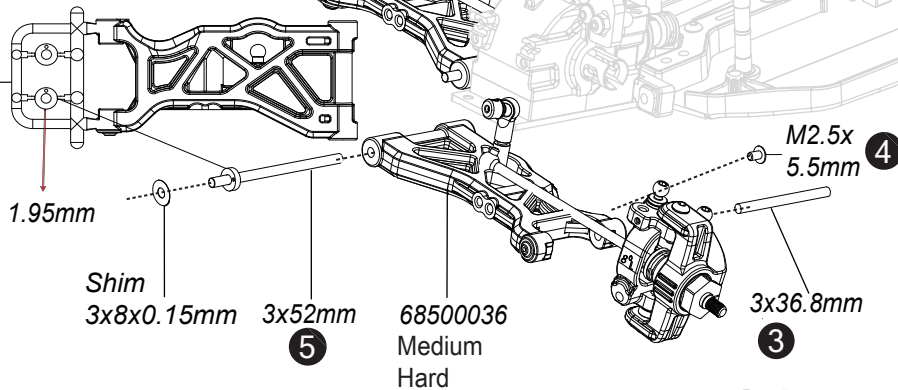


Kit Stable

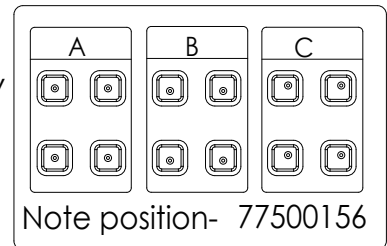
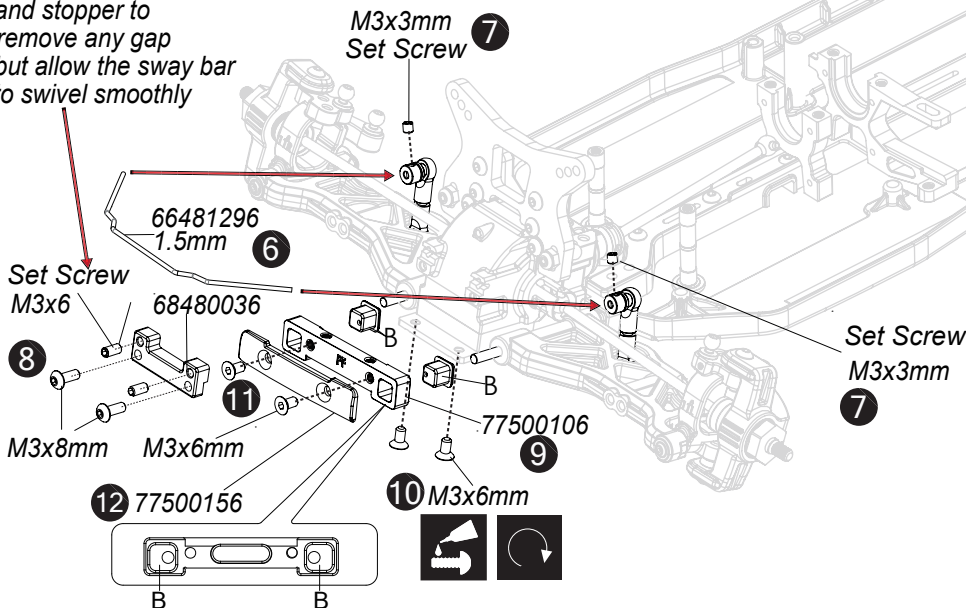
68500036
Front Wishbone
(Medium Hardness)

Option Responsive

77500076
Front Wishbone
Graphite(High Hardness)



Adjust the M3x6 Set Screws and stopper to remove any gap but allow the sway bar to swivel smoothly



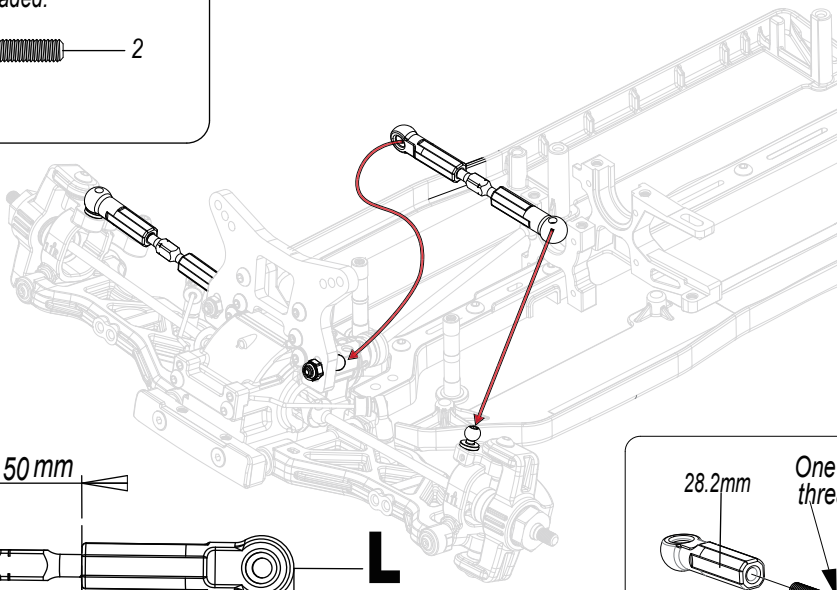
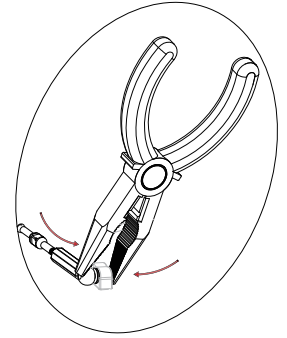
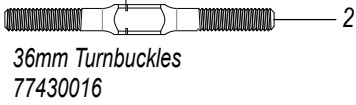
L
R Assemble left and right sides the same way.



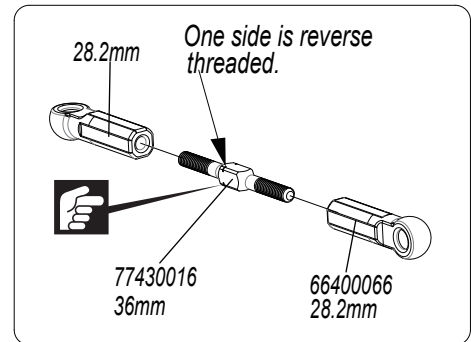
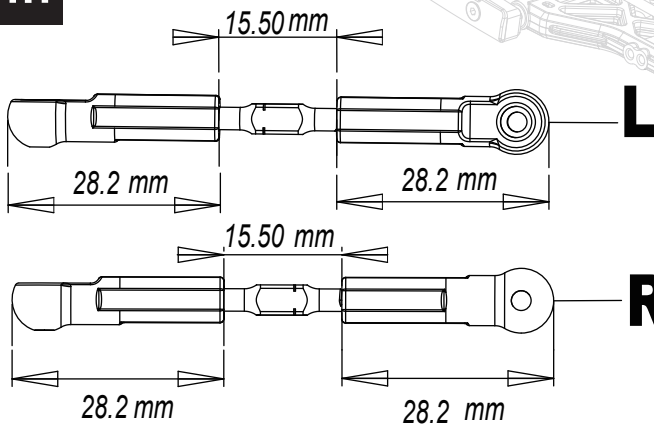
BAG
B

B4 Front Upper Turnbuckle Assembly

One side is reverse threaded.

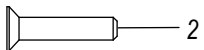


1:1

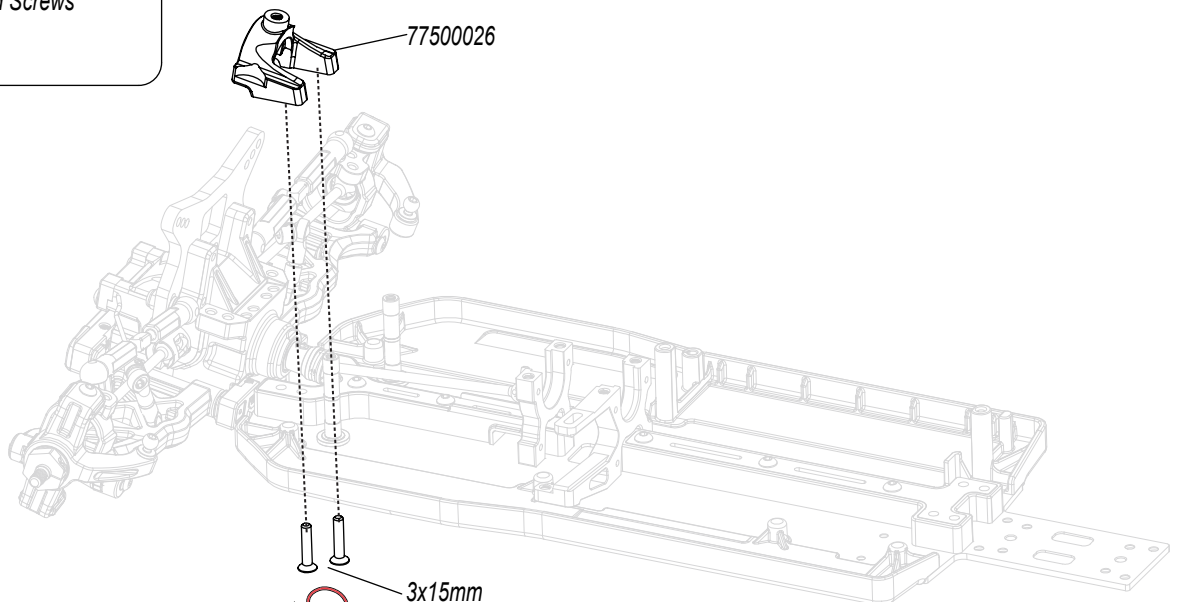


BAG
B

B5 Gearbox-Reinforcement - Front



3x15mm Flat Head Screws
82400176



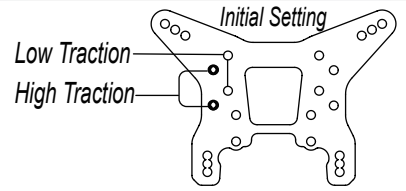
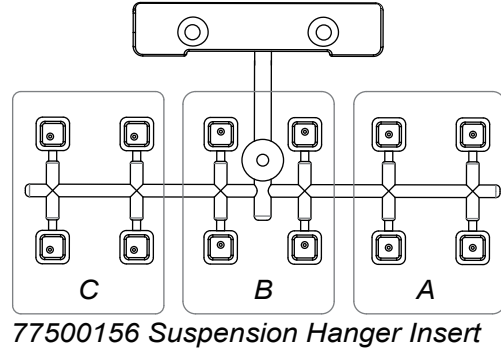
Do not tighten fully yet.



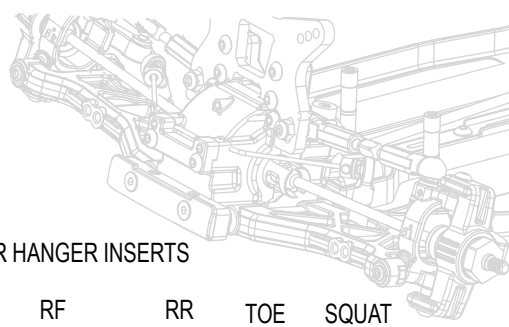
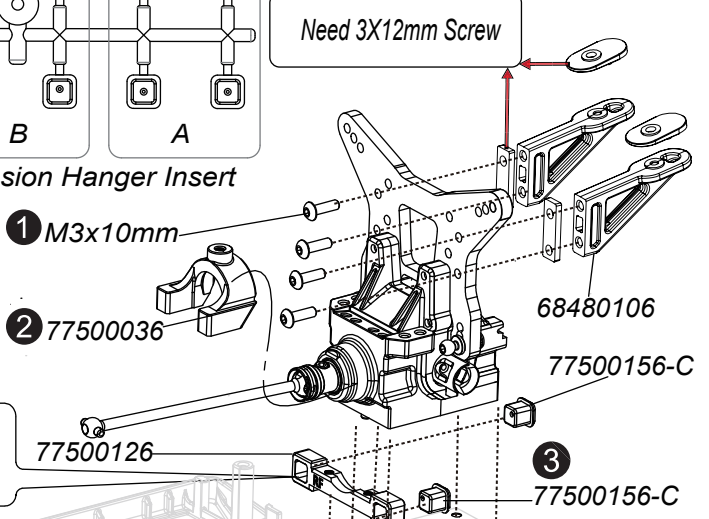
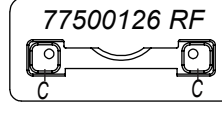


C1 RF Suspension Mount

- 4
M3x10mm Button Head Cap Screw
80400046
- 4
M3x12mm Button Head Cap Screw
80400206
- 2
M3x6mm Flat Head Screw
82400016
- 2
M3x10mm Flat Head Screw
82400106
- 2
M3x15mm Flat Head Screw
82400176

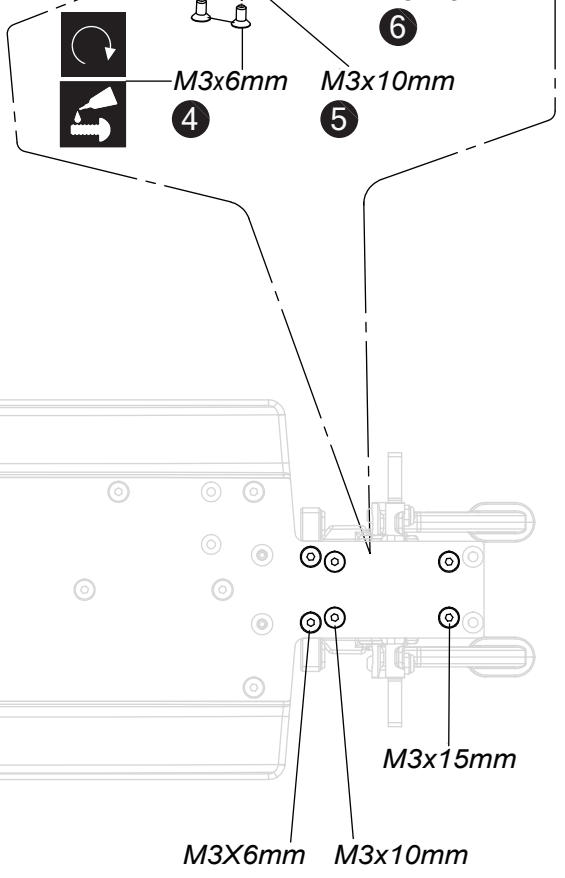


① → ②
③ Assemble in the specified order.



REAR HANGER INSERTS


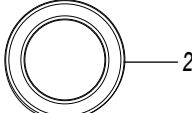
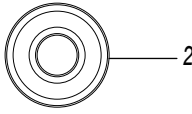
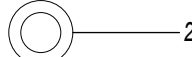
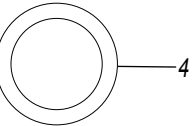
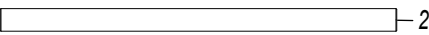

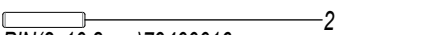
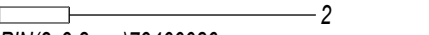

Numbering	RF	RR	TOE	SQUAT
R-1			+1.6	0
R-2			+1.6	+0.7
R-3			+1.6	+1.4
R-4			+1.6	-0.7
R-5			+1.6	0
R-6			+1.6	+0.7
R-7			+1.6	-1.4
R-8			+1.6	-0.7
R-9			+1.6	0
R-10			+1.6	0
R-11			+0.8	0
R-12			0	0
R-13			+2.5	0
R-14			+1.6	0
R-15			+0.8	0
R-16			+3.0	0
R-17			+2.5	0
R-18			+1.5	0
R-19			+3.5	+2



Note: (1) SB401 Plastic Antisquat Shims=1mm=1Degree.

C2 Rear Left Hub Carrier Assembly

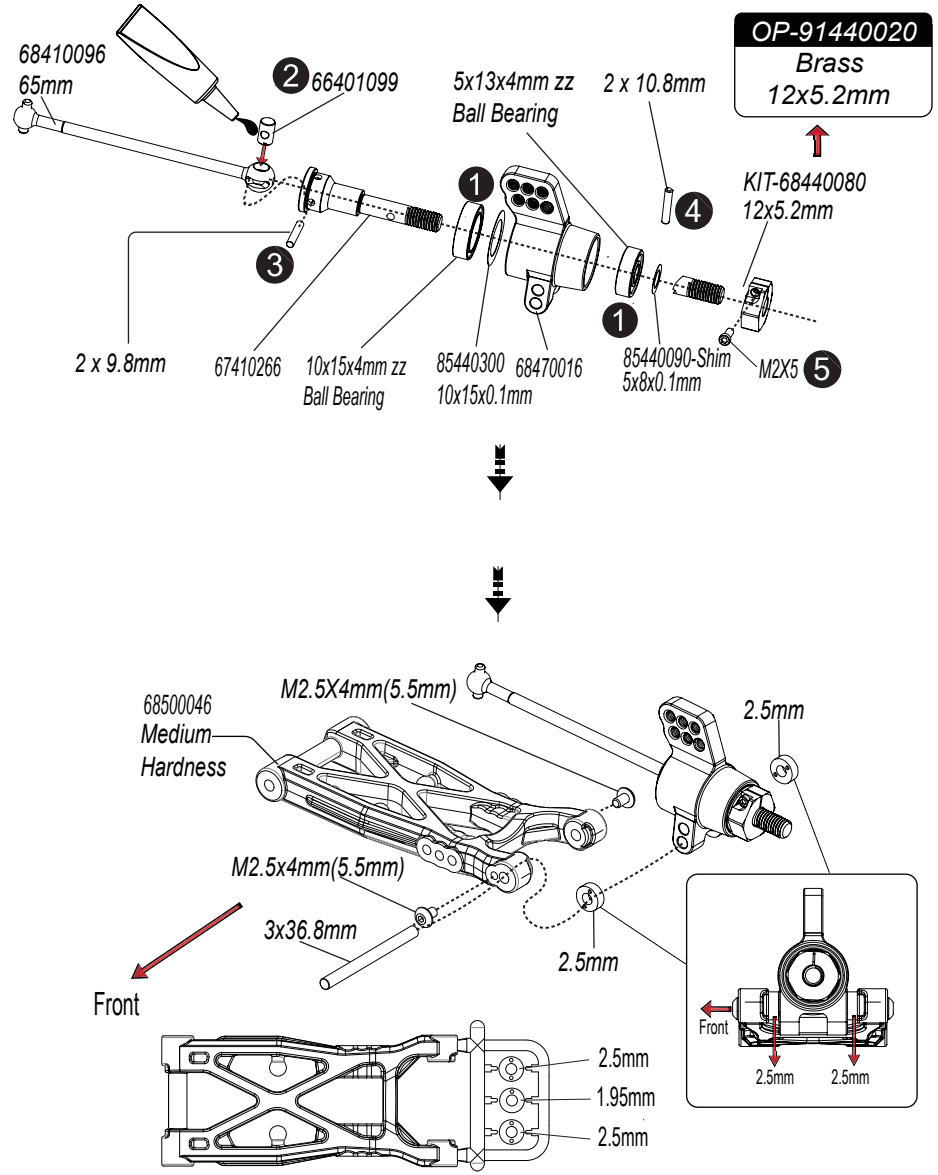
BAG C

-  4
M2.5x4mm Button Head Screw
80400016
-  2
10x15x4mm zz Ball Bearing
89430030
-  2
5x13x4mm zz Ball Bearing
89430020
-  2
Shim 5x8x0.1mm
85440090
-  4
85440300
10x15x0.1mm
-  2
PIN(3x52mm)79480036
-  2
PIN(3x36.8mm)79400036
-  2
PIN(2x10.8mm)79400016
-  2
PIN(2x9.8mm)79400086
-  2
m2x5mm-87400066

Assemble the right left side in the same manner.

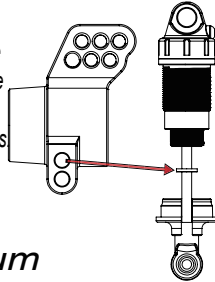


Assemble in the specified order.



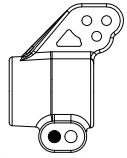
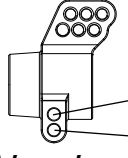
Precautions

When you use the upper hole, please add this spacer between the shafts



Up stop
+1mm shim
Aluminum

Corner Speed

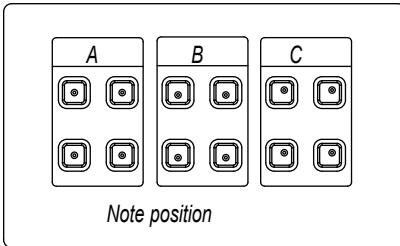
Corner Speed	
<i>Stable</i>	<i>Responsive</i>
	
Nylon plastic	Aluminum

Responsive
Stable

C3 Rear Left Hub Carrier Assembly



- 2
m3x6mm Flat Head Screws
82400016
- 2
M3x15mm Flat Head Screw
82400176
- 2
Pin 3x52mm-79480036
- 2
Shim 3x8x0.15mm 85440320

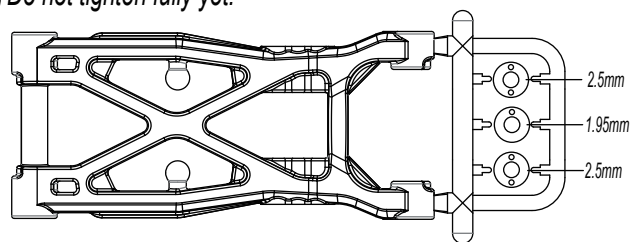
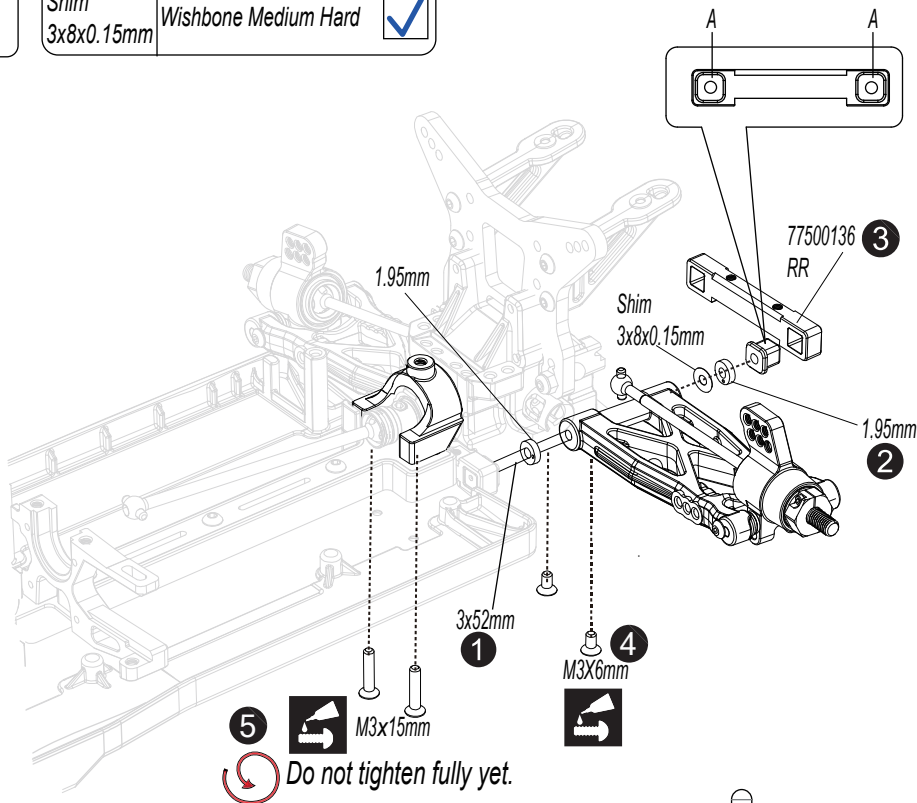


	Wishbone (Graphite) Hard	<input type="checkbox"/>
	Shim 3x8x0.15mm	Wishbone Medium Hard <input checked="" type="checkbox"/>



Assemble in the specified order.

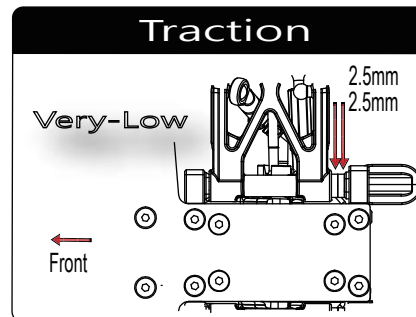
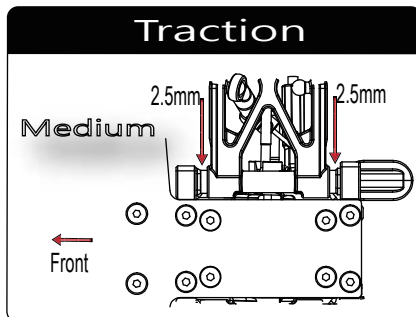
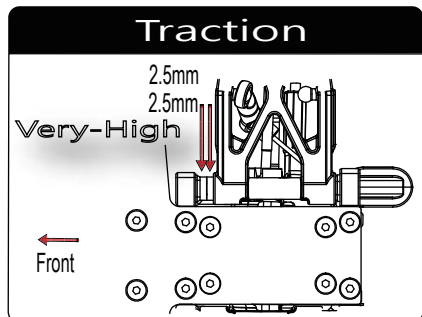
Numbering	RF	RR		
R-1			+1.6	0
R-2			+1.6	+0.7
R-3			+1.6	+1.4
R-4			+1.6	-0.7
R-5			+1.6	0
R-6			+1.6	+0.7
R-7			+1.6	-1.4
R-8			+1.6	-0.7
R-9			+1.6	0
R-10			+1.6	0
R-11			+0.8	0
R-12			0	0
R-13			+2.5	0
R-14			+1.6	0
R-15			+0.8	0
R-16			+3.0	0
R-17			+2.5	0
R-18			+1.5	0
R-19			+3.5	+2



Note: (1) SB401 Plastic Antisquat Shims=1mm=1Degree.

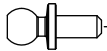
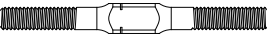
REAR HANGER INSERTS

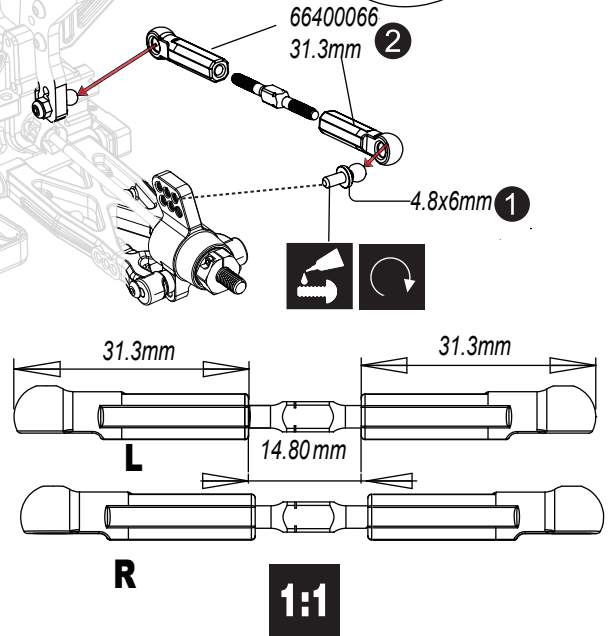
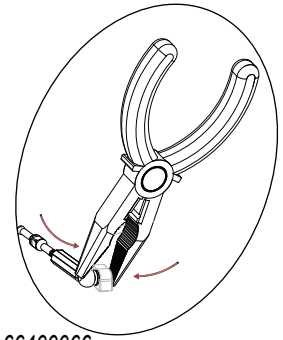
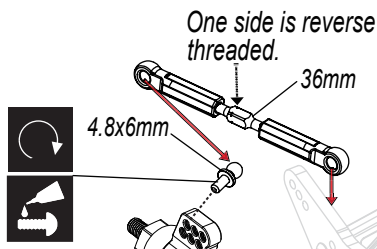
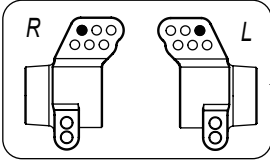
Track Conditions





C4 Rear Upper Rod - Turnbuckle Assembly





-  2
4.8x6mm Ball Studs-68430036
-  2
36mm Turnbuckles
77430016



1 → 2
3 Assemble in the specified order.

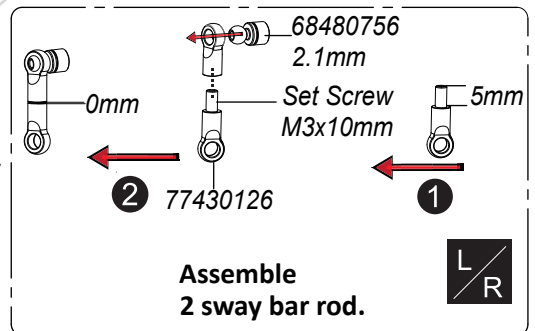
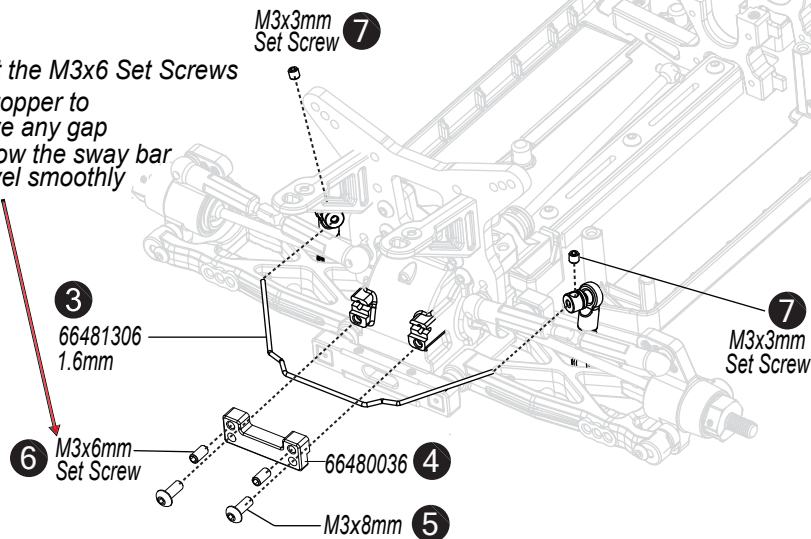


C5 Sway Bar Installation

-  2
M3x8mm Button Head Cap Screw
80400036
-  2
M3x3mm Set Screw-87400016
-  2
M3x6mm Set Screw-78400026
-  2
M3x10mm Set Screw-87400026

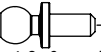
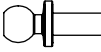


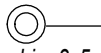

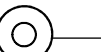
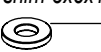
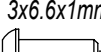
1 → 2
3 Assemble in the specified order.

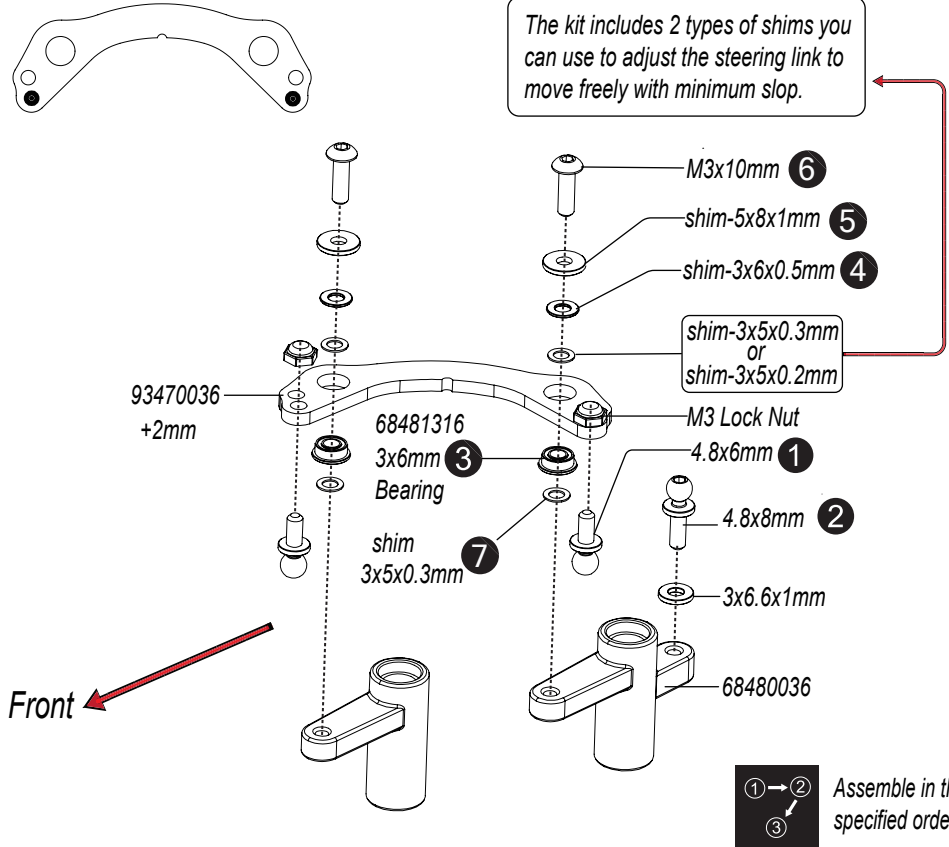
Adjust the M3x6 Set Screws and stopper to remove any gap but allow the sway bar to swivel smoothly



D1 Bell Crank Installation

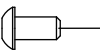

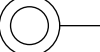
BAG
D

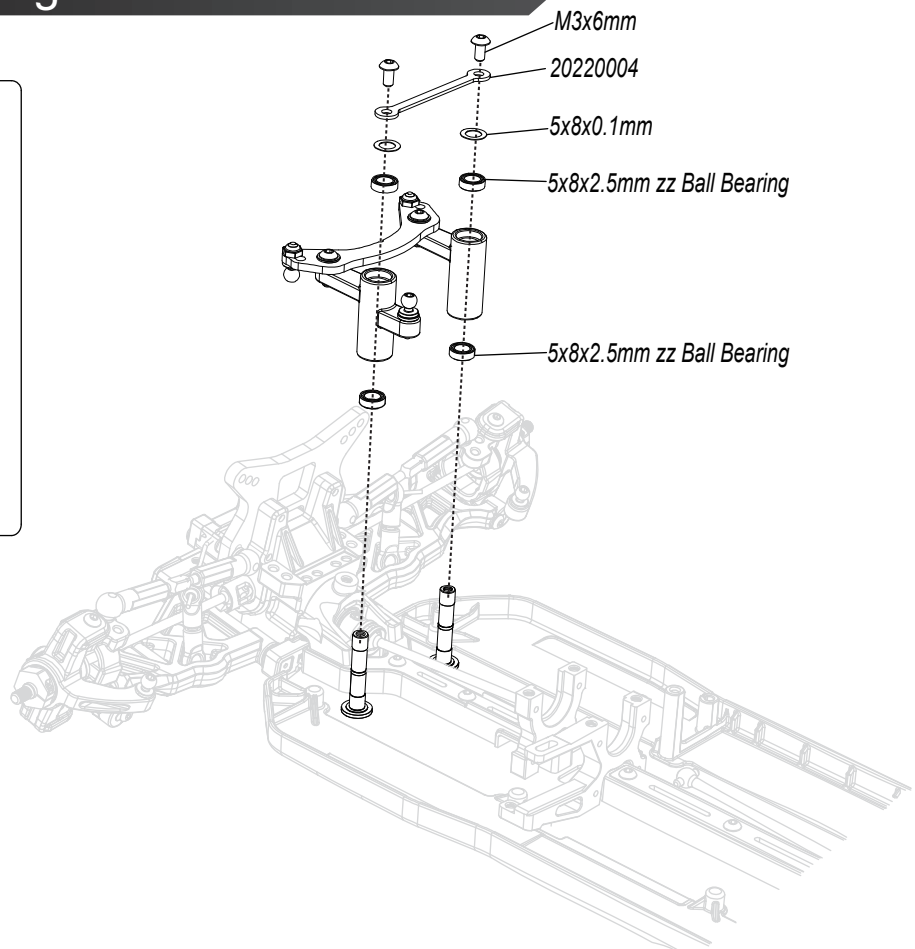
-  2
4.8x6mm Ball Studs -68430036
-  1
4.8x8mm Ball Studs -68430046
-  2
M3 Lock Nut-83400106
-  4
shim-3x5x0.3mm-85440290 Silver
-  2
shim-3x5x0.2mm-85440020 Silver
-  2
shim-3x6x0.5mm- 85440301 Black
-  2
shim-3x8x1mm- 85440210 Black
-  1
Silver Aluminum Spacer
3x6.6x1mm-85440310
-  2
M3x10mm-80400046
Button Head Cap Screw



D2 Steering

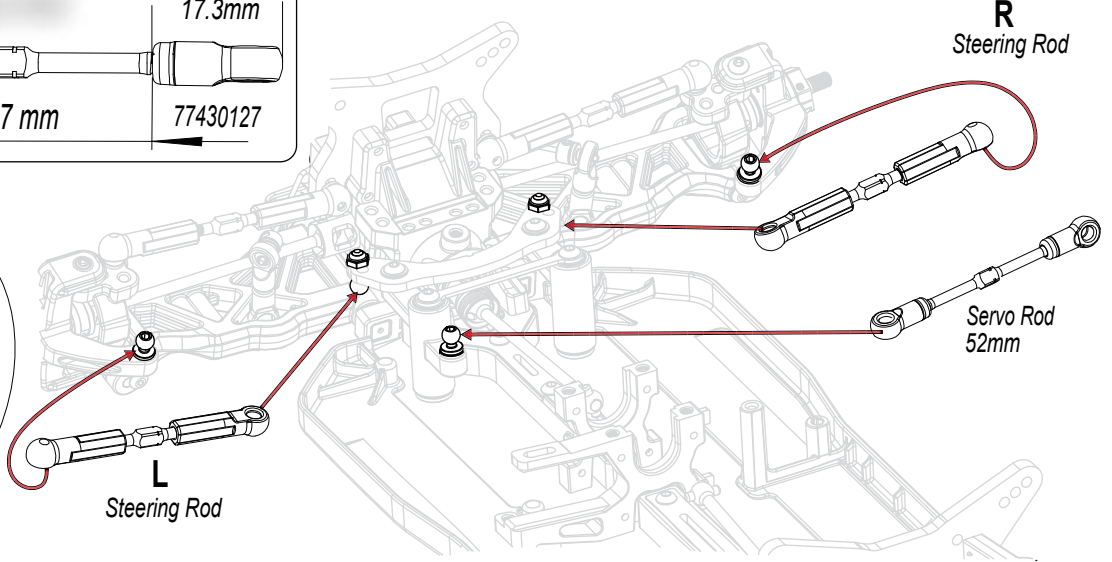
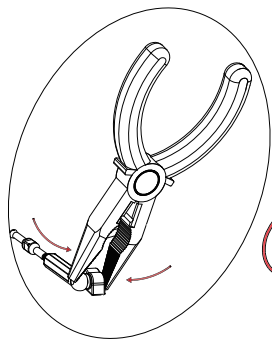
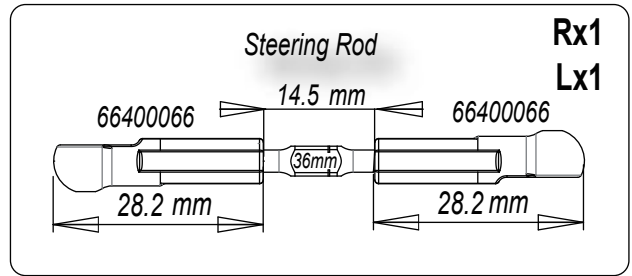
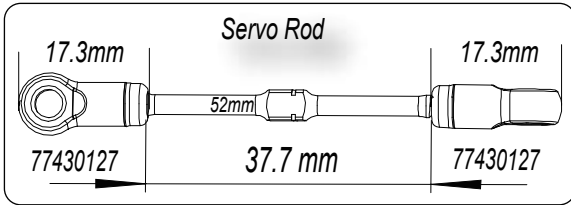
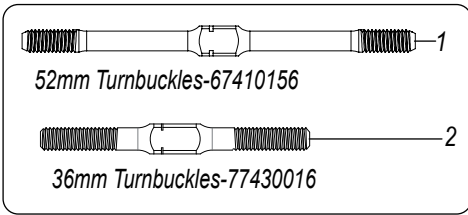
BAG
D

-  2
M3x6mm Button Head Screw
80400026
-  4
5x8x2.5mm zz Ball Bearing
66400756
-  2
Shim 5x8x0.1mm
85440090



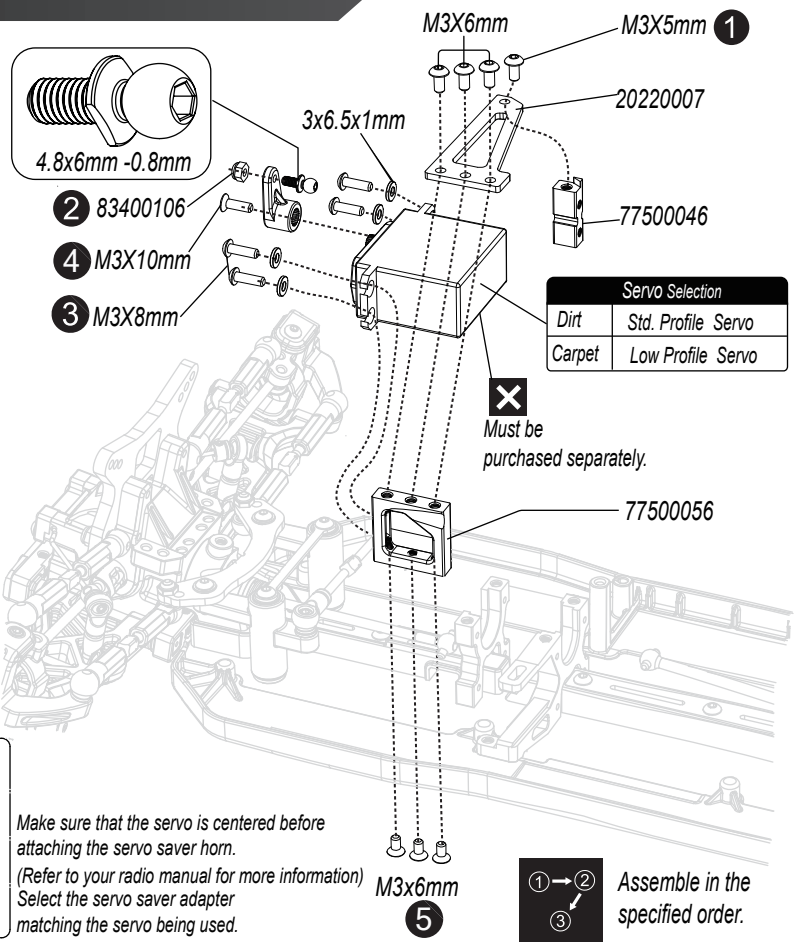
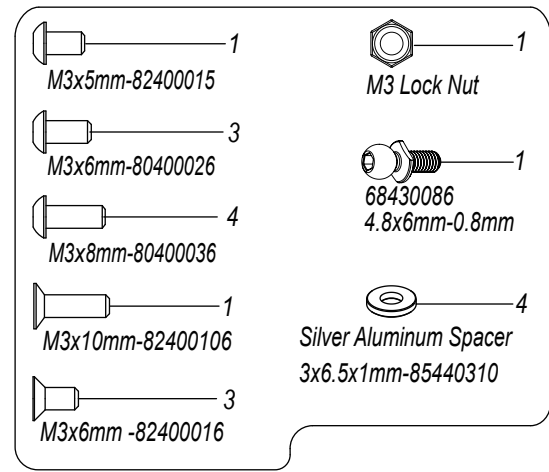
D3 Turnbuckle Assembly-Steering Rod -Servo Rod

BAG
D



D4 Steering Servo

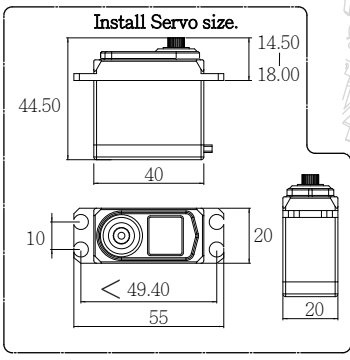
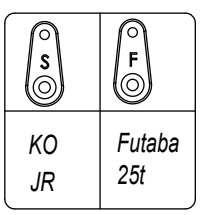
BAG
D



Servo Selection	
Dirt	Std. Profile Servo
Carpet	Low Profile Servo

X Must be purchased separately.

Servo Installation
66402466



Make sure that the servo is centered before attaching the servo saver horn.
(Refer to your radio manual for more information)
Select the servo saver adapter matching the servo being used.

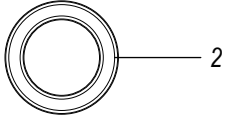
Assemble in the specified order.

D5 Center Mount Plate

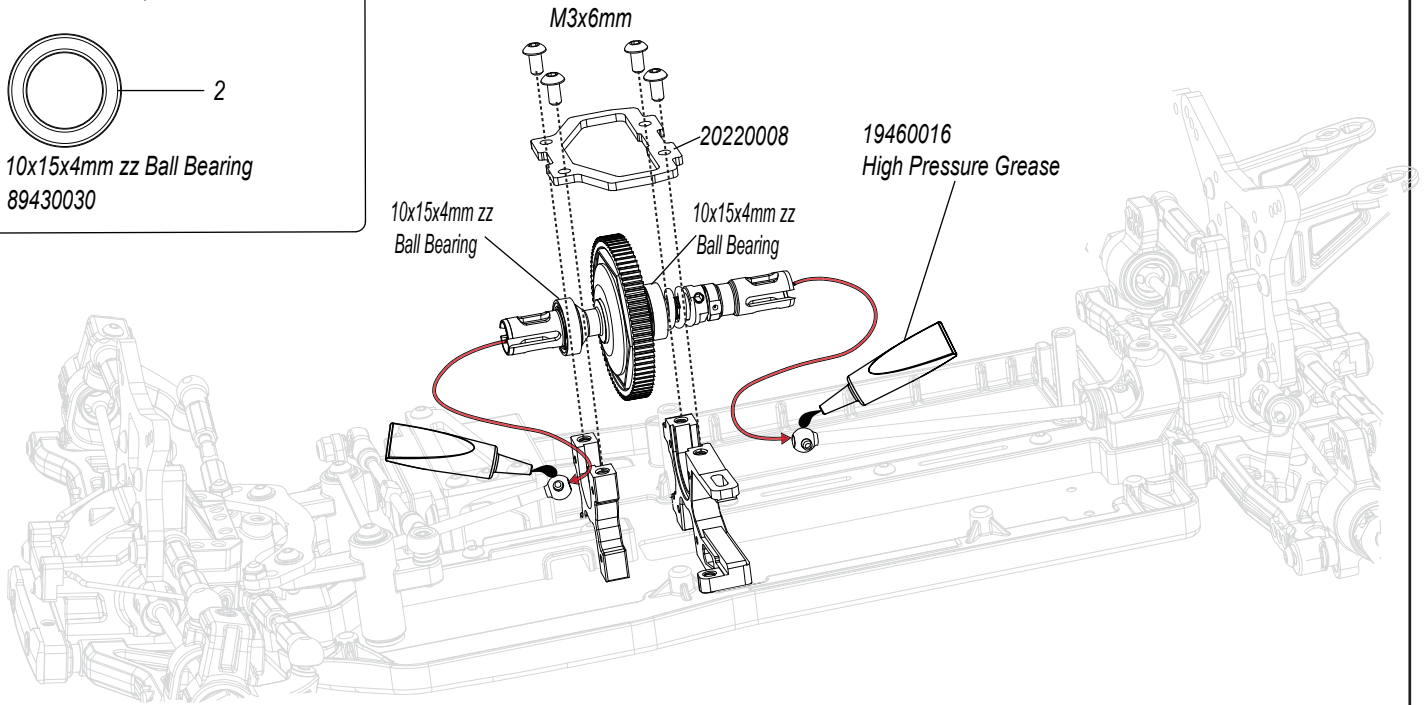
BAG
D



4
M3x6mm-80400026
Button Head Cap Screw



2
10x15x4mm zz Ball Bearing
89430030



D6 Battery Plate Installation

BAG
D

4
M3x6mm-80400026
Button Head Cap Screw

2
M3x12mm-80400206
Button Head Cap Screw

2
M3 Antislip Shims-85440240

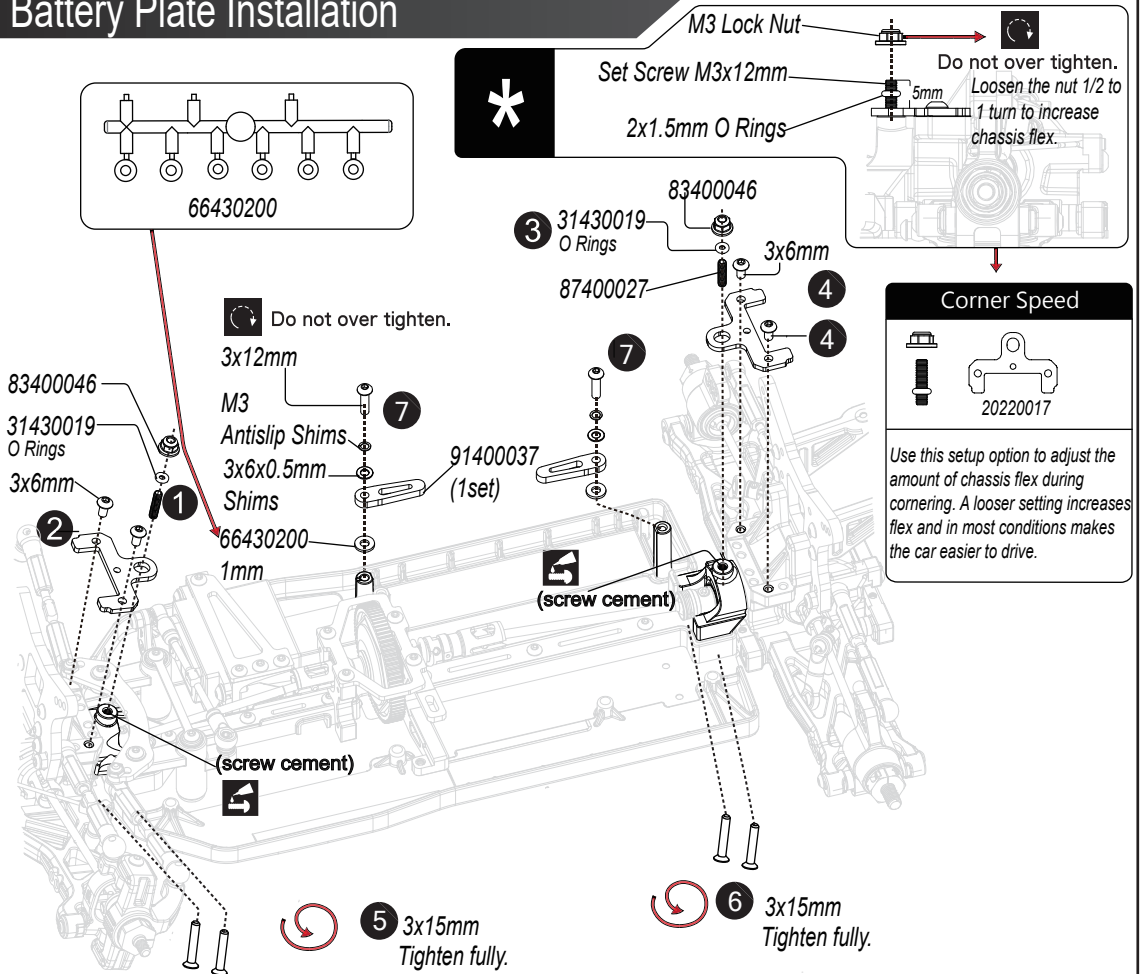
2
3x6x0.5mm Shims-85440301

2
M3 Lock Nut-83400046

2
31430019
2x1.5mm O Rings

2
87400027
Set Screw M3x12mm

2
20220017



E1 Front & Rear Shock Assembly-R

BAG
E

1 **Rear Buildx2**
Front Buildx2

68410066
17430096 1.8mmx2 hole
Machined Shock Pistons
85440070-2.6x6x0.5mm
Front-66400656
Rear-66400666
12.8mm Shock Body
31280146 O-Rings (14X1.2mm)
Front 94500018 (31.5mm)
Rear 94500019 (39.5mm)
0.36mm
0.6mm
31430017 Transparent
68410066 0.6mm
68410066 0.6mm
77400116

Do not over tighten
83400066-m2.5

SETUP TIP:
The 0.36mm plastic shim is a tuning option. Use it to improve the seal and reduce oil leakage but it may reduce smoothness of shock action or leave it out for smoother action but there may be slight oil leakage.

CORRECT

INCORRECT

INCORRECT

INCORRECT

IMPORTANT

Clamping place

3

66430200 0.95mm 1.1mm

Downstop Shims
Front- Carpet / 1-2mm
Dirt / 0
Rear- Carpet / 0mm
Dirt / 0
Thicker shim used, Greater downstop is achieved

4

66401867
Front-66400066
Rear-66400066

18.5 mm

IMPORTANT

INCORRECT

EXTREMELY IMPORTANT
Do not push the shock rod straight through the lower shock body assembly; O-ring damage may result.

CORRECT

Twist the shock rod through the lower shock body assembly.

1

Front Build x2
Rear Build x2

Initial Setting

Front shocks oil	Rear shocks oil
↑ 20°C 550Cst	↑ 20°C 450Cst
↓ 20°C 500Cst	↓ 20°C 400Cst

2

Slowly move up and down to remove air bubbles.

3 **Do not over tighten**

66430040
80400176 M2.5x4mm (4.5mm)

Join the spring cup

Slowly push the shock shaft all the way up, wipe away any excess oil that has seeped out, and screw in the bleeder screw.

4

10 x UP & DOWN

10 x push the shaft up and down.

5

Untighten the screw.

6

Gently push the shock shaft completely into the shock body. Wipe away any excess oil that flows through the hole in the shock cap and screw in the bleeder screw.

Option

PR RACING			
PR 1/10 Type R Shock Spring			
71530016-Type R Front Shock Spring Set (Not included-02530016)			
PART NO:	Color	kg/mm	lbs/in
02500096	Transparent	0.053	2.97
02500106	Blue	0.058	3.25
02500146	White	0.061	3.42
02500116	Red	0.063	3.53
02500126	Yellow	0.068	3.81
02530016	Green	0.075	4.20
02530026	Black	0.080	4.48
02530036	Blue Red	0.085	4.76
02530046	White Yellow	0.090	5.04
02530116	Green Black	0.098-(RT)	5.88-(RT)
71530026-Type R Rear Shock Spring Set (Not included-02530126)			
02500056	Transparent	0.030	1.80
02500066	Blue	0.035	2.10
02500136	White	0.037	2.22
02500076	Red	0.040	2.40
02500086	Yellow	0.045	2.70
02530056	Green	0.050	3.00
02530066	Black	0.055	3.30
02530076	Blue Red	0.060	3.60
02530086	White Yellow	0.065	3.90
02530126	Green Black	0.073-(RT)	4.50-(RT)

7 **Front Build x2**

5-6mm
Carpet 21.5-22.5mm
Dirt/23.5

66402446
31280136 15x1.2mm
02530026 (Black)
77430036 19.40 mm

Initial Setting Shock Spring

Dirt use	Carpet use
02530016(Green)	02530026(Black)

8 **Rear Build x2**

6-7mm

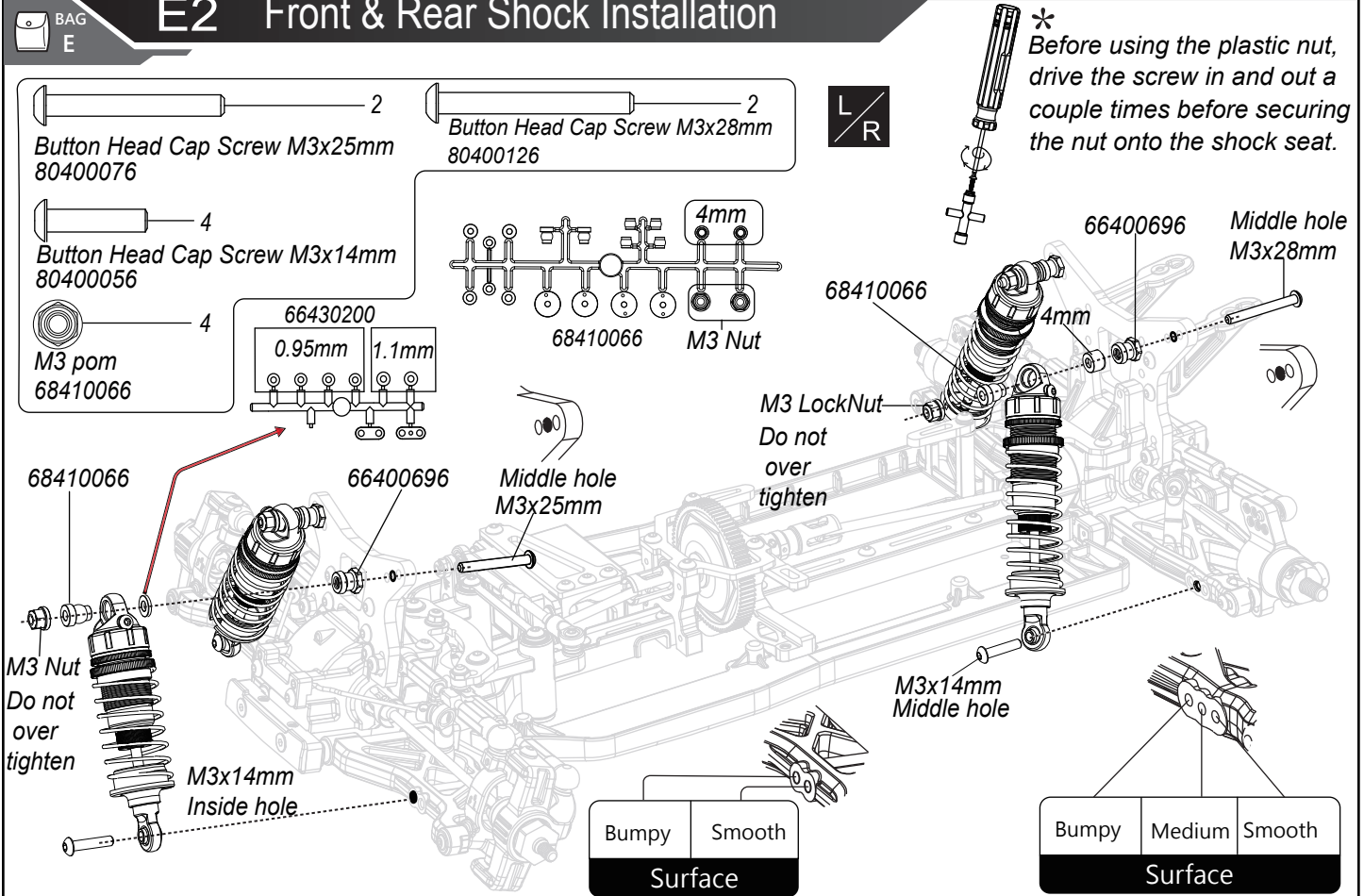
66402446
31280136 15x1.2mm
02530066 (Black)
77430036 19.40 mm

Initial Setting Shock Spring

Dirt use	Carpet use
02530056(Green)	02530066(Black)

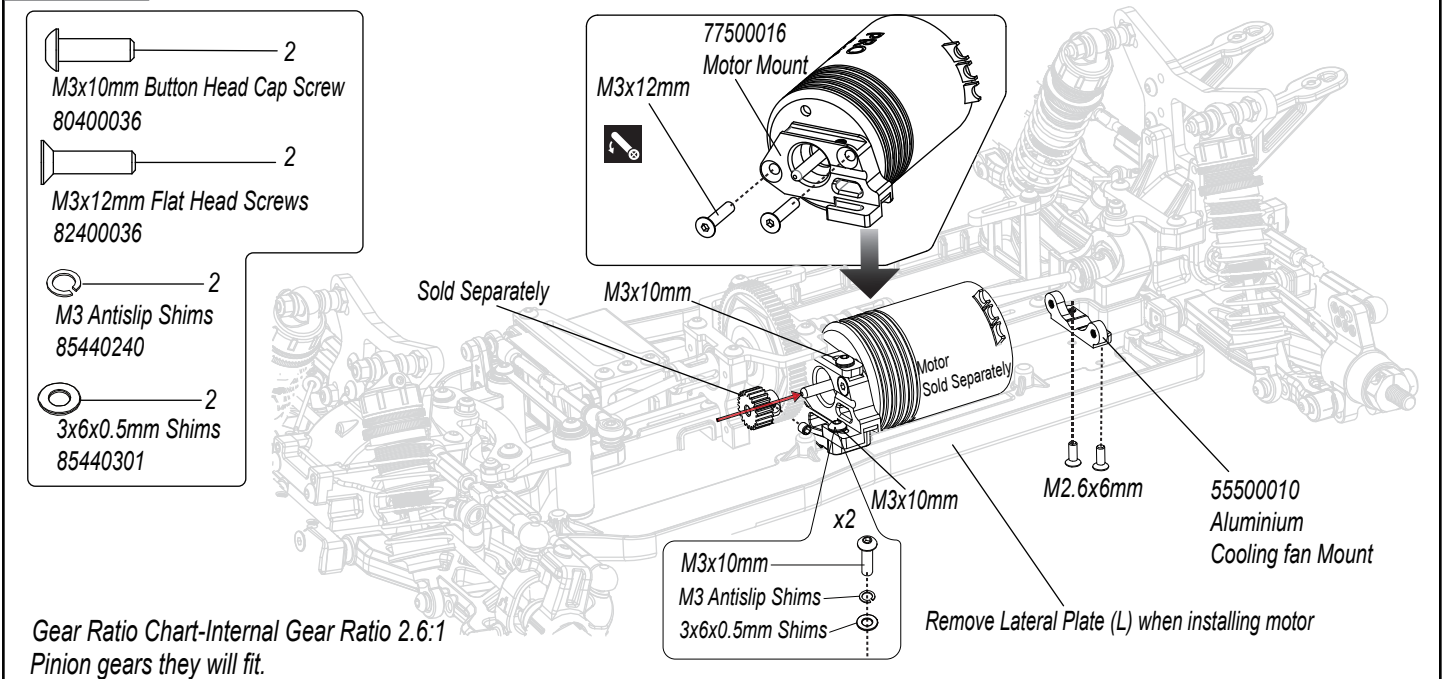
E2 Front & Rear Shock Installation

BAG
E



E3 Motor Installation

BAG
E







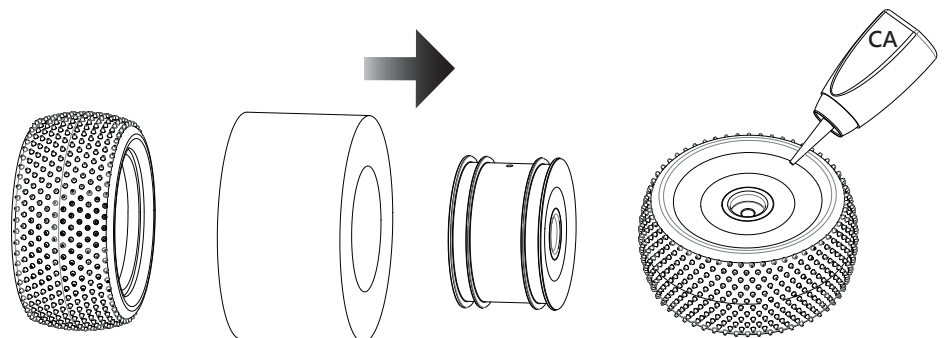
Gear Ratio Chart-Internal Gear Ratio 2.6:1
Pinion gears they will fit.

Pinion	17T	18T	19T	20T	21T	22T	23T	24T	25T	26T	27T	28T	29T	30T
73T(Spur Gear)					9.04	8.63	8.25	7.91	7.59	7.30	7.03	6.78	6.54	6.33
75T(Spur Gear)				9.75	9.29	8.86	8.48	8.13	7.80	7.50	7.22	6.96	6.72	
77T(Spur Gear)			10.54	10.01	9.53	9.10	8.70	8.34	8.01	7.70	7.41	7.15		
80T(Spur Gear)		11.56	10.95	10.40	9.90	9.45	9.04	8.67	8.32	8.00	7.70			
81T(Spur Gear)	12.39	11.70	11.08	10.53	10.03	9.57	9.16	8.78	8.42	8.10				

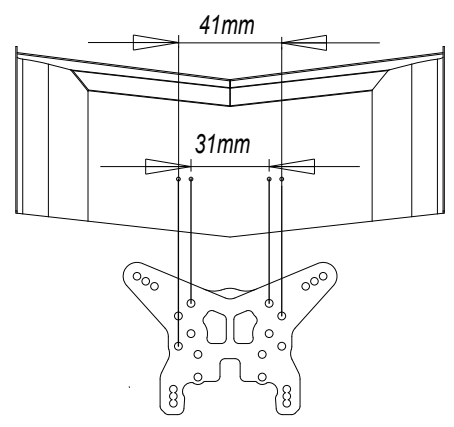
E4 Mounting Tires Wheel Installation

BAG
E

-  2
M3x8mm Flat Head Screws
82400026
-  2
M3x12mm Flat Head Screws
82400036
-  2
M4 Serrated flange nut
7mm Hex-83400076
-  2
M5 Nut with 7mm Hex Steel
83400117



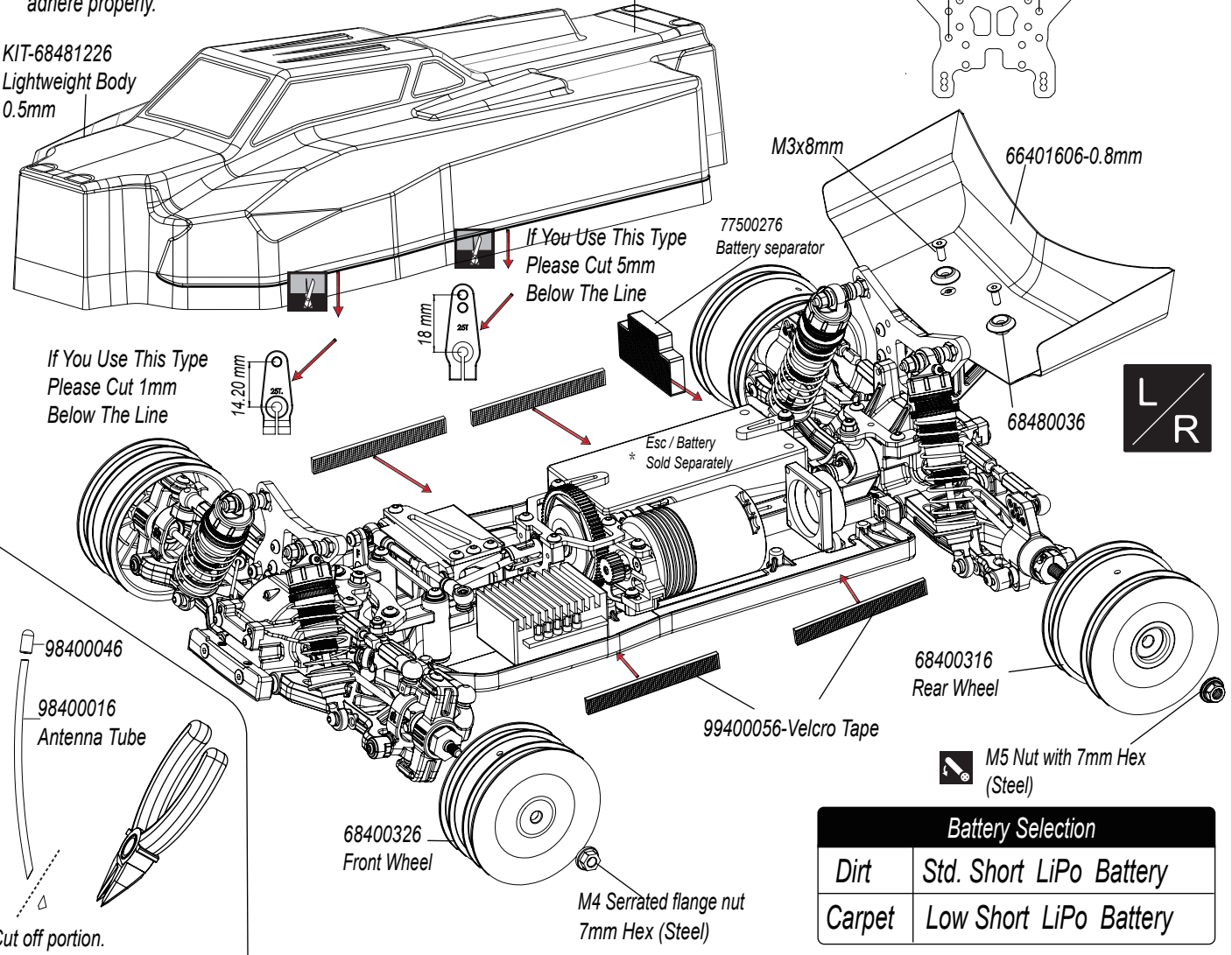
- Place the tire insert into the tire and tire into the wheel.
- Pull the sidewall of the tire slightly away from the rim and apply CA (Cyanoacrylate) glue in between the tire bead and rim
- Tire and insert (Sold separately)
CA (Cyanoacrylate) glue sold separately.



- Body and Wing Cutting
- Wash the inside of the body with luke warm water and a mild soap or detergent (such as liquid dishwashing soap) prior to painting. Oil residue or dust will prevent the paint from adhering to the painting surface, and possibly cause the paint to peel later on. After washing, thoroughly dry the body to allow the paint to adhere properly.

KIT-68481226
Lightweight Body
0.5mm

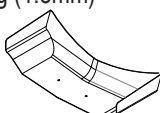
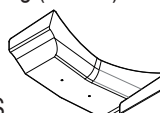

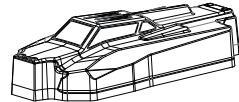
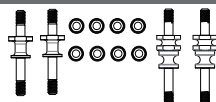
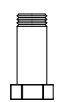


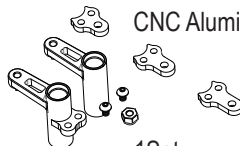
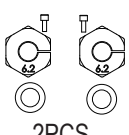
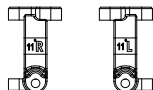
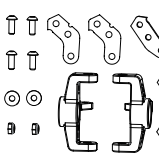


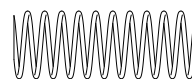

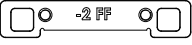
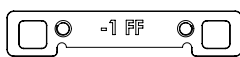


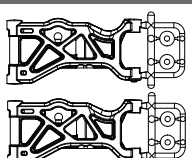
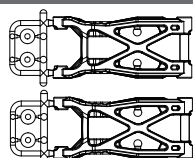
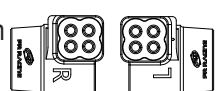
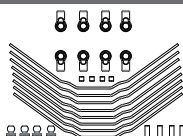
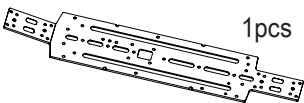
OP-68481076
Body-0.8mm



If You Use This Type
Please Cut 1mm
Below The Line

If You Use This Type
Please Cut 5mm
Below The Line

Battery Selection	
Dirt	Std. Short LiPo Battery
Carpet	Low Short LiPo Battery

<p>66402697</p> <p>Wing (1.5mm)</p>  <p>1PCS</p>	<p>66400286</p> <p>Wing (1.0mm)</p>  <p>1PCS</p>	<p>85430016</p>  <p>Aluminum Wing Mount Washer 2PCS</p>	<p>68481076</p> <p>R- Body 0.8mm</p>  <p>1PCS</p>
<p>81430106</p>  <p>1Set</p> <p>Front Rear Steel Shock Stand off Set</p>	<p>66402256</p>  <p>1PCS</p> <p>Servo Saver Post</p>	<p>66402266</p>  <p>1PCS</p> <p>Servo Saver Nut</p>	<p>68480526</p>  <p>1PCS</p> <p>Servo Saver Spring</p>
<p>66481256</p>  <p>1Set</p> <p>CNC Aluminium</p>	<p>90440010</p>  <p>2PCS</p> <p>Rear 6.2mm</p>	<p>68480976</p>  <p>1pr</p> <p>Aluminum 11 Degree SB401 Front Spindle Carrier R-L</p>	<p>77480160</p>  <p>1PR</p> <p>Aluminum Steering Knuckles</p>
<p>77480216</p>  <p>1PCS</p> <p>Aluminum</p>	<p>71530016</p>  <p>10 pr</p> <p>Type R Front Shock Spring Set</p>	<p>71530026</p>  <p>10 pr</p> <p>Type R Front Shock Spring Set</p>	<p>77510020</p>  <p>1pcs</p> <p>FR Suspension Mount -2mm narrower</p>
<p>77510010</p>  <p>1PCS</p> <p>FF Suspension Mount -2mm narrower</p>	<p>77510030</p>  <p>SB401R FF-1mm</p>	<p>77510040</p>  <p>SB401R FR-1mm</p>	<p>68430090</p>  <p>14.2mm 1pcs</p> <p>Aluminum Servo Horn</p> <p>25T</p>
<p>77500076</p>  <p>2PCS</p> <p>Graphite Front set Hard</p>	<p>77500336</p>  <p>2PCS</p> <p>Graphite Front set Hard</p>	<p>66402346</p>  <p>1Set</p> <p>CNC Rear Hub -SB401 R Aluminum</p>	<p>77480136</p>  <p>1SET</p> <p>Sway Bar Set</p>
<p>90510026</p>  <p>1pcs</p> <p>2022/2023 PR SB401 R 2.5mm Aluminium Chassis (Competition version)</p>			

PR SB401 PR RACING TYPE R

2023 PR SB401-R 1/10 Electric 4wd Off Road Buggy Kit
(Center Slipper/Diff Version) ITEM NO:77500296

Race		Name	
Track		Date	
Temperature	C	F	Best Lap Time
			sec

FRONT

Front Upper Turnbuckle Camber mm

Steering Rod TOE In Out mm

mm ALU C-Hub Shim

Anti-Roll mm

Offset Silver 4.2 mm Black mm

Caster 5° 8° 11°

Shock Body 12.0mm 12.8mm

Pom Shim 0.36mm

Oil	
Pistons	Holes mm
Downstop	Shim mm
Up stop	Shim mm
Length	mm
O Rings	<input type="checkbox"/> transparent <input type="checkbox"/> Red

Camber	
Ride Height	mm
TOE In Out	
Type R Shock Spring	

TRACK

Size	<input type="checkbox"/> Open	<input type="checkbox"/> Medium	<input type="checkbox"/> Tight
Traction	<input type="checkbox"/> Very-Low	<input type="checkbox"/> Medium	<input type="checkbox"/> Very-High
Surface	<input type="checkbox"/> Smooth	<input type="checkbox"/> Medium	<input type="checkbox"/> Bumpy
Type	<input type="checkbox"/> Clay	<input type="checkbox"/> Carpet	<input type="checkbox"/> Astro
Condition	<input type="checkbox"/> Blue Groove	<input type="checkbox"/> Hard Packed	<input type="checkbox"/> Dry
	<input type="checkbox"/> Dusty	<input type="checkbox"/> Loamy	<input type="checkbox"/> Wet

REAR

Anti-Roll mm

Nylon plastic

Aluminum

mm Camber

Offset Silver 4.2 mm Black 5.2 mm Brass mm

Shock Body 12.0mm 12.8mm

Pom Shim 0.36mm

Oil	
Pistons	Holes mm
Downstop	Shim mm
Up stop	Shim mm
Length	mm
O Rings	<input type="checkbox"/> transparent <input type="checkbox"/> Red

Camber	
Ride Height	mm
TOE In	
Type R Shock Spring	

Motor	
Spur Gera	T
Pinion	T
Esc	
Servo	<input type="checkbox"/> Std. Profile Servo <input type="checkbox"/> Low Profile Servo
Battery Size	<input type="checkbox"/> Std. Short <input type="checkbox"/> Low Short
Front Tire	ST-DR
Front Inserts	ST-EXP
Front Wheels	ST-Speed
Rear Tire	TH-DR
Rear Inserts	TH-EXP
Rear Wheels	TH-Speed
Body	<input type="checkbox"/> Standard <input type="checkbox"/> Light
Wishbone	<input type="checkbox"/> Front <input type="checkbox"/> Rear <input type="checkbox"/> Front <input type="checkbox"/> Rear <input type="checkbox"/> Medium Hardness <input type="checkbox"/> High Hardness Graphite

Servo Horn op standard

Front Battery Spacer

Slipper Clutch Spring 3.6kg/mm 7.0kg/mm

Cooling Fan

Locknut Relaxnut

mm Arm Shim

mm Arm Shim

mm Rear Hub Shim

mm Rear Hub Shim

wing Length mm

Wing Thickness mm

Wing Cutting Line mm

Aluminum Steering Knuckles	<input type="checkbox"/> # A2 <input type="checkbox"/> # A3 <input type="checkbox"/> # A4
Locknut	<input type="checkbox"/>
Relaxnut	<input type="checkbox"/>

CNC Aluminium	<input type="checkbox"/> 66480306 Slipper Pad 11mm (Included)
	<input type="checkbox"/> 68430016 Slipper Pad 19mm
	<input type="checkbox"/> 66481386 LCF Slipper Pads 11mm
	<input type="checkbox"/> 66481396 LCF Slipper Pads 19mm

Front Oil #	
Central Differential Oil #	
Rear Oil #	
2/Gear	<input type="checkbox"/>
4/Gear	<input type="checkbox"/>

Chassis Flex	<input type="checkbox"/> Kit Chassis <input type="checkbox"/> Op Chassis
SCREW USED	SCREW NOT USE <input checked="" type="checkbox"/>

Pinion Spur Gear

66480986	PR Racing 48P Pinion (3.17mm ID) (18T)*1pcs	66481576	PR Racing 48P Pinion (3.17mm ID) (26T)*1pcs
66480996	PR Racing 48P Pinion (3.17mm ID) (19T)*1pcs	66481586	PR Racing 48P Pinion (3.17mm ID) (27T)*1pcs
66481006	PR Racing 48P Pinion (3.17mm ID) (20T)*1pcs	66481596	PR Racing 48P Pinion (3.17mm ID) (28T)*1pcs
66400556	PR Racing 48P Pinion (3.17mm ID) (21T)*1pcs	66481606	PR Racing 48P Pinion (3.17mm ID) (29T)*1pcs
66480096	PR Racing 48P Pinion (3.17mm ID) (22T)*1pcs	66481616	PR Racing 48P Pinion (3.17mm ID) (30T)*1pcs
66480106	PR Racing 48P Pinion (3.17mm ID) (23T)*1pcs	66481626	PR Racing 48P Pinion (3.17mm ID) (31T)*1pcs
66480116	PR Racing 48P Pinion (3.17mm ID) (24T)*1pcs	66481636	PR Racing 48P Pinion (3.17mm ID) (32T)*1pcs
66481566	PR Racing 48P Pinion (3.17mm ID) (25T)*1pcs	66481646	PR Racing 48P Pinion (3.17mm ID) (33T)*1pcs

68000100	73T Spur Gear (For SB401)*1pcs
68400196	75T Spur Gear (For SB401)*1pcs
68400206	77T Spur Gear (For SB401)*1pcs
68400216	81T Spur Gear (For SB401)*1pcs

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

PR5B401

PR RACING
TYPE **R**



mit
MADE IN TAIWAN


PR RACING

EMAIL / infopracing@gmail.com

1.02 Version