its counterclockwise stop, and follow the instructions in paragraph 5, 6, 2, (a); then proceed according to the following steps. If the box is to be left in the receiver, perform steps (1) and (2) under paragraph 5, 6, 2, (a); then proceed according to the following steps. Refer to figures 4-2 and 5-4 for location of gears and shafts.

- (1) Turn shaft G (BAND CHANGE) elockwise to the stop below band 1. Turn shaft A counterclockwise to the stop.
- (2) Scribe a mark across the 85-tooth spider gear that carries the planetary gears, and across the 90-tooth stop-pin gear, using the top of the front gear panel as a guide.
- (3) Scribe a radial mark, precisely under the Geneva wheel detent, on the 144-tooth gear that has two stop pins attached.
- (4) Using the circumference of the Geneva wheel as a guide, scribe a mark on the 85-tooth gear that drives the Geneva wheel.
- (5) Scribe a mark through the edge of the small dial cord pulley and the front gear panel.
- (6) Remove pin from hub of large dial cord pulley.
  - (7) Remove large dial cord pulley and gear.
  - (8) Remove small dial cord pulley.
- (9) Remove retaining ring from shaft I (shown as shaft Z in the front view of gear plate in figure 5-4).
- (10) Using a pair of right angle TRUARC pliers or two bent (right angle) scribes, remove retaining ring from shaft F.
- (11) Measure and record the length of loading spring using a pair of dividers.
- (12) Remove four mounting screws from front gear panel.
- (13) Remove front gear panel, being very careful not to let shafts ride up with plate. While removing this panel, do not allow gears to unmesh or rotate.
- (14) Keep shim washers with respective gears or shafts.

- (15) Before moving or disengaging any gears other than the 90-tooth gear on shaft F, scribe a line through detent spring, 48-tooth detent gear, and rear gear panel, and another line through the 52-tooth gear on shaft E and rear gear panel.
- (16) Mark all gears being removed in such a manner that they may be identified later for reassembly.
- (17) If the overtravel coupler is removed, note that the disk and gear are detented. Do not lose detent ball.
- (18) Make all necessary repairs. If any parts that have been scribed are to be replaced, be sure to scribe the new parts in exactly the same manner before placing them in the equipment. If the loading cord is to be replaced, form a small loop at one end of each of the two pieces to provide anchors for the spring. Push free ends of the cords through the proper pulley-holes. Knot the free ends after allowing for five inch lengths of cord between the loops and knots. Coat the knots with Duco cement.
- 5.6.3. REASSEMBLY OF GEAR BOX. The following procedure assumes that all gears have been removed, that all repairs have been made, and that the gear and shaft assemblies have been reassembled after repairs were made.
- (a) Use AN-G-25 grease on all bearing surfaces during assembly.
- (b) If the 74-tooth idler gear whose shaft is riveted to the rear gear panel was removed, replace it first.
- (c) Replace a 48-tooth gear and shaft K assembly and shim washers, item J. Replace retaining ring.
- (d) Replace 52-tooth gear and shaft E assembly and washer, item G. Line up scribe marks on gear and rear panel. Replace retaining ring.
- (e) Replace 48-tooth detent gear, shaft C, detent, and 16-tooth gear assembly. Line up marks on rear panel, 48-tooth gear, and detent spring.
- (f) Replace 85-tooth spider gear, 45-tooth, and 25-tooth planetary gear assembly, and shim washer, item AP, on shaft C. Do not move other gears already lined up with the scribe marks.
- (g) Replace 48-tooth gear, shaft B, 24-tooth gear assembly, and washers, items C and D as follows: