

SUBJECT: Model 1250 Selector Adjustments

The co-ordination of the adjustments that govern the selector system may be satisfactorily accomplished in the following manner and sequence:

Index Plate Lock Arm

Loosen the lock arm bearing stud and move the stud in its elongated mounting hole to a point that provides good engagement of the lock pin with the teeth of the index wheel. The center line of the pin should be engaged a little beyond the pitch line of the teeth when one of the seven cams are engaged with the lock arm.

Holding Pawl

During adjustment of the holding pawl, it is suggested that the ratchet wheel driving pawl be completely disengaged to prevent its interfering with the holding pawl adjustment. (Turn the driving pawl release adjustment all the way in to raise the pawl out of engagement.)

Adjust the holding pawl at its mounting bracket screws to a point where the pawl will just clear the closest tooth when the lock arm is engaged with the index plate, turn the wheel and check at 90° intervals.

Over-Center Spring

Turn the selector to position the crank at selector pin 24 or 48, (facing the back, this will be at the blank pin space in the lower left of the selector drum) and lock in this position. Back out the driving pawl release adjusting screw until the pawl bottoms with minimum clearance in the ratchet wheel.

In this position, check the over-center spring for over-center action. This action should occur at the point of a tooth or maximum 1/32" before. The selector crank is accessible in this position for manual operation. If necessary, loosen the over-center spring anchor bracket with an angle screw-driver and adjust the anchor to provide the proper over-center action.

Selector Crank Driving Plate

Turn the selector shaft to position the crank at No. 25 selector pin, (the upper pin at the blank pin space in the upper right of the selector drum), lock in this position and loosen the long headed screw that serves to

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

Manually 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.