

PR SB401R

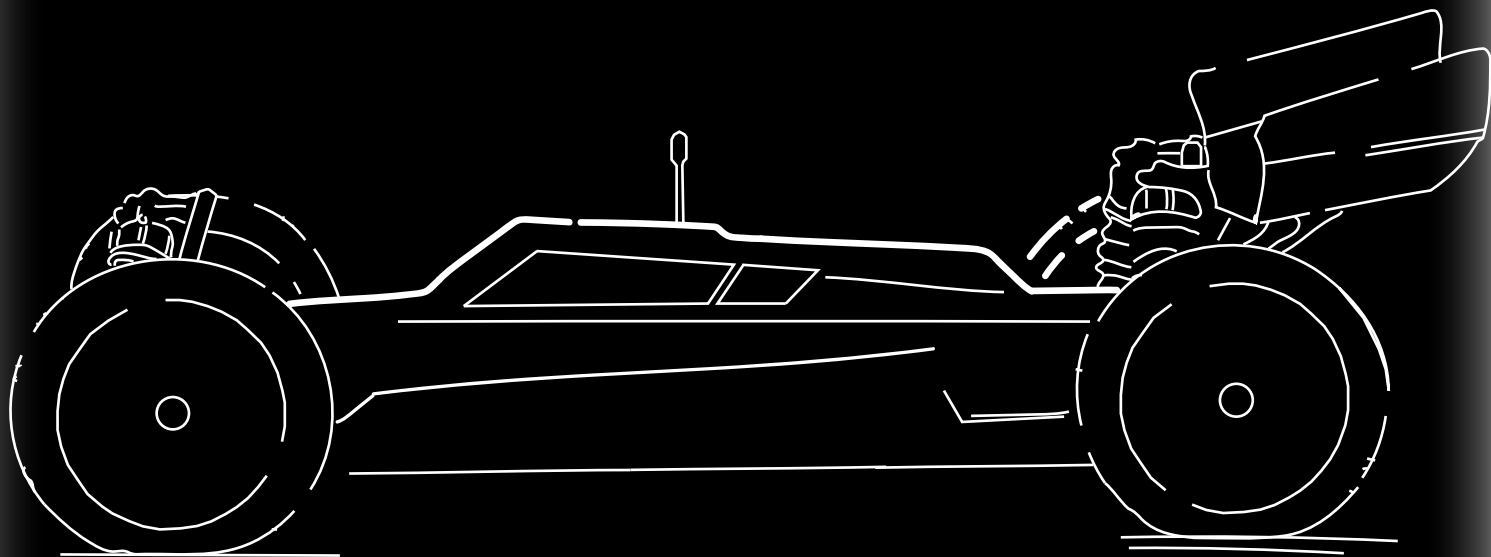
ITEM NO:77500456

PR SB401R SPORT 1/10 ELECTRIC 4WD OFF-ROAD BUGGY

SPORT



PR RACING



mit
MADE IN TAIWAN

www.pr-rc.com

SAFETY 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.

Name:PR SB401R SPORT 1/10 ELECTRIC 4WD OFF-ROAD BUGGY

Pr racing has taken all the refinements and changes from the 401R buggy, and applied them to create the 401R ! On top of that we have made further changes specifically for this vehicle to be the most capable, adjustable, durable competition 4x4/ Buggy on the market out of the box! From the aggressive "Low Center of gravity" truggy body, to the "Type R" style shocks and towers. The 401R is ready to dominate on the very first lap!

Special features

CHASSIS:

Hard anodized 2.5mm Narrow chassis with side pods

deck of added durability.

Alloy/carbon floating servo mount

Type R low center of gravity Buggy style body

TRANSMISSION

Top loading Center gear differential with ultra hard cups

Updated gear ratio

Longer front and rear gear diff out drives for more droop

SUSPENSION AND STEERING

12.75mm "LCG" Type R Shocks

Type R "Low mount" Carbon fiber towers

Insert style suspension blocks

3.5 Degree caster blocks

Composite rear hubs with extra pin location for added width adjustability

Gullwing rear arms

High tensile steel turnbuckles

Web link



SPECIFICATIONS

Type: 1/10th 4wd off-road Buggy

Power: Electric

Wheelbase: Adjustable 284mm to 290mm

Width: Front 250mm Rear 248mm

Gear Ratio: 2:6:1

Weight: 1725grams "Race ready" varies

Hardware: Full metric

Bearings: Sealed metal ball bearings

Wheels: 12mm Hex

Kit: Assembly required

Instruction manual

ITEM REQUIRED TO COMPLETE

2 Channel surface frequency radio system

2S LiPo battery & compatible LiPo charger

1/10th ESC, 540 brushless motor, pinion gear

High speed servo

1/10th Tires and inserts Wheel

Tools, paint for polycarbonate body, tire glue, and threadlock

Silicon diff and shock oil



● BEFORE INSTALLATION -----	1-2
● BAG A ----- 03-07	● BAG E ----- 18 -20
A1-Main Chassis Assembly- Chassis Brace Installation	E1-Front & Rear Shock Assembly-R
A2-Gear Diff Assembly	E2-Front & Rear Shock Installation
A3-Center Diff	E3-Motor Installation
A4-Gear Box Assembly	E4-Mounting Tires, Wheel Installation
A5 Rear Central Transmission	
● BAG B ----- 08-11	
B1-Suspension Mount Installation	
B2-Front Hub Carrier Assembly(Left Side)	
B3-Suspension Mount Installation-Sway Bar Installation	
B4-Front Upper Turnbuckle Assembly	
● BAG C ----- 12-14	
C1 RF Suspension Mount	
C2-3-Rear Left Hub Carrier Assmebly	
C4-Rear Upper Rod -Turnbuckle Assembly	
C5-Sway Bar Installation	
● BAG D ----- 15 -17	
D1-Bell Crank Installation	
D2- Steering	
D3-Turnbuckle Assembly-Steering Rod -Servo Rod	
D4-Servo Installation	
D5-Center Mount Plate	
D6-Battery Plate Installation	
● SETUP SHEET -----	21
● Upgrade Parts -----	22

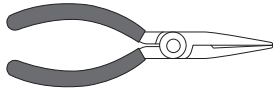
Pinion
Spur Gear Must be purchased
separately.

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		

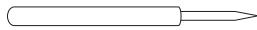
TOOLS REQUIRED

CAUTION: Handle tools carefully!

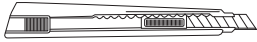
- Needle Nose Pliers



- Awl



- Sharp Hobby Knife



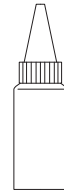
- Grease



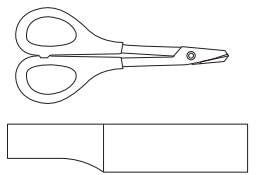
- Wire Cutters



- Screw Cement



- Round Cutter & Sander

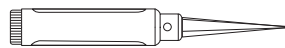


- For trimming bodies Cutting along curved lines was never so easy!

- Ball Differential Grease



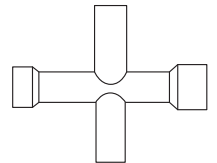
- SP Knife Edge Reamer



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

Cross Wrench

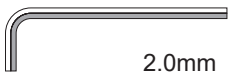
- 5.0mm-5.5mm
- 7.0mm



- Hex Wrench

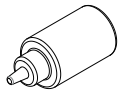


1.5mm



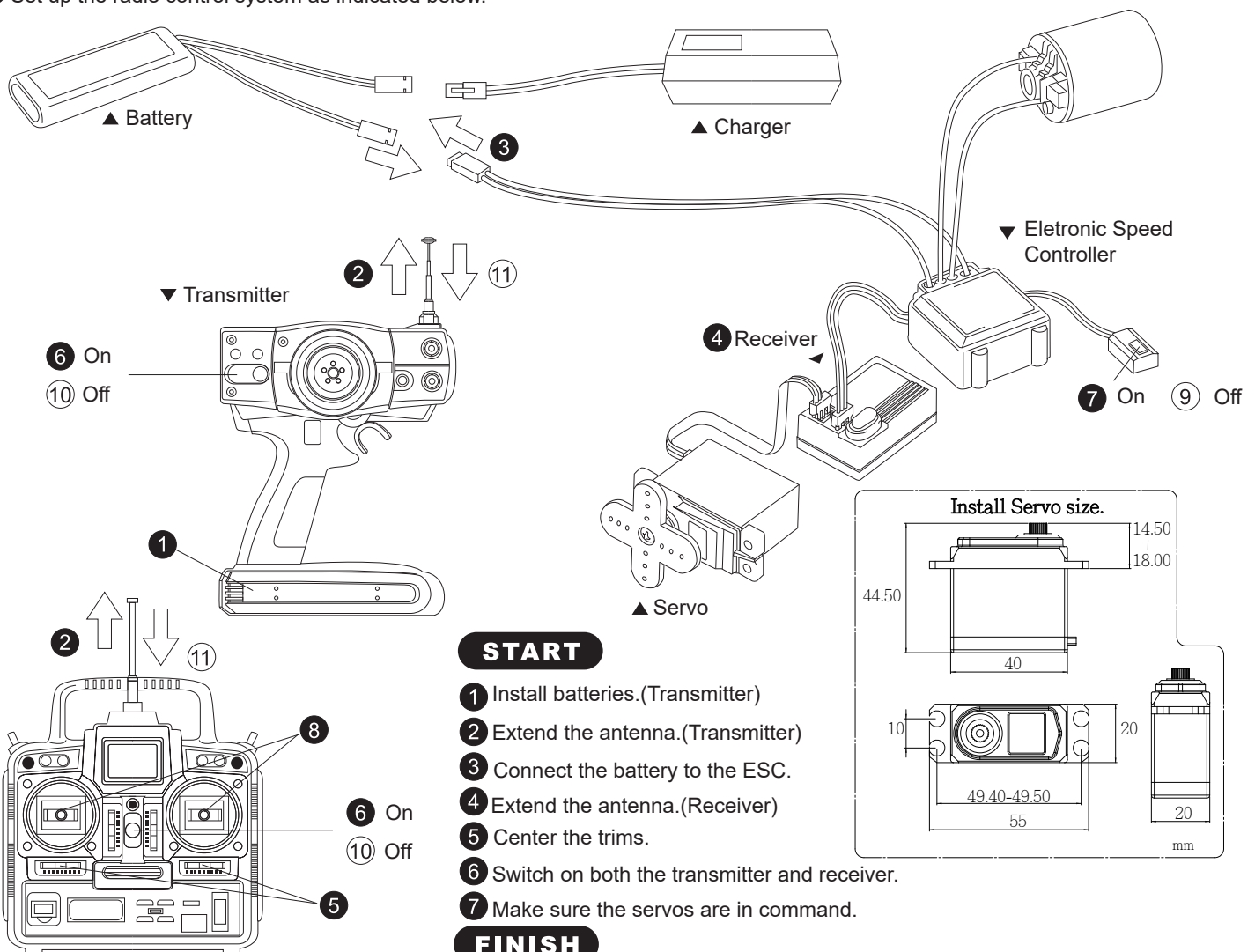
2.0mm

- SILICON DIFF OIL



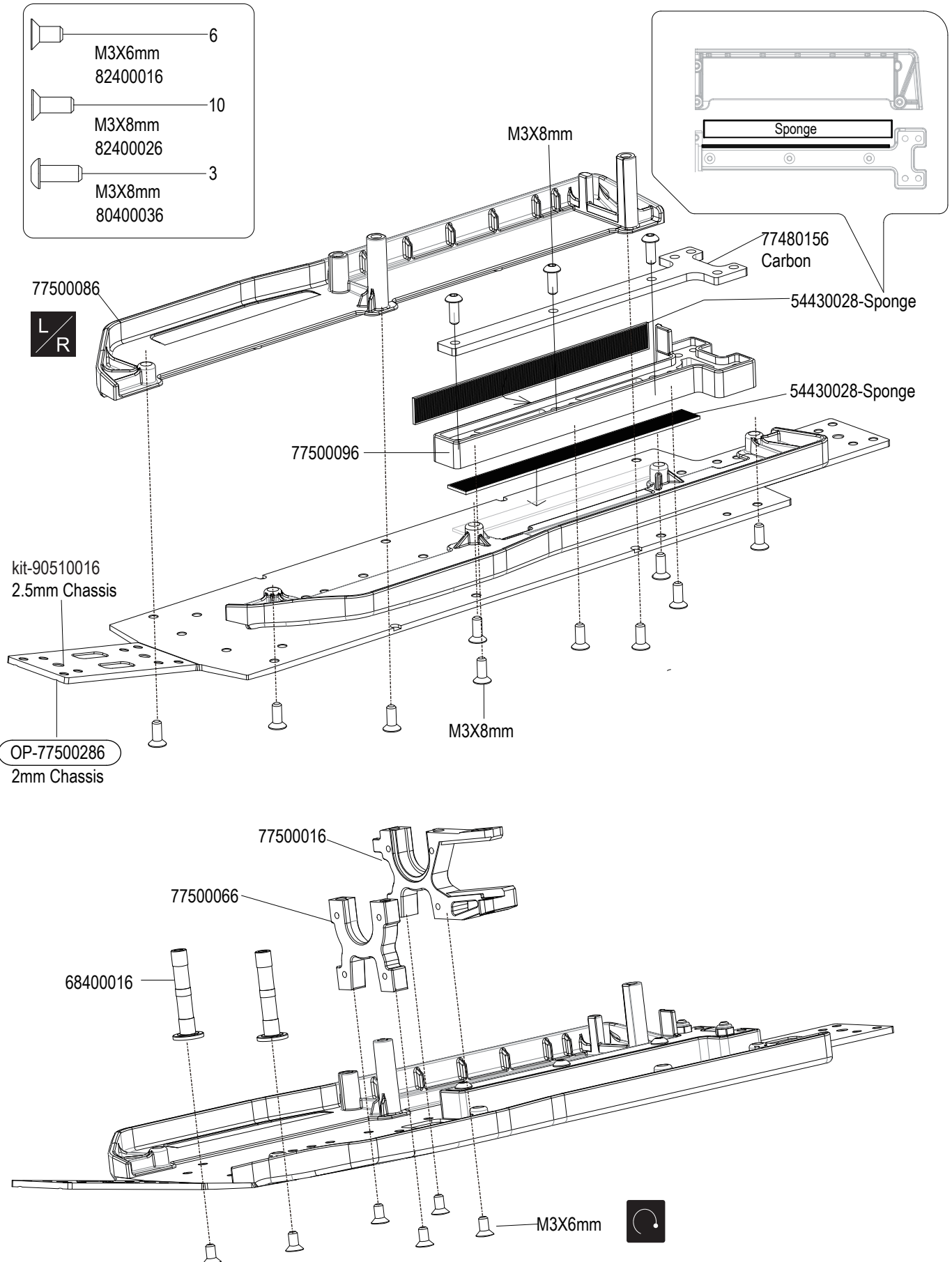
RADIO PREPARATION

- 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.



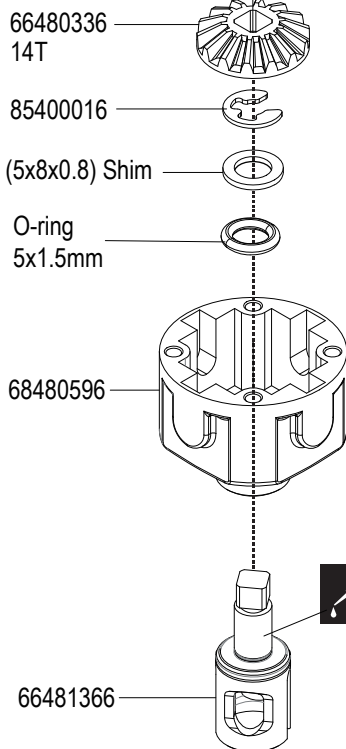


A1 Chassis Brace Installation Main Chassis Assembly

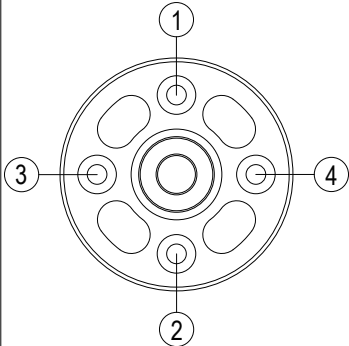


A2 Gear Diff Assembly

- 8 M2.6X10mm 82400166
- 4 5X8x0.8mm Shim 85440170
- 8 4X10x0.15mm Shim 85440160
- 4 3.5mm 85400016
- 4 O-ring -5x1.5mm 31450016



請照順序對角鎖緊差速上蓋螺絲
① → ② → ③ → ④



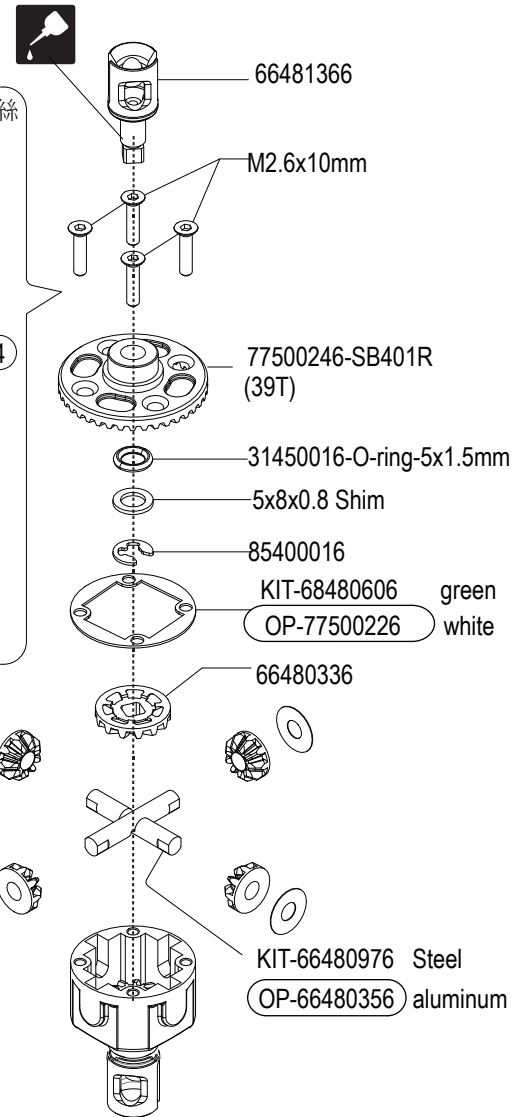
Tighten equally in the order of

① → ② then ③ → ④

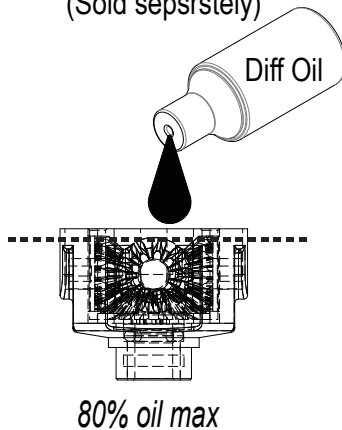
66480336
9T

4X10X0.15
Shim

x2



(Sold seprstely)



After first drive
adjust
for track conditions
SILICON DIFF OIL

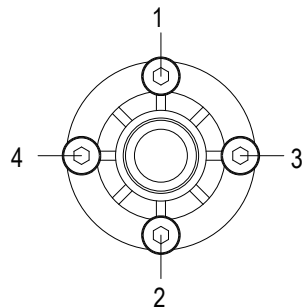
7000 Front

5000 Rear

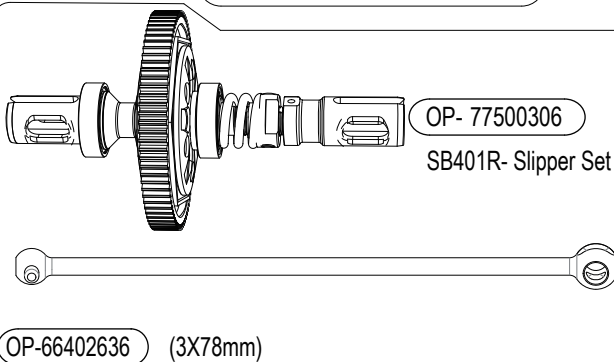


A3 Center Diff

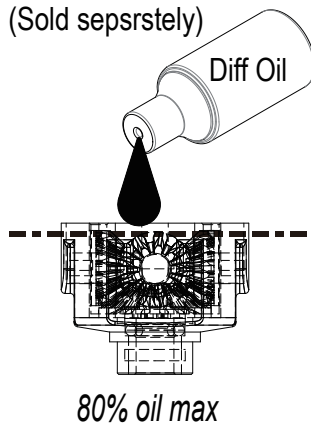
- | | |
|--|--|
|  4
M2.6X10mm
82400166 |  2
3.5mm
85400016 |
|  2
5X8x0.8mm Shim
85440170 |  4
O-ring -5x1.5mm
31450016 |
|  4
4X8x0.25mm Shim
85440150 | |



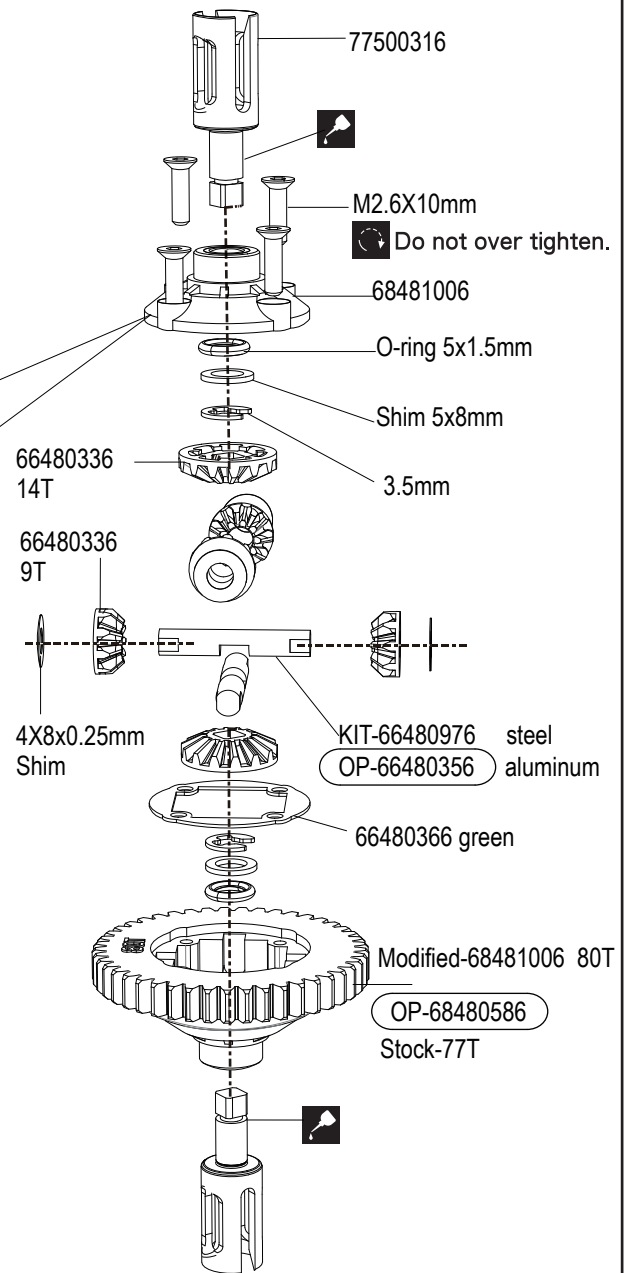
照順序對角輕鎖上差速上蓋螺絲
1 → 2 then 3 → 4
Tighten equally in the order of
1 → 2 then 3 → 4



(Sold seprstely)



After first drive
adjust
for track conditions
SILICON DIFF OIL
30000- # 50000



2
4.8x8mm Ball Studs-68430046

2
M3 Lock Nut 83400026

6
M3X10mm 80400046

1
5x8x0.1mm Shim 85440090

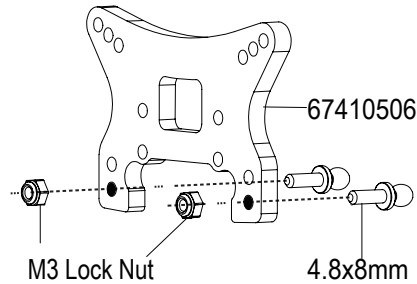
3
10X12.5X0.1Shim 85440230

2
5x10x4mm Ball Bearing
89430010

2
10x15x4mm Ball Bearing
89430030

1
(2x9.8mm)79400086

1
M4X3mm Set Screw 8400016



Tighten securely.

kit-68481256

OP-68480336

2x9.8mm

M4x3mm

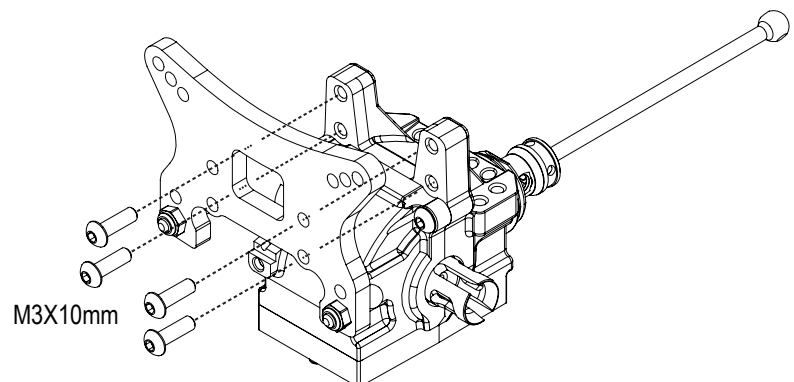
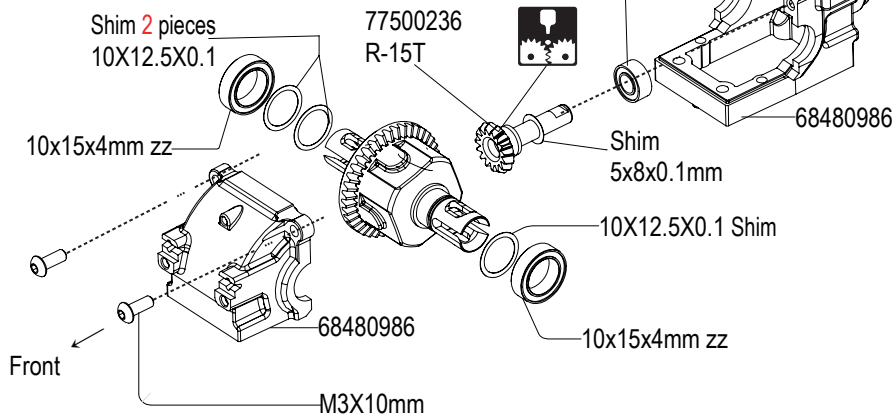
66401096

66401106(67mm)
66402626(68mm)

KIT-68480326

OP-77480216

Aluminum



Part Bags used.



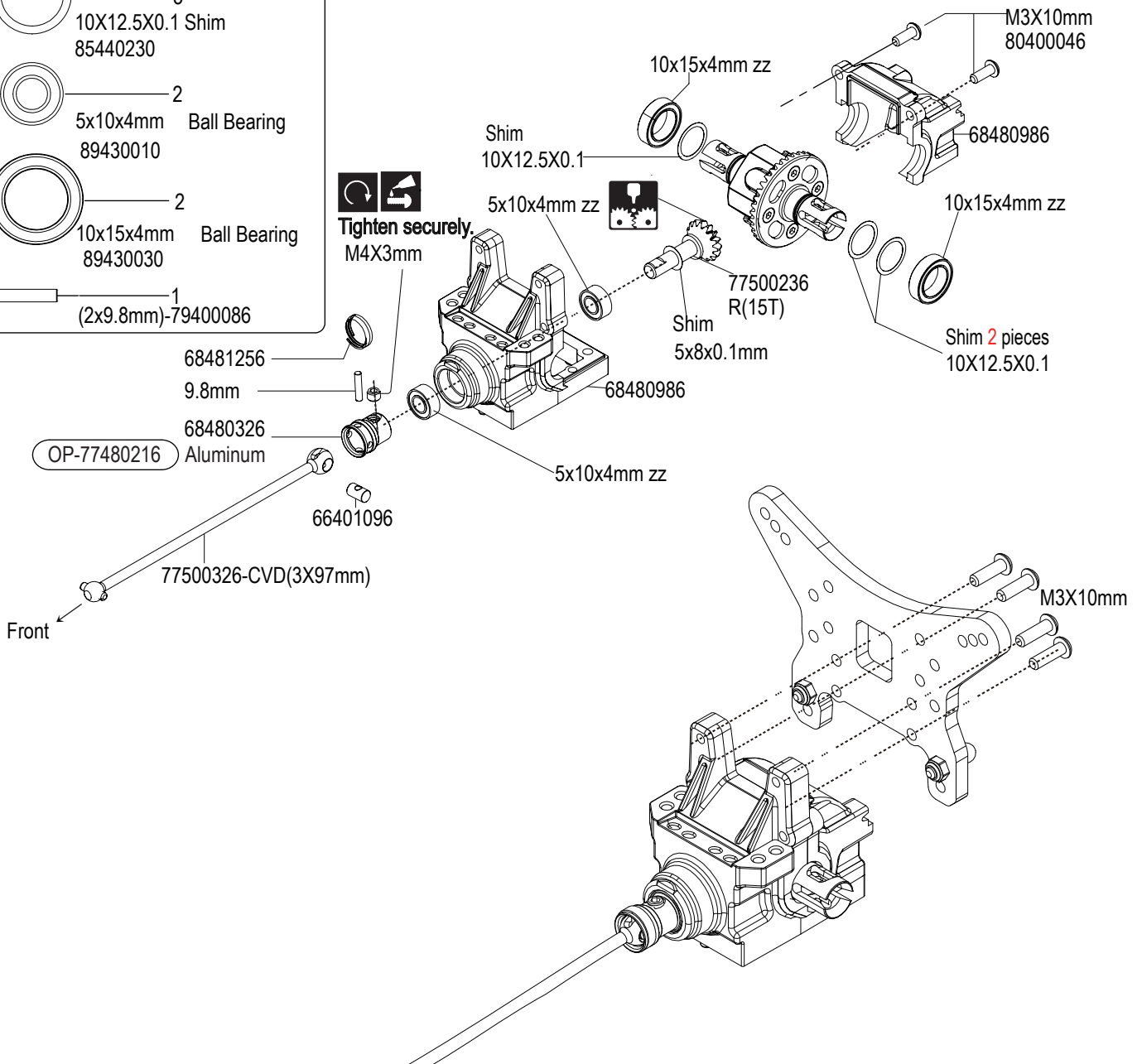
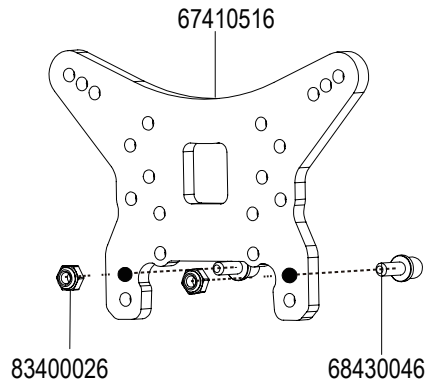
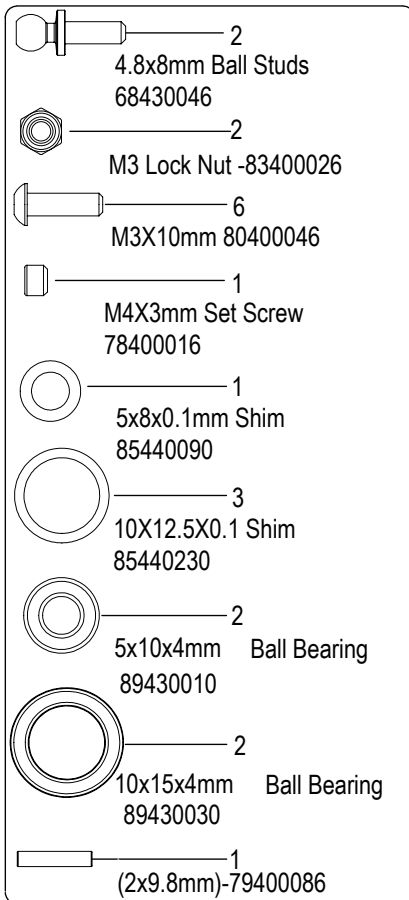
Apply grease.



Apply threadlocker (screw cement)



Tighten securely.



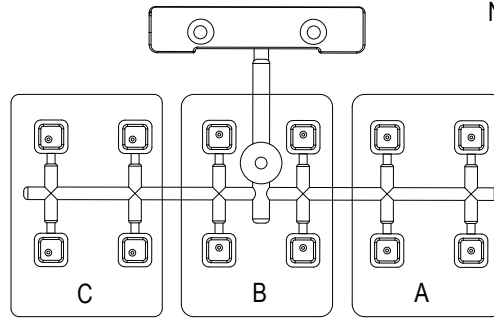


B1 Suspension Mount Installation

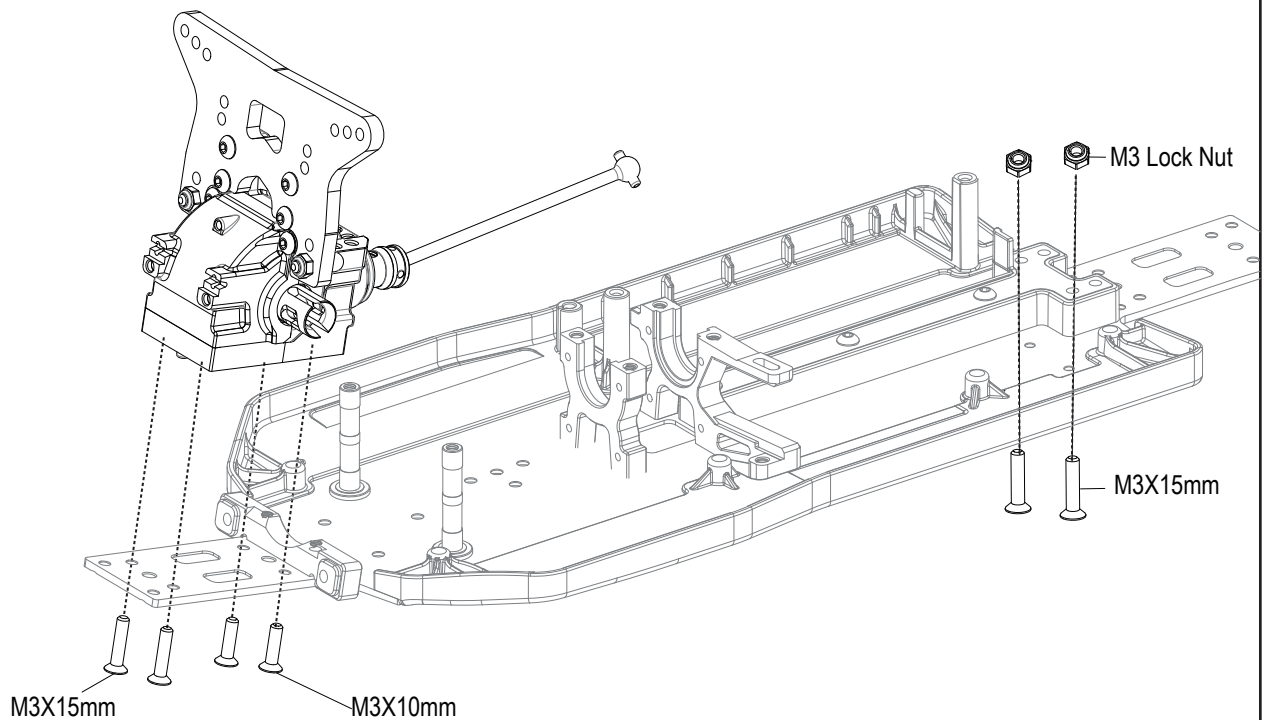
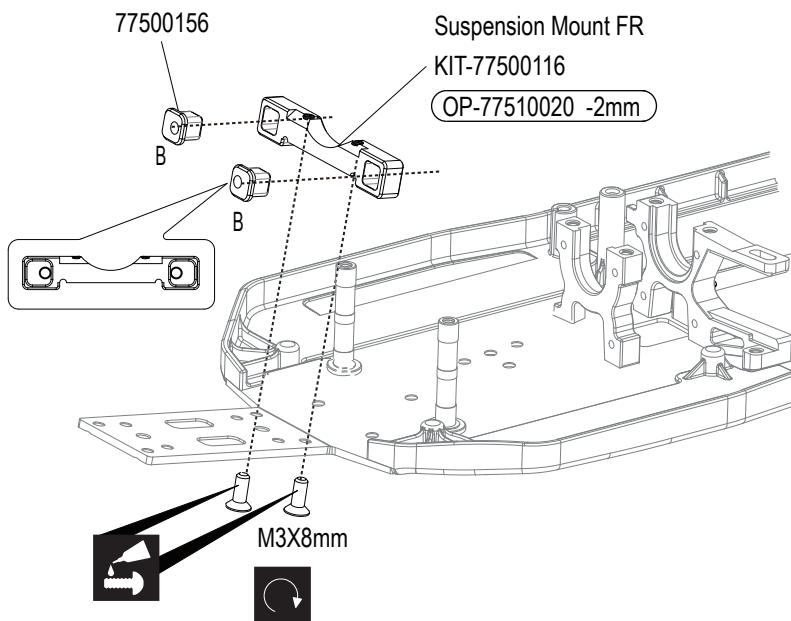
FRONT HANGER INSERTS

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

Note position-77500156



- 2
M3 Lock Nut -83400026
- 2
M3X8mm 82400026
- 2
M3X10mm 82400106
- 2
M3X15mm 82400176



Part Bags used.



Tighten securely.



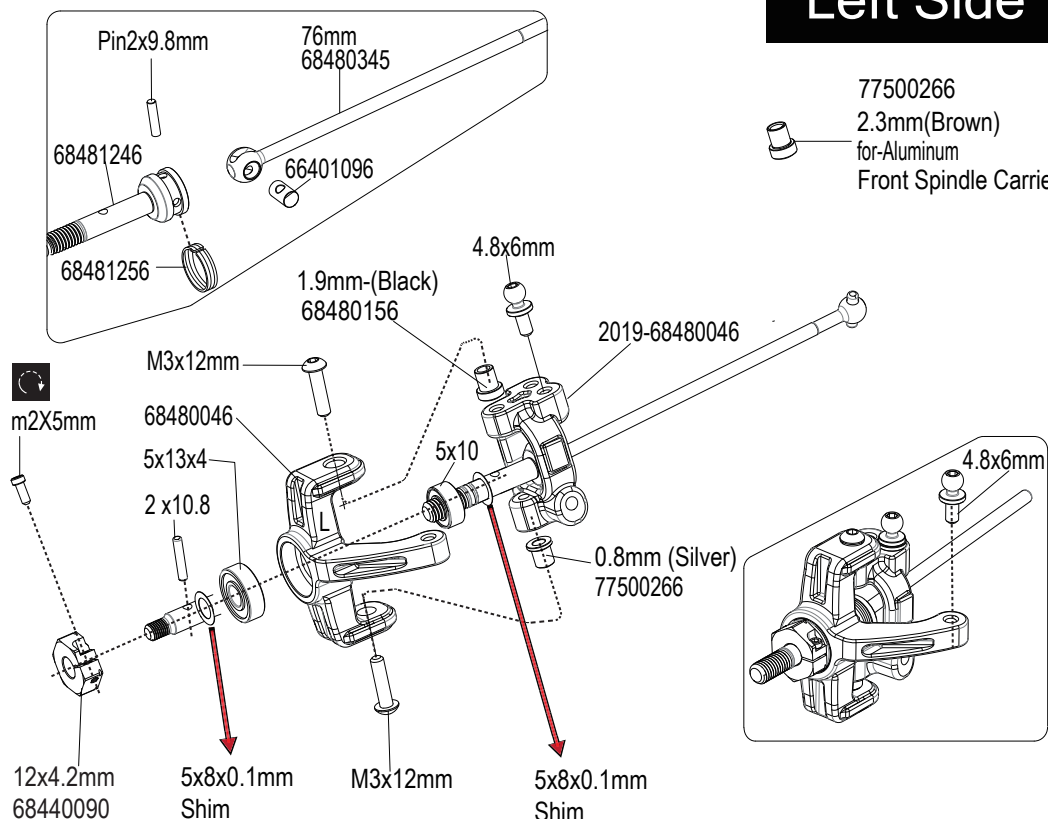
Apply threadlocker (screw cement)



B2 Front Hub Carrier Assembly (Left Side)

Left Side

- 2
M3x12mm 80400206
- 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-79400016
- 2
Shim 5x8x0.1mm-85440090
- 1
m2X5mm-87400066

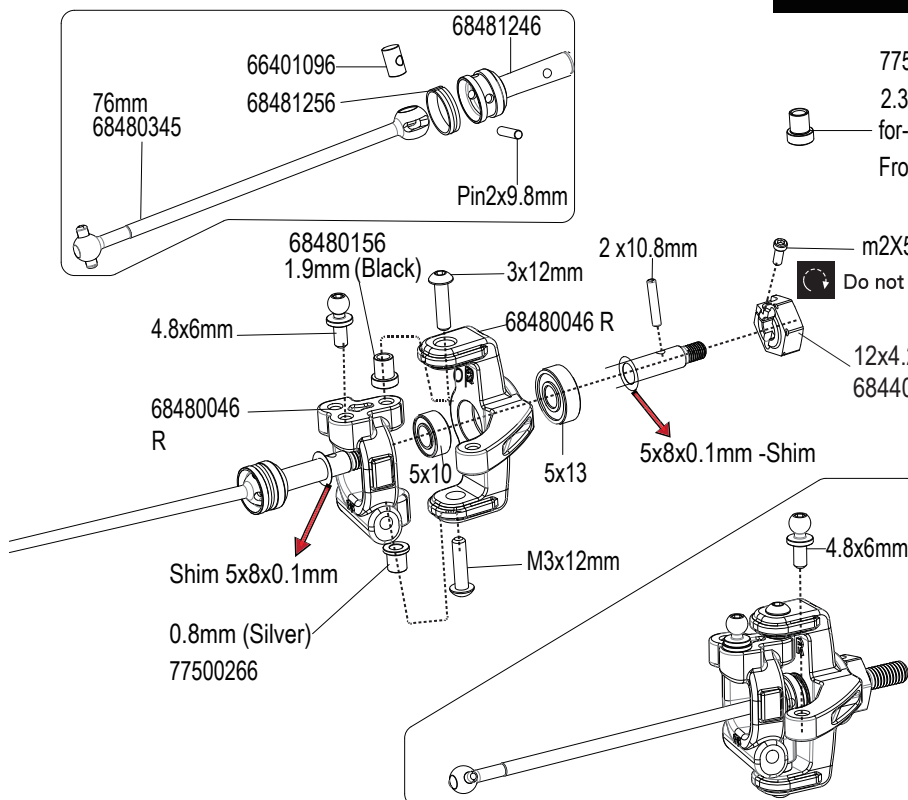


77500266
2.3mm-(Brown)
for-Aluminum
Front Spindle Carrier

B3 Front Hub Carrier Assembly (Right Side)

Right Side

- 2
M3x12mm 80400206
- 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-79400016
- 2
Shim 5x8x0.1mm-85440090
- 1
m2X5mm-87400066

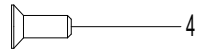


77500266
2.3mm-(Brown)
for-Aluminum
Front Spindle Carrier

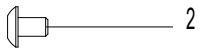




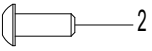
B3 Suspension Mount Installation- Sway Bar Installation



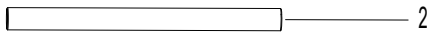
M3X8mm-82400026



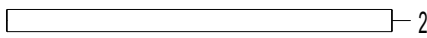
M2.5X4mm-80400016



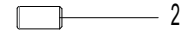
M3X8mm-80400036



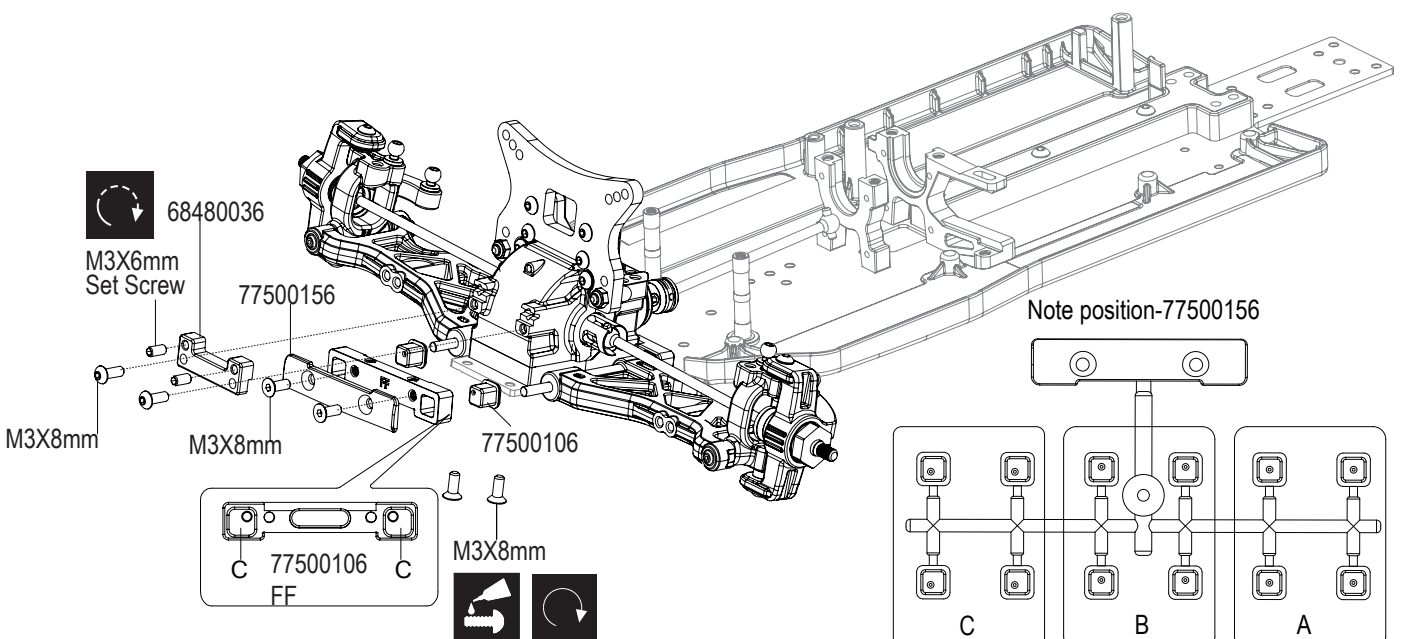
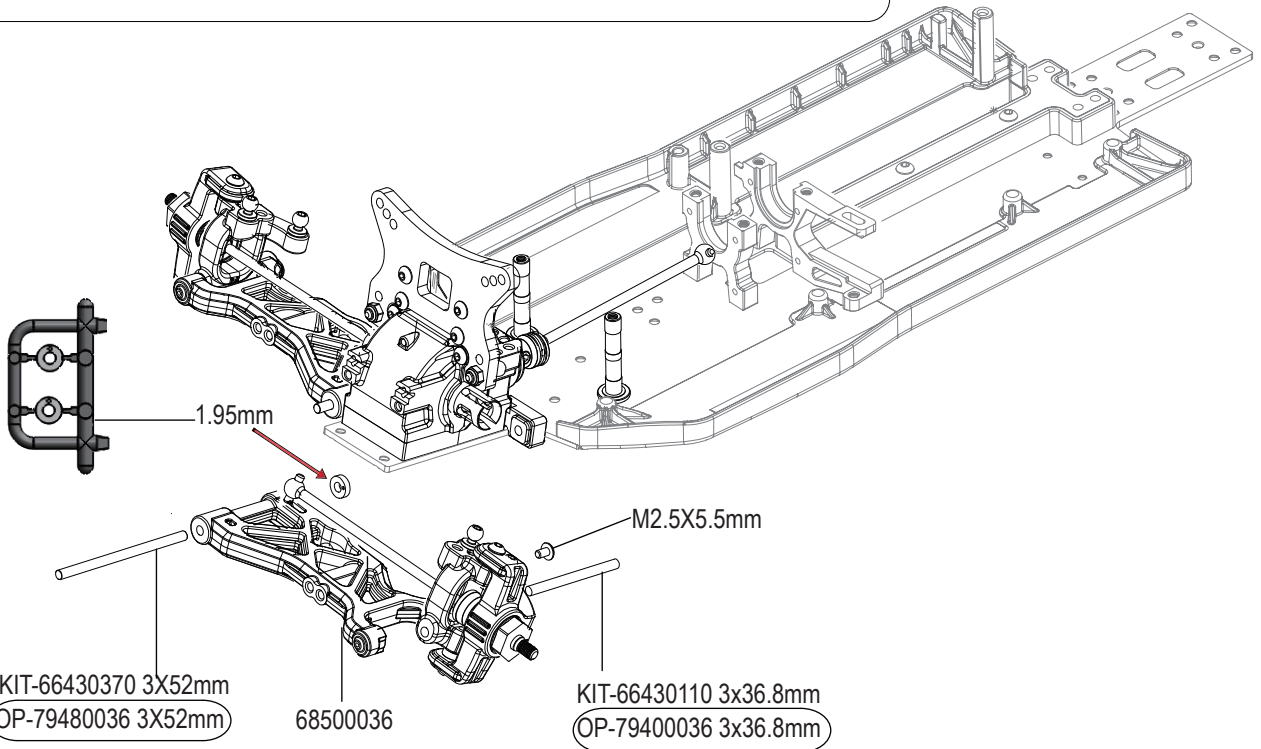
Pin 3x36.8mm-66430110



Pin 3x52mm-66430370



M3X6mm Set Screw-78400026



Part Bags used.



Do not over tighten.



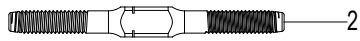
Tighten securely.



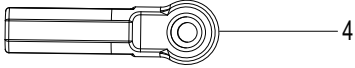
Apply threadlocker (screw cement)



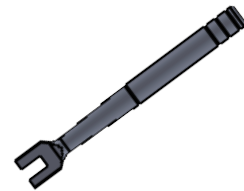
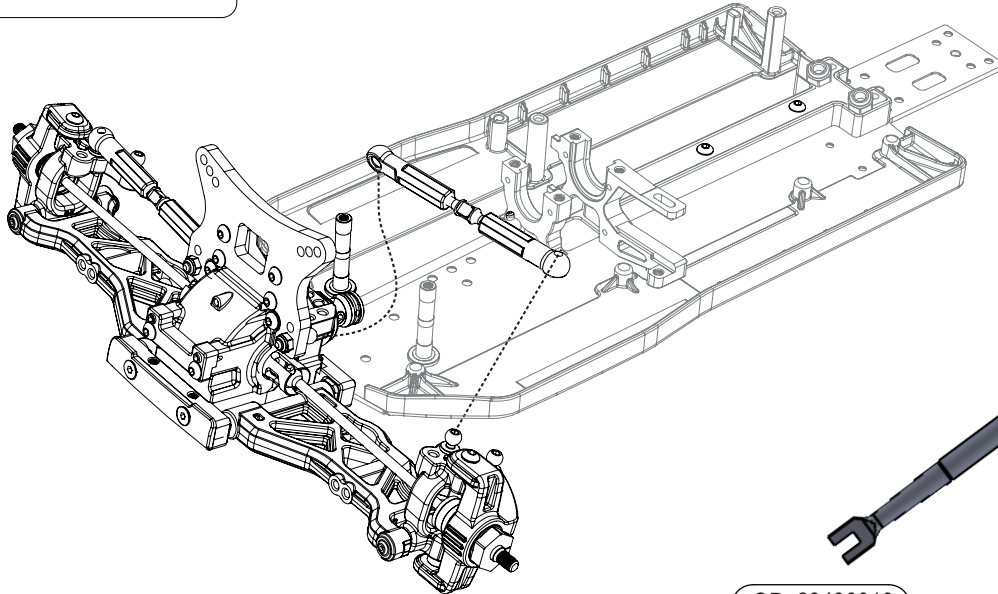
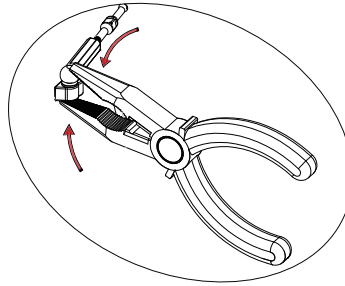
B4 Front Upper Turnbuckle Assembly



36mm Turnbuckles (Black)
66400346

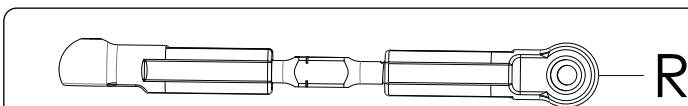
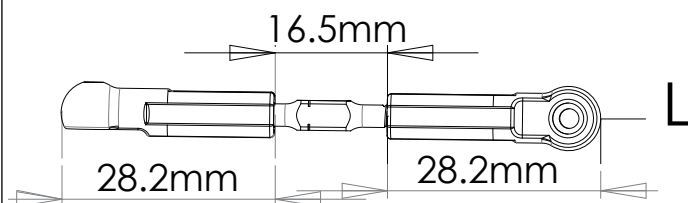


66400066-28.2mm

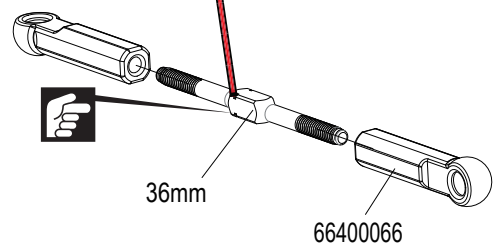


OP -23430010

PR Tools Spanner Wrench (4.0mm)



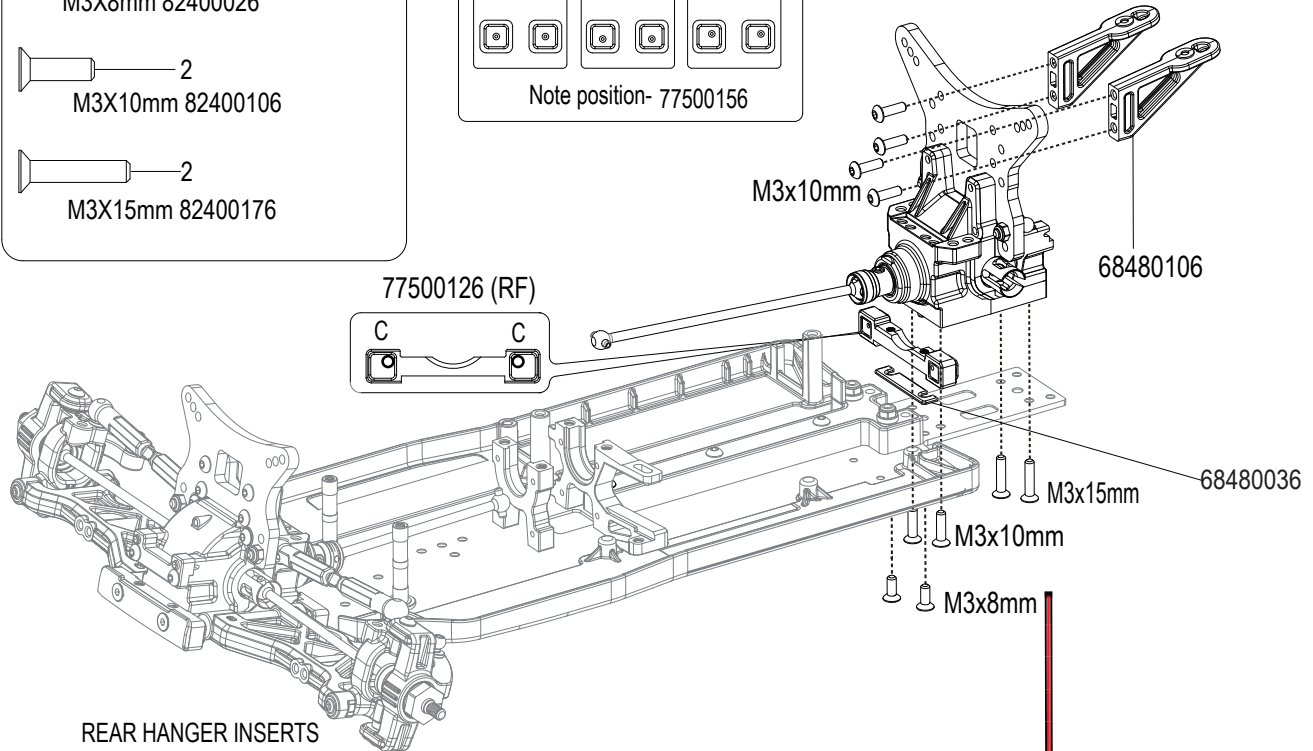
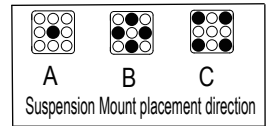
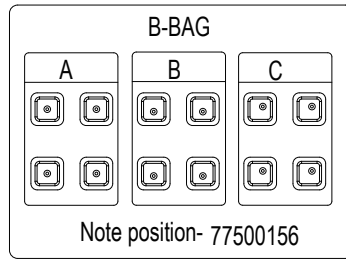
One side is reverse threaded.





C1 RF Suspension Mount

- 4
M3X10mm 80400046
- 2
M3X8mm 82400026
- 2
M3X10mm 82400106
- 2
M3X15mm 82400176



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.

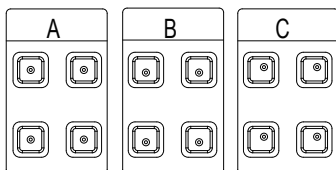
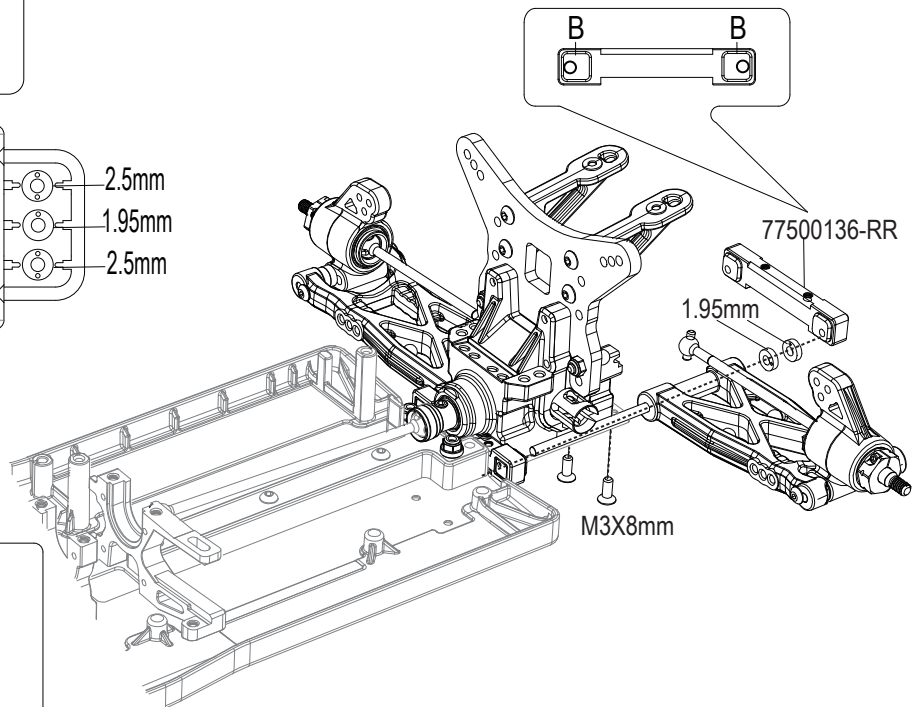
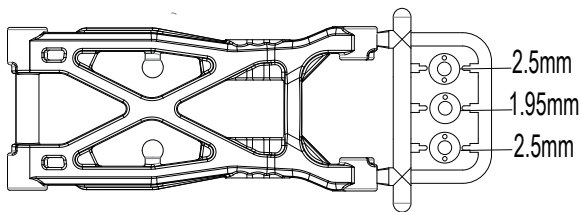
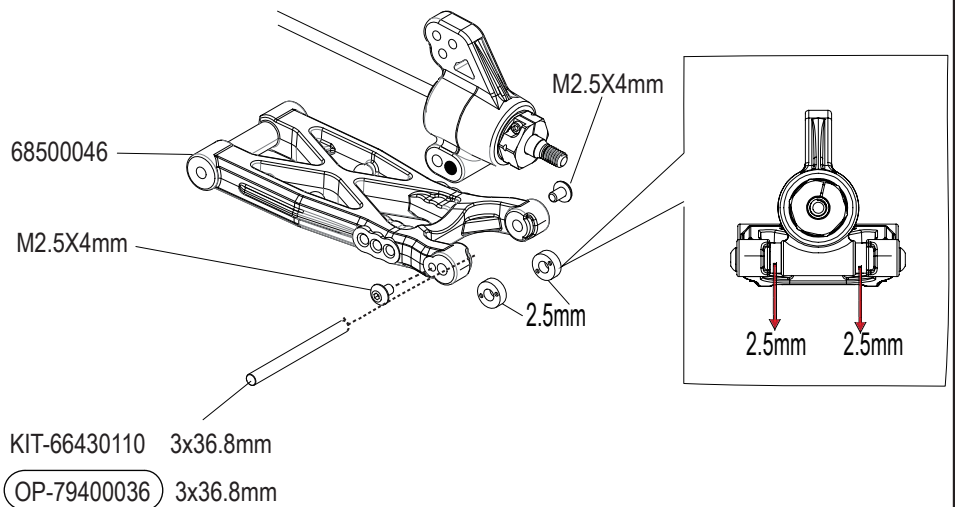
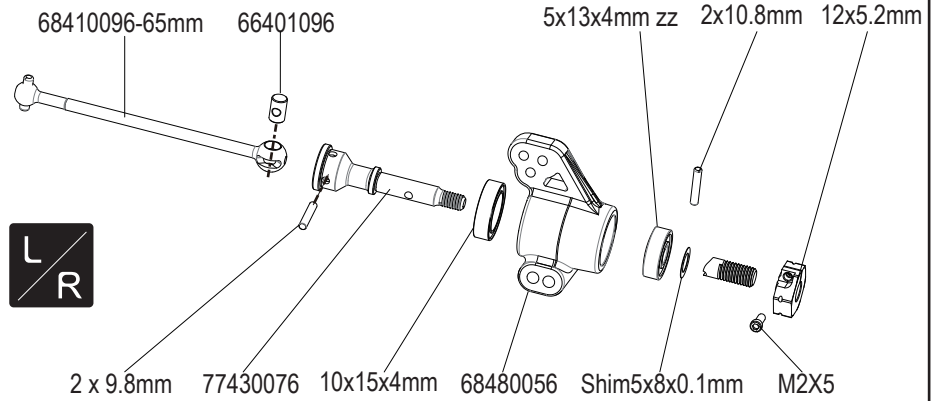


Apply threadlocker (screw cement)



C2 Rear Left Hub Carrier Assmely

- 2
M3X8mm 82400026
- 4
m2.5X4mm 80400016
- 2
10x15x4mm zz Ball Bearing 89430030
- 2
5x13x4mm zz Ball Bearing 89430020
- 2
Shim 5x8x0.1mm 85440090
- PIN(3x52mm) 66430370 — 2
- PIN(3x36.8mm) 66430110 — 2
- PIN(2 x 10.8mm) 79400016 — 2
- PIN(2 x 9.8mm) 79400086 — 2
- m2X5mm-87400066 — 2

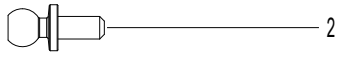


Note position



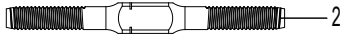


C3 Rear Upper Rod -Turnbuckle Assembly

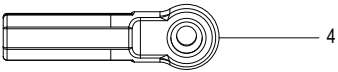


4.8x6mm Ball Studs
68430036

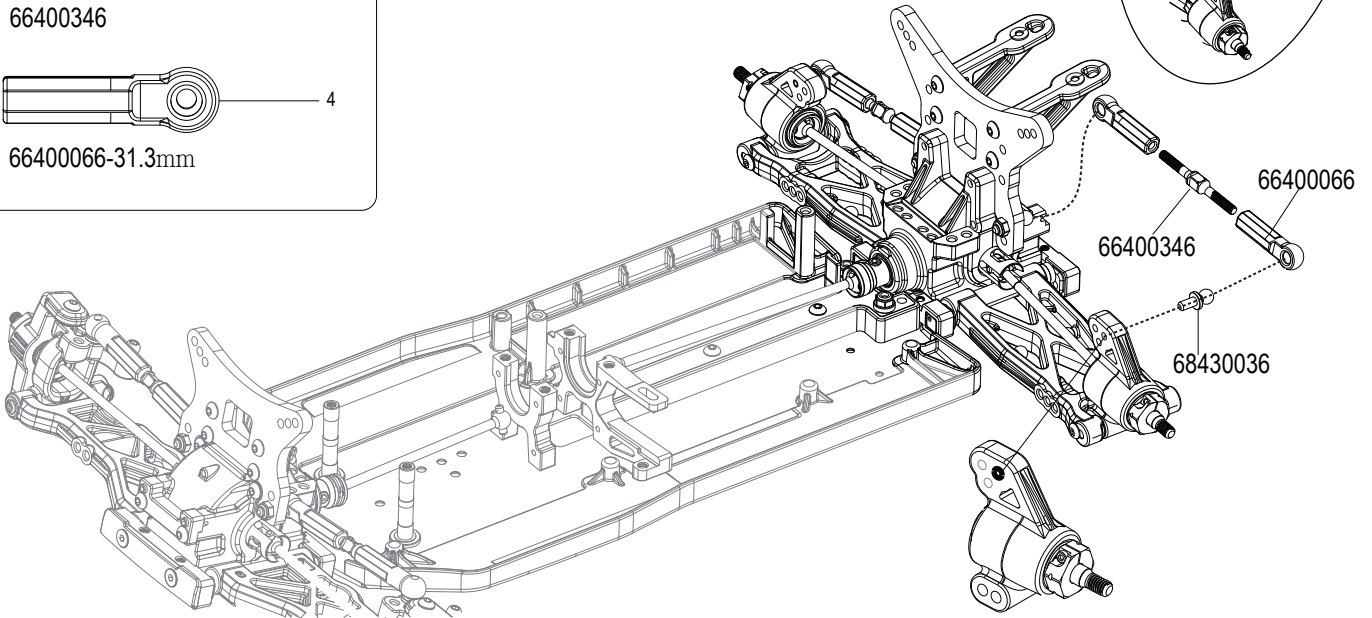
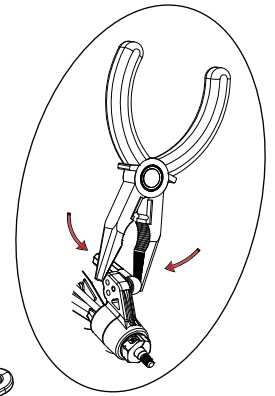
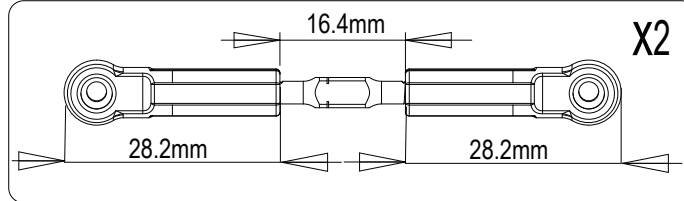
One side is reversethreaded.



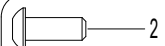
36mm Turnbuckles
66400346



66400066-31.3mm



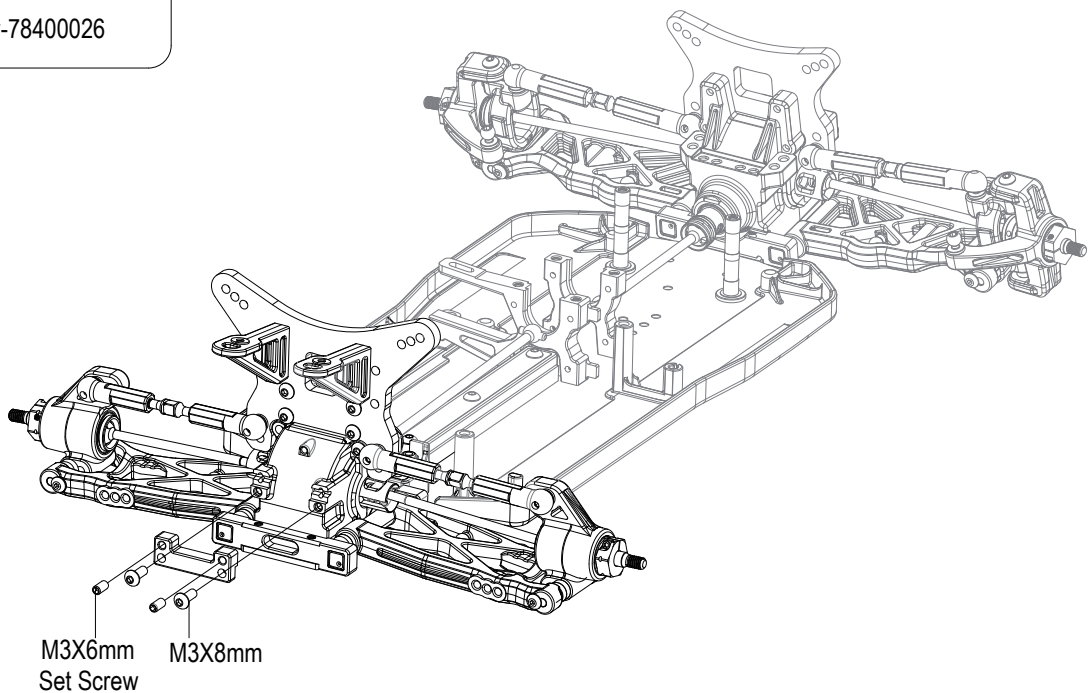
C4 Sway Bar Installation



M3X8mm -80400036



M3X6mm Set Screw-78400026



Part Bags used.



One side is reverse threaded.



D1 Bell Crank Installation

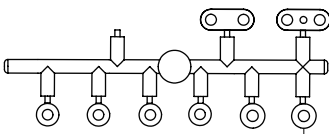
2
4.8x6mm Ball Studs
68430036

1
4.8x8mm Ball Studs
68430046

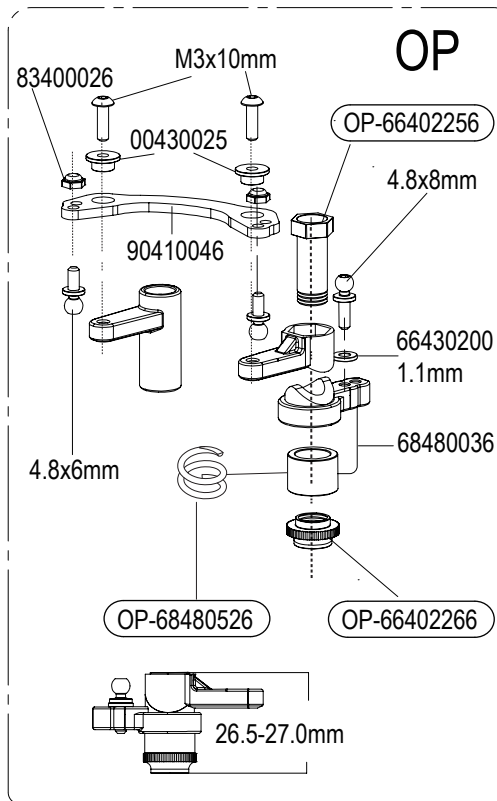
2
M3 Lock Nut-83400026

2
M3x10mm 80400046

2
00430025
Steering Knuckle Bushing
3x6mm

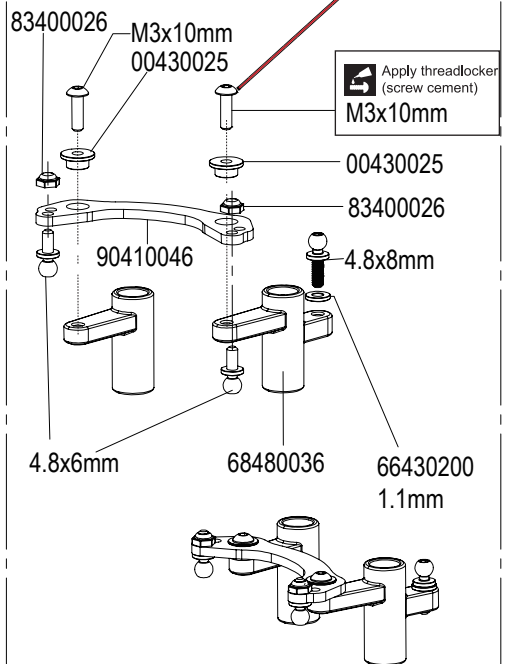


66430200-1.1mm



KIT

Adjust the BH M3x10mm Screws
remove any gap but allow the
Steering to swivel smoothly.

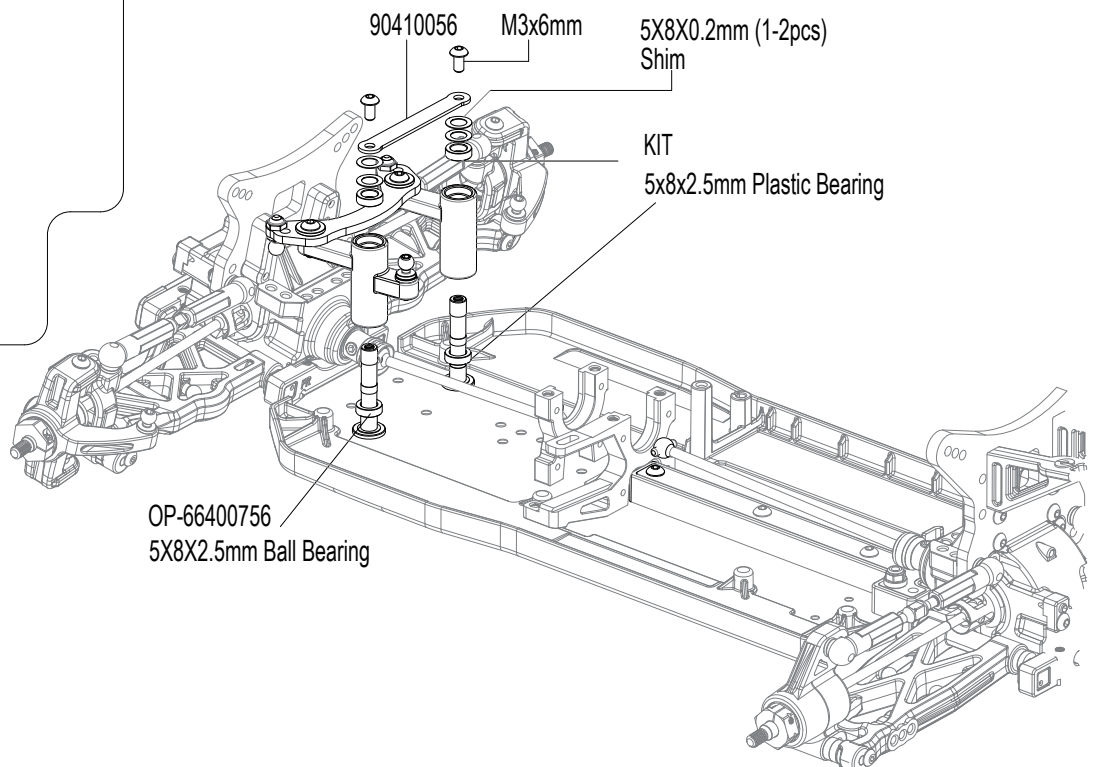


D2 Steering

2
M3x6mm-80400026

4
5x8x2.5mm Plastic Bearing
66402106

4
Shim 5x8x0.2mm
85440010



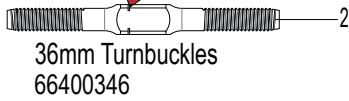


D3 Turnbuckle Assembly-Steering Rod -Servo Rod



BAG
D

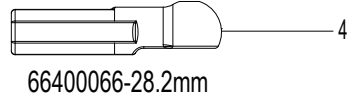
One side is reverse threaded.



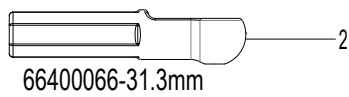
36mm Turnbuckles
66400346



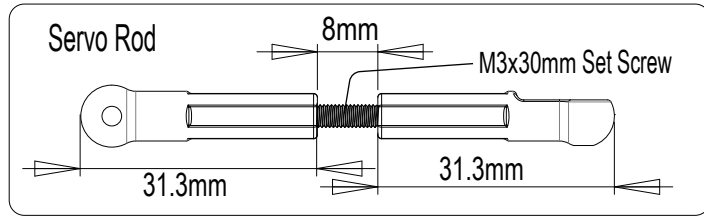
Set Screw M3x30mm
66430130



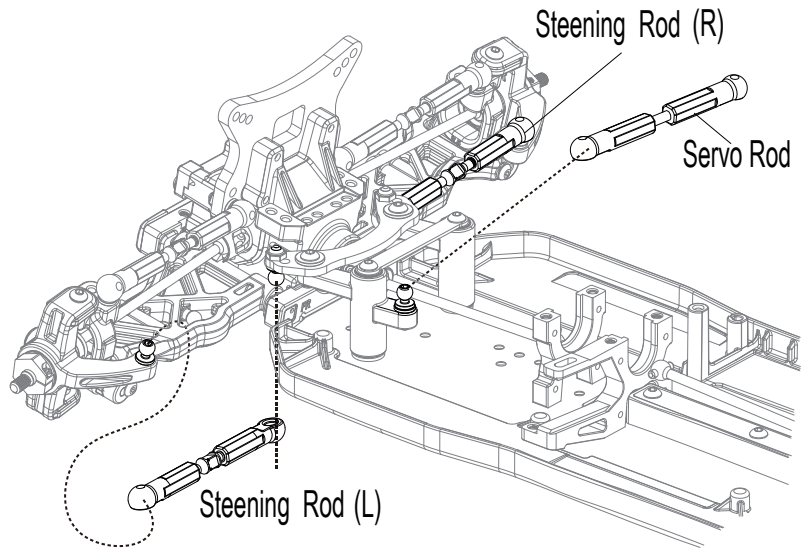
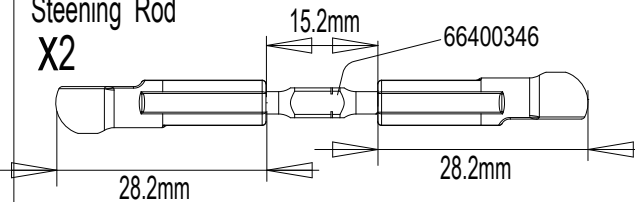
66400066-28.2mm



66400066-31.3mm

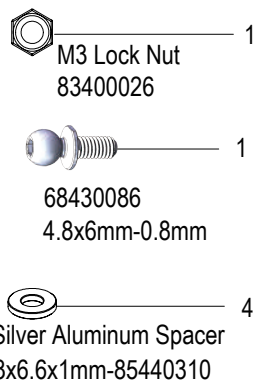
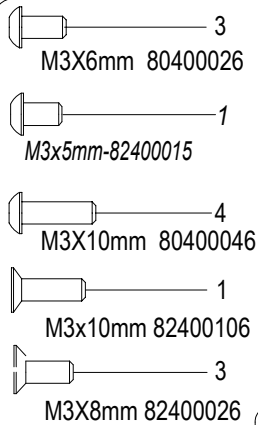


Steering Rod
X2

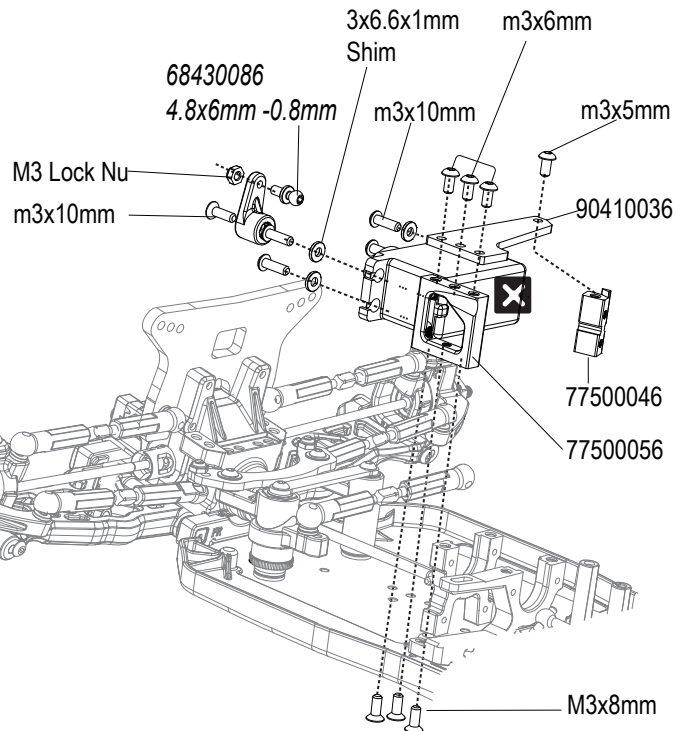
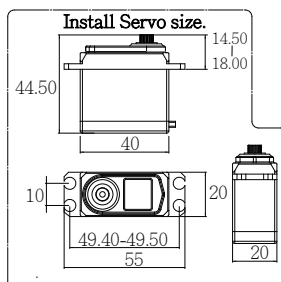
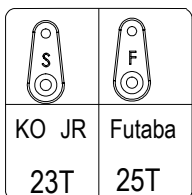


BAG
D

D4 Steering Servo



KIT
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.



Part Bags used.



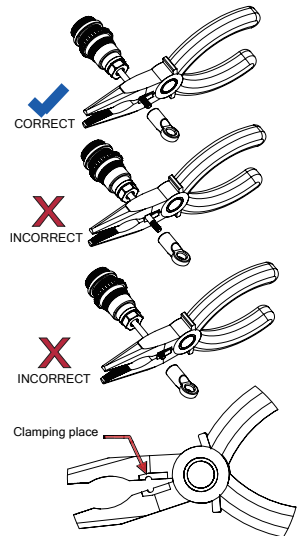
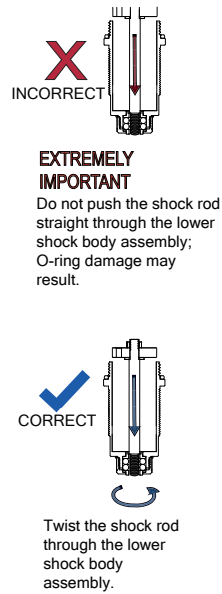
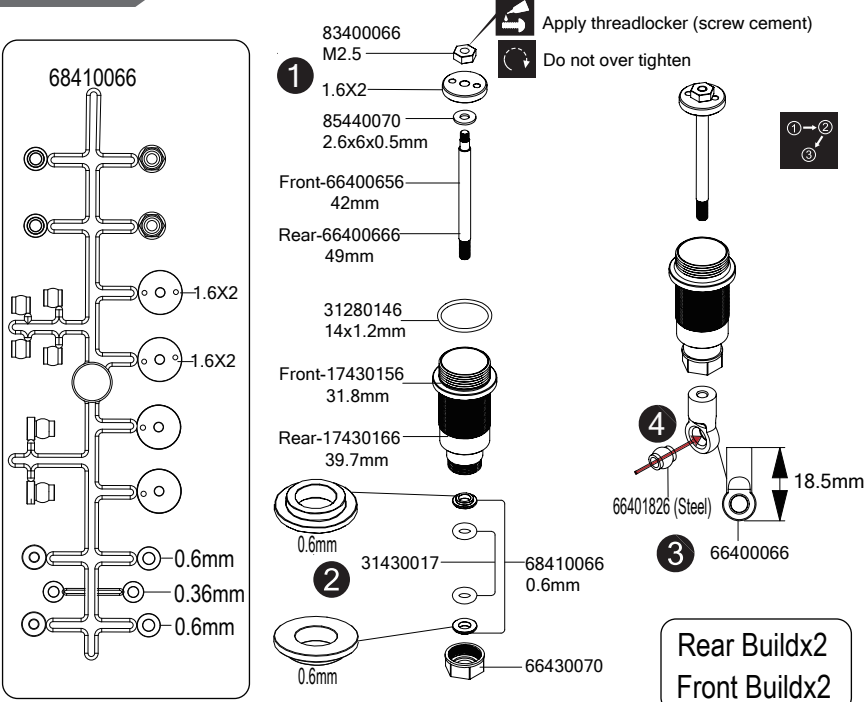
Must be purchased separately.



One side is reverse threaded.

E1 Front & Rear Shock Assembly-R

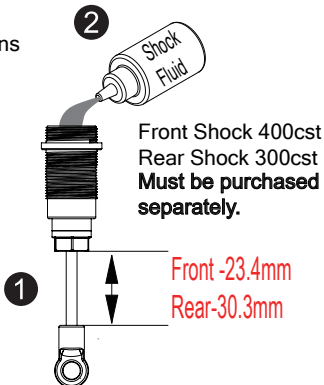
BAG
E



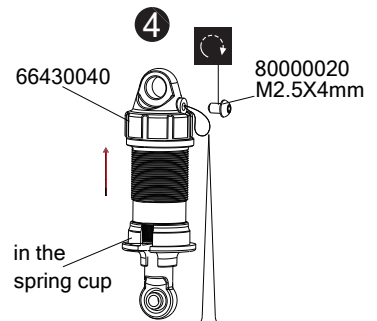
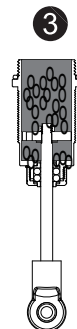
E1.1

BAG
E

After first drive
adjust
for track conditions



Slowly move up
and
down to remove
air bubbles.



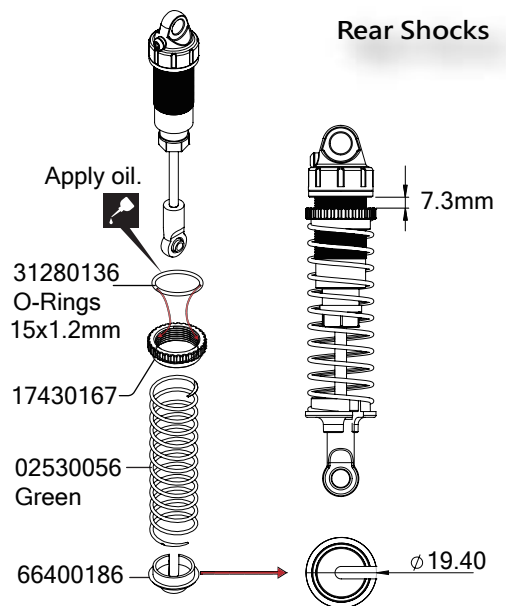
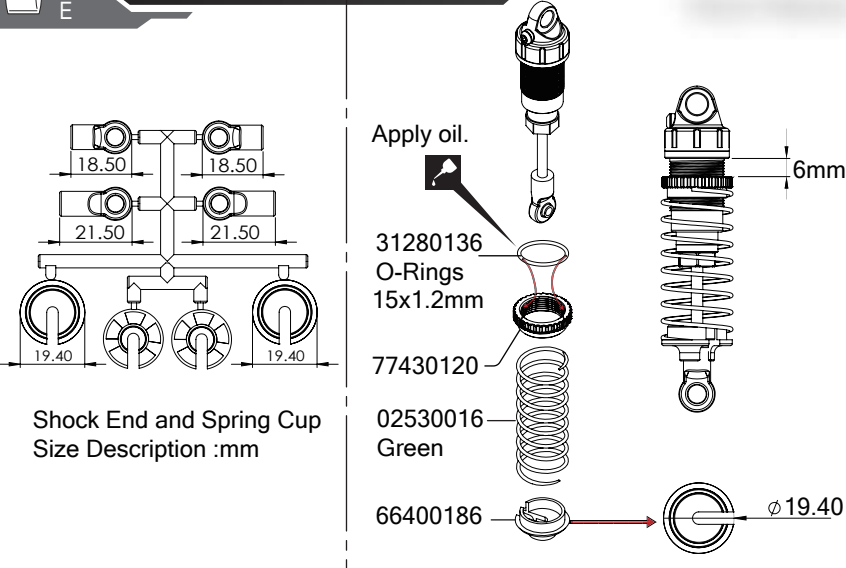
Slowly push the shock shaft all the way
up, wipe away any excess oil that has
seeped out, and screw in the bleeder
screw.

E1.2

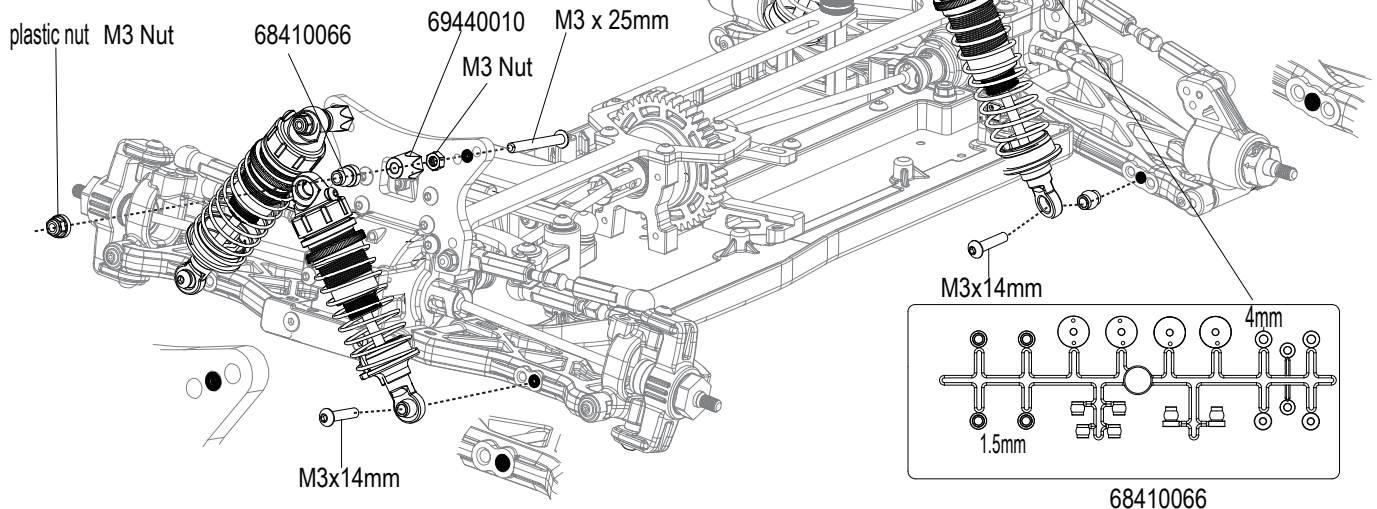
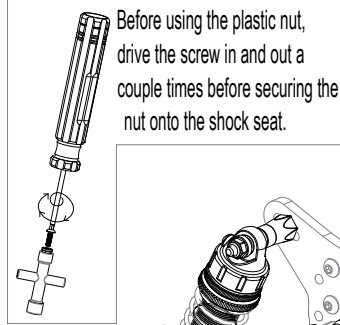
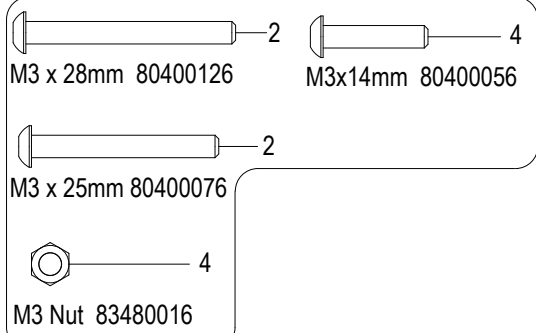
BAG
E

Front Shocks

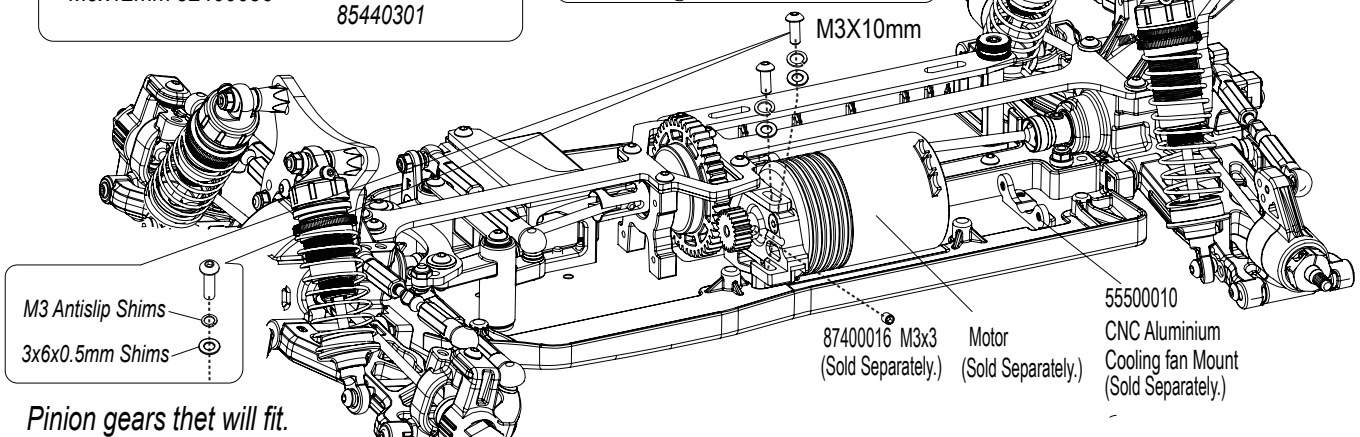
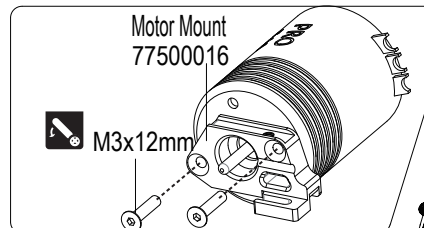
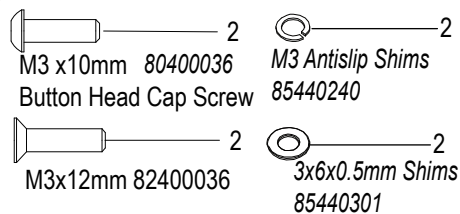
Rear Shocks



E2 Front & Rear Shock Installation



E3 Motor Installation



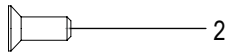
Pinion gears that will fit.

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

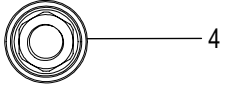




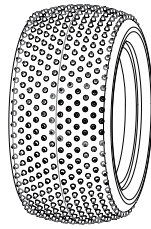
E4 Mounting Tires Wheel Installation



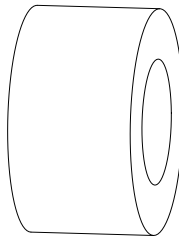
2
M3x8mm Flat Head Screws
82400026



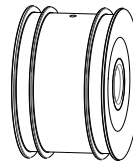
4
M4 Serrated flange nut
7mm Hex-83400076



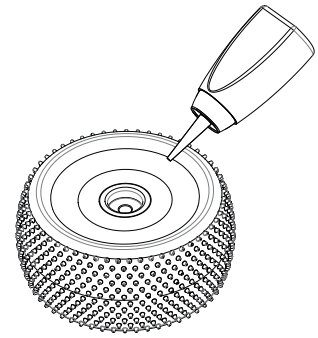
(Sold Separately)



(Sold Separately)



(Sold Separately)



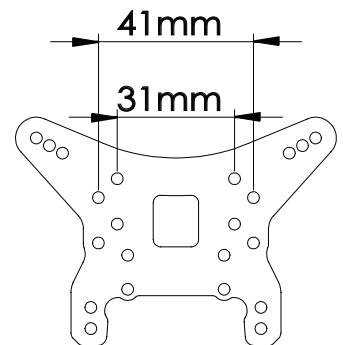
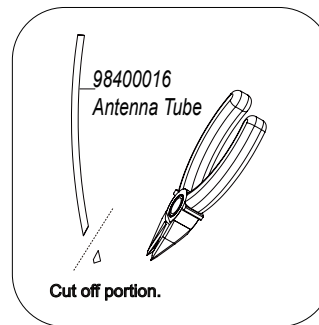
● Place the tire insert into the tire and tire onto the wheel.

● Tire and insert (Sold separately)
CA (Cyanoacrylate) glue sold separately.

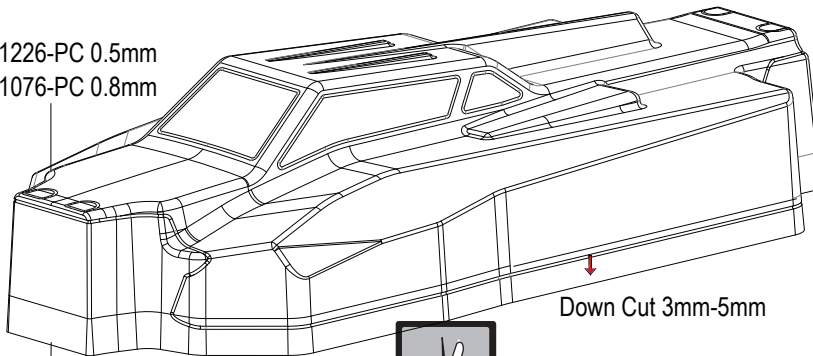
● Pull the sidewall of the tire slightly away from the rim and apply CA (Cyanoacrylate) glue in between the tire bead and rim

Body and Wing Cutting

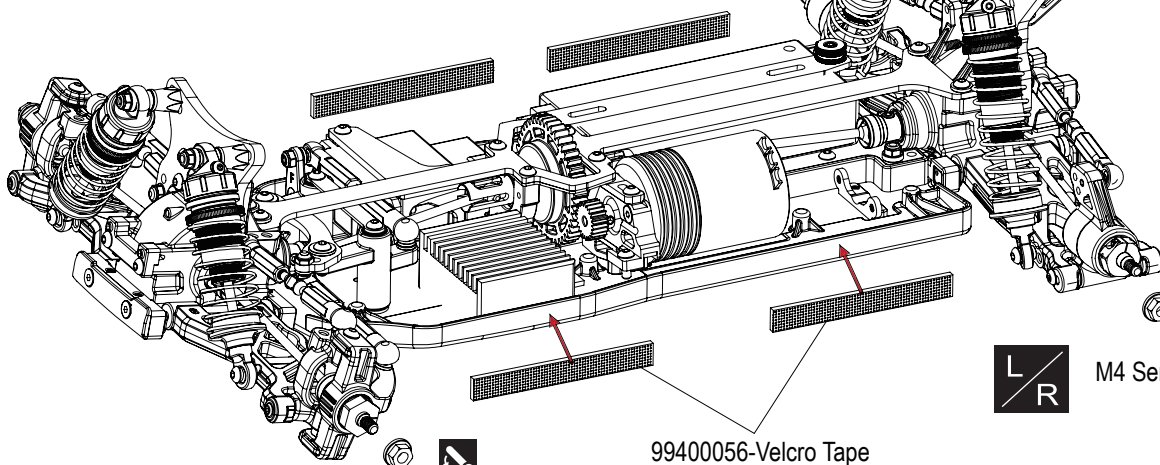
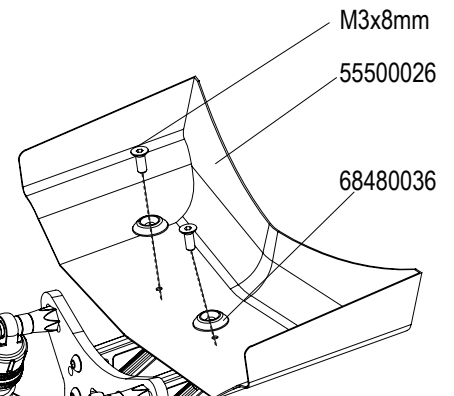
*Wash the inside of the body with luke warm water and a mild soap or detergent (such as liquid dishwashing soap) prior to painting. Oil residue or dust will prevent the paint from adhering to the painting surface, and possibly cause the paint to peel later on. After washing, thoroughly dry the body to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



OP-68481226-PC 0.5mm
OP-68481076-PC 0.8mm

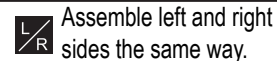
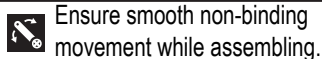
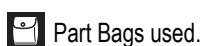


kit-68500056-PVC 0.8mm



M4 Serrated flange nut

M4 Serrated flange nut



PR SB401R SPORT

PR SB401R SPORT 1/10 Electric 4wd Off Road Buggy Kit Lightweight Edition
ITEM NO:.....

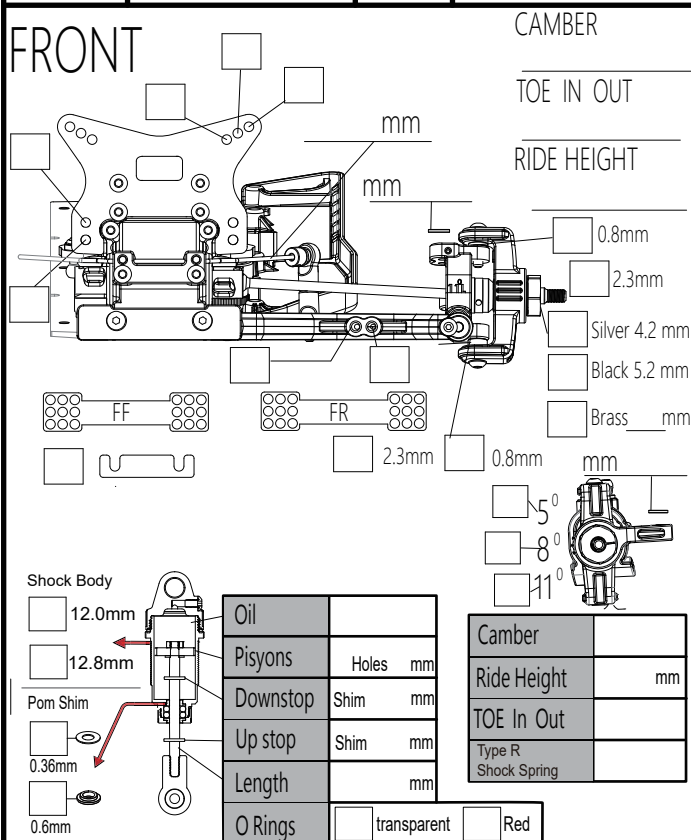
DRIVER

DATE

CIRCUIT

- ☐ INDOOR ☐ OUTDOOR ☐ DIRT ☐ ASTROTURF ☐ CARPET
☐ GLASS ☐ WOOD ☐ WET ☐ DRY ☐ DUSTY ☐ SMOOTH
☐ BUMPY ☐ HARD PACKED ☐ CLAY ☐ BLUE GROOVE
☐ LOW TRACTION ☐ MED TRACTION ☐ HIGH TRACTION

FRONT

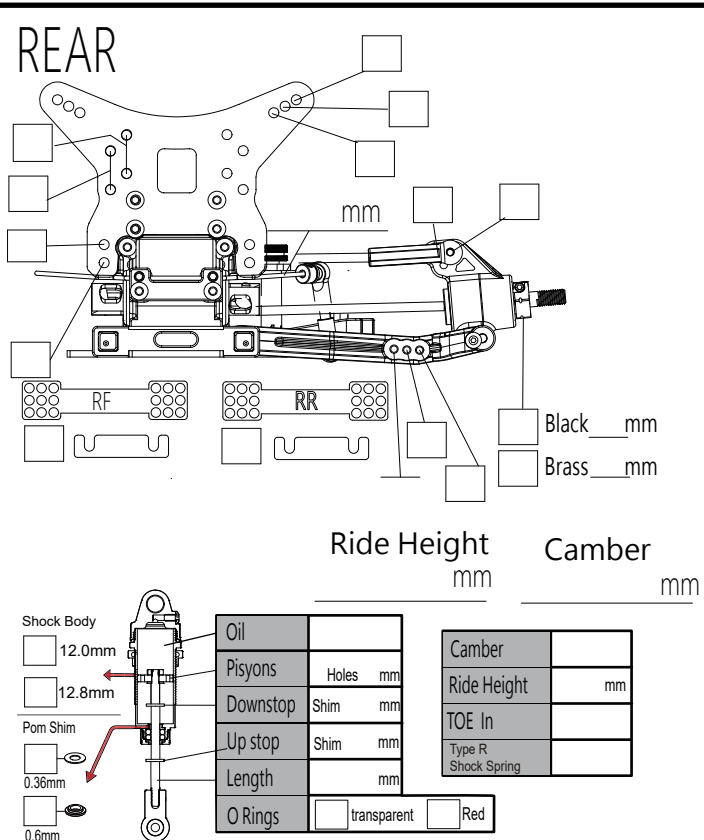


CAMBER

TOE IN OUT

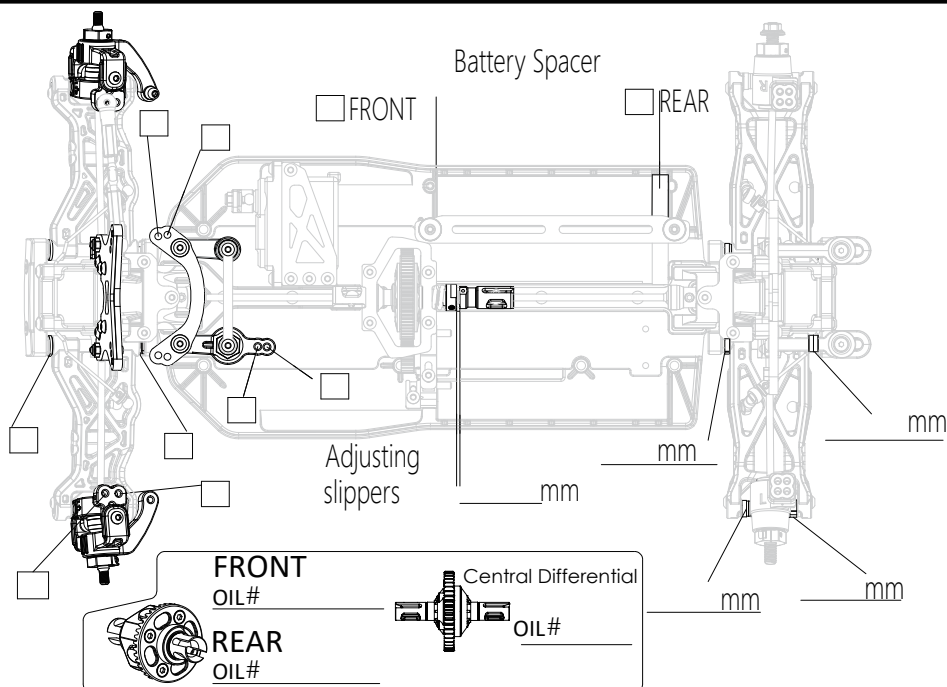
RIDE HEIGHT

REAR

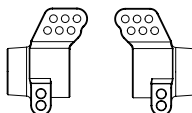
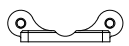
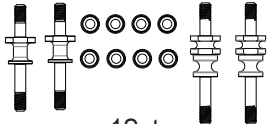
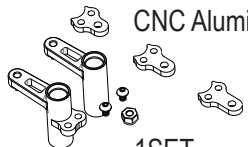
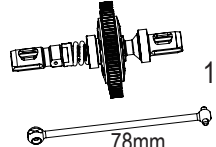
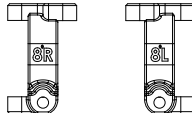
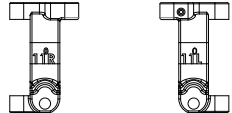
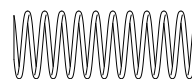
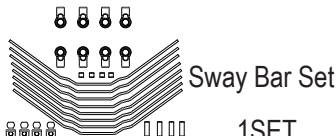
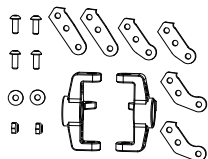
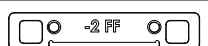
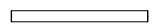
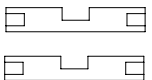
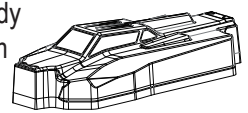
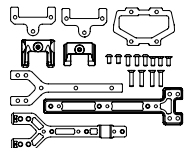
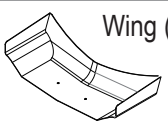
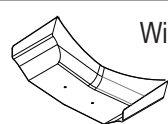
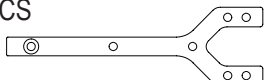
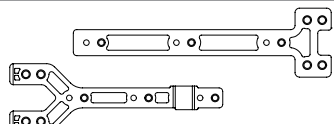
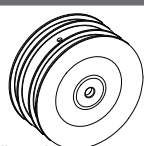
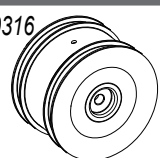


MOTOR _____ T
 GEAR Spur _____ T
 Pinion _____
 BATTERY _____
 ESC _____

FRONT
 TIRE _____
 INSERTS _____
 WHEELS _____
 REAR
 TIRE _____
 INSERTS _____
 WHEELS _____



OTHER

Machined Shock Pistons  66480716-1.7mm x 2 Hole  66480706-1.6mm x 2 Hole 4PCS	Machined Shock Pistons  17430116-2.0mm x 2 Hole  17430096-1.8mm x 2 Hole 4PCS	68470016 CNC Rear Hub -SB401 R Aluminum 1Set 	55500010 Cooling fan Mount 1PCS 
81430106  1Set	66402256  1PCS	66402266  1PCS	68480526 Servo Saver Spring 1PCS 
66481256  CNC Aluminium 1SET	77500506  1SET 78mm	68480866  1SET	68480976  1SET
77480216  Aluminum 1PCS	71530016  Type R Front Shock Spring Set	71530026  Type R Front Shock Spring Set	77430016  alloy steel 36mm 6PCS
66400756  5x8x2.5mm Ball Bearing (6pcs) 6PCS	77480136  Sway Bar Set 1SET	77480160  Aluminum Steering Knuckles 1SET	68480956  2.5mm Carbon 1pcs
77510010  FF Suspension Mount 2mm narrower 1PCS	77510020  FR Suspension Mount 2mm narrower 1pcs	79400036  alloy steel 3 x 36.8mm 4pcs	79480036  alloy steel 3 x 52mm 4pcs
66480356  Gear Diff Cross Pins Aluminum 2PCS	68481076  R- Body 0.8mm 1PCS	85430016  Aluminum Wing Mount Washer 2PCS	77510035  1Set
66402697  Wing (1.5mm) 1PCS	66400286  Wing (1.0mm) 1PCS	77480186  1PCS Front Pillar 2.5mm Carbon Signature Versatile	77500096  (1pr)
77500026 Gearbox Reinforcement Front 1PCS 	77500036 Gearbox Reinforcement Block - Rear 1PCS 	68400326  Front Wheel 2PCS	68400316  68400316 2PCS

PRSB40R

SPORT



mit
MADE IN TAIWAN



EMAIL / infopracing@gmail.com

1.3.5Version