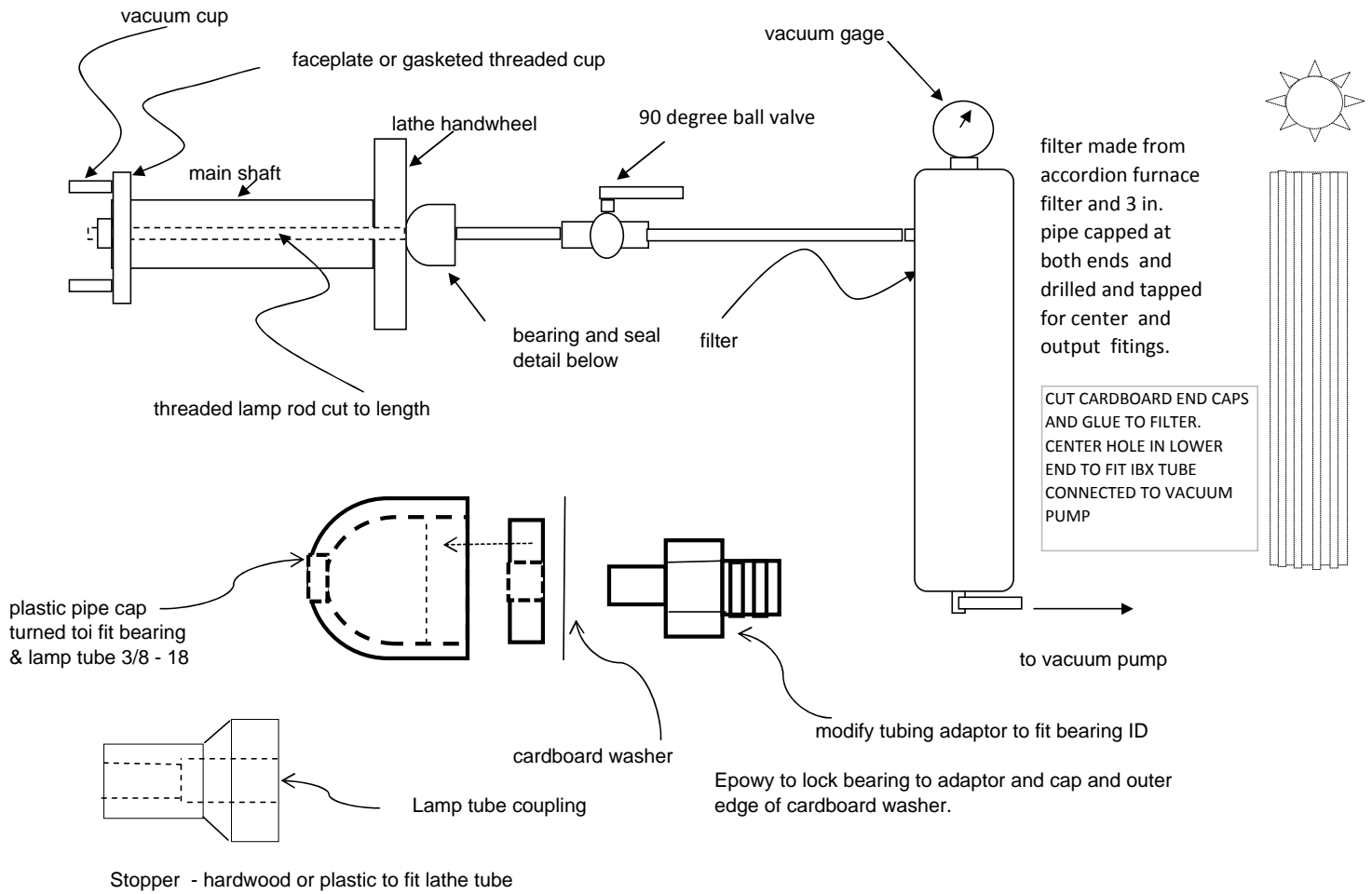


VACUUM CHUCK CONSTRUCTION



BILL OF MATERIAL

Available at a local hardware store:

- PLEATED FURNACE FILTER - 20" OR GREATER WITH FRAME REMOVED
- 3" PIPE - LENGTH 1" LONGER THAN FILTER
- 2 - 3" PIPE CAPS - DRILLED AND TAPPED FOR 3/8 PIPE THREAD AND TO MATCH VACUUM GAGE FITTING
- 1 - 1/2" PLASTIC PIPE CAP ID MACHINED TO 0.8659 FOR FORCE FIT & THREADED TO FIT LAMP ROD.
- 1 - 3/8 IBX TO 1/4 CONNECTOR
- 2 - 3/8 IBX TP 3/8 CONNECTORS & 1 PRO LINE 1/4 INCH VALVE
- OR EQUIVALENT 1/4 INCH 3/8 IBX BALL VALVE
- 2 - 3/8 IBX 90 DEGREE TO 3/8 PIPE THREAD.
- 1 PIECE OF SHIRT CARDBOARD TO MAKE FILTER ENDS FOR 3" PIPE AND VACUUM SEAL FOR BEARING
- 1 LENGTH OF IBX TUBING TO CONNECT COMPONENTS AND VACUUM PUMP
- PIPE DOPE
- 1 LAMP TUBE COUPLING
- 1 - THREADED LAMP ROD OF SUFFICIENT LENGTH TO GO THROUGH THE HEADSTOCK OF THE LATHE

Available at local auto parts store:

- 1 MANIFOLD VACUUM GAGE