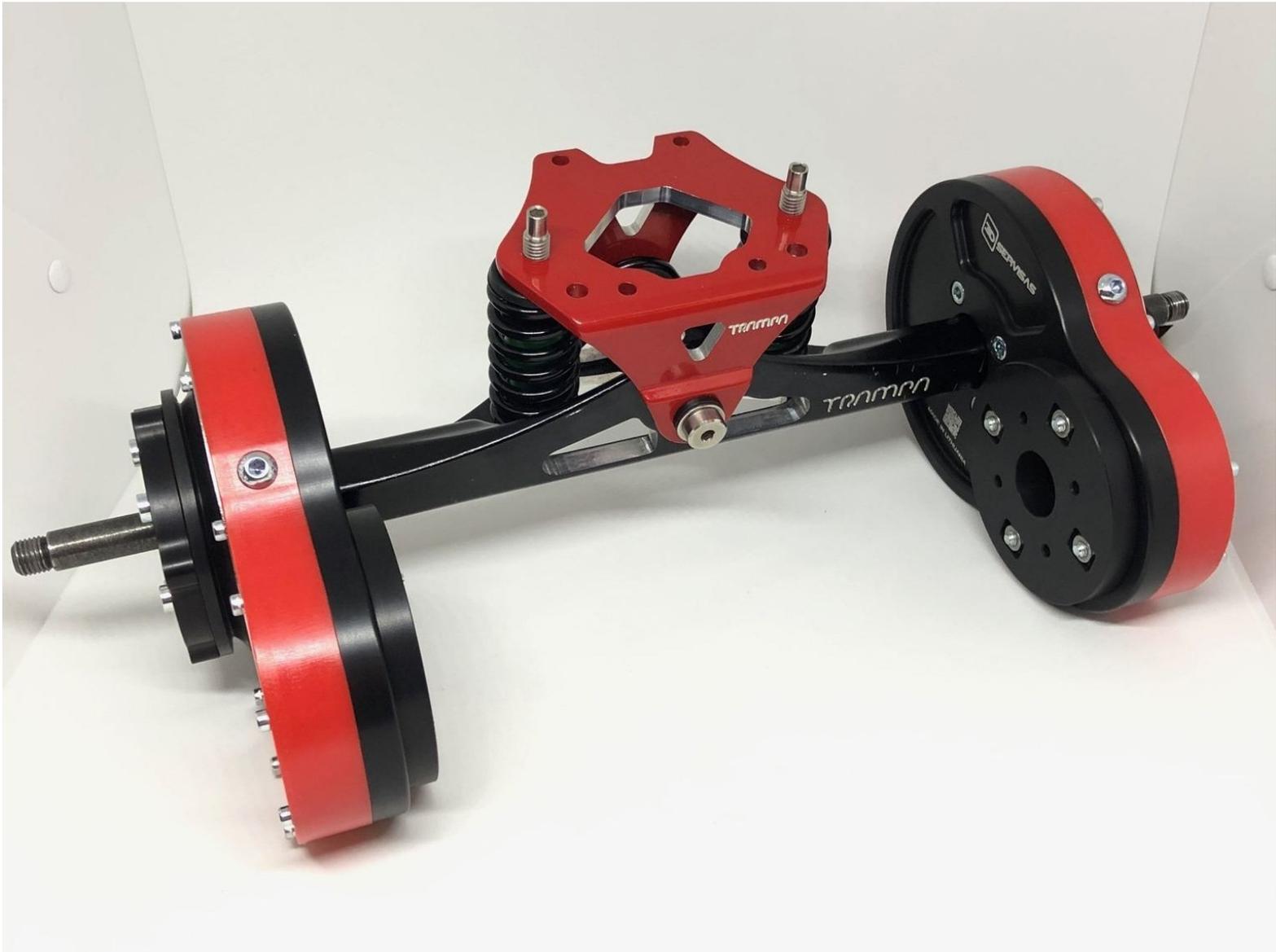




How to assembly FatBoy SS Gear Drive

A small guide how to assembly the FatBoy SS Gear Drive.

Written By: Aurimas Niekis



 **TOOLS:**

- [4 mm Hex Key](#) (1)
- [3mm Hex Key \(or Bit\)](#) (1)
- [2.5 mm Hex Key](#) (1)
- [2mm Hex Key](#) (1)
- [7mm Socket](#) (1)
- [Socket Wrench](#) (1)
- [Socket 17mm](#) (1)

 **PARTS:**

- [FatBoy SS Gear Drive Kit](#) (1)
- [Painter's Tape](#) (1)
- [MOLYKOTE G-67 Grease](#) (1)
- [Blue Loctite](#) (1)

Step 1 — Prepare parts for assembly



- ⓘ It is best to prepare all the parts for assembly
- Hex Keys, Wrenches for wheel nut and wheel hub nuts

Step 2 — Attach wheel mounting plate to wheel hubs



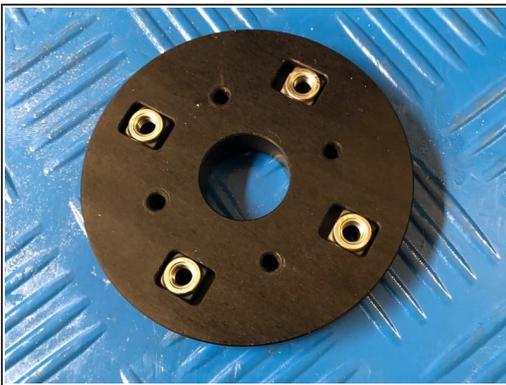
- Use Provided M3 Bolts to attach wheel mounting plate to the wheel hub.
- ⓘ Nuts should face outside

Step 3 — Attach wheel mounting plate to wheel hubs



⚠ Make sure to tighten nuts in star pattern to make sure equal tension on all bolts

Step 4 — Preparation to install motors



⚠ If you using motors longer than 90mm (80100, 63100 and etc) mount motor directly to the baseplate and skip to Step 5

- If using 63xx motors use a masking tape to prevent nuts from falling from motor mounting plate.
- Attach the plate and use 4 x M3 bolts to attach motor plate to the motors

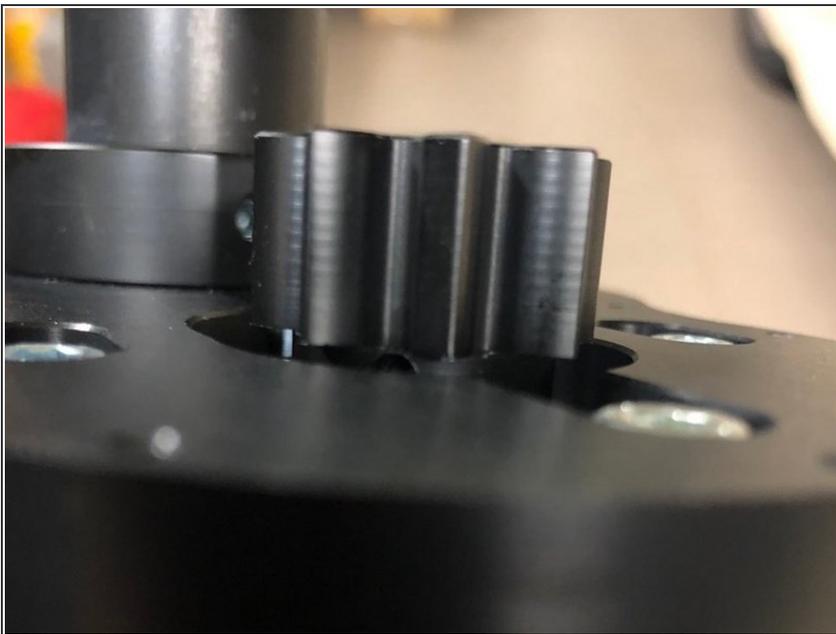
Step 5 — Mount baseplate to the hanger



i Use Loctite to secure grub screws on mounting hub

! Tighten grub screws and make sure baseplate is flat and not angled

Step 6 — Attach motor gear to motor axle



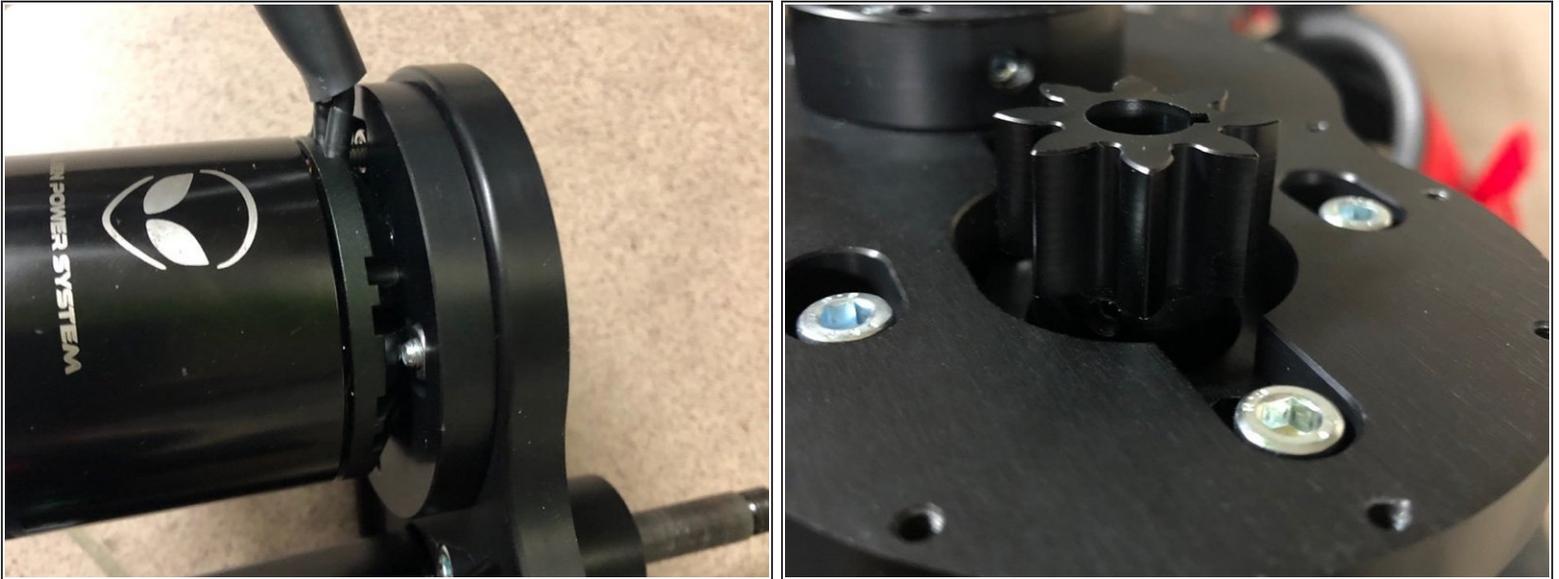
i If your motor has keyway use provided keyway.

- Use Loctite 648 to secure grub screws inside the motor gear to prevent loosening from vibrations.

! Measure position lengthwise to stick out of baseplate

! If motor axle sticks out of motor gear it will need cutting of as it would prevent lid from closing down.

Step 7 — Attach motor to the baseplate



- Use provided 4 x M3 bolts to attach motor (with motor mount adapter if use)

Step 8 — Attach wheel gear to the wheel for gear meshing



- Use 5 x M4 bolts to attach wheel gear to the wheel hub for gear meshing.

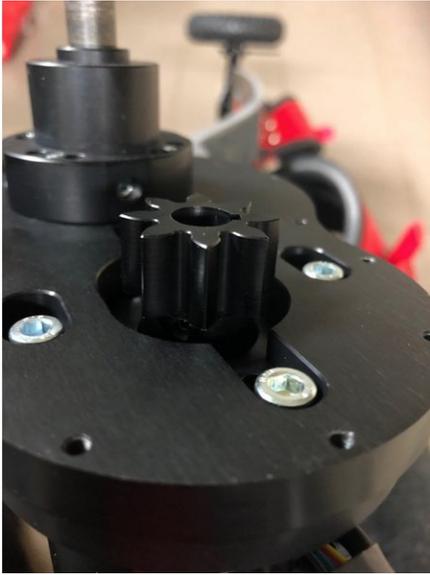
Step 9 — Mesh gears



 Baseplate should be parallel to the wheel otherwise wheels will mesh on angle and will cause negative effects.

- Attach wheel to the hanger and lower down motor to prepare gear meshing.
-  Motor gear and Wheel gear should be always parallel to each in all wheel position. If gears not parallel and at angle it can cause negative effects and product more noise than necessary.
 - If wheel gear one side is pulled in or further than other sides check wheel hub bolts probably one bolt is more tighten than others or otherwise
 - If wheel gear is more inside than motor gear use washers provided to pull wheel gear away from baseplate
- Loosen up motor bolts so that motor gear would press wheel gear.
- Use sheet of paper to drive it through wheel gear and motor gear. Spin wheel to push paper through the gears
- After meshing is good tighten motor bolts

Step 10 — Lock motor in position



- Tighten motor bolts to secure motor in correct position
- Remove wheel from wheel gear
- Use grease to lubricate gears.

Step 11 — Close the lid



- Put the plastic lid with stainless steel plate on top of it and tighten all M2.5 bolts
 - ⚠ Dont use too much force as plastic will compress
- Lubricate V-Ring using grease on ID and on the flap. Mount the V-Ring on top of wheel gear

Step 12 — Attach wheel to the wheel gear



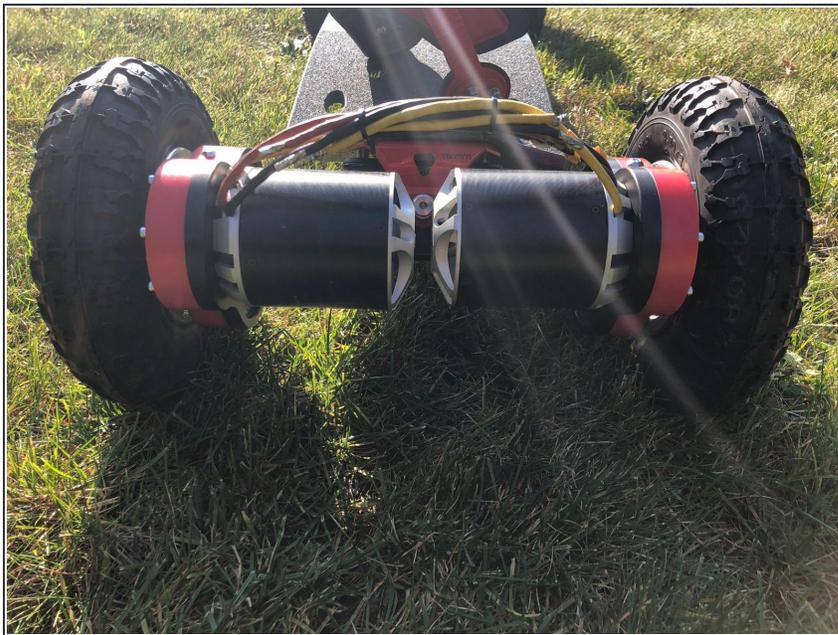
- ⚠ Make sure 5 x M4 bolts are tighten securely.

Step 13 — Repeat same for other side



- Use same instructions for assembling another side

Step 14 — Test spin



- Do a test spin on the bench to make sure everything is fine and sounds okay
- On the first test ride start by slowly accelerating and slowly braking to make sure everything is working fine.
- If there is some minor vibration happening at specific RPM it can be some misbalance in wheel/gears which should disappear after gears sit down in their place.

To disassembly gear drive, follow these instructions in reverse order.