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3	DEC 22/01	SAS	7	AUG 10/97	03	127	APR 22/08	19
4	AUG 22/99	SAS	8	AUG 22/08	03	128	NOV 10/95	16
5	DEC 22/05	SAS	9	AUG 22/08	04	129	AUG 22/00	18
6	APR 22/06	SAS	10	APR 22/01	80	130	NOV 10/95	17
7	DEC 22/05	SAS	11	MAY 10/96	02	131	AUG 22/00	17
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3	AUG 22/99	01	17	MAY 10/96	03	137	APR 10/98	16
4	AUG 22/99	01	18	MAY 10/96	05	138	AUG 10/95	14
5	AUG 22/99	01	19	DEC 22/00	04	139	AUG 10/95	14
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I			21	MAY 10/96	04	141	NOV 10/95	14
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18	AUG 22/01	08 04	112	NOV 10/95	02	170	DEC 22/00	11
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176	DEC 22/00	14	128	FEB 10/96	06	180F	MAY 10/95	27
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122	AUG 10/95	22	180	MAY 10/95	22	118	AUG 10/91	01
123	NOV 10/95	18	180A	MAY 10/95	22	119	AUG 10/91 AUG 10/91	01
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Isolation 22-00-02) (Fig.				
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These are the possible types of faults: YOU FIND A FAULT WITH 1. EICAS Message AN AIRPLANE SYSTEM 2. Observed Fault Use the EICAS message, fault code, or fault description to find the corrective action or fault isolation procedure in the FIM. DO THE CORRECTIVE For details, see Figure 3 -ACTION OR GO TO THE FAULT ISOLATION PROCEDURE IN THE FIM If you do not have a fault code or an EICAS message and if the system has BITE, then you can use the system BITE to get more information: Use the BITE Index to find if the system has BITE and to find the BITE procedures in the FIM. For details, see Figure 2 -The fault isolation procedure FOLLOW THE STEPS IN explains how to find and repair the THE FAULT ISOLATION the cause of the fault. **PROCEDURE**

> Basic Fault Isolation Process Figure 1

ALL

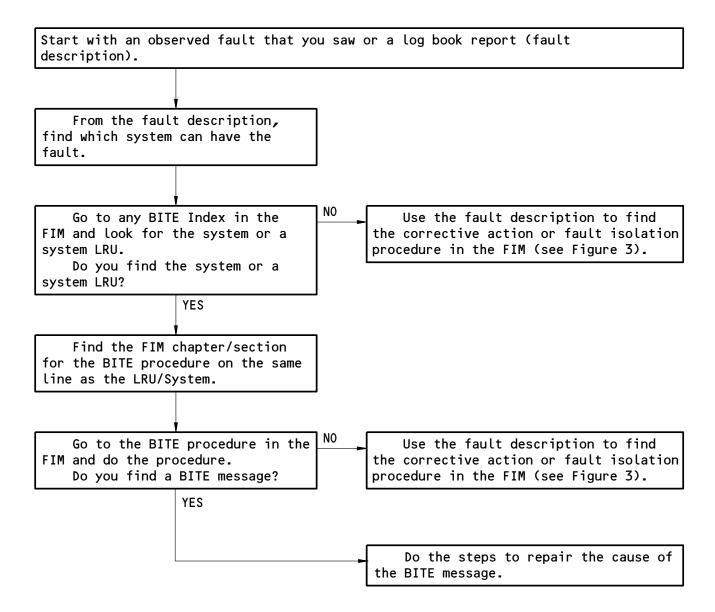
22-HOW TO USE THE FIM

For details, see Figure 4 —

01

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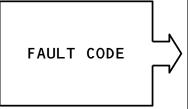
How to Get Fault Information from BITE Figure 2

22-HOW TO USE THE FIM

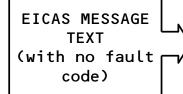
01

Page 2 Aug 22/99 IF YOU HAVE:

THEN DO THIS TO FIND THE CORRECTIVE ACTION OR FAULT ISOLATION PROCEDURE IN THE FIM:



- The first two digits of the fault code are the FIM chapter that you need. Go to the Fault Code Index in that chapter and find the fault code.
- 2. Find the Fault Isolation Reference for the fault code and do the corrective action. If there is a FIM reference, then go to that fault isolation procedure in the FIM and do the steps in the procedure (see Figure 4).



If you know the chapter of the EICAS message, then go to the EICAS Messages section in that chapter and find the EICAS message.

If you do not know the chapter of the EICAS message, then do these steps:

A. Go to FIM EICAS MESSAGE LIST and find the EICAS message in the table.

NOTE: The list follows the INTRODUCTION to the FIM.

- B. Find the chapter number on the same line as the EICAS message. Go to the EICAS Messages section in that chapter and find the EICAS message.
- 2. Do the corrective action in the "Procedure" column for the EICAS message. If there is a FIM reference, then go to that fault isolation procedure in the FIM and do the steps in the procedure (see Figure 4).



- Go to the Fault Code Diagram for the problem in the applicable chapter.
- 2. Do the fault analysis on the diagram and find the fault code.
- 3. The first two digits of the fault code are the FIM chapter that you need. Go to the Fault Code Index in that chapter and find the fault code.
- 4. Find the Fault Isolation Reference for the fault code and do the corrective action. If there is a FIM reference, then go to that fault isolation procedure in the FIM and do the steps in the procedure (see Figure 4).

How to Find the Corrective Action or Fault Isolation Procedure in the FIM Figure 3

EFFECTIVITY-

22-HOW TO USE THE FIM

01

ALL

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ASSUMED CONDITIONS AT START OF TASK

- External electrical power is OFF
- Hydraulic power and pneumatic power are OFF
- Engines are shut down
- Circuit breakers for the system are closed
- No equipment in the system is deactivated

PREREQUISITES

- This box gives the steps to get the airplane from the normal shutdown condition to the configuration necessary to do the fault isolation procedure.
- The Prerequisites give procedure references, circuit breakers, and special tools and equipment requirements.

FAULT ISOLATION BLOCKS

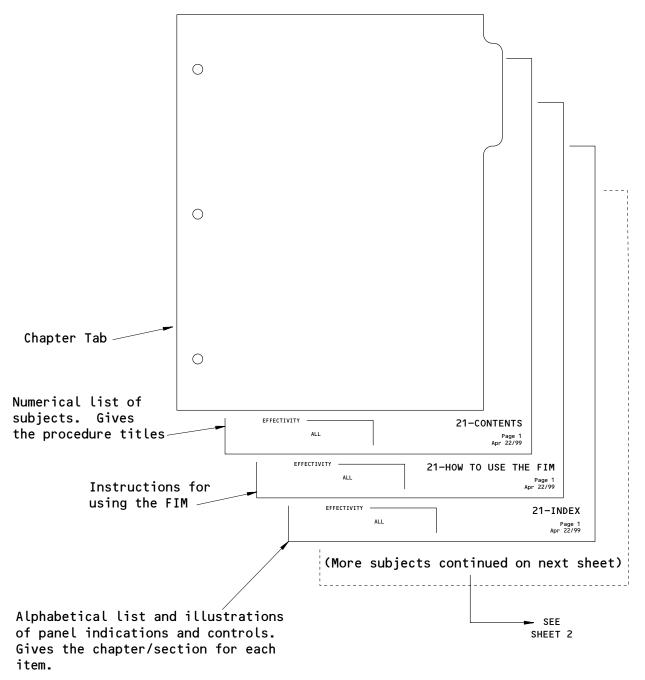
- Start the fault isolation procedure at block 1 unless specified differently.
- Do the check to get an answer to the question in the box. Follow the arrow that applies to your answer. This will go to the next check.
- When you get to a box in the column at the right of the page, you have isolated that fault. Do the steps in that box to repair the cause of the fault.
- Make sure that fault is corrected to complete the procedure.

Do the Fault Isolation Procedure Figure 4

EFFECTIVITY-

22-HOW TO USE THE FIM



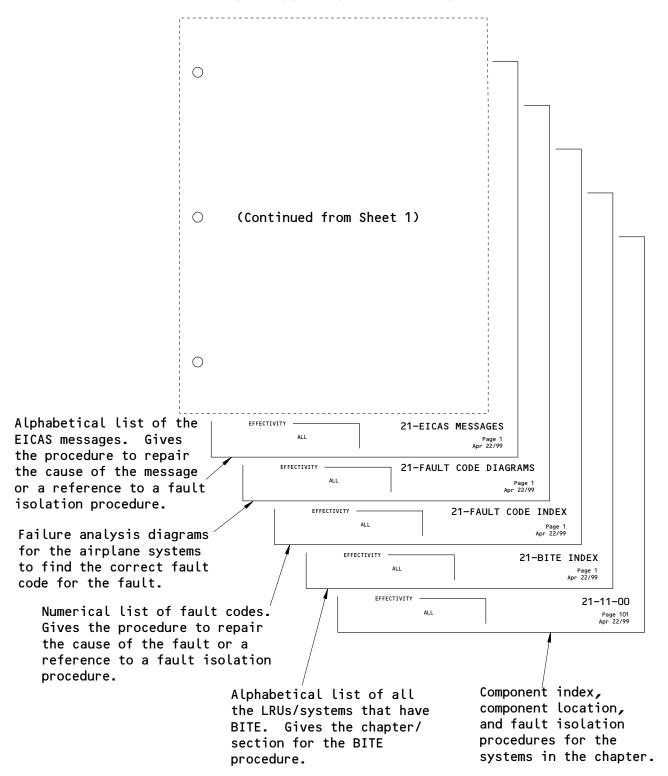


Subjects in Each FIM Chapter Figure 5 (Sheet 1)

ALL

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Subjects in Each FIM Chapter Figure 5 (Sheet 2)

EFFECTIVITY-

22-HOW TO USE THE FIM

01

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TITLE	CHAP/SEC	TITLE	CHAP/SEC
ALTITUDE ALERTALTITUDE HOLD A/P (PITCH MODE)	2200	ROLL MODE AUTOTHROTTLE	
ALTITUDE SELECT FAILED TO ENGAGE A/P (PITCH MODE) F/D SELECTOR FAULT/FAILE TO CAPTURE		FLIGHT LEVEL CHANG A/T A/P (PITCH MODE	
APPROACH A/P	2200	A/P	
AUTOLAND 2 & 3 CHANNEL GO AROUND			
AUTOLAND STATUS ANNUNC ASA TEST		LNAV A/P (ROLL MODE)	
AUTOLANDGO AROUND			
NO AUTOLAND (NON APF F/DAPP APP NOT SELECTED	2200	MCP	LUM2200
NO LAND 3 (APPROACH A/P (CMD) AUTOLAND GO AROUND		VERTICAL SPEED FAILED TO ENGAG	COMPUTER
NO LAND 3 (NON APPRO F/DAPP NOT SELECTED	2200	F/D SELECTOR FAULT/	2200
AUTOPILOT A/P DISC LGT AUTOPILOT LGT CMD DISENGAGE		F/D)

AUTOFLIGHT - INDEX

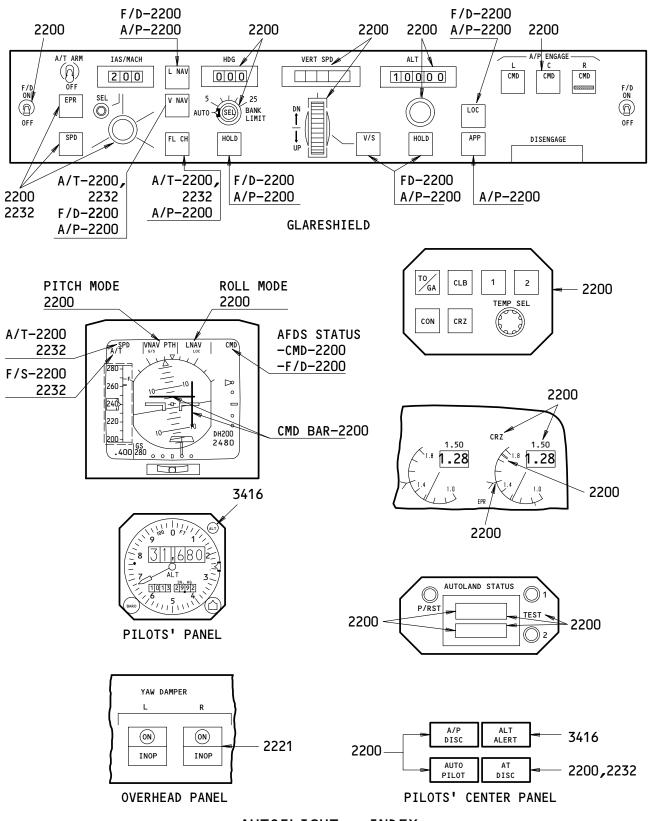
EFFECTIVITY-ALL 22-INDEX

05

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FAULT ISOLATION/MAINT MANUAL





AUTOFLIGHT - EICAS MESSAGE LIST

1. General

- A. This procedure shows the EICAS message locations and gives a list of procedures to find the solution for each message.
 - (1) EICAS Message Locations (Fig. 1)
 - (a) Figure 1 shows the location of the EICAS display units and the area where the messages show on the display units.
 - (b) Each message level has a different location. The location and color of each message level is also shown.
 - (2) The EICAS MESSAGE LIST gives the message, level, and procedure for each message.
 - (a) The EICAS MESSAGE column lists the messages alphabetically. Messages which start with L, R, or C are put together and alphabetized at L.
 - (b) The LEVEL column gives all levels for each message as follows:
 - A Warning messages
 - B Caution messages
 - C Advisory messages
 - S Status messages
 - M Maintenance messages
 - (c) The PROCEDURE column gives the steps that are necessary to remove the message and includes one or more of the procedures that follow:
 - 1) A Fault Isolation Manual procedure reference
 - 2) A Maintenance Manual procedure and reference
 - 3) Wiring checks and a Wiring Diagram Manual reference
 - 4) A reference to an EICAS message list in a different chapter.
 - 5) A reference to a FAULT CODE INDEX and specified fault codes
 - 6) A step to change the airplane configuration

EFFECTIVITY-

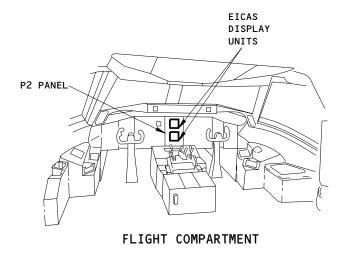
22-EICAS MESSAGES

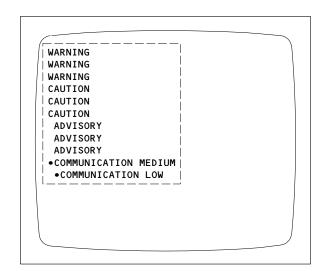
ALL

01

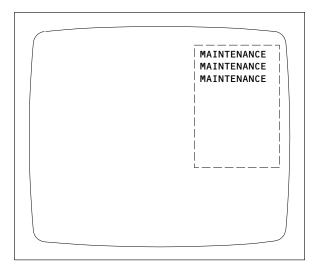


FAULT ISOLATION/MAINT MANUAL



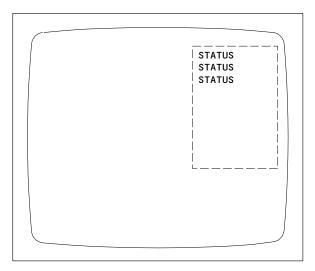


ENGINE PRIMARY PAGE OR COMPACTED PAGE (TOP DISPLAY UNIT)



ECS/MSG PAGE
(BOTTOM DISPLAY UNIT)

ALL



STATUS PAGE
(BOTTOM DISPLAY UNIT)

LEVEL	COLOR
A-WARNING B-CAUTION	RED YELLOW
C-ADVISORY E-COMMUNICATION MEDIUM F-COMMUNICATION LOW	YELLOW WHITE WHITF
S-STATUS M-MAINTENANCE	WHITE WHITE

EICAS Message Locations Figure 1

EFFECTIVITY-

22-EICAS MESSAGES

01

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EICAS MESSAGE LIST				
EICAS MESSAGE	LEVEL	PROCEDURE		
ALTITUDE ALERT	В	FIM 34-16-00/101, Fig. 101		
AUTOPILOT	В	FIM 22-00-02/101, Fig. 101		
AUTOPILOT DISC	Α	FIM 22-00-02/101, Fig. 101		
AUTOTHROT DISC	В	FIM 22-00-02/101, Fig. 101		
(L, R) YAW DAMPER	С	FIM 22-21-00/101, Fig. 103A		
YAW DAMPER	M	FIM 22-21-00/101, Fig. 103A		

EFFECTIVITY-

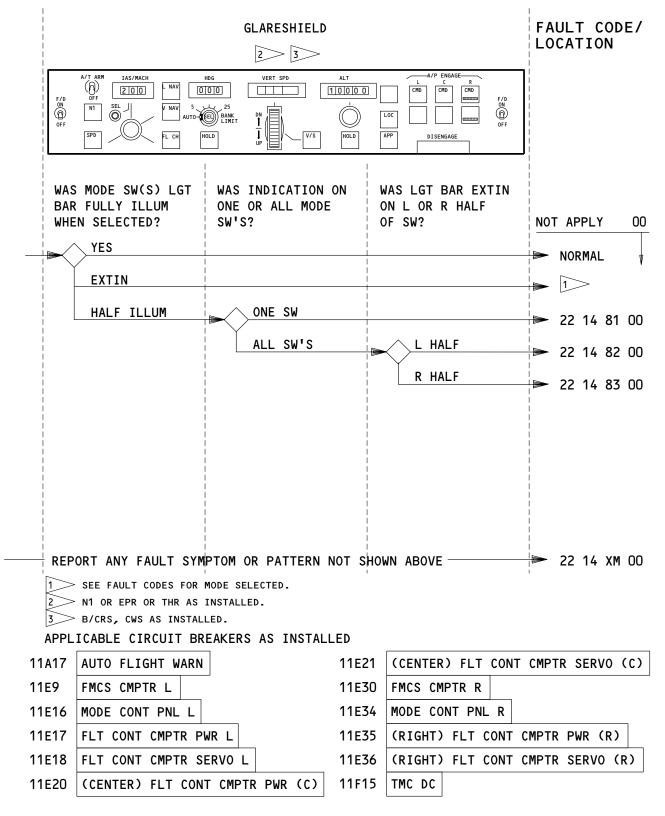
22-EICAS MESSAGES

03

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ALL

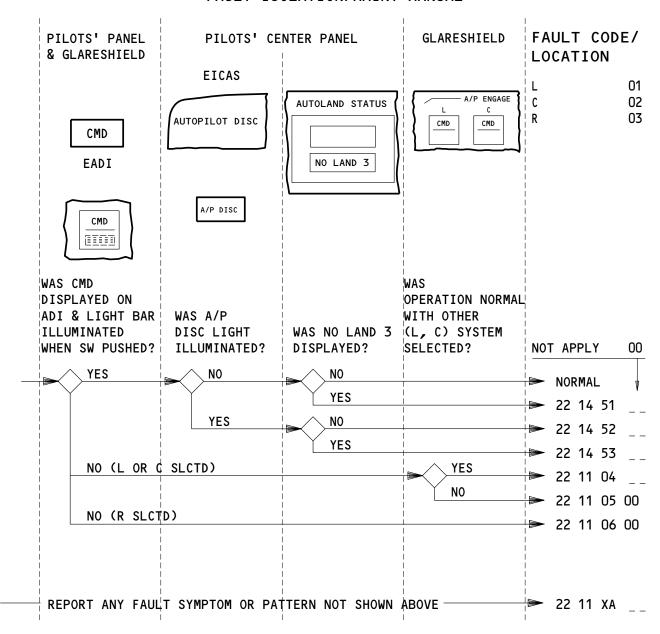




MODE CONTROL PANEL - FAULT CODES

22-FAULT CODE DIAGRAM

02



APPLICABLE CIRCUIT BREAKERS AS INSTALLED

11A17	AUTO FLIGHT WARN	11E21	(CENTER) FLT CONT CMPTR SERVO (C)
11E9	FMCS CMPTR L	11E30	FMCS CMPTR R
11E16	MODE CONT PNL L	11E34	MODE CONT PNL R
11E17	FLT CONT CMPTR PWR L	11E35	(RIGHT) FLT CONT CMPTR PWR (R)
11E18	FLT CONT CMPTR SERVO L	11E36	(RIGHT) FLT CONT CMPTR SERVO (R)
11E20	(CENTER) FLT CONT CMPTR PWR (C)	11F15	TMC DC

AUTOPILOT (COMMAND) - FAULT CODES

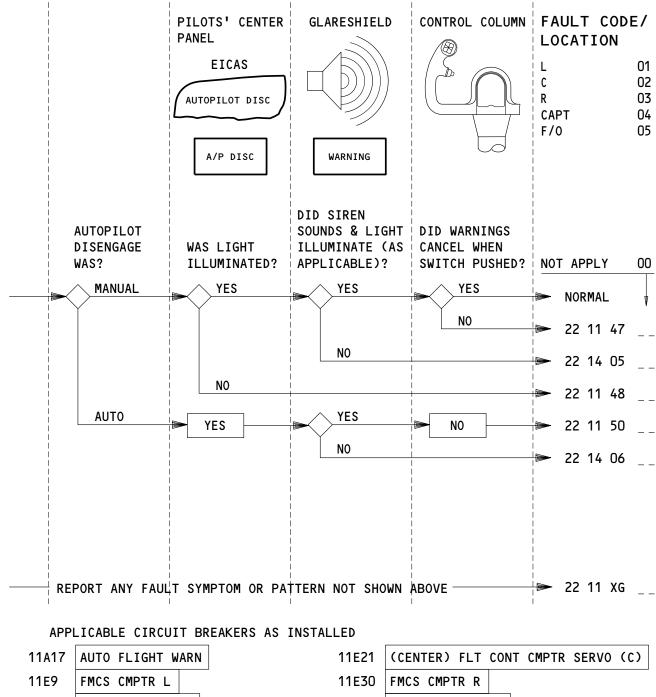
ALL

22-FAULT CODE DIAGRAM

03

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11A17	AUTO FLIGHT WARN	11E21	(CENTER) FLT CONT CMPTR SERVO (C)
11E9	FMCS CMPTR L	11E30	FMCS CMPTR R
11E16	MODE CONT PNL L	11E34	MODE CONT PNL R
11E17	FLT CONT CMPTR PWR L	11E35	(RIGHT) FLT CONT CMPTR PWR (R)
11E18	FLT CONT CMPTR SERVO L	11E36	(RIGHT) FLT CONT CMPTR SERVO (R)
11E20	(CENTER) FLT CONT CMPTR PWR (C)	11F15	TMC DC

AUTOPILOT (DISENGAGE) - FAULT CODES

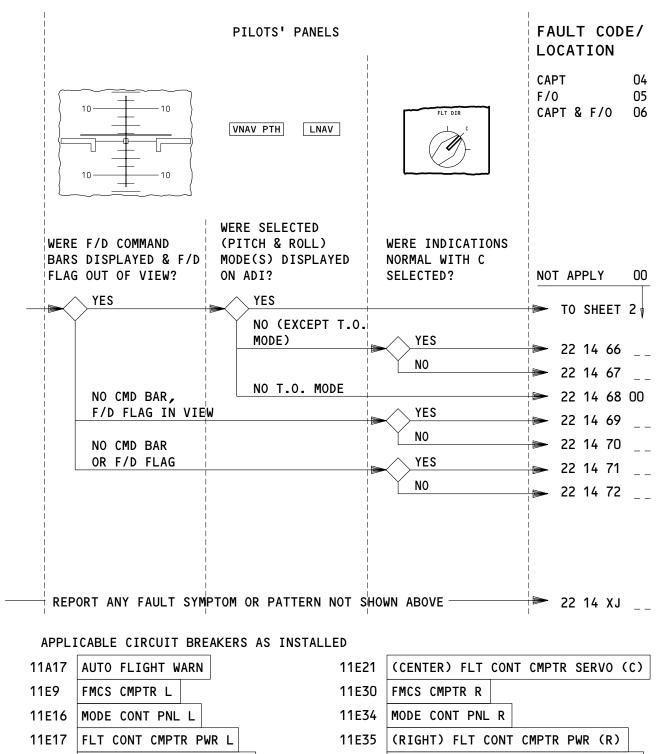
ALL ALL

22-FAULT CODE DIAGRAM

02

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FLIGHT DIRECTOR (SHEET 1) - FAULT CODES

11E36

11F15

TMC DC

22-FAULT CODE DIAGRAM

03

(RIGHT) FLT CONT CMPTR SERVO (R)

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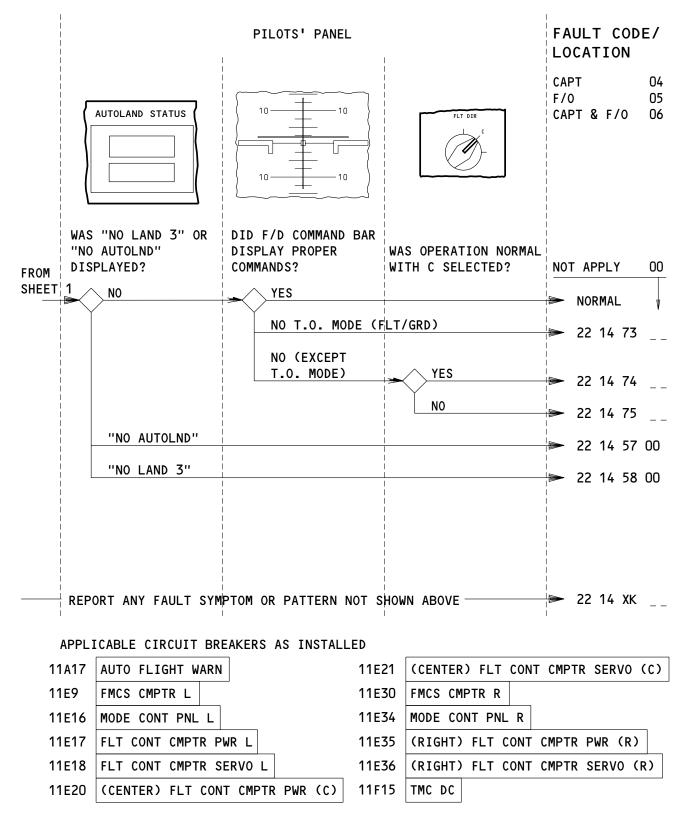
11E18

11E20

FLT CONT CMPTR SERVO L

(CENTER) FLT CONT CMPTR PWR (C)



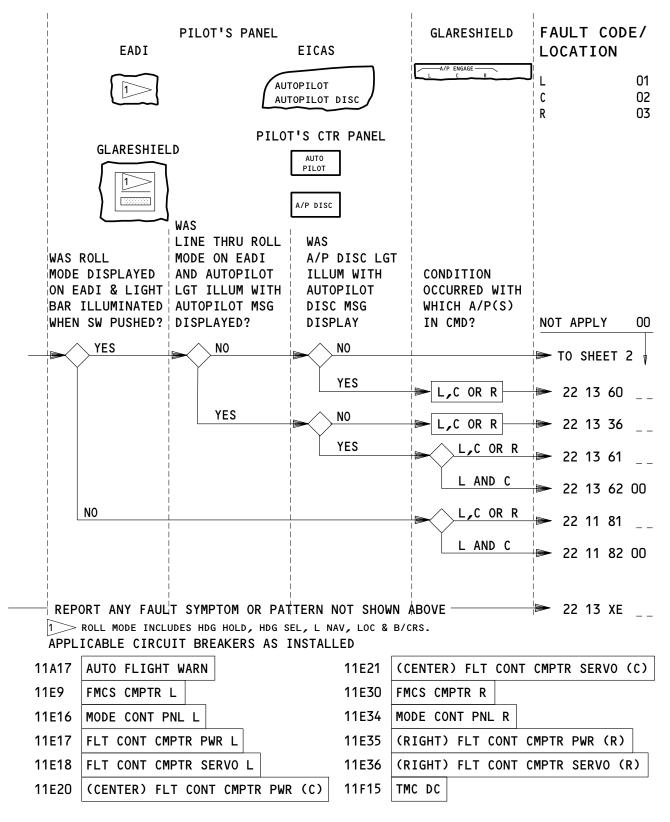


FLIGHT DIRECTOR (SHEET 2) - FAULT CODES

22-FAULT CODE DIAGRAM

03





AUTOPILOT (ROLL MODES) (SHEET 1) - FAULT CODES

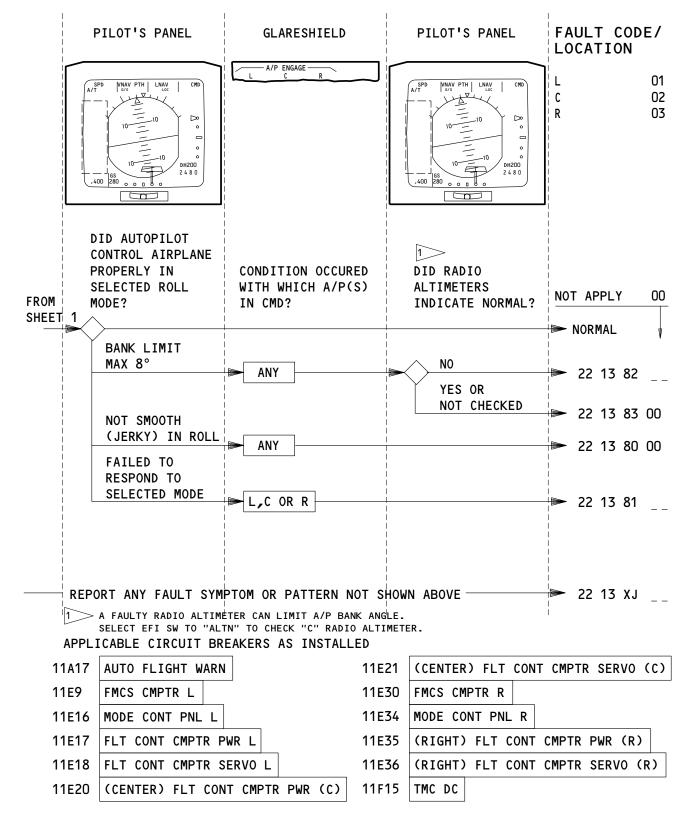
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22-FAULT CODE DIAGRAM

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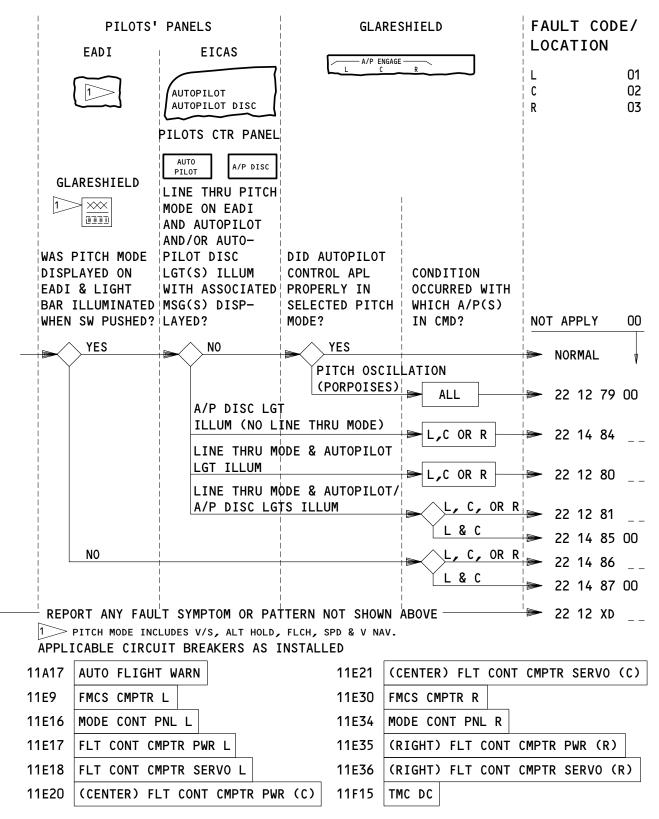




AUTOPILOT (ROLL MODES) (SHEET 2) - FAULT CODES

22-FAULT CODE DIAGRAM



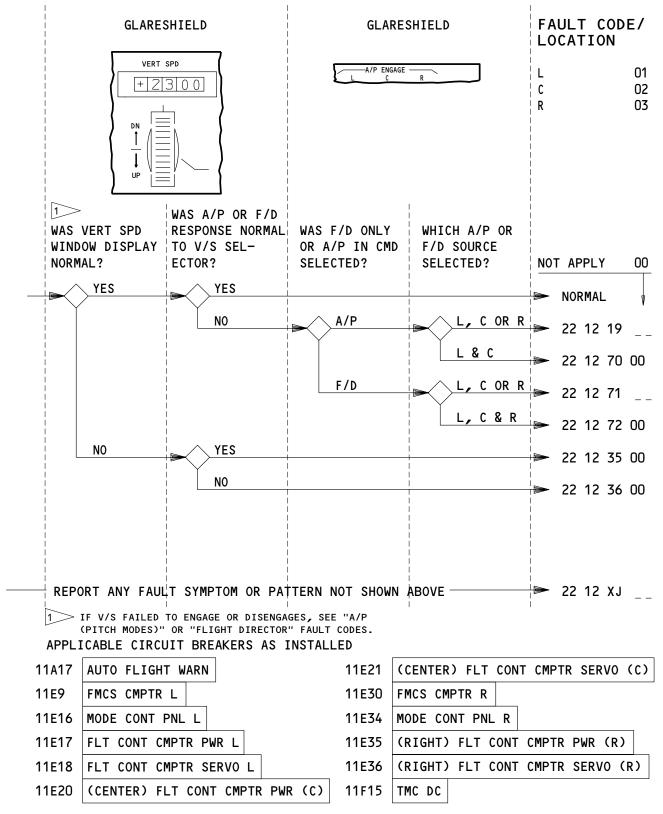


AUTOPILOT (PITCH MODES) - FAULT CODES

22-FAULT CODE DIAGRAM

02





VERTICAL SPEED - FAULT CODES

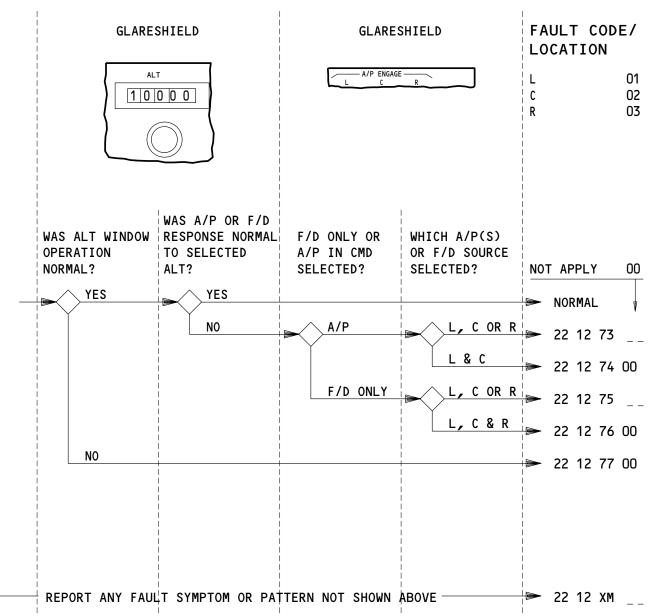
ALL

22-FAULT CODE DIAGRAM

02

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APPLICABLE CIRCUIT BREAKERS AS INSTALLED

11A17	AUTO FLIGHT WARN	11E21	(CENTER) FLT CONT CMPTR SERVO (C)
11E9	FMCS CMPTR L	11E30	FMCS CMPTR R
11E16	MODE CONT PNL L	11E34	MODE CONT PNL R
11E17	FLT CONT CMPTR PWR L	11E35	(RIGHT) FLT CONT CMPTR PWR (R)
11E18	FLT CONT CMPTR SERVO L	11E36	(RIGHT) FLT CONT CMPTR SERVO (R)
11E20	(CENTER) FLT CONT CMPTR PWR (C)	11F15	TMC DC

ALTITUDE SELECT - FAULT CODES

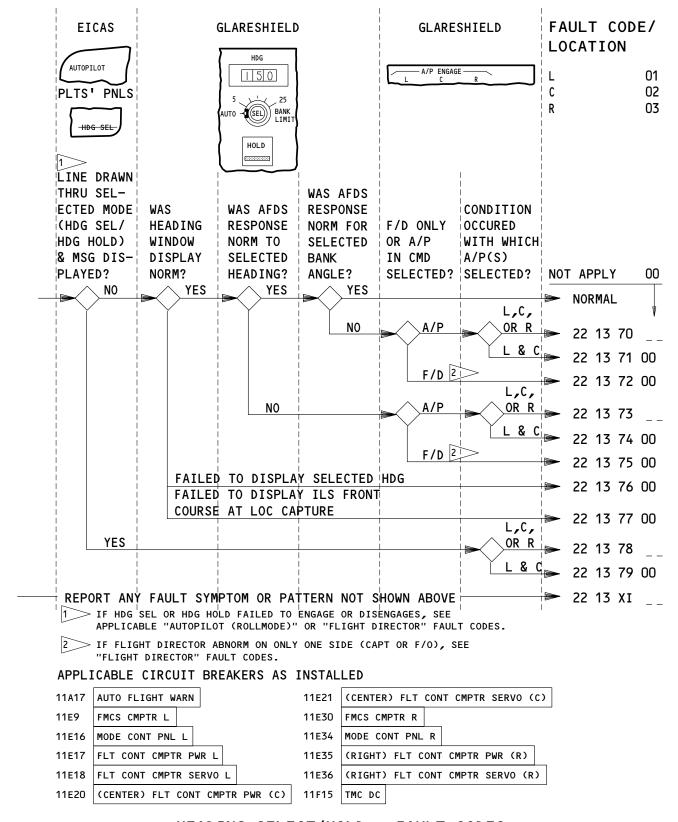
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22-FAULT CODE DIAGRAM

02

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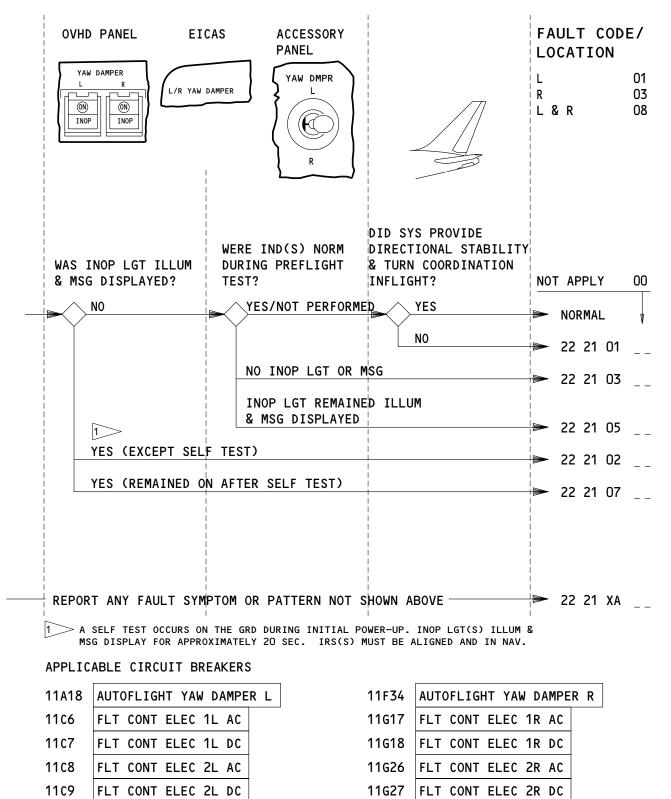
HEADING SELECT/HOLD - FAULT CODES

22-FAULT CODE DIAGRAM

02 Page 11

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YAW DAMPER - FAULT CODES

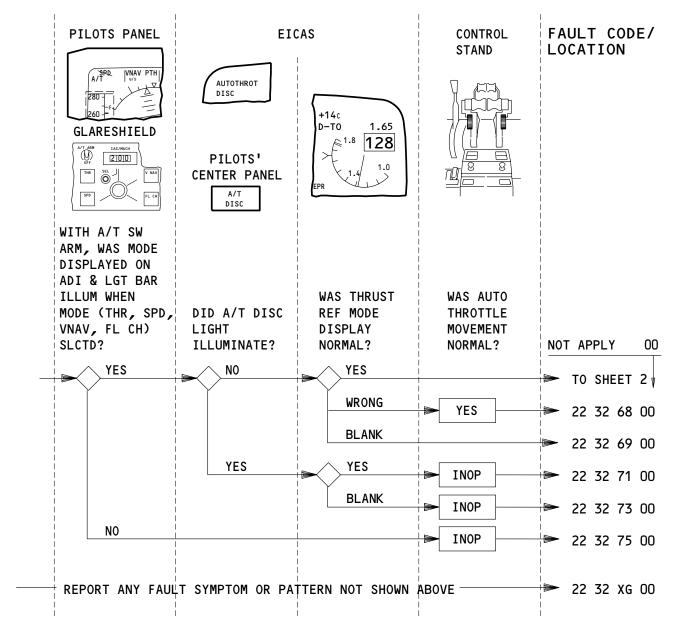
ALL

22-FAULT CODE DIAGRAM

03

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APPLICABLE CIRCUIT BREAKERS

11A17	AUTO FL	IGHT WARN	11F15	TMC DC	
11F14	TMC AC		11F16	TMC SERV	/0

AUTOTHROTTLE (SHEET 1) - FAULT CODES

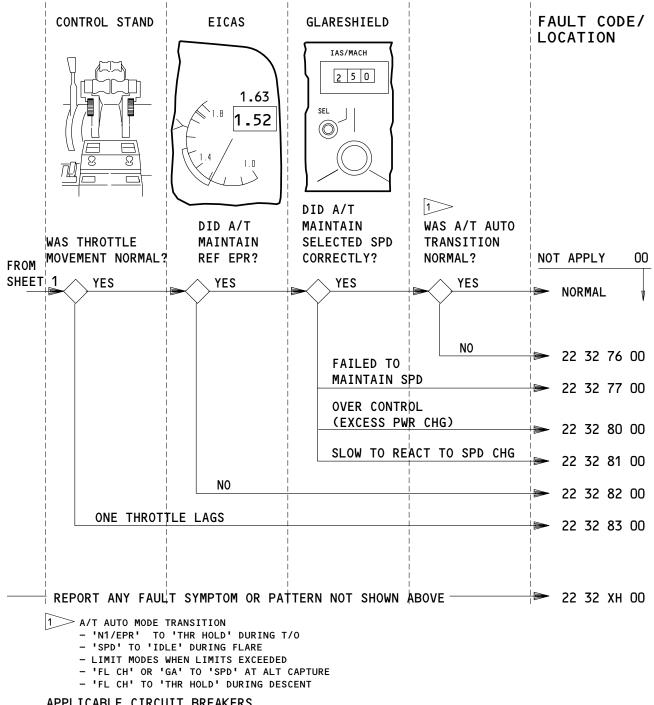
ALL

22-FAULT CODE DIAGRAM

04

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APPLICABLE CIRCUIT BREAKERS

11A17 AUTO FLIGHT WARN 11F14 TMC AC 11E16 11F15 MODE CONT PNL L TMC DC 11E34 MODE CONT PNL R 11F16 TMC SERVO

AUTOTHROTTLE (SHEET 2) - FAULT CODES

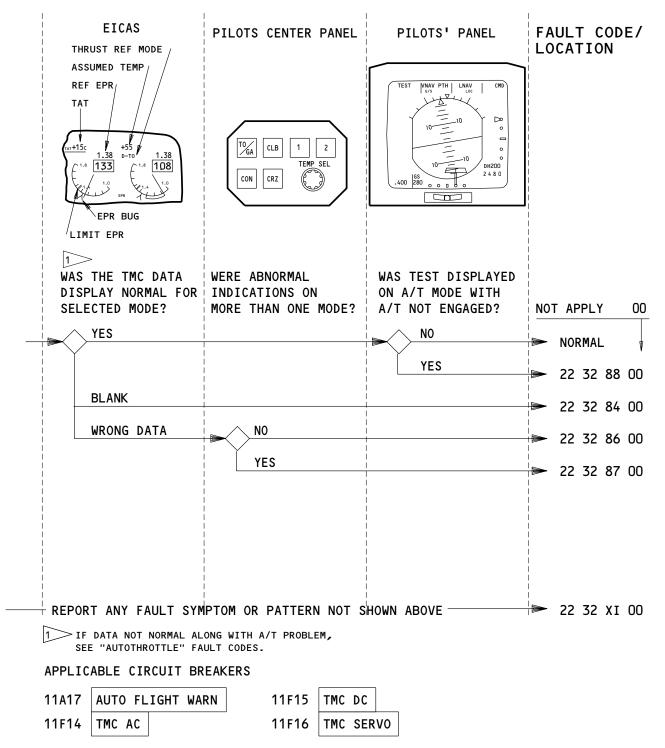
EFFECTIVITY-ALL

22-FAULT CODE DIAGRAM

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TMC - FAULT CODES

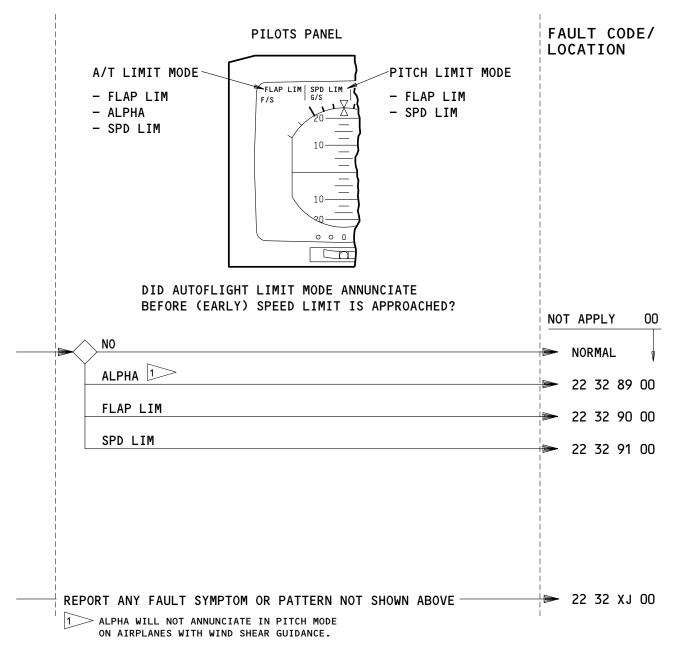
ALL

22-FAULT CODE DIAGRAM

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APPLICABLE CIRCUIT BREAKERS NONE

AUTOFLIGHT LIMIT MODES - FAULT CODES

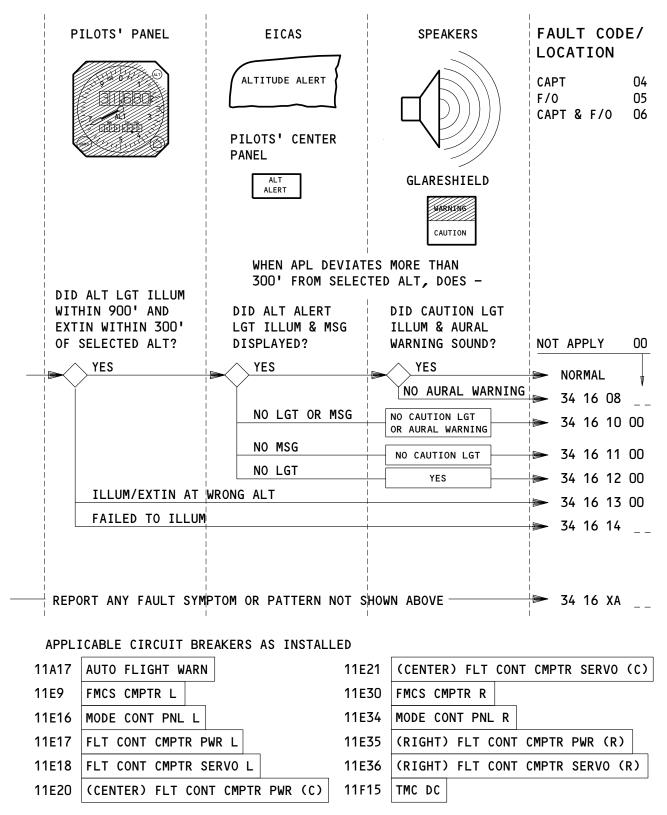
ALL

22-FAULT CODE DIAGRAM

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ALTITUDE ALERT - FAULT CODES

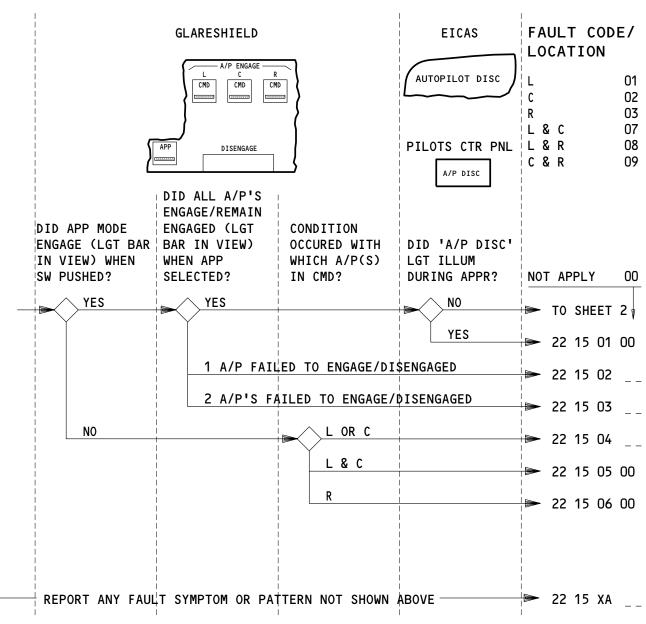
ALL

22-FAULT CODE DIAGRAM

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APPLICABLE CIRCUIT BREAKERS AS INSTALLED

11A17	AUTO FLIGHT WARN	11E21	(CENTER) FLT CONT CMPTR SERVO (C)
11E9	FMCS CMPTR L	11E30	FMCS CMPTR R
11E16	MODE CONT PNL L	11E34	MODE CONT PNL R
11E17	FLT CONT CMPTR PWR L	11E35	(RIGHT) FLT CONT CMPTR PWR (R)
11E18	FLT CONT CMPTR SERVO L	11E36	(RIGHT) FLT CONT CMPTR SERVO (R)
11E20	(CENTER) FLT CONT CMPTR PWR (C)	11F15	TMC DC

AUTOLAND (SHEET 1) - FAULT CODES

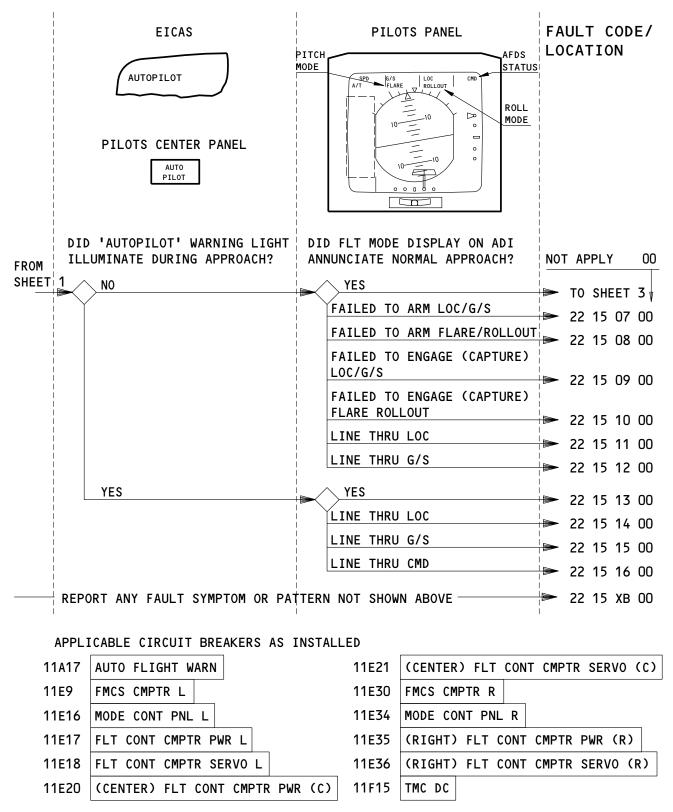
ALL ALL

22-FAULT CODE DIAGRAM

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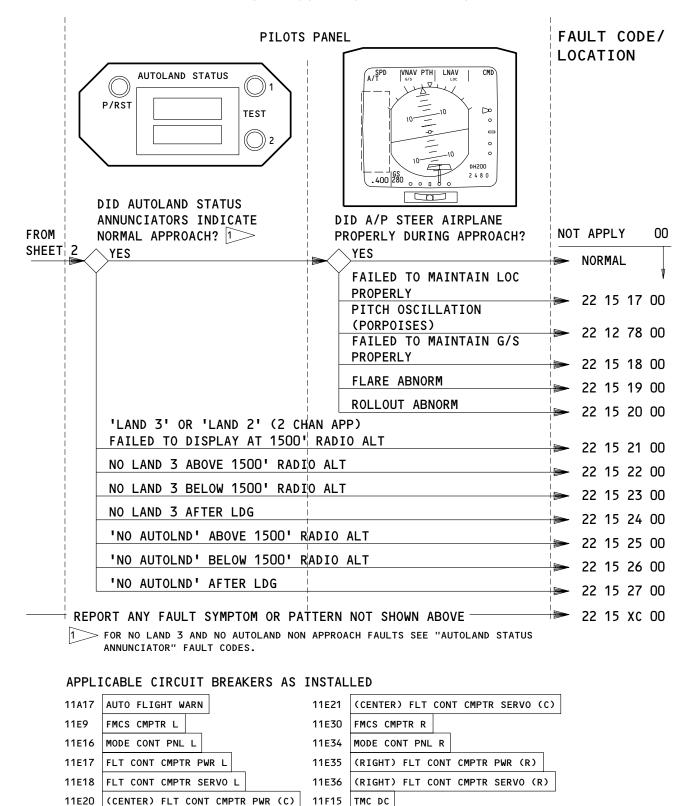
AUTOLAND (SHEET 2) - FAULT CODES

ALL ALL

22-FAULT CODE DIAGRAM

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AUTOLAND (SHEET 3) - FAULT CODES

EFFECTIVITY-

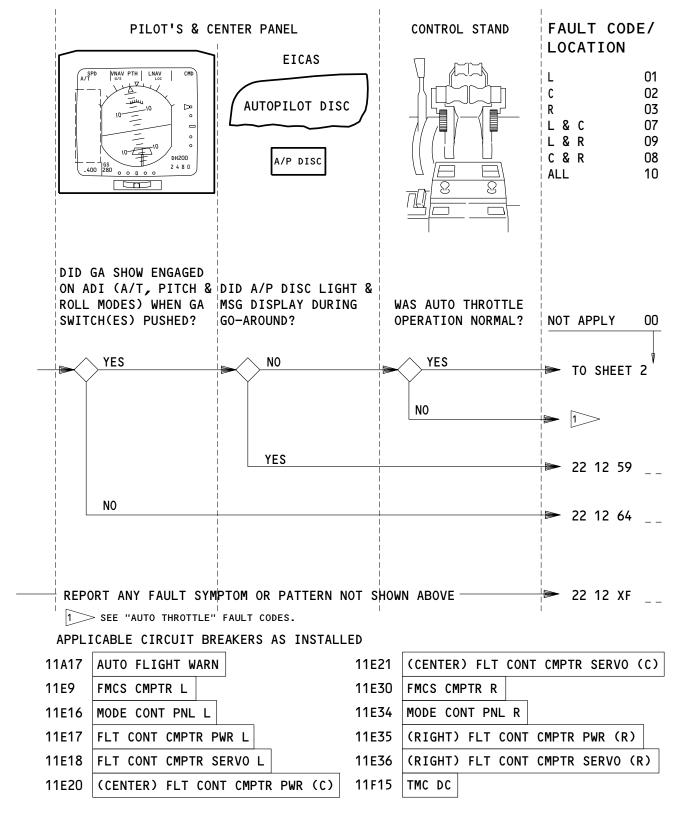
22-FAULT CODE DIAGRAM

05

ALL

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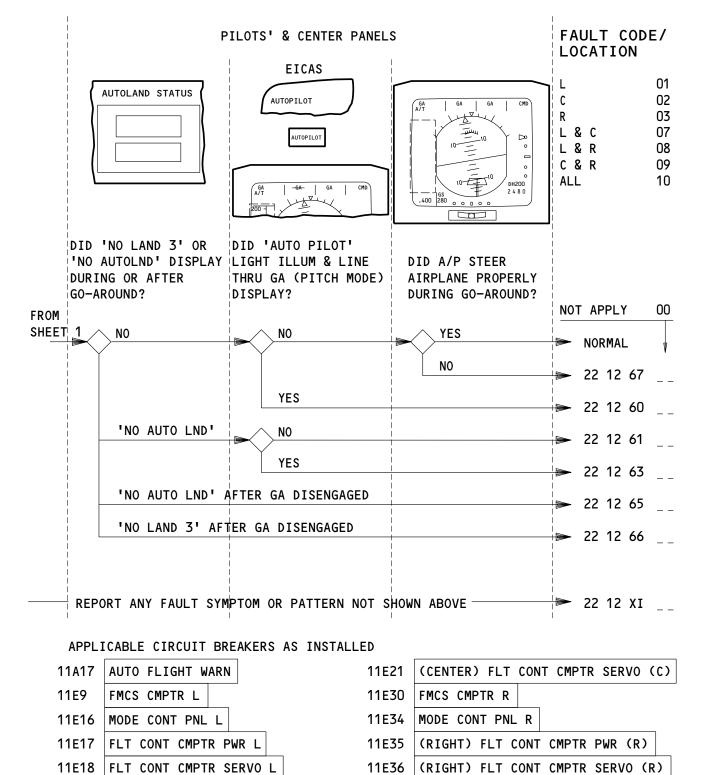
GO-AROUND - A/P (SHEET 1) - FAULT CODES

ALL 22-F

22-FAULT CODE DIAGRAM

06

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GO-AROUND - A/P (SHEET 2) - FAULT CODES

11F15

TMC DC

ALL

(CENTER) FLT CONT CMPTR PWR (C)

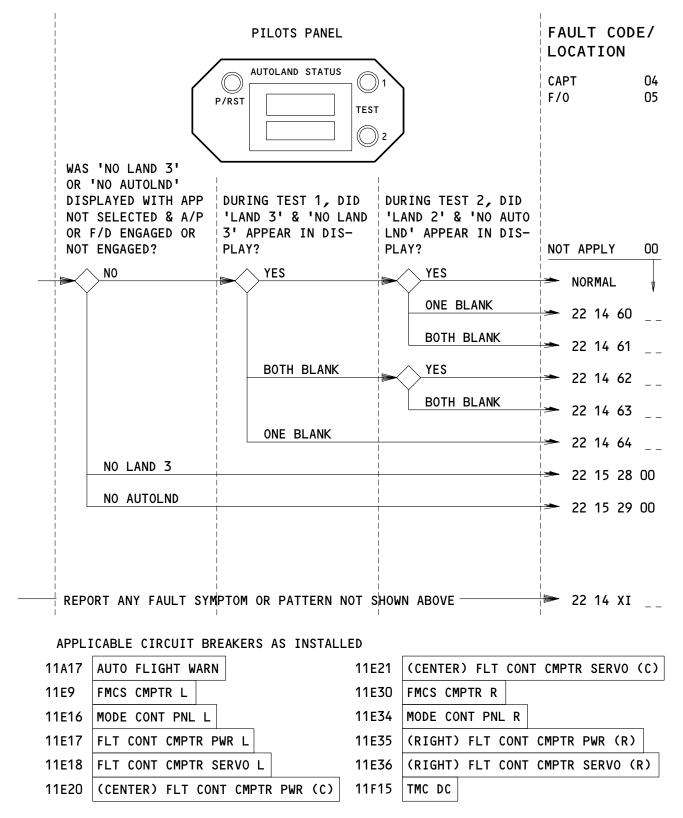
11E20

22-FAULT CODE DIAGRAM

06

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AUTOLAND STATUS ANNUNCIATOR - FAULT CODES

ALL 2

22-FAULT CODE DIAGRAM

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 11 XA	 (01=L, 02=C, 03=R) An autopilot (command) problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1
22 11 XB thru 22 11 XF	Not Used
22 11 XG	 A (01=L, 02=C, 03=R, 04=CAPT, 05=F/O) autopilot (disengage) problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1
22 12 XA thru 22 12 XC	Not Used
22 12 XD	 A (01=L, 02=C, 03=R) autopilot (Pitch Mode) problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1
22 12 XE	Not Used
22 12 XF	 A (01=L, 02=C, 03=R, 04=ALL, 05=L&C, 06=C&R, 07=L&R) autopilot problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1

22-FAULT CODE INDEX

03

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 12 XG and 22 12 XH	Not Used
22 12 XI	 A (01=L, 02=C, 03=R, 10=ALL, 07=L&C, 09=C&R, 08=L&R) autopilot problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1
22 12 XJ	 A (01=L, 02=C, 03=R) autopilot (vertical speed) problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1
22 12 XK	Not Used
and 22 12 XL	
22 12 XM	 A (01=L, 02=C, 03=R) autopilot (altitude speed) problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1
22 13 XA	Not Used
thru 22 13 XD 22 13 XE	 A (01=L, 02=C, 03=R) autopilot (HDG HOLD, LNAV, LOC) problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 13 XF thru	Not Used
22 13 XH	
22 13 XI	 A HEADING (SEL, HLD) problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew action). Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 13 XJ	1. A (01=L, 02=C, 03=R) autopilot (roll modes) problem was encountered by the flight crew which is not covered in the fault codes diagrams. (Ref fault code diagram for flight crew sections.) 2. FIM 22-00-02/101, Fig. 101, Block 1
22 14 XA	Not Used
thru	1101 0004
22 14 XH	
22 14 XI	 A (04=Capt, 05=F/0) ASA TEST problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew action.) FIM 22-00-02/101, Fig. 101, Block 1
22 14 XJ	 A (04=CAPT, 05=F/0) flight director problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1
22 14 XK	 A (04=CAPT, 05=F/0) flight director problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). FIM 22-00-02/101, Fig. 101, Block 1

22-FAULT CODE INDEX

04

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 14 XL 22 14 XM 00	Not Used 1. A mode control panel problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). 2. FIM 22-00-02/101, Fig. 101, Block 1
22 15 XA	 A (01=L, 02=c, 03=R, 04=L&c, 05=L&R, 06=C&R) autoland problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). FIM 22-00-02/101, Fig. 101, Block 1
22 15 XB 00	 An autoland problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). FIM 22-00-02/101, Fig. 101, Block 1
22 15 XC 00	 An autoland problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). FIM 22-00-02/101, Fig. 101, Block 1
22 21 XA	 A (01=L, 02=R) yaw damper system problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). FIM 22-21-00/101, Fig. 103, Block 1
22 32 XA thru 22 32 XF	Not Used



FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 32 XG 00	 An autothrottle problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC or Servo faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1) and MCDP Ground Test 10-SERVO A/T (FIM 22-00-03/101, Fig. 110A, Block 1). If the tests are
22 32 XH 00	 0.K., put the airplane back to operation. 1. An autothrottle problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). 2. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC or Servo faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1) and MCDP Ground Test 10-SERVO A/T (FIM 22-00-03/101, Fig. 110A, Block 1). If the tests are
22 32 XI 00	 0.K., put the airplane back to operation. 1. A TMC problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). 2. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC or Servo faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1) and MCDP Ground Test 10-SERVO A/T (FIM 22-00-03/101, Fig. 110A, Block 1). If the tests are
22 32 XJ 00	 0.K., put the airplane back to operation. 1. An Autoflight Limit Modes problem was encountered by the flight crew which is not covered in the fault code diagram. (Ref fault code diagram for flight crew action). 2. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC or Servo faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1) and MCDP Ground Test 10-SERVO A/T (FIM 22-00-03/101, Fig. 110A, Block 1). If the tests are
22 11 01 thru	<pre>0.K., put the airplane back to operation. Not Used</pre>
22 11 03 	

22-FAULT CODE INDEX

02

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 11 04	 CMD not displayed on EADI and switch light bar did not illuminate when (01=L, 02=C) CMD switch was pushed for engagement. Operation normal with (L,C) system selected. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC or MCP faults, do the MCDP Ground Test 01-FCC (FIM 22-00-03/101, Fig. 102, Block 1) and MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 11 05 00	 CMD not displayed on EADI and switch light bar did not illuminate when either L or C CMD switch pushed for engagement. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 11 06 00	 CMD not displayed on EADI and switch light bar did not illuminate when R CMD switch pushed for engagement. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC or MCP faults, do the MCDP Ground Test 01-FCC (FIM 22-00-03/101, Fig. 102, Block 1) and MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 11 07 thru 22 11 20	Not Used
22 11 21	 VNAV fails to remain illuminated. Fault occurs with (01=L, 02=C, 03=R, 04=Any) A/P engaged. (Ref Chapter 34 for fault code diagram). FIM 22-00-02/101, Fig. 101, Block 1
22 11 22	 LNAV fails to remain illuminated. Fault occurs with (01=L, 02=C, 03=R, 04=Any) A/P engaged. (Ref Chapter 34 for fault code diagram). FIM 22-00-02/101, Fig. 101, Block 1
22 11 23	 Airspeed command bug on (01=Capt, 02=F/0, 03=Both) Mach meter(s) is driven behind the mask with VNAV selected speed mode active. (Ref Chapter 34 for fault code diagram). FIM 22-00-02/101, Fig. 101, Block 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 11 24 thru 22 11 46	Not Used
22 11 47	 Following manual disengage the autopilot warning(s) did not cancel when autopilot disengage switch pushed the second time with (01=L, 02=C, 03=R) autopilot system engaged. (Identify which warning did not cancel, e.g., A/P DISC light, master WARNING light, etc). FIM 22-00-02/101, Fig. 101, Block 1
22 11 48	 A/P DISC light did not illuminate when (04=Capt, 05=F/0) autopilot disengage switch pushed. Operation normal when other switch pushed. FIM 22-00-02/101, Fig. 101, Block 1
22 11 49	Not Used
22 11 50	 Following automatic illumination of A/P DISC light, autopilot warning(s) did not cancel when autopilot disengage switch pushed with (01=L, 02=C, 03=R) autopilot system engaged. (Identify which warning did not cancel; e.g., A/P DISC light, master WARNING light, etc). FIM 22-00-02/101, Fig. 101, Block 1
22 11 51 thru	Not Used
22 11 80	
22 11 81	 (STATE PITCH MODE) not displayed on EADI and switch light bar did not illuminate when mode switch pushed with (01=L, 02=C, 03=R) autopilot system engaged in CMD. Operation normal with other autopilot systems in CMD. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1).
	If you cannot find the related FCC faults, do the MCDP Ground Test O1-FCC (FIM 22-00-03/101, Fig. 102, Block 1).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 11 82 00	 (STATE PITCH MODE) not displayed on EADI and switch light bar did not illuminate when mode switch pushed with either L or C autopilot system engaged in CMD. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 11 83 thru 22 11 99	Not Used
22 12 01 thru 22 12 18	Not Used
22 12 19	 Airplane does not respond to vertical speed selector change with (01=L, 02=C, 03=R) autopilot system engaged in CMD. Operation normal with (L, C, R) autopilot system selected. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 12 20 thru 22 12 34	Not Used
22 12 35 00	 Vertical speed window display does not respond to selector change. (A/P, F/D) response to selector change normal. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 12 36 00	 Vertical speed window display and (A/P, F/D) failed to respond to V/S selector change. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP or FCC faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 12 37 thru 22 12 58	Not Used
22 12 59	 A/P DISC light illuminated and EICAS message AUTOPILOT DISC displayed with (01=L, 02=C, 03=R, 07=L&C, 08=L&R, 09=C&R, 10=ALL) autopilot system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 12 60	 AUTOPILOT light illuminated, line thru G/A (pitch) on EADI, and EICAS message AUTOPILOT displayed with (01=L, 02=C, 03=R, 07=L&C, 08=L&R, 09=C&R, 10=ALL) autopilot system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 12 61	 NO AUTOLND displayed on autoland status annunciator with (01=L, 02=C, 03=R, 07=L&C, 08=L&R, 09=C&R, 10=ALL) autopilot system engaged in CMD. AUTOPILOT and A/P DISC lights extinguished. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC faults, do the MCDP Ground Test 01-FCC (FIM 22-00-03/101, Fig. 102, Block 1).
22 12 62	Not Used

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 12 63	 NO AUTOLND displayed on autoland status annunciator with (O1=L, O2=C, O3=R, O7=L&C, O8=L&R, O9=C&R, 10=ALL) autopilot system engaged in CMD. AUTOPILOT light illuminated, line thru G/A (pitch) on EADI and EICAS message AUTOPILOT displayed.
	2. FIM 22-00-02/101, Fig. 101, Block 1
22 12 64	 Pitch and roll GA's not displayed on EADI when switch(es) pushed with (01=L, 02=C, 03=R, 07=L&C, 08=L&R, 09=C&R, 10=ALL) autopilot system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 12 65	 NO AUTOLND displayed on autoland status annunciator after go-around disengaged with (01=L, 02=C, 03=R, 07=L&C, 08=L&R, 09=C&R, 10=ALL) autopilot system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 12 66	 NO LAND 3 displayed on autoland status annunciator after go-around disengaged with (01=L, 02=C, 03=R, 07=L&C, 08=L&R, 09=C&R, 10=ALL) autopilot system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 12 67	 Autopilot failed to (Describe steering problem) during go-around with (O1=L, O2=C, O3=R, O7=L&C, O8=L&R, O9=C&R, 10=ALL) autopilot system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 12 68 and 22 12 69	Not Used



FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 12 70 00	 Airplane does not respond to vertical speed selector change with either L or C autopilot system engaged in CMD. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC or MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 12 71	 F/D failed to respond to vertical speed selection with source selector in (01=L, 02=C, 03=R). Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 12 72 00	 F/D failed to respond to vertical speed selection with source selector in L, C or R. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC or MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 12 73	 Airplane did not respond to altitude select change with (01=L, 02-C, 03=R) Autopilot system engaged in CMD. Operation normal with other A/P systems selected. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC or MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 12 74 00	 Airplane did not respond to altitude select change with either L or C A/P system engaged in CMD.
22 12 75	 FIM 22-00-02/101, Fig. 101, Block 1 F/D failed to respond to altitude select with source selector in (01=L, 02=C, 03=R). Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC or MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 12 76 00	 F/D failed to respond to altitude select with source selector in L, C or R. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC or MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 12 77 00	 Unable to select altitude in altitude select window. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC or MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 12 78 00	 A/P pitch oscillation (porpoises) during multichannel approach: Do the elevator control system adjustment/test (AMM 27-31-00) and the applicable corrective actions.
22 12 79 00	 APL has pitch oscillation (porpoises) with any A/P sys in CMD and (V/S, ALT HOLD, FLCH, VNAV) mode selected. Do the elevator control system adjustment/test (AMM 27-31-00) and the applicable corrective actions.
22 12 80	 AUTOPILOT light illuminated line thru (V/S, ALT HOLD, SPD, VNAV) on EADI and EICAS message AUTOPILOT displayed with (O1=L, O2=C, O3=R) A/P sys engaged in CMD. A/P DISC light remained extinguished. FIM 22-00-02/101, Fig. 101, Block 1
22 12 81	 AUTOPILOT and A/P DISC lights illuminated line thru (V/S, ALT HOLD, SPD, VNAV) on EADI and EICAS message AUTOPILOT displayed with (O1=L, O2=C, O3=R) A/P system engaged in CMD. Operation normal with other A/Ps in CMD. FIM 22-00-02/101, Fig. 101, Block 1

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 12 83	 CMD AS bug disagrees with (MCP, FMS, CDU) on (01=Capt, 02=F/0, 03=both) ADI speed tape(s) FIM 22-00-02/101, Fig. 101, Block 1 If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1). Airplane has irregular control column movement or does not
	hold or capture selected altitude correctly. 2. FIM 22-00-02/101, Fig. 101, Block 1
22 13 01 thru 22 13 35	Not Used
22 13 36	 AUTOPILOT light illuminated, line through (STATE PITCH MODE) on EADI, and EICAS message AUTOPILOT displayed with (O1=L, O2=C, O3=R) autopilot system engaged in CMD. A/P DISC light remained extinguished. FIM 22-00-02/101, Fig. 101, Block 1
22 13 37 thru	Not Used
22 13 59 22 13 60	 A/P DISC light illuminated and EICAS message AUTOPILOT DISC displayed with (01=L, 02=C, 03=R) autopilot system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 13 61	 AUTOPILOT and A/P DISC lights illuminated, line thru (STATE PITCH MODE) on EADI, and EICAS message AUTOPILOT DISC displayed with (O1=L, O2=C, O3=R) autopilot system engaged in CMD. Operation norm with (L, C) autopilot system selected.
	 Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC faults, do the MCDP Ground Test 01-FCC (FIM 22-00-03/101, Fig. 102, Block 1).
22 13 62 00	 AUTOPILOT and A/P DISC lights illuminated, line thru (STATE PITCH MODE) on EADI, and EICAS message AUTOPILOT DISC displayed with either L or C autopilot system engaged in CMD.
	2. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 13 63 thru 22 13 69	Not Used
22 13 70	 (01=L, 02=C, 03=R) A/P failed to maintain proper bank angle with bank limit selector in pos. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 13 71 00	 Both L and C A/P failed to maintain proper bank angle with bank limit selector in pos. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 13 72 00	 F/D failed to command proper bank angle with bank limit selector in pos. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 13 73	 (01=L, 02=C, 03=R) A/P failed to (capture, maintain) selected heading in HDG (SEL, HOLD). FIM 22-00-02/101, Fig. 101, Block 1.
22 13 74 00	 Both L and C A/P failed to (capture, maintain) selected heading in HDG (SEL, HOLD). FIM 22-00-02/101, Fig. 101, Block 1.
22 13 75 00	1. F/D failed to command selected heading in HDG (SEL, HOLD). 2. FIM 22-00-02/101, Fig. 101, Block 1.
22 13 76 00	 MCP HDG window display(s) (blank in, does not respond to) HDG (SEL, HOLD). Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 13 77 00	 MCP HDG window failed to display ILS front course at localizer capture. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 13 78	 Line drawn thru HDG (SEL, HOLD) on ADI and EICAS message AUTOPILOT displayed with (O1=L, O2=C, O3=R) A/P in CMD. FIM 22-00-02/101, Fig. 101, Block 1.

1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
 Line drawn thru HDG (SEL, HOLD) on EADI and EICAS message AUTOPILOT displayed with either L or C A/P in CMD. FIM 22-00-02/101, Fig. 101, Block 1.
 APL not smooth (JERKY) in roll with any A/P in CMD and (STATE PITCH MODE) mode selected. Do the aileron control system adjustment/test (AMM 27-11-00) and the applicable corrective actions.
 A/P failed to (describe failure) with (01=L, 02=C, 03=R) A/P sys engaged in CMD and (STATE PITCH MODE) mode selected. Mode display on EADI norm. Operation norm with other A/P's in CMD.
2. Do the MCDP Ground Test 04-MCP procedure (FIM 22-00-03/101, Fig. 104, Block 1)
 APL bank angle limited to 8° in roll with any A/P in CMD. (01=L, 02=C, 03=R) radio altimeter indications abnorm. Do the radio altimeter BITE procedure (FIM 34-33-00/101, Fig. 104A, Block 1). If the problem continues, do the radio altimeter antenna and coax check (AMM 20-10-32/201).
 APL bank angle limited to 8° in roll with any A/P in CMD. Radio altimeters indications (norm, not checked). Do the radio altimeter BITE procedure (FIM 34-33-00/101, Fig. 104A, Block 1). If the problem continues, do the radio altimeter antenna and coax check (AMM 20-10-32/201).
Not Used
 Following manual disengage with illumination of A/P DISC light, siren did not sound and master WARNING light did not illuminate after appropriate time delay with (01=L, 02=C, 03=R) autopilot system engaged. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC faults, do the MCDP Ground Test 01-FCC (FIM 22-00-03/101, Fig. 102, Block 1).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 14 06	 Following automatic illumination of A/P DISC light, siren did not sound and master WARNING light did not illuminate after appropriate time delay with (O1=L, O2=C, O3=R) autopilot system engaged. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC faults, do the MCDP Ground Test O1-FCC (FIM 22-00-03/101, Fig. 102, Block 1).
22 14 07 thru 22 14 50	Not Used
22 14 51	 NO LAND 3 displayed on autoland status annunciator with (01=L, 02=C, 03=R) autopilot system engaged in CMD. Do a inspection of the connector D2211 (WDM 27-41-11) and repair the wiring or replace the connector D2211, and do the MCDP ground test #65 and #66. If the problem continues do the FIM 22-00-02/101, Fig. 101, Block 1
22 14 52	 A/P DISC light illuminated and EICAS message AUTOPILOT DISC displayed with (01=L, 02=C, 03=R) autopilot system engaged in CMD. NO LAND 3 not displayed on autoland status annunciator. FIM 22-00-02/101, Fig. 101, Block 1
22 14 53	 A/P DISC light illuminated, EICAS message AUTOPILOT DISC displayed, and NO LAND 3 displayed on autoland status annunciator with (O1=L, O2=C, O3=R) autopilot system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 14 54 thru 22 14 56	Not Used



FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 14 57 00	 Autoland status annunciator displayed "NO AUTOLND" with F/D ON. FIM 22-00-02/101, Fig. 101, Block 1
22 14 58 00	 Autoland status annunciator displayed "NO LAND 3" with F/D ON. FIM 22-00-02/101, Fig. 101, Block 1
22 14 59	Not Used
22 14 60	 (04=Capt, 05=F/0) autoland status annunciator failed to display (LAND 2, NO AUTOLND) during TEST 2. FIM 22-00-03/101, Fig. 106, Block 1
22 14 61	 (04=Capt, 05=F/0) autoland status annunciator displays blank during TEST 2. FIM 22-00-03/101, Fig. 106, Block 1
22 14 62	 (04=Capt, 05=F/0) autoland status annunciator displays blank during TEST 1. FIM 22-00-03/101, Fig. 106, Block 1
22 14 63	 (04=Capt, 05=F/0) autoland status annunciator displays blank during TEST 1 and 2. FIM 22-00-03/101, Fig. 106, Block 1
22 14 64	 (04=Capt, 05=F/O) autoland status annunciator failed to display (LAND 3, NO LAND 3) during TEST 1. FIM 22-00-03/101, Fig. 106, Block 1
22 14 65	Not Used

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03

ALL

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 14 66	 AFDS mode not displayed on (04=Capt, 05=F/0) EADI when (state mode) mode selected. Indication normal with INSTR SOURCE SEL FLT DIR switch positioned to C. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related FCC faults, do the MCDP Ground Test 01-FCC (FIM 22-00-03/101, Fig. 102, Block 1).
22 14 67	 AFDS mode not displayed on (04=Capt, 05=F/0, 06=Capt & F/0) EADI when (state mode) mode selected. Indication same with INSTR SOURCE SEL FLT DIR switch positioned to C. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related MCP faults, do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 14 68 00	 T.O. (take off) mode not displayed on pilots' EDAI on the ground with F/D switch ON. Do the MCDP Ground Test 30-Current Fault Report (FIM 22-00-03/101, Fig. 117, Block 1). Refer to the (Flight Control) Ground Faults Bite Procedure and do the corrective
22 14 69	 actions. 1. F/D flag in view & no F/D cmd bars on (04=Capt, 05=F/O) EADI. Indication normal with INSTR SOURCE SEL FLT DIR switch positioned to C. 2. FIM 22-00-02/101, Fig. 101, Block 1
22 14 70	 F/D flag in view & no F/D cmd bars on (04=Capt, 05=F/O) EADI. Indication same with INSTR SOURCE SEL FLT DIR switch positioned to C. FIM 22-00-02/101, Fig. 101, Block 1
22 14 71	 No F/D cmd bars or F/D flag on (04=Capt, 05-F/O) EADI. Indication normal with INSTR SOURCE SEL FLT DIR switch positioned to C. FIM 22-00-02/101, Fig. 101, Block 1
22 14 72	 No F/D cmd bars or F/D flag on (04=Capt, 05=F/O) EADI. Indication same with INSTR SOURCE SEL FLT DIR switch positioned to C. FIM 22-00-02/101, Fig. 101, Block 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 14 73	 (Pitch, Roll, Pitch & Roll) CMD bar(s) on (04=Capt, 05=F/0, 06=Capt & F/0) EADI (describe abnormal indication) in T.O. (takeoff) mode (on grd, inflt, on grd & inflt). FIM 22-00-02/101, Fig. 101, Block 1
	NOTE: On airplanes without -134 and subsequent FCCs, the flight director can command a target airspeed of V2 instead of V2 +15 during normal takeoffs if you turn the MCP IAS/MACH speed knob too quickly (more than 15 knots in approximately one-tenth of a second). No action is necessary. Installation of -134 or subsequent FCCs will correct the problem.
22 14 74	 (Pitch, Roll, Pitch & Roll) CMD bar(s) on (04=Capt, 05=F/0, 06=Capt &F/0) EADI (describe abnormal indication) in (state engaged mode) mode. Indication normal with INSTR SOURCE SEL FLT DIR switch positioned to C. FIM 22-00-02/101, Fig. 101, Block 1
22 14 75	 (Pitch, Roll, Pitch & Roll) CMD bar(s) on (04=Capt, 05=F/0, 06=Capt & F/0) EADI (describe abnormal indication) in (state engaged mode) mode. Indication same with INSTR SOURCE SEL FLT DIR switch positioned to C. FIM 22-00-02/101, Fig. 101, Block 1
22 14 76 thru 22 14 80	Not Used
22 14 81 00	 MCP, mode switch light bar half illuminates when selected. Push the IND LTS TEST button on the right overhead lighting control panel. Replace the lamp if the light does not come on. If the problem continues, replace the Mode Control Panel (M90) (AMM 22-11-02).
22 14 82 00	 (M90) (AMM 22-11-02). MCP, all mode switches L half of light bar extinguished when selected. Open and close the MODE CONT PNL - L (11E16) circuit breaker. Do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 14 83 00	 MCP, all mode switches R half of light bar extinguished when selected. Open and close the MODE CONT PLN-R (11E34) circuit breaker; do the MCDP Ground Test 04-MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 14 84	 A/P DISC LIGHT illuminated and EICAS message AUTOPILOT DISC displayed with (O1=L, O2=C, O3=R) A/P system engaged in CMD and (V/S, ALT HOLD, FLCH, VNAV) mode selected FIM 22-00-02/101, Fig. 101, Block 1
22 14 85 00	 AUTOPILOT and A/P DISC lights illuminated, line thru (V/S, ALT HOLD, SPD, VNAV) on EADI and EICAS message AUTOPILOT displayed with either L or C A/P system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 14 86	 (V/S, ALT HOLD, SPD, VNAV) not displayed on EADI and switch light bar did not illuminate when mode switch pushed with (O1=L, O2=C) A/P system engaged in CMD. Operation normal with other A/Ps in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 14 87 00	 (V/S, ALT HOLD, SPD, VNAV) not displayed on EADI and switch light bar did not illuminate when mode switch pushed with either L or C A/P system engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 15 01 00	 A/P DISC light illuminated & EICAS messge AUTOPILOT DISC displayed after APP mode engaged. FIM 22-00-02/101, Fig. 101, Block 1
22 15 02	 (01=L, 02=C, 03=R) A/P CMD switch (failed to engage, disengaged) with APP mode selected. FIM 22-00-02/101, Fig. 101, Block 1
22 15 03	 (07=L & C, 08=L & R, 09=C &R) A/P CMD switch (failed to engage, disengaged) with APP mode selected. FIM 22-00-02/101, Fig. 101, Block 1



FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 15 04	 APP mode failed to engage when switch pushed with (01=L, 02=C) A/P engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 15 05 00	 APP mode failed to engage when switch pushed with either L or C A/P engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 15 06 00	 APP mode failed to engage when switch pushed with R A/P engaged in CMD. FIM 22-00-02/101, Fig. 101, Block 1
22 15 07 00	 (LOC, G/S, LOC & G/S) failed to annunciate armed on EADI with APP mode selected. FIM 22-00-02/101, Fig. 101, Block 1
22 15 08 00	 (FLARE, ROLLOUT, FLARE & ROLLOUT) failed to annunciate armed on EADI during multi channel APPR. FIM 22-00-02/101, Fig. 101, Block 1
22 15 09 00	 (LOC, G/S, LOC & G/S) failed to annunciate engaged on EADI during multi channel APPR. FIM 22-00-02/101, Fig. 101, Block 1
22 15 10 00	 (FLARE, ROLLOUT) failed to annunciate engaged on EADI during multi channel APPR. FIM 22-00-02/101, Fig. 101, Block 1
22 15 11 00	 Line drawn thru LOC display on EADI with APP mode selected. AUTOPILOT warning light extinguished. FIM 22-00-02/101, Fig. 101, Block 1

22-FAULT CODE INDEX

04

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 15 12 00	 Line drawn thru G/S display on EADI with APP mode selected. AUTOPILOT warning light extinguished. FIM 22-00-02/101, Fig. 101, Block 1
22 15 13 00	 AUTOPILOT warning light illuminated & EICAS message AUTOPILOT displayed during multi channel APPR. FIM 22-00-02/101, Fig. 101, Block 1
22 15 14 00	 AUTOPILOT warning light illuminated & EICAS message AUTOPILOT displayed during multi channel APPR. Line drawn thru LOC on EADI. FIM 22-00-02/101, Fig. 101, Block 1
22 15 15 00	 AUTOPILOT warning light illuminated & EICAS message AUTOPILOT displayed during multi channel APPR. Line drawn thru G/S on EADI. FIM 22-00-02/101, Fig. 101, Block 1
22 15 16 00	 AUTOPILOT warning light illuminated & EICAS message AUTOPILOT displayed during multi channel APPR. Line drawn thru CMD on EADI. FIM 22-00-02/101, Fig. 101, Block 1
22 15 17 00	 A/P failed to maintain LOC properly during multi channel approach. Do the ILS BITE procedure (FIM 34-31-00/101, Fig. 103, Block 1). If the problem continues, do the MCDP Ground Test 01 FCC (FIM 22-00-03/101, Fig. 102, Block 1).
	If the problem continues, do the MCDP Ground Test 40 - AUTOLAND (FIM 22-00-03/101, Fig. 118A, Block 1). If the test passes, then there was one of these: 1) An intermittent fault. 2) Conditions external to the airplane.
	NOTE: If the problem occurs on the next flight, it may be caused by conditions external to the airplane. If you think it is necessary, download the data from the flight data recorder to examine the problem in more details (AMM 31-31-01/201).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 15 18 00	 A/P failed to maintain G/S properly during multi channel approach. Do the ILS BITE procedure (FIM 34-31-00/101, Fig. 103, Block 1). If the problem continues, do the MCDP Ground Test 01 FCC (FIM 22-00-03/101, Fig. 102, Block 1).
22 15 19 00	 A/P failed to flare properly during multi channel approach. FLARE annunciation on EADI normal. Do the MCDP Ground Test 08 SERVO ELEV procedure (FIM 22-00-03/101, Fig. 108, Block 1).
22 15 20 00	 A/P failed to rollout properly during multi channel approach. ROLLOUT annunciation on EADI normal. Do the MCDP Ground Test 09 SERVO RUD procedure (FIM 22-00-03/101, Fig. 109, Block 1).
22 15 21 00	 LAND (3, 2) failed to annunciate at 1500' radio altitude during (3, 2) channel approach. FIM 22-00-02/101, Fig. 101, Block 1
22 15 22 00	 NO LAND 3 displayed on Autoland Status Annunciator above 1500' radio altitude during multi channel approach. FIM 22-00-02/101, Fig. 101, Block 1
22 15 23 00	 NO LAND 3 displayed on Autoland Status Annunciator below 1500' radio altitude during multi channel approach. FIM 22-00-02/101, Fig. 101, Block 1
22 15 24 00	 NO LAND 3 displayed on Autoland Status Annunciator after landing during multi channel approach. FIM 22-00-02/101, Fig. 101, Block 1
22 15 25 00	 NO AUTOLND displayed on Autoland Status Annunciator above 1500' radio altitude during multi channel approach. FIM 22-00-02/101, Fig. 101, Block 1
22 15 26 00	 NO AUTOLND displayed on Autoland Status Annunciator below 1500' radio altitude during multi channel approach. FIM 22-00-02/101, Fig. 101, Block 1
22 15 27 00	 NO AUTOLND displayed on Autoland Status Annunciator after landing during multi channel approach. FIM 22-00-02/101, Fig. 101, Block 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 15 28 00	 NO LAND 3 displayed on Autoland Status Annunciator with APP mode not selected and Autopilot/Flight Director engaged or not engaged. If the problem shows during flight, do the FIM 22-00-02/101, Fig. 101, Block 1. If the problem shows before the flight, do the MCDP Ground Test 30-Current Fault Report (FIM 22-00-03/101, Fig. 117, Block 1).
22 15 29 00	 NO AUTOLND displayed on Autoland Status Annunciator with APP mode not selected and Autopilot/Flight Director engaged or not engaged. If the problem shows during flight, do the FIM 22-00-02/101, Fig. 101, Block 1. If the problem shows before the flight, do the MCDP Ground Test 30-Current Fault Report (FIM 22-00-03/101, Fig. 117, Block 1).
22 21 01	 Yaw damper operation abnormal with the (01=L, 03=R, 08=L&R) yaw damper switch on and INOP light extinguished. (Describe condition, such as, rudder oscillating, remained engaged after landing, etc.) Airplanes with YDM's 285T0013-101 to 121;FIM 22-21-00/101, Fig. 103, Block 1. Airplanes with YDM's 285T0013-122 and subsequent; FIM
22 21 02	22-21-00/101, Fig. 103A. 1. "(L,R) YAW DAMPER" displayed on EICAS and (01=L, 03=R) yaw damper INOP light illuminated. 2. AIRPLANES WITH YDM'S 285T0013-101 TO 121; FIM 22-21-00/101, Fig. 103, Block 1. 3. AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT;
22 21 03	 FIM 22-21-00/101, Fig. 103A. 1. (01=L, 03=R) Yaw damper INOP light did not illuminate during preflight test. 2. AIRPLANES WITH YDM'S 285T0013-101 TO 121; FIM 22-21-00/101, Fig. 103, Block 1. 3. AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT; FIM 22-21-00/101, Fig. 103A.
22 21 04	Not Used
22 21 05	 (01=L, 03=R) Yaw damper INOP light remained illuminated after preflight test. AIRPLANES WITH YDM'S 285T0013-101 TO 121; FIM 22-21-00/101, Fig. 103, Block 1. AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT; FIM 22-21-00/101, Fig. 103A.

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 21 06	Not Used
22 21 07	 (01=L, 03=R) Yaw damper INOP light remained illuminated after the power-up self test. AIRPLANES WITH YDM'S 285T0013-101 TO 121; FIM 22-21-00/101, Fig. 103, Block 1. AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT; FIM 22-21-00/101, Fig. 103A.
22 21 08	Not Used
22 21 09 00	 EICAS message YAW DAMPER displayed (Ref Chapter 31 for fault code diagram). AIRPLANES WITH YDM'S 285T0013-101 TO 121; FIM 22-21-00/101, Fig. 103, Block 1. AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT; FIM 22-21-00/101, Fig. 103A.
22 22 01	Not Used
22 22 02 04	 EICAS message UNSCHED STAB TRIM displayed. UNSCHED STAB TRIM light illuminated. Light extinguished when both trim cutout switches positioned to CUTOUT. Light reilluminated when L switch restored to NORM. Operation normal with other switch in NORM. Autopilot (L, C, R) was in CMD when unscheduled trim occurred. (Ref Chapter 27 for fault code diagram). FIM 27-09-00/101, Fig. 106A
22 22 02 05	 EICAS message UNSCHED STAB TRIM displayed. UNSCHED STAB TRIM light illuminated. Light extinguished when both trim cutout switches positioned to CUTOUT. Light reilluminated when C switch restored to NORM. Operation normal with other switch in NORM. Autopilot (L, C, R) was in CMD when unscheduled trim occurred (Ref Chapter 27 for fault code diagram). FIM 27-09-00/101, Fig. 106A, Block 1

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04

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 22 03 04	 EICAS message UNSCHED STAB TRIM displayed. UNSCHED STAB TRIM light illumimated. Light extinguished when both trim cutout switches positioned to CUTOUT. Light remained extinguished when L switch restored to NORM. Other switch was not restored to NORM. Autopilot (L, C, R) was in CMD when unscheduled trim occurred (Ref Chapter 27 for fault code diagram). FIM 27-09-00/101, Fig. 106A
22 22 03 05	 EICAS message UNSCHED STAB TRIM displayed. UNSCHED STAB TRIM light illuminated. Light extinguished when both trim cutout switches positioned to CUTOUT. Light remained extinguished when C switch restored to NORM. Other switch was not restored to NORM. Autopilot (L, C, R) was in CMD when unscheduled trim occurred (Ref Chapter 27 for fault code diagram). FIM 27-09-00/101, Fig. 106A
22 22 04 22 24 01 thru 22 24 05	Not Used Not Used
22 31 01 thru 22 31 34	Not Used
22 32 01 thru 22 32 55	Not Used
22 32 56	 EPR Command bug on (03=L, 04=R, 05=both) EPR indicator(s) is green with VNAV thrust command mode active (Ref Chapter 34 for Fault Code Diagram). Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is 0.K., put the airplane back to operation.
22 32 57 thru 22 32 66	Not Used
22 32 67	Not Used



FAULT	1. LOG BOOK REPORT
CODE	2. FAULT ISOLATION REFERENCE
22 32 68 00	 Wrong thrust reference mode displayed on EICAS, mode instead of mode with autothrottle engaged in (STATE MODE(S)) mode. Throttle movement normal. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is 0.K., put the airplane back to operation.
22 32 69 00	 Thrust reference mode display on EICAS blank with autothrottle engaged in (STATE MODE(S)) mode. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is 0.K., put the airplane back to operation.
22 32 70 22 32 71 00	Not Used 1. A/T DISC light illuminated with autothrottle engaged in (STATE MODE) mode. Thrust reference mode display on EICAS. 2. FIM 22-00-02/101, Fig. 101, Block 1
22 32 72 22 32 73 00	Not Used 1. A/T DISC light illuminated with autothrottle engaged in (STATE MODE(S)) mode. Thrust reference mode display on EICAS blank.
	2. FIM 22-00-02/101, Fig. 101, Block 1
22 32 74 22 32 75 00	 Not Used Autothrottle failed to engage when (STATE MODE(S)) mode(s) selected. Autothrottle mode not displayed on EADI. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is 0.K., put the airplane back to operation.
22 32 76 00	 Autothrottle failed to transition automatically from to mode during (T/0, flare, alt capture, descent, etc). Autothrottle was engaged in (STATE MODE) mode. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is 0.K., put the airplane back to operation.

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 32 77 00	 Autothrottle failed to maintain selected speed with (STATE MODE) mode engaged. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC or servo faults, do the MCDP Ground Tests O2-TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10-SERVO A/T (FIM 22-00-03/101, Fig. 110A, Block 1). If the tests are 0.K., put the airplane back to operation.
22 32 78 and	Not Used
22 32 79 22 32 80 00	 Autothrottle overcontrols with SPD mode engaged. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC or servo faults, do the MCDP Ground Tests O2-TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10-SERVO A/T (FIM 22-00-03/101, Fig. 110A, Block 1). If the tests are 0.K., put the airplane back to operation.
22 32 81 00	 Autothrottle slow to react to speed change with SPD mode engaged. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC or servo faults, do the MCDP Ground Tests 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10-SERVO A/T (FIM 22-00-03/101, Fig. 110A, Block 1). If the tests are 0.K., put the airplane back to operation.
22 32 82 00	 Autothrottle failed to maintain ref EPR with (STATE MODE) mode engaged. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC or servo faults, do the MCDP Ground Tests 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10-SERVO A/T (FIM 22-00-03/101, Fig. 110A, Block 1). If the tests are 0.K., put the airplane back to operation.
22 32 83 00	 Throttles failed to move together during autothrottle operation. (L, R) throttle lags. FIM 22-00-03/101, Fig. 110A, Block 1

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 32 84 00	 TMC data (list blank data) display blank on EICAS. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is 0.K., put the airplane back to operation.
22 32 85 22 32 86 00	Not Used 1. TMC data (indicate wrong data) display incorrect on EICAS with mode selected on TMSP. 2. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is 0.K., put the airplane back to operation.
22 32 87 00	 TMC data (indicate wrong data) display incorrect on EICAS with (list modes) modes selected on TMSP. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 02-TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is 0.K., put the airplane back to operation.
22 32 88 00 22 32 89 00	 A/T mode on EADI displays TEST with autothrottle not engaged. Push the GRD TEST switch and then the FLT FAULTS switch to get into and to go out of the MCDP ground test mode. AFDS limit mode ALPHA annunciated on EADI A/T mode before speed limit is approached. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 30-CURRENT FLIGHT FAULTS (FIM 22-00-03/101, Fig. 117, Block 1). If the test is 0.K., put the airplane back to operation.
22 32 90 00	 AFDS limit mode FLAP LIM annunciated on EADI (A/T, PITCH) mode before speed limit is approached. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 30-CURRENT FLIGHT FAULTS (FIM 22-00-03/101, Fig. 117, Block 1). If the test is 0.K., put the airplane back to operation.

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
22 32 91 00	 AFDS limit mode SPD LIM annunciated on EADI (A/T, PITCH) mode before speed limit is approached. Read the Flight Faults (FIM 22-00-02/101, Fig. 101, Block 1). If you cannot find the related TMC faults, do the MCDP Ground Test 30-CURRENT FLIGHT FAULTS (FIM 22-00-03/101, Fig. 117, Block 1). If the test is 0.K., put the airplane back to operation.
22 32 92 00	 A/T failed to stay engaged with (STATE MODE) mode engaged, with both EEC's off. FIM 22-00-02/101, Fig. 101, Block 1

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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.

<u>LRU/System Name</u>	<u>Acronym</u>	FIM Reference
ACARS Management Unit		23-22
Air Data Computer	ADC	34-12
Air Data Inertial Reference Unit	ADIRU	34-26
Air Supply Control and Test Unit	ASCTU	36-20
Air Traffic Control Transponder	ATC	34-53
Airborne Vibration Monitor Signal Conditioner	AVM	77–31
Antiskid/Autobrake Control Unit	AACU	32-42
APU Fire Detection System		26-15
Automatic Direction Finder Receiver	ADF	34-57
APU Control Unit (or Electronic Control Unit)	ECU	49-11
Autopilot/Flight Director	AFDS	22-00
Auxiliary Zone Temperature Controller	AZTC	2160/21-61
Brake Temperature Monitor Unit	BTMU	32-46
Bus Power Control Unit	BPCU	24-20
Cabin Pressure Controller	CPC	21-30/21-31
Cabin Temperature Controller	СТС	21-61
Digital Flight Data Acquisition Unit	DFDAU	31-31
Distance Measuring Equipment Interrogator	DME	34-55
Duct Leak (Wing and Body)		26-18
E/E Cooling Control Card (If cards installed)		21-58
ECS Bleed Configuration Card		36-10
Electronic Control Unit	ECU	49-11
Electronic Engine Control Monitor Unit (Non-FADEC Engines)	EECM	71-EECM Message Index
Electronic Flight Instrument System	EFIS	34-22

Bite Index Figure 1 (Sheet 1)

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<u>LRU/System Name</u>	<u>Acronym</u>	FIM Reference
Engine Fire/Overheat Detection System		26-11
Engine Indication and Crew Alerting System Computer	EICAS	31-41
Enhanced Ground Proximity Warning Computer	EGPWC	34-46
Equipment Cooling Systen Controller		21-58
Equipment Cooling Temperature Controller		21-58
Flap/Slat Electronic Unit	FSEU	27-51
Flap/Stabilizer Position Module	FSPM	27-58
Flight Management Computer	FMC	34-61
Fuel Quantity Indicating System Processor	FQIS	28-41
Ground Proximity Warning Computer	GPWC	34-46
HF (High Frequency) Communication		23–11
In-Flight Entertainment Equipment Cooling Card		21-58
Inertial Reference Unit	IRU	34-21
Instrument Comparator Unit	ICU	34-25
Instrument Landing System Receiver	ILS	34-31
Large Format Display System	LFDS	31–63
Lower Cargo Compartment Smoke Detection System		26–16
Maintenance Control Display Panel	MCDP	22-00
Multi-Mode Receiver	MMR	34–31
PA (Passenger Address) Amplifier		23-31
Pack Standby Temperature Controller	PSTC	21-51
Pack Temperature Controller	PTC	21-51
Passenger Entertainment System	PES	23-34
Power Supply Module (Control System Electronics Units)	PSM	27-09
Propulsion Interface and Monitor Unit (FADEC Engines)	PIMU	71-PIMU Message Index
Proximity Switch Electronics Unit	PSEU	32-09

Bite Index Figure 1 (Sheet 2)

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LRU/System Name	<u>Acronym</u>	FIM Reference
Radio Altimeter Transmitter/Receiver	RA	34-33
Rudder Ratio Changer Module	RRCM	27-09
Satellite Data Unit	SDU	23-25
Spoiler Control Module	SCM	27-09
Stabilizer Trim/Elevator Asymmetry Limit Module	SAM	27-09
Stall Warning Computer/Module (in Warning Electronic Unit)	SWC	27-32
Strut Overheat Detection System (RR Engines)		26-12
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
Warning Electronic Unit BITE Module (Stall Warning)	WEU	27-32
Weather Radar Transceiver	WXR	34-43
Wheel Well Fire Detection		26-17
Window Heat Control Unit	WHCU	30-41
Yaw Damper Module	YDM	22-21
Yaw Damper/Stabilizer Trim Module	YSM	27-09
Zone Temperature Controller	ZTC	21-60/21-61

Bite Index Figure 1 (Sheet 3)

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PREREQUISITES

MAKE SURE THIS SYSTEM WILL OPERATE:

ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)

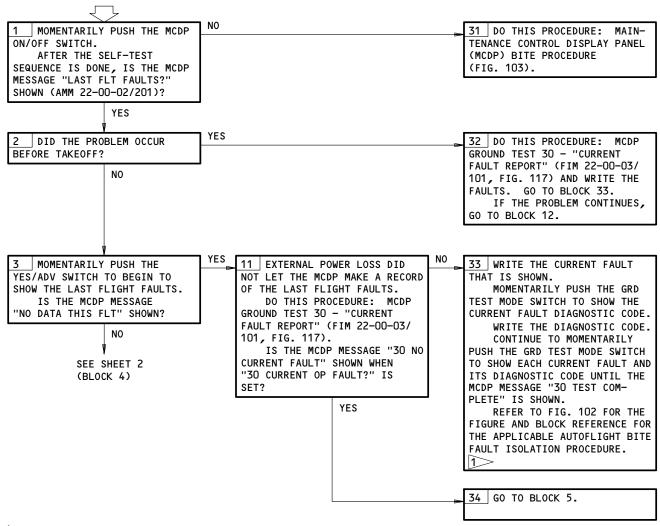
(AMM 31-41-00/501)(WHEN THE REMOTE MCDP CONTROL

PANEL IS USED)

MAKE SURE THIS CIRCUIT BREAKER IS CLOSED: 11U9

AUTOFLIGHT FLIGHT FAULTS BITE PROCEDURE

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)



IF THE LOG BOOK REPORTS AN AUTOFLIGHT PROBLEM THAT DOES NOT AGREE WITH THE MCDP FAULT MESSAGE, GO TO BLOCK 12.

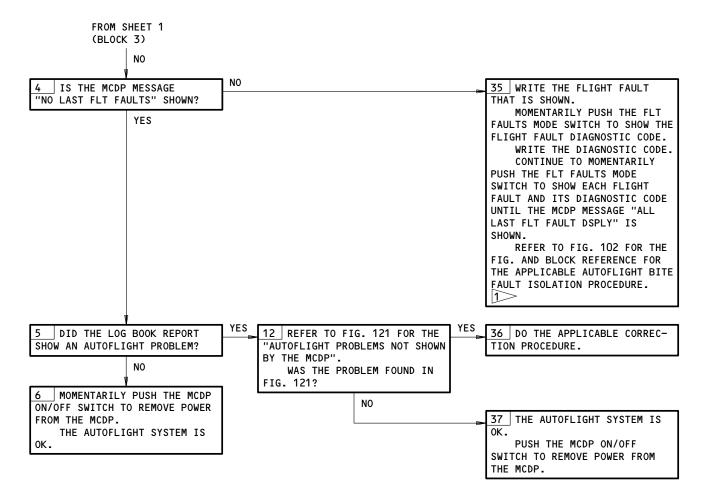
Autoflight Flight Faults BITE Procedure Figure 101 (Sheet 1)

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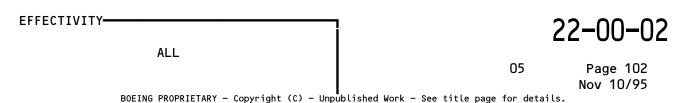
Nov 10/95

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IF THE LOG BOOK REPORTS AN AUTOFLIGHT PROBLEM THAT DOES NOT AGREE WITH THE MCDP FAULT MESSAGE, GO TO BLOCK 12.

Autoflight Flight Faults BITE Procedure Figure 101 (Sheet 2)





MCDP FAULT MESSAGE	FIG BLOCK	MCDP FAULT MESSAGE	FIG BLOCK	MCDP FAULT MESSAGE	FIG BLOCK
ADC L, ADC R ADC L/FCC L,	105-1 105-2	COWL AI L/TMC COWL AI R/TMC	107-3	FLAP POS L, FLAP POS C,	110-5
ADC L/FCC C ADC L/FMC L ADC L/FMC R ADC R/FCC R ADC R/FMC L	105-3	DME L, DME R DME L/FMC L DME L/FMC R DME R/FMC L DME R/FMC R	108-1	FLAP POS R FLAP POS L-R CH FLAP POS L-C CH FLAP POS R-C CH FLAP POS/FCC L,	110-7 110-6
ADC R/FMC R S ADC L/TMC ADC R/TMC	105-2 105-3	ECS L H/L/TMC ECS R H/L/TMC	109–1	FLAP POS/FCC C, FLAP POS/FCC R FLAP POS/TMC	110-6
ADC SYST L ADC SYST R ADC/IRU L	105-5 105-6	ECS L/TMC ECS R/TMC	109-2	FMC L, FMC R FMC L/TMC,	110-9 110-12
ADC/IRU C ADC/IRU R ADC L-R CH	105-4	EEC L, EEC R EEC L PRIM/TMC EEC R PRIM/TMC EEC L SEC/TMC	109-3 109-5 109-6	FMC R/TMC FMC L/FMC R FMC R/FMC L FMC R-FMC L	110–11
ADP/TMC	105-7	EEC R SEC/TMC	109-5 109-6	FMC NCD	110-10
AIL SRVO/FCC L, AIL SRVO/FCC C, AIL SRVO/FCC R AIL SRVO/FCC L-R,	105-8 105-9	EFIS PNL/FMC L } EFIS PNL/FMC R } EICAS L, EICAS R EICAS L/FMC L }	109-4	FUEL QTY FUEL QTY/FMC L FUEL QTY/FMC R GA SW/FCC L,	110-8
AIL SRVO/FCC L-C, AIL SRVO/FCC R-C	105 10	ELEV SRVO/FCC L,	109-7	GA SW/FCC C, GA SW/FCC R	444.4
A/G 1/TMC A/P DISC/FCC L, A/P DISC/FCC C, A/P DISC/FCC R	105–10	ELEV SRVO/FCC C, ELEV SRVO/FCC R ELEV SRV/FCC L-C ELEV SRV/FCC L-R	109-8	GA SW/TMC GPS L, GPS R GPS L/FMC L, GPS L/FMC R	111-1 111-2 111-3
A/T DISC SW/TMC A/T SRVO 1/TMC	105–12 105–13	ELEV SRV/FCC R-C EXCESS WHEEL IN	109-9	GPS R/FMC L, GPS L/FMC R	111-4
BUS ISLN/FCC L, BUS ISLN/FCC C, BUS ISLN/FCC R	106-1	FCC L, FCC C, FCC R FCC L/CONFIG ERR, FCC C/CONFIG ERR, FCC R/CONFIG ERR	110–1 110–2	GPS L RF IN GPS R RF IN HYD PWR L, HYD PWR C,	111-5 111-6 112-1
CDU L, CDU R CDU L/FMC L CDU L/FMC R	107-1	FCC L-R CH, FCC L-C CH FCC R-C CH	110-3	HYD PWR R	
CDU R/FMC L CDU R/FMC R CLOCK L	107-2	FCC L/FCC C, FCC L/FCC R FCC C/FCC L, FCC C/FCC R	110-4		
CLOCK R CLOCK/FMC L CLOCK/FMC R		FCC R/FCC L, FCC R/FCC C			

1 REF FIG. 102A FOR THE FMC FLIGHT FAULT AND THE CORRECT FAULT ISOLATION PROCEDURE.

Autoflight Flight Faults BITE Fault Isolation Procedure Reference Figure 102 (Sheet 1)

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FAULT ISOLATION/MAINT MANUAL

MCDP FAULT MESSAGE	FIG BLOCK	MCDP FAULT MESSAGE	FIG BLOCK	MCDP FAULT MESSAGE	FIG BLOCK
ILS BEAM ERR ILS L, ILS C, ILS R ILS/FCC L, ILS/FCC C,	113-1 113-2 113-4	MAG-TRUE/FCC L, MAG-TRUE/FCC C, MAG-TRUE/FCC R	114-1	SHELF/FCC L, SHELF/FCC C, SHELF/FCC R	116-3
TIS/ECC D	113-4			SHELF/THC	116-4
ILS/FMC L		MCP	114-2		''- '
ILS/FMC R		MCP/FCC L,	114-3	SLAT SW/FCC L,	116-5
ILS L-C CH,	113-3	MCP/FCC C		SLAT SW/FCC C,	
ILS L-R CH		MCP/FCC R	114-4	SLAT SW/FCC R	
ILS R-C CH		MCP/FMC L	114-3	SLAT SW/TMC	116-5
ILS CP/ILS L	113-5	MCP/FMC R	114-4	SPD BK POS/FCC L,	116-6
ILS CP/ILS C	''-	MCP/TMC	114–3	SPD BK POS/FCC C,	
ILS CP/ILS R		MODE ERR	114-5	SPD BK POS/FCC R	
ILS G/S L NCD,	113-6	NO DATA THIS FLT	FIG. 101	STAR ROS I	116-7
ILS G/S C NCD,		NO INFC FCC L MCDP	FIG. 101	STAB POS L, STAB POS C,	110-7
ILS G/S R NCD		NO INFO FCC C MCDP		STAB POS C,	
ILS LOC L NCD,	113-6	NO INFO FCC R MCDP	\ REF	STAB POS L-R CH,	116-10
ILS LOC C NCD,		NO INFO FMC L MCDP	FIG. 103	STAB POS L-C CH,	
ILS LOC R NCD		NO INFC FMC R MCDP		STAB POS R-C CH	
IRU L, IRU C, IRU R	113-9	NO INFC TMC MCDP		STAB POS/FCC L.	116-8
IRU L EXCESS MOT	113-11			STAB POS/FCC C.	
IRU C EXCESS MOT	115 11	RA L, RA C, RA R	115-1	STAB POS/FCC R	
IRU R EXCESS MOT		RA L-R CH,	115-2	STAB L/FCC L,	116-9
IRU L NO INIT,	113-12	RA L-C CH		STAB L/FCC C	
IRU C NO INIT,	''- '-	RA R-C CH	115-3	STAB L/FCC R	
IRU R NO INIT		RA/FCC L, RA/FCC C,	115-3	STAB R/FCC R,	
IRU L REALIGN,	113-13	RA/FCC C,		STAB R/FCC C	
IRU C REALIGN,		RATICE R		STAB R/FCC L	
IRU R REALIGN		RUD SRVO L,	115-5	TMC	117-1
IRU L/FCC L,	113-14	RUD SRVO C,		TMC/FMC L	117-2
IRU C/FCC C,		RUD SRVO R		TMC/FMC R	''' -
IRU R/FCC R		RUD SRVO/FCC L,	115-6	TMSP/TMC	117-3
IRU L/TMC,	113-14	RUD SRVO/FCC C,			
IRU R/TMC		RUD SRVO/FCC R		VOR L, VOR R	118–1
IRU L-R CH,	113–10	RUD SRVO/FCC L-R,	115-7	VOR L/FMC L	
IRU L-C CH,		RUD SRVO/FCC L-C,		VOR L/FMC R	
IRU R-C CH		RUD SRVO/FCC R-C		VOR R/FMC L	
IRU L/FMC L		SAM L/FCC L,	116-1	VOR R/FMC R J	
IRU L/FMC R		SAM L/FCC C		WG A/I/TMC	119–1
IRU C/FMC L 1		SAM R/FCC R,		YSM L/FCC L,	119-2
IRU R/FMC L		SAM R/FCC C		YSM L/FCC C,	'''
IRU R/FMC R		SERVO PWR/FCC L,		YSM R/FCC R,	
-		SERVO PWR/FCC C,	116-2	YSM R/FCC C	
ISLN VLV L/TMC,	113–15	SERVO PWR/FCC R			
ISLN VLV R/TMC					

Autoflight Flight Faults BITE Fault Isolation Procedure Reference Figure 102 (Sheet 2)

ALL ALL

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MCDP FAULT	FIG. 120
MESSAGE	SHT - BLOCK
ADC L/FMC L	1 - 1
ADC L/FMC R	1 - 1
ADC R/FMC L	2 - 2
ADC R/FMC R	2 - 2
CDU L/FMC L	3 - 3
CDU L/FMC R	3 - 4
CDU R/FMC L	3 - 5
CDU R/FMC R	3 - 6
CLOCK/FMC L	4 - 7
CLOCK/FMC R	4 - 8
DME L/FMC L	5 - 9
DME L/FMC R	5 - 9
DME R/FMC L	5 - 10
DME R/FMC R	5 - 10
EFIS PNL/FMC L	6 - 11
EFIS PNL/FMC R	6 - 11
EICAS L/FMC L	6 - 12
EICAS R/FMC R	6 - 12
FMC L/FMC R	7 - 13
FMC R/FMC L	7 - 14
FUEL QTY/FMC L	8 - 15
FUEL QTY/FMC R	8 - 16
ILS/FMC L	8 - 17
ILS/FMC R	8 - 17
IRU L/FMC L	9 - 18
IRU L/FMC R	9 - 18
IRU C/FMC L	10 - 19
IRU C/FMC R	10 - 19
IRU R/FMC L	11 - 20
IRU R/FMC R	11 - 20
VOR L/FMC L	12 - 21
VOR L/FMC R	12 - 21
VOR R/FMC L	12 - 22
VOR R/FMC R	12 - 22

Autoflight Flight Faults BITE Fault Isolation Procedure - FMC Configuration Reference Figure 102A

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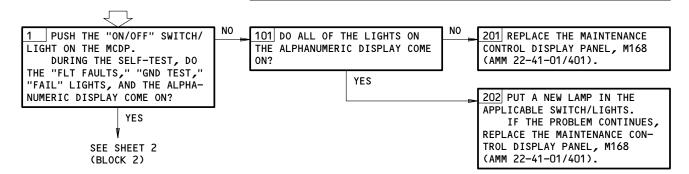
PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
AIR/GROUND RELAYS (AMM 32-09-02/201)
FLIGHT MANAGEMENT SYSTEM (AMM 34-61-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11E16,11E17,11E18,11E20,11E21,11E34,11E35,11E36, 11F14,11F15,11F16,11U9

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)

MAINTENANCE CONTROL DISPLAY PANEL (MCDP) FAULT ISOLATION BITE PROCEDURE



NOTE: YOU MUST GO OUT OF THE MCDP GRD TEST MODE AND THEN GO BACK INTO IT AFTER FAILURES SHOWN DURING A GROUND TEST ARE CORRECTED. PUSH THE "FLT FAULTS MODE" SWITCH TO GO OUT OF GRD TEST MODE. PUSH THE "GRD TEST MODE" SWITCH TO GO BACK INTO THE GRD TEST MODE. IF THIS IS NOT DONE, THE FAILURE MESSAGE WILL SHOW ALTHOUGH THE FAILURE WAS CORRECTED.

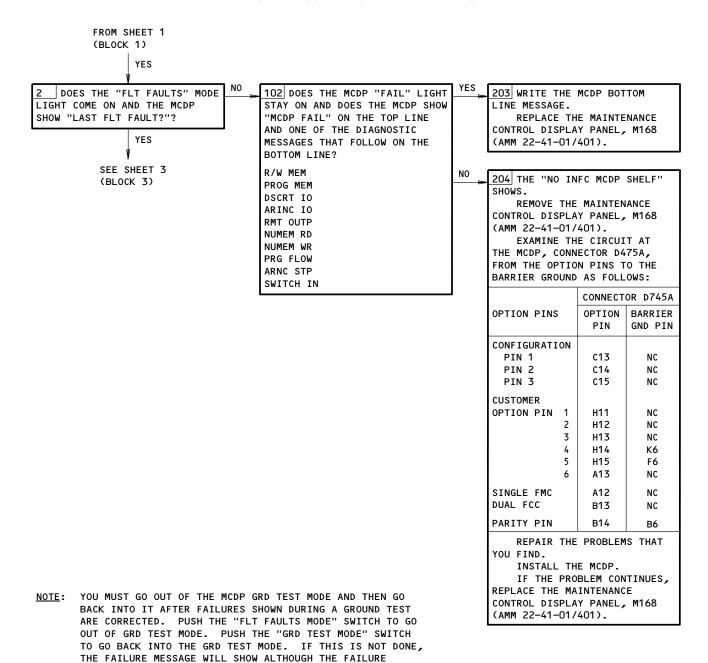
Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 1)

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Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 2)

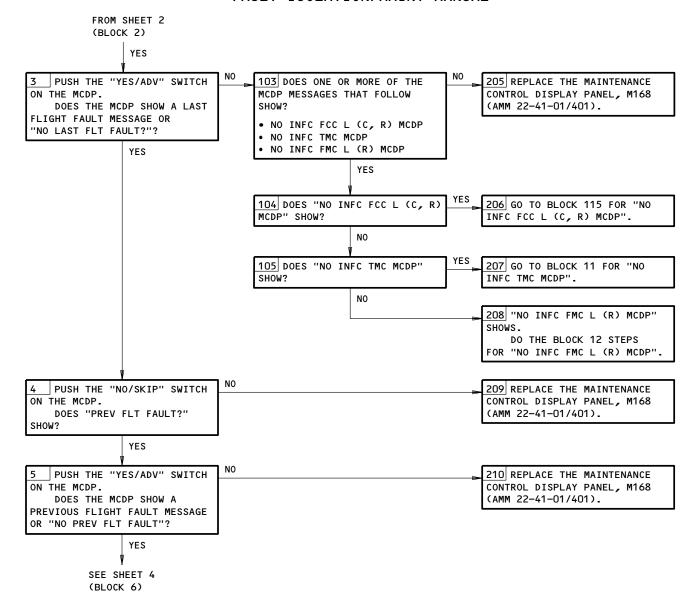
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WAS CORRECTED.

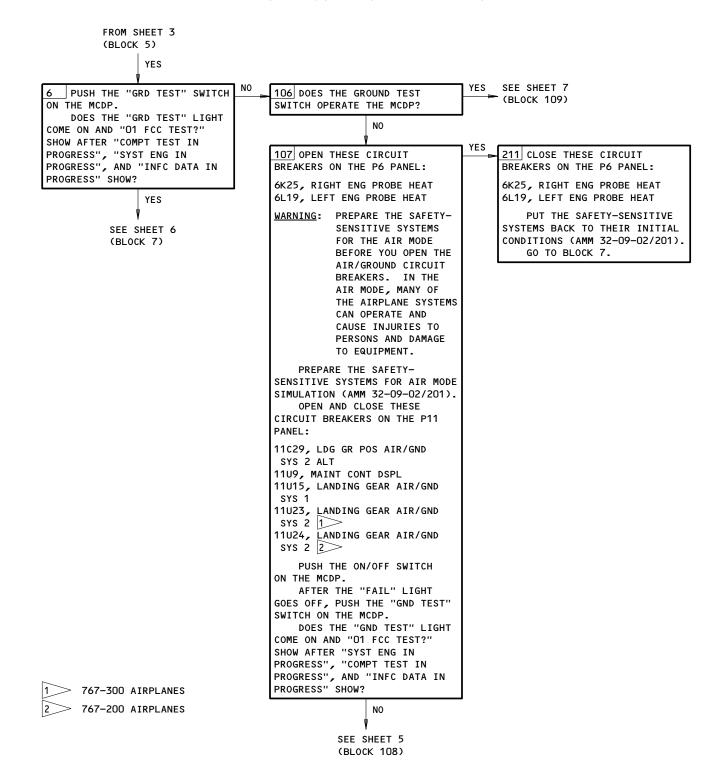
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Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 3)



Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 4)

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FROM SHEET 4 (BLOCK 107)

NΩ

108 OPEN THIS CIRCUIT BREAKER ON THE P11 PANEL, 11U15, LANDING GEAR AIR/GND SYS 1. OPEN AND CLOSE THIS CIR-CUIT BREAKER ON THE P11 PANEL, 11U9, MAINT CONT DSPL. PUSH THE ON/OFF SWITCH ON

THE MCDP. DOES "PRESENT FLT FAULTS?"

SHOW AFTER THE FAIL LIGHT GOES

NO

212 REPLACE THE SYS 2 AIR/GND RELAY, K201, ON THE P37 PANEL (AMM 32-09-02/401).

IF THE PROBLEM CONTINUES, REMOVE THE MAINTENANCE CONTROL DISPLAY PANEL, M168 (AMM 22-41-01/401).

EXAMINE THE CIRCUIT FROM CONNECTOR D3686, PINS 8,10, TO GND, AND PINS 7,11, OF RELAY K201, TO PIN H4, ON THE MCDP, CONNECTOR D745A (WDM 22-14-31; 22-41-11).

REPAIR THE PROBLEMS THAT YOU FIND.

INSTALL THE MCDP. CLOSE THESE CIRCUIT BREAKERS ON THE P6 PANEL:

6K25, RIGHT ENG PROBE HEAT 6L19, LEFT ENG PROBE HEAT.

PUT THE SAFETY-SENSITIVE SYSTEMS BACK TO THEIR INITIAL CONDITIONS (AMM 32-09-02/201).

213 REPLACE THE SYS 1 AIR/GND RELAY, K142, ON THE P36 PANEL (AMM 32-09-02/401).

IF THE PROBLEM CONTINUES, REMOVE THE MAINTENANCE CONTROL DISPLAY PANEL, M168 (AMM 22-41-01/401).

EXAMINE THE CIRCUIT FROM CONNECTOR D3614, PINS 8,10, TO GND, AND PINS 7,11 OF RELAY K142, TO PIN D4, ON THE MCDP, CONNECTOR D745A (WDM 22-14-31; 22-41-11).
REPAIR THE PROBLEMS THAT

YOU FIND.

INSTALL THE MCDP. CLOSE THESE CIRCUIT BREAKERS ON THE P6 PANEL:

6K25, RIGHT ENG PROBE HEAT 6L19, LEFT ENG PROBE HEAT.

PUT THE SAFETY-SENSITIVE SYSTEMS BACK TO THEIR INITIAL CONDITIONS (AMM 32-09-02/201).

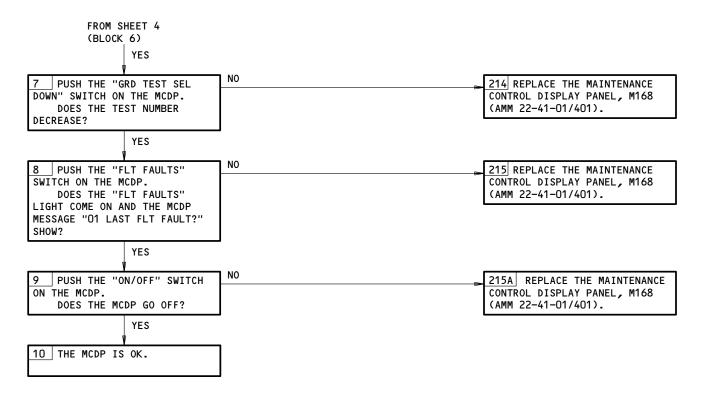
Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 5)

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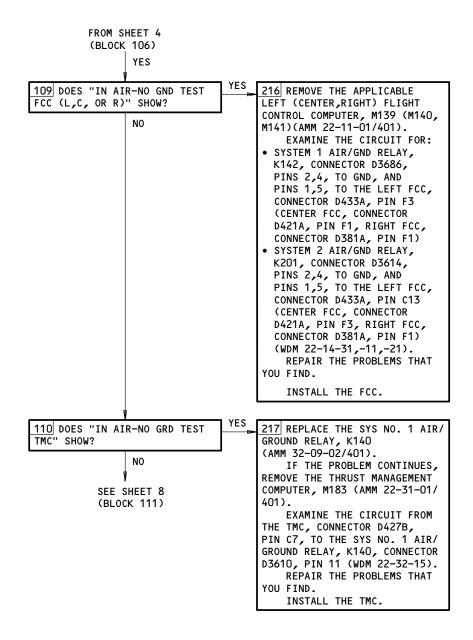
Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 6)

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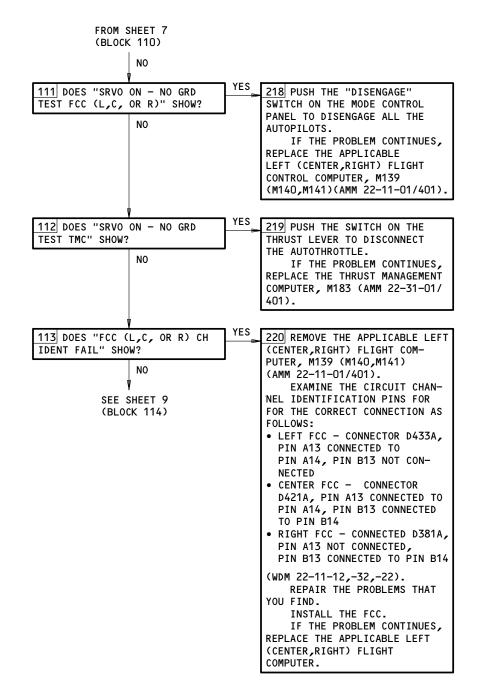
Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 7)

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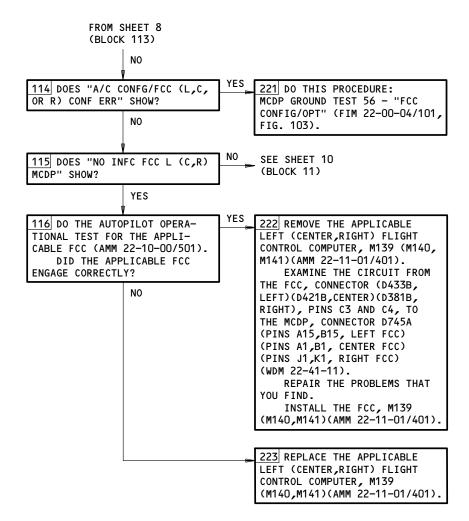
Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 8)

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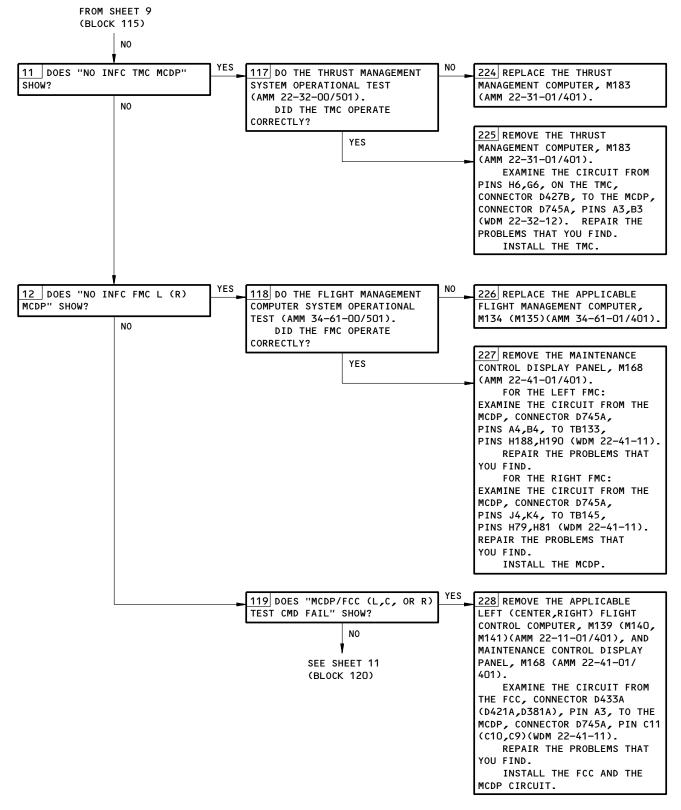
Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 9)

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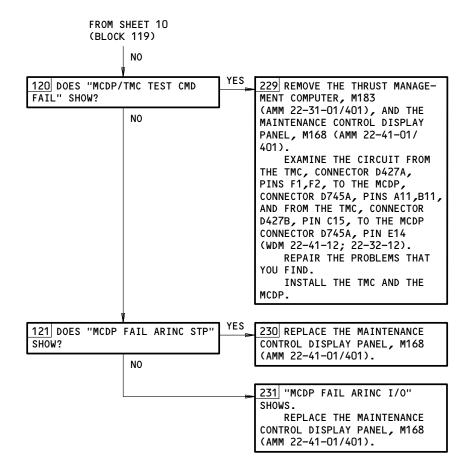
Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 10)

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Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 11)

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)

(AMM 31-41-00/501)

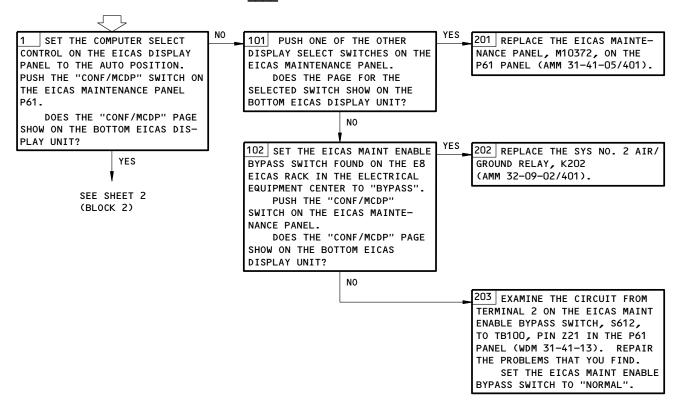
AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THIS CIRCUIT BREAKER IS CLOSED:

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)

REMOTE MAINTENANCE CONTROL DISPLAY PANEL FAULT ISOLA-TION PROCEDURES

NOTE: THE MCDP OPERATION MUST BE CORRECT.



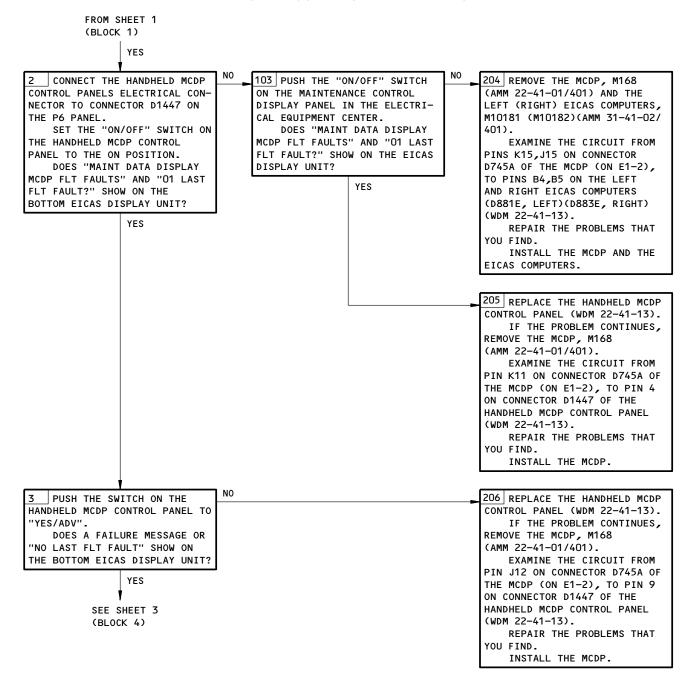
Remote Maintenance Control Display Panel Fault Isolation Procedures Figure 103A (Sheet 1)

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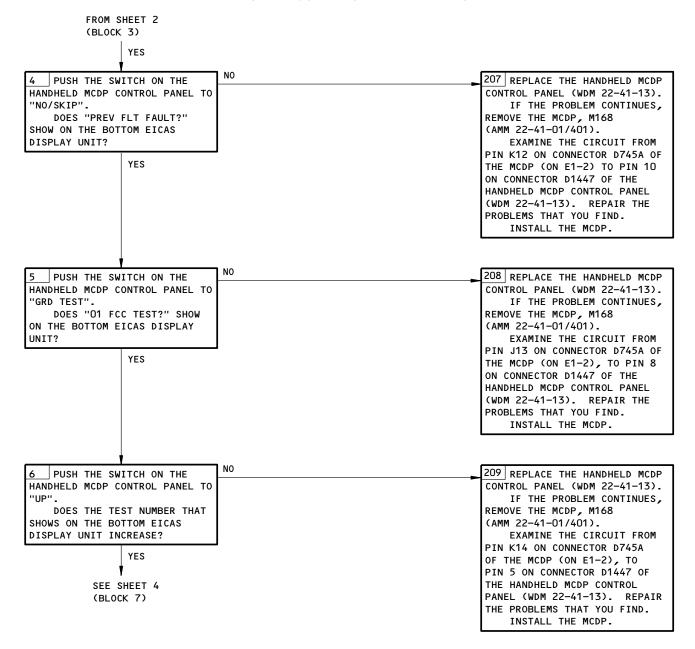
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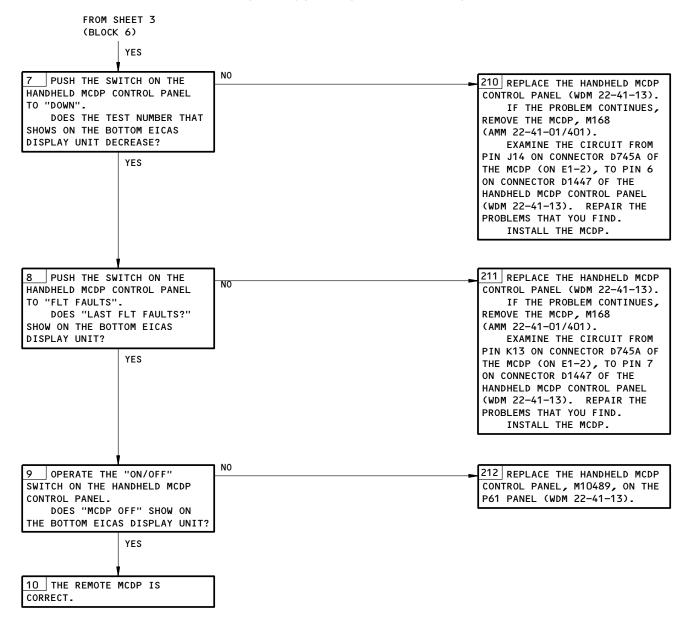
Remote Maintenance Control Display Panel Fault Isolation Procedures
Figure 103A (Sheet 2)



Remote Maintenance Control Display Panel Fault Isolation Procedures
Figure 103A (Sheet 3)

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Remote Maintenance Control Display Panel Fault Isolation Procedures
Figure 103A (Sheet 4)



	FAULT 150LATION/MAINT MANUAL					
	CHANNEL \[\begin{align*} 1 &= LEFT \\ 2 &= RIGHT \\ 3 &= CENTER \end{align*} \] \[\begin{align*} X & X & X & X \\ 3 &= CENTER \end{align*} \] \[\begin{align*} \text{INTERMITTENT FLIGHT FAULTS} \\ \text{IOR SSFD SENSOR FAULT}\\ \text{1 &= YES} \\ \text{0 &= NO} \\ \text{SOURCE COMPUTER} \end{align*} \] \[\begin{align*} \text{DIAGNOSTIC (DIAG) CODE} \end{align*}					
	SOURCE COIN OTE	SOURCE COMPUTER	, , , , , , , , , , , , , , , , , , , ,			
DIAG			_			
CODE	FCC = 1	FMC = 2	TMC = 3			
001	ACTIVITY MONITOR CANNOT FIND DATA ON THE ADC INPUT BUS	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT ADC INPUT BUS	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT ADC INPUT BUS			
002	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT ADC INPUT BUS	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT ADC INPUT BUS			
003 004 005 006	NOT USED	NOT USED	NOT USED			
007	ACTIVITY MONITOR CANNOT FIND DATA ON THE INPUT BUS	ACTIVITY MONITOR CANNOT FIND DATA ON THE CROSS-CHANNEL DATA BUS	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT FMC INPUT BUS			
800	CROSS CHANNEL DATA SHOWS THAT THE ACTIVITY MONITOR CANNOT FIND DATA ON THE OTHER FMC INPUT BUS	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT FMC INPUT BUS			
009	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT DME INPUT BUS	NOT USED			
010	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT DME INPUT BUS	NOT USED			
011	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE EICAS INPUT BUS	NOT USED			
012	NOT USED	NOT USED	NOT USED			
013	NOT USED	NOT USED	NOT USED			
014	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE FUEL QUANTITY INPUT BUS	NOT USED			
015	ACTIVITY MONITOR CANNOT FIND DATA ON THE ILS INPUT BUS - FOUND BY THE SOURCE FCC MONITOR	ACTIVITY MONITOR CANNOT FIND DATA ON THE ILS INPUT BUS	NOT USED			
016	ACTIVITY MONITOR CANNOT FIND DATA ON THE ILS INPUT BUS - FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE LEFT FCC	NOT USED	NOT USED			
017	ACTIVITY MONITOR CANNOT FIND DATA ON THE ILS INPUT BUS — FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE RIGHT FCC	NOT USED	NOT USED			

MCDP Diagnostic Codes Figure 104 (Sheet 1)

ALL ALL

FROM THE RELATIVE RIGHT FCC

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	CHANNEL 1 = LEFT 2 = RIGHT 3 = CENTER X X X X X X X (OR SSFD SENSOR FAULT) 1 = YES 0 = NO SOURCE COMPUTER DIAGNOSTIC CODE				
DIAG		SOURCE COMPUTER			
CODE	FCC = 1	FMC = 2	TMC = 3		
018	ACTIVITY MONITOR CANNOT FIND DATA ON THE IRU INPUT BUS - FOUND BY THE SOURCE FCC MONITOR	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT IRU INPUT BUS	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT IRU INPUT BUS		
019	ACTIVITY MONITOR CANNOT FIND DATA ON THE IRU INPUT BUS — FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE LEFT FCC	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT IRU INPUT BUS	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT IRU INPUT BUS		
020	ACTIVITY MONITOR CANNOT FIND DATA ON THE IRU INPUT BUS — FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE RIGHT FCC	ACTIVITY MONITOR CANNOT FIND DATA ON THE CENTER IRU INPUT BUS	NOT USED		
021	TEST WORD USED TO TEST THE MCP BUS ACTIVITY IS NOT CORRECT	ACTIVITY MONITOR CANNOT FIND DATA ON THE MCP INPUT BUS	ACTIVITY MONITOR CANNOT FIND DATA ON THE MCP INPUT BUS		
022	FCC SELF TEST FINDS A LOW SPEED WRAPAROUND FAILURE	ACTIVITY MONITOR CANNOT FIND DATA ON THE TMC INPUT BUS	NOT USED		
023	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT VOR INPUT BUS	NOT USED		
024	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT VOR INPUT BUS	NOT USED		
025	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA FROM THE ONSIDE CDU	NOT USED		
026	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA FROM THE OFFSIDE CDU	NOT USED		
027	UNSCHEDULED TRIM-L	ACTIVITY MONITOR CANNOT FIND DATA ON THE L GPS INPUT BUS	NOT USED		
028	UNSCHEDULED TRIM-R	ACTIVITY MONITOR CANNOT FIND DATA ON THE R GPS INPUT BUS	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT EPCS PRIMARY INPUT BUS		
029	COMMAND RESPONSE MONITOR FINDS A LEFT STABILIZER TRIM SERVO FAULT (OR DEAD TRIM-L)	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT EPCS SECONDARY INPUT BUS		
030	COMMAND RESPONSE MONITOR FINDS A RIGHT STABILIZER TRIM SERVO FAULT (OR DEAD TRIM-R)	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT EPCS PRIMARY INPUT BUS		
031	LEFT SAM INVALID, TRIM FAULT, RECEIVED FROM CSEU	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT EPCS SECONDARY INPUT BUS		

MCDP Diagnostic Codes Figure 104 (Sheet 2)

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	CHANNEL 1 = LEFT				
DIAG		SOURCE COMPUTER			
CODE	FCC = 1	FMC = 2	TMC = 3		
032	RIGHT SAM INVALID, TRIM FAULT, RECEIVED FROM THE CSEU	NOT USED	NOT USED		
033 THRU 039	NOT USED	NOT USED	NOT USED		
040	FAILURE WARNING RECEIVED FROM THE ADC	FAILURE WARNING RECEIVED FROM THE LEFT ADC	FAILURE WARNING RECEIVED FROM THE LEFT ADC		
041	NOT USED	NOT USED	NOT USED		
042	NOT USED	NOT USED	NOT USED		
043	ACTIVITY MONITOR CANNOT FIND SELECTED RUNWAY HEADING DATA ON THE ILS INPUT BUS	NOT USED	NOT USED		
044	NOT USED	FAILURE WARNING RECEIVED FROM THE RIGHT ADC	FAILURE WARNING RECEIVED FROM THE RIGHT ADC		
045 THRU 049	NOT USED	NOT USED	NOT USED		
050	NOT USED	NOT USED	FAILURE WARNING RECEIVED FROM THE LEFT EPCS PRIMARY CHANNEL		
051	NOT USED	NOT USED	FAILURE WARNING RECEIVED FROM THE LEFT EPCS SECONDARY CHANNEL		
052	FAILURE WARNING RECEIVED FROM THE ILS - FOUND BY THE SOURCE FCC MONITOR	FAILURE WARNING RECEIVED FROM THE ILS	NOT USED		
053	FAILURE WARNING RECEIVED FROM THE ILS - FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE LEFT FCC	NOT USED	NOT USED		
054	FAILURE WARNING RECEIVED FROM THE ILS - FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE RIGHT FCC	NOT USED	NOT USED		
055	FAILURE WARNING RECEIVED FROM THE ILS - FOUND BY THE SOURCE FCC MONITOR	FAILURE WARNING RECEIVED FROM THE LEFT IRU	FAILURE WARNING RECEIVED FROM THE LEFT IRU		
056	NO COMPUTED DATA FOR THE INERTIAL ALTITUDE AND INERTIAL VERTICAL SPEED RECEIVED FROM THE IRU	NOT USED	NO COMPUTED DATA FOR THE INERTIAL ALTITUDE AND THE INERTIAL VERTICAL SPEED RECEIVED FROM THE LEFT IRU		

MCDP Diagnostic Codes Figure 104 (Sheet 3)

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FAULT ISOLATION/MAINT MANUAL				
	CHANNEL 1 = LEFT			
DIAG	SOURCE COMPUTER			
CODE	FCC = 1	FMC = 2	TMC = 3	
057	ALIGN FAULT RECEIVED FROM THE IRU	NOT USED	ALIGN FAULT RECEIVED FROM THE LEFT IRU	
058	NO START DATA RECEIVED FROM THE	NOT USED	NO START DATA RECEIVED FROM THE LEFT IRU	
059	TOO MUCH MOVEMENT RECEIVED FROM THE IRU WHEN ALIGNED	NOT USED	TOO MUCH MOVEMENT RECEIVED FROM THE LEFT IRU WHEN ALIGNED	
060	NOT USED	NOT USED	NOT USED	
061	FAILURE WARNING RECEIVED FROM THE IRU - FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE LEFT FCC	FAILURE WARNING RECEIVED FROM THE RIGHT IRU	FAILURE WARNING RECEIVED FROM THE RIGHT IRU	
062	NOT USED	NOT USED	NO COMPUTED DATA FOR THE INERTIAL ALTITUDE AND THE INERTIAL VERTICAL SPEED RECEIVED FROM THE RIGHT IRU	
063	NOT USED	NOT USED	ALIGN FAULT RECEIVED FROM THE RIGHT IRU	
064	NOT USED	NOT USED	NO START DATA RECEIVED FROM THE RIGHT IRU	
065	NOT USED	NOT USED	TOO MUCH MOVEMENT RECEIVED FROM THE RIGHT IRU WHEN ALIGNED	
066	NOT USED	NOT USED	NOT USED	
067	FAILURE WARNING RECEIVED FROM THE IRU - FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE RIGHT FCC	FAILURE WARNING RECEIVED FROM THE CENTER IRU	NOT USED	
068 THRU 072	NOT USED	NOT USED	NOT USED	
073	NOT USED	FAILURE WARNING RECEIVED FROM THE MCP	FAILURE WARNING RECEIVED FROM THE MCP	
074 THRU 077	NOT USED	NOT USED	NOT USED	

MCDP Diagnostic Codes Figure 104 (Sheet 4)

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	CHANNEL 1 = LEFT				
DIAG	SOURCE COMPUTER				
CODE	FCC = 1	FMC = 2	TMC = 3		
078	VERTICAL SPEED MODE ERROR - NOT ENOUGH THRUST FOR THE GIVEN VERTICAL SPEED OR ALTITUDE HOLD	NOT USED	NOT USED		
079	MODE ERROR - TOO MUCH PILOT INPUT TO THE WHEEL	NOT USED	NOT USED		
080	ACTIVITY MONITOR CANNOT FIND DATA ON THE RA INPUT BUS - FOUND BY THE SOURCE FCC MONITOR	FAILURE WARNING RECEIVED FROM THE TMC	TMC SELF TEST FOUND A TMC FAILURE		
081	ACTIVITY MONITOR CANNOT FIND DATA ON THE RA INPUT BUS — FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE LEFT FCC	NOT USED	NOT USED		
082	ACTIVITY MONITOR CANNOT FIND DATA ON THE RA INPUT BUS - FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE RIGHT FCC	NOT USED	NOT USED		
083	NOT USED	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE TMSP INPUT BUS		
084	NOT USED	NOT USED	AUTOTHROTTLE SERVO 1 FAULT		
085	NOT USED	NOT USED	NOT USED		
086	FAILURE WARNING RECEIVED FROM THE RA - FOUND BY THE SOURCE FCC MONITOR	NOT USED	NOT USED		
087	FAILURE WARNING RECEIVED FROM THE RA - FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE LEFT FCC	NOT USED	NOT USED		
088	FAILURE WARNING RECEIVED FROM THE RA - FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE RIGHT FCC	NOT USED	NOT USED		
089 THRU 091	NOT USED	NOT USED	NOT USED		

MCDP Diagnostic Codes Figure 104 (Sheet 5)

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FAULT ISOLATION/MAINT MANUAL					
	CHANNEL 1 = LEFT				
DIAG		SOURCE COMPUTER			
CODE	FCC = 1	FMC = 2	TMC = 3		
092	NOT USED	NOT USED	AIR/GROUND SYSTEM 1 SHOWS AN IN-AIR CONDITION WHEN THE TAS IS LESS THAN 100 KNOTS OR AN ON-GROUND CONDITION WHEN THE TAS IS MORE THAN 220 KNOTS		
093	NOT USED	NOT USED	PARITY PIN OR PROGRAM PIN ERROR		
094	NOT USED	NOT USED	FLAP POSITION IS NOT BETWEEN THE LIMITS OF -2° THRU +40°		
095	NOT USED	NOT USED	SLAT SWITCH IMPEDANCE FAULT OR SLAT NOT TRUE FOR A FLAP ANGLE GREATER THAN 10° AND DOES NOT CHANGE MORE THAN 0.6°/SEC		
096	NOT USED	NOT USED	AUTOTHROTTLE GO-AROUND AND THE REVERSER ARE SET AT THE SAME TIME		
097	NOT USED	NOT USED	AUTOTHROTTLE DISCONNECT AND THE DISCONNECT RESET CONDITIONS DO NOT AGREE		
098	NOT USED	NOT USED	AUTOTHROTTLE SERVO DID NOT ARM WHEN THE MCP A/T ARM SWITCH WAS SET TO THE ARM POSITION		
099	MULTI-CHANNEL ENGAGE FAILURE DURING APPROACH WHEN THE AIRPLANE IS ABOVE 600 FEET	NOT USED	NOT USED		
100	DEDICATED ROLLOUT DIGITAL DISCRETE OR THE FLARE ENGAGE DISCRETE FROM THE SOURCE FCC AND RECEIVED ON THE CROSS CHANNEL FROM THE RELATIVE LEFT FCC DO NOT AGREE	NOT USED	NOT USED		
101	DEDICATED ROLLOUT DIGITAL DISCRETE OR THE FLARE ENGAGE DISCRETE FROM THE SOURCE FCC AND RECEIVED ON THE CROSS CHANNEL FROM THE RELATIVE RIGHT FCC DO NOT AGREE	NOT USED	LEFT ECS FAULT		
102	RELATIVE RIGHT FCC CHANNEL ENGAGE STATUS FROM THE CROSS CHANNEL DATA AND FROM THE RECEIVED DISCRETE DO NOT AGREE	NOT USED	LEFT ECS H/L FAULT		
103	RELATIVE LEFT FCC CHANNEL ENGAGED STATUS FROM THE CROSS CHANNEL DATA AND FROM THE	NOT USED	RIGHT ECS FAULT		

MCDP Diagnostic Codes Figure 104 (Sheet 6)

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RECEIVED DISCRETE DO NOT AGREE

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CHANNEL 1 = LEFTINTERMITTENT FLIGHT FAULTS $X \quad X \quad \underline{X \quad X \quad X} \quad X$ 2 = RIGHT(OR SSFD SENSOR FAULT) 3 = CENTER 1 = YES0 = N0SOURCE COMPUTER DIAGNOSTIC CODE SOURCE COMPUTER DIAG CODE FCC = 1FMC = 2TMC = 3104 RIGHT ECS H/L FAULT NOT USED NOT USED 105 NOT USED NOT USED NOT USED 106 NOT USED NOT USED NOT USED 107 NOT USED NOT USED AIR-DRIVEN PUMP IMPEDANCE FAULT 108 IMPACT PRESSURE FROM THE LEFT NOT USED LEFT ISOLATION VALVE FAULT ADC AND THE RIGHT ADC ARE DIFFERENT BY MORE THAN 10 LB/FT2 109 NOT USED NOT USED RIGHT ISOLATION VALVE FAULT 110 RELATIVE LEFT FCC CROSS CHANNEL NOT USED NOT USED WRAPAROUND TEST WORD IS NOT CORRECT 111 RELATIVE RIGHT FCC CROSS NOT USED LEFT COWL ANTI-ICE FAULT CHANNEL WRAPAROUND TEST WORD IS NOT CORRECT NOT USED NOT USED RIGHT COWL ANTI-ICE FAULT 112 113 RUNWAY THE HEADING DATA NOT USED NOT USED RECEIVED ON THE ILS INPUT BUS IS DIFFERENT THAN THE CROSS CHANNEL DATA BY MORE THAN 1° 114 NORMAL ACCELERATION FAILURE NOT USED WING ANTI-ICE FAULT WARNING RECEIVED FROM THE IRU (SSFD) PITCH RATE FROM THE IRU IS 115 NOT USED THE REVERSER AND THE IN-AIR DIFFERENT THAN THE PITCH RATE CONDITIONS ARE SET AT THE SAME FROM THE OTHER IRUS BY MORE TIME THAN 1° 116 ROLL RATE FROM THE IRU IS NOT USED NOT USED DIFFERENT THAN THE ROLL RATE FROM THE OTHER IRUS BY MORE THAN 1° YAW RATE FROM THE IRU IS 117 NOT USED NOT USED

> MCDP Diagnostic Codes Figure 104 (Sheet 7)

NOT USED

NOT USED

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DIFFERENT THAN THE YAW RATE FROM THE OTHER IRUS BY MORE

FAILURE WARNING RECEIVED FROM

FLIGHT PATH ACCELERATION

THAN 1°

NOT USED

THE IRU (SSFD)

19

NOT USED

SIGN STATUS MATRIX (SSM) INVALID - LEFT TRA

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	CHANNEL 1 = LEFT 2 = RIGHT 3 = CENTER X X X X X X (OR SSFD SENSOR FAULT) 1 = YES 0 = NO SOURCE COMPUTER DIAGNOSTIC CODE			
DIAG	SOURCE COMPUTER			
CODE	FCC = 1	FMC = 2	TMC = 3	
120	MODE ERROR, NO CALCULATED HORI- ZONTAL MOVEMENT DATA FROM THE FMC IN THE LNAV MODE	NOT USED	SIGN STATUS MATRIX (SSM) INVALID - RIGHT TRA	
121	MODE ERROR, NO CALCULATED VERT- ICAL MOVEMENT DATA FROM THE FMC IN THE VNAV MODE	NOT USED	NOT USED	
122	TRUE HEADING FAILURE WARNING RECEIVED FROM THE IRU (SSFD)	NOT USED	FAILURE WARNING RECEIVED FROM THE RIGHT EPCS PRIMARY CHANNEL	
123	ACTIVITY MONITOR CANNOT FIND TRUE TRACK ANGLE DATA FROM THE IRU (SSFD)	NOT USED	FAILURE WARNING RECEIVED FROM THE RIGHT EPCS SECONDARY CHANNEL	
124	CROSS TRACK HORIZONTAL ACCELER- ATION FAILURE WARNING RECEIVED FROM THE IRU (SSFD)	NOT USED	NOT USED	
125	ALONG TRACK HORIZONTAL ACCELER- ATION FAILURE WARNING RECEIVED FROM THE IRU (SSFD)	NOT USED	NOT USED	
126	NOT USED	NOT USED	NOT USED	
127	SOURCE FCC ENGAGED SINGLE CHANNEL AND ANOTHER FCC SHOWS ENGAGED CONDITION - OR - SOURCE FCC WARNING OF A DRIVER MAL- FUNCTION	NOT USED	NOT USED	
128	CROSS CHANNEL DATA SHOWS RELA- TIVE LEFT FCC ENGAGED SINGLE CHANNEL AND ANOTHER FCC SHOWS ENGAGED CONDITION - OR - RELATIVE LEFT FCC WARNING OF A DRIVER MALFUNCTION	NOT USED	NOT USED	
129	CROSS CHANNEL DATA SHOWS RELA- TIVE RIGHT FCC ENGAGED SINGLE CHANNEL AND ANOTHER FCC SHOWS ENGAGED STATE - OR - RELATIVE LEFT FCC WARNING OF A DRIVER MALFUNCTION	NOT USED	NOT USED	
130	FAILURE WARNING RECEIVED FROM THE FMC THAT IS AN INTERFACE WITH THE SOURCE FCC	FAILURE WARNING RECEIVED FROM THE OTHER FMC	FAILURE WARNING RECEIVED FROM THE LEFT FMC	

MCDP Diagnostic Codes Figure 104 (Sheet 8)

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	CHANNEL 1 = LEFT 2 = RIGHT 3 = CENTER SOURCE COMPUTER	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	YES	
IAG	SOURCE COMPUTER			
ODE	FCC = 1	FMC = 2	TMC = 3	
31	CROSS CHANNEL DATA SHOWS FAILURE WARNING RECEIVED FROM THE FMC THAT IS AN INTERFACE WITH THE RELATIVE LEFT FCC OR THE RELATIVE RIGHT FCC	NOT USED	FAILURE WARNING RECEIVED FROM THE RIGHT FMC	
32	TRUE TRACK ANGLE FAILURE WARNING RECEIVED FROM THE IRU (SSFD)	ACTIVITY MONITOR CANNOT FIND DATA ON THE CLOCK INPUT CHANNEL	NOT USED	
33	COMMON MODE MONITOR DETECTED LOSS OF AILERON SURFACE POSITION ANALOG SIGNAL OR EXCITATION VOLTAGE	FAILURE WARNING RECEIVED FROM THE CLOCK	NOT USED	
34	AILERON SERVO POSITION IS MORE THAN 2.83° FROM THE COMMAND POSITION	FAILURE WARNING RECEIVED FROM THE LEFT DME	NOT USED	
35	COMMON MODE MONITOR DETECTED LOSS OF RUDDER SERVO POSITION ANALOG SIGNAL OR EXCITATION VOLTAGE	FAILURE WARNING RECEIVED FROM THE RIGHT DME	NOT USED	
36	COMMON MODE MONITOR DETECTED RUDDER SURFACE POSITION ANALOG SIGNAL OR EXCITATION VOLTAGE	FAILURE WARNING RECEIVED FROM THE EICAS	NOT USED	
37	COMMON MODE MONITOR DETECTED ELEVATOR FEEL POSITION ANALOG SIGNAL OR EXCITATION VOLTAGE	NOT USED	NOT USED	
38	COMMON MODE MONITOR DETECTED ELEVATOR SERVO POSITION ANALOG SIGNAL OR EXCITATION VOLTAGE	NOT USED	NOT USED	
39	COMMON MODE MONITOR DETECTED ELEVATOR SURFACE POSITION ANALOG SIGNAL OR EXCITATION VOLTAGE	FAILURE WARNING RECEIVED FROM THE LEFT VOR	NOT USED	
40	FCC START-UP TIME AFTER SHUTDOWN, IS BECAUSE OF I/O BUFFER TEST FAIL	FAILURE WARNING RECEIVED FROM THE RIGHT VOR	NOT USED	
41	ELEVATOR SERVO POSITION IS MORE THAN 2° FROM THE COMMAND POSITION	NOT USED	NOT USED	

MCDP Diagnostic Codes Figure 104 (Sheet 9)

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	CHANNEL \[\begin{align*} 1 &= LEFT \\ 2 &= RIGHT \\ 3 &= CENTER \end{align*} \] \[\begin{align*} X & X & X & X & X \\ 3 &= CENTER \end{align*} \] \[\begin{align*} INTERMITTENT FLIGHT FAULTS \\ (OR SSFD SENSOR FAULT) \\ 1 &= YES \\ 0 &= NO \\ SOURCE COMPUTER \end{align*} \] \[\begin{align*} DIAGNOSTIC CODE \end{align*} \]			
DIAG	SOURCE COMPUTER			
CODE	FCC = 1	FMC = 2	TMC = 3	
142	SINGLE ELEVATOR SURFACE POSITION DATA FAULT - DO NOT AGREE BY MORE THAN 2° (SSFD)	ACTIVITY MONITOR CANNOT FIND DATA FROM THE EFIS-CP	NOT USED	
143	DUAL ELEVATOR SURFACE POSITION DATA FAULT - DO NOT AGREE BY MORE THAN 2° (SSFD)	NOT USED	NOT USED	
144	RUDDER SERVO POSITION IS MORE THAN 2° FROM THE COMMAND POSI- TION	NOT USED	NOT USED	
145	AILERON SURFACE POSITION IS GREATER THAN THE LIMITS IN SINGLE CHANNEL ENGAGE	NOT USED	NOT USED	
146	FCC/AILERON SERVO T-VALVE INTERFACE FAULT	NOT USED	FAILURE WARNING RECEIVED FROM THE FMC FOR EPR TARGET	
147	FCC/ELEVATOR SERVO T-VALVE INTERFACE FAULT	NOT USED	NOT USED	
148	FCC/RUDDER SERVO T-VALVE INTERFACE FAULT	NOT USED	NOT USED	
149	+28V DC SERVO POWER LOSS	NOT USED	NOT USED	
150	AILERON SOLENOID SHOWS ARMED OR ENGAGED WHEN THERE IS NO ARM OR ENGAGE INSTRUCTION	NOT USED	NOT USED	
151	ELEVATOR SOLENOID SHOWS ARMED OR ENGAGED WHEN THERE IS NO ARM OR ENGAGE INSTRUCTION	FAILURE MESSAGE RECEIVED FROM THE ON-SIDE CDU	NOT USED	
152	RUDDER SOLENOID SHOWS ARMED OR ENGAGED WHEN THERE IS NO ARM OR ENGAGE INSTRUCTION	FAILURE MESSAGE RECEIVED FROM THE OFF-SIDE CDU	NOT USED	
153	OPTION PINS DO NOT AGREE BETWEEN THE FCCS	FAILURE WARNING RECEIVED FROM THE ON-SIDE CDU	NOT USED	
154	AILERON SERVO POSITION IS GREATER THAN 0.25° FROM THE COMMAND IN SINGLE CHANNEL ENGAGE	FAILURE WARNING RECEIVED FROM THE OFF-SIDE CDU	NOT USED	

MCDP Diagnostic Codes Figure 104 (Sheet 10)

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	CHANNEL $\begin{cases} 1 = \text{LEFT} \\ 2 = \text{RIGHT} \\ 3 = \text{CENTER} \end{cases}$ SOURCE COMPUTE	0 =	SENSOR FAULT) YES			
DIAG		SOURCE COMPUTER				
CODE	FCC = 1	FMC = 2	TMC = 3			
155	SOURCE FCC HARDWARE AND SOFTWARE DO NOT AGREE ON ARM OR ENGAGE CONDITION OF SERVO	NOT USED	NOT USED			
156	ELEVATOR, AILERON, OR RUDDER SERVO DID NOT ARM OR ENGAGE WHEN THE COMMAND WAS GIVEN	NOT USED	FAILURE WARNING RECEIVED FROM THE EEC FOR EPR COMMAND			
157	ELEVATOR SERVO POSITION IS MORE THAN 0.25° FROM THE COMMAND IN SINGLE CHANNEL ENGAGE	FAILURE WARNING RECEIVED FROM THE FUEL QUANTITY SYSTEM	NOT USED			
158	CROSS CHANNEL HIGH SPEED WRAP- AROUND TEST WORD THAT IS RECEIVED IS NOT THE SAME AS THE ONE TRANSMITTED	NATLUREDWARNING RECEIVED FROM THE LEFT GPS SENSOR UNIT	NOT USED			
159	FCC TIMER DOES NOT WORK IN A +5 MSEC RANGE OF THE CYCLE TIME	FAILURE WARNING RECEIVED FROM THE RIGHT GPS SENSOR UNIT	NOT USED			
160	AILERON INHIBIT SINGLE CHANNEL PRE-ENGAGED TEST FAILURE	ERROR IN LEFT GPS SENSOR UNIT OR ANTENNA	NOT USED			
161	ELEVATOR SERVO COMMAND WRAP- AROUND WORD AND THE COMMAND DO NOT AGREE BY MORE THAN ±1°	ERROR IN RIGHT GPS SENSOR UNIT OR ANTENNA	FAILURE WARNING RECEIVED FROM THE EPCS FOR N2 ACT			
162	AILERON SERVO COMMAND WRAP- AROUND WORD AND THE COMMAND DO NOT AGREE BY MORE THAN ±1°		NOT USED			
163	RUDDER SERVO COMMAND WRAPAROUND WORD AND THE COMMAND DO NOT AGREE BY MORE THAN ±1°	NOT USED	NOT USED			
164	RUDDER SERVO IS ENGAGED WHEN THE AILERON AND ELEVATOR SERVOS ARE NOT ENGAGED	NOT USED	LEFT ADC PITOT-STATIC HEATER IS INOP IN IN-AIR CONDITION			
165	ELEVATOR DETENT COMPARATOR TEST FAILURE	NOT USED	RIGHT ADC PITOT-STATIC HEATER IS INOP IN IN-AIR CONDITION			
166	AILERON DETENT COMPARATOR TEST	NOT USED	ADC TAT HEATER IS INOP IN IN-AIR CONDITION			
167	RUDDER DETENT COMPARATOR TEST FAILURE	NOT USED	NOT USED			
168	SOURCE FCC IS ENGAGED SINGLE CHANNEL AND RECEIVES ENGAGED CONDITION FROM THE OTHER FCCs	NOT USED	NOT USED			

MCDP Diagnostic Codes Figure 104 (Sheet 11)

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	CHANNEL \{ 1 = LEFT \\ 2 = RIGHT \\ 3 = CENTER \} SOURCE COMPUTER	1 = 0 =	
DIAG		SOURCE COMPUTER	
CODE	FCC = 1	FMC = 2	TMC = 3
169	SOURCE FCC IS ENGAGED MULTI- CHANNEL AND RECEIVES DISENGAGED CONDITION FROM THE OTHER FCCS	NOT USED	NOT USED
170	RUDDER SERVO IS ARMED WHEN THE AILERON AND ELEVATOR SERVOS ARE NOT ARMED	NOT USED	NOT USED
171	RELATIVE LEFT CROSS CHANNEL BUFFER WRAPAROUND TEST FAILURE	NOT USED	NOT USED
172	MODE ERROR - MULTI-CHANNEL GROUND/AIR WITH A SINGLE ADC DATA SOURCE	NOT USED	NOT USED
173	SOURCE FCC OPTION PINS ERROR	NOT USED	NOT USED
174	RELATIVE RIGHT CROSS CHANNEL BUFFER WRAPAROUND TEST FAILURE	NOT USED	SIGN STATUS MATRIX (SSM) INVALID - LEFT/RIGHT N1 ACTUAL
175	MODE ERROR - AUTOPILOT DISCON- NECT AND THE MANUAL LAND ARE NOT ENGAGED BEFORE TOUCHDOWN FOR SINGLE CHANNEL AUTOLAND	NOT USED	NOT USED
176	NO RADIO HEIGHT DATA OR FAILURE WARNING RECEIVED FROM THE RA (SSFD)	NOT USED	NOT USED
177	TEST INHIBIT CONDITION IS NOT RECEIVED FROM THE RA AFTER THE TEST INHIBIT IS COMMANDED	NOT USED	NOT USED
178	NOT USED	NOT USED	NOT USED
179	SOURCE FCC FLAP POSITION MONITOR FINDS NULL FAILURE	NOT USED	NOT USED
180	CROSS CHANNEL DATA SHOWS THAT THE RELATIVE LEFT FCC FLAP POSI- TION MONITOR FINDS NULL FAILURE	NOT USED	NOT USED
181	CROSS CHANNEL DATA SHOWS THAT THE RELATIVE RIGHT FCC FLAP POSITION MONITOR FINDS NULL FAILURE	NOT USED	NOT USED

MCDP Diagnostic Codes Figure 104 (Sheet 12)

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	FAUL	I ISOLATION/MAINT MANU	AL
	CHANNEL { 1 = LEFT 2 = RIGHT 3 = CENTER } SOURCE COMPUTE	0 =	SENSOR FAULT) YES
DIAC		SOURCE COMPUTER	
DIAG	FCC = 1	FMC = 2	TMC = 3
182	NOT USED	NOT USED	NOT USED
183	NOT USED	NOT USED	NOT USED
184			
185	DISCRETES FOR THE LEFT DETENT STATUS AND THE LEFT DETENT INTERFACE DO NOT AGREE	NOT USED	NOT USED NOT USED
186	DISCRETES FOR THE RIGHT DETENT STATUS AND THE RIGHT DETENT INTERFACE DO NOT AGREE	NOT USED	NOT USED
187	DISCRETES FOR THE LEFT SERVO ENGAGE STATUS AND THE LEFT SERVO ENGAGE INTERFACE DO NOT AGREE	NOT USED	NOT USED
188	DISCRETES FOR THE RIGHT SERVO ENGAGE STATUS AND THE RIGHT SERVO ENGAGE INTERFACE DO NOT AGREE	NOT USED	NOT USED
189	AUTOPILOT DISCONNECT AND THE WARNING RESET SHOW THE SAME CONDITION	NOT USED	NOT USED
190	SOURCE FCC STABILIZER POSITION MONITOR FINDS NULL FAILURE	FMC VNAV FUNCTION IS DISCON- NECTED WHEN THE VELOCITY DROPS 10 KNOTS BELOW THE VELOCITY MINIMUM	NOT USED
191	CROSS CHANNEL DATA SHOWS THAT THE RELATIVE LEFT FCC STABI- LIZER POSITION MONITOR FINDS NULL FAILURE	NOT USED	NOT USED
192	CROSS CHANNEL DATA SHOWS THAT THE RELATIVE RIGHT FCC STABI- LIZER POSITION MONITOR FINDS NULL FAILURE	NOT USED	NOT USED
193	SPEEDBRAKE HANDLE POSITION MONITOR FINDS NULL FAILURE	NOT USED	NOT USED

MCDP Diagnostic Codes Figure 104 (Sheet 13)

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	CHANNEL { 1 = LEFT 2 = RIGHT 3 = CENTER } SOURCE COMPUTER	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	YES				
DIAG		SOURCE COMPUTER					
CODE	FCC = 1	TMC = 3					
194	SOURCE FCC GO-AROUND SWITCH INPUT DOES NOT AGREE WITH THE GO-AROUND SWITCH INPUT RECEIVED ON THE CROSS CHANNEL FROM THE OTHER FCCs	NOT USED	NOT USED				
195	SOURCE FCC MAG/TRUE SWITCH INPUT DOES NOT AGREE WITH THE MAG/TRUE SWITCH INPUT RECEIVED ON THE CROSS CHANNEL FROM THE OTHER FCCs	NOT USED	NOT USED				
196	POWER BUSES ARE NOT ISOLATED FOR LAND 3	NOT USED	NOT USED				
197	HYDRAULIC VALID SIGNAL IS NOT RECEIVED	NOT USED	NOT USED				
198	SOURCE FCC SLAT EXTENDED SWITCH INPUT DOES NOT AGREE WITH THE SLAT EXTENDED SWITCH INPUT RECEIVED ON THE CROSS CHANNEL FROM OTHER FCCS	NOT USED	NOT USED				
199	NO COMPUTED DATA RECEIVED FROM THE ILS AT GLIDESLOPE CAPTURE	NOT USED	NOT USED				
200	NO COMPUTED DATA RECEIVED FROM THE ILS AFTER GLIDESLOPE CAP- TURE	NOT USED	NOT USED				
201	ILS LOCALIZER BEAM ERROR	NOT USED	NOT USED				
202	NO COMPUTED DATA RECEIVED FROM THE ILS AT LOCALIZER CAPTURE	NOT USED	NOT USED				
203	NO COMPUTED DATA RECEIVED FROM THE ILS AFTER LOCALIZER CAPTURE	NOT USED	NOT USED				
204	TUNE INHIBIT CONDITION IS NOT RECEIVED FROM THE ILS TUNER AFTER THE TUNE INHIBIT COMMAND	NOT USED	NOT USED				
205	ILS GLIDESLOPE BEAM ERROR	NOT USED	NOT USED				
206	RUDDER SERVO WEAK	NOT USED	NOT USED				
207	MODE ERROR - ILS FREQUENCY IS CHANGED AFTER THE LOCALIZER IS CAPTURED	NOT USED	NOT USED				

MCDP Diagnostic Codes Figure 104 (Sheet 14)

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	TAGE	1 130EATTON/HAINT HAND	AL .
	CHANNEL { 1 = LEFT 2 = RIGHT 3 = CENTER } SOURCE COMPUTE	0 =	SENSOR FAULT) YES
DIAG		SOURCE COMPUTER	
CODE	FCC = 1	FMC = 2	TMC = 3
208	CROSS CHANNEL DATA CANNOT FIND DATA ON THE ADC INPUT CHANNEL OR FAILURE WARNING RECEIVED FROM THE ADC	NOT USED	NOT USED
209	NOT USED	NOT USED	NOT USED
210	SINGLE FLAP POSITION ERROR	NOT USED	NOT USED
211	SINGLE AILERON SURFACE POSITION ERROR (SSFD)	NOT USED	NOT USED
212	SINGLE RUDDER SURFACE POSITION ERROR (SSFD)	NOT USED	NOT USED
213	SINGLE STABILIZER POSITION ERROR (SSFD)	NOT USED	NOT USED
214	DUAL AILERON SURFACE POSITION ERROR (SSFD)	NOT USED	NOT USED
215	DUAL IRU DATA ERROR (SSFD) AUTOPILOT ENGAGED AGAIN BEFORE THE DATA ELEMENT IS IDENTIFIED	NOT USED	NOT USED
216	SINGLE IRU DATA ERROR (SSFD) AUTOPILOT ENGAGED AGAIN BEFORE THE DATA ELEMENT IS IDENTIFIED	NOT USED	NOT USED
217	DUAL RUDDER SURFACE POSITION ERROR (SSFD)	NOT USED	NOT USED
218	DUAL ILS DATA FAILURE DURING ILS CAPTURE (SSFD)	NOT USED	NOT USED
219	ILS DATA FAILURE DURING ILS CAPTURE, CROSS CHANNEL MONITOR IS SET AGAIN BEFORE THE DATA ELEMENT IS IDENTIFIED (SSFD)	NOT USED	NOT USED
220	NOT USED	NOT USED	NOT USED
221	DUAL RA DATA FAULT (SSFD)	NOT USED	NOT USED
222	NOT USED	NOT USED	NOT USED
223	NOT USED	NOT USED	NOT USED
224	DUAL FLAP POSITION ERROR (SSFD)	NOT USED	NOT USED

MCDP Diagnostic Codes Figure 104 (Sheet 15)

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	CHANNEL $\begin{cases} 1 = \text{LEFT} \\ 2 = \text{RIGHT} \\ 3 = \text{CENTER} \end{cases}$ SOURCE COMPUTES	0 =	SENSOR FAULT) YES
DIAG		SOURCE COMPUTER	
CODE	FCC = 1	FMC = 2	TMC = 3
225	NOT USED	NOT USED	BAROMETRIC ALTITUDE FAILURE WARNING RECEIVED FROM THE ADC
226	COMPUTED AIRSPEED FROM THE LEFT ADC AND THE RIGHT ADC DO NOT AGREE BY MORE THAN 15 KNOTS	NOT USED	NOT USED
227	MACH FROM THE LEFT ADC AND THE RIGHT ADC DO NOT AGREE BY MORE THAN 0.1 MACH	NOT USED	NOT USED
228	TRUE AIRSPEED FROM THE LEFT ADC AND THE RIGHT ADC DO NOT AGREE BY MORE THAN 15 KNOTS	NOT USED	NOT USED
229	DUAL STABILIZER POSITION ERROR (SSFD)	NOT USED	NOT USED
230	ACTIVITY MONITOR CANNOT FIND THE PITCH ANGLE DATA FROM THE IRS (SSFD)	NOT USED	NOT USED
231	ROLL ANGLE DATA FROM THE IRS THAT IS THE INTERFACE DOES NOT AGREE BY MORE THAN 3° FROM THE ROLL ANGLE DATA FROM THE OTHER IRS (SSFD)	NOT USED	NOT USED
232	MAXIMUM OPERATION SCHEDULE FROM THE LEFT ADC AND THE RIGHT ADC DO NOT AGREE BY MORE THAN 15 KNOTS	NOT USED	NOT USED
233	INERTIAL ALTITUDE CALCULATED FROM THE LEFT ADC DATA AND THE RIGHT ADC DATA DOES NOT AGREE BY MORE THAN 800 FT	NOT USED	NOT USED
234	INERTIAL VERTICAL SPEED CALCU- LATED FROM THE LEFT ADC DATA AND THE RIGHT ADC DATA DO NOT AGREE BY MORE THAN 10 FT/SEC	NOT USED	NOT USED
235	NOT USED	NOT USED	NOT USED
236	GLIDESLOPE DEVIATION FROM THE ILS DOES NOT AGREE WITH THE GLIDESLOPE DEVIATION RECEIVED FROM THE CHANNEL DATA (SSFD)	NOT USED	NOT USED
237	LOCALIZER DEVIATION FROM THE ILS DOES NOT AGREE WITH THE LOCALIZER DEVIATION RECEIVED FROM THE CROSS CHANNEL DATA (SSFD)	NOT USED	FAILURE WARNING RECEIVED FROM THE MCP FOR THE SPEED BRAKE HANDLE POSITION

MCDP Diagnostic Codes Figure 104 (Sheet 16)

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	CHANNEL 1 = LEFT 2 = RIGHT 3 = CENTER SOURCE COMPUTER	X X X X X X X (OR SSFD STATE OF THE COLOR OF	
DIAG		SOURCE COMPUTER	
CODE	FCC = 1	FMC = 2	TMC = 3
238	LATERAL ACCELERATION FROM THE IRS DOES NOT AGREE WITH THE LATERAL ACCELERATION RECEIVED FROM THE CROSS CHANNEL DATA BY MORE THAN .O4G (SSFD)	NOT USED	NOT USED
239	NOT USED	NOT USED	NOT USED
240	MAGNETIC HEADING FROM THE IRS DOES NOT AGREE WITH THE MAGNE- TIC HEADING RECEIVED FROM THE CROSS CHANNEL DATA BY MORE THAN 6° (SSFD)	NOT USED	NOT USED
241	VERTICAL ACCELERATION RECEIVED FROM THE IRS DOES NOT AGREE WITH THE VERTICAL ACCELERATION FROM THE CROSS CHANNEL DATA BY MORE THAN .04G (SSFD)	NOT USED	NOT USED
242	COMMON MODE MONITOR CANNOT FIND AILERON SERVO POSITION DISCRETE DATA	NOT USED	NOT USED
243	MODE ERROR - PILOT OVERRIDE SINGLE CHANNEL ENGAGE - OR - AILERON SERVO POSITION AND AILERON SURFACE POSITION DO NOT AGREE BY MORE THAN 4.5°	NOT USED	NOT USED
244	MODE ERROR - PILOT OVERRIDE SINGLE CHANNEL OR MULTI CHANNEL ENGAGE - OR - ELEVATOR SERVO POSITION AND THE ELEVATOR SURFACE POSITION DO NOT AGREE BY MORE THAN 1 DEGREE IN SINGLE CHANNEL ENGAGE OR DO NOT AGREE BY MORE THAN 4 DEGREES IN MULTI CHANNEL ENGAGE	NOT USED	NOT USED
245	RUDDER SERVO POSITION AND RUDDER SURFACE POSITION DO NOT AGREE BY MORE THAN 3°	NOT USED	NOT USED
246	ANGLE OF ATTACK FROM THE LEFT ADC AND THE RIGHT ADC DO NOT AGREE BY MORE THAN 4°	NOT USED	NOT USED
247	NO COMPUTED DATA RECEIVED FROM THE IRS FOR MAGNETIC HEADING AND MAGNETIC TRACK SWITCH IN THE USUAL POSITION (MAGNETIC)	NOT USED	SELECTED AIRSPEED FAILURE WHEN RECEIVED FROM THE MCP
248	MODE ERROR - CHANGED TO THE V/S MODE WHEN THE SWITCHES WERE NOT TOUCHED	NOT USED	SELECTED MACH FAILURE WARNING RECEIVED FROM THE FMC

MCDP Diagnostic Codes Figure 104 (Sheet 17)

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	CHANNEL { 1 = LEFT 2 = RIGHT 3 = CENTER } SOURCE COMPUTER	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	ENT FLIGHT FAULTS SENSOR FAULT) YES NO
DIAG		SOURCE COMPUTER	
CODE	FCC = 1	FMC = 2	TMC = 3
249	GROUND SPEED RECEIVED FROM THE IRS IS DIFFERENT FROM THE GROUND SPEED RECEIVED FROM THE CROSS CHANNEL DATA BY MORE THAN 100 FT/SEC (SSFD)	NOT USED	TAT UNREASONABLE
250	NO DISCRETE RECEIVED ON THE CROSS CHANNEL DATA FROM THE CHANNEL-IN-COMMAND	NOT USED	STABILIZER POSITION FAILURE WARNING RECEIVED FROM THE MCP
251	RUDDER SERVO ENGAGED WITH ONE FCC ENGAGED	NOT USED	VMO SPEED LIMIT FAILURE WARNING RECEIVED FROM THE ADC
252	NOT USED	NOT USED	TAT FAILURE WARNING RECEIVED FROM THE ADC
253	SOURCE FCC AND THE RELATIVE LEFT FCC SOFTWARE ARE NOT CORRECT FOR AUTOLAND	NOT USED	NOT USED
254	SOURCE FCC AND RELATIVE RIGHT FCC SOFTWARE ARE NOT CORRECT FOR AUTOLAND	NOT USED	NOT USED

SOURCE FCC		RELATIVE LEFT FCC		RELA ⁻ RIGHT	
LEFT	FCC	RIGHT	FCC	CENTER	FCC
CENTER	FCC	LEFT	FCC	RIGHT	FCC
RIGHT	FCC	CENTER	FCC	LEFT	FCC

MCDP Diagnostic Codes Figure 104 (Sheet 18)

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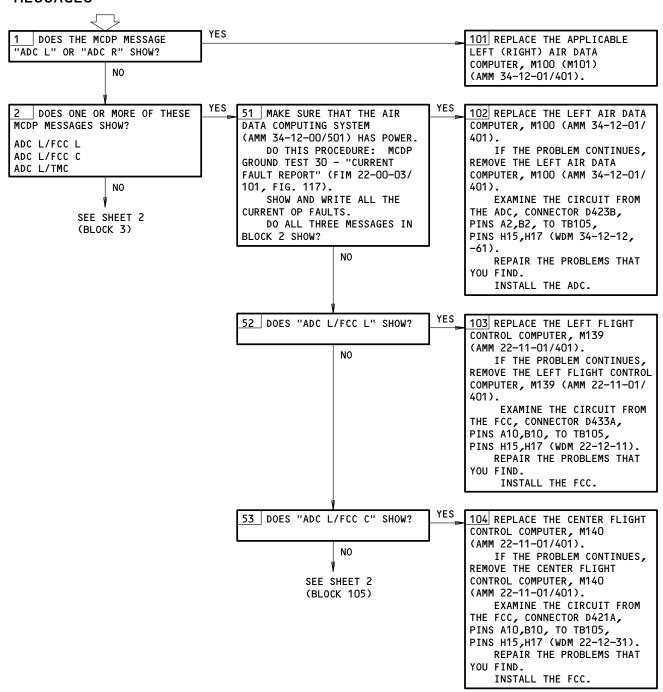
ALL

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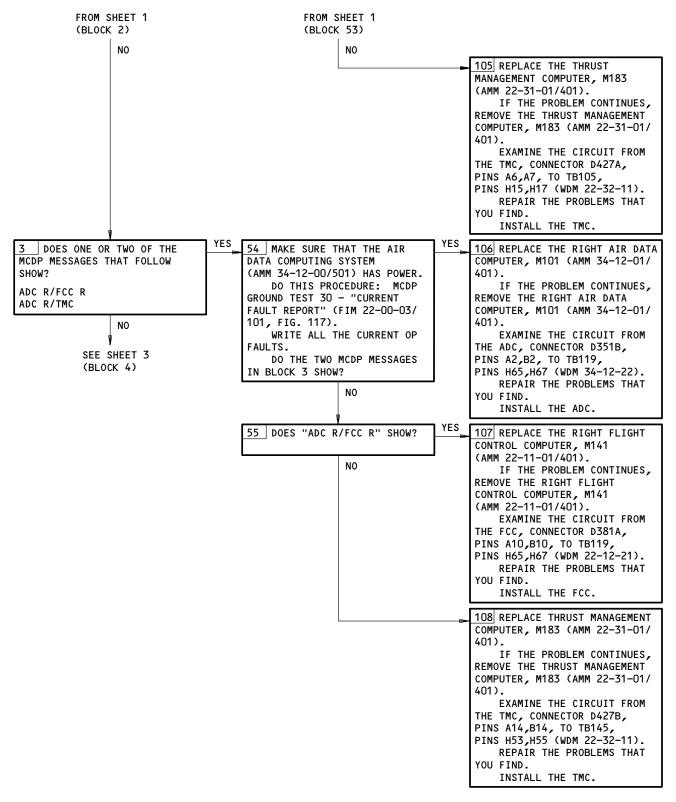
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AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "A" MESSAGES PREREQUISITES
NONE

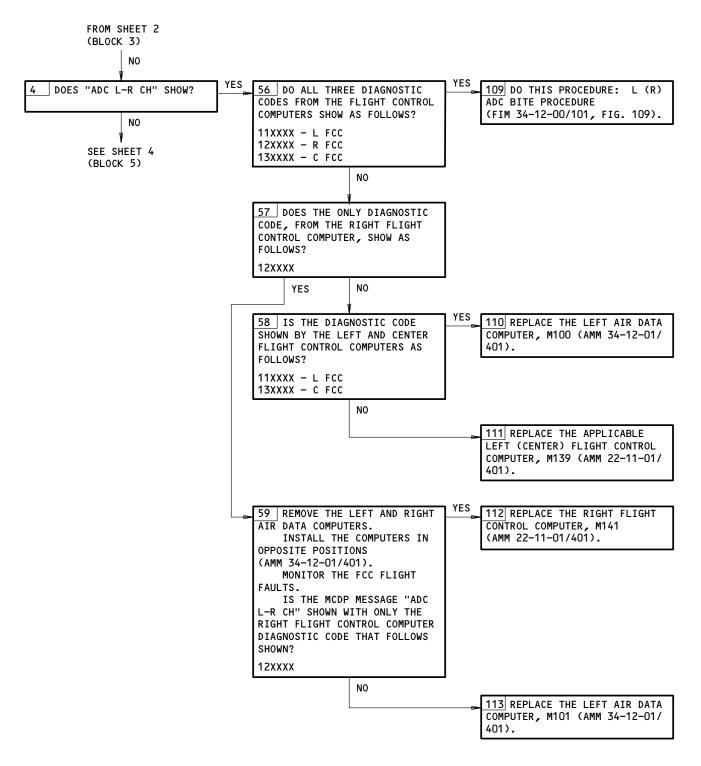


Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 1)

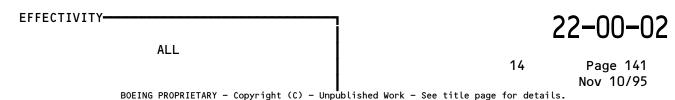


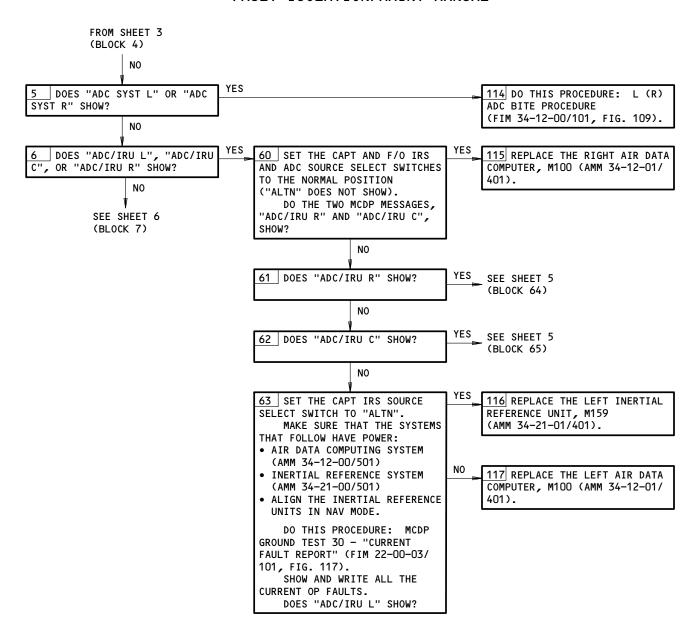
Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 2)



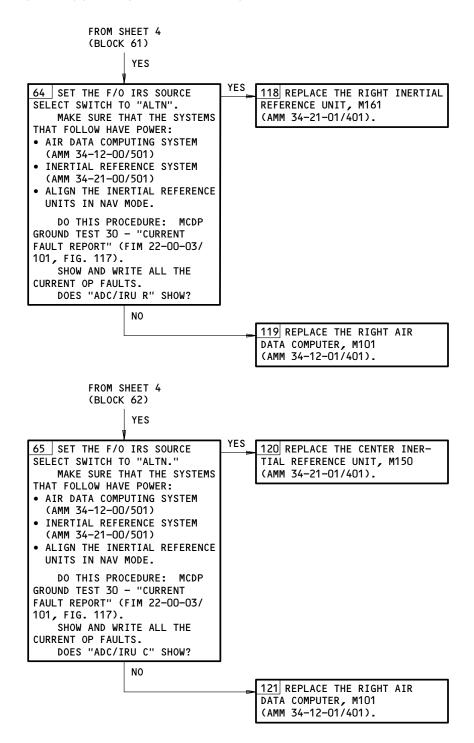


Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 3)





Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 4)



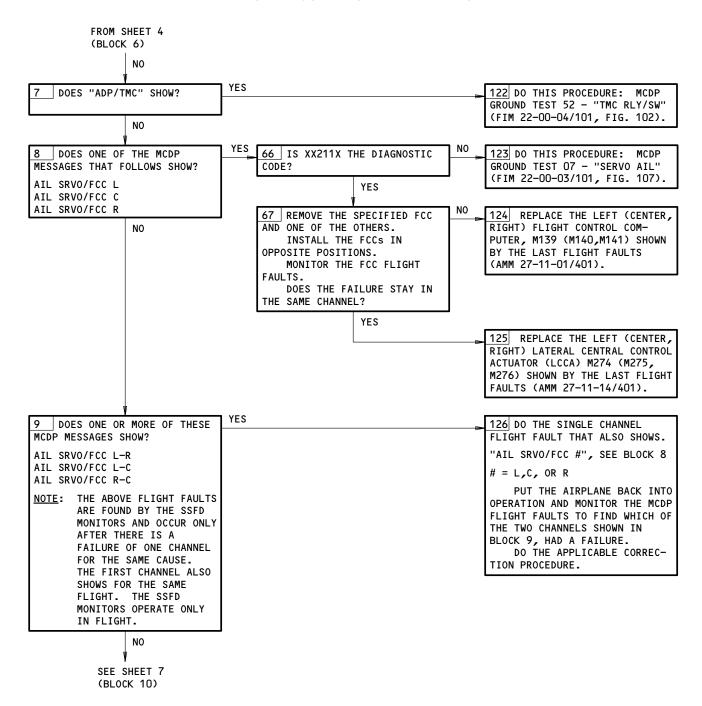
Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 5)

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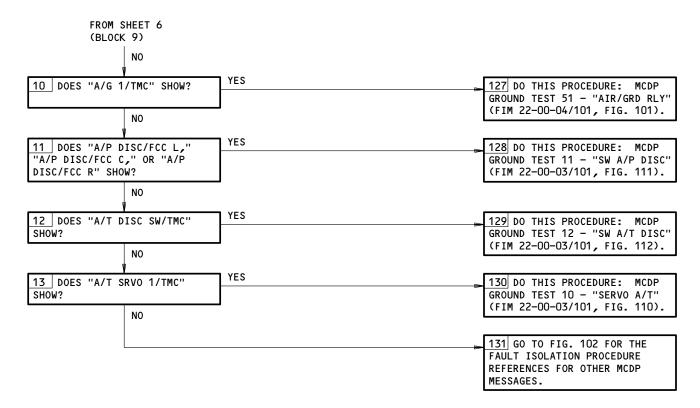
14

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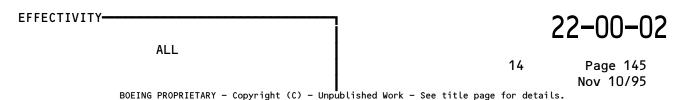


Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 6)





Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 7)

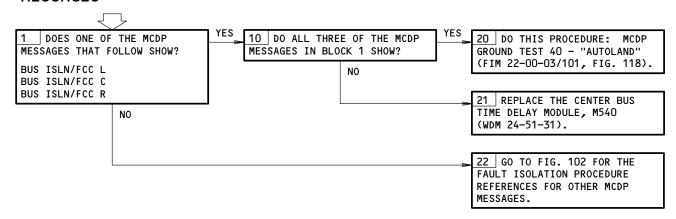


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AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "B" MESSAGES

PREREQUISITES	
NONE	



Autoflight BITE Fault Isolation Procedures - B Messages Figure 106

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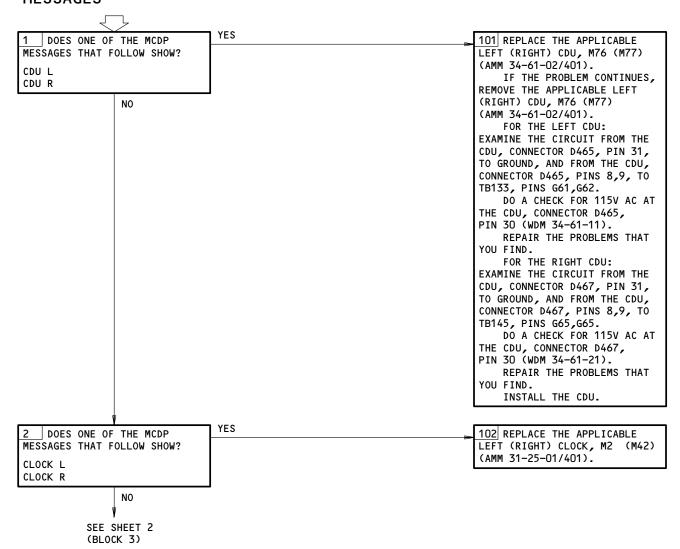
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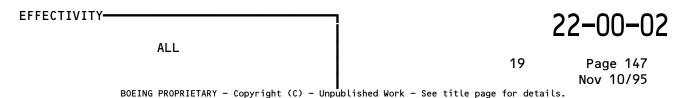


AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "C" MESSAGES

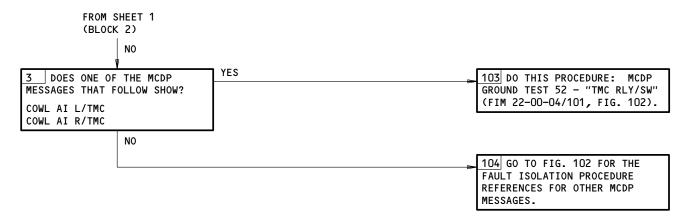
PREREQUISITES	
NONE	



Autoflight BITE Fault Isolation Procedures - C Messages Figure 107 (Sheet 1)







Autoflight BITE Fault Isolation Procedures - C Messages Figure 107 (Sheet 2)

ALL

ALL

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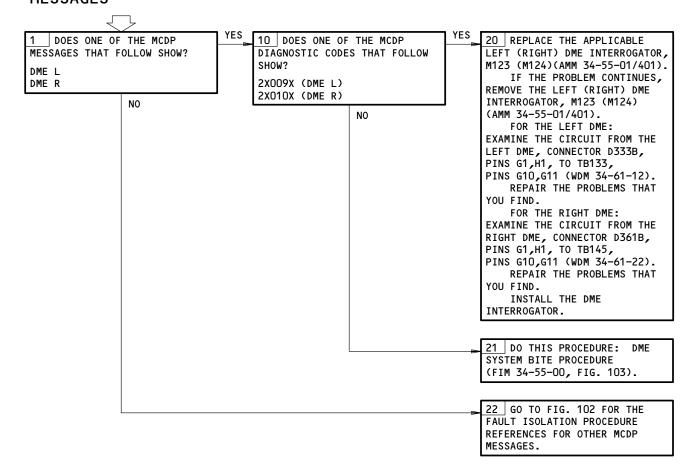
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AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "D" MESSAGES

PREREQUISITES	
NONE	

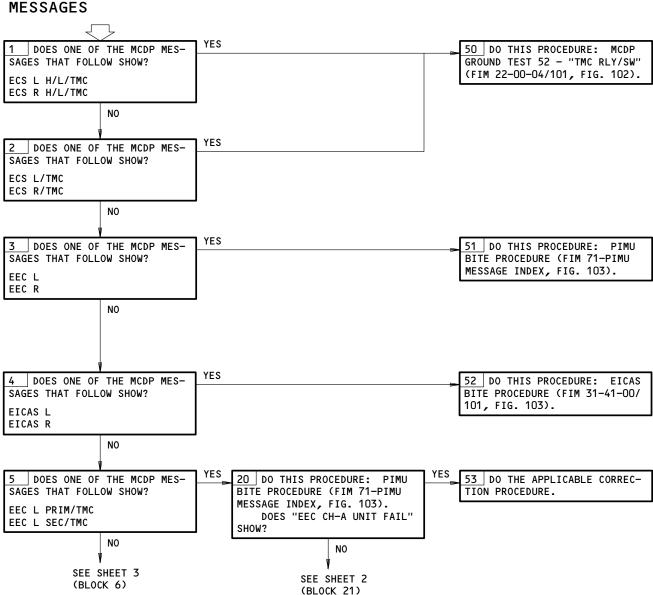


Autoflight BITE Fault Isolation Procedures - D Messages Figure 108

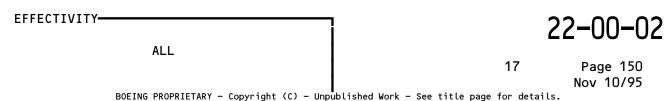
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Page 149 Nov 10/95 AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "E" PREREQUISITES NONE



Autoflight BITE Fault Isolation Procedures - E Messages Figure 109 (Sheet 1)



FROM SHEET 1

NO

(BLOCK 20) NO 55 REPLACE THE TMC, M183 21 APPLY GROUND TEST POWER TO THE LEFT EEC WITH THE "POWER" (AMM 22-31-01/401).SWITCH ON THE PILOTS' RIGHT SIDE PANEL, P61. MAKE SURE THAT CB 34P2 IS CLOSED. 1 REMOVE THE TMC, M183 (AMM 22-31-01/401). FOR THE "PRIM" SYSTEM (CHANNEL A): MAKE SURE THE 429 BUS OPERATES AT THE TMC, CONNECTOR D427B, PINS J11,K11 (WDM 22-33-11). FOR THE "SEC" SYSTEM (CHANNEL B): MAKE SURE THE 429 BUS OPERATES AT THE TMC, CONNECTOR D427B, PINS A11,A12 (WDM 22-33-11). DOES THE BUS OPERATE?

1>> sas 150-154;

MTH 275,276 WITHOUT SB 76-26

56 REPLACE THE LEFT ENGINE PROPULSION INTERFACE AND THE MONITOR UNIT, M1413 (AMM 77-35-01/401). IF THE PROBLEM CONTINUES, REMOVE THE THRUST MANAGEMENT COMPUTER, M183 (AMM 22-31-01/ 401) AND DISCONNECT THE LEFT ENGINE PROPULSION INTERFACE AND THE MONITOR UNIT, CONNEC-TOR D11786A ("PRIM" SYSTEM) OR D11786B ("SEC" SYSTEM). FOR THE "PRIM" SYSTEM (CHANNEL A): EXAMINE THE CIRCUIT FROM THE LEFT PIMU, CONNECTOR D11786A, PINS D1,D2, TO THE TMC, CONNECTOR D427B, PINS J11,K11 (WDM 77-35-11; 22-33-11). REPAIR THE PROBLEMS THAT YOU FIND. AFTER THE REPAIR, CONNECT CONNECTOR D11786A. FOR THE "SEC" SYSTEM (CHANNEL B): EXAMINE THE CIRCUIT FROM THE LEFT PIMU, CONNECTOR D11786B, PINS D1,D2, TO THE TMC, CONNECTOR D427B, PINS A11,A12 (WDM 77-35-11; 22-33-11). REPAIR THE PROBLEMS THAT YOU FIND. AFTER THE REPAIR, CONNECT CONNECTOR D11786B. INSTALL THE TMC.

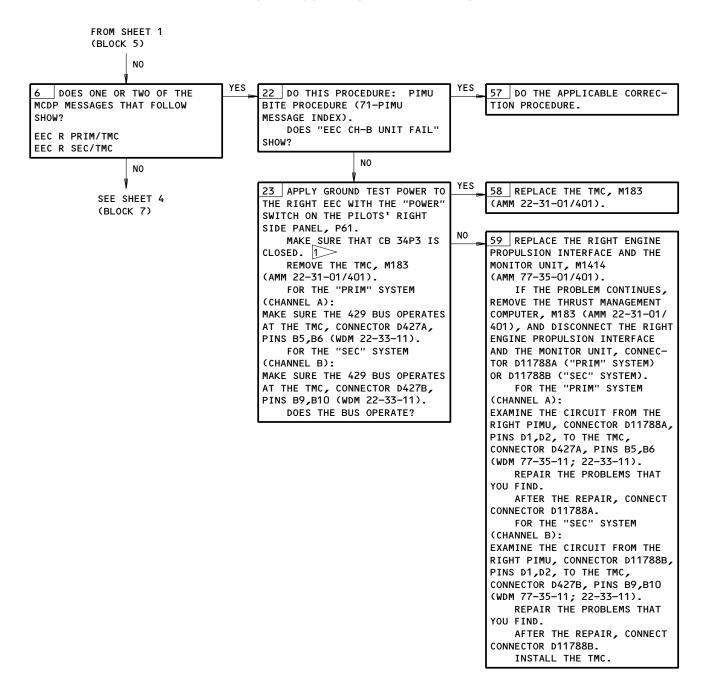
Autoflight BITE Fault Isolation Procedures - E Messages Figure 109 (Sheet 2)

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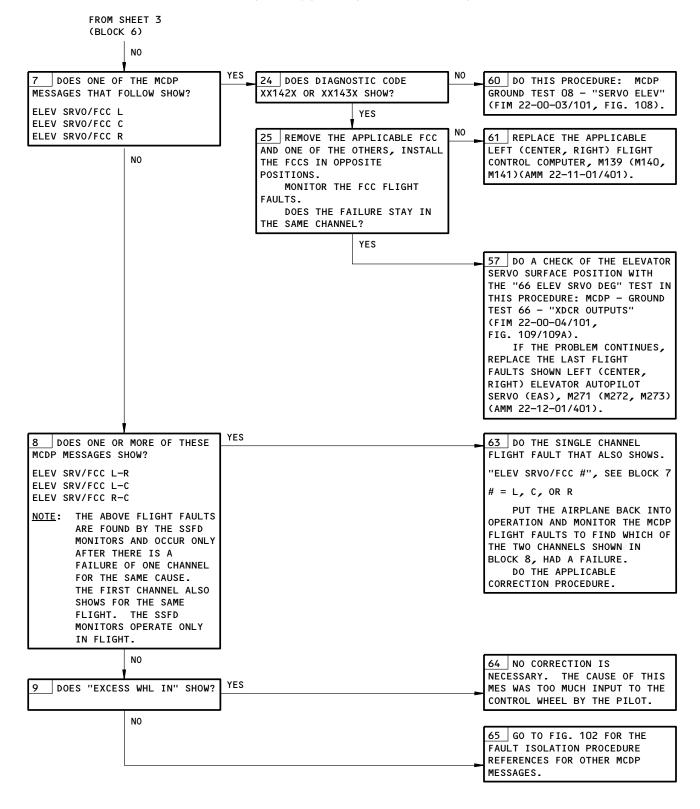


Autoflight BITE Fault Isolation Procedures - E Messages Figure 109 (Sheet 3)

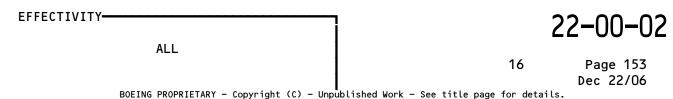
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Autoflight BITE Fault Isolation Procedures - E Messages Figure 109 (Sheet 4)



AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "F" MESSAGES

PREREQUISITES	
NONE	

1 DOES ONE OF THE MCDP MES- SAGES THAT FOLLOW SHOW?	YES
FCC L FCC C FCC R	
NO V	
SEE SHEET 2 (BLOCK 2)	

FLIGHT CONTROL COMPUTER, M139 (M140,M141)(AMM 22-11-01/401). IF THE PROBLEM CONTINUES, REPLACE THE APPLICABLE LEFT (CENTER, RIGHT) AUTOPILOT PITCH CONTROL SERVO (AMM 22-12-01/ 401). FOR THE FCC LEFT MCDP MESSAGE: EXAMINE THE CIRCUITS FROM THE LEFT FCC, CONNECTOR D433A, PINS G10 AND F9, TO THE CENTER FCC, CONNECTOR D421, PINS K3 AND E3, AND TO THE RIGHT FCC, CONNECTOR D381A, PINS K1 AND G1 (WDM 22-15-12). REPAIR THE PROBLEMS THAT YOU FIND. FOR THE FCC CENTER MCDP MESSAGE: EXAMINE THE CIRCUITS FROM THE CENTER FCC, CONNECTOR D421, PINS G10 AND F9, TO THE RIGHT FCC, CONNECTOR D381A, PINS K3 AND E3, AND TO THE LEFT FCC, CONNECTOR D433A, PINS K1 AND G1 (WDM 22-15-12). REPAIR THE PROBLEMS THAT YOU FIND. FOR THE FCC RIGHT MCDP MESSAGE: EXAMINE THE CIRCUITS FROM THE RIGHT FCC, CONNECTOR D381A, PINS G10 AND F9, TO THE LEFT FCC, CONNECTOR D433A, PINS K3 AND E3, AND TO THE CENTER FCC, CONNECTOR D421, PINS K1 AND G1 (WDM 22-15-12).

REPAIR THE PROBLEMS THAT

INSTALL THE THREE FCCs.

101 5 REPLACE THE APPLI-CABLE LEFT (CENTER,RIGHT)

AIRPLANES WITH -132 OR -133 FCCs; OPEN AND CLOSE THESE CIRCUIT BREAKERS:

> 11E14 FLT CONT COMPUTER POWER LEFT 11E20 FLT CONT CMPTR PWR CENTER 11E35 FLT CONT CMPTR PWR RIGHT

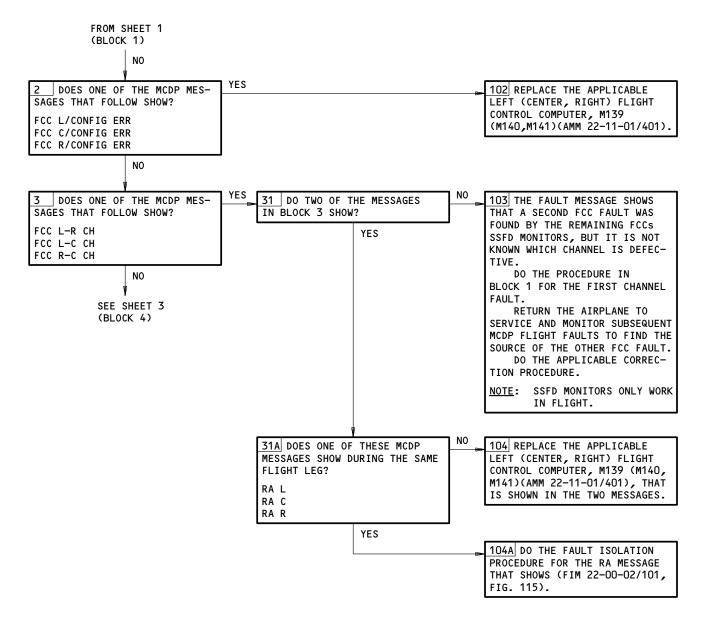
DO THIS PROCEDURE: MCDP GROUND TEST 30 - "CURRENT FAULT REPORT" (FIM 22-30-03/101, FIG. 117). IF NO FAULTS SHOW, NO MAINTENANCE ACTION IS NECESSARY.

Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 1)

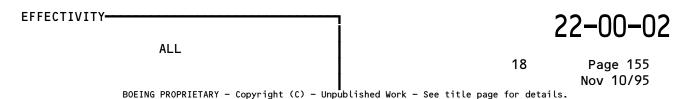
22-00-02

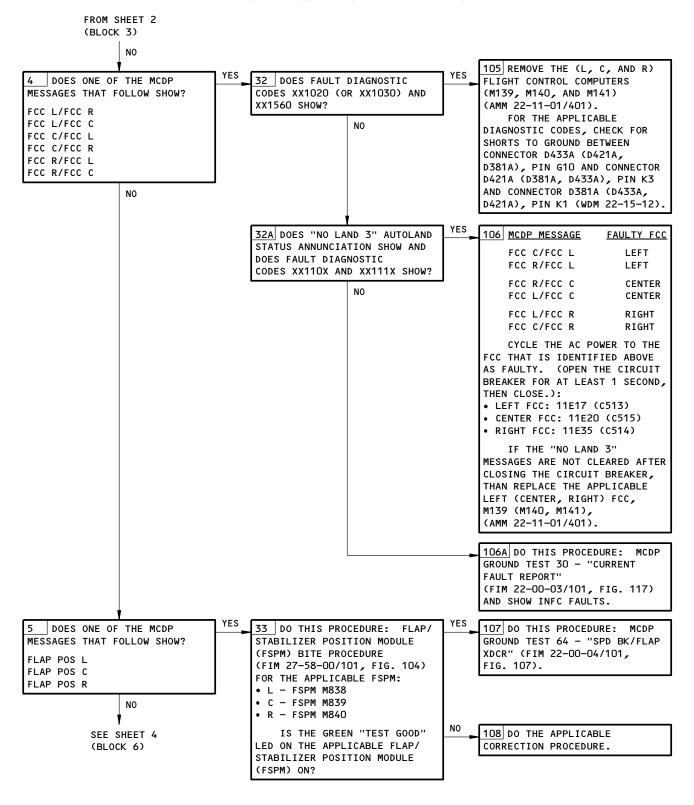
YOU FIND.



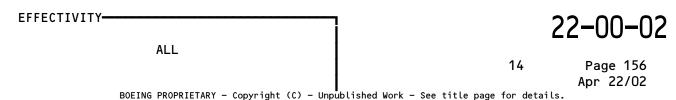


Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 2)

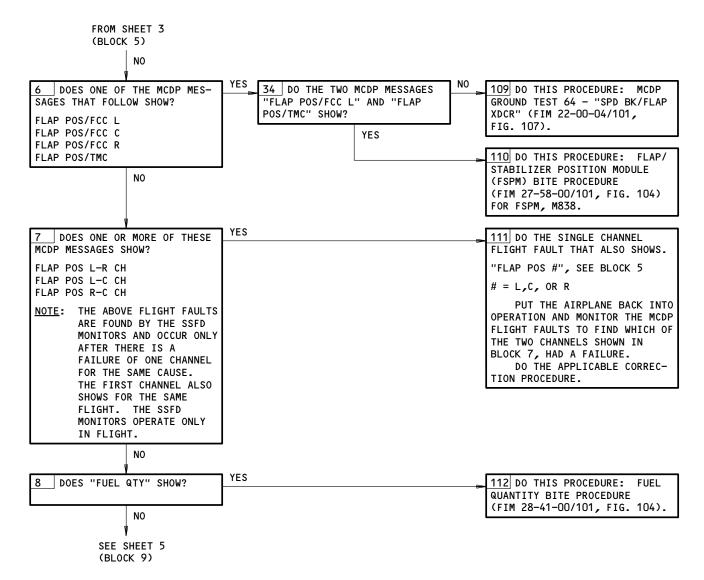




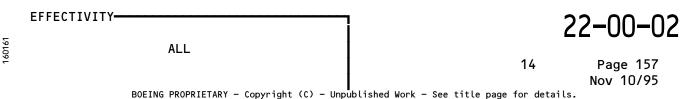
Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 3)

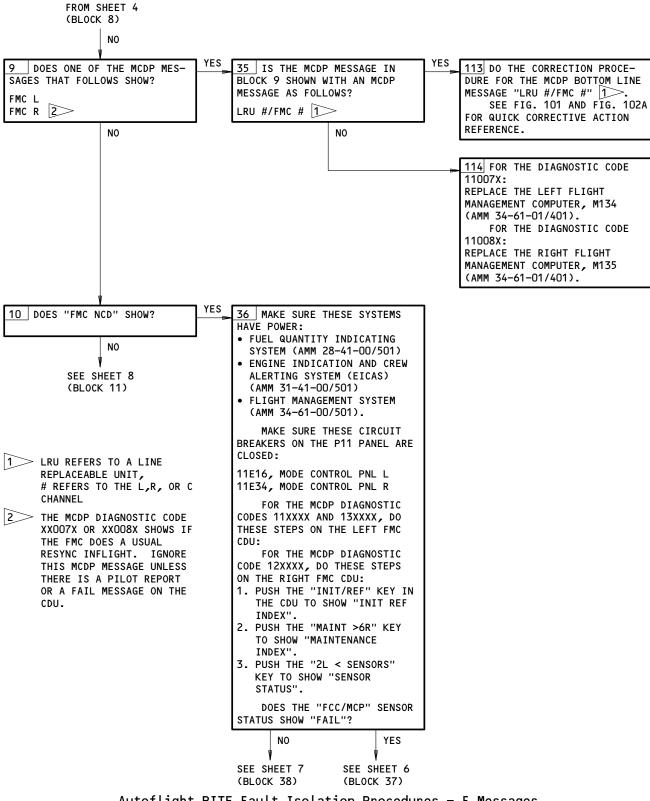






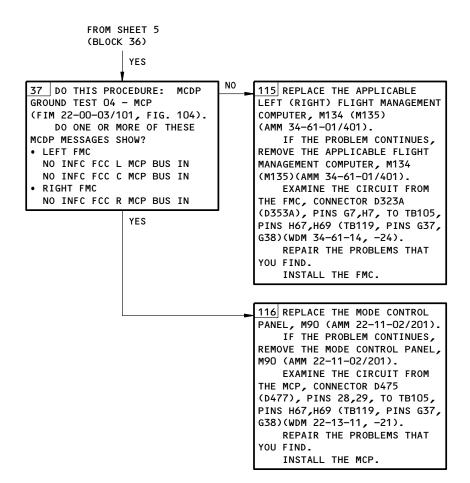
Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 4)





Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 5)

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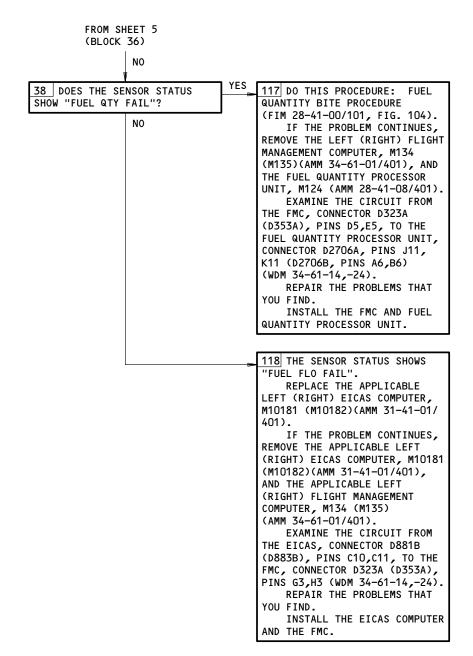
Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 6)

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Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 7)

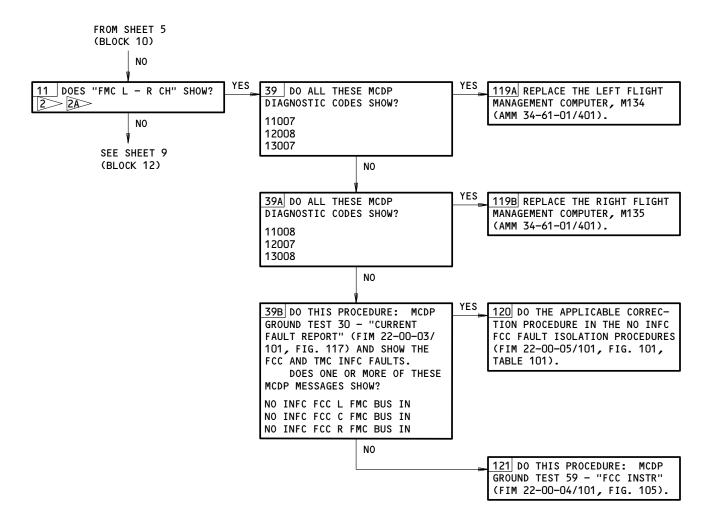
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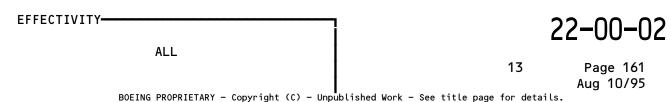
THIS MCDP MESSAGE CAN BE A NUISANCE MESSAGE. TO MAKE SURE THAT THIS IS NOT A NUISANCE MESSAGE, DO THESE STEPS:

1. USE THE CDU TO PUT THE FMC ALTITUDE ON THE PERF PAGE.

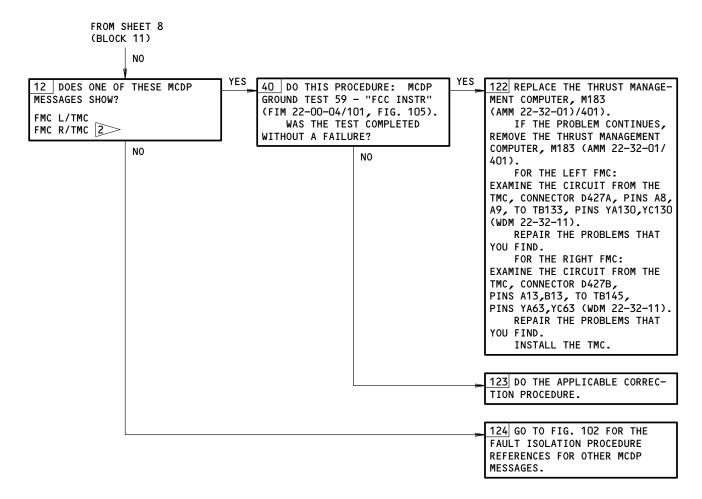
2. DO THIS PROCEDURE: MCDP GROUND TEST 30 - "CURRENT FAULT REPORT" (FIM 22-00-03/101, FIG. 117). IF THE MCDP MESSAGE DOES NOT SHOW, THEN THIS MESSAGE IS A NUISANCE MESSAGE.

THE MCDP DIAGNOSTIC CODE XXOO7X OR XXOO8X SHOWS
IF THE FMC DOES A USUAL RESYNC INFLIGHT. IGNORE
THIS MCDP MESSAGE UNLESS THERE IS A PILOT REPORT
OR A FAIL MESSAGE ON THE CDU.

Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 8)







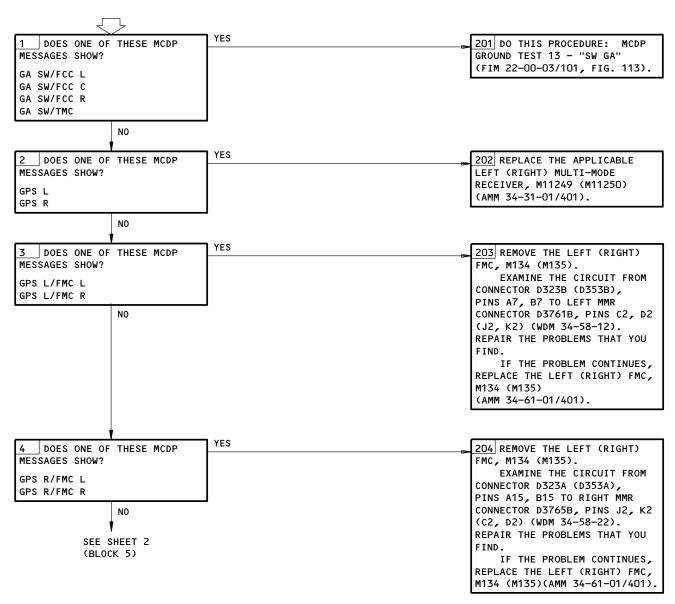
Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 9)

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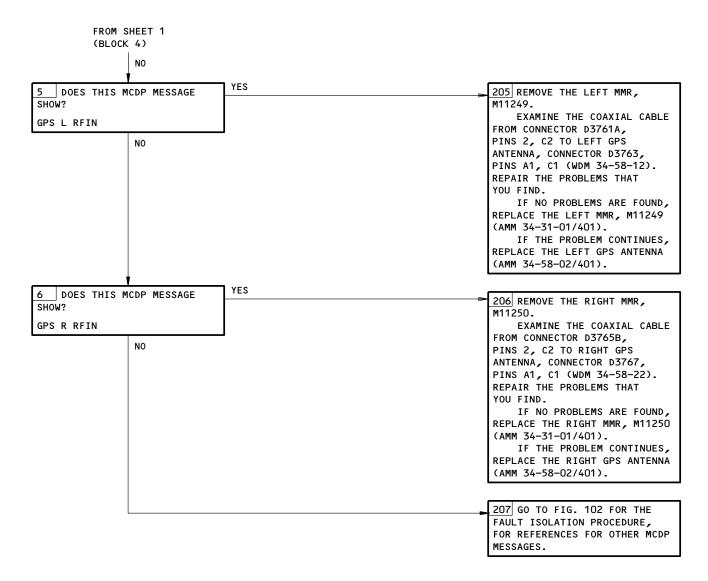
AUTOFLIGHT BITE FAULT ISOLATION "G" MESSAGES

PREREQUISITES NONE



Autoflight BITE Fault Isolation Procedures - G Messages Figure 111 (Sheet 1)





Autoflight BITE Fault Isolation Procedures - G Messages Figure 111 (Sheet 2)



AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "H" **MESSAGES**

PREREQUISITES	
NONE	

\Box		
DOES ONE OF THE MCDP MES- SAGES THAT FOLLOW SHOW? HYD PWR L	YES	100 DO THE HYDRAULIC SYSTEM FAULT ISOLATION PROCEDURE FOR SYSTEM (FIM 29-11-00/101). DO THIS PROCEDURE: MCDP
HYD PWR R		GROUND TEST 07 - "SERVO AIL" (FIM 22-00-03/101, FIG. 107) TO VERIFY VALID HYDRAULIC INPUT.
		101 GO TO FIG. 102 FOR THE FAULT ISOLATION PROCEDURE REFERENCES FOR OTHER MCDP MESSAGES.

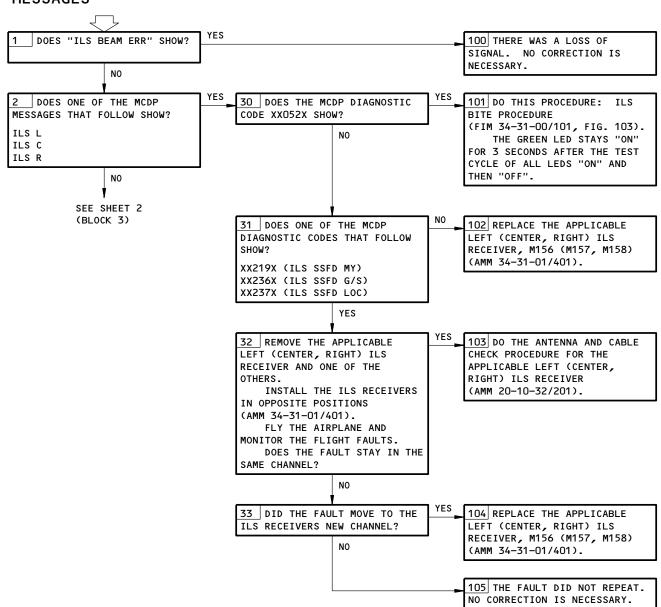
Autoflight BITE Fault Isolation Procedures - H Messages Figure 112

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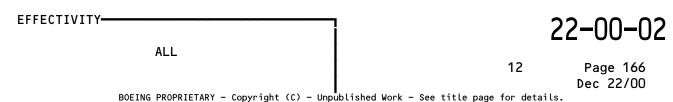
E40399

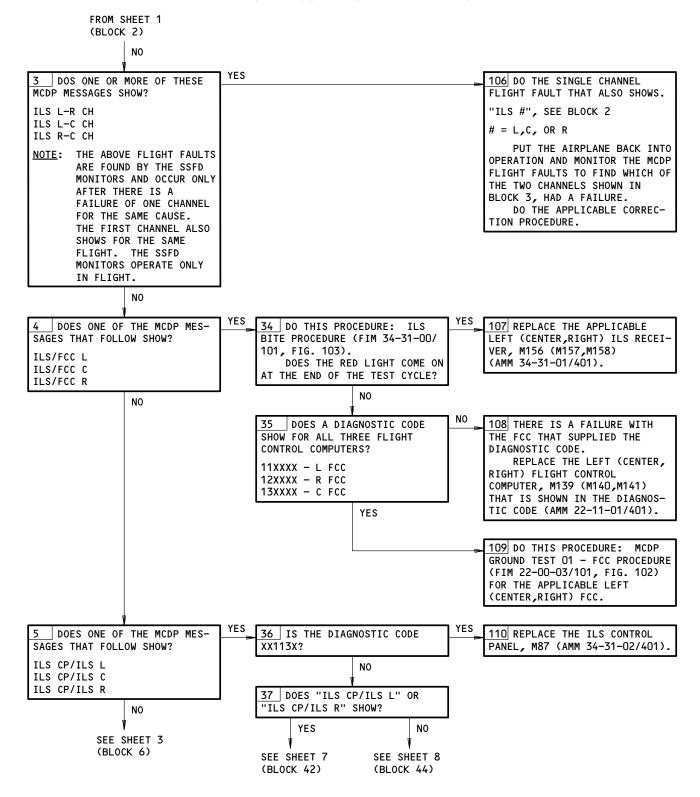
22-00-02

AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "I" MESSAGES PREREQUISTES
NONE

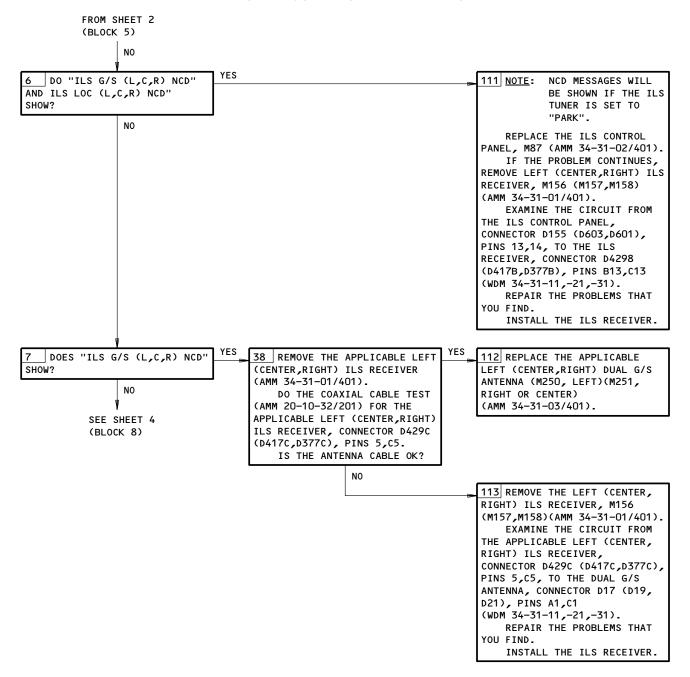


Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 1)

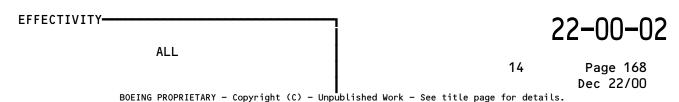


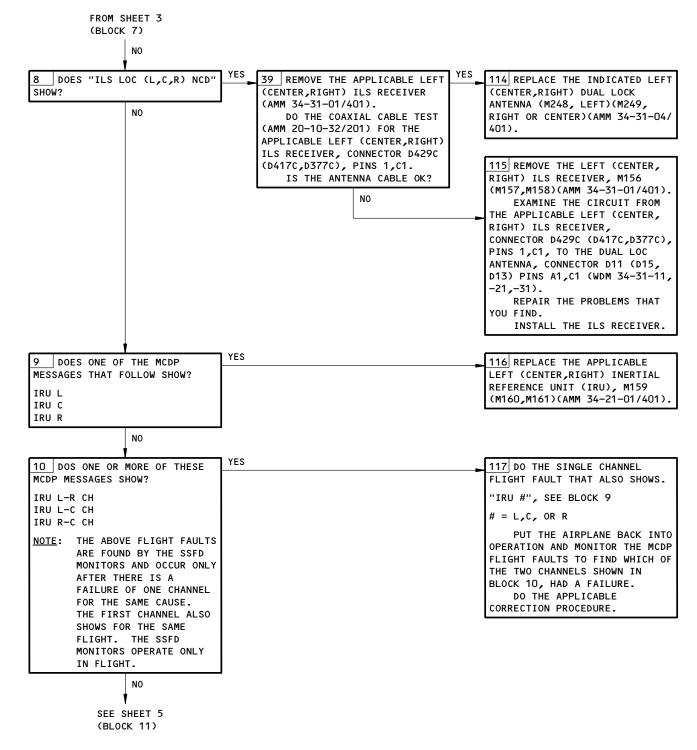


Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 2)

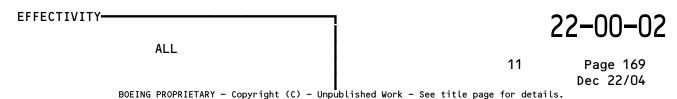


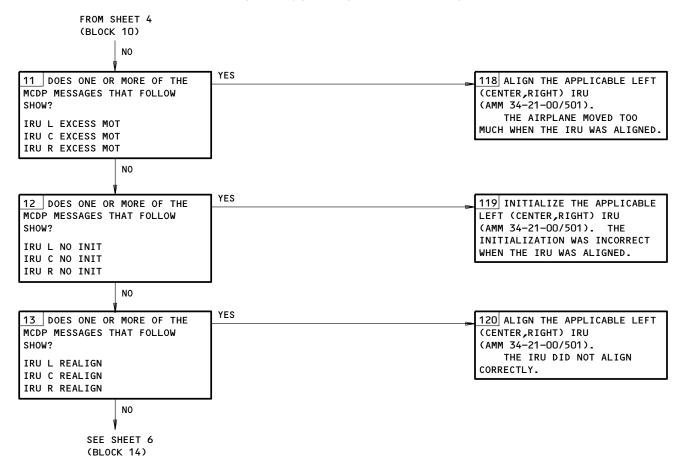
Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 3)



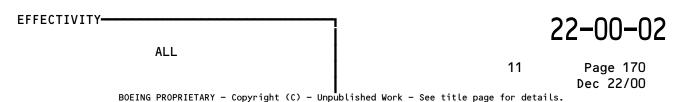


Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 4)

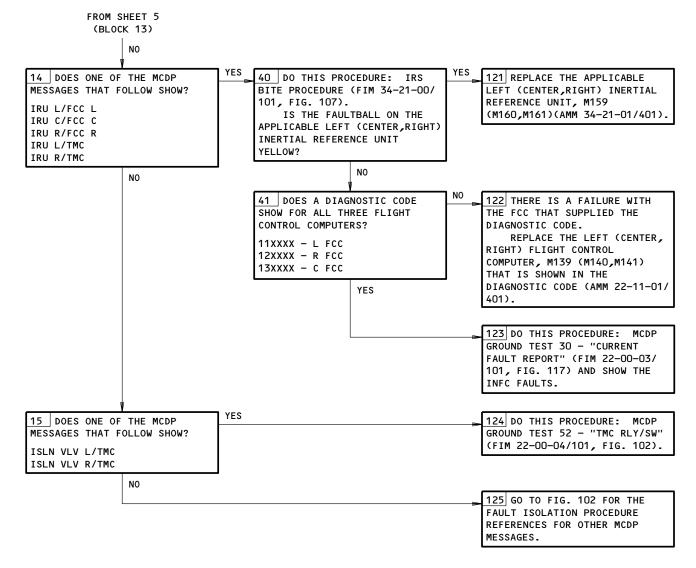




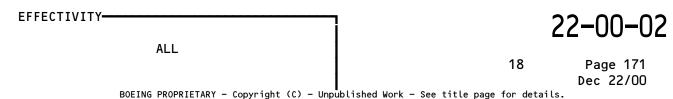
Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 5)







Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 6)



FROM SHEET 2

(BLOCK 37) 42 MAKE SURE THE SYSTEMS THAT 126 RELEASE THE "TEST" BUTTON. FOLLOW HAVE POWER: REPLACE THE APPLICABLE • EFIS (AMM 34-22-00/501) LEFT (RIGHT) ILS RECEIVER, • ILS (AMM 34-31-00/501) M156 (M158)(AMM 34-31-01/401). • VOR (AMM 34-51-00/501) IF THE PROBLEM CONTINUES, • DME (AMM 34-55-00/501). REMOVE THE LEFT (RIGHT) ILS RECEIVER, M156 (M158) SET THE APPLICABLE LEFT (AMM 34-31-01/401).(RIGHT) EFIS CONTROL PANEL EXAMINE THE CIRCUIT FROM MODE SELECT SWITCH TO "ILS". THE ILS RECEIVER, CONNECTOR PUSH AND HOLD THE "TEST" D429B (D377B), PINS B13,C13, TO TB105, PINS G62,G63 BUTTON ON THE APPLICABLE LEFT (RIGHT) DME INTERROGATOR. (TB119, PINS G72,G73) DOES THE RED "CONTROL (WDM 34-31-11,-21).INPUT FAIL" LED COME ON AT THE REPAIR THE PROBLEMS THAT END OF THE TEST (AFTER 6 YOU FIND. SECONDS)? INSTALL THE ILS RECEIVER. YES 43 RELEASE THE "TEST" BUTTON. 127 REMOVE THE APPLICABLE REMOVE THE ILS CONTROL LEFT (RIGHT) ILS RECEIVER, PANEL, M87 (AMM 34-31-02/401). M156 (M158)(AMM 34-31-01/401). DO A CHECK OF THE ILS CON-EXAMINE THE CIRCUIT FROM TROL PANEL, CONNECTOR L-D155 THE ILS RECEIVER, CONNECTOR (R-D601), PINS 8,9, FOR 115V D429B (D377B), PINS B15,C15, AC (WDM 34-31-11,-21). TO THE ILS CONTROL PANEL, IS THERE 115V AC? CONNECTOR D155 (D601), PINS 8,9 (WDM 34-31-11,-21). YES REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE ILS RECEIVER AND THE ILS CONTROL PANEL, M87 (AMM 34-31-02/401). 128 REPLACE THE ILS CONTROL PANEL, M87 (AMM 34-31-02/401). IF THE PROBLEM CONTINUES, REMOVE THE ILS CONTROL PANEL, M87 (AMM 34-31-02/401). EXAMINE THE CIRCUIT FROM THE ILS CONTROL PANEL, L-D155 (R-D601), PINS 13,14, TO TB105, PINS G62,G63 (TB119, PINS G72,G73) (WDM 34-31-11,-21). REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE ILS CONTROL PANEL.

Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 7)

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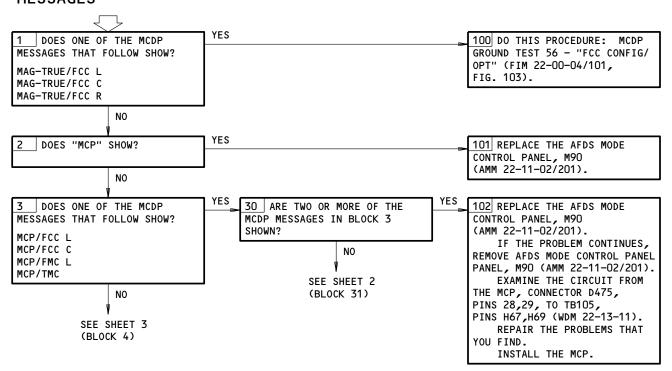
FROM SHEET 2 (BLOCK 37) NO 44 REMOVE THE CENTER ILS 129 RELEASE THE "TEST" SWITCH. RECEIVER, M157, AND THE LEFT REPLACE THE ILS RECEIVER THAT WAS MOVED TO THE LEFT ILS RECEIVER, M156. INSTALL THE RECEIVERS IN POSITION (AMM 34-31-01/401). OPPOSITE POSITIONS (AMM 34-31-01/401). MAKE SURE THE ILS SYSTEMS HAVE POWER (AMM 34-31-00/501). PUSH AND HOLD THE "TEST" BUTTON ON THE ILS RECEIVER IN THE CENTER POSITION. DOES THE RED "CONTROL INPUT FAIL" LED COME ON AT END OF THE TEST (AFTER 5 SECONDS)? YES 45 RELEASE THE "TEST" SWITCH. 130 REMOVE THE CENTER ILS RECEIVER, M157 (AMM 34-31-01/ REMOVE THE ILS CONTROL PANEL, M87 (AMM 34-31-02/401). EXAMINE ILS CONTROL PANEL, EXAMINE THE CIRCUIT FROM CONNECTOR D603, PINS 8,9, FOR THE ILS RECEIVER, CONNECTOR 115V AC (WDM 34-31-31). D417B, PINS B15,C15, TO THE IS THERE 115V AC? ILS CONTROL PANEL, CONNECTOR D603, PINS 8,9 (WDM 34-31-31). YES REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE ILS RECEIVER AND THE ILS CONTROL PANEL, M87 (AMM 34-31-02/401).131 REPLACE THE ILS CONTROL PANEL, M87 (AMM 34-31-02/401). IF THE PROBLEM CONTINUES, REMOVE THE CENTER ILS RECEI-VER, M157 (AMM 34-31-01/401), AND ILS CONTROL PANEL, M87 (AMM 34-31-02/401). EXAMINE THE CIRCUIT FROM THE ILS RECEIVER, CONNECTOR D417B, PINS B13,C13, TO THE ILS CONTROL PANEL, CONNECTOR D603, PINS 13,14 (WDM 34-31-31). REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE ILS RECEIVER AND THE ILS CONTROL PANEL.

Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 8)

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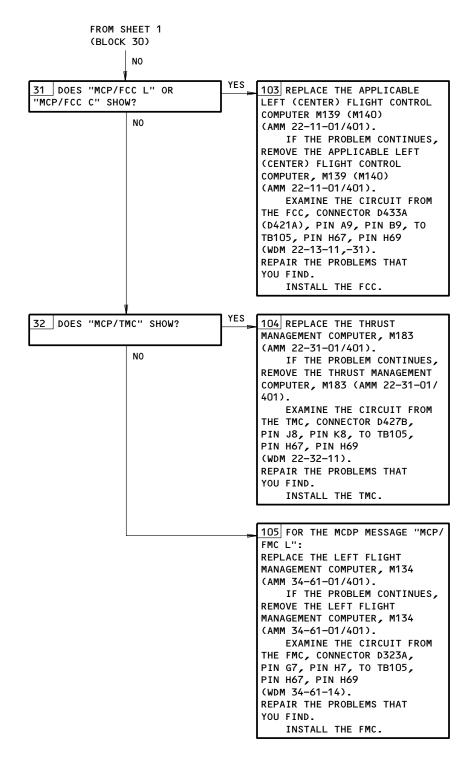
Page 173 Dec 22/00 AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES "M" MESSAGES PREREQUISITES
NONE



Autoflight BITE Fault Isolation Procedures - M Messages Figure 114 (Sheet 1)

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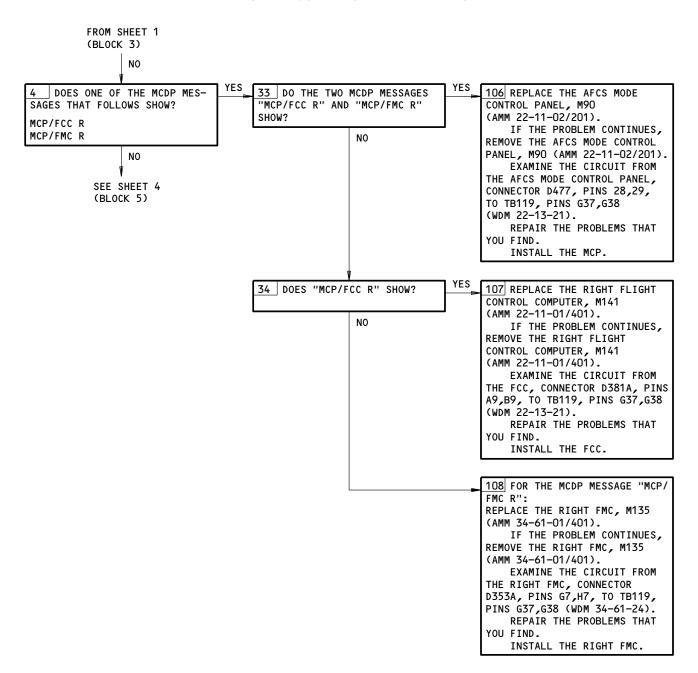
Autoflight BITE Fault Isolation Procedures - M Messages Figure 114 (Sheet 2)

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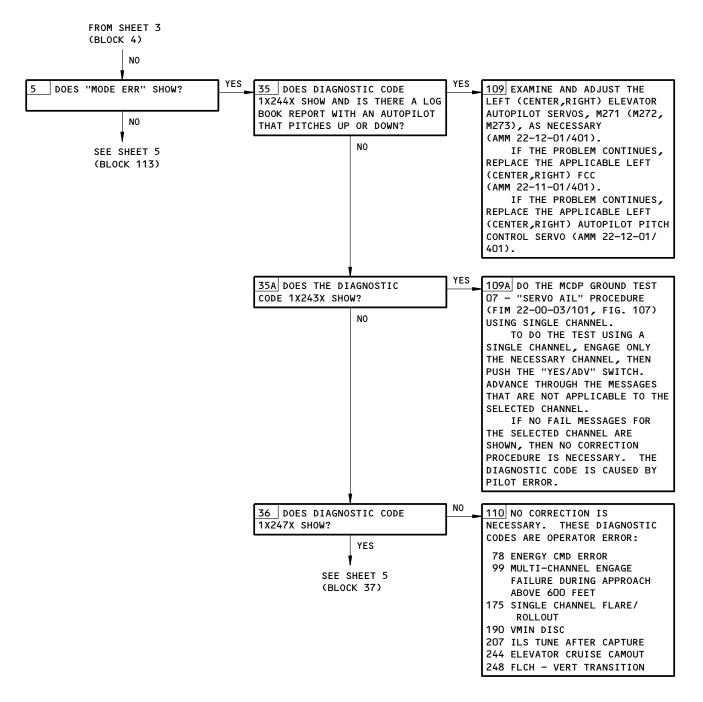
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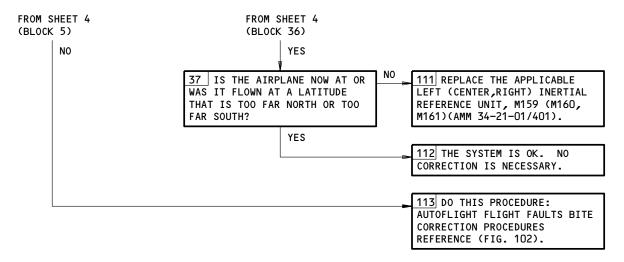
Autoflight BITE Fault Isolation Procedures - M Messages Figure 114 (Sheet 3)





Autoflight BITE Fault Isolation Procedures - M Messages Figure 114 (Sheet 4)





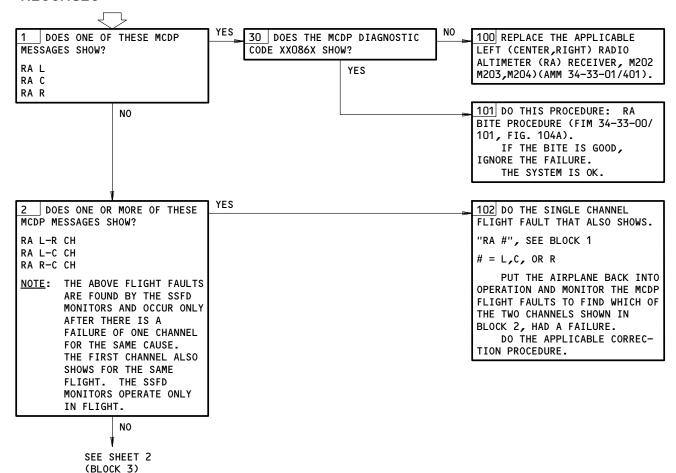
Autoflight BITE Fault Isolation Procedures - M Messages Figure 114 (Sheet 5)

EFFECTIVITY-ALL

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AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES "R" MESSAGES PREREQUISITES
NONE



Autoflight BITE Fault Isolation Procedures - R Messages Figure 115 (Sheet 1)

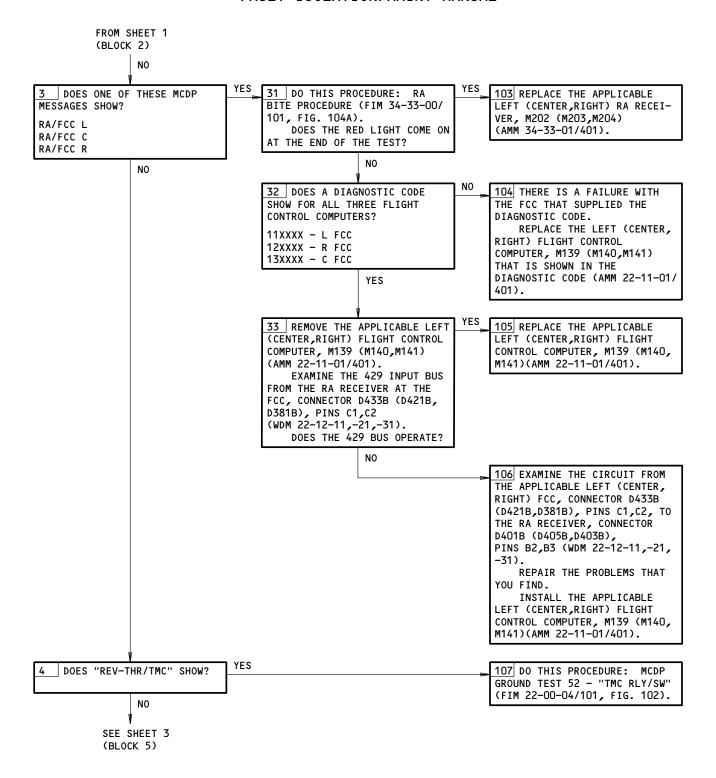
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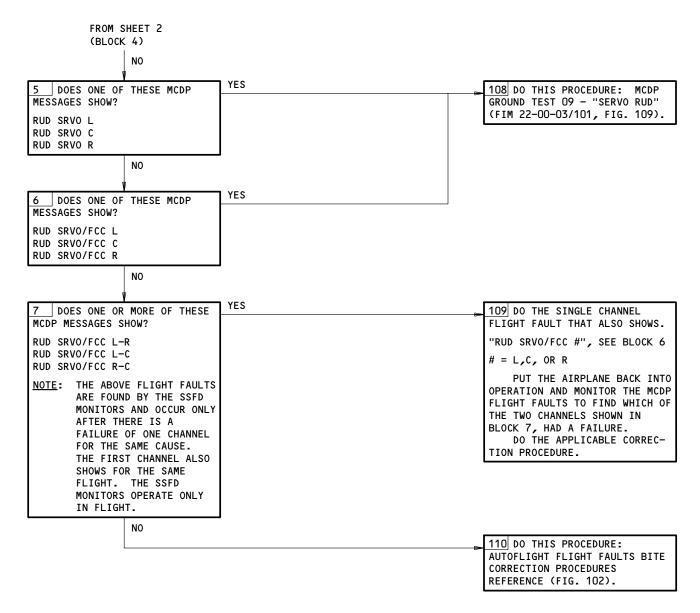
Dec 22/00

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Autoflight BITE Fault Isolation Procedures - R Messages Figure 115 (Sheet 2)





Autoflight BITE Fault Isolation Procedures - R Messages Figure 115 (Sheet 3)

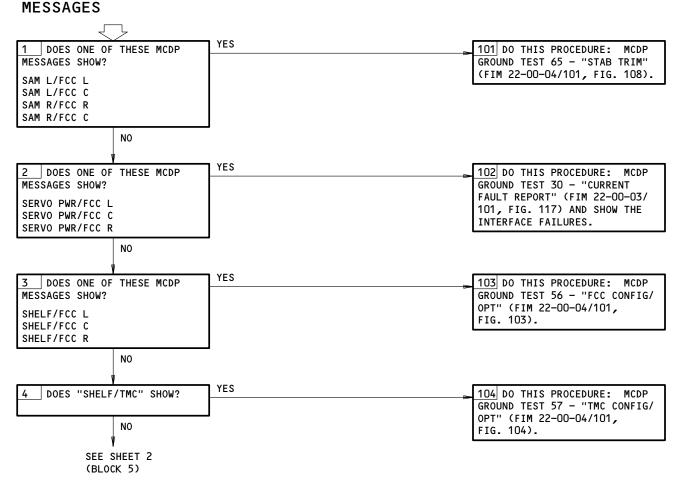
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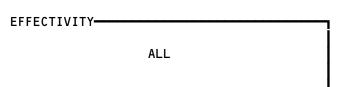
17 Page 180A
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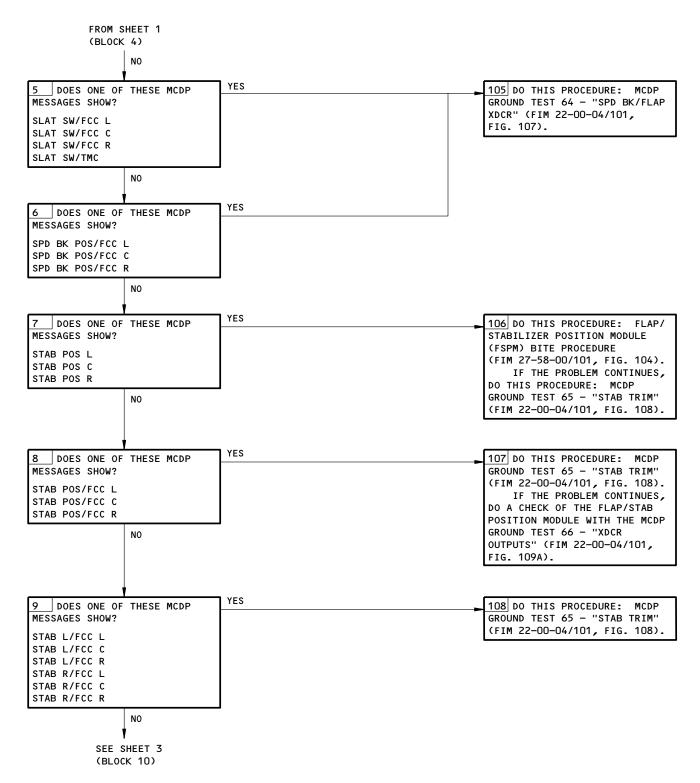
AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES "S" PREREQUISITES
NONE



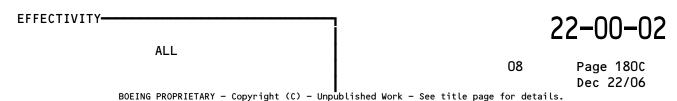
Autoflight BITE Fault Isolation Procedures - S Messages Figure 116 (Sheet 1)

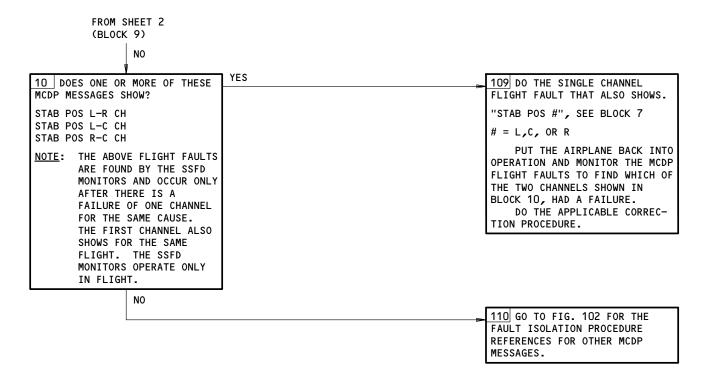






Autoflight BITE Fault Isolation Procedures - S Messages Figure 116 (Sheet 2)





Autoflight BITE Fault Isolation Procedures - S Messages Figure 116 (Sheet 3)

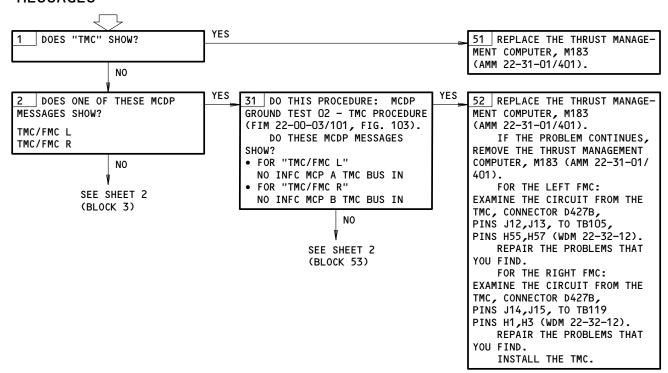
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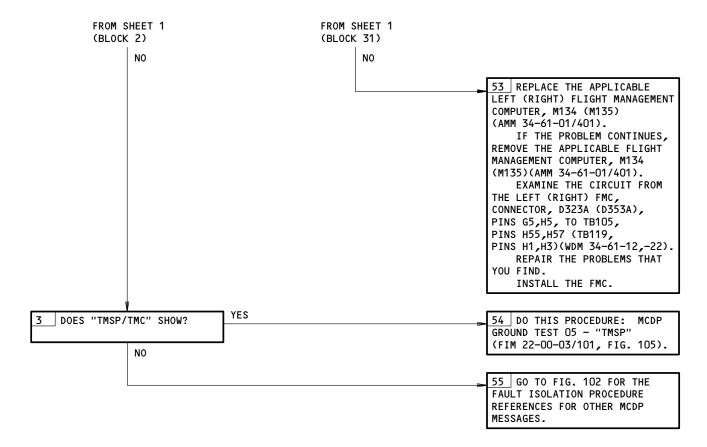
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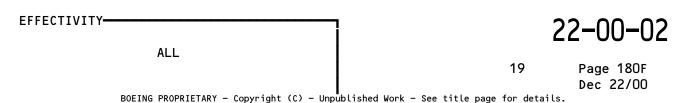
AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES "T" MESSAGES PREREQUISITES
NONE



Autoflight BITE Fault Isolation Procedures - T Messages Figure 117 (Sheet 1)



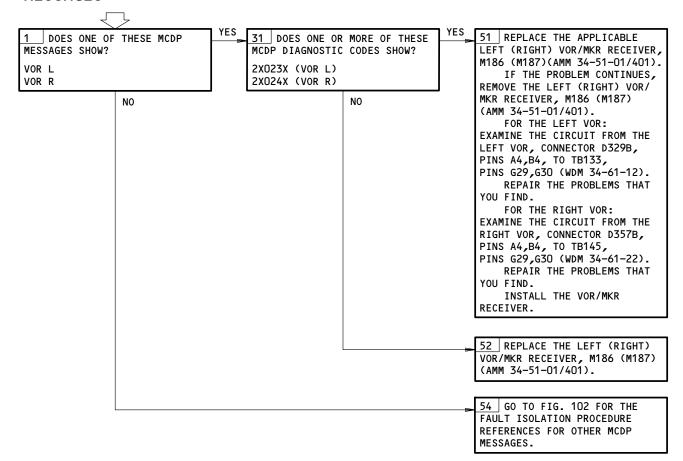
Autoflight BITE Fault Isolation Procedures - T Messages Figure 117 (Sheet 2)





AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES "V" MESSAGES

PREREQUISITES	
NONE	



Autoflight BITE Fault Isolation Procedures - V Messages Figure 118



AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES "W" MESSAGES

PREREQUISITES	
NONE	

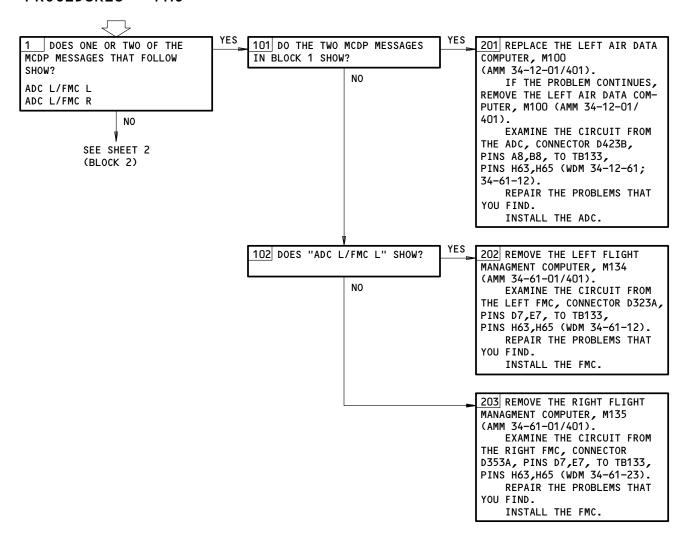
1 DOES "WG A/I/TMC" SHOW?	YES	51 DO THIS PROCEDURE: MCDP GROUND TEST 52 - "TMC RLY/SW" (FIM 22-00-04/101, FIG. 102).
		52 GO TO FIG. 102 FOR THE
		FAULT ISOLATION PROCEDURE REFERENCES FOR OTHER MCDP MESSAGES.

Autoflight BITE Fault Isolation Procedures - W Messages Figure 119

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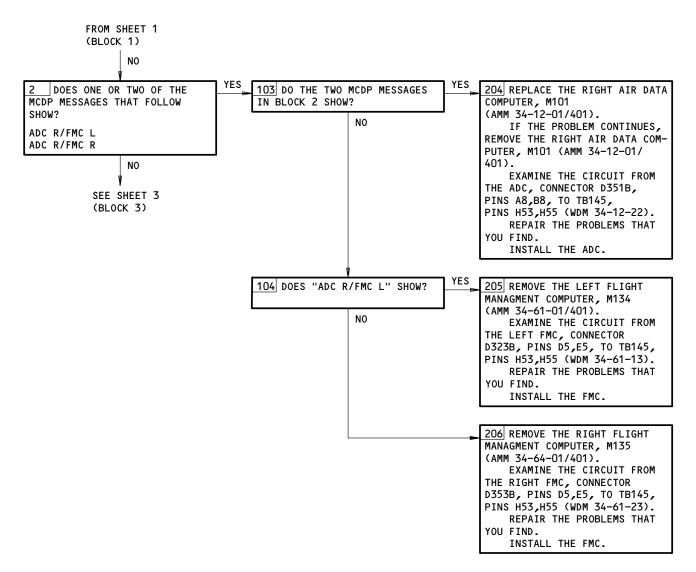
AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - FMC PREREQUISITES
NONE



Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory) Figure 120 (Sheet 1)

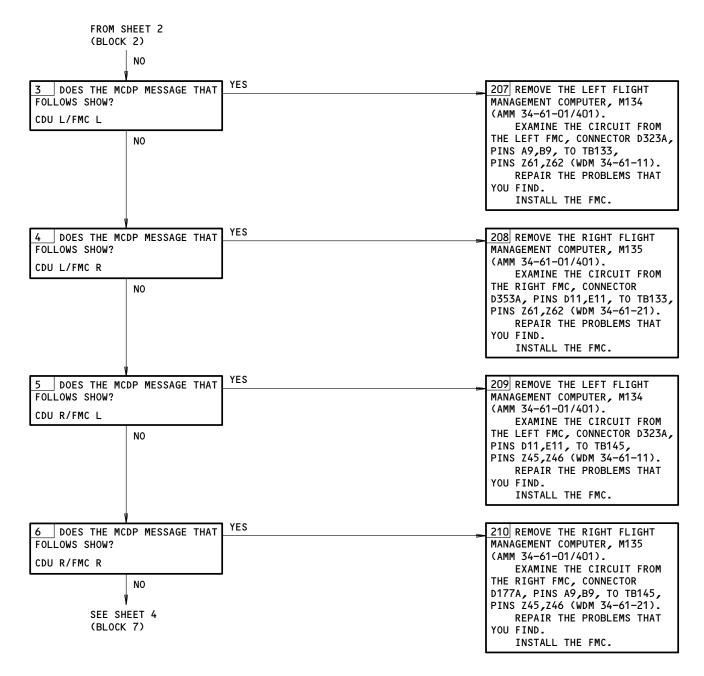
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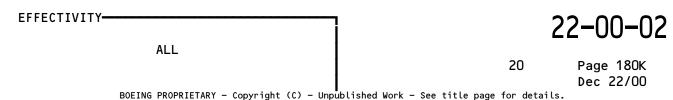


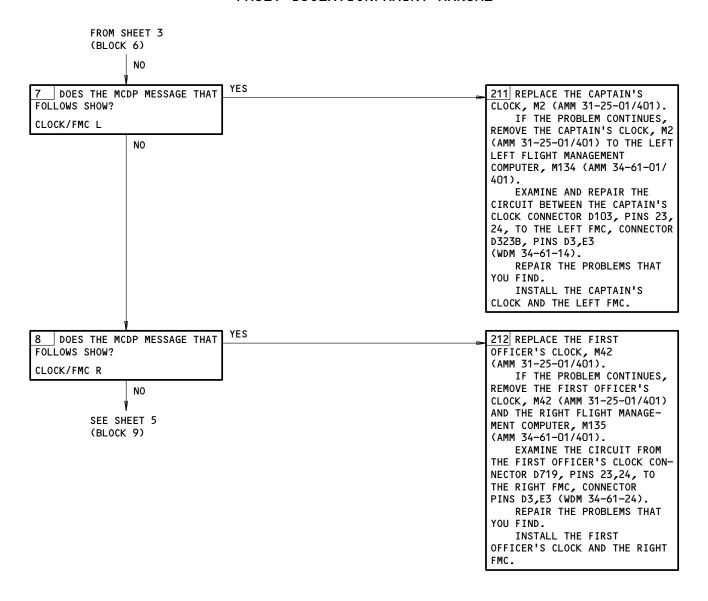
Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory) Figure 120 (Sheet 2)





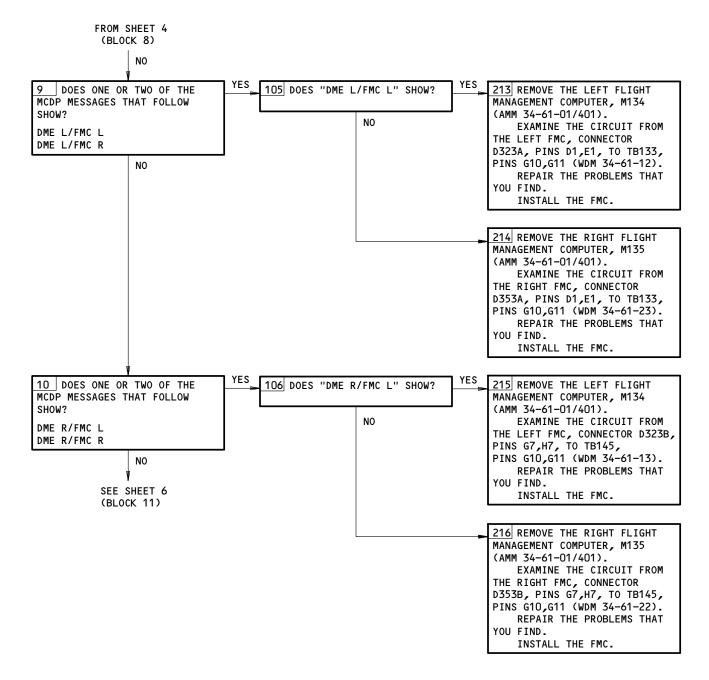
Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory) Figure 120 (Sheet 3)



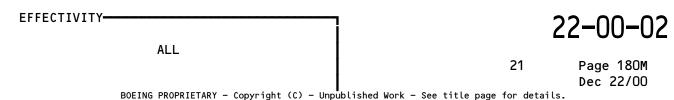


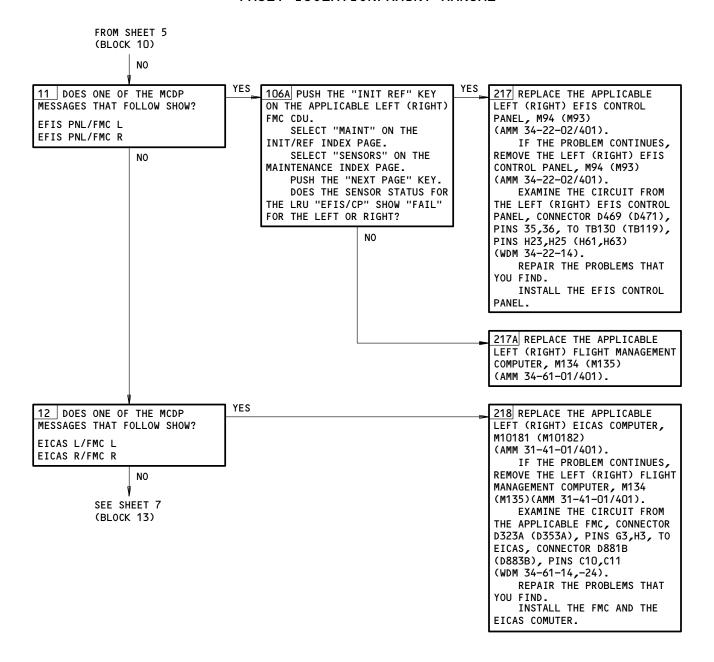
Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory) Figure 120 (Sheet 4)



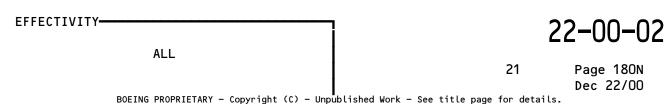


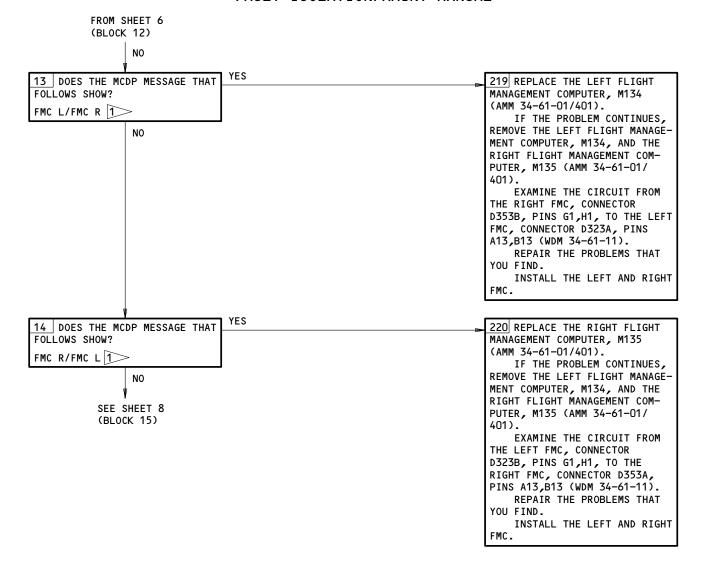
Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory) Figure 120 (Sheet 5)





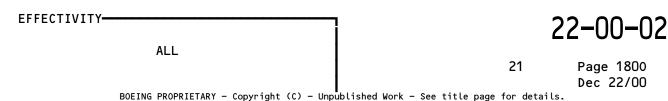
Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory)
Figure 120 (Sheet 6)

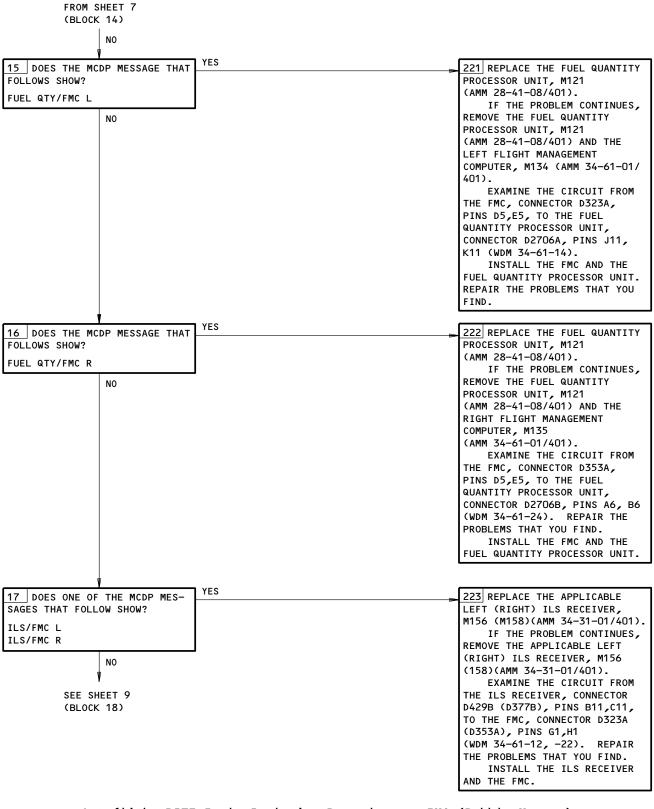




MCDP DIAGNOSTIC CODE XXOO7X OR XXOO8X WILL SHOW IF THE FMC DID A NORMAL RESYNC INFLIGHT PROCEDURE. THIS IS A NUISANCE MESSAGE UNLESS THERE IS A PILOT REPORT OR A FAIL MESSAGE ON THE CDU.

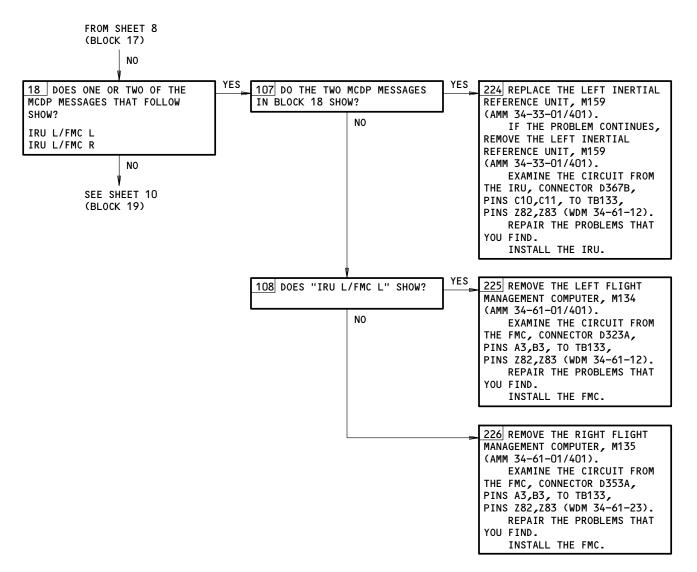
Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory)
Figure 120 (Sheet 7)





Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory)
Figure 120 (Sheet 8)



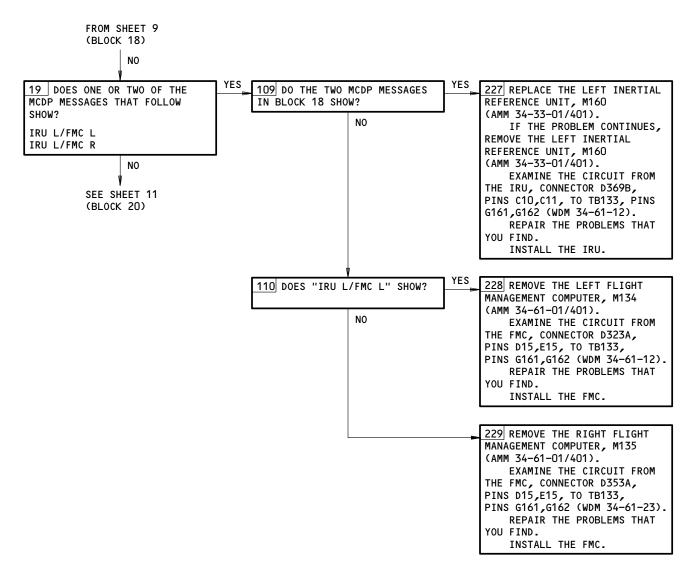


Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory)
Figure 120 (Sheet 9)

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Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory) Figure 120 (Sheet 10)

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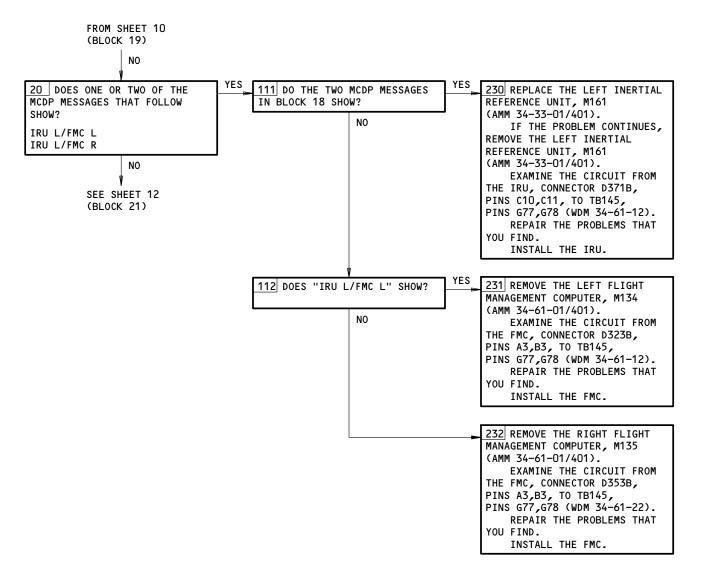
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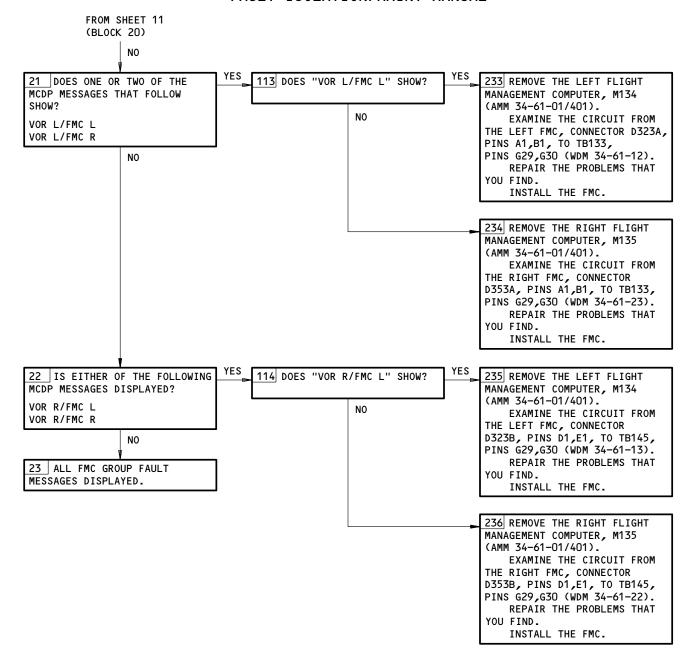




Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory) Figure 120 (Sheet 11)

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Autoflight BITE Fault Isolation Procedures - FMC (Bubble Memory)
Figure 120 (Sheet 12)

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FAULT SYMPTOM	CORRECTION PROCEDURE
1. THE AUTOPILOT OR A/P DISC ANNUNCIATOR IS ONLY HALF ILLUMINATED OR DOES NOT AGREE WITH THE MASTER CAUTION OR WARNING ANNUNCIATORS AND THE EICAS DISPLAY MESSAGES.	DO THIS PROCEDURE: MCDP GROUND TEST 30 - "CURRENT FAULT REPORT" (FIM 22-00-03/101, FIG. 117) AND SHOW THE INTERFACE FAULTS.
NOTE: THE A/P DISC WARNING LIGHT IS ONLY HALF ILLUMINATED DURING GROUND TESTING.	
2. THE AUTOLAND STATUS ANNUNCIATOR (REFER TO AS THE ASA) DOES NOT OPERATE CORRECTLY WHEN THE ASA TEST OR THE P/RST SWITCH IS USED OR IT DOES NOT AGREE WITH THE OTHER ASA.	DO THIS PROCEDURE: MCDP GROUND TEST 06 - "ASA" (FIM 22-00-03/101, FIG. 106).
3. THE AUTOPILOT DISENGAGED OR DID NOT ENGAGE.	1. DO THIS PROCEDURE: MCDP GROUND TEST 30 - "CURRENT FAULT REPORT" (FIM 22-00-03/101, FIG. 117) AND SHOW THE INTERFACE FAULTS. 2. IF THE PROBLEM CONTINUES, DO THIS PROCEDURE: MCDP GROUND TEST 04 - "MCP" (FIM 22-00-03/101, FIG. 104).
4. THE MODE CONTROL PANEL (MCP) DOES NOT OPERATE CORRECTLY.	DO THIS PROCEDURE: MCDP GROUND TEST 04 - "MCP" (FIM 22-00-03/101, FIG. 104).
5. THE AUTOTHROTTLE DOES NOT ENGAGE AFTER IT IS DISENGAGED FROM THE VNAV MODE.	NO FAULT - THE MODE CONTROL PANEL (MCP) A/T ARM SWITCH MUST BE PUT TO OFF AND BACK TO ON BEFORE THE AUTOTHROTTLE WILL ENGAGE IN THE VNAV MODE.
6. THE THRUST LIMIT DISPLAY DOES NOT SHOW ON THE EICAS DISPLAY.	1. THIS IS THE USUAL CONDITION WHEN THE REVERSE THRUST IS SET. 2. IF THIS CONDITION OCCURS WHEN THE THRUST LEVERS ARE IN THE FORWARD THRUST POSITION, DO THIS PROCEDURE: MCDP GROUND TEST 52 - "TMC RLY/SW" (FIM 22-00-04/101, FIG. 102).
7. THE THR MODE WILL NOT ENGAGE. NOTE: THE THR MODE WILL NOT ENGAGE FOR TAKEOFF UNLESS THESE ARE THE CONDITIONS: 1. THE FLAPS POSITION IS GREATER THAN 1 FOR TAKEOFF. 2. THE MODE CONTROL PANEL A/T ARM SWITCH IS IN THE ARM POSITION. 3. THE THRUST MODE SELECT PANEL (TMSP) MUST BE SET TO THE "T/O" MODE.	1. DO THIS PROCEDURE: MCDP GROUND TEST 04 - "MCP" (FIM 22-00-03/101, FIG. 104). 2. IF THE PROBLEM CONTINUES, DO THIS PROCEDURE: MCDP GROUND TEST 64 - "SPD BK/FLAP XDCR" (FIM 22-00-04/101, FIG. 107).
8. THERE IS PITCH OSCILLATION (PORPOISING) WITH AN AUTOPILOT CHANNEL ENGAGED.	1. DO THE ELEVATOR SURFACE CHECK (AMM 27-02-00/601) (FLIGHT CONTROLS SURFACE INSPECTION/CHECK) AND DO THE APPLICABLE CORRECTION PROCEDURE. 2. IF THE PROBLEM CONTINUES, DO THE POWER CONTROL ACTUATOR (PCA) INPUT RODS ADJUSTMENT (AMM 27-31-00/501).

Autoflight Problems Not Shown by the MCDP Figure 121 (Sheet 1)

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FAULT SYMPTOM	CORRECTION PROCEDURE
9. THE AUTOPILOT IS NOT SMOOTH IN THE ROLL MODES WITH AN AUTOPILOT CHANNEL ENGAGED.	1. DO THE AILERON SURFACE CHECK PART OF THE FLIGHT CONTROLS SURFACE INSPECTION/CHECK AND DO THE CORRECTION PROCEDURES (AMM 27-02-00/601). 2. IF THE PROBLEM CONTINUES, DO THE AILERON CONTROL SYSTEM ADJUSTMENT/TEST (AMM 27-11-00/501).
10. THERE IS IRREGULAR ELEVATOR (OR COLUMN) MOVEMENT IN CRUISE OR OTHER AUTOPILOT MODES, OR THERE IS A FAILURE TO HOLD OR CAPTURE THE SELECTED ALTITUDE, OR THE BANK ANGLE IS LIMITED TO 8 DEGREES IN ALL AUTOPILOT MODES.	1. DO THIS PROCEDURE: RA BITE PROCEDURE (FIM 34-33-00/101, FIG. 104A) FOR EACH SYSTEM. 2. IF THE PROBLEM CONTINUES, DO THE RADIO ALTIMETER ANTENNA AND COAXIAL CABLE CHECK (AMM 20-10-32/201). NOTE: A FAULTY RADIO ALTIMETER TRANSCEIVER OR FAULTY ANTENNA, OR LOOSE OR CORRODED COAXIAL CONNECTIONS, CAN CAUSE THOSE SYMPTOMS. THESE SYMPTOMS MAY BE INTERMITTANT.
11. THE FLIGHT DIRECTOR COMMAND BARS ARE OUT OF VIEW AND THERE IS NO F/D FLAG. THE RADIO ALTIMETER DISPLAY SHOWS 40 FEET.	DO THIS PROCEDURE: MCDP GROUND TEST 40 - "AUTOLAND" (FIM 22-00-03/101, FIG. 118, BLOCKS 1 AND 2).
12. "NO LAND 3" IS SHOWN ON THE AUTOLAND STATUS ANNUNCIATOR AND THERE ARE NO RELATED MCDP FLIGHT FAULTS SHOWN.	DO THIS PROCEDURE: RA BITE PROCEDURE (FIM 34-33-00/101, FIG. 104A) FOR EACH SYSTEM.
13. THE CENTER AUTOPILOT CHANNEL DISCONNECTS AFTER APPROACH IS SET.	1. DO THIS PROCEDURE: MCDP GROUND TEST 40 - "AUTOLAND" (FIM 22-00-03/101, FIG. 118). 2. IF TEST 40 IS DONE WITHOUT A FAILURE, THEN DO THE STEPS THAT FOLLOW: A. ENERGIZE THE CENTER BUS TRANSFER RELAY, K107 B. MEASURE THE VOLTAGE AT THE CENTER FCC, CONNECTOR D55C, PINS 1, 2, 5 (WDM 22-11-32). MAKE SURE THAT THERE IS 28V DC. 3. IF ONE OF THESE PINS DOES NOT HAVE 28V DC THEN EXAMINE THE CIRCUIT FROM THE CENTER FCC, CONNECTOR D421C, PINS 1, 2, 5, TO C BUS CONT CIRCUIT BREAKER C880, PIN 1 (WDM 22-11-32; 24-51-31). REPAIR THE PROBLEMS THAT YOU FIND.
14. THE A/T DISC LIGHT COMES ON AFTER A POWER TRANSFER.	1. PUSH ONE OF THE TWO AUTOTHROTTLE DISENGAGE SWITCHES FOUND ON THE THROTTLES. 2. IF THE PROBLEM CONTINUES, DO THIS PROCEDURE: MCDP GROUND TEST 30 - "CURRENT FAULT REPORT" (FIM 22-00-03/101, FIG. 117).

Autoflight Problems Not Shown by the MCDP Figure 121 (Sheet 2)

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FAULT SYMPTOM	CORRECTION PROCEDURE
15. "NO LAND 3" IS SHOWN ON THE AUTOLAND STATUS ANNUNCIATOR. THE MCDP DIAGNOSTIC CODE 021 IS REPORTED BY ONE OR MORE FCCs, AND NOT REPORTED BY THE TMC OR FMC.	1. CYCLE LEFT AND RIGHT MCP CIRCUIT BREAKERS (LEAVE CIRCUIT BREAKERS OPEN FOR ABOUT 5 SECONDS.) 2. SLOWLY SLEW EACH OF THE MCP WINDOW KNOBS OVER THE ENTIRE WINDOW RANGE IN BOTH DIRECTIONS. (I.E., FOR THE HEADING WINDOW, FROM PRESENT VALUE TO PRESENT VALUE [360 DEGREES] IN ONE DIRECTION, THEN IN THE OTHER DIRECTION). NOTE: ROTATION SPEED SHOULD BE 3 TO 5 DETENTS PER SECOND. WHEN CHANGING DIRECTIONS, DO NOT EXCEED 2 DETENTS PER SECOND AT THE POINTS OF CHANGE.
	3. RUN MCDP GROUND TEST 04 MCP. 4. IF ONE OF THE MCP WINDOWS FAILS TO INCREMENT OR DEINCREMENT, AND A "NO LAND 3" IS ANNUNCIATED CORRELATING TO MCDP DIAGNOSTIC 021 IN STEP 2, OR FAILS MCP GROUND TEST IN STEP 3, THEN REPLACE THE MCP. 5. NO FURTHER ACTION IS REQUIRED IF MCP OPERATES

Autoflight Problems Not Shown by the MCDP Figure 121 (Sheet 3)

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MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11U9, REFER TO FIG. 101A FOR THE GROUND TEST CIRCUIT BREAKERS THAT ARE NECESSARY

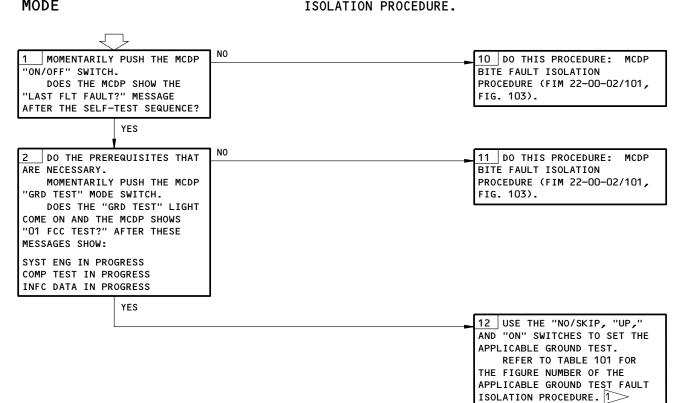
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)

NOTE:

TO PREVENT INCORRECT FAULT INDICATIONS, PREREQUISITES FOR THE APPLICABLE GROUND TEST MUST BE DONE BEFORE YOU SET THE "GRD TEST MODE."

MCDP GROUND TEST MODE

REFER TO TABLE 101 FOR THE LOCATION OF THE FIGURE NUMBER FOR THE GROUND TEST FAULT



1 > NOTE: AFTER YOU CORRECT THE FAILURES SHOWN DURING A GROUND TEST, YOU MUST GO OUT OF THE MCDP GRD TEST MODE AND THEN GO BACK INTO IT. PUSH THE "FLT FAULTS" MODE SWITCH TO GO OUT OF GRD TEST MODE. PUSH THE "GRD TEST" MODE SWITCH TO GO BACK INTO THE GRD TEST MODE. IF THIS IS NOT DONE, THE FAILURE MESSAGE WILL SHOW ALTHOUGH THE FAILURE WAS CORRECTED.

> MCDP Ground Test Mode Figure 101 (Sheet 1)

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MCDP GROUND TEST REFERENCE - TABLE 101							
TEST NO.	MCDP TEST	CH-SEC-SUB/FIG.	TEST NO.	MCDP TEST	CH-SEC-SUB/FIG.		
01 02 04	FCC TMC MCP	22-00-03/102 22-00-03/103 22-00-03/104	30 40	CURRENT FAULT REPORT AUTOLAND	22-00-03/117 22-00-03/118		
05 06	TMSP ASA	22-00-03/105 22-00-03/106	51 52	AIR/GRD RLY TMC RLY/SW	22-00-04/101 22-00-04/102		
07 08 09	SERVO AIL SERVO ELEV SERVO RUD	22-00-03/107 22-00-03/108 22-00-03/109	56 57 59	FCC CONFIG/OPT TMC CONFIG/OPT FCC INSTR	22-00-04/103 22-00-04/104 22-00-04/105		
10 11	SERVO A/T SW A/P DISC	22-00-03/110 22-00-03/111	60 64 65	TMC INSTR SPD BK/FLAP XDCR STAB TRIM	22-00-04/106 22-00-04/107 22-00-04/108		
12 13	SW A/T DISC SW G/A	22-00-03/112 22-00-03/113	66	XDCR OUTPUTS	22-00-04/109		
14 15 16 17	XDCR COL L XDCR COL R XDCR WHL PVD/PVDC	22-00-03/113 22-00-03/114 22-00-03/115 22-00-03/116 22-00-03/116A	67 68 69	AIL SERVO LIMIT ELEV SERVO LIMIT RUD SERVO LIMIT	22-00-04/110 22-00-04/111 22-00-04/112		

MCDP Ground Test Mode Figure 101 (Sheet 2)

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Not Used Figure 101A

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MCDP MESSAGE	00117.07	FAULT ISOLATION PROCEDUR			
# = L, C, or R XX = DECIMAL NO.	SOURCE CMPTR(S)	GROUND TEST(S) NO.	CH-SEC-SUB/FIG.	SHEET	BLOCK
AIL SRVO DEG	FCC	66	22-00-04/109A	5	5
±XX.X ±XX.X ±XX.X AIL SRVO # FAIL	FCC	07,08,09,40 65	22-00-03/XXX 22-00-04/108	- 7 F 4	-
AIL SURF DEG ±XX.X ±XX.X ±X.XX	FCC	66 67	22-00-04/108 22-00-04/109A 22-00-04/110	3,5,6 5 5	4,7,10 5 6,7
A/C PROGRAM/XX	TMC	57	22-00-04/104	2	4
A/G 1/FCC # FAIL	FCC	51	22-00-04/101	2	12
A/G 1/TMC FAIL	TMC	51	22-00-04/101	2	24
A/G 2/FCC # FAIL	FCC	51	22-00-04/101	3	14
A/P DISC FCC # FAIL	FCC	11	22-00-03/111	2	102
		40	22-00-03/118A	9	109
A/P WARN RST FCC # FAIL	FCC	11	22-00-03/111	2,3	103,104
404 DOT 500 # 545	500	40	22-00-03/118A	10	111
ASA RST FCC # FAIL	FCC	06	22-00-03/106	2	102
A/T CUST OPT/XX A/T DISC RST TMC FAIL	TMC TMC	57 12	22-00-04/104 22-00-03/112	2	5 12,16,17
A/T DISC TMC FAIL	TMC	12	22-00-03/112	2,3 2,3	12,16,17
W F PICC MIC TAIL			22 00 00/112	273	12710711
BUS # ISLN FAIL	FCC	40	22-00-03/118A	4	104
COWL AI L/R XX XX (XX = HI OR LO)	TMC	52	22-00-04/102	17,18	11,12
CUST OPT XX	TMC	57	22-00-04/104	2	7
ECS PACK L/R/XX XX	ТМС	52	22-00-04/102	12	7
(XX = HI OR LO)	1110) L	22 00 047 102		·
ELEV SRVO DEG ±XX.X ±XX.X ±XX.X	FCC	66	22-00-04/109A	6	6
ELEV SRVO # FAIL	FCC	04,07,08,40 65	22-00-03/XXX 22-00-04/108	3,5,6	5,8,11
ELEV SURF DEG	FCC	66	22-00-04/109A	6	6
±XX.X ±XX.X ±XX.X		68	22-00-04/111	3,4	5,6
ENG FAIL #	FCC	04,07,08,09,40 67,68,69	22-00-03/XXX 22-00-04/XXX		
ENG PROGRAM/XX	TMC	57	22-00-04/104	1	3

MCDP Ground Test Messages Cross Reference Figure 101B (Sheet 1)

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MCDP MESSAGE			FAULT ISOLATIO	N PROCI	EDURES
# = L, C, or R XX = DECIMAL NO.	SOURCE CMPTR(S)	GROUND TEST(S) NO.	CH-SEC-SUB/FIG.	SHEET	BLOCK
FCC #/NAV SEL SW FAIL	FCC	40	22-00-03/118A	20,22,	140,145,
		59	22-00-04/105	8,9, 10,11	120,125,
FCC CONFG LCR/XX XX XX	FCC	56	22-00-04/103	2	3
FCC INTLK LCR/XX XX XX	FCC	56	22-00-04/103	2	4
FCC OPT 1 LCR/XX XX XX	FCC	56	22-00-04/103	2	5
FCC OPT 2 LCR/XX XX XX	FCC	56	22-00-04/103	2	6
FCC OPT 3 LCR/XX XX XX	FCC	56	22-00-04/103	3	7
FCC OPT 4 LCR/XX XX XX	FCC	56	22-00-04/103	3	8
FCC # CH IDENT FAIL	FCC	FAILS GND TEST MODE ENTRY	22-00-02/103	7	113
FCC # FAIL	FCC	01,04,06,07,08, 09,11,13,30,40	22-00-03/XXX		
		51,56,59,64,65 66,67,68,69	22-00-04/XXX		
FLAP DEG/FCC XX.X XX.X XX.X	FCC	66	22-00-04/109A	8	9
FLAP DEG/TMC XX.X	TMC	66	22-00-04/109A	10	10
FLAP O FCC # FAIL	FCC	64	22-00-04/107	5	111
FLAP O TMC FAIL	FCC	64	22-00-04/107	5	111
FLAP 1 FCC # FAIL	FCC	40 64	22-00-03/118A 22-00-04/107	35 4	60 219
FLAP 1 TMC FAIL	TMC	64	22-00-04/107	4	219
FLAP 15 FCC # FAIL	FCC	40	22-00-03/118A	34	59
		64	22-00-04/107	4	218
FLAP 15 TMC FAIL	TMC	64	22-00-04/107	4	218
FLAP 25 FCC # FAIL	FCC	40 64	22-00-03/118A 22-00-04/107	33 4	57 108
FLAP 25 TMC FAIL	TMC	64	22-00-04/107	4	108
GA SW FCC # FAIL	FCC	13	22-00-03/113	2,3	104,107
		40	22-00-03/118A	10,11, 12	113,114, 115,116
GA SW TMC FAIL	TMC	13 40	22-00-03/113 22-00-03/118A	2,3 40,41	104,107 70,71,72, 73
HYD VLD # FAIL	FCC	07,08,09,40	22-00-03/XXX		
	FCC	64,65,67,68,69	22-00-04/XXX		

MCDP Ground Test Messages Cross Reference Figure 101B (Sheet 2)

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MCDP MESSAGE			FAULT ISOLATIO	N PROC	EDURES
# = L, C, or R XX = DECIMAL NO.	SOURCE CMPTR(S)	GROUND TEST(S) NO.	FIM CH-SEC-SUB FIG.	SHEET	BLOCK
ILS # TUNE INHIB FAIL IN AIR-NO GRD TEST/FCC # IN AIR-NO GRD TEST/TMC IRU # EXCESS MOTION IRU # NO INIT IRU # REALIGN	FCC MCDP MCDP ALL ALL ALL	30 30 30 30	22-00-03 118A 22-00-02 103 22-00-02 103 22-00-02 102 22-00-02 102 22-00-02 102	3 6 6 19 20 20	103 109 110 62 63 64
MCP CONFIG L/R/XX XX	МСР	04	22-00-03 104	1	2A
NO INFC FCC # ADC BUS IN NO INFC FCC # AIL DETNT ENG NO INFC FCC # AIL HYD ARM NO INFC FCC # AIL SRVO CMD NO INFC FCC # AIL SRVO POS NO INFC FCC # AIL SURF POS NO INFC FCC # ASA 1 NO INFC FCC # ASA 2 NO INFC FCC # ASA 3	FCC FCC FCC FCC FCC FCC	01,30 01,07,30,40,67 01,07,30,40,67 01,07,30,40,66, 67 01,07,30,40,66, 67 01,06,30,40 01,06,30,40 01,06,30,40	22-00-05 101 22-00-05 101 22-00-05 101 22-00-05 101 22-00-05 101 22-00-05 101 22-00-05 101 22-00-05 101 22-00-05 101	2,3 4 5 6 7 9	1,3 4 5 6 7 8 9 10
NO INFC FCC # ASA 4 NO INFC FCC # AUTO TRIM ARM NO INFC FCC # AUTO TRIM VLD 1 NO INFC FCC # AUTO TRIM VLD 2 NO INFC FCC # A/L BUS ISLN IN NO INFC FCC # A/L BUS ISLN OUT NO INFC FCC # A/P CTN-1 NRM NO INFC FCC # A/P CTN-2 NRM NO INFC FCC # A/P DISC SW NO INFC FCC # A/P WARN-2 BAT NO INFC FCC # A/P WARN-1 NRM NO INFC FCC # A/P WARN-2 NRM NO INFC FCC # A/P WARN-2 NRM NO INFC FCC # BAT PWR/GRD NO INFC FCC # CAPT F/D SEL IN NO INFC FCC # ELEV DETNT ENG NO INFC FCC # ELEV HYD ARM	FCC FCC FCC FCC FCC FCC FCC FCC FCC FCC	01,06,30,40 01,30,40,65 01,30,40,65 01,30,40 01,30,40 01,30 01,30 01,30 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40 01,30,40	22-00-05 101 22-00-05 105 22-00-05 105	11 12 13,14 13,15 18 16 20 21 21 22 22 23 24 2,3,5 25 26	12 13,14 15,16,18 15,17,19 21 20 22 23 24 25 26 27 28 101,106,110 29

MCDP Ground Test Messages Cross Reference Figure 101B (Sheet 3)

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MCDP MESSAGE	COLIDGE	CDOUND	FAULT ISOLATIO	N PROCI	EDURES
# = L, C, or R XX = DECIMAL NO.	SOURCE CMPTR(S)	GROUND TEST(S) NO.	CH-SEC-SUB/FIG.	SHEET	BLOCK
NO INFC FCC # ELEV SRVO CMD NO INFC FCC # ELEV SRVO POS	FCC FCC	01,08,30,40,68 01,08,30,40,66,	22-00-05/101 22-00-05/101	27 28	31 32
NO INFC FCC # ELEV SURF POS	FCC	68 01,08,30,40,66,	22-00-05/101	29	33
NO INFC FCC # FCC TO MCP BUS	FCC	01,04,07,08,09,	22-00-05/101	31	34,35
NO INFC FCC # FMC BUS IN NO INFC FCC # FLAP POS	FCC FCC	01,30	22-00-05/101 22-00-05/101	32,34 36	37,38 39
NO INFC FCC # F/O F/D SEL IN NO INFC FCC # GA SW	FCC FCC	59 01,13,30,40	22-00-04/105 22-00-05/101	2,3,4 36	3,5,7 40
NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB	FCC FCC	01,30,40 01,30,40	22-00-05/101 22-00-05/101	37 37	41 42
NO INFC FCC # IRU BUS IN NO INFC FCC # RA BUS IN	FCC FCC	01,30,40 01,30,40	22-00-05/101 22-00-05/101	38 40	43 44
NO INFC FCC # RA TEST INHIB NO INFC FCC # MCP A/P ARM IN	FCC FCC	01,30,40 01,04,07,08,09, 30,40,67,68,69	22-00-05/101 22-00-05/101	41 41	45 46
NO INFC FCC # MCP A/P ENG DISC	FCC	01,04,07,08,09,	22-00-05/101	42	47
NO INFC FCC # MCP BUS IN	FCC	01,04,07,08,09,	22-00-05/101	43	48,49
NO INFC FCC # RUD DETENT ENG	FCC	01,09,30,40,69	22-00-05/101	44	50
NO INFC FCC # RUD HYD ARM	FCC	01,09,30,40,69	22-00-05/101	45	51
NO INFC FCC # RUD SRVO CMD	FCC	01,09,30,40,69	22-00-05/101	46	52
NO INFC FCC # RUD SERVO POS	FCC	01,09,30,40,66, 69	22-00-05/101	47	53
NO INFC FCC # RUD SURF POS	FCC	01,09,30,40,66, 69	22-00-05/101	48	54
NO INFC FCC # SHELF	FCC	01,30,40,56	22-00-05/101	50	55
NO INFC FCC # SPD BRK POS	FCC	01,30,64,66	22-00-05/101	51	56
NO INFC FCC # STAB POS	FCC	01,30,40,65,66	22-00-05/101	52	57
NO INFC FCC # X-CH DETNT L IN	FCC	01,30	22-00-05/101	52,53, 54	
NO INFC FCC # X-CH DETNT R IN	FCC	01,30	22-00-05/101	52,53, 54	58,59,60
NO INFC FCC # X-CH ENG L IN	FCC	01,30,40	22-00-05/101	55,56	61,62,63
NO INFC FCC # X-CH ENG R IN	FCC	01,30,40	22-00-05/101	55,56	61,62,63
NO INFC FCC # X-CH L BUS IN	FCC	01,30,40	22-00-05/101	58	64
NO INFC FCC # X-CH R BUS IN	FCC	01,30,40	22-00-05/101	60	65

MCDP Ground Test Messages Cross Reference Figure 101B (Sheet 4)

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MCDP MESSAGE	SOURCE	GROUND	FAULT ISOLATI	ON PRO	CEDURES
# = L, C, or R XX = DECIMAL NO.	CMPTR(S)	TEST(S) NO.	CH-SEC-SUB/FIG.	SHEET	BLOCK
NO INFC FCC # 28V DC ARM PWR	FCC	01,07,08,09,30, 40,67,68,69	22-00-05/101	62	66
NO INFC FCC # 28V DC ENG PWR	FCC	01,07,08,09,30,	22-00-05/101	62	67
NO INFC FCC # 28V DC/WARN-1 BAT	FCC	01,30,40	22-00-05/101	63	221
NO INFC FCC C MCDP	MCDP		22-00-02/103	9	115
NO INFC FCC L MCDP	MCDP		22-00-02/103	9	115
NO INFC FCC R MCDP	MCDP		22-00-02/103	9	115
NO INFO FMC L MCDP	MCDP		22-00-02/103	10	12
NO INFO FMC R MCDP	MCDP		22-00-02/103	10	12
NO INFO PMC K MCDF	MCDP		22-00-02/103	2	204
NO INFO MEDE SHELF	MCDP		22-00-02/103	10	11
	· ·	0/ 70		_	
NO INFO MCP A TMC BUS IN	L,C,FCC	04,30	22-00-05/103	1	1 12
NO INFO MCP B TMC BUS IN	R,FCC	04,30	22-00-05/103	2	
NO INFC TMC ADC L BUS IN	TMC	02,30,40	22-00-05/102	2	1
NO INFC TMC ADC R BUS IN	TMC	02,30,40	22-00-05/102	3	2
NO INFC TMC ADP	TMC	02,30,40,52	22-00-05/102	4	3
NO INFC TMC A/T DISC SW	TMC	02,12,30	22-00-05/102	5	4
NO INFC TMC A/T WARN-1 BAT	TMC	02,30	22-00-05/102	6	5
NO INFC TMC A/T WARN-2 BAT	TMC	02,30	22-00-05/102	7	6
NO INFC TMC A/T WARN-1 NRM	TMC	02,30	22-00-05/102	7	7
NO INFC TMC A/T WARN-2 NRM	TMC	02,30	22-00-05/102	7	8
NO INFC TMC COWL AI L	TMC	02,30,40,52	22-00-05/102	8	9
NO INFC TMC COWL AI R	TMC	02,30,40,52	22-00-05/102	8	9
NO INFC TMC ECS L	TMC	02,30,40,52	22-00-05/102	9	10
NO INFC TMC ECS L H/L	TMC	02,30,40,52	22-00-05/102	9	11
NO INFC TMC ECS R	TMC	02,30,40,52	22-00-05/102	9	10
NO INFC TMC ECS R H/L	TMC	02,30,40,52	22-00-05/102	9	11
NO INFC TMC EEC L PRIM	TMC	02,30	22-00-05/102	10	12
NO INFC TMC EEC R PRIM	TMC	02,30	22-00-05/102	11	13
NO INFC TMC EEC L SEC	TMC	02,30	22-00-05/102	10	12
NO INFC TMC EEC R SEC	TMC	02,30	22-00-05/102	11	13
NO INFC TMC FMC L BUS IN	TMC	02,30	22-00-05/102	12	14
NO INFC TMC FMC R BUS IN	TMC	02,30	22-00-05/102	12	14
NO INFC TMC FLAP POS	TMC	02,30,40,64,66	22-00-05/102	13	15
NO INFC TMC GA SW	TMC	02,13,30	22-00-05/102	13	16
NO INFO THO GA SW NO INFO TMC IRU L BUS IN	TMC	02,30,40	22-00-05/102	14	17
NO INFC TMC IRU R BUS IN	TMC	02,30,40	22-00-05/102	14	17
NO INFO THE IRO K BOS IN	TMC	02,30,40,52	22-00-05/102	14	18
NO INFC TMC ISEN VEV E	TMC	02,30,40,52	22-00-05/102		18
	·			14	19
NO INFC TMC MCP BUS IN	TMC	02,30,40	22-00-05/102	15	17

MCDP Ground Test Messages Cross Reference Figure 101B (Sheet 5)

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	MCDP MESSAGE FAULT ISOLATION PROCEDURES			EDURES	
# = L, C, or R XX = DECIMAL NO.	SOURCE CMPTR(S)	GROUND TEST(S) NO.	CH-SEC-SUB/FIG.	SHEET	BLOCK
NO INFC TMC SHELF	TMC	02,30,40,57	22-00-05/102	16	20
NO INFC TMC SLAT SW	TMC	02,30,64	22-00-05/102	17	21
NO INFC TMC TACH L	TMC	02,30	22-00-05/102	18	22
NO INFC TMC TMSP	TMC	02,05,30,40	22-00-05/102	18	23
NO INFC TMC WG AI	TMC	02,30,40,52 09	22-00-05/102	19	143
NO TEST/ONLY 1 FCC IN CMD	MCDP	69	22-00-03/109 22-00-04/112	3	105 208
RA # TEST INHIB FAIL	FCC	40	22-00-03/118A	3	205
RUD SRVO DEG	FCC	66	22-00-04/109	9	9
±XX.X ±XX.X ±XX.X					
RUD SRVO # FAIL	FCC	09	22-00-03/109	5	7
RUD SURF DEG	FCC	66	22-00-04/109	9	9
±XX.X ±XX.X ±XX.X		69	22-00-04/112	4	5,6
SLAT SW FCC # FAIL	FCC	40	22-00-03/118A	34,35	58,61
		64	22-00-04/107	4,5	109,113
SLAT SW TMC FAIL	TMC	64	22-00-04/107	4,5	110,112
SPD BK ARM FCC # FAIL	FCC	64	22-00-04/107	3	207
SPD BK DN FCC # FAIL	FCC	64	22-00-04/107	3	104
SPD BK UP FCC # FAIL	FCC	64	22-00-04/107 22-00-04/109	2	206
SPD BK PCT XX.X XX.X XX.X	FCC	66	22-00-047109	9	10
SERVO PWR/FCC #	FCC	30	22-00-03/117	6	8A
SRVO ON-NO GND TEST FCC #	MCDP	FAILS GND TEST	22-00-03/117	7	111
SKVO ON NO GND TEST TEE #	ПСЫ	MODE ENTRY	22 00 02/103	'	'''
SRVO ON-NO GND TEST TMC	MCDP	FAILS GND TEST	22-00-02/103	7	112
STAB-DEG/LCR	FCC	66	22-00-04/109	6	6
±XX.X ±XX.X ±XX.X STAB TRIM FCC # FAIL	FCC	40	22-00-03/118A	31,32, 33	50,53,56
		65	22-00-04/108	4,5,7	6,9,12
TACH # FAIL AFT	TMC	10	22-00-03/110A	4	8
		40	22-00-03/118A	40	69
TACH # FAIL FWD	TMC	10	22-00-03/110A	4	7
		40	22-00-03/118A	39	68
TLA (L,R) FAIL FWD	TMC	10	22-00-03/110A	4	6
THRST LIM OPT/XX	TMC	40 57	22-00-03/118A 22-00-04/104	39 2	67

MCDP Ground Test Messages Cross Reference Figure 101B (Sheet 6)

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MCDP MESSAGE	COLIDAT		FAULT ISOLATIO	N PROCI	EDURES
# = L, C, or R XX = DECIMAL NO.	SOURCE CMPTR(S)		CH-SEC-SUB/FIG.	SHEET	BLOCK
TMC FAIL	TMC	02,04,05,10,12, 13,30,40 51,52,57,60,64 66	22-00-02/XXX 22-00-04/XXX	-	-

 $\begin{array}{c} \text{MCDP Ground Test Messages Cross Reference} \\ \text{Figure 101B (Sheet 7)} \end{array}$

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MAKE SURE THESE SYSTEMS WILL OPERATE:

FLIGHT CONTROL SYSTEM ELECTRONICS UNIT (FSEU)

(MM 27-09-00/201)

STABILIZER TRIM POSITION INDICATING SYSTEM

(MM 27-48-00/501)

TRAILING EDGE FLAP POSITION INDICATING SYSTEM

TRAILING EDGE FLAP POSITION INDICATING SYSTEM (MM 27-58-00/501)

ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (MM 31-41-00/501)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)

AIR/GROUND RELAYS (MM 32-09-02/201)

AIR DATA COMPUTING SYSTEM (MM 34-12-00/501)

INERTIAL REFERENCE SYSTEM (MM 34-21-00/501)

ILS (MM 34-31-00/501)

RADIO ALTIMETER SYSTEM (MM 34-33-00/501)

FLIGHT MANAGEMENT SYSTEM (MM 34-61-00/501)

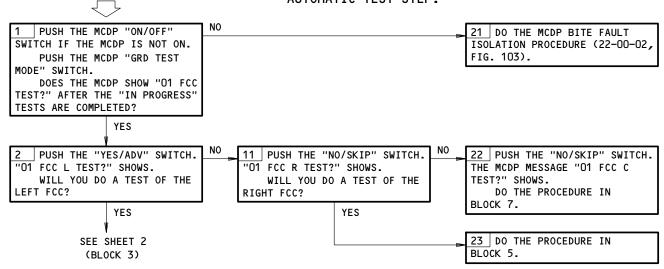
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER (MM 24-22-00/201)

MCDP GROUND TEST 01 FCC

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST STEP.



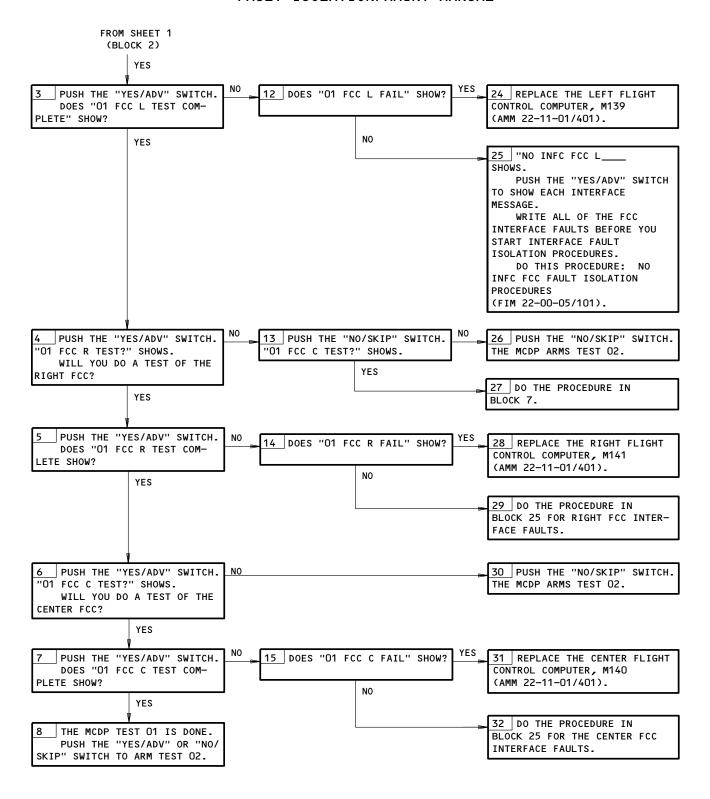
MCDP Ground Test 01 FCC Figure 102 (Sheet 1)

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MCDP Ground Test 01 FCC Figure 102 (Sheet 2)



MAKE SURE THESE SYSTEMS WILL OPERATE:
TRAILING EDGE FLAP SYSTEM (MM 27-51-00/201)
SPOILER/SPEEDBRAKE CONTROL SYSTEM (MM 27-61-00/201)
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)
(MM 31-41-00/501)

AIR/GROUND RELAYS (MM 32-09-02/201)
AIR DATA COMPUTING SYSTEM (MM 34-12-00/501)
STANDBY AIRSPEED INDICATOR (MM 34-13-00/501)
INERTIAL REFERENCE SYSTEM (MM 34-21-00/501)
ELECTRONIC FLIGHT INSTRUMENT SYSTEM (EFIS)
(MM 34-22-00/201)
FLIGHT MANAGEMENT SYSTEM (MM 34-61-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11F14,11F15,11F16,11U9,34P2,34P3

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER (MM 24-22-00/201)

CAUTION: MAKE SURE THE ENGINES ARE NOT IN OPERATION.
THIS TEST INCLUDES AUTOMATIC MOVEMENT OF THE
THRUST LEVERS AND COULD CAUSE AIRPLANE MOVE—
MENT IF THE ENGINES ARE IN OPERATION. INJURY
TO PERSONS COULD OCCUR.

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST STEP.

MCDP Ground Test 02 - TMC Figure 103 (Sheet 1)

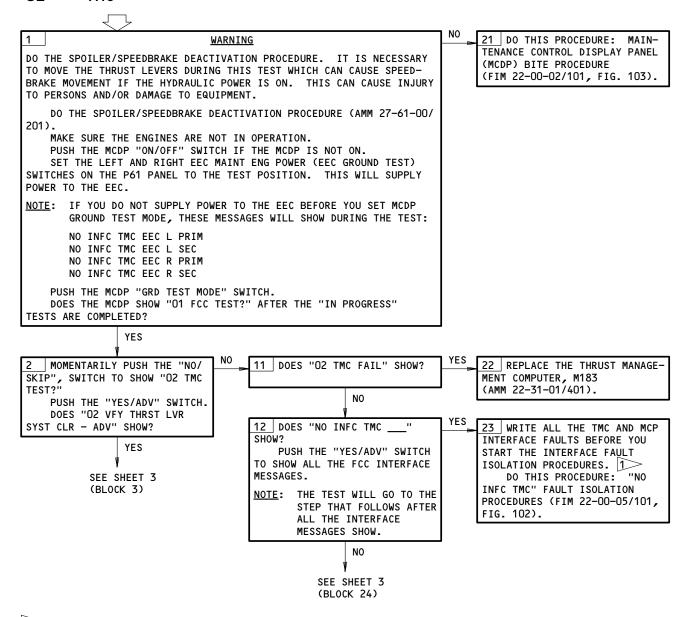
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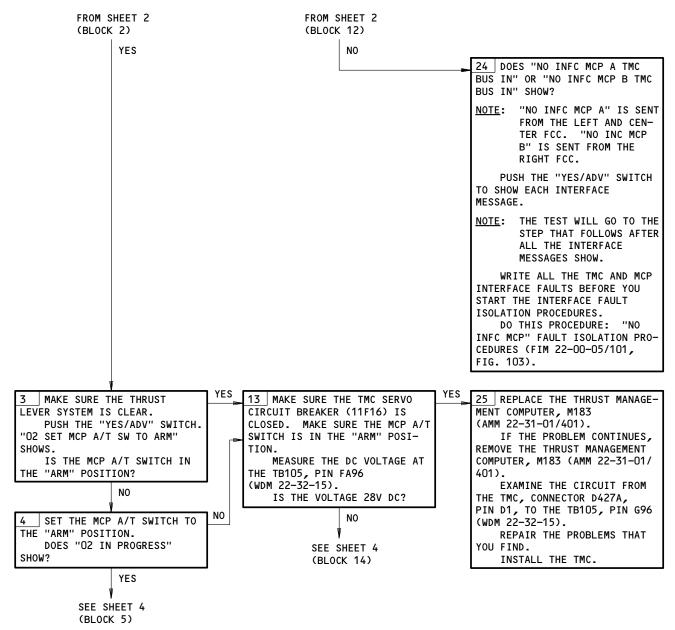


MCDP GROUND TEST O2 - "TMC"



IF MANY "NO INFC TMC" MESSAGES SHOW, GO OUT OF THE GROUND TEST MODE. GO BACK INTO THE GROUND TEST MODE AND DO THE GROUND TEST O2 AGAIN. IF THE MESSAGES STAY, DO THE CORRECTION PROCEDURE.

MCDP Ground Test 02 - TMC Figure 103 (Sheet 2)



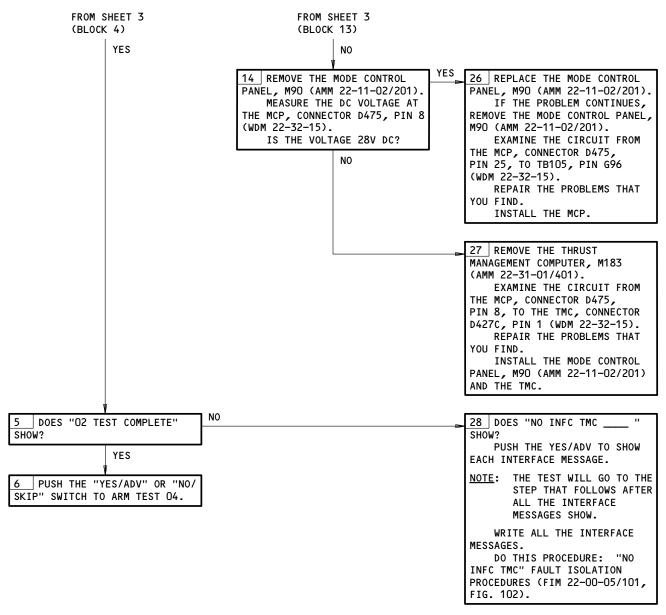
MCDP Ground Test 02 - TMC Figure 103 (Sheet 3)

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MCDP Ground Test 02 - TMC Figure 103 (Sheet 4)

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MAKE SURE THESE SYSTEMS WILL OPERATE:

ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (AMM 31-41-00/501)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)

AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17, 11E16, 11E17, 11E18, 11E20, 11E21, 11E34, 11E35, 11E36, 11F14, 11F15, 11F16, 11U9

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)

MCDP GROUND TEST 04 - MCP

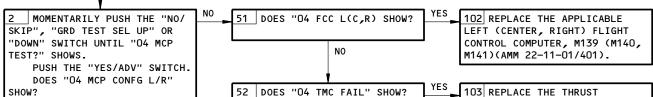
TEST?" AFTER THE "IN PROGRESS"

TESTS ARE COMPLETED?

02

"XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN NOTE: AUTOMATIC TEST STEP.

NO PUSH THE MCDP "ON/OFF" 101 DO THIS PROCEDURE: SWITCH IF THE MCDP IS NOT ON. MAINTENANCE CONTROL DISPLAY PUSH THE MCDP "GRD TEST PANEL (MCDP) BITE PROCEDURE MODE" SWITCH. (FIM 22-00-02/101, FIG. 103). DOES THE MCDP SHOW "01 FCC



MANAGEMENT COMPUTER, M183 YES (AMM 22-31-01/401). NO 103A REMOVE THE MODE CONTROL SEE SHEET 2 (BLOCK 53) PANEL, M90 (AMM 22-11-02/401).

NO 2A AN ANALYSIS IS DONE OF THE MCP AIRCRAFT CONFIGURATION DATA AND SHOWN ON THE BOTTOM I TNF -DOES THE MCDP SHOW AS FOLLOWS?: 04 MCP CONFG L/R 02

YES

SEE SHEET 3

(BLOCK 3)

CONNECTOR D475 CUSTOMER OPTION PINS **STATUS** PIN 10 OPFN 11 GND 3 15 OPEN 4 16 OPEN 17 OPFN

EXAMINE AND REPAIR THE

CIRCUIT AT MCP, CONNECTOR

D475, AS FOLLOWS

(WDM 22-11-12):

INSTALL THE MCP. IF THE PROBLEM CONTINUES, REPLACE THE MODE CONTROL PANEL, M90 (AMM 22-11-02/201)

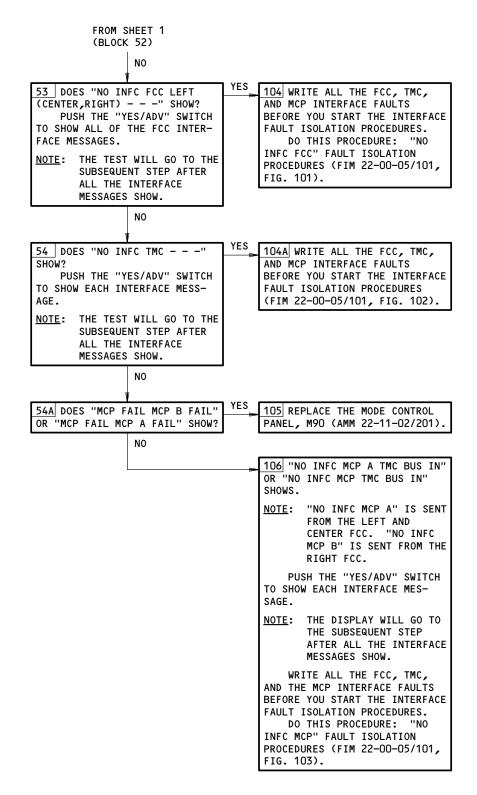
MCDP Ground Test 04 - MCP Figure 104 (Sheet 1)

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MCDP Ground Test 04 - MCP Figure 104 (Sheet 2)

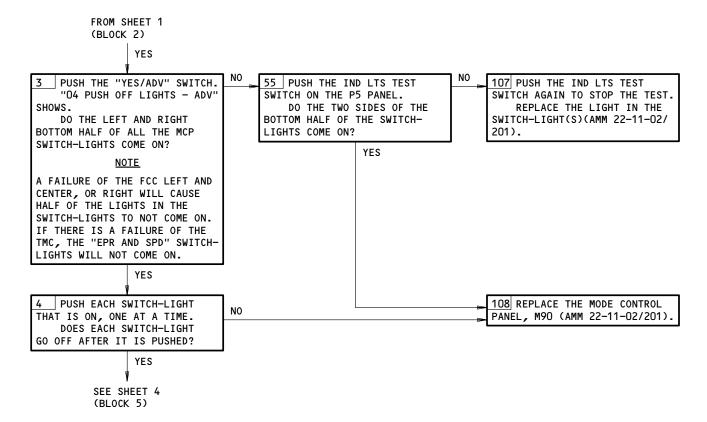
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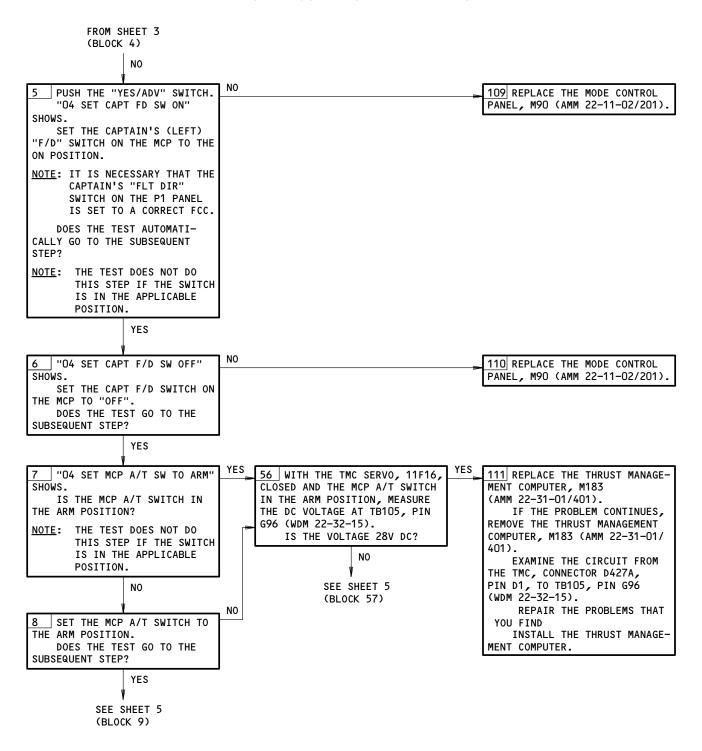
MCDP Ground Test 04 - MCP Figure 104 (Sheet 3)

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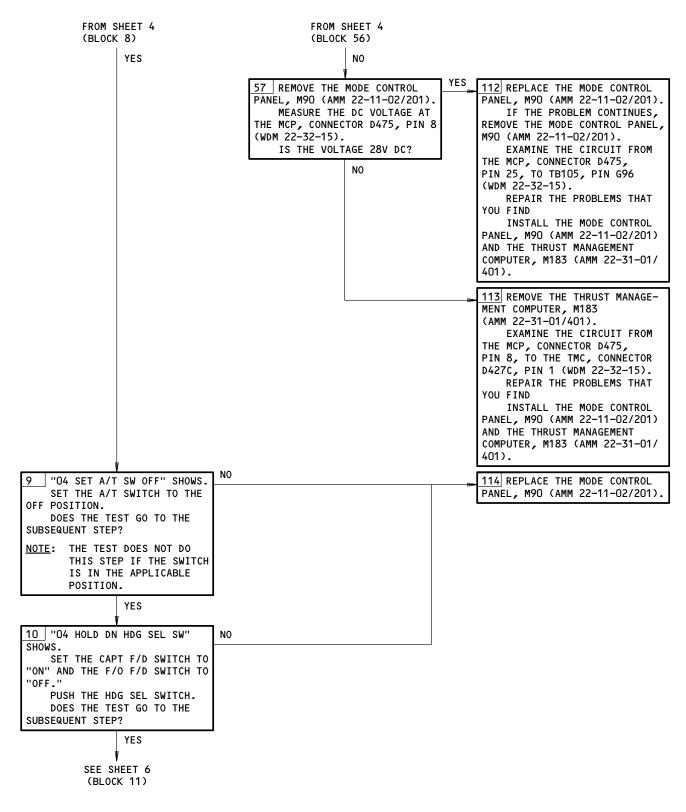
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MCDP Ground Test 04 - MCP Figure 104 (Sheet 4)

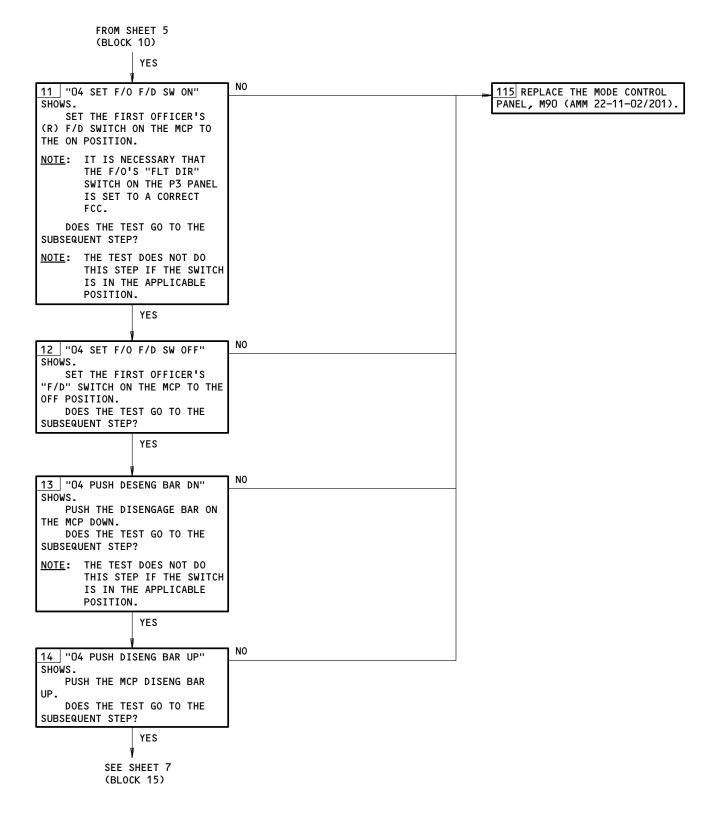


MCDP Ground Test 04 - MCP Figure 104 (Sheet 5)

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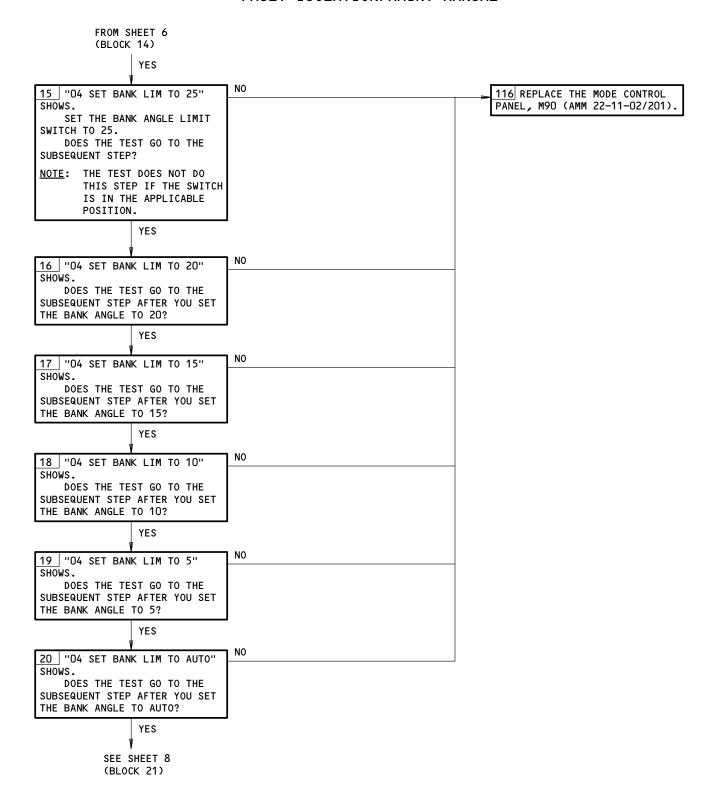
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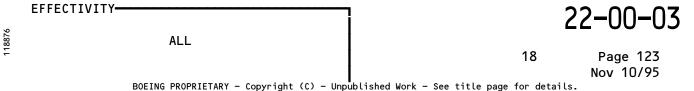


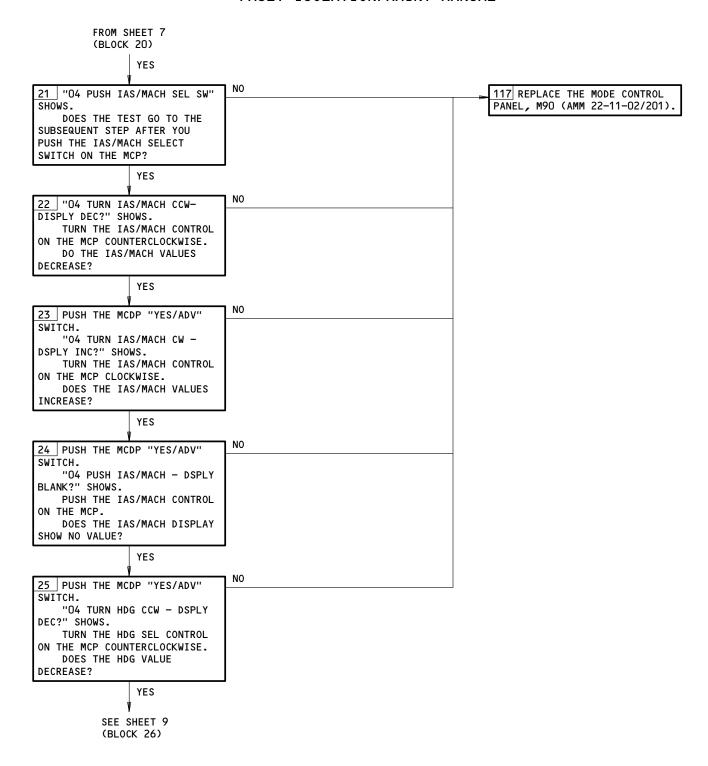
MCDP Ground Test 04 - MCP Figure 104 (Sheet 6)

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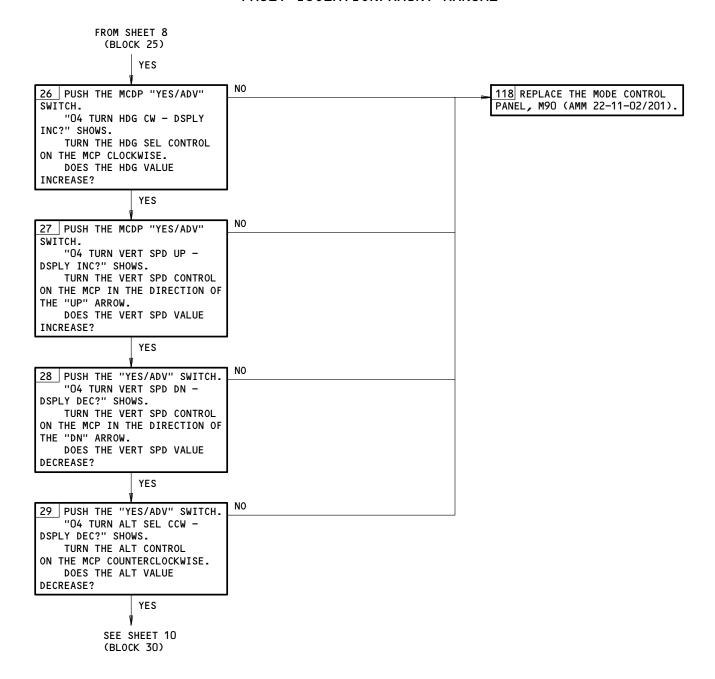


MCDP Ground Test 04 - MCP Figure 104 (Sheet 7)

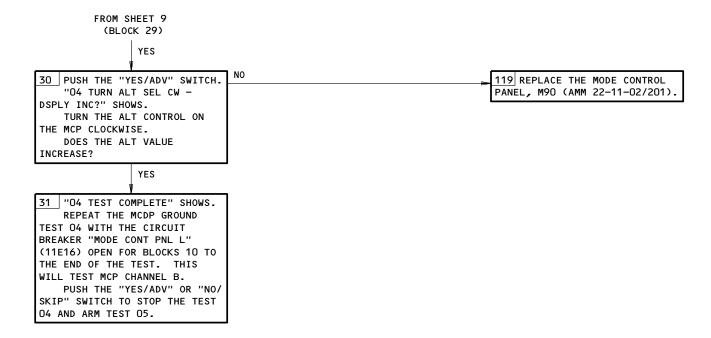




MCDP Ground Test 04 - MCP Figure 104 (Sheet 8)



MCDP Ground Test 04 - MCP Figure 104 (Sheet 9)



MCDP Ground Test 04 - MCP Figure 104 (Sheet 10)

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MAKE SURE THESE SYSTEMS WILL OPERATE:

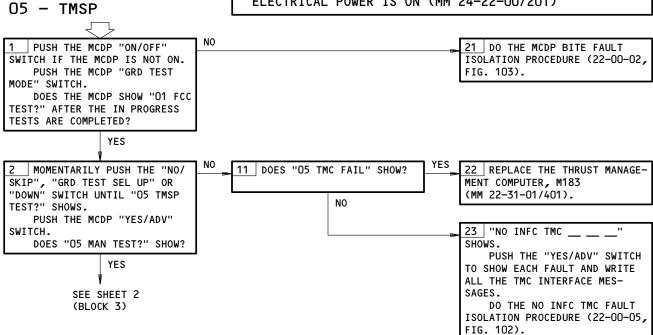
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (MM 31-41-00/201)

AIR/GROUND RELAYS (MM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F14,11F15,11F16,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201)



MCDP Ground Test 05 - TMSP Figure 105 (Sheet 1)

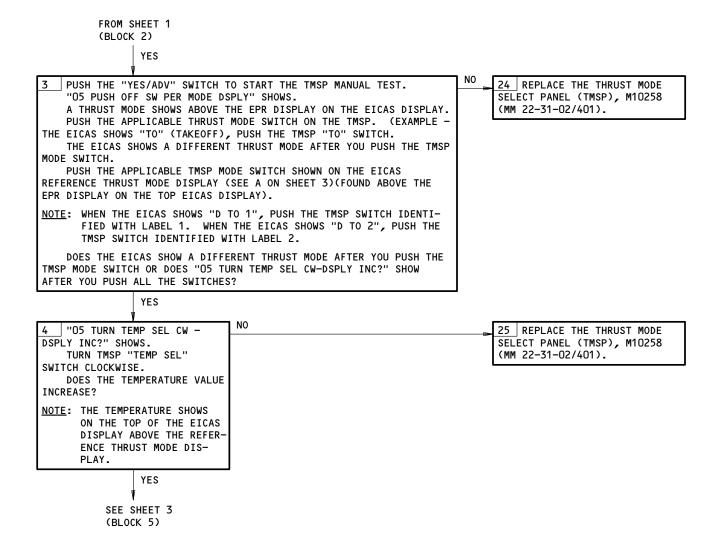
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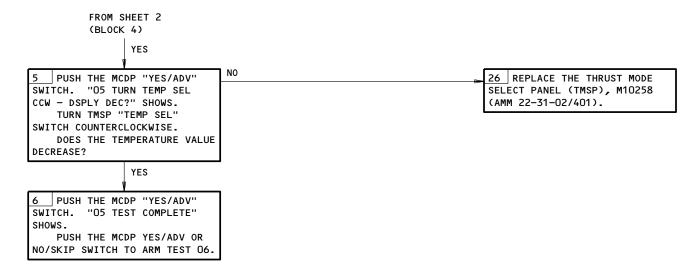


MCDP Ground Test 05 - TMSP Figure 105 (Sheet 2)

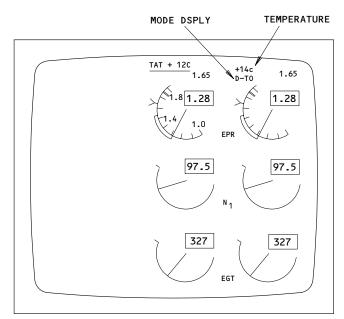
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MODE DISPLAYED ON UPPER EICAS	PRESS TMSP SWITCH
то	TO/GA
CLB	CLB
CON	CON
CRZ	CRZ
D-T0 1	1
D-T0 2	2



EICAS DISPLAY

MCDP Ground Test 05 - TMSP
 Figure 105 (Sheet 3)

ALL

ALL

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MAKE SURE THESE SYSTEMS WILL OPERATE:

EICAS (MM 31-41-00/201)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)

AIR/GROUND RELAYS (MM 32-09-02/201)

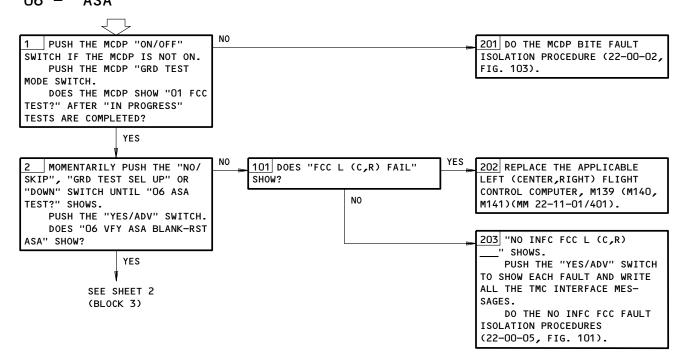
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT

ELECTRICAL POWER IS ON (MM 24-22-00/201)

MCDP GROUND TEST 06 - "ASA"

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST



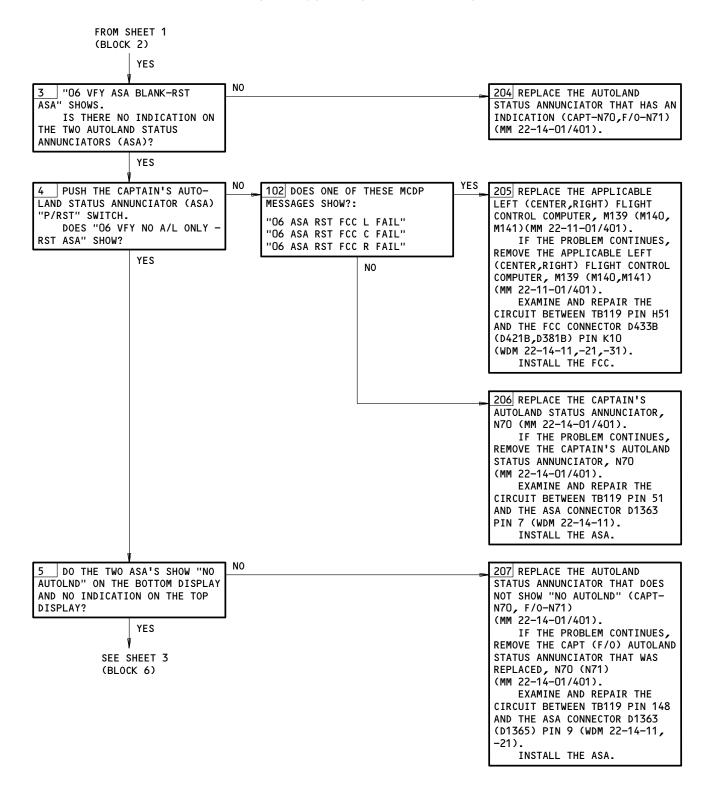
MCDP Ground Test 06 - ASA Figure 106 (Sheet 1)

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MCDP Ground Test 06 - ASA Figure 106 (Sheet 2)

ALL

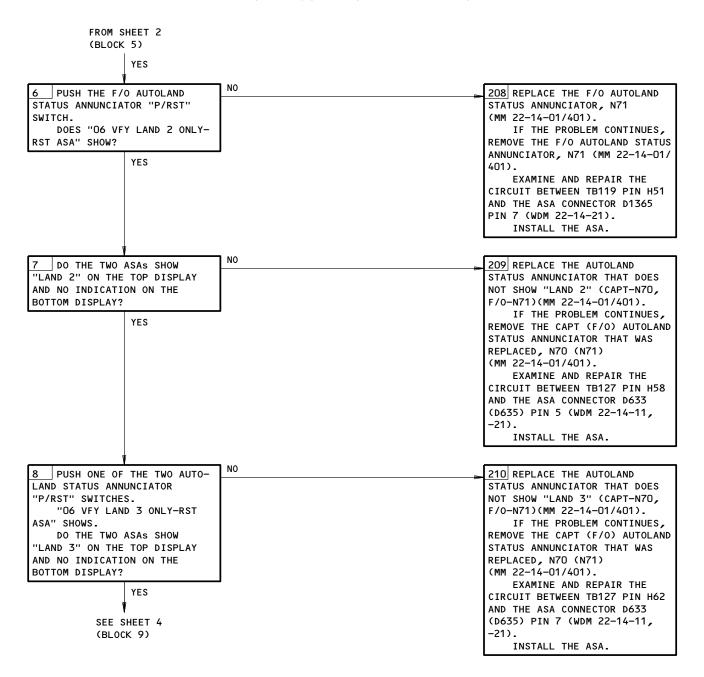
ALL

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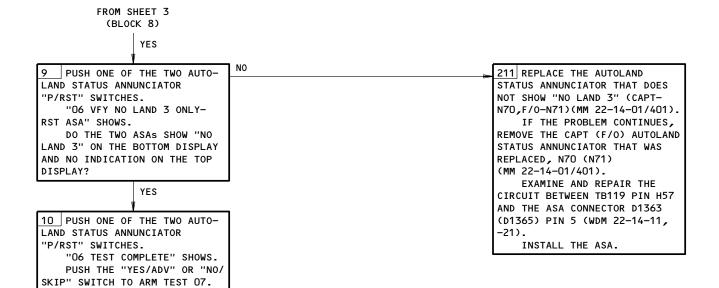
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MCDP Ground Test 06 - ASA Figure 106 (Sheet 3)



MCDP Ground Test 06 - ASA Figure 106 (Sheet 4)

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06

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MAKE SURE THESE SYSTEMS WILL OPERATE:
AILERON AND AILERON TRIM CONTROL SYSTEM
(AMM 27-11-00/501)
AILERON POSITION INDICATING SYSTEM
(AMM 27-18-00/501)
HYDRAULIC POWER (AMM 29-11-00/201)
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(AMM 34-41-00/201)(WHEN YOU USE THE REMOTE MCDP
CONTROL PANEL)
AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17, 11A33, 11E16, 11E17, 11E18, 11E20, 11E21,

11817, 11833, 11816, 11817, 11818, 11820, 11821, 11834, 11835, 11836, 1109

MAKE SURE THE AIRPLANE IN IS THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)

MAKE SURE THE RUDDER IS IN THE DETENT POSITION

MCDP GROUND TEST O7 - "SERVO AIL"

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST.

NO WARNING ALL PERSONS AND EQUIPMENT MUST BE REMOVED FROM THE CONTROL SURFACES AND THE CONTROL COLUMNS BEFORE THE HYDRAULIC SYSTEMS ARE PRESSURIZED. ALL OF THE CONTROL SURFACES ARE SUPPLIED WITH HYDRAULIC POWER AND CAN MOVE WHEN THE CONTROLS ARE MOVED OR THE HYDRAULIC SYSTEMS ARE PRESSURIZED. MOVEMENT OF THE CONTROL SURFACES CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT. PRESSURIZE THE LEFT, CENTER, AND RIGHT MAIN HYDRAULIC SYSTEMS (AMM 29-11-00/201). PUSH THE MCDP "ON/OFF" SWITCH IF THE MCDP IS NOT ON. PUSH THE MCDP "GRD TEST MODE" SWITCH. DOES THE MCDP SHOW "01 FCC TEST?" AFTER THE "IN PROGRESS" TESTS ARE COMPLETED? YES

SEE SHEET 2 (BLOCK 2)

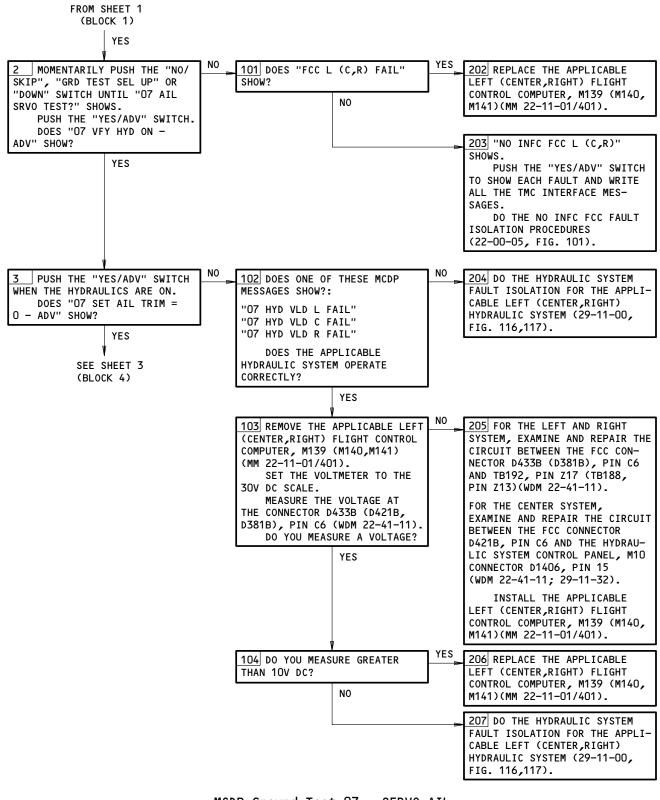
201 DO THIS PRECEDURE: MCDP BITE FAULT ISOLATION PROCEDURE (FIM 22-00-02/101, FIG. 103).

MCDP Ground Test 07 - SERVO AIL Figure 107 (Sheet 1)

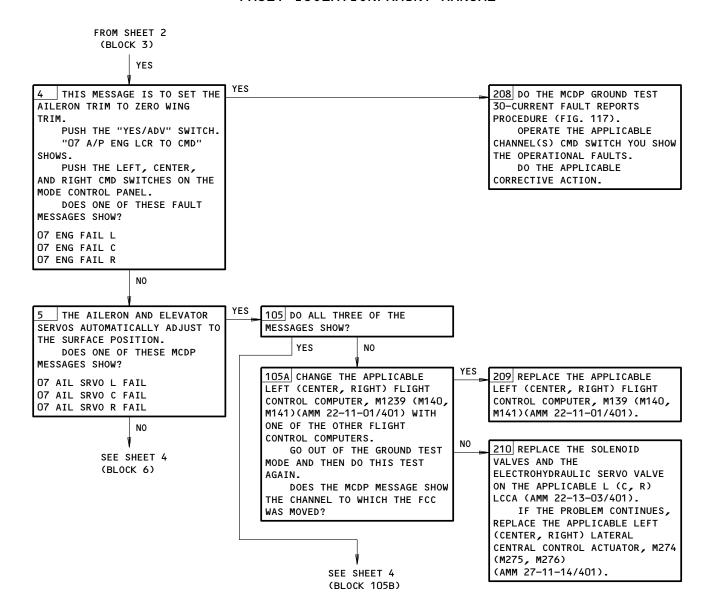
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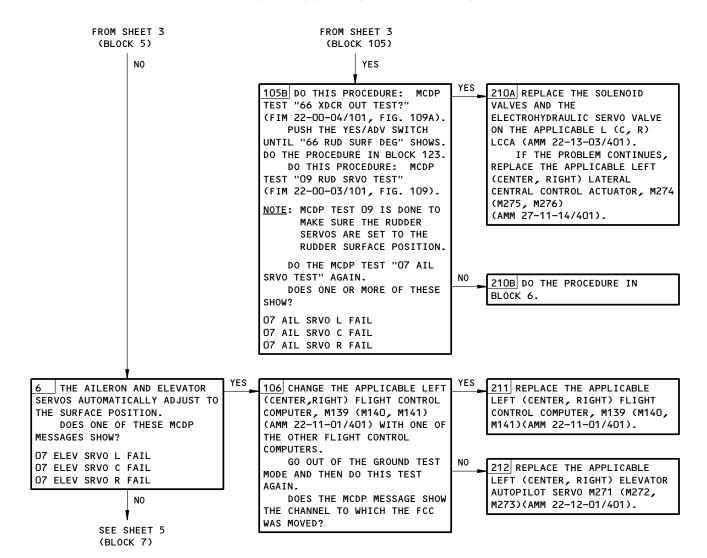
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MCDP Ground Test 07 - SERVO AIL Figure 107 (Sheet 2)



MCDP Ground Test 07 - SERVO AIL Figure 107 (Sheet 3)



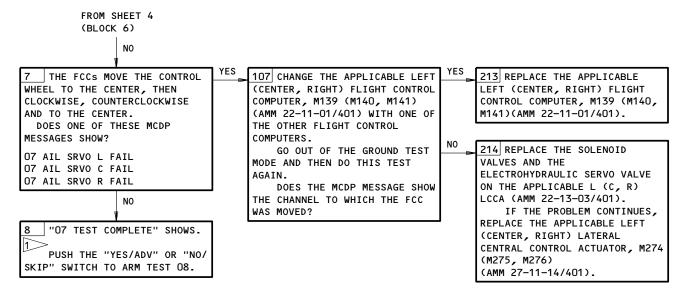
MCDP Ground Test 07 - SERVO AIL Figure 107 (Sheet 4)

EFFECTIVITY-ALL

22-00-03

10

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1 IF THIS TEST WAS DONE TO ISOLATE A PROBLEM, BUT THE TEST PASSED, REPEAT THE TEST ONLY FOR THE CHANNEL WITH A POSSIBLE FAILURE. OPEN THE APPLICABLE CIRCUIT BREAKERS (11E17, FLT CONT CMPTR PWR LEFT; 11E2O, FLT CONT CMPTR PWR CENTER; OR 11E35, FLT CONT CMPTR PWR RIGHT) FOR THE TWO CHANNELS YOU WILL NOT DO THE TEST FOR.

> MCDP Ground Test 07 - SERVO AIL Figure 107 (Sheet 5)

EFFECTIVITY-ALL

22-00-03

PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE: ELEVATOR POSITION INDICATING SYSTEM (AMM 27-38-00/501)

HORIZONTAL STABILIZER TRIM CONTROL SYSTEM (AMM 27-41-00/501)

STABILIZER TRIM POSITION INDICATING SYSTEM (AMM 27-48-00/501)

HYDRAULIC POWER (AMM 29-11-00/201)

ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (AMM 31-41-00/201)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)

AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17, 11A33, 11E16, 11E17, 11E18, 11E20, 11E21, 11E34, 11E35, 11E36, 11U9

MAKE SURE THE AIRPLANE IN IS THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201) MAKE SURE THE RUDDER IS IN THE DETENT POSITION

MCDP GROUND TEST 08 - "SERVO ELEV"

WARNING

NO

ALL PERSONS AND EQUIPMENT MUST BE REMOVED FROM THE CONTROL SURFACES AND THE CONTROL COLUMNS BEFORE THE HYDRAULIC SYSTEMS ARE PRESSURIZED. ALL OF THE CONTROL SURFACES ARE SUPPLIED WITH HYDRAULIC POWER AND CAN MOVE WHEN THE CONTROLS ARE MOVED OR THE HYDRAULIC SYSTEMS ARE PRESSURIZED. MOVEMENT OF THE CONTROL SURFACES CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

PRESSURIZE THE LEFT, CENTER, AND RIGHT MAIN HYDRAULIC SYSTEMS (AMM 29-11-00/201).

PUSH THE MCDP "ON/OFF" SWITCH IF THE MCDP IS NOT ALREADY ON.

PUSH THE MCDP "GRD TEST MODE" SWITCH.

DOES THE MCDP SHOW "01 FCC TEST?" AFTER THE "IN PROGRESS" TESTS ARE COMPLETED?

> SEE SHEET 2 (BLOCK 2)

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST.

> 201 DO THIS PRECEDURE: MCDP BITE FAULT ISOLATION PROCEDURE (FIM 22-00-02/101, FIG. 103).

MCDP Ground Test 08 - SERVO ELEV Figure 108 (Sheet 1)

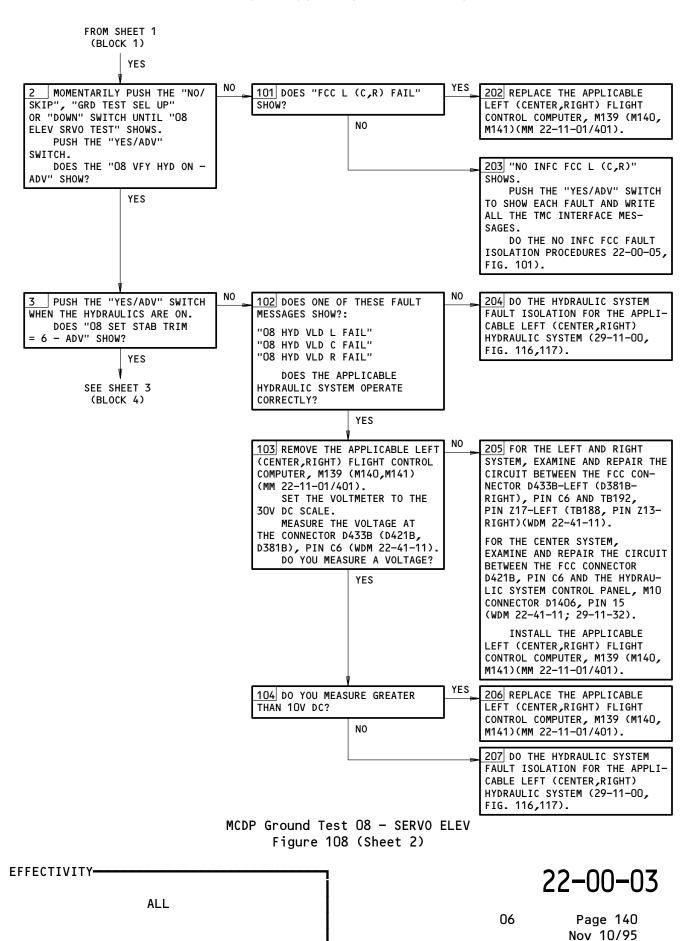
EFFECTIVITY-

22-00-03

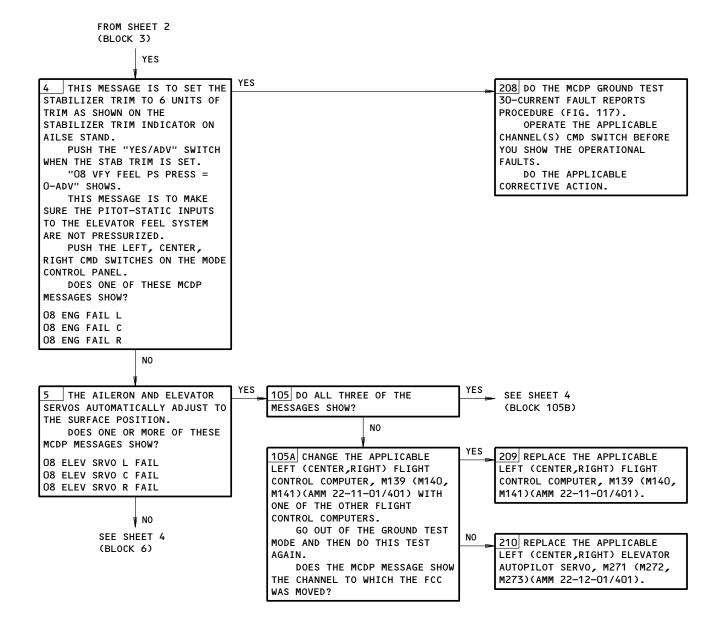
ALL

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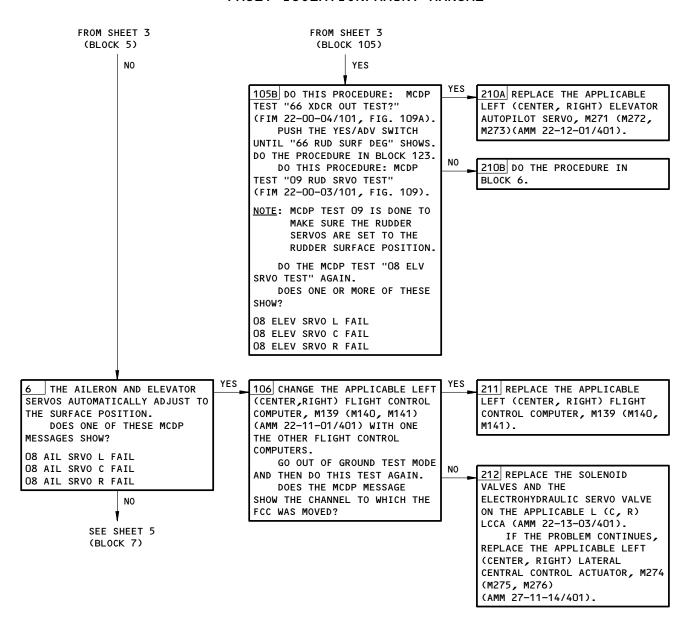


MCDP Ground Test 08 - SERVO ELEV Figure 108 (Sheet 3)

ALL

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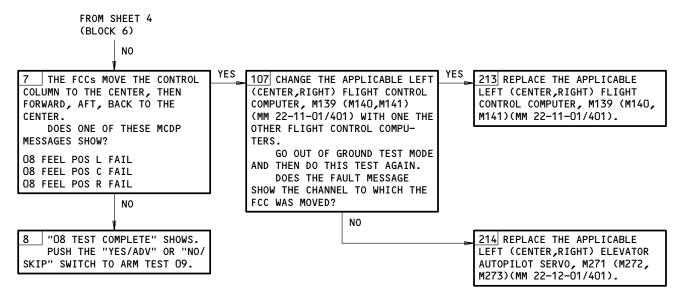
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MCDP Ground Test 08 - SERVO ELEV Figure 108 (Sheet 4)

EFFECTIVITY ALL

22-00-03



IF THIS TEST WAS DONE TO ISOLATE A PROBLEM, BUT THE TEST PASSED, REPEAT THE TEST ONLY FOR THE CHANNEL WITH A POSSIBLE FAILURE.

OPEN THE APPLICABLE CIRCUIT BREAKERS (11E17, FLT CONT CMPTR PWR LEFT; 11E20, FLT CONT CMPTR PWR CENTER; OR 11E35, FLT CONT CMPTR PWR RIGHT) FOR THE TWO CHANNELS YOU WILL NOT DO THE TEST FOR.

MCDP Ground Test 08 - SERVO ELEV Figure 108 (Sheet 5)

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06

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE: RUDDER AND RUDDER TRIM CONTROL SYSTEM (MM 27-21-00/501)

RUDDER POSITION INDICATING SYSTEM (MM 27-28-00/501) HYDRAULIC POWER (MM 29-11-00/201)

ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (MM 31-41-00/201)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)

AIR/GROUND RELAYS (MM 32-09-02/201)

MAKE SURE THESE CIRCUITS BREAKERS ARE CLOSED: 11A17,11A33,11E16,11E17,11E18,11E20,11E21,11E34, 11E35,11E36,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201) INSTALL NOSE GEAR STEERING VALVE LOCKPIN (MM 09-11-00/201).

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST STEP.

MCDP Ground Test 09 - SERVO RUD Figure 109 (Sheet 1)

EFFECTIVITY-

22-00-03

MCDP GROUND TEST 09 - "SERVO RUD"

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NO

WARNING

THE NOSE GEAR STEERING MUST BE LOCKED WHEN RUDDER MOVEMENT CAN OCCUR TO PREVENT INJURY TO PERSONS OR DAMAGE TO EQUIP-MENT.

MOVE THE TOWING LEVER ON THE NOSE GEAR METERING VALVE MODULE TO "TOW POSITION". INSTALL THE NOSE GEAR STEERING VALVE LOCKPIN (MM 09-11-00/ 201).

WARNING

ALL PERSONS AND EQUIPMENT MUST BE REMOVED FROM THE CONTROL SURFACES AND THE CONTROL COLUMNS BEFORE THE HYDRAULIC SYSTEMS ARE PRESSURIZED. ALL OF THE CONTROL SURFACES ARE SUPPLIED WITH HYDRAULIC POWER AND CAN MOVE WHEN THE CONTROLS ARE MOVED OR THE HYDRAULIC SYSTEMS ARE PRESSURIZED. MOVEMENT OF THE CONTROL SURFACES CAN CAUSE INJURY TO PERSON OR DAMAGE TO EQUIPMENT.

PRESSURIZE THE LEFT,
CENTER, AND RIGHT MAIN HYDRAULIC SYSTEMS (MM 29-11-00/201).
PUSH THE MCDP "ON/OFF"
SWITCH IF THE MCDP IS NOT ON.
PUSH THE MCDP "GRD TEST
MODE" SWITCH.
DOES THE MCDP SHOW "O1 FCC
TEST?" AFTER "IN PROGRESS"
TESTS ARE COMPLETED?

YES

SEE SHEET 3

(BLOCK 2)

201 DO THE MCDP BITE FAULT ISOLATION PROCEDURE (22-00-02, FIG. 103).

MCDP Ground Test 09 - SERVO RUD Figure 109 (Sheet 2)

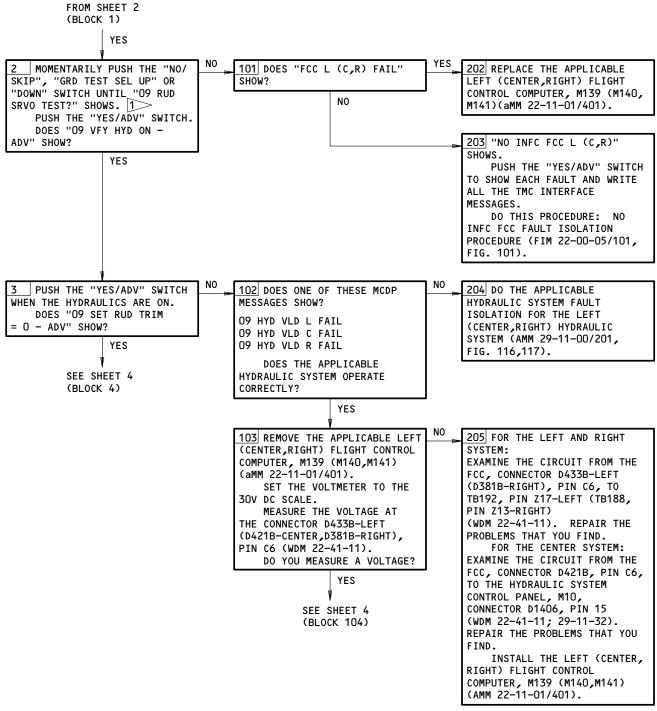
EFFECTIVITY—

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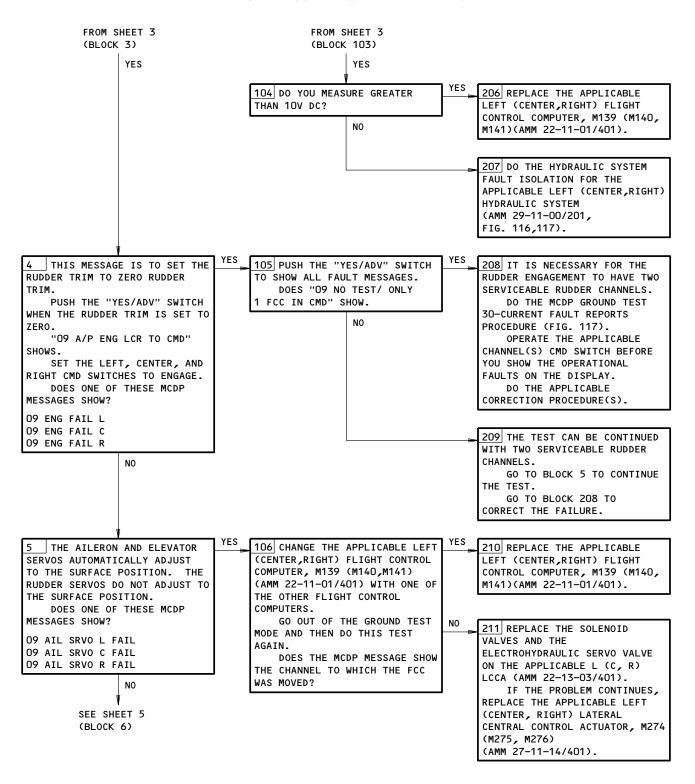
AIRPLANES WITH -133 FCCs AND OPTION GROUP 1 WITH A VALUE OF 6; IF THE RUD SERVO X FAIL (X=L,C,R) MESSAGE SHOWS INTERMITTENTLY WHEN YOU DO THIS GROUND TEST, IGNORE THIS MESSAGE UNLESS THE RUD SERVO X FAIL (X=L,C,R) MESSAGE IS SHOWN IN THE LAST FLIGHT FAULTS OR PREVIOUS FLIGHT FAULTS WITH DIAGNOSTIC CODE 206.

MCDP Ground Test 09 - SERVO RUD Figure 109 (Sheet 3)

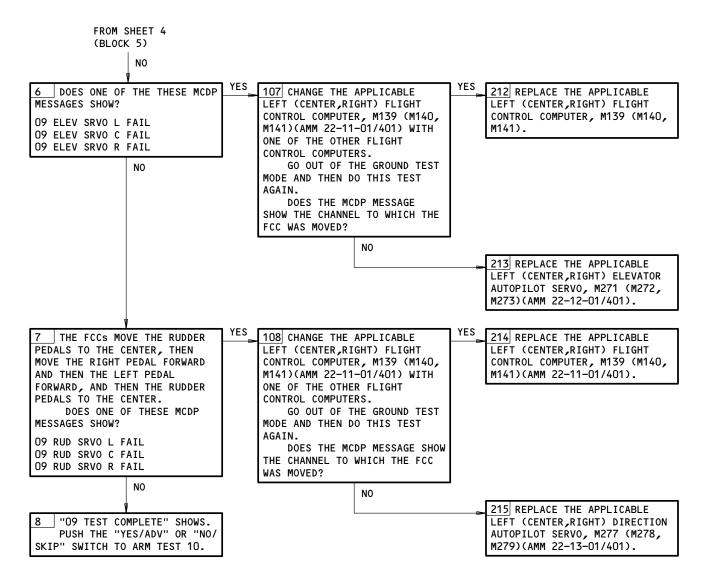
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MCDP Ground Test 09 - SERVO RUD Figure 109 (Sheet 4)



MCDP Ground Test 09 - SERVO RUD Figure 109 (Sheet 5)

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(AMM 31-41-00/201)(WHEN YOU USE THE REMOTE MCDP
CONTROL PANEL)

AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E34,11F14,11F15,11F16,11U9

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
EXTERNAL ELECTRICAL POWER IS ON (AMM 24-22-00/201)

WARNING:

MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS/SPEEDBRAKES. IT IS NECESSARY TO MOVE THE THRUST LEVERS DURING THIS TEST WHICH CAN CAUSE SPEEDBRAKE MOVEMENT IF HYDRAULIC POWER IS ON. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

MAKE SURE THE ENGINES ARE NOT IN OPERATION. THIS TEST INCLUDES AUTOMATIC MOVEMENT OF THE THRUST LEVERS WHICH CAN CAUSE AIRPLANE MOVEMENT IF THE ENGINES ARE IN OPERATION. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

MCDP GROUND TEST 10 - "SERVO A/T"

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST STEP.

NO MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS/SPEEDBRAKES DURING ALL OF THIS TEST. CLOSE THESE CIRCUIT BREAKERS ON THE P11 PANEL: 11L4 11L31 SET THE EEC MAINT SWITCHES ON THE P61 PANEL TO "TEST". PUSH THE MCDP "ON/OFF" SWITCH IF THE MCDP IS NOT ON. PUSH THE MCDP "GRD TEST MODE" SWITCH. DOES THE MCDP SHOW "01 FCC TEST?" AFTER THE "IN PROG-RESS" TESTS ARE COMPLETED? YES SEE SHEET 2 (BLOCK 2)

201 DO THIS PROCEDURE: MAIN-TENANCE CONTROL DISPLAY PANEL (MCDP) BITE PROCEDURE (FIM 22-00-02/101, FIG. 103).

MCDP Ground Test 10 - SERVO A/T Figure 110A (Sheet 1)

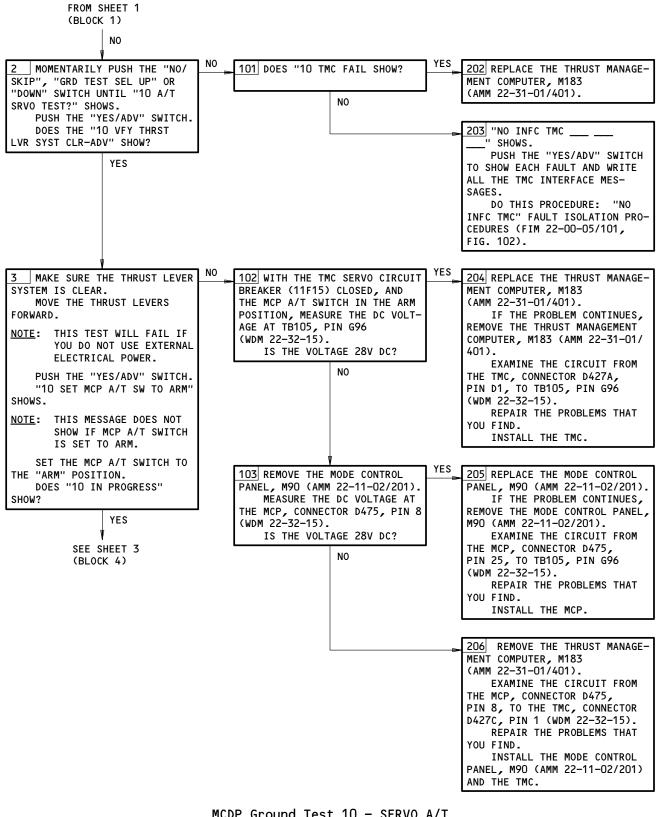
EFFECTIVITY-

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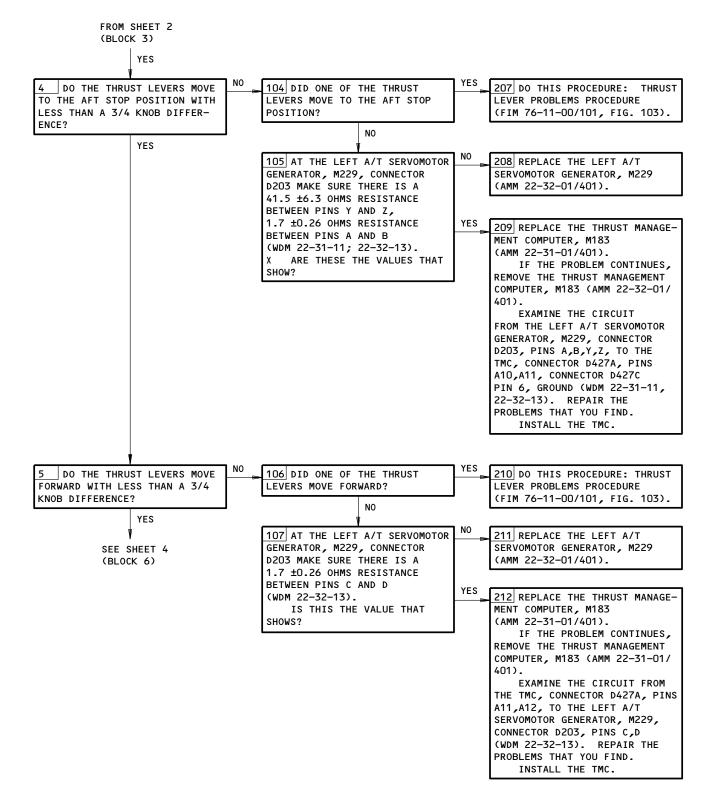
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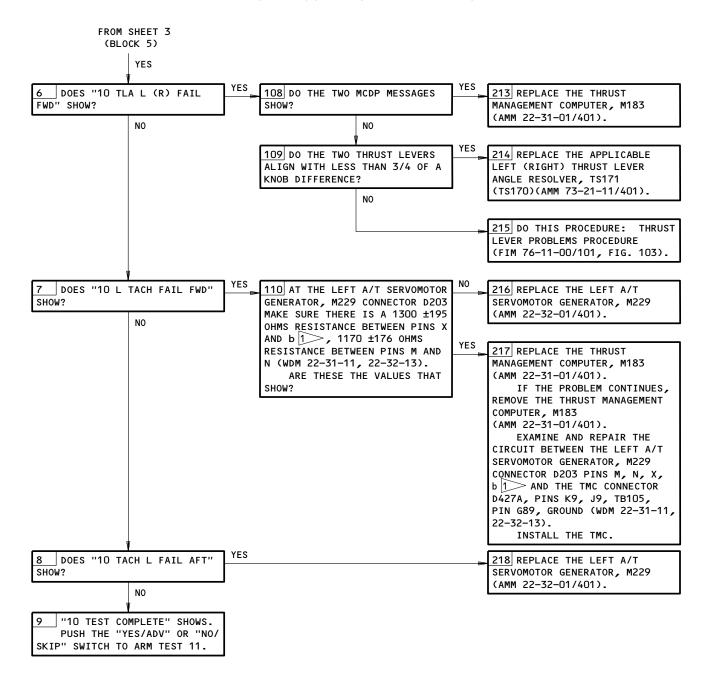
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MCDP Ground Test 10 - SERVO A/T Figure 110A (Sheet 2)



MCDP Ground Test 10 - SERVO A/T Figure 110A (Sheet 3)



1 ON WIRING DIAGRAMS "b" IS PRESENTED AS "B-"

MCDP Ground Test 10 - SERVO A/T Figure 110A (Sheet 4)



PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(AMM 31-41-00/201)(WHEN YOU USE THE REMOTE MCDP
CONTROL PANEL)

AIR/GROUND RELAYS (AMM 32-09-02/201)

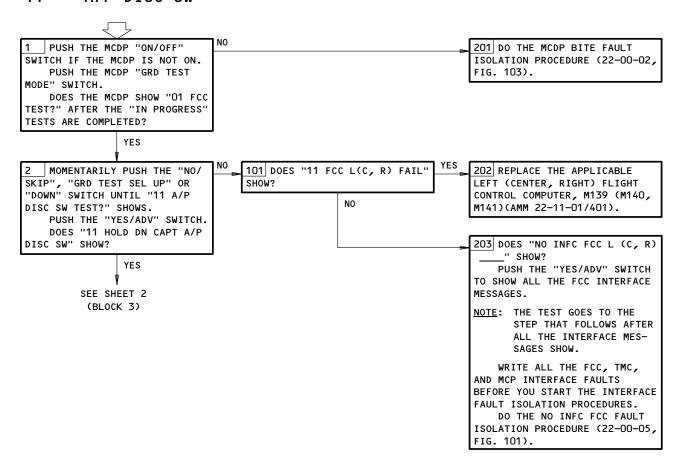
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17, 11E16, 11E17, 11E18, 11E20, 11E21, 11E34, 11E35, 11E36, 11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (AMM 22-24-00/201)

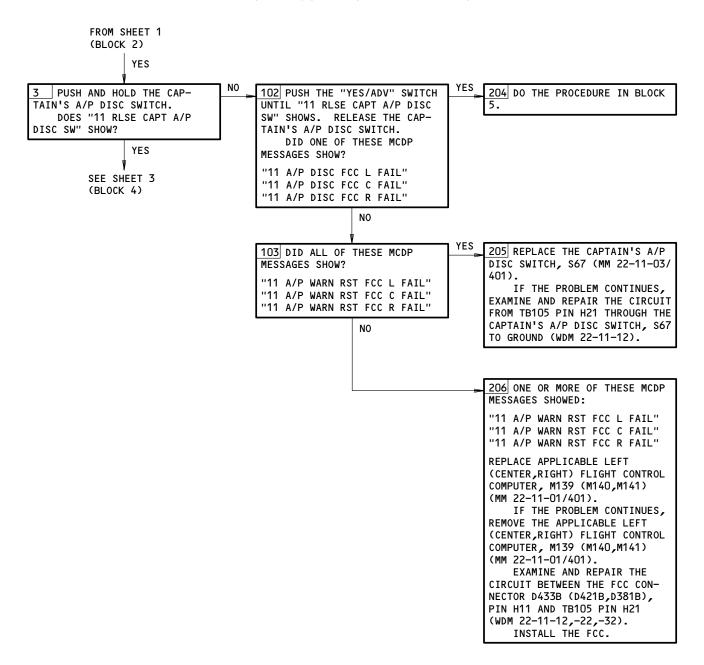
MCDP GROUND TEST 11 - "A/P DISC SW"

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST STEP.

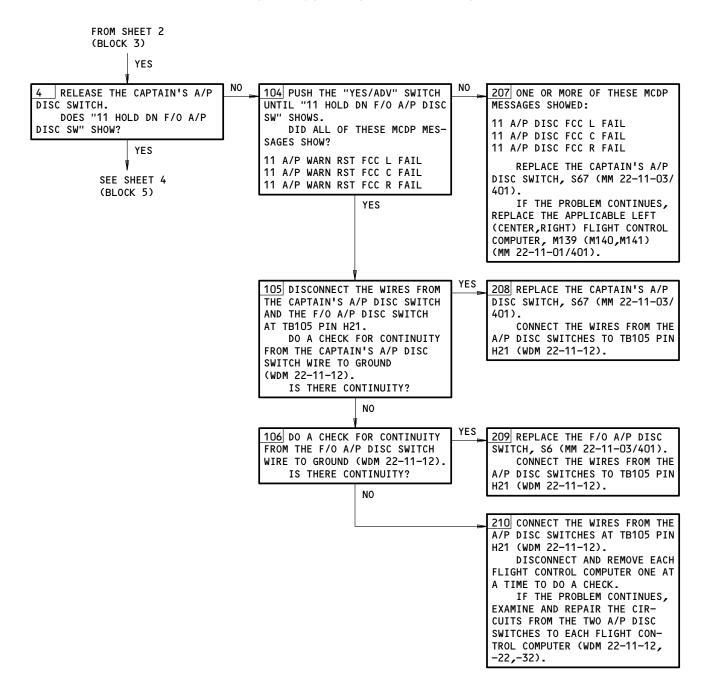


MCDP Ground Test 11 - SW A/P DISC Figure 111 (Sheet 1)

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MCDP Ground Test 11 - SW A/P DISC Figure 111 (Sheet 2)

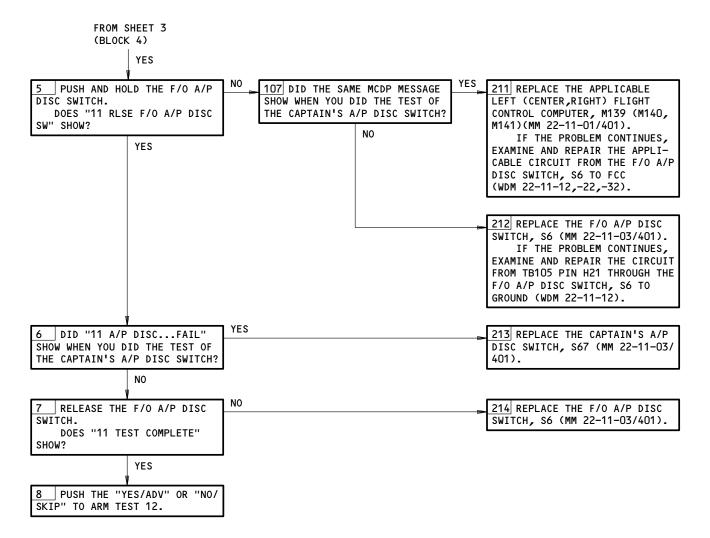


MCDP Ground Test 11 - SW A/P DISC Figure 111 (Sheet 3)

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MCDP Ground Test 11 - SW A/P DISC Figure 111 (Sheet 4)



PREREQUISITES

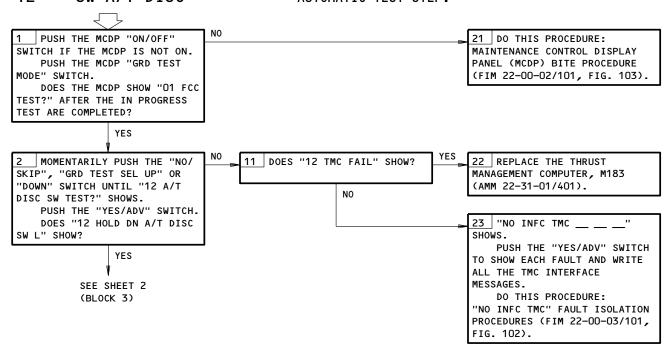
MAKE SURE THESE SYSTEMS WILL OPERATE: ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)(AMM 31-41-00/201)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL) AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F14, 11F15, 11F16, 11U9

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)

MCDP GROUND TEST 12 - "SW A/T DISC"

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST STEP.



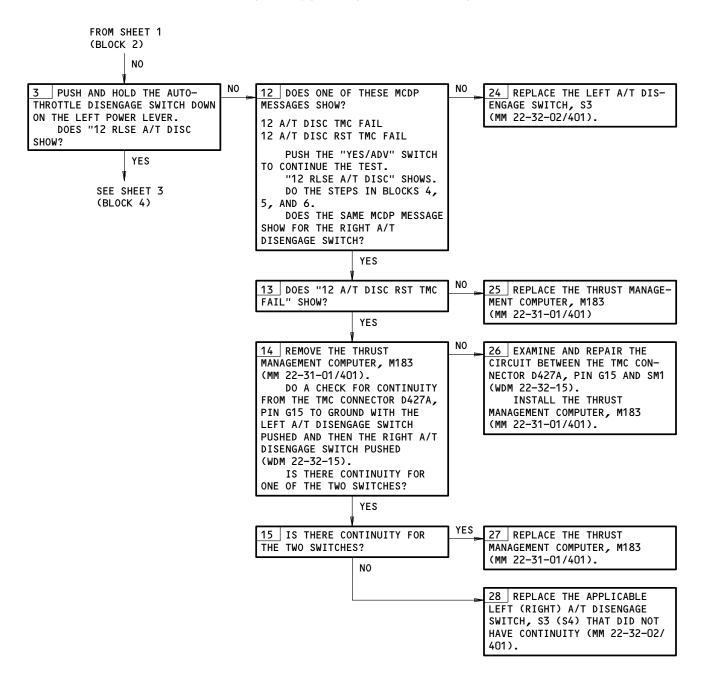
MCDP Ground Test 12 - SW A/T DISC Figure 112 (Sheet 1)

EFFECTIVITY-ALL

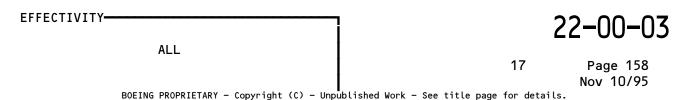
22-00-03

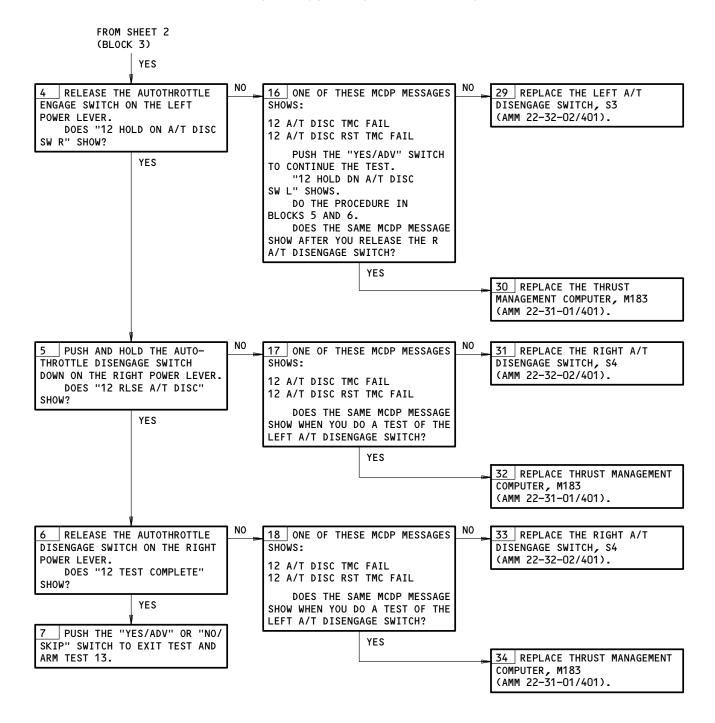
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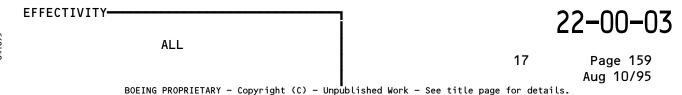


MCDP Ground Test 12 - SW A/T DISC Figure 112 (Sheet 2)





MCDP Ground Test 12 - SW A/T DISC Figure 112 (Sheet 3)



PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(MM 31-41-00/201)(WHEN YOU USE THE REMOTE MCDP
CONTROL PANEL)

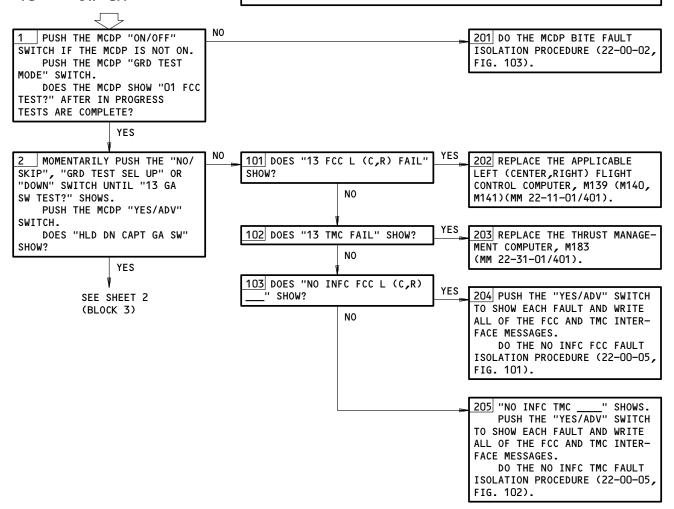
AIR/GROUND RELAYS (MM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11F14,11F15,11F16,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201)

MCDP GROUND TEST 13 - "SW GA"

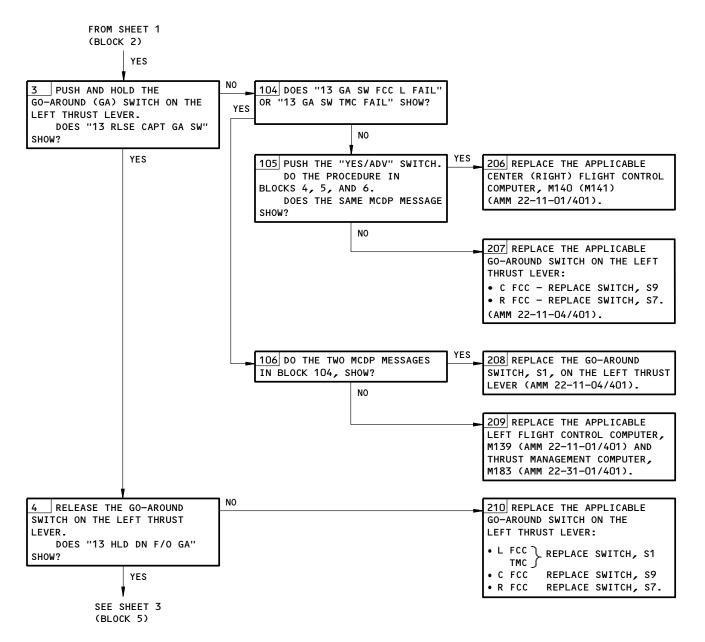


MCDP Ground Test 13 - SW GA Figure 113 (Sheet 1)

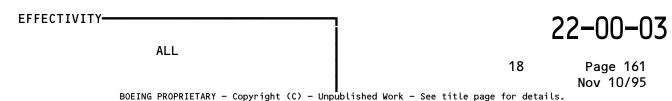
ALL 22-00-03

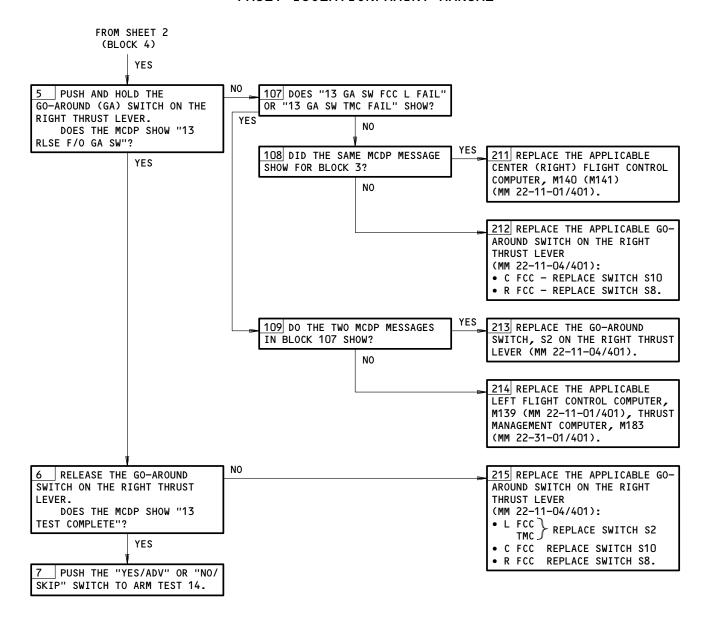
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MCDP Ground Test 13 - SW GA Figure 113 (Sheet 2)





MCDP Ground Test 13 - SW GA Figure 113 (Sheet 3)



MCDP Ground Test 14 - XDCR COL L Figure 114

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MCDP Ground Test 15 - XDCR COL R Figure 115

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MCDP Ground Test 16 - XDCR WHL Figure 116

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MCDP Ground Test 17 - PVDC Figure 116A

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PREREQUISITES MAKE SURE THESE SYSTEMS WILL OPERATE: AIR CONDITIONING (MM 21-00-00/201) FLIGHT CONTROL SYSTEM ELECTRONICS UNIT (CSEU)(MM 27-09-00/201) AILERON AND AILERON TRIM CONTROL SYSTEM (MM 27-11-00/501) AILERON POSITION INDICATING SYSTEM (MM 27-18-00/501) RUDDER AND RUDDER TRIM CONTROL SYSTEM (MM 27-21-00/501) RUDDER POSITION INDICATING SYSTEM (MM 27-28-00/501) ELEVATOR POSITION INDICATING SYSTEM (MM 27-38-00/501) HORIZONTAL STABILIZER TRIM CONTROL SYSTEM (MM 27-41-00/501) STABILIZER TRIM POSITION INDICATING SYSTEM (MM 27-48-00/501) TRAILING EDGE FLAP SYSTEM (MM 27-51-00/201) TRAILING EDGE FLAP POSITION INDICATING SYSTEM (MM 27-58-00/501) SPOILER/SPEEDBRAKE CONTROL SYSTEM (MM 27-61-00/201) FUEL QUANTITY INDICATING SYSTEM (MM 28-41-00/501) HYDRAULIC POWER (MM 29-11-00/201) WING THERMAL ANTI-ICING (MM 30-11-00/501) ENGINE INLET THERMAL ANTI-ICING (MM 21-00-00/501) PITOT-STATIC PROBE ANTI-ICING (MM 30-31-00/501) ANGLE OF ATTACK PROBE HEAT (MM 30-32-00/501) TOTAL AIR TEMPERATURE PROBE HEAT (MM 30-33-00/501) ENGINE PROBE HEAT (MM 30-34-00/501) CLOCKS (MM 31-25-00/501) ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)(MM 31-41-00/201) (WHEN YOU USE THE REMOTE MCDP CONTROL PANEL) WARNING SYSTEM (MM 31-51-00/501) AIR/GROUND RELAYS (MM 32-09-02/201) MASTER DIM AND TEST (MM 33-16-00/501) AIR DATA COMPUTING SYSTEM (MM 34-12-00/501) STANDBY AIRSPEED INDICATOR (MM 34-13-00/501) INERTIAL REFERENCE SYSTEM (MM 34-21-00/501) ELECTRONIC FLIGHT INSTRUMENT SYSTEM (EFIS)(MM 34-22-00/201) ILS (MM 34-31-00/501) RADIO ALTIMETER SYSTEM (MM 34-33-00/501) VOR SYSTEM (MM 34-51-00/501) DME SYSTEM (MM 34-55-00/501)

MCDP Ground Test 30 - CURRENT FAULT REPORT Figure 117 (Sheet 1)

EFFECTIVITY-ALL

FLIGHT MANAGEMENT SYSTEM (MM 34-61-00/501)

FUEL CONTROL (MM 73-21-00/001)

22-00-03



PREREQUISITES (CONTINUED)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17, 11E16, 11E17, 11E18, 11E20, 11E21, 11E34, 11E35, 11E36, 11F14, 11F15, 11F16, 11U9, 34P2, 34P3

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)

WARNING: MOVE ALL PERSONS AND EQUIPMENT AWAY FROM

THE SPOILERS/SPEEDBRAKES. IT IS NECESSARY TO MOVE THE THRUST LEVERS DURING THIS TEST WHICH CAN CAUSE SPEEDBRAKE MOVEMENT IF HYDRAULIC POWER IS ON. THIS CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

CAUTION: MAKE SURE THE ENGINES ARE NOT IN OPERATION.

THIS TEST INCLUDES AUTOMATIC MOVEMENT OF THE THRUST LEVERS AND COULD CAUSE AIRPLANE MOVEMENT IF THE ENGINES ARE IN OPERATION.

INJURY TO PERSONS COULD OCCUR.

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN

AUTOMATIC TEST STEP. THE A/T DISC LIGHT WILL REMAIN ILLUMINATED DURING GROUND TESTING.

MCDP Ground Test 30 - CURRENT FAULT REPORT Figure 117 (Sheet 2)

EFFECTIVITY-

22-00-03

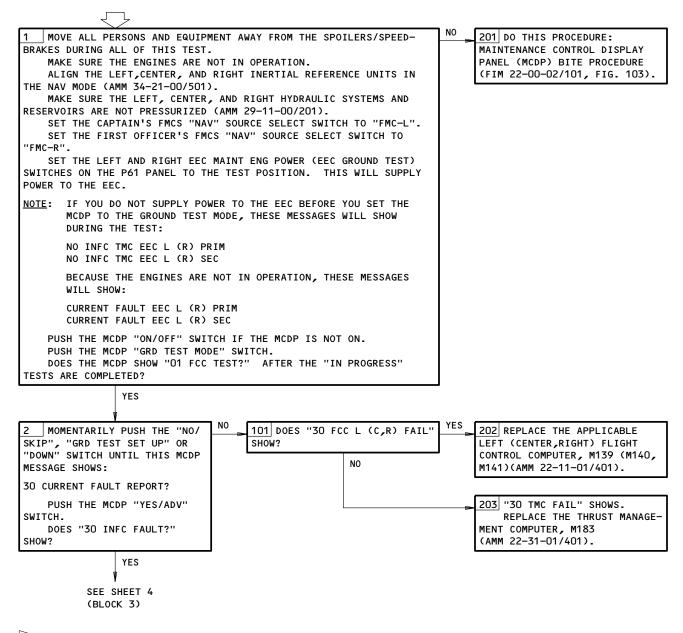
ALL

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MCDP GROUND TEST 30 - "CURRENT FAULT REPORT"



IF YOU DO THE MCDP GROUND TEST 30 MORE THAN ONE TIME, GO OUT OF THE GROUND TEST MODE BEFORE YOU DO THE GROUND TEST 30 AGAIN.

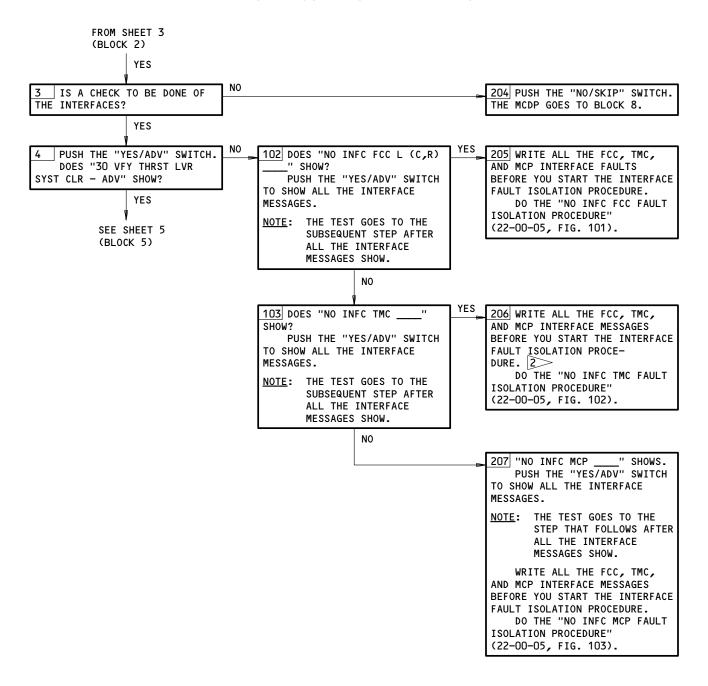
MCDP Ground Test 30 - CURRENT FAULT REPORT Figure 117 (Sheet 3)

ALL

ALL

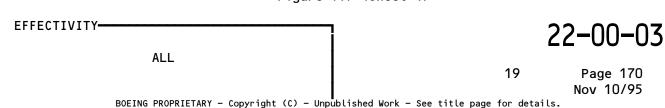
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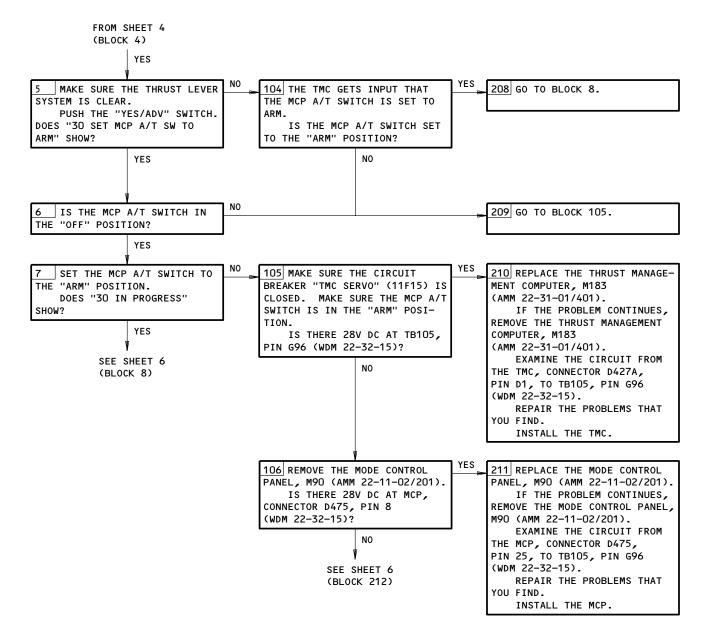


IF MANY "NO INFC TMC" MCDP MESSAGES ARE SHOWN, GO OUT OF GROUND TEST MODE. GO BACK INTO GROUND TEST 30 AGAIN. IF MESSAGES REMAIN, DO CORRECTIVE ACTION.

MCDP Ground Test 30 - CURRENT FAULT REPORT Figure 117 (Sheet 4)







MCDP Ground Test 30 - CURRENT FAULT REPORT Figure 117 (Sheet 5)

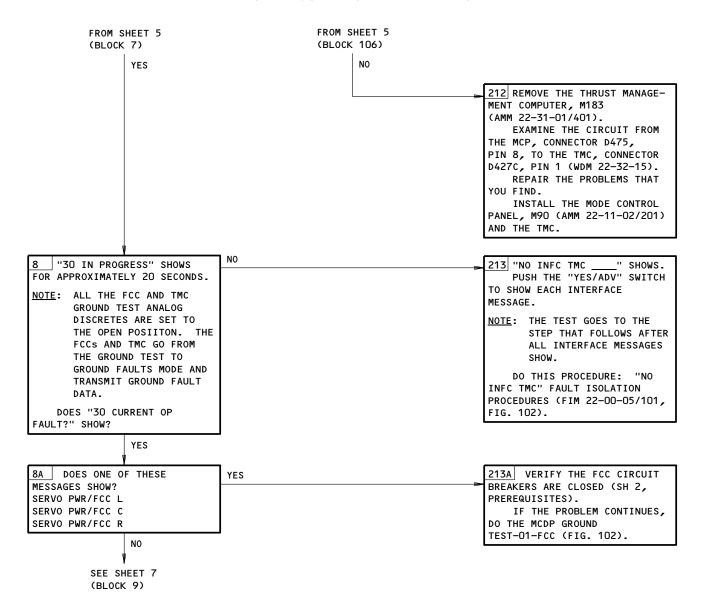
ALL

ALL

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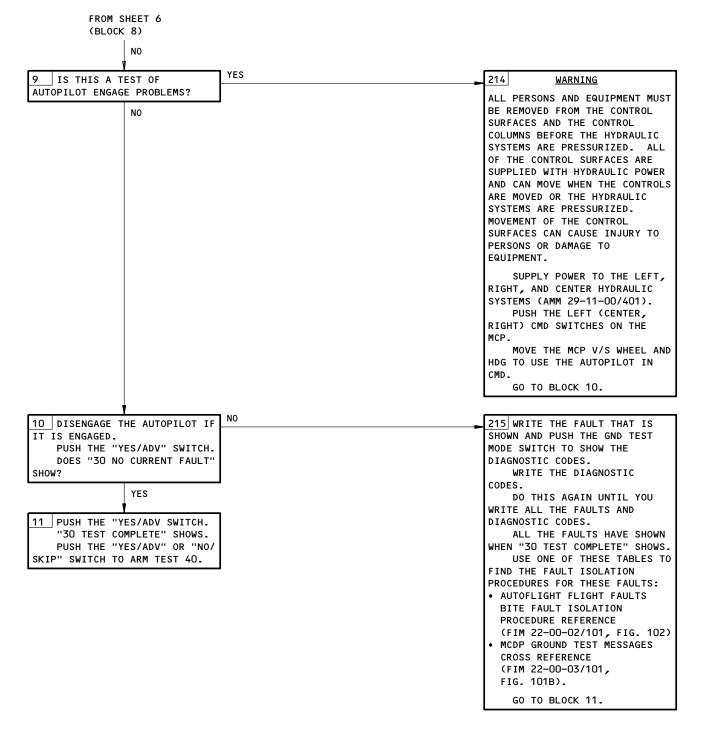
Dec 22/00

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MCDP Ground Test 30 - CURRENT FAULT REPORT Figure 117 (Sheet 6)





MCDP Ground Test 30 - CURRENT FAULT REPORT Figure 117 (Sheet 7)

ALL

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SEE FIGURE 118A

Not Used Figure 118

EFFECTIVITY-

E99456

22-00-03

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:

FLIGHT CONTROL SYSTEM ELECTRONICS UNITS (CSEU)(AMM 27-09-00/201)

AILERON AND AILERON TRIM CONTROL SYSTEM (AMM 27-11-00/501)

AILERON POSITION INDICATING SYSTEM (AMM 27-18-00/501)

RUDDER AND RUDDER TRIM CONTROL SYSTEM (AMM 27-21-00/501)

RUDDER POSITION INDICATING SYSTEM (AMM 27-28-00/501)

ELEVATOR POSITION INDICATING SYSTEM (AMM 27-38-00/501)

HORIZONTAL STABILIZER TRIM CONTROL SYSTEM (AMM 27-41-00/501)

STABILIZER TRIM POSITION INDICATING SYSTEM (AMM 27-48-00/501)

TRAILING EDGE FLAP SYSTEM (AMM 27-51-00/501)

TRAILING EDGE FLAP POSITION INDICATING SYSTEM (AMM 27-58-00/501)

HYDRAULIC POWER (AMM 29-11-00/201)

ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)(AMM 31-41-00/201)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)

WARNING SYSTEM (AMM 31-51-00/501)

AIR/GROUND RELAYS (AMM 32-09-02/201)

INERTIAL REFERENCE SYSTEM (AMM 34-21-00/501)

ELECTRONIC FLIGHT INSTRUMENT SYSTEM (EFIS)(AMM 34-22-00/501)

INSTRUMENT LANDING SYSTEM (ILS)(AMM 34-31-00/501)

RADIO ALTIMETER SYSTEM (AMM 34-33-00/501)

FLIGHT MANAGEMENT SYSTEM (AMM 34-61-00/501)

FUEL CONTROL (AMM 73-21-00/001)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11A17, 11E16, 11E17, 11E18, 11E20, 11E21, 11E34, 11E35, 11E36, 11F14, 11F15, 11F16, 11L4, 11L9, 11L31, 11L36, 11Q10, 11Q19, 11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (AMM 24-22-00/201)

INSTALL NOSE GEAR STEERING VALVE LOCKPIN (AMM 09-11-00/201)

WARNING: DO THE SPOILER/SPEEDBRAKE DEACTIVATION PROCEDURE OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS/SPEEDBRAKES. IT IS NECESSARY TO MOVE THE THRUST LEVERS DURING THIS TEST WHICH CAN CAUSE SPEEDBRAKE MOVEMENT IF THE HYDRAULIC POWER IS ON. THIS CAN CAUSE INJURY TO PERSONS AND/OR DAMAGE TO EQUIPMENT.

CAUTION: MAKE SURE THE ENGINES ARE NOT IN OPERATION. THIS TEST INCLUDES AUTOMATIC MOVEMENT OF THE THRUST LEVERS AND COULD CAUSE AIRPLANE MOVEMENT IF THE ENGINES ARE IN OPERATION. INJURY TO PERSONS COULD OCCUR.

NOTE: "XX IN PROGRESS" SHOWS WHEN THE MCDP DOES AN AUTOMATIC TEST STEP. THE A/T DISC LIGHT WILL REMAIN ILLUMINATED DURING GROUND TESTING.

MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 1)

EFFECTIVITY-

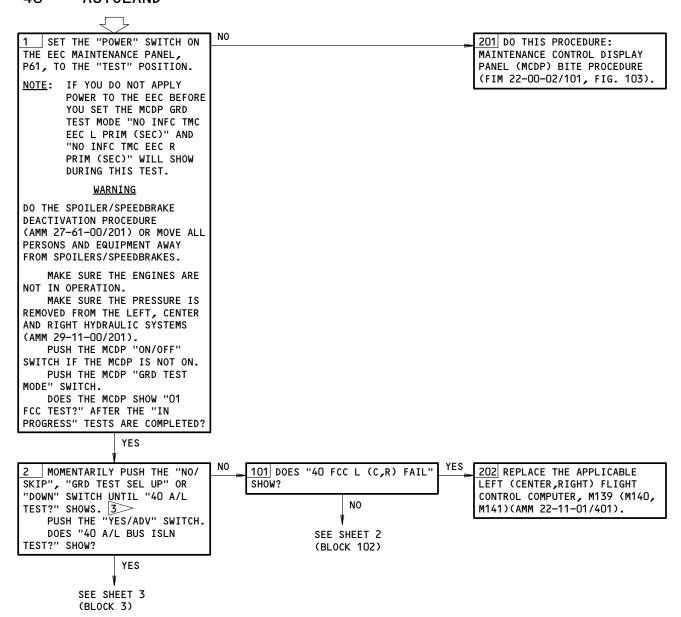
22-00-03

ALL

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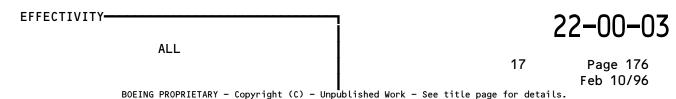
Page 175 Dec 22/05

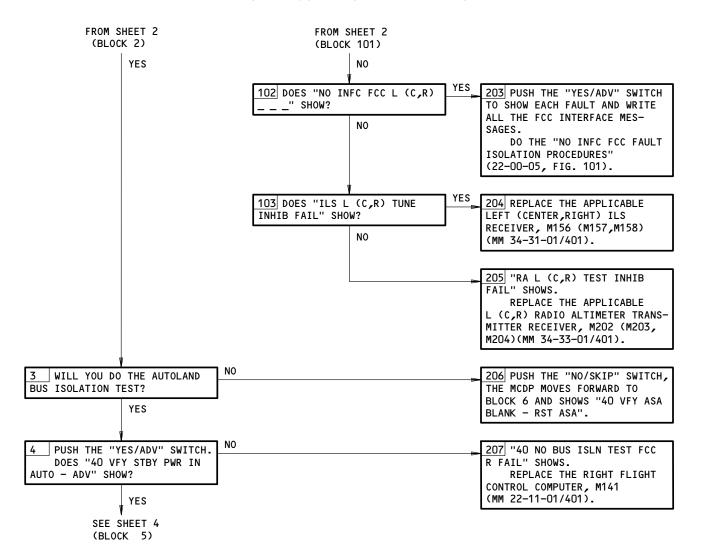
"MCDP" GROUND TEST 40 - "AUTOLAND"



AIRPLANES WITH -133 FCCs AND OPTION GROUP 1 WITH A VALUE OF 6; IF THE RUD SERVO X FAIL (X=L,C,R) MESSAGE SHOWS INTERMITTENTLY WHEN YOU DO THIS GROUND TEST, IGNORE THIS MESSAGE UNLESS THE RUD SERVO X FAIL (X=L,C,R) MESSAGE IS SHOWN IN THE LAST FLIGHT FAULTS OR PREVIOUS FLIGHT FAULTS WITH DIAGNOSTIC CODE 206.

MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 2)





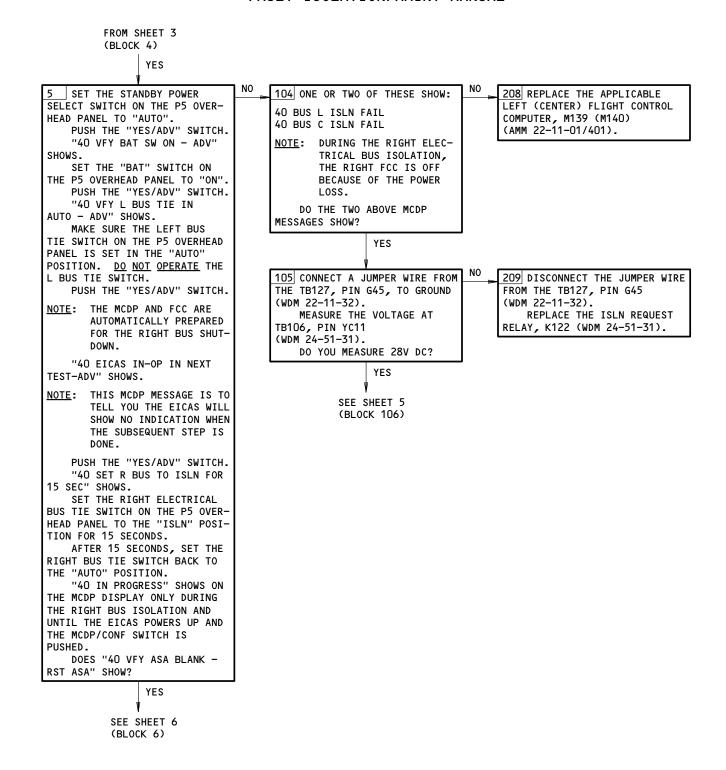
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 3)

ALL

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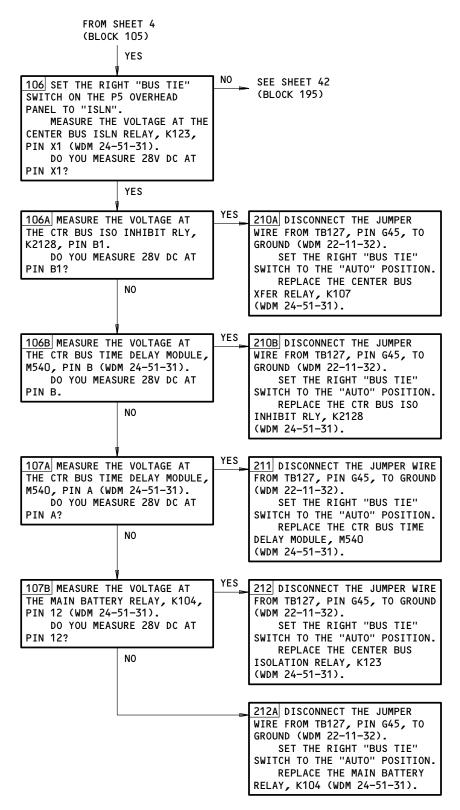
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 4)

EFFECTIVITY ALL

22-00-03

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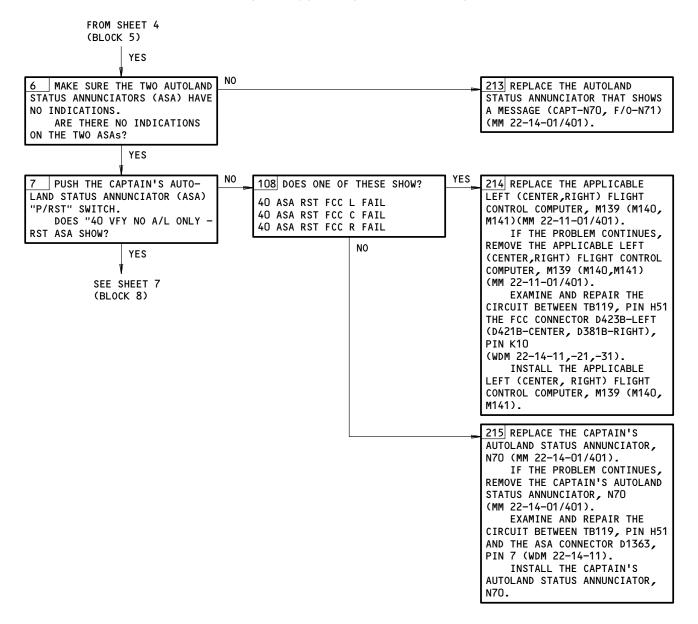


MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 5)

22-00-03

18

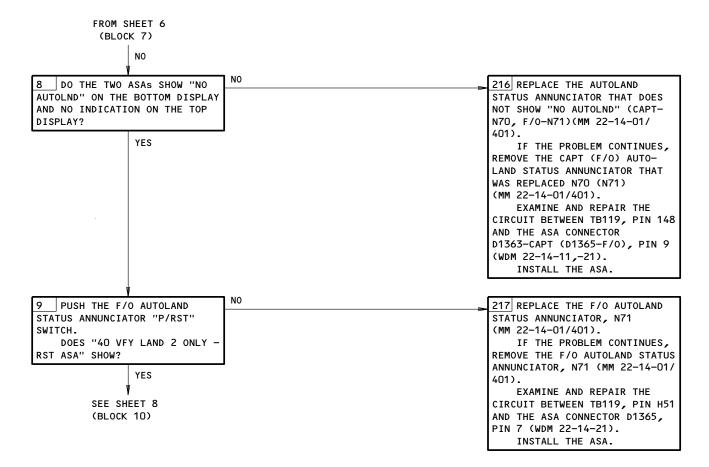
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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 6)

EFFECTIVITY-ALL



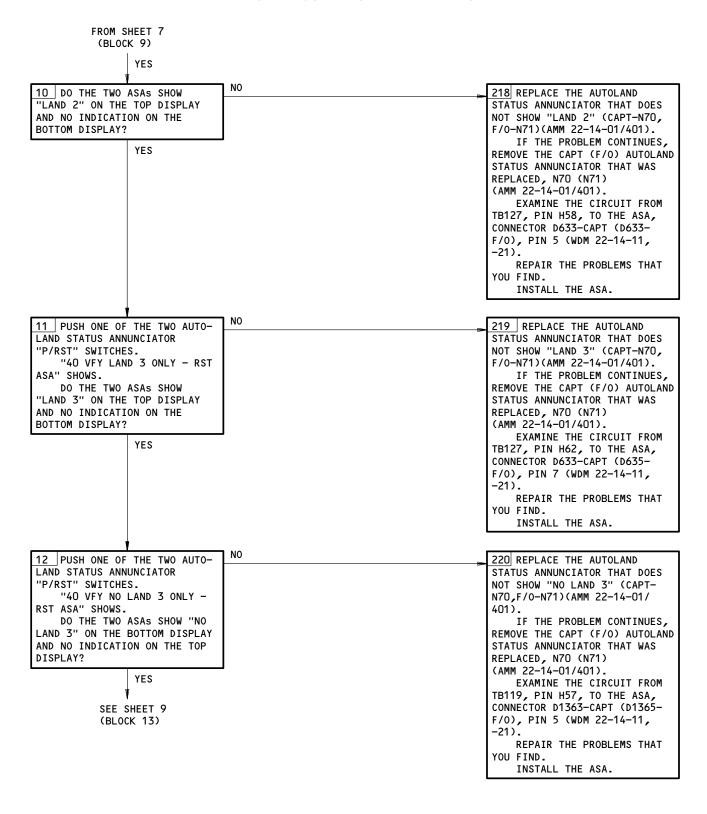


MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 7)

22-00-03

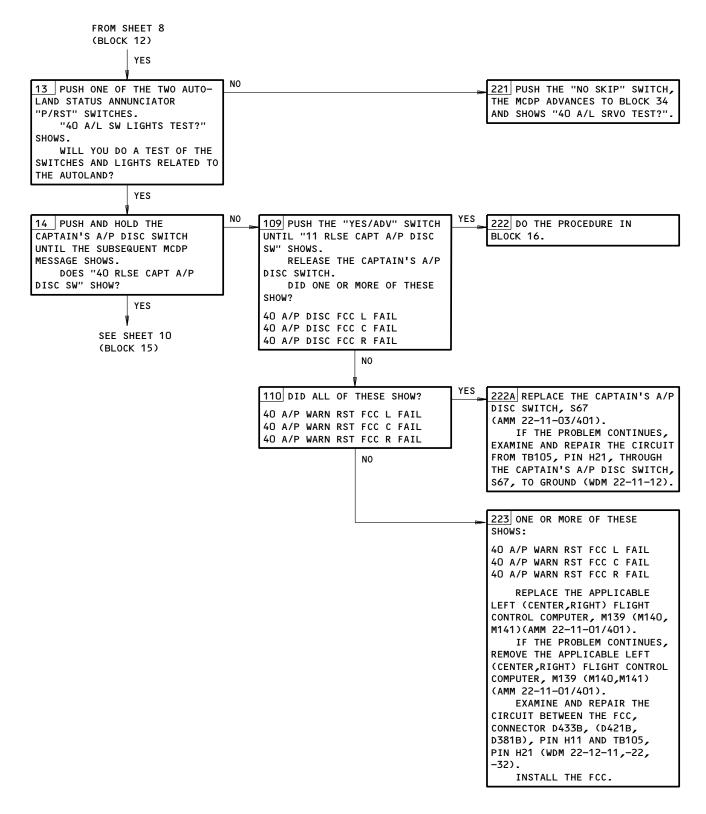
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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 8)

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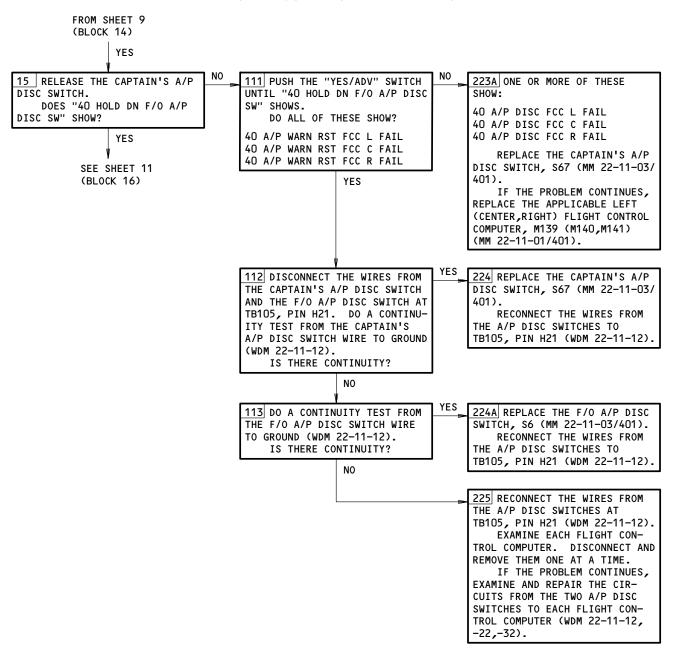
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 9)

ALL

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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 10)

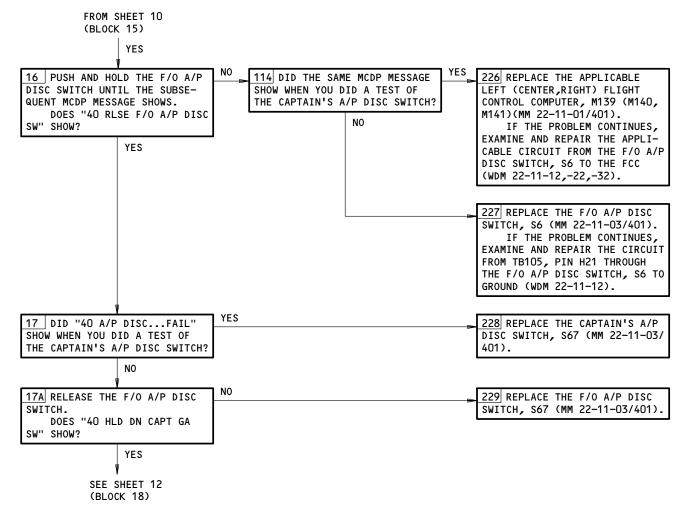
EFFECTIVITY ALL

22-00-03

18

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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 11)

ALL

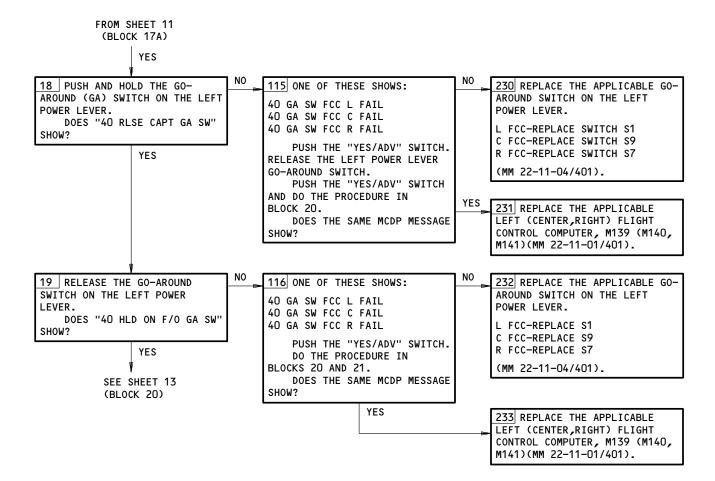
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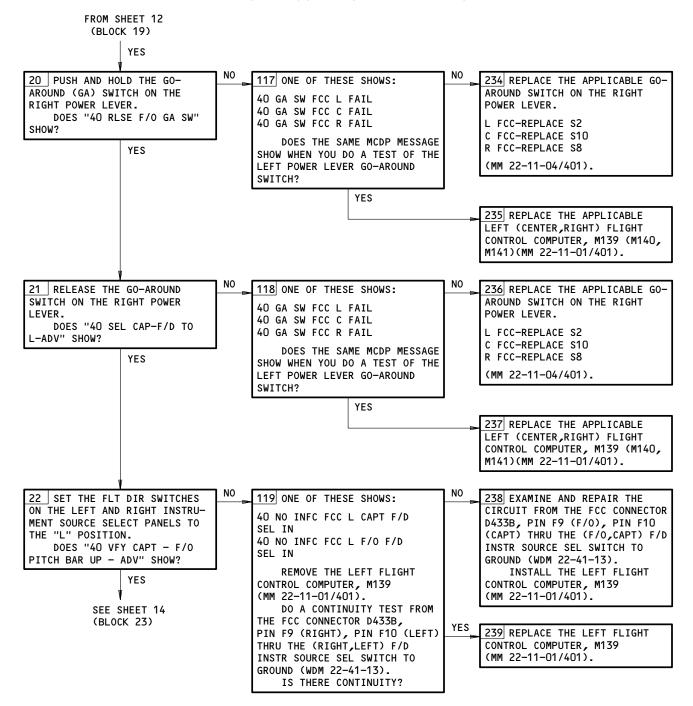
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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 12)

EFFECTIVITY-ALL

295579



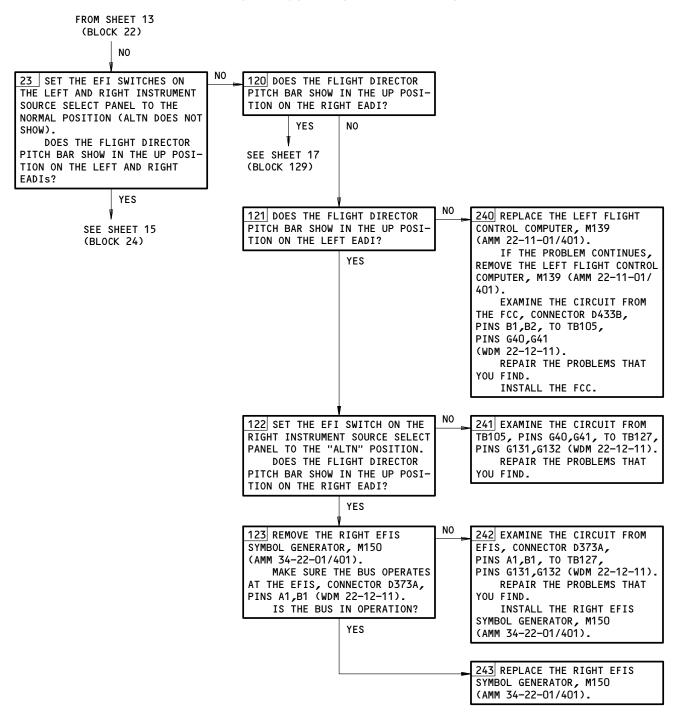
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 13)

ALL

22-00-03

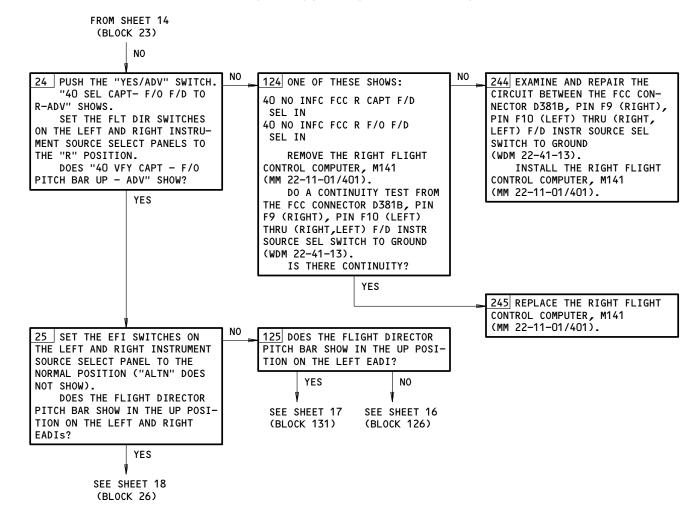
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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 14)

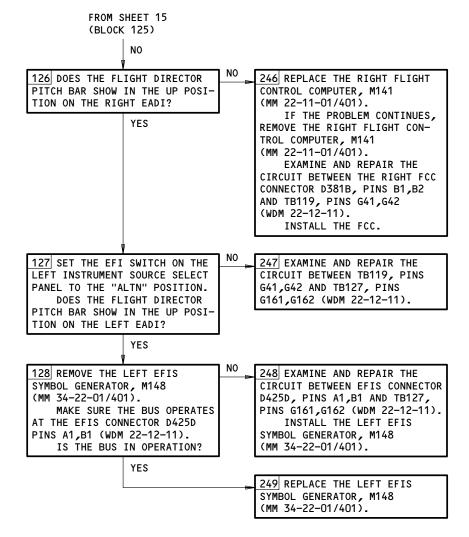
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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 15)

ALL ALL

295582

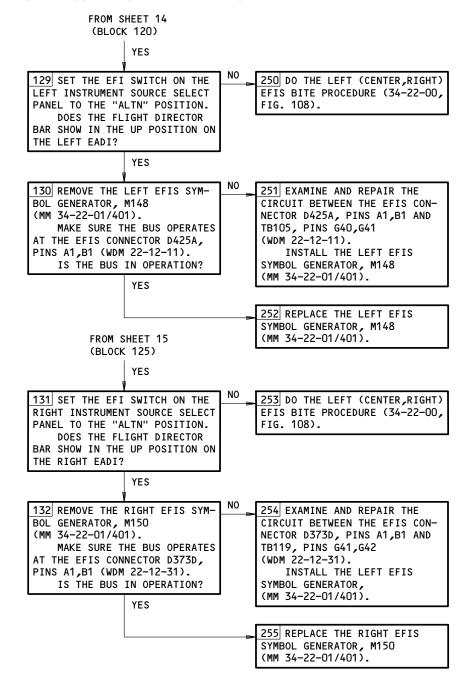


MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 16)

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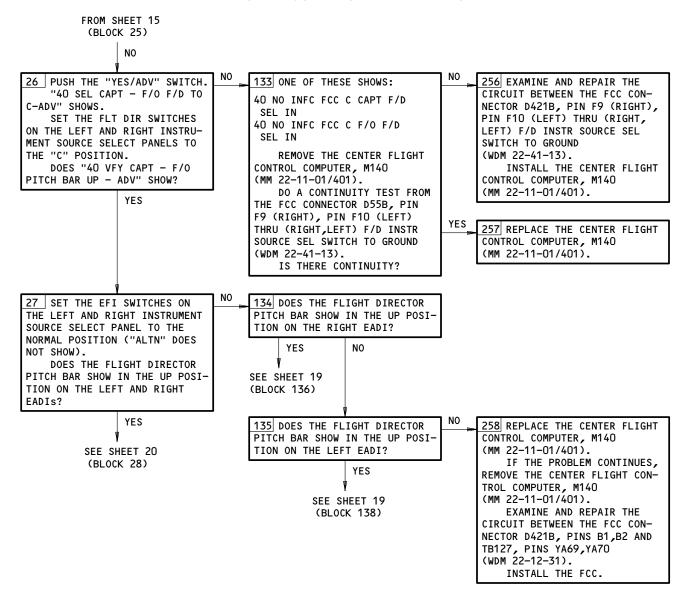
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 17)

295585

22-00-03

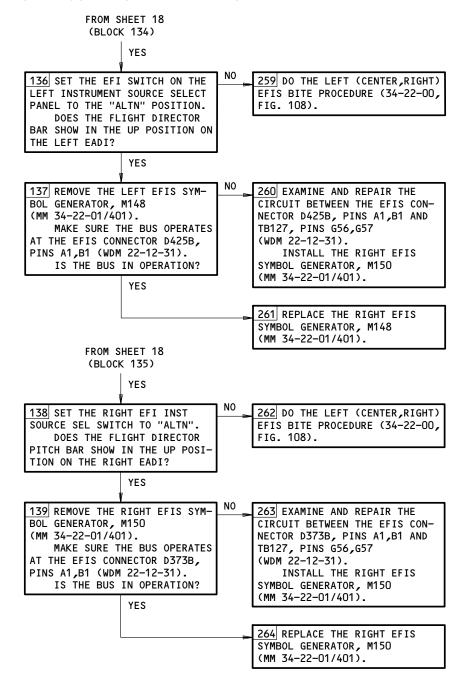
22

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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 18)

EFFECTIVITY ALL



MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 19)

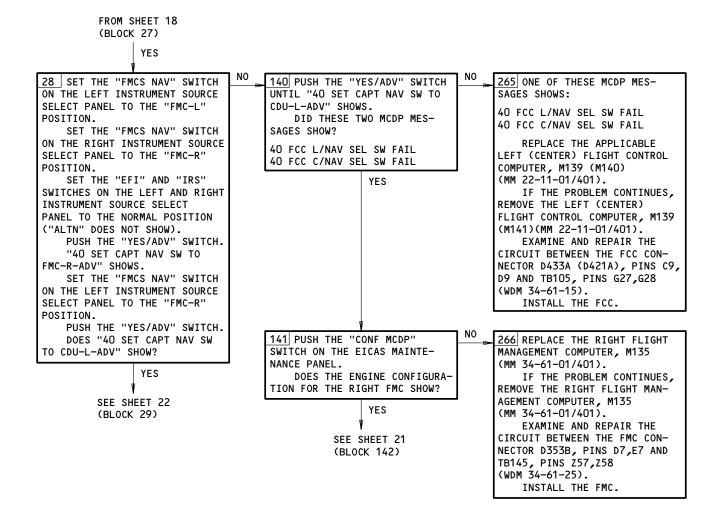
EFFECTIVITY-ALL

22-00-03

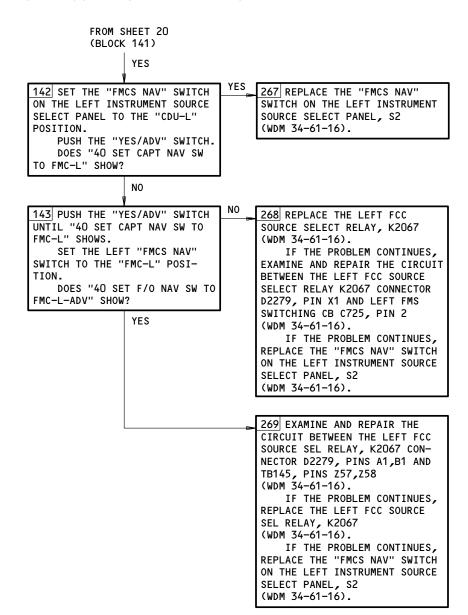
23

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295584



MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 20)



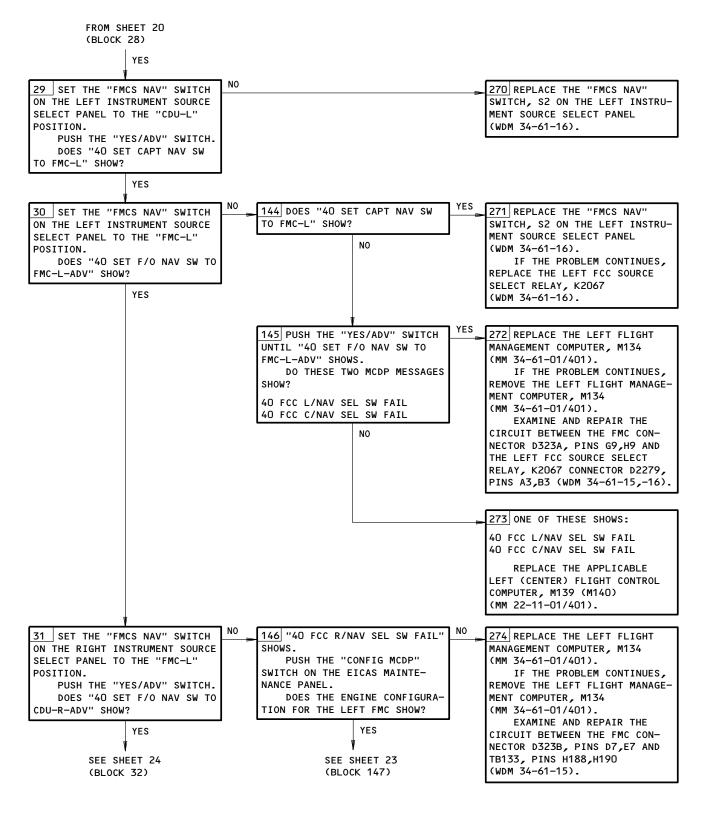
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 21)

ALL ALL

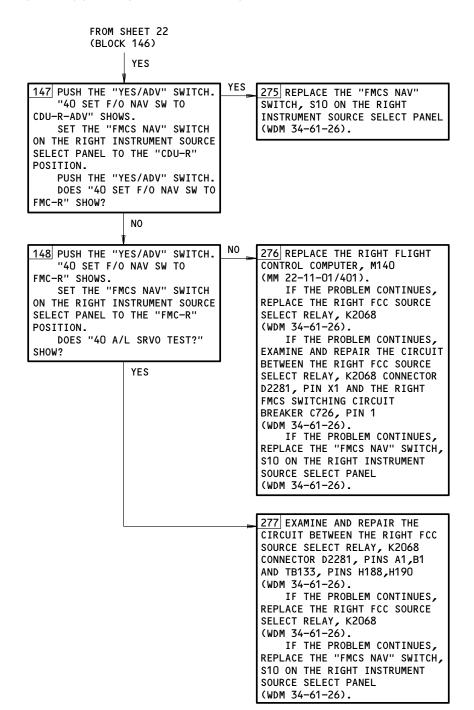
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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 22)



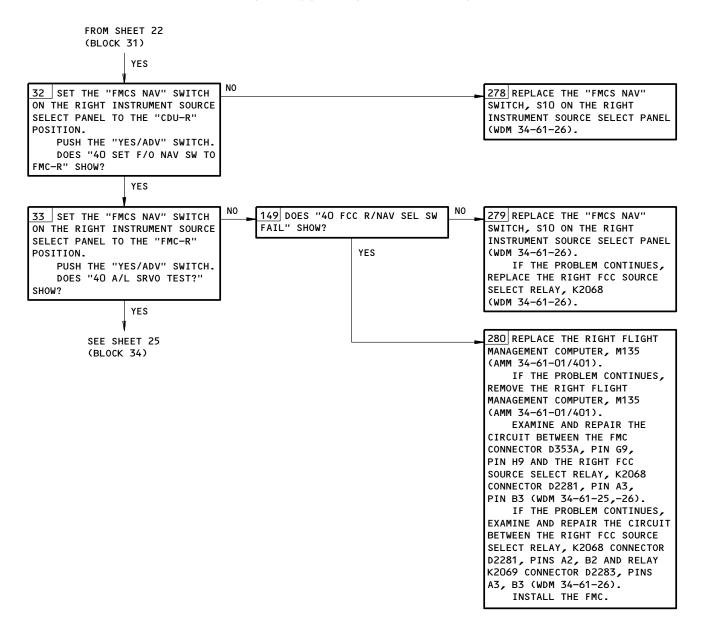
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 23)

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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 24)

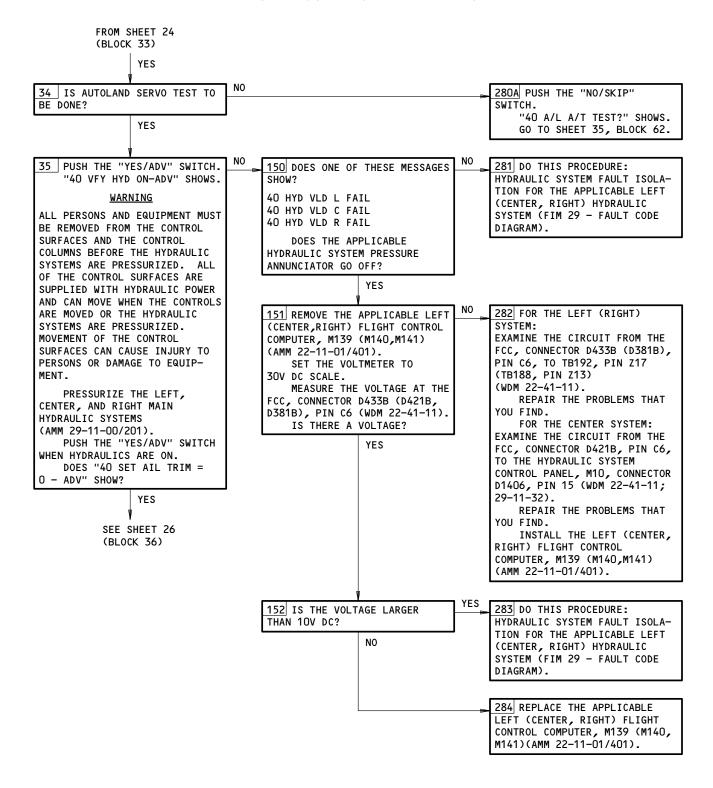
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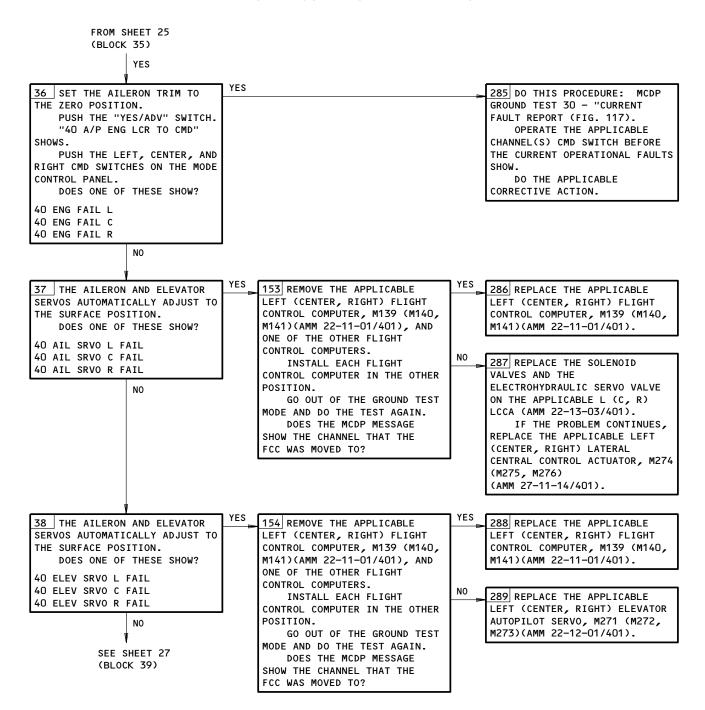
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 25)

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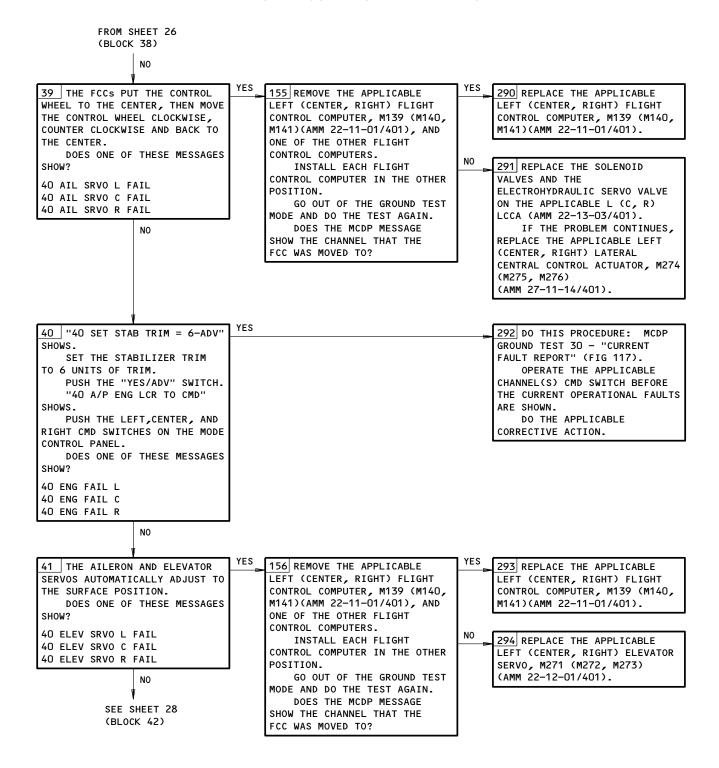
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Aug 10/95

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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 26)

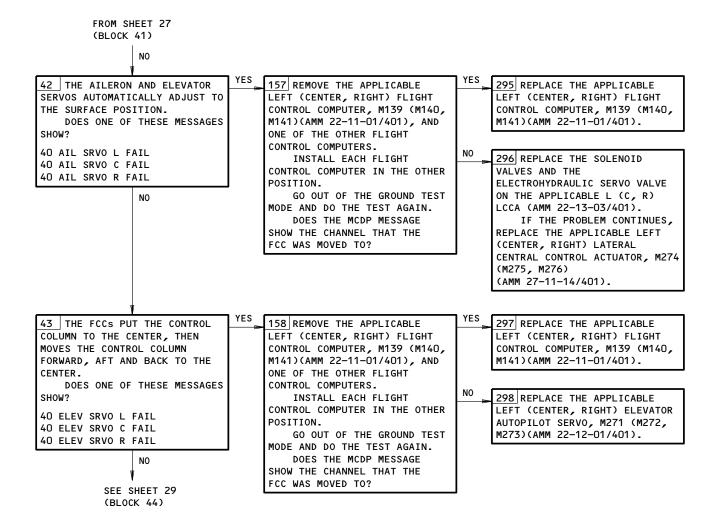


MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 27)

22-00-03

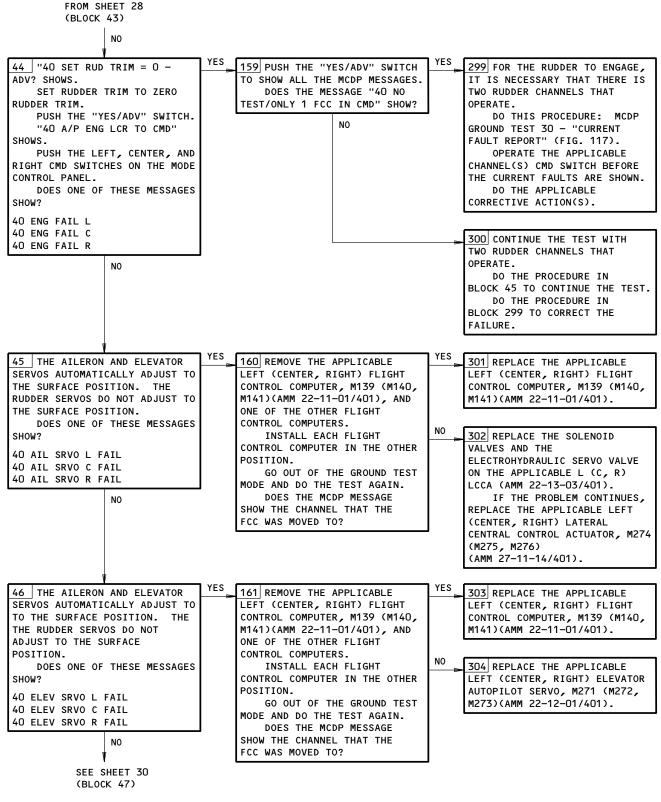
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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 28)

ALL ALL



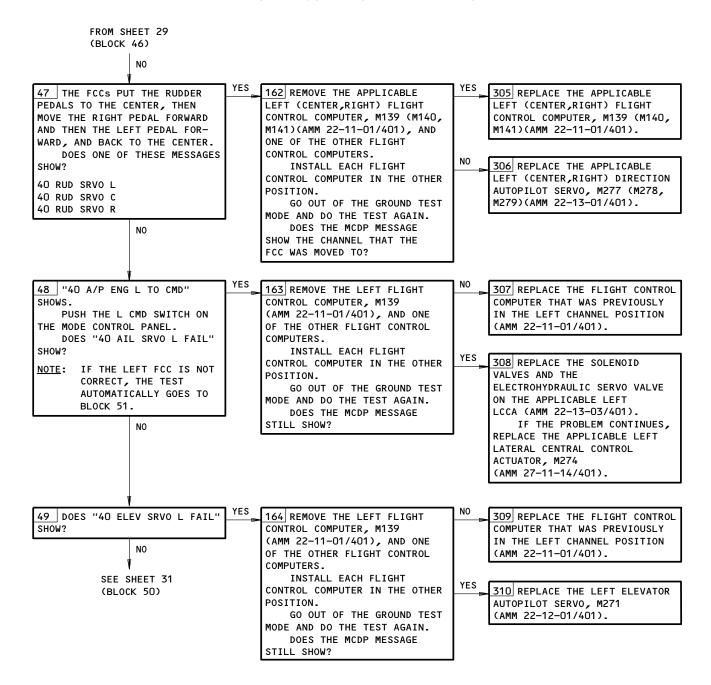
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 29)

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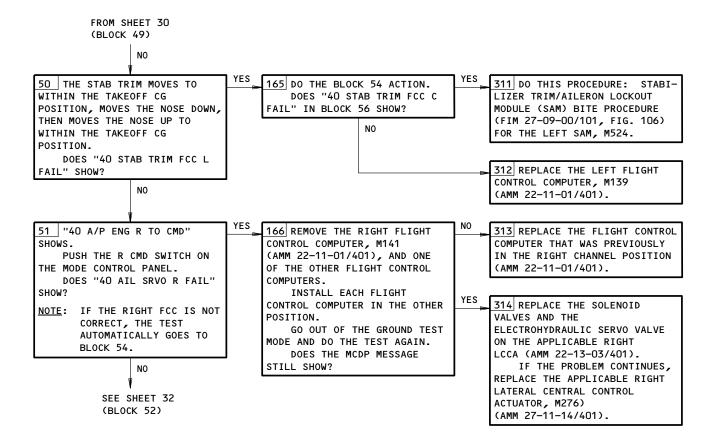
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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 30)



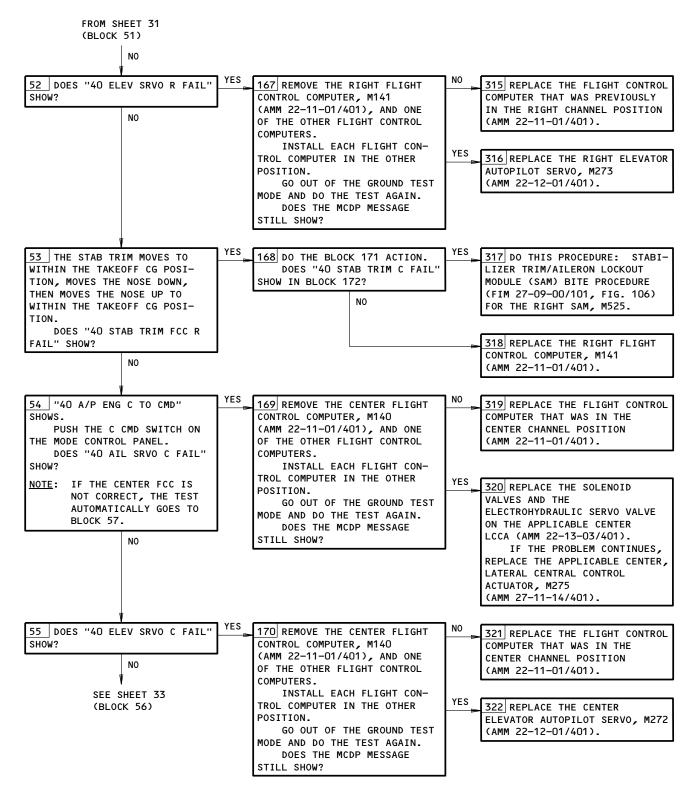
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 31)

ALL

22-00-03

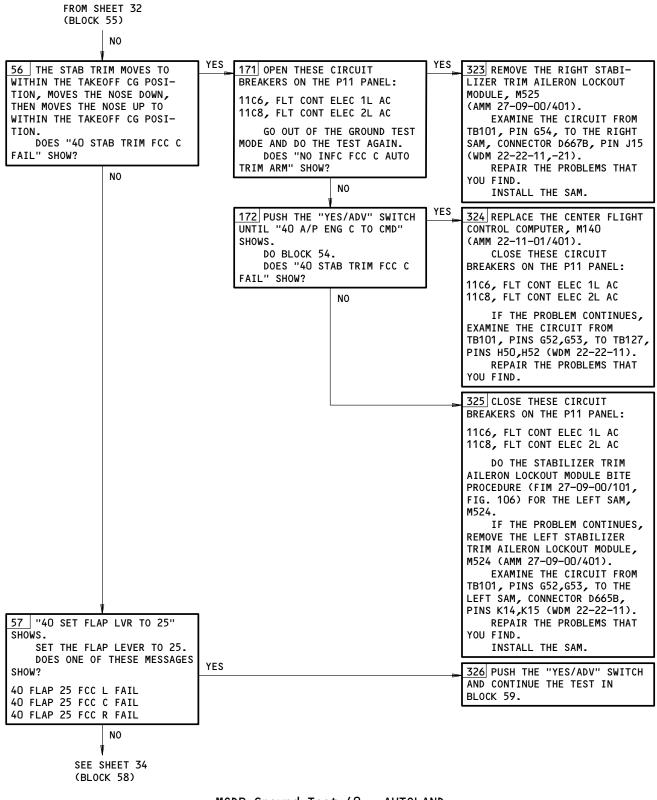
31

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MCDP Ground TEST 40 - AUTOLAND Figure 118A (Sheet 32)

ALL 29 Page 180Z Aug 22/00



MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 33)

ALL

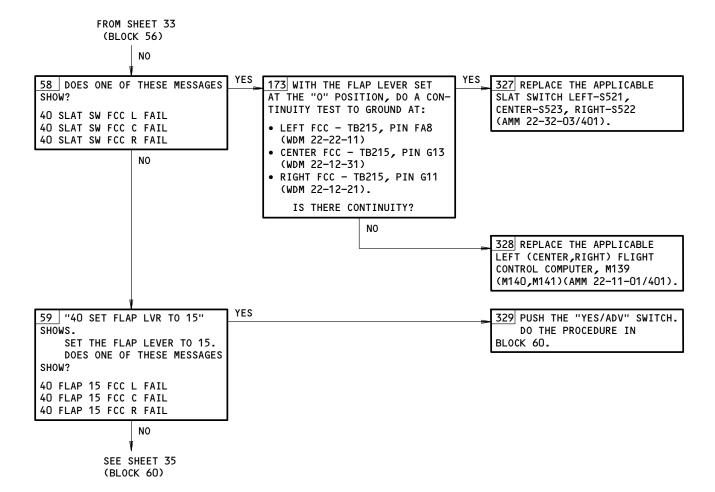
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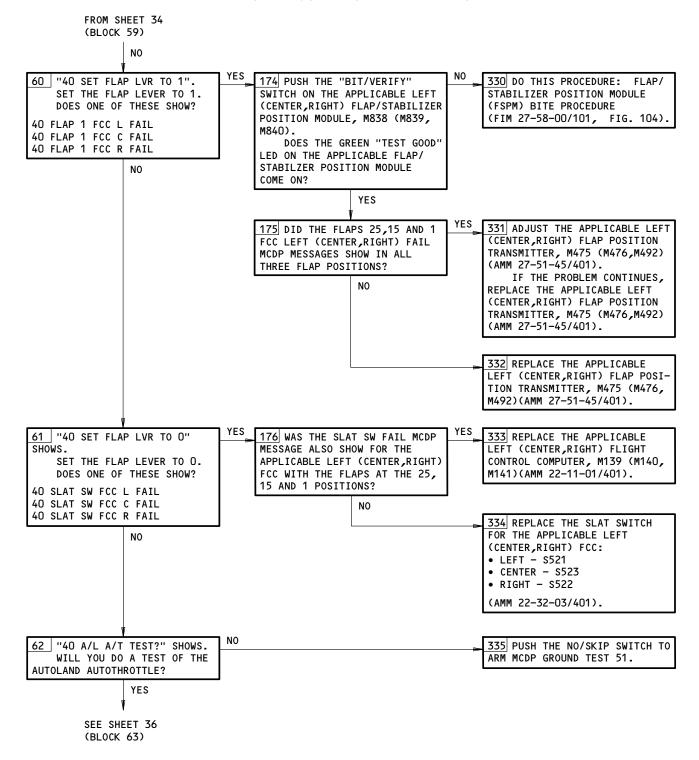
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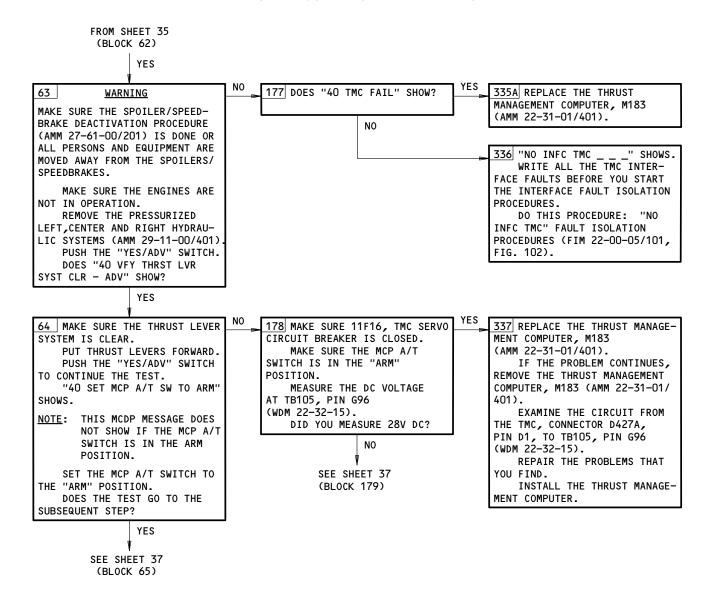
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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 34)



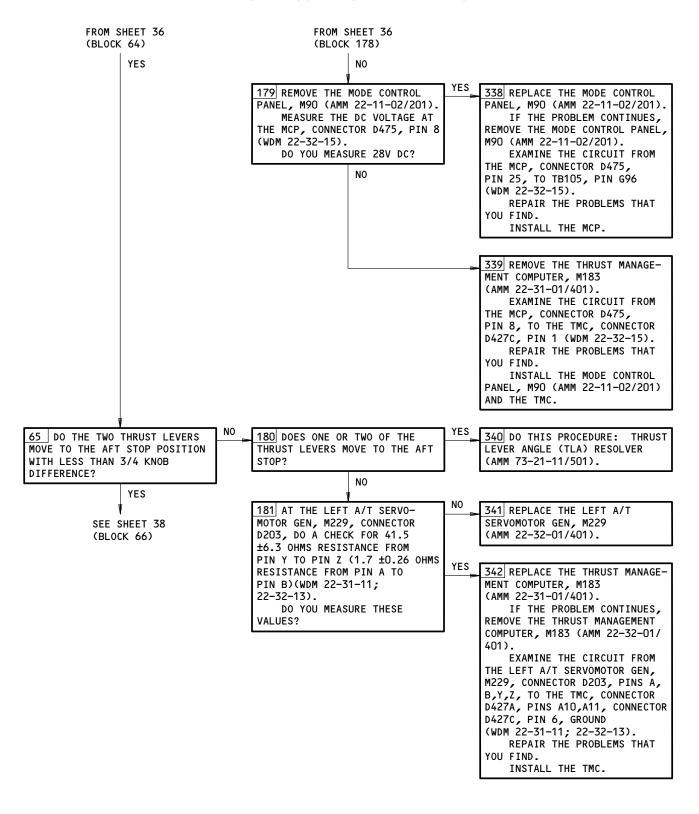
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 35)



MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 36)

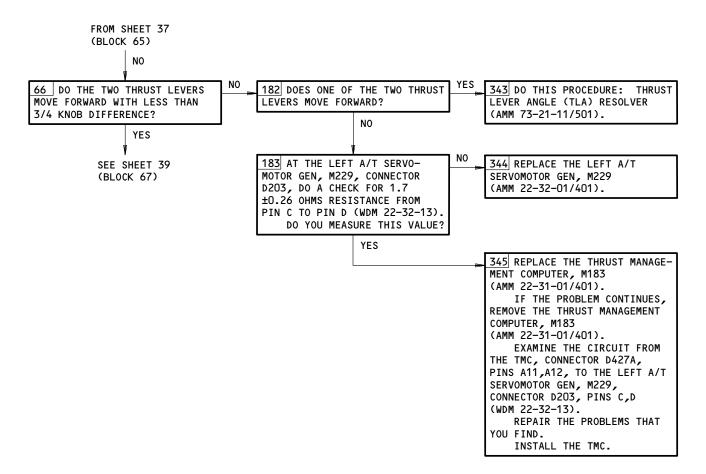
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22-00-03



MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 37)

ALL 30 Page 182C Feb 10/96



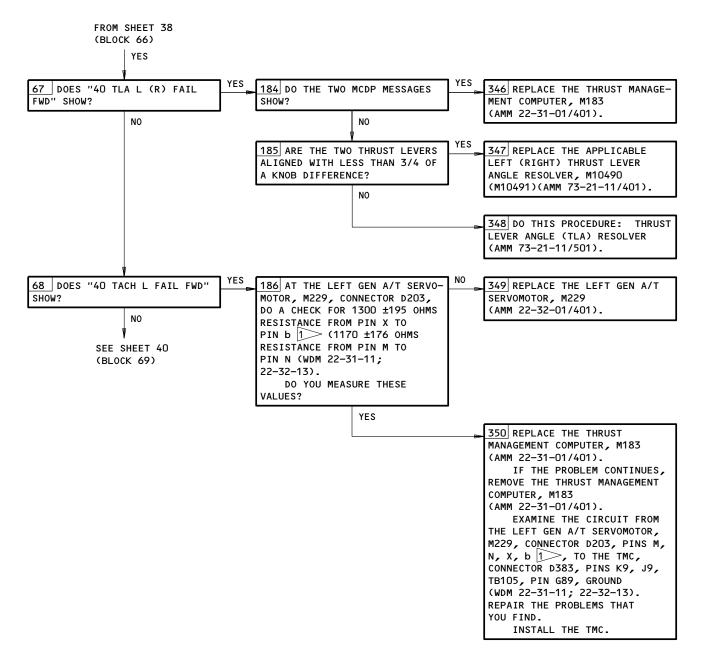
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 38)

EFFECTIVITY ALL

C62497

22-00-03





1 ON WIRING DIAGRAMS "b" IS PRESENTED AS "B-"

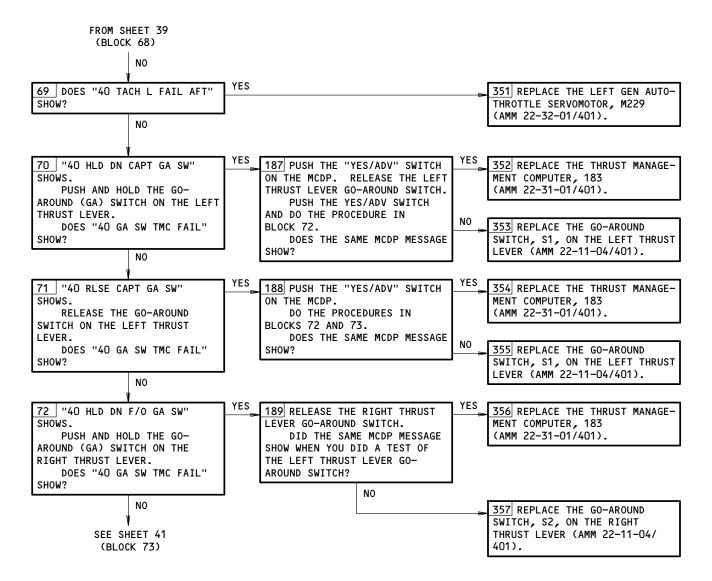
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 39)

ALL

ALL

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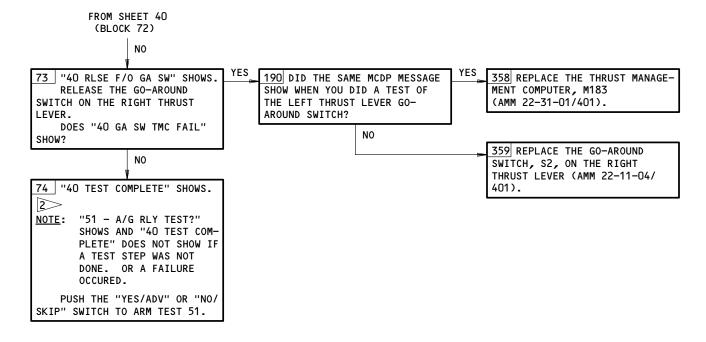


MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 40)

615042

22-00-03





THE AUTOLAND BUS ISOLATION TEST (BLOCK 3) CAN CAUSE "STAB TRIM" AND/OR "YAW DAMPER" EICAS MAINTENANCE MESSAGE(S) TO SHOW. DO THE STEP THAT FOLLOWS TO CLEAR THESE MESSAGES.

WARNING

DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS (AMM 27-61-00/201) OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS WHEN YOU OPEN THE CIRCUIT BREAKERS THAT FOLLOW. ACCIDENTAL SPOILER MOVEMENT CAN OCCUR AND CAUSE INJURY OR DAMAGE.

OPEN ALL THE CIRCUIT BREAKERS THAT FOLLOW ON THE P11 PANEL IN LESS THAN 25 SECONDS:

11C6	FLT	CONT	ELEC	1L	AC
11C8	FLT	CONT	ELEC	2L	AC
11G17	FLT	CONT	ELEC	1R	AC
11G26	FLT	CONT	ELEC	2R	AC

NOTE: MAKE SURE A FAULTBALL DOES NOT SET ON THE MODULES THAT FOLLOW WHEN YOU OPEN AND CLOSE THE ABOVE CIRCUIT BREAKERS:

(LEFT,RIGHT) STABILIZER TRIM/AILERON LOCKOUT MODULE (SAM) YAW DAMPER MODULE (YDM)

IF A FAULTBALL WAS SET, PUSH THE RESET BUTTON ON THE MODULE.

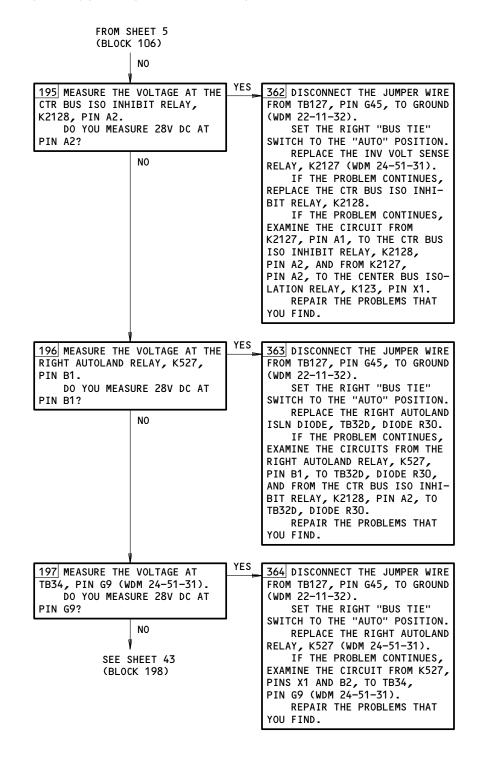
MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 41)

EFFECTIVITY ALL

22-00-03

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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 42)

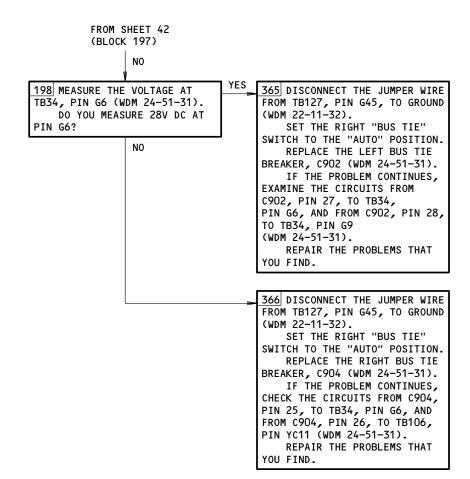
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22-00-03

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MCDP Ground Test 40 - AUTOLAND Figure 118A (Sheet 43)

B52731

22-00-03

26

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:

EICAS (MM 31-41-00/501)(IF A REMOTE MCDP CONTROL PANEL IS USED)

AIR/GROUND RELAY SYSTEM (MM 32-09-02/501)

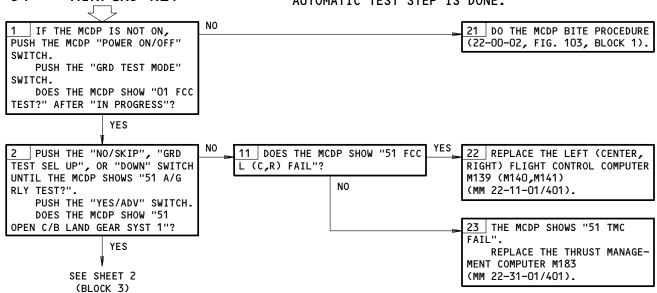
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11F14,11F15,11F16,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201)

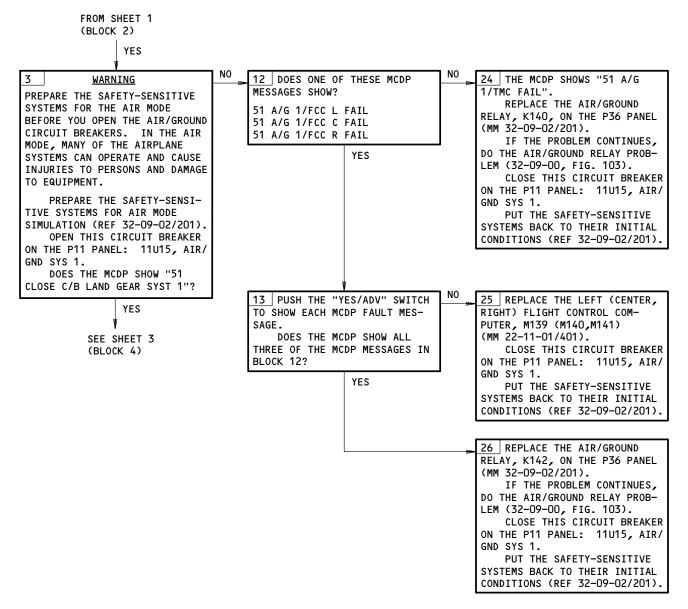
MCDP GROUND TEST 51 - "AIR/GRD RLY"

NOTE: THE MCDP SHOWS "XX IN PROGRESS" WHILE AN AUTOMATIC TEST STEP IS DONE.



MCDP Ground Test 51 - AIR/GND RLY Figure 101 (Sheet 1)

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MCDP Ground Test 51 - AIR/GND RLY Figure 101 (Sheet 2)

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FROM SHEET 2 (BLOCK 3) YES CLOSE THIS CIRCUIT BREAKER 14 ONE OR MORE OF THESE MCDP 27 REPLACE THE LEFT (CENTER, ON THE P11 PANEL: MESSAGES SHOWS: RIGHT) FLIGHT CONTROL COMPUTER, M139 (M140,M141) 11U15, AIR/GND SYS 1 51 A/G 2/FCC L FAIL (AMM 22-11-01/401). 51 A/G 2/FCC C FAIL WARNING CLOSE THESE CIRCUIT 51 A/G 2/FCC R FAIL BREAKERS ON THE P11 PANEL: PREPARE THE SAFETY-SENSITIVE PUSH THE "YES/ADV" SWITCH SYSTEMS FOR THE AIR MODE > 11U24, AIR/GND SYS 2 TO SHOW EACH MCDP FAULT MES-BEFORE YOU OPEN THE AIR/GROUND >> 11U23, AIR/GND SYS 2 CIRCUIT BREAKERS. IN THE AIR 11C29, AIR/GND SYS 2 DOES THE MCDP SHOW ALL MODE, MANY OF THE AIRPLANE AI TN THREE OF THE MCDP MESSAGES? SYSTEMS CAN OPERATE AND CAUSE PUT THE SAFETY-SENSITIVE INJURIES TO PERSONS AND DAMAGE YES SYSTEMS BACK TO THEIR INITIAL TO EQUIPMENT. CONDITIONS (AMM 32-09-02/201). PREPARE THE SAFETY-SENSI-TIVE SYSTEMS FOR AIR MODE SIMULATION (AMM 32-09-02/201). 28 REPLACE THE AIR/GROUND RELAY, K201, ON THE P37 PANEL THE MCDP SHOWS "51 OPEN C/B LAND GEAR SYST 2". (AMM 32-09-02/201). IF THE PROBLEM CONTINUES, OPEN THESE CIRCUIT BREAKERS ON THE P11 PANEL: DO THIS PROCEDURE: AIR/GROUND RELAY PROBLEM, NO AIR/GND > 11U24, AIR/GND SYS 2 DISAGREE OR NOSE A/G DISAGREE > 11U23, AIR/GND SYS 2 (FIM 32-09-00/101, FIG. 103). 11C29, AIR/GND SYS 2 CLOSE THESE CIRCUIT BREAKERS ON THE P11 PANEL: DOES THE MCDP SHOW "51 >> 11U24, AIR/GND SYS 2 CLOSE C/B LAND GEAR SYST 2"? 2 11U23, AIR/GND SYS 2 11C29, AIR/GND SYS 2 CLOSE THESE CIRCUIT PUT THE SAFETY-SENSITIVE BREAKERS ON THE P11 PANEL: SYSTEMS BACK TO THEIR INITIAL CONDITIONS (AMM 32-09-02/201). > 11U24, AIR/GND SYS 2 2 11U23, AIR/GND SYS 2 11C29, AIR/GND SYS 2 ΔΙ ΤΝ THE MCDP SHOWS "51 TEST COMPLETE". PUSH THE "YES/ADV" OR "NO/ SKIP" SWITCH TO STOP THE TEST AND TO ARM TEST 52. PUT THE SAFETY-SENSITIVE SYSTEMS BACK TO THEIR INITIAL CONDITIONS (AMM 32-09-02/201). > 767-200

MCDP Ground Test 51 - AIR/GND RLY Figure 101 (Sheet 3)

ALL

> 767-300

22-00-04

PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
AIR CONDITIONING (MM 21-00-00/201)
TRAILING EDGE FLAP SYSTEM (MM 27-51-00)
SPOILER SPEEDBRAKE CONTROL SYSTEM (MM 27-61-00/201)
WING THERMAL ANTI-ICING (MM 30-11-00/501)
ENGINE INLET THERMAL ANTI-ICING (MM 30-21-00/501)
ENGINE PROBE HEAT (MM 30-34-00/501)
EICAS (MM 31-41-00/501)(IF A REMOTE MCDP CONTROL PANEL IS USED)
AIR/GROUND RELAY SYSTEM (MM 32-09-02/501)
FLIGHT MANAGEMENT COMPUTER SYSTEM (MM 34-61-00/501)
PNEUMATIC (MM 36-00-00/201)
AIR SUPPLY DISTRIBUTION SYSTEM (MM 36-11-00/501)
FUEL CONTROL (MM 73-21-00/1)
THRUST REVERSER SYSTEM (MM 78-31-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F13,11F14,11F15,11F16,11U9,34P2,34P3

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201)

MCDP GROUND TEST 52 - "TMC RLY/SW"

NOTE: "XX IN PROGRESS" MESSAGE IS DISPLAYED WHEN AN AUTOMATIC TEST STEP IS BEING CONDUCTED.

1 PUSH THE "IND LTS TEST" SWITCH ON THE RIGHT OVERHEAT LIGHTING
CONTROL PANEL.
MAKE SURE THESE ANNUNCIATORS ARE ON:

1. ALL ANNUNCIATORS ON THE TEMPERATURE CONTROL PANEL, M14
2. ALL ANNUNCIATORS ON THE BLEED AIR SUPPLY PANEL, M15
3. ALL ANNUNCIATORS ON THE WING AND ENGINE ANTI-ICE PANEL, M10397
4. AIR HYD PUMP "PRESS" AND "OVHT" ANNUNICATORS ON THE HYDRAULIC CONTROL PANEL, M10

ARE ALL OF THE ABOVE ANNUNCIATORS ON?

YES

SEE SHEET 2

MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 1)

(BLOCK 2)

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Page 104 Aug 10/91 FROM SHEET 1 (BLOCK 1)

YES

2 PUSH THE "IND LTS TEST" SWITCH. SET THE SWITCHES ON THE P5 PANEL AS FOLLOWS:

- ON THE TEMPERATURE CONTROL PANEL, M14, SET THE L AND R PACK CONTROL TO "OFF". SET THE L AND R RECIRC FANS TO OFF ("ON" DOES NOT SHOW)
- ON THE BLEED AIR SUPPLY PANEL, M15, SET THE L,C AND R ISLN VALVES OPEN (THE BAR ON THE SWITCH SHOWS). SET THE L AND R ENG BLEED AIR SWITCHES TO "OFF"
- ON THE WING AND ENGINE ANTI-ICE PANEL, M10397, SET THE WING ANTI-ICE OFF ("ON" DOES NOT SHOW). SET THE ENGINE L AND R OFF ("ON" DOES NOT SHOW)
- ON THE HYDRAULIC CONTROL PANEL, M10, SET AIR HYD PUMP CONTROL TO "OFF"

MAKE SURE THAT THE ANNUNICATORS THAT FOLLOW ARE ON:

- 1. L AND R "PACK OFF" ON PANEL M14
- L AND R "RECIRC FAN" ON PANEL M14
- 3. L AND R ENG "OFF" ON PANEL M15
- 4. WING AND ENGINE "VALVE" ON PANEL 10397
- 5. AIR HYD PUMP "PRESS" ON PANEL M10.

ON THE EEC MAINT PANEL (P61), SET THE "POWER" SWITCH TO "TEST".

WARNING

DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS. THE SPOILERS CAN RETRACT QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS (MM 27-61-00/201) OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS.

MAKE SURE THAT THE REVERSE THRUST LEVERS ARE SET AT IDLE AND IN THE FORWARD THRUST POSITION (THE REVERSERS ARE STOWED).

DO THE THRUST REVERSER OPERATION (POWER METHOD) (MM 78-31-00/201).

PRESSURIZE THE PNEUMATIC SYSTEM (MM 36-00-00/201).

IF THE MCDP IS NOT ON, PUSH THE MCDP "POWER ON/OFF" SWITCH.

PUSH THE "GRD TEST MODE" SWITCH.

DOES THE MCDP SHOW "01 FCC TEST?" AFTER "IN PROGRESS"?

| YES ₩
SEE SHEET 3

(BLOCK 3)

1>> WHEN THE TEST IS COMPLETE, DO AS FOLLOWS:

DO THE ACTIVATION PROCEDURE FOR THE SPOILERS IF YOU DID THE DEACTIVATION PROCEDURE (MM 27-61-00/201)

MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 2)

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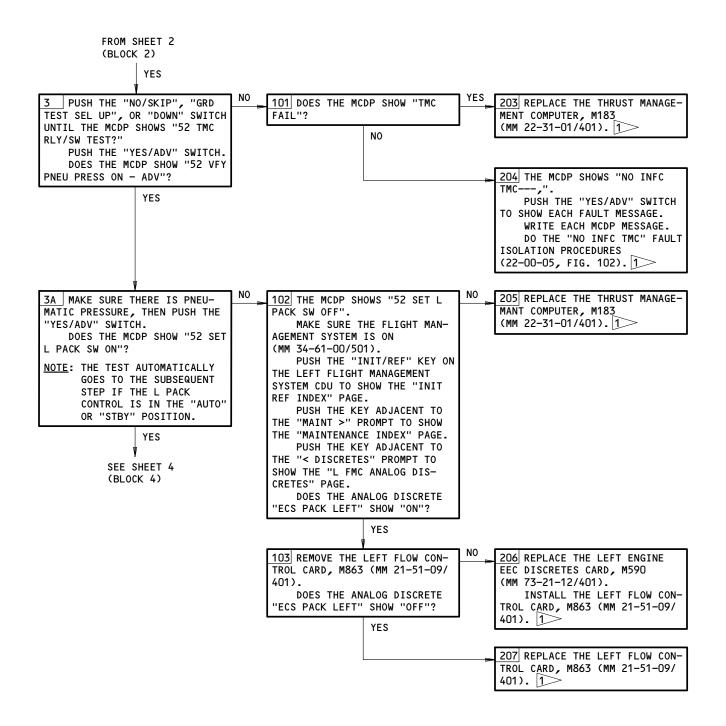
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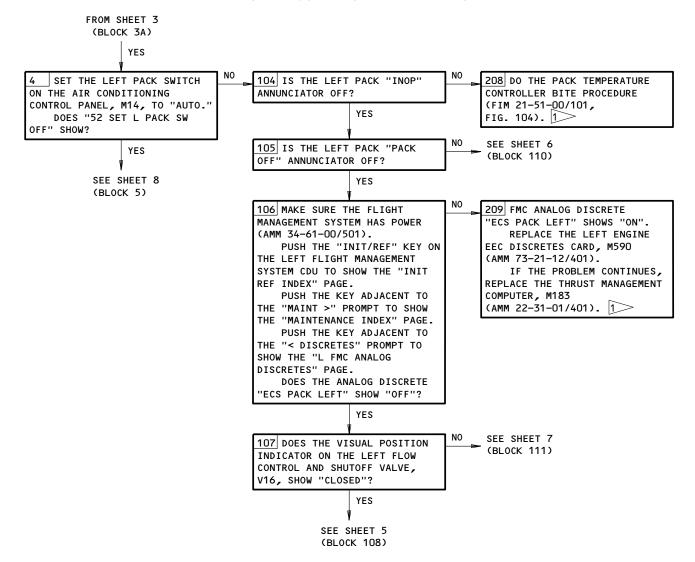
15 Page 105 Aug 10/91

202 DO THE MCDP BITE FAULT

ISOLATION PROCEDURE (22-00-02, FIG. 103). 1



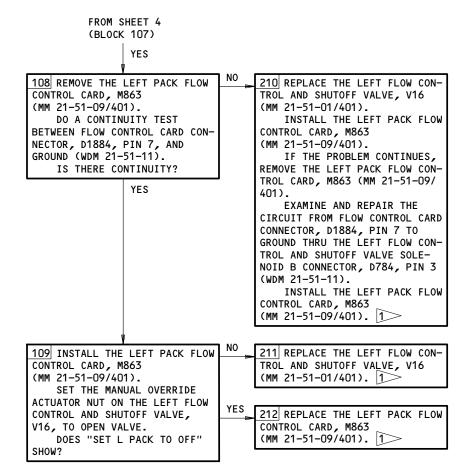
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 3)



MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 4)

EFFECTIVITY-22-00-04 ALL 05 Page 107 Dec 22/99

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MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 5)

EFFECTIVITY-ALL

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FROM SHEET 4 (BLOCK 105) NO 110 REMOVE THE LEFT PACK FLOW 213 REPLACE THE AIR CONDITION-CONTROL CARD, M863 ING CONTROL PANEL, M10193 (MM 21-51-09/401). (WDM 21-51-11). DO A CONTINUITY TEST FROM INSTALL THE LEFT PACK FLOW THE FLOW CONTROL CARD CONNEC-CONTROL CARD, M863 TOR, D1884, PIN 22, TO GROUND WITH THE LEFT PACK CONTROL (MM 21-51-09/401). IF THE PROBLEM CONTINUES, REMOVE THE LEFT PACK FLOW CON-SWITCH SET TO "AUTO" (WDM 21-51-11). TROL CARD, M863 (MM 21-51-09/ IS THERE CONTINUITY? 401) AND DISCONNECT THE AIR CONDITIONING CONTROL PANEL, YES M10193, CONNECTOR D1302 (WDM 21-51-11). EXAMINE AND REPAIR THE CIRCUIT BETWEEN PACK FLOW CON-TROL CARD CONNECTOR, D1884, PIN 22, AND AIR CONDITIONING CONTROL PANEL CONNECTOR, D1302, PIN 29 (WDM 21-51-11). EXAMINE AND REPAIR THE CIRCUIT FROM AIR CONDITIONING CONTROL PANEL CONNECTOR, D1302, PIN 27, TO GROUND (WDM 21-51-11). INSTALL THE PACK FLOW CON-TROL CARD AND CONNECT ELEC-TRICAL CONNECTOR 1. 214 REPLACE THE LEFT FLOW CON-

MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 6)

EFFECTIVITY-ALL

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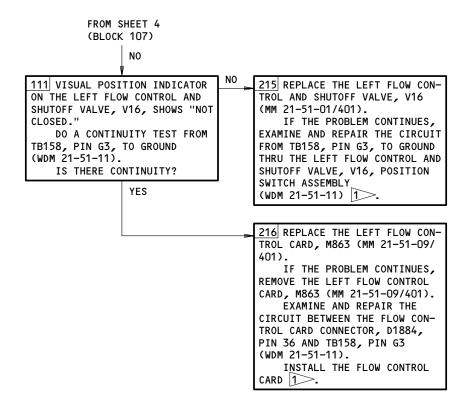
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TROL CARD, M863 (MM 21-51-09/

401) 1>.

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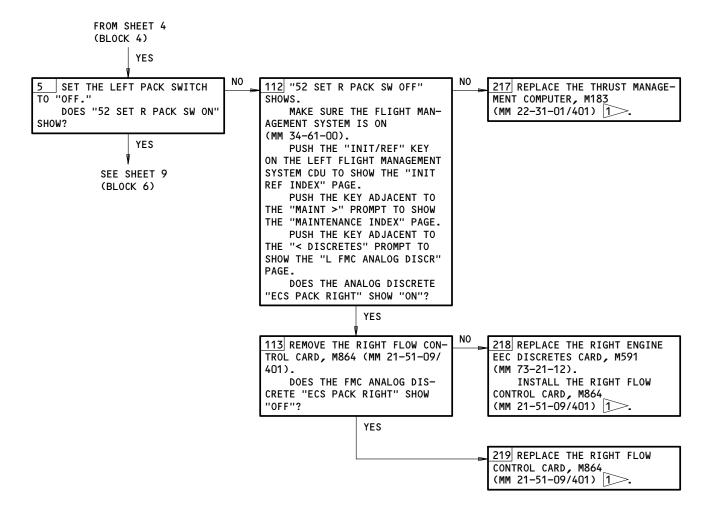
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 7)

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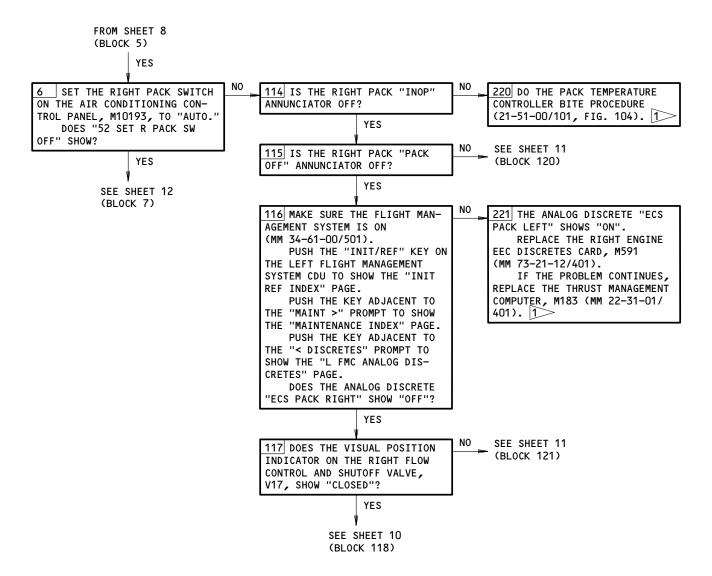




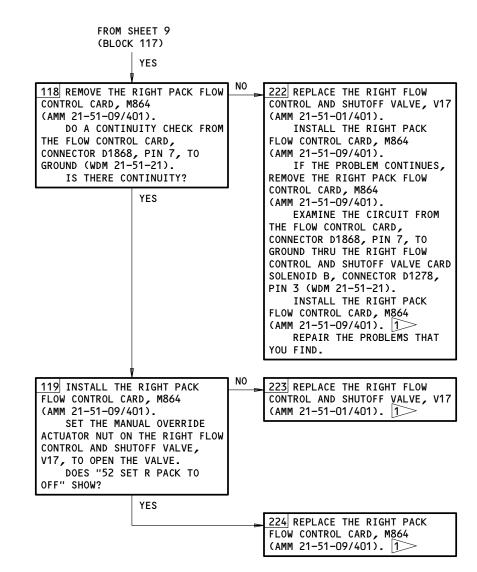
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 8)

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MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 9)



MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 10)

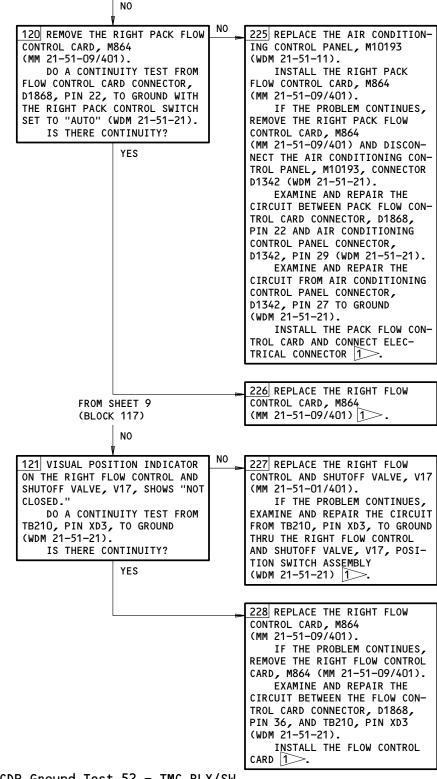
EFFECTIVITY-ALL

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FROM SHEET 9 (BLOCK 115)



MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 11)

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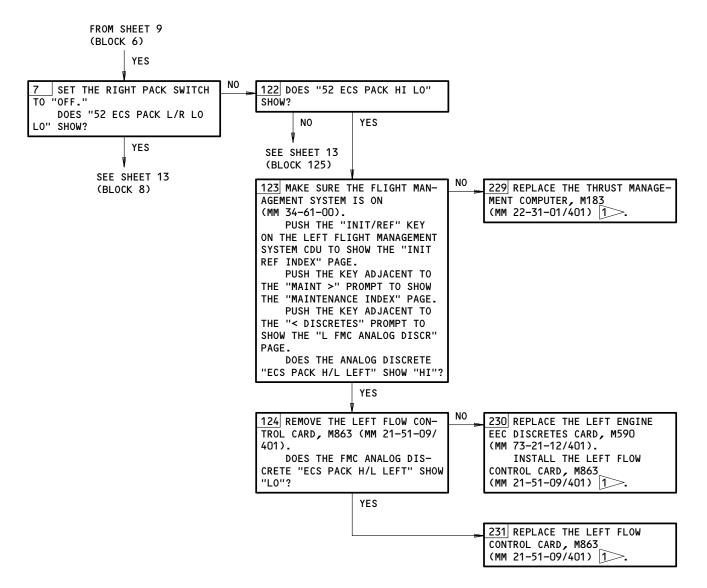
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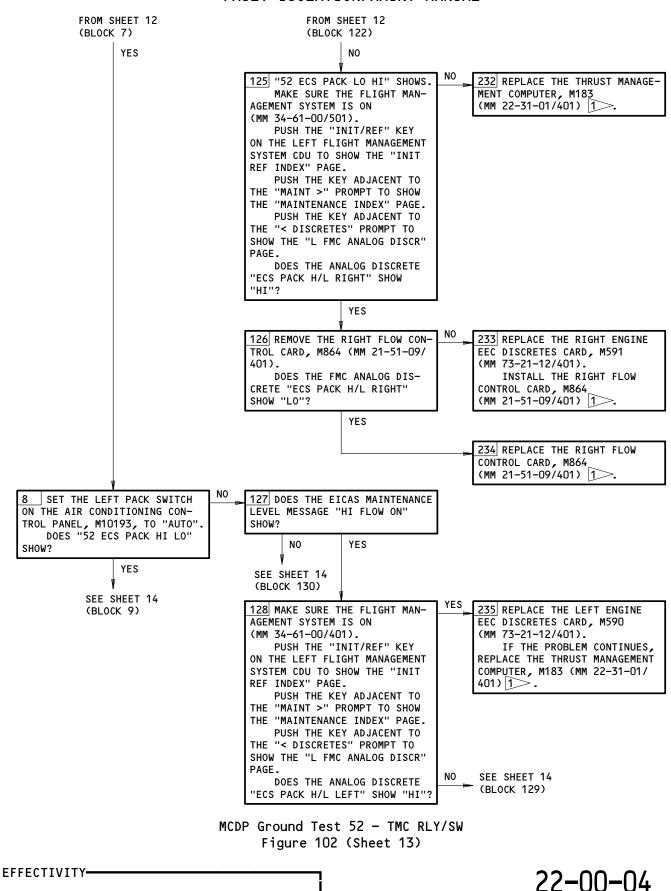


MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 12)

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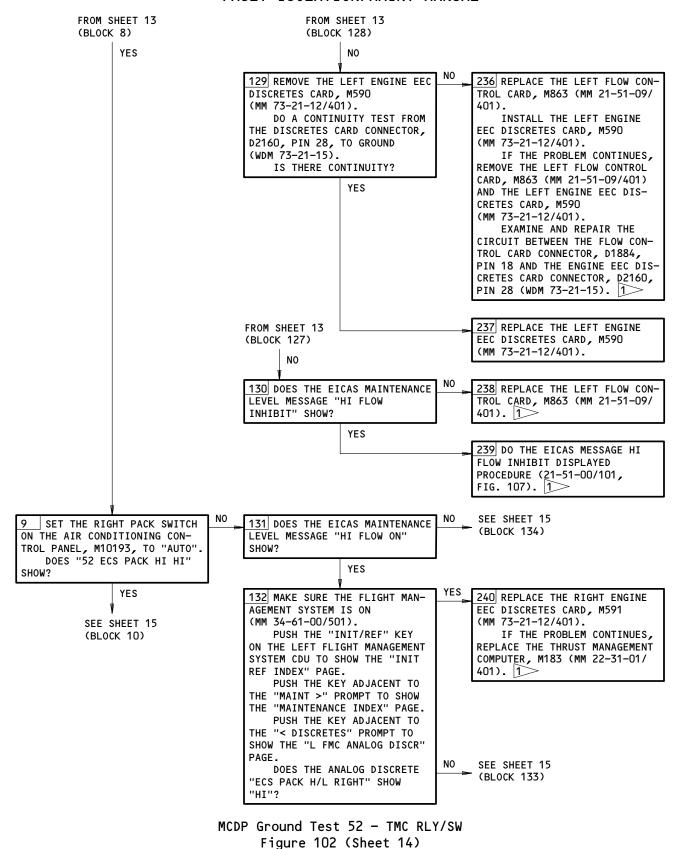


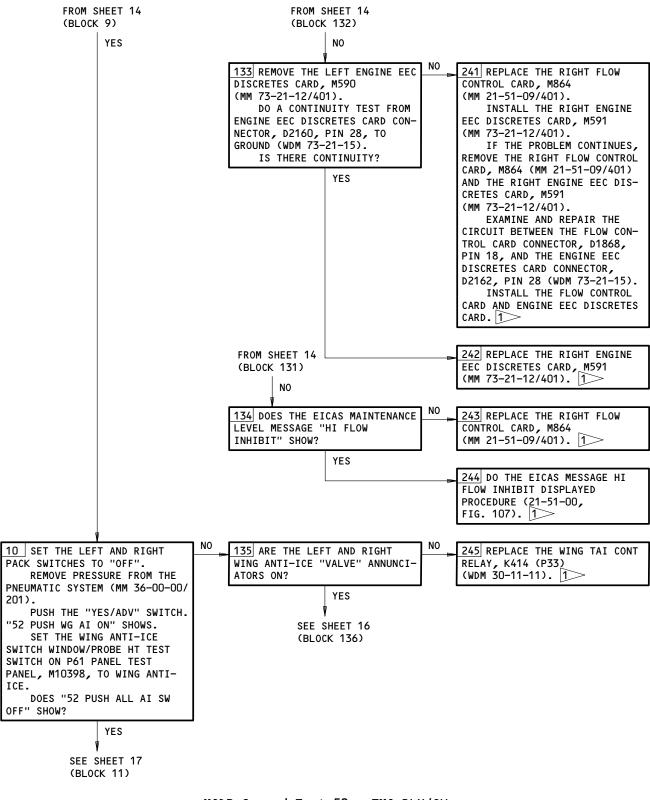
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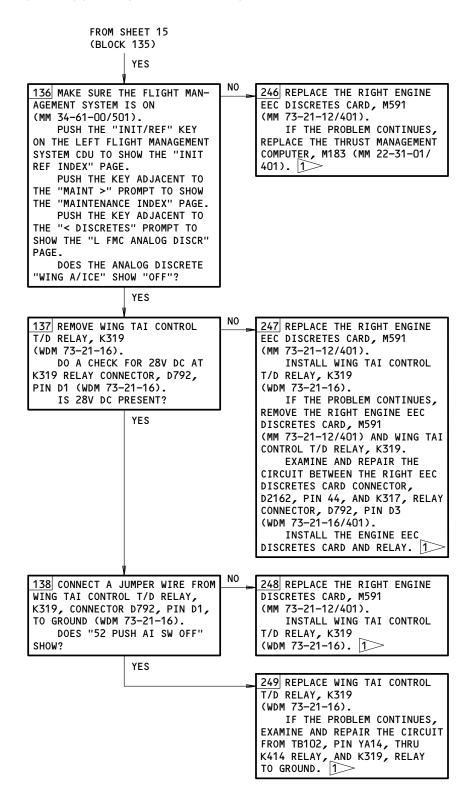
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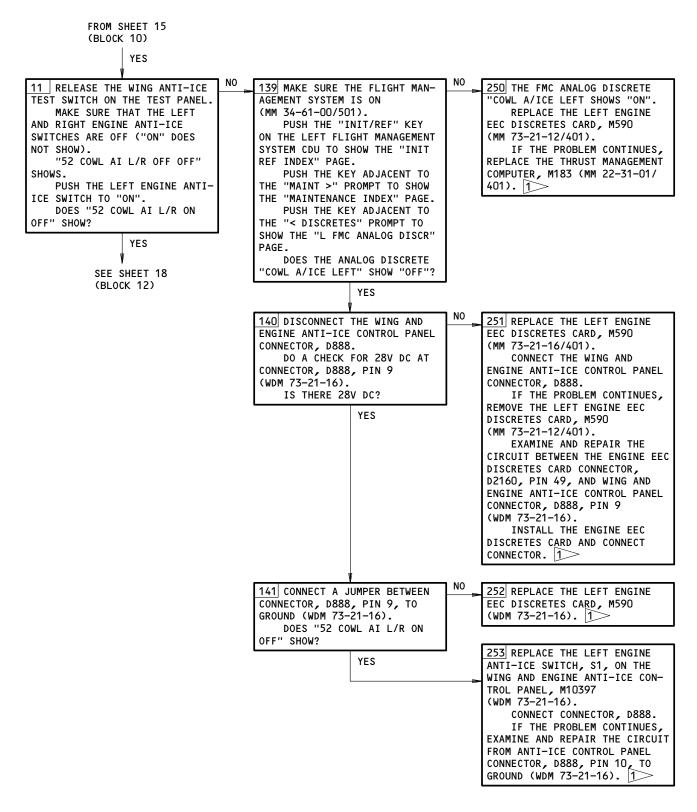


MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 15)

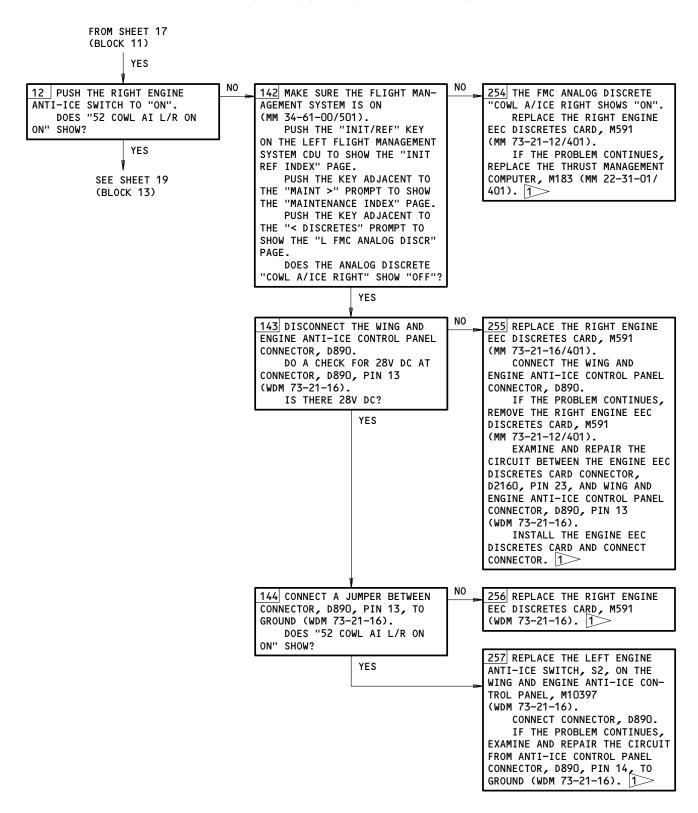


MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 16)

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MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 17)

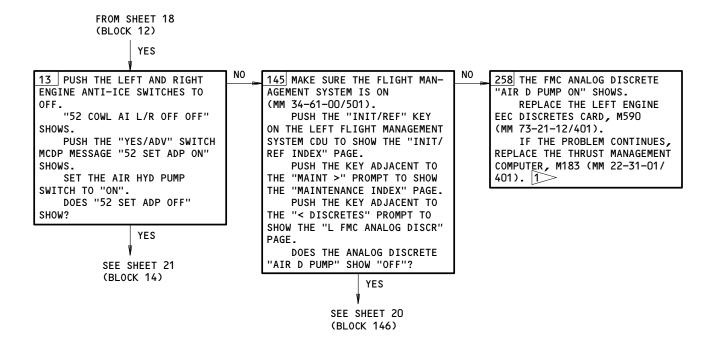


MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 18)

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MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 19)

EFFECTIVITY-ALL

22-00-04

FROM SHEET 19 (BLOCK 145A) YES 146 DO A CHECK FOR 28V DC AT 259 REPLACE THE AIR HYDRAULIC TB126, PIN YC1 (WDM 73-21-17). PUMP OVERSPEED CONTROL CARD, IS THERE 28V DC? M1057 (MM 29-11-69/401). IF THE PROBLEM CONTINUES, YES REMOVE THE AIR HYDRAULIC PUMP OVERSPEED CONTROL CARD, M1057 (MM 29-11-69/401).EXAMINE AND REPAIR THE CIRCUIT BETWEEN THE OVSP CON-TROL CARD CONNECTOR, D2246, PIN 18, AND TB126, PIN YC1 (WDM 29-11-32). INSTALL THE OVSP CONTROL CARD. |1>> 259A REPLACE THE LEFT ENGINE EEC DISCRETES CARD ASSEMBLY, M590 (MM 73-21-12/401). IF THE PROBLEM CONTINUES, REMOVE THE LEFT ENGINE EEC DISCRETES CARD, M590 (MM 73-21-12/401). EXAMINE AND REPAIR THE CIRCUIT BETWEEN THE ENGINE EEC DISCRETES CARD CONNECTOR, D2160, PIN 35, AND TB216, PIN YC1 (WDM 73-21-17). EXAMINE AND REPAIR THE CIRCUIT FROM THE ENGINE EEC DISCRETES CARD CONNECTOR, D2160, PIN 44, TO GROUND (WDM 73-21-17). INSTALL THE ENGINE EEC DISCRETES CARD.

MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 20)

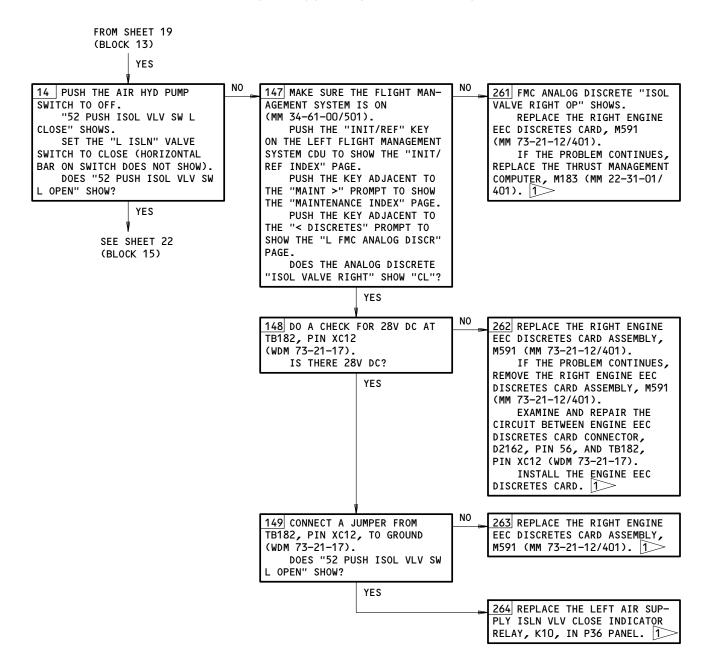
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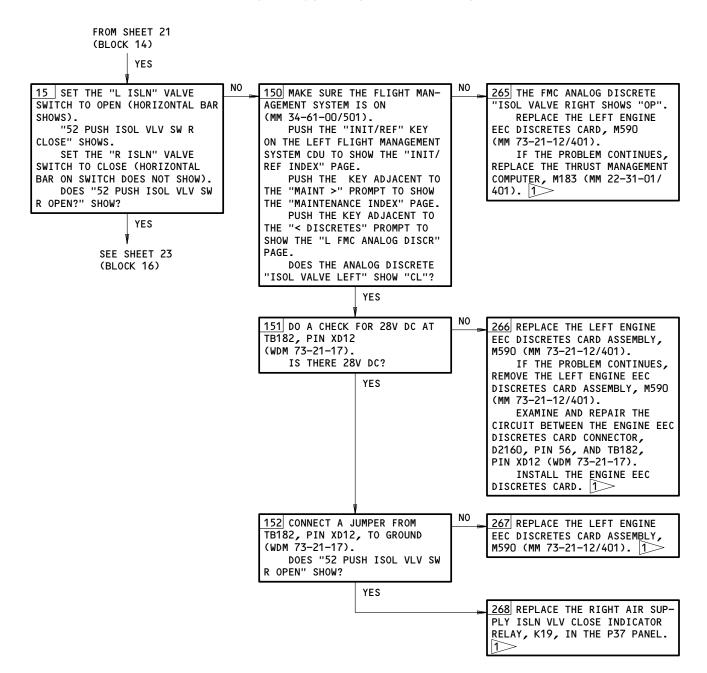
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MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 21)

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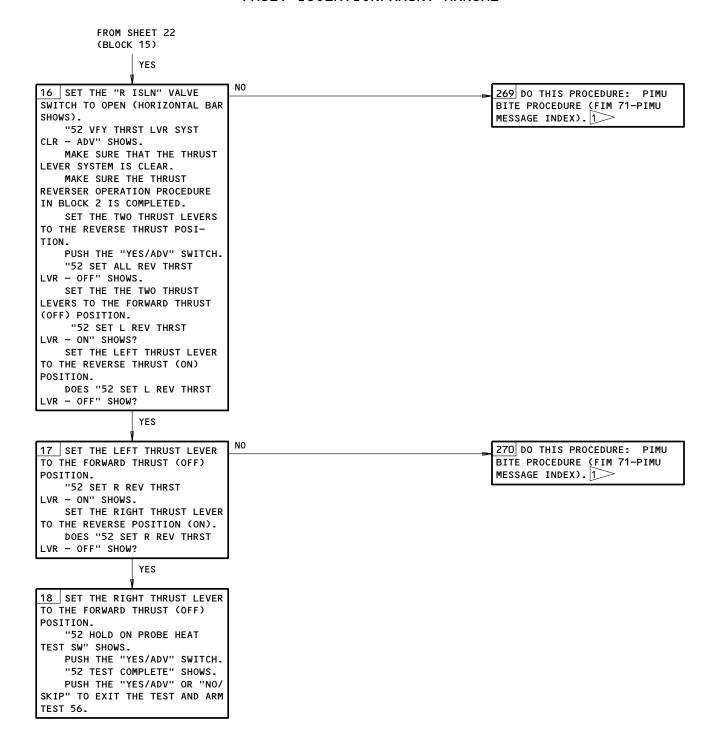


MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 22)

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MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 23)

PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:

ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (MM 31-41-00/201) (WHEN USING REMOTE MCDP CONTROL PANEL)

AIR/GROUND RELAYS (MM 32-09-02/201)

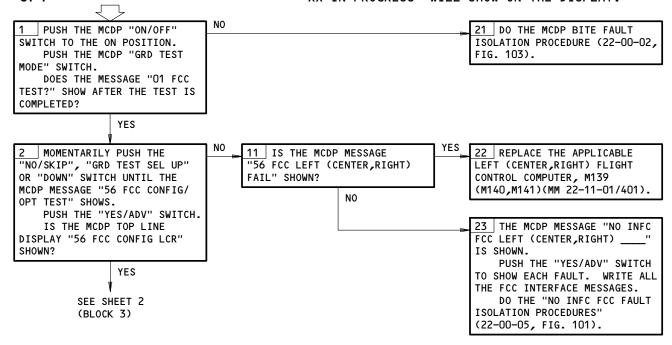
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11E16,11E17,11E18,11E20,11E21,11E34,11E35,11E36, 11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201)

MCDP GROUND TEST 56 - "FCC CONFIG/ OPT"

NOTE: WHEN AN AUTOMATIC TEST STEP IS BEING DONE, "XX IN PROGRESS" WILL SHOW ON THE DISPLAY.

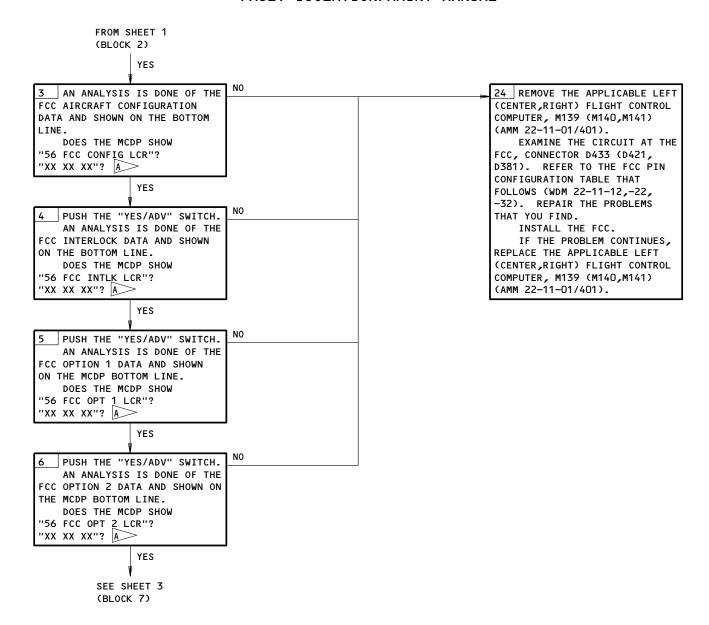


MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 1)

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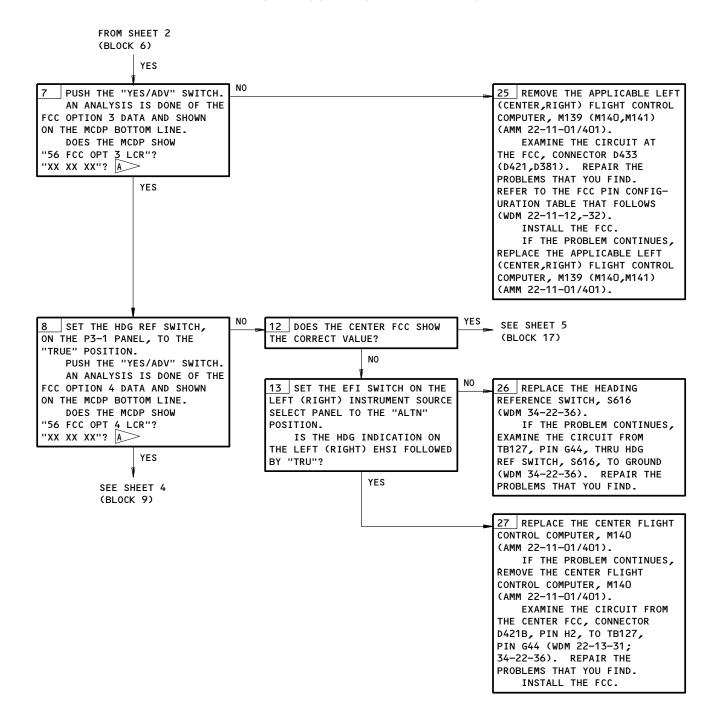
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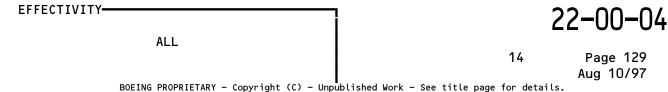


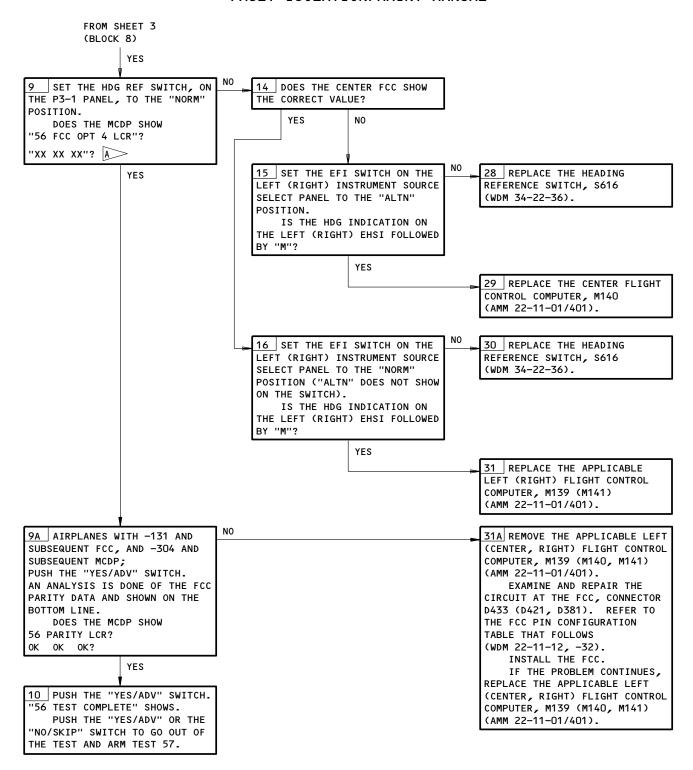
A REFER TO THE FCC PIN CONFIGURATION TABLE THAT FOLLOWS FOR APPLICABLE DISPLAY VALUE (XX)

MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 2)

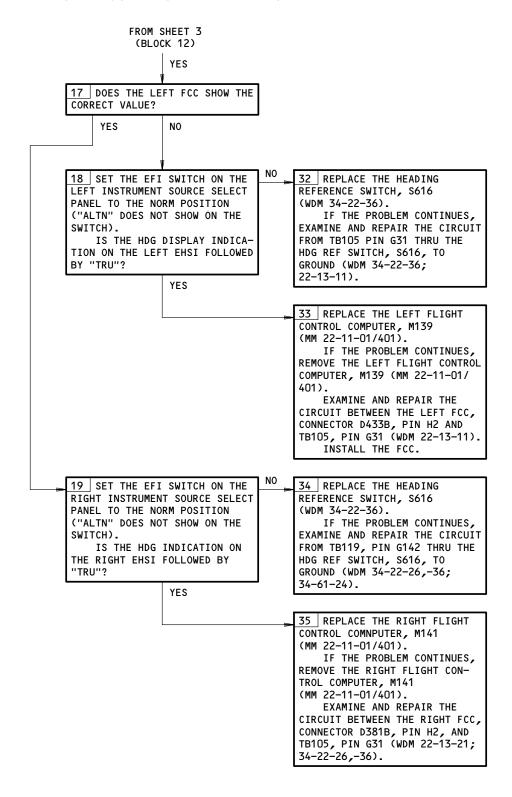


MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 3)





MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 4)



MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 5)

ALL 22-00-04

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FAULT ISOLATION/MAINT MANUAL

ODTION DESCRIPTION	BARRIER GROUN	D CONNECTIONS	1 = CONN	MCDP TEST	
OPTION DESCRIPTION	INSERT-PIN T	O INSERT-PIN	O = OPEN	56 READOUT	
FCC CONFIGURATION - PIN 1 PIN 2 PIN 3 PIN 4 PIN 5	A-A12 -B12 -C12 B-A11 -B11	A-A11 -B11 -C11 B-G8 -H8	0 0 1 0	04	
FCC INTERLOCK - PIN 1 PIN 2 PIN 3 PIN 4 PIN 5	B-C11 -F11 -D12 -F12 -H12	B-J8 -K9 -D15 -K7 -J15	1 4 0 5 0 0 0 0 0	00 4 02 5	
FCC OPTION 1 CUSTOMER OPTION PIN 1 CUSTOMER OPTION PIN 2 CUSTOMER OPTION PIN 3 CUSTOMER OPTION PIN 4 CUSTOMER OPTION PIN 5	B-A12 -B12 -C12 -A13 -B13	B-B15 -D15 -E5 -A14 -B14	1 1 0 0	03	
FCC OPTION 2 A/P MODE ENGAGE SINGLE PUSH GS CAP INHIBIT 8 FULL TIME NO LAND METHOD 2 AUTOLAND STATUS ANNUNCIATOR LATERAL COMMAND ENGAGE	B-A3 -H13 -K13 -G13 -C8 -C10	B-E4 -J14 -K14 -H14 -E8 -C14	1 0 1 0 0	05	
FCC OPTION 3 CWS INHIBIT FULL TIME F/D F/D AUTOMATIC ON ILS ANOM DLY A/P ENGA TO/GA OPT SYS ARCHITECTURE	B-J2 -D3 -A4 -D4 -G1 -H1	B-J4 -K4 A-D4 B-H4 A-G2 -H2	1 1 1 0 0	07	
GS RELAY STATUS MAG/TRUE IN LOC RELAY STATUS EO A/L INHIBIT SINGLE SOURCE A/P	B-G2 -H2 -D7 -G10 -J10	A-G4 B-G4 A-G8 -E10	0 0 OR 1 0 0	00 (MAG) 02 (TRUE)	

FCC PIN CONFIGURATION

MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 6)

MTH ALL SAS 150-999

22-00-04



OPTION DESCRIPTION	BARRIER GROUND CONNECTIONS INSERT-PIN TO INSERT-PIN				1 = CONN O = OPEN	MCDP TEST 56 READOUT
PARITY (ODD) THE SUM OF THE GROUNDED PINS (TOGETHER WITH THE PARITY PIN) MUST BE EQUAL TO AN ODD NUMBER. YOU MUST GROUND THE PARITY PIN OR KEEP IT OPEN TO GET ODD PARITY.	B-C13	B-F4	L = 0 OR 1 C = 1 OR 0 R = 0 OR 1	2>		

FCC PIN CONFIGURATION

FCC	CH IDENT-1 (PIN 1A-A13)	CH IDENT-2 (PIN 1A-B13)
LEFT	GROUND	OPEN
CENTER	GROUND	GROUND
RIGHT	OPEN	GROUND

CHANNEL IDENTIFICATION TABLE

1 CONNECTED TO THE MAG/TRUE HDG SWITCH ON THE P3-1	PANEL
--	-------

2 "NO INFC FCC (L,C,R) SHELF" IF THE PARITY IS NOT CORRECT

> -108 AND -109 FCCs; FCC OPTION 4 GROUP IS NOT INCLUDED IN THE PARITY CHECK

-133 AND SUBSEQUENT FCCs; GS RELAY STATUS, MAG/TRUE IN, AND LOC RELAY STATUS ARE NOT INCLUDED IN PARITY CHECK

4> MTH 275-277,279; SAS 150-156,162-166 WITHOUT SB 22-46

> MTH 278,280-999; SAS 150-156,162-166 WITH SB 22-46, AND SAS 157-167

8>> -135 FCC

MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 7)

EFFECTIVITY-MTH ALL SAS 150-999

22-00-04



FAULT ISOLATION/MAINT MANUAL

OPTION DESCRIPTION	BARRIER GROUN	ND CONNECTIONS	1 = CONN	MCDP TEST	
OFFICIN DESCRIPTION	INSERT-PIN T	O INSERT-PIN	O = OPEN	56 READOUT	
FCC CONFIGURATION - PIN 1 PIN 2 PIN 3 PIN 4 PIN 5	A-A12 -B12 -C12 B-A11 -B11	A-A11 -B11 -C11 B-G8 -H8	0 1 1 0	06	
FCC INTERLOCK - PIN 1 PIN 2 PIN 3 PIN 4 PIN 5	B-C11 -F11 -D12 -F12 -H12	B-J8 -K9 -D15 -K7 -J15	0 0 1 7 0 0 0 0 0	00 6 02 7	
FCC OPTION 1					
CUSTOMER OPTION PIN 1 CUSTOMER OPTION PIN 2 CUSTOMER OPTION PIN 3 CUSTOMER OPTION PIN 4 CUSTOMER OPTION PIN 5	B-A12 -B12 -C12 -A13 -B13	B-B15 -D15 -E5 -A14 -B14	1 1 0 0	03	
FCC OPTION 2					
A/P MODE ENGAGE SINGLE PUSH FULL TIME NO LAND METHOD 2 AUTOLAND STATUS ANNUNCIATOR LATERAL COMMAND ENGAGE	B-A3 -H13 -K13 -G13 -C8 -C10	B-E4 -J14 -K14 -H14 -E8 -C14	1 0 1 0 0	05	
FCC OPTION 3					
CWS INHIBIT FULL TIME F/D F/D AUTOMATIC ON ILS ANOM DLY A/P ENGA TO/GA OPT SYS ARCHITECTURE	B-J2 -D3 -A4 -D4 -G1 -H1	B-J4 -K4 A-D4 B-H4 A-G2 -H2	1 1 1 0 0	07	
FCC OPTION 4 3					
GS RELAY STATUS MAG/TRUE IN	B-G2 -H2	A-G4	0 0 OR 1	00 (MAG) 02 (TRUE)	
LOC RELAY STATUS EO A/L INHIBIT	−D7 −G10	B-G4 A-G8	0		
EO A/F INHIRII	-G1U	A-G8	U		

FCC PIN CONFIGURATION

MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 8)

SAS 050-149

22-00-04

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OPTION DESCRIPTION	BARRIER GROUN	D CONNECTIONS	1 = CONN	MCDP TEST 56 READOUT	
OFFICIN DESCRIPTION	INSERT-PIN T	O INSERT-PIN	O = OPEN		
PARITY (ODD) THE SUM OF THE GROUNDED PINS (TOGETHER WITH THE PARITY PIN) MUST BE EQUAL TO AN ODD NUMBER. YOU MUST GROUND THE PARITY PIN OR KEEP IT OPEN TO GET ODD PARITY.	B-C13	B-F4	L = 1 OR O C = 0 OR 1 R = 1 OR O	2>	

FCC PIN CONFIGURATION

FCC	CH IDENT-1 (PIN 1A-A13)	CH IDENT-2 (PIN 1A-B13)
LEFT	GROUND	OPEN
CENTER	GROUND	GROUND
RIGHT	OPEN	GROUND

CHANNEL IDENTIFICATION TABLE

CONNECTED TO THE MAG/TRUE HDG SWITCH ON THE P3-1 PANEL
2 "NO INFC FCC (L,C,R) SHELF" IF THE PARITY IS NOT CORRECT
3 -108 AND -109 FCCs; FCC OPTION 4 GROUP IS NOT INCLUDED IN THE PARITY CHECK
-133 AND SUBSEQUENT FCCs; GS RELAY STATUS, MAG/TRUE IN, AND LOC RELAY STATUS ARE NOT INCLUDED IN PARITY CHECK
6 SAS 050,051 WITHOUT SB 22-46
7 SAS 050,051 WITH SB 22-46, AND SAS 052-149

MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 9)

22-00-04

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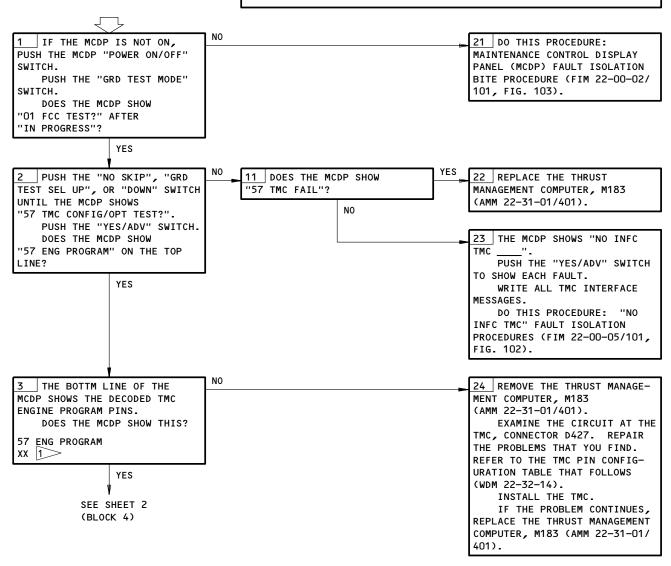
PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE: EICAS (AMM 31-41-00/501)(IF A REMOTE MCDP CONTROL PANEL IS USED)

AIR/GROUND RELAY SYSTEM (AMM 32-09-02/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F14,11F15,11F16,11U9

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)



1 > REFER TO THE TMC PIN CONFIGURATION TABLE THAT FOLLOWS FOR THE APPLICABLE MCDP DISPLAY VALUE "XX".

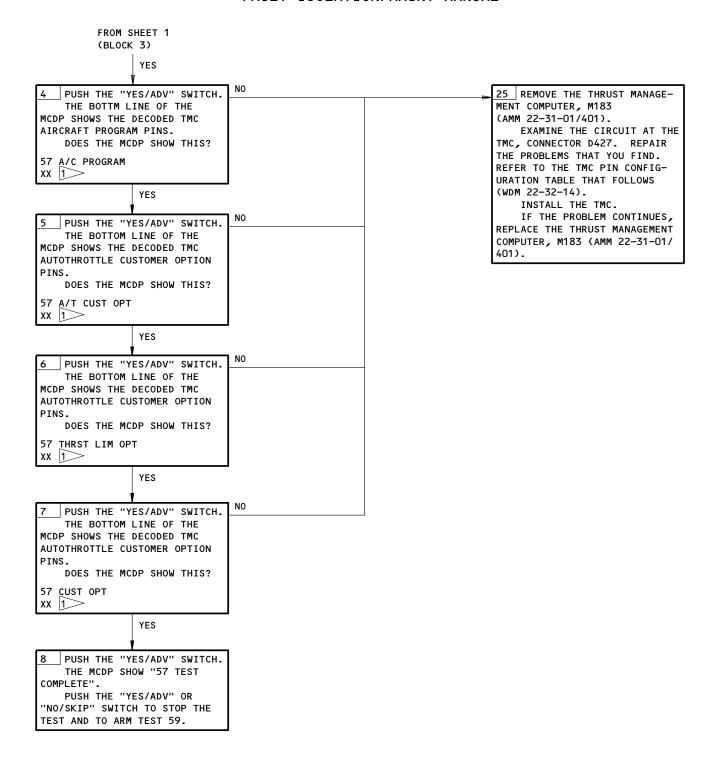
MCDP GROUND TEST

0PT"

57 - "TMC CONFIG/

MCDP Ground Test 57 - TMC CONFIG/OPT Figure 104 (Sheet 1)

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MCDP Ground Test 57 - TMC CONFIG/OPT Figure 104 (Sheet 2)

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	CONNECTOR	PIN	P	IN CONNE	CTION			
CONFIGURATION/OPTION	NUMBER	NUMBER	GND	OPEN	+28V DC	CODE	MCDP READOUT	LIMITS
ENGINE PROGRAM 8								
1	D427B	D10	Х			0	57 ENG PROGRAM	
2		F6	X			0	08	PW4060
3		G11	X	v		0		
4 5	D427A	C1 E15	x	X		1 0		
ENGINE PROGRAM 9								
1	D427B	D10	Х			0	57 ENG PROGRAM	
2		F6		Х		1	10	PW4062
3		G11	X			0		
4		C1		Х		1		
5	D427A	E15	Х			0		
AIRPLANE PROGRAM								
1	D427B	F2	Х			0	57 A/C PROGRAM	
2		F4		X		1	06	767-300ER
3	D427A	B11		X		1		IGW
4		E14	Х			0		
AUTOTHROTTLE								
CUSTOMER OPTION								
1	D427A	J10			X	1	57 A/T CUST OPT	
2		Н6			X	1	03	
3		F3	X			0		
4		J12	Х			0		
THRUST LIMIT OPTION								
1	D427A	F7			X	1	57 THRUST LIM OPT	
2		F9			Х	1	15	
3		K5			X	1		
4	D427B	H10			Х	1		
THRUST LIMIT OPTION								
2								
6	D427A	C11	Х			0		
5		D11	X			0		
CUSTOMER OPTION							57 CUST OPT	
2							04	
3		G8		Х		1		
2		D10	X			0		
1		D12	Х			0		
PARITY	D427A	H15 3		х		1		
		D13 4	x 8>	x 9>		0 1	5	
			"	"		8>9>		
						استا		

TMC PIN CONFIGURATION TABLE

_					
2 >	IS	NOT	COVERED	BY	PARITY

MCDP Ground Test 57 - TMC CONFIG/OPT Figure 104 (Sheet 3)

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^{3&}gt;> PARITY FOR THE AIRCRAFT PROGRAM AND THE AUTOTHROTTLE CUSTOMER OPTION

^{4&}gt; PARITY FOR THE ENGINE PROGRAM AND THE THRUST LIMIT OPTION

^{5 &}quot;NO INFC TMC SHELF" WILL SHOW IF THE PARITY IS NOT CORRECT

⁸ SAS 165, 167 PRE-SB 71-0118

⁹ SAS 165, 167 POST-SB 71-0118



CONFIGURATION/OPTION	CONNECTOR	PIN	Р	PIN CONNECTION			MCDP READOUT	LIMITS
COM IGORATION OF TION	NUMBER	NUMBER	GND	OPEN	+28V DC	CODE	HODE READOUT	LIMITO
ENGINE PROGRAM								
1	D427B	D10		Χ		1	57 ENG PROGRAM	
2		F6	Х			0	05 6>>	PW4056
3		G11		Χ		1		
4		C1	X			0		
5	D427A	E15	Х			0		
ENGINE PROGRAM								
1	D427B	D10	X			0	57 ENG PROGRAM	
2		F6	X			0	08 7	PW4060
3		G11	X			0		
4		C1		χ		1		
5	D427A	E15	Х			0		
AIRCRAFT PROGRAM								
1	D427B	F2		χ		1	57 A/C PROGRAM	
2		F4		χ		1	07	767-200ER
3	D427A	B11		χ		1		IGW
4		E14	Х			0		
AUTOTHROTTLE								
CUSTOMER OPTION								
1	D427A	J10			х	1	57 A/T CUST OPT	
2		Н6			X	1	03	
3		F3	X		^	Ö	03	
4		J12	X			0		
THRUST LIMIT OPTION								
1	D427A	F7			x	1	57 THRUST LIM OPT	
2	DALIK	F9			x	1	15	
3		K5			X	1	15	
4	D427B	H10			x	1 1		
	DATE	1110			^	'		
CUSTOMER OPTION 2								
1	D427A	C11	X			0	57 CUST OPT	
2		D11	X			Ö	04	
3		G8	"	Х		1		
4		D10	x	_ ^		Ó		
5		D10	X			0		
DARTTY								
PARITY	D/274	111 5				1		
	D427A	H15		Х		1		
5>>	3>							1
	D427A	D13	Х			0	7>	
	4	D13		Х		1	6>	
						·	<u> </u>	

TMC PIN CONFIGURATION TABLE

2	IS NOT COVERED BY PARITY
3	PARITY FOR THE AIRCRAFT PROGRAM AND THE AUTOTHROTTLE CUSTOMER OPTION
4>>	PARITY FOR THE ENGINE PROGRAM AND THE THRUST LIMIT OPTION
5	"NO INFC TMC SHELF" WILL SHOW IF THE PARITY IS NOT CORRECT
6	SAS 050 PRE-SB 72-37, 051-149
7 >	SAS 050 POST-SB 72-37

MCDP Ground Test 57 - TMC CONFIG/OPT Figure 104 (Sheet 4)

SAS 050-149

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
EICAS (MM 31-41-00/201)(WHEN USING REMOTE MCDP
CONTROL PANEL)

AIR/GROUND RELAYS (MM 32-09-02/201)

ELECTRONIC FLIGHT INSTRUMENT SYSTEM (EFIS) (MM 34-22-00/501)

FLIGHT MANAGEMENT COMPUTER SYSTEM (MM 34-61-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34, 11E35,11E36,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201)

MCDP GROUND TEST 59 - "FCC INSTR"

NOTE: WHEN AN AUTOMATIC TEST STEP IS BEING DONE, "XX IN PROGRESS" WILL SHOW ON THE DISPLAY.

NO SET THE EFI SWITCHES ON 201 DO THE MCDP BITE FAULT THE LEFT AND RIGHT INSTRUMENT ISOLATION PROCEDURE (22-00-02, FIG. 103, BLOCK 1). SOURCE SELECT PANELS TO THE NORM POSITION ("ALTN" NOT SHOWN ON THE SWITCH). SET THE NAV SWITCH ON THE LEFT INSTRUMENT SOURCE SELECT PANEL TO THE "FMC-L" POSITION. SET THE NAV SWITCH ON THE RIGHT INSTRUMENT SOURCE SELECT PANEL TO THE "FMC-R" POSITION. IF THE MCDP IS NOT ON, PUSH THE MCDP "POWER ON/OFF" SWITCH TO THE ON POSITION. PUSH THE MCDP "GRD TEST MODE" SWITCH. DOES THE MCDP SHOW "01 FCC TEST?" AFTER "IN PROGRESS" TESTS COMPLETED? YFS 1A HAVE ALL THE FCC AND TMC 100 DO THE MCDP GROUND TEST 201A GET OUT OF THE MCDP INFC FAULTS BEEN WRITTEN DOWN 30-CURRENT FAULT REPORT PROCE-GROUND TEST 30-CURRENT FAULT FROM THE MCDP GROUND TEST DURE (22-00-03 FIG. 117, REPORT. 30-CURRENT FAULT REPORT? BLOCK 1). GO TO BLOCK 2. LOOK AT AND WRITE DOWN ALL YES THE FCC AND TMC INFC FAULTS. YES DOES ONE OR MORE OF THESE 201B DO THE APPLICABLE CORREC-TION IN THE NO INFC FCC FAULT MCDP MESSAGES SHOW? SEE SHEET 2 ISOLATION PROCEDURE (BLOCK 2) "NO INFC FCC L FMC BUS IN" (22-00-05 FIG. 101, TABLE "NO INFC FCC C FMC BUS IN" 101). "NO INFC FCC R FMC BUS IN" GO TO BLOCK 2.

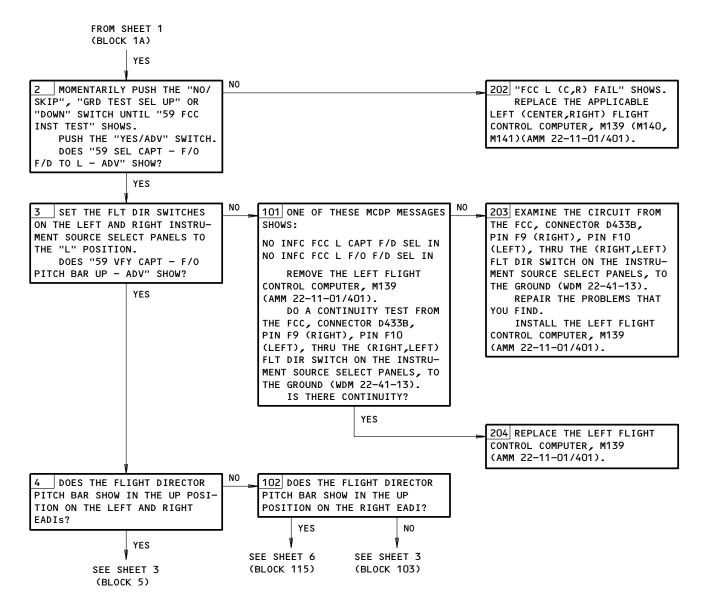
> MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 1)

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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 2)

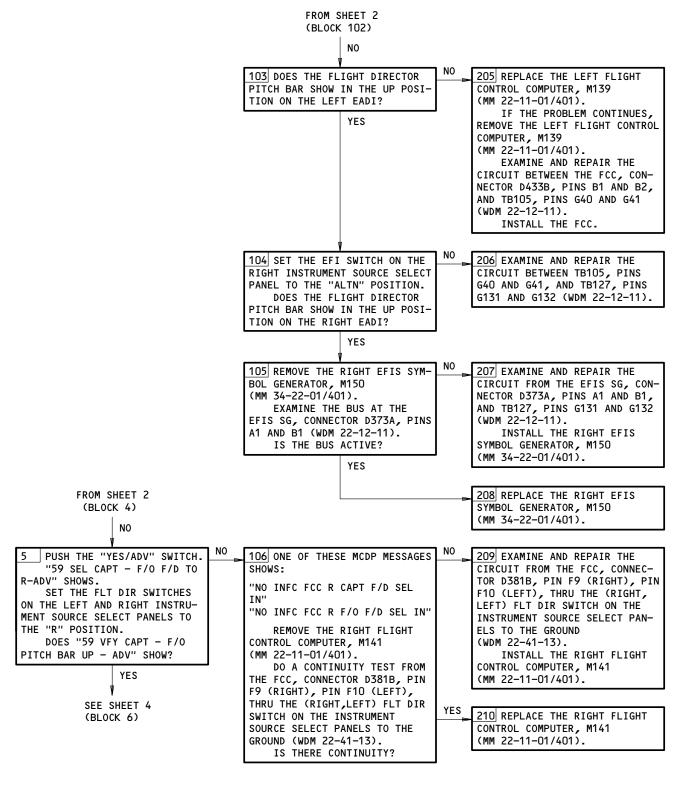
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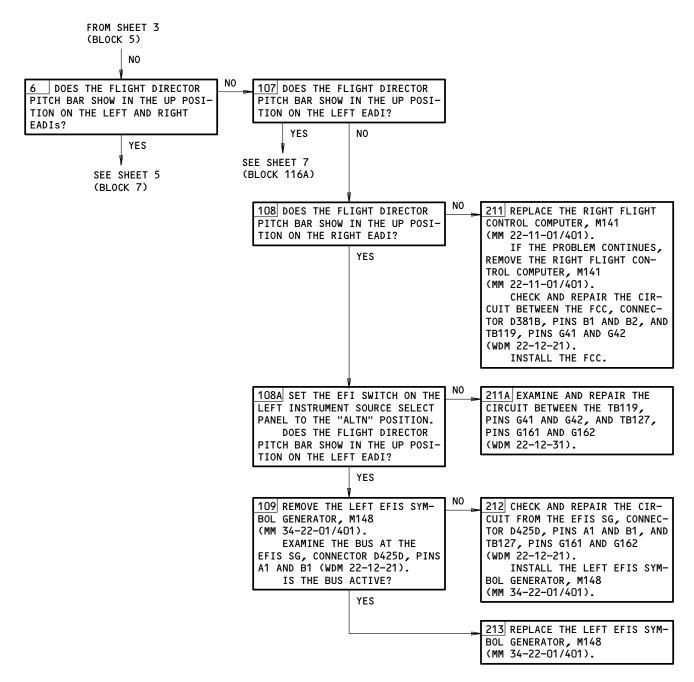
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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 3)

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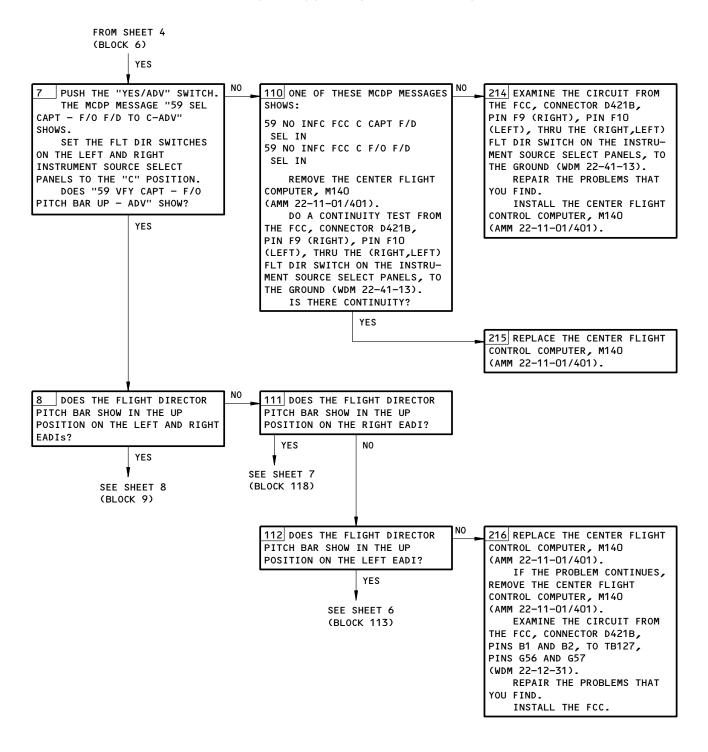


MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 4)

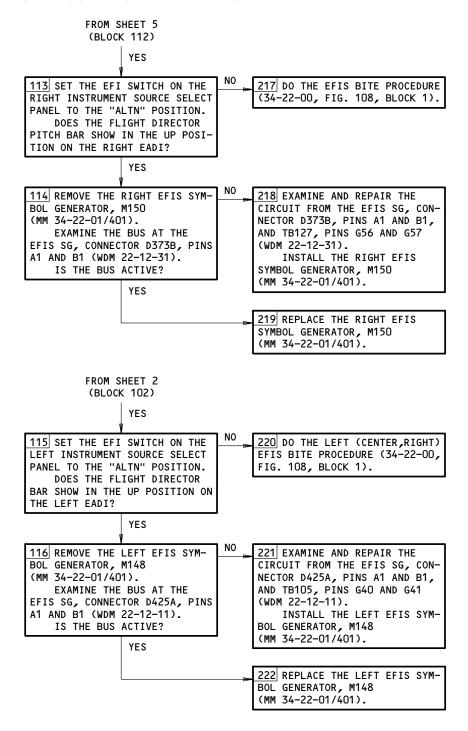
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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 5)

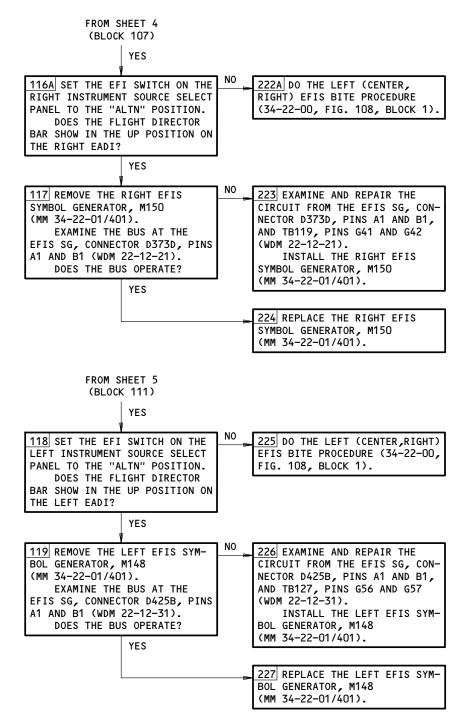


MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 6)

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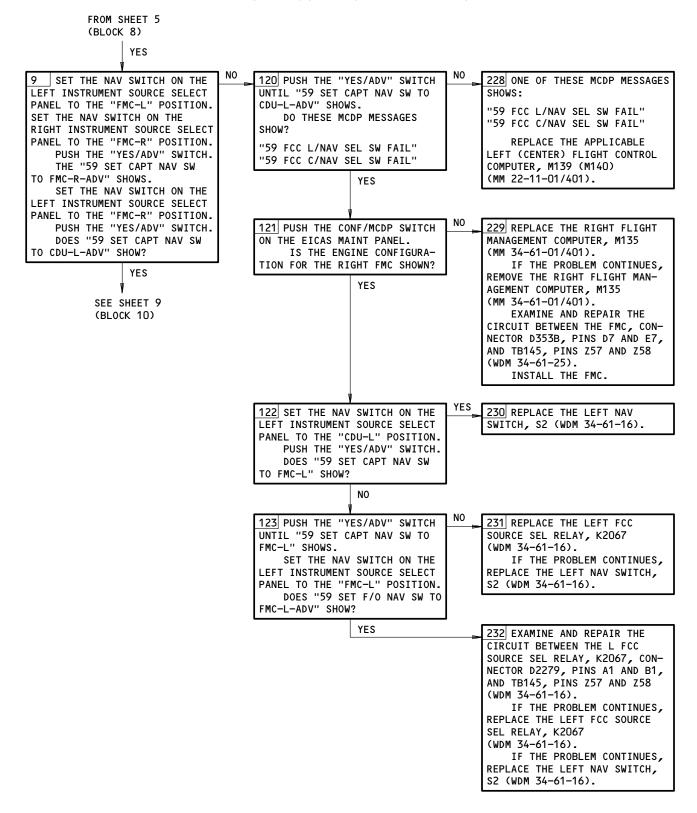
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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 7)

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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 8)

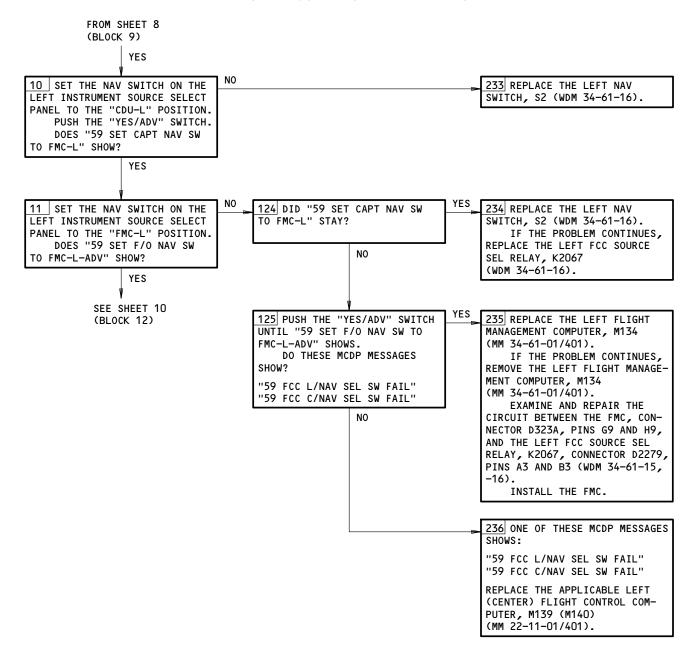
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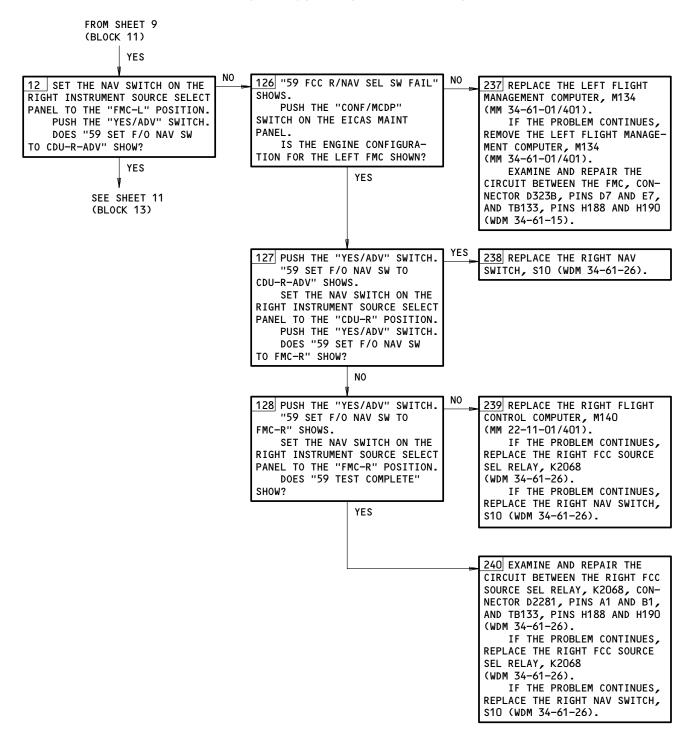
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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 9)

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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 10)

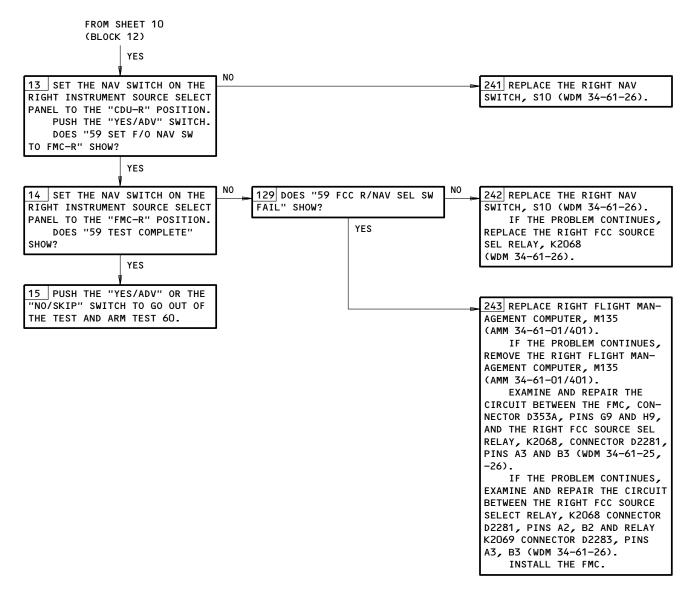
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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 11)



PREREQUISITES

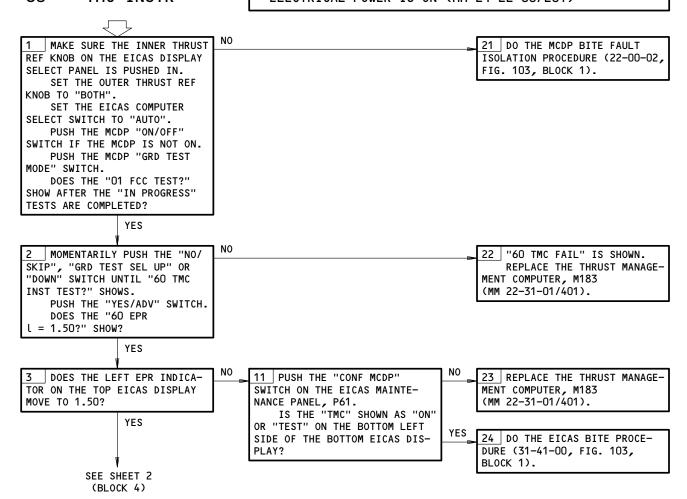
MAKE SURE THIS SYSTEM WILL OPERATE: EICAS (MM 31-41-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F14,11F15,11F16,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

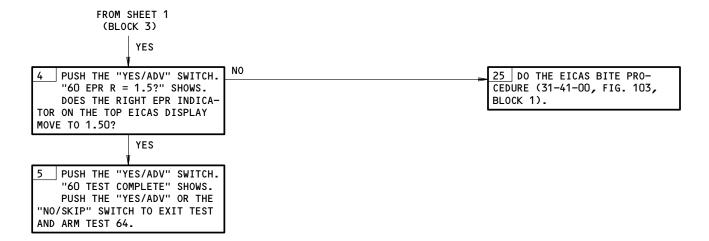
ELECTRICAL POWER IS ON (MM 24-22-00/201)

MCDP GROUND TEST 60 - "TMC INSTR"



MCDP Ground Test 60 - TMC INSTR Figure 106 (Sheet 1)

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MCDP Ground Test 60 - TMC INSTR Figure 106 (Sheet 2)

ALL

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
TRAILING EDGE FLAP SYSTEM (AMM 27-51-00/501)
TRAILING EDGE FLAP POSITION INDICATING SYSTEM
(AMM 27-58-00/501)
HYDRAULIC POWER (AMM 29-11-00/201)
EICAS (AMM 31-41-00/501)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)
AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17, 11A33, 11E16, 11E17, 11E18, 11E20, 11E21, 11E34, 11E35, 11E36, 11F14, 11F15, 11F16, 11U9

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)

MCDP GROUND TEST 64 - "SPD BK/FLAP XDCR"

1 PUT THE FLAPS AND THE FLAP .
HANDLE TO THE "O" POSITION.

WARNING

REMOVE THE HYDRAULIC POWER
DURING THE SPEED BRAKE TEST
(AMM 29-11-00/201). THE
SPEEDBRAKES WILL MOVE IF
HYDRAULIC POWER IS SUPPLIED.
INJURY TO PERSONS CAN OCCUR.
MAKE SURE THE POWER IS REMOVED
FROM THE LEFT, CENTER AND THE
RIGHT HYDRAULIC SYSTEMS
(AMM 29-11-00/201).

PUSH THE MCDP "ON/OFF"
SWITCH IF THE MCDP IS NOT ON.
PUSH THE MCDP "GRD TEST
MODE" SWITCH.
DOES "01 FCC TEST?"

DOES "O1 FCC TEST?"
SHOW AFTER THE "IN PROGRESS"
TESTS ARE COMPLETED?

YES

SEE SHEET 2

(BLOCK 2)

ALL

201 DO THIS PROCEDURE: THE MCDP BITE FAULT ISOLATION PROCEDURE (FIM 22-00-02/101, FIG. 103).

MCDP Ground Test 64 - SPD BK/FLAP XDCR Figure 107 (Sheet 1)

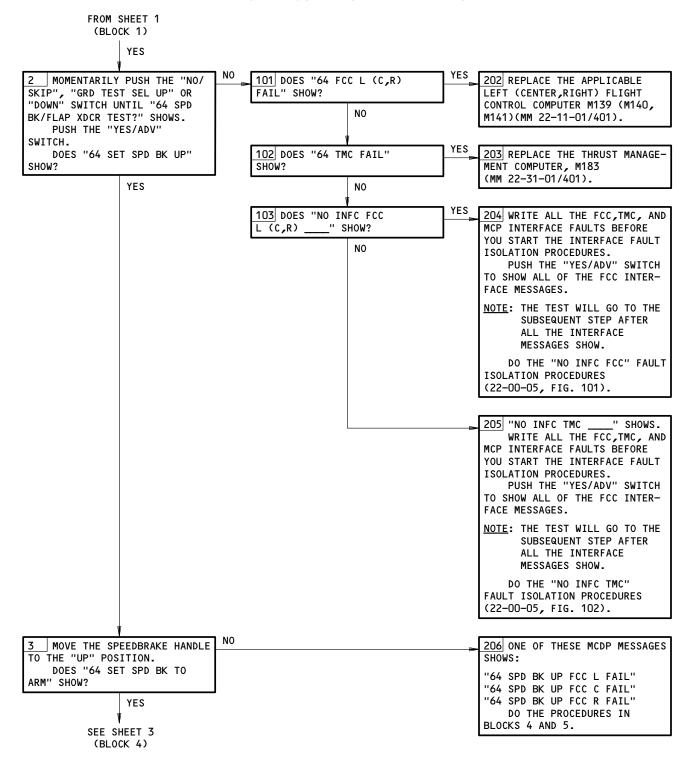
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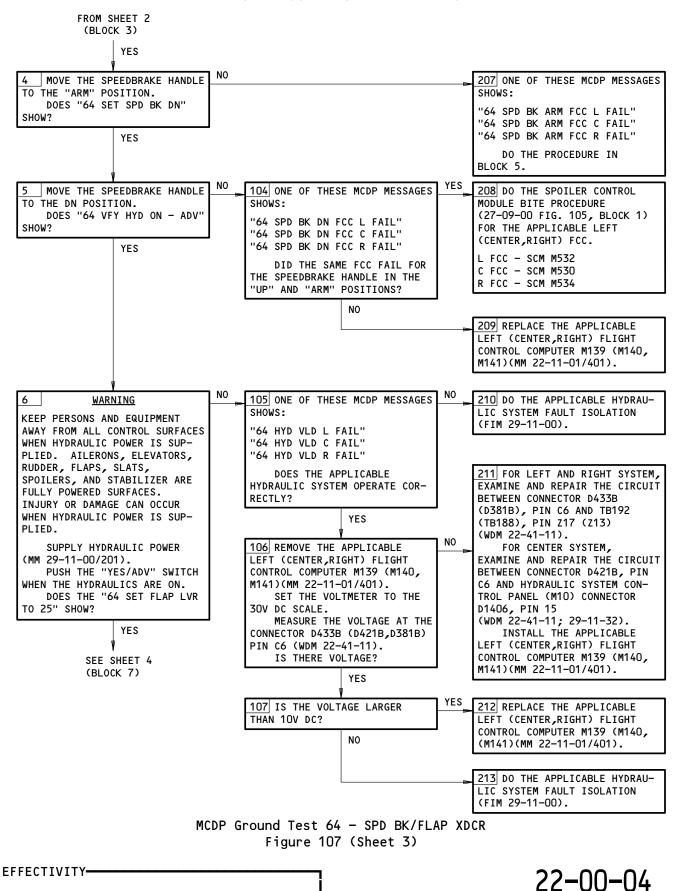
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MCDP Ground Test 64 - SPD BK/FLAP XDCR Figure 107 (Sheet 2)

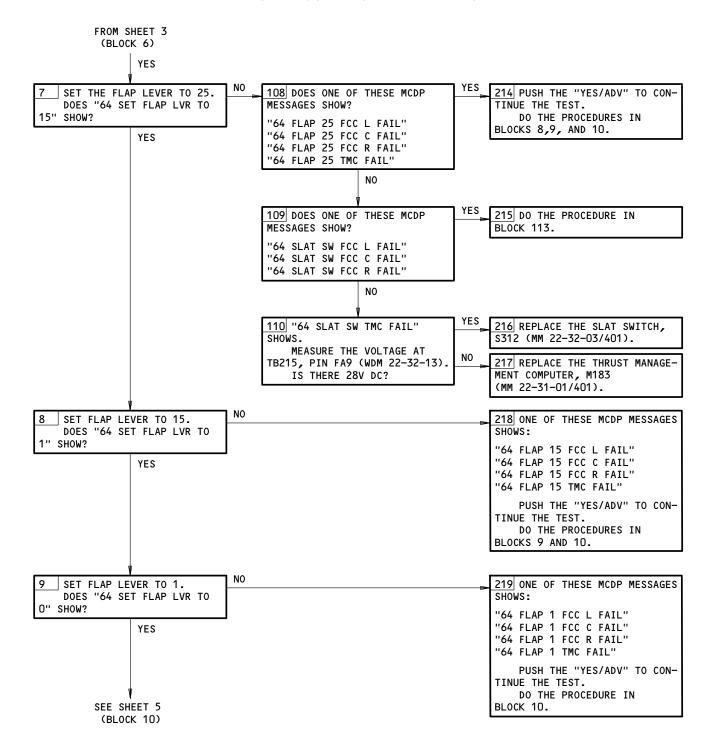


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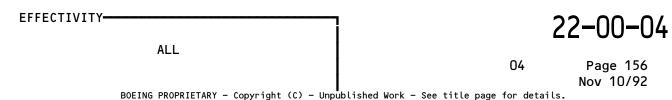
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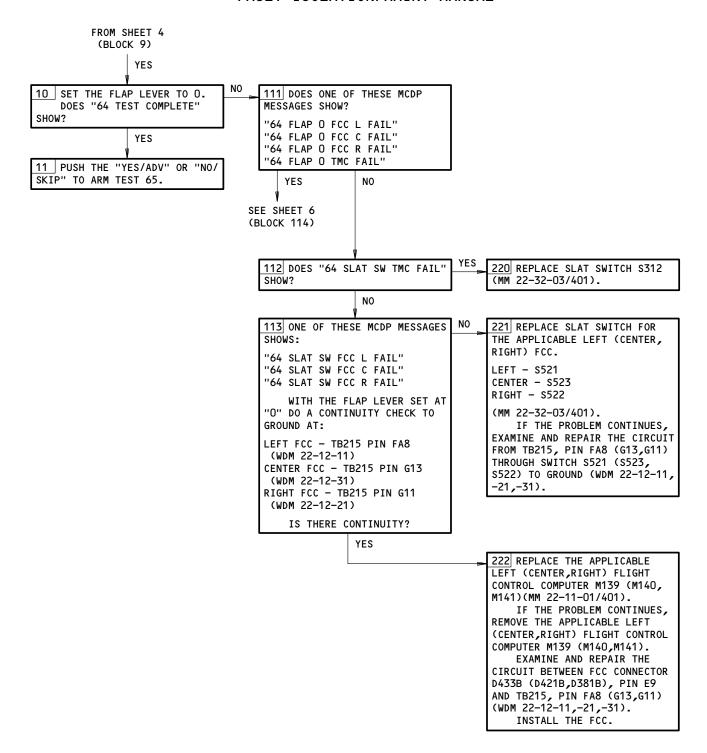
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ALL



MCDP Ground Test 64 - SPD BK/FLAP XDCR Figure 107 (Sheet 4)





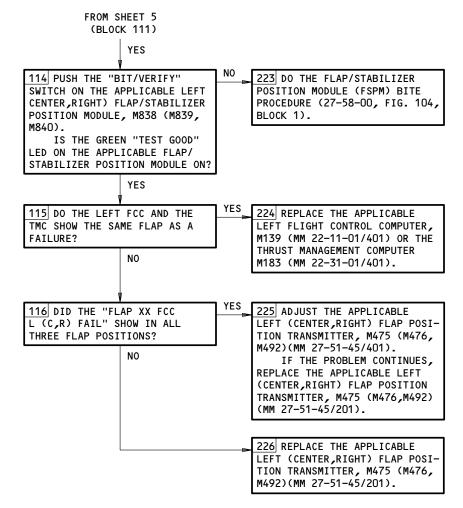
MCDP Ground Test 64 - SPD BK/FLAP XDCR Figure 107 (Sheet 5)

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MCDP Ground Test 64 - SPD BK/FLAP XDCR Figure 107 (Sheet 6)

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:

CONTROL SYSTEM ELECTRONICS UNIT (CSEU)(MM 27-09-00/201)

HORIZONTAL STABILIZER TRIM CONTROL SYSTEM (MM 27-41-00/501)

STABILIZER TRIM POSITION INDICATING SYSTEM (MM 27-48-00/501)

HYDRAULIC POWER (MM 29-11-00/201)

EICAS (MM 31-41-00/501)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)

AIR/GROUND RELAYS (MM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11A33,11E16,11E17,11E18,11E20,11E21,11E34, 11E35,11E36,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201)

MCDP GROUND TEST 65 - "STAB TRIM"

NOTE: "XX IN PROGRESS" IS SHOWN DURING AN AUTOMATIC TEST STEP.

 \bigcirc

NO

WARNING

KEEP PERSONS AND EQUIPMENT
AWAY FROM ALL CONTROL SURFACES
WHEN HYDRAULIC POWER IS SUPPLIED. AILERONS, ELEVATORS,
RUDDER, FLAPS, SLATS,
SPOILERS, AND STABILIZER ARE
FULLY POWERED SURFACES.
INJURY OR DAMAGE CAN OCCUR
WHEN HYDRAULIC POWER IS SUPPLIED.

SUPPLY HYDRAULIC POWER (MM 29-11-00/201).

PUSH THE MCDP "ON/OFF"
SWITCH IF THE MCDP IS NOT ON.
PUSH THE MCDP "GRD TEST
MODE" SWITCH.

DOES THE MCDP SHOW "01 FCC TEST?" AFTER THE "IN PROGRESS" TESTS ARE COMPLETED?

YES

V
SEE SHEET 2

(BLOCK 2)

201 DO THE MCDP BITE FAULT ISOLATION PROCEDURE (22-00-02, FIG. 103, BLOCK 1).

MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 1)

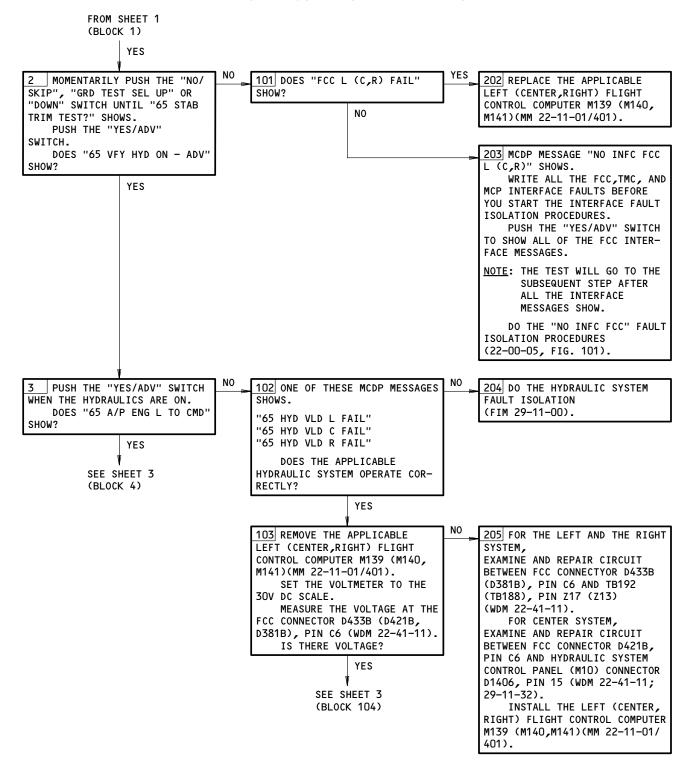
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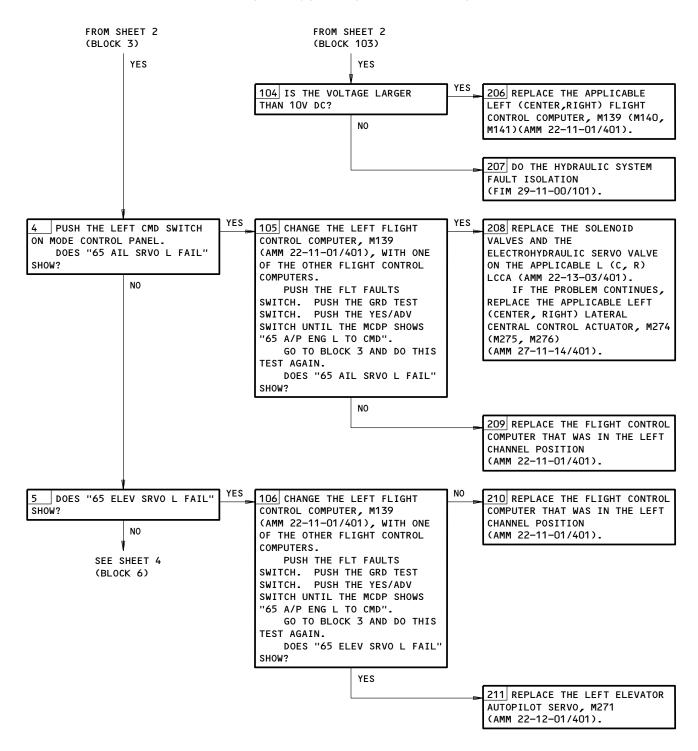
04

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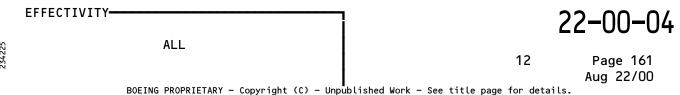


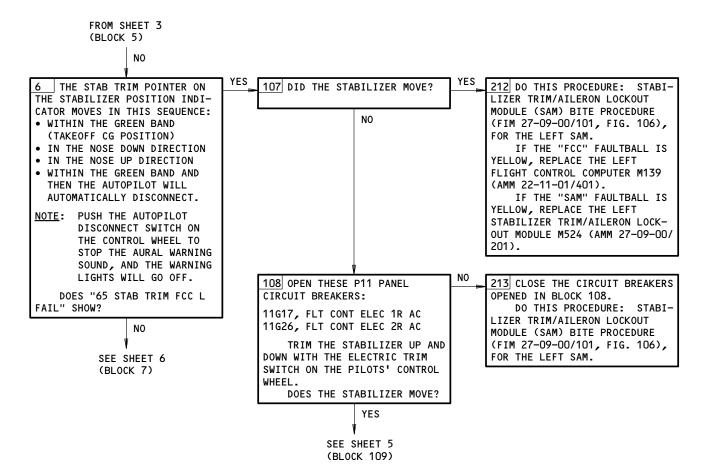
MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 2)

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MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 3)





MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 4)

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FROM SHEET 4 (BLOCK 108) YES 109 CLOSE THE CIRCUIT BREAKERS 214 REPLACE THE LEFT STABI-OPENED IN BLOCK 108. LIZER TRIM/AILERON LOCKOUT PUSH THE MCDP "YES/ADV" MODULE, M524 (AMM 27-09-00/ SWITCH UNTIL "65 A/P ENG C TO 201). CMD" SHOWS. DO THE BLOCK 10 ACTION. DOES "65 STAB TRIM/FCC C FAIL SHOW? NO 215 REPLACE THE LEFT FLIGHT CONTROL COMPUTER, M139 (AMM 22-11-01/401). IF THE PROBLEM CONTINUES, REMOVE THE LEFT STABILIZER TRIM/AILERON LOCKOUT MODULE, M524 (AMM 27-09-00/201). EXAMINE THE CIRCUIT FROM TB105, PINS G23,G24, TO THE LEFT SAM, CONNECTOR D665A, PINS D7, D8 (WDM 22-22-11). REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE LEFT SAM. IF THE PROBLEM CONTINUES, DO THIS WIRING CHECK: 1. REMOVE THE LEFT, CENTER AND RIGHT FCC 2. EXAMINE THE CIRCUIT FROM THE LEFT FCC, CONNECTOR D433A, PIN G10 (WDM 22-15-12), TO THE CENTER FCC, CONNECTOR D421A, PIN K3 (WDM 22-15-12), AND TO THE RIGHT FCC, CONNECTOR D381A, PIN K1 (WDM 22-15-12). REPAIR THE PROBLEMS THAT YOU FIND.

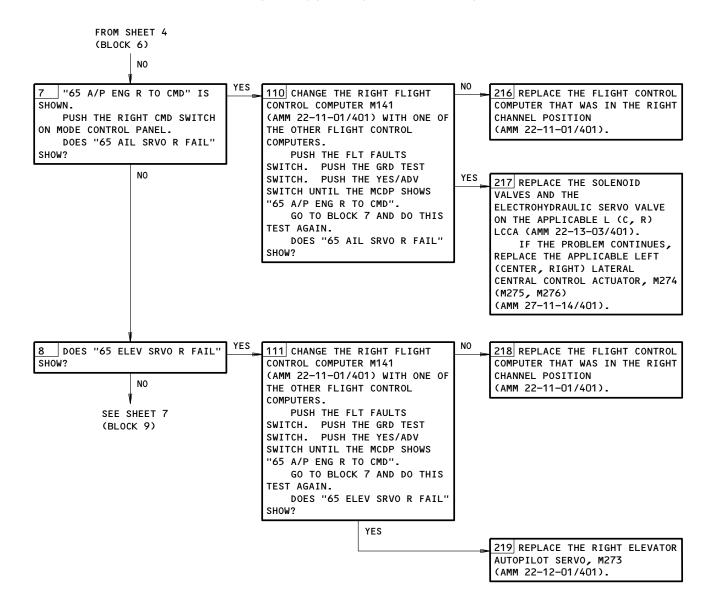
MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 5)

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3. INSTALL THE THREE FCCs.

06

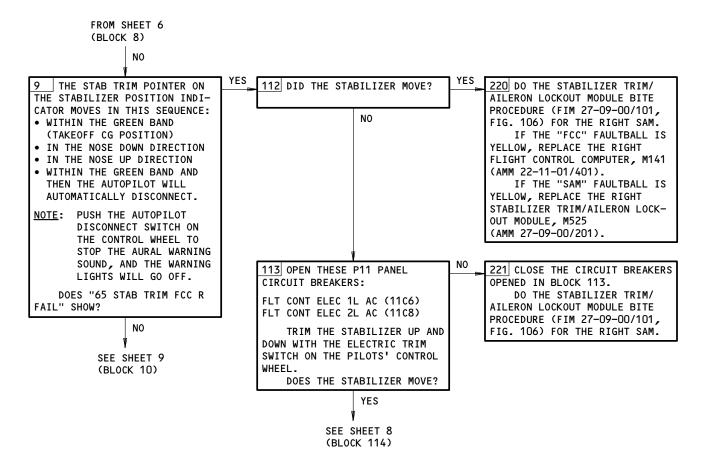
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MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 6)

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MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 7)

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FROM SHEET 7 (BLOCK 113) YES 114 PUSH THE MCDP "YES/ADV" 222 REPLACE THE RIGHT STABI-SWITCH UNTIL "64 A/P ENG C TO ZER TRIM/AILERON LOCKOUT CMD" SHOWS. MODULE, M525 (AMM 27-09-00/ DO THE BLOCK 10 ACTION. 201). DOES "65 STAB TRIM FCC C CLOSE THE CIRCUIT BREAKERS FAIL" SHOW? OPENED IN BLOCK 113. NO 223 REPLACE THE RIGHT FLIGHT CONTROL COMPUTER, M141 (AMM 22-11-01/401). CLOSE THE CIRCUIT BREAKERS OPENED IN BLOCK 113. IF THE PROBLEM CONTINUES, REMOVE THE RIGHT STABILIZER TRIM/AILERON LOCKOUT MODULE, M525 (AMM 27-09-00/401). EXAMINE THE CIRCUIT FROM TB119, PINS G34,G35, TO THE RIGHT SAM, CONNECTOR D667A, PINS D7, D8 (WDM 22-22-21). REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE RIGHT SAM. IF THE PROBLEM CONTINUES, DO THIS WIRING CHECK: 1. REMOVE THE LEFT, CENTER AND RIGHT FCC 2. EXAMINE THE CIRCUIT FROM THE RIGHT FCC, CONNECTOR D381A, PIN G10 (WDM 22-15-12), LEFT FCC,

MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 8)

22-00-04

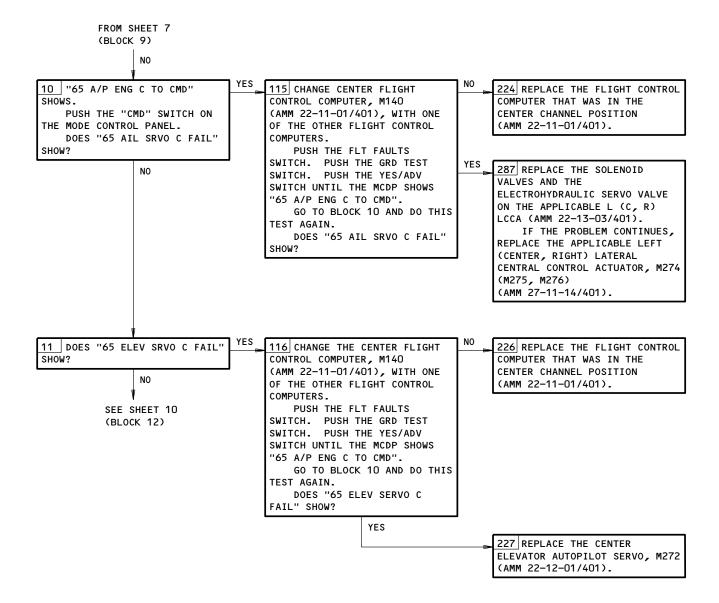
CONNECTOR D433A, PIN K3 (WDM 22-15-12), TO THE CEN-TER FCC, CONNECTOR D421A, PIN K1 (WDM 22-15-12). REPAIR THE PROBLEMS THAT

3. INSTALL THE THREE FCCs.

YOU FIND.

02

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MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 9)

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FROM SHEET 9 (BLOCK 11) NO 12 THE STAB TRIM POINTER ON 117 OPEN THESE P11 PANEL 228 REPLACE THE CENTER FLIGHT CONTROL COMPUTER, M140 THE STABILIZER POSITION INDI-CIRCUIT BREAKERS: CATOR MOVES IN THIS SEQUENCE: (AMM 22-11-01/401). 11C6, FLT CONT ELEC 1L AC • WITHIN THE GREEN BAND CLOSE THE CIRCUIT BREAKERS 11C8, FLT CONT ELEC 2L AC (TAKEOFF CG POSITION) OPENED IN BLOCK 117. IN THE NOSE DOWN DIRECTION PUSH THE FLT FAULTS IF THE PROBLEM CONTINUES, IN THE NOSE UP DIRECTION SWITCH. PUSH THE GRD TEST DO THIS WIRING CHECK: SWITCH. PUSH THE YES/ADV • WITHIN THE GREEN BAND AND 1. REMOVE THE LEFT, CENTER AND THEN THE AUTOPILOT WILL SWITCH UNTIL THE MCDP SHOWS RIGHT FCC AUTOMATICALLY DISCONNECT. "65 A/P ENG C TO CMD". 2. EXAMINE THE CIRCUIT FROM GO TO BLOCK 10 AND DO THIS THE CENTER FCC, CONNECTOR NOTE: PUSH THE AUTOPILOT TEST AGAIN. D421A, PIN G10 DISCONNECT SWITCH ON (WDM 22-15-12), TO THE NOTE: WHEN THE ABOVE CIRCUIT THE CONTROL WHEEL TO RIGHT FCC, CONNECTOR D381A, BREAKERS ARE OPEN, STOP THE AURAL WARNING PIN K3 (WDM 22-15-12), AND SOUND, AND THE WARNING IGNORE THE FOLLOWING TO THE LEFT FCC, CONNECTOR LIGHTS WILL GO OFF. MCDP MESSAGES: D433A, PIN K1 DOES "65 STAB TRIM FCC C 65 NO INFC FCC L AUTO (WDM 22-15-12). REPAIR THE FAIL" SHOW? TRIM VLD 1 PROBLEMS THAT YOU FIND. 65 NO INFC FCC L AUTO 3. INSTALL THE THREE FCCs NO TRIM VLD 2 (AMM 22-11-01/401). 65 NO INFC FCC C AUTO SEE SHEET 11 TRIM VLD 1 (BLOCK 13) DOES "65 STAB TRIM FCC C FAIL" SHOW IN BLOCK 12? NO 229 REPLACE THE LEFT STABILI-ZER TRIM/AILERON LOCKOUT MODULE, M524 (AMM 27-09-00/

201).

CLOSE THE CIRCUIT BREAKERS OPENED IN BLOCK 117.

IF THE PROBLEM CONTINUES, REMOVE THE LEFT STABILIZER TRIM/AILERON LOCKOUT MODULE, M524-

EXAMINE THE CIRCUIT FROM TB101, PINS G52,G53, TO THE LEFT SAM, CONNECTOR D665B, PINS K14,K15 (WDM 22-22-11). REPAIR THE PROBLEMS THAT YOU FIND.

INSTALL THE LEFT SAM.

MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 10)

EFFECTIVITY-ALL

22-00-04

(BLOCK 12) NO YES 13 OPEN THESE P11 PANEL 230 REPLACE THE RIGHT STABILI-CIRCUIT BREAKERS: ZER TRIM/AILERON LOCKOUT MODULE, M525 (AMM 27-09-00/ 11C6, FLT CONT ELEC 1L AC 201). 11C8, FLT CONT ELEC 2L AC IF THE PROBLEM CONTINUES, PUSH THE FLT FAULTS REMOVE THE RIGHT STABILIZER SWITCH. PUSH THE GRD TEST TRIM/AILERON LOCKOUT MODULE, SWITCH. PUSH THE YES/ADV M525. SWITCH UNTIL THE MCDP SHOWS EXAMINE THE CIRCUIT FROM "65 A/P ENG C TO CMD". TB101, PINS G52,G53, TO THE GO TO BLOCK 10 AND DO THIS RIGHT SAM, CONNECTOR D667B, PINS K14,K15 (WDM 22-22-11, TEST AGAIN. -21). NOTE: WHEN THE ABOVE CIRCUIT REPAIR THE PROBLEMS THAT BREAKERS ARE OPEN, YOU FIND. IGNORE THE FOLLOWING INSTALL THE RIGHT SAM. MCDP MESSAGES: CLOSE THE CIRCUIT BREAKERS OPENED IN BLOCK 13. 65 NO INFC FCC L AUTO TRIM VLD 1

14 "65 TEST COMPLETE" SHOWS.
PUSH THE "YES/ADV" SWITCH
OR THE "NO/SKIP" SWITCH TO ARM
TEST 66.

65 NO INFC FCC L AUTO

65 NO INFC FCC C AUTO

NO

TRIM VLD 2

TRIM VLD 1
DOES "65 STAB TRIM FCC C

FAIL" SHOW IN BLOCK 12?

FROM SHEET 10

CLOSE THE CIRCUIT BREAKERS
OPENED IN BLOCK 13.

MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 11)

ALL

F00707

22-00-04



FIGURE 109 IS NOT USED. SEE FIGURE 109A

> Not Used Figure 109

 22-00-04

22

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:

CONTROL SYSTEM ELECTRONICS UNIT (CSEU)

(MM 27-09-00/201)

AILERON AND AILERON TRIM CONTROL SYSTEM (MM 27-11-00/501)

AILERON POSITION INDICATING SYSTEM (MM 27-18-00/501) RUDDER AND RUDDER TRIM CONTROL SYSTEM

(MM 27-21-00/501)

RUDDER POSITION INDICATING SYSTEM (MM 27-28-00/501) ELEVATOR POSITION INDICATING SYSTEM (27-38-00/501)

HORIZONTAL STABILIZER TRIM CONTROL SYSTEM

(MM 27-41-00/501)

STABILIZER TRIM POSITION INDICATING SYSTEM (MM 27-48-00/501)

TRAILING EDGE FLAP SYSTEM (MM 27-51-00/501)

TRAILING EDGE FLAP POSITION INDICATING SYSTEM (MM 27-58-00/501)

EICAS (MM 31-41-00/501) (WHEN YOU USE THE REMOTE MCDP CONTROL PANEL)

AIR/GROUND RELAYS (MM 32-09-02/501) FUEL CONTROL (MM 73-21-00/001)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11E16,11E17,11E18,11E20,11E21,11E34,11E35,11E36, 11F14,11F15,11F16,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

INSTALL NOSE GEAR STEERING VALVE LOCKPIN (MM 29-11-00/201)

ELECTRICAL POWER IS ON (MM 24-22-00/201)

HYDRAULIC POWER IS ON (MM 29-11-00/201)

NOTE: "XX IN PROGRESS" MESSAGE SHOWS DURING AN AUTOMATIC TEST STEP.

MCDP Ground Test 66 - XDCR OUTPUTS Figure 109A (Sheet 1)

EFFECTIVITY-

22-00-04

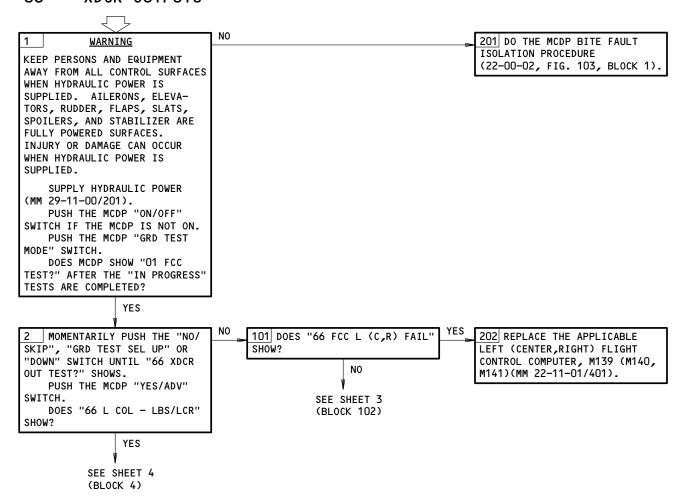
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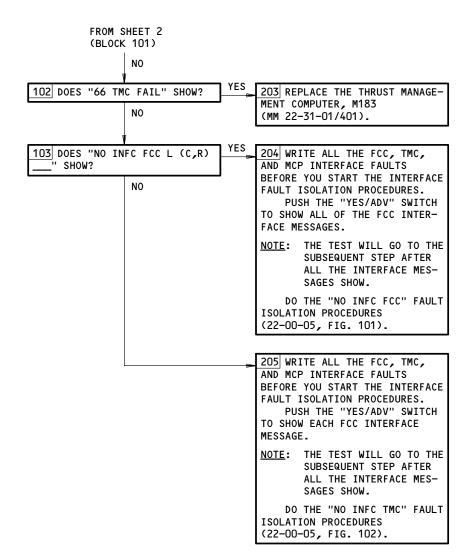
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MCDP GROUND TEST 66 - "XDCR OUTPUTS"



MCDP Ground Test 66 - XDCR OUTPUTS Figure 109A (Sheet 2)



MCDP Ground Test 66 - XDCR OUTPUTS Figure 109A (Sheet 3)

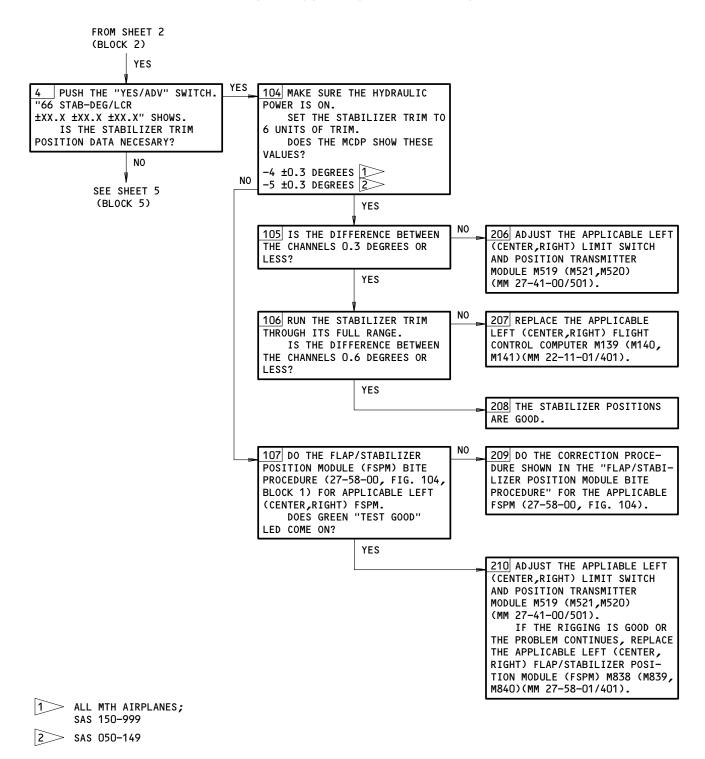
EFFECTIVITY-ALL

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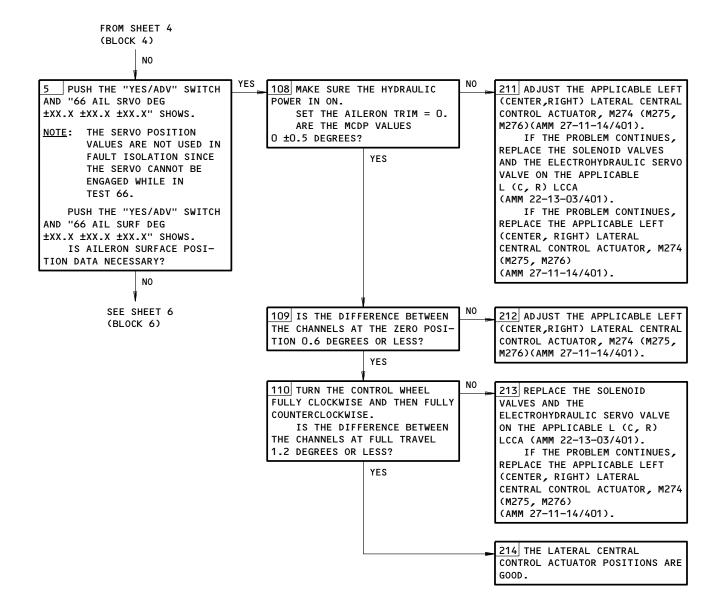
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MCDP Ground Test 66 - XDCR OUTPUTS Figure 109A (Sheet 4)

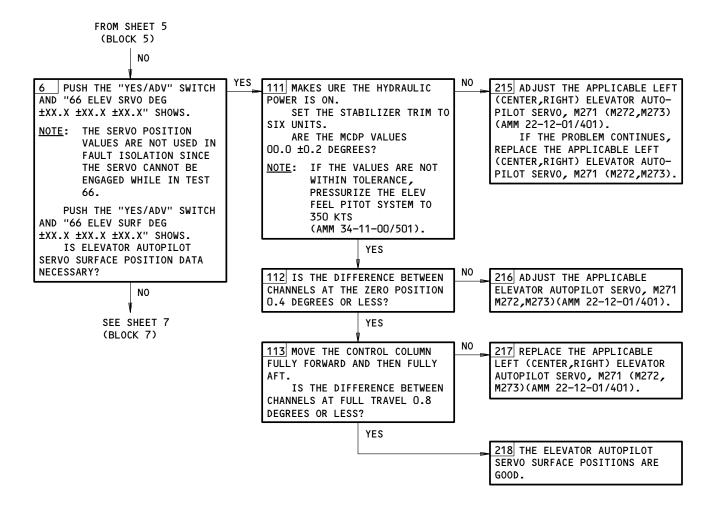


MCDP Ground Test 66 - XDCR OUTPUTS Figure 109A (Sheet 5)

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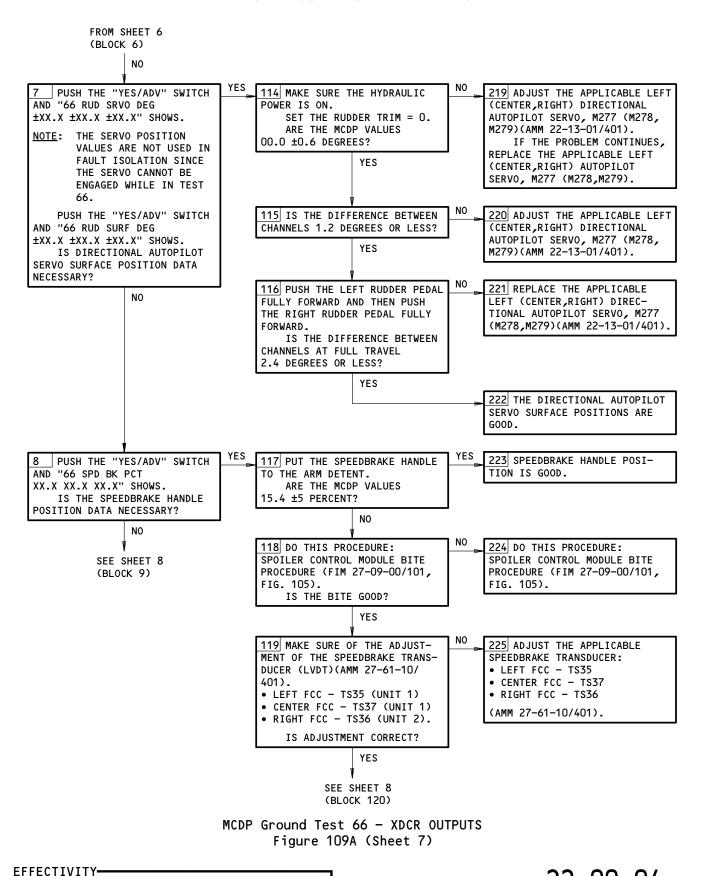


MCDP Ground Test 66 - XDCR OUTPUTS Figure 109A (Sheet 6)

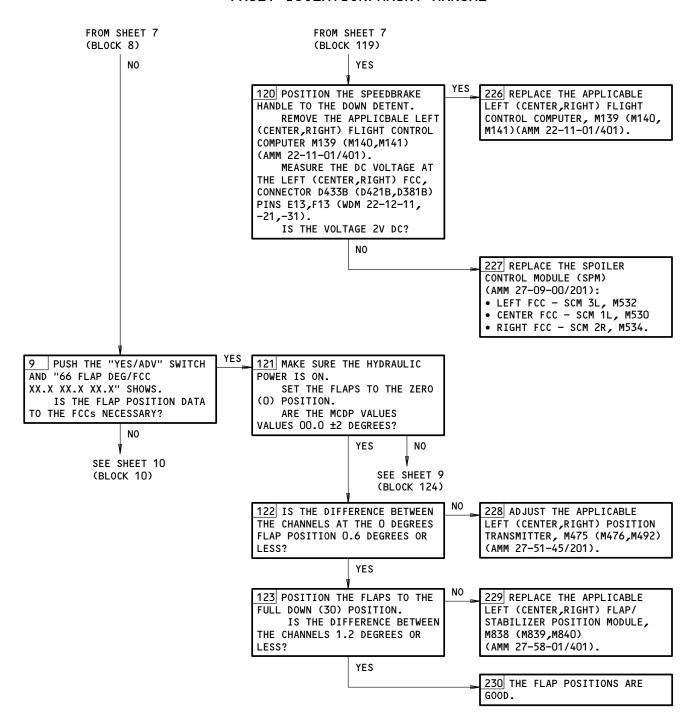
EFFECTIVITY ALL

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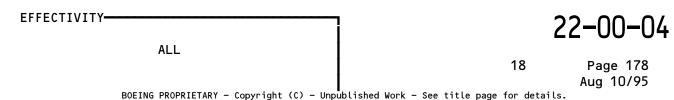
22-00-04

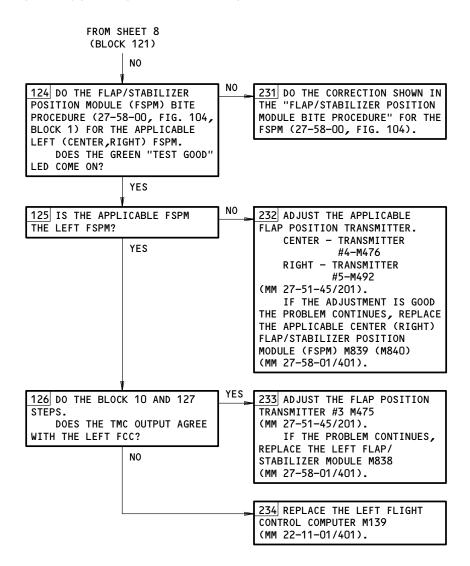


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MCDP Ground Test 66 - XDCR OUTPUTS Figure 109A (Sheet 8)





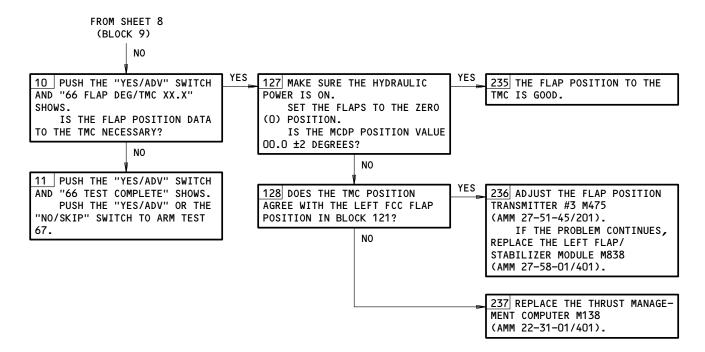
MCDP Ground Test 66 - XDCR OUTPUTS Figure 109A (Sheet 9)

EFFECTIVITY-ALL

22-00-04

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MCDP Ground Test 66 - XDCR OUTPUTS Figure 109A (Sheet 10)

PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
AILERON AND AILERON TRIM CONTROL SYSTEM
(MM 27-11-00/501)
AILERON POSITION INDICATING SYSTEM
(MM 27-18-00/501)
HYDRAULIC POWER (MM 29-11-00/201)
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(MM 31-41-00/501)(WHEN YOU USE REMOTE MCDP CONTROL PANEL)
AIR/GROUND RELAYS (MM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201)

MCDP GROUND TEST 67 - "AIL SERVO LIMIT"

NOTE: "XX IN PROGRESS" MESSAGE SHOWS DURING AN AUTOMATIC TEST STEP.

 \Box

NO

WARNING

KEEP PERSONS AND EQUIPMENT
AWAY FROM ALL CONTROL SURFACES
WHEN HYDRAULIC POWER IS
SUPPLIED. AILERONS,
ELEVATORS, RUDDER, FLAPS,
SLATS, SPOILERS, AND
STABILIZER ARE FULLY POWERED
SURFACES. INJURY OR DAMAGE
CAN OCCUR WHEN HYDRAULIC
POWER IS SUPPLIED.

SUPPLY HYDRAULIC POWER

(MM 29-11-00/201).

PUSH THE MCDP "ON/OFF"

SWITCH IF THE MCDP IS NOT ON.

PUSH THE MCDP "GRD TEST

MODE" SWITCH.

DOES THE MCDP SHOW "01 FCC TEST?" AFTER THE IN PROGRESS TESTS ARE COMPLETED?

YES

SEE SHEET 2

(BLOCK 2)

201 DO THE MCDP BITE FAULT ISOLATION PROCEDURE (22-00-02 FIG. 103, BLOCK 1).

MCDP Ground Test 67 - AIL SERVO LIMIT Figure 110 (Sheet 1)

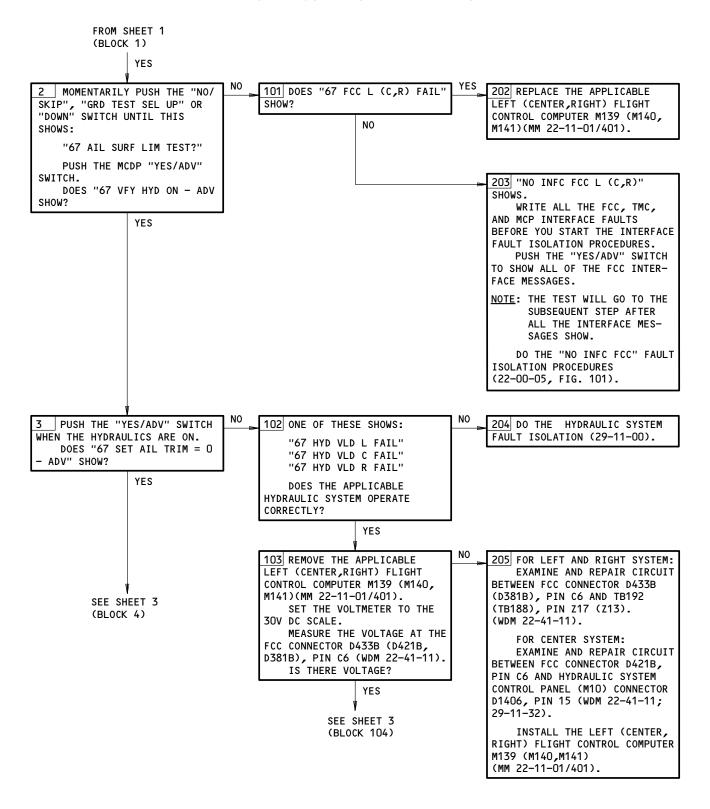
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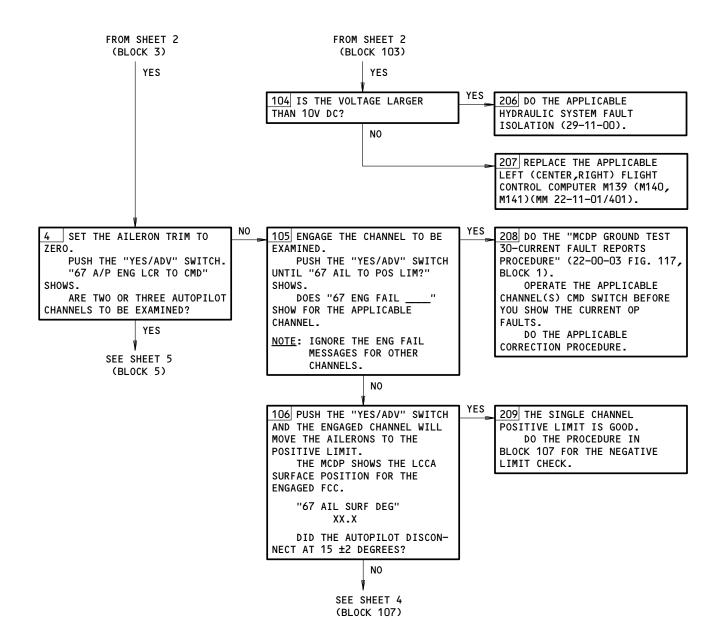
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MCDP Ground Test 67 - AIL SERVO LIMIT Figure 110 (Sheet 2)





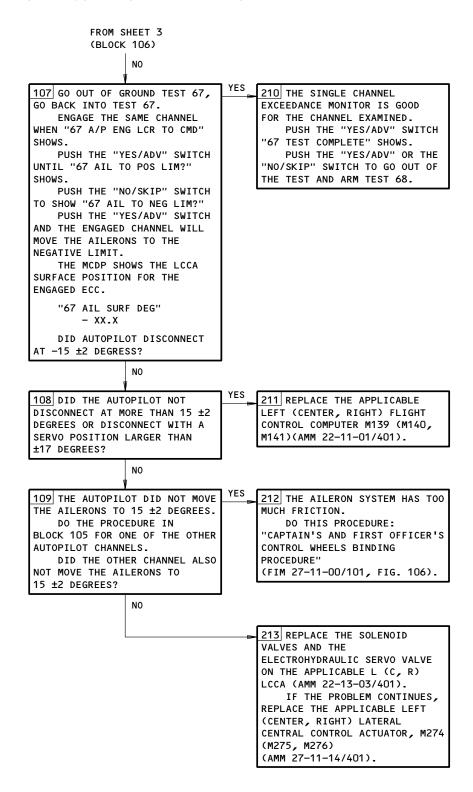
MCDP Ground Test 67 - AIL SERVO LIMIT Figure 110 (Sheet 3)

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MCDP Ground Test 67 - AIL SERVO LIMIT Figure 110 (Sheet 4)

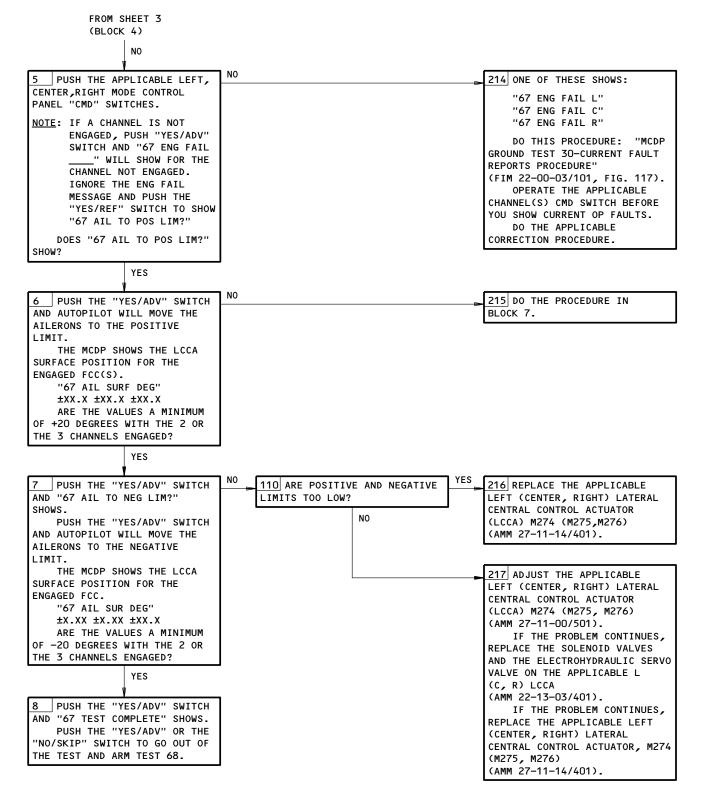
EFFECTIVITY-ALL

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MCDP Ground Test 67 - AIL SERVO LIMIT Figure 110 (Sheet 5)

PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
HORIZONTAL STABILIZER TRIM CONTROL SYSTEM
(AMM 27-41-00/501)
STABILIZER TRIM POSITION INDICATING SYSTEM
(AMM 27-48-00/501)
HYDRAULIC POWER (AMM 29-11-00/201)
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(AMM 31-41-00/501)(WHEN YOU USE REMOTE MCDP
CONTROL PANEL)
AIR/GROUND RELAYS (AMM 32-09-02/201)
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11A17, 11E16, 11E17, 11E18, 11E20, 11E21, 11E34,
11E35, 11E36, 11U9

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

MCDP GROUND TEST 68 - "ELEV SERVO LIMIT"

NOTE: "XX IN PROGRESS" MESSAGE SHOWS DURING AN AUTOMATIC TEST STEP.

ELECTRICAL POWER IS ON (AMM 24-22-00/201)

NO 201 DO THIS PROCEDURE: MCDP WARNING BITE FAULT ISOLATION PROCEDURE (FIM 22-00-02/101, FIG. 103). KEEP PERSONS AND EQUIPMENT AWAY FROM ALL CONTROL SURFACES WHEN HYDRAULIC POWER IS SUPPLIED. AILERONS, ELEVATORS, RUDDER, FLAPS, SLATS, SPOILERS, AND STABILIZER ARE FULLY POWERED SURFACES. INJURY OR DAMAGE CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED. PRESSURIZE THE LEFT, CENTER, AND RIGHT HYDRAULIC SYSTEM AND RESERVOIRS (AMM 29-11-00/201). NOTE: THE APU MAY BE USED TO PRESSURIZE THE HYDRAULIC SYSTEMS IN PLACE OF AN EXTERNAL AIR SOURCE (AMM 36-00-00/201). PUSH THE MCDP "ON/OFF" SWITCH IF THE MCDP IS NOT ON. PUSH THE MCDP "GRD TEST MODE" SWITCH. DOES THE MCDP SHOW "01 FCC YES TEST?" AFTER THE IN PROGRESS - SEE SHEET 2 TESTS ARE COMPLETED? (BLOCK 2)

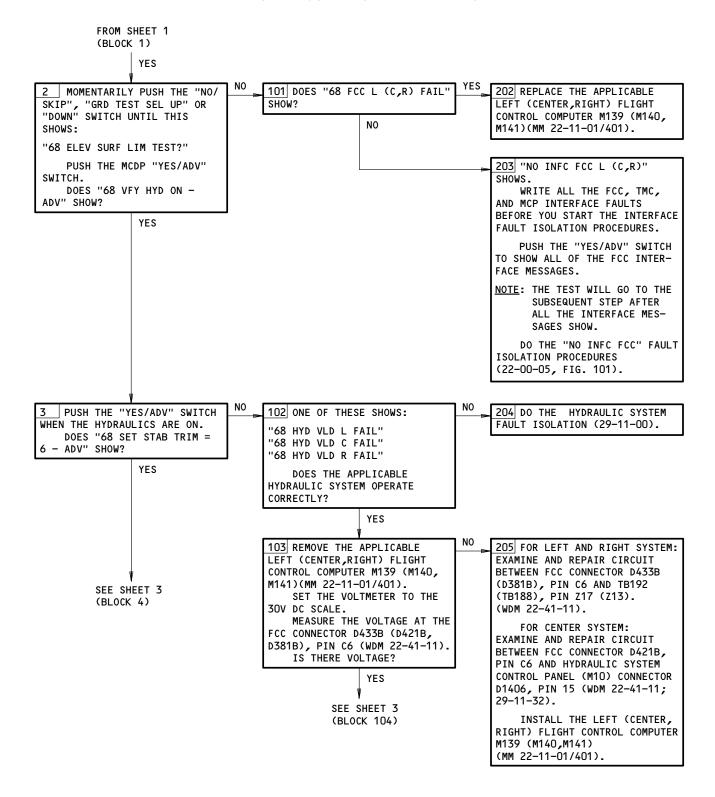
MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 1)

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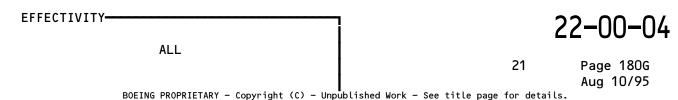
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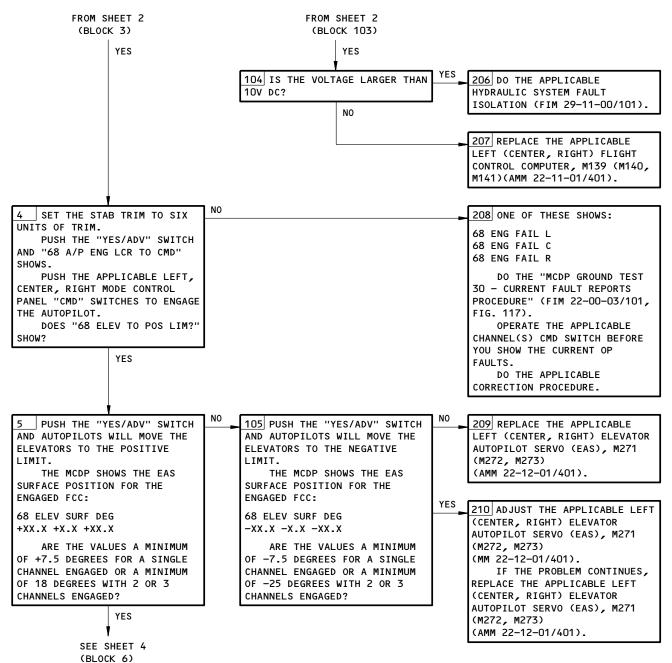
22

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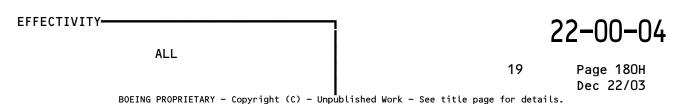


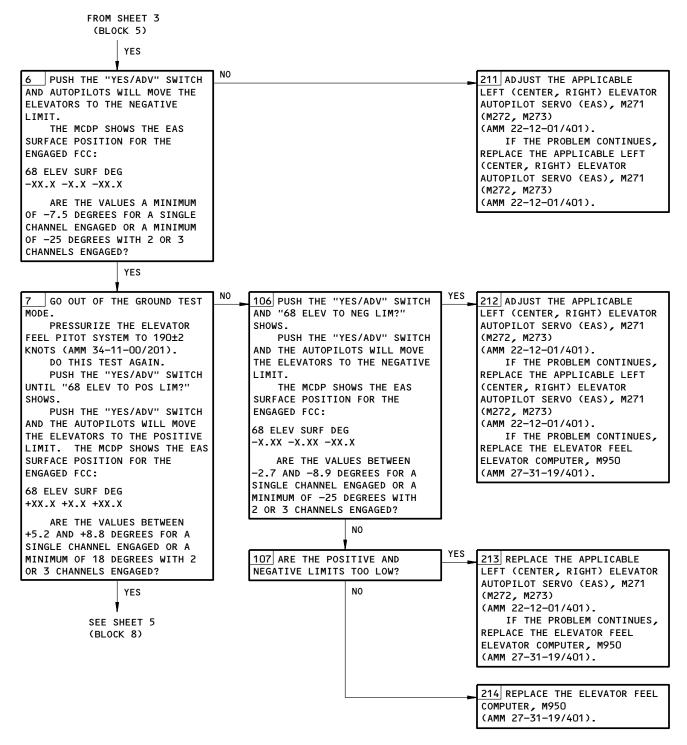
MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 2)





MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 3)





MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 4)

ALL

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Dec 22/02

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(BLOCK 7) YES

N0

8 PUSH THE "YES/ADV" SWITCH AND "68 ELEV TO NEG LIM?" SHOWS.

FROM SHEET 4

PUSH THE "YES/ADV" SWITCH AND THE AUTOPILOTS WILL MOVE THE ELEVATORS TO THE NEGATIVE

THE MCDP SHOWS THE EAS SURFACE POSITION FOR THE **ENGAGED FCC:**

68 ELEV SURF DEG -x.xx -x.xx -xx.x

ARE THE VALUES BETWEEN -2.7 AND -8.9 DEGREES FOR A SINGLE CHANNEL ENGAGED OR A MINIMUM OF -25 DEGREES WITH 2 OR 3 CHANNELS ENGAGED?

9 REMOVE THE PRESSURE FROM THE ELEVATOR FEEL PITOT SYSTEM (AMM 34-11-00/201).

PUSH THE "YES/ADV" SWITCH AND "68 TEST COMPLETE" SHOWS. PUSH THE "YES/ADV" OR THE "NO/SKIP" SWITCH TO GO OUT OF THE TEST AND ARM TEST 69.

215 ADJUST THE APPLICABLE LEFT (CENTER, RIGHT) ELEVATOR AUTOPILOT SERVO (EAS), M271 (M272,M273)(AMM 22-12-01/401).IF THE PROBLEM CONTINUES, REPLACE THE APPLICABLE LEFT (CENTER, RIGHT) ELEVATOR AUTO-PILOT SERVO (EAS), M271 (M272, M273)(AMM 22-12-01/401). IF THE PROBLEM CONTINUES REPLACE THE ELEVATOR FEEL COMPUTER, M950 (AMM 29-31-19/ 401).

MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 5)

EFFECTIVITY-ALL

22-00-04

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE: AILERON AND AILERON TRIM CONTROL SYSTEM (MM 27-11-00/501)

AILERON POSITION INDICATING SYSTEM (MM 27-18-00/501)

RUDDER AND RUDDER TRIM CONTROL SYSTEM (MM 27-21-00/501)

RUDDER POSITION INDICATING SYSTEM (MM 27-28-00/501) HYDRAULIC POWER (MM 29-11-00/201)

ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (MM 31-41-00/501)(WHEN YOU USE REMOTE MCDP CONTROL PANEL)

AIR/GROUND RELAYS (MM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11U9

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

INSTALL NOSE GEAR STEERING VALVE LOCKPIN (MM 09-11-00/201)

ELECTRICAL POWER IS ON (MM 24-22-00/201)

MCDP GROUND TEST 69 - "RUD SERVO LIMIT"

1

WARNING

NO

KEEP PERSONS AND EQUIPMENT AWAY FROM ALL CONTROL SURFACES WHEN HYDRAULIC POWER IS SUPPLIED. AILERONS, ELEVATORS, RUDDER, FLAPS, SLATS, SPOILERS, AND STABILIZER ARE FULLY POWERED SURFACES. INJURY OR DAMAGE CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

SUPPLY HYDRAULIC POWER (MM 29-11-00/201).

PUSH THE MCDP "ON/OFF" SWITCH IF THE MCDP IS NOT ON. PUSH THE MCDP "GRD TEST MODE" SWITCH.

DOES THE MCDP SHOW "01 FCC TEST?" AFTER THE IN PROGRESS TESTS ARE COMPLETED?

YES

SEE SHEET 2 (BLOCK 2)

NOTE: "XX IN PROGRESS" MESSAGE SHOWS DURING AN AUTOMATIC TEST STEP.

> 201 DO THE MCDP BITE FAULT ISOLATION PROCEDURE (22-00-02 FIG. 103, BLOCK 1).

MCDP Ground Test 69 - RUD SERVO LIMIT Figure 112 (Sheet 1)

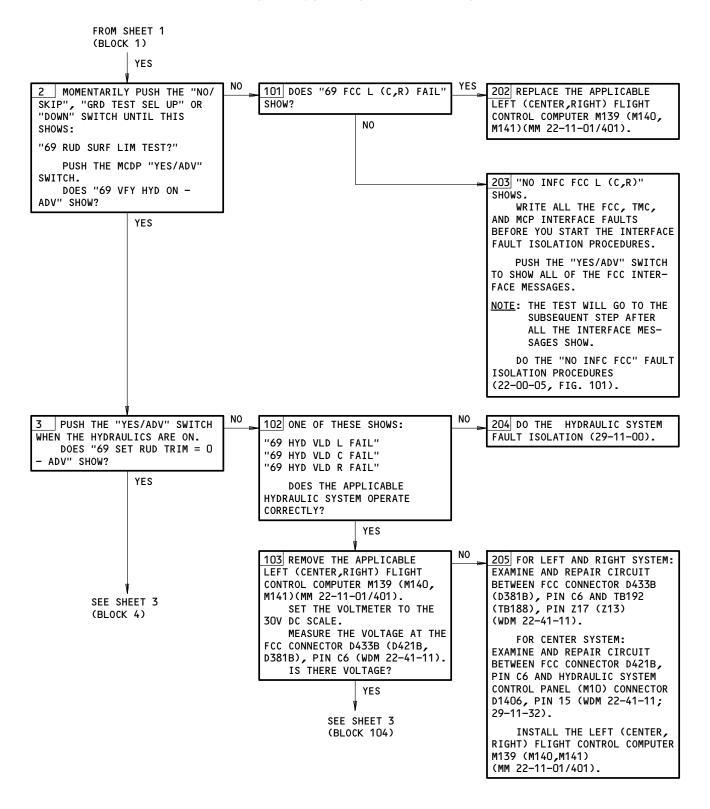
EFFECTIVITY-

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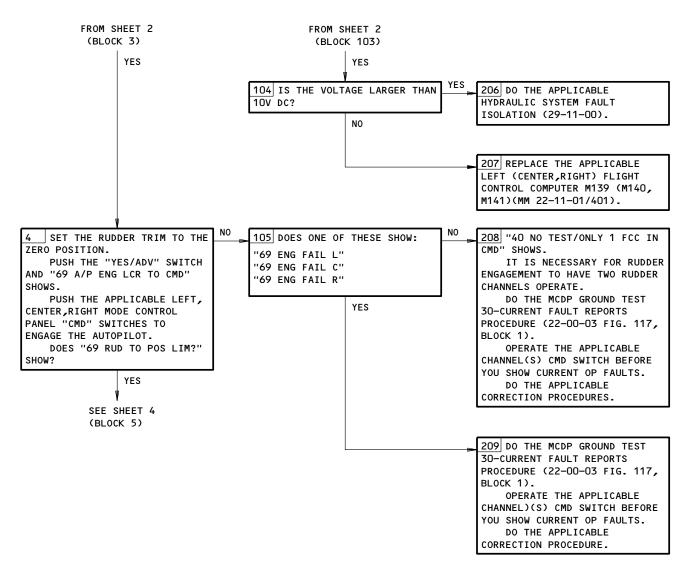
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MCDP Ground Test 69 - RUD SERVO LIMIT Figure 112 (Sheet 2)





MCDP Ground Test 69 - RUD SERVO LIMIT Figure 112 (Sheet 3)

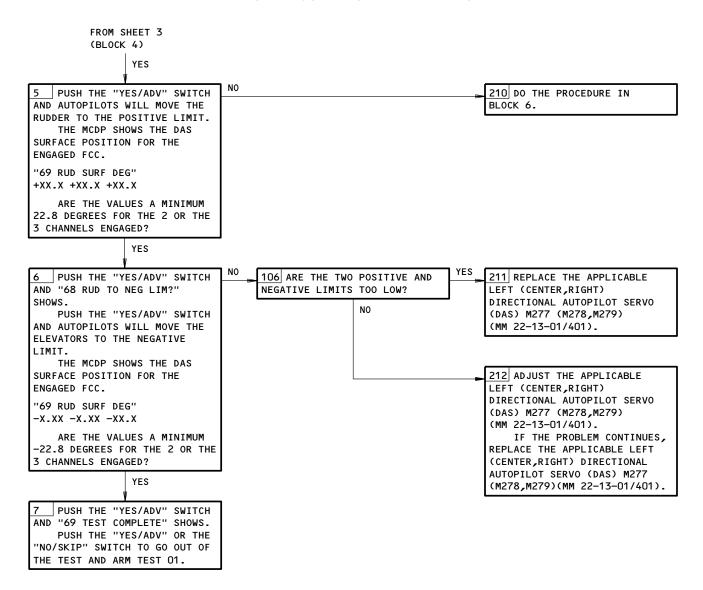
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MCDP Ground Test 69 - RUD SERVO LIMIT Figure 112 (Sheet 4)

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NOTE: TABLE 101 GIVES THE SHEET-BLOCK REFERENCES TO

WHERE THE FAULT ISOLATION AND CORRECTION
PROCEDURE FOR EACH FCC INTERFACE FAULT CAN BE

"NO INFC FCC" FAULT ISOLATION PROCEDURES

FOUND. THE PREREQUISITES FOR EACH FAILURE IS THE SAME AS THE GROUND TEST WHICH SHOWED THE FAILURE.

٧ /			
FCC INFC MESSAGE 2	Corr. Proced. Sht-Blk	FCC INFC MESSAGE 2	Corr. Proced. Sht-Blk
NO INFC FCC C ADC BUS IN NO INFC FCC L ADC BUS IN NO INFC FCC L ADC BUS IN NO INFC FCC L ADC BUS IN NO INFC FCC L,C, OR R AIL DETNT ENG NO INFC FCC L,C, OR R AIL SRVO CMD NO INFC FCC L,C, OR R AIL SRVO POS NO INFC FCC L,C, OR R AIL SRVO POS NO INFC FCC L,C, OR R AIL SURF POS NO INFC FCC L,C, OR R ASA 1 NO INFC FCC L,C, OR R ASA 2 NO INFC FCC L,C, OR R ASA 3 NO INFC FCC L,C, OR R ASA 4 NO INFC FCC L,C, OR R ASA 4 NO INFC FCC L,C, OR R ASA 4 NO INFC FCC C AUTO TRIM ARM NO INFC FCC C AUTO TRIM WLD 1 NO INFC FCC C AUTO TRIM VLD 2 NO INFC FCC C AUTO TRIM VLD 2 NO INFC FCC L AUTO TRIM VLD 2 NO INFC FCC L,C, OR R A/L BUS ISLN OUT NO INFC FCC L,C, OR R A/L BUS ISLN IN NO INFC FCC L,C, OR R A/P CTN-1 NO INFC FCC L,C, OR R A/P CTN-2 NO INFC FCC L,C, OR R A/P WARN-2 BAT NO INFC FCC L,C, OR R A/P WARN-2 BAT NO INFC FCC L,C, OR R A/P WARN-2 NRM NO INFC FCC L,C, OR R BAT PWR/GRD NO INFC FCC L,C, OR R BAT PWR/GRD NO INFC FCC L,C, OR R BAT PWR/GRD NO INFC FCC L,C, OR R BELEV SRVO CMD NO INFC FCC L,C, OR R ELEV SRVO CMD NO INFC FCC L,C, OR R ELEV SRVO POS NO INFC FCC L,C, OR R ELEV SRVO POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC L,C, OR R ELEV SURF POS NO INFC FCC C FCC TO MCP BUS	2-1 2-1 3-3 4-4 5-5 6-6 7-7 9-8 10-9 11-10 11-11 11-12 12-14 12-13 12-13 14-18 13-15 13-15 13-15 13-15 13-15 20-22 21-23 21-24 22-25 22-26 23-27 24-28 25-29 26-30 27-31 28-32 29-33 31-35 31-34 32-36 32-37	NO INFC FCC L,C, OR R FLAP POS 1 NO INFC FCC L,C, OR R GA SW 1 NO INFC FCC L,C, OR R ILS BUS IN NO INFC FCC L,C, OR R ILS BUS IN NO INFC FCC L,C, OR R IRU BUS IN NO INFC FCC L,C, OR R RA BUS IN NO INFC FCC L,C, OR R RA BUS IN NO INFC FCC L,C, OR R MCP A/P ARM IN NO INFC FCC L,C, OR R MCP A/P ARM IN NO INFC FCC L,C, OR R MCP A/P ENG DISC NO INFC FCC L,C, OR R RUP A/P ENG DISC NO INFC FCC L,C, OR R RUD DETNT ENG NO INFC FCC L,C, OR R RUD DETNT ENG NO INFC FCC L,C, OR R RUD SRVO CMD NO INFC FCC L,C, OR R RUD SRVO CMD NO INFC FCC L,C, OR R RUD SRVO POS NO INFC FCC L,C, OR R RUD SUFF POS NO INFC FCC L,C, OR R RUD SUFF POS NO INFC FCC L,C, OR R STAB POS NO INFC FCC C X-CH DETNT L IN NO INFC FCC C X-CH DETNT R IN NO INFC FCC C X-CH ENG L IN NO INFC FCC C X-CH ENG R IN NO INFC FCC C X-CH EN	36-39 36-40 37-41 37-42 38-43 40-44 41-45 41-46 42-47 43-48 43-49 44-50 45-51 46-52 47-53 48-54 50-55 51-56 52-57 53-59 54-60 52-58 54-60 52-58 54-60 52-58 54-60 52-58 54-60 52-58 53-59 55-62 56-63 55-61 55-62 58-64 60-65 62-66 62-67 63-221
NO INFC FCC C FMC BUS IN NO INFC FCC L FMC BUS IN NO INFC FCC R FMC BUS IN	32-37 32-37 34-38		

FCC INFC CORRECTION PROCEDURE REFERENCE TABLE 101

BEFORE THE START OF THE INTERFACE FAULT ISOLATION PROCEDURES, DO THE MCDP GROUND TEST 30 - CURRENT FAULT REPORT (FIM 22-00-03/101, FIG. 117) AND WRITE ALL THE FCC AND THE TMC INTERFACE FAULTS.

NOTE: YOU MUST GO OUT OF THE MCDP GRD TEST MODE AND THEN GO BACK INTO IT AFTER FAILURES SHOWN DURING A GROUND TEST ARE CORRECTED. PUSH THE "FLT FAULTS MODE" SWITCH TO GO OUT OF GRD TEST MODE. PUSH THE "GRD TEST MODE" SWITCH TO GO BACK INTO THE GRD TEST MODE. IF THIS IS NOT DONE, THE FAILURE MESSAGE WILL SHOW ALTHOUGH THE FAILURE WAS CORRECTED.

NO INFC FCC Fault Isolation Procedures
Figure 101 (Sheet 1)

 22-00-05

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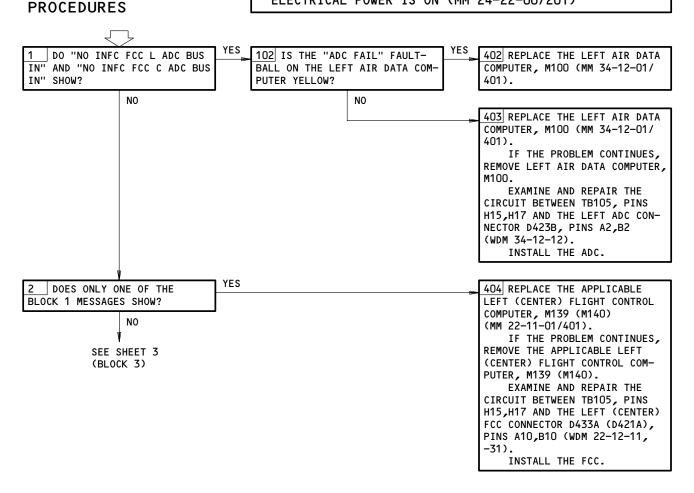


PREREQUISITES

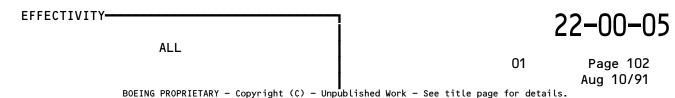
MAKE SURE THE MCDP GROUND TEST PREREQUISITES ARE COMPLETED

"NO INFC FCC" MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

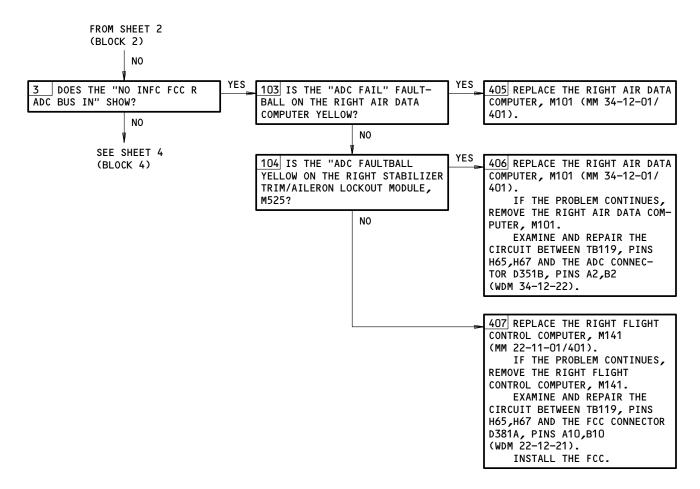
ELECTRICAL POWER IS ON (MM 24-22-00/201)



NO INFC FCC Fault Isolation Procedures
Figure 101 (Sheet 2)

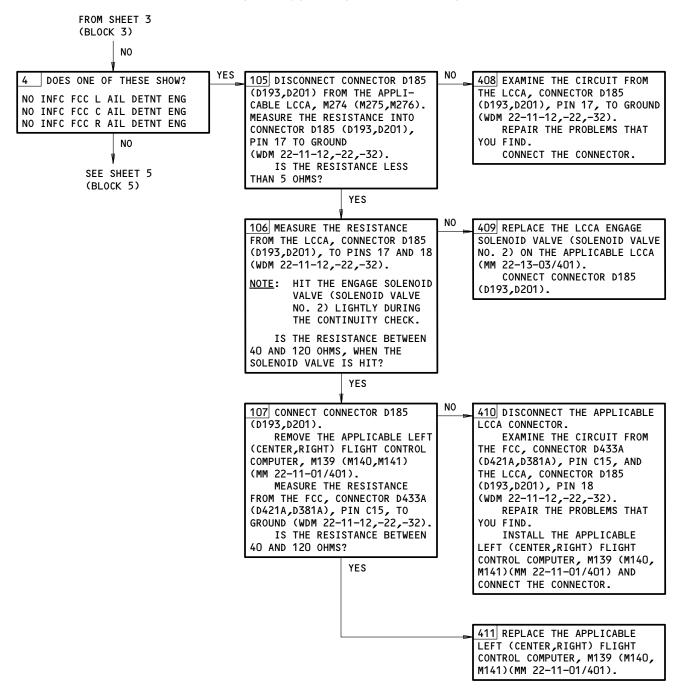




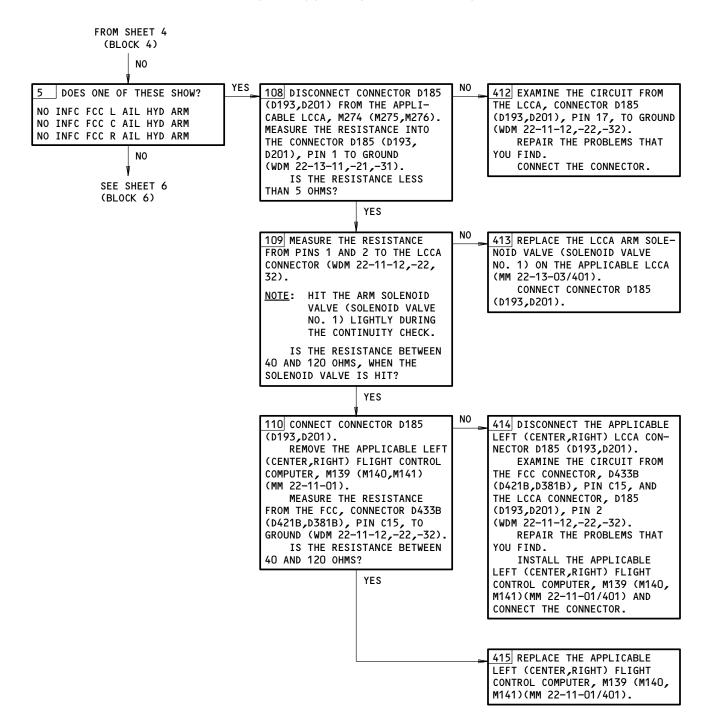


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 3)

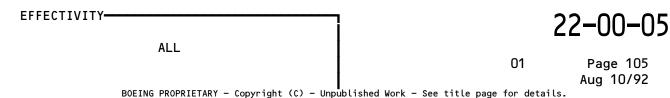
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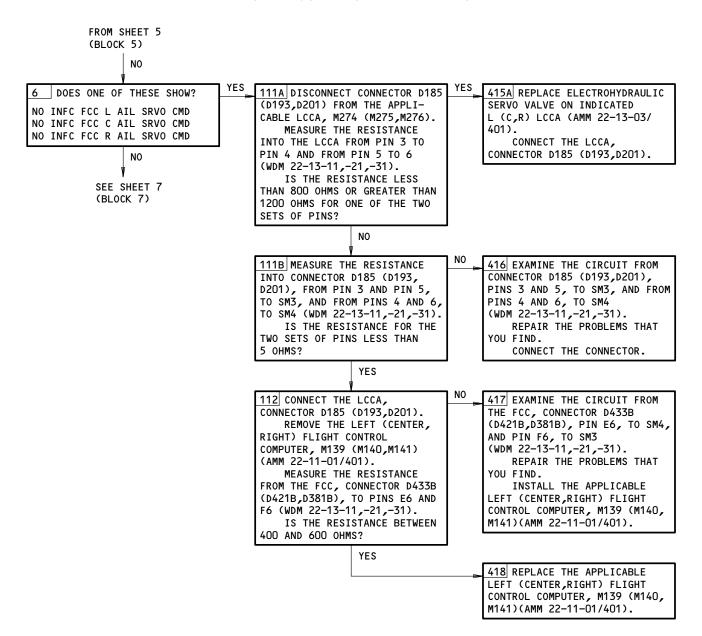


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 4)



NO INFC FCC Fault Isolation Procedures
Figure 101 (Sheet 5)

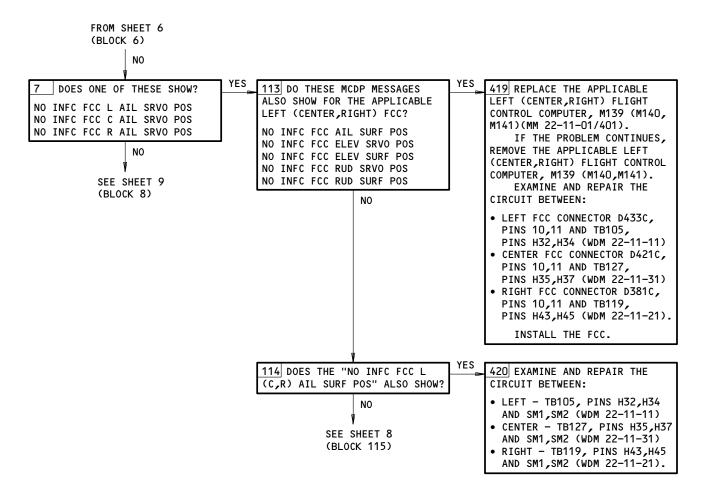




NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 6)

120121





NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 7)

ALL

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FROM SHEET 7 (BLOCK 114)

NO

115 DISCONNECT THE APPLICABLE LEFT (CENTER, RIGHT) LATERAL CENTRAL CONTROL ACTUATOR (LCCA), CONNECTOR D185 (D193, D201).

DO A VOLTAGE CHECK FOR 26V AC AT THE LCCA, CONNECTOR D185 (D193,D201), PIN 7 TO PIN 8 (WDM 22-11-11,-21,-31). IS THERE 26V AC? 421 EXAMINE THE CIRCUIT FROM
THE LCCA, CONNECTOR D185
(D193,D201), PINS 7,8, TO SM1,
SM2 (WDM 22-11-11,-21,-31).
REPAIR THE PROBLEMS THAT
YOU FIND.

CONNECT THE CONNECTOR.

YES

YES

116 CONNECT THE LCCA CONNECTOR D185 (D193,D201).

REMOVE THE APPLICABLE LEFT (CENTER,RIGHT) FLIGHT CONTROL COMPUTER, M139 (M140,M141) (AMM 22-11-01/401).

MEASURE THE RESISTANCE
INTO THE FCC, M139 (M140,M141)
CONNECTOR D433A (D421A,D381A)
BETWEEN THESE PINS:

- PINS J5 AND K5
- PINS J5 AND K6

(WDM 22-13-11,-21,-31).

IS THE RESISTANCE BETWEEN
PINS J5 AND K5 BETWEEN 240 AND
320 OHMS, AND THE RESISTANCE
BETWEEN PINS J5 AND K6 BETWEEN
110 AND 190 OHMS?

422 REPLACE THE APPLICABLE LEFT (CENTER, RIGHT) FLIGHT CONTROL COMPUTER, M139 (M140, M141)(AMM 22-11-01/401).

N0

423 REPLACE THE APPLICABLE LEFT (CENTER, RIGHT) LATERAL CENTRAL CONTROL ACTUATOR, M274 (M275, M276) (AMM 27-11-14/ 401).

INSTALL THE APPLICABLE
LEFT (CENTER, RIGHT) FLIGHT
CONTROL COMPUTER, M139 (M140, M141)(AMM 22-11-01/401).

IF THE PROBLEM CONTINUES, REMOVE THE APPLICABLE LEFT (CENTER, RIGHT) FLIGHT CONTROL COMPUTER, M139 (M140,M141), AND DISCONNECT THE APPLICABLE LEFT (CENTER, RIGHT) LCCA, CONNECTOR D185 (D193,D201).

EXAMINE THE CIRCUIT
BETWEEN THE PINS THAT DID NOT
HAVE A SATISFACTORY RESISTANCE
(WDM 22-13-11,-21,-31).

REPAIR THE PROBLEMS THAT YOU FIND.

INSTALL THE FCC AND CONNECT THE CONNECTOR.

NO INFC FCC Fault Isolation Procedures
Figure 101 (Sheet 8)

ALL ALL

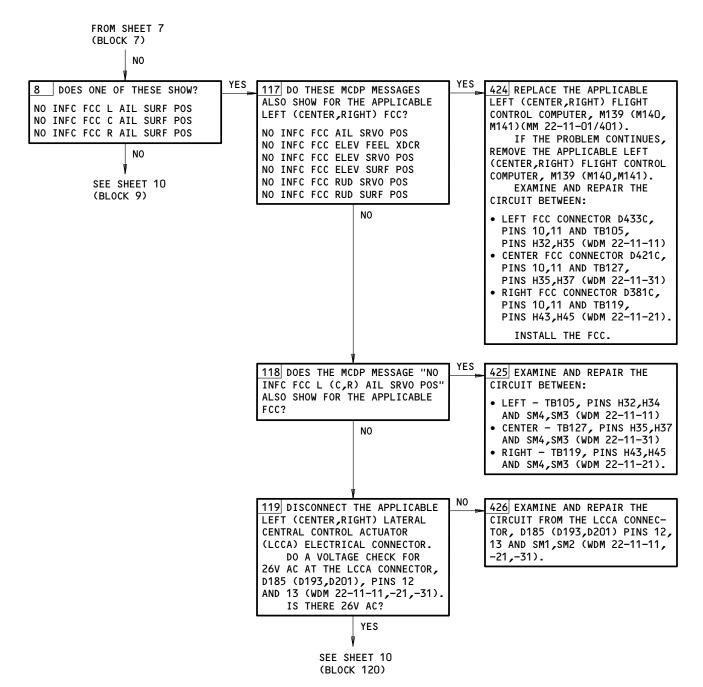
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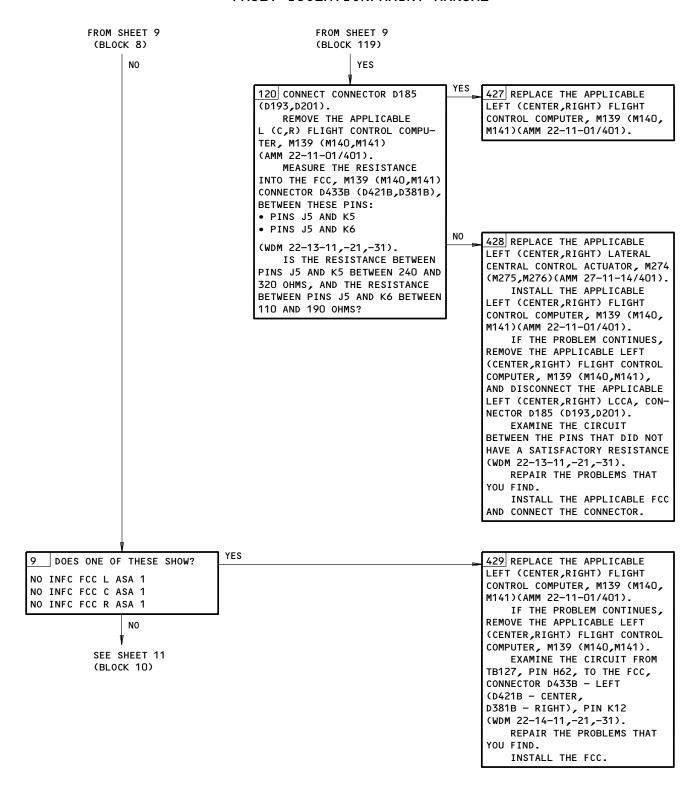
Page 108 Feb 10/94





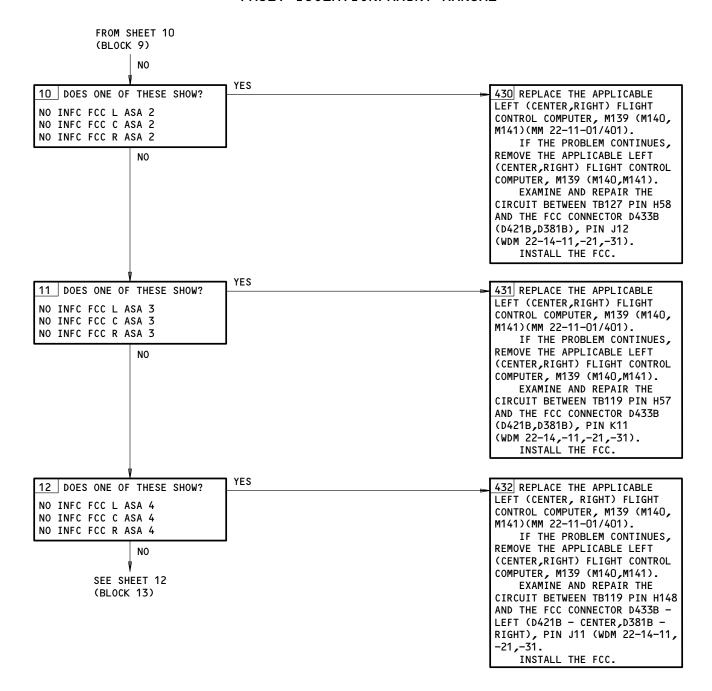
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 9)



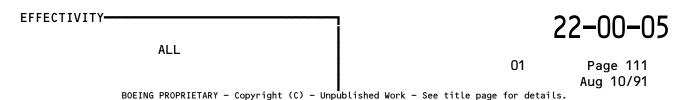


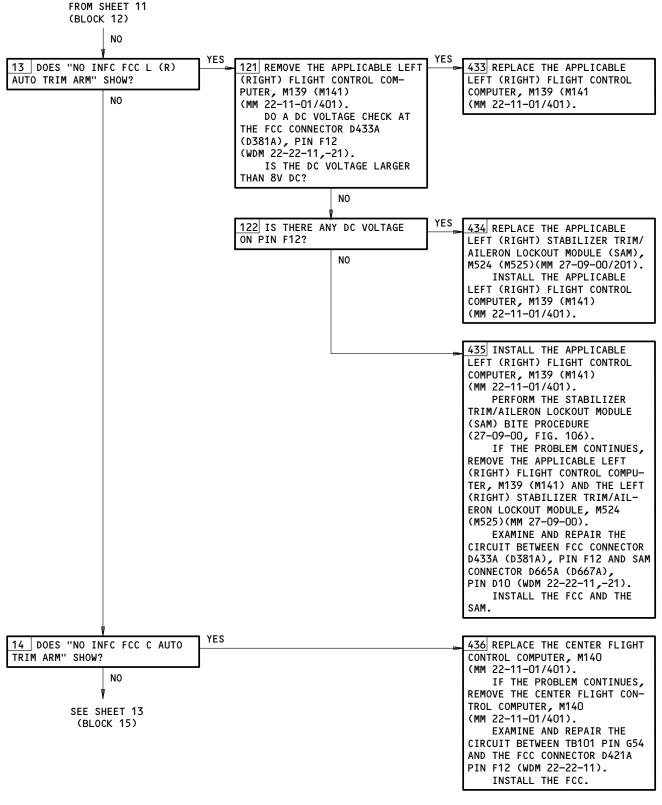
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 10)



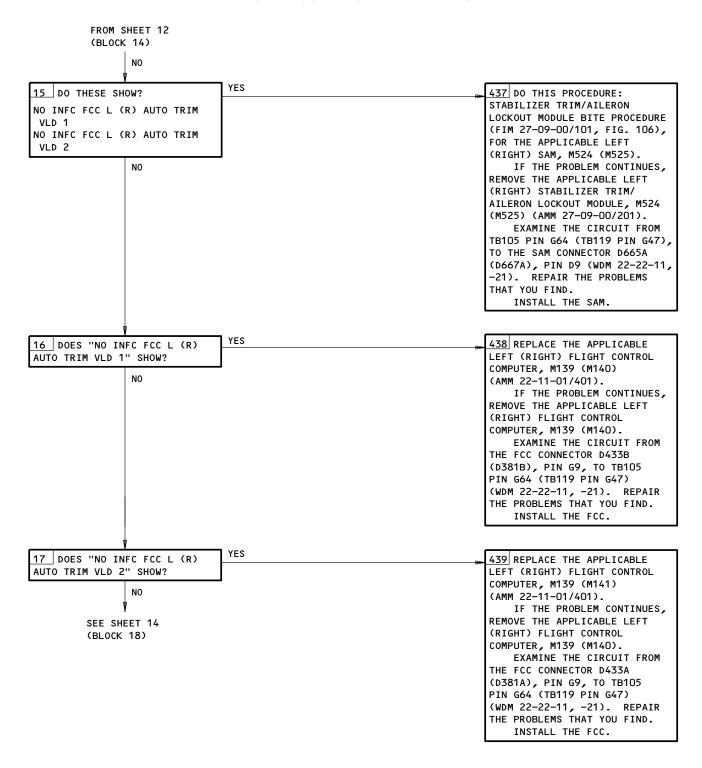


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 11)

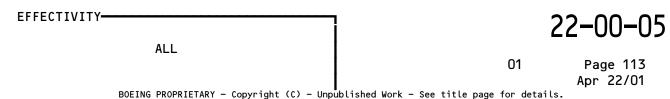


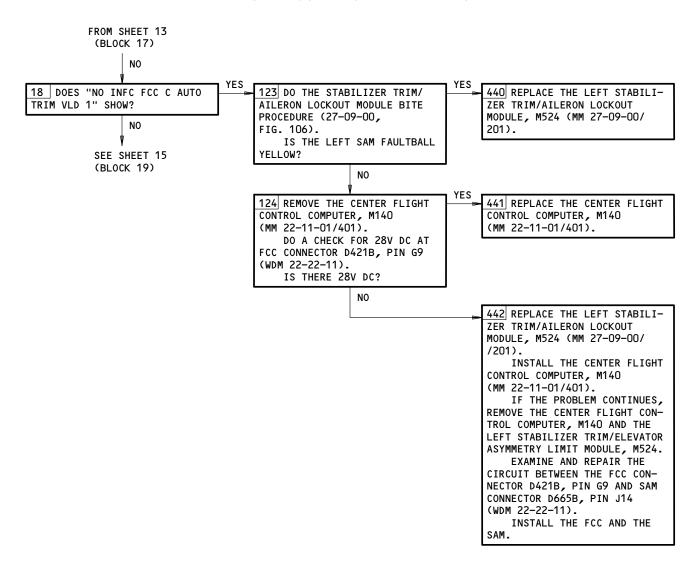


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 12)



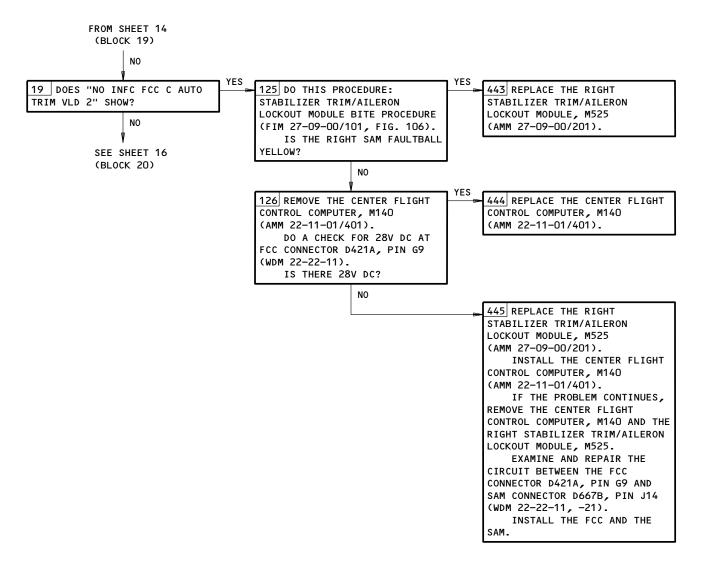
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 13)



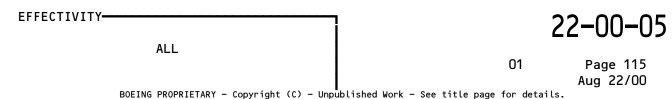


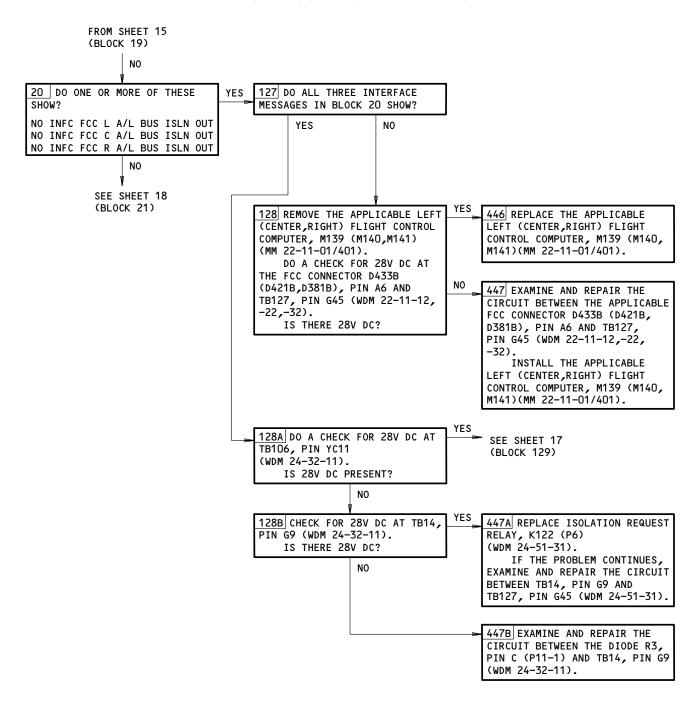
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 14)



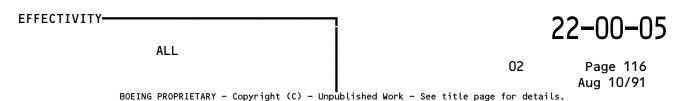


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 15)

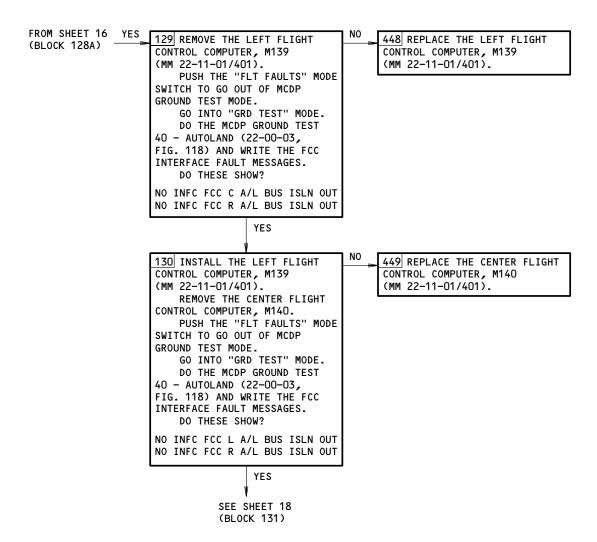




NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 16)







NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 17)

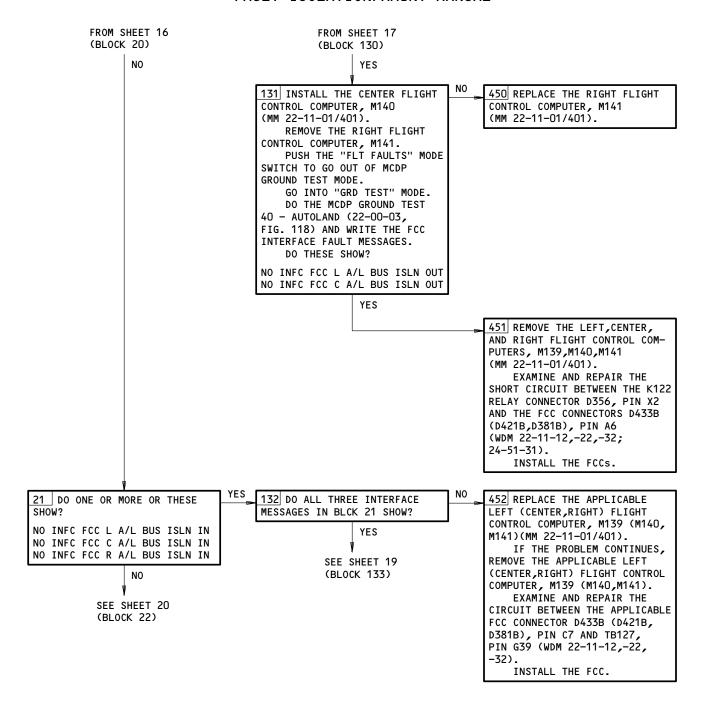
EFFECTIVITY-ALL

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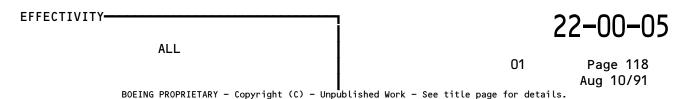
22-00-05

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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 18)



FROM SHEET 18 (BLOCK 132)

YES

133 MAKE SURE THE LEFT AND RIGHT BUS TIE SWITCHES ARE SET TO "AUTO".

OPEN THIS CIRCUIT BREAKER:

6J14, CAPT PRIM INST BUS ØA

MOMENTARILY PUSH THE MCDP "FLT FAULTS" MODE SWITCH TO GO OUT OF THE "GRD TEST" MODE. PUSH THE MCDP "GRD TEST" MODE SWITCH TO GO INTO THE GRD TEST MODE. DO THE MCDP GROUND TEST 30 - CURRENT FAULT REPORT (FIM 22-00-03/101, FIG. 117), AND WRITE ALL THE INTERFACE FAULTS.

DO THESE SHOW?

NO INFC FCC L A/L BUS ISLN IN NO INFC FCC C A/L BUS ISLN IN NO INFS FCC R A/L BUS ISLN IN 453 EXAMINE THE CIRCUIT FROM TB127, PIN G39, TO THE CAPT INSTR BUS VOLTAGE SENSE UNIT, M1079, CONNECTOR D894, PIN 5 (WDM 24-51-72).

REPAIR THE PROBLEMS THAT YOU FIND.

CLOSE THIS CIRCUIT **BREAKER:**

6J14, CAPT PRIM INST BUS ØA

IF THE PROBLEM CONTINUES, REPLACE THE CAPT INSTRUMENT BUS VOLTAGE SENSE UNIT, M1079 (WDM 24-51-72).

134 CLOSE THIS CIRCUIT **BREAKER:**

6J14, CAPT PRIM INST BUS ØA OPEN THIS CIRCUIT BREAKER:

6L20, F/O PRIM INST BUS ØA

MOMENTARILY PUSH THE MCDP "FLT FAULTS" MODE SWITCH TO GO OUT OF THE GRD TEST MODE. PUSH THE MCDP "GRD TEST" MODE SWITCH TO GO INTO THE GRD TEST MODE. DO THE MCDP GROUND TEST 30 - CURRENT FAULT REPORT (FIM 22-00-03/101, FIG. 117), AND WRITE ALL THE INTERFACE FAULTS.

DO THESE SHOW?

NO INFC FCC L A/L BUS ISLN IN NO INFC FCC C A/L BUS ISLN IN NO INFC FCC R A/L BUS ISLN IN UNIT, M1079, CONNECTOR D894, PIN 5, TO THE INSTR BUS VOL-TAGE SENSE UNIT, M1217, CON-NECTOR D10744, PIN 5 (WDM 24-51-72).

454 EXAMINE THE CIRCUIT FROM

THE INSTR BUS VOLTAGE SENSE

REPAIR THE PROBLEMS THAT YOU FIND.

CLOSE THIS CIRCUIT **BREAKER:**

6L20, F/O PRIM INST BUS ØA

IF THE PROBLEM CONTINUES, REPLACE THE INSTRUMENT BUS VOLTAGE SENSE UNIT, M1217 (WDM 24-51-72).

SEE SHEET 20 (BLOCK 135)

NO

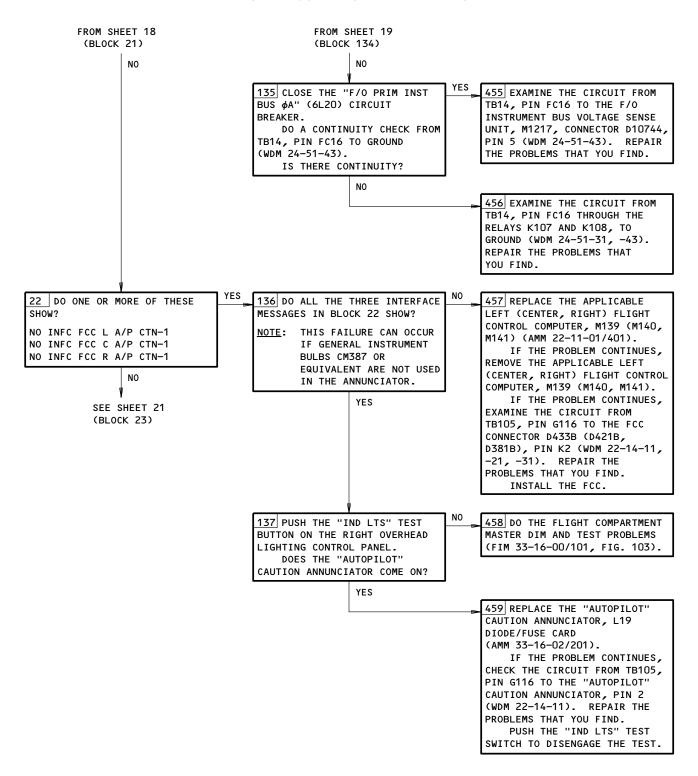
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 19)

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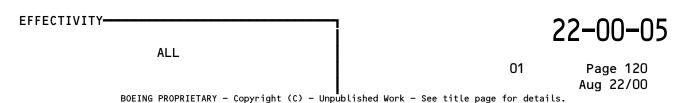
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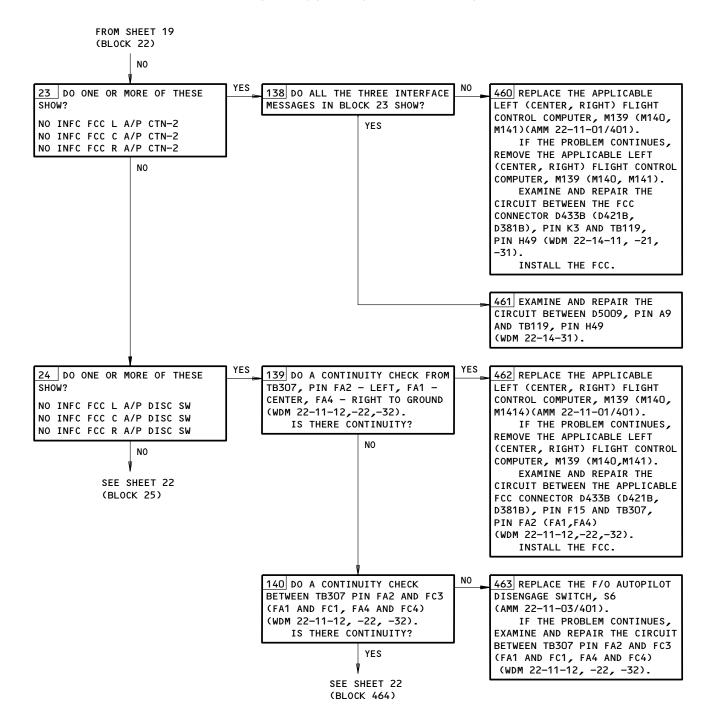
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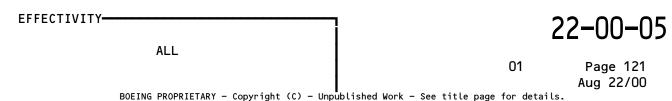


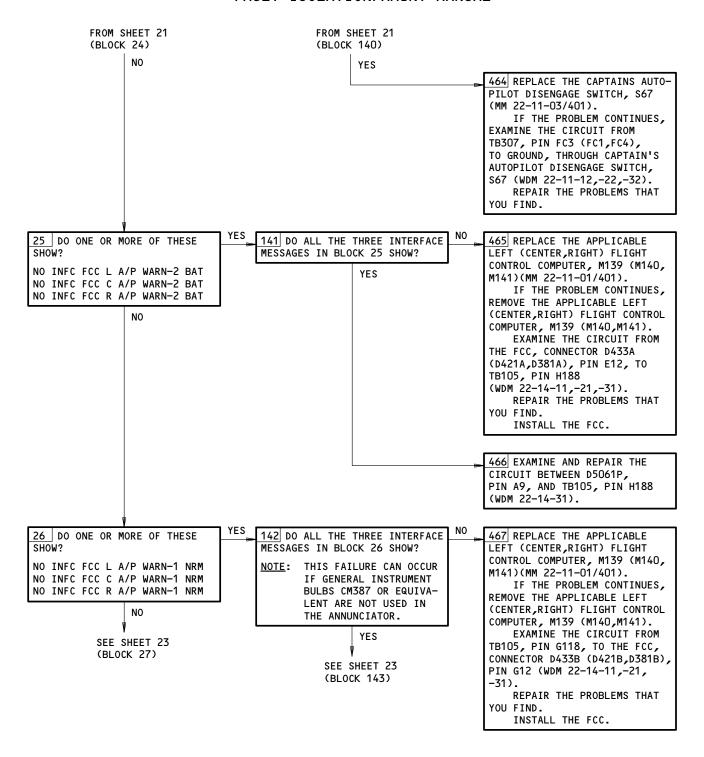
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 20)



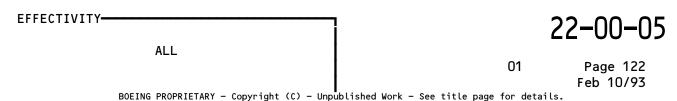


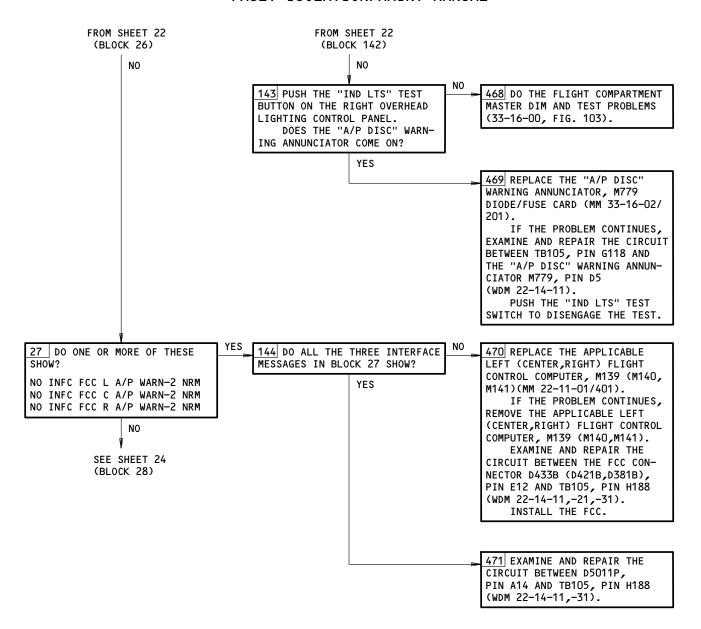
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 21)



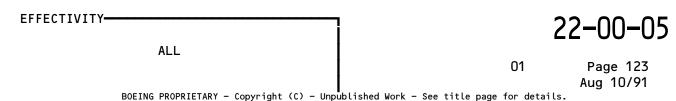


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 22)

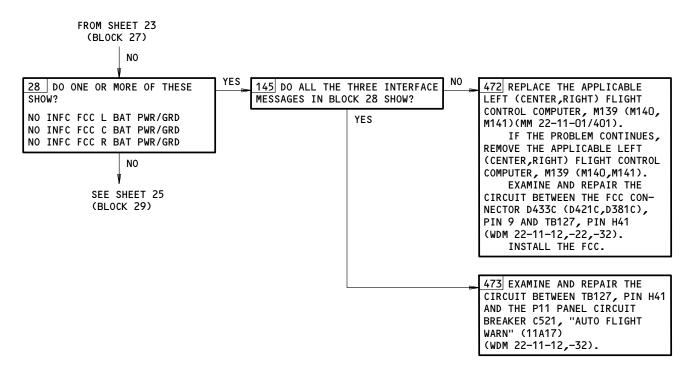




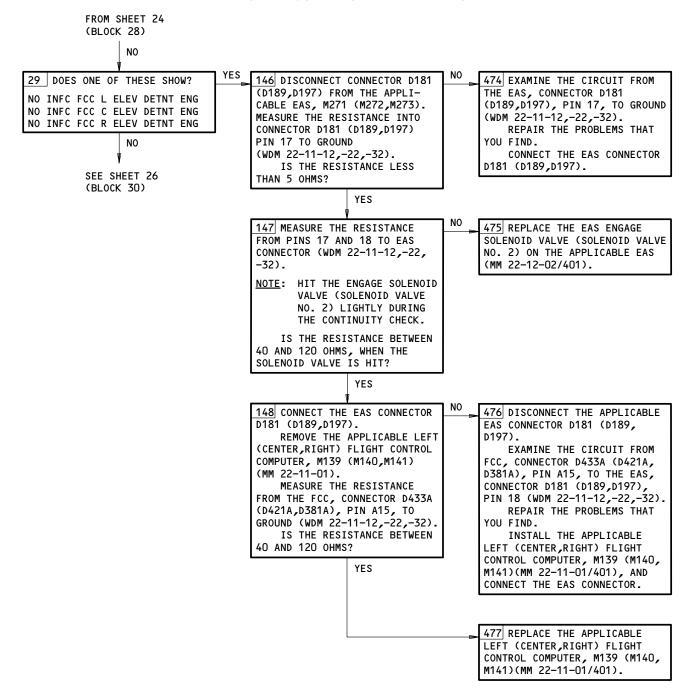
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 23)







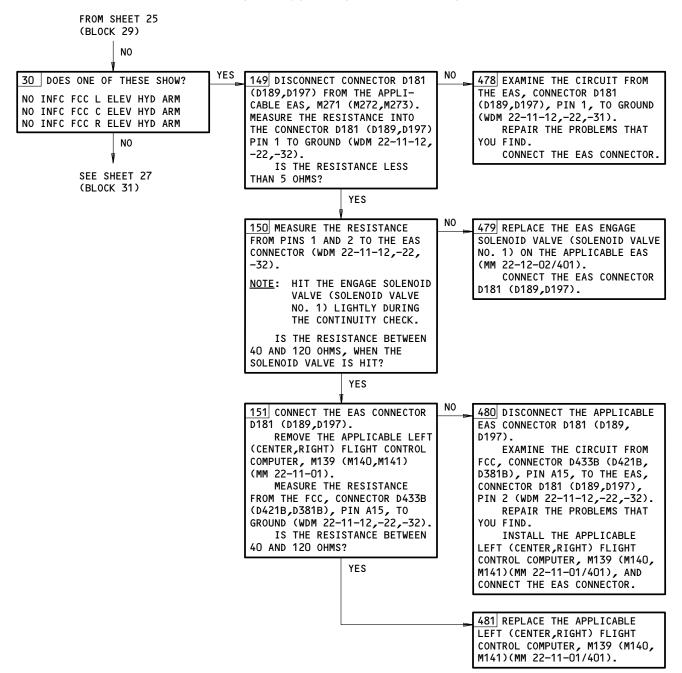
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 24)



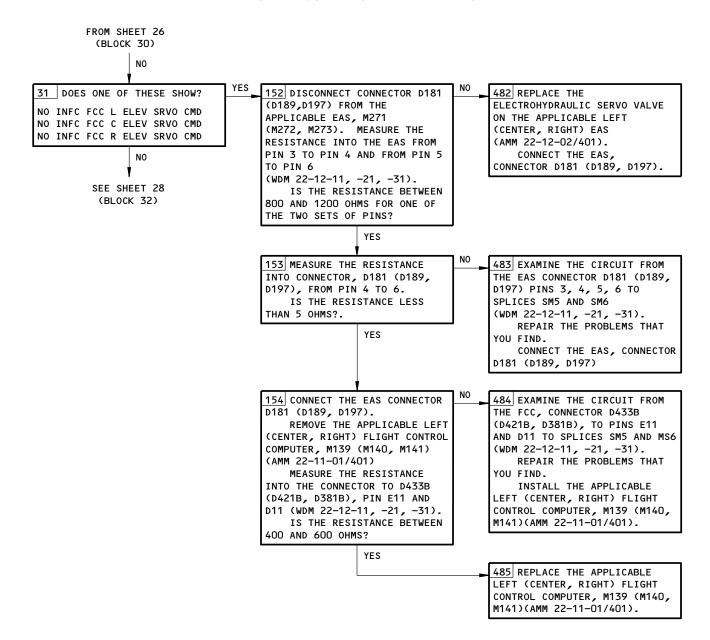
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 25)

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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 26)



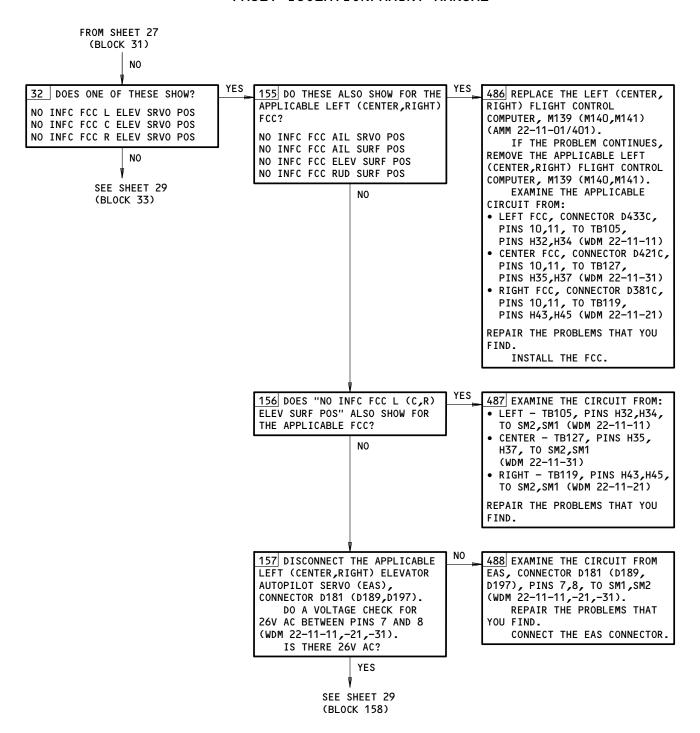
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 27)

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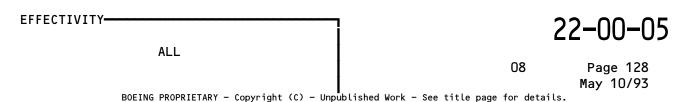
O1 Page 127

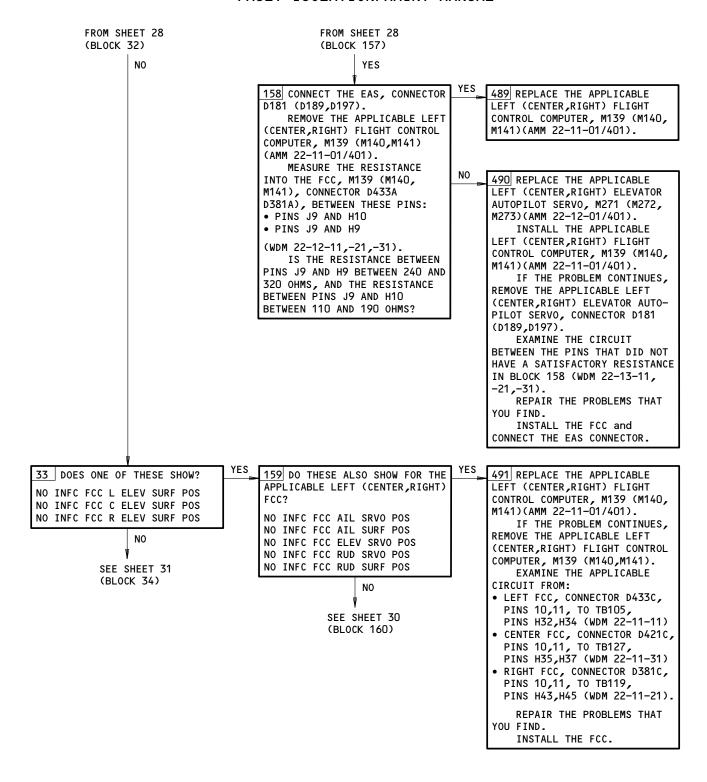
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 28)



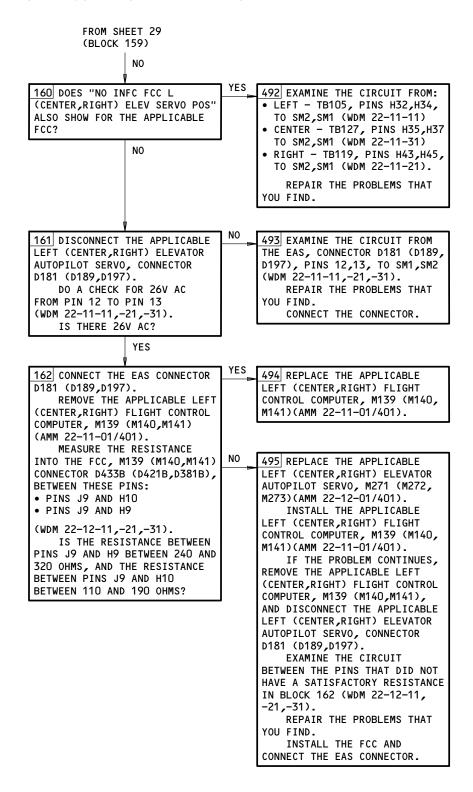


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 29)

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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 30)

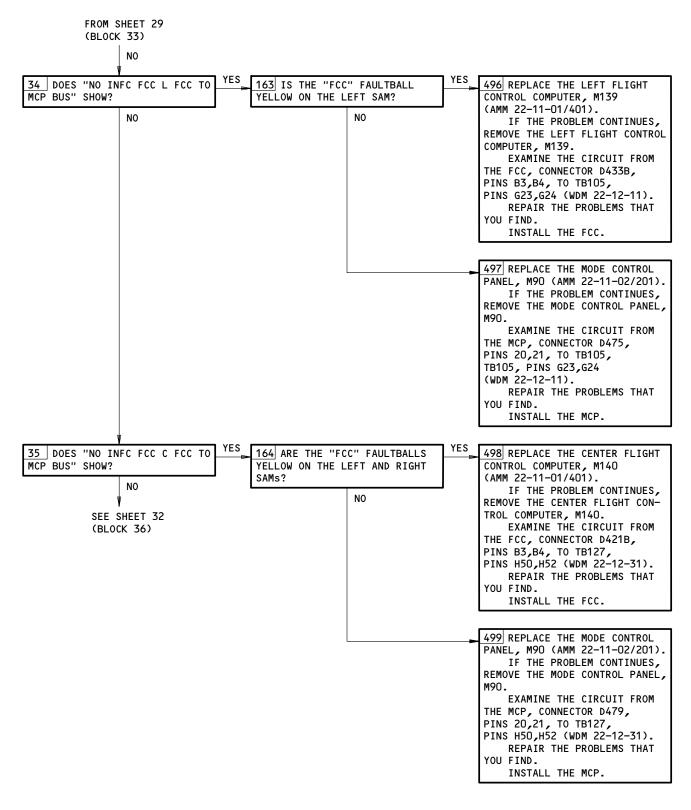
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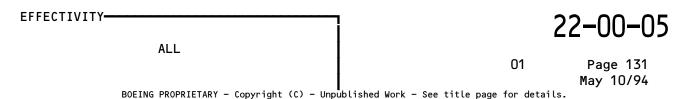
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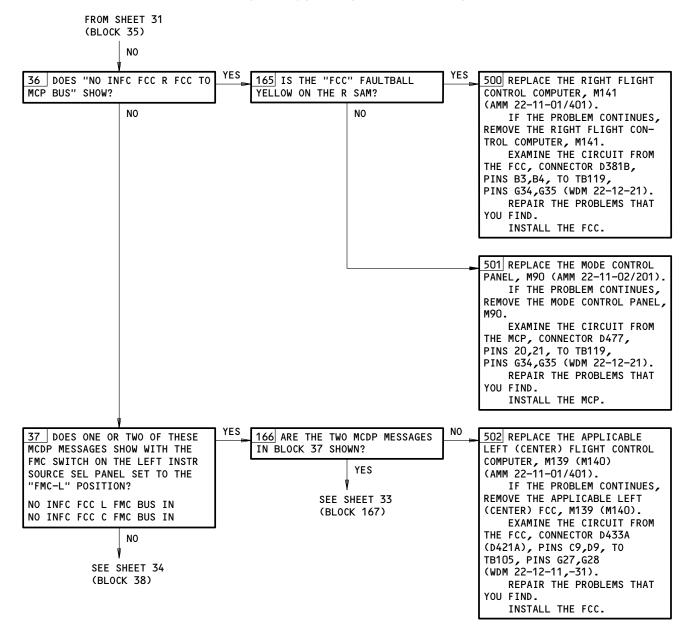
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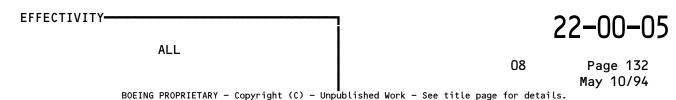


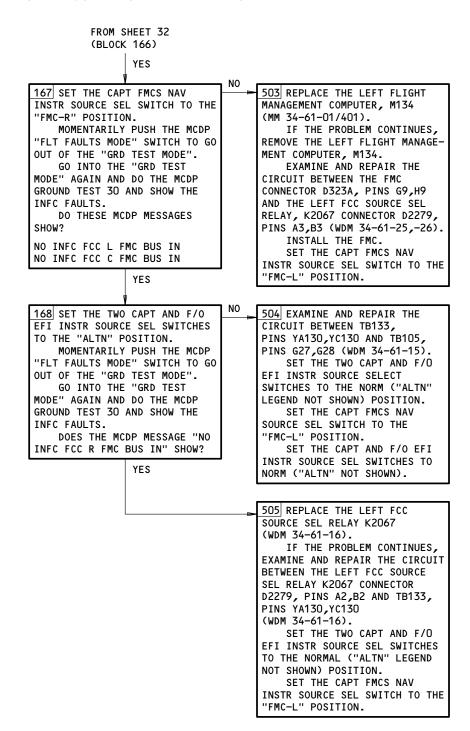
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 31)





NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 32)





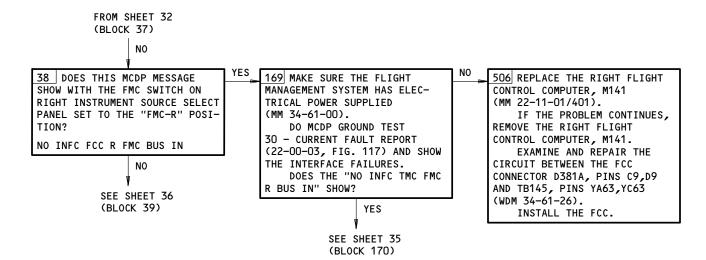
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 33)

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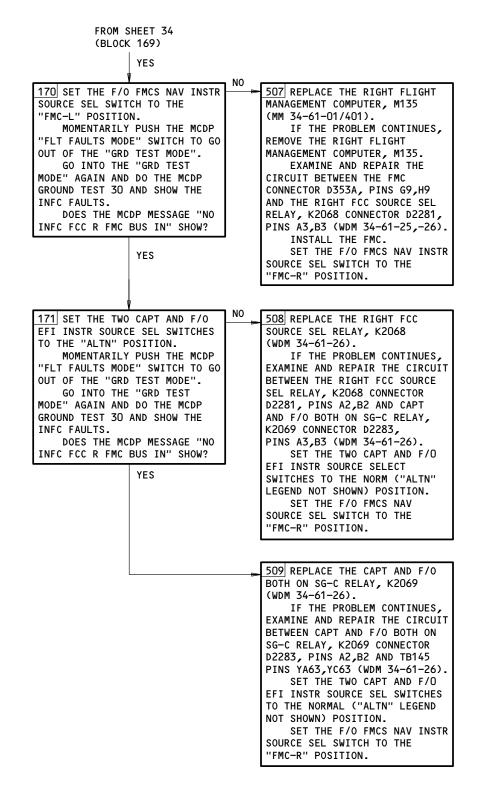
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 34)

EFFECTIVITY-ALL

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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 35)

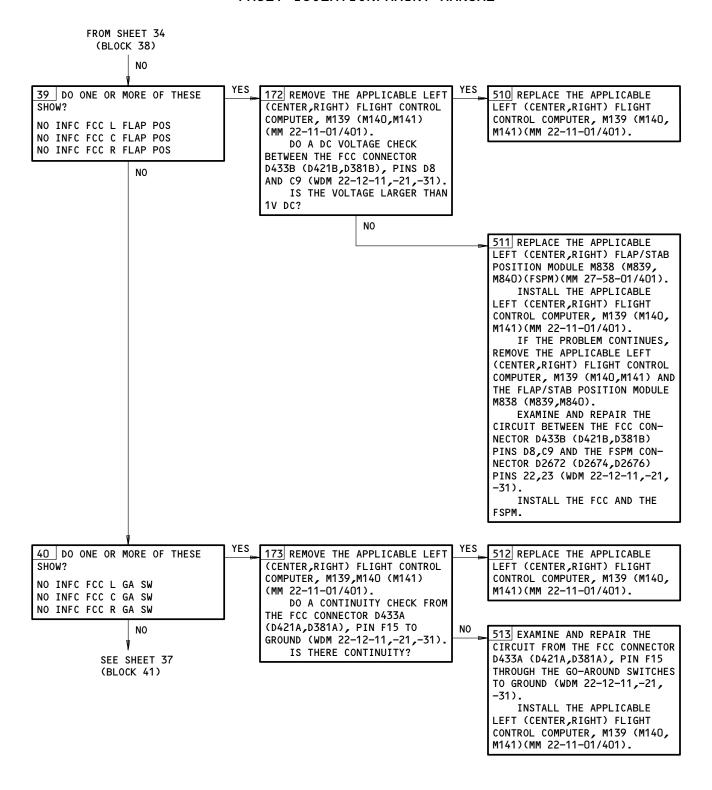
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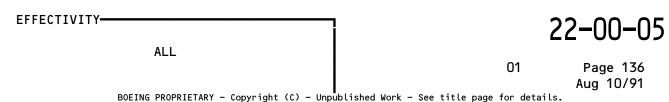
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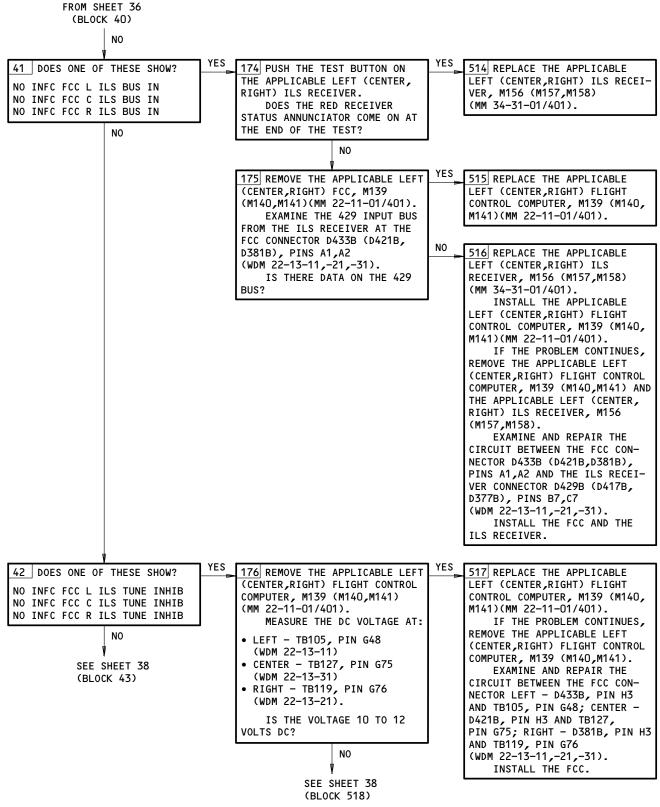
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 36)

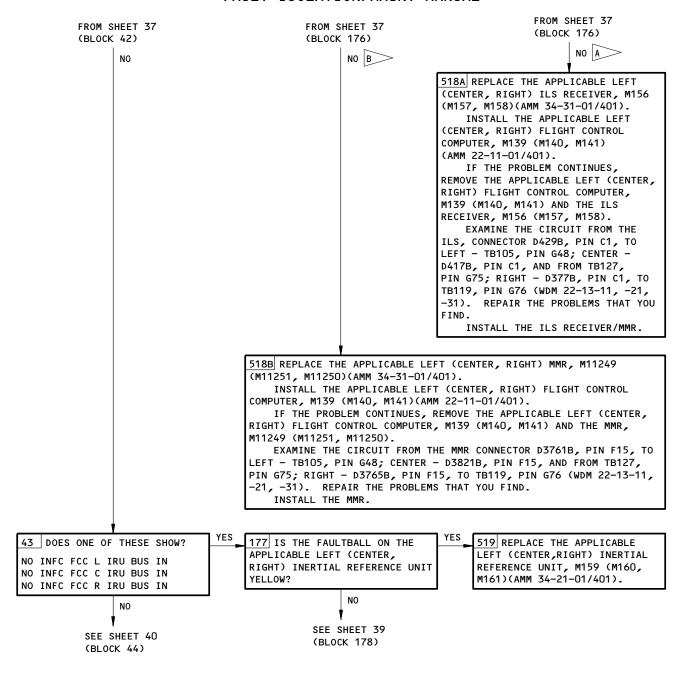




NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 37)

ALL

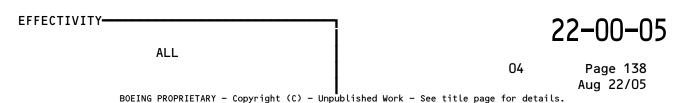
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A AIRPLANES WITH ILS RECEIVERS

B AIRPLANES WITH MULTI-MODE RECEIVERS

NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 38)



FROM SHEET 38 (BLOCK 177) NO 178 REMOVE THE LEFT (CENTER, 520 REPLACE THE APPLICABLE RIGHT) FCC, M139 (M140,M141) LEFT (CENTER, RIGHT) FLIGHT (MM 22-11-01/401). CONTROL COMPUTER, M139 (M140, M141)(MM 22-11-01/401). EXAMINE THE 429 INPUT BUS FROM THE IRU TO THE FCC CON-NECTOR D433B (D421B,D381B), PINS E1,E2 (WDM 22-13-11,-21, -31).IS THERE DATA ON THE 429 BUS? NO 521 REPLACE THE APPLICABLE LEFT (CENTER, RIGHT) INERTIAL REFERENCE UNIT, M159 (M160, M161)(MM 34-21-01/401). INSTALL THE APPLICABLE LEFT (CENTER, RIGHT) FLIGHT CONTROL COMPUTER, M139 (M140, M141)(MM 22-11-01/401). IF THE PROBLEM CONTINUES, REMOVE THE APPLICABLE LEFT (CENTER, RIGHT) FLIGHT CONTROL COMPUTER, M139 (M140,M141) AND THE APPLICABLE LEFT (CENTER, RIGHT) INERTIAL REFERENCE UNIT, M159 (M160,M161). EXAMINE THE CIRCUIT FROM THE FCC, CONNECTOR D433B (D421B,D381B), PINS E1,E2, TO THE IRU, CONNECTOR D367B (D369B,D371B), PINS E5,E6 (WDM 22-13-11,-21,-31). REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE FCC AND THE

NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 39)

EFFECTIVITY-ALL

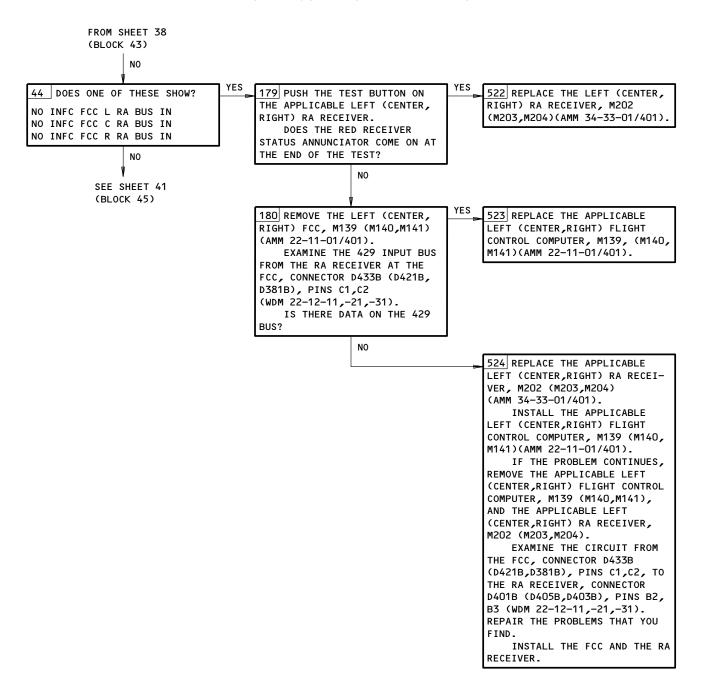
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IRU.

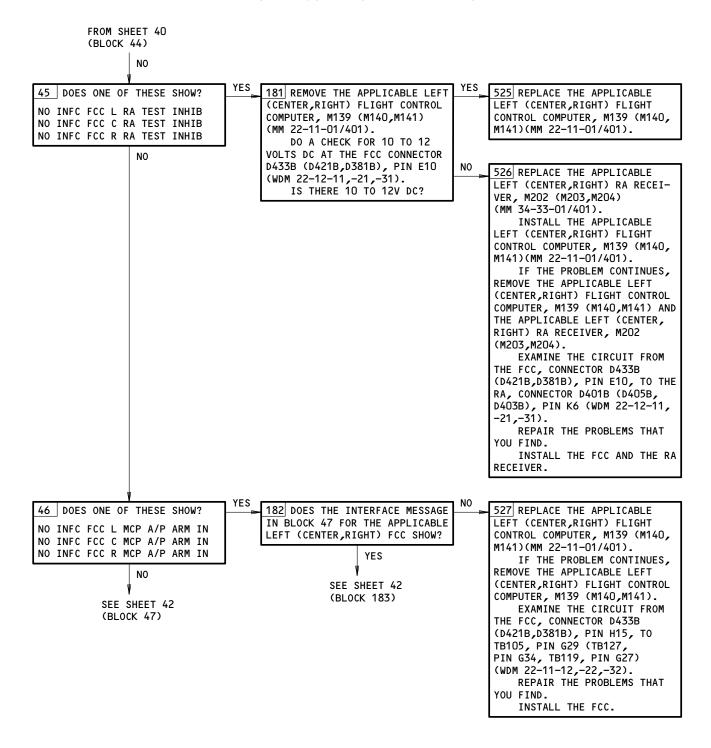
Page 139 Aug 10/91



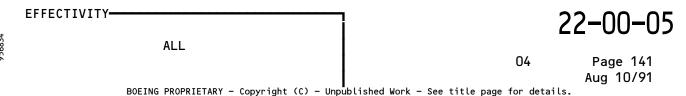
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 40)

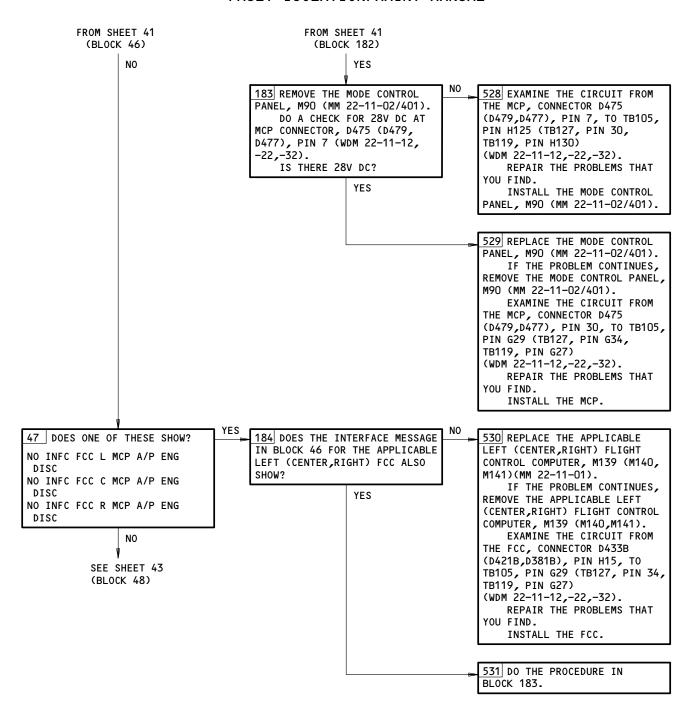
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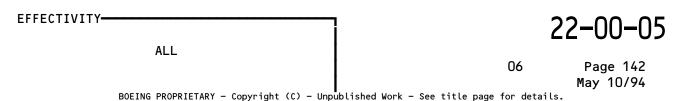


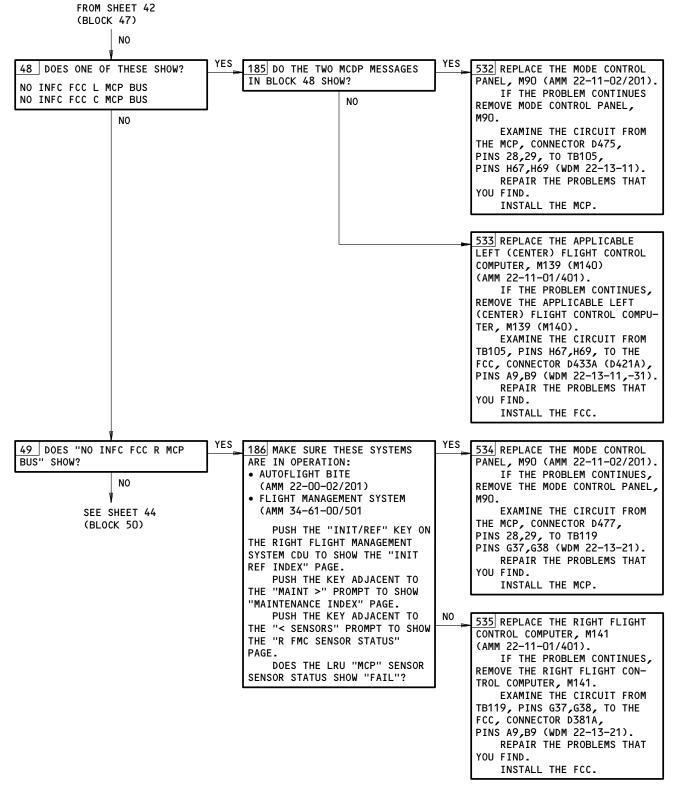
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 41)



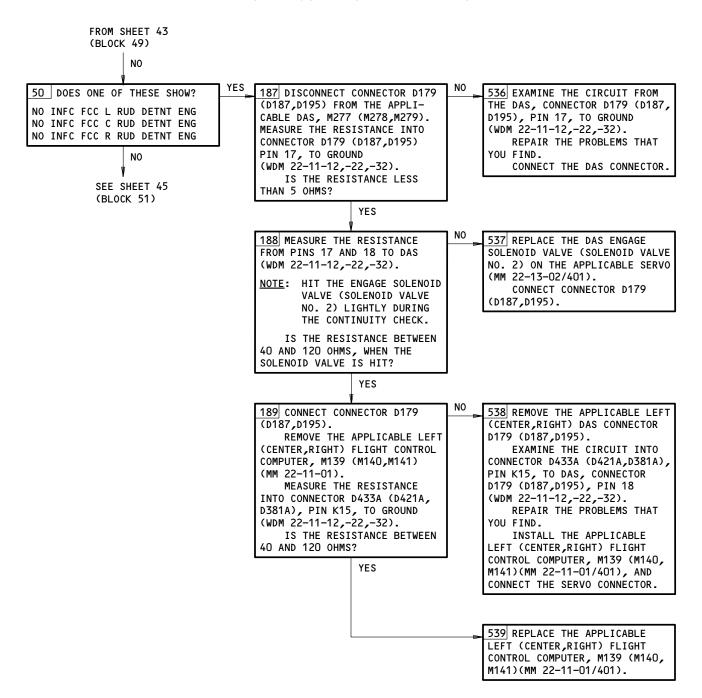


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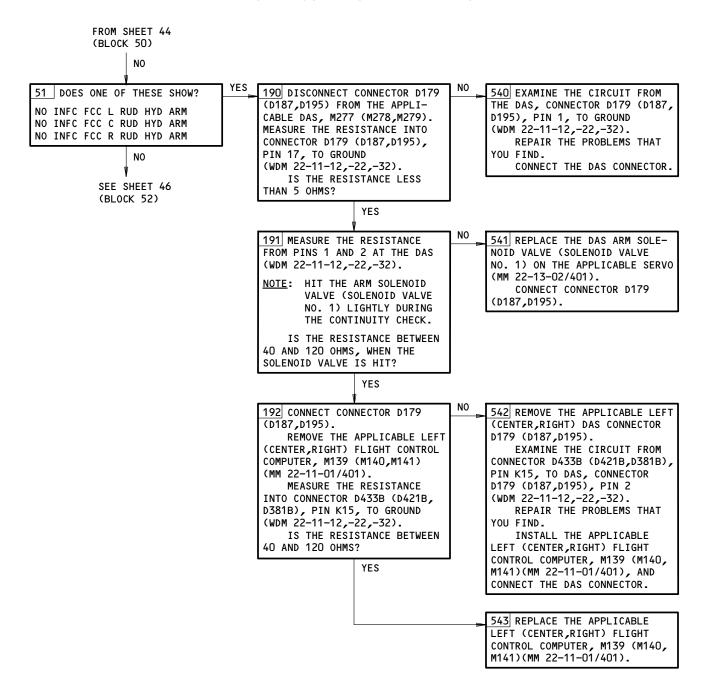




NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 43)



NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 44)

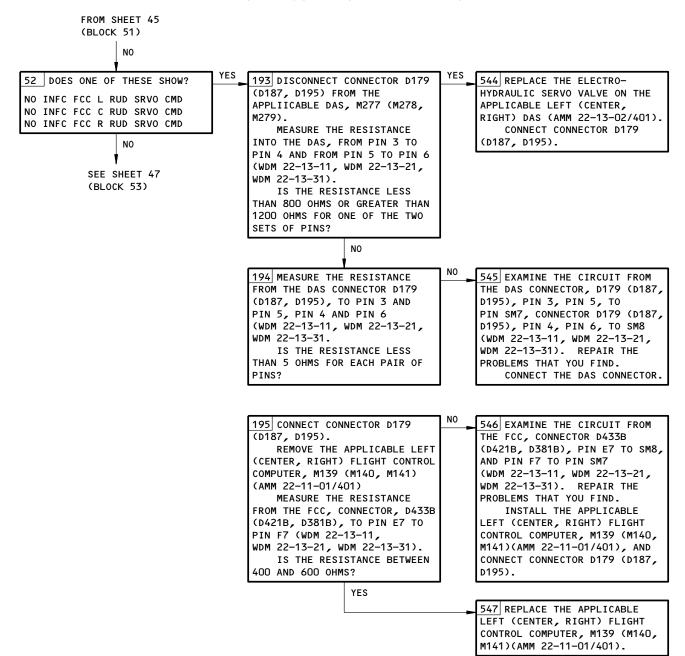


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 45)

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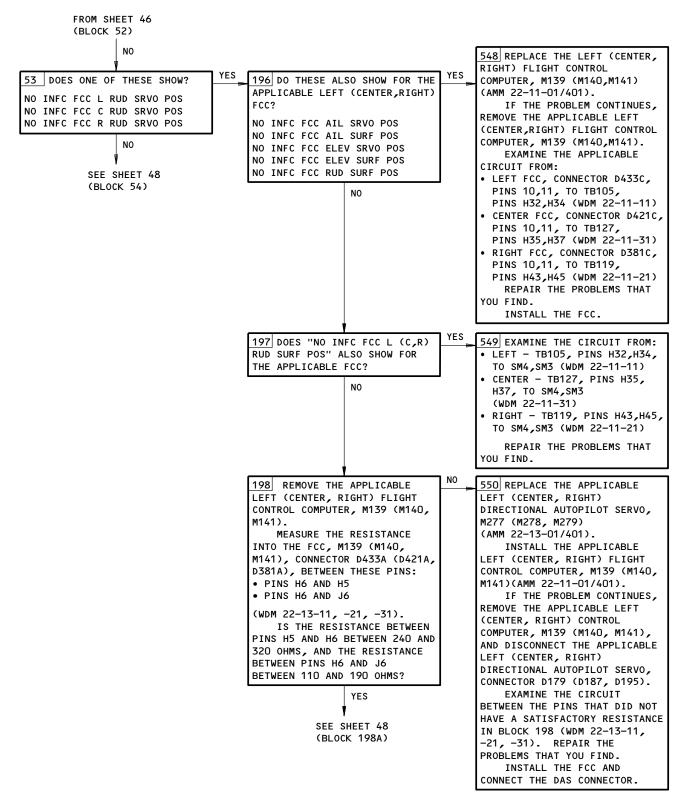


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 46)

ALL 22-00-05

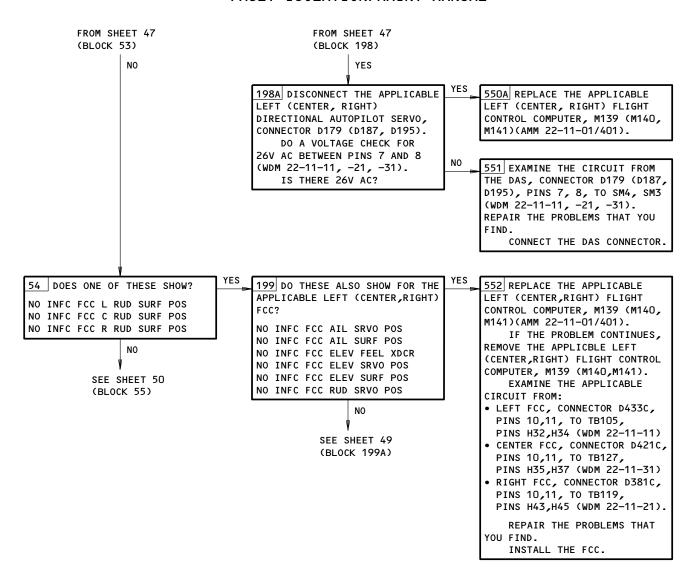
ALL 04 Page 146
Apr 22/01

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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 47)

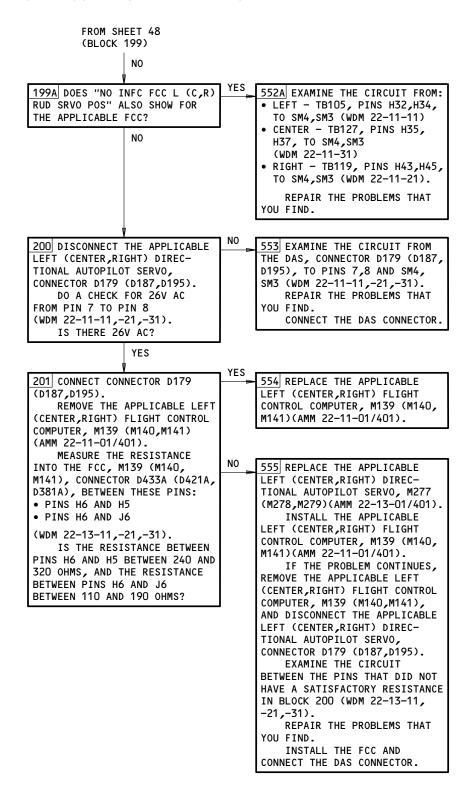
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 48)

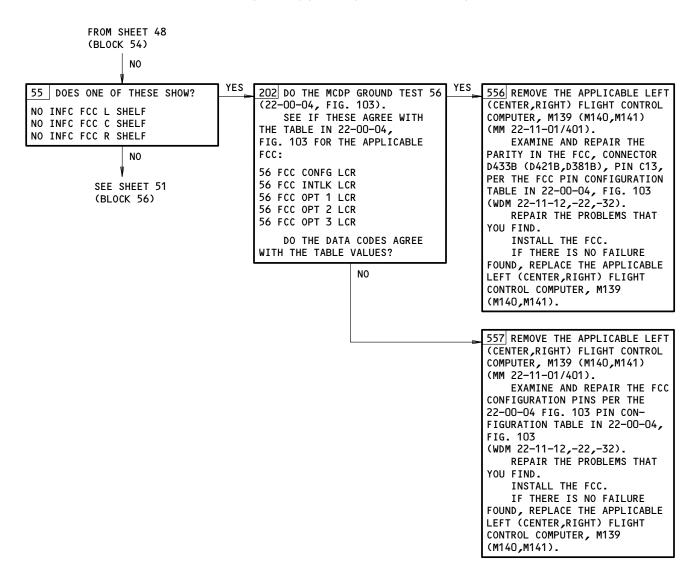
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22-00-05



NO INFC FCC Fault Isolation Procedures
Figure 101 (Sheet 49)

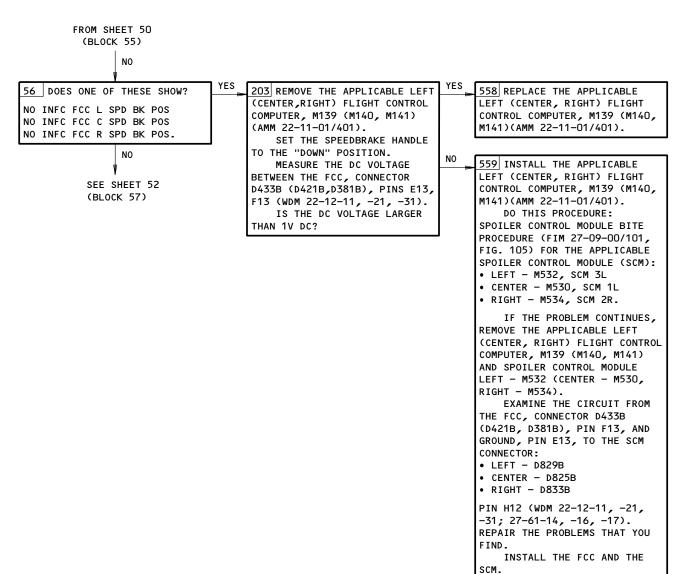
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ALL 06 Page 149
Aug 10/95



NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 50)

EFFECTIVITY-ALL

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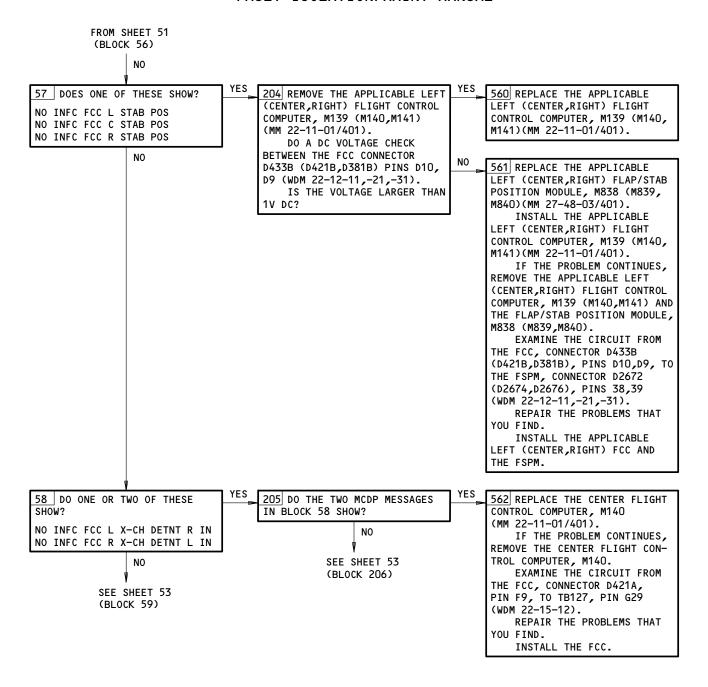
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 51)

EFFECTIVITY-ALL

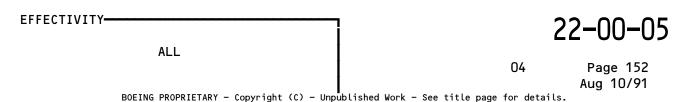
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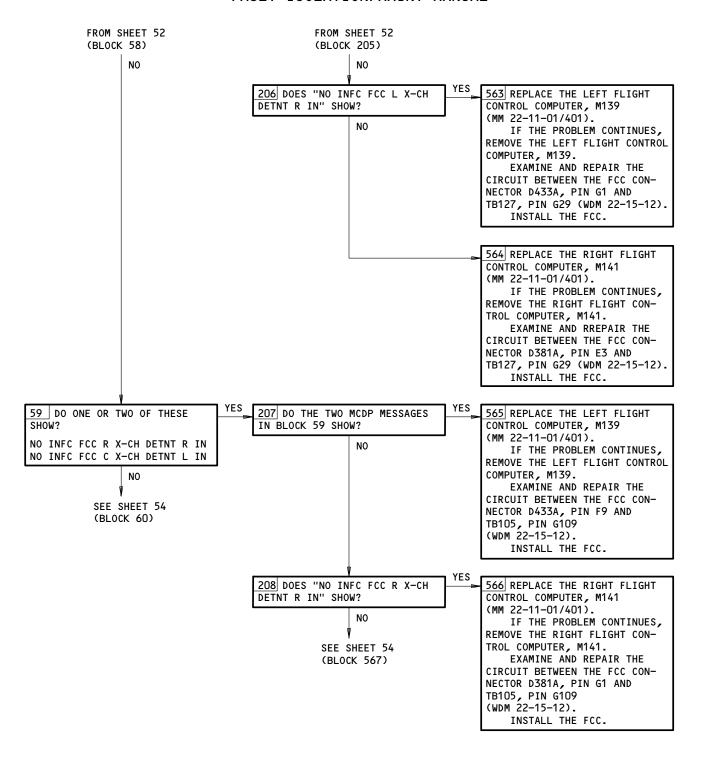
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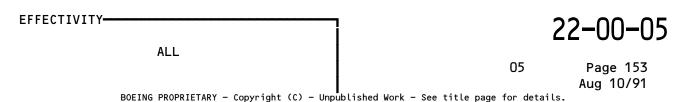


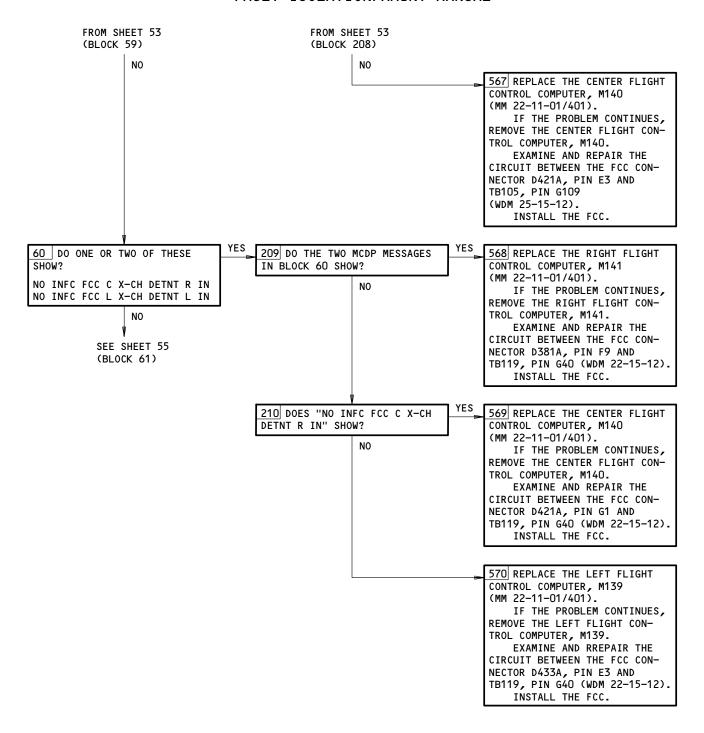
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 52)



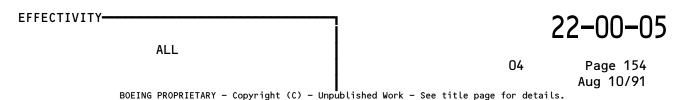


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 53)

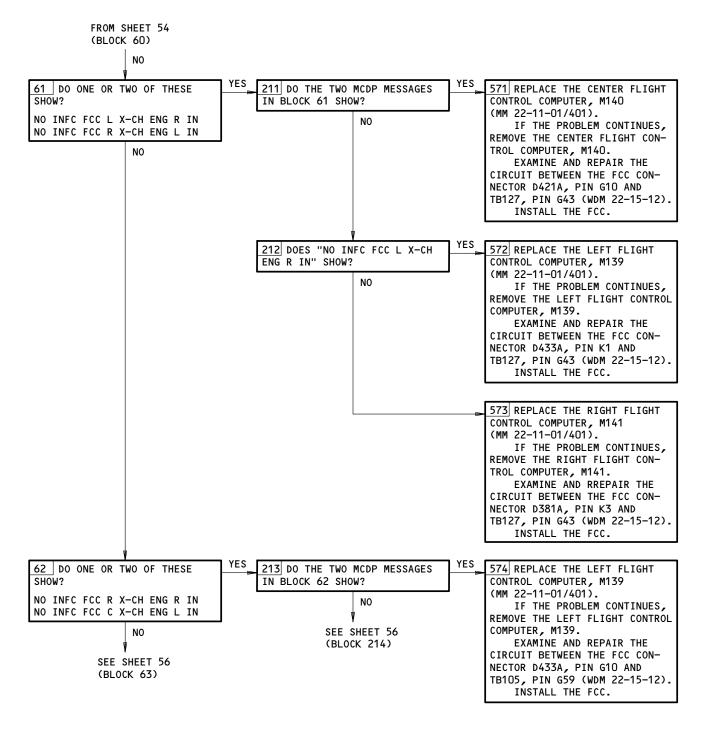




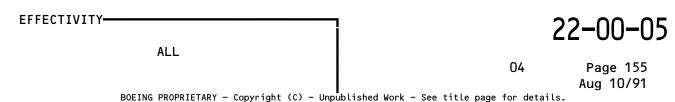
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 54)

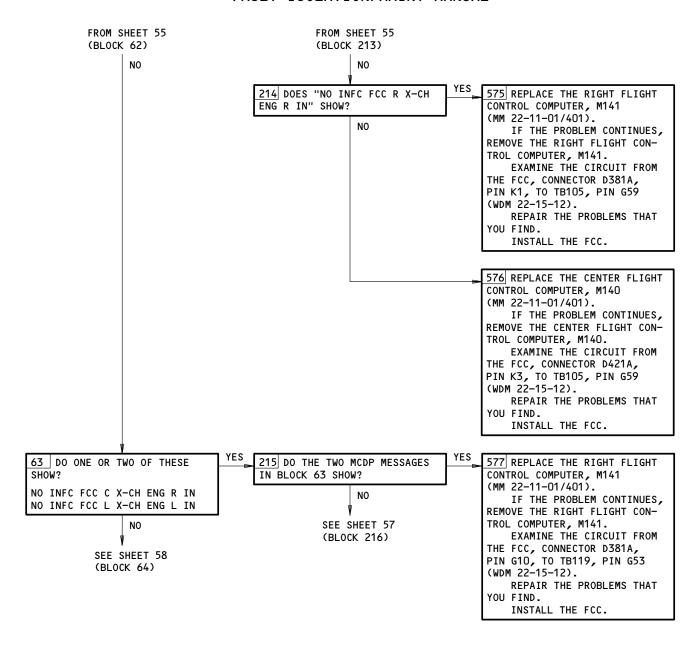






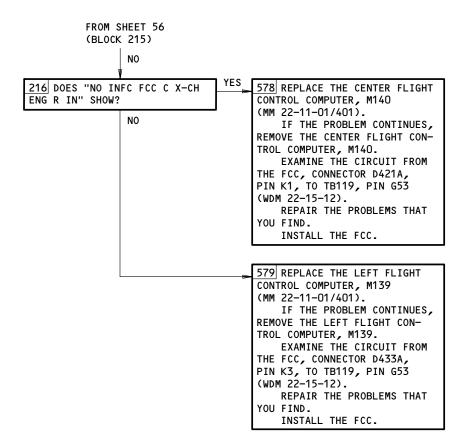
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 55)





NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 56)



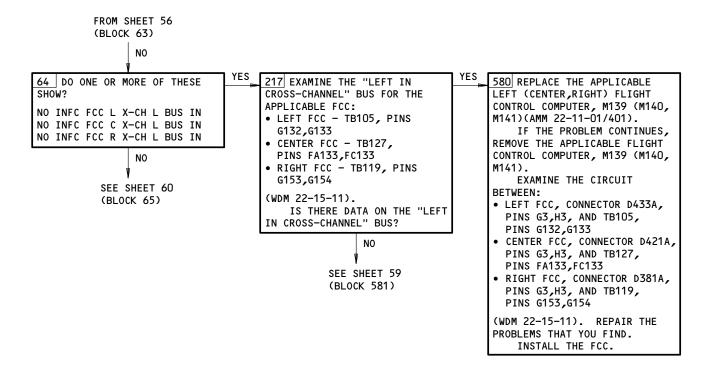


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 57)

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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 58)

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FROM SHEET 58 (BLOCK 217)

NO

581 REPLACE THE APPLICABLE
LEFT (CENTER, RIGHT) FLIGHT
CONTROL COMPUTER, M139 (M140,
M141)(MM 22-11-01/401) AS
FOLLOWS:

"NO INFC FCC L X-CH L BUS
IN" - REPLACE THE RIGHT FCC
"NO INFC FCC C X-CH L BUS
IN" - REPLACE THE LEFT FCC
"NO INFC FCC R X-CH L BUS
IN" - REPLACE THE CENTER FCC.

IF THE PROBLEM CONTINUES, REMOVE THE APPLICABLE LEFT (CENTER,RIGHT) FLIGHT CONTROL COMPUTERS, M139 (M140,M141) AS FOLLOWS:

"NO INFC FCC L X-CH L BUS
IN" - REMOVE THE RIGHT FCC
"NO INFC FCC C X-CH L BUS
IN" - REMOVE THE LEFT FCC
"NO INFC FCC R X-CH L BUS
IN" - REMOVE THE CENTER FCC.

EXAMINE THE CIRCUIT FROM:

- RIGHT FCC, CONNECTOR D381B, PINS F1,F2, TO TB105, PINS G132,G133 (WDM 21-15-11)
- LEFT FCC, CONNECTOR D433B, PINS F1,F2, TO TB127, PINS FA133,FC133 (WDM 21-15-11)
- CENTER FCC, CONNECTOR D421B, PINS F1,F2, TO TB119, PINS G153,G154 (WDM 21-15-11).

REPAIR THE PROBLEMS THAT YOU FIND.
INSTALL THE FCCs.

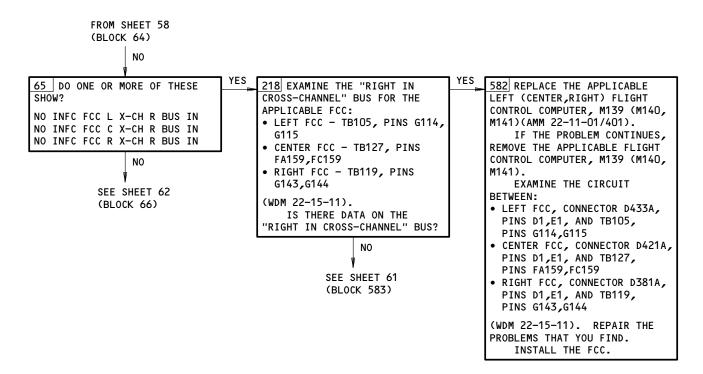
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 59)

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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 60)

22-00-05

FROM SHEET 60 (BLOCK 218)

NO

583 REPLACE THE APPLICABLE
LEFT (CENTER, RIGHT) FLIGHT
CONTROL COMPUTER, M139 (M140,
M141)(MM 22-11-01/401) AS
FOLLOWS:

"NO INFC FCC L X-CH L BUS
IN" - REPLACE THE CENTER FCC
"NO INFC FCC C X-CH L BUS
IN" - REPLACE THE RIGHT FCC
"NO INFC FCC R X-CH L BUS
IN" - REPLACE THE LEFT FCC.

IF THE PROBLEM CONTINUES, REMOVE THE APPLICABLE LEFT (CENTER,RIGHT) FLIGHT CONTROL COMPUTERS, M139 (M140,M141) AS FOLLOWS:

"NO INFC FCC L X-CH L BUS
IN" - REMOVE THE CENTER FCC
"NO INFC FCC C X-CH L BUS
IN" - REMOVE THE RIGHT FCC
"NO INFC FCC R X-CH L BUS
IN" - REMOVE THE LEFT FCC.

EXAMINE THE CIRCUIT FROM:

- RIGHT FCC, CONNECTOR D381B, PINS E3,F3, TO TB127, PINS FA159,FC159 (WDM 21-15-11)
- LEFT FCC, CONNECTOR D433B, PINS E3,F3, TO TB119, PINS G143,G144 (WDM 21-15-11)
- CENTER FCC, CONNECTOR D421B, PINS E3,F3, TO TB105, PINS G114,G115 (WDM 21-15-11).

REPAIR THE PROBLEMS THAT YOU FIND.
INSTALL THE FCCs.

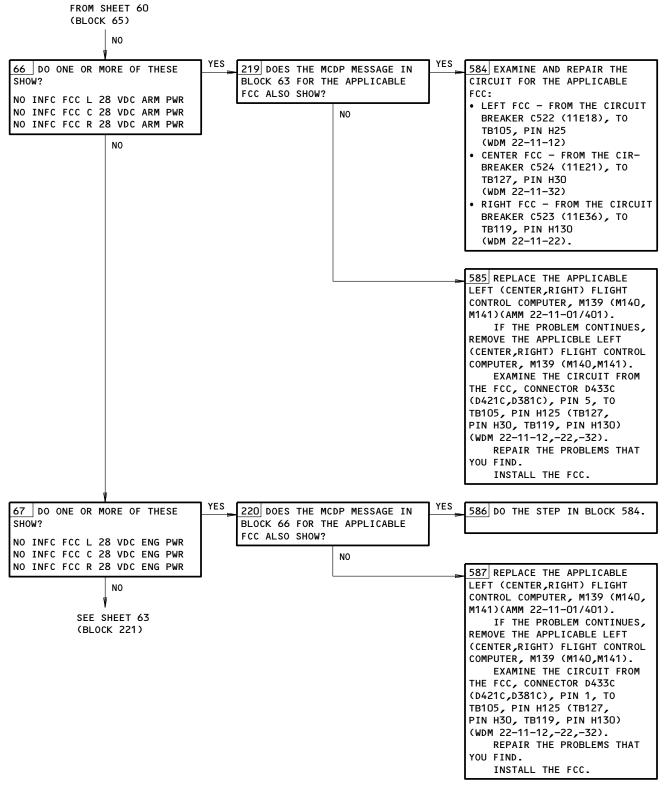
NO INFC FCC Fault Isolation Procedures
Figure 101 (Sheet 61)

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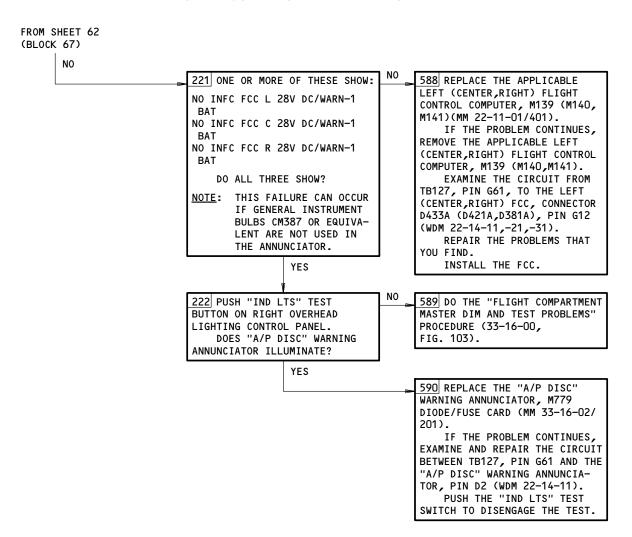
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 62)



NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 63)

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NOTE: TABLE 101 GIVES THE SHEET-BLOCK REFERENCES TO

WHERE THE FAULT ISOLATION AND CORRECTION PROCE-DURE FOR EACH FCC INTERFACE FAULT CAN BE FOUND. THE PREREQUISITES FOR EACH INTERFACE FAULT IS THE SAME AS THE GROUND TEST WHICH SHOWED THE

"NO INFC TMC" FAULT ISOLATION PROCEDURES

FAILURE.

TMC INFC CORRECTION PROCEDURE REFERENCE TABLE 101			
TMC INFC MESSAGE 2	CORRECTION PROCEDURE SHT - BLOCK	TMC INFC MESSAGE 2	CORRECTION PROCEDURE SHT - BLOCK
NO INFC TMC ADC L BUS IN 1 NO INFC TMC ADC R BUS IN 1 NO INFC TMC ADP NO INFC TMC A/T DISC SW NO INFC TMC A/T WARN - 1 BAT NO INFC TMC A/T WARN - 2 BAT NO INFC TMC A/T WARN - 1 NRM NO INFC TMC A/T WARN - 2 NRM NO INFC TMC COWL AI L NO INFC TMC COWL AI R NO INFC TMC ECS L NO INFC TMC ECS L NO INFC TMC ECS L H/L NO INFC TMC ECS L H/L NO INFC TMC ECS R H/L NO INFC TMC ECC R PRIM NO INFC TMC ECC L PRIM NO INFC TMC ECC L SEC NO INFC TMC ECC R SEC NO INFC TMC ECC R SEC NO INFC TMC ECC R SEC	2 - 1 3 - 2 4 - 3 5 - 4 6 - 5 7 - 6 7 - 7 7 - 8 8 - 9 8 - 9 9 - 10 9 - 11 10 - 12 11 - 13 10 - 12 11 - 13 10 - 12 11 - 13	NO INFC TMC FLAP POS 1 NO INFC TMC GA SW 1 NO INFC TMC IRU L BUS IN 1 NO INFC TMC IRU R BUS IN 1 NO INFC TMC ISLN VLV L NO INFC TMC ISLN VLV R NO INFC TMC MCP BUS IN 1 NO INFC TMC SHELF NO INFC TMC SLAT SW NO INFC TMC TACH L NO INFC TMC TMSP NO INFC TMC WG AI	13 - 15 13 - 16 14 - 17 14 - 18 14 - 18 15 - 19 16 - 20 17 - 21 18 - 22 18 - 23 19 - 143

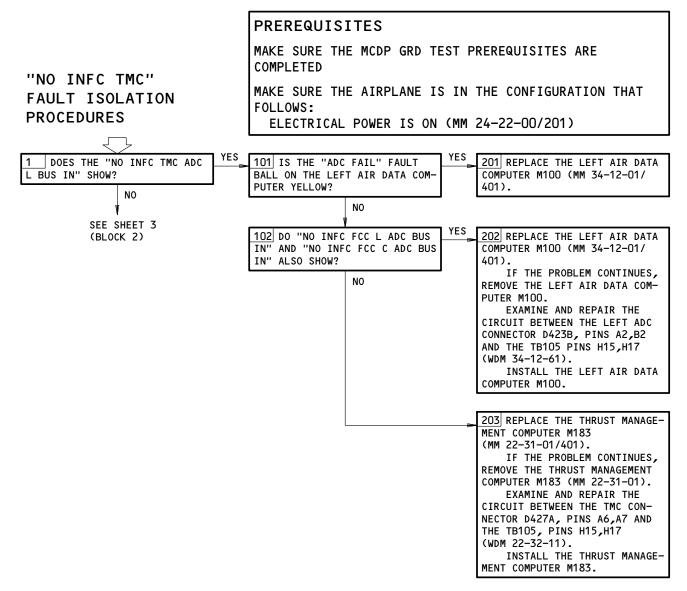
BEFORE THE START OF THE INTERFACE FAULT ISOLATION PROCEDURES, DO THE MCDP GROUND TEST 30-CURRENT FAULT REPORT (22-00-03, FIG. 117, BLOCK 1) AND WRITE ALL THE FCC AND TMC INTERFACE FAULTS.

NOTE: YOU MUST GO OUT OF THE MCDP GRD TEST MODE AND THEN GO BACK INTO IT AFTER FAILURES SHOWN DURING A GROUND TEST ARE CORRECTED. PUSH THE "FLT FAULTS MODE" SWITCH TO GO OUT OF GRD TEST MODE. PUSH THE "GRD TEST MODE" SWITCH TO GO BACK INTO THE GRD TEST MODE. IF THIS IS NOT DONE, THE FAILURE MESSAGE WILL SHOW ALTHOUGH THE FAILURE WAS CORRECTED.

NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 1)

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NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 2)

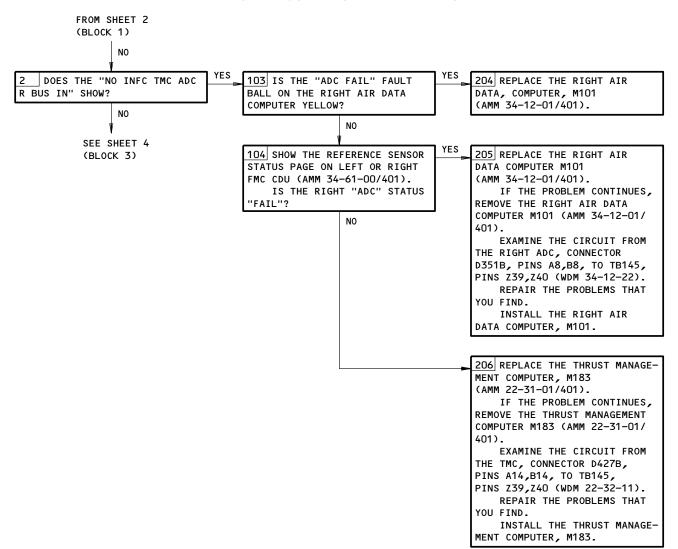
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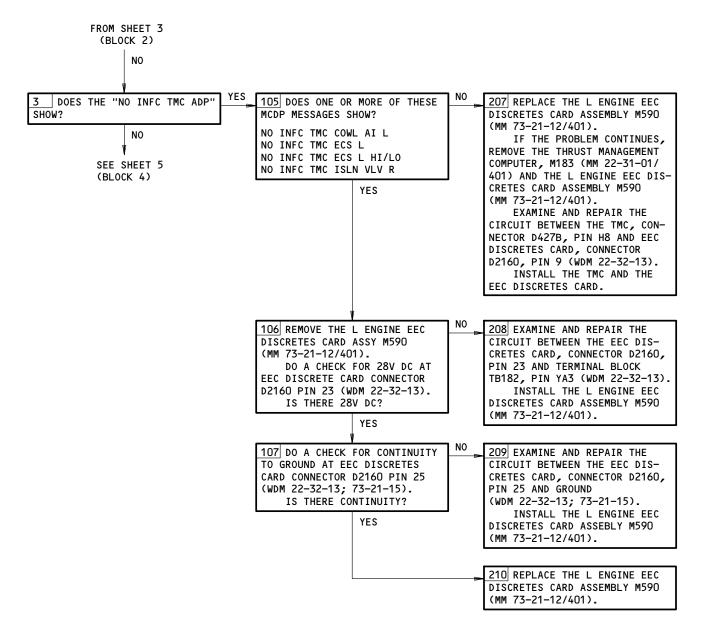


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 3)

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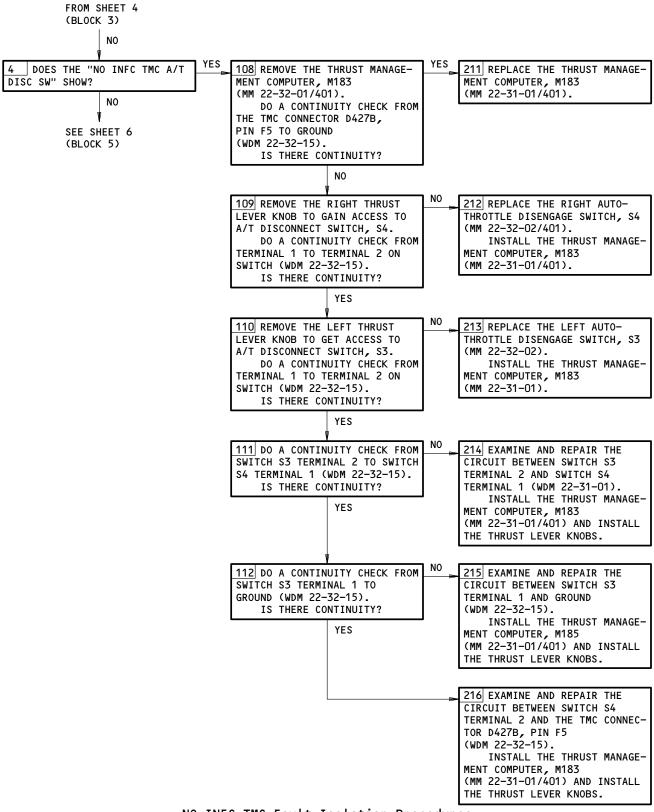
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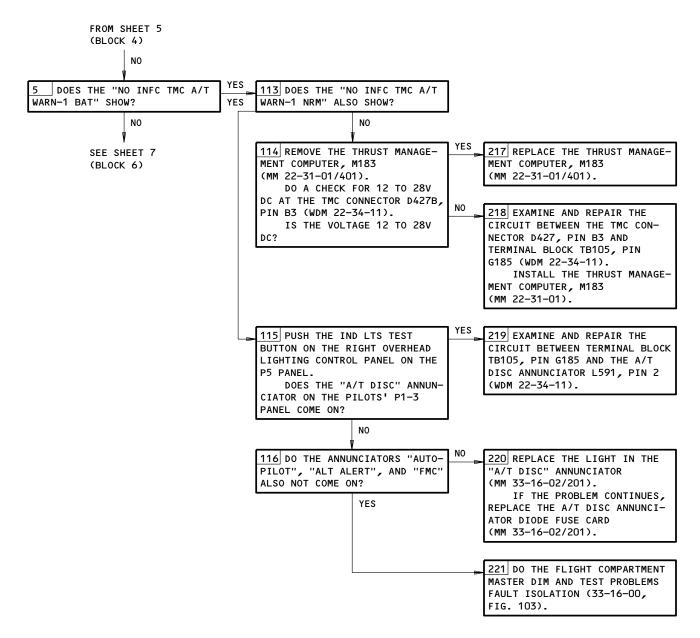
NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 4)





NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 5)



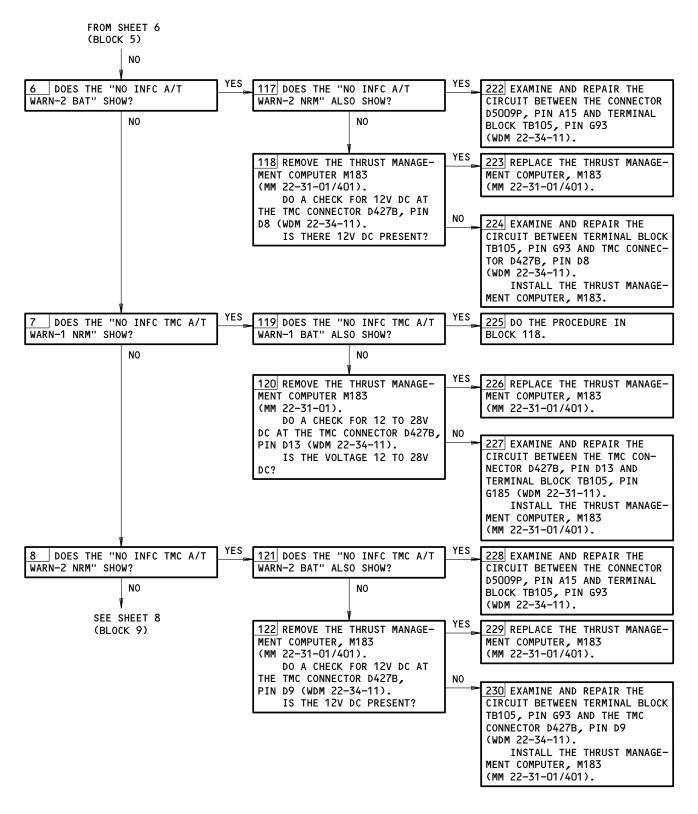


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 6)

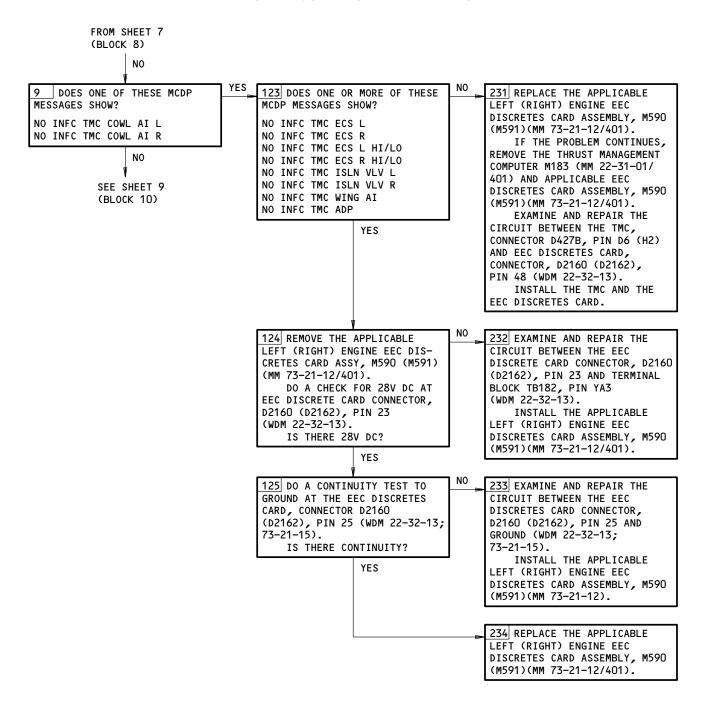
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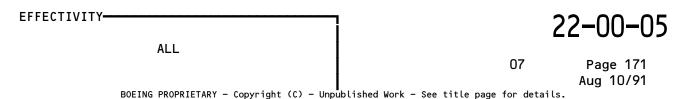
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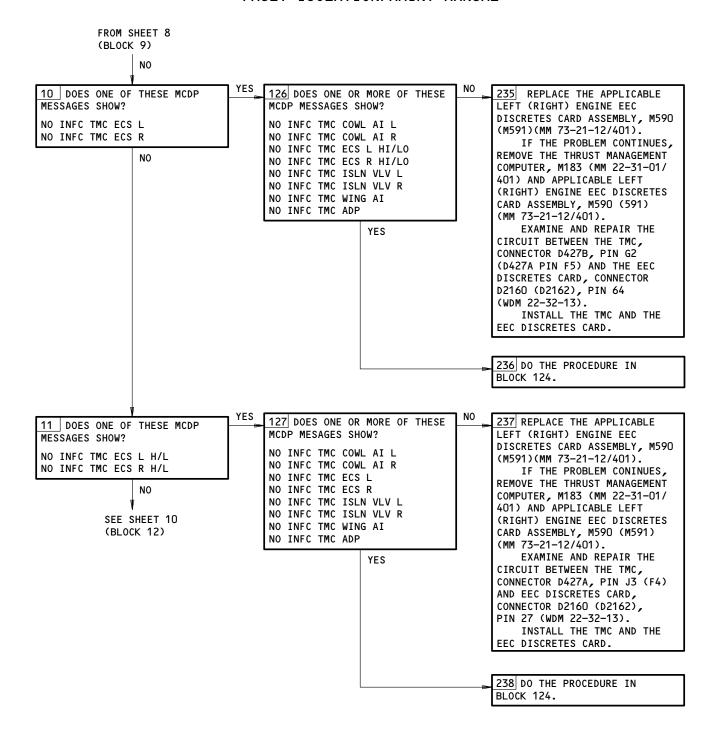


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 7)

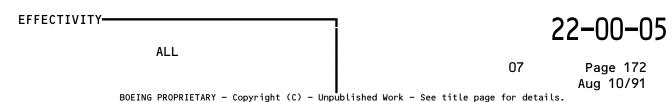


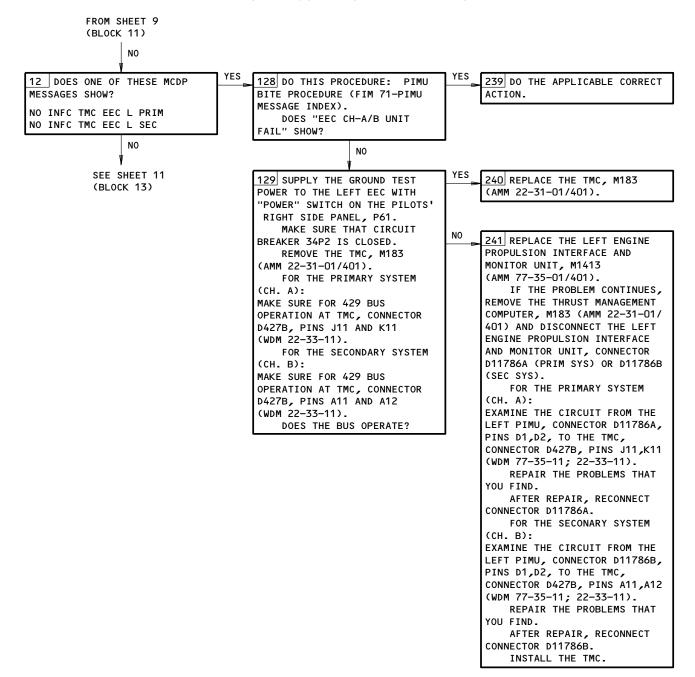
NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 8)





NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 9)



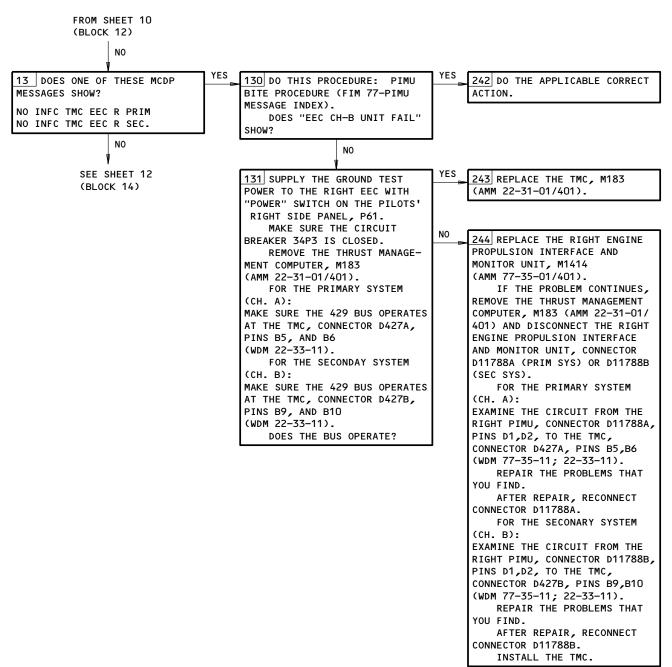


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 10)

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NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 11)

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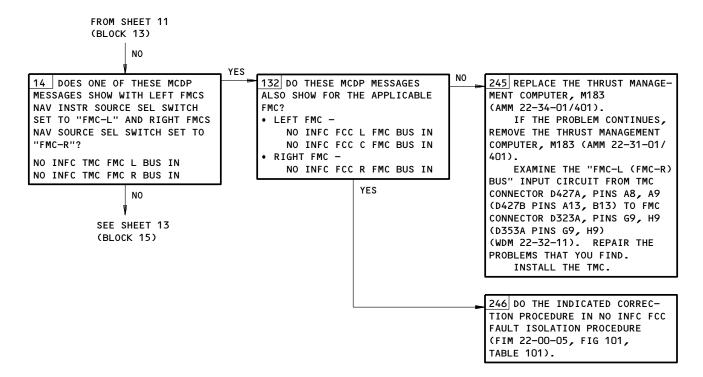
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NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 12)

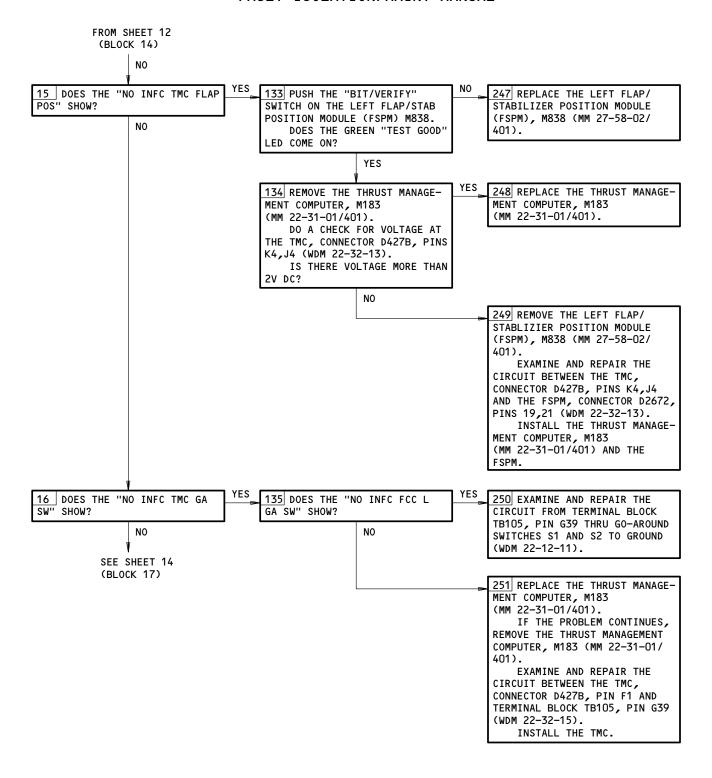
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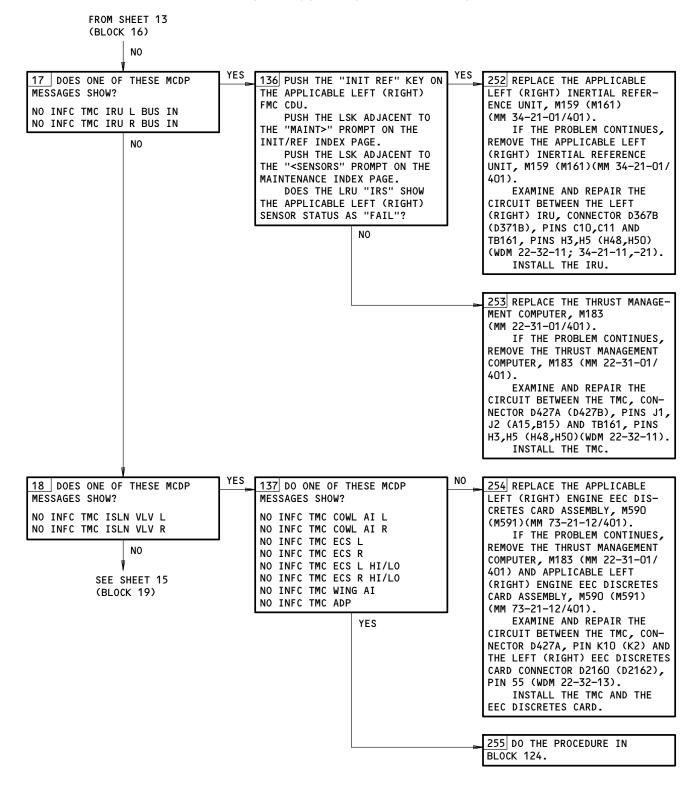
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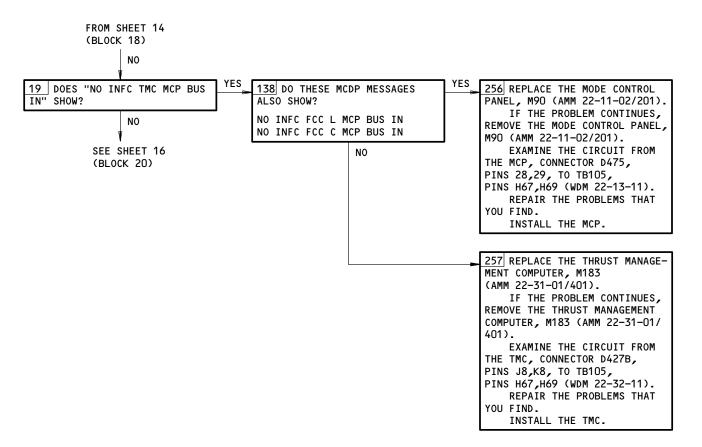
NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 13)





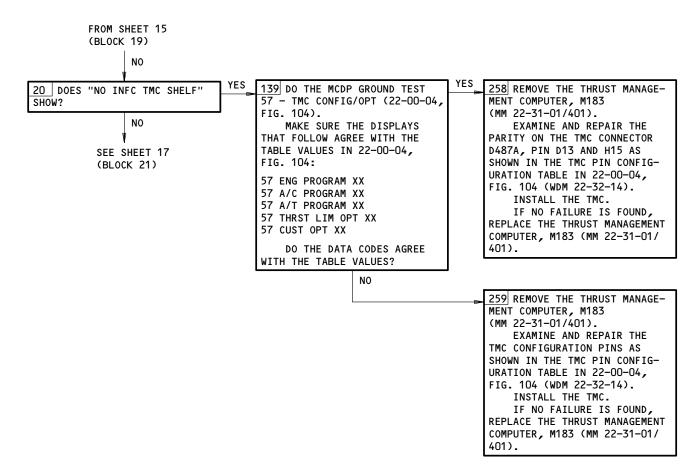
NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 14)

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NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 15)

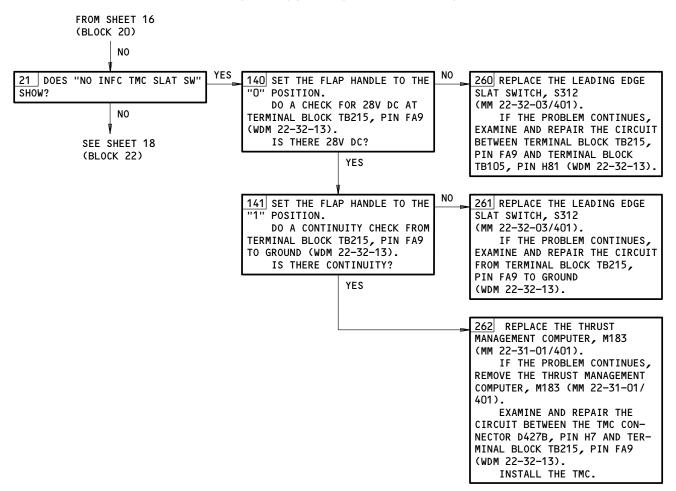
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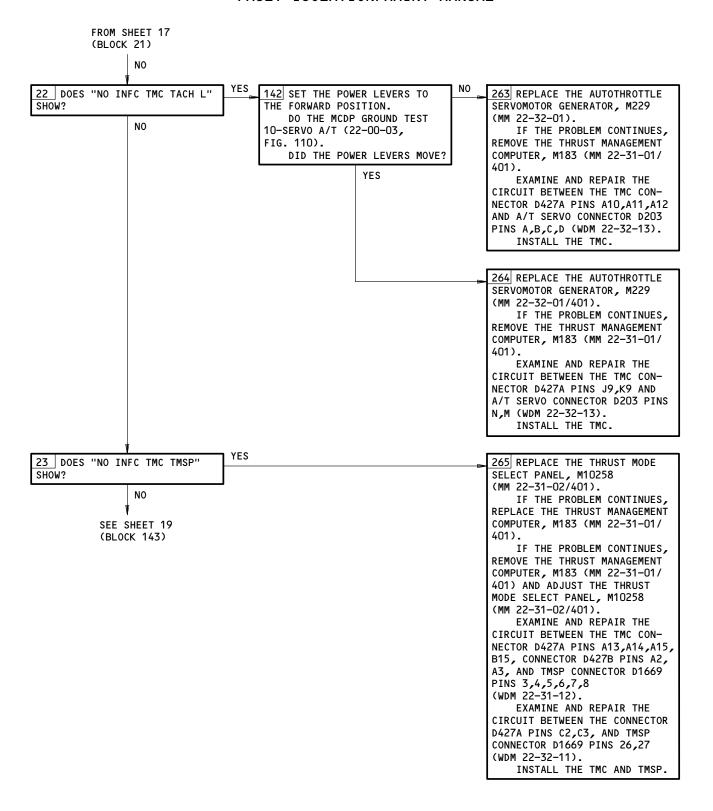
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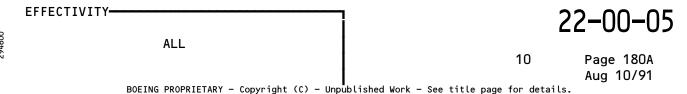
1 Page 179



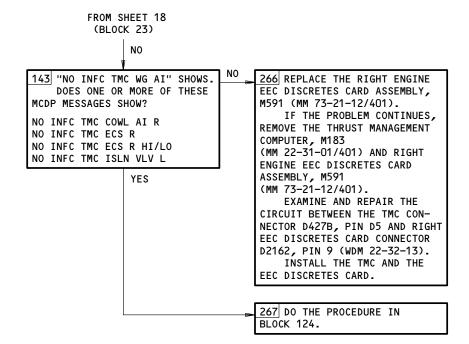
NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 17)



NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 18)







NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 19)

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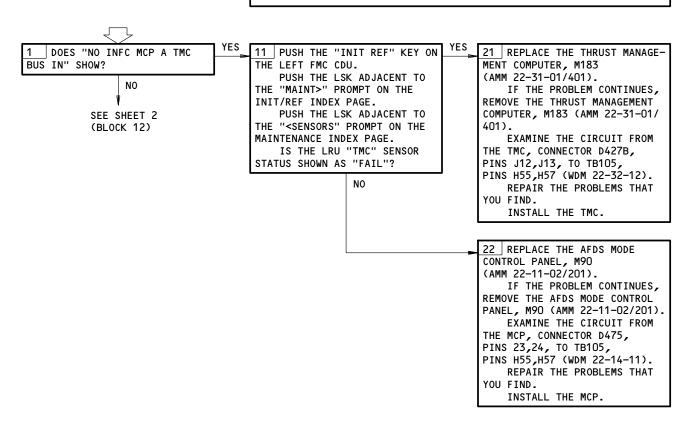
PREREQUISITES

MAKE SURE THE MCDP GRD TEST PREREQUISITES ARE COMPLETED.

MAKE SURE THESE SYSTEMS WILL OPERATE: FLIGHT MANAGEMENT SYSTEM (AMM 34-61-00/501)

"NO INFC MCP" FAULT ISOLATION PROCEDURES

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)



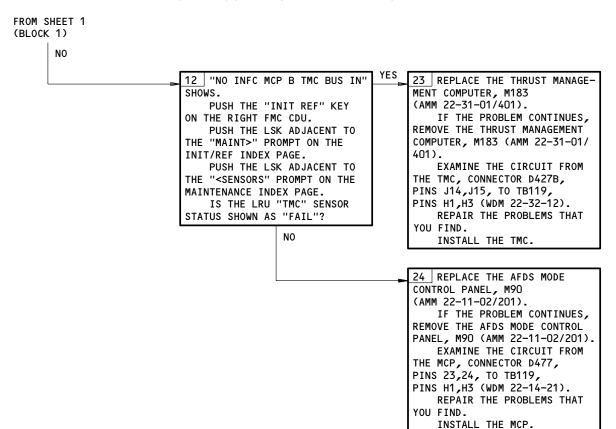
NOTE: YOU MUST GO OUT OF THE MCDP GRD TEST MODE AND THEN GO BACK INTO IT AFTER FAILURES SHOWN DURING A GROUND TEST ARE CORRECTED. PUSH THE "FLT FAULTS MODE" SWITCH TO GO OUT OF GRD TEST MODE. PUSH THE "GRD TEST MODE" SWITCH TO GO BACK INTO THE GRD TEST MODE. IF THIS IS NOT DONE, THE FAILURE MESSAGE WILL SHOW ALTHOUGH THE FAILURE WAS CORRECTED.

NO INFC MCP Fault Isolation Procedures Figure 103 (Sheet 1)

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NO INFC MCP Fault Isolation Procedures Figure 103 (Sheet 2)

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AUTOPILOT/FLIGHT DIRECTOR POWER

COMPONENT 102 SH	2 QTY	ACCESS/AREA	REFERENCE
ACTUATOR - (REF 27-11-00, FIG. 101) C LATERAL CONTROL, M275 L LATERAL CONTROL, M274 R LATERAL CONTROL, M276 ANNUNCIATOR - (REF 22-14-00, FIG. 101) AUTOLAND STATUS, CAPT, N70 AUTOLAND STATUS, F/O, N71 CIRCUIT BREAKERS AUTOFLIGHT WARN, C521 FLT CONT CMPTR PWR C, C515 FLT CONT CMPTR PWR L, C513 FLT CONT CMPTR PWR RIGHT, C514 FLT CONT CMPTR PWR RIGHT, C524 FLT CONT CMPTR SERVO C, C524 FLT CONT CMPTR SERVO L, C522 FLT CONT CMPTR SERVO RIGHT, C523 MODE CONT PNL L, C516 MODE CONT PNL R, C517 COMPUTER - (REF 22-31-00, FIG. 101) THRUST MANAGEMENT, M183 COMPUTER - (REF 31-41-00, FIG. 101) L EICAS, M10181 R EICAS, M10181 R EICAS, M10182 COMPUTER - C FLIGHT CONTROL, M140 COMPUTER - R FLIGHT CONTROL, M141 COMPUTER - (REF 34-61-00, FIG. 101) L FLIGHT MANAGEMENT, M135 INDICATOR - (REF 29-31-00, FIG. 101) HYDRAULIC SYSTEM CONTROL PANEL, M10 LIGHT - (REF 22-14-00, FIG. 101) AUTOPILOT CAUTION, L19 A/P DISC, LD/M779 MODULE - (REF 27-58-00, FIG. 101) C FLAP/STABILIZER POSITION, M839 L FLAP/STABILIZER POSITION, M839 L FLAP/STABILIZER POSITION, M840 MODULE - (REF 27-09-00, FIG. 101) 1L SPOILER CONTROL, M530 2R SPOILER CONTROL, M534 3L SPOILER CONTROL, M532 MODULE - (REF 34-16-00, FIG. 101)	1 1 1 1 1 1 1	FLT COMPT, P11 11A17 11E20 11E17 11E35 11E21 11E18 11E36 11E16 11E34 119AL, MAIN EQUIP CTR, E1-4 119AL, MAIN EQUIP CTR, E1-3 119AL, MAIN EQUIP CTR, E1-5	* * * * * * * * * 22-11-01 22-11-01 22-11-01

^{*} SEE THE WDM EQUIPMENT LIST

Autopilot/Flight Director Power - Component Index Figure 101 (Sheet 1)

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COMPONENT	FIG. 102	QTY	ACCESS/AREA	REFERENCE
	SHT			
PANEL - AFCS MODE CONTROL, M90 PANEL - (REF 22-41-00, FIG. 101) MAINTENANCE CONTROL DISPLAY, M168 RECEIVER - (REF 34-31-00, FIG. 101) C ILS, M157 L ILS, M156 R ILS, M158 RELAY - (REF 31-01-06, FIG. 101) ISOLATION REQUEST, K122 RELAY - (REF 31-01-36, FIG. 101) AIR/GROUND, SYS NO. 1, K142 RELAY - (REF 31-01-37, FIG. 101) AIR/GROUND, SYS NO. 2, K201 SERVO - (REF 22-12-00, FIG. 101) C ELEVATOR AUTOPILOT, M272 L FLEVATOR AUTOPILOT, M271	SHT	1	FLT COMPT, P55	22–11–02
L ELEVATOR AUTOPILOT, M271 R ELEVATOR AUTOPILOT, M273 SERVO - (REF 22-13-00, FIG. 101) C DIRECTIONAL AUTOPILOT, M278 L DIRECTIONAL AUTOPILOT, M277 R DIRECTIONAL AUTOPILOT, M279 SWITCH - AFCS GO-AROUND, S1,S2,S7,S8,S9,S10 SWITCH - AUTOPILOT DISENGAGE, CAPT, S67 SWITCH - AUTOPILOT DISENGAGE, F/O, S6 SWITCH - (REF 22-32-00, FIG. 101) C LEADING EDGE SLAT, S523 L LEADING EDGE SLAT, S523 L LEADING EDGE SLAT, S521 R LEADING EDGE SLAT, S522 SWITCH - (REF 34-22-00, FIG. 101) L INSTRUMENT SOURCE SELECT, CAPT, S1 R INSTRUMENT SOURCE SELECT, F/O, S9 SYMBOL GENERATOR - (REF 34-22-00, FIG. 101) C EFIS, M149 L EFIS, M148 R EFIS, M150 TRANSMITTER/RECEIVER - (REF 34-33-01, FIG. 101) C RADIO ALTIMETER, M204 L RADIO ALTIMETER, M204 L RADIO ALTIMETER, M203 UNIT - (REF 31-01-06, FIG. 101) INSTRUMENT BUS VOLTAGE SENSE, M1079 UNIT - (REF 31-51-00, FIG. 101) WARNING ELECTRONICS, P51 UNIT - (REF 34-21-00, FIG. 101) C INERTIAL REFERENCE, M160 L INERTIAL REFERENCE, M159		6 1 1	FLT COMPT, P10 FLT COMPT, CONTROL WHEEL, CAPT FLT COMPT, CONTROL WHEEL, F/O	22-11-04 22-11-03 22-11-03

Autopilot/Flight Director Power - Component Index Figure 101 (Sheet 2)

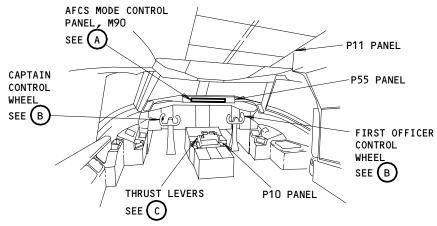
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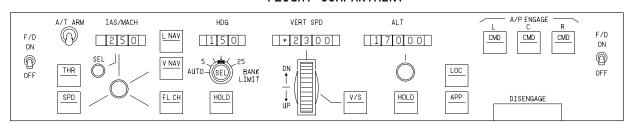
10 Page 102 Aug 10/90



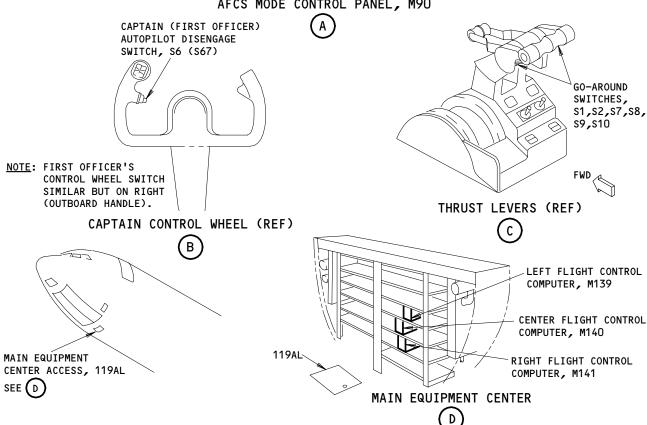
FAULT ISOLATION/MAINT MANUAL



FLIGHT COMPARTMENT



AFCS MODE CONTROL PANEL, M90



Autopilot/Flight Director Power - Component Location Figure 102

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The Autopilot (Flight Control) Flight Faults BITE Procedure is part of Autoflight BITE. Refer to the Autoflight BITE Fault Isolation, FIM 22-00-02/101.

Autopilot (Flight Control) Flight Faults BITE Procedure Figure 103

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AUTOPILOT/FLIGHT DIRECTOR PITCH CHANNEL

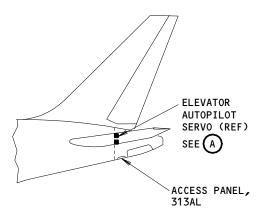
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
FILTER - EAS SERVO -		1	313AL, EA ELEVATOR AUTOPILOT SERVO	22-12-02
C ELEVATOR AUTOPILOT, M272	ll	1	313AL, SECT 48	22-12-01
L ELEVATOR AUTOPILOT, M271		i	313AL, SECT 48	22-12-01
R ELEVATOR AUTOPILOT, M273		1	313AL, SECT 48	22-12-01
ELECTROHYDRAULIC SERVO		1	313AL, EA ELEVATOR AUTOPILOT SERVO	22-12-02
ELECTROHYDRAULIC SOLENOID		2	313AL, EA ELEVATOR AUTOPILOT SERVO	22-12-02

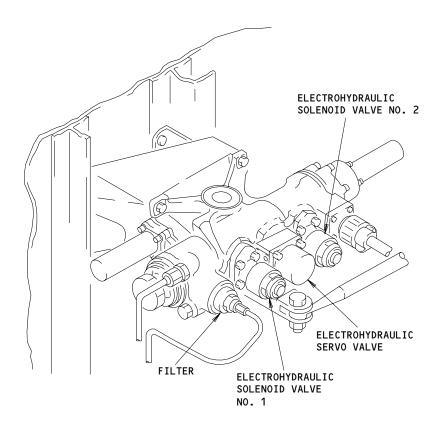
Autopilot/Flight Director Pitch Channel - Component Index Figure 101

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LEFT, CENTER OR RIGHT ELEVATOR AUTOPILOT SERVO, M271, M272 OR M273



Autopilot/Flight Director Pitch Channel - Component Location Figure 102

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AUTOPILOT/FLIGHT DIRECTOR ROLL AND YAW CHANNEL

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR - (FIM 27-11-00/101) LEFT SIDE LOWER (R AUTOPILOT) LATERAL CENTRAL CONTROL, M276 LEFT SIDE UPPER (L AUTOPILOT) LATERAL CENTRAL CONTROL, M274 RIGHT SIDE (C AUTOPILOT) LATERAL CENTRAL				
CONTROL, M275 FILTER -		1	VERT STAB, 324BL EA DIRECTIONAL AUTOPILOT SERVO	22-13-02
SERVO - C DIRECTIONAL AUTOPILOT, M278		1	VERT STAB, 324BL	22-13-01
SERVO - L DIRECTIONAL AUTOPILOT, M277		1	VERT STAB, 324BL	22-13-01
SERVO - R DIRECTIONAL AUTOPILOT, M279 VALVE - LATERAL CENTRAL CONTROL ACTUATOR		1	VERT STAB, 324BL	22-13-01
ELECTRO-HYDRAULIC SERVO		1	L/R WHEEL WELL EA LATERAL CENTRAL CONTROL ACTUATOR	22-13-03
ELECTRO-HYDRAULIC SOLENOID		2	L/R WHEEL WELL EA LATERAL CENTRAL CONTROL ACTUATOR	22-13-03
VALVE - DIRECTIONAL AUTOPILOT SERVO				
ELECTRO-HYDRAULIC SERVO		1	VERT STAB, 324BL EA DIRECTIONAL AUTOPILOT SERVO	22-13-02
ELECTRO-HYDRAULIC SOLENOID		2	VERT STAB, 324BL EA DIRECTIONAL AUTOPILOT SERVO	

Autopilot/Flight Director Roll and Yaw Channel - Component Index Figure 101

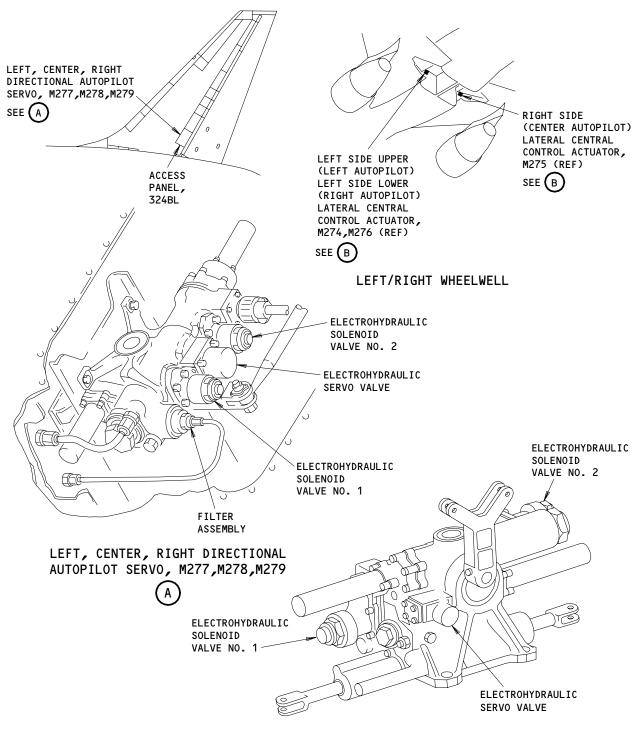
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FAULT ISOLATION/MAINT MANUAL



CONTROL ACTUATOR, M274,M275,M276

Autopilot/Flight Director Roll and Yaw Channel - Component Location Figure 102

ALL

22-13-00

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AUTOPILOT/FLIGHT DIRECTOR WARNING AND ANNUNCIATION

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ANNUNCIATOR - CAPT AUTOLAND STATUS, N70 ANNUNCIATOR - F/O AUTOLAND STATUS, N71 LIGHT - A/P DISC	 	1 1 1	FLIGHT COMPARTMENT, P1 FLIGHT COMPARTMENT, P3 FLIGHT COMPARTMENT, P1, DISCRETE WARNING DISPLAY MODULE, M779 (REF)	22-14-01 22-14-01 *
LIGHT - AUTOPILOT CAUTION, L19 MODULE - (FIM 33-16-00/101) DISCRETE WARNING DISPLAY		1	FLIGHT COMPARTMENT, P1	*

^{*} SEE THE WDM EQUIPMENT LIST

Autopilot/Flight Director Warning and Annunciation - Component Index Figure 101

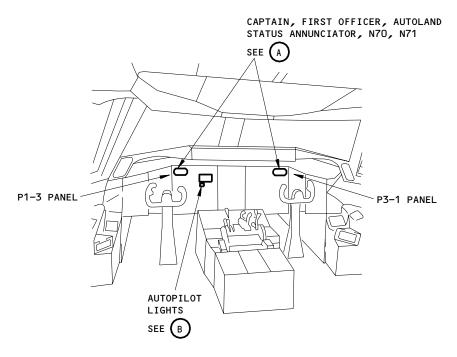
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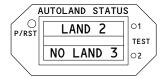
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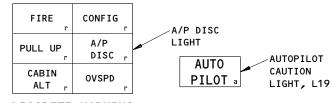


FLIGHT COMPARTMENT



CAPTAIN'S, FIRST OFFICER'S, AUTOLAND STATUS ANNUNCIATOR, N70, N71





DISCRETE WARNING DISPLAY MODULE, M779 (REF)

AUTOPILOT LIGHTS



Autopilot/Flight Director Warning and Annunciation - Component Location Figure 102

EFFECTIVITY-ALL

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YAW DAMPER SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACCELEROMETER - MODAL SUPPRESSION L, M1458	2	1	822 AFT CARGO DOOR, AFT CARGO	*
ACCELEROMETER - MODAL SUPPRESSION R, M1459	2	1	822 AFT CARGO DOOR, AFT CARGO	*
CIDCUIT PREAVER -	₁		COMPT CEILING	
CIRCUIT BREAKER -	'	1	FLT COMPT, P11 11C6	
FLT CONT ELEC 1L AC, C1538 FLT CONT ELEC 1L DC, C1534			1107	
FLT CONT ELEC 1E DC, C1334 FLT CONT ELEC 1R AC, C1536		1	11G17	
FLT CONT ELEC 1R AC, C1530 FLT CONT ELEC 1R DC, C1531		1	11G17	
FLT CONT ELEC 1K DC, C1537		1	1108	
FLT CONT ELEC 2L DC, C1533		1	1109	
FLT CONT ELEC 2R AC, C1535		lil	11G26	
FLT CONT ELEC 2R DC, C1532		i	11G27	
YAW DAMPER L, C1560		i	11A18	*
YAW DAMPER R, C1561		i	11F34	*
COMPUTER - (FIM 31-41-00/101)		•		
EICAS L, M10181				
EICAS R, M10182				
COMPUTER - (FIM 34-12-00/101)				
AIR DATA L, M100				
AIR DATA R, M101				
COMPUTER - (FIM 34-51-00/101) 1>				
FLIGHT MANAGEMENT L, M134				
FLIGHT MANAGEMENT R, M135				
MODULE - (FIM 27-09-00/101)				
LEFT POWER SUPPLY 1, M536				
LEFT POWER SUPPLY 2, M537				
RIGHT POWER SUPPLY 1, M538				
RIGHT POWER SUPPLY 2, M539	_			
MODULE - L YAW DAMPER, M522	2	1	119AL, MAIN EQUIP CTR, E1-1	22-21-04
MODULE - R YAW DAMPER, M523	2	1	119AL, MAIN EQUIP CTR, E2-1	22-21-04
PANEL - (FIM 28-43-00/101)				
MISC TEST, M10398		4	FLT COMPT DE	22 24 04
PANEL - YAW DAMPER, M10250	1	1	FLT COMPT, P5	22-21-01
RELAY - (FIM 31-01-33/101)				
AIR/GND SYS NO. 2, K518 RELAY - (FIM 31-01-36/101)				
AIR/GND BAT SYS NO. 1, K529				
AIR/GND SYS NO. 1, K199				
RELAY - (FIM 31-01-37/101)				
AIR/GND SYS NO. 2, K293				
SERVO - LEFT YAW DAMPER, M510	2	1	324EL, VERT STAB, APL R SIDE	22-21-02
SERVO - RIGHT YAW DAMPER, M509	2	i	324EL, VERT STAB, APL L SIDE	22-21-02
SWITCH - YAW DMPR TEST	1	1 1	FLT COMPT, P61, MISC TEST PNL	*
UNIT - (FIM 34-21-00/101)			· · · · · · · · · · · · · · · · · · ·	
INERTIAL REFERENCE C, M160				
INERTIAL REFERENCE L, M159				
INERTIAL REFERENCE R, M161				
VALVE - YDS ELECTROHYDRAULIC SERVO	2	1	324EL, EA YAW DAMPER SERVO	22-21-03
VALVE - YDS ELECTROHYDRAULIC SOLENOID	2	1	324EL, EA YAW DAMPER SERVO	22-21-03

^{*} SEE THE WDM EQUIPMENT LIST

1 767-300 AIRPLANES

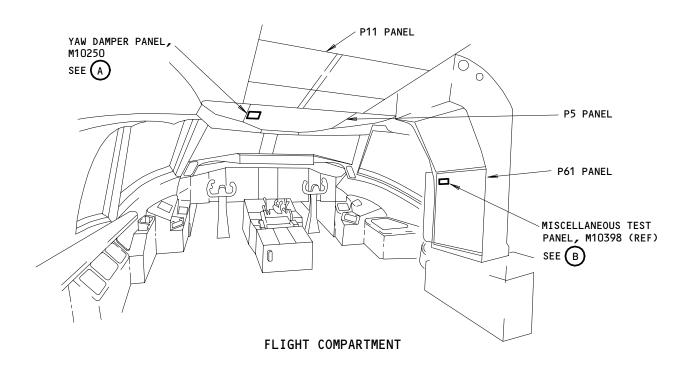
Yaw Damper System - Component Index Figure 101

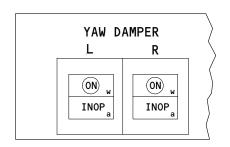
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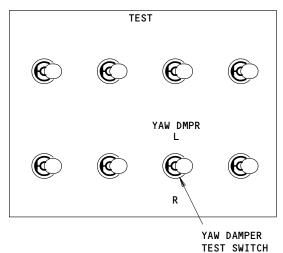






YAW DAMPER PANEL, M10250





MISCELLANEOUS TEST PANEL, M10398 (REF)

B

Yaw Damper System - Component Location Figure 102 (Sheet 1)

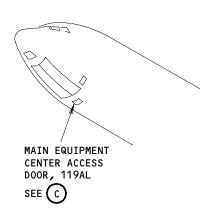
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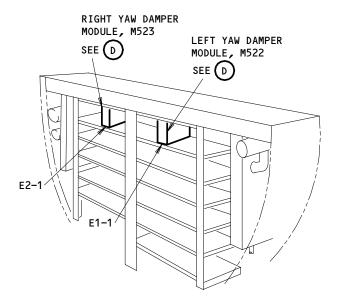
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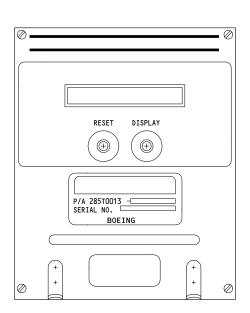






MAIN EQUIPMENT CENTER





LEFT OR RIGHT YAW DAMPER MODULE, M522 OR M523



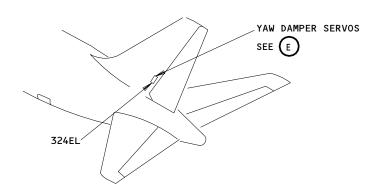
Yaw Damper System - Component Location Figure 102 (Sheet 2)

EFFECTIVITY-ALL

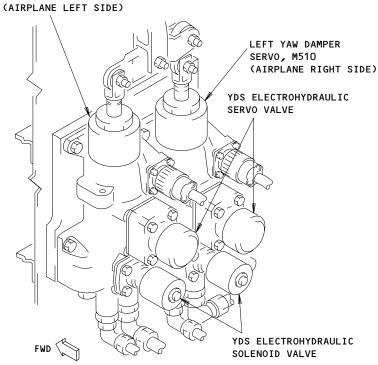
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03 Page 103





RIGHT YAW DAMPER SERVO, M509



YAW DAMPER SERVOS



Yaw Damper System - Component Location Figure 102 (Sheet 3)

EFFECTIVITY-ALL

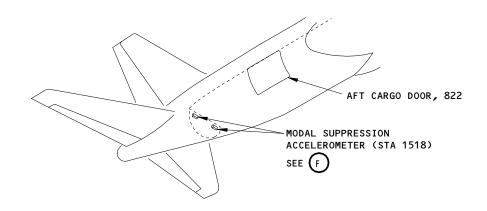
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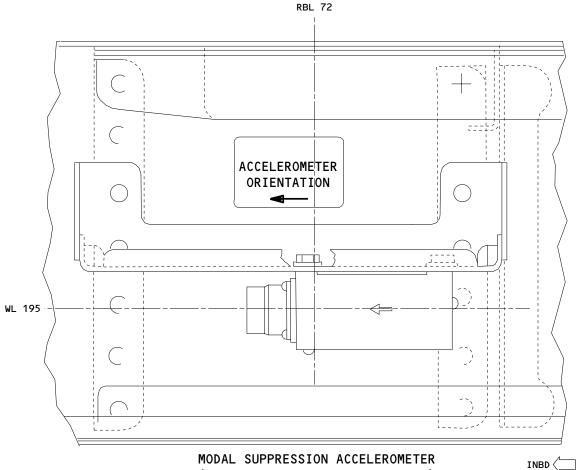
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MODAL SUPPRESSION ACCELEROMETER
(VIEW IN THE FORWARD DIRECTION)
(RIGHT SIDE IS SHOWN, LEFT SIDE IS EQUIVALENT)



Yaw Damper System - Component Location Figure 102 (Sheet 4)

EFFECTIVITY—767-300 WITH YDM -122 THRU -999

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Not Used Figure 103

ALL ALL

22-21-00

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
ENGINE INDICATION AND CREW ALERTING SYSTEM (EICAS)
(MM 31-41-00/201)
AIR/GROUND RELAYS (MM 32-09-02/201)

MASTER DIM AND TEST (MM 33-16-00/501)
AIR DATA COMPUTING SYSTEM (MM 34-12-00/501)
INERTIAL REFERENCE SYSTEM (MM 34-21-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A18,11C6,11C7,11C8,11C9,11F34,11G10,11G17,11G18, 11G26,11G27

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (MM 24-22-00/201) 1 HYDRAULIC POWER IS ON (MM 29-11-00/201) 1

YAW DAMPER SYSTEM BITE PROCEDURE

201 PUSH THE "IND LTS TEST" 1 ALIGN THE LEFT, CENTER, AND 101 PUSH THE "IND LTS TEST" RIGHT IRUS IN THE NAV MODE SWITCH ON THE RIGHT OVERHEAD SWITCH TO STOP THE TEST. (MM 34-21-00/501).LIGHTING CONTROL PANEL. DO THIS PROCEDURE: PRESSURIZE THE LEFT AND DO THE LEFT AND THE RIGHT • FLIGHT COMPARTMENT MASTER YAW DAMPER "INOP" LIGHTS ON CENTER HYDRAULIC SYSTEMS DIM AND TEST PROBLEMS (MM 29-11-00/201). THE YAW DAMPER CONTROL PANEL, (33-16-00/101, FIG. 103). PUT THE RUDDER TRIM IN M10250, COME ON? THE NEUTRAL POSITION. YES PUT THE LEFT AND RIGHT YAW DAMPER SWITCHES, ON THE YAW DAMPER CONTROL PANEL, M10250, 102 OPEN THESE CIRCUIT 202 REPLACE THE YAW DAMPER IN THE "OFF" POSITION ("ON" BREAKERS ON THE P11 PANEL FOR CONTROL PANEL, M10250 INDICATION IS NOT SHOWN ON THE THE YAW DAMPER: (MM 22-21-01/401).• 11A18, YAW DAMPER LEFT SWITCH). CLOSE THE P11 PANEL CIR-DO THE LEFT AND RIGHT YAW • 11F34, YAW DAMPER RIGHT. CUIT BREAKER OPENED IN DAMPER "INOP" LIGHTS ON THE BLOCK 102. DOES THE LEFT (RIGHT) YAW DAMPER PANEL COME ON? IF THE PROBLEM CONTINUES, "INOP" LIGHT ON THE YAW DAMPER EXAMINE THE CIRCUIT FROM YAW CONTROL PANEL STAY OFF? YES DAMPER CONTROL PANEL, CONNEC-TOR D723 (D725), PIN 7, TO YES SEE SHEET 2 TB101 (TB141), PIN G21 (G91) (WDM 22-21-11,-21). (BLOCK 2) SEE SHEET 2 (BLOCK 103)

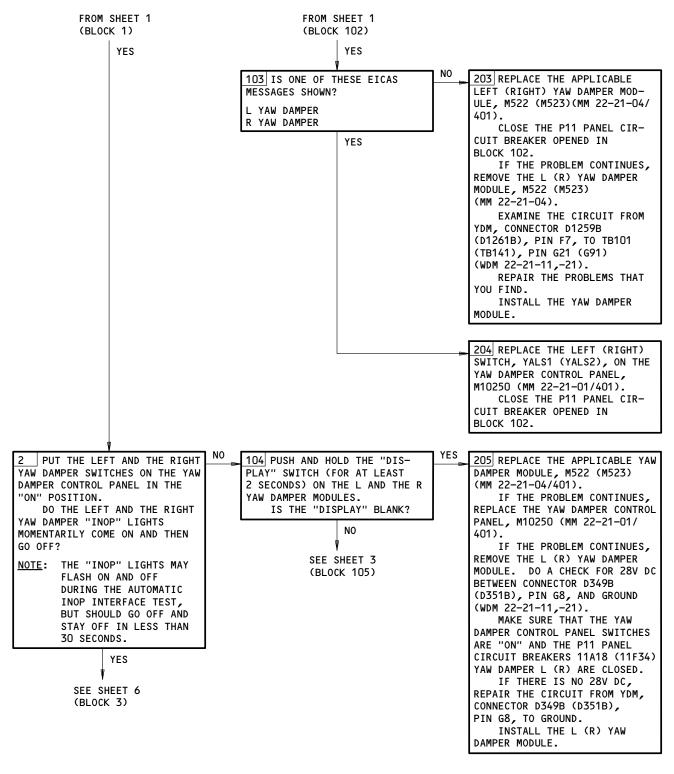
THE "HYD SWITCH" "FAULTS NOW" MESSAGE CAN BE SHOWN IF THE HYDRAULIC SYSTEM IS NOT PRESSURIZED, THE AC AND DC MAIN BUSES ARE NOT ON, THE STDY POWER IS SET TO AUTO, AND THE BATTERY SWITCH IS ON. THE "HYD SWITCH" "FAULTS NOW" MESSAGE WILL CLEAR WHEN ELECTRICAL POWER IS SUPPLIED AGAIN.

Yaw Damper System BITE Procedure Figure 103A (Sheet 1)

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Yaw Damper System BITE Procedure Figure 103A (Sheet 2)

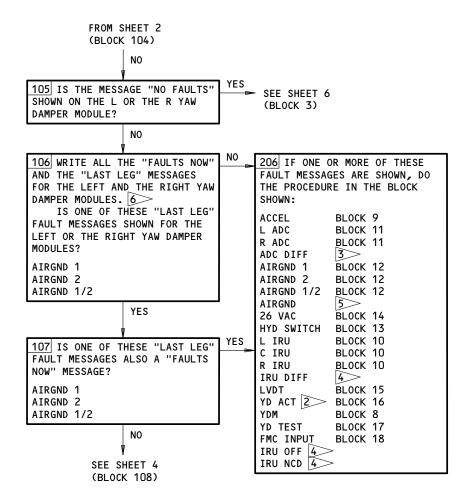
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IF THE "YD ACT" FAULT MESSAGE OCCURS WITH THE "LVDT", THE "26 VAC", OR THE "YDM" FAULT MESSAGE, DO THE PROCEDURE FOR THE LVDT, THE 26V AC, OR THE YDM FIRST.

FOR AN "ADC DIFF" FAULT MESSAGE, DO THE PROCEDURE FOR THE LEFT (RIGHT) ADC FIRST.

4>> DO THE PROCEDURE FOR THE LEFT (CENTER, RIGHT) IRU FIRST.

FOR AN "AIRGND" FAULT MESSAGE, DO THE PROCEDURE FOR THESE AIR/GROUND FAULTS FIRST:

AIRGND 1 AIRGND 2 AIRGND 1/2

THE "LAST LEG" FAULTS HAVE AN ASTERISK (*) BEFORE THE FAULT MESSAGE.

Yaw Damper System BITE Procedure Figure 103A (Sheet 3)

ALL

22-21-00

FROM SHEET 3 (BLOCK 107)

NO

WARNING

108

DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS (MM 27-61-00/ 201) OR MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS. THE SPOILERS CAN RETRACT QUICKLY AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

WARNING

DO THE DEACTIVATION PROCEDURE FOR FLIGHT MODE SIMULATION (MM 32-09-02/201) BEFORE YOU OPEN THE AIR/GROUND CIRCUIT BREAKERS. WHEN YOU OPEN THE AIR/GROUND CIRCUIT BREAKERS, THE AIRPLANE IS IN FLIGHT MODE. IN FLIGHT MODE, MANY OF THE AIRPLANE SYSTEMS CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

DO THE FLIGHT MODE SIMU-LATION PROCEDURE (MM 32-09-02/ 201).

WRITE ALL "FAULTS NOW" MESSAGES ON THE LEFT AND THE RIGHT YAW DAMPER MODULES.

IS ONE OF THESE "FAULTS NOW" MESSAGES SHOWN ON THE LEFT OR THE RIGHT YAW DAMPER MODULE?

"AIRGND 1"

"AIRGND 2"

"AIRGND 1/2"

YES

SEE SHEET 5 (BLOCK 109) 207 PUT THE AIR/GND SYSTEM BACK IN TO GROUND MODE (MM 32-09-02/201). DO THE PROCEDURE IN BLOCK 206 FOR THE REMAINING "FAULTS NOW" MESSAGES. DO THE PROCEDURE IN BLOCK 3 IF THERE ARE NO OTHER "FAULTS NOW" MESSAGES.

Yaw Damper System BITE Procedure Figure 103A (Sheet 4)

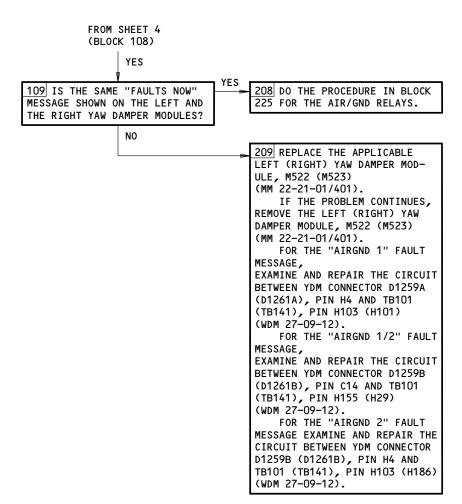
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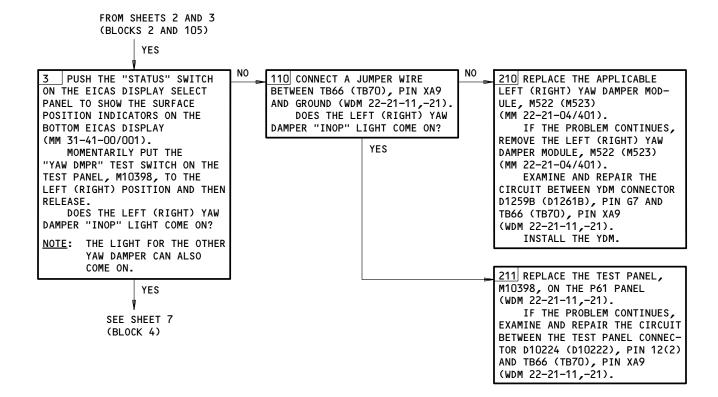


Yaw Damper System BITE Procedure Figure 103A (Sheet 5)

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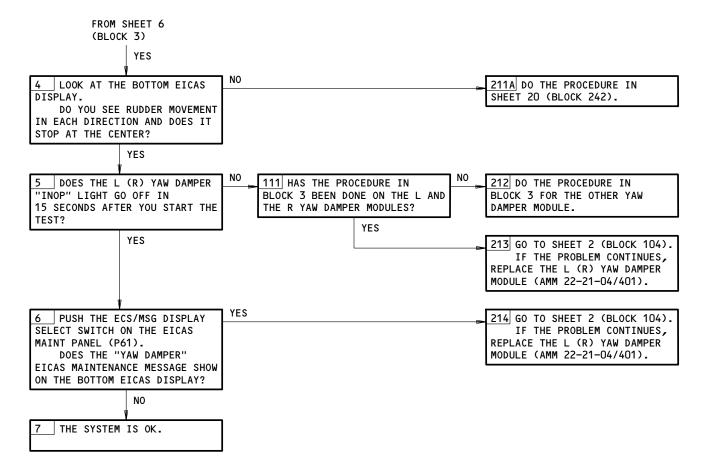
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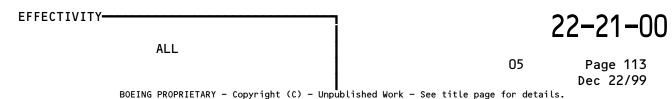


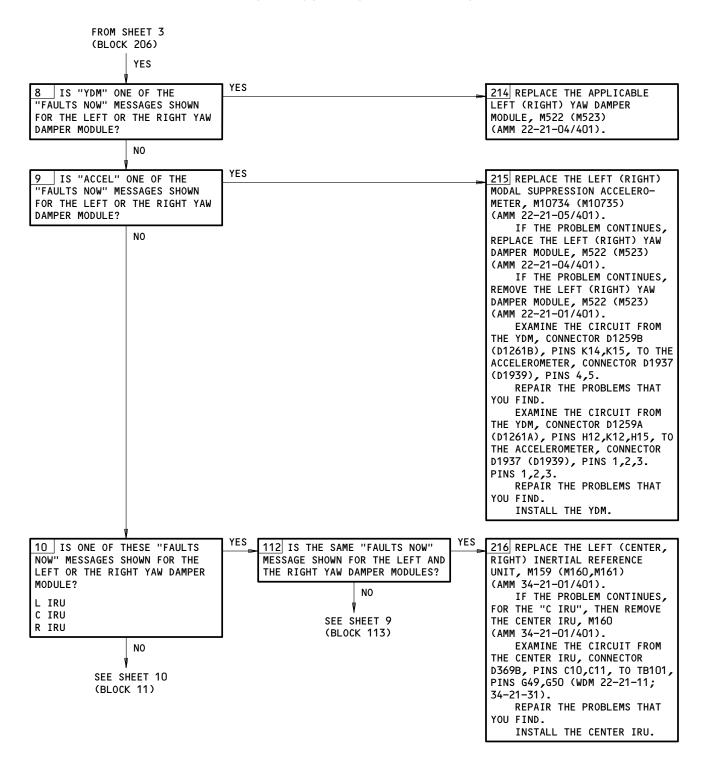
Yaw Damper System BITE Procedure Figure 103A (Sheet 6)



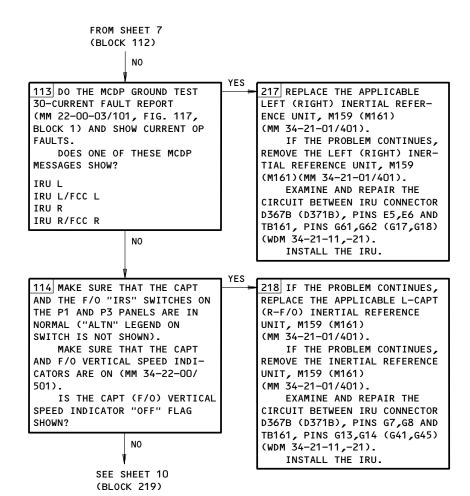


Yaw Damper System BITE Procedure Figure 103A (Sheet 7)





Yaw Damper System BITE Procedure Figure 103A (Sheet 8)

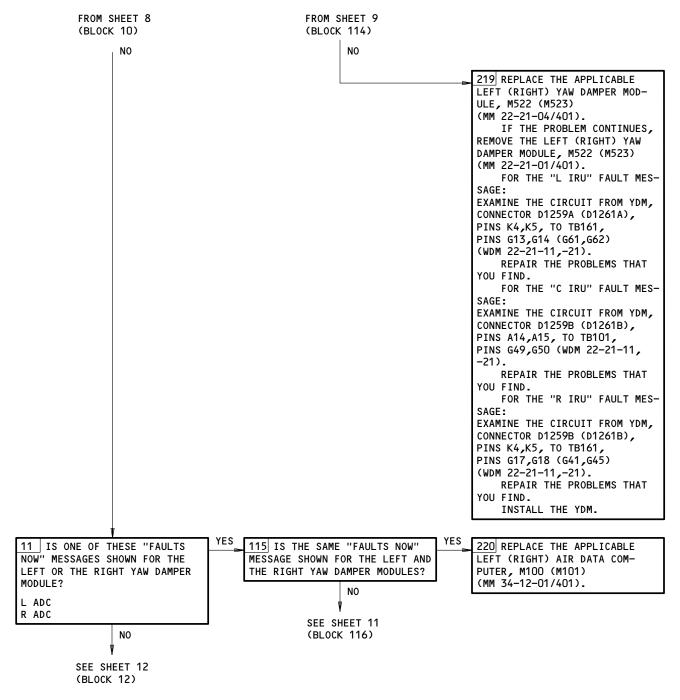


Yaw Damper System BITE Procedure Figure 103A (Sheet 9)

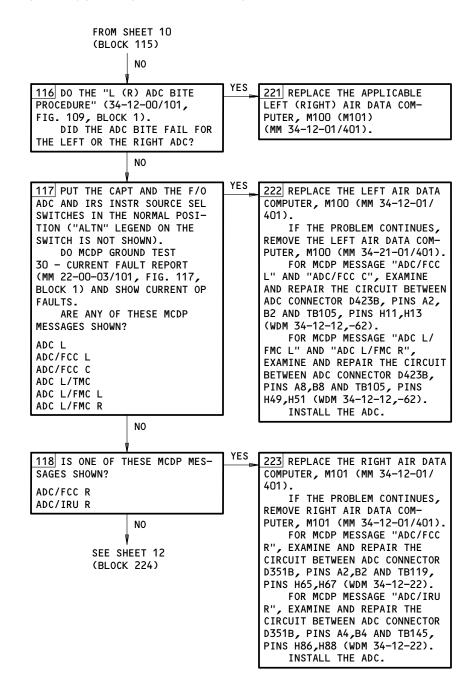
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Yaw Damper System BITE Procedure Figure 103A (Sheet 10)



Yaw Damper System BITE Procedure Figure 103A (Sheet 11)

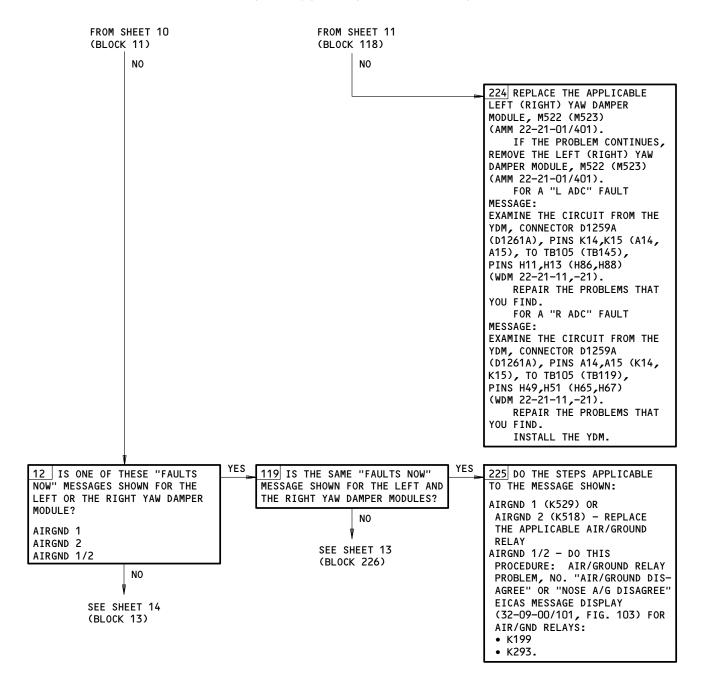
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Yaw Damper System BITE Procedure Figure 103A (Sheet 12)

EFFECTIVITY-ALL

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FROM SHEET 12 (BLOCK 119)

NO

226 REPLACE THE APPLICABLE LEFT (RIGHT) YAW DAMPER MODULE, M522 (M523) (AMM 22-21-01/401). IF THE PROBLEM CONTINUES, REMOVE THE LEFT (RIGHT) YAW DAMPER MODULE, M522 (M523) (AMM 22-21-01/401). FOR "AIRGND 1" FAULT MESSAGE: EXAMINE THE CIRCUIT FROM THE YDM, CONNECTOR D1259A (D1261A), PIN H4, T0 TB101 (TB141), PIN H103 (H101) (WDM 27-09-12). REPAIR THE PROBLEMS THAT YOU FIND. FOR "AIRGND 1/2" FAULT MESSAGE: EXAMINE THE CIRCUIT FROM THE YDM, CONNECTOR D1259B (D1261B), PIN C14, TO TB101 (TB141), PIN H155 (H29) (WDM 27-09-12). REPAIR THE PROBLEMS THAT YOU FIND. FOR "AIRGND 2" FAULT MESSAGE: EXAMINE THE CIRCUIT FROM THE YDM, CONNECTOR D1259B (D1261B), PIN H4, TO TB101 (TB141), PIN H181 (H186) (WDM 27-09-12). REPAIR THE PROBLEMS THAT YOU FIND.

Yaw Damper System BITE Procedure Figure 103A (Sheet 13)

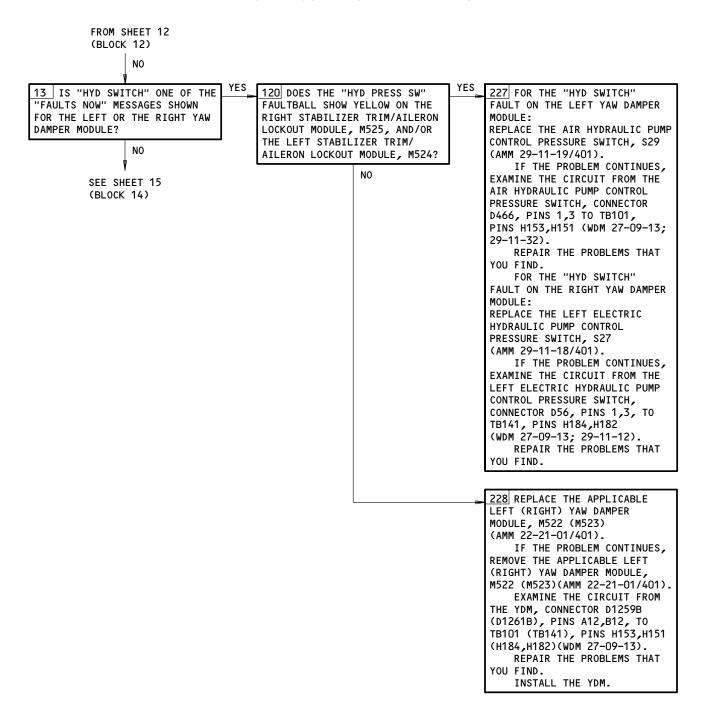
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Yaw Damper System BITE Procedure Figure 103A (Sheet 14)

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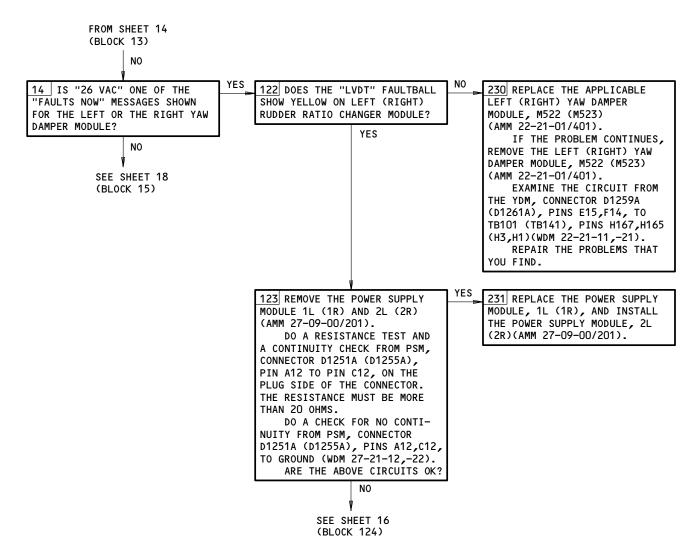
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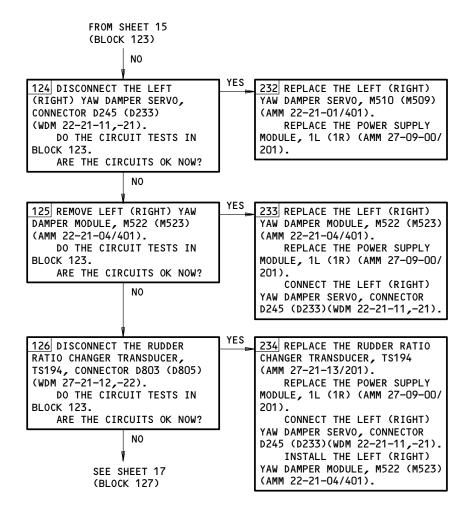
Yaw Damper System BITE Procedure Figure 103A (Sheet 15)

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Yaw Damper System BITE Procedure Figure 103A (Sheet 16)

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Page 122 Dec 22/99 FROM SHEET 16 (BLOCK 126)

NO

127 REMOVE THE LEFT (RIGHT)
RUDDER RATIO CHANGER, M528
(M529)(AMM 27-09-00/201).

MAKE SURE THAT THERE IS NO CONTINUITY BETWEEN THE PSM, CONNECTOR D1251A (D1255A), PINS A12,C12 (WDM 27-21-12, -22).

MAKE SURE THAT THERE IS NO
CONTINUITY TO GROUND AT THE
PSM, CONNECTOR D1251A
(D1255A), PINS A12,C12
(WDM 27-21-12,-22).
ARE THE CIRCUITS OK?

NO

REPLACE THE LEFT (RIGHT)
RUDDER RATIO CHANGER MODULE,
M528 (M529)(AMM 27-09-00/201).
REPLACE THE POWER SUPPLY
MODULE, 1L (1R) (AMM 27-09-00/201).

INSTALL THE LEFT (RIGHT)
YAW DAMPER MODULE, M522 (M523)
(AMM 22-21-04/401).

CONNECT THE LEFT (RIGHT)
YAW DAMPER SERVO, CONNECTOR
D245 (D233)(WDM 22-21-11,-21).
CONNECT THE RUDDER RATIO
CHANGER TRANSDUCER, TS194,
CONNECTOR D803 (D805)
(WDM 27-21-12,-22).

236 EXAMINE THE CIRCUIT FROM THE PSM, CONNECTOR D1251A (D1261A), PINS A12,C12 TO:

- THE YDM, CONNECTOR D1259A (D1261A), PINS F14,E15 (WDM 22-21-11,-21; 27-21-12,-22)
- THE YD SERVO, CONNECTOR D245 (D233), PINS 5,6 (WDM 22-21-11,-21; 27-21-12,-22)
- THE RUDDER RATIO CHANGER MODULE, CONNECTOR D1263A (D1265A), PINS A10,A9; D1263B (D1265B), PINS A5,A4 (WDM 27-21-12,-22)
- THE RUDDER RATIO CHANGER TRANSDUCER, TS194, CONNECTOR D803 (D805), PINS 6,7 (WDM 27-21-12,-22).

REPAIR THE PROBLEMS THAT YOU FIND.

REPLACE THE POWER SUPPLY MODULE, 1L (1R) (AMM 27-09-00/201).

INSTALL THE LEFT (RIGHT)
YAW DAMPER MODULE, M522 (M523)
(AMM 22-21-04/401).

CONNECT THE LEFT (RIGHT)
YAW DAMPER SERVO, CONNECTOR
D245 (D233)(WDM 22-21-11,-21).
CONNECT THE RUDDER RATIO
CHANGER TRANSDUCER, TS194,
CONNECTOR D803 (D805)

(WDM 27-21-12,-22). INSTALL THE LEFT (RIGHT) RUDDER RATIO CHANGER MODULE, M528 (M529)(AMM 27-09-00/201).

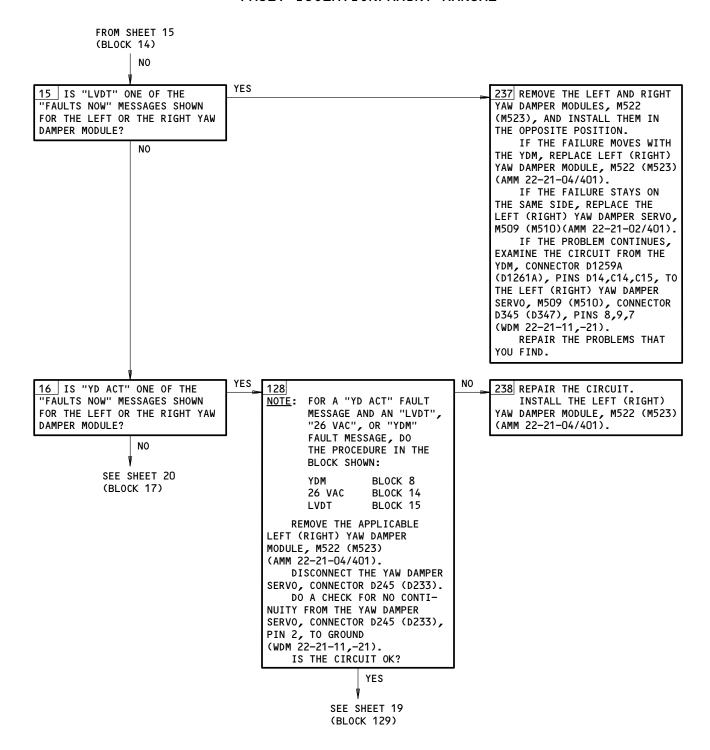
Yaw Damper System BITE Procedure Figure 103A (Sheet 17)

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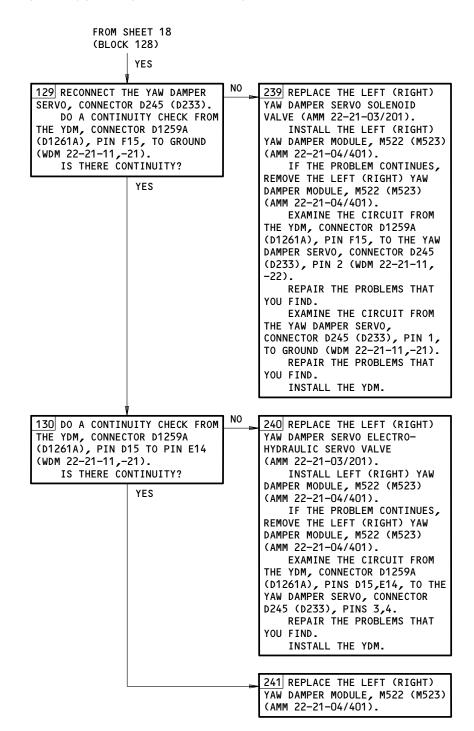
Yaw Damper System BITE Procedure Figure 103A (Sheet 18)

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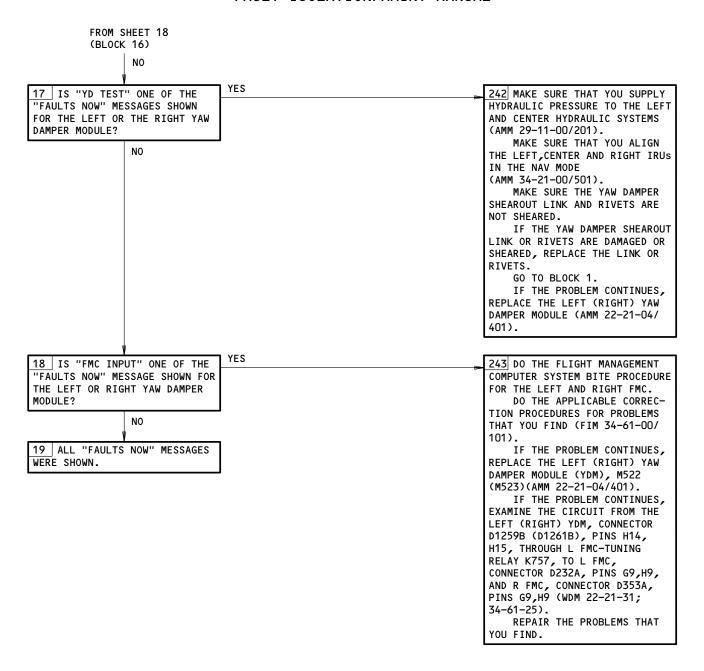
Yaw Damper System BITE Procedure Figure 103A (Sheet 19)

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Yaw Damper System BITE Procedure Figure 103A (Sheet 20)

ALL 22-21-00
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The Automatic Stabilizer Trim System (Ground Fault) is Part of Autoflight BITE.

Refer to the Autoflight BITE Fault
Isolation (FIM 22-00-04/101, FIG. 108).

Automatic Stabilizer Trim System (Ground Fault) Figure 101

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Refer to FIM 27-09-00/101, Fig. 106A for "UNSCHED STAB TRIM" problems.

"UNSCHED STAB TRIM" problems Figure 102

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THRUST MANAGEMENT POWER

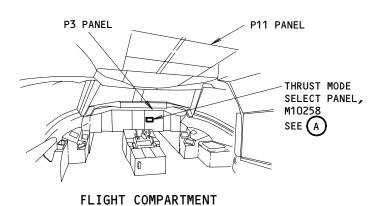
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER - AUTO FLIGHT WARN, C521 TMC AC, C501 TMC DC, C525 TMC SERVO, C512 COMPUTER - THRUST MANAGEMENT, M183 PANEL - THRUST MODE SELECT, M10258		1 1 1 1 1	FLT COMPT, P11 11A17 11F14 11F15 11F16 119AL, MAIN EQUIP CTR, E1-3 FLT COMPT, P3	* * * * 22-31-01 22-31-02

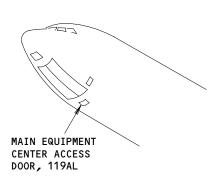
^{*} SEE THE WDM EQUIPMENT LIST

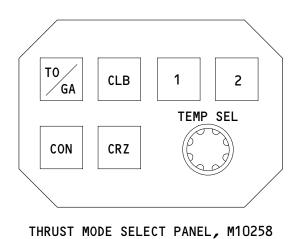
Thrust Management Power - Component Index Figure 101

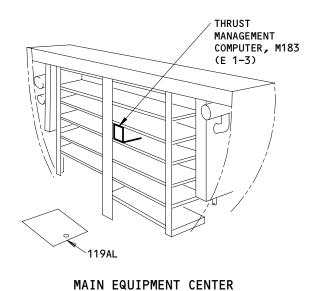
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Thrust Management Power - Component Location Figure 102

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THRUST MANAGEMENT SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
	0111	Ψ.1.1	NOCEGOT MICEN	KEI EKENCE
CARD - (REF 73-21-00, FIG. 101)				
L ENG EEC DISCRETES, M590				
R ENG EEC DISCRETES, M591			ELT COMPT DAA	
CIRCUIT BREAKERS			FLT COMPT, P11	*
AUTO FLIGHT WARN, C521		1	11A17	*
TMC AC, C501		1	11F14	*
TMC DC, C525			11F15	*
TMC SERVO, C512		1	11F16	*
COMPUTER - (REF 31-41-00, FIG. 101)				
EICAS L, M10181				
EICAS R, M10182				
COMPUTER - (REF 34-12-00, FIG. 101)				
AIR DATA L, M100 AIR DATA R, M101				
COMPUTER - (REF 34-61-00, FIG. 101)				
FLIGHT MANAGEMENT L, M134				
FLIGHT MANAGEMENT R, M135				
CONTROL - (REF 73-21-00, FIG. 101)				
ELECTRONIC ENGINE, M541				
GENERATOR - AUTOTHROTTLE SERVOMOTOR, M229		1	113AL, FORWARD EQUIPMENT BAY	22-32-01
MODULE - (REF 27-58-00, FIG. 101)			Troney ronardo Egorrient Bitt	22 32 0.
L FLAP/STAB POS, M838				
PACK - AUTOTHROTTLE BRAKE		1	113AL, FORWARD EQUIPMENT BAY	22-32-07
PACK - AUTOTHROTTLE MICROSWITCH, M966		1	113AL, FORWARD EQUIPMENT BAY	22-32-04
PANEL - (REF 22-11-00, FIG. 101)				
AFCS MODE CONTROL, M90				
PANEL - (REF 22-41-00, FIG. 101)				
MAINTENANCE CONTROL DISPLAY, M168				
RELAY - (REF 31-01-36, FIG. 101)				
SYSTEM 1 AIR GROUND, K140				
SWITCH - (REF 22-11-00, FIG. 101)				
L GO-AROUND, S1				
R GO-AROUND, S2				
SWITCH - LEADING EDGE SLAT, S312		1	FLT COMPT, P10	22-32-03
SWITCH - SYS L AUTOTHROTTLE DISENGAGE, S3		1	FLT COMPT, P10	22-32-02
SWITCH - SYS R AUTOTHROTTLE DISENGAGE, S4		1	FLT COMPT, P10	22-32-02
UNIT - (REF 34-21-00, FIG. 101)				
L INERTIAL REFERENCE, M159				
R INERTIAL REFERENCE, M161				

^{*} SEE THE WDM EQUIPMENT LIST

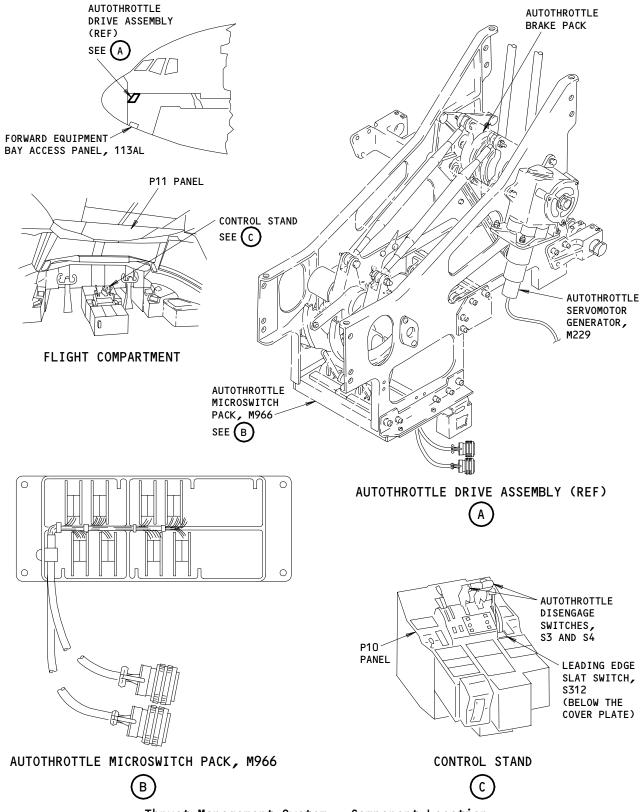
Thrust Management System - Component Index Figure 101

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FAULT ISOLATION/MAINT MANUAL



Thrust Management System - Component Location Figure 102

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The Thrust Management System Flight Faults BITE Procedure is part of Autoflight BITE.

See the Autoflight BITE Fault
Isolation Procedure (FIM 22-00-02/101).

Thrust Management System Flight Faults BITE Procedure Figure 103

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The Thrust Management System Ground Faults BITE Procedure is part of Autoflight BITE. See the Autoflight BITE Fault Isolation Procedure (FIM 22-00-02/101).

Thrust Management System Ground Faults BITE Procedure Figure 104

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1. General

A. ARINC 429 data-bus charts supply data necessary to make an analysis of ARINC 429 transmitters, receivers, and data buses. For the test, use a breakout box at available terminal blocks or at the LRU connectors.

CAUTION: DO NOT DIRECTLY TOUCH THE CONNECTORS. YOU MUST USE A BREAKOUT BOX OR YOU WILL POSSIBLY CAUSE DAMAGE TO THE CONNECTORS.

2. Equipment

- A. Standard Multimeter
- B. Data Bus Analyzer 429EB, JcAIR Instrumentation (recommended)
 400 Industrial Parkway,

Industrial Airport, KS 66031

- 429-2, Interface Technology (optional) 150 E. Arrow Highway,

San Dimas, CA 91773

- C. Breakout Box A34011-1 (recommended)
 - A34011-112 (optional)

ТМС	IC									
	DIGITAL OUTPUT BUS CHART									
BUS NAME							DHC	DIT	DATA	
	SOURCE		TYPE	BUS	CON	PINS	BUS FORMAT	RATE	DATA BUS	
ТМС	(L)	Α	1	P1A	CO4 CO5	429	L0	TMC-TRP/TMSP	
ТМС	(L)	В	2	P1B	J12 J13	429	L0	TMC-BUS L	
ТМС	(L)	С	3	P1B	J15 J14	429	L0	TMC-BUS R	
тмс	(L)	D	4	P1B	H06 G06	429	LO	TMC-MAINT	



OCTAL LABELS CHART									
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS	
TEST WORD	Α	300	BNR	5	00	N/A	N/A	N/A	
MODE DISPLAY	Α	301	BCD	10	00	N/A	N/A	N/A	
REFERENCE DISPLAY	Α	302	BCD	10	00	N/A	ALWAYS POS		
MAX LIMIT DISPLAY	Α	303	BCD	5	00	N/A	ALWAYS POS		
TEMP SELECTED	Α	304	BCD	5	00	N/A	ABOVE FREEZ	DEG (
TAT DISPLAY	Α	305	BCD	10	00	N/A	ABOVE FREEZ	DEG (
FLAP POSITION	В	137	BNR	5	00	+-180	ALWAYS POS	DEG	
A/T FAST/SLOW CMD	В	142	BNR	16	00	+-32	OVERSPEED	KNOTS	
TEMP SELECTED	В	213	BNR	5	00	+-512	ABOVE FREEZ	DEG C	
DISCRETE PARMTR 3	В	270	DIS	5	00	N/A	N/A	N/A	
TMS MODE STATUS	В	272	DIS	10	00	N/A	N/A	N/A	
ENGINE BLEED STAT	В	273	DIS	2	00	N/A	N/A	N/A	
TMS FMA STATUS	В	274	DIS	4	00	N/A	N/A	N/A	
VERT SPD CMD	В	304	BNR	20	00	+-256	UPWARDS	FT/SEC	
EPR ACTUAL-L	В	340	BNR	5	10	+-4	ALWAYS POS	RATIO	
EPR ACTUAL-R	В	340	BNR	5	01	+-4	ALWAYS POS	RATIO	
EPR BUG DRIVE-L	В	341	BNR	5	10	+-4	ALWAYS POS	RATIO	
EPR REFERENCE	В	342	BNR	5	00	+-4	ALWAYS POS	RATIO	

ALL



TMC ID=02A									
OCTAL LABELS CHART									
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS	
FLAP POSITION	С	137	BNR	5	00	+-180	ALWAYS POS	DEG	
A/T FAST/SLOW CMD	С	142	BNR	16	00	+-32	OVERSPEED	KNOTS	
TEMP SELECTED	С	213	BNR	5	00	+-512	ABOVE FREEZ	DEG C	
DISCRETE PARMTR 3	С	270	DIS	5	00	N/A	N/A	N/A	
TMS MODE STATUS	С	272	DIS	10	00	N/A	N/A	N/A	
ENGINE BLEED STAT	С	273	DIS	2	00	N/A	N/A	N/A	
TMS FMA STATUS	С	274	DIS	4	00	N/A	N/A	N/A	
EPR ACTUAL-L	С	340	BNR	5	10	+-4	ALWAYS POS	RATIO	
EPR ACTUAL-R	С	340	BNR	5	01	+-4	ALWAYS POS	RATIO	
EPR BUG DRIVE-R	С	341	BNR	5	01	+-4	ALWAYS POS	RATIO	
EPR REFERENCE	С	342	BNR	5	00	+-4	ALWAYS POS	RATIO	
POWER LVR ANGLE-L	D	134	BNR	5	10	+-180	FWD THRUST	DEG	
POWER LVR ANGLE-R	D	134	BNR	5	01	+-180	FWD THRUST	DEG	
A/T FAST/SLOW CMD	D	142	BNR	16	00	+-32	OVERSPEED	KNOTS	
DISCRETE PARMTR 1	D	145	DIS	5	00	N/A	N/A	N/A	
DISCRETE PARMTR 2	D	146	DIS	5	00	N/A	N/A	N/A	
TOTAL AIR TEMP	D	211	BNR	5	00	+-512	ABOVE FREEZ	DEG C	
TEMP SELECTED	D	213	BNR	5	00	+-512	ABOVE FREEZ	DEG C	
DISCRETE PARMTR 3	D	270	DIS	5	00	N/A	N/A	N/A	

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TMC ID=02A									
OCTAL LABELS CHART									
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS	
MAX EPR LIMIT	D	303	BNR	5	00	+-4	ALWAYS POS	RATIO	
EPR ACTUAL-L	D	340	BNR	5	10	+-4	ALWAYS POS	RATIO	
EPR ACTUAL-R	D	340	BNR	5	01	+-4	ALWAYS POS	RATIO	
EPR BUG DRIVE-L	D	341	BNR	5	10	+-4	ALWAYS POS	RATIO	
EPR BUG DRIVE-R	D	341	BNR	5	01	+-4	ALWAYS POS	RATIO	
EPR REFERENCE	D	342	BNR	5	00	+-4	ALWAYS POS	RATIO	
MAINTENANCE DATA	D	350	BNR	5	00	N/A	N/A	N/A	
FAULT DATA	D	356	DIS	1	00	N/A	N/A	N/A	
GROUND TEST DATA	D	356	DIS	5	00	N/A	N/A	N/A	
INTFC FAULT DATA	D	357	DIS	5	00	N/A	N/A	N/A	



TMC								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE				
SLAT EXTENDED	137	11	FLAPS>=1	FLAPS=0				
ECS PACK L	145	11	ON	OFF				
ECS PACK L H/L	145	12	ні	LO				
ECS PACK R	145	13	ON	OFF				
ECS PACK R H/L	145	14	ні	LO				
ISOL VALVE LFT	145	17	OPEN	CLOSED				
ISOL VALVE RIGHT	145	18	OPEN	CLOSED				
A/T G/A MODE ANNUN	145	19	OPER	INOPER				



тмс	TMC						
DISCRETE OCTAL LABELS/BIT CHART							
SIGNAL	OCTAL LABEL	ВІТ	ONE-STATE	ZERO-STATE			
COWL ANTI-ICE-L	145	20	ON	OFF			
COWL ANTI-ICE-R	145	21	ON	OFF			
FLCH MODE OPER	145	22	OPER	INOPER			
WING ANTI-ICE	145	23	ON	OFF			
AIR DRIVEN PUMP	145	24	ON	OFF			
THROTTLE HLD ANNUN	145	25	HOLD	NO HOLD			
EEC VALID-L	145	26	VALID	NOT VALID			
EEC VALID-R	145	27	VALID	NOT VALID			
FLARE RETARD MODE	145	28	OPER	INOPER			
TMC VNAV OPER	145	29	OPER	INOPER			
IAS MODE OPER	146	11	OPER	INOPER			
MACH MODE OPER	146	12	OPER	INOPER			
THRUST MODE OPER	146	13	OPER	INOPER			
SPD LIMIT	146	14	LIMIT	NO LIMIT			
FLAP LIMIT	146	15	LIMIT	NO LIMIT			

ALL



ТМС								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	ВІТ	ONE-STATE	ZERO-STATE				
MIN SPEED	146	16	MIN SPEED	INOPER				
GROUND TEST	146	17	GRD TEST	NO GRD TST				
TO MODE OPER	146	18	OPER	INOPER				
CLB MODE OPER	146	19	OPER	INOPER				
CON MODE OPER	146	20	OPER	INOPER				
CRZ MODE OPER	146	21	OPER	INOPER				
G/A MODE OPER	146	22	OPER	INOPER				
RATING 1 OPER	146	23	OPER	INOPER				
RATING 2 OPER	146	24	OPER	INOPER				
IDLE THRUST OPER	146	25	OPER	INOPER				
A/T ENGAGED	146	27	ENGAGE	ENGAGE NOT				
A/T DISCONNECT	146	28	DISC	NO DISC				
TMC VALID	146	29	VALID	INVALID				
TEMP DERATE STATUS	270	11	OPER	INOPER				
ENGINE IDENT 1	270	12	CODED					
ENGINE IDENT 2	270	13	CODED					
ENGINE IDENT 3	270	14	CODED					
ENGINE IDENT 4	270	15	CODED					
ENGINE IDENT 5	270	16	CODED					
ENGINE IDENT 6	270	17	CODED					
ENGINE IDENT 7	270	18	CODED					
ENGINE IDENT 8	270	19	CODED					

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ТМС								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	віт	ONE-STATE	ZERO-STATE				
ENGINE IDENT 9	270	20	CODED					
ENGINE IDENT 10	270	21	CODED					
ENGINE IDENT 11	270	22	CODED					
ENGINE IDENT 12	270	23	CODED					
PRE-SELECT CLIMB	270	24	OPER	INOPER				
DERATE 1 ARMED	270	25	ARMED	NOT ARMED				
DERATE 2 ARMED	270	26	ARMED	NOT ARMED				
IAS MODE OPER	272	11	OPER	INOPER				
MACH MODE OPER	272	12	OPER	INOPER				
THRUST MODE OPER	272	13	OPER	INOPER				
EEC VALID	272	14	VALID	NOT VALID				
SPD MODE OPER	272	15	IAS ENGA	ENGA NOT				
THRUST MODE OPER	272	16	THRUST EN	ENGA NOT				
ENGINE OUT	272	17	ENG VALID	ENG FAIL				
TO MODE OPER	272	18	OPER	INOPER				
CLB MODE OPER	272	19	OPER	INOPER				
CON MODE OPER	272	20	OPER	INOPER				
CRZ MODE OPER	272	21	OPER	INOPER				
G/A MODE OPER	272	22	OPER	INOPER				
RATING 1 OPER	272	23	OPER	INOPER				
RATING 2 OPER	272	24	OPER	INOPER				
IDLE THRUST OPER	272	25	OPER	INOPER				



TMC							
DISCRETE OCTAL LABELS/BIT CHART							
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE			
TMC VNAV ENABLE	272	26	ENABLED	DISABLED			
AIRSPEED SYNC	272	27	SYNC	SYNC NOT			
ECS PACK L	273	11	ON	OFF			
ECS PACK L H/L	273	12	ні	LO			
ECS PACK R	273	13	ON	OFF			
ECS PACK R H/L	273	14	ні	LO			
ISOL VALVE LFT	273	17	OPEN	CLOSED			
ISOL VALVE RIGHT	273	18	OPEN	CLOSED			
COWL ANTI-ICE-L	273	20	ON	OFF			
COWL ANTI-ICE-R	273	21	ON	OFF			
WING ANTI-ICE	273	23	ON	OFF			
AIR DRIVEN PUMP	273	24	ON	OFF			
IAS MODE ANNUN	274	11	OPER	INOPER			
MACH MODE ANNUN	274	12	OPER	INOPER			
A/T G/A MODE ANNUN	274	13	OPER	INOPER			
EPR MODE ANNUN	274	14	OPER	INOPER			
FLAP LIMIT ANNUN	274	15	LIMIT	NO LIMIT			
MIN SPEED ANNUN	274	16	MIN SPEED	INOPER			
TEST ANNUN	274	17	TEST	NO TEST			
THROTTLE HLD ANNUN	274	19	HOLD	NO HOLD			
MACH LIMIT ANNUN	274	20	LIMIT	NO LIMIT			

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TMC								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE				
IAS LIMIT ANNUN	274	21	LIMIT	NO LIMIT				
SPD ERROR WN	274	22	WARNING	NO WARNING				
FLCH MODE ANNUN	274	23	OPER	INOPER				
IDLE THRUST ANNUN	274	25	OPER	INOPER				
A/T ENGAGED	274	26	ENGA	ENGA NOT				
F/S ONLY ENGAGED	274	27	ENGA	ENGA NOT				
TMC VALID	301	17	VALID	INVALID				
TMC FLCH OPER	304	11	FLCH ENGA	ENGA NOT				
TAT VALID	305	19	VALID	INVALID				

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THRUST MANAGEMENT WARNING AND ANNUNCIATION

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
LIGHT - AUTOTHROTTLE DISCONNECT, L591		1	FLT COMPT, P1	*

^{*} SEE THE WDM EQUIPMENT LIST

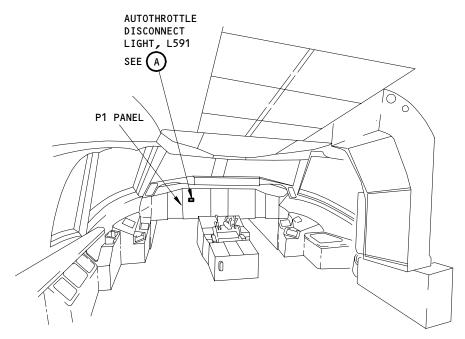
Thrust Management Warning and Annunciation - Component Index Figure 101

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FLIGHT COMPARTMENT



AUTOTHROTTLE DISCONNECT LIGHT, L591



Thrust Management Warning and Annunciation - Component Location Figure 102

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MAINTENANCE MONITOR

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER - MAINT CONT DISPLAY, C520 CONNECTOR, REMOTE MCDP CONTROL PANEL, D1447 PANEL - MAINTENANCE CONTROL DISPLAY, M168 RELAY - (FIM 31-01-36/FIG. 101) AIR/GROUND, SYS NO. 1, K142 RELAY - (FIM 31-01-37/101) AIR/GROUND, SYS NO. 2, K201 SWITCH - (FIM 31-41-00/101) MAINT ENABLE BYPASS, S612	2 1	1 1 1	FLT COMPT, P11 11U9 FLT COMPT, P6 119AL MAIN EQUIP CTR, E1-2	* * 22-41-01

^{*} SEE THE WDM EQUIPMENT LIST

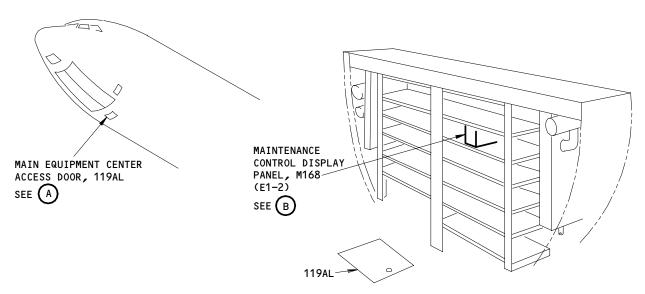
Maintenance Monitor - Component Index Figure 101

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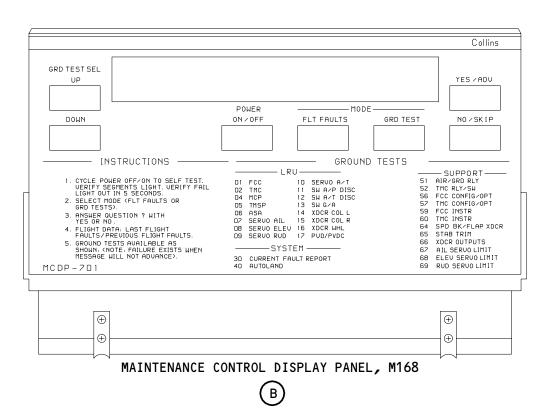
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MAIN EQUIPMENT CENTER



Maintenance Monitor - Component Location Figure 102 (Sheet 1)

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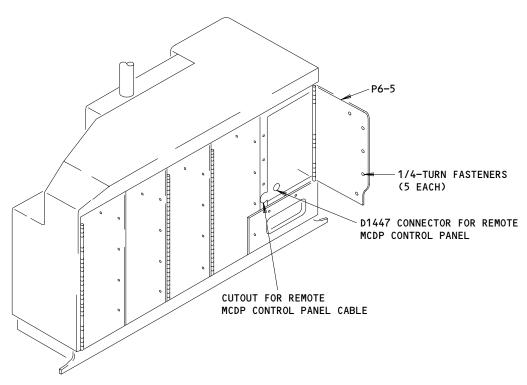
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MAIN POWER DISTRIBUTION PANEL P6

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Maintenance Monitor - Component Location Figure 102 (Sheet 2)

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The Maintenance Monitor BITE Procedure MCDP, the Diagnostic Codes Table, and the MCDP Messages Cross Reference Table are part of the Autoflight BITE. Refer to the Autoflight BITE Fault Isolation (FIM 22-00-02/101).

Maintenance Monitor BITE Procedure MCDP, the Diagnostic Codes Table, and the MCDP Messages Cross Reference Table Figure 103

EFFECTIVITY-

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1. <u>General</u>

CAUTION: DO NOT DIRECTLY TOUCH THE CONNECTORS. USE A BREAKOUT BOX OR YOU CAUSE DAMAGE TO THE CONNECTORS.

2. Equipment

- A. Standard multimeter commercially available
- B. Data Bus Analyzer
 - 429EB (preferred):JcAIR Instrumentation400 Industrial Parkway,Industrial Airport, KS 66031
 - 429-2 (optional): Interface Technology 150 E. Arrow Highway, San Dimas, CA 91773

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