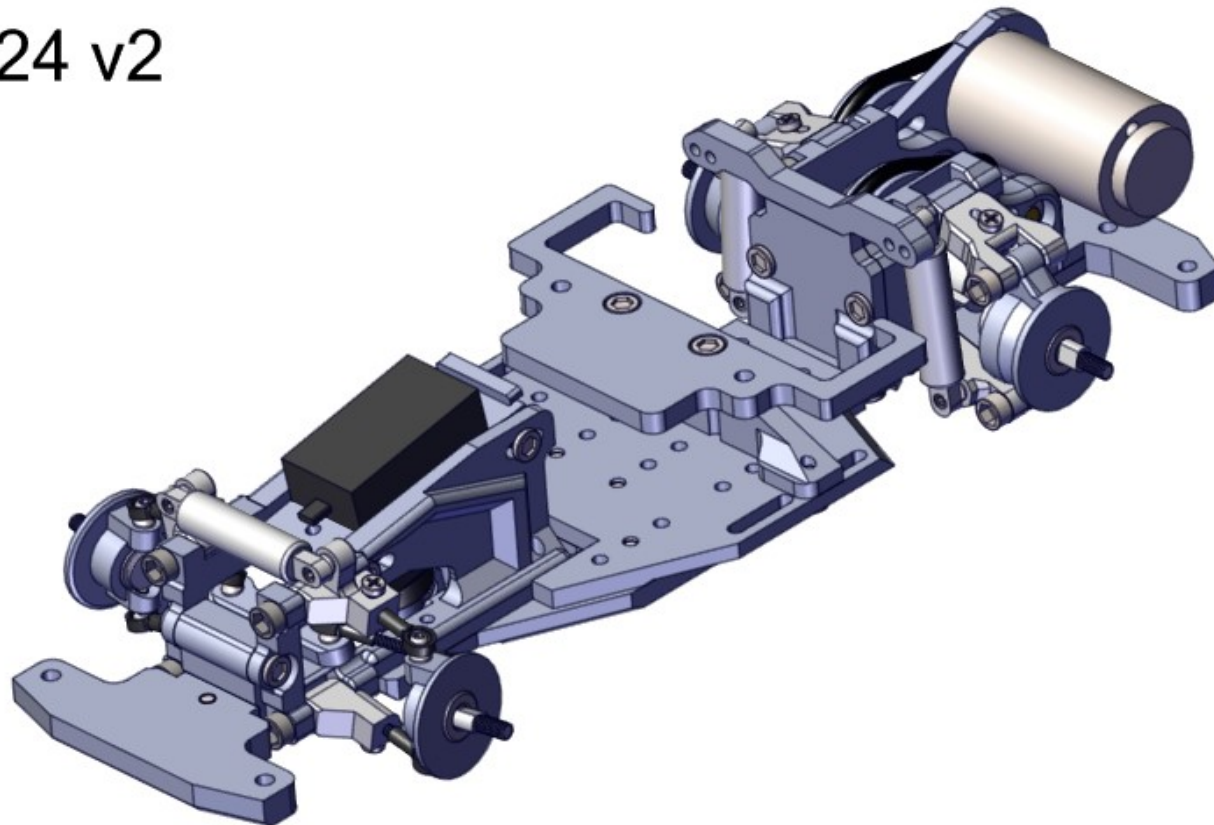


RDC24 v2



Name	Count
3x30 brass rod	1
m1.4x2	8
m1.4x4	11
m1.4x8 rod	4
m2x10 half thread	4
m2x12 half thread	8
m2x4 flat head	38
mf117zz	2
mr63-2	10
oring 18id 2cs	2
orlandoo ball m1.6	14
pinion	1
steering rod	2
universal shaft	4

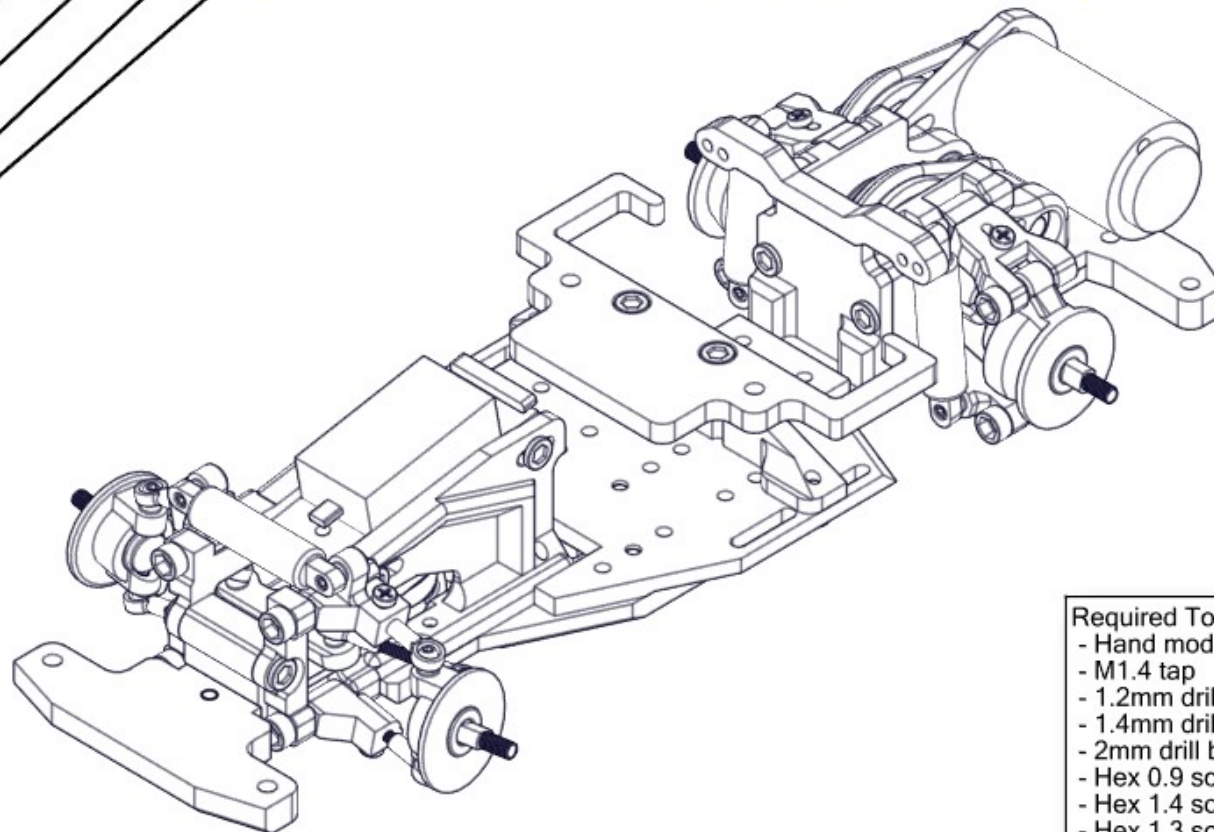
Note: Minimum length is 8mm - select final length based on body width and wheel offset

Note: Use ONLY 3x6x2mm bearings - standard MR63 (3x6x2.5mm) won't fit!

Note: For better performance, use DriftArt balls (higher quality).

Note: Use M1.4 screws (custom length) or DriftArt tie rods and caps for easier setup

Note: For front knuckles, use TGRacing axles - requires printing knuckles from separate file



Required Tools List:

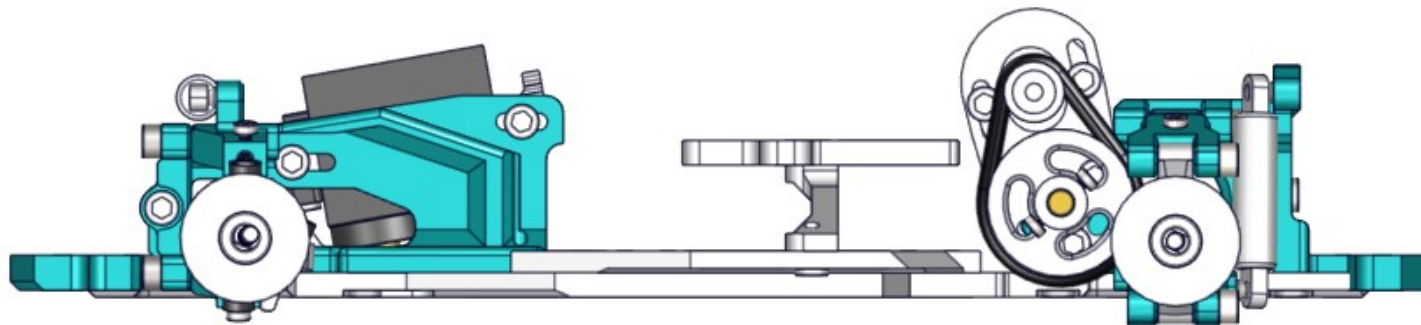
- Hand model drill
- M1.4 tap
- 1.2mm drill bit
- 1.4mm drill bit
- 2mm drill bit
- Hex 0.9 screwdriver
- Hex 1.4 screwdriver
- Hex 1.3 screwdriver
- Phillips screwdriver

Features (Base Version):

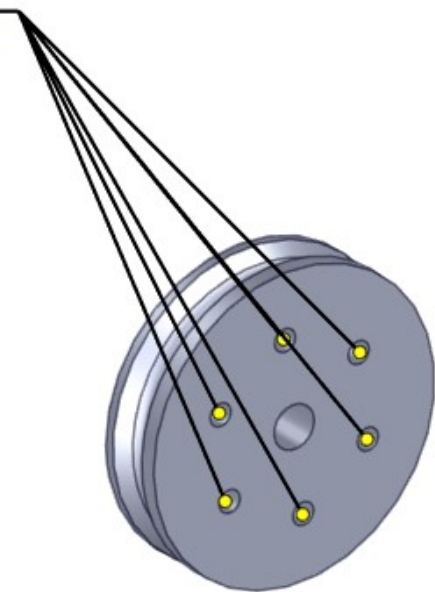
- Fixed caster angle of 3° (for adjustable caster, use the Pro Version)
- Adjustable wheelbase (98-118mm)
- Adjustable width with two arm options (narrow/wide)
- Compatible with 5g servos (e.g., AFRC D1802MG) or programmable servos (e.g., AGFRC A11CLS and similar)
- Front or rear motor placement
- Adjustable motor mounting angle
- Adjustable battery holder (designed for Gaoneng 350mAh)
- STEP files included for CNC-machined parts (carbon fiber, aluminum, etc.)
- Spool or ball differential options
- Optimized for FDM printing (PLA-based plastics recommended)

Upgrades from V1:

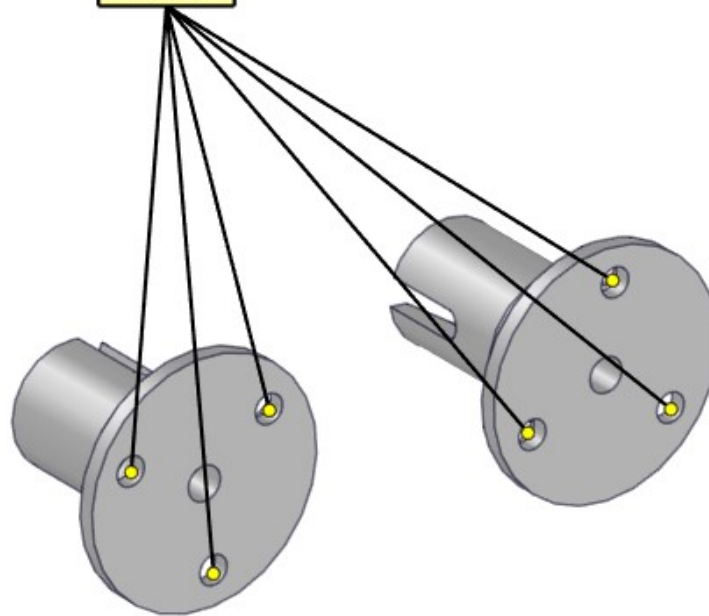
- Stronger differential cups
- Redesigned chassis for easy CNC replacement (carbon/aluminum, etc.) - order via AliExpress using provided STEP files
- Two front-end versions: Base and Pro
- Added ball differential support
- Partially threaded screws for arm axles (replaced nails) - easier assembly and maintenance



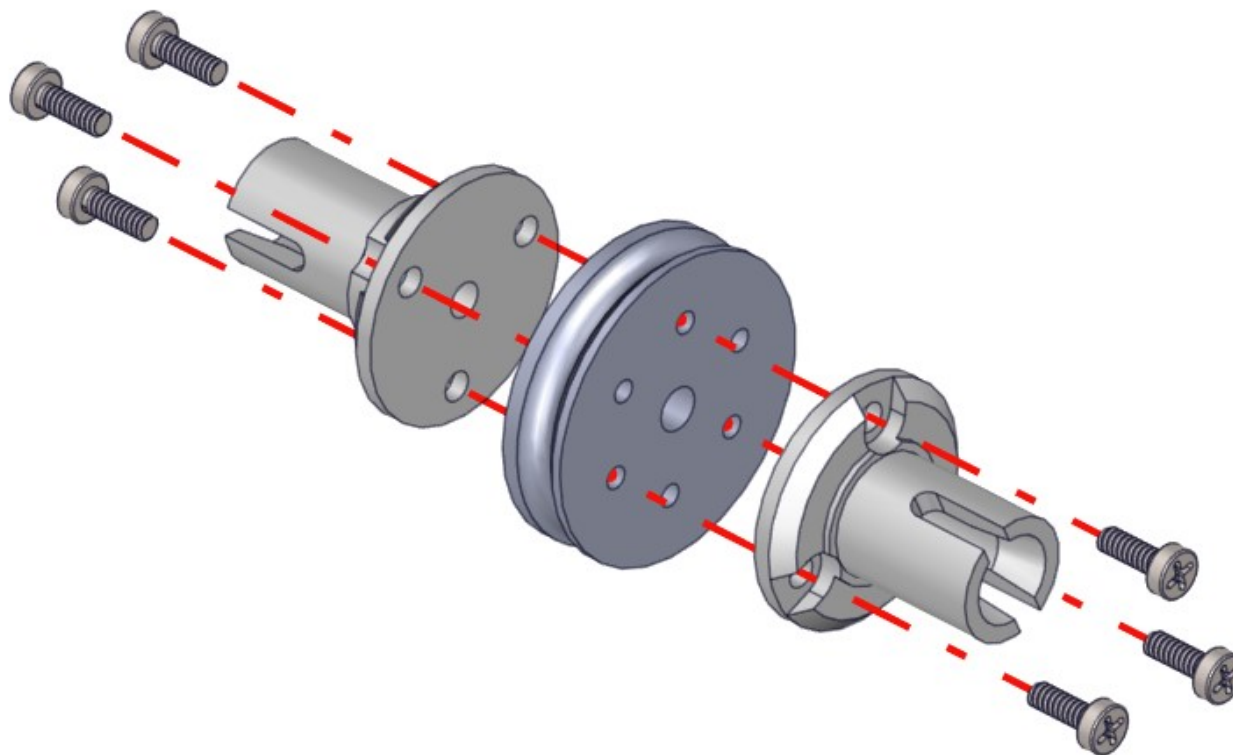
1.2mm drill

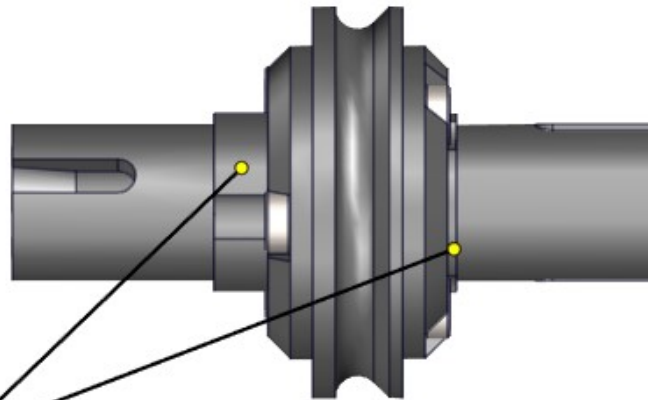


1.4mm drill



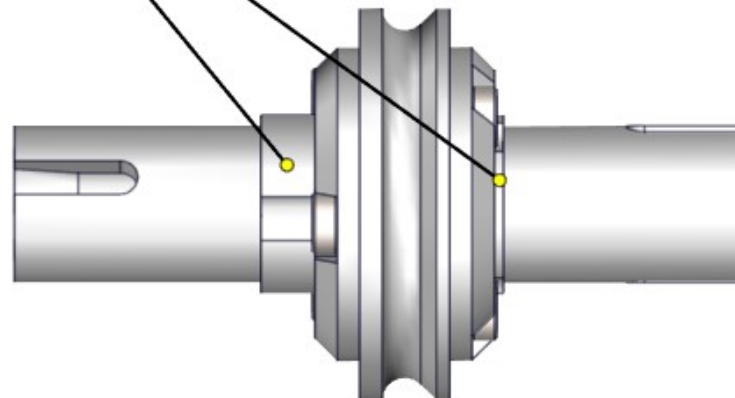
Name	Count
m1.4x4	6



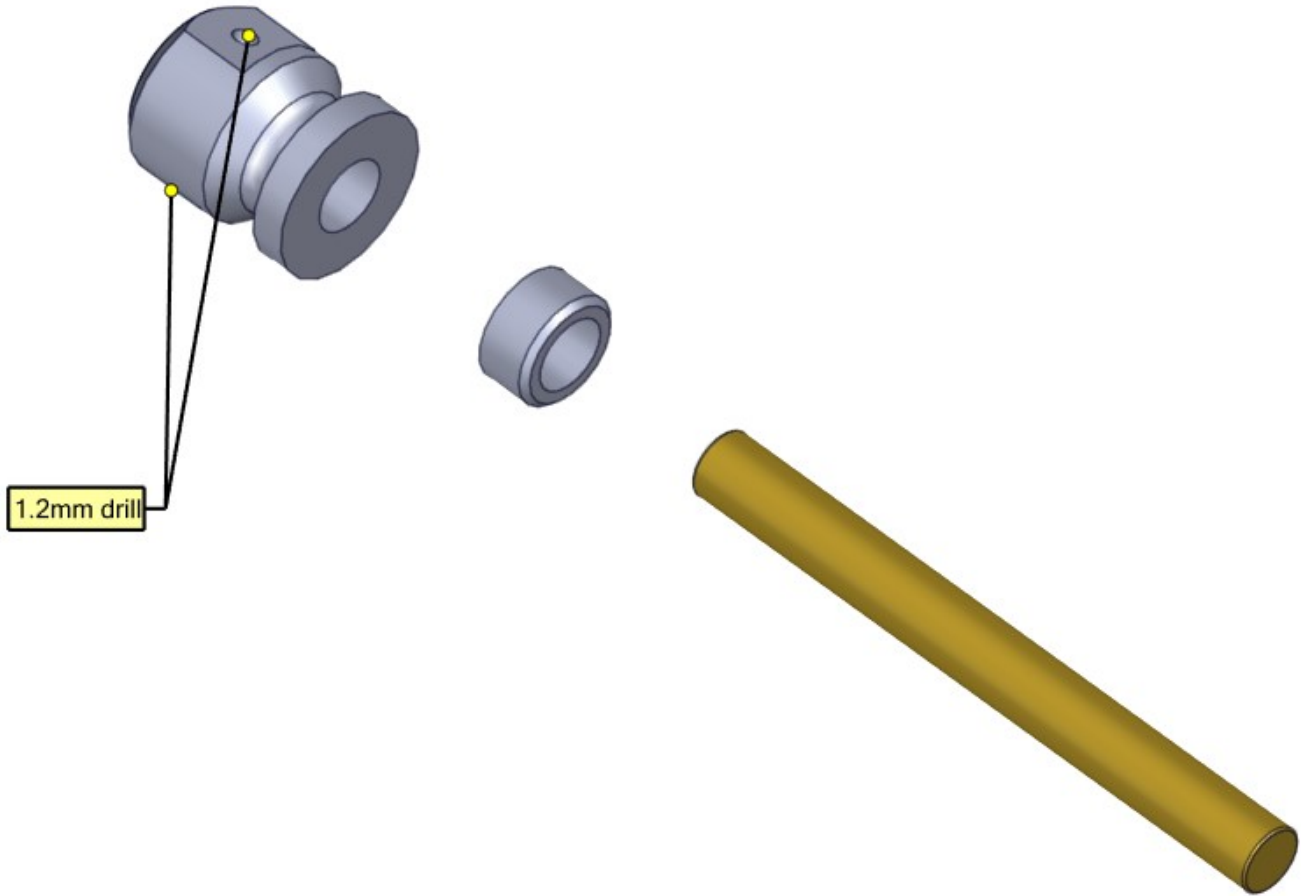


The spool cups are not identical;
one has a larger bearing stop! Don't mix them up.

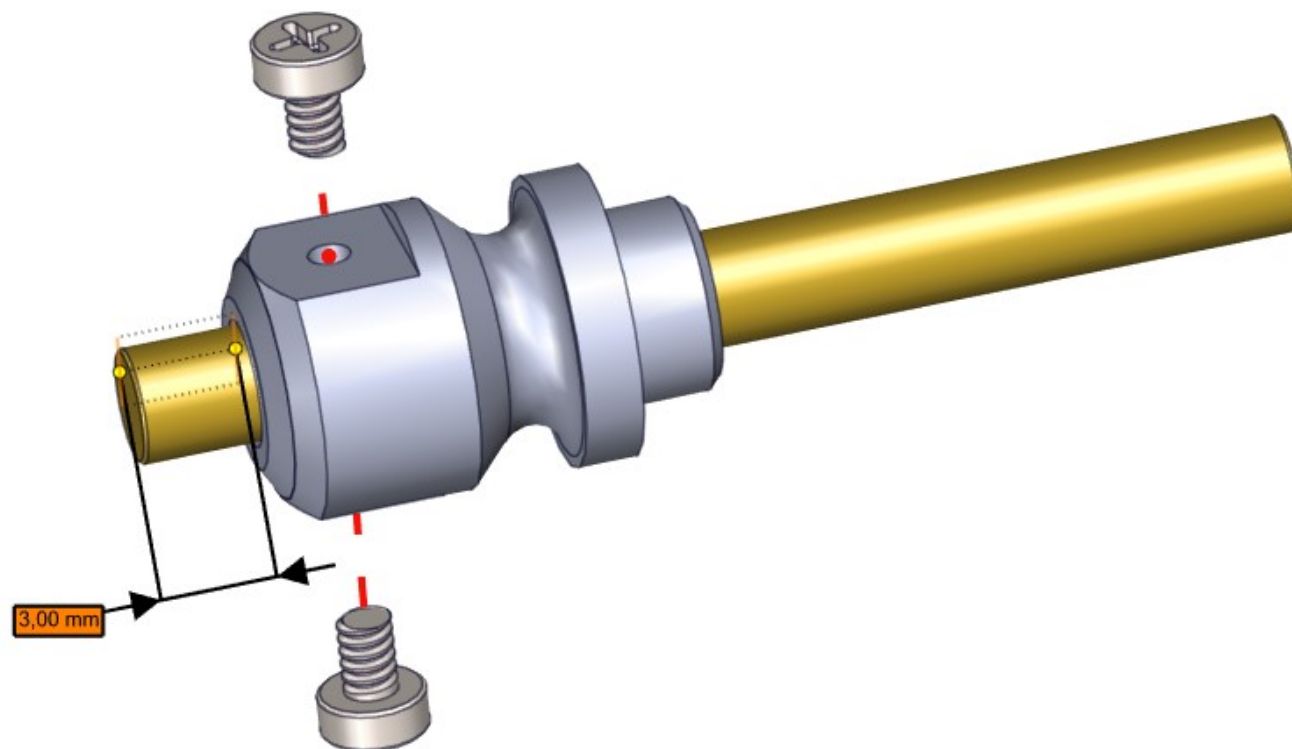
Spool cups come in two versions, narrow and wide,
and are located in their corresponding files

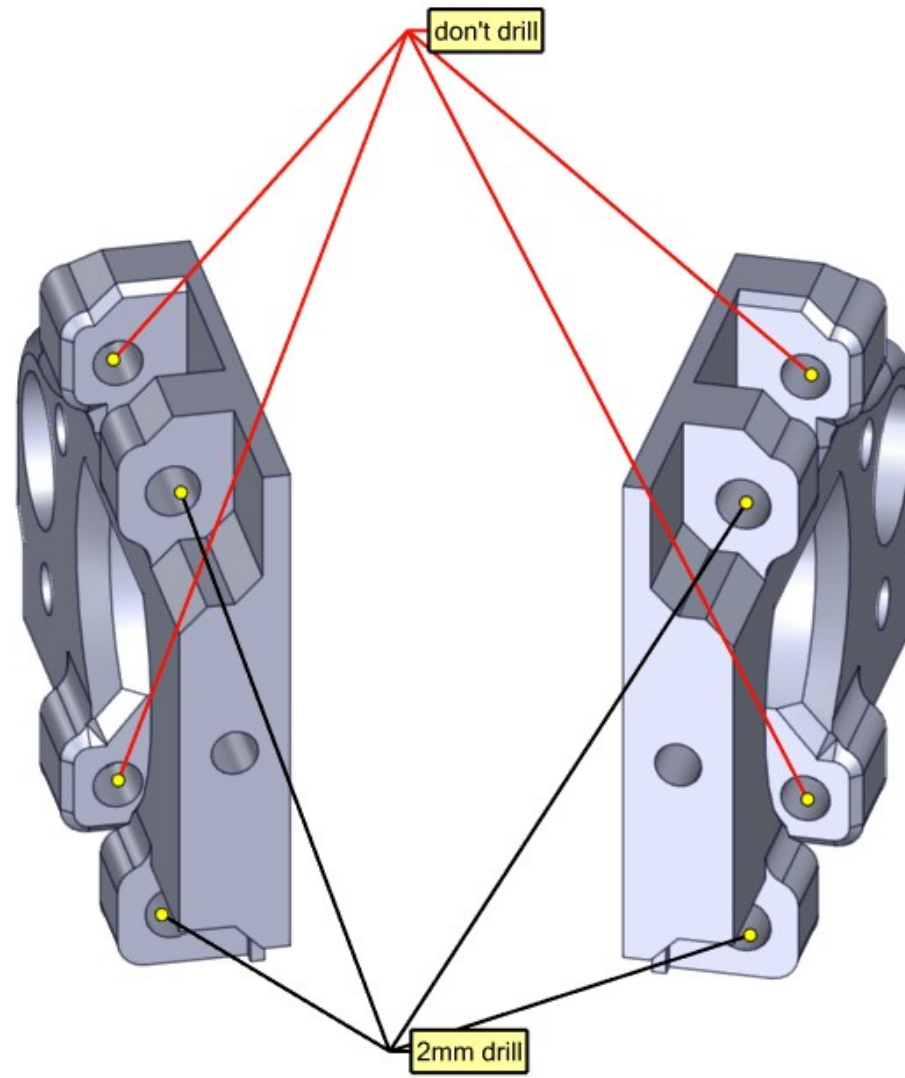


Name	Count
3x30 brass rod	1

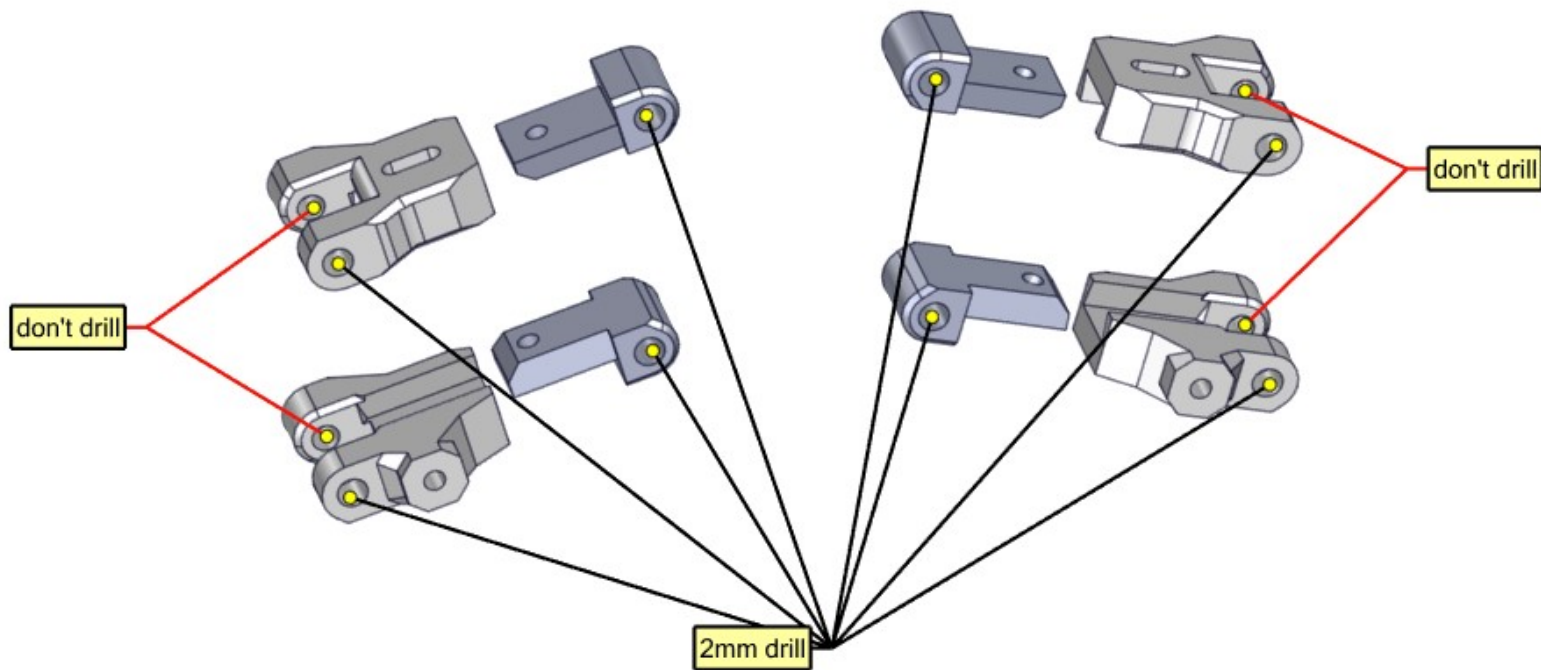


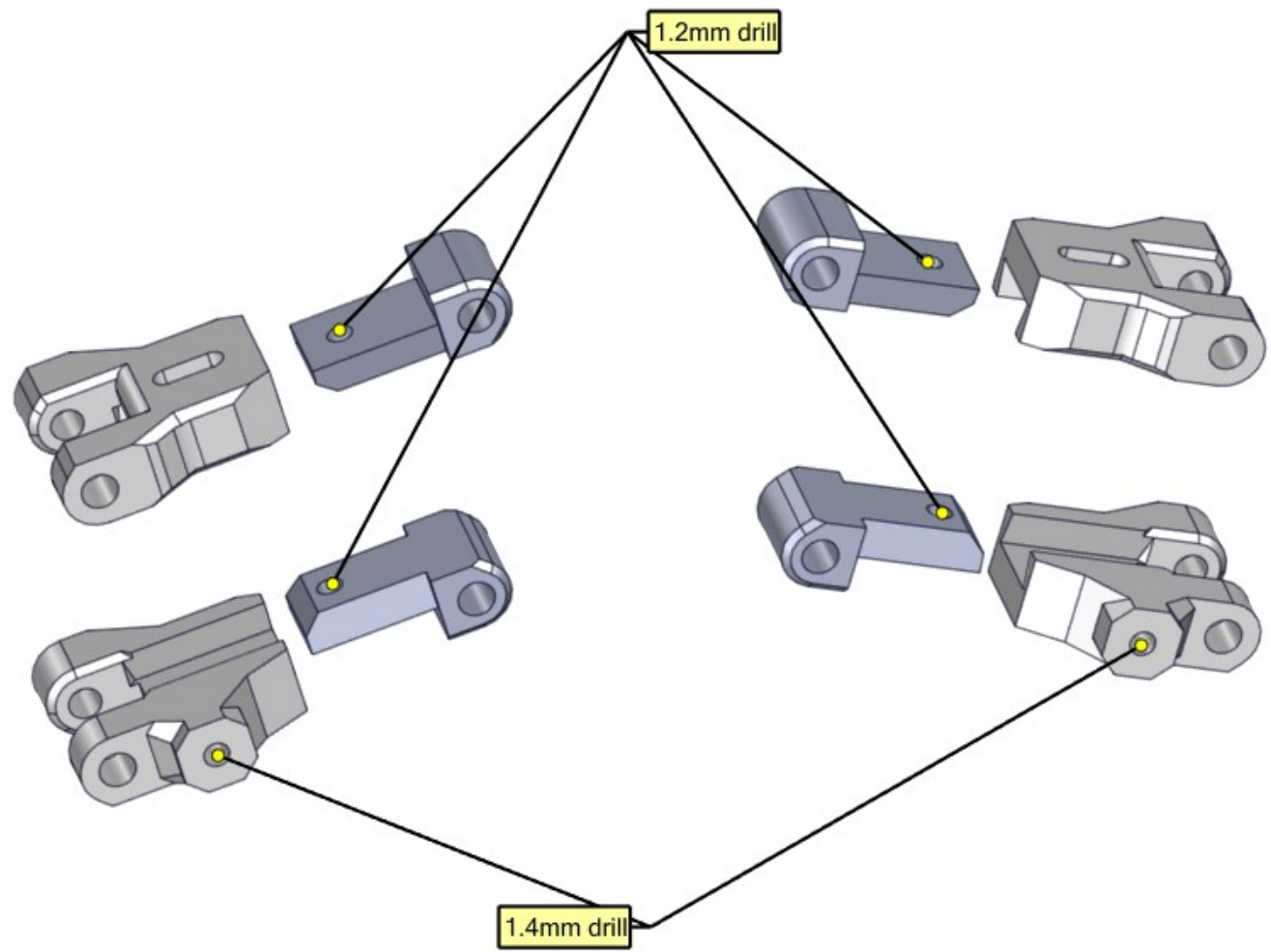
Name	Count
m1.4x2	2



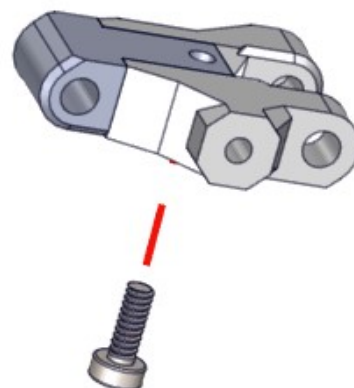
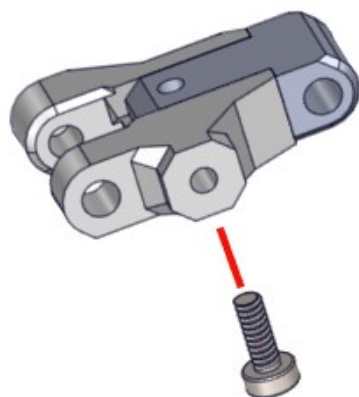
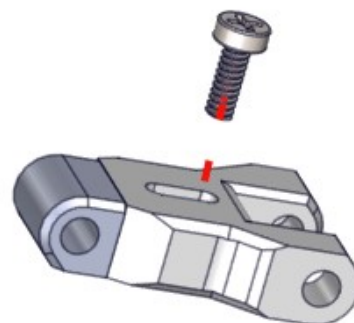
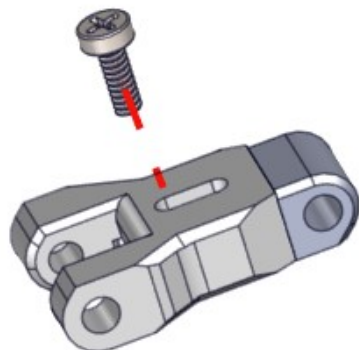


Tip: Use narrow or wide arms depending on the desired width

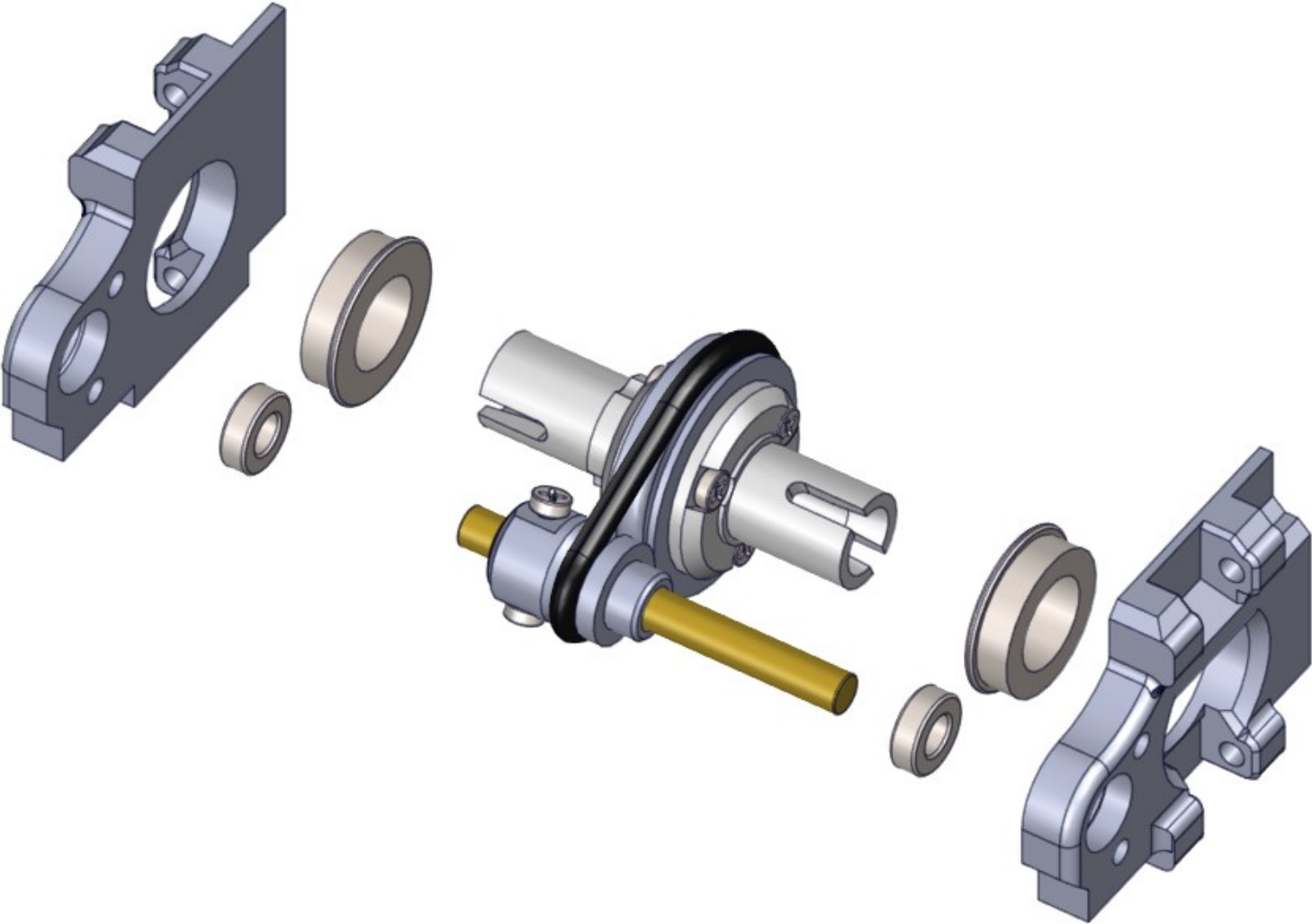




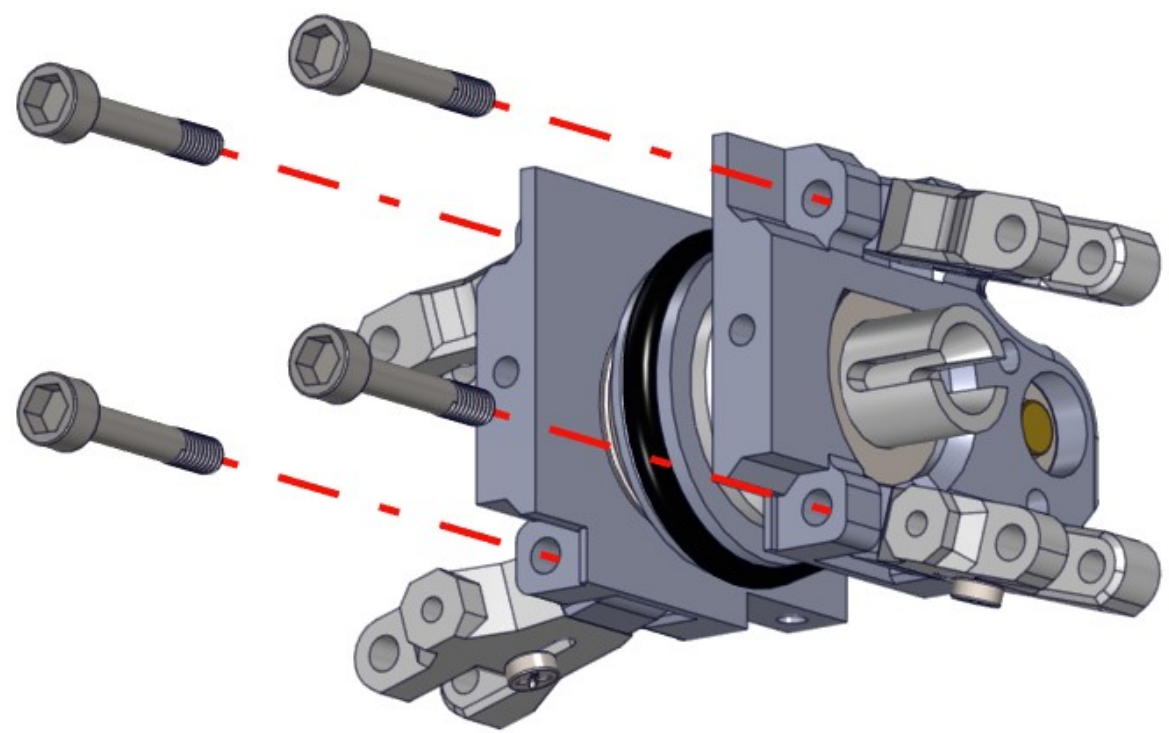
Name	Count
m1.4x4	4

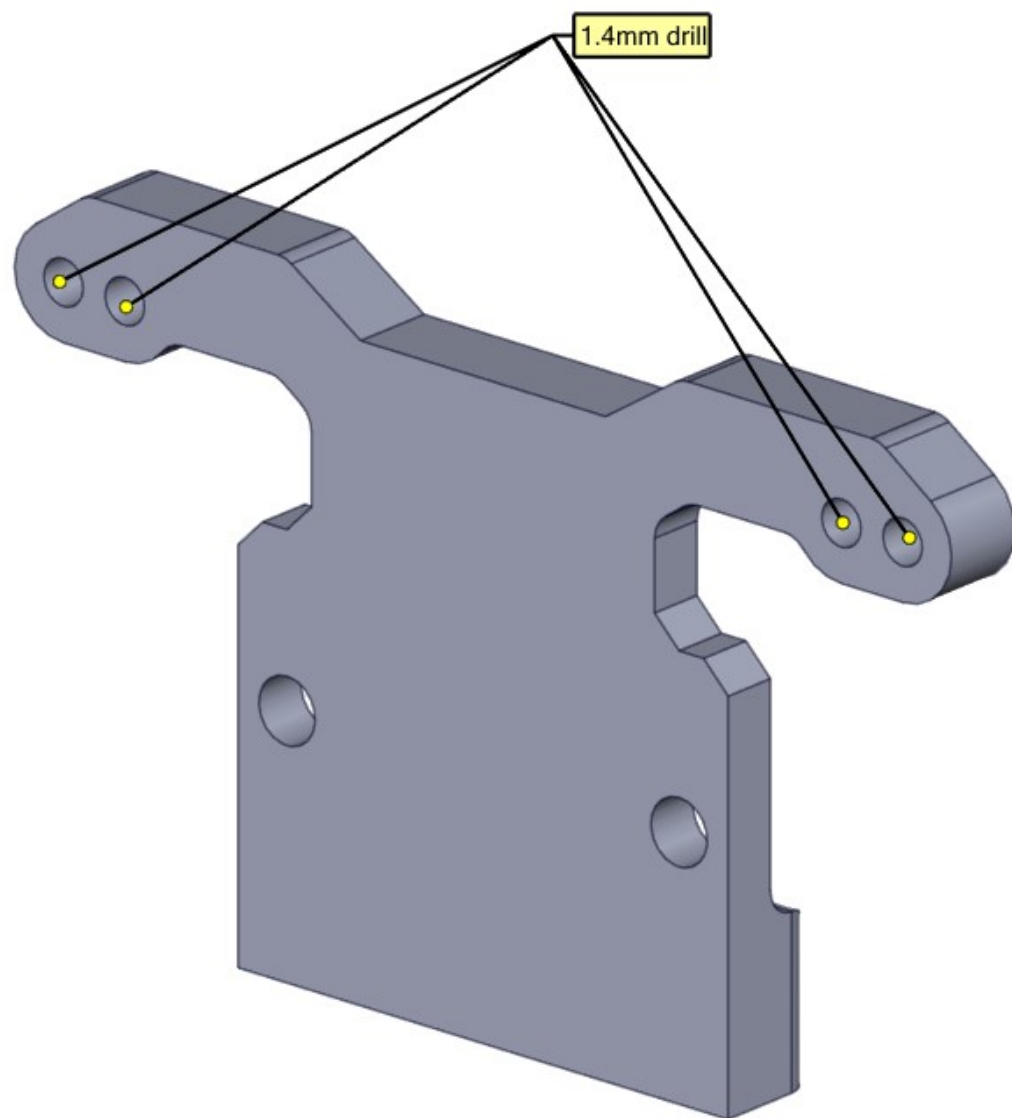


Name	Count
mf117zz	2
mr63-2	2
oring 18id 2cs	1

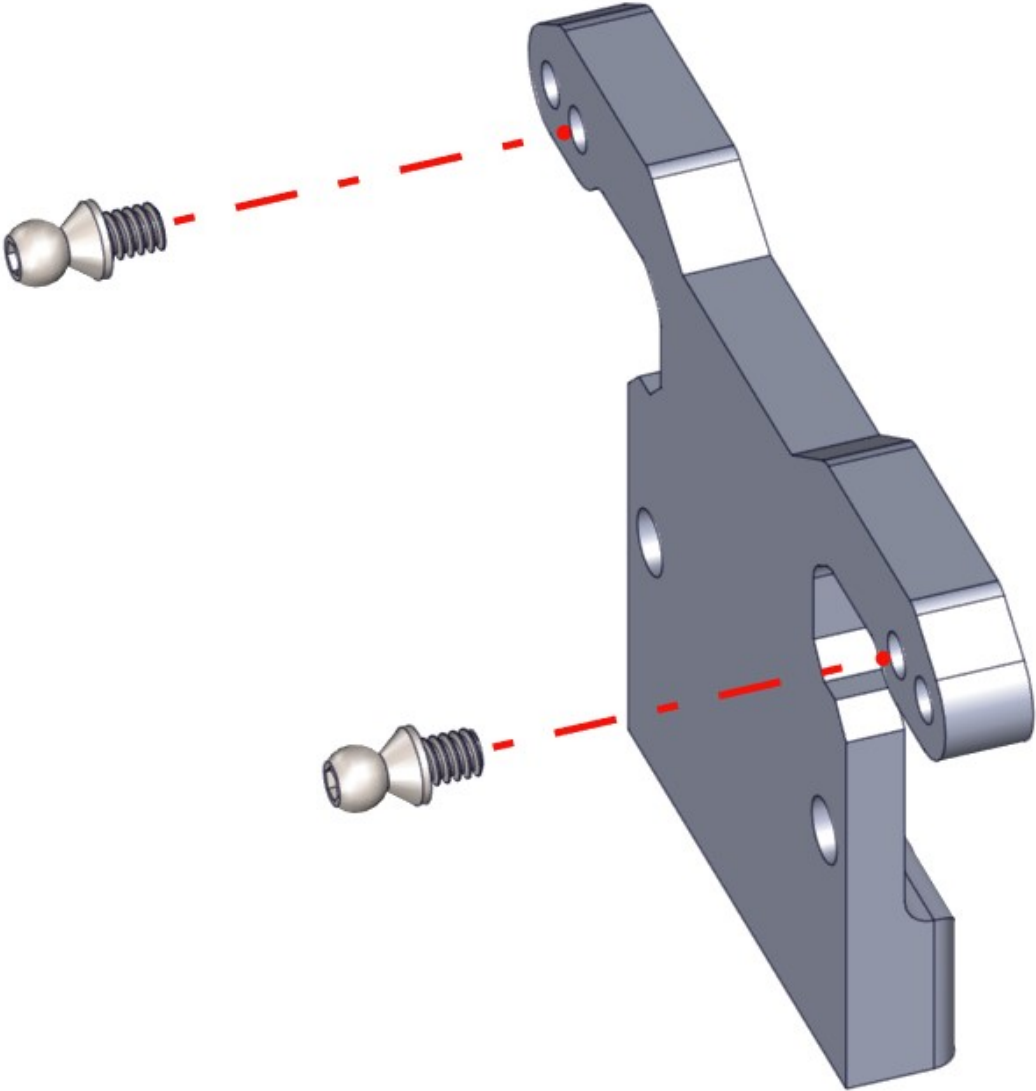


Name	Count
m2x12 half thread	4

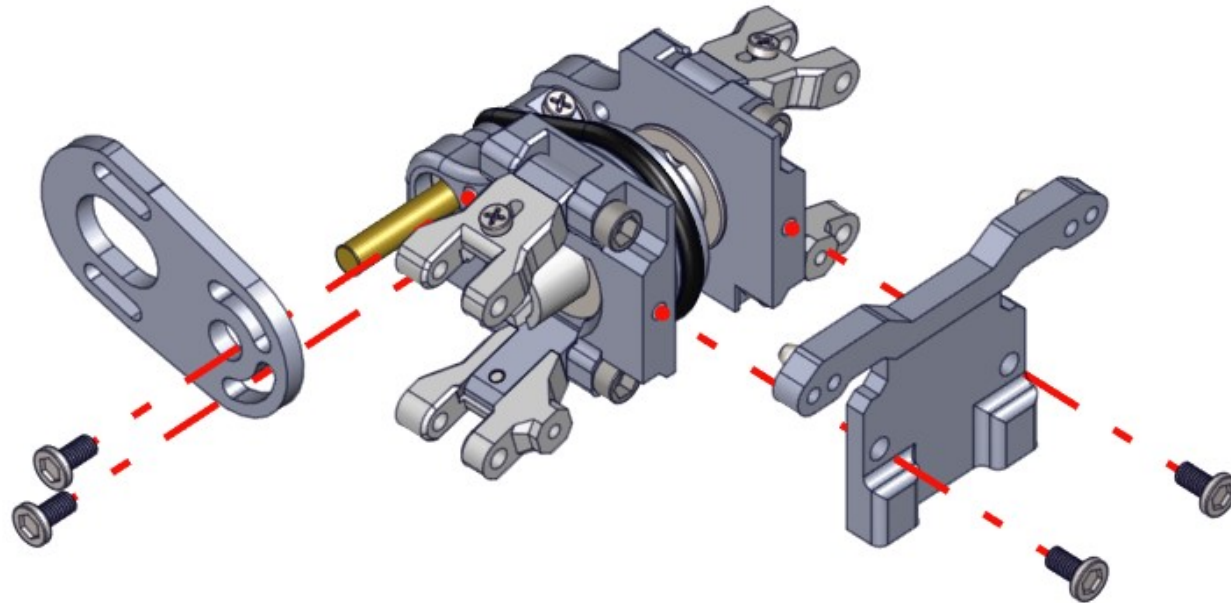




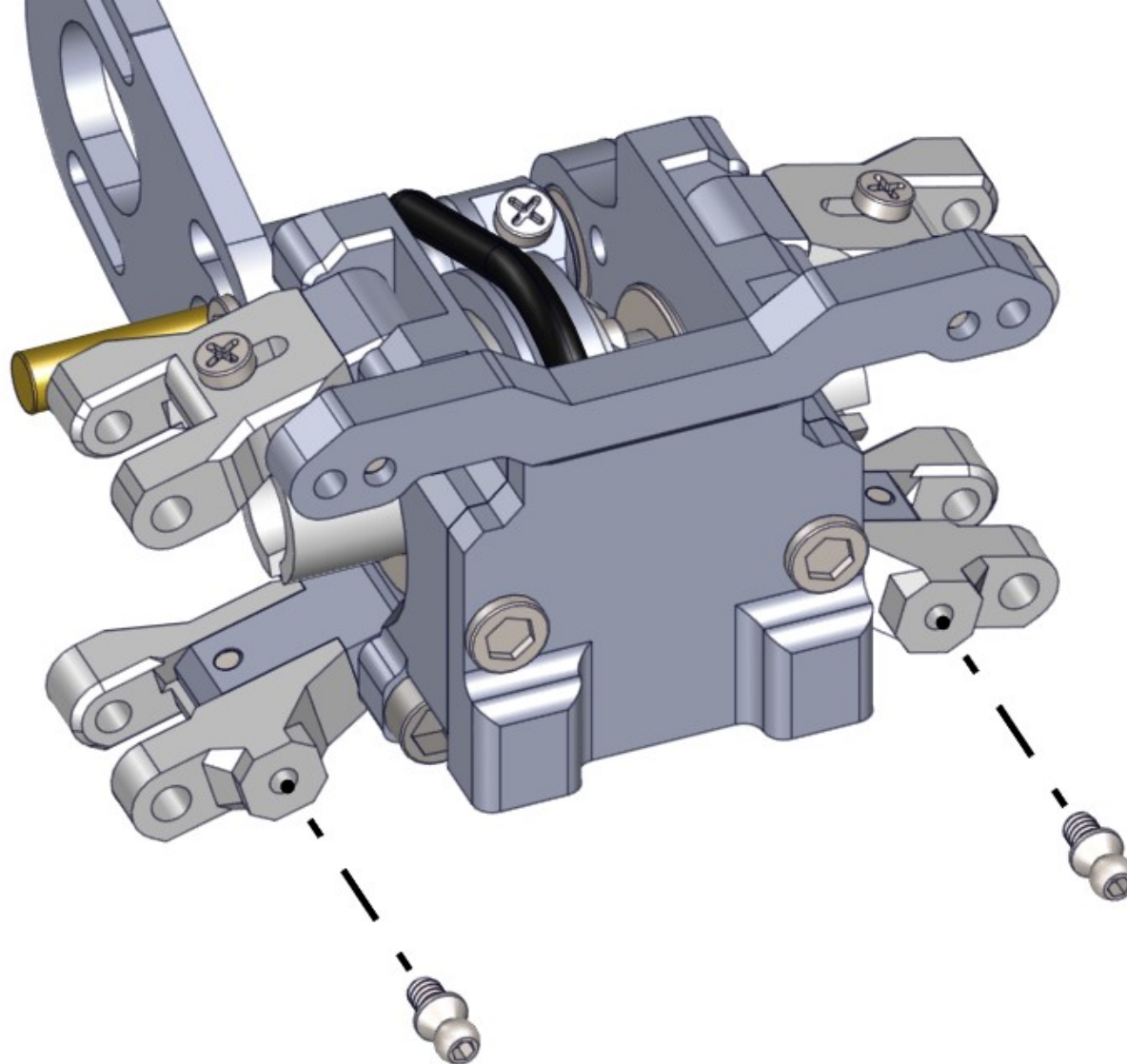
Name	Count
orlandoo ball m1.6	2



Name	Count
m2x4 flat head	4

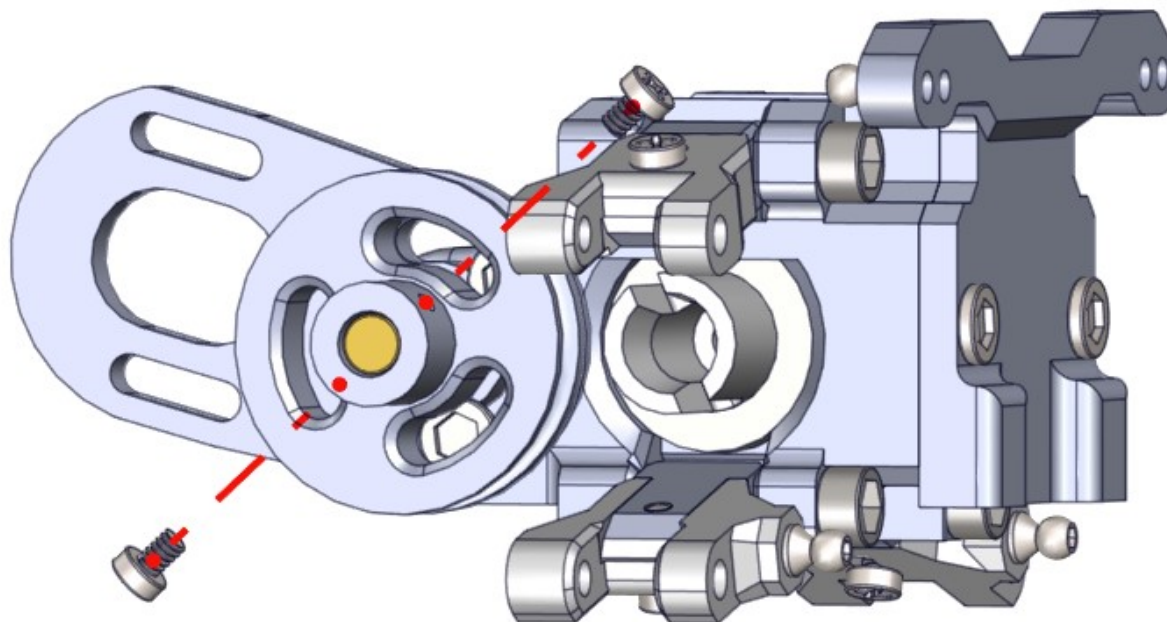


Name	Count
orlandoo ball m1.6	2

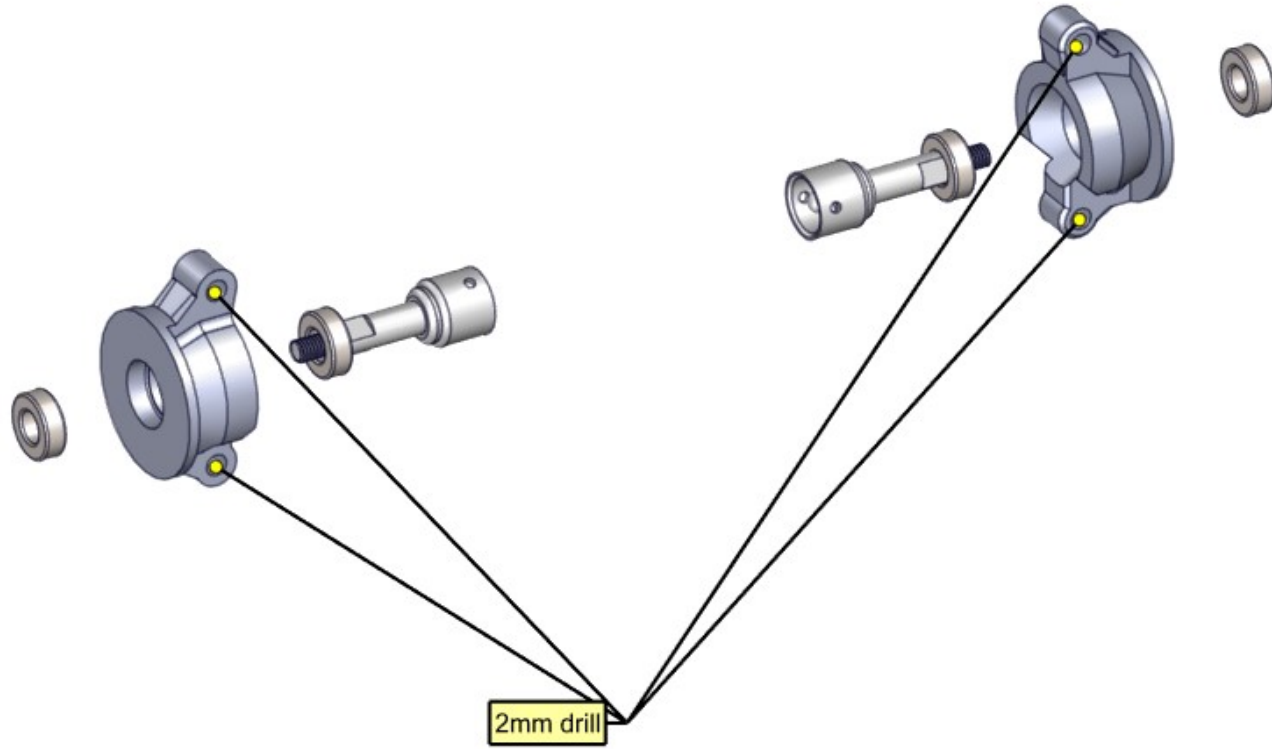


Name	Count
m1.4x2	2

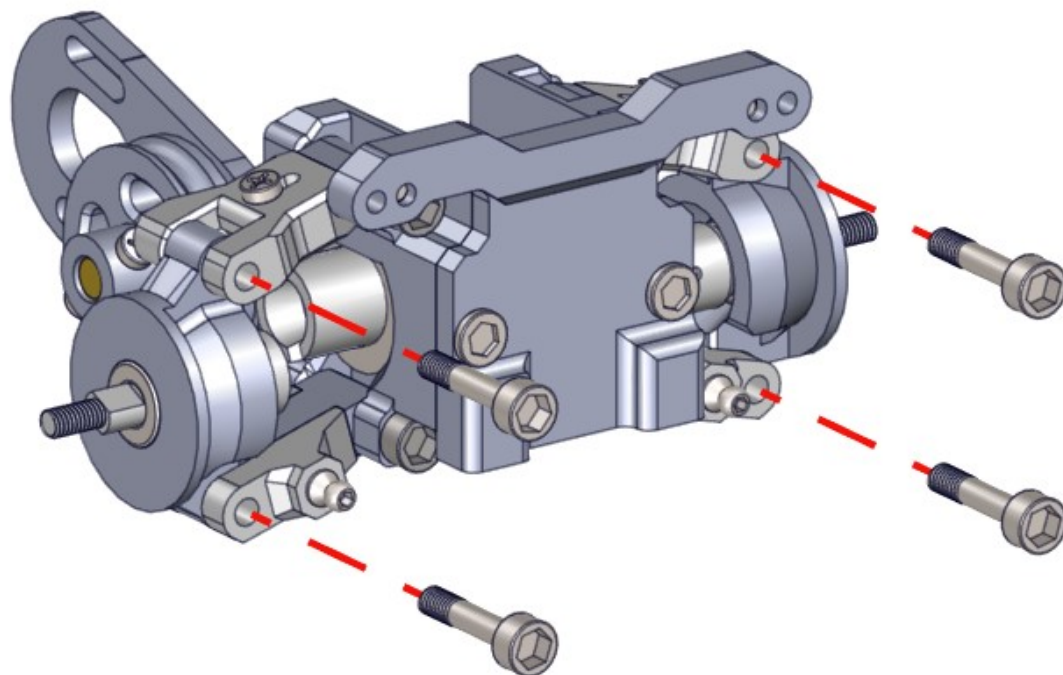
Tip: Adjust the motor mounting angle before installing the spur gear



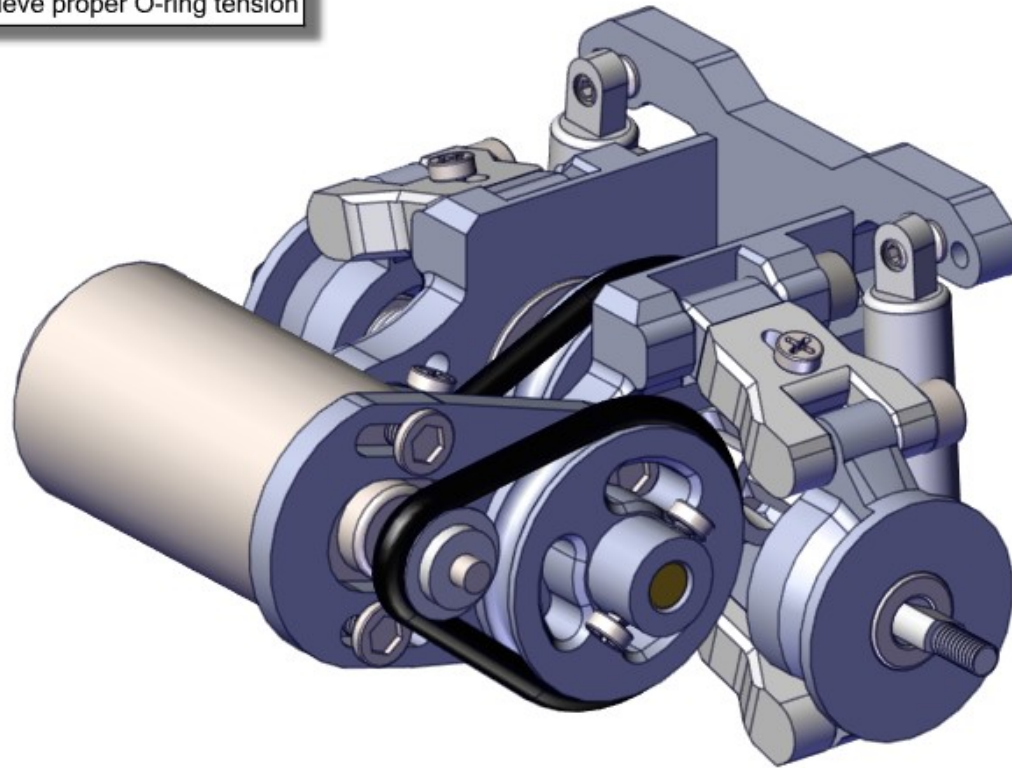
Name	Count
mr63-2	4
universal shaft-1	2



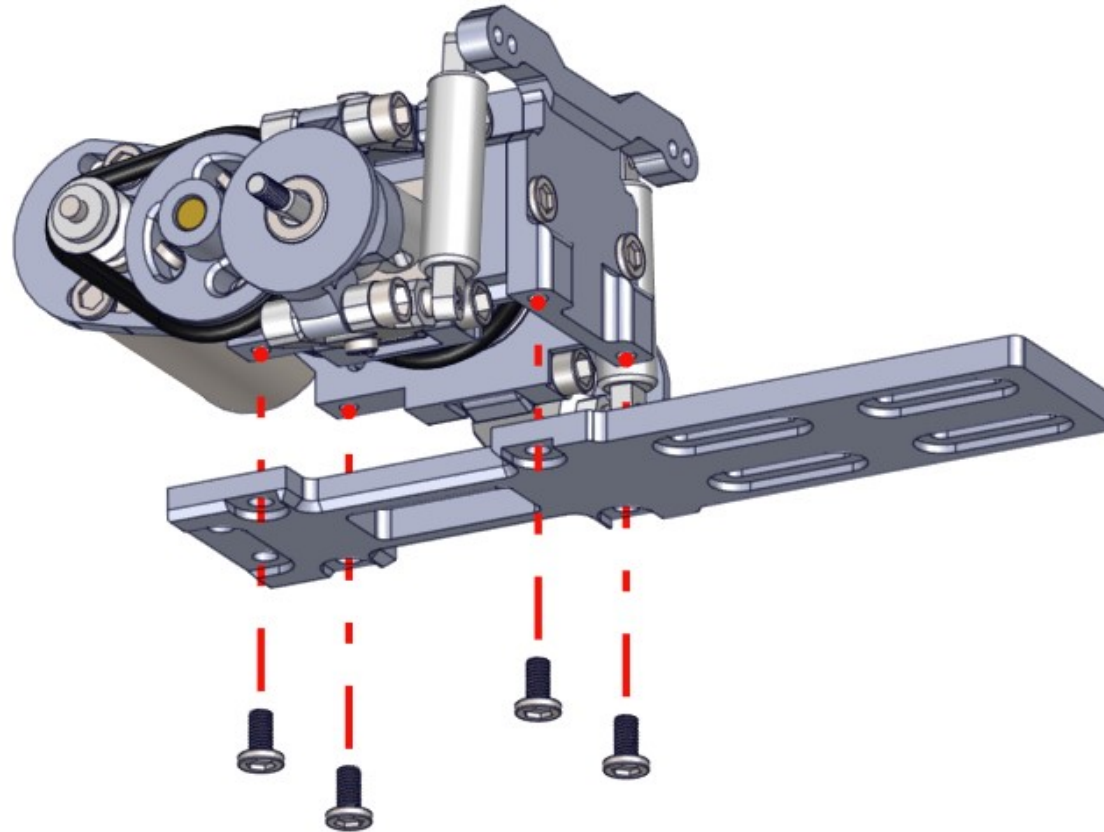
Name	Count
m2x10 half thread	4
universal shaft	2



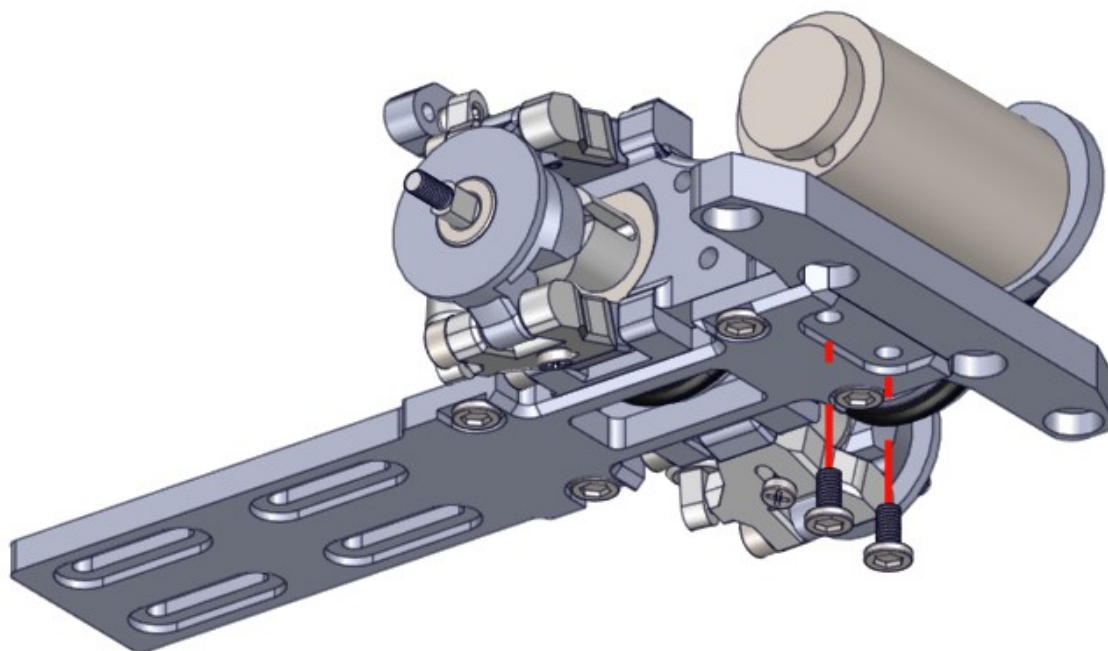
Install shocks and motor
Adjust motor position to achieve proper O-ring tension



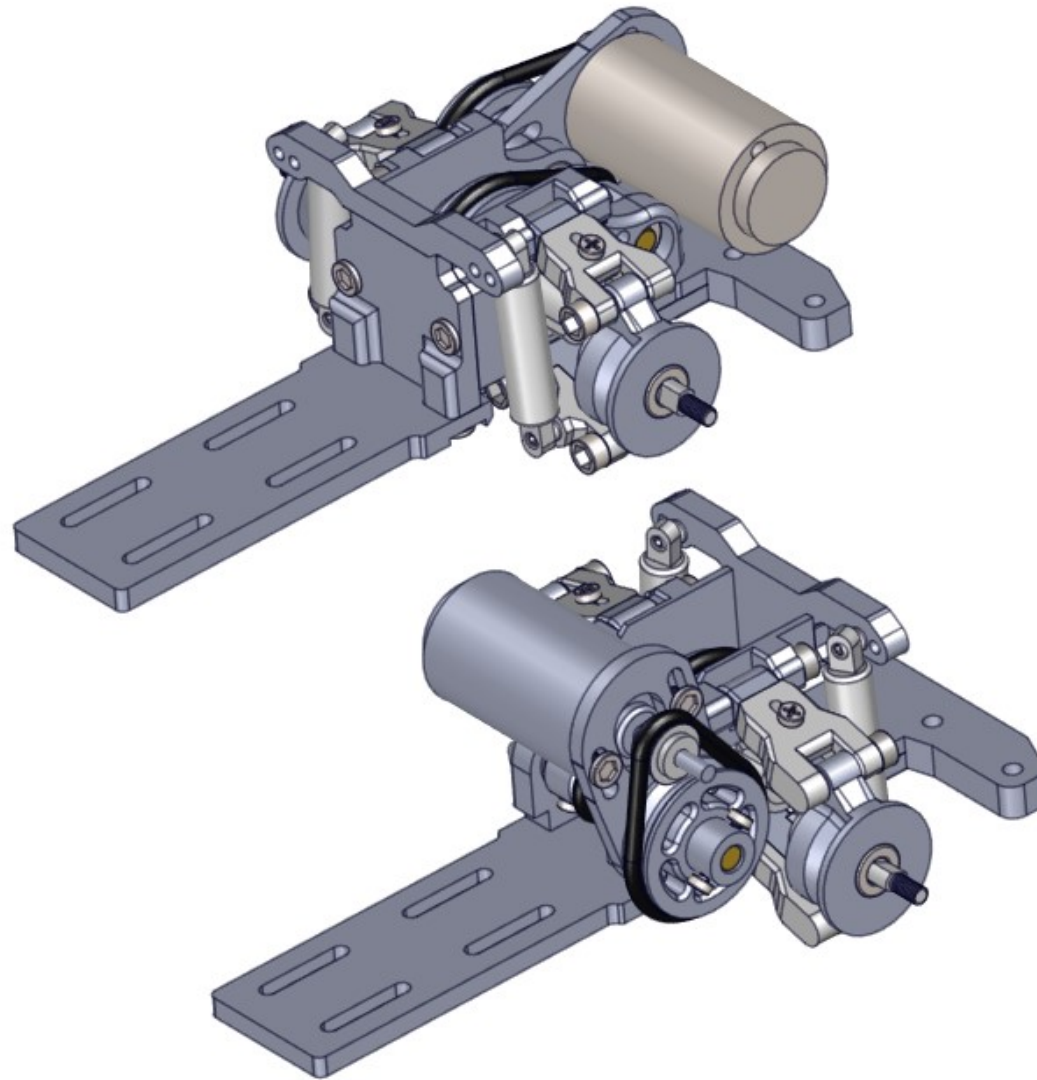
Name	Count
m2x4 flat head	4



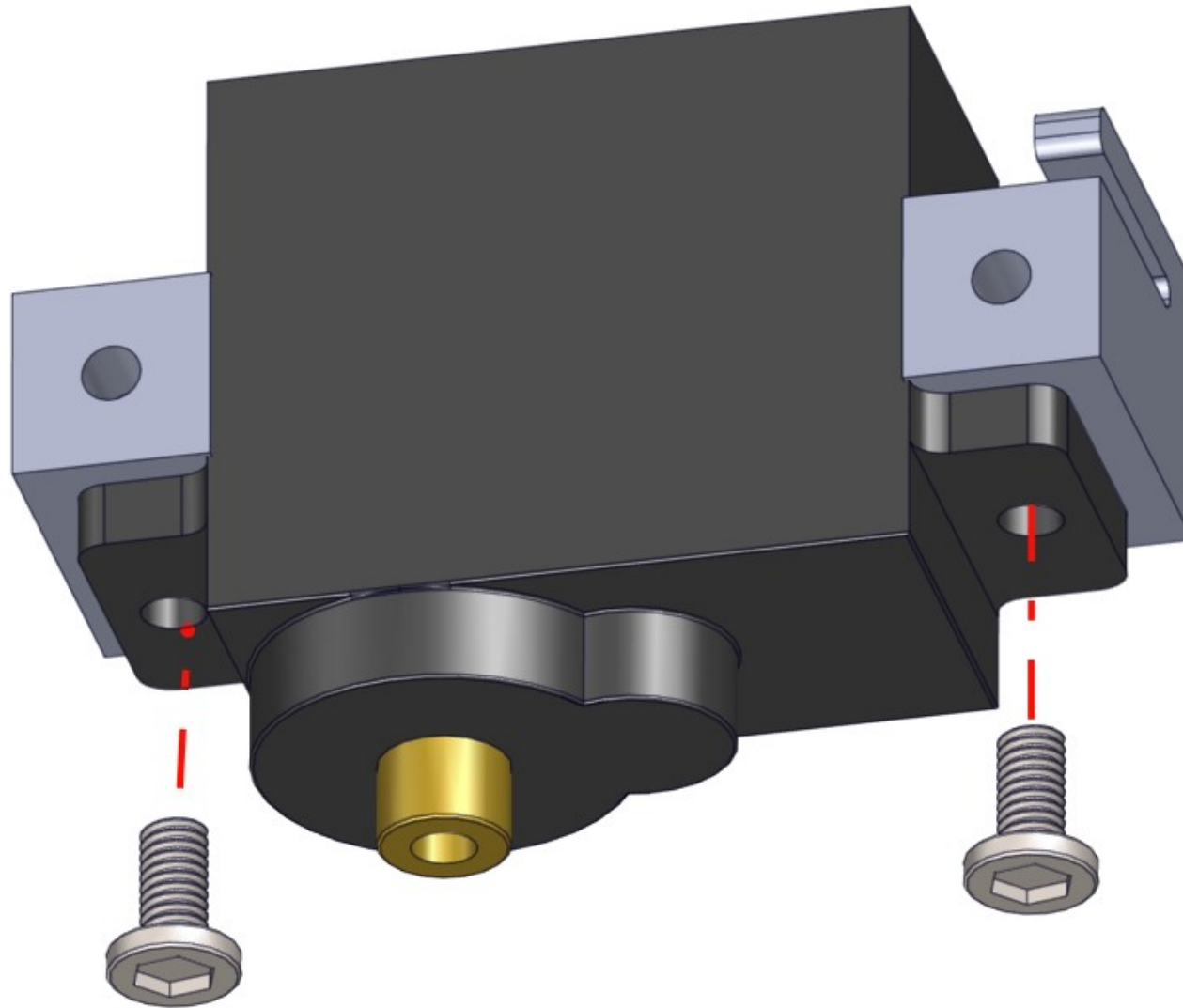
Name	Count
m2x4 flat head	2

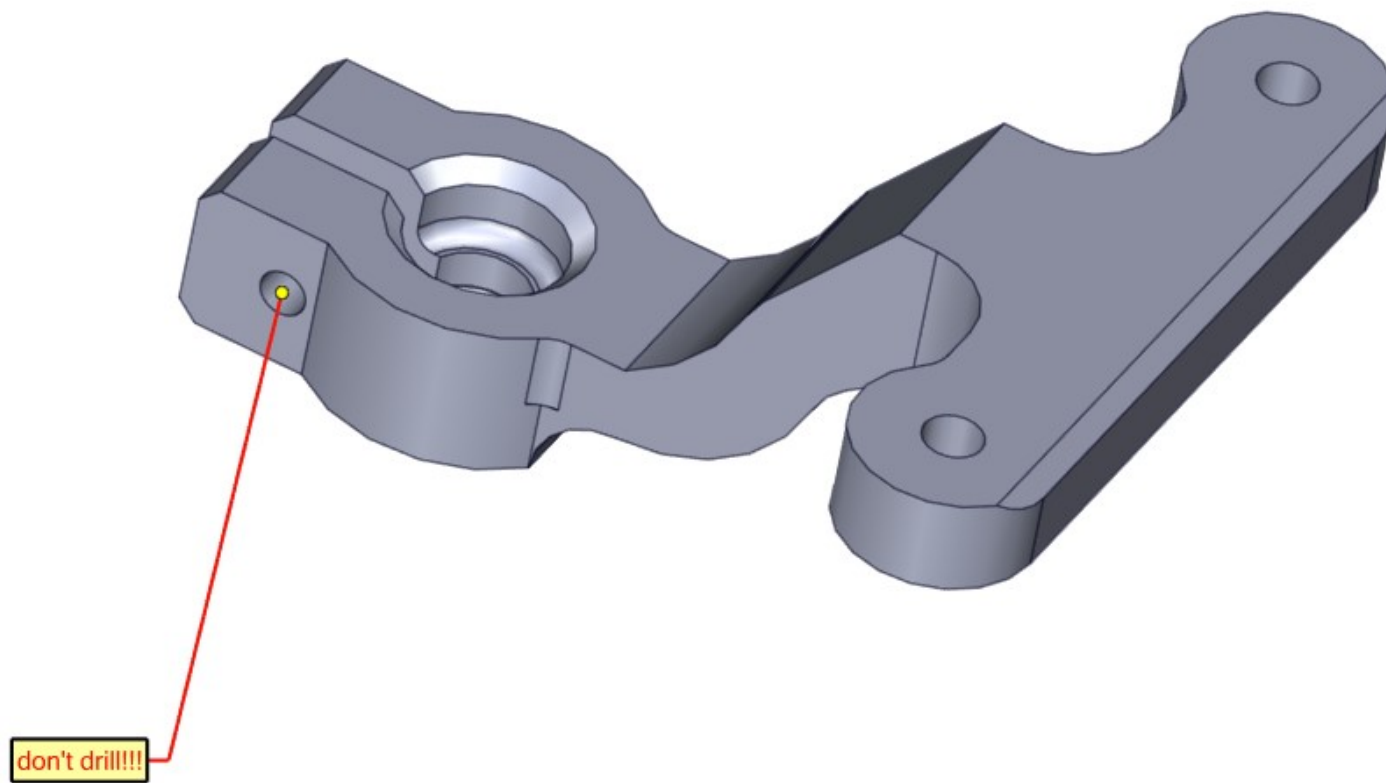


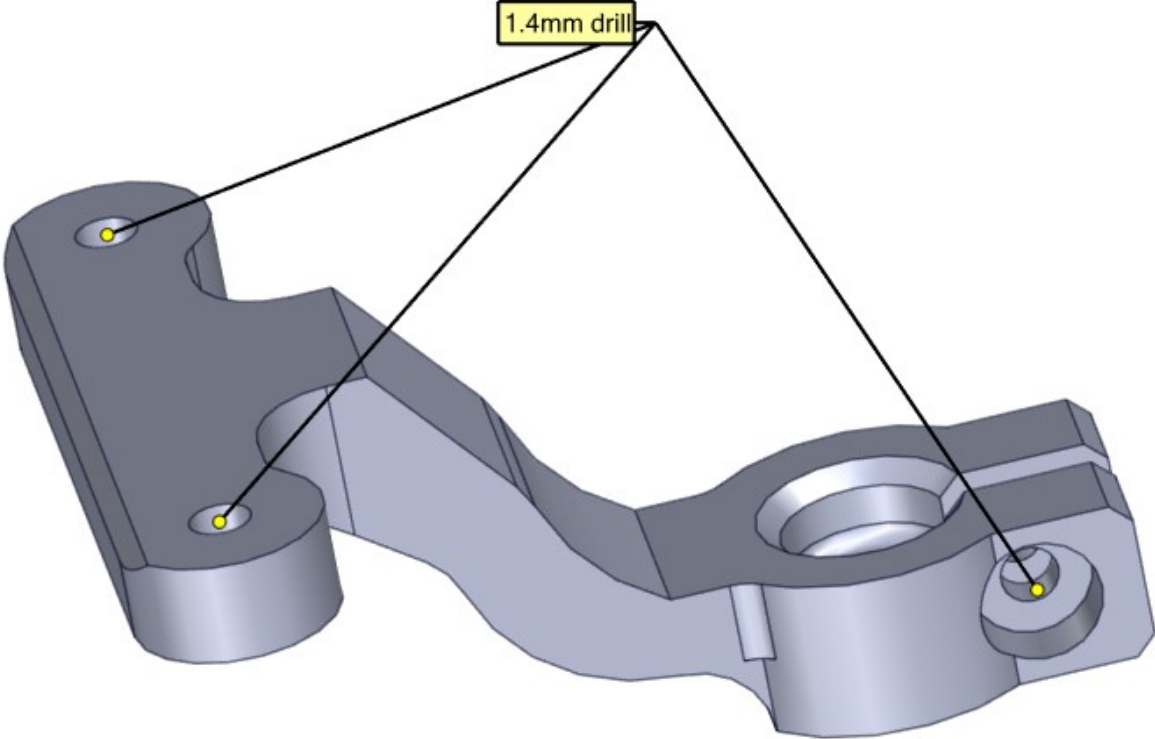
The motor can be mounted in either the front or rear position. Additionally, the motor angle can be adjusted as needed.



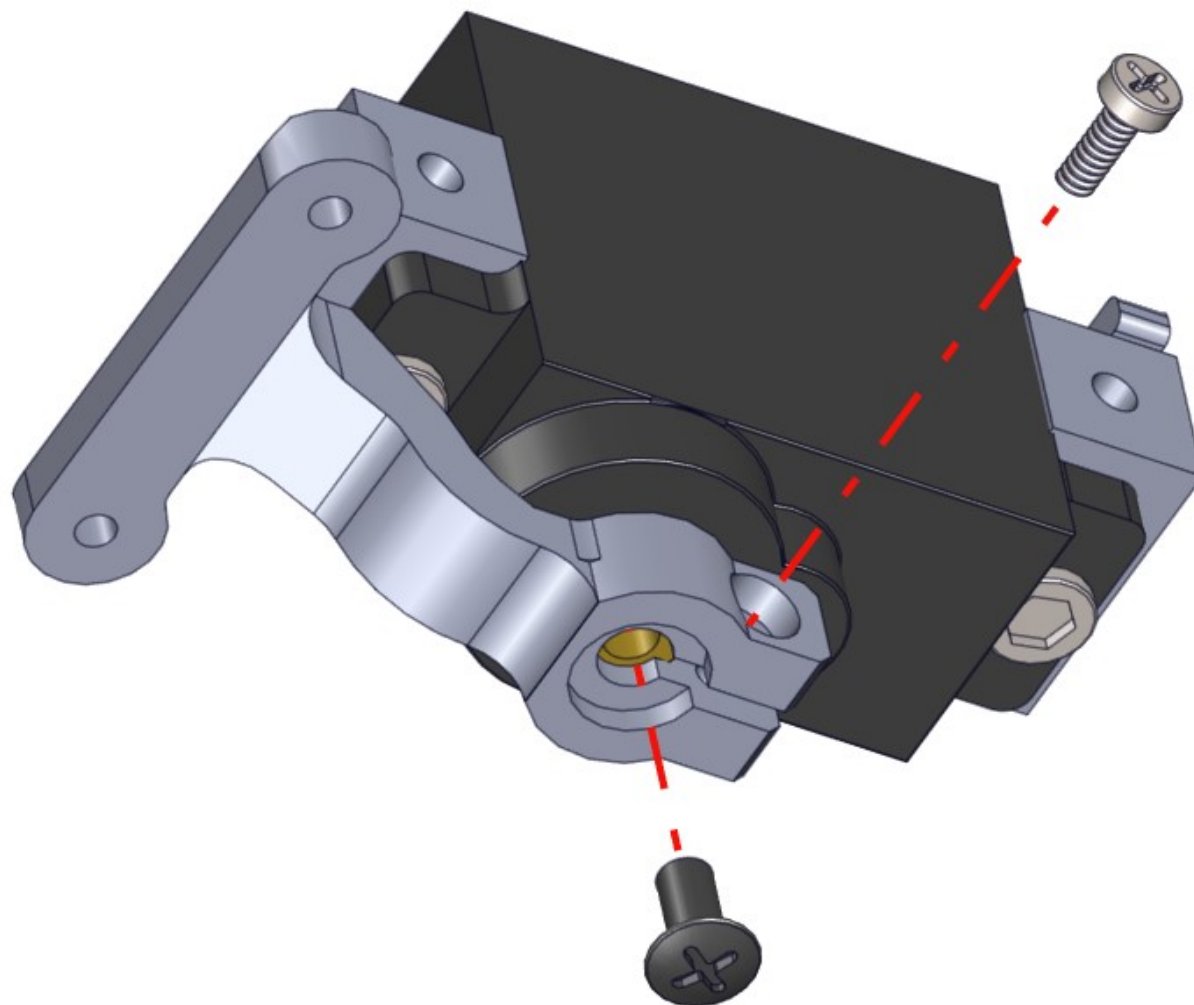
Name	Count
m2x4 flat head	2



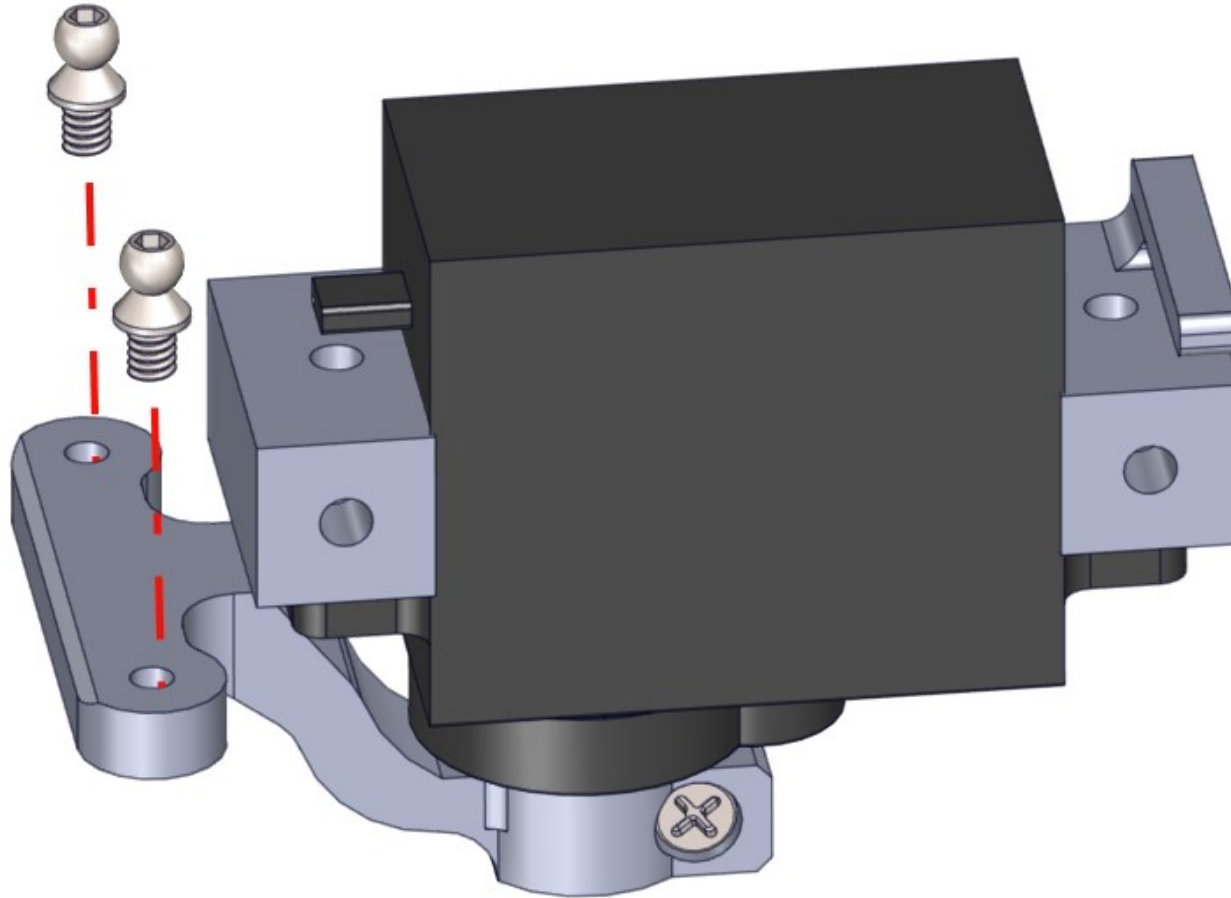


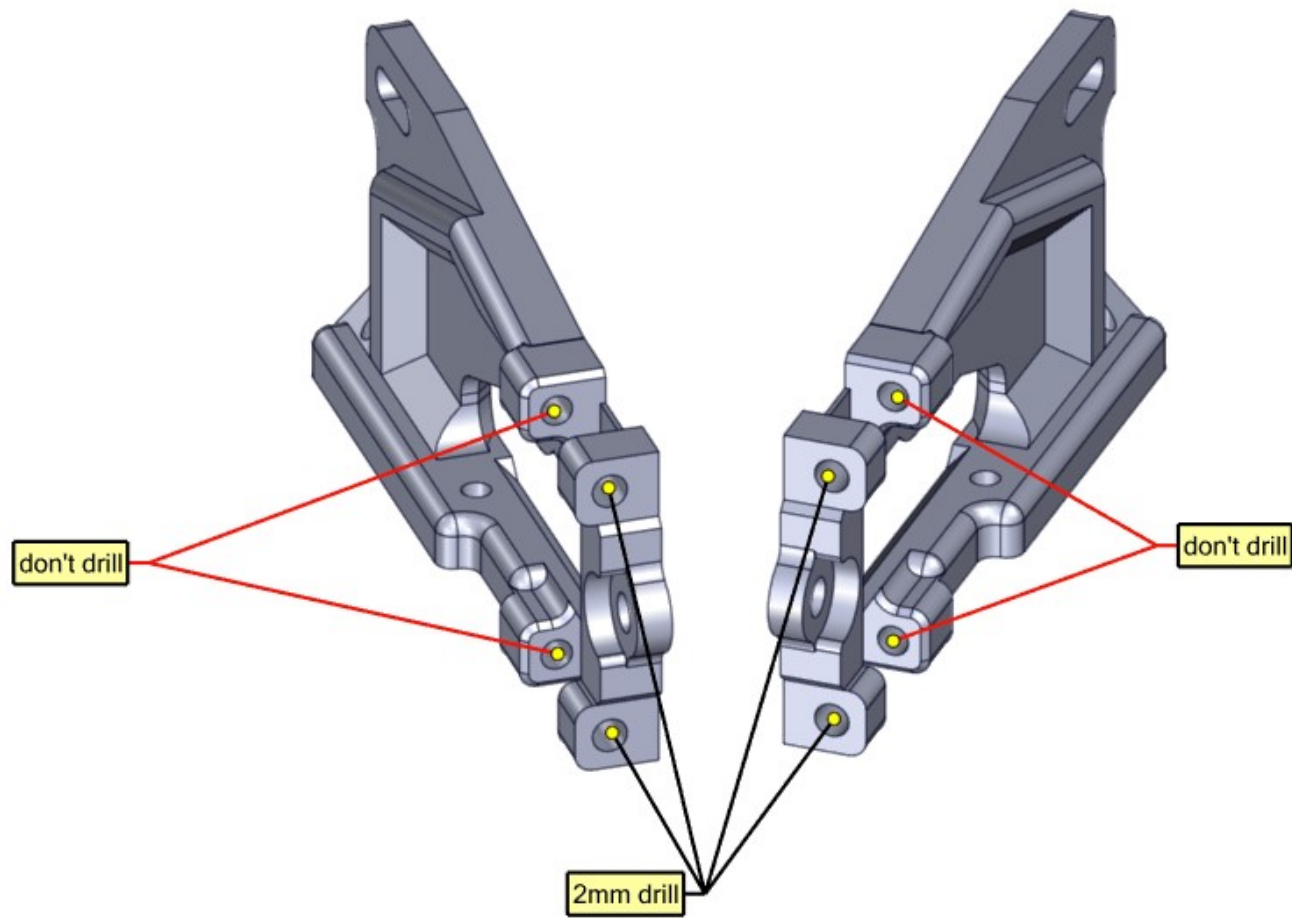


Name	Count
m1.4x4	1
servo screw	1

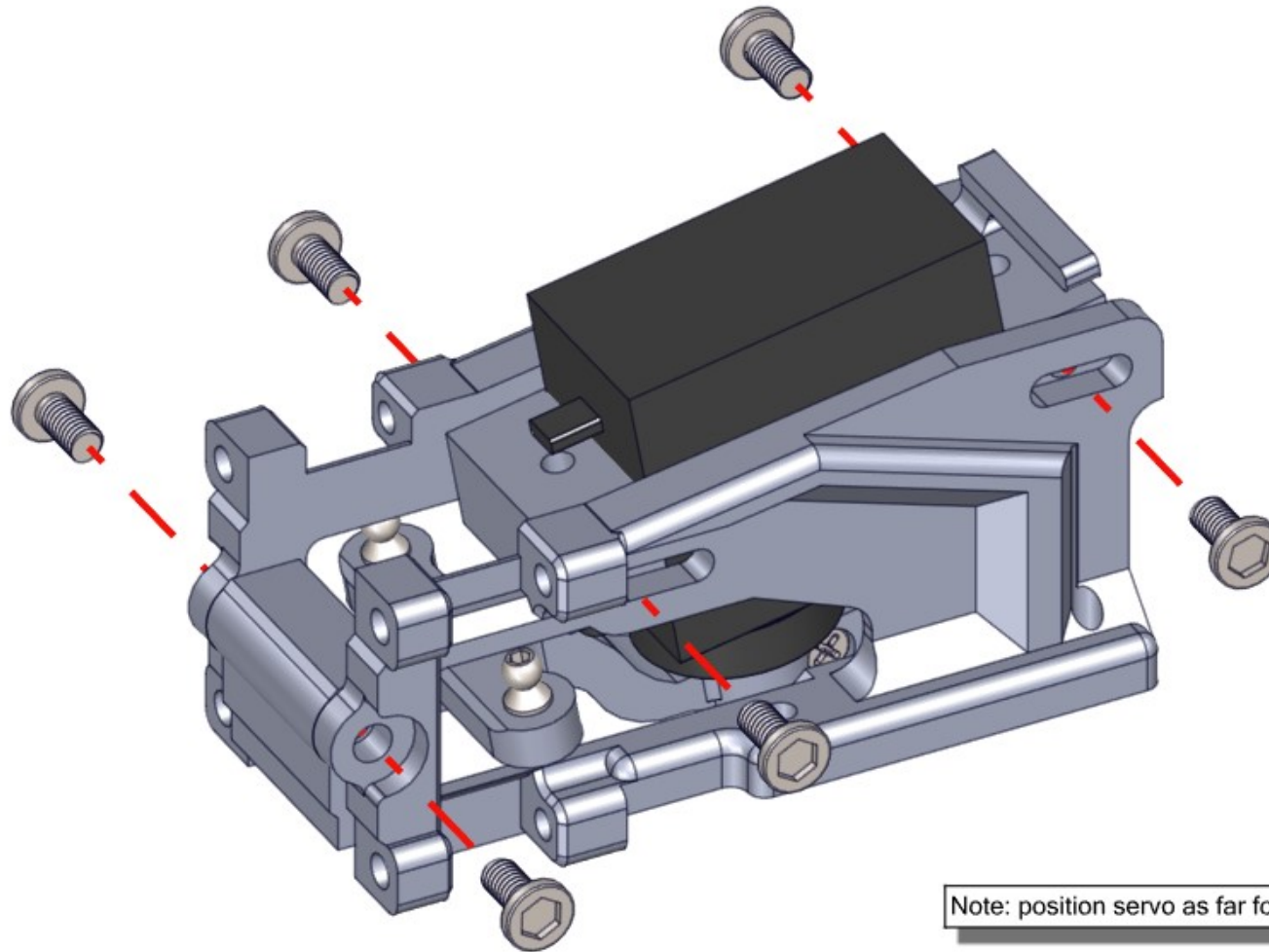


Name	Count
orlandoo ball m1.6	2

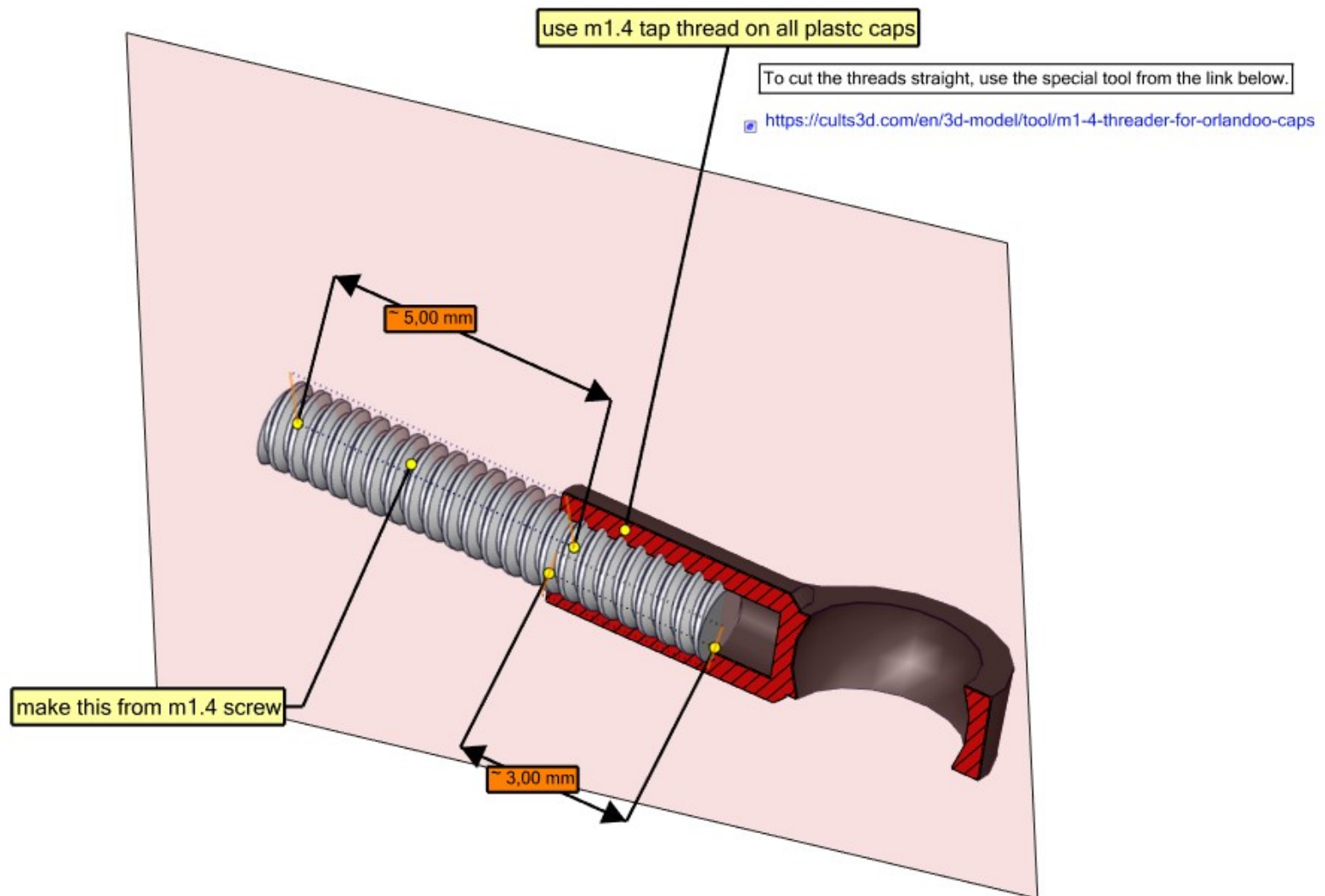




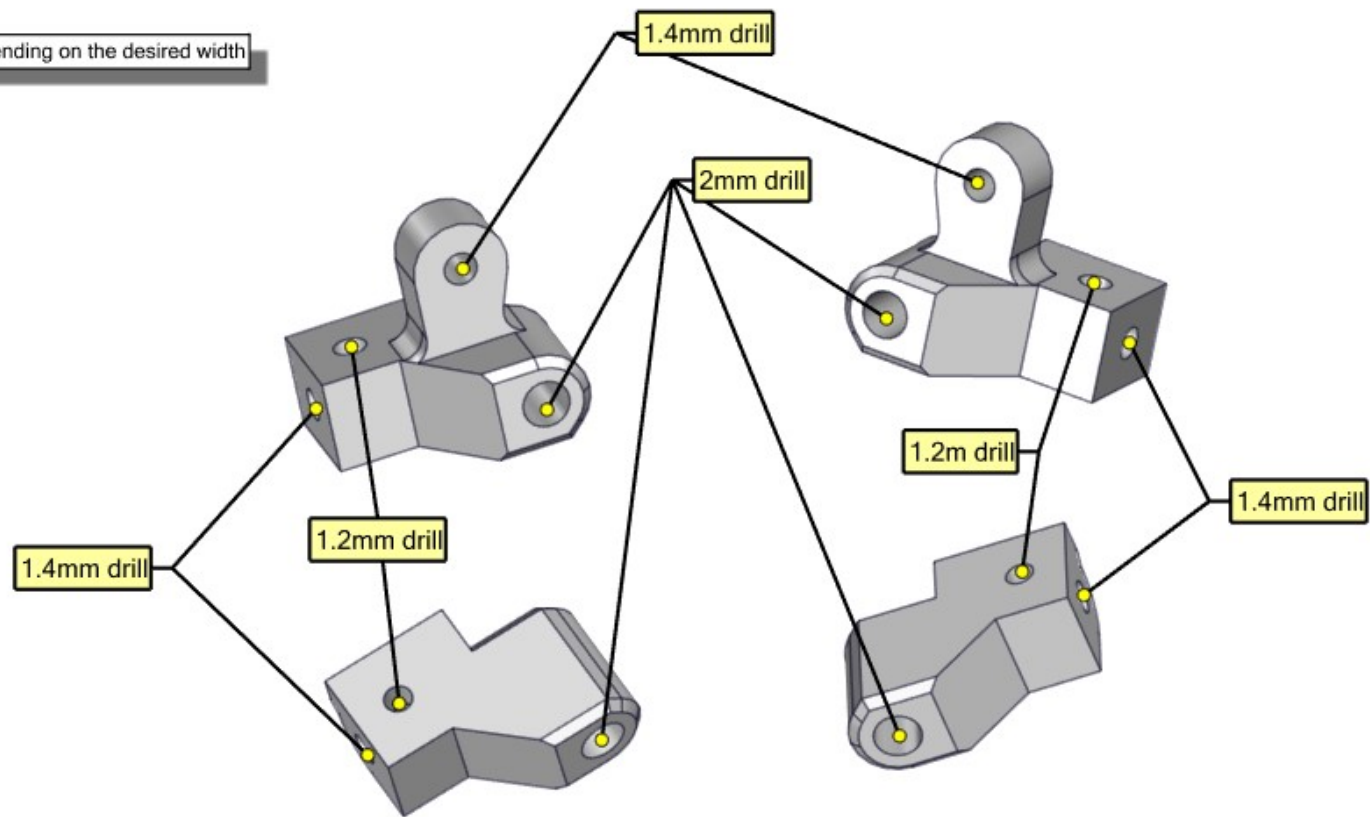
Name	Count
m2x4 flat head	6



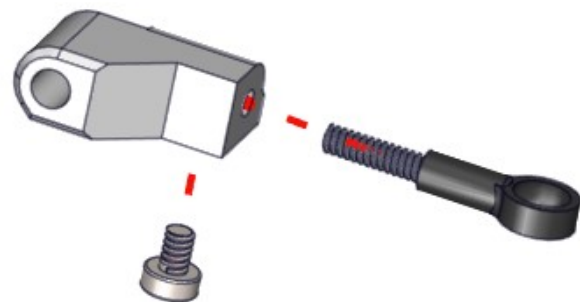
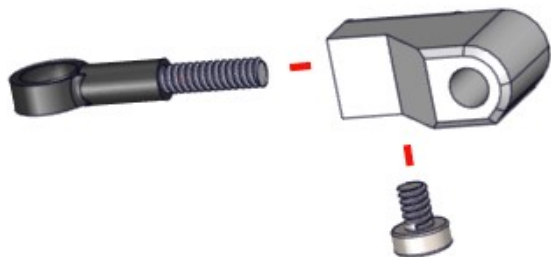
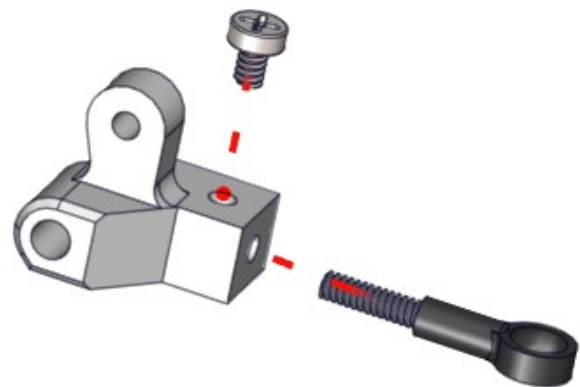
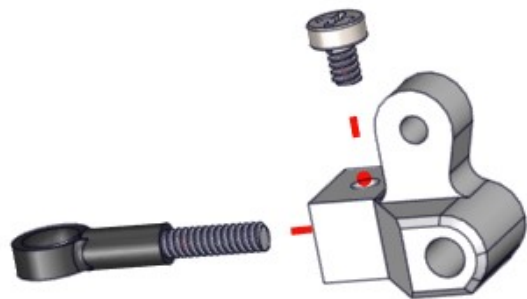
Note: position servo as far forward as possible



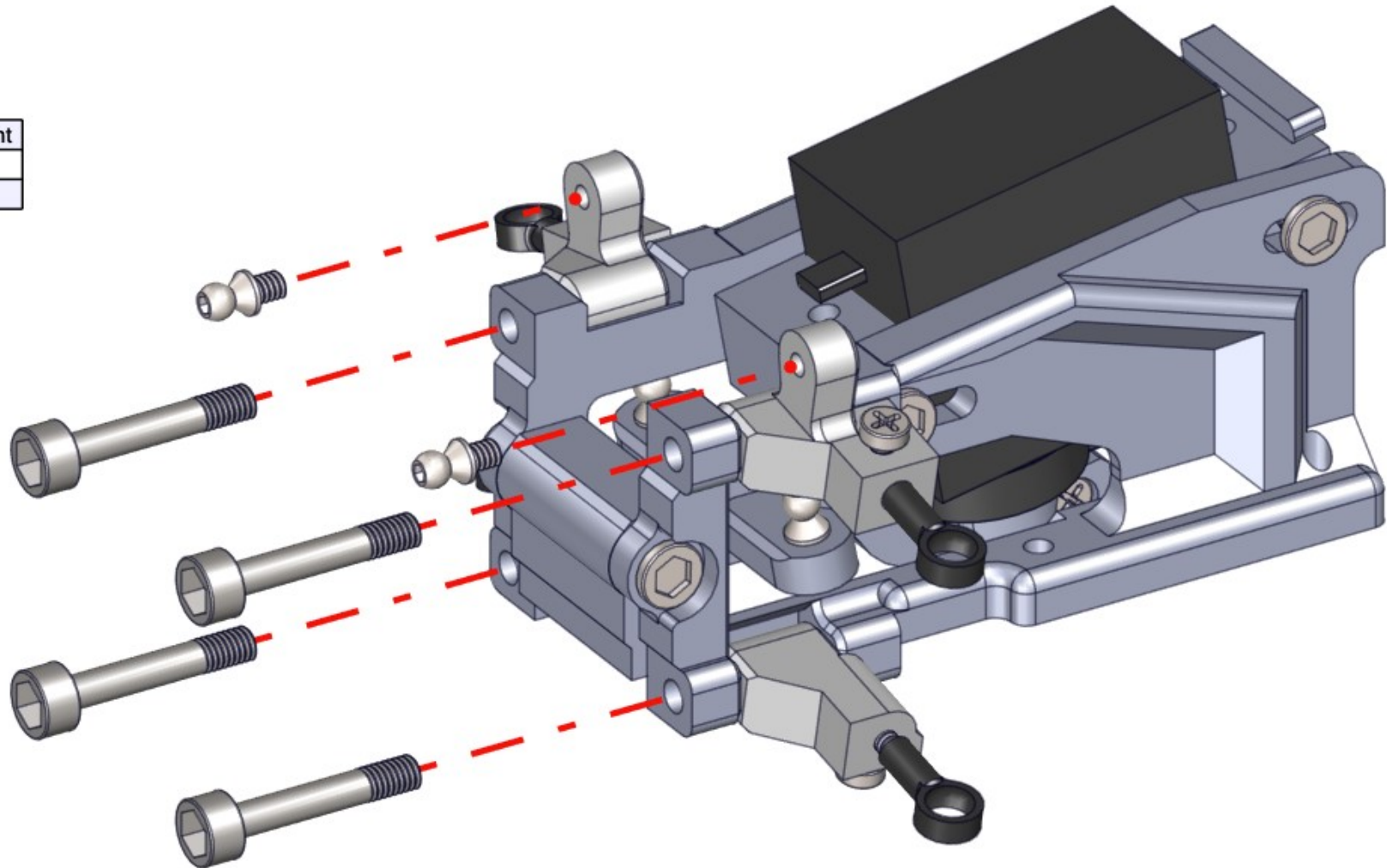
Tip: Use narrow or wide arms depending on the desired width

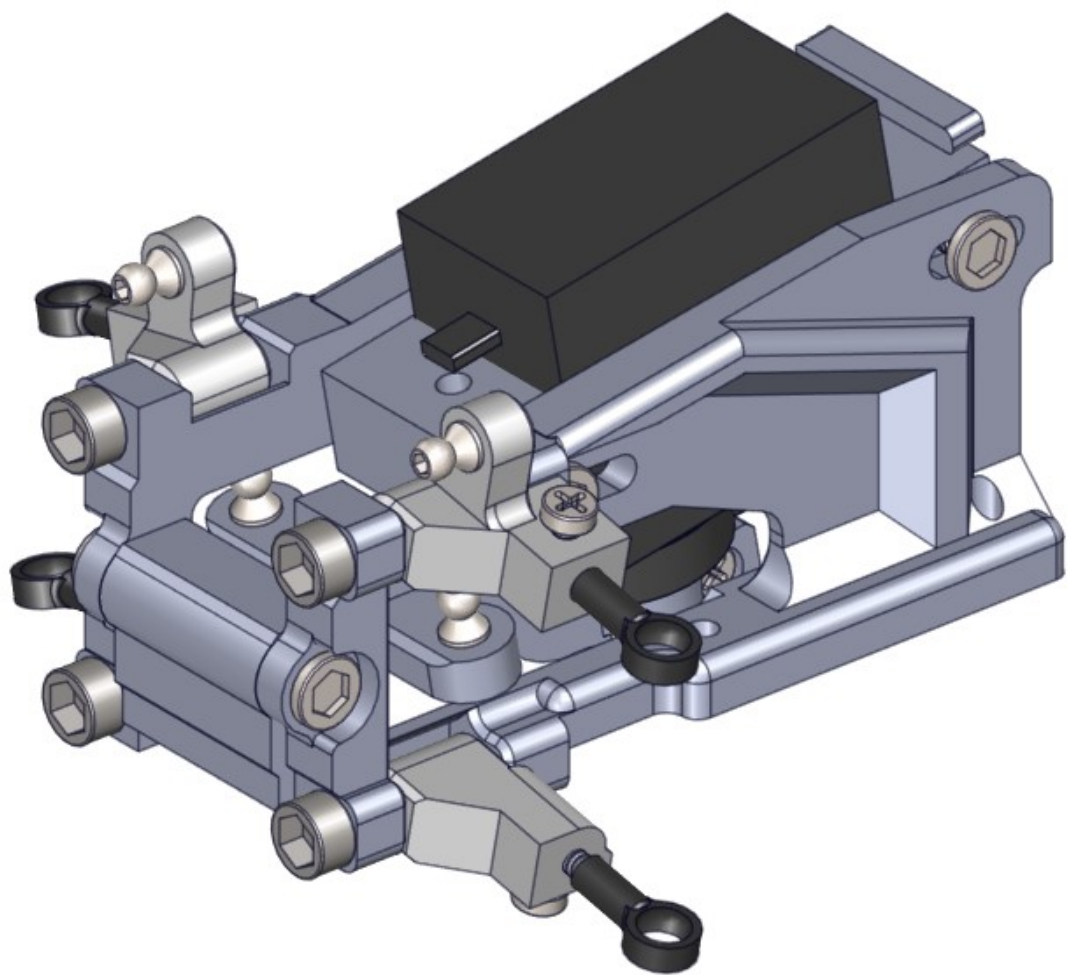


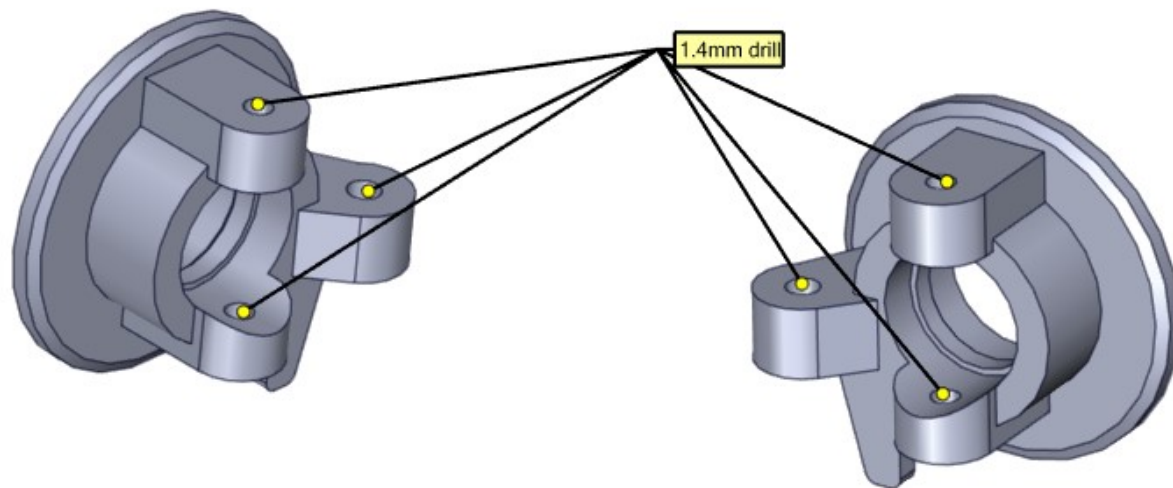
Name	Count
m1.4x2	4
orlandoo ball cap	4



Name	Count
m2x12 half thread	4
orlandoo ball m1.6	2



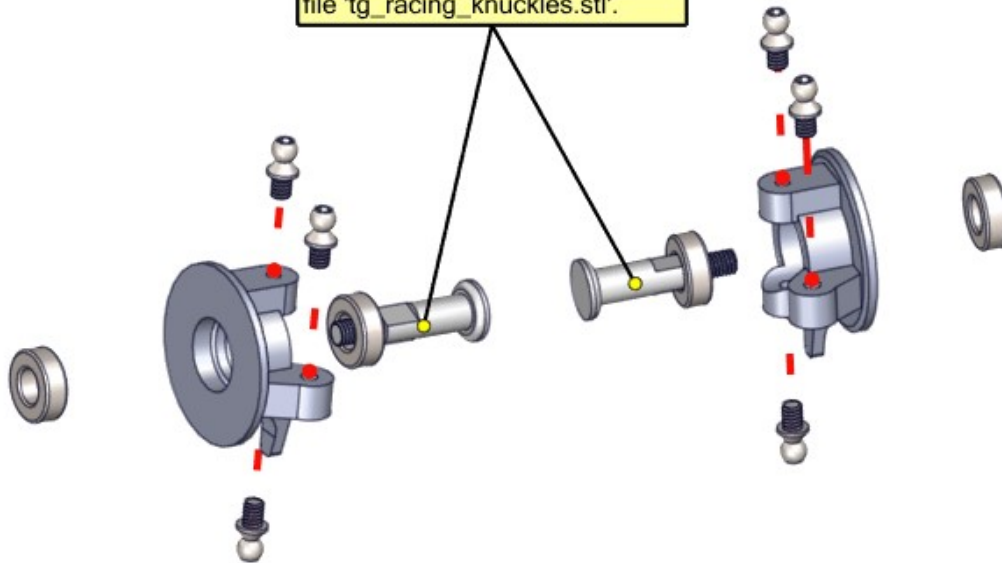




Name	Count
mr63-2	4
orlandoo ball m1.6	6
universal shaft	2

You can use driveshafts from WLToys, but you will need to trim the cups and fabricate a front axle.

Or, you can use the front axles from TG Racing, but then you must print the knuckles from the file 'tg_racing_knuckles.stl'.



Name	Count
orlandoo ball cap	4



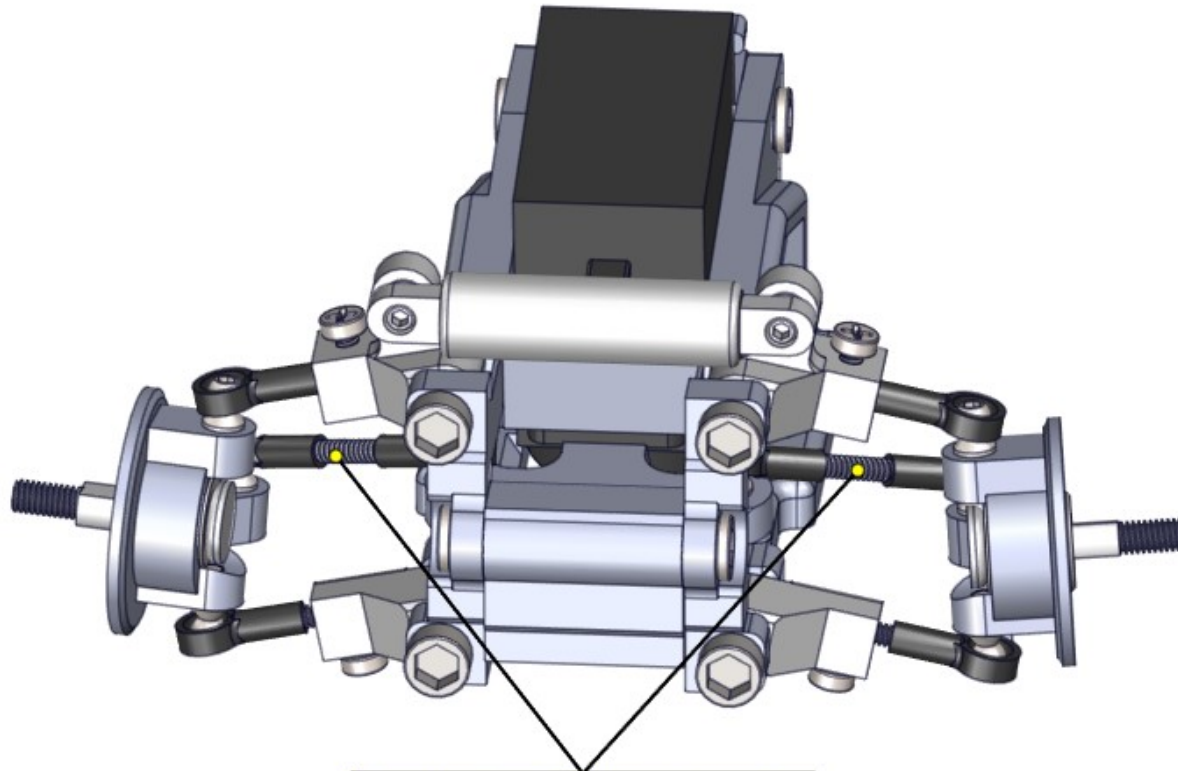
make 2 steering links from
plastic caps and m1.4 screw



You must determine the correct length
for the M1.4 stud (fabricated from a screw) based on your chosen body
and the desired front track width.

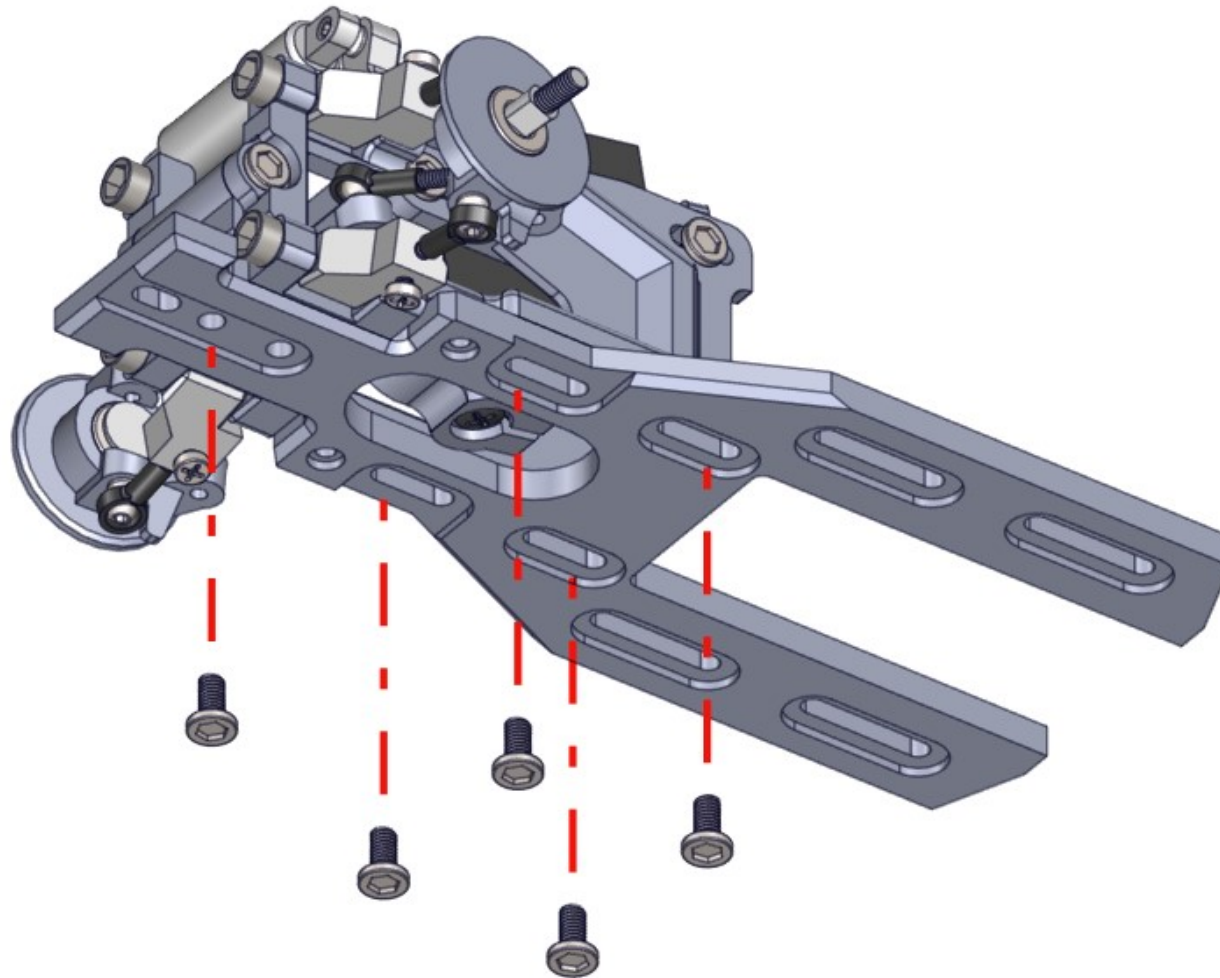
Initial Setup Tips

- Camber: Set slight negative camber (lower arm should be 1mm longer than upper arm)
- Toe: Adjust mild negative toe (using steering tie rods)
- Ackermann: Tune by modifying tie rod length
- Symmetry: Ensure equal length of arms and tie rods (L/R)
- Verify free movement after tuning



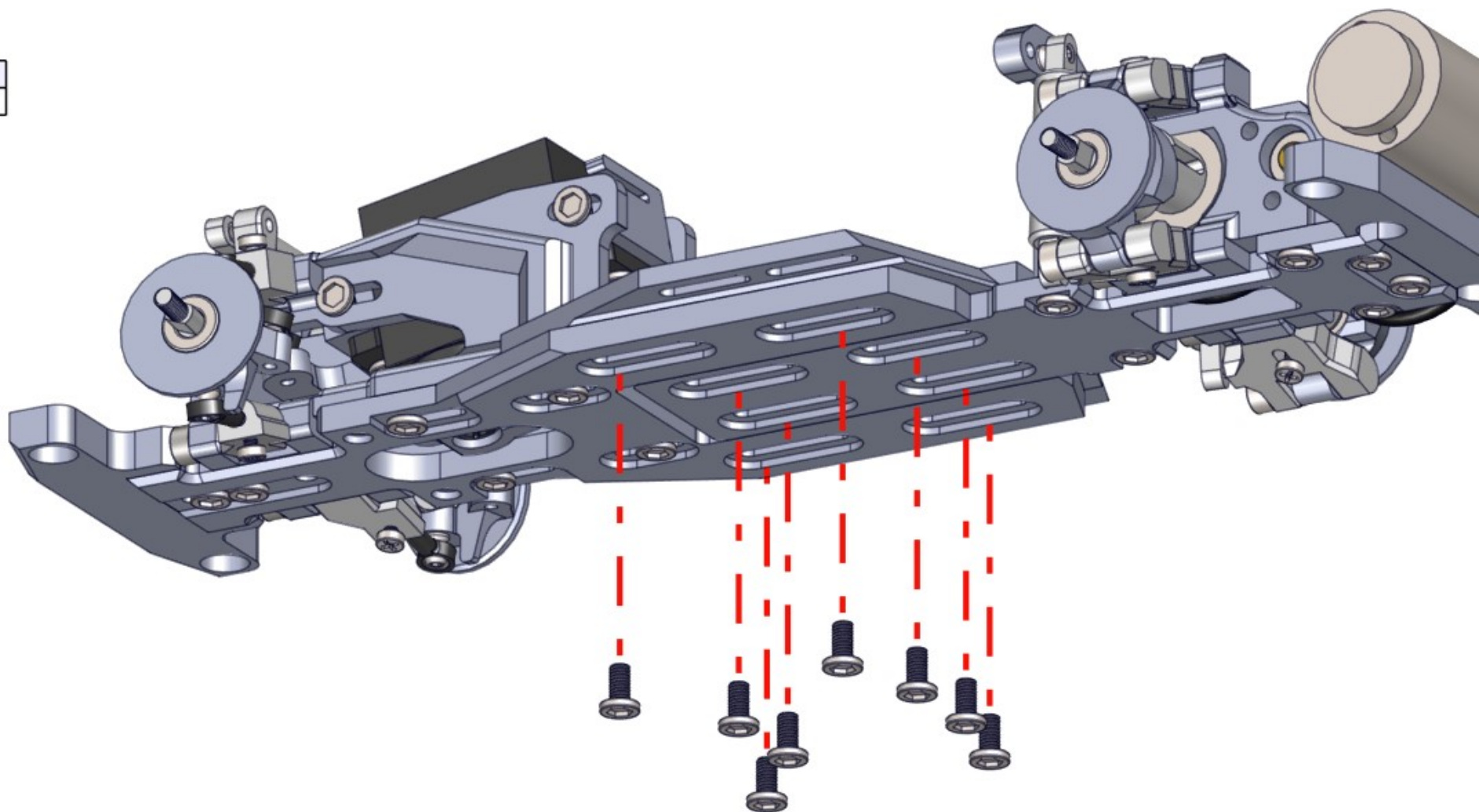
Adjust the length of the steering rods depending on your setup. Use M1.4 screws of the required length.

Name	Count
m2x4 flat head	5

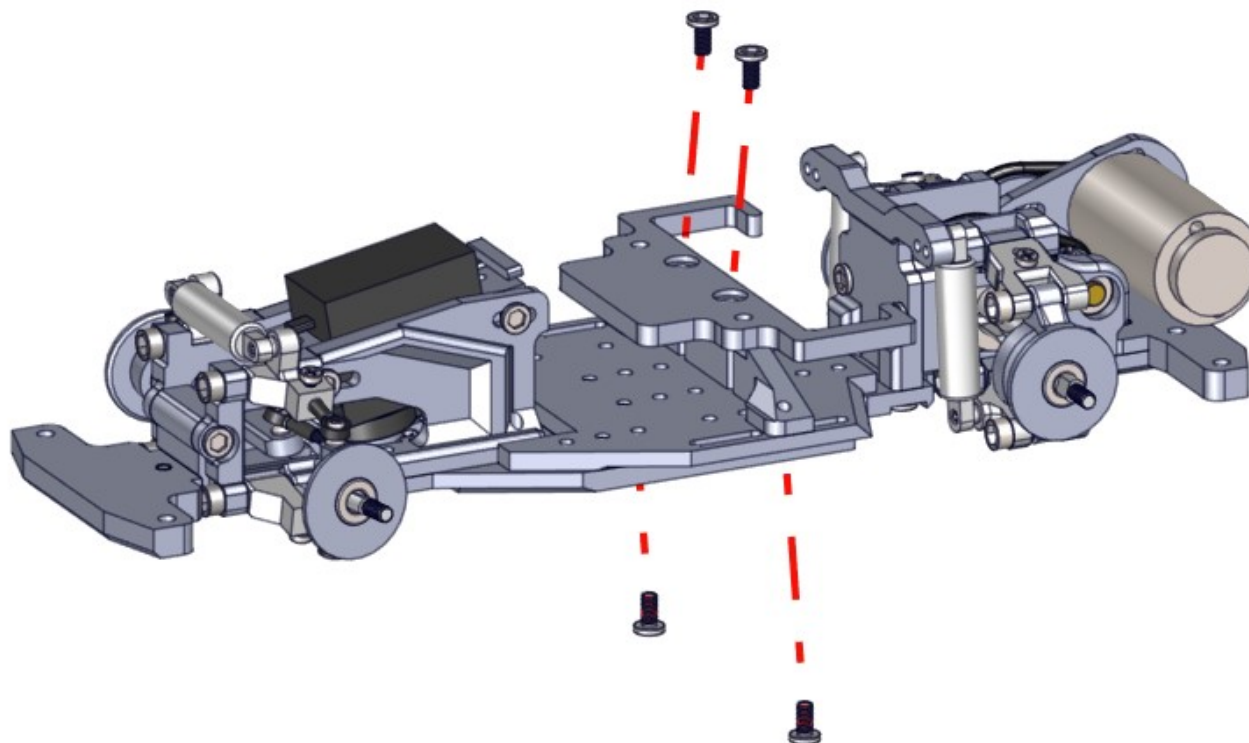


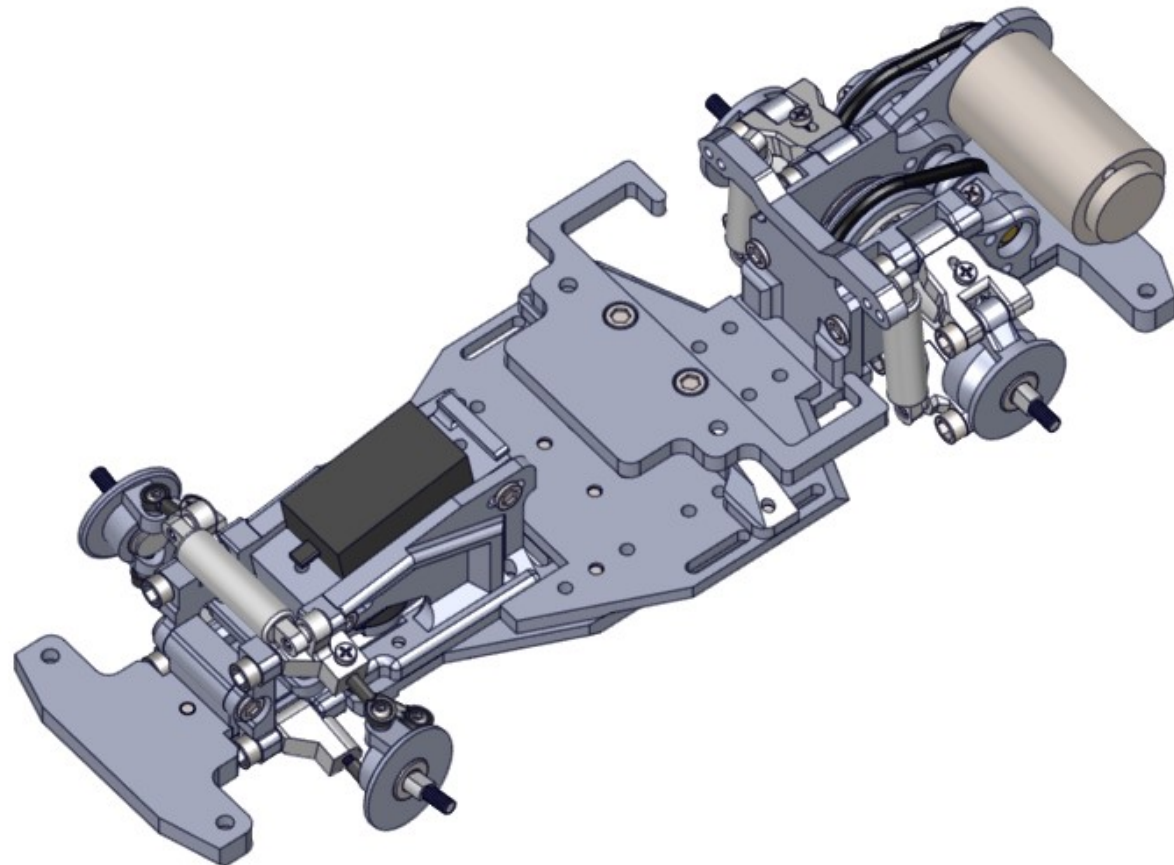
Tip: The wheelbase is adjustable from 98mm to 118mm

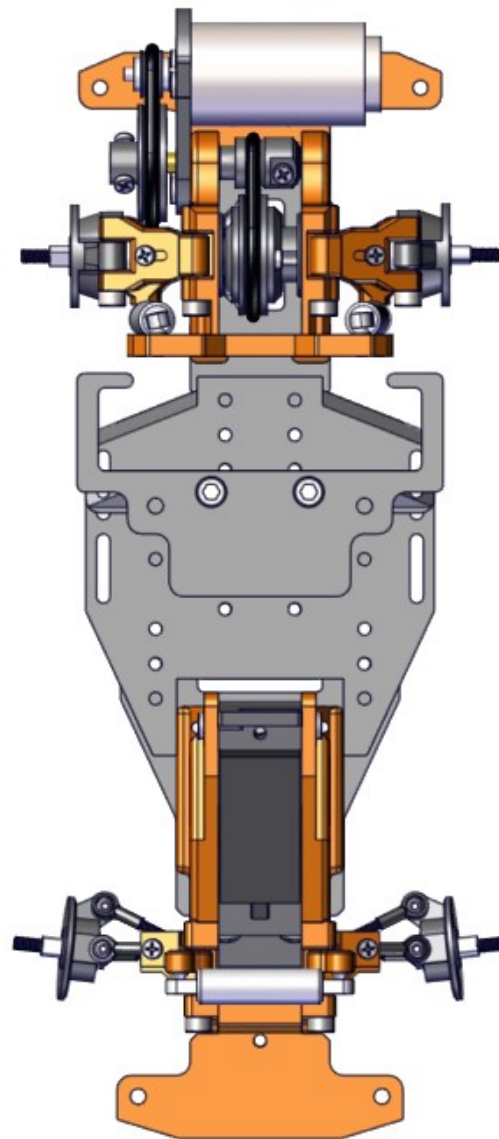
Name	Count
m2x4 flat head	8



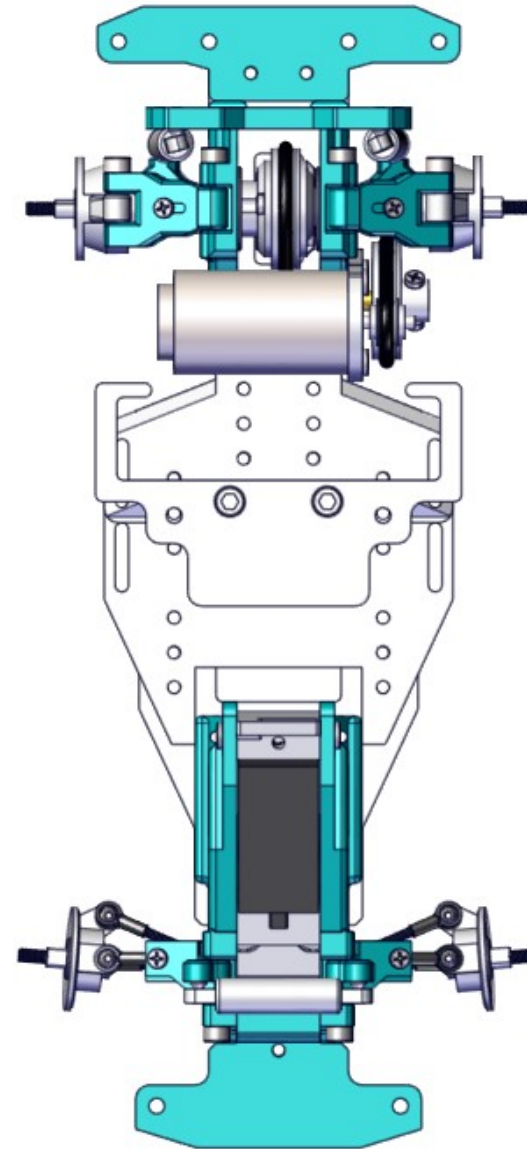
Name	Count
m2x4 flat head	4







Narrow configuration with
rear motor placement



Wide configuration with
front motor placement

