TROYKE ROTARY TABLES

1. The worm and wormwheels on all models, except the model U-9 and R-9, run in a bath of oil. Fill the base with 600W, or a good grade of gear oil, through the pipe plug located on the base ledge or in the T-slot of the table (models T-18 and T-21). Oil cups are provided on the side of the base of the models U-9 and R-9 to oil the worm and wormwheel.

The center bearing and table bearing surface are oiled through the slotted set screws located in either the O.D. of the table or the top surface. "Oil" is stamped near these locations. Sunoco Way Lubricant No. 80 is suggested.

Oil cups are provided to oil the wormshaft.

- 2. Care should be exercised in clamping work on the Rotary Table. IMPROPER CLAMPING CAN CAUSE DISTORTION resulting in operating difficulties.
- 3. The table is graduated in one degree increments. The dial is graduated in one minute increments, as well as degrees. The vernier is readable to fifteen seconds in either direction. In reading the vernier, after arriving at the closest desired minute on the dial, read the seconds on the vernier and line up the seconds required with the next long line on the dial, going in the same original direction. If you have been moving clockwise, read the second marks to the left of 0 on the vernier. If you have been moving counter-clockwise, read the second marks to the right of 0.
- 4. To disengage the worm from the wormwheel, loosen the bracket retainer "D" by turning the plastic knob downward, or clockwise, and then revolve the entire eccentric bracket assembly clockwise. This removes the worm from the wormwheel and the table can be revolved freely. To re-engage, reverse the procedure using care in feeling the proper meshing between the worm and wormwheel by jogging the handwheel. IMPROPER MESHING WILL CAUSE DAMAGE TO THE WORM AND WORMWHEEL.

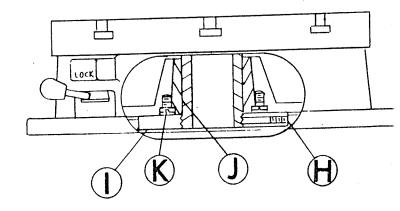
To disengage the worm from the wormwheel on the models U-9 and R-9, it is only necessary to loosen the 5/16-18 socket set screw located above the bracket assembly in the base and then revolve the bracket assembly clockwise.

5. The models U-9, R-9, U-12 and R-12 have a worm to wormwheel ratio of 1:90, and one complete revolution of the dial moves the table four degrees. The models U-15, R-15, T-18, R-18, T-21, R-21, U-18 and R-25 have a worm to wormwheel ratio of 1:120, and one complete revolution of the dial moves the table three degrees.

ADJUSTMENTS

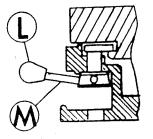
CENTER BEARING ADJUSTMENT

- 1. Disengage Worm from the Wormwheel and turn the entire Rotary Table over.
- Loosen Socket Set Screws H (there are two) in Collar I and remove Collar I.
- 3. Revolve Base and tap tapered split Bushing J with a small brass rod and hammer. Snug up Screws K (there are two) and revolve Base to feel snugness.
- 4. Replace Collar I. Gap of from .001" to .002" should be between Collar and Base.
- 5. Tighten Socket Set Screws H.
- 6. Turn Rotary Table over and engage Worm.

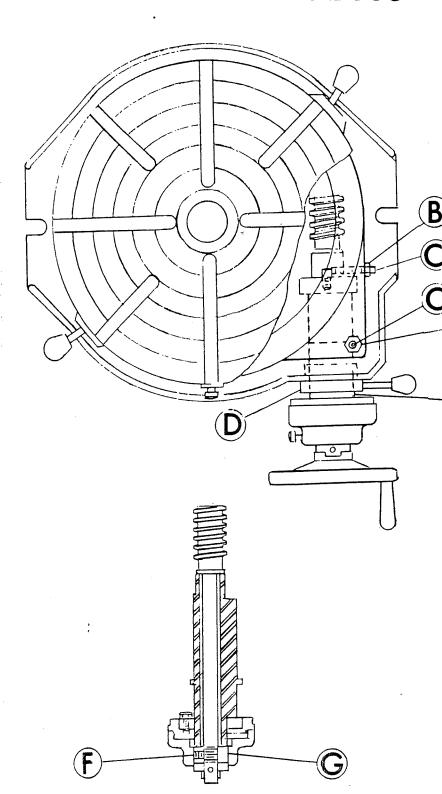


LOCKING

The table can be locked in position by the Lock Handle L. With partial application of the lock, backlash in climb cuts can be eliminated. If locking mechanism should wear, the Lock Rod M can be placed in the next tapped hole in the Lock Nut.



ADJUSTMENTS



END PLAY IN WORMSHAFT:

- 1. Remove Handwheel and Dial.
- 2. Loosen the Set Screws F (there are two) in Nut G.
- 3. Turn Nut G clockwise for take-up. Revolve Wormshaft to check adjustment.
- 4. Tighten Set Screws F and replace Dial and Handwheel.

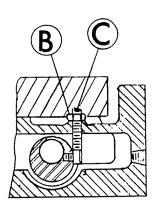
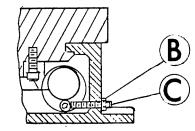


Fig. 2

Fig. 1



WORM AND WORMWHEEL (Backlash):

- Loosen Hex Nut B. (This Hex Nut is on the top of the base on Models U-9, U-12, U-15, U-18, R-18, R-21 and R-25 as shown in Fig. 1. The Hex Nut is on the side of the base on the Models R-9, R-12, R-15, T-18 and T-21 as shown in Fig. 2.)
- 2. Turn Socket Set Screw C slightly counterclockwise.
- 3. Loosen Collar D (not on models R-9 and U-9). Revolve Bracket E counter-clockwise as far as it will turn.
- 4. Read the Dial to determine the amount of backlash.

MAINTAIN 1 - 2 MINUTES BACKLASH

- 5. Adjust Set Screw C as required.
- 6. Tighten Hex Nut B.

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