## ADJUSTMENTS OF FIVE UNIT TICKER SHIFT MECHANISM

To be used in Conjunction with Bulletin #137 - Description & Adjustments of Typewheel Tape Ptr. (Ticker)

For tickers equipped with the five unit shift mechanism add the following adjustments after flutter cam oiler adjustment on page 23, Bulletin 137.

1-Remove cover guide. Place the code discs in the spacing position. Loosen the shift pawl lever arm mounting screws and the shift bracket mounting stud and screw. Adjust the shift bracket so that there is from .070° to .080° space between the shift pawl lever roller and the lower shift pawl when the roller is against the upper shift pawl (near the upper end). Tighten the shift bracket mounting stud and screw and recheck the above adjustment.

2-Remove both shift pawl springs and check pawls for freeness. Replace springs.

3-Check to see that the shift pawl lever roller turns freely and that the pin is bent so as to be safe from falling out.

4-Check to see that the shift pawl lever is free and has not more than .006" end play.

5-Adjust the shift pawl lever arm so that the pin on the shift pawl lever does not bind in the selector lever when in either the marking or the spacing position and so that the travel of the shift pawl lever roller is centered between the upper and lower shift pawls. Tighten the shift pawl lever arm mounting screws and recheck the above adjustment.

6-Check to see that when the #6 selector lever is in the marking position there is a clearance of from .002" to .006" between the shift pawl lever roller and the lower shift pawl when the play of the shift pawl lever and roller is taken up in a direction to make this clearance a maximum. Make the same check between the shift pawl lever roller and the upper shift pawl with the #6 selector lever in the spacing position. If necessary readjust the shift pawl lever arm or the shift bracket to obtain the above clearances. If it is necessary to readjust either arm or bracket recheck adjustment #5.

7-Check to see that both upper and lower shift pawls are safely on their stop pin rollers and that they clear the front guide disc.

8-Place the code discs in the marking position and #6 selector lever in the spacing position and check to see that there is not more than .015" clearance between the shift pawl lever roller and the lower shift pawl when all the play of the shift pawl lever and roller is taken up in a direction to make this clearance a maximum.

Make the same check between the shift pawl lever roller and the upper shift pawl when #1, #2, #4 and #5 code discs and #6 selector lever are in the marking position and #3 code disc is in the spacing position.

9-Place the code discs in the spacing position and check to see that the center of the shift pawl lever roller is at least .010" below a line connecting the upper ends of the shift pawls.

10-UPPER AND LOWER SHIFT PAWL SPRING TENSION: - With the code discs in the spacing position hook a 32 oz. scale over each pawl at the end of the pawl and pull at right angles to the pawl. It should require from 10 1/2 to 14 ozs. to just start each pawl moving.

11-Replace cover guide.

## LUBRICATION:

In addition to the parts listed on page 8, Bulletin 137, the following parts of the new shift mechanism should be lubricated in the same manner:

(1) Shift pawl lever roller (3) Shift pawl lever pin (2) Shift pawl lever bearing (4) Shift pawl bearing

