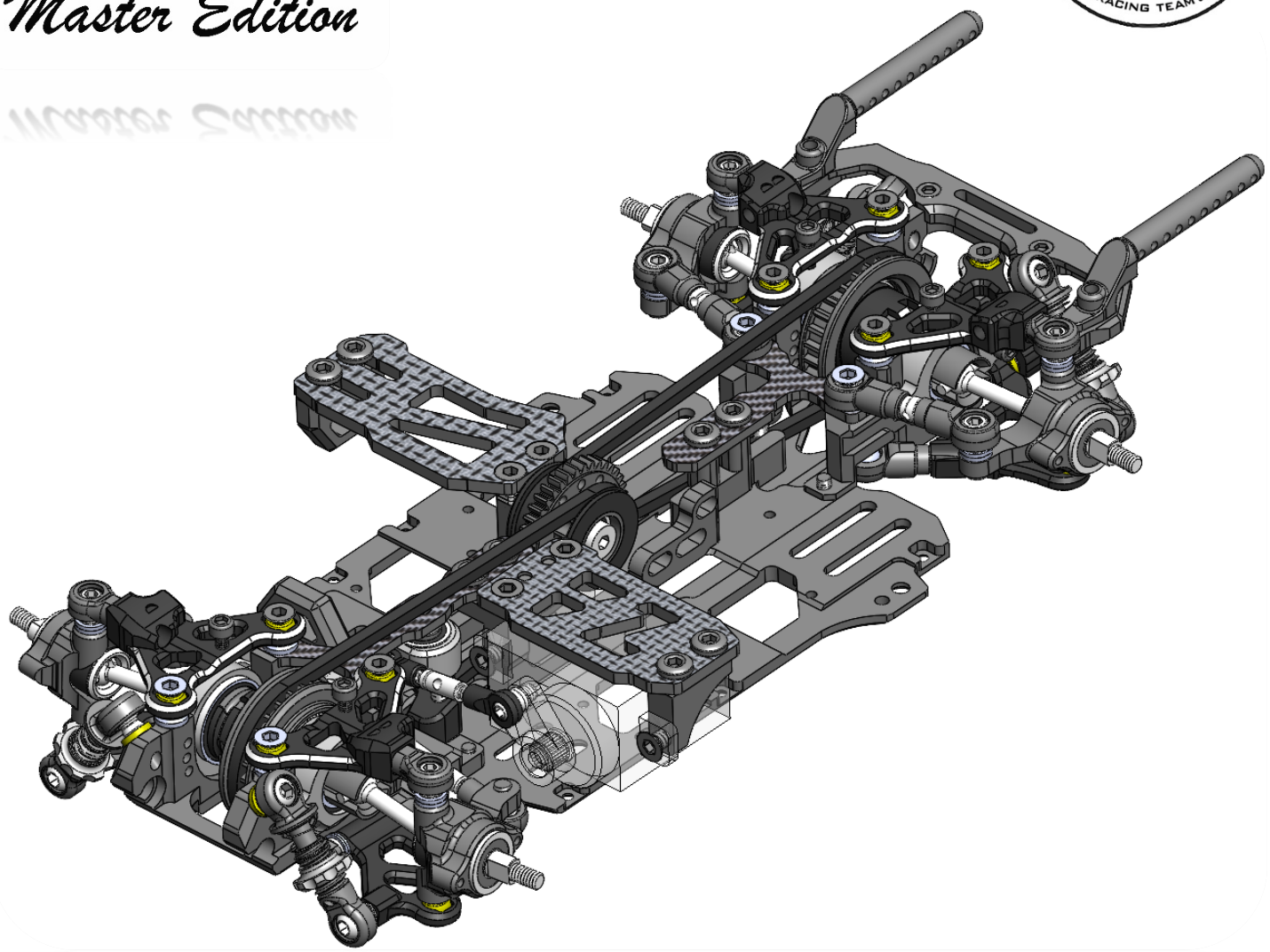
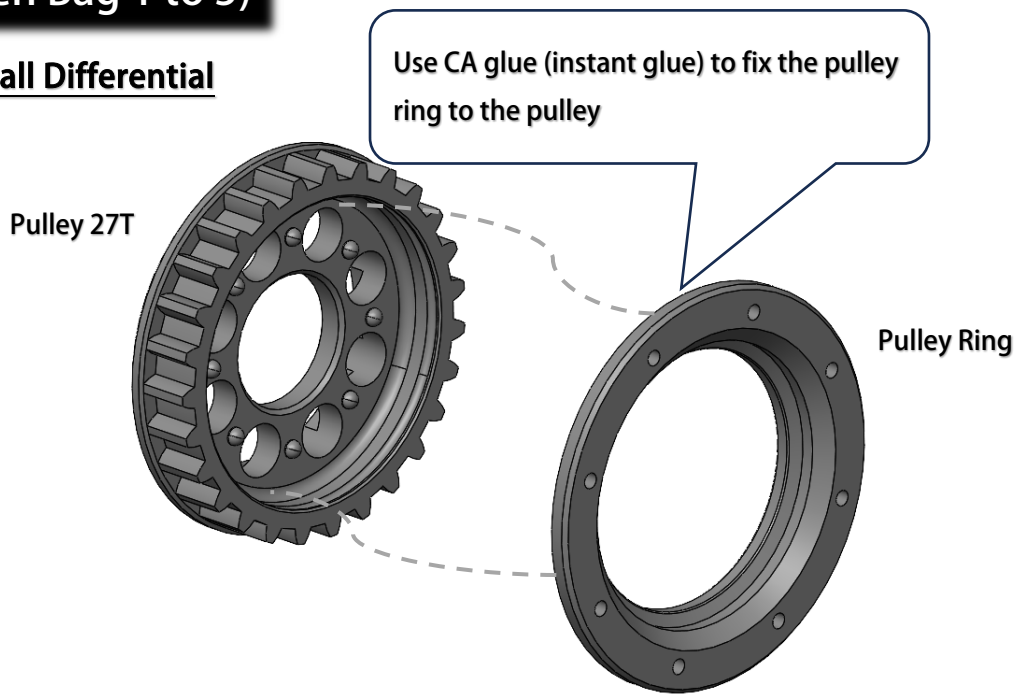


BZ Master Edition Instruction Manual

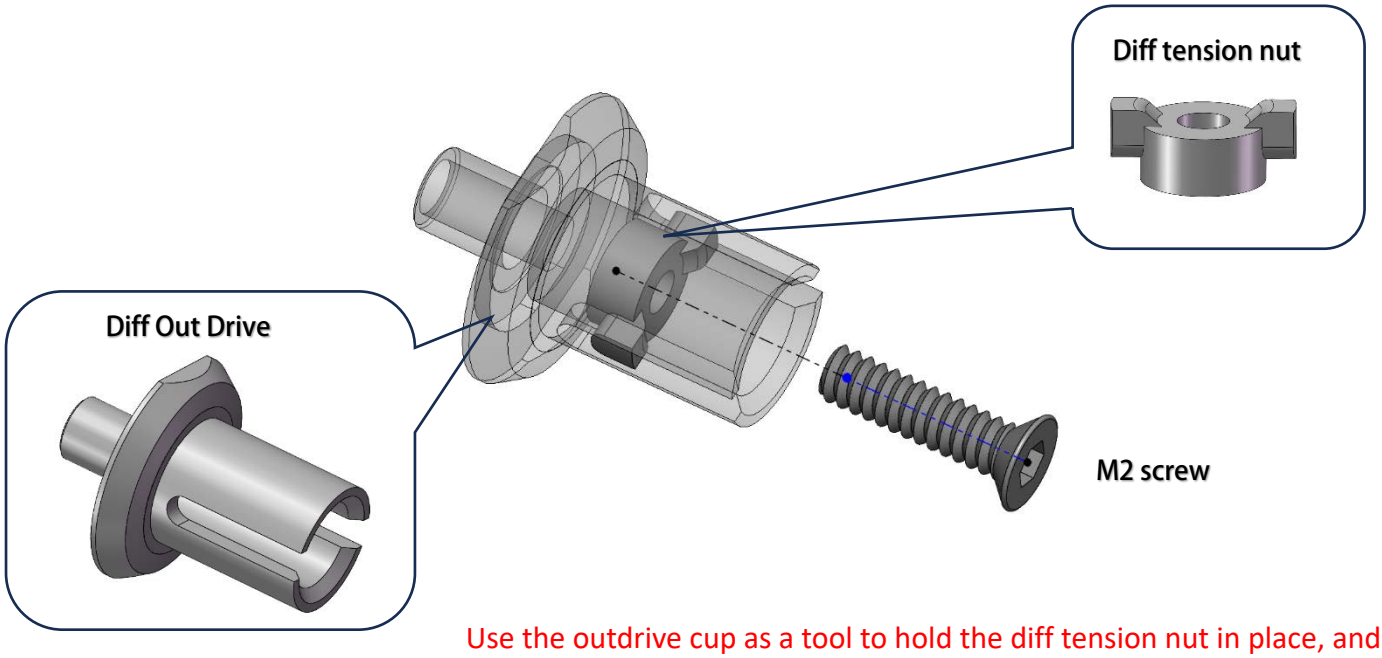
Version 1.0 (15-12-2025)

Step 01 (Open Bag 1 to 5)

Build 2 sets of Ball Differential

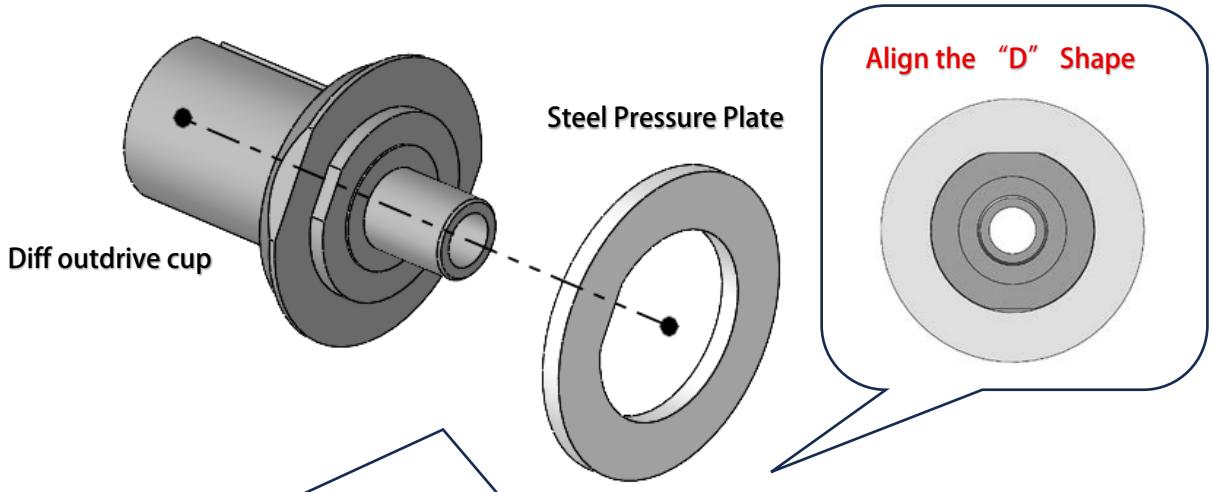


Step 02



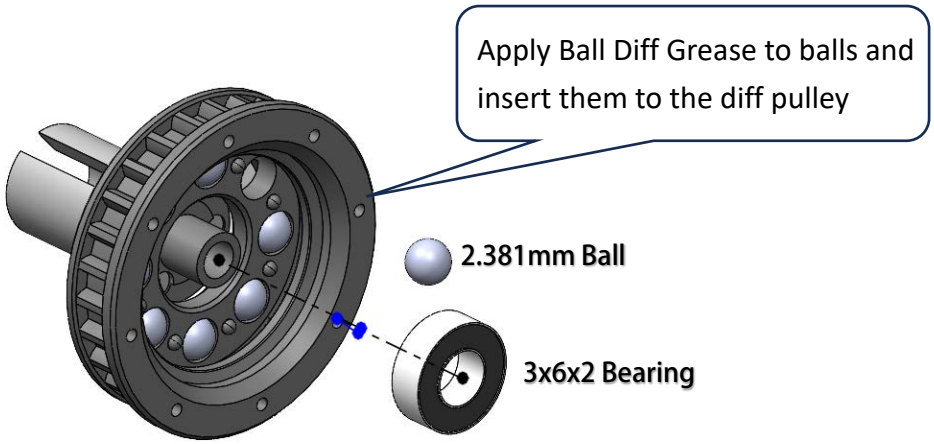
Use the outdrive cup as a tool to hold the diff tension nut in place, and then take a M2 screw to pre-make a thread on the nut first; it will be easier to do installation in following steps.

Step 03

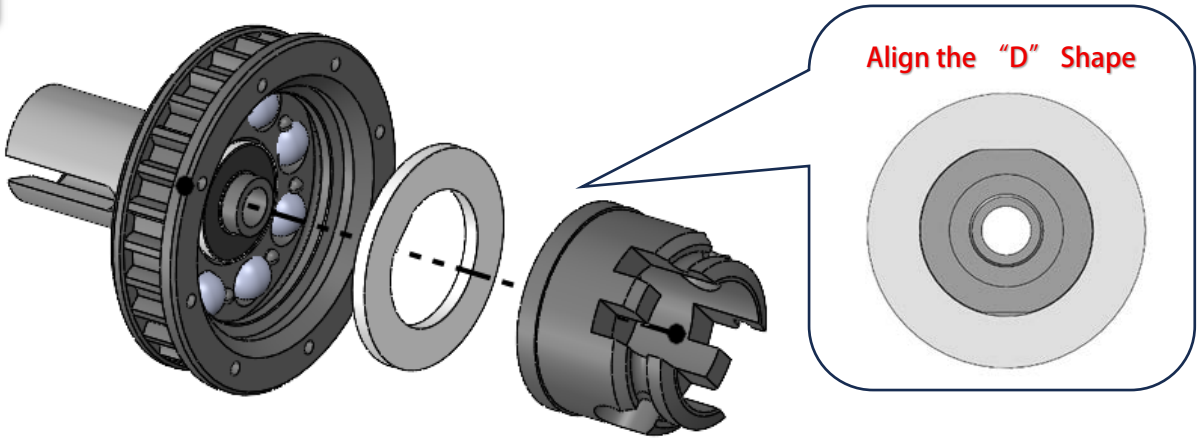


- Use the #1500 sandpaper to polish the pressure plates and thrust bearing plates for best performance.
- Apply ball diff grease to the flat surface as adhesive to hold the diff plate.

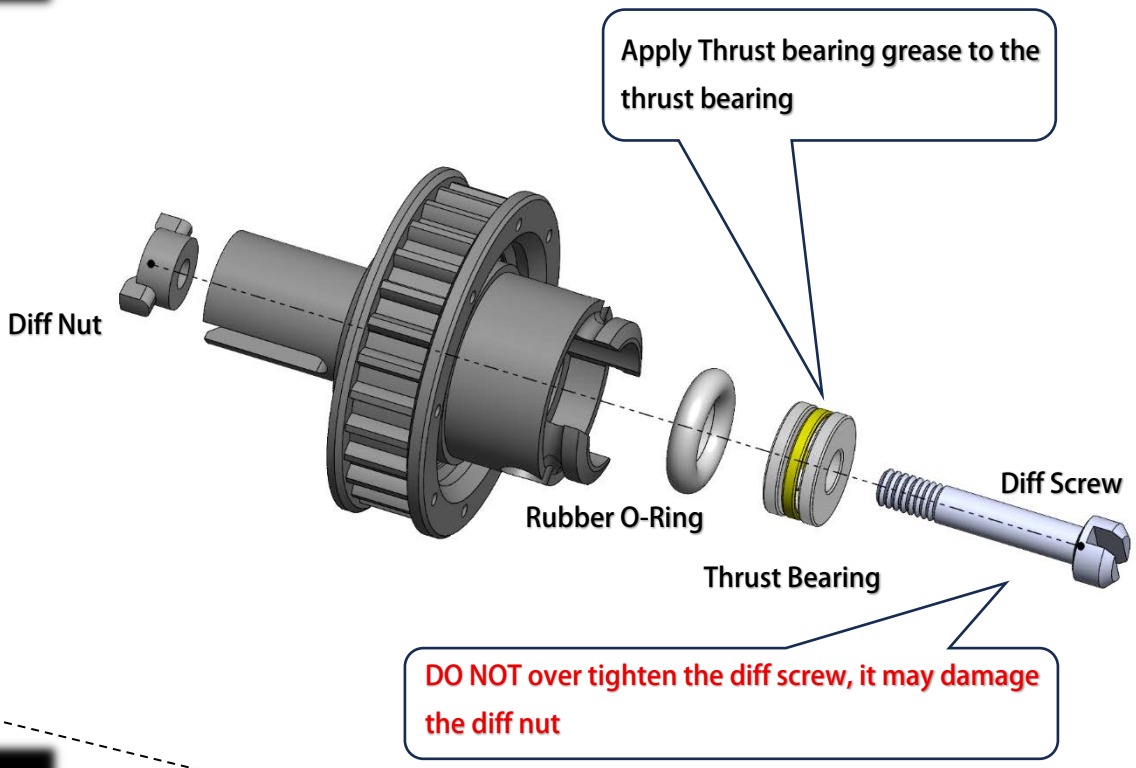
Step 04



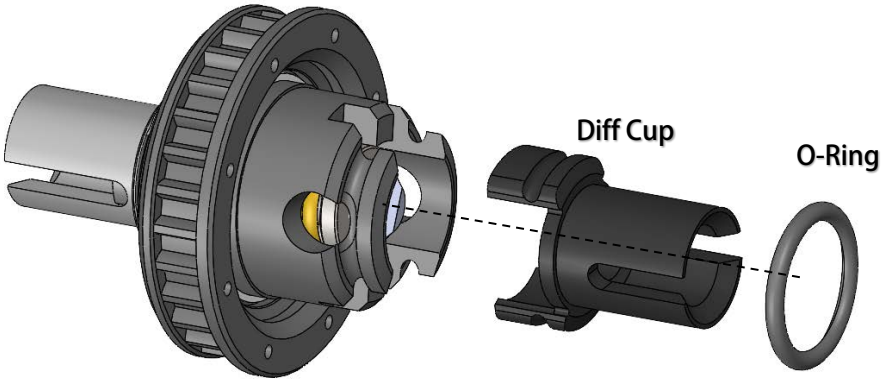
Step 05



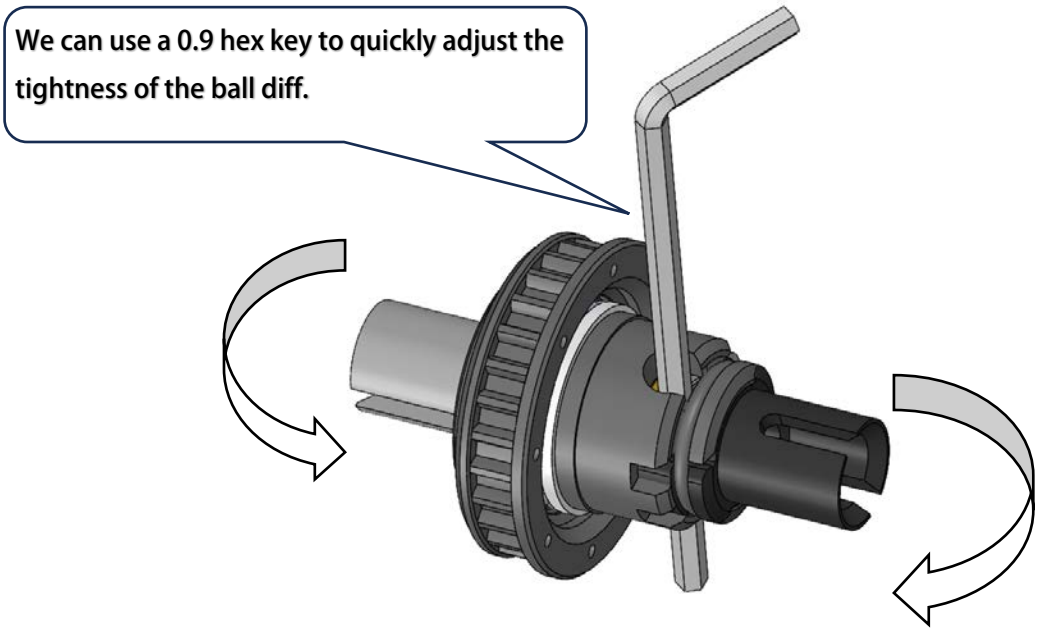
Step 06



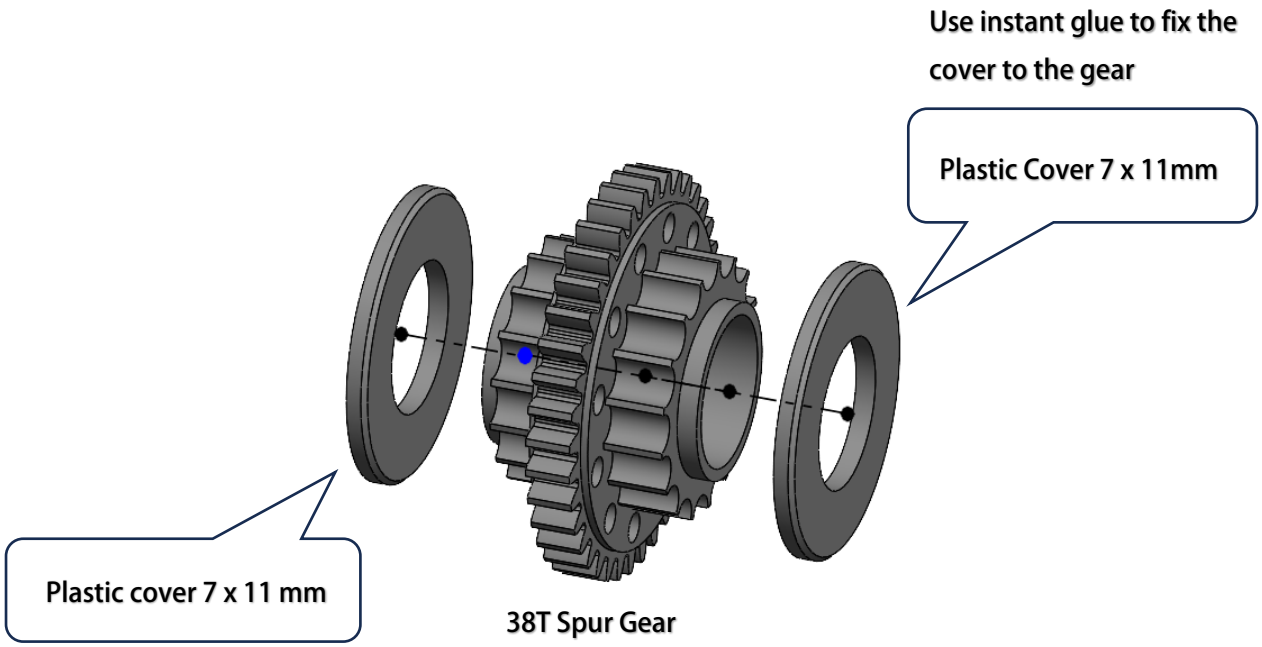
Step 07



Step 8

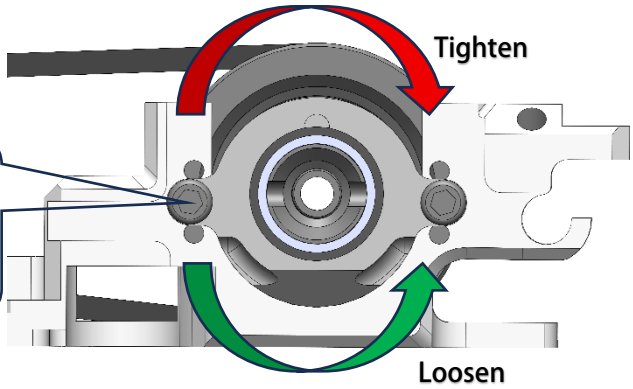


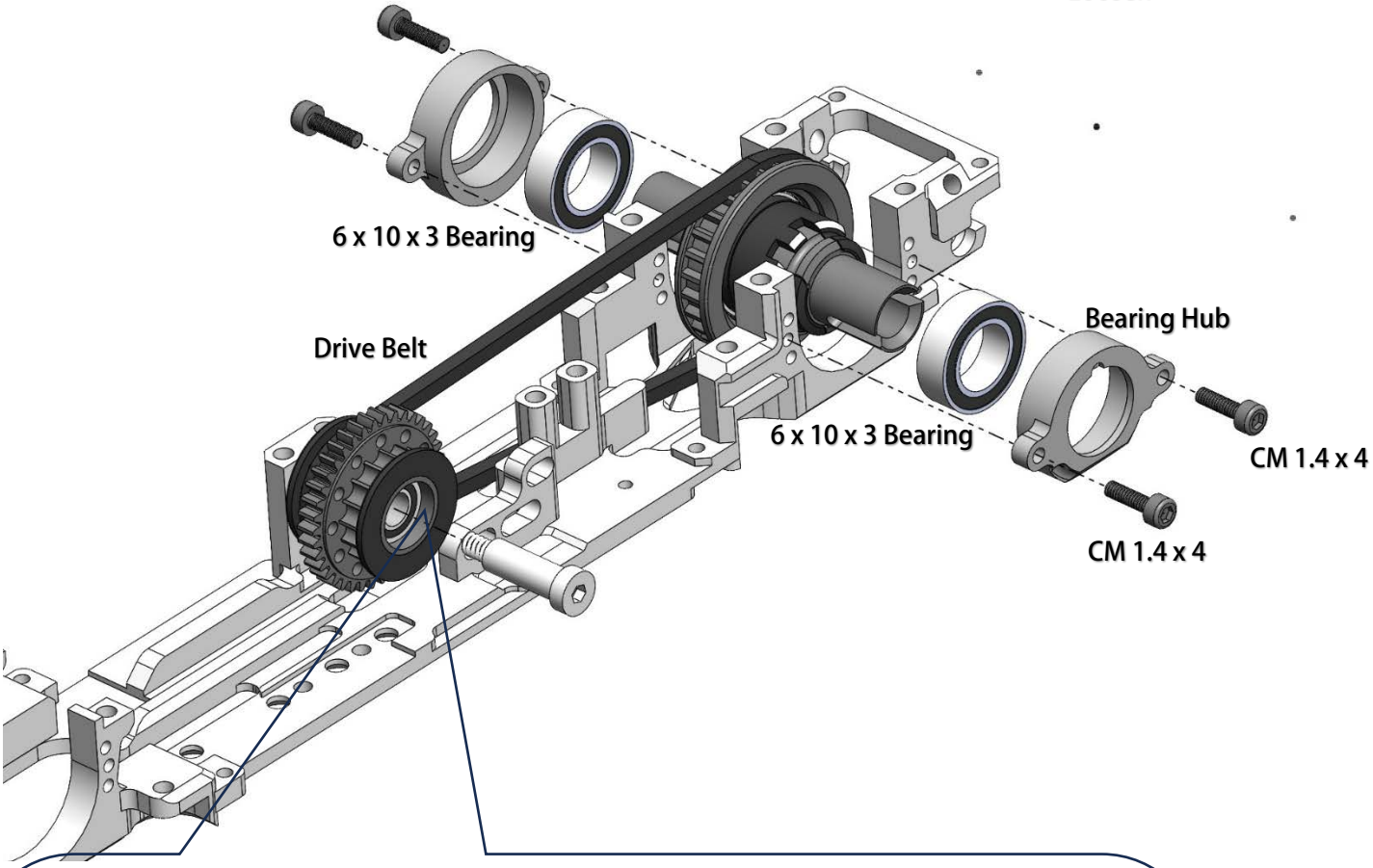
Step 09 (Open Bag 6)

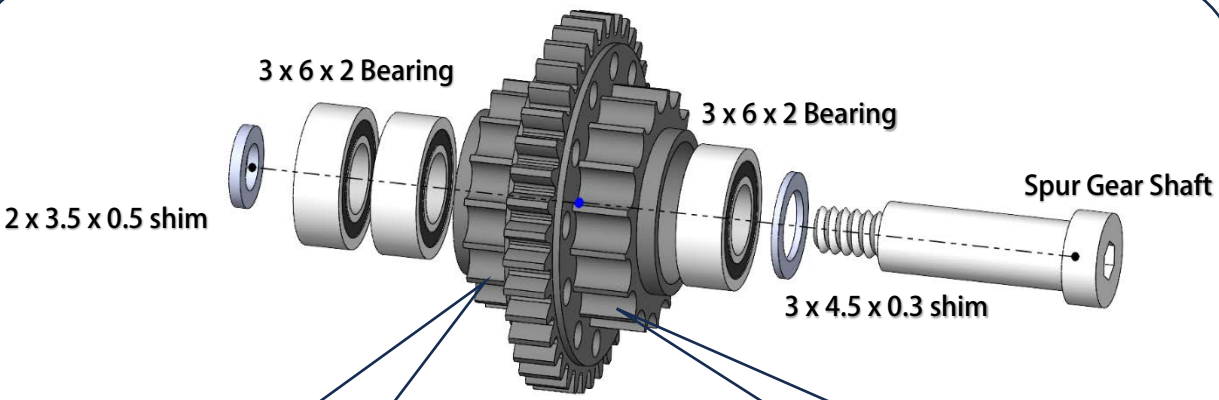


Step 10

Belt tension adjustment is adjusted by the eccentric bearing hub.
Starting at middle is recommended



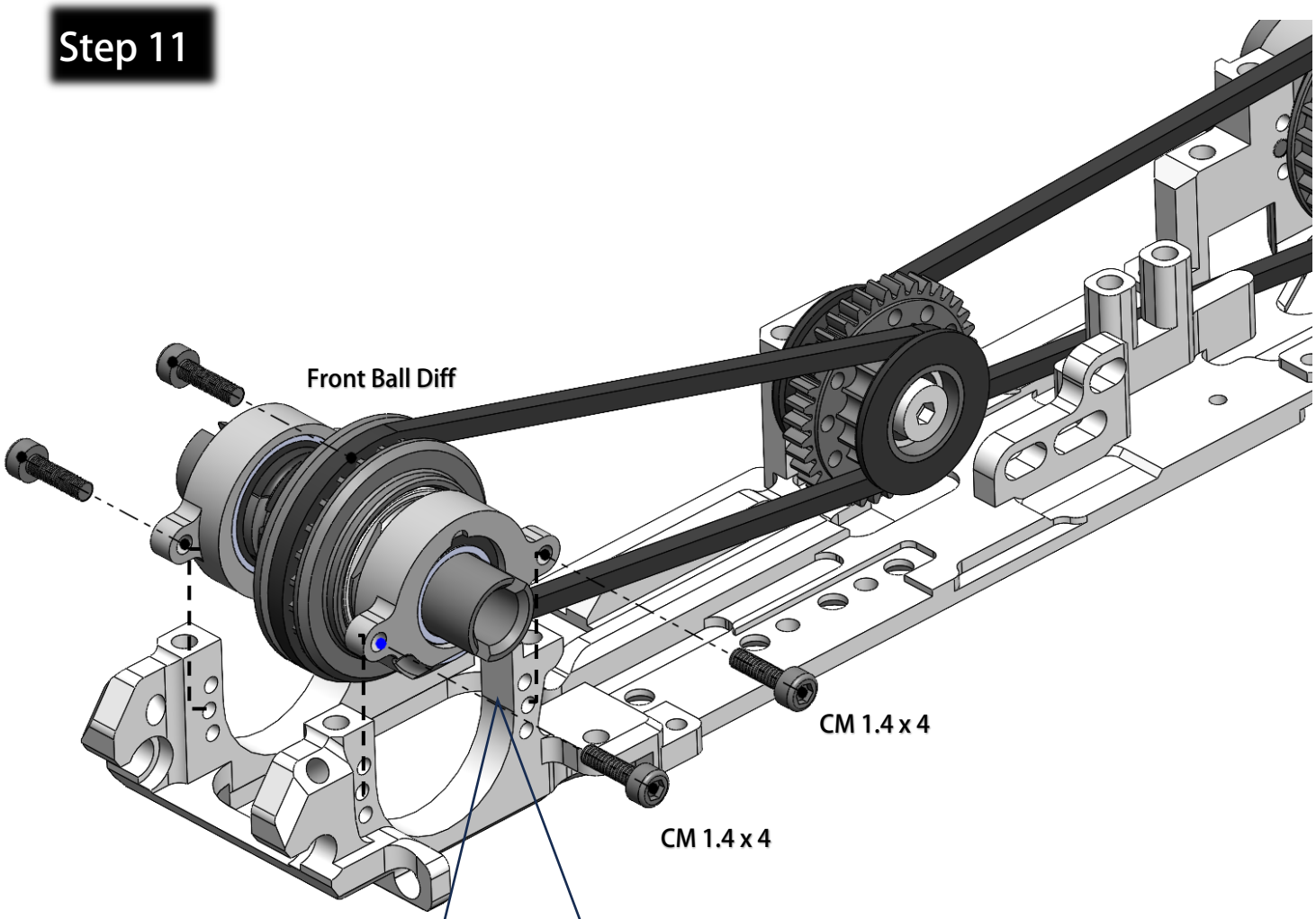


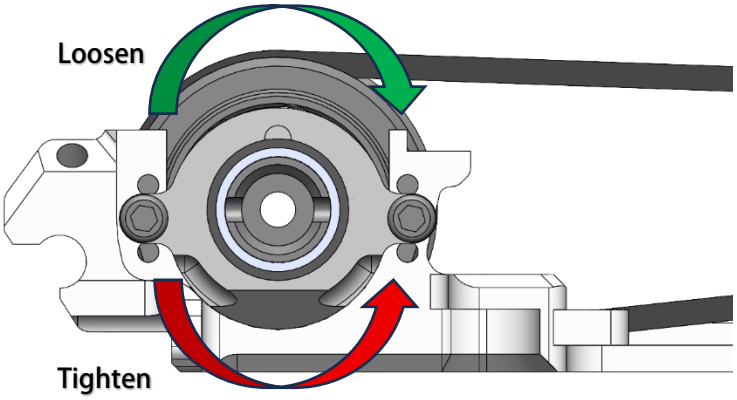


16t side has smaller diameter, which is driving REAR ball diff

17t side has bigger diameter, which is driving FRONT ball diff

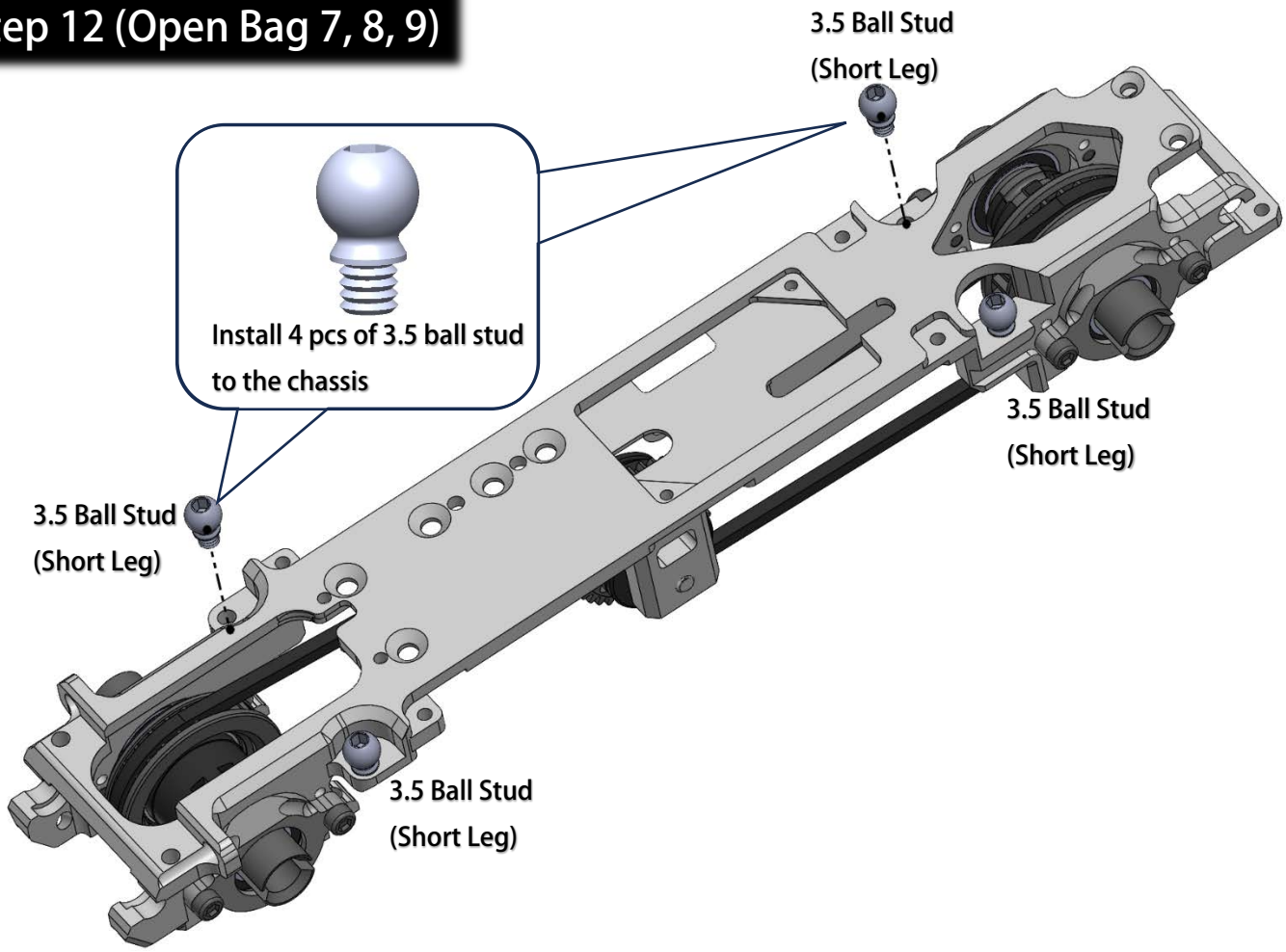
Step 11



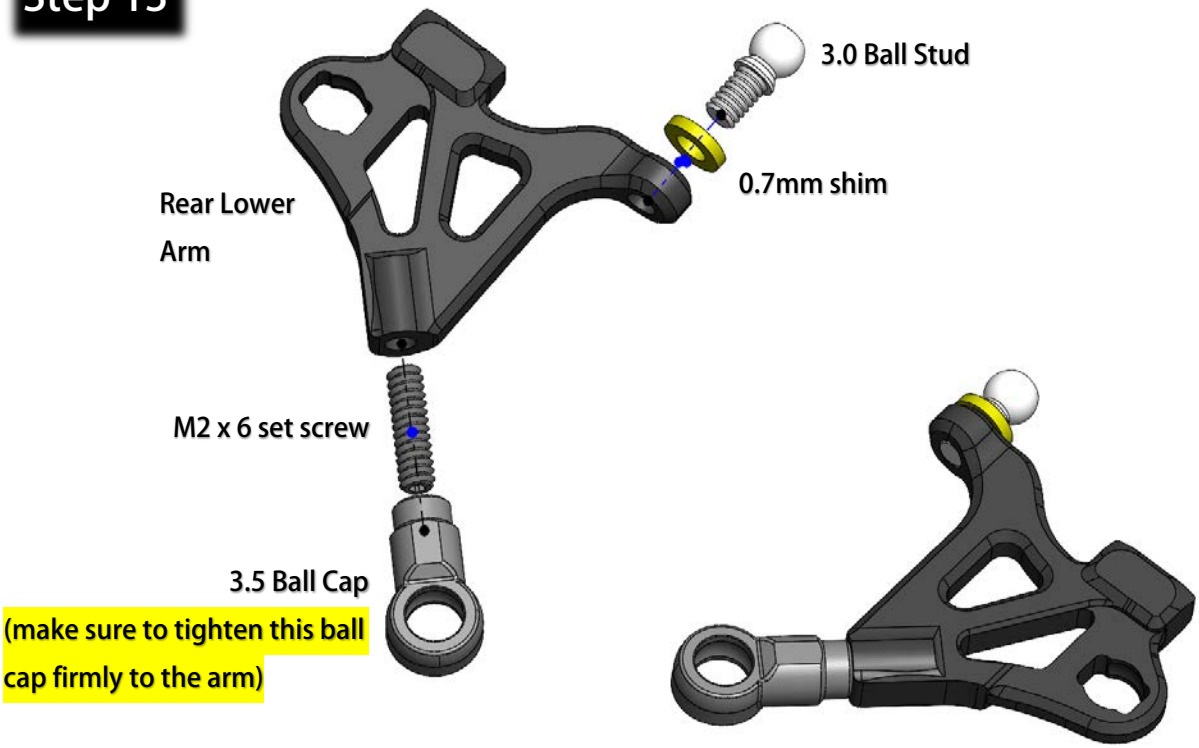


Belt tension adjustment is adjusted by
the eccentric bearing hub.
Starting at middle is recommended

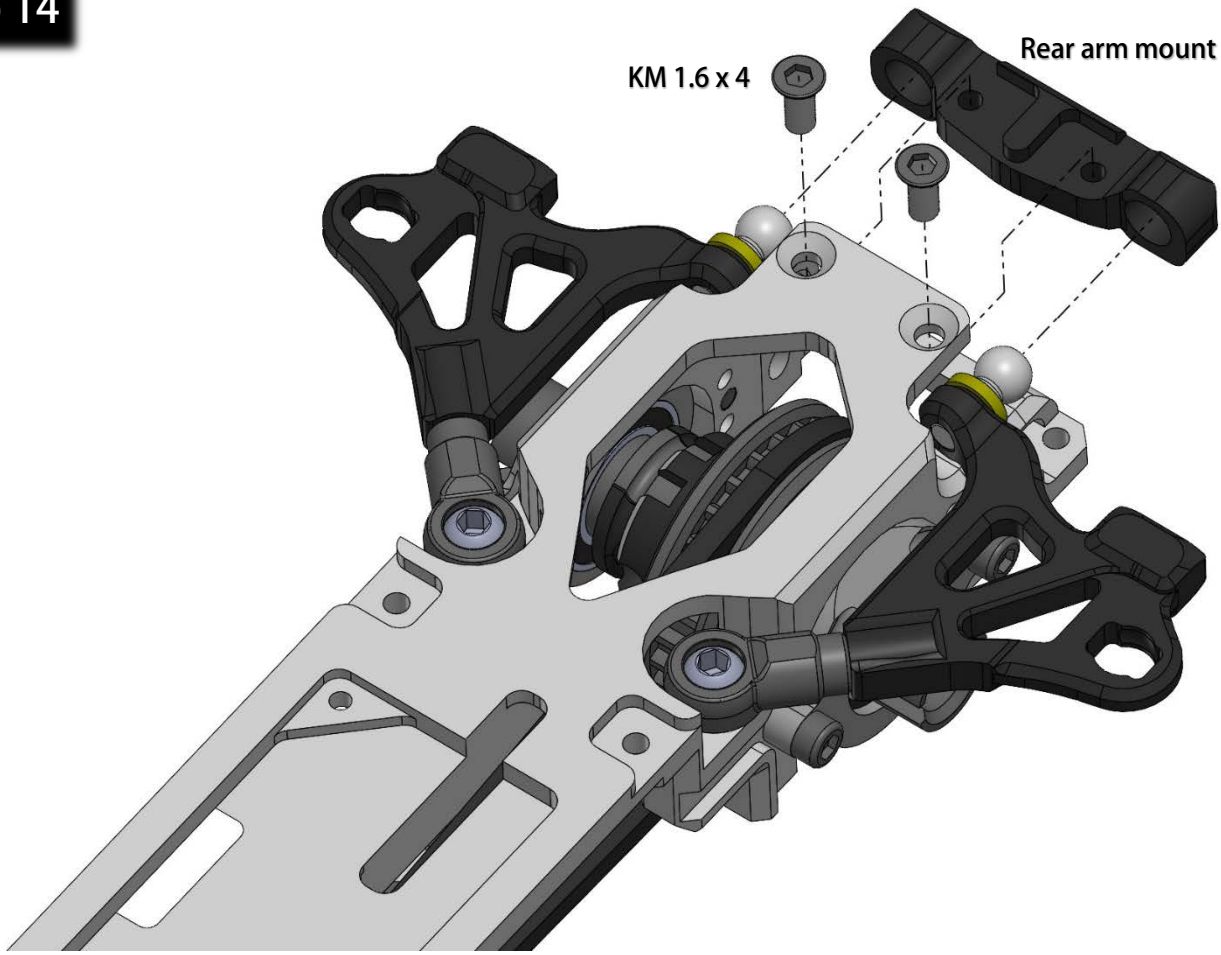
Step 12 (Open Bag 7, 8, 9)



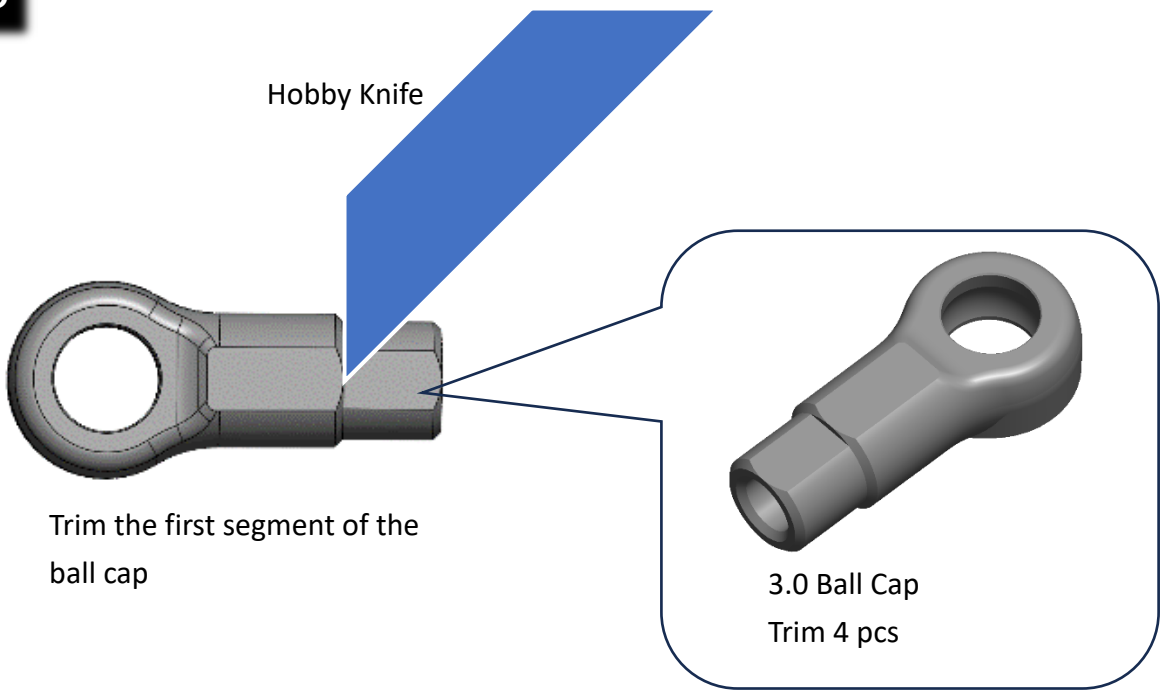
Step 13



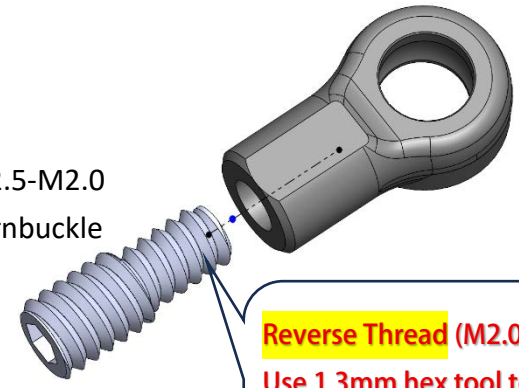
Step 14



Step 15

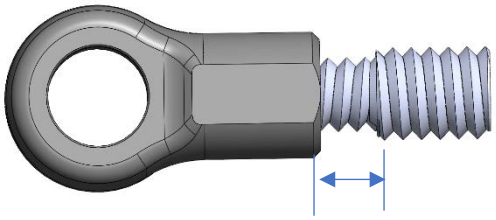


Step 16



M2.5-M2.0
Turnbuckle

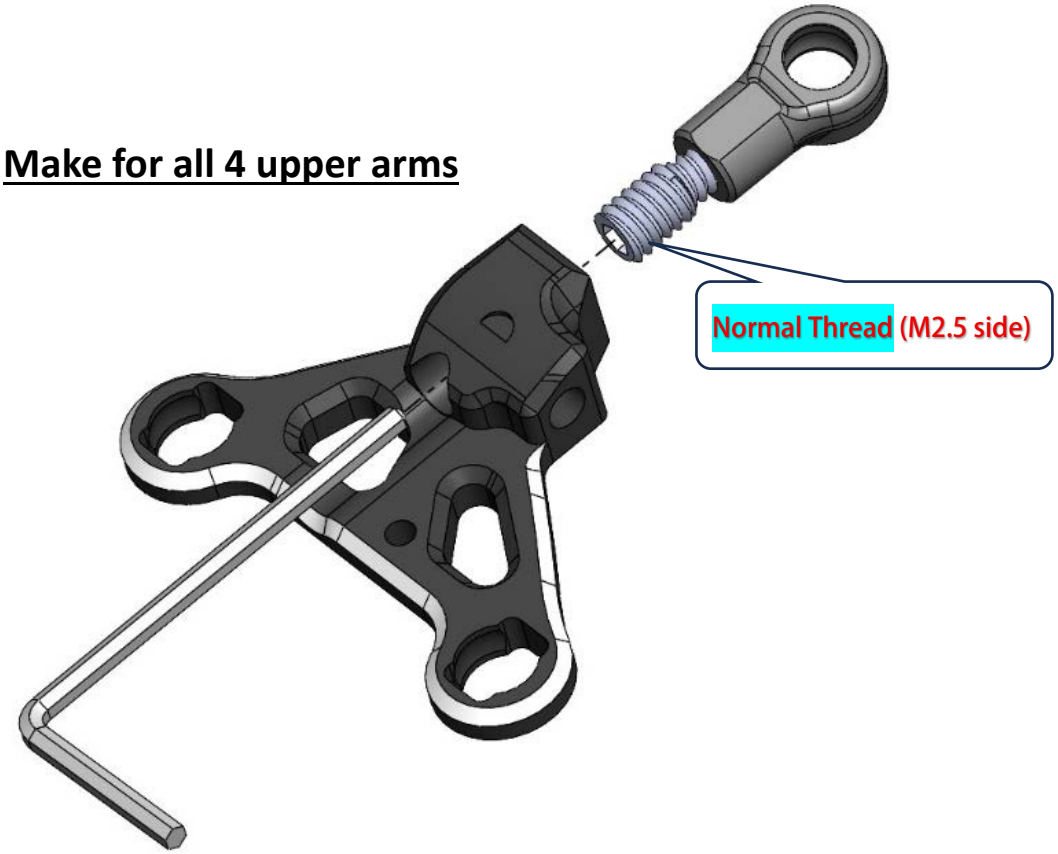
Reverse Thread (M2.0 side)
Use 1.3mm hex tool to screw the turnbuckle into the ball cap



Leave around 1.5mm gap here

Step 17

Make for all 4 upper arms

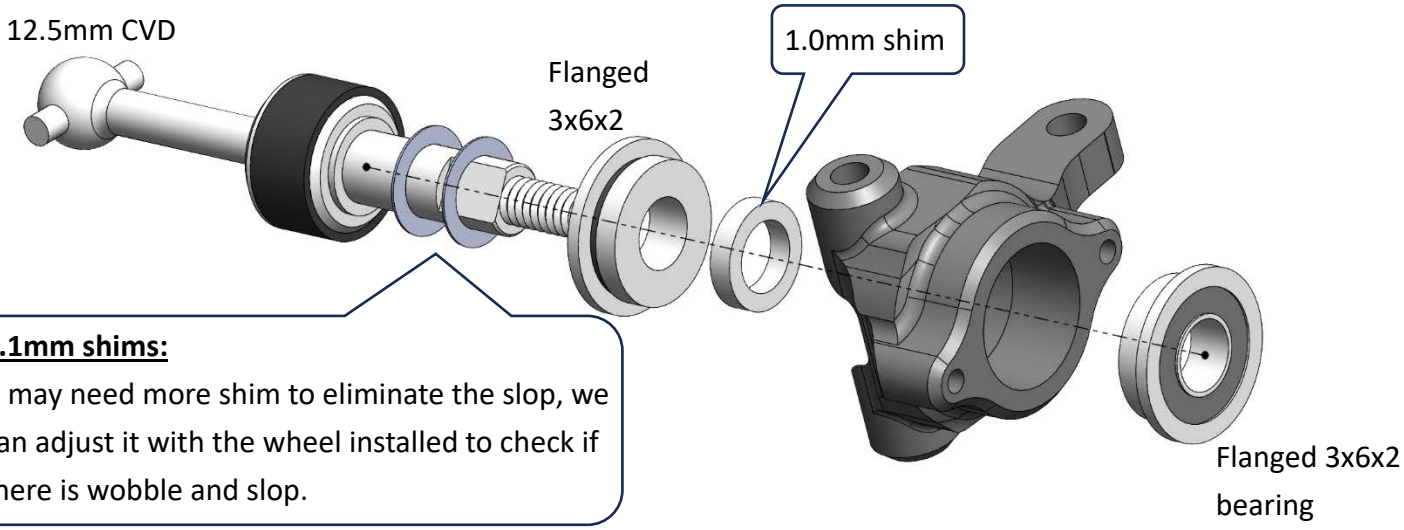


Normal Thread (M2.5 side)

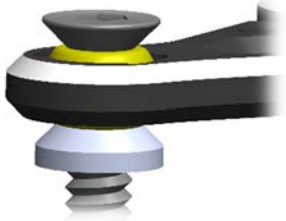
Use 1.3mm hex tool to install the turnbuckle system into the upper arm

Step 18

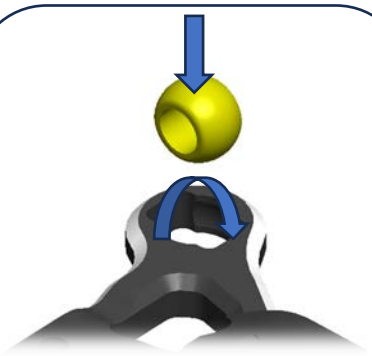
Build 4 Knuckles



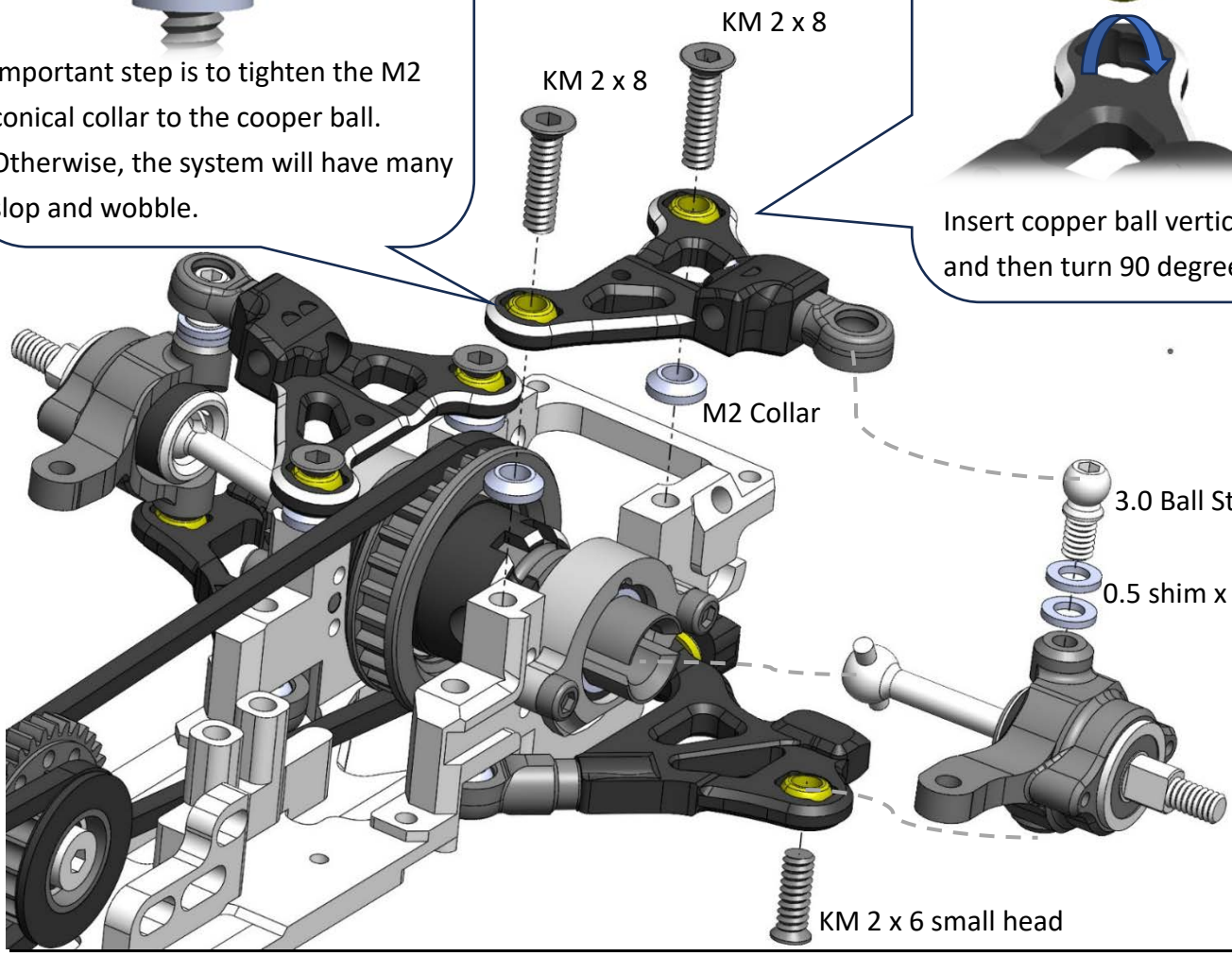
0.1mm shims:
it may need more shim to eliminate the slop, we can adjust it with the wheel installed to check if there is wobble and slop.



Important step is to tighten the M2 conical collar to the cooper ball. Otherwise, the system will have many slop and wobble.

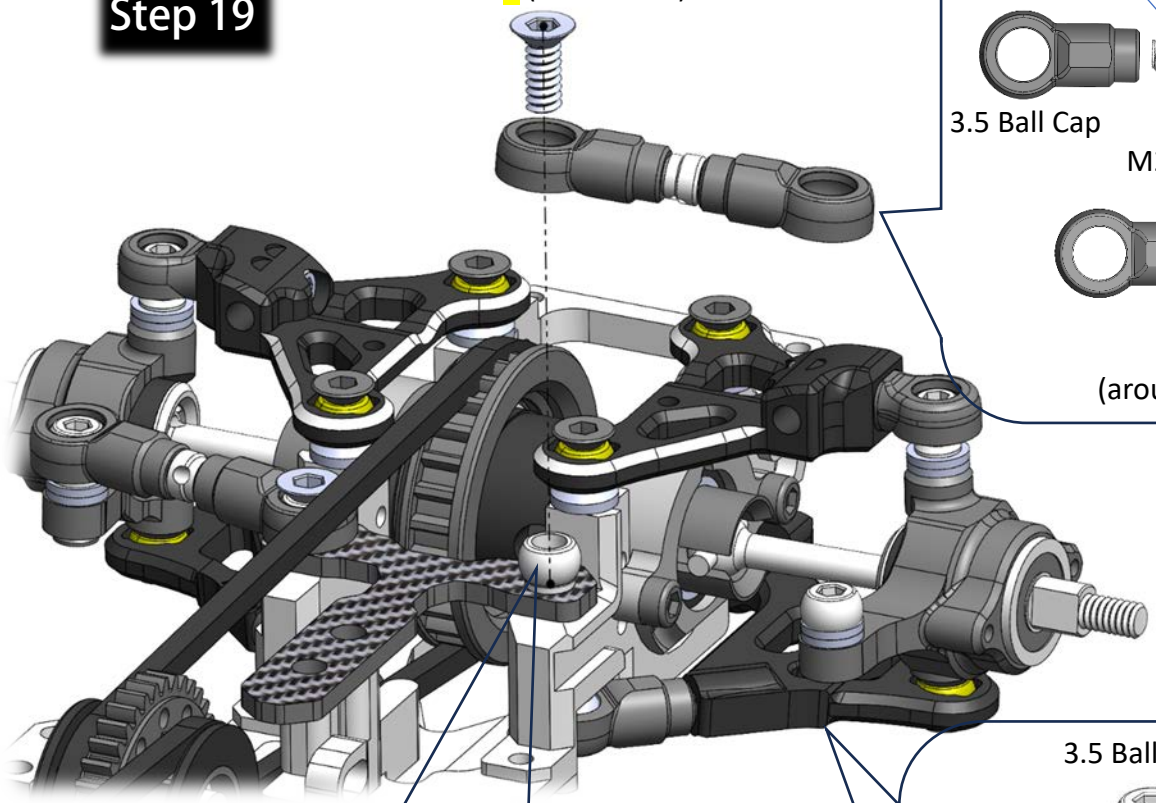


Insert copper ball vertically and then turn 90 degrees.



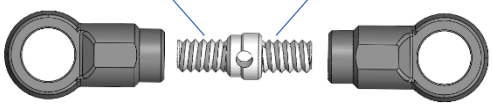
Step 19

KM 2 x 7 (silver color)



Reverse Thread

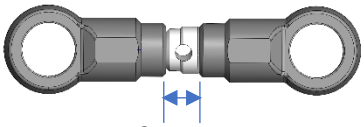
Normal Thread



3.5 Ball Cap

3.5 Ball Cap

M2 Turnbuckle



2mm gap

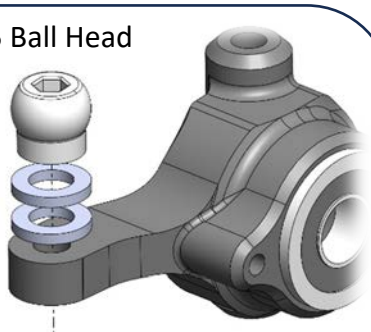
(around 1.5 deg Toe-in)

3.5 hollow steel ball

Neck facing downward

3.5 Ball Head

0.5 shim x 2

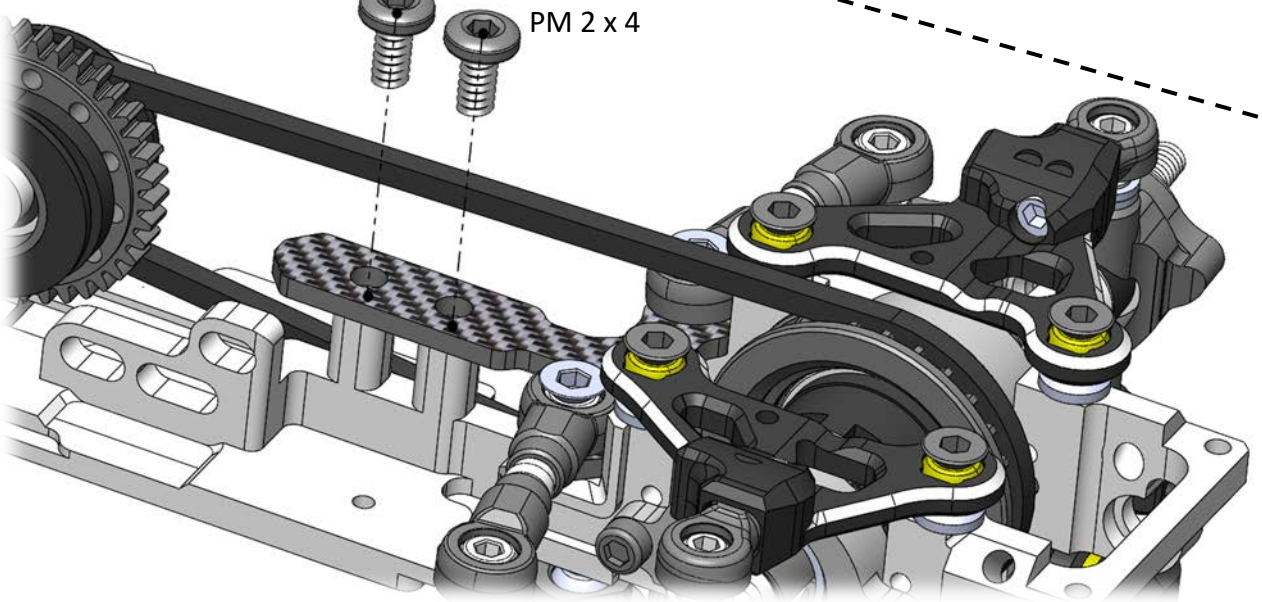


KM 2 x 6 small head

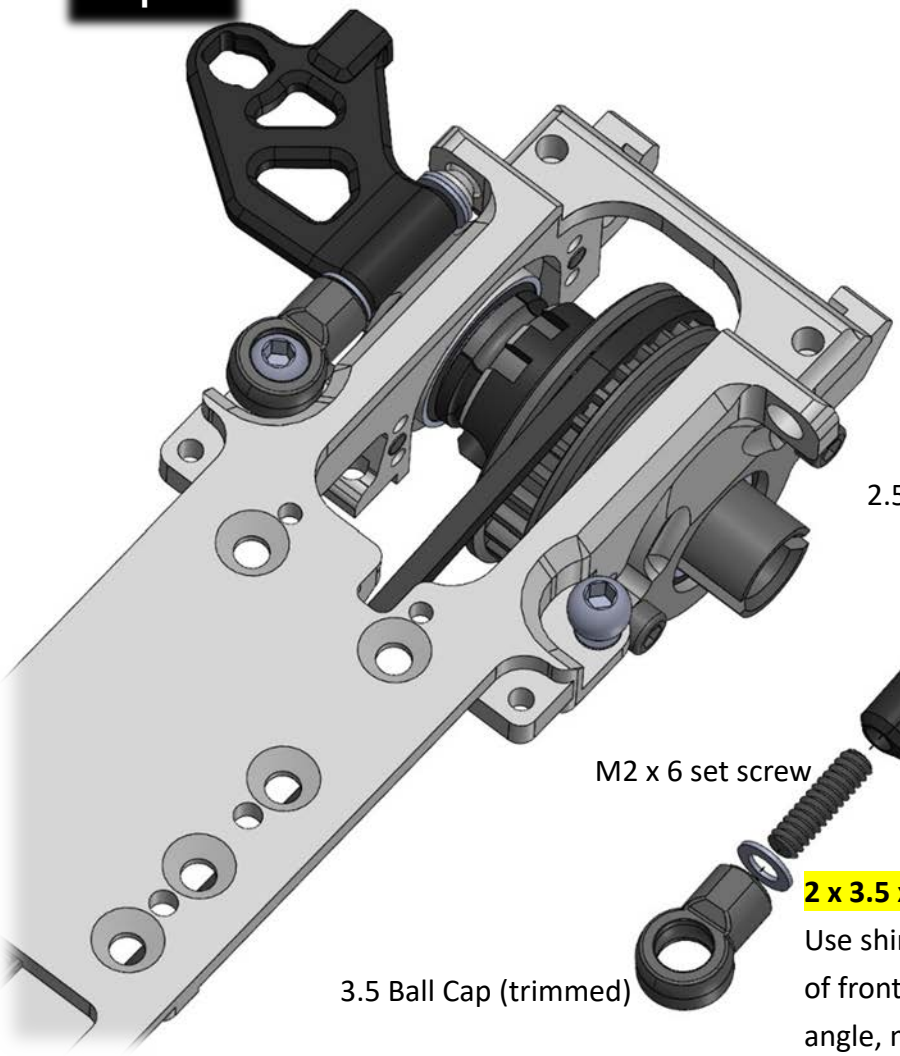
Step 20

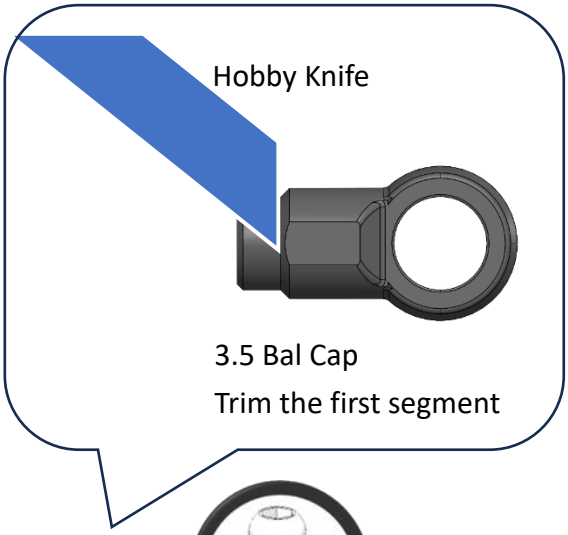
PM 2 x 4

PM 2 x 4



Step 21

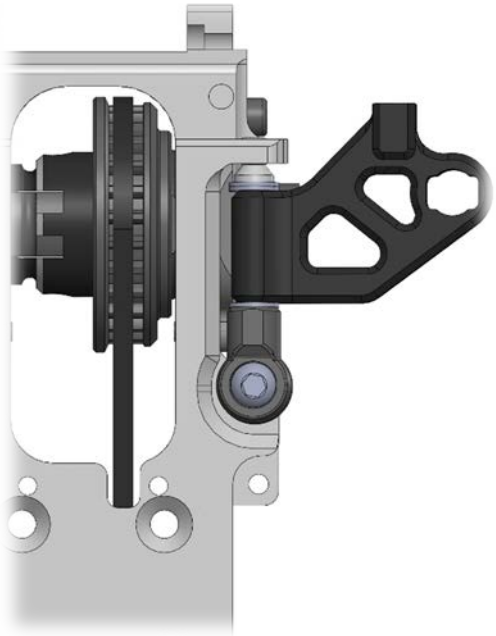




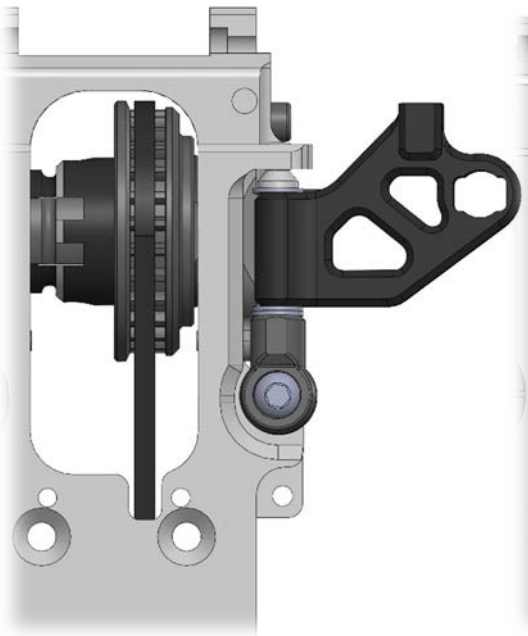
2 x 3.5 x 0.3 shims:

Use shims arrangement to adjust the caster angles of front system. More shim on the back, more caster angle, more mid corner steering.

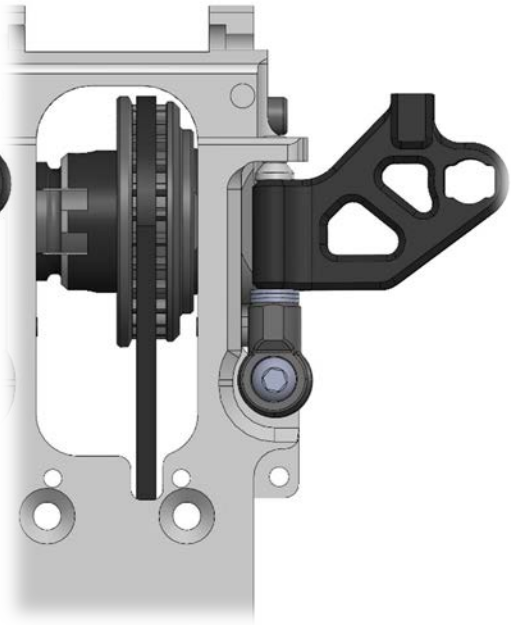
Caster 1 Degree



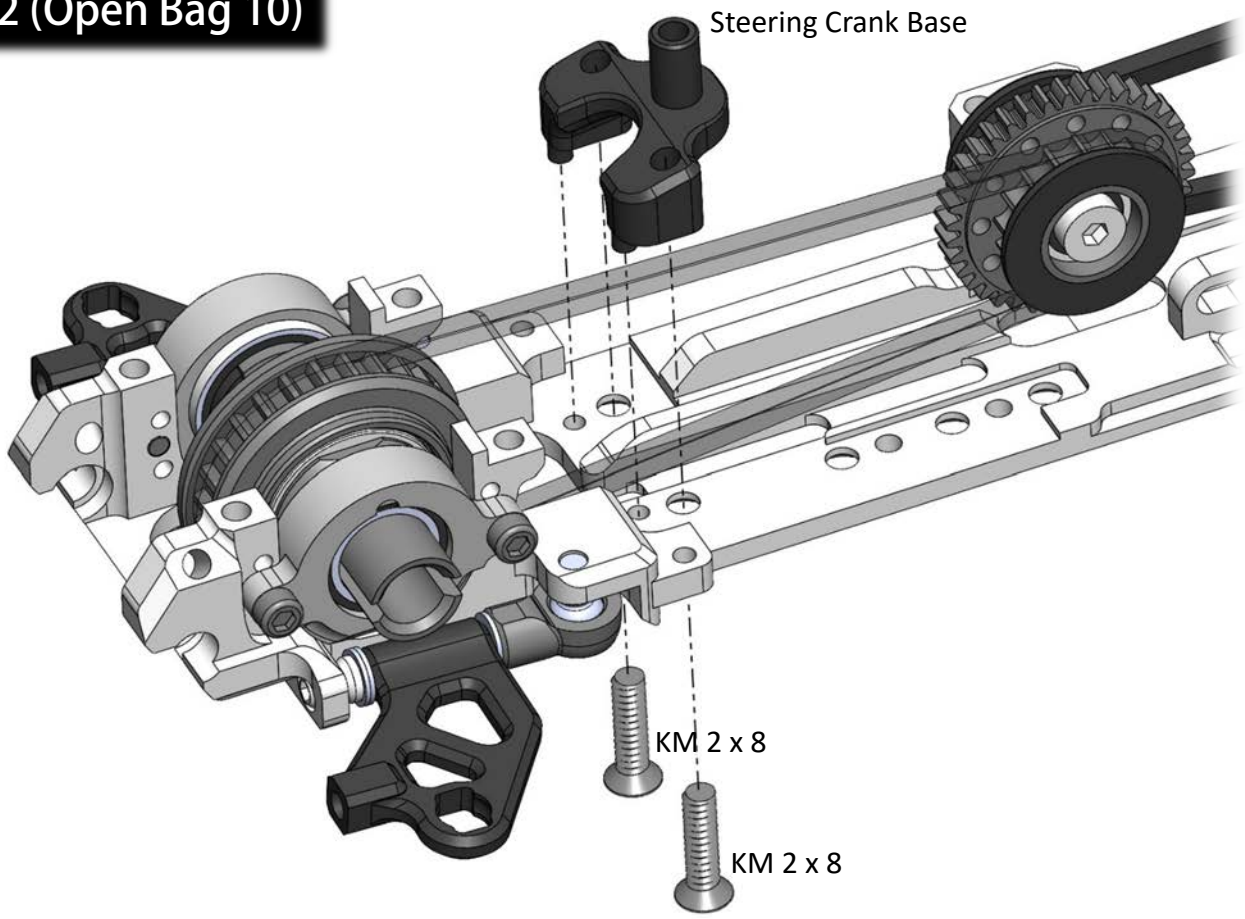
Caster 2 Degree



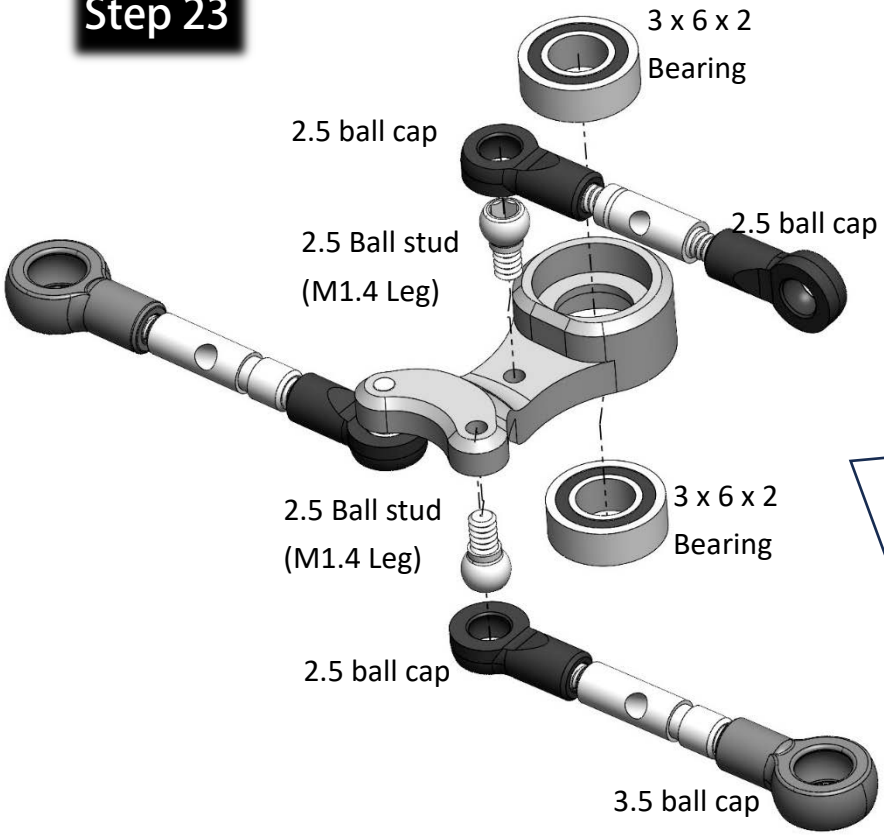
Caster 3 Degree

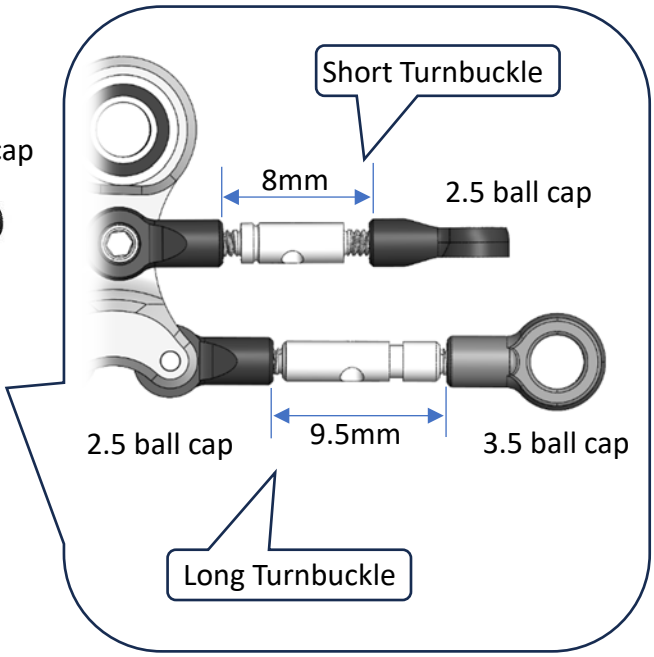


Step 22 (Open Bag 10)

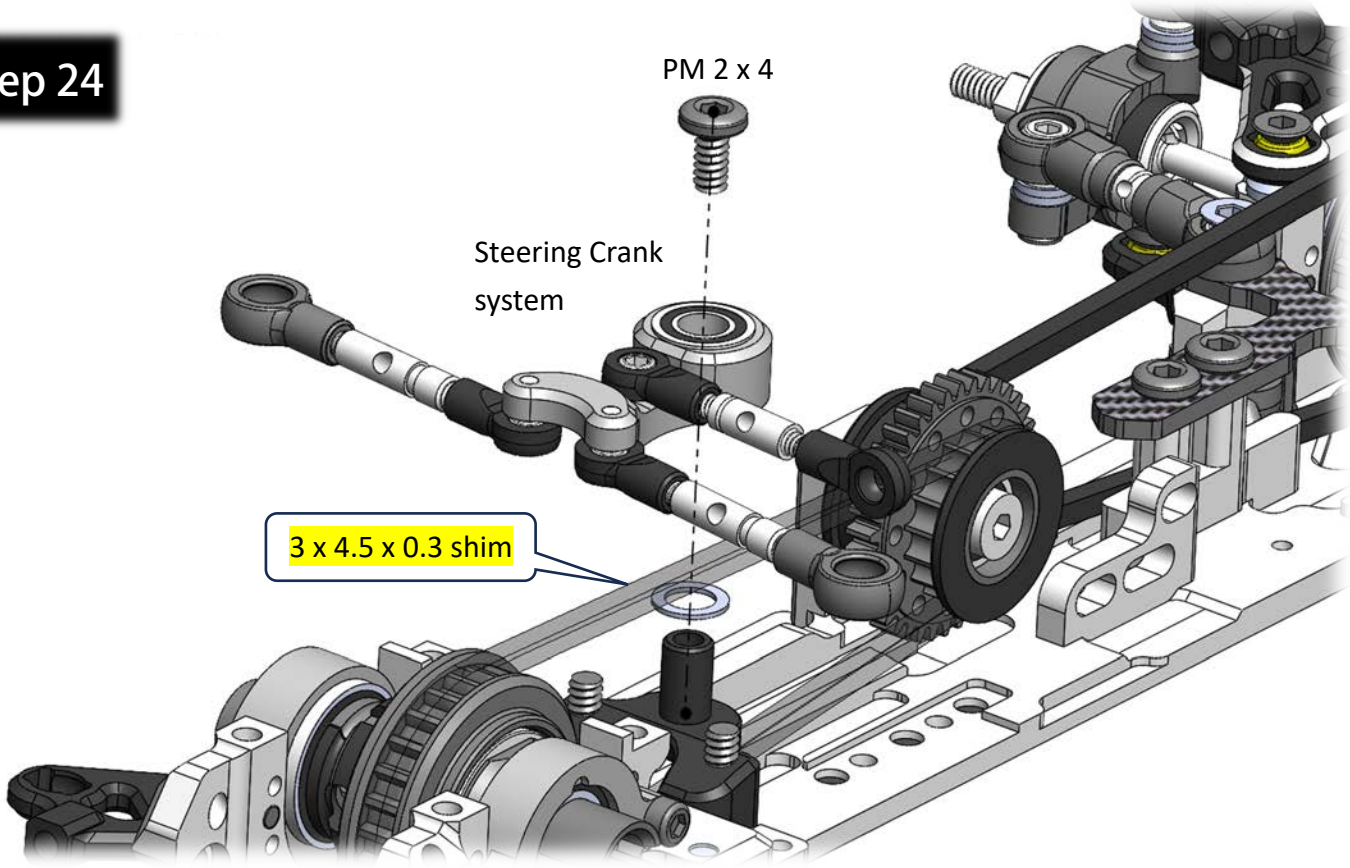


Step 23





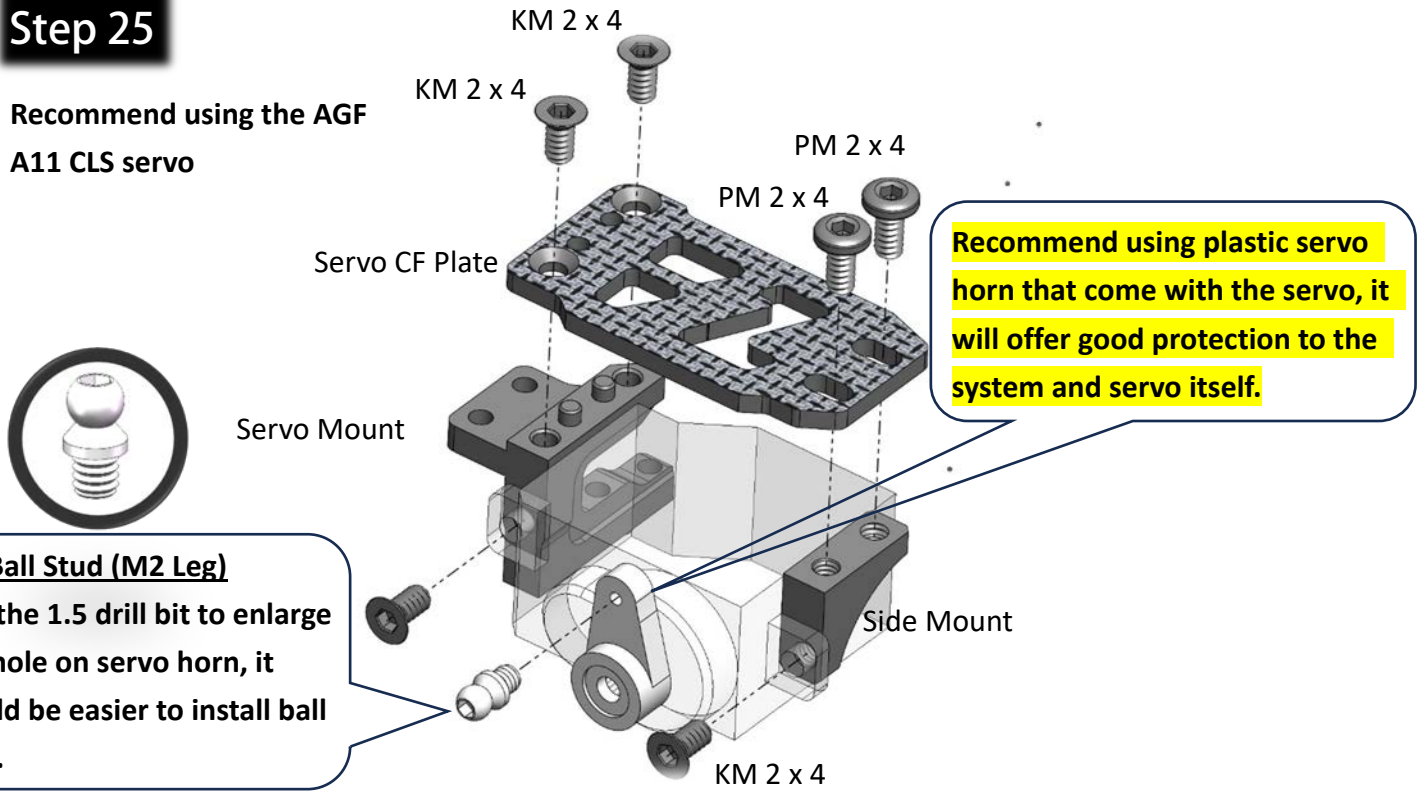
Step 24



Video to show how to smooth ball links, please scan the QR code:
Recommend allowing a little bit drag on the ball link because plastic material would deform over time and after the car is using for few hours, then the ball cap hole maybe become bigger and cause slop and wobble in the system.

Step 25

Recommend using the AGF A11 CLS servo

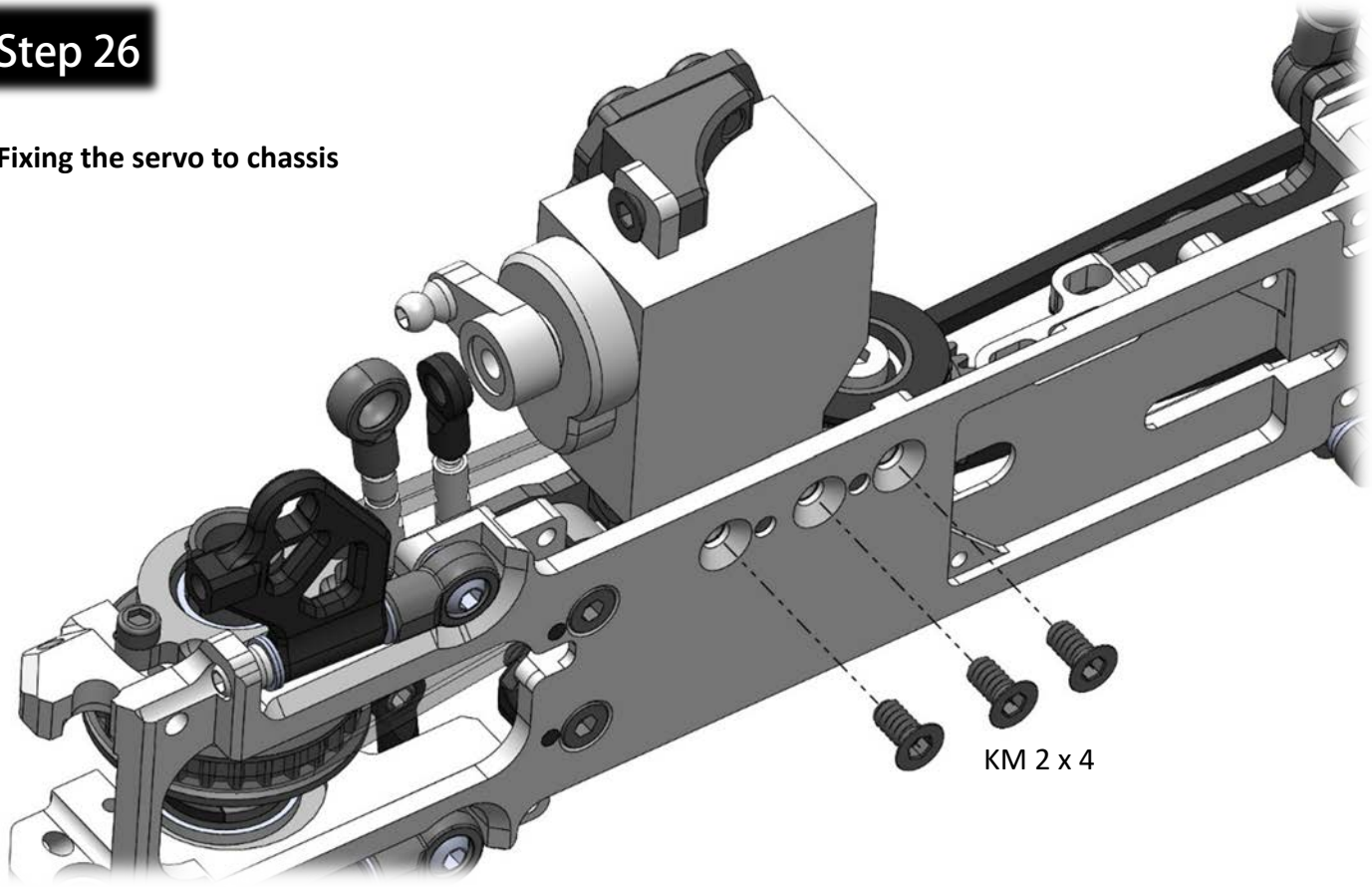


Recommend using plastic servo horn that come with the servo, it will offer good protection to the system and servo itself.

2.5 Ball Stud (M2 Leg)
Use the 1.5 drill bit to enlarge the hole on servo horn, it would be easier to install ball stud.

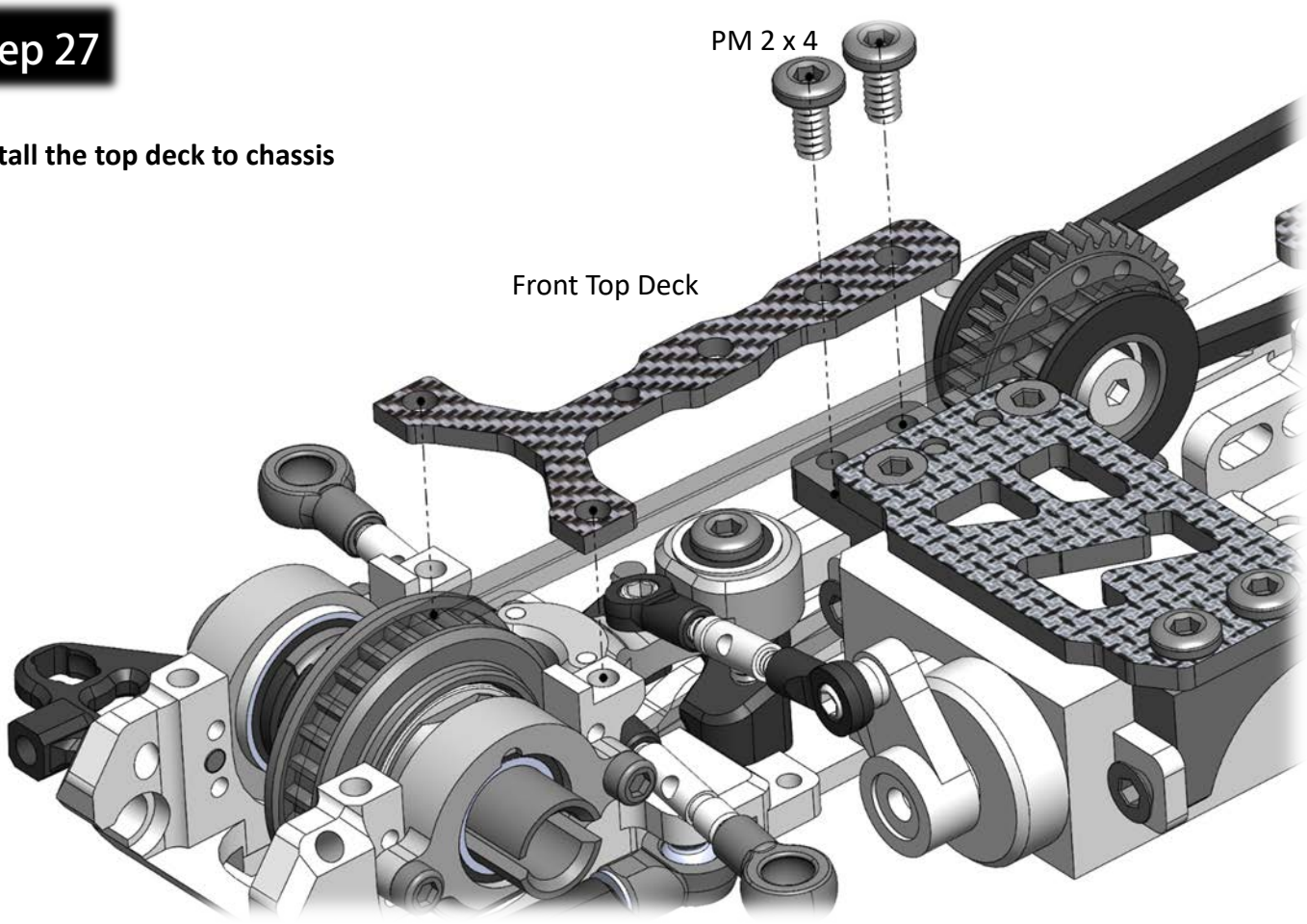
Step 26

Fixing the servo to chassis

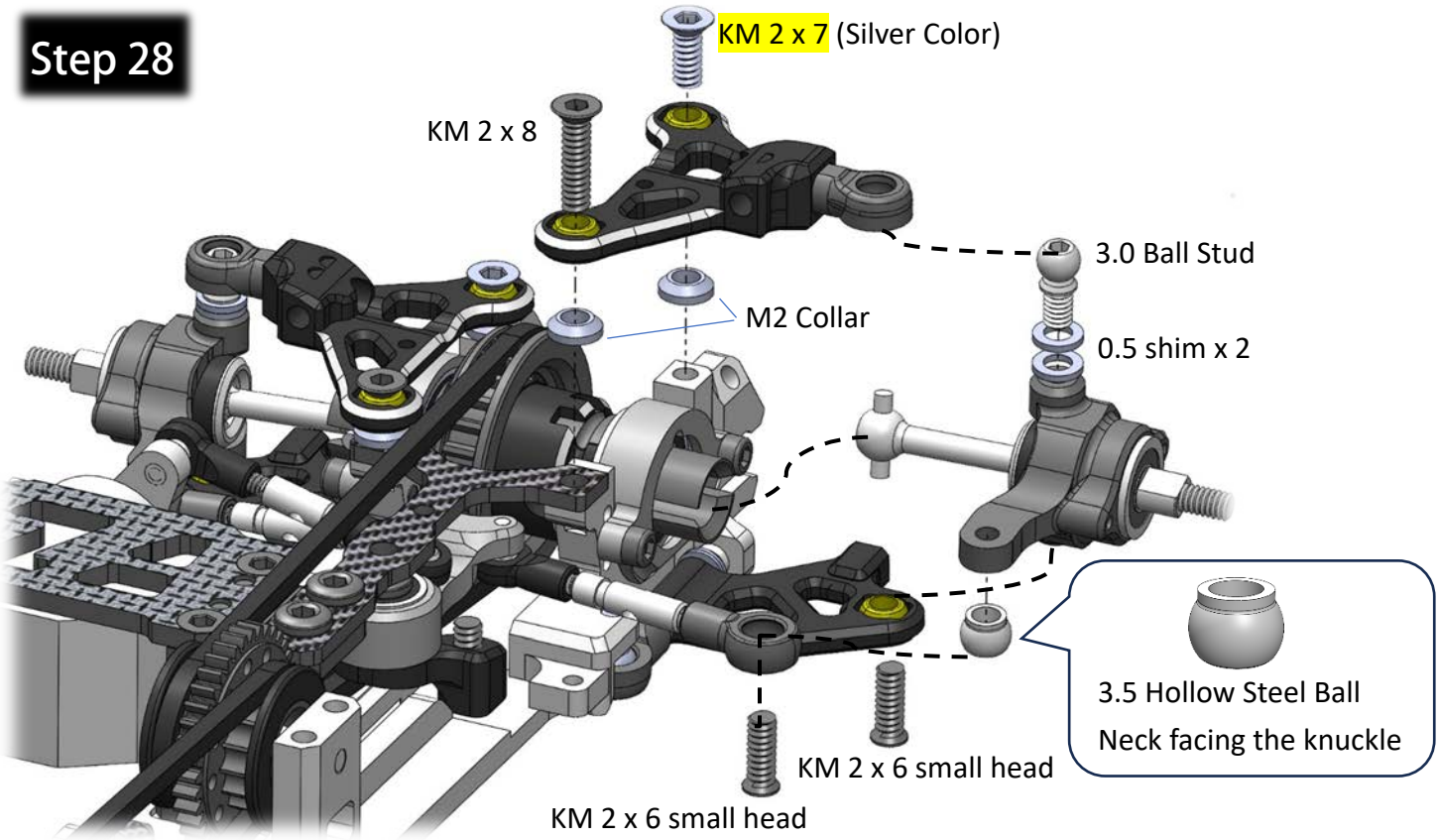


Step 27

Install the top deck to chassis

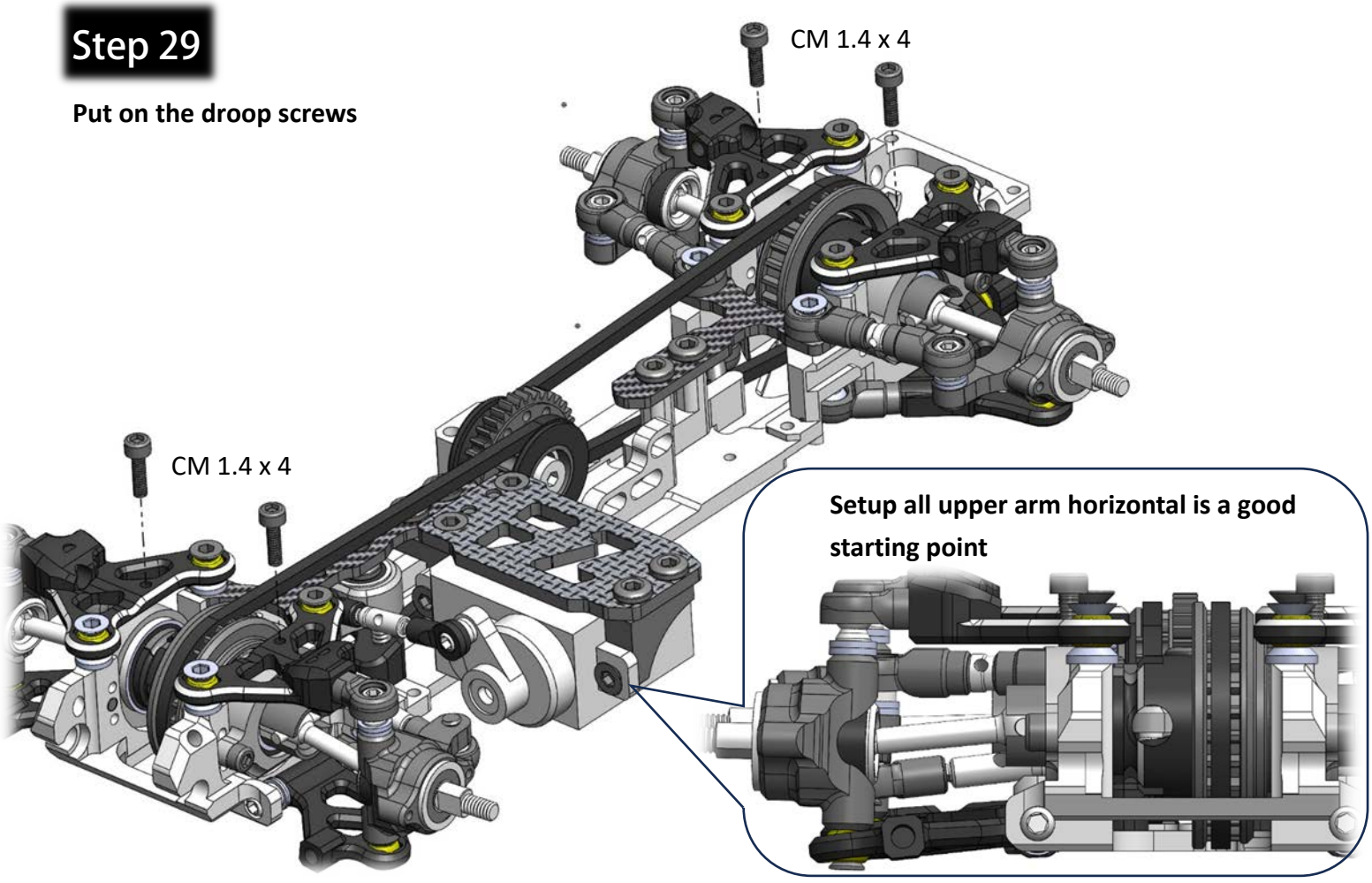


Step 28

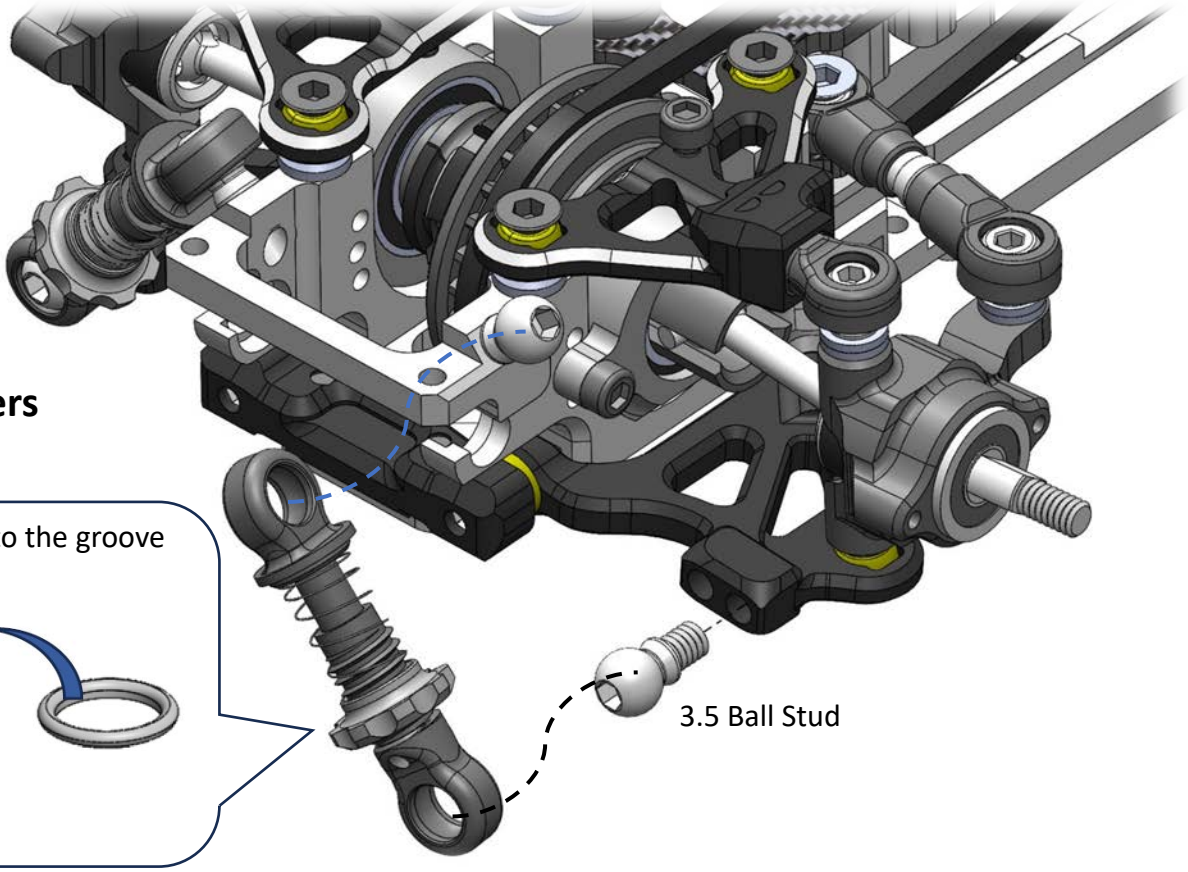


Step 29

Put on the droop screws

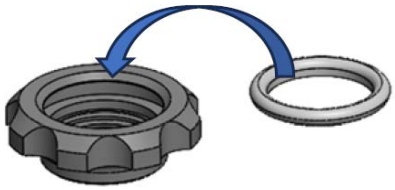


Step 30 (Open Bag 11)



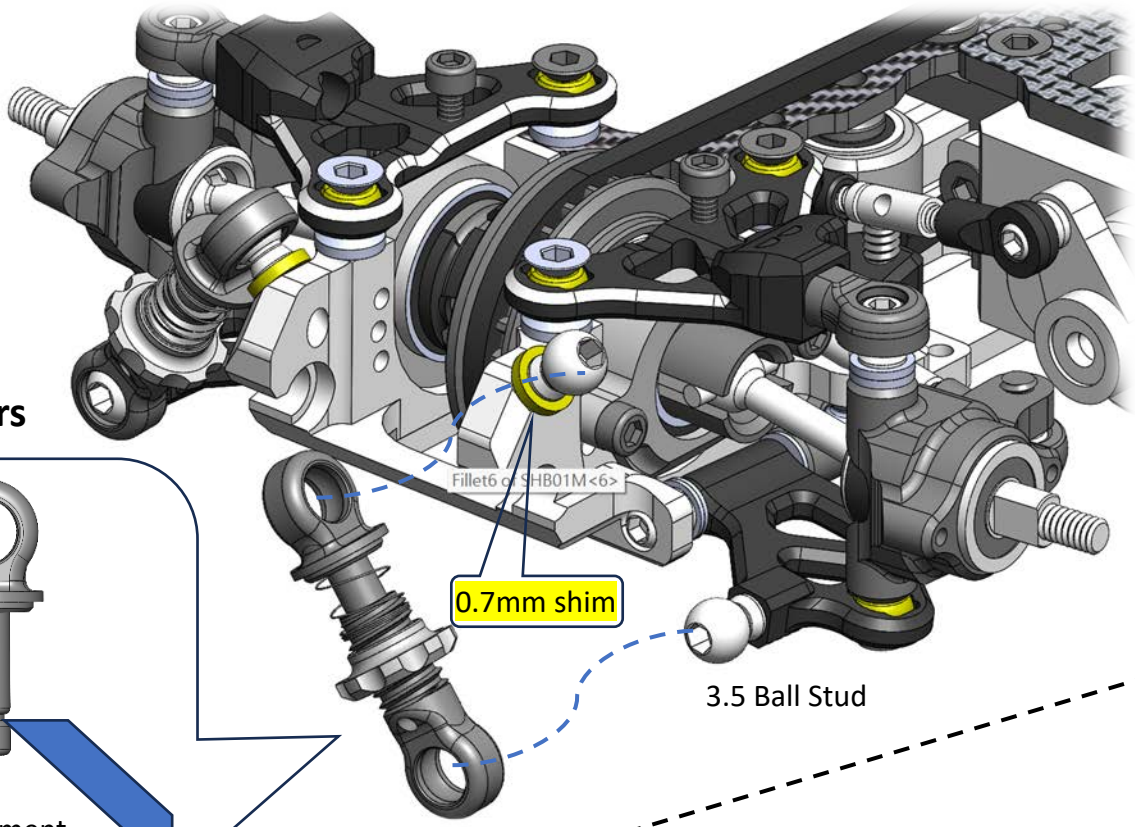
Rear Dampers

Insert the O-ring to the groove of tension collar

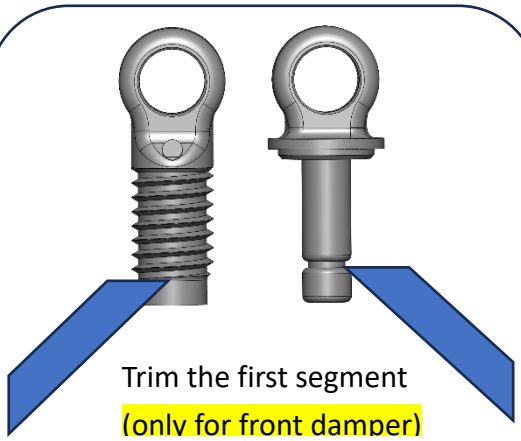


3.5 Ball Stud

Step 31

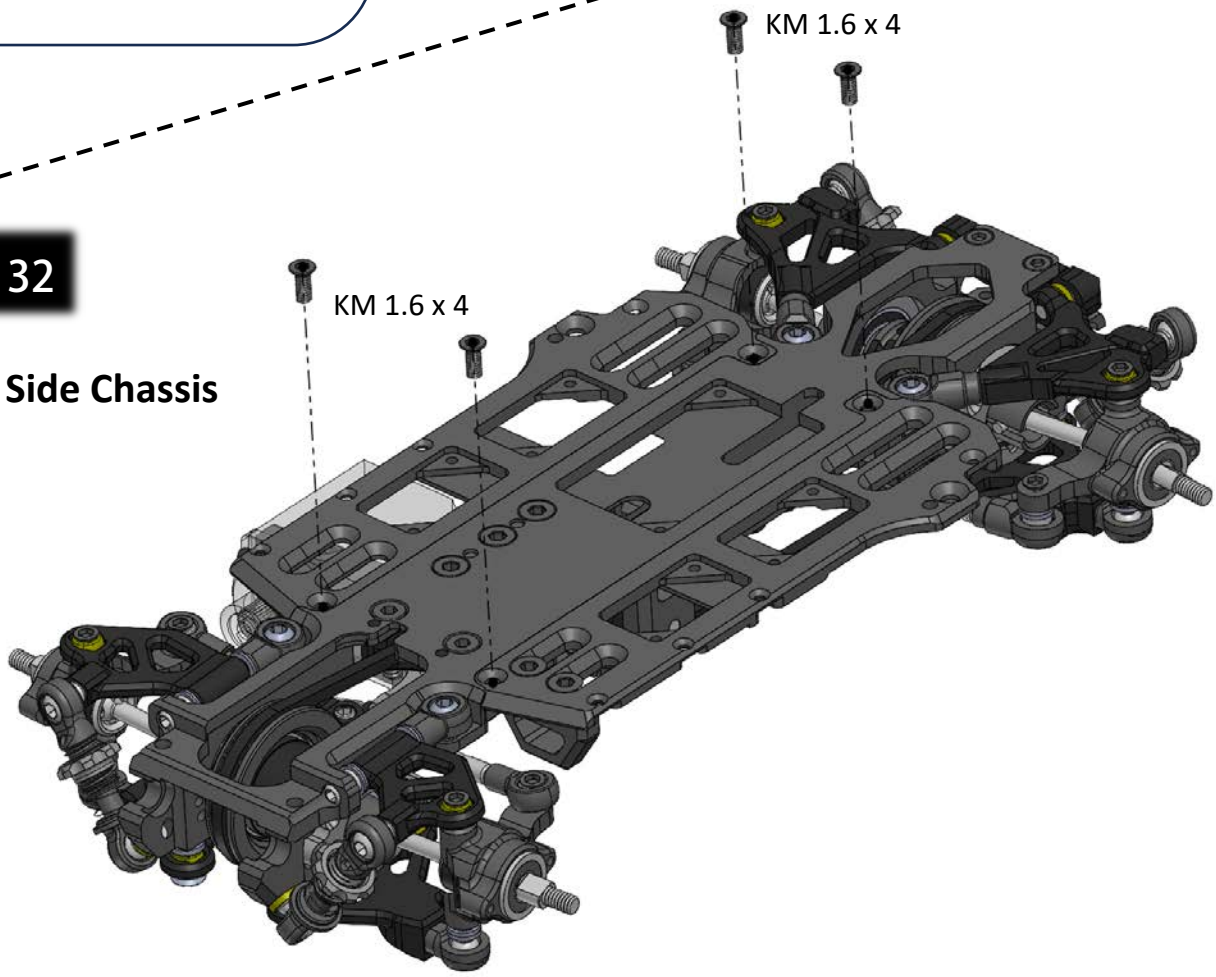


Front Dampers



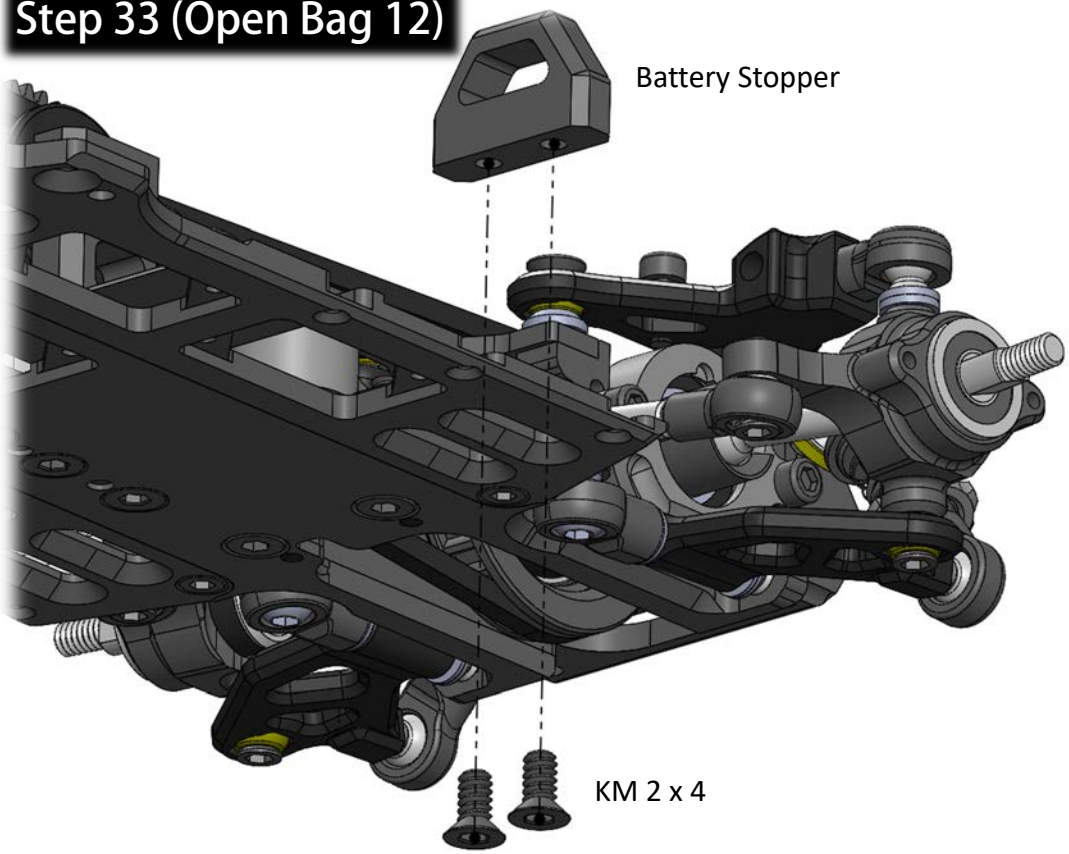
Trim the first segment
(only for front damper)

Step 32

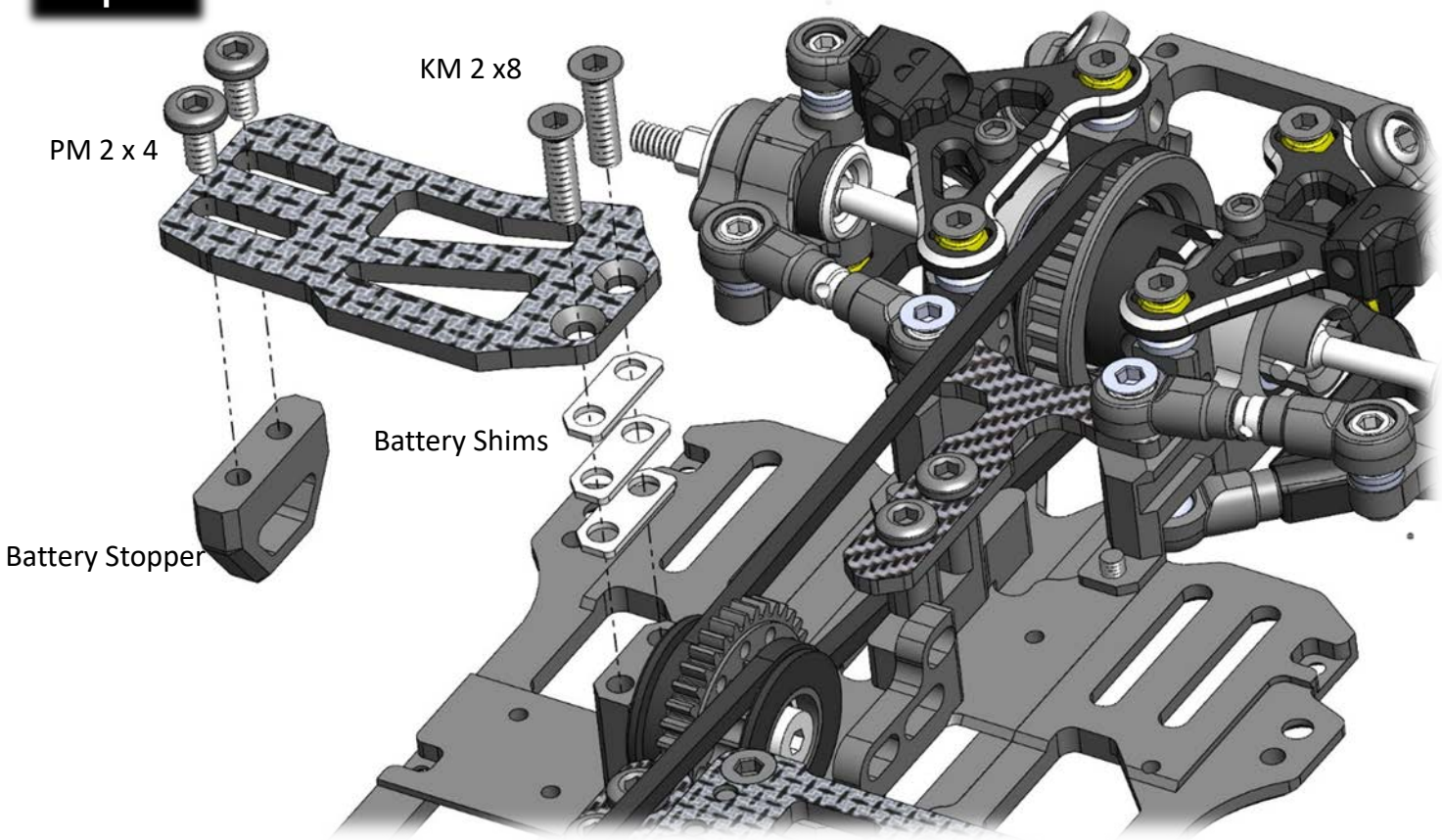


R & L Side Chassis

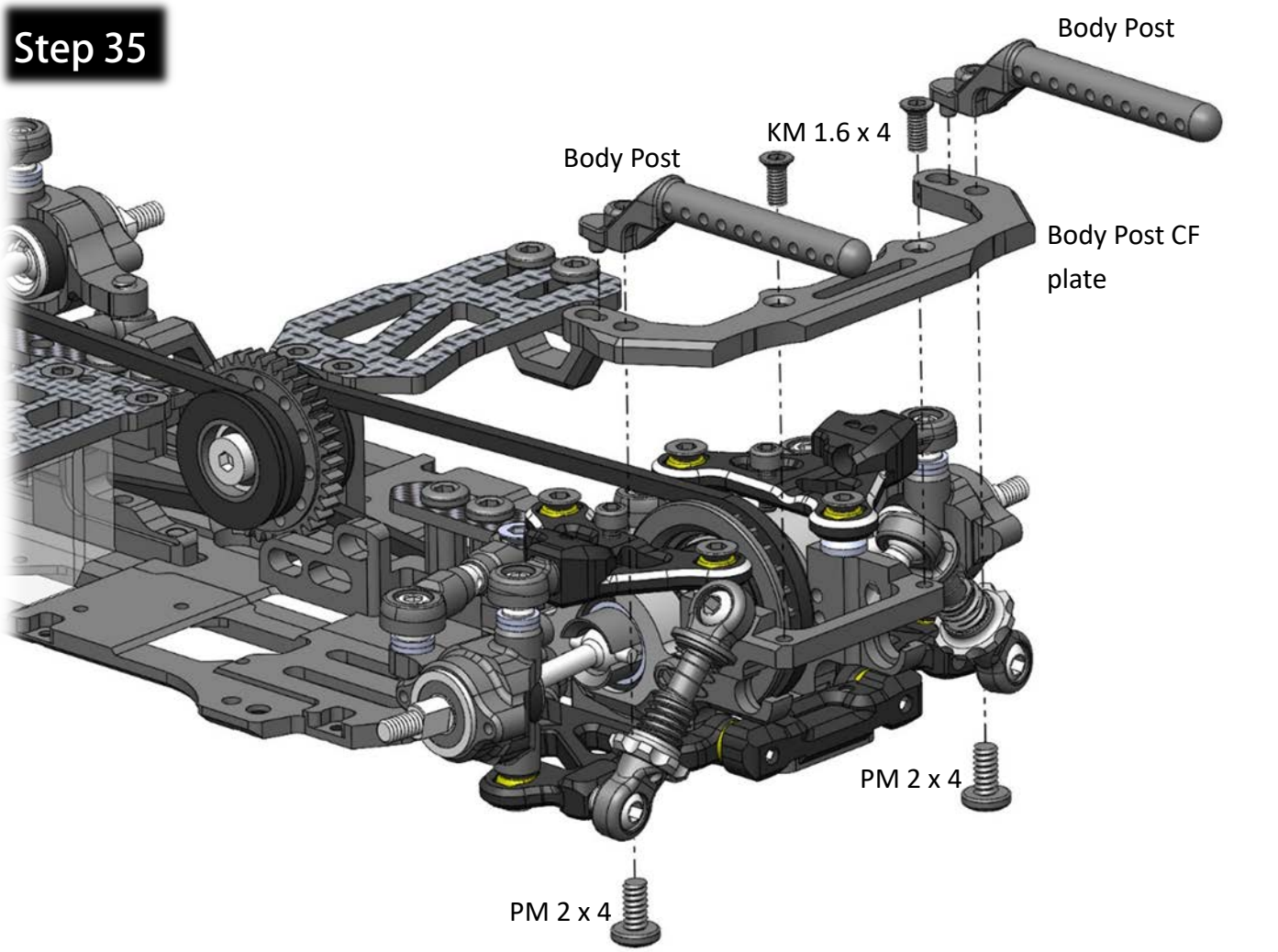
Step 33 (Open Bag 12)

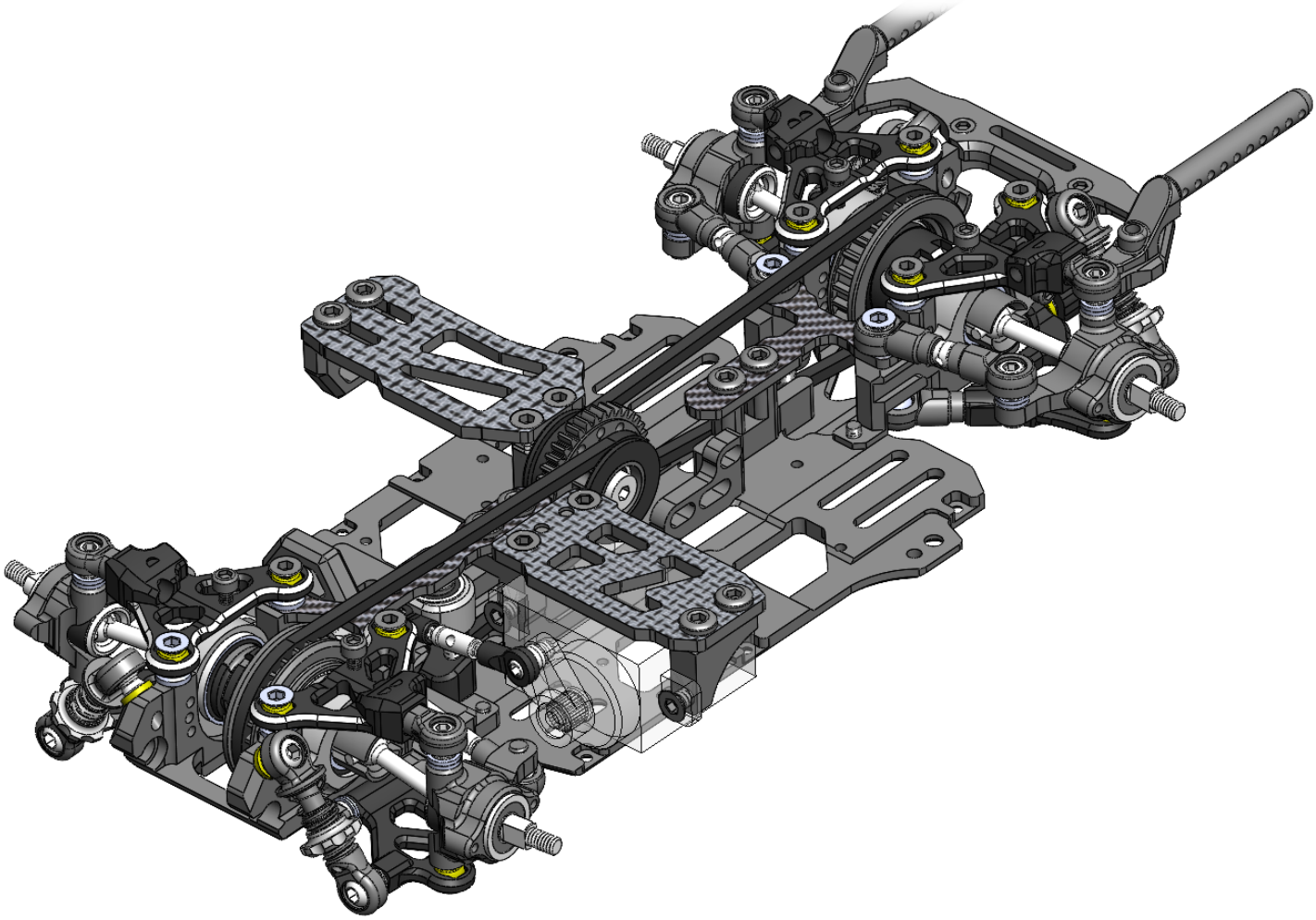


Step 34



Step 35





Gear Ratio:

Motor Pinion	38T Spur
13	*4.93*
14	*4.58*
15	*4.28*

Motor KV and suggested Gear Ratio

3500KV: 15T

4500KV: 14T

5500KV or 6500KV : 13T