This will cause the program to load automatically. After the program has been loaded, a typeout will occur on the 1407 indicating the test number, the size of 1401 storage required, and the setting for the Process Check switch. This portion of the write-up and the Program listing should be studied carefully for details. There is also a flow chart entitled "General Flow Chart C8002" written to give the C. E. an overall picture of the operation of this diagnostic.

The following is the sequence of operation after the housekeeping and instructive typeout has occurred. The program will advance automatically to the first instruction. The first instruction is to WRITE lines 1 and 2 (160 characters). A test is then made of the BRANCH error indicator. This instruction will BRANCH upon a Processing Check with the Processing Check switch in the ON position. The character at the (d) position is the percent sign. If an error has occured the program will BRANCH to WRITE the error instructions. A halt will then occur and subsequent pressing of the START key will cause the program to BRANCH back to the instruction in which the Process Check Error occurred. If there was not a Process Check Error, the program will BRANCH around these two instructions and will proceed to test by writing Line 3. After writing Line 3 the previously mentioned error procedure will again be utilized. After Line 3 has been written without errors, the program will test Sense Switch B. If Sense Switch B is ON a BRANCH back to writing Lines 1 and 2 in the MOVE mode of operation will occur, and the entire Routine will be repeated once more. If Sense Switch B if OFF however, the program will advance and WRITE Lines 1-2 in the LOAD mode of operation. The previously mentioned error check routine will again be utilized. If no error has occurred, Line 3 will be written in the LOAD mode of operation and the error tests made once more. If no error has occurred, Sense Switch C is interrogated. If Sense Switch C is ON, a BRANCH back to writing Lines 1-2 in the LOAD mode of operation will occur and the entire Routine will be repeated once more. If Sense Switch C is OFF the program will advance to WRITE the SHIFT Line 4 in the MOVE mode of operation. The error circuits are interrogated as previously mentioned. If no error has occurred the program will advance and WRITE the SHIFT Line 4 in the LOAD mode of operation. Error detection is as indicated above. If Sense Switch E is ON, a BRANCH back to WRITE SHIFT Line 4 in the MOVE mode of operation will occur and the routine repeated once again. However, if Sense Switch E if OFF the program will advance to the CARRIAGE RETURN operation. These instructions cause the CARRIAGE to RETURN from positions 80, 70, 60, 50, 40, 30, 20, 10, 4, 3, 2 and 1. The above is accomplished by sequentially placing a WORD MARK under the GROUP MARK that is in the specific locations mentioned. This will cause the CARRIAGE to RETURN from that position.