

gear train should meet the conditions set forth in these steps.

(4) The Geneva wheel should turn one notch when shaft G turns counterclockwise from an even-numbered to an odd-numbered detent position. (Count the first detent position from the clockwise stop as number 1.) Thus shaft I should rotate through 14 positions, or 280° , for 30 detent positions, or $14\frac{1}{2}$ turns, of shaft G. The initial position of shaft I should correspond to detent positions 1 and 2 of shaft G, the second shaft I positions should correspond to detent positions 3 and 4 of shaft G, and so on through to the thirtieth detent position of shaft G.

(q) After accomplishing proper operation of the BAND CHANGE gear train, replace the retaining ring on the 90-tooth stop-pin gear shaft.

(r) Replace large dial cord pulley and gear assembly as follows: Turn shaft A to counterclockwise stop. Make sure that the 52-tooth gear on shaft E and the 48-tooth detent gear on shaft C are still set at their respective scribe marks. Place pulley and gear assembly far enough on shaft B to engage the rear section of the split gear with the 15-tooth gear on shaft A. Be sure the groove-pin holes on shaft and hub are lined up and that the pulley slot is within 45° of the position shown in figure 5-4. Rotate front section of split gear so that springs stretch to $\frac{3}{4}$ inches. Engage front section with 15-tooth gear on shaft A. Replace groove pin and tighten set screw.

(s) Check operation of loading cord by turning shaft A clockwise. Be sure that the loading spring travels from the drum on shaft E to the same relative position at the drum on shaft B when shaft A hits the clockwise stop. The loading spring should not touch either drum at either end of its travel.

(t) Replace small dial cord pulley. Line up with scribe mark and tighten set screw.

(u) Rotate shaft A to its counterclockwise stop, and shaft G to its clockwise stop; then replace the gear box in the receiver. Reconnect couplers; then replace dial cords, front panel and right-hand end bracket. Replace flat washer, tension washer and collar on KILOCYCLE shaft. Push collar against tension washer until tension washer is almost flat; then tighten collar set screws. Replace knobs.

5.7. RF TUNER ASSEMBLY MAINTENANCE.

5.7.1. GENERAL. - The r-f tuner assembly will require very little maintenance. However, should it be taken apart for any reason, the following information will indicate the correct positions of the cams.

5.7.2. POSITIONS OF CAMS. - The front plate of the slug rack assembly contains three alignment holes as indicated in figure 5-5. If the cams are correctly synchronized, the tips of the front cams will be directly opposite these holes. Use a dental mirror to accurately inspect the position of the cam tips in relation to the alignment holes. If a dental mirror is not available, check positions and operation of the cams in the following manner.

(a) Turn BAND CHANGE knob to band 30. Turn KILOCYCLE knob clockwise to stop.

(b) Viewing the right-hand slug-moving cam from the front, the slug table cam rider should be approximately $\frac{1}{16}$ inch to the right of the cam tip. The cam rider should descend this same right-hand edge when step (c) is performed.

(c) Turn BAND CHANGE knob to band 16. Turn KILOCYCLE knob counterclockwise to stop. The cam rider should still be on the same side of the cam as in step (b), and not bottomed in the low spot of the cam.

(d) Turn BAND CHANGE knob to band 15. Turn KILOCYCLE knob clockwise to stop.

(e) Viewing the center cam from the front, the cam rider should be approximately $\frac{1}{32}$ inch to the left of the cam tip. The cam rider should descend this same left-hand edge when step (f) is performed.

(f) Turn BAND CHANGE knob to band 8. Turn KILOCYCLE knob counterclockwise to stop. The cam rider should still be on the same side of the cam as in step (e) and not bottomed in the low spot of the cam.

(g) Turn BAND CHANGE knob to band 7. Turn KILOCYCLE knob clockwise to stop.

(h) Viewing the left-hand cam from the front, the cam rider should be approximately $\frac{1}{32}$ inch to the right of the cam tip. The cam rider should