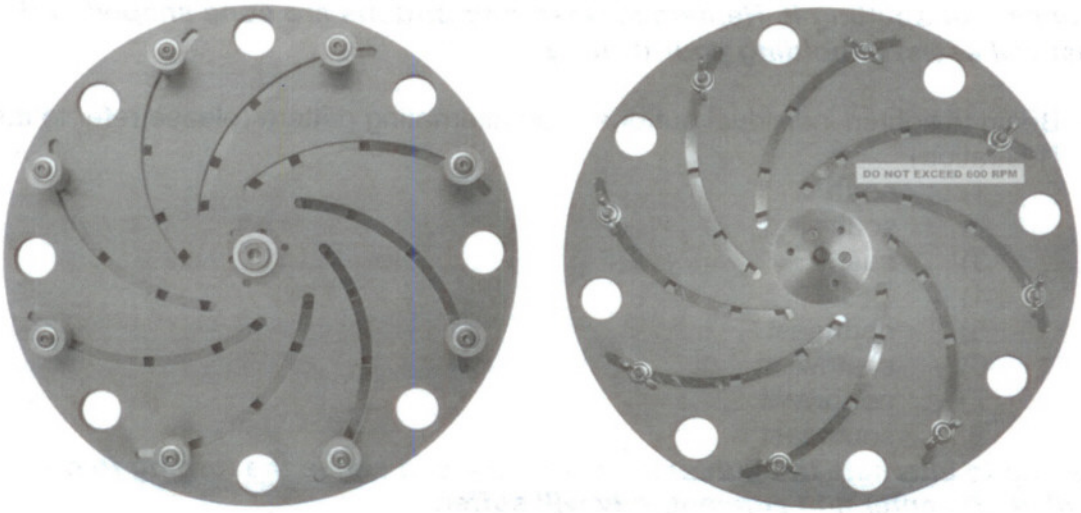
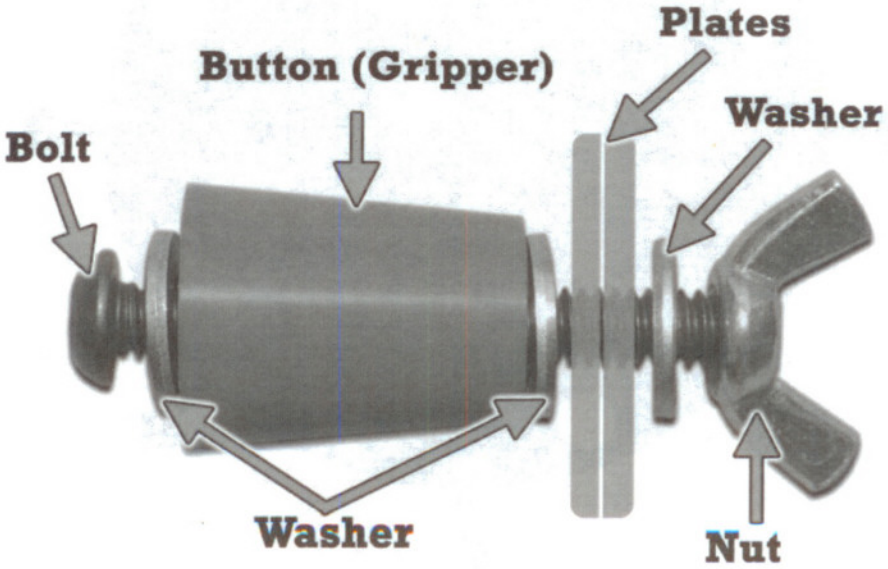
How To Use Your Modern Longworth Chuck

Please Read and Understand ALL Directions thoroughly before using this system – Always exercise all safety protocols for your lathe and tooling when using this system



Front **Back**

Your chuck is pre-assembled and ready to use out of the box. However, during shipping it is possible for one or more of the preinstalled gripper buttons to become separated from the chuck. Please use the following illustration to reinstall the buttons as necessary. Please note the taper direction of the button itself to insure that it matches the direction of the other buttons installed.



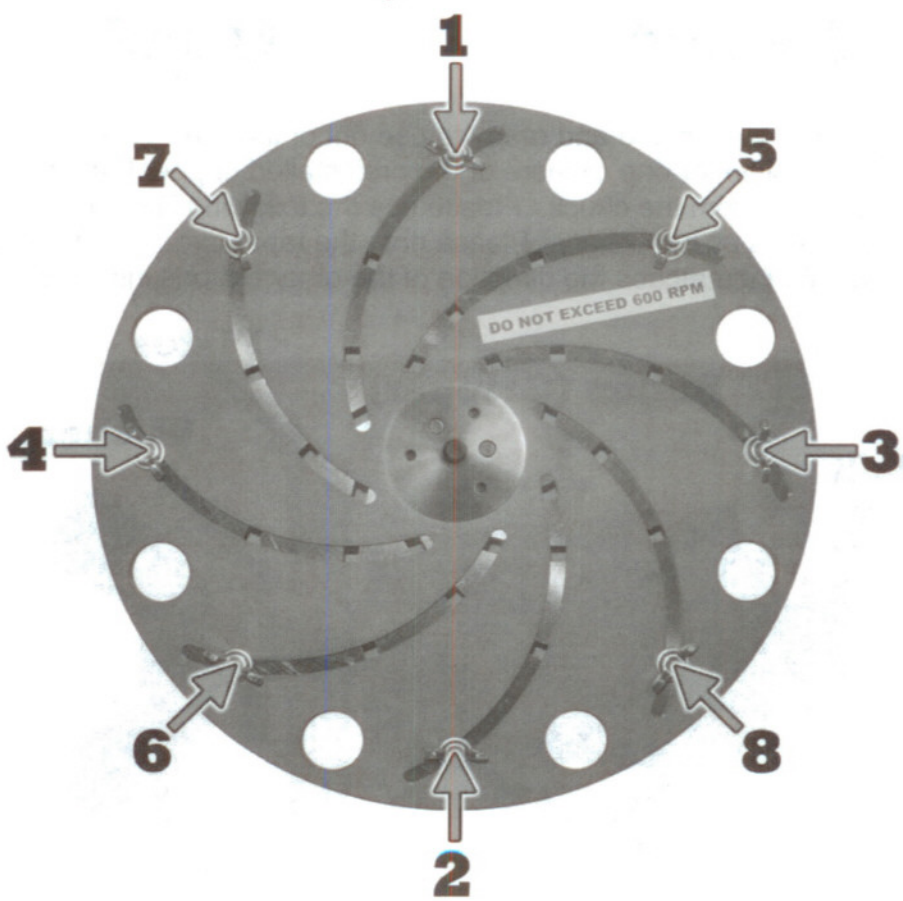
How To Use:

1. Rotate the disks so the soft rubber holding buttons (8 buttons) press against the turned object in either expansion (internal) or compression (external) mode.

Use only as much force as necessary to hold your turning securely. Do not use so much force that you risk damaging your turning by deformation, cracking or splitting it. Remember that your buttons are cone shaped and that will assist in holding your turning.

2. Begin to tighten individual buttons in an alternating pattern (please refer to the illustration)
    1) north
    2) south
    3) east
    4) west
    5) northeast
    6) southwest
    7) northwest
    8) southeast

Failing to alternate the tightening sequence can cause the turning to be pulled off center and concentricity will suffer.



Simply **SNUG UP** the soft rubber buttons until they begin to deform. Finger tighten the wing nuts by hand only. The supplied allen wrench can be used when appropriate to keep the bolt from turning while the nut is being tightened. **Do not over tighten**. The socket head bolts should be perpendicular to the holding plates.

3. Check the turning to see that it is held securely before proceeding. It should not wiggle or move side to side or in and out at this point.

4. Mount your Modern Longworth Chuck directly into your four jaw scrolling chuck with appropriate sized jaws which will properly grip the Chuck Interface installed on your Modern Longworth chuck. Other sizes of Chuck Interfaces are available to work with different sized jaws. Please refer to "Changing the Chuck Interface" for more information

5. Check the turning to see that it is held securely before proceeding as before.

6. When using your Longworth Chuck, utilize the tailstock as long as possible just as you would with any other chuck as a safety measure. When you are down to the small center portion, remove the tailstock and finish as usual.

7. Turn the assembly by hand to check that the assembly is running true before you turn it under power.

8. Re-check the security of the turning mounted into your Modern Longworth Chuck.

9. Stand aside and start your lathe on its slowest setting.

   DO NOT EXCEED 600 RPM'S AT ANY TIME !!! FAILURE TO HEED THIS LIMIT COULD CAUSE THE TURNING TO DISLODGE. SERIOUS INJURY OR DEATH COULD RESULT IF YOU FAIL TO OBSERVE THE MAXIMUM RPM LIMIT. ALSO UTILIZE THE TAILSTOCK AS LONG AS POSSABLE.

10. Taking light finishing cuts proceed to finish the bottom/foot/base of your turning. Your Modern Longworth Chuck is not intended nor is it designed for heavy stock removal such as hollowing. Heavy cuts may result in the dislodging of your turning from the Modern Longworth Chuck.

    A catch or dig-in may cause your turning to dislodge from the jaws of your Modern Longworth Chuck. Avoid catches and dig-ins. Take light cuts with sharp tools.

11. Do not leave an object mounted in the Modern Longworth Chuck for extended periods of time as this may result in permanent deformation of the individual

soft rubber buttons. If replacement buttons are necessary please contact the retailer were you purchased the Modern Longworth Chuck.

12. Loosen the wing nuts to the point that the buttons are not being compressed at the end of each turning session. Failure to remove the tension may result in permanent deformation of the buttons.

13. Warranty and users assumption of risk:

    Your Modern Longworth Chuck is warranted to be free from defects in materials and workmanship by the manufacturer for one year from the date of purchase. No warranty is expressed or implied as to the suitability to grip, hold, or affix a particular turning as wood moves, and may have inherent weaknesses in structure which would cause it to fail. Maximum caution must be taken at all times when using the Modern Longworth Chuck. Warranty does not cover standard wear and tear on items such as but not limited to buttons or grip points. For warranty claims please contact RMWoodco via e-mail at rmwoodco@yahoo.com.

Here are the sizes available for the Modern Longworth Chuck. Please note that size availability and parameters may change without notice. Dimensions are the nominal sizes of the disks and as such can be used in a lathe of the same designation. i.e. a 10" Modern Longworth Chuck can be used in a 10" swing lathe. The standard mounting disks are for #2 jaws (2.25") and #3 jaws (4.00").

Size	Approximate Max. Bowl Diameter Using External Hold (Compression)	Standard Chuck Interface	Optional Chuck Interface
10"	8"	2.25"	N/A
12"	10"	2.25"	4.00"
14"	12"	2.25"	4.00"
16"	14"	2.25"	4.00"
20"	18"	4.00"	2.25"
24"	22"	4.00"	2.25"

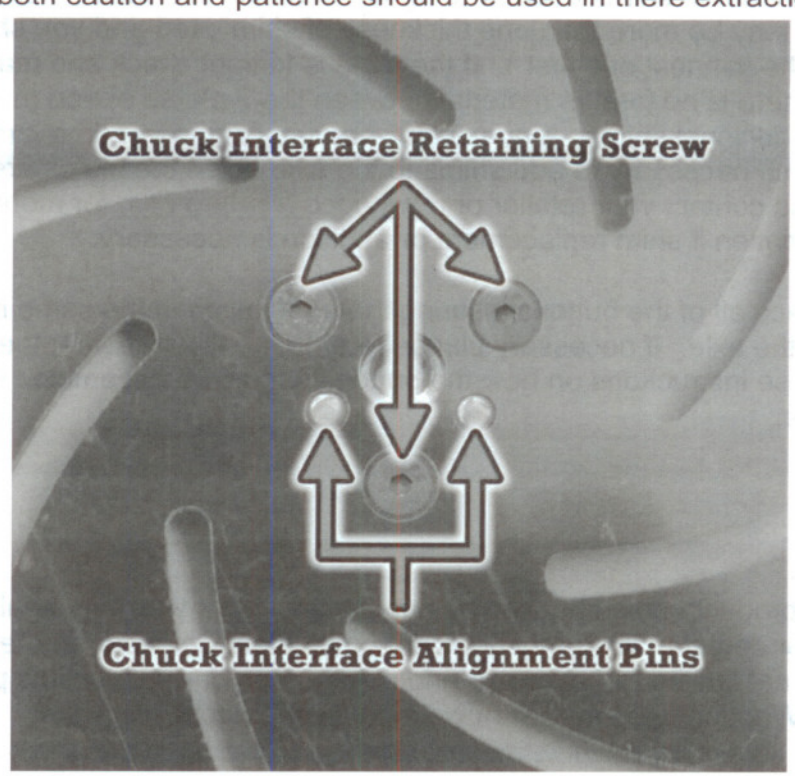
Changing the Chuck Interface:

If you need to change the chuck interface in order to match your jaws please use the following procedure.

1. Remove all of the buttons by unscrewing the nut from the back of the bolt and pull the assembly out of the front of the chuck. It is recommended that you place the washer and the nut that was taken off of the back of the assembly back on the bolt to help keep track of them.

2. Using a ¼" allen wrench inserted completely into the axle bolt, turn the bolt counter clockwise and remove it. Please note that the axle support washer and a number of small shims will also come off with the bolt. Please take careful care not to lose any of these shims or the axle support washer or the unit will not function correctly when reassembled. If for any reason you do lose any parts please contact the retailer were the unit was purchased for additional parts.

3. After the axle bolt is removed the front plate can be separated from the back plate. Referring to the illustration below you will find 3 screws and 2 pins that attach the chuck interface plate to the back plate. Using an 1/8" allen wrench carefully remove the 3 chuck interface retaining screws. Please note that these screws will be extremely tight and difficult to loosen and both caution and patience should be used in there extraction.



4. Once the chuck interface retaining screws are removed you can then carefully remove the chuck interface plate from the back plate. Use caution to insure that the back plate is not damaged while pulling the alignment pins out. The alignment pins are pressed into the chuck adaptor however, over time these can loosen and may come free from the

adaptor plate. This will not affect their operation and they should be inserted into the adaptor when reattaching the back plate.

5. To install another chuck interface adaptor simply align the pins in the adaptor with the holes in the back plate and carefully slide the two pieces together.

6. Install all 3 chuck interface retaining screws and tighten

7. Place the front plate over the back one insuring that the spiral patterns are in opposite directions.

8. Insert the axle bolt being sure to include all of the shims and the axle support washer. Hand tighten the axle bolt into place being careful not to catch the shims on the edges of the holes for both the front and back plate. Once threaded into place please firmly tighten the axle bolt with a ¼" allen wrench. At this point you should be able to rotate the 2 plates against each other relatively easily. If the plate is too loose you may need to remove some shims in order to tighten the axle interface (please note that there may be more than one thickness of shim used and you should start with the thinnest one first). If the plate is to tight check and make sure that there is no foreign material between the 2 plates or you may need to add additional shims. Since shim wear can occur over time it may become necessary to add shims to the axle bolt if the plates are too tight. Please contact your retailer or rmwoodco@yahoo.com for more information if shim replacement or addition is necessary.

9. Replace all of the buttons insuring that they all go in the same ring level from the axle. If necessary please refer to the illustration at the beginning of these instructions on how the buttons should be assembled with the plates.

Warranty :

This product comes backed by our limited 1 year warranty against manufacturer defects. Warranty does not cover standard wear and tear on items such as but not limited to buttons or grip points. For warranty claims please contact RMWoodco via e-mail at rmwoodco@yahoo.com.

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