

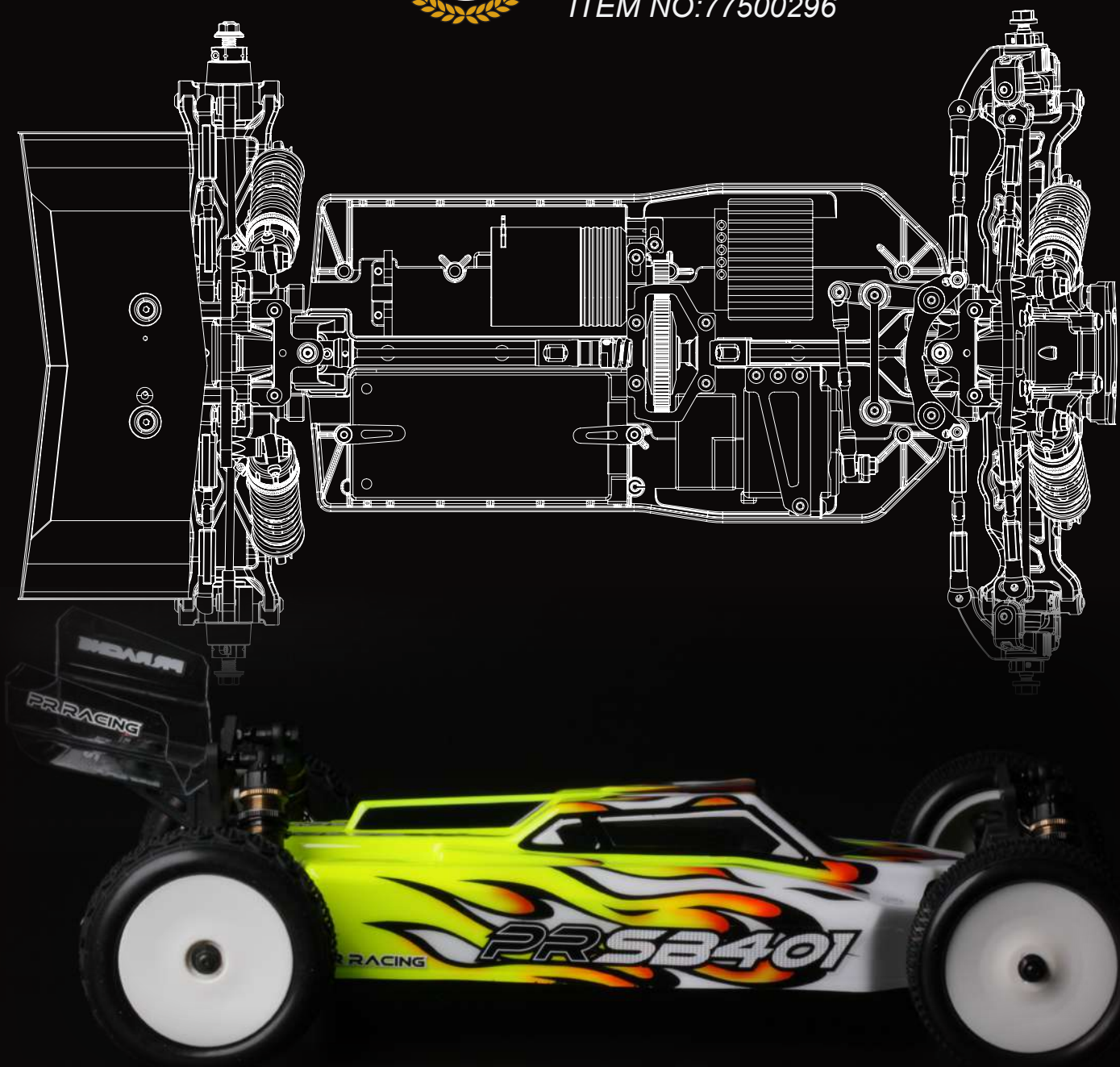
PR SB401



PR RACING
TYPE



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
A1-Main Chassis Assembly-Chassis Brace Installation	
A2-Gear Diff Assembly	
A3-Slipper Assembly	
A4-Gear Box Assembly	
A5 Rear Central Transmission	
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C4-Rear Upper Rod -Turnbuckle Assembly	
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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.

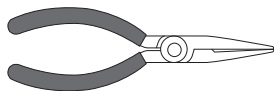
HEALTH WARNING

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!

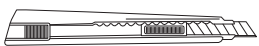
- Needle Nose Pliers



- Awl



- Sharp Hobby Knife



- Grease



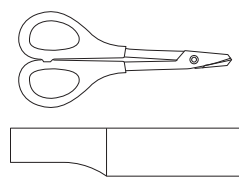
- Wire Cutters



- Screw Cement

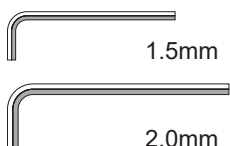


- Round Cutter & Sander



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

- Hex Wrench



- Ball Differential Grease



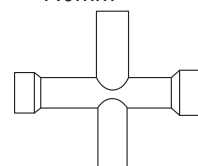
- SP Knife Edge Reamer



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

- Cross Wrench

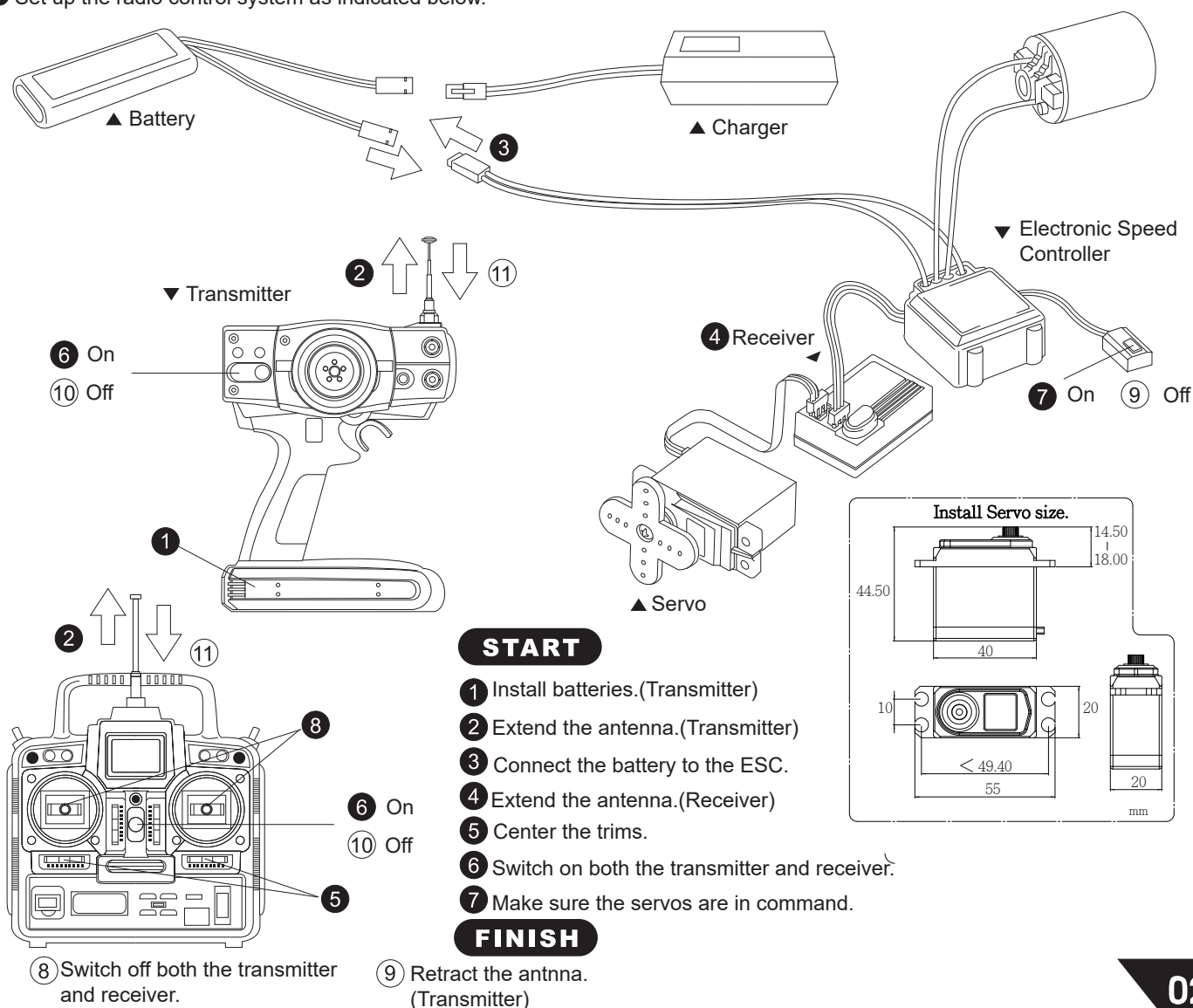
- 5.0mm-5.5mm
- 7.0mm



RADIO PREPARATION

- A new battery must be charged before it is used. Refer to the charger instruction manual for charging.

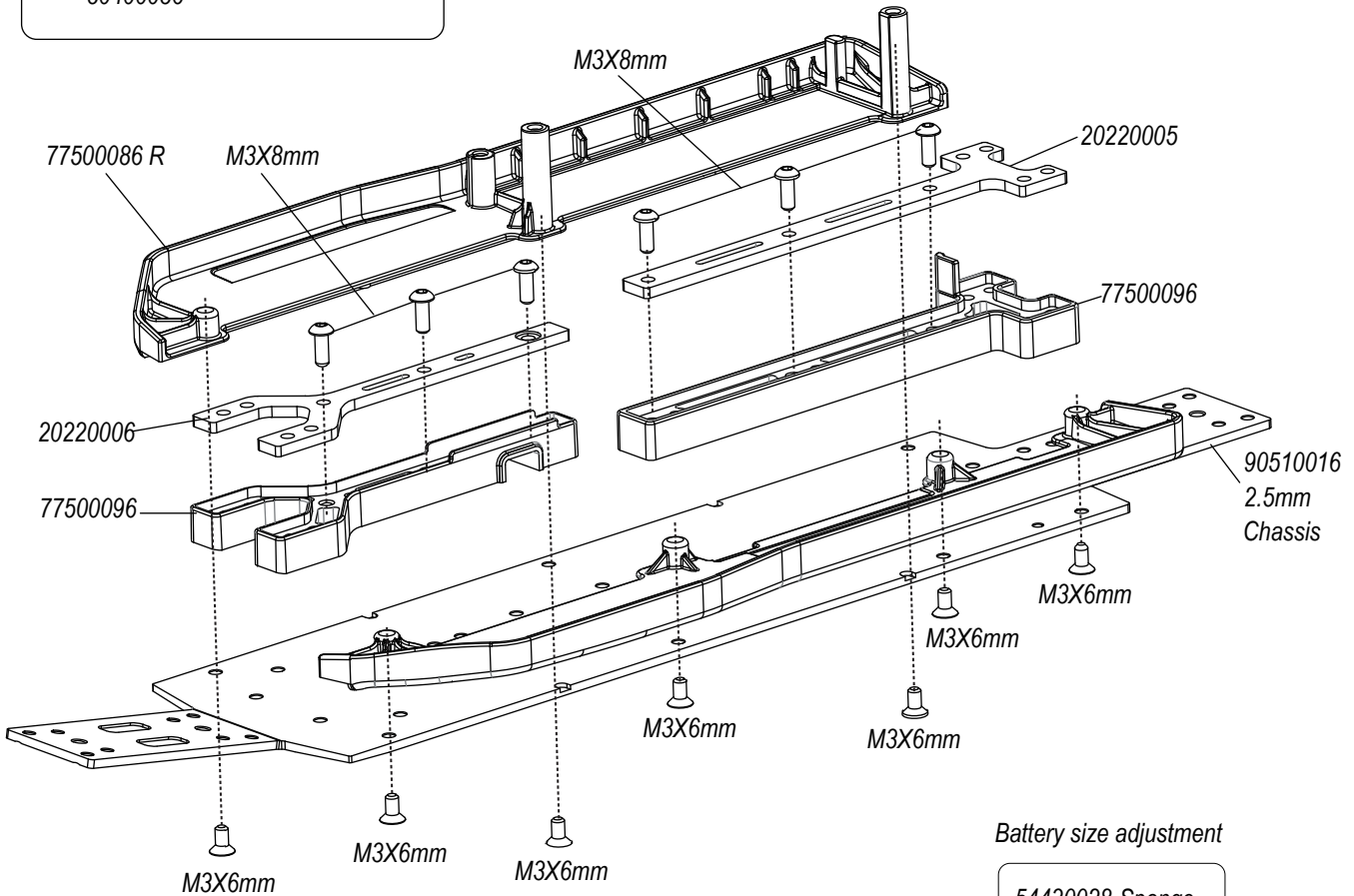
- Set up the radio control system as indicated below.



A1.1 Chassis Brace Installation

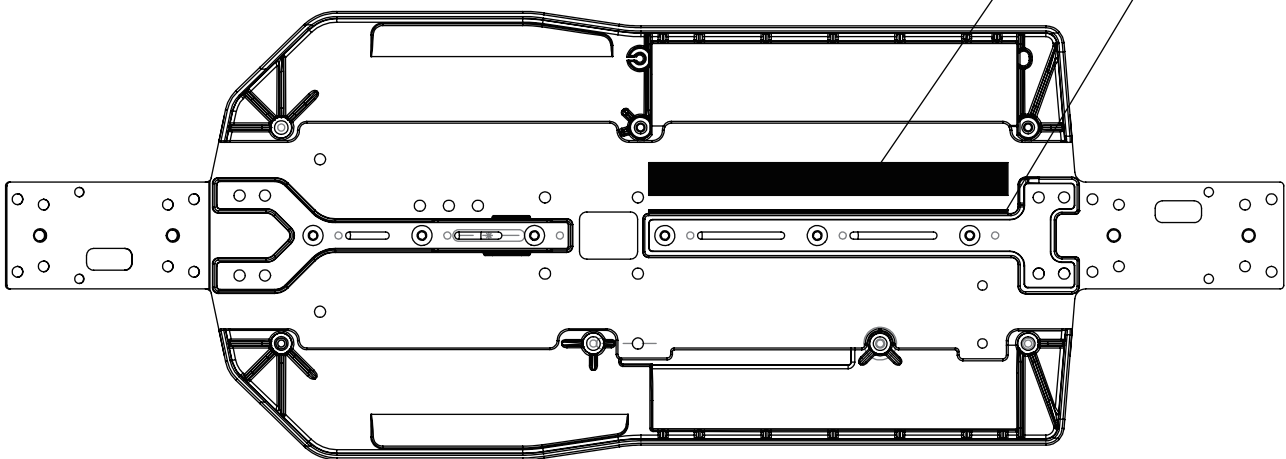
7
M3x6mm Flat Head Screws
82400016

6
M3x8mm Button Head Cap Screw
80400036



Battery size adjustment

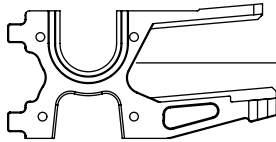
54430028-Sponge
10x99x1mm or 3 mm
54430028-Sponge
10x99x1 or 3 mm

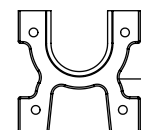


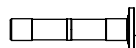
A1.2 Main Chassis Assembly

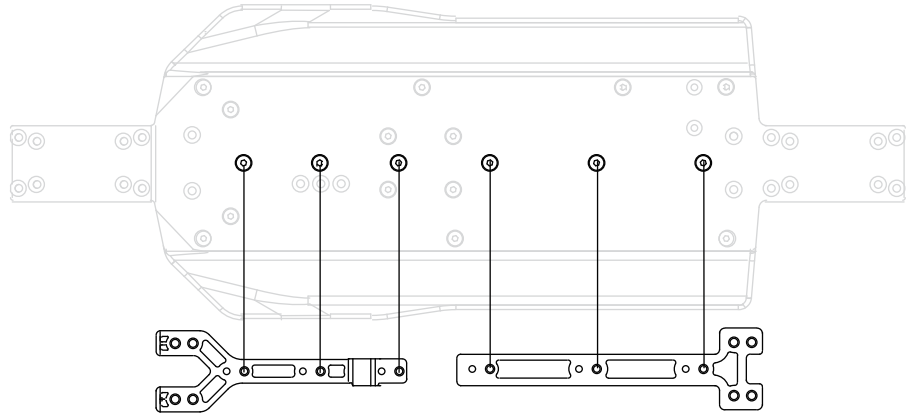
 6
M3x6mm Flat Head Screws
82400016

 6
M3x8mm Flat Head Screws
82400026

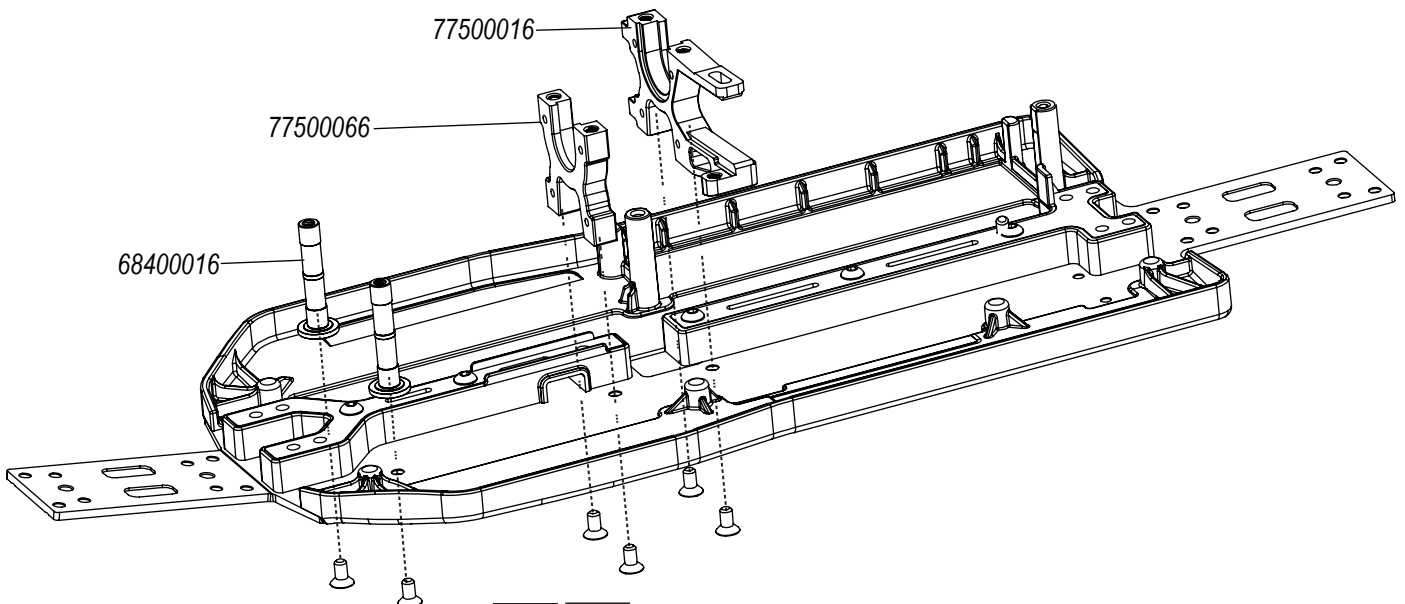
 1
77500016

 1
77500066

 2
68400016



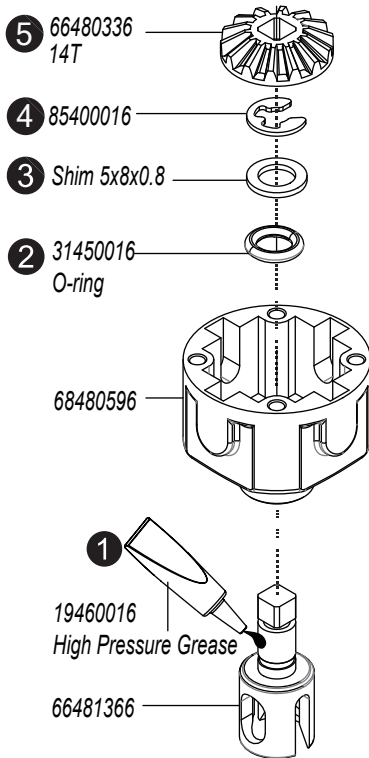
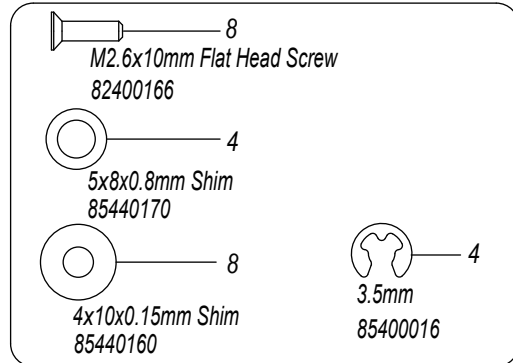
M3X8mm Flat Head Screws
Chassis rib screw position



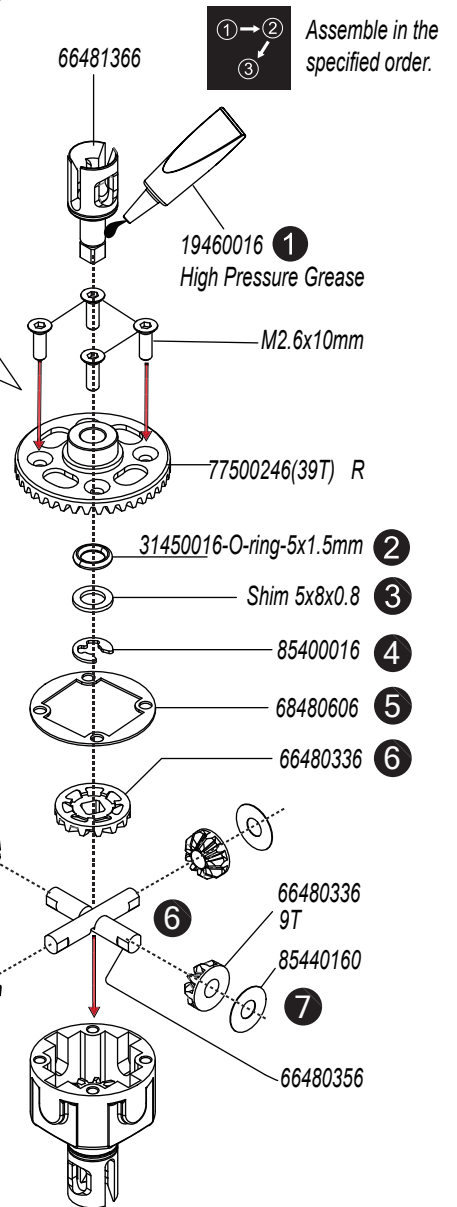
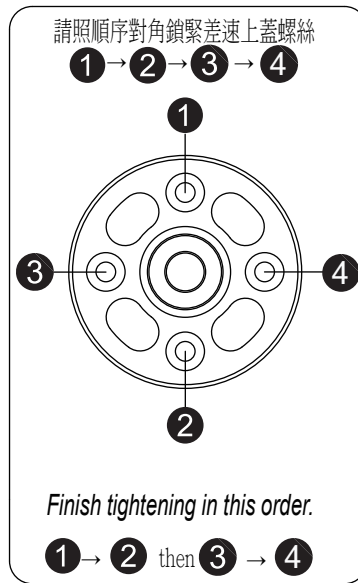
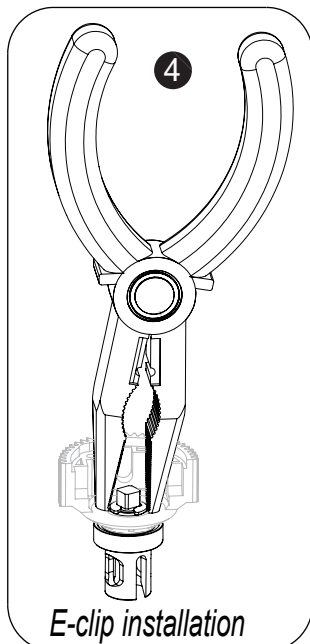
Tighten securely.

A2 Gear Diff Assembly

Assemble 1 front and 1 rear

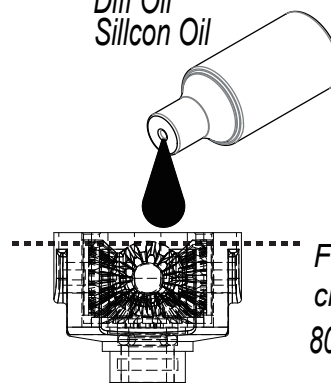


x2



According to different track conditions, you can choose to use 2 gears or 4 gears

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)

77480206
3.6kg/mm
✓Bumpy

66480826
7.0kg/mm
✓Flat

OP-77500186
Aluminum

77500466
steel

Tighten securely.



m3x6mm

77500176

Shim
3x5x0.3mm

77500176

12

3x3mm
Set Screw

15

68480186

66480306
(11mm)

68480186

77500196

7

10x15x4mm
zz Ball Bearing

8

2x10.8mm

4

66480306
(11mm)

3

68480186

2

77500166

10x15x4mm
zz Ball Bearing

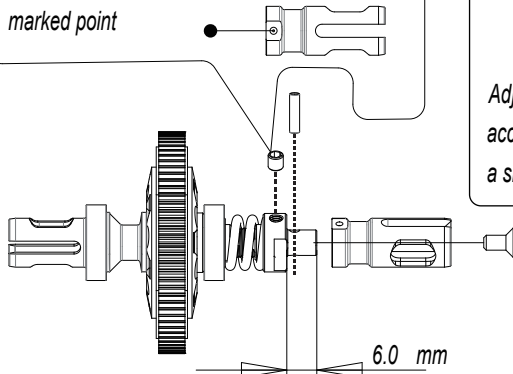
1

2x10.8mm

1

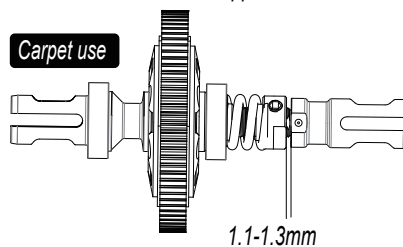
Option	PR RACING TEAM Slipper Pad		
Carpet use	Dirt use	Carpet use	Dirt use
66480306 Slipper Pad 11mm (White)	68430016 Slipper Pad 19mm (White)	66481386 LCF Slipper Pads 11mm (Yellow)	66481396 LCF Slipper Pads 19mm (Yellow)

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

Carpet use



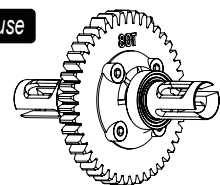
1.1-1.3mm

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

Dirt use



Track Conditions (Traction)

Very-High	Oil 50000 Cst
Medium	Oil 10000 Cst
Very-Low	Oil 7000 Cst



Part Bags used.



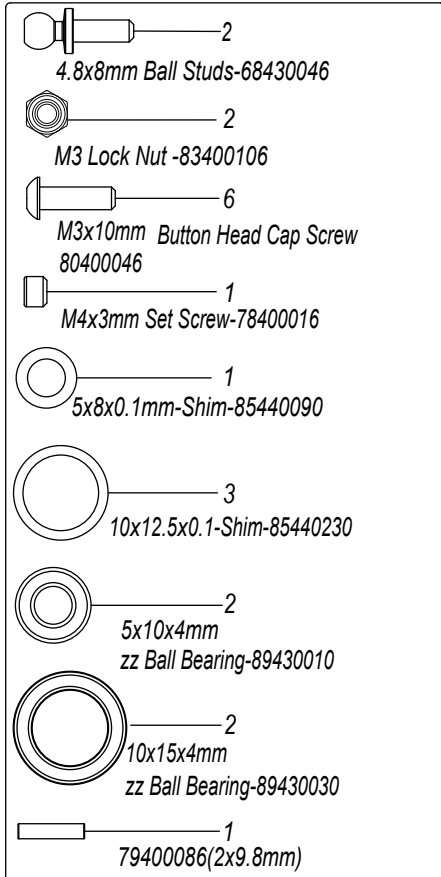
Assemble in the specified order.



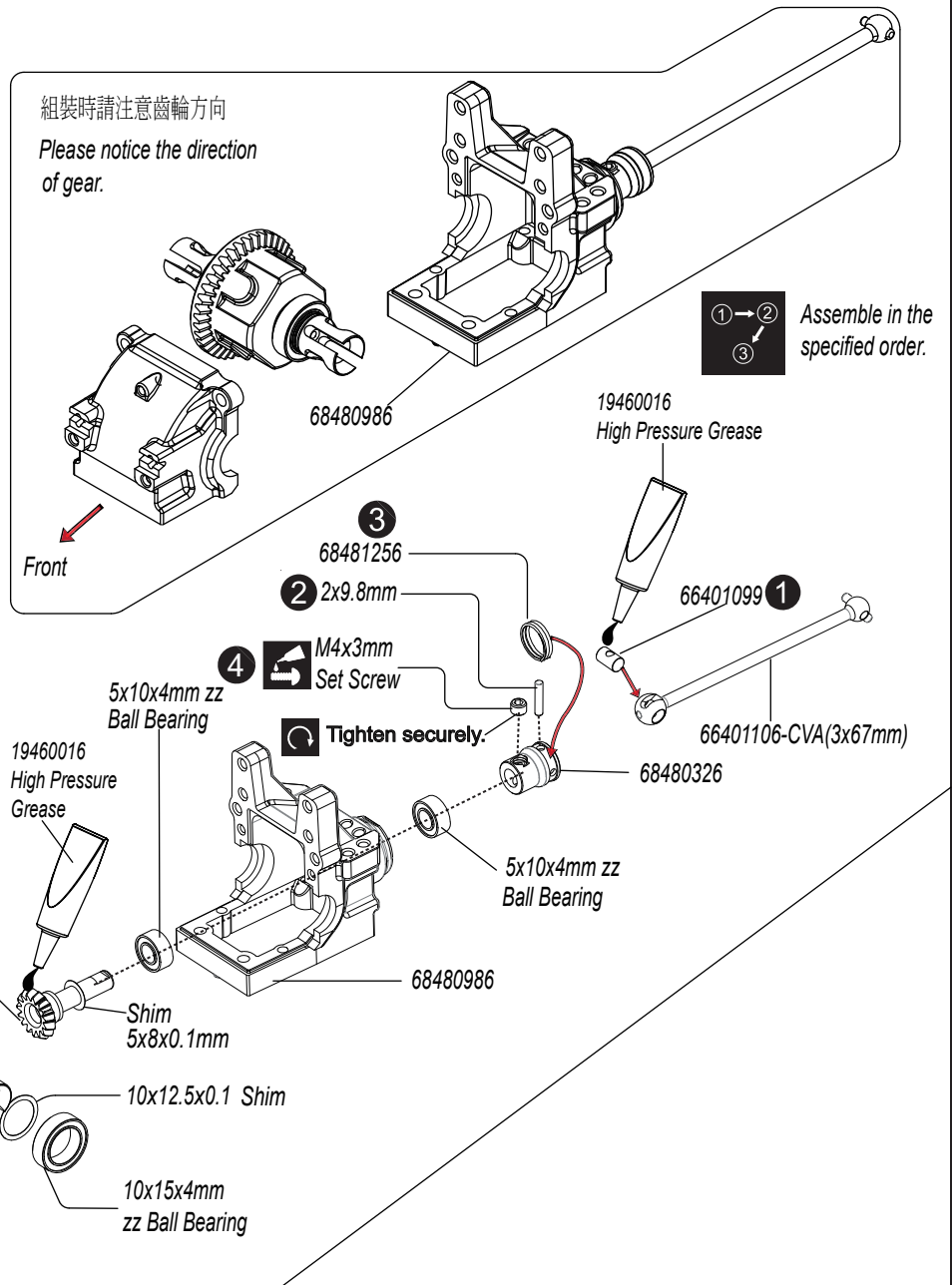
Apply threadlocker (screw cement)



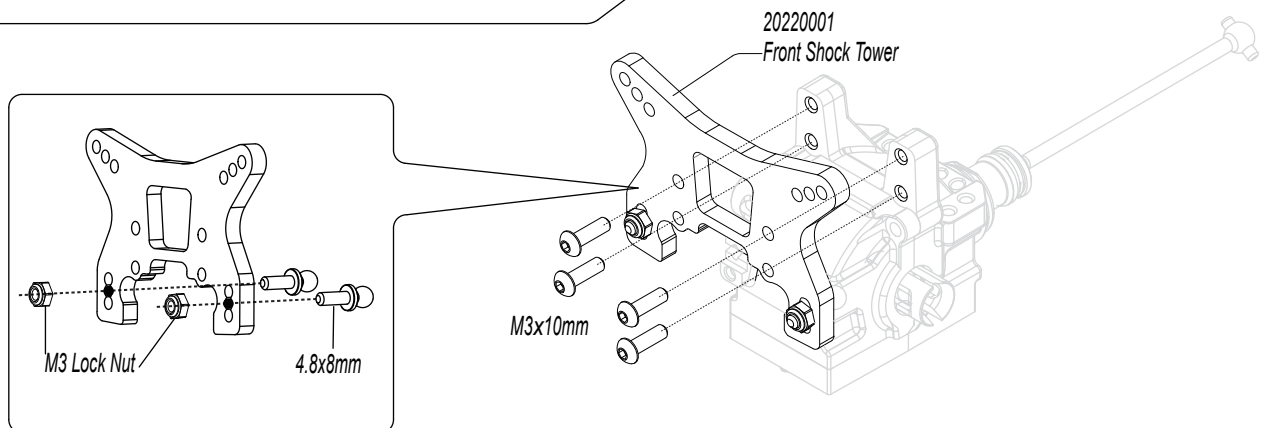
Tighten securely.

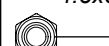
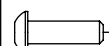
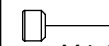
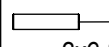


組裝時請注意齒輪方向
Please notice the direction
of gear.



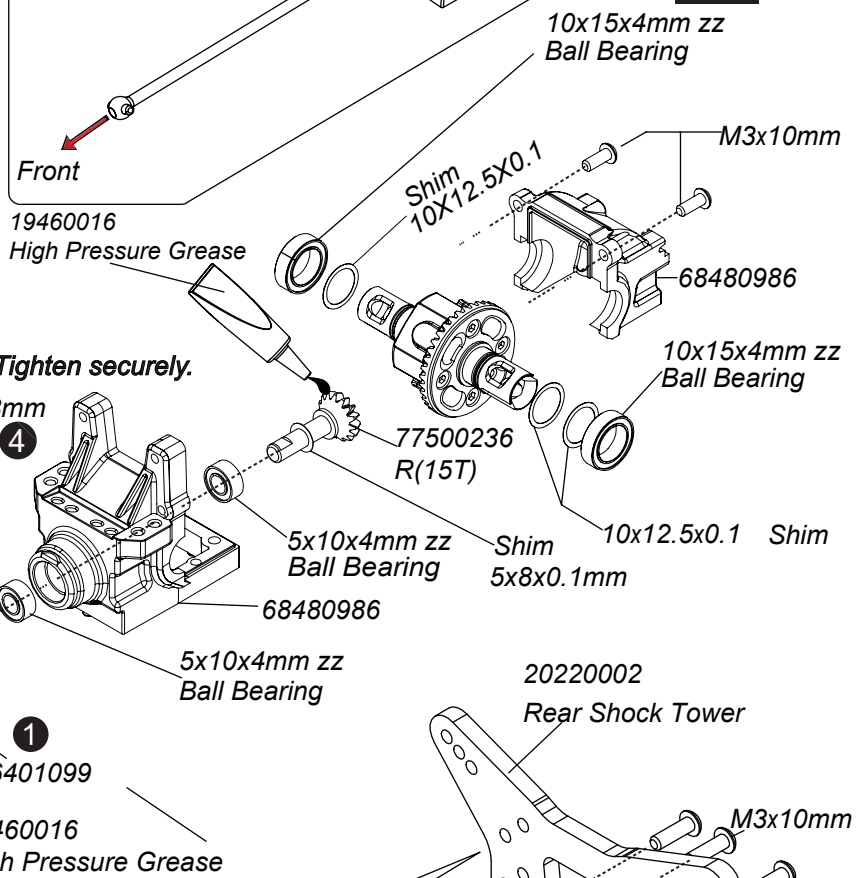
Assemble in the
specified order.



-  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

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

1 → 2
3 Assemble in the specified order.



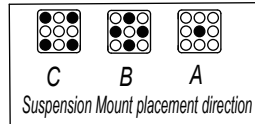
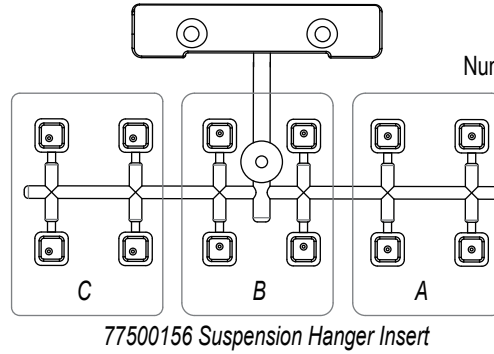
M3 Lock Nut

4.8x8mm Ball Studs

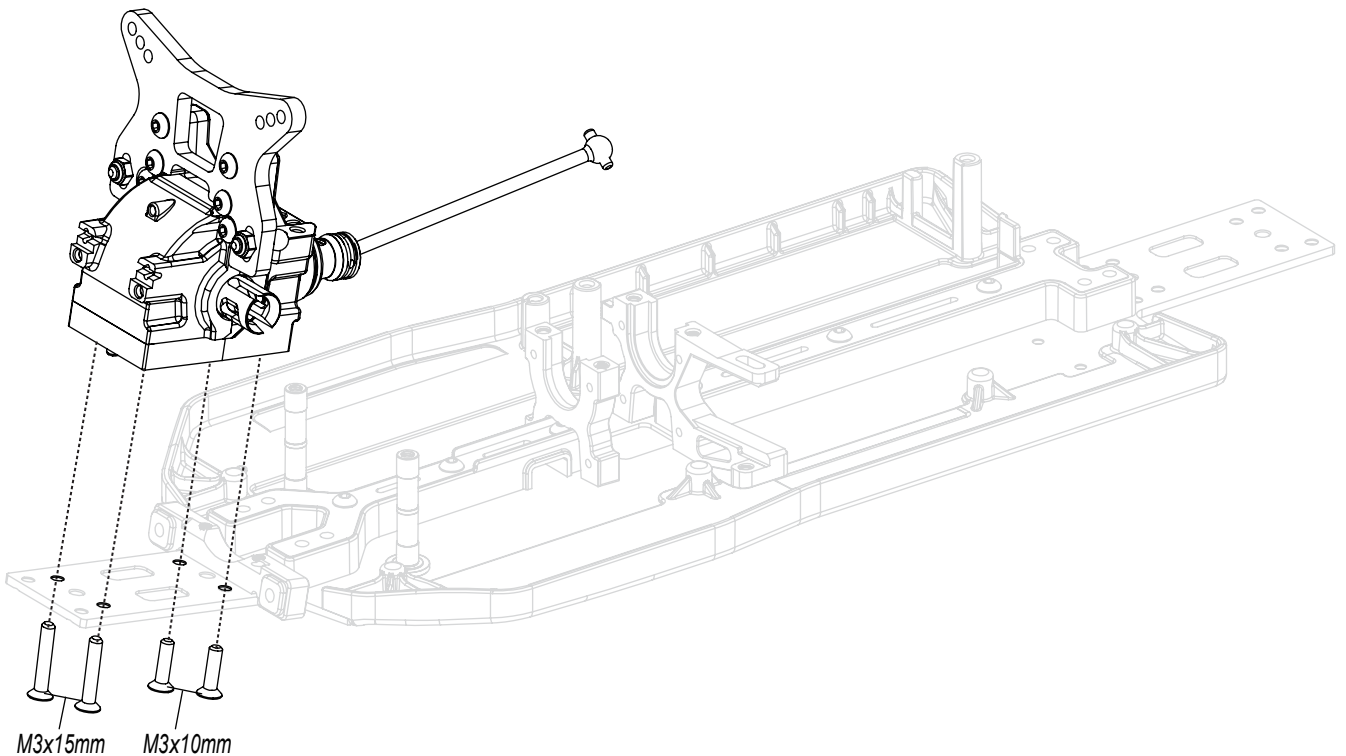
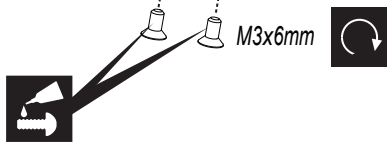
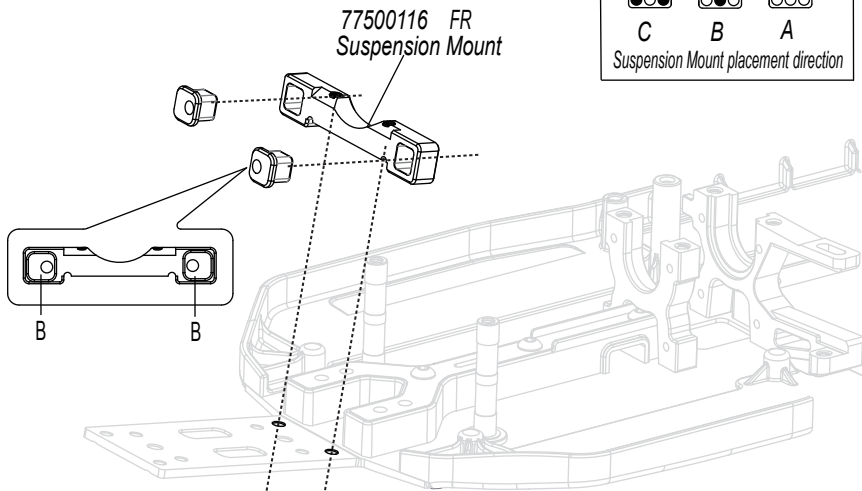
B1 Suspension Mount Installation

FRONT HANGER INSERTS

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

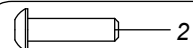


Numbering	FF	FR	TOE	SQUAT
F-1			0	0
F-2			0	+0.7
F-3			0	+1.4
F-4			0	-0.7
F-5			0	0
F-6			0	+0.7
F-7			0	-1.4
F-8			0	-0.7
F-9			0	0
F-10			0	0
F-11			-0.9	0
F-12			-1.7	0
F-13			+0.9	0
F-14			0	0
F-15			-0.9	0
F-16			+1.7	0
F-17			+0.9	0
F-18			0	0
R-19			+3.5	+2

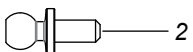


B2.1 Front Hub Carrier Assembly (Left Side)

Left Side



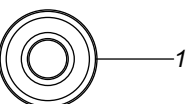
2
Button Head Cap-80400206
Screw M3x12mm



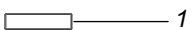
2
4.8mmx6mm-68430036
Ball Studs



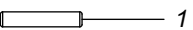
1
5x10x4mm zz Ball Bearing
89430010



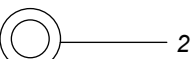
1
5x13x4mm zz Ball Bearing
89430020



1
Pin 2x9.8mm-79400086



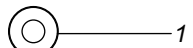
1
Pin 2 x 10.8mm-79400016



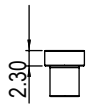
2
Shim 5x8x0.1mm-85440090



1
m2x5mm-87400066



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



(Brown)
2.3mm-77500267



(Brown)
1.1mm-77500268



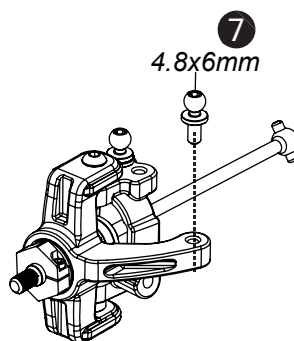
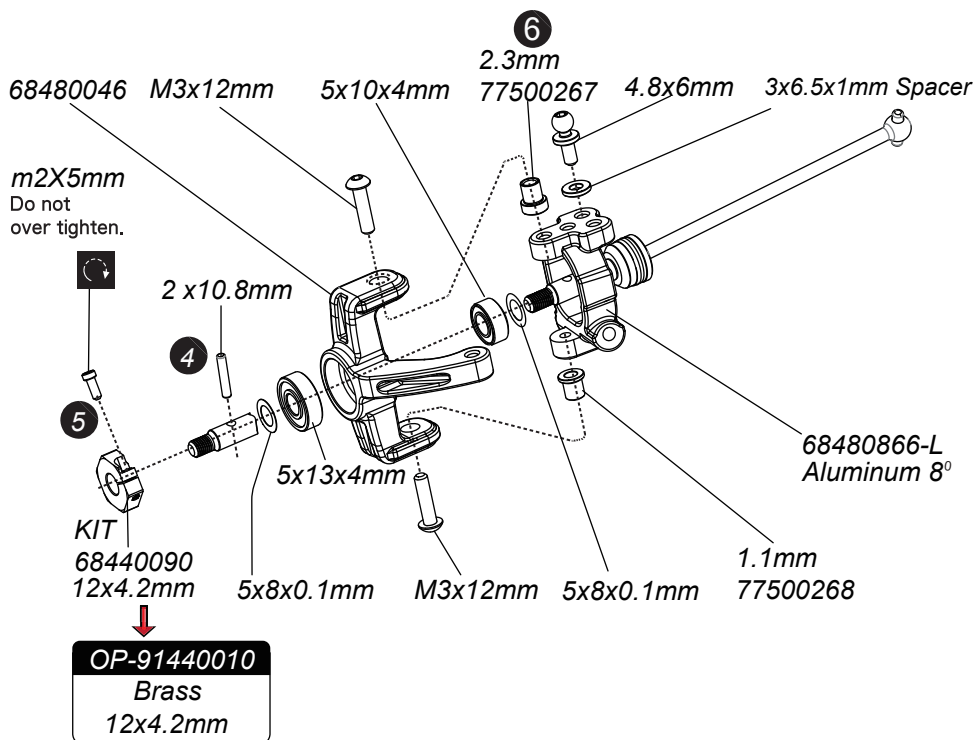
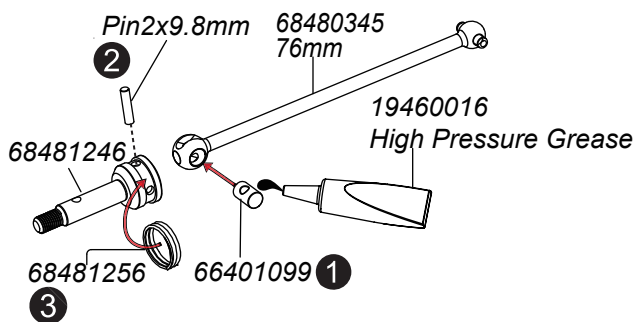
(Silver)
0.8mm-77500216

77480160 Alu Steering Knuckles
uses

68480046 plastic 5 Degree
Caster Block uses



Assemble in the
specified order.



Corner Speed

Stable

Sensitive



Nylon plastic



Aluminum



Part Bags used.



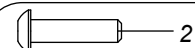
Do not over tighten.



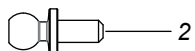
Assemble in the
specified order

B2.2 Front Hub Carrier Assembly (Right Side)

Right Side



2
Button Head Cap-Screw-80400206
Screw M3x12mm



2
4.8mmx6mm-68430036
Ball Studs



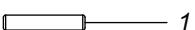
1
5x10x4mm zz Ball Bearing
89430010



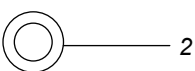
1
5x13x4mm zz Ball Bearing
89430020



1
Pin 2x9.8mm-79400086



1
Pin 2 x10.8mm-79400016



2
Shim 5x8x0.1mm-85440090



1
m2x5mm-87400066



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



(Brown)
2.3mm-77500267



(Brown)
1.1mm-77500268



(Silver)
0.8mm-77500216

77480160 Alu Steering Knuckles
uses

68480046 plastic 5 Degree
Caster Block uses



Assemble in the
specified order.

Corner Speed

Stable

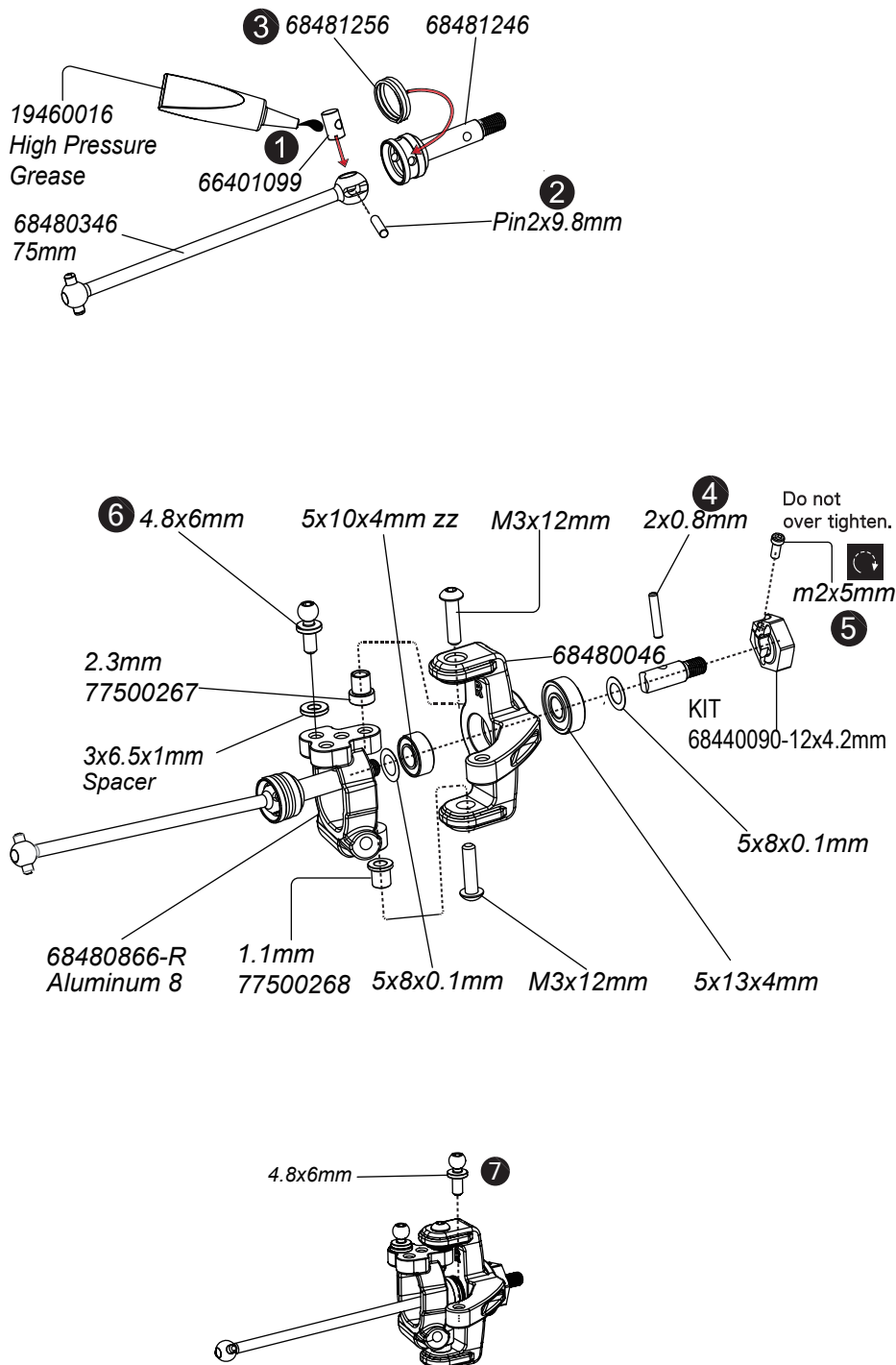
Sensitive



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

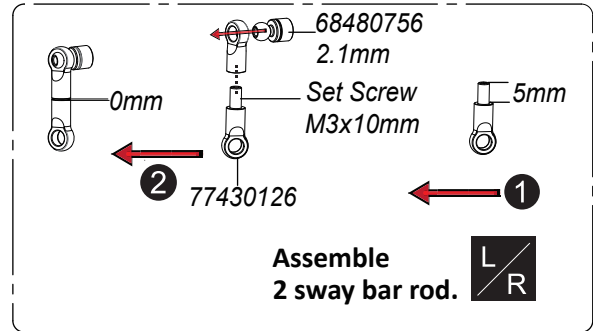
2
M3x10mm Set Screw
87400026

Pin 3x36.8mm-79400036—2

Pin 3x52mm-79480036—2

2
Shim
3x8x0.15mm
85440320

Shim 3x8x0.15mm	Wishbone (Graphite) Hard ☐
	Wishbone Medium Hard ☒



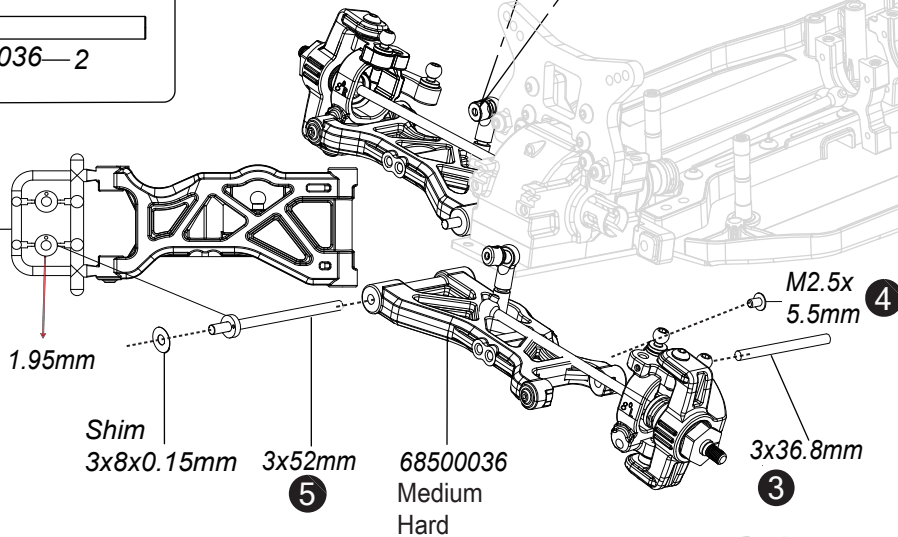
1 → 2
3 Assemble in the specified order.

Kit Stable

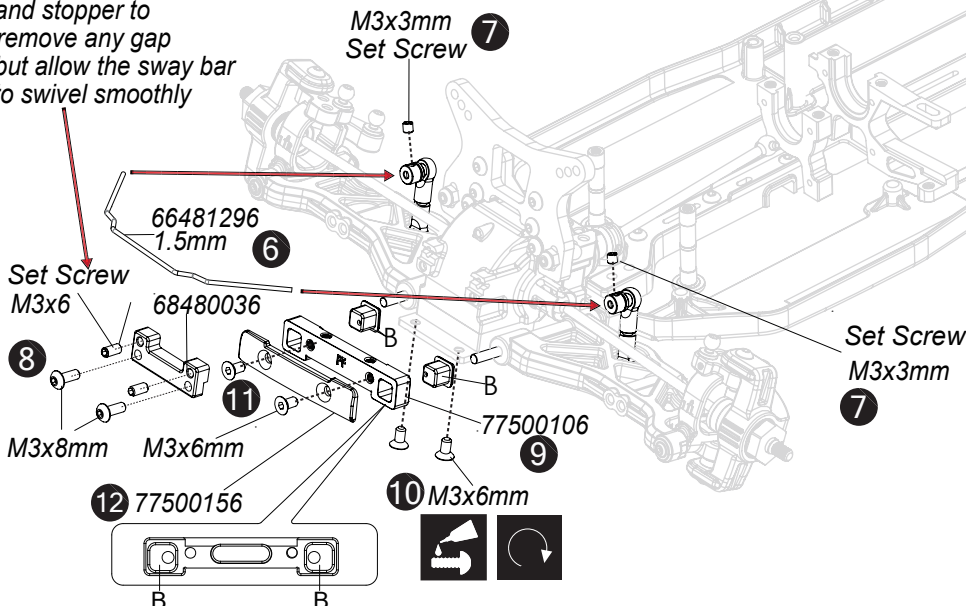
68500036
Front Wishbone
(Medium Hardness)

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



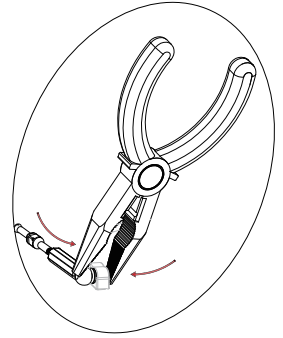
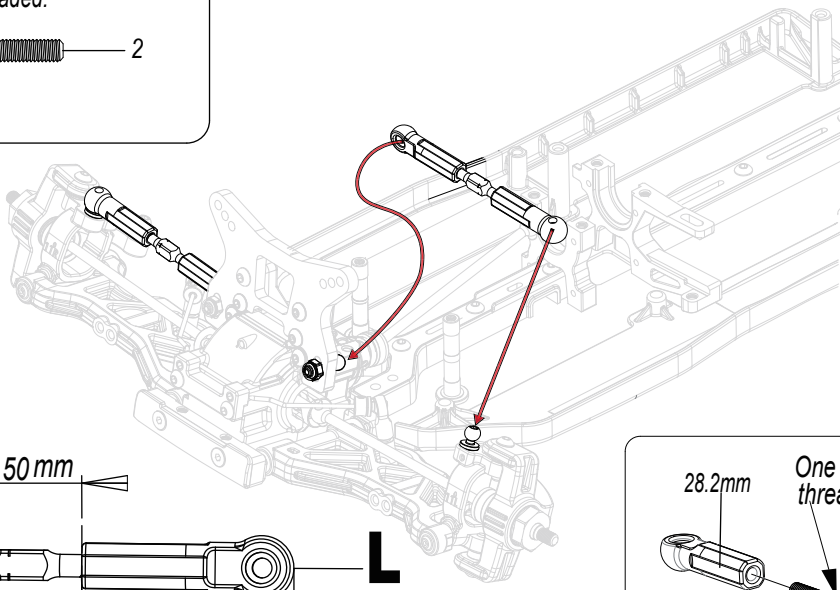
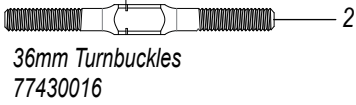
A	B	C

Note position- 77500156

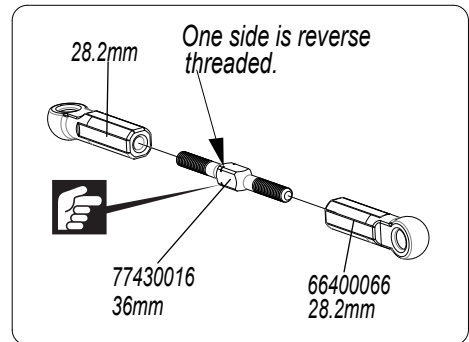
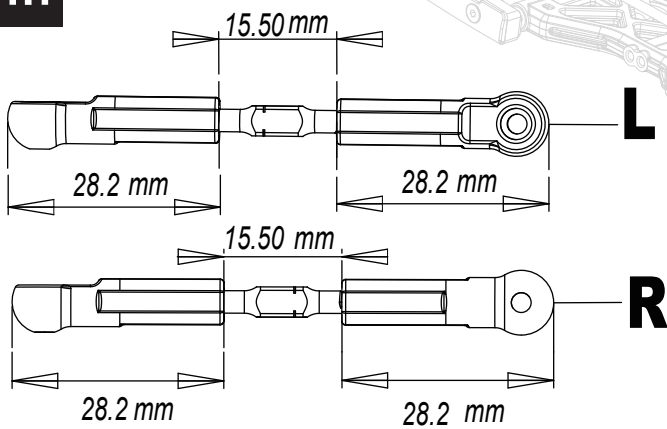


B4 Front Upper Turnbuckle Assembly

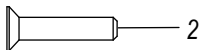
One side is reverse threaded.



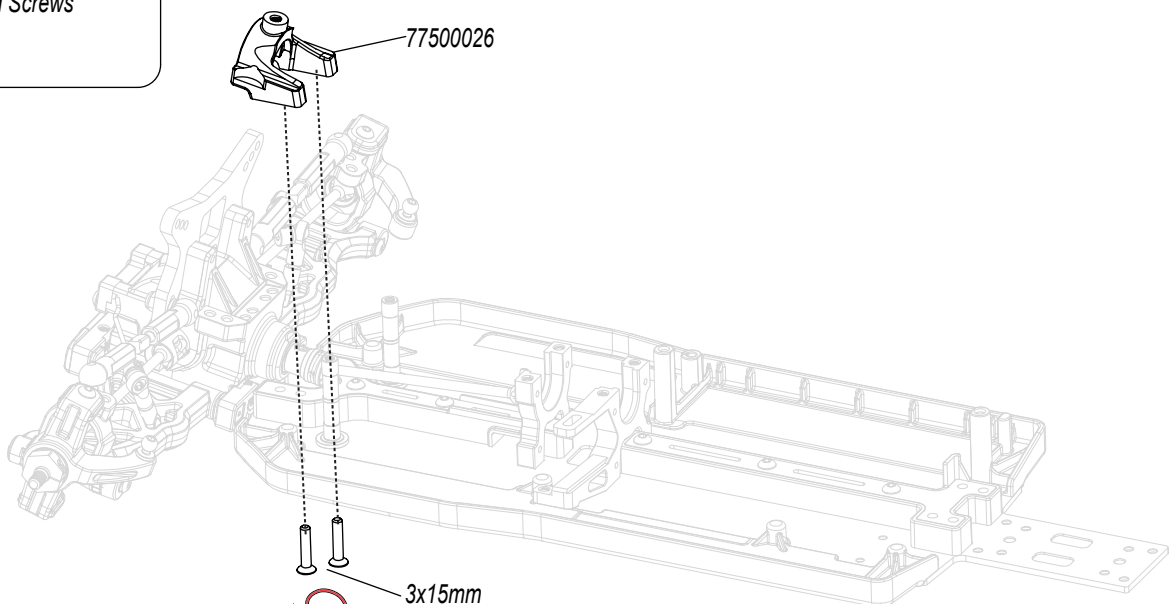
1:1



B5 Gearbox-Reinforcement - Front



3x15mm Flat Head Screws
82400176

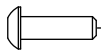
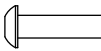
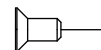
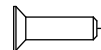
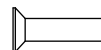


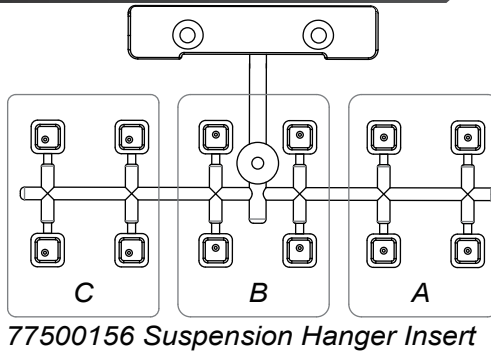
Do not tighten fully yet.



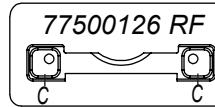


C1 RF Suspension Mount

-  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

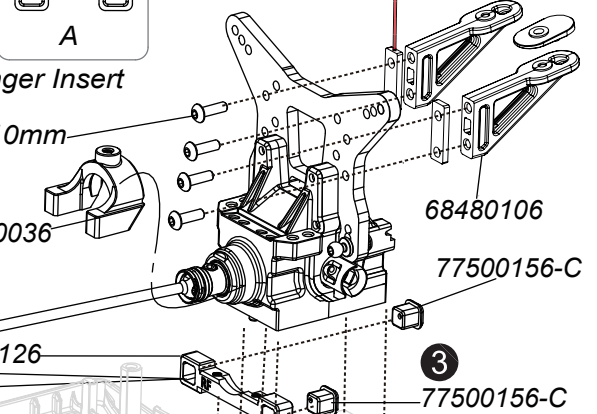
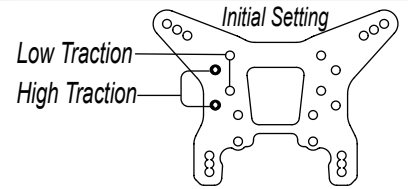


① → ②
③ Assemble in the specified order.



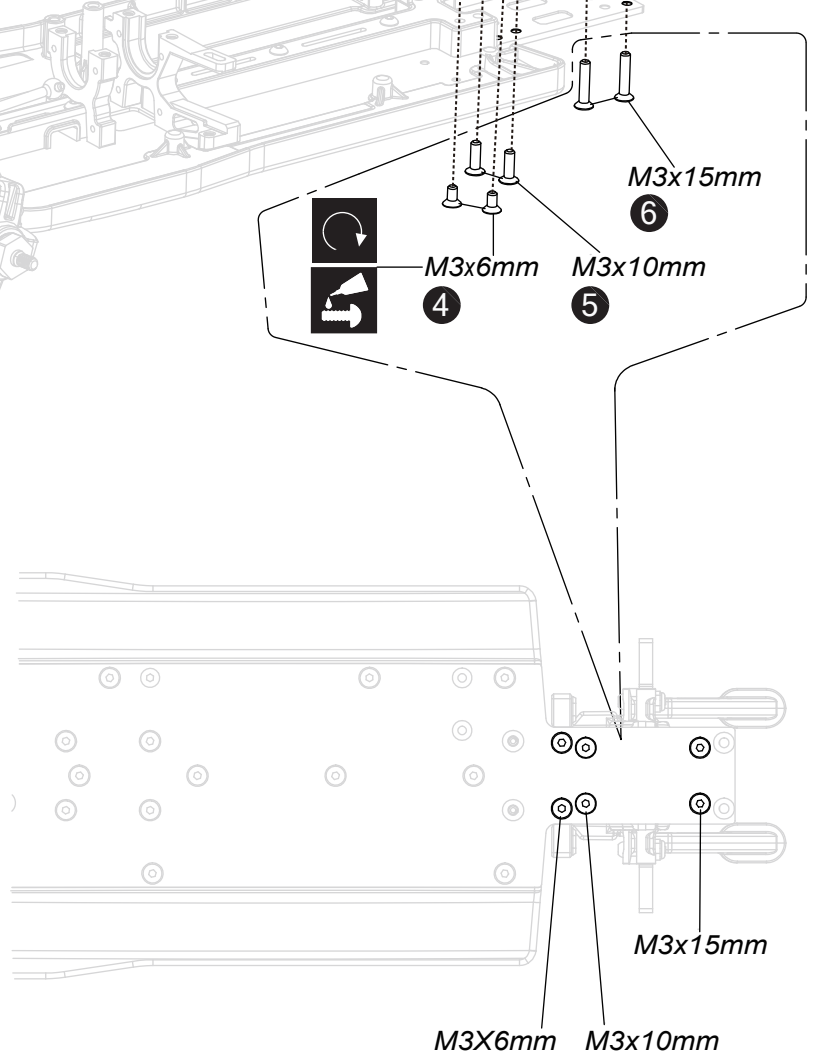
- ① M3x10mm
- ② 77500036

Need 3X12mm Screw



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.



Part Bags used.



Tighten securely.



Apply threadlocker (screw cement)

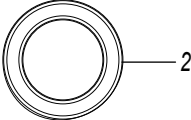


Assemble in the specified order

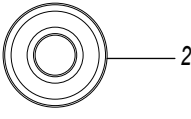
C2 Rear Left Hub Carrier Assembly



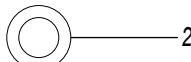
M2.5x4mm Button Head Screw
80400016



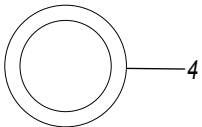
10x15x4mm zz Ball Bearing
89430030



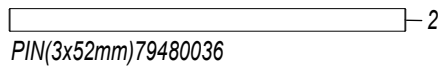
5x13x4mm zz Ball Bearing
89430020



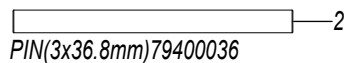
Shim 5x8x0.1mm
85440090



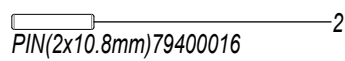
85440300
10x15x0.1mm



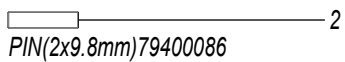
PIN(3x52mm)79480036



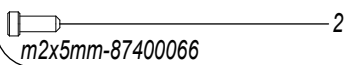
PIN(3x36.8mm)79400036



PIN(2x10.8mm)79400016



PIN(2x9.8mm)79400086

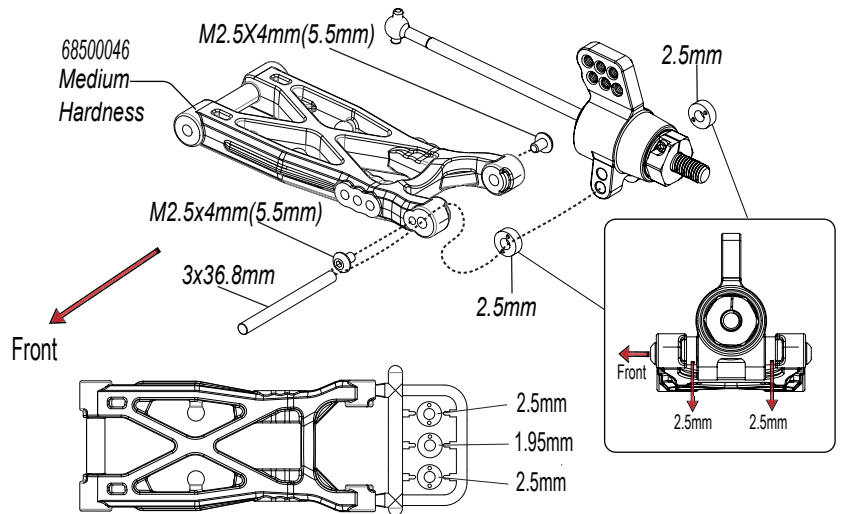
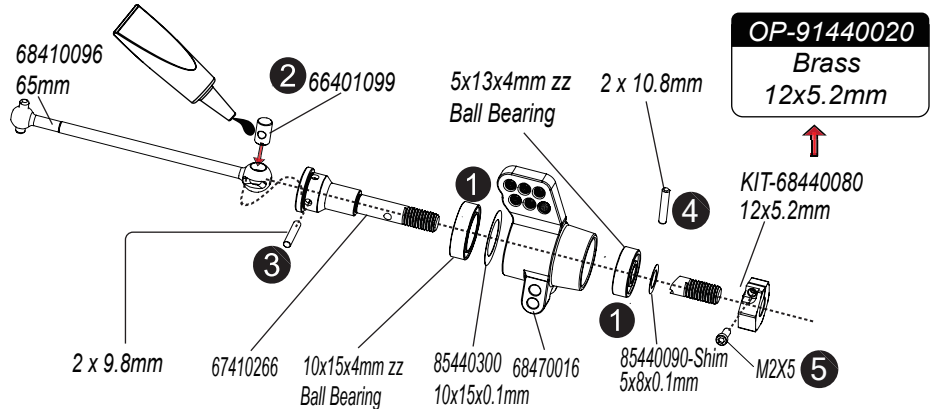


m2x5mm-87400066

Assemble the right left side in the same manner.



Assemble in the specified order.

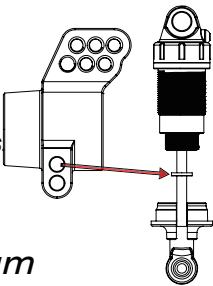


Precautions

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

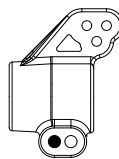
Up stop
+1mm shim

Aluminum



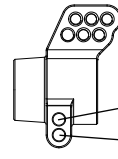
Corner Speed

Stable



Nylon plastic

Responsive



Aluminum

Responsive
Stable





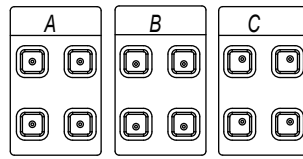
C3 Rear Left Hub Carrier Assembly

2
m3x6mm Flat Head Screws
82400016

2
M3x15mm Flat Head Screw
82400176

2
Pin 3x52mm-79480036

2
Shim 3x8x0.15mm 85440320



Note position



Wishbone (Graphite) Hard ☐



Shim
3x8x0.15mm

Wishbone Medium Hard ☒

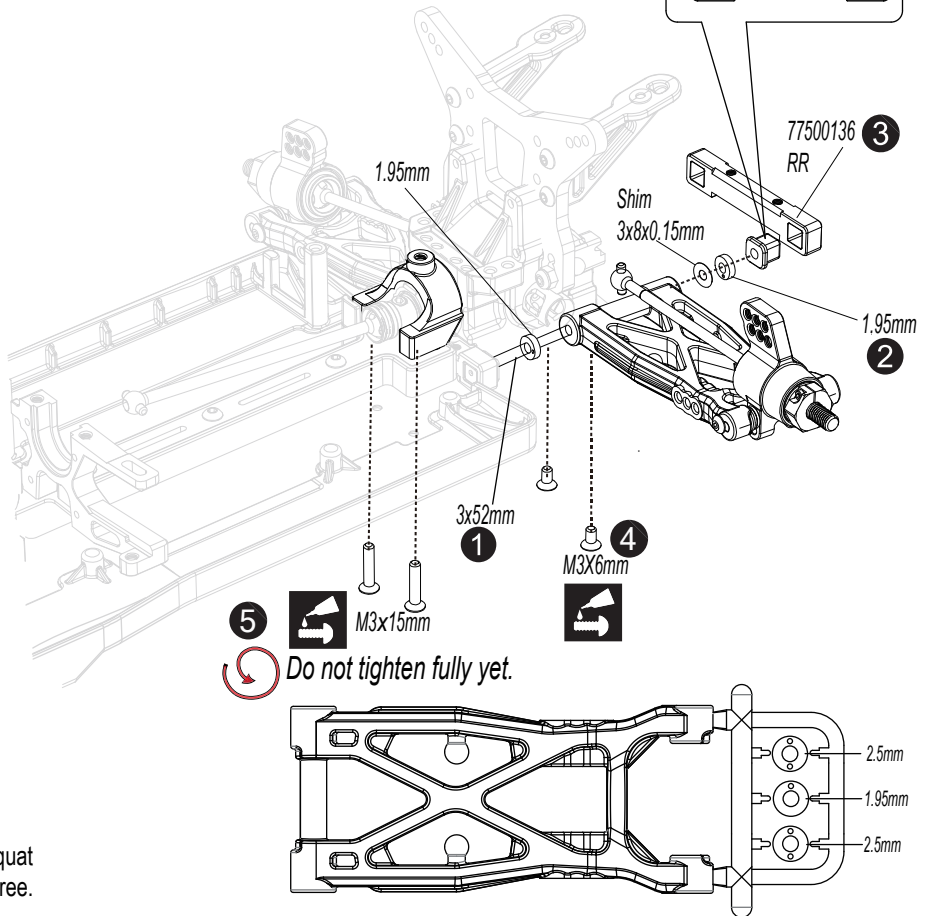


Assemble in the specified order.

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

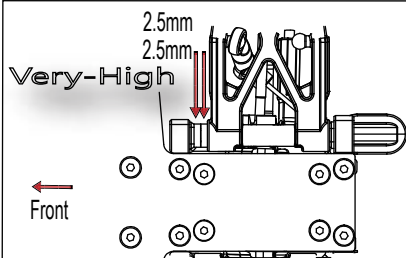
Note: (1) SB401 Plastic Antisquat
Shims=1mm=1Degree.

REAR HANGER INSERTS

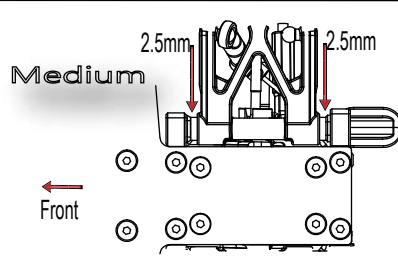


Track Conditions

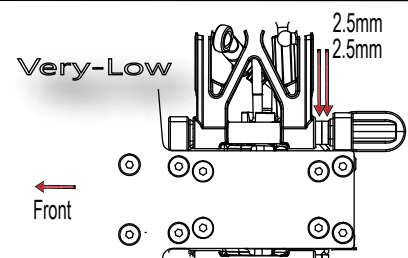
Traction



Traction



Traction



Part Bags used.



Tighten securely.



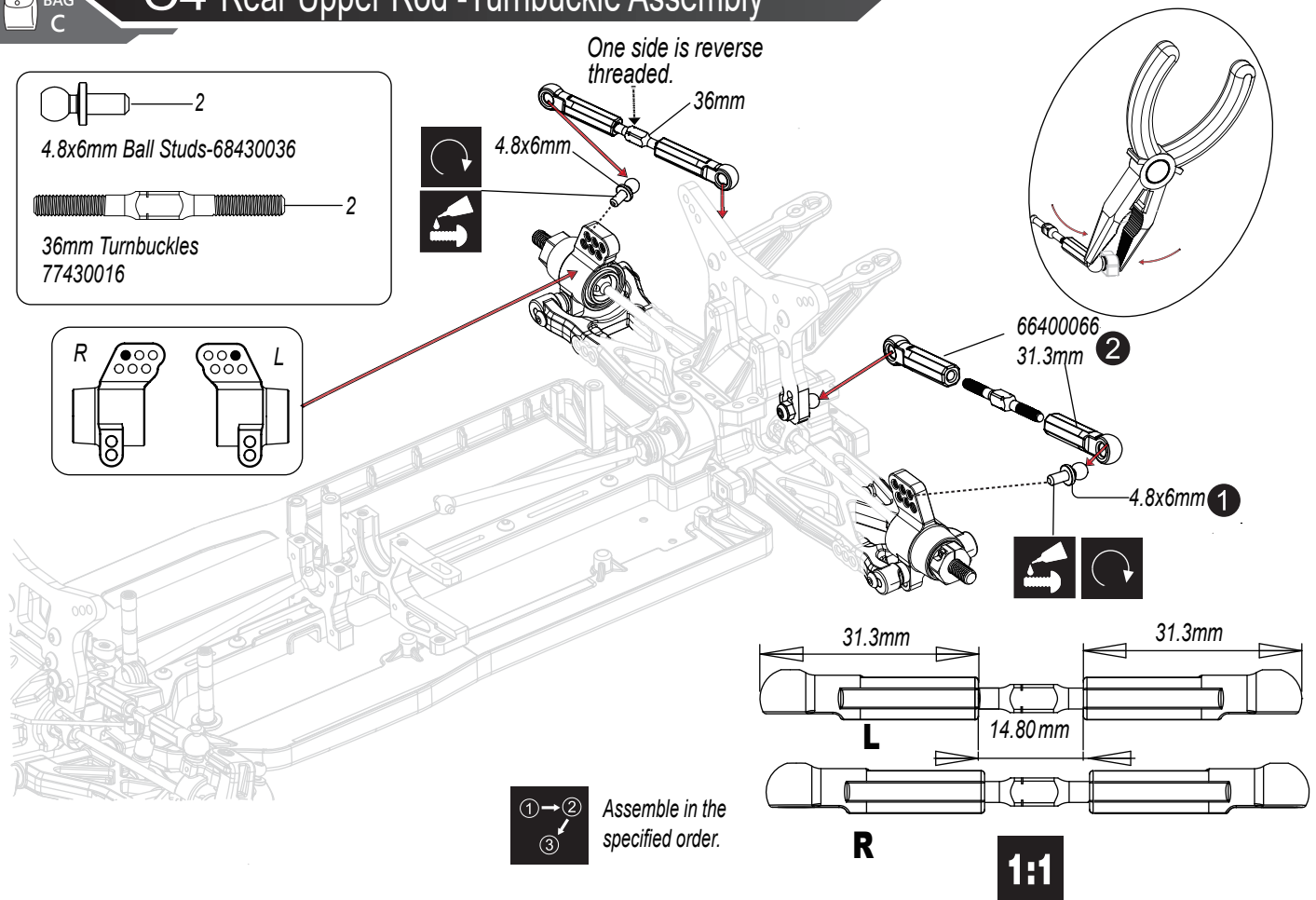
Apply threadlocker (screw cement)



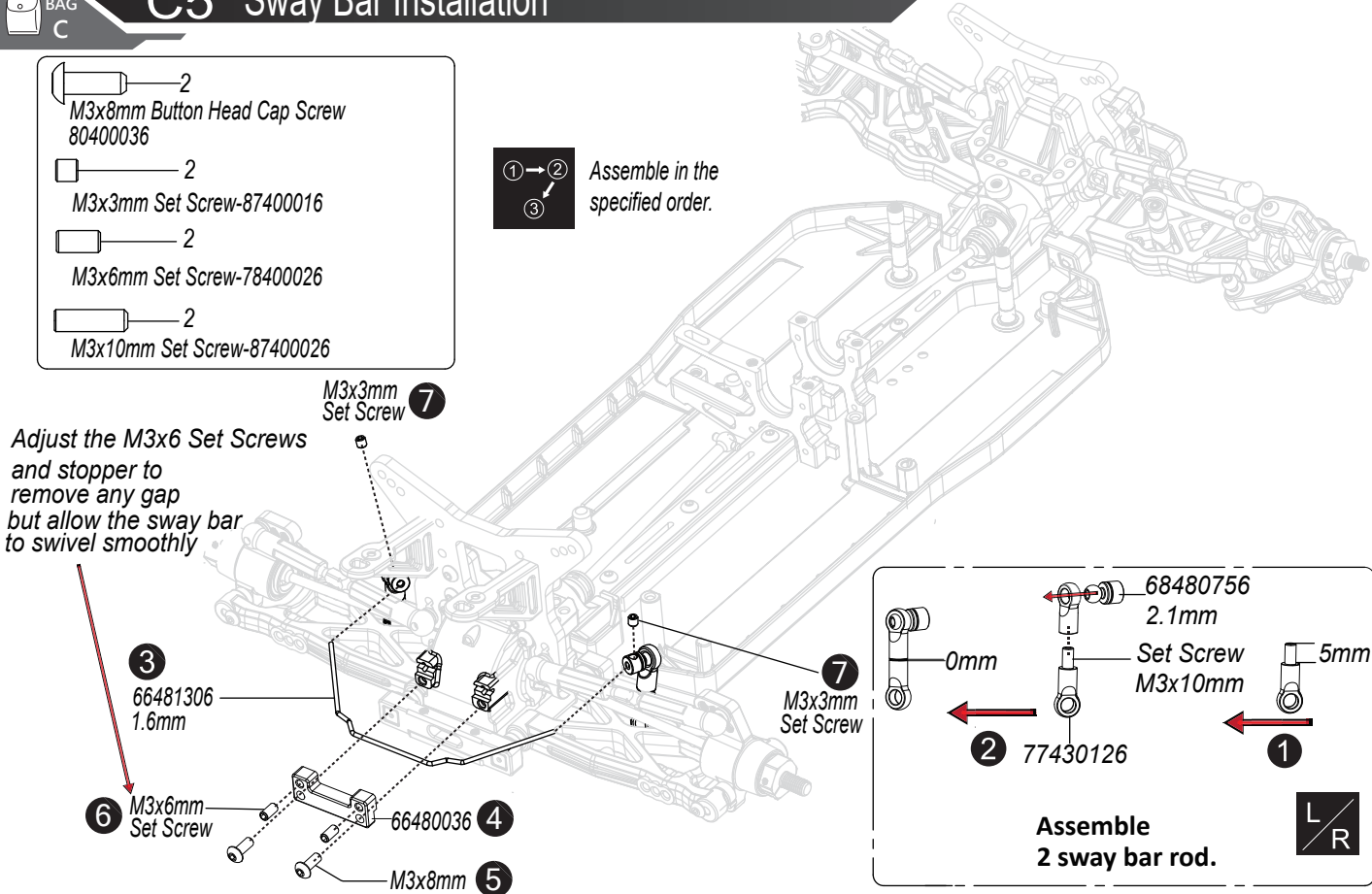
Assemble in the specified order



C4 Rear Upper Rod -Turnbuckle Assembly

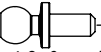
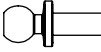
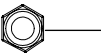
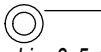
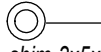
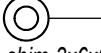
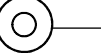
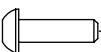


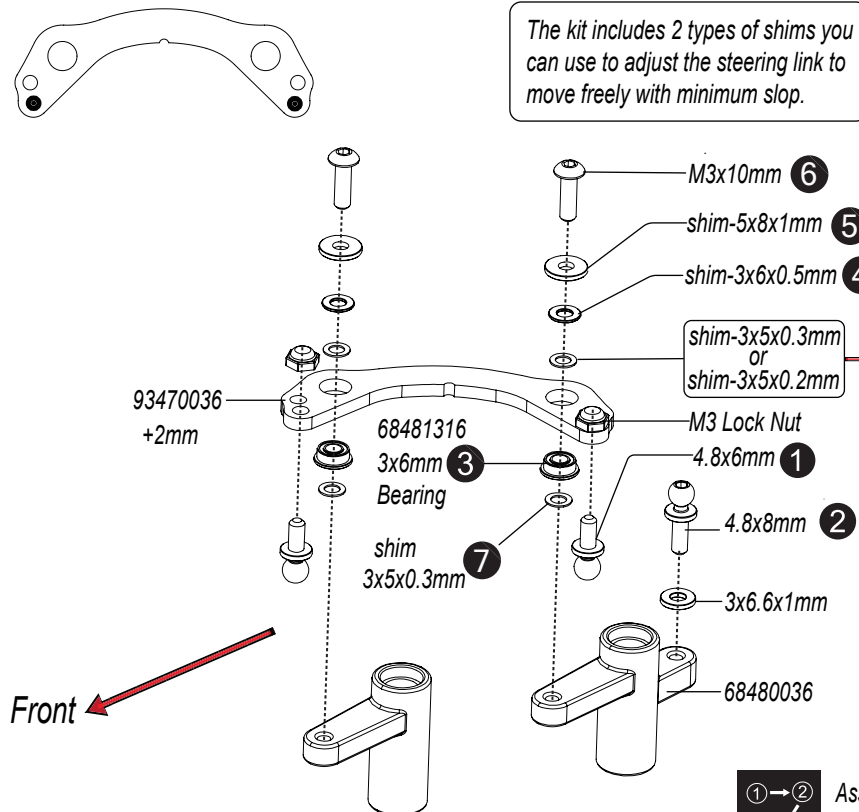
C5 Sway Bar Installation



D1 Bell Crank Installation



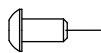
-  2
4.8x6mm Ball Studs -68430036
-  1
4.8x8mm Ball Studs -68430046
-  2
M3 Lock Nut-83400106
-  4
shim-3x5x0.3mm-85440290 Silver
-  2
shim-3x5x0.2mm-85440020 Silver
-  2
shim-3x6x0.5mm-85440301 Black
-  2
shim-3x8x1mm-85440210 Black
-  1
Silver Aluminum Spacer
3x6.6x1mm-85440310
-  2
M3x10mm-80400046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

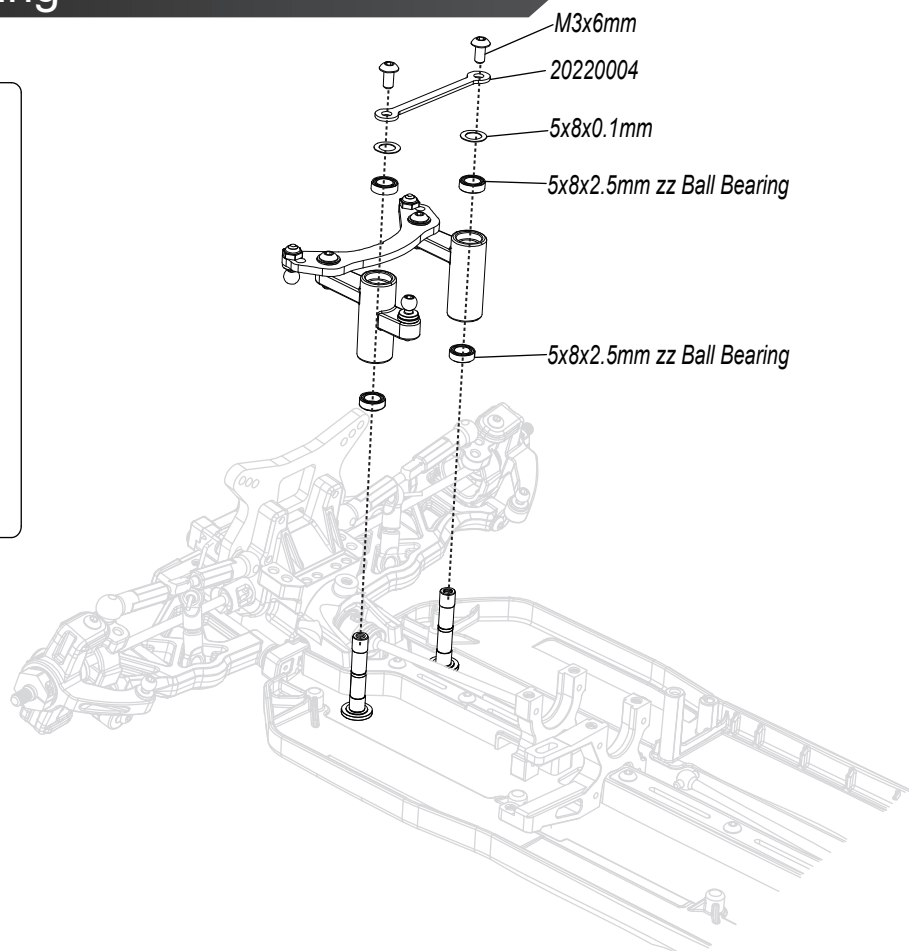


①→②
③ Assemble in the specified order.

D2 Steering

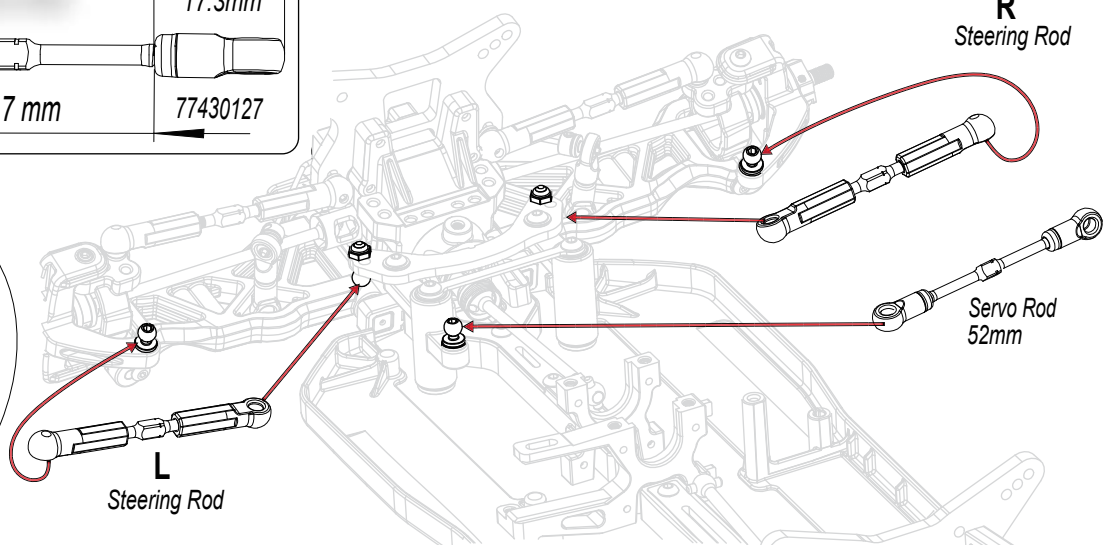
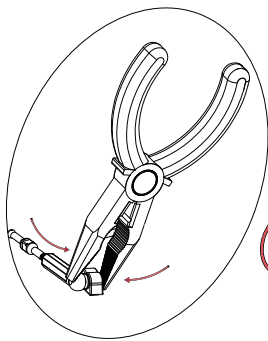
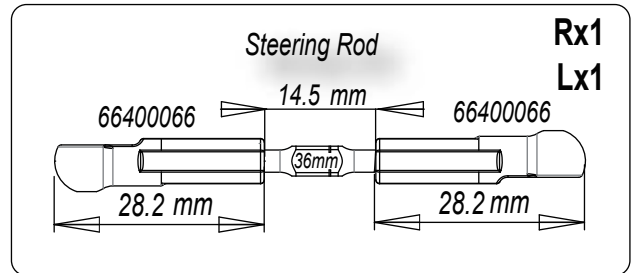
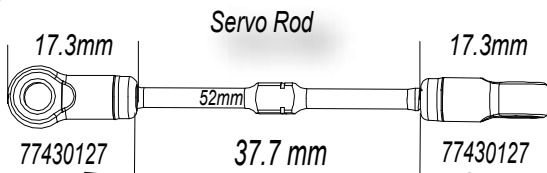
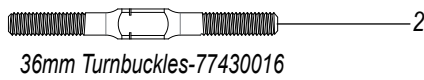
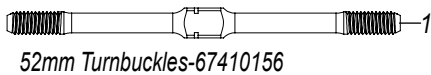


-  2
M3x6mm Button Head Screw
80400026
-  4
5x8x2.5mm zz Ball Bearing
66400756
-  2
Shim 5x8x0.1mm
85440090

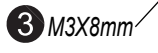
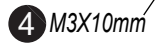
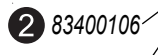
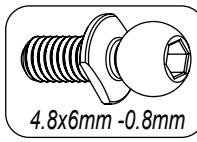
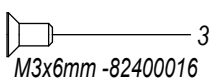
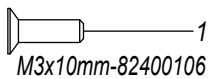
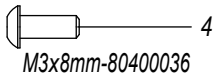
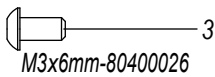
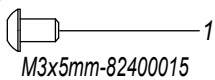




D3 Turnbuckle Assembly-Steering Rod -Servo Rod



D4 Steering Servo



M3X6mm

M3X5mm 1

3x6.5x1mm

20220007

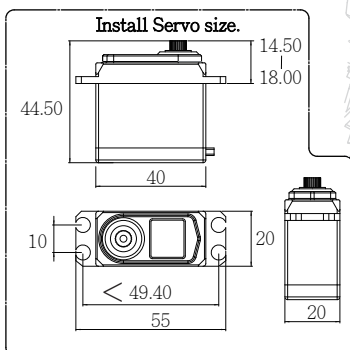
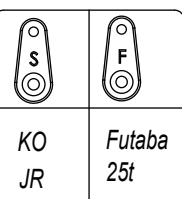
77500046

Servo Selection	
Dirt	Std. Profile Servo
Carpet	Low Profile Servo

X
Must be
purchased separately.

77500056

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.

M3x6mm
5

1 → 2
3 Assemble in the
specified order.

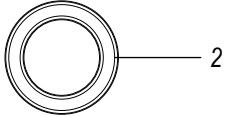


D5 Center Mount Plate

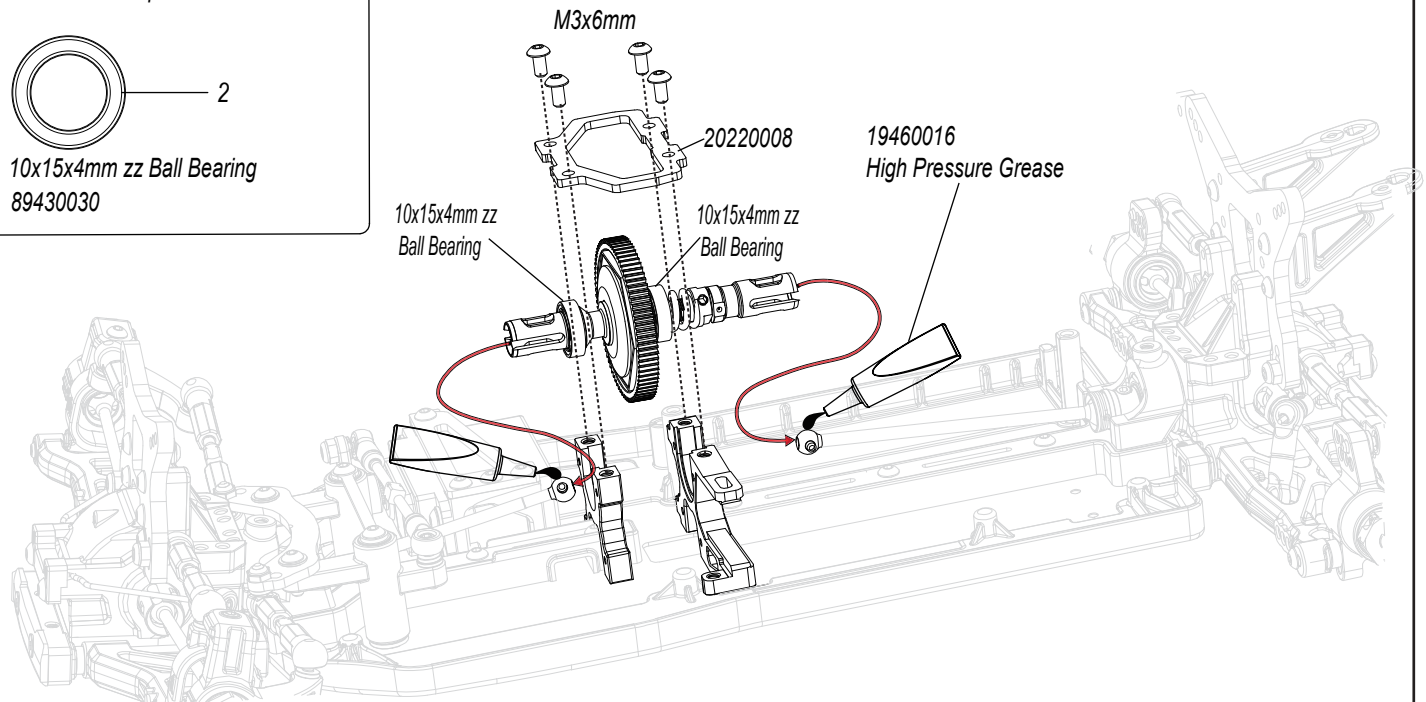
BAG
D



M3x6mm-80400026
Button Head Cap Screw



10x15x4mm zz Ball Bearing
89430030

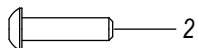


D6 Battery Plate Installation

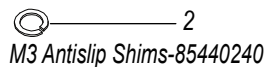
BAG
D



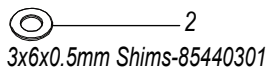
M3x6mm-80400026
Button Head Cap Screw



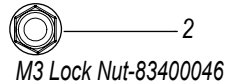
M3x12mm-80400206
Button Head Cap Screw



M3 Antislip Shims-85440240



3x6x0.5mm Shims-85440301



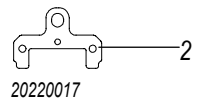
M3 Lock Nut-83400046



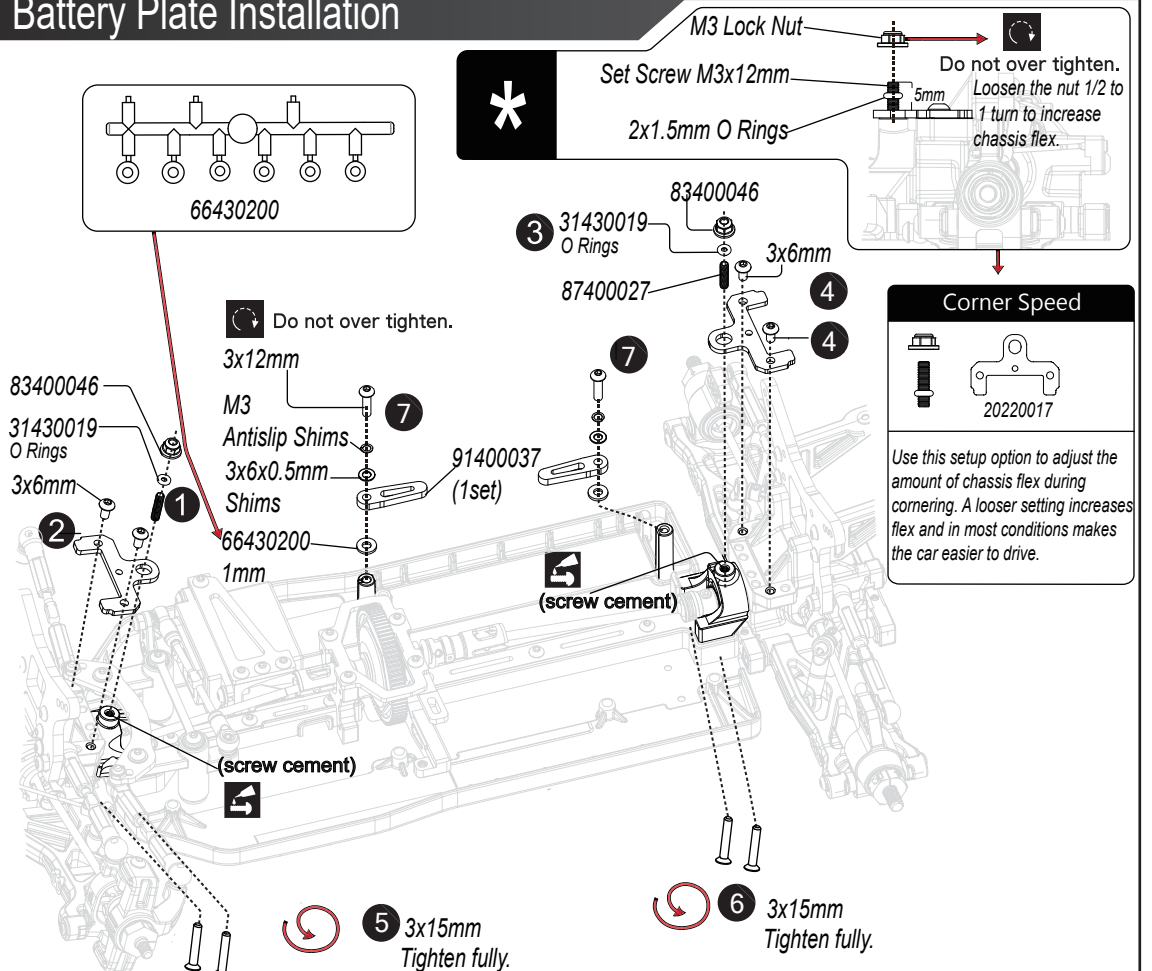
31430019
2x1.5mm O Rings



87400027
Set Screw M3x12mm



20220017



E1 Front & Rear Shock Assembly-R

BAG
E

68410066

1

Rear Buildx2
Front Buildx2

Do not over tighten
83400066-m2.5

17430096
1.8mmx2 hole
Machined Shock Pistons

85440070-2.6x6x0.5mm

Front-74480016
Rear-74480026

12.8mm Shock Body

31280146 O-Rings
(14X1.2mm)

Front 94500018
(31.5mm)

Rear 94500019
(39.5mm)

0.36mm
0.6mm

31430017 Transparent

2

68410066
0.6mm

77400116

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)	

Front Build x2

7

5-6mm

Carpet 21.5-22.5mm

Dirt/23.5

77430120

31280136
15x1.2mm

02530026
(Black)

77430036

19.40 mm

Initial Setting Shock Spring	
Dirt use	Carpet use
02530016(Green)	02530026(Black)

Rear Build x2

8

6-7mm

30mm

66402446

31280136
15x1.2mm

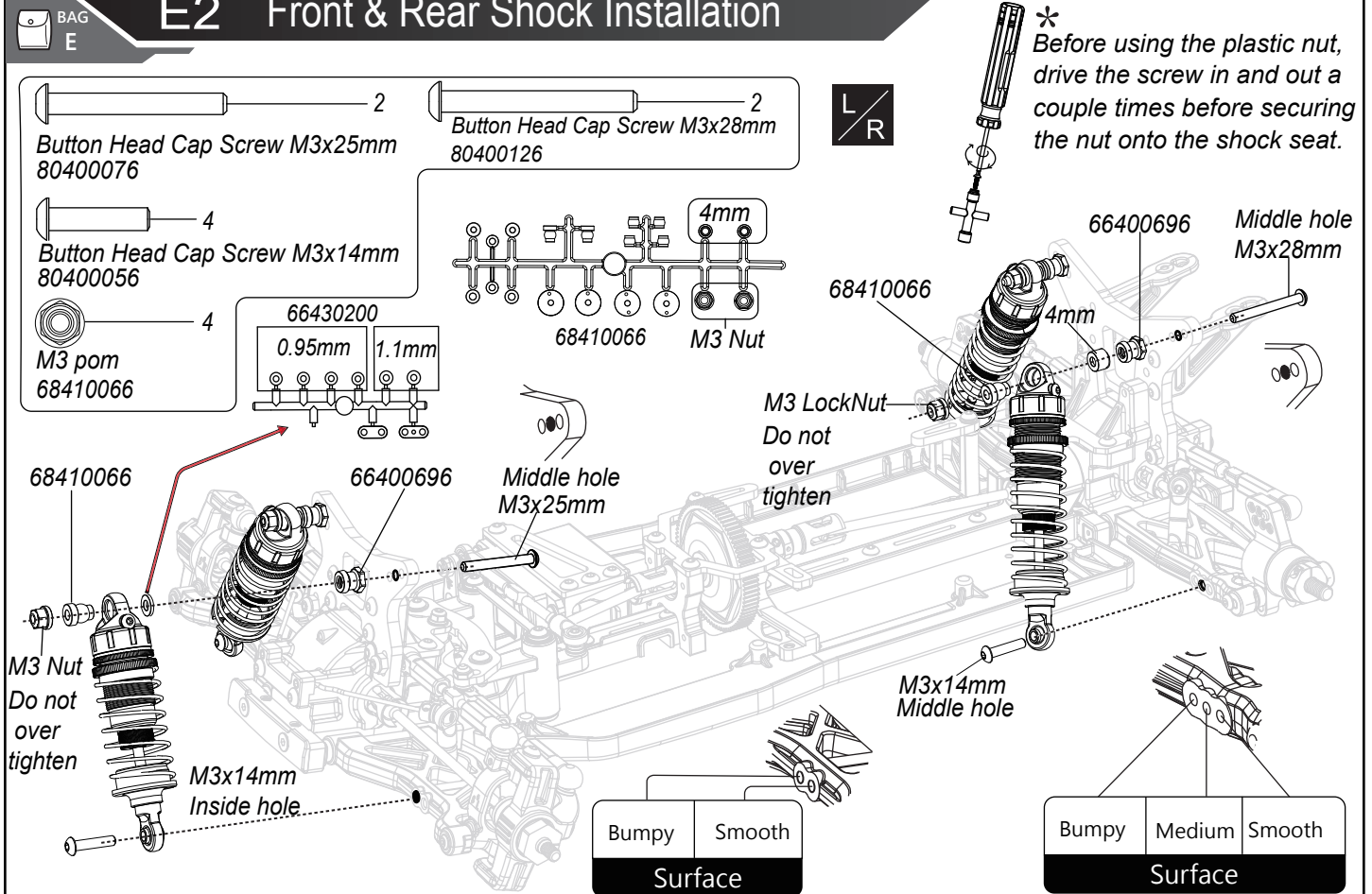
02530066
(Black)

77430036

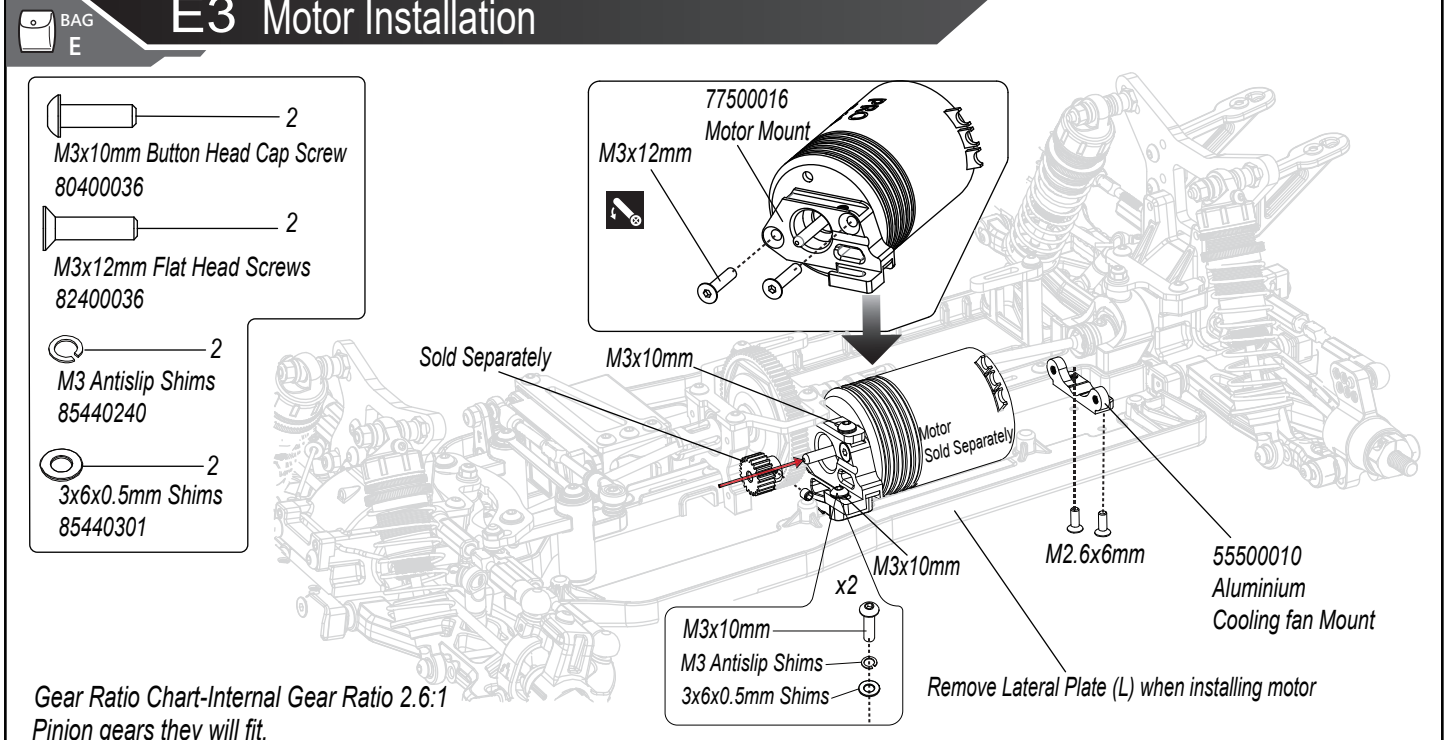
19.40 mm

Initial Setting Shock Spring	
Dirt use	Carpet use
02530056(Green)	02530066(Black)

E2 Front & Rear Shock Installation



E3 Motor Installation



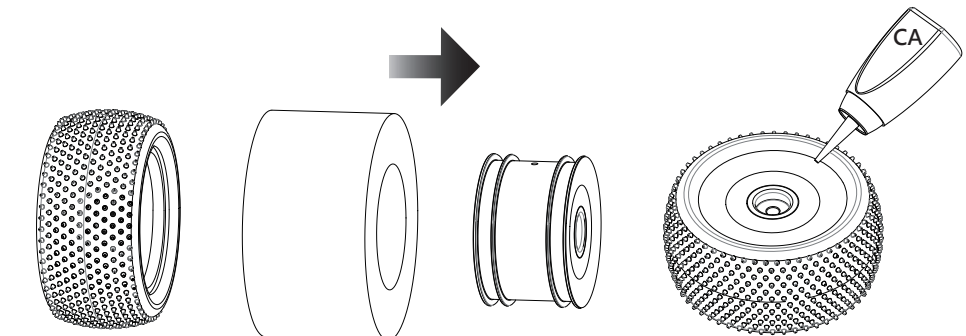
Pinion	17T	18T	19T	20T	21T	22T	23T	24T	25T	26T	27T	28T	29T	30T
73T(Spur Gear)					9.04	8.63	8.25	7.91	7.59	7.30	7.03	6.78	6.54	6.33
75T(Spur Gear)				9.75	9.29	8.86	8.48	8.13	7.80	7.50	7.22	6.96	6.72	
77T(Spur Gear)			10.54	10.01	9.53	9.10	8.70	8.34	8.01	7.70	7.41	7.15		
80T(Spur Gear)		11.56	10.95	10.40	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

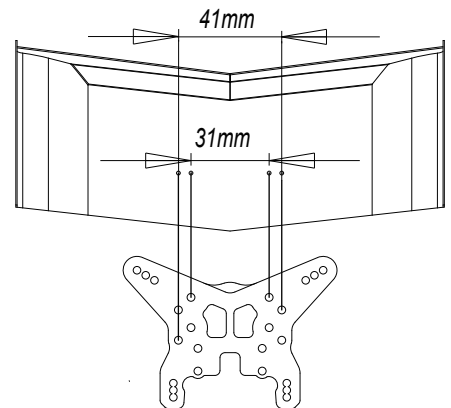
-  2
M3x8mm Flat Head Screws
82400026
-  2
M3x12mm Flat Head Screws
82400036
-  2
M4 Serrated flange nut
7mm Hex-83400076
-  2
M5 Nut with 7mm Hex Steel
83400117

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

- 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



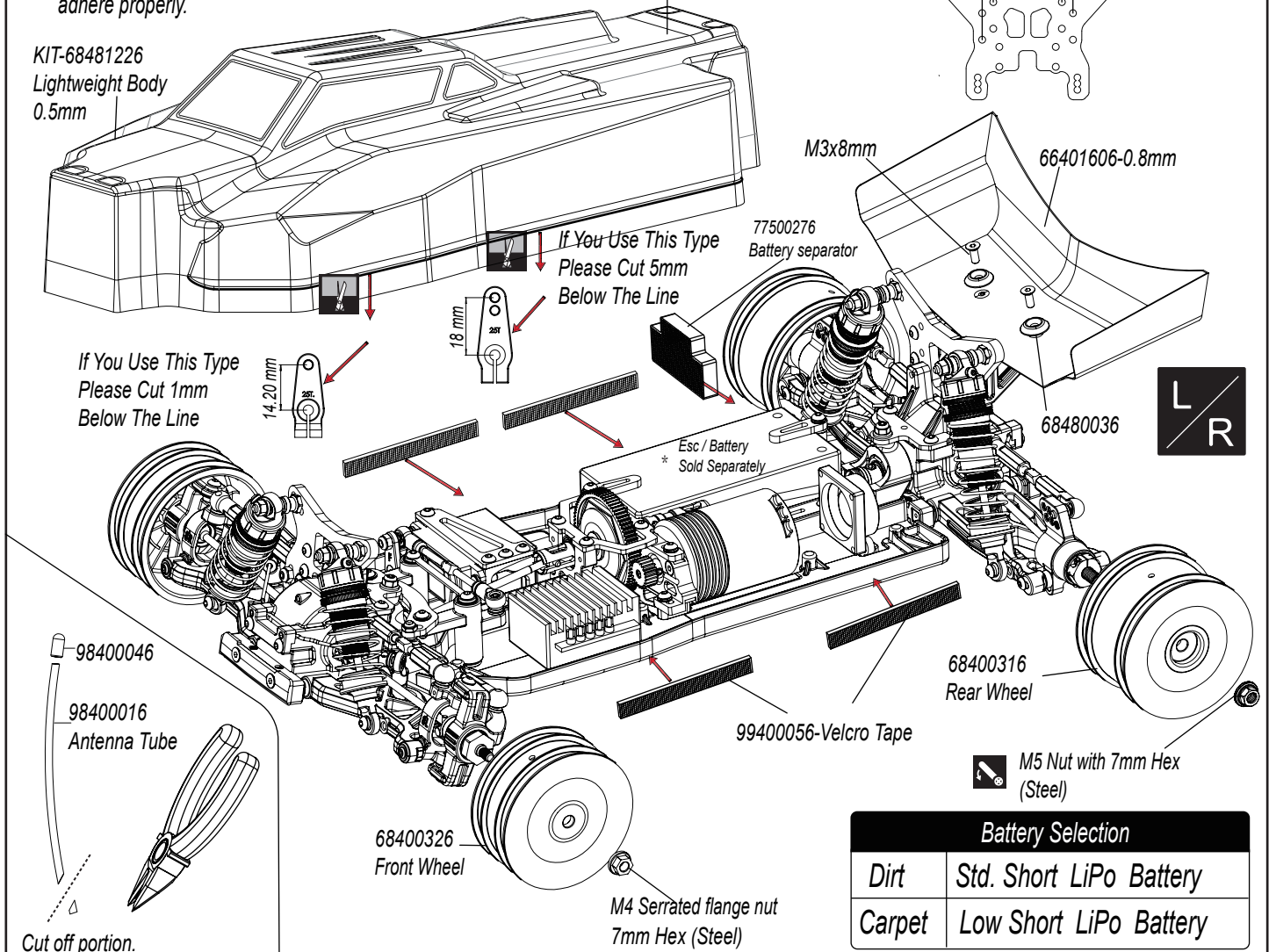
M3x8mm

66401606-0.8mm

77500276
Battery separator

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

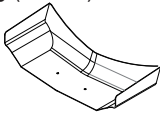
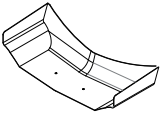
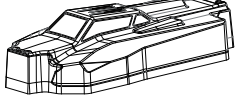
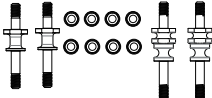
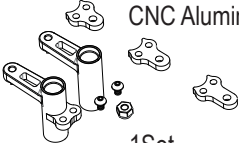
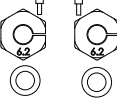
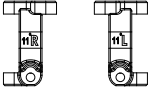
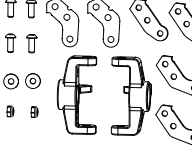
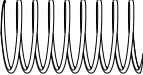
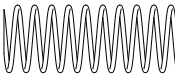
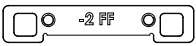
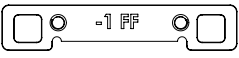
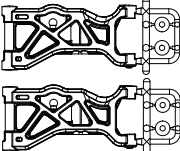
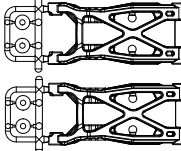
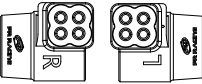
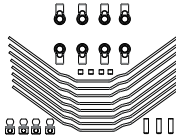
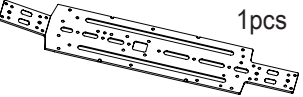
If You Use This Type
Please Cut 1mm
Below The Line



Battery Selection

Dirt	Std. Short LiPo Battery
Carpet	Low Short LiPo Battery



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

Race		Name	
Track		Date	
Temperature	C	F	Best Lap Time

FRONT

Front Upper Turnbuckle
Camber

Steering Rod
TOE In Out

mm
ALU C-Hub Shim

mm
0.8mm
1.1mm
2.3mm

Anti-Roll
mm

FF

FR

Length

Shock Body
12.0mm
12.8mm

Pom Shim
0.36mm

Offset
Silver 4.2 mm
Black mm

Caster
5°
8°
11°

Oil	
Pistons	Holes mm
Downstop	Shim mm
Up stop	Shim mm
Length	mm
O Rings	transparent Red

Camber	
Ride Height	mm
TOE In Out	
Type R Shock Spring	

Size	☐ Open	☐ Medium	☐ Tight
Traction	☐ Very-Low	☐ Medium	☐ Very-High
Surface	☐ Smooth	☐ Medium	☐ Bumpy
Type	☐ Clay	☐ Carpet	☐ Astro
Condition	☐ Blue Groove	☐ Hard Packed	☐ Dry
	☐ Dusty	☐ Loamy	☐ Wet

Motor	
Spur Gera	T
Pinion	T
Esc	
Servo	☐ Std. Profile Servo ☐ Low Profile Servo

Battery Size ☐ Std. Short
☐ Low Short

Front Radio System

Tire	ST-DR
------	-------

Inserts	ST-EXP
---------	--------

Wheels	ST-Speed
--------	----------

Rear	Radio System
------	--------------

Tire	TH-DR
------	-------

Inserts	TH-EXP
---------	--------

Wheels	TH-Speed
--------	----------

Body	☐ Standard	☐ Light
------	-----------------------------------	--------------------------------

9	<u>Wishbone</u>	<u>Eight</u>
---	-----------------	--------------

☐ Front ☐ Rear ☐ Front ☐ Rear

☐ Medium Hardness ☐ High Hardness Graphite

Aluminum Steering Knuckles

- ☐ #A2
- ☐ #A3
- ☐ #A4

Servo Horn op standard

Locknut ☐

Relaxnut ☐

Arm Shim mm

Front ☐

Rear ☐

Battery Spacer

Slipper Clutch Spring

3.6kg/mm

7.0kg/mm

Cooling Fan

CNC Aluminium

- ☐ 66480306 Slipper Pad 11mm
- ☐ 68430016 Slipper Pad 19mm
- ☐ 66481386 LCF Slipper Pads 11mm
- ☐ 66481396 LCF Slipper Pads 19mm

(Included)

mm Arm Shim

mm Rear Hub Shim

mm Rear Hub Shim

wing Length mm

Wing Thickness mm

Wing Cutting Line mm

Apply CA Glue if needed

Cut pins

Front Oil #

Rear Oil #

Central Differential

Oil #

2/Gear

4/Gear

Chassis Flex

Kit Chassis

FRONT

SCREW USED

SCREW NOT USE X

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

PRSB401

PR RACING
TYPE **R**



mit
MADE IN TAIWAN



EMAIL / infopr racing@gmail.com

1.04 Version