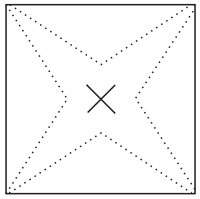
WOODTURNERS
SOUTH AUCKLAND WOODTURNERS GUILD INC
TURNING TOMORROW'S TREASURES

Eight Point Star

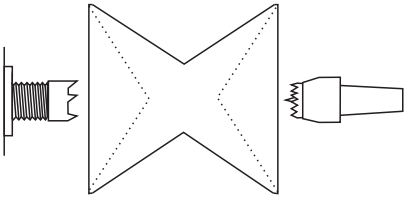
Seen as an Art of Wood exhibition entry in 2025 and in an online Alan Stratton video https://www.aswoodturns.com/2023/10/multi-axis-star/ where he attributes the first star making in this style to Theo Haralmapou from Australia.

The key to this project is perfectly equal V cuts in all three orientations of the turned block. Allan Stratton made his holding blocks using a 3d printer and put instructions for that online for a 1" spindle thread. A new plan for our 1¼" thread is on www.sawg.org.nz
If you make these holding blocks, or any others of wood or plastic that are made before you start the project, then you need to ensure that all your V cuts have the 85° angle and depth to suit these holding blocks.

For this project to be made without a pair of pre-made holding blocks, start with several 50mm cubes of firm wood for the cubes that make the stars and two of softer wood to make star holders for use when turning.



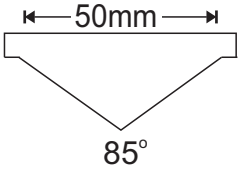
The star-making wood should be a perfect 50mm cube. Accurately mark and punch the centre of two opposite faces.



Mount the wood between centres and cut a V from as close to the points as possible, then a straight cut down to leave a 18mm diameter centre. This will be close to an 85° angle. All further cuts on this project, and any future stars using the jig made here, need to be cut on these same lines.

You can now make two items to help you replicate this angle when cutting the next two faces of the block. All three faces of the block should be cut to exactly the same dimensions.

A template to place in the cut to check angles and depth.



A board with the 85° cutting angle on it to place behind the work. White lines on a black background are best to work with.

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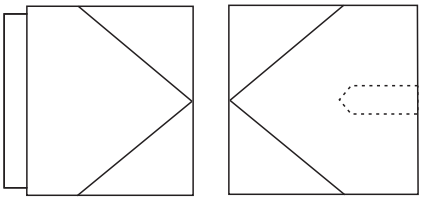
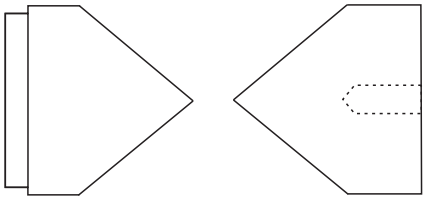
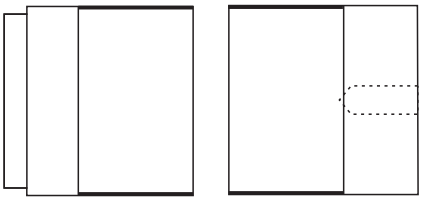
Now you need to shape the softer wood blocks to hold the star by the faces you have already cut while you cut the next two faces.
One holding block will be held in a chuck so make a spigot on that. The other holding block is to be placed on a live tail centre so drill a neat-fitting hole in that.

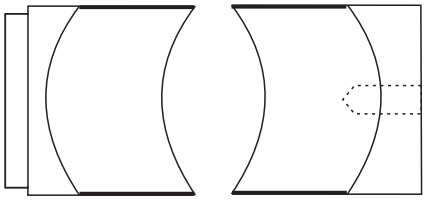


Mark one side of each block with an 85° V. Then saw off that part of the wood.



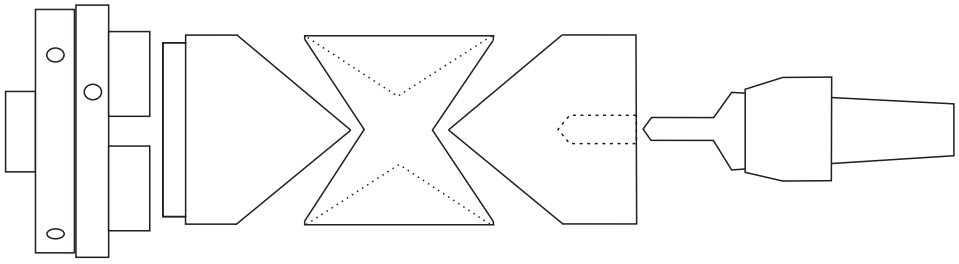


Mark each edge of the cut face of the block with a thin felt pen. Cut, carve, sand, a curve into each sawn face of the wood without removing the felt pen marks.

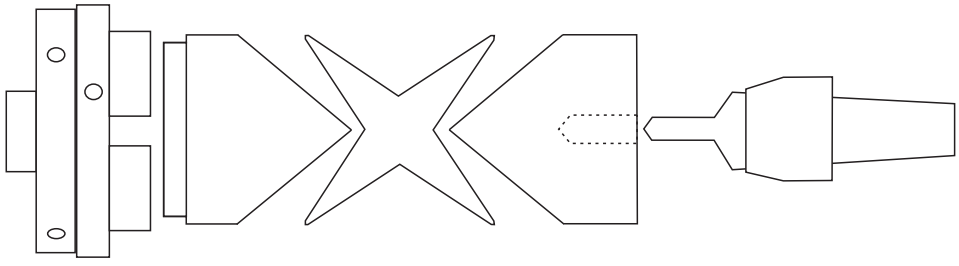


Test fit using the star block in which you have made the one cut. Modify the curve in all faces of the two holding blocks until the entire length of each wing of the star rests along the curved face of the holding block. All four faces of the holding blocks should be exactly the same.

Mount the holding blocks in a chuck and on a live tail as appropriate and bring them together onto the first cut in the star block.



Make the V cut into the block just like the first cut. At the centre cut down to met with the previous cut.



Repeat this for the third cut. Then remove from the lathe and finish.
You can sand after each chisel cut with strips of cloth-backed paper. Or sand the work off the lathe after all cutting is done.