

SUBJECT: Model 1250 Indexing Plate & Cancel Crank

Cancellation (or resetting) of selector pins may fail on one section of the selector drum while other sections of the drum are being properly canceled, due to one or more of the following conditions:

- 1. In case the two mounting brackets to which the selector drum assembly is fastened have been moved forward or back at their elongated mounting holes in the top plate, the selector crank will not rotate with the nominal 1/16" clearance on both sides of the selector drum assembly.
- 2. In case the selector drum has been removed and replaced with some of the magnet wires pinched between the mounting plate and one of its mounting brackets, a similar lateral misalignment of the selector crank will result. Such difficulty may be eliminated by carefully placing the magnet wires.
- 3. Vertical misalignment, which would appear as a failure to cancel either upper or lower pins while the ones on the opposite side were being overcanceled, could be caused by reversing the two spacers on the lower tie rod. These spacers are not the same length, and the shorter of the two must be at the front between the center plate and the selector mounting plate. These spacers are provided with centering shoulders which must enter the mounting plates. The shoulder washers must be on the outside of the mounting plates and their shoulders must enter the mounting plates.
- 4. Also vertical misalignment may result from incorrect positioning of the rear support plate on its elongated holes. Facing the rear of the chassis, the right hand corner of the rear mounting plate is fixed by the screw that holds the corner bracket of the top plate. The left hand corner may be moved slightly up or down due to the elongated mounting holes. This movement will provide vertical adjustment of the cancel crank alignment.
- 5. The selector shaft and the segment gear shaft are provided with bronze thrust washers for alignment of the segment gear and pinion and adjustment of end play in the two shafts. Care should be exercised in replacing these washers after disassembly.
- 6. A slight "out-of-true" condition of the indexing plate will not effect cancellation, however, it must be true enough to operate freely with respect to the lock arm assembly.

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adjust the selector crank driving plate. Move the crank so that its stop flange is mid-way between No. 25 and No. 26 pins. In case the adjustment range is insufficient, move the index wheel one tooth and back the crank into the proper adjustment position. Tighten the long-headed screw and inspect the position of the crank. The normal position of this screw in its final setting should be counter-clockwise of the center of its adjustment range as viewed from the rear.

## Driving Pawl

Fanually release a pin around No. 24 or 48 (for good observation), unlock the index wheel and operate the selector manually by pushing the segment gear upward. In adjusting the driving pawl, it will be necessary to follow each change with resetting of the engagement adjustment. This may be easily observed in the 24 or 48 position by watching for a line of light between the end of the screw and the stop lug on the pawl. After the screw just touches the lug, 1/4 turn will provide about .005" clearance at the bottom of the ratchet teeth. The minimum of the adjustment range will be when the adjusting screw is backed off and excess pressure results from the crank against a pin or when the outward limit of the screw has been reached. The maximum of the adjustment range will be when the adjusting screw is turned in and the driving pawl re-engages during segment gear operation or when the inward limit of the screw has been reached. (Re-engagement of the driving pawl during the searching phase will result in chattering of the index wheel.) The correct adjustment will be half way between the maximum and the minimum points. Be sure that each trial is accomplished with minimum clearance of the engagement pawl from the bottom of the ratchet teeth as indicated at the beginning of this paragraph.

## Selector Cam

After checking the take-out slide searching range and range location, set the selector crank to position its stop flange between pins No. 25 and 26 and lock the indexing plate. Check the adjustment of the selector cam on its elongated mounting holes at position No. 25. In this position the take-out slide will remain at the top tray from index plate position No. 1 through the blank space to position No. 25 inclusive. Check carefully before making changes, as the selector cam setting is not affected by the previous adjustments.