

**CHAPTER**

**31**

**INDICATING /  
RECORDING SYSTEMS**



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|                                      |          |       | 102.1 |             | Oct 09/2008 | 115             |
| RIGHT SIREN/OWL AURAL WARNING        | 31-51-06 |       | 101   |             | Jan 21/2005 | 001-008 010-099 |
|                                      |          |       | 101.1 |             | Jan 21/2005 | 001 003-011     |
|                                      |          |       | 101.2 |             | Jan 21/2005 | 002             |
|                                      |          |       | 102   |             | Jan 21/2005 | 009 115-199     |
|                                      |          | 102.1 |       | Dec 18/2007 | 115         |                 |
| BELL/CHIME AURAL WARNING             | 31-51-07 |       | 101   |             | Jan 21/2005 | ALL             |
| DECISION HEIGHT AURAL WARNING        | 31-51-09 |       | 101   |             | Jan 21/2005 | 009 115-199     |
| CLACKER/WAILER AURAL WARNING - LEFT  | 31-51-10 |       | 101   |             | Jan 21/2005 | 009 115-199     |
|                                      |          |       | 101.1 |             | Dec 18/2007 | 115             |
| CLACKER/WAILER AURAL WARNING - RIGHT | 31-51-11 |       | 101   |             | Jan 21/2005 | 009 115-199     |
|                                      |          |       | 101.1 |             | Dec 18/2007 | 115             |

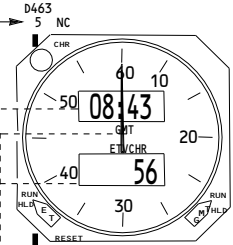
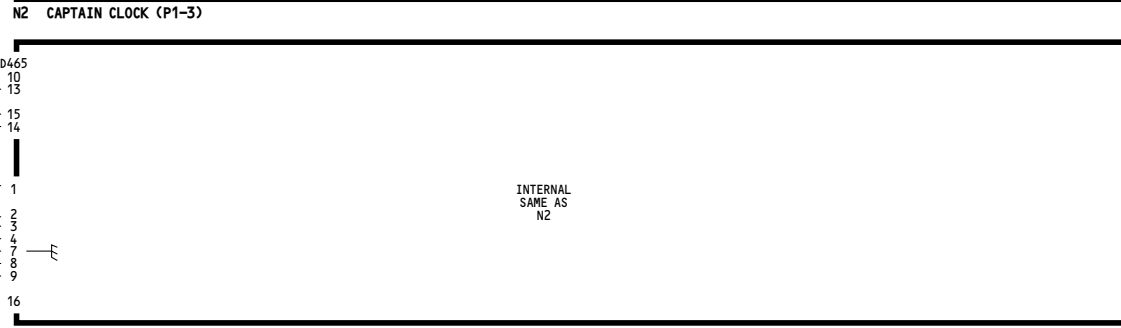
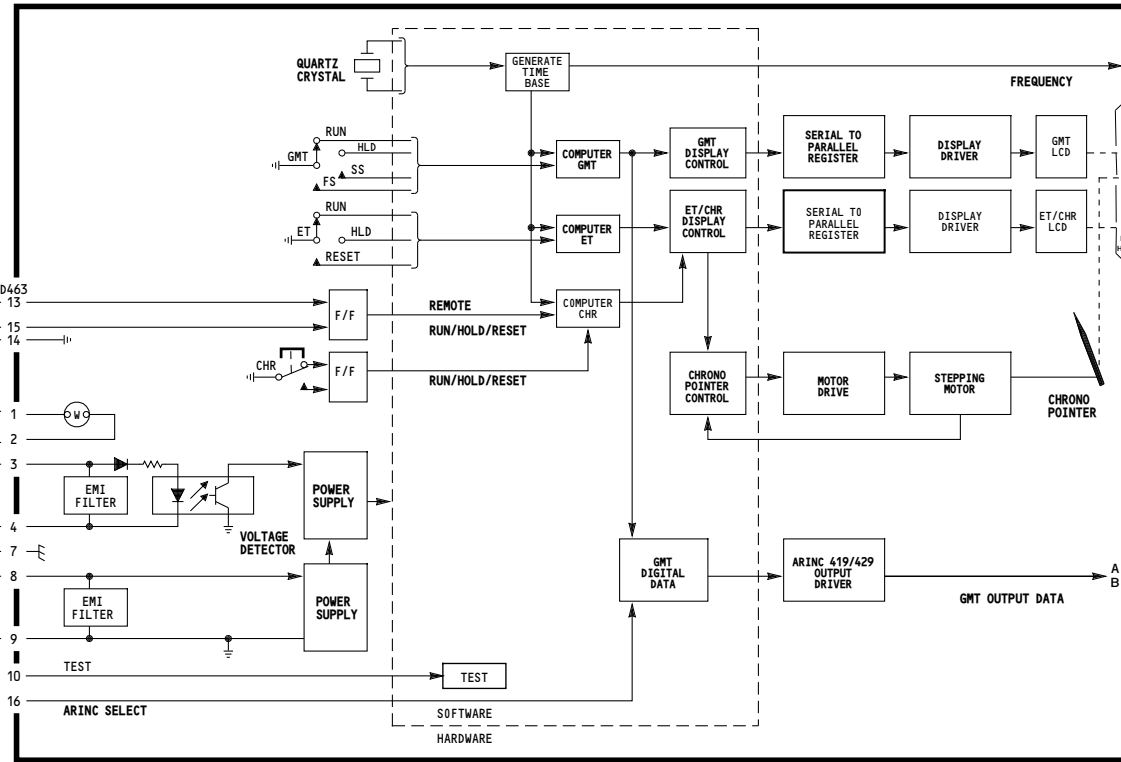
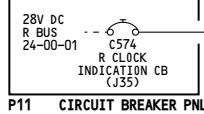
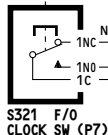
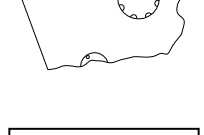
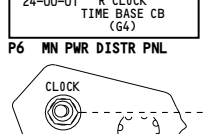
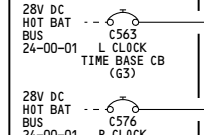
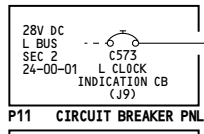
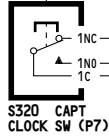
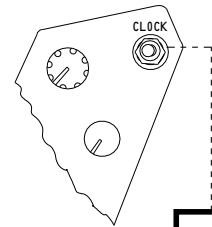
**CHAPTER 31  
INDICATING / RECORDING SYSTEMS**

| <b>CH-SC-SU</b> | <b>Title</b>                                 |
|-----------------|--|
| 31-51-07        | BELL/CHIME AURAL WARNING                     |
| 31-51-10        | CLACKER/WAILER AURAL WARNING - LEFT          |
| 31-51-11        | CLACKER/WAILER AURAL WARNING - RIGHT         |
| 31-51-09        | DECISION HEIGHT AURAL WARNING                |
| 31-31-01        | DIGITAL FLIGHT RECORDER SYSTEM               |
| 31-41-02        | EICAS ANALOG INPUTS                          |
| 31-40-01        | EICAS COMPUTER                               |
| 31-41-03        | EICAS DIGITAL INPUTS                         |
| 31-41-07        | EICAS DISPLAYS                               |
| 31-41-09        | EICAS FAILURE DETECTION                      |
| 31-41-08        | EICAS LOGIC                                  |
| 31-41-06        | EICAS OUTPUTS                                |
| 31-41-01        | EICAS POWER AND CONTROL                      |
| 31-41-05        | EICAS STATUS AND MAINTENANCE MESSAGES        |
| 31-41-04        | EICAS WARNING, CAUTION AND ADVISORY MESSAGES |
| 31-25-01        | ELECTRONIC CLOCKS                            |
| 31-51-04        | LANDING CONFIGURATION WARNING                |
| 31-51-05        | LEFT SIREN/OWL AURAL WARNING                 |
| 31-51-02        | MASTER WARNING                               |

| <b>CH-SC-SU</b> | <b>Title</b>                  |
|-----------------|-------------------------------|
| 31-51-06        | RIGHT SIREN/OWL AURAL WARNING |
| 31-51-03        | TAKEOFF CONFIGURATION WARNING |
| 31-51-01        | WARNING ELECTRONICS POWER     |
| 31-51-00        | WARNING SYSTEM - SIMPLIFIED   |

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WIRING DIAGRAMS  
31-25-11

M134 LEFT FLT  
MGT CMPTR  
(E2-1)

M138 DGTL FLT  
DATA ACQUISITION  
UNIT (E3-3)

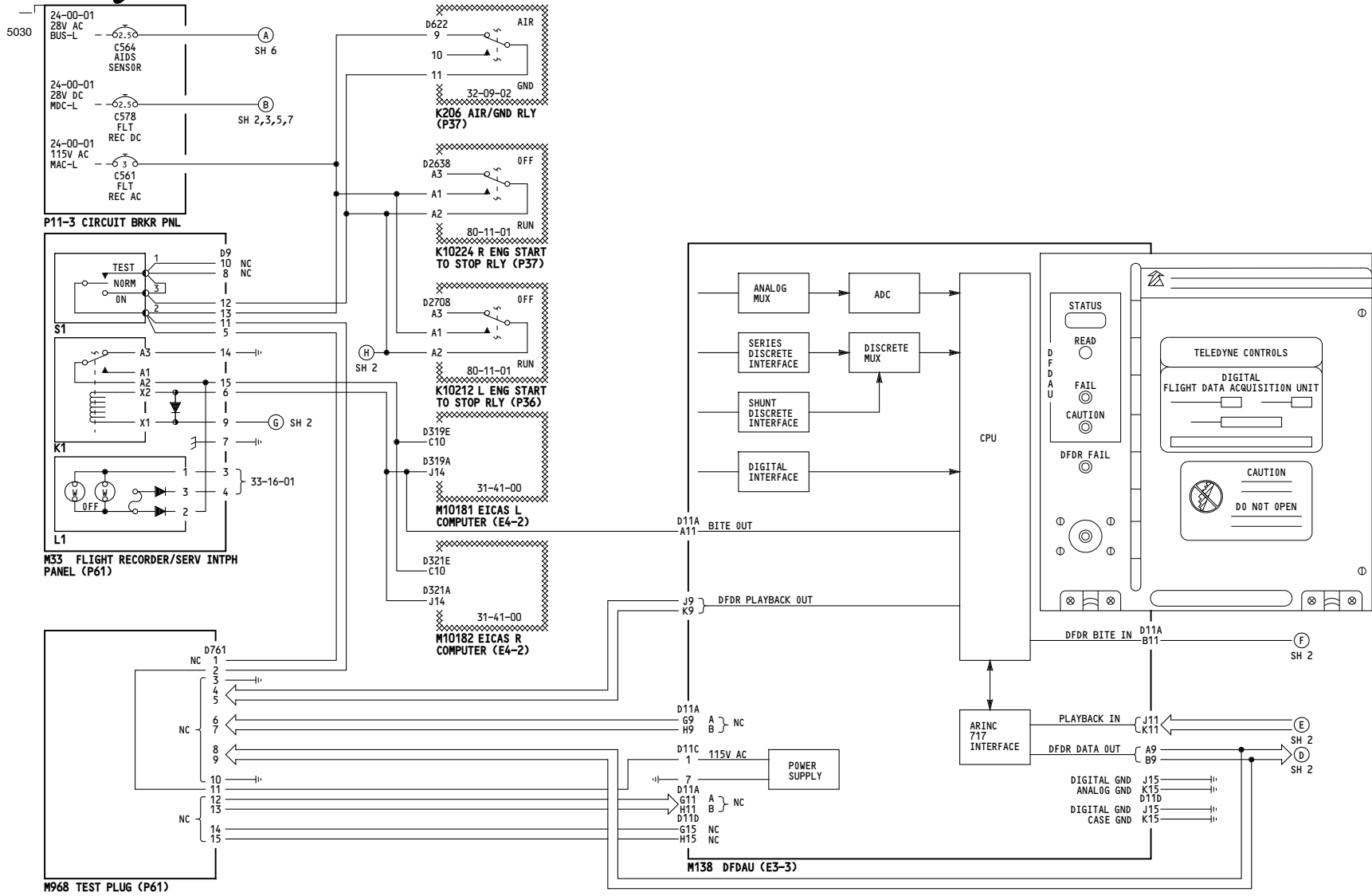
M135 RIGHT FLT  
MGT CMPTR  
(E2-2)

|     |                          |
|-----|--------------------------|
| ALL | <b>ELECTRONIC CLOCKS</b> |
|     | D280N032S                |

**31-25-01**

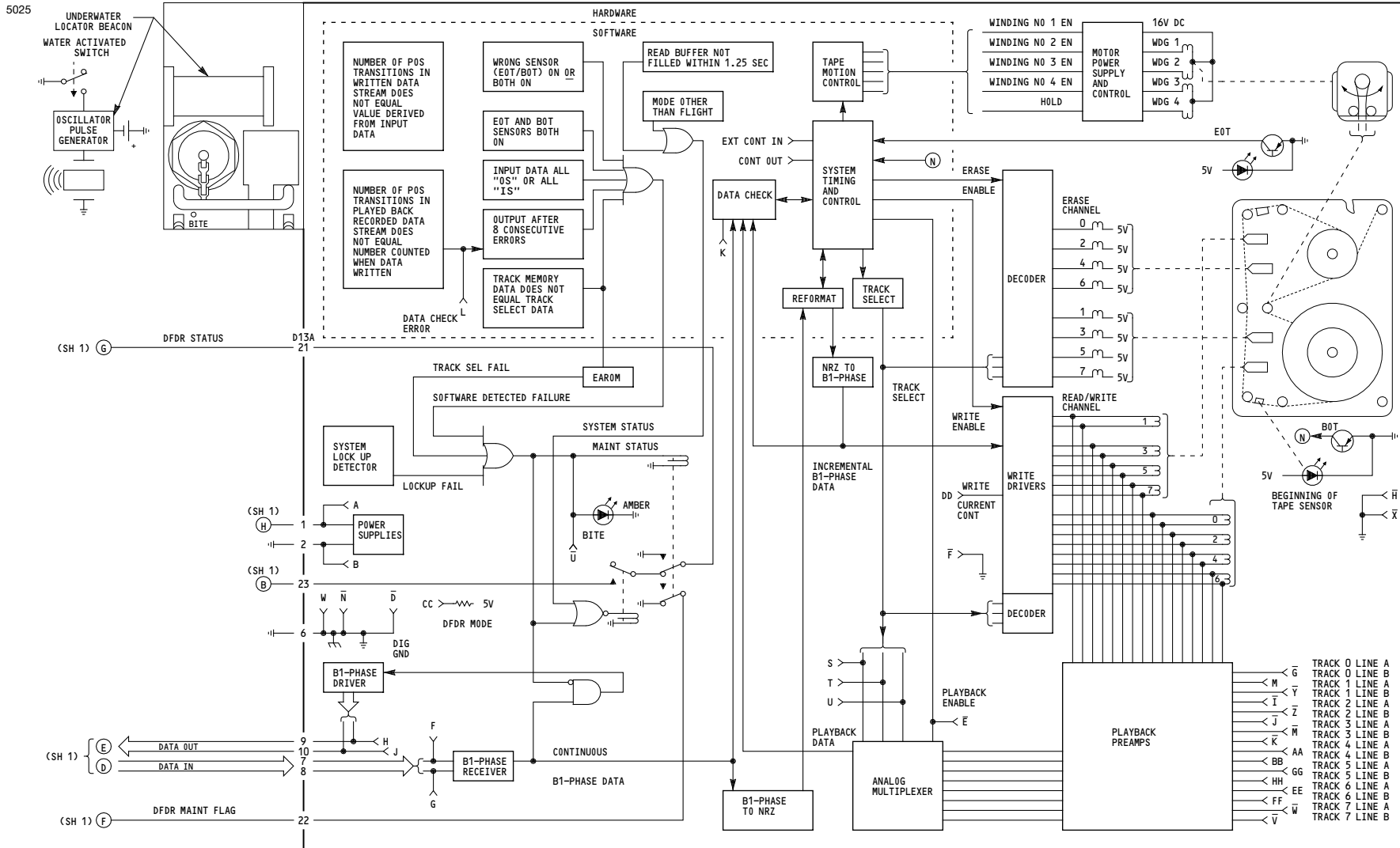
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|         |   |
|---------|---|
| 001-099 | <p><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p>D280N032S</p> |
|---------|---|

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M200 DIGITAL FLIGHT DATA RECORDER

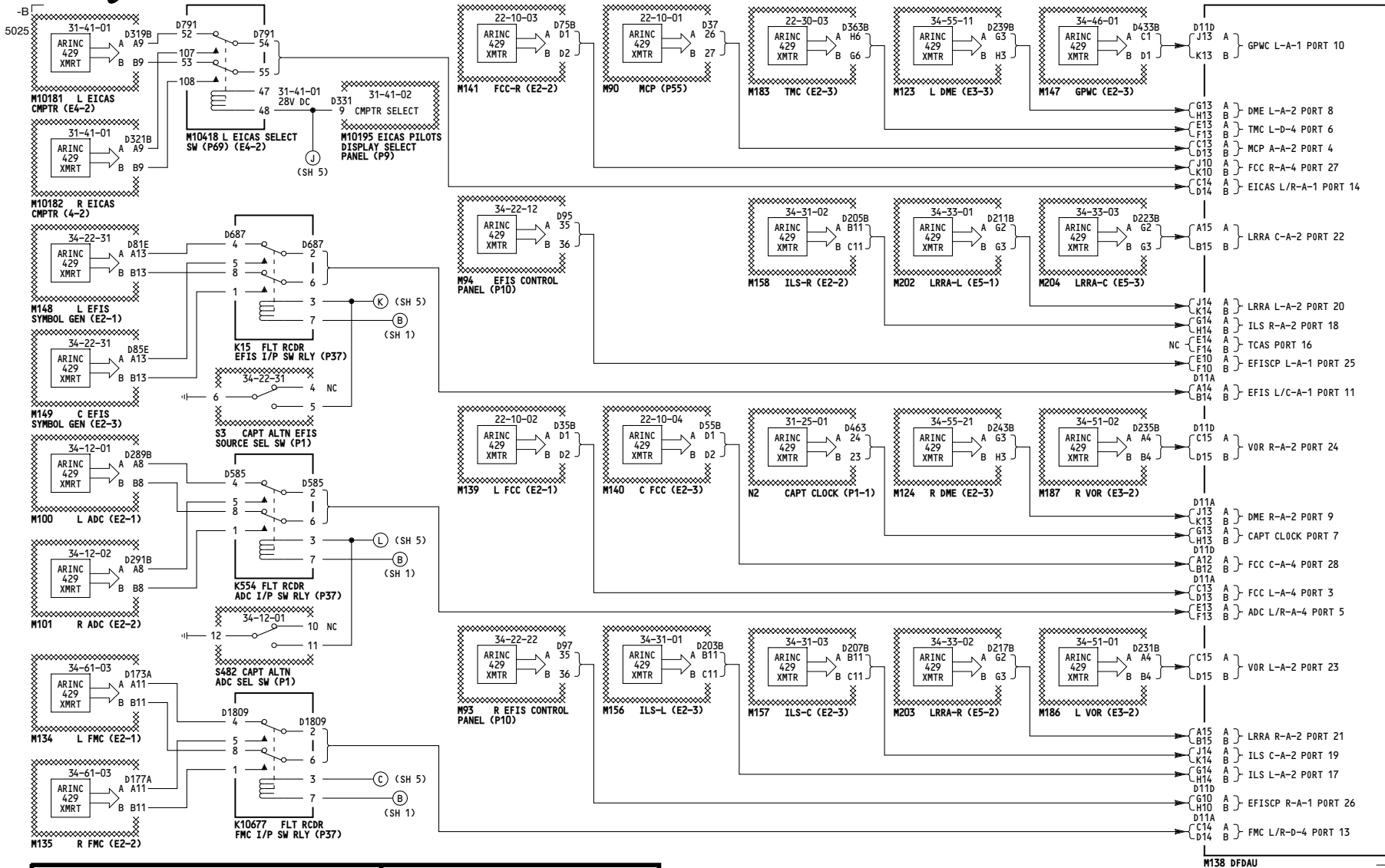
001-099

DIGITAL FLIGHT RECORDER SYSTEM

D280N032S

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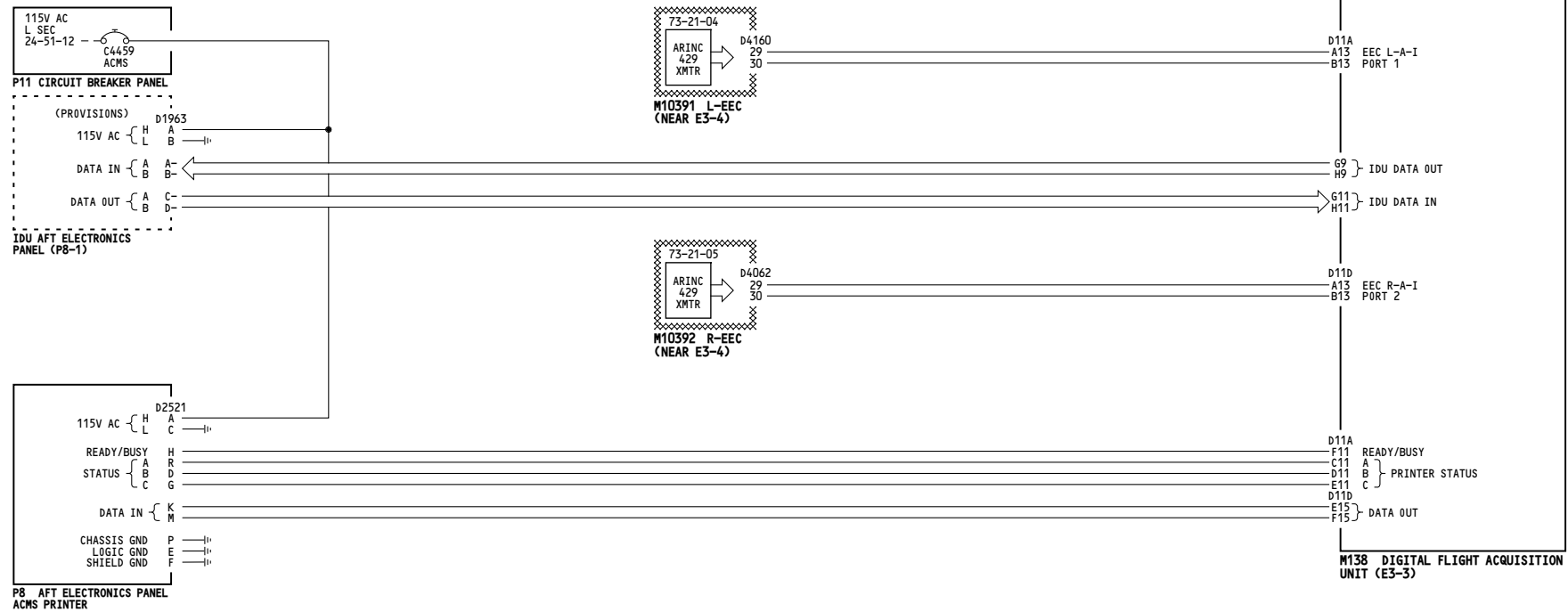
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**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

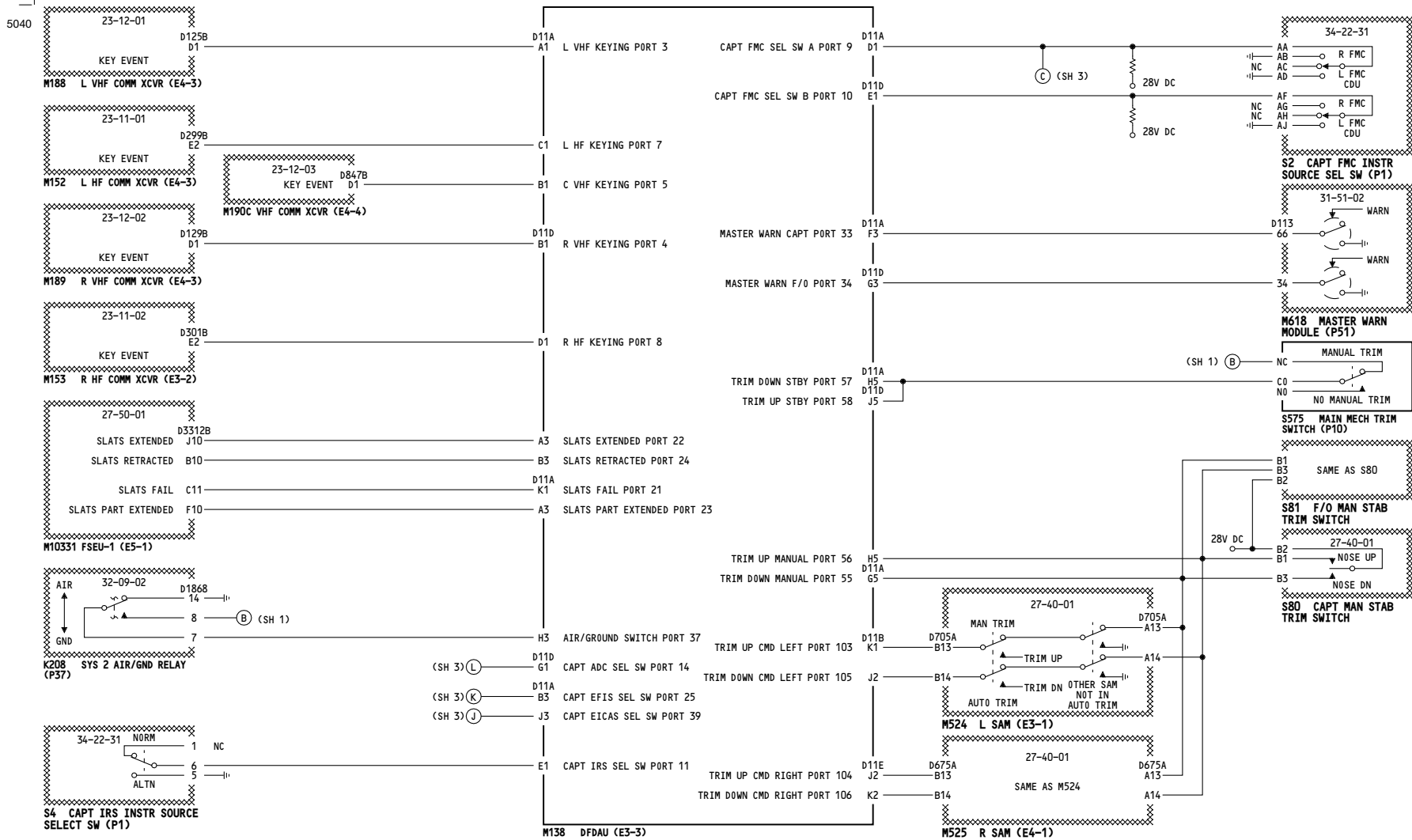
**31-31-01**

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|         |   |
|---------|---|
| 001-099 | <p align="center"><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p align="center">D280N032S</p> |
|---------|---|

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001-099

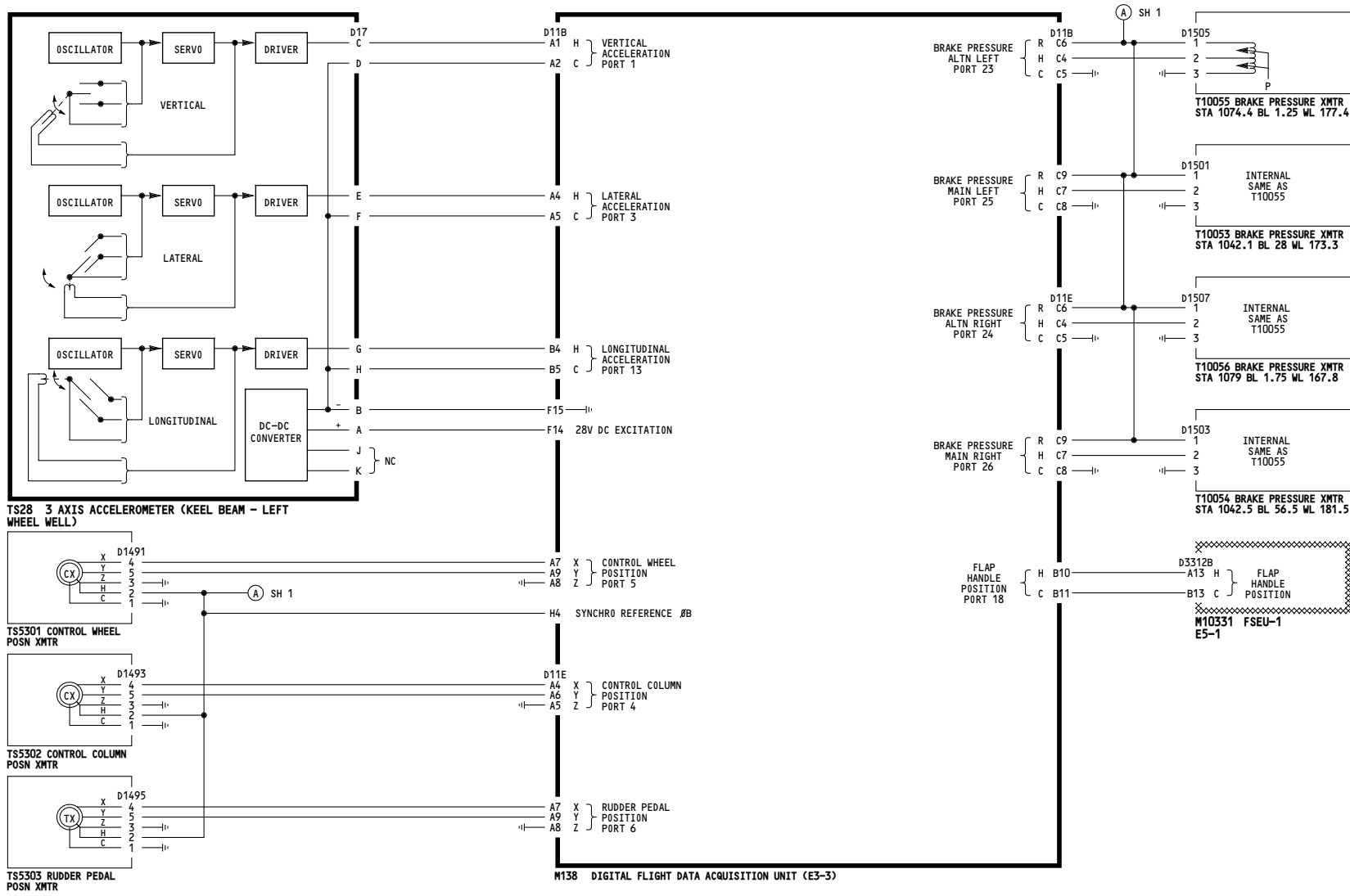
**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

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001-099

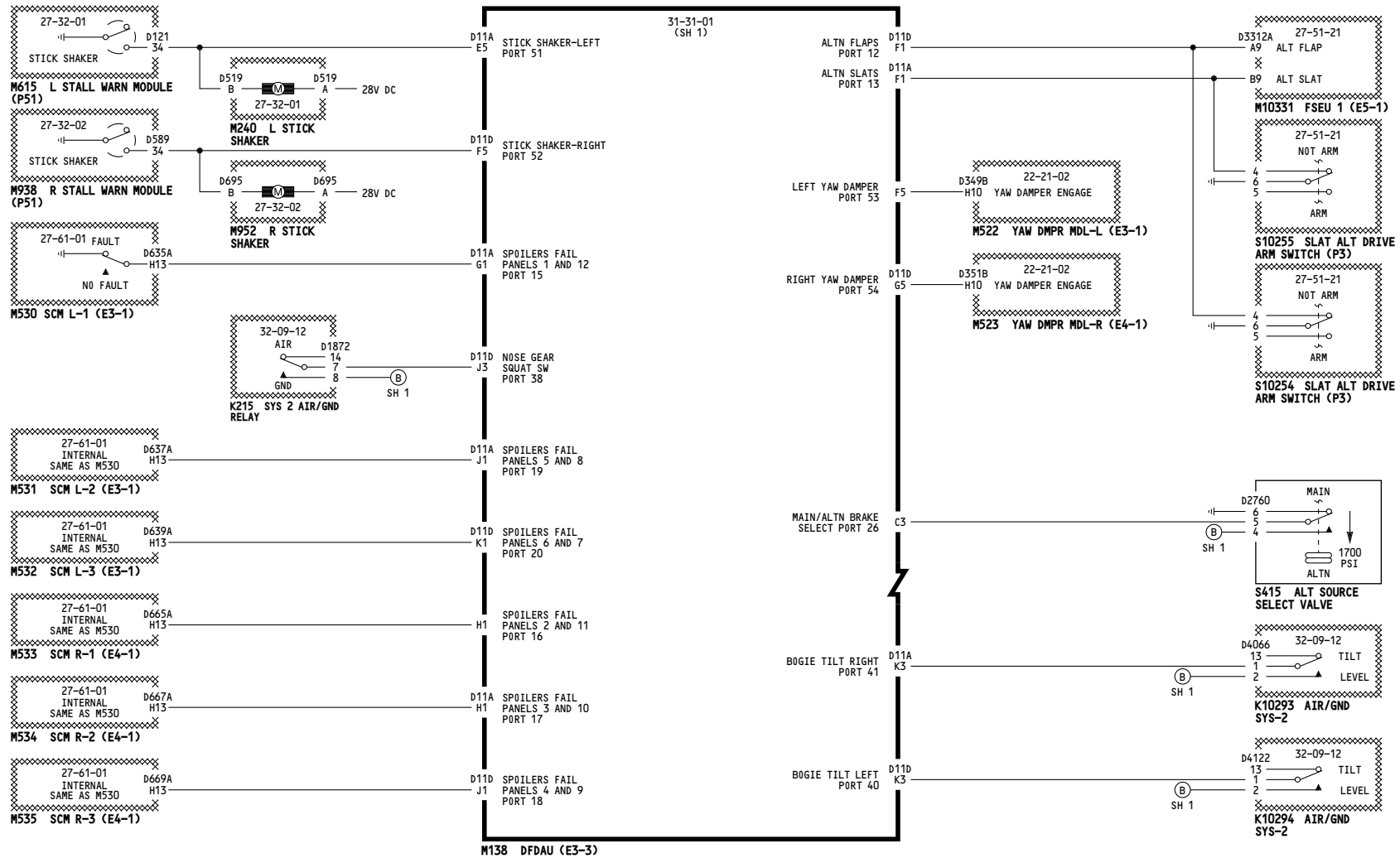
**DIGITAL FLIGHT RECORDER SYSTEM**

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001-099

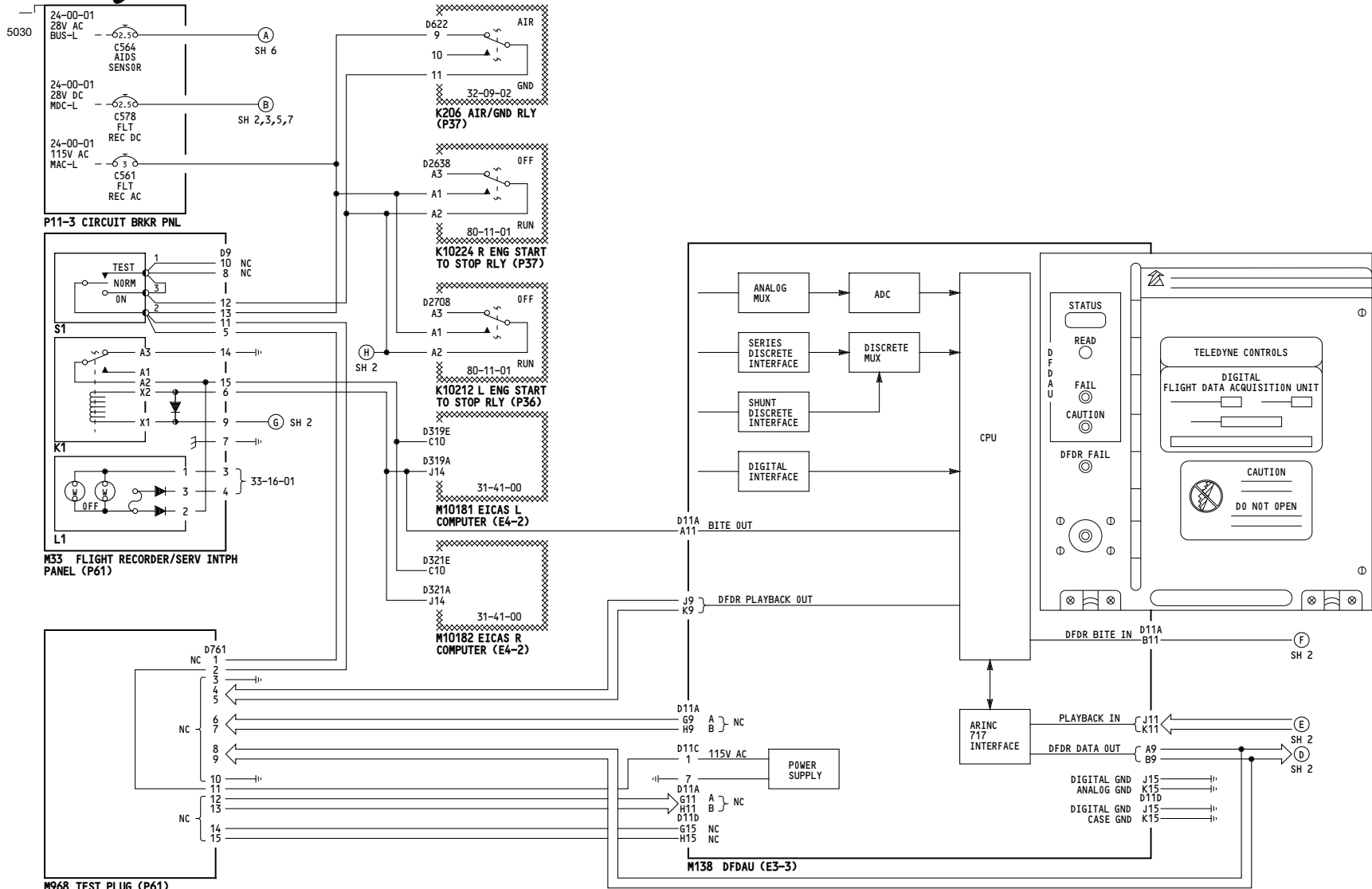
**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

**31-31-01**

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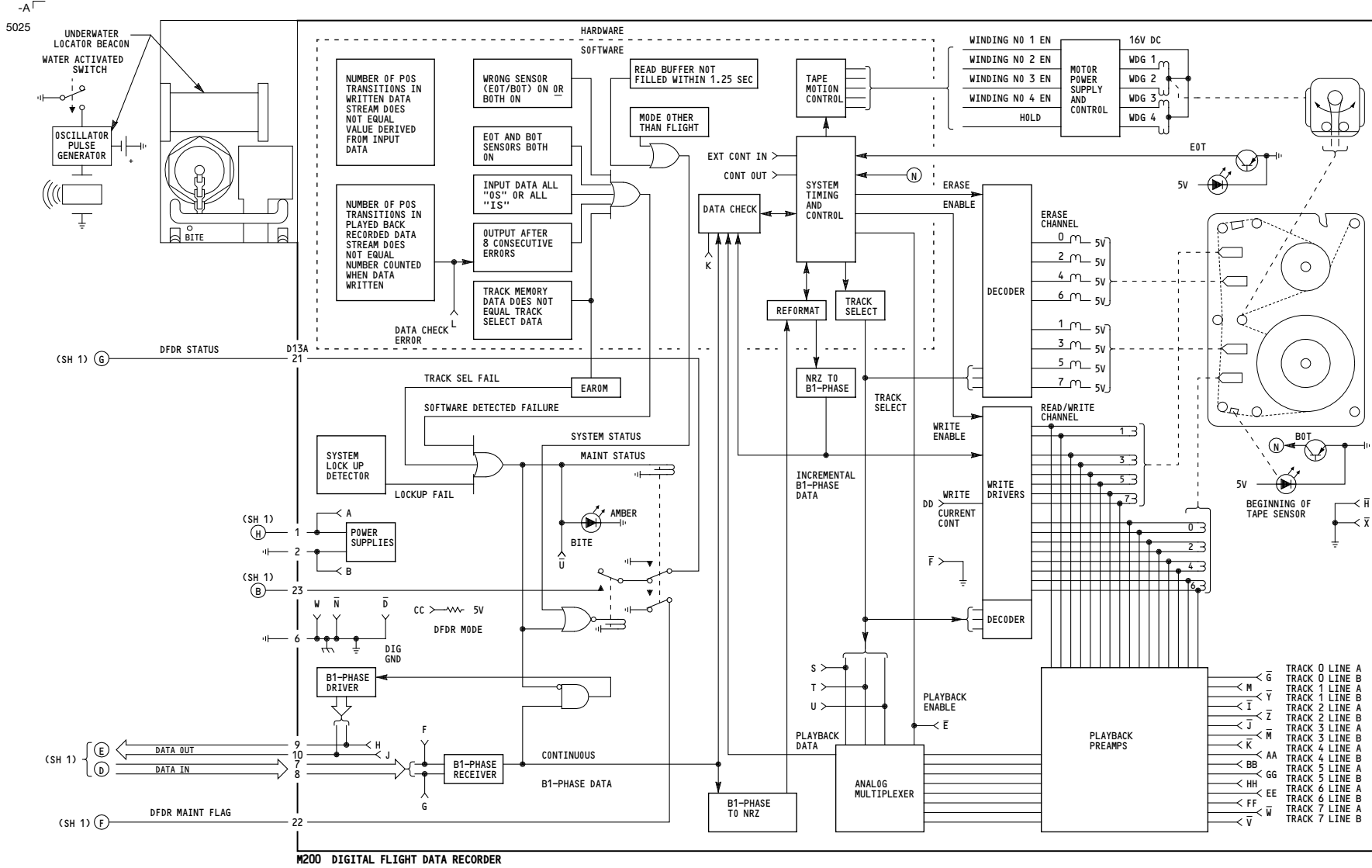




|         |  |
|---------|--|
| 001-009 | <b>DIGITAL FLIGHT RECORDER SYSTEM</b><br><br>D280N032S |
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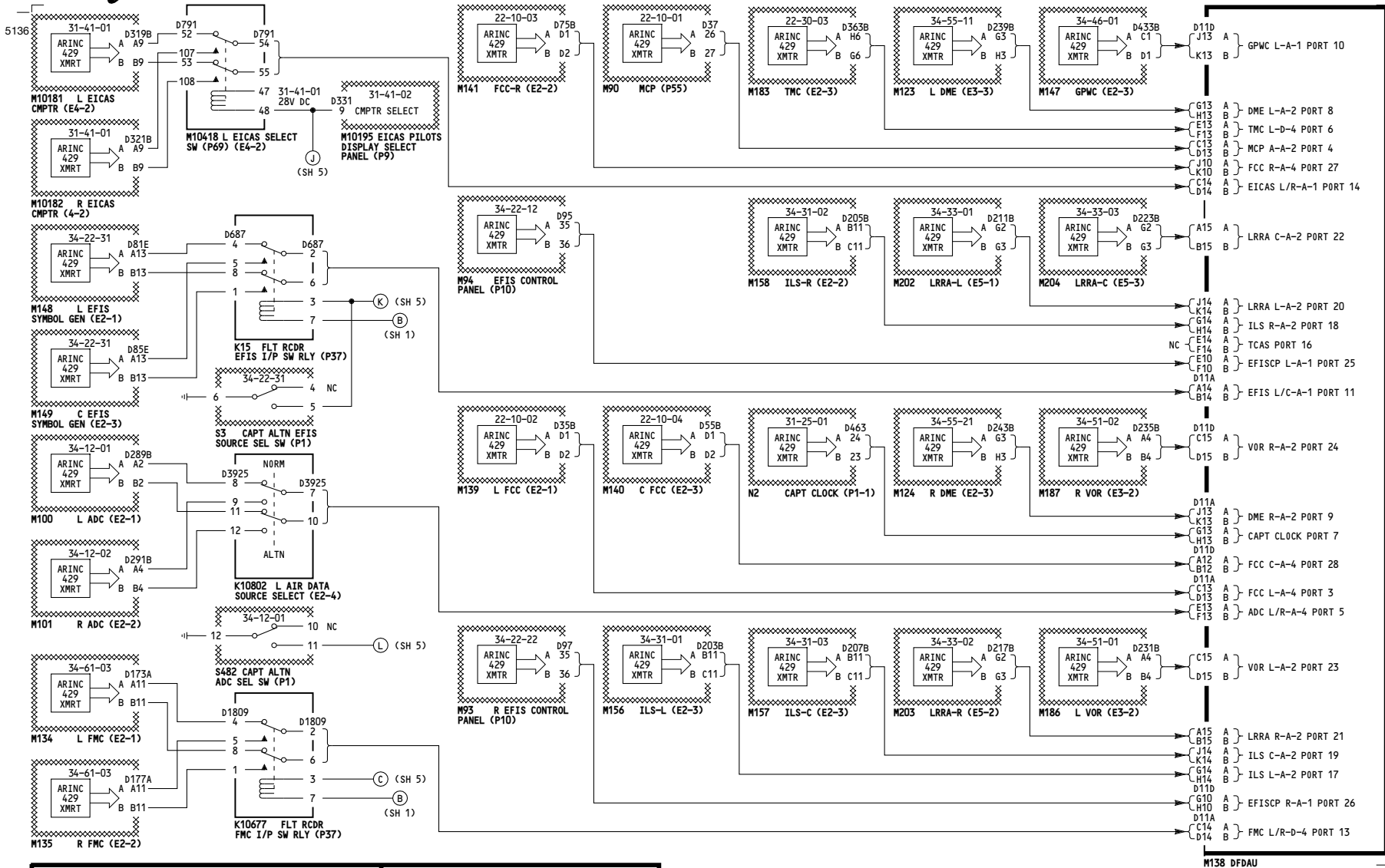


M200 DIGITAL FLIGHT DATA RECORDER

|         |   |
|---------|---|
| 001-009 | <p><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p>D280N032S</p> |
|---------|---|

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**DIGITAL FLIGHT RECORDER SYSTEM**

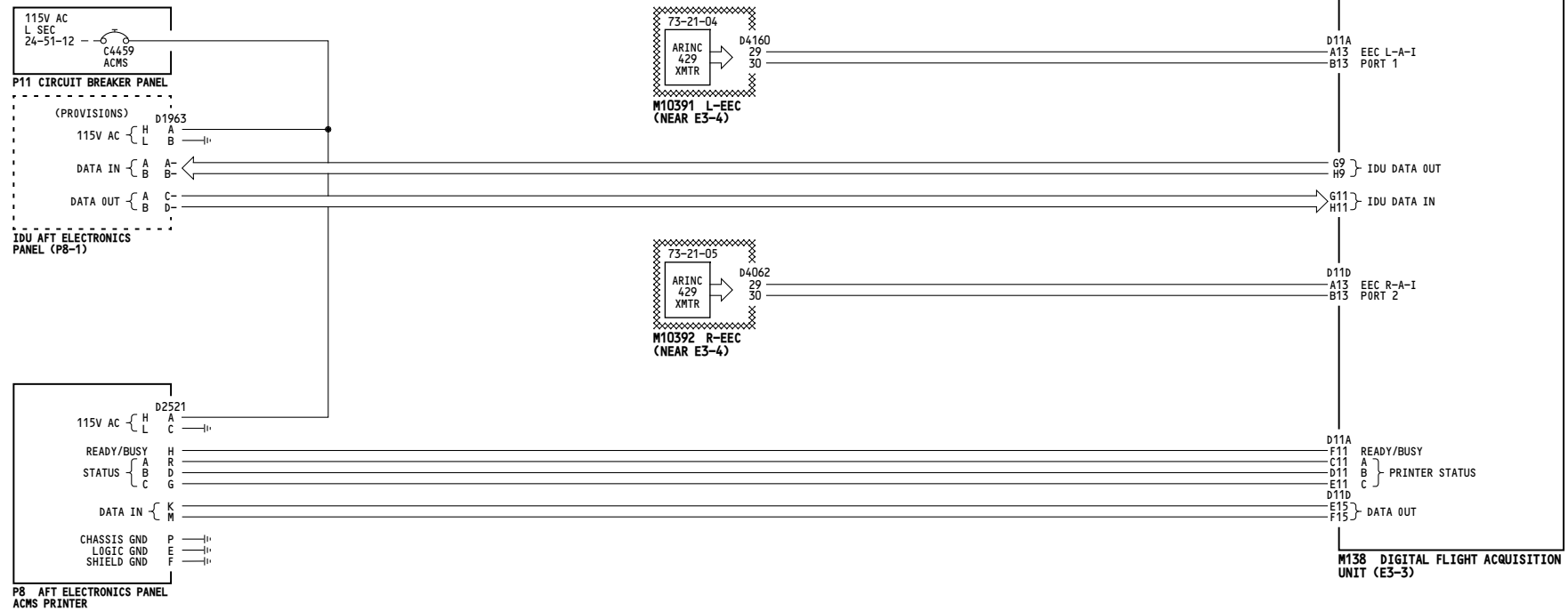
Incorporates  
34A0222

D280N032S

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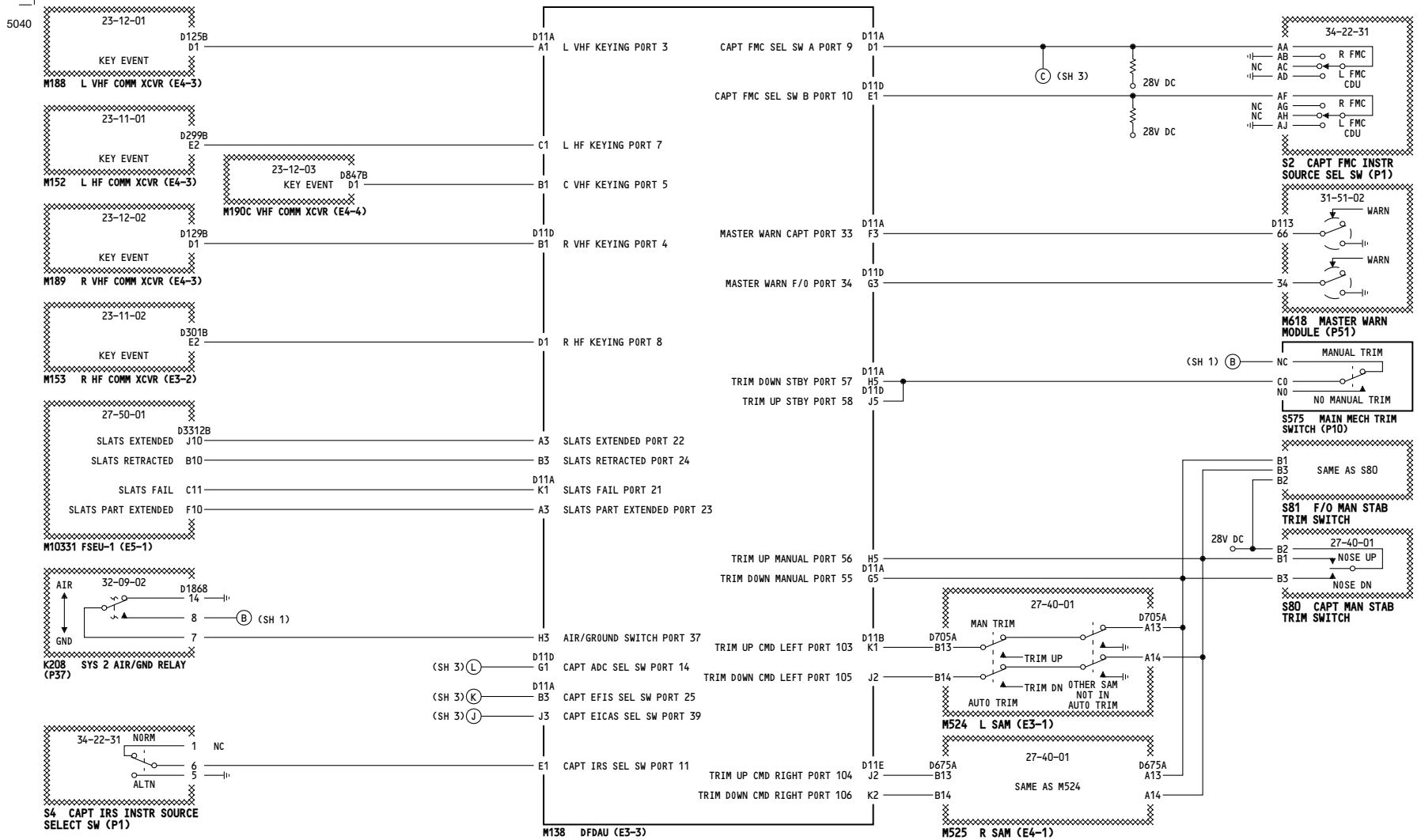
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|         |   |
|---------|---|
| 001-009 | <p align="center"><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p align="center">D280N032S</p> |
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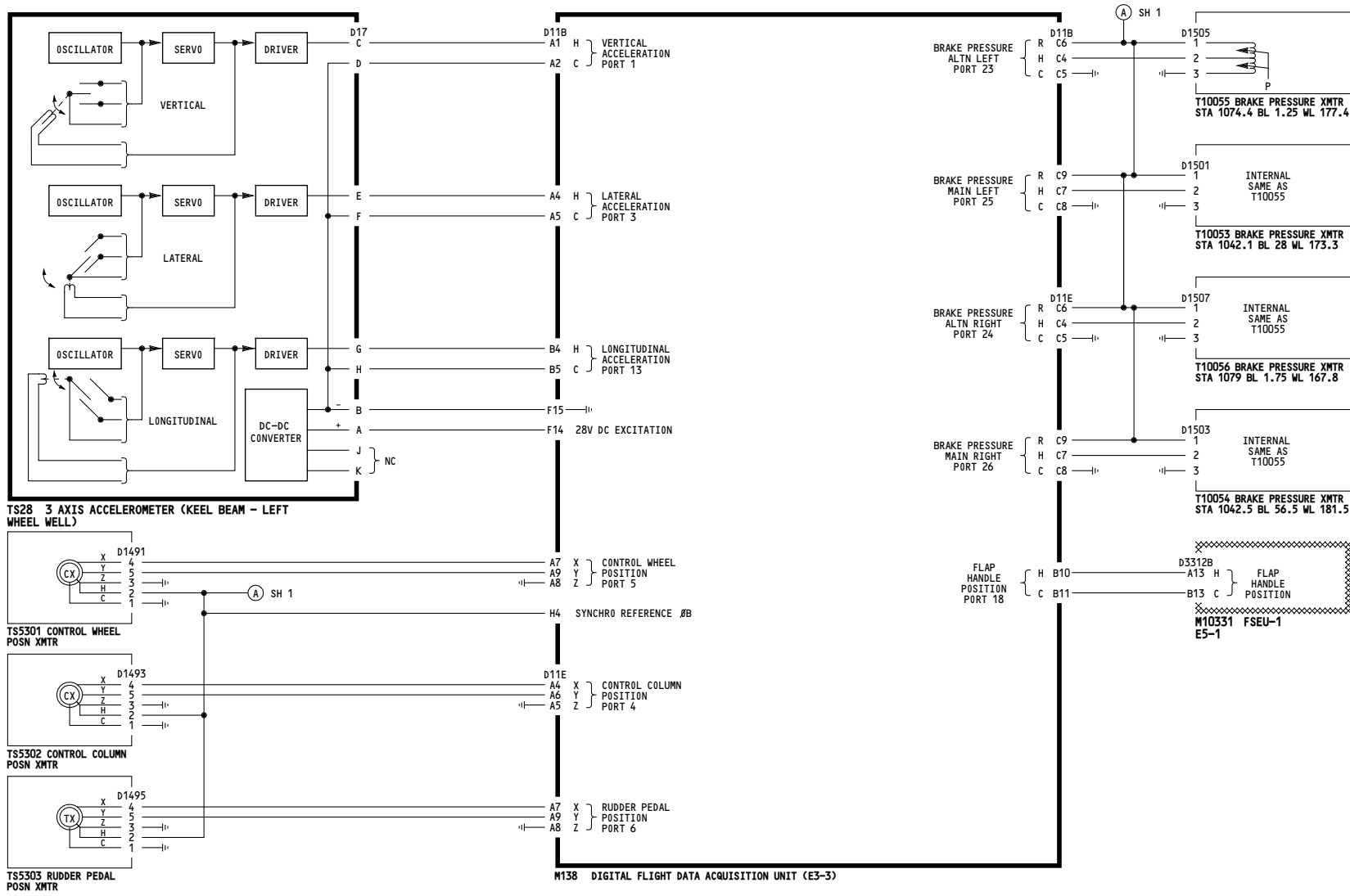


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|---------|---|
| 001-009 | <p><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p>D280N032S</p> |
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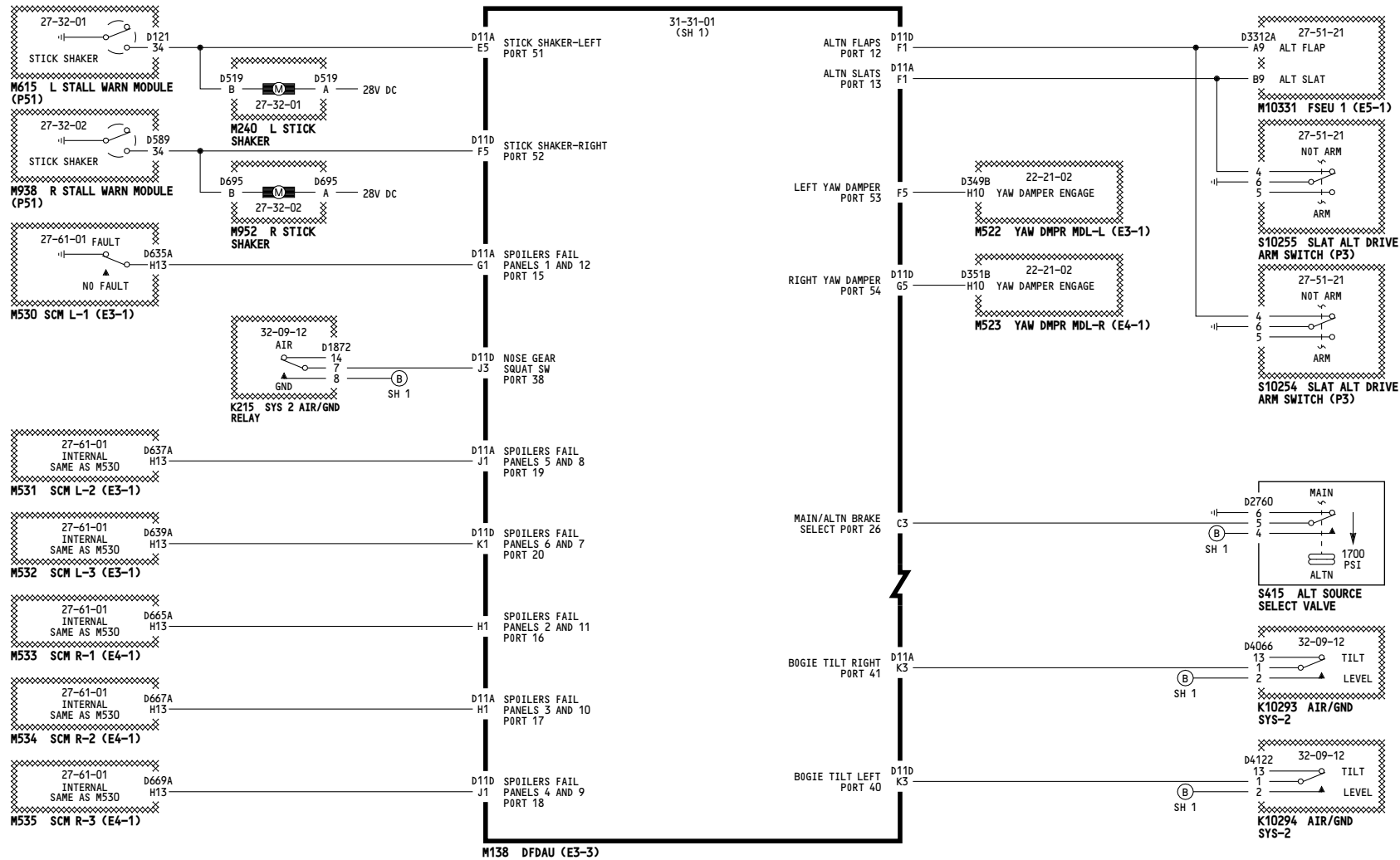
**DIGITAL FLIGHT RECORDER SYSTEM**

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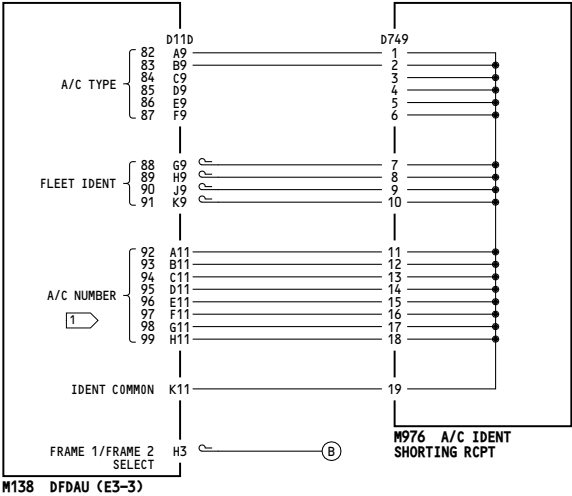


|           |                                       |
|-----------|---------------------------------------|
| 001-009   | <b>DIGITAL FLIGHT RECORDER SYSTEM</b> |
| D280N032S |                                       |

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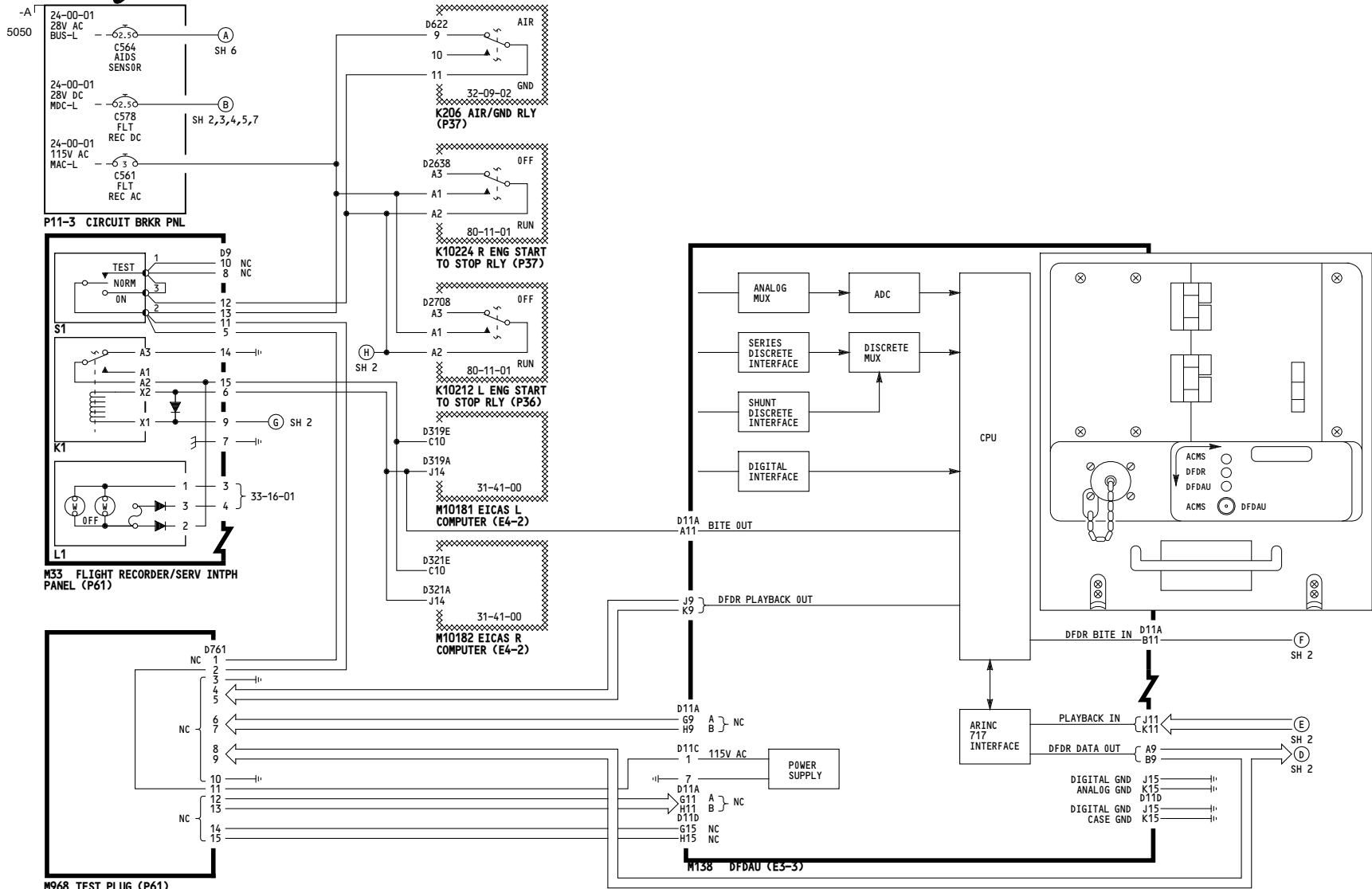
| A/C EFF                             | A/C NUMBER |    |    |    |    |    |    |    |
|-------------------------------------|------------|----|----|----|----|----|----|----|
|                                     | 99         | 98 | 97 | 96 | 95 | 94 | 93 | 92 |
| NB321                               | 0          | 0  | 0  | 0  | 0  | 0  | 0  | 1  |
| NB322                               | 0          | 0  | 0  | 0  | 0  | 0  | 1  | 0  |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
|                                     |            |    |    |    |    |    |    |    |
| 1= CONNECT TO D749<br>0= CAP & STOW |            |    |    |    |    |    |    |    |

NOTES:  
 1 → A/C NUMBERS

|         |   |
|---------|---|
| 001-009 | DIGITAL FLIGHT RECORDER SYSTEM<br><br>D280N032S |
|---------|---|

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010-011

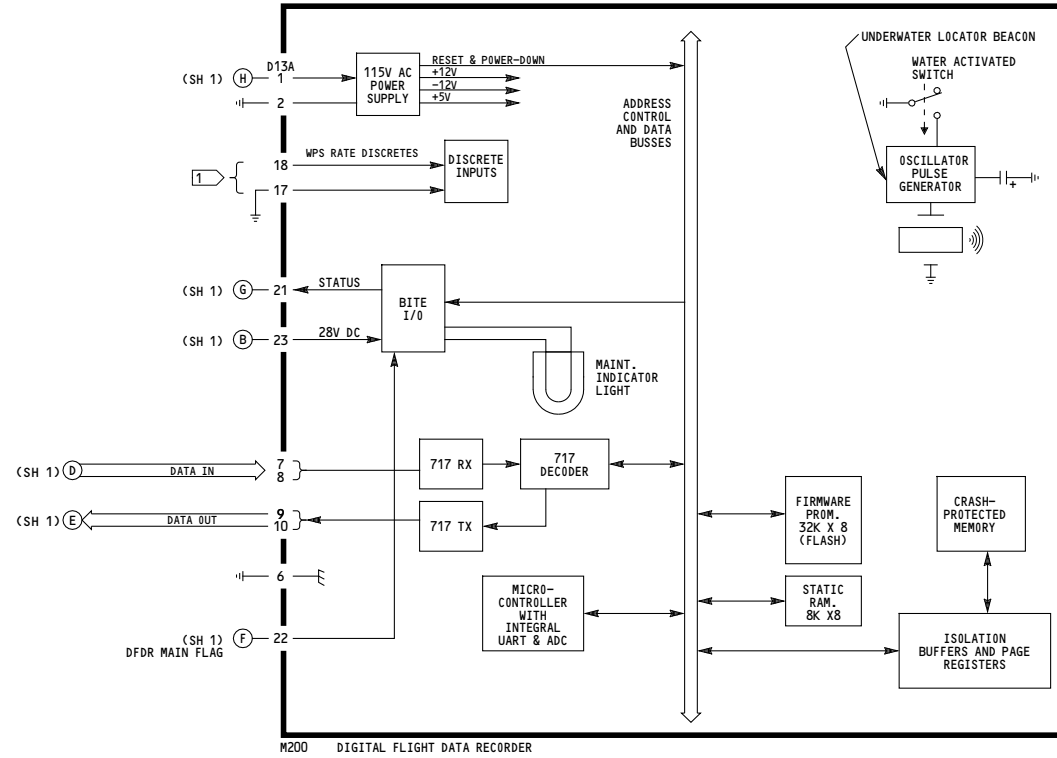
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| RECORDING SPEED | PIN 17 | PIN 18 |
|-----------------|--------|--------|
| 64 WPS          | OPN    | OPN    |
| 128 WPS         | OPN    | GND    |
| 256 WPS         | GND    | OPN    |
| 512 WPS         | GND    | GND    |

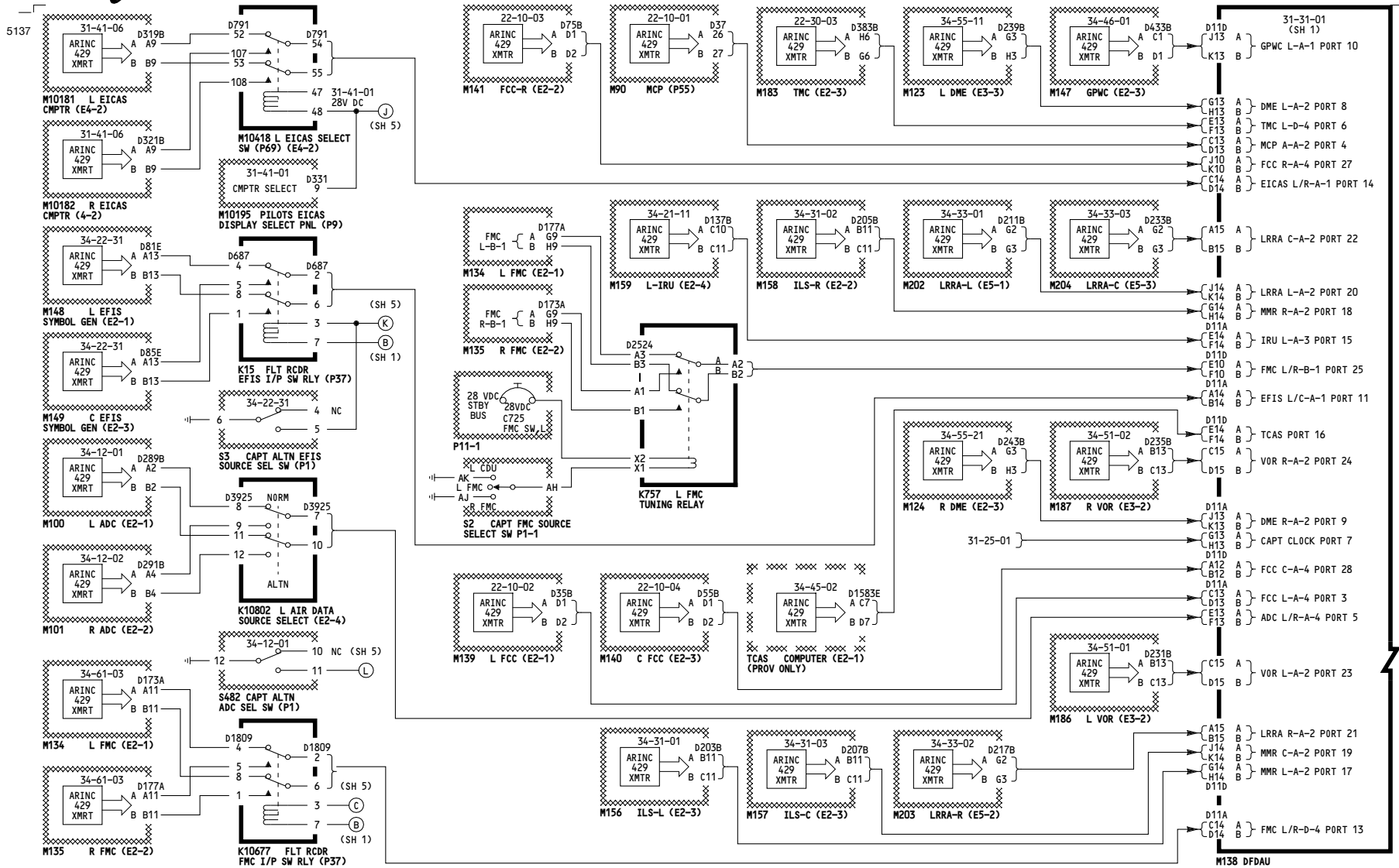
|         |                                       |
|---------|---------------------------------------|
| 010-011 | <b>DIGITAL FLIGHT RECORDER SYSTEM</b> |
|         | D280N032S                             |

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010-011

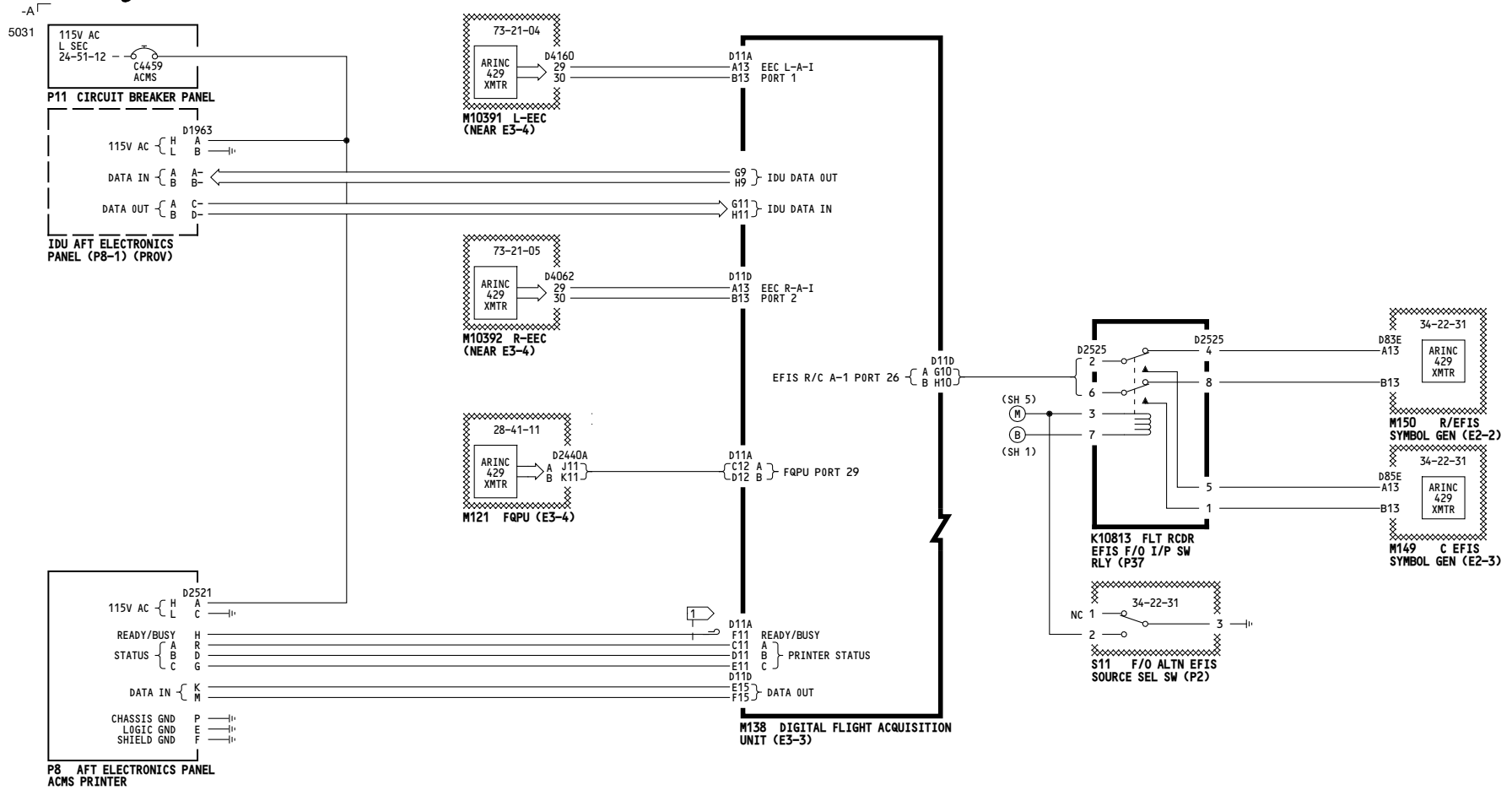
DIGITAL FLIGHT RECORDER SYSTEM

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- 31-0094
- 34A0222

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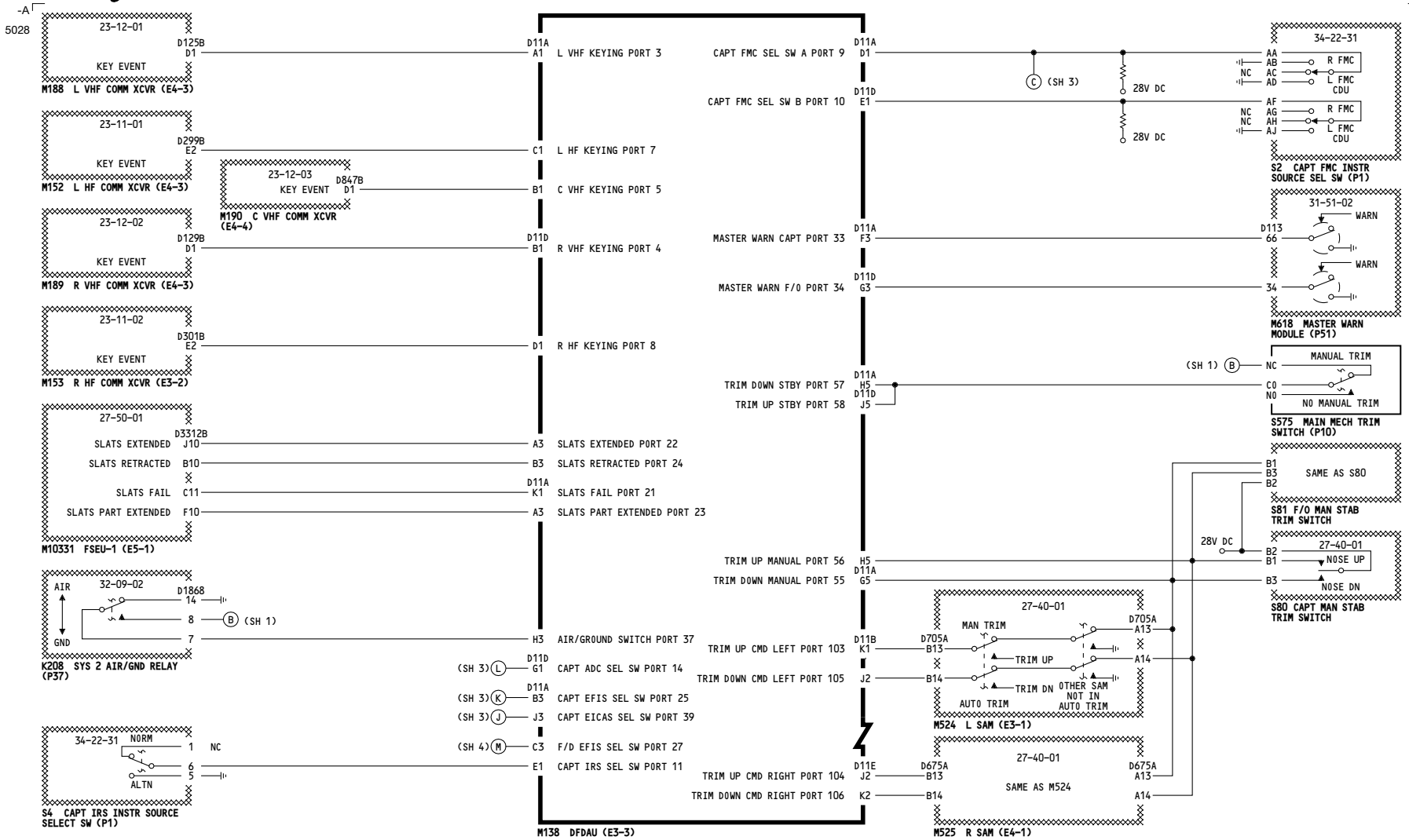
1 TAPE AND STOW NEAR D11A

|         |   |
|---------|---|
| 010-011 | <p><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p>D280N032S</p> |
|---------|---|

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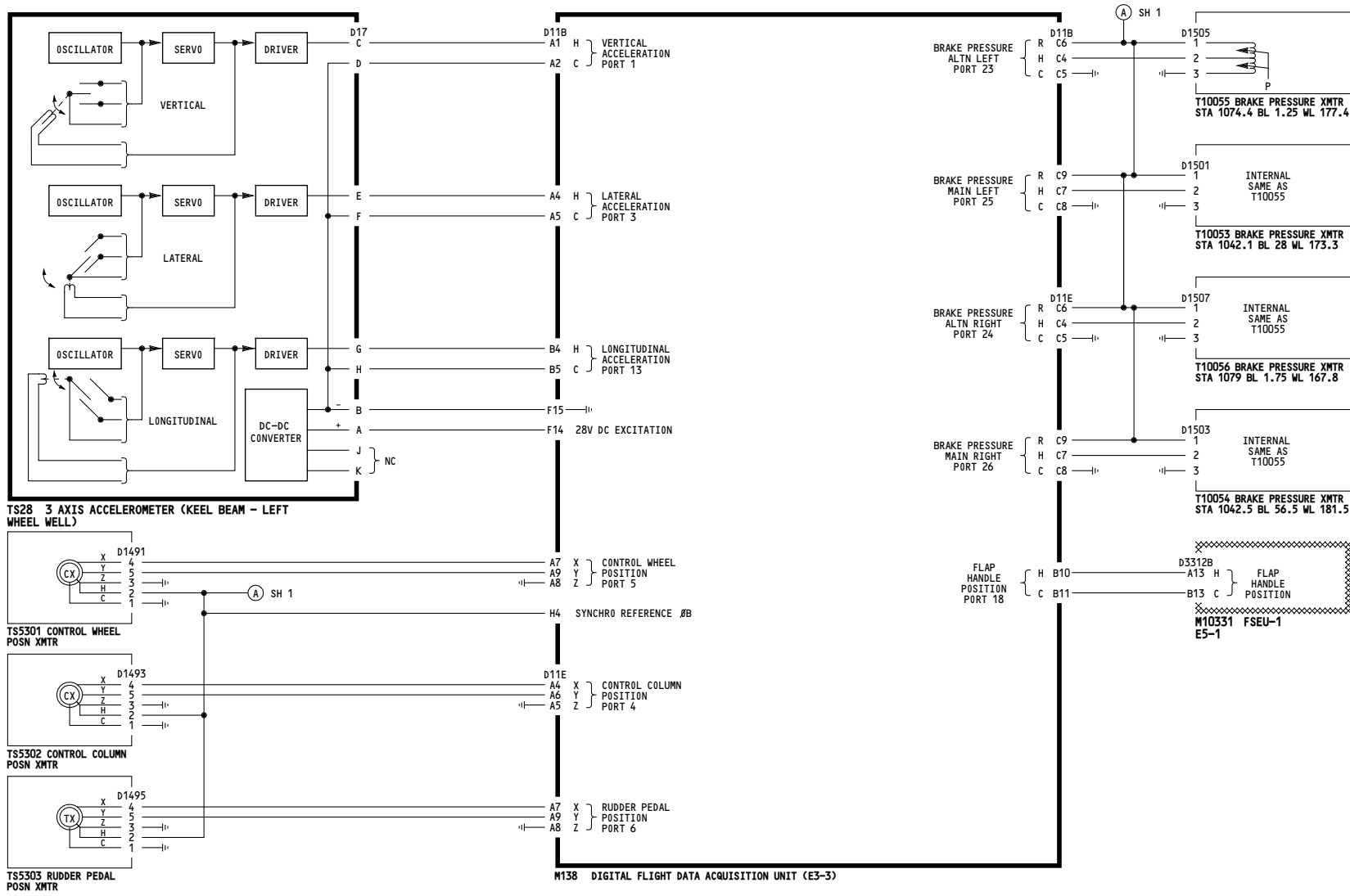
|         |                                       |
|---------|---------------------------------------|
| 010-011 | <b>DIGITAL FLIGHT RECORDER SYSTEM</b> |
|         | D280N032S                             |

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010-011

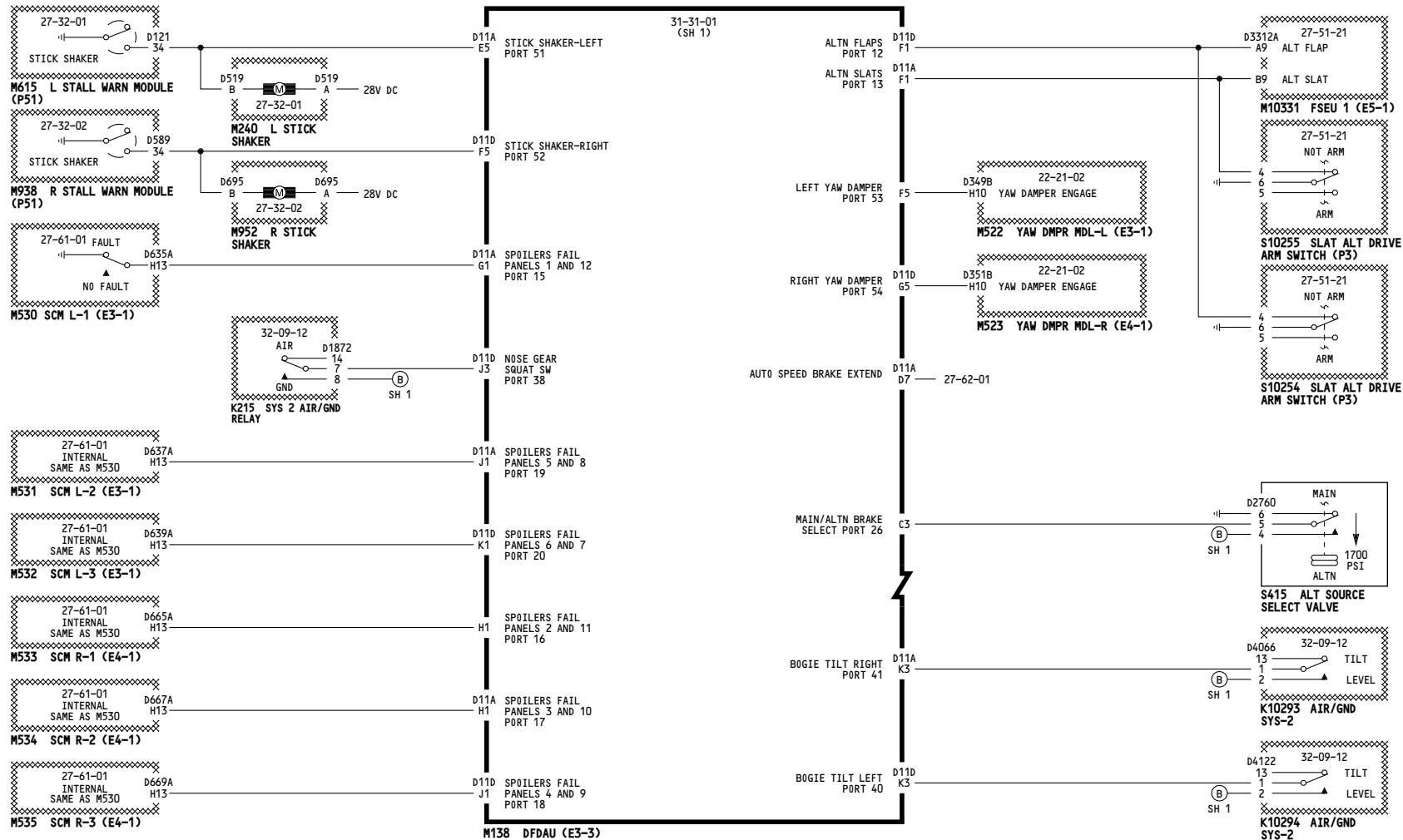
**DIGITAL FLIGHT RECORDER SYSTEM**

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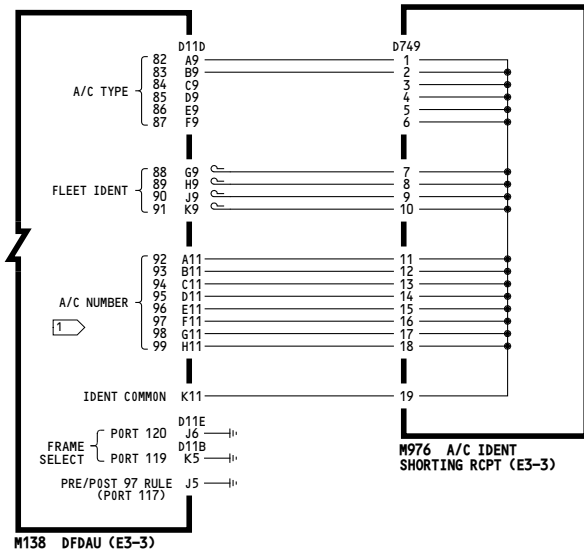
|         |   |
|---------|---|
| 010-011 | <p><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p>D280N032S</p> |
|---------|---|

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| A/C EFF | A/C NUMBER |    |    |    |    |    |    |    |
|---------|------------|----|----|----|----|----|----|----|
|         | 99         | 98 | 97 | 96 | 95 | 94 | 93 | 92 |
| NB330   | 0          | 0  | 0  | 0  | 1  | 0  | 1  | 0  |
| NB331   | 0          | 0  | 0  | 0  | 1  | 0  | 1  | 1  |
|         |            |    |    |    |    |    |    |    |

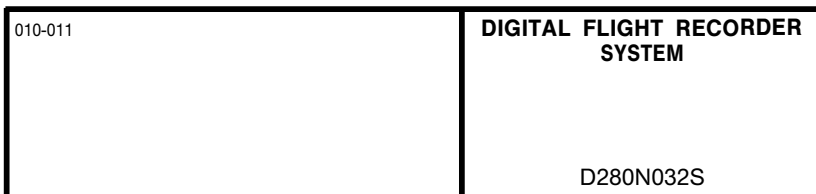
1 = CONNECT TO D749  
0 = CAP & STOW

|             | PORT |     |
|-------------|------|-----|
|             | 120  | 119 |
| 757-3       | 0    | 0   |
| 757-1 0R -4 | 0    | 1   |
| 757-5       | 1    | 0   |
| 757-2 0R -4 | 1    | 1   |

0 = GROUND  
1 = NO CONNECTION

NOTES:

1 A/C NUMBERS

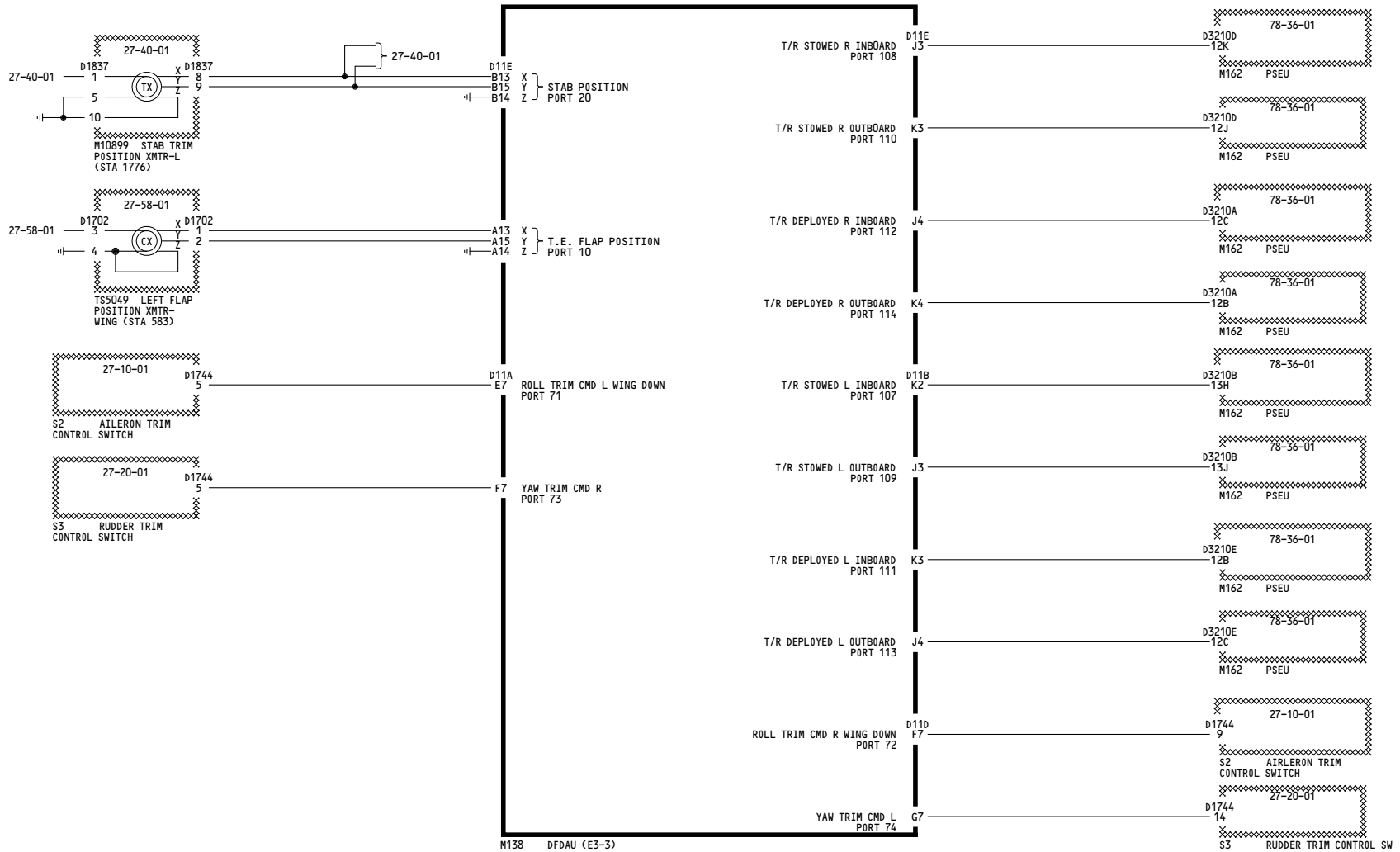


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|         |   |
|---------|---|
| 010-011 | <p align="center"><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p align="center">D280N032S</p> |
|---------|---|

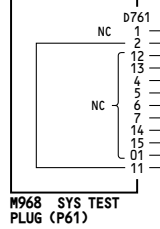
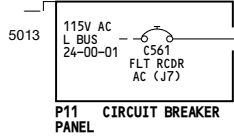
Incorporates  
31-0094

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**NOTES:**

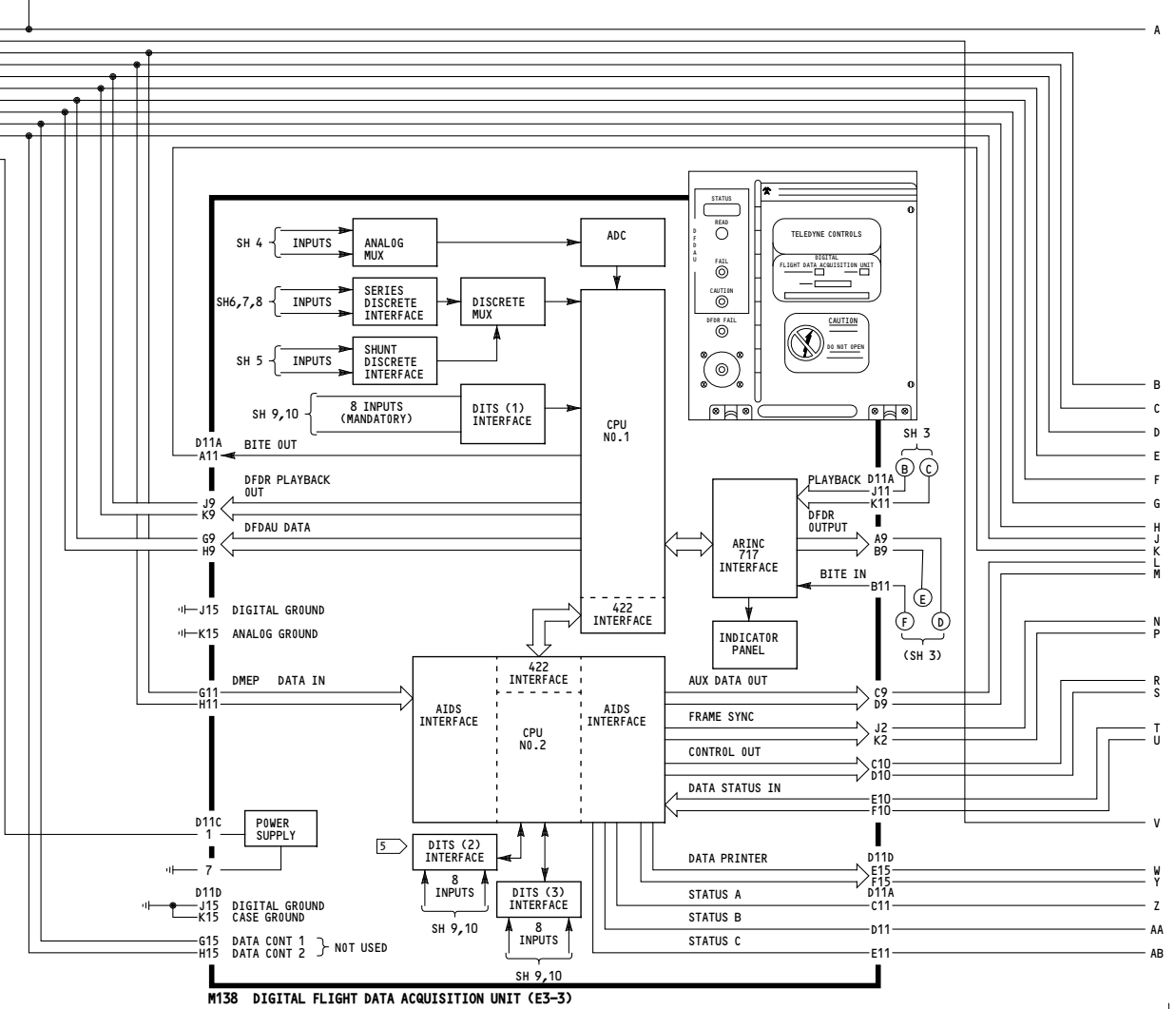
- 1 LRU FAIL LIGHTS WILL ILLUMINATE QAR, FTR AND DMEP. MANDATORY FAIL LIGHTS WILL ILLUMINATE FDAU AND DFDR.
- 2

| CONTROLS AND INDICATORS                   | FUNCTIONS   |
|---|---|
| PPR ADV (PAPER ADVANCE) PUSHBUTTON SWITCH | WHEN PRESSED, PAPER IS MOVED THROUGH THE PRINTER  |
| SELF TEST PUSHBUTTON SWITCH               | WHEN PRESSED, CAUSES A TEST PATTERN OF THE FULL CHARACTER COMPLIMENT TO BE PRINTED.   |
| PTR BUSY (PRINTER BUSY) INDICATOR         | OPERATES IN CONJUNCTION WITH INPUT DATA CHARACTERS FROM THE USERS TERMINAL. WHEN ON, INDICATES RECEIPT OF THE SIX CHARACTER AND REMAINS ON AFTER PAPER HAS ADVANCED THREE LINES PAST THE TEAR-OFF EDGE.<br><br>NOTE: THE INDICATOR WILL FLASH CONTINUOUSLY AFTER PAPER ADVANCE UNTIL THE RESET BUTTON IS PRESSED. |
| ALERT RESET (PUSHBUTTON SWITCH)           | WHEN PRESSED, RESETS THE PRINTER AURAL/VISUAL ALERT FUNCTION.   |
| PWR ON INDICATOR                          | WHEN ON, INDICATES +5 VDC OPERATING VOLTAGE IS PRESENT  |

- 3 WHEN THE READ SWITCH IS PRESSED, THE DFDAU FAIL, THE DFDAU CAUTION AND DFDR FAIL INDICATORS WILL ILLUMINATE AND THE 3-DIGIT DISPLAY WILL INDICATE "888" THEN FFF. AFTER APPROXIMATELY 4 SECONDS THESE INDICATORS WILL EXTINGUISH AND THE DISPLAY WILL INDICATE "000" UNLESS A SPECIFIC FAILURE HAS OCCURED IN WHICH CASE THE FAILURE CODE WILL BE DISPLAYED BRIEFLY BEFORE SEQUENCING TO "000".

4 UART: UNIVERSAL ASYNCHRONOUS RECEIVER/ TRANSMITTER

5 DITS: DIGITAL INFORMATION TRANSFER SYSTEM



**M138 DIGITAL FLIGHT DATA ACQUISITION UNIT (E3-3)**

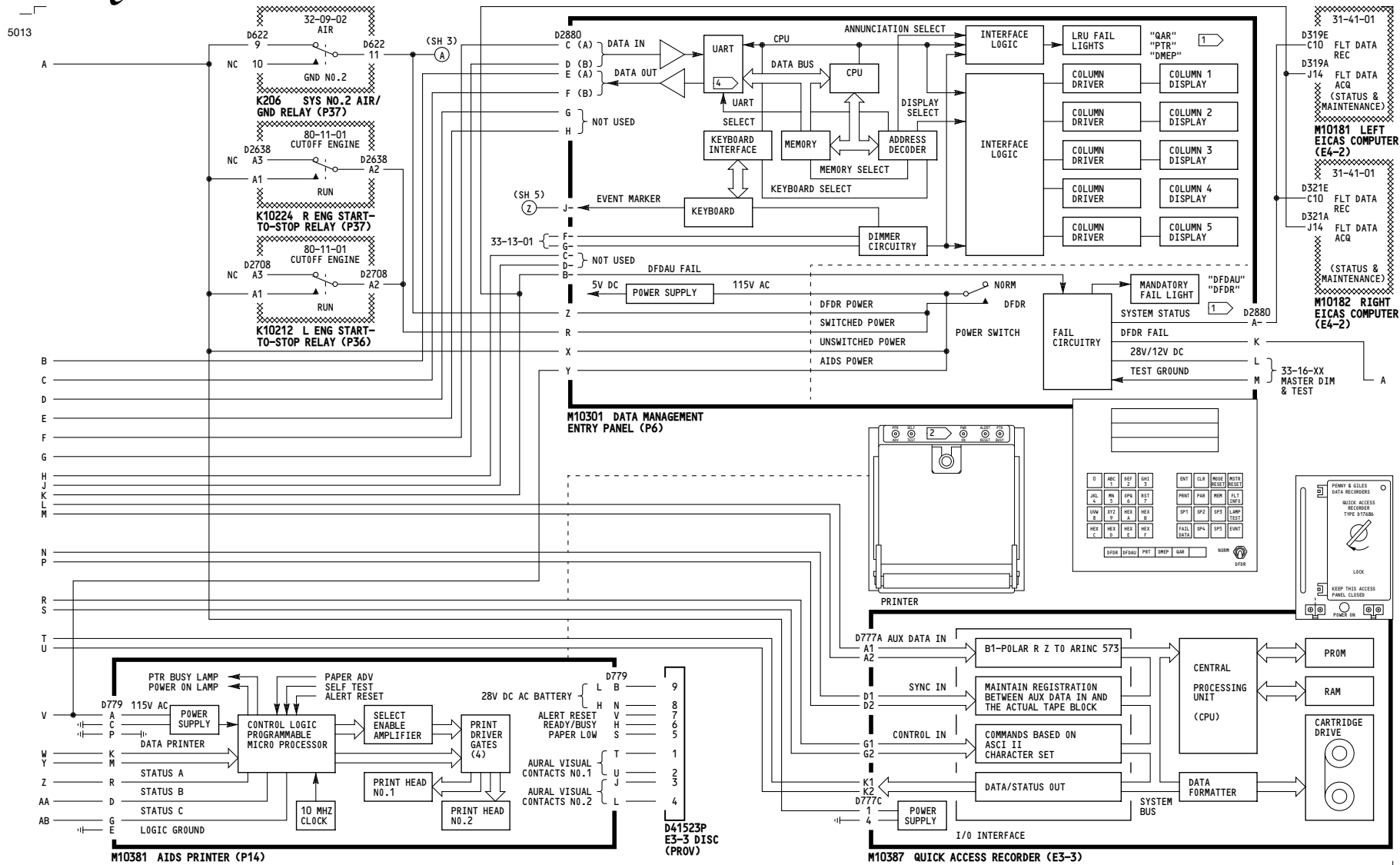
115-199

**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

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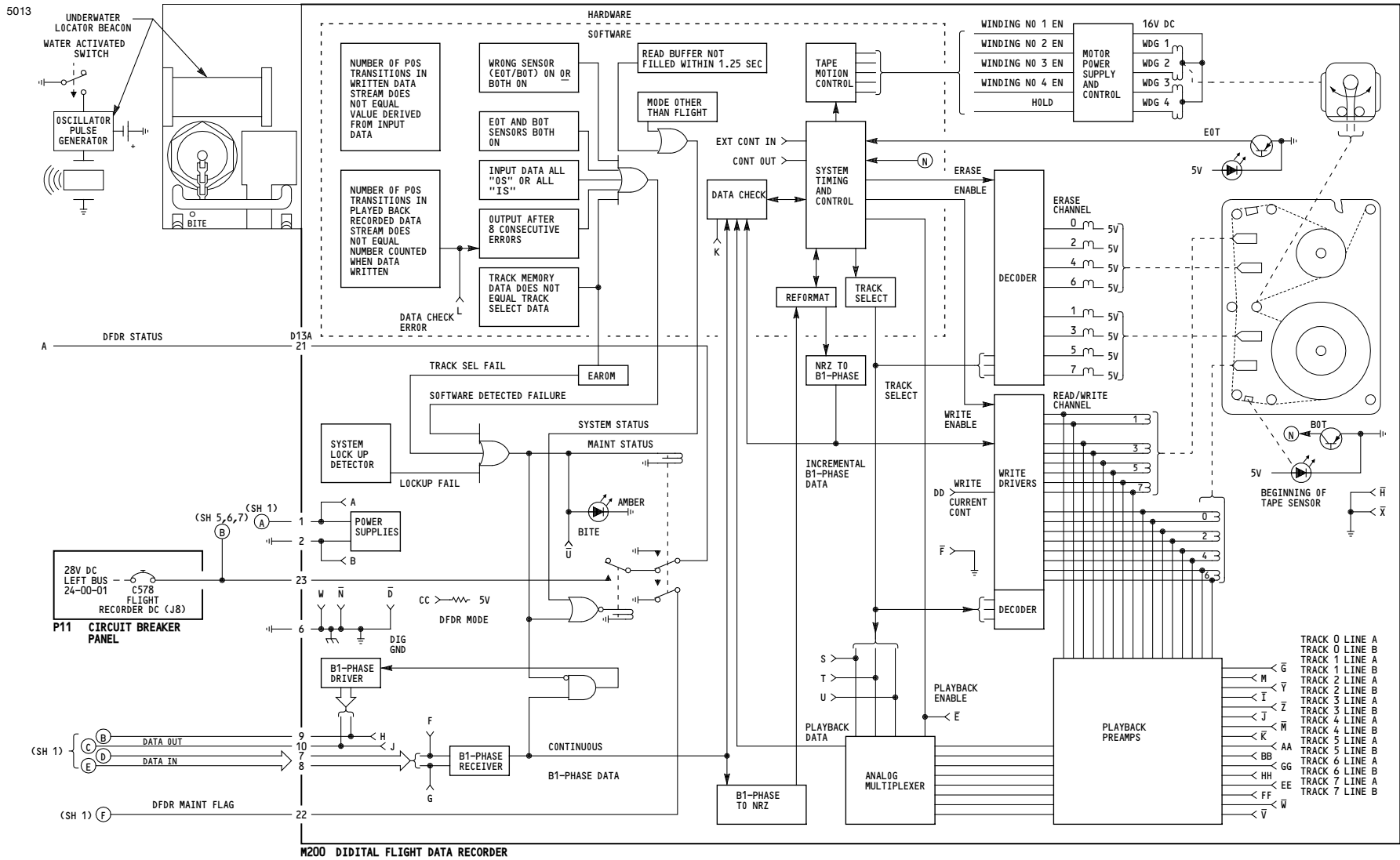
115-199

**DIGITAL FLIGHT RECORDER SYSTEM**

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**M200 DIGITAL FLIGHT DATA RECORDER**

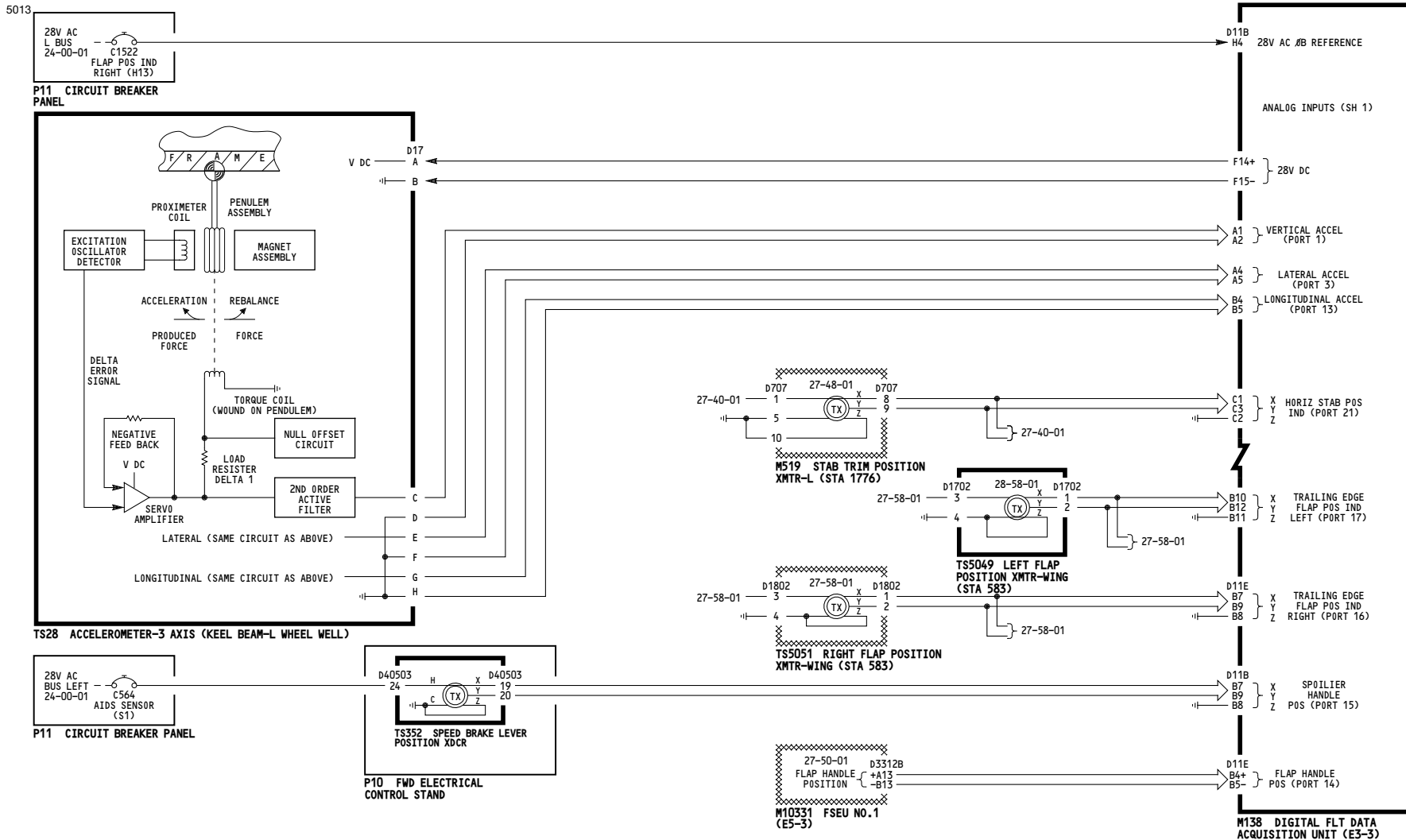
115-199

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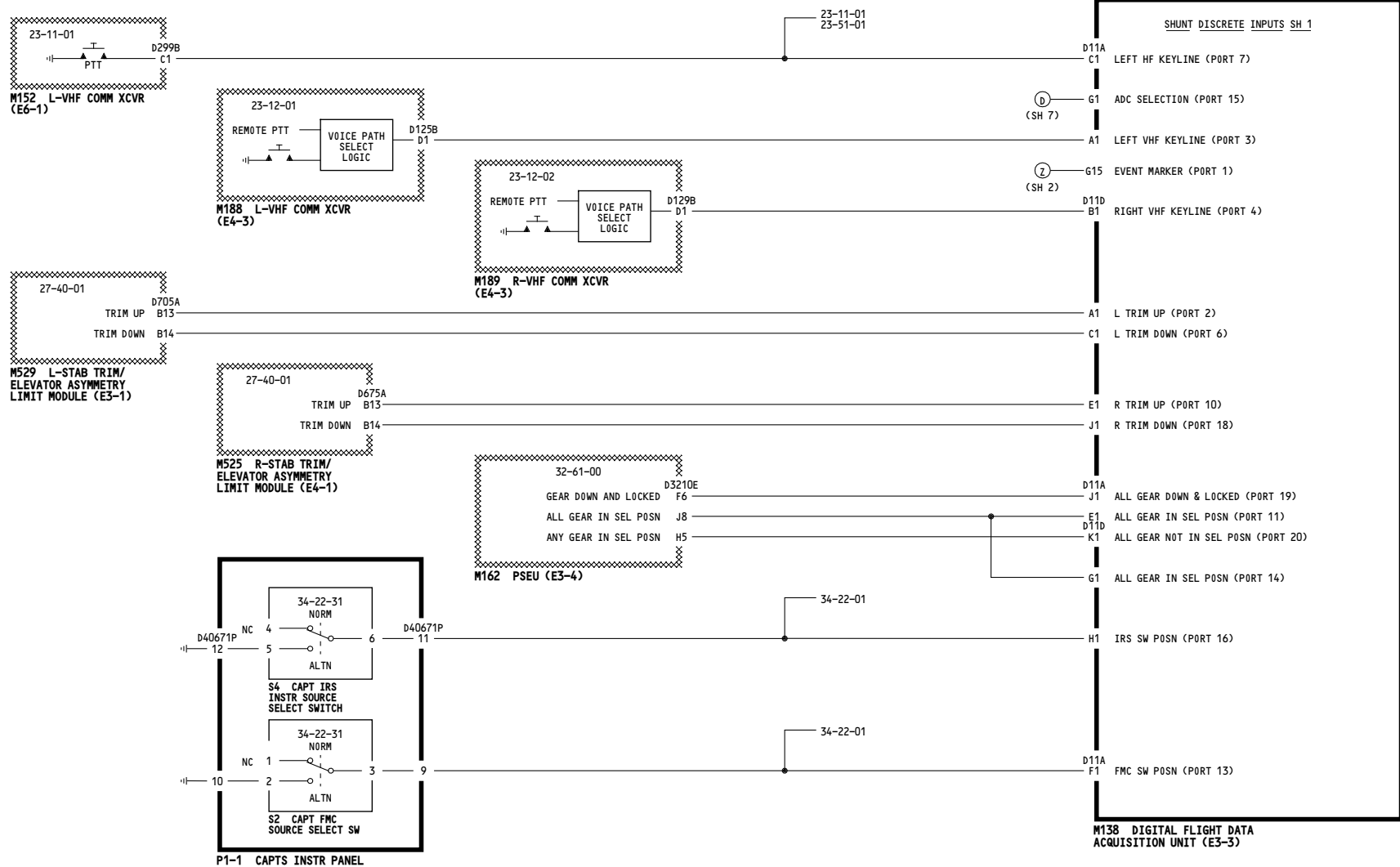
115-199

**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

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5013



115-199

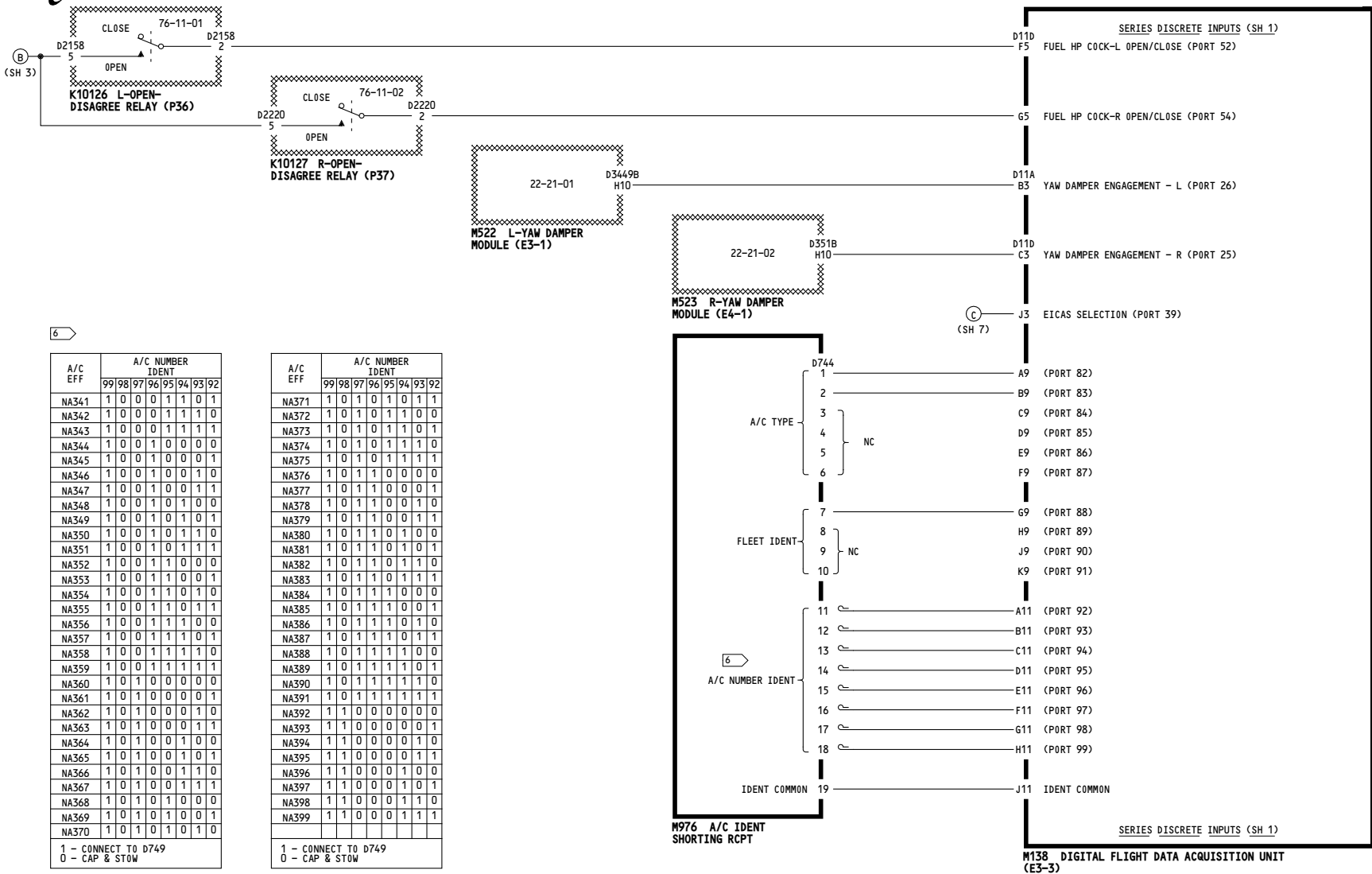
**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

**31-31-01**

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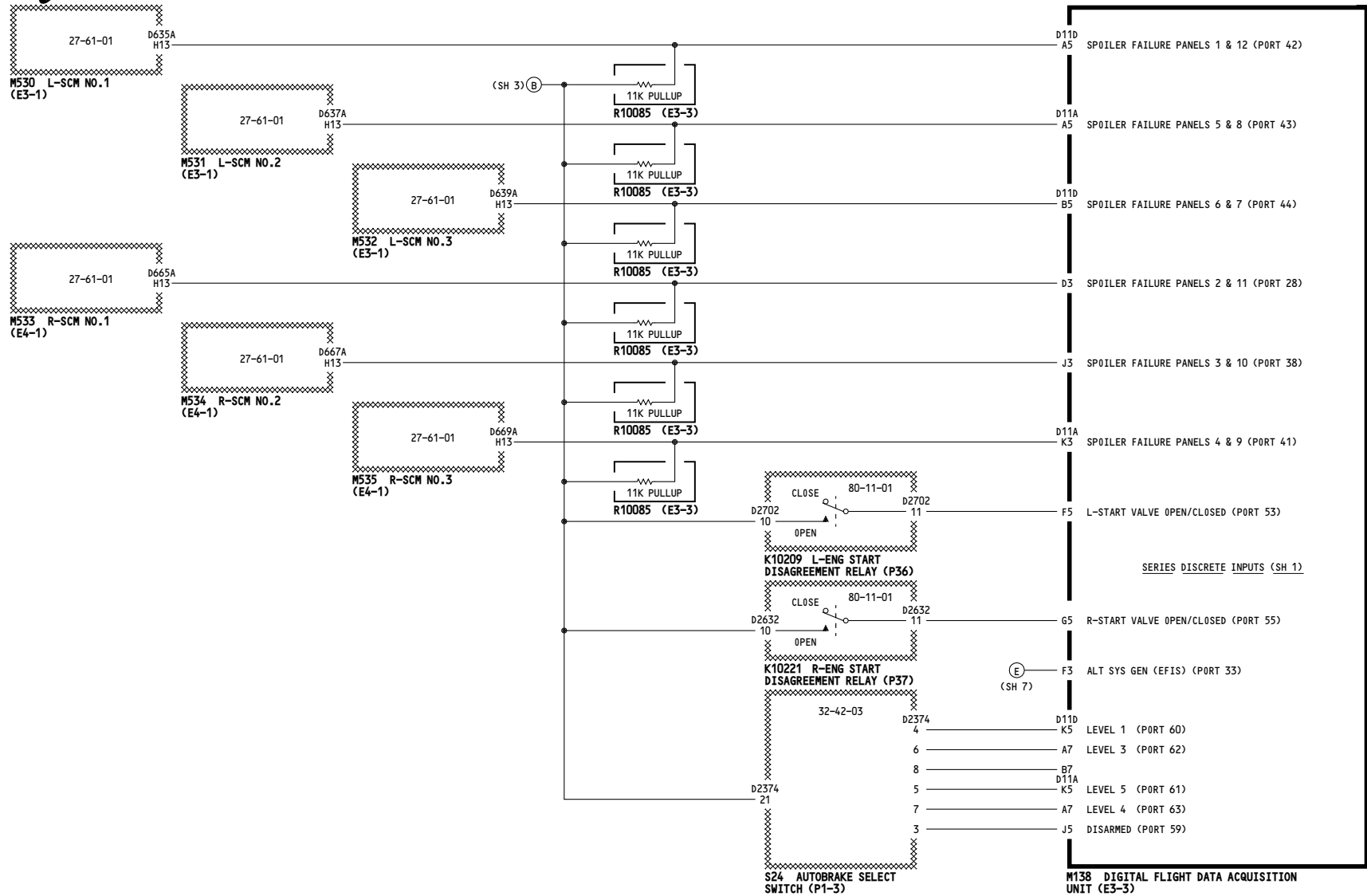
5023



|           |                                       |
|-----------|---------------------------------------|
| 115-199   | <b>DIGITAL FLIGHT RECORDER SYSTEM</b> |
| D280N032S |                                       |

**31-31-01**

5013



115-199

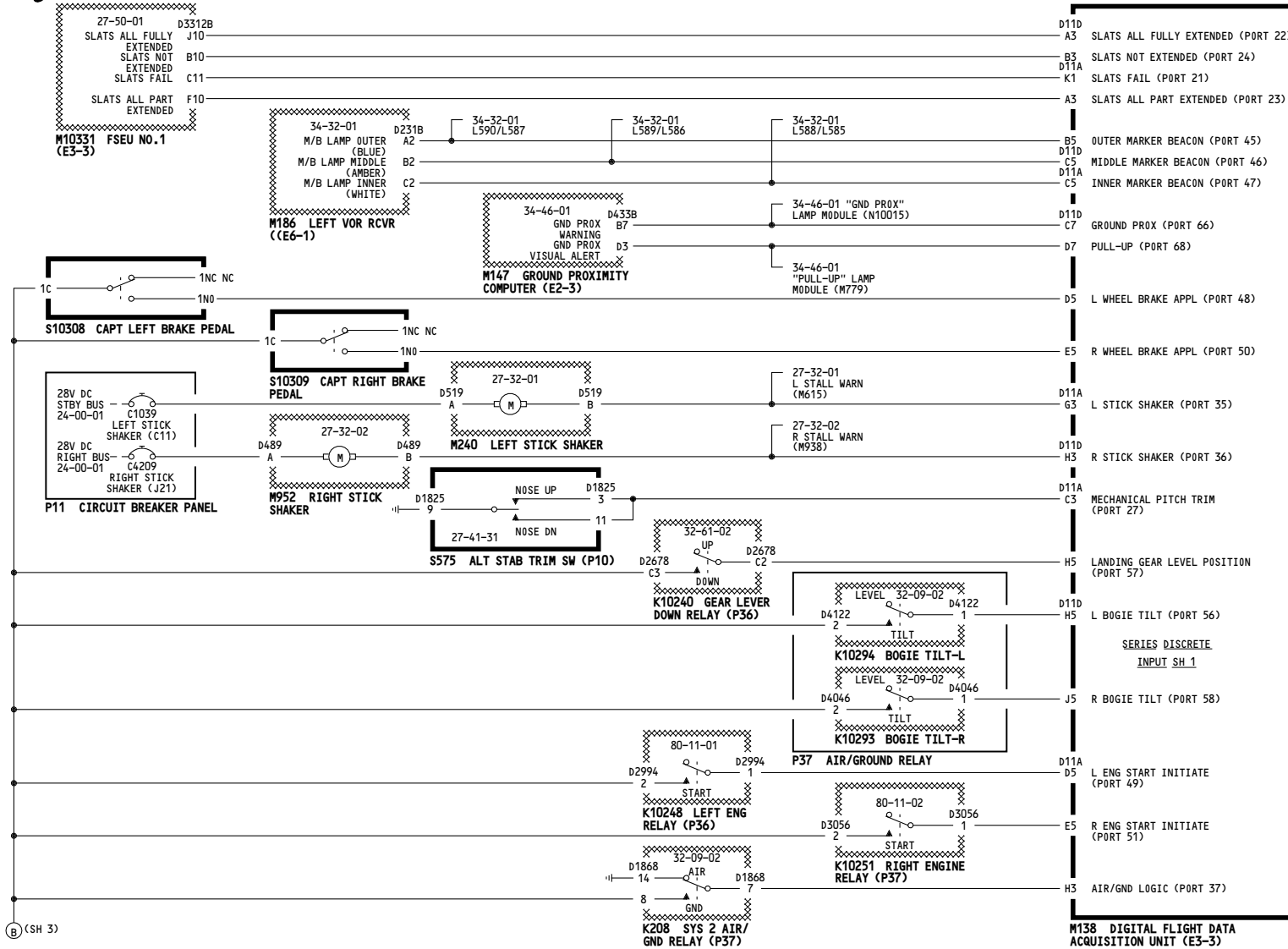
**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

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5016

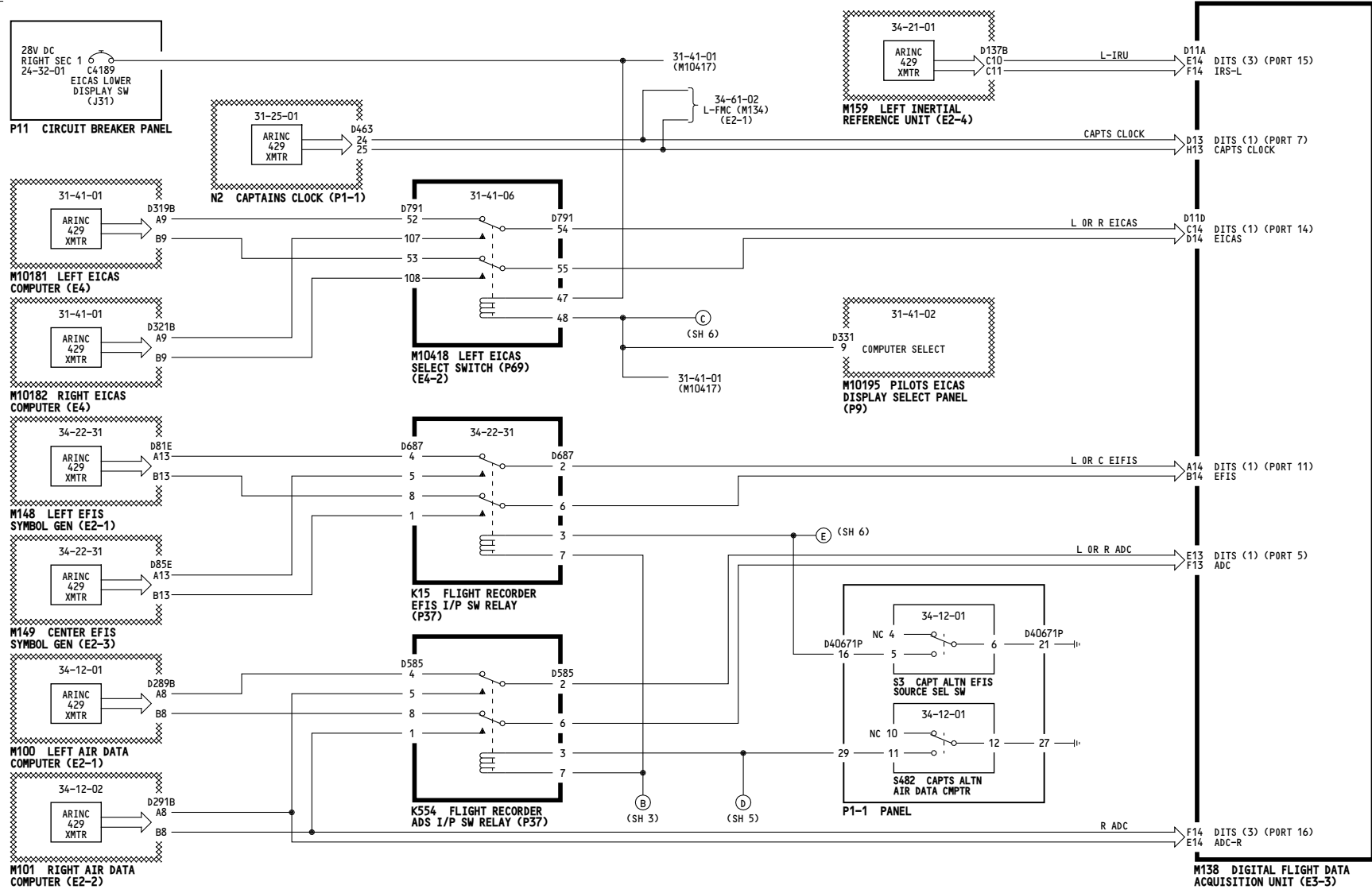


|         |   |
|---------|---|
| 115-199 | <p><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p>D280N032S</p> |
|---------|---|

**31-31-01**



-A  
5011

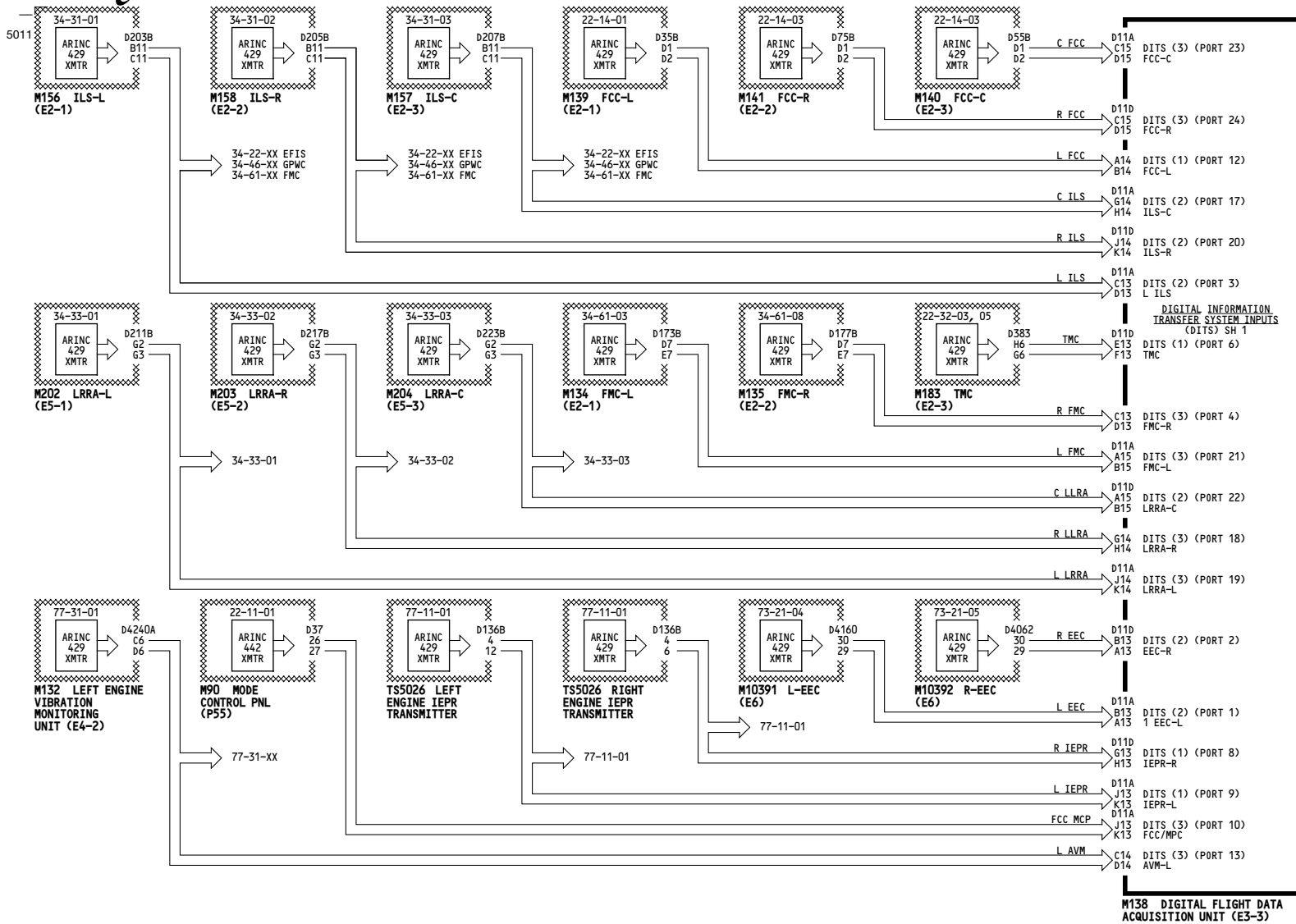


115-199

**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

**31-31-01**



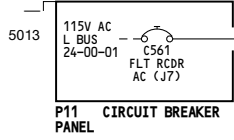
WIRING DIAGRAMS  
 31-31-11  
 31-31-12  
 31-31-13

115-199

**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

**31-31-01**



**M968 SYS TEST PLUG (P61)**

**NOTES:**

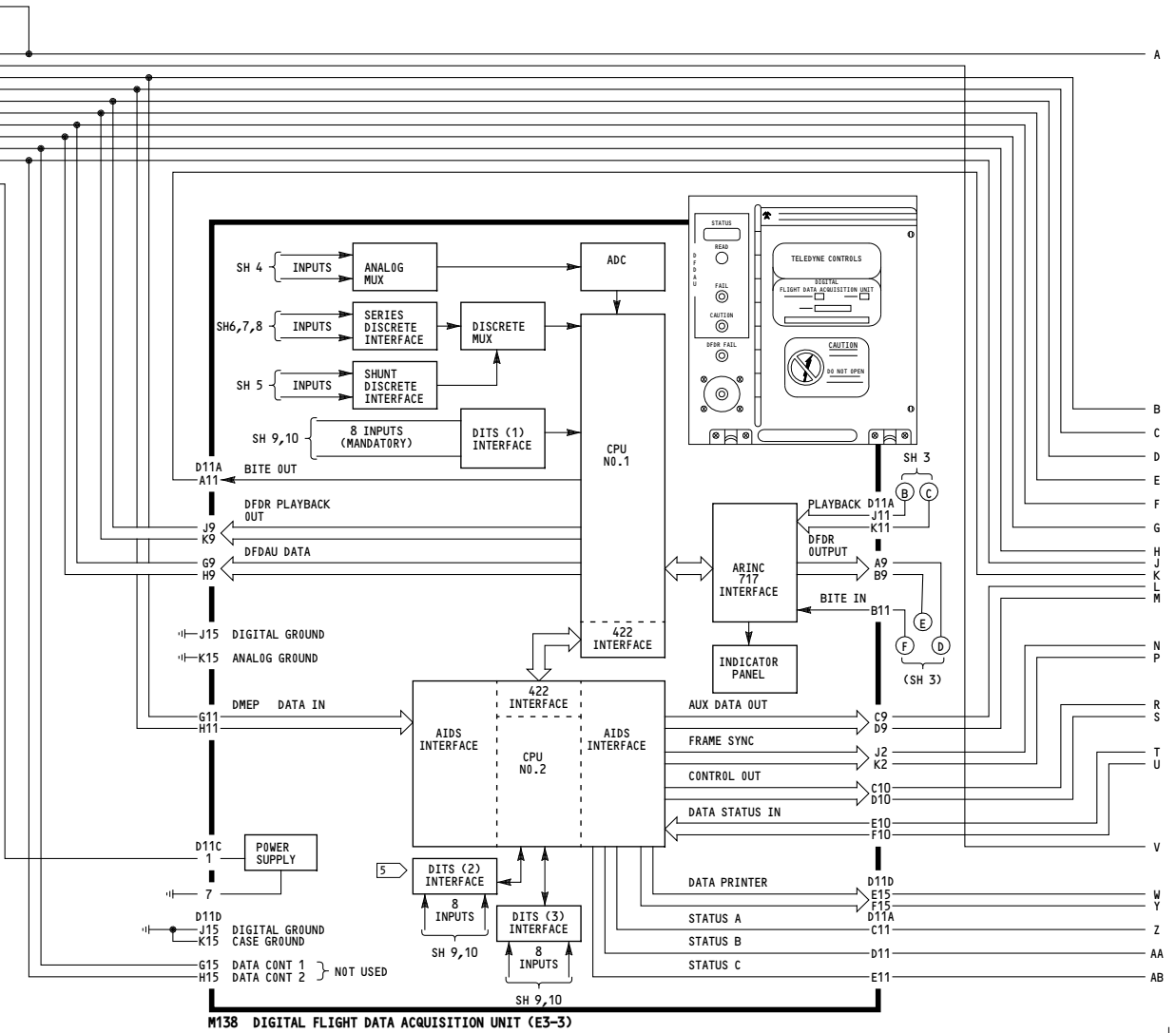
- 1 LRU FAIL LIGHTS WILL ILLUMINATE QAR, FTR AND DMEP. MANDATORY FAIL LIGHTS WILL ILLUMINATE FDAU AND DFDR.
- 2

| CONTROLS AND INDICATORS                   | FUNCTIONS   |
|---|---|
| PPR ADV (PAPER ADVANCE) PUSHBUTTON SWITCH | WHEN PRESSED, PAPER IS MOVED THROUGH THE PRINTER  |
| SELF TEST PUSHBUTTON SWITCH               | WHEN PRESSED, CAUSES A TEST PATTERN OF THE FULL CHARACTER COMPLIMENT TO BE PRINTED.   |
| PTR BUSY (PRINTER BUSY) INDICATOR         | OPERATES IN CONJUNCTION WITH INPUT DATA CHARACTERS FROM THE USERS TERMINAL. WHEN ON, INDICATES RECEIPT OF THE SIX CHARACTER AND REMAINS ON AFTER PAPER HAS ADVANCED THREE LINES PAST THE TEAR-OFF EDGE.<br><br>NOTE: THE INDICATOR WILL FLASH CONTINUOUSLY AFTER PAPER ADVANCE UNTIL THE RESET BUTTON IS PRESSED. |
| ALERT RESET (PUSHBUTTON SWITCH)           | WHEN PRESSED, RESETS THE PRINTER AURAL/VISUAL ALERT FUNCTION.   |
| PWR ON INDICATOR                          | WHEN ON, INDICATES +5 VDC OPERATING VOLTAGE IS PRESENT  |

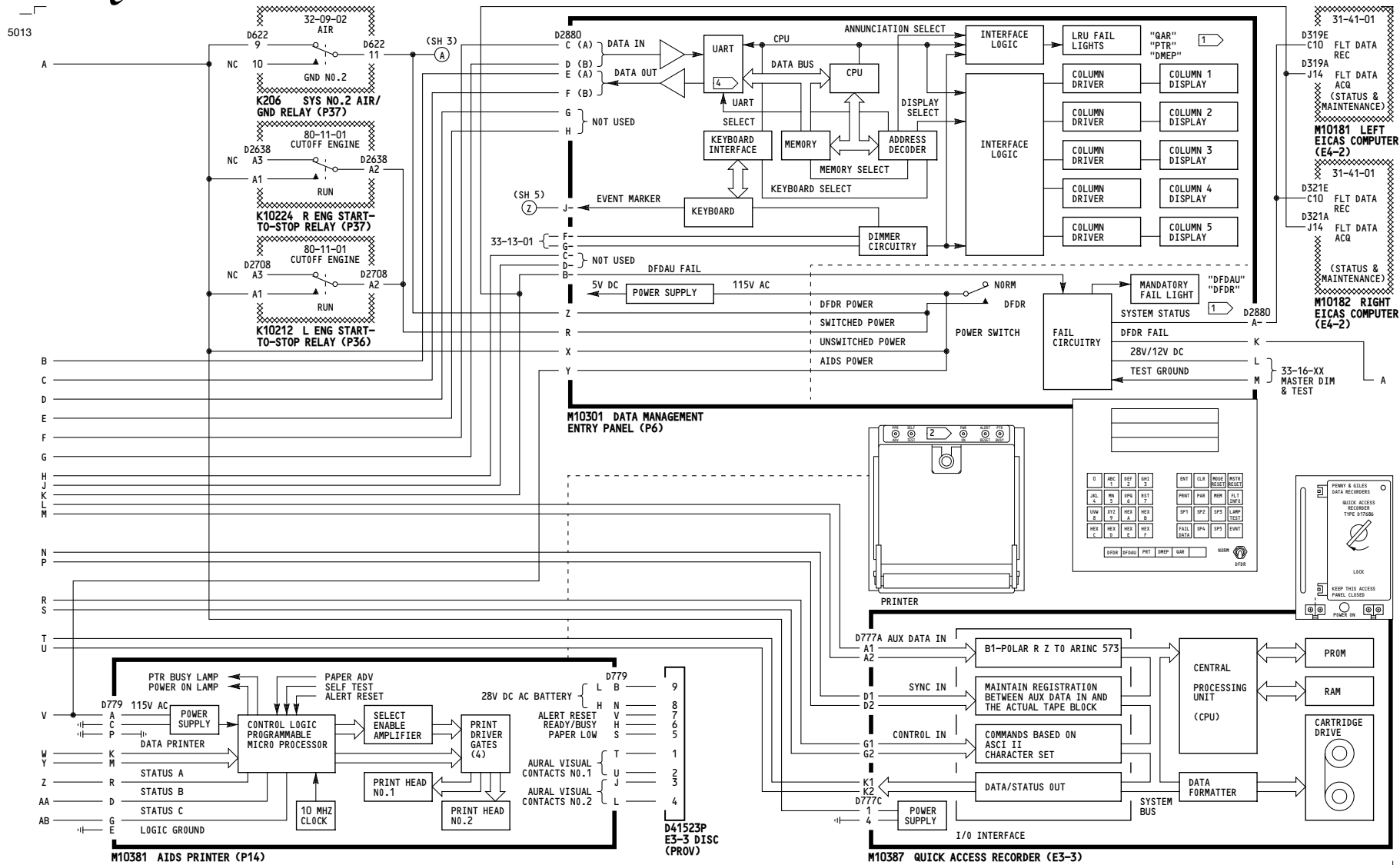
- 3 WHEN THE READ SWITCH IS PRESSED, THE DFDAU FAIL, THE DFDAU CAUTION AND DFDR FAIL INDICATORS WILL ILLUMINATE AND THE 3-DIGIT DISPLAY WILL INDICATE "888" THEN FFF. AFTER APPROXIMATELY 4 SECONDS THESE INDICATORS WILL EXTINGUISH AND THE DISPLAY WILL INDICATE "000" UNLESS A SPECIFIC FAILURE HAS OCCURED IN WHICH CASE THE FAILURE CODE WILL BE DISPLAYED BRIEFLY BEFORE SEQUENCING TO "000".

4 UART: UNIVERSAL ASYNCHRONOUS RECEIVER/ TRANSMITTER

5 DITS: DIGITAL INFORMATION TRANSFER SYSTEM



**M138 DIGITAL FLIGHT DATA ACQUISITION UNIT (E3-3)**



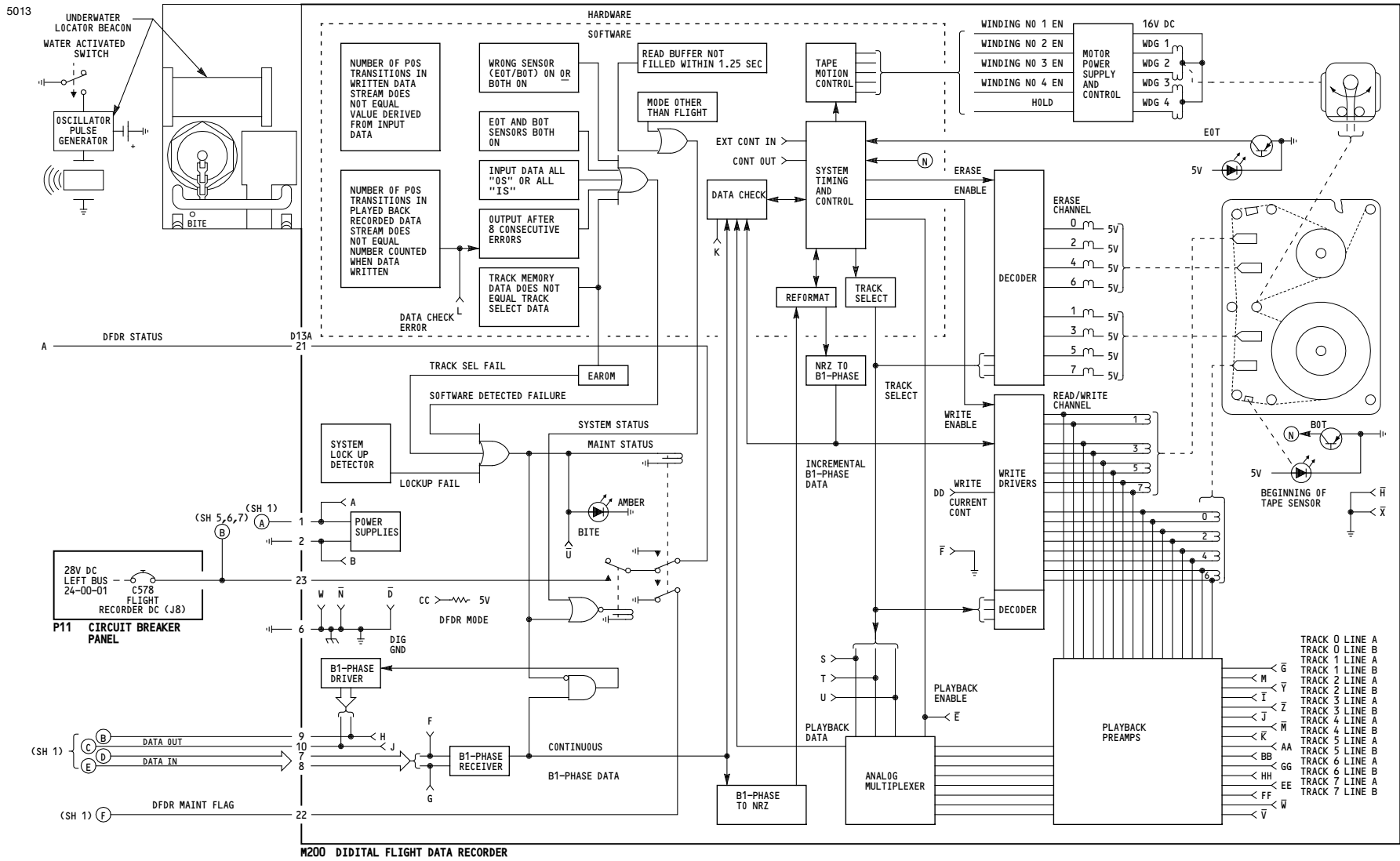
115

**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

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M200 DIGITAL FLIGHT DATA RECORDER

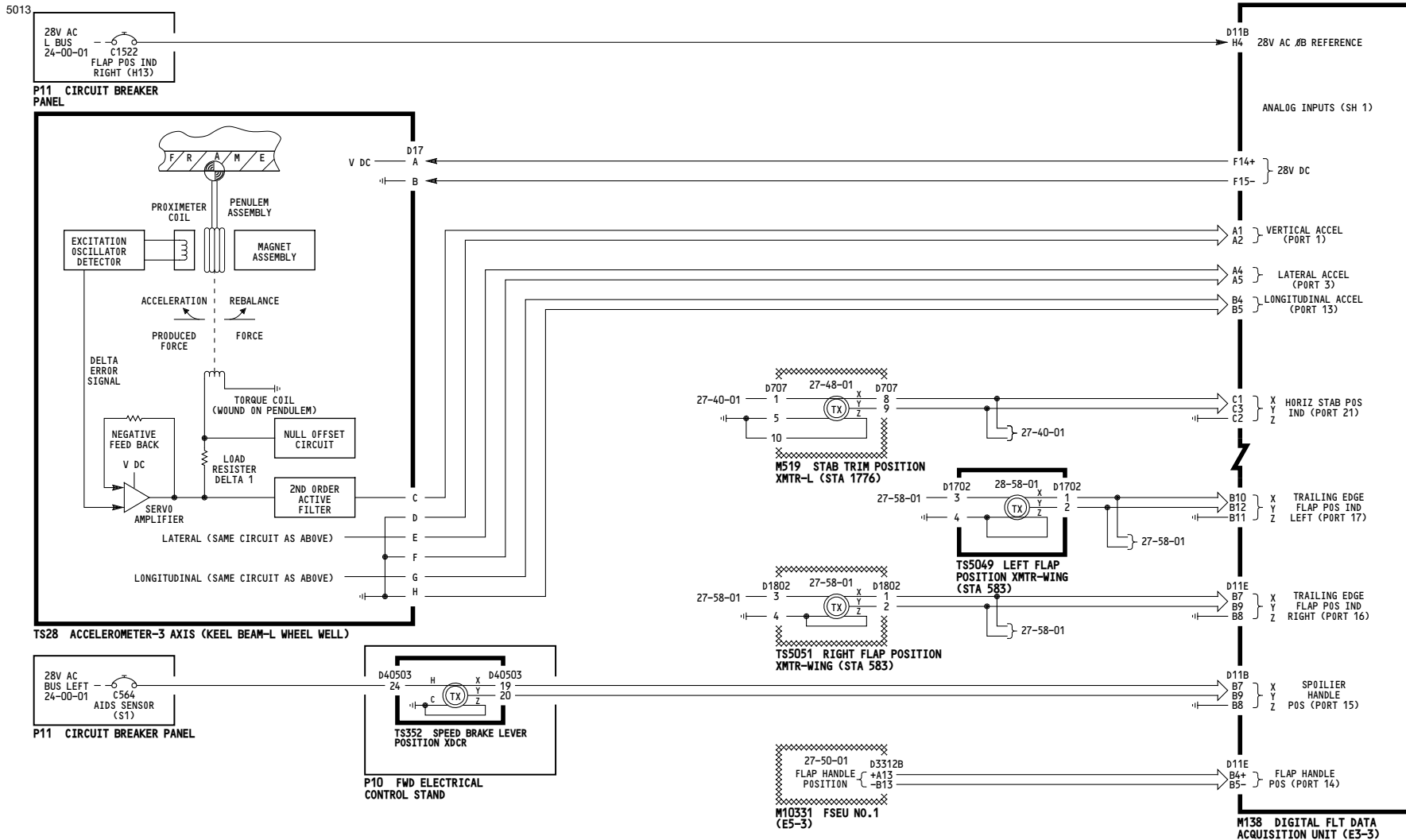
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**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

**31-31-01**

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Sheet 3  
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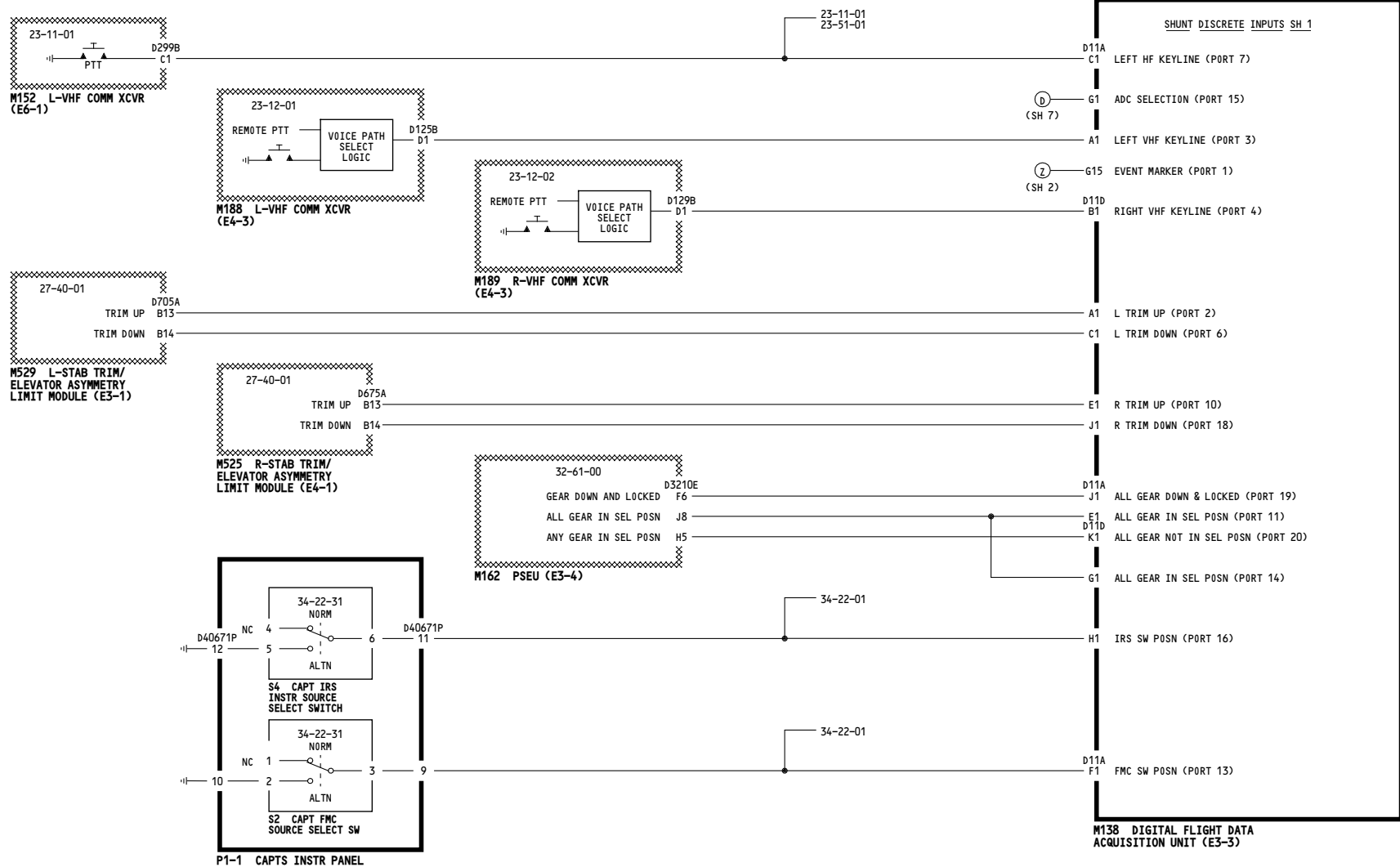


|     |  |
|-----|--|
| 115 | <b>DIGITAL FLIGHT RECORDER SYSTEM</b><br><br>D280N032S |
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**31-31-01**

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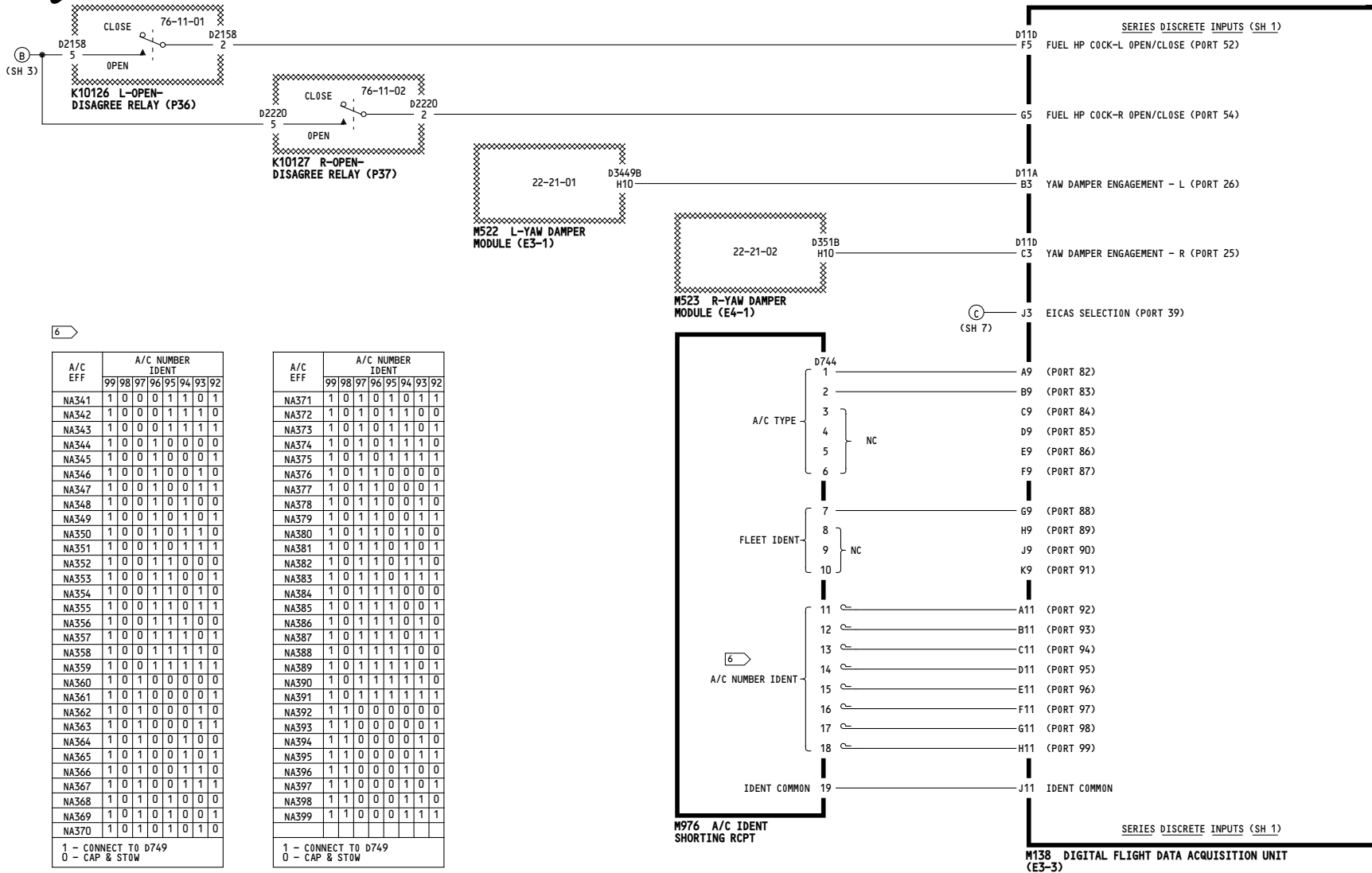
**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

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6

| A/C EFF | A/C NUMBER IDENT |    |    |    |    |    |    |    |
|---------|------------------|----|----|----|----|----|----|----|
|         | 99               | 98 | 97 | 96 | 95 | 94 | 93 | 92 |
| NA341   | 1                | 0  | 0  | 0  | 1  | 1  | 0  | 1  |
| NA342   | 1                | 0  | 0  | 0  | 1  | 1  | 1  | 0  |
| NA343   | 1                | 0  | 0  | 0  | 1  | 1  | 1  | 1  |
| NA344   | 1                | 0  | 0  | 1  | 0  | 0  | 0  | 0  |
| NA345   | 1                | 0  | 0  | 1  | 0  | 0  | 0  | 1  |
| NA346   | 1                | 0  | 0  | 1  | 0  | 0  | 1  | 0  |
| NA347   | 1                | 0  | 0  | 1  | 0  | 0  | 1  | 1  |
| NA348   | 1                | 0  | 0  | 1  | 0  | 1  | 0  | 0  |
| NA349   | 1                | 0  | 0  | 1  | 0  | 1  | 0  | 1  |
| NA350   | 1                | 0  | 0  | 1  | 0  | 1  | 1  | 0  |
| NA351   | 1                | 0  | 0  | 1  | 0  | 1  | 1  | 1  |
| NA352   | 1                | 0  | 0  | 1  | 1  | 0  | 0  | 0  |
| NA353   | 1                | 0  | 0  | 1  | 1  | 0  | 0  | 1  |
| NA354   | 1                | 0  | 0  | 1  | 1  | 0  | 1  | 0  |
| NA355   | 1                | 0  | 0  | 1  | 1  | 0  | 1  | 1  |
| NA356   | 1                | 0  | 0  | 1  | 1  | 1  | 0  | 0  |
| NA357   | 1                | 0  | 0  | 1  | 1  | 1  | 0  | 1  |
| NA358   | 1                | 0  | 0  | 1  | 1  | 1  | 1  | 0  |
| NA359   | 1                | 0  | 0  | 1  | 1  | 1  | 1  | 1  |
| NA360   | 1                | 0  | 1  | 0  | 0  | 0  | 0  | 0  |
| NA361   | 1                | 0  | 1  | 0  | 0  | 0  | 0  | 1  |
| NA362   | 1                | 0  | 1  | 0  | 0  | 0  | 1  | 0  |
| NA363   | 1                | 0  | 1  | 0  | 0  | 0  | 1  | 1  |
| NA364   | 1                | 0  | 1  | 0  | 0  | 1  | 0  | 0  |
| NA365   | 1                | 0  | 1  | 0  | 0  | 1  | 0  | 1  |
| NA366   | 1                | 0  | 1  | 0  | 0  | 1  | 1  | 0  |
| NA367   | 1                | 0  | 1  | 0  | 0  | 1  | 1  | 1  |
| NA368   | 1                | 0  | 1  | 0  | 0  | 0  | 0  | 0  |
| NA369   | 1                | 0  | 1  | 0  | 1  | 0  | 0  | 1  |
| NA370   | 1                | 0  | 1  | 0  | 1  | 0  | 1  | 0  |

1 - CONNECT TO D749  
0 - CAP & STOW

| A/C EFF | A/C NUMBER IDENT |    |    |    |    |    |    |    |
|---------|------------------|----|----|----|----|----|----|----|
|         | 99               | 98 | 97 | 96 | 95 | 94 | 93 | 92 |
| NA371   | 1                | 0  | 1  | 0  | 1  | 0  | 1  | 1  |
| NA372   | 1                | 0  | 1  | 0  | 1  | 1  | 0  | 0  |
| NA373   | 1                | 0  | 1  | 0  | 1  | 1  | 0  | 1  |
| NA374   | 1                | 0  | 1  | 0  | 1  | 1  | 1  | 0  |
| NA375   | 1                | 0  | 1  | 0  | 1  | 1  | 1  | 1  |
| NA376   | 1                | 0  | 1  | 1  | 0  | 0  | 0  | 0  |
| NA377   | 1                | 0  | 1  | 1  | 0  | 0  | 0  | 1  |
| NA378   | 1                | 0  | 1  | 1  | 0  | 0  | 1  | 0  |
| NA379   | 1                | 0  | 1  | 1  | 0  | 0  | 1  | 1  |
| NA380   | 1                | 0  | 1  | 1  | 0  | 1  | 0  | 0  |
| NA381   | 1                | 0  | 1  | 1  | 0  | 1  | 0  | 1  |
| NA382   | 1                | 0  | 1  | 1  | 0  | 1  | 1  | 0  |
| NA383   | 1                | 0  | 1  | 1  | 0  | 1  | 1  | 1  |
| NA384   | 1                | 0  | 1  | 1  | 1  | 0  | 0  | 0  |
| NA385   | 1                | 0  | 1  | 1  | 1  | 0  | 0  | 1  |
| NA386   | 1                | 0  | 1  | 1  | 1  | 0  | 1  | 0  |
| NA387   | 1                | 0  | 1  | 1  | 1  | 0  | 1  | 1  |
| NA388   | 1                | 0  | 1  | 1  | 1  | 1  | 0  | 0  |
| NA389   | 1                | 0  | 1  | 1  | 1  | 1  | 0  | 1  |
| NA390   | 1                | 0  | 1  | 1  | 1  | 1  | 1  | 0  |
| NA391   | 1                | 0  | 1  | 1  | 1  | 1  | 1  | 1  |
| NA392   | 1                | 1  | 0  | 0  | 0  | 0  | 0  | 0  |
| NA393   | 1                | 1  | 0  | 0  | 0  | 0  | 0  | 1  |
| NA394   | 1                | 1  | 0  | 0  | 0  | 0  | 1  | 0  |
| NA395   | 1                | 1  | 0  | 0  | 0  | 0  | 1  | 1  |
| NA396   | 1                | 1  | 0  | 0  | 0  | 1  | 0  | 0  |
| NA397   | 1                | 1  | 0  | 0  | 0  | 1  | 0  | 1  |
| NA398   | 1                | 1  | 0  | 0  | 0  | 1  | 1  | 0  |
| NA399   | 1                | 1  | 0  | 0  | 0  | 1  | 1  | 1  |

1 - CONNECT TO D749  
0 - CAP & STOW

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**DIGITAL FLIGHT RECORDER SYSTEM**

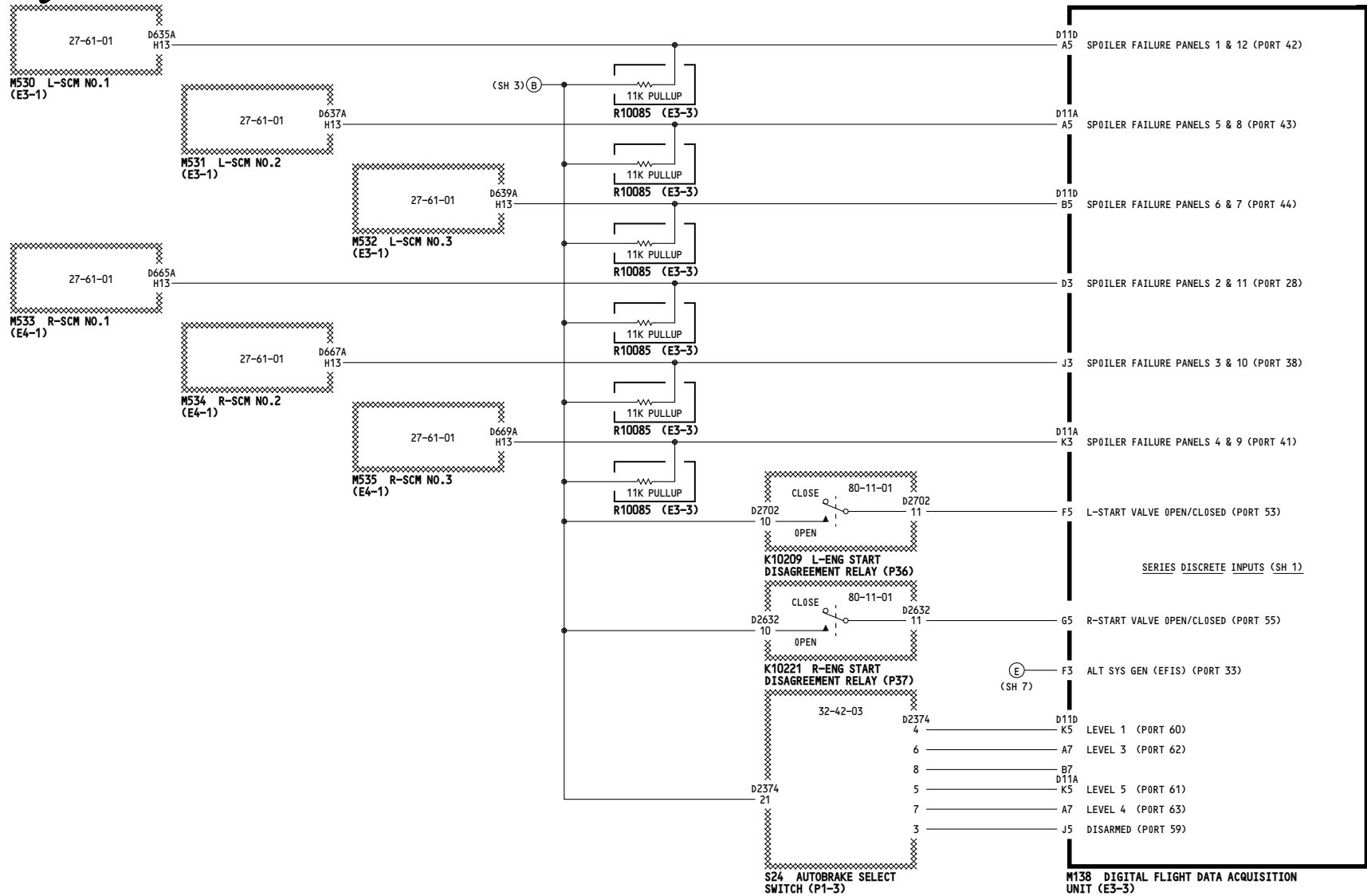
D280N032S

**31-31-01**

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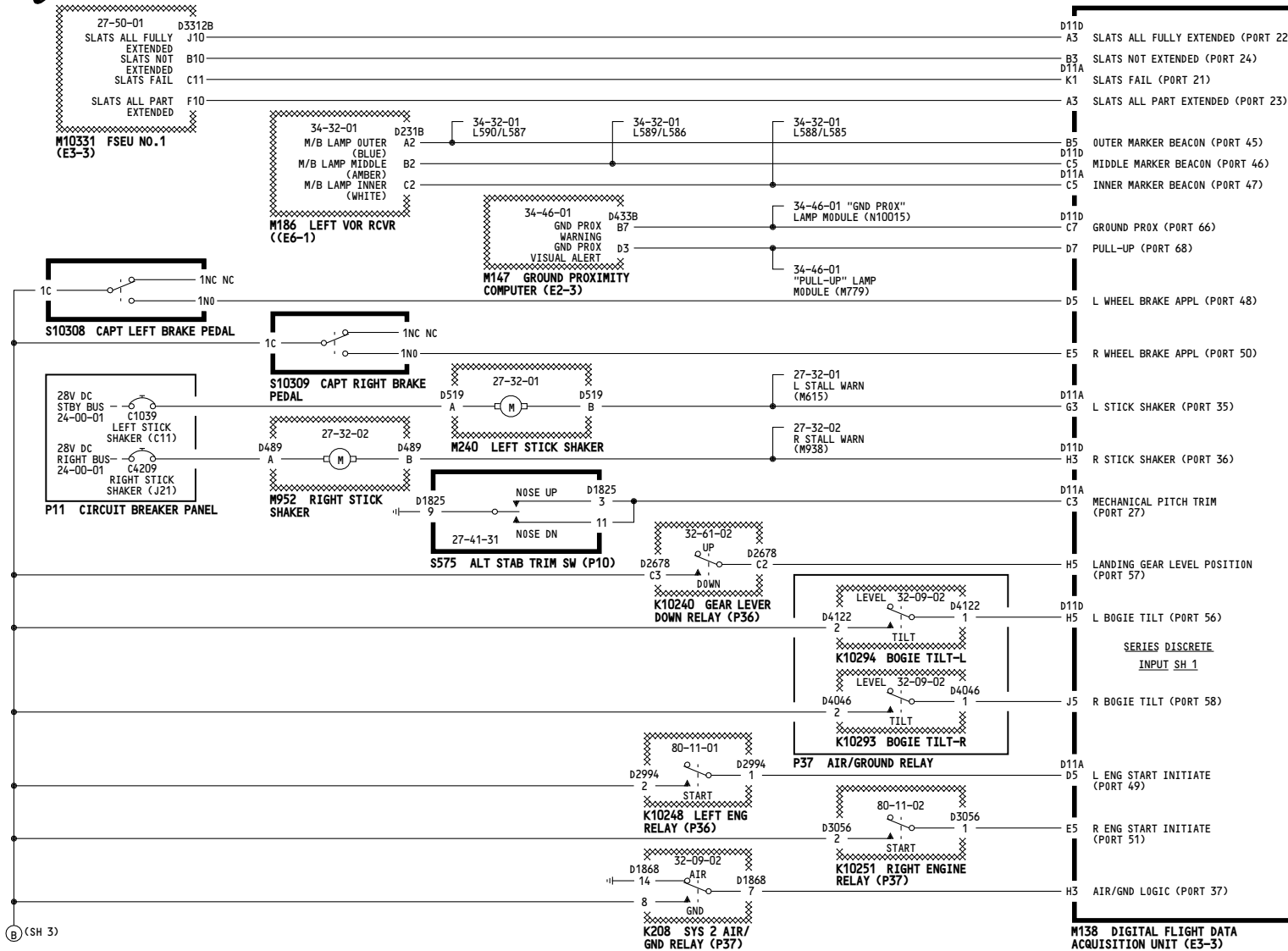
**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

**31-31-01**

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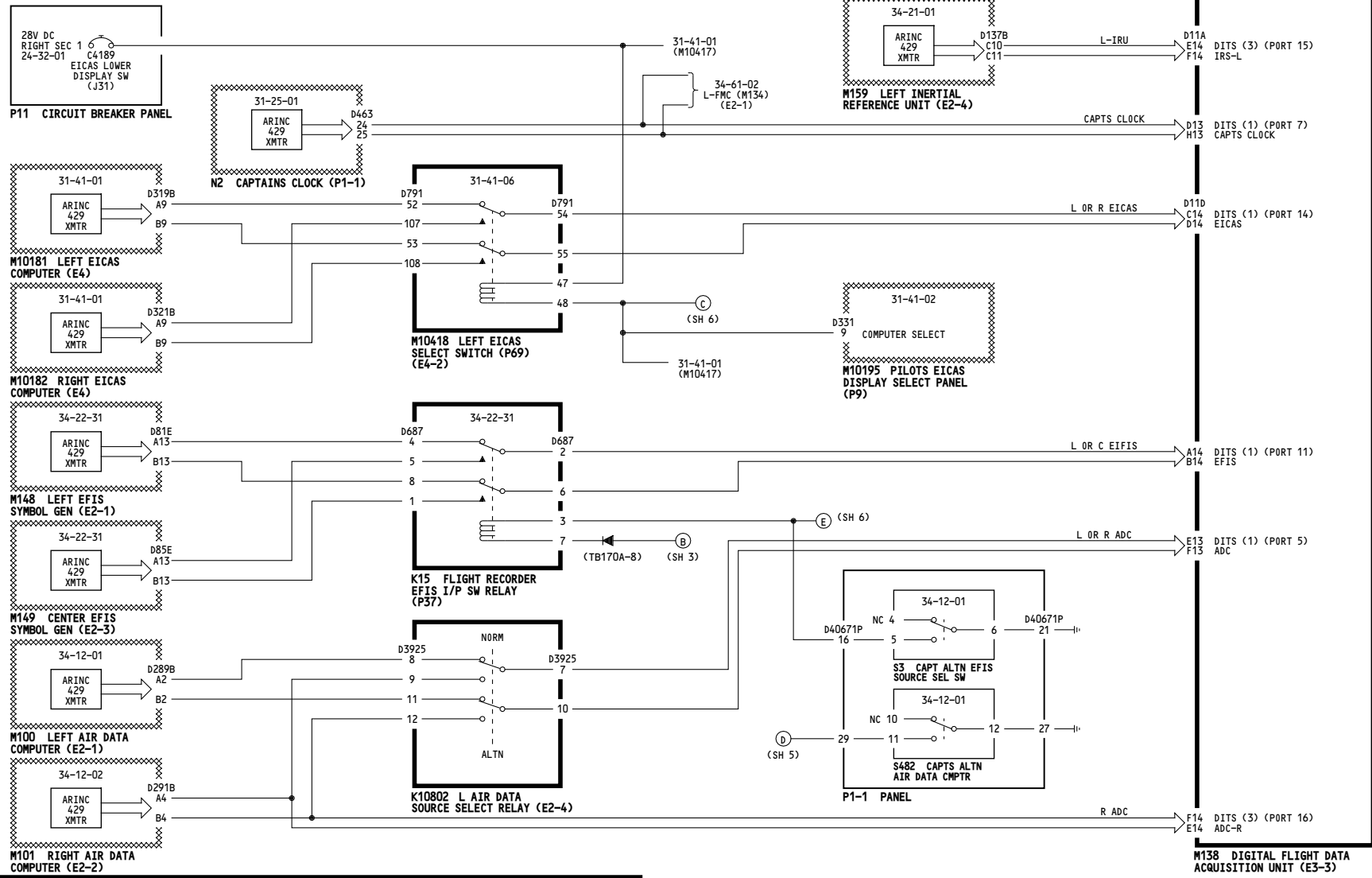
**DIGITAL FLIGHT RECORDER SYSTEM**

D280N032S

**31-31-01**

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115

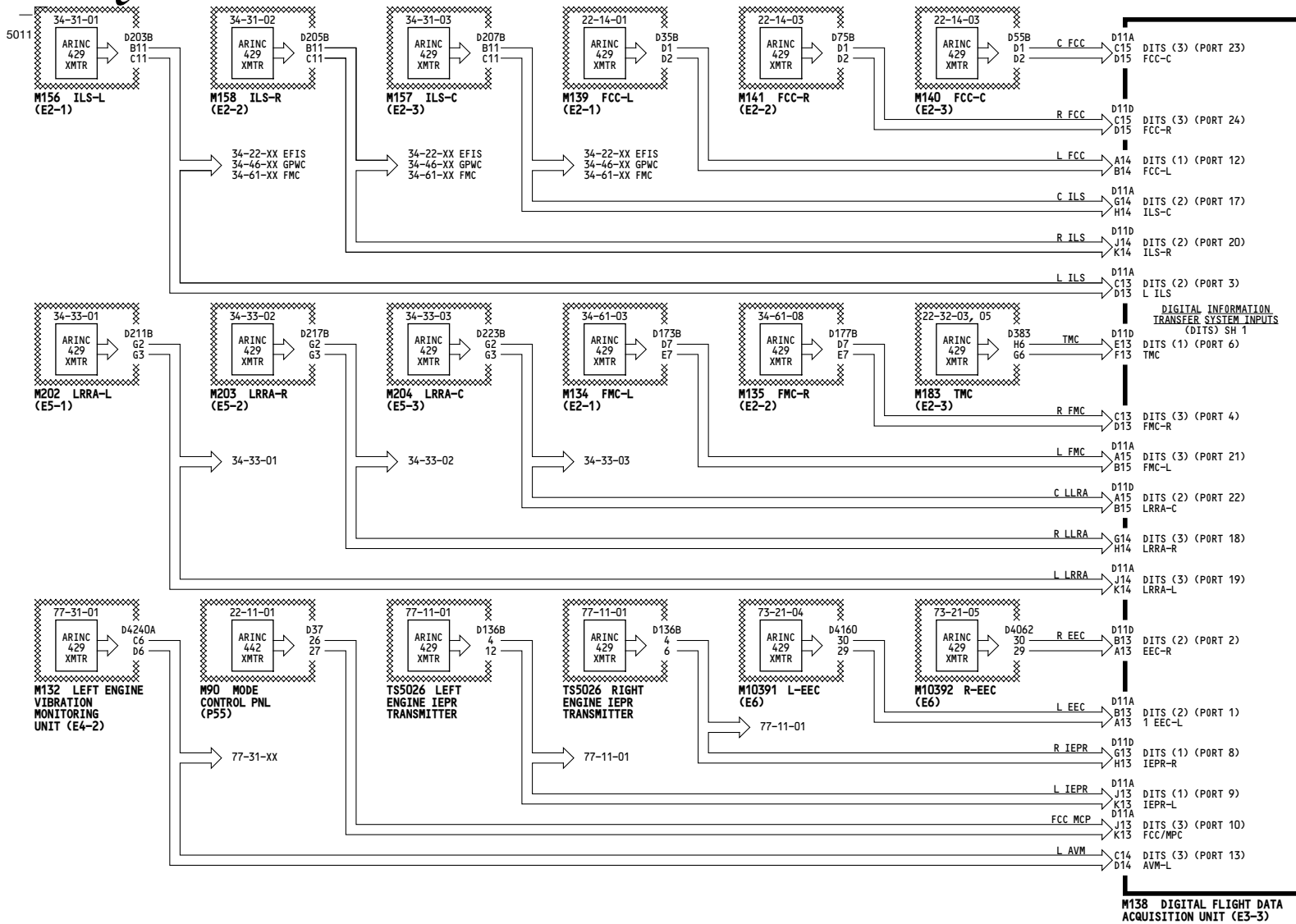
**DIGITAL FLIGHT RECORDER SYSTEM**

- Incorporates
- ▶▶ 31-0034 R02
- ▶▶ 34A0222

D280N032S

**31-31-01**

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Oct 09/2008

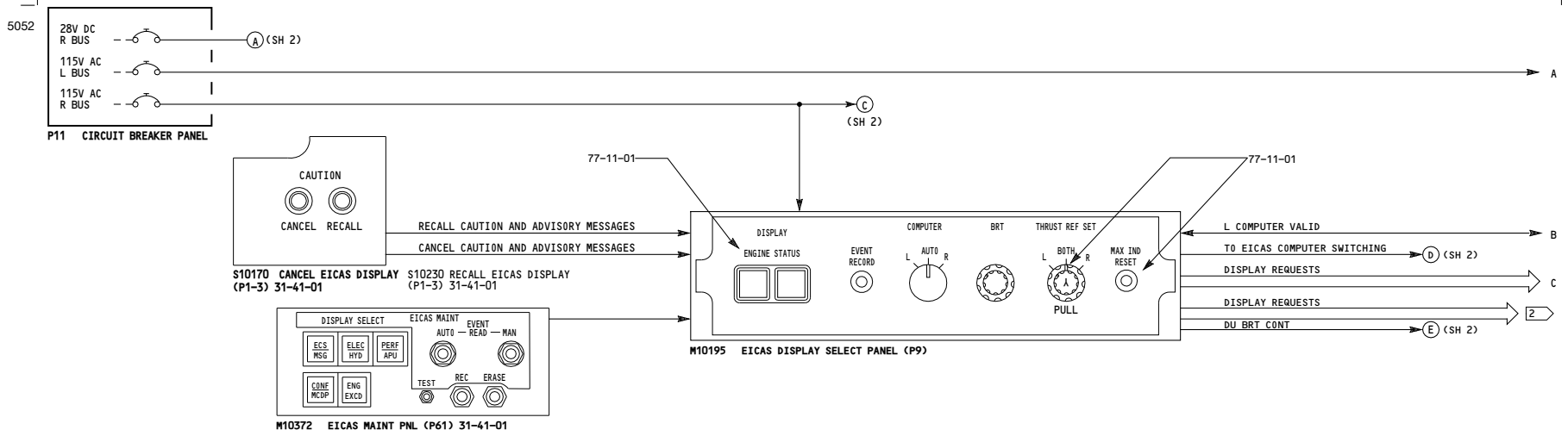


WIRING DIAGRAMS  
31-31-11  
31-31-12  
31-31-13

M138 DIGITAL FLIGHT DATA ACQUISITION UNIT (E3-3)

|     |   |
|-----|---|
| 115 | <p><b>DIGITAL FLIGHT RECORDER SYSTEM</b></p> <p>D280N032S</p> |
|-----|---|

**31-31-01**



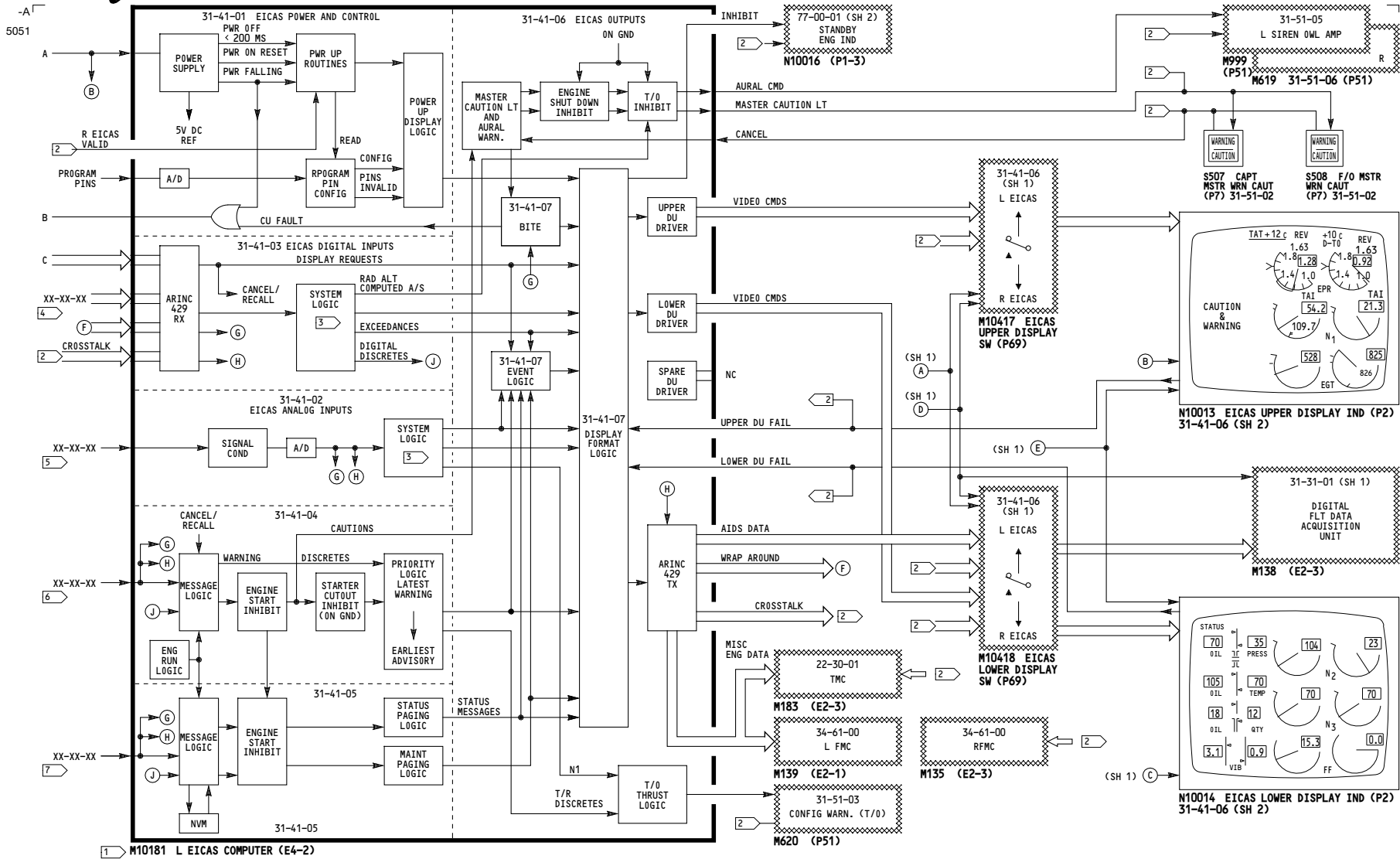
**NOTES:**

- 1 > LEFT SHOWN, RIGHT SIMILAR
- 2 > TO/FROM RIGHT SYSTEM
- 3 > FOR DETAILS OF LOGIC SEE APPROPRIATE SYSTEM
- 4 > FOR REFERENCES OF INPUTS SEE 31-41-03
- 5 > FOR REFERENCES OF INPUTS SEE 31-41-02
- 6 > FOR REFERENCES OF INPUTS SEE 31-41-04
- 7 > FOR REFERENCES OF INPUTS SEE 31-41-05

|         |                       |
|---------|-----------------------|
| 001-099 | <b>EICAS COMPUTER</b> |
|         | D280N032S             |

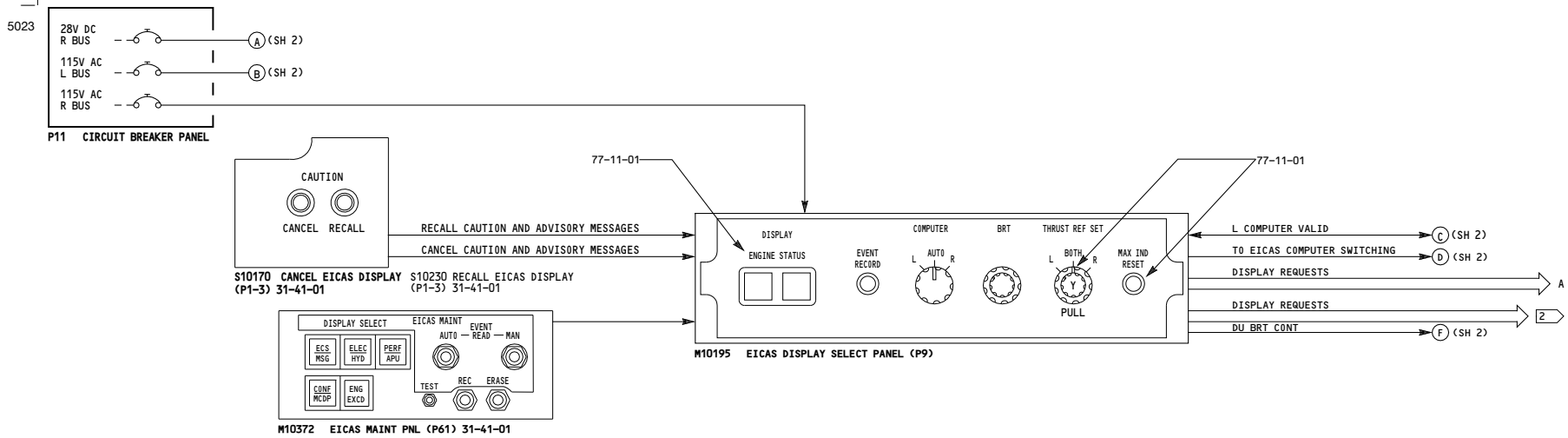
**31-40-01**

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|         |   |
|---------|---|
| 001-099 | <p align="center"><b>EICAS COMPUTER</b></p> <p align="center">D280N032S</p> |
|---------|---|

**31-40-01**



NOTES:

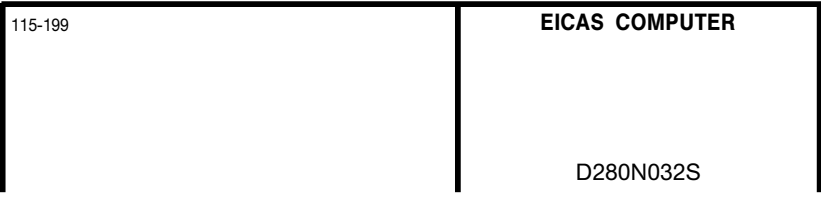
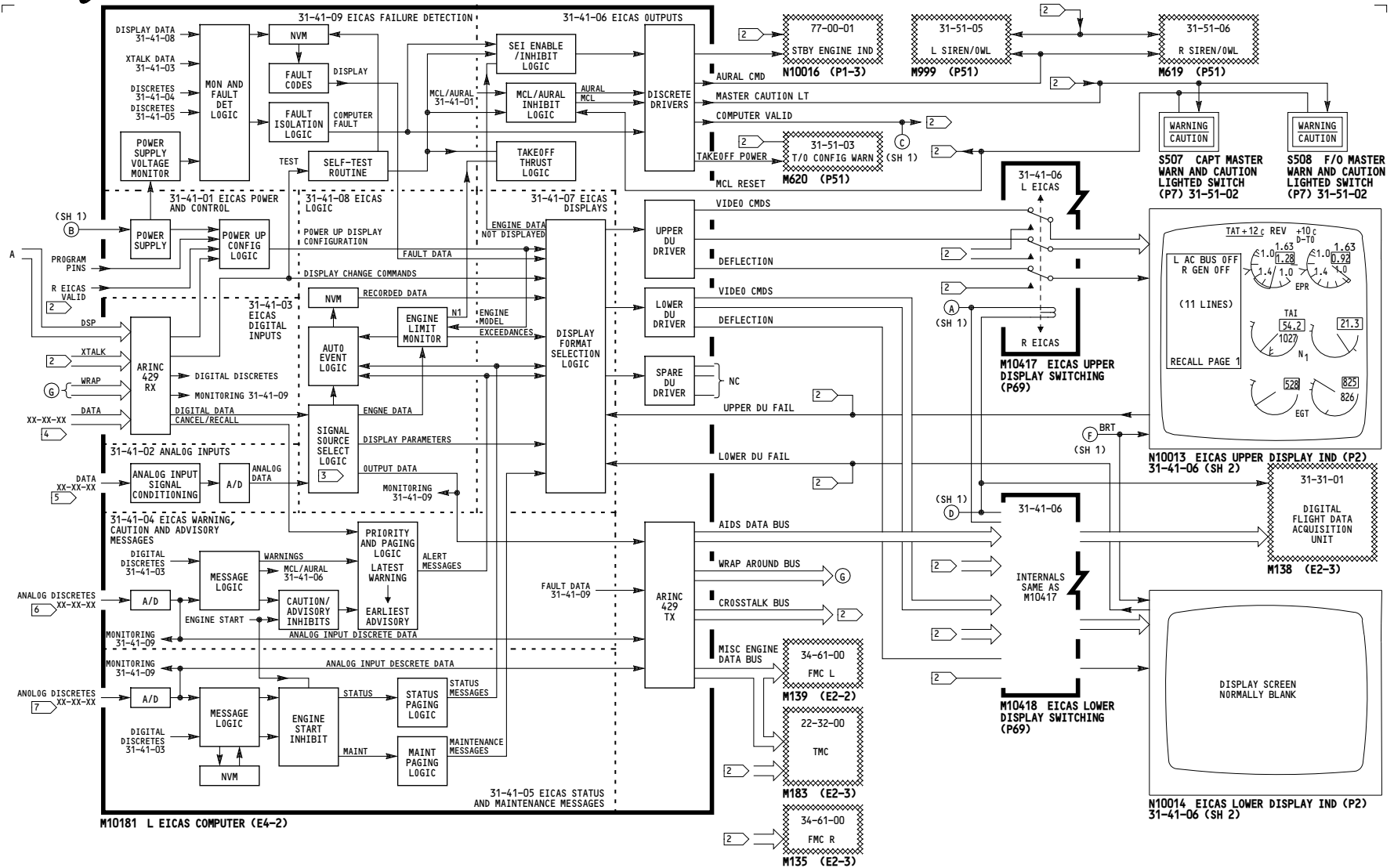
- 1 LEFT SHOWN, RIGHT SIMILAR
- 2 TO/FROM RIGHT SYSTEM
- 3 FOR DETAILS OF LOGIC SEE APPROPRIATE SYSTEM
- 4 FOR REFERENCES OF INPUTS SEE 31-41-03
- 5 FOR REFERENCES OF INPUTS SEE 31-41-02
- 6 FOR REFERENCES OF INPUTS SEE 31-41-04
- 7 FOR REFERENCES OF INPUTS SEE 31-41-05



**31-40-01**

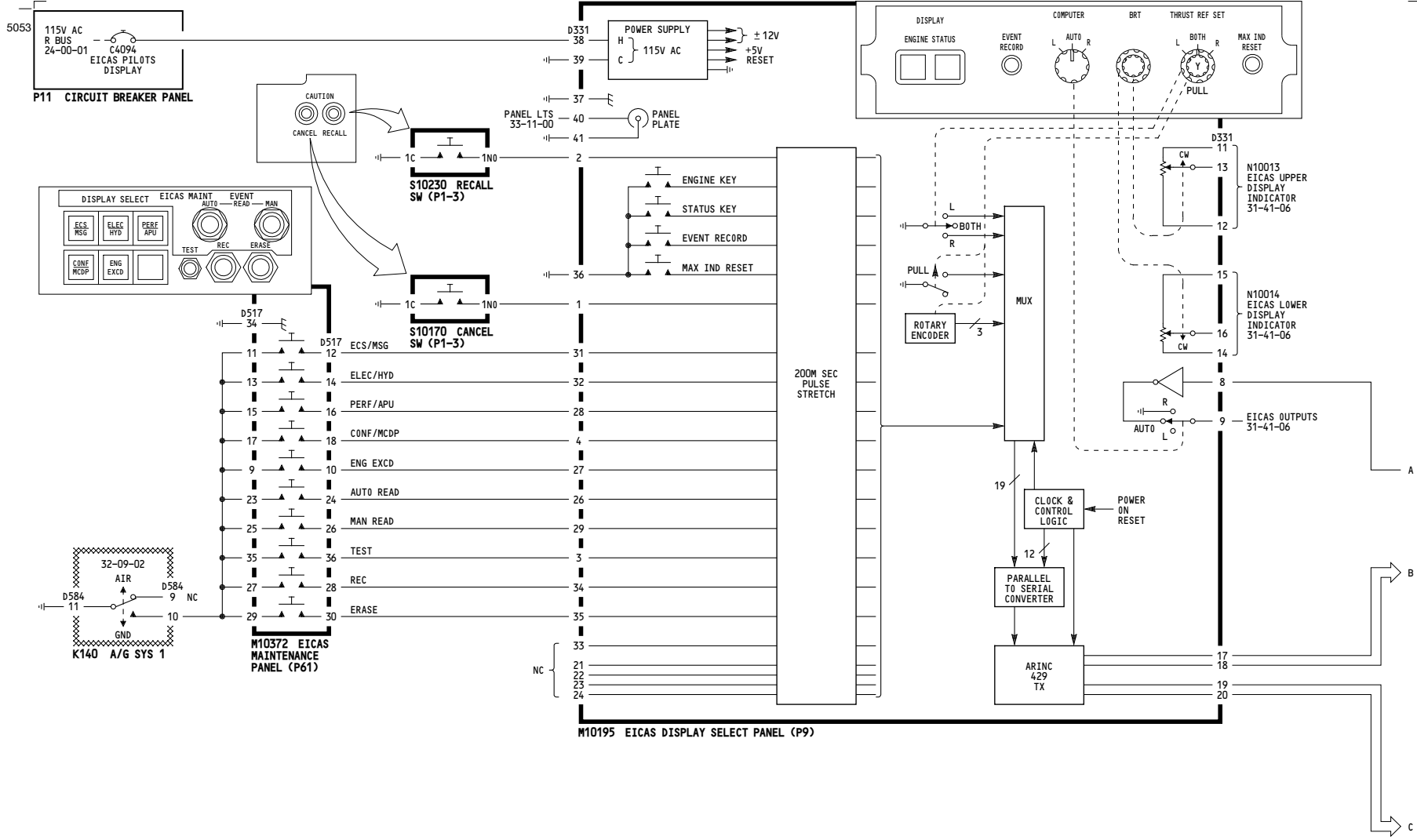
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**31-40-01**





|                  |                         |
|------------------|-------------------------|
| 001-008, 010-099 | EICAS POWER AND CONTROL |
| D280N032S        |                         |

**31-41-01**

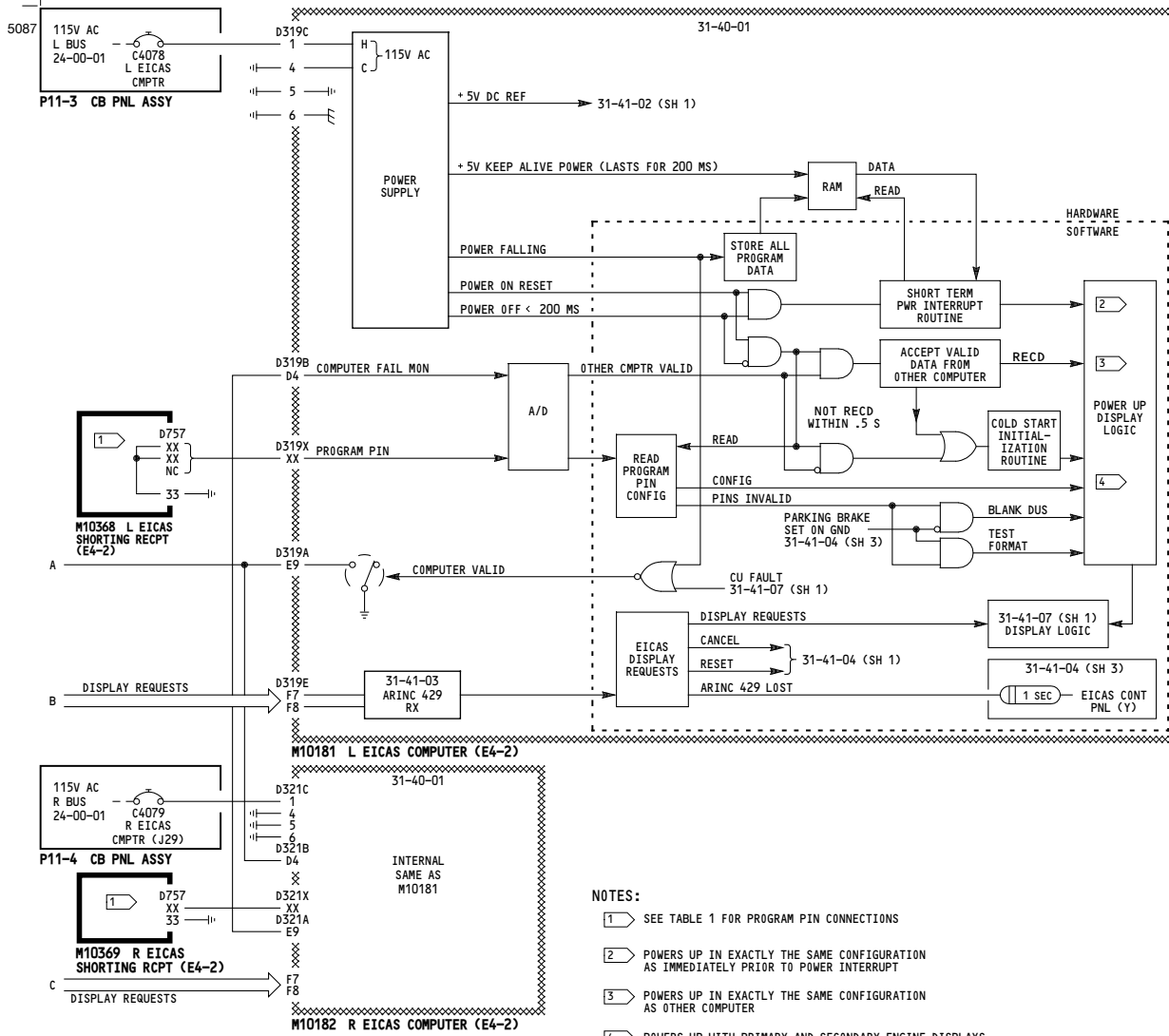


TABLE 1 EICAS PROGRAM PINS

| PROG PIN NO. | PROGRAM WHEN GROUNDED | D319 D321 PIN | L EICAS WIRED TO D755 PIN NO. | R EICAS WIRED TO D757 PIN NO. | INPUT NO. |
|--------------|-----------------------|---------------|-------------------------------|-------------------------------|-----------|
| 1            | L ENG -535E4B         | DE10          | 1                             | 1                             | 183       |
| 2            |                       | DE4           | NC                            | NC                            | 407       |
| 3            |                       | DE6           | 3                             | 3                             | 438       |
| 4            |                       | DE11          | NC                            | NC                            | 182       |
| 5            |                       | DE3           | 5                             | NC                            | 406       |
| 6            | R ENG -535E4B         | BF11          | 6                             | 6                             | 264       |
| 7            |                       | BF7           | NC                            | NC                            | 201       |
| 8            |                       | BF2           | 8                             | 8                             | 41        |
| 9            | BF10                  | NC            | NC                            | 265                           |           |
| 10           | FUEL FLOW FULL TIME   | BF6           | 10                            | 10                            | 237       |
| 11           | 767 INSTLN            | FB7           | NC                            | NC                            | 473       |
| 12           | AVM FILTER            | FB8           | 12                            | 12                            | 504       |
| 13           | METRIC UNITS          | BC9           | 13                            | 13                            | 208       |
| 14           | ECS IN US UNITS       | BC6           | NC                            | NC                            | 48        |
| 15           | PRECOOL OUTLET TEMP   | BD3           | 15                            | 15                            | 272       |
| 16           | CERT AGENCY FAA       | BD11          | NC                            | NC                            | 432       |
| 17           |                       | BB6           | 17                            | 17                            | 176       |
| 18           | MID CABIN ZONE        | BE13          | NC                            | NC                            | 400       |
| 19           | APU OIL QTY           | EG1           | NC                            | NC                            | 28        |
| 20           | NEW COOLING SYSTEM    | DD8           | 20                            | 20                            | 252       |
| 21           | ECS TEMP              | AK1           | 21                            | 21                            | 130       |
| 22           | BULK CARGO TEMP       | AK9           | NC                            | NC                            | 354       |
| 23           | HYD GEN               | BK9           | 23                            | 23                            | 56        |
| 24           | APU RPM STATUS        | BK6           | 24                            | 24                            | 280       |
| 25           | BRAKE TEMP            | DK12          | NC                            | NC                            | 178       |
| 26           | RAM OUTLET DOOR       | DJ12          | NC                            | NC                            | 402       |
| 27           | HYD PRESS. STATUS     | EK1           | 27                            | 27                            | 39        |
| 28           | 3 CREW INSTLN         | EJ8           | NC                            | NC                            | 263       |
| 29           | FUEL PRESS.           | FJ5           | NC                            | NC                            | 102       |
| 30           | RR ENG                | FH5           | 30                            | 30                            | 326       |
| 31           |                       | EJ4           | NC                            | NC                            | 213       |
| 32           | PARITY (ODD)          | EJ1           | 32                            | NC                            | 53        |

WIRING DIAGRAMS

|          |
|----------|
| 31-41-11 |
| 31-41-12 |
| 31-41-14 |
| 31-41-19 |
| 31-41-24 |

L EICAS PROGRAM PIN CODE: 29133025  
R EICAS PROGRAM PIN CODE: 21133024

TABLE 2 EICAS SUPPLEMENTAL PROGRAM PINS

| PROG PIN NO. | PROGRAM WHEN GROUNDED | D319 D321 PIN | L EICAS WIRED TO D755 PIN NO. | R EICAS WIRED TO D757 PIN NO. | INPUT NO. |
|--------------|-----------------------|---------------|-------------------------------|-------------------------------|-----------|
| 1            | NEW EGT CORRECTION    | DB4           | 34                            | 34                            | 329       |
| 2            | SPARE                 |               |                               |                               |           |
| 3            | SPARE                 |               |                               |                               |           |
| 4            | SPARE                 |               |                               |                               |           |
| 5            | SPARE                 |               |                               |                               |           |
| 6            | TCAS                  | AJ13          | NC                            | NC                            | 282       |
| 7            | SPARE                 |               |                               |                               |           |
| 8            | SPARE                 |               |                               |                               |           |
| 9            | SPARE                 |               |                               |                               |           |
| 10           | SPARE                 |               |                               |                               |           |
| 11           | SPARE                 |               |                               |                               |           |
| 12           | SPARE                 |               |                               |                               |           |
| 13           | SPARE                 |               |                               |                               |           |
| 14           | SPARE                 |               |                               |                               |           |
| 15           | SPARE                 |               |                               |                               |           |
| 16           | SPARE                 |               |                               |                               |           |

L AND R EICAS SUPPLEMENTAL PROGRAM PIN CODE: 8000

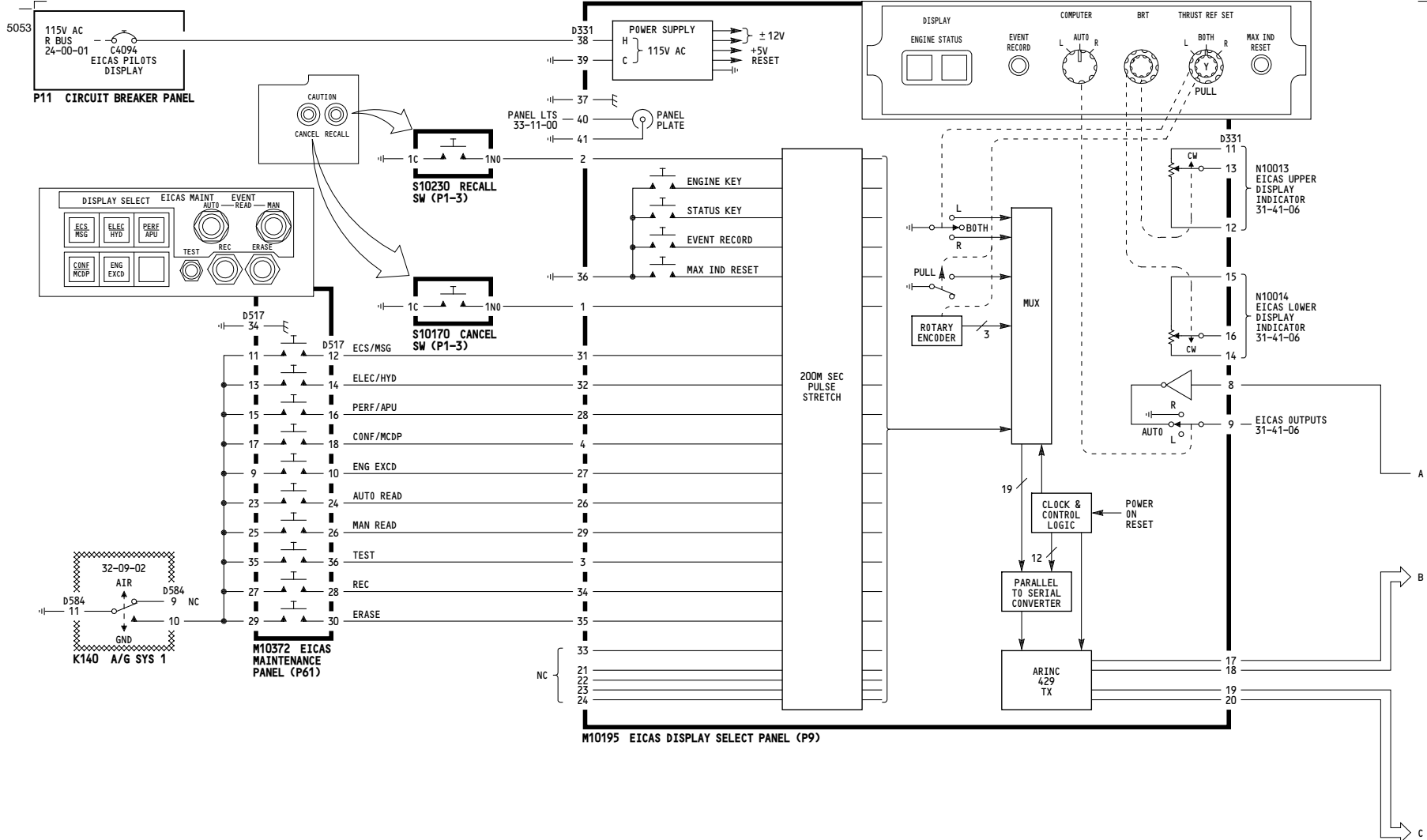
- NOTES:
- SEE TABLE 1 FOR PROGRAM PIN CONNECTIONS
  - POWERS UP IN EXACTLY THE SAME CONFIGURATION AS IMMEDIATELY PRIOR TO POWER INTERRUPT
  - POWERS UP IN EXACTLY THE SAME CONFIGURATION AS OTHER COMPUTER
  - POWERS UP WITH PRIMARY AND SECONDARY ENGINE DISPLAYS

001-008, 010-099

**EICAS POWER AND CONTROL**

D280N032S

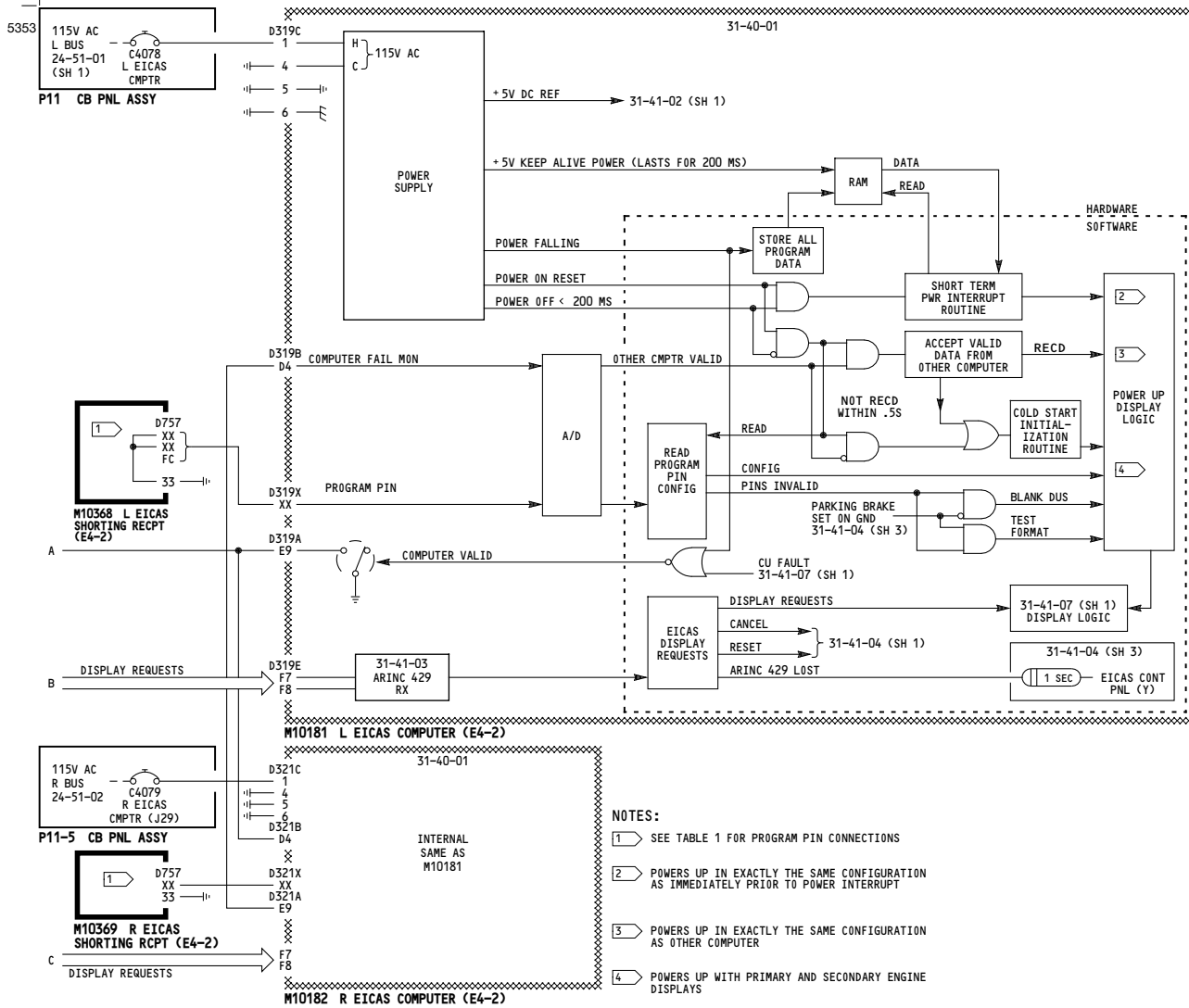
**31-41-01**



|           |                         |
|-----------|-------------------------|
| 001-011   | EICAS POWER AND CONTROL |
| D280N032S |                         |

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| WIRING DIAGRAMS |  |
|-----------------|--|
| 31-41-11        |  |
| 31-41-12        |  |
| 31-41-14        |  |
| 31-41-19        |  |
| 31-41-24        |  |

TABLE 1 EICAS PROGRAM PINS

| PROG PIN NO. | PROGRAM WHEN GROUNDED               | D319 D321 PIN | L EICAS WIRED TO D755 PIN NO. | R EICAS WIRED TO D757 PIN NO. | INPUT NO. |
|--------------|-------------------------------------|---------------|-------------------------------|-------------------------------|-----------|
| 1            | L ENG -535E4                        | DE10          | 1                             | 1                             | 183       |
| 2            |                                     | DE4           | NC                            | NC                            | 407       |
| 3            |                                     | DE6           | 3                             | 3                             | 438       |
| 4            | SCC INSTALLED CU INSTALLATION= LEFT | DE11          | NC                            | NC                            | 182       |
| 5            |                                     | DE3           | 5                             | NC                            | 406       |
| 6            | R ENG -535E4                        | BF11          | 6                             | 6                             | 264       |
| 7            |                                     | BF7           | NC                            | NC                            | 201       |
| 8            |                                     | BF2           | 8                             | 8                             | 41        |
| 9            | FREIGHTER SPARE                     | BF10          | NC                            | NC                            | 265       |
| 10           |                                     | BF6           | NC                            | NC                            | 237       |
| 11           |                                     | BF7           | NC                            | NC                            | 473       |
| 12           | SPARE                               | FD8           | NC                            | NC                            | 504       |
| 13           | RR ENG                              | BC9           | NC                            | NC                            | 208       |
| 14           |                                     | FH5           | 14                            | 14                            | 326       |
| 15           |                                     | EJ4           | NC                            | NC                            | 213       |
| 16           | PARITY (ODD)                        | EJ1           | 16                            | NC                            | 53        |

L EICAS PROGRAM PIN CODE: ADD5  
R EICAS PROGRAM PIN CODE: A504

- NOTES:
- SEE TABLE 1 FOR PROGRAM PIN CONNECTIONS
  - POWERS UP IN EXACTLY THE SAME CONFIGURATION AS IMMEDIATELY PRIOR TO POWER INTERRUPT
  - POWERS UP IN EXACTLY THE SAME CONFIGURATION AS OTHER COMPUTER
  - POWERS UP WITH PRIMARY AND SECONDARY ENGINE DISPLAYS

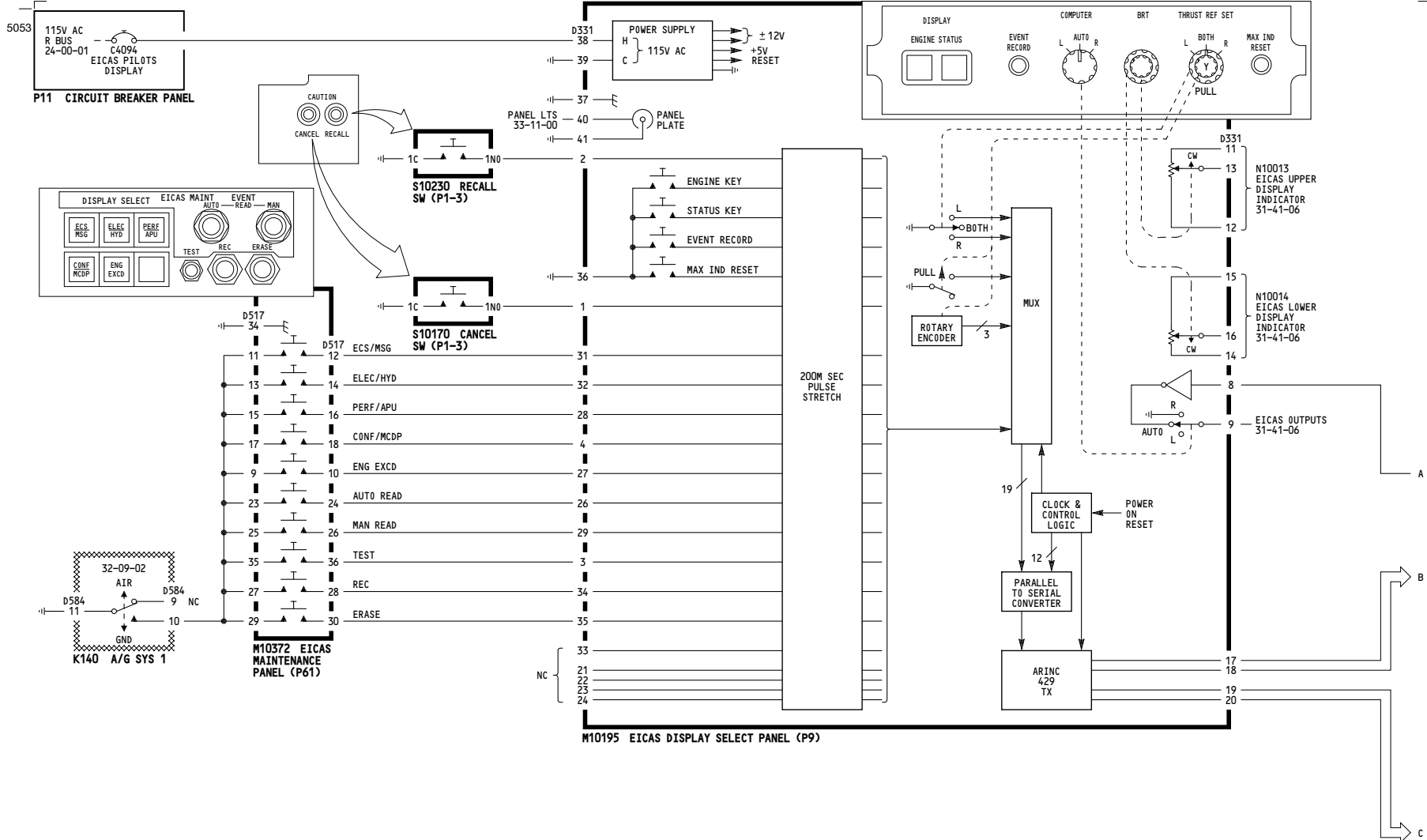
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**EICAS POWER AND CONTROL**

Incorporates 31-0059 R01

D280N032S

**31-41-01**

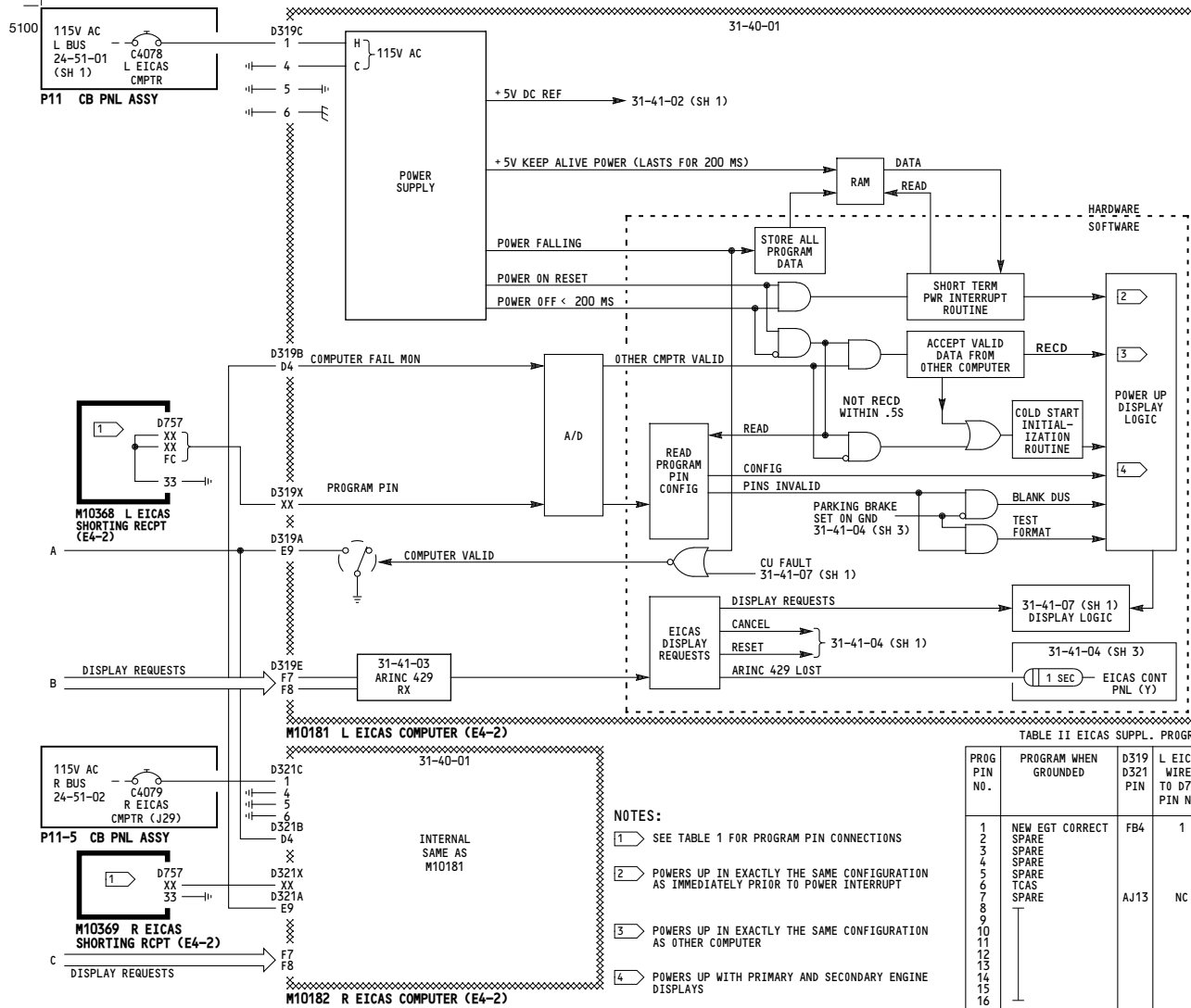


009

**EICAS POWER AND CONTROL**

D280N032S

**31-41-01**



| WIRING DIAGRAMS |  |
|-----------------|--|
| 31-41-11        |  |
| 31-41-12        |  |
| 31-41-14        |  |
| 31-41-19        |  |
| 31-41-24        |  |

TABLE I EICAS PROGRAM PINS

| PROG PIN NO. | PROGRAM WHEN GROUNDED | D319 D321 PIN | L EICAS WIRED TO D755 PIN NO. | R EICAS WIRED TO D757 PIN NO. | INPUT NO. |
|--------------|-----------------------|---------------|-------------------------------|-------------------------------|-----------|
| 1            | L ENG -535E4          | DE10          | 1                             | 1                             | 183       |
| 2            |                       | DE4           | NC                            | NC                            | 407       |
| 3            |                       | DE6           | 3                             | 3                             | 438       |
| 4            |                       | DE11          | NC                            | NC                            | 182       |
| 5            |                       | DE3           | 5                             | NC                            | 406       |
| 6            | R ENG -535E4          | BF11          | 6                             | 6                             | 264       |
| 7            |                       | BF7           | NC                            | NC                            | 201       |
| 8            |                       | BF2           | 8                             | 8                             | 41        |
| 9            |                       | BF10          | NC                            | NC                            | 265       |
| 10           | FUEL FLOW FULL TIME   | BF6           | 10                            | 10                            | 237       |
| 11           | 767 INSTL             | FB7           | NC                            | NC                            | 473       |
| 12           | AVM FILTER            | FB8           | 12                            | 12                            | 504       |
| 13           | METRIC UNITS          | BC9           | 13                            | 13                            | 208       |
| 14           | ECS IN US UNITS       | BC6           | NC                            | NC                            | 48        |
| 15           | PRECOOL OUTLET TEMP   | BD3           | 15                            | 15                            | 272       |
| 16           | CERT AGENCY CAA       | BD11          | 17                            | 17                            | 432       |
| 17           |                       | BB6           |                               |                               |           |
| 18           | MID CABIN ZONE        | BE13          | NC                            | NC                            | 400       |
| 19           | APU OIL QTY           | E61           | NC                            | NC                            | 28        |
| 20           | NEW COOLING SYS       | DD8           | 20                            | 20                            | 252       |
| 21           | ECS TEMP              | AK1           | 21                            | 21                            | 130       |
| 22           | BULK CARGO TEMP       | AK9           | NC                            | NC                            | 354       |
| 23           | HYD GEN               | BK9           | 23                            | 23                            | 56        |
| 24           | APU RPM STATUS        | BK6           | 24                            | 24                            | 280       |
| 25           | BRAKE TEMP            | DK12          | NC                            | NC                            | 178       |
| 26           | RAM OUTLET DDOOR      | DJ12          | NC                            | NC                            | 402       |
| 27           | HYD PRESS. STATUS     | EK1           | 27                            | 27                            | 39        |
| 28           | 3 CREW INSTL          | EJ8           | NC                            | NC                            | 263       |
| 29           | FUEL PRESS.           | FJ5           | NC                            | NC                            | 102       |
| 30           | RR ENG PARITY (ODD)   | FH5           | 30                            | 30                            | 326       |
| 31           |                       | EJ4           | NC                            | NC                            | 213       |
| 32           |                       | EJ1           | 32                            | NC                            | 53        |

L EICAS PROGRAM PIN CODE: A5A9B25  
R EICAS PROGRAM PIN CODE: A5A9B24

TABLE II EICAS SUPPL. PROGRAM PINS

| PROG PIN NO. | PROGRAM WHEN GROUNDED | D319 D321 PIN | L EICAS WIRED TO D755 PIN NO. | R EICAS WIRED TO D757 PIN NO. | INPUT NO. |
|--------------|-----------------------|---------------|-------------------------------|-------------------------------|-----------|
| 1            | NEW EGT CORRECT       | FB4           | 1                             | 1                             | 329       |
| 2            | SPARE                 | AJ13          | NC                            | NC                            | 282       |
| 3            | SPARE                 |               |                               |                               |           |
| 4            | SPARE                 |               |                               |                               |           |
| 5            | SPARE                 |               |                               |                               |           |
| 6            | TCAS                  |               |                               |                               |           |
| 7            | SPARE                 |               |                               |                               |           |
| 8            |                       |               |                               |                               |           |
| 9            |                       |               |                               |                               |           |
| 10           |                       |               |                               |                               |           |
| 11           |                       |               |                               |                               |           |
| 12           |                       |               |                               |                               |           |
| 13           |                       |               |                               |                               |           |
| 14           |                       |               |                               |                               |           |
| 15           |                       |               |                               |                               |           |
| 16           |                       |               |                               |                               |           |

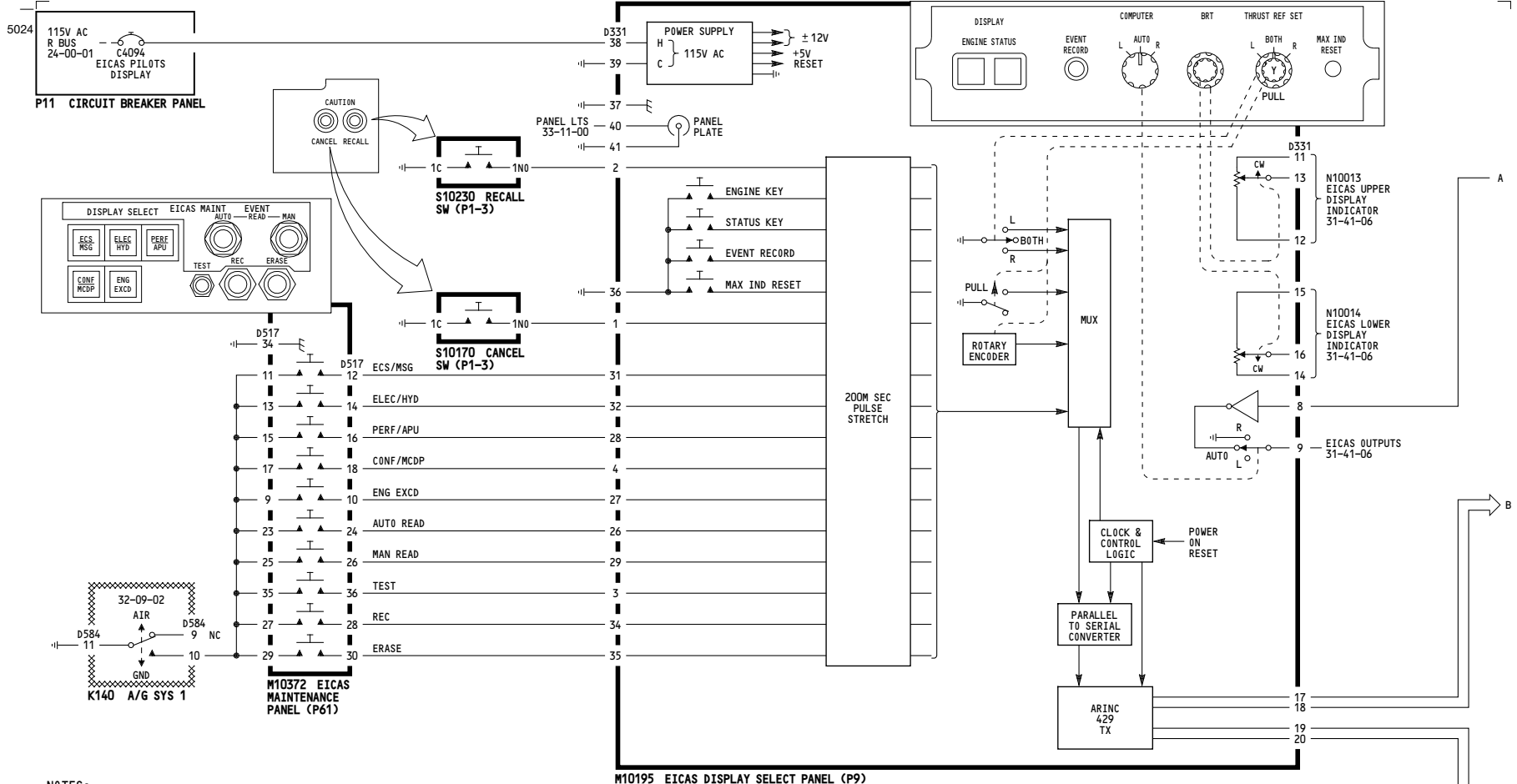
EICAS SUPPL. PROGRAM PIN CODE: 8000

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**EICAS POWER AND CONTROL**

D280N032S

**31-41-01**

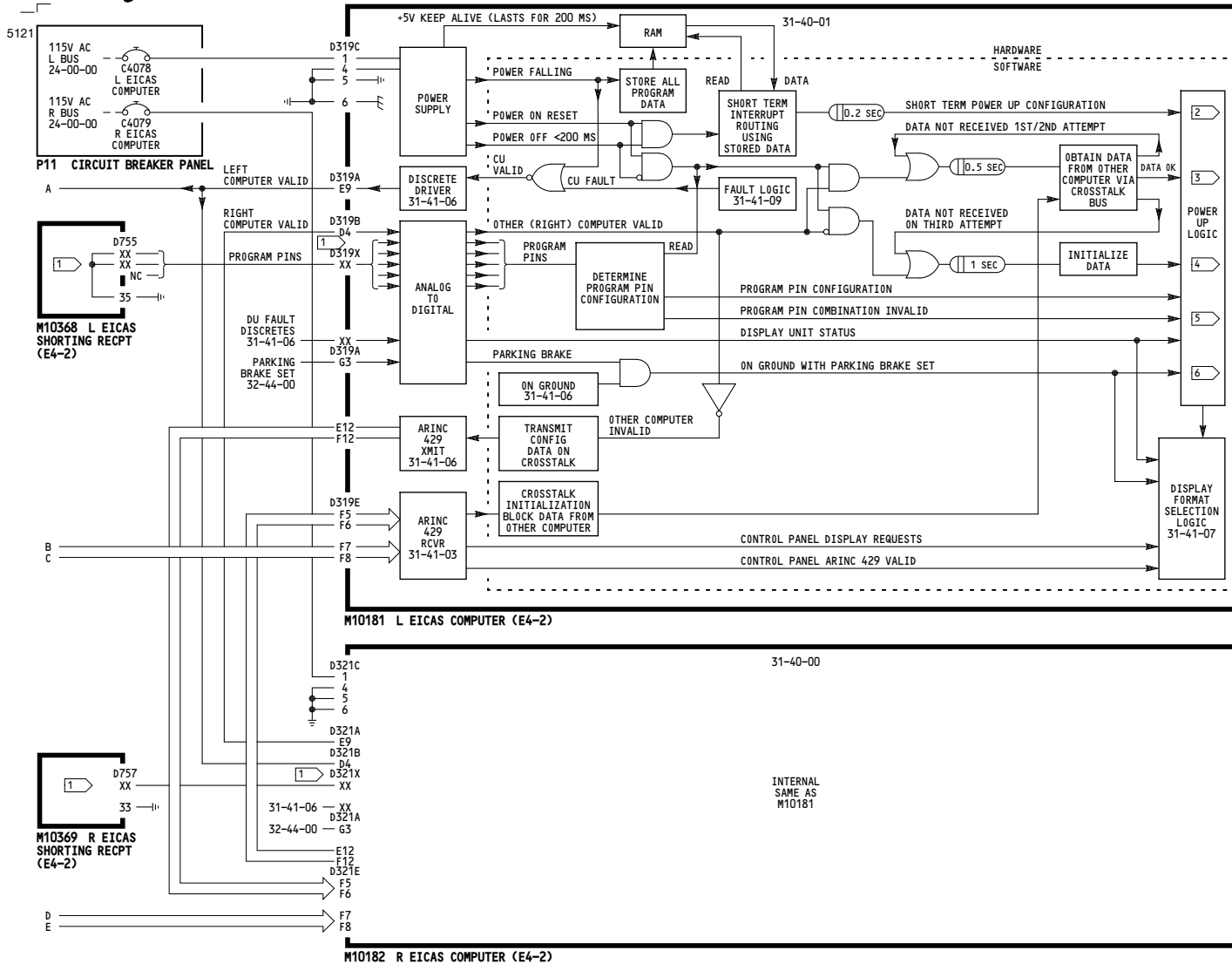


**NOTES:**

- 1 FOR TERMINATION DETAILS SEE TABLE 1 (SH 2)
- 2 POWERS UP IN EXACTLY SAME CONFIGURATION AS IMMEDIATELY PRIOR TO POWER INTERRUPT.
- 3 POWERS UP IN EXACTLY SAME CONFIGURATION AS OTHER COMPUTER.
- 4 COLD START INITIALIZATION, POWERS UP WITH PRIMARY AND SECONDARY ENGINE DISPLAYS.
- 5 POWERS UP TO "PROGRAM PIN ERROR" CONDITION WITH DISPLAYS BLANK OR, IF PARKING BRAKE SET ON THE GROUND, IN TEST MODE.
- 6 REQUIRED BEFORE SELF-TEST CAN BE SELECTED.

|           |                                |
|-----------|--------------------------------|
| 115-199   | <b>EICAS POWER AND CONTROL</b> |
| D280N032S |                                |

**31-41-01**



| WIRING DIAGRAMS |  |
|-----------------|--|
| 31-41-11        |  |
| 31-41-12        |  |
| 31-41-14        |  |
| 31-41-19        |  |
| 31-41-24        |  |

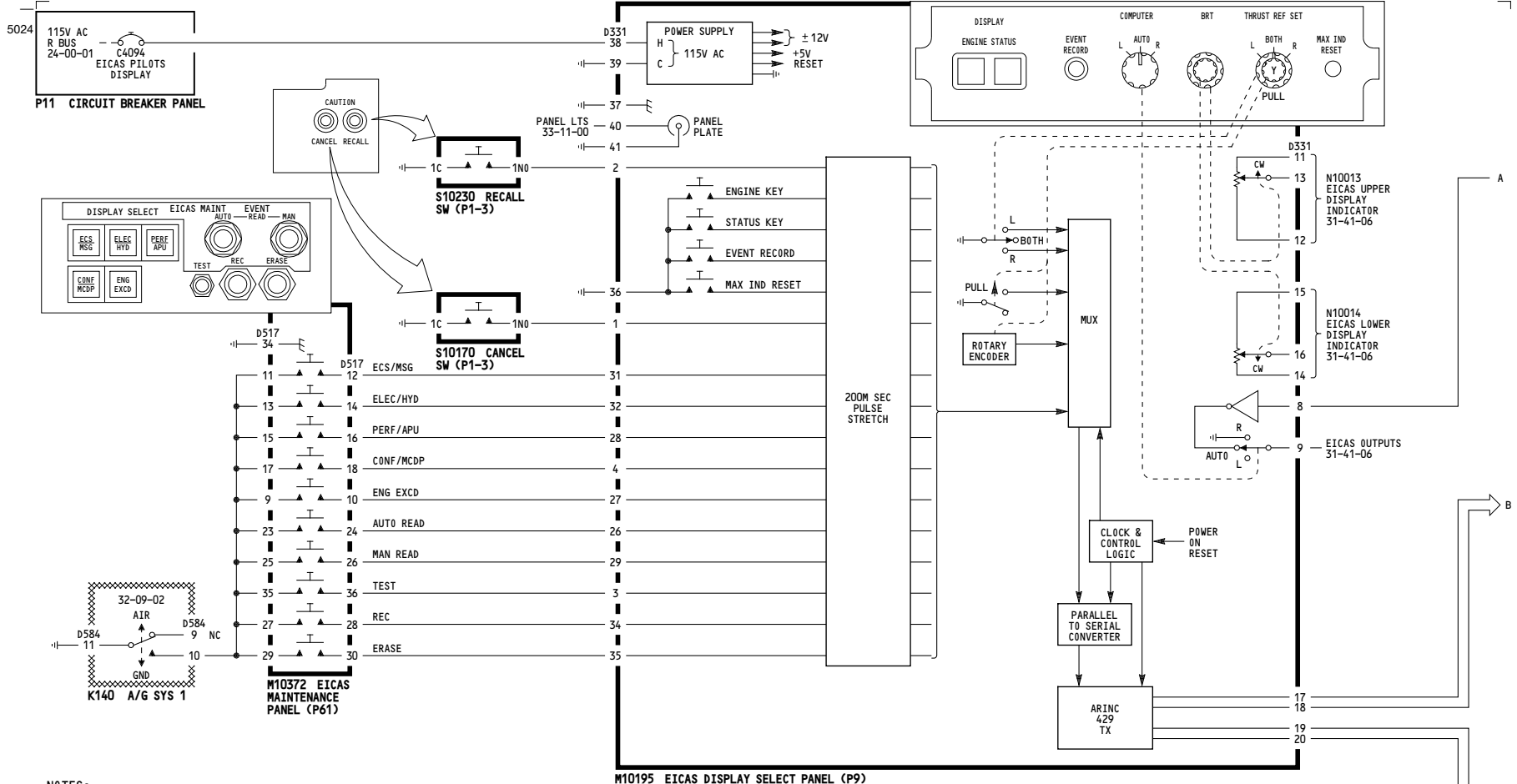
| PROG PIN No. | FUNCTION   | D319/D321 PIN | L EICAS WIRING TO D755 PIN No. | R EICAS WIRING TO D757 PIN No. |
|--------------|--|---------------|--------------------------------|--------------------------------|
| 1            | L ENGINE TYPE:<br>RR RB 211-535E4<br>DATA BASE 2 | D-E10         | 1                              | 1                              |
| 2            |  | D-E4          | 2                              | 2                              |
| 3            |  | D-E6          | NC                             | NC                             |
| 4            | LEFT INSTALLATION                                | D-E11         | NC                             | NC                             |
| 5            | R ENGINE TYPE:<br>RR RB 211-535E4<br>DATA BASE 2 | D-E3          | 5                              | NC                             |
| 6            |  | B-F11         | 6                              | 6                              |
| 7            |  | B-F7          | 7                              | 7                              |
| 8            | FULL TIME FUEL FLOW<br>767 INSTALLATION          | B-F2          | NC                             | NC                             |
| 9            |  | B-F10         | NC                             | NC                             |
| 10           |  | B-F6          | NC                             | NC                             |
| 11           | TRACK FILTER AVM                                 | F-B8          | 12                             | 12                             |
| 12           | ENG METRIC UNITS                                 | B-C9          | 13                             | 13                             |
| 13           | ECS TEMP IN DEG F                                | B-C6          | NC                             | NC                             |
| 14           | PRECOOL OUT TEMP                                 | B-D3          | 15                             | 15                             |
| 15           | CERT AGENCY<br>CAA                               | B-D11         | NC                             | NC                             |
| 16           |  | B-B6          | 17                             | 17                             |
| 17           | MID CABIN ZONE                                   | B-E13         | NC                             | NC                             |
| 18           | APU OIL Q SENSOR                                 | E-61          | 19                             | 19                             |
| 19           | NEW COOLING SYSTEM                               | D-D8          | 20                             | 20                             |
| 20           | ECS TEMP PACKAGE                                 | A-K1          | NC                             | NC                             |
| 21           | BULK CARGO TEMP                                  | A-K9          | NC                             | NC                             |
| 22           | (SPARE)  | B-K9          | NC                             | NC                             |
| 23           | APU RPM ON STATUS                                | B-K6          | 24                             | 24                             |
| 24           | BRAKE TEMPS                                      | D-K12         | 25                             | 25                             |
| 25           | RAM OUT DOOR                                     | D-J12         | NC                             | NC                             |
| 26           | HYD PRESS ON STATUS                              | E-K1          | 27                             | 27                             |
| 27           | 3 CREW INSTN                                     | E-J8          | NC                             | NC                             |
| 28           | FUEL PRESSURE                                    | F-J5          | NC                             | NC                             |
| 29           | ENGINE MANUF<br>ROLLS ROYCE                      | F-A5          | 30                             | 30                             |
| 30           |  | E-J4          | NC                             | NC                             |
| 31           | ODD PARITY                                       | E-J1          | NC                             | 32                             |

NOTES:  
L EICAS PROGRAM PIN HEX CODE CE1AB1A4  
R EICAS PROGRAM PIN HEX CODE C61AB1A5

|           |                                |
|-----------|--------------------------------|
| 115-199   | <b>EICAS POWER AND CONTROL</b> |
| D280N032S |                                |

**31-41-01**



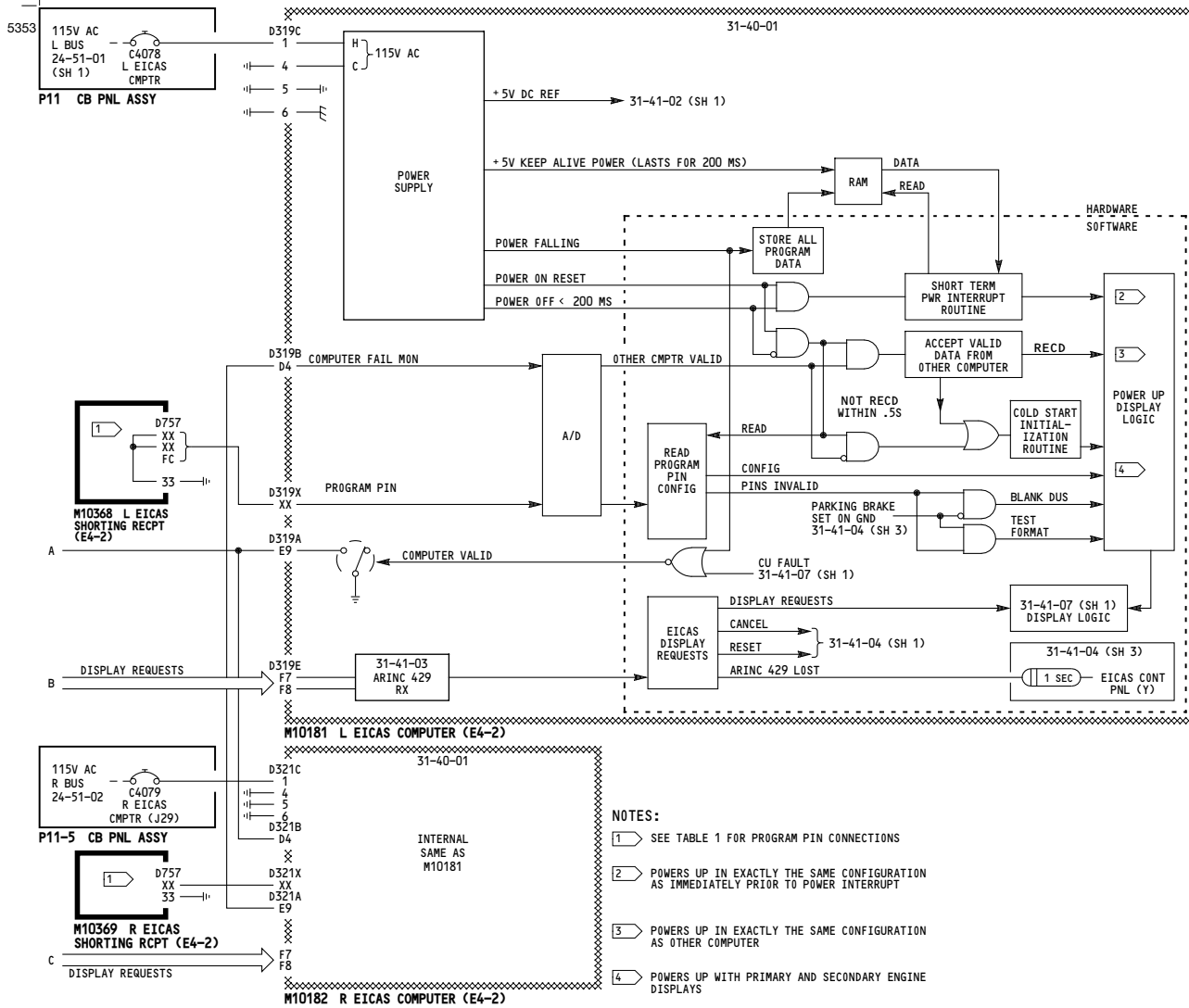


**NOTES:**

- 1 FOR TERMINATION DETAILS SEE TABLE 1 (SH 2)
- 2 POWERS UP IN EXACTLY SAME CONFIGURATION AS IMMEDIATELY PRIOR TO POWER INTERRUPT.
- 3 POWERS UP IN EXACTLY SAME CONFIGURATION AS OTHER COMPUTER.
- 4 COLD START INITIALIZATION, POWERS UP WITH PRIMARY AND SECONDARY ENGINE DISPLAYS.
- 5 POWERS UP TO "PROGRAM PIN ERROR" CONDITION WITH DISPLAYS BLANK OR, IF PARKING BRAKE SET ON THE GROUND, IN TEST MODE.
- 6 REQUIRED BEFORE SELF-TEST CAN BE SELECTED.

|           |                                |
|-----------|--------------------------------|
| 115       | <b>EICAS POWER AND CONTROL</b> |
| D280N032S |                                |

**31-41-01**



**WIRING DIAGRAMS**

- 31-41-11
- 31-41-12
- 31-41-14
- 31-41-19
- 31-41-24

TABLE 1 EICAS PROGRAM PINS

| PROG PIN NO. | PROGRAM WHEN GROUNDED               | D319 D321 PIN | L EICAS WIRED TO D755 PIN NO. | R EICAS WIRED TO D757 PIN NO. | INPUT NO. |
|--------------|-------------------------------------|---------------|-------------------------------|-------------------------------|-----------|
| 1            | L ENG -535E4                        | DE10          | 1                             | 1                             | 183       |
| 2            |                                     | DE4           | NC                            | NC                            | 407       |
| 3            |                                     | DE6           | 3                             | 3                             | 438       |
| 4            | SCC INSTALLED CU INSTALLATION= LEFT | DE11          | NC                            | NC                            | 182       |
| 5            |                                     | DE3           | 5                             | NC                            | 406       |
| 6            | R ENG -535E4                        | BF11          | 6                             | 6                             | 264       |
| 7            |                                     | BF7           | NC                            | NC                            | 201       |
| 8            |                                     | BF2           | 8                             | 8                             | 41        |
| 9            | FREIGHTER SPARE                     | BF10          | NC                            | NC                            | 265       |
| 10           |                                     | BF6           | NC                            | NC                            | 237       |
| 11           |                                     | BF7           | NC                            | NC                            | 473       |
| 12           | SPARE                               | FD8           | NC                            | NC                            | 504       |
| 13           | RR ENG                              | BC9           | NC                            | NC                            | 208       |
| 14           |                                     | FH5           | 14                            | 14                            | 326       |
| 15           |                                     | EJ4           | NC                            | NC                            | 213       |
| 16           | PARITY (ODD)                        | EJ1           | 16                            | NC                            | 53        |

L EICAS PROGRAM PIN CODE: ADD5  
R EICAS PROGRAM PIN CODE: A504

- NOTES:**
- 1 SEE TABLE 1 FOR PROGRAM PIN CONNECTIONS
  - 2 POWERS UP IN EXACTLY THE SAME CONFIGURATION AS IMMEDIATELY PRIOR TO POWER INTERRUPT
  - 3 POWERS UP IN EXACTLY THE SAME CONFIGURATION AS OTHER COMPUTER
  - 4 POWERS UP WITH PRIMARY AND SECONDARY ENGINE DISPLAYS

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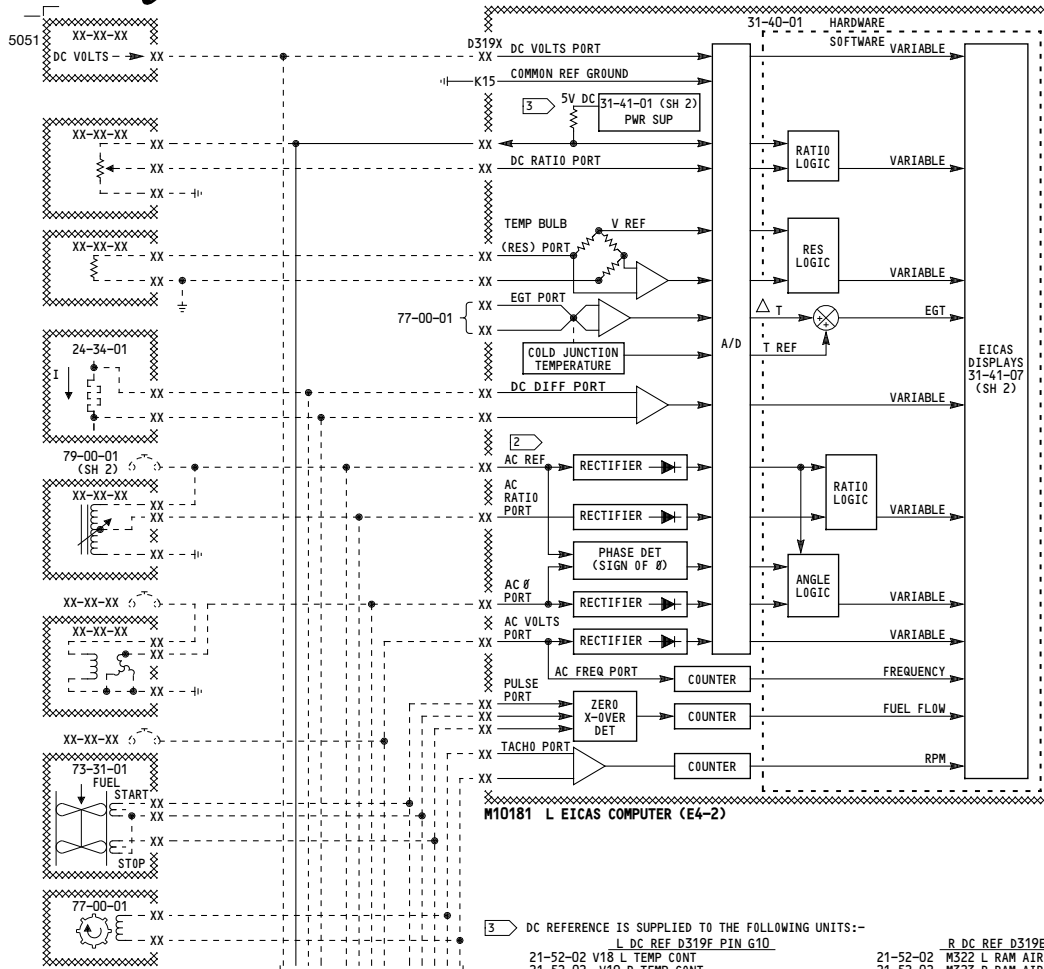
**EICAS POWER AND CONTROL**

Incorporates  
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**31-41-01**

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Sheet 2  
Jan 21/2005



3 DC REFERENCE IS SUPPLIED TO THE FOLLOWING UNITS:-  
L DC REF D319F PIN G10

- 21-52-02 V18 L TEMP CONT
- 21-52-02 V19 R TEMP CONT
- 21-64-01 V1 FLT DK ZONE TRIM AIR MOD
- 21-64-01 V2 FWD CABIN ZONE TRIM AIR MOD
- 21-64-01 V3 AFT CABIN ZONE TRIM AIR MOD
- 24-11-01 M144 L GEN CONT UNIT (VIA R10111)
- 79-31-01 TS5019 ENG OIL QTY XMTR (L ENG)
- R DC REF D319E PIN E4
- 21-52-02 M322 L RAM AIR INLET DDOOR
- 21-52-02 M323 R RAM AIR INLET DDOOR
- 24-11-02 M146 R GEN CONT UNIT (VIA R10112)
- 49-27-01 TS5154 OIL LEVER SENSOR (APU)
- 79-00-01 (SH 1) TS122 ENG OIL QTY XMTR (R ENG)

**NOTES:**

- 1 INPUTS NOT CONNECTED TO BOTH EICAS COMPUTERS ARE DISTRIBUTED VIA THE CROSSTALK BUS
- 2 AC REF IS USED IN THE CALCULATION OF: -L INNER AILERON, L OUTER AILERON & L ELEVATOR POSITION; L & C HYD PRESS. & L ENG OIL PRESS.
- 3 AC REF IS USED IN THE CALCULATION OF: -R INNER AILERON, R OUTER AILERON & R ELEVATOR POSITION R HYD PRESS. & R ENG OIL PRESS.
- 4 SEE EICAS OUTPUTS 31-41-06 (SH 1)
- 5 SEE 31-41-05 (SH 2)

|           |                            |
|-----------|----------------------------|
| 001-099   | <b>EICAS ANALOG INPUTS</b> |
| D280N032S |                            |

**TABLE 1 ANALOG INPUTS**

| SCHEMATIC REFERENCE | D319 PIN | D321 | DESCRIPTION                     | PORT TYPE |
|---------------------|----------|------|---------------------------------|-----------|
| 21-52-01            | F-A7     | —    | L PACK COMPRES-SOR OUTLET TEMP  | TEMP BULB |
| 21-52-01            | F-A8     | —    | L PACK OUTLET TEMPERATURE       | TEMP BULB |
| 21-52-01            | A-F6     | —    | L PACK PRIMARY HX OUTLET TEMP   | TEMP BULB |
| 21-52-01            | D-D13    | —    | L PACK PRIMARY HX INLET TEMP    | TEMP BULB |
| 21-52-01            | A-E15    | —    | L PACK PRIMARY HX OUTLET TEMP   | TEMP BULB |
| 21-52-01            | A-D15    | —    | L PACK SECONDARY HX OUTLET TEMP | TEMP BULB |
| 21-52-01            | A-F14    | —    | L PACK TURBINE INLET TEMP       | TEMP BULB |
| 21-52-01            | A-E14    | —    | L PACK TURBINE INLET TEMP       | TEMP BULB |
| 21-52-01            | F-C1     | —    | R PACK COMPRES-SOR OUTLET TEMP  | TEMP BULB |
| 21-52-01            | F-D1     | —    | R PACK OUTLET TEMPERATURE       | TEMP BULB |
| 21-52-01            | F-A7     | —    | R PACK PRIMARY HX INLET TEMP    | TEMP BULB |
| 21-52-01            | F-A8     | —    | R PACK PRIMARY HX OUTLET TEMP   | TEMP BULB |
| 21-52-01            | A-F6     | —    | R PACK SECONDARY HX OUTLET TEMP | TEMP BULB |
| 21-52-01            | A-F7     | —    | R PACK TURBINE INLET TEMP       | TEMP BULB |
| 21-52-01            | D-D13    | —    | R PACK TURBINE INLET TEMP       | TEMP BULB |
| 21-52-01            | D-D14    | —    | R PACK TURBINE INLET TEMP       | TEMP BULB |
| 21-52-01            | A-E15    | —    | R PACK TURBINE INLET TEMP       | TEMP BULB |
| 21-52-01            | A-D15    | —    | R PACK TURBINE INLET TEMP       | TEMP BULB |
| 21-52-01            | A-F14    | —    | R PACK TURBINE INLET TEMP       | TEMP BULB |
| 21-52-01            | A-E14    | —    | R PACK TURBINE INLET TEMP       | TEMP BULB |
| 21-52-02            | E-H13    | —    | L PACK TEMP VALVE               | DC RATIO  |
| 21-52-02            | E-J12    | —    | L RAM AIR INLET                 | DC RATIO  |
| 21-52-02            | E-H13    | —    | R PACK TEMP VALVE               | DC RATIO  |
| 21-52-02            | E-J12    | —    | R RAM AIR INLET                 | DC RATIO  |
| 21-52-03            | E-E2     | —    | L PACK AIR FLOW                 | DC VOLTS  |
| 21-52-03            | E-E2     | —    | R RAM AIR FLOW                  | DC VOLTS  |
| 21-64-01            | F-B9     | —    | FLT DK TRIM VALVE               | DC RATIO  |
| 21-66-01            | F-B9     | —    | AFT CABIN TRIM VALVE            | DC RATIO  |
| 21-65-02            | D-D11    | —    | FLT DK DUCT TEMP                | TEMP BULB |
| 21-65-02            | D-D12    | —    | AFT DUCT TEMP                   | TEMP BULB |
| 21-65-02            | D-D11    | —    | AFT DUCT TEMP                   | TEMP BULB |
| 21-65-02            | D-D12    | —    | AFT DUCT TEMP                   | TEMP BULB |

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| SCHEMATIC REFERENCE | D319 PIN       | D321 PIN       | DESCRIPTION                             | PORT TYPE     |
|---------------------|----------------|----------------|---|---------------|
| 21-65-02            | ---            | D-D9<br>D-D10  | FWD DUCT TEMP                           | TEMP BULB     |
| 24-11-01            | E-E7           | E-E7           | IDG RISE/TEMP-L                         | DC RATIO      |
| 24-11-02            | E-E8           | E-E8           | IDG RISE/TEMP-R                         | DC RATIO      |
| 24-28-01            | E-G8           | E-G8           | { APU BUS AC FREQ<br>APU BUS AC VOLTS   | AC VOLTS/FREQ |
| 24-28-01            | E-E11          | E-E11          | APU LOAD                                | DC VOLTS      |
| 24-28-01            | E-G9           | E-G9           | { BUS AC FREQ-L<br>BUS AC VOLTS-L       | AC VOLTS/FREQ |
| 24-28-01            | E-G10          | E-G10          | { BUS AC FREQ-R<br>BUS AC VOLTS-R       | AC VOLTS/FREQ |
| 24-28-01            | E-E9           | E-E9           | GEN LOAD-L                              | DC VOLTS      |
| 24-28-01            | E-E10          | E-E10          | GEN LOAD-R                              | DC VOLTS      |
| 24-28-01            | E-G12          | E-G12          | { GPU AC FREQ<br>GPU AC VOLTS           | AC VOLTS/FREQ |
| 24-28-01            | E-E12          | E-E12          | GPU LOAD                                | DC VOLTS      |
| 24-31-02            | F-B1<br>F-B2   | F-B1<br>F-B2   | APU BAT CURRENT                         | DC DIFF       |
| 24-31-02            | F-A3           | F-A3           | APU BAT VOLTS                           | DC VOLTS      |
| 24-31-01            | B-D6<br>B-D7   | B-D6<br>B-D7   | MAIN BAT CURRENT                        | DC DIFF       |
| 24-32-01            | B-D9<br>B-D10  | B-D9<br>B-D10  | TRU CURRENT-L                           | DC DIFF       |
| 24-32-01            | B-D12<br>B-D13 | B-D12<br>B-D13 | TRU CURRENT-R                           | DC DIFF       |
| 24-32-01            | E-G14          | E-G14          | TRU VOLTS-L                             | DC VOLTS      |
| 24-32-01            | B-E1           | B-E1           | TRU VOLTS-R                             | DC VOLTS      |
| 24-33-01            | EG-11          | EG-11          | { INVERTER AC FREQ<br>INVERTER AC VOLTS | AC VOLTS/FREQ |
| 24-33-01            | FA-4           | FA-4           | MAIN BAT VOLTS                          | DC VOLTS      |
| 27-10-01            | E-H4           | E-H4           | AILERON-L                               | AC 0          |
| 27-10-01            | E-H5           | E-H5           | AILERON-R                               | AC 0          |
| 27-10-01            | E-H10          | E-H10          | RUDDER POS                              | AC 0          |
| 27-10-01            | E-H6           | E-H6           | ELEV POS-L                              | AC 0          |
| 27-10-01            | E-H7           | E-H7           | ELEV POS-R                              | AC 0          |
| 29-00-04            | B-H4           | B-H4           | HYD PRESSURE-C                          | AC RATIO      |
| 29-00-02            | B-H3           | B-H3           | HYD PRESSURE-L                          | AC RATIO      |
| 29-00-03            | D-K14          | D-K14          | HYD PRESSURE-R                          | AC RATIO      |
| 29-00-04            | D-D4<br>D-D5   | ---            | C HYD RSVR TEMP                         | TEMP BULB     |
| 29-00-02            | B-J4<br>B-J5   | ---            | L HYD RSVR TEMP                         | TEMP BULB     |
| 29-00-03            | ---            | B-J4<br>B-J5   | R HYD RSVR TEMP                         | TEMP BULB     |
| 29-00-01            | A-F4           | A-F4           | HYD QUANT-C                             | DC VOLTS      |
| 29-00-01            | A-F3           | A-F3           | HYD QUANT-L                             | DC VOLTS      |
| 29-00-01            | A-F5           | A-F5           | HYD QUANT-R                             | DC VOLTS      |

| SCHEMATIC REFERENCE | D319 PIN                         | D321 PIN                         | DESCRIPTION               | PORT TYPE    |
|---------------------|----------------------------------|----------------------------------|---------------------------|--------------|
| 35-11-01            | A-F9                             | A-F9                             | CREW OXYGEN PRESS         | DC VOLTS     |
| 36-21-01            | D-H13                            | ---                              | L BLEED DUCT PRESS        | DC VOLTS     |
| 36-21-02            | ---                              | D-H13                            | R BLEED DUCT PRESS        | DC VOLTS     |
| 36-22-02            | D-H14<br>D-H15                   | ---                              | L PRECOOL OUT TEMP        | TEMP BULB    |
| 36-22-02            | ---                              | D-H14<br>D-H15                   | R PRECOOL OUT TEMP        | TEMP BULB    |
| 49-70-01            | F-A5                             | F-A5                             | APU EGT                   | DC VOLTS     |
| 49-70-01            | FF-A6                            | FF-A6                            | APU RPM                   | DC VOLTS     |
| 49-70-01            | F-F10                            | F-F10                            | APU OIL LEVEL             | DC RATIO     |
| 73-31-01            | A-J8<br>A-J7<br>A-J9             | A-J8<br>A-J7<br>A-J9             | ENG FUEL FLOW-L           | PULSE        |
| 73-31-01            | D-J1<br>D-H1<br>D-K1             | D-J1<br>D-H1<br>D-K1             | ENG FUEL FLOW-R           | PULSE        |
| 77-12-01            | B-D2<br>B-D1                     | B-D2<br>B-D1                     | ENG N1 L                  | TACHO        |
| 77-12-01            | E-A14<br>E-B14                   | E-A14<br>E-B14                   | ENG N1 R                  | TACHO        |
| 77-12-02            | A-J6<br>A-J5                     | A-J6<br>A-J5                     | ENG N2 L                  | TACHO        |
| 77-12-02            | D-J8<br>D-J9                     | D-J8<br>D-J9                     | ENG N2 R                  | TACHO        |
| 77-12-03            | A-F11<br>A-D12                   | A-F11<br>A-D12                   | ENG N3 L                  | TACHO        |
| 77-12-03            | D-A7<br>D-A8                     | D-A7<br>D-A8                     | ENG N3 R                  | TACHO        |
| 77-21-01            | B-B15<br>B-A15                   | 9                                | ENG EGT L                 | THERMOCOUPLE |
| 77-21-01            | 9                                | E-B15<br>E-A15                   | ENG EGT R                 | THERMOCOUPLE |
| 79-31-01            | B-J8                             | B-J8                             | ENG OIL QTY L             | DC VOLTS     |
| 79-31-01            | E-G13                            | E-G13                            | ENG OIL QTY R             | DC VOLTS     |
| 79-32-01            | B-G1                             | B-G1                             | AC REFERENCE L            | AC REF       |
| 79-32-01            | D-F15                            | D-F15                            | AC REFERENCE R            | AC REF       |
| 79-32-01            | B-H2                             | B-H2                             | ENG OIL PR-L              | AC RATIO     |
| 79-32-01            | E-H11                            | E-H11                            | ENG OIL PR-R              | AC RATIO     |
| 79-34-01            | A-H11<br>A-H10                   | A-H11<br>A-H10                   | ENG OIL TEMP L            | TEMP BULB    |
| 79-34-01            | D-H9<br>D-H10                    | D-H9<br>D-H10                    | ENG OIL TEMP R            | TEMP BULB    |
|                     | A-K15<br>B-K15<br>C-K15<br>D-K15 | A-K15<br>B-K15<br>C-K15<br>D-K15 | } COMMON REFERENCE GROUND |              |

NOTES: 9 LEFT COMPUTER HAS R DC REF CONNECTED TO E-B15, PIN E-A15 GROUNDED. RIGHT COMPUTER HAS L DC REF TO B-B15, PIN B-A15 GROUNDED.

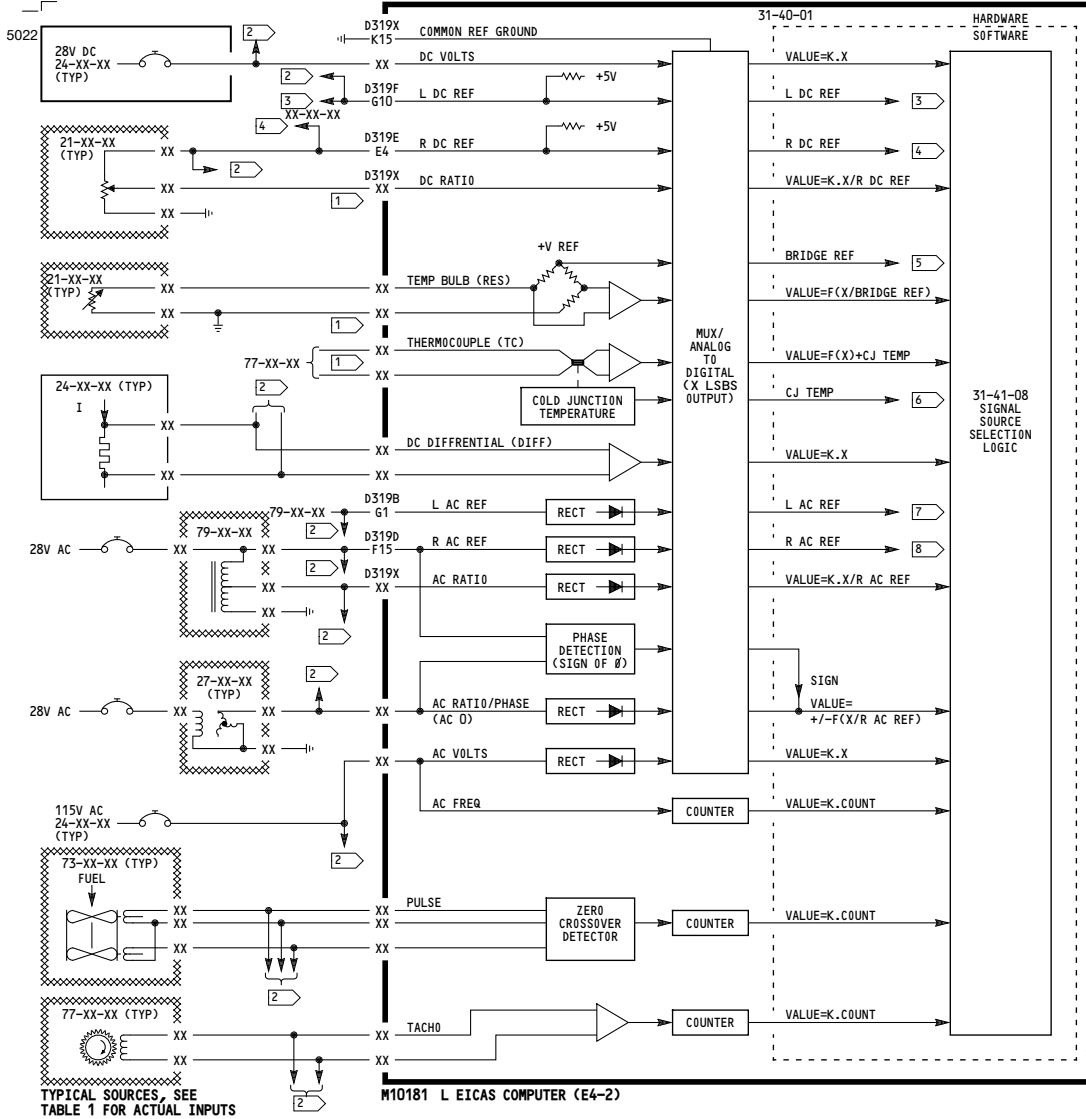
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| SCHEMATIC REFERENCE | D319 PIN       | D321 PIN       | DESCRIPTION          | INPUT NO. | PORT TYPE | RANGE       | UNITS    |
|---------------------|----------------|----------------|----------------------|-----------|-----------|-------------|----------|
| 21-52-01            | A-F6<br>A-F7   | ---            | L PACK OUTLET TEMP   | AV451     | TEMP BULB | -60 TO +200 | DEG C    |
| 21-52-01            | ---            | A-F6<br>A-F7   | R PACK OUTLET TEMP   | AV462     | TEMP BULB | -60 TO +200 | DEG C    |
| 21-52-02            | E-H13          | ---            | L PACK TEMP VALVE    | AV473     | DC RATIO  | 0 TO 100    | % OPEN   |
| 21-52-02            | E-J12          | ---            | L RAM AIR INLET      | AV474     | DC RATIO  | 0 TO 100    | % CLOSED |
| 21-52-02            | ---            | E-H13          | R PACK TEMP VALVE    | AV477     | DC RATIO  | 0 TO 100    | % OPEN   |
| 21-52-02            | ---            | E-J12          | R RAM AIR INLET      | AV478     | DC RATIO  | 0 TO 100    | % CLOSED |
| 21-52-03            | E-E2           | ---            | L PACK AIR FLOW      | AV472     | DC VOLTS  | 0 TO 75     | CU M/MIN |
| 21-52-03            | ---            | E-E2           | R PACK AIR FLOW      | AV476     | DC VOLTS  | 0 TO 75     | CU M/MIN |
| 21-64-01            | F-B9           | ---            | FLT DECK TRIM VALVE  | AV469     | DC RATIO  | 0 TO 100    | % OPEN   |
| 21-64-01            | ---            | F-B9           | AFT CABIN TRIM VALVE | AV470     | DC RATIO  | 0 TO 100    | % OPEN   |
| 21-64-01            | F-G9           | ---            | FWD CABIN TRIM VALVE | AV471     | DC RATIO  | 0 TO 100    | % OPEN   |
| 21-65-02            | D-D11<br>D-D12 | ---            | FLT DK DUCT TEMP     | AV458     | TEMP BULB | -60 TO +200 | DEG C    |
| 21-65-02            | ---            | D-D11<br>D-D12 | AFT DUCT TEMP        | AV459     | TEMP BULB | -60 TO +200 | DEG C    |

**TABLE 1 ANALOG VARIABLE INPUTS**

**NOTES:**

1 INPUTS NOT CONNECTED TO BOTH COMPUTERS ARE DISTRIBUTED VIA THE CROSSTALK BUS.

2 TO D321X ON M10182 R EICAS COMPUTER (E4-2, INTERNALS SAME AS M10181)

3 USED AS EXCITATION FOR THE FOLLOWING UNITS:

- 21-52-02 V18 L PACK TEMP CONTROL VALVE TX
- 21-52-02 V19 R PACK TEMP CONTROL VALVE TX
- 21-64-01 V1 FLT DECK ZONE TRIM AIR VALVE TX
- 21-64-01 V2 FWD CABIN ZONE TRIM AIR VALVE TX
- 21-64-01 V3 AFT CABIN ZONE TRIM AIR VALVE TX
- 24-11-01 M144 L GEN CONTROL UNIT (DG TEMP)
- 79-31-01 TS5019 L ENG OIL QUANTITY TX

4 USED AS EXCITATION FOR THE FOLLOWING UNITS:

- 21-52-02 M322 L RAM AIR INLET DOOR POSITION TX
- 21-52-02 M323 R RAM AIR INLET DOOR POSITION TX
- 24-11-02 M146 R GEN CONTROL UNIT (1 DG TEMP)
- 49-27-01 TS5154 APU OIL QUANTITY TX
- 79-31-01 TS5019 R ENG OIL QUANTITY TX

5 USED IN THE CALCULATION OF ALL TEMP BULB MEASUREMENTS.

6 USED IN ALL CALCULATION OF BOTH LEFT AND RIGHT EGT.

7 USED IN THE CALCULATION OF: L AILERON, RUDDER AND L ELEVATOR POSITION; L AND CTR HYDRAULIC PRESSURE AND L ENG OIL PRESSURE.

8 USED IN THE CALCULATION OF: R AILERON AND R ELEVATOR POSITION, R HYDRAULIC PRESSURE AND R ENGINE OIL PRESSURE.

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**EICAS ANALOG INPUTS**

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# 757-200 SYSTEM SCHEMATIC MANUAL

| SCHEMATIC REFERENCE | D319 PIN       | D321 PIN       | DESCRIPTION                             | INPUT No.      | PORT TYPE     | RANGE                | UNITS      |
|---------------------|----------------|----------------|---|----------------|---------------|----------------------|------------|
| 21-65-02            | ---            | D-D9<br>D-D10  | FWD DUCT TEMP                           | AV461          | TEMP BULB     | -60 TO +200          | DEG C      |
| 24-11-01            | E-E7           | E-E7           | IDG RISE/TEMP-L                         | AV001          | DC RATIO      | 0 TO 180             | DEG C      |
| 24-11-02            | E-E8           | E-E8           | IDG RISE/TEMP-R                         | AV002          | DC RATIO      | 0 TO 180             | DEG C      |
| 24-28-01            | E-G8           | E-G8           | { APU BUS AC FREQ<br>APU BUS AC VOLTS   | AV003<br>AV004 | AC VOLTS/FREQ | 0 TO 420<br>0 TO 130 | HZ<br>V AC |
| 24-28-01            | E-E11          | E-E11          | APU LOAD                                | AV005          | DC VOLTS      | 0 TO 150             | % LOAD     |
| 24-28-01            | E-G9           | E-G9           | { BUS AC FREQ-L<br>BUS AC VOLTS-L       | AV006<br>AV008 | AC VOLTS/FREQ | 0 TO 420<br>0 TO 130 | HZ<br>V AC |
| 24-28-01            | E-G10          | E-G10          | { BUS AC FREQ-R<br>BUS AC VOLTS-R       | AV007<br>AV009 | AC VOLTS/FREQ | 0 TO 420<br>0 TO 130 | HZ<br>V AC |
| 24-28-01            | E-E9           | E-E9           | GEN LOAD-L                              | AV010          | DC VOLTS      | 0 TO 150             | % LOAD     |
| 24-28-01            | E-E10          | E-E10          | GEN LOAD-R                              | AV011          | DC VOLTS      | 0 TO 150             | % LOAD     |
| 24-28-01            | E-G12          | E-G12          | { GPU AC FREQ<br>GPU AC VOLTS           | AV012<br>AV013 | AC VOLTS/FREQ | 0 TO 420<br>0 TO 130 | HZ<br>V AC |
| 24-28-01            | E-E12          | E-E12          | GPU LOAD                                | AV014          | DC VOLTS      | 0 TO 150             | % LOAD     |
| 24-31-02            | F-B1<br>F-B2   | F-B1<br>F-B2   | APU BAT CURRENT                         | AV018          | DC DIFF       | + - 150              | A          |
| 24-31-02            | F-A3           | F-A3           | APU BAT VOLTS                           | AV019          | DC VOLTS      | 0 TO 40              | V DC       |
| 24-31-01            | B-D6<br>B-D7   | B-D6<br>B-D7   | MAIN BAT CURRENT                        | AV020          | DC DIFF       | + - 150              | A          |
| 24-32-01            | B-D9<br>B-D10  | B-D9<br>B-D10  | TRU CURRENT-L                           | AV021          | DC DIFF       | 0 TO 150             | A          |
| 24-32-01            | B-D12<br>B-D13 | B-D12<br>B-D13 | TRU CURRENT-R                           | AV022          | DC DIFF       | 0 TO 150             | A          |
| 24-32-01            | E-G14          | E-G14          | TRU VOLTS-L                             | AV023          | DC VOLTS      | 0 TO 40              | V DC       |
| 24-32-01            | B-E1           | B-E1           | TRU VOLTS-R                             | AV024          | DC VOLTS      | 0 TO 40              | V DC       |
| 24-33-01            | EG-11          | EG-11          | { INVERTER AC FREQ<br>INVERTER AC VOLTS | AV015<br>AV016 | AC VOLTS/FREQ | 0 TO 420<br>0 TO 130 | HZ<br>V AC |
| 24-33-01            | F-A4           | F-A4           | MAIN BAT VOLTS                          | AV017          | DC VOLTS      | 0 TO 40              | V DC       |
| 27-10-01            | E-H4           | E-H4           | AILERON-L                               | AV053          | AC Ø          | -22 TO +22           | DEG        |
| 27-10-01            | E-H5           | E-H5           | AILERON-R                               | AV054          | AC Ø          | -22 TO +22           | DEG        |
| 27-10-01            | E-H10          | E-H10          | RUDDER POS                              | AV055          | AC Ø          | -36 TO +36           | DEG        |
| 27-10-01            | E-H6           | E-H6           | ELEV POS-L                              | AV056          | AC Ø          | -24 TO +34           | DEG        |
| 27-10-01            | E-H7           | E-H7           | ELEV POS-R                              | AV057          | AC Ø          | -24 TO +34           | DEG        |
| 29-00-04            | B-H4           | B-H4           | HYD PRESSURE-C                          | AV101          | AC RATIO      | 0 TO 4000            | PSI        |
| 29-00-02            | B-H3           | B-H3           | HYD PRESSURE-L                          | AV102          | AC RATIO      | 0 TO 4000            | PSI        |
| 29-00-03            | D-K14          | D-K14          | HYD PRESSURE-R                          | AV103          | AC RATIO      | 0 TO 4000            | PSI        |
| 29-00-04            | D-D4<br>D-D5   | ---            | C HYD RSVR TEMP                         | AV111          | TEMP BULB     | -60 TO +200          | DEG C      |
| 29-00-02            | B-J4<br>B-J5   | ---            | L HYD RSVR TEMP                         | AV109          | TEMP BULB     | -60 TO +200          | DEG C      |
| 29-00-03            | ---            | B-J4<br>B-J5   | R HYD RSVR TEMP                         | AV110          | TEMP BULB     | -60 TO +200          | DEG C      |
| 29-00-01            | A-F4           | A-F4           | HYD QUANT-C                             | AV104          | DC VOLTS      | 0 TO 150             | % FULL     |
| 29-00-01            | A-F3           | A-F3           | HYD QUANT-L                             | AV105          | DC VOLTS      | 0 TO 150             | % FULL     |
| 29-00-01            | A-F5           | A-F5           | HYD QUANT-R                             | AV106          | DC VOLTS      | 0 TO 150             | % FULL     |
| 32-46-01            | A-F10          | A-F10          | BRAKE 1 TEMP                            | AV151          | DC VOLTS      | 0 TO 10              | UNITS      |
| 32-46-01            | A-E2           | A-E2           | BRAKE 2 TEMP                            | AV152          | DC VOLTS      | 0 TO 10              | UNITS      |

| SCHEMATIC REFERENCE | D319 PIN                         | D321 PIN                         | DESCRIPTION             | INPUT No. | PORT TYPE    | RANGE        | UNITS  |
|---------------------|----------------------------------|----------------------------------|-------------------------|-----------|--------------|--------------|--------|
| 32-46-01            | B-E3                             | B-E3                             | BRAKE 3 TEMP            | AV153     | DC VOLTS     | 0 TO 10      | UNITS  |
| 32-46-01            | B-E2                             | B-E2                             | BRAKE 4 TEMP            | AV154     | DC VOLTS     | 0 TO 10      | UNITS  |
| 32-46-01            | D-D6                             | D-D6                             | BRAKE 5 TEMP            | AV155     | DC VOLTS     | 0 TO 10      | UNITS  |
| 32-46-01            | D-D7                             | D-D7                             | BRAKE 6 TEMP            | AV156     | DC VOLTS     | 0 TO 10      | UNITS  |
| 32-46-01            | D-D15                            | D-D15                            | BRAKE 7 TEMP            | AV157     | DC VOLTS     | 0 TO 10      | UNITS  |
| 32-46-01            | E-H1                             | E-H1                             | BRAKE 8 TEMP            | AV158     | DC VOLTS     | 0 TO 10      | UNITS  |
| 35-11-01            | A-F9                             | A-F9                             | CREW OXYGEN PRESS       | AV201     | DC VOLTS     | 0 TO 2500    | PSI    |
| 36-21-01            | D-H13                            | ---                              | L BLEED DUCT PRESS      | AV482     | DC VOLTS     | 0 TO 100     | PSI    |
| 36-21-02            | ---                              | D-H13                            | R BLEED DUCT PRESS      | AV483     | DC VOLTS     | 0 TO 100     | PSI    |
| 36-22-02            | D-H14<br>D-H15                   | ---                              | L PRECOOL OUT TEMP      | AV457     | TEMP BULB    | -60 TO +300  | DEG C  |
| 36-22-02            | ---                              | D-H14<br>D-H15                   | R PRECOOL OUT TEMP      | AV468     | TEMP BULB    | -60 TO +300  | DEG C  |
| 49-70-01            | F-A5                             | F-A5                             | APU EGT                 | AV251     | DC VOLTS     | 0 TO 900     | DEG C  |
| 49-70-01            | FF-A6                            | FF-A6                            | APU RPM                 | AV252     | DC VOLTS     | 0 TO 120     | % RPM  |
| 49-70-01            | F-F10                            | F-F10                            | APU OIL LEVEL           | AV253     | DC RATIO     | 1.75 TO 4.75 | INCHES |
| 73-31-01            | A-J8<br>A-J7<br>A-J9             | A-J8<br>A-J7<br>A-J9             | ENG FUEL FLOW-L         | AV301     | PULSE        | .2 TO 13K    | KG/HR  |
| 73-31-01            | D-J1<br>D-H1<br>D-K1             | D-J1<br>D-H1<br>D-K1             | ENG FUEL FLOW-R         | AV302     | PULSE        | .2 TO 13K    | KG/HR  |
| 77-12-01            | B-D2<br>B-D1                     | B-D2<br>B-D1                     | ENG N1 L                | AV351     | TACHO        | 0 TO 120     | % RPM  |
| 77-12-01            | E-A14<br>E-B14                   | E-A14<br>E-B14                   | ENG N1 R                | AV352     | TACHO        | 0 TO 120     | % RPM  |
| 77-12-02            | A-J6<br>A-J5                     | A-J6<br>A-J5                     | ENG N2 L                | AV353     | TACHO        | 0 TO 120     | % RPM  |
| 77-12-02            | D-J8<br>D-J9                     | D-J8<br>D-J9                     | ENG N2 R                | AV354     | TACHO        | 0 TO 120     | % RPM  |
| 77-12-03            | A-F11<br>A-D12                   | A-F11<br>A-D12                   | ENG N3 L                | AV355     | TACHO        | 0 TO 120     | % RPM  |
| 77-12-03            | D-A7<br>D-A8                     | D-A7<br>D-A8                     | ENG N3 R                | AV356     | TACHO        | 0 TO 120     | % RPM  |
| 77-21-01            | B-B15<br>B-A15                   | B-B15<br>B-A15                   | ENG EGT L               | AV357     | THERMOCOUPLE | -60 TO +1100 | DEG C  |
| 77-21-01            | E-B15<br>E-A15                   | E-B15<br>E-A15                   | ENG EGT R               | AV358     | THERMOCOUPLE | -60 TO +1100 | DEG C  |
| 79-31-01            | B-J8                             | B-J8                             | ENG OIL QTY L           | AV401     | DC VOLTS     | 0 TO 19.75   | LITRES |
| 79-31-01            | E-G13                            | E-G13                            | ENG OIL QTY R           | AV402     | DC VOLTS     | 0 TO 19.75   | LITRES |
| 79-32-01            | B-G1                             | B-G1                             | AC REFERENCE L          | ---       | AC REF       | 0 TO 30      | V AC   |
| 79-32-01            | D-F15                            | D-F15                            | AC REFERENCE R          | ---       | AC REF       | 0 TO 30      | V AC   |
| 79-32-01            | B-H2                             | B-H2                             | ENG OIL PR-L            | AV403     | AC RATIO     | 0 TO 100     | PSI    |
| 79-32-01            | E-H11                            | E-H11                            | ENG OIL PR-R            | AV404     | AC RATIO     | 0 TO 100     | PSI    |
| 79-34-01            | A-H11<br>A-H10                   | A-H11<br>A-H10                   | ENG OIL TEMP L          | AV405     | TEMP BULB    | -60 TO +200  | DEG C  |
| 79-34-01            | D-H9<br>D-H10                    | D-H9<br>D-H10                    | ENG OIL TEMP R          | AV406     | TEMP BULB    | -60 TO +200  | DEG C  |
|                     | A-K15<br>B-K15<br>C-K15<br>D-K15 | A-K15<br>B-K15<br>C-K15<br>D-K15 | COMMON REFERENCE GROUND |           |              |              |        |

NOTES: 9 LEFT COMPUTER HAS R DC REF CONNECTED TO E-B15, PIN E-A15 GROUNDED. RIGHT COMPUTER HAS L DC REF TO B-B15, PIN B-A15 GROUNDED.

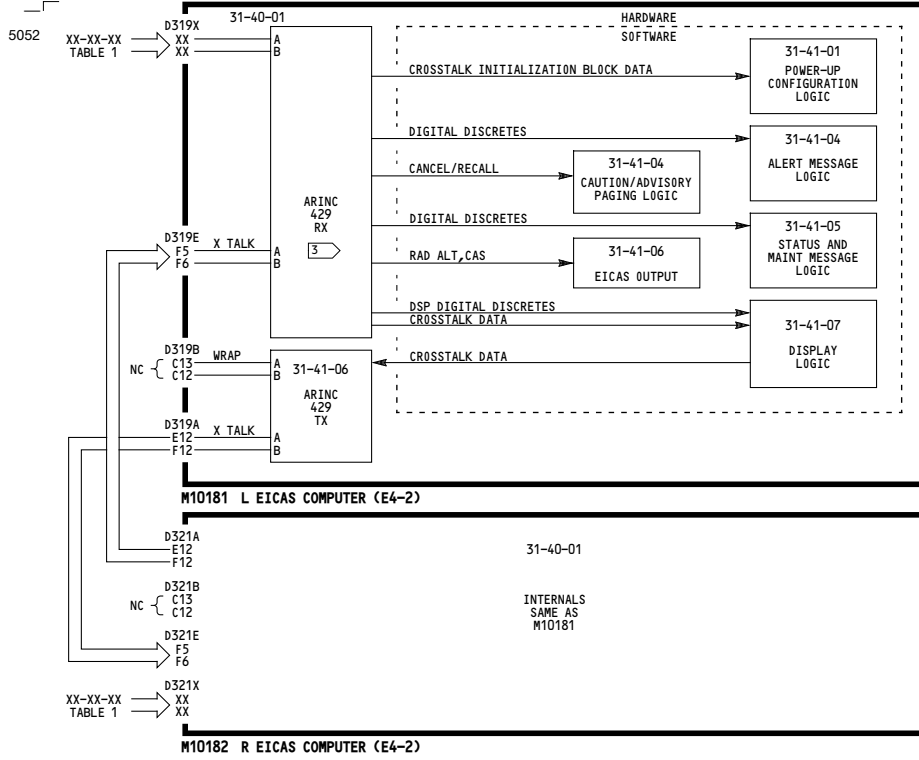
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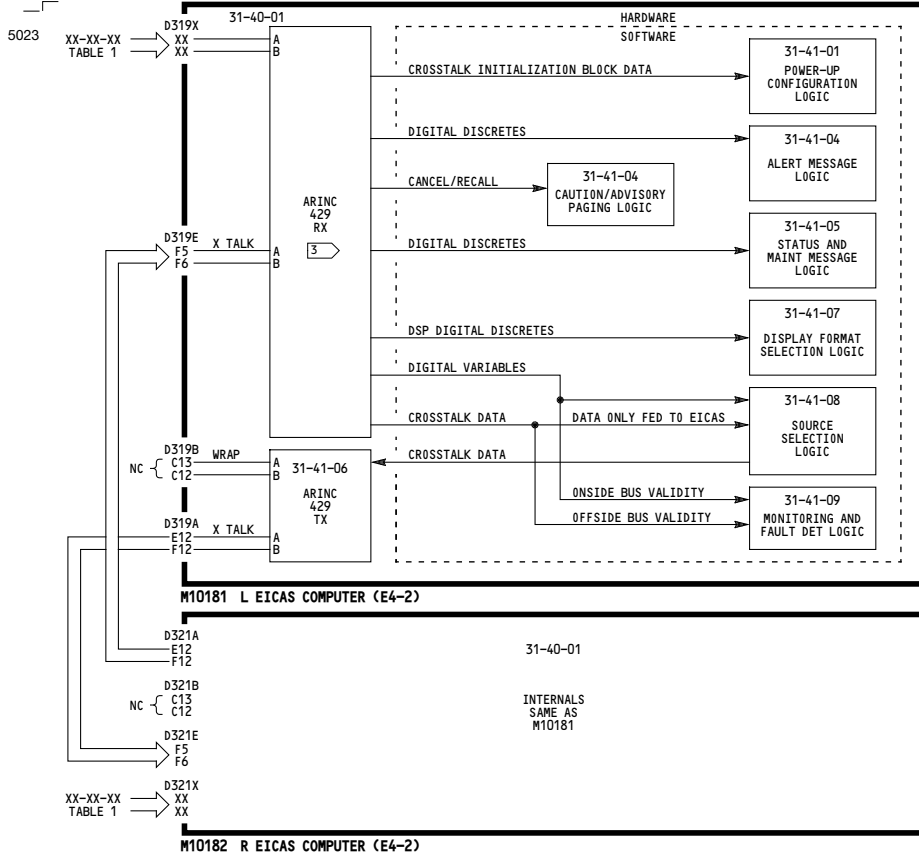
- 1 USED FOR CROSS REFERENCE BETWEEN EICAS SCHEMATICS:  
DV = DIGITAL VARIABLE, DD = DIGITAL DISCRETE
- 2 ASCII ENCODED BLOCK DATA TRANSFER PER ARINC 429
- 3 MINIMUM DETECTION LEVEL OF  $\pm 6.5V$  DC TO ENSURE DETECTION OF AN OPEN CIRCUIT OR A SHORT CIRCUIT TO GROUND ON EITHER A OR B LINE. THIS DIFFERS FROM THE REQUIREMENTS OF ARINC 429 WHICH RECOMMENDS A MINIMUM DETECTION LEVEL OF  $\pm 5V$  DC. EICAS REQUIRES BOTH A AND B LINES TO RECEIVE DATA.

| SCHEMATIC REFERENCE | BUS                       |                | SIGNALS        |  |  |   |  |
|---------------------|---------------------------|----------------|----------------|--|--|---|--|
|                     | BUS NAME                  | D319X A/B      | D321X A/B      | DESCRIPTION  | MNEMONIC 1   | HEX LABEL                                     | SDI 9.10                               |
| 22-32-02            | TMC "D" BUS               | E-86<br>E-87   | E-86<br>E-87   | DISCRETES NO. 2<br>DISCRETES NO. 3<br>EPR BUG DRIVE - L<br>EPR BUG DRIVE - R<br>MAX EPR LIMIT<br>TOTAL AIR TEMP<br>TEMP SELECTED | DD351-357<br>DD360-374<br>DV403<br>DV404<br>DV405<br>DV412<br>DV406  | 146<br>270<br>341<br>341<br>303<br>211<br>213 | 00<br>00<br>10<br>01<br>00<br>00<br>00 |
| 22-41-02            | MCDP "A" BUS (HIGH SPEED) | E-84<br>E-85   | E-84<br>E-85   | DISPLAY DATA 2   |  | 357   |  |
| 28-41-01            | FUEL QTY "A" BUS          | E-F1<br>E-F2   | E-F1<br>E-F2   | L TANK FUEL QTY<br>R TANK FUEL QTY<br>C TANK FUEL QTY  | { DV601<br>DD511-316<br>{ DV602<br>DD317-322<br>{ DV603<br>DD323-328 | 256<br>256<br>256                             | 10<br>01<br>11                         |
| 31-41-01            | EICAS DSP "A" BUS         | E-F7<br>E-F8   | E-F7<br>E-F8   | DISCRETES NO. 1<br>DISCRETES NO. 2   | DD154-191  | 270<br>271                                    | 00<br>00                               |
| 34-12-01            | L ADC "A" BUS             | E-B10<br>E-B11 |                | COMPUTED AIRSPEED<br>TOTAL AIR TEMP<br>BARO ALTITUDE<br>MACH   | DV001<br>DV002<br>DV003<br>DV004                                     | 206<br>211<br>203<br>205                      | 10<br>10<br>10<br>10                   |
| 34-12-02            | R ADC "A" BUS             |                | E-B10<br>E-B11 | COMPUTED AIRSPEED<br>TOTAL AIR TEMP<br>BARO ALTITUDE<br>MACH   | DV001<br>DV002<br>DV003<br>DV004                                     | 206<br>211<br>203<br>205                      | 01<br>01<br>01<br>01                   |
| 34-25-01            | EFIS COMP "A" BUS         | E-F11<br>E-F12 | E-F11<br>E-F12 | COMP FLAG WORD<br>COMP WARN WORD   | DD101-114<br>DD115-121   | 270<br>271                                    | 00<br>00                               |
| 34-33-01            | L RAD ALT "A" BUS         | E-F3<br>E-F4   |                | RADIO HEIGHT   | DV351  | 164   | 10                                     |
| 34-33-02            | R RAD ALT "A" BUS         |                | E-F3<br>E-F4   | RADIO HEIGHT   | DV351  | 164   | 01                                     |
| 34-61-03            | L FMC "C" BUS             | E-B8<br>E-B9   |                | DISCRETES NO. 1<br>DISCRETES NO. 2<br>EPR TARGET<br>GROSS WEIGHT   | DD211<br>DD201-210<br>DV301<br>DV303                                 | 270<br>271<br>341<br>075                      | 00<br>00<br>00<br>00                   |
| 34-61-08            | R FMC "C" BUS             |                | E-B8<br>E-B9   | DISCRETES NO. 1<br>DISCRETES NO. 2<br>EPR TARGET<br>GROSS WEIGHT   | DD211<br>DD201-210<br>DV301<br>DV303                                 | 270<br>271<br>341<br>075                      | 00<br>01<br>00<br>00                   |
| 77-11-01            | L EPR TX "A" BUS          | A-J4<br>A-J3   | A-J4<br>A-J3   | EPR ACTUAL - L   | DV151  | 340   | 00                                     |
| 77-11-01            | R EPR TX "A" BUS          | D-J4<br>D-J5   | D-J4<br>D-J5   | EPR ACTUAL - R   | DV201  | 340   | 00                                     |
| 77-11-01            | L EEC "A" BUS             | A-J1<br>A-J2   | A-J1<br>A-J2   | EPR COMMAND<br>EPR MAXIMUM<br>MAINTENANCE DISC   | DV051<br>DV052<br>DD001-009  | 341<br>342<br>270                             | 00<br>00<br>00                         |
| 77-11-01            | R EEC "A" BUS             | D-J6<br>D-J7   | D-J6<br>D-J7   | EPR COMMAND<br>EPR MAXIMUM<br>MAINTENANCE DISC   | DV101<br>DV102<br>DD051-059  | 341<br>342<br>270                             | 00<br>00<br>00                         |
| 77-31-01            | L AVM "A" BUS             | E-B2<br>E-B3   | E-B2<br>E-B3   | BROADBAND VIB<br>ENGINE VIBRATION<br>FILTER 1 VIB (N1)<br>FILTER 2 B1B (N2)<br>FILTER 3 VIB (N3)<br>STATUS WORD                  | DV259<br>DV260<br>DV261<br>DV262<br>DV263<br>DD259-263               | 357<br>353<br>354<br>355<br>356<br>270        | 10<br>10<br>10<br>10<br>10<br>00       |
| 77-31-01            | R AVM "A" BUS             | E-F9<br>E-F10  | E-F9<br>E-F10  | BROADBAND VIB<br>ENGINE VIBRATION<br>FILTER 1 VIB (N1)<br>FILTER 2 B1B (N2)<br>FILTER 3 VIB (N3)<br>STATUS WORD                  | DV264<br>DV265<br>DV266<br>DV267<br>DV268<br>DD264-268               | 357<br>353<br>354<br>355<br>356<br>270        | 01<br>01<br>01<br>01<br>01<br>00       |

TABLE 1 DIGITAL INPUTS

|           |                             |
|-----------|-----------------------------|
| 001-099   | <b>EICAS DIGITAL INPUTS</b> |
| D280N032S |                             |

**31-41-03**



- NOTES:**
- 1 USED FOR CROSS REFERENCE BETWEEN EICAS SCHEMATICS:  
DV = DIGITAL VARIABLE, DD = DIGITAL DISCRETE
  - 2 ASCII ENCODED BLOCK DATA TRANSFER PER ARINC 429
  - 3 MINIMUM DETECTION LEVEL OF ± 6.5V DC TO ENSURE DETECTION OF AN OPEN CIRCUIT OR A SHORT CIRCUIT TO GROUND ON EITHER A OR B LINE. THIS DIFFERS FROM THE REQUIREMENTS OF ARINC 429 WHICH RECOMMENDS A MINIMUM DETECTION LEVEL OF ± 5V DC. EICAS REQUIRES BOTH A AND B LINES TO RECEIVE DATA.

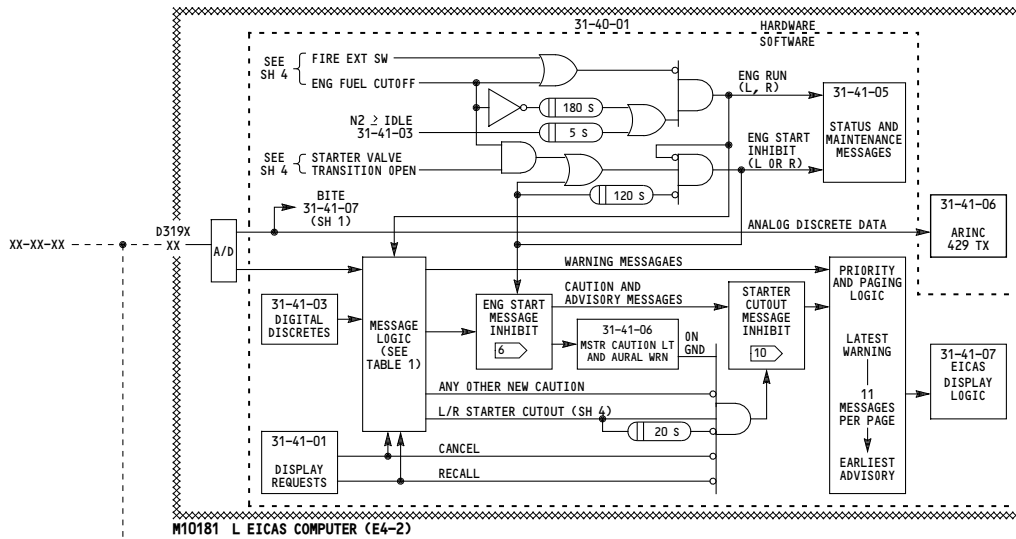
| SCHEMATIC REFERENCE | BUS                       |                | SIGNALS        |  |  |   |  |
|---------------------|---------------------------|----------------|----------------|--|--|---|--|
|                     | BUS NAME                  | D319X A/B      | D321X A/B      | DESCRIPTION  | MNEMONIC [1]   | HEX LABEL                                     | SDI 9.10                               |
| 22-32-02            | TMC "D" BUS               | E-B6<br>E-B7   | E-B6<br>E-B7   | DISCRETES NO. 2<br>DISCRETES NO. 3<br>EPR BUG DRIVE - L<br>EPR BUG DRIVE - R<br>MAX EPR LIMIT<br>TOTAL AIR TEMP<br>TEMP SELECTED | DD351-357<br>DD360-374<br>DV403<br>DV404<br>DV405<br>DV412<br>DV406          | 146<br>270<br>341<br>341<br>303<br>211<br>213 | 00<br>00<br>10<br>01<br>00<br>00<br>00 |
| 22-41-02            | MCDP "A" BUS (HIGH SPEED) | E-B4<br>E-B5   | E-B4<br>E-B5   | DISPLAY DATA [2]   |  | 357   |  |
| 28-41-01            | FUEL QTY "A" BUS          | E-F1<br>E-F2   | E-F1<br>E-F2   | L TANK FUEL QTY<br><br>R TANK FUEL QTY<br><br>C TANK FUEL QTY  | { DV601<br>DD311-316<br><br>{ DV602<br>DD317-322<br><br>{ DV603<br>DD323-328 | 256<br><br>256<br><br>256                     | 10<br><br>01<br><br>11                 |
| 31-41-01            | EICAS DSP "A" BUS         | E-F7<br>E-F8   | E-F7<br>E-F8   | DISCRETES NO. 1<br>DISCRETES NO. 2   | DD154-191  | 270<br>271                                    | 00<br>00                               |
| 34-12-01            | L ADC "A" BUS             | E-B10<br>E-B11 |                | COMPUTED AIRSPEED<br>TOTAL AIR TEMP<br>BARO ALTITUDE<br>MACH   | DV001<br>DV002<br>DV003<br>DV004   | 206<br>211<br>303<br>205                      | 10<br>10<br>10<br>10                   |
| 34-12-02            | R ADC "A" BUS             |                | E-B10<br>E-B11 | COMPUTED AIRSPEED<br>TOTAL AIR TEMP<br>BARO ALTITUDE<br>MACH   | DV001<br>DV002<br>DV003<br>DV004   | 206<br>211<br>303<br>205                      | 01<br>01<br>01<br>01                   |
| 34-25-01            | EFIS COMP "A" BUS         | E-F11<br>E-F12 | E-F11<br>E-F12 | COMP FLAG WORD<br>COMP WARN WORD   | DD101-114<br>DD115-121   | 270<br>271                                    | 00<br>00                               |
| 34-33-01            | L RAD ALT "A" BUS         | E-F3<br>E-F4   |                | RADIO HEIGHT   | DV351  | 164   | 10                                     |
| 34-33-02            | R RAD ALT "A" BUS         |                | E-F3<br>E-F4   | RADIO HEIGHT   | DV351  | 164   | 01                                     |
| 34-61-03            | L FMC "C" BUS             | E-B8<br>E-B9   |                | DISCRETES NO. 1<br>DISCRETES NO. 2<br>EPR TARGET<br>GROSS WEIGHT   | DD211<br>DD201-210<br>DV301<br>DV303   | 270<br>271<br>341<br>075                      | 00<br>10<br>00<br>00                   |
| 34-61-08            | R FMC "C" BUS             |                | E-B8<br>E-B9   | DISCRETES NO. 1<br>DISCRETES NO. 2<br>EPR TARGET<br>GROSS WEIGHT   | DD211<br>DD201-210<br>DV301<br>DV303   | 270<br>271<br>341<br>075                      | 00<br>01<br>00<br>00                   |
| 77-11-01            | L EPR TX "A" BUS          | A-J4<br>A-J3   | A-J4<br>A-J3   | EPR ACTUAL - L   | DV151  | 340   | 00                                     |
| 77-11-01            | R EPR TX "A" BUS          | D-J4<br>D-J5   | D-J4<br>D-J5   | EPR ACTUAL - R   | DV201  | 340   | 00                                     |
| 77-11-01            | L EEC "A" BUS             | A-J1<br>A-J2   | A-J1<br>A-J2   | EPR COMMAND<br>EPR MAXIMUM<br>MAINTENANCE DISC   | DV051<br>DV052<br>DD001-009  | 341<br>342<br>270                             | 00<br>00<br>00                         |
| 77-11-01            | R EEC "A" BUS             | D-J6<br>D-J7   | D-J6<br>D-J7   | EPR COMMAND<br>EPR MAXIMUM<br>MAINTENANCE DISC   | DV101<br>DV102<br>DD051-059  | 341<br>342<br>270                             | 00<br>00<br>00                         |
| 77-31-01            | L AVM "A" BUS             | E-B2<br>E-B3   | E-B2<br>E-B3   | BROADBAND VIB<br>ENGINE VIBRATION<br>FILTER 1 VIB (N1)<br>FILTER 2 VIB (N2)<br>FILTER 3 VIB (N3)<br>STATUS WORD                  | DV259<br>DV260<br>DV261<br>DV262<br>DV263<br>DD259-263                       | 357<br>353<br>354<br>355<br>356<br>270        | 10<br>10<br>10<br>10<br>10<br>00       |
| 77-31-01            | R AVM "A" BUS             | E-F9<br>E-F10  | E-F9<br>E-F10  | BROADBAND VIB<br>ENGINE VIBRATION<br>FILTER 1 VIB (N1)<br>FILTER 2 VIB (N2)<br>FILTER 3 VIB (N3)<br>STATUS WORD                  | DV264<br>DV265<br>DV266<br>DV267<br>DV268<br>DD264-268                       | 357<br>353<br>354<br>355<br>356<br>270        | 01<br>01<br>01<br>01<br>01<br>00       |

TABLE 1 DIGITAL INPUTS

|           |                             |
|-----------|-----------------------------|
| 115-199   | <b>EICAS DIGITAL INPUTS</b> |
| D280N032S |                             |

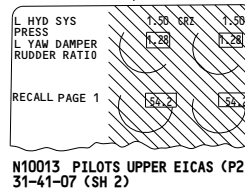
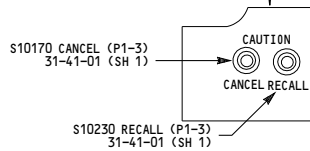


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M10181 L EICAS COMPUTER (E4-2)

M10182 R EICAS COMPUTER (E4-2)



N10013 PILOTS UPPER EICAS (P2) 31-41-07 (SH 2)

**NOTES:**

- 1 LEVEL A WARNING (RED)  
LEVEL B CAUTION (YELLOW)  
LEVEL C ADVISORY (YELLOW)
- 2 NO CAUTION AURAL COMMAND FROM EICAS
- 3 FOR INPUT SEE 31-41-05
- 4 USED IN OTHER MESSAGE LOGIC IN 31-41-04, 31-41-05
- 5 NO MASTER CAUTION LIGHT OR CAUTION AURAL
- 6 THESE MESSAGES ARE NOT INHIBITED: -  
L/R ENG SHUTDOWN, L/R STARTER CUTOUT, L/R ENG STARTER
- 7 FOR DIGITAL INPUTS SEE 31-41-03
- 8 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:  
357 TRUE=28V FALSE=OPEN  
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND  
ALL IRS INPUTS TRUE=10V FALSE=0V
- 10 REMOVES ALL MESSAGES EXCEPT  
L/R STARTER CUTOUT FROM DISPLAY  
FOR 20 SECONDS

TABLE 1  
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES

| SCHEMATIC REFERENCE | D319/321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. [8] | MESSAGE          | LEVEL [1] |
|---------------------|--------------|-----------|--|------------------|-----------|
| 21-25-01            | AE7          | 138       | 138. 1 SEC TD.L UTIL BUS OFF           | L RECIR FAN      | C         |
| 21-25-02            | AD6          | 362       | 362. 1 SEC TD.R UTIL BUS OFF           | R RECIR FAN      | C         |
| 21-31-01            |              |           | 112, 336. 5 SEC TD                     | CABIN AUTO. INOP | B         |
| 21-33-01            | AF13         | 291       | 291                                    | CABIN ALTITUDE   | A         |
| 21-51-09            | AD8          | 124       | 124                                    | L PACK OFF       | C         |
| 21-51-09            | AE6          | 92        | 92                                     | L PACK TEMP      | C         |
| 21-51-10            | AG10         | 348       | 348                                    | R PACK OFF       | C         |
| 21-51-10            | AD5          | 316       | 316                                    | R PACK TEMP      | C         |
| 21-58-06            | BG8          | 351       | 351. 1 SEC TD                          | FWD EQPT OVHT    | C         |
| 21-58-02            | FF5          | 135       | 135. 1 SEC TD                          | FWD EQPT SMOKE   | C         |
| 21-60-01            | DA14         | 91        | 91                                     | FLIGHT DECK TEMP | C         |
| 21-60-02            | FK9          | 505       | 505                                    | FWD CABIN TEMP   | C         |
| 21-60-03            | EJ10         | 271       | 271                                    | AFT CABIN TEMP   | C         |
| 21-61-04            | DA13         | 315       | 315                                    | TRIM AIR         | C         |
| 22-14-01            | DG7          | 323       | (323+244). 0.5 SEC TD                  | AUTOPILOT DISC   | A         |
| 22-14-01            | EA9          | 244       |  |                  |           |
| 22-14-01            | BJ2          | 478       | 478                                    | AUTOPILOT        | B         |
| 22-21-01            | DA6          | 212       | 212                                    | L YAW DAMPER     | C         |
| 22-21-02            | AD7          | 52        | 52                                     | R YAW DAMPER     | C         |
| 22-24-01            | FE4          | 425       | 425                                    | MACH/SPD TRIM    | C         |
| 22-34-01            | BD8          | 126       | 126                                    | AUTOTHROT DISC   | B         |
| 24-11-01            | DA10         | 306       | 306. L ENG RUNNING                     | L GEN DRIVE      | C         |
| 24-11-02            | DA1          | 219       | 219. R ENG RUNNING                     | R GEN DRIVE      | C         |
| 24-22-02            | DB3          | 236       | 236                                    | L AC BUS OFF     | B         |
| 24-22-02            | DB1          | 59        | 59. L ENG RUNNING.CAA                  | L GEN OFF        | B         |
| 24-22-04            | DB2          | 76        | 76                                     | R AC BUS OFF     | B         |
| 24-22-04            | DA12         | 283       | 283. R ENG RUNNING.CAA                 | R GEN OFF        | B         |
| 24-22-06            | DC7          | 187       | 187. 5 SEC TD                          | APU GEN OFF      | C         |
| 24-22-07            | DC6          | 44        | 44                                     | L BUS ISOLATED   | C         |
| 24-22-08            | DC1          | 268       | 268                                    | R BUS ISOLATED   | C         |
| 24-31-01            | EC15         | 142       | 142. 10 SEC TD.767                     | MAIN BAT. DISCH  | C         |
| 24-31-01            | AD4          | 250       | 250                                    | BATTERY OFF      | C         |
| 24-33-01            | DB4          | 26        | 26                                     | STANDBY BUS OFF  | C         |
| 24-51-10            | AE5          | 300       | 300. L AC BUS OFF                      | L UTIL BUS OFF   | C         |
| 24-51-20            | DC8          | 204       | 204. R AC BUS OFF                      | R UTIL BUS OFF   | C         |

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**EICAS WARNING, CAUTION AND ADVISORY MESSAGES**

D280N032S

**31-41-04**

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>D321<br>PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">8</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------------|-----------|--|------------------|---|
| 26-11-01            | BE4                  | 57        | 57   | L ENG FIRE       | A   |
| 26-11-02            | DG3                  | 99        | 99   | R ENG FIRE       | A   |
| 26-11-03            | BE5                  | 246       | 246  | L ENG OVHT       | B   |
| 26-11-04            | DG5                  | 466       | 466  | R ENG OVHT       | B   |
| 26-15-01            | FF2                  | 359       | 359  | APU FIRE         | A   |
| 26-16-01            | DF7                  | 370       | 370  | FWD CARGO FIRE   | A   |
| 26-16-02            | FF7                  | 472       | 472  | AFT CARGO FIRE   | A   |
| 26-16-02            | EA2                  | 430       | 430  | FIRE/OVHT SYS    | C   |
| 26-17-01            | DB10                 | 203       | 203  | WHEEL WELL FIRE  | A   |
| 26-18-01            | BF4                  | 217       | 217  | L BLD DUCT LEAK  | B   |
| 26-18-02            | DG4                  | 451       | 451  | R BLD DUCT LEAK  | B   |
| 26-21-01            | DG2                  | 114       | 114  | ENG BTL 1        | C   |
| 26-21-01            | FE3                  | 417       | 417  | ENG BTL 2        | C   |
| 26-22-01            | DC9                  | 42        | 42   | APU BTL          | C   |
| 26-23-01            | DD1                  | 146       | 146  | CARGO BTL 1      | C   |
| 26-23-01            | FC08                 | 389       | 389  | CARGO BTL 2      | C   |
| 27-20-02            | DC13                 | 414       | 414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)  | RUDDER RATIO     | C   |
| 27-40-01            | AD11                 | 276       | 276  | STAB. TRIM       | C   |
| 27-40-01            | EB12                 | 302       | 302  | UNSCD STAB. TRIM | B   |
| 27-51-03            | DB15                 | 475       | 475  | FLAP LD RELIEF   | C   |
| 27-51-05            | DG15                 | 122       | 122  | TE FLAP ASYM     | B   |
| 27-51-06            | ED1                  | 346       | 346  | TE FLAP DISAGREE | B   |
| 27-61-01            | DC11                 | 90        | 90   | SPOILERS         | C   |
| 27-62-01            | AG9                  | 66        | 66   | AUTO. SPEEDBRAKE | C   |
| 27-81-03            | DB14                 | 460       | 460  | LE SLAT DISAGREE | B   |
| 27-81-05            | EB1                  | 474       | 474  | LE SLAT ASYM     | B   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>321<br>PIN | INPUT NO.   | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">8</span> | MESSAGE           | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---------------------|---|--|-------------------|---|
| 28-22-01            | ED5                 | 107   | 107.6 SEC TD   | L FUEL SPAR VAL   | C   |
| 28-22-01            | EC1                 | 331   | 331.6 SEC TD   | R FUEL SPAR VAL   | C   |
| 28-22-01            | EC2                 | 399   | 399.6 SEC TD   | FUEL CROSSFEED    | C   |
| 28-22-01            | BE7                 | 87  | (322.10 SEC TD).(361.10 SEC TD)  | L FUEL SYS PRESS. | B   |
| 28-22-01            | FH4                 | 357 <span style="border: 1px solid black; padding: 0 2px;">8</span> | (.87.10 SEC TD).(357+399)<br>+(ALL PUMPS LOW PRESS.10 SEC TD)                                      |                   |   |
| 28-22-02            | DH8                 | 322   | 322.10 SEC TD. L FUEL SYS PRESS  | L FWD FUEL PUMP   | C   |
| 28-22-02            | FH8                 | 361   | 361.10 SEC TD. L FUEL SYS PRESS  | L AFT FUEL PUMP   | C   |
| 28-22-03            | DH6                 | 100   | 100.10 SEC TD. L FUEL SYS PRESS  | CTR L FUEL PUMP   | C   |
| 28-22-03            | FJ9                 | 153   | 153.10 SEC TD. R FUEL SYS PRESS  | CTR R FUEL PUMP   | C   |
| 28-22-03            | DG8                 | 338   | (377.10 SEC TD).(452.10 SEC TD)<br>(.338.10 SEC TD).(357+399)<br>+(ALL PUMPS LOW PRESS.10 SEC TD)  | R FUEL SYS PRESS. | B   |
| 28-22-04            | FH9                 | 377   | 377.10 SEC TD. R FUEL SYS PRESS  | R FWD FUEL PUMP   | C   |
| 28-22-04            | DH3                 | 452   | 452.10 SEC TD. R FUEL SYS PRESS  | R AFT FUEL PUMP   | C   |
| 28-41-01            | ED3                 | 459   | 459.31   | LOW FUEL          | B   |
| 28-41-01            | ED13                | 31  | 459.31   | FUEL CONFIG       | C   |
| 29-00-01            | EA3                 | 410   | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                 | 221   | 221  | R HYD QTY         | C   |
| 29-00-01            | DB6                 | 154   | 154  | C HYD QTY         | C   |
| 29-00-01            | AH02                | 196   | 196. L AND R ENGINES RUNNING   | L HYD RSVR PRES   | C   |
| 29-00-01            | FC10                | 225   | 225. L AND R ENGINES RUNNING   | C HYD RSVR PRES   | C   |
| 29-00-01            | DK07                | 404   | 404. L AND R ENGINES RUNNING   | R HYD RSVR PRES   | C   |
| 29-00-02            | DE14                | 403   | 403.1 SEC TD   | L HYD SYS PRESS.  | B   |
| 29-00-02            | AK2                 | 195   | 195. L ENG RUN. L HYD SYS PRESS  | L HYD ENG PUMP    | C   |
| 29-00-02            | AK11                | 35  | 35. L HYD SYS PRESS  | L HYD ELEC PUMP   | C   |
| 29-00-02            | FG4                 | 94  | 94   | L ENG HYD OVHT    | C   |
| 29-00-02            | BK7                 | 216   | 216  | L ELEC HYD OVHT   | C   |
| 29-00-03            | FC9                 | 120   | 120.1 SEC TD   | R HYD SYS PRESS.  | B   |
| 29-00-03            | DK13                | 284   | 284. R ENG RUN. R HYD SYS PRESS  | R HYD ENG PUMP    | C   |
| 29-00-03            | FK2                 | 462   | 462. R HYD SYS PRESS   | R HYD ELEC PUMP   | C   |
| 29-00-03            | AK4                 | 482   | 482  | R ENG HYD OVHT    | C   |
| 29-00-03            | AK8                 | 258   | 258  | R ELEC HYD OVHT   | C   |
| 29-00-04            | AG11                | 259   | 259. C HYD SYS PRESS.  | C HYD ELEC 1      | C   |
| 29-00-04            | BK8                 | 471   | 471  | C HYD 1 OVHT      | C   |
| 29-00-04            | DJ11                | 220   | 220. C HYD SYS PRESS.  | C HYD ELEC 2      | C   |
| 29-00-04            | AK3                 | 34  | 34   | C HYD 2 OVHT      | C   |
| 29-00-04            | DJ10                | 60  | 60.1 SEC TD  | C HYD SYS PRESS.  | B   |
| 29-00-04            | FK6                 | 437   | 437  | RAT. UNLOCKED     | C   |
| 29-00-01            | EA3                 | 410   | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                 | 221   | 221  | R HYD QTY         | C   |
| 29-00-01            | DB6                 | 154   | 154  | C HYD QTY         | C   |
| 29-00-02            |                     |   | 2 OR MORE OF (117,98,137)  | FLT CONT VALS     | C   |

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**EICAS WARNING, CAUTION  
AND ADVISORY MESSAGES**

D280N032S

**31-41-04**

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">8</span> | MESSAGE                  | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---------------|-----------|--|--------------------------|---|
| 30-11-01            | FG7           | 318       | 318. 2.5 SEC TD  | L WING ANTI-ICE          | C   |
| 30-11-01            | FJ2           | 447       | 447. 2.5 SEC TD  | R WING ANTI-ICE          | C   |
| 30-21-01            | EC14          | 305       | 305. L ENG RUN. 10 SEC TD.   | L ENG ANTI-ICE           | C   |
| 30-21-02            | EA5           | 238       | 238. R ENG RUN. 10 SEC TD.   | R ENG ANTI-ICE           | C   |
| 30-31-01            | EC3           | 45        | 45. PROBE HEAT   | CAPT PITOT               | C   |
| 30-31-01            | AD1           | 269       | 269. PROBE HEAT  | L AUX PITOT              | C   |
| 30-31-01            |               |           | 2 OR MORE OF (45, 449, 269, 97, 155, 241, 411)   | PROBE HEAT               | C   |
| 30-31-02            | EA6           | 449       | 449. PROBE HEAT  | F/O PITOT                | C   |
| 30-31-02            | DB9           | 97        | 97. PROBE HEAT   | R AUX PITOT              | C   |
| 30-32-01            | DB5           | 155       | 155. PROBE HEAT  | L AOA PROBE              | C   |
| 30-32-02            | EA7           | 241       | 241. PROBE HEAT  | R AOA PROBE              | C   |
| 30-33-01            | EA4           | 411       | 411. PROBE HEAT  | TAT PROBE                | C   |
| 30-41-01            | EC6           | 29        | 29. WINDOW HEAT  | L FWD WINDOW WINDOW HEAT | C   |
| 30-41-01            |               |           | 2 OR MORE OF (29, 189, 205, 253)   |                          | C   |
| 30-41-02            | EC5           | 205       | 205. WINDOW HEAT   | R FWD WINDOW             | C   |
| 30-41-03            | EC4           | 189       | 189. WINDOW HEAT   | L SIDE WINDOW            | C   |
| 30-41-04            | AD2           | 253       | 253. WINDOW HEAT   | R SIDE WINDOW            | C   |
| 30-81-01            | ED6           | 174       | 174. CAUTION CANCEL  | ICE DET ON               | C   |
| 30-81-01            | ED6           | 174       | 174. CAUTION CANCEL  | ICE DET OFF              | C   |
| 31-41-01            |               |           | NO VALID ARINC 429 RECEIVED FROM DSP .1 SEC TD   | EICAS CONT PNL           | C   |
| 31-41-06            |               |           | DISPLAY SYSTEM FAULT, 1 SEC TD.  | EICAS DISPLAY            | C   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">8</span> | MESSAGE         | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---------------|-----------|--|-----------------|---|
| 31-51-03            | AG15          | 235       | 235  | PARKING BRAKE   | A   |
| 31-51-03            | DA15          | 108       | 108  | FLAPS           | A   |
| 31-51-03            | ED2           | 332       | 332  | SPOILERS        | A   |
| 31-51-03            | EA1           | 431       | 431  | STABILIZER      | A   |
| 31-51-04            | BG14          | 349       | 349  | GEAR NOT DOWN   | A   |
| 31-51-04            | BC14          | 463       | 463  | SPEEDBRAKES EXT | B   |
| 31-51-07            | BD14          | 350       | 350+134  | L ENG SHUTDOWN  | <span style="border: 1px solid black; padding: 0 2px;">B5</span>      |
| 31-51-07            | BJ11          | 134       |  |                 |   |
| 31-51-07            | BJ3           | 429       | 429+147  | R ENG SHUTDOWN  | <span style="border: 1px solid black; padding: 0 2px;">B5</span>      |
| 31-51-07            | DK6           | 147       |  |                 |   |
| 32-41-01            | EH12          | 47        | 47   | BRAKE SOURCE    | C   |
| 32-41-01            | AG3           | 226       | 226. 235   | PARKING BRAKE   | C   |
| 32-42-03            | AG6           | 290       | 290  | AUTOBRAKES      | C   |
| 32-42-04            | FH10          | 65        | —  | ANTISKID        | C   |
| 32-61-01            | DB7           | 43        | (43.298.25 SEC TD).  | GEAR DISAGREE   | B   |
| 32-61-01            | AG12          | 298       |  |                 |   |
| 32-61-01            | BF14          | 125       | 125. 335. 35 SEC TD  | GEAR DOORS      | C   |
| 32-61-01            | F-C2          | 335       |  |                 |   |
| 33-51-01            | EA11          | 193       | 193  | EMER LIGHTS     | C   |
| 34-12-01            | FE5           | 136       | 136 +111   | OVERSPEED       | A   |
| 34-12-02            | BC15          | 111       |  |                 |   |
| 34-16-01            | BE14          | 477       | 477  | ALTITUDE ALERT  | <span style="border: 1px solid black; padding: 0 2px;">B2</span>      |
| 34-21-01            | AG8           | 68        | 68   | L IRS DC FAIL   | C   |
| 34-21-01            | AG5           | 292       | 292  | L IRS FAULT     | C   |
| 34-21-01            | AG1           | 228       | 228  | L IRS ON DC     | C   |
| 34-21-02            | DE9           | 168       | 168  | R IRS DC FAIL   | C   |
| 34-21-02            | DE2           | 392       | 392  | R IRS FAULT     | C   |
| 34-21-02            | DE5           | 424       | 424  | R IRS ON DC     | C   |
| 34-21-03            | FC3           | 374       | 374  | C IRS DC FAIL   | C   |
| 34-21-03            | FC4           | 502       | 502  | C IRS FAULT     | C   |
| 34-21-03            | FD5           | 150       | 150  | C IRS ON DC     | C   |
| 34-22-31            | FA9           | 289       | 289  | INSTR SWITCH    | B   |

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**EICAS WARNING, CAUTION AND ADVISORY MESSAGES**

D280N032S

**31-41-04**

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319X D321X PIN   | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---|-----------|--|------------------|---|
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD117     | DD117  | HDG DISAGREE     | C   |
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD118     | DD118  | TRACK DISAGREE   | C   |
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD119     | DD119  | ATT DISAGREE     | B   |
| 34-53-01            | EA13  | 79        | 79   | ATC FAULT        | C   |
| 34-61-02            | AG13  | 299       | 299  | FMC MESSAGE      | C   |
| 34-61-02            | EK14  | 257       | 257  | L FMC FAIL       | C   |
| 34-61-07            | BK1   | 239       | 239  | R FMC FAIL       | C   |
| 35-21-01            | FF6   | 141       | 141  | PASS. OXYGEN ON  | C   |
| 36-11-01            | EK3   | 428       | 428. L ENG RUN   | L ENG BLEED OFF  | C   |
| 36-11-01            | EK7   | 171       | 171  | L ENG HI STAGE   | C   |
| 36-11-02            | EK6   | 172       | 172. R ENG RUN   | R ENG BLEED OFF  | C   |
| 36-11-02            | EK11  | 395       | 395  | R ENG HI STAGE   | C   |
| 36-11-03            | FF1   | 365       | 365.6 SECS TD  | APU BLEED VAL    | C   |
| 36-11-05            | BB13  | 461       | 461.6 SECS TD  | BLEED ISLN VAL   | C   |
| 36-22-01            | EK10  | 396       | 396  | L ENG BLEED VAL  | B   |
| 36-22-01            | EK2   | 427       | 427  | R ENG BLEED VAL  | B   |
| 49-61-01            | FA10  | 288       | 288.6 SEC TD   | APU FUEL VAL     | C   |
| 49-61-01            | FB6   | 105       | 105  | APU FAULT        | C   |
| 52-71-01            | BA11  | 144       | 144. L ENTRY DOORS   | L CTR ENT DOOR   | C   |
| 52-71-01            | BB12  | 496       | 496. EMER DOORS  | L EMER DOOR      | C   |
| 52-71-01            | BA10  | 352       | 352. L ENTRY DOORS   | L FWD ENT DOOR   | C   |
| 52-71-01            | BE12  | 368       | 368. L ENTRY DOORS   | L AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (144, 352, OR 368)  | L ENTRY DOORS    | C   |
| 52-71-01            | BA5   | 129       | 129. R ENTRY DOORS   | R CTR ENT DOOR   | C   |
| 52-71-01            | BD5   | 481       | 481. EMER DOORS  | R EMER DOOR      | C   |
| 52-71-01            | AD14  | 369       | 369. R ENTRY DOORS   | R FWD ENT DOOR   | C   |
| 52-71-01            | AD13  | 353       | 353. R ENTRY DOORS   | R AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (129, 369 OR 353)   | R ENTRY DOORS    | C   |
| 52-71-01            |   |           | 2 OR MORE OF (496, 481, 347, 251, 27 OR 255)   | EMER DOORS       | C   |
| 52-71-01            | AE04  | 347       | 347. EMER DOORS  | L FWD EMER DOORS | C   |
| 52-71-01            | DAD9  | 251       | 251. EMER DOORS  | L AFT EMER DOORS | C   |
| 52-71-01            | DC05  | 27        | 27. EMER DOORS   | R FWD EMER DOORS | C   |
| 52-71-01            | AE01  | 255       | 255. EMER DOORS  | R AFT EMER DOORS | C   |
| 52-71-01            | BB7   | 416       | 416. ACCESS DOORS  | FWD ACCESS DOOR  | C   |
| 52-71-01            | BA6   | 160       | 160. ACCESS DOORS  | EE ACCESS DOOR   | C   |
| 52-71-01            |   |           | 416. 160   | ACCESS DOOR      | C   |
| 52-71-01            | AF15  | 384       | 384. CARGO DOORS   | FWD CARGO DOOR   | C   |
| 52-71-01            | BA7   | 145       | 145. CARGO DOORS   | AFT CARGO DOOR   | C   |
| 52-71-01            |   |           | 384. 145   | CARGO DOORS      | C   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------|-----------|--|------------------|---|
| 73-21-01            | BF13           | 303       | 303.6 SECS TD  | L ENG FUEL VAL   | C   |
| 73-21-01            | BD14           | 350       | 350 + 134  | L ENG SHUTDOWN   | B   |
|                     | BJ11           | 134       |  |                  |   |
| 73-21-02            | BD15           | 415       | 415.6 SEC TD   | R ENG FUEL VAL   | C   |
| 73-21-02            | BJ3            | 429       | 429 + 147  | R ENG SHUTDOWN   | B   |
|                     | DK6            | 147       |  |                  |   |
| 73-21-04            | BH08           | 455       | 455. L ENG RUNNING. 4 SEC TD   | L ENG LIMITER    | C   |
| 73-21-05            | DH04           | 167       | 167. R ENG RUNNING. 4 SEC TD   | R ENG LIMITER    | C   |
| 73-21-04            | BG10           | 373       | 373  | L EEC OFF        | B   |
| 73-21-04            | BH6            | 358       | (L ENG RUNNING. 4 SEC TD.) 358. <span style="border: 1px solid black; padding: 0 2px;">373</span>  | L ENG EEC        | C   |
| 73-21-05            | DE13           | 386       | 386  | R EEC OFF        | B   |
| 73-21-05            | DK9            | 324       | (R ENG RUNNING. 4 SEC TD.) 324. <span style="border: 1px solid black; padding: 0 2px;">386</span>  | R ENG EEC        | C   |
| 78-36-01            | BH07           | 103       | (103. L AC BUS OFF. 2 SEC TD) +  | REV ISLN VAL     | C   |
|                     | DH07           | 391       | (391. R AC BUS OFF. 2 SEC TD)  |                  |   |
| 79-33-01            | AH3            | 483       | 483. L ENG RUN   | L ENG OIL PRESS  | C   |
| 79-33-01            | DK10           | 371       | 371. R ENG RUN   | R ENG OIL PRESS  | C   |
| 79-35-01            | AH04           | 131       | 131. L ENG OIL TEMP >10°C  | L OIL FILTER     | C   |
| 79-35-01            | DK03           | 423       | 423. R ENG OIL TEMP >10°C  | R OIL FILTER     | C   |
| 80-11-01            | FD09           | 152       | 152. 5 SEC TD  | L STARTER CUTOUT | B   |
| 80-11-01            | BH11           | 327       | 327. <span style="border: 1px solid black; padding: 0 2px;">152</span> . 5 SEC TD                  | L ENG STARTER    | C   |
|                     | FD09           | 152       |  |                  |   |
| 80-11-02            | FB05           | 121       | 121. 5 SEC TD  | R STARTER CUTOUT | B   |
| 80-11-02            | DK02           | 440       | 440. <span style="border: 1px solid black; padding: 0 2px;">121</span> . 5 SEC TD                  | R ENG STARTER    | C   |
|                     | FB05           | 121       |  |                  |   |
| 77-12-01            | BD2            | AV351     | (L ENG RUNNING .60 SEC TD)   | L ENG LOW N1     | C   |
|                     | BD1            |           | .L ENG N1 < N1 LOW .20 SEC TD  |                  |   |
| 77-12-01            | EA14           | AV352     | (R ENG RUNNING .60 SEC TD)   | R ENG LOW N1     | C   |
|                     | EB14           |           | .R ENG N1 < N1 LOW .20 SEC TD  |                  |   |

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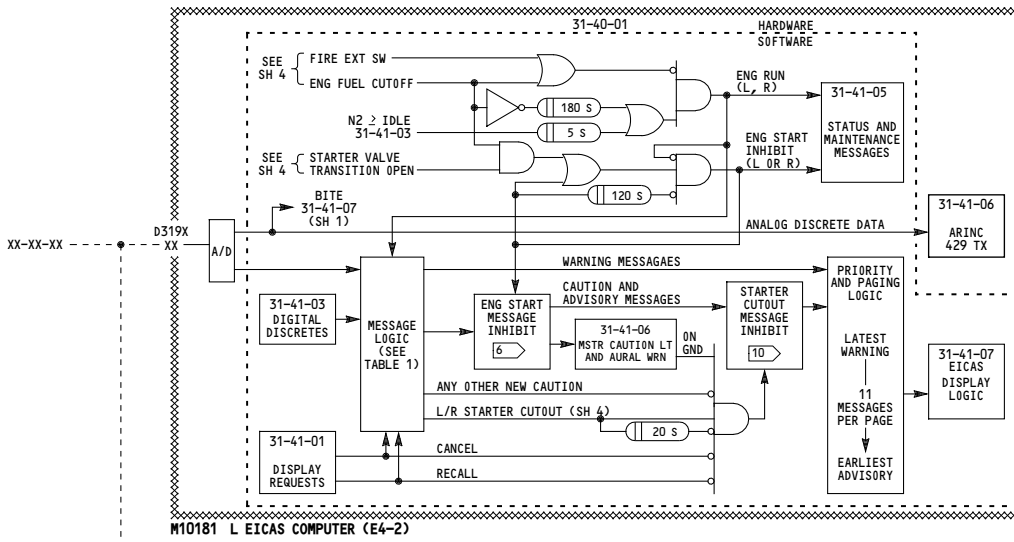
**EICAS WARNING, CAUTION AND ADVISORY MESSAGES**

D280N032S

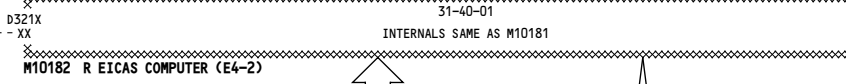
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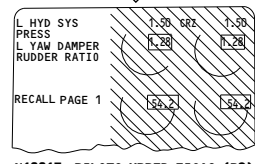
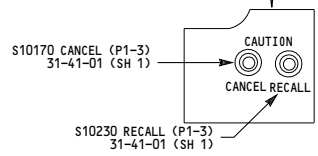
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**M10181 L EICAS COMPUTER (E4-2)**



**M10182 R EICAS COMPUTER (E4-2)**



**N10013 PILOTS UPPER EICAS (P2)  
31-41-07 (SH 2)**

**NOTES:**

- 1 LEVEL A WARNING (RED)  
LEVEL B CAUTION (YELLOW)  
LEVEL C ADVISORY (YELLOW)
- 2 NO CAUTION AURAL COMMAND FROM EICAS
- 3 FOR INPUT SEE 31-41-05
- 4 USED IN OTHER MESSAGE LOGIC IN 31-41-04,  
31-41-05
- 5 NO MASTER CAUTION LIGHT OR CAUTION AURAL
- 6 THESE MESSAGES ARE NOT INHIBITED: -  
L/R ENG SHUTDOWN, L/R STARTER CUTOFF,  
L/R ENG STARTER
- 7 FOR DIGITAL INPUTS SEE 31-41-03
- 8 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:  
357 TRUE=28V FALSE=OPEN  
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND  
ALL IRS INPUTS TRUE=10V FALSE=0V
- 10 REMOVES ALL MESSAGES EXCEPT  
L/R STARTER CUTOFF FROM DISPLAY  
FOR 20 SECONDS

**TABLE 1  
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES**

| SCHEMATIC REFERENCE | D319/321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. [8] | MESSAGE          | LEVEL [1] |
|---------------------|--------------|-----------|--|------------------|-----------|
| 21-25-01            | AE7          | 138       | 138. 1 SEC TD.L UTIL BUS OFF           | L RECIR FAN      | C         |
| 21-25-02            | AD6          | 362       | 362. 1 SEC TD.R UTIL BUS OFF           | R RECIR FAN      | C         |
| 21-31-01            |              |           | 112, 336. 5 SEC TD [3]                 | CABIN AUTO. INOP | B         |
| 21-33-01            | AF13         | 291       | 291                                    | CABIN ALTITUDE   | A         |
| 21-51-09            | AD8          | 124       | 124                                    | L PACK OFF       | C         |
| 21-51-09            | AE6          | 92        | 92                                     | L PACK TEMP      | C         |
| 21-51-10            | AG10         | 348       | 348                                    | R PACK OFF       | C         |
| 21-51-10            | AD5          | 316       | 316                                    | R PACK TEMP      | C         |
| 21-58-06            | BG8          | 351       | 351. 1 SEC TD                          | FWD EQPT OVHT    | C         |
| 21-58-02            | FF5          | 135       | 135. 1 SEC TD                          | FWD EQPT SMOKE   | C         |
| 21-60-01            | DA14         | 91        | 91                                     | FLIGHT DECK TEMP | C         |
| 21-60-02            | FK9          | 505       | 505                                    | FWD CABIN TEMP   | C         |
| 21-60-03            | EJ10         | 271       | 271                                    | AFT CABIN TEMP   | C         |
| 21-61-04            | DA13         | 315       | 315                                    | TRIM AIR         | C         |
| 22-14-01            | DG7          | 323       | (323+244). 0.5 SEC TD                  | AUTOPILOT DISC   | A         |
| 22-14-01            | EA9          | 244       |  |                  |           |
| 22-14-01            | BJ2          | 478       | 478                                    | AUTOPILOT        | B         |
| 22-21-01            | DA6          | 212       | 212                                    | L YAW DAMPER     | C         |
| 22-21-02            | AD7          | 52        | 52                                     | R YAW DAMPER     | C         |
| 22-24-01            | FE4          | 425       | 425                                    | MACH/SPD TRIM    | C         |
| 22-34-01            | BD8          | 126       | 126. 1 SEC TD                          | AUTO THROT DISC  | B         |
| 24-11-01            | DA10         | 306       | 306. L ENG RUNNING                     | L GEN DRIVE      | C         |
| 24-11-02            | DA1          | 219       | 219. R ENG RUNNING                     | R GEN DRIVE      | C         |
| 24-22-02            | DB3          | 236       | 236                                    | L AC BUS OFF     | B [4]     |
| 24-22-02            | DB1          | 59        | 59. L ENG RUNNING.CAA                  | L GEN OFF        | B         |
| 24-22-04            | DB2          | 76        | 76                                     | R AC BUS OFF     | B         |
| 24-22-04            | DA12         | 283       | 283. R ENG RUNNING.CAA                 | R GEN OFF        | B [4]     |
| 24-22-06            | DC7          | 187       | 187. 5 SEC TD                          | APU GEN OFF      | C         |
| 24-22-07            | DC6          | 44        | 44                                     | L BUS ISOLATED   | C         |
| 24-22-08            | DC1          | 268       | 268                                    | R BUS ISOLATED   | C         |
| 24-31-01            | EC15         | 142       | 142. 10 SEC TD.767                     | MAIN BAT. DISCH  | C         |
| 24-31-01            | AD4          | 250       | 250                                    | BATTERY OFF      | C [4]     |
| 24-33-01            | DB4          | 26        | 26                                     | STANDBY BUS OFF  | C [4]     |
| 24-51-10            | AE5          | 300       | 300. L AC BUS OFF                      | L UTIL BUS OFF   | C         |
| 24-51-20            | DC8          | 204       | 204. R AC BUS OFF                      | R UTIL BUS OFF   | C         |

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**EICAS WARNING, CAUTION AND ADVISORY MESSAGES**

Incorporates  
31-0059 R01

D280N032S

**31-41-04**

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>D321<br>PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; border-radius: 50%; padding: 0 2px;">8</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; border-radius: 50%; padding: 0 2px;">1</span> |
|---------------------|----------------------|-----------|--|------------------|---|
| 26-11-01            | BE4                  | 57        | 57   | L ENG FIRE       | A   |
| 26-11-02            | DG3                  | 99        | 99   | R ENG FIRE       | A   |
| 26-11-03            | BE5                  | 246       | 246  | L ENG OVHT       | B   |
| 26-11-04            | DG5                  | 466       | 466  | R ENG OVHT       | B   |
| 26-15-01            | FF2                  | 359       | 359  | APU FIRE         | A   |
| 26-16-01            | DF7                  | 370       | 370  | FWD CARGO FIRE   | A   |
| 26-16-02            | FF7                  | 472       | 472  | AFT CARGO FIRE   | A   |
| 26-16-02            | EA2                  | 430       | 430  | FIRE/OVHT SYS    | C   |
| 26-17-01            | DB10                 | 203       | 203  | WHEEL WELL FIRE  | A   |
| 26-18-01            | BF4                  | 217       | 217  | L BLD DUCT LEAK  | B   |
| 26-18-02            | DG4                  | 451       | 451  | R BLD DUCT LEAK  | B   |
| 26-21-01            | DG2                  | 114       | 114  | ENG BTL 1        | C   |
| 26-21-01            | FE3                  | 417       | 417  | ENG BTL 2        | C   |
| 26-22-01            | DC9                  | 42        | 42   | APU BTL          | C   |
| 26-23-01            | DD1                  | 146       | 146  | CARGO BTL 1      | C   |
| 26-23-01            | FC08                 | 389       | 389  | CARGO BTL 2      | C   |
| 27-20-02            | DC13                 | 414       | 414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)  | RUDDER RATIO     | C   |
| 27-40-01            | AD11                 | 276       | 276  | STAB. TRIM       | C   |
| 27-40-01            | EB12                 | 302       | 302  | UNSCD STAB. TRIM | B   |
| 27-51-03            | DB15                 | 475       | 475  | FLAP LD RELIEF   | C   |
| 27-51-05            | DG15                 | 122       | 122  | TE FLAP ASYM     | B   |
| 27-51-06            | ED1                  | 346       | 346  | TE FLAP DISAGREE | B   |
| 27-61-01            | DC11                 | 90        | 90   | SPOILERS         | C   |
| 27-62-01            | AG9                  | 66        | 66   | AUTO. SPEEDBRAKE | C   |
| 27-81-03            | DB14                 | 460       | 460  | LE SLAT DISAGREE | B   |
| 27-81-05            | EB1                  | 474       | 474  | LE SLAT ASYM     | B   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>321<br>PIN | INPUT NO.   | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; border-radius: 50%; padding: 0 2px;">8</span> | MESSAGE           | LEVEL <span style="border: 1px solid black; border-radius: 50%; padding: 0 2px;">1</span> |
|---------------------|---------------------|---|--|-------------------|---|
| 28-22-01            | ED5                 | 107   | 107.6 SEC TD   | L FUEL SPAR VAL   | C   |
| 28-22-01            | EC1                 | 331   | 331.6 SEC TD   | R FUEL SPAR VAL   | C   |
| 28-22-01            | EC2                 | 399   | 399.6 SEC TD   | FUEL CROSSFEED    | C   |
| 28-22-01            | BE7                 | 87  | (322.10 SEC TD).(361.10 SEC TD)  | L FUEL SYS PRESS. | B   |
| 28-22-01            | FH4                 | 357 <span style="border: 1px solid black; border-radius: 50%; padding: 0 2px;">8</span> | (.87.10 SEC TD).(357+399)<br>+(ALL PUMPS LOW PRESS.10 SEC TD)  |                   |   |
| 28-22-02            | DH8                 | 322   | 322.10 SEC TD. L FUEL SYS PRESS  | L FWD FUEL PUMP   | C   |
| 28-22-02            | FH8                 | 361   | 361.10 SEC TD. L FUEL SYS PRESS  | L AFT FUEL PUMP   | C   |
| 28-22-03            | DH6                 | 100   | 100.10 SEC TD. L FUEL SYS PRESS  | CTR L FUEL PUMP   | C   |
| 28-22-03            | FJ9                 | 153   | 153.10 SEC TD. R FUEL SYS PRESS  | CTR R FUEL PUMP   | C   |
| 28-22-03            | DG8                 | 338   | (377.10 SEC TD).(452.10 SEC TD)<br>(.338.10 SEC TD).(357+399)<br>+(ALL PUMPS LOW PRESS.10 SEC TD)                      | R FUEL SYS PRESS. | B   |
| 28-22-04            | FH9                 | 377   | 377.10 SEC TD. R FUEL SYS PRESS  | R FWD FUEL PUMP   | C   |
| 28-22-04            | DH3                 | 452   | 452.10 SEC TD. R FUEL SYS PRESS  | R AFT FUEL PUMP   | C   |
| 28-41-01            | ED3                 | 459   | 459.31   | LOW FUEL          | B   |
| 28-41-01            | ED13                | 31  | 459.31   | FUEL CONFIG       | C   |
| 29-00-01            | EA3                 | 410   | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                 | 221   | 221  | R HYD QTY         | C   |
| 29-00-01            | D86                 | 154   | 154  | C HYD QTY         | C   |
| 29-00-01            | AH02                | 196   | 196. L AND R ENGINES RUNNING   | L HYD RSVR PRES   | C   |
| 29-00-01            | FC10                | 225   | 225. L AND R ENGINES RUNNING   | C HYD RSVR PRES   | C   |
| 29-00-01            | DK07                | 404   | 404. L AND R ENGINES RUNNING   | R HYD RSVR PRES   | C   |
| 29-00-02            | DE14                | 403   | 403.1 SEC TD   | L HYD SYS PRESS.  | B   |
| 29-00-02            | AK2                 | 195   | 195. L ENG RUN. L HYD SYS PRESS  | L HYD ENG PUMP    | C   |
| 29-00-02            | AK11                | 35  | 35. L HYD SYS PRESS  | L HYD ELEC PUMP   | C   |
| 29-00-02            | FG4                 | 94  | 94   | L ENG HYD OVHT    | C   |
| 29-00-02            | BK7                 | 216   | 216  | L ELEC HYD OVHT   | C   |
| 29-00-03            | FC9                 | 120   | 120.1 SEC TD   | R HYD SYS PRESS.  | B   |
| 29-00-03            | DK13                | 284   | 284. R ENG RUN. R HYD SYS PRESS  | R HYD ENG PUMP    | C   |
| 29-00-03            | FK2                 | 462   | 462. R HYD SYS PRESS   | R HYD ELEC PUMP   | C   |
| 29-00-03            | AK4                 | 482   | 482  | R ENG HYD OVHT    | C   |
| 29-00-03            | AK8                 | 258   | 258  | R ELEC HYD OVHT   | C   |
| 29-00-04            | AG11                | 259   | 259. C HYD SYS PRESS.  | C HYD ELEC 1      | C   |
| 29-00-04            | BK8                 | 471   | 471  | C HYD 1 OVHT      | C   |
| 29-00-04            | DJ11                | 220   | 220. C HYD SYS PRESS.  | C HYD ELEC 2      | C   |
| 29-00-04            | AK3                 | 34  | 34   | C HYD 2 OVHT      | C   |
| 29-00-04            | DJ10                | 60  | 60.1 SEC TD  | C HYD SYS PRESS.  | B   |
| 29-00-04            | FK6                 | 437   | 437  | RAT. UNLOCKED     | C   |
| 29-00-01            | EA3                 | 410   | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                 | 221   | 221  | R HYD QTY         | C   |
| 29-00-01            | DB6                 | 154   | 154  | C HYD QTY         | C   |
| 29-00-02            |                     |   | 2 OR MORE OF (117,98,137)  | FLT CONT VALS     | C   |

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. 8           | MESSAGE         | LEVEL 1 |
|---------------------|---------------|-----------|--|-----------------|---------|
| 30-11-01            | FG7           | 318       | 318. 2.5 SEC TD                                | L WING ANTI-ICE | C       |
| 30-11-01            | FJ2           | 447       | 447. 2.5 SEC TD                                | R WING ANTI-ICE | C       |
| 30-21-01            | EC14          | 305       | 305. L ENG RUN. 10 SEC TD.                     | L ENG ANTI-ICE  | C       |
| 30-21-02            | EA5           | 238       | 238. R ENG RUN. 10 SEC TD.                     | R ENG ANTI-ICE  | C       |
| 30-31-01            | EC3           | 45        | 45. PROBE HEAT                                 | CAPT PITOT      | C       |
| 30-31-01            | AD1           | 269       | 269. PROBE HEAT                                | L AUX PITOT     | C       |
| 30-31-01            |               |           | 2 OR MORE OF (45, 449, 269, 97, 155, 241, 411) | PROBE HEAT      | C       |
| 30-31-02            | EA6           | 449       | 449. PROBE HEAT                                | F/O PITOT       | C       |
| 30-31-02            | DB9           | 97        | 97. PROBE HEAT                                 | R AUX PITOT     | C       |
| 30-32-01            | DB5           | 155       | 155. PROBE HEAT                                | L AOA PROBE     | C       |
| 30-32-02            | EA7           | 241       | 241. PROBE HEAT                                | R AOA PROBE     | C       |
| 30-33-01            | EA4           | 411       | 411. PROBE HEAT                                | TAT PROBE       | C       |
| 30-41-01            | EC6           | 29        | 29. WINDOW HEAT                                | L FWD WINDOW    | C       |
| 30-41-01            |               |           | 2 OR MORE OF (29, 189, 205, 253)               | WINDOW HEAT     | C       |
| 30-41-02            | EC5           | 205       | 205. WINDOW HEAT                               | R FWD WINDOW    | C       |
| 30-41-03            | EC4           | 189       | 189. WINDOW HEAT                               | L SIDE WINDOW   | C       |
| 30-41-04            | AD2           | 253       | 253. WINDOW HEAT                               | R SIDE WINDOW   | C       |
| 30-81-01            | ED6           | 174       | 174. CAUTION CANCEL                            | ICE DET ON      | C       |
| 30-81-01            | ED6           | 174       | 174. CAUTION CANCEL                            | ICE DET OFF     | C       |
| 31-41-01            |               |           | NO VALID ARINC 429 RECEIVED FROM DSP .1 SEC TD | EICAS CONT PNL  | C       |
| 31-41-06            |               |           | DISPLAY SYSTEM FAULT, 1 SEC TD.                | EICAS DISPLAY   | C       |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. 8 | MESSAGE         | LEVEL 1 |
|---------------------|---------------|-----------|--------------------------------------|-----------------|---------|
| 31-51-03            | AG15          | 235       | 235                                  | PARKING BRAKE   | A       |
| 31-51-03            | DA15          | 108       | 108                                  | FLAPS           | A       |
| 31-51-03            | ED2           | 332       | 332                                  | SPOILERS        | A       |
| 31-51-03            | EA1           | 431       | 431                                  | STABILIZER      | A       |
| 31-51-04            | BG14          | 349       | 349                                  | GEAR NOT DOWN   | A       |
| 31-51-04            | BC14          | 463       | 463                                  | SPEEDBRAKES EXT | B       |
| 31-51-07            | BD14          | 350       | 350+134                              | L ENG SHUTDOWN  | B5      |
| 31-51-07            | BJ11          | 134       |                                      |                 |         |
| 31-51-07            | BJ3           | 429       | 429+147                              | R ENG SHUTDOWN  | B5      |
| 31-51-07            | DK6           | 147       |                                      |                 |         |
| 32-41-01            | EH12          | 47        | 47                                   | BRAKE SOURCE    | C       |
| 32-41-01            | AG3           | 226       | 226. 235                             | PARKING BRAKE   | C       |
| 32-42-03            | AG6           | 290       | 290                                  | AUTOBRAKES      | C       |
| 32-42-04            | FH10          | 65        | 65, 199                              | ANTISKID        | C       |
| 32-61-01            | DB7           | 43        | (43.298.25 SEC TD).                  | GEAR DISAGREE   | B       |
| 32-61-01            | AG12          | 298       |                                      |                 |         |
| 32-61-01            | BF14          | 125       | 125. 335. 35 SEC TD                  | GEAR DOORS      | C       |
| 32-61-01            | F-C2          | 335       |                                      |                 |         |
| 32-61-01 (SH 2)     | FE9           | 360       | 360*445.L AC BUS OFF                 | AIR/GND SYS     | C       |
| 32-61-01 (SH 2)     | BJ13          | 445       | .R AC BUS OFF.G/S <80KTS .10 SEC TD  |                 |         |
| 32-61-01 (SH 2)     | FF8           | 421       | 421*157.L AC BUS OFF                 | NOSE A/G SYS    | C       |
| 32-61-01 (SH 2)     | BH1           | 157       | .R AC BUS OFF.G/S <80KTS .10 SEC TD  |                 |         |
| 33-51-01            | EA11          | 193       | 193                                  | EMER LIGHTS     | C       |
| 34-12-01            | FE5           | 136       | 136 +111                             | OVERSPEED       | A       |
| 34-12-02            | BC15          | 111       |                                      |                 |         |
| 34-16-01            | BE14          | 477       | 477                                  | ALTITUDE ALERT  | B2      |
| 34-21-01            | AG8           | 68        | 68                                   | L IRS DC FAIL   | C       |
| 34-21-01            | AG5           | 292       | 292                                  | L IRS FAULT     | C       |
| 34-21-01            | AG1           | 228       | 228                                  | L IRS ON DC     | C       |
| 34-21-02            | DE9           | 168       | 168                                  | R IRS DC FAIL   | C       |
| 34-21-02            | DE2           | 392       | 392                                  | R IRS FAULT     | C       |
| 34-21-02            | DE5           | 424       | 424                                  | R IRS ON DC     | C       |
| 34-21-03            | FC3           | 374       | 374                                  | C IRS DC FAIL   | C       |
| 34-21-03            | FC4           | 502       | 502                                  | C IRS FAULT     | C       |
| 34-21-03            | FD5           | 150       | 150                                  | C IRS ON DC     | C       |
| 34-22-31            | FA9           | 289       | 289                                  | INSTR SWITCH    | B       |

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319X D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO.           | MESSAGE          | LEVEL |
|---------------------|-----------------|-----------|--|------------------|-------|
| 34-25-01            |                 | DD117     | DD117  | HDG DISAGREE     | C     |
| 34-25-01            |                 | DD118     | DD118  | TRACK DISAGREE   | C     |
| 34-25-01            |                 | DD119     | DD119  | ATT DISAGREE     | B     |
| 34-53-01            | EA13            | 79        | 79   | ATC FAULT        | C     |
| 34-61-02            | AG13            | 299       | 299  | FMC MESSAGE      | C     |
| 34-61-02            | EK14            | 257       | 257  | L FMC FAIL       | C     |
| 34-61-07            | BK1             | 239       | 239  | R FMC FAIL       | C     |
| 35-21-01            | FF6             | 141       | 141  | PASS. OXYGEN ON  | C     |
| 36-11-01            | EK3             | 428       | 428. L ENG RUN                               | L ENG BLEED OFF  | C     |
| 36-11-01            | EK7             | 171       | 171  | L ENG HI STAGE   | C     |
| 36-11-02            | EK6             | 172       | 172. R ENG RUN                               | R ENG BLEED OFF  | C     |
| 36-11-02            | EK11            | 395       | 395  | R ENG HI STAGE   | C     |
| 36-11-03            | FF1             | 365       | 365.6 SECS TD                                | APU BLEED VAL    | C     |
| 36-11-05            | BB13            | 461       | 461.6 SECS TD                                | BLEED ISLN VAL   | C     |
| 36-22-01            | EK10            | 396       | 396  | L ENG BLEED VAL  | B     |
| 36-22-01            | EK2             | 427       | 427  | R ENG BLEED VAL  | B     |
| 49-61-01            | FA10            | 288       | 288.6 SEC TD                                 | APU FUEL VAL     | C     |
| 49-61-01            | FB6             | 105       | 105  | APU FAULT        | C     |
| 52-71-01            | BA11            | 144       | 144. L ENTRY DOORS                           | L CTR ENT DOOR   | C     |
| 52-71-01            | BB12            | 496       | 496. EMER DOORS                              | L EMER DOOR      | C     |
| 52-71-01            | BA10            | 352       | 352. L ENTRY DOORS                           | L FWD ENT DOOR   | C     |
| 52-71-01            | BE12            | 368       | 368. L ENTRY DOORS                           | L AFT ENT DOOR   | C     |
| 52-71-01            | BA5             | 129       | 2 OR MORE OF (144, 352, OR 368)              | L ENTRY DOORS    | C     |
| 52-71-01            | BD5             | 481       | 129. R ENTRY DOORS                           | R CTR ENT DOOR   | C     |
| 52-71-01            | BD5             | 481       | 481. EMER DOORS                              | R EMER DOOR      | C     |
| 52-71-01            | AD14            | 369       | 369. R ENTRY DOORS                           | R FWD ENT DOOR   | C     |
| 52-71-01            | AD13            | 353       | 353. R ENTRY DOORS                           | R AFT ENT DOOR   | C     |
| 52-71-01            |                 |           | 2 OR MORE OF (129, 369 OR 353)               | R ENTRY DOORS    | C     |
| 52-71-01            |                 |           | 2 OR MORE OF (496, 481, 347, 251, 27 OR 255) | EMER DOORS       | C     |
| 52-71-01            | AE04            | 347       | 347. EMER DOORS                              | L FWD EMER DOORS | C     |
| 52-71-01            | DA09            | 251       | 251. EMER DOORS                              | L AFT EMER DOORS | C     |
| 52-71-01            | DC05            | 27        | 27. EMER DOORS                               | R FWD EMER DOORS | C     |
| 52-71-01            | AE01            | 255       | 255. EMER DOORS                              | R AFT EMER DOORS | C     |
| 52-71-01            | BB7             | 416       | 416. ACCESS DOORS                            | FWD ACCESS DOOR  | C     |
| 52-71-01            | BA6             | 160       | 160. ACCESS DOORS                            | EE ACCESS DOOR   | C     |
| 52-71-01            |                 |           | 416. 160                                     | ACCESS DOOR      | C     |
| 52-71-01            | AF15            | 384       | 384. CARGO DOORS                             | FWD CARGO DOOR   | C     |
| 52-71-01            | BA7             | 145       | 145. CARGO DOORS                             | AFT CARGO DOOR   | C     |
| 52-71-01            |                 |           | 384. 145                                     | CARGO DOORS      | C     |
| 73-14-01            | AJ11            | 50        | 50. 30 SEC TD                                | L ENG FUEL FILT  | C     |
| 73-14-01            | DG12            | 179       | 179. 30 SEC TD                               | R ENG FUEL FILT  | C     |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO.   | MESSAGE          | LEVEL |
|---------------------|----------------|-----------|--------------------------------------|------------------|-------|
| 73-21-01            | BF13           | 303       | 303.6 SECS TD                        | L ENG FUEL VAL   | C     |
| 73-21-01            | BD14           | 350       | 350 + 134                            | L ENG SHUTDOWN   | B     |
|                     | BJ11           | 134       |                                      |                  |       |
| 73-21-02            | BD15           | 415       | 415.6 SEC TD                         | R ENG FUEL VAL   | C     |
| 73-21-02            | BJ3            | 429       | 429 + 147                            | R ENG SHUTDOWN   | B     |
|                     | DK6            | 147       |                                      |                  |       |
| 73-21-04            | BH08           | 455       | 455. L ENG RUNNING. 4 SEC TD         | L ENG LIMITER    | C     |
| 73-21-05            | DH04           | 167       | 167. R ENG RUNNING. 4 SEC TD         | R ENG LIMITER    | C     |
| 73-21-04            | BG10           | 373       | 373                                  | L EEC OFF        | B     |
| 73-21-04            | BH6            | 358       | (L ENG RUNNING. 4 SEC TD.) 358. 373  | L ENG EEC        | C     |
| 73-21-05            | DE13           | 386       | 386                                  | R EEC OFF        | B     |
| 73-21-05            | DK9            | 324       | (R ENG RUNNING. 4 SEC TD.) 324. 386  | R ENG EEC        | C     |
|                     | FB05           | 121       |                                      |                  |       |
| 77-12-01            | BD2            | AV351     | (L ENG RUNNING .60 SEC TD)           | L ENG LOW N1     | C     |
|                     | BD1            |           | .L ENG N1 < N1 LOW .20 SEC TD        |                  |       |
| 77-12-01            | EA14           | AV352     | (R ENG RUNNING .60 SEC TD)           | R ENG LOW N1     | C     |
|                     | EB14           |           | .R ENG N1 < N1 LOW .20 SEC TD        |                  |       |
| 78-36-01            | BH07           | 103       | (103. L AC BUS OFF. 2 SEC TD) +      | REV ISLN VAL     | C     |
|                     | DH07           | 391       | (391. R AC BUS OFF. 2 SEC TD)        |                  |       |
| 79-33-01            | AH3            | 483       | 483. L ENG RUN                       | L ENG OIL PRESS  | C     |
| 79-33-01            | DK10           | 371       | 371. R ENG RUN                       | R ENG OIL PRESS  | C     |
| 79-35-01            | AH04           | 131       | 131.(L OIL TEMP>25)+IN AIR).5 SEC TD | L OIL FILTER     | C     |
| 79-35-01            | DK03           | 423       | 423.(R OIL TEMP>25)+IN AIR).5 SEC TD | R OIL FILTER     | C     |
| 80-11-01            | FD09           | 152       | 152. 5 SEC TD                        | L STARTER CUTOUT | B     |
| 80-11-01            | BH11           | 327       | 327. 152. 5 SEC TD                   | L ENG STARTER    | C     |
|                     | FD09           | 152       |                                      |                  |       |
| 80-11-02            | FB05           | 121       | 121. 5 SEC TD                        | R STARTER CUTOUT | B     |
| 80-11-02            | DK02           | 440       | 440. 121. 5 SEC TD                   | R ENG STARTER    | C     |

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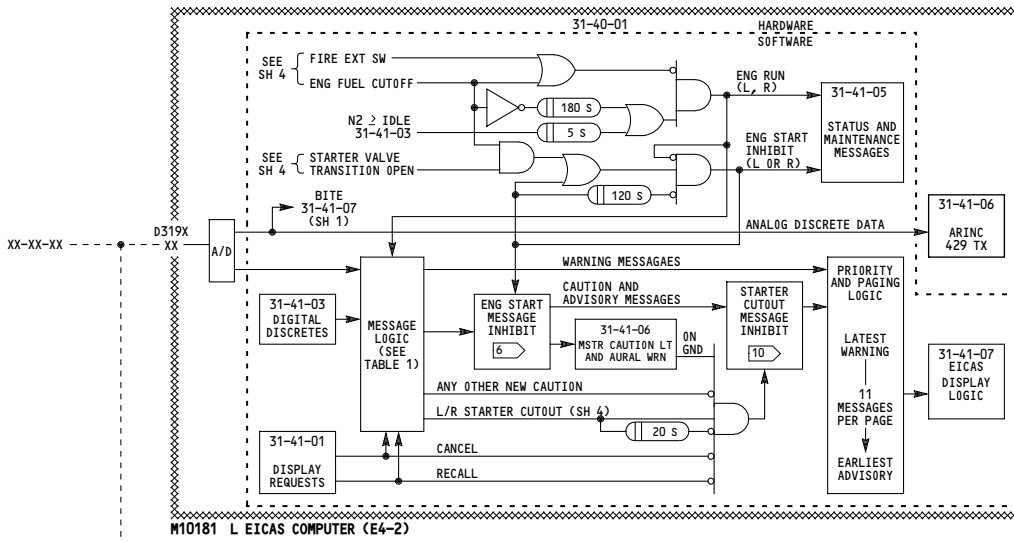
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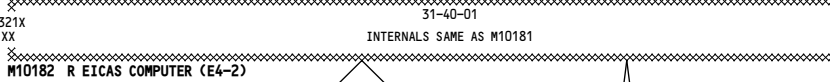
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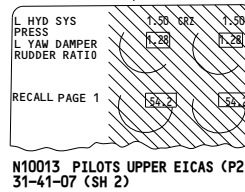
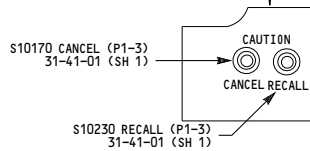
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**M10181 L EICAS COMPUTER (E4-2)**



**M10182 R EICAS COMPUTER (E4-2)**



**N10013 PILOTS UPPER EICAS (P2)  
31-41-07 (SH 2)**

**NOTES:**

- 1 LEVEL A WARNING (RED)  
LEVEL B CAUTION (YELLOW)  
LEVEL C ADVISORY (YELLOW)
- 2 NO CAUTION AURAL COMMAND FROM EICAS
- 3 FOR INPUT SEE 31-41-05
- 4 USED IN OTHER MESSAGE LOGIC IN 31-41-04,  
31-41-05
- 5 NO MASTER CAUTION LIGHT OR CAUTION AURAL
- 6 THESE MESSAGES ARE NOT INHIBITED: -  
L/R ENG SHUTDOWN, L/R STARTER CUTOFF,  
L/R ENG STARTER
- 7 FOR DIGITAL INPUTS SEE 31-41-03
- 8 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:  
357 TRUE=28V FALSE=OPEN  
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND  
ALL IRS INPUTS TRUE=10V FALSE=0V
- 10 REMOVES ALL MESSAGES EXCEPT  
L/R STARTER CUTOFF FROM DISPLAY  
FOR 20 SECONDS

**TABLE 1  
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES**

| SCHEMATIC REFERENCE | D319/321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. [8] | MESSAGE          | LEVEL [1] |
|---------------------|--------------|-----------|--|------------------|-----------|
| 21-25-01            | AE7          | 138       | 138. 1 SEC TD.L UTIL BUS OFF           | L RECIR FAN      | C         |
| 21-25-02            | AD6          | 362       | 362. 1 SEC TD.R UTIL BUS OFF           | R RECIR FAN      | C         |
| 21-31-01            |              |           | 112, 336. 5 SEC TD                     | CABIN AUTO. INOP | B         |
| 21-33-01            | AF13         | 291       | 291                                    | CABIN ALTITUDE   | A         |
| 21-51-09            | AD8          | 124       | 124                                    | L PACK OFF       | C         |
| 21-51-09            | AE6          | 92        | 92                                     | L PACK TEMP      | C         |
| 21-51-10            | AG10         | 348       | 348                                    | R PACK OFF       | C         |
| 21-51-10            | AD5          | 316       | 316                                    | R PACK TEMP      | C         |
| 21-58-06            | BG8          | 351       | 351. 1 SEC TD                          | FWD EQPT OVHT    | C         |
| 21-58-02            | FF5          | 135       | 135. 1 SEC TD                          | FWD EQPT SMOKE   | C         |
| 21-60-01            | DA14         | 91        | 91                                     | FLIGHT DECK TEMP | C         |
| 21-60-02            | FK9          | 505       | 505                                    | FWD CABIN TEMP   | C         |
| 21-60-03            | EJ10         | 271       | 271                                    | AFT CABIN TEMP   | C         |
| 21-61-04            | DA13         | 315       | 315                                    | TRIM AIR         | C         |
| 22-14-01            | DG7          | 323       | (323+244). 0.5 SEC TD                  | AUTOPILOT DISC   | A         |
| 22-14-01            | EA9          | 244       |  |                  |           |
| 22-14-01            | BJ2          | 478       | 478                                    | AUTOPILOT        | B         |
| 22-21-01            | DA6          | 212       | 212                                    | L YAW DAMPER     | C         |
| 22-21-02            | AD7          | 52        | 52                                     | R YAW DAMPER     | C         |
| 22-24-01            | FE4          | 425       | 425                                    | MACH/SPD TRIM    | C         |
| 22-34-01            | BD8          | 126       | 126                                    | AUTOTHROT DISC   | B         |
| 24-11-01            | DA10         | 306       | 306. L ENG RUNNING                     | L GEN DRIVE      | C         |
| 24-11-02            | DA1          | 219       | 219. R ENG RUNNING                     | R GEN DRIVE      | C         |
| 24-22-02            | DB3          | 236       | 236                                    | L AC BUS OFF     | B         |
| 24-22-02            | DB1          | 59        | 59. L ENG RUNNING.CAA                  | L GEN OFF        | B         |
| 24-22-04            | DB2          | 76        | 76                                     | R AC BUS OFF     | B         |
| 24-22-04            | DA12         | 283       | 283. R ENG RUNNING.CAA                 | R GEN OFF        | B         |
| 24-22-06            | DC7          | 187       | 187. 5 SEC TD                          | APU GEN OFF      | C         |
| 24-22-07            | DC6          | 44        | 44                                     | L BUS ISOLATED   | C         |
| 24-22-08            | DC1          | 268       | 268                                    | R BUS ISOLATED   | C         |
| 24-31-01            | EC15         | 142       | 142. 10 SEC TD.767                     | MAIN BAT. DISCH  | C         |
| 24-31-01            | AD4          | 250       | 250                                    | BATTERY OFF      | C         |
| 24-33-01            | DB4          | 26        | 26                                     | STANDBY BUS OFF  | C         |
| 24-51-10            | AE5          | 300       | 300. L AC BUS OFF                      | L UTIL BUS OFF   | C         |
| 24-51-20            | DC8          | 204       | 204. R AC BUS OFF                      | R UTIL BUS OFF   | C         |

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| SCHEMATIC REFERENCE | D319/<br>D321<br>PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">8</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------------|-----------|--|------------------|---|
| 26-11-01            | BE4                  | 57        | 57   | L ENG FIRE       | A   |
| 26-11-02            | DG3                  | 99        | 99   | R ENG FIRE       | A   |
| 26-11-03            | BE5                  | 246       | 246  | L ENG OVHT       | B   |
| 26-11-04            | DG5                  | 466       | 466  | R ENG OVHT       | B   |
| 26-15-01            | FF2                  | 359       | 359  | APU FIRE         | A   |
| 26-16-01            | DF7                  | 370       | 370  | FWD CARGO FIRE   | A   |
| 26-16-02            | FF7                  | 472       | 472  | AFT CARGO FIRE   | A   |
| 26-16-02            | EA2                  | 430       | 430  | FIRE/OVHT SYS    | C   |
| 26-17-01            | DB10                 | 203       | 203  | WHEEL WELL FIRE  | A   |
| 26-18-01            | BF4                  | 217       | 217  | L BLD DUCT LEAK  | B   |
| 26-18-02            | DG4                  | 451       | 451  | R BLD DUCT LEAK  | B   |
| 26-21-01            | DG2                  | 114       | 114  | ENG BTL 1        | C   |
| 26-21-01            | FE3                  | 417       | 417  | ENG BTL 2        | C   |
| 26-22-01            | DC9                  | 42        | 42   | APU BTL          | C   |
| 26-23-01            | DD1                  | 146       | 146  | CARGO BTL 1      | C   |
| 26-23-01            | FC08                 | 389       | 389  | CARGO BTL 2      | C   |
| 27-20-02            | DC13                 | 414       | 414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)  | RUDDER RATIO     | C   |
| 27-40-01            | AD11                 | 276       | 276  | STAB. TRIM       | C   |
| 27-40-01            | EB12                 | 302       | 302  | UNSCD STAB. TRIM | B   |
| 27-51-03            | DB15                 | 475       | 475  | FLAP LD RELIEF   | C   |
| 27-51-05            | DG15                 | 122       | 122  | TE FLAP ASYM     | B   |
| 27-51-06            | ED1                  | 346       | 346  | TE FLAP DISAGREE | B   |
| 27-61-01            | DC11                 | 90        | 90   | SPOILERS         | C   |
| 27-62-01            | AG9                  | 66        | 66   | AUTO. SPEEDBRAKE | C   |
| 27-81-03            | DB14                 | 460       | 460  | LE SLAT DISAGREE | B   |
| 27-81-05            | EB1                  | 474       | 474  | LE SLAT ASYM     | B   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>321<br>PIN | INPUT NO.   | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">8</span> | MESSAGE           | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---------------------|---|--|-------------------|---|
| 28-22-01            | ED5                 | 107   | 107.6 SEC TD   | L FUEL SPAR VAL   | C   |
| 28-22-01            | EC1                 | 331   | 331.6 SEC TD   | R FUEL SPAR VAL   | C   |
| 28-22-01            | EC2                 | 399   | 399.6 SEC TD   | FUEL CROSSFEED    | C   |
| 28-22-01            | BE7                 | 87  | (322.10 SEC TD).(361.10 SEC TD)  | L FUEL SYS PRESS. | B   |
| 28-22-01            | FH4                 | 357 <span style="border: 1px solid black; padding: 0 2px;">8</span> | (.87.10 SEC TD).(357+399)<br>+(ALL PUMPS LOW PRESS.10 SEC TD)                                      |                   |   |
| 28-22-02            | DH8                 | 322   | 322.10 SEC TD. L FUEL SYS PRESS  | L FWD FUEL PUMP   | C   |
| 28-22-02            | FH8                 | 361   | 361.10 SEC TD. L FUEL SYS PRESS  | L AFT FUEL PUMP   | C   |
| 28-22-03            | DH6                 | 100   | 100.10 SEC TD. L FUEL SYS PRESS  | CTR L FUEL PUMP   | C   |
| 28-22-03            | FJ9                 | 153   | 153.10 SEC TD. R FUEL SYS PRESS  | CTR R FUEL PUMP   | C   |
| 28-22-03            | DG8                 | 338   | (377.10 SEC TD).(452.10 SEC TD)<br>(.338.10 SEC TD).(357+399)<br>+(ALL PUMPS LOW PRESS.10 SEC TD)  | R FUEL SYS PRESS. | B   |
| 28-22-04            | FH9                 | 377   | 377.10 SEC TD. R FUEL SYS PRESS  | R FWD FUEL PUMP   | C   |
| 28-22-04            | DH3                 | 452   | 452.10 SEC TD. R FUEL SYS PRESS  | R AFT FUEL PUMP   | C   |
| 28-41-01            | ED3                 | 459   | 459.31   | LOW FUEL          | B   |
| 28-41-01            | ED13                | 31  | 459.31   | FUEL CONFIG       | C   |
| 29-00-01            | EA3                 | 410   | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                 | 221   | 221  | R HYD QTY         | C   |
| 29-00-01            | DB6                 | 154   | 154  | C HYD QTY         | C   |
| 29-00-01            | AH02                | 196   | 196. L AND R ENGINES RUNNING   | L HYD RSVR PRES   | C   |
| 29-00-01            | FC10                | 225   | 225. L AND R ENGINES RUNNING   | C HYD RSVR PRES   | C   |
| 29-00-01            | DK07                | 404   | 404. L AND R ENGINES RUNNING   | R HYD RSVR PRES   | C   |
| 29-00-02            | DE14                | 403   | 403.1 SEC TD   | L HYD SYS PRESS.  | B   |
| 29-00-02            | AK2                 | 195   | 195. L ENG RUN. L HYD SYS PRESS  | L HYD ENG PUMP    | C   |
| 29-00-02            | AK11                | 35  | 35. L HYD SYS PRESS  | L HYD ELEC PUMP   | C   |
| 29-00-02            | FG4                 | 94  | 94   | L ENG HYD OVHT    | C   |
| 29-00-02            | BK7                 | 216   | 216  | L ELEC HYD OVHT   | C   |
| 29-00-03            | FC9                 | 120   | 120.1 SEC TD   | R HYD SYS PRESS.  | B   |
| 29-00-03            | DK13                | 284   | 284. R ENG RUN. R HYD SYS PRESS  | R HYD ENG PUMP    | C   |
| 29-00-03            | FK2                 | 462   | 462. R HYD SYS PRESS   | R HYD ELEC PUMP   | C   |
| 29-00-03            | AK4                 | 482   | 482  | R ENG HYD OVHT    | C   |
| 29-00-03            | AK8                 | 258   | 258  | R ELEC HYD OVHT   | C   |
| 29-00-04            | AG11                | 259   | 259. C HYD SYS PRESS.  | C HYD ELEC 1      | C   |
| 29-00-04            | BK8                 | 471   | 471  | C HYD 1 OVHT      | C   |
| 29-00-04            | DJ11                | 220   | 220. C HYD SYS PRESS.  | C HYD ELEC 2      | C   |
| 29-00-04            | AK3                 | 34  | 34   | C HYD 2 OVHT      | C   |
| 29-00-04            | DJ10                | 60  | 60.1 SEC TD  | C HYD SYS PRESS.  | B   |
| 29-00-04            | FK6                 | 437   | 437  | RAT. UNLOCKED     | C   |
| 29-00-01            | EA3                 | 410   | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                 | 221   | 221  | R HYD QTY         | C   |
| 29-00-01            | DB6                 | 154   | 154  | C HYD QTY         | C   |
| 29-00-02            |                     |   | 2 OR MORE OF (117,98,137)  | FLT CONT VALS     | C   |

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**EICAS WARNING, CAUTION AND ADVISORY MESSAGES**

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. 8           | MESSAGE                  | LEVEL 1 |
|---------------------|---------------|-----------|--|--------------------------|---------|
| 30-11-01            | FG7           | 318       | 318. 2.5 SEC TD                                | L WING ANTI-ICE          | C       |
| 30-11-01            | FJ2           | 447       | 447. 2.5 SEC TD                                | R WING ANTI-ICE          | C       |
| 30-21-01            | EC14          | 305       | 305. L ENG RUN. 10 SEC TD.                     | L ENG ANTI-ICE           | C       |
| 30-21-02            | EA5           | 238       | 238. R ENG RUN. 10 SEC TD.                     | R ENG ANTI-ICE           | C       |
| 30-31-01            | EC3           | 45        | 45. PROBE HEAT                                 | CAPT PITOT               | C       |
| 30-31-01            | AD1           | 269       | 269. PROBE HEAT                                | L AUX PITOT              | C       |
| 30-31-01            |               |           | 2 OR MORE OF (45, 449, 269, 97, 155, 241, 411) | PROBE HEAT               | C       |
| 30-31-02            | EA6           | 449       | 449. PROBE HEAT                                | F/O PITOT                | C       |
| 30-31-02            | DB9           | 97        | 97. PROBE HEAT                                 | R AUX PITOT              | C       |
| 30-32-01            | DB5           | 155       | 155. PROBE HEAT                                | L AOA PROBE              | C       |
| 30-32-02            | EA7           | 241       | 241. PROBE HEAT                                | R AOA PROBE              | C       |
| 30-33-01            | EA4           | 411       | 411. PROBE HEAT                                | TAT PROBE                | C       |
| 30-41-01            | EC6           | 29        | 29. WINDOW HEAT                                | L FWD WINDOW WINDOW HEAT | C       |
| 30-41-01            |               |           | 2 OR MORE OF (29, 189, 205, 253)               |                          | C       |
| 30-41-02            | EC5           | 205       | 205. WINDOW HEAT                               | R FWD WINDOW             | C       |
| 30-41-03            | EC4           | 189       | 189. WINDOW HEAT                               | L SIDE WINDOW            | C       |
| 30-41-04            | AD2           | 253       | 253. WINDOW HEAT                               | R SIDE WINDOW            | C       |
| 30-81-01            | ED6           | 174       | 174. CAUTION CANCEL                            | ICE DET ON               | C       |
| 30-81-01            | ED6           | 174       | 174. CAUTION CANCEL                            | ICE DET OFF              | C       |
| 31-41-01            |               |           | NO VALID ARINC 429 RECEIVED FROM DSP .1 SEC TD | EICAS CONT PNL           | C       |
| 31-41-06            |               |           | DISPLAY SYSTEM FAULT, 1 SEC TD.                | EICAS DISPLAY            | C       |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. 8 | MESSAGE         | LEVEL 1 |
|---------------------|---------------|-----------|--------------------------------------|-----------------|---------|
| 31-51-03            | AG15          | 235       | 235                                  | PARKING BRAKE   | A       |
| 31-51-03            | DA15          | 108       | 108                                  | FLAPS           | A       |
| 31-51-03            | ED2           | 332       | 332                                  | SPOILERS        | A       |
| 31-51-03            | EA1           | 431       | 431                                  | STABILIZER      | A       |
| 31-51-04            | BG14          | 349       | 349                                  | GEAR NOT DOWN   | A       |
| 31-51-04            | BC14          | 463       | 463                                  | SPEEDBRAKES EXT | B       |
| 31-51-07            | BD14          | 350       | 350+134                              | L ENG SHUTDOWN  | B 5     |
| 31-51-07            | BJ11          | 134       |                                      |                 |         |
| 31-51-07            | BJ3           | 429       | 429+147                              | R ENG SHUTDOWN  | B 5     |
| 31-51-07            | DK6           | 147       |                                      |                 |         |
| 32-41-01            | EH12          | 47        | 47                                   | BRAKE SOURCE    | C       |
| 32-41-01            | AG3           | 226       | 226. 235                             | PARKING BRAKE   | C       |
| 32-42-03            | AG6           | 290       | 290                                  | AUTOBRAKES      | C       |
| 32-42-04            | FH10          | 65        | —                                    | ANTISKID        | C       |
| 32-61-01            | DB7           | 43        | (43.298.25 SEC TD).                  | GEAR DISAGREE   | B       |
| 32-61-01            | AG12          | 298       |                                      |                 |         |
| 32-61-01            | BF14          | 125       | 125. 335. 35 SEC TD                  | GEAR DOORS      | C       |
| 32-61-01            | F-C2          | 335       |                                      |                 |         |
| 33-51-01            | EA11          | 193       | 193                                  | EMER LIGHTS     | C       |
| 34-12-01            | FE5           | 136       | 136 +111                             | OVERSPEED       | A       |
| 34-12-02            | BC15          | 111       |                                      |                 |         |
| 34-16-01            | BE14          | 477       | 477                                  | ALTITUDE ALERT  | B 2     |
| 34-21-01            | AG8           | 68        | 68                                   | L IRS DC FAIL   | C       |
| 34-21-01            | AG5           | 292       | 292                                  | L IRS FAULT     | C       |
| 34-21-01            | AG1           | 228       | 228                                  | L IRS ON DC     | C       |
| 34-21-02            | DE9           | 168       | 168                                  | R IRS DC FAIL   | C       |
| 34-21-02            | DE2           | 392       | 392                                  | R IRS FAULT     | C       |
| 34-21-02            | DE5           | 424       | 424                                  | R IRS ON DC     | C       |
| 34-21-03            | FC3           | 374       | 374                                  | C IRS DC FAIL   | C       |
| 34-21-03            | FC4           | 502       | 502                                  | C IRS FAULT     | C       |
| 34-21-03            | FD5           | 150       | 150                                  | C IRS ON DC     | C       |
| 34-22-31            | FA9           | 289       | 289                                  | INSTR SWITCH    | B       |

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EICAS WARNING, CAUTION AND ADVISORY MESSAGES

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319X D321X PIN   | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---|-----------|--|------------------|---|
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD119     | DD119  | ATT DISAGREE     | B   |
| 34-53-01            | EA13  | 79        | 79   | ATC FAULT        | C   |
| 34-61-02            | AG13  | 299       | 299  | FMC MESSAGE      | C   |
| 34-61-02            | EK14  | 257       | 257  | L FMC FAIL       | C   |
| 34-61-07            | BK1   | 239       | 239  | R FMC FAIL       | C   |
| 35-21-01            | FF6   | 141       | 141  | PASS. OXYGEN ON  | C   |
| 36-11-01            | EK3   | 428       | 428. L ENG RUN   | L ENG BLEED OFF  | C   |
| 36-11-01            | EK7   | 171       | 171  | L ENG HI STAGE   | C   |
| 36-11-02            | EK6   | 172       | 172. R ENG RUN   | R ENG BLEED OFF  | C   |
| 36-11-02            | EK11  | 395       | 395  | R ENG HI STAGE   | C   |
| 36-11-03            | FF1   | 365       | 365.6 SECS TD  | APU BLEED VAL    | C   |
| 36-11-05            | BB13  | 461       | 461.6 SECS TD  | BLEED ISLN VAL   | C   |
| 36-22-01            | EK10  | 396       | 396  | L ENG BLEED VAL  | B   |
| 36-22-01            | EK2   | 427       | 427  | R ENG BLEED VAL  | B   |
| 49-61-01            | FA10  | 288       | 288.6 SEC TD   | APU FUEL VAL     | C   |
| 49-61-01            | FB6   | 105       | 105  | APU FAULT        | C   |
| 52-71-01            | BA11  | 144       | 144. L ENTRY DOORS   | L CTR ENT DOOR   | C   |
| 52-71-01            | BB12  | 496       | 496. EMER DOORS  | L EMER DOOR      | C   |
| 52-71-01            | BA10  | 352       | 352. L ENTRY DOORS   | L FWD ENT DOOR   | C   |
| 52-71-01            | BE12  | 368       | 368. L ENTRY DOORS   | L AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (144, 352, OR 368)  | L ENTRY DOORS    | C   |
| 52-71-01            | BA5   | 129       | 129. R ENTRY DOORS   | R CTR ENT DOOR   | C   |
| 52-71-01            | BD5   | 481       | 481. EMER DOORS  | R EMER DOOR      | C   |
| 52-71-01            | AD14  | 369       | 369. R ENTRY DOORS   | R FWD ENT DOOR   | C   |
| 52-71-01            | AD13  | 353       | 353. R ENTRY DOORS   | R AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (129, 369 OR 353)   | R ENTRY DOORS    | C   |
| 52-71-01            |   |           | 2 OR MORE OF (496, 481, 347, 251, 27 OR 255)   | EMER DOORS       | C   |
| 52-71-01            | AE04  | 347       | 347. EMER DOORS  | L FWD EMER DOORS | C   |
| 52-71-01            | DAD9  | 251       | 251. EMER DOORS  | L AFT EMER DOORS | C   |
| 52-71-01            | DC05  | 27        | 27. EMER DOORS   | R FWD EMER DOORS | C   |
| 52-71-01            | AE01  | 255       | 255. EMER DOORS  | R AFT EMER DOORS | C   |
| 52-71-01            | BB7   | 416       | 416. ACCESS DOORS  | FWD ACCESS DOOR  | C   |
| 52-71-01            | BA6   | 160       | 160. ACCESS DOORS  | EE ACCESS DOOR   | C   |
| 52-71-01            |   |           | 416. 160   | ACCESS DOOR      | C   |
| 52-71-01            | AF15  | 384       | 384. CARGO DOORS   | FWD CARGO DOOR   | C   |
| 52-71-01            | BA7   | 145       | 145. CARGO DOORS   | AFT CARGO DOOR   | C   |
| 52-71-01            |   |           | 384. 145   | CARGO DOORS      | C   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------|-----------|--|------------------|---|
| 73-21-01            | BF13           | 303       | 303.6 SECS TD  | L ENG FUEL VAL   | C   |
| 73-21-01            | BD14           | 350       | 350 + 134  | L ENG SHUTDOWN   | B   |
|                     | BJ11           | 134       |  |                  |   |
| 73-21-02            | BD15           | 415       | 415.6 SEC TD   | R ENG FUEL VAL   | C   |
| 73-21-02            | BJ3            | 429       | 429 + 147  | R ENG SHUTDOWN   | B   |
|                     | DK6            | 147       |  |                  |   |
| 73-21-04            | BH08           | 455       | 455. L ENG RUNNING. 4 SEC TD   | L ENG LIMITER    | C   |
| 73-21-05            | DH04           | 167       | 167. R ENG RUNNING. 4 SEC TD   | R ENG LIMITER    | C   |
| 73-21-04            | BG10           | 373       | 373  | L EEC OFF        | B   |
| 73-21-04            | BH6            | 358       | (L ENG RUNNING. 4 SEC TD.) 358. 373  | L ENG EEC        | C   |
| 73-21-05            | DE13           | 386       | 386  | R EEC OFF        | B   |
| 73-21-05            | DK9            | 324       | (R ENG RUNNING. 4 SEC TD.) 324. 386  | R ENG EEC        | C   |
| 78-36-01            | BH07           | 103       | (103. L AC BUS OFF. 2 SEC TD)  | L REV ISLN VAL   | C   |
| 78-36-01            | DH07           | 391       | (391. R AC BUS OFF. 2 SEC TD)  | R REV ISLN VAL   | C   |
| 79-33-01            | AH3            | 483       | 483. L ENG RUN   | L ENG OIL PRESS  | C   |
| 79-33-01            | DK10           | 371       | 371. R ENG RUN   | R ENG OIL PRESS  | C   |
| 79-35-01            | AH04           | 131       | 131. L ENG OIL TEMP >10°C  | L OIL FILTER     | C   |
| 79-35-01            | DK03           | 423       | 423. R ENG OIL TEMP >10°C  | R OIL FILTER     | C   |
| 80-11-01            | FD09           | 152       | 152. 5 SEC TD  | L STARTER CUTOUT | B   |
| 80-11-01            | BH11           | 327       | 327. 152. 5 SEC TD   | L ENG STARTER    | C   |
|                     | FD09           | 152       |  |                  |   |
| 80-11-02            | FB05           | 121       | 121. 5 SEC TD  | R STARTER CUTOUT | B   |
| 80-11-02            | DK02           | 440       | 440. 121. 5 SEC TD   | R ENG STARTER    | C   |
|                     | FB05           | 121       |  |                  |   |

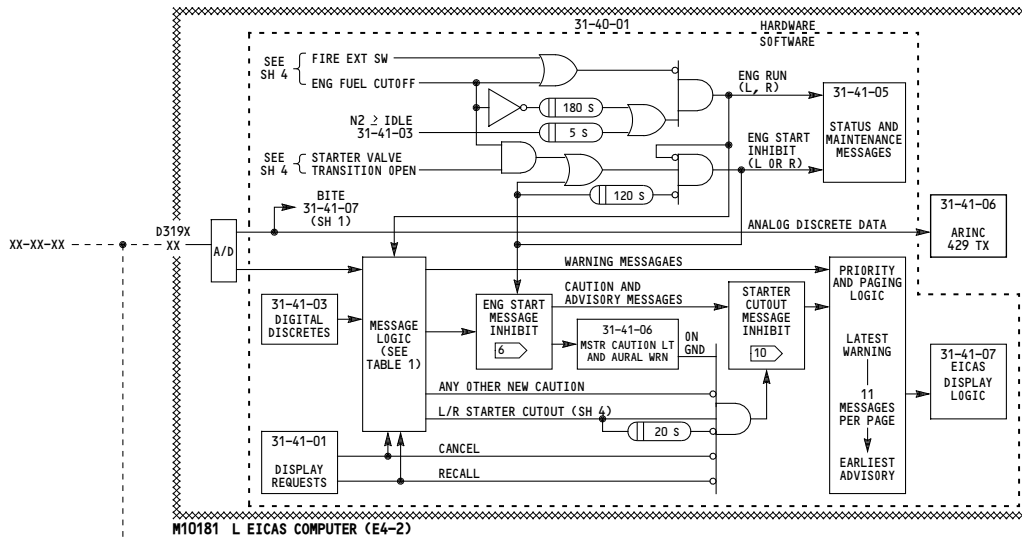
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**EICAS WARNING, CAUTION AND ADVISORY MESSAGES**

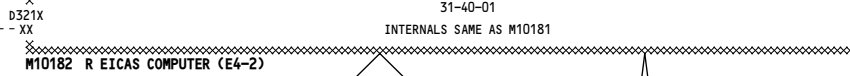
D280N032S

**31-41-04**

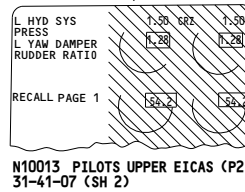
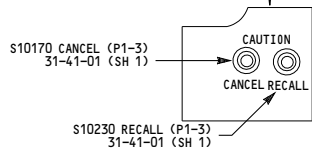
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**M10181 L EICAS COMPUTER (E4-2)**



**M10182 R EICAS COMPUTER (E4-2)**



**NOTES:**

- 1 LEVEL A WARNING (RED)  
LEVEL B CAUTION (YELLOW)  
LEVEL C ADVISORY (YELLOW)
- 2 NO CAUTION AURAL COMMAND FROM EICAS
- 3 FOR INPUT SEE 31-41-05
- 4 USED IN OTHER MESSAGE LOGIC IN 31-41-04,  
31-41-05
- 5 NO MASTER CAUTION LIGHT OR CAUTION AURAL
- 6 THESE MESSAGES ARE NOT INHIBITED: -  
L/R ENG SHUTDOWN, L/R STARTER CUTOFF,  
L/R ENG STARTER
- 7 FOR DIGITAL INPUTS SEE 31-41-03
- 8 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:  
357 TRUE=28V FALSE=OPEN  
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND  
ALL IRS INPUTS TRUE=10V FALSE=0V
- 10 REMOVES ALL MESSAGES EXCEPT  
L/R STARTER CUTOFF FROM DISPLAY  
FOR 20 SECONDS

**TABLE 1  
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES**

| SCHEMATIC REFERENCE | D319/321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. [8] | MESSAGE          | LEVEL [1] |
|---------------------|--------------|-----------|--|------------------|-----------|
| 21-25-01            | AE7          | 138       | 138. 1 SEC TD.L UTIL BUS OFF           | L RECIR FAN      | C         |
| 21-25-02            | AD6          | 362       | 362. 1 SEC TD.R UTIL BUS OFF           | R RECIR FAN      | C         |
| 21-31-01            |              |           | 112, 336. 5 SEC TD                     | CABIN AUTO. INOP | B         |
| 21-33-01            | AF13         | 291       | 291                                    | CABIN ALTITUDE   | A         |
| 21-51-09            | AD8          | 124       | 124                                    | L PACK OFF       | C         |
| 21-51-09            | AE6          | 92        | 92                                     | L PACK TEMP      | C         |
| 21-51-10            | AG10         | 348       | 348                                    | R PACK OFF       | C         |
| 21-51-10            | AD5          | 316       | 316                                    | R PACK TEMP      | C         |
| 21-58-06            | BG8          | 351       | 351. 1 SEC TD                          | FWD EQPT OVHT    | C         |
| 21-58-02            | FF5          | 135       | 135. 1 SEC TD                          | FWD EQPT SMOKE   | C         |
| 21-60-01            | DA14         | 91        | 91                                     | FLIGHT DECK TEMP | C         |
| 21-60-02            | FK9          | 505       | 505                                    | FWD CABIN TEMP   | C         |
| 21-60-03            | EJ10         | 271       | 271                                    | AFT CABIN TEMP   | C         |
| 21-61-04            | DA13         | 315       | 315                                    | TRIM AIR         | C         |
| 22-14-01            | DG7          | 323       | (323+244). 0.5 SEC TD                  | AUTOPILOT DISC   | A         |
| 22-14-01            | EA9          | 244       |  |                  |           |
| 22-14-01            | BJ2          | 478       | 478                                    | AUTOPILOT        | B         |
| 22-21-01            | DA6          | 212       | 212                                    | L YAW DAMPER     | C         |
| 22-21-02            | AD7          | 52        | 52                                     | R YAW DAMPER     | C         |
| 22-24-01            | FE4          | 425       | 425                                    | MACH/SPD TRIM    | C         |
| 22-34-01            | BD8          | 126       | 126. 1 SEC TD                          | AUTO THROT DISC  | B         |
| 24-11-01            | DA10         | 306       | 306. L ENG RUNNING                     | L GEN DRIVE      | C         |
| 24-11-02            | DA1          | 219       | 219. R ENG RUNNING                     | R GEN DRIVE      | C         |
| 24-22-02            | DB3          | 236       | 236                                    | L AC BUS OFF     | B [4]     |
| 24-22-02            | DB1          | 59        | 59. L ENG RUNNING.CAA                  | L GEN OFF        | B         |
| 24-22-04            | DB2          | 76        | 76                                     | R AC BUS OFF     | B         |
| 24-22-04            | DA12         | 283       | 283. R ENG RUNNING.CAA                 | R GEN OFF        | B [4]     |
| 24-22-06            | DC7          | 187       | 187. 5 SEC TD                          | APU GEN OFF      | C         |
| 24-22-07            | DC6          | 44        | 44                                     | L BUS ISOLATED   | C         |
| 24-22-08            | DC1          | 268       | 268                                    | R BUS ISOLATED   | C         |
| 24-31-01            | EC15         | 142       | 142. 10 SEC TD.767                     | MAIN BAT. DISCH  | C         |
| 24-31-01            | AD4          | 250       | 250                                    | BATTERY OFF      | C [4]     |
| 24-33-01            | DB4          | 26        | 26                                     | STANDBY BUS OFF  | C [4]     |
| 24-51-10            | AE5          | 300       | 300. L AC BUS OFF                      | L UTIL BUS OFF   | C         |
| 24-51-20            | DC8          | 204       | 204. R AC BUS OFF                      | R UTIL BUS OFF   | C         |

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>D321<br>PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">8</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------------|-----------|--|------------------|---|
| 26-11-01            | BE4                  | 57        | 57   | L ENG FIRE       | A   |
| 26-11-02            | DG3                  | 99        | 99   | R ENG FIRE       | A   |
| 26-11-03            | BE5                  | 246       | 246  | L ENG OVHT       | B   |
| 26-11-04            | DG5                  | 466       | 466  | R ENG OVHT       | B   |
| 26-15-01            | FF2                  | 359       | 359  | APU FIRE         | A   |
| 26-16-01            | DF7                  | 370       | 370  | FWD CARGO FIRE   | A   |
| 26-16-02            | FF7                  | 472       | 472  | AFT CARGO FIRE   | A   |
| 26-16-02            | EA2                  | 430       | 430  | FIRE/OVHT SYS    | C   |
| 26-17-01            | DB10                 | 203       | 203  | WHEEL WELL FIRE  | A   |
| 26-18-01            | BF4                  | 217       | 217  | L BLD DUCT LEAK  | B   |
| 26-18-02            | DG4                  | 451       | 451  | R BLD DUCT LEAK  | B   |
| 26-21-01            | DG2                  | 114       | 114  | ENG BTL 1        | C   |
| 26-21-01            | FE3                  | 417       | 417  | ENG BTL 2        | C   |
| 26-22-01            | DC9                  | 42        | 42   | APU BTL          | C   |
| 26-23-01            | DD1                  | 146       | 146  | CARGO BTL 1      | C   |
| 26-23-01            | FC08                 | 389       | 389  | CARGO BTL 2      | C   |
| 27-20-02            | DC13                 | 414       | 414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)  | RUDDER RATIO     | C   |
| 27-40-01            | AD11                 | 276       | 276  | STAB. TRIM       | C   |
| 27-40-01            | EB12                 | 302       | 302  | UNSCD STAB. TRIM | B   |
| 27-51-03            | DB15                 | 475       | 475  | FLAP LD RELIEF   | C   |
| 27-51-05            | DG15                 | 122       | 122  | TE FLAP ASYM     | B   |
| 27-51-06            | ED1                  | 346       | 346  | TE FLAP DISAGREE | B   |
| 27-61-01            | DC11                 | 90        | 90   | SPOILERS         | C   |
| 27-62-01            | AG9                  | 66        | 66   | AUTO. SPEEDBRAKE | C   |
| 27-81-03            | DB14                 | 460       | 460  | LE SLAT DISAGREE | B   |
| 27-81-05            | EB1                  | 474       | 474  | LE SLAT ASYM     | B   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>321<br>PIN | INPUT NO.   | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">8</span> | MESSAGE           | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---------------------|---|--|-------------------|---|
| 28-22-01            | ED5                 | 107   | 107.6 SEC TD   | L FUEL SPAR VAL   | C   |
| 28-22-01            | EC1                 | 331   | 331.6 SEC TD   | R FUEL SPAR VAL   | C   |
| 28-22-01            | EC2                 | 399   | 399.6 SEC TD   | FUEL CROSSFEED    | C   |
| 28-22-01            | BE7                 | 87  | (322.10 SEC TD).(361.10 SEC TD)  | L FUEL SYS PRESS. | B   |
| 28-22-01            | FH4                 | 357 <span style="border: 1px solid black; padding: 0 2px;">8</span> | (.87.10 SEC TD).(357+399)<br>+(ALL PUMPS LOW PRESS.10 SEC TD)                                      |                   |   |
| 28-22-02            | DH8                 | 322   | 322.10 SEC TD. L FUEL SYS PRESS  | L FWD FUEL PUMP   | C   |
| 28-22-02            | FH8                 | 361   | 361.10 SEC TD. L FUEL SYS PRESS  | L AFT FUEL PUMP   | C   |
| 28-22-03            | DH6                 | 100   | 100.10 SEC TD. L FUEL SYS PRESS  | CTR L FUEL PUMP   | C   |
| 28-22-03            | FJ9                 | 153   | 153.10 SEC TD. R FUEL SYS PRESS  | CTR R FUEL PUMP   | C   |
| 28-22-03            | DG8                 | 338   | (377.10 SEC TD).(452.10 SEC TD)<br>(.338.10 SEC TD).(357+399)<br>+(ALL PUMPS LOW PRESS.10 SEC TD)  | R FUEL SYS PRESS. | B   |
| 28-22-04            | FH9                 | 377   | 377.10 SEC TD. R FUEL SYS PRESS  | R FWD FUEL PUMP   | C   |
| 28-22-04            | DH3                 | 452   | 452.10 SEC TD. R FUEL SYS PRESS  | R AFT FUEL PUMP   | C   |
| 28-41-01            | ED3                 | 459   | 459.31   | LOW FUEL          | B   |
| 28-41-01            | ED13                | 31  | 459.31   | FUEL CONFIG       | C   |
| 29-00-01            | EA3                 | 410   | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                 | 221   | 221  | R HYD QTY         | C   |
| 29-00-01            | D86                 | 154   | 154  | C HYD QTY         | C   |
| 29-00-01            | AH02                | 196   | 196. L AND R ENGINES RUNNING   | L HYD RSVR PRES   | C   |
| 29-00-01            | FC10                | 225   | 225. L AND R ENGINES RUNNING   | C HYD RSVR PRES   | C   |
| 29-00-01            | DK07                | 404   | 404. L AND R ENGINES RUNNING   | R HYD RSVR PRES   | C   |
| 29-00-02            | DE14                | 403   | 403.1 SEC TD   | L HYD SYS PRESS.  | B   |
| 29-00-02            | AK2                 | 195   | 195. L ENG RUN. L HYD SYS PRESS  | L HYD ENG PUMP    | C   |
| 29-00-02            | AK11                | 35  | 35. L HYD SYS PRESS  | L HYD ELEC PUMP   | C   |
| 29-00-02            | FG4                 | 94  | 94   | L ENG HYD OVHT    | C   |
| 29-00-02            | BK7                 | 216   | 216  | L ELEC HYD OVHT   | C   |
| 29-00-03            | FC9                 | 120   | 120.1 SEC TD   | R HYD SYS PRESS.  | B   |
| 29-00-03            | DK13                | 284   | 284. R ENG RUN. R HYD SYS PRESS  | R HYD ENG PUMP    | C   |
| 29-00-03            | FK2                 | 462   | 462. R HYD SYS PRESS   | R HYD ELEC PUMP   | C   |
| 29-00-03            | AK4                 | 482   | 482  | R ENG HYD OVHT    | C   |
| 29-00-03            | AK8                 | 258   | 258  | R ELEC HYD OVHT   | C   |
| 29-00-04            | AG11                | 259   | 259. C HYD SYS PRESS.  | C HYD ELEC 1      | C   |
| 29-00-04            | BK8                 | 471   | 471  | C HYD 1 OVHT      | C   |
| 29-00-04            | DJ11                | 220   | 220. C HYD SYS PRESS.  | C HYD ELEC 2      | C   |
| 29-00-04            | AK3                 | 34  | 34   | C HYD 2 OVHT      | C   |
| 29-00-04            | DJ10                | 60  | 60.1 SEC TD  | C HYD SYS PRESS.  | B   |
| 29-00-04            | FK6                 | 437   | 437  | RAT. UNLOCKED     | C   |
| 29-00-01            | EA3                 | 410   | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                 | 221   | 221  | R HYD QTY         | C   |
| 29-00-01            | DB6                 | 154   | 154  | C HYD QTY         | C   |
| 29-00-02            |                     |   | 2 OR MORE OF (117,98,137)  | FLT CONT VALS     | C   |

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| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. 8           | MESSAGE         | LEVEL 1 |
|---------------------|---------------|-----------|--|-----------------|---------|
| 30-11-01            | FG7           | 318       | 318. 2.5 SEC TD                                | L WING ANTI-ICE | C       |
| 30-11-01            | FJ2           | 447       | 447. 2.5 SEC TD                                | R WING ANTI-ICE | C       |
| 30-21-01            | EC14          | 305       | 305. L ENG RUN. 10 SEC TD.                     | L ENG ANTI-ICE  | C       |
| 30-21-02            | EA5           | 238       | 238. R ENG RUN. 10 SEC TD.                     | R ENG ANTI-ICE  | C       |
| 30-31-01            | EC3           | 45        | 45. PROBE HEAT                                 | CAPT PITOT      | C       |
| 30-31-01            | AD1           | 269       | 269. PROBE HEAT                                | L AUX PITOT     | C       |
| 30-31-01            |               |           | 2 OR MORE OF (45, 449, 269, 97, 155, 241, 411) | PROBE HEAT      | C       |
| 30-31-02            | EA6           | 449       | 449. PROBE HEAT                                | F/O PITOT       | C       |
| 30-31-02            | DB9           | 97        | 97. PROBE HEAT                                 | R AUX PITOT     | C       |
| 30-32-01            | DB5           | 155       | 155. PROBE HEAT                                | L AOA PROBE     | C       |
| 30-32-02            | EA7           | 241       | 241. PROBE HEAT                                | R AOA PROBE     | C       |
| 30-33-01            | EA4           | 411       | 411. PROBE HEAT                                | TAT PROBE       | C       |
| 30-41-01            | EC6           | 29        | 29. WINDOW HEAT                                | L FWD WINDOW    | C       |
| 30-41-01            |               |           | 2 OR MORE OF (29, 189, 205, 253)               | WINDOW HEAT     | C       |
| 30-41-02            | EC5           | 205       | 205. WINDOW HEAT                               | R FWD WINDOW    | C       |
| 30-41-03            | EC4           | 189       | 189. WINDOW HEAT                               | L SIDE WINDOW   | C       |
| 30-41-04            | AD2           | 253       | 253. WINDOW HEAT                               | R SIDE WINDOW   | C       |
| 30-81-01            | ED6           | 174       | 174. CAUTION CANCEL                            | ICE DET ON      | C       |
| 30-81-01            | ED6           | 174       | 174. CAUTION CANCEL                            | ICE DET OFF     | C       |
| 31-41-01            |               |           | NO VALID ARINC 429 RECEIVED FROM DSP .1 SEC TD | EICAS CONT PNL  | C       |
| 31-41-06            |               |           | DISPLAY SYSTEM FAULT, 1 SEC TD.                | EICAS DISPLAY   | C       |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. 8 | MESSAGE         | LEVEL 1 |
|---------------------|---------------|-----------|--------------------------------------|-----------------|---------|
| 31-51-03            | AG15          | 235       | 235                                  | PARKING BRAKE   | A       |
| 31-51-03            | DA15          | 108       | 108                                  | FLAPS           | A       |
| 31-51-03            | ED2           | 332       | 332                                  | SPOILERS        | A       |
| 31-51-03            | EA1           | 431       | 431                                  | STABILIZER      | A       |
| 31-51-04            | BG14          | 349       | 349                                  | GEAR NOT DOWN   | A       |
| 31-51-04            | BC14          | 463       | 463                                  | SPEEDBRAKES EXT | B       |
| 31-51-07            | BD14          | 350       | 350+134                              | L ENG SHUTDOWN  | B 5     |
| 31-51-07            | BJ11          | 134       |                                      |                 |         |
| 31-51-07            | BJ3           | 429       | 429+147                              | R ENG SHUTDOWN  | B 5     |
| 31-51-07            | DK6           | 147       |                                      |                 |         |
| 32-41-01            | EH12          | 47        | 47                                   | BRAKE SOURCE    | C       |
| 32-41-01            | AG3           | 226       | 226. 235                             | PARKING BRAKE   | C       |
| 32-42-03            | AG6           | 290       | 290                                  | AUTOBRAKES      | C       |
| 32-42-04            | FH10          | 65        | 65, 199                              | ANTISKID        | C       |
| 32-61-01            | DB7           | 43        | (43.298.25 SEC TD).                  | GEAR DISAGREE   | B       |
| 32-61-01            | AG12          | 298       |                                      |                 |         |
| 32-61-01            | BF14          | 125       | 125. 335. 35 SEC TD                  | GEAR DOORS      | C       |
| 32-61-01            | F-C2          | 335       |                                      |                 |         |
| 32-61-01 (SH 2)     | FE9           | 360       | 360*445.L AC BUS OFF                 | AIR/GND SYS     | C       |
| 32-61-01 (SH 2)     | BJ13          | 445       | .R AC BUS OFF.G/S <80KTS .10 SEC TD  |                 |         |
| 32-61-01 (SH 2)     | FF8           | 421       | 421*157.L AC BUS OFF                 | NOSE A/G SYS    | C       |
| 32-61-01 (SH 2)     | BH1           | 157       | .R AC BUS OFF.G/S <80KTS .10 SEC TD  |                 |         |
| 33-51-01            | EA11          | 193       | 193                                  | EMER LIGHTS     | C       |
| 34-12-01            | FE5           | 136       | 136 +111                             | OVERSPEED       | A       |
| 34-12-02            | BC15          | 111       |                                      |                 |         |
| 34-16-01            | BE14          | 477       | 477                                  | ALTITUDE ALERT  | B 2     |
| 34-21-01            | AG8           | 68        | 68                                   | L IRS DC FAIL   | C       |
| 34-21-01            | AG5           | 292       | 292                                  | L IRS FAULT     | C       |
| 34-21-01            | AG1           | 228       | 228                                  | L IRS ON DC     | C       |
| 34-21-02            | DE9           | 168       | 168                                  | R IRS DC FAIL   | C       |
| 34-21-02            | DE2           | 392       | 392                                  | R IRS FAULT     | C       |
| 34-21-02            | DE5           | 424       | 424                                  | R IRS ON DC     | C       |
| 34-21-03            | FC3           | 374       | 374                                  | C IRS DC FAIL   | C       |
| 34-21-03            | FC4           | 502       | 502                                  | C IRS FAULT     | C       |
| 34-21-03            | FD5           | 150       | 150                                  | C IRS ON DC     | C       |
| 34-22-31            | FA9           | 289       | 289                                  | INSTR SWITCH    | B       |

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319X D321X PIN   | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---|-----------|--|------------------|---|
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD119     | DD119  | ATT DISAGREE     | B   |
| 34-53-01            | EA13  | 79        | 79   | ATC FAULT        | C   |
| 34-61-02            | AG13  | 299       | 299  | FMC MESSAGE      | C   |
| 34-61-02            | EK14  | 257       | 257  | L FMC FAIL       | C   |
| 34-61-07            | BK1   | 239       | 239  | R FMC FAIL       | C   |
| 35-21-01            | FF6   | 141       | 141  | PASS. OXYGEN ON  | C   |
| 36-11-01            | EK3   | 428       | 428. L ENG RUN   | L ENG BLEED OFF  | C   |
| 36-11-01            | EK7   | 171       | 171  | L ENG HI STAGE   | C   |
| 36-11-02            | EK6   | 172       | 172. R ENG RUN   | R ENG BLEED OFF  | C   |
| 36-11-02            | EK11  | 395       | 395  | R ENG HI STAGE   | C   |
| 36-11-03            | FF1   | 365       | 365.6 SECS TD  | APU BLEED VAL    | C   |
| 36-11-05            | BB13  | 461       | 461.6 SECS TD  | BLEED ISLN VAL   | C   |
| 36-22-01            | EK10  | 396       | 396  | L ENG BLEED VAL  | B   |
| 36-22-01            | EK2   | 427       | 427  | R ENG BLEED VAL  | B   |
| 49-61-01            | FA10  | 288       | 288.6 SEC TD   | APU FUEL VAL     | C   |
| 49-61-01            | FB6   | 105       | 105  | APU FAULT        | C   |
| 52-71-01            | BA11  | 144       | 144. L ENTRY DOORS   | L CTR ENT DOOR   | C   |
| 52-71-01            | BB12  | 496       | 496. EMER DOORS  | L EMER DOOR      | C   |
| 52-71-01            | BA10  | 352       | 352. L ENTRY DOORS   | L FWD ENT DOOR   | C   |
| 52-71-01            | BE12  | 368       | 368. L ENTRY DOORS   | L AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (144, 352, OR 368)  | L ENTRY DOORS    | C   |
| 52-71-01            | BA5   | 129       | 129. R ENTRY DOORS   | R CTR ENT DOOR   | C   |
| 52-71-01            | BD5   | 481       | 481. EMER DOORS  | R EMER DOOR      | C   |
| 52-71-01            | AD14  | 369       | 369. R ENTRY DOORS   | R FWD ENT DOOR   | C   |
| 52-71-01            | AD13  | 353       | 353. R ENTRY DOORS   | R AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (129, 369 OR 353)   | R ENTRY DOORS    | C   |
| 52-71-01            |   |           | 2 OR MORE OF (496, 481, 347, 251, 27 OR 255)   | EMER DOORS       | C   |
| 52-71-01            | AE04  | 347       | 347. EMER DOORS  | L FWD EMER DOORS | C   |
| 52-71-01            | DAD9  | 251       | 251. EMER DOORS  | L AFT EMER DOORS | C   |
| 52-71-01            | DC05  | 27        | 27. EMER DOORS   | R FWD EMER DOORS | C   |
| 52-71-01            | AE01  | 255       | 255. EMER DOORS  | R AFT EMER DOORS | C   |
| 52-71-01            | BB7   | 416       | 416. ACCESS DOORS  | FWD ACCESS DOOR  | C   |
| 52-71-01            | BA6   | 160       | 160. ACCESS DOORS  | EE ACCESS DOOR   | C   |
| 52-71-01            |   |           | 416. 160   | ACCESS DOOR      | C   |
| 52-71-01            | AF15  | 384       | 384. CARGO DOORS   | FWD CARGO DOOR   | C   |
| 52-71-01            | BA7   | 145       | 145. CARGO DOORS   | AFT CARGO DOOR   | C   |
| 52-71-01            |   |           | 384. 145   | CARGO DOORS      | C   |
| 73-14-01            | AJ11  | 50        | 50. 30 SEC TD  | L ENG FUEL FILT  | C   |
| 73-14-01            | DG12  | 179       | 179. 30 SEC TD   | R ENG FUEL FILT  | C   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------|-----------|--|------------------|---|
| 73-21-01            | BF13           | 303       | 303.6 SECS TD  | L ENG FUEL VAL   | C   |
| 73-21-01            | BD14           | 350       | 350 + 134  | L ENG SHUTDOWN   | B   |
| 73-21-02            | BJ11           | 134       |  |                  |   |
| 73-21-02            | BD15           | 415       | 415.6 SEC TD   | R ENG FUEL VAL   | C   |
| 73-21-02            | BJ3            | 429       | 429 + 147  | R ENG SHUTDOWN   | B   |
| 73-21-04            | DK6            | 147       |  |                  |   |
| 73-21-04            | BH08           | 455       | 455. L ENG RUNNING. 4 SEC TD   | L ENG LIMITER    | C   |
| 73-21-05            | DH04           | 167       | 167. R ENG RUNNING. 4 SEC TD   | R ENG LIMITER    | C   |
| 73-21-04            | BG10           | 373       | 373  | L EEC OFF        | B   |
| 73-21-04            | BH6            | 358       | (L ENG RUNNING. 4 SEC TD.) 358. <span style="border: 1px solid black; padding: 0 2px;">373</span>  | L ENG EEC        | C   |
| 73-21-05            | DE13           | 386       | 386  | R EEC OFF        | B   |
| 73-21-05            | DK9            | 324       | (R ENG RUNNING. 4 SEC TD.) 324. <span style="border: 1px solid black; padding: 0 2px;">386</span>  | R ENG EEC        | C   |
| 78-36-01            | BH07           | 103       | (103. L AC BUS OFF. 2 SEC TD)  | L REV ISLN VAL   | C   |
| 78-36-01            | DH07           | 391       | (391. R AC BUS OFF. 2 SEC TD)  | R REV ISLN VAL   | C   |
| 79-33-01            | AH3            | 483       | 483. L ENG RUN   | L ENG OIL PRESS  | C   |
| 79-33-01            | DK10           | 371       | 371. R ENG RUN   | R ENG OIL PRESS  | C   |
| 79-35-01            | AH04           | 131       | 131.(L OIL TEMP>25)+IN AIR).5 SEC TD   | L OIL FILTER     | C   |
| 79-35-01            | DK03           | 423       | 423.(R OIL TEMP>25)+IN AIR).5 SEC TD   | R OIL FILTER     | C   |
| 80-11-01            | FD09           | 152       | 152. 5 SEC TD  | L STARTER CUTOUT | B   |
| 80-11-01            | BH11           | 327       | 327. <span style="border: 1px solid black; padding: 0 2px;">152</span> . 5 SEC TD                  | L ENG STARTER    | C   |
| 80-11-02            | FB05           | 121       | 121. 5 SEC TD  | R STARTER CUTOUT | B   |
| 80-11-02            | DK02           | 440       | 440. <span style="border: 1px solid black; padding: 0 2px;">121</span> . 5 SEC TD                  | R ENG STARTER    | C   |
|                     | FB05           | 121       |  |                  |   |

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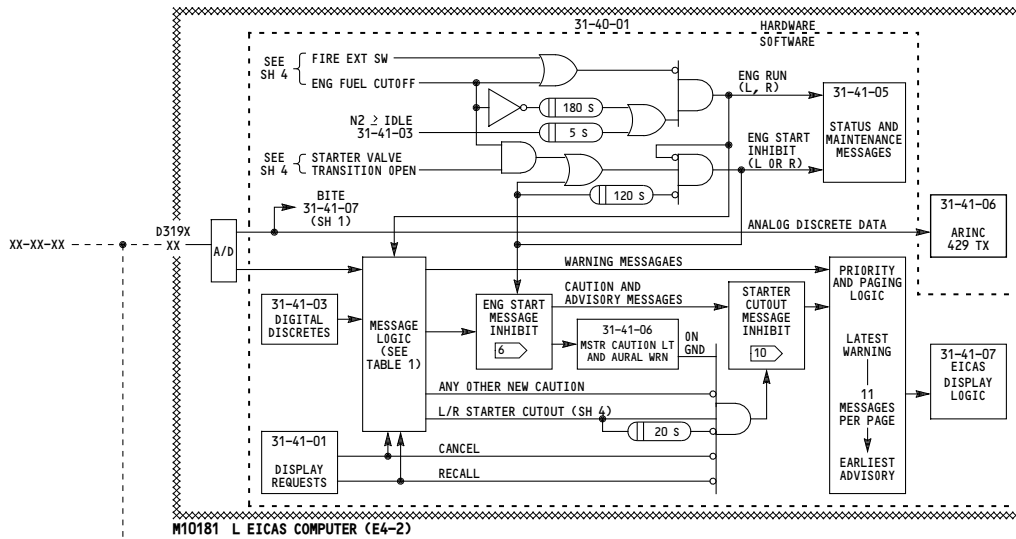
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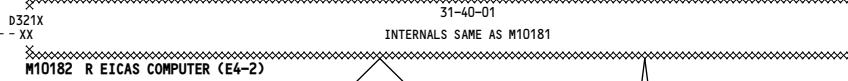
D280N032S



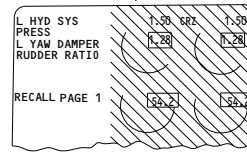
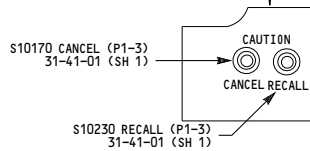
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M10181 L EICAS COMPUTER (E4-2)



M10182 R EICAS COMPUTER (E4-2)



N10013 PILOTS UPPER EICAS (P2)  
31-41-07 (SH 2)

**NOTES:**

- 1 LEVEL A WARNING (RED)  
LEVEL B CAUTION (YELLOW)  
LEVEL C ADVISORY (YELLOW)
- 2 NO CAUTION AURAL COMMAND FROM EICAS
- 3 FOR INPUT SEE 31-41-05
- 4 USED IN OTHER MESSAGE LOGIC IN 31-41-04,  
31-41-05
- 5 NO MASTER CAUTION LIGHT OR CAUTION AURAL
- 6 THESE MESSAGES ARE NOT INHIBITED: -  
L/R ENG SHUTDOWN, L/R STARTER CUTOFF,  
L/R ENG STARTER
- 7 FOR DIGITAL INPUTS SEE 31-41-03
- 8 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:  
357 TRUE=28V FALSE=OPEN  
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND  
ALL IRS INPUTS TRUE=10V FALSE=0V
- 10 REMOVES ALL MESSAGES EXCEPT  
L/R STARTER CUTOFF FROM DISPLAY  
FOR 20 SECONDS

TABLE 1  
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES

| SCHEMATIC REFERENCE | D319/321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. [8] | MESSAGE          | LEVEL [1] |
|---------------------|--------------|-----------|--|------------------|-----------|
| 21-25-01            | AE7          | 138       | 138. 1 SEC TD.L UTIL BUS OFF           | L RECIR FAN      | C         |
| 21-25-02            | AD6          | 362       | 362. 1 SEC TD.R UTIL BUS OFF           | R RECIR FAN      | C         |
| 21-31-01            |              |           | 112, 336. 5 SEC TD                     | CABIN AUTO. INOP | B         |
| 21-33-01            | AF13         | 291       | 291                                    | CABIN ALTITUDE   | A         |
| 21-51-09            | AD8          | 124       | 124                                    | L PACK OFF       | C         |
| 21-51-09            | AE6          | 92        | 92                                     | L PACK TEMP      | C         |
| 21-51-10            | AG10         | 348       | 348                                    | R PACK OFF       | C         |
| 21-51-10            | AD5          | 316       | 316                                    | R PACK TEMP      | C         |
| 21-58-06            | BG8          | 351       | 351. 1 SEC TD                          | FWD EQPT OVHT    | C         |
| 21-58-02            | FF5          | 135       | 135. 1 SEC TD                          | FWD EQPT SMOKE   | C         |
| 21-60-01            | DA14         | 91        | 91                                     | FLIGHT DECK TEMP | C         |
| 21-60-02            | FK9          | 505       | 505                                    | FWD CABIN TEMP   | C         |
| 21-60-03            | EJ10         | 271       | 271                                    | AFT CABIN TEMP   | C         |
| 21-61-04            | DA13         | 315       | 315                                    | TRIM AIR         | C         |
| 22-14-01            | DG7          | 323       | (323+244). 0.5 SEC TD                  | AUTOPILOT DISC   | A         |
| 22-14-01            | EA9          | 244       |  |                  |           |
| 22-14-01            | BJ2          | 478       | 478                                    | AUTOPILOT        | B         |
| 22-21-01            | DA6          | 212       | 212                                    | L YAW DAMPER     | C         |
| 22-21-02            | AD7          | 52        | 52                                     | R YAW DAMPER     | C         |
| 22-24-01            | FE4          | 425       | 425                                    | MACH/SPD TRIM    | C         |
| 22-34-01            | BD8          | 126       | 126                                    | AUTOTHROT DISC   | B         |
| 24-11-01            | DA10         | 306       | 306. L ENG RUNNING                     | L GEN DRIVE      | C         |
| 24-11-02            | DA1          | 219       | 219. R ENG RUNNING                     | R GEN DRIVE      | C         |
| 24-22-02            | DB3          | 236       | 236                                    | L AC BUS OFF     | B [4]     |
| 24-22-02            | DB1          | 59        | 59. L ENG RUNNING.CAA                  | L GEN OFF        | B         |
| 24-22-04            | DB2          | 76        | 76                                     | R AC BUS OFF     | B         |
| 24-22-04            | DA12         | 283       | 283. R ENG RUNNING.CAA                 | R GEN OFF        | B [4]     |
| 24-22-06            | DC7          | 187       | 187. 5 SEC TD                          | APU GEN OFF      | C         |
| 24-22-07            | DC6          | 44        | 44                                     | L BUS ISOLATED   | C         |
| 24-22-08            | DC1          | 268       | 268                                    | R BUS ISOLATED   | C         |
| 24-31-01            | EC15         | 142       | 142. 10 SEC TD.767                     | MAIN BAT. DISCH  | C         |
| 24-31-01            | AD4          | 250       | 250                                    | BATTERY OFF      | C [4]     |
| 24-33-01            | DB4          | 26        | 26                                     | STANDBY BUS OFF  | C [4]     |
| 24-51-10            | AE5          | 300       | 300. L AC BUS OFF                      | L UTIL BUS OFF   | C         |
| 24-51-20            | DC8          | 204       | 204. R AC BUS OFF                      | R UTIL BUS OFF   | C         |

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## EICAS WARNING, CAUTION AND ADVISORY MESSAGES

D280N032S

# 31-41-04

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>D321<br>PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------------|-----------|--|------------------|---|
| 26-11-01            | BE4                  | 57        | 57   | L ENG FIRE       | A   |
| 26-11-02            | DG3                  | 99        | 99   | R ENG FIRE       | A   |
| 26-11-03            | BE5                  | 246       | 246  | L ENG OVHT       | B   |
| 26-11-04            | DG5                  | 466       | 466  | R ENG OVHT       | B   |
| 26-15-01            | FF2                  | 359       | 359  | APU FIRE         | A   |
| 26-16-01            | DF7                  | 370       | 370  | FWD CARGO FIRE   | A   |
| 26-16-02            | FF7                  | 472       | 472  | AFT CARGO FIRE   | A   |
| 26-16-02            | EA2                  | 430       | 430  | FIRE/OVHT SYS    | C   |
| 26-17-01            | DB10                 | 203       | 203  | WHEEL WELL FIRE  | A   |
| 26-18-01            | BF4                  | 217       | 217  | L BLD DUCT LEAK  | B   |
| 26-18-02            | DG4                  | 451       | 451  | R BLD DUCT LEAK  | B   |
| 26-21-01            | DG2                  | 114       | 114  | ENG BTL 1        | C   |
| 26-21-01            | FE3                  | 417       | 417  | ENG BTL 2        | C   |
| 26-22-01            | DC9                  | 42        | 42   | APU BTL          | C   |
| 26-23-01            | DD1                  | 146       | 146  | CARGO BTL 1      | C   |
| 26-23-01            | FC08                 | 389       | 389  | CARGO BTL 2      | C   |
| 27-20-02            | DC13                 | 414       | 414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)  | RUDDER RATIO     | C   |
| 27-40-01            | AD11                 | 276       | 276  | STAB. TRIM       | B   |
| 27-40-01            | EB12                 | 302       | 302  | UNSCD STAB. TRIM | B   |
| 27-51-03            | DB15                 | 475       | 475  | FLAP LD RELIEF   | C   |
| 27-51-05            | DG15                 | 122       | 122  | TE FLAP ASYM     | B   |
| 27-51-06            | ED1                  | 346       | 346  | TE FLAP DISAGREE | B   |
| 27-81-05            | DC11                 | 90        | 90   | SPOILERS         | C   |
| 27-81-03            | AG9                  | 66        | 66   | AUTO. SPEEDBRAKE | C   |
| 27-81-03            | DB14                 | 460       | 460  | LE SLAT DISAGREE | B   |
| 27-81-05            | EB1                  | 474       | 474  | LE SLAT ASYM     | B   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>D321<br>PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span>     | MESSAGE           | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------------|-----------|--|-------------------|---|
| 28-22-01            | ED5                  | 107       | 107.6 SEC TD   | L FUEL SPAR VAL   | C   |
| 28-22-01            | EC1                  | 331       | 331.6 SEC TD   | R FUEL SPAR VAL   | C   |
| 28-22-01            | EC2                  | 399       | 399.6 SEC TD   | FUEL CROSSFEED    | C   |
| 28-22-01            | BE7                  | 87        | (322.10 SEC TD).(361.10 SEC TD)  | L FUEL SYS PRESS. | B   |
| 28-22-01            | FH4                  | 357       | (.87.10 SEC TD).(357+399)<br>+ (CALL RH PUMPS LOW PRESS.10 SEC TD)                                     |                   |   |
| 28-22-02            | DH8                  | 322       | 322.10 SEC TD. L FUEL SYS PRESS  | L FWD FUEL PUMP   | C   |
| 28-22-02            | FH8                  | 361       | 361.10 SEC TD. L FUEL SYS PRESS  | L AFT FUEL PUMP   | C   |
| 28-22-03            | DH6                  | 100       | 100.10 SEC TD. L FUEL SYS PRESS  | CTR L FUEL PUMP   | C   |
| 28-22-03            | FJ9                  | 153       | 153.10 SEC TD. R FUEL SYS PRESS  | CTR R FUEL PUMP   | C   |
| 28-22-03            | DG8                  | 338       | (377.10 SEC TD).(452.10 SEC TD)<br>(.338.10 SEC TD).(357+399)<br>+ (CALL LH PUMPS LOW PRESS.10 SEC TD) | R FUEL SYS PRESS. | B   |
| 28-22-04            | FH9                  | 377       | 377.10 SEC TD. R FUEL SYS PRESS  | R FWD FUEL PUMP   | C   |
| 28-22-04            | DH3                  | 452       | 452.10 SEC TD. R FUEL SYS PRESS  | R AFT FUEL PUMP   | C   |
| 28-41-01            | ED3                  | 459       | 459.31   | LOW FUEL          | B   |
| 28-41-01            | ED13                 | 31        | 459.31   | FUEL CONFIG       | C   |
| 29-00-01            | AH02                 | 196       | 196. L AND R ENGINES RUNNING   | L HYD RSVR PRES   | C   |
| 29-00-01            | FC10                 | 225       | 225. L AND R ENGINES RUNNING   | C HYD RSVR PRES   | C   |
| 29-00-01            | DK07                 | 404       | 404. L AND R ENGINES RUNNING   | R HYD RSVR PRES   | C   |
| 29-00-02            | DE14                 | 403       | 403.1 SEC TD   | L HYD SYS PRESS.  | B   |
| 29-00-02            | AK2                  | 195       | 195. L ENG RUN. L HYD SYS PRESS  | L HYD ENG PUMP    | C   |
| 29-00-02            | AK11                 | 35        | 35. L HYD SYS PRESS  | L HYD ELEC PUMP   | C   |
| 29-00-02            | FG4                  | 94        | 94   | L ENG HYD OVHT    | C   |
| 29-00-02            | BK7                  | 216       | 216  | L ELEC HYD OVHT   | C   |
| 29-00-03            | FC9                  | 120       | 120.1 SEC TD   | R HYD SYS PRESS.  | B   |
| 29-00-03            | DK13                 | 284       | 284. R ENG RUN. R HYD SYS PRESS  | R HYD ENG PUMP    | C   |
| 29-00-03            | FK2                  | 462       | 462. R HYD SYS PRESS   | R HYD ELEC PUMP   | C   |
| 29-00-03            | AK4                  | 482       | 482  | R ENG HYD OVHT    | C   |
| 29-00-03            | AK8                  | 258       | 258  | R ELEC HYD OVHT   | C   |
| 29-00-04            | AG11                 | 259       | 259. C HYD SYS PRESS.  | C HYD ELEC 1      | C   |
| 29-00-04            | BK8                  | 471       | 471  | C HYD 1 OVHT      | C   |
| 29-00-04            | DJ11                 | 220       | 220. C HYD SYS PRESS.  | C HYD ELEC 2      | C   |
| 29-00-04            | AK3                  | 34        | 34   | C HYD 2 OVHT      | C   |
| 29-00-04            | DJ10                 | 60        | 60.1 SEC TD  | C HYD SYS PRESS.  | B   |
| 29-00-04            | FK6                  | 437       | 437  | RAT. UNLOCKED     | C   |
| 29-00-01            | EA3                  | 410       | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                  | 221       | 221  | R HYD QTY         | C   |
| 29-00-01            | DB6                  | 154       | 154  | C HYD QTY         | C   |
| 29-00-02            |                      |           | 2 OR MORE OF (117,98,137)  | FLT CNT VALS      | C   |

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**EICAS WARNING, CAUTION AND ADVISORY MESSAGES**

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE         | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---------------|-----------|--|-----------------|---|
| 30-11-01            | FG7           | 318       | 318. 2.5 SEC TD  | L WING ANTI-ICE | C   |
| 30-11-01            | FJ2           | 447       | 447. 2.5 SEC TD  | R WING ANTI-ICE | C   |
| 30-21-01            | EC14          | 305       | 305. L ENG RUN. 10 SEC TD.   | L ENG ANTI-ICE  | C   |
| 30-21-02            | EA5           | 238       | 238. R ENG RUN. 10 SEC TD.   | R ENG ANTI-ICE  | C   |
| 30-31-01            | EC3           | 45        | 45. PROBE HEAT   | CAPT PITOT      | C   |
| 30-31-01            | AD1           | 269       | 269. PROBE HEAT  | L AUX PITOT     | C   |
| 30-31-01            |               |           | 2 OR MORE OF (45, 449, 269, 97, 155, 241, 411)   | PROBE HEAT      | C   |
| 30-31-02            | EA6           | 449       | 449. PROBE HEAT  | F/O PITOT       | C   |
| 30-31-02            | DB9           | 97        | 97. PROBE HEAT   | R AUX PITOT     | C   |
| 30-32-01            | DB5           | 155       | 155. PROBE HEAT  | L AOA PROBE     | C   |
| 30-32-02            | EA7           | 241       | 241. PROBE HEAT  | R AOA PROBE     | C   |
| 30-33-01            | EA4           | 411       | 411. PROBE HEAT  | TAT PROBE       | C   |
| 30-41-01            | EC6           | 29        | 29. WINDOW HEAT  | L FWD WINDOW    | C   |
| 30-41-01            |               |           | 2 OR MORE OF (29, 189, 205, 253)   | WINDOW HEAT     | C   |
| 30-41-02            | EC5           | 205       | 205. WINDOW HEAT   | R FWD WINDOW    | C   |
| 30-41-03            | EC4           | 189       | 189. WINDOW HEAT   | L SIDE WINDOW   | C   |
| 30-41-04            | AD2           | 253       | 253. WINDOW HEAT   | R SIDE WINDOW   | C   |
| 31-41-09            |               |           | NO VALID ARINC 429 RECEIVED FROM DSP   | EICAS CONT PNL  | C   |
| 31-51-04            | B-C14         | 463       | 463  | SPEEDBRAKES EXT | B   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE        | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---------------|-----------|--|----------------|---|
| 31-41-09            | AC3           | ---       | UPPER OR LOWER DISPLAY   | EICAS DISPLAY  | C   |
|                     | AB3           | ---       | UNIT BEAM TEST   |                |   |
|                     | AC5           | ---       | FAIL OR ANOMALY  |                |   |
|                     | AC4           | ---       | OR CMPTR FAULT WHICH BLANKS DISPLAY  |                |   |
| 31-51-03            | AG15          | 235       |  | PARKING BRAKE  | A   |
| 31-51-03            | DA15          | 108       |  | FLAPS          | A   |
| 31-51-03            | ED2           | 332       |  | SPOILERS       | A   |
| 31-51-03            | EA1           | 431       |  | STABILIZER     | A   |
| 31-51-04            | BG14          | 349       |  | GEAR NOT DOWN  | A   |
| 32-41-01            | EH12          | 47        |  | BRAKE SOURCE   | C   |
| 32-41-01            | AG3           | 226       | 226, 239   | PARKING BRAKE  | C   |
| 32-42-03            | AG6           | 290       |  | AUTOBRAKES     | C   |
| 32-42-04            | FH10          | 65        | 65, 199  | ANTISKID       | C <span style="border: 1px solid black; padding: 0 2px;">5</span>     |
| 32-61-01            | DB7           | 43        | (43.298.25 SEC TD).  | GEAR DISAGREE  | B <span style="border: 1px solid black; padding: 0 2px;">5</span>     |
|                     | AG12          | 298       |  |                |   |
| 32-61-01            | BF14          | 125       | 125. 335. 35 SEC TD  | GEAR DOORS     | C <span style="border: 1px solid black; padding: 0 2px;">5</span>     |
|                     | F-C2          | 335       |  |                |   |
| 33-51-01            | EA11          | 193       |  | EMER LIGHTS    | C   |
| 34-12-02            | FE5           | 136       | 136 + 111  | OVERSPEED      | A   |
|                     | BC15          | 111       |  |                |   |
| 34-16-01            | BE14          | 477       | 477  | ALTITUDE ALERT | B <span style="border: 1px solid black; padding: 0 2px;">2</span>     |
| 34-21-01            | AG8           | 68        | 68   | L IRS DC FAIL  | C   |
| 34-21-01            | AG5           | 292       | 292  | L IRS FAULT    | C   |
| 34-21-01            | AG1           | 228       | 228  | L IRS ON DC    | C   |
| 34-21-02            | DE9           | 168       | 168  | R IRS DC FAIL  | C   |
| 34-21-02            | DE2           | 392       | 392  | R IRS FAULT    | C   |
| 34-21-02            | DE5           | 424       | 424  | R IRS ON DC    | C   |
| 34-21-03            | FC3           | 374       | 374  | C IRS DC FAIL  | C   |
| 34-21-03            | FC4           | 502       | 502  | C IRS FAULT    | C   |
| 34-21-03            | FD5           | 150       | 150  | C IRS ON DC    | C   |
| 34-22-09            | FA9           | 289       | 289  | INSTR SWITCH   | B   |

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**EICAS WARNING, CAUTION AND ADVISORY MESSAGES**

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319X D321X PIN   | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---|-----------|--|------------------|---|
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD117     | DD117  | HDG DISAGREE     | C   |
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD118     | DD118  | TRACK DISAGREE   | C   |
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD119     | DD119  | ATT DISAGREE     | B   |
| 34-53-01            | EA13  | 79        | 79   | ATC FAULT        | C   |
| 34-61-02            | AG13  | 299       | 299  | FMC MESSAGE      | C   |
| 34-61-02            | EK14  | 257       | 257  | L FMC FAIL       | C   |
| 34-61-07            | BK1   | 239       | 239  | R FMC FAIL       | C   |
| 35-21-01            | FF6   | 141       | 141  | PASS. OXYGEN ON  | C   |
| 36-11-01            | EK3   | 428       | 428. L ENG RUN   | L ENG BLEED OFF  | C   |
| 36-11-01            | EK7   | 171       | 171  | L ENG HI STAGE   | C   |
| 36-11-02            | EK6   | 172       | 172. R ENG RUN   | R ENG BLEED OFF  | C   |
| 36-11-02            | EK11  | 395       | 395  | R ENG HI STAGE   | C   |
| 36-11-03            | FF1   | 365       | 365.6 SECS TD  | APU BLEED VAL    | C   |
| 36-11-05            | BB13  | 461       | 461.6 SECS TD  | BLEED ISLN VAL   | C   |
| 36-22-01            | EK10  | 396       | 396  | L ENG BLEED VAL  | B   |
| 36-22-01            | EK2   | 427       | 427  | R ENG BLEED VAL  | B   |
| 49-61-01            | FA10  | 288       | 288.6 SEC TD   | APU FUEL VAL     | C   |
| 49-61-01            | FB6   | 105       | 105  | APU FAULT        | C   |
| 52-71-01            | BA11  | 144       | 144. L ENTRY DOORS   | L CTR ENT DOOR   | C   |
| 52-71-01            | BB12  | 496       | 496. EMER DOORS  | L EMER DOOR      | C   |
| 52-71-01            | BA10  | 352       | 352. L ENTRY DOORS   | L FWD ENT DOOR   | C   |
| 52-71-01            | BE12  | 368       | 368. L ENTRY DOORS   | L AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (144, 352, OR 368)  | L ENTRY DOORS    | C   |
| 52-71-01            | BA5   | 129       | 129. R ENTRY DOORS   | R CTR ENT DOOR   | C   |
| 52-71-01            | BD5   | 481       | 481. EMER DOORS  | R EMER DOOR      | C   |
| 52-71-01            | AD14  | 369       | 369. R ENTRY DOORS   | R FWD ENT DOOR   | C   |
| 52-71-01            | AD13  | 353       | 353. R ENTRY DOORS   | R AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (129, 369 OR 353)   | R ENTRY DOORS    | C   |
| 52-71-01            |   |           | 2 OR MORE OF (496, 481, 347, 251, 27 OR 255)   | EMER DOORS       | C   |
| 52-71-01            | AE04  | 347       | 347. EMER DOORS  | L FWD EMER DOORS | C   |
| 52-71-01            | DAD9  | 251       | 251. EMER DOORS  | L AFT EMER DOORS | C   |
| 52-71-01            | DC05  | 27        | 27. EMER DOORS   | R FWD EMER DOORS | C   |
| 52-71-01            | AE01  | 255       | 255. EMER DOORS  | R AFT EMER DOORS | C   |
| 52-71-01            | BB7   | 416       | 416. ACCESS DOORS  | FWD ACCESS DOOR  | C   |
| 52-71-01            | BA6   | 160       | 160. ACCESS DOORS  | EE ACCESS DOOR   | C   |
| 52-71-01            |   |           | 416. 160   | ACCESS DOOR      | C   |
| 52-71-01            | AF15  | 384       | 384. CARGO DOORS   | FWD CARGO DOOR   | C   |
| 52-71-01            | BC05  | 145       | 145. CARGO DOORS   | AFT CARGO DR 1   | C   |
| 52-71-01            | BC07  | 156       | 156. CARGO DOORS   | AFT CARGO DR 2   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (493, 384, 145 OR 156)  | CARGO DOORS      | C   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321X PIN  | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---|-----------|--|------------------|---|
| 73-21-01            | BF13  | 303       | 303.6 SECS TD  | L ENG FUEL VAL   | C   |
| 73-21-01            | BD14  | 350       | 350 + 134  | L ENG SHUTDOWN   | B   |
|                     | BJ11  | 134       |  |                  |   |
| 73-21-02            | BD15  | 415       | 415.6 SEC TD   | R ENG FUEL VAL   | C   |
| 73-21-02            | BJ3   | 429       | 429 + 147  | R ENG SHUTDOWN   | B   |
|                     | DK6   | 147       |  |                  |   |
| 73-21-04            | BH08  | 455       | 455. L ENG RUNNING. 4 SEC TD   | L ENG LIMITER    | C   |
| 73-21-05            | DH04  | 167       | 167. R ENG RUNNING. 4 SEC TD   | R ENG LIMITER    | C   |
| 73-21-04            | BG10  | 373       | 373  | L EEC OFF        | B   |
| 73-21-04            | BH6   | 358       | (L ENG RUNNING. 4 SEC TD.) 358. 373  | L ENG EEC        | C   |
| 73-21-05            | DE13  | 386       | 386  | R EEC OFF        | B   |
| 73-21-05            | DK9   | 324       | (R ENG RUNNING. 4 SEC TD.) 324. 386  | R ENG EEC        | C   |
| 78-36-01            | BH07  | 103       | (103. L AC BUS OFF. 2 SEC TD) +  | REV ISLN VAL     | C   |
|                     | DH07  | 391       | (391. R AC BUS OFF. 2 SEC TD)  |                  |   |
| 79-33-01            | AH3   | 483       | 483. L ENG RUN   | L ENG OIL PRESS  | C   |
| 79-33-01            | DK10  | 371       | 371. R ENG RUN   | R ENG OIL PRESS  | C   |
| 79-35-01            | AH04  | 131       | DD260 + 131. L ENG VIB LATCH   | L ENG VIBRATION  | B   |
|                     | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD260     |  |                  |   |
| 79-35-01            | DK03  | 423       | DD265 + 423. R ENG VIB LATCH   | R ENG VIBRATION  | B   |
|                     | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD265     |  |                  |   |
| 79-35-01            | <span style="border: 1px solid black; padding: 0 2px;">9</span> | AV405     | AV405 > 10°. 131 +   | L OIL FILTER     | C   |
|                     | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD260     | DD260. L ENG AP LATCH +  |                  |   |
| 79-35-01            | AH04  | 131       | 131. (DD260 + L ENG VIB LATCH)   | R OIL FILTER     | C   |
|                     | <span style="border: 1px solid black; padding: 0 2px;">9</span> | AV406     | AV406 > 10°. 423 +   |                  |   |
|                     | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD265     | DD265. R ENG AP LATCH +  |                  |   |
|                     | DK03  | 423       | 423. (DD265 + R ENG VIB LATCH)   |                  |   |
| 80-11-01            | FD09  | 152       | 152. 5 SEC TD  | L STARTER CUTOUT | B   |
| 80-11-01            | BH11  | 327       | 327. 152. 5 SEC TD   | L ENG STARTER    | C   |
|                     | FD09  | 152       |  |                  |   |
| 80-11-02            | FB05  | 121       | 121. 5 SEC TD  | R STARTER CUTOUT | B   |
| 80-11-02            | DK02  | 440       | 440. 121. 5 SEC TD   | R ENG STARTER    | C   |
|                     | FB05  | 121       |  |                  |   |

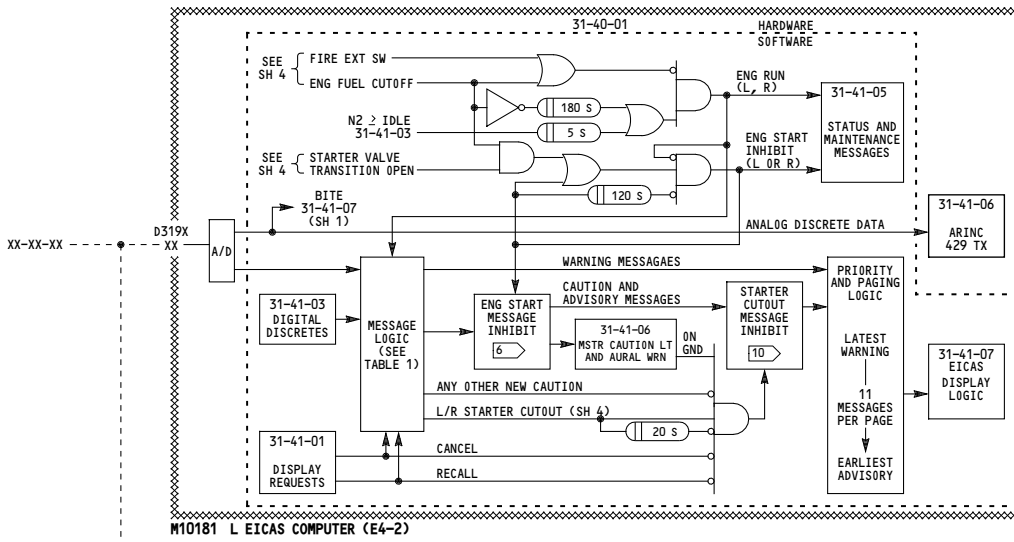
115-199

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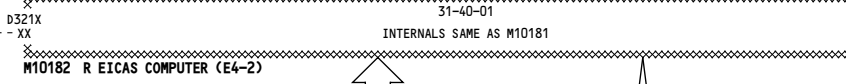
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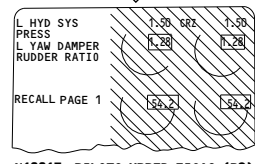
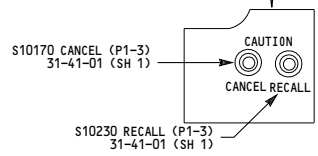
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M10181 L EICAS COMPUTER (E4-2)



M10182 R EICAS COMPUTER (E4-2)



N10013 PILOTS UPPER EICAS (P2)  
31-41-07 (SH 2)

**NOTES:**

- 1 LEVEL A WARNING (RED)  
LEVEL B CAUTION (YELLOW)  
LEVEL C ADVISORY (YELLOW)
- 2 NO CAUTION AURAL COMMAND FROM EICAS
- 3 FOR INPUT SEE 31-41-05
- 4 USED IN OTHER MESSAGE LOGIC IN 31-41-04,  
31-41-05
- 5 NO MASTER CAUTION LIGHT OR CAUTION AURAL
- 6 THESE MESSAGES ARE NOT INHIBITED: -  
L/R ENG SHUTDOWN, L/R STARTER CUTOFF,  
L/R ENG STARTER
- 7 FOR DIGITAL INPUTS SEE 31-41-03
- 8 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT:  
357 TRUE=28V FALSE=OPEN  
257 343 & ALL DU INPUTS TRUE=OPEN FALSE=GND  
ALL IRS INPUTS TRUE=10V FALSE=0V
- 10 REMOVES ALL MESSAGES EXCEPT  
L/R STARTER CUTOFF FROM DISPLAY  
FOR 20 SECONDS

TABLE 1  
EICAS ANALOGUE DISCRETE INPUTS AND MESSAGES

| SCHEMATIC REFERENCE | D319/321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. [8] | MESSAGE          | LEVEL [1] |
|---------------------|--------------|-----------|--|------------------|-----------|
| 21-25-01            | AE7          | 138       | 138. 1 SEC TD.L UTIL BUS OFF           | L RECIR FAN      | C         |
| 21-25-02            | AD6          | 362       | 362. 1 SEC TD.R UTIL BUS OFF           | R RECIR FAN      | C         |
| 21-31-01            |              |           | 112, 336. 5 SEC TD                     | CABIN AUTO. INOP | B         |
| 21-33-01            | AF13         | 291       | 291                                    | CABIN ALTITUDE   | A         |
| 21-51-09            | AD8          | 124       | 124                                    | L PACK OFF       | C         |
| 21-51-09            | AE6          | 92        | 92                                     | L PACK TEMP      | C         |
| 21-51-10            | AG10         | 348       | 348                                    | R PACK OFF       | C         |
| 21-51-10            | AD5          | 316       | 316                                    | R PACK TEMP      | C         |
| 21-58-06            | BG8          | 351       | 351. 1 SEC TD                          | FWD EQPT OVHT    | C         |
| 21-58-02            | FF5          | 135       | 135. 1 SEC TD                          | FWD EQPT SMOKE   | C         |
| 21-60-01            | DA14         | 91        | 91                                     | FLIGHT DECK TEMP | C         |
| 21-60-02            | FK9          | 505       | 505                                    | FWD CABIN TEMP   | C         |
| 21-60-03            | EJ10         | 271       | 271                                    | AFT CABIN TEMP   | C         |
| 21-61-04            | DA13         | 315       | 315                                    | TRIM AIR         | C         |
| 22-14-01            | DG7          | 323       | (323+244). 0.5 SEC TD                  | AUTOPILOT DISC   | A         |
| 22-14-01            | EA9          | 244       |  |                  |           |
| 22-14-01            | BJ2          | 478       | 478                                    | AUTOPILOT        | B         |
| 22-21-01            | DA6          | 212       | 212                                    | L YAW DAMPER     | C         |
| 22-21-02            | AD7          | 52        | 52                                     | R YAW DAMPER     | C         |
| 22-24-01            | FE4          | 425       | 425                                    | MACH/SPD TRIM    | C         |
| 22-34-01            | BD8          | 126       | 126. 1 SEC TD                          | AUTO THROT DISC  | B         |
| 24-11-01            | DA10         | 306       | 306. L ENG RUNNING                     | L GEN DRIVE      | C         |
| 24-11-02            | DA1          | 219       | 219. R ENG RUNNING                     | R GEN DRIVE      | C         |
| 24-22-02            | DB3          | 236       | 236                                    | L AC BUS OFF     | B [4]     |
| 24-22-02            | DB1          | 59        | 59. L ENG RUNNING.CAA                  | L GEN OFF        | B         |
| 24-22-04            | DB2          | 76        | 76                                     | R AC BUS OFF     | B         |
| 24-22-04            | DA12         | 283       | 283. R ENG RUNNING.CAA                 | R GEN OFF        | B [4]     |
| 24-22-06            | DC7          | 187       | 187. 5 SEC TD                          | APU GEN OFF      | C         |
| 24-22-07            | DC6          | 44        | 44                                     | L BUS ISOLATED   | C         |
| 24-22-08            | DC1          | 268       | 268                                    | R BUS ISOLATED   | C         |
| 24-31-01            | EC15         | 142       | 142. 10 SEC TD.767                     | MAIN BAT. DISCH  | C         |
| 24-31-01            | AD4          | 250       | 250                                    | BATTERY OFF      | C [4]     |
| 24-33-01            | DB4          | 26        | 26                                     | STANDBY BUS OFF  | C [4]     |
| 24-51-10            | AE5          | 300       | 300. L AC BUS OFF                      | L UTIL BUS OFF   | C         |
| 24-51-20            | DC8          | 204       | 204. R AC BUS OFF                      | R UTIL BUS OFF   | C         |

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>D321<br>PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------------|-----------|--|------------------|---|
| 26-11-01            | BE4                  | 57        | 57   | L ENG FIRE       | A   |
| 26-11-02            | DG3                  | 99        | 99   | R ENG FIRE       | A   |
| 26-11-03            | BE5                  | 246       | 246  | L ENG OVHT       | B   |
| 26-11-04            | DG5                  | 466       | 466  | R ENG OVHT       | B   |
| 26-15-01            | FF2                  | 359       | 359  | APU FIRE         | A   |
| 26-16-01            | DF7                  | 370       | 370  | FWD CARGO FIRE   | A   |
| 26-16-02            | FF7                  | 472       | 472  | AFT CARGO FIRE   | A   |
| 26-16-02            | EA2                  | 430       | 430  | FIRE/OVHT SYS    | C   |
| 26-17-01            | DB10                 | 203       | 203  | WHEEL WELL FIRE  | A   |
| 26-18-01            | BF4                  | 217       | 217  | L BLD DUCT LEAK  | B   |
| 26-18-02            | DG4                  | 451       | 451  | R BLD DUCT LEAK  | B   |
| 26-21-01            | DG2                  | 114       | 114  | ENG BTL 1        | C   |
| 26-21-01            | FE3                  | 417       | 417  | ENG BTL 2        | C   |
| 26-22-01            | DC9                  | 42        | 42   | APU BTL          | C   |
| 26-23-01            | DD1                  | 146       | 146  | CARGO BTL 1      | C   |
| 26-23-01            | FC08                 | 389       | 389  | CARGO BTL 2      | C   |
| 27-20-02            | DC13                 | 414       | 414. (R ENG RUNNING + R ENG RUNNING. 30 SEC TD)  | RUDDER RATIO     | C   |
| 27-40-01            | AD11                 | 276       | 276  | STAB. TRIM       | B   |
| 27-40-01            | EB12                 | 302       | 302  | UNSCD STAB. TRIM | B   |
| 27-51-03            | DB15                 | 475       | 475  | FLAP LD RELIEF   | C   |
| 27-51-05            | DG15                 | 122       | 122  | TE FLAP ASYM     | B   |
| 27-51-06            | ED1                  | 346       | 346  | TE FLAP DISAGREE | B   |
| 27-81-05            | DC11                 | 90        | 90   | SPOILERS         | C   |
| 27-81-03            | AG9                  | 66        | 66   | AUTO. SPEEDBRAKE | C   |
| 27-81-03            | DB14                 | 460       | 460  | LE SLAT DISAGREE | B   |
| 27-81-05            | EB1                  | 474       | 474  | LE SLAT ASYM     | B   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319/<br>D321<br>PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span>     | MESSAGE           | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|----------------------|-----------|--|-------------------|---|
| 28-22-01            | ED5                  | 107       | 107.6 SEC TD   | L FUEL SPAR VAL   | C   |
| 28-22-01            | EC1                  | 331       | 331.6 SEC TD   | R FUEL SPAR VAL   | C   |
| 28-22-01            | EC2                  | 399       | 399.6 SEC TD   | FUEL CROSSFEED    | C   |
| 28-22-01            | BE7                  | 87        | (322.10 SEC TD).(361.10 SEC TD)  | L FUEL SYS PRESS. | B   |
| 28-22-01            | FH4                  | 357       | .(87.10 SEC TD).(357+399)<br>+ (CALL RH PUMPS LOW PRESS.10 SEC TD)                                     |                   |   |
| 28-22-02            | DH8                  | 322       | 322.10 SEC TD. L FUEL SYS PRESS  | L FWD FUEL PUMP   | C   |
| 28-22-02            | FH8                  | 361       | 361.10 SEC TD. L FUEL SYS PRESS  | L AFT FUEL PUMP   | C   |
| 28-22-03            | DH6                  | 100       | 100.10 SEC TD. L FUEL SYS PRESS  | CTR L FUEL PUMP   | C   |
| 28-22-03            | FJ9                  | 153       | 153.10 SEC TD. R FUEL SYS PRESS  | CTR R FUEL PUMP   | C   |
| 28-22-03            | DG8                  | 338       | (377.10 SEC TD).(452.10 SEC TD)<br>.(338.10 SEC TD).(357+399)<br>+ (CALL LH PUMPS LOW PRESS.10 SEC TD) | R FUEL SYS PRESS. | B   |
| 28-22-04            | FH9                  | 377       | 377.10 SEC TD. R FUEL SYS PRESS  | R FWD FUEL PUMP   | C   |
| 28-22-04            | DH3                  | 452       | 452.10 SEC TD. R FUEL SYS PRESS  | R AFT FUEL PUMP   | C   |
| 28-41-01            | ED3                  | 459       | 459.31   | LOW FUEL          | B   |
| 28-41-01            | ED13                 | 31        | 459.31   | FUEL CONFIG       | C   |
| 29-00-01            | AH02                 | 196       | 196. L AND R ENGINES RUNNING   | L HYD RSVR PRES   | C   |
| 29-00-01            | FC10                 | 225       | 225. L AND R ENGINES RUNNING   | C HYD RSVR PRES   | C   |
| 29-00-01            | DK07                 | 404       | 404. L AND R ENGINES RUNNING   | R HYD RSVR PRES   | C   |
| 29-00-02            | DE14                 | 403       | 403.1 SEC TD   | L HYD SYS PRESS.  | B   |
| 29-00-02            | AK2                  | 195       | 195. L ENG RUN. L HYD SYS PRESS  | L HYD ENG PUMP    | C   |
| 29-00-02            | AK11                 | 35        | 35. L HYD SYS PRESS  | L HYD ELEC PUMP   | C   |
| 29-00-02            | FG4                  | 94        | 94   | L ENG HYD OVHT    | C   |
| 29-00-02            | BK7                  | 216       | 216  | L ELEC HYD OVHT   | C   |
| 29-00-03            | FC9                  | 120       | 120.1 SEC TD   | R HYD SYS PRESS.  | B   |
| 29-00-03            | DK13                 | 284       | 284. R ENG RUN. R HYD SYS PRESS  | R HYD ENG PUMP    | C   |
| 29-00-03            | FK2                  | 462       | 462. R HYD SYS PRESS   | R HYD ELEC PUMP   | C   |
| 29-00-03            | AK4                  | 482       | 482  | R ENG HYD OVHT    | C   |
| 29-00-03            | AK8                  | 258       | 258  | R ELEC HYD OVHT   | C   |
| 29-00-04            | AG11                 | 259       | 259. C HYD SYS PRESS.  | C HYD ELEC 1      | C   |
| 29-00-04            | BK8                  | 471       | 471  | C HYD 1 OVHT      | C   |
| 29-00-04            | DJ11                 | 220       | 220. C HYD SYS PRESS.  | C HYD ELEC 2      | C   |
| 29-00-04            | AK3                  | 34        | 34   | C HYD 2 OVHT      | C   |
| 29-00-04            | DJ10                 | 60        | 60.1 SEC TD  | C HYD SYS PRESS.  | B   |
| 29-00-04            | FK6                  | 437       | 437  | RAT. UNLOCKED     | C   |
| 29-00-01            | EA3                  | 410       | 410  | L HYD QTY         | C   |
| 29-00-01            | EC7                  | 221       | 221  | R HYD QTY         | C   |
| 29-00-01            | DB6                  | 154       | 154  | C HYD QTY         | C   |
| 29-00-02            |                      |           | 2 OR MORE OF (117,98,137)  | FLT CNT VALS      | C   |

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE         | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---------------|-----------|--|-----------------|---|
| 30-11-01            | FG7           | 318       | 318. 2.5 SEC TD  | L WING ANTI-ICE | C   |
| 30-11-01            | FJ2           | 447       | 447. 2.5 SEC TD  | R WING ANTI-ICE | C   |
| 30-21-01            | EC14          | 305       | 305. L ENG RUN. 10 SEC TD.   | L ENG ANTI-ICE  | C   |
| 30-21-02            | EA5           | 238       | 238. R ENG RUN. 10 SEC TD.   | R ENG ANTI-ICE  | C   |
| 30-31-01            | EC3           | 45        | 45. PROBE HEAT   | CAPT PITOT      | C   |
| 30-31-01            | AD1           | 269       | 269. PROBE HEAT  | L AUX PITOT     | C   |
| 30-31-01            |               |           | 2 OR MORE OF (45, 449, 269, 97, 155, 241, 411)   | PROBE HEAT      | C   |
| 30-31-02            | EA6           | 449       | 449. PROBE HEAT  | F/O PITOT       | C   |
| 30-31-02            | DB9           | 97        | 97. PROBE HEAT   | R AUX PITOT     | C   |
| 30-32-01            | DB5           | 155       | 155. PROBE HEAT  | L AOA PROBE     | C   |
| 30-32-02            | EA7           | 241       | 241. PROBE HEAT  | R AOA PROBE     | C   |
| 30-33-01            | EA4           | 411       | 411. PROBE HEAT  | TAT PROBE       | C   |
| 30-41-01            | EC6           | 29        | 29. WINDOW HEAT  | L FWD WINDOW    | C   |
| 30-41-01            |               |           | 2 OR MORE OF (29, 189, 205, 253)   | WINDOW HEAT     | C   |
| 30-41-02            | EC5           | 205       | 205. WINDOW HEAT   | R FWD WINDOW    | C   |
| 30-41-03            | EC4           | 189       | 189. WINDOW HEAT   | L SIDE WINDOW   | C   |
| 30-41-04            | AD2           | 253       | 253. WINDOW HEAT   | R SIDE WINDOW   | C   |
| 31-41-09            |               |           | NO VALID ARINC 429 RECEIVED FROM DSP .1 SEC TD   | EICAS CONT PNL  | C   |
| 31-51-04            | B-C14         | 463       | 463  | SPEEDBRAKES EXT | B   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321 PIN | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE        | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---------------|-----------|--|----------------|---|
| 31-41-09            | AC3           | ---       | UPPER OR LOWER DISPLAY   | EICAS DISPLAY  | C   |
|                     | AB3           | ---       | UNIT BEAM TEST   |                |   |
|                     | AC5           | ---       | FAIL OR ANOMALY  |                |   |
|                     | AC4           | ---       | OR CMPTR FAULT WHICH BLANKS DISPLAY  |                |   |
| 31-51-03            | AG15          | 235       |  | PARKING BRAKE  | A   |
| 31-51-03            | DA15          | 108       |  | FLAPS          | A   |
| 31-51-03            | ED2           | 332       |  | SPOILERS       | A   |
| 31-51-03            | EA1           | 431       |  | STABILIZER     | A   |
| 31-51-04            | BG14          | 349       |  | GEAR NOT DOWN  | A   |
| 32-41-01            | EH12          | 47        |  | BRAKE SOURCE   | C   |
| 32-41-01            | AG3           | 226, 239  |  | PARKING BRAKE  | C   |
| 32-42-03            | AG6           | 290       |  | AUTOBRAKES     | C   |
| 32-42-04            | FH10          | 65        | 65, 199  | ANTISKID       | C <span style="border: 1px solid black; padding: 0 2px;">5</span>     |
| 32-61-01            | DB7           | 43        | (43.298.25 SEC TD).  | GEAR DISAGREE  | B <span style="border: 1px solid black; padding: 0 2px;">5</span>     |
| 32-61-01            | AG12          | 298       |  |                |   |
| 32-61-01            | BF14          | 125       | 125. 335. 35 SEC TD  | GEAR DOORS     | C <span style="border: 1px solid black; padding: 0 2px;">5</span>     |
| 32-61-01            | F-C2          | 335       |  |                |   |
| 32-61-01 (SH 2)     | FE9           | 360       | 360*445.L AC BUS OFF   | AIR/GND SYS    | C   |
| 32-61-01 (SH 2)     | BJ13          | 445       | .R AC BUS OFF.G/S <80KTS .10 SEC TD  |                |   |
| 32-61-01 (SH 2)     | FF8           | 421       | 421*157.L AC BUS OFF   | NOSE A/G SYS   | C   |
| 32-61-01 (SH 2)     | BH1           | 157       | .R AC BUS OFF.G/S <80KTS .10 SEC TD  |                |   |
| 33-51-01            | EA11          | 193       | 193  | EMER LIGHTS    | C   |
| 34-12-02            | FE5           | 136       | 136 +111   | OVERSPEED      | A   |
|                     | BC15          | 111       |  |                |   |
| 34-16-01            | BE14          | 477       | 477  | ALTITUDE ALERT | B <span style="border: 1px solid black; padding: 0 2px;">2</span>     |
| 34-21-01            | AG8           | 68        | 68   | L IRS DC FAIL  | C   |
| 34-21-01            | AG5           | 292       | 292  | L IRS FAULT    | C   |
| 34-21-01            | AG1           | 228       | 228  | L IRS ON DC    | C   |
| 34-21-02            | DE9           | 168       | 168  | R IRS DC FAIL  | C   |
| 34-21-02            | DE2           | 392       | 392  | R IRS FAULT    | C   |
| 34-21-02            | DE5           | 424       | 424  | R IRS ON DC    | C   |
| 34-21-03            | FC3           | 374       | 374  | C IRS DC FAIL  | C   |
| 34-21-03            | FC4           | 502       | 502  | C IRS FAULT    | C   |
| 34-21-03            | FD5           | 150       | 150  | C IRS ON DC    | C   |
| 34-22-09            | FA9           | 289       | 289  | INSTR SWITCH   | B   |

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319X D321X PIN   | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---|-----------|--|------------------|---|
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD117     | DD117  | HDG DISAGREE     | C   |
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD118     | DD118  | TRACK DISAGREE   | C   |
| 34-25-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD119     | DD119  | ATT DISAGREE     | B   |
| 34-53-01            | EA13  | 79        | 79   | ATC FAULT        | C   |
| 34-61-02            | AG13  | 299       | 299  | FMC MESSAGE      | C   |
| 34-61-02            | EK14  | 257       | 257  | L FMC FAIL       | C   |
| 34-61-07            | BK1   | 239       | 239  | R FMC FAIL       | C   |
| 35-21-01            | FF6   | 141       | 141  | PASS. OXYGEN ON  | C   |
| 36-11-01            | EK3   | 428       | 428. L ENG RUN   | L ENG BLEED OFF  | C   |
| 36-11-01            | EK7   | 171       | 171  | L ENG HI STAGE   | C   |
| 36-11-02            | EK6   | 172       | 172. R ENG RUN   | R ENG BLEED OFF  | C   |
| 36-11-02            | EK11  | 395       | 395  | R ENG HI STAGE   | C   |
| 36-11-03            | FF1   | 365       | 365.6 SECS TD  | APU BLEED VAL    | C   |
| 36-11-05            | BB13  | 461       | 461.6 SECS TD  | BLEED ISLN VAL   | C   |
| 36-22-01            | EK10  | 396       | 396  | L ENG BLEED VAL  | B   |
| 36-22-01            | EK2   | 427       | 427  | R ENG BLEED VAL  | B   |
| 49-61-01            | FA10  | 288       | 288.6 SEC TD   | APU FUEL VAL     | C   |
| 49-61-01            | FB6   | 105       | 105  | APU FAULT        | C   |
| 52-71-01            | BA11  | 144       | 144. L ENTRY DOORS   | L CTR ENT DOOR   | C   |
| 52-71-01            | BB12  | 496       | 496. EMER DOORS  | L EMER DOOR      | C   |
| 52-71-01            | BA10  | 352       | 352. L ENTRY DOORS   | L FWD ENT DOOR   | C   |
| 52-71-01            | BE12  | 368       | 368. L ENTRY DOORS   | L AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (144, 352, OR 368)  | L ENTRY DOORS    | C   |
| 52-71-01            | BA5   | 129       | 129. R ENTRY DOORS   | R CTR ENT DOOR   | C   |
| 52-71-01            | BD5   | 481       | 481. EMER DOORS  | R EMER DOOR      | C   |
| 52-71-01            | AD14  | 369       | 369. R ENTRY DOORS   | R FWD ENT DOOR   | C   |
| 52-71-01            | AD13  | 353       | 353. R ENTRY DOORS   | R AFT ENT DOOR   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (129, 369 OR 353)   | R ENTRY DOORS    | C   |
| 52-71-01            |   |           | 2 OR MORE OF (496, 481, 347, 251, 27 OR 255)   | EMER DOORS       | C   |
| 52-71-01            | AE04  | 347       | 347. EMER DOORS  | L FWD EMER DOORS | C   |
| 52-71-01            | DA09  | 251       | 251. EMER DOORS  | L AFT EMER DOORS | C   |
| 52-71-01            | DC05  | 27        | 27. EMER DOORS   | R FWD EMER DOORS | C   |
| 52-71-01            | AE01  | 255       | 255. EMER DOORS  | R AFT EMER DOORS | C   |
| 52-71-01            | BB7   | 416       | 416. ACCESS DOORS  | FWD ACCESS DOOR  | C   |
| 52-71-01            | BA6   | 160       | 160. ACCESS DOORS  | EE ACCESS DOOR   | C   |
| 52-71-01            |   |           | 416. 160   | ACCESS DOOR      | C   |
| 52-71-01            | AF15  | 384       | 384. CARGO DOORS   | FWD CARGO DOOR   | C   |
| 52-71-01            | BC05  | 145       | 145. CARGO DOORS   | AFT CARGO DR 1   | C   |
| 52-71-01            | BC07  | 156       | 156. CARGO DOORS   | AFT CARGO DR 2   | C   |
| 52-71-01            |   |           | 2 OR MORE OF (493, 384, 145 OR 156)  | CARGO DOORS      | C   |
| 73-14-01            | AJ11  | 50        | 50. 30 SEC TD  | L ENG FUEL FILT  | C   |
| 73-14-01            | DG12  | 179       | 179. 30 SEC TD   | R ENG FUEL FILT  | C   |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319 D321X PIN  | INPUT NO. | INPUT REQ FOR MESSAGE BY INPUT NO. <span style="border: 1px solid black; padding: 0 2px;">7</span> | MESSAGE          | LEVEL <span style="border: 1px solid black; padding: 0 2px;">1</span> |
|---------------------|---|-----------|--|------------------|---|
| 73-21-01            | BF13  | 303       | 303.6 SECS TD  | L ENG FUEL VAL   | C   |
| 73-21-01            | BD14  | 350       | 350 + 134  | L ENG SHUTDOWN   | B   |
|                     | BJ11  | 134       |  |                  |   |
| 73-21-02            | BD15  | 415       | 415.6 SEC TD   | R ENG FUEL VAL   | C   |
| 73-21-02            | BJ3   | 429       | 429 + 147  | R ENG SHUTDOWN   | B   |
|                     | DK6   | 147       |  |                  |   |
| 73-21-04            | BH08  | 455       | 455. L ENG RUNNING. 4 SEC TD   | L ENG LIMITER    | C   |
| 73-21-05            | DH04  | 167       | 167. R ENG RUNNING. 4 SEC TD   | R ENG LIMITER    | C   |
| 73-21-04            | BG10  | 373       | 373  | L EEC OFF        | B   |
| 73-21-04            | BH6   | 358       | (L ENG RUNNING. 4 SEC TD.) 358. <span style="border: 1px solid black; padding: 0 2px;">373</span>  | L ENG EEC        | C   |
| 73-21-05            | DE13  | 386       | 386  | R EEC OFF        | B   |
| 73-21-05            | DK9   | 324       | (R ENG RUNNING. 4 SEC TD.) 324. <span style="border: 1px solid black; padding: 0 2px;">386</span>  | R ENG EEC        | C   |
| 78-36-01            | BH07  | 103       | (103. L AC BUS OFF. 2 SEC TD) +  | REV ISLN VAL     | C   |
|                     | DH07  | 391       | (391. R AC BUS OFF. 2 SEC TD)  |                  |   |
| 79-33-01            | AH3   | 483       | 483. L ENG RUN   | L ENG OIL PRESS  | C   |
| 79-33-01            | DK10  | 371       | 371. R ENG RUN   | R ENG OIL PRESS  | C   |
| 79-35-01            | AH04  | 131       | DD260 + 131. L ENG VIB LATCH   | L ENG VIBRATION  | B   |
| 79-35-01            | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD260     | DD265 + 423. R ENG VIB LATCH   | R ENG VIBRATION  | B   |
|                     | DK03  | 423       |  |                  |   |
| 79-35-01            | <span style="border: 1px solid black; padding: 0 2px;">9</span> | DD265     | AV405 > 10°. 131 +   | L OIL FILTER     | C   |
|                     | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD260     | DD260. L ENG ΔP LATCH +  |                  |   |
| 79-35-01            | AH04  | 131       | 131. (DD260 + L ENG VIB LATCH)   | R OIL FILTER     | C   |
|                     | <span style="border: 1px solid black; padding: 0 2px;">9</span> | AV406     | AV406 > 10°. 423 +   |                  |   |
|                     | <span style="border: 1px solid black; padding: 0 2px;">8</span> | DD265     | DD265. R ENG ΔP LATCH +  |                  |   |
|                     | DK03  | 423       | 423. (DD265 + R ENG VIB LATCH)   |                  |   |
| 80-11-01            | FD09  | 152       | 152. 5 SEC TD  | L STARTER CUTOUT | B   |
| 80-11-01            | BH11  | 327       | 327. <span style="border: 1px solid black; padding: 0 2px;">152</span> . 5 SEC TD                  | L ENG STARTER    | C   |
|                     | FD09  | 152       |  |                  |   |
| 80-11-02            | FB05  | 121       | 121. 5 SEC TD  | R STARTER CUTOUT | B   |
| 80-11-02            | DK02  | 440       | 440. <span style="border: 1px solid black; padding: 0 2px;">121</span> . 5 SEC TD                  | R ENG STARTER    | C   |
|                     | FB05  | 121       |  |                  |   |

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**EICAS WARNING, CAUTION AND ADVISORY MESSAGES**

Incorporates 31-0059 R01

D280N032S

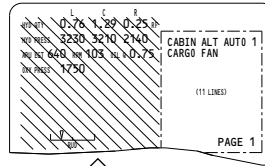
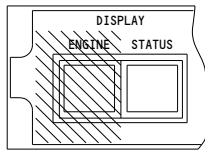
**31-41-04**

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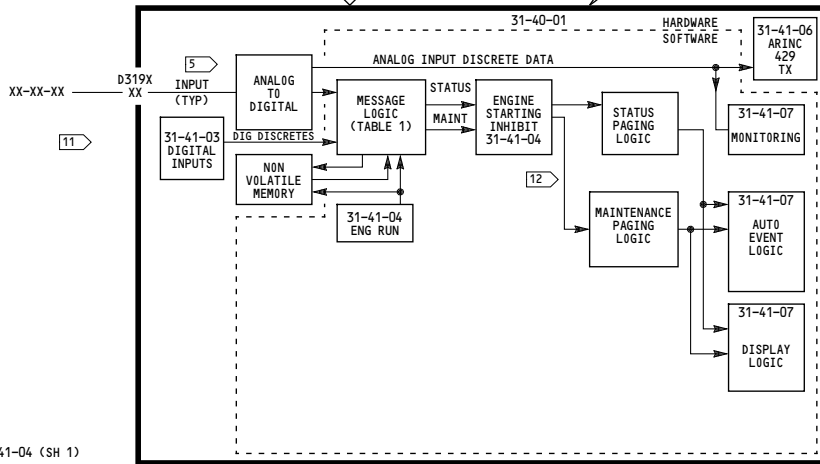
5054

**M10195 EICAS DISPLAY SELECT PNL (P9) 31-41-01 (SH 1)**



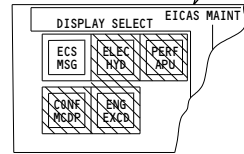
**N10014 EICAS LOWER DISPLAY IND (P2) 31-41-07 (SH 2)**

**STATUS FORMAT**

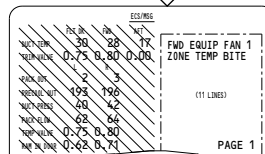


**NOTES:**

- 1 SEE 31-41-04 (SH 1)
- 2 SEE 31-41-02
- 3 SEE 31-41-04 (SH 2)
- 4 454=GND=TEST START
- 5 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT: 51,169, 285,494 } TRUE=OPEN FALSE=GND
- 6 SEE 31-41-02 (SH 2)
- 7 SEE 31-41-06 (SH 1)
- 8 INPUTS IDENTICAL TO M10181 AND M10182. ONLY M10181 SHOWN.
- 9 INHIBITED UNTIL ON GND WITH ALL HYD SYS PRESSURIZED AND AIRSPEED < 50 KNTS
- 10 SEE 31-41-04 (SH 3)
- 11 TO OTHER COMPUTER D321X
- 12 NEW MESSAGES AND RECORDING INTO NVM, INHIBITED DURING ENGINE START
- 13 SEE 31-41-03
- 14 LATCHES NVM ONLY IN THE AIR



**M10372 EICAS MAINTENANCE PNL (P61) 31-41-01 (SH 1)**



**ECS/MSG MAINTENANCE FORMAT**

**N10014 EICAS LOWER DISPLAY IND (P2) 31-41-07 (SH 2)**

**TABLE 1 EICAS MESSAGE LOGIC**

| SCHEMATIC REFERENCE | D319X/D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.)   | MESSAGE           | STATUS | MAINTENANCE | NVM |
|---------------------|-----------------|-----------|--|-------------------|--------|-------------|-----|
| 21-31-01            | EF14            | 112       | 112.5 SEC TD   | CABIN ALT AUTO. 1 | X      | X           | 1   |
| 21-31-02            | EF13            | 336       | 336.5 SEC TD   | CABIN ALT AUTO. 2 | X      | X           |     |
| 21-43-01            | DA5             | 227       | 227. L UTIL BUS OFF. 1 SEC TD  | FWD CARGO FAN     | X      | X           | X   |
| 21-44-01            | AJ15            | 67        | 67. R UTIL BUS OFF. 1 SEC TD   | AFT CARGO FAN     | X      | X           | X   |
| 21-51-09            | FD2             | 397       | 397  | L PACK BITE       | X      |             |     |
| 21-51-10            | DF11            | 69        | 69   | R PACK BITE       | X      |             |     |
| 21-58-01            | DA3             | 84        | 84. ON GND .30 SEC TD  | FWD EQ SUP FLOW   | X      | X           |     |
| 21-58-01            | DA4             | 244       | 244. ON GND .30 SEC TD   | FWD EQ EXH FLOW   | X      | X           |     |
| 21-58-01            | FH7             | 375       | 375. ON GND .30 SEC TD   | AFT EQ FLOW       | X      | X           |     |
| 21-58-02            |                 |           | 375.454 .2 SEC TD  | FWD EQPT EXH DET  | X      | X           |     |
| 21-58-01            |                 |           | (FWD EQ EXH FLOW) + (FWD EQ SUP FLOW) + (AFT EQ FLOW)  | EQPT CLG FLOW     | X      |             |     |
| 21-58-03            | AE11            | 330       | 330. LAC BUS OFF. CLG TEST .4 SEC TD   | FWD EQ SUP FAN 1  | X      | X           |     |
| 21-58-03            | AD9             | 58        | (58. CLG TEST.304. R AC BUS OFF.2 SEC TD   | FWD EQ SUP FAN 2  | X      | X           |     |
| 21-58-03            | E-D14           | 304       | (58. CLG TEST).2 SEC TD  | EQ CLG FAN        | X      |             |     |
| 21-58-03            |                 |           | (FWD EQ SUP FAN 1) + (FWD EQ SUP FAN 2) + (AFT EQ SUP FAN 1) + (AFT EQ SUP FAN 2)            |                   |        |             |     |
| 21-58-03            | AG14            | 249       | 249. L AC BUS OFF. 2 SEC TD  | AFT EQ EXH FAN 1  | X      | X           |     |
| 21-58-03            | AK14            | 74        | 74. R AC BUS OFF. 2 SEC TD   | AFT EQ EXH FAN 2  | X      | X           |     |
| 21-58-03            | FJ7             | 503       | 503. LAC BUS OFF.3 SEC TD  | AFT EQ SUP FAN 1  | X      | X           |     |
| 21-58-03            | FK7             | 151       | 151. RAC BUS OFF .4 SEC TD   | AFT EQ SUP FAN 2  | X      | X           |     |
| 21-58-06            | F-K5            | 454       | (ENGINES SHUTDOWN .15 SEC TD .454 .LAC BUS OFF) + (EITHER ENGINE RUNNING .454 .STBY BUS OFF) | EQPT CLG TEST     | X      | X           |     |
| 21-58-01            | D-A3            | 84        | ANYONE OF THE FOLLOWING 3  | EQPT CLG SENSOR   | X      |             |     |
| 21-58-01            | D-44            | 244       | 84 .454 .2 SEC TD  | FWD EQ SUP SNSR   | X      | X           |     |
| 21-58-01            | F-H7            | 375       | 244 .454 .2 SEC TD   | FWD EQ EXH SNSR   | X      | X           |     |
| 21-58-02            | DE15            | 266       | 375 .454 .2 SEC TD   | AFT EQ SNSR       | X      | X           |     |
| 21-58-02            |                 |           | 266 .454 .10 SEC TD  | OVBD EX VAL TEST  | X      | X           |     |
| 21-58-02            | D-E15           | 266       | 266 .454 .2 SEC TD   | OVBD EX VAL OPEN  | X      | X           |     |
| 21-58-02            | E-D14           | 304       | 304 .454 .10 SEC TD  | EQPT SMOKE TEST   | X      | X           |     |
| 21-58-02            | D-A2            | 308       | 308 .454 .2 SEC TD   | FWD EQPT DET 1    | X      | X           |     |
| 21-58-02            | DF13            | 229       | 229 .454 .2 SEC TD   | FWD EQPT DET 2    | X      | X           |     |
| 21-61-01            | D88             | 186       | 186  | ZONE TEMP BITE    | X      |             |     |
| 24-11-01            |                 |           | L IDG OIL TEMP RISE > 175°C  | L IDG TEMP SENS   | X      |             |     |
| 24-11-01            |                 |           | L IDG OIL TEMP > 140°C. L IDG TEMP SENS.300 SEC TD   | L IDG OIL TEMP    | X      | X           |     |
| 24-11-02            |                 |           | R IDG OIL TEMP > 175°C   | R IDG TEMP SENS   | X      |             |     |
| 24-11-02            |                 |           | R IDG OIL TEMP > 140°C. R IDG TEMP SENS.300 SEC TD   | R IDG OIL TEMP    | X      | X           |     |
| 24-11-02            |                 |           | (ABS IDG OIL TEMP RISE DIFF(L-R) > 6 ) L IDG TEMP SENS                                       | IDG RISE TEMP     | X      | X           |     |
| 24-11-02            |                 |           | R IDG TEMP SENSE.283.59 .600 SEC TD  |                   |        |             |     |
| 24-25-01            | FJ04            | 133       | 133  | HYD GEN ON        | X      | X           | 14  |
| 24-25-01            | E813            | 67        | 67 .5 SEC TD   | HYD GEN VAL       | X      | X           |     |

001-099

**EICAS STATUS AND MAINTENANCE MESSAGES**

D280N032S

**31-41-05**

TABLE 1 (CONT)

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| SCHEMATIC REFERENCE | D319X/D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.) | MESSAGE                   | STATUS      |     |   |
|---------------------|-----------------|-----------|--------------------------------------|---------------------------|-------------|-----|---|
|                     |                 |           |                                      |                           | MAINTENANCE | NVM |   |
| 5                   | EA12            | 494       | 494. R AC BUS OFF. 10 SEC TD         | MAIN BAT. CHGR            | X           | X   | X |
|                     | FE02            | 169       | 169. R AC BUS OFF. 10 SEC TD         | APU BAT CHGR              | X           | X   | X |
|                     | FE03            | 345       | 365. 1 SEC TD                        | APU BAT NO STBY           | X           | X   | X |
| 3                   | EJ14            | 62        | 62                                   | TR UNIT                   | X           | X   | X |
|                     | AD4             | 250       | INV AC VOLTS > 124 + <106            | INV AC VOLTS > 124 + <106 | X           | X   | X |
|                     | EG11            | 541       | 0.7 SEC TD. BAT SW ON                | F/O INSTR XFER            | X           | X   | X |
| 5                   | BN14            | 285       | 285. R AC BUS OFF                    | CAPT INSTR XFER           | X           | X   | X |
|                     | BJ14            | 61        | 61. L AC BUS OFF                     | L ENG FIRE LP 1           | X           | X   | X |
|                     | D66             | 467       | 467. 57                              | L ENG FIRE LP 1           | X           | X   | X |
| 5                   | 57              | 467       | 467                                  | L ENG FIRE LP 2           | X           | X   | X |
|                     | EG4             | 233       | 233. 57                              | L ENG FIRE LP 2           | X           | X   | X |
|                     | 57              | 233       | 233                                  | L ENG FIRE LP 2           | X           | X   | X |
| 5                   | AG2             | 484       | 484. 99                              | R ENG FIRE LP 1           | X           | X   | X |
|                     | 99              | 484       | 484                                  | R ENG FIRE LP 1           | X           | X   | X |
|                     | BE9             | 311       | 311. 99                              | R ENG FIRE LP 2           | X           | X   | X |
| 5                   | 99              | 311       | 311                                  | R ENG FIRE LP 2           | X           | X   | X |
|                     | AG4             | 356       | 356. 246                             | L ENG OH LP 1             | X           | X   | X |
|                     | 246             | 356       | 356                                  | L ENG OH LP 1             | X           | X   | X |
| 5                   | BE6             | 453       | 453. 246                             | L ENG OH LP 2             | X           | X   | X |
|                     | 246             | 453       | 453                                  | L ENG OH LP 2             | X           | X   | X |
|                     | DG9             | 339       | 339. 466                             | R ENG OH LP 1             | X           | X   | X |
| 5                   | 466             | 339       | 339                                  | R ENG OH LP 1             | X           | X   | X |
|                     | EG6             | 297       | 297. 466                             | R ENG OH LP 2             | X           | X   | X |
|                     | 466             | 297       | 297                                  | R ENG OH LP 2             | X           | X   | X |
| 5                   | AG7             | 132       | 132. 246                             | L STRUT OH DET 1          | X           | X   | X |
|                     | 246             | 132       | 132                                  | L STRUT OH DET 1          | X           | X   | X |
|                     | BG4             | 88        | 88. 246                              | L STRUT OH DET 2          | X           | X   | X |
| 5                   | 246             | 88        | 88                                   | L STRUT OH DET 2          | X           | X   | X |
|                     | DG1             | 115       | 115. 466                             | R STRUT OH DET 1          | X           | X   | X |
|                     | 466             | 115       | 115                                  | R STRUT OH DET 1          | X           | X   | X |
| 5                   | EG7             | 262       | 262. 466                             | R STRUT OH DET 2          | X           | X   | X |
|                     | 466             | 262       | 262                                  | R STRUT OH DET 2          | X           | X   | X |
|                     | AH7             | 260       | 260. 57                              | L TURB OH DET 1           | X           | X   | X |
| 5                   | 57              | 260       | 260                                  | L TURB OH DET 1           | X           | X   | X |
|                     | BG2             | 312       | 312. 57                              | L TURB OH DET 2           | X           | X   | X |
|                     | 57              | 312       | 312                                  | L TURB OH DET 2           | X           | X   | X |
| 5                   | DF5             | 388       | 388. 99                              | R TURB OH DET 1           | X           | X   | X |
|                     | 99              | 388       | 388                                  | R TURB OH DET 1           | X           | X   | X |
|                     | EG5             | 38        | 38. 99                               | R TURB OH DET 2           | X           | X   | X |
| 5                   | 99              | 38        | 38                                   | R TURB OH DET 2           | X           | X   | X |
|                     | DF4             | 420       | 420. 359                             | APU FIRE LP 1             | X           | X   | X |
|                     | 359             | 420       | 420                                  | APU FIRE LP 1             | X           | X   | X |
| 5                   | FD4             | 161       | 161. 359                             | APU FIRE LP 2             | X           | X   | X |
|                     | 359             | 161       | 161                                  | APU FIRE LP 2             | X           | X   | X |
|                     | FE7             | 385       | 385. 20 SEC TD                       | CARGO DET AIR             | X           | X   | X |
| 5                   | DG11            | 419       | 419. 10 SEC TD                       | FWD DET FAN               | X           | X   | X |
|                     | AH6             | 36        | 36. 370                              | FWD CARGO DET 1           | X           | X   | X |
|                     | 370             | 36        | 36                                   | FWD CARGO DET 1           | X           | X   | X |
| 5                   | BG5             | 247       | 247. 370                             | FWD CARGO DET 2           | X           | X   | X |
|                     | 370             | 247       | 247                                  | FWD CARGO DET 2           | X           | X   | X |
|                     | EC11            | 206       | 206. 10 SEC TD                       | AFT DET FAN               | X           | X   | X |
| 5                   | DF1             | 164       | 164. 472                             | AFT CARGO DET 1           | X           | X   | X |
|                     | 472             | 164       | 164                                  | AFT CARGO DET 1           | X           | X   | X |
|                     | EG2             | 73        | 73. 472                              | AFT CARGO DET 2           | X           | X   | X |
| 5                   | 472             | 73        | 73                                   | AFT CARGO DET 2           | X           | X   | X |
|                     | DC10            | 158       | 158. 2 SEC TD                        | DUCT LEAK BITE            | X           | X   | X |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319X/D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.)  | MESSAGE          | STATUS      |     |   |
|---------------------|-----------------|-----------|---|------------------|-------------|-----|---|
|                     |                 |           |   |                  | MAINTENANCE | NVM |   |
| 5                   | FD3             | 270       | 270. STBY BUS OFF. 30 SEC TD  | L FLT CONT ELEC  | X           | X   | X |
|                     | EA10            | 222       | 222. STBY BUS OFF. 30 SEC TD  | R FLT CONT ELEC  | X           | X   | X |
|                     | FD7             | 328       | 328. 9  | L ELEV PCU       | X           | X   | X |
| 5                   | ED8             | 286       | 286. 9  | R ELEV PCU       | X           | X   | X |
|                     | BE8             | 281       | 281. 9  | RUDDER PCU       | X           | X   | X |
|                     | —               | —         | (IN AIR). (281+286+328). 10 SEC TD  | PCU MONITOR      | X           | X   | X |
| 5                   | AH9             | 469       | 469+275. ALL HYD SYS POWERED.   | ELEV L HYD PRESS | X           | X   | X |
|                     | BH9             | 275       | 2.5 SEC TD  | ELEV C HYD PRESS | X           | X   | X |
|                     | FK8             | 397       | 397+181. ALL HYD SYS POWERED.   | ELEV R HYD PRESS | X           | X   | X |
| 5                   | FJ6             | 181       | 2.5 SEC TD  | ELEV R HYD PRESS | X           | X   | X |
|                     | DH2             | 450       | 450+180. ALL HYD SYS POWERED.   | ELEV ASYM        | X           | X   | X |
|                     | DK4             | 180       | 2.5 SEC TD  | ELEV FEEL        | X           | X   | X |
| 5                   | EG15            | 464       | 464. 5 SEC TD   | ELEV FEEL        | X           | X   | X |
|                     | DC4             | 314       | 314. ALL HYD SYS POWERED. 10 SEC TD   | FLAP/SLAT BITE   | X           | X   | X |
|                     | DC17            | 442       | 442. R AC BUS OFF. 15 SEC TD  | FLAP/SLAT BITE   | X           | X   | X |
| 5                   | DF3             | 500       | 500. STBY BUS OFF. 5 SEC TD   | FLAP/SLAT BITE   | X           | X   | X |
|                     | ED9             | 366       | 366. L HYD SYS PRESS >1700. 1 SEC TD  | FLAP/SLAT VAL    | X           | X   | X |
|                     | EK09            | 77        | 77. 20 SEC TD   | RUDDER RAT10     | X           | X   | X |
| 5                   | AH14            | 82        | 82. STBY BUS OFF. 10 SEC TD   | SPOILERS         | X           | X   | X |
|                     | EK13            | 301       | 301. STBY BUS OFF   | YAW DAMPER       | X           | X   | X |
|                     | EJ11            | 207       | 207. STBY BUS OFF   | STAB TRIM        | X           | X   | X |
| 5                   | FD10            | 192       | 192   | DC FUEL PUMP ON  | X           | X   | X |
|                     | FD4             | 175       | 175   | FUEL QTY BITE    | X           | X   | X |
|                     | 13              | 175       | DD311 + DD312 + DD313 + DD317 + DD318 + DD319 + DD323 + DD324 + DD325   | FUEL QTY CHANNEL | X           | X   | X |
| 5                   | 13              | 175       | DD314 + DD315 + DD316 + DD320 + DD321 + DD322 + DD326 + DD327 + DD328   | FUEL QTY IND     | X           | X   | X |
|                     | ED04            | 175       | (DV601 INVALID + DV602 INVALID + DV603 INVALID). 175. FUEL QTY CHANNEL  | FUEL QTY BITE    | X           | X   | X |
|                     | DE14            | 403       | 403. L HYD SYS PRESS < 2800.  | L HYD SYS MAINT  | X           | X   | X |
| 5                   | 6               | 120       | 403. BOTH ENG RUN. 60 SEC TD  | L HYD SYS MAINT  | X           | X   | X |
|                     | FC09            | 120       | R HYD SYS PRESS < 2800.   | R HYD SYS MAINT  | X           | X   | X |
|                     | 6               | 120       | 120. BOTH ENG RUN. 60 SEC TD  | R HYD SYS MAINT  | X           | X   | X |
| 5                   | DJ10            | 60        | C HYD SYS PRESS < 2800.   | C HYD SYS MAINT  | X           | X   | X |
|                     | 6               | 60        | 60. BOTH ENG RUN. 60 SEC TD   | C HYD SYS MAINT  | X           | X   | X |
|                     | 18              | 184       | 184. STBY BUS OFF 5 SEC TD  | POWER XFER UNIT  | X           | X   | X |
| 5                   | DK5             | 184       | 184. STBY BUS OFF 5 SEC TD  | RAT              | X           | X   | X |
|                     | FK6             | 405       | 405.  | RSV BRAKE VAL    | X           | X   | X |
|                     | FK10            | 64        | 64. 2 SEC TD  | RSV BRAKE VAL    | X           | X   | X |
| 5                   | 6               | AV105     | HYD QTY L ≥ 1.22  | L HYD QTY 0/FULL | X           | X   | X |
|                     | 6               | AV104     | HYD QTY C ≥ 1.22  | C HYD QTY 0/FULL | X           | X   | X |
|                     | 6               | AV106     | HYD QTY R ≥ 1.22  | R HYD QTY 0/FULL | X           | X   | X |
| 5                   | F65             | 95        | 95. 10 SEC TD   | L ENG TAI VALVE  | X           | X   | X |
|                     | F68             | 319       | 319. 10 SEC TD  | R ENG TAI VALVE  | X           | X   | X |
|                     | F88             | 457       | 457. ON GND. 10 SEC TD  | CAPT PITOT HEAT  | X           | X   | X |
| 5                   | EK5             | 170       | 170. ON GND. 10 SEC TD  | L AUX PITOT HEAT | X           | X   | X |
|                     | EK12            | 394       | 394. ON GND. 10 SEC TD  | F/O PITOT HEAT   | X           | X   | X |
|                     | EK8             | 241       | 241. ON GND. 10 SEC TD  | R AUX PITOT HEAT | X           | X   | X |
| 5                   | DB11            | 463       | 463. L AC BUS OFF. 5 SEC TD   | L ENG PROBE HEAT | X           | X   | X |
|                     | E48             | 483       | 483. R AC BUS OFF. 5 SEC TD   | R ENG PROBE HEAT | X           | X   | X |
|                     | EC10            | 113       | 113. 75. BOTH ENGINES RUNNING   | FLT DATA REC     | X           | X   | X |
| 5                   | AJ14            | 75        | 75. L AC BUS OFF. 60 SEC TD   | FLT DATA ACQ     | X           | X   | X |
|                     | AJ14            | 75        | 75. L AC BUS OFF. BOTH ENGINES RUNNING.   | FLT DATA ACQ     | X           | X   | X |
|                     | 31-31-01        | —         | 60 SEC TD   | FLT DATA ACQ     | X           | X   | X |
| 5                   | B04             | —         | (OTHER FAIL -L) + (OWN FAIL -L)   | L EICAS CMPTR    | X           | X   | X |
|                     | —               | —         | (OTHER FAIL -L) + (OWN FAIL -L)   | R EICAS CMPTR    | X           | X   | X |
|                     | —               | —         | SELF DETECTED FAULT ONSIDE + SELF DETECTED FAULT OFFSIDE + L EICAS CMPTR + R EICAS CMPTR + (NO X-TALK DATA). ALTN EICAS CMPTR | EICAS BITE       | X           | X   | X |
| 5                   | —               | —         | ENG DISAGREE IN NUM + CAUT ALERT FAULT  | EICAS DISAGREE   | X           | X   | X |
|                     | BC8             | 412       | 412. STBY BUS OFF   | WARN ELEX        | X           | X   | X |

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## EICAS STATUS AND MAINTENANCE MESSAGES

D280N032S

31-41-05

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**TABLE 1 (CONT)**

| SCHEMATIC REFERENCE                       | D319/<br>D321X<br>PIN  | INPUT NO.                                    | INPUT REQ FOR MESSAGE (BY INPUT NO.) <span style="border: 1px solid black; padding: 0 2px;">5</span>  | MESSAGE   | STATUS            | MAINT | INM |
|---|--|--|---|---|-------------------|-------|-----|
|   |  |  |   |   |                   |       |     |
| 7 <span style="font-size: 2em;">}</span>  | 32-09-02 (SH 1)  | FE9<br>BJ13                                  | 360<br>445  | 360 ⊙ 445 • R AC BUS OFF • 10 SEC TD                  | AIR/GND DISAGREE  | X     | X X |
|   | 32-09-02 (SH 1)  | FF8<br>BH1                                   | 421<br>157  | 421 ⊙ 157 • R AC BUS OFF • 10 SEC TD                  | NOSE A/G DISAGREE | X     | X X |
| 10 <span style="font-size: 2em;">}</span> | 32-42-04 (SH 2)  | BF15   | 159   | 159 • ANTI-SKID OFF                                   | NORM ANTISKID     | X     | X X |
|   | 32-42-04 (SH 2)  | AD3  | 398   | 398 • ANTI-SKID OFF                                   | ALTN ANTISKID     | X     | X X |
|   | 32-42-04 (SH 2)  | DB12   | 78  | 78  | ANTISKID/AUTO BRK | X     | X X |
|   | 32-61-01   | AG12<br>DB07<br>DE07<br>EJ07<br>DF06<br>FC07 | 298<br>43<br>439<br>277<br>372<br>344   | (298 ⊙ 43) • (439 + 277) •<br>R AC BUS OFF • 2 SEL TD | GEAR DISAGREE     | X     | X X |
| 32-61-01                                  | AD10   | 83   | (372 ⊙ 344) • R AC BUS OFF • 30 SEC TD  | NOSE GEAR DOWN  | X                 | X X   |     |
| 32-61-01                                  | DC12<br>DF06<br>ED11<br>FC07                                     | 202<br>372<br>191<br>344                     | (83 ⊙ 202) • R AC BUS OFF • 2 SEC TD  | NOSE GEAR LOCKED                                      | X                 | X X   |     |
| 32-61-01                                  |  |  | 191 • 372 • 344 • R AC BUS OFF • 30 SEC TD  | ALL GEAR DOWN   | X                 | X X   |     |
| 32-61-01                                  |  |  | 191 • (439 + 277) • R AC BUS OFF • 60 SEC TD  | GEAR LEVER  | X                 | X X   |     |
| 32-61-01                                  | FDD6<br>DF08   | 104<br>387                                   | (104 ⊙ 387) • R AC BUS OFF • 30 SEC TD  | R GEAR DOWN   | X                 | X X   |     |
| 32-61-01                                  | FC05<br>DG13   | 456<br>163                                   | (456 ⊙ 163) • R AC BUS OFF • 30 SEC TD  | L GEAR DOWN   | X                 | X X   |     |
| 32-61-01                                  |  |  | ANY OF THE PREVIOUS SEVEN MESSAGES<br>( (298 ⊙ 43) • 439 • 277 • R AC BUS OFF ) •<br>2 SEC TD ) + ( (125 ⊙ 335) • R AC BUS OFF ) •<br>10 SEC TD ) | LDG GEAR MONITOR<br>PSEU BITE                         | X                 | X X   |     |
| 34-46-01 (SH 2)                           | BJ1  | 33   | 33 • STBY BUS OFF • 5 SEC TD  | GND PROX BITE   | X                 | X X   |     |
| 49-27-01                                  | EK4  | 426  | 426 • 60 SEC TD   | APU OIL QTY   | X                 | X X   |     |
| 49-52-02                                  | FE1  | 393  | 393 • 60 SEC TD   | APU DOOR  | X                 | X X   |     |
| 49-61-01                                  | BA13   | 480  | 480   | APU BITE  | X                 | X X   |     |
| 73-21-01                                  | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD001  | DD001   | L EEC BITE  | X                 | X X   |     |
| 73-21-01                                  | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD051  | DD051   | R EEC BITE  | X                 | X X   |     |
| 73-31-01                                  | AJ11   | 50   | 50 • 10 SEC TD  | L ENG FUEL FILT                                       | X                 | X X   |     |
| 73-31-01                                  | AK7  | 274  | 274 • 10 SEC TD   | R ENG FUEL FILT                                       | X                 | X X   |     |
| 73-31-01                                  | EH5  | 341  | 341 • L ENG RUNNING • 5 SEC TD  | L ENG LP PUMP   | X                 | X X   |     |
| 73-31-01                                  | EJ5  | 214  | 214 • R ENG RUNNING • 5 SEC TD  | R ENG LP PUMP   | X                 | X X   |     |
| 74-31-01                                  | BH15   | 317  | 317   | L IGN STBY BUS  | X                 | X X   |     |
| 74-31-01                                  | BK2  | 413  | 413   | R IGN STBY BUS  | X                 | X X   |     |
| 75-32-01                                  | AH5  | 51   | 51 • L ENG RUNNING • 5 SEC TD   | L ENG SURGE CONT                                      | X                 | X X   |     |
| 75-32-01                                  | DJ2  | 436  | 436 • R ENG RUNNING • 5 SEC TD  | R ENG SURGE CONT                                      | X                 | X X   |     |
| 75-32-01                                  | BJ10   | 486  | 486 • L ENG RUNNING • 5 SEC TD  | L ENG SURGE BITE                                      | X                 | X X   |     |
| 75-32-01                                  | DJ3  | 499  | 499 • R ENG RUNNING • 5 SEC TD  | R ENG SURGE BITE                                      | X                 | X X   |     |
| 77-12-01                                  | <span style="border: 1px solid black; padding: 0 2px;">6</span>  | —  | LN1 < 19.8% • (L ENG RUN • 60 SEC TD •<br>20 SEC TD   | L ENG LOW N1  | X                 | X X   |     |
| 77-12-01                                  | <span style="border: 1px solid black; padding: 0 2px;">6</span>  | —  | RN1 < 19.8% • (R ENG RUN • 60 SEC TD •<br>20 SEC TD   | R ENG LOW N1  | X                 | X X   |     |
| 77-12-04                                  | FJ10   | 32   | (32 • N3 > IDLE + 32 • STBY BUS OFF •<br>N3 > IDLE • 10 SEC TD  | L ENG SPEED CARD                                      | X                 | X X   |     |
| 77-12-05                                  | FB10   | 256  | (256 • N37 > IDLE + 256 • STBY BUS OFF •<br>N3 > IDLE • 10 SEC TD   | R ENG SPEED CARD                                      | X                 | X X   |     |
| 77-31-01                                  | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD261  | DD261 • 10 SEC TD   | L ENG VIB   | X                 | X X   |     |
| 77-31-01                                  | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD259  | (DD259 + DD261) • 10 SEC TD   | L ENG VIB BITE  | X                 | X X   |     |
| 77-31-01                                  | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD266  | DD266 • 10 SEC TD   | R ENG VIB   | X                 | X X   |     |
| 77-31-01                                  | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD274  | (DD264 + DD266) • 10 SEC TD   | R ENG VIB BITE  | X                 | X X   |     |
| 78-36-01                                  | BH7  | 103  | 103 • L AC BUS OFF • 2 SEC TD   | L REV ISLN VAL  | X                 | X X   |     |
| 78-36-01                                  | DH7  | 391  | 391 • R AC BUS OFF • 2 SEC TD   | R REV ISLN VAL  | X                 | X X   |     |

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**EICAS STATUS AND  
MAINTENANCE MESSAGES**

D280N032S

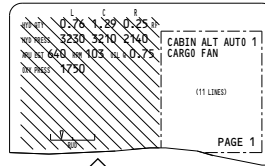
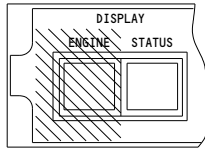
**31-41-05**

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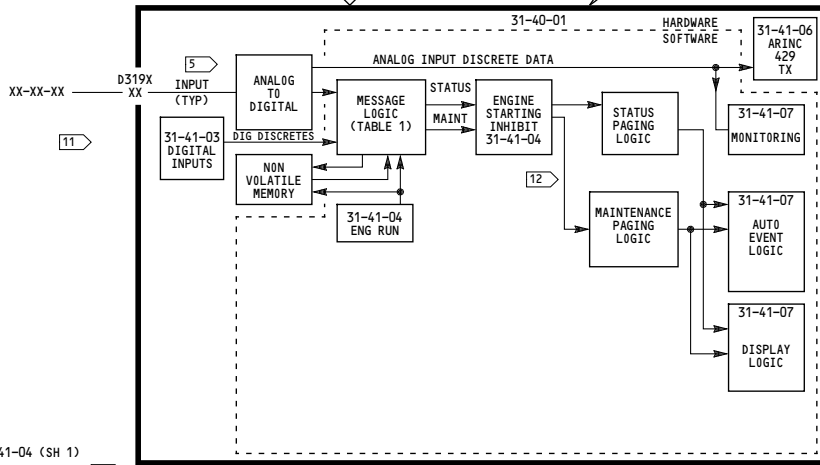
5100

M10195 EICAS DISPLAY SELECT PNL (P9) 31-41-01 (SH 1)



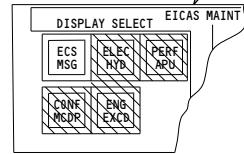
N10014 EICAS LOWER DISPLAY IND (P2) 31-41-07 (SH 2)

STATUS FORMAT

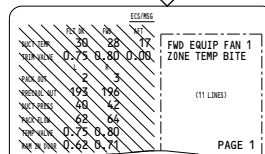


**NOTES:**

- 1 SEE 31-41-04 (SH 1)
- 2 SEE 31-41-02
- 3 SEE 31-41-04 (SH 2)
- 4 454=GND=TEST START
- 5 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT: 51,169, 283,494 } TRUE=OPEN FALSE=GND
- 6 SEE 31-41-02 (SH 2)
- 7 SEE 31-41-06 (SH 1)
- 8 INPUTS IDENTICAL TO M10181 AND M10182. ONLY M10181 SHOWN.
- 9 INHIBITED UNTIL ON GND WITH ALL HYD SYS PRESSURIZED AND AIRSPEED < 50 KNTS
- 10 SEE 31-41-04 (SH 3)
- 11 TO OTHER COMPUTER D321X
- 12 NEW MESSAGES AND RECORDING INTO NVM, INHIBITED DURING ENGINE START
- 13 SEE 31-41-03
- 14 LATCHES NVM ONLY IN THE AIR



M10372 EICAS MAINTENANCE PNL (P61) 31-41-01 (SH 1)



N10014 EICAS LOWER DISPLAY IND (P2) 31-41-07 (SH 2)

ECS/MSG MAINTENANCE FORMAT

TABLE 1  
EICAS MESSAGE LOGIC

| SCHEMATIC REFERENCE | D319X/D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.)  | MESSAGE           | STATUS | MAINTENANCE | NVM |
|---------------------|-----------------|-----------|---|-------------------|--------|-------------|-----|
| 21-31-01            | EF14            | 112       | 112.5 SEC TD  | CABIN ALT AUTO. 1 | X      | X           | 1   |
| 21-31-02            | EF13            | 336       | 336.5 SEC TD  | CABIN ALT AUTO. 2 | X      | X           |     |
| 21-43-01            | DA5             | 227       | 227. L UTIL BUS OFF. 1 SEC TD   | FWD CARGO FAN     | X      | X           | X   |
| 21-44-01            | AJ15            | 67        | 67. R UTIL BUS OFF. 1 SEC TD  | AFT CARGO FAN     | X      | X           | X   |
| 21-51-09            | FD2             | 397       | 397   | L PACK BITE       | X      |             |     |
| 21-51-10            | DF11            | 69        | 69  | R PACK BITE       | X      |             |     |
| 21-58-01            | DA3             | 84        | 84. ON GND .30 SEC TD   | FWD EQ SUP FLOW   | X      | X           |     |
| 21-58-01            | DA4             | 244       | 244. ON GND .30 SEC TD  | FWD EQ EXH FLOW   | X      | X           |     |
| 21-58-01            | FH7             | 375       | 375. ON GND .30 SEC TD  | AFT EQ FLOW       | X      | X           |     |
| 21-58-02            |                 |           | 376.454 .2 SEC TD   | FWD EQPT EXH DET  | X      | X           |     |
| 21-58-01            |                 |           | (FWD EQ EXH FLOW) + (FWD EQ SUP FLOW) + (AFT EQ FLOW)                                     | EQPT CLG FLOW     | X      |             |     |
| 21-58-03            | AE11            | 330       | 330. LAC BUS OFF. CLG TEST .4 SEC TD  | FWD EQ SUP FAN 1  | X      | X           |     |
| 21-58-03            | AD9             | 58        | (58. CLG TEST.304. R AC BUS OFF.2 SEC TD) + (58. CLG TEST).2 SEC TD                       | FWD EQ SUP FAN 2  | X      | X           |     |
| 21-58-03            | E-D14           | 304       | (FWD EQ SUP FAN 1) + (FWD EQ SUP FAN 2) + (AFT EQ SUP FAN 1) + (AFT EQ SUP FAN 2)         | EQ CLG FAN        | X      |             |     |
| 21-58-03            | AG14            | 249       | 249. L AC BUS OFF. 2 SEC TD   | AFT EQ EXH FAN 1  | X      | X           |     |
| 21-58-03            | AK14            | 74        | 74. R AC BUS OFF. 2 SEC TD  | AFT EQ EXH FAN 2  | X      | X           |     |
| 21-58-03            | FJ7             | 503       | 503. LAC BUS OFF.3 SEC TD   | AFT EQ SUP FAN 1  | X      | X           |     |
| 21-58-03            | FK7             | 151       | 151. RAC BUS OFF .4 SEC TD  | AFT EQ SUP FAN 2  | X      | X           |     |
| 21-58-06            | F-K5            | 454       | (454. LAC BUS OFF) + (EITHER ENGINE RUNNING .454 .STBY BUS OFF)                           | EQPT CLG TEST     | X      | X           |     |
| 21-58-01            | D-A3            | 84        | ANYONE OF THE FOLLING 3   | EQPT CLG SENSOR   | X      |             |     |
| 21-58-01            | D-A4            | 244       | 84 .454 .2 SEC TD   | FWD EQ SUP SNSR   | X      | X           |     |
| 21-58-01            | F-H7            | 375       | 244 .454 .2 SEC TD  | FWD EQ EXH SNSR   | X      | X           |     |
| 21-58-01            | F-H7            | 375       | 375 .454 .2 SEC TD  | AFT EQ SNSR       | X      | X           |     |
| 21-58-02            | DE15            | 266       | 266 .454 .10 SEC TD   | OVBD EX VAL TEST  | X      | X           |     |
| 21-58-02            | D-E15           | 266       | 266 .454 .2 SEC TD  | OVBD EX VAL OPEN  | X      | X           |     |
| 21-58-02            | E-D14           | 304       | 304 .454 .10 SEC TD   | EQPT SMOKE TEST   | X      | X           |     |
| 21-58-02            | D-A2            | 308       | 308 .454 .2 SEC TD  | FWD EQPT DET 1    | X      | X           |     |
| 21-58-02            | DF13            | 229       | 229 .454 .2 SEC TD  | FWD EQPT DET 2    | X      | X           |     |
| 21-61-01            | D88             | 186       | 186   | ZONE TEMP BITE    | X      | X           |     |
| 24-11-01            |                 |           | L IDG OIL TEMP RISE > 175°C+ ((L IDG OIL TEMP RISE <= 0.5). L ENG RUNNING. 59.60 SEC TD)  | L IDG TEMP SENS   | X      | X           |     |
| 24-11-01            |                 |           | L IDG OIL TEMP > 140°C. L IDG TEMP SENS.300 SEC TD  | L IDG OIL TEMP    | X      | X           |     |
| 24-11-02            |                 |           | R IDG OIL TEMP RISE > 175°C+ ((R IDG OIL TEMP RISE <= 0.5). R ENG RUNNING. 283.60 SEC TD) | R IDG TEMP SENS   | X      | X           |     |
| 24-11-02            |                 |           | R IDG OIL TEMP > 140°C. R IDG TEMP SENS.300 SEC TD  | R IDG OIL TEMP    | X      | X           |     |
| 24-11-02            | DA12            | 283       | (ABS(IDG OIL TEMP RISE DIFF(L-R)) > 6).L IDG TEMP SENS.                                   | IDG RISE TEMP     | X      | X           |     |
| 24-11-02            | D-B1            | 593       | R IDG TEMP SENSE.283.59 .600 SEC TD   |                   |        |             |     |
| 24-25-01            | FJ04            | 133       | 133   | HYD GEN ON        | X      | X           | 14  |
| 24-25-01            | EB13            | 67        | 67 .5 SEC TD  | HYD GEN VAL       | X      | X           |     |

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**EICAS STATUS AND MAINTENANCE MESSAGES**

Incorporates  
31-0059 R01

D280N032S

**31-41-05**



# 757-200 SYSTEM SCHEMATIC MANUAL

TABLE 1 (CONT)

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TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319X/D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.) | MESSAGE          | MAINTENANCE |     |     |
|---------------------|-----------------|-----------|--------------------------------------|------------------|-------------|-----|-----|
|                     |                 |           |                                      |                  | STATUS      | NVM | NVM |
| 5                   | EA12            | 494       | 494. R AC BUS OFF. 10 SEC TD         | MAIN BAT. CHGR   | X           | X   | X   |
|                     | FE02            | 169       | 169. R AC BUS OFF. 10 SEC TD         | APU BAT CHGR     | X           | X   | X   |
|                     | FE03            | 345       | 365. 1 SEC TD                        | APU BAT NO STBY  | X           | X   | X   |
|                     | EJ14            | 62        | 62                                   | TR UNIT          | X           | X   | X   |
|                     | AD4             | 250       | INV AC VOLTS > 124 + <106            | STBY INVERTER    | X           | X   | X   |
| 3                   | EG11            | 541       | 0.7 SEC TD. BAT SW ON                | F/O INSTR XFER   | X           | X   | X   |
|                     | BN14            | 285       | 285. R AC BUS OFF                    | CAPT INSTR XFER  | X           | X   | X   |
| 5                   | BJ14            | 61        | 61. L AC BUS OFF                     | L ENG FIRE LP 1  | X           | X   | X   |
|                     | D66             | 467       | 467. 57                              | L ENG FIRE LP 1  | X           | X   | X   |
| 3                   | EG4             | 233       | 233. 57                              | L ENG FIRE LP 2  | X           | X   | X   |
|                     | AG2             | 484       | 484. 99                              | L ENG FIRE LP 2  | X           | X   | X   |
| 3                   | BE9             | 311       | 311. 99                              | R ENG FIRE LP 1  | X           | X   | X   |
|                     | AG4             | 356       | 356. 246                             | R ENG FIRE LP 2  | X           | X   | X   |
| 3                   | BE6             | 453       | 453. 246                             | L ENG OH LP 1    | X           | X   | X   |
|                     | DG9             | 339       | 339. 466                             | L ENG OH LP 2    | X           | X   | X   |
| 3                   | EG6             | 297       | 297. 466                             | R ENG OH LP 1    | X           | X   | X   |
|                     | AG7             | 132       | 132. 246                             | R ENG OH LP 2    | X           | X   | X   |
| 3                   | BG4             | 88        | 88. 246                              | L STRUT OH DET 1 | X           | X   | X   |
|                     | DG1             | 115       | 115. 466                             | L STRUT OH DET 2 | X           | X   | X   |
| 3                   | EG7             | 262       | 262. 466                             | R STRUT OH DET 1 | X           | X   | X   |
|                     | AH7             | 260       | 260. 57                              | R STRUT OH DET 2 | X           | X   | X   |
| 3                   | BG2             | 312       | 312. 57                              | L TURB OH DET 1  | X           | X   | X   |
|                     | DF5             | 388       | 388. 99                              | L TURB OH DET 2  | X           | X   | X   |
| 3                   | EG5             | 38        | 38. 99                               | R TURB OH DET 1  | X           | X   | X   |
|                     | DF4             | 420       | 420. 359                             | R TURB OH DET 2  | X           | X   | X   |
| 3                   | FD4             | 161       | 161. 359                             | APU FIRE LP 1    | X           | X   | X   |
|                     | DG11            | 385       | 385. 20 SEC TD                       | APU FIRE LP 2    | X           | X   | X   |
| 3                   | AH6             | 419       | 419. 10 SEC TD                       | APU FIRE LP 2    | X           | X   | X   |
|                     | BG5             | 247       | 247. 370                             | CARGO DET AIR    | X           | X   | X   |
| 3                   | EC11            | 206       | 206. 10 SEC TD                       | FWD CARGO DET 1  | X           | X   | X   |
|                     | DF1             | 164       | 164. 472                             | FWD CARGO DET 2  | X           | X   | X   |
| 3                   | EG2             | 73        | 73. 472                              | FWD CARGO DET 2  | X           | X   | X   |
|                     | EG2             | 472       | 472                                  | AFT CARGO DET 1  | X           | X   | X   |
| 3                   | DC10            | 158       | 158. 2 SEC TD                        | AFT CARGO DET 2  | X           | X   | X   |
|                     | DC10            | 158       | 158. 2 SEC TD                        | DUCT LEAK BITE   | X           | X   | X   |

| SCHEMATIC REFERENCE | D319X/D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.)          | MESSAGE          | MAINTENANCE |     |     |
|---------------------|-----------------|-----------|---|------------------|-------------|-----|-----|
|                     |                 |           |   |                  | STATUS      | NVM | NVM |
| 5                   | FD3             | 270       | 270. STBY BUS OFF. 30 SEC TD                  | L FLT CONT ELEC  | X           | X   | X   |
|                     | EA10            | 222       | 222. STBY BUS OFF. 30 SEC TD                  | R FLT CONT ELEC  | X           | X   | X   |
| 3                   | FD7             | 328       | 328. 9  | L ELEV PCU       | X           | X   | X   |
|                     | ED8             | 286       | 286. 9  | R ELEV PCU       | X           | X   | X   |
| 3                   | BE8             | 281       | 281. 9  | RUDDER PCU       | X           | X   | X   |
|                     | AH9             | 469       | (IN AIR). (281+286+328). 10 SEC TD            | PCU MONITOR      | X           | X   | X   |
| 3                   | BH9             | 275       | 469+275. ALL HYD SYS POWERED.                 | ELEV L HYD PRESS | X           | X   | X   |
|                     | FK8             | 397       | 2.5 SEC TD                                    | ELEV C HYD PRESS | X           | X   | X   |
| 3                   | FJ6             | 181       | 397+181. ALL HYD SYS POWERED.                 | ELEV R HYD PRESS | X           | X   | X   |
|                     | DH2             | 450       | 2.5 SEC TD                                    | ELEV ASYM        | X           | X   | X   |
| 3                   | DK4             | 180       | 450+180. ALL HYD SYS POWERED.                 | ELEV FEEL        | X           | X   | X   |
|                     | EG15            | 464       | 2.5 SEC TD                                    | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | DC4             | 314       | 464. 5 SEC TD                                 | FLAP/SLAT BITE   | X           | X   | X   |
|                     | DC17            | 442       | 314. ALL HYD SYS POWERED. 10 SEC TD           | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | DF3             | 500       | 442. R AC BUS OFF. 15 SEC TD                  | FLAP/SLAT BITE   | X           | X   | X   |
|                     | ED9             | 366       | 500. STBY BUS OFF. 5 SEC TD                   | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | EK09            | 77        | 366. L HYD SYS PRESS >1700. 1 SEC TD          | FLAP/SLAT BITE   | X           | X   | X   |
|                     | AH14            | 82        | 77. 20 SEC TD                                 | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | EK13            | 301       | 82. STBY BUS OFF. 10 SEC TD                   | FLAP/SLAT BITE   | X           | X   | X   |
|                     | EJ11            | 207       | 301. STBY BUS OFF                             | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | FD10            | 192       | 207. STBY BUS OFF                             | FLAP/SLAT BITE   | X           | X   | X   |
|                     | FD4             | 175       | 192   | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | DD311           | 175       | 175   | FLAP/SLAT BITE   | X           | X   | X   |
|                     | DD312           | 175       | DD311 + DD312 + DD313 + DD317 + DD318         | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | DD319           | 175       | DD311 + DD312 + DD313 + DD317 + DD318         | FLAP/SLAT BITE   | X           | X   | X   |
|                     | DD324           | 175       | DD311 + DD312 + DD313 + DD317 + DD318         | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | DD321           | 175       | DD311 + DD312 + DD313 + DD317 + DD318         | FLAP/SLAT BITE   | X           | X   | X   |
|                     | DD322           | 175       | DD311 + DD312 + DD313 + DD317 + DD318         | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | DD327           | 175       | DD311 + DD312 + DD313 + DD317 + DD318         | FLAP/SLAT BITE   | X           | X   | X   |
|                     | DD328           | 175       | DD311 + DD312 + DD313 + DD317 + DD318         | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | DD601           | 175       | DD311 + DD312 + DD313 + DD317 + DD318         | FLAP/SLAT BITE   | X           | X   | X   |
|                     | DD602           | 175       | DD311 + DD312 + DD313 + DD317 + DD318         | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | DE14            | 403       | DD601 INVALID + DD602 INVALID + DD603 INVALID | FLAP/SLAT BITE   | X           | X   | X   |
|                     | FC09            | 120       | 175. FUEL QTY CHANNEL                         | FLAP/SLAT BITE   | X           | X   | X   |
| 3                   | DE14            | 403       | L HYD SYS PRESS < 2800.                       | L HYD SYS MAINT  | X           | X   | X   |
|                     | FC09            | 120       | 403. BOTH ENG RUN. 60 SEC TD                  | L HYD SYS MAINT  | X           | X   | X   |
| 3                   | FC09            | 120       | R HYD SYS PRESS < 2800.                       | R HYD SYS MAINT  | X           | X   | X   |
|                     | DJ10            | 60        | 120. BOTH ENG RUN. 60 SEC TD                  | R HYD SYS MAINT  | X           | X   | X   |
| 3                   | DJ10            | 60        | C HYD SYS PRESS < 2800.                       | C HYD SYS MAINT  | X           | X   | X   |
|                     | DK5             | 184       | 60. BOTH ENG RUN. 60 SEC TD                   | C HYD SYS MAINT  | X           | X   | X   |
| 3                   | FK10            | 64        | 184. STBY BUS OFF 5 SEC TD                    | POWER XFER UNIT  | X           | X   | X   |
|                     | AV105           | 64        | 64. 2 SEC TD                                  | RAT              | X           | X   | X   |
| 3                   | AV105           | 64        | 64. 2 SEC TD                                  | RSV BRAKE VAL    | X           | X   | X   |
|                     | AV104           | 64        | 64. 2 SEC TD                                  | L HYD QTY 0/FULL | X           | X   | X   |
| 3                   | AV104           | 64        | 64. 2 SEC TD                                  | R HYD QTY 0/FULL | X           | X   | X   |
|                     | AV106           | 64        | 64. 2 SEC TD                                  | C HYD QTY 0/FULL | X           | X   | X   |
| 3                   | FG5             | 95        | 95. 10 SEC TD                                 | R HYD QTY 0/FULL | X           | X   | X   |
|                     | FG8             | 319       | 319. 10 SEC TD                                | R HYD QTY 0/FULL | X           | X   | X   |
| 3                   | FB8             | 457       | 457. 10 SEC TD                                | L ENG TAI VALVE  | X           | X   | X   |
|                     | EK5             | 170       | 170. 10 SEC TD                                | R ENG TAI VALVE  | X           | X   | X   |
| 3                   | EK12            | 394       | 457. ON GND. 10 SEC TD                        | CAPT PITOT HEAT  | X           | X   | X   |
|                     | EK8             | 241       | 170. ON GND. 10 SEC TD                        | F/O PITOT HEAT   | X           | X   | X   |
| 3                   | DB11            | 463       | 394. ON GND. 10 SEC TD                        | R AUX PITOT HEAT | X           | X   | X   |
|                     | EA8             | 483       | 241. ON GND. 10 SEC TD                        | L ENG PROBE HEAT | X           | X   | X   |
| 3                   | EC10            | 113       | 463. L AC BUS OFF. 5 SEC TD                   | R ENG PROBE HEAT | X           | X   | X   |
|                     | AJ14            | 75        | 483. R AC BUS OFF. 5 SEC TD                   | R ENG PROBE HEAT | X           | X   | X   |
| 3                   | AJ14            | 75        | 113. 75. BOTH ENGINES RUNNING                 | FLT DATA REC     | X           | X   | X   |
|                     | AJ14            | 75        | L AC BUS OFF. 60 SEC TD                       | FLT DATA ACQ     | X           | X   | X   |
| 3                   | B04             | ---       | 75. L AC BUS OFF. BOTH ENGINES RUNNING.       | L EICAS CMPTR    | X           | X   | X   |
|                     | ---             | ---       | 60 SEC TD                                     | R EICAS CMPTR    | X           | X   | X   |
| 3                   | ---             | ---       | (OTHER FAIL -L) + (OWN FAIL -L)               | EICAS BITE       | X           | X   | X   |
|                     | ---             | ---       | (OTHER FAIL -L) + (OWN FAIL -L)               | EICAS BITE       | X           | X   | X   |
| 3                   | ---             | ---       | SELF DETECTED FAULT ONSIDE +                  | EICAS BITE       | X           | X   | X   |
|                     | ---             | ---       | SELF DETECTED FAULT OFFSIDE +                 | EICAS BITE       | X           | X   | X   |
| 3                   | ---             | ---       | L EICAS CMPTR + R EICAS CMPTR                 | EICAS BITE       | X           | X   | X   |
|                     | ---             | ---       | + (NO X-TALK DATA). ALTN EICAS CMPTR          | EICAS BITE       | X           | X   | X   |
| 3                   | ---             | ---       | ENG DISAGREE IN NUM + CAUT ALERT FAULT        | EICAS DISAGREE   | X           | X   | X   |
|                     | ---             | ---       | 412. STBY BUS OFF                             | WARN ELEX        | X           | X   | X   |

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## EICAS STATUS AND MAINTENANCE MESSAGES

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**TABLE 1 (CONT)**

| SCHEMATIC REFERENCE  | D319/<br>D321X<br>PIN        | INPUT NO.                | INPUT REQ FOR MESSAGE (BY INPUT NO.)  | MESSAGE                       | STATUS | MAINT | INM |
|--|------------------------------|--------------------------|---|-------------------------------|--------|-------|-----|
|  |                              |                          |   |                               |        |       |     |
| 7 { 32-09-02 (SH 1)  | FE9<br>BJ13                  | 360<br>445               | 360 ⊙ 445 • R AC BUS OFF • 10 SEC TD  | AIR/GND DISAGREE              | X      | X     | X   |
|  | FF8<br>BH1                   | 421<br>157               | 421 ⊙ 157 • R AC BUS OFF • 10 SEC TD  | NOSE A/G DISAGREE             | X      | X     | X   |
| 10 { 32-42-04 (SH 2)<br>32-42-04 (SH 2)<br>32-42-04 (SH 2)<br>32-61-01 | BF15                         | 159                      | 159 • ANTI-SKID OFF   | NORM ANTISKID                 | X      | X     | X   |
|  | AD3                          | 398                      | 398 • ANTI-SKID OFF   | ALTN ANTISKID                 | X      | X     | X   |
|  | DB12                         | 78                       | 78  | ANTISKID/AUTO BRK             | X      | X     | X   |
|  | AG12                         | 298                      | (298 ⊙ 43) • (439 + 277) •<br>RAC BUS OFF • 2 SEL TD  | GEAR DISAGREE                 | X      | X     | X   |
|  | DB07<br>DE07<br>EJ07         | 43<br>439<br>277         |   |                               |        |       |     |
| 32-61-01   | DF06<br>FC07                 | 372<br>344               | (372 ⊙ 344) • R AC BUS OFF • 30 SEC TD  | NOSE GEAR DOWN                | X      | X     |     |
| 32-61-01   | AD10                         | 83                       | (83 ⊙ 202) • R AC BUS OFF • 2 SEC TD  | NOSE GEAR LOCKED              | X      | X     |     |
| 32-61-01   | DC12<br>DF06<br>ED11<br>FC07 | 202<br>372<br>191<br>344 | 191 • 372 • 344 • R AC BUS OFF • 30 SEC TD  | ALL GEAR DOWN                 | X      | X     |     |
| 32-61-01   |                              |                          | 191 • (439 + 277) • R AC BUS OFF • 60 SEC TD  | GEAR LEVER                    | X      | X     |     |
| 32-61-01   | FD06<br>DF08                 | 104<br>387               | (104 ⊙ 387) • R AC BUS OFF • 30 SEC TD  | R GEAR DOWN                   | X      | X     |     |
| 32-61-01   | FC05<br>DG13                 | 456<br>163               | (456 ⊙ 163) • R AC BUS OFF • 30 SEC TD  | L GEAR DOWN                   | X      | X     |     |
| 32-61-01   |                              |                          | ANY OF THE PREVIOUS SEVEN MESSAGES<br>( (298 ⊙ 43) • 439 • 277 • R AC BUS OFF ) •<br>2 SEC TD + ( (125 ⊙ 335) • R AC BUS OFF ) •<br>10 SEC TD | LDG GEAR MONITOR<br>PSEU BITE | X      | X     | X   |
| 32-61-01   | BF14<br>FC02                 | 125<br>335               |   |                               | X      | X     | X   |
| 34-46-01 (SH 2)  | BJ1                          | 33                       | 33 • STBY BUS OFF • 5 SEC TD  | GND PROX BITE                 | X      | X     |     |
| 49-27-01   | EK4                          | 426                      | (426. APU OIL QTY SEL)<br>+(APU OIL QTY "ADD").<br>APU OIL QTY SEL. 300 SEC TD  | APU OIL QTY                   | X      | X     | X   |
| 49-52-02   | FE1                          | 393                      | 393 • 60 SEC TD   | APU DOOR                      | X      | X     |     |
| 49-61-01   | BA13                         | 480                      | 480   | APU BITE                      | X      | X     |     |
| 73-21-01   | 13                           | DD001                    | DD001   | L EEC BITE                    | X      | X     |     |
| 73-21-01   | 13                           | DD051                    | DD051   | R EEC BITE                    | X      | X     |     |
| 73-31-01   | AJ11                         | 50                       | 50 • 10 SEC TD  | L ENG FUEL FILT               | X      | X     | X   |
| 73-31-01   | AK7                          | 274                      | 274 • 10 SEC TD   | R ENG FUEL FILT               | X      | X     | X   |
| 73-31-01   | EH5                          | 341                      | 341 • L ENG RUNNING • 5 SEC TD  | L ENG LP PUMP                 | X      | X     | X   |
| 73-31-01   | FJ5                          | 214                      | 214 • R ENG RUNNING • 5 SEC TD  | R ENG LP PUMP                 | X      | X     | X   |
| 74-31-01   | BH15                         | 317                      | 317   | L IGN STBY BUS                | X      | X     |     |
| 74-31-01   | BK2                          | 413                      | 413   | R IGN STBY BUS                | X      | X     |     |
| 75-32-01   | AH5                          | 51                       | 51 • L ENG RUNNING • 5 SEC TD   | L ENG SURGE CONT              | X      | X     | X   |
| 75-32-01   | DJ2                          | 436                      | 436 • R ENG RUNNING • 5 SEC TD  | R ENG SURGE CONT              | X      | X     | X   |
| 75-32-01   | BJ10                         | 486                      | 486 • L ENG RUNNING • 5 SEC TD  | L ENG SURGE BITE              | X      | X     |     |
| 75-32-01   | DJ3                          | 499                      | 499 • R ENG RUNNING • 5 SEC TD  | R ENG SURGE BITE              | X      | X     |     |
| 77-12-01   | 6                            | —                        | LN1 < 19.8% • (L ENG RUN • 60 SEC TD •<br>20 SEC TD   | L ENG LOW N1                  | X      | X     | X   |
| 77-12-01   | 6                            | —                        | RN1 < 19.8% • (R ENG RUN • 60 SEC TD •<br>20 SEC TD   | R ENG LOW N1                  | X      | X     | X   |
| 77-12-04   | FJ10                         | 32                       | (32 • N3 > IDLE + 32 • STBY BUS OFF •<br>N3 > IDLE • 10 SEC TD  | L ENG SPEED CARD              | X      | X     | X   |
| 77-12-05   | FB10                         | 256                      | (256 • N37 > IDLE + 256 • STBY BUS OFF •<br>N3 > IDLE • 10 SEC TD   | R ENG SPEED CARD              | X      | X     | X   |
| 77-31-01   | 13                           | DD261                    | DD261 • 10 SEC TD   | L ENG VIB                     | X      | X     |     |
| 77-31-01   | 13                           | DD259                    | (DD259 + DD261) • 10 SEC TD   | L ENG VIB BITE                | X      | X     |     |
| 77-31-01   | 13                           | DD266                    | DD266 • 10 SEC TD   | R ENG VIB                     | X      | X     |     |
| 77-31-01   | 13                           | DD274                    | (DD264 + DD266) • 10 SEC TD   | R ENG VIB BITE                | X      | X     |     |
| 78-36-01   | BH7                          | 103                      | 103 • L AC BUS OFF • 2 SEC TD   | L REV ISLN VAL                | X      | X     |     |
| 78-36-01   | DH7                          | 391                      | 391 • R AC BUS OFF • 2 SEC TD   | R REV ISLN VAL                | X      | X     |     |
| 79-35-01   | AH4                          | 131                      | 131. ((L OIL TEMP > 25) + IN AIR). 5 SEC TD   | L OIL FILTER                  | X      | X     | X   |
| 79-35-01   | DK3                          | 423                      | 423. ((R OIL TEMP > 25) + IN AIR). 5 SEC TD   | R OIL FILTER                  | X      | X     | X   |

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**EICAS STATUS AND  
MAINTENANCE MESSAGES**

 Incorporates  
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D280N032S

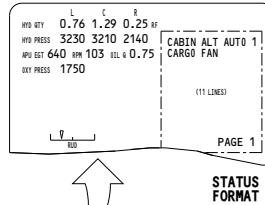
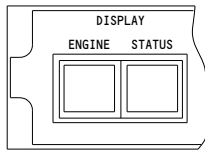
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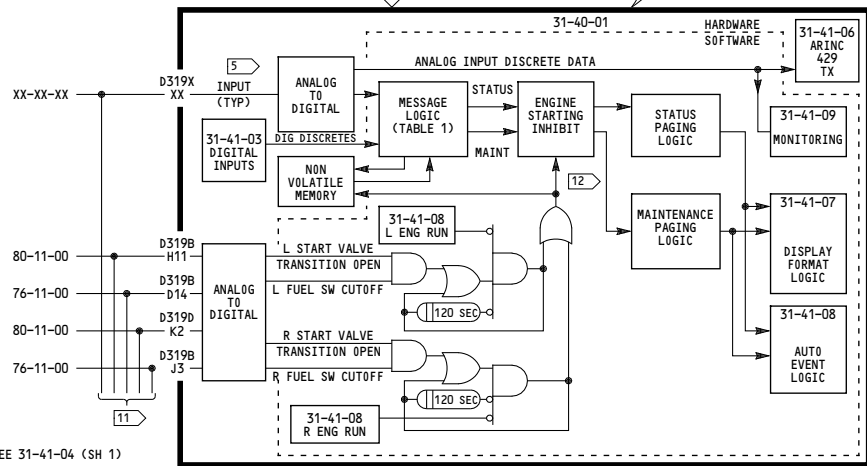
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**M10195 EICAS DISPLAY SELECT PNL (P9) 31-41-01 (SH 1)**

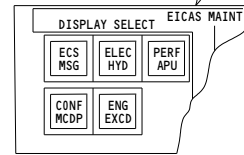


**M10014 EICAS LOWER DISPLAY IND (P2) 31-41-07 (SH 2)**

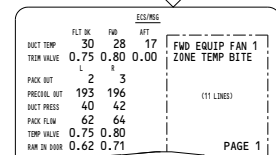


**NOTES:**

- 1 SEE 31-41-04 (SH 1)
- 2 SEE 31-41-08
- 3 SEE 31-41-04 (SH 2)
- 4 454=GND=TEST START
- 5 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT: 51,169 } TRUE=OPEN FALSE=GND 285,494 }
- 6 SEE 31-41-02 (SH 2)
- 7 SEE 31-41-06 (SH 1)
- 8 INPUTS IDENTICAL TO M10181 AND M10182. ONLY M10181 SHOWN.
- 9 INHIBITED UNTIL ON GND WITH ALL HYD SYS PRESSURIZED AND AIRSPEED < 50 KNTS
- 10 SEE 31-41-04 (SH 3)
- 11 TO OTHER COMPUTER D321X
- 12 NEW MESSAGES AND RECORDING INTO NVM, INHIBITED DURING ENGINE START
- 13 SEE 31-41-03
- 14 LATCHES NVM ONLY IN THE AIR



**M10372 EICAS MAINTENANCE PNL (P61) 31-41-01 (SH 1)**



**M10014 EICAS LOWER DISPLAY IND (P2) 31-41-07 (SH 2)**

**ECS/MSG MAINTENANCE FORMAT**

**TABLE 1 EICAS MESSAGE LOGIC**

| SCHEMATIC REFERENCE | D319X/D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.)   | MESSAGE           | STATUS | MAINTENANCE | NVM |
|---------------------|-----------------|-----------|--|-------------------|--------|-------------|-----|
| 21-31-01            | EF14            | 112       | 112.5 SEC TD   | CABIN ALT AUTO. 1 | X      | X           | 1   |
| 21-31-02            | EF13            | 336       | 336.5 SEC TD   | CABIN ALT AUTO. 2 | X      | X           |     |
| 21-43-01            | DA5             | 227       | 227. L UTIL BUS OFF. 1 SEC TD  | FWD CARGO FAN     | X      | X           | X   |
| 21-44-01            | AJ15            | 67        | 67. R UTIL BUS OFF. 1 SEC TD   | AFT CARGO FAN     | X      | X           | X   |
| 21-51-09            | FD2             | 397       | 397  | L PACK BITE       | X      |             |     |
| 21-51-10            | DF11            | 69        | 69   | R PACK BITE       | X      |             |     |
| 21-58-01            | DA3             | 84        | 84.30 SEC TD.ON GND  | FWD EQ SUP FLOW   | X      | X           |     |
| 21-58-01            | DA4             | 248       | 248.30 SEC TD.ON GND   | FWD EQ EXH FLOW   | X      | X           |     |
| 21-58-01            | FH7             | 375       | 375.30 SEC TD.ON GND   | AFT EQ FLOW       | X      | X           |     |
| 21-58-01            |                 |           | (FWD EQ EXH FLOW) + (FWD EQ SUP FLOW) + (AFT EQ FLOW)  | EQPT CLG FLOW     | X      |             |     |
| 21-58-03            | AE11            | 330       | (330. L AC BUS OFF.4 SEC TD)+ (CLG TEST.2 SEC TD.330.1 SEC TD)   | FWD EQ SUP FAN 1  | X      | X           |     |
| 21-58-03            | AD9 E-D14       | 58 304    | (58.CLG TEST.304.R AC BUS OFF.2 SEC TD) + (58.CLG TEST).2 SEC TD   | FWD EQ SUP FAN 2  | X      | X           |     |
| 21-58-03            |                 |           | (FWD EQ SUP FAN 1) + (FWD EQ SUP FAN 2) + (AFT EQ SUP FAN 2)   | EQ CLG FAN        | X      |             |     |
| 21-58-03            | AG14            | 249       | 249. L AC BUS OFF. 2 SEC TD  | AFT EQ EXH FAN 1  | X      | X           |     |
| 21-58-03            | AK14            | 74        | 74. R AC BUS OFF. 2 SEC TD   | AFT EQ EXH FAN 2  | X      | X           |     |
| 21-58-03            | FJ7             | 503       | (503. L AC BUS OFF.4 SEC TD) + (CLG TEST.2 SEC.503.1 SEC TD)   | AFT EQ SUP FAN 1  | X      | X           |     |
| 21-58-03            | FK7             | 151       | (151. CLG TEST.R AC BUS OFF.2 SEC TD) + (151. CLG TEST.2 SEC TD)   | AFT EQ SUP FAN 2  | X      | X           |     |
| 21-58-06            | F-K5            | 454       | (ENGINES SHUTDOWN.L AC BUS OFF. 454+L OR R ENGINE RUNNING. STBY BUS OFF.454).10 SEC TD                       | EQPT CLG TEST     | X      | X           |     |
| 21-58-01            | D-A3            | 84        | ANYONE OF THE FOLLING 3  | EQPT CLG SENSOR   | X      |             |     |
| 21-58-01            | D-44            | 244       | (3 SEC DURING TEST.84).1 SEC TD  | FWD EQ SUP SNSR   | X      | X           |     |
| 21-58-01            | F-H7            | 375       | (3 SEC DURING TEST.244).1 SEC TD   | FWD EQ EXH SNSR   | X      | X           |     |
| 21-58-01            | DE15            | 266       | (3 SEC DURING TEST.375).1 SEC TD   | AFT EQ SNSR       | X      | X           |     |
| 21-58-02            |                 |           | (3 SEC DURING TEST.266.FWD EQ EXH SNSR.2 SEC TD)+(CLG TEST.266.90 SEC TD)                                    | OVBD EX VAL TEST  | X      | X           |     |
| 21-58-02            | D-E15           | 266       | 266. IN AIR.10 SEC TD  | OVBD EX VAL OPEN  | X      | X           |     |
| 21-58-02            | E-D14           | 304       | 3 SEC DURING TEST.304.1 SEC TD   | EQPT SMOKE TEST   | X      | X           |     |
| 21-58-02            | D-A2            | 308       | (3 SEC DURING TEST.308. SEC TD) + (CLG TEST.308.229.5 SEC TD)  | FWD EQPT DET 1    | X      | X           |     |
| 21-58-02            | DF13            | 229       | (3 SEC DURING TEST.229.1 SEC TD) + (CLG TEST.229.308.5 SEC TD)   | FWD EQPT DET 2    | X      | X           |     |
| 21-61-01            | D88             | 186       | 186  | ZONE TEMP BITE    | X      | X           |     |
| 24-11-01            |                 |           | L IDG OIL TEMP RISE > 175°C  | L IDG TEMP SENS   | X      | X           |     |
| 24-11-01            |                 |           | L IDG OIL TEMP > 140°C.  | L IDG OIL TEMP    | X      | X           |     |
| 24-11-01            |                 |           | L IDG TEMP SENS.300 SEC TD   | L IDG TEMP SENS   | X      | X           |     |
| 24-11-02            |                 |           | R IDG OIL TEMP > 175°C   | R IDG TEMP SENS   | X      |             |     |
| 24-11-02            |                 |           | R IDG OIL TEMP > 140°C.  | R IDG OIL TEMP    | X      | X           |     |
| 24-11-02            |                 |           | R IDG TEMP SENS.300 SEC TD   | R IDG TEMP SENS   | X      | X           |     |
| 24-11-02            | DA12 D-B1       | 283 59    | (ABS(L IDG OIL TEMP RISE DIFF(L-R)) > 6).L IDG TEMP SENS   | IDG RISE TEMP     | X      | X           |     |
| 24-11-02            |                 |           | R IDG TEMP SENSE.283.59 .600 SEC TD  | IDG RISE TEMP     | X      | X           |     |
| 24-11-02            |                 |           | (ABS(L IDG OIL TEMP DIFF(L-R))>10). (ABS(L NI-RNI)<10 .283 .59 .L IDG TEMP SENS .R IDG TEMP SENS .600 SEC TD | IDG OUT TEMP      | X      | X           |     |

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**EICAS STATUS AND MAINTENANCE MESSAGES**

D280N032S

**31-41-05**



TABLE 1 (CONT)

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| SCHEMATIC REFERENCE | D319X/<br>D321X<br>PIN | INPUT NO. | INPUT REQ FOR<br>MESSAGE (BY INPUT NO.) | MESSAGE          | STATUS | MAINTENANCE | NVM |
|---------------------|------------------------|-----------|---|------------------|--------|-------------|-----|
| 24-31-01            | EA12                   | 494       | 494. R AC BUS OFF. 10 SEC TD            | MAIN BAT. CHGR   | X      | X           | X   |
| 24-32-01            | EJ14                   | 62        | 62                                      | T-R UNIT         | X      | X           |     |
| 24-33-01            | AD4                    | 250       | INV AC VOLTS >124 + <106                | STBY INVERTER    | X      | X           | X   |
| 24-51-61            | EG11                   | 541       | 0.7 SEC TD. BAT SW ON                   | CAPT INSTR XFER  | X      | X           |     |
| 26-11-01            | BJ14                   | 61        | 61. L AC BUS OFF                        | L ENG FIRE LP 1  | X      | X           |     |
| 26-11-01            | D66                    | 467       | 467. 57                                 | L ENG FIRE LP 2  | X      | X           |     |
| 26-11-01            | 5                      | 57        | 467                                     | L ENG FIRE LP 1  | X      | X           |     |
| 26-11-01            | EG4                    | 233       | 233. 57                                 | L ENG FIRE LP 2  | X      | X           |     |
| 26-11-02            | 5                      | 57        | 233                                     | L ENG FIRE LP 2  | X      | X           |     |
| 26-11-02            | AG2                    | 484       | 484. 99                                 | R ENG FIRE LP 1  | X      | X           |     |
| 26-11-02            | 5                      | 99        | 484                                     | R ENG FIRE LP 1  | X      | X           |     |
| 26-11-02            | BE9                    | 311       | 311. 99                                 | R ENG FIRE LP 2  | X      | X           |     |
| 26-11-02            | 5                      | 99        | 311                                     | R ENG FIRE LP 2  | X      | X           |     |
| 26-11-03            | AG4                    | 356       | 356. 246                                | L ENG OH LP 1    | X      | X           |     |
| 26-11-03            | 5                      | 246       | 356                                     | L ENG OH LP 1    | X      | X           |     |
| 26-11-03            | BE6                    | 453       | 453. 246                                | L ENG OH LP 2    | X      | X           |     |
| 26-11-03            | 5                      | 246       | 453                                     | L ENG OH LP 2    | X      | X           |     |
| 26-11-04            | DG9                    | 339       | 339. 466                                | R ENG OH LP 1    | X      | X           |     |
| 26-11-04            | 5                      | 466       | 339                                     | R ENG OH LP 1    | X      | X           |     |
| 26-11-04            | EG6                    | 297       | 297. 466                                | R ENG OH LP 2    | X      | X           |     |
| 26-11-04            | 5                      | 466       | 297                                     | R ENG OH LP 2    | X      | X           |     |
| 26-12-01            | AG7                    | 132       | 132. 246                                | L STRUT OH DET 1 | X      | X           |     |
| 26-12-01            | 5                      | 246       | 132                                     | L STRUT OH DET 1 | X      | X           |     |
| 26-12-01            | BG4                    | 88        | 88. 246                                 | L STRUT OH DET 2 | X      | X           |     |
| 26-12-01            | 5                      | 246       | 88                                      | L STRUT OH DET 2 | X      | X           |     |
| 26-12-01            | DG1                    | 115       | 115. 466                                | R STRUT OH DET 1 | X      | X           |     |
| 26-12-01            | 5                      | 466       | 115                                     | R STRUT OH DET 1 | X      | X           |     |
| 26-12-01            | EG7                    | 262       | 262. 466                                | R STRUT OH DET 2 | X      | X           |     |
| 26-12-01            | 5                      | 466       | 262                                     | R STRUT OH DET 2 | X      | X           |     |
| 26-13-01            | AH7                    | 260       | 260. 57                                 | L TURB OH DET 1  | X      | X           |     |
| 26-13-01            | 5                      | 57        | 260                                     | L TURB OH DET 1  | X      | X           |     |
| 26-13-01            | BG2                    | 312       | 312. 57                                 | L TURB OH DET 2  | X      | X           |     |
| 26-13-01            | 5                      | 57        | 312                                     | L TURB OH DET 2  | X      | X           |     |
| 26-13-02            | DF5                    | 388       | 388. 99                                 | R TURB OH DET 1  | X      | X           |     |
| 26-13-02            | 5                      | 99        | 388                                     | R TURB OH DET 1  | X      | X           |     |
| 26-13-02            | EG5                    | 38        | 38. 99                                  | R TURB OH DET 2  | X      | X           |     |
| 26-13-02            | 5                      | 99        | 38                                      | R TURB OH DET 2  | X      | X           |     |
| 26-15-01            | DF4                    | 420       | 420. 359                                | APU FIRE LP 1    | X      | X           |     |
| 26-15-01            | 5                      | 359       | 420                                     | APU FIRE LP 1    | X      | X           |     |
| 26-15-01            | FD4                    | 161       | 161. 359                                | APU FIRE LP 2    | X      | X           |     |
| 26-15-01            | 5                      | 359       | 161                                     | APU FIRE LP 2    | X      | X           |     |
| 26-16-01            | FE7                    | 385       | 385. 20 SEC TD                          | CARGO DET AIR    | X      | X           |     |
| 26-16-01            | DG11                   | 419       | 419. 10 SEC TD                          | FWD DET FAN      | X      | X           |     |
| 26-16-01            | AH6                    | 36        | 36. 370                                 | FWD CARGO DET 1  | X      | X           |     |
| 26-16-01            | 5                      | 370       | 36                                      | FWD CARGO DET 1  | X      | X           |     |
| 26-16-01            | BG5                    | 247       | 247. 370                                | FWD CARGO DET 2  | X      | X           |     |
| 26-16-01            | 5                      | 370       | 247                                     | FWD CARGO DET 2  | X      | X           |     |
| 26-16-02            | EC11                   | 206       | 206. 10 SEC TD                          | AFT DET FAN      | X      | X           |     |
| 26-16-02            | DF1                    | 164       | 164. 472                                | AFT CARGO DET 1  | X      | X           |     |
| 26-16-02            | 5                      | 472       | 164                                     | AFT CARGO DET 1  | X      | X           |     |
| 26-16-02            | EG2                    | 73        | 73. 472                                 | AFT CARGO DET 2  | X      | X           |     |
| 26-16-02            | 5                      | 472       | 73                                      | AFT CARGO DET 2  | X      | X           |     |
| 26-17-01            | DC10                   | 158       | 158. 2 SEC TD                           | DUCT LEAK BITE   | X      | X           |     |

TABLE 1 (CONT)

| SCHEMATIC REFERENCE | D319X/<br>D321X<br>PIN | INPUT NO. | INPUT REQ FOR<br>MESSAGE (BY INPUT NO.)  | MESSAGE          | STATUS | MAINTENANCE | NVM |
|---------------------|------------------------|-----------|--|------------------|--------|-------------|-----|
| 27-09-05            | FD3                    | 270       | 270. STBY BUS OFF .30 SEC TD   | L FLT CONT ELEC  | X      | X           |     |
| 27-09-05            | EA10                   | 222       | 222. STBY BUS OFF .30 SEC TD   | R FLT CONT ELEC  | X      | X           |     |
| 27-23-01            | FD7                    | 328       | 328. 9   | L ELEV PCU       | X      | X           | X   |
| 27-23-01            | ED8                    | 286       | 286. 9   | R ELEV PCU       | X      | X           | X   |
| 27-23-01            | BE8                    | 281       | 281. 9   | RUDDER PCU       | X      | X           | X   |
| 27-23-01            | —                      | —         | (IN AIR). (281+286+328). 10 SEC TD   | PCU MONITOR      | X      | X           | X   |
| 27-30-01            | AH9                    | 469       | 469+275. ALL HYD SYS POWERED.  | ELEV L HYD PRESS | X      | X           | X   |
| 27-30-01            | BH9                    | 275       | 2.5 SEC TD   | ELEV C HYD PRESS | X      | X           | X   |
| 27-30-01            | FK8                    | 397       | 397+181. ALL HYD SYS POWERED.  | ELEV R HYD PRESS | X      | X           | X   |
| 27-30-01            | FJ6                    | 181       | 2.5 SEC TD   | ELEV R HYD PRESS | X      | X           | X   |
| 27-30-01            | DH2                    | 450       | 450+180. ALL HYD SYS POWERED.  | ELEV ASYM        | X      | X           | X   |
| 27-30-01            | DK4                    | 180       | 2.5 SEC TD   | ELEV FEEL        | X      | X           | X   |
| 27-30-01            | EG15                   | 464       | 464. 30 SEC TD   | FLAP/SLAT BITE   | X      | X           | X   |
| 27-30-01            | DC4                    | 314       | 314. ALL HYD SYS POWERED. 10 SEC TD  | FLAP/SLAT BITE   | X      | X           | X   |
| 27-50-01            | DC17                   | 442       | 442. R AC BUS OFF .15 SEC TD   | FLAP/SLAT BITE   | X      | X           | X   |
| 27-50-01            | DF3                    | 500       | 500. STBY BUS OFF .5 SEC TD  | FLAP/SLAT BITE   | X      | X           | X   |
| 27-51-02            | ED9                    | 366       | 366. L HYD SYS PRESS >1700. 1 SEC TD   | FLAP/SLAT BITE   | X      | X           | X   |
| 27-20-02            | EK09                   | 77        | 77. 20 SEC TD  | RUDDER RAT10     | X      | X           | X   |
| 27-61-01            | AH14                   | 82        | 82. STBY BUS OFF .10 SEC TD  | SPOILERS         | X      | X           | X   |
| 22-21-01            | EK13                   | 301       | 301. STBY BUS OFF  | YAW DAMPER       | X      | X           | X   |
| 27-40-01            | EJ11                   | 207       | 207. STBY BUS OFF  | STAB TRIM        | X      | X           | X   |
| 28-25-01            | FD10                   | 192       | 192. STBY BUS OFF  | DC FUEL PUMP ON  | X      | X           | X   |
| 28-41-01            | FD4                    | 175       | 175  | FUEL QTY BITE    | X      | X           | X   |
| 28-41-03            | 13                     | 175       | DD311+ DD312+ DD313+ DD317+ DD318<br>+ DD319+ DD323+ DD324+ DD325                              | FUEL QTY CHANNEL | X      | X           | X   |
| 28-41-03            | 13                     | 175       | DD314+ DD315+ DD316+ DD320+ DD321<br>+ DD322+ DD326+ DD327+ DD328                              | FUEL QTY IND     | X      | X           | X   |
| 28-41-03            | 13                     | 175       | (DV601 INVALID + DV602 INVALID +<br>DV603 INVALID). 175. FUEL QTY CHANNEL                      | FUEL QTY BITE    | X      | X           | X   |
| 29-00-02 (SH 1)     | DE14                   | 403       | L HYD SYS PRESS <2800.   | L HYD SYS MAINT  | X      | X           | X   |
| 29-00-02 (SH 1)     | 6                      | 403.      | BOTH ENG RUN. 60 SEC TD  | L HYD SYS MAINT  | X      | X           | X   |
| 29-00-03 (SH 1)     | FC09                   | 120       | R HYD SYS PRESS <2800.   | R HYD SYS MAINT  | X      | X           | X   |
| 29-00-03 (SH 1)     | 6                      | 120.      | BOTH ENG RUN. 60 SEC TD  | R HYD SYS MAINT  | X      | X           | X   |
| 29-00-04 (SH 1)     | DJ10                   | 60        | C HYD SYS PRESS <2800.   | C HYD SYS MAINT  | X      | X           | X   |
| 29-00-04 (SH 1)     | 6                      | 60.       | BOTH ENG RUN. 60 SEC TD  | C HYD SYS MAINT  | X      | X           | X   |
| 29-00-04            | DK5                    | 184       | 184. STBY BUS OFF 5 SEC TD   | POWER XFER UNIT  | X      | X           | X   |
| 29-00-04            | FK6                    | 405       | 405.   | RAT              | X      | X           | X   |
| 32-41-01            | FK10                   | 64        | 64. 2 SEC TD   | RSV BRAKE VAL    | X      | X           | X   |
| 29-00-01            | 6                      | AV105     | HYD QTY L ≥1.22  | L HYD QTY 0/FULL | X      | X           | X   |
| 29-00-01            | 6                      | AV104     | HYD QTY C ≥1.22  | C HYD QTY 0/FULL | X      | X           | X   |
| 29-00-01            | 6                      | AV106     | HYD QTY R ≥1.22  | R HYD QTY 0/FULL | X      | X           | X   |
| 30-21-01            | FG5                    | 95        | 95. 10 SEC TD  | L ENG TAI VALVE  | X      | X           | X   |
| 30-21-01            | FG8                    | 319       | 319. 10 SEC TD   | R ENG TAI VALVE  | X      | X           | X   |
| 30-30-01            | FB8                    | 457       | 457. ON GND .10 SEC TD   | CAPT PITOT HEAT  | X      | X           | X   |
| 30-30-01            | EK5                    | 170       | 170. ON GND .10 SEC TD   | L AUX PITOT HEAT | X      | X           | X   |
| 30-30-02            | EK12                   | 394       | 394. ON GND .10 SEC TD   | F/O PITOT HEAT   | X      | X           | X   |
| 30-30-02            | EK8                    | 241       | 241. ON GND .10 SEC TD   | R AUX PITOT HEAT | X      | X           | X   |
| 30-40-01            | DB11                   | 463       | 463. L AC BUS OFF. 5 SEC TD  | L ENG PROBE HEAT | X      | X           | X   |
| 30-40-01            | EA8                    | 483       | 483. R AC BUS OFF. 5 SEC TD  | R ENG PROBE HEAT | X      | X           | X   |
| 31-31-01            | EC10                   | 113       | 113. 75. BOTH ENGINES RUNNING  | FLT DATA REC     | X      | X           | X   |
| 31-31-01            | AJ14                   | 75        | 75. L AC BUS OFF. 60 SEC TD  | FLT DATA ACQ     | X      | X           | X   |
| 31-41-09            | B04                    | —         | (OTHER FAIL .L) + (OWN FAIL .L)  | L EICAS CMPTR    | X      | X           | X   |
| 31-41-09            | —                      | —         | (OTHER FAIL .L) + (OWN FAIL .L)  | R EICAS CMPTR    | X      | X           | X   |
| 31-41-09            | —                      | —         | SELF DETECTED FAULT ONSIDE +<br>SELF DETECTED FAULT OFFSIDE +<br>L EICAS CMPTR + R EICAS CMPTR | EICAS BITE       | X      | X           | X   |
| 31-41-09            | —                      | —         | + (NO X-TALK DATA, ALTN EICAS CMPTR)   | EICAS BITE       | X      | X           | X   |
| 31-41-09            | BC8                    | 412       | ENG DISAGREE IN NVM + CAUT ALERT FAULT   | EICAS DISAGREE   | X      | X           | X   |
| 31-51-01 (SH 1)     | —                      | —         | 412. STBY BUS OFF  | WARN ELEX        | X      | X           | X   |

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EICAS STATUS AND MAINTENANCE MESSAGES

D280N032S

31-41-05

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**TABLE 1 (CONT)**

| SCHEMATIC REFERENCE | D319/<br>D321X<br>PIN  | INPUT NO.                                      | INPUT REQ FOR MESSAGE (BY INPUT NO.) <span style="border: 1px solid black; padding: 0 2px;">5</span> | MESSAGE           | STATUS | MAINT | INM |
|---------------------|--|--|--|-------------------|--------|-------|-----|
|                     |  |  |  |                   |        |       |     |
| 32-09-02 (SH 1)     | FE9<br>BJ13  | 360<br>445                                     | 360 @ 445 • R AC BUS OFF • 10 SEC TD   | AIR/GND DISAGREE  | X      | X     | X   |
| 32-09-02 (SH 1)     | FF8<br>BH1   | 421<br>157                                     | 421 @ 157 • R AC BUS OFF • 10 SEC TD   | NOSE A/G DISAGREE | X      | X     | X   |
| 32-42-04 (SH 2)     | BF15   | 159  | 159  | NORM ANTISKID     | X      | X     |     |
| 32-42-04 (SH 2)     | AD3  | 398  | 398  | ALTN ANTISKID     | X      | X     |     |
| 32-42-04 (SH 2)     | DB12   | 78   | 78   | ANTISKID/AUTOBRK  |        | X     |     |
| 32-61-01            | AG12<br>DB07<br>DE07<br>EJ07<br>DF06<br>FC07                     | 298<br>43<br>439<br>277<br>372<br>344          | (298 @ 43) • (439 + 277) •<br>R AC BUS OFF • 2 SEC TD  | GEAR DISAGREE     |        |       |     |
| 32-61-01            | AD10<br>DC12<br>DF06<br>ED11<br>FC07                             | 372<br>344<br>83<br>202<br>37264<br>191<br>344 | (372 @ 344) • R AC BUS OFF • 30 SEC TD   | NOSE GEAR DOWN    |        | X     | X   |
| 32-61-01            |  | 83   | (83 @ 202) • R AC BUS OFF • 2 SEC TD   | NOSE GEAR DOWN    |        | X     | X   |
| 32-61-01            |  | 37264  | 191 • 372 • 344 • R AC BUS OFF • 30 SEC TD   | ALL GEAR LOCKED   |        | X     | X   |
| 32-61-01            |  | 191  | 191 • (439 + 277) • R AC BUS OFF • 30 SEC TD   | GEAR LEVER        |        | X     | X   |
| 32-61-01            | FD06<br>DF08<br>FC05<br>DG13                                     | 104<br>387<br>456<br>163                       | (104 @ 387) • R AC BUS OFF • 30 SEC TD   | R GEAR DOWN       |        | X     | X   |
| 32-61-01            |  | 456  | (456 @ 163) • R AC BUS OFF • 30 SEC TD   | L GEAR DOWN       |        | X     | X   |
| 32-61-01            |  | 163  | ANY OF THE PREVIOUS SEVEN MESSAGES   | LDG GEAR MONITOR  | X      |       |     |
| 32-61-01            | BF14<br>FC02   | 125<br>335                                     | (298 @ 43) • 439 • 277 •<br>R AC BUS OFF • 2 SEC TD + (125 @ 335)<br>R AC BUS OFF • 10 SEC TD        | PSEU BITE         |        | X     | X   |
| 34-22-22            | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD121  | DD121 + (INVALID EFIS CU DATA WRAPAROUND)  | COMPARATOR BITE   | X      | X     | X   |
| 34-46-01 (SH 2)     | BJ1  | 33   | 33 STBY BUS OFF 5 SEC TD   | GND PROX BITE     | X      | X     |     |
| 49-27-01            | EK4  | 426  | [426 + (APU OIL QTY "ADD" •<br>APU OIL QTY PP)] • 60 SEC TD  | APU OIL QTY       | X      | X     | X   |
| 49-52-02            | FE1  | 393  | 393 • 60 SEC TD  | APU D00R          | X      | X     |     |
| 49-61-01            | BA13   | 480  | 480  | APU BITE          |        | X     | X   |
| 73-21-              | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD001  | DD001  | L EEC BITE        |        | X     | X   |
| 73-21-              | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD051  | DD051  | R EEC BITE        |        | X     | X   |
| 73-31-01            | AJ11   | 50   | 50 • 10 SEC TD   | L ENG FUEL FILT   | X      | X     | X   |
| 73-31-01            | AK7  | 274  | 274 • 10 SEC TD  | R ENG FUEL FILT   | X      | X     | X   |
| 73-31-01            | EH5  | 341  | 341 • L ENG RUNNING • 5 SEC TD   | L ENG LP PUMP     | X      | X     | X   |
| 73-31-01            | EJ3  | 214  | 214 • R ENG RUNNING • 5 SEC TD   | R ENG LP PUMP     | X      | X     | X   |
| 74-31-01            | BH15   | 317  | 317  | L IGN STBY BUS    |        | X     |     |
| 74-31-01            | BK2  | 413  | 413  | R IGN STBY BUS    |        | X     |     |
| 75-32-01            | AH5  | 51   | 51 • L ENG RUNNING • 5 SEC TD  | L ENG SURGE CONT  | X      | X     | X   |
| 75-32-01            | DJ2  | 436  | 436 • R ENG RUNNING • 5 SEC TD   | R ENG SURGE CONT  | X      | X     | X   |
| 75-32-01            | BJ10   | 486  | 486 • L ENG RUNNING • 5 SEC TD   | L ENG SURGE BITE  |        | X     | X   |
| 75-32-01            | DJ3  | 499  | 499 • R ENG RUNNING • 5 SEC TD   | R ENG SURGE BITE  |        | X     | X   |

**TABLE 1 (CONT)**

| SCHEMATIC REFERENCE | D319/<br>D321X<br>PIN  | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.) <span style="border: 1px solid black; padding: 0 2px;">5</span> | MESSAGE          | STATUS | MAINT | INM |
|---------------------|--|-----------|--|------------------|--------|-------|-----|
|                     |  |           |  |                  |        |       |     |
| 77-12-01            | <span style="border: 1px solid black; padding: 0 2px;">2</span>  | AV351     | (L ENG RUNNING • 60 SEC TD •<br>L ENG NT < 22.5) • 20 SEC TD   | L ENG LOW N1     | X      | X     | X   |
| 77-12-01            | <span style="border: 1px solid black; padding: 0 2px;">2</span>  | AV352     | (R ENG RUNNING • 60 SEC TD •<br>R ENG NT < 22.5) • 20 SEC TD   | R ENG LOW N1     | X      | X     | X   |
| 77-12-04            | FJ10   | 32        | (32 • N3 > IDLE + 32 • STBY BUS OFF •<br>N3 > IDLE) • 10 SEC TD                                      | L ENG SPEED CARD | X      | X     | X   |
| 77-12-05            | FB10   | 256       | (256 • N3 > IDLE + 256 • STBY BUS OFF •<br>N3 > IDLE) • 10 SEC TD                                    | R ENG SPEED CARD | X      | X     | X   |
| 77-31-01            | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD261     | DD261 • 10 SEC TD  | L ENG VIB        |        | X     | X   |
| 77-31-01            | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD259     | DD259 + DD261 • 10 SEC TD  | L ENG VIB        |        | X     | X   |
| 77-31-01            | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD266     | DD266 • 10 SEC TD  | R ENG VIB        |        | X     | X   |
| 77-31-01            | <span style="border: 1px solid black; padding: 0 2px;">13</span> | DD264     | DD264 + DD266 • 10 SEC TD  | R ENG VIB BITE   |        | X     | X   |
| 78-36-01            | BH7  | 103       | 103 • L AC BUS OFF • 2 SEC TD  | L REV ISLN VAL   |        | X     |     |
| 78-36-01            | DH7  | 391       | 391 • R AC BUS OFF • 2 SEC TD  | R REV ISLN VAL   |        | X     |     |

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**EICAS STATUS AND  
MAINTENANCE MESSAGES**

D280N032S

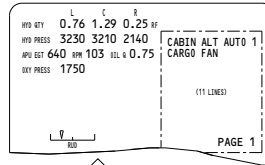
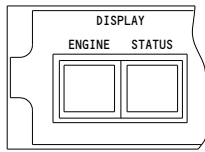
**31-41-05**

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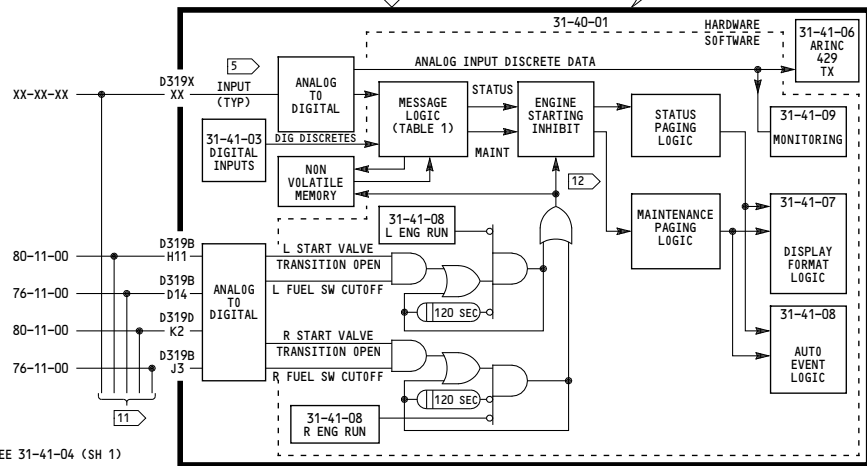
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**M10195 EICAS DISPLAY SELECT PNL (P9) 31-41-01 (SH 1)**



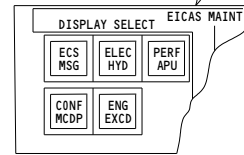
**N10014 EICAS LOWER DISPLAY IND (P2) 31-41-07 (SH 2)**

**STATUS FORMAT**

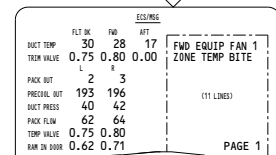


**NOTES:**

- 1 SEE 31-41-04 (SH 1)
- 2 SEE 31-41-08
- 3 SEE 31-41-04 (SH 2)
- 4 454=GND=TEST START
- 5 ALL INPUTS TRUE=GND FALSE=OPEN EXCEPT: 51,169 } TRUE=OPEN FALSE=GND 283,494 }
- 6 SEE 31-41-02 (SH 2)
- 7 SEE 31-41-06 (SH 1)
- 8 INPUTS IDENTICAL TO M10181 AND M10182. ONLY M10181 SHOWN.
- 9 INHIBITED UNTIL ON GND WITH ALL HYD SYS PRESSURIZED AND AIRSPEED < 50 KNTS
- 10 SEE 31-41-04 (SH 3)
- 11 TO OTHER COMPUTER D321X
- 12 NEW MESSAGES AND RECORDING INTO NVM, INHIBITED DURING ENGINE START
- 13 SEE 31-41-03
- 14 LATCHES NVM ONLY IN THE AIR



**M10372 EICAS MAINTENANCE PNL (P61) 31-41-01 (SH 1)**



**N10014 EICAS LOWER DISPLAY IND (P2) 31-41-07 (SH 2)**

**ECS/MSG MAINTENANCE FORMAT**

**TABLE 1 EICAS MESSAGE LOGIC**

| SCHEMATIC REFERENCE | D319X/D321X PIN | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.)   | MESSAGE                        | STATUS | MAINTENANCE | NVM |
|---------------------|-----------------|-----------|--|--------------------------------|--------|-------------|-----|
| 21-31-01            | EF14            | 112       | 112.5 SEC TD   | CABIN ALT AUTO. 1              | X      | X           |     |
| 21-31-02            | EF13            | 336       | 336.5 SEC TD   | CABIN ALT AUTO. 2              | X      | X           |     |
| 21-43-01            | DA5             | 227       | 227. L UTIL BUS OFF. 1 SEC TD  | FWD CARGO FAN                  | X      | X           | X   |
| 21-44-01            | AJ15            | 67        | 67. R UTIL BUS OFF. 1 SEC TD   | AFT CARGO FAN                  | X      | X           | X   |
| 21-51-09            | FD2             | 397       | 397  | L PACK BITE                    |        | X           |     |
| 21-51-10            | DF11            | 69        | 69   | R PACK BITE                    |        | X           |     |
| 21-58-01            | DA3             | 84        | 84.30 SEC TD.ON GND  | FWD EQ SUP FLOW                | X      | X           |     |
| 21-58-01            | DA4             | 248       | 248.30 SEC TD.ON GND   | FWD EQ EXH FLOW                | X      | X           |     |
| 21-58-01            | FH7             | 375       | 375.30 SEC TD.ON GND   | AFT EQ FLOW                    | X      | X           |     |
| 21-58-01            |                 |           | (FWD EQ EXH FLOW) + (FWD EQ SUP FLOW) + (AFT EQ FLOW)  | EQPT CLG FLOW                  | X      |             |     |
| 21-58-03            | AE11            | 330       | (330. L AC BUS OFF.4 SEC TD)+ (CLG TEST.2 SEC TD.330.1 SEC TD)   | FWD EQ SUP FAN 1               | X      | X           |     |
| 21-58-03            | AD9 E-D14       | 508       | (58.CLG TEST.304.R AC BUS OFF.2 SEC TD) + (58.CLG TEST).2 SEC TD   | FWD EQ SUP FAN 2               | X      | X           |     |
| 21-58-03            |                 |           | (FWD EQ SUP FAN 1) + (FWD EQ SUP FAN 2) + (AFT EQ SUP FAN 1) + (AFT EQ SUP FAN 2)                            | EQ CLG FAN                     | X      |             |     |
| 21-58-04            | AG14            | 249       | 249. L AC BUS OFF. 2 SEC TD  | AFT EQ EXH FAN 1               | X      | X           |     |
| 21-58-04            | AK14            | 74        | 74. R AC BUS OFF. 2 SEC TD   | AFT EQ EXH FAN 2               | X      | X           |     |
| 21-58-05            | FJ7             | 503       | (503. L AC BUS OFF.4 SEC TD) + (CLG TEST.2 SEC.503.1 SEC TD)   | AFT EQ SUP FAN 1               | X      | X           |     |
| 21-58-05            | FK7             | 151       | (151. CLG TEST.R AC BUS OFF.2 SEC TD) + (151. CLG TEST.2 SEC TD)   | AFT EQ SUP FAN 2               | X      | X           |     |
| 21-58-05            | F-K5            | 454       | (ENGINES SHUTDOWN.L AC BUS OFF. 454+L OR R ENGINE RUNNING. STBY BUS OFF.454).10 SEC TD                       | EQPT CLG TEST                  | X      | X           |     |
| 21-58-05            | D-A3            | 84        | ANYONE OF THE FOLLING 3 (3 SEC DURING TEST.84).1 SEC TD  | EQPT CLG SENSOR                | X      |             |     |
| 21-58-05            | D-A4            | 244       | (3 SEC DURING TEST.244).1 SEC TD   | FWD EQ EXH SNSR                | X      | X           |     |
| 21-58-05            | F-H7            | 375       | (3 SEC DURING TEST.375).1 SEC TD   | AFT EQ SNSR                    | X      | X           |     |
| 21-58-05            | DE15            | 266       | (3 SEC DURING TEST.266.FWD EQ EXH SNSR.2 SEC TD)+(CLG TEST.266.90 SEC TD)                                    | OVBD EX VAL TEST               | X      | X           |     |
| 21-58-05            | D-E15           | 266       | 266. IN AIR.10 SEC TD  | OVBD EX VAL OPEN               | X      | X           |     |
| 21-58-05            | E-D14           | 304       | 3 SEC DURING TEST.304.1 SEC TD   | EQPT SMOKE TEST                | X      | X           |     |
| 21-58-05            | D-A2            | 308       | (3 SEC DURING TEST.308. SEC TD) + (CLG TEST.308.229.5 SEC TD)  | FWD EQPT DET 1                 | X      | X           |     |
| 21-58-05            | DF13            | 229       | (3 SEC DURING TEST.229.1 SEC TD) + (CLG TEST.229.308.5 SEC TD)   | FWD EQPT DET 2                 | X      | X           |     |
| 21-61-01            | D88             | 186       | 186 L IDG OIL TEMP RISE > 175°C+ ((L IDG OIL TEMP RISE <= 0.5). L ENG RUNNING. 59.60 SEC TD)                 | ZONE TEMP BITE L IDG TEMP SENS | X      | X           |     |
| 24-11-01            |                 |           | L IDG OIL TEMP > 140°C. L IDG TEMP SENS.300 SEC TD   | L IDG OIL TEMP                 | X      | X           |     |
| 24-11-02            |                 |           | R IDG OIL TEMP RISE > 175°C+ ((R IDG OIL TEMP RISE <= 0.5). R ENG RUNNING. 283.60 SEC TD)                    | R IDG TEMP SENS                | X      | X           |     |
| 24-11-02            |                 |           | R IDG OIL TEMP > 140°C. R IDG TEMP SENS.300 SEC TD   | R IDG OIL TEMP                 | X      | X           |     |
| 24-11-02            | DA12 D-B1       | 283 59    | [(ABS(IDG OIL TEMP RISE DIFF(L-R)) > 6).L IDG TEMP SENS. 600 SEC TD] R IDG TEMP SENSE.283.59 .600 SEC TD     | IDG RISE TEMP                  | X      | X           |     |
| 24-11-02            |                 |           | [(ABS(IDG OIL TEMP DIFF(L-R))>10). (ABS (L NI-RNI)<10 .283 .59 .L IDG TEMP SENS .R IDG TEMP SENS .600 SEC TD | IDG OUT TEMP                   | X      | X           |     |

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**EICAS STATUS AND MAINTENANCE MESSAGES**

D280N032S

Incorporates 31-0059 R01

**31-41-05**



-A  
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**TABLE 1 (CONT)**

| SCHEMATIC REFERENCE | D319/<br>D321X<br>PIN                        | INPUT NO.                                      | INPUT REQ FOR MESSAGE (BY INPUT NO.)  | MESSAGE           | STATUS | MAINT | INM |
|---------------------|--|--|---|-------------------|--------|-------|-----|
|                     |  |  |   |                   |        |       |     |
| 32-09-02 (SH 1)     | FE9<br>BJ13                                  | 360<br>445                                     | 360 @ 445 • R AC BUS OFF • 10 SEC TD  | AIR/GND DISAGREE  | X      | X     | X   |
| 32-09-02 (SH 1)     | FF8<br>BH1                                   | 421<br>157                                     | 421 @ 157 • R AC BUS OFF • 10 SEC TD  | NOSE A/G DISAGREE | X      | X     | X   |
| 32-42-04 (SH 2)     | BF15   | 159  | 159   | NORM ANTISKID     | X      | X     |     |
| 32-42-04 (SH 2)     | AD3  | 398  | 398   | ALTN ANTISKID     | X      | X     |     |
| 32-42-04 (SH 2)     | DB12   | 78   | 78  | ANTISKID/AUTOBRK  |        | X     |     |
| 32-61-01            | AG12<br>DB07<br>DE07<br>EJ07<br>DF06<br>FC07 | 298<br>43<br>439<br>277<br>372<br>344          | (298 @ 43) • (439 + 277) •<br>R AC BUS OFF • 2 SEC TD   | GEAR DISAGREE     |        |       |     |
| 32-61-01            | AD10<br>DG12<br>DF06<br>ED11<br>FC07         | 372<br>344<br>83<br>202<br>37264<br>191<br>344 | (372 @ 344) • R AC BUS OFF • 30 SEC TD  | NOSE GEAR DOWN    |        | X     | X   |
| 32-61-01            |  | 83   | (83 @ 202) • R AC BUS OFF • 2 SEC TD  | NOSE GEAR DOWN    |        | X     | X   |
| 32-61-01            |  | 37264  | 191 • 372 • 344 • R AC BUS OFF • 30 SEC TD  | ALL GEAR LOCKED   |        | X     | X   |
| 32-61-01            |  | 191  | 191 • (439 + 277) • R AC BUS OFF • 30 SEC TD  | GEAR LEVER        |        | X     | X   |
| 32-61-01            | FD06<br>DF08<br>FC05<br>DG13                 | 104<br>387<br>456<br>163                       | (104 @ 387) • R AC BUS OFF • 30 SEC TD  | R GEAR DOWN       |        | X     | X   |
| 32-61-01            |  | 456  | (456 @ 163) • R AC BUS OFF • 30 SEC TD  | L GEAR DOWN       |        | X     | X   |
| 32-61-01            |  | 163  | ANY OF THE PREVIOUS SEVEN MESSAGES  | LDG GEAR MONITOR  | X      |       |     |
| 32-61-01            | BF14<br>FC02                                 | 125<br>335                                     | (298 @ 43) • 439 • 277 •<br>R AC BUS OFF • 2 SEC TD + (125 @ 335)<br>R AC BUS OFF • 10 SEC TD | PSEU BITE         |        | X     | X   |
| 34-22-22            | 13   | DD121  | DD121 + (INVALID EFIS CU DATA WRAPAROUND)   | COMPARATOR BITE   | X      | X     | X   |
| 34-46-01 (SH 2)     | BJ1  | 33   | 33 STBY BUS OFF 5 SEC TD  | GND PROX BITE     | X      | X     |     |
| 49-27-01            | EK4  | 426  | (426 • APU OIL QTY SEL)<br>+(APU OIL QTY "ADD")<br>APU OIL QTY SEL. 300 SEC TD)               | APU OIL QTY       | X      | X     | X   |
| 49-52-02            | FE1  | 393  | 393 • 60 SEC TD   | APU D00R          | X      | X     |     |
| 49-61-01            | BA13   | 480  | 480   | APU BITE          |        | X     | X   |
| 73-21-              | 13   | DD001  | DD001   | L EEC BITE        |        | X     | X   |
| 73-21-              | 13   | DD051  | DD051   | R EEC BITE        |        | X     | X   |
| 73-31-01            | AJ11   | 50   | 50 • 10 SEC TD  | L ENG FUEL FILT   | X      | X     | X   |
| 73-31-01            | AK7  | 274  | 274 • 10 SEC TD   | R ENG FUEL FILT   | X      | X     | X   |
| 73-31-01            | EH5  | 341  | 341 • L ENG RUNNING • 5 SEC TD  | L ENG LP PUMP     | X      | X     | X   |
| 73-31-01            | EJ3  | 214  | 214 • R ENG RUNNING • 5 SEC TD  | R ENG LP PUMP     | X      | X     | X   |
| 74-31-01            | BH15   | 317  | 317   | L IGN STBY BUS    |        | X     |     |
| 74-31-01            | BK2  | 413  | 413   | R IGN STBY BUS    |        | X     |     |
| 75-32-01            | AH5  | 51   | 51 • L ENG RUNNING • 5 SEC TD   | L ENG SURGE CONT  | X      | X     | X   |
| 75-32-01            | DJ2  | 436  | 436 • R ENG RUNNING • 5 SEC TD  | R ENG SURGE CONT  | X      | X     | X   |
| 75-32-01            | BJ10   | 486  | 486 • L ENG RUNNING • 5 SEC TD  | L ENG SURGE BITE  |        | X     | X   |
| 75-32-01            | DJ3  | 499  | 499 • R ENG RUNNING • 5 SEC TD  | R ENG SURGE BITE  |        | X     | X   |
| 79-00-01            | AH4  | 131  | 131. ((L OIL TEMP>25)+IN AIR).5 SEC TD  | L OIL FILTER      | X      | X     | X   |
| 79-00-01            | DK3  | 423  | 423. ((R OIL TEMP>25)+IN AIR).5 SEC TD  | R OIL FILTER      | X      | X     | X   |

**TABLE 1 (CONT)**

| SCHEMATIC REFERENCE | D319/<br>D321X<br>PIN | INPUT NO. | INPUT REQ FOR MESSAGE (BY INPUT NO.)                              | MESSAGE          | STATUS | MAINT | INM |
|---------------------|-----------------------|-----------|---|------------------|--------|-------|-----|
|                     |                       |           |   |                  |        |       |     |
| 77-12-01            | 2                     | AV351     | (L ENG RUNNING • 60 SEC TD •<br>L ENG NT < 22.5) • 20 SEC TD      | L ENG LOW NT     | X      | X     | X   |
| 77-12-01            | 2                     | AV352     | (R ENG RUNNING • 60 SEC TD •<br>R ENG NT < 22.5) • 20 SEC TD      | R ENG LOW NT     | X      | X     | X   |
| 77-12-04            | FJ10                  | 32        | (32 • N3 > IDLE + 32 • STBY BUS OFF •<br>N3 > IDLE) • 10 SEC TD   | L ENG SPEED CARD | X      | X     | X   |
| 77-12-05            | FB10                  | 256       | (256 • N3 > IDLE + 256 • STBY BUS OFF •<br>N3 > IDLE) • 10 SEC TD | R ENG SPEED CARD | X      | X     | X   |
| 77-31-01            | 13                    | DD261     | DD261 • 10 SEC TD   | L ENG VIB        |        | X     | X   |
| 77-31-01            | 13                    | DD259     | DD259 + DD261 • 10 SEC TD   | L ENG VIB        |        | X     | X   |
| 77-31-01            | 13                    | DD266     | DD266 • 10 SEC TD   | R ENG VIB        |        | X     | X   |
| 77-31-01            | 13                    | DD264     | DD264 + DD266 • 10 SEC TD   | R ENG VIB BITE   |        | X     | X   |
| 78-36-01            | BH7                   | 103       | 103 • L AC BUS OFF • 2 SEC TD                                     | L REV ISLN VAL   |        | X     | X   |
| 78-36-01            | DH7                   | 391       | 391 • R AC BUS OFF • 2 SEC TD                                     | R REV ISLN VAL   |        | X     | X   |

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**EICAS STATUS AND MAINTENANCE MESSAGES**

 Incorporates  
 31-0059 R01

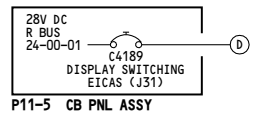
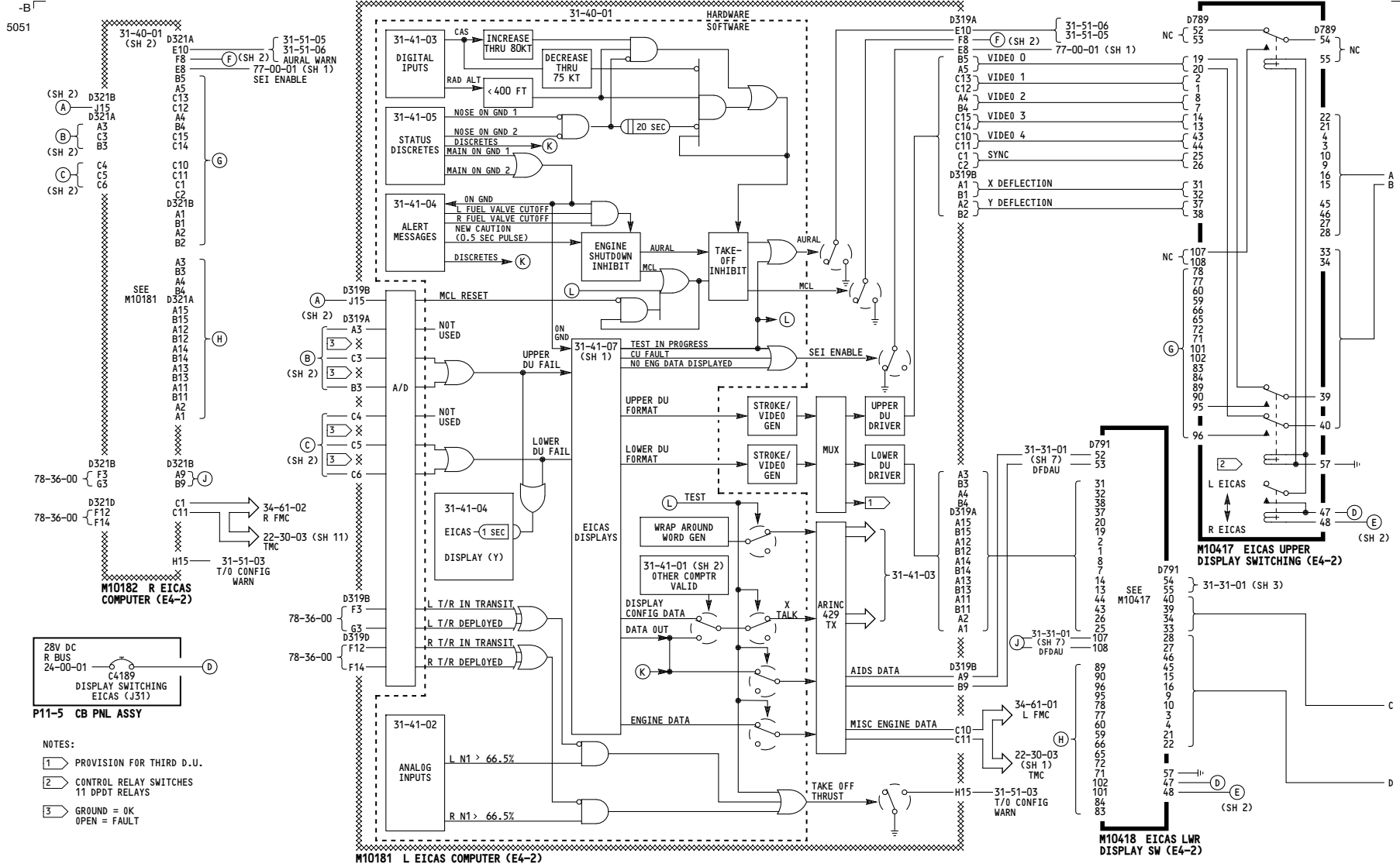
D280N032S

**31-41-05**

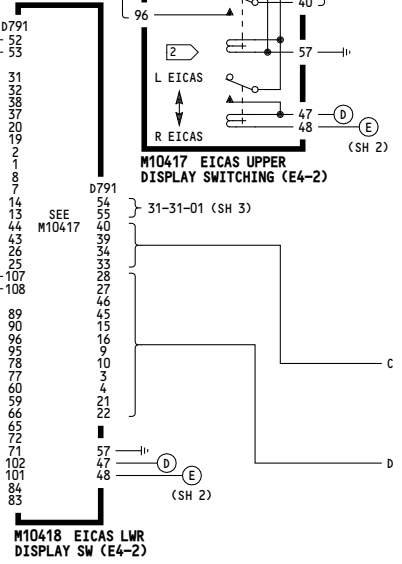
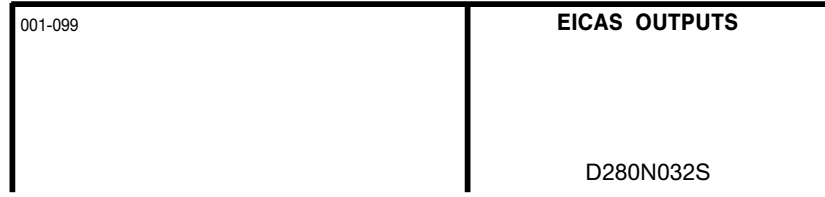
 Page 102.1  
 Sheet 3  
 Dec 18/2007

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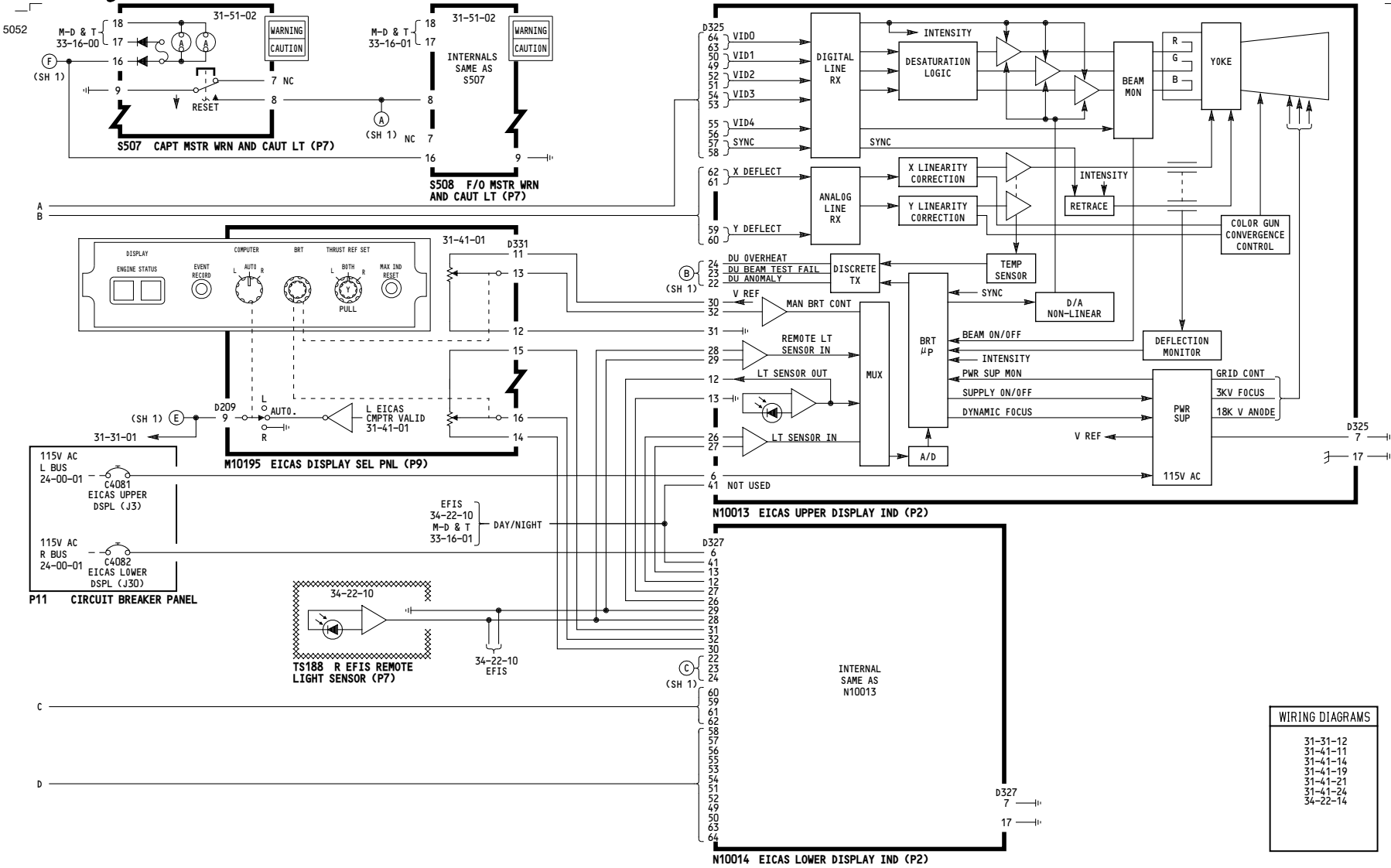




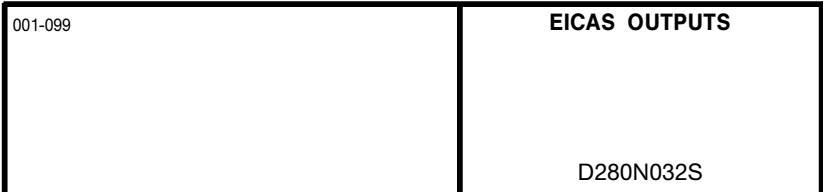
- NOTES:**
- 1 PROVISION FOR THIRD D.U.
  - 2 CONTROL RELAY SWITCHES 11 DPDT RELAYS
  - 3 GROUND = OK  
OPEN = FAULT



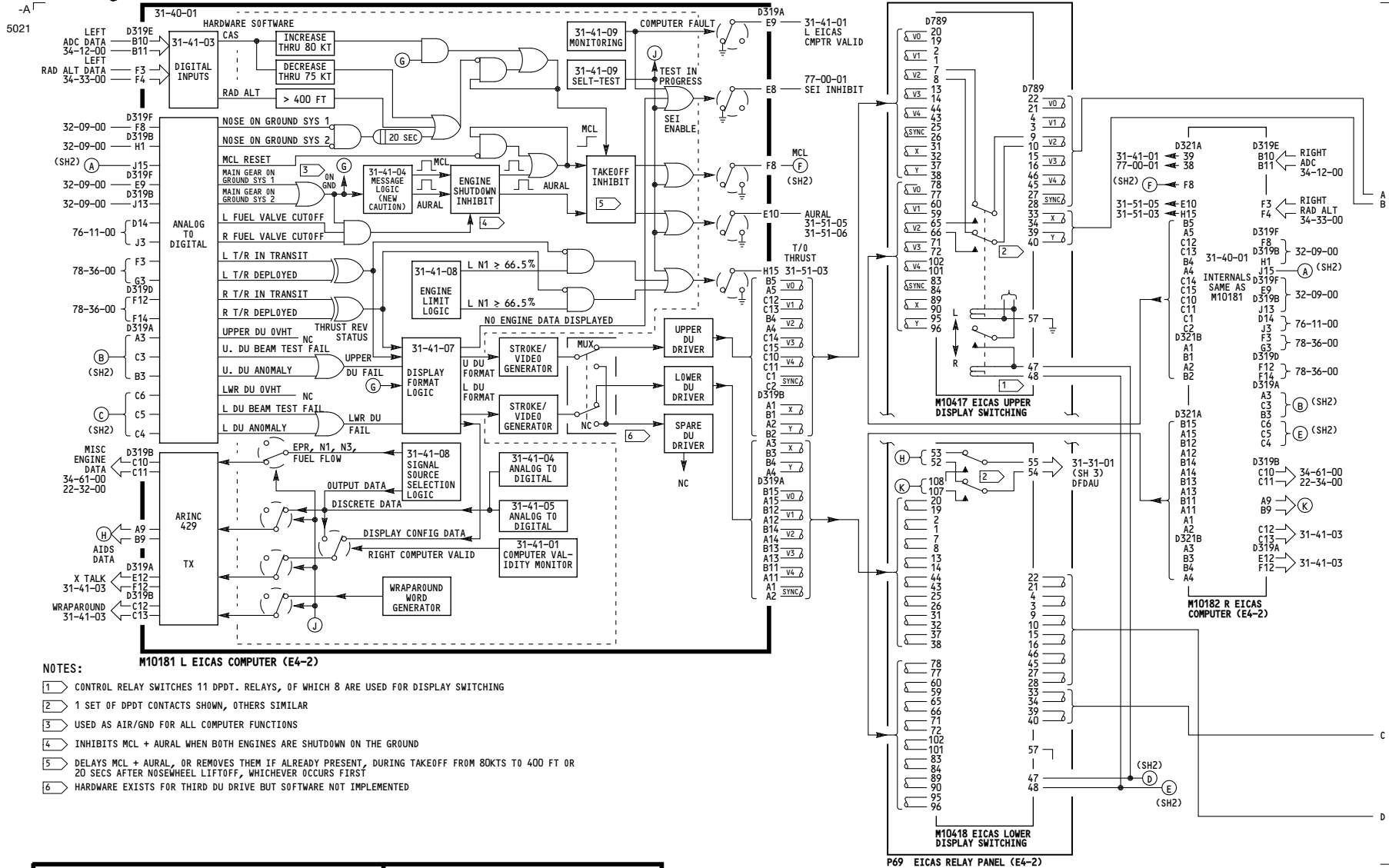
**31-41-06**



| WIRING DIAGRAMS |  |
|-----------------|--|
| 31-31-12        |  |
| 31-41-11        |  |
| 31-41-14        |  |
| 31-41-19        |  |
| 31-41-21        |  |
| 31-41-24        |  |
| 34-22-14        |  |



**31-41-06**



**NOTES:**

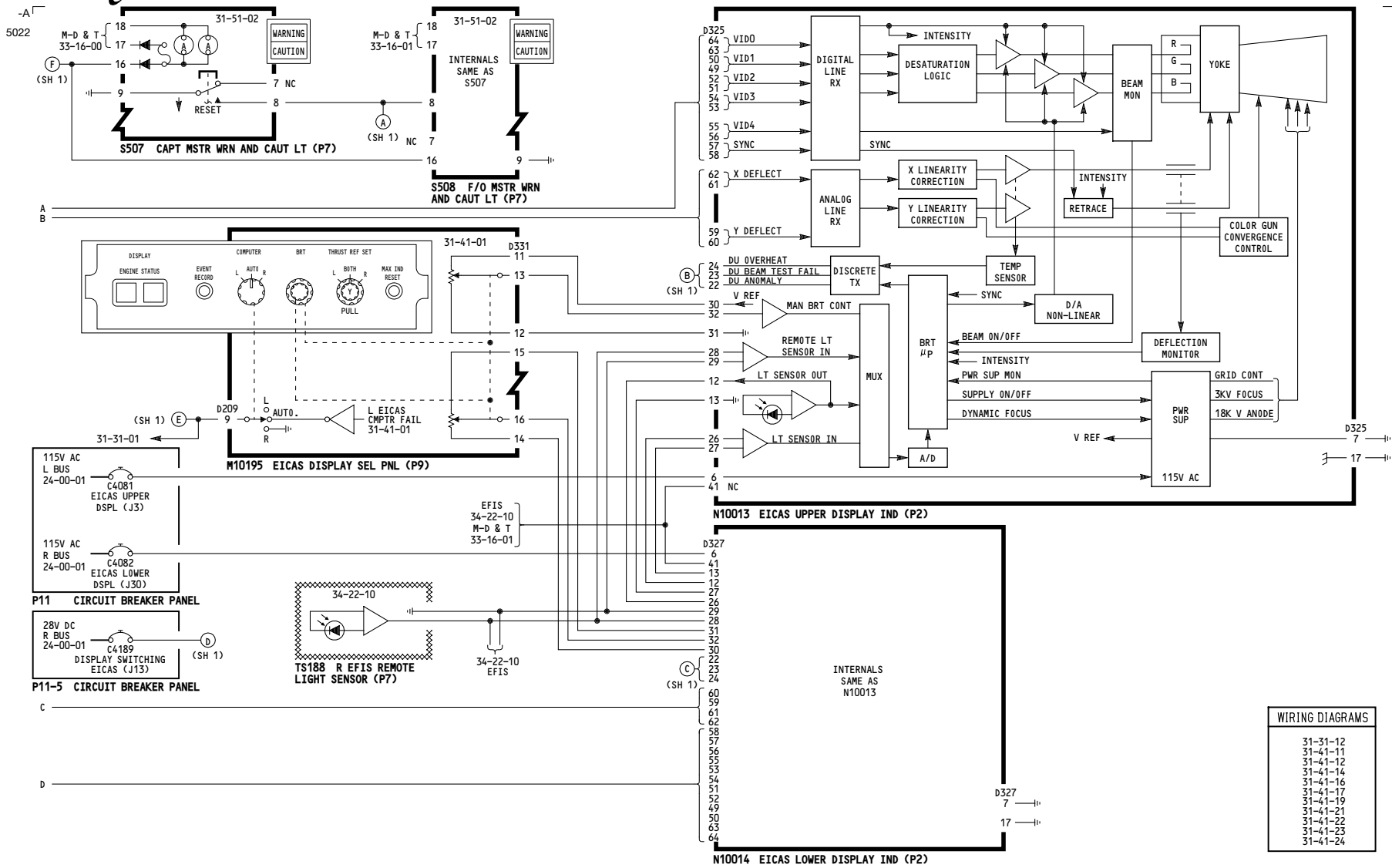
- 1 CONTROL RELAY SWITCHES 11 DPDT. RELAYS, OF WHICH 8 ARE USED FOR DISPLAY SWITCHING
- 2 1 SET OF DPDT CONTACTS SHOWN, OTHERS SIMILAR
- 3 USED AS AIR/GND FOR ALL COMPUTER FUNCTIONS
- 4 INHIBITS MCL + AURAL WHEN BOTH ENGINES ARE SHUTDOWN ON THE GROUND
- 5 DELAYS MCL + AURAL, OR REMOVES THEM IF ALREADY PRESENT, DURING TAKEOFF FROM 80KTS TO 400 FT OR 20 SECS AFTER NOSEWHEEL LIFTOFF, WHICHEVER OCCURS FIRST
- 6 HARDWARE EXISTS FOR THIRD DU DRIVE BUT SOFTWARE NOT IMPLEMENTED

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**EICAS OUTPUTS**

D280N032S

**31-41-06**

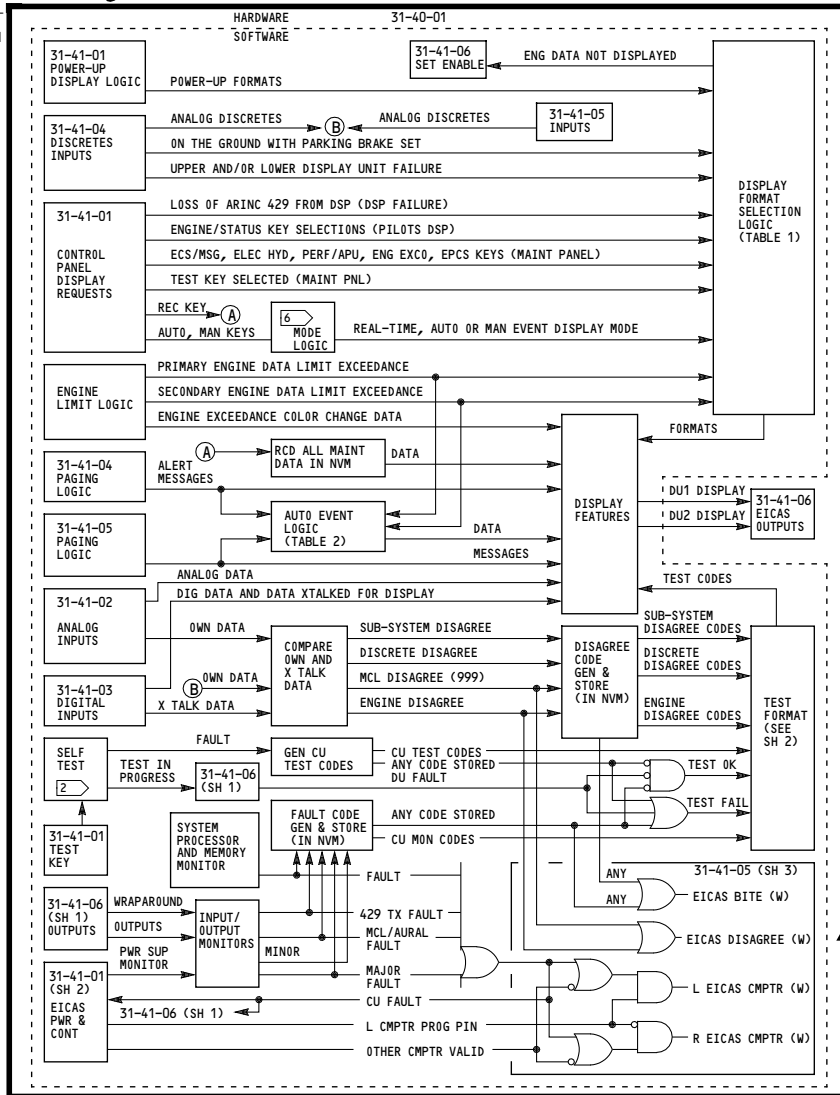


| WIRING DIAGRAMS |  |
|-----------------|--|
| 31-31-12        |  |
| 31-41-11        |  |
| 31-41-12        |  |
| 31-41-14        |  |
| 31-41-16        |  |
| 31-41-17        |  |
| 31-41-19        |  |
| 31-41-21        |  |
| 31-41-22        |  |
| 31-41-23        |  |
| 31-41-24        |  |



**31-41-06**

5051



M10181 L EICAS COMPUTER (E4-2) 1



| ENGINE KEY      | NO SECONDARY ENGINE EXCEEDANCE |                  |                  |                  |                  |                  |                  | EXISTING SECONDARY EXCEEDANCE |                  |                  |                  |                  | PRESENT DISPLAY UPPER LOWER |
|-----------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------------------|------------------|------------------|------------------|------------------|-----------------------------|
|                 | PRIMARY BLANK                  | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY STATUS   | COMP-P STATUS    | COMP-F STATUS    | TEST TEST                     | PRIMARY SEC-PART | PRIMARY SEC-FULL | COMP-P STATUS    | COMP-F STATUS    |                             |
| 7               | PRIMARY SEC-FULL               | PRIMARY SEC-FULL | PRIMARY BLANK    | PRIMARY SEC-FULL | PRIMARY BLANK    | PRIMARY SEC-FULL | NO CHNG          | 4                             | PRIMARY SEC-FULL | PRIMARY SEC-PART | PRIMARY SEC-FULL | PRIMARY SEC-FULL | NO CHNG                     |
| 6               | PRIMARY STATUS                 | PRIMARY STATUS   | PRIMARY STATUS   | PRIMARY BLANK    | PRIMARY BLANK    | PRIMARY STATUS   | NO CHNG          | 4                             | COMP-P STATUS    | COMP-P STATUS    | PRIMARY SEC-PART | COMP-P STATUS    | NO CHNG                     |
| NEW PRIM EXCEED | NO CHANGE                      | NO CHANGE        | NO CHANGE        | NO CHANGE        | NO CHANGE        | PRIMARY BLANK    | NO CHANGE        | NO CHANGE                     | NO CHANGE        | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-FULL | NO CHANGE                   |
| NEW SEC EXCEED  | PRIMARY SEC-PART               | PRIMARY SEC-PART | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-PART | PRIMARY SEC-PART | NO CHANGE        | PRIMARY SEC-PART              | NO CHANGE        | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | NO CHANGE                   |
| TEST 2          | TEST TEST                      | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | PRIMARY SEC-FULL              | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | PRIMARY SEC-FULL            |
| MAINT 3         | COMP-F MAINT                   | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | NO CHNG          | 4                             | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | NO CHNG                     |
| UPR DU FAIL     | PRIMARY                        | PRIMARY          | COMP-F           | PRIMARY          | PRIMARY          | PRIMARY          | TEST             | COMP-P                        | COMP-F           | COMP-P           | COMP-P           | COMP-P           | TEST                        |
| LWR DU FAIL     | PRIMARY                        | PRIMARY          | COMP-F           | PRIMARY          | PRIMARY          | PRIMARY          | TEST             | COMP-P                        | COMP-F           | COMP-P           | COMP-P           | COMP-P           | TEST                        |
| DSP FAIL        | PRIMARY SEC-FULL               | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL              | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL            |

TABLE 1 DISPLAY FORMAT SELECTION

| SNAPSHOT | AUTO EVENT   | EICAS REF          | SYSTEM             | SNAPSHOT | AUTO EVENT                       | EICAS REF | SYSTEM   |
|----------|--|--------------------|--------------------|----------|----------------------------------|-----------|----------|
| ECS      | FLT DK, FWD OR AFT CABIN TEMP, L, R PACK TEMP  | 31-41-04           | 21-60-XX, 21-50-XX | PERF     | ANY EXCD:-N1, N2 OR EGT          | 31-41-02  | 77-00-XX |
|          |  |                    |                    |          | ANY EXCD:-OIL PRESS, QTY OR TEMP | 31-41-02  | 79-00-XX |
| ELEC     | L, R GEN DRIVE, L, R IDG OIL TEMP, IDG RISE TEMP   | 31-41-04, 31-41-05 | 24-11-XX, 24-11-XX | APU      | APU FAULT                        | 31-41-04  | 49-00-XX |
|          |  |                    |                    |          | APU OIL QTY                      | 31-41-05  | 49-00-XX |
| HYD      | L, C, R HYD SYS PRESS, L, C, R HYD QTY, L, R ENG HYD QVHT, C HYD 1, 2 QVHT, L, R ELEC HYD QVHT | 31-41-04           | 29-00-XX           |          |                                  |           |          |

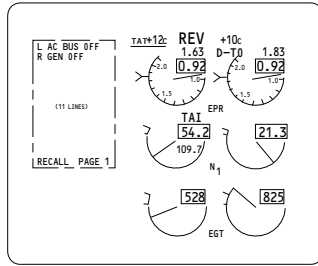
**NOTES:**

TABLE 2 AUTO-EVENTS

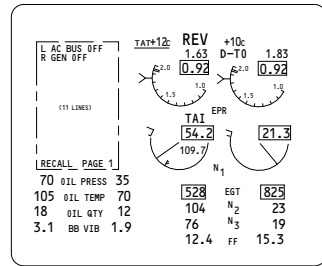
- M10181 SHOWN. M10182 R EICAS COMPUTER (E4-2) SIMILAR
- ONLY ACTIVE ON THE GROUND WITH THE PARKING BRAKE SET, WRAPS TEST SIGNAL INTO ALL FREQUENCY AND DISCRETE INPUT PORTS
- ELEC/HYD, ECS/MSG, PERF/APU, ENG EXCD OR CONF/MCDP KEY (ACTIVE ON GROUND ONLY)
- INDICATES WHICH KEY PRESSED ON THE TEST FORMAT
- IF SAME KEY PRESSED AS MAINT FORMAT ALREADY ON DISPLAY, WILL CHANGE TO PRIMARY/SEC-FULL. IF ANY OTHER MAINT KEY 3 PRESSED, LOWER DISPLAY WILL CHANGE TO THAT FORMAT.
- IF COMP-F/MAINT IS DISPLAYED BY SELECTION OF A MAINT 3 KEY, THE DATA ON DISPLAY WILL BE REAL-TIME. IF THE MAN KEY ON THE MAINT PANEL IS THEN PRESSED, THE DATA ON THE MAINT FORMAT WILL CHANGE TO THAT RECORDED BY THE LAST MANUAL SNAPSHOT. IF THE MAN KEY IS PRESSED AGAIN, THE DISPLAY WILL CHANGE BACK TO THE REAL-TIME DATA. ALTERNATELY, IF THE AUTO KEY IS PRESSED, THE DATA WILL CHANGE TO THAT RECORDED BY AN AUTO-EVENT.
- THE STATUS KEY IS INOPERATIVE IN THE AIR IF EITHER UPPER OR LOWER DISPLAY UNIT IS FAILED.
- NOT ALL PARAMETERS ARE SHOWN WHEN "PARTIAL".

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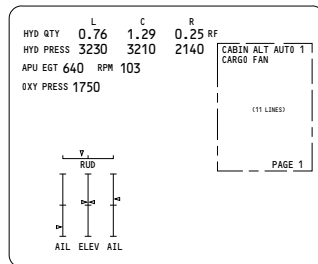
OPERATIONAL FORMATS



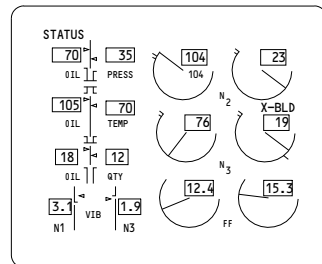
PRIMARY



COMPACTED (FULL)

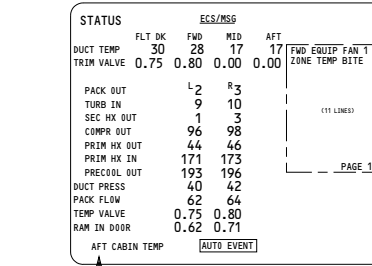


STATUS

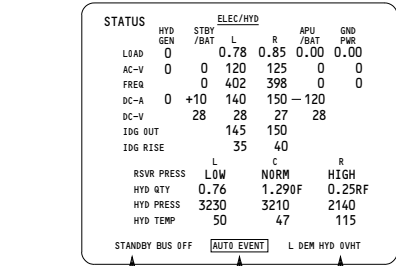


SECONDARY (FULL)

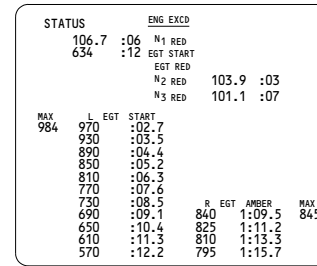
MAINTENANCE FORMATS



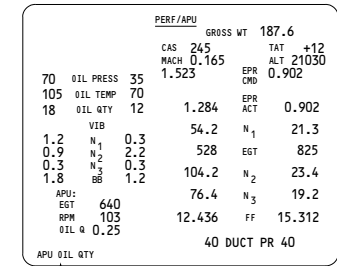
AUTO EVENT MESSAGE ENVIRONMENT CONTROL SYSTEM/MESSAGE



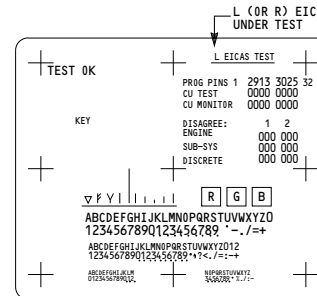
ELECTRICAL AUTO EVENT MESSAGE OR HYD AUTO EVENT MESSAGE (BLANK FOR REAL-TIME DATA) ELECTRICAL/HYDRAULIC



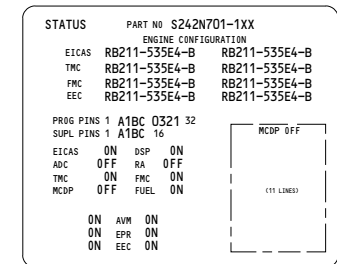
ENGINE EXCEEDANCES



APU AUTO EVENT MESSAGE PERFORMANCE/APU



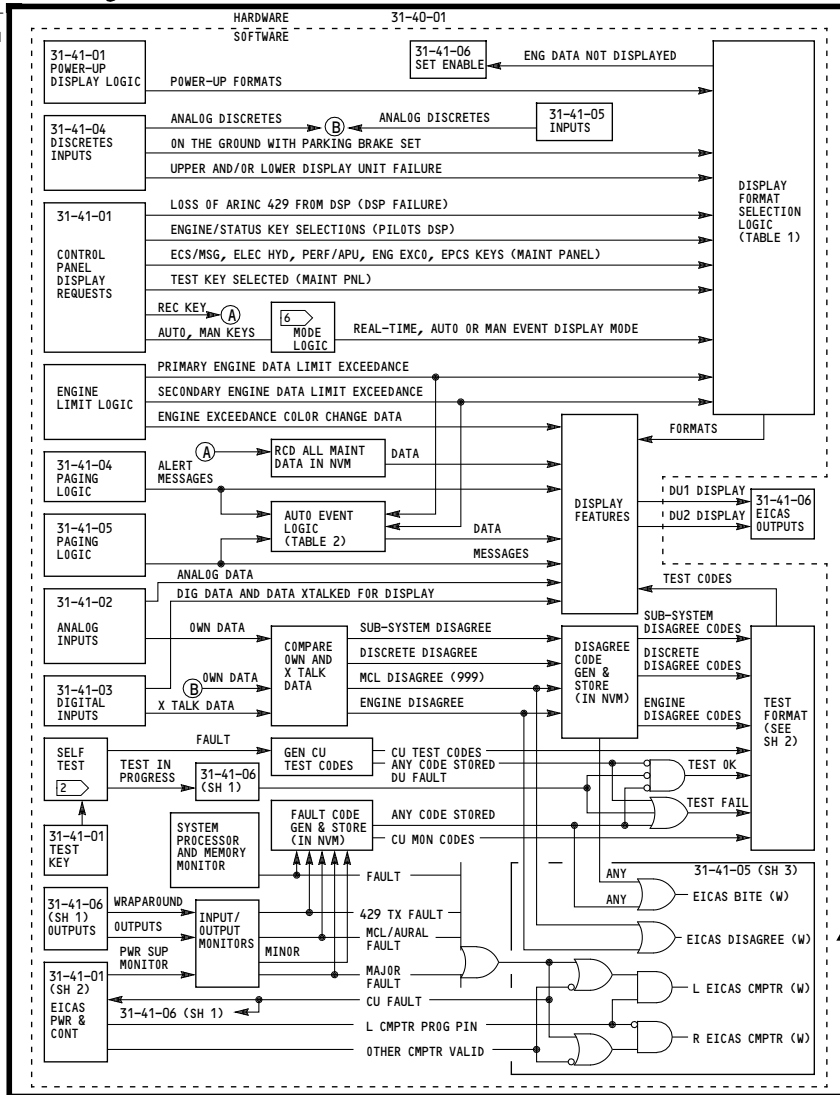
TEST



CONFIGURATION/MCDP SYSTEM MESSAGE

|           |                       |
|-----------|-----------------------|
| 001-099   | <b>EICAS DISPLAYS</b> |
| D280N032S |                       |

5051



M10181 L EICAS COMPUTER (E4-2) 1

| ENGINE KEY      | NO SECONDARY ENGINE EXCEEDANCE |                  |                  |                  |                  |                  |                  | EXISTING SECONDARY EXCEEDANCE |                  |                  |                  |                  | PRESENT DISPLAY UPPER LOWER |
|-----------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------------------|------------------|------------------|------------------|------------------|-----------------------------|
|                 | PRIMARY BLANK                  | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY STATUS   | COMP-P STATUS    | COMP-F STATUS    | TEST TEST                     | PRIMARY SEC-PART | PRIMARY SEC-FULL | COMP-P STATUS    | COMP-F STATUS    |                             |
| 7               | PRIMARY SEC-FULL               | PRIMARY SEC-FULL | PRIMARY BLANK    | PRIMARY SEC-FULL | PRIMARY BLANK    | PRIMARY BLANK    | PRIMARY SEC-FULL | NO CHNG 4                     | PRIMARY SEC-FULL | PRIMARY SEC-PART | PRIMARY SEC-FULL | PRIMARY SEC-FULL | NO CHNG 4                   |
| 6               | PRIMARY STATUS                 | PRIMARY STATUS   | PRIMARY STATUS   | PRIMARY BLANK    | PRIMARY BLANK    | PRIMARY BLANK    | PRIMARY STATUS   | NO CHNG 4                     | COMP-P STATUS    | COMP-P STATUS    | PRIMARY SEC-PART | COMP-P STATUS    | NO CHNG 4                   |
| NEW PRIM EXCEED | NO CHANGE                      | NO CHANGE        | NO CHANGE        | NO CHANGE        | NO CHANGE        | NO CHANGE        | PRIMARY BLANK    | NO CHANGE                     | NO CHANGE        | NO CHANGE        | NO CHANGE        | PRIMARY SEC-PART | NO CHANGE                   |
| NEW SEC EXCEED  | PRIMARY SEC-PART               | PRIMARY SEC-PART | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-PART | PRIMARY SEC-PART | NO CHANGE        | NO CHANGE                     | PRIMARY SEC-PART | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-FULL | NO CHANGE                   |
| TEST 2          | TEST TEST                      | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | PRIMARY SEC-FULL              | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | PRIMARY SEC-FULL            |
| MAINT 3         | COMP-F MAINT                   | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | NO CHNG 4        | NO CHNG 4                     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | NO CHNG 4                   |
| UPR DU FAIL     | PRIMARY                        | PRIMARY          | COMP-F           | PRIMARY          | PRIMARY          | PRIMARY          | TEST             | COMP-P                        | COMP-F           | COMP-P           | COMP-P           | COMP-P           | TEST                        |
| LWR DU FAIL     | PRIMARY                        | PRIMARY          | COMP-F           | PRIMARY          | PRIMARY          | PRIMARY          | TEST             | COMP-P                        | COMP-F           | COMP-P           | COMP-P           | COMP-P           | TEST                        |
| DSP FAIL        | PRIMARY SEC-FULL               | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL              | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL            |

TABLE 1 DISPLAY FORMAT SELECTION

| SNAPSHOT | AUTO EVENT   | EICAS REF            | SYSTEM               | SNAPSHOT | AUTO EVENT                       | EICAS REF | SYSTEM   |
|----------|--|----------------------|----------------------|----------|----------------------------------|-----------|----------|
| ECS      | FLT DK, FWD OR AFT CABIN TEMP L, R PACK TEMP   | 31-41-04             | 21-60-XX<br>21-50-XX | PERF     | ANY EXCD:-N1, N2 OR EGT          | 31-41-02  | 77-00-XX |
|          |  |                      |                      |          | ANY EXCD:-OIL PRESS, QTY OR TEMP | 31-41-02  | 79-00-XX |
| ELEC     | L, R GEN DRIVE<br>L, R IDG OIL TEMP<br>IDG RISE TEMP   | 31-41-04<br>31-41-05 | 24-11-XX<br>24-11-XX | APU      | APU FAULT                        | 31-41-04  | 49-00-XX |
|          |  |                      |                      |          | APU OIL QTY                      | 31-41-05  | 49-00-XX |
| HYD      | L, C, R HYD SYS PRESS<br>L, C, R HYD QTY<br>L, R ENG HYD QVHT<br>C HYD 1, 2 QVHT<br>L, R ELEC HYD QVHT | 31-41-04             | 29-00-XX             |          |                                  |           |          |

- NOTES:
- M10181 SHOWN. M10182 R EICAS COMPUTER (E4-2) SIMILAR
  - ONLY ACTIVE ON THE GROUND WITH THE PARKING BRAKE SET, WRAPS TEST SIGNAL INTO ALL FREQUENCY AND DISCRETE INPUT PORTS
  - ELEC/HYD, ECS/MSG, PERF/APU, ENG EXCD OR CONF/MCDP KEY (ACTIVE ON GROUND ONLY)
  - INDICATES WHICH KEY PRESSED ON THE TEST FORMAT
  - IF SAME KEY PRESSED AS MAINT FORMAT ALREADY ON DISPLAY, WILL CHANGE TO PRIMARY/SEC-FULL. IF ANY OTHER MAINT KEY 3 PRESSED, LOWER DISPLAY WILL CHANGE TO THAT FORMAT.
  - IF COMP-F/MAINT IS DISPLAYED BY SELECTION OF A MAINT 3 KEY, THE DATA ON DISPLAY WILL BE REAL-TIME. IF THE MAN KEY ON THE MAINT PANEL IS THEN PRESSED, THE DATA ON THE MAINT FORMAT WILL CHANGE TO THAT RECORDED BY THE LAST MANUAL SNAPSHOT. IF THE MAN KEY IS PRESSED AGAIN, THE DISPLAY WILL CHANGE BACK TO THE REAL-TIME DATA. ALTERNATELY, IF THE AUTO KEY IS PRESSED, THE DATA WILL CHANGE TO THAT RECORDED BY AN AUTO-EVENT.
  - THE STATUS KEY IS INOPERATIVE IN THE AIR IF EITHER UPPER OR LOWER DISPLAY UNIT IS FAILED.
  - NOT ALL PARAMETERS ARE SHOWN WHEN "PARTIAL".

001-011

EICAS DISPLAYS

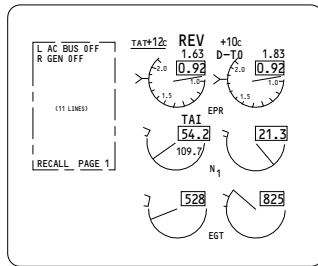
D280N032S

**31-41-07**

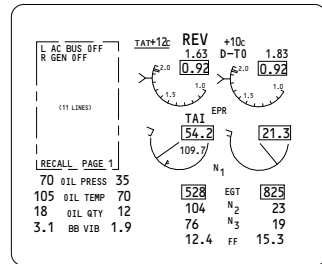
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Jan 21/2005

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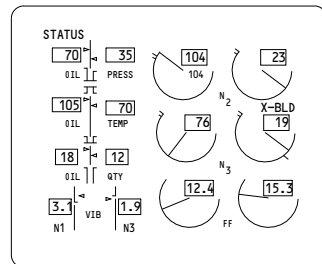
OPERATIONAL FORMATS



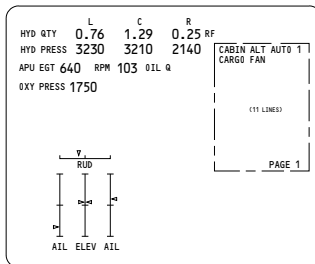
PRIMARY



COMPACTED (FULL)

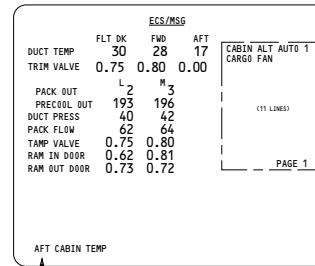


SECONDARY (FULL)

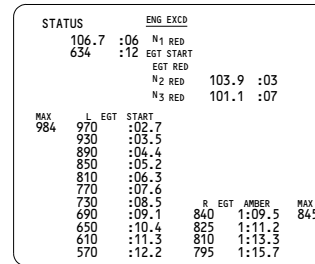


STATUS

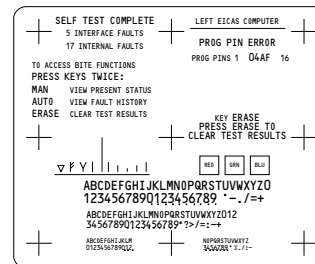
MAINTENANCE FORMATS



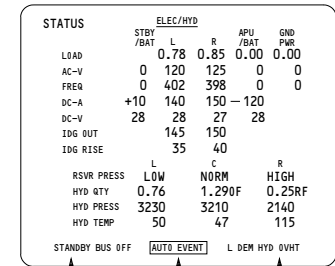
AUTO EVENT MESSAGE ENVIRONMENT CONTROL SYSTEM/MESSAGE



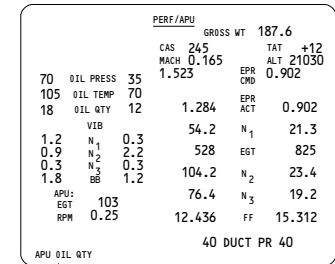
ENGINE EXCEEDANCES



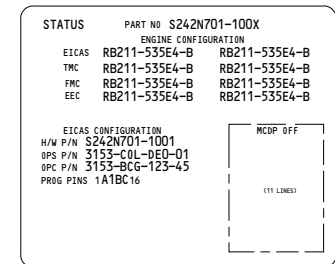
TEST



ELECTRICAL AUTO EVENT MESSAGE OR HYD AUTO EVENT MESSAGE (BLANK FOR REAL-TIME DATA) ELECTRICAL/HYDRAULIC



APU AUTO EVENT MESSAGE PERFORMANCE/APU



CONFIGURATION/MCDP SYSTEM MESSAGE

001-011

**EICAS DISPLAYS**

Incorporates 31-0059 R01

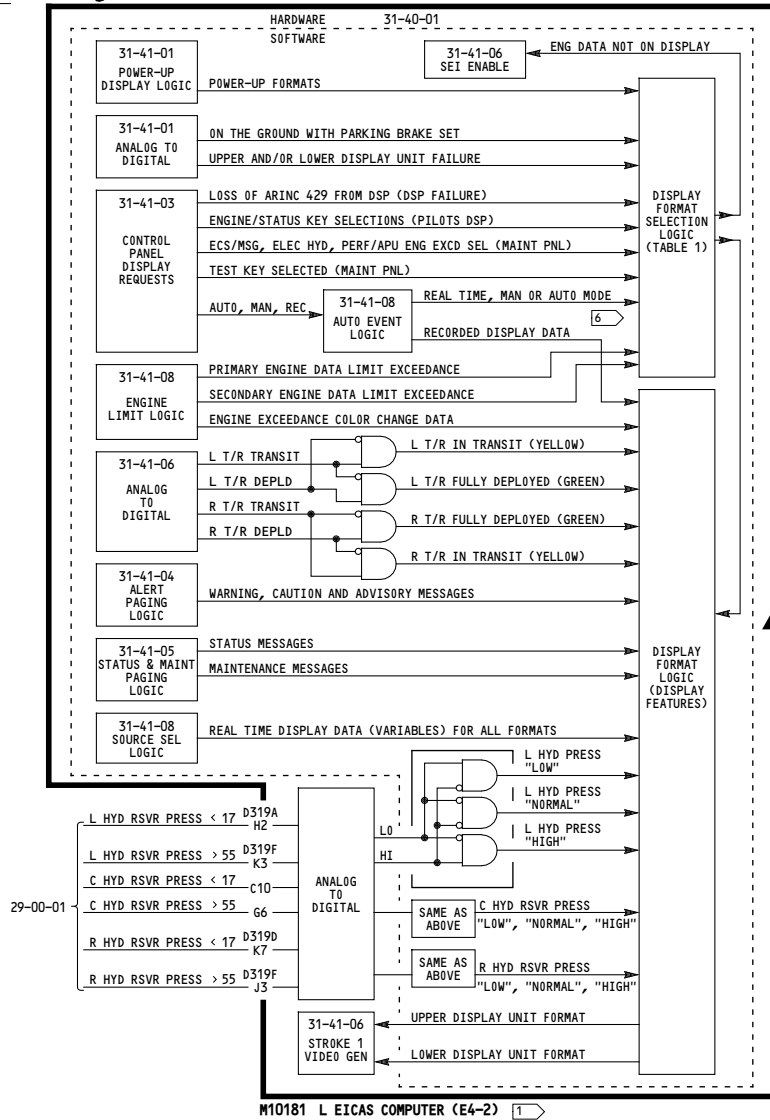
D280N032S

**31-41-07**

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**M10181 L EICAS COMPUTER (E4-2)** 1

| ENGINE KEY      | NO SECONDARY ENGINE EXCEEDANCE |                  |                  |                  |                  |                  |                  | EXISTING SECONDARY EXCEEDANCE |                  |                  |                  |                  | PRESENT DISPLAY UPPER LOWER |
|-----------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------------------|------------------|------------------|------------------|------------------|-----------------------------|
|                 | PRIMARY BLANK                  | PRIMARY SEC-PART | PRIMARY SEC-FULL | PRIMARY STATUS   | PRIMARY BLANK    | COMP-P STATUS    | COMP-F MAINT     | TEST TEST                     | PRIMARY SEC-PART | PRIMARY SEC-FULL | COMP-P STATUS    | COMP-F MAINT     |                             |
| STATUS KEY      | PRIMARY STATUS                 | PRIMARY STATUS   | PRIMARY STATUS   | PRIMARY BLANK    | PRIMARY BLANK    | PRIMARY STATUS   | NO CHANGE        | PRIMARY SEC-FULL              | PRIMARY SEC-FULL | PRIMARY SEC-PART | PRIMARY SEC-FULL | PRIMARY SEC-FULL | NO CHANGE                   |
| NEW PRIM EXCEED | NO CHANGE                      | NO CHANGE        | NO CHANGE        | NO CHANGE        | NO CHANGE        | PRIMARY BLANK    | NO CHANGE        | NO CHANGE                     | NO CHANGE        | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-FULL | NO CHANGE                   |
| NEW SEC EXCEED  | PRIMARY SEC-PART               | PRIMARY SEC-PART | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-PART | PRIMARY SEC-PART | NO CHANGE        | PRIMARY SEC-PART              | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-FULL | PRIMARY SEC-FULL | NO CHANGE                   |
| TEST            | TEST TEST                      | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | PRIMARY SEC-FULL              | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | PRIMARY SEC-FULL            |
| MAINT           | COMP-F MAINT                   | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | NO CHANGE        | COMP-F MAINT                  | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | NO CHANGE                   |
| UPPER DU FAIL   | PRIMARY                        | PRIMARY          | COMP-F           | PRIMARY          | PRIMARY          | PRIMARY          | TEST             | COMP-P                        | COMP-F           | COMP-P           | COMP-P           | COMP-P           | TEST                        |
| LOWER DU FAIL   | PRIMARY                        | PRIMARY          | COMP-F           | PRIMARY          | PRIMARY          | PRIMARY          | TEST             | COMP-P                        | COMP-F           | COMP-P           | COMP-P           | COMP-P           | TEST                        |
| DSP FAIL        | PRIMARY SEC-FULL               | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL              | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL            |

**TABLE 1 DISPLAY FORMAT SELECTION**

**NOTES:**

- 1 M10181 SHOWN, M10182 R EICAS COMPUTER (E4-2) HAS IDENTICAL INPUTS AND INTERNALS.
- 2 ONLY ACTIVE ON THE GROUND WITH THE PARKING BRAKE SET.
- 3 ELEC/HYD, ECS/MSG, PERF/APU, ENG EXCD OR CONF/MCDP KEY (ACTIVE ON GROUND ONLY).
- 4 INDICATES WHICH KEY PRESSED ON THE TEST FORMAT.
- 5 IF SAME KEY PRESSED AS MAINT FORMAT ALREADY ON DISPLAY, WILL CHANGE TO PRIMARY/SEC-FULL. IF ANY OTHER MAINT KEY 3 PRESSED, LOWER DISPLAY WILL CHANGE TO THAT FORMAT.
- 6 IF COMP-F/MAINT IS DISPLAYED BY SELECTION OF A MAINT 3 KEY, THE DATA ON DISPLAY WILL BE REAL-TIME. IF THE MAN KEY ON THE MAINTENANCE PANEL IS THEN PRESSED, THE DATA ON THE MAINT FORMAT WILL CHANGE TO THAT RECORDED BY THE LAST MANUAL SNAPSHOT (31-41-08). IF THE MAN KEY IS PRESSED AGAIN, THE DISPLAY WILL CHANGE BACK TO REAL-TIME DATA, ALTERNATELY, IF THE AUTO KEY IS PRESSED, THE DATA WILL CHANGE TO THAT RECORDED BY AN AUTO-EVENT.

115-199

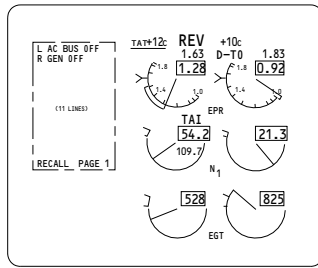
**EICAS DISPLAYS**

D280N032S

**31-41-07**

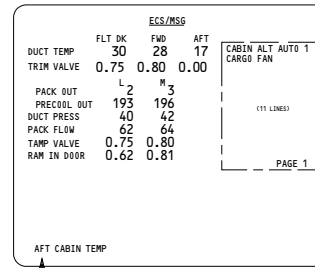
5029

OPERATIONAL FORMATS

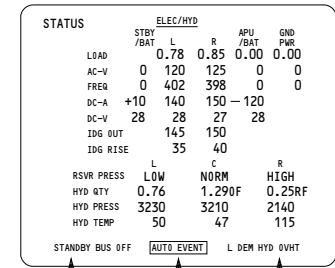


PRIMARY

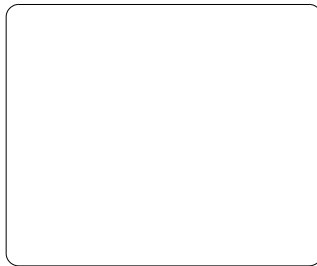
MAINTENANCE FORMATS



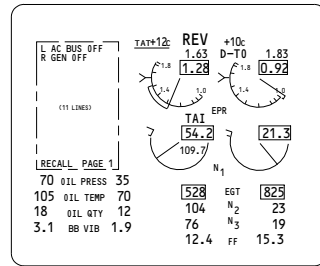
AUTO EVENT MESSAGE  
ENVIRONMENT CONTROL SYSTEM/MESSAGE



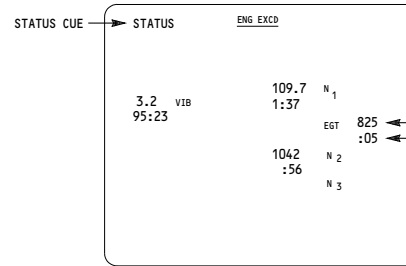
ELECTRICAL AUTO EVENT MESSAGE  
AUTO EVENT OR MAN EVENT  
HYD AUTO EVENT MESSAGE  
(BLANK FOR REAL-TIME DATA)  
ELECTRICAL/HYDRAULIC



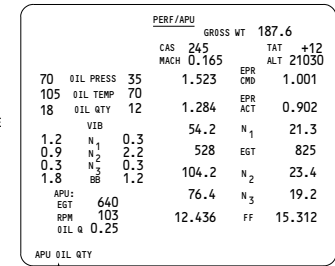
BLANK



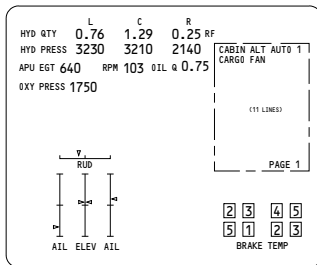
COMPACTED (FULL)



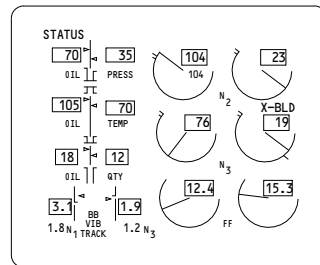
ENGINE EXCEEDANCES



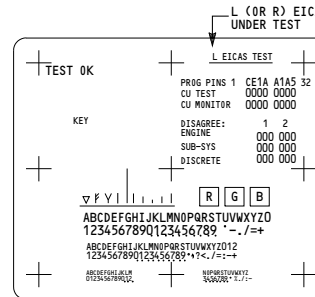
APU AUTO EVENT MESSAGE  
PERFORMANCE/APU



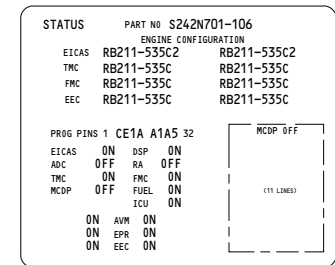
STATUS



SECONDARY (FULL)



TEST



CONFIGURATION/MCDP SYSTEM MESSAGE

115-199

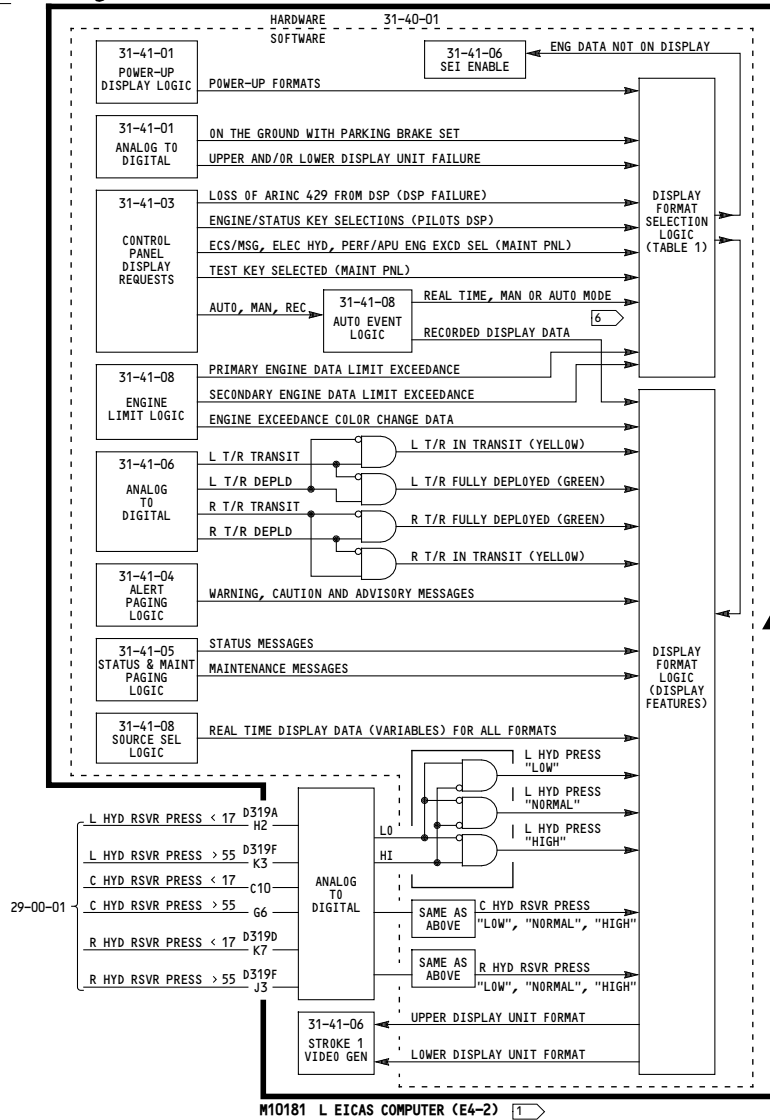
EICAS DISPLAYS

D280N032S

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M10181 L EICAS COMPUTER (E4-2) 1

| ENGINE KEY      | NO SECONDARY ENGINE EXCEEDANCE |                  |                  |                  |                  |                  |                  | EXISTING SECONDARY EXCEEDANCE |                  |                  |                  |                  | PRESENT DISPLAY UPPER LOWER |
|-----------------|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------------------|------------------|------------------|------------------|------------------|-----------------------------|
|                 | PRIMARY BLANK                  | PRIMARY SEC-PART | PRIMARY SEC-FULL | PRIMARY STATUS   | PRIMARY BLANK    | COMP-P STATUS    | COMP-F MAINT     | TEST TEST                     | PRIMARY SEC-PART | PRIMARY SEC-FULL | COMP-P STATUS    | COMP-F MAINT     |                             |
| STATUS KEY      | PRIMARY STATUS                 | PRIMARY STATUS   | PRIMARY STATUS   | PRIMARY BLANK    | PRIMARY BLANK    | PRIMARY STATUS   | NO CHANGE        | PRIMARY SEC-FULL              | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | NO CHANGE                   |
| NEW PRIM EXCEED | NO CHANGE                      | NO CHANGE        | NO CHANGE        | NO CHANGE        | NO CHANGE        | PRIMARY BLANK    | NO CHANGE        | NO CHANGE                     | NO CHANGE        | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-FULL | NO CHANGE                   |
| NEW SEC EXCEED  | PRIMARY SEC-PART               | PRIMARY SEC-PART | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-PART | PRIMARY SEC-PART | NO CHANGE        | PRIMARY SEC-PART              | NO CHANGE        | PRIMARY SEC-PART | PRIMARY SEC-FULL | PRIMARY SEC-FULL | NO CHANGE                   |
| TEST            | TEST TEST                      | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | PRIMARY SEC-FULL              | TEST TEST        | TEST TEST        | TEST TEST        | TEST TEST        | PRIMARY SEC-FULL            |
| MAINT           | COMP-F MAINT                   | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | NO CHANGE        | COMP-F MAINT                  | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | COMP-F MAINT     | NO CHANGE                   |
| UPPER DU FAIL   | PRIMARY                        | PRIMARY          | COMP-F           | PRIMARY          | PRIMARY          | PRIMARY          | TEST             | COMP-P                        | COMP-F           | COMP-P           | COMP-P           | COMP-P           | TEST                        |
| LOWER DU FAIL   | PRIMARY                        | PRIMARY          | COMP-F           | PRIMARY          | PRIMARY          | PRIMARY          | TEST             | COMP-P                        | COMP-F           | COMP-P           | COMP-P           | COMP-P           | TEST                        |
| DSP FAIL        | PRIMARY SEC-FULL               | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL              | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL | PRIMARY SEC-FULL            |

TABLE 1 DISPLAY FORMAT SELECTION

NOTES:

- 1 M10181 SHOWN, M10182 R EICAS COMPUTER (E4-2) HAS IDENTICAL INPUTS AND INTERNALS.
- 2 ONLY ACTIVE ON THE GROUND WITH THE PARKING BRAKE SET.
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115

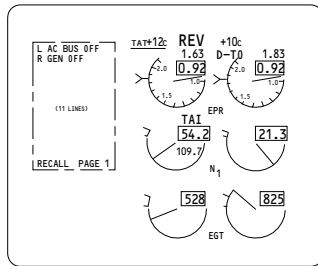
**EICAS DISPLAYS**

D280N032S

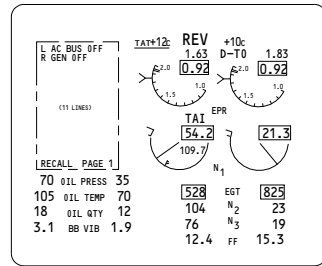
**31-41-07**

5313

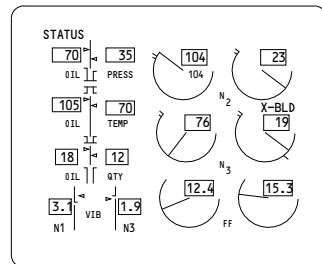
**OPERATIONAL FORMATS**



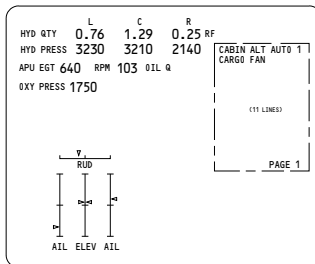
**PRIMARY**



**COMPACTED (FULL)**

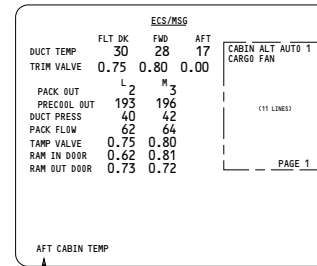


**SECONDARY (FULL)**

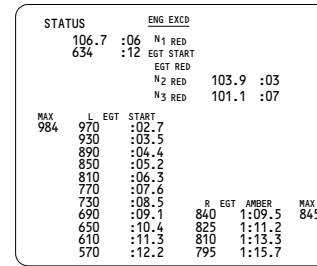


**STATUS**

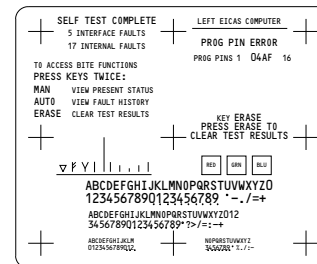
**MAINTENANCE FORMATS**



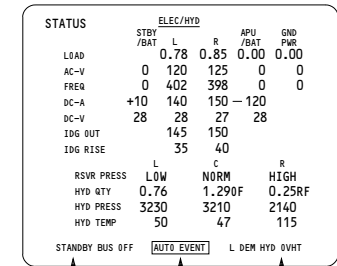
**AUTO EVENT MESSAGE**  
**ENVIRONMENT CONTROL SYSTEM/MESSAGE**



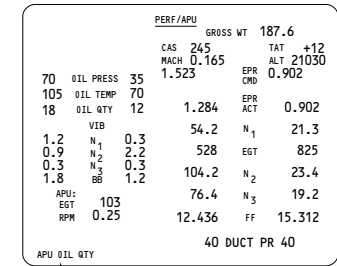
**ENGINE EXCEEDANCES**



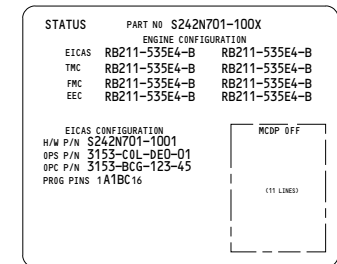
**TEST**



**ELECTRICAL AUTO EVENT MESSAGE**  
**AUTO EVENT** OR **MAN EVENT**  
**HYD AUTO EVENT MESSAGE**  
**(BLANK FOR REAL-TIME DATA)**  
**ELECTRICAL/HYDRAULIC**



**APU AUTO EVENT MESSAGE**  
**PERFORMANCE/APU**



**CONFIGURATION/MCDP SYSTEM MESSAGE**

115

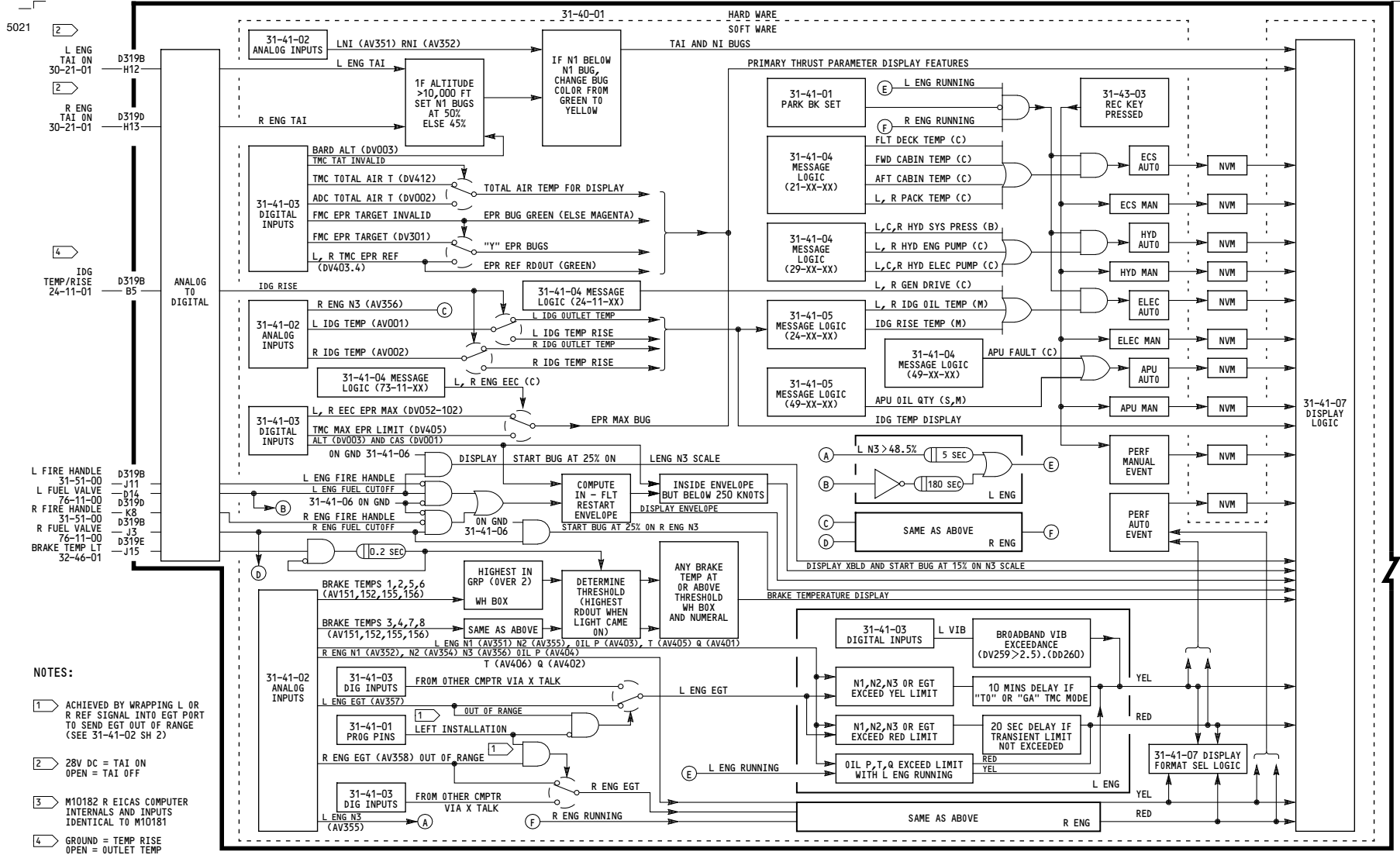
**EICAS DISPLAYS**

Incorporates  
31-0059 R01

D280N032S

**31-41-07**

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Sheet 2  
Jan 21/2005



- NOTES:**
- 1 ACHIEVED BY WRAPPING L OR R REF SIGNAL INTO EGT PORT TO SEND EGT OUT OF RANGE (SEE 31-41-02 SH 2)
  - 2 28V DC = TAI ON OPEN = TAI OFF
  - 3 M10182 R EICAS COMPUTER INTERNALS AND INPUTS IDENTICAL TO M10181
  - 4 GROUND = TEMP RISE OPEN = OUTLET TEMP

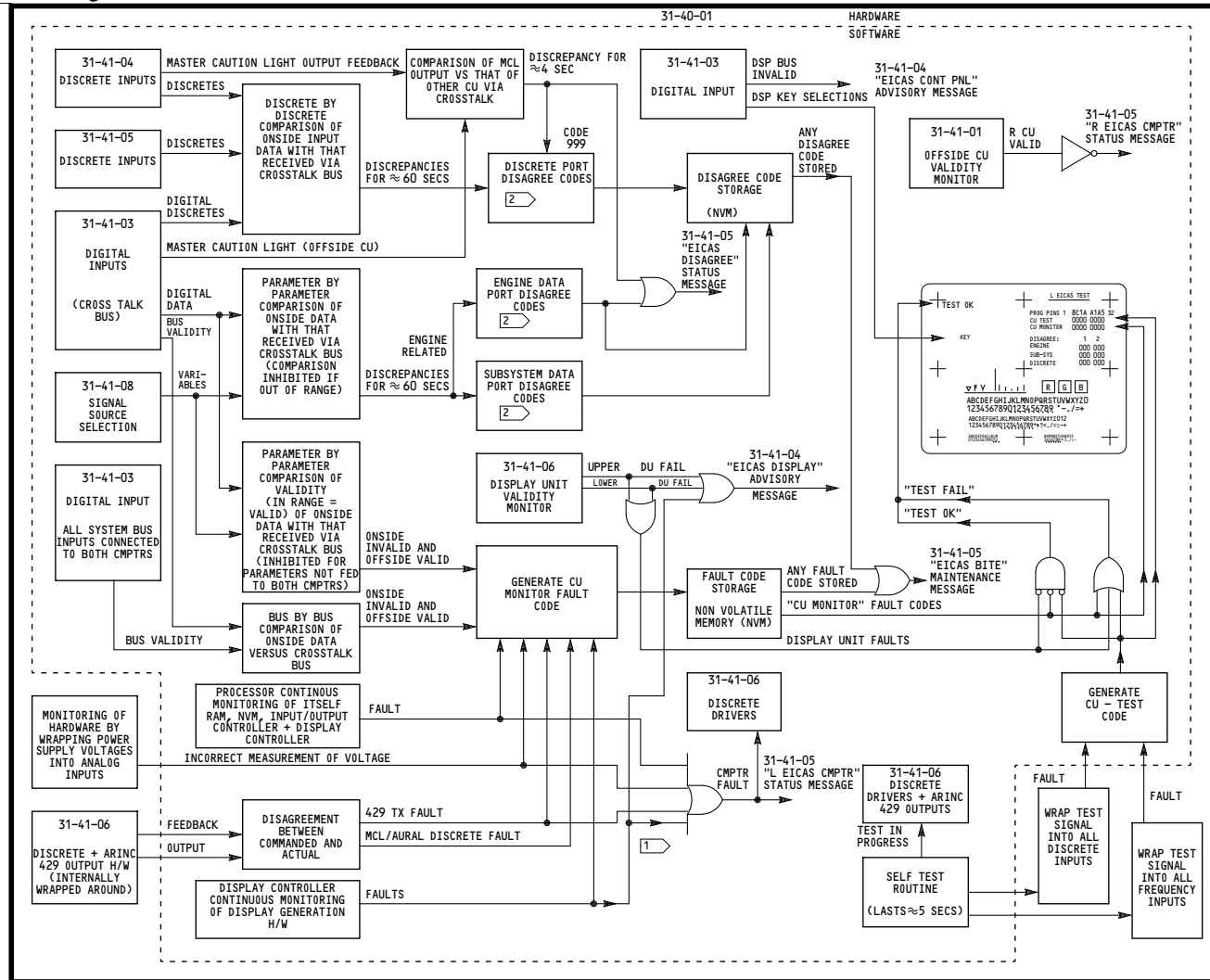
115-199

**EICAS LOGIC**

D280N032S

**31-41-08**

5021



M10181 L EICAS COMPUTER (E4-2)

M10182 R EICAS COMPUTER (E4-2)

NOTES: 1 ONLY WHEN COMBINATION OF FAULTS BLANKS BOTH DISPLAY 2 REFER TO FIM FOR DISAGREE CODES

115-199

**EICAS FAILURE DETECTION**

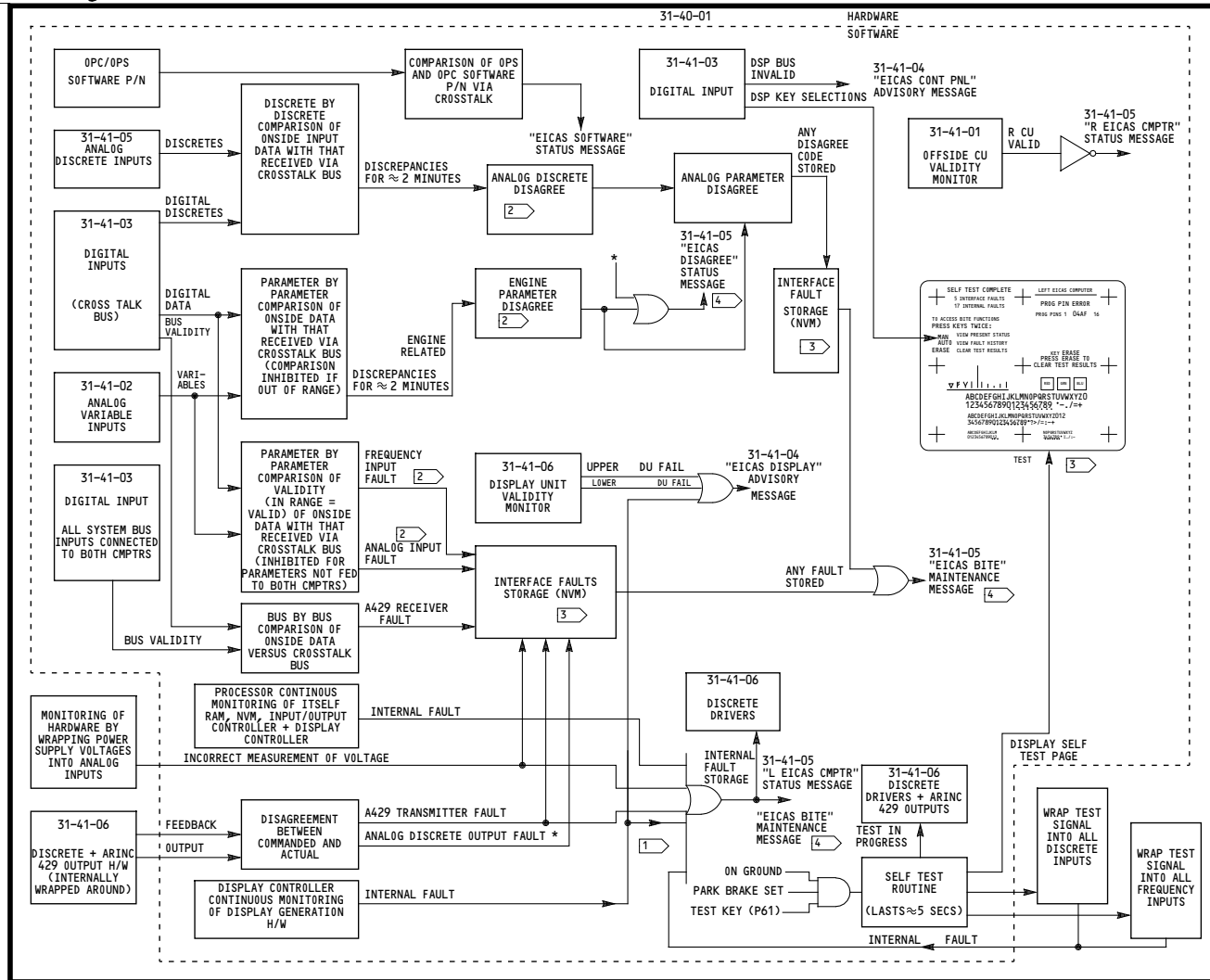
D280N032S

**31-41-09**

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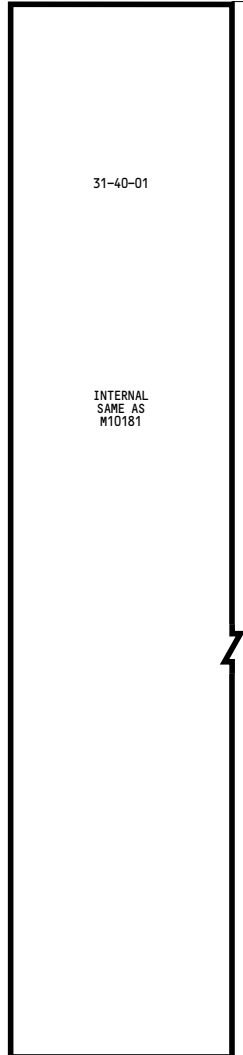


M10181 L EICAS COMPUTER (E4-2)

NOTES:   
 1 ONLY WHEN COMBINATION OF FAULTS BLANKS BOTH DISPLAY   
 2 REFER TO FIM FOR FAIL CODES

3 THE NUMBER OF PRESENT INTERFACE AND INTERNAL FAULTS ARE SHOWN ON THE TEST PAGE. INSTRUCTIONS TO VIEW PRESENT STATUS OR FAULT HISTORY ARE SHOWN IF FAULTS RESIDE IN NVM. EXIT SELF TEST PAGE AND WAIT 3 MINUTES BEFORE REPEATING SELF TEST.   
 4 FAULTS RECORDED IN FAULT HISTORY WILL LATCH MESSAGE

M10182 R EICAS COMPUTER (E4-2)



001-115

**EICAS FAILURE DETECTION**

Incorporates   
 31-0059 R01

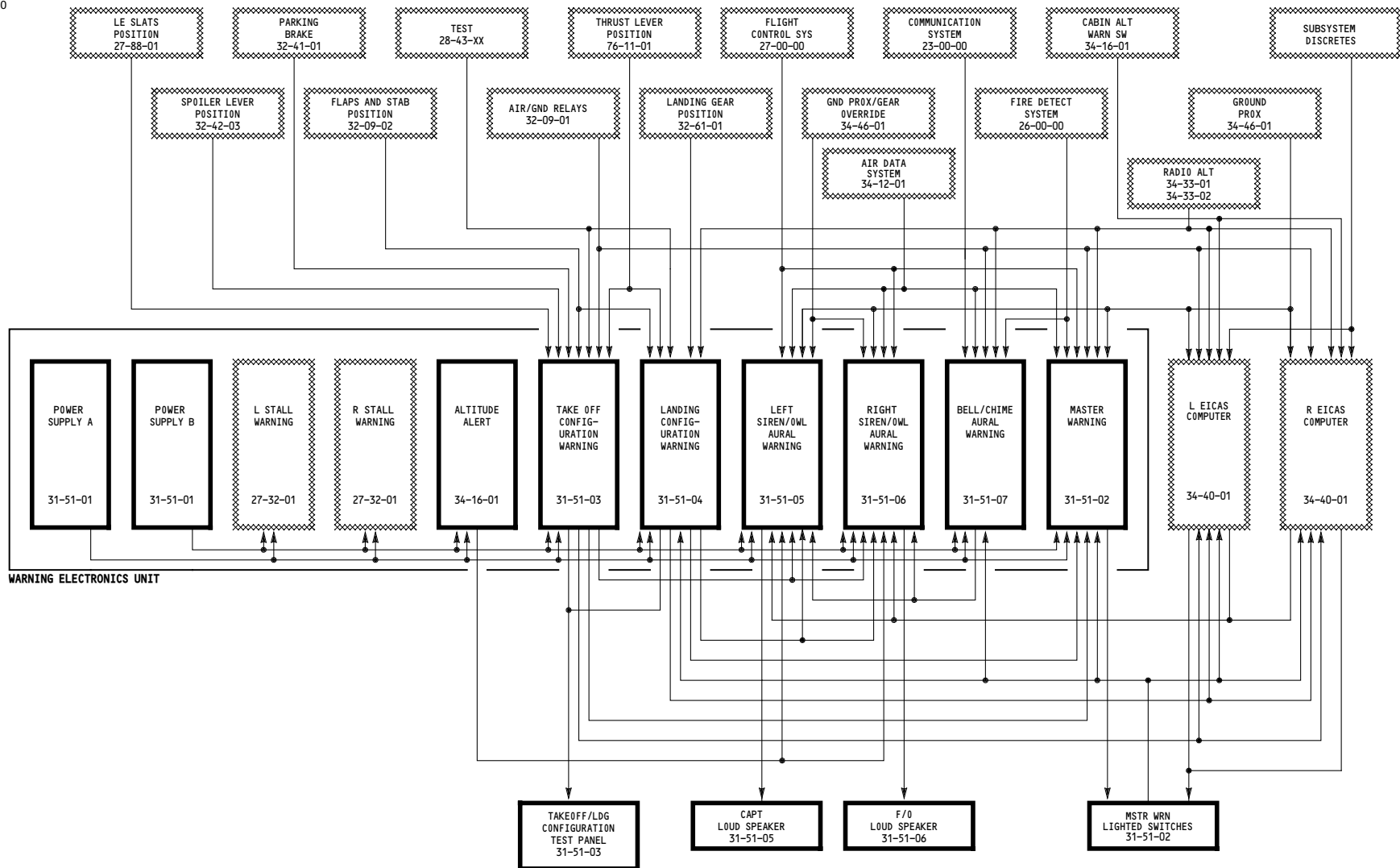
D280N032S

**31-41-09**

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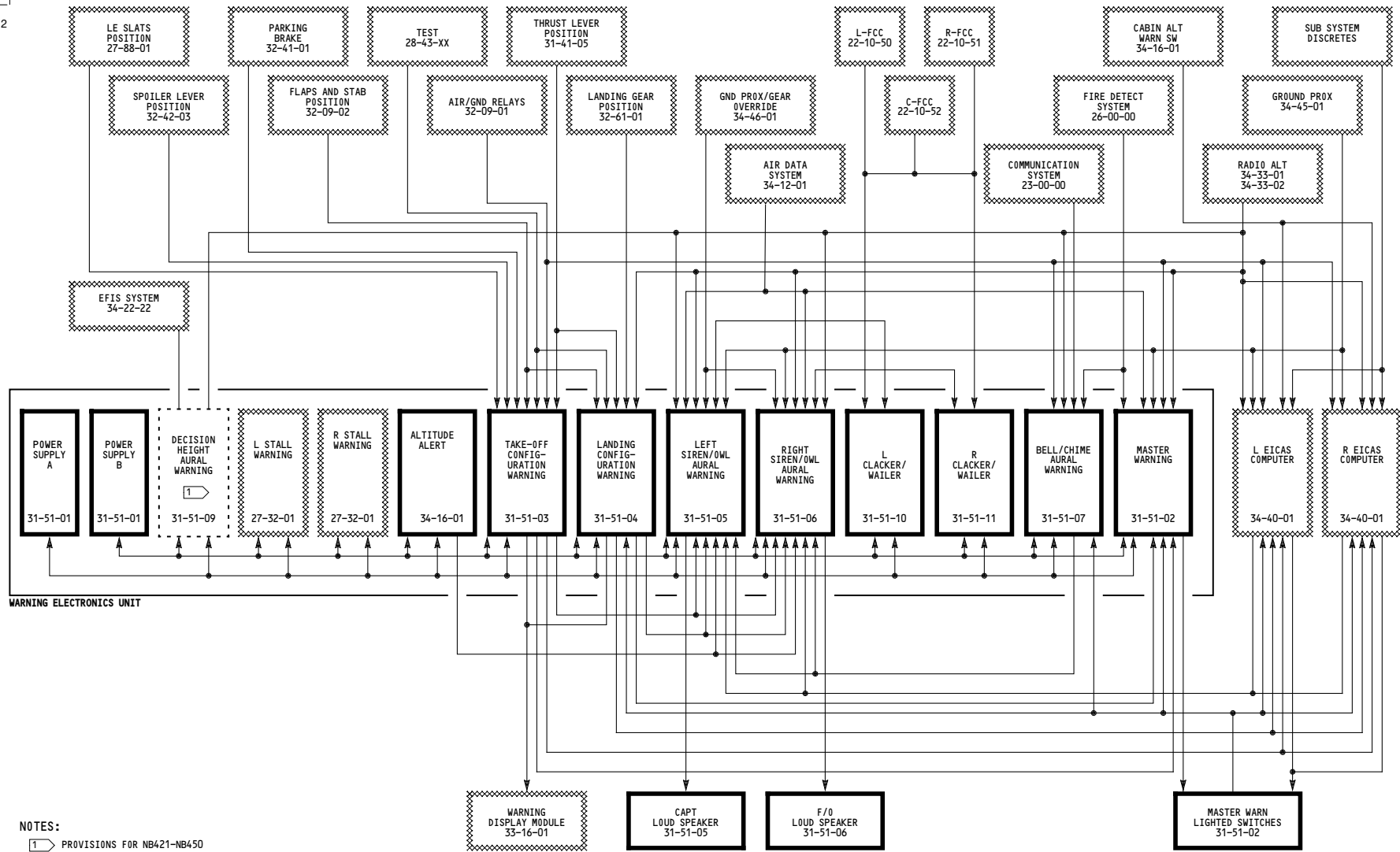


|                  |  |
|------------------|--|
| 001-008, 010-099 | <p><b>WARNING SYSTEM - SIMPLIFIED</b></p> <p>D280N032S</p> |
|------------------|--|

**31-51-00**



5012



**NOTES:**

1 PROVISIONS FOR NB421-NB450

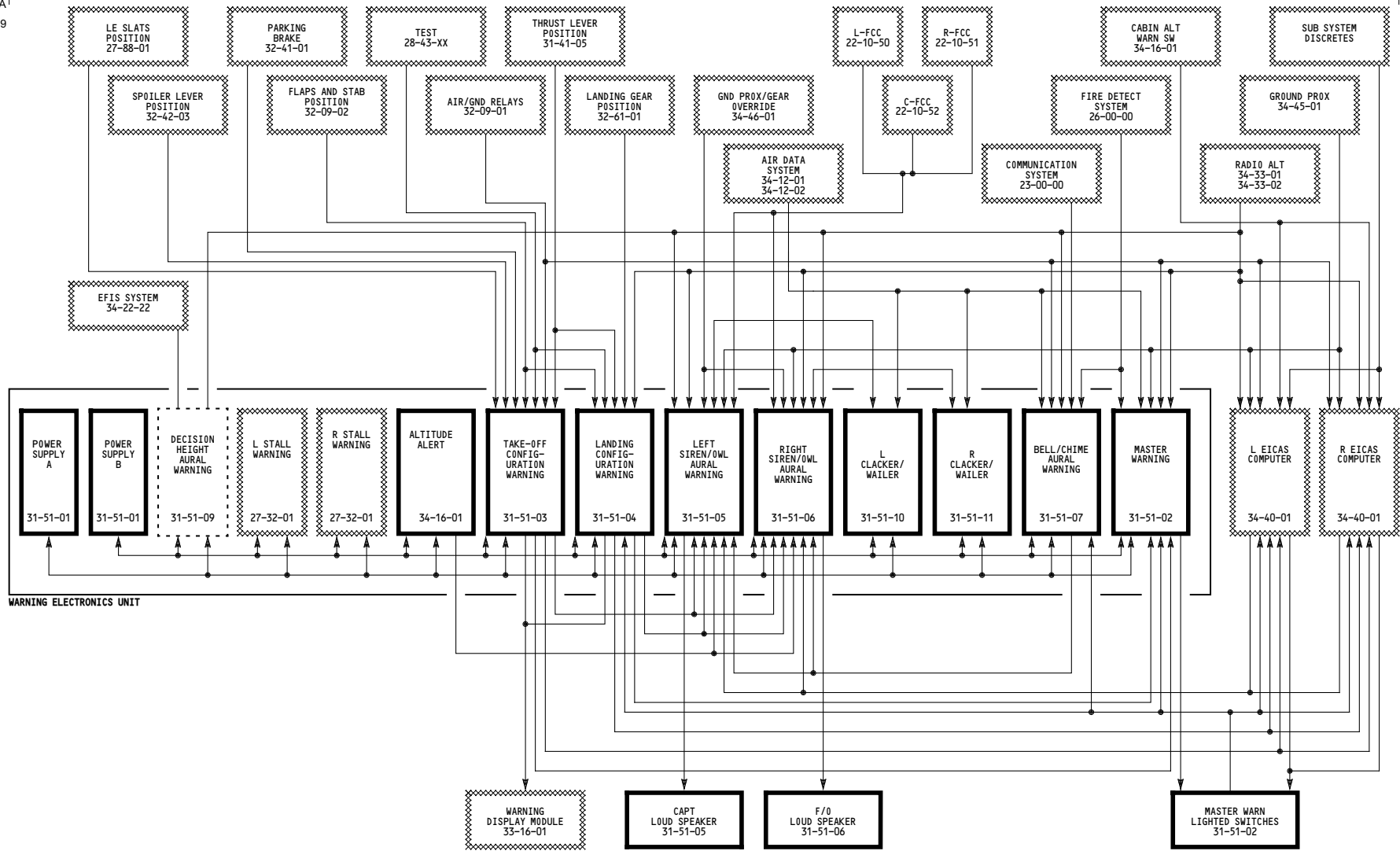
|              |  |
|--------------|--|
| 009, 115-199 | <p><b>WARNING SYSTEM - SIMPLIFIED</b></p> <p>D280N032S</p> |
|--------------|--|

**31-51-00**

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-A  
5029



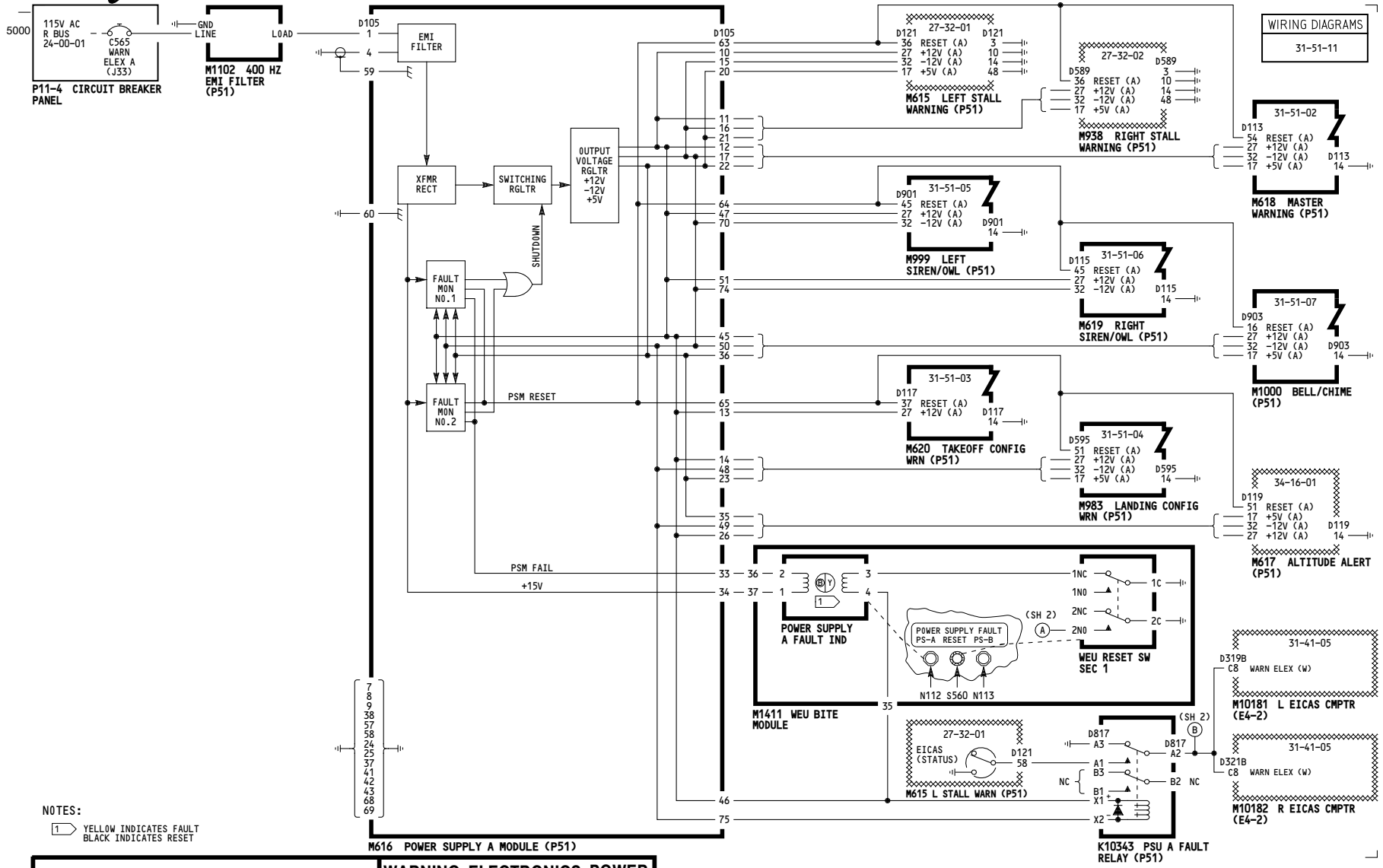
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|-----|--|
| 115 | <p><b>WARNING SYSTEM - SIMPLIFIED</b></p> <p>D280N032S</p> |
|-----|--|

Incorporates  
 31-0164 R01

**31-51-00**

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WIRING DIAGRAMS  
31-51-11

31-51-02  
D113  
59 RESET (A)  
27 +12V (A)  
32 -12V (A)  
17 +5V (A)  
D113  
14

31-51-07  
D903  
16 RESET (A)  
27 +12V (A)  
32 -12V (A)  
17 +5V (A)  
D903  
14

34-16-01  
D119  
51 RESET (A)  
17 +5V (A)  
32 -12V (A)  
27 +12V (A)  
14

31-41-05  
D319B  
C8 WARN ELEX (W)  
M10181 L EICAS CMPTR (E4-2)

31-41-05  
D321B  
C8 WARN ELEX (W)  
M10182 R EICAS CMPTR (E4-2)

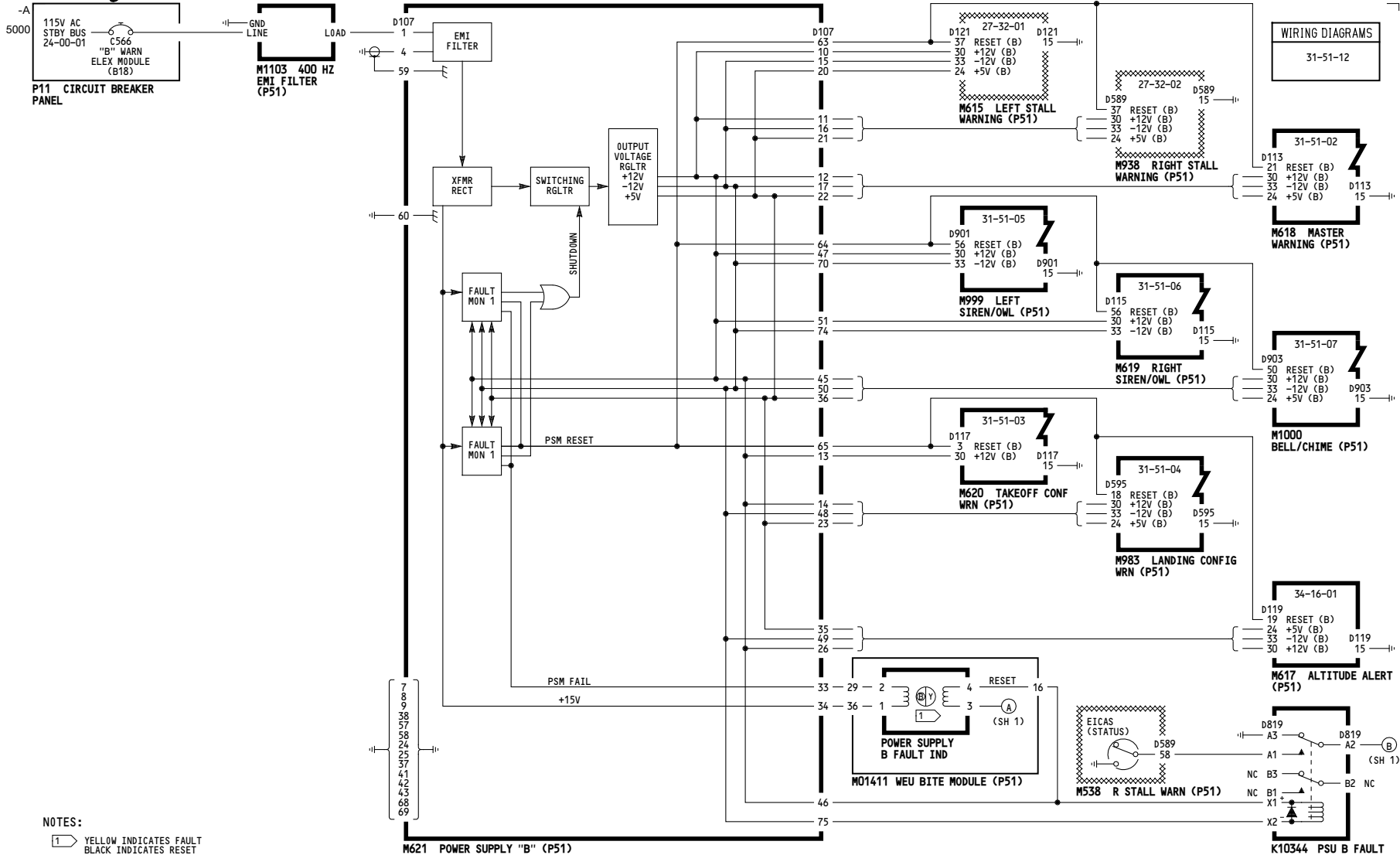
NOTES:  
1 YELLOW INDICATES FAULT  
BLACK INDICATES RESET

001-008, 010-099

**WARNING ELECTRONICS POWER**

D280N032S

**31-51-01**



WIRING DIAGRAMS  
31-51-12

31-51-02  
D113  
21 RESET (B)  
30 +12V (B)  
33 -12V (B)  
24 +5V (B)  
D113  
15

31-51-07  
D903  
50 RESET (B)  
30 +12V (B)  
33 -12V (B)  
24 +5V (B)  
D903  
15

34-16-01  
D119  
19 RESET (B)  
24 +5V (B)  
33 -12V (B)  
30 +12V (B)  
D119  
15

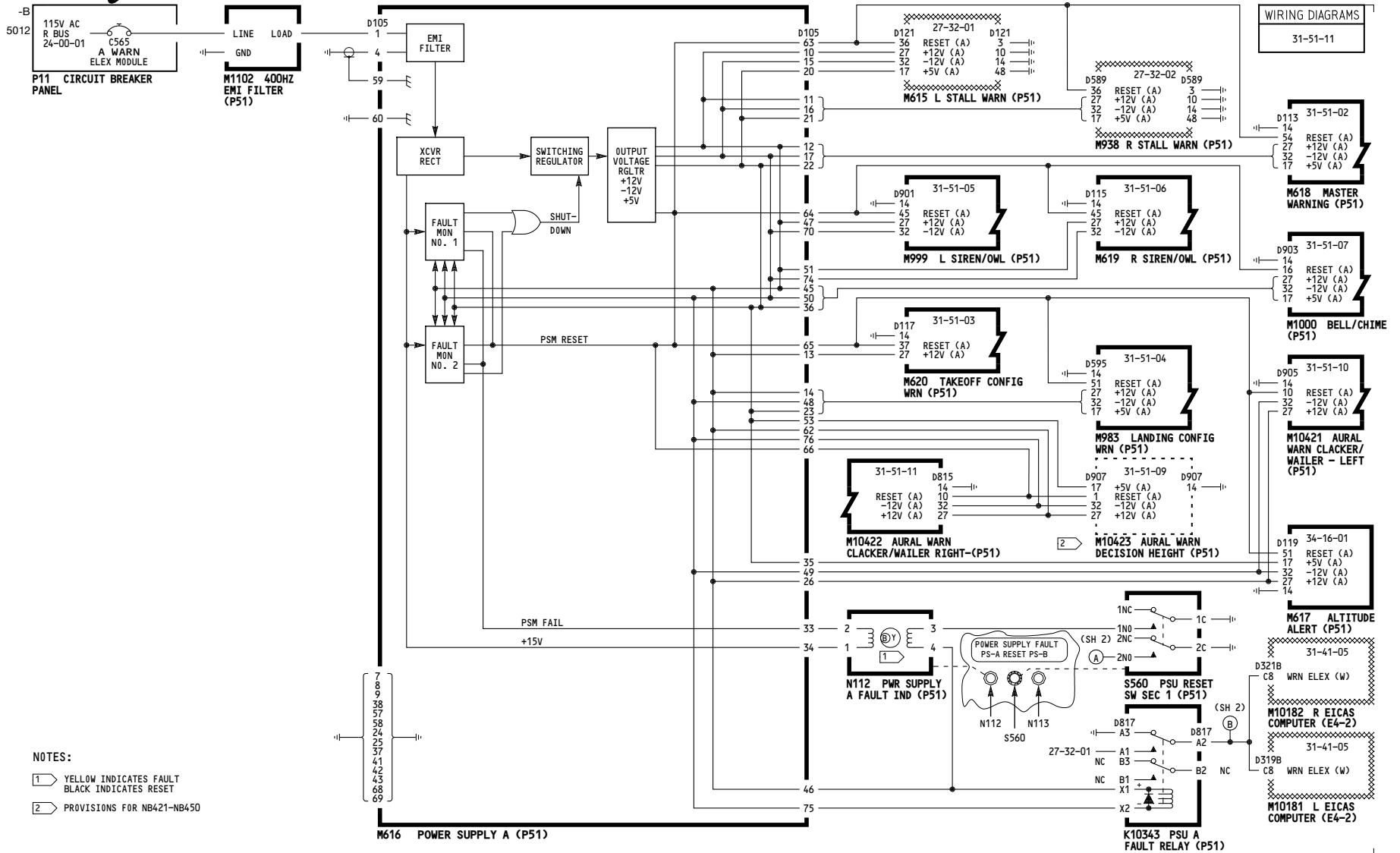
NOTES:  
1 YELLOW INDICATES FAULT  
BLACK INDICATES RESET

001-008, 010-099

**WARNING ELECTRONICS POWER**

D280N032S

**31-51-01**



WIRING DIAGRAMS  
31-51-11

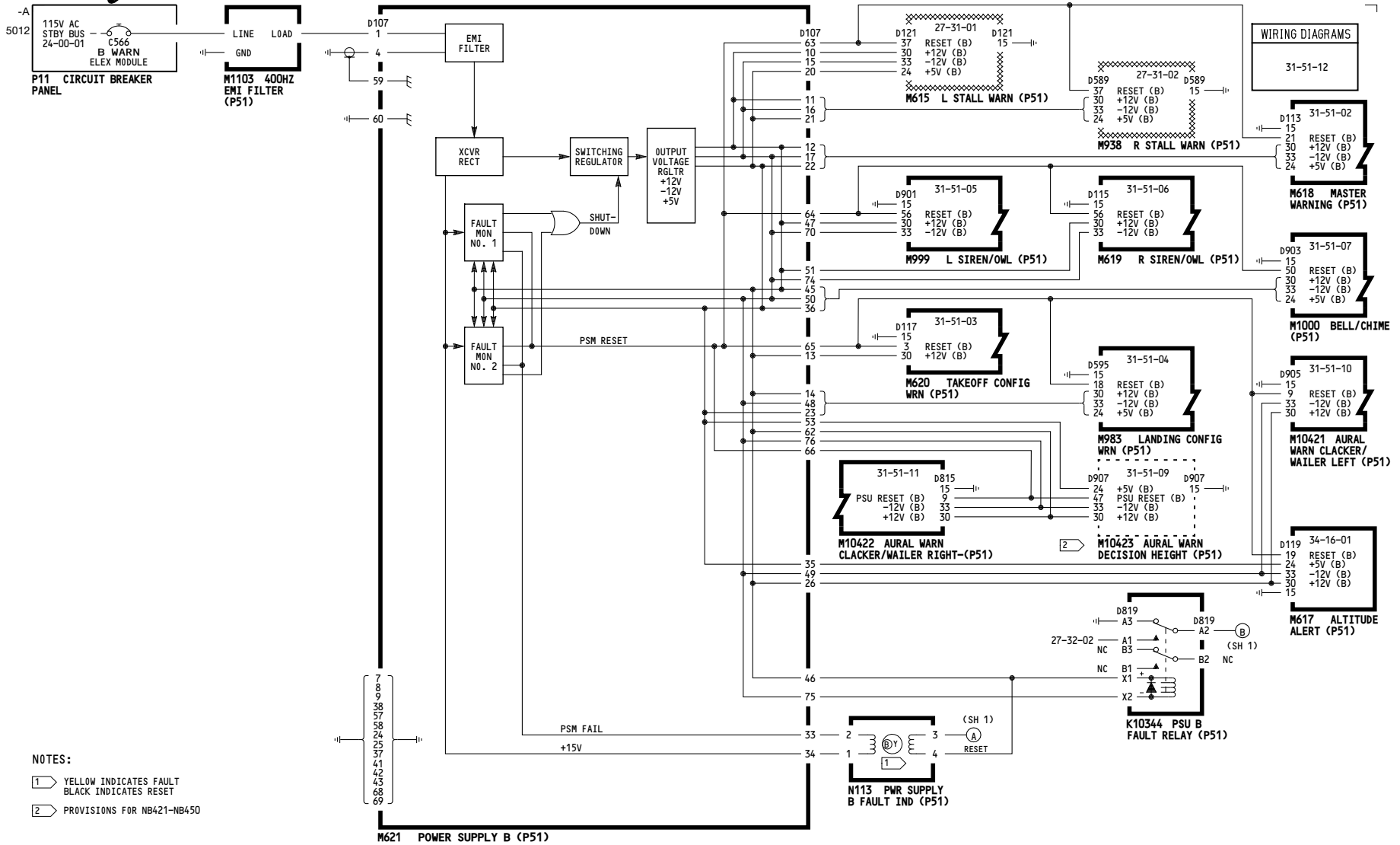
- NOTES:
- ① YELLOW INDICATES FAULT  
BLACK INDICATES RESET
  - ② PROVISIONS FOR NB421-NB450

009, 115-199

**WARNING ELECTRONICS POWER**

D280N032S

**31-51-01**



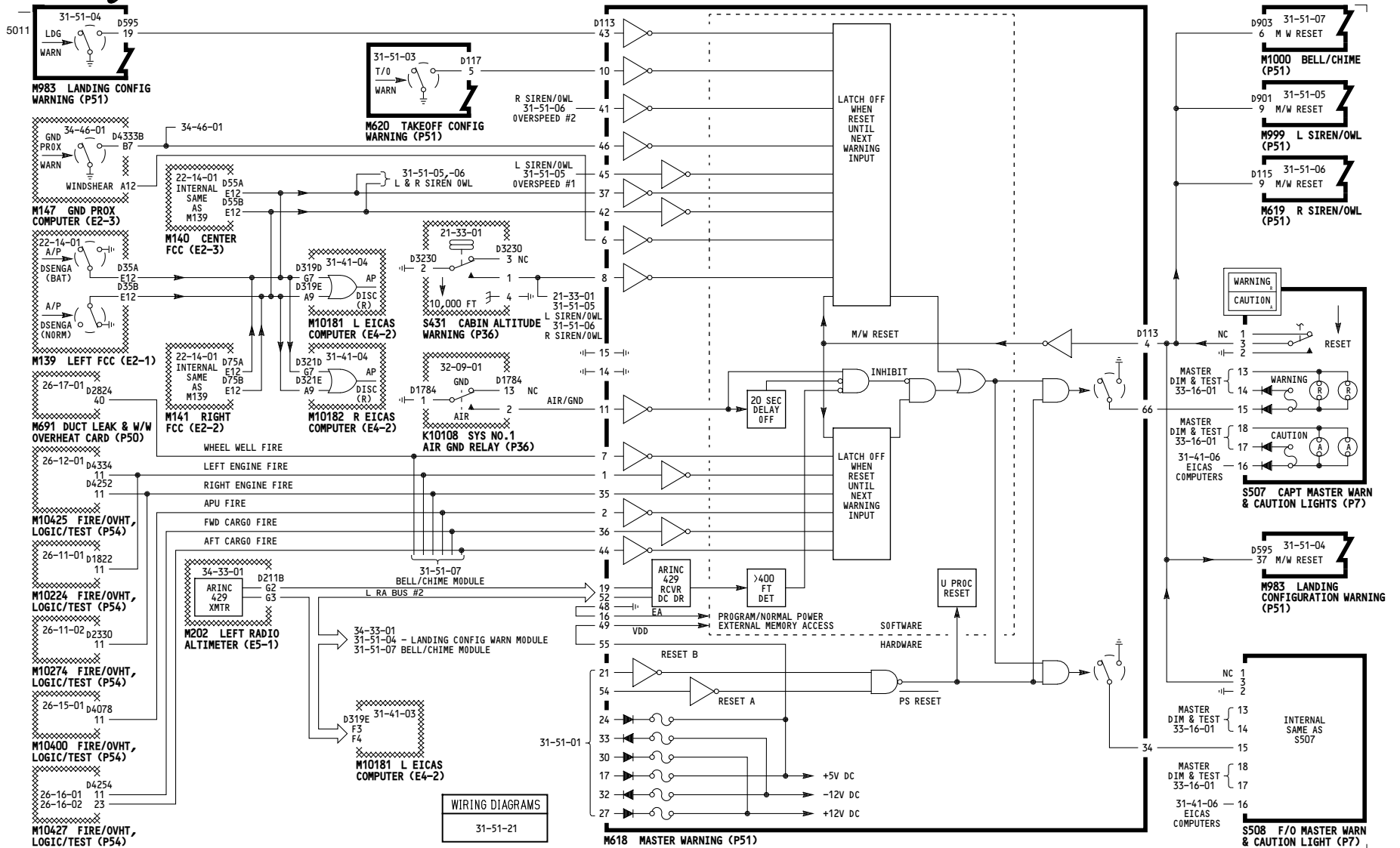
**NOTES:**  
 1 YELLOW INDICATES FAULT  
 BLACK INDICATES RESET  
 2 PROVISIONS FOR NB421-NB450

009, 115-199

**WARNING ELECTRONICS POWER**

D280N032S

**31-51-01**



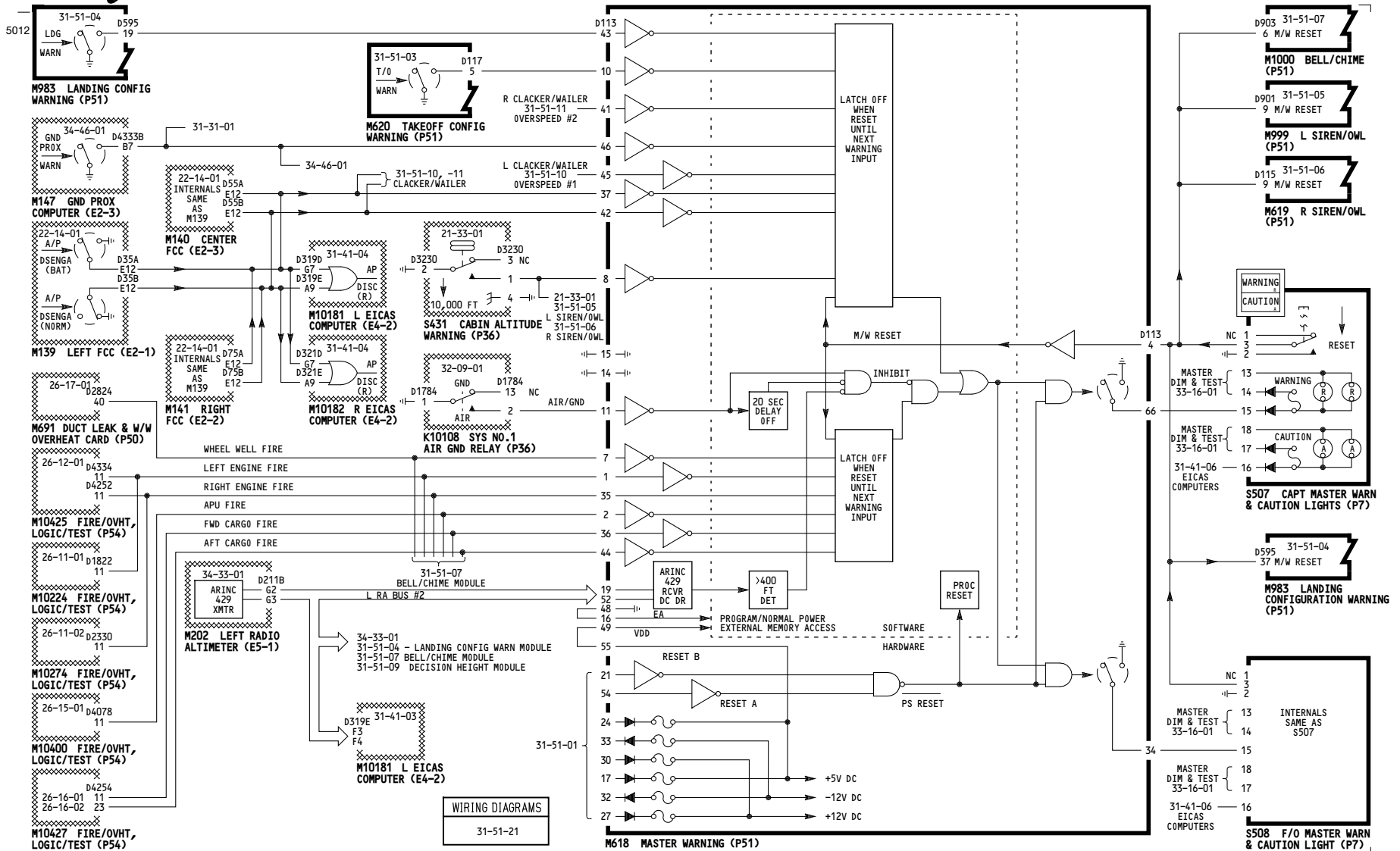
**MASTER WARNING**

D280N032S

**31-51-02**

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009, 115-199

**MASTER WARNING**

D280N032S

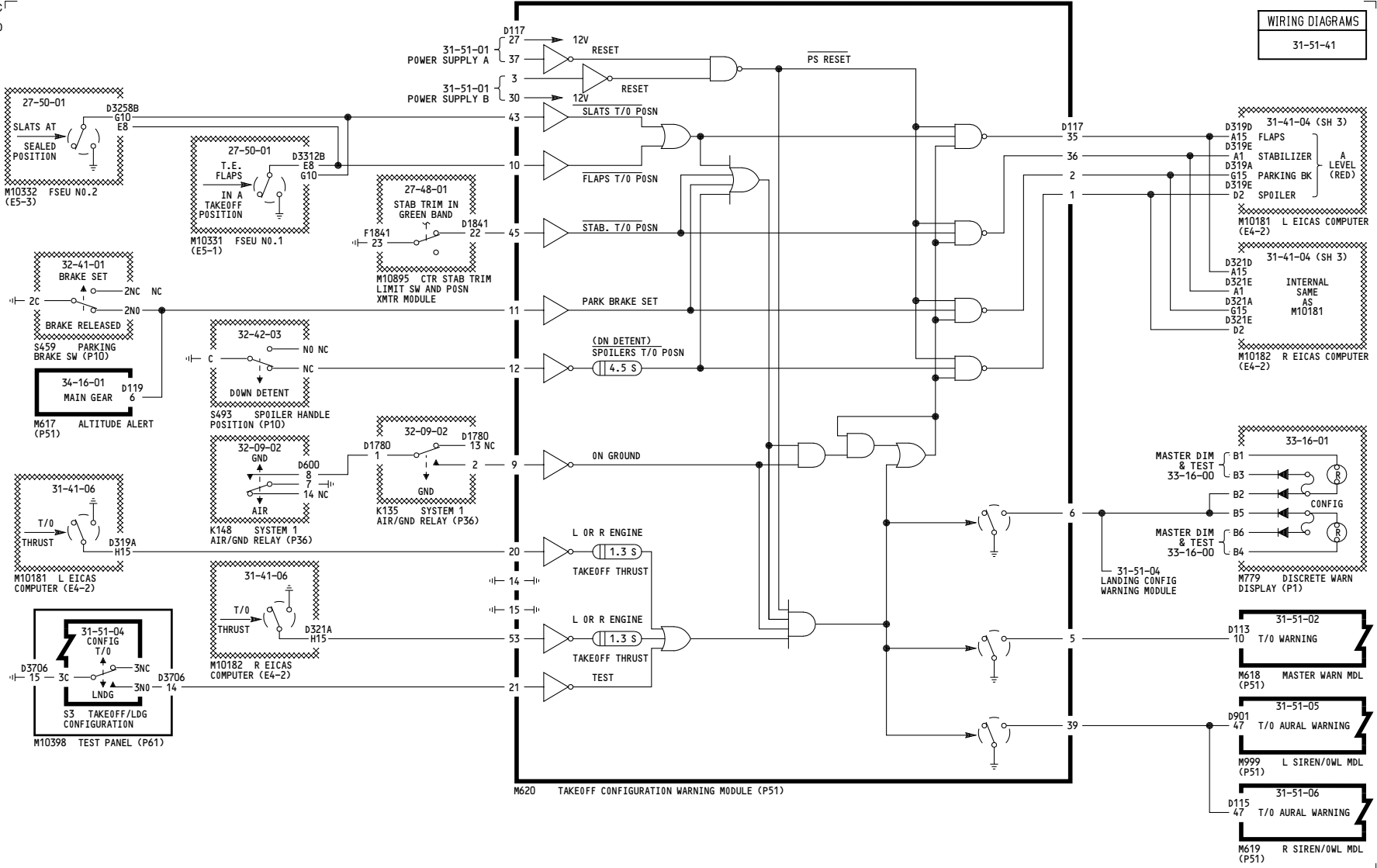
**31-51-02**





5020

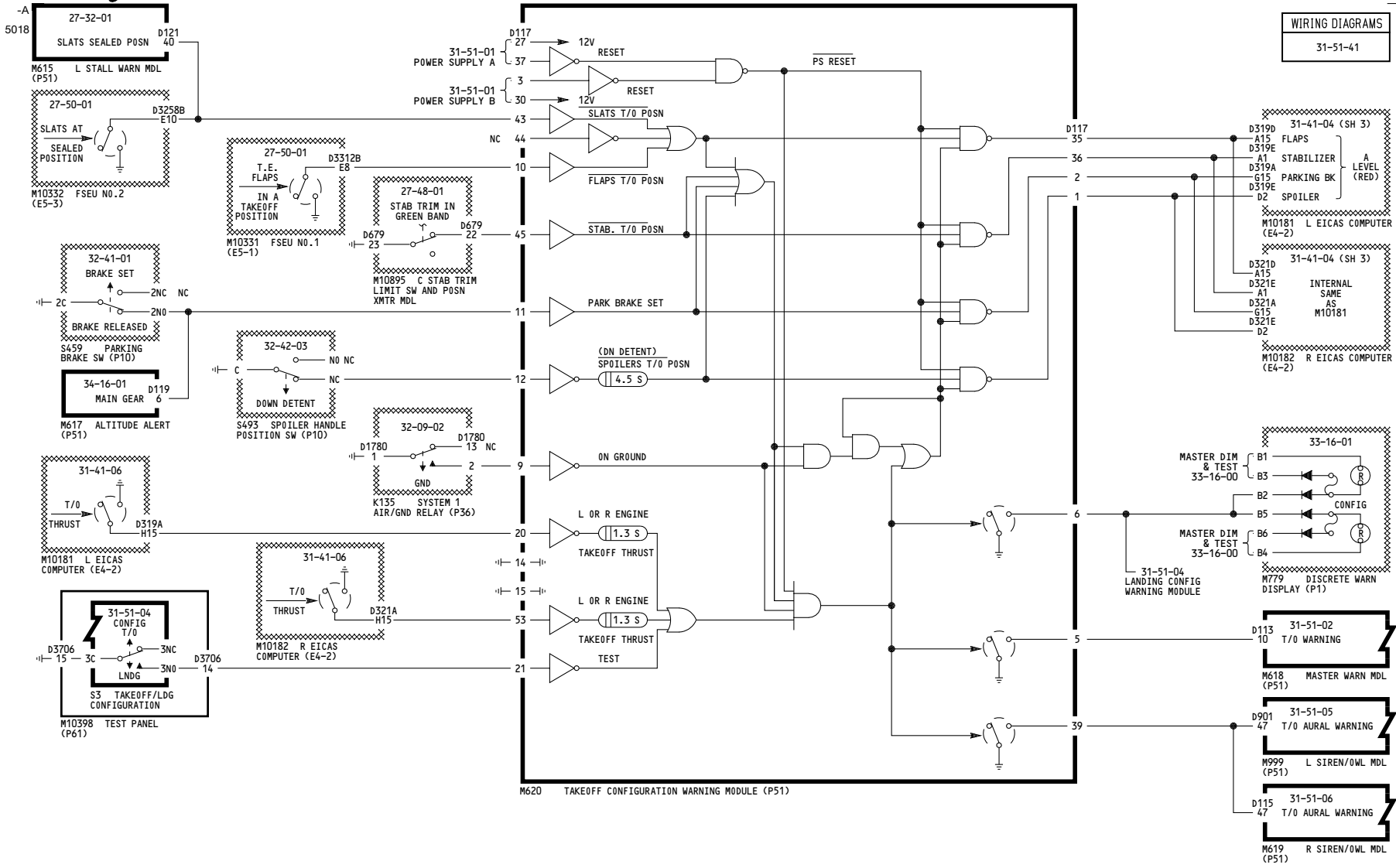
WIRING DIAGRAMS  
31-51-41



|         |  |
|---------|--|
| 001-099 | <p><b>TAKEOFF CONFIGURATION WARNING</b></p> <p>D280N032S</p> |
|---------|--|

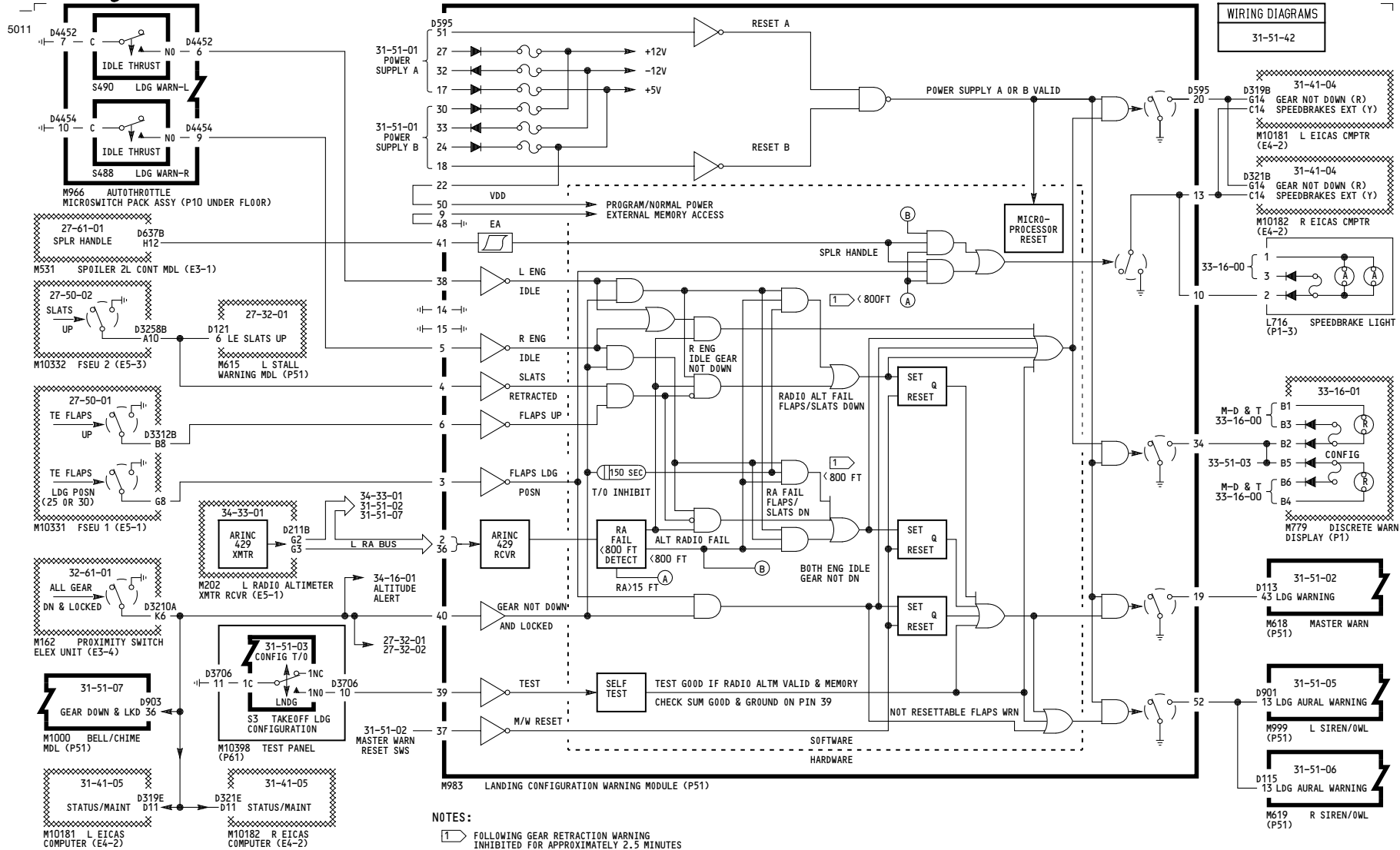
**31-51-03**

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|         |  |
|---------|--|
| 115-199 | <p><b>TAKEOFF CONFIGURATION WARNING</b></p> <p>D280N032S</p> |
|---------|--|

**31-51-03**



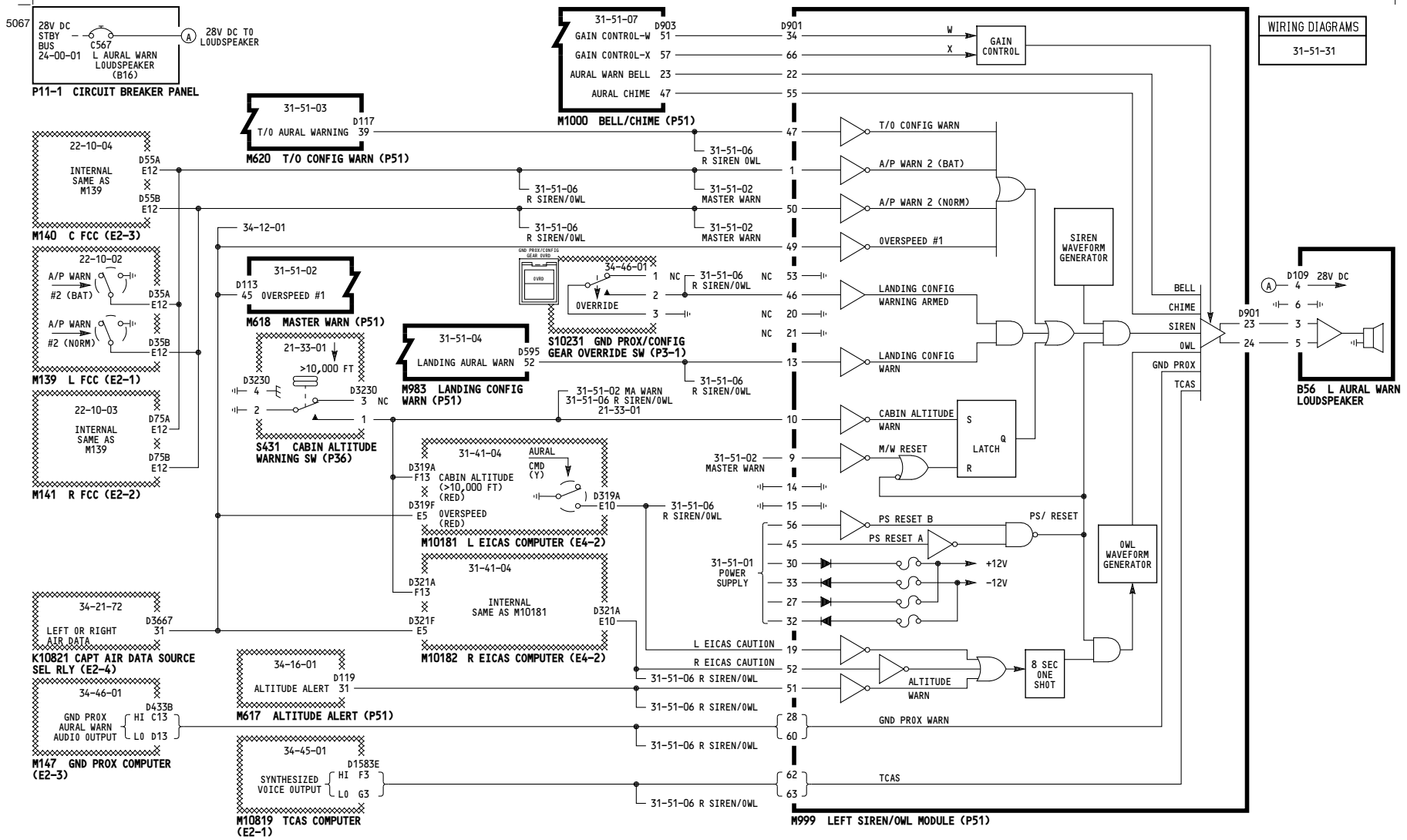
|     |  |
|-----|--|
| ALL | <p><b>LANDING CONFIGURATION WARNING</b></p> <p>D280N032S</p> |
|-----|--|

**31-51-04**

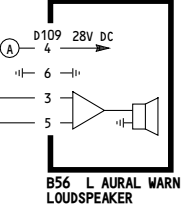
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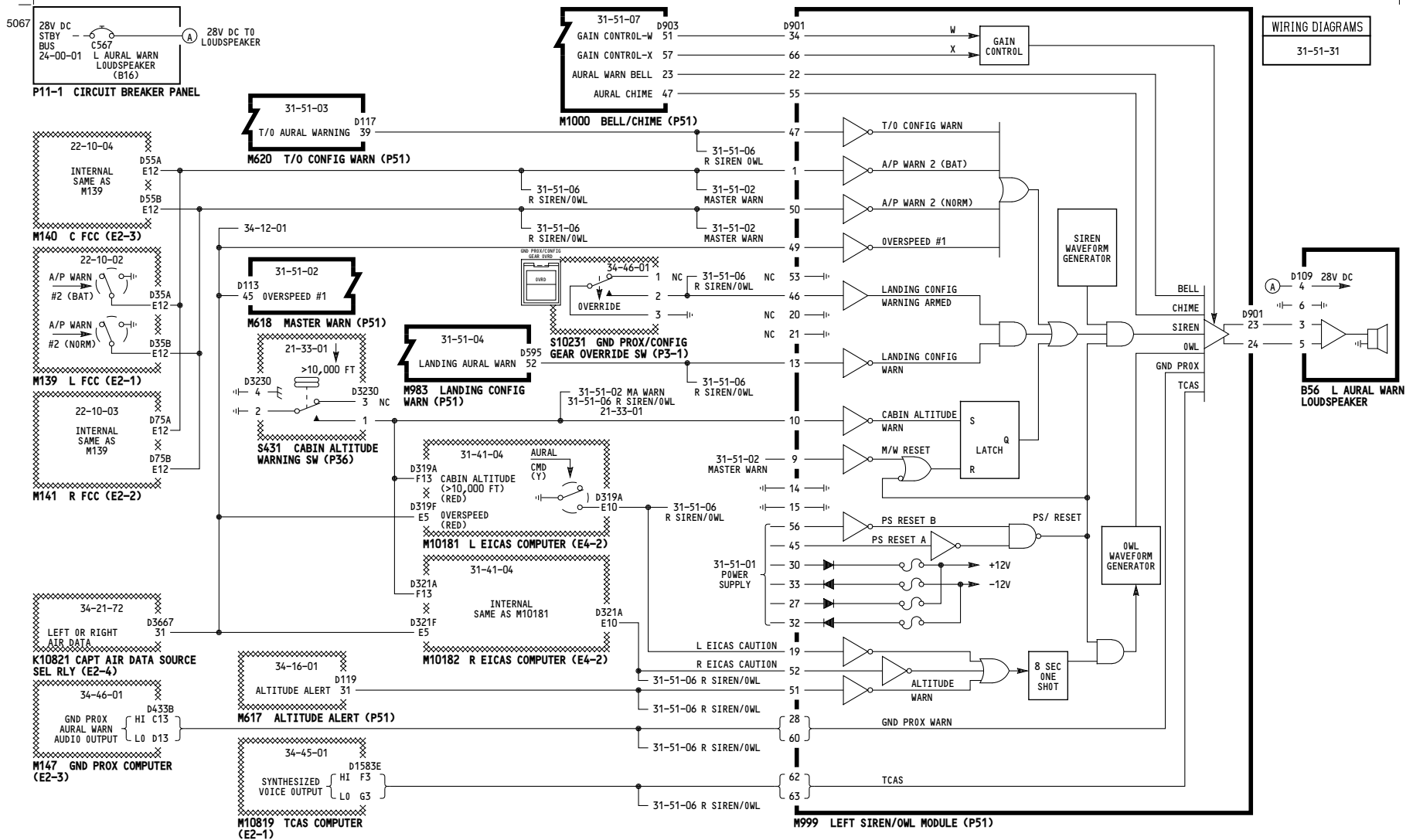


WIRING DIAGRAMS  
31-51-31



|              |   |
|--------------|---|
| 001, 003-011 | <p><b>LEFT SIREN/OWL AURAL WARNING</b></p> <p>Incorporates</p> <ul style="list-style-type: none"> <li>▶▶ 31-0055</li> <li>▶▶ 34A0222</li> </ul> |
| D280N032S    |   |

**31-51-05**



002

**LEFT SIREN/OWL AURAL WARNING**

- Incorporates
- ▶ 31-0055
  - ▶ 34-0200
  - ▶ 34A0222

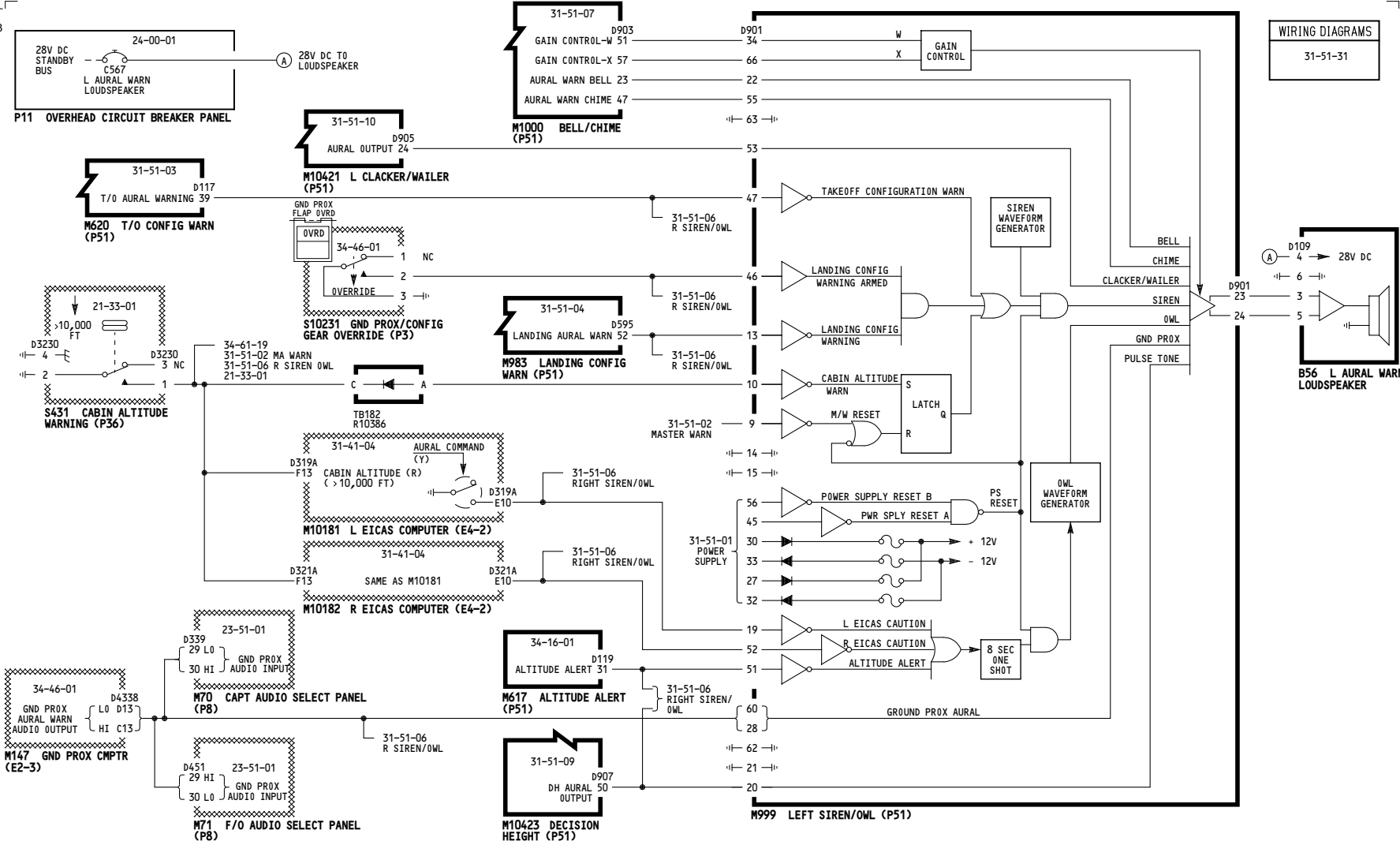
D280N032S

**31-51-05**

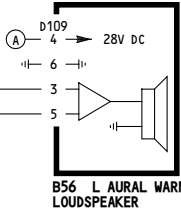
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WIRING DIAGRAMS  
31-51-31



009, 115-199

**LEFT SIREN/OWL AURAL WARNING**

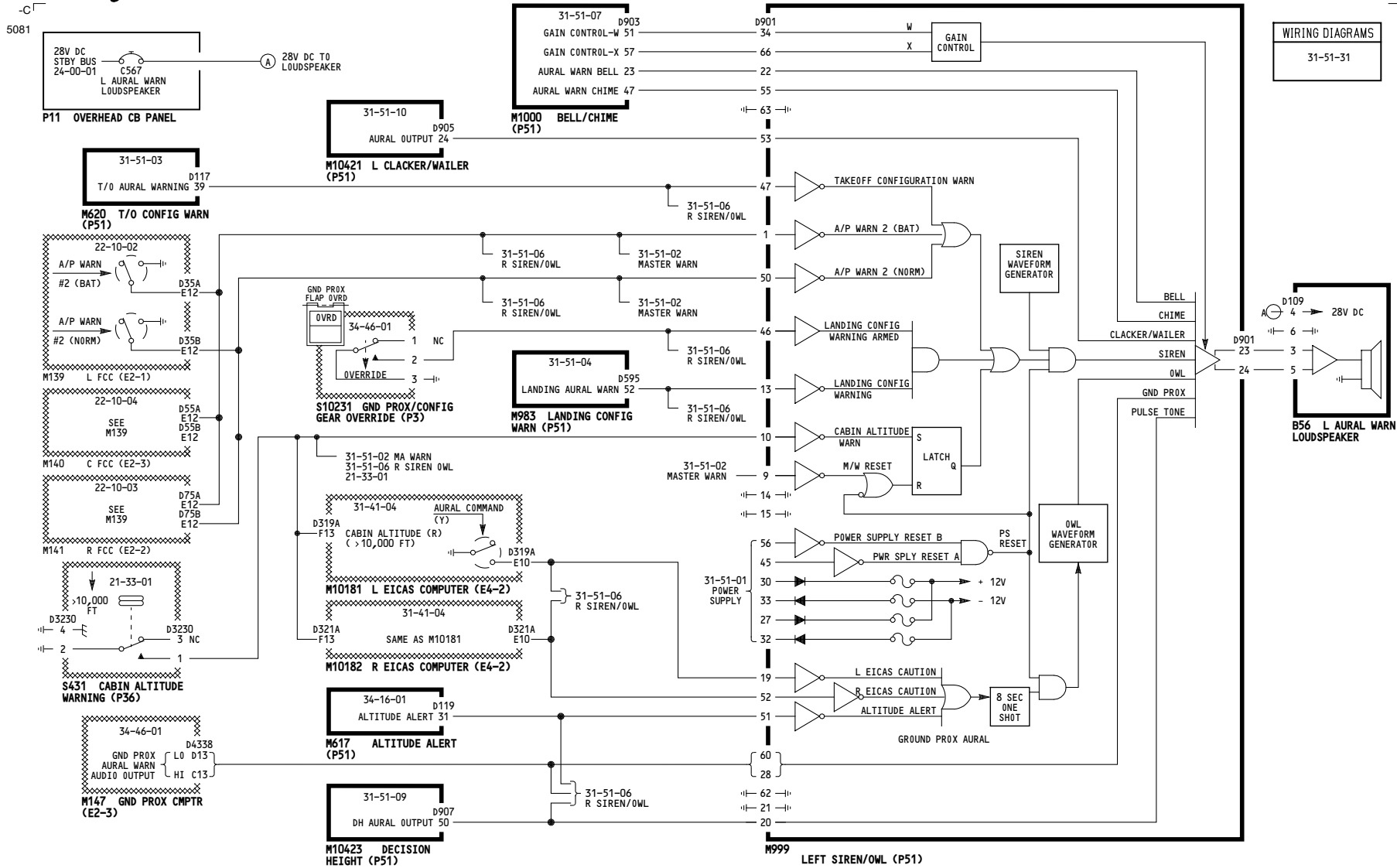
D280N032S

**31-51-05**

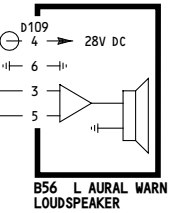
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WIRING DIAGRAMS  
31-51-31



115

**LEFT SIREN/OWL AURAL WARNING**

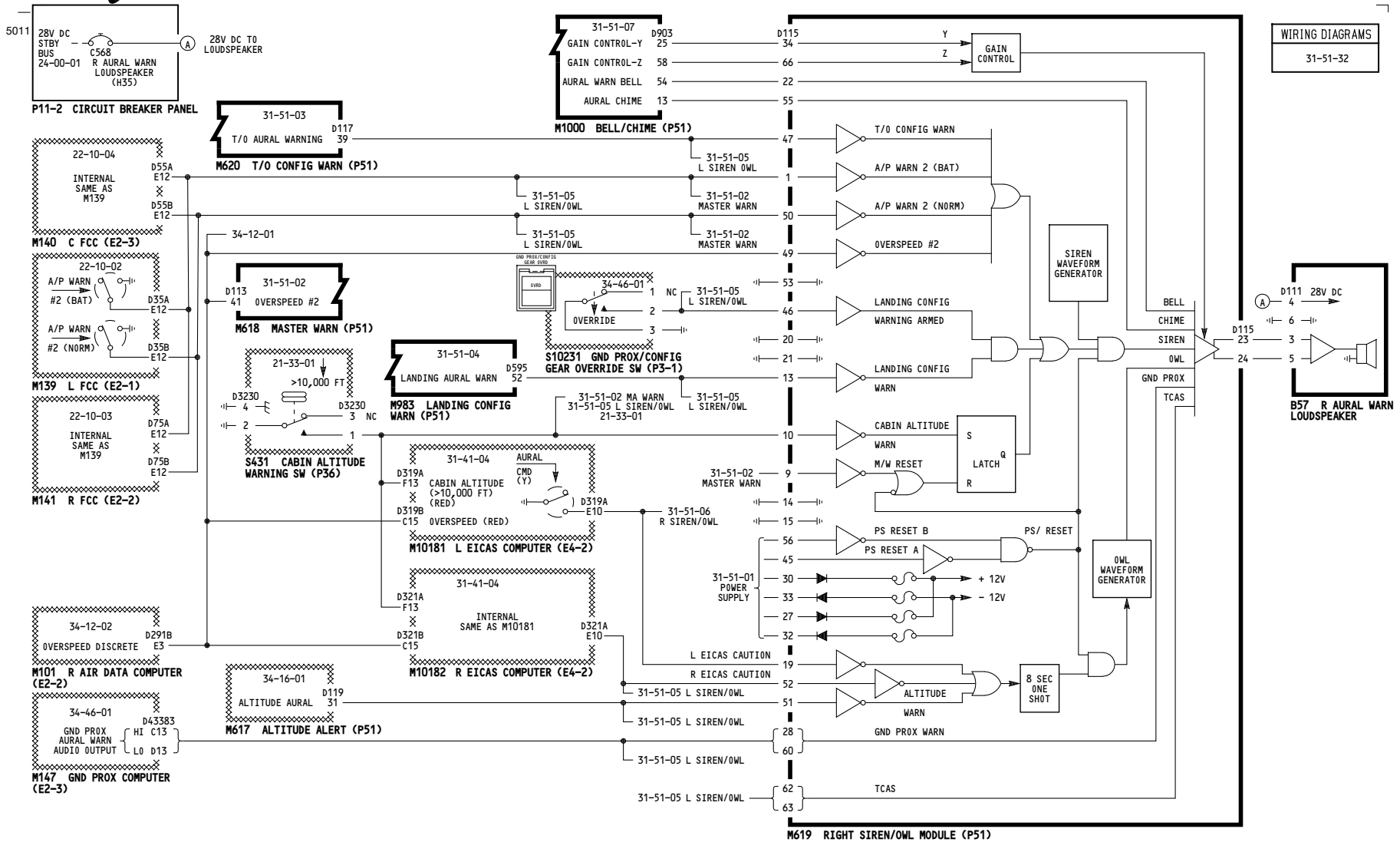
D280N032S

- Incorporates
- ▶ 31-0055
  - ▶ 31-0164 R01
  - ▶ 34A0222

**31-51-05**

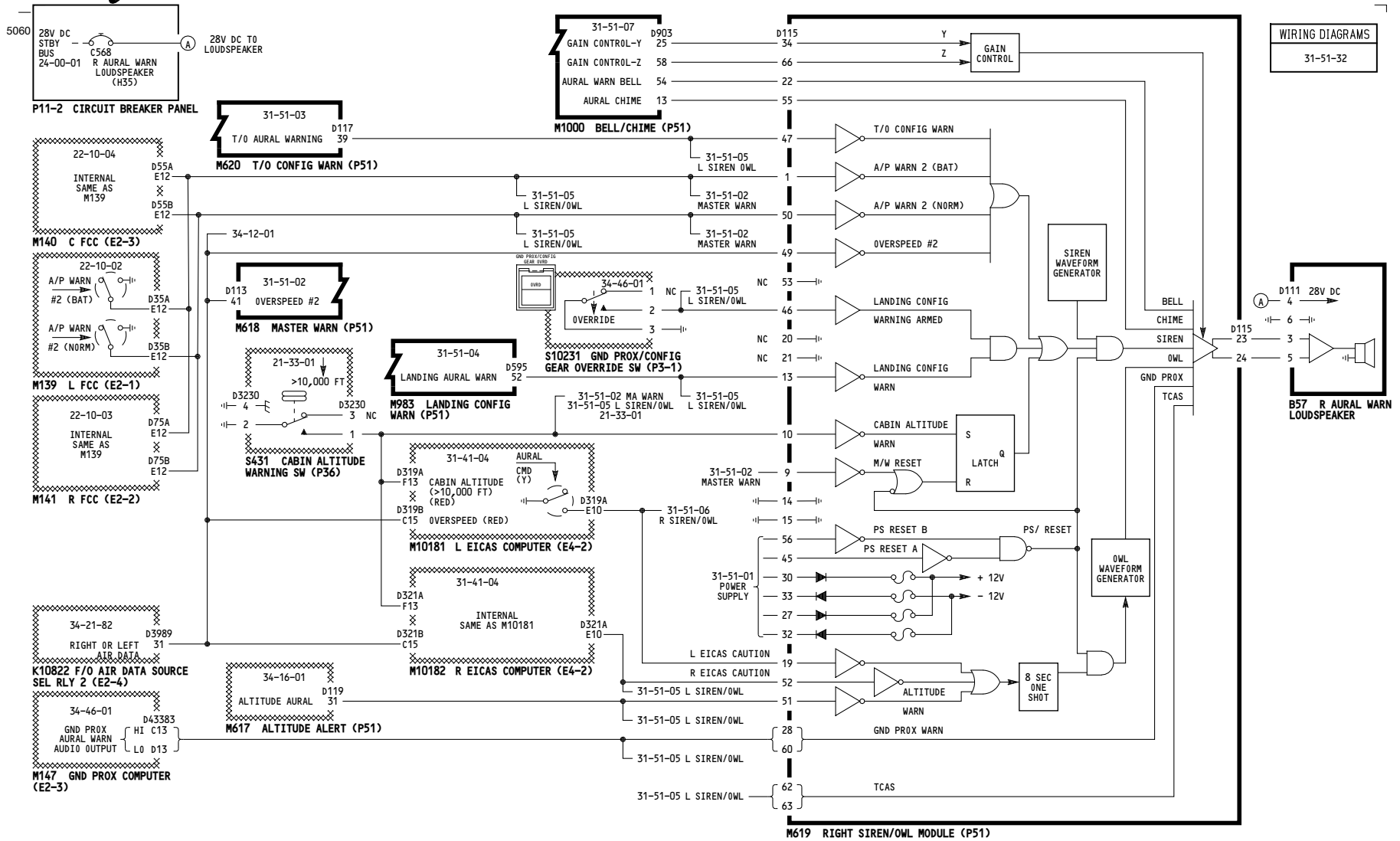
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Oct 09/2008



|                  |  |
|------------------|--|
| 001-008, 010-099 | <p align="center"><b>RIGHT SIREN/OWL<br/>AURAL WARNING</b></p> <p align="center">D280N032S</p> |
|------------------|--|

**31-51-06**



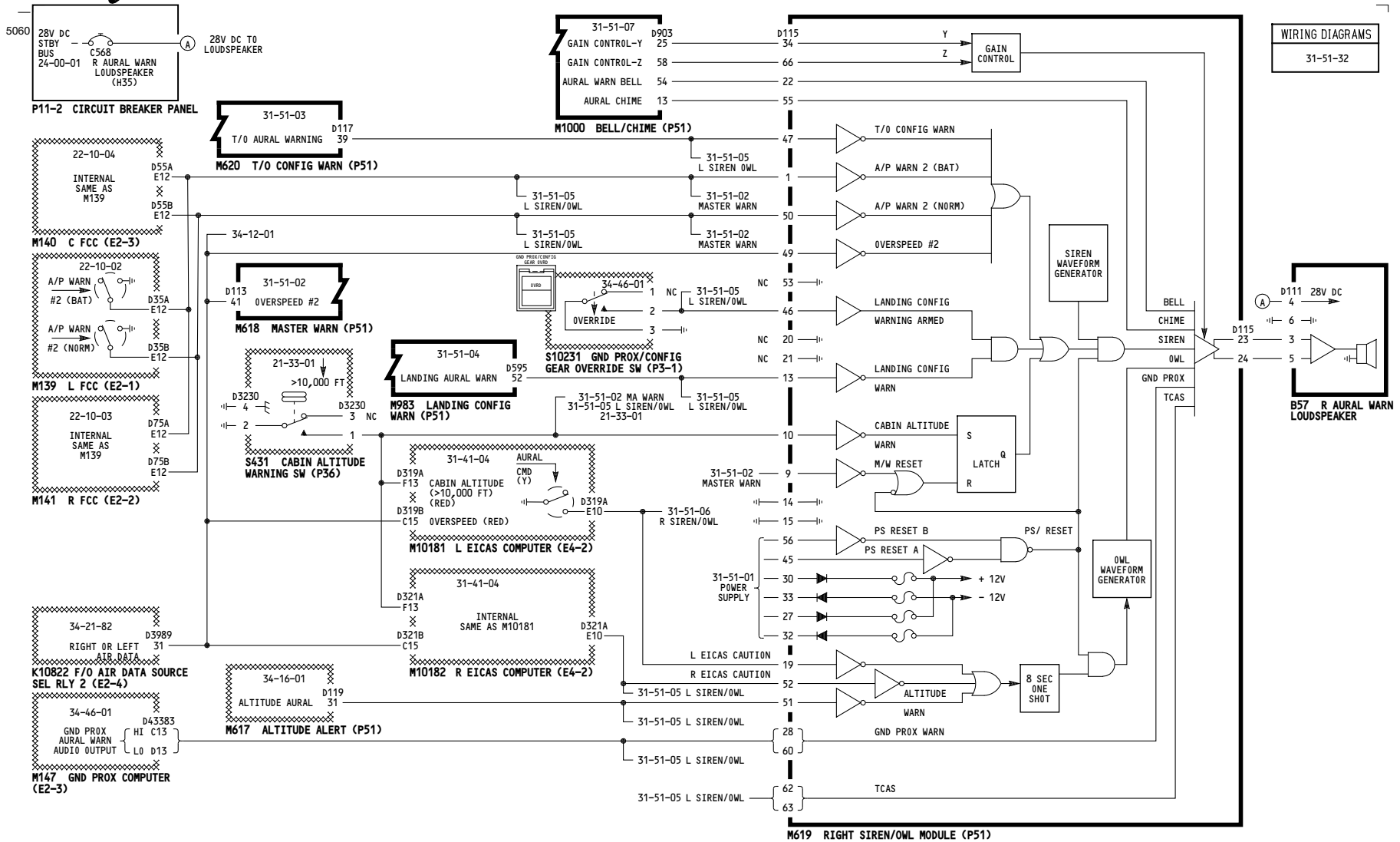
WIRING DIAGRAMS  
31-51-32

|              |  |                                    |
|--------------|--|------------------------------------|
| 001, 003-011 | <b>RIGHT SIREN/OWL<br/>AURAL WARNING</b> | Incorporates<br>31-0055<br>34A0222 |
| D280N032S    |  |                                    |

**31-51-06**

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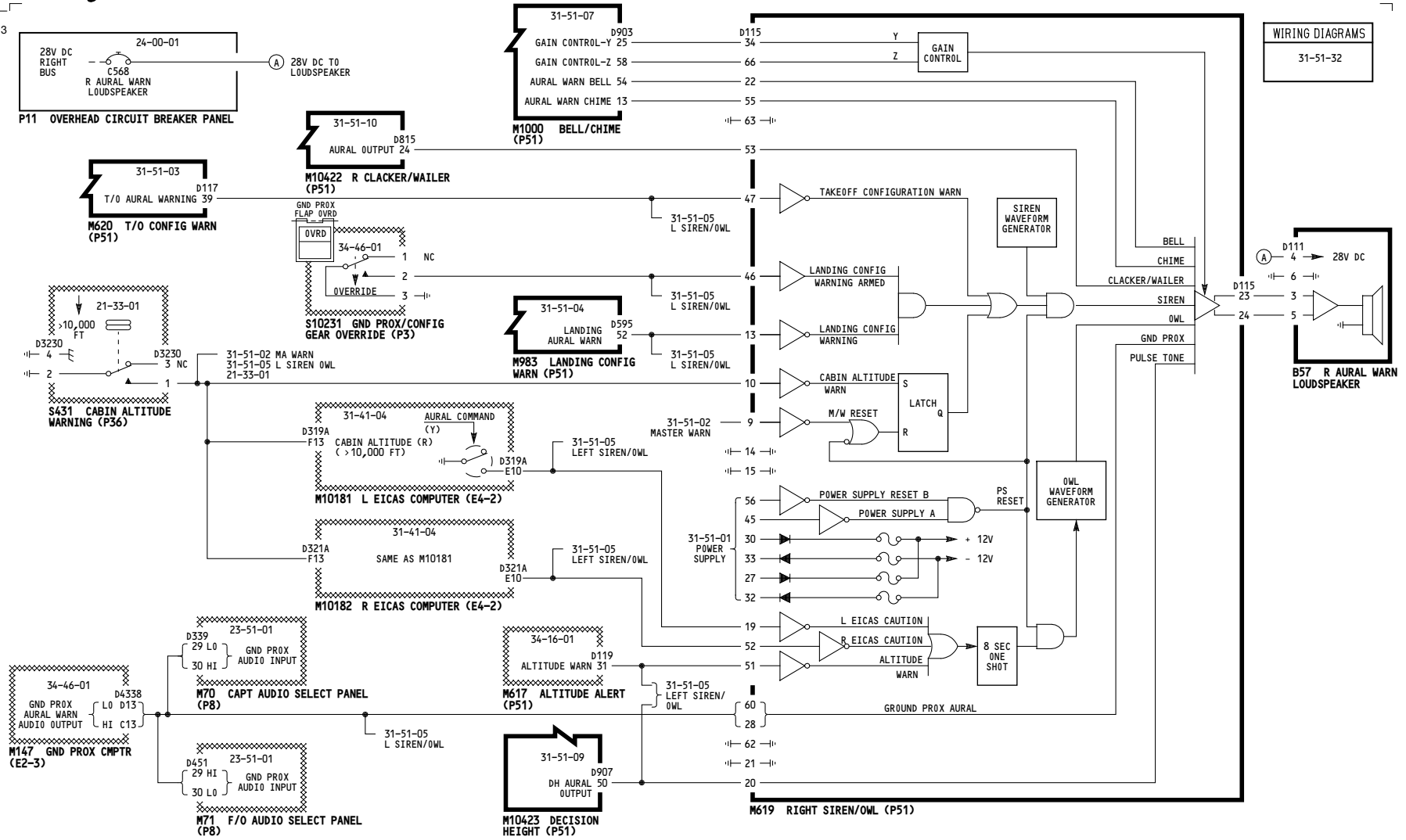


|     |   |
|-----|---|
| 002 | <b>RIGHT SIREN/OWL AURAL WARNING</b><br><br>D280N032S |
|-----|---|

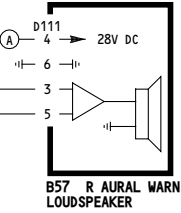
- Incorporates
- ▶ 31-0055
  - ▶ 34-0200
  - ▶ 34A0222

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5013

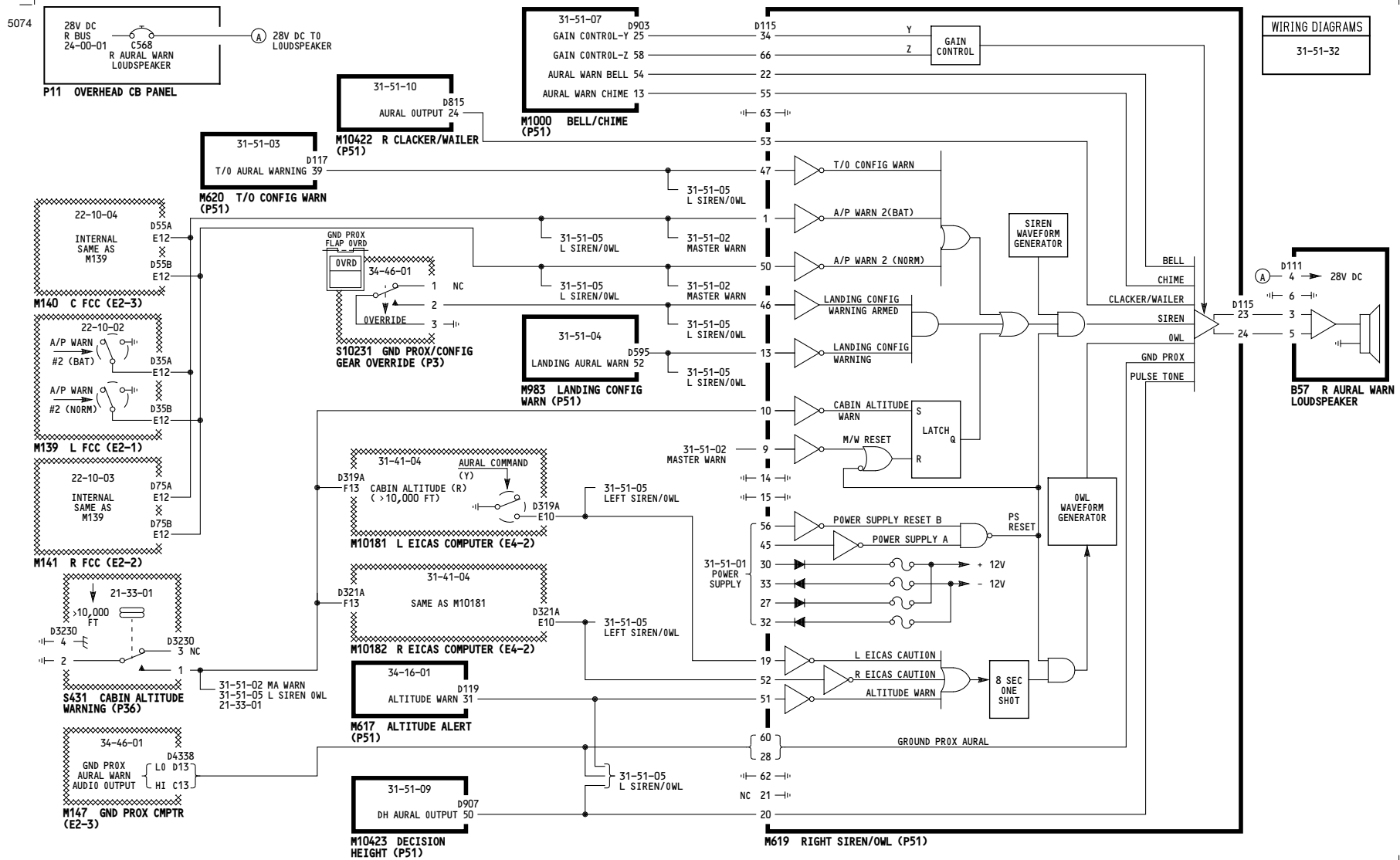


WIRING DIAGRAMS  
31-51-32

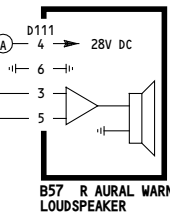


|              |  |
|--------------|--|
| 009, 115-199 | <b>RIGHT SIREN/OWL<br/>AURAL WARNING</b> |
|              | D280N032S                                |

**31-51-06**



WIRING DIAGRAMS  
31-51-32



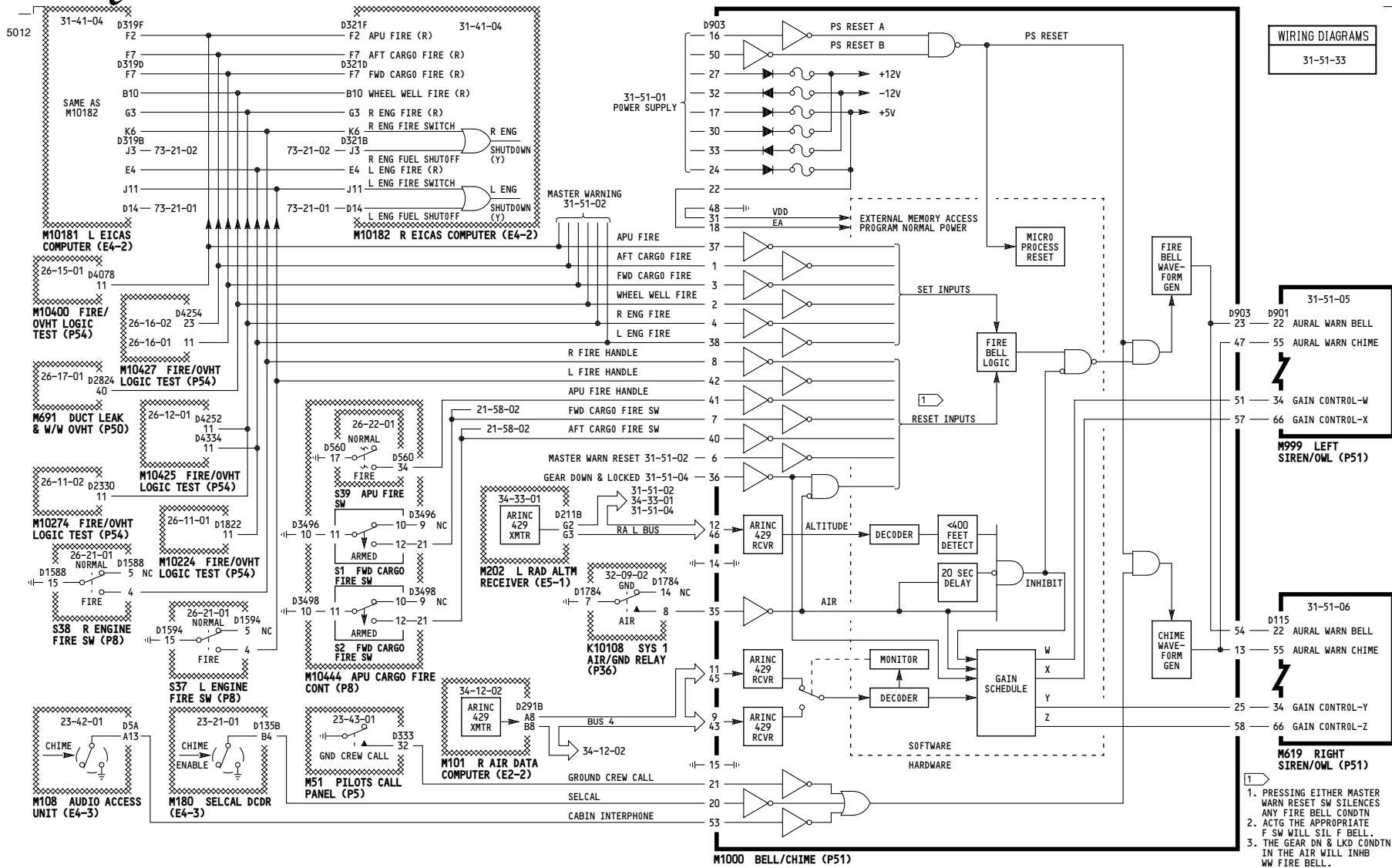
115

**RIGHT SIREN/OWL AURAL WARNING**

D280N032S

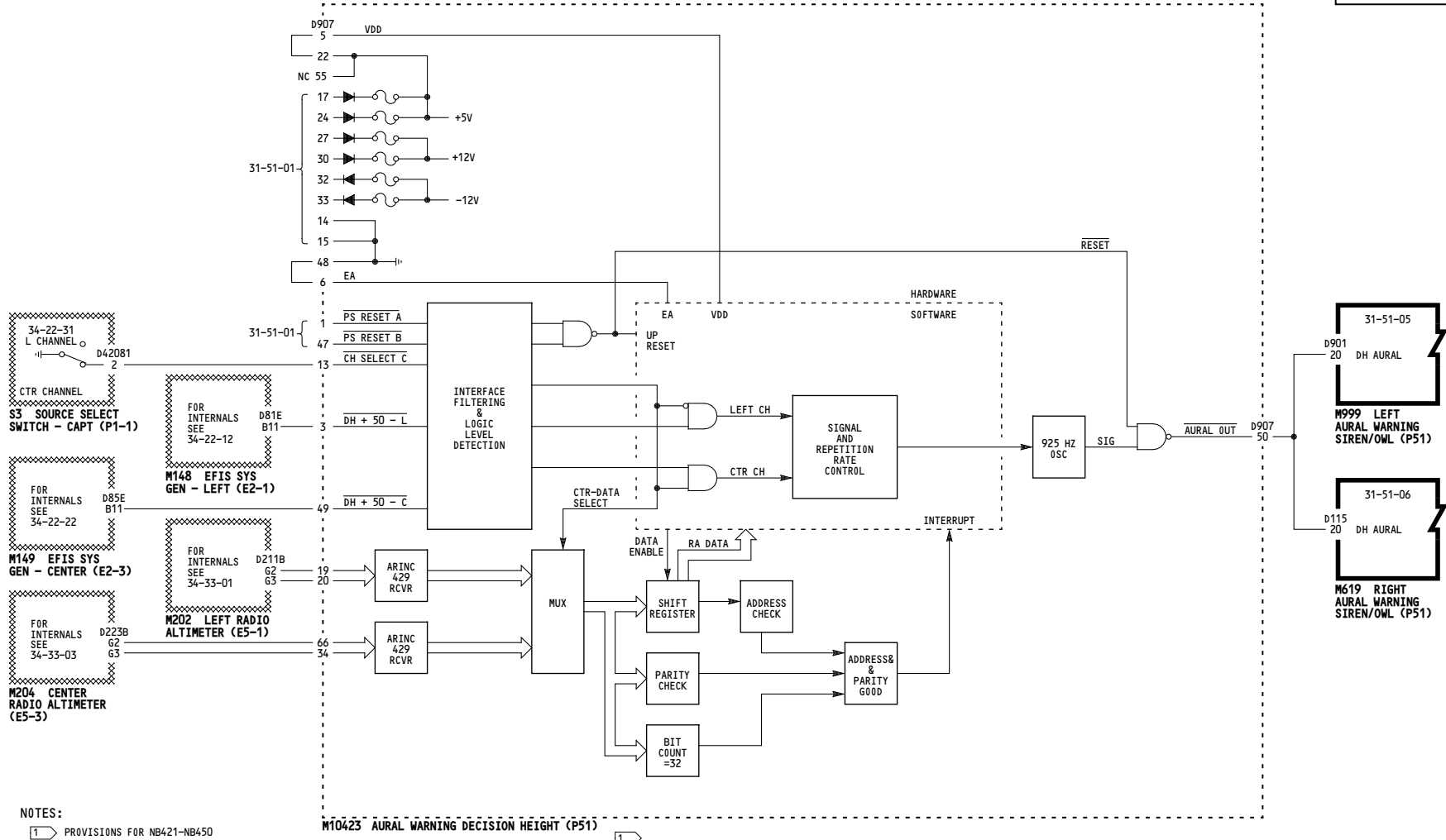
- Incorporates
- ▶▶▶ 31-0055
  - ▶▶▶ 31-0164 R01
  - ▶▶▶ 34A0222

**31-51-06**



|     |                                 |
|-----|---------------------------------|
| ALL | <b>BELL/CHIME AURAL WARNING</b> |
|     | D280N032S                       |

**31-51-07**

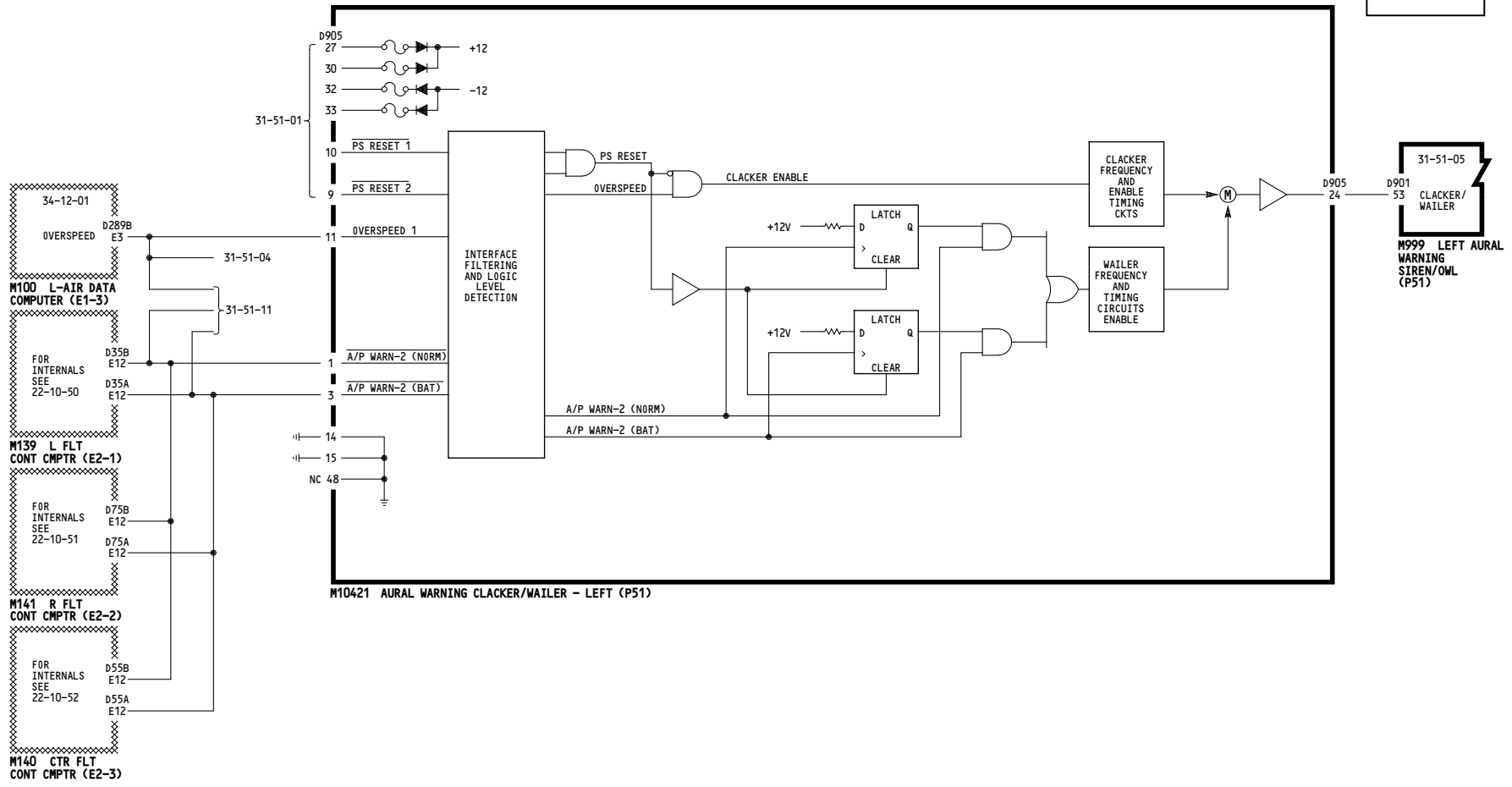


|              |  |
|--------------|--|
| 009, 115-199 | <p><b>DECISION HEIGHT AURAL WARNING</b></p> <p>D280N032S</p> |
|--------------|--|



5011

WIRING DIAGRAMS  
31-51-10



|              |  |
|--------------|--|
| 009, 115-199 | <p><b>CLACKER/WAILER<br/>AURAL WARNING - LEFT</b></p> <p>D280N032S</p> |
|--------------|--|

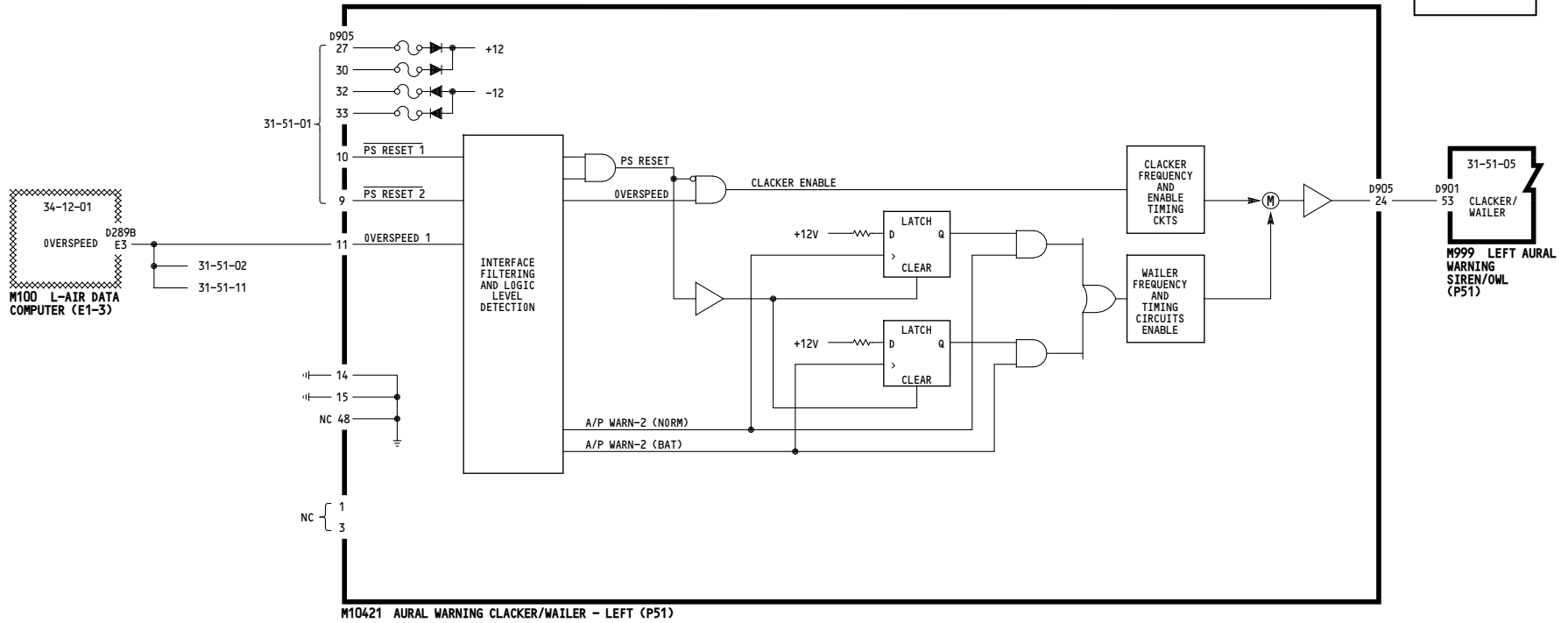
**31-51-10**

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WIRING DIAGRAMS  
31-51-10



|     |  |
|-----|--|
| 115 | <p><b>CLACKER/WAILER<br/>AURAL WARNING - LEFT</b></p> <p>D280N032S</p> |
|-----|--|

Incorporates  
31-0164 R01

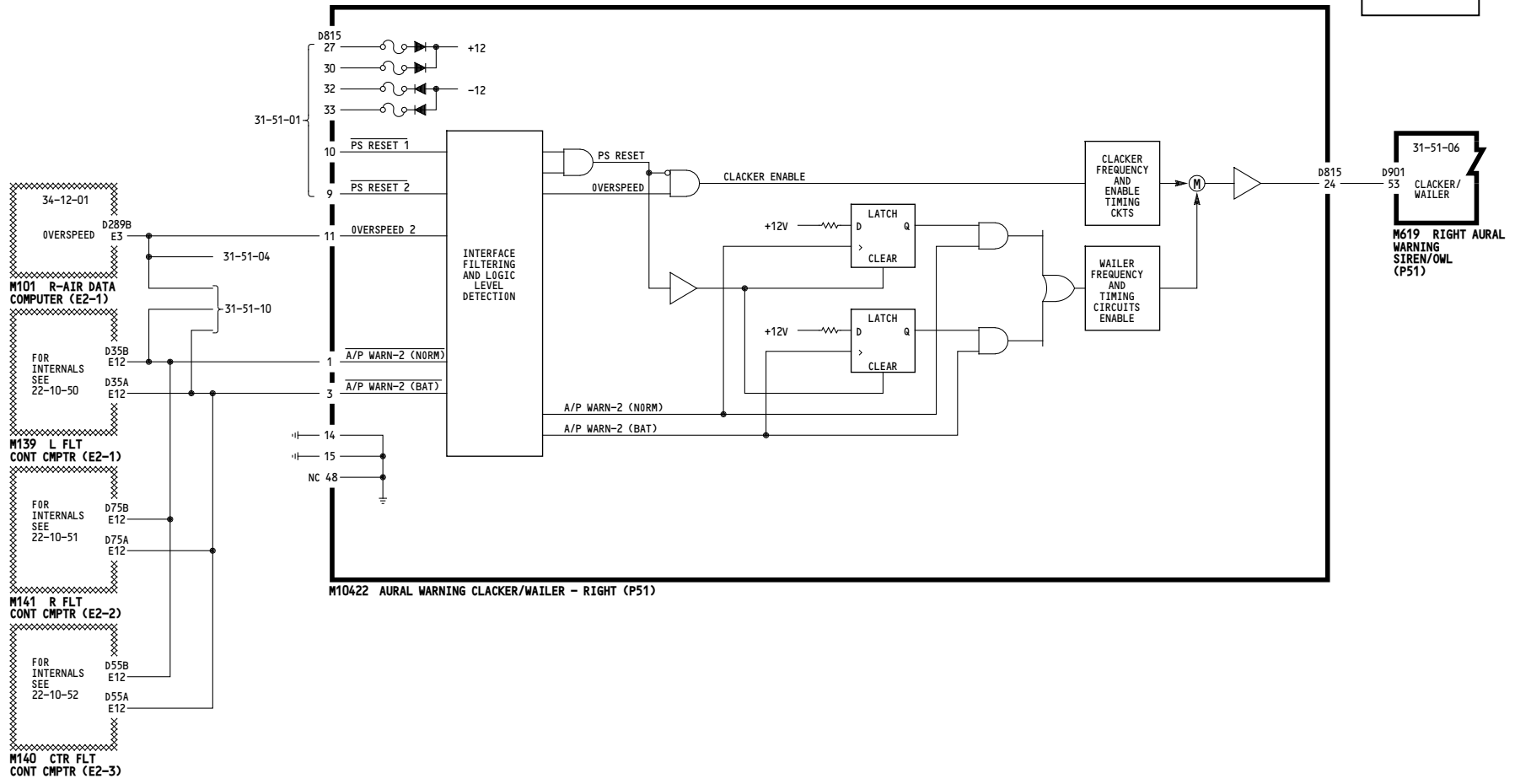
**31-51-10**

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5011

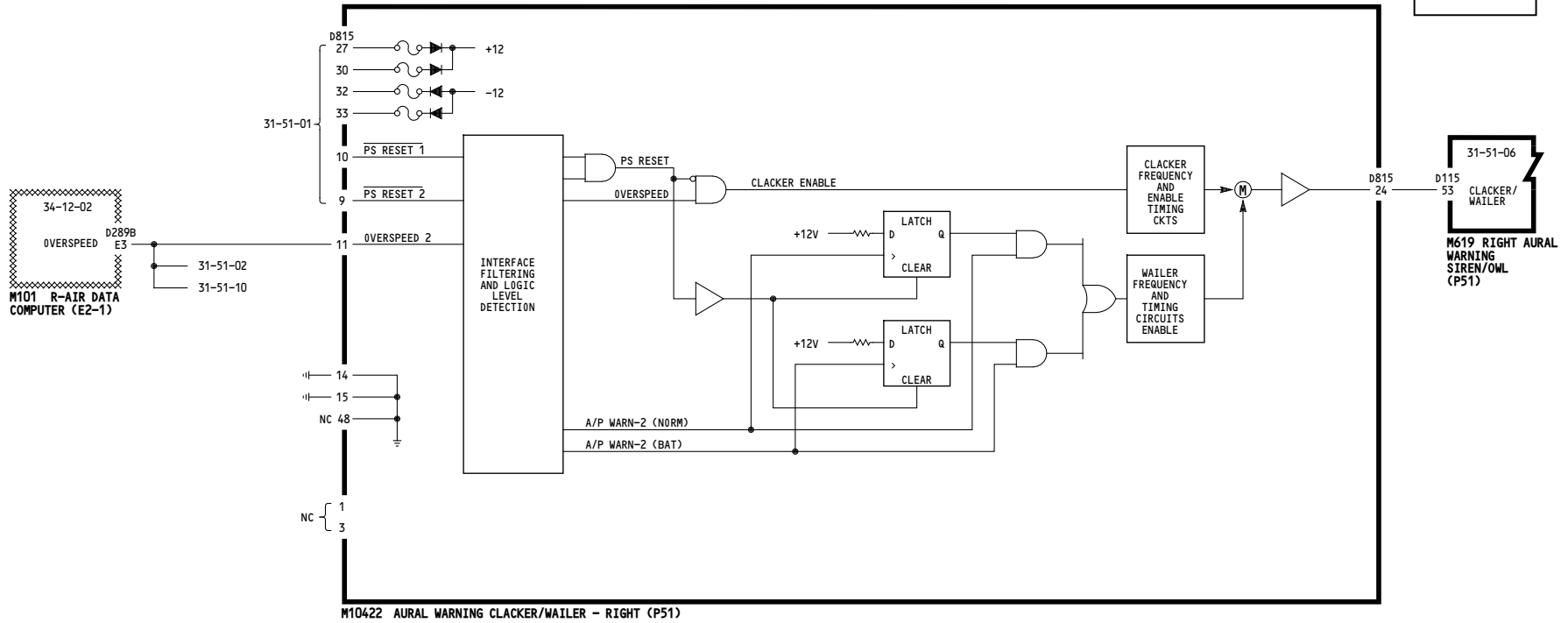
WIRING DIAGRAMS  
31-51-11



|              |   |
|--------------|---|
| 009, 115-199 | <p><b>CLACKER/WAILER<br/>AURAL WARNING - RIGHT</b></p> <p>D280N032S</p> |
|--------------|---|

5025

WIRING DIAGRAMS  
31-51-11



|     |   |
|-----|---|
| 115 | <b>CLACKER/WAILER<br/>AURAL WARNING - RIGHT</b> |
|     | D280N032S                                       |

Incorporates  
31-0164 R01

**31-51-11**

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