Longworth Chuck Layout Guide

Draw this pattern directly on your plywood.
1. Circle A should be 1/2" larger than your faceplate.
2. Circle D should be 1/2" smaller than overall width.
3. Circle C should be halfway between A & D.
4. Circle B should be halfway between A & C.
5. The straight lines create B equal sections of the pattern.
6. The pivot point for Arc #1 is where Circle C and the straight lines cross.
7. Every other arc is cut short at Circle B to add strength to the chuck.
8. Drill 3/4" finger holes in both disc to aid in use.
9. Following routing and drilling, sand and seal material.

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Ctr A</th>
<th>Ctr B</th>
<th>Ctr C</th>
<th>Ctr D</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot;</td>
<td>4&quot;</td>
<td>6-1/4&quot;</td>
<td>6-1/8&quot;</td>
<td>11-1/2&quot;</td>
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<tr>
<td>18&quot;</td>
<td>4&quot;</td>
<td>6-7/8&quot;</td>
<td>9-3/4&quot;</td>
<td>15-1/2&quot;</td>
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<td>6&quot;</td>
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<td>12-3/4&quot;</td>
<td>19-1/2&quot;</td>
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Longworth Chuck Hardware and Sketch package

Hardware pack includes:
- 8 pcs 1/4" x 3" Carriage Bolts
- 8 pcs 1/4" wing nuts
- 8 pcs #4 rubber stoppers with 13/64" hole
- 16 pcs 1/4" X 1-1/4" Fender washers
- 1 pc. 1/4" X 3/8" Brass Bushing