

firepickdelta

Assembling the Delta pulley and arms

Written By: Neil Jansen

Rev	Quantity	Description	Part Number
1	1	Delta pulley assembly - Pulley, 100 teeth	SC00010 - Delta pulley assembly - Pulley (100T)
2	2	Delta pulley assembly - Delta arm 80mm	SC00010a - Delta pulley assembly - Delta arm 80mm
3	2	Delta pulley assembly - Delta arm 80mm - nut	SC00010b - Delta pulley assembly - Delta arm 80mm - nut
4	1	Delta pulley assembly - L&R switch knob/pulley	SC00017 - Delta pulley assembly - L&R switch knob/pulley
5	2	Knob/pulley, 100T	SC00017
6	2	Ball screw, 1/8" ID, 1/2" OD	SC00017a - Ball screw, 1/8" ID, 1/2" OD
7	1	Fastener, M3 Torx-head machine screw, 10mm L	PLT1400-10L
8	10	Fastener, M3 nut	PLT1400
9	1	Fastener, M3 pan-head machine screw, 10mm L	PMH1400-10L
10	1	Fastener, M3 pan-head machine screw, 10mm L	PMH1400-10L
11	4	Fastener, M3 pan-head machine screw, 10mm L	PMH1400-10L
12	2	Fastener, M3 pan-head machine screw, 10mm L	PMH1400-10L
13	2	Fastener, M3 Torx-head	PLT1400

NOTE: QUANTITIES SHOWN ARE FOR ONE (1) PULLEY ASSEMBLY. THREE (3) ARE NEEDED FOR THE MACHINE, ONE FOR EACH ARM.

FirePick™ Delta

AD0006 - Delta pulley and arm assembly

TIN WHISKERS TECHNOLOGY

Rev: 1.1

Author: Neil Jansen

Part Number: SC00010

Part Name: Delta pulley assembly - Pulley (100T)

Part Description: Delta pulley assembly - Pulley (100T)

Part Category: Pulley

Part Material: Steel

Part Weight: 0.15g

Part Volume: 0.15cm³

Part Length: 10mm

Part Width: 10mm

Part Height: 10mm

Part Diameter: 10mm

Part Radius: 10mm

Part Fillet: 10mm

Part Chamfer: 10mm

Part Thread: 10mm

Part Hole: 10mm

Part Slot: 10mm

Part Groove: 10mm

Part Rib: 10mm

Part Fillet: 10mm

Part Chamfer: 10mm

Part Thread: 10mm

Part Hole: 10mm

Part Slot: 10mm

Part Groove: 10mm

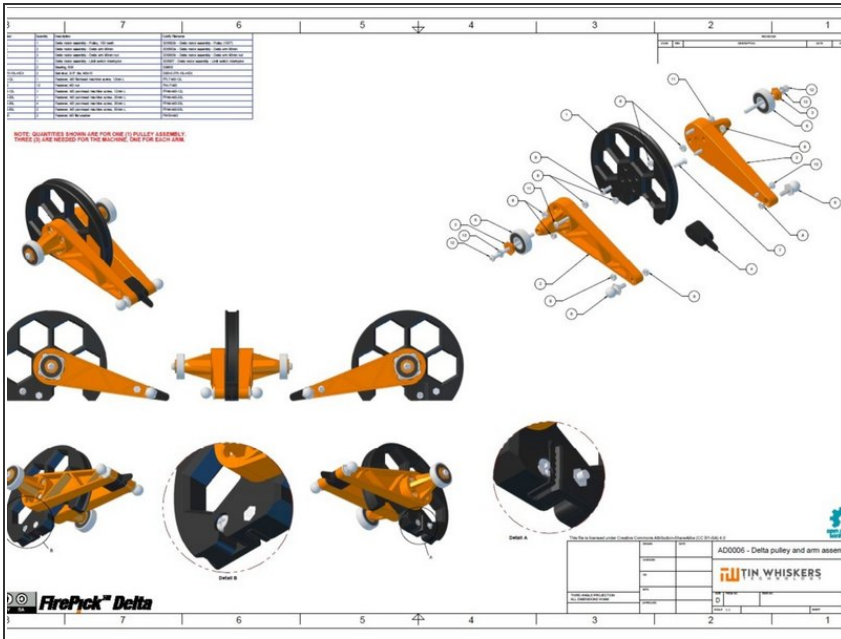
Part Rib: 10mm



TOOLS:

- [Small phillips screw driver](#) (1)
-

Step 1 — Reference - Exploded View Diagram



- For this guide, please refer to the [exploded diagram](#) with annotated parts / Bill of Materials.
- Note: Use the PDF linked diagram above, not the thumbnail provided by Dozuki.

Step 2 — Gather parts



- Note to self: Take some pics of the hardware bags and put them here

Step 3 — Remove Support Material



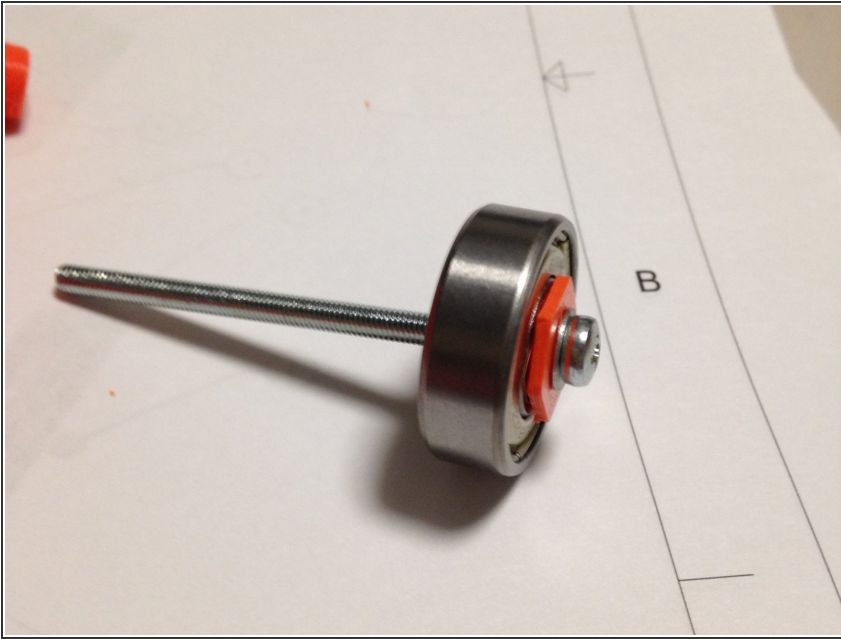
- Remove the [brim](#) on the smaller end of the arm, and the support material in the two nut traps
- i** **NOTE:** The brim and the support material may have already been removed for you by us, when we packed your kit. but it's best to double-check.

Step 4 — Assemble Bearing



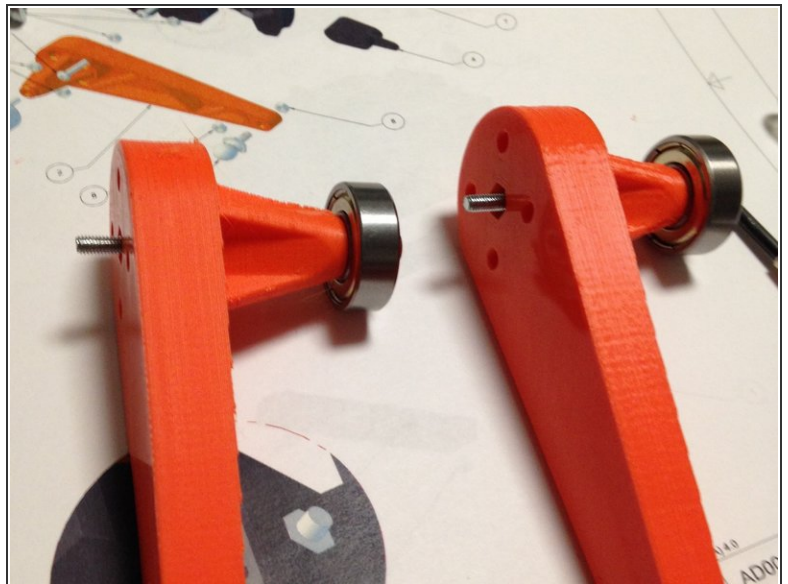
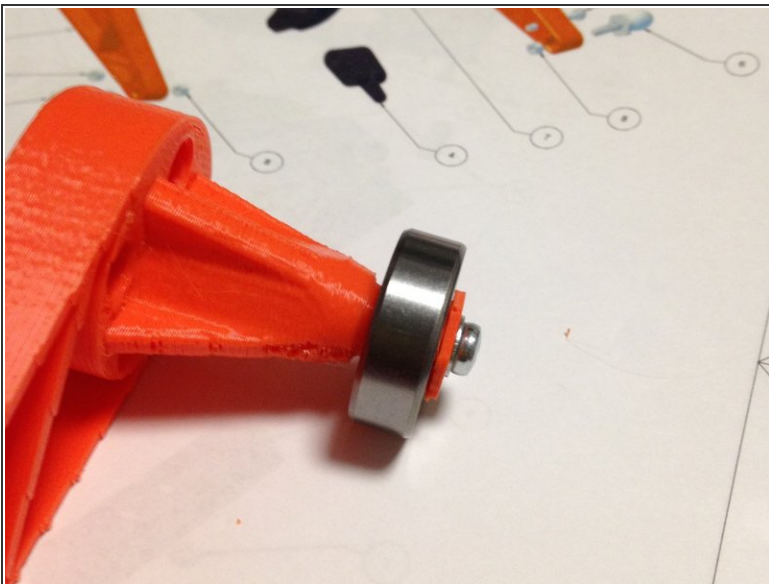
- Insert 3d printed nut into ball bearing

Step 5 — Create bearing assembly



- Place flat washer on M3-50mm screw
- Place screw through 3d printed nut

Step 6 — Add bearing to arm



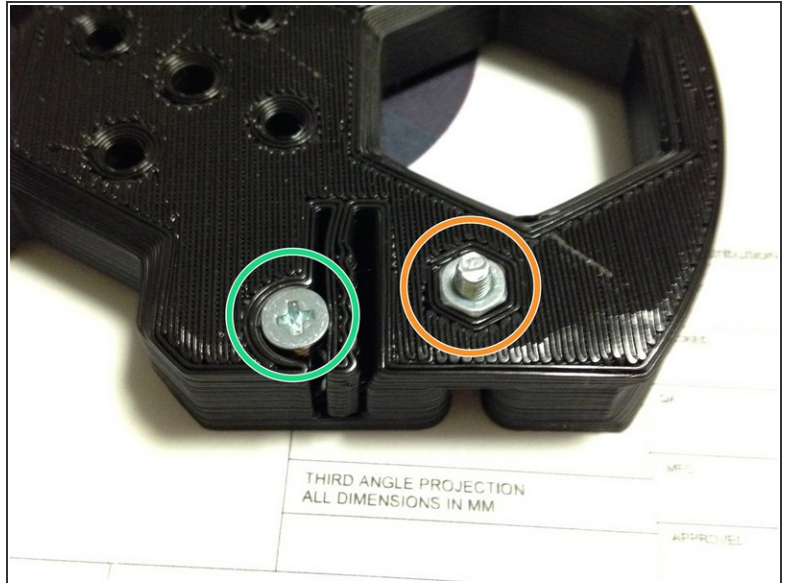
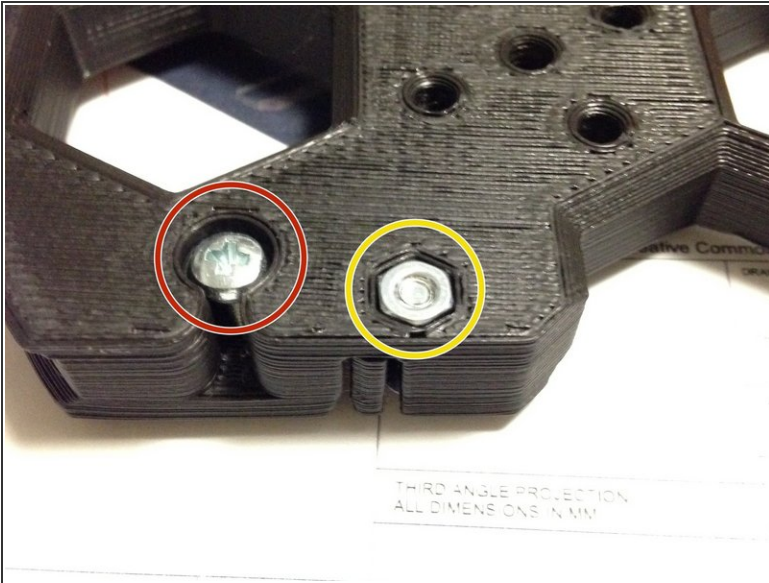
- Insert screw into arm
- Attach M3 nut to back side and tighten until secure and snug, but not so much that the plastic deforms.

Step 7 — Add DBS-0.375-10L-HEX Ball-Studs



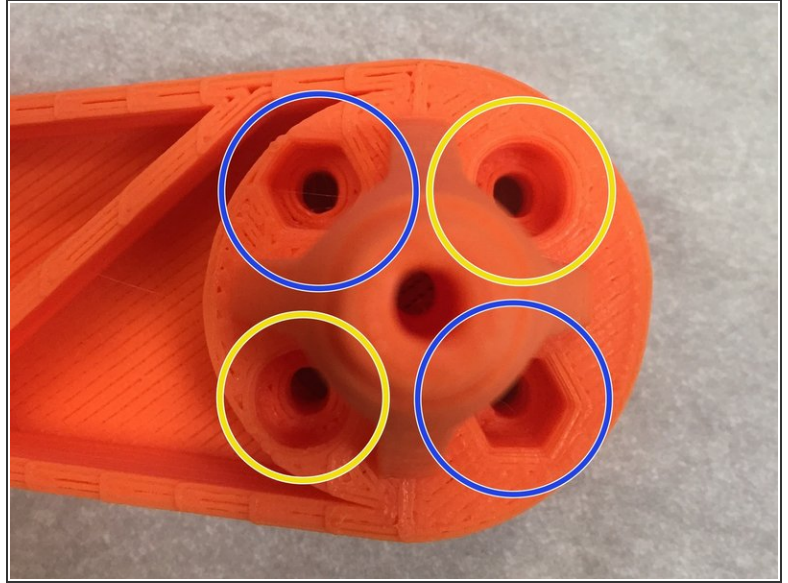
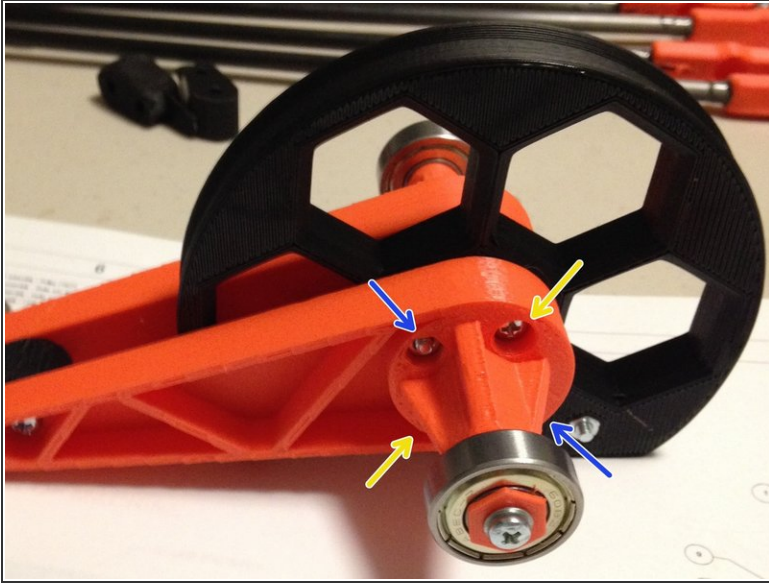
- Attach ball-stud to arm
- Secure with M3 nut. Again, tighten until secure and snug, but not so much that the plastic deforms.

Step 8 — Add Belt Screws



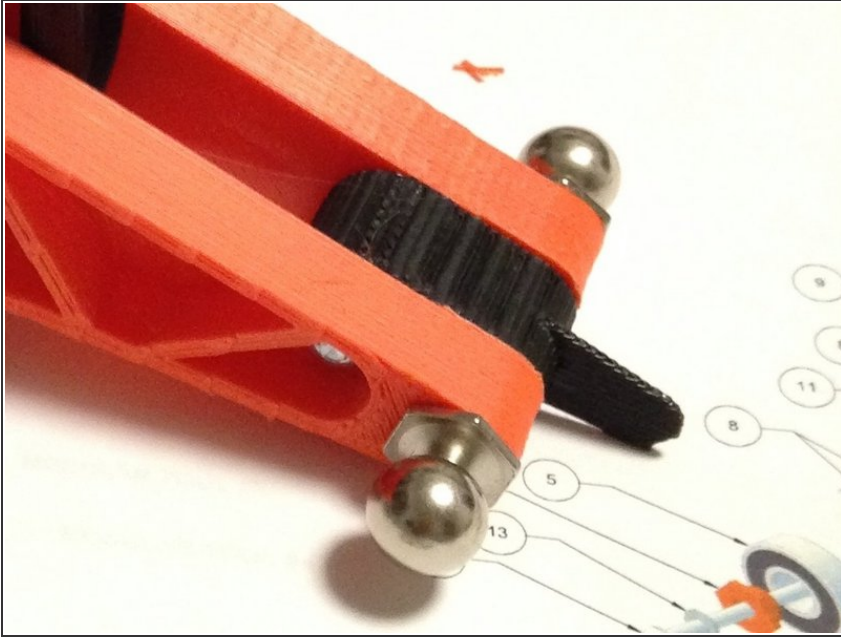
- Insert M3 x 12mm L pan-head screw into pulley
- Secure screw with M3 nut
- Insert M3 12L flat head screw into opposite side of pulley
- Secure flathead screw with M3 nut

Step 9 — Attach Arms to Pulley



- Insert two M3 nuts into each orange arm, as shown in the second picture. **NOTE: Only two of the holes will accept nut traps.**
 - Insert two M3 x 30mm? pan-head machine screws into each orange arm. **NOTE: Only insert the screws into the ROUND counter-bored holes.**
 - Carefully assemble both orange arms and the black pulley as shown in the first picture. The nuts and screws are caddy-corner, so when facing each other, everything should line up nicely (nut to screw, etc).
- i NOTE:** Do not fully tighten until you complete the next step

Step 10 — Add limit switch interruptor



- Insert 3d printed limit switch interruptor
- Secure with 20mm M3 screw and nut
- Tighten all screws

Step 11 — Repeat Two More Times



- Repeat this guide until you've got three assembled pulleys, as shown.