

11. Move carriage close to bearing bracket (C) and close half nuts.
12. Bolt bearing bracket securely to bed with socket cap screws (B).
13. Move carriage to extreme left. Shift both quick-change levers (B, fig. 6) to rest on lip (C) of gear housing.
14. Turn lead screw by hand, shifting quick-change housing until lead screw turns freely, then tighten the two screws (A) securely. Recheck to make sure lead screw turns freely.
15. Screw nut (A, fig. 9) and washer against support bracket by hand – DO NOT use wrench.
16. Tighten nut (B) and washer against support bracket securely.
17. Tighten set screw (J, fig. 8).
18. Mount threading chart to gear housing with screws furnished.
19. Weekly oil with S.A.E. No. 20 oil each quick-change oiler.
20. Rotate lathe spindle by hand, shifting reverse tumbler and quick-change levers, to make sure mechanism turns freely.
21. Check adjustment of slipping clutch – refer to LEAD SCREW CLUTCH ADJUSTMENT.
22. Read Operating Instructions before turning on lathe motor.

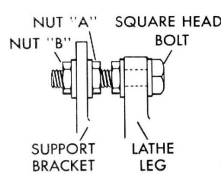


Figure 9

## OPERATING INSTRUCTIONS

Study the chart on the gear box – it lists the threads and feeds available and indicates the position of the controls for threads or feed desired.

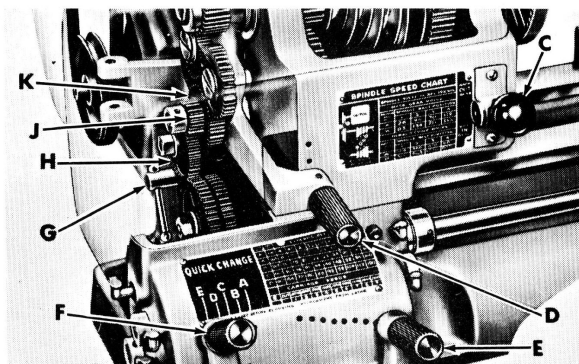


Figure 10

LEAD SCREW DIRECTION LEVER (D, fig. 10) has three positions. Center position is neutral – gear train is disengaged and lead screw does not turn.

Upper position moves carriage toward tailstock and cross slide away from operator. Lower position moves carriage toward headstock and cross slide toward operator.

**CAUTION:** Always turn off motor and let spindle stop before shifting lead screw direction lever.

The left LEVER (F) on quick-change box shifts to five positions – A, B, C, D and E.

LEVER (E) on right side of quick-change box shifts to nine positions, numbered on bottom of chart. The indexing holes for this lever are directly below the thread or feed desired.

SLIDING GEAR (H) has two positions. IN position is toward headstock and meshed with 32-tooth compound gear (K). OUT position is away from the headstock and meshed with the 16-tooth compound gear (J). The position of the sliding gear (IN or OUT) is shown on the chart in the same row as thread or feed desired.

Loosen QUADRANT LOCK (G) to mesh sliding gear with compound gear. After gears are properly meshed, tighten the lock. Be sure to allow sufficient clearance between the two meshing gears.

**CAUTION:** Always stop motor and spindle before changing feeds. If quick-change levers do not index, do not force, merely rotate spindle by hand until levers slide easily into position.

## LEAD SCREW SAFETY CLUTCH ADJUSTMENT

Clutch is preset at factory. If adjustment is necessary, it should be set at 5 foot pounds.

To adjust:

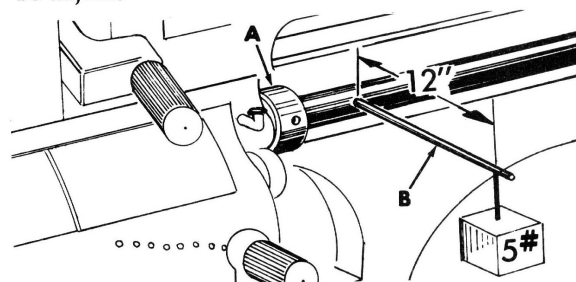


Figure 11

1. Insert  $\frac{1}{4}$ " rod (B, fig. 11) in the hole in lead screw near clutch.
2. Hang a 5 lb. weight on rod 12 inches from lead screw.
3. Tighten collar (A) until clutch is properly adjusted.

**NOTE:** When lead screw safety clutch is properly adjusted, the 5 lb. weight will move slowly down. If it moves too fast, tighten collar (A). If it doesn't move, loosen collar (A).

**IMPORTANT:** Clutch collar is self-locking.