

# Southern Turners Project Sheet

## Captive Rings



This project sheet details how to make captive rings. There are multiple ways to make captive rings, this is one method.

Choose a piece timber approx. 45mm square and 160mm long. Mount between centers and rough down to approx. 40mm diameter.



Mark your blank with five 8mm wide bands that will become the rings. It is helpful to color the waste wood in between so that the correct timber is removed.



Now remove the waste timber leaving a shaft diameter of 15-20mm. Now using a spindle gouge bead the top of the rings to be.



Using a parting tool positioned as shown in pictures cut a rebate to start making the ring. Start at about 45 deg and as cutting swing handle gently towards lathe. Do this on both sides of the ring.



Cut in making sure to leave enough timber to keep the ring attached to the center shaft!



Hamlet and other vendors market dedicated ring tools in various sizes that can be useful if making lots of rings. These tools are presented to the ring as shown with the handle slightly raised. A gentle rotation motion is used to achieve a nice shavings and shape. Do both sides.



As mentioned earlier try not to be too aggressive with the undercut, if you are it can lead to a free ranging ring as shown!



Not all is lost, wrap some tape around the shaft and jam the ring onto it. Now sand the tops and sides of all rings.



Remove tape and prepare to separate rings from shaft. Working gently use the same cuts as used initially to create the undercut. Alternating a little from each side is best until the ring separates. You should now have 5 loose rings on the shaft.



The pesky rings can jump around and get in the way so move them to one end and tape them with some masking tape.



The shaft can then be smoothed and sanded.



Repeat process for the other end.



The inside of the rings look pretty average but this can be rectified now.



Separate rings and wrap a thin strip of sandpaper, about 25-30mm wide, around the shaft and secure with a small piece of masking tape. Make sure the tape is wrapped in the direction of rotation.



Sand with the lathe running moving the ring around to smooth inner surface. Rewrap with finer grades of sandpaper until you achieve the desired result. No need to immobilize the rings for this process.



If you have been successful, you will now have 5 finished rings on a smooth central shaft. Well done.

