

## MDF Rose Engine Detailed Drawings

Jon Magill  
v2 – 2/26/07

This document contains the detailed drawings for the MDF Rose Engine project. The drawings are meant to accompany the *MDF Rose Engine Construction Instructions* document.

The following drawings are included:

1. Rough Shape Cutting Plan
2. Final Sizes Cutting Plan
3. Base Assembly Detail
4. Headstock Assembly Detail
5. Rubber Support
6. Main Spindle Shaft
7. Main Pulley/Rosette Flange
8. Main Pulley
9. Fixed Pivot & Pulley Shaft
10. Hand Crank Shaft
11. Plain 4 Rosette
12. Sin 24 Soft Rosette

There are seven machined components that either need to be made or purchased with the parts kit. The attached drawings give the dimensions and materials to make all the parts.



*[Note: Many parts have been simplified since photos were taken. Make all parts per the current drawings.]*

A complete parts kit, with all the machined parts, two rosettes and all the parts and fasteners, including everything you need to build the lathe except for the MDF, biscuits and glue is available for \$299 from:

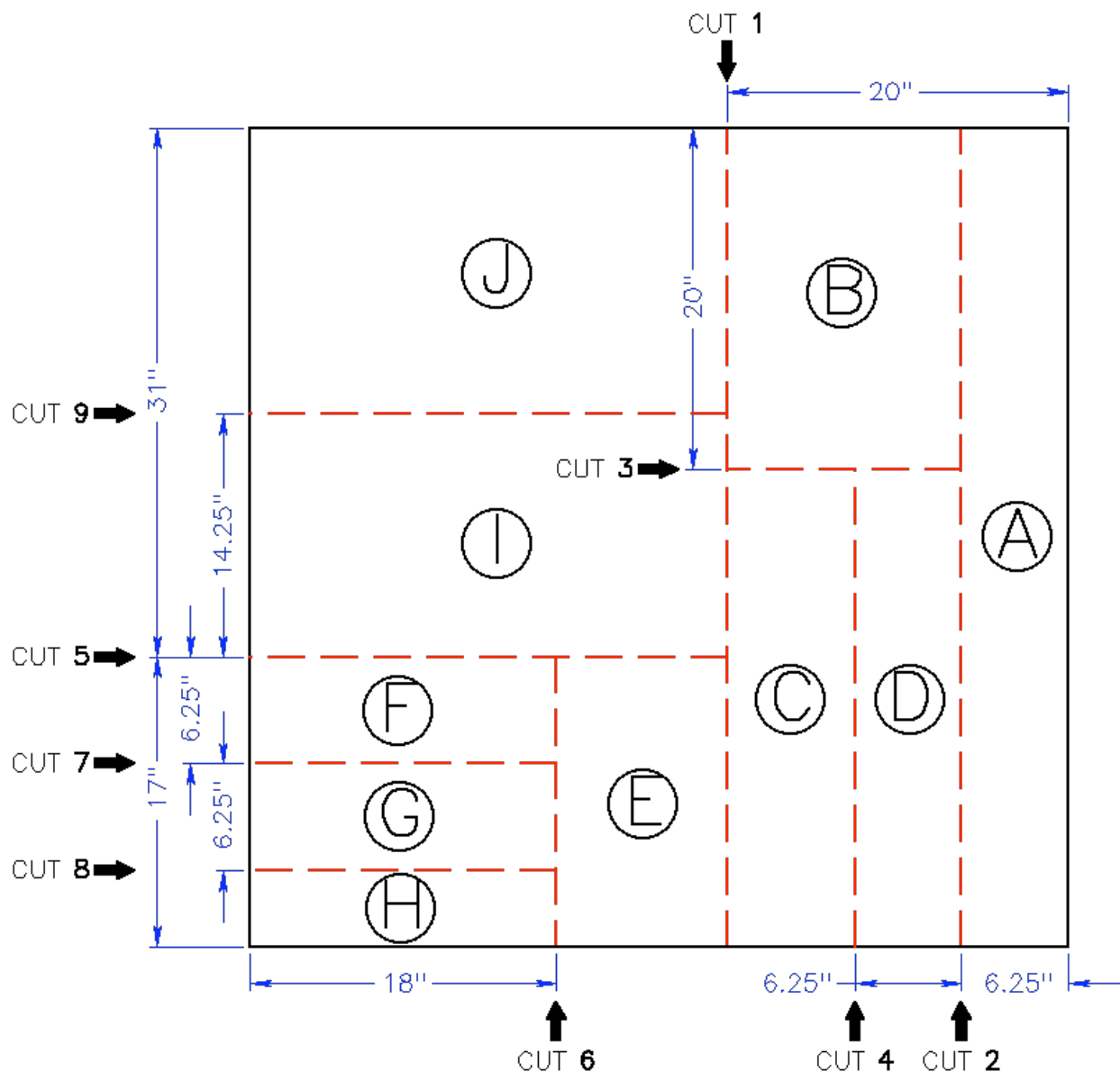
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# MDF Rough Shape Cutting Plan

v5 - 2/18/07



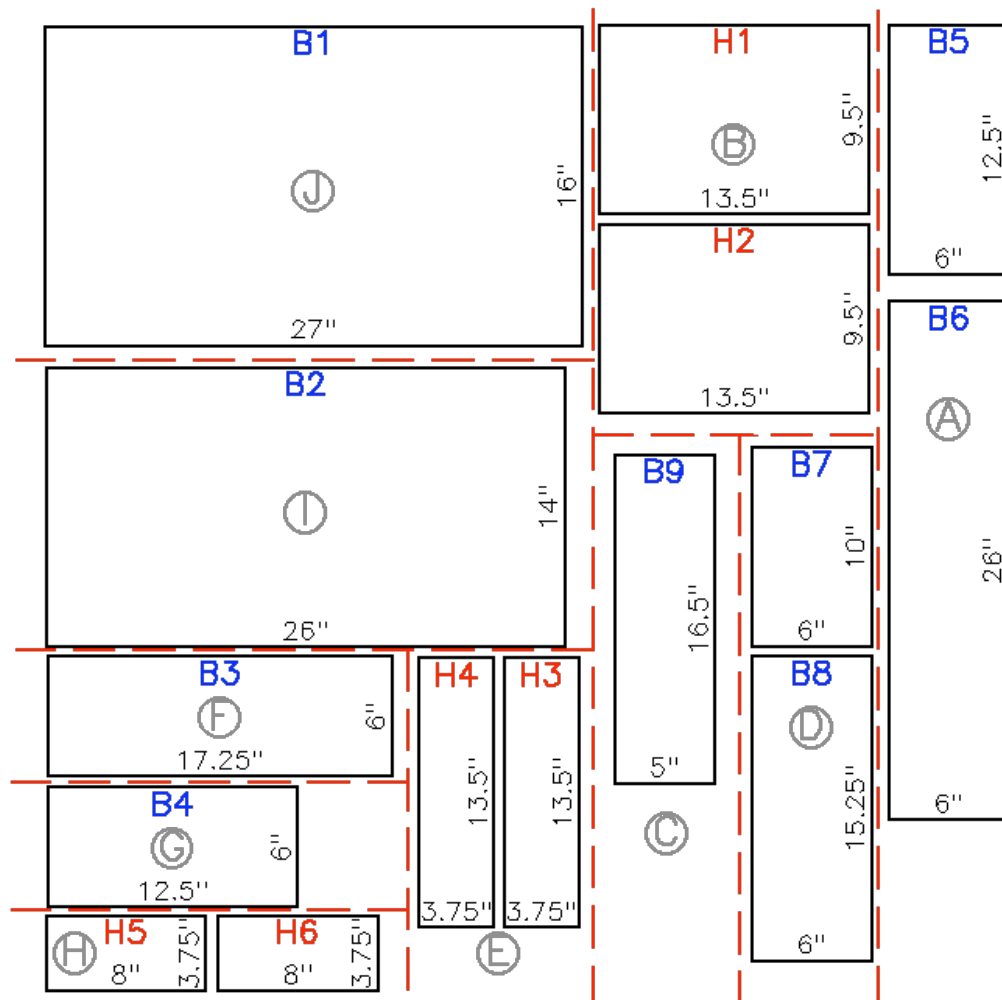
Follow the sequence of cuts to get the rough pieces out of a 48" x 48" (half sheet) of 3/4" MDF.

The sequence of cuts is important. To allow for the blade thickness, always measure the dimension for each new cut, referenced off the exposed edge. In other words, do not mark out all the cutting lines first.

Mark the ends of each cut piece, as you cut them, with the letters above, to avoid confusion.

# MDF Final Sizes Cutting Plan

v7 - 2/26/07



## Headstock Parts - H1 through H6:

H1 & H2 = 13.5" x 9.5"

H3 & H4 = 13.5" x 3.75"

H5 & H6 = 8"+/- (to fit) x 3.75"

## Base Parts - B1 through B9:

B1 = 27" x 16"

B2 = 26" x 14"

B3 = 17.25" x 6"

B4 = 12.5" x 6"

B5 = 12.5" x 6"

B6 = 26" x 6"

B7 = 10" x 6"

B8 = 15.25" x 6"

B9 = 16.5" x 5"

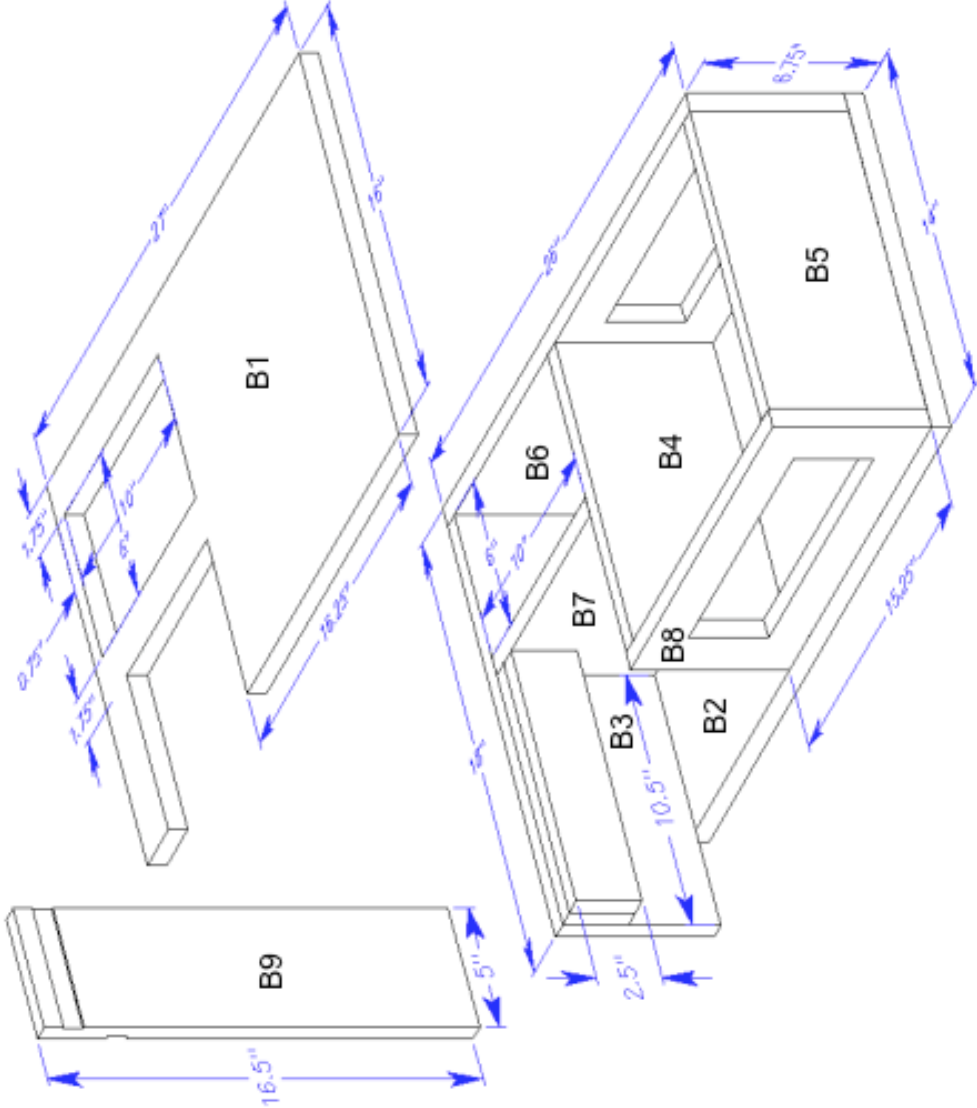
Cut the pieces out per the Rough Shape Cutting Plan, then use this guide to cut all pieces to their final sizes.

Try to cut all pieces with the same dimensions at once, e.g. prepare and cut all of the base components that are 6" wide at the same time to ensure the best accuracy possible.

Note: Cut H5/H6 length to fit rather than to dimension shown.

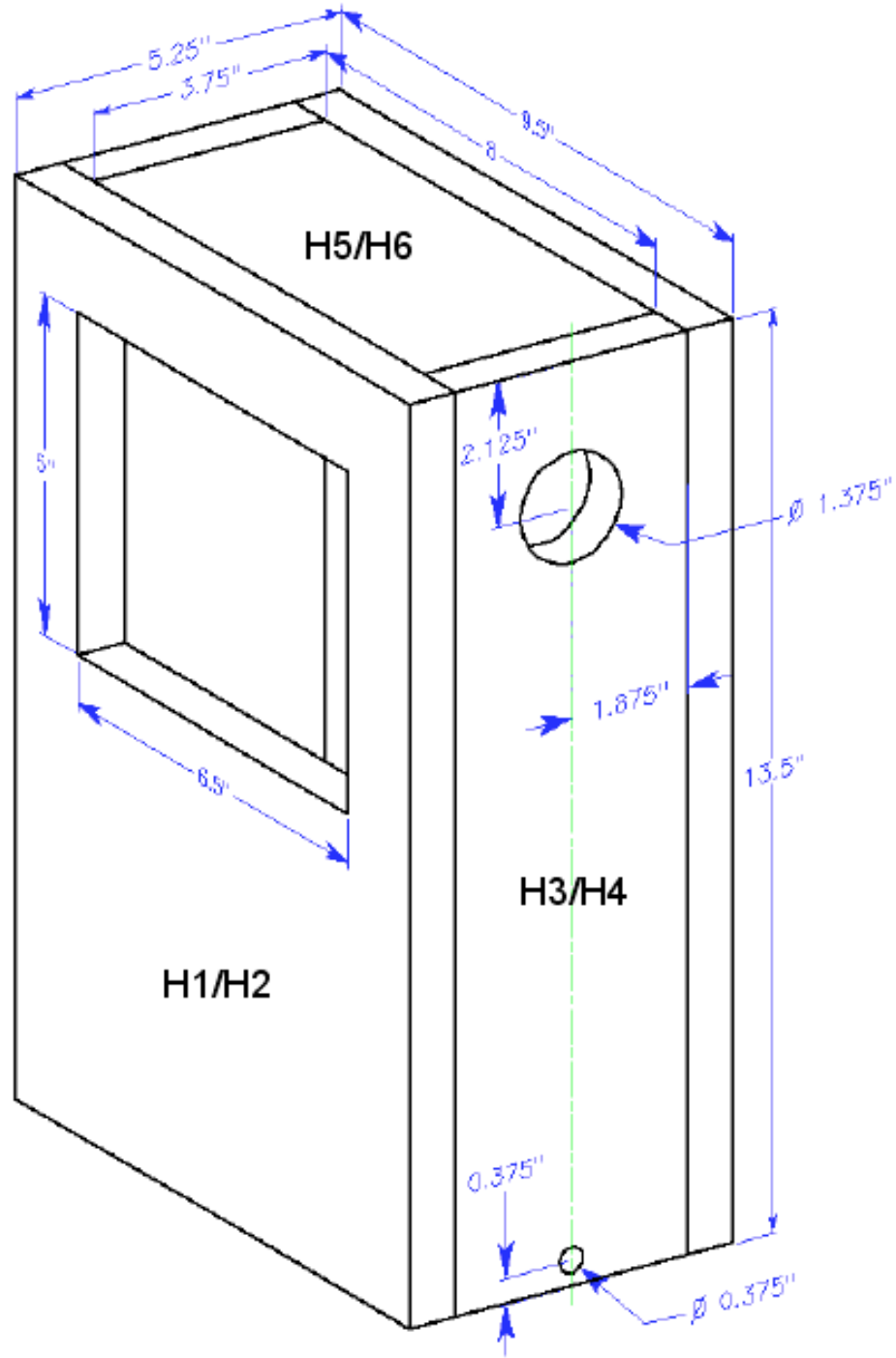
Base Assembly Detail

v4 - 2/26/07



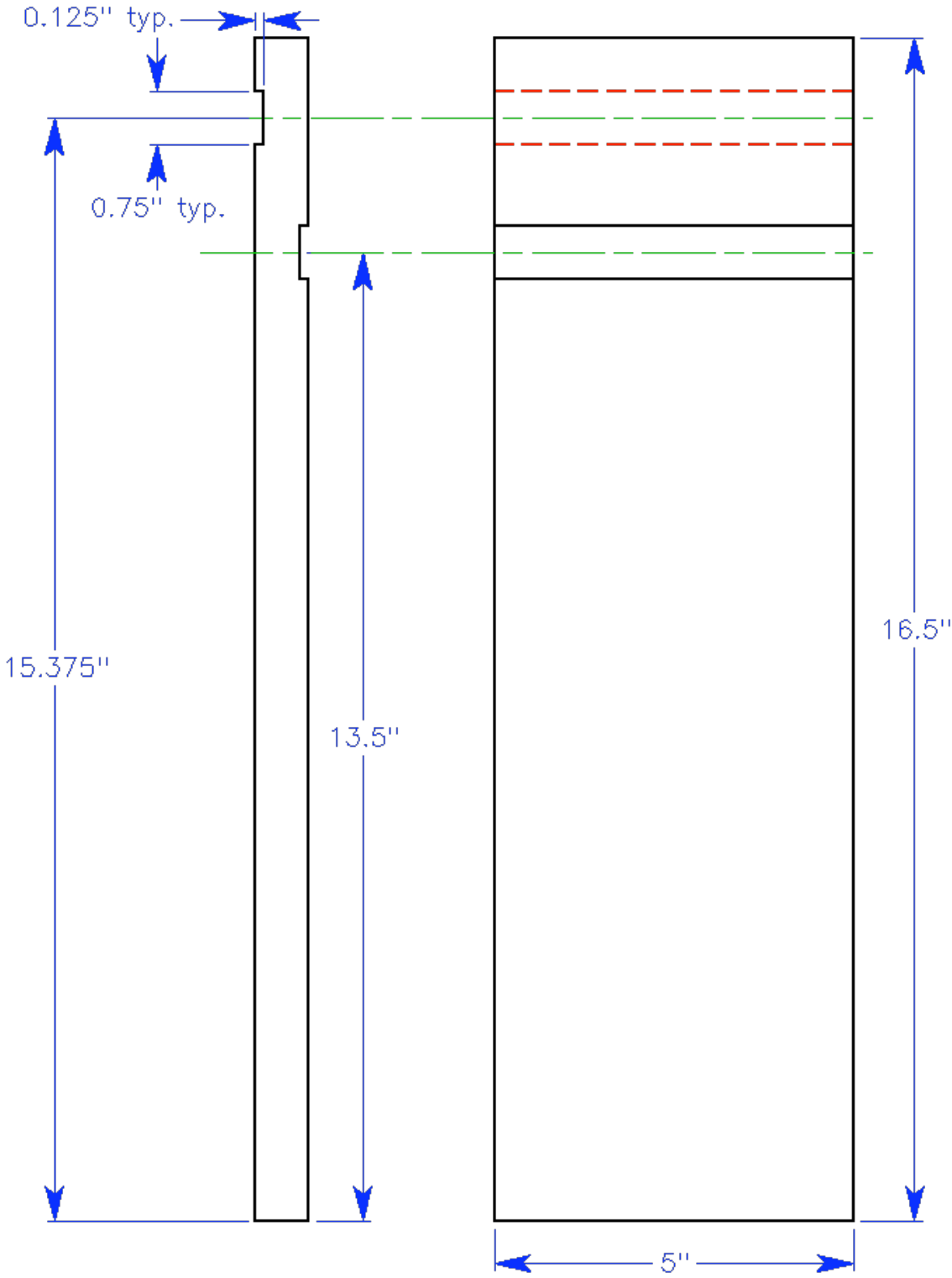
Headstock Assembly Detail

v4 - 2/26/07



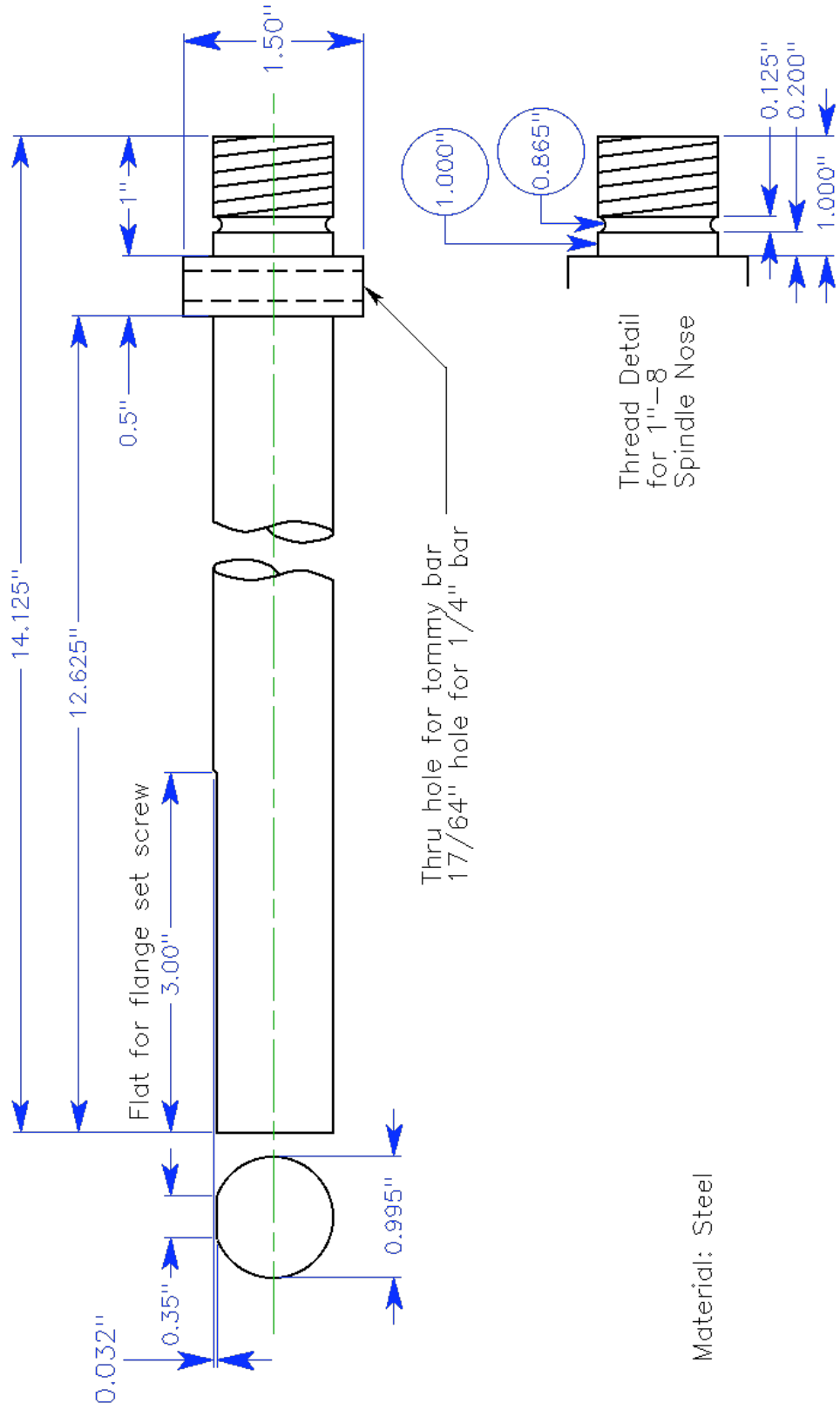
# MDF Rubber Support — B9

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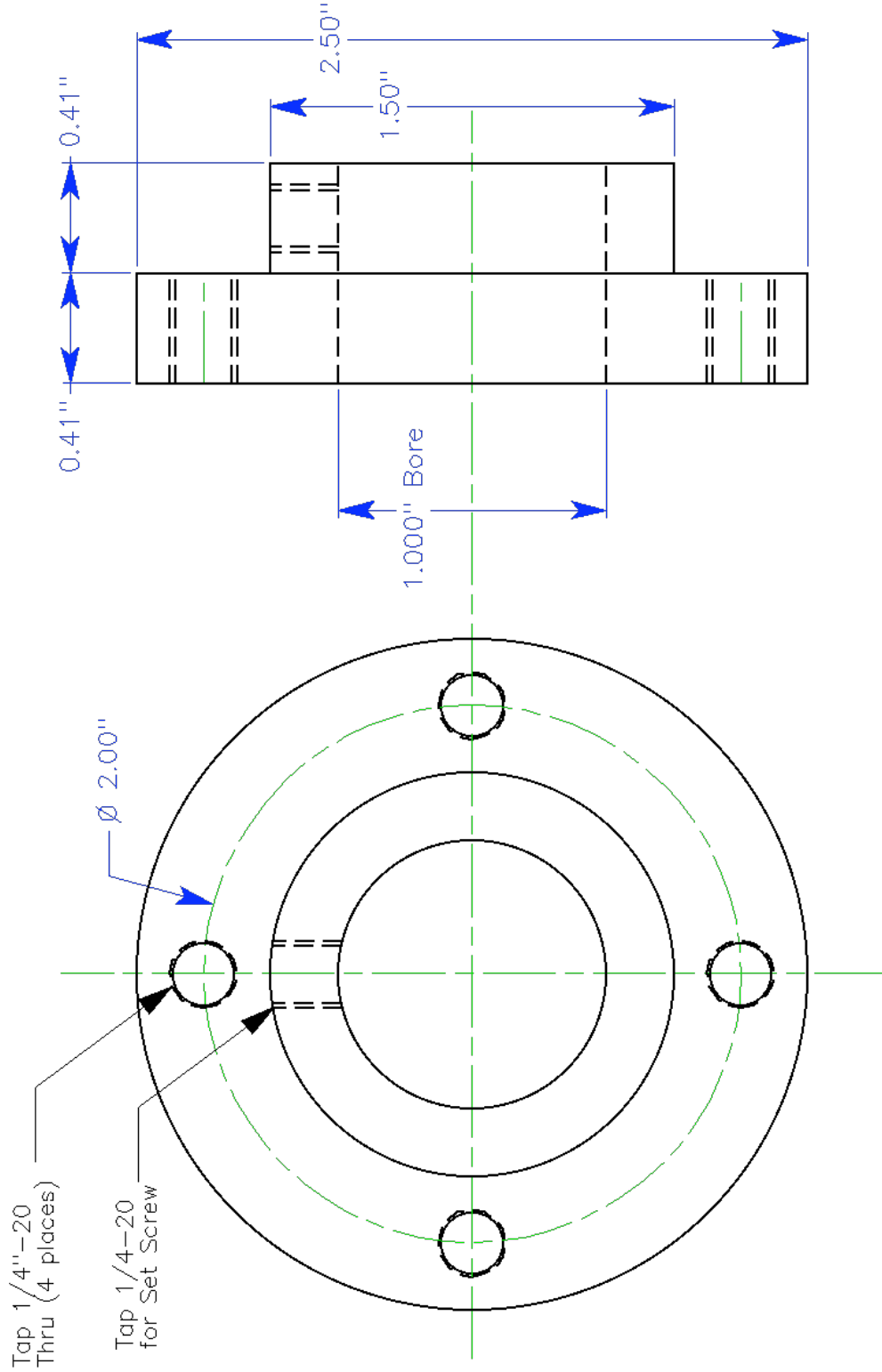
Material: 3/4" MDF

Main Spindle Shaft  
v2 - 2/18/07



Material: Steel

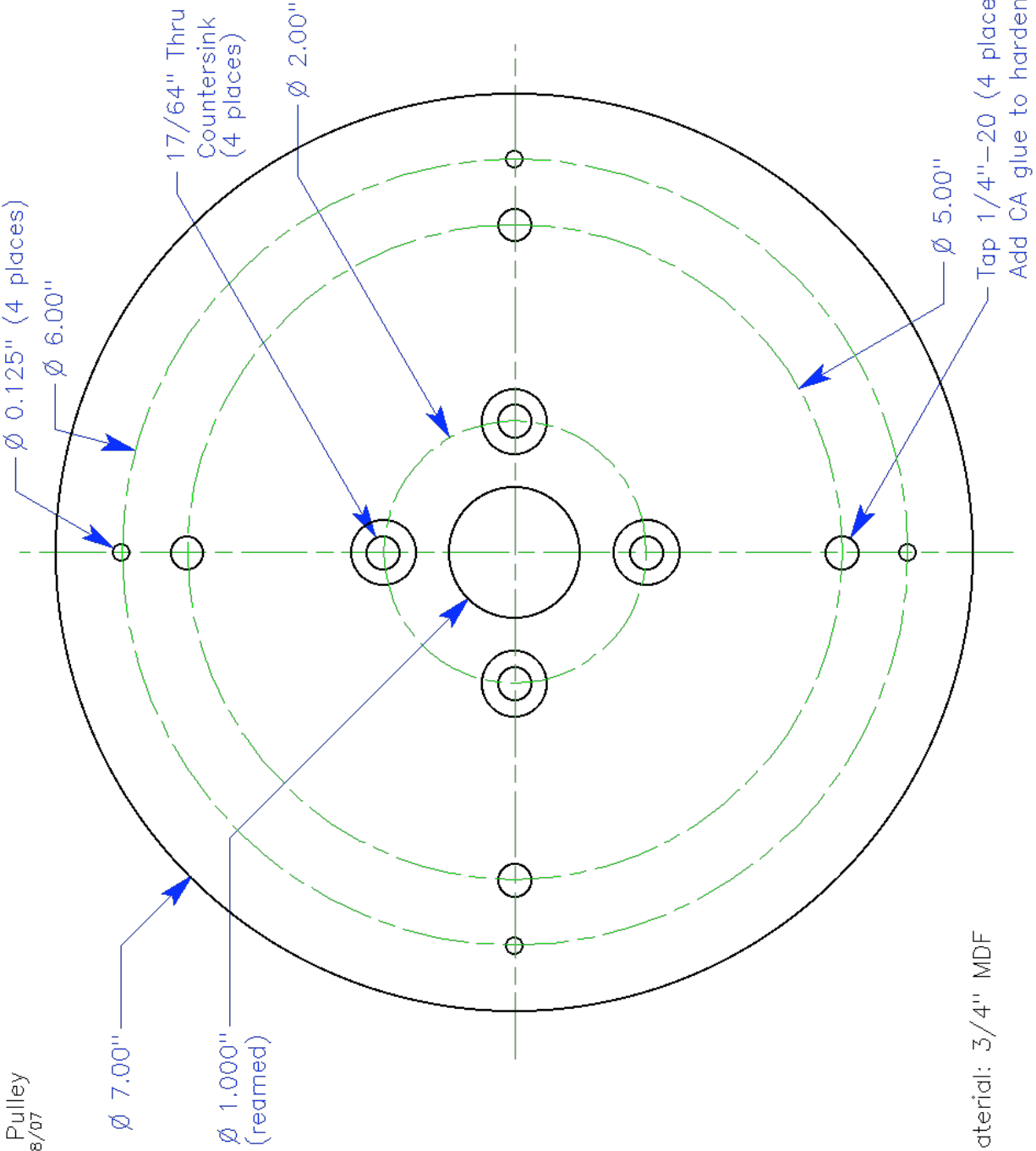
Main Pulley/Rosette Flange  
v3 - 2/18/07



Material: Aluminum or Steel

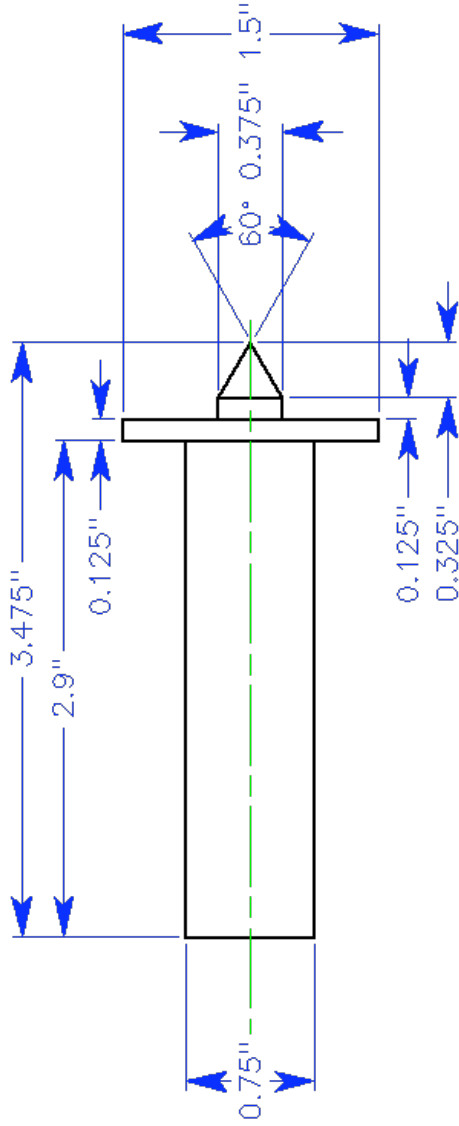


Main Pulley  
v3 2/18/07



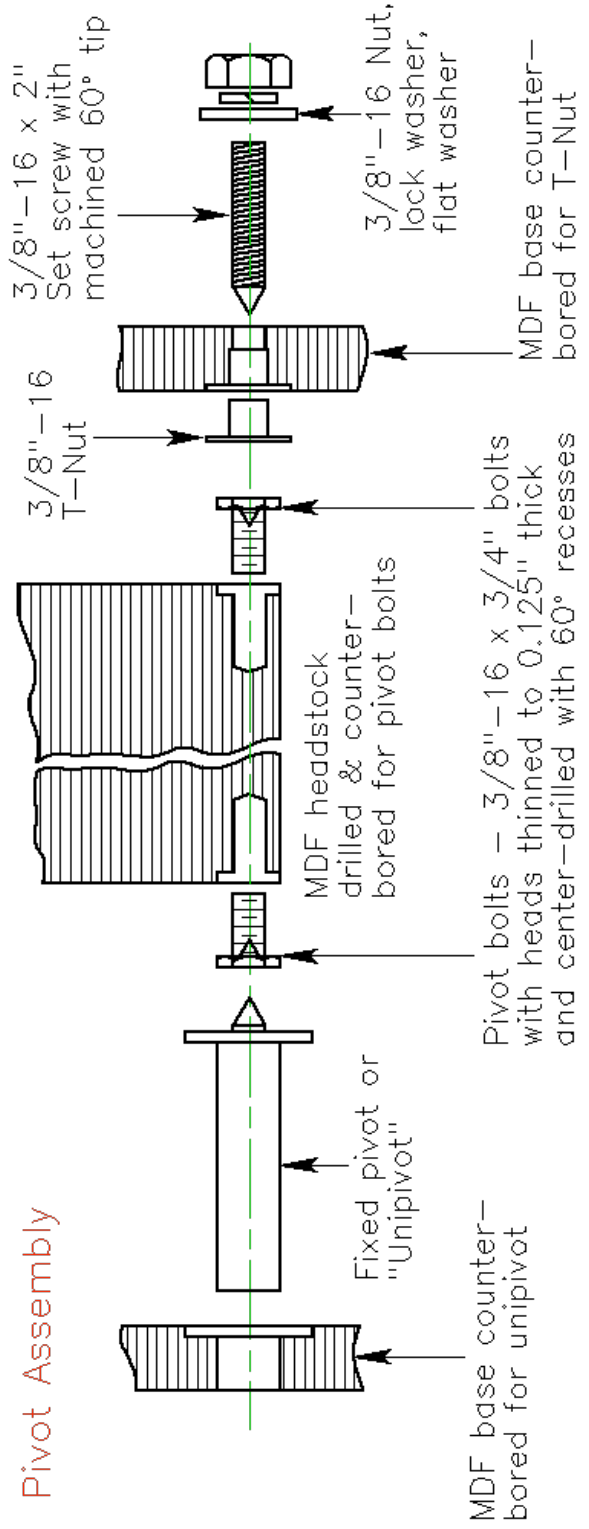
Material:  $3/4''$  MDF

Fixed Pivot & Pulley Shaft, Shown with Pivot Assembly  
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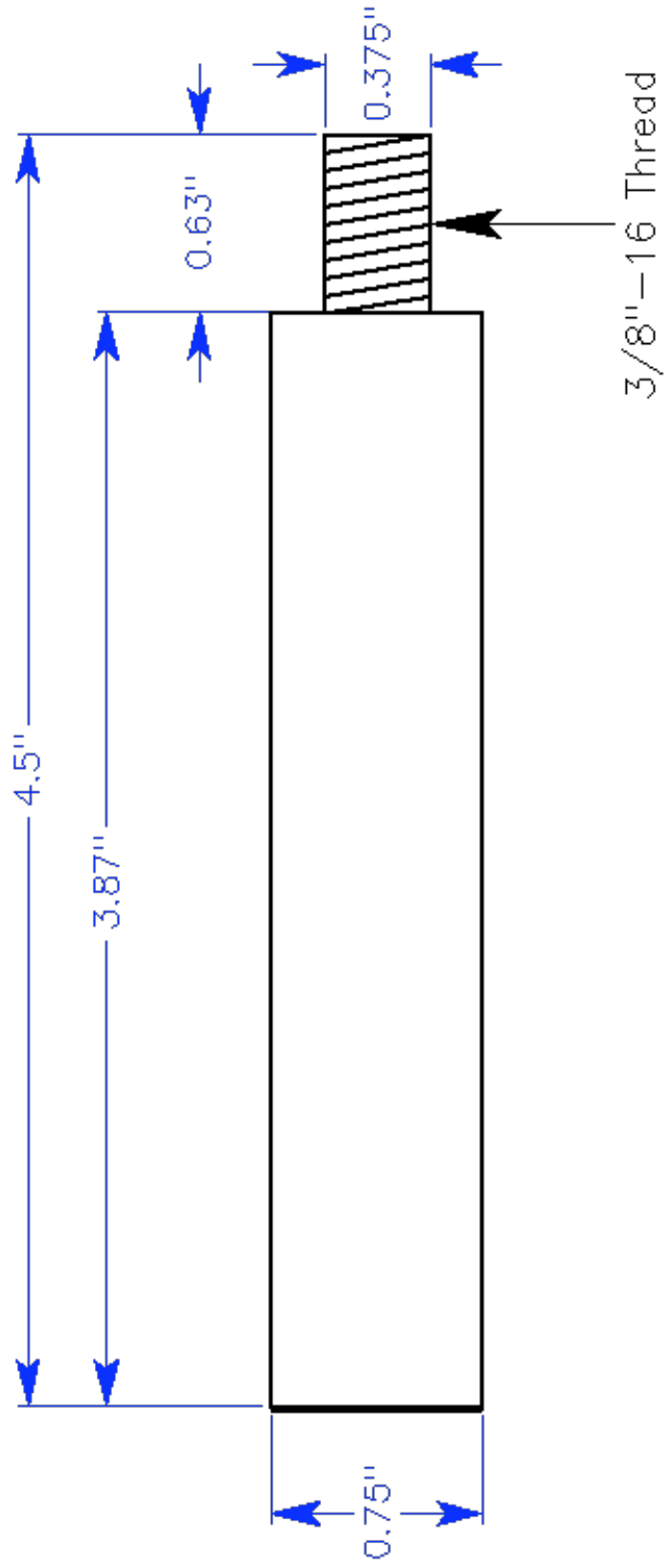


Material: Steel

Pivot Assembly



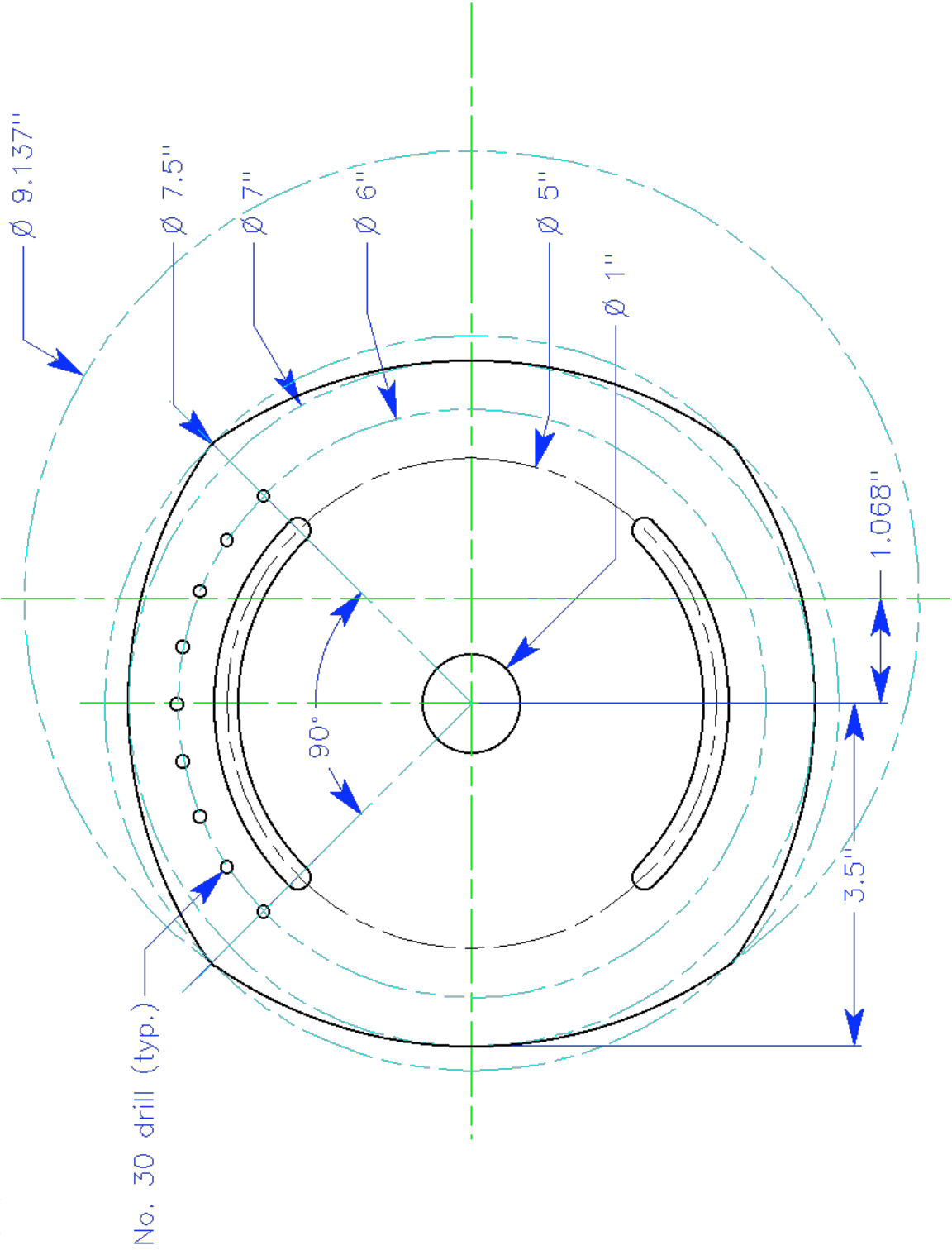
Hand Crank Shaft  
v4 - 2/18/07



Material: Steel

Plain 4 Rosette Construction

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# Sin 24 'Soft' – Rosette Construction

v6-soft – 2/26/07

