**MDF Rose Engine Lathe 2.0**

**with Stepper Motor Drive**

**A picture containing indoor, table, desk, sitting

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**Stepper Motor Bracket**

**& Associated Parts**

**Version 1.0**

**03 August 2020**

You can purchase this from us at [www.ColvinTools.com](http://www.ColvinTools.com), or build them yourself. If you have any questions, please contact us at [ColvinTools@Gmail.com](mailto:ColvinTools@Gmail.com).

Good luck and we hope you enjoy this machine as much as we.

Rich Colvin & Jack Zimmel

**Permission is not granted to manufacture these for sale.**

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Parts for Stepper Drive Plate and Idler Assembly

v1 - 8-2-20

Off-the-shelf Parts:

4 - #8-32 x 3/8" screws (Phillips or BHCS) for NEMA 23 motor

2 - 1/4"-20 x 2-1/2" Hex head bolts

3 - 1/4" washers, 2 for plate and 1 for idler

1 - 1/4"-20 x 5/8" FH hex drive screw

1 - 1/4"-20 x 3/8" BHCS

2 - 1/4"-20 dowel nuts for wood (.39" OD x .63" L) McM-C #90835A210 https://www.mcmaster.com/90835A210/

1 - 12T GT2 5mm pulley with .25" bore, 2 flanges, aluminum, for 9mm wide belt, SDP-SI #A 6A55-012DF0908 http://shop.sdp-si.com/catalog/product/?id=A%206a55-012df0908

2 - 3/8" x 7/8" x 9/32" shielded ball bearings MSC #01377498 https://www.mscdirect.com/product/details/01377498

1 - GT3 5mm pitch, 131T / 655mm long, 9mm wide Timing belt, Misumi #GBN655EV5GT-90 https://us.misumi-ec.com

Manufactured Parts:

1 - Stepper Plate - 1/4" thick plate, rough 5-3/4" x 3-1/4"

2 - Stepper plate spacers - 3/4" diameter aluminum rod

1 - Idler shaft - 7/8" diameter steel rod

1 - Idler shaft spacer - 5/8" diameter HDPE rod or similar

1 - Idler body - 1-1/4" diameter HDPE rod or similar

