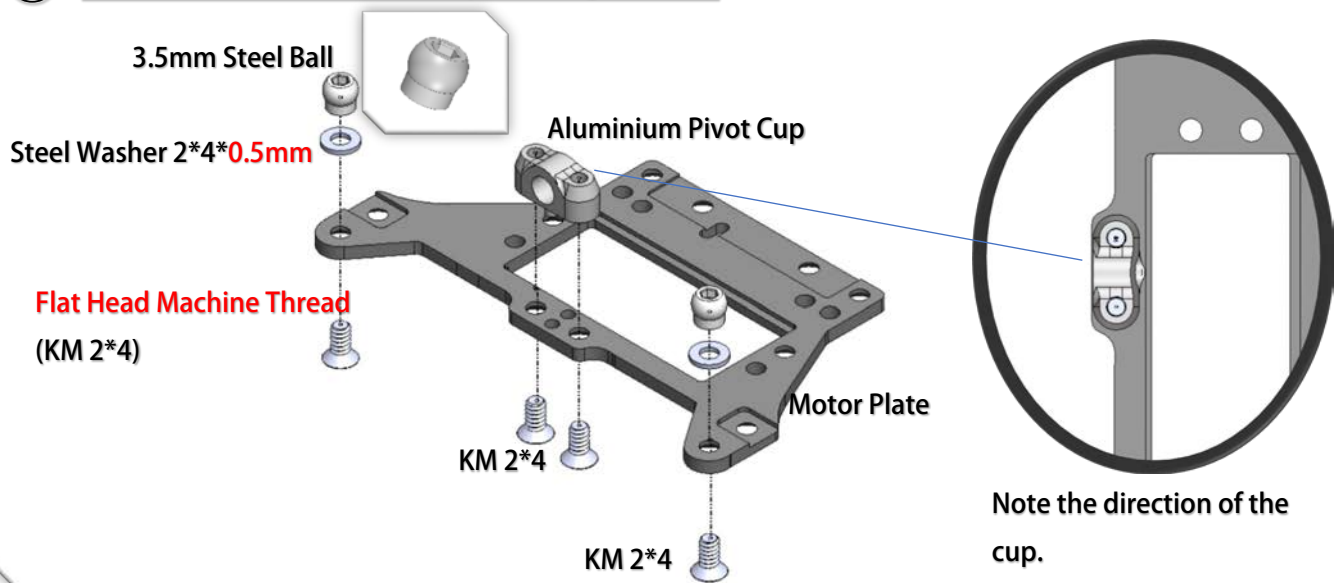


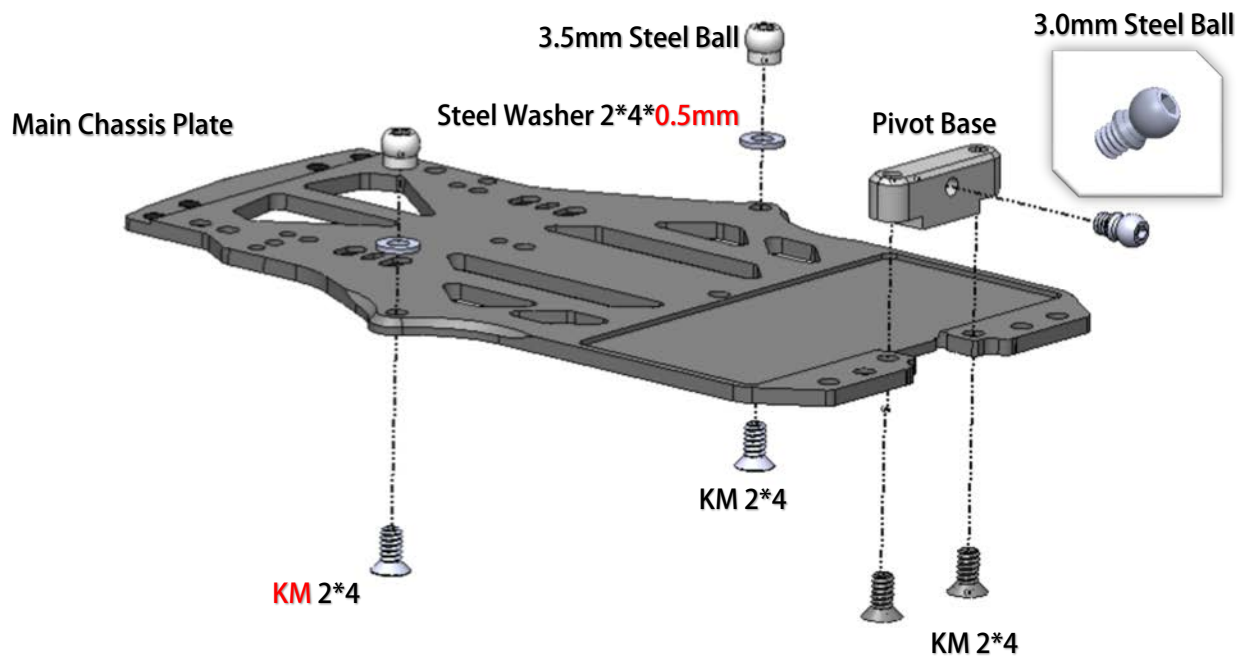


MRZ DWS KIT - 1:28 Rear Wheel Drive Competition Pan Car Chassis

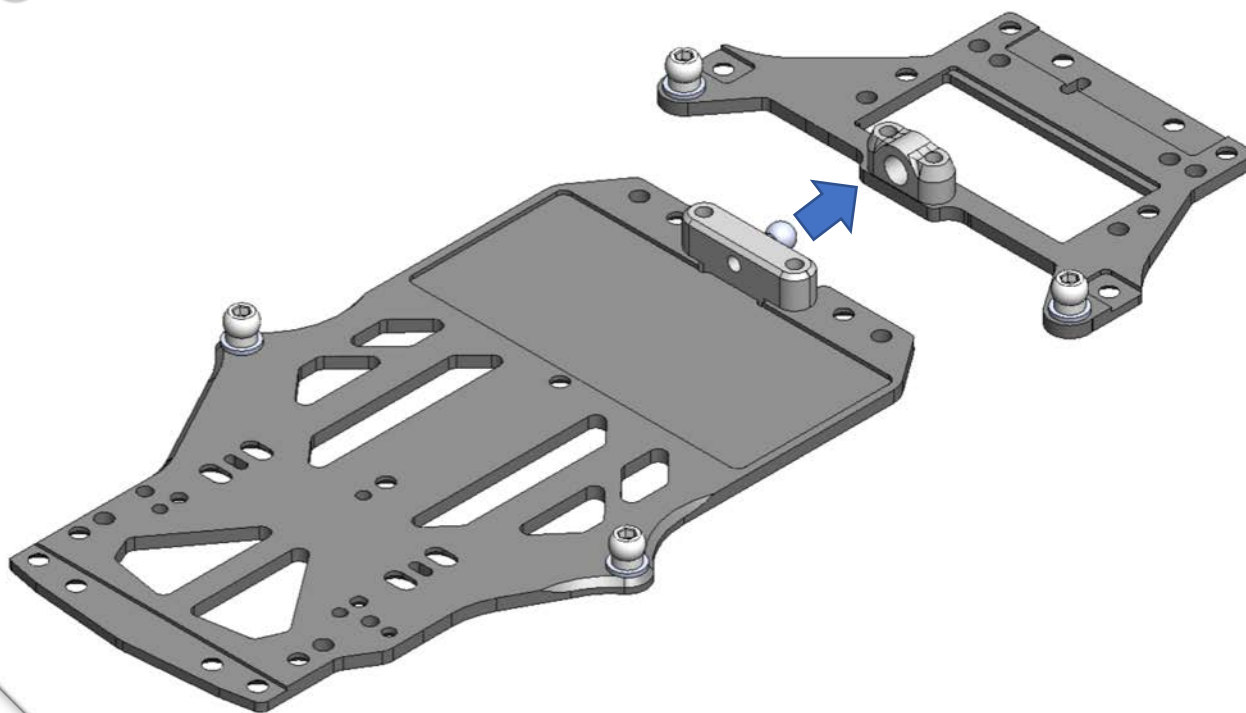
## ① Chassis Center Pivot (open Bag 1 to 5)



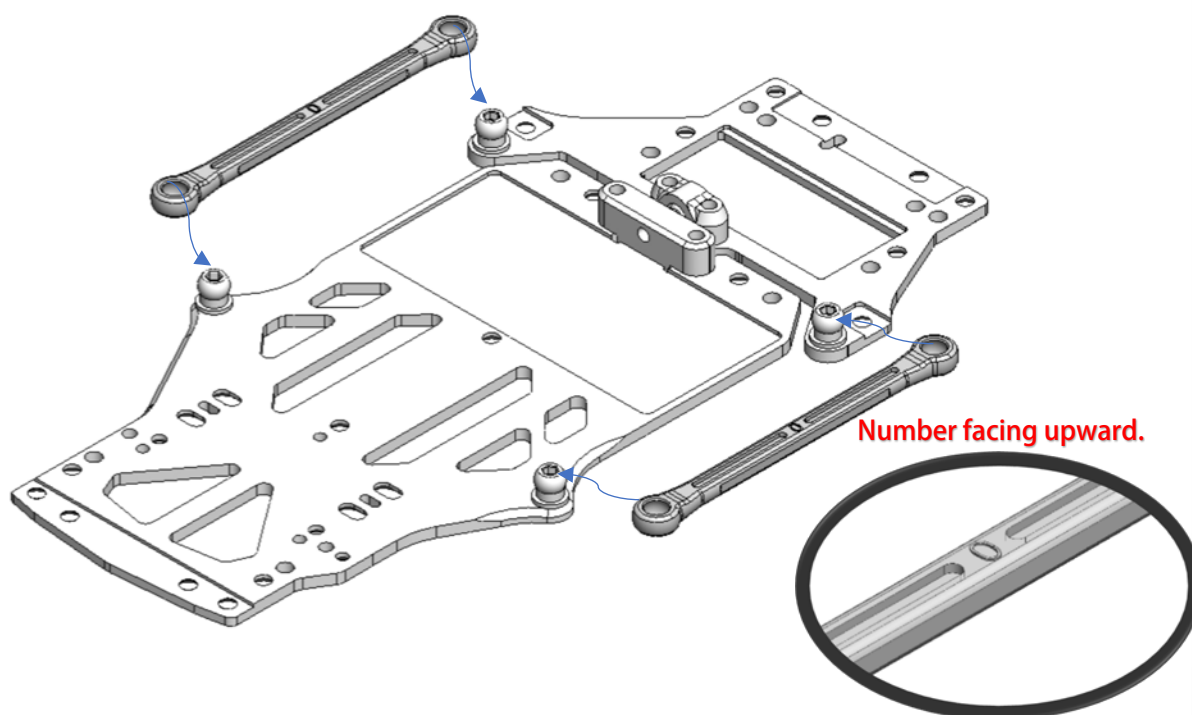
## ② Chassis Center Pivot



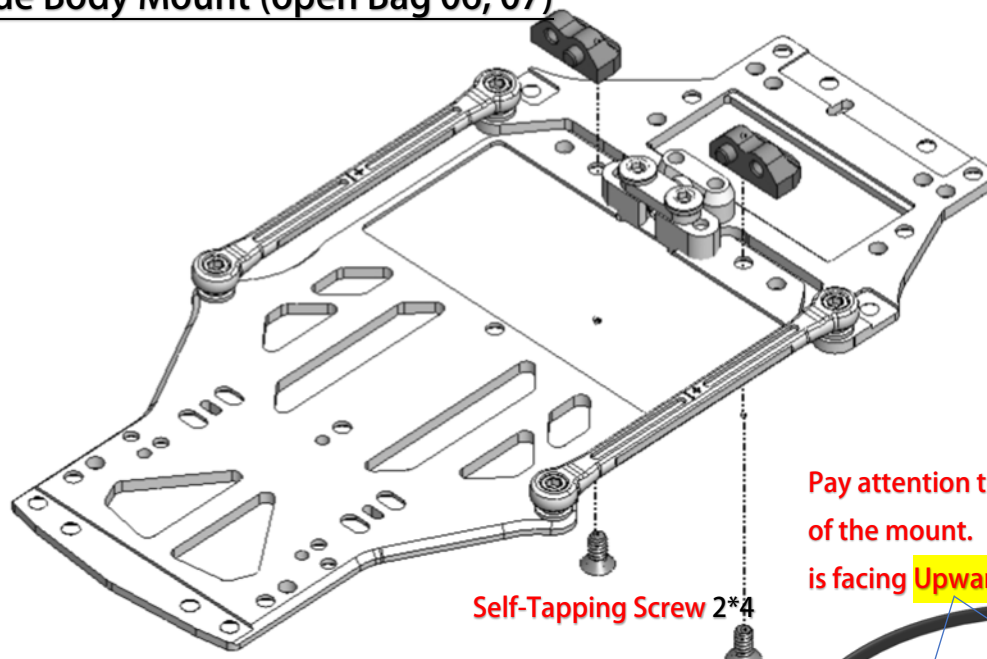
### ③ Side Links System



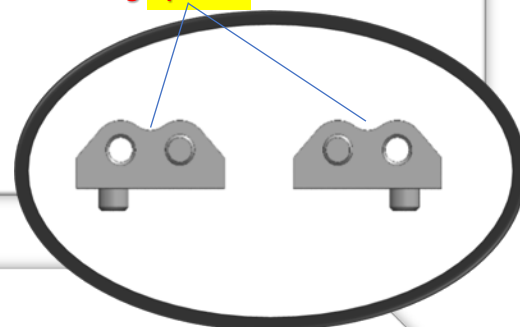
### ④ Fixing Side Links



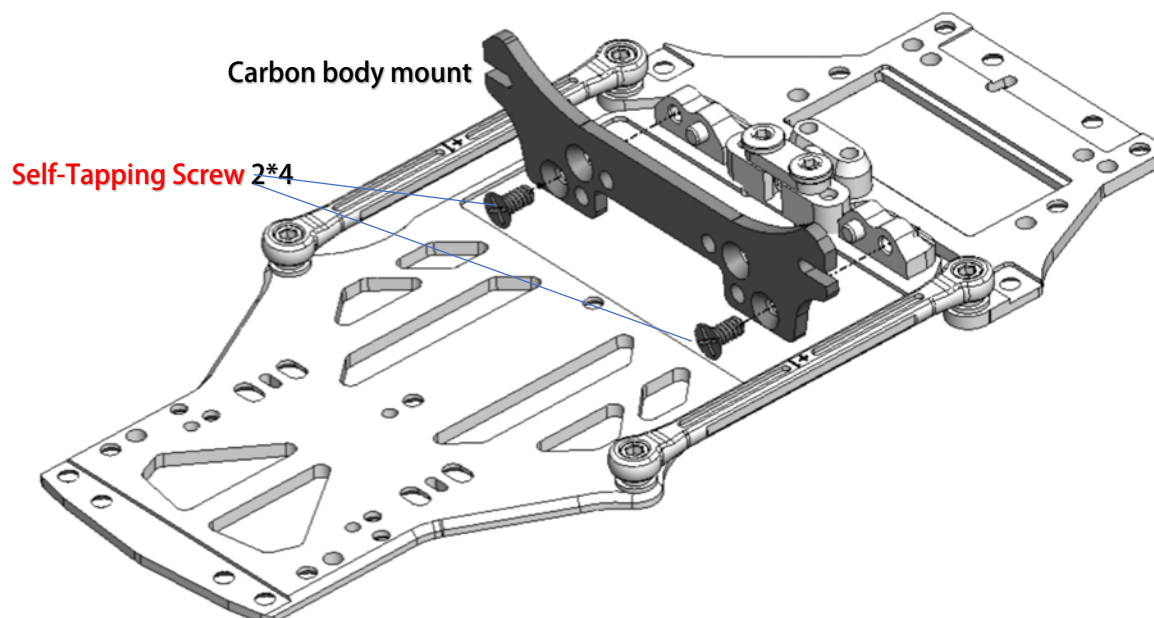
### ⑤ Side Body Mount (open Bag 06, 07)



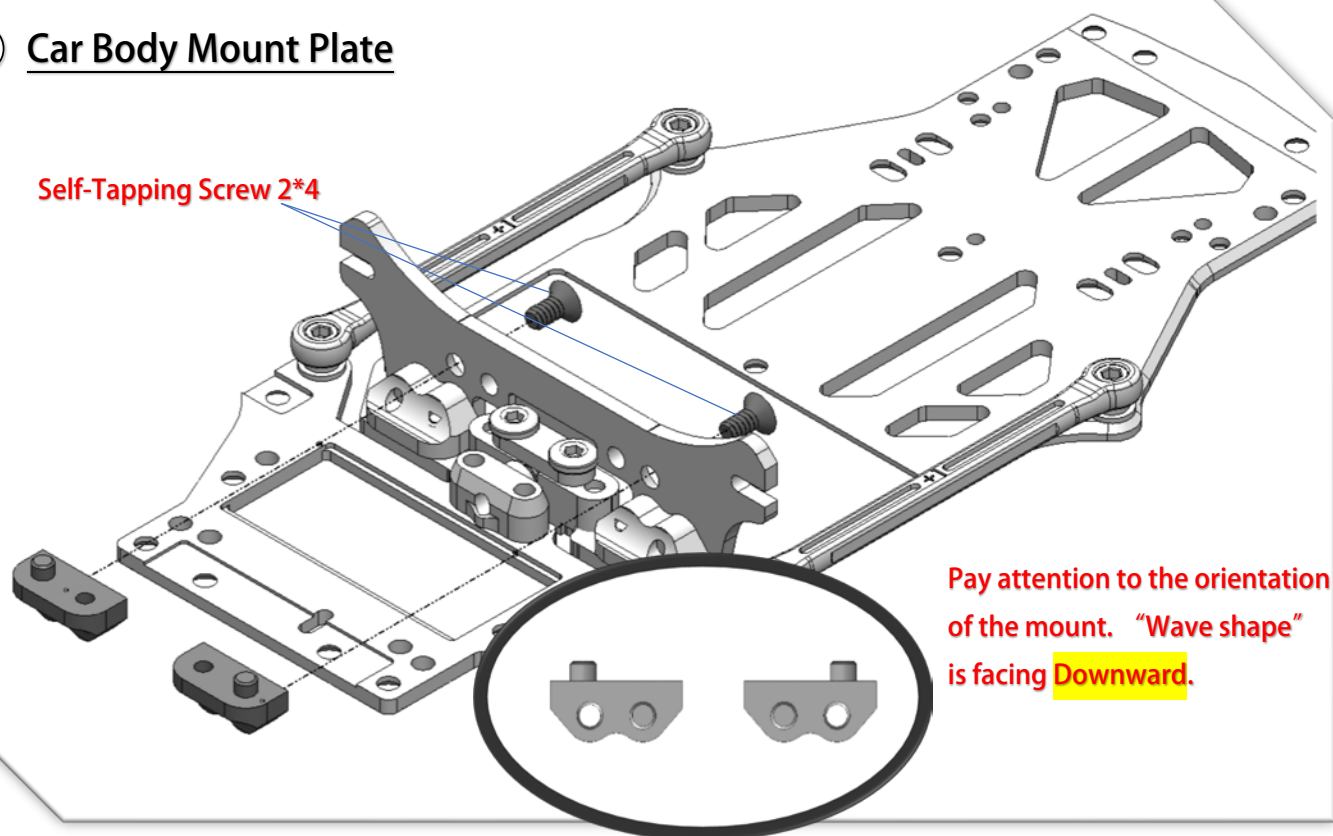
Pay attention to the orientation of the mount. "Wave shape" is facing **Upward**.



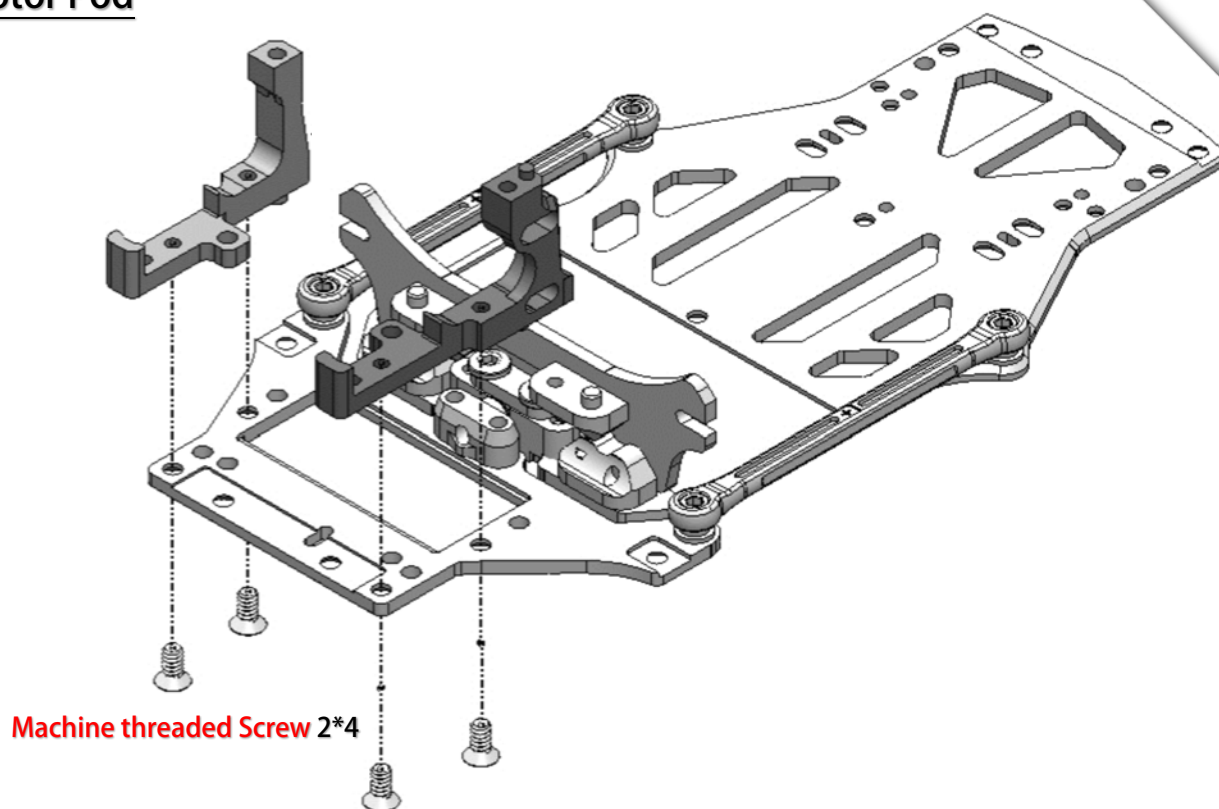
### ⑥ Car Body Mount Plate



## 07 Car Body Mount Plate

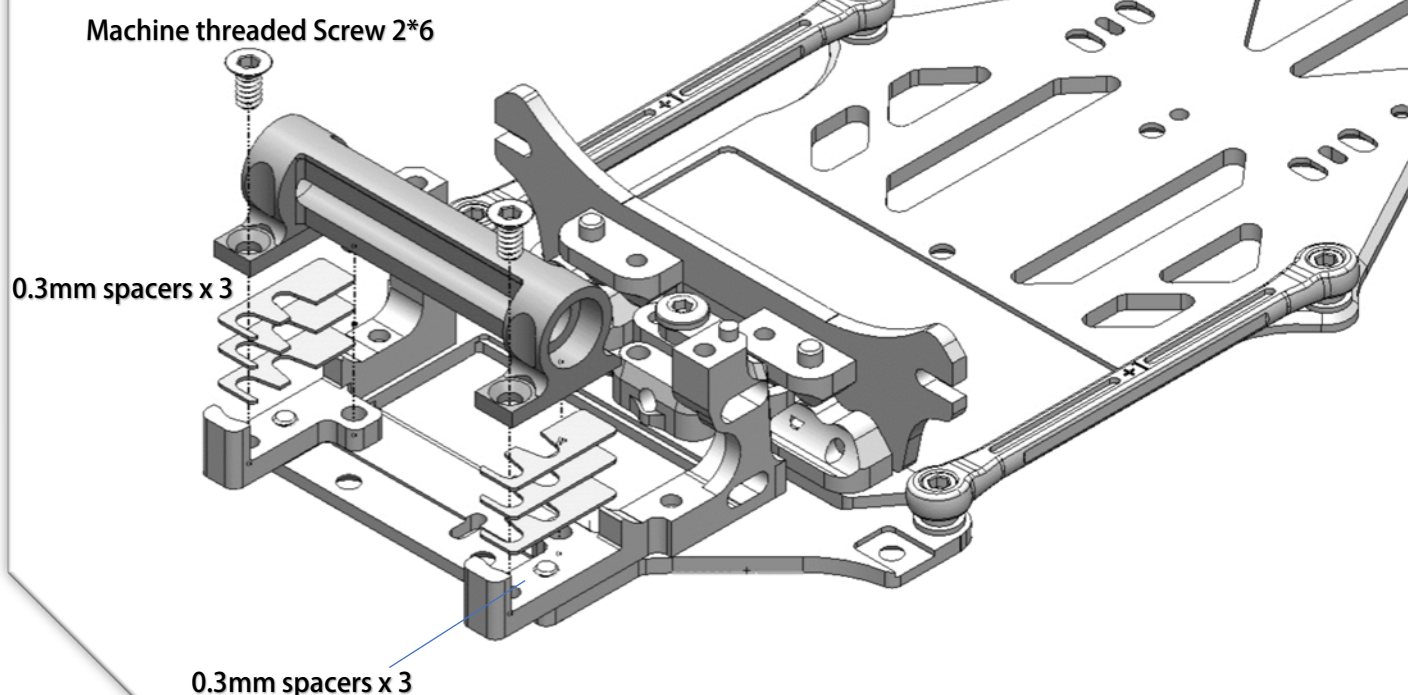


## 08 Motor Pod

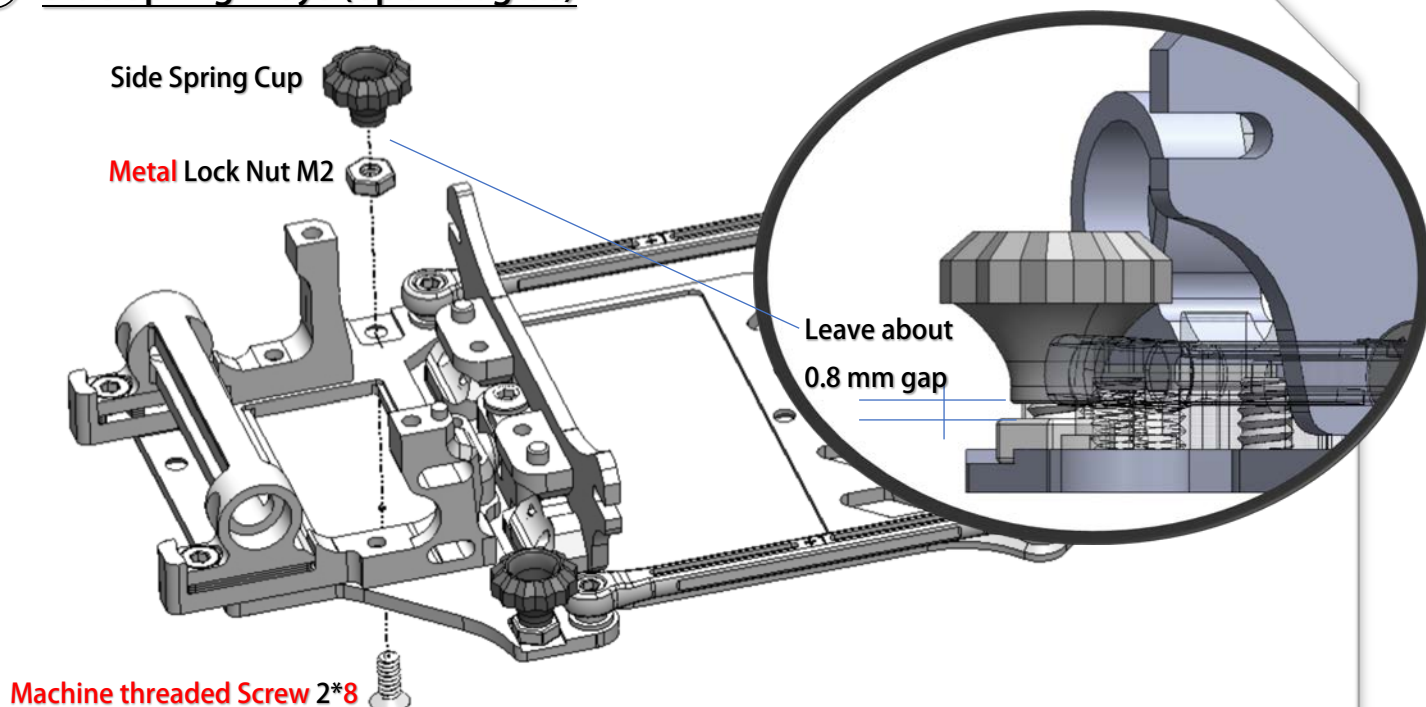




## 09 Ride Height Spacers



## 10 Side Spring Trays (open Bag 08)



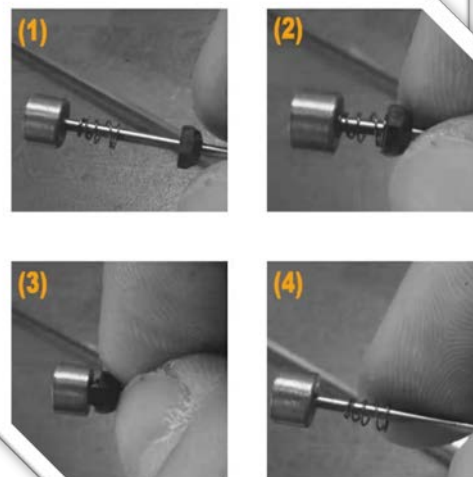
## 11 Side Springs (open Bag 09)

The side spring will be holding firmly by the screw thread once you fix them onto the screw, so you need to rotate the spring anti-clockwise if you want to take them out. (like removing a screw)

Do not just pull the spring out, it will damage it.

### Conical Shape Spring

Before install the springs, fully compress them few times. This makes spring shorter and softer. Fail to do this step, the rear grip of the car will be decreased a lot.

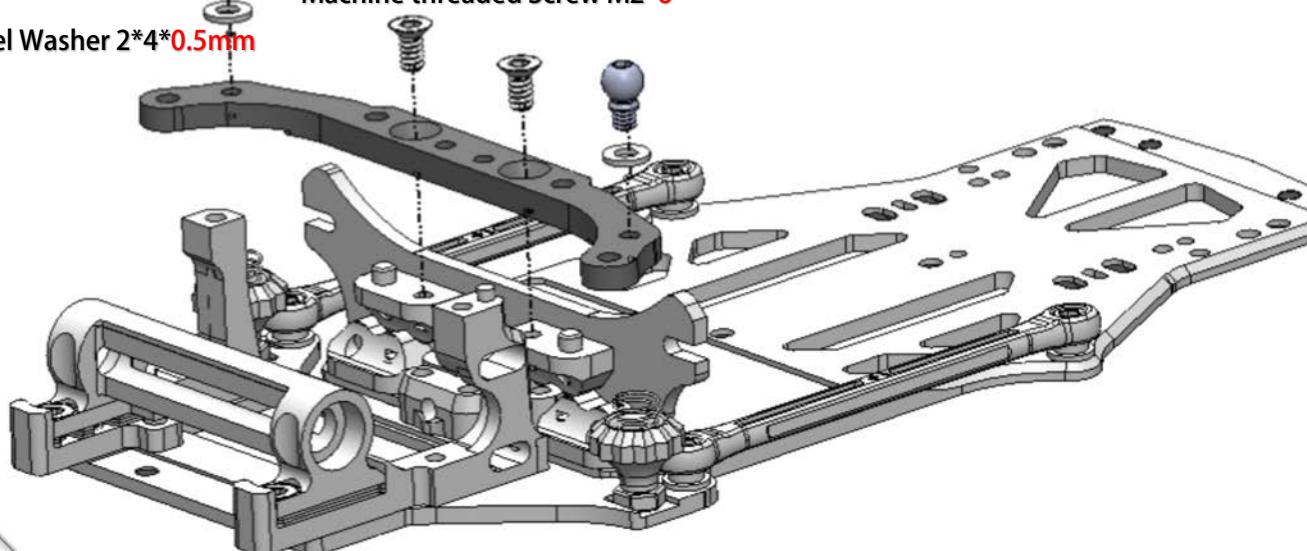


## 12 Body Post Plate

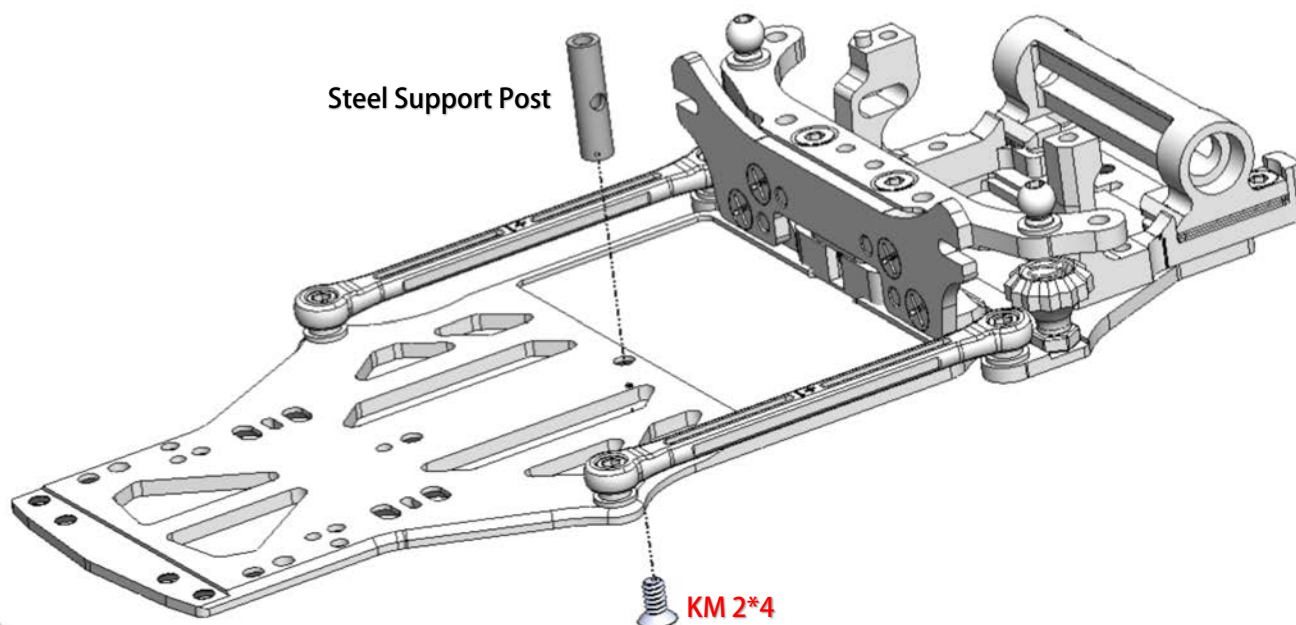
3.5mm Steel Ball Head

Machine threaded Screw M2\*6

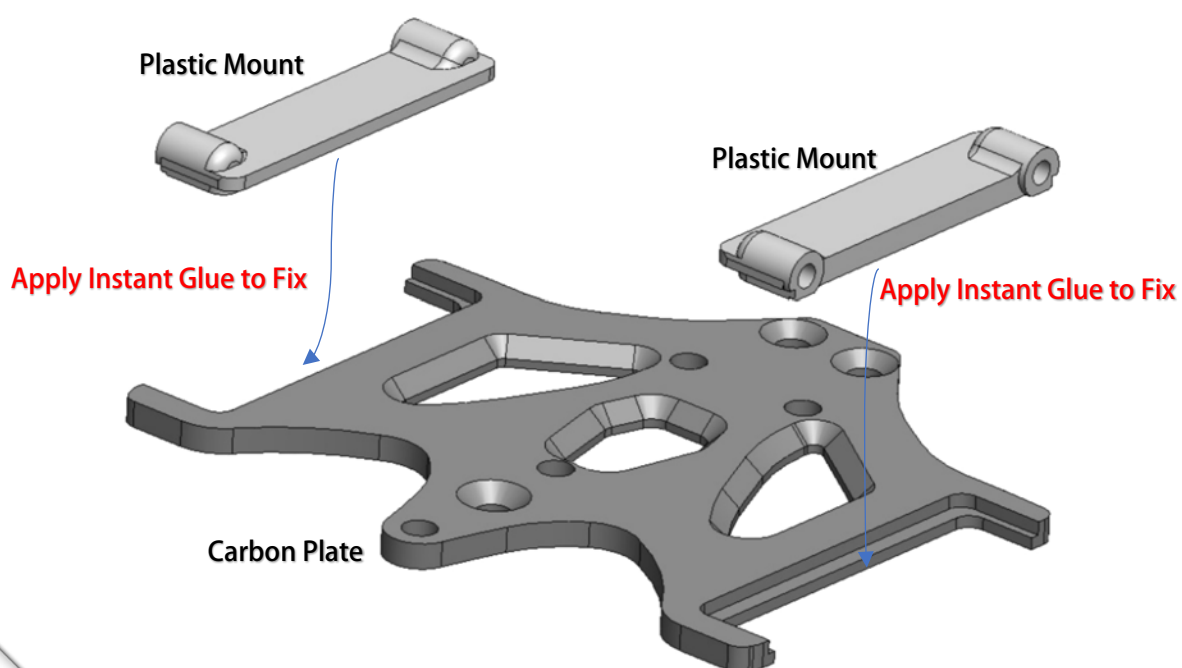
Steel Washer 2\*4\*0.5mm



### ⑬ Middle Chassis Support

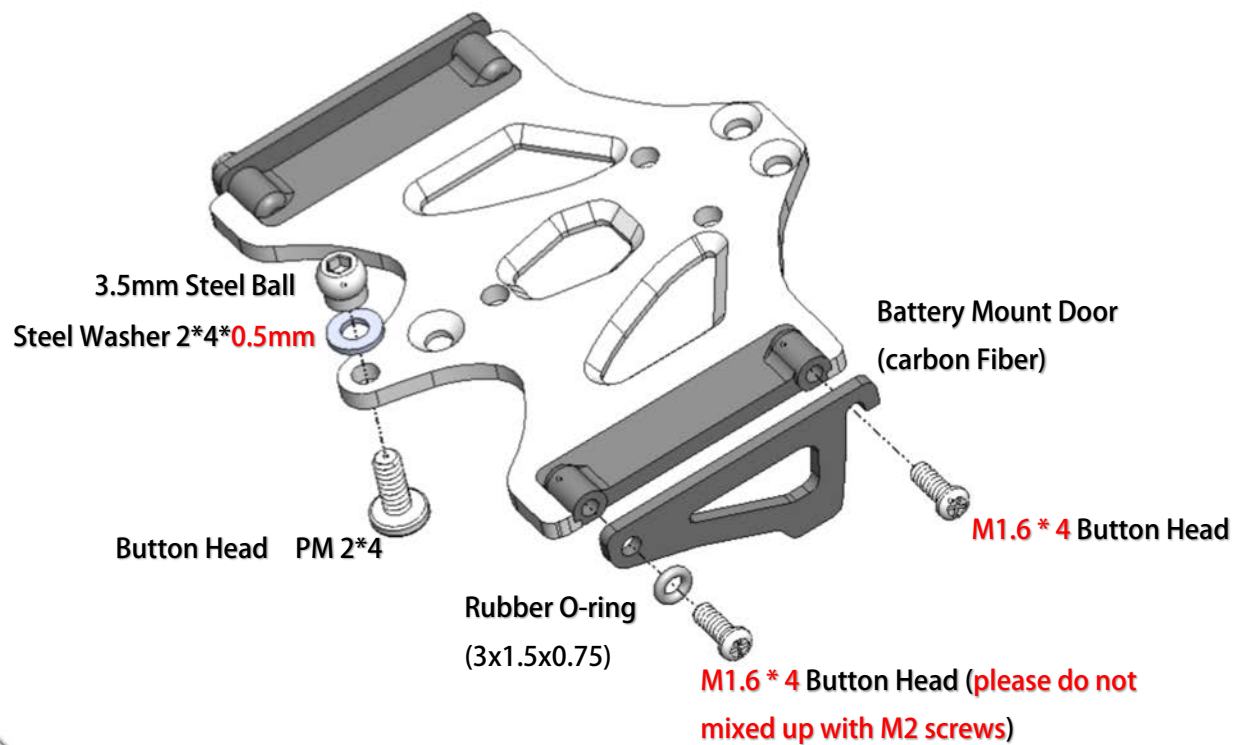


### ⑭ Battery Mount

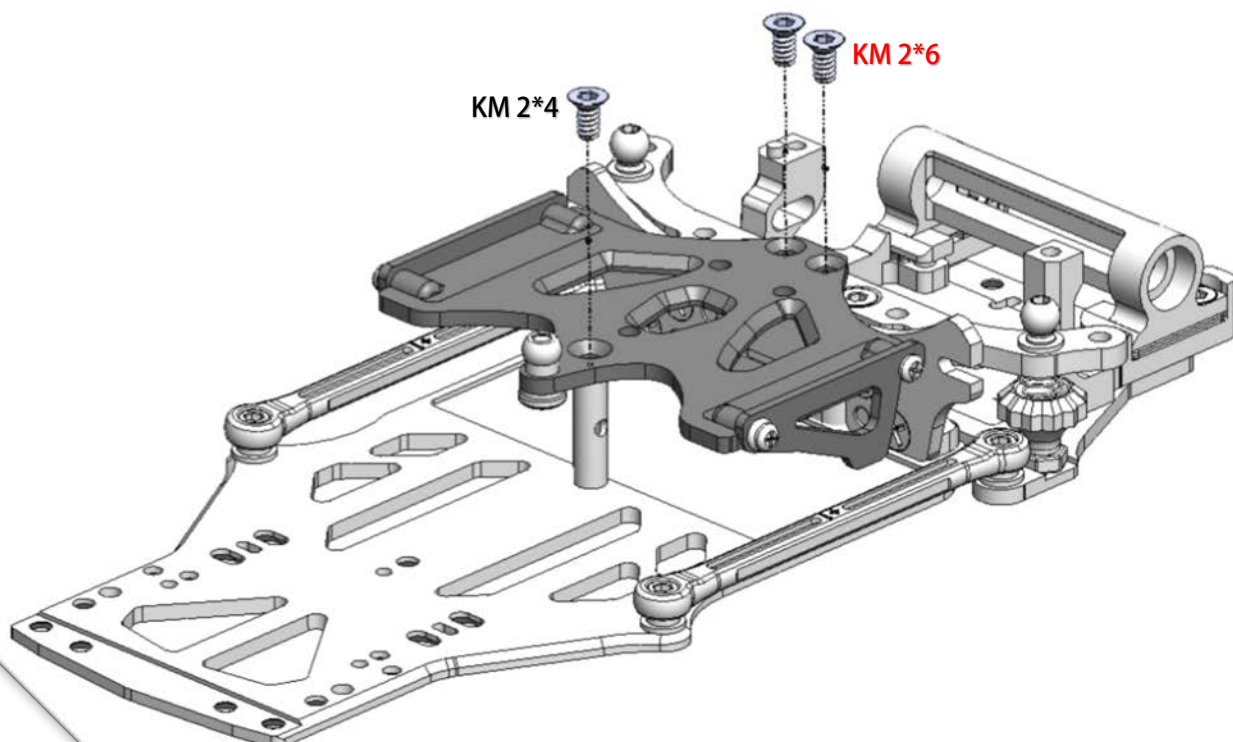




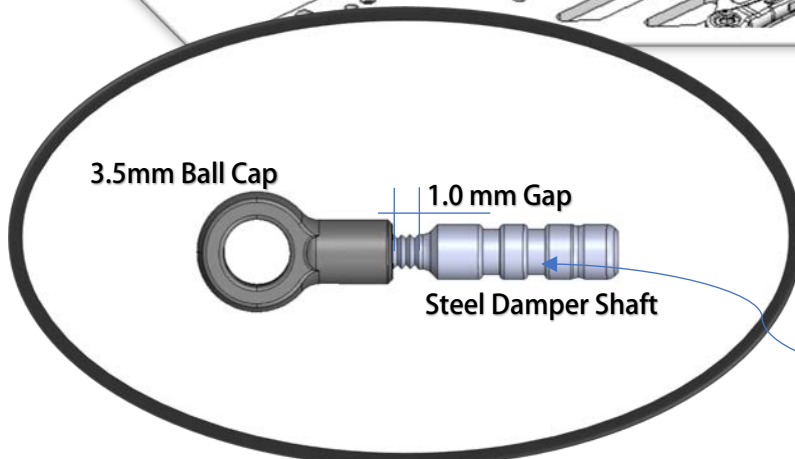
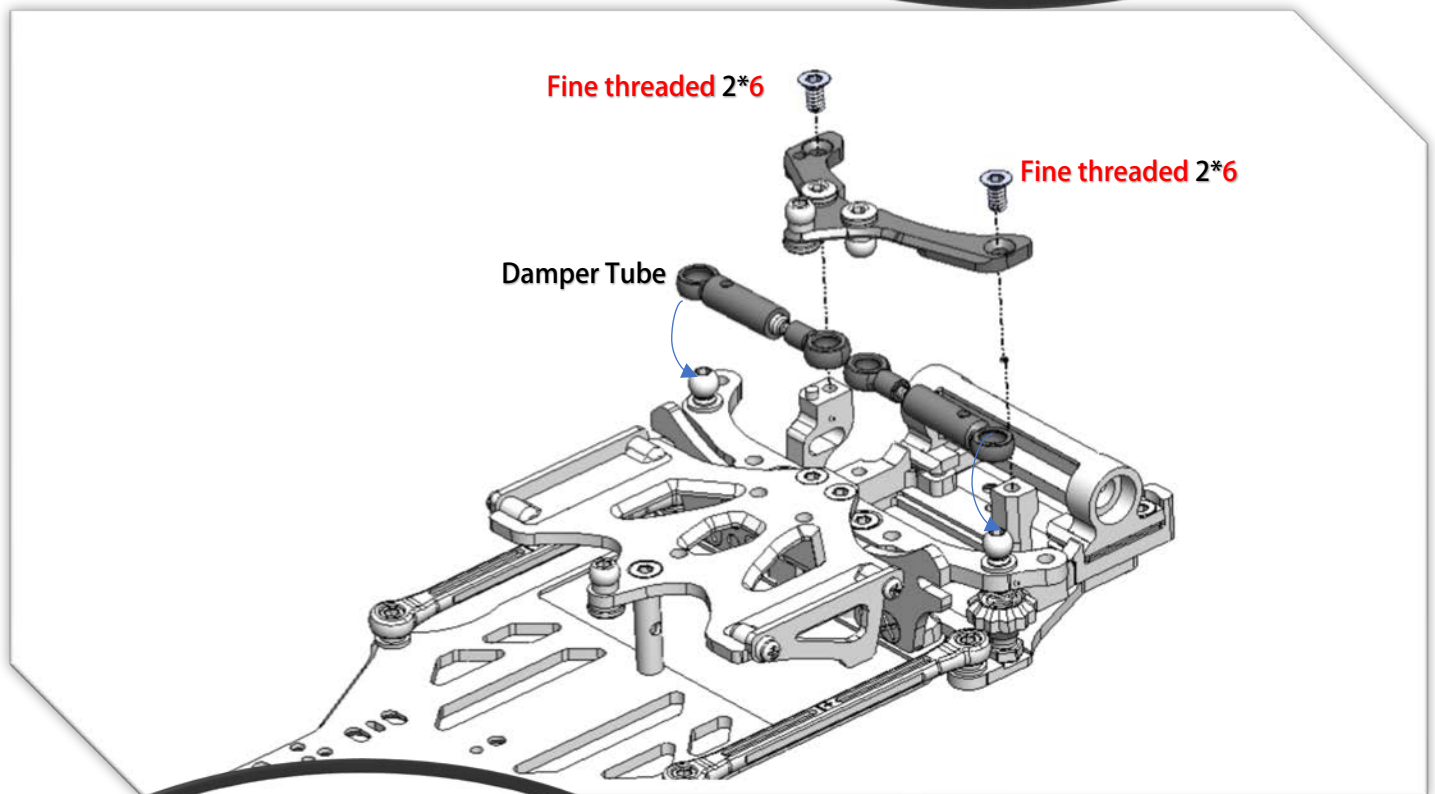
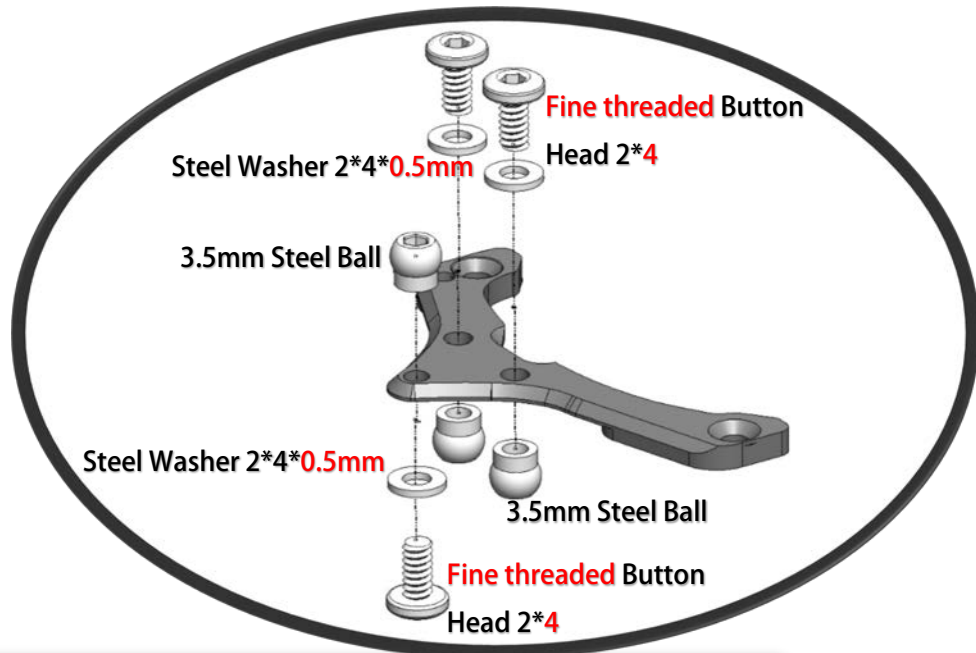
## 15 Battery Mount Door



## 16 Battery Mount Installation

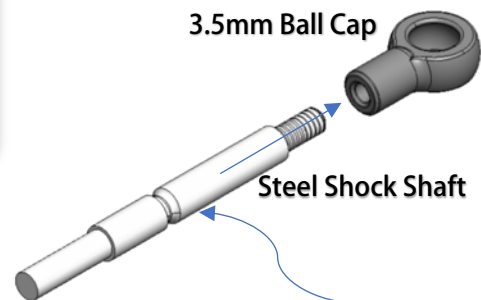
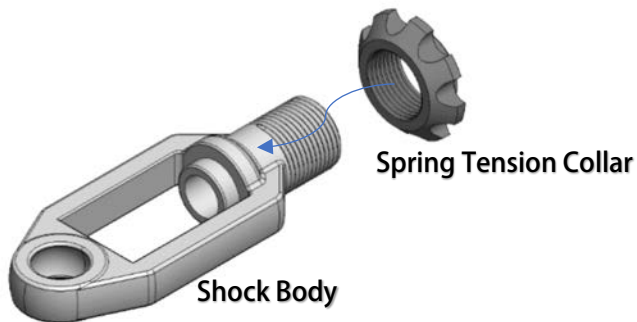


## 17 Lateral Shock Dampers



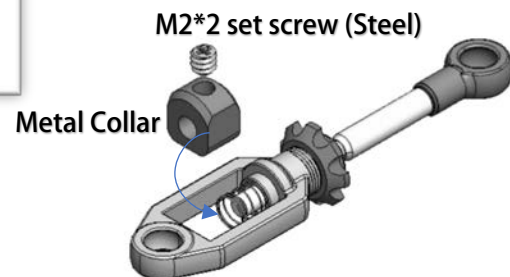
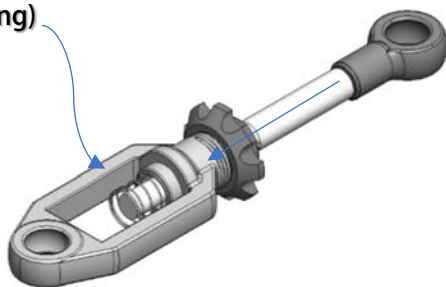
Apply #25000 or 35000 damper grease to the shaft.

## 18 Center Shock Damper

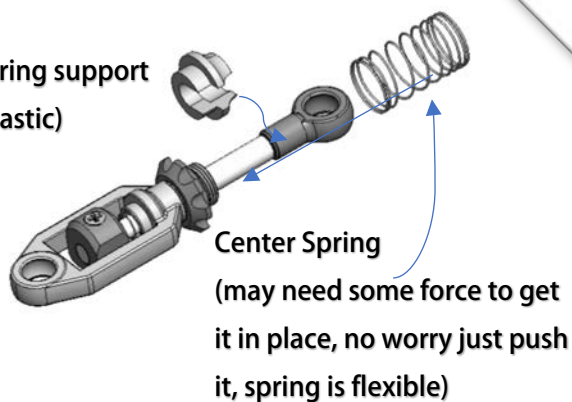


Apply #25000 or 35000 damper grease to the shaft.

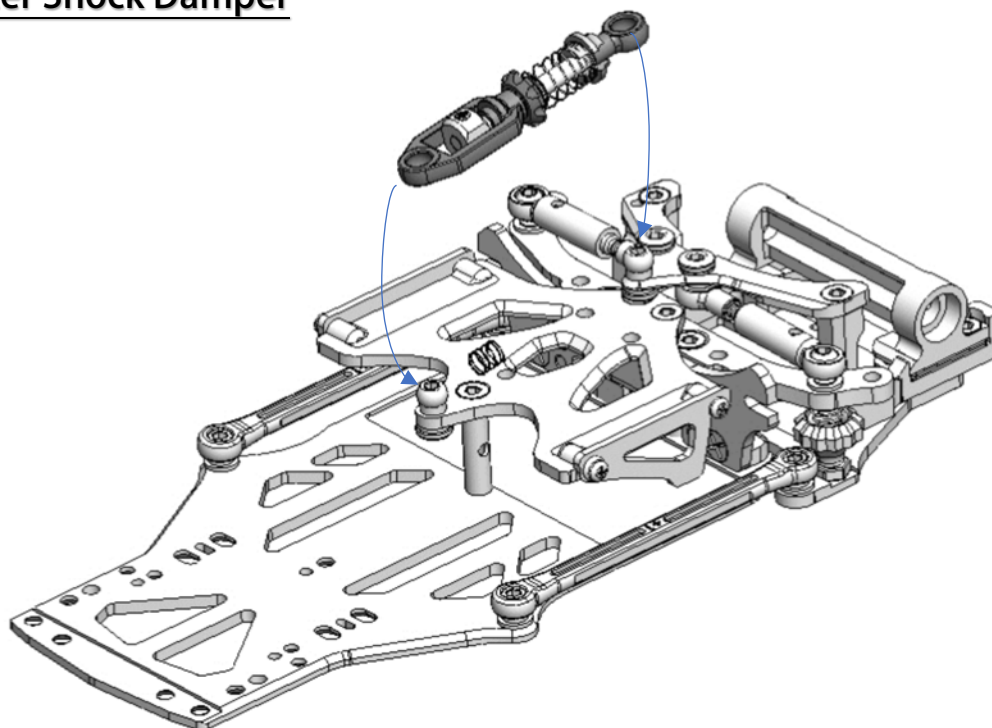
Insert Small Mid Spring  
(3mm long)



Spring support  
(Plastic)



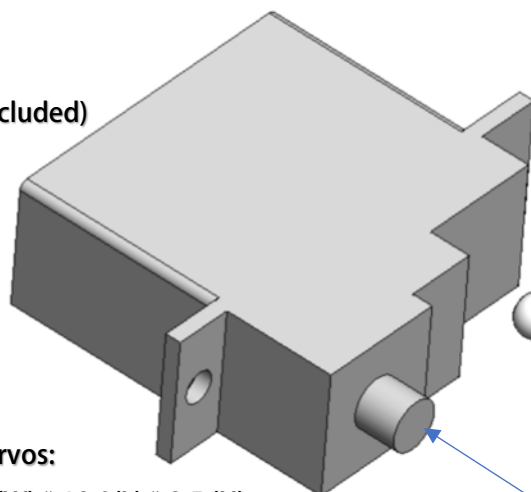
## 19 Center Shock Damper



## 20 Servo Horn

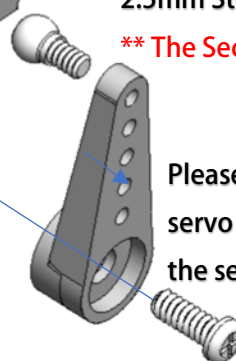
Servo (not included)

MRZ suitable servos:  
size within 20.0(W) \* 18.0(L) \* 8.5 (H) mm



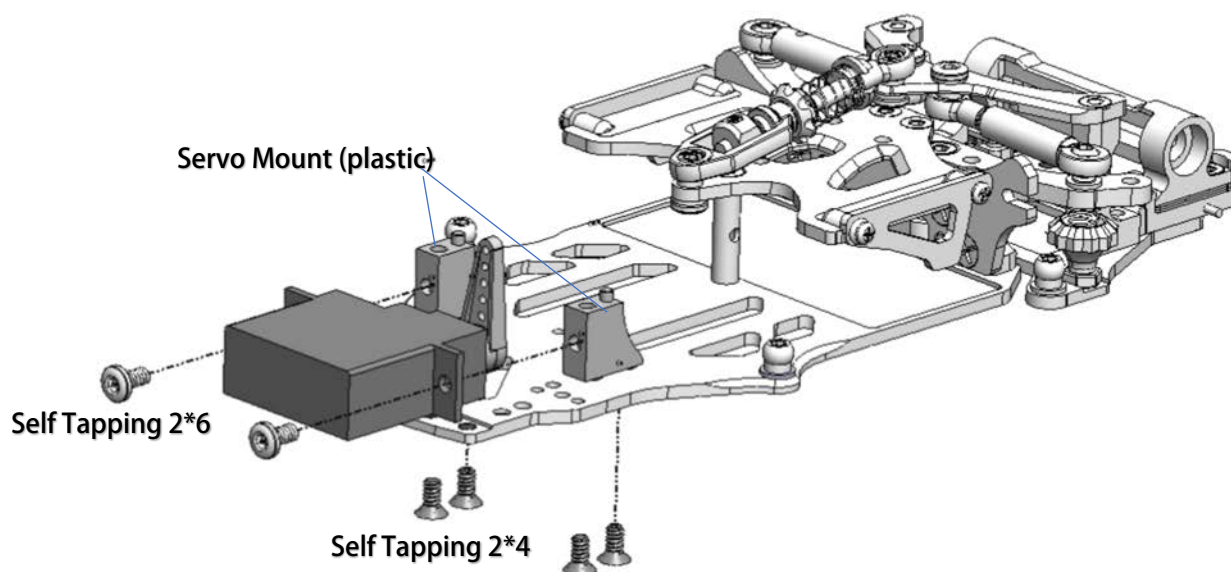
2.5mm Steel Ball Head, M1.4 thread

**\*\* The Second Top Hole is recommended.**

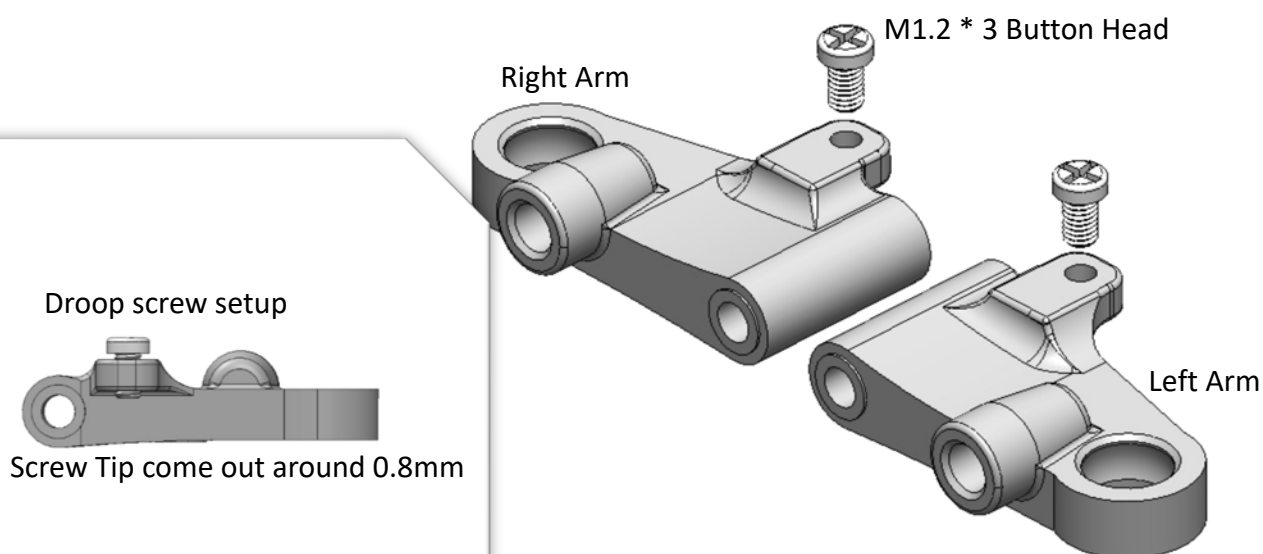


Please use the screw and  
servo horn that come with  
the servo.

## 21 Servo Installation (open Bag 10)

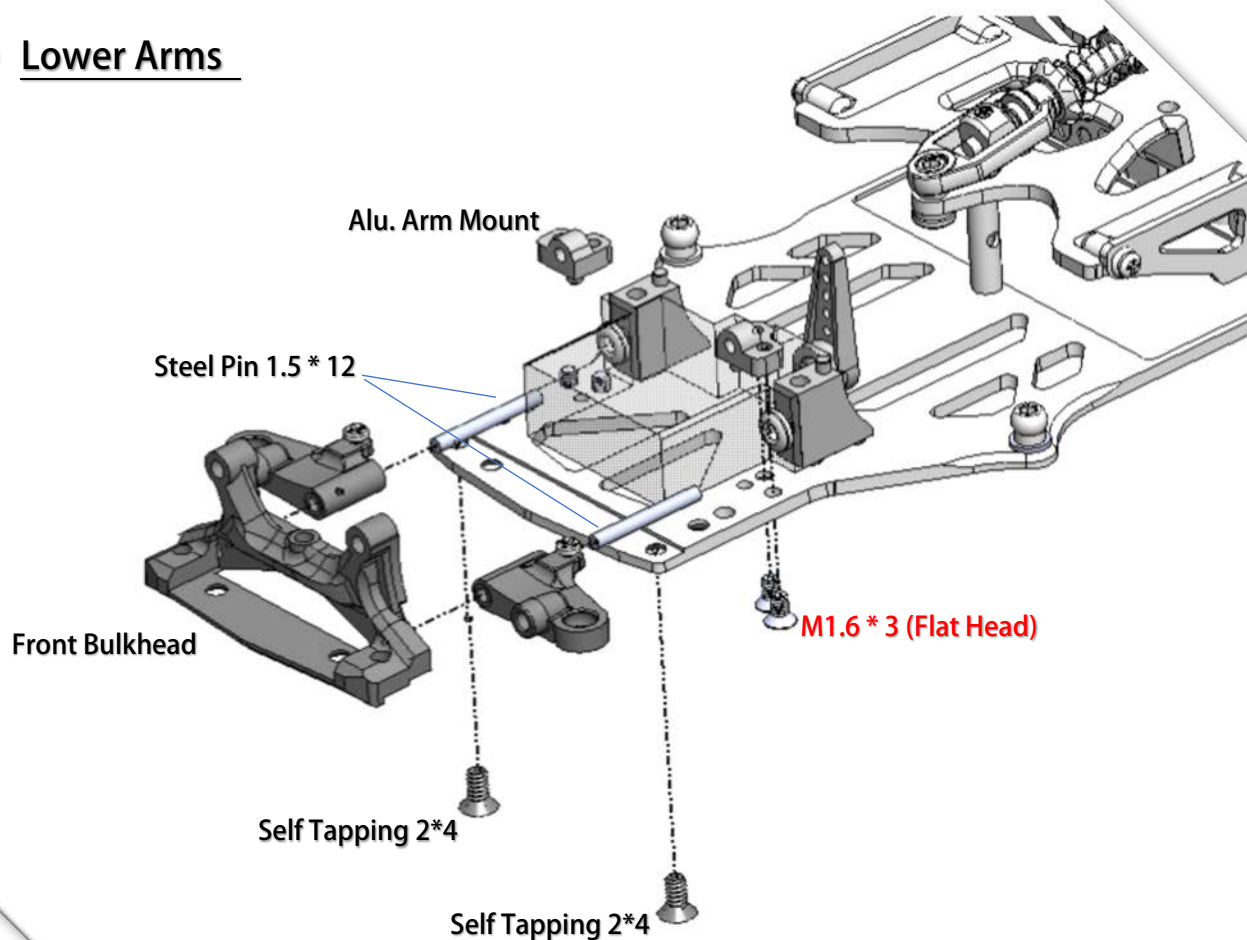


## 22 Lower Arms (open Bag 13)

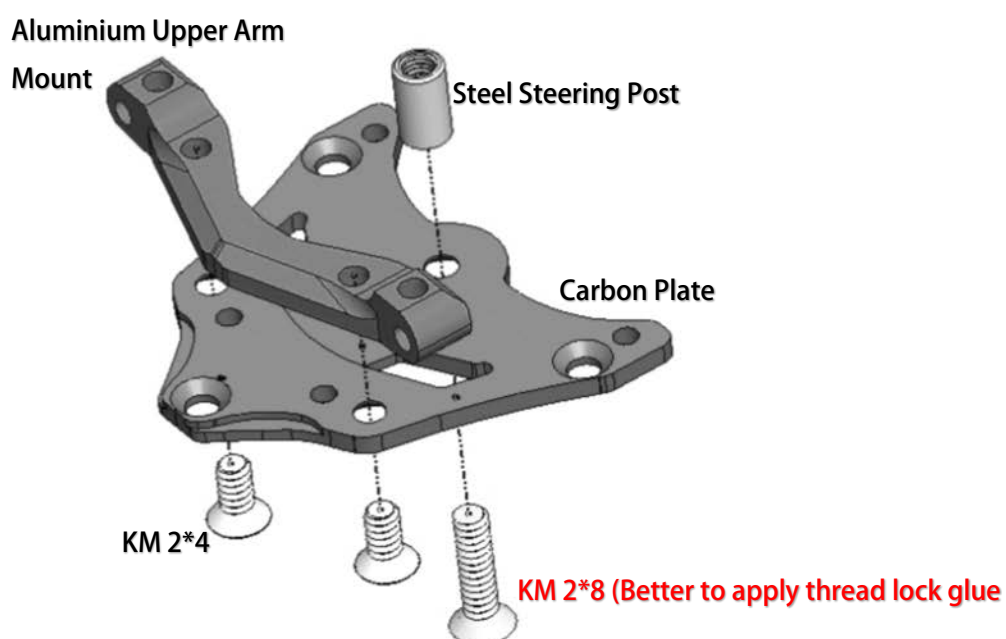




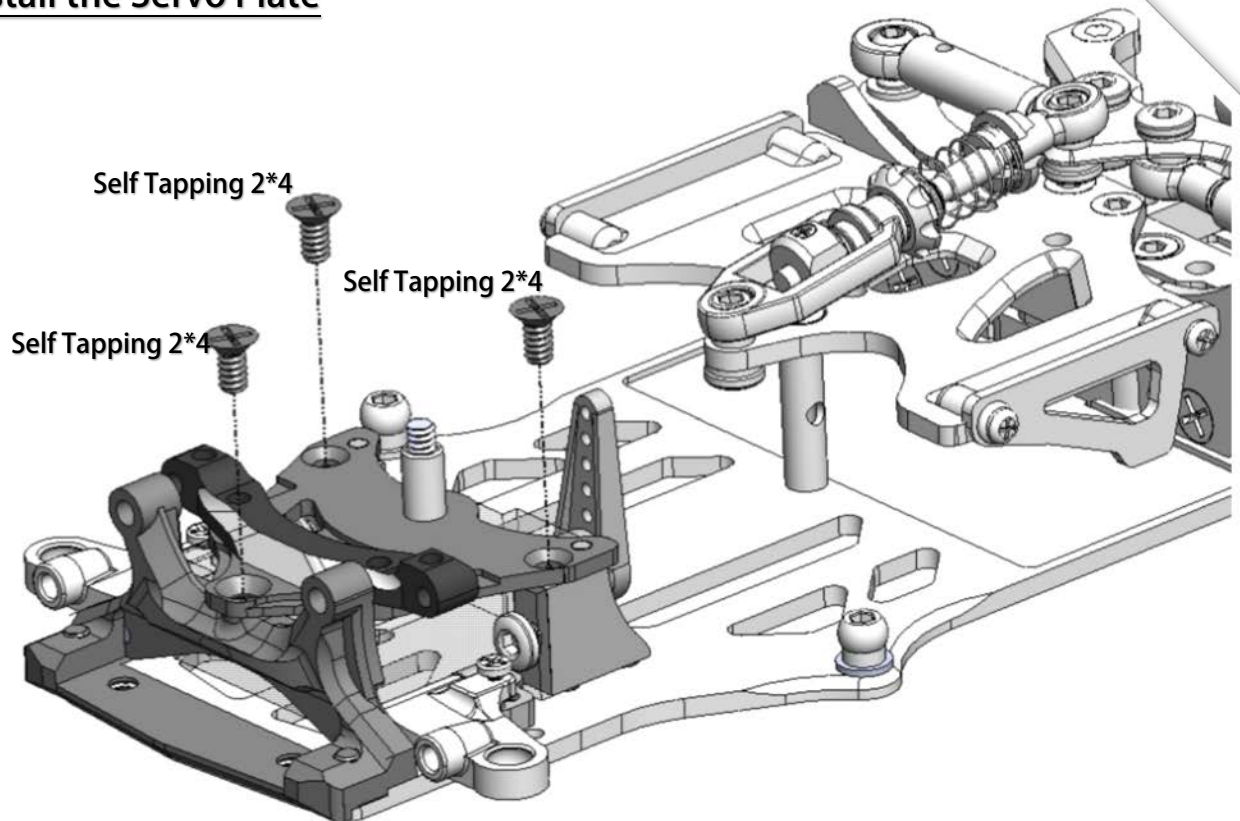
## 22 Lower Arms



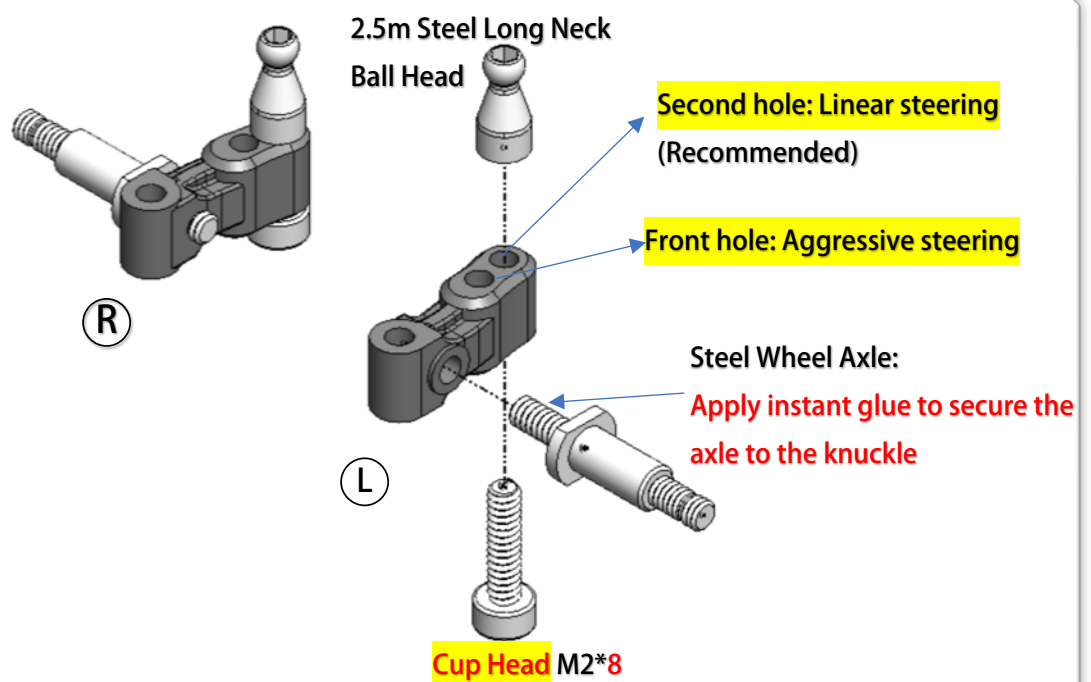
## 23 Upper Arm Mount



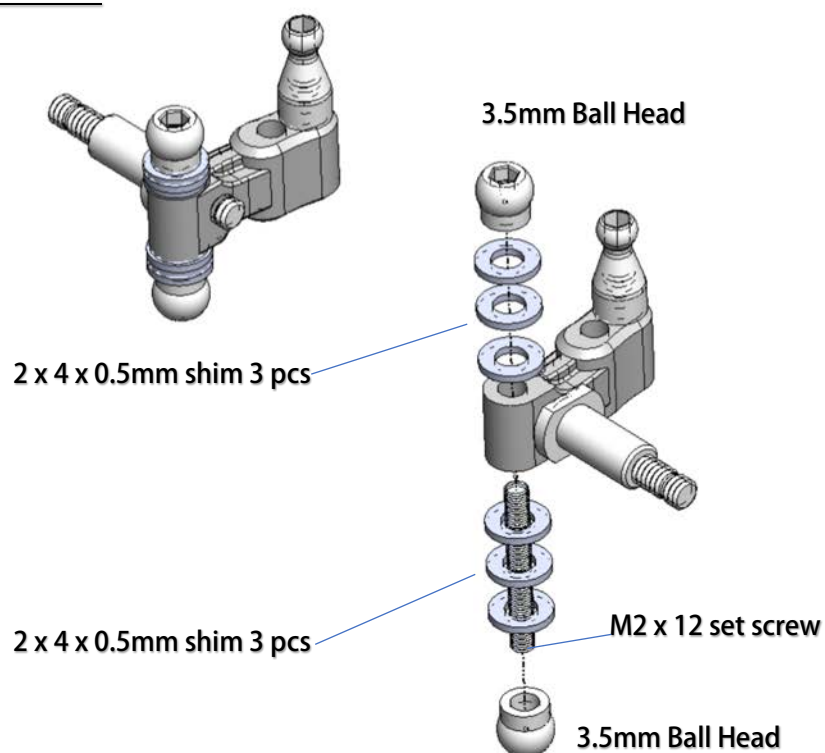
## 24 Install the Servo Plate



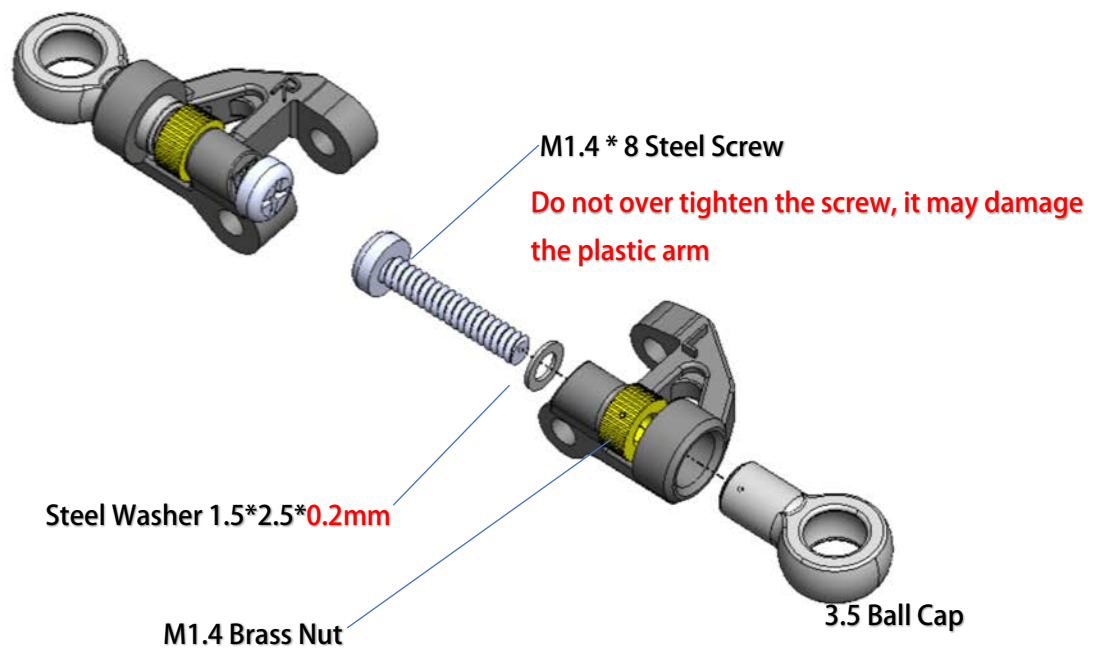
## 25 Steering Knuckles Build Left and Right Knuckle as picture shown.



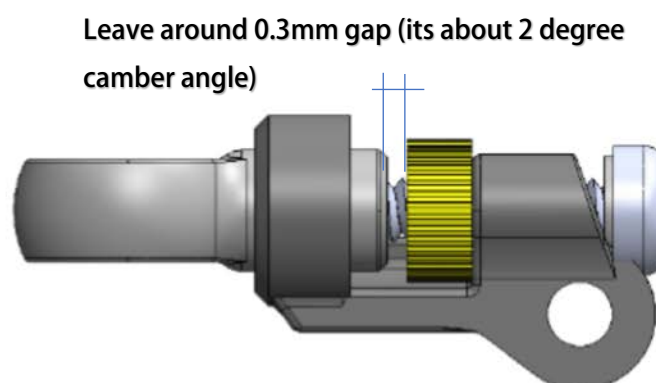
## 25 Steering Knuckles



## 26 Upper Arms Preparation



## 27 Upper Arms Preparation



## 28 Upper Arms

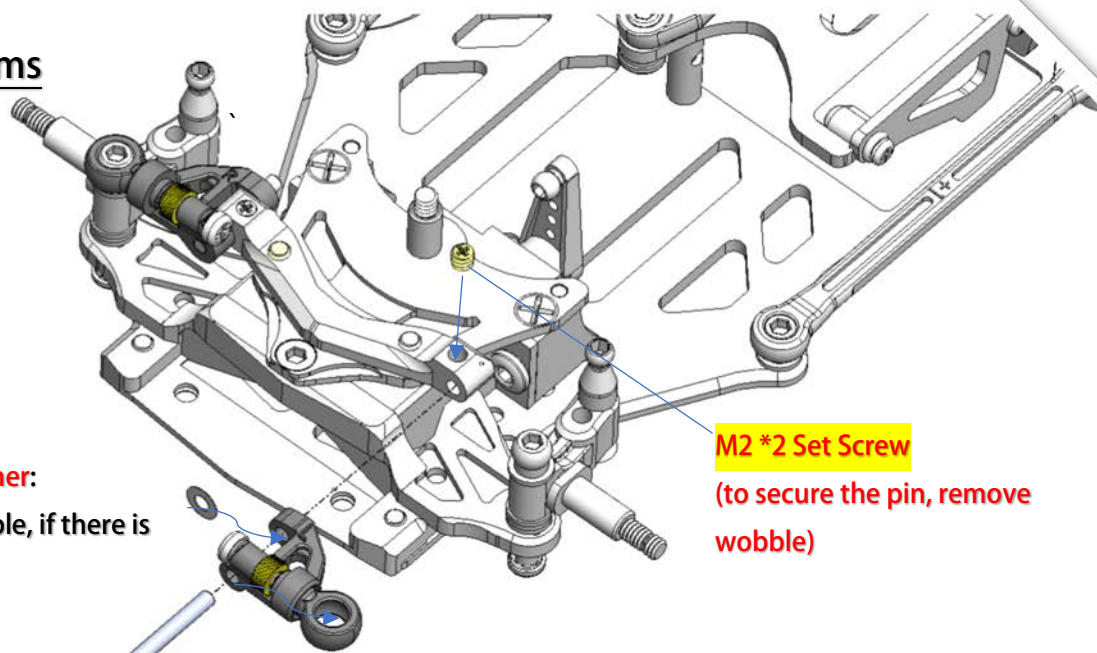
**0.05mm Steel Washer:**

To eliminates wobble, if there is necessary.

1.5\*10 Steel Pin

**M2 \*2 Set Screw**

(to secure the pin, remove wobble)



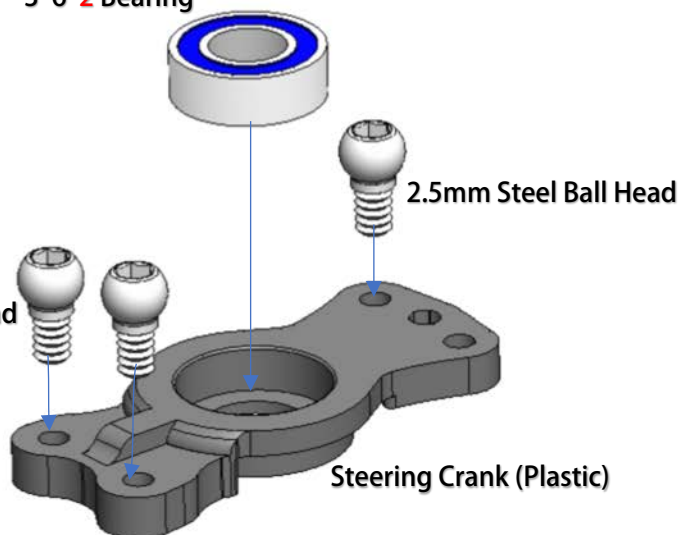
## 29 Steering Crank

3\*6\*2 Bearing

2.5mm Steel Ball Head

2.5mm Steel Ball Head

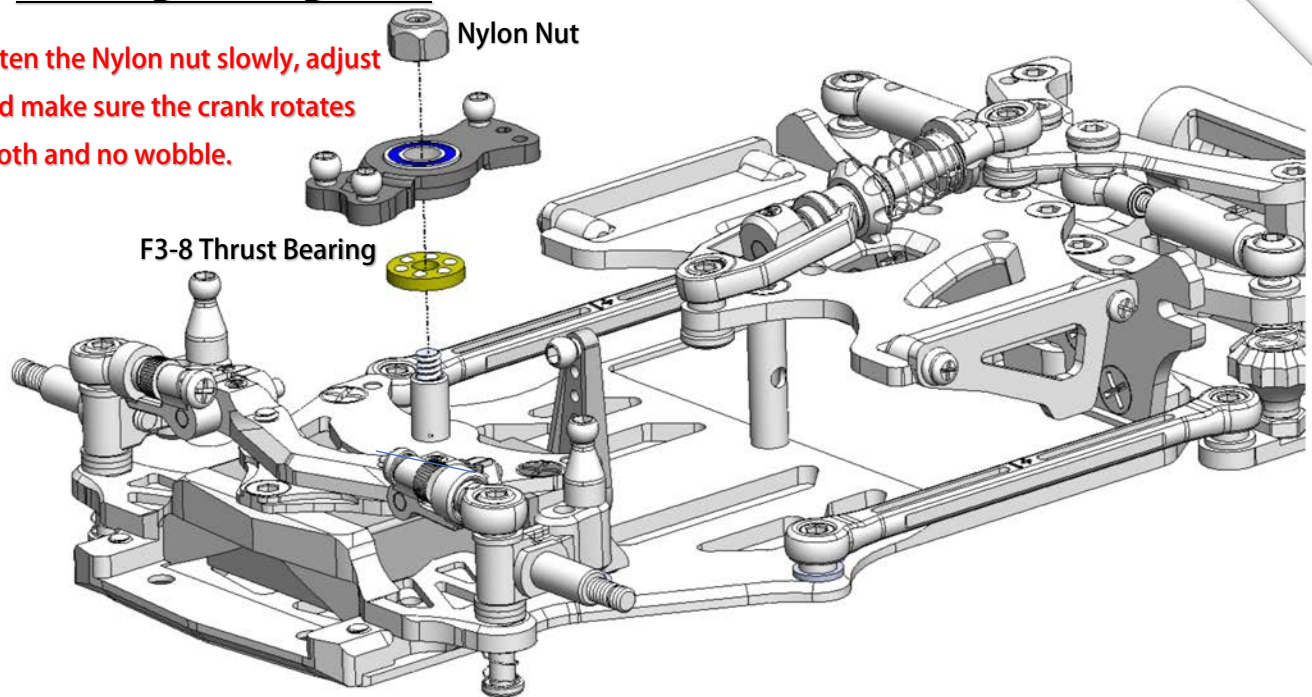
Steering Crank (Plastic)



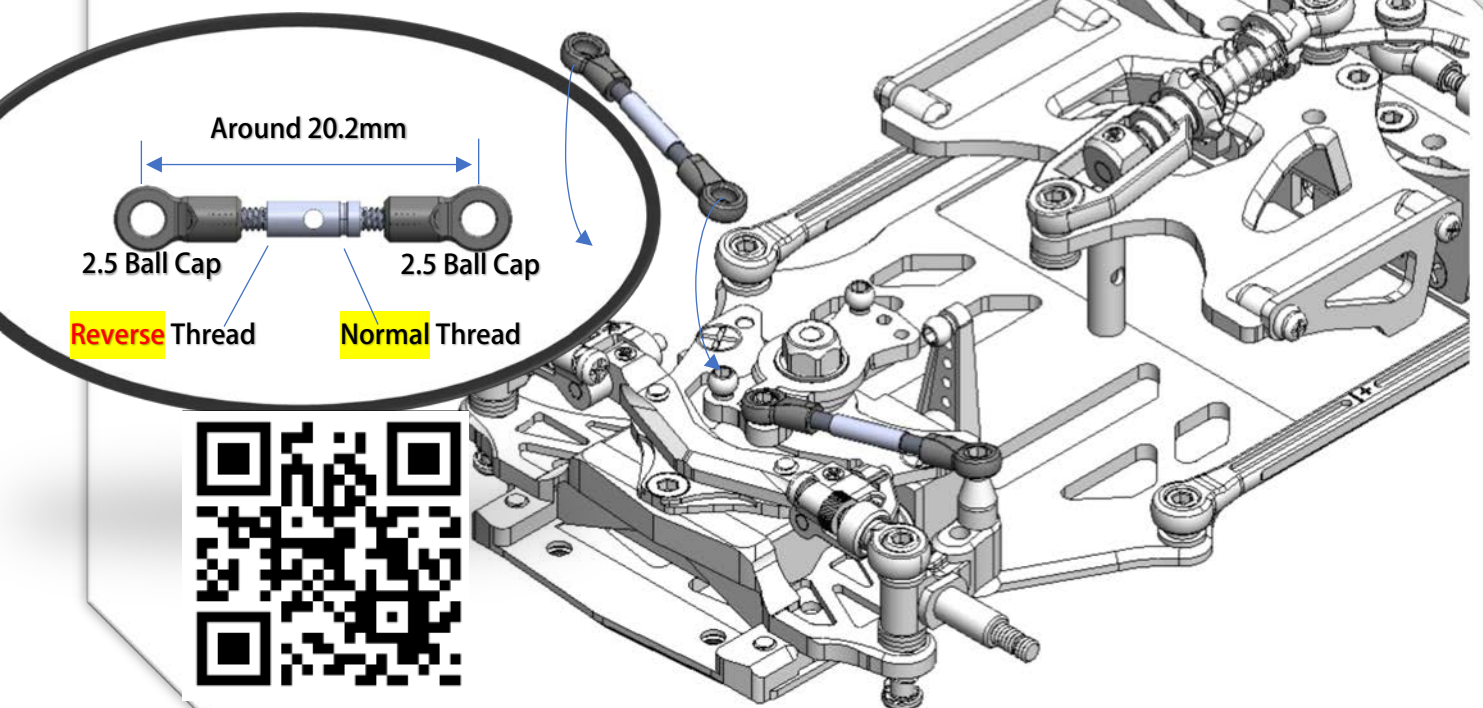


### 30 Installing Steering Crank

**Tighten the Nylon nut slowly, adjust it and make sure the crank rotates smooth and no wobble.**



### 31 Steering Linkages

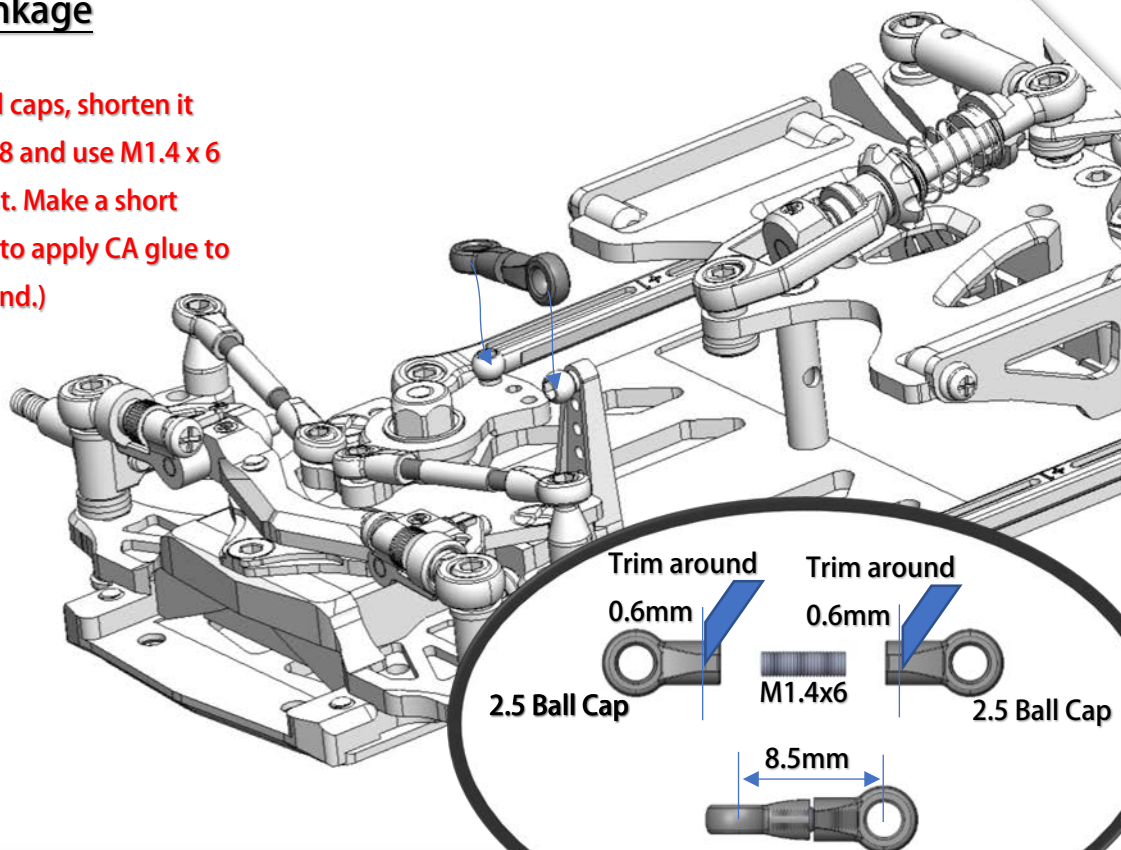


YouTube **Video:** Scan this QR Code to see how to make the ball link Smooth and no wobble.

[https://www.youtube.com/watch?feature=youtu.be&v=RMhkoIUS\\_og](https://www.youtube.com/watch?feature=youtu.be&v=RMhkoIUS_og)

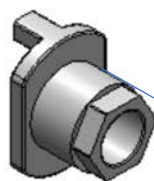
### 32 Servo Linkage

Trim the 2.5 ball caps, shorten it around 0.5 to 0.8 and use M1.4 x 6 steel link to joint. Make a short linkage. (Better to apply CA glue to make strong bond.)

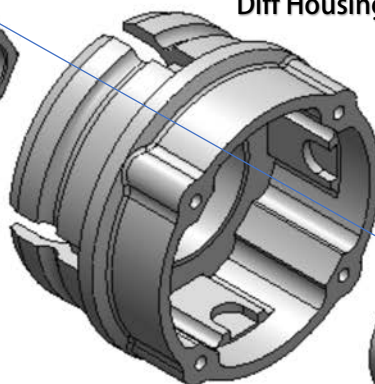


### 33 Gear Differential (open Bag 11)

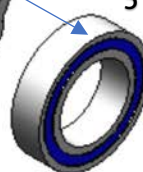
Right Wheel Hub (plastic)



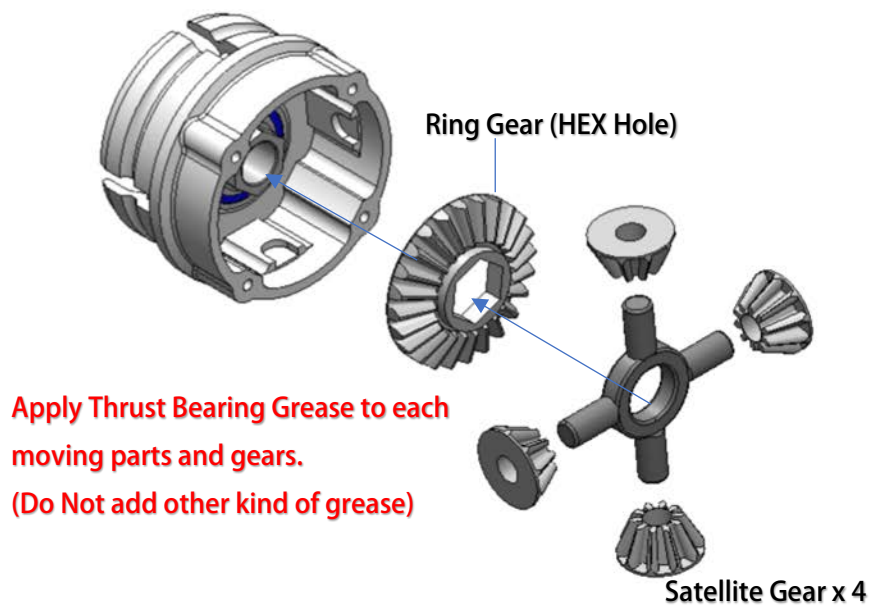
Diff Housing



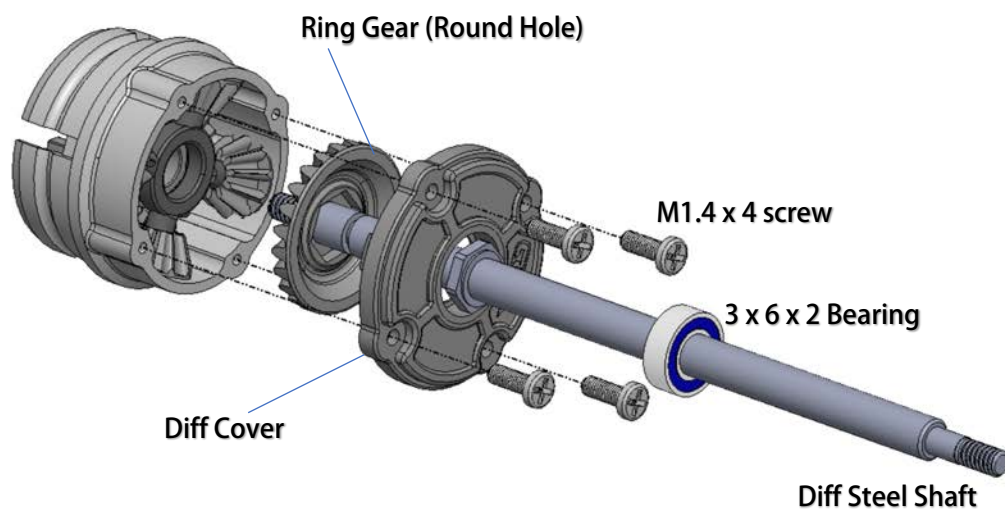
5 x 8 x 2 Bearing



### 34 Gear Differential



### 35 Gear Differential



### ③⑥ LSD Clutch

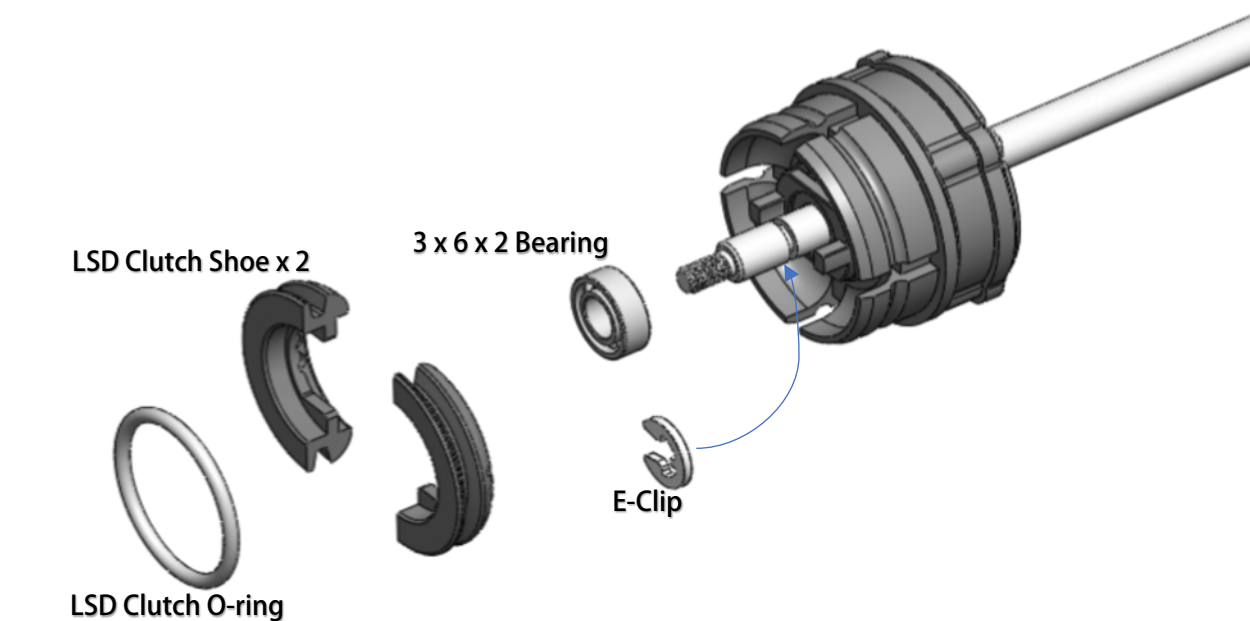
### ③⑥ Gear Differential

LSD Clutch Shoe x 2

3 x 6 x 2 Bearing

E-Clip

LSD Clutch O-ring

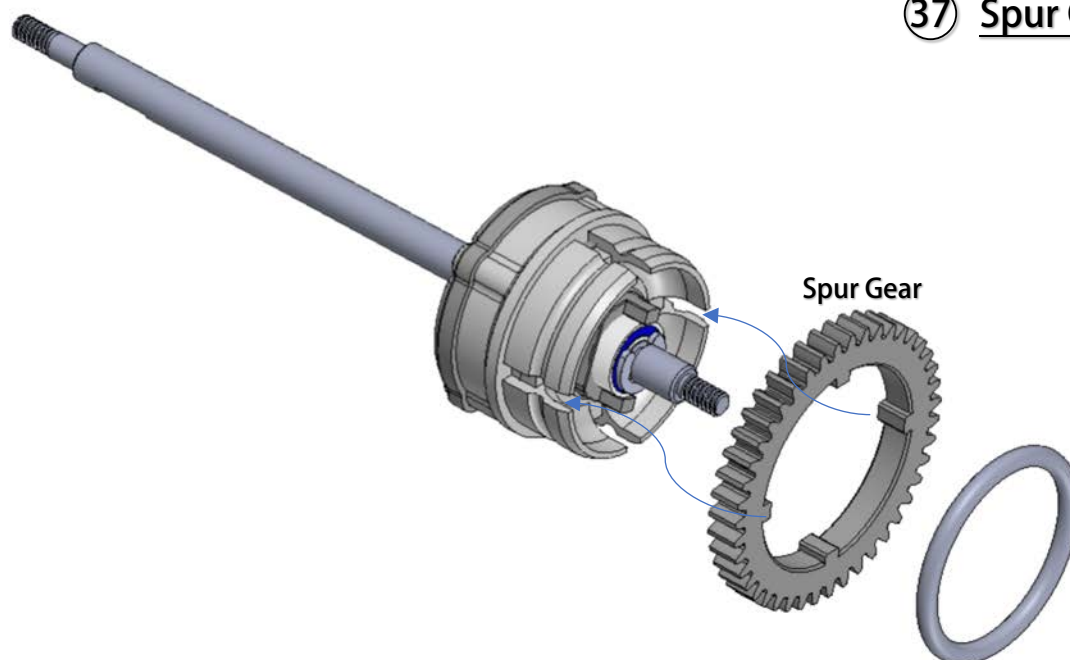


### ③⑦ Spur Gear

Spur Gear

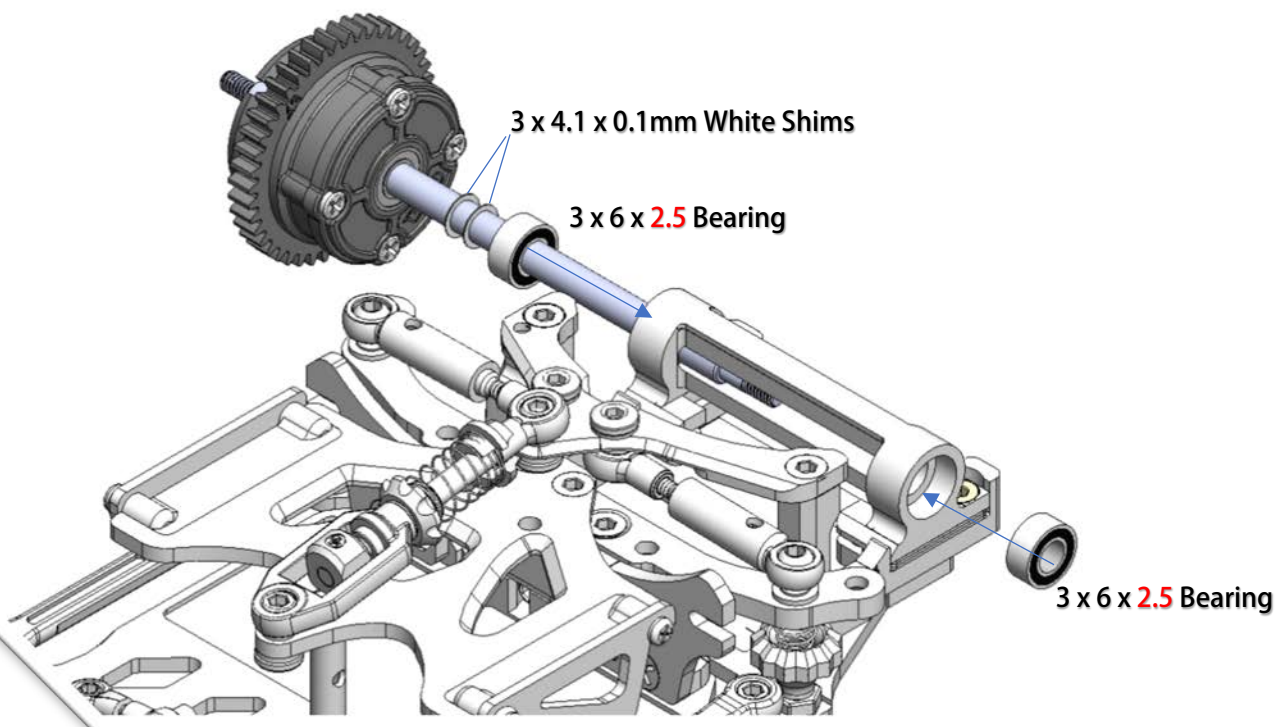
O-Ring (Rubber)

14mm inner hole

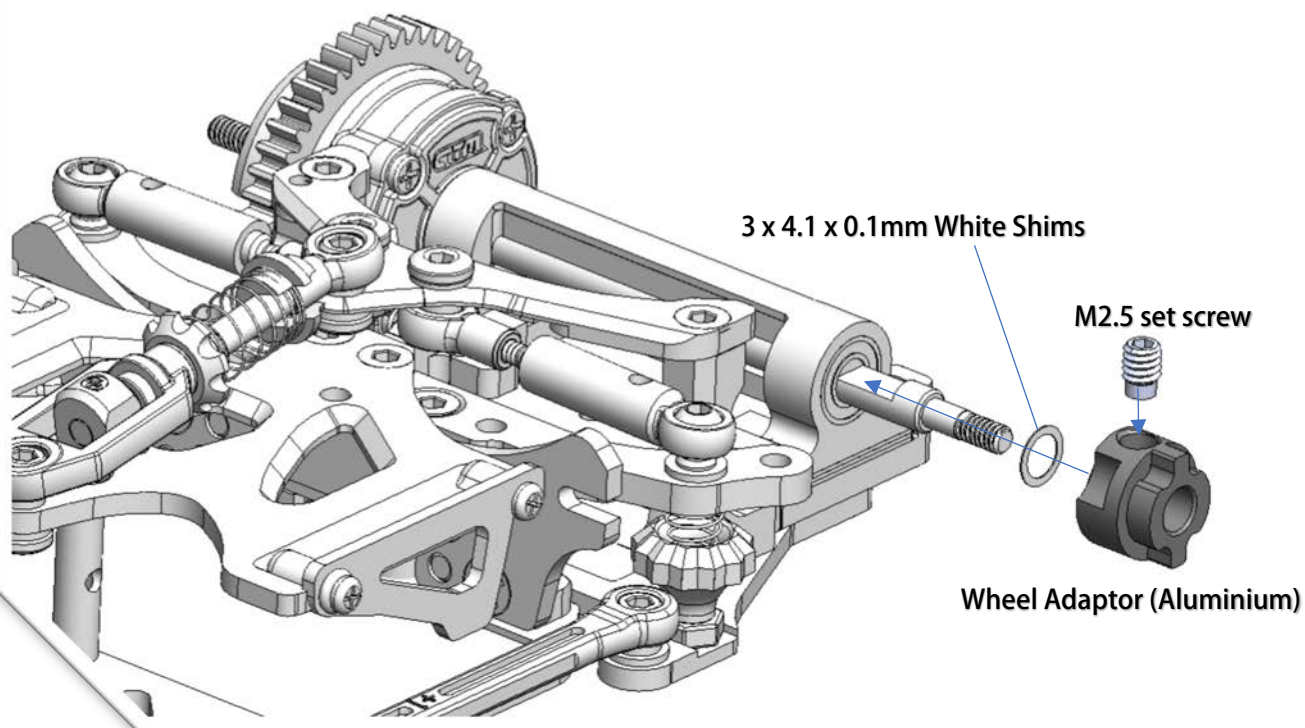




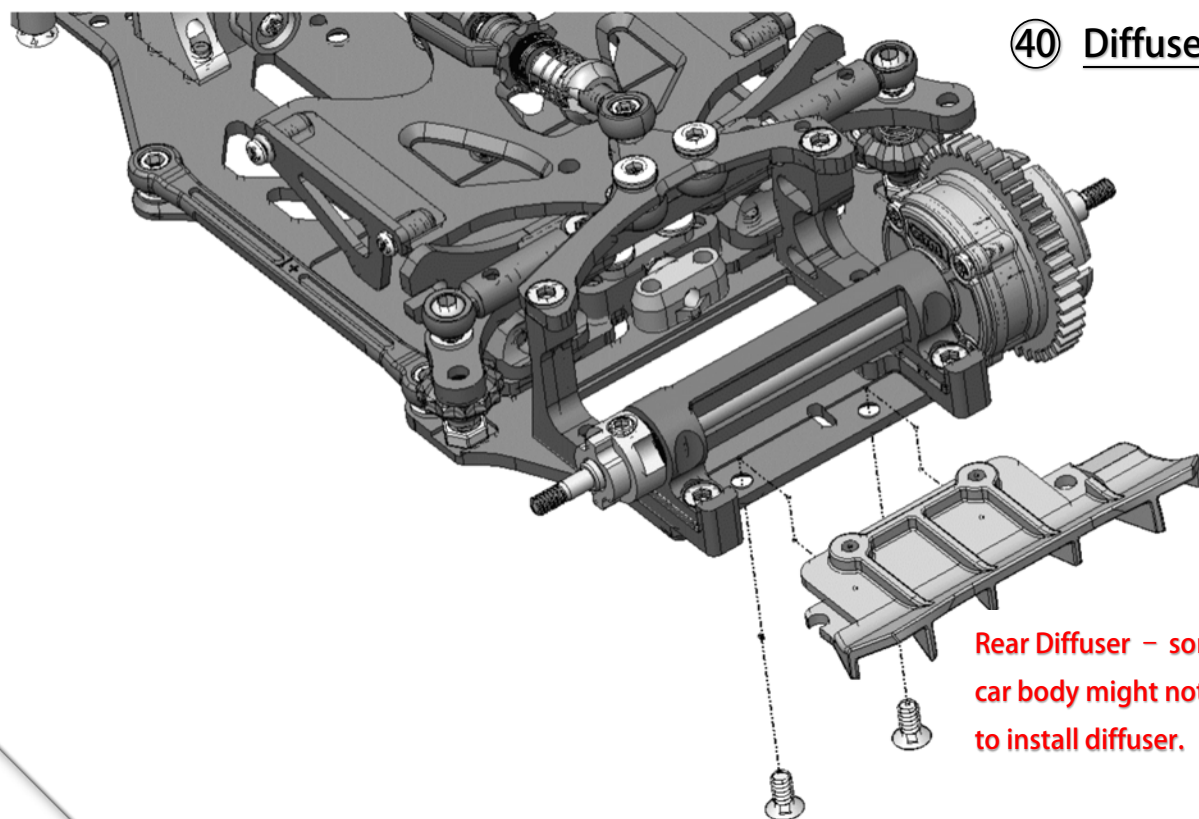
### 38 Install the Differential



### 39 Wheel Adaptor

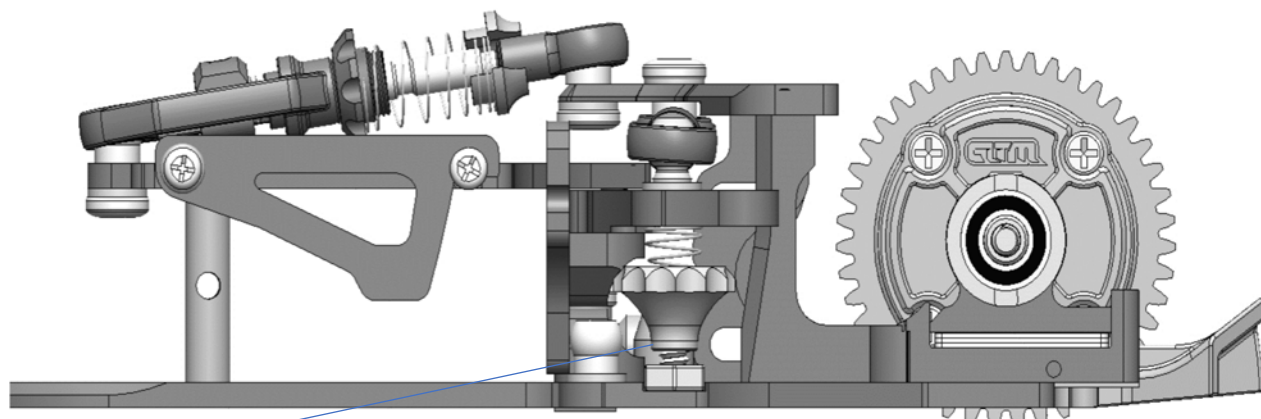




**40** Diffuser

Rear Diffuser – some of the car body might not be able to install diffuser.

Hex Flat Head M2\*4

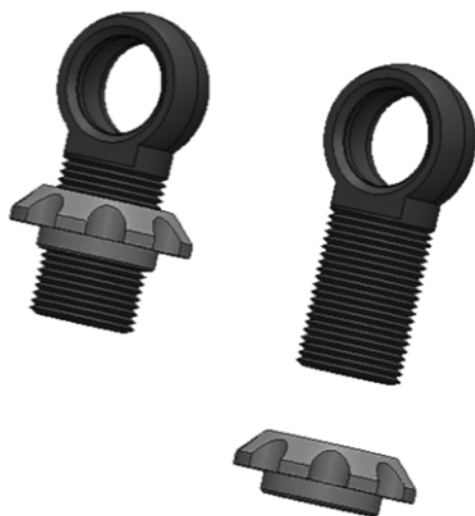
**40** Side Spring Adjust

Adjust the side spring cup, to make the spring just barely touch the top plate.

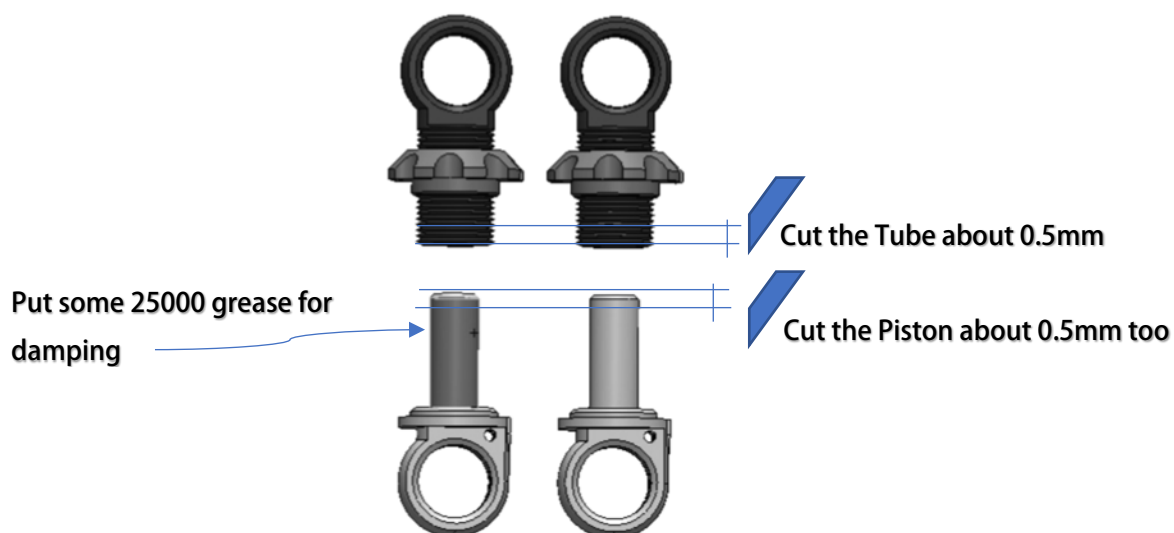
Note :

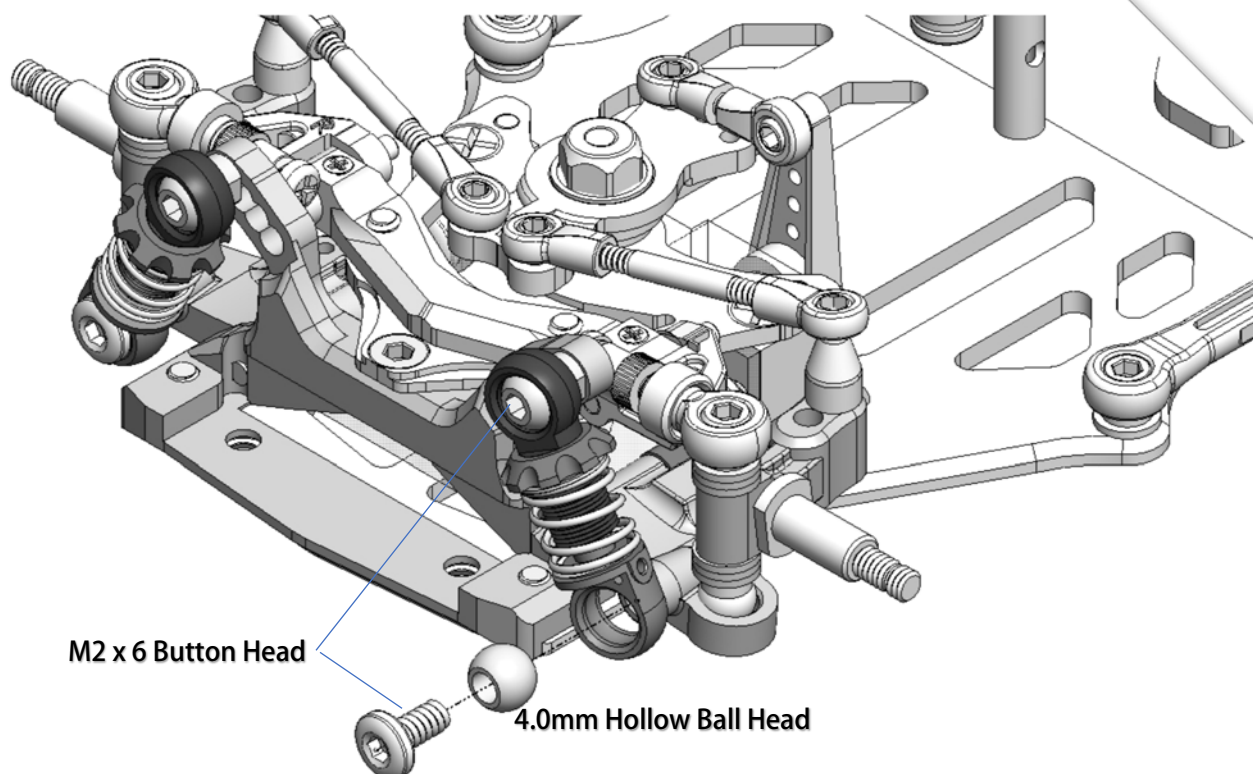
- More Spring pre-load to the plate, the car will have more steering, rear spin faster in corners.
- Less pre-load, will make the car has more rear grip.
- Make sure the spring tension feeling is symmetrically left to right.

## 41 Prepare the Dampers.



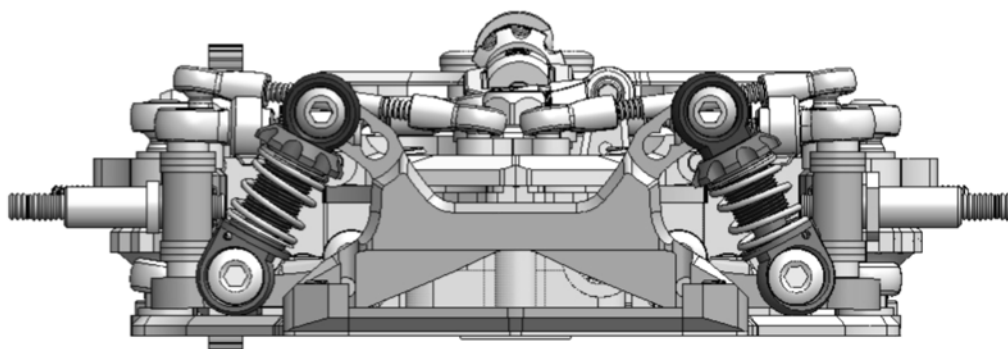
Put some 35000 grease (or cleaning clay) to add friction between spring collar and tube body.





## ④2 Install the Dampers

## ④3 Adjust Ride Height and Droop (End of Assembly)



**Note:**

To have a good performance and stable car, the key point is to make sure there is “No droop” no matter what ride height the front it is. That means, the front arm is not able to drop down if you lift the car. Adjust it thru the “droop screw” of the lower arm to achieve this.  
(If you sway Bar is installed, the situation is different. it needs some droop to work well)

|            |   |
|------------|---|
| MRZ-UP01   | MRZ Metal Servo Saver (M1.6 for BA-82MG)  |
| MRZ-UP02S  | MRZ Front Spring Soft (Blue)              |
| MRZ-UP02M  | MRZ Front Spring Medium (Red)             |
| MRZ-UP02H  | MRZ Front Spring Hard (White)             |
| MRZ-UP03XS | MRZ Side Spring Extra Soft (Green)        |
| MRZ-UP03S  | MRZ Side Spring Soft (Blue)               |
| MRZ-UP03M  | MRZ Side Spring Medium (Red)              |
| MRZ-UP03H  | MRZ Side Spring Hard (White)              |
| MRZ-UP03XH | MRZ Side Spring Extra Hard (Yellow)       |
| MRZ-UP04S  | MRZ Mid Spring Soft (Red)                 |
| MRZ-UP04M  | MRZ Mid Spring Medium (White)             |
| MRZ-UP04H  | MRZ Mid Spring Hard (Yellow)              |
| MRZ-UP05   | Spacer for Motor Pod (0.3mm) 6 pcs        |
| MRZ-UP06   | Spacer for Front Body Mount (0.5mm) 2 pcs |
| MRZ-UP07   | MRZ Double A-Arm Conversion Kit           |
| MRZ-UP07P1 | DWS Spare Lower Arms w/ Pin               |
| MRZ-UP07P2 | DWS Optional Spring Set                   |
| MRZ-UP07P3 | DWS Damper Shock                          |
| MRZ-UP08   | MRZ Alu. Servo Mount                      |
| MRZ-UP09   | MRZ Alu. Knuckle                          |
| MRZ-UP10   | MRZ Alu. Upper Arm                        |
| MRZ-UP11   | MRZ Alu. Central Mount                    |
| MRZ-UP12G  | MRZ Alu. Steering Crank (Gold)            |
| MRZ-UP12K  | MRZ Alu. Steering Crank (Black)           |
| MRZ-UP13   | MRZ 102mm WB Motor Pod Plate              |
| MRZ-UP14   | MRZ Arm Mount Caster 2 Deg.               |
| MRZ-UP15   | MRZ Arm Mount Caster 4 Deg.               |
| MRZ-UP16   | MRZ Ball Differential                     |
| MRZ-UP17   | MRZ Front Chassis Support                 |
| MRZ-UP18   | MRZ Optional Long Dampers                 |
| MRZ-UP19   | MRZ Optional Delrin Side Spring Adjuster  |
| MRZ-UP20   | Spacer for Front Ride Height (0.25mm)     |
| MRZ-UP21   | MRZ Light weight Mid Damper Shaft         |
| MRZ-UP22   | MRZ Rear Body Post                        |

# MRZ DWS Instruction Manual

|             |   |
|-------------|---|
| MRZ-UP23    | MRZ Delrin Pivot Base Set (Adjustable WB) |
| MRZ-UP24-10 | Hard Coated 64DP Pinion 10T (MRZ)         |
| MRZ-UP24-11 | Hard Coated 64DP Pinion 11T (MRZ)         |
| MRZ-UP24-12 | Hard Coated 64DP Pinion 12T (MRZ)         |
| MRZ-UP24-13 | Hard Coated 64DP Pinion 13T (MRZ)         |
| MRZ-UP24-14 | Hard Coated 64DP Pinion 14T (MRZ)         |
| MRZ-UP24-CB | Hard Coated 64DP Pinion Set 10-14T (MRZ)  |
| MRZ-UP25    | Brass Motor Mount Plate (98WB)            |
| MRZ-UP26    | Brass Motor Mount Plate (102WB)           |
| MRZ-UP27    | DWS Aluminium Bulkhead                    |
|             |   |
|             |   |
|             |   |