757

Fault Isolation Manual

GPA Group plc

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GPA Group plc
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To: All Holders of Boeing Document D633N632.

Attached is the current revision to Document D633N632, Boeing 757 Fault Isolation Manual for GPA Group plc.

FILING INSTRUCTIONS

This revision of the aircraft maintenance manual (AMM) replaces all previous microfilm cartridges and magnetic tapes.

This revision includes only the changed pages for printed pages (paper). File the pages according to the LEP for each chapter.

ATTENTION

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For printed manuals this revision should be incorporated into the manual in the order indicated by the List of Effective pages (LEP). The pages which are revised will be identified on the LEP by an R (Revised), A (Added), or D (Deleted).

Each page in the LEP is identified by Chapter-Section-Subject number, page number, page date, and page code. Pages replaced or obsoleted by this revision should be removed.

NOTE: Pages may be dated earlier, the same as, or later than the replaced page. Therefore, it is important that both the page date and page code in the LEP be used when filing pages. Agreement of the first two digits (left of decimal), between LEP code and page code, assures that the page is correct for the manual. Only revised pages will have the decimal and following number(s) appear on both the page and the LEP. The decimal and following numbers are for Boeing internal use and may be on an old page but not appear on the LEP.

TEMPORARY REVISIONS

Remove any Temporary Revisions that have a date earlier than the date of this revision.

Do not remove any Temporary Revisions (TRs) that have a date later than the date of this revision. TRs with a later date will be incorporated in the next revision of the manual (unless they are superseded by a subsequent TR).

A TR Status Report is sent with each TR. The TR Status Report has a list of all TRs that were sent for this manual during the last two scheduled revisions. At the top of the list are the date and time that the list was created.

When you have more than one TR, the TR Status Report with the latest date and time gives you the most current information.

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HIGHLIGHTS

CHAPTER 00 - INTRODUCTION

ABBREVIATION LIST 1-14	Added the title.

CHAPTER 21 - AIR CONDITIONING

21-00-01 101	Reissued the page.
21-00-01 104,107	Added engine applicability statement for RR engines.
21-51-00 128	Re-issued the page.

CHAPTER 23 - COMMUNICATIONS

23-FAULT CODE INDEX 1-22	Added fault code 23-11-17 for inoperative HF at altitude, but normal on the ground.

CHAPTER 24 - ELECTRICAL POWER

24-20-00 180P-180Q 182B-182D	Changed the data to the bulb resistance.

CHAPTER 31 - INDICATING/RECORDING SYSTEMS

31-41-00 101-180N	Changed the EICAS Fail Codes.

CHAPTER 32 - LANDING GEAR

32-FAULT CODE INDEX 8	Re-issued the page.

CHAPTER 34 - NAVIGATION

34-61-00 103-104	Changed the data for SB 34-427 which replaced the FMC-CDU with FMC-MCDU.

CHAPTER 77 - ENGINE INDICATING

77-FAULT CODE INDEX 1	Re-issued the page.

CHAPTER 79 - OIL

79-31-00 108-109	Changed the reference to drain the oil tank and the high speed gearbox.

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PAGE	DATE	CODE
TITLE PAGE		
1	JAN 28/07	29
2	BLANK	
EFFECTIVE PAGES		
SEE LAST PAGE OF LIST FOR		
NUMBER OF PAGES		
REVISION RECORD		
1	SEP 28/05	01
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1	SEP 28/05	01
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FIM INDEX		
1	JUN 20/95	01
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LIST OF AIRPLANES		
1	MAY 20/08	29
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ABBREVIATION LIST		
R 1	MAY 20/09	01.1
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PANEL LOCATIONS		
1	DEC 20/93	01
2	DEC 20/93	01
3	DEC 20/93	01
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5	DEC 20/93	01
6	BLANK	
LIST OF SERVICE BULLETINS		
R 1	MAY 20/09	29.1
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EICAS MESSAGE LIST TAB		
EICAS MESSAGE LIST TAB		
EICAS MESSAGE LIST		
1	SEP 28/99	02
2	SEP 28/99	02
3	SEP 28/01	06
4	SEP 28/99	19
5	SEP 28/99	23
6	SEP 28/99	19
7	SEP 28/99	19
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23	SEP 28/99	26

PAGE	DATE	CODE
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47	SEP 28/99	20
48	SEP 28/01	27
49	JAN 28/00	16
50	SEP 28/99	12
BITE INDEX TAB		
BITE INDEX		
1	SEP 28/99	01
2	SEP 28/99	01
3	SEP 28/99	01
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REVISION RECORD

All revisions to this manual will be accompanied by a transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the date filed and the initials of the person filing, in the form below:

REVISION NO.	DATE FILED	BY	REVISION NO.	DATE FILED	BY	REVISION NO.	DATE FILED	BY

Revision Record
Figure 1

REVISION RECORD

56600

RECORD OF TEMPORARY REVISIONS

REVISION		INSERTED		REMOVED	
TR NO.	DATED	BY	DATE	BY	DATE

REVISION		INSERTED		REMOVED	
TR NO.	DATED	BY	DATE	BY	DATE

Record of Temporary Revisions
Figure 1

FIM Index
Figure 1 (Sheet 1)

FIM INDEX

56602

FIM Index
Figure 1 (Sheet 2)

FIM INDEX

56605

FIM Index
Figure 1 (Sheet 3)

FIM INDEX

56606

FIM Index
Figure 1 (Sheet 4)

FIM INDEX

FIM Index
Figure 1 (Sheet 5)

FIM INDEX

56608

INTRODUCTION

1. General
   A. This publication was prepared by the Boeing Commercial Airplane Group in accordance with Air Transport Association of America Specification No. 100, Specification for Manufacturers' Technical Data. It contains information necessary to isolate and correct faults in systems and equipment installed in the 757 family of airplanes.

      NOTE: THIS MANUAL IS PREPARED SPECIFICALLY TO COVER THE BOEING AIRPLANES LISTED IN THE "LIST OF EFFECTIVE AIRPLANES" SECTION, FOR THE OPERATOR NAMED ON THE TITLE PAGE.

      IT CONTAINS INSTRUCTIONS AND INFORMATION APPLICABLE TO THOSE SPECIFIC AIRPLANES, IN THEIR AS-DELIVERED CONFIGURATION, PLUS ANY APPLICABLE BOEING SERVICE BULLETINS OR OTHER OPERATOR CHANGES, THE INCORPORATION OF WHICH THE NAMED OPERATOR HAS NOTIFIED BOEING.

      THE NAMED OPERATOR IS SOLELY RESPONSIBLE FOR THE ACCURACY AND VALIDITY OF ALL INFORMATION FURNISHED BY THAT NAMED OPERATOR OR ANY OTHER PARTY BESIDES BOEING AND, IF IN RECEIPT OF ACTIVE REVISION SERVICE, THAT ANY MODIFICATIONS TO THE AIRPLANE ARE PROPERLY REFLECTED IN THE MAINTENANCE INSTRUCTIONS CONTAINED IN THIS MANUAL.

      OPERATORS ARE RESPONSIBLE FOR ENSURING THAT THE MAINTENANCE DOCUMENTATION THEY ARE USING IS COMPLETE AND MATCHES THE CURRENT CONFIGURATION OF THE AIRPLANE.

      THE BOEING COMPANY ASSUMES NO RESPONSIBILITY IN THIS REGARD.

      CUSTOMIZATION DOES NOT TRACK THE CONFIGURATION OF AIRCRAFT LISTED ON THE LIST OF EFFECTIVE AIRPLANES PAGE THAT HAVE BEEN CONVEYED TO ANOTHER OPERATOR.

      THIS MANUAL IS NOT SUITABLE FOR USE, INCLUDING WITHOUT LIMITATION, GENERAL INSTRUCTIONS OR TRAINING, FOR ANY AIRPLANES NOT LISTED HEREIN, NOR DOES IT NECESSARILY APPLY TO LISTED AIRPLANES THAT HAVE BEEN CONVEYED TO OTHER OPERATORS.

B. Send communications about this publication to Boeing Commercial Airplane Services. Write "Attention: Manager, Maintenance Engineering Technical Services."
   (1) For a quicker response, use the Publications Change Request form.
      (a) This form, supplied by Boeing, is available to you through your publications organization or access it on MyBoeingFleet at: https://www.myboeingfleet.com:443/boldweb/pcr_select.bhtml.
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   (2) You can also e-mail requests directly into the Boeing Communication system at this address: http://bcsweb.web.boeing.com/. Please provide this information:
      (a) airline name
      (b) your name
      (c) phone number
      (d) e-mail address
      (e) airplane model-type
      (f) title of manual or document number
      (g) ATA Chapter-section-subject
      (h) description of the change requested.

C. The Fault Isolation Manual (FIM) and the Fault Reporting Manual (FRM) together provide a structured method for the airplane operator to report and correct faults in the airplane systems.
   (1) The FRM is primarily for the flight crews. It contains fault code diagrams to help the flight crew identify a unique 8-digit fault code and log book report for a fault.
   (2) The FIM is primarily for the maintenance crews. It contains numerical indexes of all the fault codes given in the FRM. The indexes will give the corrective action or a reference to a fault isolation procedure for each fault.

D. For general information about the manual numbering system, arrangement, and revision service refer to the introduction in the Airplane Maintenance Manual (AMM).

2. Types of Faults

A. EICAS Messages
   (1) There are different types of messages that show on the flight compartment displays to tell the flight crew of problems or other conditions of the airplane. These are the types (levels) of messages that can show on the display units:
      (a) Warning (level A)
      (b) Caution (level B)
      (c) Advisory (level C)
      (d) Status (level S)
      (e) Maintenance (level M)
   (2) A warning message tells the flight crew of a condition that requires immediate crew action.
   (3) A caution message tells the flight crew of a condition that requires immediate crew awareness and possible crew action.
   (4) An advisory message tells the flight crew of a condition that requires crew awareness.

(5) A status message gives information to the flight crew and maintenance crew about the dispatch status of the airplane. The maintenance crew can use the status messages together with the operator's Minimum Equipment List (MEL).

(6) A maintenance message is for the maintenance crew. It does not require flight crew attention. There will be a maintenance message for most of the conditions that make a status message show. The maintenance message can be the same as the status message. Typically, maintenance messages are inhibited in flight and will only show when the airplane is on the ground when the ECS/MSG page is selected.

B. Observed Faults

(1) Observed faults are problem symptoms sensed by the flight crew, maintenance crew, or cabin crew. These are the types of observed faults:

(a) Faults that are shown on the flight compartment panels and displays (other than EICAS messages):

1) Fault lights
2) Failure and alert flags
3) Other display messages
4) Indicated values and displays that are not normal

(b) Flight crew observations in the flight compartment or during walk around.

(c) Servicing crew observations

(d) Ground maintenance crew observations

(e) Problems with the systems and equipment in the passenger cabin (cabin crew observations).

C. BITE Messages

(1) Built-in test equipment (BITE) messages are the fault indications that you get from the BITE feature of the system or individual component. They help you find the cause of an EICAS message or observed fault. These are examples of typical types of BITE messages:

(a) A specific light or lights

(b) An alphanumeric code

(c) A group of English words or abbreviations, with or without an associated numeric code.

(2) You do most BITE tests at the front panel of components in the electronic equipment compartment or other equipment racks on the airplane. You do some BITE tests in the flight compartment.

3. FIM Content - Front Matter

A. The front matter has sections for record keeping, introductory, and general information. These are the sections:

(1) Transmittal Letter

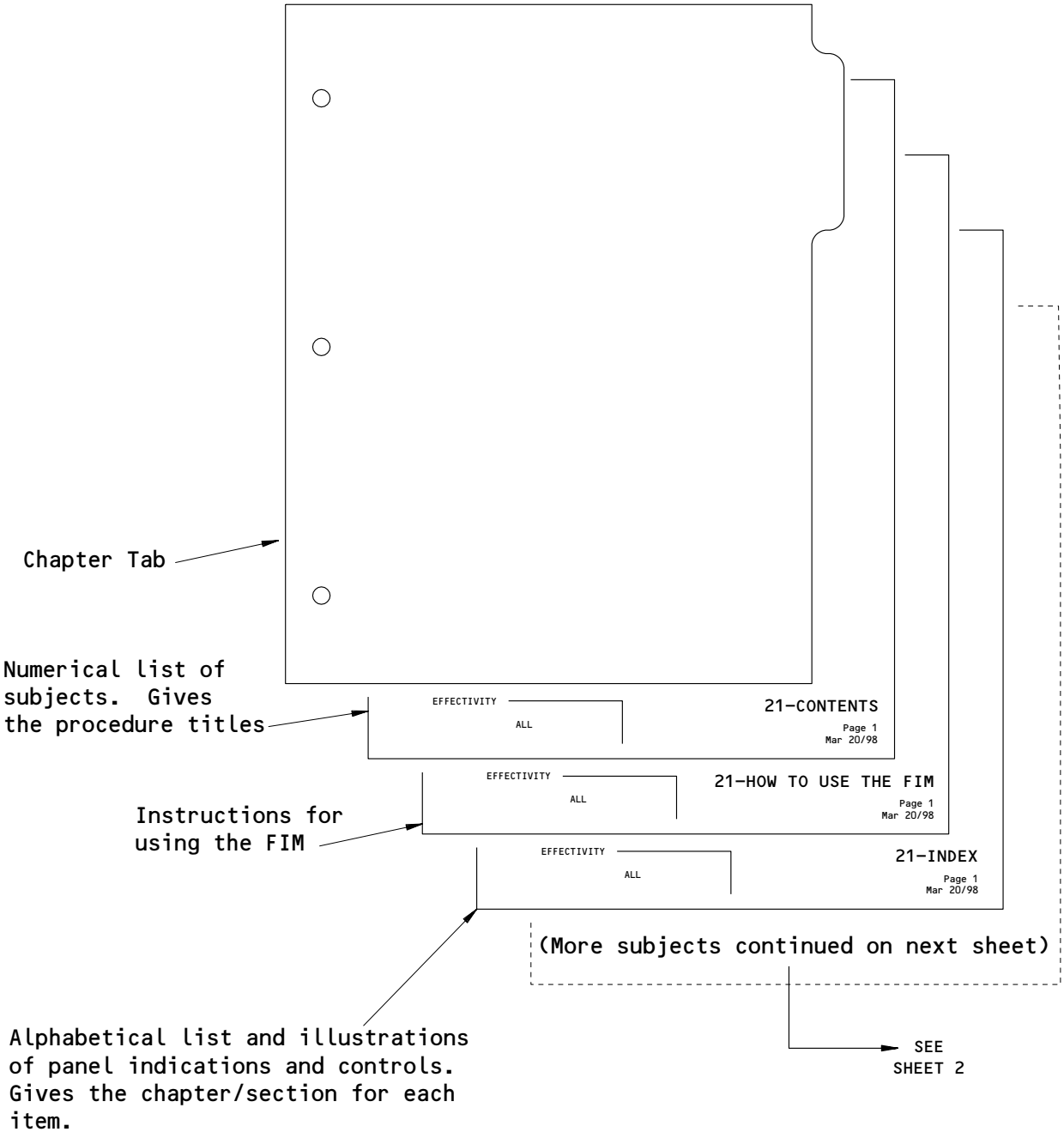
(2) List of Effective Pages (for front matter)

(3) Revision Record

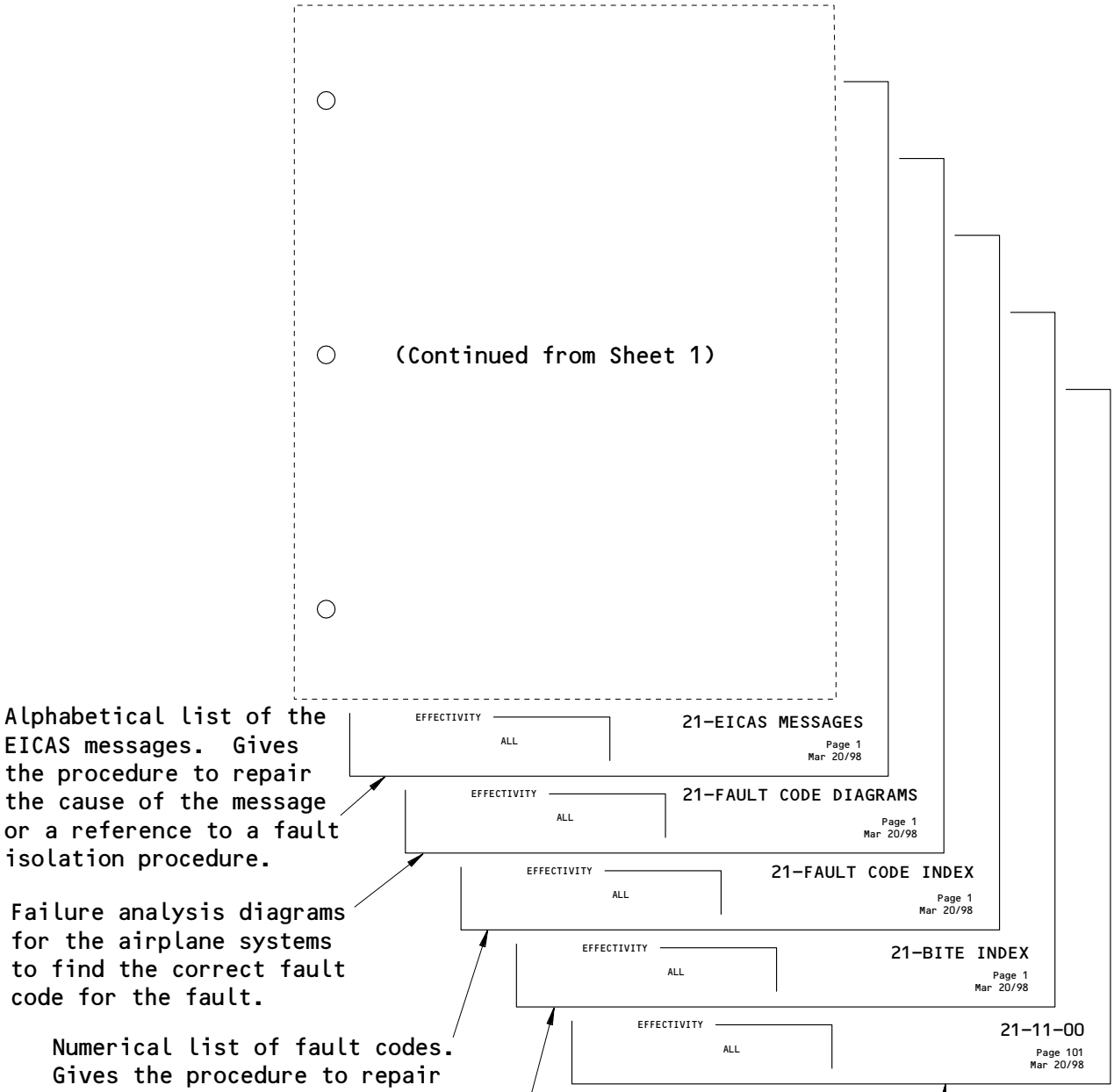
(4) Record of Temporary Revisions

(5) FIM Index
(a) The index is an alphabetical lsit of all subjects included in the FIM. For each subject, the index gives the chapter and the section in the FIM where fault isolation procedures for the subject are found.
(6) Introduction
(a) The introduction has general information about the FIM and describes these items:
1) Types of faults
2) FIM contents
3) Using the FIM to isolate faults
4) Fault isolation procedure features.
(7) Effectivity
(8) Abbreviation List
(9) Panel Locations
(a) The Panel Location section has these figures:
1) Flight/Passenger Cabin Panel Locations
2) Equipment Center Rack and Panel Locations
3) Ground Service Points and Panel Locations
(b) List of Service Bulletins
(c) List of Chapters

4. FIM Content - Numbered Chapters (Fig. 1)
A. Contents
B. How to Use the FIM
(1) These are simplified illustrations that give a summary of how to use the FIM and the airplane systems BITE to isolate faults. The topics covered are:
(a) Basic Fault Isolation Process
(b) How To Get Fault Information from BITE
(c) Find the Corrective Action or Fault Isolation Procedure in the FIM
(d) Do the Fault Isolation Procedure
(e) Subjects in Each FIM Chapter
C. Index
(1) The Index has two parts. The first part shows the panel indications and controls with the chapter and the section in the FIM where the applicable fault isolation procedures are found. The second part has a table that shows the title of each instrument panel in the chapter with the chapter and the section in the FIM where applicable fault isolation procedures are found.



Subjects in Each FIM Chapter
Figure 1 (Sheet 1)



Subjects in Each FIM Chapter
Figure 1 (Sheet 2)

(2) The Index pages are the same as the Contents pages in the FRM.

D. EICAS Messages

(1) Most chapters will have an EICAS Message table that shows all the EICAS messages for that chapter. The EICAS Message table gives the EICAS message, the level of the message, and the procedure to correct the fault.

(a) The EICAS MESSAGE column shows the messages alphabetically. Messages that start with L (left), R (right), or C (center) are put together in this list starting with L.

E. Fault Code Diagrams

(1) The Fault Code Diagrams give fault codes through problem analysis, for common faults that can occur on the airplane. Most of the diagrams are equivalent to the diagrams in the FRM. Other diagrams, shown by the word "GROUND" in the title, give the problem analysis and fault codes for ground crew operated systems.

(2) The Fault Code Diagrams have five areas of data:

(a) The top area has the controls and the indicators applicable to each subject. These items are at the top of columns that extend into the analysis part of the diagram immediately below. You can also find questions in the top area.

(b) The middle area is an analysis that you can follow to find the applicable fault code. This area is intended to relate the specific system configuration to what has been observed. The analysis starts at an arrow on the left edge of the page and continues to the right and down. A diamond in a column shows where there are two or more answers to a question about the indicator or control. The diagram gives other possible indications or answers on lines that extend down and to the right of the diamond. The analysis continues until all faults that can occur for the diagram are included. Each fault has a line that extends into the Fault Code column at the right of the page.

(c) The column at the right of the page has the fault codes. Each fault has a fault code. This fault code is used to communicate a problem that was observed to the person who will do the troubleshooting. Fault codes that end with an X-alpha (XA, XB, etc.) are used for faults that cannot be identified in the FIM.

(d) The location part of the fault codes are specified in the top right corner of the page. These codes identify the specific part of the system or location where the fault occurred.

(e) Applicable circuit breakers for a system are at the bottom of the diagram.

F. Fault Code Index

(1) The Fault Code Index is a numerical list of all fault codes for the chapter. For each fault code that is used, the index has these items:

(a) Item 1 is the problem report. This is a description of the fault. The problem report is equivalent to the logbook report entry in the FRM.

(b) Item 2 shows the steps to correct the fault. If a fault isolation procedure is necessary to correct the fault, then item 2 will refer to the applicable procedure.

G. BITE Index

(1) The BITE Index is an alphabetical list of all the systems and components that have BITE procedures in the FIM. For each system or component, this list gives the chapter-section number where you can find the BITE procedure. Each BITE procedure will give the corrective action or a reference to a fault isolation procedure for each BITE message.

H. Component Location Data

(1) Component location data is supplied for the major system components. The data is at the front of the applicable FIM chapter-section for the system or subsystem (subject). It is divided into two parts: The Component Index and the Component Location.

(a) The Component Index is a table that list the components in a system or subsystem in alphabetical order. Components that are not assigned to the section or subject, but are operationally related, are also included with a reference to its own chapter-section. For each component, the Component Index table can have this data:

1) A reference to the figure and sheet that shows the location of the component
2) Quantity of each component
3) Access number of the door or panel that must be opened to get to the component
4) Area, panel, or grid location (for circuit breakers) where the component is located
5) A reference for the chapter-section-subject in the Airplane Maintenance Manual (AMM) where the component is assigned.

(b) The Component Location figure shows the access and location of the major components in the Component Index. The components are shown in relation to any structural or system features that are near.

I. Fault Isolation Procedures

(1) The Fault Isolation Procedures are used when one or more checks are necessary to find the cause of a fault. They are usually block flow diagrams that start with a description of a fault and end with the corrective action.

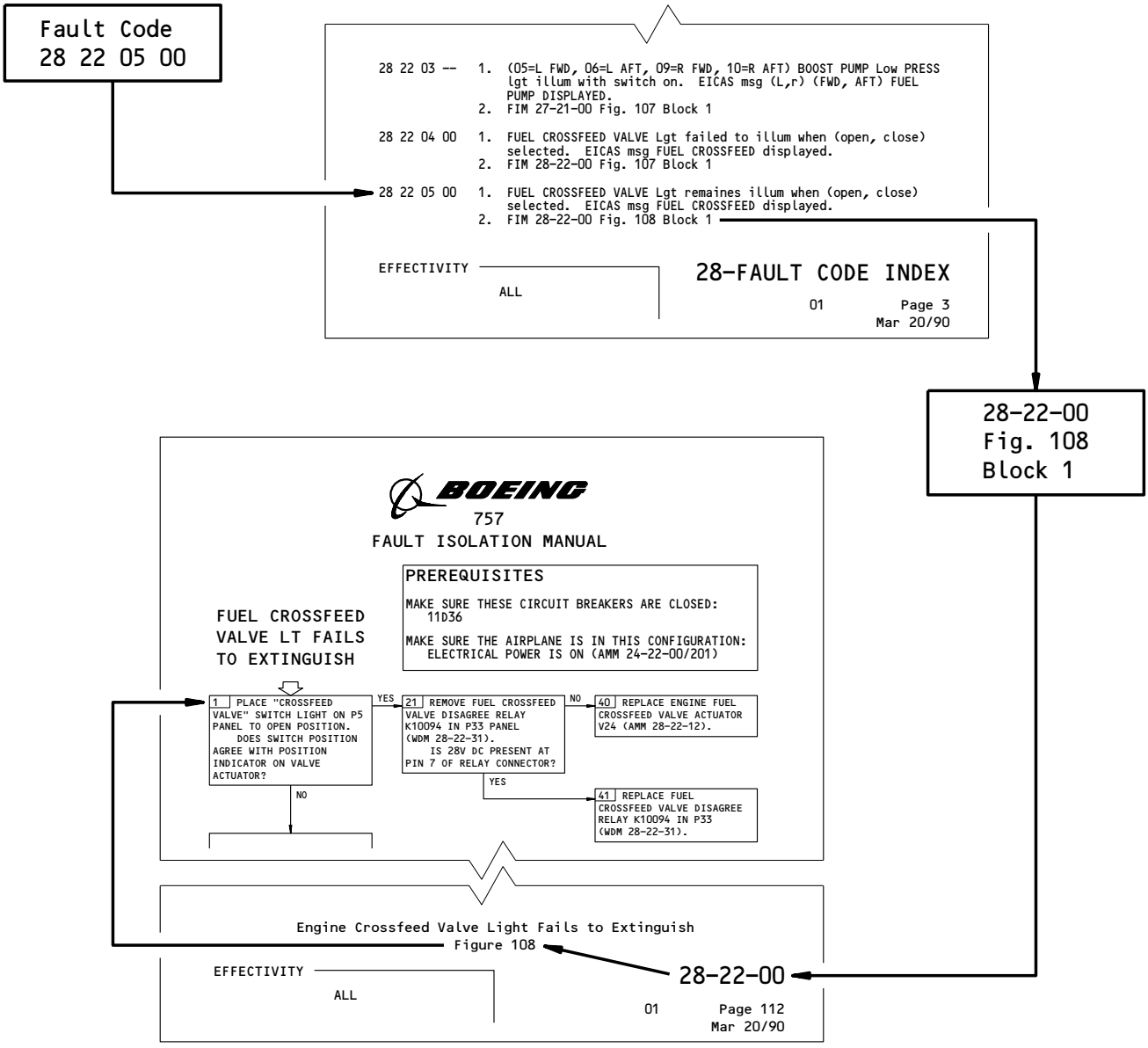
(2) There are some Fault Isolation Procedures that are not block flow diagrams. These procedures can be in a tabular or text format.

(3) Each Fault Isolation procedure has a "PREREQUISITES" box. The data in this box is used to make sure the systems that are necessary to do the fault isolation are in an operational condition.

(4) For details on the structure and the content of the Fault Isolation Procedures, refer to the paragraph "Fault Isolation Procedure Features" that follows.

J. ARINC 429 Data Bus Charts
(1) The data bus charts are supplied for many of the units that have an ARINC 429 data bus output transmitter (output port) that gives data to one or more other units with an ARINC 429 bus receiver (input port).
(2) These charts show each transmitter data bus, each connector, the pins, the name of the bus, the word octal label, and the type of data. An ARINC 429 data bus transmitter and reader is necessary to monitor the buses for specific transmitted data.

5. Using the FIM to Isolate Faults
A. IF YOU HAVE A FAULT CODE for an observed fault (possibly reported by the flight crew), then use the Fault Code Index (Fig. 2):
(1) Look at the first two digits of the fault code. This is the FIM ATA chapter number you need. Go to that chapter in the FIM and find the Fault Code Index near the front of the chapter.
(2) Find the fault code for the observed fault. The fault codes are shown in sequence by numbers with all the chapter X-alpha codes (XA, XB, etc.) shown first.
(3) To correct the fault, read the "FAULT ISOLATION REFERENCE" (item 2).
(a) If item 2 gives corrective action steps, then do the steps to repair the cause of the fault.
(b) If item 2 gives a figure and block reference, then go to the specified Fault Isolation Procedure in the FIM. Start at the referenced block and follow the procedure to isolate and repair the cause of the fault.
(c) If the fault code is an X-alpha fault code, then item 2 is usually a reference to the Wiring Diagram Manual (WDM) or System Schematics Manual (SSM). Use the flight crew's description of the fault in the log book, and the referenced WDM or SSM diagram to isolate and correct the fault.
(4) If you corrected the fault, then return the airplane to service.
B. IF YOU HAVE NO FAULT CODE for an observed fault, then do these steps:
(1) EICAS MESSAGE
If the problem report has an EICAS message, then use the EICAS Messages list (Fig. 3):



Fault Isolation Process for an Observed Fault or EICAS Message
Using a Fault Code
Figure 2

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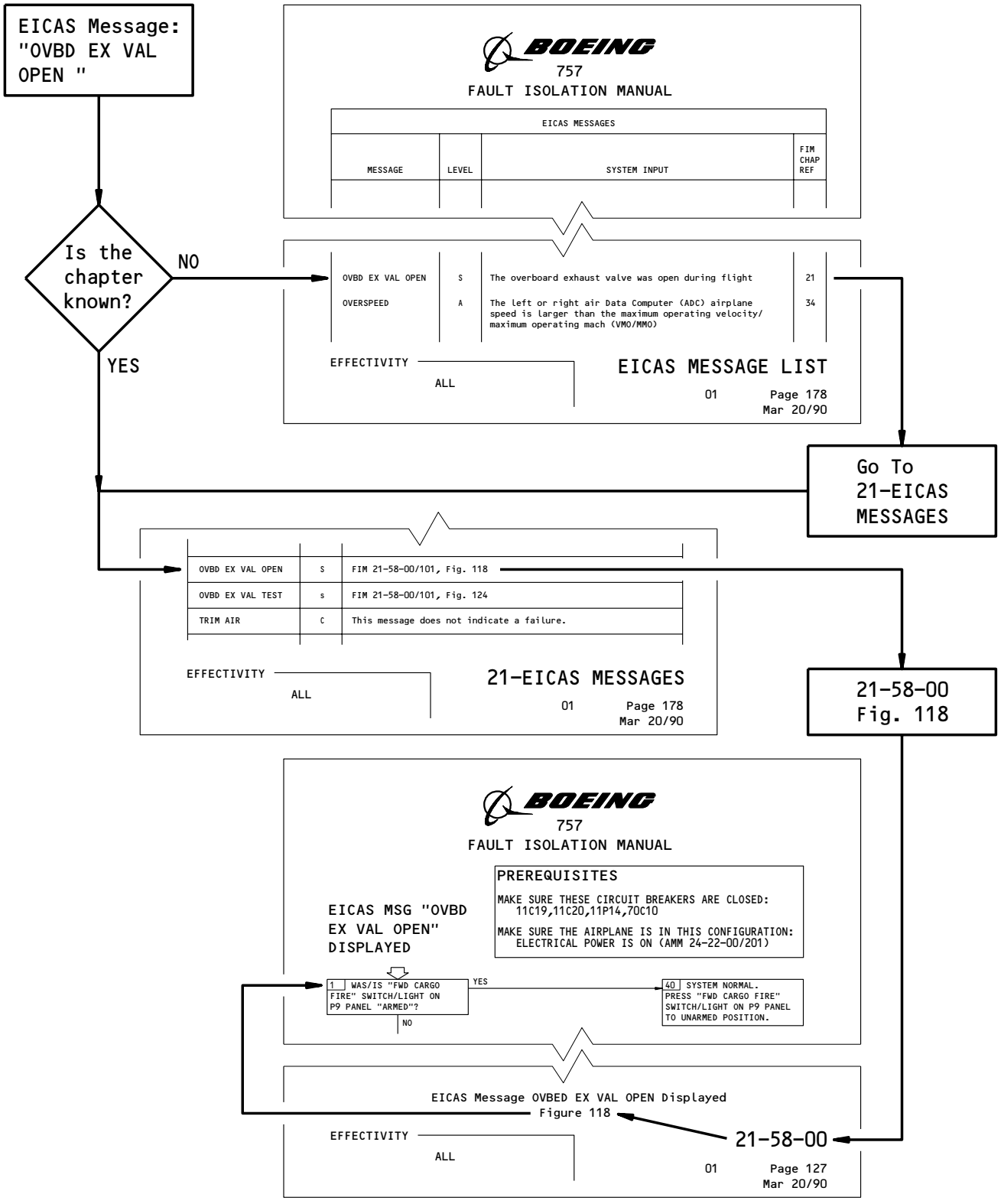


Fault Isolation Process for an EICAS Message – NO Fault Code
Figure 3

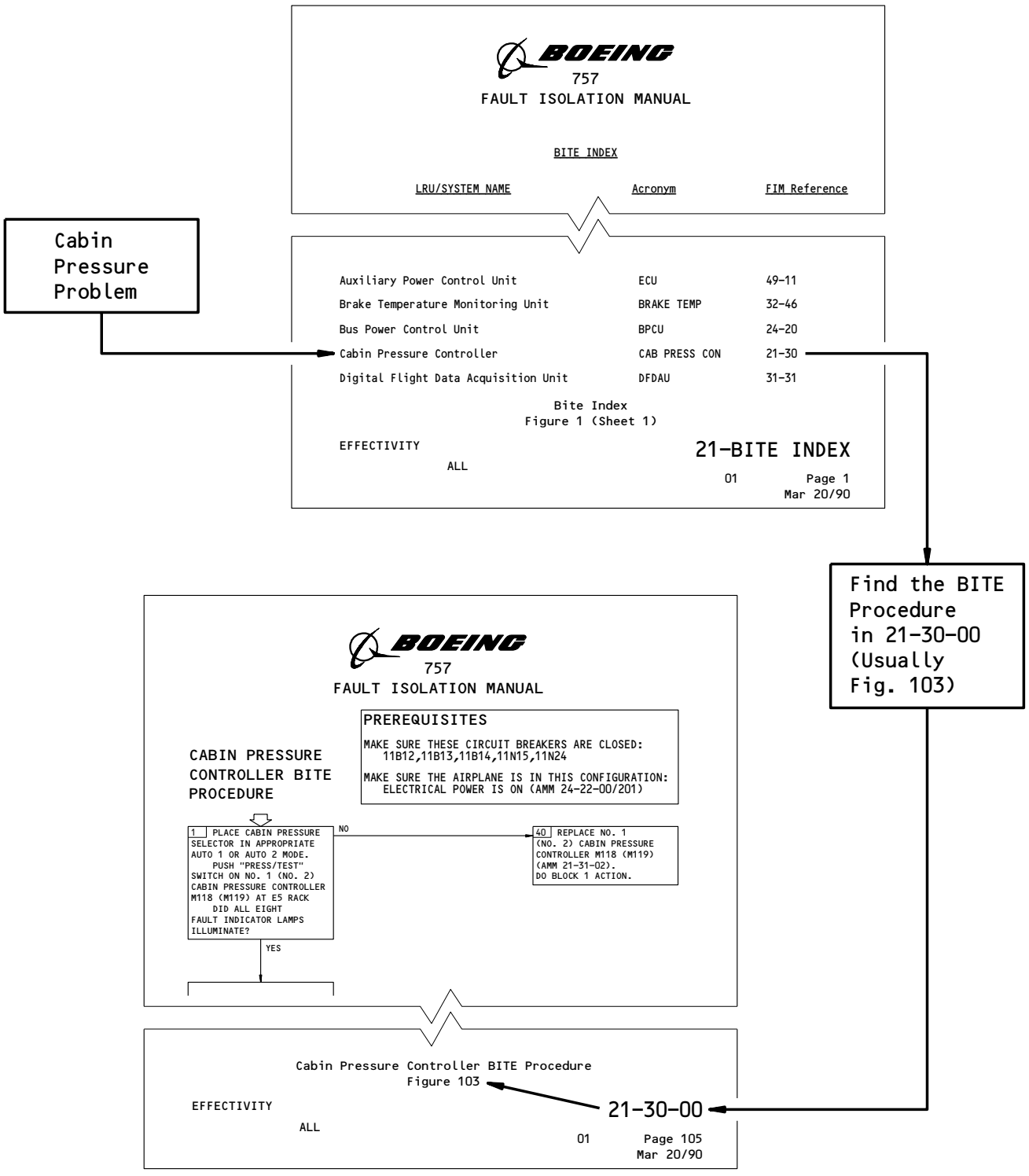
(a) If you know the chapter for the EICAS message, then do these steps:
1) Go to the applicable chapter in the FIM and find the EICAS Messages list at the front of the chapter.
2) Find the EICAS message in the list.
3) To correct the fault, read the "PROCEDURE" column for the message.
a) If the "PROCEDURE" column gives corrective action steps, then do the steps to repair the cause of the fault.
b) If the "PROCEDURE" column gives a figure and block reference, then go to the specified Fault Isolation Procedure in the FIM. Start at the referenced block and follow the procedure to isolate and repair the cause of the fault.

(b) If you do not know the chapter for the EICAS message, then do these steps:
1) Go to the EICAS MESSAGE LIST section in the FIM. This list is found after the INTRODUCTION to the FIM.
2) Find the EICAS message in the table.
a) The EICAS MESSAGE column shows the messages alphabetically. Messages that start with L (left), R (right), or C (center) are put together in this list starting with L.
3) Find the FIM Chapter Reference on the same line as the EICAS message.
4) Go to the EICAS Messages list at the front of the chapter.
5) Find the EICAS message in the list.
6) To correct the fault, read the "PROCEDURE".
a) If the "PROCEDURE gives corrective action steps, then do the steps to repair the cause of the fault.
b) If the "PROCEDURE" gives a figure reference, then go to the specified Fault Isolation Procedure in the FIM and follow the procedure to isolate and repair the cause of the fault.

(c) If you corrected the fault, then return the airplane to service.

(2) SYSTEM BITE

If the problem report is for a system that has BITE, then you can do the BITE procedure (Fig. 4):
(a) Go to any BITE Index near the front of a FIM chapter.
(b) Look for the system or a line replaceable unit (LRU) in the system. If the system or an LRU in the system has BITE, then you will find it listed alphabetically.
(c) On the same line as the LRU or system name, look for the FIM chapter-section reference in the "FIM REFERENCE" column.
(d) Find the BITE procedure in the specified FIM chapter-section and do the steps to get the BITE message.
(e) Do the steps in the BITE procedure to repair the cause of the BITE message.



Fault Isolation Process for an Observed Fault –
No Fault Code, System Has BITE
Figure 4

(f) If you corrected the fault, then return the airplane to service.

(g) Repair a failure with an MCDP message.

1) If the MCDP message is a flight fault, then go to the Autoflight Flight Faults BITE Fault Isolation Procedure Reference (FIM 22-00-02/101, Fig. 102). If the MCDP message is a ground test fault, then go to the MCDP Ground Test Messages Cross Reference (FIM 22-00-03/101, Fig. 101B).
   a) Find the MCDP message in the figure.
   b) Do the applicable isolation procedure.
2) If the problem was repaired, return the airplane to service.
3) If the problem was not repaired, refer to the WDM or the SSM and correct the problem.
4) Return the airplane to service.

(3) NO EICAS MESSAGE, NO SYSTEM BITE

If the problem report does not have an EICAS message and the system does not have BITE, then do these steps (Fig. 5):

(a) Go to the Fault Code Diagram at the front of the chapter for the applicable system.

(b) Start at the arrow at the left edge of the page and follow the analysis to the right and down. Follow the arrow in response to each question or condition.

(c) Find the fault code for the fault in the right column.

(d) Look at the first two digits of the fault code. This is the FIM chapter number you need. Go to that chapter in the FIM and find the Fault Code Index near the front of the chapter.

(e) Find the fault code in the Fault Code Index.

(f) To correct the fault, read the Fault Isolation Reference (item 2).

1) If item 2 gives corrective action steps, then do the steps to repair the cause of the fault.
2) If item 2 gives a figure reference, then go to the specified Fault Isolation Procedure in the FIM and follow the procedure to isolate and repair the cause of the fault.

(g) If you corrected the fault, then return the airplane to service.

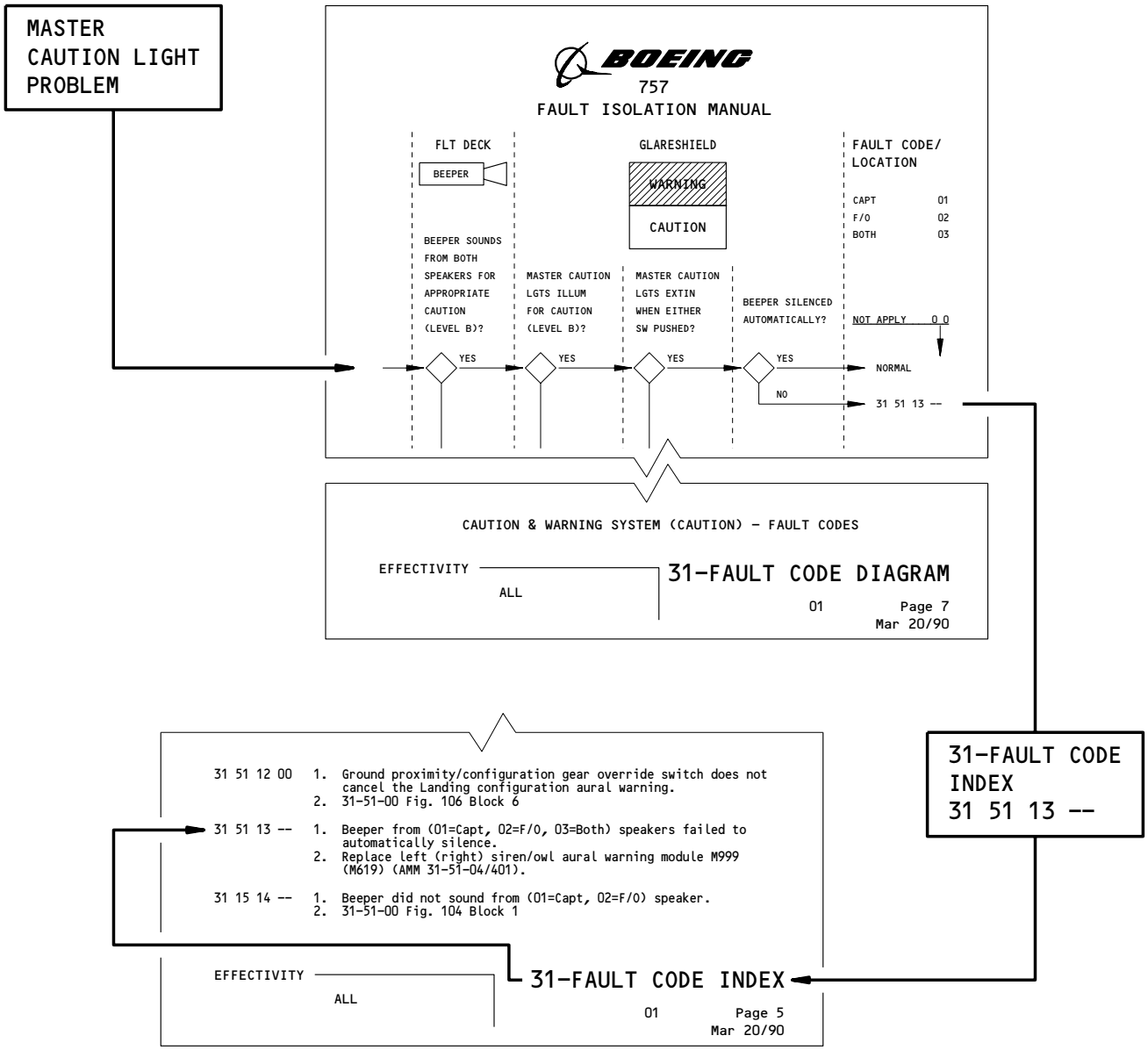
6. Fault Isolation Procedure Features

A. Format

(1) Fault Isolation Procedures are given when it is necessary to do one or more checks to find and repair the cause of the fault.

(2) Each Fault Isolation Procedure is a figure that can have many sheets. The title of the figure is the fault description. The fault description is also at the top left corner on the first sheet of the procedure. This is where the Fault Isolation Procedure starts.

(3) Fault Isolation Procedures are usually flowcharts with three columns. The flow charts go from top to bottom and from left to right.



Fault Isolation Process for an Observed Fault -
No Fault Code, No BITE
Figure 5

(4) There are some Fault Isolation Procedures that are not block flow diagrams. These procedures can be in a tabular or text format.

B. Assumed Conditions at the Start of the Fault Isolation Procedure

(1) Each Fault Isolation Procedure starts with these assumptions (unless the procedure tells you differently):
- (a) Electrical power is off.
- (b) Hydraulic power is off.
- (c) Pneumatic power is off.
- (d) Engines are shut down.
- (e) All circuit breakers for the system are closed.
- (f) No equipment in the system is deactivated.
- (g) The fault was caused by a single failure, not multiple simultaneous failures.

C. Prerequisites

(1) There is a Prerequisites box at the top of the procedure. The purpose of the Prerequisites box is to get the airplane from the normal shutdown condition to the configuration necessary to do the Fault Isolation Procedure. The Prerequisites box can give data after each of these action steps:
- (a) MAKE SURE THESE SYSTEMS WILL OPERATE
  - 1) Below this step is a list of other systems that must operate in a normal configuration. The AMM Adjustment/Test (501 page block) or the Maintenance Practces (201 page block) procedures for these systems are referenced but it is not necessary to do these procedures unless you have indications that a system that is necessary will not operate correctly.
  - 2) All circuit breakers for these systems must be closed.
  - 3) If operation of the system is necessary, then it will usually be stated, such as "APU OPERATING" or "ENGINE OPERATING".
- (b) MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED
  - 1) Below this step is a list of circuit breakers with their panel and grid location numbers, for the system with the fault. Make sure these circuit breakers are closed before you start the Fault Isolation Procedure.
  - 2) The word "NONE" will show under this step for these conditions:
    - a) No electrical, pneumatic, or hydraulic power is necessary to do the Fault Isolation Procedure.
    - b) Operation of other systems is not necessary.
    - c) Special test equipment is not necessary.
- (c) MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION
  - 1) Below this step is the condition that the airplane must be in to do the Fault Isolation Procedure. This condition is different from the assumed conditions of an airplane in the normal shutdown configuration.

(2) If there are no prerequisites, then "NONE" will show in the Prerequisites box.

D. Equivalent Tools, Fixtures and Test Equipment
   (1) Some of the procedures in this manual identify tools or equipment. But you can use equivalent alternatives unless the procedure tells you the specified tool or equipment item is mandatory. If you use alternative tools or equipment, make sure that they give the same results and are as safe to the parts and personnel as the tools or equipment specified in the procedure.
      (a) Tools in this manual identified with an "ST" prefix are designed by the Boeing Commercial Company. Detail drawings of these tools are available upon request.

E. WARNINGS, CAUTIONS, NOTES, and Flag Notes
   (1) WARNINGS and CAUTIONS will be shown in one of two areas. They will come before a step in a block of an isolation procedure when they apply to only that step of the procedure. WARNINGS and CAUTIONS will also be shown below the "PREREQUISITES" block when they apply to the full procedure.

      NOTE: Normal safety precautions are to be followed at all times when potentially dangerous maintenance procedures are done. The removal of electrical power, the use of body safety lines when in high areas, or the use of equipment slings are all examples of potentially dangerous maintenance procedures.

   (2) NOTES will follow a step in a block of an isolation procedure when they apply to only that step of the procedure. NOTES will be shown below the "PREREQUISITES" block or in another area on the page when the NOTE is applicable to the full procedure.
   (3) Flag Notes
      (a) A numbered flag is used to show a reference to a flag note. The flag notes supply more data or other necessary steps. Flag notes are usually used in more than one block of an isolation procedure.
      (b) If a figure has multiple sheets and a flag is shown on more than one sheet, the flag notes will be shown on the first sheet they are referred to.
      (c) When the flag is shown on only one sheet of the figure, the flag note will be on the same sheet.

F. Flowchart Blocks
   (1) Each block in a flowchart has a number. The first block in the procedure has the number "1". It is the first block in the left column under the fault description. A reference to a Fault Isolation Procedure can give the number of the block that you start the fault isolation. This block number is not always "1".
   (2) Typically, each block in the first two columns of a flowchart gives an action or a check. A question related to the action or check follows. The question can be answered with a "YES" or a "NO". Arrows identified as "YES" or "NO" move the user to the next action block.

(3) Typically, each block in the right column has the corrective action necessary to repair the cause of the fault. These blocks have a reference to an AMM procedure, another FIM procedure, a WDM diagram, or a SSM diagram.
(4) Some Fault Isolation Procedures can end at a block that is not a corrective action. This occurs when all the checks are completed and the system operation is normal.
(5) Components in the Fault Isolation Procedures are identified by the same name as in the AMM and, where applicable, their electrical equipment number the same as in the WDM and SSM.

G. Repair Confirmation
(1) It is assumed that after you do a repair, you will do a check to make sure the reported fault is gone.
(2) When the Fault Isolation Procedure tells you to replace an LRU, the block can have an AMM reference. The referenced procedure has a test to make sure the LRU is installed correctly. You must make sure the test is satisfactory and the fault is gone. You can do an operational test to make sure the fault is gone.
(3) If the Fault Isolation Procedure is for an EICAS message, the procedure will tell you to "Make sure the ---- EICAS message is removed". In most cases, you can look at the EICAS display to make sure that the status or maintenance message does not show. Some EICAS messages are latched. If the message is latched, then it is necessary to do the EICAS message erase procedure that is referenced in the Fault Isolation Procedure.

H. Electrical Checks
(1) Electrical checks are used at components to find if they have a fault. Electrical checks are also used to find a problem in the wiring (also referred to as wiring checks).
(2) A step can tell you to do a specific electrical check. When a step tells you to do a wiring check, these are the checks you must do:
(a) Examine any connectors that you disconnect for contamination, damage, and bent or pushed back pins.
(b) Do these three types of electrical checks for the specified contacts (pins):
1) Continuity from pin to pin
2) Short circuits between pins
3) Short circuits from each pin to structure ground.
(3) Since many electrical component installations are obvious, a WDM reference is supplied whenever an AMM procedure is not available. The WDM reference supplies the data necessary to confirm voltages in the circuit. This allows you to open the applicable circuit breaker before the component is removed or replaced.
(4) Standard procedures for connectors and wiring maintenance are shown in the Standard Wiring Practices Manual.

(5) To make electrical measurements at the major card files, use an appropriate extender card to get access to the electrical contacts. These are the part numbers for the extender cards:

CARD FILE		EXTENDER CARD PART NUMBER
P50	Electrical Systems	G26004-39, -40
P51	Warning Electronics	G26004-39, -40
P54	Fire Detection	G26004-39, -40

(6) ARINC 429 Wiring Checks
   (a) An ARINC 429 wiring circuit connects a transmitting LRU to one or more receiving LRUs.
   (b) To check the resistance between two pins of an ARINC 429 wiring circuit, first remove all LRUs that are connected to the circuit (refer to the applicable wiring diagram or schematic to see which LRUs are connected to the circuit).
      1) This will prevent effects on the measurement from the resistance of the ARINC 429 receivers and transmitters in the LRUs.
      2) This will also prevent damage to connected LRUs by test equipment that operates at a high voltage. For example, when you use an ohmmeter that measures very high resistances to check for insulation problems.
   (c) To make electrical measurements at ARINC 600 connectors, use the breakout box, A34011 to get access to the electrical contacts. You can find more data on the A34011 breakout box in 34-00-00 of the Illustrated Tools and Equipment Manual.
   (d) After you complete the wiring checks (and the subsequent wiring repair, if it is necessary), re-install the LRUs you removed.

LIST OF EFFECTIVE AIRPLANES

1. General
   A. The following list provides a cross reference table of the airplanes that are applicable to the information contained in this manual.

GPA Group plc

Customer Effectivity Code	Line No.	Variable Number	Manufacturing Serial Number	Registration Number
MODEL 757-2Y0				
GUI 001	388	NB321	25240	XA-MTY
GUI 002	400	NB322	25268	G-CPEP
GUI 003	472	NB323	26151	G-ZAPU
GUI 004	478	NB324	26152	EI-CEY
GUI 005	482	NB325	26153	B-2831
GUI 006	486	NB326	26154	EI-CEZ
GUI 007	495	NB327	26155	B-2826
GUI 008	503	NB328	26156	B-2827
GUI 009	526	NB329	26158	G-000X
GUI 010	555	NB330	26160	G-FCLJ
GUI 011	557	NB331	26161	G-FCLK
MODEL 757-236				
GUI 115	362	NA346	25054	G-000K

Abbreviation	Words
A/C	air conditioning
A/G	air/ground
A/L	autoland
A/P	autopilot
A/S	airspeed
A/T	autothrottle, adjustment/test
ABNORM	abnormal
AC	alternating current
ACARS	ARINC Communications Addressing and Reporting System
ACCEL	acceleration, accelerate
ACM	air cycle machine
ADC	air data computer
ADF	automatic direction finder
ADI	attitude director indicator
ADP	air driven pump, air driven hydraulic pump
ADV	advance
AFCS	automatic flight control system
AGL	above ground level
AI	anti-ice
AIDS	aircraft integrated data system
AIL	aileron
ALT	altitude
ALTM	altimeter
ALTN	alternate
ALTNT	alternate
AMB	ambient
AMM	Airplane Maintenance Manual
ANN	announcement
ANNUNC	annunciator
ANT	antenna
AOA	angle of attack
APB	auxiliary power breaker
APD	approach progress display
APL	airplane
APPR	approach
APPROX	approximately

ABBREVIATION LIST

Abbreviation	Words
APU	auxiliary power unit
ARINC	Aeronautical Radio Incorporated
ARINC IO	ARINC I/O error
ARNC STP	ARINC I/O UART data strip error
ASA	autoland status annunciator
ASP	audio selector panel
ASYM	asymmetrical
ATC	air traffic control
ATC/DABS	air traffic control/discrete address beacon system
ATT	attitude
ATTND	attendant
AUTO	automatic
AUX	auxiliary
AVM	airborne vibration monitor
B/CRS	back course
BARO	barometric
BAT	battery
BFO	beat frequency oscillator
BITE	built-in test equipment
BK	brake
BKGRD	background
BPCU	bus power control unit
BRKR	breaker
BRT	bright
BTB	bus tie breaker
BTL	bottle
C/B	circuit breaker
C	center
°C	degrees Centigrade
CADC	central air data computer
CAPT	captain
CB	circuit breaker
CCA	central control actuator

Abbreviation	Words
CCW	counterclockwise
CDU	control display unit
CH	channel
CHAN	channel
CHG	change
CHR	chronograph
CHRGR	charger
CK	check
CKT	circuit
CL	close
CLB	climb
CLR	clear
CLSD	closed
CMD	command
CMPTR	computer
CNX	cancelled
COL	column
COMM	communication
COMP	compressor
COMPT	compartment
CON	continuous
COND	condition
CONFG	configuration
CONFIG	configuration
CONN	connection
CONT	control
CP	control panel
CPCS	cabin pressure control system
CPS	cycles per second
CRS	course
CRT	cathode ray tube
CRZ	cruise
CSEU	control system electronics unit
CT	current transformer
CTN	caution

Abbreviation	Words
CTR	center
CU	control unit
CUST	customer
CW	clockwise
CWS	control wheel steering
DA	drift angle
DADC	digital air data computer
DC	direct current
DEC	decrease, decrement
DECEL	decelerate
DECR	decrease
DEG	degree
DEPR	depressurize
DEPT	departure
DEST	destination
DET	detector
DETNT	detent
DEV	deviation
DFDR	digital flight data recorder
DG	directional gyro
DH	decision height
DIFF	differential
DIR	direct
DISC	disconnect
DISCH	discharge
DISCONT	discontinued
DISENG	disengage
DISP	dispatch
DIST	distance
DK	deck
DME	distance measuring equipment
DMU	data management unit
DN	down
DPCT	differential protection current transformer
DR	door
DSCRT IO	discrete I/O error
DSPLY	display
DSPY	display

Abbreviation	Words
EADI	electronic attitude director indicator
ECON	economy
ECS	environmental control system
EDP	engine driven pump, engine hydraulic pump
EEC	electronic engine control
EFDARS	expanded flight data acquisition and reporting system
EFI	electronic flight instruments
EFIS	electronic flight instrument system
EGT	exhaust gas temperature
EHSI	electronic horizontal situation indicator
EICAS	engine indicating and crew alerting system
ELEC	electrical
ELEV	elevation
EMER	emergency
ENG	engage, engine
ENT	entrance, entry
ENTMT	entertainment
EPC	external power contactor
EPR	engine pressure ratio
EPRL	engine pressure ratio limit
EQUIP	equipment
ERR	error
ESS	essential
EVAC	evacuation
EVBC	engine vane and bleed control
EXH	exhaust
EXT	external
EXTIN	extinguish, extinguished
EXTING	extinguishing
F/D	flight director
F/F	fuel flow
F/O	first officer
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FCC	flight control computer

Abbreviation	Words
FCEU	flight controls electronic unit
FCU	fuel control unit
FDR	feeder
FIM	Fault Isolation Manual
FL	flow
FL/CH	flight level change
FLD	field
FLT	flight
FLUOR	fluorescent
FMC	flight management computer
FMS	flight management system
FREQ	frequency
FRM	Fault Reporting Manual
FSEU	flap/slat electronic unit
FT	feet, foot
FWD	forward
G/S	glide slope, ground slope
GA	go-around
GB	generator breaker
GCB	generator circuit breaker
GCR	generator control relay
GCU	generator control unit
GEN	generator
GHR	ground handling relay
GND	ground
GP	group
GPWS	ground proximity warning system
GR	gear
GRD	ground
GS	ground speed
GSSR	ground service select relay
GSTR	ground service transfer relay
GW	gross weight

Abbreviation	Words
H/L	high/low
HDG	heading
HF	high frequency
HORIZ	horizontal
HP	high pressure
HSI	horizontal situation indicator
HTR	heater
HYD	hydraulic
IAS	indicated airspeed
IDENT	identification
IDG	integrated drive generator
IGN	ignition
ILLUM	illuminate, illuminated
ILS	instrument landing system
IMP	imperial
IN	in, input
INBD	inboard
INC	incorporated, increase, increment
INCR	increase
IND	indicator
INFC	interface
INFLT	inflight
INHIB	inhibit
INIT	initiation
INOP	inoperative
INPH	interphone
INST	instrument
INT	interphone
INTLK	interlock
INTPH	interphone
INTMT	intermittent
IP	intermediate pressure
IRS	inertial reference system
IRU	inertial reference unit
ISLN	isolation
ISOL	isolation
IVSI	instantaneous vertical speed indicator

Abbreviation	Words
KG	kilograms
KIAS	knots indicated airspeed
KTS	knots
L	left
L/R	left/right
L-NAV	lateral naviation
LAV	lavatory
LB	pound
LBS	pounds
LCD	liquid crystal display
LCR	left-center-right
LDG	landing
LDG GR	langing gear
LE	leading edge
LED	light emitting diode
LF	left front
LGT	light
LH	left hand
LIM	limit
LOC	localizer
LN	left nose
LR	left rear
LRRA	low range radio altimeter
LRU	line replacable unit
LSB	lower side band
LVR	lever
LW	left wing
LWR	lower
M-SPD	manual speed
MAG	magnetic
MAINT	maintenance
MALF	malfunction
MAN	manual
MAX	maximum

Abbreviation	Words
MCDP	maintenance control display panel
MCP	mode control panel
MCU	modular concept unit
MDA	minimum decision altitude
MIC	microphone
MIN	minimum
MM	Maintenance Manual
MOD	module
MON	monitor
MOT	motion
MPU	magnetic pickup
MSG	message
MSTR	master
MSU	mode selector unit
MTG	miles to go
MU	management unit
MUX	multiplexer
N/A	not applicable
NAC	nacelle
NAV	navigation
NCD	no computed data
NEG	negative
NEUT	neutral
NLG	nose landing gear
NO.	number
NORM	normal
NRM	normal
NVMEM RD	non-volatile memory read error
NVMEM WR	non-volatile memory write error
O2	oxygen
OBS	observer
OK	okay
OPR	operate
OPT	option
OPRN	operation

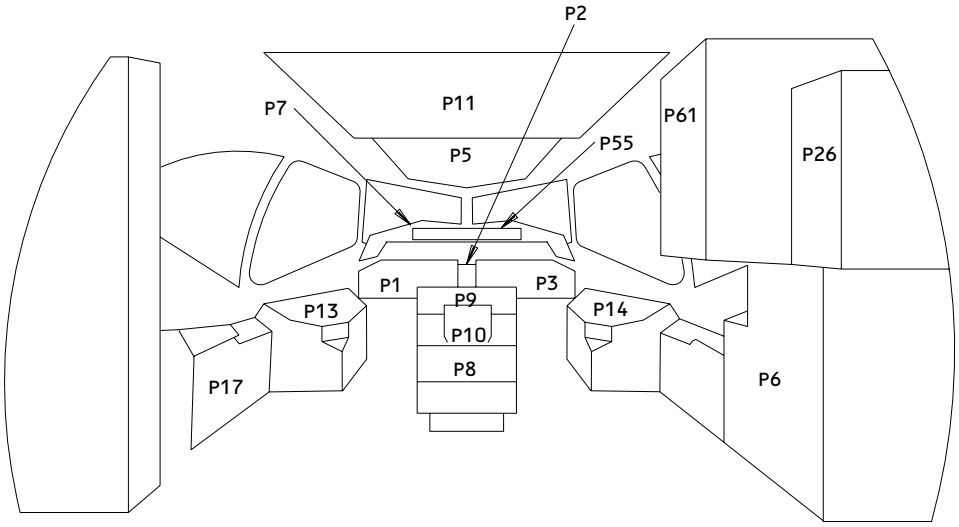
Abbreviation	Words
OUT	output
OUTBD	outboard
OVHD	overhead
OVHT	overheat
OVRD	override
OXY	oxygen
P/RST	press to reset
P/S	pitot/static
PA	passenger address
PASS	passenger
PCA	power control actuator
PCT	percentage
PDI	pictorial deviation indicator
PES	passenger entertainment system
PLA	power level angle
PLT	pilot
PMG	permananet magnet generator
PNEU	pneumatic
PNL	panel
POR	point of regulation
POS	position, positive
PPOS	present position
PRESS	pressure
PRG FLOW	program flow error
PRIM	primary
PROC	procedure
PROG MEM	ROM memory error
PROJ	projector
PROT	protection
PS	pitot static
PSI	pounds per square inch
PSS	passenger service system
PSU	passenger service unit
PTT	push to talk
PTU	power transfer unit
PWR	power

Abbreviation	Words
QAD	quick-attach-detach
QTS	quarts
QTY	quantity
R/T	rate of turn
R/W MEM	RAM memory error
R	right
RA	radio altimeter, radio altitude
RAT	ram air turbine
RCVR	reciever
RDMI	radio distance magnetic indicator
REC	recorder
RECIRC	recirculate
REF	reference
REFRIG	refrigeration
REG	regulator
REL	release
REP	representative
REQ	required
RES	reserve
RESSTART	power interrupt restart error
REV	reverse
RF	right front
RH	right hand
RLSE	release
RLY	relay
RLY/SW	relay/switch
RMI	radio magnetic indicator
RMT OUT	high-speed ARINC output error
RN	right nose
ROT	rotation
RPM	revolutions per minute
RPTG	reporting
RR	right rear

Abbreviation	Words
RST	reset
RTO	rejected takeoff
RUD	rudder
RW	right wing
RWY	runway
SAM	stabilizer trim/elevator asymmetry limit module
SAT	static air temperature
SEC	second
SEI	standby engine indicator
SEL	select
SELCAL	selective calling
SERV	service
SG	signal generator
SLCTD	selected
SLCTR	selector
SOV	shut off valve
SP	speed
SPD	speed
SPD BK	speed brake
SQL	squelch
SSB	single side band
STA	station
STAB	stabilizer
STBY	standby
STS	system status
SURF	surface
SW	switch
SWITCH IN	switch input error
SYNC	synchronous
SYS	system
SYST	system
T/R	thrust reverser
T.O.	takeoff
TACH	tachometer
TAI	thermal anti-ice
TAS	true airspeed
TAT	total air temperature

Abbreviation	Words
TCC	turbine case cooling
TE	trailing edge
TEMP	temperature
TFR	transfer
THR	thrust
THROT	throttle
THRSH	threshold
THRT	thrust
THRU	through
TIE	bus tie
TLA	thrust lever angle
TMC	thrust management computer
TMS	thrust management system
TMSP	thrust mode select panel
TO	TO/takeoff
TOL	tolerance
TR	transformer rectifier
TRP	thrust rating panel
TUNE	tuner
TURB	turbine
TURBL	turbulent, turbulence
UBR	utility bus relay
UPR	upper
USB	upper side band
V/NAV	vertical navigation
V/S	vertical speed
VERT	vertical
VERT SPD	vertical speed
VFY	verify
VG	vertical gyro
VHF	very high frequency
VIB	vibration
VLD	valid
VLV	valve

Abbreviation	Words
VOL	volume
VOLT	voltage
VOR	VHF omni range receiver
VOX	voice
VTR	video tape reproducer
W/D	wiring diagram
W/W	wheel well
WARN	warning
WG	wing
WHL	wheel
WHLS	wheels
WPT	waypoint
WSHLD	windshield
WX	weather
WXR	weather
X-CH	cross channel
X-CHAN	cross channel
XDCR	transducer
XMISSION	transmission
XMIT	transmit
XMTR	transmitter
XPNDR	transponder
Y/D	yaw damper



FLIGHT COMPARTMENT

PANEL NOMENCLATURE	
P1 CAPTAINS INSTRUMENT P2 EICAS DISPLAY P3 FIRST OFFICERS INSTRUMENTS P5 PILOTS' OVERHEAD P6 MAIN POWER DISTRIBUTION P7 GLARESHIELD P8 AFT PILOTS CONTROL STAND P9 FORWARD ELECTRICAL CONTROL STAND P10 QUADRANT STAND P11 OVERHEAD CIRCUIT BREAKER P13 FORWARD CAPTAINS AUXILIARY INSTRUMENT P14 FORWARD FIRST OFFICERS AUXILIARY INSTRUMENT P17 FIRST OBSERVERS CONSOLE P21 FORWARD ATTENDANT (NO. 1 LEFT PASSENGER DOOR) P22 AFT ATTENDANT (NO. 4 LEFT PASSENGER DOOR) P23 MID ATTENDANT (NO. 2 LEFT PASSENGER DOOR) P25 WATER SERVICE (AFT LOWER FUSELAGE) P26 EQUIPMENT LIGHTING P28 FUELING CONTROL (RIGHT WING AREA) P30 EXTERNAL POWER RECEPTACLE (FORWARD LOWER RIGHT FUSELAGE) P31 LEFT GENERATOR POWER P32 RIGHT GENERATOR POWER P33 MISCELLANEOUS ELECTRICAL POWER	P34 APU EXTERNAL POWER MISCELLANEOUS ELECTRICAL EQUIPMENT P36 LEFT MISCELLANEOUS ELECTRICAL EQUIPMENT P37 RIGHT MISCELLANEOUS ELECTRICAL EQUIPMENT P41 FORWARD CARGO DOOR CONTROL (INBOARD OF THE NO.1 CARGO DOOR) P42 AFT CARGO DOOR CONTROL (INBOARD OF THE NO. 2 CARGO DOOR) P43 FORWARD CARGO DOOR CONTROL (AFT OF THE NO. 1 CARGO DOOR) P44 FORWARD CARGO DOOR CONTROL (AFT OF THE NO. 2 CARGO DOOR) P50 ELECTRICAL SYSTEMS CARDFILE P51 WARNING ELECTRONICS CARDFILE P54 FIRE DETECTION CARDFILE P55 CENTER GLARESHIELD P61 RIGHT SIDEWALL P62 NOSE LANDING GEAR CONTROL HOUSING (NOSE LANDING GEAR) P63 NOSE LANDING GEAR CONTROL HOUSING (NOSE LANDING GEAR) P70 MISCELLANEOUS ELECTRICAL EQUIPMENT P72 MAIN WHEEL WELL ELECTRICAL SERVICE (AFT OF THE WHEEL WELL, LOWER FUSELAGE)

SCHEM. MAN.
00-00-30

Panel Locations
Figure 1 (Sheet 1)

PANEL LOCATIONS

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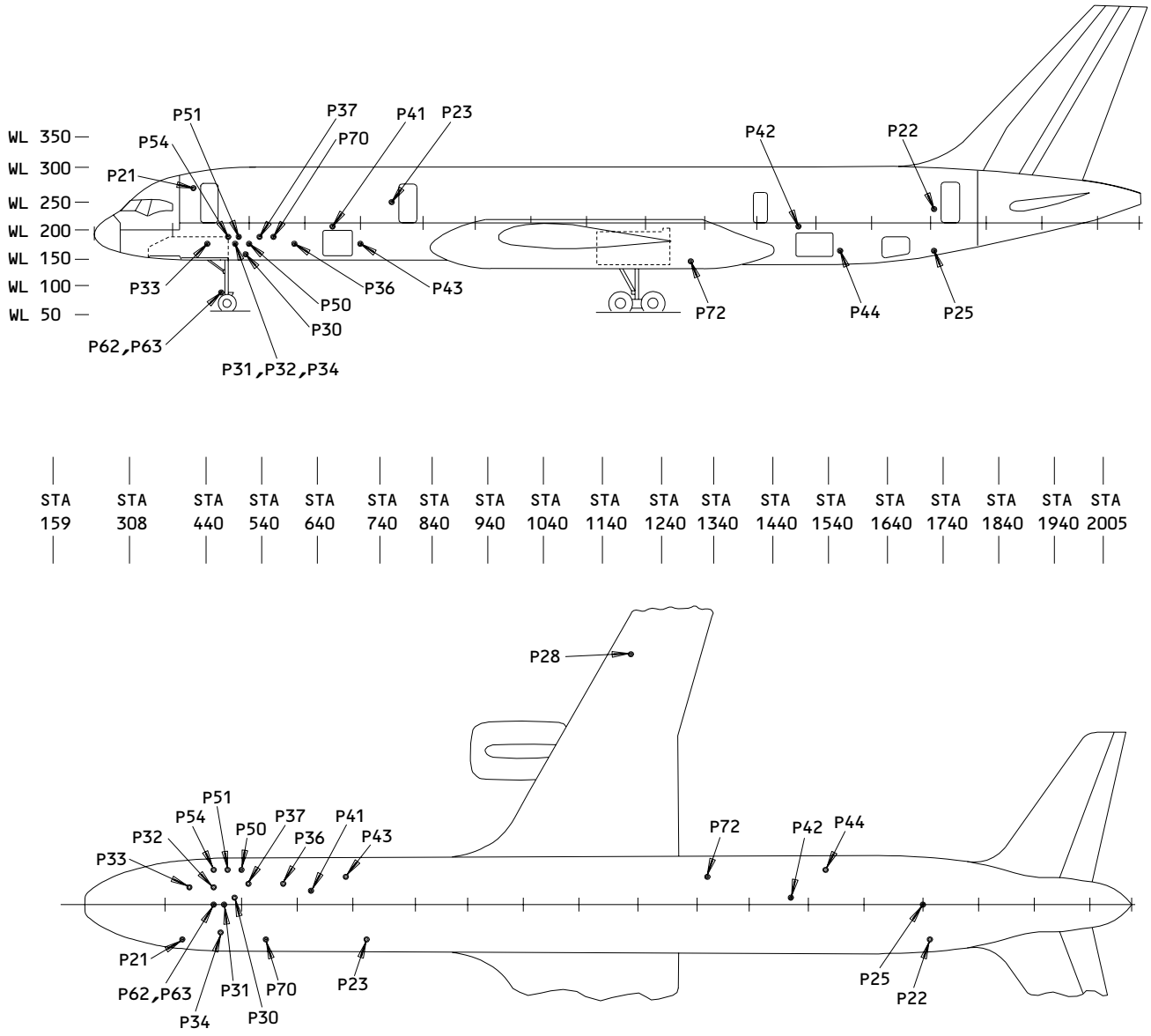
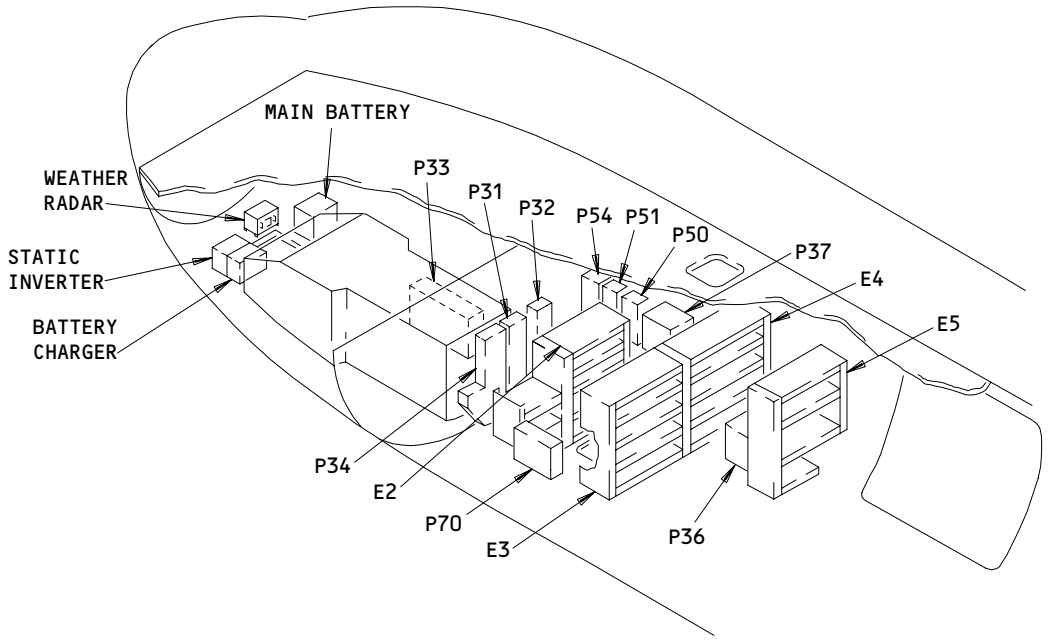


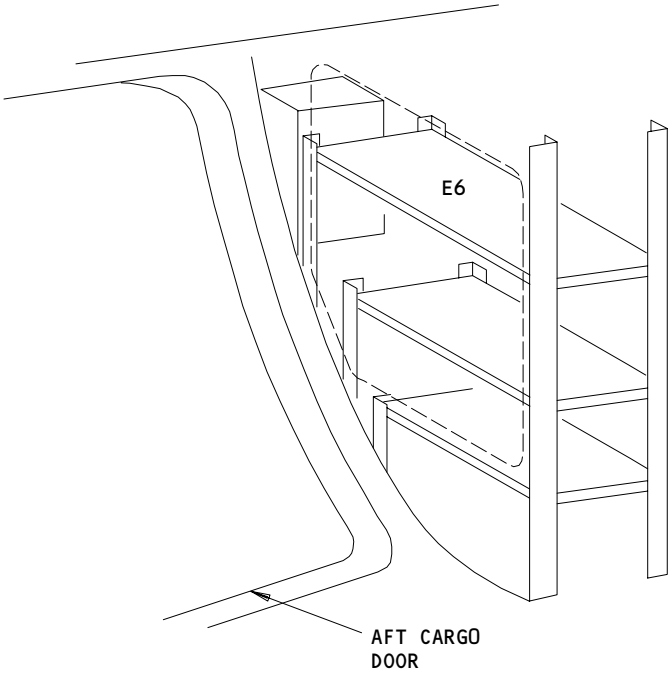
SCHEM. MAN.
00-00-30

Panel Locations
Figure 1 (Sheet 2)

PANEL LOCATIONS



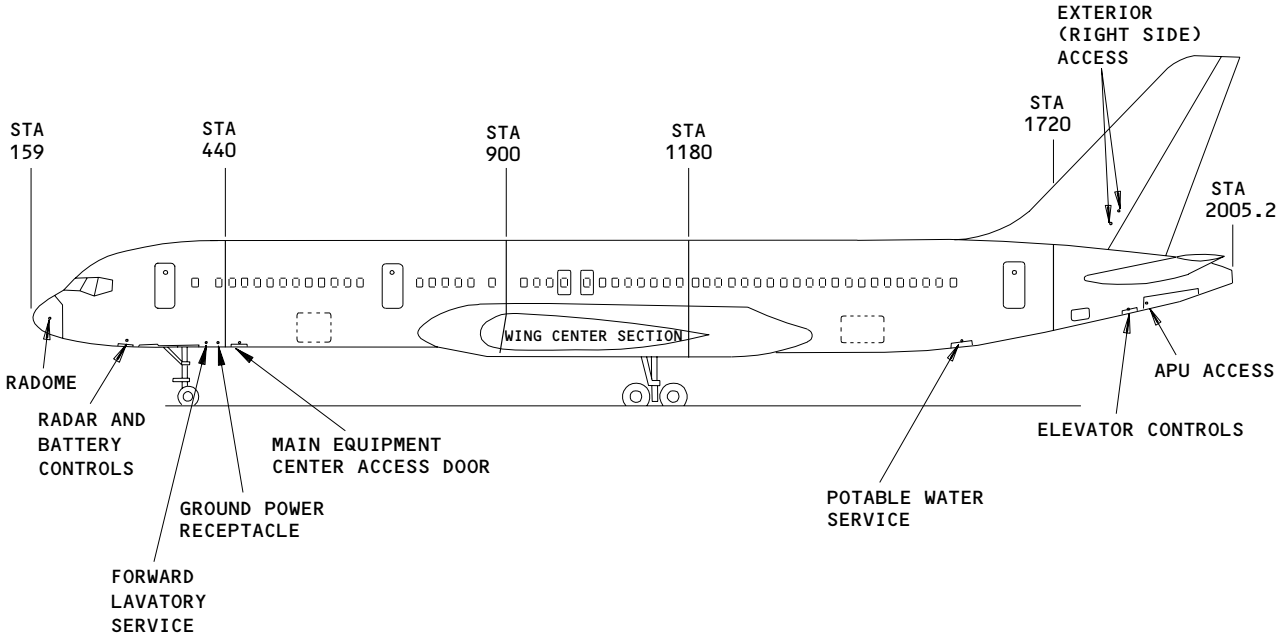
FORWARD AND MAIN EQUIPMENT CENTERS



AFT EQUIPMENT CENTER, E6

Equipment Center Locations
Figure 2

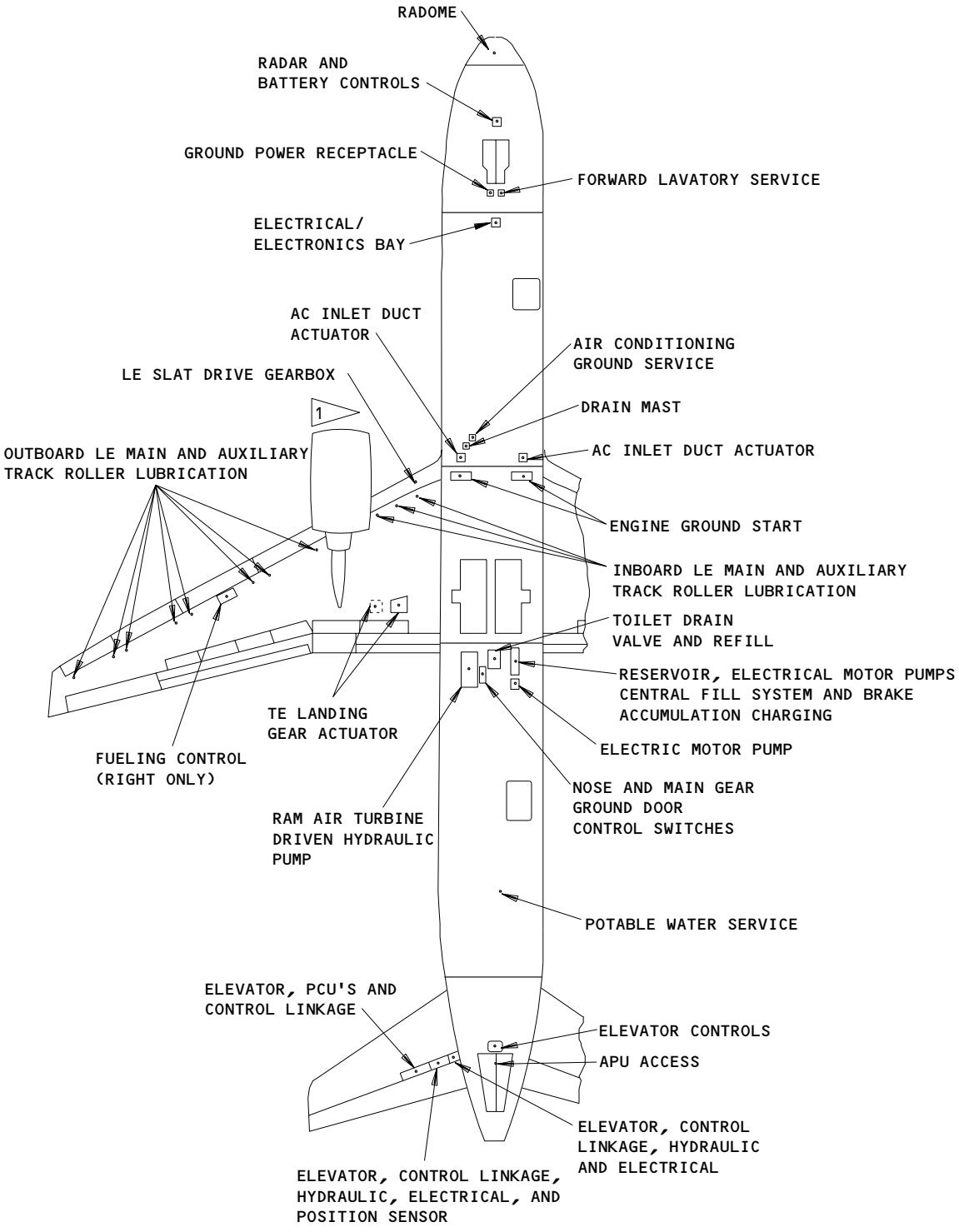
PANEL LOCATIONS



SCHEM. MAN.
00-00-10

Ground Service Access Panels
Figure 3 (Sheet 1)

PANEL LOCATIONS



1 GO TO AMM 71-00-00/201 TO SEE THE POWER PLANT/NACELLE STRUT SERVICE ACCESS PANELS

SCHEM. MAN.
00-00-10

Ground Service Access Panels
Figure 3 (Sheet 2)

PANEL LOCATIONS

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LIST OF SERVICE BULLETINS

This list tells you which service bulletins (SB) were evaluated for applicability to this manual. The list has this data: the SB number, the chapter affected, the subject of the SB, and the configuration of the change in the manual. S tells you that two configurations, pre- and post-SB, are in the manual. C tells you that the complete configuration, post-SB, is the only configuration that is shown in the manual. The revision date that the SB was, or will be, incorporated (NO EFFECT tells you that no change was necessary for that SB. INCORP tells you that the change for the SB was previously incorporated, and no more changes are necessary.)

SERVICE BULLETIN	ATA	INCORP DATE	SUBJECT	S/C
21-61	21	INCORP	REMOVAL OF THE EXHAUST LOW FLOW DETECTOR	S
21-61R1	21	01/28/00	A/C EQUIPMENT COOLING - EXHAUST LOW FLOW	S
21-61R1	31	05/28/00	A/C EQUIPMENT COOLING - EXHAUST LOW FLOW	S
21-63	21	09/28/04	AIR CONDITIONING EQUIPMENT COOLING	S
22A52	22	03/20/97	AUTOTHROTTLE-THRUST MANAGEMENT COMPUTER	S
22-63	22	01/28/06	AUTOFLIGHT-FLIGHT CONTROL COMPUTER-	S
22-64	22	09/28/01	AUTOFLIGHT-FLIGHT CONTROL COMPUTER-	S
22-74R1	22	05/20/08	AUTOFLIGHT - AUTOPILOT - FLIGHT CONTROL	S
22-74R2	22	01/20/09	AUTOFLIGHT - AUTOPILOT - FLIGHT CONTROL	S
22-79	22	01/20/09	AUTOFLIGHT - AUTOPILOT - FLIGHT CONTROL	S
23-101	23	01/20/08	COMMUNICATIONS - FLIGHT INTERPHONE	S
23-101R1	23	01/20/08	COMMUNICATIONS - FLIGHT INTERPHONE	S
23-101R2	23	05/20/09	COMMUNICATIONS - FLIGHT INTERPHONE	S
24A79	24	09/20/97	MAIN BATT SHUNT INSPECT/REPLACE & MAIN	S
24A79R1	24	09/20/97	MAIN BATT SHUNT INSPECT/REPLACE & MAIN	S
24A79R2	24	09/20/97	MAIN BATT SHUNT INSPECT/REPLACE & MAIN	S
24-93	31	05/28/05	ELECTRICAL POWER INSTALL OF INFLIGHT	S
24-93	38	01/28/04	ELECTRICAL POWER INSTALL OF INFLIGHT	S
24-125R1	24	09/20/08	ELECTRICAL PWR-MN&AUX PWR UNIT BATTERY	S
24-125R1	31	09/20/08	ELECTRICAL PWR-MN&AUX PWR UNIT BATTERY	S

SERVICE BULLETIN	ATA	INCORP DATE	SUBJECT	S/C
24-125R2	24	01/20/09	ELECTRICAL PWR-MN&AUX PWR UNIT BATTERY	S
24-125R2	31	01/20/09	ELECTRICAL PWR-MN&AUX PWR UNIT BATTERY	S
24-125R3	24	01/20/09	ELECTRICAL PWR-MN&AUX PWR UNIT BATTERY	S
24-125R3	24	05/20/09	ELECTRICAL PWR-MN&AUX PWR UNIT BATTERY	S
24-125R3	31	05/20/09	ELECTRICAL PWR-MN&AUX PWR UNIT BATTERY	S
24-130	24	05/20/09	ELEC POWER-STANDBY PWR-MN&AUX PWR UNIT	S
24-130	31	05/20/09	ELEC POWER-STANDBY PWR-MN&AUX PWR UNIT	S
25-269	52	05/28/05	EQUIP/FURN - FLIGHT COMPARTMENT DOOR	S
25-271R2	52	05/28/04	FLIGHT COMPARTMENT DOOR REPLACEMENT	S
26A42	21	01/28/01	CARGO COMPARTMENT SMOKE DETECTION	S
27-104	27	05/28/93	RUDDER RATIO CHANGER CIRCUIT BREAKER	S
27A127	12	01/28/00	TE FLAP TRANSMISSION-TORQUE LIMITER RPLC	S
27A127R1	12	01/28/00	FLT CONTROLS-FLAPS-TRAILING EDGE FLAP	S
27A130	30	01/28/03	AUTO-SPEEDBRAKE CONTROL SYSTEM -	S
27A135	12	05/28/04	ELEVATOR CNTRL SYS-(PCA) & REACTION	S
27A135	27	05/28/04	ELEVATOR CNTRL SYS-(PCA) & REACTION	S
27-137R1	12	01/28/05	FLIGHT CONTROLS STABILIZER TRIM CONTROL	S
27A146	27	05/28/05	FLIGHT CONTROLS - AILERON CONTROL -	S
27A146R1	27	05/28/05	FLIGHT CONTROLS - AILERON CONTROL -	S
28-29	31	INCORP	ENGINE SECOND FUEL CROSSFEED VALVE	S
28-29R1	31	INCORP	SECOND FUEL CROSSFEED VALVE INSTL	S
28-29R2	28	01/28/05	FUEL - DISTRIBUTION - ENGINE FUEL FEED	S
28-29R2	31	01/28/05	FUEL - DISTRIBUTION - ENGINE FUEL FEED	S
28A78	28	05/20/09	ENG FUEL FEED SYS-FUEL PUMP CTRL GROUND	S
28A81	28	05/28/06	FUEL-ENGINE FUEL FEED SYS-CENTER FUEL	S
28A85	28	05/28/06	FUEL-INDICATING-HOT SHORT PROTECTOR	S
28A85R1	28	01/20/08	FUEL - INDICATING - HOT SHORT PROTECTOR	S
28A85R2	28	01/20/08	FUEL - INDICATING - HOT SHORT PROTECTOR	S
28A105	28	05/28/07	FUEL - ENGINE FUEL FEED SYSTEM - CENTER	S
28A105R1	28	05/28/07	FUEL - ENGINE FUEL FEED SYSTEM - CENTER	S
31-34R2	31	05/28/07	EFIS SWITCHING RELAY DIODE INSTALLATION	S
31-59	32	09/28/98	EICAS COMPUTER RPLC	S
31-59R1	32	01/28/00	EICAS COMPUTER RPLC	S
31-59R2	32	01/28/01	CENTRAL COMPUTERS - UPGRADE TO THE	S
31-59R3	31	05/28/01	INDICATING/RECORDING-CENTRAL COMPUTERS-	S
31-66	31	01/28/02	WEU-OVERVOLTAGE TEST PROC	S
31-66R2	31	05/28/00	INDICATING/RECORDING - CENTRAL WARNING	S
31-68	31	09/28/00	INDICATING/RECORDING SYS-CENTRAL WARNING	S
31-68R1	34	09/28/04	INDICATING/RECORDING SYS-CENTRAL	S
31-69	31	05/28/07	EICAS OPS & OPC SOFTWARE CHNG	S
31-78	31	01/28/02	INDICATING/RECORDING SYS-EICAS	S
31-78R1	34	01/28/01	INDICATING/RECORDING SYS - EICAS	S
31-104	31	09/28/04	EICAS-UPGRADE THE EICAS OPERATIONAL	S
31-159	31	01/20/08	IND/RECORD SYS-ENGINE IND/CREW ALERTING	S
32-175R1	32	09/20/08	LANDING GEAR - CRANE/ELDEC PROXIMITY	S
33-35R1	33	01/28/05	LIGHTS - CARGO AND SERVICE COMPARTMENT	S
34-132	34	09/20/96	AIR DATA COMPUTER REPL/WIRE CHANGES TO	S
34-132R1	34	01/20/08	AIR DATA COMPUTER RPL/WIRE CHANGES TO	S

SERVICE BULLETIN	ATA	INCORP DATE	SUBJECT	S/C
34-167	34	INCORP	ALT ALERT MODULE RPLC	S
34-192R1	34	09/28/04	NAVIGATION - INSTALLATION OF 200K -200	S
34A222	34	05/28/03	AIR DATA COMPUTING SYS OVERSPEED &	S
34-228R1	34	01/28/03	FLIGHT INSTRUMENT SYSTEM-UPDATE THE	S
34-400R2	34	05/20/10	VAN-LAND/TAXI AIDS-REPL INSTRUMENT	S
36-23	36	12/20/96	AIR SUPPLY PRESS REG AND SHUTOFF VALVE-	S
52-57	32	01/28/00	MLG DOOR CLOSED PROXIMITY SENSOR	S
71-58R6	26	01/28/01	ENGINE INTERMIX OF RB211 ENGINES	S
71-58R7	26	01/28/01	ENGINE INTERMIX OF RB211 ENGINES	S
71-58R7	71	01/28/01	ENGINE INTERMIX OF RB211 ENGINES	S
75-5	31	09/28/00	RB211-535 ENGINE BLEED VALVE EICAS	S
75-5	75	01/28/00	RB211-535 ENGINE BLEED VALVE EICAS	S
76-11R1	73	01/28/00	ENG FUEL VALVE INDICATION WIRING CHNGS-	S
77-9	R77	05/28/07	AIRBORNE VIBRATION MONITORING SYSTEM-	S
78-32R3	22	01/28/00	RB211 THRUST REVERSER SYNC LOCK	S
78-32R3	22	05/28/00	RB211 THRUST REVERSER SYNC LOCK	S
78-32R3	31	05/28/00	RB211 THRUST REVERSER SYNC LOCK	S
78-32R3	31	09/28/00	RB211 THRUST REVERSER SYNC LOCK	S
78-39R1	78	09/20/95	THRUST REVERSER POSITION INDICATING	S

LIST OF CHAPTERS

1. EICAS Messages

A. The MESSAGE column shows the message as shown on the EICAS display unit.
   (1) Number flagnotes show if an Auto Event occurs with that message.
   (2) Messages with *[5] shown an auto event has occurred because of an engine exceedance. These messages show only on the PERF/APU page.
   (3) The number flagnotes are as follows:
      *[1] ECS Auto Event
      *[2] ELEC Auto Event
      *[3] HYD Auto Event
      *[4] APU Auto Event
      *[5] PERF Auto Event (Auto Event Messages Only)

B. The LEVEL column shows the letters A, B, C, E, F, S, or M and also if that message is kept in nonvolatile memory (NVM). Levels A, B, and C are Alert messages, level E and F are Communication messages, level S is a Status message, and level M is a Maintenance message.
   (1) Alert messages, level A, B and C, show automatically in the top left corner of the engine primary page. They show the conditions that follow:
      (a) Level A (Warning) messages show an incorrect condition that must be corrected immediately. Warning messages are red in color and show at the top of the alert message list.
      (b) Level B (Caution) messages show an incorrect condition that must be known immediately and corrected subsequently. Caution messages are yellow in color and show below the last warning message.
      (c) Level C (Advisory) messages show an incorrect condition that only must be known immediately. Advisory messages are also yellow in color and show below the last caution message. Advisory messages start one space to the right of the caution messages.
   (2) Alert messages (level A, B, and C) show at the top position of each message level area as they occur. When a new message shows, each of the remaining messages move down 1 line. Alert messages show only while there is an incorrect condition; they are not kept in NVM.
   (3) Communication messages (levels E and F) are displayed on the bottom line of the alert level message field in the order of occurrence. Communication messages indicate arrival of incoming communication. Communication messages are white in color and are preceeded by a solid bullet.

      NOTE: Levels E and F messages are only applicable on the -1001 series EICAS computer.

      (a) Level E messages are accompanied with an aural chime and are displayed above level F messages.

(b) Level F messages are displayed one character space indented to the right of level E messages.

(4) Level S (status) messages show on the right side of the STATUS page. You must push the STATUS switch on the DISPLAY select panel to see the STATUS page. Status messages show incorrect conditions that the flight crew must know about before flight. Status messages are white in color.

(5) Level M (maintenance) messages show on the top and right side of the ECS/MSG page. You must push the ECS/MCS switch on the maintenance page to see the ECS/MSG page. Some messages have status and maintenance levels. These messages are important to the flight crew and the maintenance crew. Other messages have only a maintenance level. These are important to the maintenance crew, but the flight crew does not have to know about them.

C. The SYSTEM INPUT column gives the general conditions that are necessary for the sub-system to send a discrete signal to show the message.

D. The FIM CHAP REF column gives the primary ATA chapter location of each message in the FIM. There is an EICAS MESSAGE LIST in each chapter which follows the FIM Contents section. This list shows all messages for that chapter and gives a corrective action or the FIM Chapter-Section reference with the applicable figure number.

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
ACCESS DOORS	C	Two or more of the access doors are unlatched	52
AFT CABIN TEMP *[1]	C	A condition that follows continues: 1) The aft cabin supply duct temperature is larger than 190°F (88°C) 2) Zone temperature aft cabin channel failure 3) The zone temperature aft cabin channel is off	21
AFT CARGO DET 1	S,M	The aft cargo detector loop 1 has an output failure or a test failure	26
AFT CARGO DET 2	S,M	Aft cargo detector loop 2 has an output failure or test failure	26
AFT CARGO DOOR	C	The aft cargo door (cargo door No. 2) is not closed and locked	52
AFT CARGO DR 1	C	The aft cargo door 1 (cargo door No. 2) is not closed and locked	52
AFT CARGO DR 2	C	The aft cargo door 2 (cargo door No. 3) is not closed and locked	52
AFT CARGO FAN	S,M (NVM)	Aft cargo compartment fan failure	21
AFT CARGO FIRE	A	Aft cargo compartment fire	26
AFT DET FAN	M	Aft cargo smoke detector blower 1 failure or blower 2 failure	26

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
AFT EQ EXH FAN 1	M (NVM)	Aft equipment exhaust fan 1 failure	21
AFT EQ EXH FAN 1	S,M (NVM)	Aft equipment exhaust fan 1 failure	21
AFT EQ EXH FAN 2	M (NVM)	Aft equipment exhaust fan 2 failure	21
AFT EQ EXH FAN 2	S,M (NVM)	Aft equipment exhaust fan 2 failure	21
AFT EQ FLOW	M	The aft equipment cooling ducts flow is low and the airplane is on the ground	21
AFT EQ SNSR	M (NVM)	Aft equipment supply duct low flow sensor failure	21
AFT EQ SUP FAN 1	M (NVM)	Aft equipment supply fan 1 failure	21
AFT EQ SUP FAN 2	M (NVM)	Aft equipment supply fan 2 failure	21
AFT EQPT SMOKE	C	Smoke in the aft equipment cooling supply duct	21
AFT FUEL X-FEED	C	AIRPLANES WITH A DUAL FUEL CROSSFEED SYSTEM; the aft fuel crossfeed switch position does not agree with the aft fuel crossfeed valve position	28

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
AIR/GND DISAGREE	S,M (NVM)	The system 1 air/ground logic disagreed with the System 2 air/ground logic because the main gear was put at an angle	32
AIR/GND SYS	C	Air/ground disagree after dispatch and prior to take-off	32
ALL GEAR DOWN	M (NVM)	The landing gear system showed that all the gear were down and locked, but the air/ground system showed that the nose gear was up	32
ALT CALLOUTS	S,M	Loss of the EGPWS altitude callouts	34
ALT DISAGREE	B	The altitude difference between the air data computers is greater than 200 feet and the radio altitude is greater than 200 feet	34
ALTITUDE ALERT	B	The airplane moved away from the altitude selection by more than ± 200 or 300 feet (61-91 meters)	34
ALTN ANTISKID	S,M	The antiskid system found a failure in the alternate antiskid system	32
ANTISKID	M	The antiskid system in operation (normal or alternate) has a failure	32
ANTISKID/AUTOBRK	M (NVM)	The antiskid/autobrake system BITE found a failure	32

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
APU BAT CHGR	S,M (NVM)	APU battery charger failure	24
APU BAT NO STBY	S,M (NVM)	Either condition as follows occurred: 1) The APU battery was not connected in parallel during a main DC power supply failure 2) The parallel connection between the APU battery and the main battery was not removed after the main dc power supply became available	24
APU BITE	M (NVM)	The APU BITE found a failure	49
APU BLEED VAL	C	The APU bleed valve switch position does not agree with the APU bleed valve position	36
APU BTL	C	APU bottle low pressure	26
APU DOOR	S,M	The APU door position does not agree with the position of the APU master control switch	49
APU FAULT *[4]	C	APU BITE found a failure and did a shutdown	49
APU FIRE	A	APU fire	26
APU FIRE LP 1	S,M	APU fire in loop 1 or failure of loop 1 fire detection	26
APU FIRE LP 2	S,M	APU fire in loop 2 or failure of loop 2 fire detection	26

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
APU FUEL VAL	C	The APU fuel valve position does not agree with the set position	28
APU GEN OFF	C	APU generator auxiliary power breaker (APB) is open and the external power contactor (EPC) is open during APU operation	24
APU OIL QTY *[4]	S,M (NVM)	The APU oil quantity is low	49
ATC FAULT	C	Air traffic control transponder failure	34
ATT DISAGREE	B	Instrument comparator unit (ICU) left attitude does not agree with the ICU right attitude	34
ATT FAIL	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
AUTO SPEEDBRAKE	C	Auto speedbrake system BITE found a failure	27
AUTOBRAKES	C	Autobrake disarmed or not operative	32
AUTOPILOT	B	Air data computer, flight management computer, stabilizer trim, instrument landing system, or radio altimeter input failure to the autopilot which is in operation	22
AUTOPILOT DISC	A	All autopilots in operation failed	22
AUTOTHROT DISC	B	The autothrottle was manually or automatically disengaged or the power was not removed from the autothrottle	22

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
BATTERY OFF	C	Battery switch off	24
BBAND SYS SMOKE	B	Message is added to indicate cooling system shutdown due to smoke detection	43
BLEED ISLN VAL	C	The bleed isolation valve switch does not agree with the bleed isolation valve position	36
BRAKE SOURCE	C	The accumulator is the only hydraulic brake pressure source	32
BROADBAND SYS	S	Message is added to indicate system failure	43
C FLT CONT HYD	C	The center hydraulic flight control valves are closed	27
C HYD 1 OVHT *[3]	C	The center electrical pump 1 temperature is larger than 225°F (107°C)	29
C HYD 2 OVHT *[3]	C	The center electrical pump 2 temperature temperature is larger than 225°F (107°C)	29
C HYD ELEC 1	C	The center electrical pump 1 output pressure is low	29
C HYD ELEC 2	C	The center electrical pump 2 output pressure is low	29
C HYD QTY *[3]	C	The center hydraulic reservoir quantity is low	29
C HYD RSVR PRES	C	The center hydraulic system reservoir pressure is less than 17 psi (1.15 Kg/cm2) while both engines are in operation	29

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
C HYD SYS MAINT	S,M (NVM)	The center hydraulic system pressure is less than 2800 psi (193 Kg/cm2) while both engines are in operation	29
C HYD SYS PRESS *[3]	B	The center hydraulic system pressure is low	29
C HYD QTY O/FULL	M	The center hydraulic system reservoir quantity is larger than 122%	29
C IRS DC FAIL	C	Center inertial reference system dc power supply failure	34
C IRS FAULT	C	Center inertial reference system failure	34
C IRS ON DC	C	Center inertial reference system ac power supply failure. The IRS changed to dc power supply use	34
CABIN ALERT	E	An alert call has been received over the cabin interphone	23
CABIN ALT AUTO 1	S,M	Automatic pressurization controller 1 BITE found a failure	21
CABIN ALT AUTO 2	S,M	Automatic pressurization controller 2 BITE found a failure	21
CABIN ALTITUDE	A	The cabin altitude is above 10,000 feet feet (3050 meters)	21

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
CABIN ALTITUDE	A	The cabin altitude is above 10,000 feet (3050 meters) if the cabin altitude warning switch is in the usual position or the cabin altitude is above 14,500 feet (4420 meters) if the cabin altitude warning switch is in high altitude position	21
CABIN AUTO INOP	B	Failure of No. 1 and 2 automatic pressurization controllers or the pilot changed to manual pressurization control	21
CABIN CALL	E	An interphone call has been received from the passenger cabin	23
CAPT INSTR XFER	S,M	The captain changed to the other instrument data bus supply while the left main data bus operation was satisfactory	24
CAPT PITOT	C	Captain's main pitot heat power supply failure, continuity failure, or power level change	30
CAPT PITOT HEAT	M (NVM)	The captain's pitot heat was high while the airplane was on the ground	30
CARGO BTL 1	C	Cargo bottle 1 pressure is low	26

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
CARGO BTL 2	C	Cargo bottle 2 pressure is low	26
CARGO DET AIR	S	The pressure is low at some position downstream of the forward or the aft cargo smoke detector blowers	26
CARGO DOORS	C	Two or more cargo doors are open	52
COMPARATOR BITE	S,M (NVM)	Instrument comparator unit (ICU) BITE found a failure	34
CTR L FUEL PUMP	C	The center left fuel pump output is low	28
CTR R FUEL PUMP	C	The center right fuel pump output pressure is low	28
DC FUEL PUMP ON	M	APU DC fuel pump is operating	28
DUCT LEAK BITE	M	The duct leak/wheel well fire system logic card BITE found a failure	26
E/E ACCESS DOOR	C	The EE bay door is not latched	52
EGT RED *[5]	NA	The left/right engine EGT is equal to or larger than a temperature as follows: 1) 1598°F (870°C) records immediately 2) 1562°F (850°C) for 20 seconds 3) 1058°F (570°C) during engine start	71
EGT YEL *[5]	NA	The left/right engine EGT is equal to or larger than 1463°F (795°C)	71

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
EICAS BITE	M	A condition that follows continues: 1) The left or right EICAS computer BITE found a failure 2) The left and right EICAS computers have a DISAGREE code latched in BITE NVM 3) The computer which is not in use failed 4) The computer which is not in use is off	31
EICAS CONT PNL	C	EICAS DISPLAY select panel failure	31
EICAS DISAGREE	S	A condition that follows continues: 1) EICAS computer failure which caused an ENGINE DISAGREE code be latched in BITE NVM 2) EICAS computer failure which caused a caution alert function failure	31
EICAS DISPLAY	C	A condition that follows continues: 1) EICAS top or bottom display unit failed 2) EICAS top or bottom display unit is off 3) EICAS top or bottom display unit is out of view because of a computer failure	31
EICAS SOFTWARE	S	An incompatibility exists in the EICAS software	31
ELEV ASYM	S,M	Elevator asymmetry protection system failure	27

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
ELEV FEEL	S,M (NVM-AIR)	The elevator feel system has detected a fault	27
ELEV C HYD PRESS	S,M (NVM)	High or low pressure at the center elevator hydraulic system pressure reducer valve	27
ELEV L HYD PRESS	S,M (NVM)	High or low pressure at left elevator hydraulic system pressure reducer valve	27
ELEV R HYD PRESS	S,M (NVM)	High or low pressure at the right elevator hydraulic system pressure reducer valve	27
EMER DOORS	C	Two or more emergency doors are open	52
EMER LIGHTS	C	The emergency light switch is in the OFF or the ON position	N/A
ENG BTL 1	C	Engine bottle 1 pressure is low	26
ENG BTL 2	C	Engine bottle 2 pressure is low	26
EQPT CLG FAN	S	Forward or aft equipment cooling supply fan failure	21
EQPT CLG FLOW	S (NVM)	The forward or aft equipment cooling ducts flow was low while the airplane was on the ground	21
EQPT CLG SENSOR	S	BITE test failure of one or more low flow sensors	21

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
EQPT CLG TEST	S,M (NVM)	Equipment cooling automatic BITE test did not operate or not completed	21
EQPT OVHT	C	A condition that follows continues: 1) Both forward supply fans are off 2) Both aft supply fans are off 3) Left recirculation fan failure and the overboard exhaust valve did not open after 10 seconds	21
EQPT SMOKE TEST	S,M (NVM)	Fwd equipment smoke system test failure	21
F/O INSTR XFER	S,M	The first officer changed to the other instrument data bus supply while the right main data bus was satisfactory	24
F/O PITOT	C	F/O's main pitot heat power supply failure, continuity failure, or power level change	30
F/O PITOT HEAT	M (NVM)	The F/O's pitot heat was high while the airplane was on the ground	30
FAST/SLOW FAIL	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
FD COMMAND FAIL	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
FIRE/OVHT SYS	C	Fire/overheat system failure	26

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
FLAP LD RELIEF	C	The flaps did not automatically retract at the correct airspeed or they did not extend after the airspeed decreased	27
FLAP ISLN VAL	S,M	The flap isolation valve was open when it should have been closed or there was a flap isolation valve failure	27
FLAP/SLAT BITE	M (NVM)	Flap slat electronics unit (FSEU) BITE found a failure	27
FLAP/SLAT ELEC	S,M	FSEU BITE found a failure because of a disagree alert or unsatisfactory asymmetry	27
FLAPS	A	The LE slots or the TE flaps are not in a takeoff position and at least one engine has takeoff thrust	31
FLT CONT VALS	C	Two or more hydraulic flight control valves are closed	27
FLT DATA ACQ	S,M (NVM-AIR)	DFDAU failure while the left and right engines were operating	31
FLT DATA REC	S,M (NVM-AIR)	The flight recorder was OFF while the left and right engines were operating	31
FLT DECK TEMP [1]*	C	A condition that follows continues: 1) Flight deck supply duct temperature is larger than 190°F (88°C) 2) The zone temperature flight deck channel is off 3) Zone temperature flight deck channel failure	21

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
FMC MESSAGE	C	The flight management system has an important message	34
FUEL CONFIG	C	A condition that follows continues: 1) The left and right fuel tank quantities have a difference of more than 1800 lbs (800 Kg on metric indicators) 2) The center tank fuel pumps are off and the center tank has fuel (approximately 1200 lbs [500 Kg]) that can be used	28
FUEL CROSSFEED	C	AIRPLANES WITH A SINGLE FUEL CROSSFEED SYSTEM; The fuel crossfeed valve position does not agree with the fuel crossfeed switch position	28
FUEL QTY BITE	S,M	Fuel Quantity Indicating System (FQIS) BITE failure	28
FUEL QTY CHANNEL	S	The fuel quantity processor unit has a failure in one or more channels	28
FUEL QTY IND	S	The accuracy of one or more fuel tank quantity indicators is not known	28
FUEL SOV BATTERY	M	The shut-off valve battery is low	28

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
FWD ACCESS DOOR	C	The forward access door is not latched	52
FWD CABIN TEMP *[1]	C	A condition that follows continues: 1) The forward cabin supply duct temperature was larger than 190°F (88°C) 2) The zone temperature forward cabin channel failure 3) The zone temperature forward cabin channel is off	21
FWD CARGO DET 1	S,M	The forward cargo detector loop 1 has an output failure or a test failure	26
FWD CARGO DET 2	S,M	The forward cargo detector loop 2 has an output failure or a test failure	26
FWD CARGO DOOR	C	The forward cargo door (Cargo No. 1) is not closed and locked	52
FWD CARGO FAN	S,M (NVM)	Forward cargo compartment fan failure	21
FWD CARGO FIRE	A	Forward cargo compartment fire	26
FWD DET FAN	M	Forward cargo smoke detector blower 1 failure or blower 2 failure	26
FWD EQ EXH FLOW	M	Low flow detected in the forward flow equipment exhaust duct while the ground airplane is on the ground	21

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
FWD EQ EXH SNSR	M (NVM)	Forward equipment exhaust duct low flow sensor BITE failure	21
FWD EQ SUP FAN 1	M (NVM)	Forward equipment supply fan 1 failure	21
FWD EQ SUP FAN 2	M (NVM)	Forward equipment supply fan 2 failure	21
FWD EQ SUP FLOW	M	The forward equipment supply duct flow is low and the airplane is on the ground	21
FWD EQ SUP SNSR	M (NVM)	Forward equipment supply duct low flow sensor BITE failure	21
FWD EQPT DET 1	M (NVM)	Forward equipment smoke detector 1 BITE failure	21
FWD EQPT DET 2	M (NVM)	Forward equipment smoke detector 2 BITE failure	21
FWD EQPT EXH DET	M (NVM)	Forward equipment exhaust detector failure	21
FWD EQPT SMOKE	C	Smoke in the forward equipment cooling exhaust or supply ducts	21
FWD FUEL X-FEED	C	AIRPLANES WITH A DUAL FUEL CROSSFEED SYSTEM; the forward fuel crossfeed switch position does not agree with the forward fuel crossfeed valve position	28

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
G/S DISAGREE	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
G/S FAIL	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
GEAR DISAGREE	B	System 1 and system 2 landing gear positions do not agree	32
GEAR DISAGREE	M (NVM)	The system 1 and system 2 landing gear indications did not agree	32
GEAR DOORS	C	A landing gear door is not closed and locked (System 1 and System 2)	32
GEAR DOORS	M (NVM)	EICAS COMPUTERS -111 AND SUBSEQUENT; the system 1 and system 2 gear door indications disagree	32
GEAR LEVER	M (NVM)	The system 1 and system 2 landing gear gear lever indications did not agree	32
GEAR NOT DOWN	A	A gear is not down and locked and a condition that follows continues: 1) Trailing edge flaps are set to 25 or 30 degrees 2) The two thrust levers are set to idle and the radio altitude is below below 800 feet (244 meters) 3) At least one thrust lever is set to idle, the radio altitude is below 800 feet, and the 140 second time delay is complete 4) At least one thrust lever is set to idle and a radio altimeter failure occurred	31

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
GND PROX BITE	S,M	Ground proximity system BITE fault	34
GND PROX SYS	C	The basic or enhanced GPWS features have failed	34
GND PROX SYS	S,M	The basic GPWS features have failed	34
GROUND CALL	E	Interphone call received from APU remote control panel on nose gear	23
HDG DISAGREE	C	The instrument comparator unit left heading data does not agree with the right heading data	34
HDG DISAGREE	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
HDG FAIL	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
HYD GEN ON	S,M (NVM-AIR)	The hydraulic driven generator is in operation	24
HYD GEN VAL	S,M	The hydraulic drive generator supply valve is not fully closed or not fully open	24

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
IAS DISAGREE	B	The airspeed difference between the air data computers is greater than 5 knots and the radio altitude is greater than 400 feet	34
IDG OUT TEMP *[2]	M (NVM)	-107 THRU -110 EICAS COMPUTERS; all of the conditions that follow occurred: 1) The left and right IDG oil out temperatures are different by more than 50°F (10°C) 2) The left and right engine N1 speeds are different by less than 10% of each other 3) The two buses have power from the related generator	24
IDG RISE TEMP *[2]	M (NVM)	-107 THRU -110 EICAS COMPUTERS; The left and right IDG temperatures difference was more than 6°C for 10 minutes with both generators in operation	24
INSTR SWITCH	B	The captain's and the F/O's EFIs are both set to the ALTN position	34
L AC BUS OFF	B	The left AC main bus is not energized	24
L AFT EMER DOOR	C	The left aft emergency door is unlatched on an overwing exit	52

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L AFT ENT DOOR	C	The left aft entry door is not latched	52
L AFT FUEL PUMP	C	The left aft fuel pump output pressure is low	28
L AOA PROBE	C	The left angle of attack probe has a power or continuity failure	30
L AUX PITOT	C	The left auxiliary pitot heater has a power or continuity failure or an incorrect power level	30
L AUX PITOT HEAT	M (NVM)	The left auxiliary pitot heater was set to high heat while the airplane was on the ground	30
L BLD DUCT LEAK	B	Duct leak (overheat) between the left engine and the isolation valve or between the APU and the isolation valve	26
L BUS ISOLATED	C	The left isolation bus tie was opened manually or is kept open automatically	24
L CTR ENT DOOR	C	The left center entry door is not latched	52
L EEC BITE	M (NVM)	Left electronic engine control (EEC) failure in BITE memory	73

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L EEC OFF	B	The left EEC is off and the thrust lever is in the full forward position	73
L EICAS CMPTR	S	Left EICAS computer failure or power supply failure	31
L ELEC HYD OVHT *[3]	C	The left electrical pump temperature is larger than 225°F (107°C)	29
L ELEV PCU	S,M (NVM)	All of the conditions that follow occurred: 1) The airplane was on the ground 2) All hydraulic systems were pressurized 3) The airspeed was less then 50 knots 4) The left ac bus was energized 5) One or more elevator power control units had a valve in a locked position	27
L EMER DOOR	C	The left emergency door is not latched	52
L ENG ANALOG N2	S,M (NVM)	The analog N2 value does not agree with the digital N2 value	77
L ENG ANALOG N3	S,M (NVM)	The analog N3 value does not agree with the digital N3 value	80
L ENG ANTI-ICE	C	The left engine is in operation and the left engine cowl anti-ice valve position does not agree with the left engine cowl anti-ice switch position	30

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L ENG BB VIB	M (NVM)	The left engine broadband vibration was high	77
L ENG BLEED OFF	C	The left engine is in operation and the left engine pressure regulating and shutoff valve is closed	36
L ENG BLEED VAL	B	The left engine high pressure shutoff valve (HPSOV) and pressure regulating and shutoff valve (PRSOV) are closed because the bleed air is too hot	36
L ENG EEC	C	The left EEC has a failure or the EEC is off while the engine is in operation	73
L ENG FIRE LP 1	S,M	Left engine loop 1 fire or failure output	26
L ENG FIRE LP 2	S,M	Left engine loop 2 fire or failure output	26
L ENG FUEL FILT	C	The differential pressure across the left engine fuel filter was near bypass	73
L ENG FUEL FILT	S,M (NVM)	The differential pressure across the left engine fuel filter was near bypass	73
L ENG FUEL VAL	C	The left engine fuel valve is not in the necessary position	76

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L ENG HI STAGE	C	The left engine high pressure shutoff valve (HPSOV) is closed because the high high stage bleed pressure is too high	36
L ENG HYD OVHT *[3]	C	The left primary hydraulic pump case drain temperature is too high	29
L ENG LIMITER	C	The left EEC limiter has a BITE failure and the left engine is in operation	73
L ENG LOW N1	S,M (NVM)	The left engine fan speed was less than the minimum idle limit while the engine was stable	73
L ENG LP PUMP	S,M (NVM)	The pressure was low downstream of the left engine LP fuel pump during left engine operation	73
L ENG OH LP 1	S,M	Left engine nacelle loop 1 detector overheat or failure output	26
L ENG OH LP 2	S,M	Left engine nacelle loop 2 detector overheat or failure output	26
L ENG OIL PRESS	B	The left engine oil pressure is less than the low limit during left engine operation	79
L ENG OIL PRESS	C	The left engine oil pressure is less than the low limit during left engine operation	79

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L ENG OVHT	B	Left engine strut or nacelle overtemperature	26
L ENG PROBE HEAT	S,M (NVM)	Left engine P1 probe heat failure	30
L ENG SHUTDOWN	B	The left engine fire switch is pulled or the left fuel control switch is in the cutoff position	73
L ENG SPEED CARD	S,M (NVM)	Left engine N2/N3 speed sensing relay failure	77
L ENG STARTER	C	The left starter valve position does not agree with the left starter switch position	80
L ENG STATOR	B	The left EEC is not capable of controlling the left stator vane actuator (SVA) and has de-powered the SVA to the failsafe (full-open) position	80
L ENG SURGE BITE	M (NVM)	The left engine Bleed Valve Control Unit (BVCU) had a BITE failure during engine operation	75
L ENG SURGE CONT	S,M (NVM)	The left engine BVCU found a dispatch critical failure of the bleed valve control system during left engine operation	75

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L ENG SURGE DET	M (NVM)	The left EEC has detected an engine surge	80
L ENG TAI VALVE	S,M (NVM)	The left engine thermal anti-ice pressure was high	30
L ENG VIB	S (NVM)	The left engine Airborne Vibration Monitor (AVM) found a dispatch critical failure	77
L ENG VIB BITE	M (NVM)	AVM left channel BITE failure	77
L ENGINE FIRE	A	Left engine fire or the turbine temperature is too high	26
L ENTRY DOORS	C	Two or more left entry emergency doors are not latched	52
L FLT CONT ELEC	M	Left Control System Electronics Unit (CSEU) power supply module failure	27
L FLT CONT HYD	C	Left hydraulic flight control valves are closed	27
L FMC FAIL	C	Left flight management computer failure	34
L FUEL SPAR VAL	C	The left fuel spar valve is not in the correct position	28

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L FUEL SYS PRESS	B	A condition that follows continues: 1) All six left system fuel pumps are off 2) All six left system fuel pumps have low pressure 3) The fuel crossfeed valve(s) is closed, the two left main pumps have low pressure, and the center tank pump has low pressure	28
L FWD EMER DOOR	C	The left forward emergency door is unlatched on an overwing exit	52
L FWD ENT DOOR	C	The left forward entry door is not latched	52
L FWD FUEL PUMP	C	The left forward fuel pump output pressure is low	28
L FWD WINDOW	C	The left forward window heat temperature is too high or there is a high power output	30
L GEAR DOWN	M (NVM)	The system 1 left main gear down and locked indication did not agree with system 2	32
L GEN DRIVE *[2]	C	Left generator drive low oil pressure or high oil temperature during engine operation	24
L GEN OFF	C	Left generator control breaker (GCB) open during engine operation	24
L GEN OFF	B	Left generator control breaker (GCB) open during engine operation	24

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L HYD ELEC PUMP	C	The left electrical pump output pressure is low	29
L HYD ENG PUMP	C	The left engine primary pump output pressure is low during engine operation	29
L HYD QTY *[3]	C	The left hydraulic reservoir quantity is low	29
L HYD QTY O/FULL	M	The left hydraulic reservoir quantity is larger than 1.22	29
L HYD RSVR PRES	C	The left hydraulic reservoir pressure is less than 17 psi (1.15 Kg/cm2) during left and right engine operation	29
L HYD SYS MAINT	S,M (NVM)	The left hydraulic pressure was less than 2800 psi (193 Kg/cm2) during left and right engine operation	29
L HYD SYS PRESS *[3]	B	The left hydraulic system pressure is low	29
L IDG OIL LEVEL	M (NVM)	Left IDG oil level is low	24
L IDG OIL TEMP *[2]	M (NVM)	The left IDG outlet temperature was more than 284°F (140°C)	24
L IDG TEMP SENS	M	Left IDG temperature sensor failure	24
L IGN STBY BUS	M	The left engine ignitors power is from the standby bus	74

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L IRS DC FAIL	C	Left inertial reference system (IRS) dc power supply failure	34
L IRS FAULT	C	Left IRS failure	34
L IRS ON DC	C	Left IRS ac power supply failure, thus dc power is used	34
L OIL FILTER	C	The left engine oil filter delta pressure is near bypass while the oil temperature is more than 50°F (10°C)	79
L PACK BITE	M	Left pack controller BITE failure or left pack system component failure	21
L PACK OFF	C	The left pack is off or the left pack compressor outlet temperature is larger than 489°F (254°C)	21
L PACK TEMP *[1]	C	A condition that follows continues: 1) The left pack outlet temperature is larger than 190°F (88°C) 2) The left pack compressor outlet temperature is larger than 489°F (254°C) 3) The left pack controller found the failure of a necessary system component	21
L RECIR FAN	C	Left recirculation/electrical equipment exhaust fan failure	21
L REV ISLN VAL	C	Left thrust reverser isolation valve failure	78

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L REV ISLN VAL	M (NVM) S,M (NVM)	AIRPLANES WITH -101 THRU -110 EICAS COMPUTERS; left thrust reverser isolation valve failure AIRPLANES WITH -111 AND SUBSEQUENT EICAS COMPUTERS; left thrust reverser isolation valve failure	78
L REV STOW SIG	S,M (NVM)	Left engine reverser auto restore sensor failure	78
L SIDE WINDOW	C	The left side window temperature is too high or there is a high power output	30
L STARTER CUTOUT	B	The left engine starter valve is open at an engine rpm level where it should be closed	80
L STRUT OH DET 1	S,M	Left engine strut overheat detector loop 1 fire output	26
L STRUT OH DET 2	S,M	Left engine strut overheat detector loop 2 fire output	26
L TURB OH DET 1	M	Left turbine overheat at detector 1 or loop 1 failure	26
L TURB OH DET 1	S	Left turbine overheat at detector 1 or loop 1 failure NOTE: Message does not show during L ENGINE FIRE	26

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
L TURB OH DET 2	M	Left turbine overheat at detector 2 or loop 2 failure	26
L TURB OH DET 2	S	Left turbine overheat at detector 2 or loop 2 failure NOTE: Message does not show during L ENGINE FIRE	26
L UTIL BUS OFF	C	The left utility bus is not energized while the left AC main bus is energized	24
L WING ANTI-ICE	C	The left wing anti-ice valve position does not agree with the left wing anti-ice switch position	30
L YAW DAMPER	C	Left yaw damper failure, power supply failure, or the left yaw damper is off	22
LDG GEAR MONITOR	S	System 1 and system 2 landing gear position indications do not agree NOTE: LDG GEAR MONITOR is not in NVM, but LDG GEAR MONITOR shows when an NVM message that follows shows: ALL GEAR DOWN GEAR DISAGREE GEAR DOORS GEAR LEVER L(R) GEAR DOWN L(R) DRAG BRACE L(R) SIDE BRACE NOSE GEAR DOWN NOSE GEAR LOCKED	32

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
LE SLAT ASYM	B	Leading edge (LE) slat asymmetry or slat failure	27
LE SLAT DISAGREE	B	A LE slat position does not agree with the necessary position	27
LOC DISAGREE	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
LOC FAIL	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
LOW FUEL	B	Low fuel quantity in the main tanks (the quantity in a tank is less than 2200 lbs [1000 Kg])	28
MACH/SPD TRIM	C	Mach/speed trim does not operate because of failures of the two mach/speed trim channels or systems	27
MAIN BAT CHGR	S,M (NVM)	Main battery charger failure	24
MAIN BAT DISCH	C	The main battery has a current output of 4-6 amps or more	24

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
MAIN CARGO DOOR	W	Main cargo door is not closed and locked.	31
N1 RED *[5]	NA	The left(right) engine N1 is equal to or larger than a percentage that follows: 1) 110.0% recorded immediately 2) 108.8% for 20 seconds	71
N1 YEL *[5]	NA	The left(right) engine N1 is equal to or larger than 108.4%	71
N2 RED *[5]	NA	The left(right) engine N2 is equal to or larger than a percentage that follows: 1) 101.3% recorded immediately 2) 100.3% for 20 seconds	71
N2 YEL *[5]	NA	The left(right) engine N2 is equal to or larger than 98.0% and the airplane is not in a Go-Around mode	71
N3 RED *[5]	NA	The left(right) engine N3 is equal to or larger than a percentage that follows: 1) 100.2% recorded immediately 2) 99.0% for 20 seconds	71
N3 YEL *[5]	NA	The left(right) engine N3 is equal to or larger than 95.8%	71
NITROGN GEN PERF	S	Message is added to indicate a degraded NGS	47
NITROGN GEN SYS	S	Message is added to indicate an inoperative NGS.	47
NORM ANTISKID	S,M	Antiskid system failure in the normal system	32
NOSE A/G DISAGREE	S,M (NVM)	System 1 and system 2 air/ground logic of the nosegear position did not agree	32

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
NOSE GEAR DOWN	M (NVM)	System 1 and system 2 nose gear down indications did not agree	32
NOSE GEAR LOCKED	M (NVM)	System 1 and system 2 nose gear locked indications did not agree	32
OIL P RED *[5]	NA	The left(right) engine oil pressure was equal to or less than 18 psi during left(right) engine operation	71
OIL P YEL *[5]	NA	The left(right) engine oil pressure was equal to or less than the yellow low oil pressure limit. The yellow low oil pressure limit is as follows: 1) a linear function from 18 psi at 50% N3 to 25 psi at 70% N3 2) a linear function from 25 psi at 70% N3 to 35 psi at 93% N3 3) a linear function from 35 psi at 93% N3 to 45 psi at 116% N3	71
OIL Q *[5]	NA	The left(right) engine oil quantity was equal to or less than 5 quarts during left(right) engine operation	71
OIL T RED *[5]	NA	The left(right) engine oil temperature was equal to or larger than 338°F (170°C)	71

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
OVBD EX VAL OPEN	S,M (NVM)	The overboard exhaust valve was open during flight	21
OVBD EX VAL TEST	S,M (NVM)	Overboard exhaust valve test failure or overboard exhaust valve control relay failure	21
OVERSPEED	A	The left or right Air Data Computer (ADC) airplane speed is larger than the maximum operating velocity/maximum operating mach (VMO/MMO)	34
PARKING BRAKE	A	The parking brake is engaged and one or two engines have takeoff thrust	31
PARKING BRAKE	C	The parking brake is set (valve closed)	32
PASS OXYGEN ON	C	Oxygen passenger service unit (PSU) latch energized	35
PCU MONITOR	M (NVM)	The power control unit (PCU) monitor had an incorrect indication during flight	27
POWER XFER UNIT	S,M (NVM)	Power transfer unit protection circuit failure	29
PROBE HEAT	C	Two or more probe heaters have power or continuity failures	30

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
PSEU BITE	M (NVM)	-102 THRU -110 EICAS COMPUTERS; System 1 and system 2 landing gear disagree inputs disagree in uplock position or gear door position indications disagree	32
R AC BUS OFF	B	The right AC main bus is not energized	24
R AFT EMER DOOR	C	The right aft emergency door is unlatched on an overwing exit	52
R AFT ENT DOOR	C	The right aft entry door is not latched	52
R AFT FUEL PUMP	C	The right aft fuel pump output pressure is low	28
R AOA PROBE	C	The right angle of attach probe has a power or continuity failure	30
R AUX PITOT	C	The right auxiliary pitot heater has a power or continuity failure or an incorrect power level	30
R AUX PITOT HEAT	M (NVM)	The right auxiliary pitot heater was set to high heat while the airplane was on the ground	30
R BLD DUCT LEAK	B	Duct leak overheat between the right engine and the isolation valve	26
R BUS ISOLATED	C	The right isolation bus tie was opened manually or is kept open automatically	24
R CTR ENT DOOR	C	The right center entry door is not latched	52

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
R EEC BITE	M (NVM)	Right EEC failure in BITE memory	73
R EEC OFF	B	The right EEC is off and the thrust lever is in the full forward position	73
R EICAS CMPTR	S	Right EICAS computer failure or power supply failure	31
R ELEC HYD OVHT *[3]	C	The right electrical pump temperature is larger than 225°F (107°C)	29
R ELEV PCU	S,M (NVM)	All of the conditions that follow occurred: 1) The airplane was on the ground 2) All hydraulic systems were pressurized 3) The airspeed was less than 50 knots 4) The left AC bus was energized 5) One or more elevator power control units had a valve in a locked position	27
R EMER DOOR	C	The right emergency door is not latched	52
R ENG ANALOG N2	S,M (NVM)	The analog N2 value does not agree with the digital N2 value	77
R ENG ANALOG N3	S,M (NVM)	The analog N3 value does not agree with the digital N3 value	80

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
R ENG ANTI-ICE	C	The right engine is in operation and the right engine cowl anti-ice valve position does not agree with the left engine cowl anti-ice switch position	30
R ENG BB VIB	M (NVM)	The right engine broadband vibration was high	77
R ENG BLEED OFF	C	The right engine is in operation and the right engine PRSOV is closed	36
R ENG BLEED VAL	B	The right engine HPSOV and PRSOV are closed because the bleed air is too hot	36
R ENG EEC	C	The right EEC had a failure or the EEC is off and the engine is in operation	73
R ENG FIRE LP 1	S,M	Right engine loop 1 fire or failure output	26
R ENG FIRE LP 2	S,M	Right engine loop 2 fire or failure output	26
R ENG FUEL FILT	C	Differential pressure across the right engine fuel filter was near bypass	73
R ENG FUEL FILT	S,M (NVM)	Differential pressure across the right engine fuel filter was near bypass	73
R ENG FUEL VAL	C	The right engine fuel valve was not in the necessary position	76
R ENG HI STAGE	C	The right engine HPSOV is closed because the high stage bleed pressure is too high	36
R ENG HYD OVHT *[3]	C	The right primary hydraulic pump case drain temperature is too high	29

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
R ENG LIMITER	C	The right EEC has a BITE failure and the right engine is in operation	73
R ENG LOW N1	S,M (NVM)	The right engine fan speed was less than the minimum idle limit while the engine was stable	77
R ENG LP PUMP	S,M (NVM)	The pressure was low downstream of the right engine LP fuel pump during right engine operation	73
R ENG OH LP 1	S,M	Right engine nacelle loop 1 detector overheat or failure output	26
R ENG OH LP 2	S,M	Right engine nacelle loop 2 detector overheat or failure output	26
R ENG OIL PRESS	B	The right engine oil pressure is less than the low limit and the right engine is in operation	79
R ENG OIL PRESS	C	The right engine oil pressure is less than the low limit during right engine operation	79
R ENG OVHT	B	Right engine strut or nacelle overtemperature	26
R ENG PROBE HEAT	S,M (NVM)	Right engine P1 probe heat failure	30
R ENG SHUTDOWN	B	The right engine fire switch is pulled or the right fuel control switch is in the cutoff position	73

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
R ENG SPEED CARD	S,M (NVM)	Right engine N2/N3 speed sensing relay failure	77
R ENG STARTER	C	The right starter valve position does not agree with the right starter switch position	80
R ENG STATOR	B	The right EEC is not capable of controlling the right stator vane actuator (SVA) and has de-powered the SVA to the failsafe (full-open)	80
R ENG SURGE BITE	M (NVM)	The right engine BVCU had a BITE failure during engine operation	75
R ENG SURGE CONT	S,M (NVM)	The right engine BVCU found a dispatch critical failure of the bleed valve control system during right engine operation	75
R ENG SURGE DET	M (NVM)	The right EEC detected an engine surge	73
R ENG TAI VALVE	S,M (NVM)	The right engine thermal anti-ice pressure was high	30
R ENG VIB	S (NVM)	The right engine AVM found a dispatch critical failure	77
R ENG VIB BITE	M (NVM)	AVM right channel BITE failure	77
R ENGINE FIRE	A	Right engine fire or the turbine temperature is too high	26

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
R ENTRY DOORS	C	Two or more right entry doors are not latched	52
R FLT CONT ELEC	M	Right CSEU power supply module failure	27
R FLT CONT HYD	C	Right hydraulic flight control valves are closed	27
R FMC FAIL	C	Right flight management computer failure	34
R FUEL SPAR VAL	C	The right fuel spar valve is not in the correct position	28
R FUEL SYS PRESS	B	A condition that follows continues: 1) All six right system fuel pumps are off 2) All six right system fuel pumps have low pressure 3) The fuel crossfeed valve(s) is closed, the two right main fuel pumps have low pressure, and the center tank pump has low pressure	28
R FWD EMER DOOR	C	The right forward emergenct door is unlatched on an overwing exit	52
R FWD ENT DOOR	C	The right forward entry door is not latched	52
R FWD FUEL PUMP	C	The right forward fuel pump output pressure is low	28
R FWD WINDOW	C	The right forward window heat temperature is too high or there is a high power output	30
R GEAR DOWN	M (NVM)	The system 1 right main gear down and locked indication did not agree with system 2	32

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
R GEN DRIVE *[2]	C	Right generator drive low oil pressure or high oil temperature during engine operation	24
R GEN OFF	B	Right generator control breaker (GCB) open during engine operation	24
R HYD ELEC PUMP	C	The right electrical pump output pressure is low	29
R HYD ENG PUMP	C	The right engine primary pump output pressure is low during engine operation	29
R HYD QTY *[3]	C	The right hydraulic reservoir quantity is low	29
R HYD QTY O/FULL	M	The right hydraulic reservoir is larger than 1.22	29
R HYD RSVR PRES	C	The right hydraulic reservoir pressure is less than 17 psi (1.15 Kg/cm2) during left and right engine operation	29
R HYD SYS MAINT	S,M (NVM)	The right hydraulic pressure was less than 2800 psi (193 Kg/cm2) during left and right engine operation	29
R HYD SYS PRESS *[3]	B	The right hydraulic system pressure is low	29

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
R IDG OIL LEVEL	M (NVM)	Right IDG oil level is low	24
R IDG OIL TEMP *[2]	M (NVM)	The right IDG outlet temperature was more than 284°F (140°C)	24
R IDG TEMP SENS	M	Right IDG temperature sensor failure	24
R IGN STBY BUS	M	The right engine ignitors power is from the standby bus	74
R IRS DC FAIL	C	Right inertial reference system (IRS) dc power supply failure	34
R IRS FAULT	C	Right IRS failure	34
R IRS ON DC	C	Right IRS ac power supply failure, thus dc power is used	34
R OIL FILTER	C	The right engine oil filter delta pressure is near bypass while the oil temperature is more than 50°F (10°C)	79
R PACK BITE	M	Right pack controller BITE failure or right pack system component failure	21
R PACK OFF	C	The right pack is off or the right pack compressor outlet temperature is larger than 489°F (254°C)	21
R PACK TEMP *[1]	C	A condition that follows continues: 1) The right pack outlet temperature is larger than 190°F (254°C) 2) The right pack compressor outlet temperature is larger than 489°F (254°C) 3) The right pack controller found the failure of a necessary system component	21

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
R RECIRC FAN	C	Right recirculation/electrical equipment exhaust fan failure	21
R REV ISLN VAL	C	Right thrust reverser isolation valve failure	78
R REV ISLN VAL	M (NVM) S,M (NVM)	AIRPLANES WITH -101 THRU -110 EICAS COMPUTERS; left thrust reverser isolation valve failure AIRPLANES WITH -111 AND SUBSEQUENT EICAS COMPUTERS; left thrust reverser isolation valve failure	78
R REV STOW SIG	S,M (NVM)	Right engine reverser auto restore sensor failure	78
R SIDE WINDOW	C	The right side window temperature is too high or there is a high power output	30
R STARTER CUTOUT	B	The right engine starter valve is open at an engine RPM level where it should be closed	80
R STRUT OH DET 1	S,M	Right engine strut overheat detector loop 1 fire output	26
R STRUT OH DET 2	S,M	Right engine strut overheat detector loop 2 fire output	26

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
R TURB OH DET 1	M	Right turbine overheat at detector 1 or loop 1 failure	26
R TURB OH DET 1	S	Right turbine overheat at detector 1 or loop 1 failure NOTE: Message does not show during R ENGINE FIRE	26
R TURB OH DET 2	M	Right turbine overheat at detector 2 or loop 2 failure	26
R TURB OH DET 2	S	Right turbine overheat at detector 2 or loop 2 failure NOTE: Message does not show during R ENGINE FIRE	26
R UTIL BUS OFF	C	The right utility bus is not energized while the right AC main bus is energized	24
R WING ANTI-ICE	C	The right wing anti-ice valve position does not agree with the right wing anti-ice switch position	30
R YAW DAMPER	C	Right yaw damper failure, power supply failure, or the right yaw damper is off	22
RA DISAGREE	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
RADIO TRANSMIT	C	The VHF or HF radio has been transmitting continuously for 30 seconds or longer	23
RAT	S,M	Ram air turbine system failure or ram air turbine system operation while the airplane is on the ground	29
RAT UNLOCKED	C	The ram air turbine is not locked	29
RSV BRAKE VAL	M (NVM)	One of the Reserve Brake System valves (the Isolated ACMP supply shutoff valve or the Isolated ACMP pressure valve) is not in the correct position	29
RUDDER PCU	S,M (NVM)	All of the conditions that follow occurred: 1) The airplane was on the ground 2) All hydraulic systems were pressurized 3) The airspeed was less than 50 knots 4) The left AC bus was energized 5) One or more rudder power control units had a valve in a locked position	27
RUDDER RATIO	C	Rudder ratio system failure	27
RUDDER RATIO	M	Left or right rudder ratio module failure	27

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
SELCAL	E	SELCAL communication is requested (incoming ground to air call or a requested connection has been established for an air to ground call)	23
SPEEDBRAKES EXT	B	One of the conditions that follow continues: 1) The radio altitude (RA) is larger than 15 feet, the spoilers are extended, and the flaps are in a landing position 2) The RA is larger than 15 feet, but less than 800 feet, and the spoilers are extended	31
SPOILERS	A	An engine is set to takeoff thrust and the spoilers are not in a takeoff position	31
SPOILERS	M	Failure in one of 3 left or 3 right spoiler control modules	27
SPOILERS	C	Spoiler system has two or more electrical failures, or a 767 spoiler control module is installed on a 757	27
STAB TRIM	C	Stabilizer trim system failure (one-half drive speed)	27
STAB TRIM	M	Left or right SAM failure	27

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
STABILIZER	A	An engine is set to takeoff thrust and the stabilizer is not in a takeoff position	31
STANDBY BUS OFF	C	The standby bus is not energized	24
STBY INVERTER	S,M (NVM)	The standby inverter voltage was not in the correct range while the main battery switch was ON	24
T-R UNIT	S,M	Left or right transformer rectifier unit failure (DC Bus Tie is closed)	24
TAIL STRIKE	B	Landing gear #1 and #2 body contact sensors detect an aft body contact from a tailstrike	32
TAT PROBE	C	Total Air Temperature (TAT) probe heat power supply failure or continuity failure	30
TE FLAP ASYM	B	Flap asymmetry	27
TE FLAP DISAGREE	B	A flap position does not agree with the flaps position selection	27
TRACK DISAGREE	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
TRACK FAIL	C	Used only during self-test of the ICU. If this message shows during normal operation, replace the instrument comparator unit	34
TRIM AIR	C	Trim air valve closed	21

EICAS MESSAGE LIST			
MESSAGE	LEVEL	SYSTEM INPUT	FIM CHAP REF
UNSCHD STAB TRIM	B	Unwanted stabilizer motion in the Autopilot or Mach/Speed Trim Modes	27
VIB *[5]	NA	The broadbond vibration is equal to or larger than 2.5	77
WARN ELEX	S,M	Warning electronics unit (WEU) power supply A failure, power supply B failure, or the WEU BITE module has a failure code	31
WHEEL WELL FIRE	A	The wheel well temperature is larger than 400°F (204°C)	26
WINDOW HEAT	C	Two or more individual window heat temperatures are too high or two or more windows have a high power output	30
YAW DAMPER	M	Left or right yaw damper module failure	22
ZONE TEMP BITE	M	Zone temperature controller BITE failure or system component failure	21

BITE Index

1. General
   A. Use this index to find the BITE procedure for the applicable LRU/System.
   B. The BITE procedure will provide the fault isolation instructions for the fault indications/LRU maintenance messages.

LRU/System Name	Acronym	FIM Reference
Air Data Computer	ADC	34-12
Air Data Inertial Reference Unit	ADIRU	34-26
Air Traffic Control Transponder	ATC	34-53
Airborne Vibration Monitor Signal Conditioner	AVM	77-31
Antiskid/Autobrake Control Unit		32-42
APU Fire Detection System		26-15
Automatic Direction Finder Receiver	ADF	34-57
APU Control Unit	ECU	49-11
Brake Temperature Monitor Unit		32-46
Bus Power Control Unit	BPCU	24-20
Cabin Pressure Controller		21-30
Digital Flight Data Acquisition Unit	DFDAU	31-31
Distance Measuring Equipment Interrogator	DME	34-55
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ECS Bleed Configuration Card		36-10
Electronic Engine Control (RR Engines)	EEC	73-21
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Electronic Flight Instrument System	EFIS	34-22
Electronic Propulsion Control System (PW Engines)	EPCS	71-EPCS Message Index
Engine Fire/Overheat Detection System		26-11
Engine Indication and Crew Alerting System Computer	EICAS	31-41

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Figure 1 (Sheet 1)

LRU/System Name	Acronym	FIM Reference
Engine Turbine Cooling Overheat Detection System (RR Engines)		26-13
Enhanced Ground Proximity Warning Computer	EGPWC	34-46
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Radio Altimeter Transmitter/Receiver	RA	34-33
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Stall Warning Computer/Module (in Warning Electronic Unit)	SWC	27-32
Strut Overheat Detection System (RR Engines)		26-12

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Figure 1 (Sheet 2)

LRU/System Name	Acronym	FIM Reference
Thrust Management Computer/Autothrottle	TMC	22-00
Traffic Alert and Collision Avoidance Computer	TCAS	34-45
VHF (Very High Frequency) Communication		23-12
VOR/Marker Beacon Receiver	VOR/MKR	34-51
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