

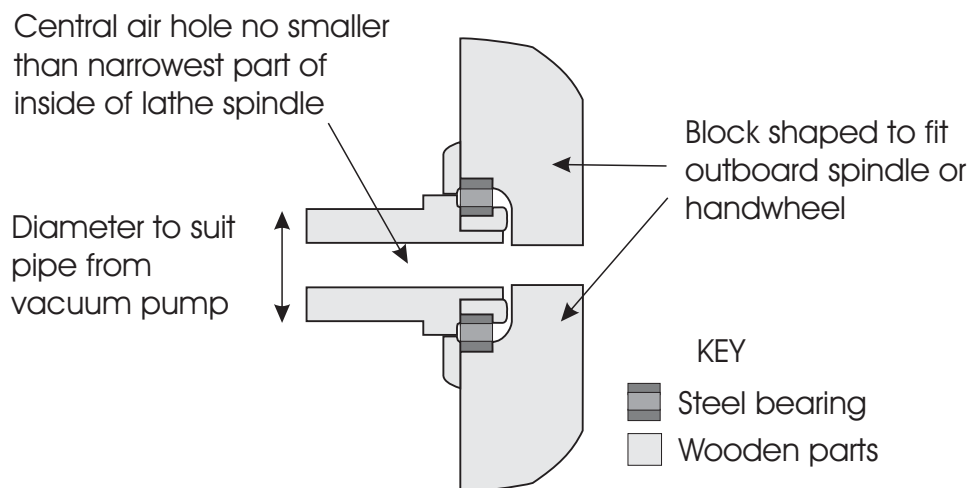
VACUUM CHUCK

A device using the suck of a vacuum pump to hold woodturning on the lathe for finishing cuts, polishing or other light work.

There are three main components: The vacuum pump, usually a vacuum cleaner; the connection to the lathe; and the faceplate.

The vacuum pump needs to be clean and in good working order. Some form of airflow control between the pump and the lathe is desirable.

The connection to the lathe may be on the outboard spindle or handwheel, or between the faceplate and headstock. The drawing below is for the outboard side.



CROSS SECTION OF VACUUM CONNECTION TO LATHE

The faceplate is a regular faceplate with a strong sheet of ply or mdf attached, cut round and dressed so that there is no wobble as it rotates. This surface does not need to be flat and may be shaped to fit a variety of work pieces. Foam rubber/plastic is glued to this outside surface.

This foam must be "closed cell" so that no air will pass through it. There are many types and thicknesses of closed cell foam. Choose one that is thin and robust.