



OS Racing®

Team
Ming Yang
4WD OFF-ROAD NITRO BUGGY
ML2

Instruction Manual

Nitro

1/8 Scale 4WD OFF-Road Nitro Buggy

Vol.1 00801-005

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Cautions

To prevent any serious personal injury and/or damage to property, please be responsible when operating all remote controlled models. Extra attention is called for when operating any glow fuel powered model. These models can exceed speeds of 31 mph (50km/h) and use highly poisonous and flammable fuels.

Inspect your model before operation

- Make sure that all screws and nuts are properly tightened. It is also a good idea to use removable thread glue wherever metal screws go into metal, especially for engine mounts and the engine pilot shaft.
- Always use fresh batteries for your transmitter and for your receiver to avoid losing control of the model.
- Always test the brakes and the throttle before starting your engine to avoid losing control of the model.
- Make sure the air filter is clean and oiled. Never run your engine without an air filter.
- Your engine can be seriously damaged if dirt and debris get inside the engine.
- Make sure no one else is using the same radio frequency as you are using.

Choose the right place to operate your R/C model.

- Do not run on public streets or highways. This could cause serious accidents, personal injuries, and/or property damage.
- Never run R/C models near people or animals.
- To avoid injury, do not run in confined spaces.
- Do not run where loud noises can disturb others, such as hospitals and residential areas.
- Never run indoors. There is a high risk of fire and/or damage.

Heat, Fire, and Fuel Safety

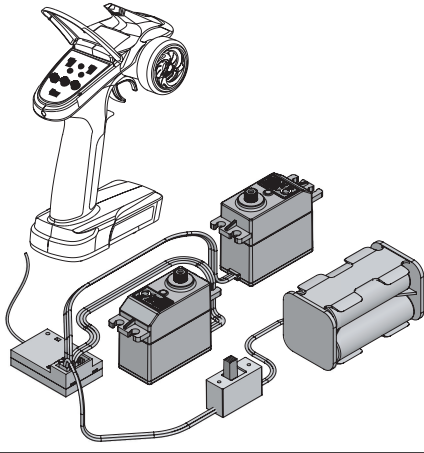
- Never use gasoline in a glow model engine. Use glow fuel specifically designed for car engines. Using non-approved fuels in your engine can cause an explosion.
- Do not run near open flames or smoke while running your model or while handling fuel.
- Always store fuel in a well ventilated place, away from heating devices, open flames, direct sunlight, or batteries. Keep glow fuel away from children.
- Be aware that some parts will be hot after operation. Do not touch the exhaust or the engine until they have cooled. These parts may reach 275°C (527°F) degrees during operation!



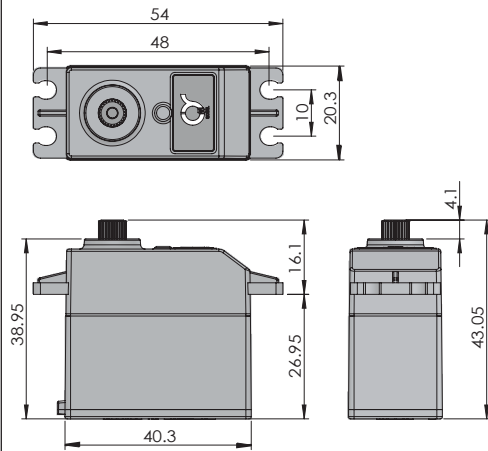
Glow fuel is flammable and poisonous. Always read the warning label for safety information. Glow fuel powered model engines emit poisonous vapors and gasses. These vapors irritate eyes and can be highly dangerous to you health. We recommend wearing rubber or vinyl gloves to avoid direct contact with glow fuel. Also, be aware of spilled or leaking fuel. Fuel leaks can cause fires or explosions.

Equipment Needed

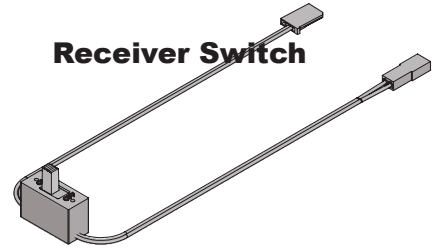
Needed for kit without Radio.



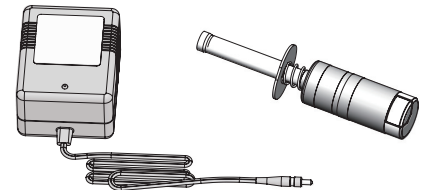
Servo



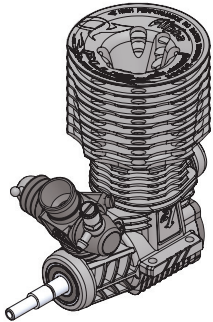
Receiver Switch



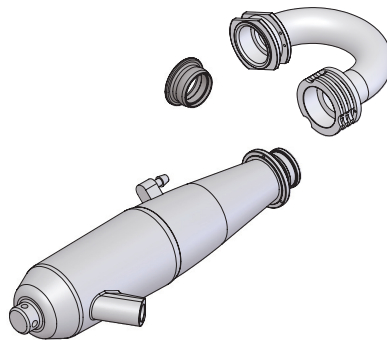
Glow Plug Igniter



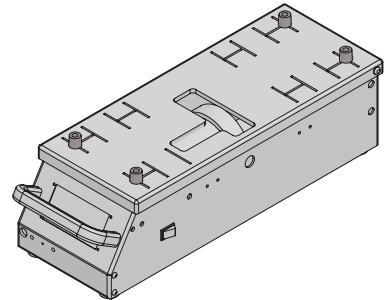
Engine



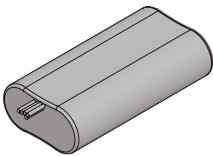
Exhaust Pipe



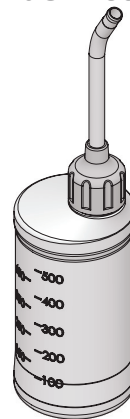
Starter Box



Li-Po Battery 7.4V



Fuel Bottle



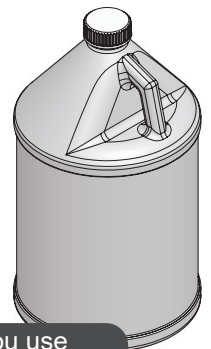
Tires



Charger for Receiver Battery Pack



Glow Fuel



We recommend that you use fuel containing 20~30% nitro.

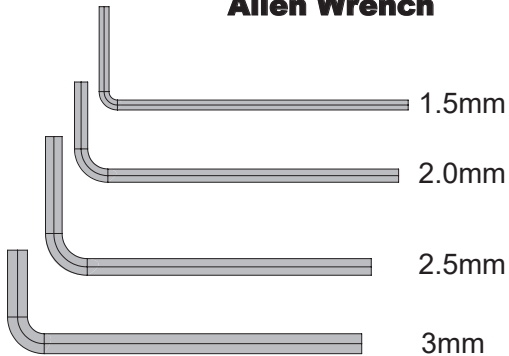


Cautions

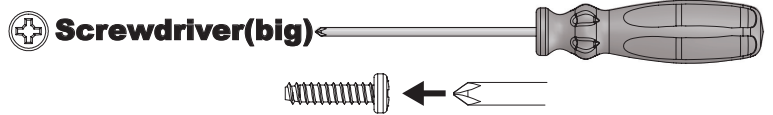
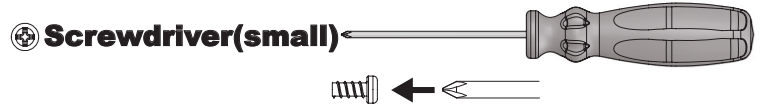
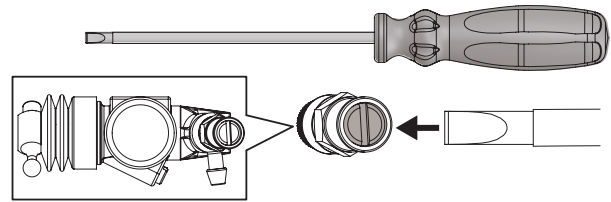
If you do not use a charger designed to charge Nickel Metal Hydride/LiPo batteries, The batteries will be damaged.

Tools Recommended

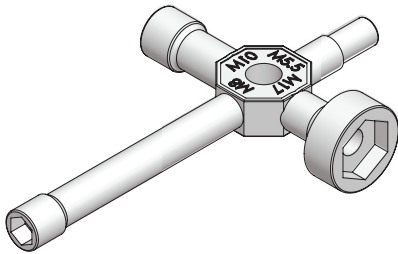
Allen Wrench



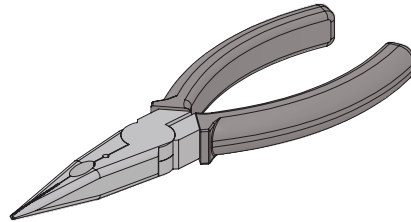
Screwdriver



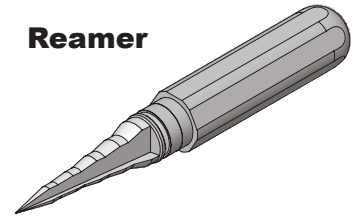
Glow Plug Wrench M5.5/M8/M10/M17



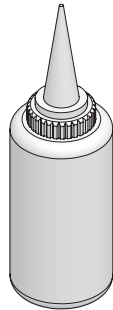
Needle Nosed Pliers



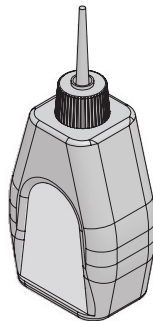
Reamer



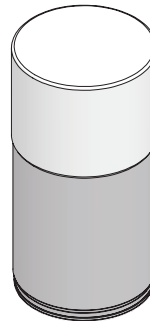
Thread Glue



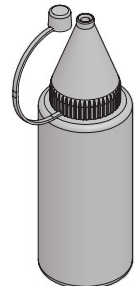
Grease



Instant Cement



Paint



Air Filter Oil

Included Items



Front
Diff Oil #7,000



Center
Diff Oil #5,000



Rear
Diff Oil #2,000



2x
Shock
Oil #500

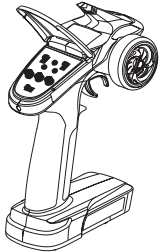
Start the Engine



Before using the starter, make sure the batteries in your R/C car and transmitter are fully charged. Check the radio functions to make sure your R/C car is in proper working order.

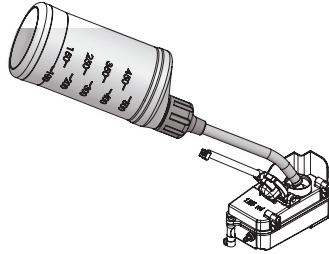
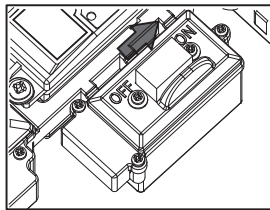
STEP
1

ON ↑

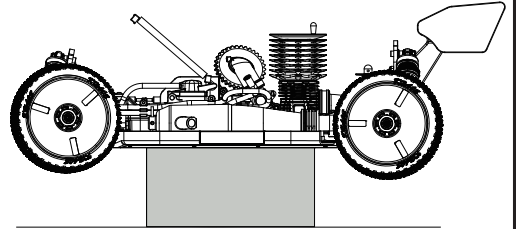


Turn on Radio System
1. Switch on transmitter.
2. Switch on receiver.

STEP
2



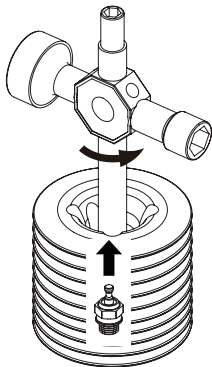
Fill tank with high quality R/C car glow fuel.



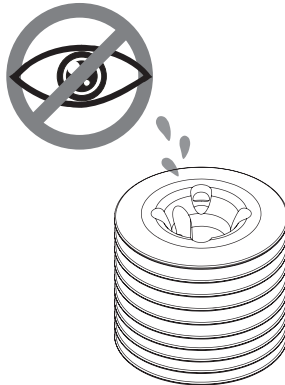
Keep the wheels off the ground during static break-in!

Flooded Engine

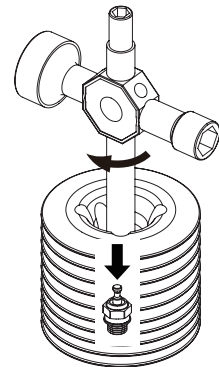
1 Turn the wrench counter-clockwise to remove the glow plug.



2 Tilt the engine head away from face and turn the motor over using the starter.



3 Replace the glow plug and complete the starting steps without priming the engine.



Glow Plug



HOT!

Use a fully charged glow plug igniter to test the glow plug. Hold the glow plug with needle nose pliers and attach to the igniter. If the plug is good, the element will glow an orange or red color. If the element doesn't glow, or if it is damaged, you will need to replace the plug. The element will be very hot when glowing.

Glow Plug Igniter

Pliers

Element

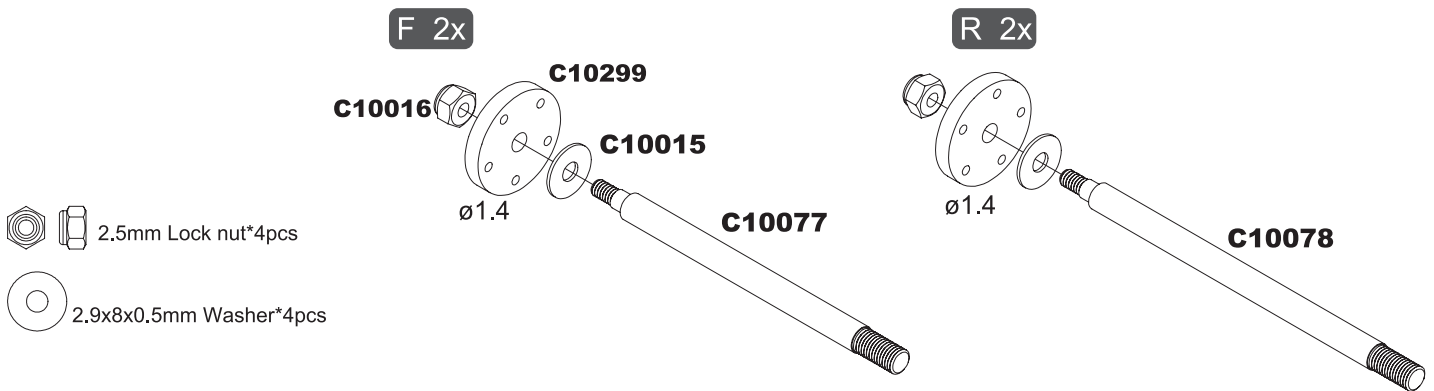
Good Plug
Element glows when tested.

Bad Plug
Element may be damaged or broken if it doesn't light up completely.

Bad Plug
Element is broken or doesn't light up at all.

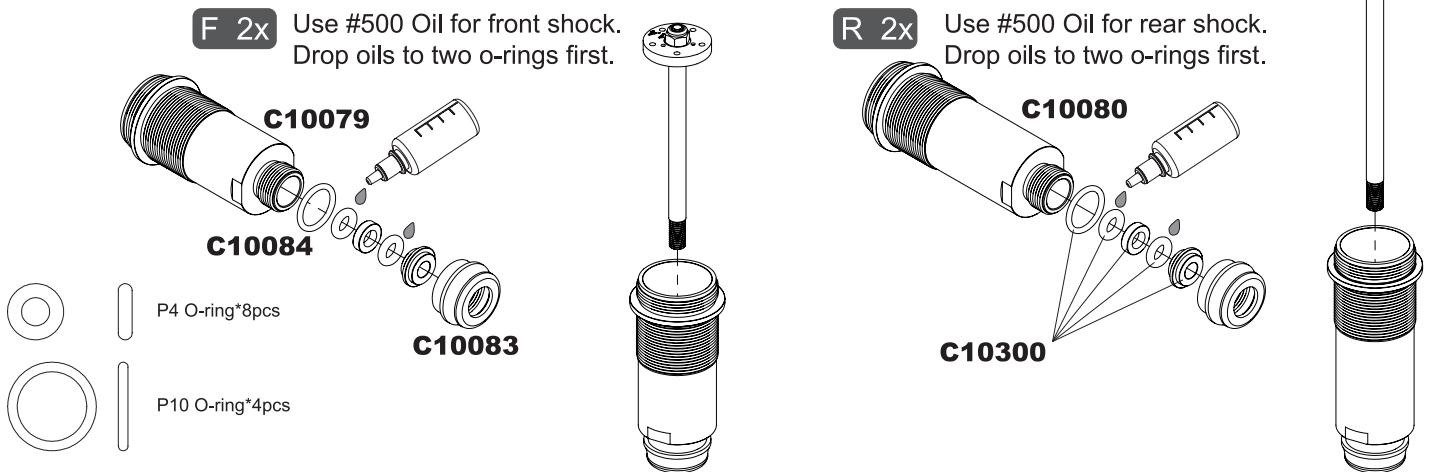
A01

Front / Rear Shock Shaft Assembly(4sets)



A02

Front / Rear Shock Body Assembly(4sets)



A03

Front Point To Fill Shock Silicone Oil

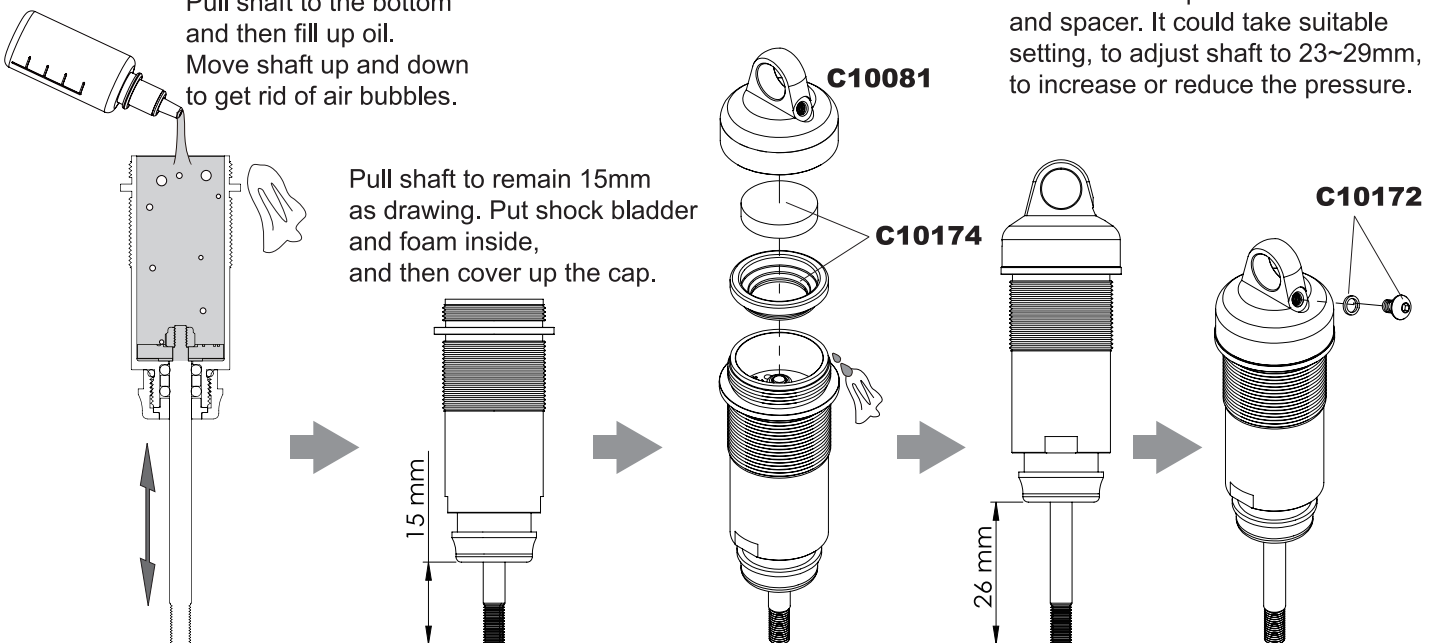
F 2x

Front Shock Oil #500

Pull shaft to the bottom and then fill up oil. Move shaft up and down to get rid of air bubbles.

Pull shaft to remain 15mm as drawing. Put shock bladder and foam inside, and then cover up the cap.

Pull shaft to remain 26mm as drawing, and then lock up M2.5x4 screw and spacer. It could take suitable setting, to adjust shaft to 23~29mm, to increase or reduce the pressure.



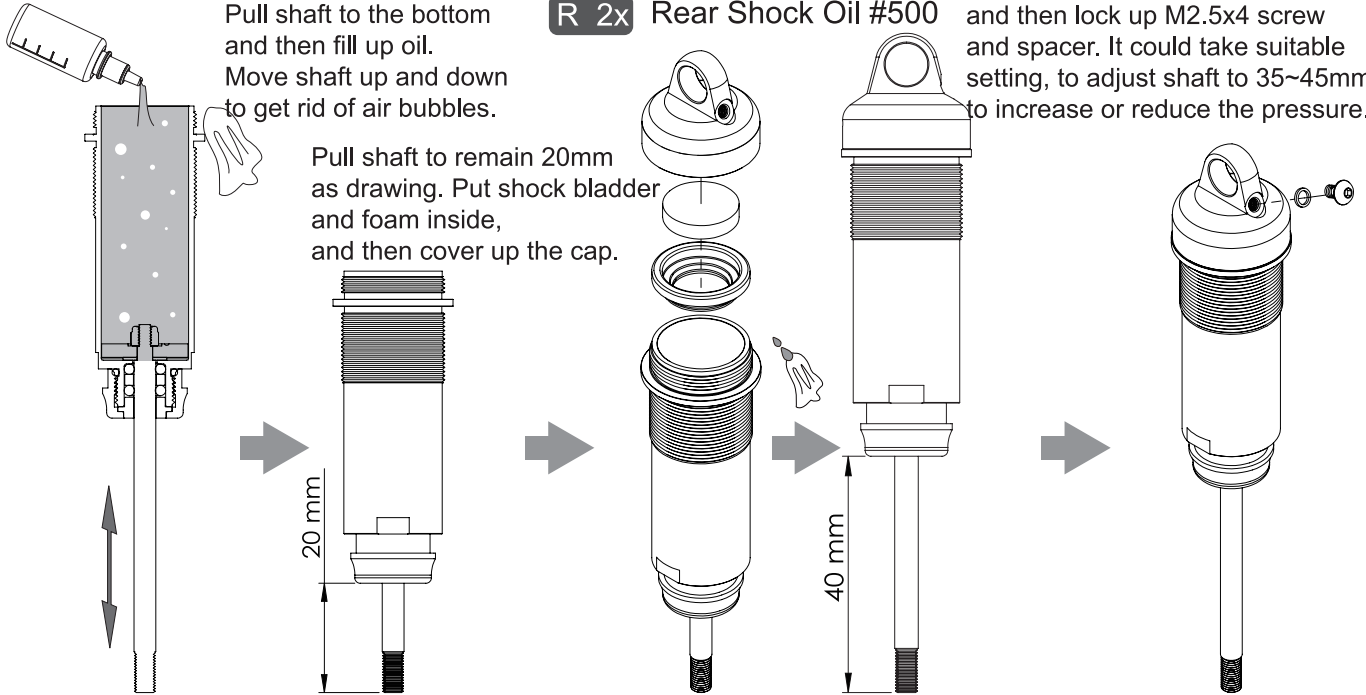
A03

Rear Point To Fill Shock Silicone Oil

Pull shaft to the bottom and then fill up oil. Move shaft up and down to get rid of air bubbles.

R 2x Rear Shock Oil #500

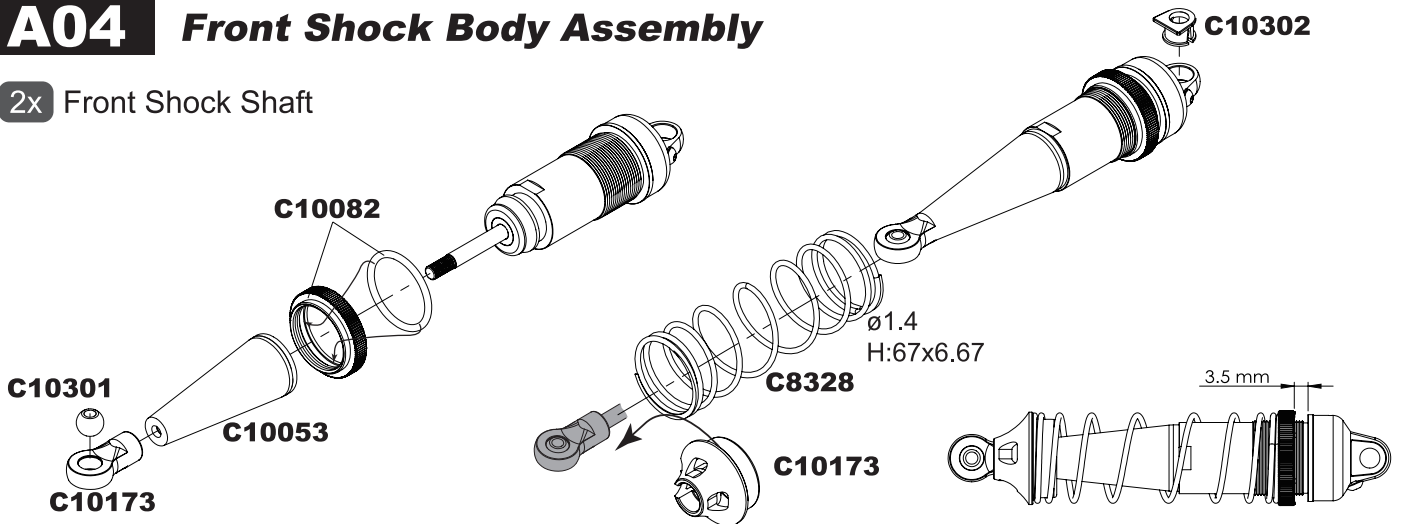
Pull shaft to remain 40mm as drawing, and then lock up M2.5x4 screw and spacer. It could take suitable setting, to adjust shaft to 35~45mm, to increase or reduce the pressure.



A04

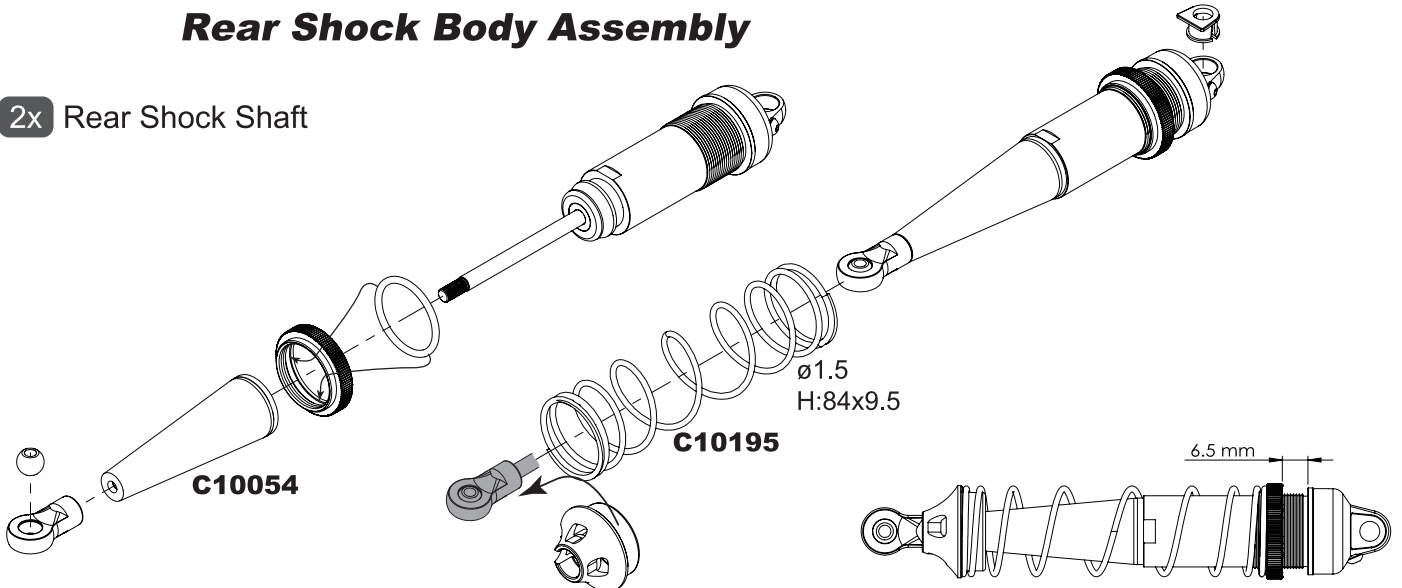
Front Shock Body Assembly

2x Front Shock Shaft



Rear Shock Body Assembly





2x Rear Shock Shaft

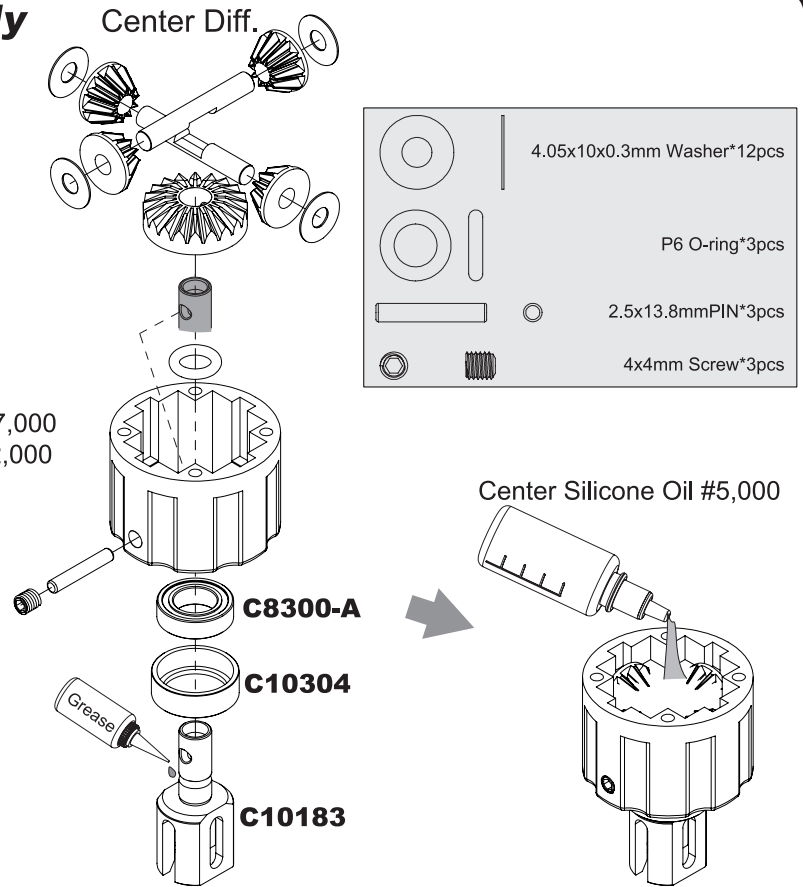
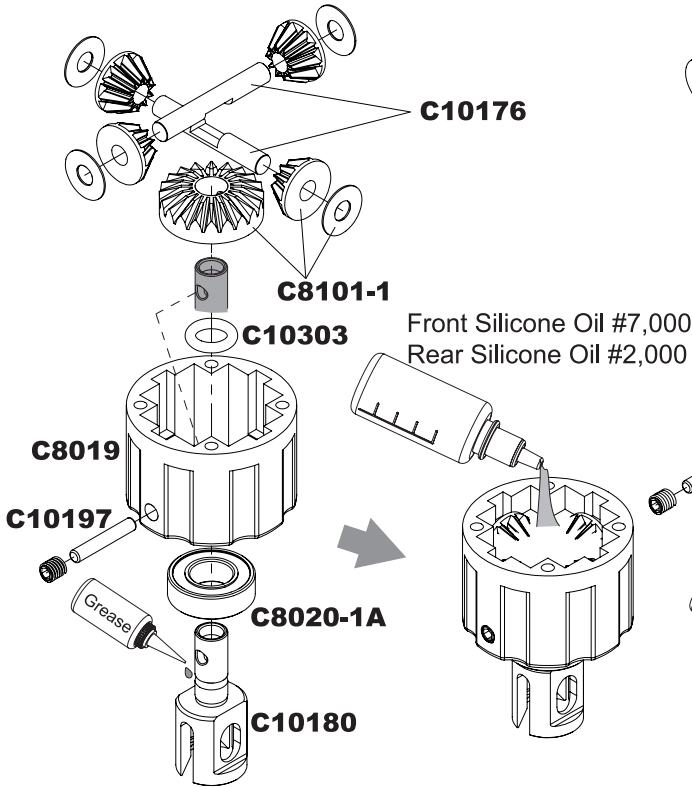


B01 Differential Assembly

Front/Rear Diff.

Center Diff.





-  4.05x10x0.3mm Washer*12pcs
-  P6 O-ring*3pcs
-  2.5x13.8mm PIN*3pcs
-  4x4mm Screw*3pcs



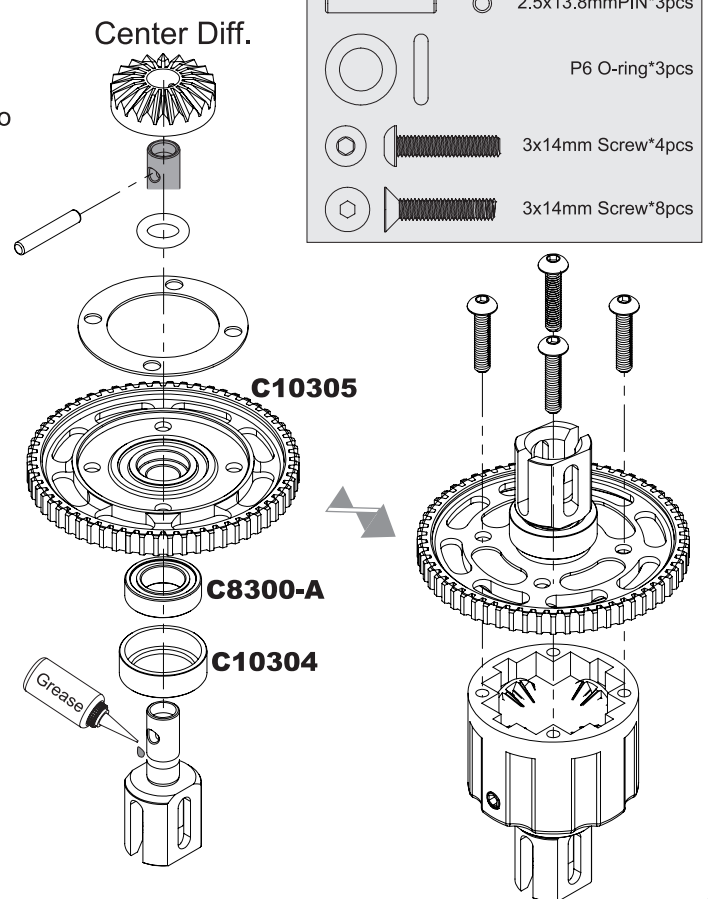
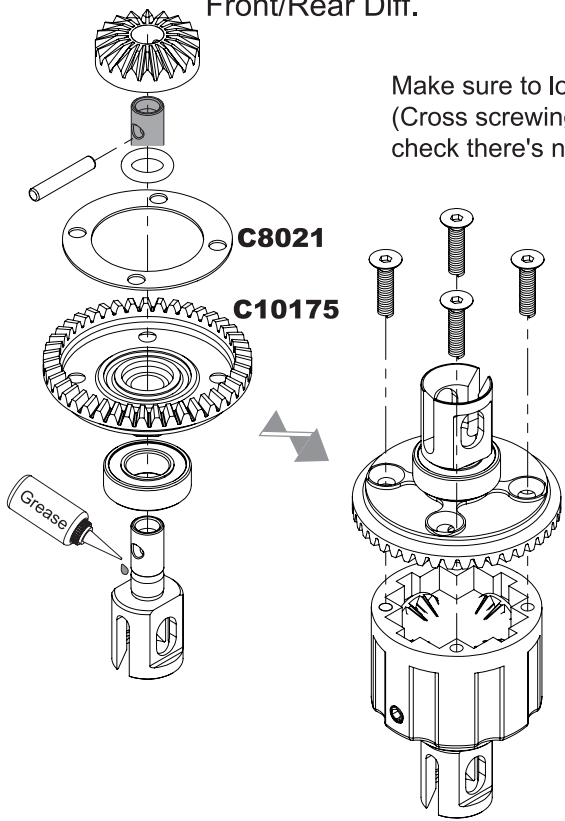
B02 Differential Assembly

Front/Rear Diff.

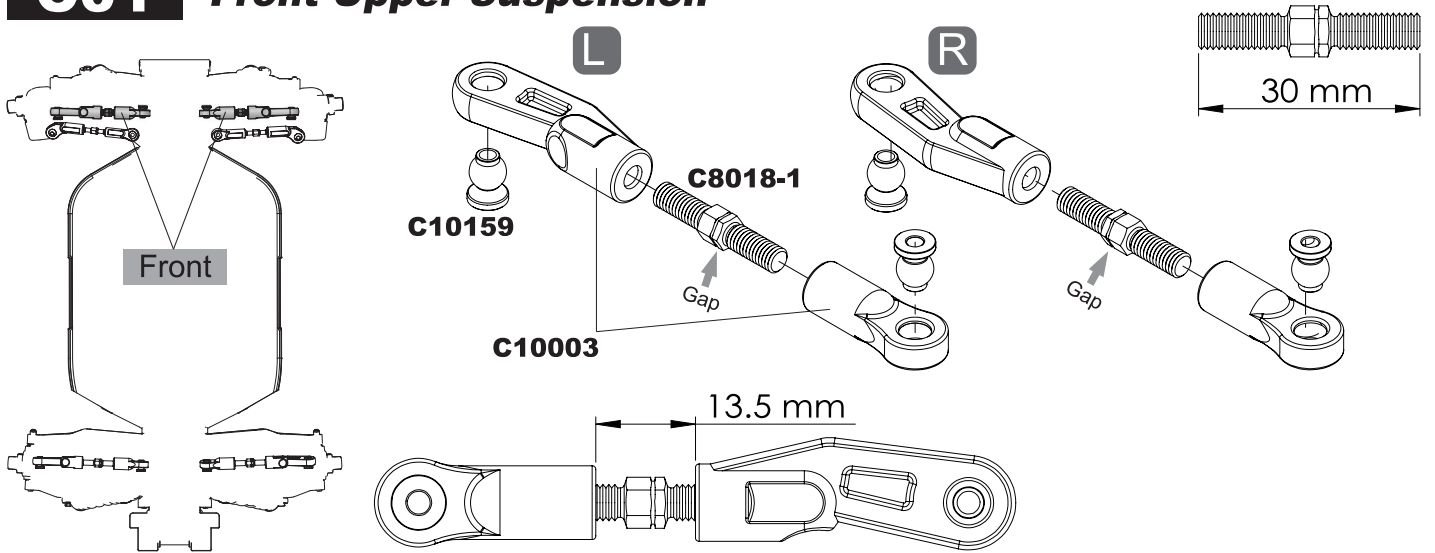
Center Diff.

-  2.5x13.8mm PIN*3pcs
-  P6 O-ring*3pcs
-  3x14mm Screw*4pcs
-  3x14mm Screw*8pcs

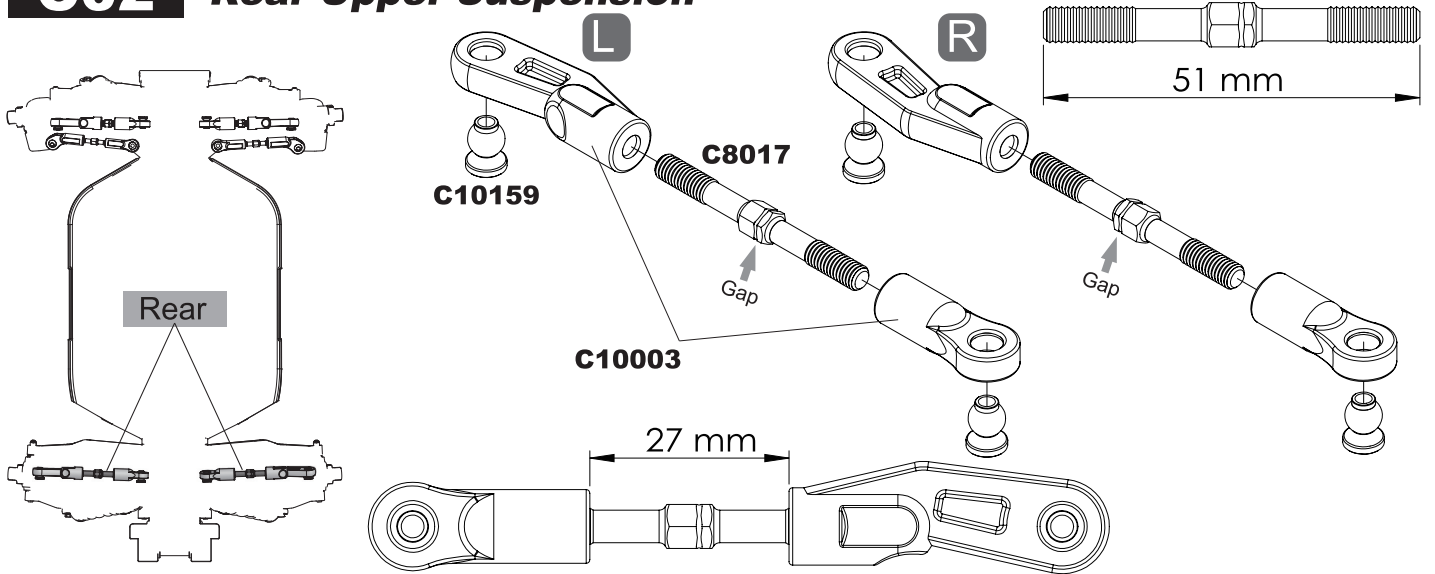
Make sure to lock up screws (Cross screwing). Turn over to check there's no leaking.



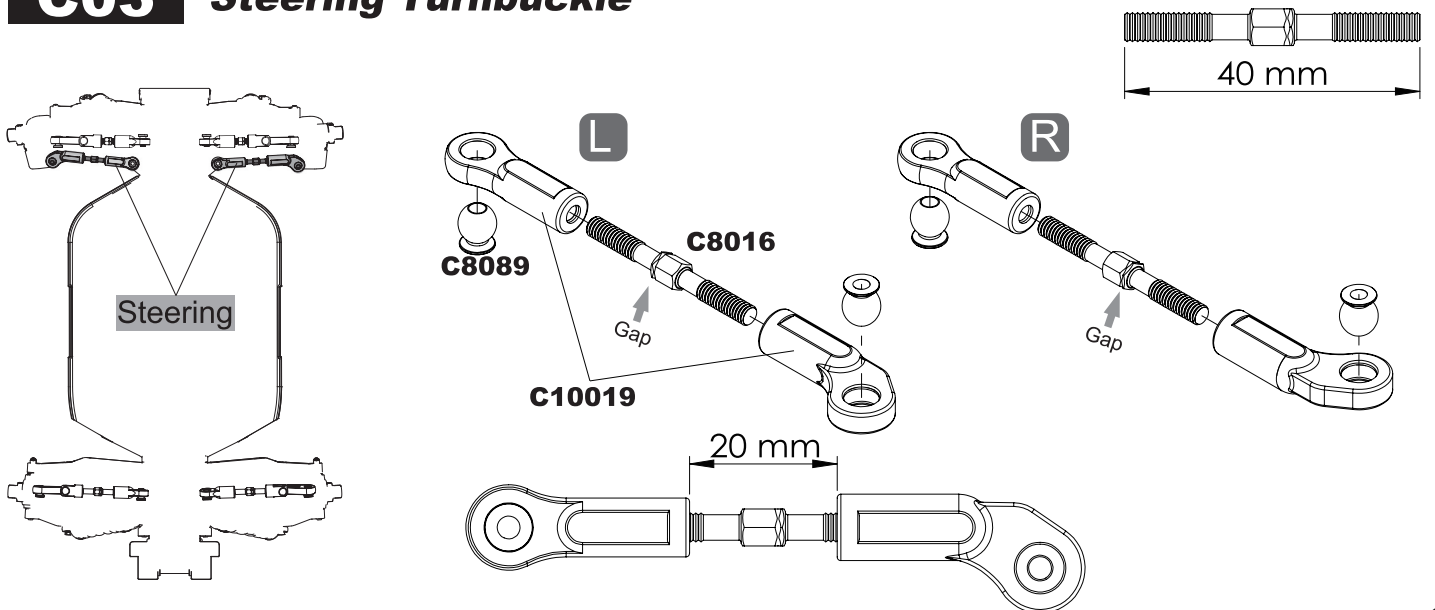
C01 Front Upper Suspension



C02 Rear Upper Suspension

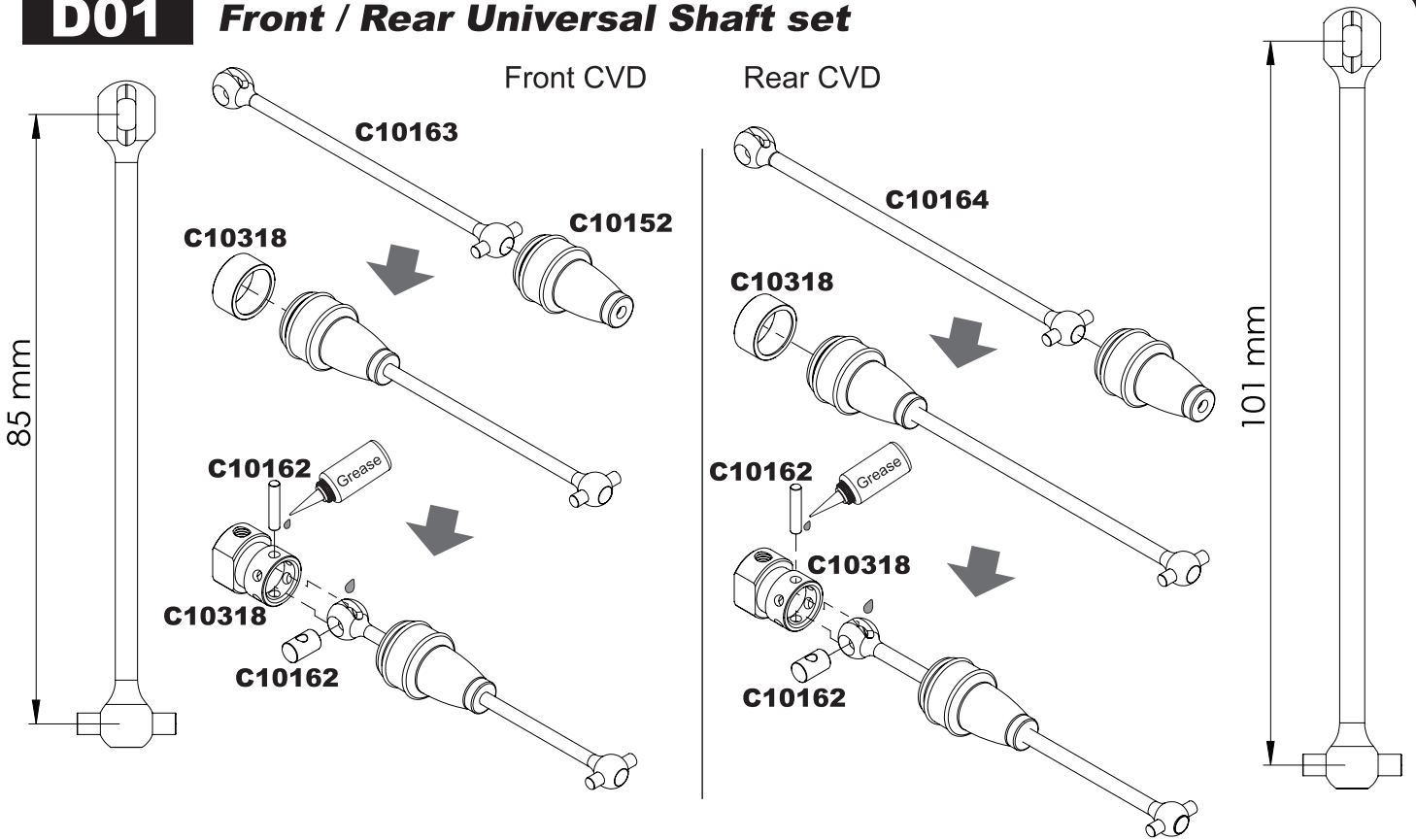


C03 Steering Turnbuckle



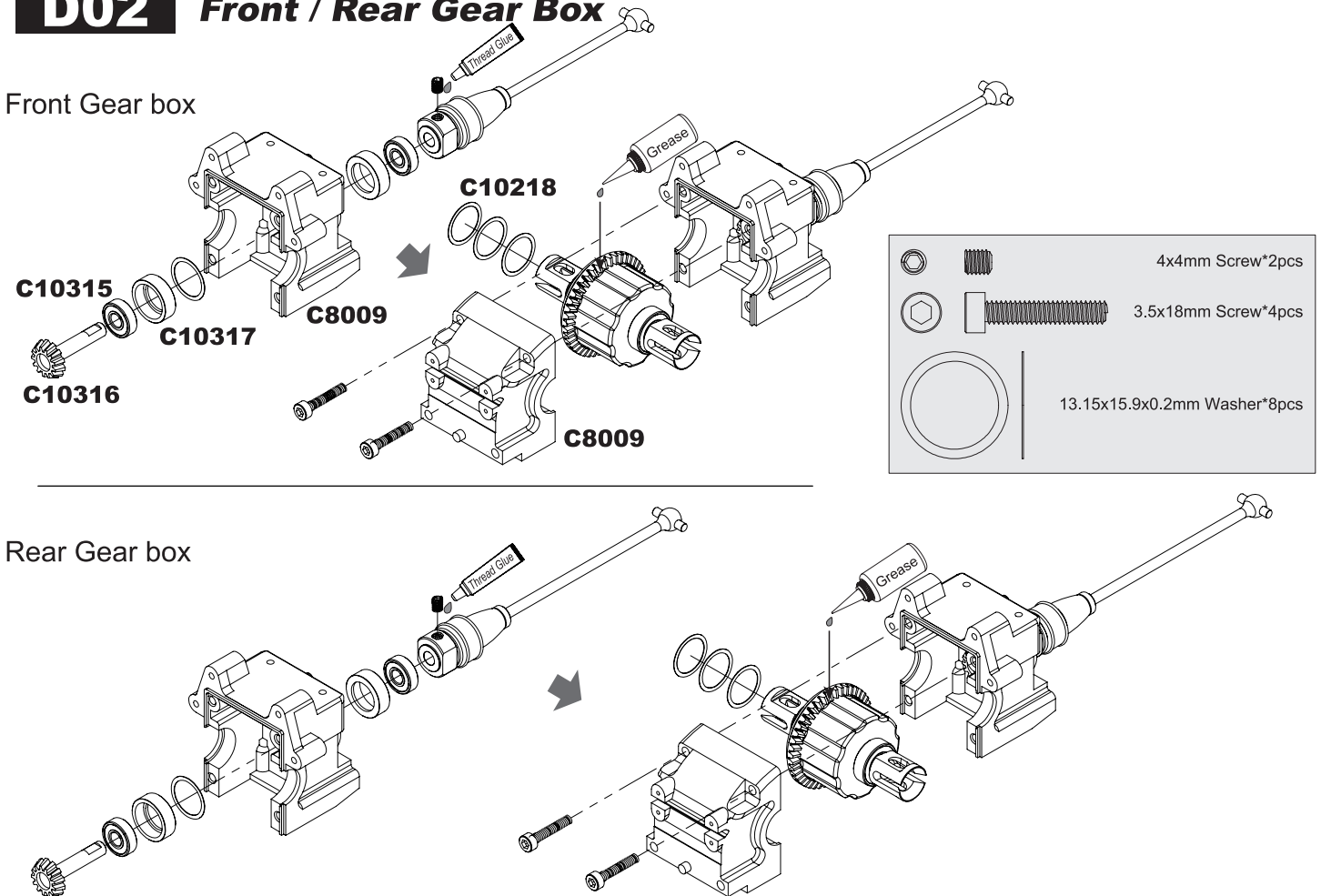
D01

Front / Rear Universal Shaft set



D02

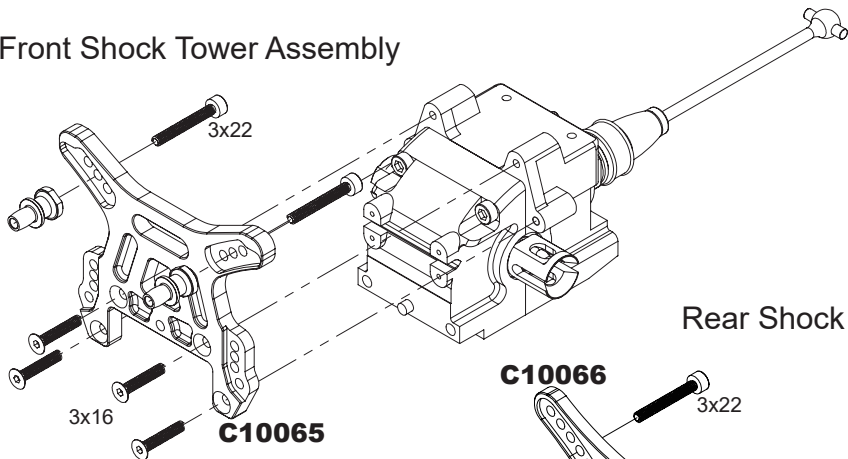
Front / Rear Gear Box



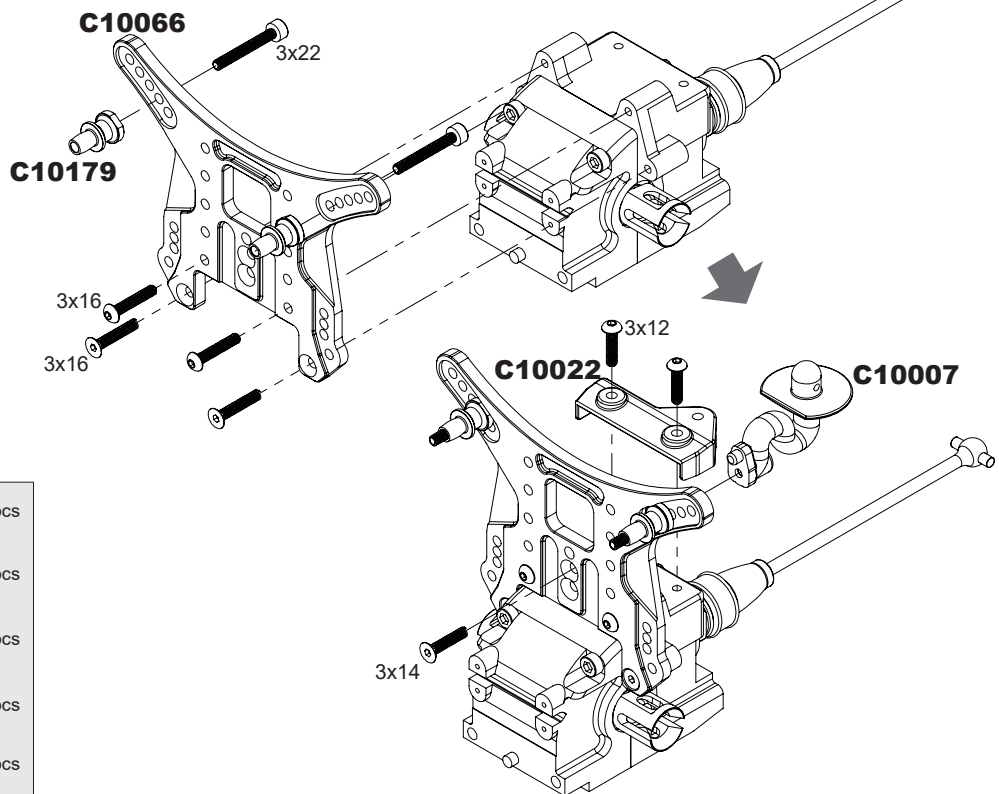
D03

Front / Rear Shock Tower Assembly

Front Shock Tower Assembly



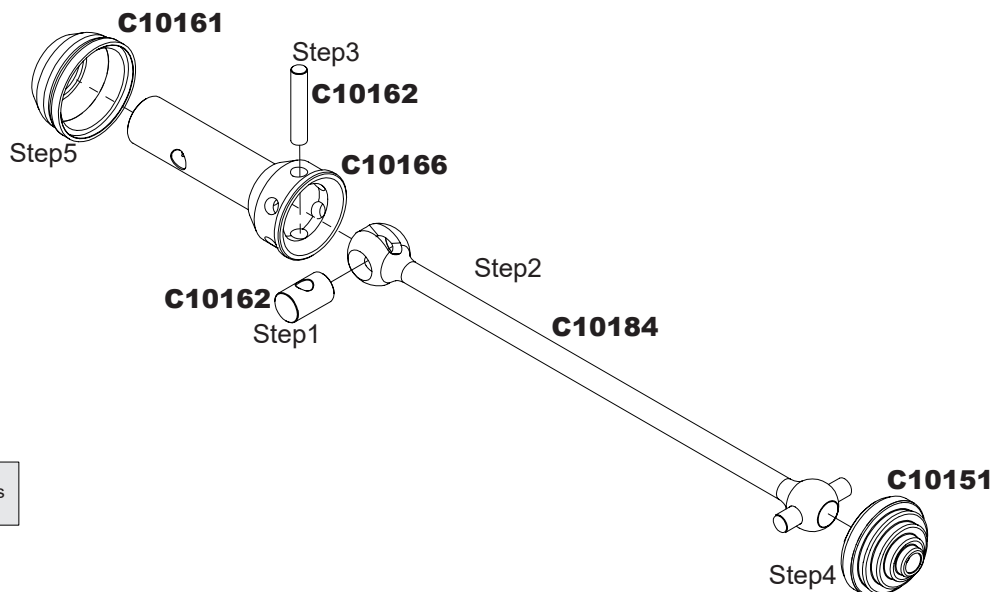
Rear Shock Tower Assembly



		3x22mm Screw*4pcs
		3x12mm Screw*2pcs
		3x14mm Screw*1pcs
		3x16mm Screw*6pcs
		3x16mm Screw*2pcs

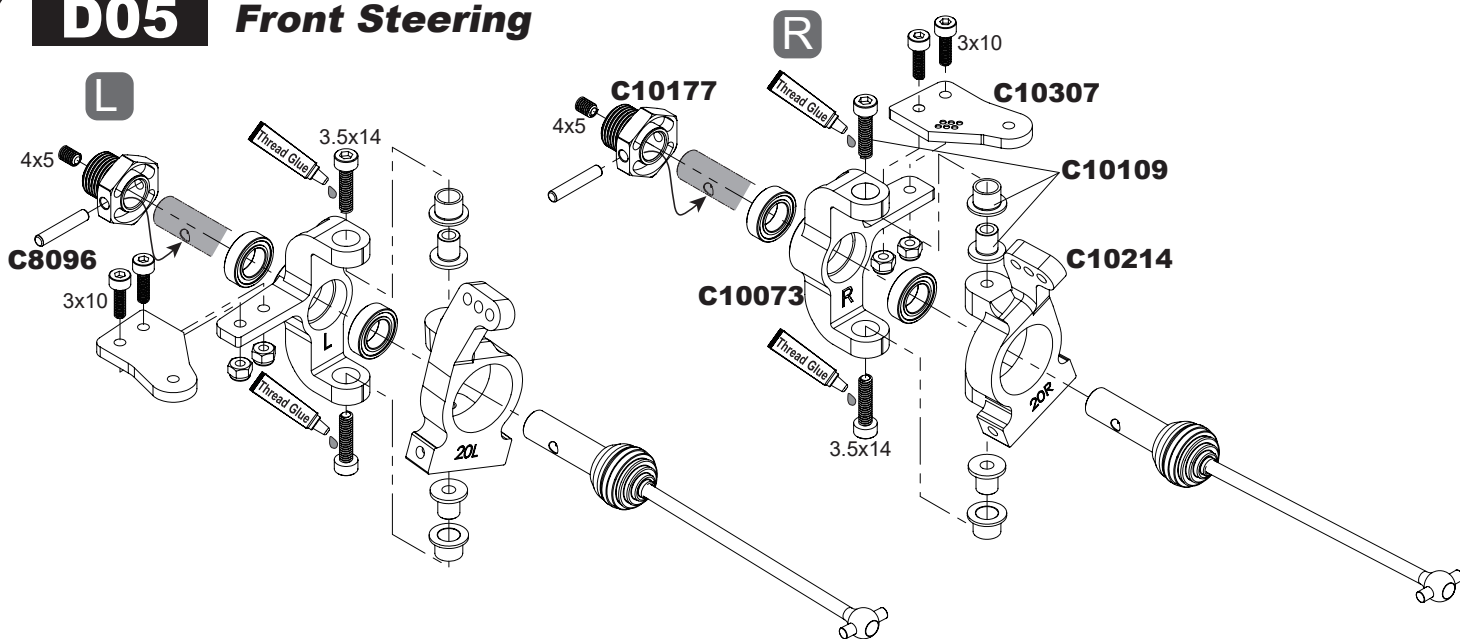
D04

CVD Assembly

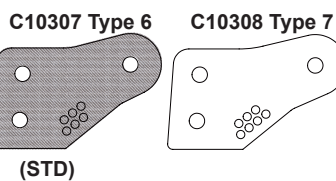
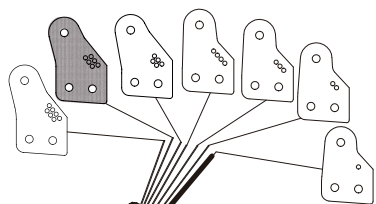
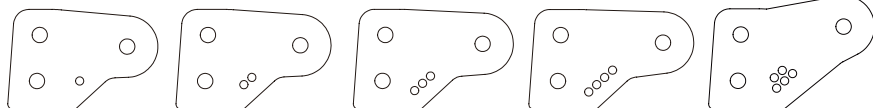


		2.5x13.2mm PIN*4pcs
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D05 Front Steering

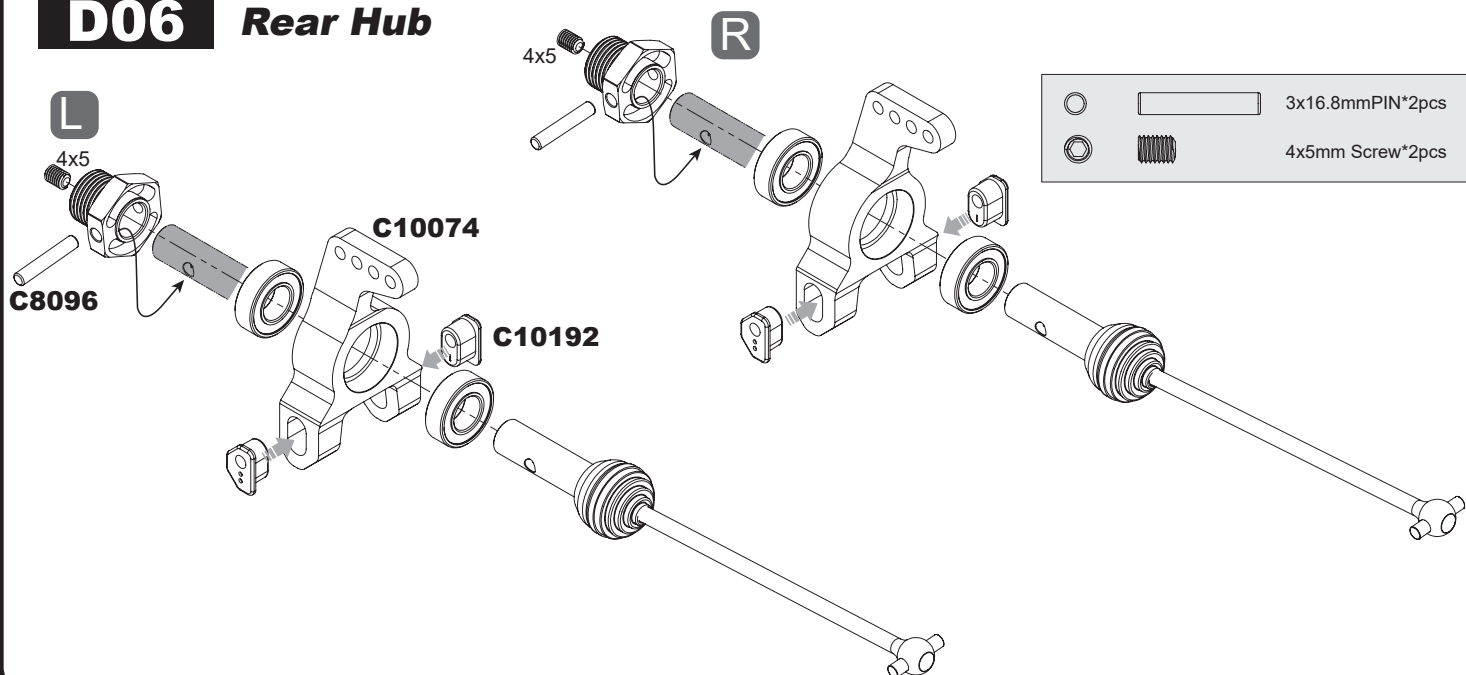


C10168 Type 1 C10169 Type 2 C10170 Type 3 C10171 Type 4 C10306 Type 5



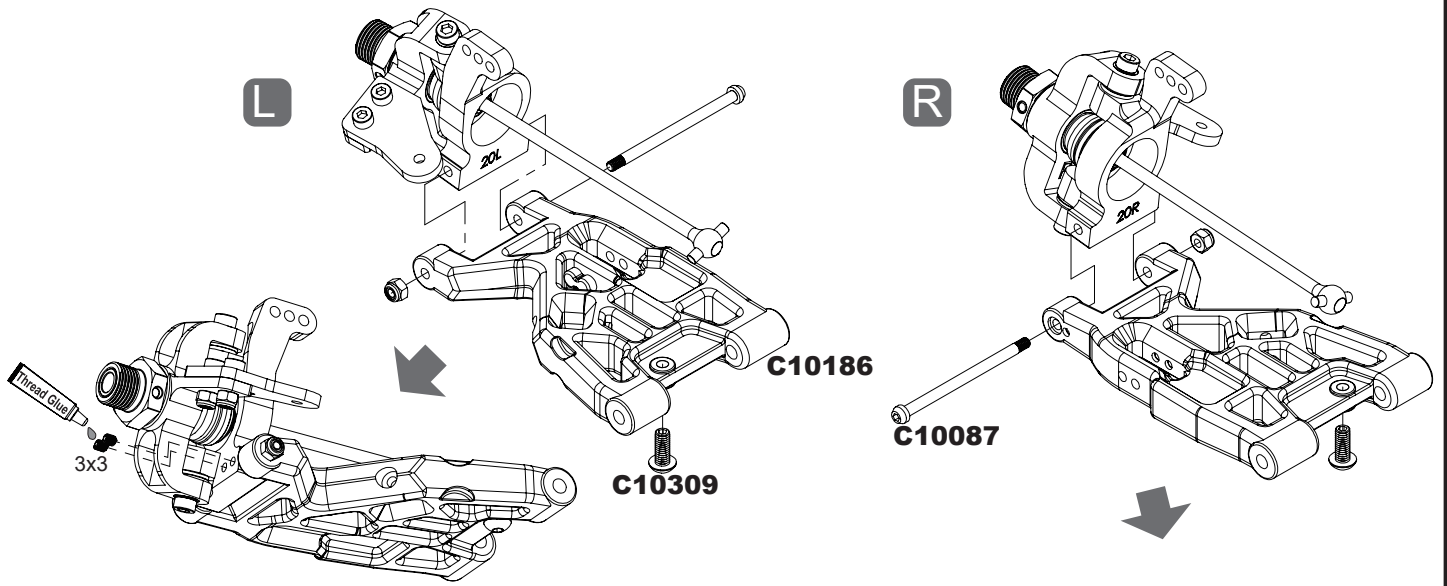
		3mm Lock Nut*4pcs
		Steering Block Bushing*4pcs
		Steering Block Bushing*4pcs
		3x16.8mm PIN*2pcs
		4x5mm Screw*2pcs
		3x10mm Screw*4pcs
		3.5x14mm Screw*4pcs

D06 Rear Hub

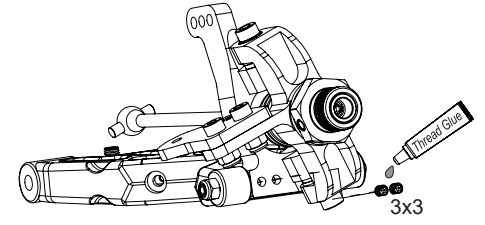


		3x16.8mm PIN*2pcs
		4x5mm Screw*2pcs

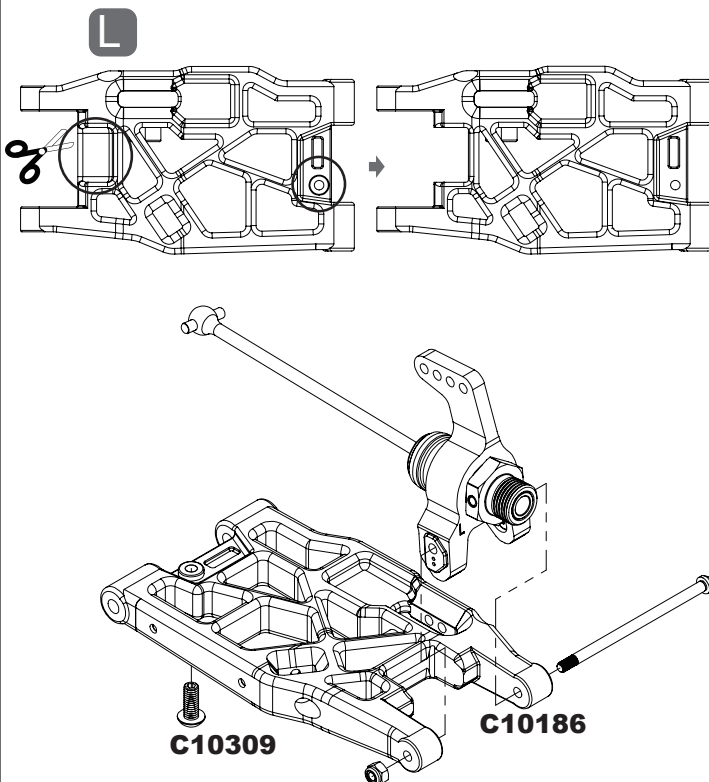
E01 Front Arm Set



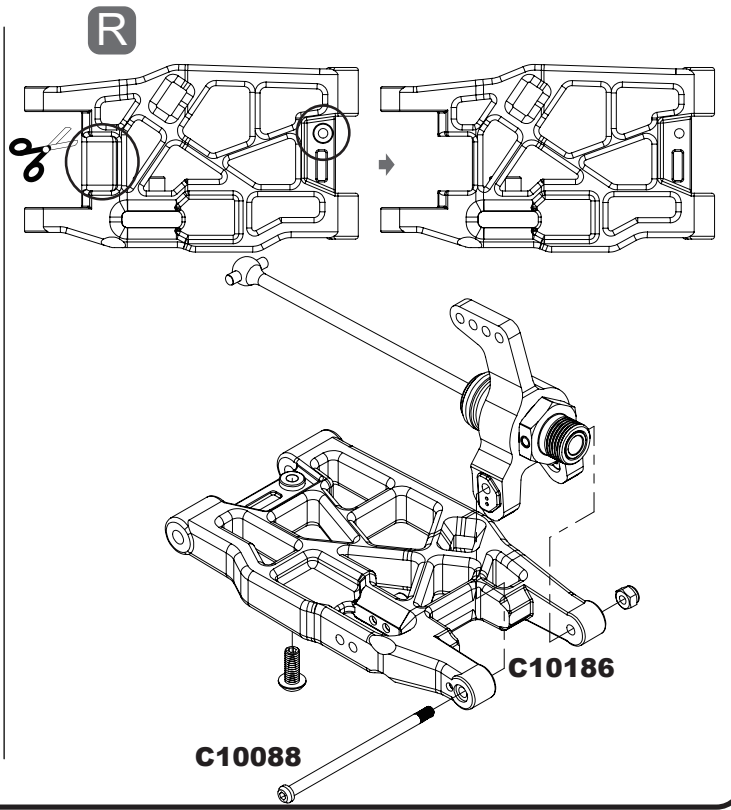
		3x3mm Screw*4pcs
		3mm Lock Nut*2pcs
		3x44 Shaft*2pcs











E02 Rear Arm Set

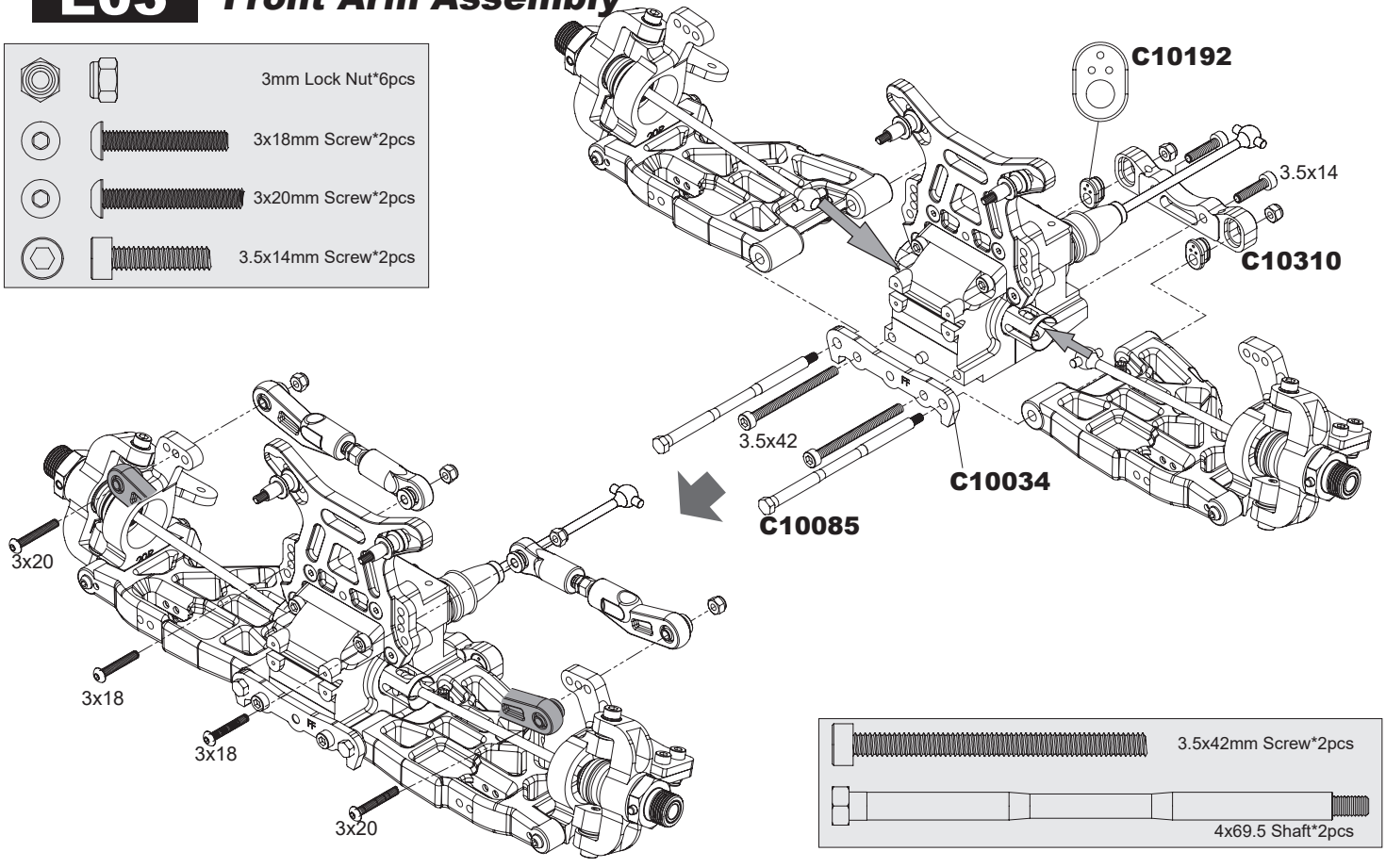


		3mm Lock Nut*2pcs
		3x49 Shaft*2pcs












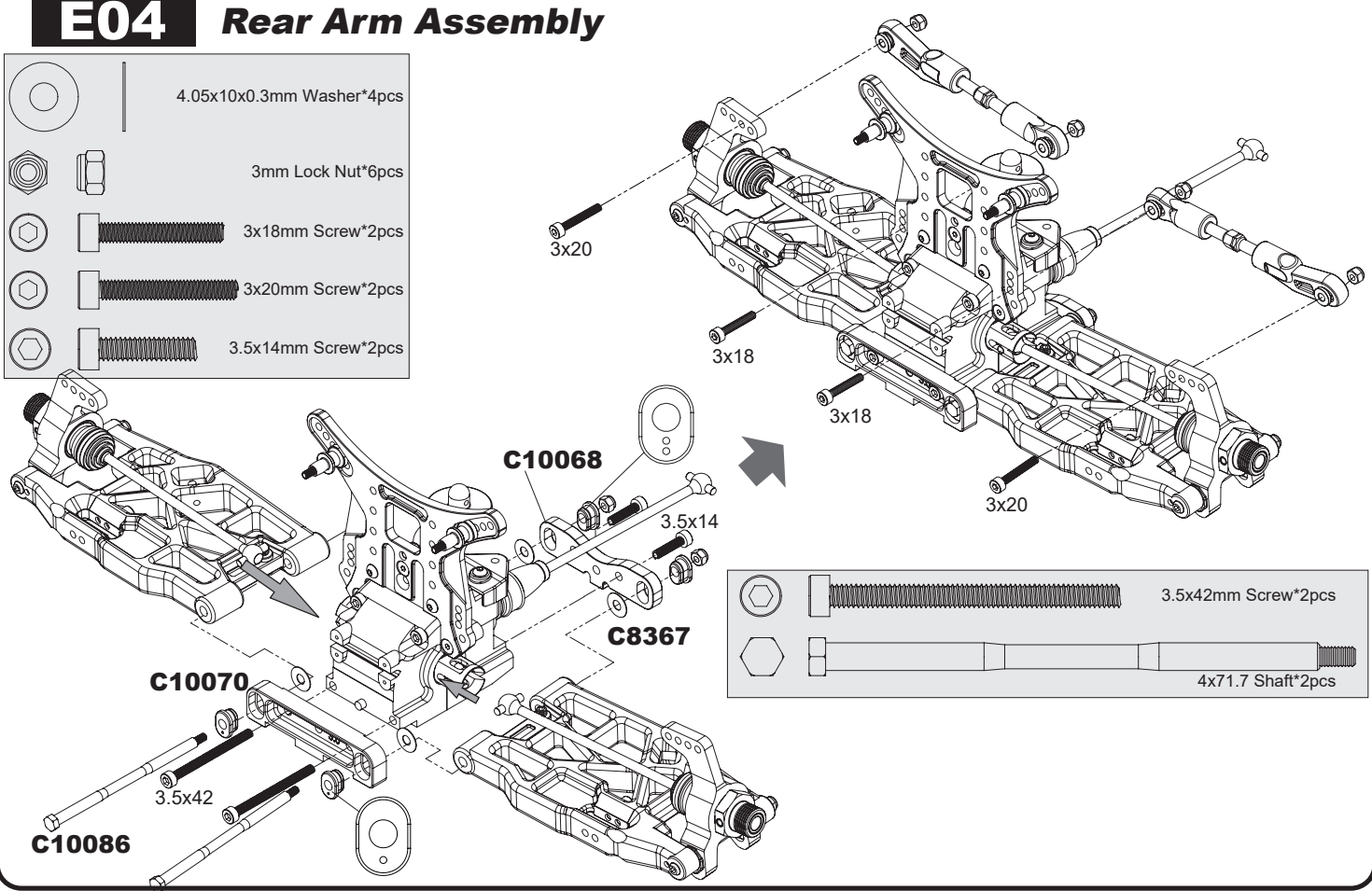
E03 Front Arm Assembly

-   3mm Lock Nut*6pcs
-   3x18mm Screw*2pcs
-   3x20mm Screw*2pcs
-   3.5x14mm Screw*2pcs

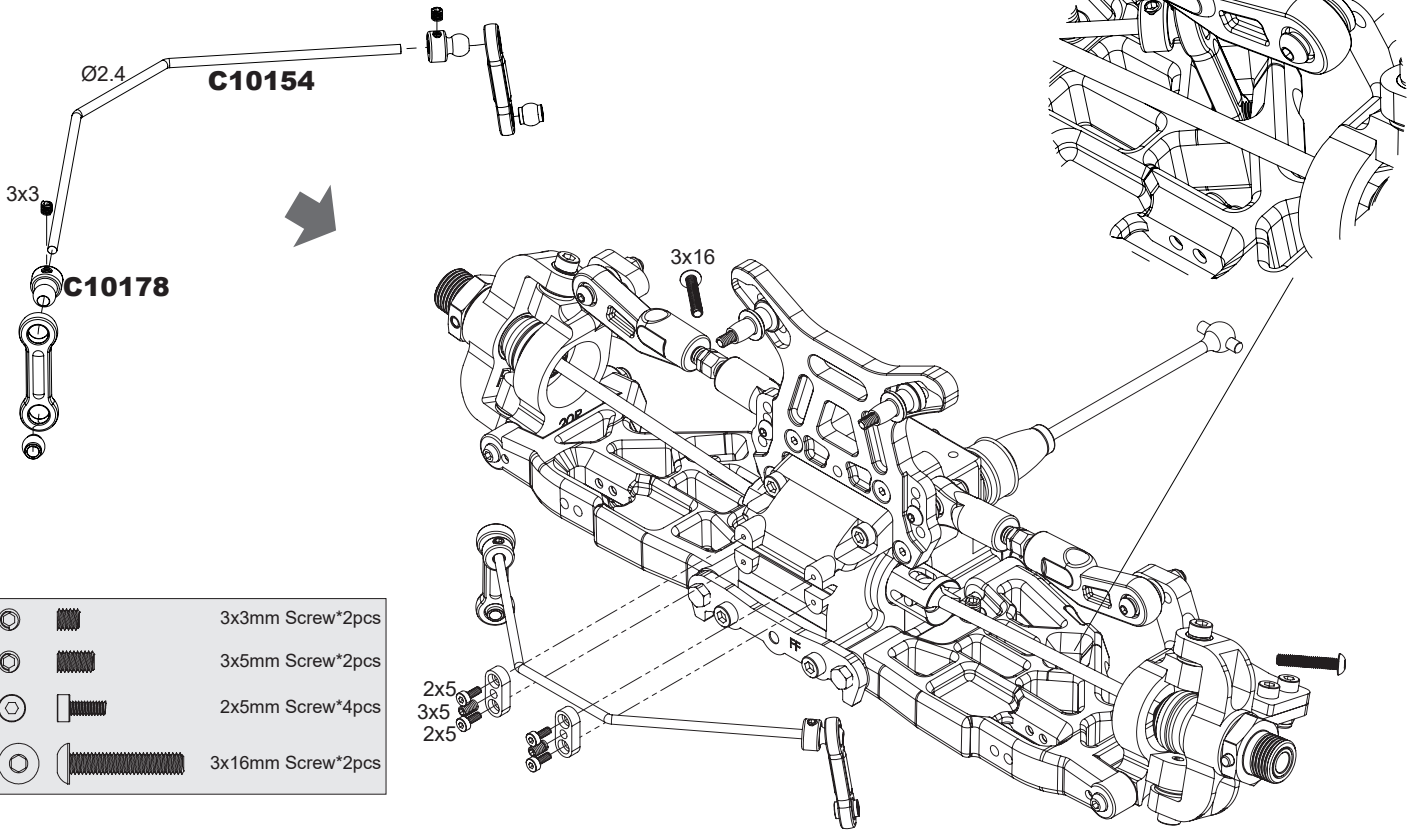


E04 Rear Arm Assembly

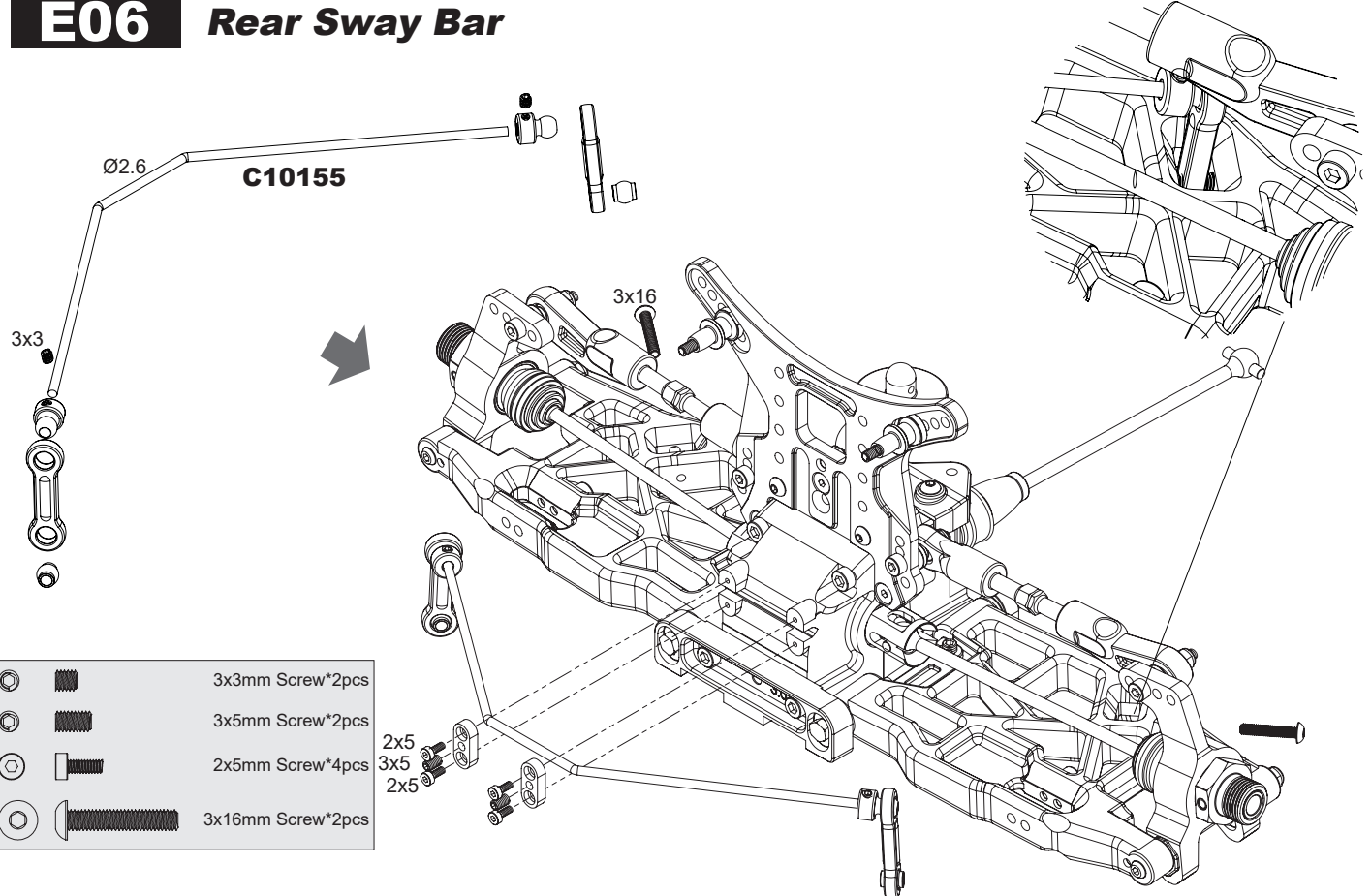
-  4.05x10x0.3mm Washer*4pcs
-   3mm Lock Nut*6pcs
-   3x18mm Screw*2pcs
-   3x20mm Screw*2pcs
-   3.5x14mm Screw*2pcs



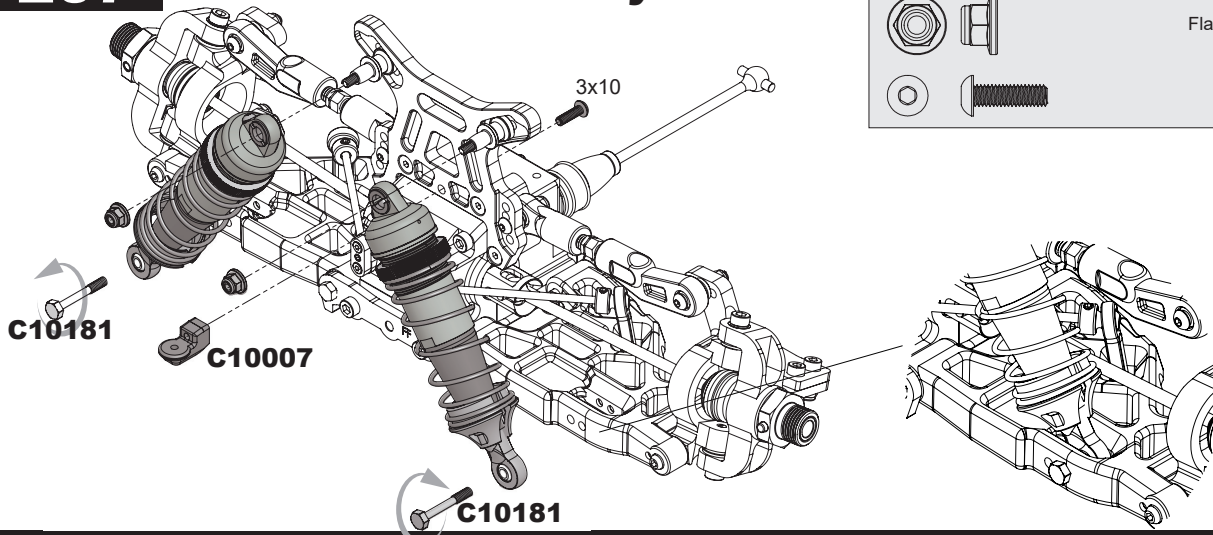
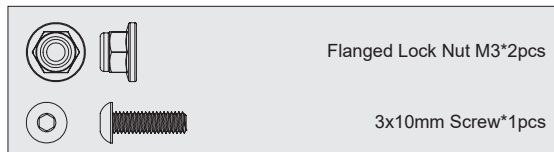
E05 Front Sway Bar



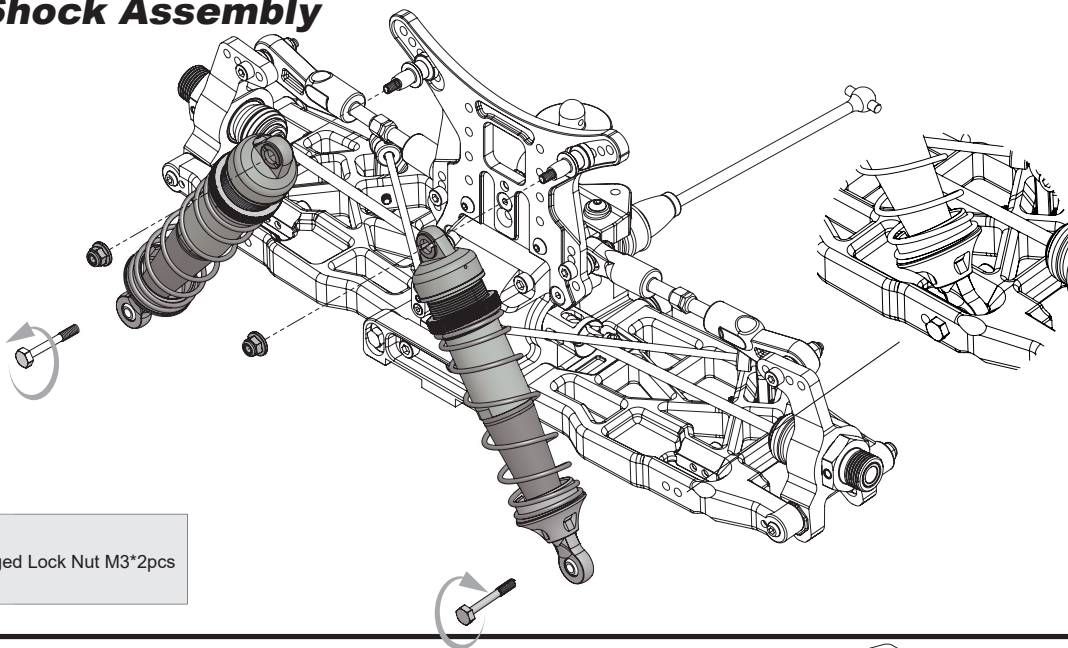
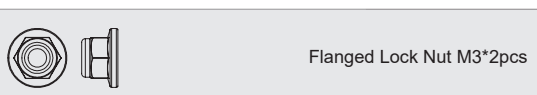
E06 Rear Sway Bar



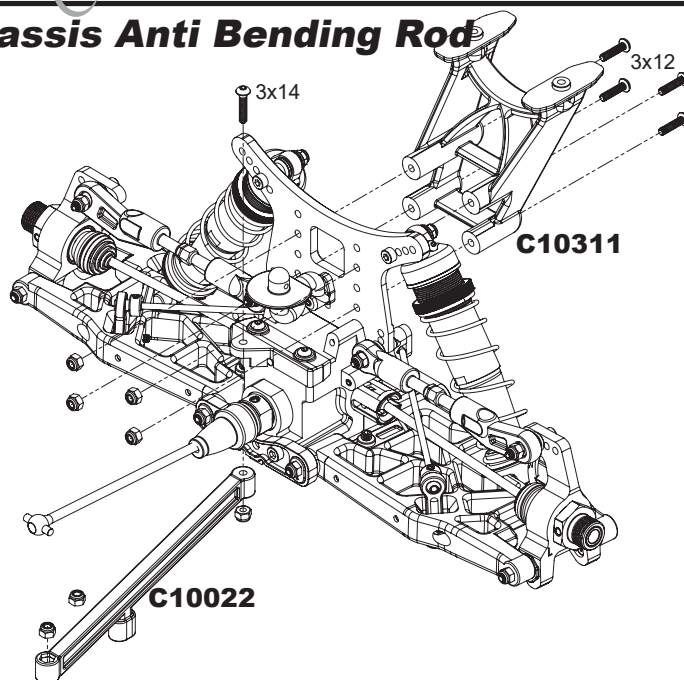
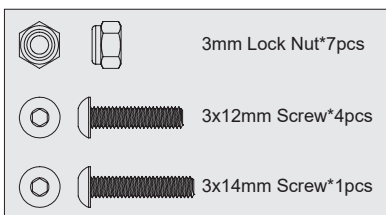
E07 Front Shock Assembly




E08 Rear Shock Assembly

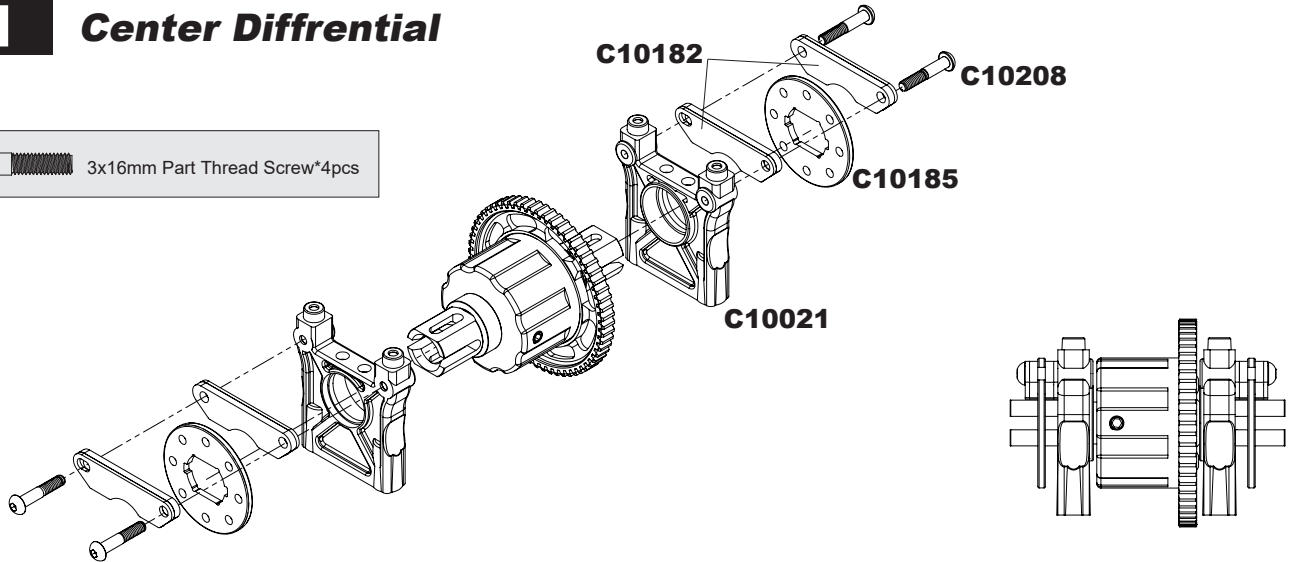


E09 Wing Mount and Rear Chassis Anti Bending Rod





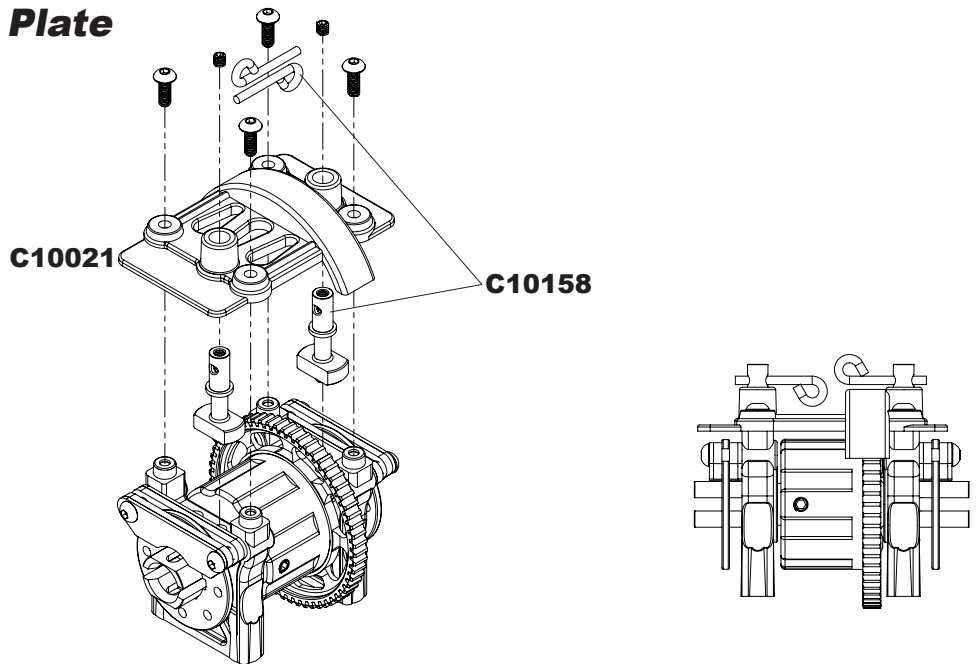
F01 Center Differential

 3x16mm Part Thread Screw*4pcs






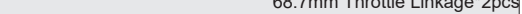


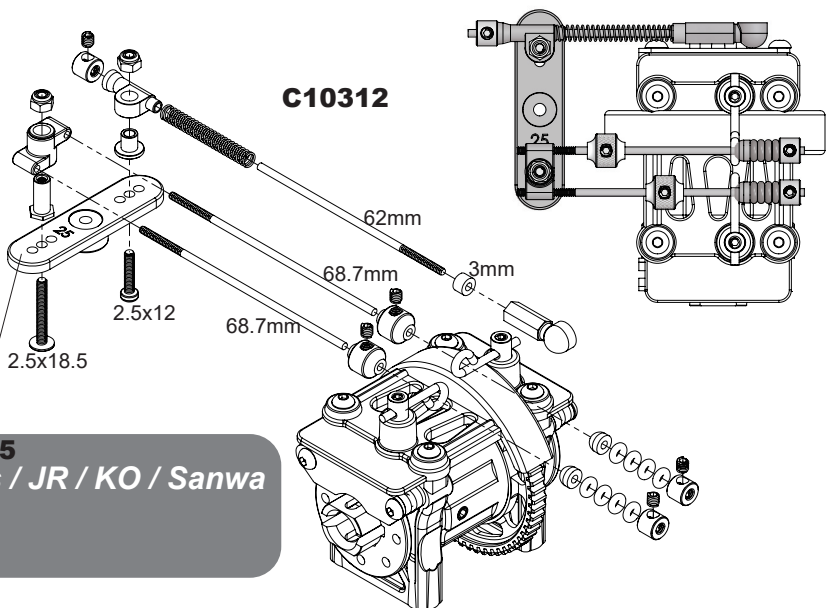
F02 Center Diff. Plate

 3x3mm Screw*2pcs
 3x8mm Screw*4pcs





F03 Brake Cam

 2.5mm Lock Nut*2pcs
 3x3mm Screw*5pcs
 2.5x12mm Screw*1pcs
 2.5x18.5mm Washer Screw*1pcs
 62mm Throttle Linkage*1pcs
 68.7mm Throttle Linkage*2pcs

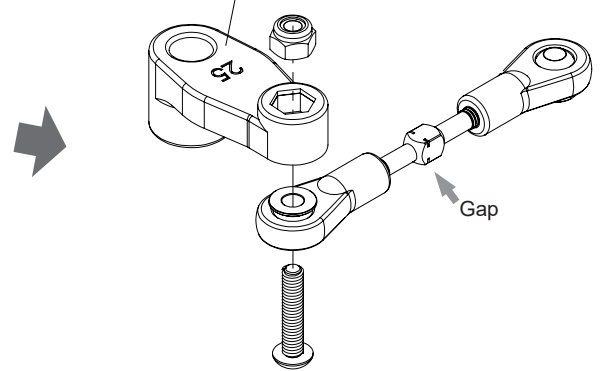
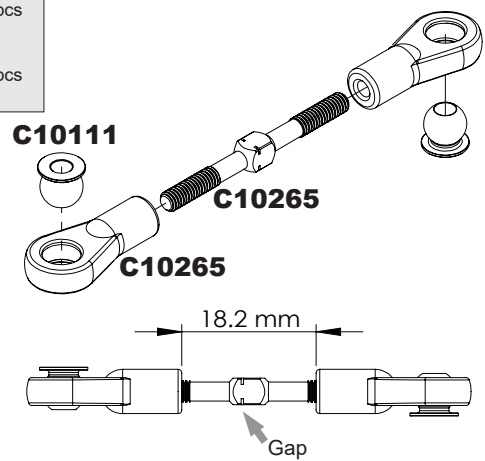
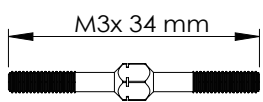


C10025
 23T ---Airtronics / JR / KO / Sanwa
 24T---Hitec
 25T---Futaba


G01 Steering Linkage

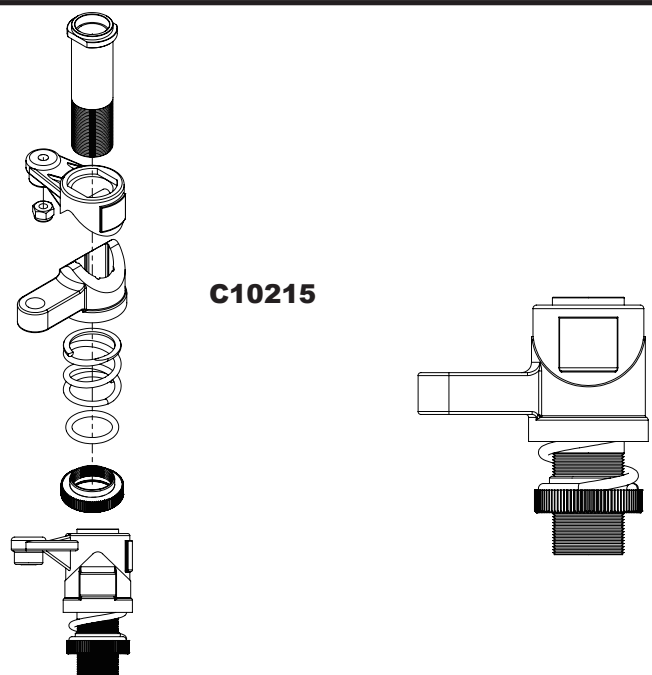
-  3x14mm Screw*1pcs
-  3mm Lock Nut*1pcs

- C10025**
23T ---Airtronics / JR / KO / Sanwa
24T---Hitec
25T---Futaba





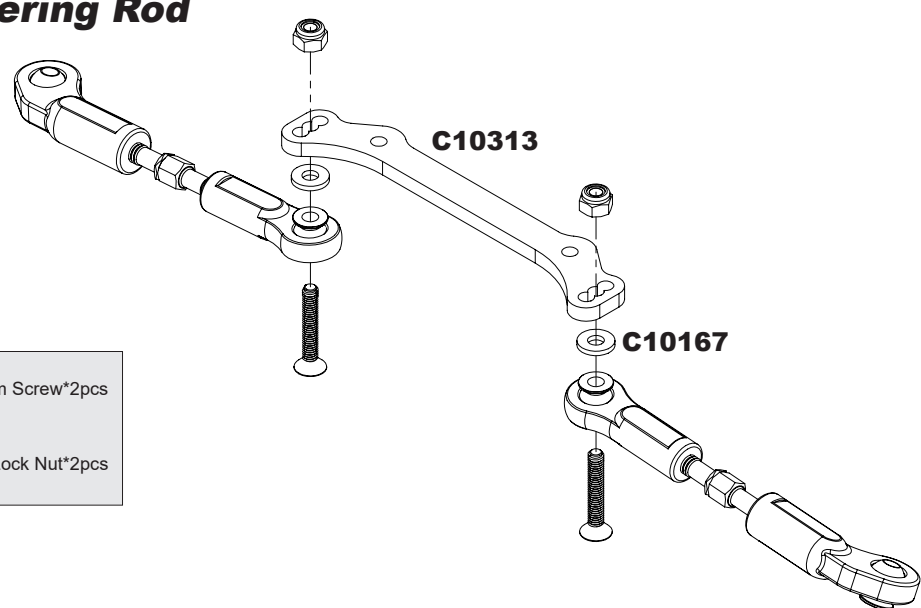
G02 Servo Saver (Right)

-  3mm Lock Nut*1pcs

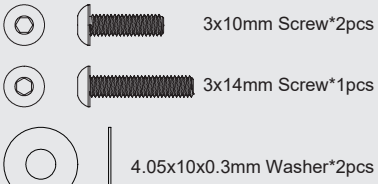
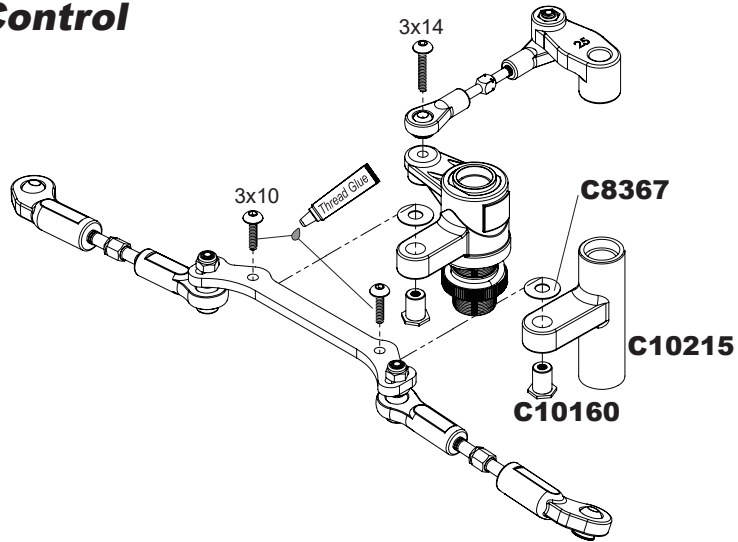


G03 Steering Rod

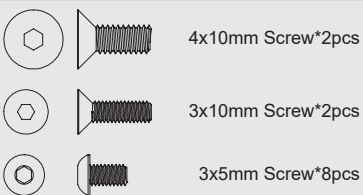
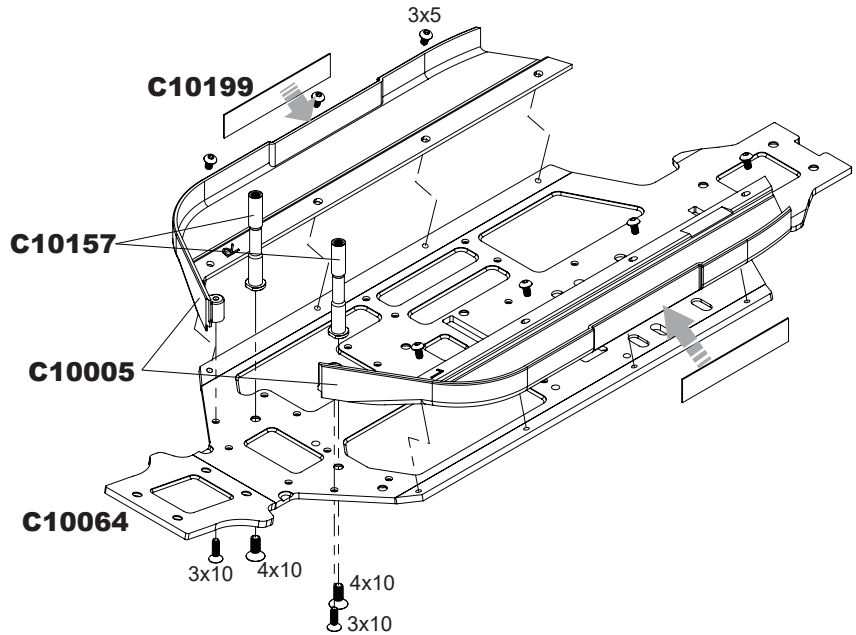
-  3x18mm Screw*2pcs
-  3mm Lock Nut*2pcs



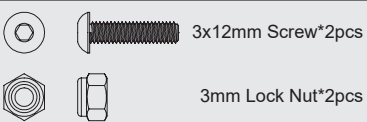
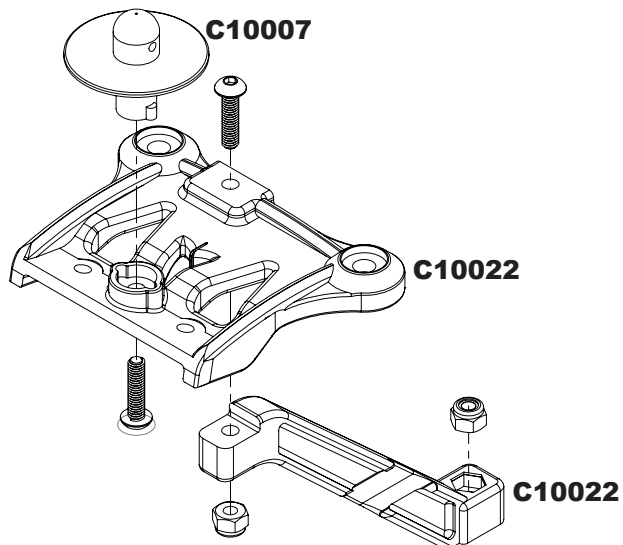
G04 Steering Control



G05 Chassis and Stone Guard

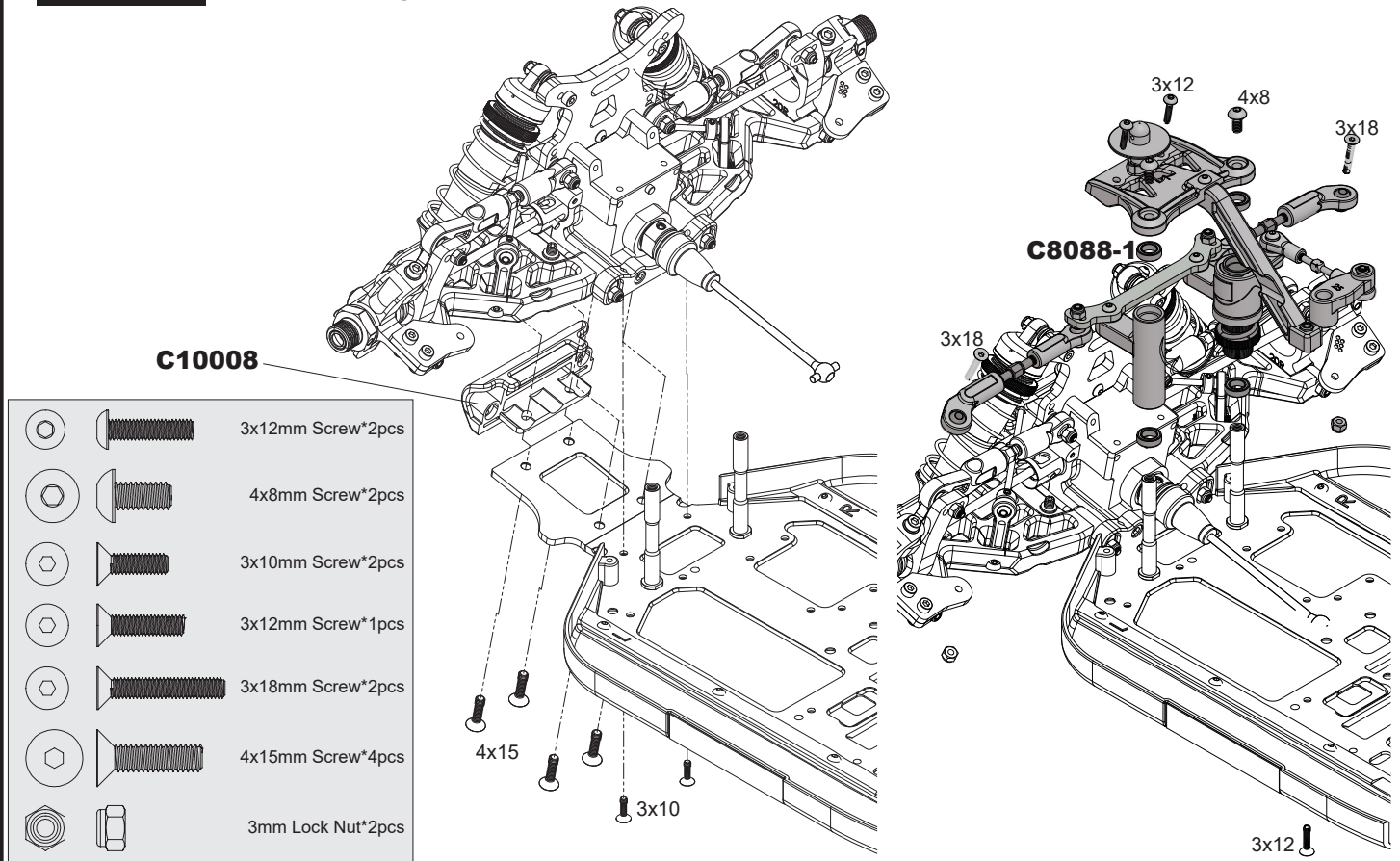


G06 Front Upper Plate



G07

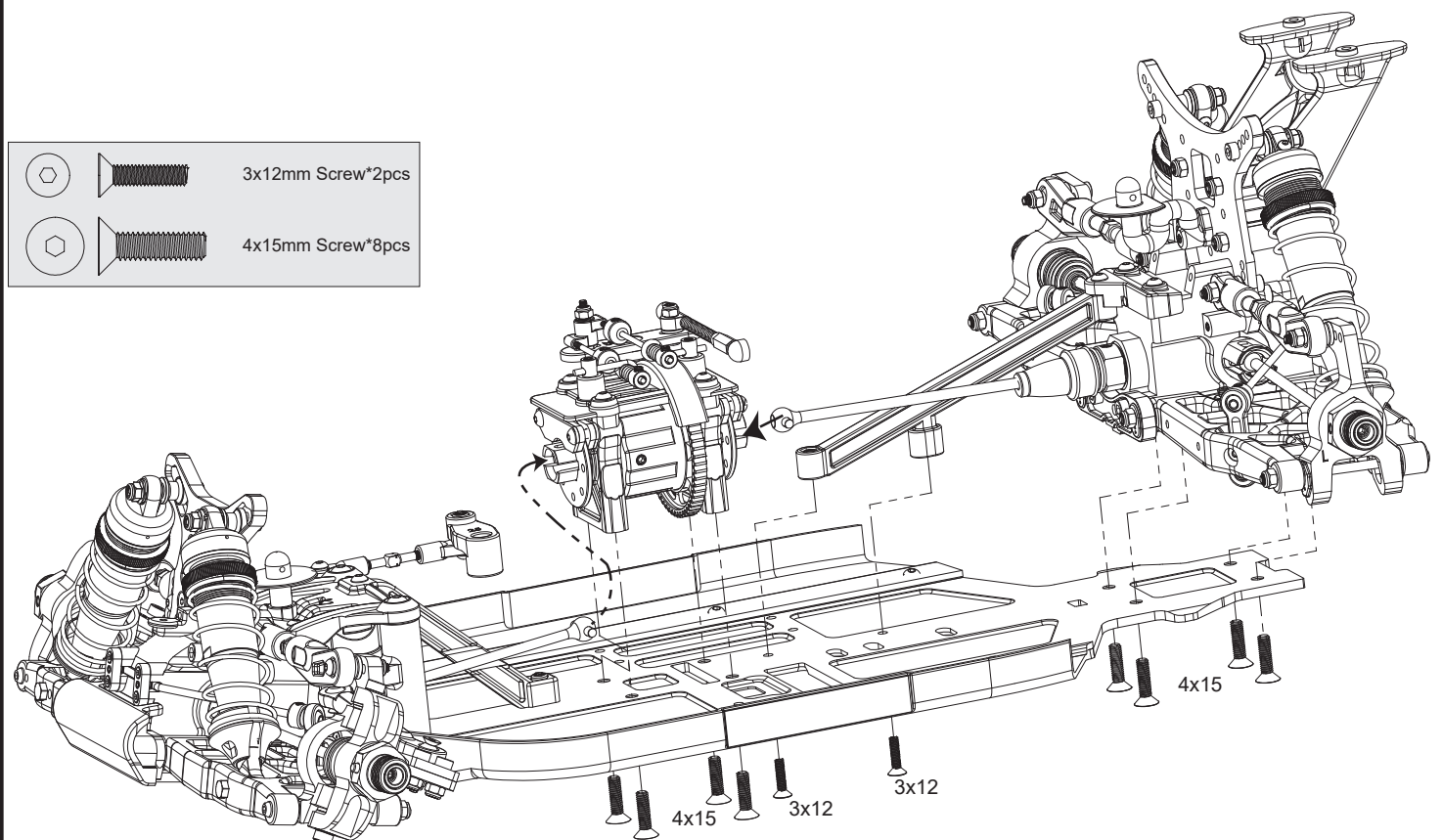
Assembly for Front Suspension to Chassis



- | | |
|--|-------------------|
| | 3x12mm Screw*2pcs |
| | 4x8mm Screw*2pcs |
| | 3x10mm Screw*2pcs |
| | 3x12mm Screw*1pcs |
| | 3x18mm Screw*2pcs |
| | 4x15mm Screw*4pcs |
| | 3mm Lock Nut*2pcs |

G08

Assembly for Center Diff and Rear Suspension to Chassis

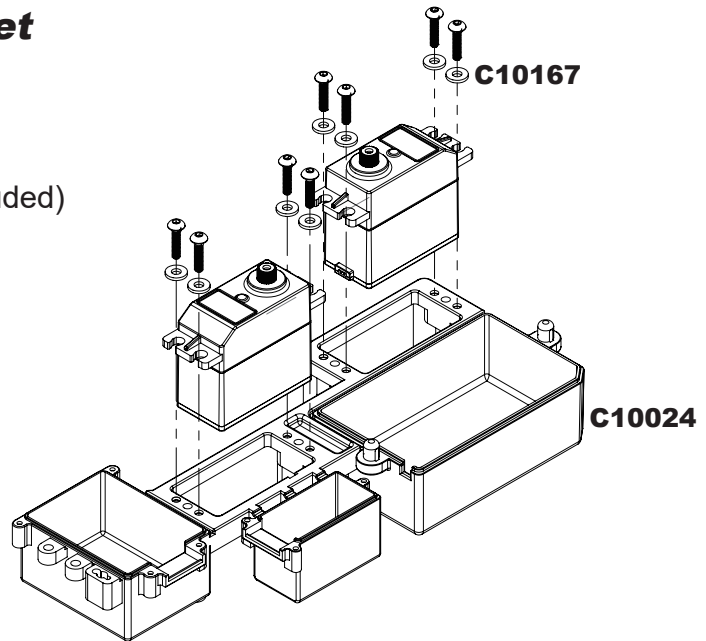






- | | |
|--|-------------------|
| | 3x12mm Screw*2pcs |
| | 4x15mm Screw*8pcs |

H01

Servo and Switch Set

※ Servos
(Not included)

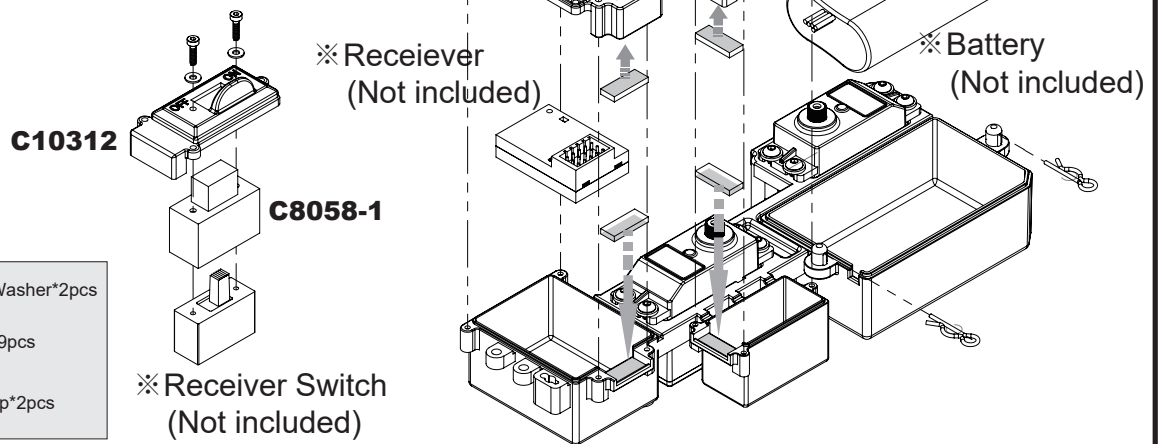





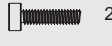

-   3x12mm Screw*8pcs
-   Alum. 3x7x1mm Washer*8pcs

H02

Radio Control System

Apply all foam tape first. Line switch wires and cover the lid.
 Put on battery and plug to switch,
 then cover battery box lid and fix with clip.
 Line up wires of servo and switch and plug to receiver.
 Pull aerial outside of receiver box,
 and then cover the lid of receiver box, lock it up.

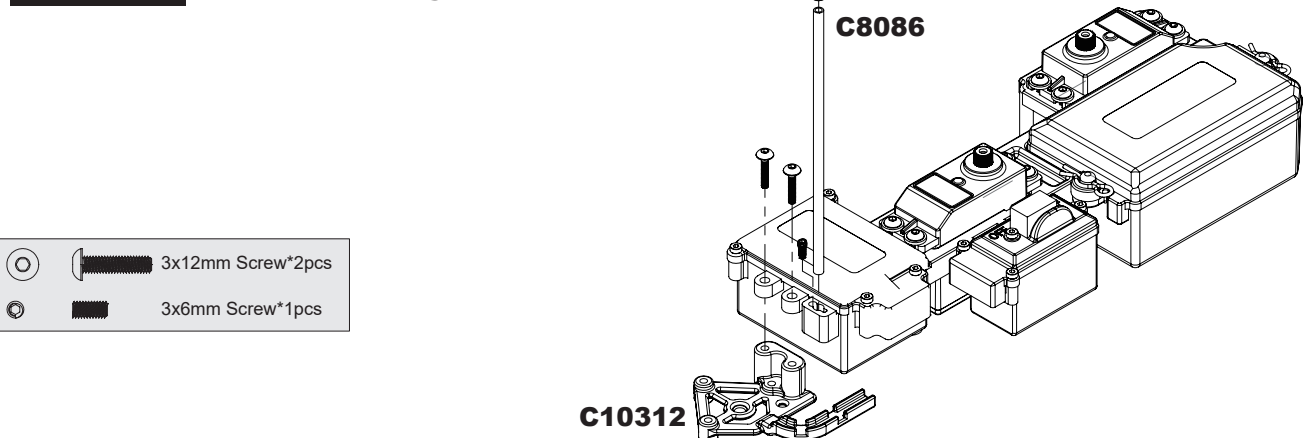






-   2.2x5x0.5mm Washer*2pcs
-   2x8mm Screw*9pcs
-  6mm R type Clip*2pcs

※ Receiver Switch
(Not included)

H03

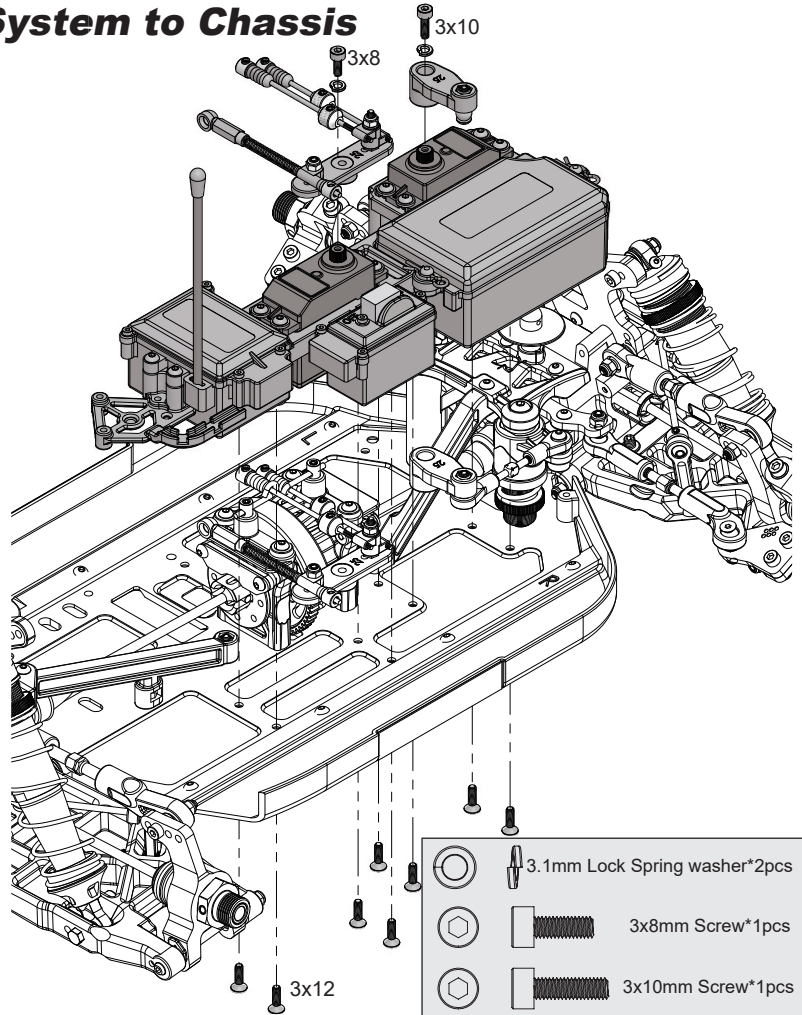
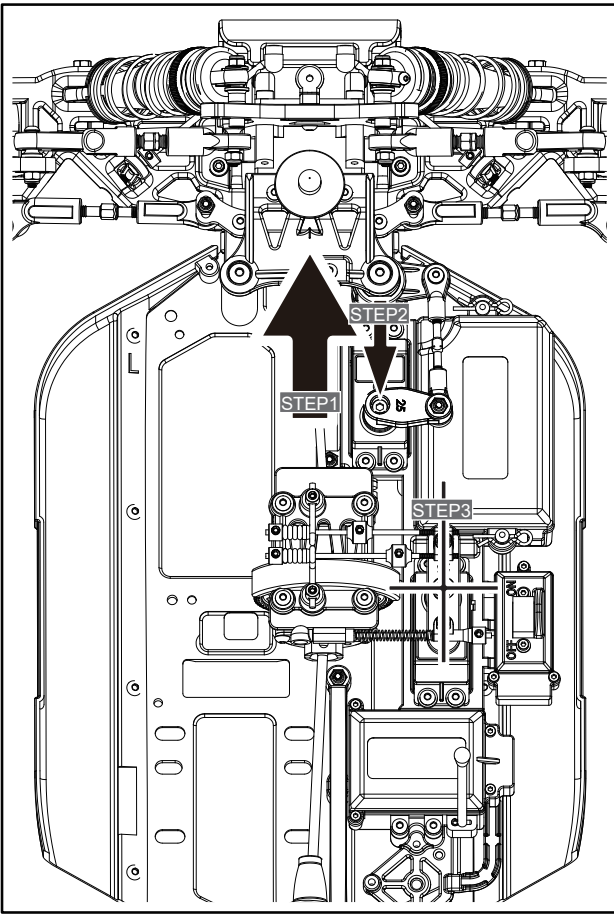
Receiver System



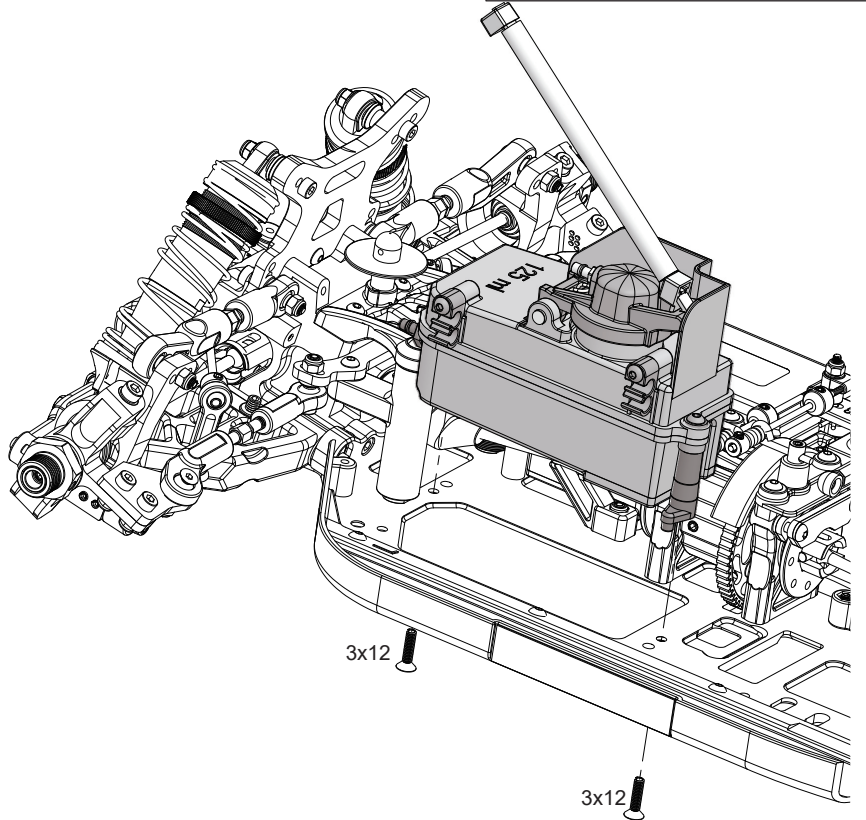
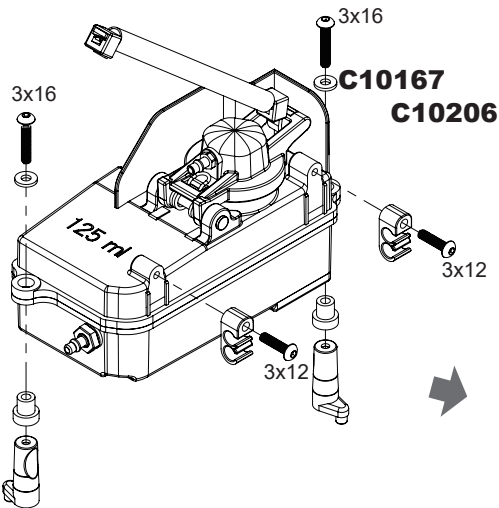
-   3x12mm Screw*2pcs
-   3x6mm Screw*1pcs

H04

Assembly Receiver System to Chassis



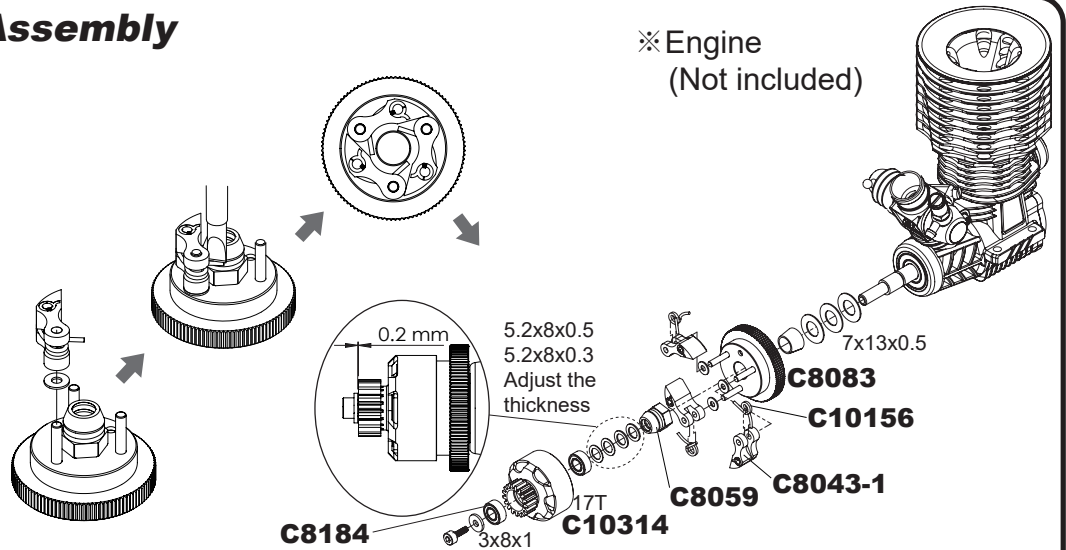
Set up Fuel Tank to Chassis



	Alum. 3x7x1mm Washer*2pcs
	3x12mm Screw*2pcs
	3x12mm Screw*2pcs
	3x16mm Screw*2pcs

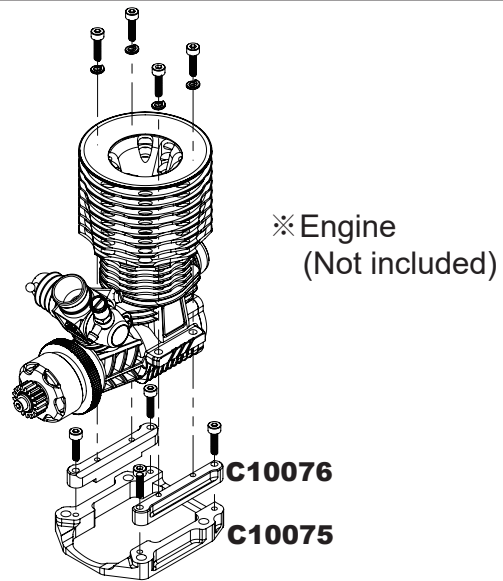
J01 Engine Assembly

	3x8mm Screw*1pcs
	3x8x1mm Washer*1pcs
	2.7x6x0.5mm Washer*3pcs
	5.2x8x0.3mm Washer*2pcs
	5.2x8x0.5mm Washer*2pcs
	7x13x0.5mm Washer*3pcs

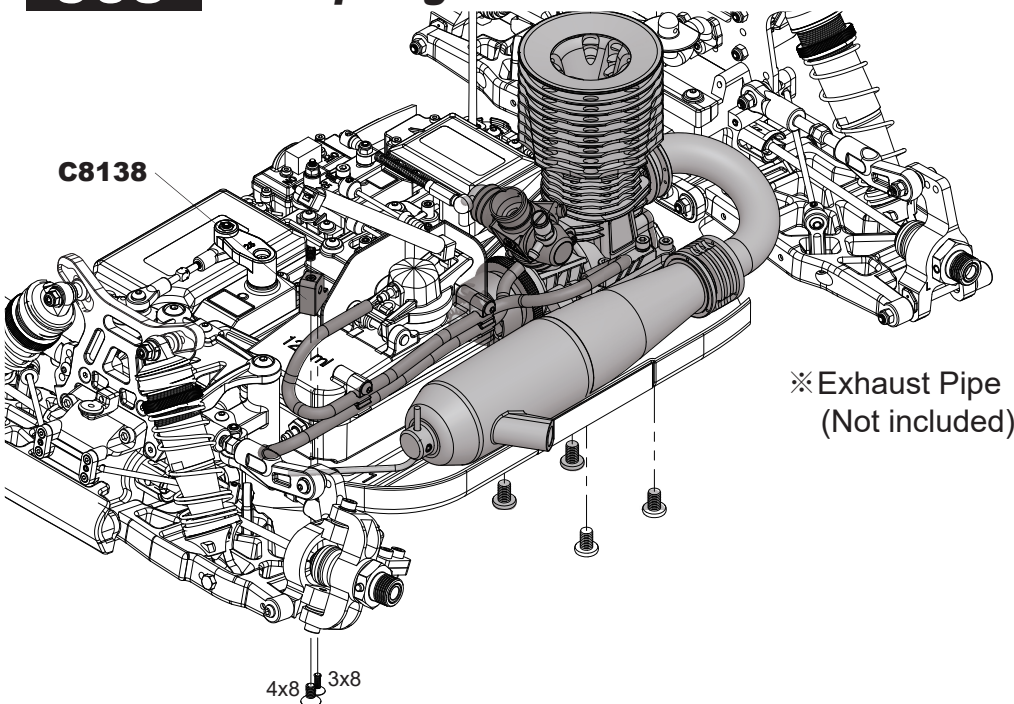


J02 Engine Mount Assembly

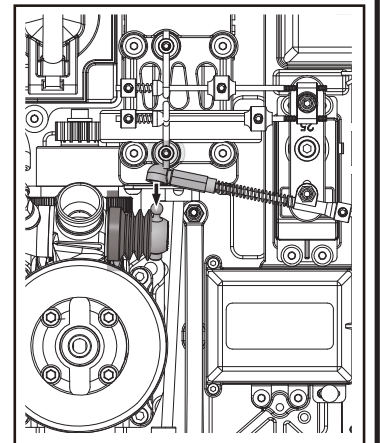
	3.1mm Lock Spring washer*4pcs
	3x12mm Screw*8pcs



J03 Set up Engine to Chassis

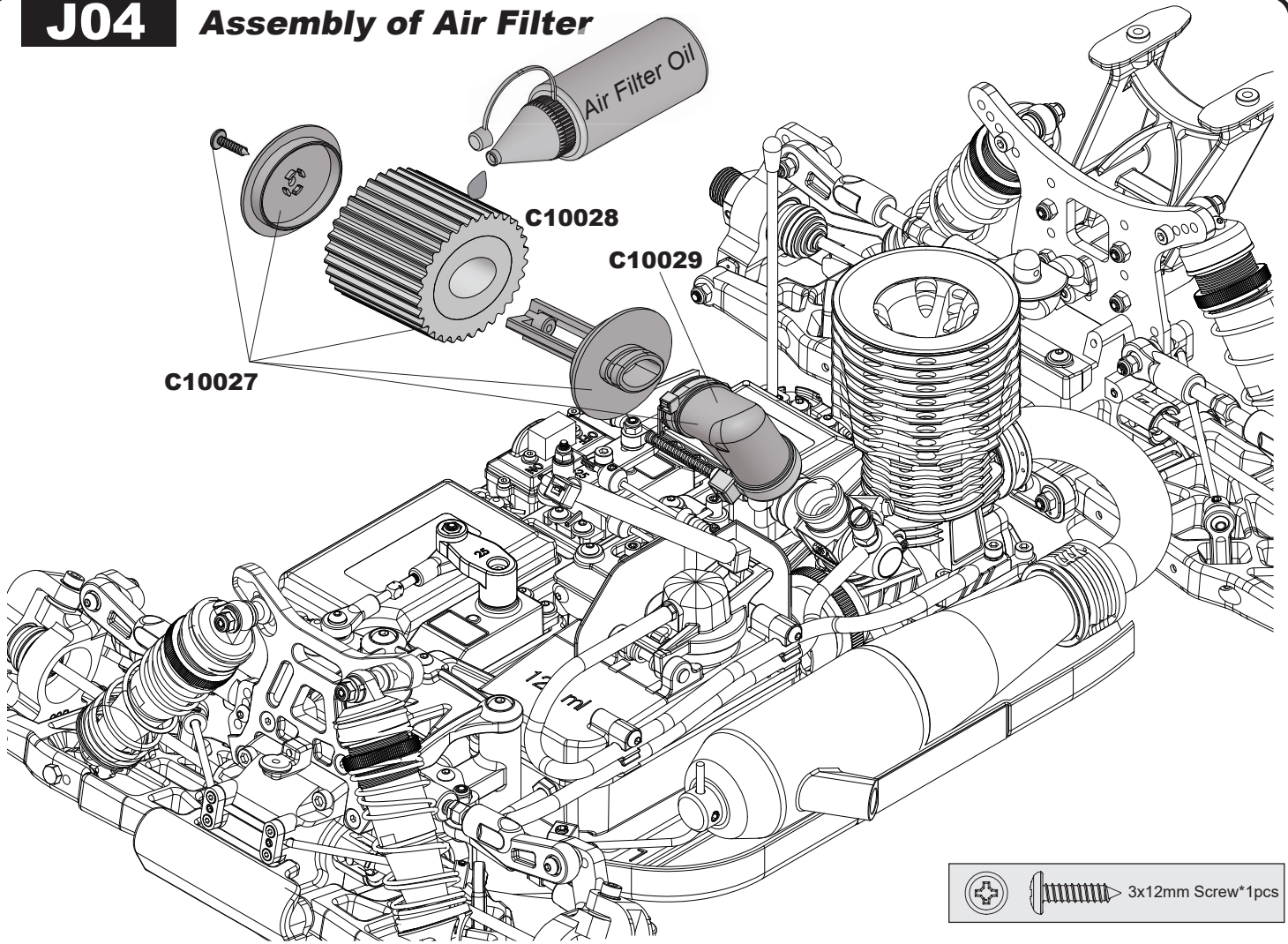


	4x5mm Screw*1pcs
	3x8mm Screw*1pcs
	4x8mm Screw*1pcs
	5x9.6mm Screw*4pcs



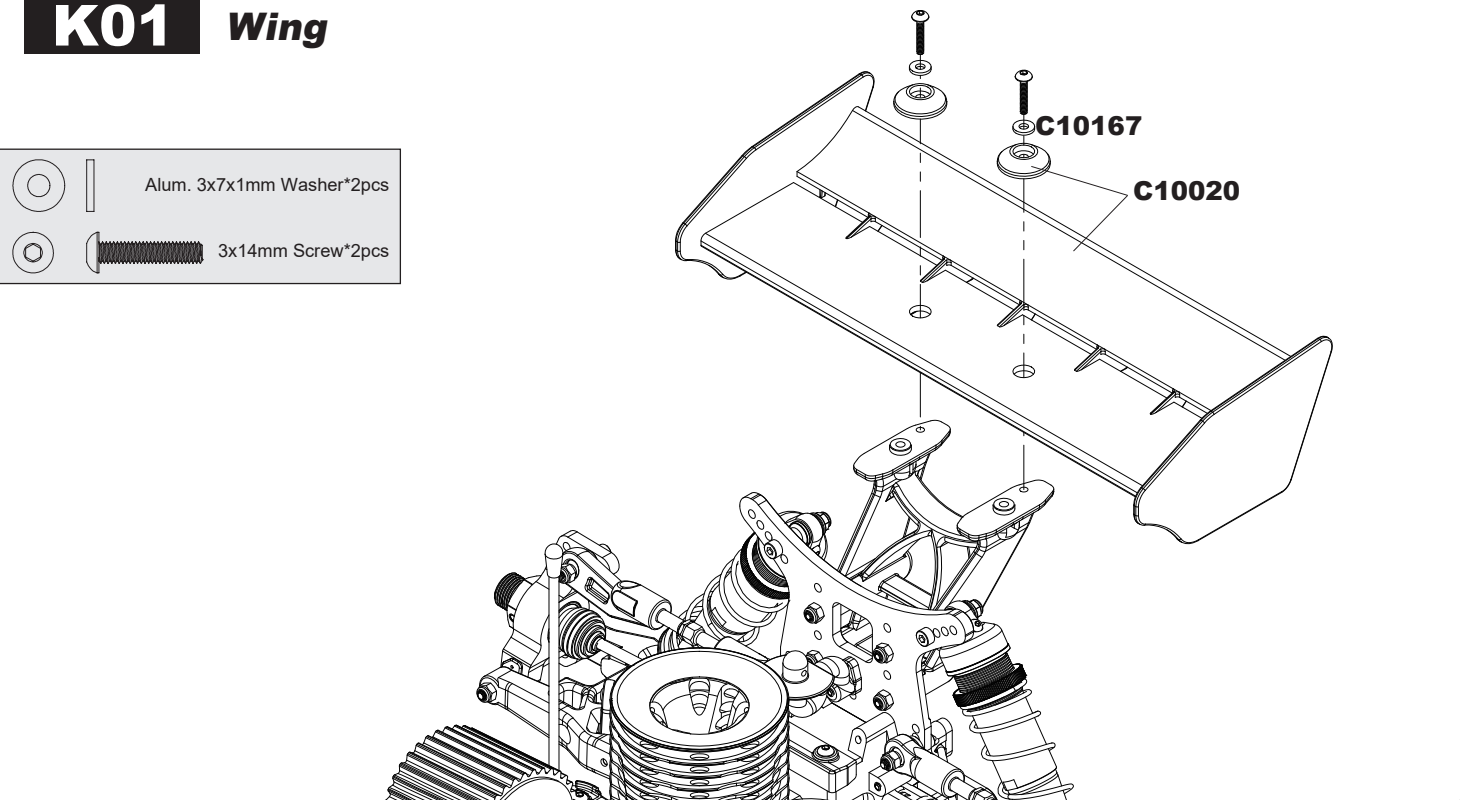
J04

Assembly of Air Filter



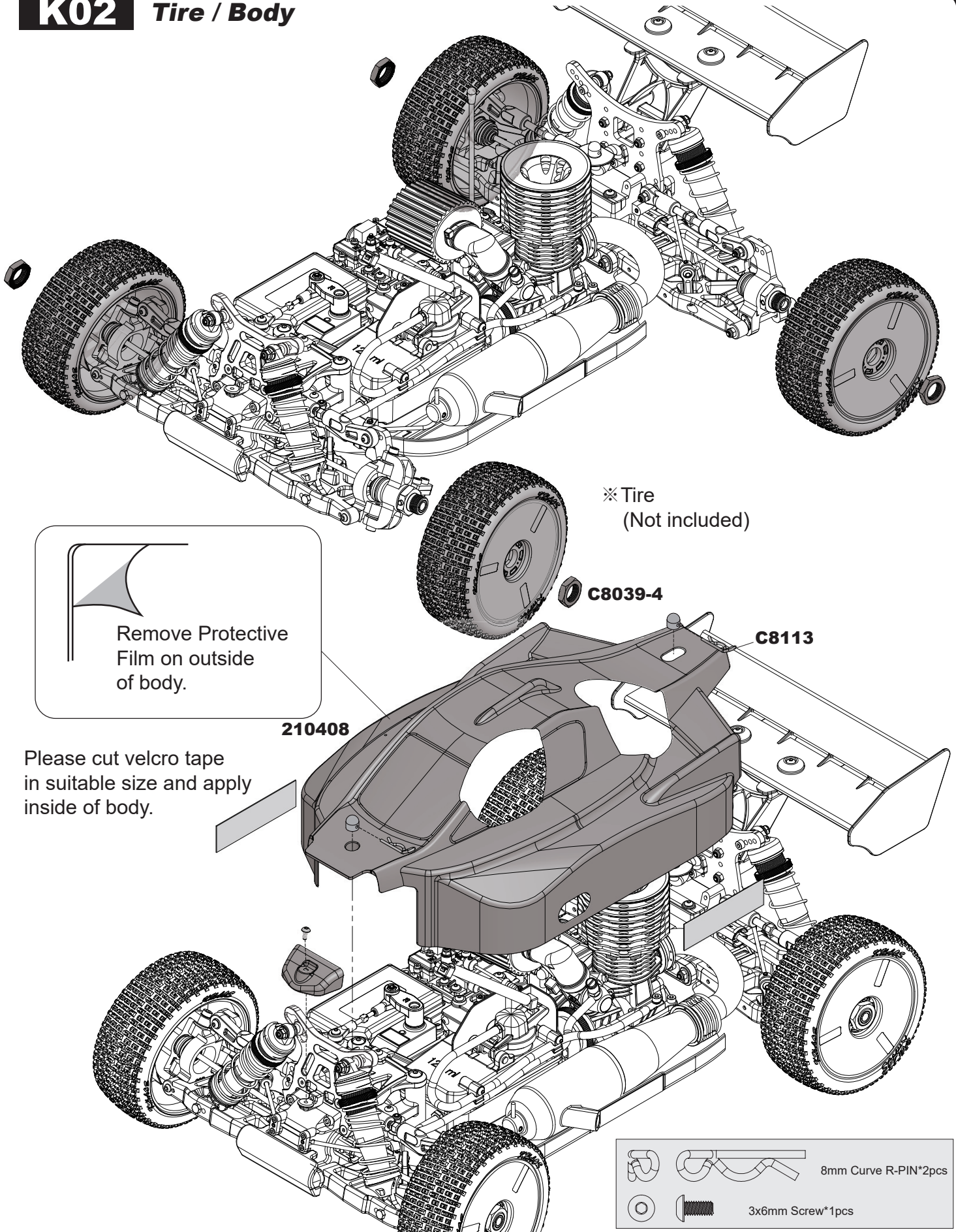
K01

Wing



K02

Tire / Body



Remove Protective Film on outside of body.

※ Tire (Not included)

C8039-4

C8113

210408

Please cut velcro tape in suitable size and apply inside of body.

- 8mm Curve R-PIN*2pcs
- 3x6mm Screw*1pcs

Standard Setup Sheet

Driver _____

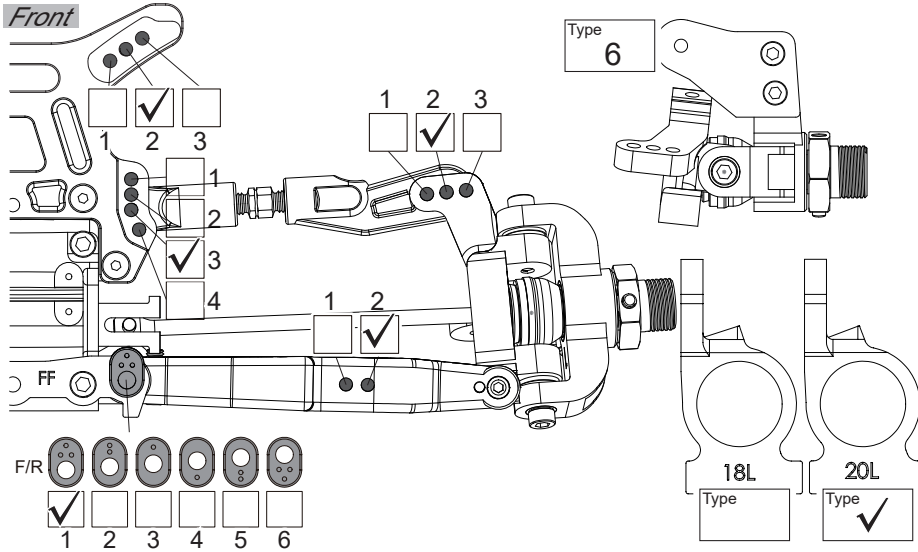
Date _____

Track _____

Event _____

Track Condition _____

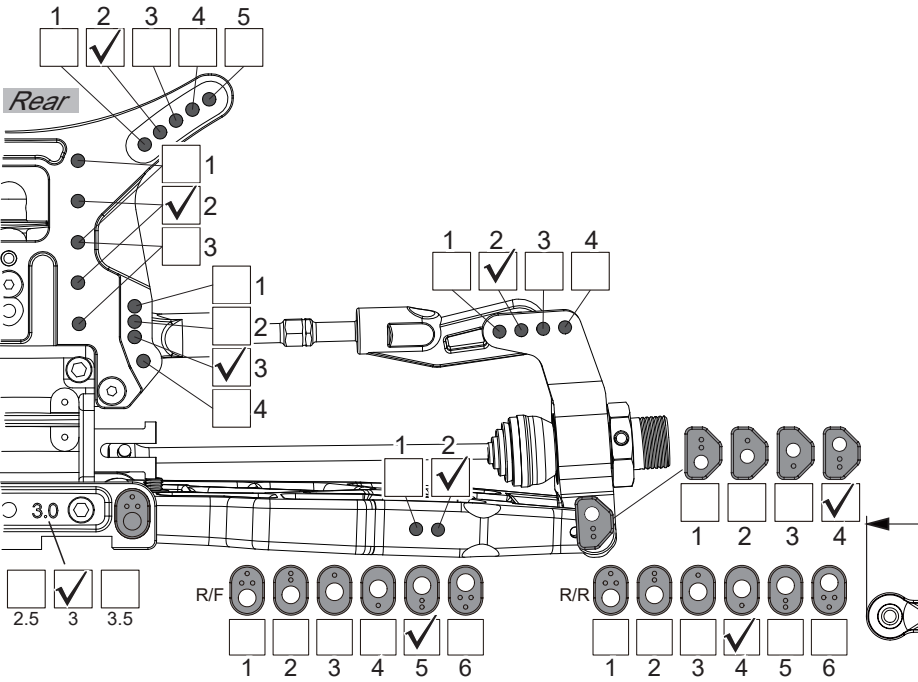
Front



Ride Height 27 mm
 Camber Angle 1°
 Toe Angle -2°
 Sway Bar 2.4 mm
 Shock Length 110 mm

Shocks	
Oil	C&Y #500
Piston	1.4x5
Bladder	C&Y
Spring	1.4x67x6.67
Notes	

Rear



Ride Height 27 mm
 Camber Angle 2°
 Sway Bar 2.6 mm
 Shock Length 128 mm

Shocks	
Oil	C&Y #500
Piston	1.4x5
Bladder	C&Y
Spring	1.5x84x9.5
Notes	

Engine
Brand _____
Spur Gear _____
Clutch Bell _____
Clutch Shoe _____
Clutch Springs _____
Glow Plug _____

Engine
Glow Fuel _____
Pipe Brand/Model _____
Notes _____

Tire	
Front	Rear
Brand _____	Brand _____
Compound _____	Compound _____
Insert _____	Insert _____
Wheel _____	Wheel _____
Notes _____	Notes _____

Diff Oils		
	Brand	Oil
Front	C&Y	7K
Center	C&Y	5K
Rear	C&Y	2K

Setup Sheet

Driver _____

Date _____

Track _____

Event _____

Track Condition _____

Front

Type _____

Ride Height _____ mm

Camber Angle _____

Toe Angle _____

Sway Bar _____ mm

Shock Length _____ mm

18L Type _____

20L Type _____

Shocks	
Oil	_____
Piston	_____
Bladder	_____
Spring	_____
Notes	_____

F/R 1 2 3 4 5 6

Rear

1 2 3 4 5

1 2 3 4

1 2 3 4

3.0

2.5 3 3.5

R/F 1 2 3 4 5 6

R/R 1 2 3 4 5 6

Ride Height _____ mm

Camber Angle _____

Sway Bar _____ mm

Shock Length _____ mm

Shocks	
Oil	_____
Piston	_____
Bladder	_____
Spring	_____
Notes	_____

Engine
Brand _____
Spur Gear _____
Clutch Bell _____
Clutch Shoe _____
Clutch Springs _____
Glow Plug _____

Engine
Glow Fuel _____
Pipe Brand/Model _____
Notes _____

Tire	
Front	Rear
Brand _____	Brand _____
Compound _____	Compound _____
Insert _____	Insert _____
Wheel _____	Wheel _____
Notes _____	Notes _____

Diff Oils	
Brand	Oil
Front _____	_____
Center _____	_____
Rear _____	_____

Setup Sheet

Driver _____

Date _____

Track _____

Event _____

Track Condition _____

Front

Type _____

Ride Height _____ mm

Camber Angle _____

Toe Angle _____

Sway Bar _____ mm

Shock Length _____ mm

Shocks	
Oil	_____
Piston	_____
Bladder	_____
Spring	_____
Notes	_____

F/R

1 2 3 4 5 6

18L Type _____

20L Type _____

Rear

1 2 3 4 5

1 2 3 4

1 2 3 4

1 2

3.0

2.5 3 3.5

R/F

R/R

1 2 3 4 5 6

1 2 3 4

Ride Height _____ mm

Camber Angle _____

Sway Bar _____ mm

Shock Length _____ mm

Shocks	
Oil	_____
Piston	_____
Bladder	_____
Spring	_____
Notes	_____

Engine
Brand _____
Spur Gear _____
Clutch Bell _____
Clutch Shoe _____
Clutch Springs _____
Glow Plug _____

Engine
Glow Fuel _____
Pipe Brand/Model _____
Notes _____

Tire	
Front	Rear
Brand _____	Brand _____
Compound _____	Compound _____
Insert _____	Insert _____
Wheel _____	Wheel _____
Notes _____	Notes _____

Diff Oils	
Brand	Oil
Front _____	_____
Center _____	_____
Rear _____	_____

