

## TO REMEDY A STICKY CLUTCH

The cause of a sticky clutch can usually be traced to dirty oil, improper oil, or edge of clutch discs are burred. To remedy, follow the steps outlined below:

1. Drain apron oil from reservoir and fill with kerosene.
2. Operate lathe for a day or two and drain kerosene.
3. Flush with kerosene until clean.
4. Refill reservoir with South Bend CE1600 oil or equal.
5. If clutch remains sticky it is necessary to remove clutch assembly to examine the discs.

## TO REMOVE CLUTCH DISCS

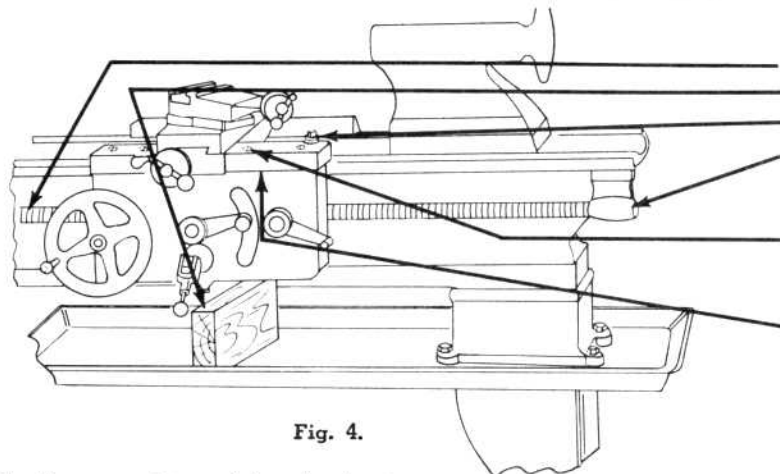


Fig. 4.

1. Remove drain plug and drain apron reservoir.
2. Turn lead screw so keyway is down.
3. Block to support apron.
4. Remove saddle lock and bolt.
5. Remove lead screw bracket.
6. Remove screws holding apron to saddle.
7. Loosen saddle gib screws on back underside of saddle 1/4". (Not visible in picture)
8. Lift up saddle to clear cross feed screw and slide apron off right end of lead screw. Be careful not to bend lead screw.

9. Remove oil trough from back of apron. See fig. 5
10. With Allen wrench through hole "U" (fig. 2) loosen set screw and remove clutch handle and swivel nut together by turning counterclockwise. See item 1, fig. 6.
11. Remove thrust washer. Item 2, fig. 6.
12. Unlock nut and remove set screw. Items 6 and 7, fig. 6.
13. Remove retainer bushing and bearing. Items 3 and 4, fig. 6.
14. Remove pin from draw bar. Item 5, fig. 6. (Some models have a key instead of pin)
15. Remove clutch draw bar, bearing, clutch disc plate, spring, and clutch discs together on draw bar. Items 8, 9, 10, 11, 12, and 13, fig. 6.
16. Remove clutch discs and examine for burrs, dirt, pieces of metal or scored discs. Discs not deeply burred can be smoothed by stroking burred surfaces on abrasive paper held firm against a level surface. Discs deeply burred should be replaced. See Form 992C.

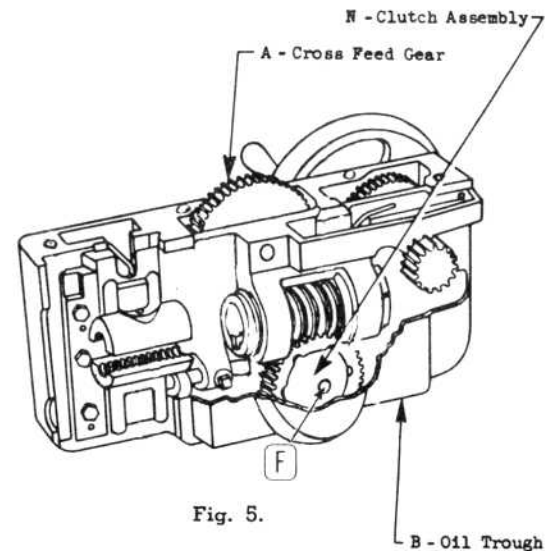


Fig. 5.

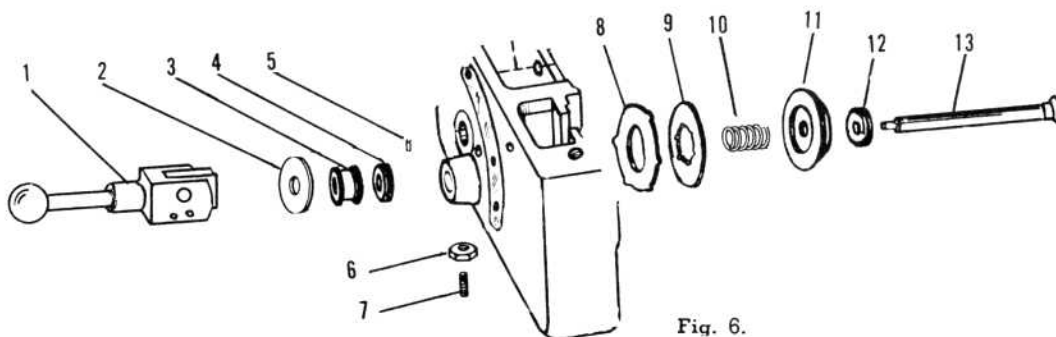
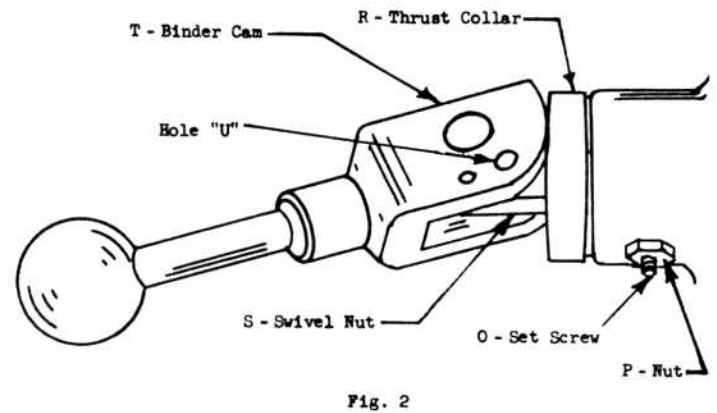
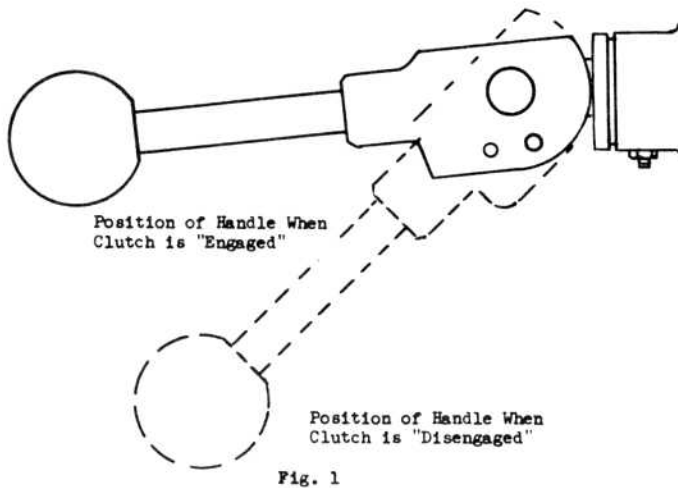


Fig. 6.

17. When assembling apply pressure on back of draw bar to hold discs in place until swivel nut and handle are fastened. See "F", fig. 5.
18. When installing apron, lift up on front of saddle to clear cross feed gear to allow correct positioning. Secure apron and rear lead screw bracket.
19. Tighten saddle gibs previously loosened.
20. Fill reservoir and adjust clutch according to instructions on other side.

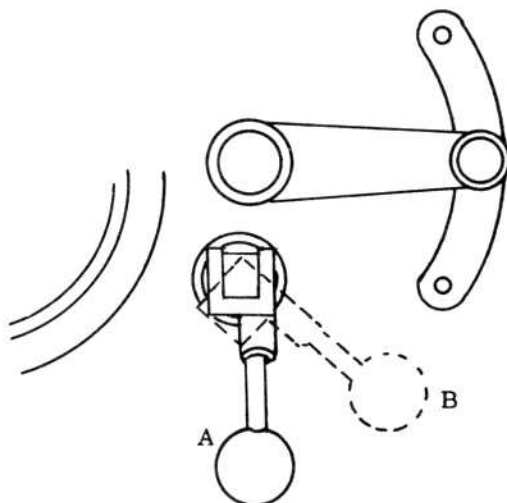
# ADJUSTING TOGGLE CAM APRON CLUTCH



## TO ADJUST CLUTCH

1. With Allen wrench, loosen set screw "U" and turn clutch lever clockwise until clutch engages in proper position. (See figs. 1 & 2) Clutch lever should not go beyond the perpendicular to the thrust collar "R".
2. Tighten set screw "U" as much as possible.
3. Clutch lever should be just tight enough to stay engaged in a heavy cut. If clutch is too loose, repeat the steps outlined above. If too tight, turn clutch lever counter-clockwise in steps outlined above.

If all adjustments have been utilized replace clutch discs. See form 992C and back side of this page.



## TO ADJUST DIRECTION OF CLUTCH LEVER SWING

The clutch lever can be adjusted to swing in any plane convenient to the operator. (As in "A" or "B" fig. 3)

1. Loosen lock nut "P" and set screw "O" (Fig. 2)
2. By the clutch lever, rotate entire assembly to the desired angle.
3. Pull slightly on clutch lever allowing the clutch mechanism to come forward as far as possible while tightening set screw "O".
4. Lock with nut "P".