

INSTRUCTIONS FOR SETTING UP AND LEVELING 9W-10 SOUTH BEND LATHE

When trouble occurs with a newly installed lathe, the first question which should be asked is, "Is the lathe level?" Nine times out of ten it is not level and that is the cause of the trouble. Regarding this, we are giving below a few items which should be of help to you in setting up the lathe.

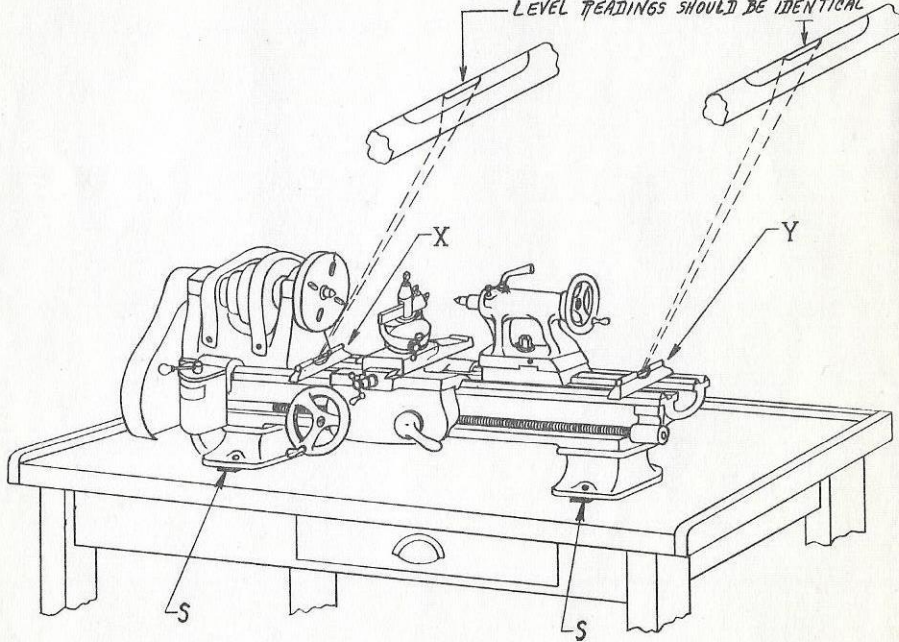
1. For bench mounting level up the top of bench first, see that the bench top is approximately level before leveling the lathe; this will eliminate a good deal of shimming between bench and lathe.
2. Use an accurate spirit level both lengthwise and crosswise of bed as shown at X and Y.
3. Use wedging or shims underneath the leg pads or the four points of contact around the four bolt holes as shown at S.
4. After leveling the lathe, fasten the legs to the bench or floor and again check the lathe with level. If lathe is twisted, check the wedging and relevel.
5. Remember that any lathe, whether 200 lbs. or 20,000 lbs. must be perfectly level, without distortion or strain, to function properly.

IF LATHE IS NOT LEVEL YOU MAY FIND ANY OF THE FOLLOWING TROUBLES

- a. Either the bed will be twisted, or the head will be twisted, or both will be twisted.
- b. Cannot turn work straight in chuck. (Bed or head twisted).
- c. Cannot bore straight hole in work held in chuck.
- d. Cannot turn piece of work straight, when between centers.
- e. Carriage cannot fit snugly on V-ways, causing chatter.
- f. Head twisted out of line causing spindle to score in bearing.
- g. Head twisted making spindle bind and causing chatter.

In conclusion, this advice applies to South Bend -- Bench Lathes and floor leg lathes, but the same advice also applies to all lathes of any size of any make or type. When a lathe is perfectly level and bolted to a solid foundation with the spindle functioning freely and the bed not strained, you will find it a pleasure to turn out A-1 work at all times.

NOTE -
LEVEL READINGS SHOULD BE IDENTICAL



ALL 9W-10 LATHES DRAWN No. 775

LEVELING A LATHE

SOUTH BEND LATHE WORKS
SOUTH BEND, IND., U.S.A.

DRAWN BY	DATE	RETRACED	DATE
M.I.	1-16-36.	C.Z.	9-2-36.