

VOLUME 2 LINEAR FUNCTION INTERPOLATOR



DIAGNOSTIC MANUAL MARK I COMPUTER
SYSTEMS DIVISION © GENERAL PRECISION, INC

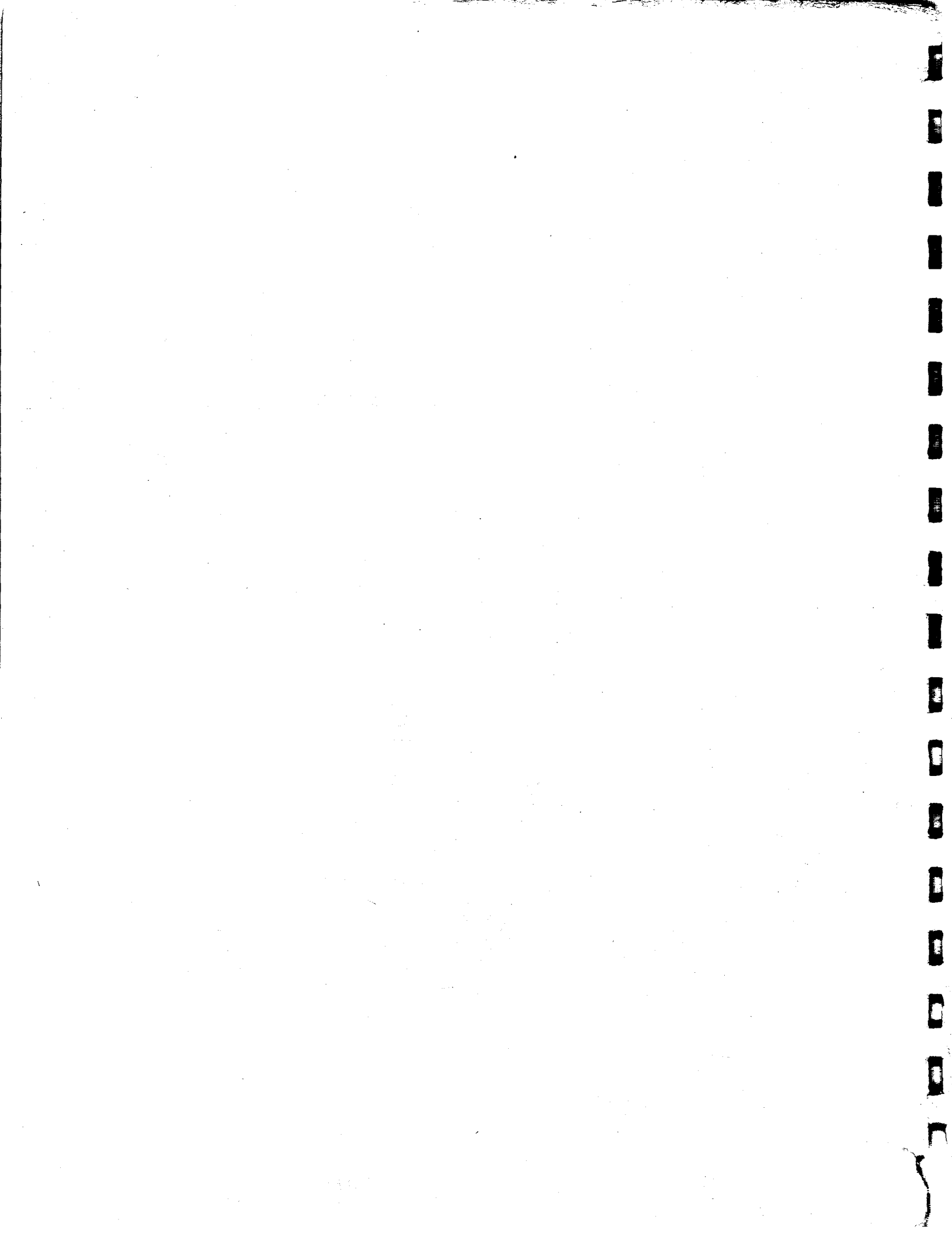
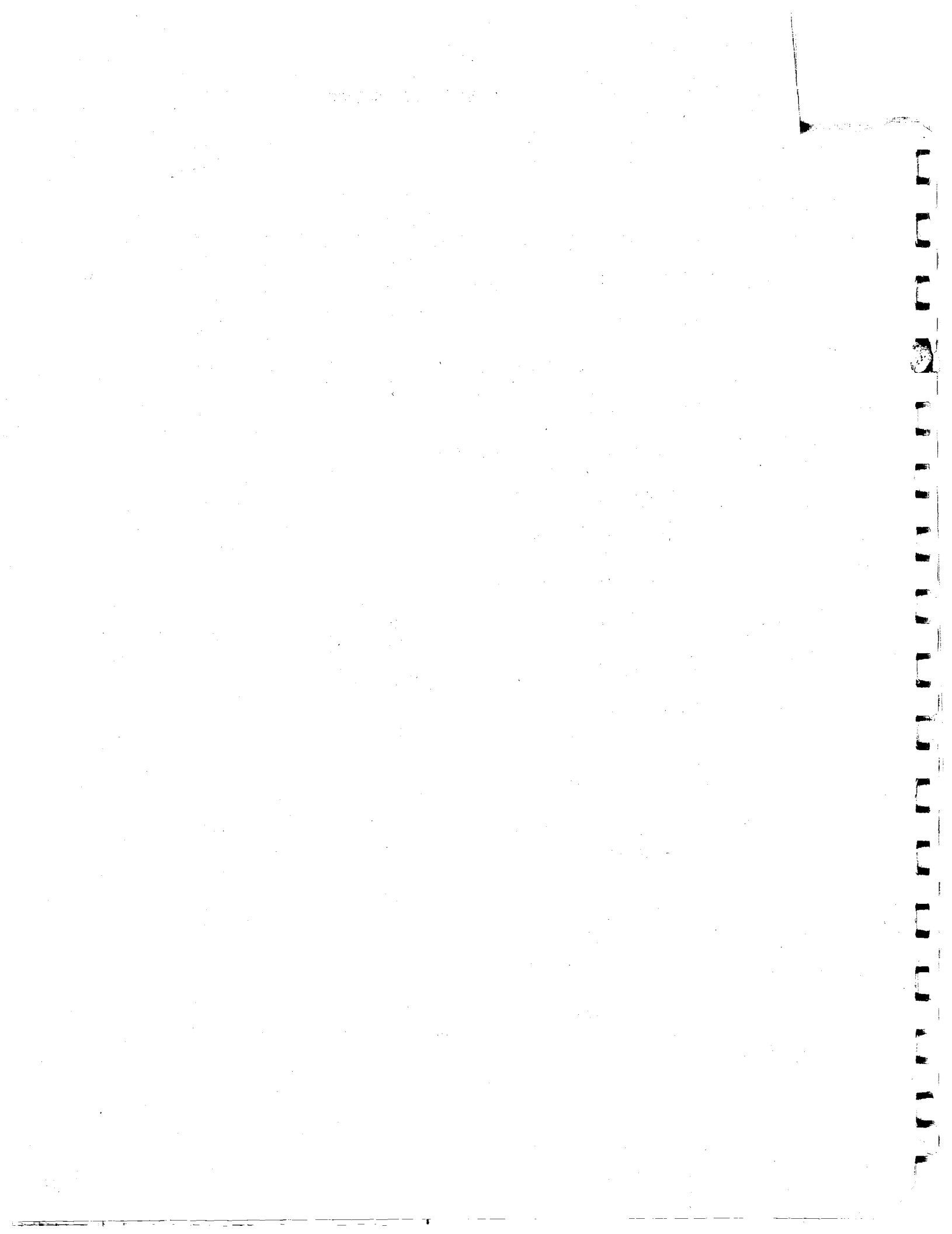


TABLE OF CONTENTS

	<u>Page</u>
1. Introduction	1
2. General Design Philosophy	2
2.1 Testing Function	2
2.2 Diagnostic Function	3
2.3 Assumptions	4
2.4 Operator Communications	5
3. Operating Instructions	6
3.1 Program Loading	6
3.2 Start-Up Procedure	7
3.3 Options	8
4. Stop Codes List	10
5. Program Description	122
Appendix A Flow Charts	A
Appendix B Program Listing	B-0



1. Introduction

The maintenance program described herein has been designed to:

- (a) thoroughly test the Linear Function Interpolator, and
- (b) to be used as a tool in isolating a detected fault.

The programs then, can be used by maintenance personnel for the routine exercising of the LFI during scheduled (preventive) maintenance periods or troubleshooting the LFI after a malfunction has been noted in order to minimize time-to-repair.

To accomplish these objectives the GP computer is used to test and diagnose the LFI for the purpose of isolating a defect to a small number of logic cards (S-Pacs) and with a minimum of operator participation.

2.0 General Design Philosophy

The maintenance program may be logically separated into two functions: a testing function and a diagnostic function. A testing function is defined as those program steps needed to determine whether a particular unit is or is not operating properly. The term "unit" is used here quite generally, and may denote a register, an instruction, a flip-flop, a gate, etc. The operation of a testing function results in one of two conditions: either the unit has successfully passed all tests performed by the subroutines, indicating that the unit is in proper operation condition; or it has failed one or more of the tests, indicating that a defect exists. A diagnostic function is defined as those program steps required to isolate the cause of a detected failure within a unit and provide this detailed information to the maintenance technician.

2.1 Testing Function

The testing function has been designed to detect failures in gates and/or flip-flops which exhibit symptoms of being improperly on or improperly off. The testing function exercises, in sequence, each unit of the Mark I to determine whether it is functioning properly. The performance of testing functions through the use of programs implies that certain portions of the equipment are used

to test other portions. The logic used to test each capability is carefully limited to the minimum essential for the performance of the test. The underlying philosophy is that any given gate or flip-flop is suspect to failure unless previously tested by the program. The performance of the tests have, therefore, been sequenced so as to assure that only features that have already been proven reliable will be used for further testing of other capabilities.

2.2 Diagnostic Function

The diagnostic function is initiated whenever a failure is detected by the testing function. The diagnostic functions are those program steps required to isolate the cause of a detected failure and provide this information to the maintenance personnel. The technique used in isolating a fault is similar to that used by maintenance personnel for manual diagnosis - except the order is reversed. In manual diagnosis the engineer notes the symptoms or effect and traces back through the logic diagrams to determine those S-Pacs which if faulty, could be the cause. The designer of a programmed diagnostic, on the other hand, assumes a component is failing then traces forward through the logic diagrams to determine the effect. The computer is then programmed to "look" for the effect, and remember the cause. In most (almost all) instances more than one fault can cause identically the same effect. In order to keep the number of suspect

gates and/or flip-flops to a minimum the program makes use of a second technique which is essentially a process of elimination. The program eliminates suspected elements by noting those which were previously tested and by trying other operations which use the remaining elements. In this way if a particular element or group of elements is used for more than one operation, it is possible to further isolate a defect to the element(s) which causes two operations to fail.

2.3 Assumptions

In the interest of reducing the task to manageable proportions the following assumptions have been adhered to:

- (a) The program is not responsible for the diagnosis of transient or intermittent type failures. If a transient or intermittent type failure occurs during execution of the program it will be detected; that is the program will not come to its normal error free conclusion - it will come to an error stop, however the diagnosis will not be correct. It is for this reason that the program should be executed more than once (see looping options Sec. 3.3) when an error stop occurs, for transient or intermittent type failures are characterized by yielding different diagnosis (varying stop codes).

- (b) Any detected errors are caused by component failures only. The assumption is made that the computer has been initially "de-bugged" and therefore eliminates the possibility of design or wiring errors.
- (c) No more than one defect is present. It is expected that frequent exercise of the computer by means of the maintenance program will result in detection of a defect before another defect can occur. It should be noted, however, that if a second defect is present, it will not hamper diagnosis of the first defect providing the diagnosis of the first defect is independent of the circuit containing the second defect.

2.4 Operator Communications

Whenever operator action is required the program executes a STOP instruction or comes to a LFI FE STOP. At this time any information which must be conveyed to operating personnel is done so via the System Instruction nixies or the System Address nixies of the Mark I console. The address portion of each STOP instruction has been uniquely coded and is defined in the Stop Codes List. The address at which a LFI FE STOP occurs also corresponds to a unique definition in the Stop Codes List. A detailed description on the use of Stop Codes is contained in Section 4,

3. Operating Instructions for LFI Diagnostic Program

3.1 Program Loading

1. Enter Single Step Mode at location 00 0037.
2. Mount the LFI Program Tape.
3. Turn Drum Write ON.
4. Turn Reader Power ON.
5. Select Short Block Mode.
6. Select Write/Check Mode.
7. The 2^{10} switch may be in either position.
8. Depress DP LOAD button.
9. Set Drum Address to 170.
10. Master Clear.
11. Depress START LOAD.
12. After the Photo Electric reader stops, depress GP LOAD button.
13. Set Drum Address to 000.
14. Master Clear.
15. Depress START LOAD.
16. After the Photo Electric reader stops, depress LFI LOAD button.
17. Master Clear.
18. Depress START LOAD.
19. After the Photo Electric reader stops, turn Drum Write OFF.

3.2 Start-Up Procedure

1. Place Conditional Stop and Execute Failure OFF.
If any stop conditions are present, depress Operation Continue.
2. Continuous Replace location 00 0014 with the instruction 12 0000.
3. Depress the NORMAL RUN/SINGLE STEP button twice;
i. e. put the computer into Normal Run Mode and then back into Single Step Mode.
4. Check the following indicators on the LFI console.
If No. Vars. \neq 00 see Stop Code 2750.
If Zone Counter \neq 000 see Stop Code 2751.
If Priority Register \neq 0000 see Stop Code 2752.
If Index Register X, Y, Z \neq 000, see Stop Code 2753.
5. Place Conditional Stop ON.
6. Enable LFI Execute Failure Test as follows:
 - (a) Place Execute Failure ON.
 - (b) Depress LFI button under Execute Failure.
 - (c) Clear Failure Occurred Indicator by depressing Operation Continue.
7. Place Instruction Replace OFF.
8. Depress NORMAL RUN.
9. If the MARK I stops with 27 2000 in the System Instruction Nixies, no failures have been detected in the LFI. The logic necessary to generate an LFI FE stop, however, has not been tested. This may now be tested by selecting option # 4. Options # 1, # 3, or # 4 may be selected at this time.

If the MARK I stops with the Failure Occurred Indicator ON or with a 27 XXXX where XXXX \neq 2000 in the System Instruction Nixies, a failure has been detected. For a diagnosis of faults causing stops of the first type, see the LFI FE Stop in Section 4

with the Stop Address as displayed in the System Address Nixies. For a diagnosis of faults causing stops of the second type, see Stop Code XXXX in Section 4. After either of these types of stops, looping option # 2 should be selected.*

3.3 Options

1. Execute Continuously (this option may be initiated only when the Mark I stops with a 27 2000 or upon successful conclusion of option # 4).

- (a) Continuous Replace location 00 7701 with the instruction 12 0000.
- (b) Depress Operation Continue.

The program can be conveniently stopped by turning Instruction Replace OFF.

2. Execute Once More (this option may be initiated at any time).

- (a) Place 00 0037 in the Single Step Address Switches.
- (b) Enter Single Step Mode.
- (c) Place Conditional Stop and Execute Failure OFF.
- (d) Depress Operation Continue
- (e) Go to Step 2 of the Start-Up Procedure.

3. No Error-Execute Once More (this option may be initiated only when the Mark I stops with a 27 2000 or upon successful conclusion of option # 4).

- (a) Depress Operation Continue.

* The program should always be executed at least twice whenever an error stops occurs. This will establish whether the fault is transient or intermittent in which case the diagnosis is not reliable.

4. LFI FE Stop Circuit Test. This option may be initiated only when the Mark I has stopped with a 27 2000. There are a series of four programmed LFI Execute Failure stops which will test the LFI FE Stop circuitry.

1. Single replace location 00 7702 with the instruction 12 0000.
2. Depress Operation Continue.
3. The computer should stop almost immediately at Fast Band location 7707 with the Failure Occurred Indicator ON. If this does not take place, see Stop Code 2754.
4. Depress Operation Continue.
10
5. The computer should stop almost immediately at Fast Band location 7723 with the Failure Occurred Indicator ON. If this does not take place, see Stop Code 2755.
6. Depress Operation Continue.
24
7. The computer should stop almost immediately at Fast Band location 7741 with the Failure Occurred Indicator ON. If this does not take place, see Stop Code 2756.
8. Depress Operation Continue.
42
9. The computer should stop almost immediately at Fast Band location 7761 with the Failure Occurred Indicator ON. If this does not take place, see Stop Code 2757.
10. The complete LFI has now been tested and no failures have been detected. At this time options # 1 or # 3 may be selected.

4. Stop Codes List

Upon detection and diagnosis of a failure the program will stop. If the stop is due to the execution of a STOP instruction, the address portion of the stop instruction is uniquely coded and can be found in the list which follows. As a cross check the list also provides the location at which the stop should occur. If the stop is due to an LFI FE STOP, the stop code is written as LFI FE and the location of the stop provides a unique listing. Note that the band address listed, is the physical band address and bears no relationship to the sequence in which the bands are executed. In some instances the fault is not detected by the program but is detected by a manual procedure, in this case a drum address is not applicable, and is indicated as N/A. The diagnosis should not be relied upon if the stop code occurs at a location different than that listed. A more detailed description of this condition appears in section 5.

The diagnosis specifies the S-Pac(s), the gate or flip-flop on the S-Pac, the card type and the logic drawing number which contains the S-Pac. For example:

5C19 (9, 13) DN-30, 041-3

indicates that the gates associated with pins 9 and 13 of S-Pac 5C19 are suspect. Note that the pin numbers are used only to identify the suspect gate or flip-flop on the card. DN-30 is the card type and the logic is shown on drawing number 041, sheet 3.

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
LFI FE	Any Address ≠ 00 7707 ≠ 00 7723 ≠ 00 7741 ≠ 00 7761 and not listed below with an LFI FE Stop	4F14 (13, 17) DN-30, 054 Also console logic associated with the LFI FE Stop
LFI FE	00 0037	If Priority Reg. = 0000 4F14 (17) DN-30, 054 If Priority Reg. = 1111 4R2 (14) DC-30, 075
LFI FE	00 0073	If No. Vars. = 00 4R2 (6) DC-30, 075 If No. Vars. = 11 4F14 (13, 17) DN-30, 054 4R6 (27, 16) DI-30, 075 4R3 (6) DI-30, 075
LFI FE	00 0076	If Zone Counter = 000 4R1 (9) BC-30, 075 4R7 (27, 33) DI-30, 075 4M (CR4) , 075 If Zone Counter = 010 4R2 (6) DC-30, 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
LFI FE	00 0100	4R1 (33, 9) BC-30, 075 4R7 (27, 33) DI-30, 075 4M (CR4) , 075
LFI FE	00 0102	If Zone Counter = 100 4R2 (30, 6) DC-30, 075 If Zone Counter = 000 4R1 (25) BC-30, 075 4M (CR3) , 075 If Zone Counter = 101 4R4 (32) DN-30, 075 4R1 (33) BC-30, 075
LFI FE	00 0111	If Priority Reg. = 1001 4R3 (34, 33, 7) DI-30, 075 4R2 (18) DC-30, 075 4F18 (13) DN-30, 054 4F17 (28) FF-30, 054 If Priority Reg. = 0101 4R6 (34) DI-30, 075 4R3 (27) DI-30, 075 4R2 (22) DC-30, 075 4F18 (21) DN-30, 054 4F17 (23) FF-30, 054 If Priority Reg. = 0011 4R6 (33) DI-30, 075 4R3 (12) DI-30, 075 4R2 (26) DC-30, 075 4F16 (13) DN-30, 054 4F17 (16) FF-30, 054

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
LFI FE (Cont'd)	00 0111	If Priority Reg. = 1111 4R3 (34) DI-30, 075 5D24 (35) , 125
		If Priority Reg. = 0001 4F14 (9, 13) DN-30, 054
		If Priority Reg. = 1011 4R1 (27) BC-30, 075
LFI FE	00 0123	4R1 (27) BC-30, 075
LFI FE	00 0170	4R1 (27) BC-30, 075
LFI FE	00 0262	4F17 (11) FF-30, 054 4F16 (17) DN-30, 054 4R4 (21) DN-30, 075
LFI FE	00 0670	4R4 (29) DN-30, 075
LFI FE	00 0672	4R7 (34) DI-30, 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
LFI FE	00 1073	4R3 (7, 33) DI-30, 075 4R7 (33) DI-30, 075
LFI FE	00 1075	If Priority Reg. = 1101 4R3 (7, 33) DI-30, 075 4R7 (33) DI-30, 075 If Priority Reg. = 0101 4F17 (23) FF-30, 054 If Priority Reg. = 0011 4F17 (16) FF-30, 054 4F18 (35) DN-30, 054 If Priority Reg. = 0111 4F18 (17) DN-30, 054
LFI FE	00 1117	If Priority Reg. = 0101 4R2 (22) DC-30, 075 If Priority Reg. = 0011 4F16 (9) DN-30, 054 4F17 (16) FF-30, 054

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2000	00 7701	The LFI diagnostic has been successfully completed. The logic necessary to generate an LFI FE stop, however, has not been tested. This may now be tested by selecting option # 4. You may at this time select option # 1, # 3, or # 4 as described in the operating instructions.
2001	00 0072	4F15 (17) DN-30, 054
2002	00 0110	4R3 (16) DI-30, 075 4F15 (17) DN-30, 054
2003	00 0116	If Zone Counter = 101 4R4 (13) DN-30, 075 If Zone Counter = 111 4R7 (12) DI-30, 075 4R5 (33) FF-30, 075
2004	00 0122	Possible fault in INT 3 bit from drum 2FP12-J

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2005	00 0127	If Zone Counter = 110 4R4 (13) DN-30, 075 If Zone Counter = 111 4R6 (7) DI-30, 075 4R5 (27) FF-30, 075
2006	00 0133	Possible fault in INT 4 bit from drum 2FP12-L
2007	00 0210	4F28 (23) DI-30, 081 3D9 (26) DI-30, 437-3
2010	00 0214	4F28 (6) DI-30, 081 3D8 (10) DN-30, 437-3

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2011	00 0261	LFI does not execute a store into core memory. (a) If Zone Counter = 000 4R6 (6, 12) DI-30, 075 4R1 (33) BC-30, 075 4L2 (35) , 075 4R7 (34) DI-30, 075 6C4 (33) , 231-1 (b) If (Zone Counter = 111) · (Priority Reg. = 0000) · (No Vars. = 00) 4R3 (34) DI-30, 075 4R2 (14) DC-30, 075 4N13 (11) FF-30, 126-3 (c) If (Zone Counter = 111) · (Priority Reg. = 0001) 4R4 (13) DN-30, 075 (d) If (Zone Counter = 111) · (Priority Reg. = 0000) · (No Vars. = 11) Single step advance to location 00 0277 1. If Priority Reg. bit 7/0 = 0 4F17 (11) FF-30, 054 4F18 (9) DN-30, 054 4F16 (17) DN-30, 054 4R4 (21, 13) DN-30, 075 2. If Priority Reg. bit 7/0 = 1 4F16 (35) DN-30, 054 4F15 (17, 21) DN-30, 054 4F14 (21, 25) DN-30, 054 4F9 (13, 17, 9) DN-30, 054 4F11 (18) PA-30, 054 4F25 (11) FF-30, 054 4R3 (16) DI-30, 075 3D9 (11) DI-30, 437-3

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2011 (Cont'd)	00 0261	(e) If Zone Counter \neq 000 or 111 4N3 (33, 25) BC-30, 075 4R1 (27, 6, 20) BC-30, 075 4M (CR5) , 075 (f) Also it is possible that LFI band 1 or LFI band 3 is not being executed con- currently with the GP Fast Band
2012	00 0305	4R1 (20) BC-30, 075
2013	00 0360	Possible fault in INT 8 bit from drum 2FP12-V
2014	00 0370	4F28 (7) DI-30, 081
2015	00 0367	Possible fault in INT 1 bit from drum 2FP12-D
2016	00 0400	4F28 (16) DI-30, 081

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2017	00 0377	Possible fault in INT 2 bit from drum 2FP12-F
2020	00 0410	4F28 (12) DI-30, 081 3D8 (18) DN-30, 437-3
2021	00 0407	Possible fault in INT 5 bit from drum 2FP12-N
2022	00 0420	4F28 (27) DI-30, 081 3D8 (14) DN-30, 437-3
2023	00 0417	Possible fault in INT 6 bit from drum 2FP12-R
2024	00 0440	4F28 (33) DI-30, 081 3D6 (6) DN-30, 437-3

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2025	00 0437	Possible fault in INT 7 bit from drum 2FP12-T
2026	00 0450	4F28 (34) DI-30, 081 3D6 (14) DN-30, 437-3
2027	00 0447	Possible fault in INT 8 bit from drum 2FP12-V
2030	00 0463	Possible fault in INT 8 bit from drum 2FP12-V
2031	00 0473	4F21 (17) DN-30, 081 4F27 (22) DC-30, 081 4F26 (12, 16) DC-30, 081 3D6 (18) DN-30, 437-3
2032	00 0503	Possible fault in INT 9 bit from drum ZFP12-X

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2033	00 0513	Possible fault in INT 8 bit from drum 2FP12-V
2034	00 0523	4F12 (35) DN-30, 081 4F21 (21) DN-30, 081 4F27 (6) DC-30, 081 4F26 (6) DI-30, 081 3D6 (10) DN-30, 437-3
2035	00 0533	Possible fault in INT 10 bit from drum ZFP12-Z
2036	00 0543	Possible fault in INT 8 bit from drum 2FP12-V
2037	00 0553	Possible fault in INT 9 bit from drum ZFP12-X
2040	00 0563	See Stop Code # 2035

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2041	00 0562	If Index Reg. X, Y, Z = 000 4F27 (26) DC-30, 081 4F26 (34) DI-30, 081 If Index Reg. X, Y, Z = 100 4F26 (27) DI-30, 081 If Index Reg. X, Y, Z = 010 4F26 (33) DI-30, 081 If Index Reg. X, Y, Z = 001 4F26 (7) DI-30, 081
2042	00 0573	See Stop Code # 2037
2043	00 0603	See Stop Code # 2040
2044	00 0602	See Stop Code # 2041
2045	00 0613	See Stop Code # 2037
2046	00 0633	See Stop Code # 2040

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2047	00 0632	See Stop Code # 2041
2050	00 0643	See Stop Code # 2037
2051	00 0653	See Stop Code # 2040
2052	00 0652	See Stop Code # 2041
2053	00 0702	4R5 (23) FF-30, 075 4R6 (7) DI-30, 075
2054	00 0706	Possible fault in INT 4 bit from drum 2FP12-L
2055	00 0713	4R5 (28) FF-30, 075 4R7 (12) DI-30, 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2056	00 0717	Possible fault in INT 3 bit from drum 2FP12-J
2057	00 0742	4F26 (6) DI-30, 081 4F27 (6) DC-30, 081 4F24 (13, 21) DN-30, 081 4F23 (13, 21) DN-30, 081 4F22 (13, 21) DN-30, 081 4F21 (13, 21) DN-30, 081 4F12 (32) DN-30, 081
2060	00 0746	4F26 (12, 16) DI-30, 081 4F27 (18, 22) DC-30, 081 4F24 (9, 17) DN-30, 081 4F23 (9, 17) DN-30, 081 4F22 (9, 17) DN-30, 081 4F21 (9, 17) DN-30, 081
2061	00 0752	4F28 (34) DI-30, 081
2062	00 0761	Possible fault in INT 7 bit from drum 2FP12-T

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2063	00 0762	4F28 (33) DI-30, 081
2064	00 0771	Possible fault in INT 6 bit from drum 2FP12-R
2065	00 0772	4F28 (27) DI-30, 081
2066	00 1001	Possible fault in INT 5 bit from drum 2FP12-N
2067	00 1002	4F28 (12) DI-30, 081
2070	00 1006	4F28 (6) DI-30, 081
2071	00 1007	4F28 (23) DI-30, 081

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2072	00 1047	Possible fault in INT 2 bit from drum 4FP12-F
2073	00 1050	4F28 (16) DI-30, 081
2074	00 1055	Possible fault in INT 1 bit from drum 2FP12-D
2075	00 1056	4F28 (7) DI-30, 081
2076	00 1111	If No. Vars. = 01 4R1 (6) BC-30, 075 4R7 (33, 27) DI-30, 075 4R4 (29) DN-30, 075 If No. Vars. = 11 4R2 (6, 14) DC-30, 075 4N13 (11) FF-30, 126-3 If No. Vars. = 00 4R6 (23) DI-30, 075 4R2 (10) DC-30, 075 4L2 (21) DN-30, 075 4M (CR6) , 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2077	00 1112	4R3 (7, 33) DI-30, 075 4R7 (33) DI-30, 075 4R1 (6) BC-30, 075
2100	00 1125	4R3 (27) DI-30, 075
2101	00 1135	4R7 (34) DI-30, 075 4R2 (6) DC-30, 075
2102	00 1136	4R3 (27) DI-30, 075 4R6 (34) DI-30, 075 4R7 (34, 27) DI-30, 075
2103	00 1165 00 1171 00 1175 00 1215	4R2 (14) DC-30, 075 4N13 (11) FF-30, 126-3
2104	00 1176	4R3 (27) DI-30, 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2105	00 1441	(a) If IL Flip Flop of Cycle Counter = 1 4R9 (20) BC-30, 057-2 4R7 (6, 7) DI-30, 057-1,2 4K10 (32, 26) PA-30, 057-2, 046-1 4R12 (6, 18) DC-30, 057-2 4R11 (8) PA-30, 057-2 4H18 (27) BC-30, 047-1 4R14 (14, 6) DC-30, 057-1 4R16 (8) PA-30, 057-1 (b) If (IL Flip Flop of Cycle Counter = 0) and (Word Counter > 001) 4K10 (26) PA-30, 046-1 4H28 (27, 20, 18) BC-30, 046-1 4K8 (23) FF-30, 046-1 4K11 (34) DI-30, 046-1 (c) If (IL Flip Flop of Cycle Counter = 0) and (Y Reg. 2^{-1} , 2^{-2} , $2^{-3} \neq 000$) 4H19 (11) FF-30, 047-1 4H14 (28, 11) FF-30, 047-1 4H15 (7, 16, 12) DI-30, 047-1 4F11 (26) PA-30, 054 4F13 (21) DN-30, 054 (d) If (IL Flip Flop of Cycle Counter = 0) and (Curve Counter $\neq 000$) 4K10 (26) PA-30, 046-1 4H18 (18, 20, 27) BC-30, 047-1 4K8 (23) FF-30, 046-1 4K11 (34) DI-30, 046-1 (e) If (IL Flip Flop of Cycle Counter = 0) and (Z Reg. 2^{-1} , 2^{-2} , $2^{-3} \neq 000$) 4H7 (16, 28, 11) FF-30, 048-1 4H6 (27, 23, 34) DI-30, 048-1 4F11 (32) PA-30, 054 4F15 (13) DN-30, 054

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2105 (Cont'd)	00 1441	(f) If (IL Flip Flop of Cycle Counter = 0) and (Page Counter \neq 000) 4K10 (26) PA-30, 046-1 4H9 (18, 20, 27) DC-30, 048-1 (g) If (IL Flip Flop of Cycle Counter = 0) and (Cycle Counter $2^2 = 1$) 4R9 (18) BC-30, 057-2 (h) If IL Flip Flop of Cycle Counter = 0 but (b), (c), (d), (e), (f), or (g) are not true 4H26 (16, 12, 33, 27, 7, 6) DI-30, 046-1 4H27 (21) DN-30, 046-1 4F10 (9) DN-30, 046-1 4H16 (16, 12, 33, 27, 7, 6) DI-30, 047-1 4H17 (13, 21) DN-30, 047-1, 048-1 4H8 (16, 12, 33, 27, 7, 6) DI-30, 048-1 4K7 (13, 21, 9, 17) DN-30, 076 4K9 (7) DI-30, 076 4K8 (33) FF-30, 076 4R10 (33) DI-30, 076 4R6 (27) DI-30, 075 4R3 (6) DI-30, 075 5C26 (24) BO, 057-1 4R13 (6) DI-30, 057-1 4R14 (14) DC-30, 057-1 4R15 (33, 34) DI-30, 057-1 4R5 (12) FF-30, 057-2
2106	00 1442	(a) If (IL Flip Flop of Cycle Counter = 1) and F_N Register = 00000) 4L28 (28) FF-30, 126-1 4L27 (27, 23) DI-30, 126-1 4L25 (9) DN-30, 126-1 4L22 (30) FCG, 126-1 4N28 (23) DI-30, 073-1 4R11 (8) PA-30, 057-2 4K10 (26) PA-30, 046-1 4H18 (27) BC-30, 047-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2106 (Cont'd)	00 1442	(b) If (IL Flip Flop of Cycle Counter = 1) and F_N Register \neq 00000) 4R9 (20) BC-30, 057-2 4R7 (6, 7) DI-30, 057-1,2 4K10 (32, 26) PA-30, 057-2, 046-1 4R12 (6, 18) DC-30, 057-2 4R11 (8) PA-30, 057-2 4H18 (27) BC-30, 047-1
		(c) If (IL Flip Flop of Cycle Counter = 0) and (Word Counter $>$ 010) See Stop Code #2105 (b)
		(d) If (IL Flip Flop of Cycle Counter = 0) and (Y Reg. 2^{-1} , 2^{-2} , $2^{-3} \neq$ 000) See Stop Code #2105 (c)
		(e) If (IL Flip Flop of Cycle Counter = 0) and (Curve Counter \neq 000) See Stop Code #2105 (d)
		(f) If (IL Flip Flop of Cycle Counter = 0) and (Z Reg. 2^{-1} , 2^{-2} , $2^{-3} \neq$ 000) See Stop Code #2105 (e)
		(g) If (IL Flip Flop of Cycle Counter = 0) and (Page Counter \neq 000) See Stop Code #2105 (f)
		(h) If (IL Flip Flop of Cycle Counter = 0) and (Cycle Counter $2^2 = 1$) See Stop Code #2105 (g)
		(i) If IL Flip Flop of Cycle Counter = 0 but (c), (d), (e), (f), (g), or (h) are not true 4R14 (14) DC-30, 057-1 Also See Stop Code #2105 (h)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2107	00 1443	(a) If Word Counter > 011 See Stop Code # 2105 (b) (b) If Y Reg. 2^{-1} , 2^{-2} , $2^{-3} \neq 000$ See Stop Code #2105 (c) (c) If Curve Counter $\neq 000$ See Stop Code #2105 (d) (d) If Z Reg. 2^{-1} , 2^{-2} , $2^{-3} \neq 000$ See Stop Code #2105 (e) (e) If Page Counter $\neq 000$ See Stop Code #2105 (f) (f) If Cycle Counter $2^2 = 1$ See Stop Code #2105 (g) (g) If neither (a), (b), (c), (d), (e), (f) nor (g) are true 4K10 (26) PA, 046-1 4H18 (27) BC-30, 047-1 4N6 (8) PA-35, 132-2 4R11 (8) PA-30, 057-2 Also See Stop Code #2105 (h)
2110	00 1451	4N26 (28) FF-30, 073-1 4N28 (23) DI-30, 073-1 4R13 (33) DI-30, 057-2 4R7 (23, 16) DI-30, 057-2 4R8 (17) BO, 057-2 4R10 (34) DI-30, 057-2 4R12 (30, 33) DC-30, 057-2 4R11 (18) PA-30, 057-2 4K10 (26) PA-30, 046-1 4H18 (27) BC-30, 047-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2112	00 1540	(a) 4N19 (23) DI-30, 073-2 4L12 (27) DI-30, 126-2 (b) 4R10 (34) DI-30, 057-2 4R12 (30, 33) DC-30, 057-2 4R7 (23, 16) DI-30, 057-2
2113	00 1560	4N20 (23) DI-30, 073-2 4L20 (12) DI-30, 126-2 Also See Stop Code #2112 (b)
2114	00 1600	4N21 (6) DI-30, 073-1 4L20 (6) DI-30, 126-2 Also See Stop Code #2112 (b)
2115	00 1620	4N21 (23) DI-30, 073-1 4L20 (34) DI-30, 126-1 Also See Stop Code #2112 (b)
2116	00 1640	4N23 (23) DI-30, 073-1 4L20 (27) DI-30, 126-1 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2117	00 1660	4N25 (23) DI-30, 073-1 4L27 (12) DI-30, 126-1 Also See Stop Code #2112 (b)
2120	00 1700	4N27 (6) DI-30, 073-1 4L27 (6) DI-30, 126-1 Also See Stop Code #2112 (b)
2121	00 1720	4N27 (23) DI-30, 073-1 4L27 (34) DI-30, 126-1 Also See Stop Code #2112 (b)
2122	00 1740	4N28 (16, 23) DI-30, 073-1 4L27 (27) DI-30, 126-1 4L25 (9) DN-30, 126-1 Also See Stop Code #2112 (b)
2123	00 2026	(a) If F _N Register ≠ 0 4K26 (27) DI-30, 055 4K27 (33) FF-30, 055 4R28 (23, 33) DI-30, 068 (b) If Accumulator Rank B = 0 4N28 (27) DI-30, 073-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2123 (Cont'd)	00 2026	(c) If neither of the above conditions are true 4L24 (12) DI-30, 126-1 4L25 (9) DN-30, 126-1 4L27 (27) DI-30, 126-1 4N28 (23) DI-30, 073-1
2124	00 2036	4N28 (23, 16) DI-30, 073-1 4N26 (28) FF-30, 073-1
2125	00 2037	4L25 (9) DN-30, 126-1 4L27 (27) DI-30, 126-1 4N28 (23) DI-30, 073-1 4K10 (8) PA-30, 076 4K9 (6) DI-30, 076
2126	00 2047	(a) If F_N Register $\neq 0$ 4K26 (34) DI-30, 055 4K27 (27) FF-30, 055 4R28 (27, 34) DI-30, 068 (b) If Accumulator Rank B = 0 4N27 (27) DI-30, 073-1 (c) If neither of the above conditions are true 4L24 (16) DI-30, 126-1 4L27 (27, 34) DI-30, 126-1 4L25 (9) DN-30, 126-1 4N27 (23) DI-30, 073-1 4N28 (23) DI-30, 073-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2127	00 2057	(a) If (Acc. Rank B $2^{-1} = 0$) and (Adder $2^{-1} = 1$) 4L24 (27, 7) DI-30, 126-1 4L26 (16, 33) DI-30, 126-1 4K28 (27) DI-30, 055 4L22 (28, 29) FCG, 126-1 (b) If (a) condition is not true 4L26 (23) DI-30, 126-1 4L27 (33, 34, 27) DI-30, 126-1 4L28 (23) FF-30, 126-1 4L25 (9) DN-30, 126-1 4N27 (23) DI-30, 073-1 4N28 (23) DI-30, 073-1
2130	00 2070	4N27 (23, 16) DI-30, 073-1 4N26 (23) FF-30, 073-1
2131	00 2071	4N27 (23) DI-30, 073-1 4N28 (23) DI-30, 073-1 4L27 (27, 34) DI-30, 126-1 4L25 (9) DN-30, 126-1 4N6 (8) PA-35, 132-2 Also See Stop Code #2122 (b)
2132	00 2111	(a) If F_N Register $\neq 0$ 4K26 (6) DI-30, 055 4K27 (12) FF-30, 055 4R28 (6, 7) DI-30, 068

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2132 (Cont'd)	00 2111	(b) If Accumulator Rank B = 0 4N25 (27) DI-30, 073-1 (c) If neither of the above conditions are true 4L23 (23) DI-30, 126-1 4L27 (6, 34) DI-30, 126-1 4N27 (6, 23) DI-30, 073-1 Also See Stop Code #2112 (b)
2133	00 2122	(a) If (Acc. Rank B $2^{-2} = 0$) and (Adder $2^{-2} = 1$) 4L24 (34, 6) DI-30, 126-1 4L26 (12, 34) DI-30, 126-1 4K28 (34) DI-30, 055 4L22 (10, 28) FCG, 126-1 (b) If (a) condition is not true 4L26 (27) DI-30, 126-1 4L27 (6, 7, 34) DI-30, 126-1 4L28 (16) FF-30, 126-1 4N27 (6, 23) DI-30, 073-1 Also See Stop Code #2112 (b)
2134	00 2142	4N25 (7) DI-30, 073-1 4N26 (16) FF-30, 073-1 4N27 (6) DI-30, 073-1 Also See Stop Code #2112 (b)
2135	00 2143	4N27 (6, 23) DI-30, 073-1 4L27 (6, 34) DI-30, 126-1 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2136	00 2153	(a) If F_N Register $\neq 0$ 4K26 (12) DI-30, 055 4K27 (6) FF-30, 055 4R28 (16, 12) DI-30, 068 (b) If Accumulator Rank B = 0 4N24 (27) DI-30, 073-1 (c) If neither of the above conditions are true 4L17 (16) DI-30, 126-1 4L27 (6, 12) DI-30, 126-1 4N25 (23) DI-30, 073-1 4N27 (6) DI-30, 073-1 Also See Stop Code #2112 (b)
2137	00 2164	(a) If (Acc. Rank B $2^{-3} = 0$) and (Adder $2^{-3} = 1$) 4L23 (33, 27, 6, 7) DI-30, 126-1 4K28 (6) DI-30, 055 4L22 (9, 10) FCG, 126-1 (b) If (a) condition is not true 4L23 (12) DI-30, 126-1 4L27 (12, 16, 6) DI-30, 126-1 4L28 (11) FF-30, 126-1 4N25 (23) DI-30, 073-1 4N27 (6) DI-30, 073-1 Also See Stop Code #2112 (b)
2140	00 2175	4N25 (16, 23) DI-30, 073-1 4N26 (11) FF-30, 073-1 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2141	00 2176	4N25 (23) DI-30, 073-1 4N27 (6) DI-30, 073-1 4L27 (6, 12) DI-30, 126-1 Also See Stop Code #2112 (b)
2142	00 2206	(a) If F_N Register $\neq 0$ 4K26 (23) DI-30, 055 4K24 (33) FF-30, 055 4R25 (23, 33) DI-30, 068 (b) If Accumulator Rank B = 0 4N24 (16) DI-30, 073-1 (c) If neither of the above conditions are true 4L17 (12) DI-30, 126-1 4L20 (27) DI-30, 126-1 4L27 (12) DI-30, 126-1 4N23 (23) DI-30, 073-1 4N25 (23) DI-30, 073-1 Also See Stop Code #2112 (b)
2143	00 2217	(a) If (Acc. Rank B $2^{-4} = 0$) and (Adder $2^{-4} = 1$) 4L17 (34, 6) DI-30, 126-1 4L19 (16, 33) DI-30, 126-1 4K28 (12) DI-30, 055 4L22 (8, 9) FCG, 126-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2143 (Cont'd)	00 2217	(b) (f (a) condition is not true 4L19 (23) DI-30, 126-1 4L20 (23, 27) DI-30, 126-1 4L21 (28) FF-30, 126-1 4L27 (12) DI-30, 126-1 4N23 (23) DI-30, 073-1 4N25 (23) DI-30, 073-1 Also See Stop Code #2112 (b)
2144	00 2230	4N22 (28) FF-30, 073-1 4N23 (16, 23) DI-30, 073-1 Also See Stop Code #2112 (b)
2145	00 2231	4N23 (23) DI-30, 073-1 4N25 (23) DI-30, 073-1 4L20 (27) DI-30, 126-1 4L27 (12) DI-30, 126-1 Also See Stop Code #2112 (b)
2146	00 2241	(a) If F_N Register $\neq 0$ 4K24 (27) FF-30, 055 4K26 (33) DI-30, 055 4R25 (27, 34) DI-30, 068 (b) If Accumulator Rank B = 0 4N23 (27) DI-30, 073-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2146 (Cont'd)	00 2241	(c) If neither of the above conditions are true 4L15 (16) DI-30, 126-2 4L20 (27, 34) DI-30, 126-1 4N21 (23) DI-30, 073-1 4N23 (23) DI-30, 073-1 Also See Stop Code #2112 (b)
2147	00 2252	(a) If (Acc. Rank B $2^{-5} = 0$) and (Adder $2^{-5} = 1$) 4L17 (27, 7) DI-30, 126-1 4L19 (12, 34) DI-30, 126-1 4K25 (27) DI-30, 055 4L22 (5, 8) FCG, 126-1,2 (b) If (a) condition is not true 4L19 (27) DI-30, 126-1 4L20 (33, 34, 27) DI-30, 126-1 4L21 (23) FF-30, 126-1 4N21 (23) DI-30, 073-1 4N23 (23) DI-30, 073-1 Also See Stop Code #2112 (b)
2150	00 2263	4N21 (16, 23) DI-30, 073-1 4N22 (23) FF-30, 073-1 Also See Stop Code #2112 (b)
2151	00 2264	4N21 (23) DI-30, 073-1 4N23 (23) DI-30, 073-1 4L20 (27, 34) DI-30, 126-1 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2152	00 2304	(a) If F_N Register $\neq 0$ 4K24 (12) FF-30, 055 4K26 (7) DI-30, 055 4R25 (6, 7) DI-30, 068 (b) If Accumulator Rank B = 0 4N21 (27) DI-30, 073-1 (c) If neither of the above conditions are true 4L15 (12) DI-30, 126-2 4L20 (34, 6) DI-30, 126-1, 2 4N21 (6, 23) DI-30, 073-1 Also See Stop Code #2112 (b)
2153	00 2315	(a) If (Acc. Rank B $2^{-6} = 0$) and (Adder $2^{-6} = 1$) 4L15 (34, 6) DI-30, 126-2 4L16 (12, 34) DI-30, 126-2 4L14 (33, 34) DI-35, 126-2 4L22 (5) FCG, 126-2 4L6 (32) FCG, 126-2 4K25 (34) DI-30, 055 (b) If (a) condition is not true 4L16 (27) DI-30, 126-2 4L20 (34, 6, 7) DI-30, 126-1, 2 4L21 (16) FF-30, 126-2 4N20 (7) DI-30, 073-1 4N21 (6, 23) DI-30, 073-1 4N22 (16) FF-30, 073-1 Also See Stop Code #2112 (b)
2154	00 2316	4N21 (6, 23) DI-30, 073-1 4L20 (34, 6) DI-30, 126-1, 2 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2155	00 2335	(a) If F_N Register $\neq 0$ 4K24 (6) FF-30, 055 4K26 (16) DI-30, 055 4R25 (16, 12) DI-30, 068 (b) If Accumulator Rank B = 0 4N20 (27) DI-30, 073-2 (c) If neither of the above conditions are true 4L9 (16) DI-30, 126-2 4L20 (6, 12) DI-30, 126-2 4N20 (23) DI-30, 073-2 4N21 (6) DI-30, 073-1 Also See Stop Code #2112 (b)
2156	00 2346	(a) If (Acc. Rank B $2^{-7} = 0$) and (Adder $2^{-7} = 1$) 4L15 (27, 7) DI-30, 126-2 4L16 (16, 33) DI-30, 126-2 4K25 (6) DI-30, 055 4L6 (30, 32) FCG, 126-2 (b) If (a) condition is not true 4L16 (23) DI-30, 126-2 4L20 (12, 16, 6) DI-30, 126-2 4L21 (11) FF-30, 126-2 4N20 (23, 16) DI-30, 073-2 4N21 (6) DI-30, 073-1 4N22 (11) FF-30, 073-2 Also See Stop Code #2112 (b)
2157	00 2347	4N20 (23) DI-30, 073-2 4N21 (6) DI-30, 073-1 4L20 (6, 12) DI-30, 126-2 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2160	00 2357	<p>(a) If F_N Register $\neq 0$:</p> <ul style="list-style-type: none">4K21 (27) DI-30, 0554K22 (33) FF-30, 0554R22 (23, 33) DI-30, 068 <p>(b) If Accumulator Rank B = 0</p> <ul style="list-style-type: none">4N19 (27) DI-30, 073-2 <p>(c) If neither of the above conditions are true</p> <ul style="list-style-type: none">4L9 (12) DI-30, 126-24L12 (27) DI-30, 126-24L20 (12) DI-30, 126-24N19 (23) DI-30, 073-24N20 (23) DI-30, 073-2 <p>Also See Stop Code #2112 (b)</p>
2161	00 2370	<p>(a) If (Acc. Rank B $2^{-8} = 0$) and (Adder $2^{-8} = 1$)</p> <ul style="list-style-type: none">4L9 (34, 6) DI-30, 126-24L11 (12, 34) DI-30, 126-24K25 (12) DI-30, 0554L6 (29, 30) FCG, 126-2 <p>(b) If (a) condition is not true</p> <ul style="list-style-type: none">4L11 (27) DI-30, 126-24L12 (27, 23) DI-30, 126-24L13 (28) FF-30, 126-24L20 (12) DI-30, 126-24N17 (28) FF-30, 073-24N19 (23, 16) DI-30, 073-24N20 (23) DI-30, 073-2 <p>Also See Stop Code #2112 (b)</p>

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2162	00 2371	4N19 (23) DI-30, 073-2 4N20 (23) DI-30, 073-2 4L12 (27) DI-30, 126-2 4L20 (12) DI-30, 126-2 Also See Stop Code #2112 (b)
2163	00 2401	(a) If F_N Register $\neq 0$ 4K21 (34) DI-30, 055 4K22 (27) FF-30, 055 4R22 (27, 34) DI-30, 068 (b) If Accumulator Rank B = 0 4N18 (27) DI-30, 073-2 (c) If neither of the above conditions are true 4L7 (16) DI-30, 126-3 4L12 (34, 27) DI-30, 126-2 4N18 (23) DI-30, 073-2 4N19 (23) DI-30, 073-2 Also See Stop Code #2112 (b)
2164	00 2412	(a) If (Acc. Rank B $2^{-9} = 0$) and (Adder $2^{-9} = 1$) 4L9 (27, 7) DI-30, 126-2 4L11 (16, 33) DI-30, 126-2 4K23 (27) DI-30, 055 4L6 (29, 28) FCG, 126-2, 3

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2164 (Cont'd)	00 2412	(b) If (a) condition is not true 4L11 (23) DI-30, 126-2 4L12 (33, 34, 27) DI-30, 126-2 4L13 (23) FF-30, 126-2 4N17 (23) FF-30, 073-2 4N18 (23, 16) DI-30, 073-2 4N19 (23) DI-30, 073-2 Also See Stop Code #2112 (b)
2165	00 2413	4N18 (23) DI-30, 073-2 4N19 (23) DI-30, 073-2 4L12 (34, 27) DI-30, 126-2 Also See Stop Code #2112 (b)
2166	00 2423	(a) If FN Register \neq 0 4K22 (12) FF-30, 055 4R22 (6, 7) DI-30, 068 (b) If Accumulator Rank B = 0 4N16 (27) DI-30, 073-2 (c) If neither of the above conditions are true 4L7 (12) DI-30, 126-3 4L12 (34, 6) DI-30, 126-2, 3 4N18 (6, 23) DI-30, 073-2 4R11 (16) PA-30, 057-2 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2167	00 2434	(a) If (Acc. Rank B $2^{-10} = 0$) and (Adder $2^{-10} = 1$) 4L7 (34, 6) DI-30, 126-3 4L8 (12, 34) DI-30, 126-3 4K23 (34) DI-30, 055 4L6 (10, 28) FCG, 126-3 (b) If (a) condition is not true 4L8 (27) DI-30, 126-3 4L12 (34, 6, 7) DI-30, 126-2, 3 4L13 (16) FF-30, 126-3 4N16 (7) DI-30, 073-2 4N17 (16) FF-30, 073-2 4N18 (6, 23) DI-30, 073-2 4R11 (16) PA-30, 057-2 Also See Stop Code #2112 (b)
2170	00 2435	4L12 (34, 6) DI-30, 126-2, 3 4N18 (6, 23) DI-30, 073-2 4R11 (16) PA-30, 057-2 Also See Stop Code #2112 (b)
2171	00 2501	4R11 (18) PA-30, 057-2 4F11 (26, 32) PA-30, 054 4F13 (21) DN-30, 054 4F15 (13) DN-30, 054 4H6 (27, 23, 34) DI-30, 048-1 4H15 (7, 16, 12) DI-30, 047-1 4K10 (26) PA-30, 046-1 4H28 (20) BC-30, 046-1 4N18 (23, 6) DI-30, 073-2 4L12 (34, 6) DI-30, 126-2, 3 4N28 (23) DI-30, 073-1 4L27 (27) DI-30, 126-1 4L25 (9) DN-30, 126-1 Also See Stop Codes # 2112-2121

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2172	00 2502	4L2 (35) , 075 4R6 (12) DI-30, 075
2173	00 2553 00 2614	4K8 (28) FF-30, 076 4K7 (13) DN-30, 076 4K9 (7) DI-30, 076
2174	00 2644 00 2671	4K7 (13) DN-30, 076
2175	00 3170 00 3173 00 3176	4R10 (33) DI-30, 076 4R5 (16) FF-30, 057-2 5C26 (24) BO, 057-1 4R8 (17) BO, 057-2 4R11 (18) PA-30, 057-2 4K10 (26) PA-30, 046-1 4H18 (27) BC-30, 047-1 Also See Stop Code #2112 (b)
2176	00 3203	4H28 (33, 25, 12, 9) BC-30, 046-1 4H26 (16, 12, 33, 27, 7, 6) DI-30, 046-1 4H27 (21, 17) DN-30, 046-1 4F10 (9) DN-30, 046-1 4K11 (34, 33) DI-30, 046-1 4K8 (23) FF-30, 046-1 4K7 (35) , 046-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2176 (Cont'd)	00 3203	4K10 (26) PA-30, 046-1 4K9 (6) DI-30, 076 4R6 (33) DI-30, 075 4R3 (12) DI-30, 075 4F11 (32, 26) PA-30, 054 4F13 (21) DN-30, 054 4F15 (13) DN-30, 054 4H15 (12, 16, 7) DI-30, 047-1 4H6 (34, 23, 27) DI-30, 048-1
2177	00 3213	(a) If (IL Flip Flop of Cycle Counter = 1) and (Word Counter = 000) 4H28 (33) BC-30, 046-1 4K11 (33, 34) DI-30, 046-1 4K8 (23) FF-30, 046-1 4K7 (35) DN-30, 046-1 (b) If (IL Flip Flop of Cycle Counter = 1) and (Word Counter ≠ 000) 4K10 (26, 32, 8) PA-30, 046-1, 057-2, 076 4R12 (6, 18) DC-30, 057-2 4H27 (21) DN-30, 046-1 4K7 (21) DN-30, 076 4K6 (25) BC-30, 076 4K9 (34, 6) DI-30, 076 4R13 (7, 6) DI-30, 057-1 4R5 (16) FF-30, 057-2 4R14 (14) DC-30, 057-1 4N6 (26) PA-30, 054 4R9 (6) BC-30, 057-2 4R10 (33) DI-30, 076 5C26 (24) BO, 057-1 4R11 (18, 8) PA-30, 057-2 4R8 (17) BO, 057-2 4R19 (7) DI-30, 057-2 4H28 (25) BC-30, 046-1 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2177 (Cont'd)	00 3213	<p>(c) If (IL Flip Flop of Cycle Counter = 0) and (Word Counter \geq 001) See Stop Code # 2105 (b)</p> <p>(d) If (IL Flip Flop of Cycle Counter = 0) and (Y Reg. 2^{-1}, 2^{-2}, $2^{-3} \neq$ 000) See Stop Code # 2105 (c)</p> <p>(e) If (IL Flip Flop of Cycle Counter = 0) and (Curve Counter \neq 000) See Stop Code # 2105 (d)</p> <p>(f) If (IL Flip Flop of Cycle Counter = 0) and (Z Reg. 2^{-1}, 2^{-2}, $2^{-3} \neq$ 000) See Stop Code # 2105 (e)</p> <p>(g) If (IL Flip Flop of Cycle Counter = 0) and (Page Counter \neq 000) See Stop Code # 2105 (f)</p> <p>(h) If (IL Flip Flop of Cycle Counter = 0) and (Cycle Counter $2^2 = 1$) See Stop Code # 2105 (g)</p> <p>(i) If IL Flip Flop of Cycle Counter = 0 but (c), (d), (e), (f), (g), or (h) are not true See Stop Code # 2105 (h)</p>
2200	00 3244	<p>(a) If IL Flip Flop of Cycle Counter = 1 4K10 (26) PA-30, 046-1 4R11 (8) PA-30, 057-2</p> <p>(b) If (IL Flip Flop of Cycle Counter = 0) and (Word Counter $>$ 010) See Stop Code #2105 (b)</p>

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2200 (Cont'd)	00 3244	(c) If (IL Flip Flop of Cycle Counter = 0) and (Y Reg. 2^{-1} , 2^{-2} , $2^{-3} \neq 000$) See Stop Code # 2105 (c)
		(d) If (IL Flip Flop of Cycle Counter = 0) and (Curve Counter $\neq 000$) See Stop Code # 2105 (d)
		(e) If (IL Flip Flop of Cycle Counter = 0) and (Z Reg. 2^{-1} , 2^{-2} , $2^{-3} \neq 000$) See Stop Code # 2105 (e)
		(f) If (IL Flip Flop of Cycle Counter = 0) and (Page Counter $\neq 000$) See Stop Code # 2105 (f)
		(g) If (IL Flip Flop of Cycle Counter = 0) and (Cycle Counter $2^2 = 1$) See Stop Code # 2105 (g)
		(h) If IL Flip Flop of Cycle Counter = 0 but (b), (c), (d), (e), (f), or (g) are not true See Stop Code 2105 (h)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2201	00 3245	4K10 (26) PA-30, 046-1 4H28 (18,20,27) BC-30, 046-1 4H26 (16,12,33,27,7,6) DI-30, 046-1 4K11 (34) DI-30, 046-1 4H18 (27) BC-30, 047-1
2202	00 3263	4N26 (23,16,11) FF-30, 073-1 4N22 (28,23) FF-30, 073-1 4R9 (9) BC-30, 057-2 4R10 (27) DI-30, 057-2 4K10 (26) PA-30, 046-1 4R8 (17) BO, 057-2 4R11 (18) PA-30, 057-2 4N21 (23) DI-30, 073-1 4N23 (23) DI-30, 073-1 4N25 (32) DI-30, 073-1 4N27 (6, 23) DI-30, 073-1 Also See Stop Code #2112 (b)
2203	00 3273	4N18 (23) DI-30, 073-2 4L12 (34) DI-30, 126-2 Also See Stop Code #2112 (b)
2204	00 3303	4N19 (23) DI-30, 073-2 4L12 (27) DI-30, 126-2 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2205	00 3313	4N20 (23) DI-30, 073-2 4L20 (12) DI-30, 126-2 Also See Stop Code #2112 (b)
2206	00 3323	4N21 (6) DI-30, 073-1 4L20 (6) DI-30, 126-2 Also See Stop Code #2112 (b)
2207	00 3344	4N21 (16, 23) DI-30, 073-1 4L20 (34) DI-30, 126-1 Also See Stop Code #2112 (b)
2210	00 3354	4N23 (16, 23) DI-30, 073-1 4L20 (27) DI-30, 126-1 Also See Stop Code #2112 (b)
2211	00 3364	4N25 (16, 23) DI-30, 073-1 4L27 (12) DI-30, 126-1 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2212	00 3374	4N25 (7) DI-30, 073-1 4N27 (6) DI-30, 073-1 4L27 (6) DI-30, 126-1 Also See Stop Code #2112 (b)
2213	00 3404	4N27 (16, 23) DI-30, 073-1 4L27 (34) DI-30, 126-1 Also See Stop Code #2112 (b)
2214	00 3414	4N28 (23) DI-30, 073-1 4L27 (27) DI-30, 126-1 4L25 (9) DN-30, 126-1 Also See Stop Code #2112 (b)
2215	00 3427	(a) If F_N Register $\neq 0$ 4K22 (6) FF-30, 055 4R22 (12, 16) DI-30, 068 (b) If Accumulator Rank B = 0 4N15 (27) DI-30, 073-2 (c) If neither of the above conditions are true 4L1 (16) DI-30, 126-3 4L12 (6, 12) DI-30, 126-3 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2216	00 3436	4L12 (6, 12) DI-30, 126-3 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code #2112 (b)
2217	00 3437	(a) If (Acc. Rank B $2^{-11} = 0$) and (Adder $2^{-11} = 1$) 4L7 (27, 7) DI-30, 126-3 4L8 (16, 33) DI-30, 126-3 4K23 (6) DI-30, 055 4L6 (9, 10) FCG, 126-3 (b) If (a) condition is not true 4L8 (23) DI-30, 126-3 4L12 (6, 12, 16) DI-30, 126-3 4L13 (11) FF-30, 126-3 4N16 (16, 23) DI-30, 073-2 4N17 (11) FF-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code #2112 (b)
2220	00 3447	(a) If F_N Register $\neq 0$ 4K19 (33) FF-30, 055 4R19 (6, 33) DI-30, 068 (b) If Accumulator Rank B = 0 4N14 (27) DI-30, 073-2 (c) If neither of the above conditions are true 4L1 (12) DI-30, 126-3 4L4 (27) DI-30, 126-3 4L12 (6, 12) DI-30, 126-3 4N15 (23) DI-30, 073-2 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2221	00 3456	4L4 (27) DI-30, 126-3 4L12 (6, 12) DI-30, 126-3 4N15 (23) DI-30, 073-2 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code #2112 (b)
2222	00 3457	(a) If $(\text{Acc. Rank B } 2^{-12} = 0)$ and $(\text{Adder } 2^{-12} = 1)$ 4L1 (34, 6) DI-30, 126-3 4L3 (12, 34) DI-30, 126-3 4K23 (12) DI-30, 055 4L6 (8, 9) FCG, 126-3 (b) If (a) condition is not true 4L3 (27) DI-30, 126-3 4L4 (27, 23) DI-30, 126-3 4L5 (28) FF-30, 126-3 4L12 (6, 12) DI-30, 126-3 4N13 (28) FF-30, 073-2 4N15 (23, 16) DI-30, 073-2 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code #2112 (b)
2223	00 3467	(a) If F_N Register $\neq 0$ 4K19 (27) FF-30, 055 4R9 (16, 34) DI-30, 068 (b) If Accumulator Rank B = 0 4N12 (27) DI-30, 073-2

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2223 (Cont'd)	00 3467	(c) If neither of the above conditions are true 4N1 (16) DI-30, 126-3 4L4 (27, 34) DI-30, 126-3 4L12 (6, 12) DI-30, 126-3 4N14 (23) DI-30, 073-2 4N15 (23) DI-30, 073-2 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code #2112 (b)
2224	00 3476	4L4 (27, 34) DI-30, 126-3 4L12 (6, 12) DI-30, 126-3 4N14 (23) DI-30, 073-2 4N15 (23) DI-30, 073-2 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code #2112 (b)
2225	00 3477	(a) If (Acc. Rank B $2^{-13} = 0$) and (Adder $2^{-13} = 1$) 4L1 (27, 7) DI-30, 126-3 4L3 (16, 33) DI-30, 126-3 4K20 (27) DI-30, 055 4L6 (5, 8) FCG, 126-3 (b) If (a) condition is not true 4L3 (23) DI-30, 126-3 4L4 (33, 34, 27) DI-30, 126-3 4L5 (23) FF-30, 126-3 4L12 (6, 12) DI-30, 126-3 4N13 (23) FF-30, 073-2 4N14 (23, 16) DI-30, 073-2 4N15 (23) DI-30, 073-2 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code #2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2226	00 3507	(a) If Accumulator Rank B = 0 4N11 (9) DN-30, 132-1 (b) If (a) condition is not true 4L4 (27, 34, 36) DI-30, 126-3 4L12 (6, 12) DI-30, 126-3 4N12 (6) DI-30, 132-1 4N14 (23) DI-30, 073-2 4N15 (23) DI-30, 073-2 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code # 2112 (b)
2227	00 3510	(a) If (Acc. Rank B $2^{-14} = 0$) and (Adder $2^{-14} = 1$) 4N1 (7, 33, 12, 34) DI-30, 126-3 4K20 (34) DI-30, 055 4L6 (5) FCG, 126-3 4L5 (6) FF-30, 126-3 4N2 (9) DN-30, 126-3 (b) If (a) condition is not true 4N1 (27) DI-30, 126-3 4L4 (6, 7, 27, 34) DI-30, 126-3 4L5 (16) FF-30, 126-3 4N10 (29) SR-30, 132-1 4N11 (25) DN-30, 132-1 4N12 (6) DI-30, 132-1 4H6 (16) DI-30, 048-2 4H15 (23) DI-30, 047-2 4H24 (23) DI-30, 046-2 4L12 (6, 12) DI-30, 126-3 4N14 (23) DI-30, 073-2 4N15 (23) DI-30, 073-2 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code # 2112 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2230	00 3511	(a) If Accumulator Rank B = 0 4N11 (13) DN-30, 132-1 (b) If (a) condition is not true 4N10 (19) SR-30, 132-1 4N11 (29) DN-30, 132-1 4H6 (12) DI-30, 048-2 4H15 (34) DI-30, 047-2 4H24 (34) DI-30, 046-2 4L4 (27, 34, 6) DI-30, 126-3 4L12 (6, 12) DI-30, 126-3 4N12 (6) DI-30, 132-1 4N14 (23) DI-30, 073-2 4N15 (23) DI-30, 073-2 4N16 (23) DI-30, 073-2 4N18 (6) DI-30, 073-2 Also See Stop Code # 2112 (b)
2231	00 3545	4H26 (7, 33) DI-30, 046-1 4K7 (13) DN-30, 076 4K10 (26) PA-30, 046-1
2232	00 3572	4N9 (6) DC-30, 075
2233	00 3576	4N21 (23) DI-30, 073-1 4N23 (23) DI-30, 073-1 4N25 (23) DI-30, 073-1 4N27 (6, 23) DI-30, 073-1 4N28 (23) DI-30, 073-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2233 (Cont'd)	00 3576	4R8 (17) BO, 057-2 4R11 (18) PA-30, 057-2 4K10 (26) PA-30, 046-1 Also See Stop Code # 2112 (b)
2234	00 3624	4F11 (8) PA-30, 054 4F12 (9, 21) DN-30, 054 4F13 (9, 13) DN-30, 054 4F14 (25) DN-30, 054 4H27 (21) DN-30, 046-1 4K7 (13) DN-30, 076
2235	00 3655	4H28 (27, 18) BC-30, 046-1
2236	00 3701	(a) If (Zone Counter = 000) 4N9 (6) DC-30, 075 (b) If (Zone Counter = 001) and (No. Vars. = 01) 4L2 (21) DN-30, 075 4R5 (23) FF-30, 075 4M (CR6) , 075 (c) If (Zone Counter = 001) and (No. Vars. = 00) 4R1 (18) BC-30, 075 4M (CR4) , 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2236 (Cont'd)	00 3701	(d) If (Zone Counter = 010) 4N3 (25, 33) BC-30, 075 4R1 (18) BC-30, 075 (e) If (Zone Counter = 110) 4R1 (27) BC-30, 075
2237	00 3710	4H25 (16, 28) FF-30, 046-1 4H24 (7, 16) DI-30, 046-1
2240	00 3731	4R3 (6) DI-30, 075
2241	00 3751	4N3 (25) BC-30, 075
2242	00 3775	(a) If (Zone Counter = 101) and (No. Vars. = 00) 4L2 (21) DN-30, 075 (b) If (Zone Counter = 101) and (No. Vars. = 11) 4R5 (28) FF-30, 075 (c) If Zone Counter = 010 4R1 (20) BC-30, 075 4M (CR3) , 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2243	00 4035	4L2 (35) , 075 4R6 (12) DI-30, 075
2244	00 4063	4F11 (16) PA-30, 054 4F13 (13) DN-30, 054 4F14 (25) DN-30, 054 4F17 (33) FF-30, 054 4F18 (13) DN-30, 054 4K10 (25) PA-30, 046-1 4H24 (6) DI-30, 046-1 4H25 (23) FF-30, 046-1 4H26 (34) DI-30, 046-1 4H27 (17) DN-30, 046-1
2245	00 4064	4H24 (7, 16, 12) DI-30, 046-1 4H25 (12, 33, 6) FF-30, 046-1 4H26 (12) DI-30, 046-1 4H27 (21) DN-30, 046-1
2246	00 4131	4F13 (13, 21) DN-30, 054 4F15 (13) DN-30, 054 4H24 (7, 16, 12) DI-30, 046-1 4H25 (11) FF-30, 046-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2247	00 4154	4F11 (26) PA-30, 054 4F12 (9) DN-30, 054 4F13 (17, 21) DN-30, 054 4F14 (25) DN-30, 054 4F17 (27) FF-30, 054 4F18 (17, 21) DN-30, 054 4F27 (30) , 054 4K6 (20) BC-30, 076 4K7 (9) DN-30, 076 4K9 (34, 27) DI-30, 076 4K10 (30) PA-30, 046-1 4H15 (6) DI-30, 047-1 4H16 (34) DI-30, 047-1 4H17 (13) DN-30, 047-1 4H19 (16) FF-30, 047-1
2250	00 4177	4F9 (13) DN-30, 054 4F11 (32) PA-30, 054 4F12 (9) DN-30, 054 4F15 (13, 9) DN-30, 054 4F16 (9, 13) DN-30, 054 4F17 (12) FF-30, 054 4F18 (35) DN-30, 054 4K6 (27) BC-30, 076 4K7 (17) DN-30, 076 4K9 (33) DI-30, 076 4K10 (18) PA-30, 046-1 4H6 (33) DI-30, 048-1 4H7 (23) FF-30, 048-1 4H8 (34) DI-30, 048-1 4H17 (21) DN-30, 048-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2251	00 4225	4H6 (33) DI-30, 048-1 4H7 (23, 16, 28, 11) FF-30, 048-1 4H8 (34) DI-30, 048-1 4H14 (28, 11) FF-30, 047-1 4H15 (6) DI-30, 047-1 4H16 (34) DI-30, 047-1 4H19 (16, 11) FF-30, 047-1 4H24 (6) DI-30, 046-1 4H25 (23, 16, 28) FF-30, 046-1 4H26 (34) DI-30, 046-1
2252	00 4252	4H24 (6) DI-30, 046-1
2253	00 4276	4F10 (9) DN-30, 046-1
2254	00 4323	4H14 (6) FF-30, 047-1 4H15 (12) DI-30, 047-1 4H16 (6) DI-30, 047-1 4H17 (13) DN-30, 047-1 4H28 (27) BC-30, 046-1 4K7 (13) DN-30, 076
2255	00 4356	4H16 (6, 7) DI-30, 047-1 4H18 (9, 33) BC-30, 047-1 4F10 (9) DN-30, 046-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2256	00 4402	4F10 (9) DN-30, 046-1
2257	00 4417	4F22 (13, 9, 21, 17) DN-30, 081 4F23 (13, 9, 21, 17) DN-30, 081 4F24 (13, 9, 21, 17) DN-30, 081
2260	00 4436	4F22 (9, 13) DN-30, 081 4F23 (9, 13) DN-30, 081 4F24 (9, 13) DN-30, 081 4F26 (12) DI-30, 081 4F27 (18, 6) DC-30, 081
2261	00 4575	4F24 (13, 9, 21, 17) DN-30, 081 4F26 (27, 34) DI-30, 081 4F27 (26, 22, 6) DI-30, 081 4F21 (9, 13) DN-30, 081 4F25 (33) FF-30, 081 4F12 (32) DN-30, 081 4R10 (16) DI-30, 081
2262	00 4576 00 4627 00 4660 00 4721	4H17 (18) , 131 4F20 (20, 27) BC-30, 081

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2263	00 4626	4F21 (13, 9) DN-30, 081 4F24 (9, 17, 21) DN-30, 081 4F27 (22, 6) DC-30, 081
2264	00 4657	4F24 (13, 21, 17) DN-30, 081 4F21 (9, 13) DN-30, 081 4F26 (12) DI-30, 081 4F27 (6) DC-30, 081 4F12 (32) DN-30, 081
2265	00 4720	4F21 (13, 9) DN-30, 081 4F24 (21, 17) DN-30, 081 4F26 (12) DI-30, 081 4F27 (6) DI-30, 081
2266	00 4743 00 4757 00 4773	4F21 (13, 9, 7) DN-30, 081 4F25 (27) FF-30, 081 4F26 (33, 34, 23) DI-30, 081 4F27 (22, 6) DC-30, 081 4F12 (35, 32) DN-30, 081

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2267	00 4752 00 4766 00 5002 00 5016	4F23 (21, 17, 9, 13) DN-30, 081 4F27 (18, 6) DC-30, 081 4R2 (18) DC-30, 075
2270	00 5007	4F21 (13, 9) DN-30, 081 4F27 (6, 22) DC-30, 081 4F12 (32) DN-30, 081
2272	00 5052	4F22 (13, 9, 21, 17) DN-30, 081 4F25 (12) FF-30, 081 4F26 (7) DI-30, 081
2273	00 5057 00 5076 00 5115	4F26 (34, 7) DI-30, 081 4F25 (12) FF-30, 081
2274	00 5071 00 5110 00 5127	4F22 (13, 9, 21, 17) DN-30, 081 4F27 (22, 6) DC-30, 081

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2275	00 5151	4F25 (27) FF-30, 081 4F26 (33, 34) DI-30, 081
2276	00 5170 00 5176 00 5204 00 5212	4R2 (18) DC-30, 075
2277	00 5232	(a) 4K21 (34) DI-30, 055 4K22 (23) FF-30, 055 4R13 (27) DI-30, 057-2 4N6 (30) PA-30, 054 4N18 (27) DI-30, 073-2 3D4 (22) DI-30, 437-1 4N19 (7) DI-30, 073-2 4L11 (23) DI-30, 126-3 4L12 (33, 6) DI-30, 126-3 Also See Stop Code # 2112 (b) (b) 4R8 (17) BO, 057-2 4R11 (18) PA-30, 057-2
2300	00 5243	4L6 (28) FCG, 126-3 4L8 (12) DI-30, 126-3 4L12 (27, 6) DI-30, 126-2, 3 4N18 (23) DI-30, 073-2 4N19 (7, 23) DI-30, 073-2 Also See Stop Code # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2301	00 5254	4K23 (23) DI-30, 055 4N6 (16) PA-35, 132-2 4L6 (29, 28) FCG, 126-2, 3 4L7 (23, 16) DI-30, 126-3 4L10 (13) DN-30, 126-2 4L11 (33, 23) DI-30, 126-2 4L12 (33, 34, 27, 6) DI-30, 126-2, 3 4L13 (27) FF-30, 126-2 4N17 (27) FF-30, 073-2 4N18 (16, 23) DI-30, 073-2 4N19 (7, 23) DI-30, 073-2 4R7 (23) DI-30, 057-2 4R11 (8) PA-30, 057-2 4R13 (16, 12) DI-30, 057-2 Also See Stop Code # 2277 (b)
2302	00 5265	4L6 (29) FCG, 126-2 4L12 (27, 6) DI-30, 126-2, 3 4N18 (23) DI-30, 073-2 4N19 (7, 23) DI-30, 073-2
2303	00 5266	4R13 (27) DI-30, 057-2 4R12 (18) DC-30, 057-2 4R7 (7) DI-30, 057-1 4K10 (32) PA-30, 057-2 4L11 (23) DI-30, 126-3 4L12 (27, 33, 6) DI-30, 126-2, 3 4N18 (6) DI-30, 073-2 4N19 (7, 23) DI-30, 073-2 Also See Stop Codes # 2112 (b) and # 2277 (b).

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2304	00 5302	4K22 (28) FF-30, 055 4K21 (27) DI-30, 055 4N19 (27, 6) DI-30, 073-2 3D4 (31) DI-30, 437-1 4L11 (27) DI-30, 126-2 4L12 (23, 34) DI-30, 126-2 Also See Stop Codes # 2112 (b) and # 2277 (b)
2305	00 5313	4L11 (16) DI-30, 126-2 4L6 (29) FCG, 126-2 4L12 (34) DI-30, 126-2 4L20 (12) DI-30, 126-2 4N18 (23) DI-30, 073-2 4N19 (6) DI-30, 073-2 4N20 (23) DI-30, 073-2 Also See Stop Code # 2277 (b)
2306	00 5324	4K23 (33) DI-30, 055 4L9 (33, 12) DI-30, 126-2 4L6 (29, 30) FCG, 126-2 4L10 (9) DN-30, 126-2 4L11 (34, 27) DI-30, 126-2 4L12 (27, 23, 34) DI-30, 126-2 4L13 (33) FF-30, 126-2 4N17 (33) FF-30, 073-2 4N19 (6, 16) DI-30, 073-2 4N18 (23) DI-30, 073-2 4N20 (23) DI-30, 073-2 4L20 (12) DI-30, 126-2 4R7 (23) DI-30, 057-2 Also See Stop Code # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2307	00 5335	4L6 (30) FCG, 126-2 4L12 (34) DI-30, 126-2 4L20 (12) DI-30, 126-2 4N18 (23) DI-30, 073-2 4N19 (6) DI-30, 073-2 4N20 (23) DI-30, 073-2
2310	00 5336	4N19 (6) DI-30, 073-2 4L11 (27) DI-30, 126-2 4L12 (23, 34) DI-30, 126-2 4N18 (23) DI-30, 073-2 4N20 (23) DI-30, 073-2 4L20 (12) DI-30, 126-2 Also See Stop Codes #2112 (b) and # 2277 (b)
2311	00 5352	4K24 (11) FF-30, 055 4K26 (16) DI-30, 055 4N20 (6, 27) DI-30, 073-2 3D4 (20) DI-30, 073-2 4L12 (27) DI-30, 126-2 4L16 (23) DI-30, 126-2 4L20 (16) DI-30, 126-2 Also See Stop Codes # 2112 (b) and # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2312	00 5363	4L6 (30) FCG, 126-2 4L11 (12) DI-30, 126-2 4L12 (27) DI-30, 126-2 4L20 (6) DI-30, 126-2 4N19 (23) DI-30, 073-2 4N20 (6) DI-30, 073-2 4N21 (6) DI-30, 073-1 Also See Stop Code # 2277 (b)
2313	00 5374	4K25 (7) DI-30, 055 4L9 (23, 16) DI-30, 126-2 4L6 (30, 32) FCG, 126-2 4L16 (23, 33) DI-30, 126-2 4L18 (21) DN-30, 126-2 4L20 (12, 16, 6) DI-30, 126-2 4L21 (6) FF-30, 126-2 4L12 (27) DI-30, 126-2 4N22 (6) FF-30, 073-2 4N20 (6, 16) DI-30, 073-2 4N19 (23) DI-30, 073-2 4N21 (6) DI-30, 073-1 4R7 (23) DI-30, 057-2 Also See Stop Code # 2277 (b)
2314	00 5405	4L6 (31) FCG, 126-2 4L12 (27) DI-30, 126-2 4L20 (6) DI-30, 126-2 4N20 (6) DI-30, 073-2 4N19 (23) DI-30, 073-2 4N21 (6) DI-30, 073-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2315	00 5406	4N19 (23) DI-30, 073-2 4N21 (6) DI-30, 073-1 4N20 (6) DI-30, 073-2 4L12 (27) DI-30, 126-2 4L16 (23) DI-30, 126-2 4L20 (16, 6) DI-30, 126-2 Also See Stop Codes # 2112 (b) and # 2277 (b)
2316	00 5422	4K24 (16) FF-30, 055 4K26 (7) DI-30, 055 4N21 (7, 27) DI-30, 073-1 3D2 (9) DI-30, 437-1 4N6 (26) PA-30, 054 4R13 (33) DI-30, 057-2 4L16 (27) DI-30, 126-2 4L20 (7, 12) DI-30, 126-2 Also See Stop Codes # 2112 (b) and # 2277 (b)
2317	00 5433	4L16 (16) DI-30, 126-2 4L6 (32) FCG, 126-2 4L20 (34, 12) DI-30, 126-1, 2 4N20 (23) DI-30, 073-2 4N21 (7, 23) DI-30, 073-1 Also See Stop Code # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2320	00 5444	4K25 (16) DI-30, 055 4L15 (33, 12) DI-30, 126-2 4L6 (31) FCG, 126-2 4L14 (33, 34) DI-35, 126-2 4L16 (27, 34) DI-30, 126-2 4L18 (17) DN-30, 126-2 4L20 (34, 6, 7, 12) DI-30, 126-1, 2 4L21 (12) FF-30, 126-2 4L22 (5) FCG, 126-2 4N22 (12) FF-30, 073-1 4N21 (7, 23) DI-30, 073-1 4N20 (7, 23) DI-30, 073-1, 2 4R13 (23, 33) DI-30, 057-2 4R7 (23) DI-30, 057-2 Also See Stop Codes # 2112 (b) and # 2277 (b)
2321	00 5455	4L22 (5) FCG, 126-2 4L20 (34, 12) DI-30, 126-1, 2 4N21 (7, 23) DI-30, 073-1 4N20 (23) DI-30, 073-2
2322	00 5456	4R13 (33) DI-30, 057-2 4N21 (7, 23) DI-30, 073-1 4N20 (23) DI-30, 073-2 4L20 (34, 7, 12) DI-30, 126-1, 2 4L16 (27) DI-30, 126-2 Also See Stop Codes # 2112 (b) and # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2323	00 5472	4K24 (23) FF-30, 055 4K26 (33) DI-30, 055 4N23 (7, 27) DI-30, 073-1 3D2 (11) DI-30, 437-1 4L19 (27) DI-30, 126-1 4L20 (33, 6) DI-30, 126-1, 2 Also See Stop Codes # 2112 (b) and # 2277 (b)
2324	00 5503	4L16 (12) DI-30, 126-2 4L22 (5) FCG, 126-2 4L20 (27, 6) DI-30, 126-1, 2 4N23 (23, 7) DI-30, 073-1 4N21 (6) DI-30, 073-1 Also See Stop Code # 2277 (b)
2325	00 5514	4K25 (23) DI-30, 055 4L15 (23, 16) DI-30, 126-2 4N22 (27) FF-30, 073-1 4N23 (7, 23) DI-30, 073-1 4N21 (16, 6) DI-30, 073-1 4L20 (33, 27, 6) DI-30, 126-1, 2 4L19 (27) DI-30, 126-1 4R7 (23) DI-30, 057-2 Also See Stop Code # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2326	00 5525	4L18 (13) DN-30, 126-1 4L19 (34, 27) DI-30, 126-1 4L20 (33, 34, 27, 6) DI-30, 126-1, 2 4L21 (27) FF-30, 126-1 4L22 (8, 5) FCG, 126-1, 2 4N23 (7, 23) DI-30, 073-1 4N21 (6) DI-30, 073-1 Also See Stop Code # 2277 (b)
2327	00 5536	4L22 (8) FCG, 126-1 4L20 (27, 6) DI-30, 126-1, 2 4N21 (6) DI-30, 073-1 4N23 (7, 23) DI-30, 073-1
2330	00 5537	4N23 (7, 23) DI-30, 073-1 4N21 (6) DI-30, 073-1 4L19 (27) DI-30, 126-1 4L20 (27, 33, 6) DI-30, 126-1, 2 Also See Stop Codes # 2112 (b) and # 2277 (b)
2331	00 5553	4K24 (28) FF-30, 055 4K26 (23) DI-30, 055 4N24 (16) DI-30, 073-1 3D2 (30) DI-30, 437-1 4N23 (6) DI-30, 073-1 4L19 (23) DI-30, 126-1 4L20 (23, 34) DI-30, 126-1 Also See Stop Codes # 2112 (b) and # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2332	00 5564	4L19 (12) DI-30, 126-1 4L22 (8) FCG, 126-1 4L20 (34) DI-30, 126-1 4L27 (12) DI-30, 126-1 4N23 (6) DI-30, 073-1 4N25 (23) DI-30, 073-1 4N21 (23) DI-30, 073-1 Also See Stop Code # 2277 (b)
2333	00 5575	4K25 (33) DI-30, 055 4L17 (33, 12) DI-30, 126-1 4N22 (33) FF-30, 073-1 4N23 (6, 16) DI-30, 073-1 4L19 (23) DI-30, 126-1 4L20 (23, 34) DI-30, 126-1 4L27 (12) DI-30, 126-1 4N21 (23) DI-30, 073-1 4N25 (23) DI-30, 073-1 4R7 (23) DI-30, 057-2 Also See Stop Code # 2277 (b)
2334	00 5606	4L18 (9) DN-30, 126-1 4L19 (23, 33) DI-30, 126-1 4L20 (27, 23, 34) DI-30, 126-1 4L21 (33) FF-30, 126-1 4L22 (8, 9) FCG, 126-1 4L27 (12) DI-30, 126-1 4N23 (6) DI-30, 073-1 4N21 (23) DI-30, 073-1 4N25 (23) DI-30, 073-1 Also See Stop Code # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2335	00 5617	4L22 (9) FCG, 126-1 4L20 (34) DI-30, 126-1 4L27 (12) DI-30, 126-1 4N21 (23) DI-30, 073-1 4N23 (6) DI-30, 073-1 4N25 (23) DI-30, 073-1
2336	00 5620	4L20 (23, 34) DI-30, 126-1 4L19 (23) DI-30, 126-1 4L27 (12) DI-30, 126-1 4N23 (6) DI-30, 073-1 4N21 (23) DI-30, 073-1 4N25 (23) DI-30, 073-1 Also See Stop Codes # 2112 (b) and # 2277 (b)
2337	00 5634	4K27 (11) FF-30, 055 4K26 (12) DI-30, 055 4N24 (27) DI-30, 073-1 3D2 (19) DI-30, 437-1 4N25 (6) DI-30, 073-1 4L20 (27) DI-30, 126-1 4L23 (12) DI-30, 126-1 4L27 (16) DI-30, 126-1 Also See Stop Codes # 2112 (b) and # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2340	00 5645	4L19 (16) DI-30, 126-1 4L22 (9) FCG, 126-1 4L20 (27) DI-30, 126-1 4L27 (6) DI-30, 126-1 4N25 (6) DI-30, 073-1 4N23 (23) DI-30, 073-1 4N27 (6) DI-30, 073-1 Also See Stop Code # 2277 (b)
2341	00 5656	4K28 (7) DI-30, 055 4L17 (23, 16) DI-30, 126-1 4N25 (6, 16) DI-30, 073-1 4N26 (6) FF-30, 073-1 4L20 (27) DI-30, 126-1 4L23 (12) DI-30, 126-1 4L27 (16, 6) DI-30, 126-1 4N23 (23) DI-30, 073-1 4N27 (6) DI-30, 073-1 4R7 (23) DI-30, 057-2 Also See Stop Code # 2277 (b)
2342	00 5667	4L23 (7, 12) DI-30, 126-1 4L25 (21) DN-30, 126-1 4L22 (9, 10) FCG, 126-1 4L27 (12, 16, 6) DI-30, 126-1 4L28 (6) FF-30, 126-1 4N25 (6) DI-30, 073-1 4N23 (26) DI-30, 073-1 4N27 (6) DI-30, 073-1 4L20 (27) DI-30, 126-1 Also See Stop Code # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2343	00 5700	4L22 (10) FCG, 126-1 4L20 (27) DI-30, 126-1 4N25 (6) DI-30, 073-1 4N23 (23) DI-30, 073-1 4N27 (6) DI-30, 073-1 4L27 (6) DI-30, 126-1
2344	00 5701	4N25 (6) DI-30, 073-1 4L20 (27) DI-30, 126-1 4L23 (12) DI-30, 126-1 4L27 (16, 6) DI-30, 126-1 4N23 (23) DI-30, 073-1 4N27 (6) DI-30, 073-1 Also See Stop Codes # 2112 (b) and # 2277 (b)
2345	00 5715	4K27 (16) FF-30, 055 4K26 (6) DI-30, 055 4N25 (27) DI-30, 073-1 3D2 (17) DI-30, 437-1 4N27 (7) DI-30, 073-1 4L26 (27) DI-30, 126-1 4L27 (7, 12) DI-30, 126-1 Also See Stop Codes # 2112 (b) and # 2277 (b)
2346	00 5726	4L23 (6) DI-30, 126-1 4L22 (10) FCG, 126-1 4L27 (12, 34) DI-30, 126-1 4N25 (23) DI-30, 073-1 4N27 (7, 23) DI-30, 073-1 Also See Stop Code # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2347	00 5737	4K28 (16) DI-30, 055 4L23 (34, 23) DI-30, 126-1 4N26 (12) FF-30, 073-1 4N27 (7, 23) DI-30, 073-1 4N25 (7, 23) DI-30, 073-1 4L26 (27) DI-30, 126-1 4L27 (7, 12, 34) DI-30, 126-1 4R7 (23) DI-30, 057-2 Also See Stop Code # 2277 (b)
2350	00 5750	4L25 (17) DN-30, 126-1 4L26 (27, 34) DI-30, 126-1 4L22 (10, 28) FCG, 126-1 4L27 (6, 7, 12, 34) DI-30, 126-1 4L28 (12) FF-30, 126-1 4N27 (7, 23) DI-30, 073-1 4N25 (23) DI-30, 073-1 Also See Stop Code # 2277 (b)
2351	00 5760	4L22 (28) FCG, 126-1 4L27 (12, 34) DI-30, 126-1 4N25 (23) DI-30, 073-1 4N27 (7, 23) DI-30, 073-1
2352	00 5761	4N27 (7, 23) DI-30, 073-1 4L27 (7, 12, 34) DI-30, 126-1 4L26 (27) DI-30, 126-1 4N25 (23) DI-30, 073-1 Also See Stop Codes # 2112 (b) and # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2353	00 6006	4K27 (23) FF-30, 055 4K26 (34) DI-30, 055 4N27 (27) DI-30, 073-1 3D2 (22) DI-30, 437-1 4N28 (7) DI-30, 073-1 4L27 (6, 33) DI-30, 126-1 4L26 (23) DI-30, 126-1 Also See Stop Codes # 2112 (b) and # 2277 (b)
2354	00 6017	4L26 (12) DI-30, 126-1 4L22 (28) FCG, 126-1 4L27 (6, 27) DI-30, 126-1 4N28 (7, 23) DI-30, 073-1 4N27 (6) DI-30, 073-1 4L25 (9) DN-30, 126-1 Also See Stop Code # 2277 (b)
2355	00 6030	4K28 (23) DI-30, 055 4L24 (23, 16) DI-30, 126-1 4N26 (27) FF-30, 073-1 4N27 (16, 6) DI-30, 073-1 4N28 (7, 23) DI-30, 073-1 4L25 (9) DN-30, 126-1 4L26 (23) DI-30, 126-1 4L27 (6, 33, 27) DI-30, 126-1 4R7 (23) DI-30, 057-2 Also See Stop Code # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2356	00 6040	4L26 (23, 33) DI-30, 126-1 4L25 (9, 13) DN-30, 126-1 4L22 (28, 29) FCG, 126-1 4L27 (33, 34, 6, 27) DI-30, 126-1 4L28 (27) FF-30, 126-1 4N28 (7, 23) DI-30, 073-1 4N27 (6) DI-30, 073-1 Also See Stop Code # 2277 (b)
2357	00 6050	4L22 (29) FCG, 126-1 4L27 (6, 27) DI-30, 126-1 4L25 (9) DN-30, 126-1 4N28 (7, 23) DI-30, 073-1 4N27 (6) DI-30, 073-1
2360	00 6051	4N28 (7, 23) DI-30, 073-1 4L27 (33, 6, 27) DI-30, 126-1 4L26 (23) DI-30, 126-1 4L25 (9) DN-30, 126-1 4N27 (6) DI-30, 073-1 Also See Stop Codes # 2112 (b) and # 2277 (b)
2361	00 6075	4K27 (28) FF-30, 055 4K26 (27) DI-30, 055 4N28 (6, 27) DI-30, 073-1 3D2 (31) DI-30, 437-1 4L27 (23, 34) DI-30, 126-1 Also See Stop Codes # 2112 (b) and # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2362	00 6105	4L26 (16) DI-30, 126-1 4L22 (29) FCG, 126-1 4L27 (34) DI-30, 126-1 4N28 (6) DI-30, 073-1 4N27 (23) DI-30, 073-1 Also See Stop Code # 2277 (b)
2363	00 6115	4K28 (33) DI-30, 055 4L24 (33, 12) DI-30, 126-1 4N26 (33) FF-30, 073-1 4N28 (6, 16) DI-30, 073-1 4N27 (23) DI-30, 073-1 4L27 (23, 34) DI-30, 126-1 4R7 (23) DI-30, 057-2 Also See Stop Code # 2277 (b)
2364	00 6125	4L22 (29, 30) FCG, 126-1 4L25 (9) DN-30, 126-1 4L27 (27, 23, 34) DI-30, 126-1 4L28 (33) FF-30, 126-1 4N28 (6) DI-30, 073-1 4N27 (23) DI-30, 073-1 Also See Stop Code # 2277 (b)
2365	00 6126	4L27 (23, 34) DI-30, 126-1 4N28 (6) DI-30, 073-1 4N27 (23) DI-30, 073-1 Also See Stop Codes # 2112 (b) and # 2277 (b)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2366	00 6145	4K9 (6) DI-30, 076
2367	00 6155	4N17 (15) UF-35, 132-2
2370	00 6223	(a) If X Register \neq 0 4H23 (28, 23, 11, 16) FF-30, 046-2 4H21 (28, 23, 11, 16) FF-30, 046-2 4H19 (28, 23) FF-30, 046-2 4H24 (27, 33, 23, 34) DI-30, 046-2 4H22 (6, 7, 27, 33, 16, 12, 23, 34) DI-30, 046-2 4H20 (6, 7, 27, 33, 16, 12, 23, 34) DI-30, 046-2 (b) If X Register = 0 4N7 (15, 26) UF-35, 132-2 4N8 (6, 10, 19, 29) SR-30, 132-1, 2 4N10 (6, 10) SR-30, 132-1 4N9 (10, 14, 18, 22, 26, 30) 132-1, 2 4N11 (32, 35) DN-30, 132-1 4H2 (23, 34, 16, 12) DI-30, 048-2 4H4 (23, 34, 16, 12) DI-30, 048-2 4H11 (16, 12, 23, 34) DI-30, 047-2 4H13 (16, 12, 23, 34) DI-30, 047-2 4H24 (27, 33, 23, 34) DI-30, 046-2 4H22 (6, 7, 27, 33, 16, 12, 23, 34) DI-30, 046-2 4H20 (6, 7, 27, 33, 16, 12, 23, 34) DI-30, 046-2
2371	00 6222	4K26 (27, 34, 6, 12, 23, 33, 7, 16) DI-30, 055 4K21 (27, 34) DI-30, 055

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2372	00 6237	(a) If Accumulator Rank B 2 ⁻¹¹ bit = 1 4N16 (27) DI-30, 073-2 3D4 (17) DI-30, 437-1 (b) If Accumulator Rank B 2 ⁻¹¹ bit = 0 4L26 (33, 16, 7, 34, 12, 6) DI-30, 126-1 4L19 (33, 16, 7, 34, 12, 6) DI-30, 126-1 4L18 (9, 13, 17, 21) DN-30, 126-1, 2 4L16 (33, 16, 7, 34, 12, 6) DI-30, 126-2 4L11 (33, 16, 7, 34, 12, 6) DI-30, 126-2 4L23 (27, 7, 6, 16) DI-30, 126-1 4L8 (34, 27, 12, 6) DI-30, 126-3 4L25 (13, 17, 21) DN-30, 126-1 4L10 (9, 13, 17) DN-30, 126-2, 3 4L24 (7, 6) DI-30, 126-1 4L17 (6, 7) DI-30, 126-1 4L15 (6, 7) DI-30, 126-2 4L9 (6, 7) DI-30, 126-2 4L7 (6) DI-30, 126-3 4L27 (33, 7, 16) DI-30, 126-1 4L20 (23, 33, 7, 16) DI-30, 126-1, 2 4L12 (23, 33, 6, 7) DI-30, 126-2, 3 4L13 (12) FF-30, 126-3 4R7 (16, 23) DI-30, 057-2 4R11 (16) PA-30, 057-2 4N17 (2) FF-30, 073-2 4N18 (7, 6, 23) DI-30, 073-2 4N19 (6, 7, 23) DI-30, 073-2 4N20 (6, 23) DI-30, 073-2 4N21 (7, 6, 23) DI-30, 073-1 4N23 (6, 7, 23) DI-30, 073-1 4N25 (6, 23) DI-30, 073-1 4N27 (6, 7, 23) DI-30, 073-1 4N28 (6) DI-30, 073-1 Also See Stop Code # 2375
2373	00 6257	4N6 (8, 18) PA-35, 132-2 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2374	00 6270	4N6 (16) PA-35, 132-2 4R19 (7) DI-30, 057-2 4R10 (34, 6) DI-30, 057-2 4R15 (7, 12, 33, 34) DI-30, 057-1 4R12 (30, 33) DC-30, 057-2 4N7 (6) UF-35, 132-2 4N11 (21) DN-30, 132-1 4N28 (12) DI-30, 073-1 4K19 (12) FF-30, 056 4K21 (7) DI-30, 056 4K9 (12) DI-30, 076 4K10 (16) PA-30, 076 4K28 (33) DI-30, 055 4K20 (16) DI-30, 056 4K7 (13) DN-30, 076 4L24 (33) DI-30, 126-1 4R7 (16, 23) DI-30, 057-2 Also See Stop Code # 2375
2375	00 6274	4R17 (34, 33, 27, 12) DI-30, 057-2 4R8 (17) BO, 057-2 4P (DL1, DL2) 057-2 4R11 (8, 18) PA-30, 057-2
2376	00 6275	(a) If F_{N+1} Register $\neq 0$ 4K10 (35) PA-30, 057-2 4K9 (12, 16) DI-30, 076 (b) If F_{N+1} Register = 0 4R13 (16, 23) DI-30, 057-2 4N28 (6, 16) DI-30, 073-1 4N26 (28) FF-30, 073-1 4L22 (29) FCG, 126-1 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2377	00 6305	4L24 (23) DI-30, 126-1 4K28 (23) DI-30, 055 4K20 (7) DI-30, 056 4N27 (12) DI-30, 073-1 Also See Stop Code # 2375
2400	00 6311	4K19 (6) FF-30, 056 4K21 (16) DI-30, 056 4N27 (12) DI-30, 073-1 4N10 (33) SR-30, 132-1 4N12 (23, 16) DN-30, 132-1 4H23 (28) FF-30, 046-2 4H24 (23, 27) DI-30, 046-2 4R7 (16) DI-30, 057-2 Also See Stop Code # 2375
2401	00 6312	4R10 (12) DI-30, 057-2 4L22 (28) FCG, 126-1 4L24 (27) DI-30, 126-1 4K20 (6) DI-30, 056 4N10 (33, 25, 15, 9) SR-30, 132-1 4N8 (23, 25, 15, 9) SR-30, 132-1, 2 4N7 (35) UF-35, 132-2 4N11 (17) DN-30, 132-1 4N26 (23) FF-30, 073-1 4N28 (7) DI-30, 073-1 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2402	00 6322	4L23 (34) DI-30, 126-1 4K28 (16) DI-30, 055 4K18 (33) DI-30, 056 4N25 (12) DI-30, 073-1 Also See Stop Code # 2375
2403	00 6326	4K17 (33) FF-30, 056 4K16 (27) DI-30, 056 4N25 (12) DI-30, 073-1 4N10 (25) SR-30, 132-1 4H24 (33, 34) DI-30, 046-2 4H23 (23) FF-30, 046-2 Also See Stop Code # 2375
2404	00 6327	4N26 (16) FF-30, 073-1 4N27 (7, 12) DI-30, 073-1 4L22 (10) FCG, 126-1 4L24 (34) DI-30, 126-1 4K20 (12) DI-30, 056 Also See Stop Code # 2375
2405	00 6337	4L17 (23) DI-30, 126-1 4K28 (7) DI-30, 055 4K18 (23) DI-30, 056 4N24 (12) DI-30, 073-1 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2406	00 6343	4K17 (27) FF-30, 056 4K16 (34) DI-30, 056 4N24 (12) DI-30, 073-1 4N10 (15) SR-30, 132-1 4H22 (6, 16) DI-30, 046-2 4H23 (11) FF-30, 046-2 Also See Stop Code # 2375
2407	00 6344	4N25 (6, 12) DI-30, 073-1 4N26 (11) FF-30, 073-1 4L22 (9) FCG, 126-1 4L23 (33) DI-30, 126-1 4K18 (27) DI-30, 056 Also See Stop Code # 2375
2410	00 6354	4L17 (33) DI-30, 126-1 4K25 (33) DI-30, 055 4K18 (16) DI-30, 056 4N24 (7) DI-30, 073-1 4R7 (16, 6) DI-30, 057-2 4R9 (25) BC-30, 057-2 Also See Stop Code # 2375
2411	00 6360	4K17 (12) FF-30, 056 4K16 (6) DI-30, 056 4N24 (7) DI-30, 073-1 4N10 (9) SR-30, 132-1 4H22 (7, 12) DI-30, 046-2 4H23 (16) FF-30, 046-2 4R13 (16) DI-30, 057-2 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2412	00 6361	4N23 (6) DI-30, 073-1 4N22 (28) FF-30, 073-1 4N24 (12) DI-30, 073-1 4L17 (34) DI-30, 126-1 4L22 (8) FCG, 126-1 4K18 (34) DI-30, 056 4R13 (16) DI-30, 057-2 Also See Stop Code # 2375
2413	00 6371	4R7 (7, 16, 23) DI-30, 057-1, 2 4R13 (6) DI-30, 057-1 4L15 (23) DI-30, 057-2 4K25 (23) DI-30, 055 4K18 (7) DI-30, 056 4N23 (12) DI-30, 073-1 Also See Stop Code # 2375
2414	00 6375	4K17 (6) FF-30, 056 4K16 (12) DI-30, 056 4N23 (12) DI-30, 073-1 4N8 (23) SR-30, 132-1 4H22 (23, 27) DI-30, 046-2 4H21 (28) FF-30, 046-2 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2415	00 6376	4N22 (23) FF-30, 073-1 4N23 (7) DI-30, 073-1 4N24 (7) DI-30, 073-1 4L17 (27) DI-30, 126-1 4L22 (5) FCG, 126-2 4K18 (6) DI-30, 056 4R13 (16) DI-30, 057-2 Also See Stop Code # 2375
2416	00 6406	4L15 (33) DI-30, 126-2 4K25 (16) DI-30, 055 4K15 (33) DI-30, 056 4N21 (12) DI-30, 073-1 Also See Stop Code # 2375
2417	00 6412	4K14 (33) FF-30, 056 4K16 (23) DI-30, 056 4N21 (12) DI-30, 073-1 4N8 (25) SR-30, 132-2 4H22 (33, 34) DI-30, 046-2 4H21 (23) FF-30, 046-2 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2420	00 6413	4K9 (23) DI-30, 076 4K18 (12) DI-30, 056 4N21 (7) DI-30, 073-1 4N22 (16) FF-30, 073-1 4N23 (12) DI-30, 073-1 4L15 (34) DI-30, 126-2 4L6 (32) FCG, 126-2 4R13 (16) DI-30, 057-2 Also See Stop Code # 2375
2421	00 6423	4L9 (23) DI-30, 126-2 4K25 (7) DI-30, 055 4K15 (23) DI-30, 056 4N20 (12) DI-30, 073-2 4R15 (6) DI-30, 057-1 Also See Stop Code # 2375
2422	00 6427	4K14 (27) FF-30, 056 4K16 (33) DI-30, 056 4N20 (12) DI-30, 073-2 4N8 (15) SR-30, 132-2 4H20 (6, 16) DI-30, 046-2 4H21 (11) FF-30, 046-2 4R15 (6) DI-30, 057-1 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2423	00 6430	4N20 (6) DI-30, 073-2 4N22 (11) FF-30, 073-2 4N21 (12) DI-30, 073-1 4L6 (30) FCG, 126-2 4L15 (27) DI-30, 126-2 4K15 (27) DI-30, 056 Also See Stop Code # 2375
2424	00 6441	4L9 (33) DI-30, 126-2 4K23 (33) DI-30, 055 4K15 (16) DI-30, 056 4N19 (12) DI-30, 073-2 4R10 (34) DI-30, 057-2 4R12 (30, 33) DC-30, 057-2 Also See Stop Code # 2375
2425	00 6445	4K14 (12) FF-30, 056 4K16 (7) DI-30, 056 4N19 (12) DI-30, 073-2 4N8 (9) SR-30, 132-2 4H20 (7, 12) DI-30, 046-2 4H21 (16) FF-30, 046-2 Also See Stop Code # 2375
2426	00 6446	4N19 (6) DI-30, 073-2 4N17 (28) FF-30, 073-2 4N20 (12) DI-30, 073-2 4L9 (34) DI-30, 126-2 4L6 (29) FCG, 126-2 4K15 (34) DI-30, 056 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2427	00 6456	4L7 (23) DI-30, 126-3 4K23 (23) DI-30, 055 4K15 (7) DI-30, 056 4N18 (12) DI-30, 073-2 4N7 (6) UF-35, 132-2 4H20 (33, 34) DI-30, 046-2 4H19 (23) FF-30, 046-2 4R7 (23, 16) DI-30, 057-2 4R9 (6) BC-30, 057-2 4R10 (34) DI-30, 057-2 4R12 (33) DC-30, 057-2 Also See Stop Code # 2375
2430	00 6462	4K14 (6) FF-30, 056 4K16 (16) DI-30, 056 4N18 (12) DI-30, 073-2 Also See Stop Code # 2375
2431	00 6463	4N19 (7, 12) DI-30, 073-2 4N17 (23) FF-30, 073-2 4N7 (35) UF-35, 132-2 4L6 (28) FCG, 126-3 4L9 (27) DI-30, 126-2 4K15 (6) DI-30, 056 4H20 (23, 27) DI-30, 046-2 4H19 (28) FF-30, 046-2 4R7 (23) DI-30, 057-2 Also See Stop Code # 2375

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2432	00 6467	4K12 (33, 27, 12, 6) FF-30, 056 4K13 (27, 34, 6, 12) DI-30, 056 4K15 (12) DI-30, 056 4N1 (7) DI-30, 126-3 4N12 (12, 16) DI-30, 073-2, 132-1 4N14 (12) , DI-30, 073-2 4N15 (12) DI-30, 073-2 4N16 (12) DI-30, 073-2 4L1 (34, 27) DI-30, 126-3 4L7 (34, 27) DI-30, 126-3 4R11 (32) PA-30, 057-2 4R10 (7) DI-30, 057-2 4L27 (6, 12) DI-30, 126-1 4L20 (27, 34, 6, 12) DI-30, 126-1, 2 4L12 (27, 34, 6, 12) DI-30, 126-2, 3 4N27 (23, 6) DI-30, 073-1 4N25 (23) DI-30, 073-1 4N23 (23) DI-30, 073-1 4N21 (23, 6) DI-30, 073-1 4N20 (23) DI-30, 073-2 4N19 (23) DI-30, 073-2 4N18 (23, 6) DI-30, 073-2 Also See Stop Code # 2375
2433	00 6470	4R11 (32) PA-30, 057-2 Also See Stop Code # 2375
2434	00 6511	4R11 (16) PA-30, 057-2 4R12 (14) DI-30, 057-2 4L7 (7) DI-30, 126-3 4L1 (6, 7) DI-30, 126-3 4L13 (6) FF-30, 126-3 4L12 (12, 16) DI-30, 126-3

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2434 (Cont'd)	00 6511	4L8 (6, 7, 33, 23) DI-30, 126-3 4L10 (21) DN-30, 126-3 4L5 (33, 27, 12) FF-30, 126-3 4L4 (27, 23, 34, 33, 6, 7) DI-30, 126-3 4L3 (6, 7, 12, 16, 27, 34, 23, 33) DI-30, 126-3 4L2 (9, 13, 17) DN-30, 126-3 4N1 (6, 12, 33, 34, 27) DI-30, 126-3 4N12 (6, 23) DI-30, 132-1 4N10 (25) SR-30, 132-1 4N11 (13) DN-30, 132-1 4N17 (6) FF-30, 073-2 4N13 (33, 27) FF-30, 073-2 4N16 (6, 23) DI-30, 073-2 4N15 (6, 23) DI-30, 073-2 4N14 (6, 23) DI-30, 073-2
2435	00 6523	4L7 (33) DI-30, 126-3 4K13 (33) DI-30, 056 4K23 (16) DI-30, 055 4K6 (12) BC-30, 076 4R15 (12) DI-30, 057-1 4R19 (23, 12) DI-30, 057-1, 2 4R9 (18) BC-30, 057-2 4N16 (12) DI-30, 073-2 4R14 (6) DC-30, 057-1
2437	00 6524	4N18 (7, 12) DI-30, 073-2 4N17 (16) FF-30, 073-2 4N21 (16) DI-30, 073-1 4L6 (10) FCG, 126-3

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2440	00 6534	4L1 (23) DI-30, 126-3 4K13 (27) DI-30, 057 4K23 (7) DI-30, 055 4N15 (12) DI-30, 073-2
2442	00 6535	4N16 (6, 12) DI-30, 073-2 4N17 (11) FF-30, 073-2 4L6 (9) FCG, 126-3
2443	00 6545	4L1 (33) DI-30, 126-3 4K13 (16) DI-30, 056 4K20 (33) DI-30, 055 4N14 (12) DI-30, 073-2
2445	00 6546	4N15 (6, 12) DI-30, 073-2 4N13 (28) FF-30, 073-2 4L6 (8) FCG, 126-3
2446	00 6556	4K13 (7) DI-30, 056 4K20 (23) DI-30, 055 4N1 (23) DI-30, 126-3 4N12 (12) DI-30, 073-2

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2450	00 6557	4N14 (6, 12) DI-30, 073-2 4N13 (23) FF-30, 073-2 4L6 (5) FCG, 126-3
2452	00 6560	4N12 (12, 23) DI-30, 073-2, 132-1 4N10 (29) SR-30, 132-1 4R11 (25) PA-30, 057-2
2453	00 6575	4N6 (25) PA-35, 132-2 4R11 (8) PA-30, 057-2 4L15 (23) DI-30, 126-2 4L17 (23, 33) DI-30, 126-1 4L18 (9, 13) DN-30, 126-1 4L22 (29, 28, 10, 9, 8) FCG, 126-1 4L23 (34) DI-30, 126-1 4L24 (23, 33) DI-30, 126-1 4L25 (13, 17, 21) DN-30, 126-1 4K9 (12, 16, 23) DI-30, 076 4K10 (35) PA-30, 057-2 4K16 (27, 34, 16, 12) DI-30, 056 4K17 (28, 23, 16, 11) FF-30, 056 4K18 (33, 23, 16, 7) DI-30, 056 4K19 (16, 11) FF-30, 056 4K20 (16, 7) DI-30, 056 4K21 (7, 16) DI-30, 056 4H27 (29) , 076

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2454	00 6605	4L9 (23, 33) DI-30, 126-2 4L10 (9, 13) DN-30, 126-2 4L15 (33) DI-30, 126-2 4L18 (17, 21) DN-30, 126-2 4L6 (32, 30, 29) FCG, 126-2 4L22 (5) FCG, 126-2 4L7 (23) DI-30, 126-3 4K14 (28, 23, 16, 11) FF-30, 056 4K15 (33, 23, 16, 7) DI-30, 056 4K16 (23, 33, 7, 16) DI-30, 056 4R11 (25) PA-30, 057-2
2455	00 6627	(a) 4N8 (23, 25, 15, 9) SR-30, 132-1, 2 4N7 (35, 6) UF-35, 132-2 4N10 (25, 15, 9) SR-30, 132-1 (b) 4R11 (35) PA-30, 057-2 4N6 (8) PA-35, 132-2
2456	00 6634	(a) 4K15 (27, 34, 6) DI-30, 056 4K18 (27, 34, 6, 12) DI-30, 056 4K20 (6, 12) DI-30, 056 (b) 4K28 (27, 34, 6, 12) DI-30, 055 4K25 (27, 34, 6, 12) DI-30, 055 4K23 (27) DI-30, 055 4L22 (29, 28, 10, 9, 8, 5) FCG, 126-1, 2 4L6 (32, 30, 29) FCG, 126-2 4L24 (34, 27) DI-30, 126-1 4L23 (33) DI-30, 126-1 4L17 (34, 27) DI-30, 126-1 4L15 (34, 27) DI-30, 126-2 4L9 (34, 27) DI-30, 126-2

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2457	00 6635	4N18 (16) DI-30, 073-2 4R13 (12) DI-30, 057-2 4L6 (32, 30, 29) FCG, 126-2 4L22 (29, 28, 10, 9, 8, 5) FCG, 126-1, 2 4L9 (12, 16) DI-30, 126-2 4L10 (9, 13) DN-30, 126-2 4L11 (6, 7) DI-30, 126-2 4L15 (12, 16) DI-30, 126-2 4L16 (6, 7) DI-30, 126-2 4L17 (12, 16) DI-30, 126-1 4L18 (9, 13, 17, 21) DN-30, 126-1, 2 4L19 (6, 7) DI-30, 126-1 4L23 (16, 23) DI-30, 126-1 4L24 (12, 16) DI-30, 126-1 4L25 (13, 17, 21) DN-30, 126-1 4L26 (7, 6) DI-30, 126-1
2460	00 6663	4K28 (27, 34, 6, 12, 23, 16, 7) DI-30, 055 4K25 (27, 34, 6, 12, 33, 23, 16, 7) DI-30, 055 4K23 (27, 33) DI-30, 055 4N6 (18) PA-35, 132-2 4N11 (9) DN-30, 132-1 4N15 (27) DI-30, 073-2 4N14 (27) DI-30, 073-2 4N12 (27) DI-30, 073-2 3D4 (9, 19, 30, 11) DI-30, 437-1, 2 4N1 (27) DI-30, 126-3 4N2 (9) DN-30, 126-3 4L3 (27, 23) DI-30, 126-3 4L4 (23, 33, 7) DI-30, 126-3 4L8 (27, 23) DI-30, 126-3 4L12 (7, 16) DI-30, 126-3 Also See Stop Codes # 2455 (a) and 2456 (a)

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2461	00 6674	4R11 (16) PA-30, 057-2 4K20 (7) DI-30, 056 4K18 (33, 23, 16, 7) DI-30, 056 4K15 (33,23,16,7,12)DI-30,056 4K28 (23, 16, 7) DI-30, 055 4K25 (33, 23, 16, 7) DI-30, 055 4K23 (33, 23, 16) DI-30, 055 4L7 (16, 34) DI-30, 126-3 4N10 (29, 10, 6) SR-30, 132-1 4N8 (29) SR-30, 132-1 4N11 (17) DN-30, 132-1 4N12 (6) DI-30, 132-1 4N6 (25) PA-35, 132-2 4N16 (23) DI-30, 073-2 4L4 (27) DI-30, 126-3
2462	00 6717	4R11 (32) PA-30, 057-2 4K23 (23, 34) DI-30, 055 4K15 (12) DI-30, 056 4N25 (7, 16) DI-30, 073-1 4N23 (16) DI-30, 073-1 4N20 (7, 16) DI-30, 073-1, 2 4N19 (16) DI-30, 073-2 4R22 (6, 16) DI-30, 068 4R19 (6, 16) DI-30, 068
2463	00 6732	4K28 (33) DI-30, 055 4K23 (34) DI-30, 055 4N15 (23) DI-30, 073-2 4N11 (21) DN-30, 132-1 4N8 (19) SR-30, 132-2 4L4 (34) DI-30, 126-3

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2464	00 6764	4R13 (27) DI-30, 057-2 4N20 (16, 23) DI-30, 073-2 4N22 (11) FF-30, 073-2 4N10 (19) SR-30, 132-1
2465	00 7022	4N2 (9) DN-30, 126-3 4L4 (16) DI-30, 126-3
2466	00 7023	5C26 (31) BO, 057-2 4N2 (9) DN-30, 126-3
2467	00 7047	4R10 (6, 12) DI-30, 057-2
2470	00 7057	4R10 (12) DI-30, 057-2 4L6 (5, 8) FCG, 126-3 4L2 (13, 17) DN-30, 126-3 4L3 (33) DI-30, 126-3 4N1 (6) DI-30, 126-3 4L4 (6) DI-30, 126-3 4N14 (23) DI-30, 073-2

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2471	00 7060	4L5 (6) FF-30, 126-3 4L6 (5) FCG, 126-3 4L4 (12, 16) DI-30, 126-3 4N2 (9, 17, 13, 21) DN-30, 126-3, 057-2 5C26 (31) BO, 057-2
2472	00 7067	4L6 (28, 10, 9, 8) FCG, 126-3 4L10 (17, 21) DN-30, 126-3 4L2 (9, 13) DN-30, 126-3 4L8 (6, 7) DI-30, 126-3 4L3 (6, 7) DI-30, 126-3
2473	00 7207	4H18 (18, 20, 27) BC-30, 047-1 4H16 (16, 12, 33, 27) DI-30, 047-1 4H17 (9) DN-30, 047-1
2474	00 7210	4H15 (7, 16) DI-30, 047-1 4H19 (6) FF-30, 047-1 4H14 (33) FF-30, 047-1 4H18 (18, 20, 27) BC-30, 047-1
2475	00 7262	4R13 (7, 6, 34) DI-30, 057-1 4R9 (27, 18) BC-30, 057-2 4R15 (27, 33, 34) DI-30, 057-1 4R16 (35, 30, 8) PA-30, 057-1 4R19 (23, 27, 12) DI-30, 057-1, 2

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2475 (Cont'd)	00 7262	4R11 (26) PA-30, 057-1 4R14 (6, 33) DC-30, 057-1 4R12 (22) DC-30, 057-1 4K9 (27, 33) DI-30, 076 4K6 (33) BC-30, 076
2476	00 7267	4R26 (28) FF-30, 068 4R11 (26) PA-30, 057-1 4N28 (23) DI-30, 073-1 4K10 (16) PA-30, 076 4H10 (11, 16, 28, 23) FF-30, 047-2 4H11 (6, 7, 27, 33, 16, 12, 23, 34) DI-30, 047-2 4H12 (11, 16, 28, 23) FF-30, 047-2 4H13 (6, 7, 27, 33, 16, 12, 23, 34) DI-30, 047-2 4H14 (16, 23) FF-30, 047-2 4H15 (27, 33, 23, 34) DI-30, 047-2 4H20 (16, 12, 23, 34) DI-30, 046-2 4H22 (16, 12, 23, 34) DI-30, 046-2 4H24 (23, 34) DI-30, 046-2
2477	00 7270	4R11 (30) PA-30, 057-1 4R20 (28, 23, 16, 11) FF-30, 068 4R23 (28, 23, 16, 11) FF-30, 068 4R26 (23, 16, 11) FF-30, 068 4R18 (16, 11) FF-30, 068 4R22 (23, 27, 6, 16) DI-30, 068 4R25 (23, 27, 6, 16) DI-30, 068 4R28 (27, 6, 16) DI-30, 068 4R19 (6, 16, 27) DI-30, 068, 057-1 4K24 (28, 23, 16, 11) FF-30, 055 4K27 (28, 23, 16, 11) FF-30, 055 4R16 (35) PA-30, 057-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2477 (Cont'd)	00 7270	4K22 (28, 23) FF-30, 055 4N12 (33) DI-30, 073-2 4N14 (33) DI-30, 073-2 4N15 (33) DI-30, 073-2 4N16 (33) DI-30, 073-2 4N18 (33) DI-30, 073-2 4N19 (33) DI-30, 073-2 4N20 (33) DI-30, 073-2 4N21 (33) DI-30, 073-1 4N23 (33) DI-30, 073-1 4N24 (33, 23) DI-30, 073-1 4N25 (33) DI-30, 073-1 4N27 (33) DI-30, 073-1
2500	00 1424	4R11 (8) PA-30, 057-2
2501	00 3255	4R11 (16) PA-30, 057-2
2502	00 7332	4H26 (16) DI-30, 046-1 4R11 (26) PA-30, 057-1 4R13 (34) DI-30, 057-1 4R15 (7, 6) DI-30, 057-1 4R14 (33, 18) DC-30, 057-1, 2 4R26 (28, 23, 16, 11) FF-30, 068 4R23 (28, 23, 16, 11) FF-30, 068 4R20 (28, 23) FF-30, 068 4R28 (23, 27, 6, 16) DI-30, 068 4R16 (18) PA-30, 057-1 4R19 (33, 34) DI-30, 068

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2502 (Cont'd)	00 7332	4R25 (23, 27, 6, 16) DI-30, 068 4R22 (23, 27, 7, 12) DI-30, 068 4N18 (12, 33) DI-30, 073-2 4N19 (12, 33) DI-30, 073-2 4N20 (12, 33) DI-30, 073-2 4N21 (12, 33) DI-30, 073-1 4N23 (12, 33) DI-30, 073-1 4N24 (12, 7, 33, 23) DI-30, 073-1 4N25 (12, 33) DI-30, 073-1 4N27 (12, 33) DI-30, 073-1 4N28 (12, 33) DI-30, 073-1 4K14 (28, 23, 16, 11) FF-30, 056 4K17 (28, 23, 16, 11) FF-30, 056 4K19 (16, 11) FF-30, 056
2503	00 7361	4L1 (16, 23, 12, 33) DI-30, 126-3 4L2 (9, 13) DN-30, 126-3 4L6 (28, 10, 9, 8, 5) FCG, 126-3 4L7 (12, 33) DI-30, 126-3 4L8 (33, 34) DI-30, 126-3 4L10 (17, 21) DN-30, 126-3 4L3 (34) DI-30, 126-3 4K12 (28, 23, 16, 11) FF-30, 056 4K13 (33, 23, 16, 7) DI-30, 056 4K22 (16, 11, 28, 23) FF-30, 055 4K20 (33, 23) DI-30, 055 4K23 (16, 7) DI-30, 055 4N1 (12, 16, 23) DI-30, 126-3 4N16 (12, 33, 7, 16) DI-30, 073-2 4N14 (12, 33, 16) DI-30, 073-2 4N15 (12, 33, 16) DI-30, 073-2 4N13 (12, 33) DI-30, 073-2 4R20 (16, 11) FF-30, 068 4R18 (16, 11) FF-30, 068 4R22 (6, 16) DI-30, 068 4R19 (6, 16) DI-30, 068 4R13 (34) DI-30, 057-1 4R14 (33) DC-30, 057-1 4R25 (33) DI-30, 068

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2504	00 7422	4N8 (10, 6) SR-30, 132-2 4N7 (26, 15) UF-35, 132-2
2505	00 7222	4R16 (25, 16) PA-30, 057-1 4H2 (23, 34, 16, 12) DI-30, 048-2 4H4 (23, 34, 16, 12) DI-30, 048-2 4H6 (16, 12) DI-30, 048-2 4H11 (16, 12, 23, 34) DI-30, 047-2 4H13 (16, 12, 23, 34) DI-30, 047-2 4H15 (23, 34) DI-30, 047-2 4H18 (18, 20) BC-30, 047-1
2506	00 7451	4N8 (29, 19) SR-30, 132-1, 2 4N10 (19, 10, 6) SR-30, 132-1 4R10 (12, 6) DI-30, 057-2 4R12 (14) DC-30, 057-2
2507	00 7477	4L1 (34, 16) DI-30, 126-3 4L6 (10, 28) FCG, 126-3 4L8 (16) DI-30, 126-3 4L10 (17) DN-30, 126-3 4K13 (34) DI-30, 056 4K23 (12) DI-30, 055 4N16 (23, 16) DI-30, 073-2

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2510	00 7407	4K20 (23, 33) DI-30, 055 4K23 (7, 16) DI-30, 055 4N16 (7, 16) DI-30, 073-2 4N15 (16) DI-30, 073-2 4N14 (16) DI-30, 073-2
2511	00 7551	4L6 (8, 9) FCG, 126-3 4L3 (16) DI-30, 126-3 4L2 (9) DN-30, 126-3 4K20 (34) DI-30, 055 4K13 (12) DI-30, 056 4N1 (7, 16) DI-30, 126-3 4N14 (23, 16) DI-30, 073-2
2512	00 7576	4L7 (12) DI-30, 126-3 4K13 (33, 23, 16) DI-30, 056 4K20 (33, 34) DI-30, 055 4K23 (7) DI-30, 055 4N18 (23, 16, 6) DI-30, 073-2 4N19 (23, 16) DI-30, 073-2 4N16 (7) DI-30, 073-2 4N20 (7) DI-30, 073-1 4N21 (6) DI-30, 073-1
2513	00 7524	4L1 (27, 12) DI-30, 126-3 4L6 (9, 10) FCG, 126-3 4L3 (12) DI-30, 126-3 4L10 (21) DN-30, 126-3 4K13 (6) DI-30, 056 4K20 (27) DI-30, 055 4N15 (23, 16) DI-30, 073-2

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2520	01 1042	4L7 (27) DI-30, 126-3 4K13 (27, 34, 6, 12) DI-30, 056 4K23 (6, 12) DI-30, 055 4K20 (27) DI-30, 055
2521	01 1100	4K13 (27, 7) DI-30, 056 4K23 (6) DI-30, 055 4K20 (23) DI-30, 055
2522	01 1167	4H16 (27, 12) DI-30, 047-1 4H17 (13) DN-30, 047-1
2523	01 1262	4H16 (33, 16) DI-30, 047-1
2524	01 1317	4H10 (11, 16, 28, 23) FF-30, 047-2 4H12 (11, 16, 28, 23) FF-30, 047-2 4H14 (16, 23) FF-30, 047-2 4H23 (28, 23, 11, 16) FF-30, 046-2 4H21 (28, 23, 11, 16) FF-30, 046-2 4H19 (28, 23) FF-30, 046-2 4H16 (23) DI-30, 047-1 4H25 (11) FF-30, 046-1 4H26 (23) DI-30, 046-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2525	01 3117	4H9 (9, 12, 25, 33) BC-30, 048-1 4H8 (16, 12, 33, 27, 7, 6) DI-30, 048-1 4H17 (17) DN-30, 048-1 4F18 (17) DN-30, 054 4F16 (9) DN-30, 054
2526	01 3125	4H9 (18, 20, 27) BC-30, 048-1 4H7 (33, 6) FF-30, 048-1 4H6 (23, 34) DI-30, 048-1 4H18 (9, 33) BC-30, 047-1 4H17 (9) DN-30, 047-1 4F16 (9) DN-30, 054
2527	01 3132	4H9 (18, 20, 27) BC-30, 048-2 4F16 (9) DN-30, 054
2530	01 3667	4H8 (16, 33) DI-30, 048-1 4H17 (21) DN-30, 048-1 4R15 (23) DI-30, 057-1 4R14 (22) DC-30, 057-1
2531	01 3677	4R27 (28, 23, 16, 11) FF-30, 068 4R28 (33, 34, 7, 12) DI-30, 068 4N28 (34) DI-30, 073-1 4N27 (34) DI-30, 073-1 4N25 (34) DI-30, 073-1 4N24 (34) DI-30, 073-1 4R16 (26) PA-30, 057-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2532	01 3706	4R24 (28, 23, 16, 11) FF-30, 068 4R25 (33, 34, 7, 12) DI-30, 068 4N24 (6) DI-30, 073-1 4N23 (34) DI-30, 073-1 4N21 (34) DI-30, 073-1 4N20 (34) DI-30, 073-2 4R16 (26) PA-30, 057-1
2533	01 3715	4R21 (28, 23, 16, 11) FF-30, 068 4R22 (33, 34, 7, 12) DI-30, 068 4N19 (34) DI-30, 073-2 4N18 (34) DI-30, 073-2 4N16 (34) DI-30, 073-2 4N15 (34) DI-30, 073-2 4R16 (26) PA-30, 057-1
2534	01 3714	4R18 (28, 23) FF-30, 068 4R19 (33, 34) DI-30, 068 4N14 (34) DI-30, 073-2 4N12 (34) DI-30, 073-2 4R16 (26) PA-30, 057-1
2535	01 4772	4H8 (6, 12, 27) DI-30, 048-1 4H17 (21) DN-30, 048-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2536	01 5203	4R16 (18, 26) PA-30, 057-1 4R15 (12, 34) DI-30, 057-1 4R14 (26, 18) DC-30, 057-1 4K6 (12) BC-30, 076 4K9 (27) DI-30, 076 4F18 (17) DN-30, 054
2537	01 5210	4R28 (34, 7, 12) DI-30, 068 4R14 (22, 18, 30) DC-30, 057-1 4R15 (27) DI-30, 057-1 4R16 (25) PA-30, 057-1 4R19 (27) DI-30, 057-1 4K9 (33) DI-30, 076 4K7 (17) DN-30, 076 4H8 (23) DI-30, 048-1 4H5 (11) FF-30, 048-2 4H6 (6, 16) DI-30, 048-2 4N2 (9, 17) DN-30, 126-3 4N11 (25) DN-30, 132-1 4F18 (17) DN-30, 054
2540	01 5215	4R27 (23, 16, 11) FF-30, 068 4R28 (34, 7, 12) DI-30, 068 4R15 (23) DI-30, 057-1 4H5 (16, 28, 23) FF-30, 048-2 4H4 (27, 33, 23, 34) DI-30, 048-2 4H6 (7, 12) DI-30, 048-2 4K7 (9, 17) DN-30, 076 4N27 (34) DI-30, 073-1 4N25 (34) DI-30, 073-1 4N24 (34) DI-30, 073-1 4N2 (17) DN-30, 126-3 4F18 (17) DN-30, 054

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2541	01 5222	4R24 (28, 23, 16, 11) FF-30, 068 4R25 (33, 34, 7, 12) DI-30, 068 4R15 (16) DI-30, 057-1 4H3 (11, 16, 28, 23) FF-30, 048-2 4H2 (27, 33, 23, 34) DI-30, 048-2 4H4 (6, 7, 16, 12) DI-30, 048-2 4N8 (10, 6) SR-30, 132-2 4N24 (6) DI-30, 073-1 4N23 (34) DI-30, 073-1 4N21 (34) DI-30, 073-1 4N20 (34) DI-30, 073-2 4N2 (17) DN-30, 126-3 4F18 (17) DN-30, 054
2542	01 5227	4R21 (28, 23, 16, 11) FF-30, 068 4R22 (33, 34, 7, 12) DI-30, 068 4H1 (11, 16) FF-30, 048-2 4H2 (6, 7, 16, 12) DI-30, 048-2 4N7 (26, 15) UF-35, 132-2 4N19 (34) DI-30, 073-2 4N18 (34) DI-30, 073-2 4N16 (34) DI-30, 073-2 4N15 (34) DI-30, 073-2 4F18 (17) DN-30, 054
2543	01 5230	4R18 (28, 23) FF-30, 068 4R19 (33, 34) DI-30, 068 4R12 (14) DC-30, 057-2 4N14 (34) DI-30, 073-2 4N12 (34) DI-30, 073-2 4F18 (17) DN-30, 054

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2544	01 5415	4H5 (11, 16, 28, 23) FF-30, 048-2 4H3 (11, 16, 28, 23) FF-30, 048-2 4H1 (11, 16) FF-30, 048-2 4H6 (6, 7, 16, 12) DI-30, 048-2 4H4 (27, 33, 6, 7, 23, 34, 16, 12) DI-30, 048-2 4H2 (27, 33, 6, 7, 23, 34, 16, 12) DI-30, 048-2 4N9 (10, 14, 18, 22, 26, 30) 132-1, 2 4N11 (29, 32, 35) DN-30, 132-1 4R15 (12, 7, 16) DI-30, 057-1 4R14 (18, 6) DC-30, 057-1 4R16 (30) PA-30, 057-1 4R19 (23, 27) DI-30, 057-1 4R25 (34, 7, 12) DI-30, 068 4R22 (33, 34) DI-30, 068 4R27 (28) FF-30, 068 4R28 (33) DI-30, 068 4N28 (34) DI-30, 073-1 4N24 (34, 6) DI-30, 073-1 4N23 (34) DI-30, 073-1 4N21 (34) DI-30, 073-1 4N20 (34) DI-30, 073-2 4N19 (34) DI-30, 073-2 4N18 (34) DI-30, 073-2
2545	01 7454	4R15 (6) DI-30, 057-1 4N16 (33, 34) DI-30, 073-2 4N15 (33, 34) DI-30, 073-2 4N14 (33, 34) DI-30, 073-2 4N12 (33, 34) DI-30, 073-2 4N2 (17) DN-30, 126-3 4H5 (11, 16, 28, 23) FF-30, 048-2 4H3 (11, 16, 28, 23) FF-30, 048-2 4H1 (11, 16) FF-30, 048-2

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2546	01 7254	4H9 (9, 33) BC-30, 048-1 4H17 (17) DN-30, 048-1
2547	01 7624	4H5 (11, 16, 28, 23) FF-30, 048-2 4H3 (11, 16, 28, 23) FF-30, 048-2 4H1 (11, 16) FF-30, 048-2 4H8 (23) DI-30, 048-1
2600	00 7312	4H15 (27, 33, 23, 34) DI-30, 047-2 4H13 (6, 7, 27, 33, 16, 12, 23, 34) DI-30, 047-2 4H11 (6, 7, 27, 33, 16, 12, 23, 34) DI-30, 047-2 4H14 (16, 23) FF-30, 047-2 4H12 (11, 16, 28, 23) FF-30, 047-2 4H10 (11, 16, 28, 23) FF-30, 047-2 4R14 (6, 26) DC-30, 057-1 4R12 (14) DC-30, 057-2 4R9 (18) BC-30, 057-2 4N2 (13, 9) DN-30, 126-3 4N11 (25, 29, 32, 35) DN-30, 132-1 4N9 (10, 14, 18, 22, 26, 30) 132-1, 2 4N10 (33, 25, 15, 9) SR-30, 132-1 4N8 (23, 25, 15, 9) SR-30, 132-1, 2 4N7 (35, 6) UF-35, 132-2 4N19 (16, 12) DI-30, 073-2 4N20 (7, 16, 12) DI-30, 073-1, 2 4N12 (12) DI-30, 073-2 4N14 (12) DI-30, 073-2 4N15 (12) DI-30, 073-2 4N16 (12) DI-30, 073-2 4N18 (12) DI-30, 073-2 4N21 (12) DI-30, 073-1 4N23 (12) DI-30, 073-1 4N24 (7, 12) DI-30, 073-1 4N25 (12) DI-30, 073-1 4N27 (12) DI-30, 073-1 4N28 (12) DI-30, 073-1

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2601	00 7313	4R16 (16) PA-30, 057-1 4H16 (23) DI-30, 047-1 4K7 (9) DN-30, 076
2701	00 7640	FAILURE IN BAND SEQUENCING; BAND 16 not executed in order
2702	00 7647	FAILURE IN BAND SEQUENCING; BAND 14 not executed in order
2703	00 7666	FAILURE IN BAND SEQUENCING; BAND 13 not executed in order
2704	00 7675	FAILURE IN BAND SEQUENCING; BAND 15 is not executed in order

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2715	00 0056	1G7 (16) DI-30, 311 1G6 (17, 32) DN-30, 311 1G23 (16) DI-30, 426 1G22 (31) DC-30, 426
2750	N/A	(a) If No. Vars. = 01 4R5 (23) FF-30, 075 4R6 (7) DI-30, 075 4R2 (6) DC-30, 075 (b) If No. Vars. = 10 4R5 (28) FF-30, 075 4R7 (12) DI-30, 075 4R2 (6) DC-30, 075 (c) If No. Vars. = 11 4R6 (23) DI-30, 075 4R2 (6) DC-30, 075
2751	N/A	(a) If Zone Counter = 001 4L2 (35) , 075 4N3 (25) BC-30, 075 4N9 (6) DC-30, 075 4R1 (27) BC-30, 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2751 (Cont'd)	N/A	4R6 (6) DI-30, 075 4L25 (35) , 075 4N13 (11) FF-30, 126-3 4M (CR5) 075 Also possible fault in FLAG BIT from drum
		(b) If Zone Counter = 010 4R1 (6) BC-30, 075 4R6 (6) DI-30, 075 4L25 (35) , 075 Also possible fault in FLAG BIT from drum
		(c) If Zone Counter = 011 4R6 (6) DI-30, 075 4L25 (35) , 075 Also possible fault in FLAG BIT from drum
		(d) If Zone Counter = 100 4R1 (20) BC-30, 075 4R6 (6) DI-30, 075 4L25 (35) , 075 Also possible fault in FLAG BIT from drum
		(e) If Zone Counter = 110 4R6 (6, 12) DI-30, 075 4L25 (35) , 075 Also possible fault in FLAG BIT from drum
		(f) If Zone Counter = 101 or 111 4R6 (6) DI-30, 075 4L25 (35) , 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2752	N/A	(a) If Priority Reg. 2, 3, 4, 7/0 = 1, 1, 1, 1 4R3 (34) DI-30, 075 4R2 (6) DC-30, 075 4R6 (16) DI-30, 075 4F18 (9) DN-30, 054
		(b) If Priority Reg. 2, 3, 4, 7/0 = 1, 0, 0, 0 4F17 (28) FF-30, 054 4F18 (9) DN-30, 054 4R2 (6) DC-30, 075 4R6 (16) DI-30, 075
		(c) If Priority Reg. 2, 3, 4, 7/0 = 0, 1, 0, 0 4F17 (23) FF-30, 054 4F27 (30) , 054 4F18 (9) DN-30, 054 4R2 (6) DC-30, 075 4R6 (16) DI-30, 075
		(d) If Priority Reg. 2, 3, 4, 7/0 = 0, 0, 1, 0 4F17 (16) FF-30, 054 4F18 (35, 9) DN-30, 054 4R2 (6) DC-30, 075 4R6 (16) DI-30, 075
		(e) If Priority Reg. 2, 3, 4, 7/0 = 0, 0, 0, 1 4F17 (11) FF-30, 054 4F18 (9) DN-30, 054 4R2 (6) DC-30, 075 4R6 (16) DI-30, 075
		(f) If conditions (a) - (e) are not true 4F18 (9) DN-30, 054 4R2 (6) DC-30, 075 4R6 (16) DI-30, 075

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2753	N/A	(a) If Index Reg. X, Y, Z = 1, 0, 0 4F25 (28) FF-30, 081 4F26 (27) DI-30, 081 4R10 (16) DI-30, 081 4R6 (16) DI-30, 075 4R2 (6) DC-30, 075 (b) If Index Reg. X, Y, Z = 0, 1, 0 4F25 (23) FF-30, 081 4F26 (33) DI-30, 081 4R10 (16) DI-30, 081 4R6 (16) DI-30, 075 4R2 (6) DC-30, 075 (c) If Index Reg. X, Y, Z, = 0, 0, 1 4F25 (16) FF-30, 081 4F26 (7) DI-30, 081 4R10 (16) DI-30, 081 4R6 (16) DI-30, 075 4R2 (6) DC-30, 075 (d) If conditions (a) - (c) are not true 4R10 (16) DI-30, 081 4R6 (16) DI-30, 075 4R2 (6) DC-30, 075
2754	N/A	4F14 (13, 9) DN-30, 054 6L12 (17) 231-3 Also possible failure in console logic associated with the LFI FE Stop.
2755	N/A	4F14 (9) DN-30, 054

<u>Stop Code</u>	<u>Stop Locs.</u>	<u>Diagnosis</u>
2756	N/A	4F14 (9) DN-30, 054
2757	N/A	4F14 (17) DN-30, 054 4F16 (21) DN-30, 054 4F18 (9) DN-30, 054
2777	See Program Listing	This stop code logically should not occur. It has been used in the program as a safety stop. If, for example, the program has 4 choices it generally does not assume the 4th choice after eliminating the first three. Instead the program looks for the 4th condition - if it also does not exist then the program will stop with a 27 2777. This will prevent the program from continuing when unpredictable symptoms occur. Transients, intermittents or more than one failure will in many cases cause a 27 2777 stop.

5.0 Program Description

This section provides more detailed information than section 2 concerning the design of the LFI Diagnostic. Used in conjunction with the Flow Charts, Appendix A, and the Program Listing, Appendix B, thorough knowledge of the LFI Diagnostic may be obtained. Before studying the details, the general design philosophy, section 2 should be read. In particular section 2.3, Assumptions, should be thoroughly understood, since they have been rigidly adhered to in the design of the program.

The general purpose computer is used to test and diagnose the LFI. Thus the LFI Diagnostic consists of a GP program and a LFI program which are to be executed in parallel. The logical interconnection between these two programs is basic to the LFI Diagnostic. The GP program stores data in memory locations that the LFI is expected to access, and it examines the contents of memory locations to test the results of the various interpolations.

The LFI program utilizes all four quadrants of each of the four LFI bands. The GP program is stored on physical bands 00 and 01, the remaining GP bands 02-12 being zeroed out. The program starts at the beginning of the GP band addressed as 00 and ends after physical band 00 (or the fast band) has been executed five times.

The operation of the LFI Diagnostic depends on the fact that there is a fast band (i. e. a GP band which is executed on every other drum cycle and is synchronized with LFI bands 1 and 3) and a Medium Fast or Medium band (a GP band which is executed every fourth or eighth drum cycle).

When the program runs to completion each type of interpolation in the LFI will have been exercised utilizing different options and test patterns which have been chosen to detect logical failures. For example, flip-flops will have been set and reset using every input to the set, reset, and complement modes shown on the logic diagrams. This implies that in general each type of interpolation is performed many times. Each type of interpolation, however, is not performed under all possible conditions. This is not necessary and, practically speaking is impossible to perform. Thus it must be concluded that the program is not responsible for the detection of failures which are sensitive to random type patterns.

At the start the program and procedures (see Start-up, section 3.2) are designed to check out the clearing of various registers which is supposed to take place at the beginning of the execution of LFI band 1. The MARK I is allowed to run and then halted at drum location 00 0037. The conditions which generate clearing signals for the

ZONE CTR., the NO. VARS. REG., the PRIORITY REG., and the INDEX REG. should have been met shortly before the computer was halted and no intervening flag bits should have been sensed to change the state of any of these registers. If the visual check is passed, we have ascertained that these registers can be cleared, that the flag bit can be read as zero from the drum, that ZONE 0 can be decoded, etc. It should be noted that the diagnosis of any failure at this point or further along in the program, assumes that the GP Diagnostic Program was executed successfully just prior to the initiation of the LFI diagnostic program. Thus all of the logic checked by the GP Diagnostic is assumed to be operating without error.

After a successful visual check, the MARK I is put into run mode with Conditional Stop and LFI FE Stop enabled. If there is a failure in the logic which generates a LFI FE Stop such that it looks like the LFI has failed to get memory access as soon as the program begins, the MARK I will stop as soon as it starts with the Execute Failure Indicator on. This error stop will occur at location 00 0037. The GP drum location 00 0037 contains the instruction 23 3777. This instruction is used to force the error stop if the failure does exist. The instruction 23 3777 appears often in the GP program. Although

it may seem to appear at random, it is actually used to inhibit the LFI from gaining memory access or to send a GP memory access signal to the LFI FE Stop logic.

The format of the words which were loaded onto the LFI drum bands is checked next. Core memory location 0167 (or 2167) still contains the word which was loaded onto LFI band 4, address 6170. The word is retrieved from core memory to check for the correct loading format.

The LFI program next encounters the word 1400 while still in ZONE 0. If there is a logic failure which causes the LFI to execute a C-W memory access at this time, the GP will find that the sign stored in memory location 1400 has been changed from a minus to a plus and will execute a stop instruction. This method of checking to see if the LFI has stored any result into memory is used in the first part of the diagnostic before the results of the calculations carried out by the LFI are checked. The GP program stores a negative number into the particular memory location in question and then at the appropriate time checks to see if that same memory location contains a positive number due to a LFI C-W memory access.

The LFI program proceeds to the first interpolation. At this early stage of the diagnostic it has not yet been ascertained that the LFI can count up to ZONE 7 without skipping any stages and store a result into memory during ZONE 7. The first interpolation is used to test this portion of the logic and any failure which is found will cause a LFI FE Stop or the execution of a Stop instruction. By the time ZONE 7 is reached a partial check of the decode of the ZONE CTR. has been made, both bits of the NO. VARS, REG. have proven capable of being set to ones, the decode of the NO. VARS, REG. has been partially checked, and the clearing of the PRIORITY REG. has been partially checked. The address used in ZONE 7 serves to test the ability of the LFI to store a result into a core memory location whose address is all ones (i. e. the ten bits of the address which can be used by the LFI are all ones). If the result is not found in the correct location, all possible incorrect locations are checked. Each separate incorrect location leads to at least one different Stop instruction and thus to at least one unique diagnosis. A separate Stop instruction is executed if none of the predictable locations are found to contain the result.

It should be noted that ZONE 5 of this interpolation contains a word which might be used by the LFI as the memory address for a C-W memory access in the event of certain logic failures. The word appears in the listing as 7000 but if it is used as a memory address it will effectively be 1600. This is because the tape preparation unit interprets words it identifies as being in ZONE 5 according to a different format from that used for words in all other zones. In following the listing of the LFI program it may seem that quite a few words in the program are written incorrectly. This apparent inconsistency is due to the fact that the LFI program is non-standard, and the program, as it is punched on cards, must in a sense "fool" the tape preparation unit into interpreting the program correctly. This will be most apparent in the second quadrant of LFI bands 1 and 3, since the LFI program does not start in ZONE 0 at the beginning of these quadrants contrary to the assumption made by the TPU.

At the successful completion of the first interpolation it has been found that the LFI does store a result into memory during ZONE 7 and thus the GP program can examine LFI results after they get to memory. From this point on there is little need to rely on an LFI FE Stop to aid in the diagnosis. This type of error stop will henceforth only appear occasionally.

The diagnostic next tests that the LFI can recycle and store a result during ZONE 7 a second time and then that the address used in ZONE 7 is not automatically being indexed. Now that a memory address of all ones has been tested, the program proceeds to check that each bit of the memory address used in ZONE 7 can be read as a zero. At the same time further tests are made on the NO. VARS. REG. and its decode. In conjunction with this we carry out an interpolation where the NO. VARS. REG. is to be left equal to zero. This should act as an interpolation of a function of three variables even though the format is non-standard. Throughout the rest of the diagnostic program there will be several interpolations which will leave the NO. VARS. REG. in the zero state and are to be executed as interpolations on three variables.

Until now the interpolations used have been for functions of three variables. Next a check is made on the ZONE CTR., PRIORITY REG., and associated logic to see if they operate correctly for functions of one and two variables. This is followed by the final test needed to complete the check on non-indexed ZONE 7 memory addressing, i. e., checking to see that the data on the drum in ZONE 2 does not get set into the INDEX REG.

The LFI Diagnostic is now ready to check the results of the calculations carried out by the LFI. The sequence of tests is begun by carrying out an interpolation where all words in all zones are zero. Since the program has not yet checked whether the addresses in zones 2, 3, or 4 are automatically indexed, the values of X, Y, and Z, are stored in core memory locations 1, 2, and 3 as well as in location 0. (This procedure of storing values of X, Y, and Z in both indexed and non-indexed addresses is continued until the time when a test can be made to determine if any unwanted indexing is actually taking place.) Since the only way that the GP program can look at data stored in memory location 0 is by means of BLD instructions, only bits 1 through 11 of the result can now be checked. If these bits are all zero, the test has been successfully passed.

The program goes on to perform a series of interpolations where some zones contain non-zero words. By analyzing the results of these interpolations the GP program determines if certain key parts of the arithmetic control logic are malfunctioning. At the end of this series of tests it has been determined the CM flip-flop is not always set, that the set gate on the CM flip-flop does not always see a ZONE 5 signal, and that the IL flip-flop is not always

set. Once these basic elements of the control logic have been tested, it is possible to let the LFI carry out an interpolation and store the result in a non-zero address without having the analysis of any errors found in the result become overwhelmingly cumbersome. In the course of the aforementioned series of tests it has also been proven that the LFI can perform calculations and obtain a non-zero result.

The next steps are to exercise the circuitry which senses consecutive flag bits and synchronizes the ZONE CTR. accordingly, then to almost completely check out the comparison networks which sense compares on the X, Y, and Z interval registers, and to test the INDEX REG. and its associated logic. The state of the INDEX REG. is tested on every other execution of the fast band to see if it counts correctly.

The GP program now performs further tests on the calculations taking place in the LFI with test patterns carefully chosen to exercise all of the circuitry involved in computing a function of one variable. At the completion of this check, a test of the additional logic involved in computing a function of two variables is initiated. In the middle of this check we near the end of the fast band. At this point, it is necessary to interrupt the check on interpolations of functions of two variables and carry out a LFI band sequencing check,

Each LFI band computes a unique result which it stores in core memory location 1447. By the time the LFI Diagnostic reaches the band sequencing check enough logic has been tested to insure that the unique result can be computed correctly. The GP program first checks the result in core memory location 1447 to determine if the last LFI band executed was the correct one (this check is omitted on the first pass of the fast band) and then after a short wait checks again to determine if the LFI band currently being executed is also correct. At the end of the band sequencing check the program proceeds to test the remaining logic associated with calculations of a function of two variables and a function of three variables. These last tests are executed in GP band 01.

If there have been no failures detected and the fast band has been executed for the fifth time, the MARK I will stop at location 00 7701 with a 27 2000. When this stop is reached a test has been made on all of the logic in the LFI with the exception of a piece of the LFI FE Stop logic. The program provides the ability to initiate a check on the rest of the LFI FE Stop logic at this time. (See option # 4, sec. 3.3). If option # 4 is chosen and successfully completed, the program will be halted at the last in a series of four LFI FE Stops.

For the purposes of the program, this last LFI FE Stop is a normal program stop, similar to the instruction 27 2000. There are two looping options which may be initiated after either of these normal program stops. The program may be allowed to execute itself once more and stop at 27 2000 again if no failures are detected or it may be allowed to loop continuously and stop only in case a failure is detected. (See options # 1 and # 3 in section 3.3). There is a counter in the boolean memory which keeps track of how many times the fast band has been executed. Just before the instruction 27 2000 is encountered this counter is reinitialized to a count of one in preparation for either of these looping options. If the program is stopped at any place other than these two normal stops, options # 1 or # 3 will not execute correctly. Various memory locations will have to be reinitialized and thus option # 2 (see sec. 3.3) must be selected to enable the program to execute itself once more.

Upon detection and diagnosis of a failure the program stops with a uniquely coded STOP instruction or with an LFI FE stop at a unique location. The program has no capability for distinguishing between intermittent and solid type failures. However, the operator can conveniently execute again via looping option # 2. This option should always be chosen at least once and if the same STOP occurs again the failure can be safely called solid. The Stop codes list, section 4 can then be used to isolate the fault.

In using the stop codes list, the coded address of a Stop instruction and location at which the stop occurs must match. This check is included as a catchall for certain loading failures which the diagnosis does not consider. The operator, therefore, when noting an incorrect address, should not rely on the diagnosis.

The program tape consists of 4 DP blocks followed by a Reel End Code, followed by 44 GP blocks and a Reel End code, followed by 16 LFI blocks and a Reel End Code. All blocks are short blocks.

FLOW CHARTING SYMBOLS

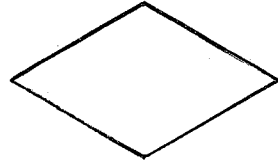
GP Symbols



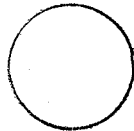
Decisions



Statements

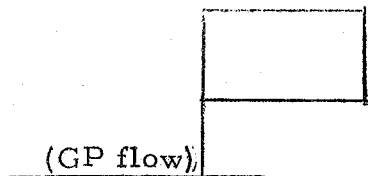


Set Variable Connector

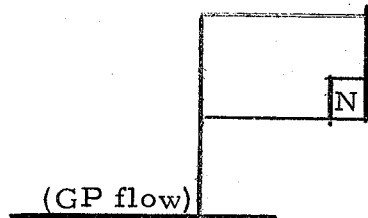


Connector (Fixed or Variable)

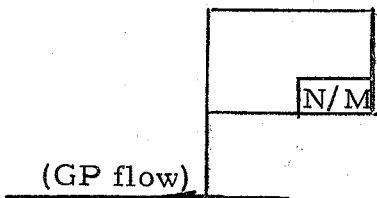
LFI Symbols



Statements



Statements occurring during ZONE N



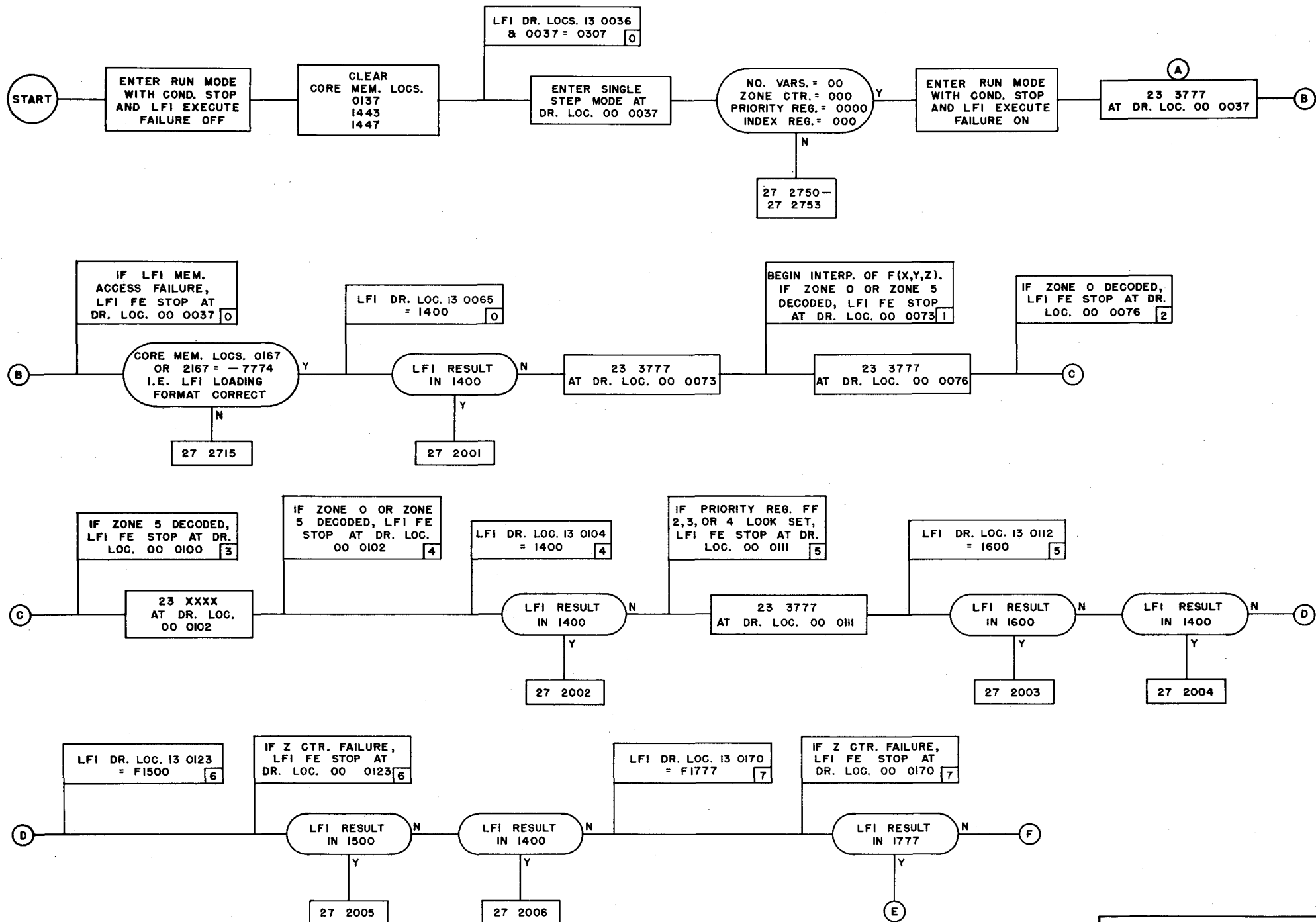
Statements spanning ZONE N to ZONE M

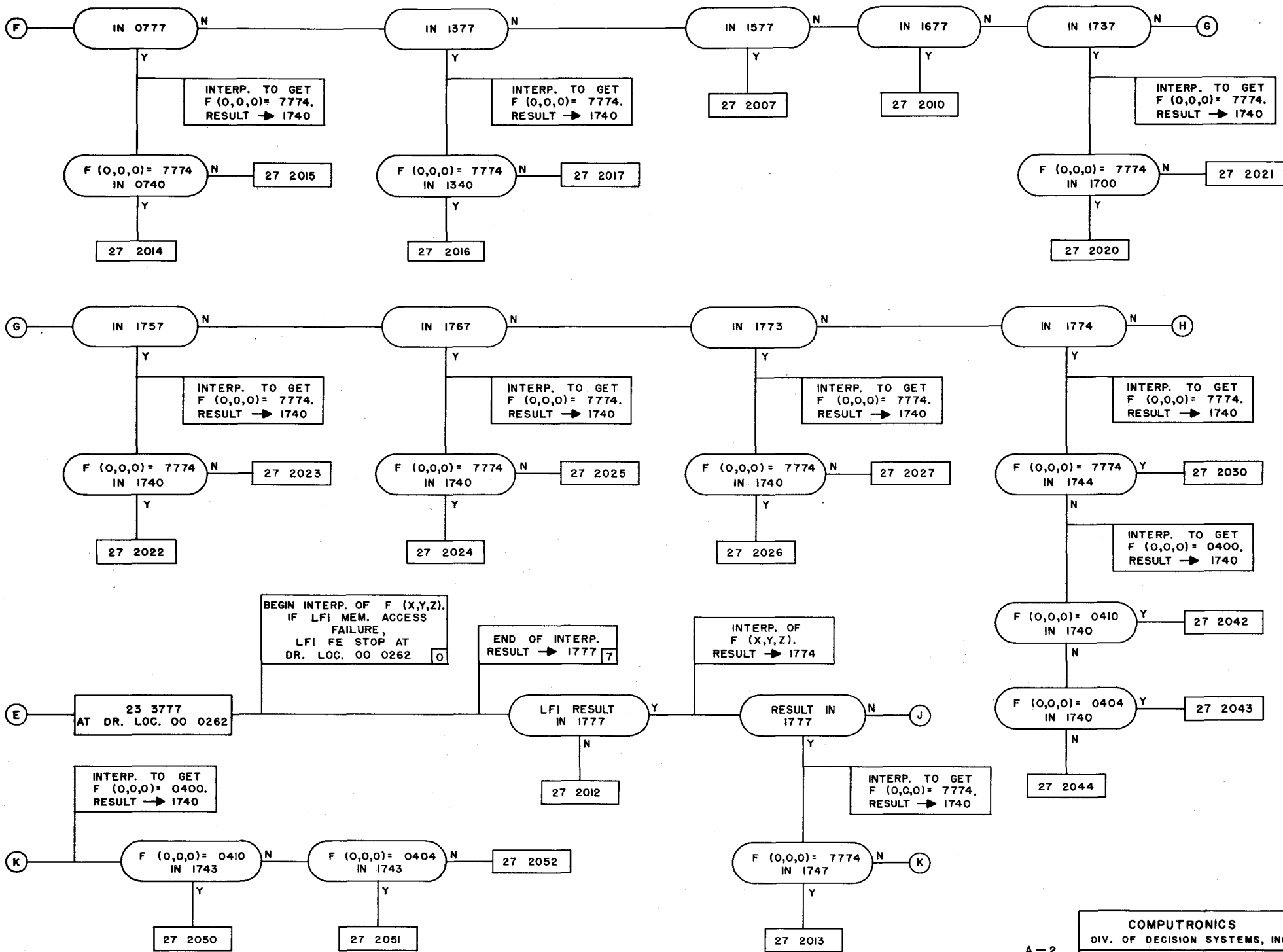
NOTES

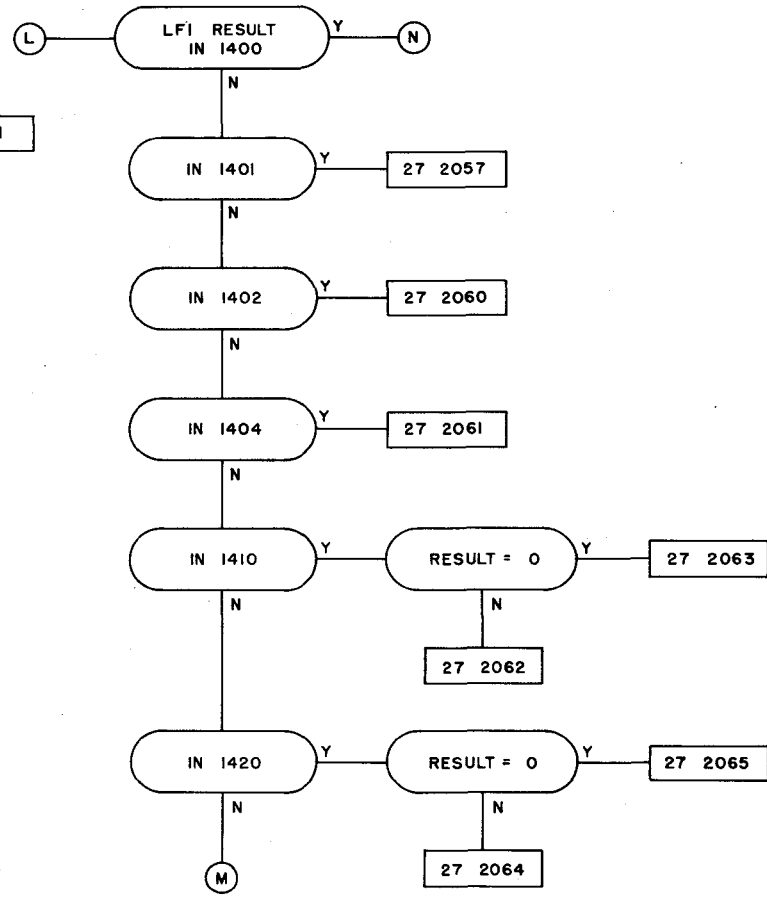
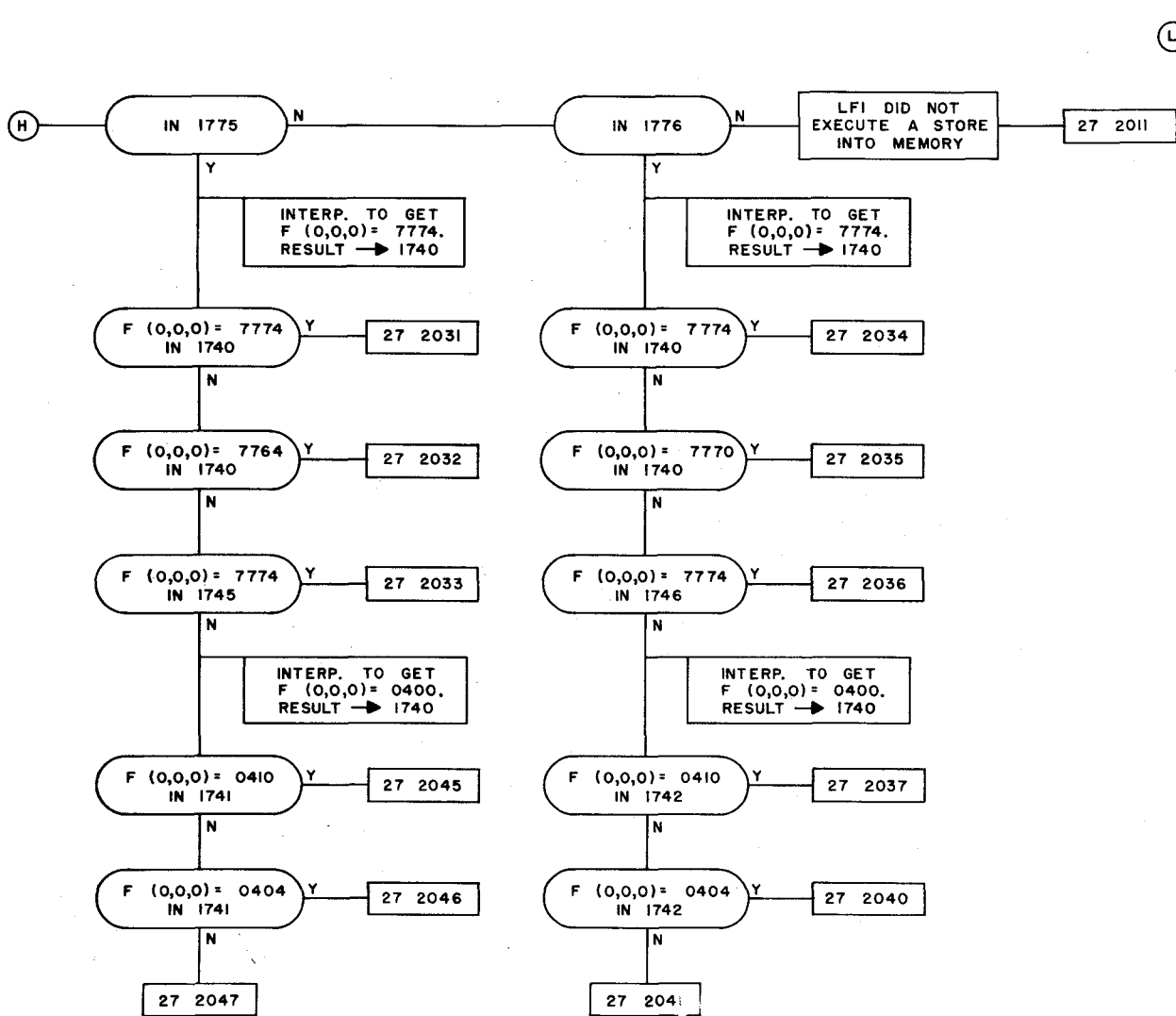
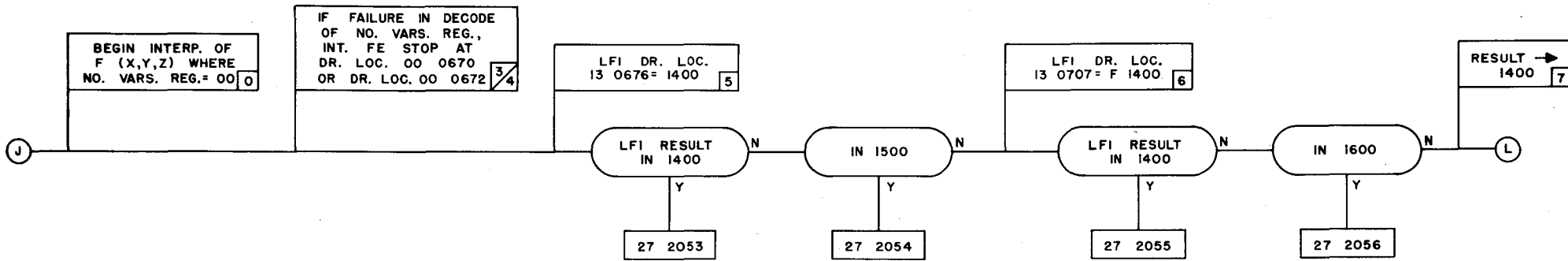
1. The basic flow is of the GP program.

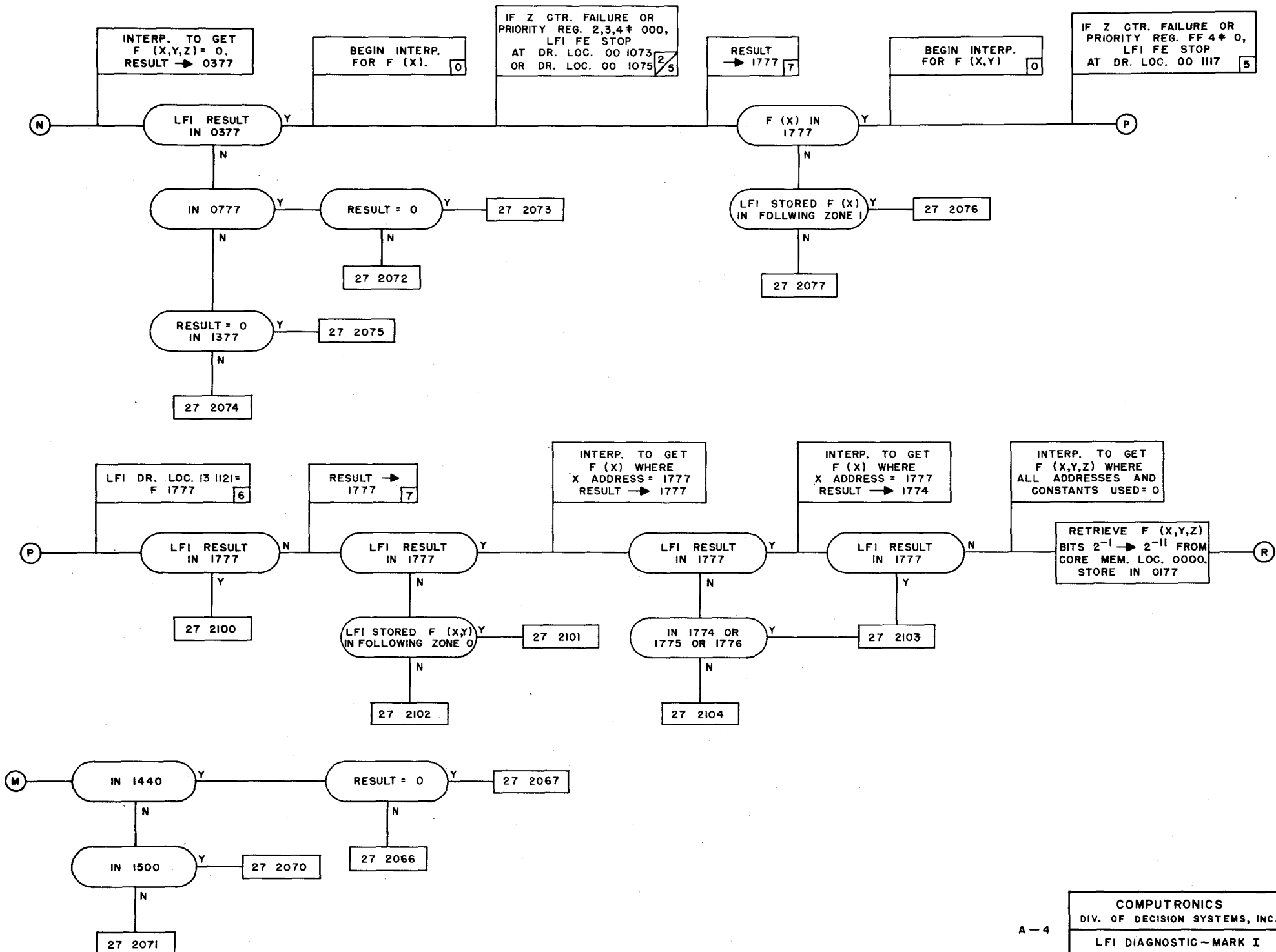
2. Drum band 00 = physical band 00
Drum band 01 = physical band 01
Drum band 13 = LFI band 1 (same flow for LFI 3)
Drum band 14 = LFI band 2 (same flow for LFI 4)

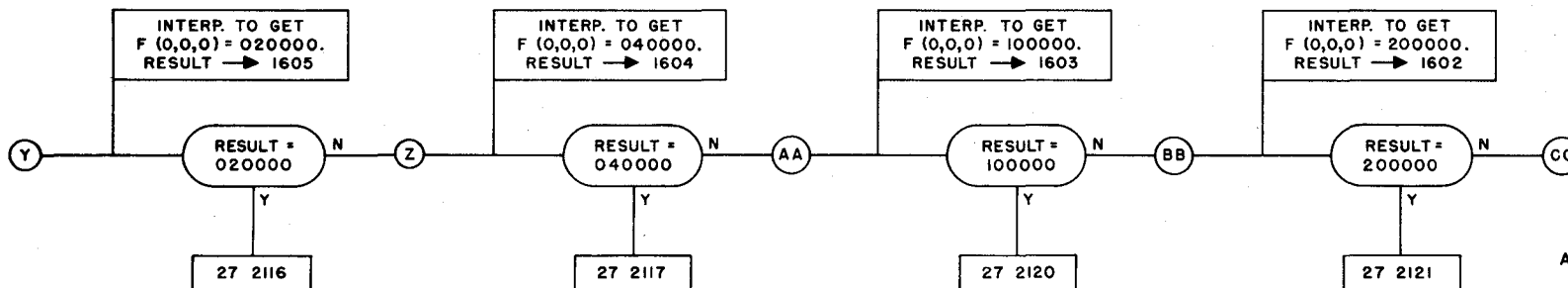
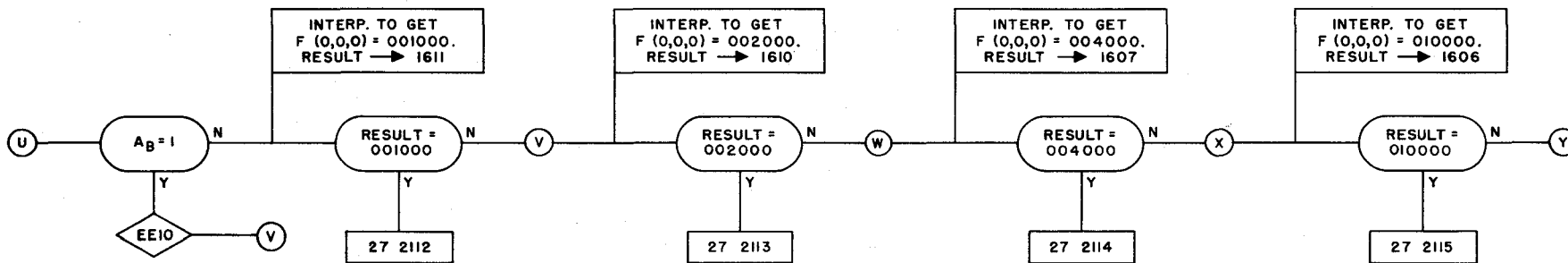
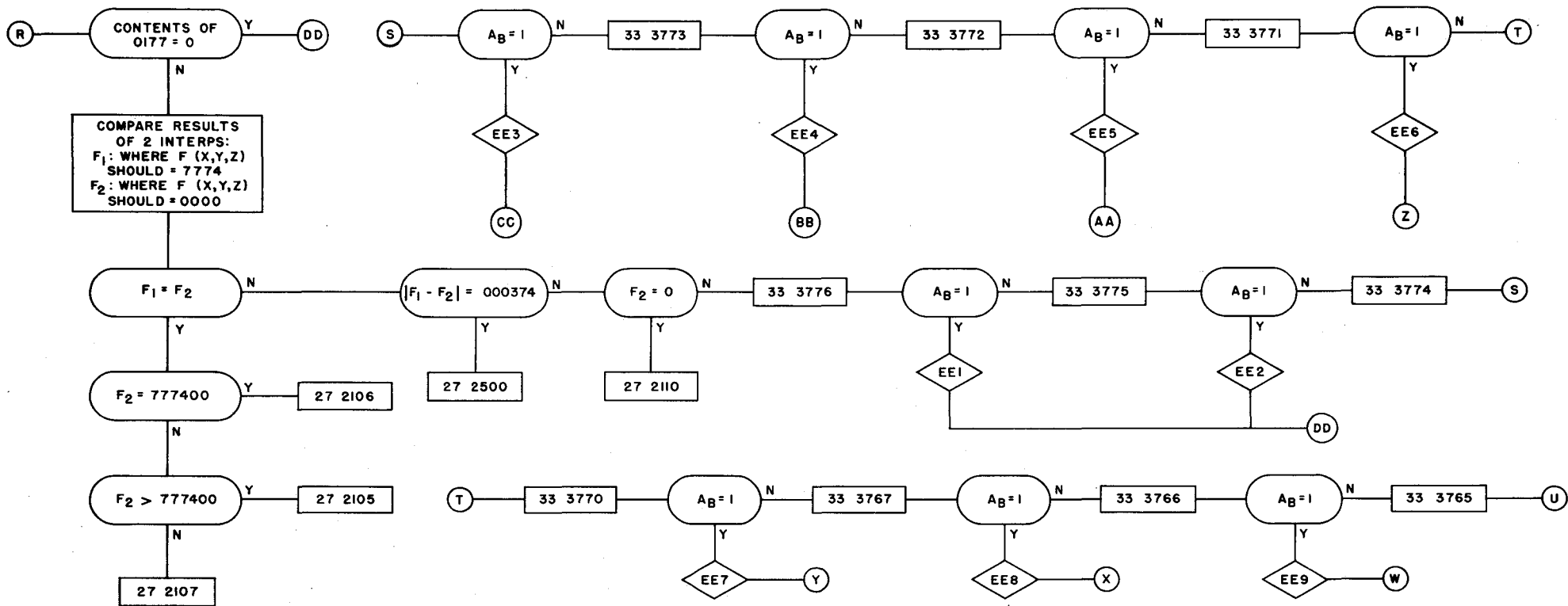
3. "ZONE 5 cut short" means that there are not enough computer cycle times in ZONE 5 to allow CM Flip-Flop to be set.

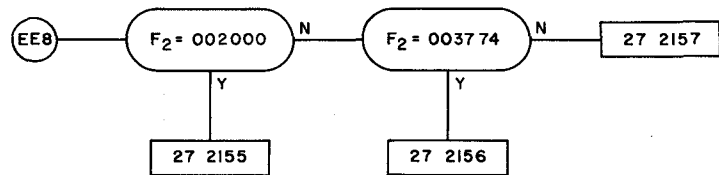
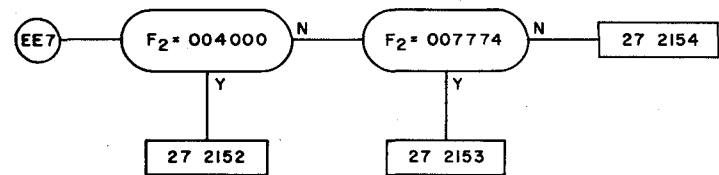
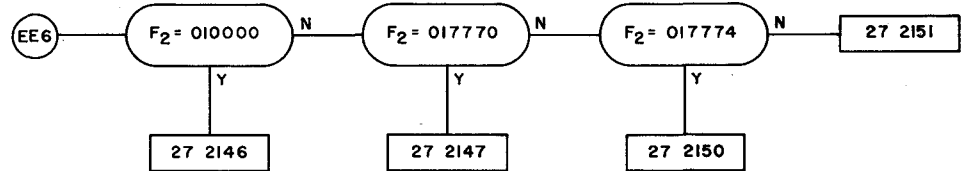
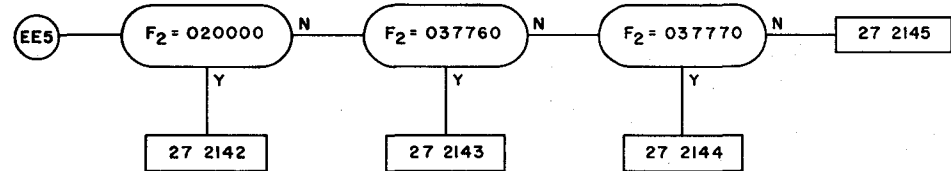
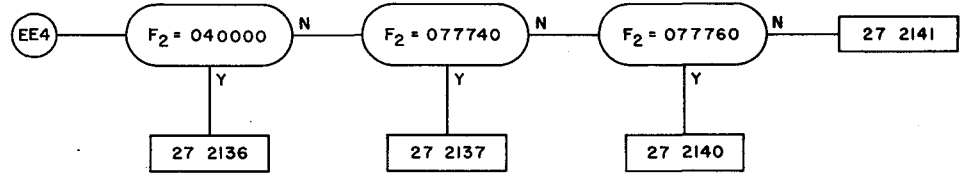
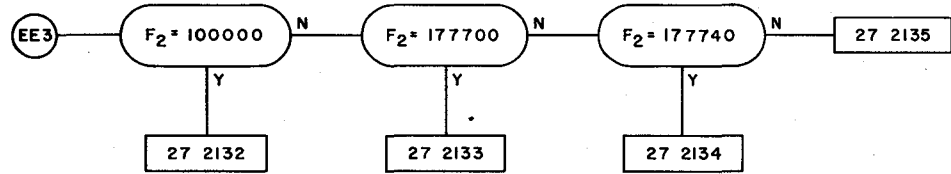
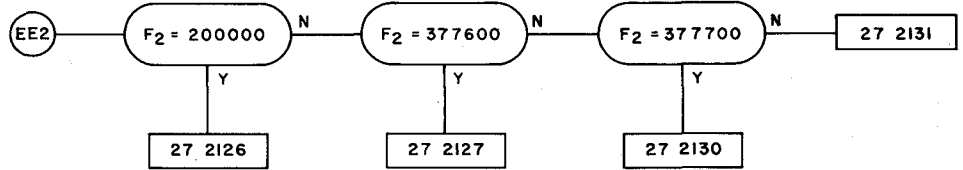
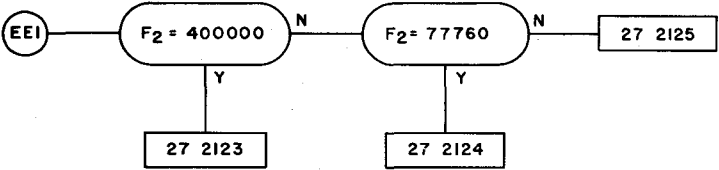
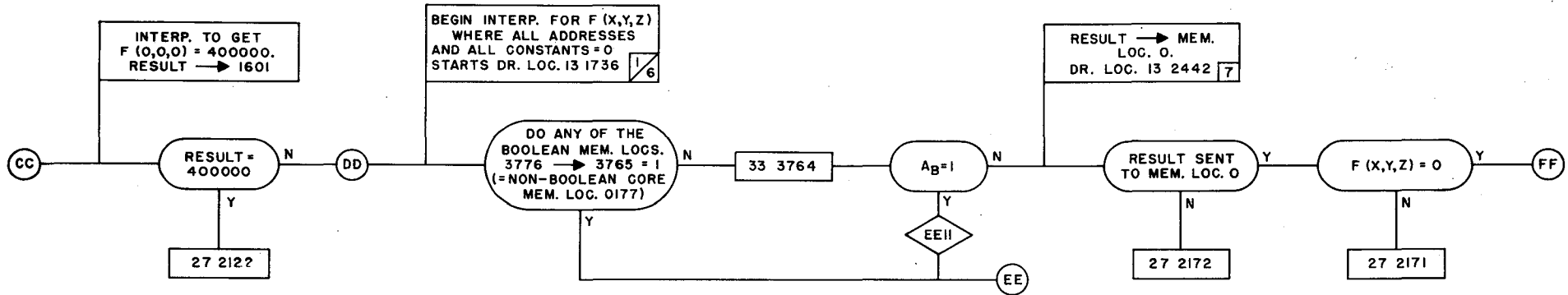


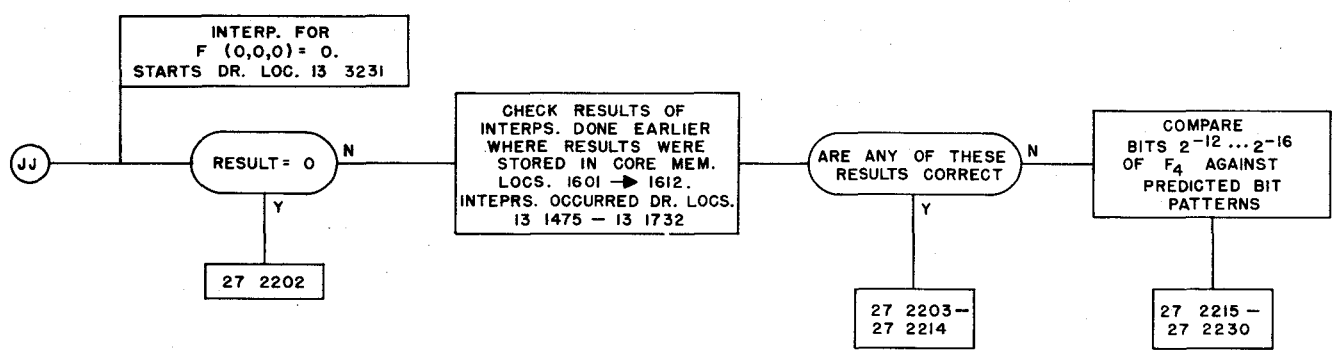
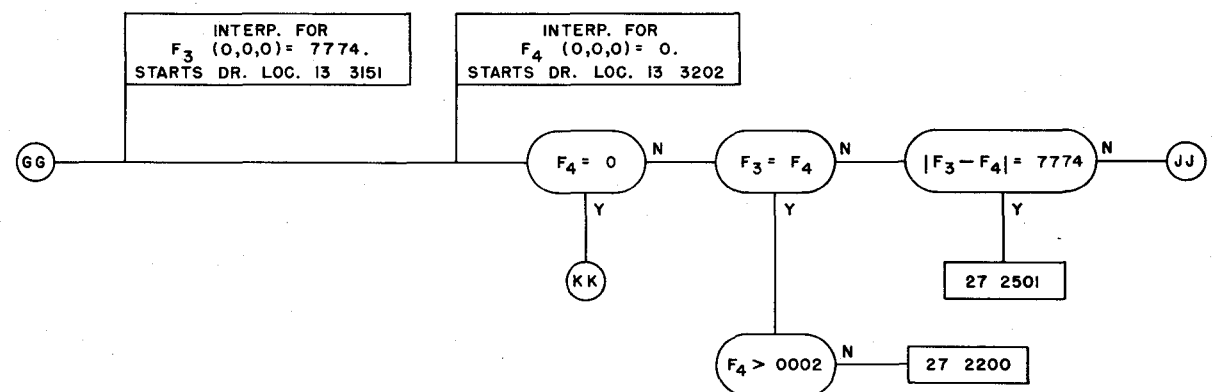
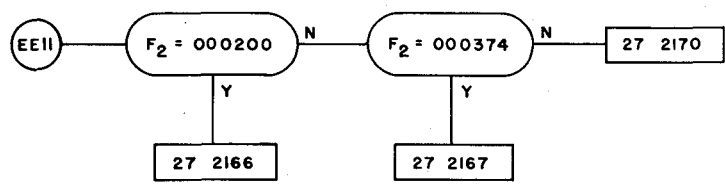
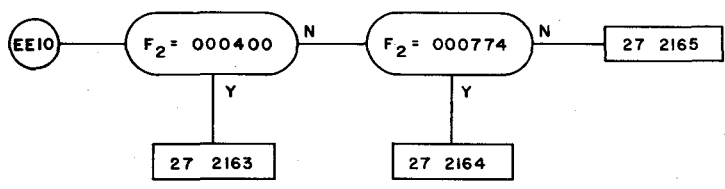
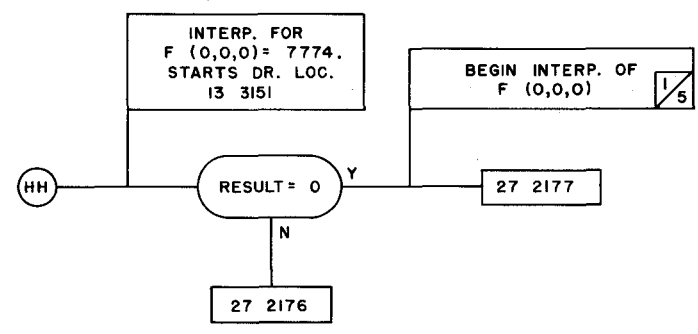
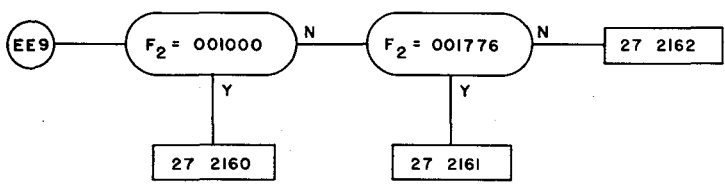
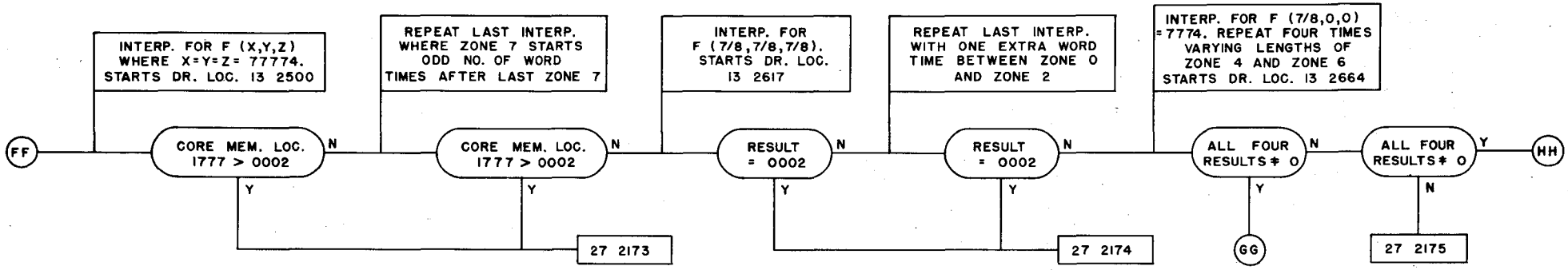


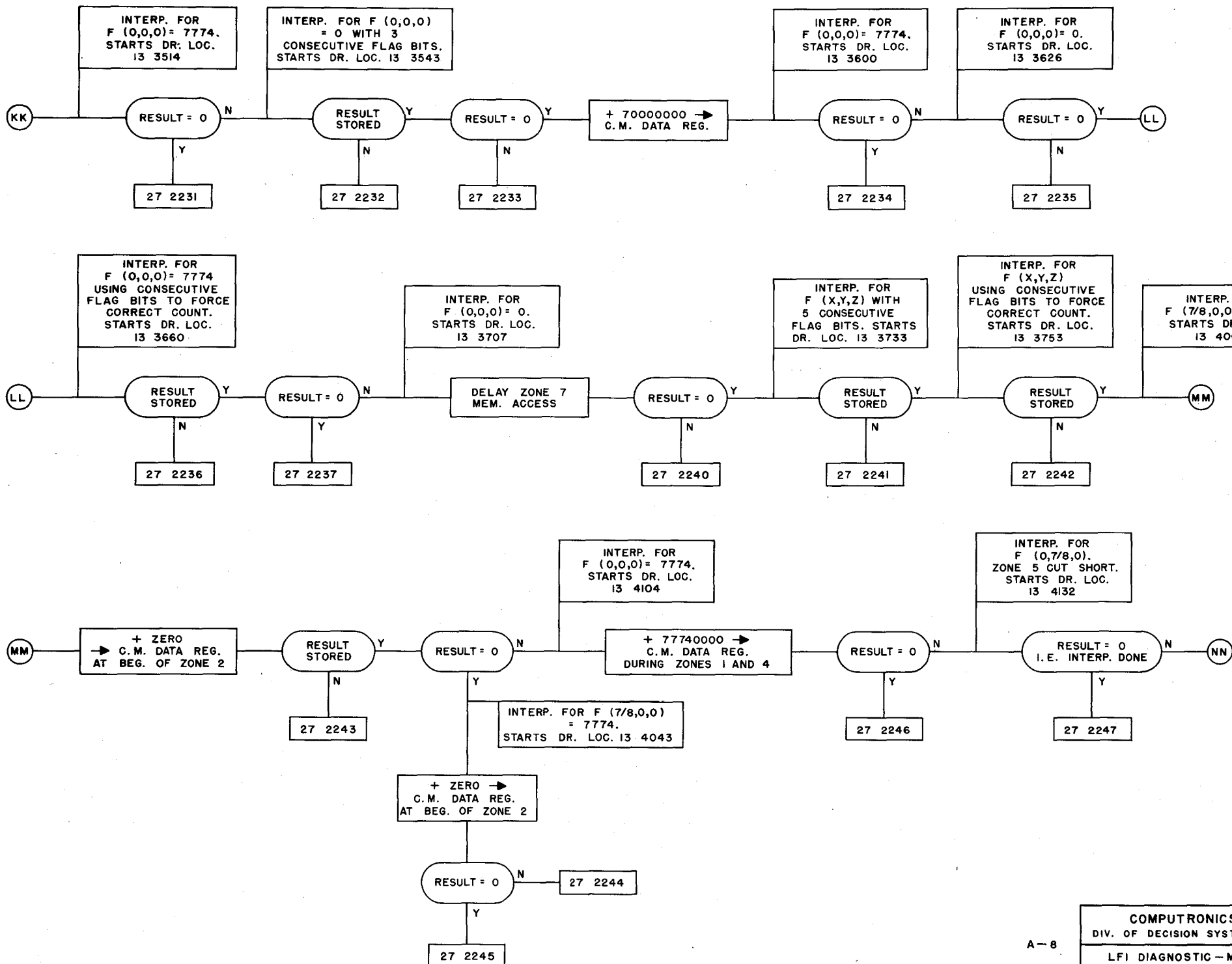


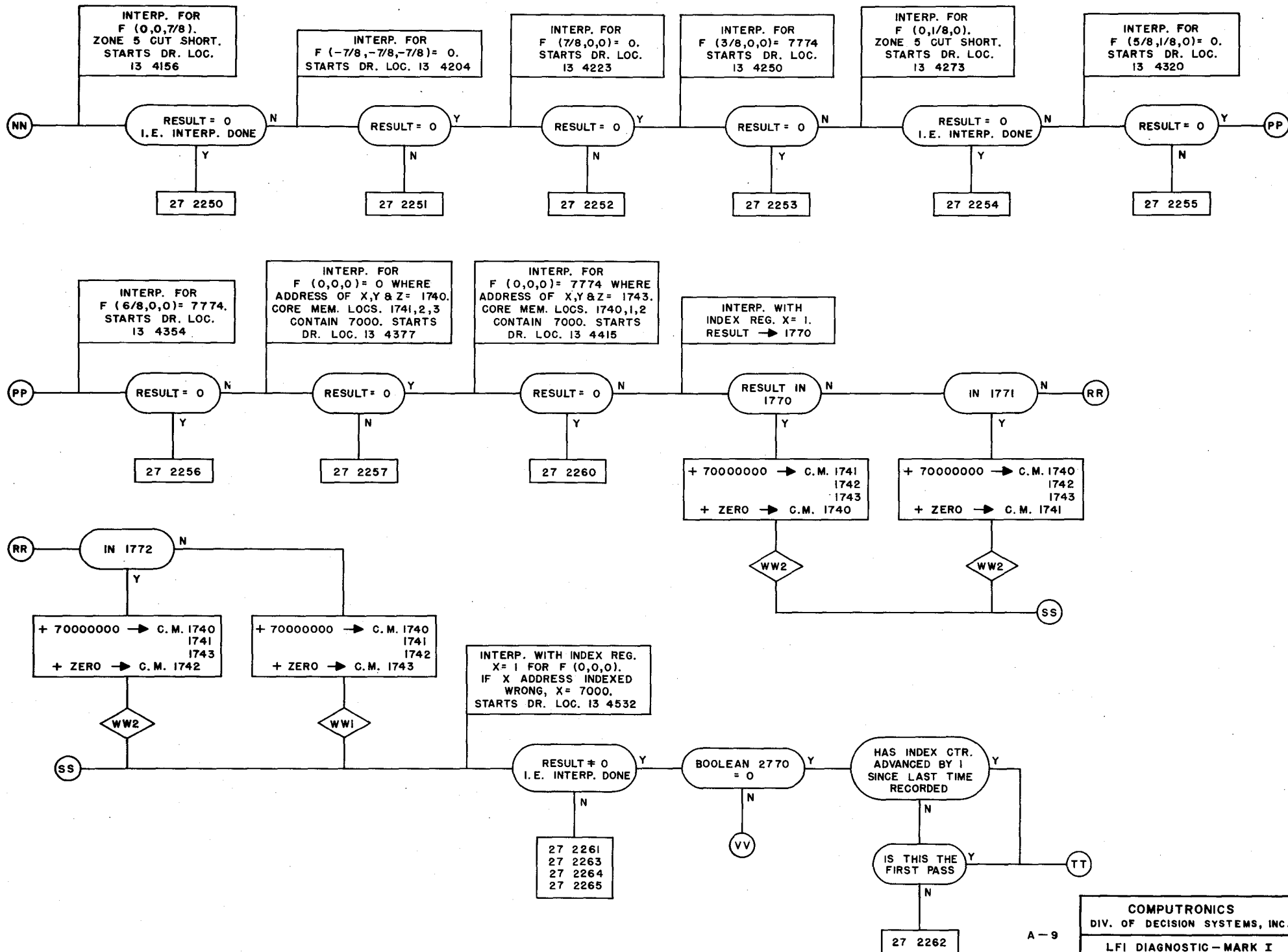


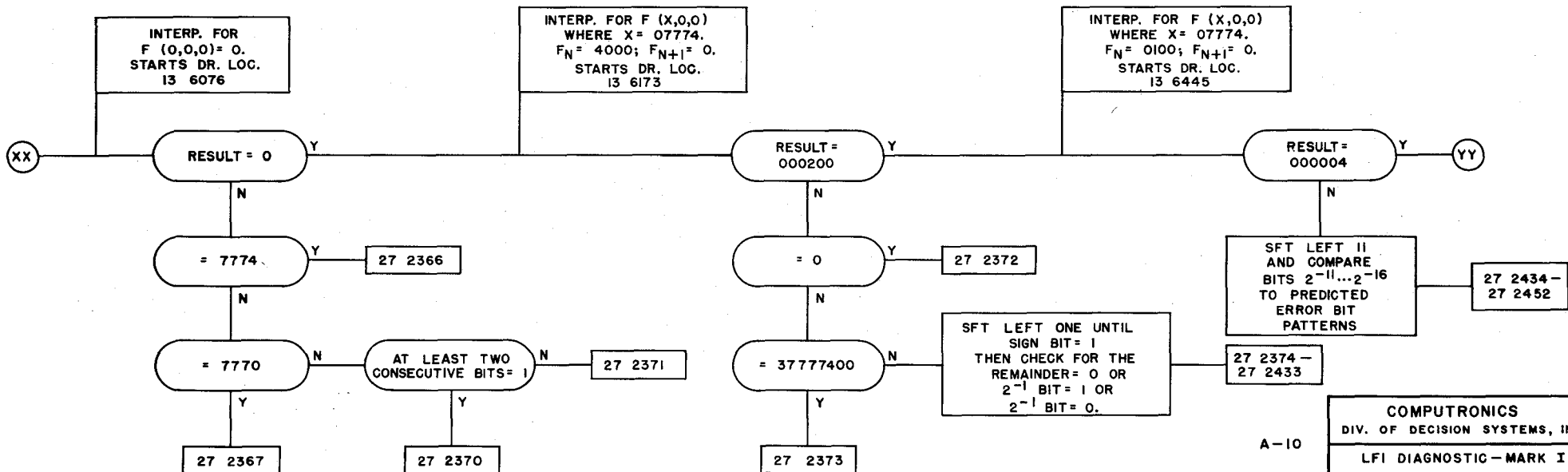
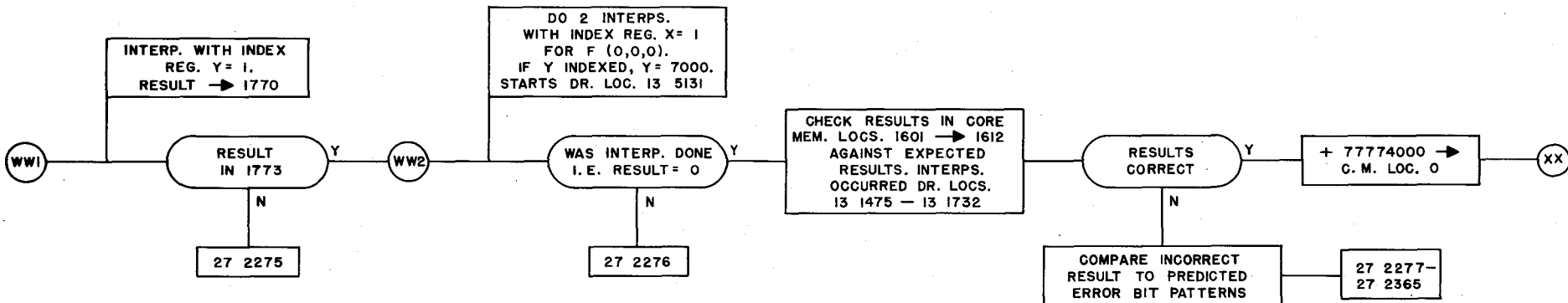
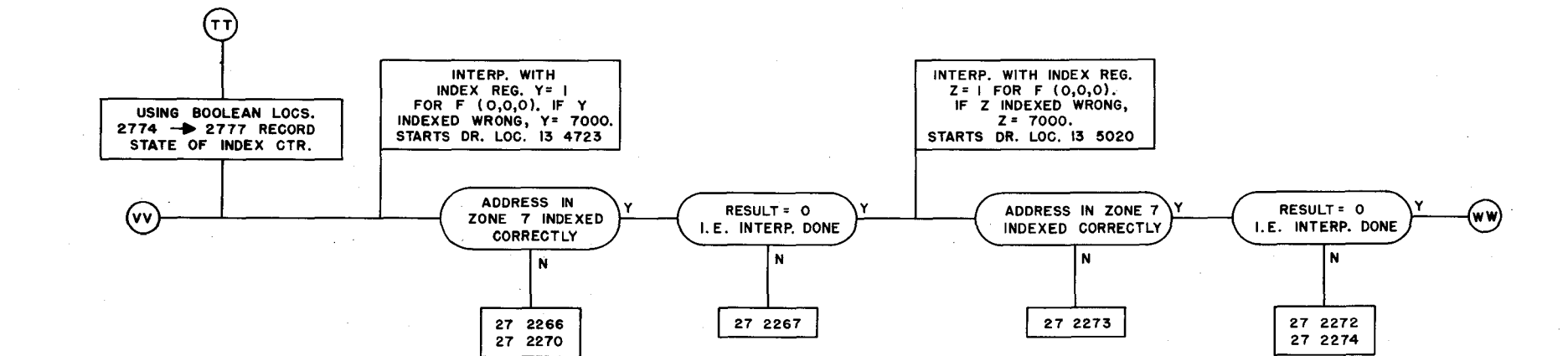


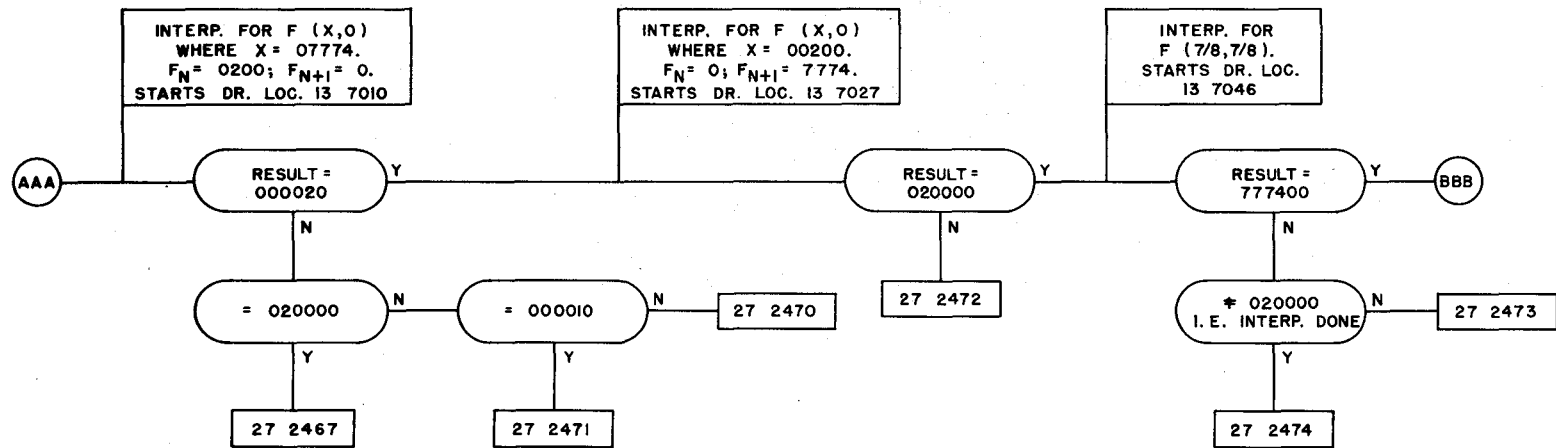
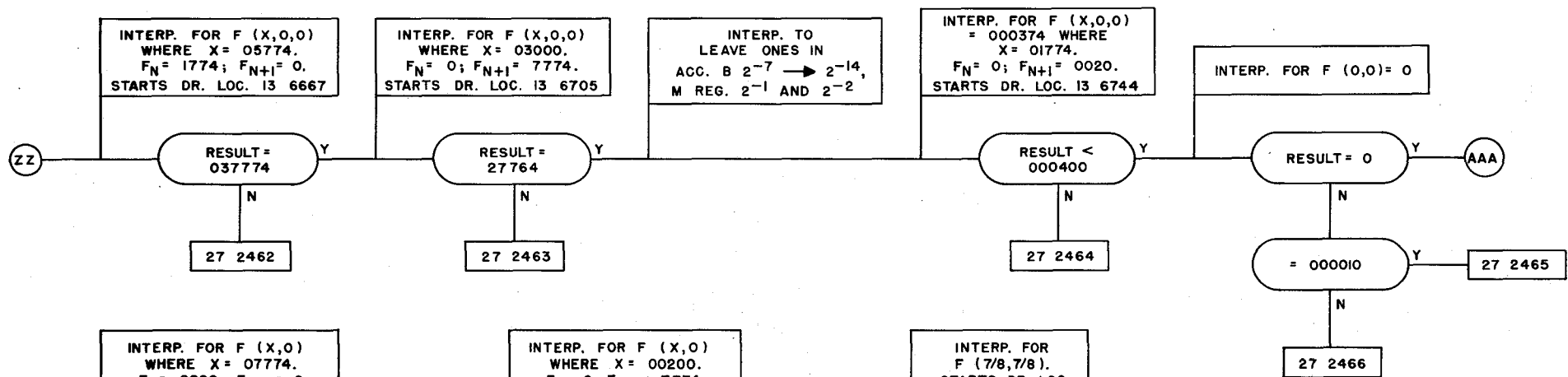
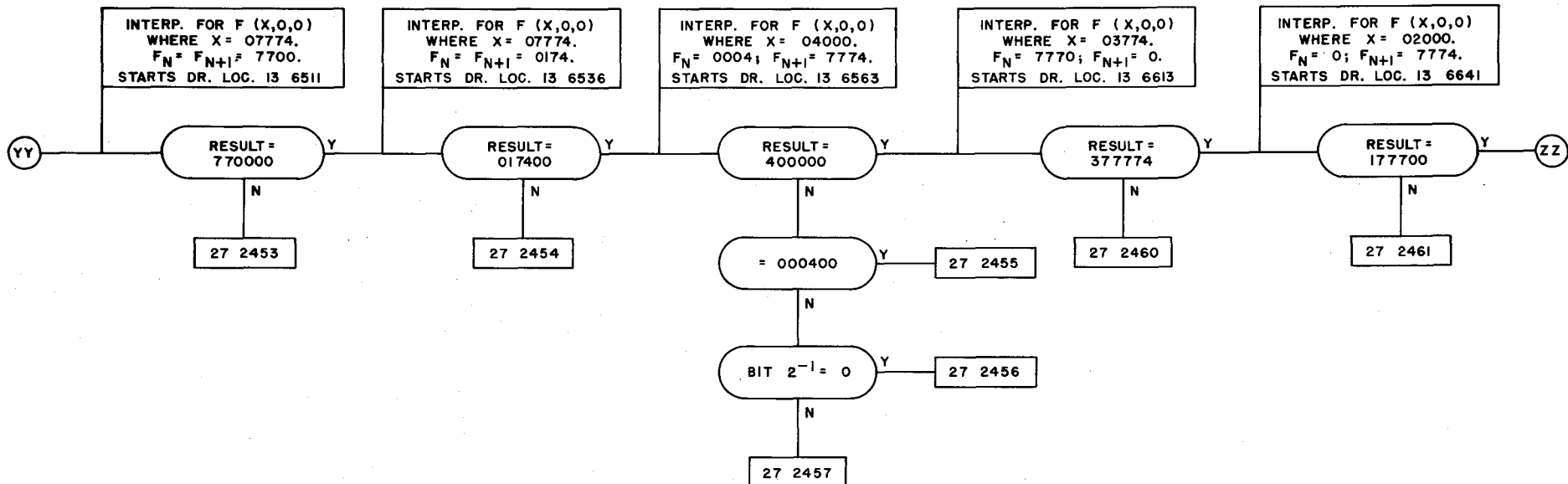


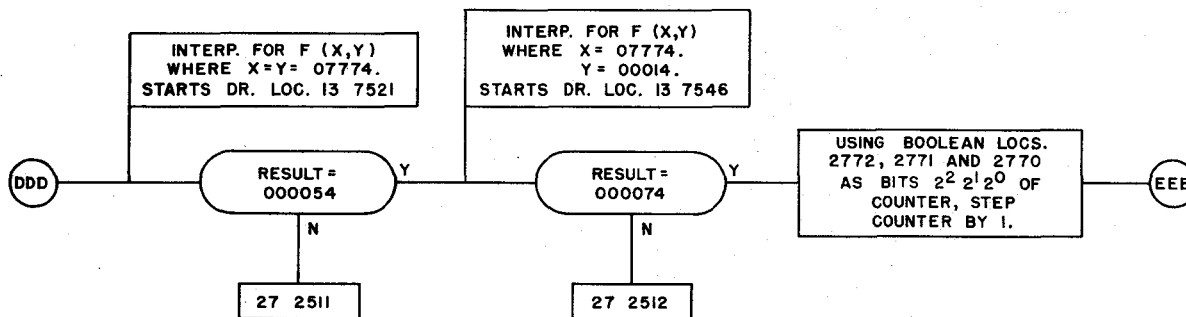
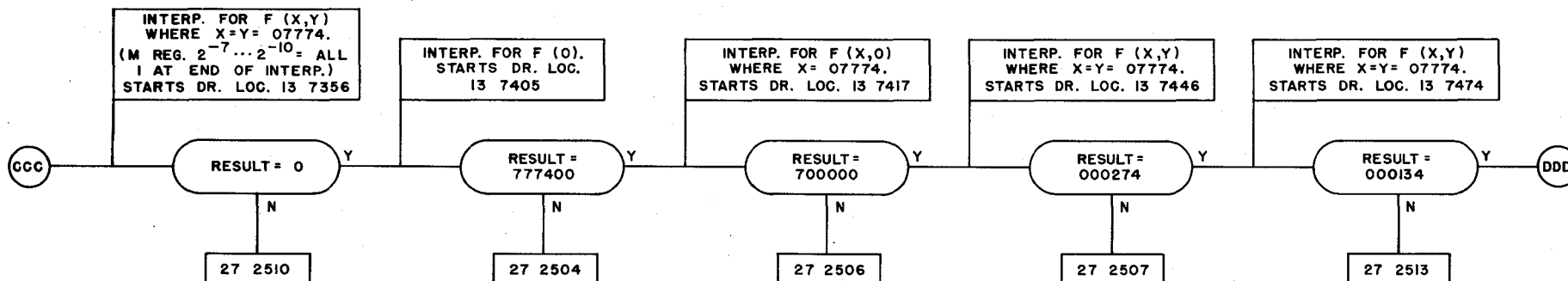
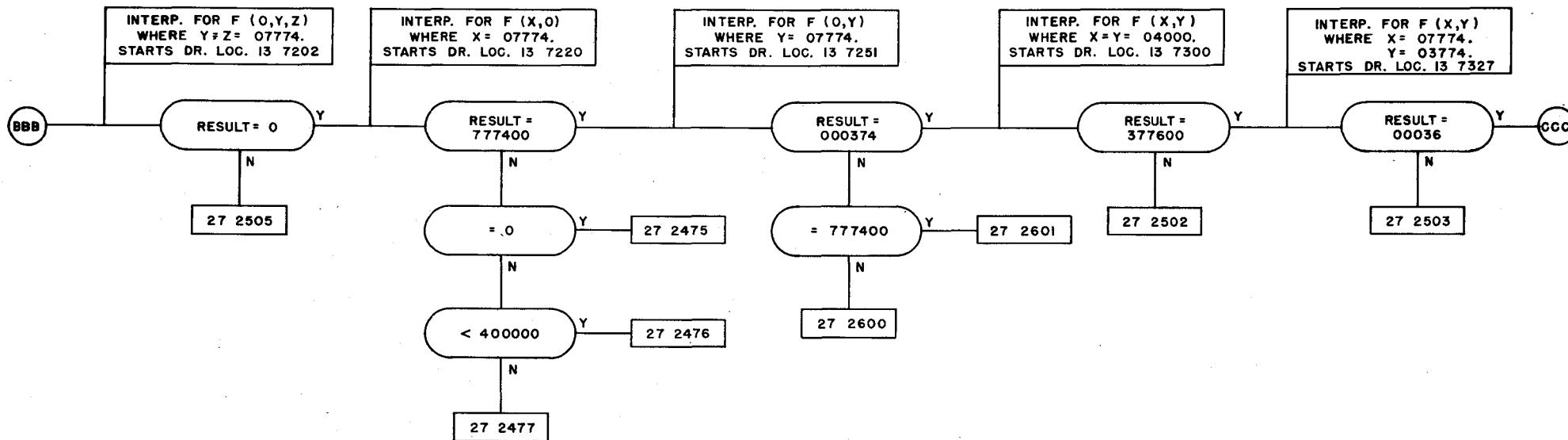


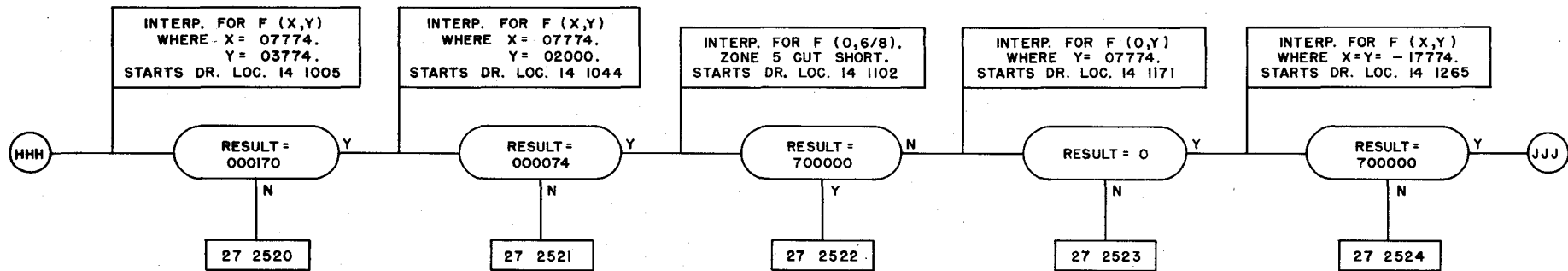
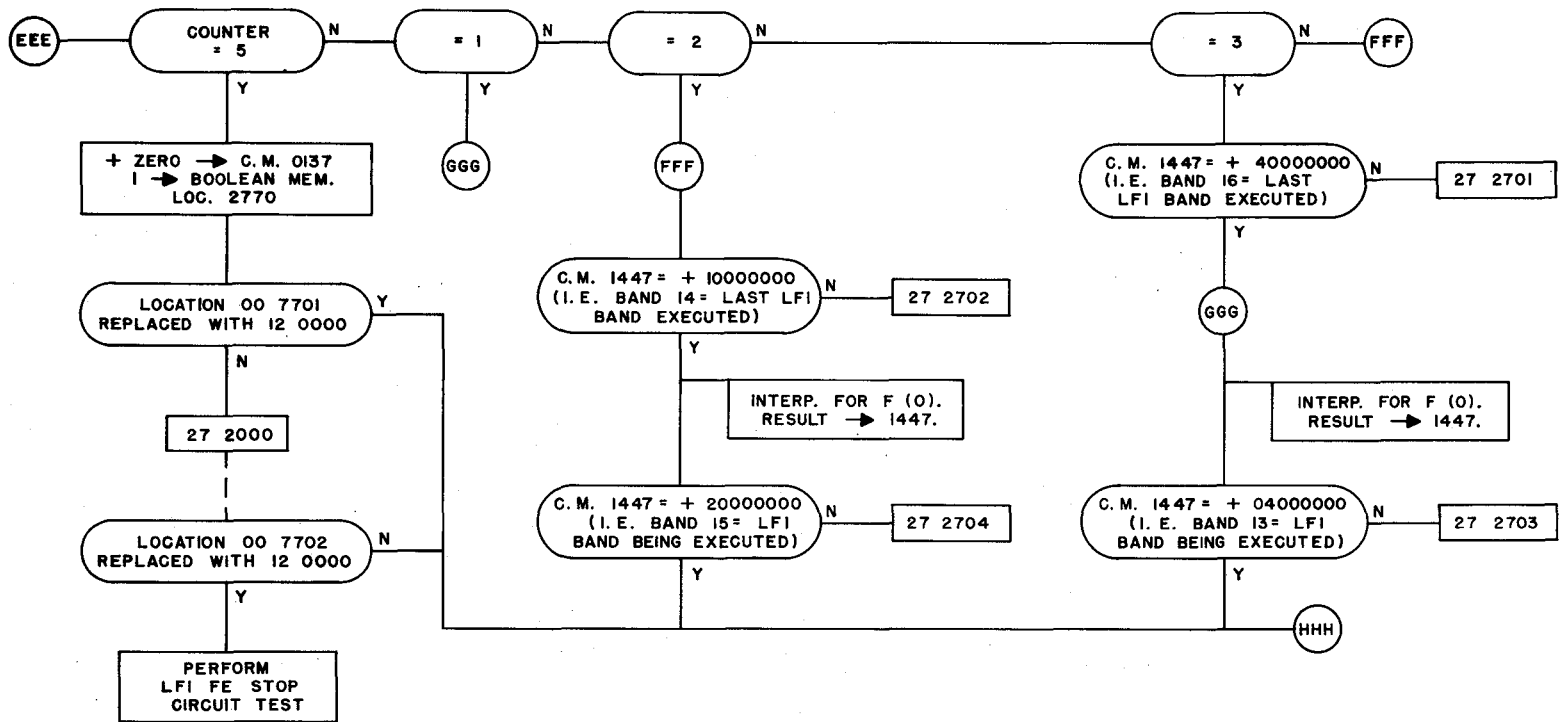


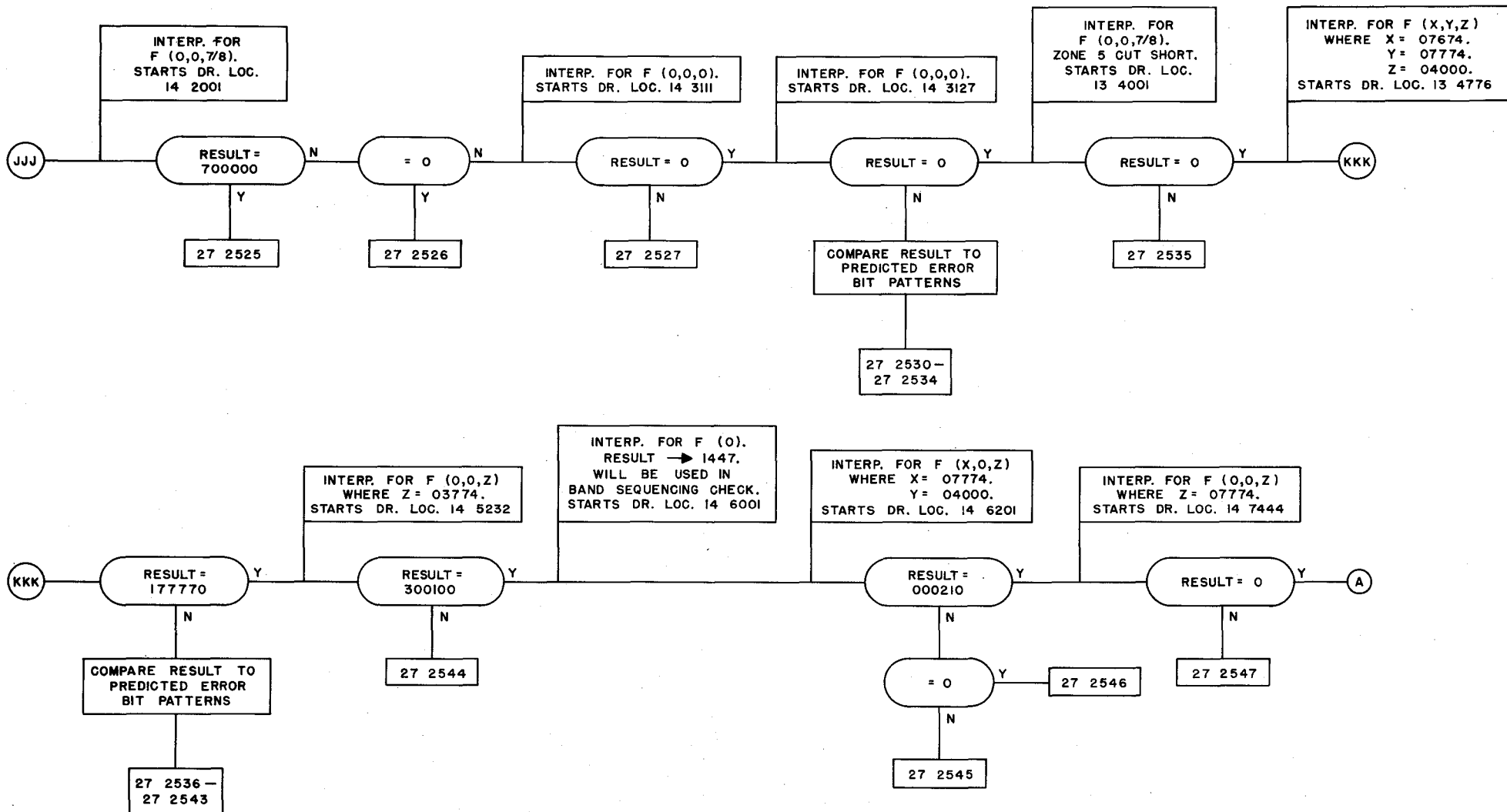












PROGRAM LISTING

The following pages contain listings for the GP and LFI Programs.

NOTES:

1. The locations used in the GP listing are in terms of physical band numbers.
2. The locations to the left of each line in the LFI listing are the locations of the leftmost word on each line.
3. The symbol \emptyset in the LFI listing signifies that the number 0 and the "11" row are punched in parallel.
4. The symbol O in the LFI listing refers to the letter O.

B-001

INSTRUCTION

LOCATION

+12 0000	00 0004
+00 0000	00 0002
+00 0000	00 0003
+00 0000	00 0004
+00 0000	00 0005
+00 0000	00 0006
+00 0000	00 0007
+12 0000	00 0010
+12 0000	00 0011
+26 0001	00 0012
+32 0000	00 0013
+26 0004	00 0014
+22 0000	00 0015
+23 0137	00 0016
+23 1443	00 0017
+23 1447	00 0020
+12 0000	00 0021
+12 0000	00 0022
+12 0000	00 0023
+12 0000	00 0024
+12 0000	00 0025
+12 0000	00 0026
+12 0000	00 0027
+12 0000	00 0030
+12 0000	00 0031
+12 0000	00 0032
+12 0000	00 0033
+12 0000	00 0034
+12 0000	00 0035
+12 0000	00 0036
+23 3777	00 0037
+22 0000	00 0040
+23 2000	00 0041
+22 7774	00 0042
+01 2167	00 0043
+14 0000	00 0044
+02 2000	00 0045
+16 0000	00 0046
+26 0012	00 0047
+22 7774	00 0050
+01 0167	00 0051
+14 0000	00 0052
+02 2000	00 0053
+16 0000	00 0054
+26 0004	00 0055
+27 2715	00 0056
+27 2777	00 0057
+27 2777	00 0060
+27 2777	00 0061
+22 0000	00 0062

B-002

INSTRUCTION

LOCATION

+13 0000	00 0063
+23 1400	00 0064
+12 0000	00 0065
+20 1400	00 0066
+16 0000	00 0067
+12 0000	00 0070
+26 0001	00 0071
+27 2001	00 0072
+23 3777	00 0073
+23 3777	00 0074
+22 0000	00 0075
+23 3777	00 0076
+13 0000	00 0077
+23 1600	00 0100
+12 0000	00 0101
+23 1500	00 0102
+12 0000	00 0103
+25 3777	00 0104
+20 1400	00 0105
+16 0000	00 0106
+26 0001	00 0107
+27 2002	00 0110
+23 3777	00 0111
+12 0000	00 0112
+20 1600	00 0113
+16 0000	00 0114
+26 0001	00 0115
+27 2003	00 0116
+20 1400	00 0117
+16 0000	00 0120
+26 0001	00 0121
+27 2004	00 0122
+12 0000	00 0123
+20 1500	00 0124
+16 0000	00 0125
+26 0001	00 0126
+27 2005	00 0127
+20 1400	00 0130
+16 0000	00 0131
+26 0001	00 0132
+27 2006	00 0133
+22 0000	00 0134
+13 0000	00 0135
+23 1777	00 0136
+23 0777	00 0137
+23 1377	00 0140
+23 1577	00 0141
+23 1677	00 0142
+23 1737	00 0143
+23 1757	00 0144

3
5
9
4
8
6
01
11
12

B-003

INSTRUCTION

LOCATION

+23 1767	00 0145
+23 1773	00 0146
+23 1774	00 0147
+23 1775	00 0150
+23 1776	00 0151
+22 0000	00 0152
+23 1740	00 0153
+23 1741	00 0154
+23 1742	00 0155
+23 1743	00 0156
+23 1744	00 0157
+23 1745	00 0160
+23 1746	00 0161
+23 1747	00 0162
+23 0740	00 0163
+23 1340	00 0164
+23 1700	00 0165
+12 0000	00 0166
+23 2000	00 0167
+12 0000	00 0170
+20 1777	00 0171
+16 0000	00 0172
+32 0000	00 0173
+26 0065	00 0174
+20 0777	00 0175
+16 0000	00 0176
+32 0000	00 0177
+26 0160	00 0200
+20 1377	00 0201
+16 0000	00 0202
+32 0000	00 0203
+26 0164	00 0204
+20 1577	00 0205
+16 0000	00 0206
+26 0001	00 0207
+27 2007	00 0210
+20 1677	00 0211
+16 0000	00 0212
+26 0001	00 0213
+27 2010	00 0214
+20 1737	00 0215
+16 0000	00 0216
+32 0000	00 0217
+26 0160	00 0220
+32 0000	00 0221
+26 0006	00 0222
+27 2777	00 0223
+27 2777	00 0224
+27 2777	00 0225
+27 2777	00 0226

3
4
5
6
7
8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-004

INSTRUCTION

LOCATION

+27 2777	00 0227
+27 2777	00 0230
+20 1757	00 0231
+16 0000	00 0232
+32 0000	00 0233
+26 0154	00 0234
+20 1767	00 0235
+16 0000	00 0236
+32 0000	00 0237
+26 0170	00 0240
+20 1773	00 0241
+16 0000	00 0242
+32 0000	00 0243
+26 0174	00 0244
+20 1774	00 0245
+16 0000	00 0246
+32 0000	00 0247
+26 0150	00 0250
+20 1775	00 0251
+16 0000	00 0252
+32 0000	00 0253
+26 0145	00 0254
+20 1776	00 0255
+16 0000	00 0256
+32 0000	00 0257
+26 0170	00 0260
+27 2011	00 0261
+23 3777	00 0262
+22 0000	00 0263
+13 0000	00 0264
+23 1777	00 0265
+12 0000	00 0266
+25 3777	00 0267
+12 0000	00 0270
+25 3777	00 0271
+12 0000	00 0272
+25 3777	00 0273
+12 0000	00 0274
+25 3777	00 0275
+12 0000	00 0276
+25 3777	00 0277
+12 0000	00 0300
+20 1777	00 0301
+16 0000	00 0302
+32 0000	00 0303
+26 0001	00 0304
+27 2012	00 0305
+22 0000	00 0306
+13 0000	00 0307
+25 3777	00 0310

B-006

INSTRUCTION

LOCATION

+14 0000	00 0373
+02 2000	00 0374
+16 0000	00 0375
+26 0001	00 0376
+27 2017	00 0377
+27 2016	00 0400
+22 7774	00 0401
+02 1700	00 0402
+14 0000	00 0403
+02 2000	00 0404
+16 0000	00 0405
+26 0001	00 0406
+27 2021	00 0407
+27 2020	00 0410
+22 7774	00 0411
+02 1740	00 0412
+14 0000	00 0413
+02 2000	00 0414
+16 0000	00 0415
+26 0001	00 0416
+27 2023	00 0417
+27 2022	00 0420
+26 0032	00 0421
+26 0041	00 0422
+27 2777	00 0423
+27 2777	00 0424
+27 2777	00 0425
+27 2777	00 0426
+27 2777	00 0427
+27 2777	00 0430
+22 7774	00 0431
+02 1740	00 0432
+14 0000	00 0433
+02 2000	00 0434
+16 0000	00 0435
+26 0001	00 0436
+27 2025	00 0437
+27 2024	00 0440
+22 7774	00 0441
+02 1740	00 0442
+14 0000	00 0443
+02 2000	00 0444
+16 0000	00 0445
+26 0001	00 0446
+27 2027	00 0447
+27 2026	00 0450
+26 0042	00 0451
+26 0141	00 0452
+26 0160	00 0453
+22 7774	00 0454

8
7
5
9
2
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-007

INSTRUCTION

LOCATION

+02 1744	00 0455
+14 0000	00 0456
+02 2000	00 0457
+16 0000	00 0460
+32 0000	00 0461
+26 0101	00 0462
+27 2030	00 0463
+22 7774	00 0464
+02 1740	00 0465
+14 0000	00 0466
+02 2000	00 0467
+16 0000	00 0470
+32 0000	00 0471
+26 0001	00 0472
+27 2031	00 0473
+22 7764	00 0474
+02 1740	00 0475
+14 0000	00 0476
+02 2000	00 0477
+16 0000	00 0500
+32 0000	00 0501
+26 0001	00 0502
+27 2032	00 0503
+22 7774	00 0504
+02 1745	00 0505
+14 0000	00 0506
+02 2000	00 0507
+16 0000	00 0510
+32 0000	00 0511
+26 0071	00 0512
+27 2033	00 0513
+22 7774	00 0514
+02 1740	00 0515
+14 0000	00 0516
+02 2000	00 0517
+16 0000	00 0520
+32 0000	00 0521
+26 0001	00 0522
+27 2034	00 0523
+22 7770	00 0524
+02 1740	00 0525
+14 0000	00 0526
+02 2000	00 0527
+16 0000	00 0530
+32 0000	00 0531
+26 0001	00 0532
+27 2035	00 0533
+22 7774	00 0534
+02 1746	00 0535
+14 0000	00 0536

12
11
10
9
8
7
6
5
4
3

B-008

INSTRUCTION	LOCATION
+02 2000	00 0537
+16 0000	00 0540
+32 0000	00 0541
+26 0001	00 0542
+27 2036	00 0543
+22 0410	00 0544
+02 1742	00 0545
+14 0000	00 0546
+02 2000	00 0547
+16 0000	00 0550
+32 0000	00 0551
+26 0001	00 0552
+27 2037	00 0553
+22 0404	00 0554
+02 1742	00 0555
+14 0000	00 0556
+02 2000	00 0557
+16 0000	00 0560
+26 0001	00 0561
+27 2041	00 0562
+27 2040	00 0563
+22 0410	00 0564
+02 1740	00 0565
+14 0000	00 0566
+02 2000	00 0567
+16 0000	00 0570
+32 0000	00 0571
+26 0001	00 0572
+27 2042	00 0573
+22 0404	00 0574
+02 1740	00 0575
+14 0000	00 0576
+02 2000	00 0577
+16 0000	00 0600
+26 0001	00 0601
+27 2044	00 0602
+27 2043	00 0603
+22 0410	00 0604
+02 1741	00 0605
+14 0000	00 0606
+02 2000	00 0607
+16 0000	00 0610
+32 0000	00 0611
+26 0011	00 0612
+27 2045	00 0613
+26 0037	00 0614
+27 2777	00 0615
+27 2777	00 0616
+27 2777	00 0617
+27 2777	00 0620

9
4
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-009

INSTRUCTION

LOCATION

+27 2777	00 0621
+27 2777	00 0622
+27 2777	00 0623
+22 0404	00 0624
+02 1741	00 0625
+14 0000	00 0626
+02 2000	00 0627
+16 0000	00 0630
+26 0001	00 0631
+27 2047	00 0632
+27 2046	00 0633
+22 0410	00 0634
+02 1743	00 0635
+14 0000	00 0636
+02 2000	00 0637
+16 0000	00 0640
+32 0000	00 0641
+26 0001	00 0642
+27 2050	00 0643
+22 0404	00 0644
+02 1743	00 0645
+14 0000	00 0646
+02 2000	00 0647
+16 0000	00 0650
+26 0001	00 0651
+27 2052	00 0652
+27 2051	00 0653
+12 0000	00 0654
+25 3777	00 0655
+12 0000	00 0656
+22 0000	00 0657
+23 1770	00 0660
+23 1771	00 0661
+23 1772	00 0662
+23 1774	00 0663
+13 0000	00 0664
+23 1400	00 0665
+12 0000	00 0666
+23 1500	00 0667
+12 0000	00 0670
+23 1600	00 0671
+12 0000	00 0672
+25 3777	00 0673
+23 3777	00 0674
+23 3777	00 0675
+12 0000	00 0676
+20 1400	00 0677
+16 0000	00 0700
+26 0001	00 0701
+27 2053	00 0702

12
11
10
9
8
7
6
5
4
3

3
4
5
9
2
8
6
10
11
12

B-010

INSTRUCTION

LOCATION

+20 1500	00 0703
+16 0000	00 0704
+26 0001	00 0705
+27 2054	00 0706
+12 0000	00 0707
+20 1400	00 0710
+16 0000	00 0711
+26 0001	00 0712
+27 2055	00 0713
+20 1600	00 0714
+16 0000	00 0715
+26 0001	00 0716
+27 2056	00 0717
+22 0000	00 0720
+13 0000	00 0721
+23 1401	00 0722
+23 1402	00 0723
+23 1404	00 0724
+23 1410	00 0725
+23 1420	00 0726
+23 1440	00 0727
+23 1500	00 0730
+23 1600	00 0731
+12 0000	00 0732
+20 1400	00 0733
+16 0000	00 0734
+32 0000	00 0735
+26 0057	00 0736
+20 1401	00 0737
+16 0000	00 0740
+26 0001	00 0741
+27 2057	00 0742
+20 1402	00 0743
+16 0000	00 0744
+26 0001	00 0745
+27 2060	00 0746
+20 1404	00 0747
+16 0000	00 0750
+26 0001	00 0751
+27 2061	00 0752
+20 1410	00 0753
+16 0000	00 0754
+26 0005	00 0755
+02 2000	00 0756
+16 0000	00 0757
+26 0001	00 0760
+27 2062	00 0761
+27 2063	00 0762
+20 1420	00 0763
+16 0000	00 0764

2
9
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-011

INSTRUCTION

LOCATION

+26 0005	00 0765
+02 2000	00 0766
+16 0000	00 0767
+26 0001	00 0770
+27 2064	00 0771
+27 2065	00 0772
+20 1440	00 0773
+16 0000	00 0774
+26 0005	00 0775
+02 2000	00 0776
+16 0000	00 0777
+26 0001	00 1000
+27 2066	00 1001
+27 2067	00 1002
+20 1500	00 1003
+16 0000	00 1004
+26 0001	00 1005
+27 2070	00 1006
+27 2071	00 1007
+27 2777	00 1010
+27 2777	00 1011
+27 2777	00 1012
+27 2777	00 1013
+27 2777	00 1014
+27 2777	00 1015
+22 0000	00 1016
+13 0000	00 1017
+23 0377	00 1020
+23 0777	00 1021
+23 1377	00 1022
+12 0000	00 1023
+25 3777	00 1024
+12 0000	00 1025
+25 3777	00 1026
+12 0000	00 1027
+25 3777	00 1030
+12 0000	00 1031
+25 3777	00 1032
+12 0000	00 1033
+25 3777	00 1034
+20 0377	00 1035
+16 0000	00 1036
+32 0000	00 1037
+26 0026	00 1040
+20 0777	00 1041
+16 0000	00 1042
+26 0005	00 1043
+02 2000	00 1044
+16 0000	00 1045
+26 0001	00 1046

12
11
10
9
8
7
6
5
4
3

3
7
5
9
7
8
6
10
11
12

B-012

INSTRUCTION

LOCATION

+27 2072	00 1047
+27 2073	00 1050
+20 1377	00 1051
+02 2000	00 1052
+16 0000	00 1053
+26 0001	00 1054
+27 2074	00 1055
+27 2075	00 1056
+27 2777	00 1057
+27 2777	00 1060
+27 2777	00 1061
+27 2777	00 1062
+27 2777	00 1063
+27 2777	00 1064
+27 2777	00 1065
+27 2777	00 1066
+22 0000	00 1067
+13 0000	00 1070
+23 1777	00 1071
+23 1600	00 1072
+23 1400	00 1073
+12 0000	00 1074
+25 3777	00 1075
+12 0000	00 1076
+25 3777	00 1077
+12 0000	00 1100
+25 3777	00 1101
+20 1777	00 1102
+16 0000	00 1103
+32 0000	00 1104
+26 0005	00 1105
+20 1600	00 1106
+16 0000	00 1107
+26 0001	00 1110
+27 2076	00 1111
+27 2077	00 1112
+12 0000	00 1113
+22 0000	00 1114
+13 0000	00 1115
+23 1777	00 1116
+12 0000	00 1117
+25 3777	00 1120
+12 0000	00 1121
+20 1777	00 1122
+16 0000	00 1123
+26 0001	00 1124
+27 2100	00 1125
+20 1777	00 1126
+16 0000	00 1127
+32 0000	00 1130

2
5
9
4
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

INSTRUCTION

LOCATION

+26 0005	00 1131
+20 1777	00 1132
+16 0000	00 1133
+26 0001	00 1134
+27 2101	00 1135
+27 2102	00 1136
+22 0000	00 1137
+13 0000	00 1140
+23 1774	00 1141
+23 1775	00 1142
+23 1776	00 1143
+23 1777	00 1144
+12 0000	00 1145
+25 3777	00 1146
+12 0000	00 1147
+25 3777	00 1150
+12 0000	00 1151
+25 3777	00 1152
+12 0000	00 1153
+25 3777	00 1154
+12 0000	00 1155
+20 1777	00 1156
+16 0000	00 1157
+32 0000	00 1160
+26 0015	00 1161
+20 1774	00 1162
+16 0000	00 1163
+26 0001	00 1164
+27 2103	00 1165
+20 1775	00 1166
+16 0000	00 1167
+26 0001	00 1170
+27 2103	00 1171
+20 1776	00 1172
+16 0000	00 1173
+26 0001	00 1174
+27 2103	00 1175
+27 2104	00 1176
+22 0000	00 1177
+13 0000	00 1200
+23 1777	00 1201
+26 0007	00 1202
+27 2777	00 1203
+27 2777	00 1204
+27 2777	00 1205
+27 2777	00 1206
+27 2777	00 1207
+27 2777	00 1210
+27 2777	00 1211
+20 1777	00 1212

B-014

INSTRUCTION

LOCATION

+16 0000	00 1213
+26 0001	00 1214
+27 2103	00 1215
+12 0000	00 1216
+22 0000	00 1217
+23 1600	00 1220
+23 1601	00 1221
+23 1602	00 1222
+23 1603	00 1223
+25 3777	00 1224
+12 0000	00 1225
+25 3777	00 1226
+12 0000	00 1227
+23 1400	00 1230
+23 1401	00 1231
+23 1402	00 1232
+23 1403	00 1233
+25 3777	00 1234
+12 0000	00 1235
+25 3777	00 1236
+12 0000	00 1237
+25 3777	00 1240
+12 0000	00 1241
+25 3777	00 1242
+12 0000	00 1243
+25 3777	00 1244
+12 0000	00 1245
+22 7774	00 1246
+23 2001	00 1247
+12 0000	00 1250
+25 3777	00 1251
+12 0000	00 1252
+22 0000	00 1253
+23 0001	00 1254
+23 0002	00 1255
+23 0003	00 1256
+23 0000	00 1257
+12 0000	00 1260
+23 0000	00 1261
+12 0000	00 1262
+23 0000	00 1263
+12 0000	00 1264
+23 0177	00 1265
+12 0000	00 1266
+25 3777	00 1267
+12 0000	00 1270
+25 3777	00 1271
+12 0000	00 1272
+25 3777	00 1273
+12 0000	00 1274

2
3
5
9
7
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-015

INSTRUCTION

LOCATION

+25 3777	00 1275
+22 0000	00 1276
+13 0000	00 1277
+23 0000	00 1300
+12 0000	00 1301
+33 0017	00 1302
+34 3777	00 1303
+33 0016	00 1304
+34 3776	00 1305
+33 0015	00 1306
+34 3775	00 1307
+33 0014	00 1310
+34 3774	00 1311
+33 0013	00 1312
+34 3773	00 1313
+33 0012	00 1314
+34 3772	00 1315
+33 0011	00 1316
+34 3771	00 1317
+33 0010	00 1320
+34 3770	00 1321
+33 0007	00 1322
+34 3767	00 1323
+33 0006	00 1324
+34 3766	00 1325
+33 0005	00 1326
+34 3765	00 1327
+33 0004	00 1330
+34 3764	00 1331
+12 0000	00 1332
+25 3777	00 1333
+22 7774	00 1334
+23 2001	00 1335
+12 0000	00 1336
+12 0000	00 1337
+25 3777	00 1340
+22 0000	00 1341
+12 0000	00 1342
+23 1500	00 1343
+12 0000	00 1344
+23 1501	00 1345
+23 1502	00 1346
+23 1503	00 1347
+23 1601	00 1350
+23 1602	00 1351
+23 1603	00 1352
+23 1604	00 1353
+23 1605	00 1354
+23 1606	00 1355
+23 1607	00 1356

3
4
5
6
7
8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-016

INSTRUCTION

LOCATION

+23 1610	00 1357
+23 1611	00 1360
+25 3777	00 1361
+23 1612	00 1362
+22 7774	00 1363
+23 2001	00 1364
+25 3777	00 1365
+12 0000	00 1366
+25 3777	00 1367
+22 0000	00 1370
+23 0001	00 1371
+23 0002	00 1372
+23 0003	00 1373
+23 0000	00 1374
+12 0000	00 1375
+23 0000	00 1376
+12 0000	00 1377
+23 0000	00 1400
+12 0000	00 1401
+20 0177	00 1402
+02 2000	00 1403
+16 0000	00 1404
+26 0153	00 1405
+20 1600	00 1406
+02 1400	00 1407
+14 0000	00 1410
+02 2000	00 1411
+16 0000	00 1412
+26 0011	00 1413
+22 0176	00 1414
+11 1005	00 1415
+02 0000	00 1416
+14 0000	00 1417
+02 2000	00 1420
+16 0000	00 1421
+32 0000	00 1422
+26 0020	00 1423
+27 2500	00 1424
+22 7774	00 1425
+02 1400	00 1426
+14 0000	00 1427
+02 2000	00 1430
+16 0000	00 1431
+26 0007	00 1432
+12 0000	00 1433
+22 7774	00 1434
+02 1400	00 1435
+16 0000	00 1436
+32 0000	00 1437
+26 0002	00 1440

01
11
71
0
9
4
8
6
01
11
71

10
9
8
7
6
5
4
3

B-017

INSTRUCTION

LOCATION

+27 2105	00 1441
+27 2106	00 1442
+27 2107	00 1443
+20 1400	00 1444
+02 2000	00 1445
+16 0000	00 1446
+32 0000	00 1447
+26 0001	00 1450
+27 2110	00 1451
+33 3776	00 1452
+26 0105	00 1453
+33 3775	00 1454
+26 0103	00 1455
+33 3774	00 1456
+26 0102	00 1457
+33 3773	00 1460
+26 0101	00 1461
+33 3772	00 1462
+26 0100	00 1463
+33 3771	00 1464
+26 0162	00 1465
+33 3770	00 1466
+26 0140	00 1467
+33 3767	00 1470
+26 0116	00 1471
+33 3766	00 1472
+26 0074	00 1473
+33 3765	00 1474
+26 0052	00 1475
+32 0000	00 1476
+26 0010	00 1477
+25 3777	00 1500
+12 0000	00 1501
+25 3777	00 1502
+12 0000	00 1503
+25 3777	00 1504
+12 0000	00 1505
+25 3777	00 1506
+12 0000	00 1507
+25 3777	00 1510
+12 0000	00 1511
+25 3777	00 1512
+12 0000	00 1513
+25 3777	00 1514
+12 0000	00 1515
+25 3777	00 1516
+12 0000	00 1517
+25 3777	00 1520
+12 0000	00 1521
+25 3777	00 1522

3
4
5
9
2
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-018

INSTRUCTION

LOCATION

+12 0000	00 1523
+25 3777	00 1524
+12 0000	00 1525
+25 3777	00 1526
+12 0000	00 1527
+25 3777	00 1530
+22 0010	00 1531
+02 1611	00 1532
+14 0000	00 1533
+02 2000	00 1534
+16 0000	00 1535
+32 0000	00 1536
+26 0001	00 1537
+27 2112	00 1540
+12 0000	00 1541
+25 3777	00 1542
+12 0000	00 1543
+25 3777	00 1544
+12 0000	00 1545
+25 3777	00 1546
+12 0000	00 1547
+25 3777	00 1550
+22 0020	00 1551
+02 1610	00 1552
+14 0000	00 1553
+02 2000	00 1554
+16 0000	00 1555
+32 0000	00 1556
+26 0011	00 1557
+27 2113	00 1560
+26 0157	00 1561
+26 0145	00 1562
+26 0124	00 1563
+26 0103	00 1564
+12 0000	00 1565
+25 3777	00 1566
+12 0000	00 1567
+25 3777	00 1570
+22 0040	00 1571
+02 1607	00 1572
+14 0000	00 1573
+02 2000	00 1574
+16 0000	00 1575
+32 0000	00 1576
+26 0011	00 1577
+27 2114	00 1600
+12 0000	00 1601
+27 2777	00 1602
+27 2777	00 1603
+27 2777	00 1604

B-019

INSTRUCTION

LOCATION

+27 2777	00 1605
+27 2777	00 1606
+27 2777	00 1607
+12 0000	00 1610
+22 0100	00 1611
+02 1606	00 1612
+14 0000	00 1613
+02 2000	00 1614
+16 0000	00 1615
+32 0000	00 1616
+26 0001	00 1617
+27 2115	00 1620
+12 0000	00 1621
+25 3777	00 1622
+12 0000	00 1623
+25 3777	00 1624
+12 0000	00 1625
+25 3777	00 1626
+12 0000	00 1627
+25 3777	00 1630
+22 0200	00 1631
+02 1605	00 1632
+14 0000	00 1633
+02 2000	00 1634
+16 0000	00 1635
+32 0000	00 1636
+26 0001	00 1637
+27 2116	00 1640
+12 0000	00 1641
+25 3777	00 1642
+12 0000	00 1643
+25 3777	00 1644
+12 0000	00 1645
+25 3777	00 1646
+12 0000	00 1647
+25 3777	00 1650
+22 0400	00 1651
+02 1604	00 1652
+14 0000	00 1653
+02 2000	00 1654
+16 0000	00 1655
+32 0000	00 1656
+26 0001	00 1657
+27 2117	00 1660
+12 0000	00 1661
+25 3777	00 1662
+12 0000	00 1663
+25 3777	00 1664
+12 0000	00 1665
+25 3777	00 1666

B-020

INSTRUCTION

LOCATION

+12 0000	00 1667
+25 3777	00 1670
+22 1000	00 1671
+02 1603	00 1672
+14 0000	00 1673
+02 2000	00 1674
+16 0000	00 1675
+32 0000	00 1676
+26 0001	00 1677
+27 2120	00 1700
+12 0000	00 1701
+25 3777	00 1702
+12 0000	00 1703
+25 3777	00 1704
+12 0000	00 1705
+25 3777	00 1706
+12 0000	00 1707
+25 3777	00 1710
+22 2000	00 1711
+02 1602	00 1712
+14 0000	00 1713
+02 2000	00 1714
+16 0000	00 1715
+32 0000	00 1716
+26 0001	00 1717
+27 2121	00 1720
+12 0000	00 1721
+25 3777	00 1722
+12 0000	00 1723
+25 3777	00 1724
+12 0000	00 1725
+25 3777	00 1726
+12 0000	00 1727
+25 3777	00 1730
+22 4000	00 1731
+02 1601	00 1732
+14 0000	00 1733
+02 2000	00 1734
+16 0000	00 1735
+32 0000	00 1736
+26 0001	00 1737
+27 2122	00 1740
+22 0000	00 1741
+23 0001	00 1742
+23 0002	00 1743
+23 0003	00 1744
+23 0000	00 1745
+12 0000	00 1746
+23 0000	00 1747
+12 0000	00 1750

3
4
5
6
7
8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-021

INSTRUCTION

LOCATION

+23 0000	00 1751
+33 3776	00 1752
+26 0043	00 1753
+33 3775	00 1754
+26 0062	00 1755
+33 3774	00 1756
+26 0122	00 1757
+33 3773	00 1760
+26 0162	00 1761
+33 3772	00 1762
+26 0115	00 1763
+33 3771	00 1764
+26 0105	00 1765
+33 3770	00 1766
+26 0107	00 1767
+32 0000	00 1770
+26 0013	00 1771
+27 2777	00 1772
+27 2777	00 1773
+27 2777	00 1774

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

+27 2777	00 2001
+27 2777	00 2002
+27 2777	00 2003
+27 2777	00 2004
+33 3767	00 2005
+26 0065	00 2006
+33 3766	00 2007
+26 0064	00 2010
+33 3765	00 2011
+26 0063	00 2012
+33 3764	00 2013
+26 0063	00 2014
+32 0000	00 2015
+26 0053	00 2016
+22 4000	00 2017
+02 1400	00 2020
+14 0000	00 2021
+02 2000	00 2022
+16 0000	00 2023
+32 0000	00 2024
+26 0001	00 2025
+27 2123	00 2026
+22 7776	00 2027
+02 1400	00 2030

B-022

8
7
5
9
4
8
6
01
11
21

INSTRUCTION

LOCATION

+14 0000	00 2031
+02 2000	00 2032
+16 0000	00 2033
+32 0000	00 2034
+26 0001	00 2035
+27 2124	00 2036
+27 2125	00 2037
+22 2000	00 2040
+02 1400	00 2041
+14 0000	00 2042
+02 2000	00 2043
+16 0000	00 2044
+32 0000	00 2045
+26 0001	00 2046
+27 2126	00 2047
+22 3776	00 2050
+02 1400	00 2051
+14 0000	00 2052
+02 2000	00 2053
+16 0000	00 2054
+32 0000	00 2055
+26 0001	00 2056
+27 2127	00 2057
+22 7776	00 2060
+11 1001	00 2061
+02 1400	00 2062
+14 0000	00 2063
+02 2000	00 2064
+16 0000	00 2065
+32 0000	00 2066
+26 0001	00 2067
+27 2130	00 2070
+27 2131	00 2071
+26 0172	00 2072
+26 0136	00 2073
+26 0171	00 2074
+26 0171	00 2075
+26 0171	00 2076
+26 0175	00 2077
+26 0170	00 2100
+26 0075	00 2101
+22 1000	00 2102
+02 1400	00 2103
+14 0000	00 2104
+02 2000	00 2105
+16 0000	00 2106
+32 0000	00 2107
+26 0001	00 2110
+27 2132	00 2111
+22 3776	00 2112

12
11
10
9
8
7
6
5
4

B-023

INSTRUCTION

LOCATION

+11 1001	00 2113
+02 1400	00 2114
+14 0000	00 2115
+02 2000	00 2116
+16 0000	00 2117
+32 0000	00 2120
+26 0010	00 2121
+27 2133	00 2122
+27 2777	00 2123
+27 2777	00 2124
+27 2777	00 2125
+27 2777	00 2126
+27 2777	00 2127
+27 2777	00 2130
+27 2777	00 2131
+22 7776	00 2132
+11 1002	00 2133
+02 1400	00 2134
+14 0000	00 2135
+02 2000	00 2136
+16 0000	00 2137
+32 0000	00 2140
+26 0001	00 2141
+27 2134	00 2142
+27 2135	00 2143
+22 0400	00 2144
+02 1400	00 2145
+14 0000	00 2146
+02 2000	00 2147
+16 0000	00 2150
+32 0000	00 2151
+26 0001	00 2152
+27 2136	00 2153
+22 3776	00 2154
+11 1002	00 2155
+02 1400	00 2156
+14 0000	00 2157
+02 2000	00 2160
+16 0000	00 2161
+32 0000	00 2162
+26 0001	00 2163
+27 2137	00 2164
+22 7776	00 2165
+11 1003	00 2166
+02 1400	00 2167
+14 0000	00 2170
+02 2000	00 2171
+16 0000	00 2172
+32 0000	00 2173
+26 0001	00 2174

B-024

INSTRUCTION

LOCATION

+27 2140	00 2175
+27 2141	00 2176
+22 0200	00 2177
+02 1400	00 2200
+14 0000	00 2201
+02 2000	00 2202
+16 0000	00 2203
+32 0000	00 2204
+26 0001	00 2205
+27 2142	00 2206
+22 3776	00 2207
+11 1003	00 2210
+02 1400	00 2211
+14 0000	00 2212
+02 2000	00 2213
+16 0000	00 2214
+32 0000	00 2215
+26 0001	00 2216
+27 2143	00 2217
+22 7776	00 2220
+11 1004	00 2221
+02 1400	00 2222
+14 0000	00 2223
+02 2000	00 2224
+16 0000	00 2225
+32 0000	00 2226
+26 0001	00 2227
+27 2144	00 2230
+27 2145	00 2231
+22 0100	00 2232
+02 1400	00 2233
+14 0000	00 2234
+02 2000	00 2235
+16 0000	00 2236
+32 0000	00 2237
+26 0001	00 2240
+27 2146	00 2241
+22 3776	00 2242
+11 1004	00 2243
+02 1400	00 2244
+14 0000	00 2245
+02 2000	00 2246
+16 0000	00 2247
+32 0000	00 2250
+26 0001	00 2251
+27 2147	00 2252
+22 7776	00 2253
+11 1005	00 2254
+02 1400	00 2255
+14 0000	00 2256

8
7
6
5
4
3
2
1
01
11
21

12
11
10
9
8
7
6
5
4

B-025

INSTRUCTION

LOCATION

+02 2000	00 2257
+16 0000	00 2260
+32 0000	00 2261
+26 0001	00 2262
+27 2150	00 2263
+27 2151	00 2264
+26 0150	00 2265
+26 0037	00 2266
+26 0060	00 2267
+26 0101	00 2270
+26 0122	00 2271
+26 0000	00 2272
+26 0000	00 2273
+26 0000	00 2274
+22 0040	00 2275
+02 1400	00 2276
+14 0000	00 2277
+02 2000	00 2300
+16 0000	00 2301
+32 0000	00 2302
+26 0001	00 2303
+27 2152	00 2304
+22 3776	00 2305
+11 1005	00 2306
+02 1400	00 2307
+14 0000	00 2310
+02 2000	00 2311
+16 0000	00 2312
+32 0000	00 2313
+26 0001	00 2314
+27 2153	00 2315
+27 2154	00 2316
+27 2777	00 2317
+27 2777	00 2320
+27 2777	00 2321
+27 2777	00 2322
+27 2777	00 2323
+27 2777	00 2324
+27 2777	00 2325
+22 0020	00 2326
+02 1400	00 2327
+14 0000	00 2330
+02 2000	00 2331
+16 0000	00 2332
+32 0000	00 2333
+26 0001	00 2334
+27 2155	00 2335
+22 1776	00 2336
+11 1005	00 2337
+02 1400	00 2340

3
4
5
6
7
8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-026

INSTRUCTION

LOCATION

+14 0000	00 2341
+02 2000	00 2342
+16 0000	00 2343
+32 0000	00 2344
0001	00 2345
2156	00 2346
+27 2157	00 2347
+22 0010	00 2350
+02 1400	00 2351
+14 0000	00 2352
+02 2000	00 2353
+16 0000	00 2354
+32 0000	00 2355
+26 0001	00 2356
+27 2160	00 2357
+22 0776	00 2360
+11 1005	00 2361
+02 1400	00 2362
+14 0000	00 2363
+02 2000	00 2364
+16 0000	00 2365
+32 0000	00 2366
+26 0001	00 2367
+27 2161	00 2370
+27 2162	00 2371
+22 0004	00 2372
+02 1400	00 2373
+14 0000	00 2374
+02 2000	00 2375
+16 0000	00 2376
+32 0000	00 2377
+26 0001	00 2400
+27 2163	00 2401
+22 0378	00 2402
+11 1005	00 2403
+02 1400	00 2404
+14 0000	00 2405
+02 2000	00 2406
+16 0000	00 2407
+32 0000	00 2410
+26 0001	00 2411
+27 2164	00 2412
+27 2165	00 2413
+22 0002	00 2414
+02 1400	00 2415
+14 0000	00 2416
+02 2000	00 2417
+16 0000	00 2420
+32 0000	00 2421
+26 0001	00 2422

B-027

INSTRUCTION

LOCATION

+27 2166	00 2423
+22 0176	00 2424
+11 1005	00 2425
+02 1400	00 2426
+14 0000	00 2427
+02 2000	00 2430
+16 0000	00 2431
+32 0000	00 2432
+26 0001	00 2433
+27 2167	00 2434
+27 2170	00 2435
+22 0000	00 2436
+13 0000	00 2437
+23 0177	00 2440
+23 0000	00 2441
+12 0000	00 2442
+33 0017	00 2443
+34 3777	00 2444
+33 0016	00 2445
+34 3776	00 2446
+33 0015	00 2447
+34 3775	00 2450
+33 0014	00 2451
+34 3774	00 2452
+33 0013	00 2453
+34 3773	00 2454
+33 0012	00 2455
+34 3772	00 2456
+33 0011	00 2457
+34 3771	00 2460
+33 0010	00 2461
+34 3770	00 2462
+33 0007	00 2463
+34 3767	00 2464
+33 0006	00 2465
+34 3766	00 2466
+33 0005	00 2467
+34 3765	00 2470
+33 0004	00 2471
+34 3764	00 2472
+20 0177	00 2473
+16 0000	00 2474
+26 0004	00 2475
+02 2000	00 2476
+16 0000	00 2477
+26 0002	00 2500
+27 2171	00 2501
+27 2172	00 2502
+22 7776	00 2503
+13 0000	00 2504

12
11
10
9
8
7
6
5
4
3

16
15
14
13
12
11
10
9
8
7
6
5
4
3

3
4
5
6
7
8
9
10
11

00 2505	00 1001
00 2506	00 0000
00 2507	00 1001
00 2508	00 1001
00 2509	00 1001
00 2510	00 1000
00 2511	00 1111
00 2512	00 1111
00 2513	00 1111
00 2514	00 1111
00 2515	00 1111
00 2516	00 1111
00 2517	00 1111
00 2518	00 1111
00 2519	00 1111
00 2520	00 1111
00 2521	00 1000
00 2522	00 1000
00 2523	00 1000
00 2524	00 1000
00 2525	00 1000
00 2526	00 1000
00 2527	00 1000
00 2528	00 1000
00 2529	00 1000
00 2530	00 1000
00 2531	00 1000
00 2532	00 1000
00 2533	00 1000
00 2534	00 1000
00 2535	00 1000
00 2536	00 1000
00 2537	00 1000
00 2538	00 1000
00 2539	00 1000
00 2540	00 1000
00 2541	00 1000
00 2542	00 1000
00 2543	00 1000
00 2544	00 1000
00 2545	00 1000
00 2546	00 1000
00 2547	00 1000
00 2548	00 1000
00 2549	00 1000
00 2550	00 1000
00 2551	00 1000
00 2552	00 1000
00 2553	00 1000
00 2554	00 1000
00 2555	00 1000
00 2556	00 1000
00 2557	00 1000
00 2558	00 1000
00 2559	00 1000
00 2560	00 1000
00 2561	00 1000
00 2562	00 1000
00 2563	00 1000
00 2564	00 1000
00 2565	00 1000
00 2566	00 1000
00 2567	00 1000
00 2568	00 1000
00 2569	00 1000
00 2570	00 1000
00 2571	00 1000
00 2572	00 1000
00 2573	00 1000
00 2574	00 1000
00 2575	00 1000
00 2576	00 1000
00 2577	00 1000
00 2578	00 1000
00 2579	00 1000
00 2580	00 1000
00 2581	00 1000
00 2582	00 1000
00 2583	00 1000
00 2584	00 1000
00 2585	00 1000
00 2586	00 1000
00 2587	00 1000
00 2588	00 1000
00 2589	00 1000
00 2590	00 1000
00 2591	00 1000
00 2592	00 1000
00 2593	00 1000
00 2594	00 1000
00 2595	00 1000
00 2596	00 1000
00 2597	00 1000
00 2598	00 1000
00 2599	00 1000
00 2600	00 1000

LOCATION

INSTRUCTION

B-028

12
11
10
9
8
7
6
5
3

INSTRUCTION

LOCATION

+22 0000	00 2567
+23 1777	00 2570
+12 0000	00 2571
+25 3777	00 2572
+12 0000	00 2573
+25 3777	00 2574
+12 0000	00 2575
+25 3777	00 2576
+12 0000	00 2577
+25 3777	00 2600
+12 0000	00 2601
+25 3777	00 2602
+12 0000	00 2603
+25 3777	00 2604
+12 0000	00 2605
+25 3777	00 2606
+22 0002	00 2607
+02 1777	00 2610
+16 0000	00 2611
+32 0000	00 2612
+26 0001	00 2613
+27 2173	00 2614
+12 0000	00 2615
+25 3777	00 2616
+12 0000	00 2617
+25 3777	00 2620
+12 0000	00 2621
+25 3777	00 2622
+22 7000	00 2623
+23 1777	00 2624
+12 0000	00 2625
+25 3777	00 2626
+12 0000	00 2627
+25 3777	00 2630
+12 0000	00 2631
+25 3777	00 2632
+12 0000	00 2633
+12 0000	00 2634
+25 3777	00 2635
+12 0000	00 2636
+22 0002	00 2637
+02 1777	00 2640
+16 0000	00 2641
+32 0000	00 2642
+26 0001	00 2643
+27 2174	00 2644
+12 0000	00 2645
+25 3777	00 2646
+12 0000	00 2647
+22 7000	00 2650

3
4
5
6
7
8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-030

INSTRUCTION

LOCATION

+23 1777	00 2651
+12 0000	00 2652
+25 3777	00 2653
+12 0000	00 2654
+25 3777	00 2655
+12 0000	00 2656
+25 3777	00 2657
+12 0000	00 2660
+25 3777	00 2661
+12 0000	00 2662
+25 3777	00 2663
+22 0002	00 2664
+0 1777	00 2665
+1 0000	00 2666
+32 0000	00 2667
+24 0001	00 2670
+2 2174	00 2671
+12 0000	00 2672
+25 3777	00 2673
+12 0000	00 2674
+2 3777	00 2675
+12 0000	00 2676
+22 7000	00 2677
+23 0001	00 2700
+23 0002	00 2701
+23 0003	00 2702
+23 0000	00 2703
+22 0000	00 2704
+23 0001	00 2705
+23 0002	00 2706
+23 0003	00 2707
+23 0000	00 2710
+12 0000	00 2711
+23 0000	00 2712
+26 0007	00 2713
+27 1777	00 2714
+27 2777	00 2715
+27 2777	00 2716
+27 2777	00 2717
+27 2777	00 2720
+27 2777	00 2721
+27 2777	00 2722
+25 3777	00 2723
+12 0000	00 2724
+25 3777	00 2725
+12 0000	00 2726
+25 3777	00 2727
+12 0000	00 2730
+25 3777	00 2731
+12 0000	00 2732

12
11
10
9
8
7
6
5
4
3

9
2
8
6
01
11
21

INSTRUCTION

LOCATION

+25 3777	00 2733
+12 0000	00 2734
+25 3777	00 2735
+12 0000	00 2736
+25 3777	00 2737
+12 0000	00 2740
+22 0000	00 2741
+23 1777	00 2742
+12 0000	00 2743
+20 1777	00 2744
+02 2000	00 2745
+16 0000	00 2746
+34 3770	00 2747
+25 3777	00 2750
+12 0000	00 2751
+22 7000	00 2752
+23 0001	00 2753
+23 0002	00 2754
+23 0003	00 2755
+23 0000	00 2756
+22 0000	00 2757
+23 0001	00 2760
+23 0002	00 2761
+23 0003	00 2762
+23 0000	00 2763
+12 0000	00 2764
+23 0000	00 2765
+12 0000	00 2766
+25 3777	00 2767
+12 0000	00 2770
+12 0000	00 2771
+25 3777	00 2772
+12 0000	00 2773
+25 3777	00 2774
+12 0000	00 2775
+25 3777	00 2776
+12 0000	00 2777
+25 3777	00 3000
+12 0000	00 3001
+25 3777	00 3002
+12 0000	00 3003
+25 3777	00 3004
+12 0000	00 3005
+25 3777	00 3006
+12 0000	00 3007
+25 3777	00 3010
+12 0000	00 3011
+25 3777	00 3012
+12 0000	00 3013
+25 3777	00 3014

12
11
10
9
8
7
6
5
4
3

1
2
3
4
5
6
7
8
9
10
11
12

B-032

INSTRUCTION

LOCATION

+22 0000	00 3015
+23 1777	00 3016
+12 0000	00 3017
+20 1777	00 3020
+02 2000	00 3021
+16 0000	00 3022
+34 3771	00 3023
+25 3777	00 3024
+12 0000	00 3025
+22 7000	00 3026
+23 0001	00 3027
+23 0002	00 3030
+23 0003	00 3031
+23 0000	00 3032
+22 0000	00 3033
+23 0001	00 3034
+23 0002	00 3035
+23 0003	00 3036
+23 0000	00 3037
+12 0000	00 3040
+23 0000	00 3041
+12 0000	00 3042
+23 3777	00 3043
+12 0000	00 3044
+12 0000	00 3045
+23 3777	00 3046
+12 0000	00 3047
+23 3777	00 3050
+12 0000	00 3051
+23 3777	00 3052
+12 0000	00 3053
+23 3777	00 3054
+12 0000	00 3055
+23 3777	00 3056
+12 0000	00 3057
+23 3777	00 3060
+12 0000	00 3061
+23 3777	00 3062
+12 0000	00 3063
+23 3777	00 3064
+12 0000	00 3065
+23 3777	00 3066
+22 0000	00 3067
+23 1777	00 3070
+12 0000	00 3071
+20 1777	00 3072
+02 2000	00 3073
+16 0000	00 3074
+34 3772	00 3075
+23 3777	00 3076

01
11
21

12
11
10
9
8
7
6
5
4
3

B-033

INSTRUCTION

LOCATION

+12 0000	00 3077
+22 7000	00 3100
+23 0001	00 3101
+23 0002	00 3102
+23 0003	00 3103
+23 0000	00 3104
+22 0000	00 3105
+23 0001	00 3106
+23 0002	00 3107
+23 0003	00 3110
+23 0000	00 3111
+12 0000	00 3112
+23 0000	00 3113
+12 0000	00 3114
+25 3777	00 3115
+12 0000	00 3116
+12 0000	00 3117
+25 3777	00 3120
+12 0000	00 3121
+25 3777	00 3122
+12 0000	00 3123
+25 3777	00 3124
+12 0000	00 3125
+25 3777	00 3126
+12 0000	00 3127
+25 3777	00 3130
+26 0011	00 3131
+32 0000	00 3132
+26 0007	00 3133
+27 2777	00 3134
+27 2777	00 3135
+27 2777	00 3136
+27 2777	00 3137
+27 2777	00 3140
+27 2777	00 3141
+27 2777	00 3142
+22 0000	00 3143
+23 1777	00 3144
+12 0000	00 3145
+20 1777	00 3146
+02 2000	00 3147
+16 0000	00 3150
+22 0000	00 3151
+23 1500	00 3152
+23 1400	00 3153
+12 0000	00 3154
+26 0010	00 3155
+33 3772	00 3156
+26 0010	00 3157
+33 3771	00 3160

3
4
5
6
7
8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-034

INSTRUCTION

LOCATION

+26 0006	00 3161
+33 3770	00 3162
+26 0004	00 3163
+32 0000	00 3164
+26 0026	00 3165
+33 3772	00 3166
+26 0001	00 3167
+27 2175	00 3170
+33 3771	00 3171
+26 0001	00 3172
+27 2175	00 3173
+33 3770	00 3174
+26 0001	00 3175
+27 2175	00 3176
+20 1500	00 3177
+02 2000	00 3200
+16 0000	00 3201
+26 0010	00 3202
+27 2176	00 3203
+12 0000	00 3204
+25 3777	00 3205
+12 0000	00 3206
+25 3777	00 3207
+12 0000	00 3210
+25 3777	00 3211
+12 0000	00 3212
+27 2177	00 3213
+12 0000	00 3214
+25 3777	00 3215
+12 0000	00 3216
+12 0000	00 3217
+22 0000	00 3220
+23 1700	00 3221
+23 1701	00 3222
+23 1702	00 3223
+23 1703	00 3224
+12 0000	00 3225
+20 1400	00 3226
+02 2000	00 3227
+16 0000	00 3230
+26 0101	00 3231
+02 1500	00 3232
+14 0000	00 3233
+02 2000	00 3234
+16 0000	00 3235
+32 0000	00 3236
+26 0006	00 3237
+22 0002	00 3240
+02 1400	00 3241
+16 0000	00 3242

12
11
10
9
8
7
6
5
4
3

8
7
6
5
4
3
2
1

INSTRUCTION

LOCATION

+26 0001	00 3243
+27 2200	00 3244
+27 2201	00 3245
+22 7774	00 3246
+02 2000	00 3247
+14 0000	00 3250
+02 2000	00 3251
+16 0000	00 3252
+32 0000	00 3253
+26 0001	00 3254
+27 2501	00 3255
+20 1700	00 3256
+02 2000	00 3257
+16 0000	00 3260
+32 0000	00 3261
+26 0001	00 3262
+27 2202	00 3263
+22 0004	00 3264
+02 1612	00 3265
+14 0000	00 3266
+02 2000	00 3267
+16 0000	00 3270
+32 0000	00 3271
+26 0001	00 3272
+27 2203	00 3273
+22 0010	00 3274
+02 1611	00 3275
+14 0000	00 3276
+02 2000	00 3277
+16 0000	00 3300
+32 0000	00 3301
+26 0001	00 3302
+27 2204	00 3303
+22 0020	00 3304
+02 1610	00 3305
+14 0000	00 3306
+02 2000	00 3307
+16 0000	00 3310
+32 0000	00 3311
+26 0001	00 3312
+27 2205	00 3313
+22 0040	00 3314
+02 1607	00 3315
+14 0000	00 3316
+02 2000	00 3317
+16 0000	00 3320
+32 0000	00 3321
+26 0012	00 3322
+27 2206	00 3323
+27 2777	00 3324

B-036

INSTRUCTION

LOCATION

+27 2777	00 3325
+27 2777	00 3326
+27 2777	00 3327
+27 2777	00 3330
+27 2777	00 3331
+27 2777	00 3332
+26 0156	00 3333
+26 0000	00 3334
+22 0100	00 3335
+02 1606	00 3336
+14 0000	00 3337
+02 2000	00 3340
+16 0000	00 3341
+32 0000	00 3342
+26 0001	00 3343
+27 2207	00 3344
+22 0200	00 3345
+02 1605	00 3346
+14 0000	00 3347
+02 2000	00 3350
+16 0000	00 3351
+32 0000	00 3352
+26 0001	00 3353
+27 2210	00 3354
+22 0400	00 3355
+02 1604	00 3356
+14 0000	00 3357
+02 2000	00 3360
+16 0000	00 3361
+32 0000	00 3362
+26 0001	00 3363
+27 2211	00 3364
+22 1000	00 3365
+02 1603	00 3366
+14 0000	00 3367
+02 2000	00 3370
+16 0000	00 3371
+32 0000	00 3372
+26 0001	00 3373
+27 2212	00 3374
+22 2000	00 3375
+02 1602	00 3376
+14 0000	00 3377
+02 2000	00 3400
+16 0000	00 3401
+32 0000	00 3402
+26 0001	00 3403
+27 2213	00 3404
+22 4000	00 3405
+02 1601	00 3406

B-037

INSTRUCTION

LOCATION

+14 0000	00 3407
+02 2000	00 3410
+16 0000	00 3411
+32 0000	00 3412
+26 0001	00 3413
+27 2214	00 3414
+20 1400	00 3415
+11 0005	00 3416
+11 0005	00 3417
+11 0002	00 3420
+16 0000	00 3421
+32 0000	00 3422
+26 0014	00 3423
+01 2000	00 3424
+16 0000	00 3425
+26 0001	00 3426
+27 2215	00 3427
+22 7400	00 3430
+01 0000	00 3431
+14 0000	00 3432
+02 2000	00 3433
+16 0000	00 3434
+26 0001	00 3435
+27 2216	00 3436
+27 2217	00 3437
+11 0001	00 3440
+16 0000	00 3441
+32 0000	00 3442
+26 0014	00 3443
+01 2000	00 3444
+16 0000	00 3445
+26 0001	00 3446
+27 2220	00 3447
+22 7000	00 3450
+01 0000	00 3451
+14 0000	00 3452
+02 2000	00 3453
+16 0000	00 3454
+26 0001	00 3455
+27 2221	00 3456
+27 2222	00 3457
+11 0001	00 3460
+16 0000	00 3461
+32 0000	00 3462
+26 0014	00 3463
+01 2000	00 3464
+16 0000	00 3465
+26 0001	00 3466
+27 2223	00 3467
+22 6000	00 3470

12
11
10
9
8
7
6
5
4
3

3
4
5
9
2
8
6
01
11
12

B-038

INSTRUCTION

LOCATION

+01 0000	00 3471
+14 0000	00 3472
+02 2000	00 3473
+16 0000	00 3474
+26 0001	00 3475
+27 2224	00 3476
+27 2225	00 3477
+11 0001	00 3500
+16 0000	00 3501
+32 0000	00 3502
+26 0005	00 3503
+01 2000	00 3504
+16 0000	00 3505
+26 0001	00 3506
+27 2226	00 3507
+27 2227	00 3510
+27 2230	00 3511
+22 0000	00 3512
+13 0000	00 3513
+23 1770	00 3514
+23 1771	00 3515
+23 1772	00 3516
+12 0000	00 3517
+23 1773	00 3520
+16 0000	00 3521
+26 0007	00 3522
+27 2777	00 3523
+27 2777	00 3524
+27 2777	00 3525
+27 2777	00 3526
+27 2777	00 3527
+27 2777	00 3530
+27 2777	00 3531
+12 0000	00 3532
+25 3777	00 3533
+12 0000	00 3534
+25 3777	00 3535
+12 0000	00 3536
+25 3777	00 3537
+20 1400	00 3540
+02 2000	00 3541
+16 0000	00 3542
+32 0000	00 3543
+26 0001	00 3544
+27 2231	00 3545
+12 0000	00 3546
+25 3777	00 3547
+12 0000	00 3550
+25 3777	00 3551
+12 0000	00 3552

8
7
5
9
4
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

INSTRUCTION

LOCATION

+25 3777	00 3553
+12 0000	00 3554
+25 3777	00 3555
+12 0000	00 3556
+25 3777	00 3557
+12 0000	00 3560
+25 3777	00 3561
+12 0000	00 3562
+25 3777	00 3563
+12 0000	00 3564
+25 3777	00 3565
+20 1770	00 3566
+16 0000	00 3567
+32 0000	00 3570
+26 0001	00 3571
+27 2232	00 3572
+02 2000	00 3573
+16 0000	00 3574
+26 0001	00 3575
+27 2233	00 3576
+22 7000	00 3577
+23 2001	00 3600
+12 0000	00 3601
+25 3777	00 3602
+12 0000	00 3603
+25 3777	00 3604
+12 0000	00 3605
+25 3777	00 3606
+12 0000	00 3607
+25 3777	00 3610
+12 0000	00 3611
+25 3777	00 3612
+12 0000	00 3613
+25 3777	00 3614
+12 0000	00 3615
+25 3777	00 3616
+20 1770	00 3617
+02 2000	00 3620
+16 0000	00 3621
+32 0000	00 3622
+26 0001	00 3623
+27 2234	00 3624
+22 0000	00 3625
+23 1770	00 3626
+12 0000	00 3627
+25 3777	00 3630
+12 0000	00 3631
+25 3777	00 3632
+12 0000	00 3633
+25 3777	00 3634

B-040

INSTRUCTION

LOCATION

+12 0000	00 3635
+25 3777	00 3636
+12 0000	00 3637
+25 3777	00 3640
+12 0000	00 3641
+25 3777	00 3642
+12 0000	00 3643
+25 3777	00 3644
+12 0000	00 3645
+25 3777	00 3646
+12 0000	00 3647
+25 3777	00 3650
+20 1770	00 3651
+02 2000	00 3652
+16 0000	00 3653
+26 0001	00 3654
+27 2235	00 3655
+12 0000	00 3656
+25 3777	00 3657
+12 0000	00 3660
+25 3777	00 3661
+12 0000	00 3662
+25 3777	00 3663
+12 0000	00 3664
+25 3777	00 3665
+12 0000	00 3666
+25 3777	00 3667
+22 0000	00 3670
+13 0000	00 3671
+23 1770	00 3672
+12 0000	00 3673
+25 3777	00 3674
+20 1770	00 3675
+16 0000	00 3676
+32 0000	00 3677
+26 0001	00 3700
+27 2236	00 3701
+02 2000	00 3702
+16 0000	00 3703
+32 0000	00 3704
+22 0000	00 3705
+23 1770	00 3706
+26 0012	00 3707
+27 2237	00 3710
+27 2777	00 3711
+27 2777	00 3712
+27 2777	00 3713
+27 2777	00 3714
+27 2777	00 3715
+27 2777	00 3716

3
4
5
6
7
8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-041

INSTRUCTION

LOCATION

+27 2777	00 3717
+27 2777	00 3720
+12 0000	00 3721
+23 3777	00 3722
+23 3777	00 3723
+12 0000	00 3724
+20 1770	00 3725
+02 2000	00 3726
+16 0000	00 3727
+26 0001	00 3730
+27 2240	00 3731
+12 0000	00 3732
+25 3777	00 3733
+12 0000	00 3734
+25 3777	00 3735
+12 0000	00 3736
+25 3777	00 3737
+22 0000	00 3740
+13 0000	00 3741
+23 1770	00 3742
+12 0000	00 3743
+25 3777	00 3744
+20 1770	00 3745
+16 0000	00 3746
+32 0000	00 3747
+26 0001	00 3750
+27 2241	00 3751
+12 0000	00 3752
+25 3777	00 3753
+12 0000	00 3754
+25 3777	00 3755
+12 0000	00 3756
+25 3777	00 3757
+12 0000	00 3760
+25 3777	00 3761
+12 0000	00 3762
+25 3777	00 3763
+12 0000	00 3764
+22 0000	00 3765
+13 0000	00 3766
+23 1770	00 3767
+12 0000	00 3770
+20 1770	00 3771
+16 0000	00 3772
+32 0000	00 3773
+26 0004	00 3774
+27 2242	00 3775

BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

B-042

INSTRUCTION

LOCATION

+22 7000	00 4001
+23 1740	00 4002
+23 1741	00 4003
+23 1742	00 4004
+23 1743	00 4005
+22 0000	00 4006
+23 0000	00 4007
+12 0000	00 4010
+25 3777	00 4011
+12 0000	00 4012
+25 3777	00 4013
+12 0000	00 4014
+25 3777	00 4015
+12 0000	00 4016
+25 3777	00 4017
+12 0000	00 4020
+25 3777	00 4021
+12 0000	00 4022
+25 3777	00 4023
+12 0000	00 4024
+22 0000	00 4025
+13 0000	00 4026
+23 1770	00 4027
+12 0000	00 4030
+20 1770	00 4031
+16 0000	00 4032
+32 0000	00 4033
+26 0001	00 4034
+27 2243	00 4035
+02 2000	00 4036
+16 0000	00 4037
+32 0000	00 4040
+26 0023	00 4041
+12 0000	00 4042
+22 0000	00 4043
+23 0000	00 4044
+12 0000	00 4045
+25 3777	00 4046
+12 0000	00 4047
+25 3777	00 4050
+12 0000	00 4051
+25 3777	00 4052
+12 0000	00 4053
+25 3777	00 4054
+12 0000	00 4055
+25 3777	00 4056
+20 1770	00 4057
+02 2000	00 4060

6
7
8
9
Z
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

INSTRUCTION

LOCATION

+16 0000	00 4061
+26 0001	00 4062
+27 2244	00 4063
+27 2245	00 4064
+23 0000	00 4065
+23 1770	00 4066
+26 0010	00 4067
+27 2777	00 4070
+27 2777	00 4071
+27 2777	00 4072
+27 2777	00 4073
+27 2777	00 4074
+27 2777	00 4075
+27 2777	00 4076
+12 0000	00 4077
+25 3777	00 4100
+12 0000	00 4101
+25 3777	00 4102
+12 0000	00 4103
+22 7774	00 4104
+23 3777	00 4105
+12 0000	00 4106
+25 3777	00 4107
+23 3777	00 4110
+12 0000	00 4111
+25 3777	00 4112
+23 3777	00 4113
+12 0000	00 4114
+25 3777	00 4115
+23 3777	00 4116
+12 0000	00 4117
+25 3777	00 4120
+12 0000	00 4121
+25 3777	00 4122
+12 0000	00 4123
+20 1770	00 4124
+02 2000	00 4125
+16 0000	00 4126
+32 0000	00 4127
+26 0001	00 4130
+27 2246	00 4131
+22 0000	00 4132
+23 1770	00 4133
+12 0000	00 4134
+23 0000	00 4135
+23 3777	00 4136
+13 0000	00 4137
+23 3777	00 4140
+12 0000	00 4141
+25 3777	00 4142

12

11

10

9

8

7

6

5

4

3

B-044

INSTRUCTION

LOCATION

+12 0000	00 4143
+25 3777	00 4144
+12 0000	00 4145
+25 3777	00 4146
+20 1770	00 4147
+02 2000	00 4150
+16 0000	00 4151
+32 0000	00 4152
+26 0001	00 4153
+27 2247	00 4154
+22 0000	00 4155
+23 1770	00 4156
+13 0000	00 4157
+23 3777	00 4160
+13 0000	00 4161
+23 0000	00 4162
+23 3777	00 4163
+12 0000	00 4164
+25 3777	00 4165
+12 0000	00 4166
+25 3777	00 4167
+12 0000	00 4170
+25 3777	00 4171
+20 1770	00 4172
+02 2000	00 4173
+16 0000	00 4174
+32 0000	00 4175
+26 0001	00 4176
+27 2250	00 4177
+22 7000	00 4200
+13 0000	00 4201
+23 1740	00 4202
+23 1741	00 4203
+23 1742	00 4204
+23 1743	00 4205
+12 0000	00 4206
+25 3777	00 4207
+12 0000	00 4210
+25 3777	00 4211
+12 0000	00 4212
+22 7000	00 4213
+23 1740	00 4214
+23 1741	00 4215
+23 1742	00 4216
+23 1743	00 4217
+12 0000	00 4220
+20 1770	00 4221
+02 2000	00 4222
+16 0000	00 4223
+26 0001	00 4224

12
11
10
9
8
7
6
5
4
3

8
5
9
7
8
6
01
11
12

B-045

INSTRUCTION

LOCATION

+27 2251	00 4225
+22 0000	00 4226
+13 0000	00 4227
+23 3777	00 4230
+12 0000	00 4231
+25 3777	00 4232
+12 0000	00 4233
+25 3777	00 4234
+12 0000	00 4235
+25 3777	00 4236
+22 3000	00 4237
+23 1740	00 4240
+23 1741	00 4241
+23 1742	00 4242
+23 1743	00 4243
+12 0000	00 4244
+25 3777	00 4245
+20 1770	00 4246
+02 2000	00 4247
+16 0000	00 4250
+26 0007	00 4251
+27 2252	00 4252
+27 2777	00 4253
+27 2777	00 4254
+27 2777	00 4255
+27 2777	00 4256
+27 2777	00 4257
+27 2777	00 4260
+22 1000	00 4261
+23 1740	00 4262
+23 1741	00 4263
+23 1742	00 4264
+23 1743	00 4265
+12 0000	00 4266
+20 1770	00 4267
+02 2000	00 4270
+16 0000	00 4271
+22 0000	00 4272
+23 1770	00 4273
+32 0000	00 4274
+26 0001	00 4275
+27 2253	00 4276
+12 0000	00 4277
+25 3777	00 4300
+12 0000	00 4301
+25 3777	00 4302
+12 0000	00 4303
+25 3777	00 4304
+12 0000	00 4305
+22 5000	00 4306

12

11

10

9

8

7

6

5

4

3

B-046

INSTRUCTION

LOCATION

+23 1750	00 4307
+23 1751	00 4310
+23 1752	00 4311
+23 1753	00 4312
+12 0000	00 4313
+25 3777	00 4314
+12 0000	00 4315
+20 1770	00 4316
+02 2000	00 4317
+16 0000	00 4320
+32 0000	00 4321
+26 0001	00 4322
+27 2254	00 4323
+22 0000	00 4324
+23 1770	00 4325
+12 0000	00 4326
+25 3777	00 4327
+12 0000	00 4330
+25 3777	00 4331
+12 0000	00 4332
+12 0000	00 4333
+25 3777	00 4334
+12 0000	00 4335
+25 3777	00 4336
+22 6000	00 4337
+23 1740	00 4340
+23 1741	00 4341
+23 1742	00 4342
+23 1743	00 4343
+12 0000	00 4344
+12 0000	00 4345
+25 3777	00 4346
+12 0000	00 4347
+25 3777	00 4350
+12 0000	00 4351
+20 1770	00 4352
+02 2000	00 4353
+16 0000	00 4354
+26 0001	00 4355
+27 2255	00 4356
+12 0000	00 4357
+25 3777	00 4360
+12 0000	00 4361
+25 3777	00 4362
+12 0000	00 4363
+22 7000	00 4364
+23 1741	00 4365
+23 1742	00 4366
+23 1743	00 4367
+22 0000	00 4370

8
1
2
9
2
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-047

INSTRUCTION

LOCATION

+23 1740	00 4371
+23 1774	00 4372
+23 1775	00 4373
+12 0000	00 4374
+20 1770	00 4375
+02 2000	00 4376
+16 0000	00 4377
+32 0000	00 4400
+26 0001	00 4401
+27 2256	00 4402
+12 0000	00 4403
+25 3777	00 4404
+22 7000	00 4405
+23 1740	00 4406
+12 0000	00 4407
+22 0000	00 4410
+23 1743	00 4411
+12 0000	00 4412
+20 1770	00 4413
+02 2000	00 4414
+16 0000	00 4415
+26 0001	00 4416
+27 2257	00 4417
+22 0000	00 4420
+23 1776	00 4421
+12 0000	00 4422
+23 1777	00 4423
+23 1750	00 4424
+23 1751	00 4425
+23 1752	00 4426
+23 1753	00 4427
+12 0000	00 4430
+20 1770	00 4431
+02 2000	00 4432
+16 0000	00 4433
+32 0000	00 4434
+26 0001	00 4435
+27 2260	00 4436
+22 0000	00 4437
+13 0000	00 4440
+23 1770	00 4441
+23 1771	00 4442
+23 1772	00 4443
+23 1773	00 4444
+26 0014	00 4445
+12 0000	00 4446
+25 3777	00 4447
+12 0000	00 4450
+25 3777	00 4451
+12 0000	00 4452

12

11

10

9

5

4

3

8
7
5
9
2
8
6
01
11
21

B-048

INSTRUCTION

LOCATION

+27 2777	00 4453
+27 2777	00 4454
+27 2777	00 4455
+27 2777	00 4456
+27 2777	00 4457
+27 2777	00 4460
+27 2777	00 4461
+20 1770	00 4462
+16 0000	00 4463
+26 0010	00 4464
+22 7000	00 4465
+23 1741	00 4466
+23 1742	00 4467
+23 1743	00 4470
+22 0000	00 4471
+23 1740	00 4472
+32 0000	00 4473
+26 0051	00 4474
+20 1771	00 4475
+16 0000	00 4476
+26 0010	00 4477
+22 7000	00 4500
+23 1740	00 4501
+23 1742	00 4502
+23 1743	00 4503
+22 0000	00 4504
+23 1741	00 4505
+32 0000	00 4506
+26 0067	00 4507
+20 1772	00 4510
+16 0000	00 4511
+26 0010	00 4512
+22 7000	00 4513
+23 1740	00 4514
+23 1741	00 4515
+23 1743	00 4516
+22 0000	00 4517
+23 1742	00 4520
+32 0000	00 4521
+26 0105	00 4522
+22 7000	00 4523
+23 1740	00 4524
+23 1741	00 4525
+23 1742	00 4526
+22 0000	00 4527
+23 1743	00 4530
+26 0137	00 4531
+27 2777	00 4532
+27 2777	00 4533
+27 2777	00 4534

8
9
10
11
21

12
10
7
6
5
4
3

B-049

INSTRUCTION

LOCATION

+27 2777	00 4535
+27 2777	00 4536
+27 2777	00 4537
+27 2777	00 4540
+12 0000	00 4541
+25 3777	00 4542
+12 0000	00 4543
+25 3777	00 4544
+12 0000	00 4545
+20 1770	00 4546
+02 2000	00 4547
+16 0000	00 4550
+26 0023	00 4551
+33 2770	00 4552
+26 0015	00 4553
+33 2777	00 4554
+26 0007	00 4555
+33 2776	00 4556
+26 0016	00 4557
+33 2775	00 4560
+26 0014	00 4561
+33 2774	00 4562
+26 0012	00 4563
+32 0000	00 4564
+34 2774	00 4565
+32 0000	00 4566
+34 2777	00 4567
+32 0000	00 4570
+22 0000	00 4571
+13 0000	00 4572
+23 1770	00 4573
+26 0142	00 4574
+27 2261	00 4575
+27 2262	00 4576
+20 1771	00 4577
+02 2000	00 4600
+16 0000	00 4601
+26 0023	00 4602
+33 2770	00 4603
+26 0015	00 4604
+33 2774	00 4605
+26 0007	00 4606
+33 2777	00 4607
+26 0016	00 4610
+33 2776	00 4611
+26 0014	00 4612
+33 2775	00 4613
+26 0012	00 4614
+32 0000	00 4615
+34 2775	00 4616

12

11

10

9

8

7

6

5

4

3

B-050

INSTRUCTION

LOCATION

+32 0000	00 4617
+34 2774	00 4620
+32 0000	00 4621
+22 0000	00 4622
+13 0000	00 4623
+23 1771	00 4624
+26 0125	00 4625
+27 2263	00 4626
+27 2262	00 4627
+20 1772	00 4630
+02 2000	00 4631
+16 0000	00 4632
+26 0023	00 4633
+33 2770	00 4634
+26 0015	00 4635
+33 2775	00 4636
+26 0007	00 4637
+33 2774	00 4640
+26 0016	00 4641
+33 2777	00 4642
+26 0014	00 4643
+33 2776	00 4644
+26 0012	00 4645
+32 0000	00 4646
+34 2776	00 4647
+32 0000	00 4650
+34 2775	00 4651
+32 0000	00 4652
+22 0000	00 4653
+13 0000	00 4654
+23 1772	00 4655
+26 0110	00 4656
+27 2264	00 4657
+27 2262	00 4660
+12 0000	00 4661
+25 3777	00 4662
+12 0000	00 4663
+25 3777	00 4664
+12 0000	00 4665
+25 3777	00 4666
+12 0000	00 4667
+25 3777	00 4670
+20 1773	00 4671
+02 2000	00 4672
+16 0000	00 4673
+26 0023	00 4674
+33 2770	00 4675
+26 0015	00 4676
+33 2776	00 4677
+26 0007	00 4700

8
7
6
5
4
3
2
1
01
11
21

12
11
10
9
8
7
6
5
4
3

B-051

INSTRUCTION

LOCATION

+33 2775	00 4701
+26 0016	00 4702
+33 2774	00 4703
+26 0014	00 4704
+33 2777	00 4705
+26 0012	00 4706
+32 0000	00 4707
+34 2777	00 4710
+32 0000	00 4711
+34 2776	00 4712
+32 0000	00 4713
+22 0000	00 4714
+13 0000	00 4715
+23 1773	00 4716
+26 0063	00 4717
+27 2265	00 4720
+27 2262	00 4721
+12 0000	00 4722
+25 3777	00 4723
+12 0000	00 4724
+25 3777	00 4725
+12 0000	00 4726
+25 3777	00 4727
+27 2777	00 4730
+27 2777	00 4731
+27 2777	00 4732
+27 2777	00 4733
+27 2777	00 4734
+27 2777	00 4735
+27 2777	00 4736
+20 1770	00 4737
+16 0000	00 4740
+32 0000	00 4741
+26 0001	00 4742
+27 2266	00 4743
+02 2000	00 4744
+16 0000	00 4745
+22 0000	00 4746
+13 0000	00 4747
+23 1770	00 4750
+26 0062	00 4751
+27 2267	00 4752
+20 1771	00 4753
+16 0000	00 4754
+32 0000	00 4755
+26 0001	00 4756
+27 2266	00 4757
+02 2000	00 4760
+16 0000	00 4761
+22 0000	00 4762

3
4
5
6
7
8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-052

INSTRUCTION

LOCATION

+13 0000	00 4763
+23 1771	00 4764
+26 0065	00 4765
+27 2267	00 4766
+20 1772	00 4767
+16 0000	00 4770
+32 0000	00 4771
+26 0001	00 4772
+27 2266	00 4773
+02 2000	00 4774
+16 0000	00 4775
+22 0000	00 4776
+13 0000	00 4777
+23 1772	00 5000
+26 0070	00 5001
+27 2267	00 5002
+20 1773	00 5003
+16 0000	00 5004
+32 0000	00 5005
+26 0001	00 5006
+27 2270	00 5007
+02 2000	00 5010
+16 0000	00 5011
+22 0000	00 5012
+13 0000	00 5013
+23 1773	00 5014
+26 0073	00 5015
+27 2267	00 5016
+12 0000	00 5017
+25 3777	00 5020
+12 0000	00 5021
+25 3777	00 5022
+12 0000	00 5023
+25 3777	00 5024
+12 0000	00 5025
+25 3777	00 5026
+12 0000	00 5027
+25 3777	00 5030
+12 0000	00 5031
+25 3777	00 5032
+12 0000	00 5033
+20 1770	00 5034
+16 0000	00 5035
+32 0000	00 5036
+26 0001	00 5037
+27 2777	00 5040
+02 2000	00 5041
+16 0000	00 5042
+32 0000	00 5043
+22 0000	00 5044

12
11
10
9
8
7
6
5
4
3

8
7
5
9
4
8
6
01
11
21

B-053

INSTRUCTION

LOCATION

+13 0000	00 5045
+23 1770	00 5046
+22 7000	00 5047
+23 7774	00 5050
+26 0133	00 5051
+27 2272	00 5052
+20 1771	00 5053
+16 0000	00 5054
+32 0000	00 5055
+26 0001	00 5056
+27 2273	00 5057
+02 2000	00 5060
+16 0000	00 5061
+32 0000	00 5062
+22 0000	00 5063
+13 0000	00 5064
+23 1771	00 5065
+22 7000	00 5066
+23 7775	00 5067
+26 0072	00 5070
+27 2274	00 5071
+20 1772	00 5072
+16 0000	00 5073
+32 0000	00 5074
+26 0001	00 5075
+27 2273	00 5076
+02 2000	00 5077
+16 0000	00 5100
+32 0000	00 5101
+22 0000	00 5102
+13 0000	00 5103
+23 1772	00 5104
+22 7000	00 5105
+23 1776	00 5106
+26 0061	00 5107
+27 2274	00 5110
+20 1773	00 5111
+16 0000	00 5112
+32 0000	00 5113
+26 0001	00 5114
+27 2273	00 5115
+02 2000	00 5116
+16 0000	00 5117
+32 0000	00 5120
+22 0000	00 5121
+13 0000	00 5122
+23 1773	00 5123
+22 7000	00 5124
+23 1777	00 5125
+26 0016	00 5126

12

11

10

9

8

7

6

5

4

3

B-054

INSTRUCTION

LOCATION

+27 2274	00 5127
+27 2777	00 5130
+27 2777	00 5131
+27 2777	00 5132
+27 2777	00 5133
+27 2777	00 5134
+27 2777	00 5135
+27 2777	00 5136
+12 0000	00 5137
+25 3777	00 5140
+12 0000	00 5141
+25 3777	00 5142
+12 0000	00 5143
+25 3777	00 5144
+20 1773	00 5145
+16 0000	00 5146
+32 0000	00 5147
+26 0001	00 5150
+27 2275	00 5151
+22 0000	00 5152
+13 0000	00 5153
+23 1775	00 5154
+26 0021	00 5155
+12 0000	00 5156
+25 3777	00 5157
+12 0000	00 5160
+25 3777	00 5161
+12 0000	00 5162
+20 1771	00 5163
+02 2000	00 5164
+16 0000	00 5165
+32 0000	00 5166
+26 0027	00 5167
+27 2276	00 5170
+20 1772	00 5171
+02 2000	00 5172
+16 0000	00 5173
+32 0000	00 5174
+26 0021	00 5175
+27 2276	00 5176
+20 1773	00 5177
+02 2000	00 5200
+16 0000	00 5201
+32 0000	00 5202
+26 0015	00 5203
+27 2276	00 5204
+20 1770	00 5205
+02 2000	00 5206
+16 0000	00 5207
+32 0000	00 5210

12
11
10
9
8
7
6
5
4
3

8
7
5
9
2
8
6
01
11
21

B-055

INSTRUCTION

LOCATION

+26 0005	00 5211
+27 2276	00 5212
+12 0000	00 5213
+25 3777	00 5214
+12 0000	00 5215
+25 3777	00 5216
+22 0004	00 5217
+02 1612	00 5220
+14 0000	00 5221
+02 2000	00 5222
+16 0000	00 5223
+26 0042	00 5224
+20 1612	00 5225
+02 2000	00 5226
+16 0000	00 5227
+32 0000	00 5230
+26 0001	00 5231
+27 2277	00 5232
+22 0376	00 5233
+11 1005	00 5234
+02 1612	00 5235
+14 0000	00 5236
+02 2000	00 5237
+16 0000	00 5240
+32 0000	00 5241
+26 0001	00 5242
+27 2300	00 5243
+22 0176	00 5244
+11 1005	00 5245
+02 1612	00 5246
+14 0000	00 5247
+02 2000	00 5250
+16 0000	00 5251
+32 0000	00 5252
+26 0001	00 5253
+27 2301	00 5254
+22 0644	00 5255
+11 1005	00 5256
+02 1612	00 5257
+14 0000	00 5260
+02 2000	00 5261
+16 0000	00 5262
+32 0000	00 5263
+26 0001	00 5264
+27 2302	00 5265
+27 2303	00 5266
+22 0010	00 5267
+02 1611	00 5270
+14 0000	00 5271
+02 2000	00 5272

12

11

10

9

8

7

6

5

4

3

B-056

INSTRUCTION

LOCATION

+16 0000	00 5273
+26 0042	00 5274
+20 1611	00 5275
+02 2000	00 5276
+16 0000	00 5277
+32 0000	00 5300
+26 0001	00 5301
+27 2304	00 5302
+22 0776	00 5303
+11 1005	00 5304
+02 1611	00 5305
+14 0000	00 5306
+02 2000	00 5307
+16 0000	00 5310
+32 0000	00 5311
+26 0001	00 5312
+27 2305	00 5313
+22 0376	00 5314
+11 1005	00 5315
+02 1611	00 5316
+14 0000	00 5317
+02 2000	00 5320
+16 0000	00 5321
+32 0000	00 5322
+26 0001	00 5323
+27 2306	00 5324
+22 1510	00 5325
+11 1005	00 5326
+02 1611	00 5327
+14 0000	00 5330
+02 2000	00 5331
+16 0000	00 5332
+32 0000	00 5333
+26 0001	00 5334
+27 2307	00 5335
+27 2310	00 5336
+22 0020	00 5337
+02 1610	00 5340
+14 0000	00 5341
+02 2000	00 5342
+16 0000	00 5343
+26 0042	00 5344
+20 1610	00 5345
+02 2000	00 5346
+16 0000	00 5347
+32 0000	00 5350
+26 0001	00 5351
+27 2311	00 5352
+22 1716	00 5353
+11 1005	00 5354

8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-057

INSTRUCTION

LOCATION

+02 1610	00 5355
+14 0000	00 5356
+02 2000	00 5357
+16 0000	00 5360
+32 0000	00 5361
+26 0001	00 5362
+27 2312	00 5363
+22 0776	00 5364
+11 1005	00 5365
+02 1610	00 5366
+14 0000	00 5367
+02 2000	00 5370
+16 0000	00 5371
+32 0000	00 5372
+26 0001	00 5373
+27 2313	00 5374
+22 3222	00 5375
+11 1005	00 5376
+02 1610	00 5377
+14 0000	00 5400
+02 2000	00 5401
+16 0000	00 5402
+32 0000	00 5403
+26 0001	00 5404
+27 2314	00 5405
+27 2315	00 5406
+22 0040	00 5407
+02 1607	00 5410
+14 0000	00 5411
+02 2000	00 5412
+16 0000	00 5413
+26 0042	00 5414
+20 1607	00 5415
+02 2000	00 5416
+16 0000	00 5417
+32 0000	00 5420
+26 0001	00 5421
+27 2316	00 5422
+22 3776	00 5423
+11 1005	00 5424
+02 1607	00 5425
+14 0000	00 5426
+02 2000	00 5427
+16 0000	00 5430
+32 0000	00 5431
+26 0001	00 5432
+27 2317	00 5433
+22 1776	00 5434
+11 1005	00 5435
+02 1607	00 5436

B-058

8
7
6
5
4
3
2
1
0
11
12

INSTRUCTION

LOCATION

+14 0000	00 5437
+02 2000	00 5440
+16 0000	00 5441
+32 0000	00 5442
+26 0001	00 5443
+27 2320	00 5444
+22 6444	00 5445
+11 1005	00 5446
+02 1607	00 5447
+14 0000	00 5450
+02 2000	00 5451
+16 0000	00 5452
+32 0000	00 5453
+26 0001	00 5454
+27 2321	00 5455
+27 2322	00 5456
+22 0100	00 5457
+02 1606	00 5460
+14 0000	00 5461
+02 2000	00 5462
+16 0000	00 5463
+26 0053	00 5464
+20 1606	00 5465
+02 2000	00 5466
+16 0000	00 5467
+32 0000	00 5470
+26 0001	00 5471
+27 2323	00 5472
+22 7776	00 5473
+11 1005	00 5474
+02 1606	00 5475
+14 0000	00 5476
+02 2000	00 5477
+16 0000	00 5500
+32 0000	00 5501
+26 0001	00 5502
+27 2324	00 5503
+22 5776	00 5504
+11 1005	00 5505
+02 1606	00 5506
+14 0000	00 5507
+02 2000	00 5510
+16 0000	00 5511
+32 0000	00 5512
+26 0001	00 5513
+27 2325	00 5514
+22 7776	00 5515
+11 1004	00 5516
+02 1606	00 5517
+14 0000	00 5520

12
11
10
9
8
7
6
5
4
3

B-059

INSTRUCTION

LOCATION

+02 2000	00 5521
+16 0000	00 5522
+32 0000	00 5523
+26 0001	00 5524
+27 2326	00 5525
+22 6444	00 5526
+11 1004	00 5527
+02 1606	00 5530
+14 0000	00 5531
+02 2000	00 5532
+16 0000	00 5533
+32 0000	00 5534
+26 0001	00 5535
+27 2327	00 5536
+27 2330	00 5537
+22 0200	00 5540
+02 1605	00 5541
+14 0000	00 5542
+02 2000	00 5543
+16 0000	00 5544
+26 0053	00 5545
+20 1605	00 5546
+02 2000	00 5547
+16 0000	00 5550
+32 0000	00 5551
+26 0001	00 5552
+27 2331	00 5553
+22 7776	00 5554
+11 1004	00 5555
+02 1605	00 5556
+14 0000	00 5557
+02 2000	00 5560
+16 0000	00 5561
+32 0000	00 5562
+26 0001	00 5563
+27 2332	00 5564
+22 5776	00 5565
+11 1004	00 5566
+02 1605	00 5567
+14 0000	00 5570
+02 2000	00 5571
+16 0000	00 5572
+32 0000	00 5573
+26 0001	00 5574
+27 2333	00 5575
+22 1776	00 5576
+11 1005	00 5577
+02 1605	00 5600
+14 0000	00 5601
+02 2000	00 5602

3
4
5
6
7
8
9
10
11
12

12
11
10
9
8
7
6
5
4
3

B-060

INSTRUCTION

LOCATION

+16 0000	00 5603
+32 0000	00 5604
+26 0001	00 5605
+27 2334	00 5606
+22 6444	00 5607
+11 1003	00 5610
+02 1605	00 5611
+14 0000	00 5612
+02 2000	00 5613
+16 0000	00 5614
+32 0000	00 5615
+26 0001	00 5616
+27 2335	00 5617
+27 2336	00 5620
+22 0400	00 5621
+02 1604	00 5622
+14 0000	00 5623
+02 2000	00 5624
+16 0000	00 5625
+26 0053	00 5626
+20 1604	00 5627
+02 2000	00 5630
+16 0000	00 5631
+32 0000	00 5632
+26 0001	00 5633
+27 2337	00 5634
+22 7776	00 5635
+11 1003	00 5636
+02 1604	00 5637
+14 0000	00 5640
+02 2000	00 5641
+16 0000	00 5642
+32 0000	00 5643
+26 0001	00 5644
+27 2340	00 5645
+22 3776	00 5646
+11 1003	00 5647
+02 1604	00 5650
+14 0000	00 5651
+02 2000	00 5652
+16 0000	00 5653
+32 0000	00 5654
+26 0001	00 5655
+27 2341	00 5656
+22 1776	00 5657
+11 1002	00 5660
+02 1604	00 5661
+14 0000	00 5662
+02 2000	00 5663
+16 0000	00 5664

5
7
5
9
4
8
6
10
11
12

12
11
10
9
8
7
6
5
4
3

B-061

INSTRUCTION

LOCATION

+32 0000	00 5665
+26 0001	00 5666
+27 2342	00 5667
+22 6444	00 5670
+11 1002	00 5671
+02 1604	00 5672
+14 0000	00 5673
+02 2000	00 5674
+16 0000	00 5675
+32 0000	00 5676
+26 0001	00 5677
+27 2343	00 5700
+27 2344	00 5701
+22 1000	00 5702
+02 1603	00 5703
+14 0000	00 5704
+02 2000	00 5705
+16 0000	00 5706
+26 0052	00 5707
+20 1603	00 5710
+02 2000	00 5711
+16 0000	00 5712
+32 0000	00 5713
+26 0001	00 5714
+27 2345	00 5715
+22 1776	00 5716
+11 1002	00 5717
+02 1603	00 5720
+14 0000	00 5721
+02 2000	00 5722
+16 0000	00 5723
+32 0000	00 5724
+26 0001	00 5725
+27 2346	00 5726
+22 3776	00 5727
+11 1002	00 5730
+02 1603	00 5731
+14 0000	00 5732
+02 2000	00 5733
+16 0000	00 5734
+32 0000	00 5735
+26 0001	00 5736
+27 2347	00 5737
+22 1776	00 5740
+11 1001	00 5741
+02 1603	00 5742
+14 0000	00 5743
+02 2000	00 5744
+16 0000	00 5745
+32 0000	00 5746

B-062

INSTRUCTION

LOCATION

+26 0001	00 5747
+27 2350	00 5750
+22 3222	00 5751
+02 1603	00 5752
+14 0000	00 5753
+02 2000	00 5754
+16 0000	00 5755
+32 0000	00 5756
+26 0001	00 5757
+27 2351	00 5760
+27 2352	00 5761
+22 2000	00 5762
+02 1602	00 5763
+14 0000	00 5764
+02 2000	00 5765
+16 0000	00 5766
+26 0062	00 5767
+32 0000	00 5770
+26 0007	00 5771

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

+20 1602	00 6001
+02 2000	00 6002
+16 0000	00 6003
+32 0000	00 6004
+26 0001	00 6005
+27 2353	00 6006
+22 1776	00 6007
+11 1001	00 6010
+02 1602	00 6011
+14 0000	00 6012
+02 2000	00 6013
+16 0000	00 6014
+32 0000	00 6015
+26 0001	00 6016
+27 2354	00 6017
+22 5776	00 6020
+11 1001	00 6021
+02 1602	00 6022
+14 0000	00 6023
+02 2000	00 6024
+16 0000	00 6025
+32 0000	00 6026
+26 0001	00 6027
+27 2355	00 6030
+22 1776	00 6031

B-063

INSTRUCTION

LOCATION

+02 1602	00 6032
+14 0000	00 6033
+02 2000	00 6034
+16 0000	00 6035
+32 0000	00 6036
+26 0001	00 6037
+27 2356	00 6040
+22 6444	00 6041
+02 1602	00 6042
+14 0000	00 6043
+02 2000	00 6044
+16 0000	00 6045
+32 0000	00 6046
+26 0001	00 6047
+27 2357	00 6050
+27 2360	00 6051
+22 7774	00 6052
+13 0000	00 6053
+11 1001	00 6054
+13 0000	00 6055
+11 1001	00 6056
+13 0000	00 6057
+11 1001	00 6060
+23 0000	00 6061
+22 4000	00 6062
+02 1601	00 6063
+14 0000	00 6064
+02 2000	00 6065
+16 0000	00 6066
+26 0037	00 6067
+20 1601	00 6070
+02 2000	00 6071
+16 0000	00 6072
+32 0000	00 6073
+26 0001	00 6074
+27 2361	00 6075
+22 7776	00 6076
+02 1601	00 6077
+14 0000	00 6100
+02 2000	00 6101
+16 0000	00 6102
+32 0000	00 6103
+26 0001	00 6104
+27 2362	00 6105
+22 3776	00 6106
+02 1601	00 6107
+14 0000	00 6110
+02 2000	00 6111
+16 0000	00 6112
+32 0000	00 6113

12

11

10

9

8

7

6

5

4

3

8
7
6
5
4
3
2
1
01
11
21

B-064

INSTRUCTION

LOCATION

+26 0001	00 6114
+27 2363	00 6115
+22 3774	00 6116
+02 1601	00 6117
+14 0000	00 6120
+02 2000	00 6121
+16 0000	00 6122
+32 0000	00 6123
+26 0001	00 6124
+27 2364	00 6125
+27 2365	00 6126
+22 7774	00 6127
+11 1003	00 6130
+23 1751	00 6131
+20 1601	00 6132
+02 2000	00 6133
+16 0000	00 6134
+26 0066	00 6135
+22 7774	00 6136
+02 1601	00 6137
+14 0000	00 6140
+02 2000	00 6141
+16 0000	00 6142
+32 0000	00 6143
+26 0001	00 6144
+27 2366	00 6145
+22 7770	00 6146
+02 1601	00 6147
+14 0000	00 6150
+02 2000	00 6151
+16 0000	00 6152
+32 0000	00 6153
+26 0001	00 6154
+27 2367	00 6155
+20 1601	00 6156
+11 0001	00 6157
+16 0000	00 6160
+26 0032	00 6161
+11 0001	00 6162
+16 0000	00 6163
+26 0027	00 6164
+11 0001	00 6165
+16 0000	00 6166
+26 0024	00 6167
+11 0001	00 6170
+16 0000	00 6171
+26 0021	00 6172
+11 0001	00 6173
+16 0000	00 6174
+26 0016	00 6175

3
4
5
6
7
8
9
10
11
12

B-065

INSTRUCTION

LOCATION

+11 0001	00 6176
+16 0000	00 6177
+26 0013	00 6200
+11 0001	00 6201
+16 0000	00 6202
+26 0010	00 6203
+11 0001	00 6204
+16 0000	00 6205
+26 0005	00 6206
+11 0001	00 6207
+16 0000	00 6210
+26 0002	00 6211
+32 0000	00 6212
+26 0007	00 6213
+11 0001	00 6214
+16 0000	00 6215
+26 0004	00 6216
+11 0001	00 6217
+16 0000	00 6220
+26 0001	00 6221
+27 2371	00 6222
+27 2370	00 6223
+22 0002	00 6224
+02 1601	00 6225
+14 0000	00 6226
+02 2000	00 6227
+16 0000	00 6230
+26 0177	00 6231
+20 1601	00 6232
+02 2000	00 6233
+16 0000	00 6234
+32 0000	00 6235
+26 0001	00 6236
+27 2372	00 6237
+22 777b	00 6240
+13 0000	00 6241
+11 1001	00 6242
+13 0000	00 6243
+11 1001	00 6244
+13 0000	00 6245
+11 1001	00 6246
+13 0000	00 6247
+11 1002	00 6250
+02 1601	00 6251
+14 0000	00 6252
+02 2000	00 6253
+16 0000	00 6254
+32 0000	00 6255
+26 0001	00 6256
+27 2373	00 6257

12

11

10

9

8

7

6

5

4

3

INSTRUCTION

LOCATION

+20 1601	00 6260
+11 0001	00 6261
+16 0000	00 6262
+32 0000	00 6263
+26 0011	00 6264
+01 2000	00 6265
+16 0000	00 6266
+26 0001	00 6267
+27 2374	00 6270
+11 0001	00 6271
+16 0000	00 6272
+26 0001	00 6273
+27 2375	00 6274
+27 2376	00 6275
+11 0001	00 6276
+16 0000	00 6277
+32 0000	00 6300
+26 0011	00 6301
+01 2000	00 6302
+16 0000	00 6303
+26 0001	00 6304
+27 2377	00 6305
+11 0001	00 6306
+16 0000	00 6307
+26 0001	00 6310
+27 2400	00 6311
+27 2401	00 6312
+11 0001	00 6313
+16 0000	00 6314
+32 0000	00 6315
+26 0011	00 6316
+01 2000	00 6317
+16 0000	00 6320
+26 0001	00 6321
+27 2402	00 6322
+11 0001	00 6323
+16 0000	00 6324
+26 0001	00 6325
+27 2403	00 6326
+27 2404	00 6327
+11 0001	00 6330
+16 0000	00 6331
+32 0000	00 6332
+26 0011	00 6333
+01 2000	00 6334
+16 0000	00 6335
+26 0001	00 6336
+27 2405	00 6337
+11 0001	00 6340
+16 0000	00 6341

12

11

10

9

8

7

6

5

4

3

B-067

INSTRUCTION

LOCATION

+26 0001	00 6342
+27 2406	00 6343
+27 2407	00 6344
+11 0001	00 6345
+16 0000	00 6346
+32 0000	00 6347
+26 0011	00 6350
+01 2000	00 6351
+16 0000	00 6352
+26 0001	00 6353
+27 2410	00 6354
+11 0001	00 6355
+16 0000	00 6356
+26 0001	00 6357
+27 2411	00 6360
+27 2412	00 6361
+11 0001	00 6362
+16 0000	00 6363
+32 0000	00 6364
+26 0011	00 6365
+01 2000	00 6366
+16 0000	00 6367
+26 0001	00 6370
+27 2413	00 6371
+11 0001	00 6372
+16 0000	00 6373
+26 0001	00 6374
+27 2414	00 6375
+27 2415	00 6376
+11 0001	00 6377
+16 0000	00 6400
+32 0000	00 6401
+26 0011	00 6402
+01 2000	00 6403
+16 0000	00 6404
+26 0001	00 6405
+27 2416	00 6406
+11 0001	00 6407
+16 0000	00 6410
+26 0001	00 6411
+27 2417	00 6412
+27 2420	00 6413
+11 0001	00 6414
+16 0000	00 6415
+32 0000	00 6416
+26 0012	00 6417
+01 2000	00 6420
+16 0000	00 6421
+26 0001	00 6422
+27 2421	00 6423

12

11

10

9

8

7

6

5

4

3

2792

B-068

INSTRUCTION

LOCATION

+11 0001	00 6424
+16 0000	00 6425
+26 0001	00 6426
+27 2422	00 6427
+27 2423	00 6430
+26 0037	00 6431
+11 0001	00 6432
+16 0000	00 6433
+32 0000	00 6434
+26 0011	00 6435
+01 2000	00 6436
+16 0000	00 6437
+26 0001	00 6440
+27 2424	00 6441
+1 0001	00 6442
+10 0000	00 6443
+2 0001	00 6444
+2 2425	00 6445
+2 2426	00 6446
+1 0001	00 6447
+10 0000	00 6450
+32 0000	00 6451
+26 0011	00 6452
+01 2000	00 6453
+16 0000	00 6454
+26 0001	00 6455
+27 2427	00 6456
+11 0001	00 6457
+16 0000	00 6460
+26 0001	00 6461
+27 2430	00 6462
+27 2431	00 6463
+11 0001	00 6464
+16 0000	00 6465
+26 0001	00 6466
+2 2432	00 6467
+2 2433	00 6470
+12 0000	00 6471
+25 3777	00 6472
+12 0000	00 6473
+25 3777	00 6474
+22 0002	00 6475
+11 1003	00 6476
+02 1601	00 6477
+14 0000	00 6500
+02 2000	00 6501
+6 0000	00 6502
+0 0055	00 6503
+0 1601	00 6504
+02 2000	00 6505

12
11
10
9
8
7
6
5
4
3

01
11
21

B-069

INSTRUCTION

LOCATION

+16 0000	00 6506
+32 0000	00 6507
+26 0001	00 6510
+27 2434	00 6511
+11 0005	00 6512
+11 0005	00 6513
+11 0001	00 6514
+16 0000	00 6515
+32 0000	00 6516
+26 0005	00 6517
+01 2000	00 6520
+16 0000	00 6521
+26 0001	00 6522
+27 2435	00 6523
+27 2437	00 6524
+11 0001	00 6525
+16 0000	00 6526
+32 0000	00 6527
+26 0005	00 6530
+01 2000	00 6531
+16 0000	00 6532
+26 0001	00 6533
+27 2440	00 6534
+27 2442	00 6535
+11 0001	00 6536
+16 0000	00 6537
+32 0000	00 6540
+26 0005	00 6541
+01 2000	00 6542
+16 0000	00 6543
+26 0001	00 6544
+27 2443	00 6545
+27 2445	00 6546
+11 0001	00 6547
+16 0000	00 6550
+32 0000	00 6551
+26 0005	00 6552
+01 2000	00 6553
+16 0000	00 6554
+26 0001	00 6555
+27 2446	00 6556
+27 2450	00 6557
+27 2452	00 6560
+22 4000	00 6561
+11 1003	00 6562
+23 1751	00 6563
+12 0000	00 6564
+25 3777	00 6565
+22 7700	00 6566
+02 1602	00 6567

12
11
10
9
8
7
6
5
4
3

B-070

INSTRUCTION

LOCATION

+14 0000	00 6570
+02 2000	00 6571
+16 0000	00 6572
+12 0000	00 6573
+26 0001	00 6574
+27 2453	00 6575
+22 0174	00 6576
+02 1601	00 6577
+14 0000	00 6600
+02 2000	00 6601
+16 0000	00 6602
+12 0000	00 6603
+26 0001	00 6604
+27 2454	00 6605
+22 3774	00 6606
+11 1003	00 6607
+23 1751	00 6610
+22 4000	00 6611
+02 1601	00 6612
+14 0000	00 6613
+02 2000	00 6614
+16 0000	00 6615
+12 0000	00 6616
+26 0016	00 6617
+22 0004	00 6620
+02 1601	00 6621
+14 0000	00 6622
+02 2000	00 6623
+16 0000	00 6624
+32 0000	00 6625
+26 0001	00 6626
+27 2455	00 6627
+20 1601	00 6630
+11 0001	00 6631
+16 0000	00 6632
+26 0001	00 6633
+27 2456	00 6634
+27 2457	00 6635
+12 0000	00 6636
+25 3777	00 6637
+22 0200	00 6640
+23 1751	00 6641
+22 7776	00 6642
+13 0000	00 6643
+11 1001	00 6644
+13 0000	00 6645
+11 1001	00 6646
+13 0000	00 6647
+11 1001	00 6650
+13 0000	00 6651

8
7
5
9
2
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-071

INSTRUCTION

LOCATION

+11 1002	00 6652
+02 1601	00 6653
+14 0000	00 6654
+02 2000	00 6655
+16 0000	00 6656
+22 5774	00 6657
+11 1003	00 6660
+23 1751	00 6661
+26 0001	00 6662
+27 2460	00 6663
+12 0000	00 6664
+22 3776	00 6665
+11 1001	00 6666
+02 1601	00 6667
+14 0000	00 6670
+02 2000	00 6671
+16 0000	00 6672
+26 0001	00 6673
+27 2461	00 6674
+22 0300	00 6675
+23 1751	00 6676
+12 0000	00 6677
+25 3777	00 6700
+12 0000	00 6701
+25 3777	00 6702
+22 7776	00 6703
+13 0000	00 6704
+11 1005	00 6705
+12 0000	00 6706
+25 3777	00 6707
+12 0000	00 6710
+25 3777	00 6711
+02 1601	00 6712
+14 0000	00 6713
+02 2000	00 6714
+16 0000	00 6715
+26 0001	00 6716
+27 2462	00 6717
+22 0010	00 6720
+23 1751	00 6721
+22 3772	00 6722
+13 0000	00 6723
+11 1002	00 6724
+02 1601	00 6725
+14 0000	00 6726
+02 2000	00 6727
+16 0000	00 6730
+26 0001	00 6731
+27 2463	00 6732
+12 0000	00 6733

12
11
10
9
8
7
6
5
4
3

5791

3
4
5
6
7
8
9
10
11
12

B-072

INSTRUCTION

LOCATION

+25 3777	00 6734
+12 0000	00 6735
+25 3777	00 6736
+12 0000	00 6737
+25 3777	00 6740
+12 0000	00 6741
+25 3777	00 6742
+22 0776	00 6743
+11 1002	00 6744
+23 1751	00 6745
+25 3777	00 6746
+12 0000	00 6747
+25 3777	00 6750
+12 0000	00 6751
+25 3777	00 6752
+12 0000	00 6753
+25 3777	00 6754
+12 0000	00 6755
+25 3777	00 6756
+22 0004	00 6757
+02 1601	00 6760
+16 0000	00 6761
+32 0000	00 6762
+26 0001	00 6763
+27 2464	00 6764
+12 0000	00 6765
+25 3777	00 6766
+12 0000	00 6767
+25 3777	00 6770
+12 0000	00 6771
+25 3777	00 6772
+12 0000	00 6773
+25 3777	00 6774
+12 0000	00 6775
+25 3777	00 6776
+12 0000	00 6777
+25 3777	00 7000
+12 0000	00 7001
+22 7774	00 7002
+11 1003	00 7003
+23 1751	00 7004
+12 0000	00 7005
+20 1601	00 7006
+02 2000	00 7007
+16 0000	00 7010
+26 0012	00 7011
+22 0002	00 7012
+11 1004	00 7013
+02 1601	00 7014
+14 0000	00 7015

8
7
6
5
4
3
2
1
01
11
21

12
11
10
9
8
7
6
5
4
3

B-073

INSTRUCTION

LOCATION

+02 2000	00 7016
+16 0000	00 7017
+32 0000	00 7020
+26 0001	00 7021
+27 2465	00 7022
+27 2466	00 7023
+12 0000	00 7024
+22 0020	00 7025
+23 1751	00 7026
+22 0002	00 7027
+11 1003	00 7030
+02 1601	00 7031
+14 0000	00 7032
+02 2000	00 7033
+16 0000	00 7034
+22 7000	00 7035
+23 1751	00 7036
+26 0021	00 7037
+22 0200	00 7040
+02 1601	00 7041
+14 0000	00 7042
+02 2000	00 7043
+16 0000	00 7044
+32 0000	00 7045
+26 0001	00 7046
+27 2467	00 7047
+22 0002	00 7050
+11 1004	00 7051
+02 1601	00 7052
+14 0000	00 7053
+02 2000	00 7054
+16 0000	00 7055
+26 0001	00 7056
+27 2470	00 7057
+27 2471	00 7060
+22 0200	00 7061
+02 1602	00 7062
+14 0000	00 7063
+02 2000	00 7064
+16 0000	00 7065
+26 0001	00 7066
+27 2472	00 7067
+12 0000	00 7070
+12 0000	00 7071
+25 3777	00 7072
+12 0000	00 7073
+25 3777	00 7074
+12 0000	00 7075
+25 3777	00 7076
+12 0000	00 7077

12

11

10

9

8

7

6

5

4

3

B-074

INSTRUCTION

LOCATION

+25 3777	00 7100
+12 0000	00 7101
+25 3777	00 7102
+12 0000	00 7103
+25 3777	00 7104
+12 0000	00 7105
+25 3777	00 7106
+12 0000	00 7107
+25 3777	00 7110
+12 0000	00 7111
+25 3777	00 7112
+12 0000	00 7113
+25 3777	00 7114
+12 0000	00 7115
+25 3777	00 7116
+12 0000	00 7117
+25 3777	00 7120
+12 0000	00 7121
+25 3777	00 7122
+12 0000	00 7123
+25 3777	00 7124
+12 0000	00 7125
+25 3777	00 7126
+12 0000	00 7127
+25 3777	00 7130
+12 0000	00 7131
+25 3777	00 7132
+12 0000	00 7133
+25 3777	00 7134
+12 0000	00 7135
+25 3777	00 7136
+12 0000	00 7137
+25 3777	00 7140
+12 0000	00 7141
+25 3777	00 7142
+12 0000	00 7143
+25 3777	00 7144
+12 0000	00 7145
+25 3777	00 7146
+12 0000	00 7147
+25 3777	00 7150
+12 0000	00 7151
+25 3777	00 7152
+12 0000	00 7153
+25 3777	00 7154
+12 0000	00 7155
+25 3777	00 7156
+12 0000	00 7157
+25 3777	00 7160
+12 0000	00 7161

E
V
S
9
Z
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-075

INSTRUCTION

LOCATION

+25 3777	00 7162
+12 0000	00 7163
+25 3777	00 7164
+22 7774	00 7165
+11 1003	00 7166
+23 1751	00 7167
+12 0000	00 7170
+22 7774	00 7171
+02 1601	00 7172
+14 0000	00 7173
+02 2000	00 7174
+16 0000	00 7175
+12 0000	00 7176
+26 0011	00 7177
+22 0200	00 7200
+02 1601	00 7201
+14 0000	00 7202
+02 2000	00 7203
+16 0000	00 7204
+32 0000	00 7205
+26 0001	00 7206
+27 2473	00 7207
+27 2474	00 7210
+12 0000	00 7211
+25 3777	00 7212
+12 0000	00 7213
+25 3777	00 7214
+12 0000	00 7215
+20 1601	00 7216
+02 2000	00 7217
+16 0000	00 7220
+26 0001	00 7221
+27 2505	00 7222
+12 0000	00 7223
+25 3777	00 7224
+12 0000	00 7225
+25 3777	00 7226
+12 0000	00 7227
+25 3777	00 7230
+12 0000	00 7231
+25 3777	00 7232
+12 0000	00 7233
+25 3777	00 7234
+12 0000	00 7235
+25 3777	00 7236
+12 0000	00 7237
+25 3777	00 7240
+12 0000	00 7241
+25 3777	00 7242
+12 0000	00 7243

12

11

10

9

8

7

6

5

4

3

B-076

INSTRUCTION

LOCATION

+25 3777	00 7244
+12 0000	00 7245
+12 0000	00 7246
+22 7774	00 7247
+02 1601	00 7250
+14 0000	00 7251
+02 2000	00 7252
+16 0000	00 7253
+26 0014	00 7254
+20 1601	00 7255
+02 2000	00 7256
+16 0000	00 7257
+32 0000	00 7260
+26 0001	00 7261
+27 2475	00 7262
+22 4000	00 7263
+02 1601	00 7264
+16 0000	00 7265
+26 0001	00 7266
+27 2476	00 7267
+27 2477	00 7270
+22 0400	00 7271
+23 1751	00 7272
+12 0000	00 7273
+25 3777	00 7274
+22 0176	00 7275
+11 1005	00 7276
+02 1601	00 7277
+14 0000	00 7300
+02 2000	00 7301
+16 0000	00 7302
+26 0010	00 7303
+22 7774	00 7304
+02 1601	00 7305
+14 0000	00 7306
+02 2000	00 7307
+16 0000	00 7310
+26 0001	00 7311
+27 2600	00 7312
+27 2601	00 7313
+12 0000	00 7314
+25 3777	00 7315
+12 0000	00 7316
+22 7774	00 7317
+11 1003	00 7320
+23 1751	00 7321
+11 1001	00 7322
+23 1752	00 7323
+22 3776	00 7324
+02 1601	00 7325

8
7
5
9
2
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-077

INSTRUCTION

LOCATION

+14 0000	00 7326
+02 2000	00 7327
+16 0000	00 7330
+26 0001	00 7331
+27 2502	00 7332
+12 0000	00 7333
+25 3777	00 7334
+12 0000	00 7335
+25 3777	00 7336
+12 0000	00 7337
+25 3777	00 7340
+12 0000	00 7341
+25 3777	00 7342
+12 0000	00 7343
+25 3777	00 7344
+12 0000	00 7345
+25 3777	00 7346
+12 0000	00 7347
+25 3777	00 7350
+12 0000	00 7351
+22 0074	00 7352
+11 1004	00 7353
+02 1601	00 7354
+14 0000	00 7355
+02 2000	00 7356
+16 0000	00 7357
+26 0001	00 7360
+27 2503	00 7361
+12 0000	00 7362
+25 3777	00 7363
+12 0000	00 7364
+25 3777	00 7365
+12 0000	00 7366
+25 3777	00 7367
+12 0000	00 7370
+25 3777	00 7371
+12 0000	00 7372
+25 3777	00 7373
+12 0000	00 7374
+25 3777	00 7375
+12 0000	00 7376
+25 3777	00 7377
+12 0000	00 7400
+25 3777	00 7401
+12 0000	00 7402
+20 1601	00 7403
+02 2000	00 7404
+16 0000	00 7405
+26 0001	00 7406
+27 2510	00 7407

12

11

10

9

8

7

6

5

4

3

R-078

INSTRUCTION

LOCATION

+12 0000	00 7410
+25 3777	00 7411
+12 0000	00 7412
+25 3777	00 7413
+22 7774	00 7414
+02 1601	00 7415
+14 0000	00 7416
+02 2000	00 7417
+16 0000	00 7420
+26 0001	00 7421
+27 2504	00 7422
+12 0000	00 7423
+25 3777	00 7424
+12 0000	00 7425
+25 3777	00 7426
+12 0000	00 7427
+25 3777	00 7430
+12 0000	00 7431
+25 3777	00 7432
+12 0000	00 7433
+25 3777	00 7434
+12 0000	00 7435
+25 3777	00 7436
+22 0074	00 7437
+11 1003	00 7440
+23 1752	00 7441
+25 3777	00 7442
+22 7000	00 7443
+02 1601	00 7444
+14 0000	00 7445
+02 2000	00 7446
+16 0000	00 7447
+26 0001	00 7450
+27 2506	00 7451
+25 3777	00 7452
+12 0000	00 7453
+25 3777	00 7454
+12 0000	00 7455
+25 3777	00 7456
+12 0000	00 7457
+25 3777	00 7460
+12 0000	00 7461
+25 3777	00 7462
+12 0000	00 7463
+25 3777	00 7464
+12 0000	00 7465
+25 3777	00 7466
+12 0000	00 7467
+22 0136	00 7470
+11 1005	00 7471

8
7
5
9
2
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-079

INSTRUCTION

LOCATION

+02 1601	00 7472
+14 0000	00 7473
+02 2000	00 7474
+16 0000	00 7475
+26 0001	00 7476
+27 2507	00 7477
+25 3777	00 7500
+12 0000	00 7501
+25 3777	00 7502
+12 0000	00 7503
+25 3777	00 7504
+12 0000	00 7505
+25 3777	00 7506
+12 0000	00 7507
+25 3777	00 7510
+12 0000	00 7511
+25 3777	00 7512
+12 0000	00 7513
+22 0056	00 7514
+11 1005	00 7515
+12 0000	00 7516
+02 1601	00 7517
+14 0000	00 7520
+02 2000	00 7521
+16 0000	00 7522
+26 0001	00 7523
+27 2513	00 7524
+25 3777	00 7525
+12 0000	00 7526
+25 3777	00 7527
+12 0000	00 7530
+25 3777	00 7531
+12 0000	00 7532
+25 3777	00 7533
+12 0000	00 7534
+12 0000	00 7535
+22 0006	00 7536
+11 1002	00 7537
+23 1752	00 7540
+22 0026	00 7541
+11 1005	00 7542
+12 0000	00 7543
+02 1601	00 7544
+14 0000	00 7545
+02 2000	00 7546
+16 0000	00 7547
+26 0001	00 7550
+27 2511	00 7551
+25 3777	00 7552
+12 0000	00 7553

12

11

10

9

8

7

6

5

4

3

2785

B-080

INSTRUCTION

LOCATION

+25 3777	00 7554
+12 0000	00 7555
+25 3777	00 7556
+12 0000	00 7557
+25 3777	00 7560
+12 0000	00 7561
+25 3777	00 7562
+12 0000	00 7563
+25 3777	00 7564
+12 0000	00 7565
+25 3777	00 7566
+22 0036	00 7567
+11 1005	00 7570
+02 1601	00 7571
+14 0000	00 7572
+02 2000	00 7573
+16 0000	00 7574
+20 0001	00 7575
+21 2512	00 7576
-25 3777	00 7577
-12 0000	00 7600
25 3777	00 7601
+12 0000	00 7602
+25 3777	00 7603
+25 3777	00 7604
+12 0000	00 7605
+25 3777	00 7606
+12 0000	00 7607
+33 2770	00 7610
+32 0000	00 7611
+34 2770	00 7612
+26 0011	00 7613
+33 2771	00 7614
+32 0000	00 7615
+34 2771	00 7616
+26 0021	00 7617
+33 2772	00 7620
+32 0000	00 7621
+34 2772	00 7622
+20 0010	00 7623
+2 2771	00 7624
+2 2772	00 7625
+20 0041	00 7626
+33 2771	00 7627
+32 0000	00 7630
+26 0026	00 7631
+22 4000	00 7632
+02 1447	00 7633
+14 0000	00 7634
+02 2000	00 7635

3
4
5
6
7
8
9
10
11
12

3
4
5
6
7
8
9
10
11
12

B-081

INSTRUCTION

LOCATION

+16 0000	00 7636
+26 0020	00 7637
+27 2701	00 7640
+22 1000	00 7641
+02 1447	00 7642
+14 0000	00 7643
+02 2000	00 7644
+16 0000	00 7645
+26 0020	00 7646
+27 2702	00 7647
+12 0000	00 7650
+25 3777	00 7651
+12 0000	00 7652
+25 3777	00 7653
+12 0000	00 7654
+25 3777	00 7655
+12 0000	00 7656
+25 3777	00 7657
+22 0400	00 7660
+02 1447	00 7661
+14 0000	00 7662
+02 2000	00 7663
+16 0000	00 7664
+26 0106	00 7665
+27 2703	00 7666
+22 2000	00 7667
+02 1447	00 7670
+14 0000	00 7671
+02 2000	00 7672
+16 0000	00 7673
+26 0077	00 7674
+27 2704	00 7675
+22 0000	00 7676
+23 0137	00 7677
+34 2770	00 7700
+27 2000	00 7701
+26 0071	00 7702
+12 0000	00 7703
+25 3777	00 7704
+23 3777	00 7705
+23 3777	00 7706
+12 0000	00 7707
+25 3777	00 7710
+12 0000	00 7711
+25 3777	00 7712
+12 0000	00 7713
+25 3777	00 7714
+12 0000	00 7715
+25 3777	00 7716
+12 0000	00 7717

12
11
10
9
8
7
6
5
4
3

3
4
5
9
2
8
6
10
11
12

B-082

INSTRUCTION

LOCATION

+25 3777	00 7720
+23 3777	00 7721
+23 3777	00 7722
+12 0000	00 7723
+25 3777	00 7724
+12 0000	00 7725
+25 3777	00 7726
+12 0000	00 7727
+25 3777	00 7730
+12 0000	00 7731
+25 3777	00 7732
+12 0000	00 7733
+25 3777	00 7734
+12 0000	00 7735
+25 3777	00 7736
+23 3777	00 7737
+23 3777	00 7740
+12 0000	00 7741
+25 3777	00 7742
+12 0000	00 7743
+25 3777	00 7744
+12 0000	00 7745
+25 3777	00 7746
+12 0000	00 7747
+25 3777	00 7750
+12 0000	00 7751
+25 3777	00 7752
+12 0000	00 7753
+25 3777	00 7754
+12 0000	00 7755
+25 3777	00 7756
+23 3777	00 7757
+23 3777	00 7760
+23 3777	00 7761
+12 0000	00 7762
+25 3777	00 7763
+12 0000	00 7764
+25 3777	00 7765
+12 0000	00 7766
+25 3777	00 7767
+12 0000	00 7770
+25 3777	00 7771
+12 0000	00 7772
+12 0000	00 7773
+12 0000	00 7774

12- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

11
10
9
8
7
6
5
4
3

11
21

B-083

INSTRUCTION

LOCATION

+12 0000
- LOCS. 01 0002 - 01 0777 ARE BLANK

01 0001

+22 7774

01 1000

+11 1003

01 1001

+23 1751

01 1002

+11 1001

01 1003

+23 1752

01 1004

+12 0000

01 1005

+25 3777

01 1006

+12 0000

01 1007

+25 3777

01 1010

+12 0000

01 1011

+25 3777

01 1012

+12 0000

01 1013

+25 3777

01 1014

+12 0000

01 1015

+25 3777

01 1016

+12 0000

01 1017

+25 3777

01 1020

+12 0000

01 1021

+25 3777

01 1022

+12 0000

01 1023

+25 3777

01 1024

+12 0000

01 1025

+25 3777

01 1026

+12 0000

01 1027

+25 3777

01 1030

+12 0000

01 1031

+25 3777

01 1032

+22 0036

01 1033

+11 1004

01 1034

+02 1601

01 1035

+14 0000

01 1036

+02 2000

01 1037

+16 0000

01 1040

+26 0001

01 1041

+27 2520

01 1042

+22 0200

01 1043

+23 1752

01 1044

+12 0000

01 1045

+25 3777

01 1046

+12 0000

01 1047

+25 3777

01 1050

+12 0000

01 1051

+25 3777

01 1052

+12 0000

01 1053

+25 3777

01 1054

+12 0000

01 1055

+25 3777

01 1056

B-084

INSTRUCTION

LOCATION

+12 0000	01 1057
+25 3777	01 1060
+12 0000	01 1061
+25 3777	01 1062
+12 0000	01 1063
+25 3777	01 1064
+12 0000	01 1065
+25 3777	01 1066
+12 0000	01 1067
+25 3777	01 1070
+22 0036	01 1071
+11 1005	01 1072
+02 1601	01 1073
+14 0000	01 1074
+02 2000	01 1075
+16 0000	01 1076
+26 0001	01 1077
+27 2521	01 1100
+22 0000	01 1101
+23 1750	01 1102
+22 6000	01 1103
+23 1751	01 1104
+12 0000	01 1105
+25 3777	01 1106
+12 0000	01 1107
+25 3777	01 1110
+12 0000	01 1111
+25 3777	01 1112
+12 0000	01 1113
+25 3777	01 1114
+12 0000	01 1115
+25 3777	01 1116
+12 0000	01 1117
+25 3777	01 1120
+12 0000	01 1121
+25 3777	01 1122
+12 0000	01 1123
+25 3777	01 1124
+12 0000	01 1125
+25 3777	01 1126
+12 0000	01 1127
+25 3777	01 1130
+12 0000	01 1131
+25 3777	01 1132
+12 0000	01 1133
+25 3777	01 1134
+12 0000	01 1135
+25 3777	01 1136
+12 0000	01 1137
+25 3777	01 1140

6
7
5
9
2
8
6
01
11
21

12
11
10
9
8
7
6
5
4
3

B-085

INSTRUCTION

LOCATION

+12 0000	01 1141
+25 3777	01 1142
+12 0000	01 1143
+25 3777	01 1144
+12 0000	01 1145
+25 3777	01 1146
+12 0000	01 1147
+25 3777	01 1150
+12 0000	01 1151
+25 3777	01 1152
+12 0000	01 1153
+25 3777	01 1154
+12 0000	01 1155
+25 3777	01 1156
+12 0000	01 1157
+22 7000	01 1160
+02 1601	01 1161
+14 0000	01 1162
+02 2000	01 1163
+16 0000	01 1164
+32 0000	01 1165
+26 0001	01 1166
+27 2522	01 1167
+22 7774	01 1170
+11 1003	01 1171
+23 1751	01 1172
+12 0000	01 1173
+25 3777	01 1174
+12 0000	01 1175
+25 3777	01 1176
+12 0000	01 1177
+25 3777	01 1200
+12 0000	01 1201
+25 3777	01 1202
+12 0000	01 1203
+25 3777	01 1204
+12 0000	01 1205
+25 3777	01 1206
+12 0000	01 1207
+25 3777	01 1210
+12 0000	01 1211
+25 3777	01 1212
+12 0000	01 1213
+25 3777	01 1214
+12 0000	01 1215
+25 3777	01 1216
+12 0000	01 1217
+25 3777	01 1220
+12 0000	01 1221
+25 3777	01 1222

12
11
10
9
8
7
6
5
4
3

3
7
5
9
2
8
6
10
11
12

INSTRUCTION

LOCATION

+12 0000	01 1223
+25 3777	01 1224
+12 0000	01 1225
+25 3777	01 1226
+12 0000	01 1227
+25 3777	01 1230
+12 0000	01 1231
+25 3777	01 1232
+12 0000	01 1233
+25 3777	01 1234
+12 0000	01 1235
+25 3777	01 1236
+12 0000	01 1237
+25 3777	01 1240
+12 0000	01 1241
+25 3777	01 1242
+12 0000	01 1243
+25 3777	01 1244
+12 0000	01 1245
+25 3777	01 1246
+12 0000	01 1247
+25 3777	01 1250
+12 0000	01 1251
+25 3777	01 1252
+12 0000	01 1253
+25 3777	01 1254
+12 0000	01 1255
+20 1601	01 1256
+02 2000	01 1257
+16 0000	01 1260
+26 0001	01 1261
+27 2523	01 1262
+22 7776	01 1263
+11 1002	01 1264
+13 0000	01 1265
+23 1751	01 1266
+12 0000	01 1267
+25 3777	01 1270
+12 0000	01 1271
+25 3777	01 1272
+12 0000	01 1273
+25 3777	01 1274
+12 0000	01 1275
+25 3777	01 1276
+12 0000	01 1277
+25 3777	01 1300
+12 0000	01 1301
+25 3777	01 1302
+12 0000	01 1303
+25 3777	01 1304

B-087

INSTRUCTION

LOCATION

+12 0000	01 1305
+25 3777	01 1306
+12 0000	01 1307
+25 3777	01 1310
+22 7000	01 1311
+02 1601	01 1312
+14 0000	01 1313
+02 2000	01 1314
+16 0000	01 1315
+26 0001	01 1316
+27 2524	01 1317

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

+22 7000	01 2001
+23 1751	01 2002

- LOCS. 01 2003 - 01 3107 ARE BLANK

+22 7000	01 3110
+02 1601	01 3111
+14 0000	01 3112
+02 2000	01 3113
+16 0000	01 3114
+32 0000	01 3115
+26 0001	01 3116
+27 2525	01 3117
+20 1601	01 3120
+02 2000	01 3121
+16 0000	01 3122
+32 0000	01 3123
+26 0001	01 3124
+27 2526	01 3125
+20 1601	01 3126
+02 2000	01 3127
+16 0000	01 3130
+26 0001	01 3131
+27 2527	01 3132

- LOCS. 01 3133 - 01 3653 ARE BLANK

+20 1601	01 3654
+02 2000	01 3655
+16 0000	01 3656
+26 0036	01 3657
+22 7000	01 3660
+02 1601	01 3661
+14 0000	01 3662
+02 2000	01 3663

12
11
10
9
8
7
6
5
4
3

B-088

INSTRUCTION

LOCATION

+16 0000	01 3664
+32 0000	01 3665
+26 0001	01 3666
+27 2530	01 3667
+20 1601	01 3670
+11 0004	01 3671
+14 0000	01 3672
+02 2000	01 3673
+16 0000	01 3674
+32 0000	01 3675
+26 0001	01 3676
+27 2531	01 3677
+11 0004	01 3700
+14 0000	01 3701
+02 2000	01 3702
+16 0000	01 3703
+32 0000	01 3704
+26 0001	01 3705
+27 2532	01 3706
+11 0004	01 3707
+14 0000	01 3710
+02 2000	01 3711
+16 0000	01 3712
+26 0001	01 3713
+27 2534	01 3714
+27 2533	01 3715
+12 0000	01 3716

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

+12 0000	01 4001
----------	---------

- LOCS. 01 4002 - 01 4765 ARE BLANK

+20 1601	01 4766
+02 2000	01 4767
+16 0000	01 4770
+26 0001	01 4771
+27 2535	01 4772
+22 7774	01 4773
+11 1003	01 4774
+23 1752	01 4775
+22 7674	01 4776
+11 1003	01 4777
+23 1751	01 5000
+22 0400	01 5001
+23 1753	01 5002
+12 0000	01 5003

INSTRUCTION

LOCATION

+25 3777	01 5004
+12 0000	01 5005
+25 3777	01 5006
+12 0000	01 5007

- LOCS. 01 5010 - 01 5157 ARE BLANK

+12 0000	01 5160
+25 3777	01 5161
+22 7776	01 5162
+13 0000	01 5163
+11 1001	01 5164
+13 0000	01 5165
+11 1003	01 5166
+02 1601	01 5167
+14 0000	01 5170
+02 2000	01 5171
+16 0000	01 5172
+26 0035	01 5173
+22 7400	01 5174
+23 2100	01 5175
+20 1601	01 5176
+02 2000	01 5177
+16 0000	01 5200
+32 0000	01 5201
+26 0001	01 5202
+27 2536	01 5203
+11 0002	01 5204
+16 0000	01 5205
+32 0000	01 5206
+26 0001	01 5207
+27 2537	01 5210
+22 7000	01 5211
+02 0000	01 5212
+16 0000	01 5213
+26 0001	01 5214
+27 2540	01 5215
+11 0003	01 5216
+01 2100	01 5217
+16 0000	01 5220
+26 0001	01 5221
+27 2541	01 5222
+11 0004	01 5223
+01 2100	01 5224
+16 0000	01 5225
+26 0001	01 5226
+27 2542	01 5227
+27 2543	01 5230
+22 3774	01 5231
+11 1003	01 5232
+23 1753	01 5233

B-090

INSTRUCTION

LOCATION

+22 4000

01 5234

+23 3777

01 5235

- LOCS. 01 5236 - 01 5375 ARE BLANK

+22 7774

01 5376

+11 1003

01 5377

+23 1751

01 5400

+22 0400

01 5401

+23 1753

01 5402

+12 0000

01 5403

+25 3777

01 5404

+12 0000

01 5405

+22 6002

01 5406

+11 1001

01 5407

+02 1601

01 5410

+14 0000

01 5411

+02 2000

01 5412

+16 0000

01 5413

+26 0001

01 5414

+27 2544

01 5415

+12 0000

01 5416

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

+12 0000

01 6001

- LOCS. 01 6002 - 01 7432 ARE BLANK

+22 7774

01 7433

+11 1003

01 7434

+13 0000

01 7435

+23 1753

01 7436

+12 0000

01 7437

+22 0042

01 7440

+11 1004

01 7441

+02 1601

01 7442

+14 0000

01 7443

+02 2000

01 7444

+16 0000

01 7445

+26 0007

01 7446

+20 1601

01 7447

+12 0000

01 7450

+02 2000

01 7451

+16 0000

01 7452

+26 0001

01 7453

+27 2545

01 7454

+27 2546

01 7455

- LOCS. 01 7456 - 01 7613 ARE BLANK

B-091

INSTRUCTION

LOCATION

+12 0000	01 7614
+25 3777	01 7615
+12 0000	01 7616
+25 3777	01 7617
+20 1601	01 7620
+02 2000	01 7621
+16 0000	01 7622
+26 0001	01 7623
+27 2547	01 7624

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

- BANDS 02 - 12 ARE BLANK

12
11
10
9
8
7
6
5
4
3

B-093

0720	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0731	+0000	+J400	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0742	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0753	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0764	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0775	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1006	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1017	+0000	+0300	+0300	+J770	+1770	+J770	+1770	+J770	+1770
1030	+0000	+0000	+0000	+0000	+0377	+0000	+0000	+0000	+0000
1041	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1052	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1063	+0000	+0000	+0000	+0000	+0000	+0000	+0100	+0100	+J770
1074	+1770	+0000	+0000	+0000	+0000	+J777	+0000	+0000	+0000
1105	+J600	+1600	+1600	+1600	+1600	+1600	+J770	+1770	+J770
1146	+1770	+0000	+0000	+J777	+0000	+0000	+0000	+J777	+0000
1127	+0000	+0000	+J777	+0000	+0000	+0000	+0000	+0000	+0000
1140	+0000	+0000	+0000	+0000	+0000	+0100	+0100	+J777	+1777
1151	+0000	+0000	+0000	+0000	+J777	+0000	+0000	+0000	+0000
1162	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1173	+0000	+0000	+0000	+0000	+0000	+0000	+0100	+0100	+J777
1204	+1777	+0000	+0000	+0000	+0000	+J774	+0000	+0000	+0000
1215	+0000	+0000							
1217	+0000	+0000	+0000	+0000	+J600	+1600	+J600	+1600	+J600
1230	+1600	+J777	+1777	+1777	+1777	+1777	+1777	+1777	+1777
1241	+1777	+0000	+0000	+J600	+1600				
1246	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1257	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1270	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1301	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1312	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1323	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1334	+0000	+0000	+0000	+0000	+J400	+1400	+J400	+1400	+J400
1345	+1400	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1356	+0000	+0000	+0000	+J400	+1400	+0000	+0000	+0000	+0000
1367	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1400	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1411	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1422	+0000	+0000							
1424	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1435	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1446	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1457	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1470	+0000	+0000	+0000						
1473	+0000	+0000	+0000	+0000	+J500	+1500	+J500	+1500	+J500
1504	+1500	+0001	+0001	+0000	+0000	+J612	+1612	+0000	+0000
1515	+0000	+0000	+J500	+1500	+J500	+1500	+J500	+1500	+0002
1526	+0002	+0000	+0000	+J611	+1611	+0000	+0000	+0000	+0000
1537	+J500	+1500	+J500	+1500	+J500	+1500	+0004	+0004	+0000
1550	+0000	+J610	+1610	+0000	+0000	+0000	+0000	+J500	+1500
1561	+J500	+1500	+J500	+1500	+0010	+0010	+0000	+0000	+J607
1572	+1607	+0000	+0000	+0000	+0000	+J500	+1500	+J500	+1500
1603	+J500	+1500	+0020	+0020	+0000	+0000	+J606	+1606	+0000
1614	+0000	+0000	+0000	+J500	+1500	+J500	+1500	+J500	+1500
1625	+0040	+0040	+0000	+0000	+J605	+1605	+0000	+0000	+0000
1636	+0000	+J500	+1500	+J500	+1500	+J500	+1500	+0100	+0100

B-095

2516	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2527	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J777
2540	+1777	+1777	+1777	+1777	+1777	+J777	+0000	+0000	+0000
2551	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2562	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2573	+0000	+0000	+0000	+0000	+0000	+J777	+1777	+1777	+1777
2604	+1777	+1777	+J777	+0000	+0000	+0000	+0000	+0000	+0000
2615	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J777
2626	+1777	+P774	+7774	+J777	+1777	+0000	+0000	+0000	+0000
2637	+J777	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2650	+0000	+0000	+0000	+1777	+P774	+7774	+J777	+1777	+0000
2661	+0000	+0000	+0000	+J777	+0000	+0000	+0000	+0000	+0000
2672	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2703	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2714	+0000	+0000	+0000	+0000	+0000	+0000	+J777	+1777	
2724	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
2735	+0000	+0000	+0000	+0000	+0000	+0000	+J777	+0000	+0000
2746	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2757	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2770	+0000	+0000	+0000	+0000	+0000	+0000	+J777	+1777	
3000	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
3011	+0000	+0000	+0000	+0000	+0000	+0000	+J777	+0000	+0000
3022	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3033	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3044	+0000	+0000	+0000	+0000	+0000	+0000	+J777	+1777	
3054	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
3065	+0000	+0000	+0000	+0000	+J777	+0000	+0000	+0000	+0000
3076	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3107	+0000	+0000	+0000						
3112	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3123	+0000	+0000	+0000	+J777	+1777				
3130	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
3141	+0000	+0000	+0000	+0000	+J777	+0000	+0000	+0000	+0000
3152	+0000	+0000	+0000	+J500	+1500	+0400	+6400	+J500	+1500
3163	+J777	+1777							
3165	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
3176	+J500	+0000	+0000	+0000	+0000	+0000	+J400	+1400	+J400
3207	+1400	+J400	+1400	+0000	+0000	+0000	+0000	+0000	+0000
3220	+0000								
3221	+0000	+0000	+0000	+0000	+J400	+0000	+0000	+0000	+0000
3232	+0000	+J700	+1700	+J700	+1700	+J700	+1700	+1700	+0000
3243	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3254	+0000	+J700	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3265	+0000	+0000							
3267	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3300	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3311	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3322	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3333	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3344	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3355	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3366	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3377	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3410	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3421	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000

12
11
10
9
8
7
6
5
4
3

3432	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3443	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3454	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3465	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3476	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3507	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J400	+1400
3520	+J400	+1400	+J400	+1400	+J777	+1777	+1777	+1777	+1777
3531	+1777	+1777	+1777	+1777	+0000	+0000	+J400	+1400	+0000
3542	+0000	+0000	+J770	+1770	+J770	+1770	+J770	+1770	+0000
3553	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3564	+0000	+J770	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3574	+0000	+0000	+0000	+0000	+0000	+J770	+1770	+J770	+1770
3605	+J770	+1770	+J770	+1770	+1770	+1770	+1770	+0000	+0000
3616	+J770	+1770	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3627	+J770	+1770	+J770	+1770	+J770	+1770	+0000	+0000	+0000
3640	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J770
3651	+1770	+0000	+0000	+0000	+0000	+0000	+0000	+0400	+0000
3662	+J770	+1770	+J770	+1770	+J770	+1770	+J770	+1770	+0000
3673	+0000	+J770	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3704	+0000	+0000	+0000	+0000	+J770	+1770	+J770	+1770	+J770
3715	+1770	+0000	+0000	+0000	+0000	+J770	+1770	+1770	+0000
3726	+0000	+0000	+0000	+0000	+0000	+0000	+J770	+J770	+J770
3737	+1770	+0000	+0000	+0000	+0000	+J770	+0000	+0000	+0000
3750	+0000	+0000	+0000	+0300	+J770	+1770	+J770	+1770	+J770
3761	+0100	+J770	+1770	+0000	+0000	+0000	+0000	+J770	+0000
3772	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J770	+0000

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

LOC	LINEAR FUNCTION INTERPOLATOR					BAND 1	QUADRANT 2		
4001	+0000	+0000	+0000	+0000	+0000				
4006	+0000	+J740	+1740	+J770	+1770	+J770	+1770	+0000	+0000
4017	+0000	+0000	+0000	+0000	+0000	+1777	+0000	+0000	+0000
4030	+J770	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4041	+0000	+0000	+0000	+J740	+1740	+J770	+1770	+J770	+1770
4052	+J777	+0000	+0000	+0000	+J770	+0000	+0000	+0000	+0000
4063	+0000	+0000	+0000	+0000	+J770	+1770	+J770	+1770	+J770
4074	+1770	+0000	+0000	+0000	+0000	+J770	+1770	+0000	+0000
4105	+0000	+J770	+1740	+1740	+J770	+1740	+1740	+J770	+1740
4116	+1740	+J777	+0000	+0000	+0000	+J770	+0000	+0000	+0000
4127	+0000	+0000	+0000	+0000	+0000	+J770	+1770	+J740	+1740
4140	+J770	+1770	+0000	+0000	+0000	+0000	+J770	+0000	+0000
4151	+0000	+0000	+0000	+0000	+0000	+0000	+J770	+1770	+J770
4162	+1770	+J740	+1740	+0000	+0000	+0000	+0000	+J770	+0000
4173	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4204	+0000	+0000	+J740	+1740	+J740	+1740	+J740	+1740	+0000
4215	+0000	+0000	+0000	+J770	+0000	+0000	+0000	+J740	+1740
4226	+J770	+1770	+J770	+1770	+J777	+1777	+1777	+1777	+1777
4237	+0000	+0000	+0000	+0000	+0000	+0000	+J770	+0000	+0000
4250	+0000	+J740	+1740	+J770	+1770	+J770	+1770	+J777	+1777
4261	+1777	+1777	+1777	+0000	+0000	+J770	+0000	+0000	+0000
4272	+0000	+0000	+J770	+1770	+J740	+1740	+J770	+1770	+0000
4303	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4314	+0000	+J770	+0000	+0000	+0000	+0000	+J750	+1750	+J740

B-097

4325	+1740	+J770	+1770	+0000	+0000	+0000	+0000	+0000	+0000
4336	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4346	+0000								
4347	+0000	+0000	+J770	+0000	+0000	+0000	+J740	+1740	+J770
4360	+1770	+J770	+1770	+J777	+1777	+1777	+1777	+1777	+1777
4371	+1777								
4372	+0000	+0000	+J770	+0000	+0000	+0000	+J740	+1740	+J740
4403	+1740	+J740	+1740	+0000	+0000	+0000	+0000	+J770	+0000
4414	+0000	+0000	+J743	+1743	+J743	+1743	+J743	+1743	+J777
4425	+1777	+0000	+0000	+J770	+0000	+0000	+0000	+0000	+0000
4436	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0001
4447	+J750	+1750	+J750	+1750	+J750	+1750	+0000	+0000	+0000
4460	+0000	+J770	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4471	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4502	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4513	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4524	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4535	+J750	+1750	+J750	+1750	+J777	+0000	+0001	+J743	+1743
4546	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4557	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4570	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4601	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4612	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4623	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4634	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4645	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4656	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4667	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4700	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4711	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4722	+0000	+0002	+J750	+1750	+J743	+1743	+J750	+1750	+0000
4733	+0000	+0000	+0000	+J773	+0000	+0000	+0000	+0000	+0000
4744	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4755	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4766	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4777	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5010	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0004
5021	+J750	+1750	+J750	+1750	+J743	+1743	+J777	+0000	+0000
5032	+0000	+J770	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5043	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5054	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5065	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5076	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5107	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5120	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5131	+0002	+J750	+1750	+J743	+1743	+J750	+1750	+0000	+0000
5142	+0000	+0000	+J770	+0000	+0000	+0001	+J750	+1750	+J774
5153	+1774	+J750	+1750	+J777	+0000	+0000	+0000	+J770	+0000
5164	+0000	+0000	+0001	+0001	+J750	+1750	+J777	+1777	+J750
5175	+1750	+J777	+0000	+0000	+0000	+J770	+1770	+1770	+0000
5206	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5217	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5230	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5241	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5252	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000

6154	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6165	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J751
6176	+1751	+J750	+1750	+J750	+1750	+J000	+0000	+0000	+0000
6207	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6220	+0000	+0000	+J601	+1601	+0000	+0000	+0000	+0000	+0000
6231	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6242	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6253	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6264	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6275	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6306	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6317	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6330	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6341	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6346	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6357	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6370	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6401	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6412	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6423	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6434	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6445	+0000	+0000	+J751	+1751	+J750	+1750	+J750	+1750	+0020
6456	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6467	+0000	+J601	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6500	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6511	+0000	+J751	+1751	+J750	+1750	+J750	+1750	+J760	+1760
6522	+1760	+1760	+1760	+1760	+1760	+1760	+1760	+0000	+0000
6533	+J602	+1602	+0000	+0000	+J751	+1751	+J750	+1750	+J750
6544	+1750	+0037	+0037	+0037	+0037	+0037	+0037	+0037	+0037
6555	+0037	+0000	+0000	+J601	+0000	+0000	+0000	+J751	+1751
6566	+J750	+1750	+J750	+1750	+0001	+1777	+0000	+0000	+0000
6577	+0000	+0000	+0000	+0000	+0000	+0000	+J601	+0000	+0000
6610	+0000	+0000	+0000	+0000	+J751	+1751	+J750	+1750	+J750
6621	+1750	+J776	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6632	+0000	+0000	+0000	+J601	+0000	+0000	+0000	+0000	+J751
6643	+1751	+J750	+1750	+J750	+1750	+0000	+1777	+0000	+0000
6654	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J601	+0000
6665	+0000	+0000	+0000	+J751	+1751	+J750	+1750	+J750	+1750
6676	+0377	+0000	+0000	+0000	+J601	+0000	+0000	+0000	+J751
6707	+1751	+J750	+1750	+J750	+1750	+0000	+1777	+0000	+0000
6720	+J601	+0000	+0000	+0000	+0000	+0000	+0000	+J751	+1751
6731	+J750	+1750	+J750	+1750	+0000	+1777	+0000	+0000	+J601
6742	+1601	+0000	+0000	+J751	+1751	+J750	+1750	+J750	+1750
6753	+0000	+0004	+0000	+0000	+J601	+0000	+0000	+0000	+0000
6764	+0000	+0000	+0000	+0000	+0200	+J750	+1750	+J750	+1750
6775	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J601
7006	+0000	+0000	+0200	+J751	+1751	+J750	+1750	+0200	+0000
7017	+0000	+0000	+J601	+0000	+0000	+0000	+0000	+0200	+J751
7030	+1751	+J750	+1750	+0000	+7774	+0000	+0000	+0000	+0000
7041	+J602	+1602	+0000						
7044	+0000	+0000	+0200	+J751	+1751	+J751	+1751	+0000	+0000
7055	+0000	+0000	+0000	+0000	+0000	+1000	+0000	+0000	+0000
7066	+0000	+0000	+0000	+0000	+0000	+0400	+0000	+0000	+0000
7077	+0000	+0000	+0000	+0000	+0000	+0100	+0000	+0000	+0000
7110	+0000	+0000	+0000	+0000	+0000	+0040	+0000	+0000	+0000

B-100

7121	+0000	+0000	+0000	+0000	+0000	+0020	+0000	+0000	+0000
7132	+0000	+0000	+0000	+0000	+0000	+0010	+0000	+0000	+0000
7143	+0000	+0000	+0000	+0000	+0000	+0004	+0000	+0000	+0000
7154	+0000	+0000	+0000	+0000	+0000	+7774	+0000	+0000	+0000
7165	+0000	+0000	+0000	+0000	+J601	+0000	+0000	+0000	+0000
7176	+0000	+0000	+0000						
7201	+0000	+0000	+J750	+1750	+J751	+1751	+J751	+1751	+0000
7212	+1777	+0000	+0000	+J601	+0000	+0000	+0200	+J751	+1751
7223	+J750	+1750	+P774	+7774	+0000	+0000	+0000	+0000	+0000
7234	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7245	+0000	+J601	+0000	+0000	+0200	+J750	+1750	+J751	+1751
7256	+P774	+7774	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7267	+0000	+0000	+0000	+0000	+0000	+0000	+J601	+0000	+0000
7300	+0200	+J751	+1751	+J751	+1751	+0000	+0000	+0000	+0000
7311	+0000	+0000	+0000	+0000	+0000	+7774	+7774	+0000	+0000
7322	+0000	+0000	+J601	+0000	+0000	+0200	+J751	+1751	+J752
7333	+1752	+P400	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7344	+0000	+7400	+0000	+0000	+0000	+0000	+0000	+J601	+0000
7355	+0000	+0200	+J751	+1751	+J751	+1751	+P400	+0000	+0000
7366	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7377	+0000	+0000	+0000	+J601	+0000	+0000	+0100	+J750	+1750
7410	+P774	+0000	+0000	+0000	+J601	+0000	+0000	+0200	+J751
7421	+1751	+J750	+1750	+P000	+7000	+0000	+0000	+0000	+0000
7432	+0000	+0000	+0000	+0374	+0000	+0000	+0000	+0000	+0000
7443	+J601	+0000	+0000	+0200	+J751	+1751	+J751	+1751	+0000
7454	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7465	+0000	+0000	+0000	+0000	+J601	+0000	+0000	+0200	+J751
7476	+J751	+1751	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7507	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J601	+0000
7520	+0000	+0200	+J751	+J751	+1751	+0000	+0000	+0000	+0000
7531	+0000	+0000	+0000	+0000	+0000	+1400	+0000	+0000	+0000
7542	+0000	+J601	+0000	+0000	+0200	+J751	+J752	+1752	+0400
7553	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7564	+0400	+0000	+0000	+0000	+J601	+0000			
7572	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7603	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7614	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7625	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7636	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7647	+0000								
7650	+0000	+0100	+J443	+1443	+0400	+0400	+0000	+0000	+J447
7661	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7672	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7703	+0000	+0100	+J443	+1443	+0000	+0000	+0000	+0000	+0000
7714	+0000	+0000	+J443	+1443	+1443	+J443	+1443	+0000	+0000
7725	+0000	+0000	+0000	+0000	+0000	+0300	+J443	+1443	+J443
7736	+1443	+J443	+1443	+0000	+0000	+0000	+0000	+0000	+0000
7747	+0000	+0100	+J443	+1443	+0000	+0000	+0000	+0000	+0000
7760	+0000	+0000	+0100	+J443	+1443	+0000	+0000	+0000	+0000
7771	+0000								
7772	+0000	+0000							

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

8
7
6
5
4
3

8
7
5
9
zi

B-102

0745	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0756	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0767	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1000	+0000	+0000	+0000	+0000	+0000	+0200	+0200	+J751	+1751
1011	+J752	+1752	+P400	+0000	+0000	+0000	+0000	+0000	+0000
1022	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+1601
1033	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1044	+0200	+J751	+1751	+J752	+1752	+0000	+0000	+0000	+0000
1055	+0000	+0000	+0000	+0000	+0000	+7400	+0000	+0000	+0000
1066	+0000	+0000	+J601	+0000	+0000	+0000	+0000	+0000	+0000
1077	+0000	+0000	+0000	+0200	+J750	+1750	+J751	+1751	+P000
1110	+7000	+7000	+7000	+7000	+7000	+7000	+7000	+7000	+7000
1121	+7000	+7000	+7000	+7000	+7000	+7000	+7000	+7000	+7000
1132	+7000	+7000	+7000	+7000	+7000	+7000	+7000	+7000	+7000
1143	+7000	+7000	+7000	+7000	+7000	+7000	+7000	+7000	+7000
1154	+7000	+0000	+0000	+J601	+1601	+0000	+0000	+0000	+0000
1165	+0000	+0000	+0000	+0000	+0200	+J750	+1750	+J751	+1751
1176	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1207	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1220	+7774	+7774	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1231	+7774	+7774	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1242	+7774	+7774	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1253	+0000	+0000	+J601	+0000	+0000	+0000	+0000	+0000	+0000
1264	+0000	+0200	+J751	+1751	+J751	+1751	+P000	+0000	+0000
1275	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1306	+0000	+0000	+J601	+0000	+0000	+0000	+0000	+0000	+0000
1317	+0000								

- BLOCK END CODE - THE REST OF THIS QUAD. IS BLANK

LOC	LINEAR FUNCTION INTERPOLATOR				BAND 2		QUADRANT 1		
2001	+0300	+0300	+J750	+1750	+J750	+1750	+J751	+1751	+0000
2012	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2023	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2034	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2045	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2056	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2067	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2100	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2111	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2122	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2133	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2144	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2155	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2166	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2177	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2210	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2221	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2232	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2243	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2254	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2265	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2276	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2307	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000

6
7
5
9
2

5241	+M000								
5242	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+3774
5253	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5264	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5275	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5306	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5317	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5330	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5341	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5352	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+2000
5363	+2000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5374	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+1601
5405	+0000	+0000							

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

LOC	LINEAR FUNCTION INTERPOLATOR				BAND 2		QUADRANT 3		
6001	+0100	+0100	+J443	+1443	+J000	+1000	+0000	+0000	+J447
6012	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6023	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6034	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6045	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6056	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6067	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6100	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6111	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6122	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6133	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6144	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6155	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6166	+0000	+0000							
6170	+J777	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6201	+0300	+0300	+J751	+1751	+J750	+1750	+J753	+1753	+0004
6212	+0004	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+7400
6223	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6234	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6245	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6256	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6267	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6300	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6311	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6322	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0400
6333	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+7774
6344	+7774	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6355	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6366	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6377	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6410	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6421	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6432	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6443	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6454	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6465	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6476	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000

12
11
10
9
8
7
6
5
4
3

B-108

7465	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7476	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7507	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7520	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7531	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7542	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7553	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7564	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+2000
7575	+2000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7606	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J601
7617	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

LOC	LINEAR FUNCTION INTERPOLATOR					BAND 3	QUADRANT 0		
0001	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0012	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0023	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0034	+0000	+0000	+0307	+0307					
0040	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0051	+0000	+0000	+0000	+0000	+0000	+0000	+0000		
0060	+0000	+0000	+0000	+0000	+0000	+1400	+0000	+0000	+0000
0071	+0000	+0000	+0300	+0000	+0000	+0000	+0000	+0000	+0000
0102	+0000	+0000	+1400	+0000	+0000	+0000	+0000	+0000	+7000
0113	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J500
0124	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0135	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0146	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0157	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0170	+J777	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0201	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0212	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0223	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	
0233	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0244	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0255	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0300	+0300
0266	+J740	+1740	+J740	+1740	+J740	+1740	+0000	+0000	+0000
0277	+0000	+J777	+0000	+0000	+0000	+0000	+0000	+0300	+0300
0310	+J740	+1740	+J740	+1740	+J740	+1740	+0000	+0000	+0000
0321	+0000	+J774	+1774	+0000	+0000	+0000	+0000	+0000	+0000
0332	+0000	+0300	+0300	+J740	+1740	+J740	+1740	+J740	+1740
0343	+P774	+7774	+0000	+0000	+J740	+1740	+0000	+0000	+0000
0354	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0365	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0376	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0407	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0420	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0431	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	
0441	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0452	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0463	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0474	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0505	+0000	+0000	+0000	+0000					
0511	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0300	+0300

0522	+0300	+0300	+J740	+1740	+J740	+1740	+J740	+1740	+1740 ⁴
0533	+1740	+0400	+0400	+0000	+0000	+J740	+1740	+0000	+0000 ⁸
0544	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000 ⁶
0555	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000 ⁰¹
0566	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000 ¹¹
0577	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000 ²¹
0610	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0621	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0631	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0642	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0653	+0000								
0654	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0665	+0000	+J770	+1770	+J770	+1770	+J770	+1770	+0000	+0000
0676	+1400	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0707	+J400	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0720	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0731	+0000	+J400	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0742	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0753	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0764	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
0775	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1006	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1017	+0000	+0300	+0300	+J770	+1770	+J770	+1770	+J770	+1770
1030	+0000	+0000	+0000	+0000	+0377	+0000	+0000	+0000	+0000
1041	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1052	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1063	+0000	+0000	+0000	+0000	+0000	+0000	+0100	+0100	+J770
1074	+1770	+0000	+0000	+0000	+0000	+J777	+0000	+0000	+0000
1105	+J600	+1600	+1600	+1600	+1600	+1600	+J770	+1770	+J770
1116	+1770	+0000	+0000	+J777	+0000	+0000	+0000	+J777	+0000
1127	+0000	+0000	+J777	+0000	+0000	+0000	+0000	+0000	+0000
1140	+0000	+0000	+0000	+0000	+0000	+0100	+0100	+J777	+1777
1151	+0000	+0000	+0000	+0000	+J777	+0000	+0000	+0000	+0000
1162	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1173	+0000	+0000	+0000	+0000	+0000	+0000	+0100	+0100	+J777
1204	+1777	+0000	+0000	+0000	+0000	+J774	+0000	+0000	+0000
1215	+0000	+0000							
1217	+0000	+0000	+0000	+0000	+J600	+1600	+J600	+1600	+J600
1230	+1600	+J777	+1777	+1777	+1777	+1777	+1777	+1777	+1777
1241	+1777	+0000	+0000	+J600	+1600				
1246	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1257	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1270	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1301	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1312	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1323	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1334	+0000	+0000	+0000	+0000	+J400	+1400	+J400	+1400	+J400
1345	+1400	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1356	+0000	+0000	+0000	+J400	+1400	+0000	+0000	+0000	+0000
1367	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1400	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1411	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1422	+0000	+0000							
1424	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
1435	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000

12
11
10
9
8
7
6
5
4
3

B-111

2322	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2333	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2344	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2355	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2366	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2377	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2410	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2421	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2432	+0000								
2433	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2444	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2455	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2466	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2475	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2506	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2516	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2527	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2540	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000	+0000
2551	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2562	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2573	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2604	+1777	+1777	+1777	+0000	+0000	+0000	+0000	+0000	+0000
2615	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2626	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000	+0000
2637	+1777	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2650	+0000	+0000	+0000	+1777	+1777	+1777	+1777	+1777	+0000
2661	+0000	+0000	+0000	+1777	+0000	+0000	+0000	+0000	+0000
2672	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2703	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2714	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2724	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
2735	+0000	+0000	+0000	+0000	+0000	+0000	+1777	+0000	+0000
2746	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2757	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
2770	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3000	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
3011	+0000	+0000	+0000	+0000	+0000	+0000	+1777	+0000	+0000
3022	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3033	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3044	+0000	+0000	+0000	+0000	+0000	+0000	+1777	+1777	+0000
3054	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
3065	+0000	+0000	+0000	+0000	+1777	+0000	+0000	+0000	+0000
3076	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3107	+0000	+0000	+0000						
3112	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3123	+0000	+0000	+0000	+1777	+1777				
3130	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
3141	+0000	+0000	+0000	+0000	+1777	+0000	+0000	+0000	+0000
3152	+0000	+0000	+0000	+1500	+1500	+0400	+0400	+0500	+1500
3163	+1777	+1777							
3165	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
3176	+1500	+0000	+0000	+0000	+0000	+0000	+1400	+1400	+1400
3207	+1400	+1400	+1400	+0000	+0000	+0000	+0000	+0000	+0000
3220	+0000								
3221	+0000	+0000	+0000	+0000	+1400	+0000	+0000	+0000	+0000

12
11
10
9
8
7
6
5
4
3

B-112

3232	+0000	+J700	+1700	+J700	+1700	+J700	+1700	+1700	+0000
3243	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3254	+0000	+J700	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3265	+0000	+0000							
3267	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3300	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3311	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3322	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3333	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3344	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3355	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3366	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3377	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3410	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3421	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3432	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3443	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3454	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3465	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3476	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3507	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J400	+1400
3520	+J400	+1400	+J400	+1400	+J777	+1777	+1777	+1777	+1777
3531	+1777	+1777	+1777	+1777	+0000	+0000	+J400	+1400	+0000
3542	+0000	+0000	+J770	+1770	+J770	+1770	+J770	+1770	+0000
3553	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3564	+0000	+J770	+0000	+0000	+0000	+0000	+0000	+0000	
3574	+0000	+0000	+0000	+0000	+0000	+J770	+1770	+J770	+1770
3605	+J770	+1770	+J770	+1770	+1770	+1770	+1770	+0000	+0000
3616	+J770	+1770	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3627	+J770	+1770	+J770	+1770	+J770	+1770	+0000	+0000	+0000
3640	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3651	+1770	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3662	+J770	+1770	+J770	+1770	+J770	+1770	+J770	+1770	+0000
3673	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3704	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3715	+1770	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3726	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3737	+1770	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3750	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
3761	+0100	+J770	+1770	+0000	+0000	+0000	+0000	+0000	+0000
3772	+0000	+0000	+0000	+0000	+0000				

- BLOCK END CODE THE REST OF THIS QUAD. IS BLANK

LOC	LINEAR FUNCTION INTERPOLATOR					BAND 3 QUADRANT 2			
4001	+0000	+0000	+0000	+0000	+0000				
4006	+0000	+J740	+1740	+J770	+1770	+J770	+1770	+0000	+0000
4017	+0000	+0000	+0000	+0000	+0000	+1777	+0000	+0000	+0000
4030	+J770	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4041	+0000	+0000	+0000	+J740	+1740	+J770	+1770	+J770	+1770
4052	+J777	+0000	+0000	+0000	+J770	+0000	+0000	+0000	+0000
4063	+0000	+0000	+0000	+0000	+J770	+1770	+J770	+1770	+J770
4074	+1770	+0000	+0000	+0000	+0000	+J770	+1770	+0000	+0000
4105	+0000	+J770	+1740	+1740	+J770	+1740	+1740	+J770	+1740

B-113

4116	+1740	+J777	+0000	+0000	+0000	+J770	+0000	+0000	+0000 ⁴
4127	+0000	+0000	+0000	+0000	+0000	+J770	+1770	+J740	+1740 ⁸
4140	+J770	+1770	+0000	+0000	+0000	+0000	+J770	+0000	+0000 ⁶
4151	+0000	+0000	+0000	+0000	+0000	+0000	+J770	+1770	+J770 ⁰¹
4162	+1770	+J740	+1740	+0000	+0000	+0000	+0000	+J770	+0000 ¹¹
4173	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000 ²¹
4204	+0000	+0000	+J740	+1740	+J740	+1740	+J740	+1740	+0000
4215	+0000	+0000	+0000	+J770	+0000	+0000	+0000	+J740	+1740
4226	+J770	+1770	+J770	+1770	+J777	+1777	+1777	+1777	+1777
4237	+0000	+0000	+0000	+0000	+0000	+0000	+J770	+0000	+0000
4250	+0000	+J740	+1740	+J770	+1770	+J770	+1770	+J777	+1777
4261	+1777	+1777	+1777	+0000	+0000	+J770	+0000	+0000	+0000
4272	+0000	+0000	+J770	+1770	+J740	+1740	+J770	+1770	+0000
4303	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4314	+0000	+J770	+0000	+0000	+0000	+0000	+J750	+1750	+J740
4325	+1740	+J770	+1770	+0000	+0000	+0000	+0000	+0000	+0000
4336	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4346	+0000								
4347	+0000	+0000	+J770	+0000	+0000	+0000	+J740	+1740	+J770
4360	+1770	+J770	+1770	+J777	+1777	+1777	+1777	+1777	+1777
4371	+1777								
4372	+0000	+0000	+J770	+0000	+0000	+0000	+J740	+1740	+J740
4403	+1740	+J740	+1740	+0000	+0000	+0000	+0000	+J770	+0000
4414	+0000	+0000	+J743	+1743	+J743	+1743	+J743	+1743	+J777
4425	+1777	+0000	+0000	+J770	+0000	+0000	+0000	+0000	+0000
4436	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0001
4447	+J750	+1750	+J750	+1750	+J750	+1750	+0000	+0000	+0000
4460	+0000	+J770	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4471	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4502	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4513	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4524	+0000	+0000	+0000	+0000	+0000	+0000	+0001	+J743	+1743
4535	+J750	+1750	+J750	+1750	+J777	+0000	+0000	+0000	+J770
4546	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4557	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4570	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4601	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4612	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4623	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4634	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4645	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4656	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4667	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4700	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4711	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4722	+0000	+0002	+J750	+1750	+J743	+1743	+J750	+1750	+0000
4733	+0000	+0000	+0000	+J773	+0000	+0000	+0000	+0000	+0000
4744	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4755	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4766	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
4777	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5010	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0004
5021	+J750	+1750	+J750	+1750	+J743	+1743	+J777	+0000	+0000
5032	+0000	+J770	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5043	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000

12
11
10
9
8
7
6
5
4
3

5054	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5065	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5076	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5107	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5120	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5131	+0002	+J750	+1750	+J743	+1743	+J750	+1750	+0000	+0000
5142	+0000	+0000	+J770	+0000	+0000	+J750	+1750	+J774	+0000
5153	+1774	+J750	+1750	+J777	+0000	+0000	+J770	+0000	+0000
5164	+0000	+0000	+0001	+0001	+J750	+1750	+J777	+1777	+J750
5175	+1750	+J777	+0000	+0000	+0000	+J770	+1770	+1770	+0000
5206	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5217	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5230	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5341	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5252	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5263	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5274	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5305	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5316	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5327	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5340	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5351	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5362	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5373	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5404	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5415	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5426	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5437	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5450	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5461	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5472	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5503	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5514	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5525	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5536	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5547	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5560	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5571	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5602	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5613	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5624	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5635	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5646	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5657	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5670	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5701	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5712	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5723	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5734	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5745	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5756	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5767	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

12
11
10
9
8
7
6
5
4
3

LOC	LINEAR FUNCTION INTERPOLATOR					BAND 3 QUADRANT 3			
6001	+0000	+0000	+0000	+0000	+0000	+0000			
6007	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000 ⁰¹
6020	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000 ¹¹
6031	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000 ²¹
6042	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6053	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6064	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6075	+0000	+0000							
6077	+0000	+J750	+1750	+J750	+1750	+J750	+1750	+0000	+1777
6110	+1777	+1777	+1777	+1777	+1777	+1777	+1777	+0000	+0000
6121	+0000	+0000	+0000	+0000	+J601	+1601	+0000	+0000	+0000
6132	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6143	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6154	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6165	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6176	+1751	+J750	+1750	+J750	+1750	+J000	+0000	+0000	+0000
6207	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6220	+0000	+0000	+J601	+1601	+0000	+0000	+0000	+0000	+0000
6231	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6242	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6253	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6264	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6275	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6306	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6317	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6330	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6341	+0000	+0000	+0000	+0000	+0000				
6346	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6357	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6370	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6401	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6412	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6423	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6434	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6445	+0000	+0000	+J751	+1751	+J750	+1750	+J750	+1750	+0020
6456	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6477	+0000	+J601	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6500	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6511	+0000	+J751	+1751	+J750	+1750	+J750	+1750	+0760	+1760
6522	+1760	+1750	+1760	+1760	+1760	+1760	+1760	+0000	+0000
6533	+J602	+1602	+0000	+0000	+J751	+1751	+J750	+1750	+J750
6544	+0037	+0000	+0000	+J601	+0000	+0000	+0000	+J751	+1751
6555	+1750	+0037	+0037	+0037	+0037	+0037	+0037	+0037	+0037
6566	+J750	+1750	+J750	+1750	+0001	+1717	+0000	+0000	+0000
6577	+0000	+0000	+0000	+0000	+0000	+0000	+J601	+0000	+0000
6610	+0000	+0000	+0000	+0000	+J751	+1751	+J750	+1750	+J750
6621	+1750	+J776	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6632	+0000	+0000	+0000	+J601	+0000	+0000	+0000	+0000	+J751
6643	+1751	+J750	+1750	+J750	+1750	+0000	+1777	+0000	+0000
6654	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J601	+0000
6665	+0000	+0000	+0000	+J751	+1751	+J750	+1750	+J750	+1750
6676	+0377	+0000	+0000	+0000	+J601	+0000	+0000	+0000	+J751
6707	+1751	+J750	+1750	+J750	+1750	+0000	+1777	+0000	+0000

6720	+J601	+0000	+0000	+0000	+0000	+0000	+0000	+J751	+1751
6731	+J750	+1750	+J750	+1750	+0000	+1777	+0000	+0000	+J601
6742	+1601	+0000	+0000	+J751	+1751	+J750	+1750	+J750	+1750
6753	+0000	+0004	+0000	+0000	+J601	+0000	+0000	+0000	+0000
6764	+0000	+0000	+0000	+0000	+0200	+J750	+1750	+J750	+1750
6775	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J601
7006	+0000	+0000	+0200	+J751	+1751	+J750	+1750	+0200	+0000
7017	+0000	+0000	+J601	+0000	+0000	+0000	+0000	+0200	+J751
7030	+1751	+J750	+1750	+0000	+7774	+0000	+0000	+0000	+0000
7041	+J602	+1602	+0000						
7044	+0000	+0000	+0200	+J751	+1751	+J751	+1751	+0000	+0000
7055	+0000	+0000	+0000	+0000	+0000	+1000	+0000	+0000	+0000
7066	+0000	+0000	+0000	+0000	+0000	+0400	+0000	+0000	+0000
7077	+0000	+0000	+0000	+0000	+0000	+0100	+0000	+0000	+0000
7110	+0000	+0000	+0000	+0000	+0000	+0040	+0000	+0000	+0000
7121	+0000	+0000	+0000	+0000	+0000	+0020	+0000	+0000	+0000
7132	+0000	+0000	+0000	+0000	+0000	+0010	+0000	+0000	+0000
7143	+0000	+0000	+0000	+0000	+0000	+0004	+0000	+0000	+0000
7154	+0000	+0000	+0000	+0000	+0000	+7774	+0000	+0000	+0000
7165	+0000	+0000	+0000	+0000	+J601	+0000	+0000	+0000	+0000
7176	+0000	+0000	+0000						
7201	+0000	+0000	+J750	+1750	+J751	+1751	+J751	+1751	+0000
7212	+1777	+0000	+0000	+J601	+0000	+0000	+0200	+J751	+1751
7223	+J750	+1750	+P774	+7774	+0000	+0000	+0000	+0000	+0000
7234	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7245	+0000	+J601	+0000	+0000	+0200	+J750	+1750	+J751	+1751
7256	+P774	+7774	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7267	+0000	+0000	+0000	+0000	+0000	+0000	+J601	+0000	+0000
7300	+0200	+J751	+1751	+J751	+1751	+0000	+0000	+0000	+0000
7311	+0000	+0000	+0000	+0000	+0000	+7774	+7774	+0000	+0000
7322	+0000	+0000	+J601	+0000	+0000	+0200	+J751	+1751	+J752
7333	+1752	+P400	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7344	+0000	+7400	+0000	+0000	+0000	+0000	+0000	+J601	+0000
7355	+0000	+0200	+J751	+1751	+J751	+1751	+P400	+0000	+0000
7366	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7377	+0000	+0000	+0000	+J601	+0000	+0000	+0100	+J750	+1750
7410	+P774	+0000	+0000	+0000	+J601	+0000	+0000	+0200	+J751
7421	+1751	+J750	+1750	+P000	+7000	+0000	+0000	+0000	+0000
7432	+0000	+0000	+0000	+0374	+0000	+0000	+0000	+0000	+0000
7443	+J601	+0000	+0000	+0200	+J751	+1751	+J751	+1751	+0000
7454	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+6000
7465	+0000	+0000	+0000	+0000	+J601	+0000	+0000	+0200	+J751
7476	+J751	+1751	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7507	+0000	+0000	+3000	+0000	+0000	+0000	+0000	+J601	+0000
7520	+0000	+0200	+J751	+J751	+1751	+J000	+0000	+0000	+0000
7531	+0000	+0000	+0000	+0000	+0000	+1400	+0000	+0000	+0000
7542	+0000	+J601	+0000	+0000	+0200	+J751	+J752	+1752	+0400
7553	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7564	+0400	+0000	+0000	+0000	+J601	+0000			
7572	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7603	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7614	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7625	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7636	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7647	+0000								

12
11
10
9
8
7
6
5
4
3

5042	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5053	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5064	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5075	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5106	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5117	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+7400
5130	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5141	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5152	+0000	+0000	+0000	+0000	+0000	+0000	+J601	+0000	+0000
5163	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5174	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5205	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5216	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5227	+0000								
5230	+0000	+0000	+0300	+J750	+1750	+J750	+1750	+J753	+1753
5241	+M000								
5242	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+3774
5253	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5264	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5275	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5306	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5317	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5330	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5341	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5352	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+2000
5363	+2000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
5374	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J601
5405	+0000	+0000							

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

LOC	LINEAR FUNCTION INTERPOLATOR					BAND 4	QUADRANT 3		
6001	+0100	+0100	+J443	+1443	+M000	+4000	+0000	+0000	+J447
6012	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6023	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6034	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6045	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6056	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6067	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6100	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6111	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6122	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6133	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6144	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6155	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6166	+0000	+0000							
6170	+J777	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6201	+0300	+0300	+J751	+1751	+J750	+1750	+J753	+1753	+0004
6212	+0004	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+7400
6223	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6234	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6245	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6256	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
6267	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000

12
11
10
9
8
7
6
5
4
3

7257	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7270	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7301	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7312	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7323	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7334	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7345	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7356	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7367	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7400	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7411	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7422	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7433	+0000	+0000	+0000	+0000	+0000	+0000	+J601	+0000	+0000
7444	+0300	+J750	+1750	+J750	+1750	+J753	+1753	+0000	
7454	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7465	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7476	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7507	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7520	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7531	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7542	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7553	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7564	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+2000
7575	+2000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000
7606	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+0000	+J601
7617	+0000	+0000	+0000	+0000	+0000	+0000			

- BLOCK END CODE-THE REST OF THIS QUAD. IS BLANK

32
11
10
9
8
7
6
5
4
3