

Atlas

TEN INCH LATHE MOUNTING INSTRUCTIONS

LATHE BULLETIN
T10L-3
February, 1947

LATHE BENCH REQUIREMENTS

1. The bench or stand on which your lathe is mounted must be heavy, rigid and level -- height should be approximately 30 inches. Remember, when carelessly mounted, any lathe bed will become twisted, and once this has happened, accurate work is impossible.
2. Bench top should be clear hard wood at least $1\frac{5}{8}$ " thick and 14" wide, glued, cleated and well doweled.
3. Bench legs must also be ruggedly constructed -- preferably of 4" x 4" lumber, well braced and securely anchored to bench top. Provide legs with lugs for bolting to floor.
4. Before bolting bench to floor, check for differences in height with a good machinist's level, and shim up any low points in bench or floor with sheet metal or other non-compressible material.

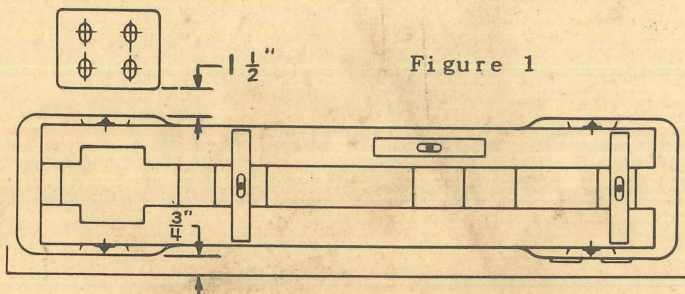


Figure 1

MOUNTING THE LATHE

1. Place the lathe on the bench or stand in the position shown in Fig. 1, with the front edge of the lathe legs about $\frac{3}{4}$ " from the front of the bench.
2. Mark and drill four $\frac{3}{8}$ " holes for machine bolts under the corresponding holes in the lathe legs. Put bolts through the holes but do not tighten.

MOUNTING LATHE COUNTERSHAFT

1. Place the countershaft bracket behind the lathe headstock and position it so that the base is approximately $1\frac{1}{2}$ " from the bottom of the rear lathe leg. If your lathe is bench mounted, drill four $\frac{3}{8}$ " diameter holes in center of slots -- if you have an Atlas floor stand, the bracket mounts on a heavy cast iron pad in which the holes have already been drilled. Bolt the bracket to bench or pad but do not tighten.

2. Remove the left grease cup from the countershaft spindle. Slide the large two-step pulley on the spindle -- small step should be on the out-side. Lock pulley to spindle and replace grease cup.
3. Loosen the two screws "A" (see Fig. 2), raise countershaft spindle, place spindle belt around the countershaft pulley, and retighten the screws. CAUTION -- The screws should be turned only until they touch the bottom of the bearing housing -- too much pressure will distort the housing and damage the bearings.
4. Screw belt release lever into lever fulcrum (see Fig. 2).
5. Place the spindle belt around the LARGE step of the spindle pulley and the SMALL step of the countershaft pulley. If pulley steps do not line up, merely loosen the countershaft pulley set screw and position the pulley.
6. Shift the belt-release lever to belt tension position (away from headstock), slide the countershaft bracket back until belt is tight, and tighten bracket to bench.

A moderate amount of pressure should depress the center of the belt about $\frac{1}{2}$ " -- tension may be adjusted by turning screws "A". CAUTION -- Do not turn the screws too tightly against the bearing housing -- it could distort the housing and damage the bearings. IMPORTANT -- The countershaft spindle must be parallel with the lathe spindle after this adjustment has been made.

7. Fasten motor base to countershaft bracket with hinge shaft furnished (see Fig. 2). Place hex nuts (C) and (D) on adjusting screw (see Fig. 2).
8. Level the lathe, carefully following the instructions in bulletin T106L-2. Bolt lathe to bench.

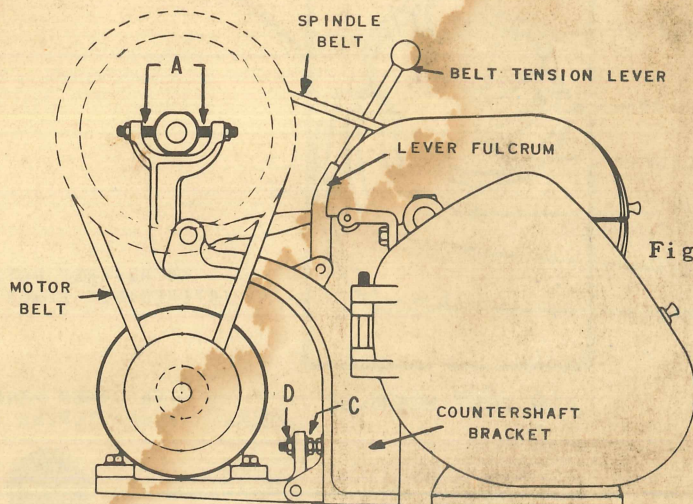


Figure 2

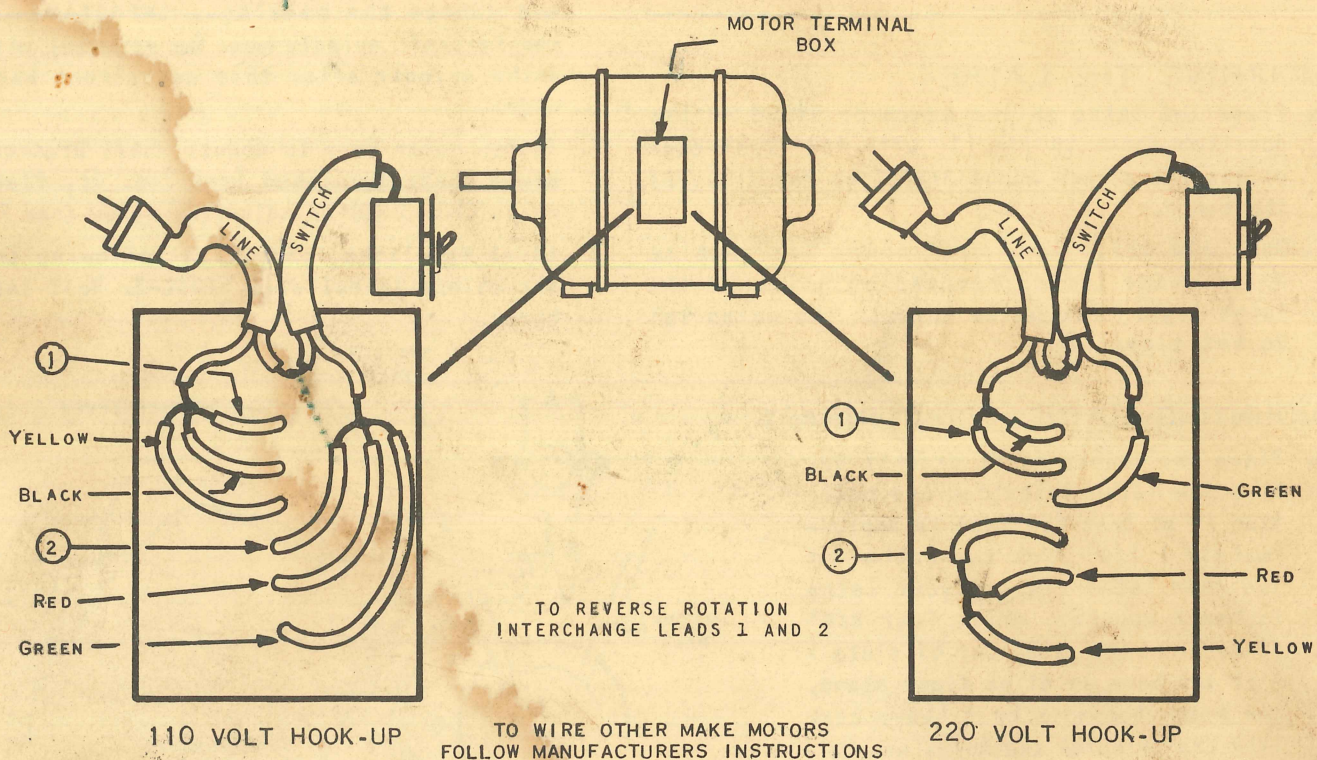
INSTRUCTIONS FOR WIRING AND MOUNTING AN ATLAS MOTOR

WIRING INSTRUCTIONS

1. Make all wiring connections before fastening the motor to the motor base.
2. Run both line and switch cords through the TOP knock-out in the terminal box (see diagram below).
3. Motor must rotate counterclockwise when viewed from the end of the motor opposite the shaft -- diagram below shows correct hook-up for either 110V or 220V current.

MOUNTING MOTOR

1. Slide the pulley on the motor shaft so that the small step is next to the motor, and place the motor on motor support bracket.
2. Slip the belt over the pulleys and shift the motor until the motor pulley is in alignment with the large countershaft pulley.
3. Bolt motor to motor base.
4. Motor support bracket is hinged for easy belt tension adjustment. To adjust, merely turn hex nuts (C) and (D), (see Figure 2).



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