



AIR TRAINING COMMAND

COMPUTER SYSTEMS DEPARTMENT

AN/FSQ-7 DRUM SYSTEM

CHARTS & DIAGRAMS

5 JANUARY 1965

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This Schematics and Logic Diagrams Book provides student study material in support of Type II and Type III computer maintenance courses relating to WS416L.

SCHEMATICS

FOR

DRUM SYSTEM

OF

AN/FSQ-7

COMBAT DIRECTION CENTRAL

TRAINING MANUAL

1, September 1961

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MILITARY PRODUCTS DIVISION

INTERNATIONAL BUSINESS MACHINES CORPORATION

KINGSTON, NEW YORK

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| LOGIC | DESCRIPTION |
|---------------|---|
| 1. 0. 1 | MODULE 21 A&B |
| 1. 1. 1 | 7AIN DRUM SELECTION & DIODE SWITCH |
| 1. 1. 1- 2 | RD DRUM CD SELECTION & SWITCHING |
| 1. 1. 2 | MAIN DRUM TIMING & DISTRIBUTION |
| 1. 2. 1 | MAIN DRUM ADDRESSABLE CONTROL CIRCUIT |
| 1. 2. 2 | MAIN DRUMS CD READ CIRCUITS & READ BUS. |
| 1. 2. 3 | MAIN DRUMS APC & ALARM CIRCUITS |
| 1. 3. 1 | MANUAL INPUT STATUS CONTROLS |
| 1. 3. 3 | LONG RANGE RADAR INPUT NO. 1-OPERATE CIRCUITRY |
| 1. 3. 4 | LONG RANGE RADAR INPUT NO. 2-OPERATE CIRCUITRY |
| 1. 3. 5 | CROSSTELL OPERATE CIRCUITRY |
| 1. 3. 6 | SPARE CROSSTELL OPERATE CIRCUITRY |
| 1. 4. 1 | MAIN DRUM OUTPUT BUFFER STATUS OPERATE |
| 1. 5. 1 | SITUATION DISPLAY RD & TD OPERATE CIRCUITRY |
| 1. 5. 2 | SITUATION DISPLAY OD FIELD SWITCHING & READ CIRCUITRY |
| 1. 5. 3 | DIGITAL DISPLAY OD CONTROLS & READ CIRCUITS |
| 1. 6. 1 | OD IC FIELD COMP. A&B |
| 1. 7. 1 | MAIN DRUMS MANUAL CONTROLS |
| 1. 7. 1- 2 | MAIN DRUMS TEST PANEL NEON WIRING |
| 1. 7. 2 | MAIN DRUM MANUAL READ-WRITE CONTROLS |
| 1. 7. 3 | MAIN DRUM ERASE & WRITE INDEX & TIMING CHANNELS |
| 1. 7. 3- 2 | COMMON & SPECIAL SERVICE WIRING |
| 1. 8. 1 | MAIN DRUM LOOP TEST WRITE |
| 1. 8. 2 | MAIN DRUM LOOP TEST READ |
| 1. 8. 3 | INTERCOMMUNICATION TEST CONTROLS |
| 1- 2. 1. 1 | AXD DRUM SELECTION & DIODE SWITCHING |
| 1- 2. 1. 2 | AXD TIMING & DISTRIBUTION |
| 1- 2. 2. 1 | AXD DRUMS CONTROL & WRITE CIRCUITS |
| 1- 2. 2. 2 | AXD READ CIRCUITS |
| 1. 2. 2. 3 | AXD APC & ALARM CIRCUITS |
| 1- 2. 3. 1 | AUXILIARY DRUM UNIT MANUAL CONTROLS |
| 1- 2. 3. 1- 2 | AXD DRUMS TEST PANEL NEON WIRING |
| 1- 2. 3. 2 | AXD MANUAL TEST READ-WRITE CONTROLS |
| 1- 2. 3. 3 | AUXILIARY DRUMS ERASE & WRITE TIMING & INDEX CHANNELS |

NOTE III

16 6.2K 15 2a -70V

L4 15K 13

12 15K 11

L20 91K 19

22 91K 21

L24 24K 23

126 24K 125

24 -240V

L32 15K 31

134 15K 33

2b -70V

L34 15K 35

L36 8.2K 37

L40 8.2K 39

| UNIT 21 MODULE -B | | Z | 77019 Y | 77156 X | SPARE W | 77121 V | 77179 U | 77096 T | 77121 S | 77144 R | 77121 P | 77144 N | SPARE M | NOTE I 77135 L | NOTE I 77121 K | NOTE I 77162 J | 77121 H | 77179 G | 77096 F | 77135 E | 77121 D | 77162 C | #B | A | |
|----------------------|--|-------------|-------------|----------------|----------------|---------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------------|----------------|----------------|----------------|-------------|-------------|------------------|-------------|-------------------|-------------|-------------|-------------|-------------|
| | | 9 CCF 1.2.1 | 1 CCF 1.2.1 | 58.6 CCF 1.2.1 | 4.5A CCF 1.2.1 | 2.3 AFF 1.2.1 | 7.8 1.2.1 | 9 APA 5P | 9 APA 1.3.4 | 7 APA 1.1.2 | 6 ARD 5P | 5 ARD 1.1.2 | 3 BPA 1 | 2 BPA 1 | 1 BPA 1.1.2 | | | | | | | | | | |
| | | 9 AGT 1.3.6 | 9 AGT 1.7.1 | 7 AGT 1.3.2 | 5 AGT 1.3.2 | 4 AGT 1.7.1 | 3 AGT 1.3.2 | 2 AGT 1.3.2 | 1 AGT 1.3.2 | 5B ECF | 2B 5A GA 3.5 CCF | 2A GB 2 CCF | 1.7.3 3.8FF 1.3.2 | | | | | | | | | | | | |
| | | 9 BPA 1.3.2 | 9 BPA 1.3.2 | 7 BPA 1.3.2 | 5 BPA 1.3.4 | 4 BPA 1.3.3 | 3 BPA 1.3.3 | 2 BPA 1.3.3 | 1 BPA 1.7.1 | 9 AGT 1.7.1 | 7 AGT 1.8.1 | 6 AGT 1.3.4 | 5 AGT 1.3.4 | 4 AGT 1.7.1 | 3 AGT 1.3.4 | 2 AGT 1.3.4 | 1 AGT 1.3.4 | 5B ECF | 2B 5A GA 3.5 CCF | 2A GB 2 CCF | 1.7.3 3.8FF 1.3.3 | | | | |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.3 | 6 AGT 1.3.3 | 5 AGT 1.3.3 | 4 AGT 1.3.3 | 3 AGT 1.3.3 | 2 AGT 1.3.3 | 1 AGT 1.3.3 | 9 AGT 1.7.1 | 7 AGT 1.3.6 | 6 AGT 1.3.6 | 5 AGT 1.3.6 | 4 AGT 1.7.1 | 3 AGT 1.3.6 | 2 AGT 1.3.6 | 1 AGT 1.3.6 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 |
| | | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | 6 AGT 1.3.5 | 5 AGT 1.3.5 | 4 AGT 1.7.1 | 3 AGT 1.3.5 | 2 AGT 1.3.5 | 1 AGT 1.3.5 | 9 AGT 1.7.1 | 7 AGT 1.3.5 | | | | | | |

NOTE II

The diagram shows a ladder network with the following components and connections:

- Resistor L6 (6.2 K) is connected between points L5 and L1.
- Resistor L4 (15 K) is connected between points L3 and L1.
- Resistor L2 (15 K) is connected between points L3 and L1.
- Resistor L20 (91 K) is connected between points L19 and L21.
- Resistor L22 (9.1 K) is connected between points L21 and L23.
- Resistor L24 (2.4 K) is connected between points L23 and L25.
- Resistor L26 (2.4 K) is connected between points L25 and L27.
- Resistor L32 (15 K) is connected between points L31 and L33.
- Resistor L34 (15 K) is connected between points L33 and L35.
- Resistor L36 (15 K) is connected between points L35 and L37.
- Resistor L38 (0.2 K) is connected between points L37 and L39.
- Resistor L40 (0.2 K) is connected between points L39 and L41.

Voltage taps are indicated on the right side of the diagram:

- 0.2a - 70V is connected to point L5.
- 0.24 - 26.0V is connected to point L25.
- 0.2b - 70V is connected to point L31.

XI ALL BIAS RESISTORS 2W, 5%
 I POSITION WIRED, P.U. NOT SUPPLIED
 NOTES:

EC R73685
3137753



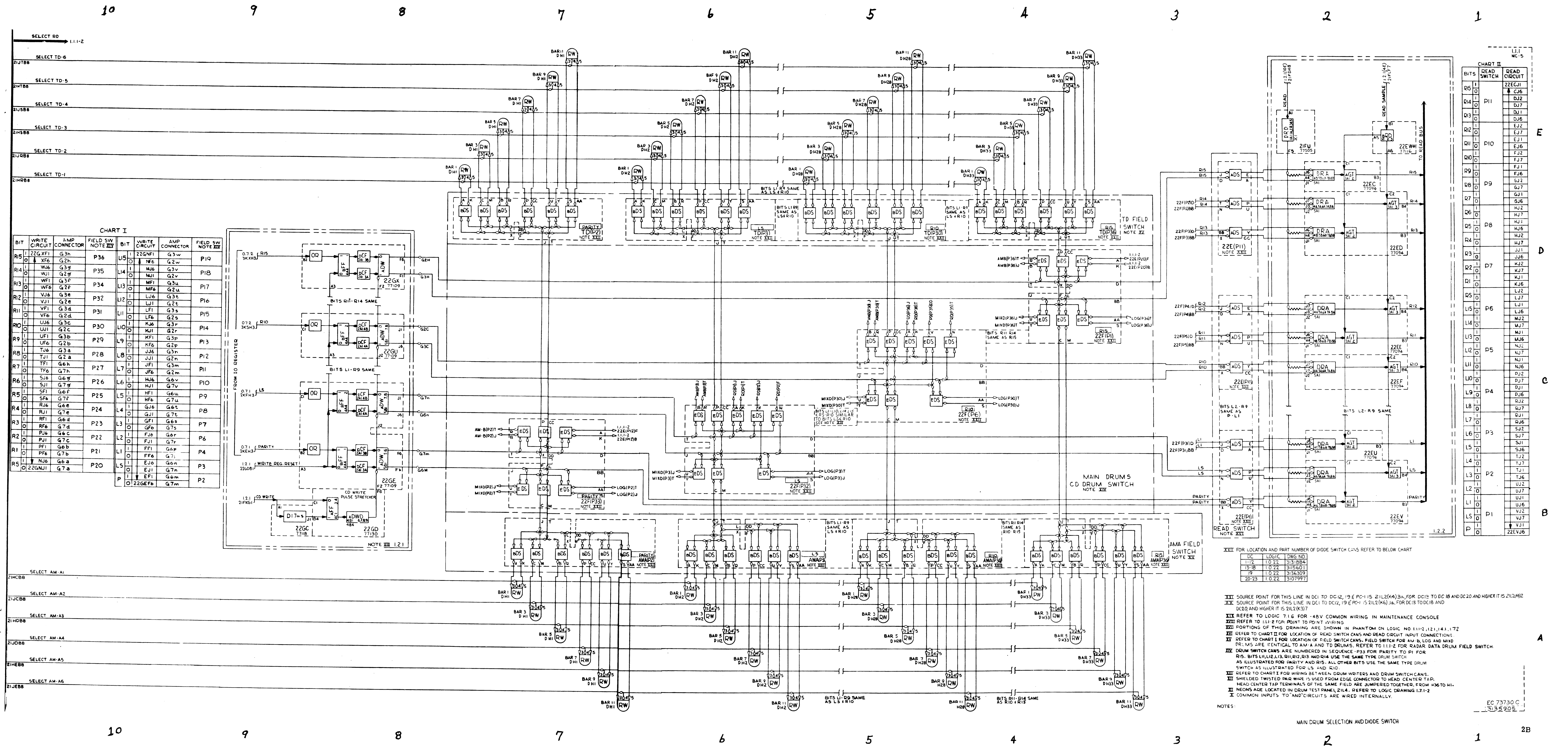


CHART I

| BIT | WRITE CIRCUIT | AMP CONNECTOR | FIELD SW NOTE XX | BIT | WRITE CIRCUIT | AMP CONNECTOR | FIELD SW NOTE XX |
|-----|---------------|---------------|------------------|-----|---------------|---------------|------------------|
| R15 | 22GXF1 | G3h | P36 | L15 | 22GNF1 | G3w | P19 |
| R14 | 22GXF2 | G3h | P35 | L14 | 22GNF2 | G3w | P18 |
| R13 | 22GXF3 | G3h | P34 | L13 | 22GNF3 | G3w | P17 |
| R12 | 22GXF4 | G3h | P33 | L12 | 22GNF4 | G3w | P16 |
| R11 | 22GXF5 | G3h | P32 | L11 | 22GNF5 | G3w | P15 |
| R10 | 22GXF6 | G3h | P31 | L10 | 22GNF6 | G3w | P14 |
| R9 | 22GXF7 | G3h | P30 | L9 | 22GNF7 | G3w | P13 |
| R8 | 22GXF8 | G3h | P29 | L8 | 22GNF8 | G3w | P12 |
| R7 | 22GXF9 | G3h | P28 | L7 | 22GNF9 | G3w | P11 |
| R6 | 22GXF10 | G3h | P27 | L6 | 22GNF10 | G3w | P10 |
| R5 | 22GXF11 | G3h | P26 | L5 | 22GNF11 | G3w | P9 |
| R4 | 22GXF12 | G3h | P25 | L4 | 22GNF12 | G3w | P8 |
| R3 | 22GXF13 | G3h | P24 | L3 | 22GNF13 | G3w | P7 |
| R2 | 22GXF14 | G3h | P23 | L2 | 22GNF14 | G3w | P6 |
| R1 | 22GXF15 | G3h | P22 | L1 | 22GNF15 | G3w | P5 |
| R15 | 22GXF16 | G3h | P21 | L15 | 22GNF16 | G3w | P4 |
| R14 | 22GXF17 | G3h | P20 | L14 | 22GNF17 | G3w | P3 |
| R13 | 22GXF18 | G3h | P19 | L13 | 22GNF18 | G3w | P2 |
| R12 | 22GXF19 | G3h | P18 | L12 | 22GNF19 | G3w | P1 |
| R11 | 22GXF20 | G3h | P17 | L11 | 22GNF20 | G3w | P0 |
| R10 | 22GXF21 | G3h | P16 | L10 | 22GNF21 | G3w | P-1 |
| R9 | 22GXF22 | G3h | P15 | L9 | 22GNF22 | G3w | P-2 |
| R8 | 22GXF23 | G3h | P14 | L8 | 22GNF23 | G3w | P-3 |
| R7 | 22GXF24 | G3h | P13 | L7 | 22GNF24 | G3w | P-4 |
| R6 | 22GXF25 | G3h | P12 | L6 | 22GNF25 | G3w | P-5 |
| R5 | 22GXF26 | G3h | P11 | L5 | 22GNF26 | G3w | P-6 |
| R4 | 22GXF27 | G3h | P10 | L4 | 22GNF27 | G3w | P-7 |
| R3 | 22GXF28 | G3h | P9 | L3 | 22GNF28 | G3w | P-8 |
| R2 | 22GXF29 | G3h | P8 | L2 | 22GNF29 | G3w | P-9 |
| R1 | 22GXF30 | G3h | P7 | L1 | 22GNF30 | G3w | P-10 |

CHART II

| READ SWITCH | READ CIRCUIT |
|-------------|--------------|
| R15 | 22ECJ1 |
| R14 | 22ECJ2 |
| R13 | 22ECJ3 |
| R12 | 22ECJ4 |
| R11 | 22ECJ5 |
| R10 | 22ECJ6 |
| R9 | 22ECJ7 |
| R8 | 22ECJ8 |
| R7 | 22ECJ9 |
| R6 | 22ECJ10 |
| R5 | 22ECJ11 |
| R4 | 22ECJ12 |
| R3 | 22ECJ13 |
| R2 | 22ECJ14 |
| R1 | 22ECJ15 |
| R15 | 22ECJ16 |
| R14 | 22ECJ17 |
| R13 | 22ECJ18 |
| R12 | 22ECJ19 |
| R11 | 22ECJ20 |
| R10 | 22ECJ21 |
| R9 | 22ECJ22 |
| R8 | 22ECJ23 |
| R7 | 22ECJ24 |
| R6 | 22ECJ25 |
| R5 | 22ECJ26 |
| R4 | 22ECJ27 |
| R3 | 22ECJ28 |
| R2 | 22ECJ29 |
| R1 | 22ECJ30 |

XXII FOR LOCATION AND PART NUMBER OF DIODE SWITCH CANS REFER TO BELOW CHART

| DC | LOGIC | DWG NO |
|-------|-------|---------|
| 1-12 | 10 22 | 31318B4 |
| 13-18 | 10 22 | 31318B4 |
| 19 | 10 22 | 31318B4 |
| 20-23 | 10 22 | 31318B4 |

XXIII SOURCE POINT FOR THIS LINE IN DC1 TO DC12, 19 & PC-115. 21L2(K4) 30, FOR DC13 TO DC18 AND DC20 AND HIGHER IT IS 21L2(K4) 30.

XXIV SOURCE POINT FOR THIS LINE IN DC1 TO DC12, 19 & PC-115. 21L2(K4) 30, FOR DC13 TO DC18 AND DC20 AND HIGHER IT IS 21L2(K4) 30.

XXV REFER TO LOGIC 7.1 G FOR -48V COMMON WIRING IN MAINTENANCE CONSOLE

XXVI REFER TO 1.1.1.2 FOR POINT TO POINT WIRING

XXVII PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC NO 1.1.1.2, 1.1.1.3, 1.1.1.4, 1.1.1.5

XXVIII REFER TO CHART I FOR LOCATION OF FIELD SWITCH CANS, FIELD SWITCH FOR AM, LOG AND MIXD

XXIX REFER TO CHART I FOR LOCATION OF FIELD SWITCH CANS, FIELD SWITCH FOR AM, LOG AND MIXD

XXX DRUM SWITCH CANS ARE NUMBERED IN SEQUENCE - P33 FOR FIELD SWITCH TO P1 FOR FIELD SWITCH

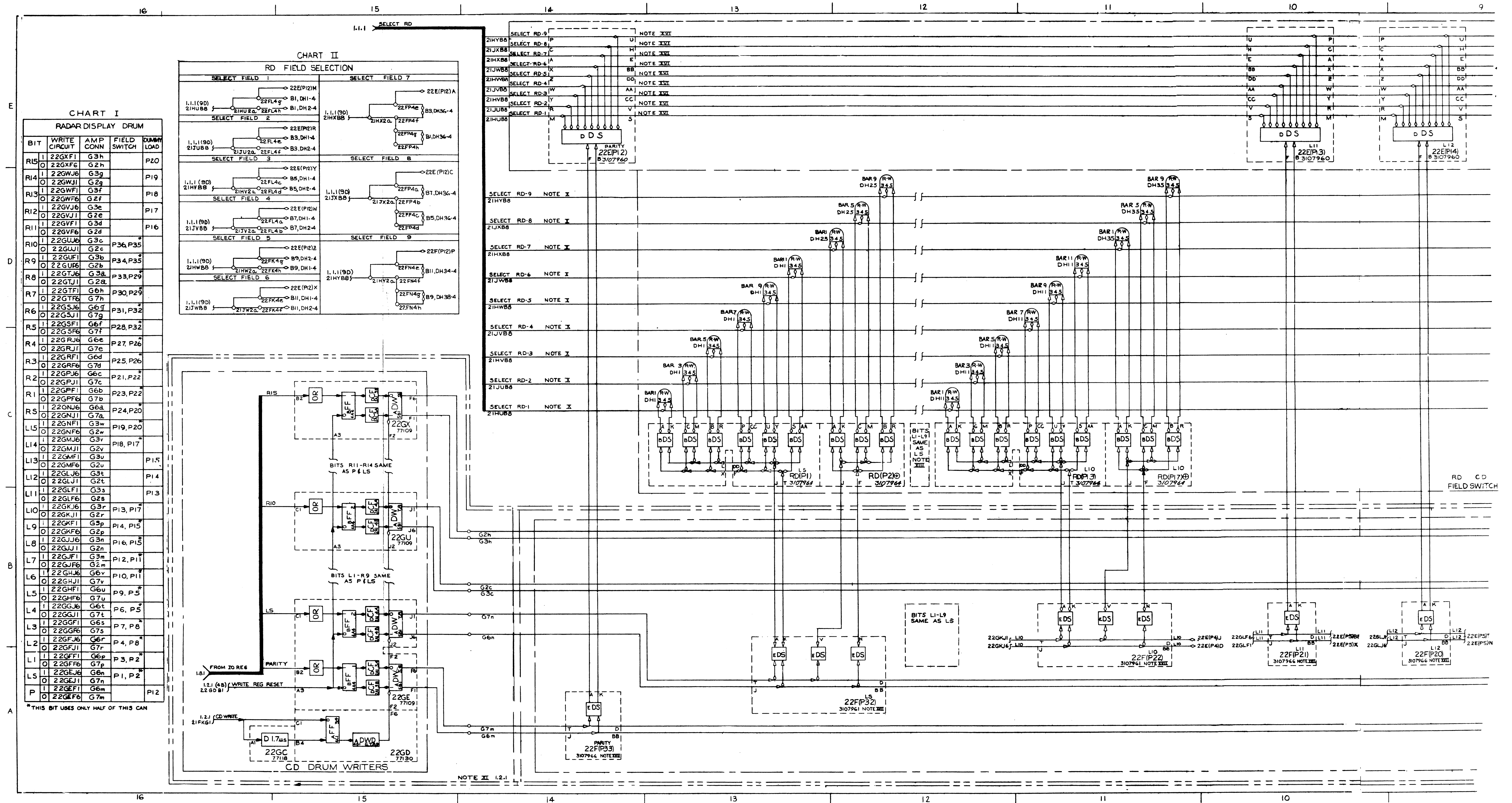
XXXI AS ILLUSTRATED FOR PARITY AND R15. ALL OTHER BITS USE THE SAME TYPE DRUM SWITCH

XXXII REFER TO CHART I FOR WIRING BETWEEN DRUM WRITERS AND DRUM SWITCH CANS

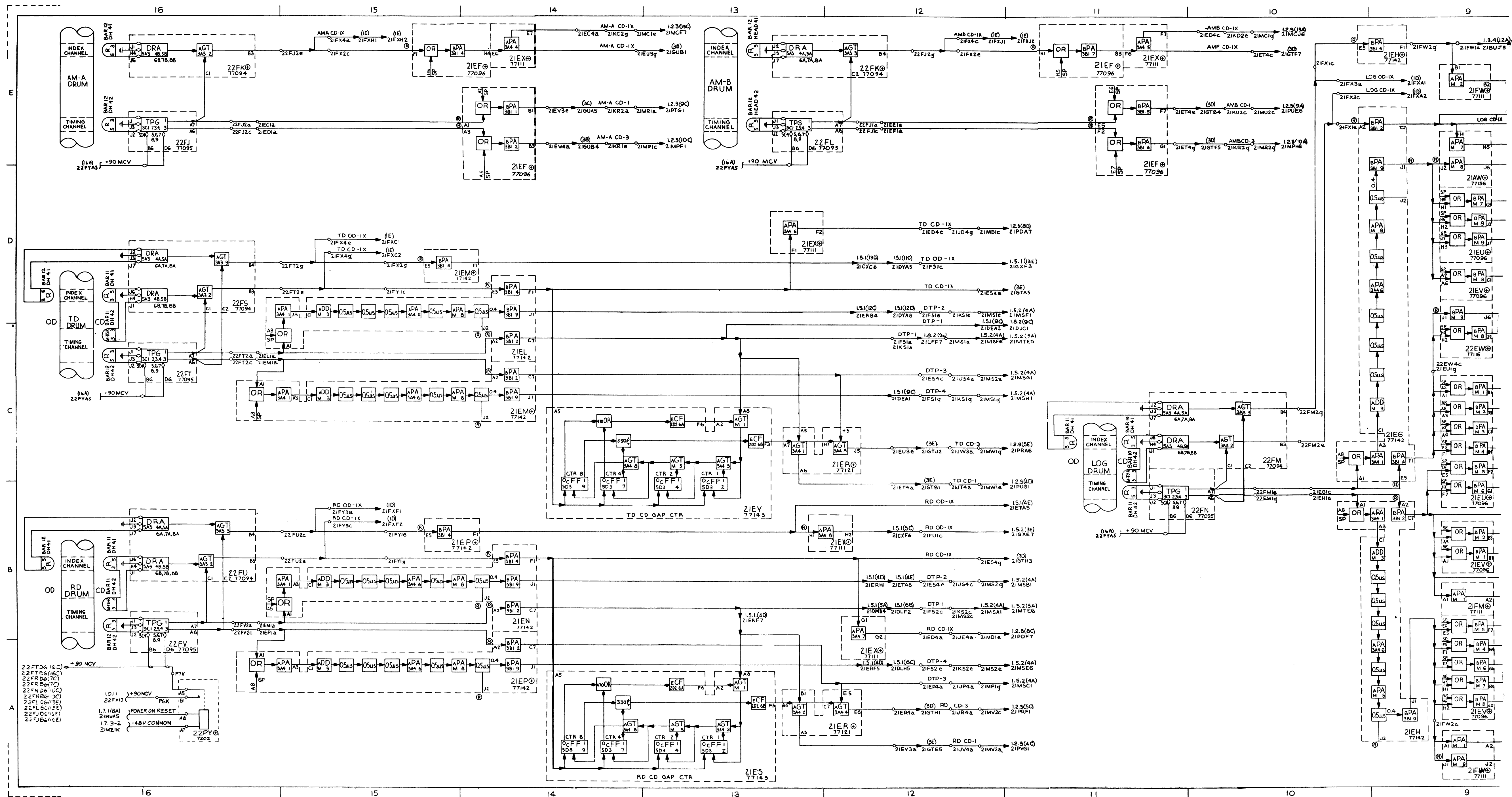
XXXIII SHIELDED TWISTED PAIR WIRE IS USED FROM EDGE CONNECTOR TO HEAD CENTER TAP. HEAD CENTER TAP TERMINALS OF THE SAME FIELD ARE JUMPED TOGETHER FROM H36 TO H1.

XXXIV NEONS ARE LOCATED IN DRUM TEST PANEL 21L4. REFER TO LOGIC DRAWING 1.1.1.2

XXXV COMMON INPUTS TO AND CIRCUITS ARE WIRED INTERNALLY.

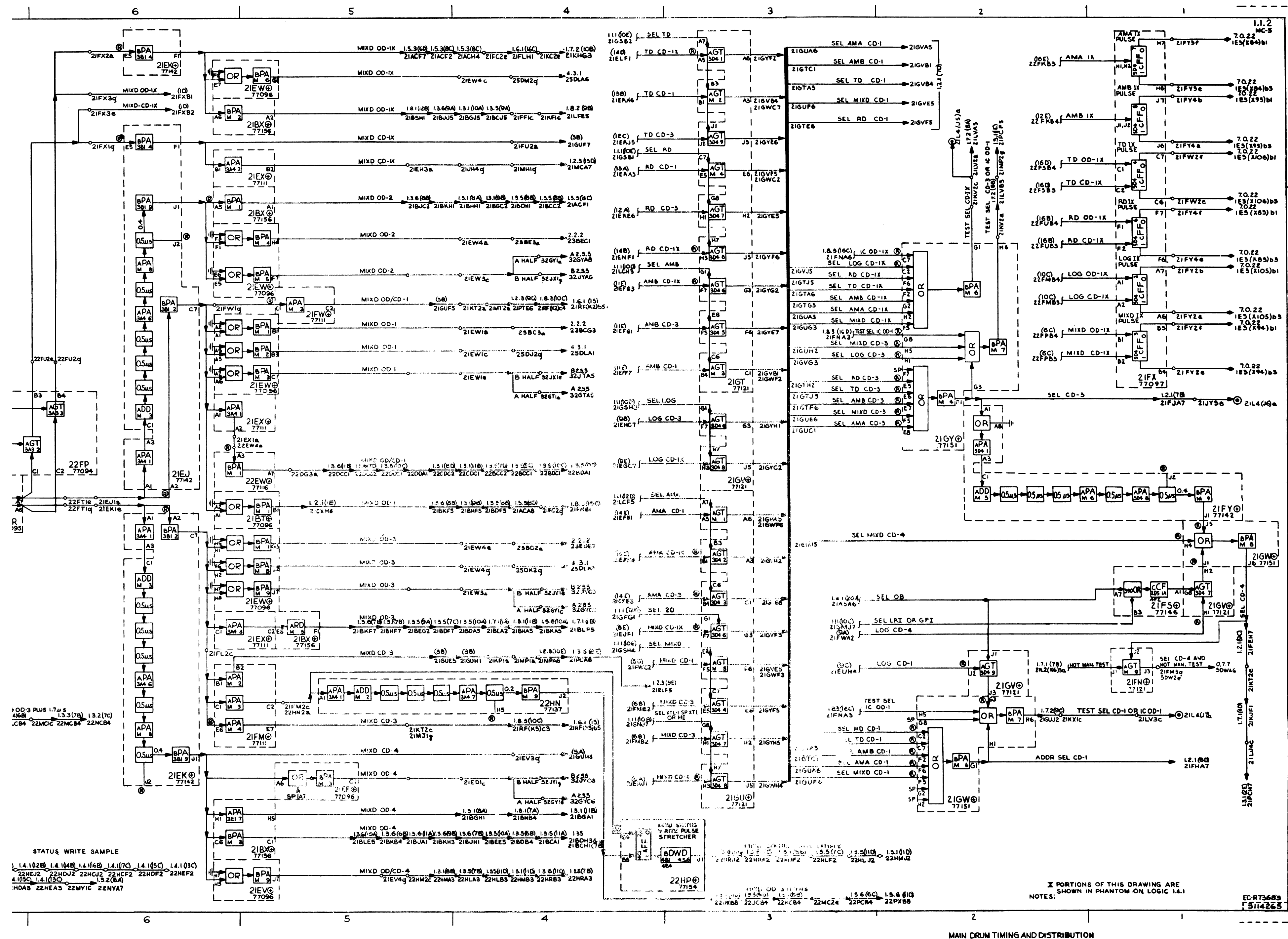












MAIN DRUM TIMING AND DISTRIBUTION



E

D

C

B

A

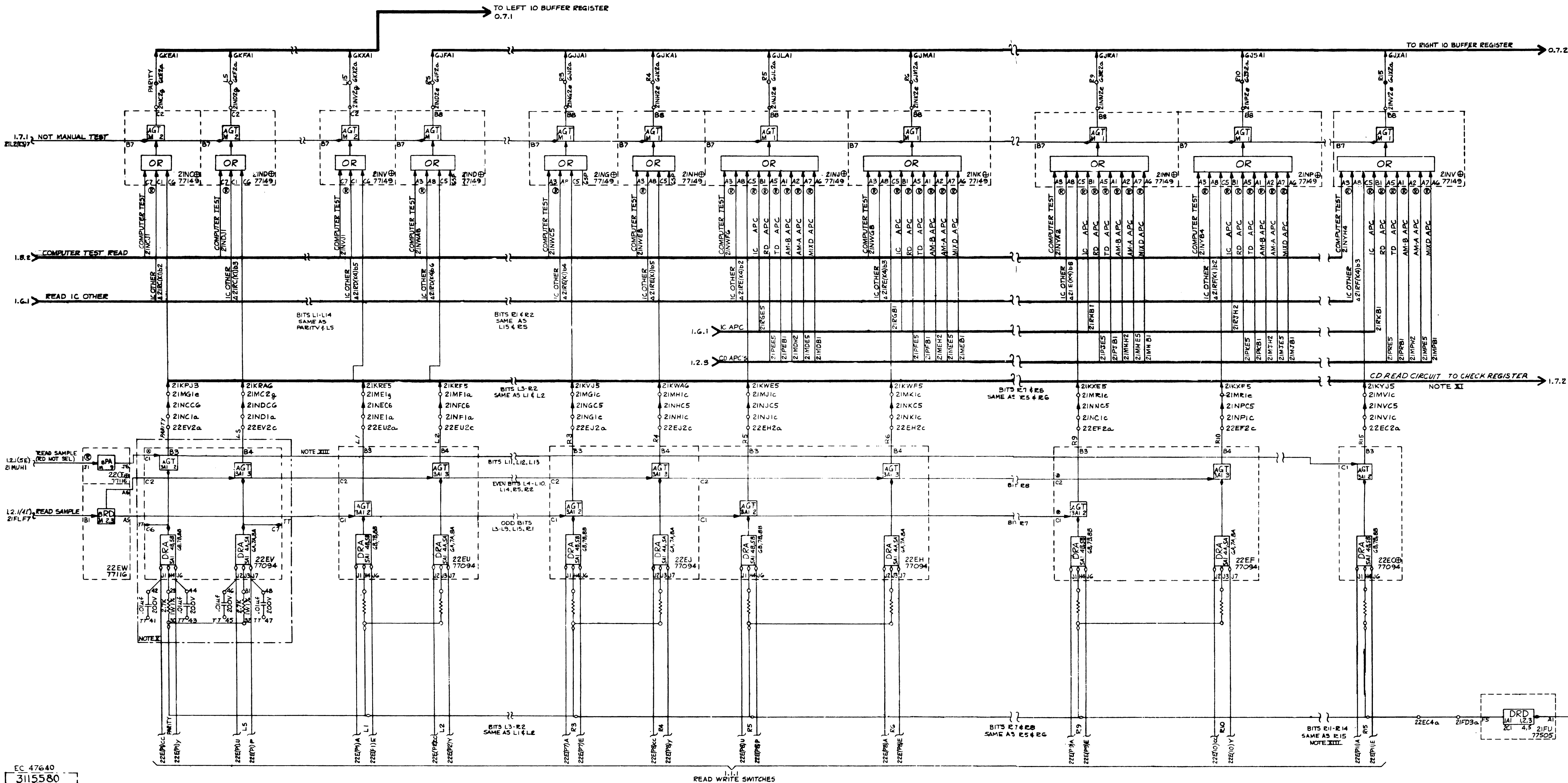


CHART II
READ SAMPLE (RED NOT SEL)

| BIT | P.U. | PIN |
|----------|----------|----------|
| 22EVC1 | 22EVC1 | 22EVC1 |
| 22EVC2 | 22EVC2 | 22EVC2 |
| 22EVC3 | 22EVC3 | 22EVC3 |
| 22EVC4 | 22EVC4 | 22EVC4 |
| 22EVC5 | 22EVC5 | 22EVC5 |
| 22EVC6 | 22EVC6 | 22EVC6 |
| 22EVC7 | 22EVC7 | 22EVC7 |
| 22EVC8 | 22EVC8 | 22EVC8 |
| 22EVC9 | 22EVC9 | 22EVC9 |
| 22EVC10 | 22EVC10 | 22EVC10 |
| 22EVC11 | 22EVC11 | 22EVC11 |
| 22EVC12 | 22EVC12 | 22EVC12 |
| 22EVC13 | 22EVC13 | 22EVC13 |
| 22EVC14 | 22EVC14 | 22EVC14 |
| 22EVC15 | 22EVC15 | 22EVC15 |
| 22EVC16 | 22EVC16 | 22EVC16 |
| 22EVC17 | 22EVC17 | 22EVC17 |
| 22EVC18 | 22EVC18 | 22EVC18 |
| 22EVC19 | 22EVC19 | 22EVC19 |
| 22EVC20 | 22EVC20 | 22EVC20 |
| 22EVC21 | 22EVC21 | 22EVC21 |
| 22EVC22 | 22EVC22 | 22EVC22 |
| 22EVC23 | 22EVC23 | 22EVC23 |
| 22EVC24 | 22EVC24 | 22EVC24 |
| 22EVC25 | 22EVC25 | 22EVC25 |
| 22EVC26 | 22EVC26 | 22EVC26 |
| 22EVC27 | 22EVC27 | 22EVC27 |
| 22EVC28 | 22EVC28 | 22EVC28 |
| 22EVC29 | 22EVC29 | 22EVC29 |
| 22EVC30 | 22EVC30 | 22EVC30 |
| 22EVC31 | 22EVC31 | 22EVC31 |
| 22EVC32 | 22EVC32 | 22EVC32 |
| 22EVC33 | 22EVC33 | 22EVC33 |
| 22EVC34 | 22EVC34 | 22EVC34 |
| 22EVC35 | 22EVC35 | 22EVC35 |
| 22EVC36 | 22EVC36 | 22EVC36 |
| 22EVC37 | 22EVC37 | 22EVC37 |
| 22EVC38 | 22EVC38 | 22EVC38 |
| 22EVC39 | 22EVC39 | 22EVC39 |
| 22EVC40 | 22EVC40 | 22EVC40 |
| 22EVC41 | 22EVC41 | 22EVC41 |
| 22EVC42 | 22EVC42 | 22EVC42 |
| 22EVC43 | 22EVC43 | 22EVC43 |
| 22EVC44 | 22EVC44 | 22EVC44 |
| 22EVC45 | 22EVC45 | 22EVC45 |
| 22EVC46 | 22EVC46 | 22EVC46 |
| 22EVC47 | 22EVC47 | 22EVC47 |
| 22EVC48 | 22EVC48 | 22EVC48 |
| 22EVC49 | 22EVC49 | 22EVC49 |
| 22EVC50 | 22EVC50 | 22EVC50 |
| 22EVC51 | 22EVC51 | 22EVC51 |
| 22EVC52 | 22EVC52 | 22EVC52 |
| 22EVC53 | 22EVC53 | 22EVC53 |
| 22EVC54 | 22EVC54 | 22EVC54 |
| 22EVC55 | 22EVC55 | 22EVC55 |
| 22EVC56 | 22EVC56 | 22EVC56 |
| 22EVC57 | 22EVC57 | 22EVC57 |
| 22EVC58 | 22EVC58 | 22EVC58 |
| 22EVC59 | 22EVC59 | 22EVC59 |
| 22EVC60 | 22EVC60 | 22EVC60 |
| 22EVC61 | 22EVC61 | 22EVC61 |
| 22EVC62 | 22EVC62 | 22EVC62 |
| 22EVC63 | 22EVC63 | 22EVC63 |
| 22EVC64 | 22EVC64 | 22EVC64 |
| 22EVC65 | 22EVC65 | 22EVC65 |
| 22EVC66 | 22EVC66 | 22EVC66 |
| 22EVC67 | 22EVC67 | 22EVC67 |
| 22EVC68 | 22EVC68 | 22EVC68 |
| 22EVC69 | 22EVC69 | 22EVC69 |
| 22EVC70 | 22EVC70 | 22EVC70 |
| 22EVC71 | 22EVC71 | 22EVC71 |
| 22EVC72 | 22EVC72 | 22EVC72 |
| 22EVC73 | 22EVC73 | 22EVC73 |
| 22EVC74 | 22EVC74 | 22EVC74 |
| 22EVC75 | 22EVC75 | 22EVC75 |
| 22EVC76 | 22EVC76 | 22EVC76 |
| 22EVC77 | 22EVC77 | 22EVC77 |
| 22EVC78 | 22EVC78 | 22EVC78 |
| 22EVC79 | 22EVC79 | 22EVC79 |
| 22EVC80 | 22EVC80 | 22EVC80 |
| 22EVC81 | 22EVC81 | 22EVC81 |
| 22EVC82 | 22EVC82 | 22EVC82 |
| 22EVC83 | 22EVC83 | 22EVC83 |
| 22EVC84 | 22EVC84 | 22EVC84 |
| 22EVC85 | 22EVC85 | 22EVC85 |
| 22EVC86 | 22EVC86 | 22EVC86 |
| 22EVC87 | 22EVC87 | 22EVC87 |
| 22EVC88 | 22EVC88 | 22EVC88 |
| 22EVC89 | 22EVC89 | 22EVC89 |
| 22EVC90 | 22EVC90 | 22EVC90 |
| 22EVC91 | 22EVC91 | 22EVC91 |
| 22EVC92 | 22EVC92 | 22EVC92 |
| 22EVC93 | 22EVC93 | 22EVC93 |
| 22EVC94 | 22EVC94 | 22EVC94 |
| 22EVC95 | 22EVC95 | 22EVC95 |
| 22EVC96 | 22EVC96 | 22EVC96 |
| 22EVC97 | 22EVC97 | 22EVC97 |
| 22EVC98 | 22EVC98 | 22EVC98 |
| 22EVC99 | 22EVC99 | 22EVC99 |
| 22EVC100 | 22EVC100 | 22EVC100 |

CHART I

| BIT | LOGIC 1.2.2 | EDGE CONNECTOR | EDGE CONNECTOR | LOGIC 1.2.2 | EDGE CONNECTOR | LOGIC 1.7.2 |
|-----|-------------|----------------|----------------|-------------|----------------|-------------|
| P | 22EVC1 | 22EVC1 | 22EVC1 | 22EVC1 | 22EVC1 | 22EVC1 |
| L5 | 22EVC2 | 22EVC2 | 22EVC2 | 22EVC2 | 22EVC2 | 22EVC2 |
| L1 | 22EVC3 | 22EVC3 | 22EVC3 | 22EVC3 | 22EVC3 | 22EVC3 |
| L2 | 22EVC4 | 22EVC4 | 22EVC4 | 22EVC4 | 22EVC4 | 22EVC4 |
| L3 | 22EVC5 | 22EVC5 | 22EVC5 | 22EVC5 | 22EVC5 | 22EVC5 |
| L4 | 22EVC6 | 22EVC6 | 22EVC6 | 22EVC6 | 22EVC6 | 22EVC6 |
| L5 | 22EVC7 | 22EVC7 | 22EVC7 | 22EVC7 | 22EVC7 | 22EVC7 |
| L6 | 22EVC8 | 22EVC8 | 22EVC8 | 22EVC8 | 22EVC8 | 22EVC8 |
| L7 | 22EVC9 | 22EVC9 | 22EVC9 | 22EVC9 | 22EVC9 | 22EVC9 |
| L8 | 22EVC10 | 22EVC10 | 22EVC10 | 22EVC10 | 22EVC10 | 22EVC10 |
| L9 | 22EVC11 | 22EVC11 | 22EVC11 | 22EVC11 | 22EVC11 | 22EVC11 |
| L10 | 22EVC12 | 22EVC12 | 22EVC12 | 22EVC12 | 22EVC12 | 22EVC12 |
| L11 | 22EVC13 | 22EVC13 | 22EVC13 | 22EVC13 | 22EVC13 | 22EVC13 |
| L12 | 22EVC14 | 22EVC14 | 22EVC14 | 22EVC14 | 22EVC14 | 22EVC14 |
| L13 | 22EVC15 | 22EVC15 | 22EVC15 | 22EVC15 | 22EVC15 | 22EVC15 |
| L14 | 22EVC16 | 22EVC16 | 22EVC16 | 22EVC16 | 22EVC16 | 22EVC16 |
| L15 | 22EVC17 | 22EVC17 | 22EVC17 | 22EVC17 | 22EVC17 | 22EVC17 |
| R5 | 22EVC18 | 22EVC18 | 22EVC18 | 22EVC18 | 22EVC18 | 22EVC18 |
| R1 | 22EVC19 | 22EVC19 | 22EVC19 | 22EVC19 | 22EVC19 | 22EVC19 |
| R2 | 22EVC20 | 22EVC20 | 22EVC20 | 22EVC20 | 22EVC20 | 22EVC20 |
| R3 | 22EVC21 | 22EVC21 | 22EVC21 | 22EVC21 | 22EVC21 | 22EVC21 |
| R4 | 22EVC22 | 22EVC22 | 22EVC22 | 22EVC22 | 22EVC22 | 22EVC22 |
| R5 | 22EVC23 | 22EVC23 | 22EVC23 | 22EVC23 | 22EVC23 | 22EVC23 |
| R6 | 22EVC24 | 22EVC24 | 22EVC24 | 22EVC24 | 22EVC24 | 22EVC24 |
| R7 | 22EVC25 | 22EVC25 | 22EVC25 | 22EVC25 | 22EVC25 | 22EVC25 |
| R8 | 22EVC26 | 22EVC26 | 22EVC26 | 22EVC26 | 22EVC26 | 22EVC26 |
| R9 | 22EVC27 | 22EVC27 | 22EVC27 | 22EVC27 | 22EVC27 | 22EVC27 |
| R10 | 22EVC28 | 22EVC28 | 22EVC28 | 22EVC28 | 22EVC28 | 22EVC28 |
| R11 | 22EVC29 | 22EVC29 | 22EVC29 | 22EVC29 | 22EVC29 | 22EVC29 |
| R12 | 22EVC30 | 22EVC30 | 22EVC30 | 22EVC30 | 22EVC30 | 22EVC30 |
| R13 | 22EVC31 | 22EVC31 | 22EVC31 | 22EVC31 | 22EVC31 | 22EVC31 |
| R14 | 22EVC32 | 22EVC32 | 22EVC32 | 22EVC32 | 22EVC32 | 22EVC32 |
| R15 | 22EVC33 | 22EVC33 | 22EVC33 | 22EVC33 | 22EVC33 | 22EVC33 |

NOTES:
XIII REFER TO CHART II FOR POINT TO POINT WIRING.
XII PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC 1.1.1, 1.1.2, 1.2.1, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5, 1.3.6, 1.6.1, 1.7.2, 1.8.2, 1.8.3.
XI REFER TO CHART I FOR WIRING SEQUENCE OF DRA OUTPUTS SHOWN IN PU 22EV ARE THE SAME FOR ALL DRA'S.





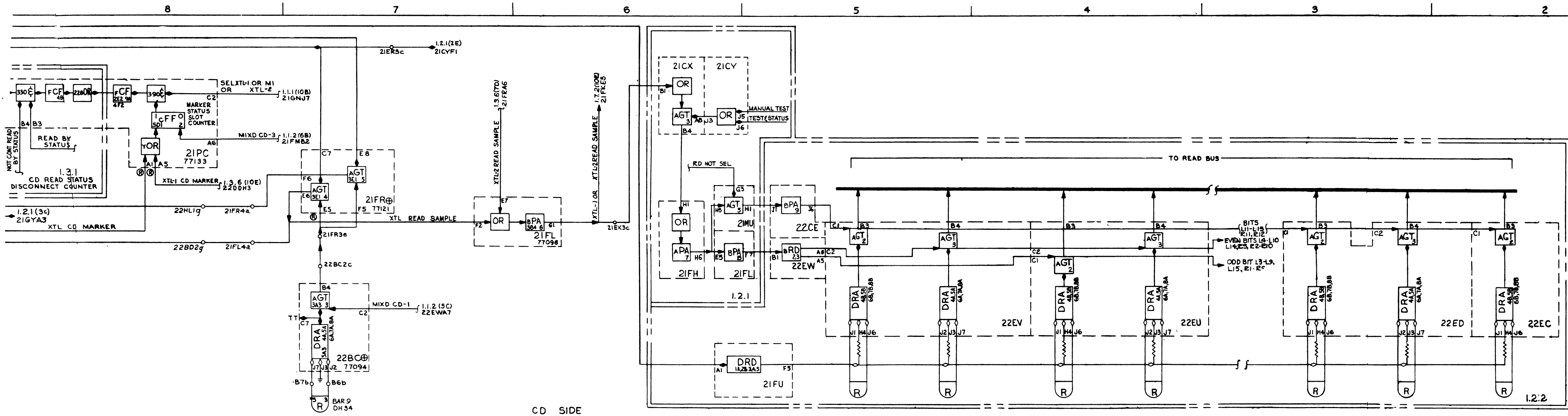


CHART II
TEST INPUTS TO WRITE CIRCUITS

| BIT | LOGIC 1.8.1 PU PIN | LOGIC 1.3.5 PU PIN | BIT | LOGIC 1.8.1 PU PIN | LOGIC 1.3.5 PU PIN |
|-----|--------------------------|--------------------------|-----|--------------------------|--------------------------|
| P | 21LJA8 | 22JDB2 | | | |
| LS | 21LJA2 | 22JDC1 | R5 | 21LKJ7 | 22JMC1 |
| L1 | 21LJB4 | 22JEB2 | R1 | 21LLA8 | 22JNB2 |
| L2 | 21LJC5 | 22JEC1 | R2 | 21LLA2 | 22JNC1 |
| L3 | 21LJE6 | 22JFB2 | R3 | 21LLB4 | 22JPB2 |
| L4 | 21LJF6 | 22JFC1 | R4 | 21LLC5 | 22JPC1 |
| L5 | 21LJG8 | 22JGB2 | R5 | 21LLE8 | 22JRB2 |
| L6 | 21LJH4 | 22JHC1 | R6 | 21LLF6 | 22JRC1 |
| L7 | 21LJH2 | 22JHB2 | R7 | 21LLG8 | 22JSB2 |
| L8 | 21LKA8 | 22JHC1 | R8 | 21LLH4 | 22JSC1 |
| L9 | 21LKA2 | 22JJB2 | R9 | 21LLJ7 | 22JTB2 |
| L10 | 21LKB4 | 22JJC1 | R10 | 21LLM8 | 22JTC1 |
| L11 | 21LKC5 | 22JKB2 | R11 | 21LLM5 | 22JUB2 |
| L12 | 21LKE8 | 22JJC1 | R12 | 21LME8 | 22JUC1 |
| L13 | 21LKF6 | 22JLB2 | R13 | 21LMF6 | 22JVB2 |
| L14 | 21LKG8 | 22JLC1 | R14 | 21LMG8 | 22JVC1 |
| L15 | 21LKH4 | 22JMB2 | R15 | 21MLM4 | 22JWB2 |

CHART III
SHOWING AMP CONNECTORS FROM DRUM WRITERS TO HEADS

| BIT | DH PIN | AMP CONN | PU PIN | BIT | DH PIN | AMP CONN | PU PIN |
|-----|-----------|-------------|---------|-----|-----------|-------------|---------|
| P | 1-3 | J6m | 22J DF1 | R5 | 18-3 | J6b | 22J MJ6 |
| LS | 2-3 | J6p | DJ6 | R1 | 19-3 | J6c | NF1 |
| L1 | 3-3 | J6f | EF1 | R2 | 19-3 | J6c | NF6 |
| L2 | 4-3 | J6g | EF6 | R3 | 20-3 | J6d | NJ1 |
| L3 | 5-3 | J6t | FF1 | R4 | 21-3 | J6e | PF1 |
| L4 | 6-3 | J6u | FJ6 | R5 | 22-3 | J6f | PF6 |
| L5 | 7-3 | J6v | GF1 | R6 | 23-3 | J6g | RF1 |
| L6 | 8-3 | J6w | GF6 | R7 | 24-3 | J6h | RF6 |
| L7 | 9-3 | J6x | HJ1 | R8 | 25-3 | J6i | SF1 |
| L8 | 10-3 | J6y | HJ6 | R9 | 26-3 | J6j | SF6 |
| L9 | 11-3 | J6z | IJ1 | R10 | 27-3 | J6k | TF1 |
| L10 | 12-3 | J6a | IJ6 | R11 | 28-3 | J6l | TF6 |
| L11 | 13-3 | J6b | JJ1 | R12 | 29-3 | J6m | UF1 |
| L12 | 14-3 | J6c | JJ6 | R13 | 30-3 | J6n | UF6 |
| L13 | 15-3 | J6d | KJ1 | R14 | 31-3 | J6o | VJ1 |
| L14 | 16-3 | J6e | KJ6 | R15 | 32-3 | J6p | VJ6 |
| L15 | 17-3 | J6f | LJ1 | | | | |
| | | | | | | | |

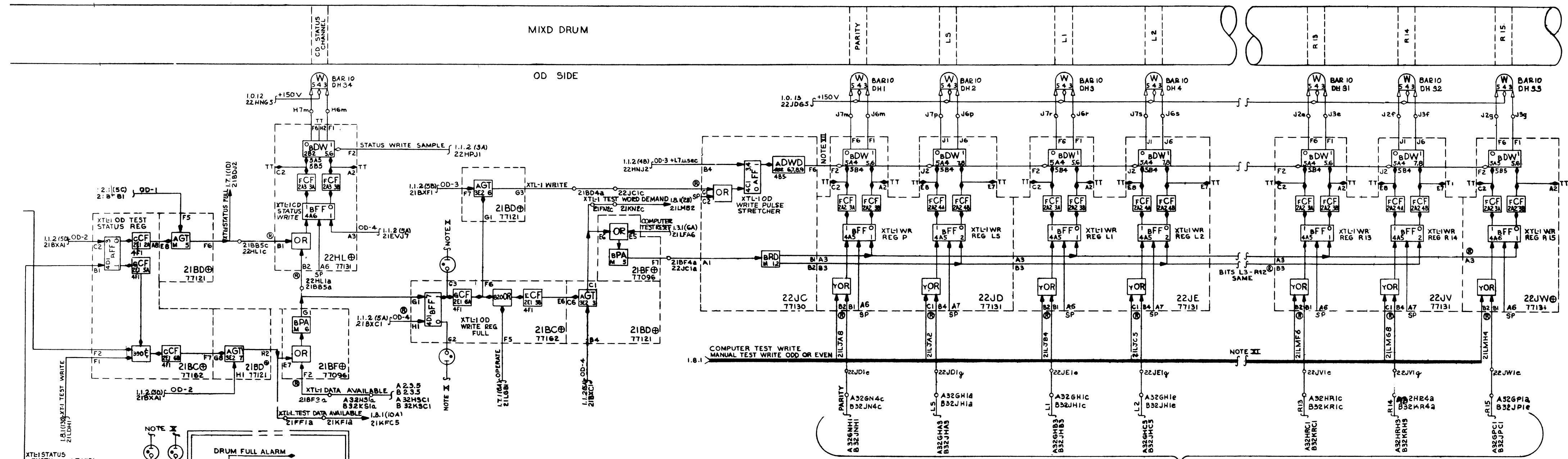
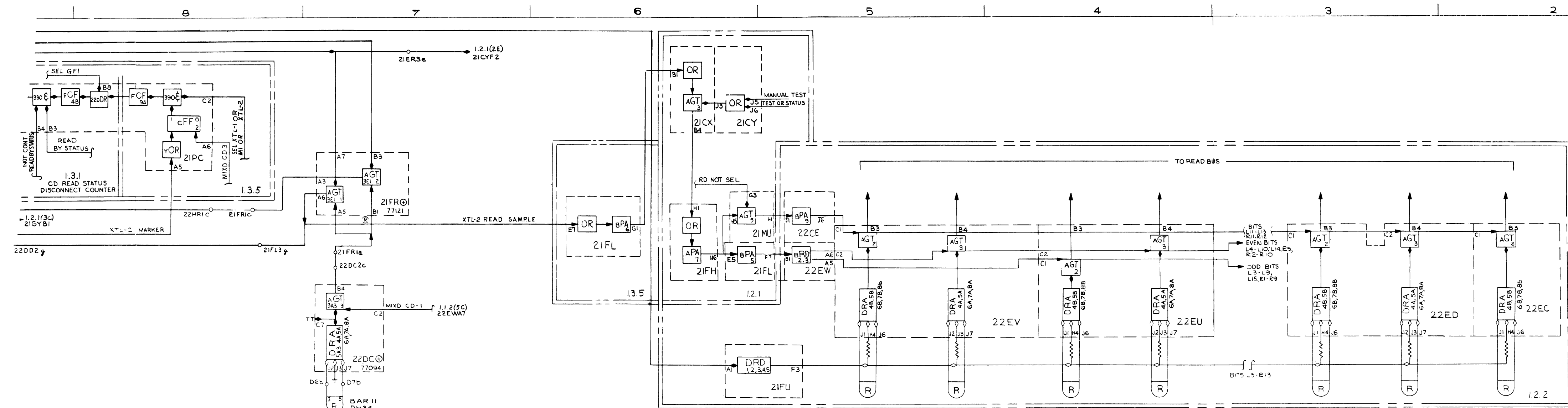


CHART I SHOWING INPUTS TO WRITE CIRCUITS

| BIT | P | LS | L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 | L9 | L10 | L11 | L12 | L13 | L14 | L15 | R5 | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| EC | A32 | GN4c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c |
| | B32 | JN4c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c |
| P.U. | A32 | GN1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c | G1H1c |
| | B32 | JN1H1 | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c | J1H1c |

NOTE: XIX PORTIONS OF THIS DRAWING ARE SHOWN IN PHANTOM ON LOGIC NO. 1.3.6.
 XX FOR POINT TO POINT WIRING REFER TO LOGIC DRAWING 1.8.1.
 XX WIRING IS FROM 22JCF6 TO 22JDF2—55—22JWF2 TO 22JVF2—55—22JVF2.
 XX SEE CHART II FOR TEST INPUTS.
 XX REFER TO LOGIC DWG 1.1-2.





1.3.6
MC-5

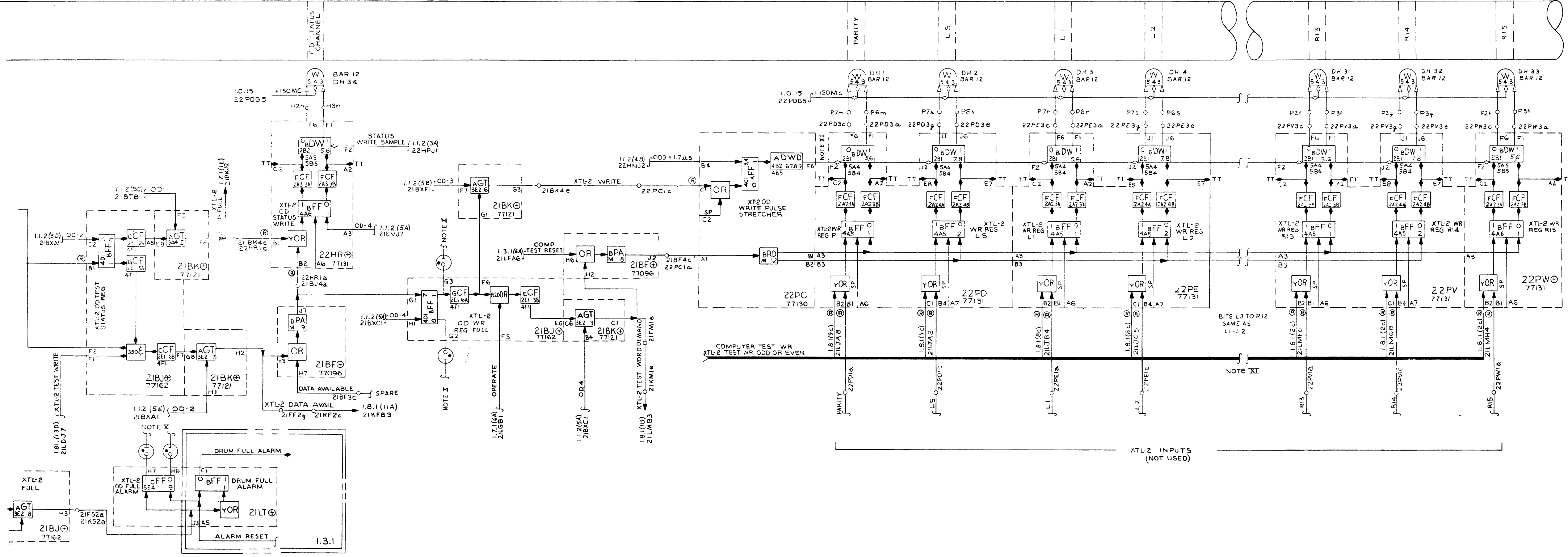
CHART II

| BIT | LOGIC 1.8.1 PU PIN | LOGIC 1.3.6 PU PIN | BIT | LOGIC 1.8.1 PU PIN | LOGIC 1.3.6 PU PIN |
|-----|-----------------------|-----------------------|-----|-----------------------|-----------------------|
| P | 21LJA8 | 22PD82 | RS | 21LKJ7 | 22PMC1 |
| LS | 21LJA2 | 22PDB2 | R1 | 21LLA8 | 22PNB2 |
| L1 | 21LJB4 | 22PEB2 | R2 | 21LLA2 | 22PNC1 |
| L2 | 21LJC5 | 22PEC1 | R3 | 21LLB4 | 22PPB2 |
| L3 | 21LJE8 | 22PF82 | R4 | 21LLC5 | 22PPC1 |
| L4 | 21LJF6 | 22PFC1 | R5 | 21LLE8 | 22PRB2 |
| L5 | 21LJG8 | 22PGB2 | R6 | 21LLF6 | 22PRC1 |
| L6 | 21LJH4 | 22PGC1 | R7 | 21LLG8 | 22PSB2 |
| L7 | 21LJJ7 | 22PHB2 | R8 | 21LLH4 | 22PSC1 |
| L8 | 21LKA8 | 22PHC1 | R9 | 21LLJ7 | 22PTB2 |
| L9 | 21LKA2 | 22PJ82 | R10 | 21LMB4 | 22PTC1 |
| L10 | 21LKB4 | 22PJC1 | R11 | 21LMB8 | 22PUB2 |
| L11 | 21LKC5 | 22PKB2 | R12 | 21LME8 | 22PUC1 |
| L12 | 21LKE8 | 22PKC1 | R13 | 21LME2 | 22PVB2 |
| L13 | 21LKF6 | 22PLB2 | R14 | 21LMG8 | 22PVC1 |
| L14 | 21LKG8 | 22PLC1 | R15 | 21LMH4 | 22PWB2 |
| L15 | 21LKH4 | 22PMB2 | | | |

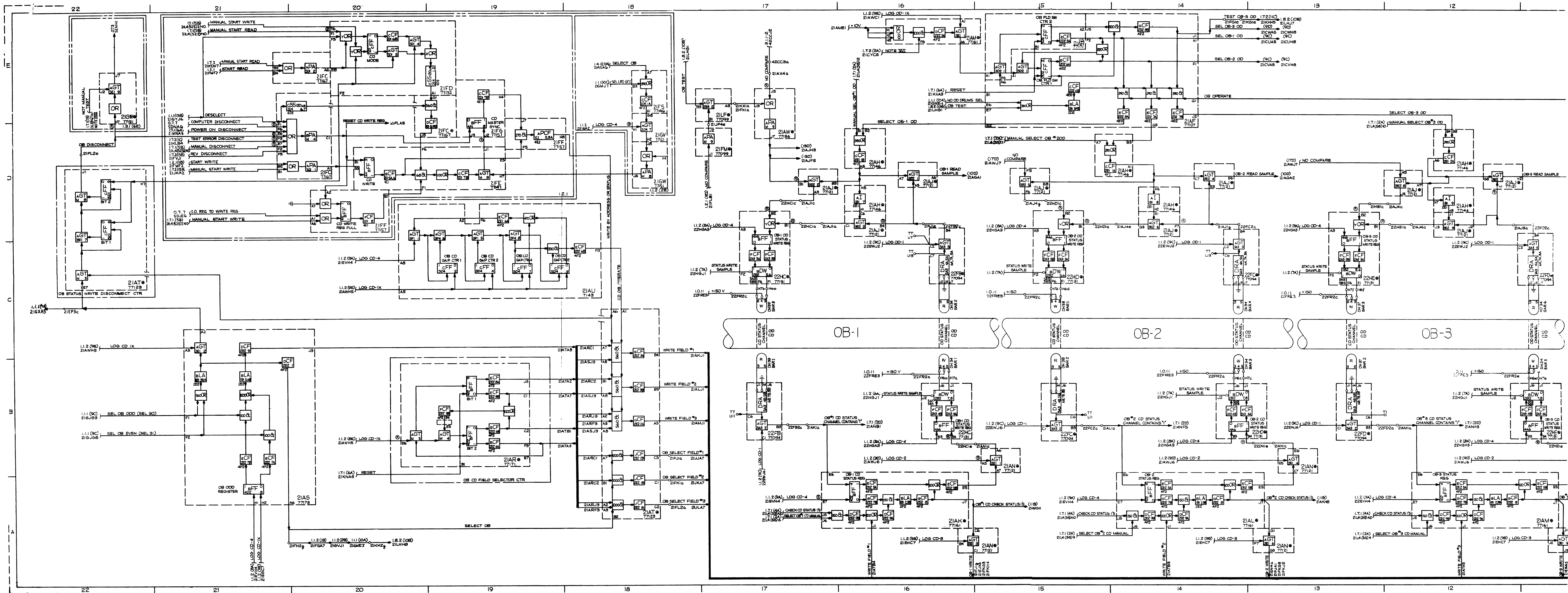
CHART I

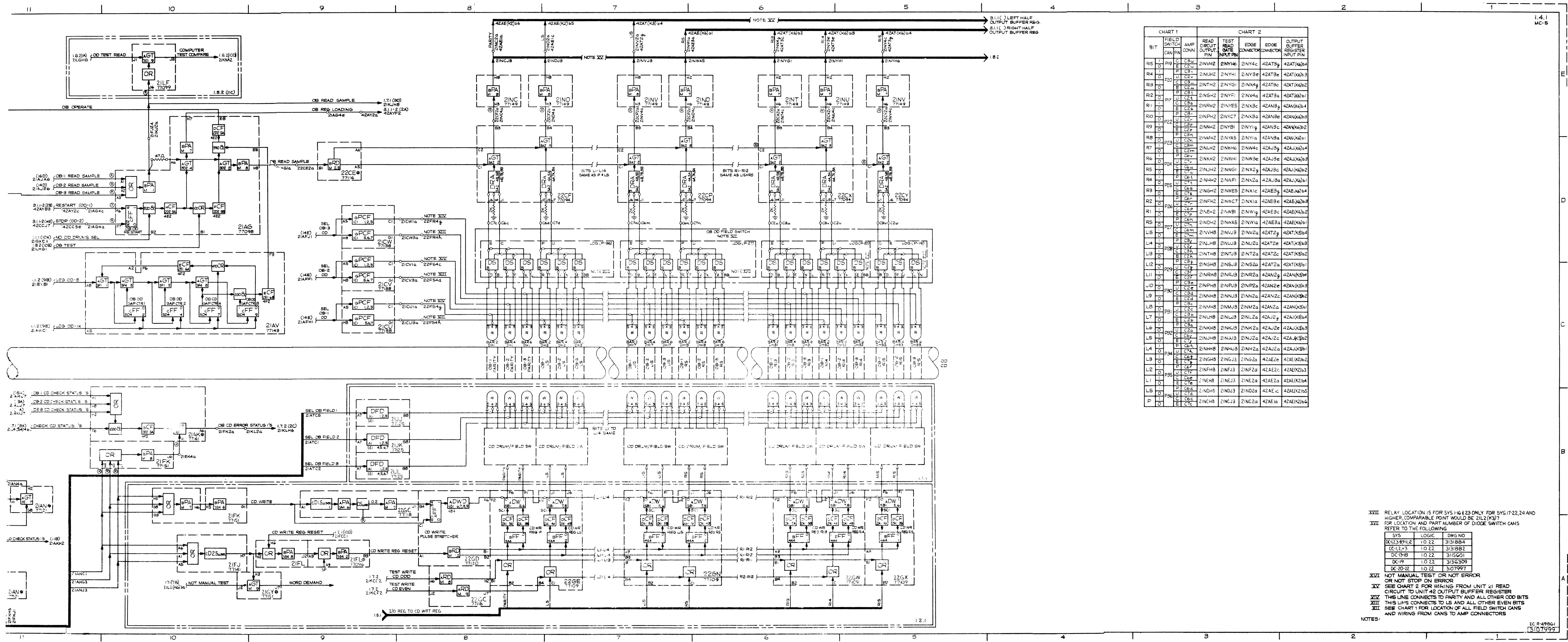
| BIT | DM-PIN | AMP CONN | EDGE CONNECTOR | BIT | DM-PIN | AMP CONN | EDGE CONNECTOR |
|-----|--------|----------|----------------|-----|--------|----------|----------------|
| P | 1-3 | P6m | 22PD3a | RS | 18-3 | P6b | 22PM3e |
| LS | 2-3 | P6n | 22PD3c | R1 | 18-5 | P7b | 22PM3g |
| L1 | 3-3 | P6r | 22PD3e | R2 | 19-3 | P6c | 22PN3a |
| L2 | 3-5 | P6r | 22PD3g | R3 | 19-5 | P7c | 22PN3c |
| L3 | 4-3 | P6s | 22PD3e | R4 | 20-3 | P6d | 22PN3e |
| L4 | 4-5 | P6s | 22PD3g | R5 | 20-5 | P7d | 22PN3g |
| L5 | 5-3 | P6t | 22PD3a | R6 | 21-3 | P6e | 22PP3a |
| L6 | 5-5 | P6t | 22PD3c | R7 | 21-5 | P7e | 22PP3c |
| L7 | 6-3 | P6u | 22PD3e | R8 | 22-3 | P6f | 22PP3e |
| L8 | 6-5 | P6u | 22PD3g | R9 | 22-5 | P7f | 22PP3g |
| L9 | 7-3 | P6v | 22PD3a | R10 | 23-3 | P6g | 22PR3a |
| L10 | 7-5 | P6v | 22PD3c | R11 | 23-5 | P7g | 22PR3c |
| L11 | 8-3 | P6w | 22PD3e | R12 | 24-3 | P6h | 22PR3e |
| L12 | 8-5 | P6w | 22PD3g | R13 | 24-5 | P7h | 22PR3g |
| L13 | 9-3 | P6x | 22PD3a | R14 | 25-3 | P6i | 22PS3a |
| L14 | 9-5 | P6x | 22PD3c | R15 | 25-5 | P7i | 22PS3c |
| L15 | 10-3 | P6y | 22PD3e | | | | |
| L16 | 10-5 | P6y | 22PD3g | | | | |
| L17 | 11-3 | P6z | 22PD3a | | | | |
| L18 | 11-5 | P6z | 22PD3c | | | | |
| L19 | 12-3 | P6z | 22PD3e | | | | |
| L20 | 12-5 | P6z | 22PD3g | | | | |
| L21 | 13-3 | P6z | 22PD3a | | | | |
| L22 | 13-5 | P6z | 22PD3c | | | | |
| L23 | 14-3 | P6z | 22PD3e | | | | |
| L24 | 14-5 | P6z | 22PD3g | | | | |
| L25 | 15-3 | P6z | 22PD3a | | | | |
| L26 | 15-5 | P6z | 22PD3c | | | | |
| L27 | 16-3 | P6z | 22PD3e | | | | |
| L28 | 16-5 | P6z | 22PD3g | | | | |
| L29 | 17-3 | P6z | 22PD3a | | | | |
| L30 | 17-5 | P6z | 22PD3c | | | | |

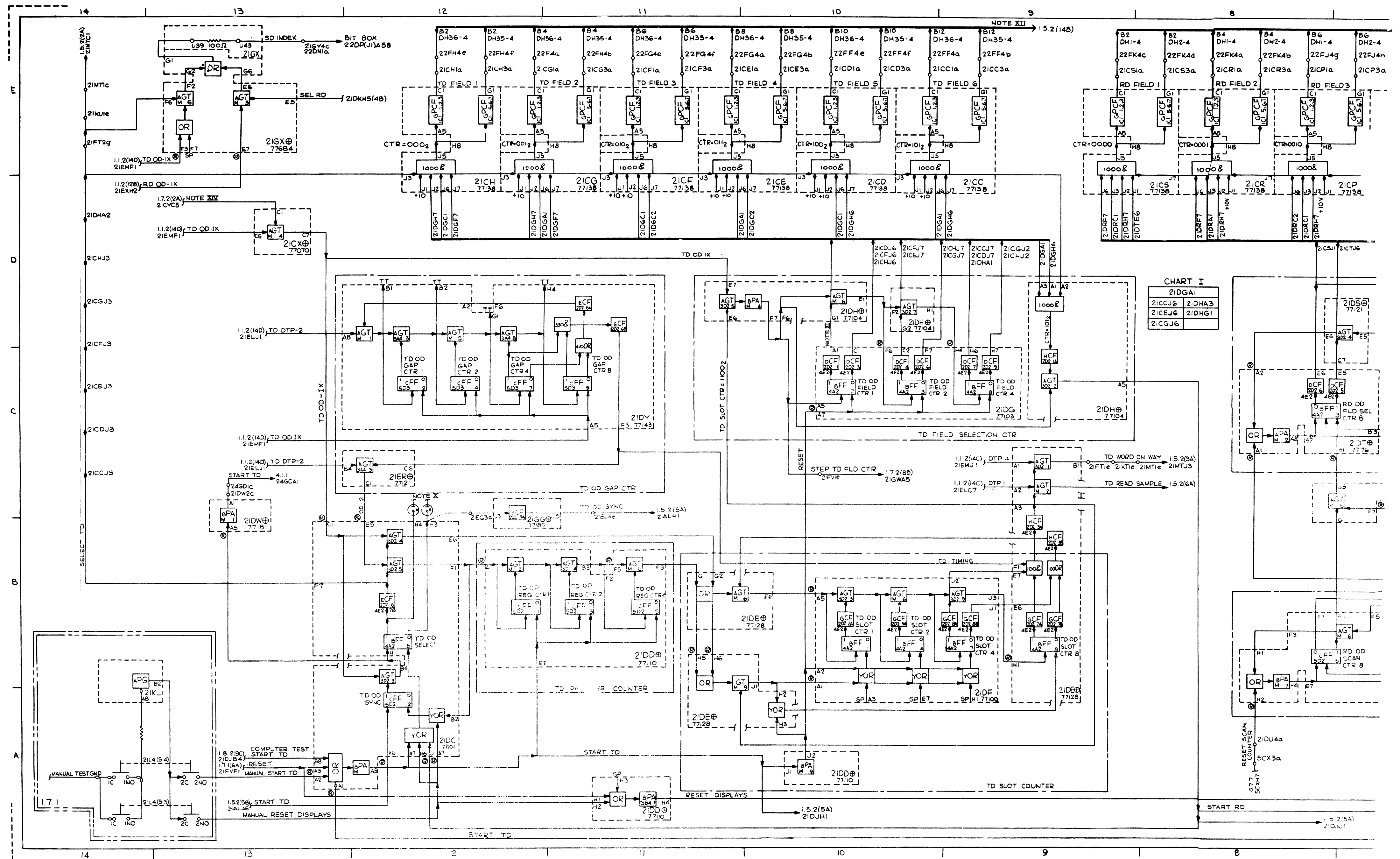
NOTE: PLUGGABLE UNITS FOR SPARE XTL CIRCUITRY ARE NOT SUPPLIED.
 REFER TO UNIT SUPPLEMENT 22H LOGIC DWG. 1.0.12
 FOR POINT TO POINT WIRING REFER TO LOGIC DWG. 1.8.1
 WIRING IS FROM 22PCF6 TO 22PDF2-11-22PWF2 TO 22PV3-11-22PDJ2
 SEE CHART II FOR TEST INPUTS
 REFER TO LOGIC DWG. 1.7.1-2

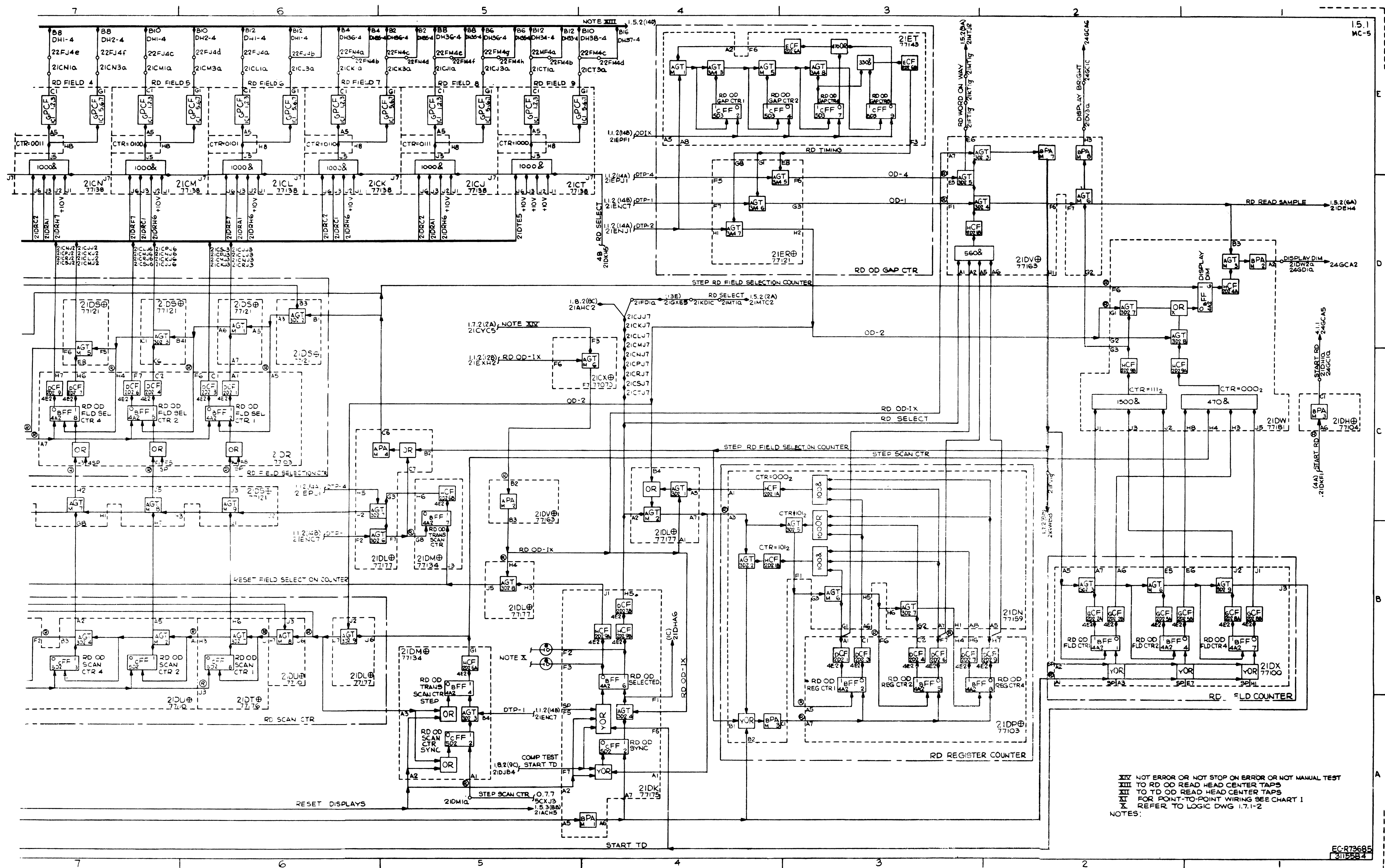


CROSTELL-2 OPERATE CIRCUITRY



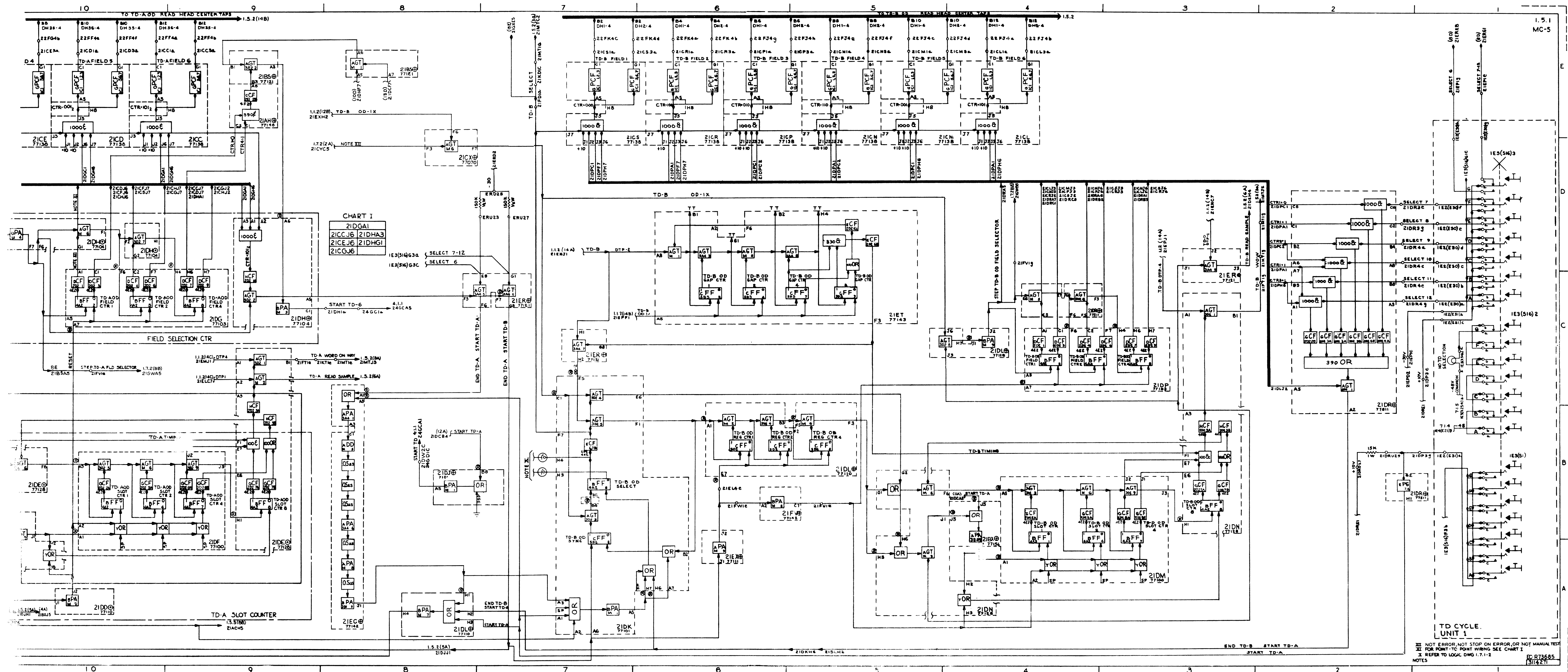






SITUATION DISPLAY (RD & TD) OPERATE CIRCUITRY





SITUATION DISPLAY OPERATE CIRCUITRY

CHART 2
DIGITAL DISPLAY INFORMATION PULSE OUTPUT WIRING

| BIT | UNIT 21 EDGE CONN | UNIT 25 EDGE CONN | UNIT 25 PU PIN | BIT | UNIT 21 TEST PULSE CONN | UNIT 21 EDGE CONN | UNIT 25 PU PIN |
|-----|----------------------|----------------------|-------------------|-----|----------------------------|----------------------|-------------------|
| L1 | 21NE3c | 25BC1g | 25BEA5 | R1 | 21NW83 | 21NW2c | 25CC1g |
| L2 | F3c | D1e | 25BED5 | R2 | C2 | W2g | D1e |
| L3 | G3c | D1e | 25BEF6 | R3 | E7 | X1g | D1g |
| L4 | H3c | E1e | 25BEA2 | R4 | F7 | X2g | E1e |
| L5 | J3c | F1e | D6 | R5 | G3 | W3c | F1e |
| L6 | K3c | F1e | J7 | R6 | H3 | W4a | F1e |
| L7 | L3c | F1e | A6 | R7 | 21NWH8 | W4g | F1e |
| L8 | M3c | G1e | D7 | R8 | 21NYA7 | Y1e | G1e |
| L9 | N3c | G1e | G2 | R9 | B3 | Y2c | G1e |
| L10 | P3c | 25BC1a | A3 | R10 | C2 | Y2g | G2e |
| L11 | R3c | 25AE4a | D8 | R11 | E7 | X3g | E3g |
| L12 | S3c | 25BE3e | G6 | R12 | 21NYF3 | 21NX4e | 25CC4a |
| L13 | T3c | 25BF1a | A7 | | | | |
| L14 | 21NU3c | 25BC4a | 25BEU3 | | | | |

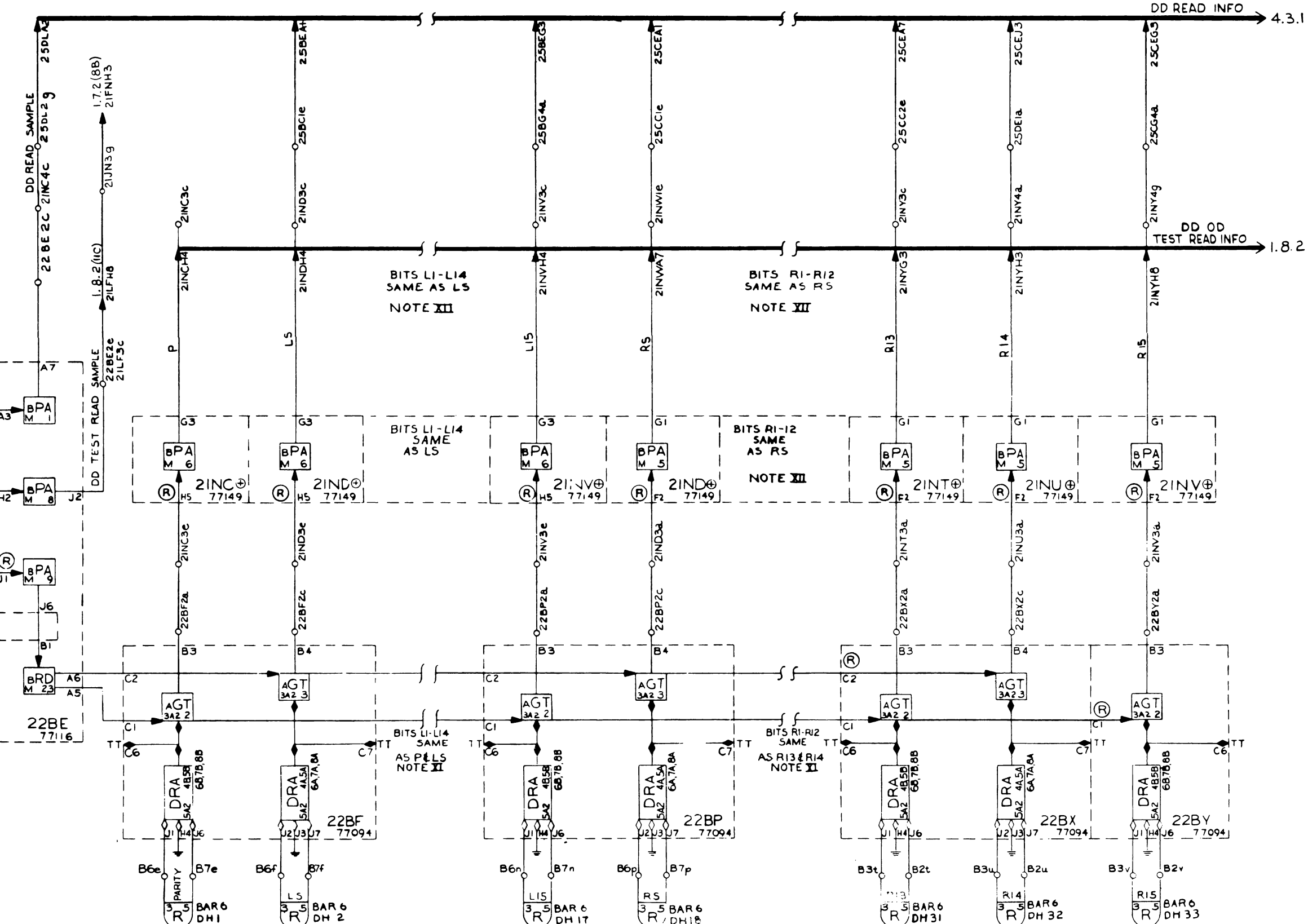
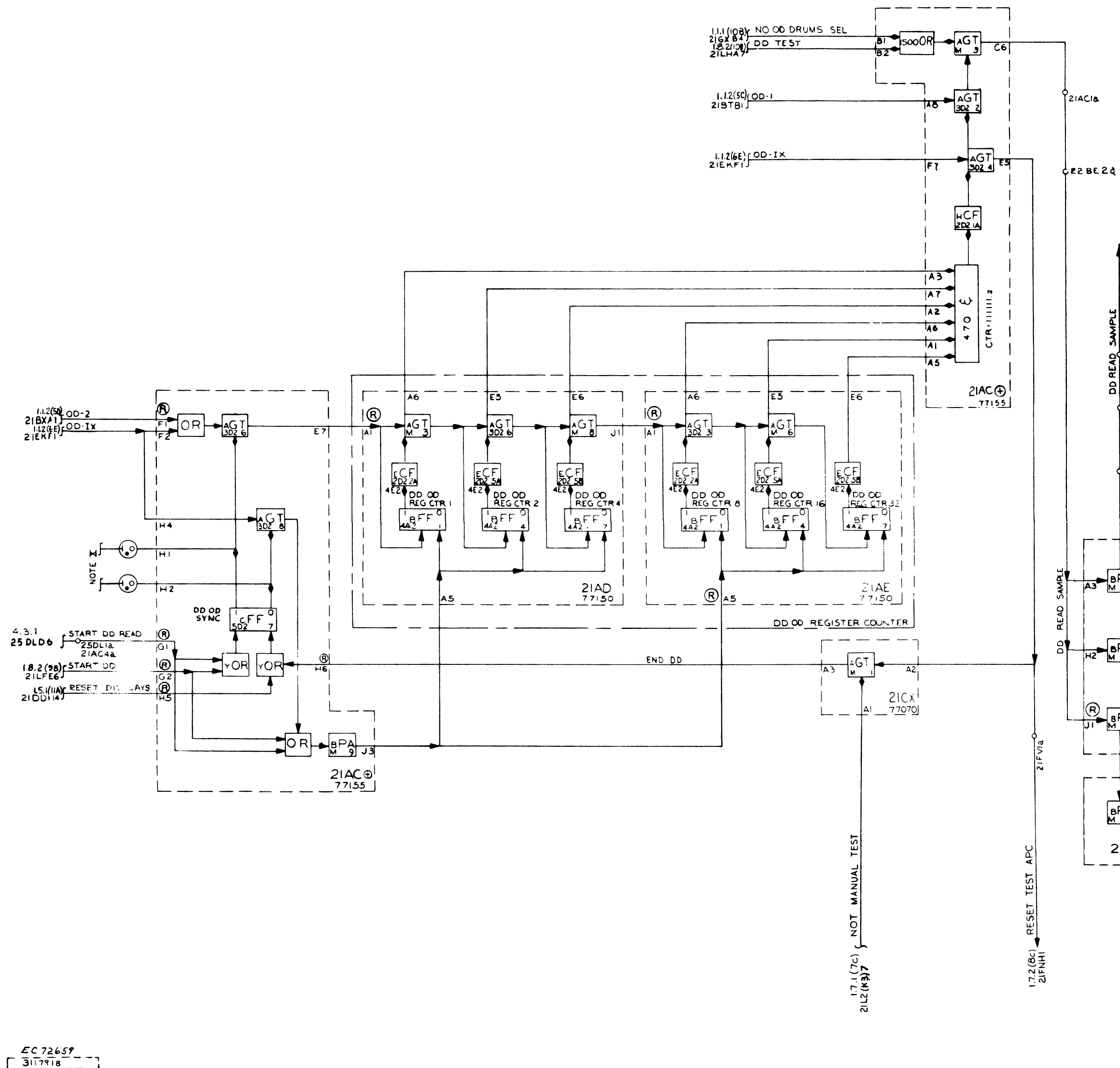
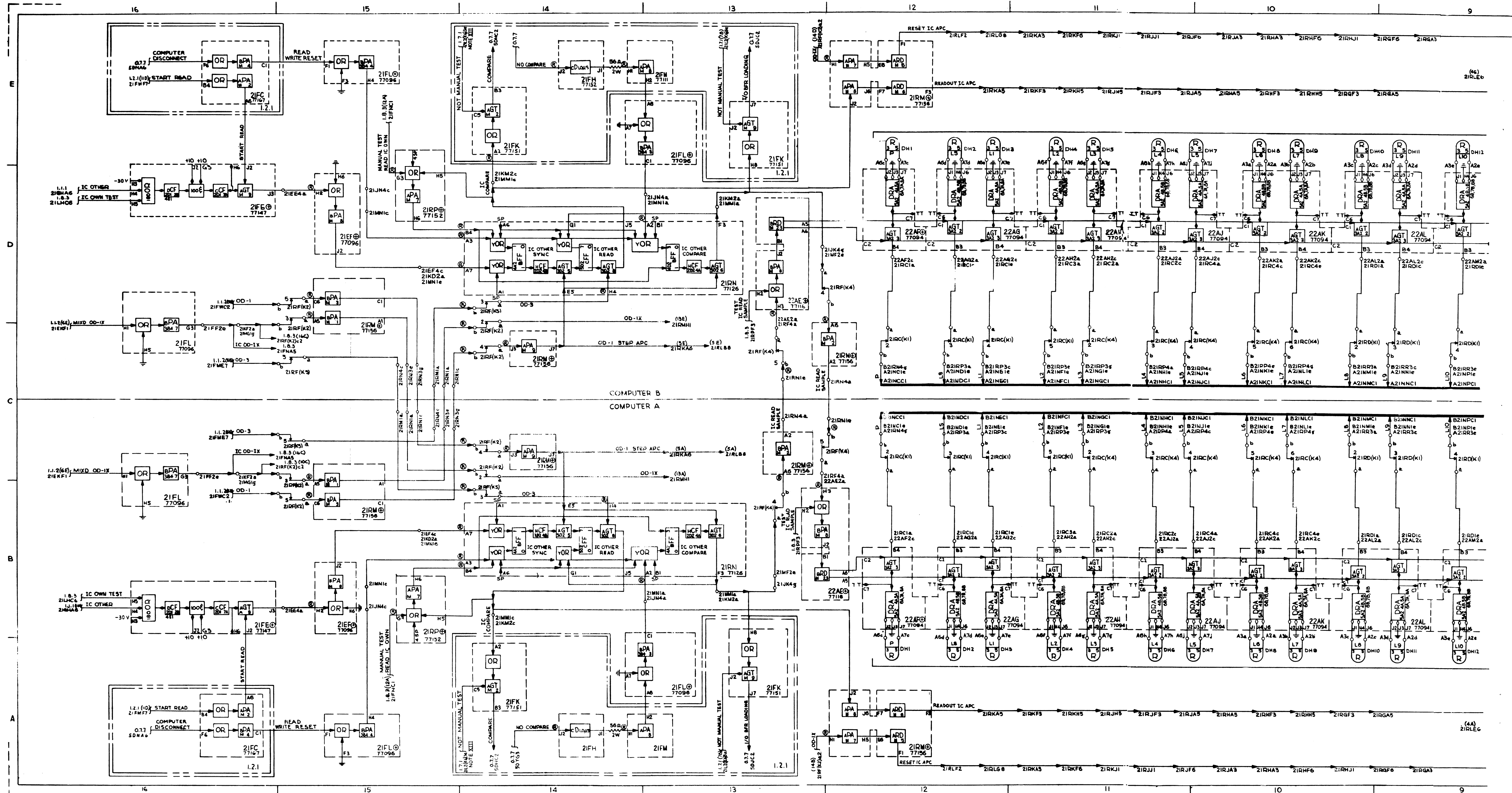


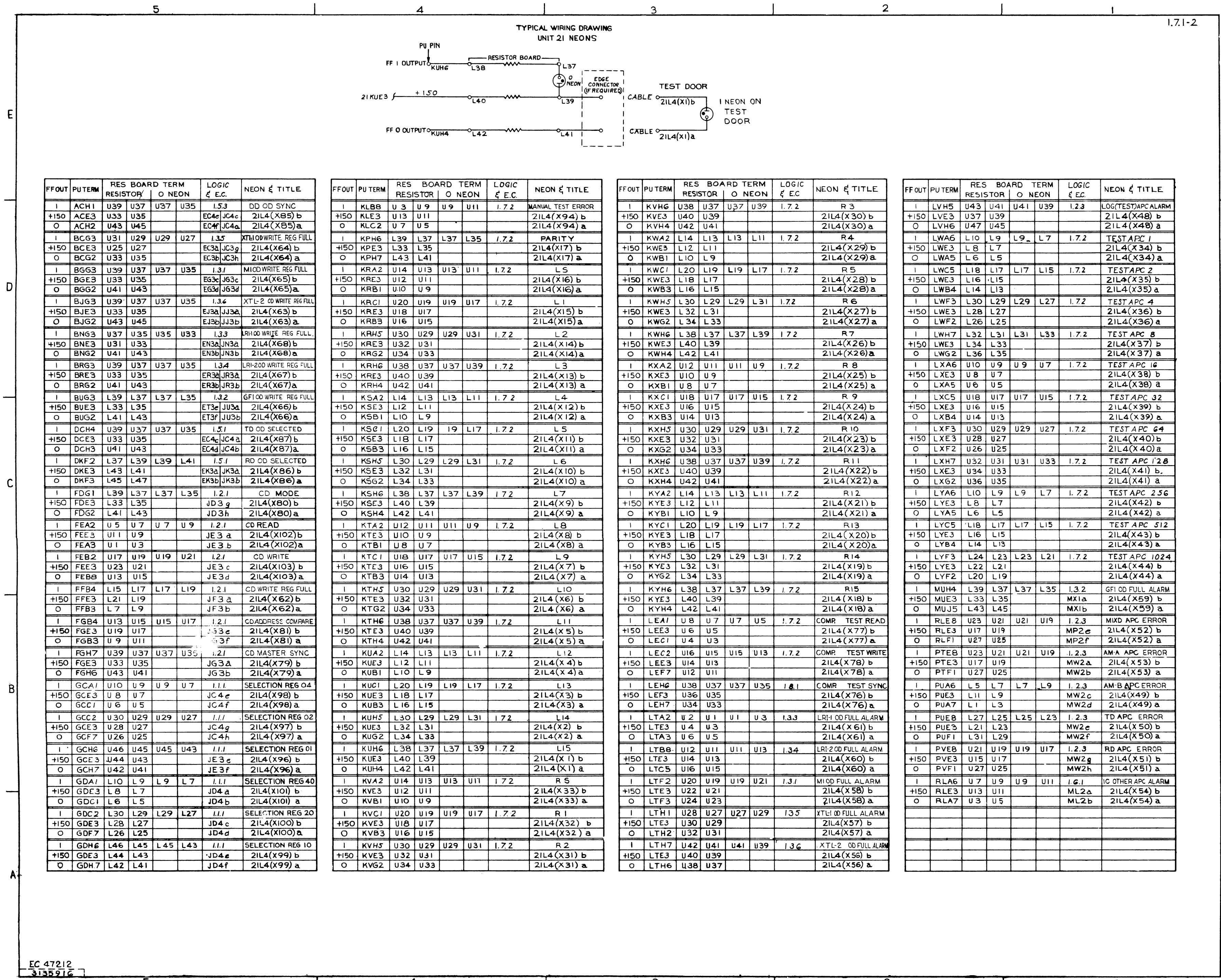
CHART 1
DIGITAL DISPLAY READ CIRCUIT WIRING

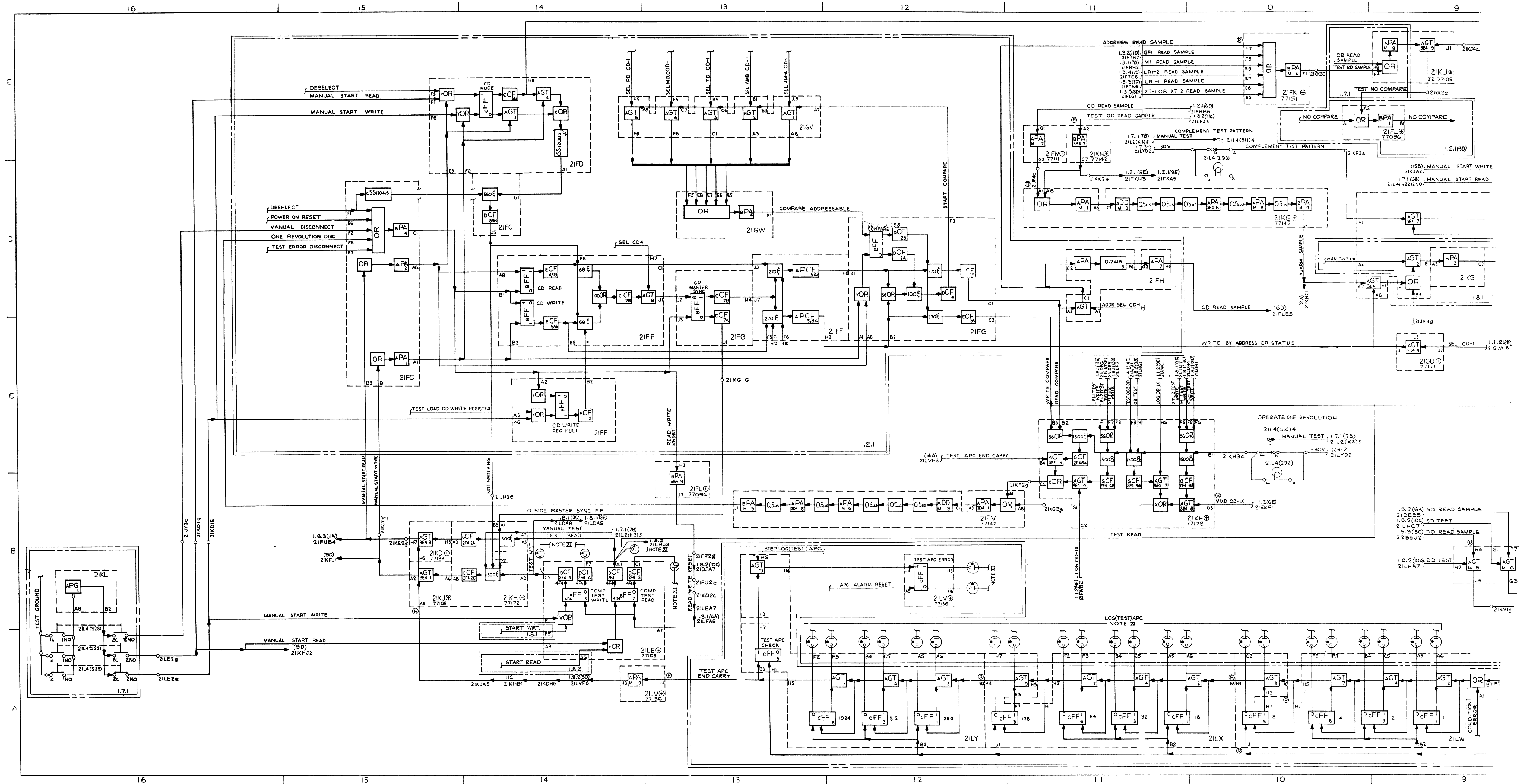
| BIT | HEAD PIN | AMP CONN | P PIN | BIT | HEAD PIN | AMP CONN | P PIN |
|-----|-------------|-------------|----------|-----|-------------|-------------|----------|
| L1 | DH3-3 | B6g | 22BGJ1 | R1 | DH19-3 | B6r | 22BRJ1 |
| L2 | DH4-3 | B7g | GJ2 | R2 | DH20-3 | B7r | RJ2 |
| L3 | DH5-3 | B6h | GJ2 | R3 | DH21-3 | B6t | SJ1 |
| L4 | DH6-3 | B7h | GJ2 | R4 | DH22-3 | B7t | SJ2 |
| L5 | DH7-3 | B3a | JJ1 | R5 | DH23-3 | B6v | TJ1 |
| L6 | DH8-3 | B3b | JJ2 | R6 | DH24-3 | B6w | TJ2 |
| L7 | DH9-3 | B2c | KJ1 | R7 | DH25-3 | B3l | UJ1 |
| L8 | DH10-3 | B3d | KJ2 | R8 | DH26-3 | B3m | UJ2 |
| L9 | DH11-3 | B3e | LJ1 | R9 | DH27-3 | B3n | VJ1 |
| L10 | DH12-3 | B3f | LJ2 | R10 | DH28-3 | B3p | VJ2 |
| L11 | DH13-3 | B3g | MJ1 | R11 | DH29-3 | B3r | WJ1 |
| L12 | DH14-3 | B3h | MJ2 | R12 | DH30-3 | B3s | WJ2 |
| L13 | DH15-3 | B6j | NJ1 | | | | |
| L14 | DH16-3 | B6m | NJ2 | | | | |

NOTES:
II SEE CHART B FOR OUTPUT WIRING.
III SEE CHART I FOR WIRING FROM DRUM HEADS TO READ
CIRCUIT PLUGGABLE UNIT PINS.
X REFER TO LOGIC DWG 1.7.1-2



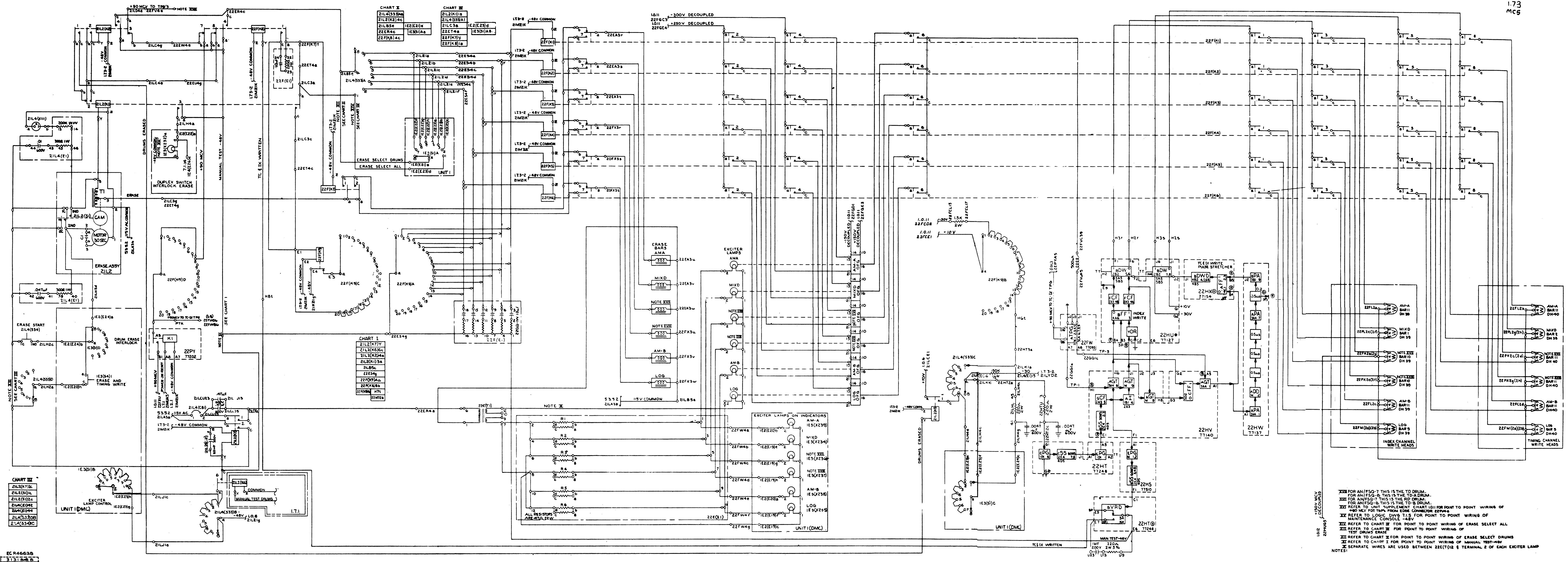


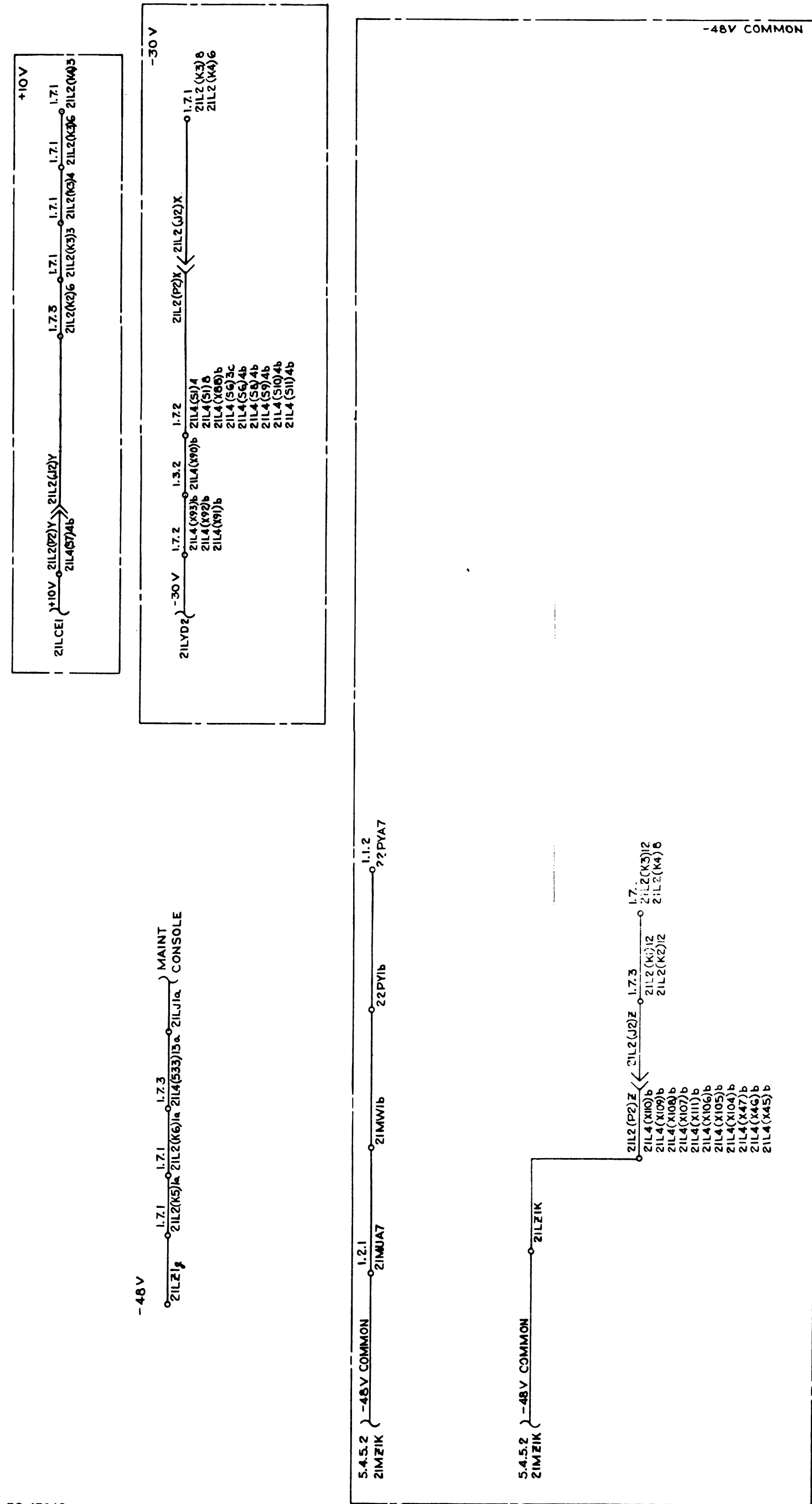






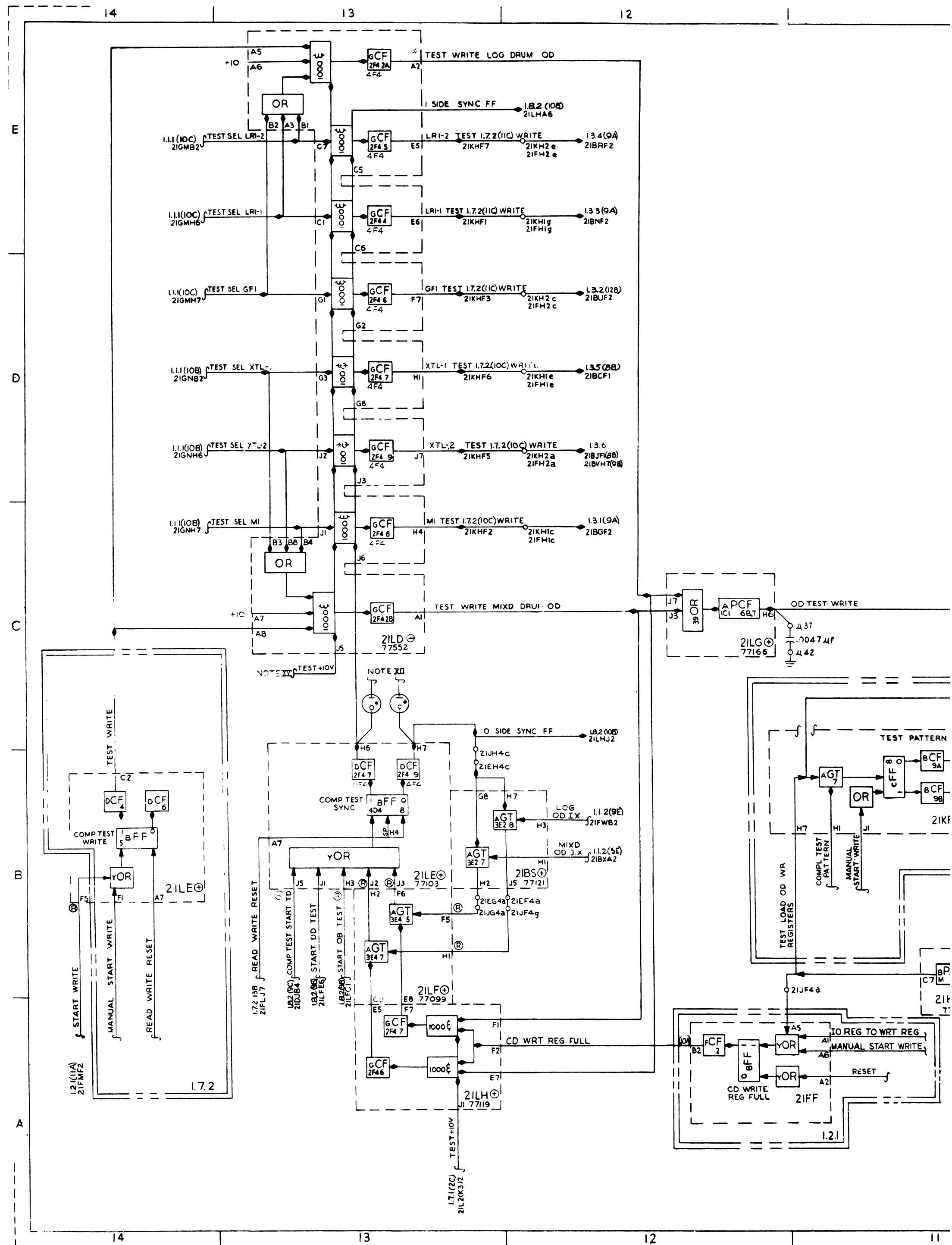


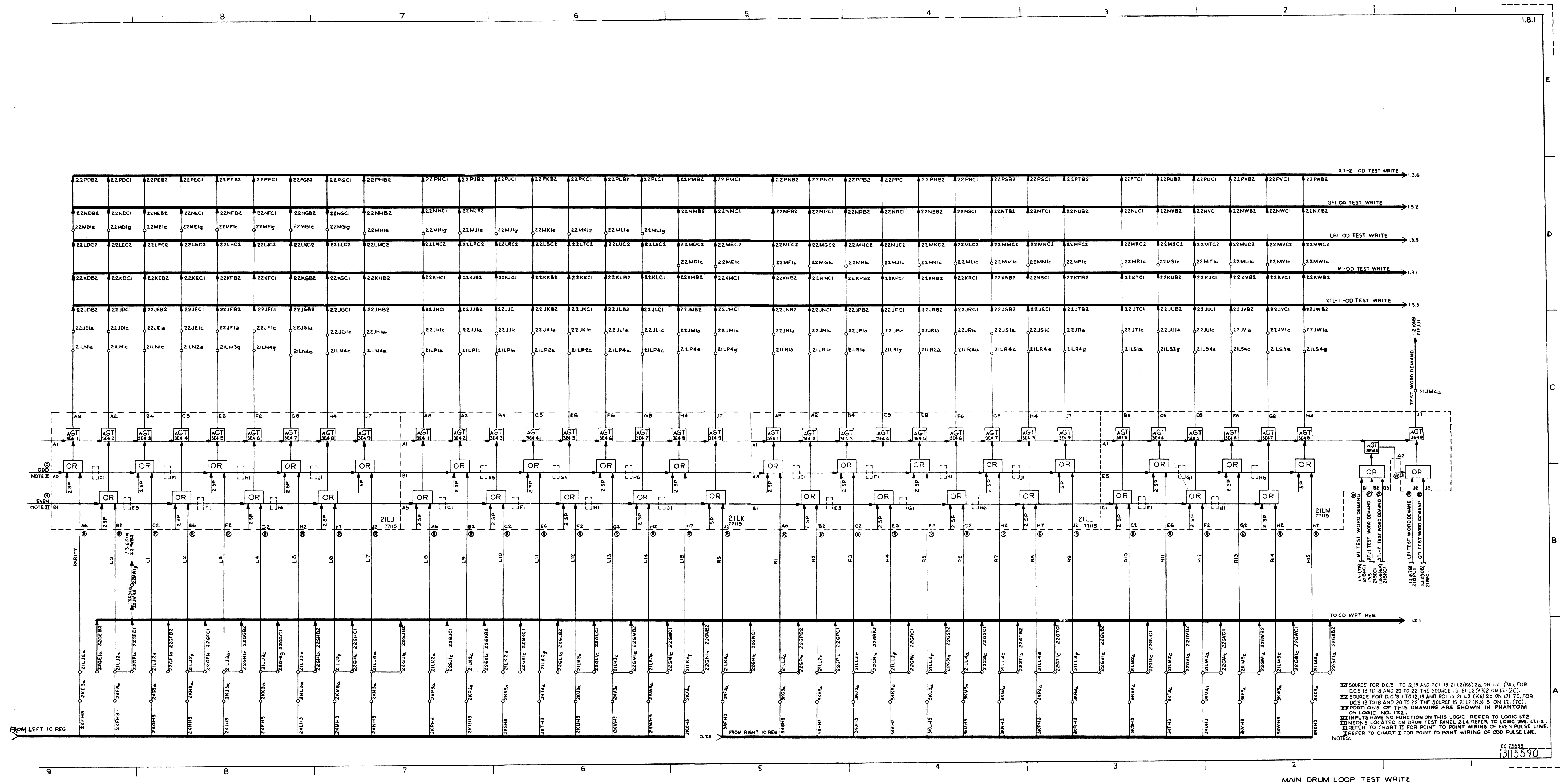




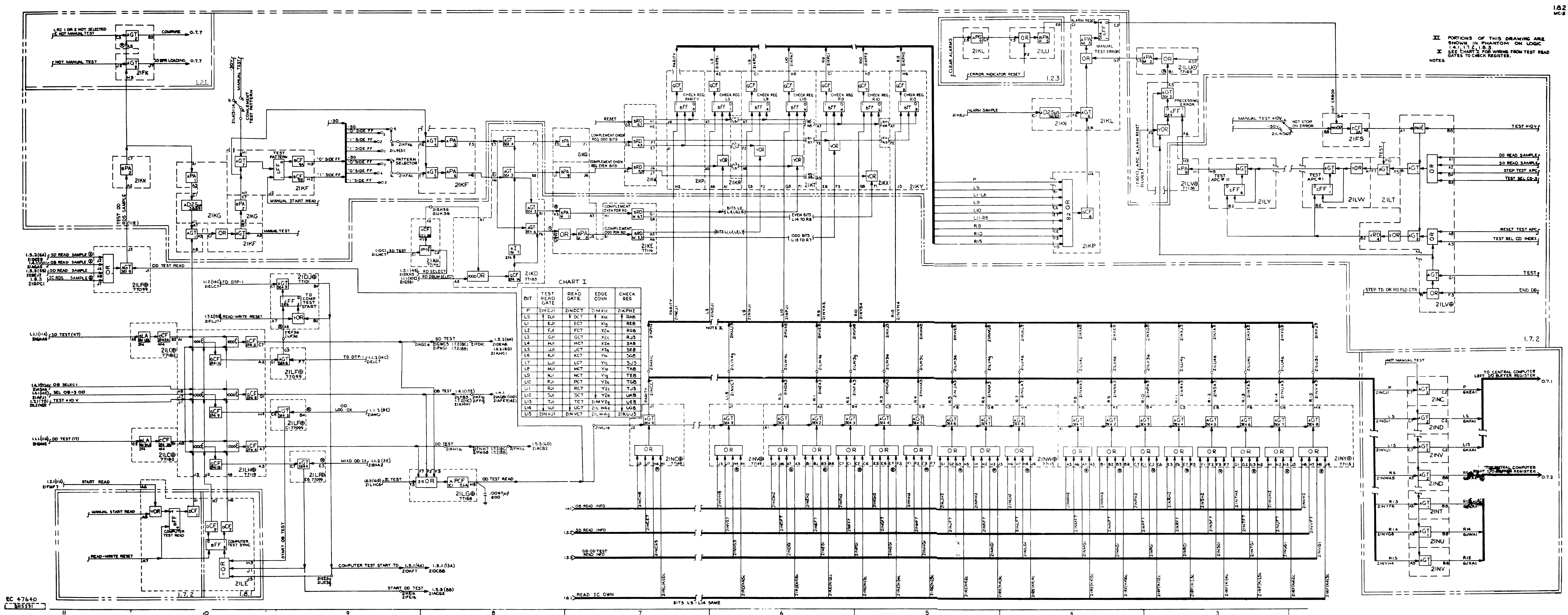
COMMON & SPECIAL SERVICE WIRING

1.7.3-2
MC-5

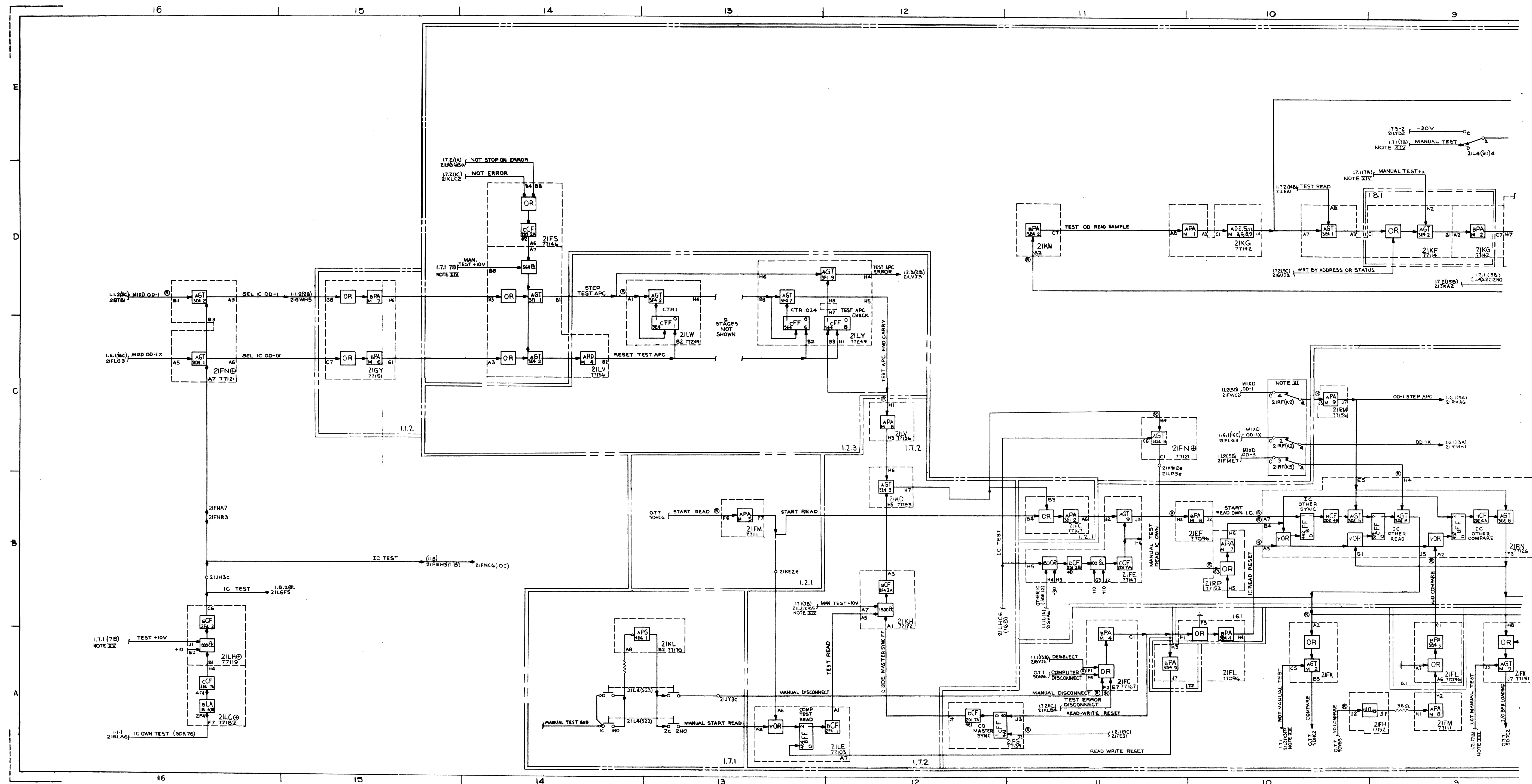




MAIN DRUM LOOP TEST WRITE



MAIN DRUM LOOP TEST READ



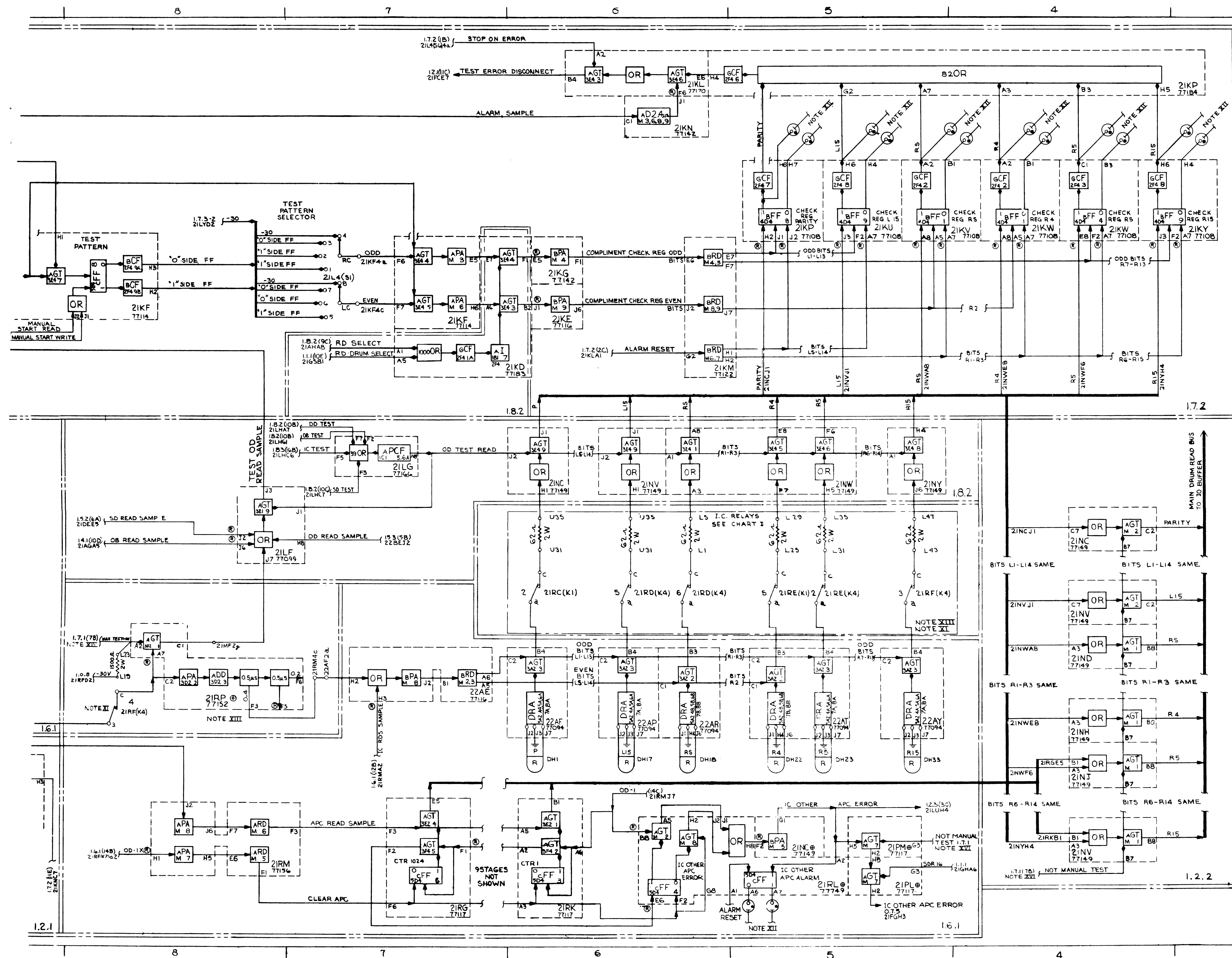


CHART 1

| BIT | IC RELAY | RESISTOR BOARD ZIR | TO RESISTOR FROM RESISTOR | PU PIN |
|------|-----------|--------------------|---------------------------|--------|
| P | C(K1)2C | CU31 | CU35 | CH1 |
| L5 | C(K1)3C | DL31 | DL35 | DH1 |
| L1 | C(K1)4C | EU31 | EU35 | EH1 |
| L2 | C(K1)5C | FL31 | FL35 | FH1 |
| L3 | C(K1)6C | GU31 | GU35 | GH1 |
| L4 | C(K1)7C | HL31 | HL35 | HH1 |
| L5 | C(K1)8C | JU31 | JU35 | JH1 |
| L6 | C(K1)9C | KL31 | KL35 | KH1 |
| L7 | C(K1)10C | LU31 | LU35 | LH1 |
| L8 | C(K1)11C | ML31 | ML35 | MH1 |
| L9 | C(K1)12C | NU31 | NU35 | NH1 |
| L10 | C(K1)13C | PL31 | PL35 | PH1 |
| L11 | C(K1)14C | RU31 | RU35 | RH1 |
| L12 | C(K1)15C | SL31 | SL35 | SH1 |
| L13 | C(K1)16C | TU31 | TU35 | TH1 |
| L14 | C(K1)17C | VU31 | VU35 | VH1 |
| L15 | C(K1)18C | WL31 | WL35 | WH1 |
| L16 | C(K1)19C | XL31 | XL35 | XH1 |
| L17 | C(K1)20C | YL31 | YL35 | YH1 |
| L18 | C(K1)21C | ZL31 | ZL35 | ZH1 |
| L19 | C(K1)22C | AA31 | AA35 | AAH1 |
| L20 | C(K1)23C | BB31 | BB35 | BBH1 |
| L21 | C(K1)24C | CC31 | CC35 | CCH1 |
| L22 | C(K1)25C | DD31 | DD35 | DDH1 |
| L23 | C(K1)26C | EE31 | EE35 | EEH1 |
| L24 | C(K1)27C | FF31 | FF35 | FFH1 |
| L25 | C(K1)28C | GG31 | GG35 | GGH1 |
| L26 | C(K1)29C | HH31 | HH35 | HHH1 |
| L27 | C(K1)30C | II31 | II35 | IIH1 |
| L28 | C(K1)31C | JJ31 | JJ35 | JJH1 |
| L29 | C(K1)32C | KK31 | KK35 | KKH1 |
| L30 | C(K1)33C | LL31 | LL35 | LLH1 |
| L31 | C(K1)34C | MM31 | MM35 | MMH1 |
| L32 | C(K1)35C | NN31 | NN35 | NNH1 |
| L33 | C(K1)36C | OO31 | OO35 | OOH1 |
| L34 | C(K1)37C | PP31 | PP35 | PPH1 |
| L35 | C(K1)38C | QQ31 | QQ35 | QQH1 |
| L36 | C(K1)39C | RR31 | RR35 | RRH1 |
| L37 | C(K1)40C | SS31 | SS35 | SSH1 |
| L38 | C(K1)41C | TT31 | TT35 | TTH1 |
| L39 | C(K1)42C | UU31 | UU35 | UUH1 |
| L40 | C(K1)43C | VV31 | VV35 | VVH1 |
| L41 | C(K1)44C | WW31 | WW35 | WWH1 |
| L42 | C(K1)45C | XX31 | XX35 | XXH1 |
| L43 | C(K1)46C | YY31 | YY35 | YYH1 |
| L44 | C(K1)47C | ZZ31 | ZZ35 | ZZH1 |
| L45 | C(K1)48C | AA31 | AA35 | AAH1 |
| L46 | C(K1)49C | BB31 | BB35 | BBH1 |
| L47 | C(K1)50C | CC31 | CC35 | CCH1 |
| L48 | C(K1)51C | DD31 | DD35 | DDH1 |
| L49 | C(K1)52C | EE31 | EE35 | EEH1 |
| L50 | C(K1)53C | FF31 | FF35 | FFH1 |
| L51 | C(K1)54C | GG31 | GG35 | GGH1 |
| L52 | C(K1)55C | HH31 | HH35 | HHH1 |
| L53 | C(K1)56C | II31 | II35 | IIH1 |
| L54 | C(K1)57C | JJ31 | JJ35 | JJH1 |
| L55 | C(K1)58C | KK31 | KK35 | KKH1 |
| L56 | C(K1)59C | LL31 | LL35 | LLH1 |
| L57 | C(K1)60C | MM31 | MM35 | MMH1 |
| L58 | C(K1)61C | NN31 | NN35 | NNH1 |
| L59 | C(K1)62C | OO31 | OO35 | OOH1 |
| L60 | C(K1)63C | PP31 | PP35 | PPH1 |
| L61 | C(K1)64C | QQ31 | QQ35 | QQH1 |
| L62 | C(K1)65C | RR31 | RR35 | RRH1 |
| L63 | C(K1)66C | SS31 | SS35 | SSH1 |
| L64 | C(K1)67C | TT31 | TT35 | TTH1 |
| L65 | C(K1)68C | UU31 | UU35 | UUH1 |
| L66 | C(K1)69C | VV31 | VV35 | VVH1 |
| L67 | C(K1)70C | WW31 | WW35 | WWH1 |
| L68 | C(K1)71C | XX31 | XX35 | XXH1 |
| L69 | C(K1)72C | YY31 | YY35 | YYH1 |
| L70 | C(K1)73C | ZZ31 | ZZ35 | ZZH1 |
| L71 | C(K1)74C | AA31 | AA35 | AAH1 |
| L72 | C(K1)75C | BB31 | BB35 | BBH1 |
| L73 | C(K1)76C | CC31 | CC35 | CCH1 |
| L74 | C(K1)77C | DD31 | DD35 | DDH1 |
| L75 | C(K1)78C | EE31 | EE35 | EEH1 |
| L76 | C(K1)79C | FF31 | FF35 | FFH1 |
| L77 | C(K1)80C | GG31 | GG35 | GGH1 |
| L78 | C(K1)81C | HH31 | HH35 | HHH1 |
| L79 | C(K1)82C | II31 | II35 | IIH1 |
| L80 | C(K1)83C | JJ31 | JJ35 | JJH1 |
| L81 | C(K1)84C | KK31 | KK35 | KKH1 |
| L82 | C(K1)85C | LL31 | LL35 | LLH1 |
| L83 | C(K1)86C | MM31 | MM35 | MMH1 |
| L84 | C(K1)87C | NN31 | NN35 | NNH1 |
| L85 | C(K1)88C | OO31 | OO35 | OOH1 |
| L86 | C(K1)89C | PP31 | PP35 | PPH1 |
| L87 | C(K1)90C | QQ31 | QQ35 | QQH1 |
| L88 | C(K1)91C | RR31 | RR35 | RRH1 |
| L89 | C(K1)92C | SS31 | SS35 | SSH1 |
| L90 | C(K1)93C | TT31 | TT35 | TTH1 |
| L91 | C(K1)94C | UU31 | UU35 | UUH1 |
| L92 | C(K1)95C | VV31 | VV35 | VVH1 |
| L93 | C(K1)96C | WW31 | WW35 | WWH1 |
| L94 | C(K1)97C | XX31 | XX35 | XXH1 |
| L95 | C(K1)98C | YY31 | YY35 | YYH1 |
| L96 | C(K1)99C | ZZ31 | ZZ35 | ZZH1 |
| L97 | C(K1)100C | AA31 | AA35 | AAH1 |
| L98 | C(K1)101C | BB31 | BB35 | BBH1 |
| L99 | C(K1)102C | CC31 | CC35 | CCH1 |
| L100 | C(K1)103C | DD31 | DD35 | DDH1 |

XVI SOURCE FOR +10 NOT MANUAL TEST DC-13 THRU 18 AND 20 THRU 22 2IL2(K3)7 DC-1 THRU 12/19 PC-1 AND CC-1 THRU 3 2IL2(K6)3a
 XV SOURCE FOR TEST +10 DC-13 THRU 18 AND 20 THRU 22 2IL2(K3)2 DC-1 THRU 12/19 PC-1 AND CC-1 THRU 3 2IL2(K6)3a
 XIV SOURCE FOR +10 IN MANUAL TEST DC-13 THRU 18 AND 20 THRU 22 2IL2(K3)5 DC-1 THRU 12/19 PC-1 AND CC-1 THRU 3 2IL2(K6)2C
 XIII THIS IS NOT A PHANTOM AREA
 XII ALL RELAYS ARE SHOWN IN THE ENERGIZED POSITION FOR TEST PURPOSES
 XI DOES NOT APPLY TO THIS LOGIC
 NOTES



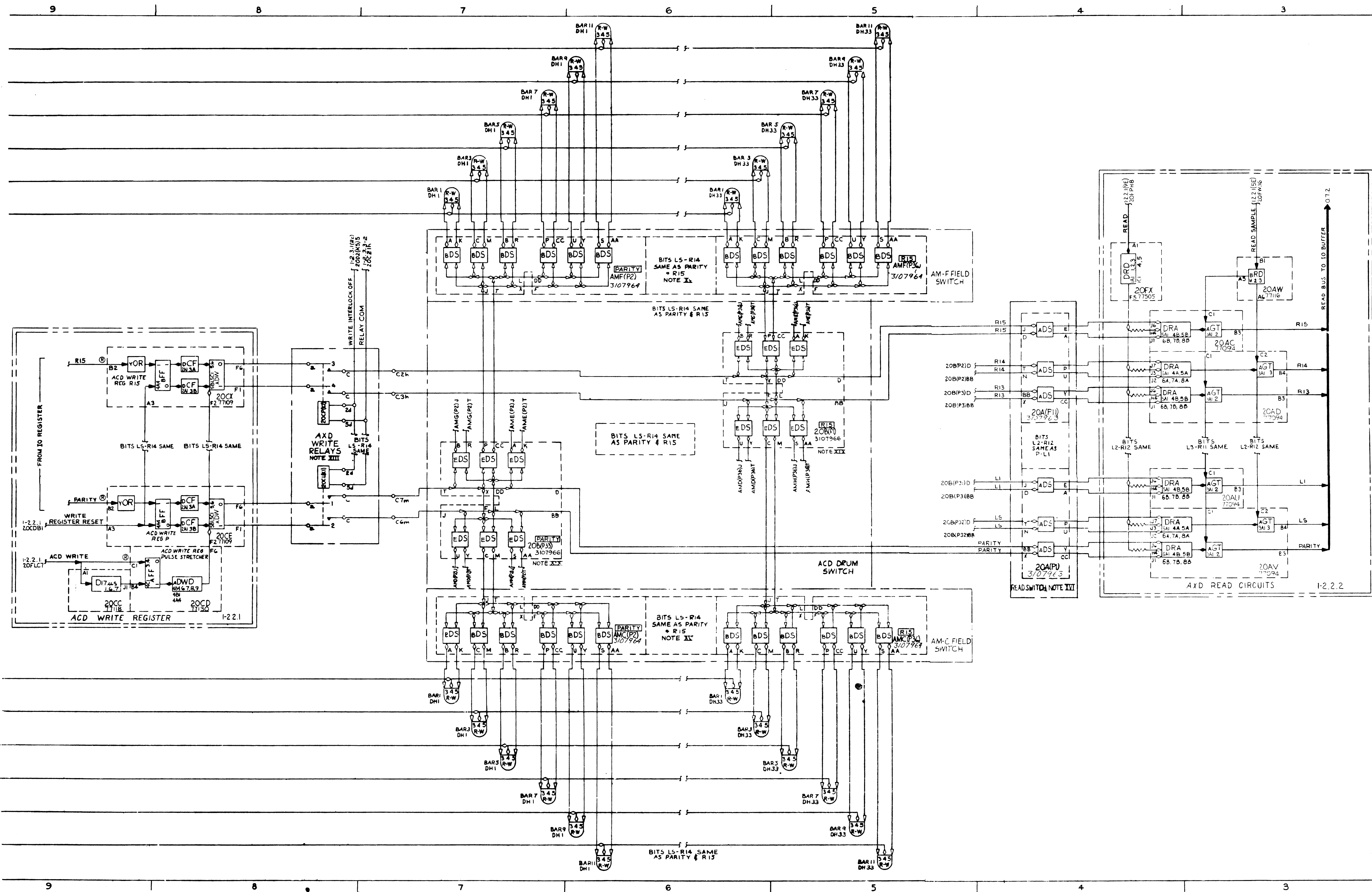
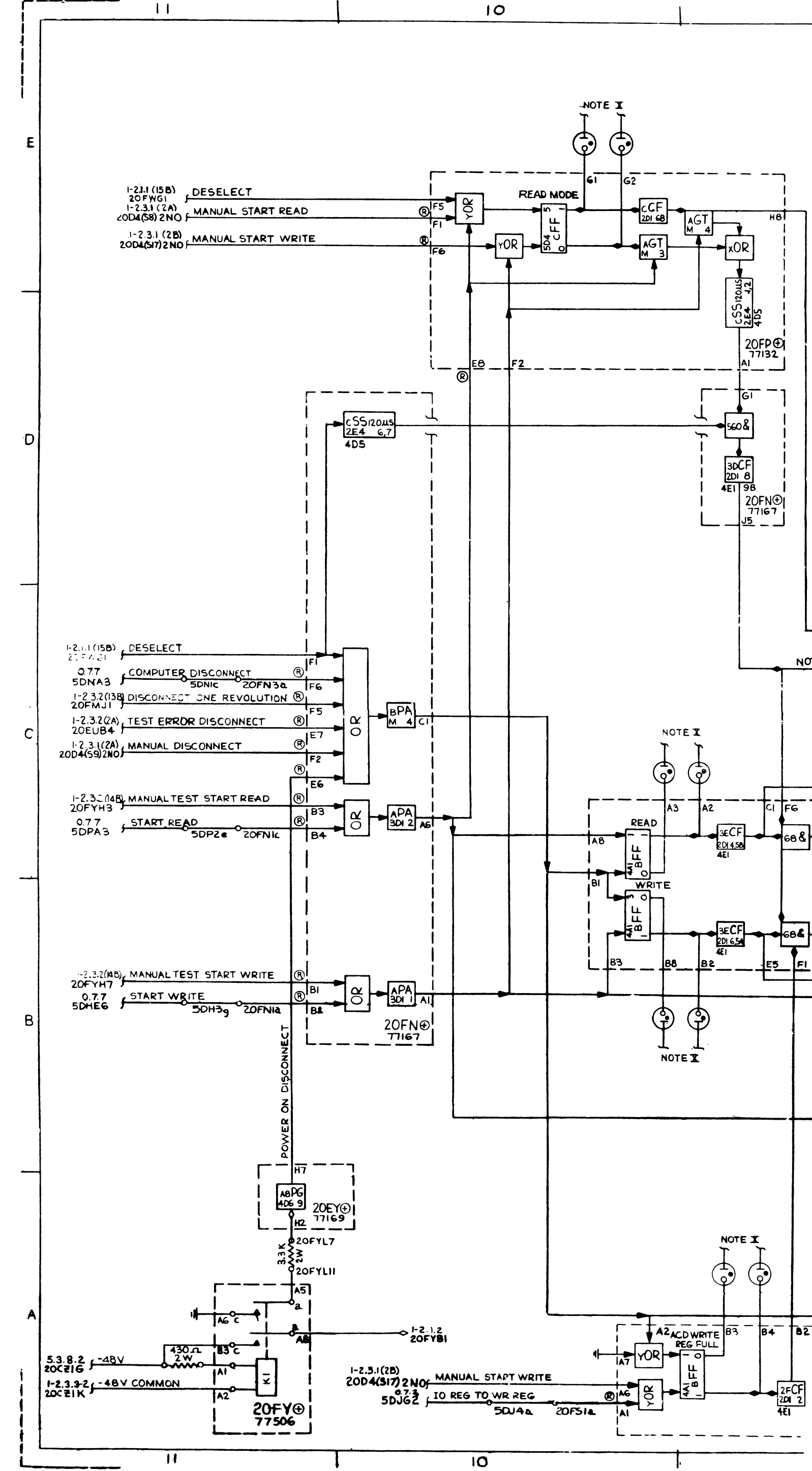
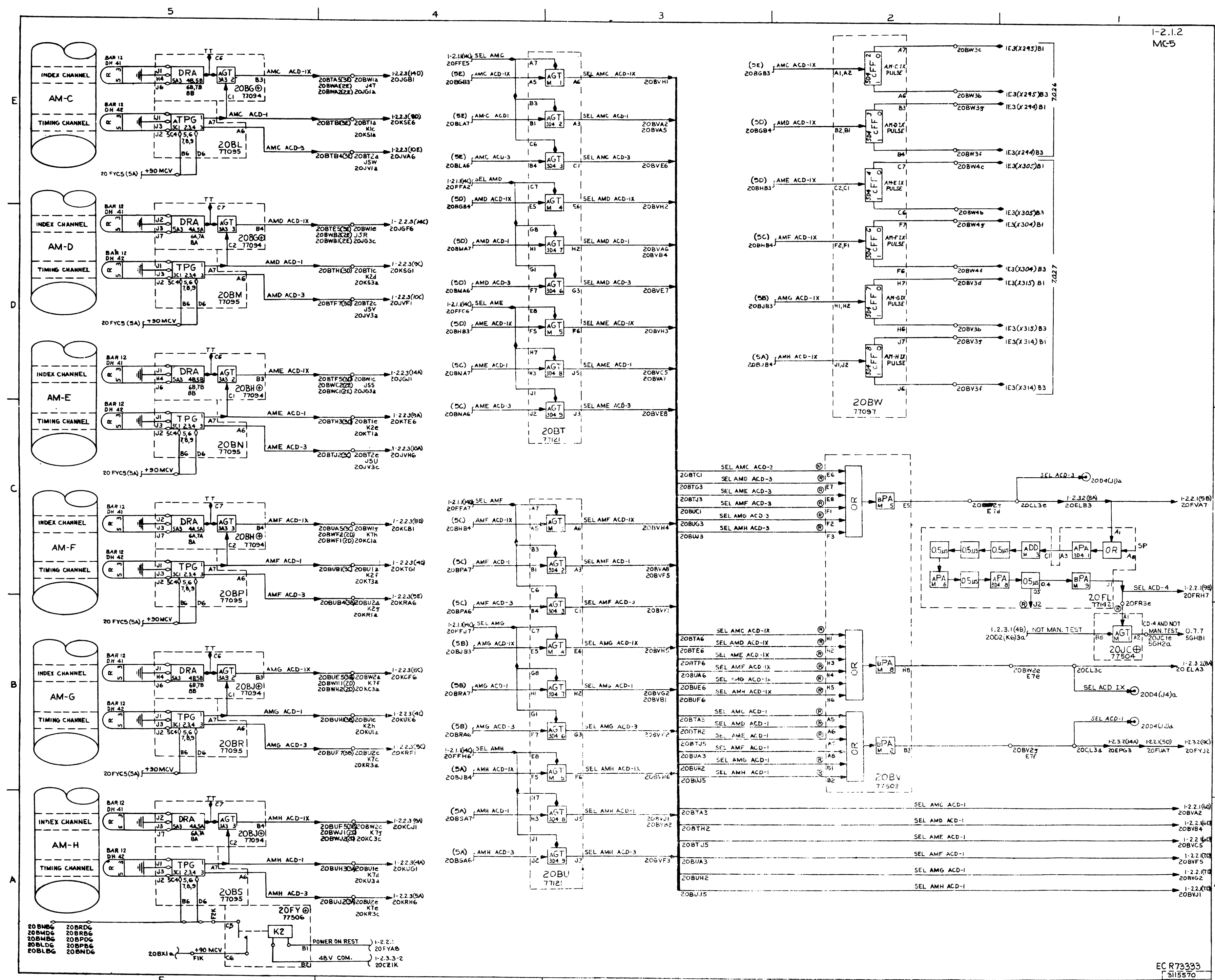


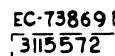
CHART II

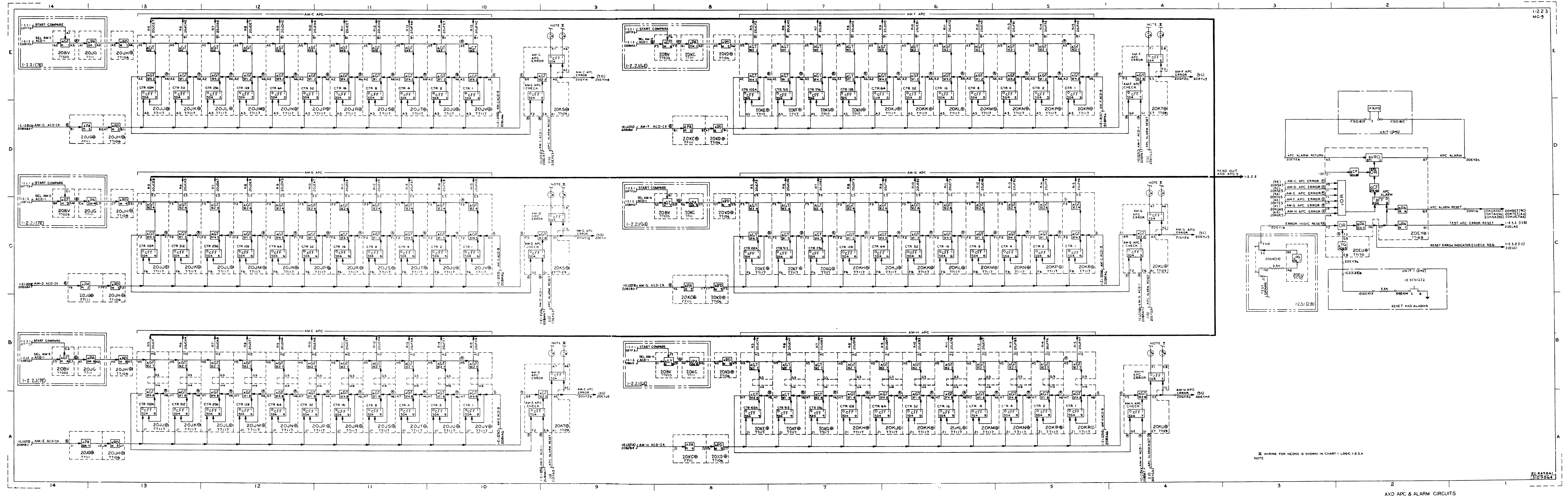
| BIT | READ SW. 20A | READ CIRCUIT | BIT | READ SW. 20A | READ CIRCUIT |
|-----|--------------|--------------|-----|--------------|--------------|
| R15 | 0 | ACJ1 | R5 | 0 | ALJ2 |
| R14 | 0 | ACJ6 | R4 | 0 | ALJ7 |
| R13 | 0 | ADJ2 | R3 | 0 | ALJ1 |
| R12 | 0 | ADJ7 | R2 | 0 | ALJ6 |
| R11 | 0 | ADJ1 | R1 | 0 | AMJ2 |
| R10 | 0 | ADJ6 | P1 | 0 | AMJ7 |
| R9 | 0 | AEJ2 | P2 | 0 | AMJ1 |
| R8 | 0 | AEJ7 | P3 | 0 | AMJ6 |
| R7 | 0 | AEJ1 | P4 | 0 | AMJ2 |
| R6 | 0 | AEJ6 | P5 | 0 | AMJ7 |
| R5 | 0 | AFJ2 | P6 | 0 | ANJ1 |
| R4 | 0 | AFJ7 | P7 | 0 | ANJ6 |
| R3 | 0 | AFJ1 | P8 | 0 | APJ2 |
| R2 | 0 | AFJ6 | P9 | 0 | APJ7 |
| R1 | 0 | AGJ2 | P10 | 0 | APJ1 |
| P1 | 0 | AGJ7 | P11 | 0 | APJ6 |
| P2 | 0 | AGJ1 | P12 | 0 | ARJ2 |
| P3 | 0 | AGJ6 | P13 | 0 | ARJ7 |
| P4 | 0 | AHJ2 | P14 | 0 | ARJ1 |
| P5 | 0 | AHJ7 | P15 | 0 | ARJ6 |
| P6 | 0 | AHJ1 | P16 | 0 | ASJ2 |
| P7 | 0 | AHJ6 | P17 | 0 | ASJ7 |
| P8 | 0 | AJJ2 | P18 | 0 | ASJ1 |
| P9 | 0 | AJJ7 | P19 | 0 | ASJ6 |
| P10 | 0 | AJJ1 | P20 | 0 | ATJ2 |
| P11 | 0 | AJJ6 | P21 | 0 | ATJ7 |
| P12 | 0 | AKJ2 | P22 | 0 | ATJ1 |
| P13 | 0 | AKJ7 | P23 | 0 | ATJ6 |
| P14 | 0 | AKJ1 | P24 | 0 | AUJ2 |
| P15 | 0 | AKJ6 | P25 | 0 | AUJ7 |
| P16 | 0 | | P26 | 0 | AUJ1 |
| P17 | 0 | | P27 | 0 | AUJ6 |
| P18 | 0 | | P28 | 0 | AVJ2 |
| P19 | 0 | | P29 | 0 | AVJ7 |
| P20 | 0 | | P30 | 0 | AVJ1 |
| P21 | 0 | | P31 | 0 | AVJ6 |
| P22 | 0 | | P32 | 0 | |

- NOTES:
- XXIX THE CIRCUIT SCHEMATIC AND BLOCK DIAGRAM FOR PART NO. 3107966 IS 3107976.
 - XXX PORTIONS OF THIS DRAWING APPEAR IN PHANTOM ON LOGIC 1-2.2.1
 - XXXI COMMON INPUTS TO AND CIRCUITS ARE WIRED INTERNALLY.
 - XXII REFER TO CHART II FOR LOCATION OF READ SWITCH CANS AND READ CIRCUIT INPUT CONNECTIONS.
 - XXIII REFER TO CHART I FOR LOCATION OF FIELD SWITCH CANS FOR ALL DRUMS. FIELD SWITCH FOR AM-C, E, G, H DRUMS IS IDENTICAL TO AM-C, K, AM-F DRUMS.
 - XXIV DRUM SWITCH CANS ARE NUMBERED IN SEQUENCE P33 FOR PARITY TO P1 FOR R15.
 - XXV REFER TO CHART I FOR WIRING BETWEEN DRUM WRITERS AND DRUM SWITCH CANS.
 - XXVI SHIELDED TWISTED PAIR WIRE USED FROM EDGE CONNECTOR TO HEAD RECEPTACLE 36. RECEPTABLES ON EACH BAR ARE JUMPED TOGETHER, FROM 36 TO 1. RECEPTABLES 34 TO 36 ARE SPARE.
 - XXVII REFER TO LOGIC DRAWING 1-2.3.2-1
 - XXVIII REFER TO LOGIC DWG 7.16 FOR MAINTENANCE CONSOLE GROUND LOOP WIRING

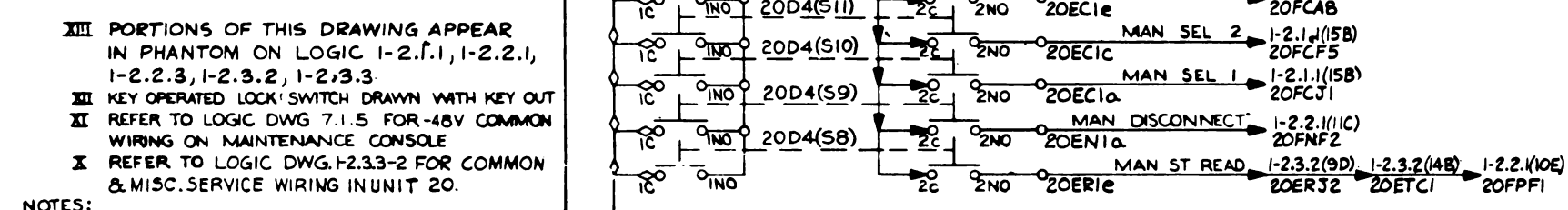








AXD APC & ALARM CIRCUITS



3

2

1

ADVANCE

1-2.3.1-2

E

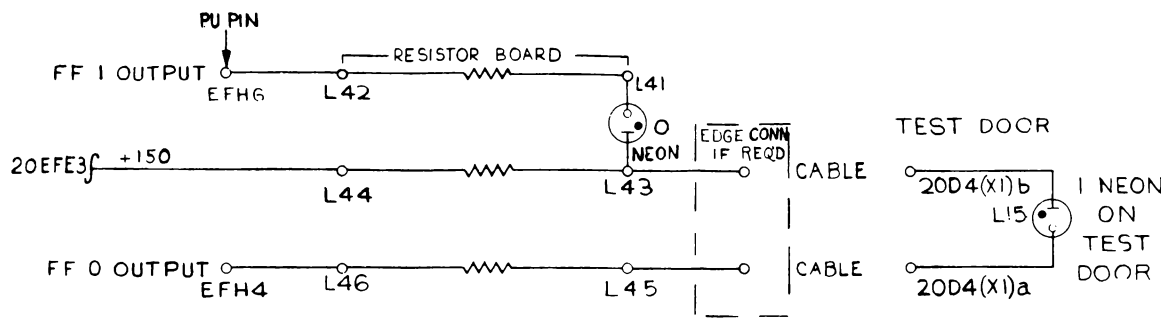
D

C

B

A

TYPICAL WIRING DRAWING
UNIT 20 - NEONS

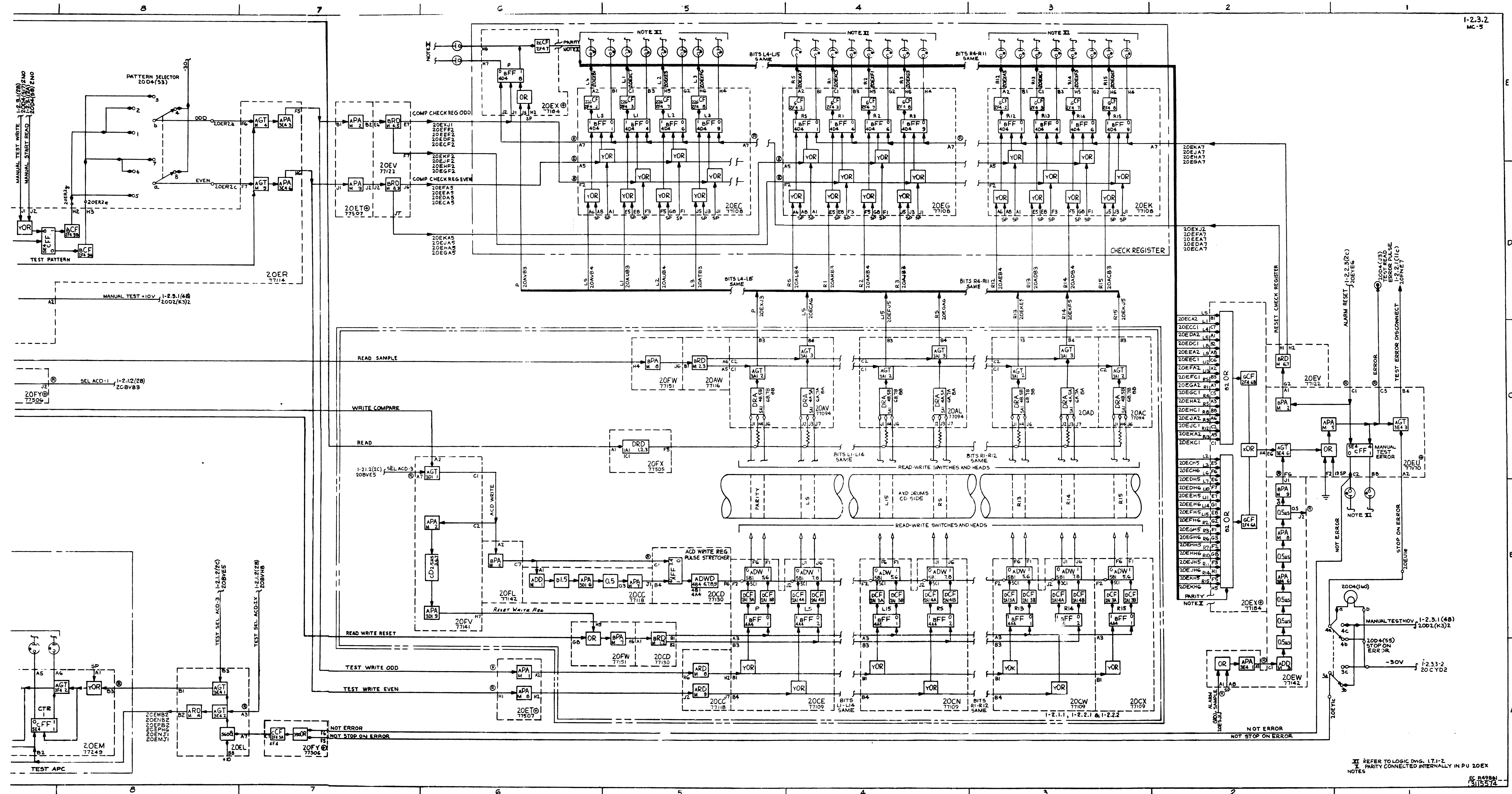


| FF OUT | PU TERM | RES RESISTOR | BOARD TERM | LOGIC & E.C. | NEON & TITLE |
|--------|---------|--------------|------------|--------------|--------------|
| I | ECA2 | U18 | U17 | U9 | L5 |
| +150 | ECE3 | U10 | U9 | | 20D4(X16)b |
| O | ECB1 | U12 | U11 | | 20D4(X16)a |
| I | ECC1 | U16 | U15 | U17 | L1 |
| +150 | ECE3 | U18 | U17 | | 20D4(X15)b |
| O | ECB3 | U20 | U19 | | 20D4(X15)a |
| I | ECH7 | U34 | U33 | U35 | L2 |
| +150 | ECE3 | U36 | U35 | | 20D4(X14)b |
| O | ECG2 | U38 | U37 | | 20D4(X14)a |
| I | ELHG | U42 | U41 | U43 | L3 |
| +150 | ECE3 | U44 | U43 | | 20D4(X13)b |
| O | ECH4 | U46 | U45 | | 20D4(X13)a |
| I | ECA2 | L8 | L7 | L9 | L4 |
| +150 | EDE3 | L10 | L9 | | 20D4(X12)b |
| O | EDB1 | L12 | L11 | | 20D4(X12)a |
| I | EDC1 | L16 | L15 | L17 | L5 |
| +150 | EDE3 | L18 | L17 | | 20D4(X11)b |
| O | EDB3 | L20 | L19 | | 20D4(X11)a |
| I | EDH7 | L34 | L33 | L35 | L6 |
| +150 | EDE3 | L36 | L35 | | 20D4(X10)b |
| O | EDG2 | L38 | L37 | | 20D4(X10)a |
| I | EDH7 | L42 | L41 | L43 | L7 |
| +150 | EDE3 | L44 | L43 | | 20D4(X9)b |
| O | EDH4 | L46 | L45 | | 20D4(X9)a |
| I | EEA2 | U8 | U7 | U9 | L8 |
| +150 | EEE3 | U10 | U9 | | 20D4(X8)b |
| O | EEB1 | U12 | U11 | | 20D4(X8)a |
| I | EEC1 | U16 | U15 | U17 | L9 |
| +150 | EEE3 | U18 | U17 | | 20D4(X7)b |
| O | EEB3 | U20 | U19 | | 20D4(X7)a |
| I | EEH5 | U34 | U33 | U35 | L10 |
| +150 | EEE3 | U36 | U35 | | 20D4(X6)b |
| O | EEG2 | U38 | U37 | | 20D4(X6)a |
| I | EEH7 | U42 | U41 | U43 | L11 |
| +150 | EEE3 | U44 | U43 | | 20D4(X5)b |
| O | EEH4 | U46 | U45 | | 20D4(X5)a |
| I | EFA2 | L8 | L7 | L9 | L12 |
| +150 | EFE3 | L10 | L9 | | 20D4(X4)b |
| O | EFB1 | L12 | L11 | | 20D4(X4)a |
| I | EFB1 | L16 | L15 | L17 | L13 |
| +150 | EFE3 | L18 | L17 | | 20D4(X3)b |
| O | EFB3 | L20 | L19 | | 20D4(X3)a |
| I | EFH5 | L34 | L33 | L35 | L14 |
| +150 | EFE3 | L36 | L35 | | 20D4(X2)b |
| O | EFG2 | L38 | L37 | | 20D4(X2)a |
| I | EFH7 | L42 | L41 | L43 | L15 |
| +150 | EFE3 | L44 | L43 | | 20D4(X1)b |
| O | EFH4 | L46 | L45 | | 20D4(X1)a |
| I | EGA2 | U8 | U7 | U9 | R5 |
| +150 | EGE3 | U10 | U9 | | 20D4(X3)b |
| O | EGB1 | U12 | U11 | | 20D4(X3)a |
| I | EGC1 | U16 | U15 | U17 | R1 |
| +150 | EGE3 | U18 | U17 | | 20D4(X32)b |
| O | EGB3 | U20 | U19 | | 20D4(X32)a |
| I | EGH5 | U34 | U33 | U35 | R2 |
| +150 | EGE3 | U36 | U35 | | 20D4(X31)b |
| O | EGG2 | U38 | U37 | | 20D4(X31)a |
| I | EGH6 | U42 | U41 | U43 | R3 |
| +150 | EGE3 | U44 | U43 | | 20D4(X30)b |
| O | EGH4 | U46 | U45 | | 20D4(X30)a |
| I | EH A2 | L8 | L7 | L9 | R4 |
| +150 | EHE3 | L10 | L9 | | 20D4(X29)b |
| O | EH B1 | L12 | L11 | | 20D4(X29)a |

| FF OUT | PU TERM | RES RESISTOR | BOARD TERM | LOGIC & E.C. | NEON & TITLE |
|--------|---------|--------------|------------|--------------|----------------|
| I | EHC1 | L16 | L15 | L17 | R5 |
| +150 | EHE3 | L18 | L17 | | 20D4(X28)b |
| O | EH B3 | L20 | L19 | | 20D4(X28)a |
| I | EH H5 | L34 | L33 | L35 | R6 |
| +150 | EHE3 | L36 | L35 | | 20D4(X27)b |
| O | EH G2 | L38 | L37 | | 20D4(X27)a |
| I | EH H7 | L42 | L41 | L43 | R7 |
| +150 | EHE3 | L44 | L43 | | 20D4(X26)b |
| O | EH H4 | L46 | L45 | | 20D4(X26)a |
| I | EJA2 | U8 | U7 | U9 | R8 |
| +150 | EJE3 | U10 | U9 | | 20D4(X25)b |
| O | EJB1 | U12 | U11 | | 20D4(X25)a |
| I | EJC1 | U16 | U15 | U17 | R9 |
| +150 | EJE3 | U18 | U17 | | 20D4(X24)b |
| O | EJB3 | U20 | U19 | | 20D4(X24)a |
| I | EJH5 | U34 | U33 | U35 | R10 |
| +150 | EJE3 | U36 | U35 | | 20D4(X23)b |
| O | EJG2 | U38 | U37 | | 20D4(X23)a |
| I | EJH7 | U42 | U41 | U43 | R11 |
| +150 | EJE3 | U44 | U43 | | 20D4(X22)b |
| O | EJH4 | U46 | U45 | | 20D4(X22)a |
| I | EKA2 | L8 | L7 | L9 | R12 |
| +150 | EKE3 | L10 | L9 | | 20D4(X21)b |
| O | EKB1 | L12 | L11 | | 20D4(X21)a |
| I | EKC1 | L16 | L15 | L17 | R13 |
| +150 | EKE3 | L18 | L17 | | 20D4(X20)b |
| O | EKB3 | L20 | L19 | | 20D4(X20)a |
| I | EKH5 | L34 | L33 | L35 | R14 |
| +150 | EKE3 | L36 | L35 | | 20D4(X19)b |
| O | ENG2 | L38 | L37 | | 20D4(X19)a |
| I | EKH6 | L42 | L41 | L43 | R15 |
| +150 | EKE3 | L44 | L43 | | 20D4(X18)b |
| O | EKH4 | L46 | L45 | | 20D4(X18)a |
| I | ELH5 | U40 | U39 | U41 | TEST APC ERROR |
| +150 | ELE3 | U42 | U41 | | 20D4(X48)b |
| O | ELH6 | U44 | U43 | | 20D4(X48)a |
| I | EMA6 | L4 | L3 | L5 | TEST APC 1 |
| +150 | EME3 | L6 | L5 | | 20D4(X34)b |
| O | EMA5 | L8 | L7 | | 20D4(X34)a |
| I | EMC5 | L14 | L13 | L15 | TEST APC 2 |
| +150 | EME3 | L16 | L15 | | 20D4(X35)b |
| O | EMB4 | L18 | L17 | | 20D4(X35)a |
| I | EMF3 | L26 | L25 | L27 | TEST APC 4 |
| +150 | EME3 | L28 | L27 | | 20D4(X36)b |
| O | EMF2 | L30 | L29 | | 20D4(X36)a |
| I | EMH7 | L34 | L33 | L35 | TEST APC 8 |
| +150 | EME3 | L36 | L35 | | 20D4(X37)b |
| O | EMG2 | L38 | L37 | | 20D4(X37)a |
| I | ENA6 | U2 | U1 | U3 | TEST APC 16 |
| +150 | ENE3 | U4 | U3 | | 20D4(X38)b |
| O | ENA5 | U6 | U5 | | 20D4(X38)a |
| I | ENC5 | U16 | U15 | U17 | TEST APC 32 |
| +150 | ENE3 | U18 | U17 | | 20D4(X39)b |
| O | ENB4 | U20 | U19 | | 20D4(X39)a |
| I | ENF3 | U26 | U25 | U27 | TEST APC 11 |
| +150 | ENE3 | U28 | U27 | | 20D4(X40)b |
| O | ENF2 | U30 | U29 | | 20D4(X40)a |
| I | ENH7 | U34 | U33 | U35 | TEST APC 18 |
| +150 | ENE3 | U36 | U35 | | 20D4(X41)b |
| O | ENG2 | U38 | U37 | | 20D4(X41)a |
| I | EPA6 | L2 | L1 | L3 | TEST APC 256 |
| +150 | EPE3 | L4 | L3 | | 20D4(X42)b |
| O | EPA5 | L6 | L5 | | 20D4(X42)a |
| I | EPC5 | L16 | L15 | L17 | TEST APC 512 |
| +150 | EPE3 | L18 | L17 | | 20D4(X43)b |
| O | EPB4 | L20 | L19 | | 20D4(X43)a |

| FF OUT | PU TERM | RES RESISTOR | BOARD TERM | LOGIC & E.C. | NEON & TITLE |
|--------|---------|--------------|------------|--------------|--------------------|
| I | EPF3 | L26 | L25 | L27 | TEST APC 128 |
| +150 | EPE3 | L28 | L27 | | 20D4(X44)b |
| O | EPF2 | L30 | L29 | | 20D4(X44)a |
| I | EUBB | L2 | L1 | L3 | NOT ERROR |
| +150 | EUE3 | L4 | L3 | | 20D4(X59)b |
| O | EUC2 | L6 | L5 | | 20D4(X59)a |
| I | EXH6 | U39 | U37 | U35 | PARITY |
| +150 | EXE3 | U33 | U35 | | 20D4(X17)b |
| O | EXH7 | U41 | U43 | | 20D4(X17)a |
| I | FCA1 | U10 | U9 | U11 | SEL REG 4 |
| +150 | FCE3 | U12 | U11 | | 20D4(X68)b |
| O | FCU1 | U14 | U13 | | 20D4(X68)a |
| I | FCC2 | U32 | U31 | U33 | SEL REG 2 |
| +150 | FCE3 | U34 | U33 | | 20D4(X67)b |
| O | FCF7 | U36 | U35 | | 20D4(X67)a |
| I | FCH6 | U44 | U43 | U45 | SEL REG 1 |
| +150 | FCE3 | U46 | U45 | | 20D4(X66)b |
| O | FCH7 | U48 | U47 | | 20D4(X66)a |
| I | FDA1 | L10 | L9 | L11 | SEL REG 40 |
| +150 | FDE3 | L12 | L11 | | 20D4(X71)b |
| O | FDC1 | L14 | L13 | | 20D4(X71)a |
| I | FDC2 | L32 | L31 | L33 | SEL REG 20 |
| +150 | FDE3 | L34 | L33 | | 20D4(X70)b |
| O | FDF7 | L36 | L35 | | 20D4(X70)a |
| I | FDH6 | L44 | L43 | L45 | SEL REG 10 |
| +150 | FDE3 | L46 | L45 | | 20D4(X69)b |
| O | FDH7 | L48 | L47 | | 20D4(X69)a |
| I | FPG1 | L31 | L33 | L35 | READ MODE |
| +150 | FPE3 | L37 | L35 | | 20D4(X46)b |
| O | FPG2 | L41 | L39 | | 20D4(X46)a |
| I | FRA2 | U4 | U3 | U5 | READ FF |
| +150 | FRE3 | U6 | U5 | | 20D4(X65)b |
| O | FRA3 | U8 | U7 | | 20D4(X65)a |
| I | FRB2 | U12 | U11 | U13 | WRITE FF |
| +150 | FRE3 | U14 | U13 | | 20D4(X72)b |
| O | FRB8 | U16 | U15 | | 20D4(X72)a |
| I | FSB4 | L8 | L7 | L9 | ADD WRITE REG FULL |
| +150 | FSE3 | L10 | L9 | | 20D4(X55)b |
| O | FSB3 | L12 | L11 | | 20D4(X55)a |
| I | FTB4 | U40 | U39 | U41 | COMPARE |
| +150 | FTE3 | U42 | U41 | | 20D4(X47)b |
| O | FTB3 | U44 | U43 | | 20D4(X47)a |
| I | FTH7 | U10 | U9 | U11 | MASTER SYNC |
| +150 | FTE3 | U12 | U11 | | 20D4(X45)b |
| O | FTH6 | U14 | U13 | | 20D4(X45)a |
| I | KSA6 | L11 | L13 | L15 | AM-C APC ERROR |
| +150 | KSE3 | L17 | L15 | | 20D4(X54)b |
| O | KS A7 | L21 | L19 | | 20D4(X54)a |
| I | KSE8 | L37 | L39 | L41 | AM-B APC ERROR |
| +150 | KSE3 | L43 | L41 | | 20D4(X53)b |
| O | KSF1 | L47 | L45 | | 20D4(X53)a |
| I | KTA6 | U11 | U13 | U15 | AM-E APC ERROR |
| +150 | KTE3 | U17 | U15 | | 20D4(X52)b |
| O | KTA7 | U21 | U19 | | 20D4(X52)a |
| I | KTEB | U37 | U39 | U41 | AM-F APC ERROR |
| +150 | KTE3 | U43 | U41 | | 20D4(X51)b |
| O | KTF1 | U47 | U45 | | 20D4(X51)a |
| I | KUA6 | L11 | L13 | L15 | AM-G APC ERROR |
| +150 | KUE3 | L17 | L15 | | 20D4(X50)b |
| O | KUA7 | L21 | L19 | | 20D4(X50)a |
| I | KUEB | L37 | L39 | L41 | AM-H APC ERROR |
| +150 | KUE3 | L43 | L41 | | 20D4(X49)b |
| O | KUF1 | L47 | L45 | | 20D4(X49)a |





II REFER TO LOGIC DWG. 1-2.1-2.
 NOTES
 EC 849881
 3115574



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