



BFB-3000

Extruder Motor Drive Pulley Height Setting
V1.0

1 Summary

This document outlines how to calculate the extruder motor pulley height, and how to set it.

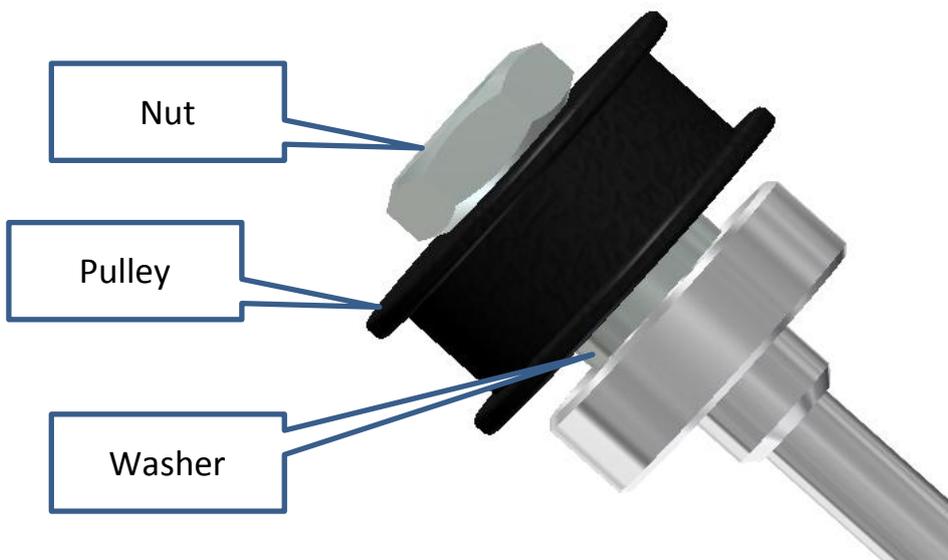
2 Identifying the extruder configuration

There are two variables on the extruder assembly which determine the pulley height.

Observe two areas:

- Spring washer position
- Number of motor plates

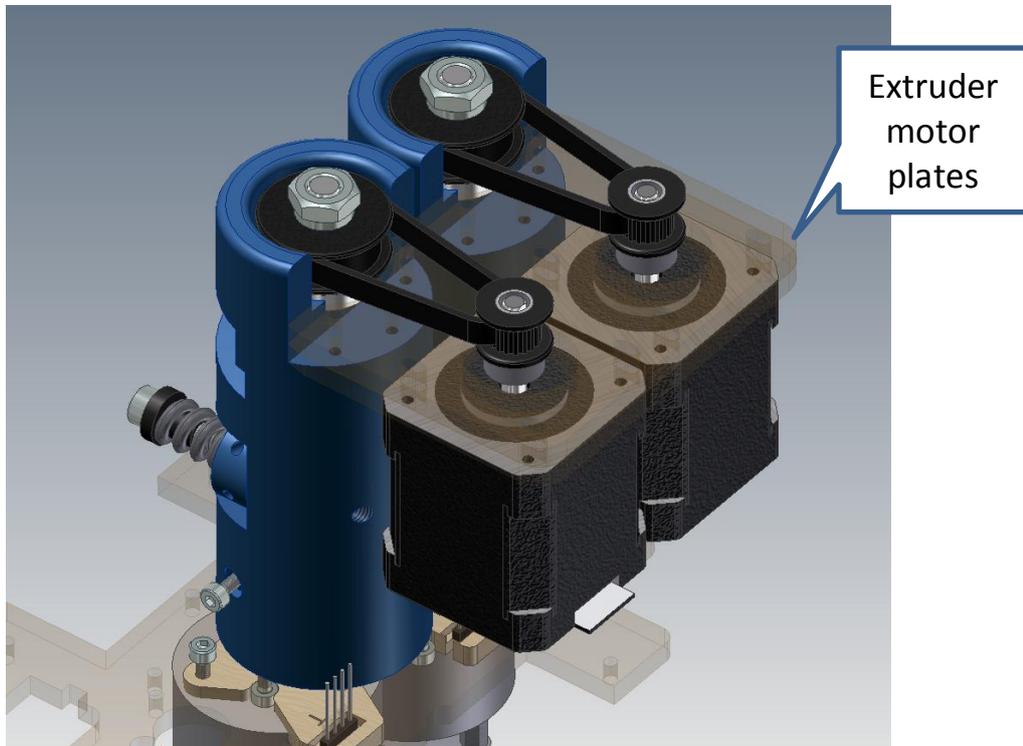
2.1 Spring washer position



Examine the order of assembly, and match the order to the table below.

Position A	Position B
Nut	Nut
Pulley	Washer
Washer	Pulley

2.2 Number of extruder motor plates



Examine the number of plates on the back of the extruder.

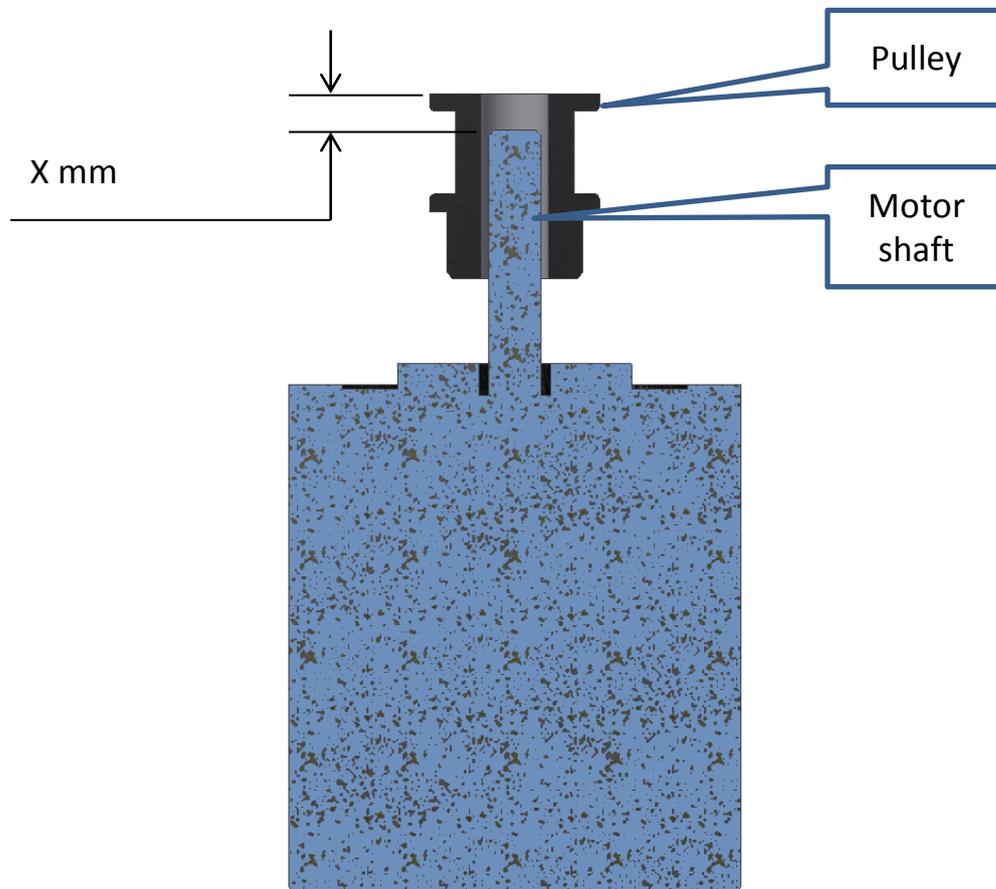
3 Calculating the height setting

After identifying your configuration, use the table below to determine the correct height setting for the motor pulley:

Number of extruder plates	Position of spring washer	Height setting for motor pulley (mm)	Tolerance
1	A	5.7	± 0.5
1	B	3.6	± 0.5
2	A	6.1	± 0.5
2	B	3.7	± 0.5

4 Setting the height

After determining the correct height setting, the pulley height is set from the top of the drive pulley down to the top of the motor shaft (shown below).



This can be done using either a set of Vernier Callipers, or the height setting jig (shown in the following sections).

4.1 Using Vernier Callipers to set the pulley height

The existing pulley must be unlocked. Use the 1.5 mm allen key (supplied with in the BFB-3000 toolkit) to unlock the grub screw in the drive pulley and make it free to slide up and down the shaft (you may need to use a screw driver to lever the pulley if is stuck to the shaft).



If the pulley is to be replaced, do this now.

Set the depth gauge on a set of Vernier Calipers (identified below) to the distance determined in "Calculating the height setting" (page 3).

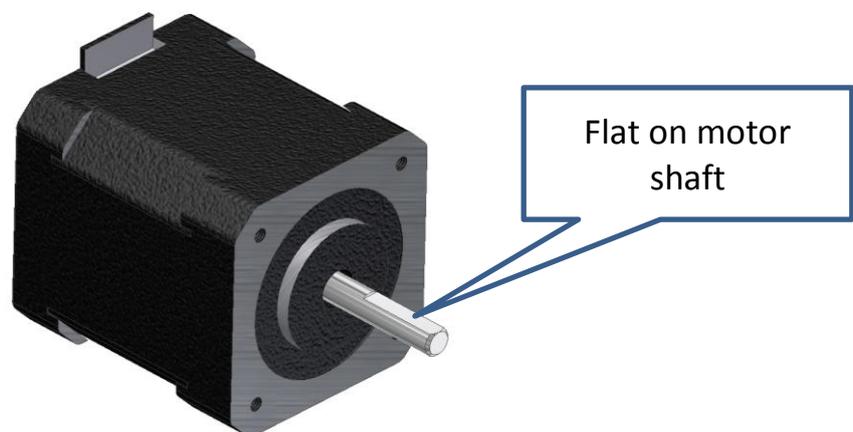


Insert the depth gauge into the top of the pulley and set the height accordingly. Ensure that the bottom of the depth gauge touches the motor shaft, and the end of the callipers sit flush with the top of the motor pulley.



Use the 1.5 mm grub screw to lock the pulley at this position.

The grub screw in the pulley must be tightened against the flat of the motor shaft.





4.2 Using the height setting jig

A height setting jig (included in some kits) can be used instead of the vernier calipers. Simply match the length of stub to the required height setting, and use the stub in place of the Vernier depth gauge detailed in the previous section.

