After clearing the print area and testing for a "1" in S52 to print or by-pass the title, a card counter is set to 003. This counter is advanced by "1" and tested for every detail card until it reaches 50. Immediately after each read instruction, delay instructions (two Move and Zero Suppress) and a Start Read Feed instruction are executed. These instructions are calculated to use up approximately 9.8 milliseconds of processing time.

After the Start Read Feed instruction, three more Move and Zero Suppress instructions and a Branch instruction are executed. These instructions, plus the instructions executed after the Branch up to the next Read instruction, are calculated to use up approximately 20.8 milliseconds of processing time. Since the processing time utilized between successive read cycles is within the maximum 31 milliseconds allowed, cards should feed continuously. If audible interruption is detected, the maximum speed of 800 cards a minute is not maintained and a failure of the Start Read Feed circuitry is normally indicated.

It must be recognized, of course, that the audible interruption may be caused by failure in other phases of the loop resulting in a delay in excess of 31 milliseconds. This condition is intentionally forced by the program when the card counter reaches 50 by executing an extra 8 milliseconds delay before the next Read instruction. This extra delay causes a late read instruction and the machine should therefore stop with the Read Check Error Light ON and the incorrectly-read card in the stacker, and the I STAR at Location 599.

To proceed with the second part of this test, reset the error conditions, perform a non-process runout of two cards remaining in the machine, and restart the program at Location 600.

The procedure for Start Punch Feed (punch release) is much the same as for the Start Read Feed (read release) except that the delay instructions are calculated to use up approximately 58.5 milliseconds of processing time. Since the processing time utilized between successive punch cycles is within the maximum 59.5 milliseconds allowed, cards should be punched continuously at the maximum rate of 250 cards a minute. If audible interruption is detected, this speed is not maintained and a failure of the Start Punch Feed circuitry is normally indicated.

When the card counter reaches 50 in this part of the test, an extra 8 milliseconds delay is executed to force a Punch Check Error Stop condition. This delay causes a late punch instruction and the machine should therefore stop with the Punch Check Error Light ON and the I STAR at Location 799, indicating the end of the test.