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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** For details, see Figure 4 —

> Basic Fault Isolation Process Figure 1

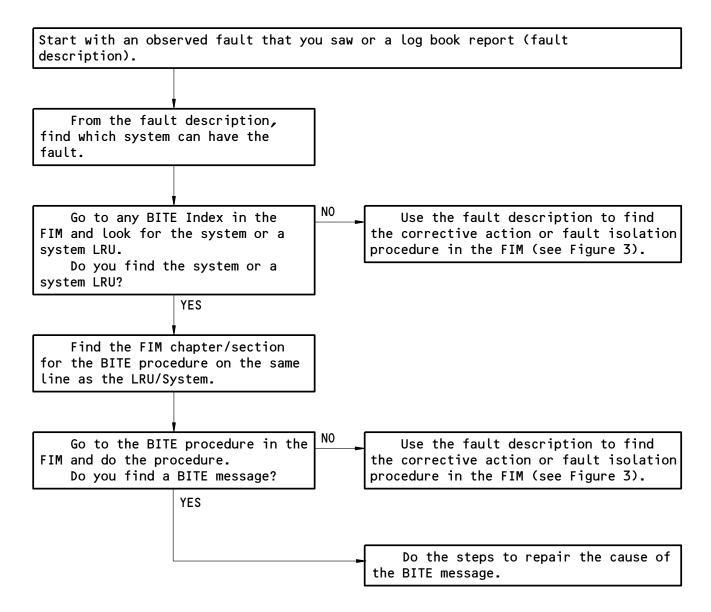
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How to Get Fault Information from BITE Figure 2

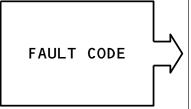
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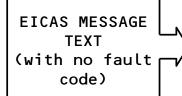
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Page 2 Sep 20/98 IF YOU HAVE:

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

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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

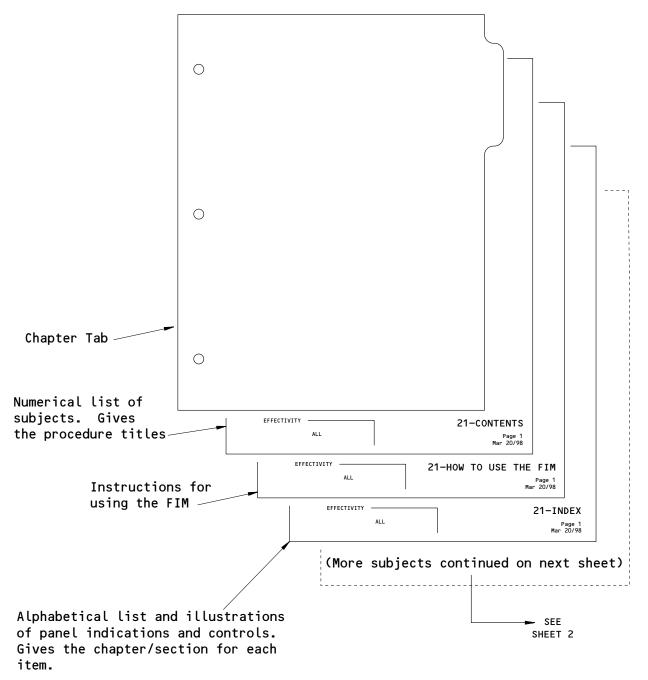
- Start the fault isolation procedure at block 1 unless specified differently.
- Do the check to get an answer to the question in the box. Follow the arrow that applies to your answer. This will go to the next check.
- When you get to a box in the column at the right of the page, you have isolated that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

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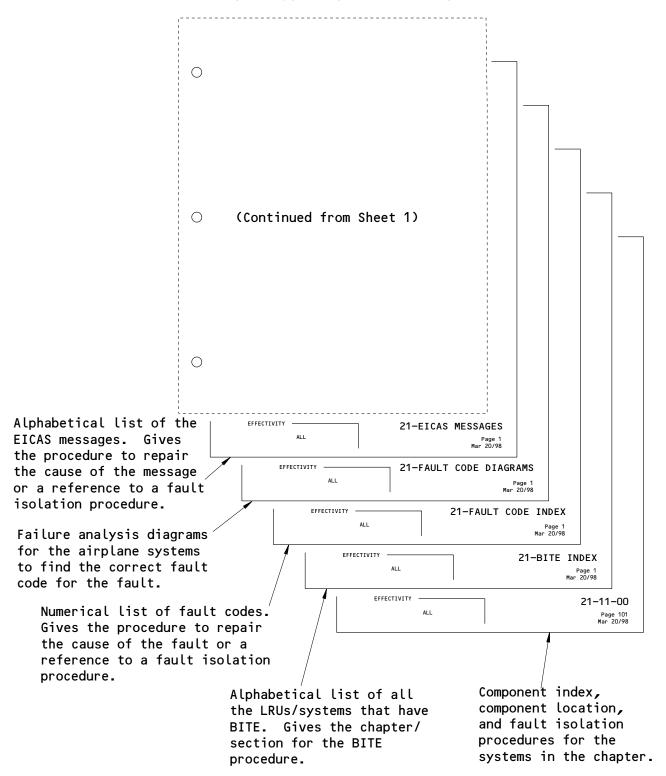


Subjects in Each FIM Chapter Figure 5 (Sheet 1)

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Subjects in Each FIM Chapter Figure 5 (Sheet 2)

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TITLE	CHAP/SEC	TITLE	CHAP/SEC
ALTITUDE ALERT		AUTOTHROTTLE FLIGHT DIRECTOR FLIGHT LEVEL CHANGE A/T A/P (PITCH MODE) GO AROUND HEADING HOLD A/P F/D	
APPROACH A/P F/D AUTOLAND 2 & 3 CHANNEL GO AROUND AUTOLAND STATUS ANNUNCIATO ASA TEST AUTOLAND APP (F/D OR SINGLE A/P AUTOLAND F/D (NON APP MODE) GO AROUND MANUAL LND AUTOLAND F/D (NON APP MODE) GO AROUND AUTOPILOT A/P DISC LGT AUTOPILOT LGT CMD DISENGAGE PITCH MODE ROLL MODE	2200 2200 R 2200 2200 2200 2200 2200 22	HEADING SELECT A/P F/D LIMIT MODES LNAV A/P (ROLL MODE) F/D LOCALIZER A/P (ROLL MODE) F/D AFDS MODE CONTROL PANEL LGT BAR HALF ILLUM THRUST MANAGEMENT COMPUT TMC DATA ON EICAS A/T MODE DISPLAYS TEST VERTICAL SPEED FAILED TO ENGAGE A/P (PITCH MODE) F/D SELECTOR FAULT/FAILED TO CAPTURE VNAV A/P F/D YAW DAMPER	

AUTOFLIGHT - INDEX Figure 1 (Sheet 1)

EFFECTIVITY-

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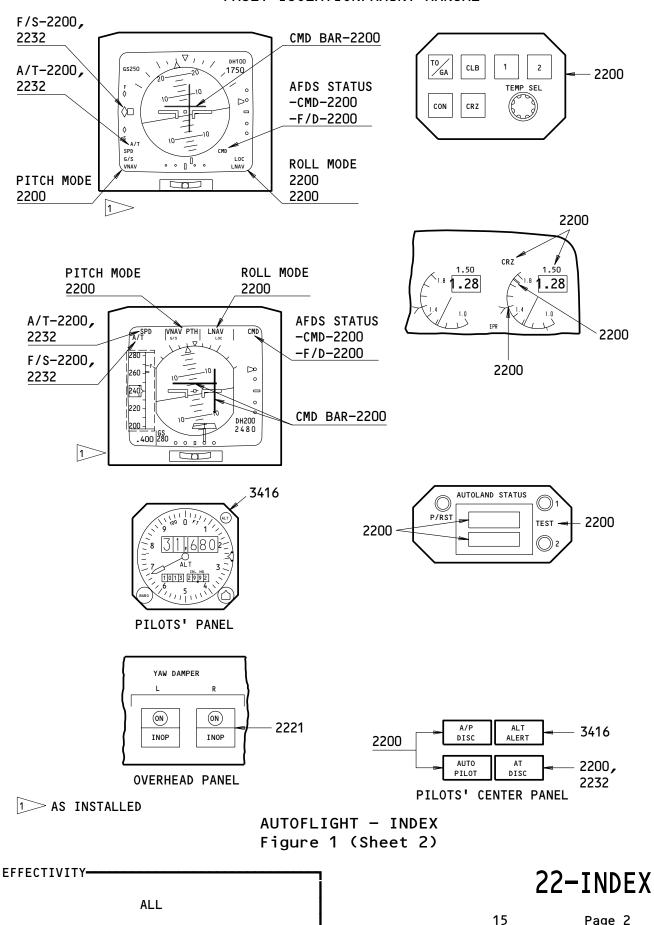
22-INDEX

ALL

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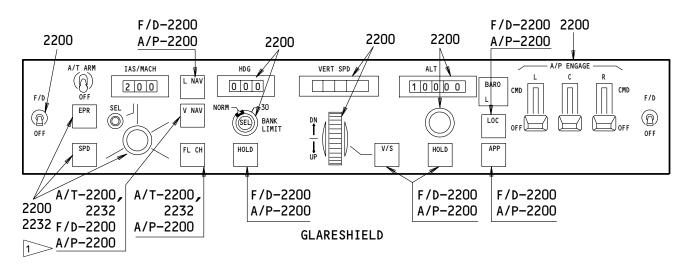
FAULT ISOLATION/MAINT MANUAL

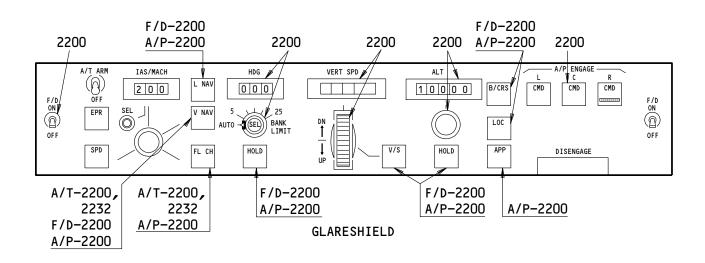


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AUTOFLIGHT - INDEX
Figure 1 (Sheet 3)

EFFECTIVITY

ALL

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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-

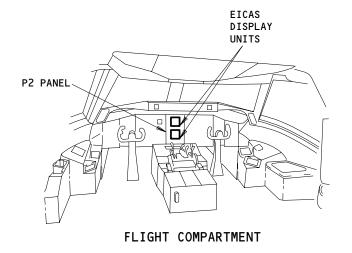
22-EICAS MESSAGES

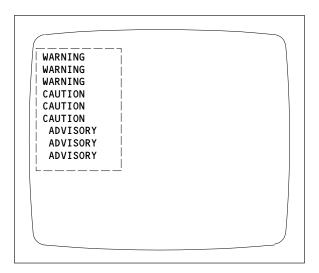
01

ALL

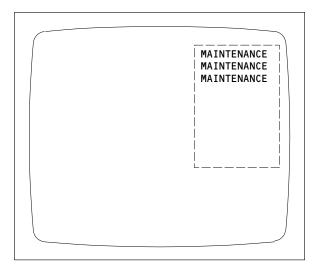


FAULT ISOLATION/MAINT MANUAL

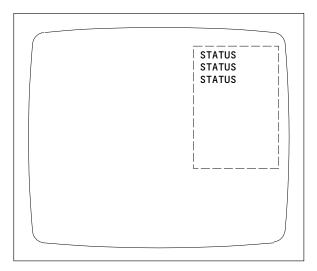




ENGINE PRIMARY PAGE OR COMPACTED PAGE (TOP DISPLAY UNIT)



ECS/MSG PAGE
(BOTTOM DISPLAY UNIT)



STATUS PAGE
(BOTTOM DISPLAY UNIT)

LEVEL	COLOR
A-WARNING	RED
B-CAUTION	YELLOW
C-ADVISORY	YELLOW
S-STATUS	WHITE
M-MAINTENANCE	WHITE

EICAS Message Locations Figure 1

22-EICAS MESSAGES

01

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EICAS MESSAGE LIST			
EICAS MESSAGE LEVEL		PROCEDURE	
ALTITUDE ALERT	В	FIM 34-16-00/101, Fig. 103	
AUTOPILOT	В	FIM 22-00-02/101, Fig. 101	
AUTOPILOT DISC	Α	FIM 22-00-02/101, Fig. 101	
AUTOTHROT DISC B MACH/SPD TRIM C		FIM 22-00-02/101, Fig. 101	
		FIM 27-09-00/101, Fig. 106	
(L, R) YAW DAMPER YAW DAMPER	C M	FIM 22-21-00/101, Fig. 103A FIM 22-21-00/101, Fig. 103A	

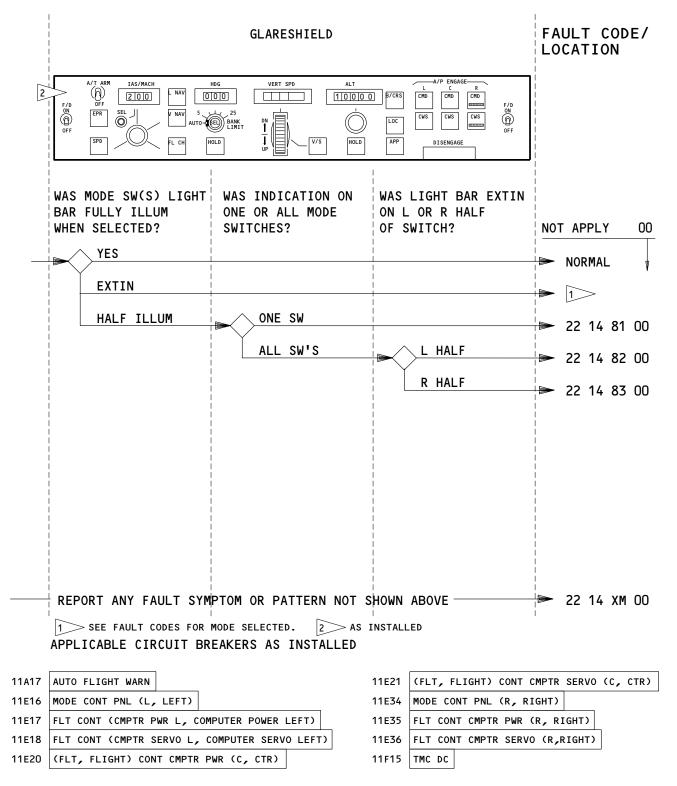
EFFECTIVITY-

22-EICAS MESSAGES

09

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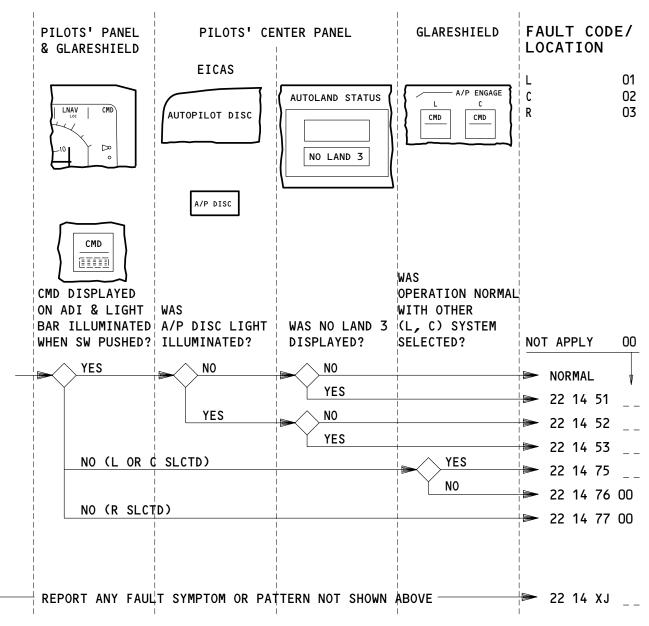




MODE CONTROL PANEL - FAULT CODES

22-FAULT CODE DIAGRAM





11A17	AUTO FLIGHT WARN	11E21	(FLT, FLIGHT) CONT CMPTR SERVO (C, CTR)
11E16	MODE CONT PNL (L, LEFT)	11E34	MODE CONT PNL (R, RIGHT)
11E17	FLT CONT (CMPTR PWR L, COMPUTER POWER LEFT)	11E35	FLT CONT CMPTR PWR (R, RIGHT)
11E18	FLT CONT (CMPTR SERVO L, COMPUTER SERVO LEFT)	11E36	FLT CONT CMPTR SERVO (R,RIGHT)
11E20	(FLT, FLIGHT) CONT CMPTR PWR (C, CTR)	11F15	TMC DC

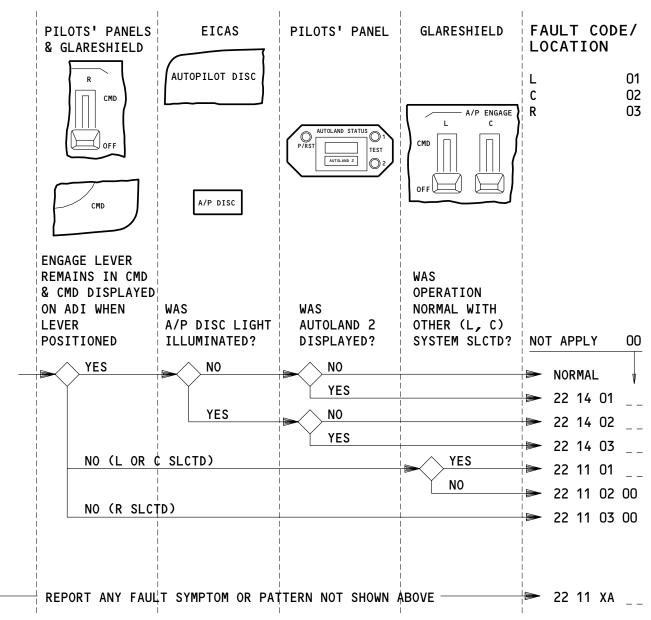
AUTOPILOT (COMMAND) - FAULT CODES

22-FAULT CODE DIAGRAM

05

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11A17	AUTO FLIGHT WARN	11E21	(FLT, FLIGHT) CONT CMPTR SERVO (C, CTR)
11E16	MODE CONT PNL (L, LEFT)	11E34	MODE CONT PNL (R, RIGHT)
11E17	FLT CONT (CMPTR PWR L, COMPUTER POWER LEFT)	11E35	FLT CONT CMPTR PWR (R, RIGHT)
11E18	FLT CONT (CMPTR SERVO L, COMPUTER SERVO LEFT)	11E36	FLT CONT CMPTR SERVO (R,RIGHT)
11E20	(FLT, FLIGHT) CONT CMPTR PWR (C, CTR)	11F15	TMC DC

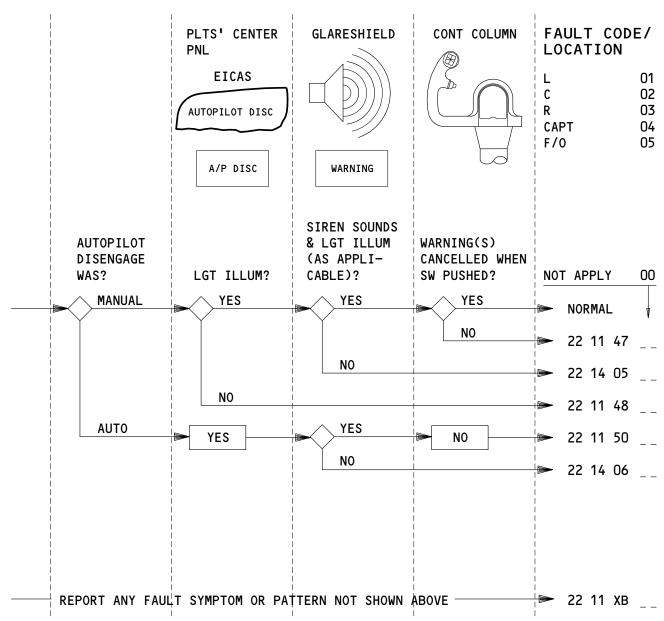
AUTOPILOT (COMMAND) - FAULT CODES

22-FAULT CODE DIAGRAM

06

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11A17	AUTO FLIGHT WARN	11E21	(FLT, FLIGHT) CONT CMPTR SERVO (C, CTR)
11E16	MODE CONT PNL (L, LEFT)	11E34	MODE CONT PNL (R, RIGHT)
11E17	FLT CONT (CMPTR PWR L, COMPUTER POWER LEFT)	11E35	FLT CONT CMPTR PWR (R, RIGHT)
11E18	FLT CONT (CMPTR SERVO L, COMPUTER SERVO LEFT)	11E36	FLT CONT CMPTR SERVO (R,RIGHT)
11E20	(FLT, FLIGHT) CONT CMPTR PWR (C, CTR)	11F15	TMC DC

AUTOPILOT (DISENGAGE) - FAULT CODES

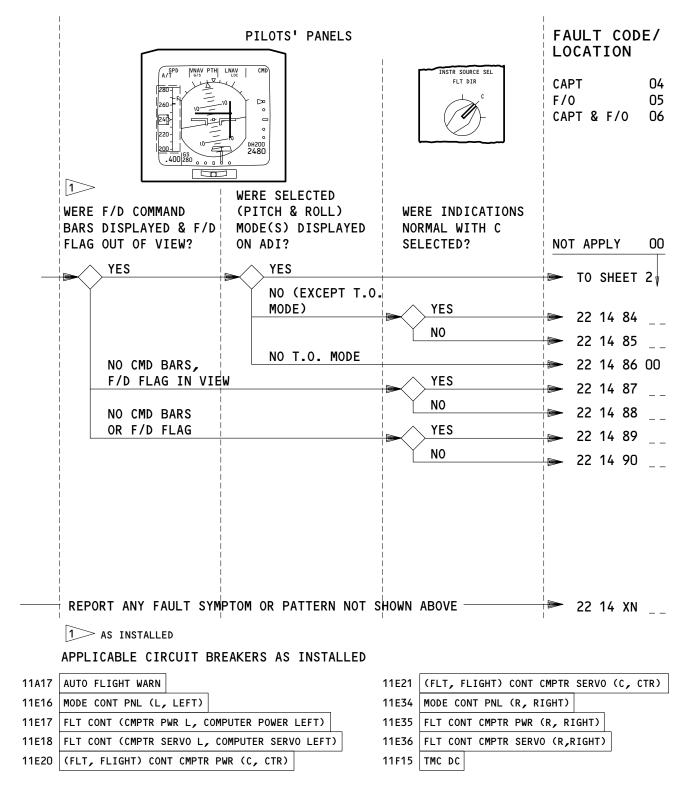
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22-FAULT CODE DIAGRAM

04

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FLIGHT DIRECTOR (SHEET 1) - FAULT CODES

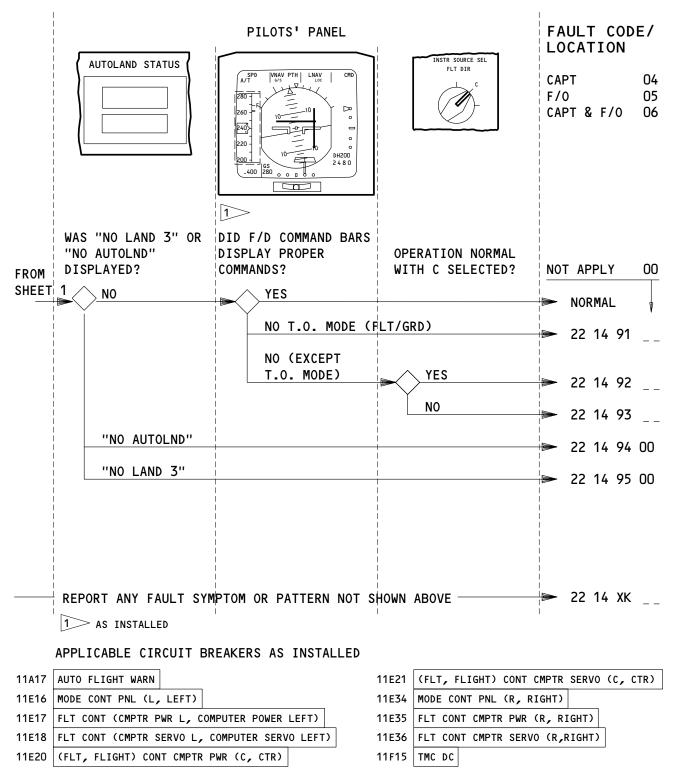
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22-FAULT CODE DIAGRAM

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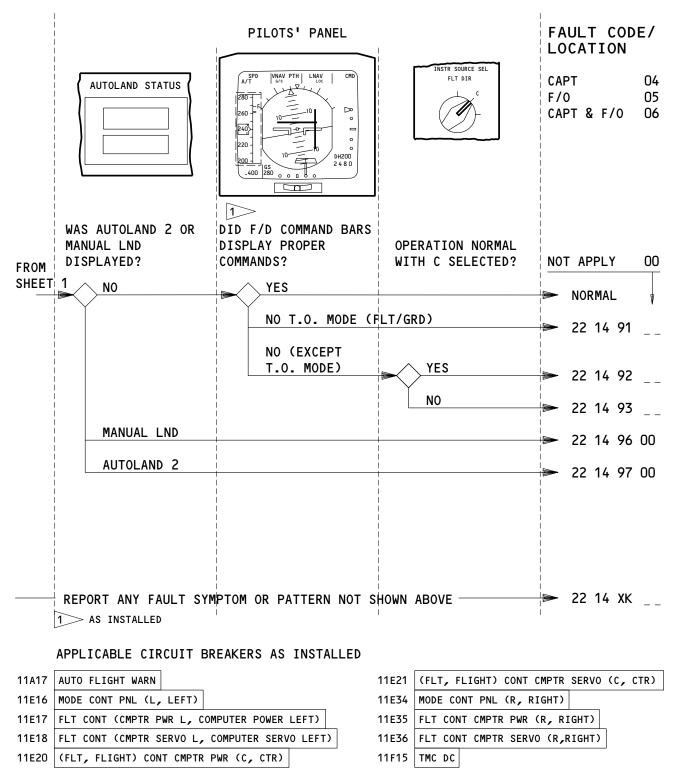
FLIGHT DIRECTOR (SHEET 2) - FAULT CODES

22-FAULT CODE DIAGRAM

04

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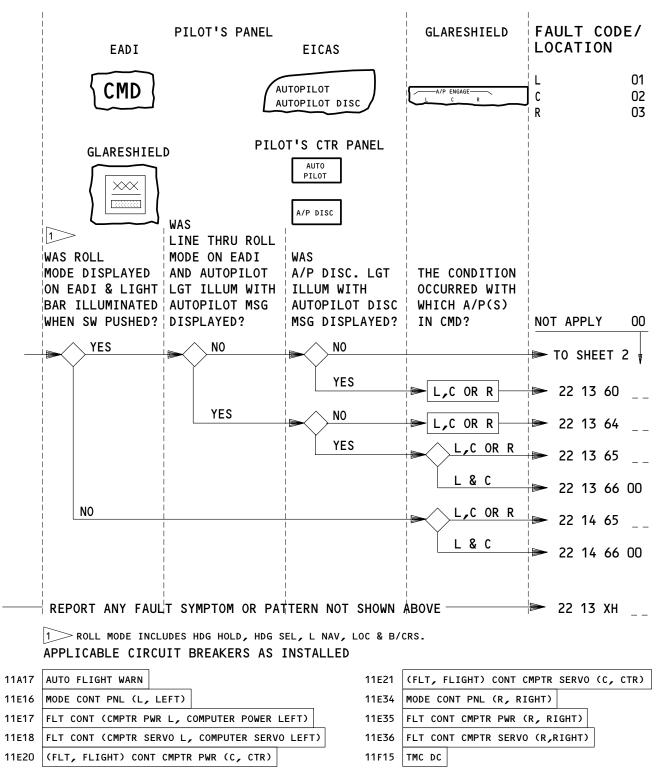
FLIGHT DIRECTOR (SHEET 2) - FAULT CODES

22-FAULT CODE DIAGRAM

06

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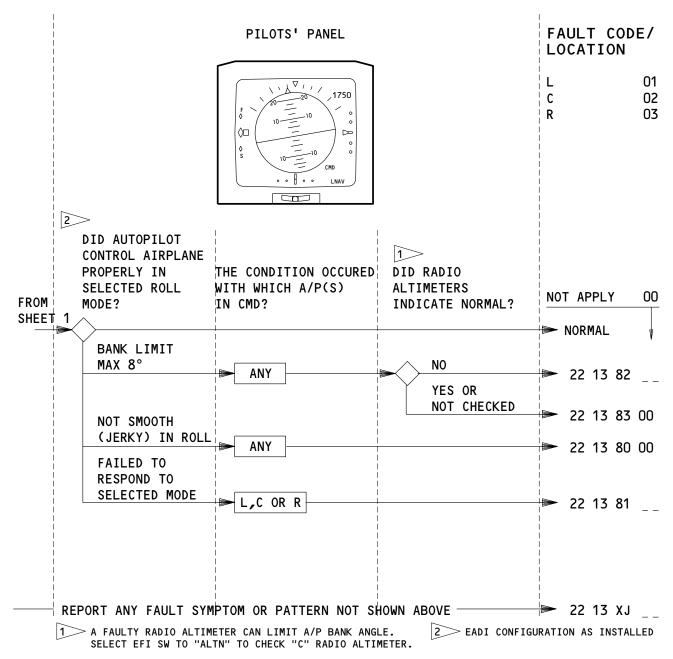
AUTOPILOT (ROLL MODES) (SHEET 1) - FAULT CODES

ALL

22-FAULT CODE DIAGRAM

03 Page 8
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11A17	AUTO FLIGHT WARN	11E21 (FLT, FLIGHT) CONT CMPTR SERVO (C, CTF	()
11E16	MODE CONT PNL (L, LEFT)	11E34 MODE CONT PNL (R, RIGHT)	
11E17	FLT CONT (CMPTR PWR L, COMPUTER POWER LEFT)	11E35 FLT CONT CMPTR PWR (R, RIGHT)	
11E18	FLT CONT (CMPTR SERVO L, COMPUTER SERVO LEFT)	11E36 FLT CONT CMPTR SERVO (R,RIGHT)	
11E20	(FLT, FLIGHT) CONT CMPTR PWR (C, CTR)	11F15 TMC DC	

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

EFFECTIVITY-ALL

22-FAULT CODE DIAGRAM

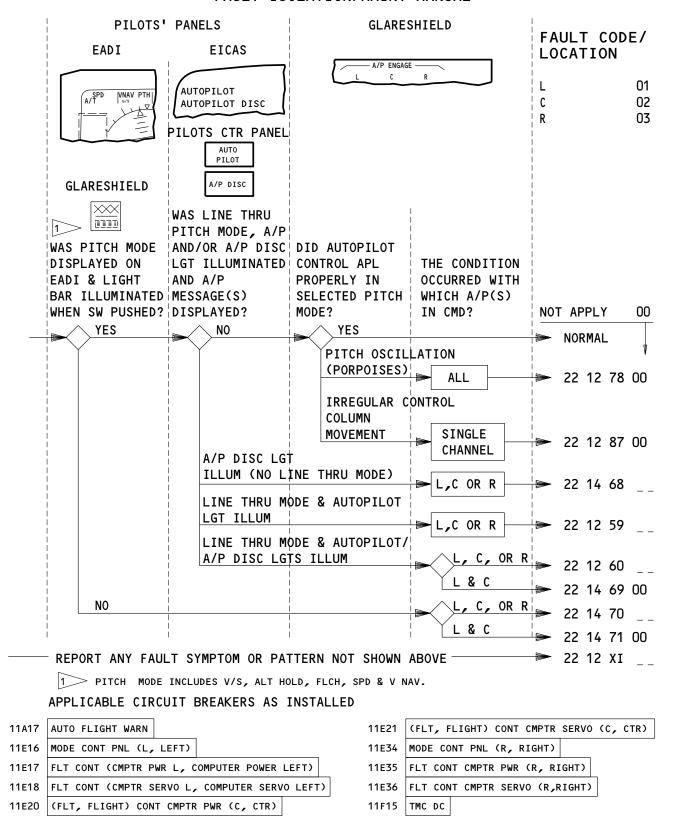
04

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835557



FAULT ISOLATION/MAINT MANUAL



AUTOPILOT (PITCH MODES) - FAULT CODES

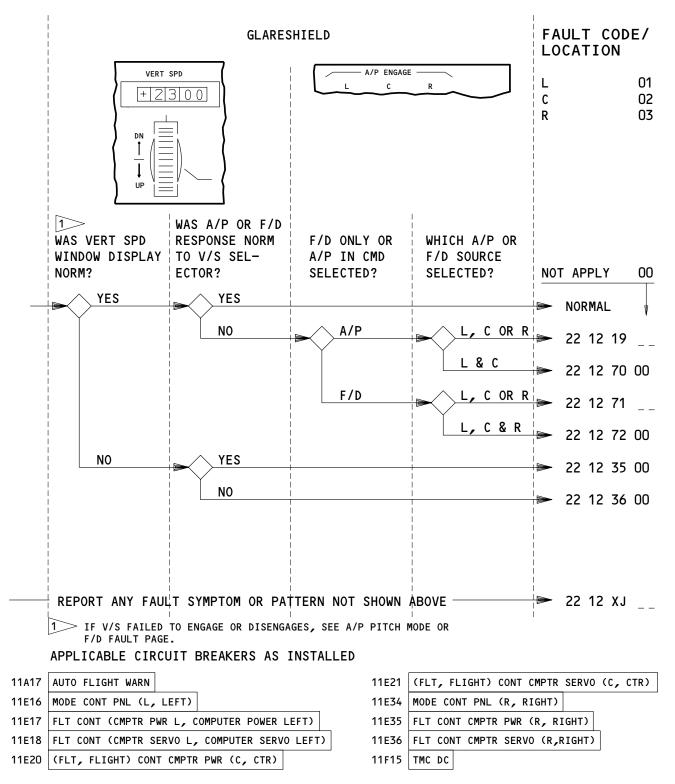
22-FAULT CODE DIAGRAM

ALL

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04





VERTICAL SPEED - FAULT CODES

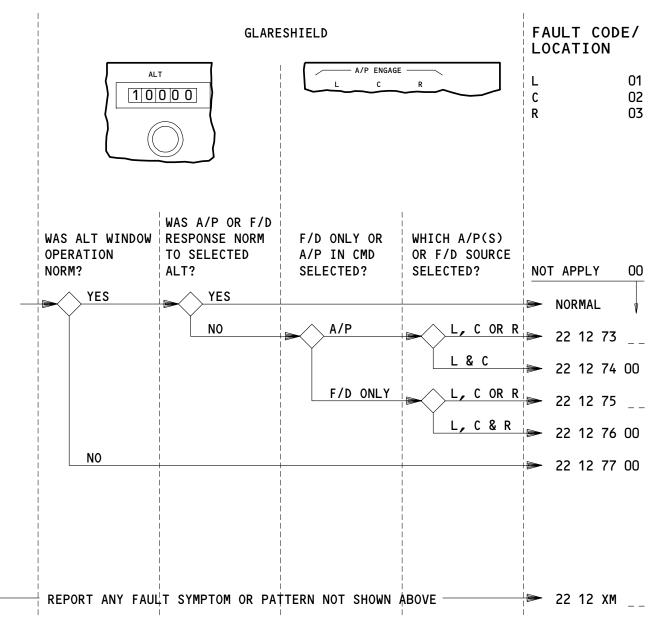
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22-FAULT CODE DIAGRAM

04

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11A17	AUTO FLIGHT WARN	11E21	(FLT, FLIGHT) CONT CMPTR SERVO (C, CTR)
11E16	MODE CONT PNL (L, LEFT)	11E34	MODE CONT PNL (R, RIGHT)
11E17	FLT CONT (CMPTR PWR L, COMPUTER POWER LEFT)	11E35	FLT CONT CMPTR PWR (R, RIGHT)
11E18	FLT CONT (CMPTR SERVO L, COMPUTER SERVO LEFT)	11E36	FLT CONT CMPTR SERVO (R,RIGHT)
11E20	(FLT, FLIGHT) CONT CMPTR PWR (C, CTR)	11F15	TMC DC

ALTITUDE SELECT - FAULT CODES

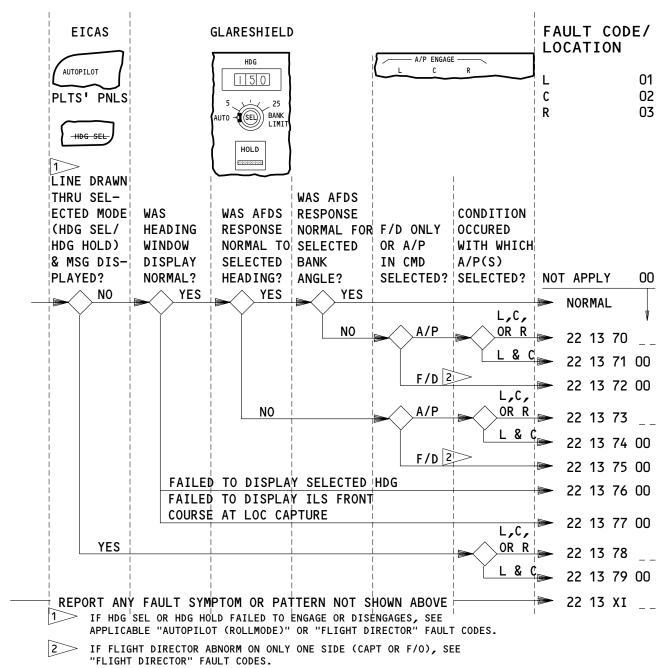
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22-FAULT CODE DIAGRAM

03

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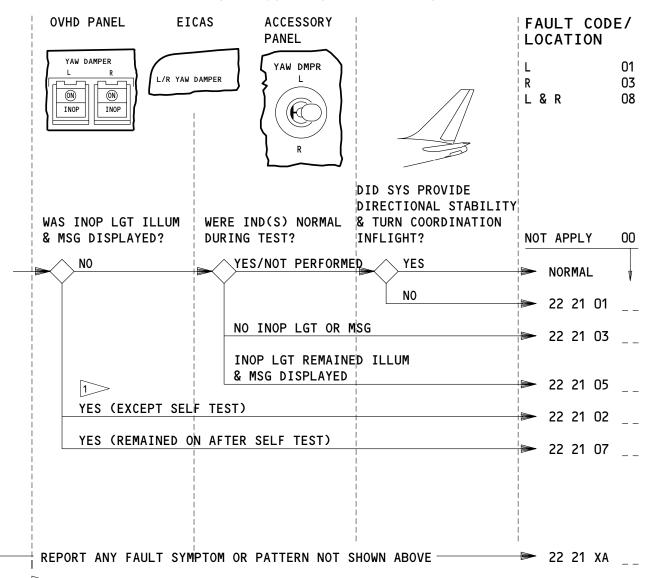
11A17	AUTO FLIGHT WARN	11E21	(FLT, FLIGHT) CONT CMPTR SERVO (C, CTR)
11E16	MODE CONT PNL (L, LEFT)	11E34	MODE CONT PNL (R, RIGHT)
11E17	FLT CONT (CMPTR PWR L, COMPUTER POWER LEFT)	11E35	FLT CONT CMPTR PWR (R, RIGHT)
11E18	FLT CONT (CMPTR SERVO L, COMPUTER SERVO LEFT)	11E36	FLT CONT CMPTR SERVO (R,RIGHT)
11E20	(FLT, FLIGHT) CONT CMPTR PWR (C, CTR)	11F15	TMC DC

HEADING SELECT/HOLD - FAULT CODES

22-FAULT CODE DIAGRAM



FAULT ISOLATION/MAINT MANUAL



A SELF TEST OCCURS ON THE GRD DURING INITIAL POWER-UP. INOP LGT(S) ILLUM & MSG DISPLAY FOR APPROXIMATELY 20 SEC. IRS(S) MUST BE ALIGNED AND IN NAV.

APPLICABLE CIRCUIT BREAKERS AS INSTALLED

11A18	AUTOFLIGHT YAW DAMPER (L, LEFT	11F34 OR AUTOFLIGHT YAW DAMP	ER (R, RIGHT)
1106	(FLT CONT ELEC, CSEU) 1L AC		
11c7	(FLT CONT ELEC, CSEU) 1L DC	11G17 (FLT CONT ELEC, CSE	U) 1R AC
11C8	(FLT CONT ELEC, CSEU) 2L AC	11G18 (FLT CONT ELEC, CSE	U) 1R DC
1109	(FLT CONT ELEC, CSEU) 2L DC	11G27 (FLT CONT ELEC, CSE	U) 2R AC
		11G28 (FLT CONT ELEC, CSE	U) 2R DC

YAW DAMPER - FAULT CODES

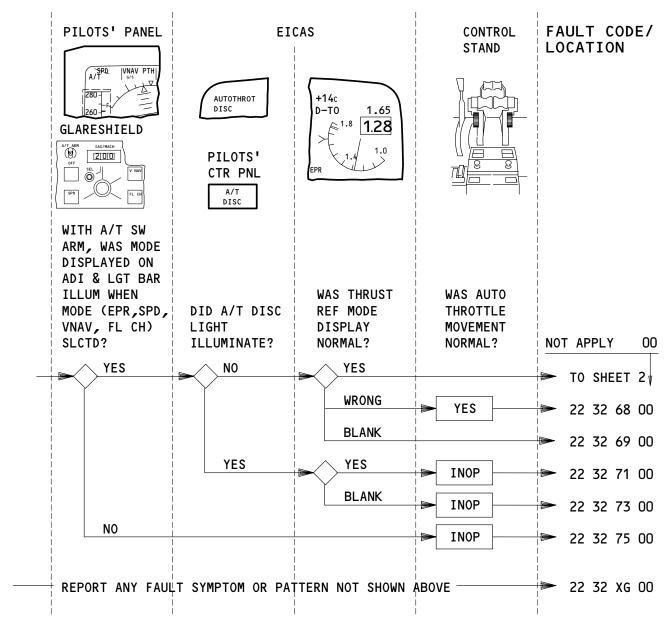
ALL ALL

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	SERVO

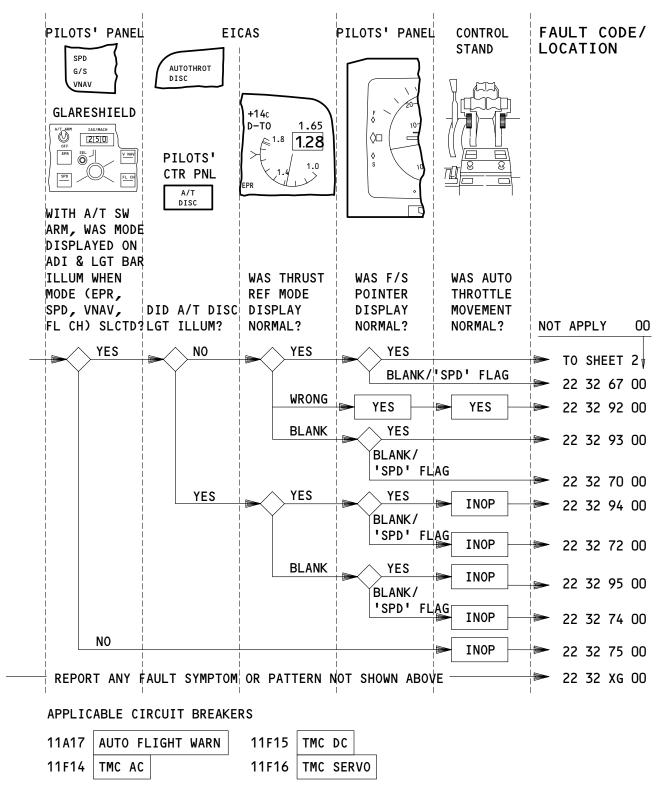
AUTOTHROTTLE (SHEET 1) - FAULT CODES

22-FAULT CODE DIAGRAM

08.1

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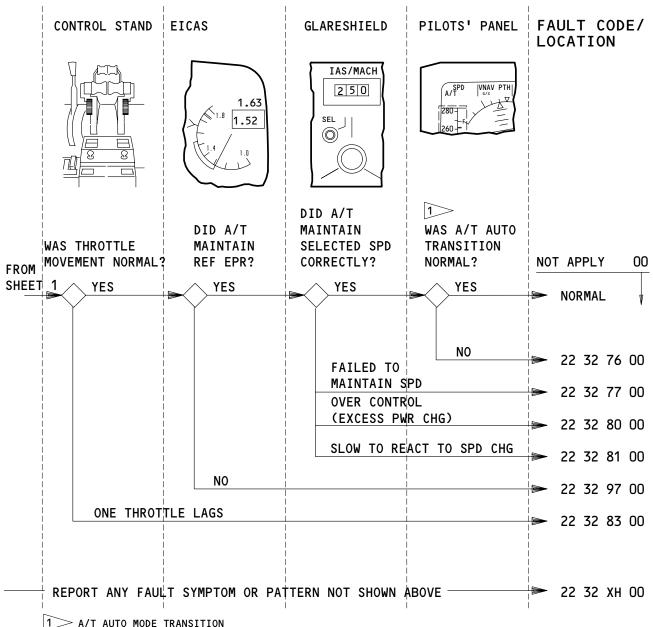
AUTOTHROTTLE (SHEET 1) - FAULT CODES

22-FAULT CODE DIAGRAM

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1>> A/T AUTO MODE TRANSITION

- 'EPR' TO 'THR HOLD' DURING T/O
 'SPD' TO 'IDLE' DURING FLARE
- LIMIT MODES WHEN LIMITS EXCEEDED - 'FL CH' OR 'GA' TO 'SPD' AT ALT CAPTURE
- 'FL CH' TO 'THR HOLD' DURING DESCENT

APPLICABLE CIRCUIT BREAKERS

11A17	AUTO FLIGHT WARN	11F14	TMC AC	
11E16	MODE CONT PNL LEFT	11F15	TMC DC	
11E34	MODE CONT PNL RIGHT	11F16	TMC SERVO	2

AUTOTHROTTLE (SHEET 2) - FAULT CODES

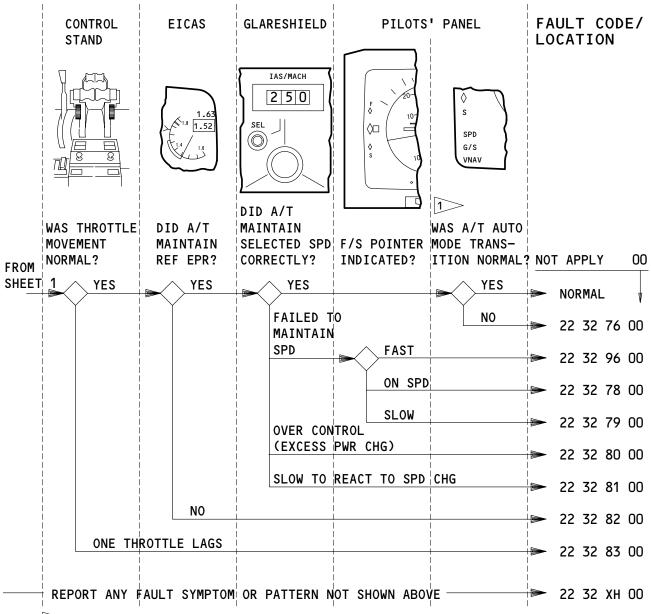
EFFECTIVITY-AIRPLANES WITHOUT FAST/SLOW INDICATOR

22-FAULT CODE DIAGRAM

09

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1>> A/T AUTO MODE TRANSITION

- 'EPR' TO 'THR HOLD' DURING T/O
- 'SPD' TO 'IDLE' DURING FLARE
- LIMIT MODES WHEN LIMITS EXCEEDED
- 'FL CH' OR 'GA' TO 'SPD' AT ALT CAPTURE
- 'FL CH' TO 'THR HOLD' DURING DESCENT

APPLICABLE CIRCUIT BREAKERS

11A17	AUTO FLIGHT WARN	11F14	TMC AC	
11E16	MODE CONT PNL L	11F15	TMC DC	
11E34	MODE CONT PNL R	11F16	TMC SERV	0

AUTOTHROTTLE (SHEET 2) - FAULT CODES

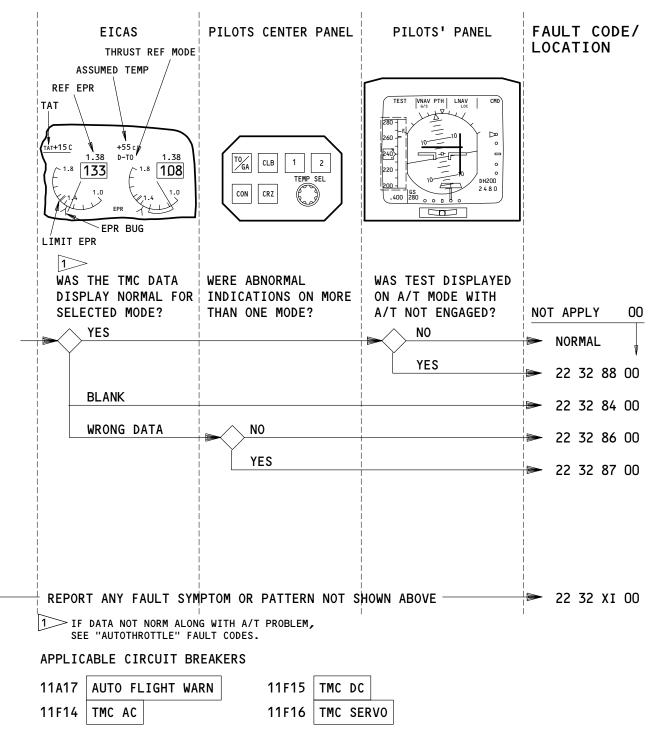
AIRPALNES WITH FAST/SLOW INDICATOR

22-FAULT CODE DIAGRAM

09

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TMC - FAULT CODES

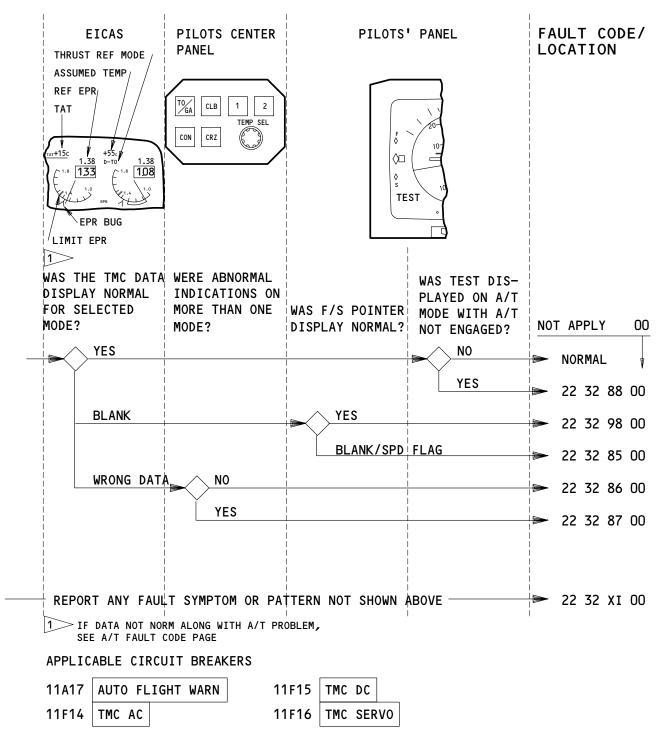
AIRPLANES WITHOUT FAST/SLOW POINTER

22-FAULT CODE DIAGRAM

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TMC - FAULT CODES

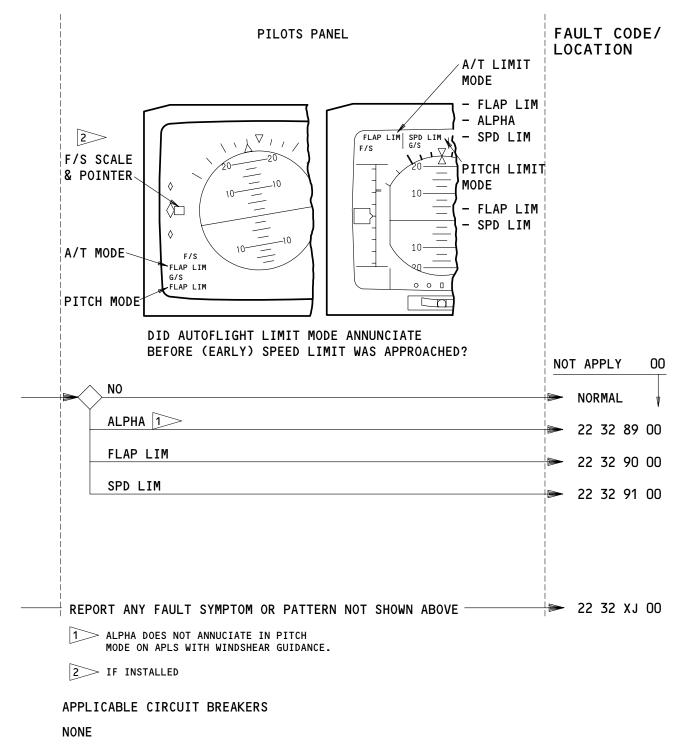
AIRPLANES WITH FAST/SLOW INDICATOR

22-FAULT CODE DIAGRAM

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AUTOFLIGHT LIMIT MODES - FAULT CODES

ALL

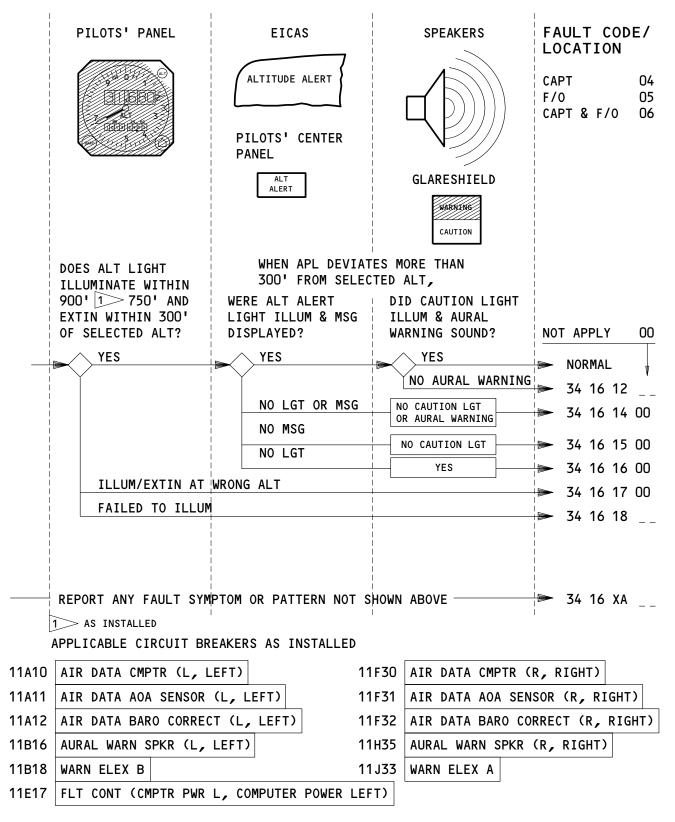
22-FAULT CODE DIAGRAM

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FAULT ISOLATION/MAINT MANUAL



ALTITUDE ALERT - FAULT CODES

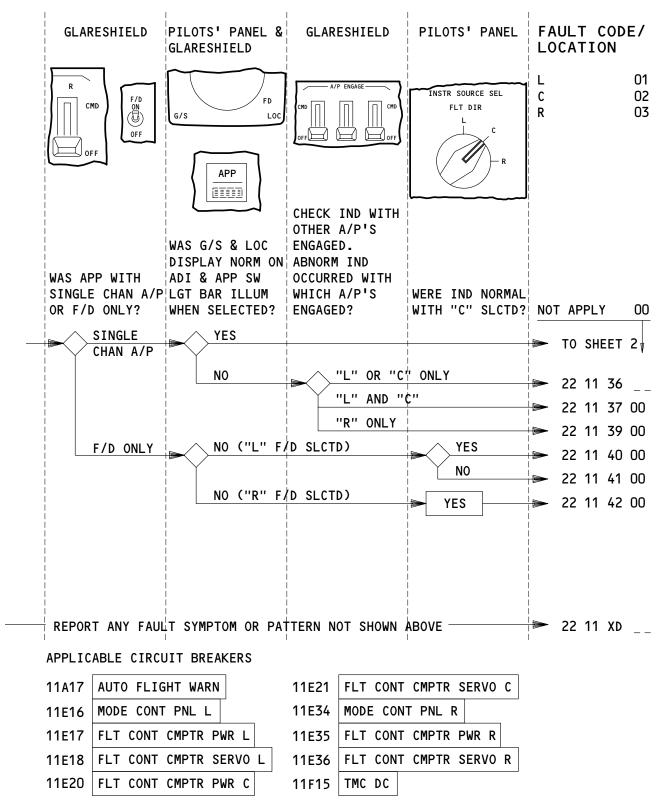
ALL

22-FAULT CODE DIAGRAM

09

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APPROACH SINGLE CHANNEL A/P AND F/D (SHEET 1) - FAULT CODES

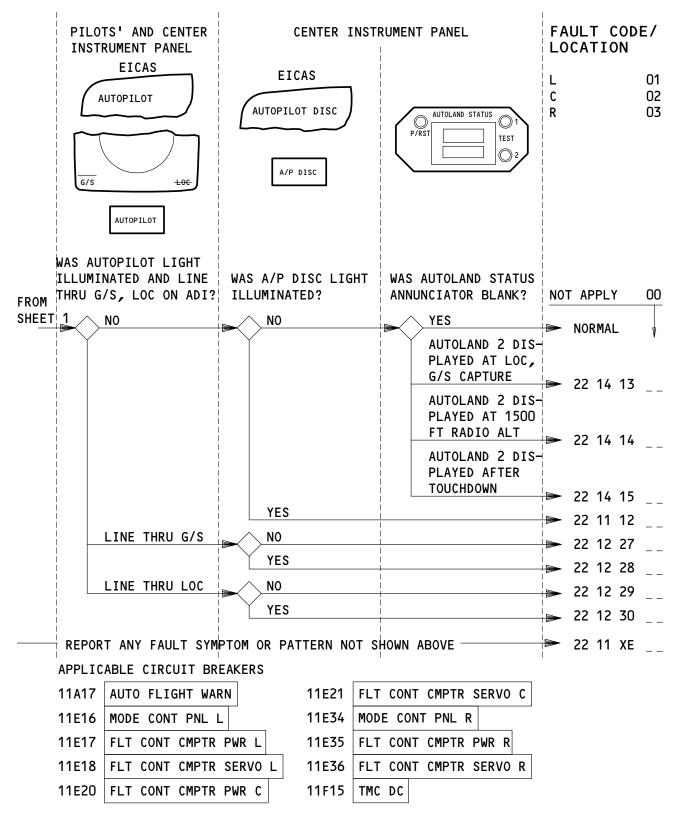
APPROACH SINGLE CHANNEL A/P AND F/D

22-FAULT CODE DIAGRAM

10

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APPROACH SINGLE CHANNEL A/P AND F/D (SHEET 2) - FAULT CODES

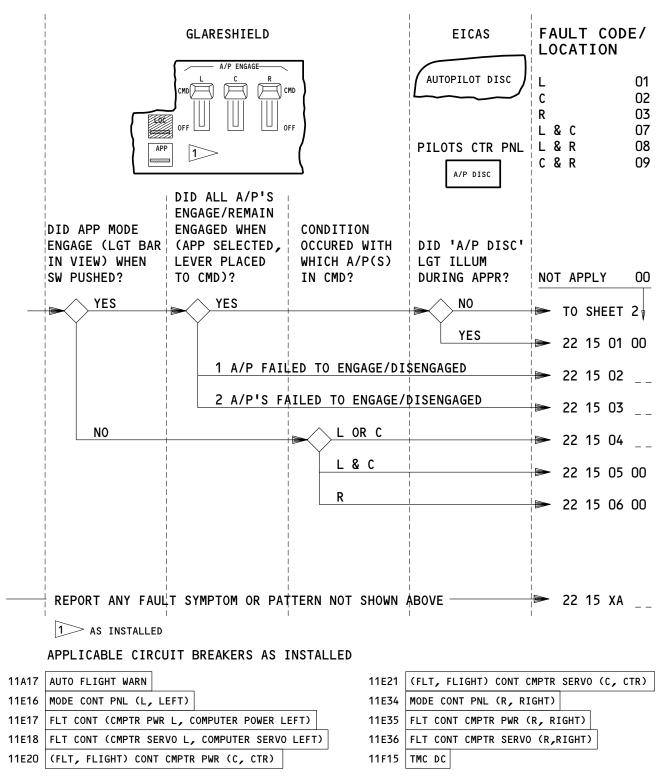
APPROACH SINGLE CHANNEL A/P AND F/D

22-FAULT CODE DIAGRAM

08

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AUTOLAND (SHEET 1) - FAULT CODES

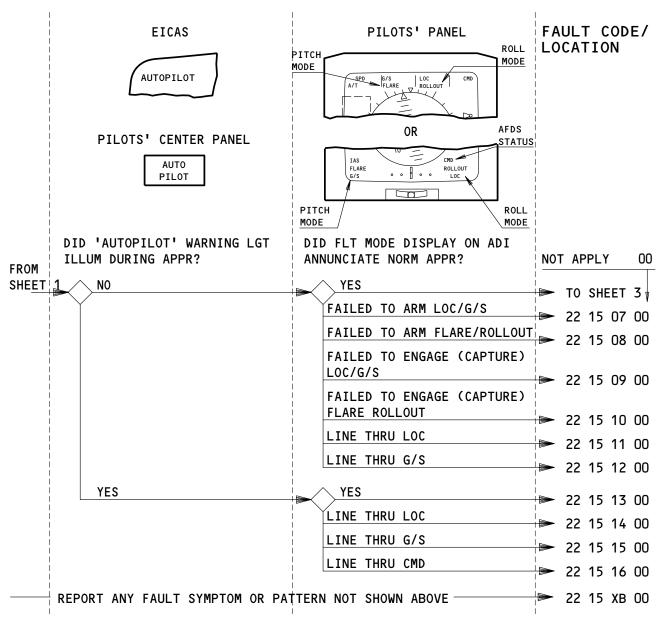
ALL

22-FAULT CODE DIAGRAM

06

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APPLICABLE CIRCUIT BREAKERS AS INSTALLED

11A17	AUTO FLIGHT WARN	11E21	(FLT, FLIGHT) CONT CMPTR SERVO (C, CTR)
11E16	MODE CONT PNL (L, LEFT)	11E34	MODE CONT PNL (R, RIGHT)
11E17	FLT CONT (CMPTR PWR L, COMPUTER POWER LEFT)	11E35	FLT CONT CMPTR PWR (R, RIGHT)
11E18	FLT CONT (CMPTR SERVO L, COMPUTER SERVO LEFT)	11E36	FLT CONT CMPTR SERVO (R,RIGHT)
11E20	(FLT, FLIGHT) CMPTR PWR (C, CTR)	11F15	TMC DC

AUTOLAND (SHEET 2) - FAULT CODES

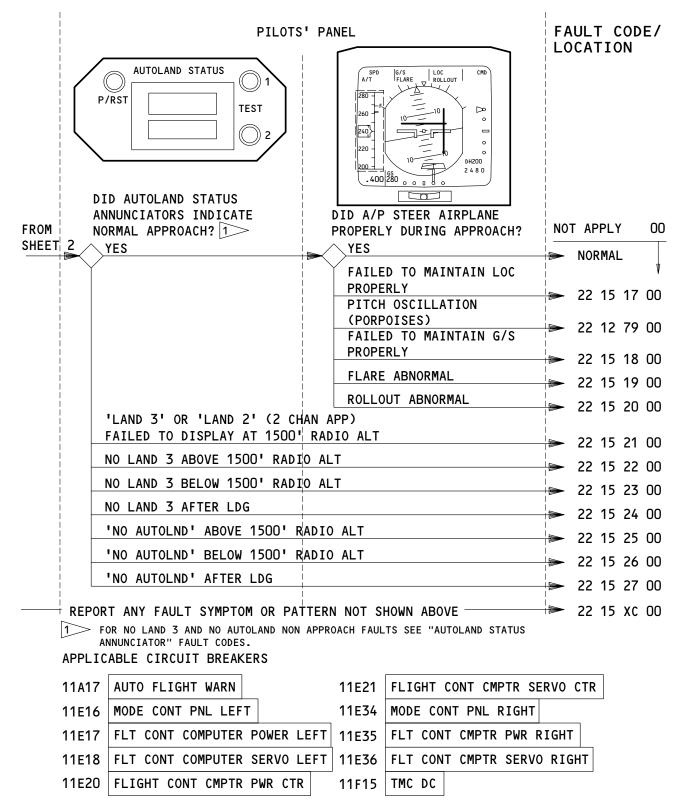
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22-FAULT CODE DIAGRAM

06

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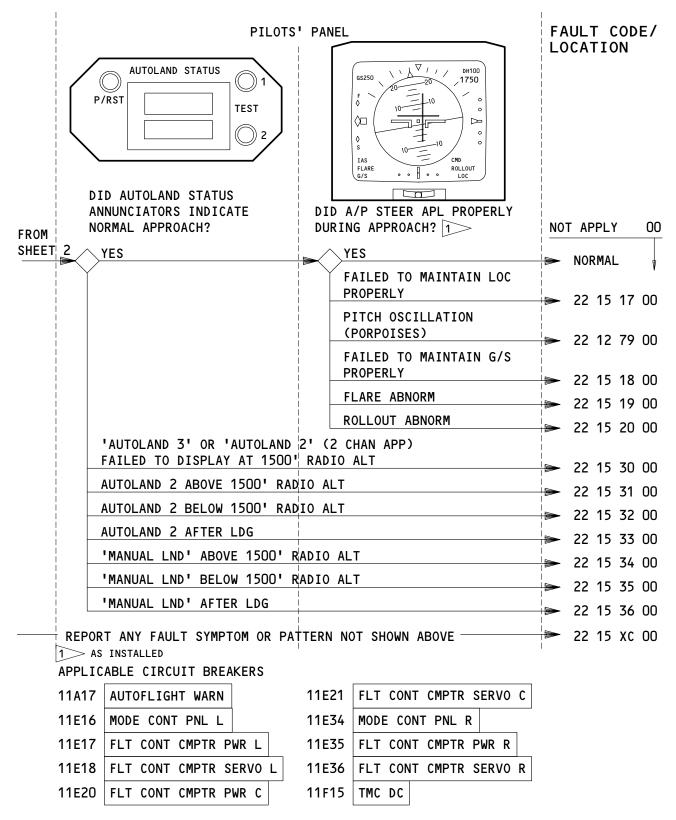
AUTOLAND (SHEET 3) - FAULT CODES

22-FAULT CODE DIAGRAM

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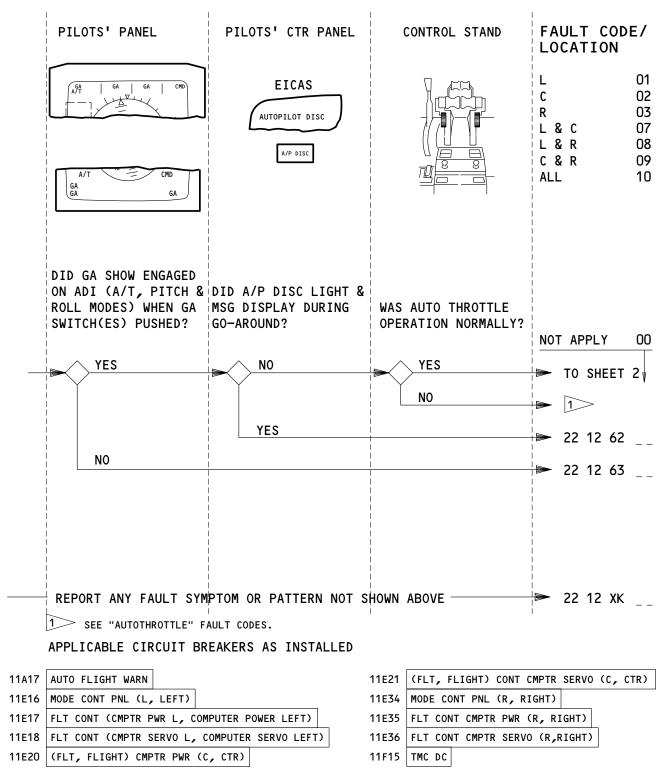
AUTOLAND (SHEET 3) - FAULT CODES

22-FAULT CODE DIAGRAM

02

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

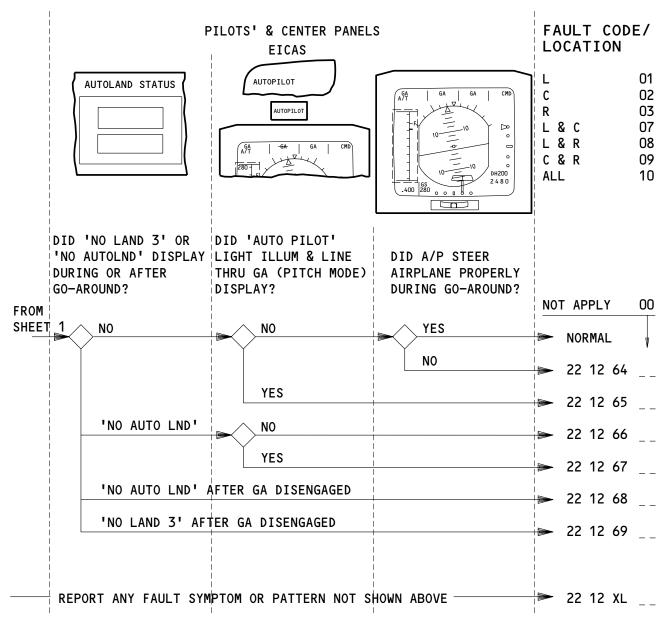
ALL ALL

22-FAULT CODE DIAGRAM

02

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APPLICABLE CIRCUIT BREAKERS AS INSTALLED

11A17	AUTO FLIGHT WARN	11E21	(FLT, FLIGHT) CONT CMPTR SERVO (C, CTR)
11E16	MODE CONT PNL (L, LEFT)	11E34	MODE CONT PNL (R, RIGHT)
11E17	FLT CONT (CMPTR PWR L, COMPUTER POWER LEFT)	11E35	FLT CONT CMPTR PWR (R, RIGHT)
11E18	FLT CONT (CMPTR SERVO L, COMPUTER SERVO LEFT)	11E36	FLT CONT CMPTR SERVO (R,RIGHT)
11E20	(FLT, FLIGHT) CONT CMPTR PWR (C, CTR)	11F15	TMC DC

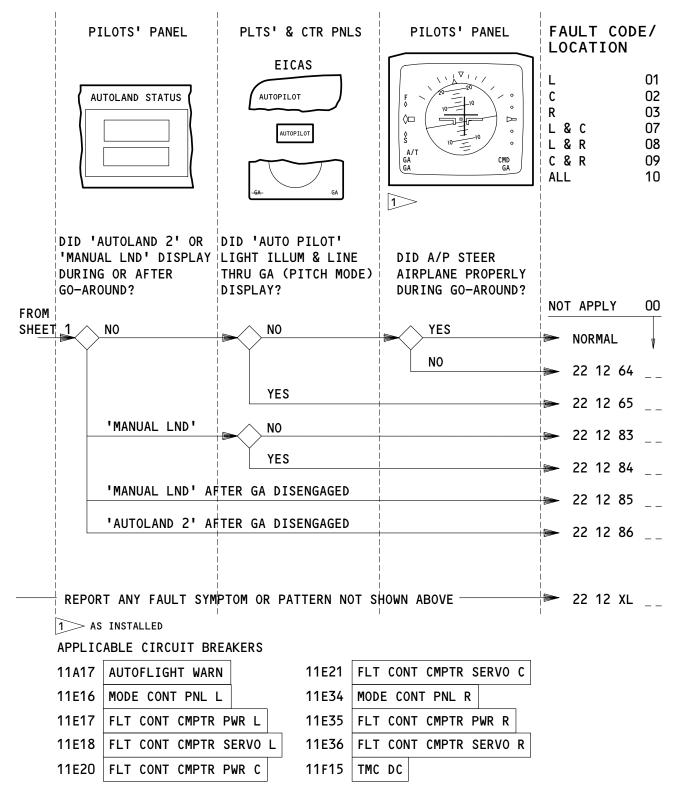
GO-AROUND - A/P (SHEET 2) - FAULT CODES

22-FAULT CODE DIAGRAM

03

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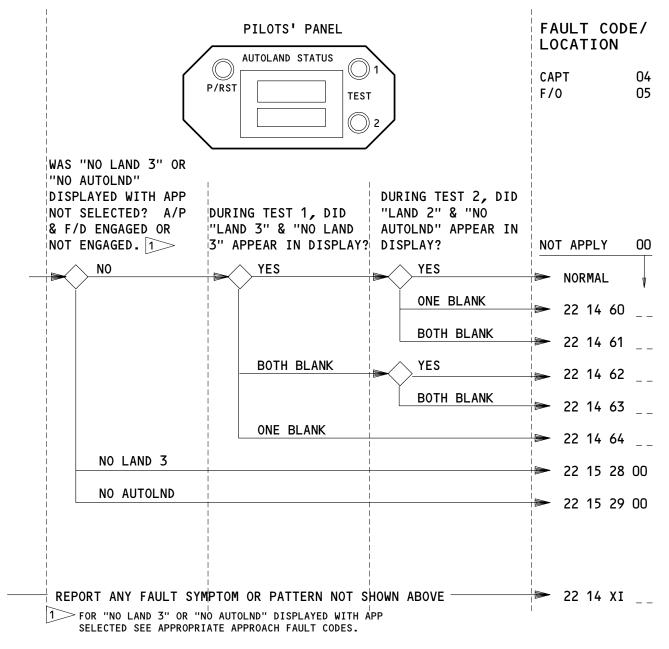
GO-AROUND - A/P (SHEET 2) - FAULT CODES

22-FAULT CODE DIAGRAM

01

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APPLICABLE CIRCUIT BREAKERS AS INSTALLED

11A17	AUTO FLIGHT WARN	11E21	(FLT, FLIGHT) CONT CMPTR SERVO (C, CTR)
11E16	MODE CONT PNL (L, LEFT)	11E34	MODE CONT PNL (R, RIGHT)
11E17	FLT CONT (CMPTR PWR L, COMPUTER POWER LEFT)	11E35	FLT CONT CMPTR PWR (R, RIGHT)
11E18	FLT CONT (CMPTR SERVO L, COMPUTER SERVO LEFT)	11E36	FLT CONT CMPTR SERVO (R,RIGHT)
11E20	(FLT, FLIGHT) CONT CMPTR PWR (C, CTR)	11F15	TMC DC

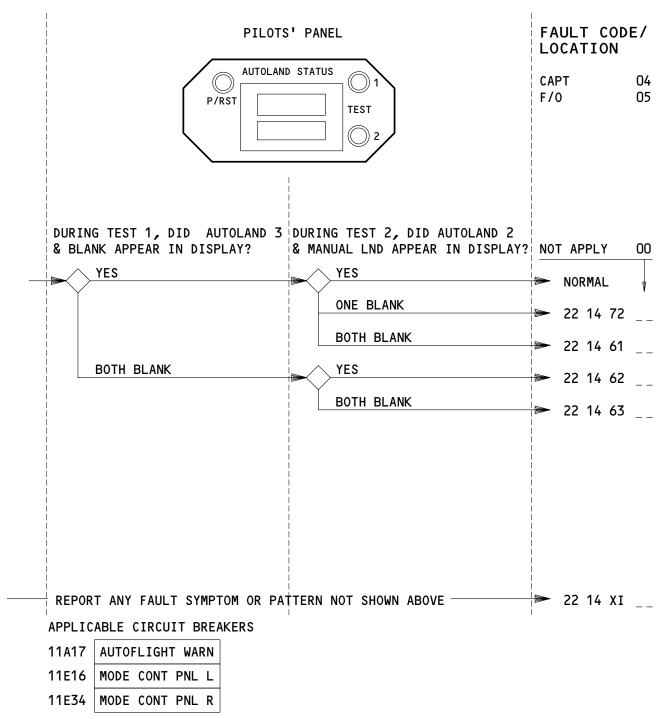
AUTOLAND STATUS ANNUNCIATOR - FAULT CODES

22-FAULT CODE DIAGRAM

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AUTOLAND STATUS ANNUNCIATOR TEST - FAULT CODES

AIRPLANES WITH "AUTOLAND 2"
OR "MANUAL LND"

22-FAULT CODE DIAGRAM

01

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 11 XA	A (01=L,02=C,03=R) autopilot (command) problem was encountered by the flight crew which is not covered in the fault code diagram.	FIM 22-00-02/101, Fig. 101, Block 1
22 11 XB	A (01=L,02=C,03=R,04=Capt, 05=F/0) autopilot (disengage) problem was encountered by the flight crew which is not covered in the fault code diagram.	FIM 22-00-02/101, Fig. 101, Block 1
22 11 XD	A (01=L,02=C,03=R) autopilot and flight director single channel approach, problem was encountered by the flight crew which is not covered in the fault code diagrams.	FIM 22-00-02/101, Fig. 101, Block 1
22 11 XE	A (01=L,02=C,03=R) autopilot and flight director single channel approach problem was encountered by the flight crew which is not covered in the fault code diagrams.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 XI	A (01=L,02=C,03=R) autopilot (pitch modes) problem was encountered by the flight crew which was not covered in the fault code diagrams.	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 diagrams.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 XK	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.	

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
ļ	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.	FIM 22-00-02/101,
22 12 XM	A (01=L,02=C,03=R) autopilot Altitude Select problem was encountered by the flight crew which is not covered in the fault code diagrams.	FIM 22-00-02/101, Fig. 101, Block 1
22 13 XH	A (01=L,02=C,03=R) autopilot (Roll Modes) problem was encountered by the flight crew which is not covered in the fault code diagrams.	FIM 22-00-02/101, Fig. 101, Block 1
22 13 XI	A (01=L,02=C,03=R) autopilot (HDG select) problem was encountered by the flight crew which is not covered in the fault code diagrams.	FIM 22-00-02/101, Fig. 101, Block 1
22 13 XJ	A (01=L,02=C,03=R) autopilot (Roll Modes) problem was encountered by the flight crew which is not covered in the fault code diagrams.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 XI	A (01=Capt,02=F/O) autoland status annunciator test problem was encountered by the flight crew which is not covered in the fault code diagrams.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 XJ	A (01=L,02=C,03=R) autopilot (CMD) problem was encountered by the flight crew which is not covered in the fault code diagram.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 XK	A (01=Capt,02=F/O) flight director problem was encountered by the flight crew which is not covered in the fault code diagram.	FIM 22-00-02/101, Fig. 101, Block 1

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 14 XM 00	A mode control panel problem was encountered by the flight crew which is not covered in the fault code diagram.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 XN	A (01=Capt,02=F/O) flight director problem was encountered by the flight crew which is not covered in the fault code diagram.	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.	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.	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.	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.	FIM 22-00-00/101, Fig. 103, Block 1
22 32 XG 00	An autothrottle problem was encountered by the flight crew which is not covered in the fault code diagram.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 32 XH 00	An autothrottle problem was encountered by the flight crew which is not covered in the fault code diagram.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.
22 32 XI 00	A TMC problem was encountered by the flight crew which is not covered in the fault code diagram.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related light faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.
22 32 XJ 00	An autoflight limit modes problem was encountered by the flight crew which is not covered in the fault code diagram.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1). If the test is OK, the system is OK.
22 11 01	(01=L,02=C) engage lever did not remain in CMD when positioned. Operation normal with other system (L,C) selected.	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).
22 11 02 00	Neither L nor C engage lever would remain in CMD when positioned.	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).
22 11 03 00	R engage lever did not remain in command when positioned.	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).

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 11 12	A/P DISC light on 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. If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1).
22 11 21	VNAV fails to remain on. Fault occurs with (01=L,02=C,03=R,04=any) autopilot engaged.	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).
22 11 22	LNAV light fails to remain on. Fault occurs with (01=L,02=C, 03=R,04=any) autopilot engaged.	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).
22 11 36	G/S and LOC not displayed on EADI and APP switch/light bar did not come on when the APP mode switch was pushed with (O1=L,O2=C) autopilot system engaged in CMD. Operation normal with other (L,C) system selected.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 01 FCC (FIM 22-00-03/101, Fig. 102, Block 1).
22 11 37 00	G/S and LOC not displayed on EADI and APP switch/light bar extinguished when switch pushed with either L or C autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 11 39 00	G/S and LOC not displayed on EADI and the APP switch/light bar did not come on when the APP mode switch was pushed with the R autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1. If no FCC or MCP related flight faults are shown, do the MCDP Ground Test 01 FCC (FIM 22-00-03/101, Fig. 102, Block 1) and 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 11 40 00	G/S and LOC not displayed on EADI and the APP switch/light bar turned off when APP mode switch was pushed with INSTR SOURCE SEL FLT DIR switch positioned to L. Operation normal with INSTR SOURCE SEL FLT DIR switch positioned to C.	FIM 22-00-02/101, Fig. 101, Block 1. If no FCC related flight faults are shown, do the MCDP Ground Test 01 FCC (FIM 22-00-03/101, Fig. 102, Block 1).
22 11 41 00	G/S and LOC not displayed on EADI and the APP switch/light bar turned off when APP mode switch was pushed with INSTR SOURCE SEL FLT DIR switch positioned to either L or C.	FIM 22-00-02/101, Fig. 101, Block 1. If no FCC related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 11 42 00	G/S and LOC not displayed on EADI and the APP switch/light bar turned off when APP mode switch was pushed with INSTR SOURCE SEL FLT DIR switch positioned to R. Operation normal with INSTR SOURCE SEL FLT DIR switch positioned to C.	FIM 22-00-02/101, Fig. 101, Block 1. If no FCC or MCP related flight faults are shown, do the MCDP Ground Test 01 FCC (FIM 22-00-03/101, Fig. 104, Block 1).
22 11 47	Following manual disengage the autopilot warning(s) did not cancel when autopilot disengage switch pushed the second time with (O1=L,O2=C,O3=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. If no A/P disconnect switch related flight faults are shown, do the MCDP Ground Test 11 SW A/P DISC (FIM 22-00-03/101, Fig. 111, Block 1).
22 11 48	A/P DISC light did not come on when (04=Capt,05=F/0) autopilot disconnect switch pushed. Operation normal when other switch pushed.	FIM 22-00-02/101, Fig. 101, Block 1. If no A/P disconnect switch related flight faults are shown, do the MCDP Ground Test 11 SW A/P DISC (FIM 22-00-03/101, Fig. 111, Block 1).

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 11 50	Following automatic illumination of A/P DISC light, autopilot warning(s) did not cancel when autopilot disconnect 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. If no A/P disconnect switch related flight faults are shown, do the MCDP Ground Test 11 SW A/P DISC (FIM 22-00-03/101, Fig. 111, Block 1).
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 another system selected.	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).
22 12 27	Line through G/S on EADI, AUTOPILOT light illuminated, and EICAS message AUTOPILOT displayed with (01=L,02=C,03=R) autopilot system engaged in CMD. A/P DISC light remained off.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 28	AUTOPILOT and A/P DISC lights off, line through G/S on EADI, and EICAS message AUTOPILOT DISC displayed with (O1=L,O2=C,O3=R) autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 29	AUTOPILOT light on, line through LOC on EADI, and EICAS message AUTOPILOT displayed with (O1=L, O2=C,O3=R) autopilot system engaged in CMD. A/P DISC light remained off.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 30	AUTOPILOT and A/P DISC lights on, line thru LOC on EADI, and EICAS message AUTOPILOT DISC displayed with (O1=L,O2=C,O3=R) autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 12 35 00	Vertical speed window display does not respond to selector change. (A/P, F/D) response to selector change normal.	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).
22 12 36 00	Vertical speed window display and (A/P, F/D) failed to respond to V/S selector change.	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).
22 12 59	AUTOPILOT light on. Line thru V/S, ALT HOLD, SPD, VNAV on EADI and EICAS message AUTOPILOT displayed with (O1=L,O2=C,O3=R) autopilot system engaged in CMD. A/P DISC light remained off.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 60	AUTOPILOT and A/P DISC lights off. Line thru V/S, ALT HOLD, SPD, VNAV on EADI and EICAS message AUTOPILOT displayed with (01=L,02=C,03=R) autopilot system engaged in CMD. Operation normal with other autopilot system in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 62	A/P DISC lights on 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 63	Pitch and roll GAs 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 64	Autopilot failed to describe steering problem during go-around 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

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 12 65	AUTOPILOT light on. Line through GA (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 66	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 systems engaged in CMD. AUTOPILOT and A/P DISC lights off.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 67	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 systems engaged in CMD. AUTOPILOT light on, line thru G/A (pitch) on EADI and EICAS message AUTOPILOT displayed.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 68	NO AUTOLND displayed on autoland status annunciator after go-around disengaged with (O1=L, O2=C,O3=R,O7=L&C,O8=L&R,O9=C&R, 10=all) autopilot systems engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 69	NO LAND 3 displayed on autoland status annunciator with go-around disengaged with (01=L, 02=c,03=R,07=L&c,08=L&R,09=C&R, 10=all) autopilot systems engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 70 00	Airplane does not respond to vertical speed selector change with either L or C autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 12 70	F/D failed to respond to vertical speed selection with source selector in (01=L,02=C, 03=R).	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).
22 12 72 00	F/D failed to respond to vertical speed selection with source selector in L, C, or R.	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).
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 autopilot system selected.	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).
22 12 74 00	Airplane did not respond to altitude select change with either L or C autopilot system engaged in CMD.	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).
22 12 75	F/D failed to respond to altitude select with source selector in (01=L,02=C,03=R).	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).
22 12 76 00	F/D failed to respond to altitude select with source selector in L, C, or R.	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).
22 12 77 00	Unable to select altitude in altitude select window.	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).

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 12 78 00	Airplane has pitch oscillation (porpoising) with any Autopilot system in CMD and (V/S, ALT HOLD, FLCH, VNAV) mode selected.	Do a check of the elevator surface freeplay (AMM 27-02-00/601). If the problem continues, do the adjustment/test of the elevator control system (AMM 27-31-00/501).
22 12 79 00	Autopilot pitch oscillation (porpoises) during multi-channel approach.	Do a check of the elevator surface freeplay (AMM 27-02-00/601). If the problem continues, do the adjustment/test of the elevator control system (AMM 27-31-00/501).
22 12 80	SEL SPD displayed on (01=Capt, 02=F/0) EADI.	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).
22 12 81	Command bug(s) on (O1=Capt, O2=F/0,O3=both) EADI speed tape(s) disagree(s) with (MCP, FMC CDU). Bugs normal using ALTN EFI.	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).
22 12 82	Command airspeed bug(s) (not normal, missing, etc.) on (O1=Capt,O2=F/O) EADI speed tape(s) with normal or ALTN EFI selected.	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).
22 12 83	MANUAL LND displayed on autoland status annunciator with (01=L, 02=C,03=R,07=L&C,08=L&R,09=C&R, 10=all) autopilot systems engaged in CMD. AUTOPILOT and A/P DISC lights off.	FIM 22-00-02/101, Fig. 101, Block 1

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 12 84	MANUAL LND displayed on autoland status annunciator with (01=L, 02=C,03=R,07=L&C,08=L&R,09=C&R, 10=all) autopilot systems engaged in CMD. AUTOPILOT light on, line thru G/A (pitch) on EADI and EICAS message AUTOPILOT displayed.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 85	MANUAL LND displayed on autoland status annunciator with (01=L, 02=C,03=R,07=L&C,08=L&R,09=C&R, 10=all) autopilot systems engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 86	AUTOLAND 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 systems engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 12 87	Airplane has irregular control column movement or does not hold or capture selected altitude correctly.	FIM 22-00-02/101, Fig. 101, Block 1
22 13 60	A/P DISC light on 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 64	AUTOPILOT light on. Line thru HDG HOLD, HDG SEL, LNAV, LOC, B/CRS on EADI, and EICAS message AUTOPILOT displayed with (O1=L, O2=C,O3=R) autopilot system engaged in CMD. A/P DISC light remained off.	FIM 22-00-02/101, Fig. 101, Block 1
22 13 65	AUTOPILOT and A/P DISC lights on. Line thru HDG HOLD, HDG SEL, LNAV, LOC, B/CRS on EADI, and EICAS message AUTOPILOT DISC displayed with (O1=L,O2=C,O3=R) autopilot 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	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 13 66	AUTOPILOT and A/P DISC lights on. Line thru HDG HOLD, HDG SEL, LNAV, LOC, B/CRS on EADI, and EICAS message AUTOPILOT DISC displayed with either L or C autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 13 70	(01=L,02=C,03=R) A/P failed to maintain proper bank angle with bank limit selector in position.	FIM 22-00-02/101, Fig. 101, Book 1. If no MCP related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 13 71 00	L or C A/P failed to maintain proper bank angle with bank limit selector in position.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP related flight faults are shown, 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 position.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP related flight faults are shown, 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	L or 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	F/D failed to command selected heading in HDG (SEL, HOLD).	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).	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 13 77 00	MCP HDG window failed to display ILS front course at loc capture.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 13 78	Line drawn thru HDG SEL or HGD HOLD on ADI. EICAS msg AUTOPILOT displayed with (O1=L,O2=C,O3=R) A/P in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 13 79 00	Line drawn thru HDG (SEL, HOLD) on ADI and EICAS msg AUTOPILOT displayed with L or C A/P in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 13 80 00	APL not smooth (JERKY) in roll mode with any A/P in CMD and (HDG HOLD, HDG SEL, LNAV, LOC or B/CRS) mode selected.	Do a check of the aileron surface freeplay (AMM 27-02-00/601). If the problem continues, do the adjustment/test of the aileron and aileron trim control system (AMM 27-11-00/501).
22 13 81	Autopilot failed to describe failure with (O1=L O2=C,O3=R) A/P sys engaged in CMD and HDG HOLD, HDG SEL, LNAV, LOC or B/CRS mode selected. Mode display on EADI norm. Operation norm with other A/Ps in CMD.	Do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 13 82	APL bank angle limited to 8° in roll with any A/P in CMD. (01=L, 02=C, 03=R) radio altimeter indications abnormal.	Do the RA BITE Procedure (FIM 34-33-00/101, Fig. 105A, Block 1). If the problem continues, do a test of the radio altimeter antenna and coaxial cable (AMM 20-10-32/201).
22 13 83 00	APL bank angle limited to 8° in roll with any A/P in CMD. Radio altimeters indications norm, not checked.	Do the RA BITE Procedure (FIM 34-33-00/101, Fig. 105A, Block 1). If the problem continues, do a test of the radio altimeter antenna and coaxial cable (AMM 20-10-32/201).

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 14 01	AUTOLAND 2 displayed on autoland status annunciator with (01=L, 02=C,03=R) autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 02	A/P DISC light on and EICAS message AUTOPILOT DISC displayed with (01=L,02=C,03=R) autopilot system engaged in CMD. AUTOLAND 2 not displayed on autoland status annunciator.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 03	A/P DISC light on, EICAS message AUTOPILOT DISC displayed, and AUTOLAND 2 displayed on autoland status annunciator with (01=L, 02=C,03=R) autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 05	Following manual disengage with illumination of A/P DISC light, siren did not sound and master WARNING light did not come on after appropriate time delay with (01=L,02=C,03=R) autopilot system engaged.	FIM 22-00-02/101, Fig. 101, Block 1. If no FCC related flight faults are shown, do the MCDP Ground Test 01 FCC (FIM 22-00-03/101, Fig. 102, Block 1). If the test is OK, do the Aural Warning Problems procedure (FIM 31-51-00/101, Fig. 104, Block 1).
22 14 06	Following automatic illumination of A/P DISC light, siren did not sound and master WARNING light did not come on after appropriate time delay with (01=L,02=C,03=R) autopilot system engaged.	
22 14 13	AUTOLAND 2 displayed on autoland status annunciator at (LOC,G/S) capture with (O1=L,O2=C,O3=R) autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 14 14	AUTOLAND 2 displayed on autoland status annunciator at 1500 feet radio altitude with (01=L,02=C, 03=R) autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 15	AUTOLAND 2 displayed on autoland status annunciator after touchdown with (01=L,02=c,03=R) autopilot system in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 51	NO LAND 3 displayed on autoland status annunciator with (01=L, 02=C, 03=R) autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 52	A/P DISC light on 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 on, 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.	
22 14 60	(04=Capt,05=F/O) autoland status annunciator failed to display (LAND 2, NO AUTOLND) during test 2.	Do the MCDP Ground Test 06 ASA (FIM 22-00-03/101, Fig. 106, Block 1).
22 14 61	(04=Capt,05=F/O) autoland status annunciator displays blank during test 2.	Do the MCDP Ground Test 06 ASA (FIM 22-00-03/101, Fig. 106, Block 1).
22 14 62	(04=Capt,05=F/O) autoland status annunciator displays blank during test 1.	Do the MCDP Ground Test O6 ASA (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 & 2.	Do the MCDP Ground Test O6 ASA (FIM 22-00-03/101, Fig. 106, Block 1).

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 14 64	(04=Capt,05=F/O) autoland status annunciator failed to display (LAND 3, NO LAND 3) during test 1.	Do the MCDP Ground Test 06 ASA (FIM 22-00-03/101, Fig. 106, Block 1).
22 14 65	HDG HOLD, HDG SEL, LNAV, LOC or B/CRS) not displayed on EADI and switch/light bar did not come on when mode switch pushed with (O1=L,O2=C,O3=R) autopilot system engaged in CMD. Operation normal with other A/Ps in CMD.	related flight faults are shown, do the MCP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104,
22 14 66 00	HDG HOLD, HDG SEL, LNAV, LOC or B/CRS not displayed on EADI and switch/light bar did not come on when mode switch pushed with either L or C autopilot system engaged in CMD.	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).
22 14 68	A/P DISC light on and EICAS message AUTOPILOT DISC displayed with (01=L,02=C,03=R) autopilot system engaged in CMD and (V/S, ALT HOLD, FLCH, VNAV) mode selected.	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).
22 14 69 00	AUTOPILOT and A/P DISC lights come on, line thru V/S, ALT HOLD, SPD, or VNAV on EADI, and EICAS message AUTOPILOT displayed with either L or C autopilot system engaged in CMD.	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).
22 14 70	V/S, ALT HOLD, SPD, or VNAV not displayed on EADI and switch/light bar did not come on when mode switch pushed with (O1=L,O2=C) autopilot system engaged in CMD. Operation normal with other A/Ps in CMD.	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).
22 14 71 00	V/S, ALT HOLD, SPD, or VNAV not displayed on EADI and switch/light bar did not come on when mode switch pushed with either L or C autopilot system engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 14 72	(04=Capt, 05=F/0) Autoland status annunciator failed to display (AUTOLAND 2, MANUAL LND) during test 2.	Do the MCDP Ground Test 06 ASA (FIM 22-00-03/101, Fig. 106, Block 1).
22 14 75	CMD not displayed on EADI and switch/light bar did not come on when (01=L,02=C) CMD switch was pushed for engagement. Operation normal with (L,C) system selected.	FIM 22-00-02/101, Fig. 101, Block 1. If no FCC related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 14 76	CMD not displayed on EADI and switch/light bar did not come on when either L or C CMD switch pushed for engagement.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 14 77 00	CMD not displayed on EADI and switch/light bar did not come on when R CMD switch pushed for engagement.	FIM 22-00-02/101, Fig. 101, Block 1. If no FCC or MCP related flight faults are shown, do the MCDP Ground Test 01 FCC (FIM 22-00-03/101, Fig. 102, Block 1) and 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 14 81 00	MCP mode switch/light bar half comes on when selected.	Push the IND LTS TEST switch on the right lighting control panel (on P5). Replace the specified lamp if it stays off. If the problem continues, replace the AFCS Mode Control Panel (M90) (AMM 22-11-02/201).
22 14 82 00	MCP, all mode switches L half of light bar off when selected.	Cycle the 11E16, MODE CONT PNL L circuit breaker, and then do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 14 83 00	MCP, all mode switches R half of light bar off when selected.	Cycle the 11E34, MODE CONT PNL R circuit breaker, and then do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).

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FAULT CODE	LOC BOOK BEDORT	EALILY ISOLATION DECEDENCE
TAULI CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 14 84	AFDS mode not displayed on (O4=Capt,O5=F/O) EADI when state mode selected. Indication normal with INSTR SOURCE SEL FLT DIR switch positioned to C.	flight faults are shown, do the
22 14 85	AFDS mode not displayed on (04=Capt,05=F/0,06=Capt & F/0) EADI when state mode selected. Indication same with INSTR SOURCE SEL FLT DIR switch positioned to C.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP related flight faults are shown, do the MCDP Ground Test 04 MCP (FIM 22-00-03/101, Fig. 104, Block 1).
22 14 86 00	T.O. (takeoff) mode not displayed on pilots' EADI 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).
22 14 87	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.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 88	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 89	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 90	No F/D cmd bars or F/D flag on (O4=Capt,O5=F/O) EADI. Indication same with INSTR SOURCE SEL FLT DIR switch positioned to C.	FIM 22-00-02/101, Fig. 101, Block 1

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 14 91	(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 1/10 of a second). No action is necessary. Installation of -134 or subsequent FCCs will correct the problem.
22 14 92	(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. Indication normal with INSTR SOURCE SEL FLT DIR switch positioned to C.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 93	(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. Indication same with INSTR SOURCE SEL FLT DIR switch positioned to C.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 94 00	Autoland status annunciator displayed NO AUTOLND with F/D ON.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 95 00	Autoland status annunciator displayed NO LAND 3 with F/D ON.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 96 00	Autoland status annunciator displayed MANUAL LND with F/D ON.	FIM 22-00-02/101, Fig. 101, Block 1
22 14 97 00	Autoland status annunciator displayed AUTOLAND 2 with F/D ON.	FIM 22-00-02/101, Fig. 101, Block 1



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 15 01 00	A/P DISC light on and EICAS message AUTOPILOT DISC displayed after APP mode engaged.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1).
22 15 02	(01=L,02=C,03=R) A/P CMD switch failed to engage, disengaged, with APP mode selected.e	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1).
22 15 03	(07=L&C,08=L&R,9=C&R) A/P CMD switches failed to engage, disengage, with APP mode selected.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1).
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. If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1).
22 15 05 00	APP mode failed to engage when switch pushed with L or C A/P engaged in CMD.	FIM 22-00-02/101, Fig. 101, Block 1. If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, 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. If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1).

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
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. If no MCP or FCC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1).
22 15 08 00	FLARE, ROLLOUT, FLARE & ROLLOUT failed to annunciate armed on EADI during multichannel 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 multichannel APPR.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 10 00	FLARE, ROLLOUT failed to annunciate engaged on EADI during multichannel 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 off.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 12 00	Line drawn thru G/S display on EADI with APP mode selected. AUTOPILOT warning light off.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 13 00	AUTOPILOT warning light on and EICAS message AUTOPILOT displayed during multichannel APPR.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 14 00	AUTOPILOT warning light on and EICAS message AUTOPILOT displayed during multichannel APPR. Line drawn thru LOC on EADI.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 15 00	AUTOPILOT warning light on and EICAS message AUTOPILOT displayed during multichannel APPR. Line drawn thru LOC on EADI.	FIM 22-00-02/101, Fig. 101, Block 1



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 15 16 00	AUTOPILOT warning light on and EICAS message AUTOPILOT displayed during multichannel 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 (describe in detail) during multichannel approach.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 18 00	A/P failed to maintain G/S properly (describe in detail) during multichannel approach.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 19 00	A/P failed to flare properly (describe in detail) during multichannel approach. FLARE annunciation on EADI normal.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 20 00	A/P failed to roll out properly (describe in detail) during multichannel approach. ROLLOUT annunciation on EADI normal.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 21 00	LAND (3, 2) failed to annunciate at 1500 ft radio altitude during (3, 2) channel approach.	
22 15 22 00	NO LAND 3 displayed on Autoland Status Annunciator above 1500 ft radio altitude during multichannel approach.	
22 15 23 00	NO LAND 3 displayed on Autoland Status Annunciator below 1500 ft radio altitude during multichannel approach.	
22 15 24 00	NO LAND 3 displayed on Autoland Status Annunciator after landing during multichannel approach.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 25 00	NO AUTOLND displayed on Autoland Status Annunciator above 1500 ft radio altitude during multichannel approach.	



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 15 26 00	NO AUTOLND displayed on Autoland Status Annunciator below 1500 ft radio altitude during multichannel approach.	
22 15 27 00	NO AUTOLND displayed on Autoland Status Annunciator after landing during multichannel approach.	
22 15 28 00	NO LAND 3 displayed on Autoland Status Annunciator with APP mode not selected and Autopilot or Flight Director engaged or not engaged.	If the problem was reported during the flight, do FIM 22-00-02/101, Fig. 101, Block 1. If the problem was reported 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 or Flight Director engaged or not engaged.	If the problem was reported during the flight, do FIM 22-00-02/101, Fig. 101, Block 1. If the problem was reported before the flight, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1).
22 15 30 00	AUTOLAND (3,2) failed to annunciate at 1500 ft radio altitude during (3,2) channel approach.	FIM 22-00-02/101, Fig. 101, Block 1
22 15 31 00	AUTOLAND 2 displayed on Autoland Status Annunciator above 1500 ft radio altitude during multichannel approach.	
22 15 32 00	AUTOLAND 2 displayed on Autoland Status Annunciator below 1500 ft radio altitude during multichannel approach.	
22 15 33 00	AUTOLAND 2 displayed on Autoland Status Annunciator after landing during multichannel approach.	



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 15 34 00	MANUAL LND displayed on Autoland Status Annunciator above 1500 ft radio altitude during multichannel approach.	
22 15 35 00	MANUAL LND displayed on Autoland Status Annunciator below 1500 ft radio altitude during multichannel approach.	
22 15 36 00	MANUAL LND displayed on Autoland Status Annunciator after landing during multichannel approach.	
22 21 01	Yaw damper operation abnormal with the (01=L,03=R,08=L&R) yaw damper SW on and INOP light off (describe conditions).	FIM 22-21-00/101, Fig. 103A, Block 1. If the test is OK, do a check of the rudder surface freeplay (AMM 27-02-00/601).
22 21 02	EICAS message (L,R) YAW DAMPER displayed and (O1=L,O3=R) yaw damper INOP light on.	FIM 22-00-02/101, Fig. 103A, Block 1
22 21 03	(01=L,03=R) Yaw damper INOP light did not come on during preflight test.	FIM 22-00-02/101, Fig. 103A, Block 1
22 21 05	(01=L,03=R) Yaw damper INOP light remained on after preflight test.	FIM 22-00-02/101, Fig. 103A, Block 1
22 21 07	(01=L,03=R) Yaw damper INOP remained on after preflight test.	FIM 22-21-00/101, Fig. 103A, Block 1
22 21 08 00	EICAS message YAW DAMPER displayed.	AIRPLANES WITH YDMs 285T0013-101 TO -121; FIM 22-21-00/101, Fig. 103, Block 1. AIRPLANES WITH YSMs 285T0013-122 AND SUBSEQUENT; FIM 22-21-00/101, Fig. 103A, Block 1.



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 32 67 00	F/S pointer display on EADI (blank, SPD flag in view) with autothrottle engaged in (EPR, SPD, VNAV, FL CH, any) mode(s). Thrust reference mode display on EICAS was normal.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 68 00	Wrong thrust reference mode displayed on EICAS, mode instead of mode with autothrottle engaged in (EPR, SPD, VNAV, FL CH, any) mode(s). F/S pointer display on EADI & throttle movement normal.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 69 00	Thrust reference mode display on EICAS blank with autothrottle engaged in (EPR, SPD, VNAV, FL CH, any) mode(s). F/S pointer display on EADI normal.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 70 00	Thrust reference mode display on EICAS blank. F/S pointer display on EADI (blank, SPD flag in view).	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 71 00	A/T DISC light on with autothrottle engaged in (EPR, SPD, VNAV, FL CH) mode. Thrust reference mode display on EICAS normal.	FIM 22-00-02/101, Fig. 101, Block 1
22 32 72 00	A/T DISC light on with autothrottle engaged in (EPR, SPD, VNAV, FL CH) mode. Thrust reference mode display on EICAS normal, F/S pointer display on EADI (blank, SPD flag in view).	FIM 22-00-02/101, Fig. 101, Block 1



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 32 73 00	A/T DISC light on with autothrottle engaged in (EPR, SPD, VNAV, FL CH) mode. Thrust reference mode display on EICAS blank. F/S pointer display on EADI normal.	FIM 22-00-02/101, Fig. 101, Block 1
22 32 74 00	A/T DISC light on with autothrottle engaged in (EPR, SPD, VNAV, FL CH) mode. Thrust reference mode display on EICAS blank. F/S pointer display on EADI (blank, SPD flag in view).	FIM 22-00-02/101, Fig. 101, Block 1
22 32 75 00	Autothrottle failed to engage when (EPR, SPD, VNAV, FL CH, any) mode(s) selected. Autothrottle mode not displayed on EADI.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 76 00	Autothrottle failed to transition automatically from to mode during (T/O, flare, alt capture, descent, etc.). Autothrottle was engaged in (EPR, SPD, VNAV, FL CH, GA) mode.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 77 00	Autothrottle failed to maintain selected speed with (SPD, FL CH, VNAV, GA) mode engaged.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 32 78 00	Autothrottle failed to maintain selected speed with (SPD, FL CH, VNAV, GA) mode engaged. F/S pointer on EADI displayed on spd.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.
22 32 79 00	Autothrottle failed to maintain selected speed with (SPD, FL CH, VNAV, GA) mode engaged. F/S pointer on EADI displayed on slow.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.
22 32 80 00	Autothrottle overcontrols with SPD mode engaged.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.
22 32 81 00	Autothrottle slow to react to spd change with SPD mode engaged.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 32 82 00	Autothrottle failed to maintain ref EPR with (EPR, FL CH, VNAV, GA) mode engaged.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.
22 32 83 00	Throttles failed to move together during autothrottle operation, (L,R) throttle lags.	Do the MCDP Ground Test 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1).
22 32 84 00	TMC data (list blank data) display blank on EICAS (F/S pointer display on EADI normal).	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 85 00	TMC data (list blank data) display blank on EICAS. F/S pointer display on EADI (blank, SPD flag in view).	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 86 00	TMC data (indicate wrong data) display incorrect on EICAS with mode selected in TMSP.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK. If the thrust mode display did not transition from climb (CLB) to cruise (CRS) at top of climb (T/C), do the procedure to reset the FMC parameter DEFCLBTHRUST to zero (AMM 34-61-00/201).



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 32 87 00	TMC data (indicate wrong data) display incorrect on EICAS with (list modes) modes selected on TMSP.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 88 00	A/T mode on EADI display TEST with autothrottle not engaged.	Go into, and then out of, the MCDP Ground Test Mode to reset the logic (AMM 22-00-02/201).
22 32 89 00	AFDS limit mode ALPHA annunciated on EADI (A/T, pitch) mode before speed limit is approached.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1). If the test is OK, the system is OK.
22 32 90 00	AFDS limit mode FLAP LIM annunciated on EADI (A/T, pitch) mode before speed limit is approached.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1). If the test is OK, the system is OK.
22 32 91 00	AFDS limit mode SPD LIM annunciated on EADI (A/T, pitch) mode before speed limit is approached.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 30 CURRENT FAULT REPORT (FIM 22-00-03/101, Fig. 117, Block 1). If the test is OK, the system is OK.
22 32 92 00	Wrong thrust reference mode displayed on EICAS, mode instead of mode with autothrottle engaged in (EPR, SPD, VNAV, FL CH, any) mode(s). F/S pointer display on EADI & throttle movement normal.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.



FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 32 93 00	Thrust reference mode display on EICAS blank with autothrottle engaged in (EPR, SPD, VNAV, FL CH, any) mode(s). F/S pointer display on EADI normal.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.
22 32 94 00	A/T DISC light on with autothrottle engaged in (EPR, SPD, VNAV, FL CH) mode. Thrust reference mode display on EICAS & F/S pointer display on EADI normal.	FIM 22-00-02/101, Fig. 101, Block 1
22 32 95 00	A/T DISC light on with autothrottle engaged in (EPR, SPD, VNAV, FL CH) mode. Thrust reference mode display on EICAS blank. F/S pointer display on EADI normal.	FIM 22-00-02/101, Fig. 101, Block 1
22 32 96 00	Autothrottle failed to maintain selected speed with (SPD, FL CH, VNAV, GA) mode engaged. F/S pointer on EADI displayed fast.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.
22 32 96 00	Autothrottle failed to maintain ref N1 with (EPR, FL CH, VNAV, GA) mode engaged.	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC or A/T SERVO related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1) and 10 SERVO A/T (FIM 22-00-03/101, Fig. 110, Block 1). If the tests are OK, the system is OK.

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FAULT CODE	LOG BOOK REPORT	FAULT ISOLATION REFERENCE
22 32 98 00	display blank on EICAS. F/S	FIM 22-00-02/101, Fig. 101, Block 1. If no TMC related flight faults are shown, do the MCDP Ground Test 02 TMC (FIM 22-00-03/101, Fig. 103, Block 1). If the test is OK, the system is OK.

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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
Air Data Computer	ADC	34–12
Air Data Inertial Reference Unit	ADIRU	34-26
Air Traffic Control Transponder	ATC	34-53
Airborne Vibration Monitor Signal Conditioner	AVM	77–31
Antiskid/Autobrake Control Unit		32-42
APU Fire Detection System		26-15
Automatic Direction Finder Receiver	ADF	34-57
APU Control Unit	ECU	49–11
Brake Temperature Monitor Unit		32-46
Bus Power Control Unit	BPCU	24-20
Cabin Pressure Controller		21-30
Digital Flight Data Acquisition Unit	DFDAU	31-31
Distance Measuring Equipment Interrogator	DME	34-55
Duct Leak (Wing and Body)		26-18
E/E Cooling Control Card (If cards installed)		21-58
ECS Bleed Configuration Card		36-10
Electronic Engine Control (RR Engines)	EEC	73–21
Electronic Engine Control Monitor Unit (PW Engines)	EECM	71-EPCS Message Index
Electronic Flight Instrument System	EFIS	34-22
Electronic Propulsion Control System (PW Engines)	EPCS	71-EPCS Message Index
Engine Fire/Overheat Detection System		26–11
Engine Indication and Crew Alerting System Computer	EICAS	31-41

Bite Index Figure 1 (Sheet 1)

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LRU/System Name	Acronym	FIM Reference
Engine Turbine Cooling Overheat Detection System (RR Engines)		26-13
Enhanced Ground Proximity Warning Computer	EGPWC	34-46
Flap/Slat Accessory Module	FSAM	27-51
Flap/Slat Electronic Unit	FSEU	27-51
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
Inertial Reference Unit	IRU	34-21
Instrument Comparator Unit	ICU	34-25
Instrument Landing System Receiver	ILS	34-31
Lower Cargo Compartment Smoke Detection System		26-16
Maintenance Control Display Panel	MCDP	22-00
PA (Passenger Address) Amplifier		23-31
Pack Standby Temperature Controller		21-51
Pack Temperature Controller		21-51
Passenger Entertainment System	PES	23-34
Power Supply Module (Control System Electronics Units)	PSM	27-09
Propulsion Discrete Interface Unit (PW Engines)	PDIU	73-21
Proximity Switch Electronics Unit	PSEU	32-09
Radio Altimeter Transmitter/Receiver	RA	34-33
Rudder Ratio Changer Module	RRCM	27-09
Spoiler Control Module	SCM	27-09
Stabilizer Position Module	SPM	27-48
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

Bite Index Figure 1 (Sheet 2)

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<u>LRU/System Name</u>	<u>Acronym</u>	FIM Reference
Thrust Management Computer/Autothrottle	TMC	22-00
Traffic Alert and Collision Avoidance Computer	TCAS	34-45
VHF (Very High Frequency) Communication		23-12
VOR/Marker Beacon Receiver	VOR/MKR	34-51
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		21-60

Bite Index Figure 1 (Sheet 3)

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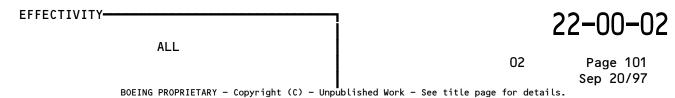
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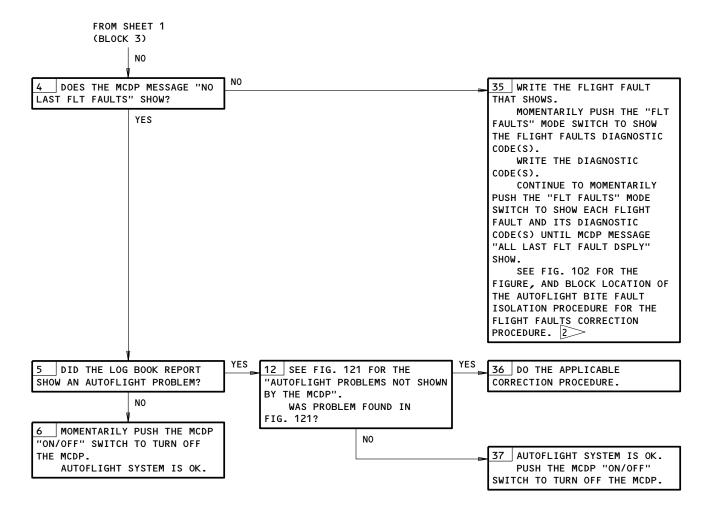
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PREREQUISITES MAKE SURE THIS SYSTEM WILL OPERATE: ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (AMM 31-41-00/201)(WHEN USING REMOTE MCDP CONTROL PANEL) MAKE SURE THIS CIRCUIT BREAKER IS CLOSED: AUTOFLIGHT FLIGHT $|_{1}>> 11SX$ FAULTS BITE MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: **PROCEDURE** ELECTRICAL POWER IS ON (AMM 24-22-00/201) NO MOMENTARILY PUSH THE MCDP 31 DO THIS PROCEDURE: "ON/OFF" SWITCH. TENANCE CONTROL DISPLAY PANEL AFTER THE SELF-TEST (MCDP) BITE FAULT ISOLATION SEQUENCE IS DONE, IS THE MCDP MESSAGE "LAST FLT FAULTS?" PROCEDURE (FIG. 103). SHOWN (AMM 22-00-02/201)? YES YES DID THE PROBLEM OCCUR 32 DO THIS PROCEDURE: MCDP GROUND TEST 30 - "CURRENT BEFORE TAKEOFF? FAULT REPORT" (FIM 22-00-03/ NO 101, FIG. 117) AND WRITE THE FAULTS. GO TO BLOCK 33. IF NO FAULTS OCCUR, GO TO BLOCK 12. 33 WRITE THE CURRENT FAULT MOMENTARILY PUSH THE 11 EXTERNAL POWER LOSS DID "YES/ADV" SWITCH TO BEGIN TO NOT LET THE MCDP MAKE A RECORD THAT IS SHOWN. SHOW LAST FLIGHT FAULTS. OF THE LAST FLIGHT FAULTS. MOMENTARILY PUSH THE "GRD DO THIS PROCEDURE: MCDP DOES "NO DATA THIS FLT" TEST" MODE SWITCH TO SHOW THE SHOW? GROUND TEST 30 - "CURRENT CURRENT FAULTS DIAGNOSTIC FAULT REPORT" (FIM 22-00-03/ CODE(S). NO 101, FIG. 117). WRITE THE DIAGNOSTIC CODE. IS THE MCDP MESSAGE "30 CONTINUE TO MOMENTARILY SEE SHEET 2 NO CURRENT FAULT" SHOWN WHEN PUSH THE "GRD TEST" MODE (BLOCK 4) "30 CURRENT OP FAULT?" SWITCH TO SHOW EACH CURRENT FAULT AND ITS DIAGNOSTIC IS SET? CODE(S) UNTIL MCDP MESSAGE "30 YES TEST COMPLETE" IS SHOWN. SEE FIG. 102 FOR THE FIGURE AND BLOCK LOCATION OF THE AUTOFLIGHT BITE FAULT ISOLATION PROCEDURE FOR THE CURRENT OP FAULTS CORRECTION WHERE X = 3,4 OR 6 FOR THE CIRCUIT PROCEDURE. 2 BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL". 34 GO TO BLOCK 5. 2 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)





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	107-5	FEEL POS/FCC L, FEEL POS/FCC C,	110-5
ADC L/FCC C ADC L/FMC L ADC L/FMC R ADC R/FCC R	105-4	DME L, DME R DME L/FMC L DME L/FMC R DME R/FMC L	108-1	FEEL POS/FCC R FEEL POS/FCC L-R, FEEL POS/FCC L-C, FEEL POS/FCC R-C	110-6
ADC R/FMC L ADC R/FMC R ADC L/TMC	105-2	DME R/FMC R J	109-1	FLAP POS L, FLAP POS C,	110-7
ADC E/TMC	105-2	ECS R H/L/TMC	109-1	FLAP POS R	
ADC SYST L ADC SYST R	105-6	ECS L/TMC ECS R/TMC	109-2	FLAP POS L-R CH FLAP POS L-C CH FLAP POS R-C CH	110-8
ADC/IRU L ADC/IRU C ADC/IRU R	105-7	EEC L, EEC R EEC L/TMC EEC R/TMC	109-3 109-4	FLAP POS/FCC L, FLAP POS/FCC C, FLAP POS/FCC R	110-9
ADC L-R CH	105-8			IFLAP POS/TMC	110-9
AIL SRVO/FCC L, AIL SRVO/FCC C,	105-9	EFIS PNL/FMC L }	100.7	FMC L, FMC R	110-10
AIL SRVO/FCC R AIL SRVO/FCC L-R, AIL SRVO/FCC L-C,	105-10	EICAS L, EICAS R EICAS L/TMC EICAS R/TMC	109-7 109-8	FMC L/FCC L, FMC L/FCC C FMC R/FCC R	110-11
AIL SRVO/FCC R-C		EICAS L/FMC L EICAS R/FMC R		FMC L/TMC,	110-13 110-14
A/G 1/TMC	105–11	ELEV SRVO/FCC L,	109-9	FMC L/FMC R FMC R/FMC L FMC NCD	110-14
A/P DISC/FCC L, A/P DISC/FCC C,	105–12	ELEV SRVO/FCC C, ELEV SRVO/FCC R		I FIC NCD	110-16
A/P DISC/FCC R, A/T DISC SW/TMC	105-13	ELEV SRV/FCC L-C ELEV SRV/FCC L-R ELEV SRV/FCC R-C	109–10	FUEL QTY FUEL QTY/FMC L FUEL QTY/FMC R	110–18
A/T SRVO 1/TMC	105–14	EXCESS WHEEL IN	109–11	GA SW/FCC L,	111-1
BUS ISLN/FCC L, BUS ISLN/FCC C, BUS ISLN/FCC R	106–1	FCC L, FCC C, FCC R FCC L/CONFIG ERR,	110-1 110-2	GA SW/FCC C, GA SW/FCC R	11111
	10- 4	FCC C/CONFIG ERR,		GA SW/TMC	111–1
CDU L, CDU R CDU L/FMC L CDU L/FMC R	107-1	FCC R/CONFIG ERR FCC L-R CH, FCC L-C CH	110-3	GPS L, GPS R GPS L/FMC L, GPS L/FMC R	111-2 111-3
CDU R/FMC L CDU R/FMC R		FCC R-C CH FCC L/FCC C,	110-4	GPS R/FMC L, GPS R/FMC R	111-4
CLOCK L CLOCK R	107-2	FCC L/FCC R FCC C/FCC L,		GPS L RF IN GPS R RF IN	111-5 111-6
CLOCK/FMC L CLOCK/FMC R		FCC C/FCC R FCC R/FCC L, FCC R/FCC C		HYD PWR L, HYD PWR C, HYD PWR R	112–1

1> REFER TO FIG. 102A FOR THE FAULT ISOLATION PROCEDURE FOR THE FMC FLIGHT FAULT.

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

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FAULT ISOLATION/MAINT MANUAL

MCDP FAULT MESSAGE	FIGBLOCK	MCDP FAULT MESSAGE	FIGBLOCK	MCDP FAULT MESSAGE	FIGBLOCK
ILS BEAM ERR	113-1	МСР	114-2	SHELF/FCC L,	116-3
ILS L, ILS C, ILS R	113-2 113-3	MCP/FCC L,	114–3	SHELF/FCC C, SHELF/FCC R	
ILS L-C CH, ILS L-R CH	113-3	MCP/FCC C, MCP/FCC R	114-4	SHELF/TMC	116-4
ILS R-C CH		MCP/FMC L	114-3	5.122.7.1.15	
ILS/FCC C, ILS/FCC L,	113-4	MCP/FMC R	114-4	SOV L/TMC	116-5
ILS/FCC R		MCP/TMC	114-3	SOV R/TMC	
ILS/FMC L]		MODE ERR	114-5	SDD DK DOS/ECC I	116-6
ILS G/S L NCD,	113-5,6		REF	SPD BK POS/FCC L, SPD BK POS/FCC C,	110-0
ILS G/S C NCD,	113 3,0	NO DATA THIS FLT	FIG. 101	-	
ILS G/S R NCD		NO INFC FCC L MCDP	1)		
ILS LOC L NCD,	113-5,7	NO INFC FCC C MCDP		STAB POS L,	116-7
ILS LOC C NCD,		NO INFC FCC R MCDP	REF	STAB POS C,	
ILS LOC R NCD	447.0	NO INFC FMC L MCDP	FIG. 103	OTAB TOO K	11/ 0
ILS CP/ILS L ILS CP/ILS C	113–8	NO INFC FMC R MCDP NO INFC TMC MCDP		STAB POS L-R CH, STAB POS L-C CH,	116–8
ILS CP/ILS C		NO THE HEDI		STAB POS R-C CH	
		PLA POS L/TMC,	114A-1	STAB POS/FCC L,	116-9
IRU L, IRU C, IRU R	113-9	PLA POS R/TMC		STAB POS/FCC C,	
IRU L-R CH,	113-10			STAB POS/FCC R	
IRU L-C CH,		RA L, RA C, RA R	115-1	STAB L/FCC L,	116–10
IRU R-C CH	113-11	RA L-R CH, RA L-C CH	115–2	STAB L/FCC C	
IRU L EXCESS MOT IRU C EXCESS MOT	113-11	RA L-C CH		STAB R/FCC R, STAB R/FCC C	
IRU R EXCESS MOT		RA/FCC L	115-3	STAB KITCC C	
IRU L NO INIT,	113-12	RA/FCC C,		TMC	117-1
IRU C NO INIT,		RA/FCC R		TMC/FMC L	117-2
IRU R NO INIT				TMC/FMC R	
IRU L REALIGN,	113–13	REV-THR/TMC	115–4	TMC DATA IN NCD	117-4
IRU C REALIGN, IRU R REALIGN		RUD SRVO L,	115-5	TMSP/TMC	117–3
IRU L/FCC L,	113-14	RUD SRVO C,	115-5	VOR L, VOR R	118-1
IRU C/FCC C,		RUD SRVO R		VOR L/FMC L	
IRU R/FCC R		RUD SRVO/FCC L,	115-6	VOR L/FMC R	
IRU L/TMC,	113-14	RUD SRVO/FCC C,		VOR R/FMC L	
IRU R/TMC		RUD SRVO/FCC R	445.7	VOR R/FMC R J	
IRU L/FMC L IRU L/FMC R		RUD SRVO/FCC L-R, RUD SRVO/FCC L-C,	115–7	WG A/I/TMC	119–1
IRU C/FMC L		RUD SRVO/FCC L-C,		WG A/1/TMC	119-1
IRU C/FMC R		ROD SKVOTTEE K C			
IRU R/FMC L		SAM L/FCC L,	116–1		
IRU R/FMC R)		SAM L/FCC C			
		SAM R/FCC R,			
ISLN VLV L/TMC	113–15	SAM R/FCC C			
MAG-TRUE/FCC L,	114-1	SERVO PWR/FCC L,	116-2		
MAG-TRUE/FCC C,		SERVO PWR/FCC C,			
MAG-TRUE/FCC R		SERVO PWR/FCC R			
1K02/100 K		52.136 1 mk/1 66 k			

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

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	ı
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	9 - 16
ILS/FMC L	9 - 17
ILS/FMC R	9 - 17
IRU L/FMC L	10 - 18
IRU L/FMC R	10 - 18
IRU C/FMC L	11 - 19
IRU C/FMC R	11 - 19
IRU R/FMC L	12 - 20
IRU R/FMC R	12 - 20
VOR L/FMC L	13 - 21
VOR L/FMC R	13 - 21
VOR R/FMC L	13 - 22
VOR R/FMC R	13 - 22

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

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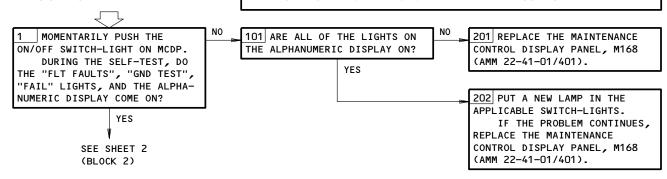


PREREQUISITES

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; 1>> 11SX

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.

NOTE: THE BITE DOES A TEST OF THIS SYSTEM COMPONENT: • THE MCDP.

MAINTENANCE CONTROL

PROCEDURE

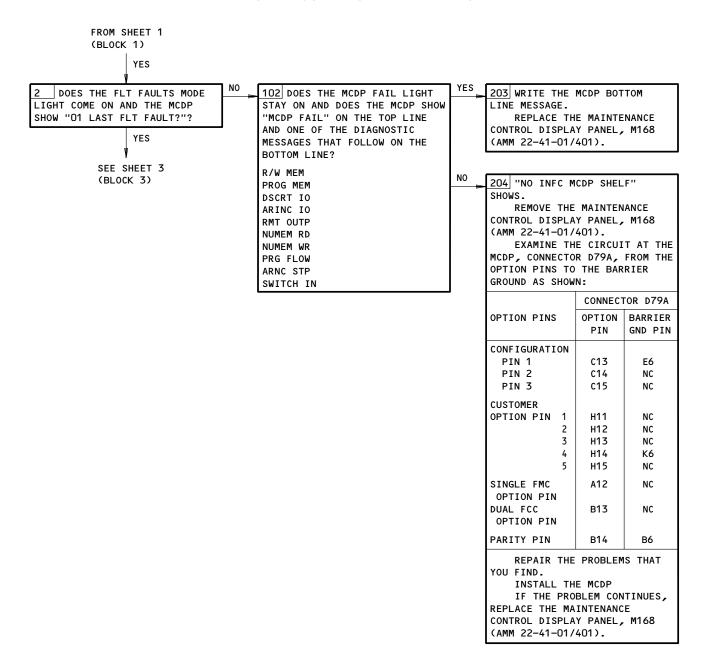
DISPLAY PANEL (MCDP) BITE FAULT ISOLATION

WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

EFFECTIVITY-ALL

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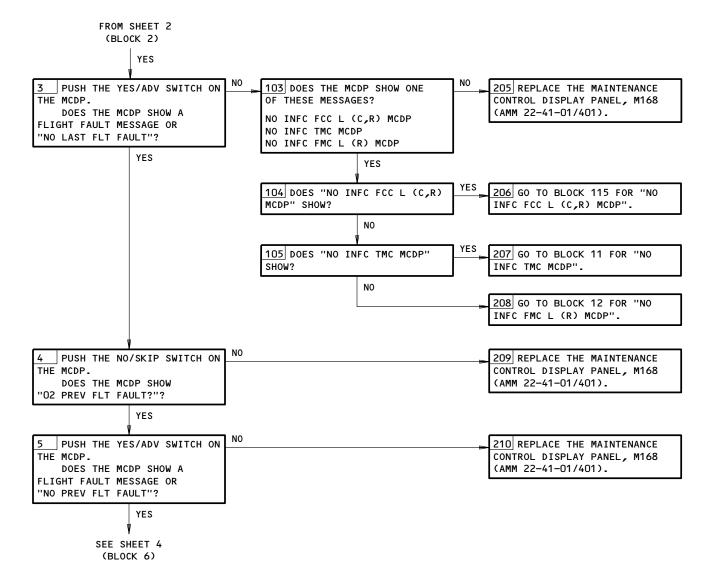
Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 2)

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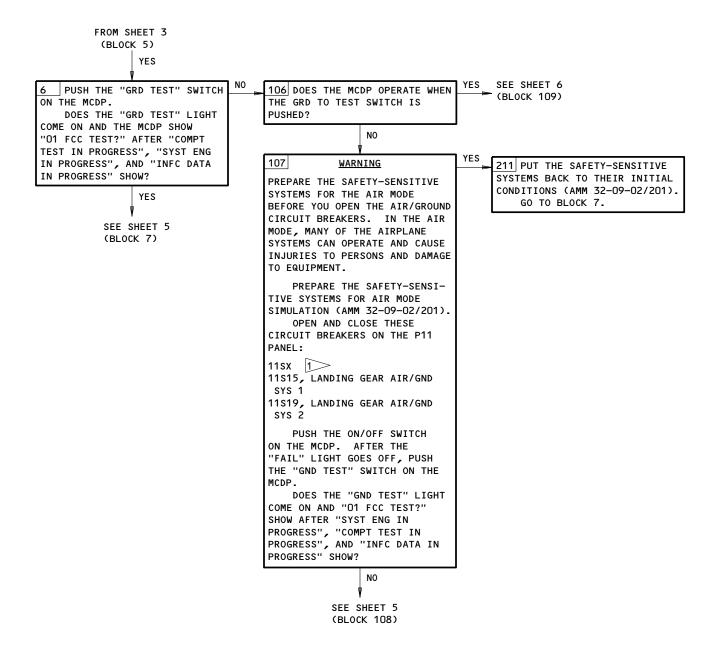




Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 3)







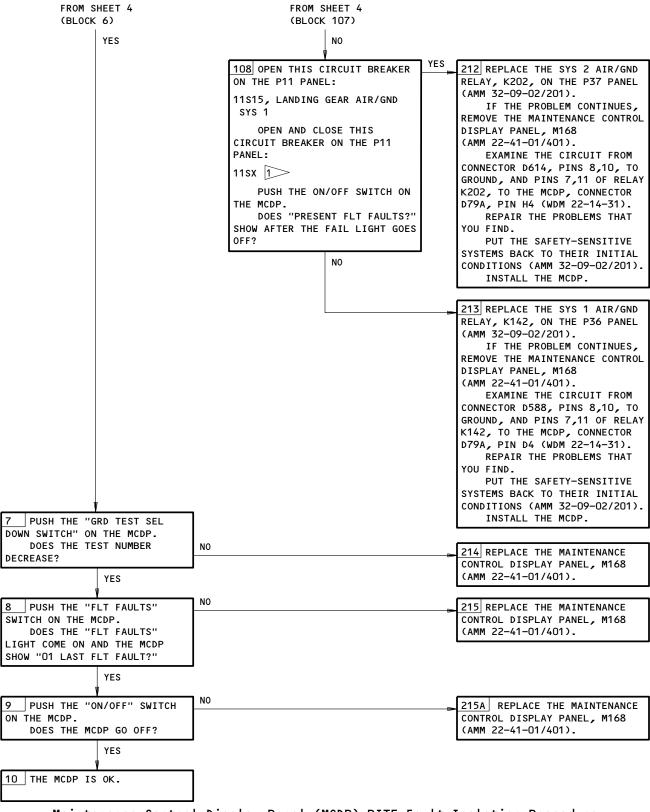
Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 4)

22-00-02

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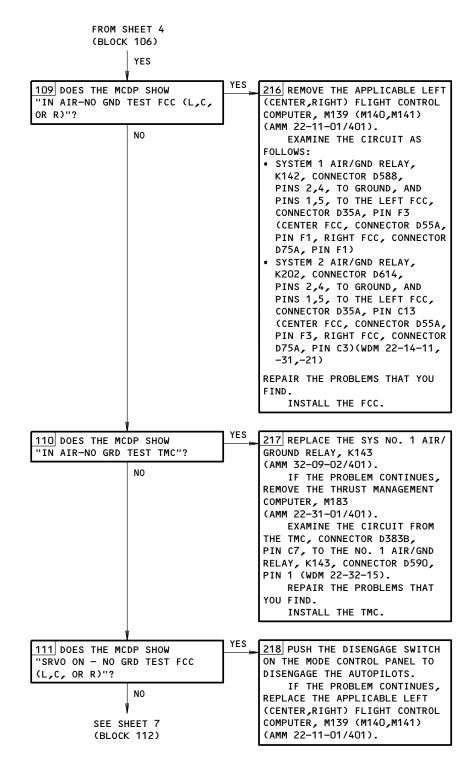
Page 109 Mar 20/97

FAULT ISOLATION/MAINT MANUAL



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





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

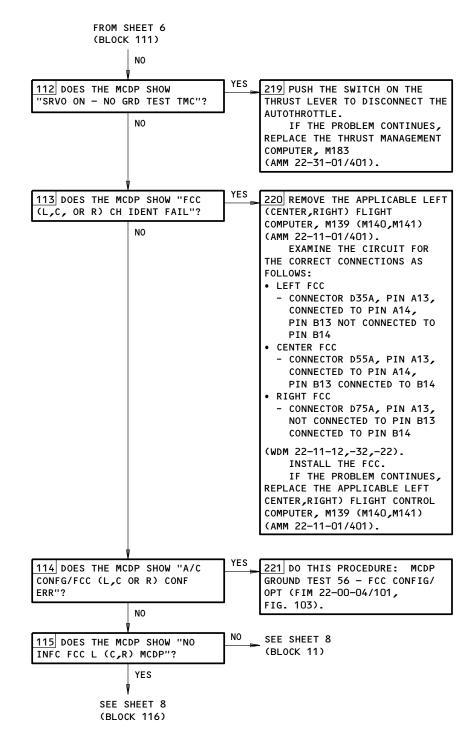
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Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 7)

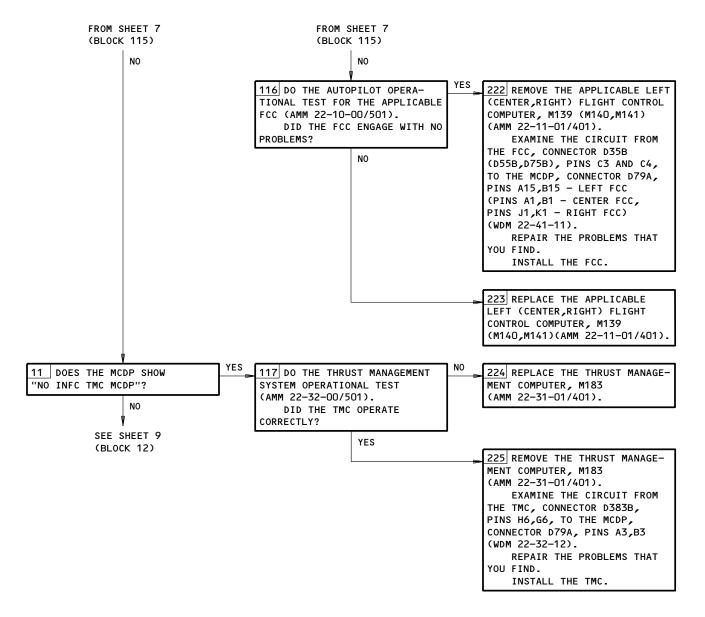
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Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 8)

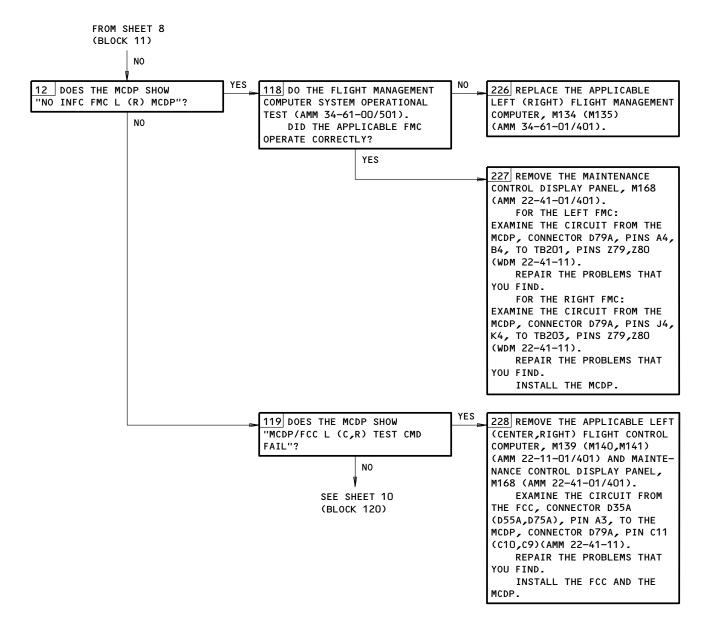
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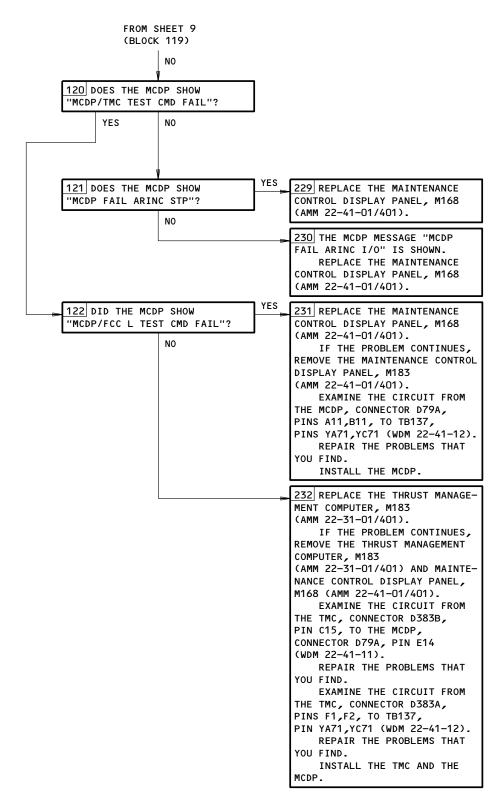
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Maintenance Control Display Panel (MCDP) BITE Fault Isolation Procedure Figure 103 (Sheet 9)





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

ALL

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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 32-09-02/401)

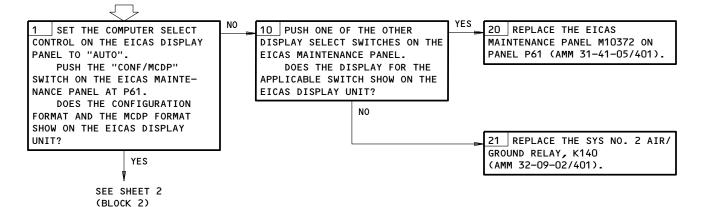
AIR/GROUND RELAYS (AMM 52-09-02/401)

MAKE SURE THIS CIRCUIT BREAKER IS CLOSED: 1 11SX

REMOTE MAINTENANCE CONTROL DISPLAY PANEL FAULT ISOLA-TION PROCEDURE

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

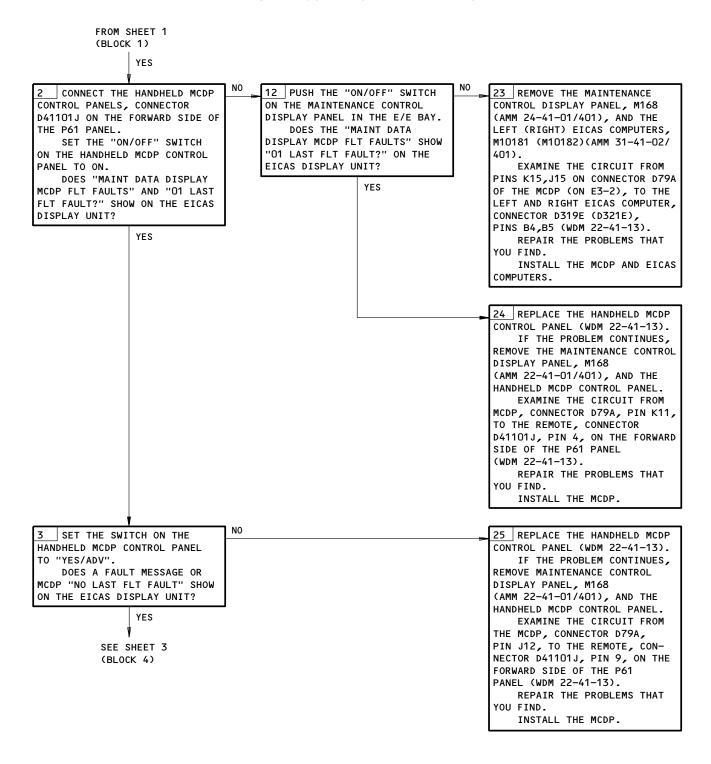
NOTE: MCDP OPERATION MUST BE OK.



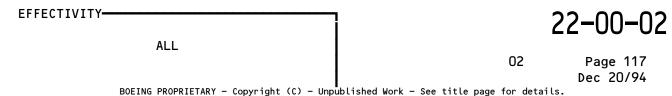
WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

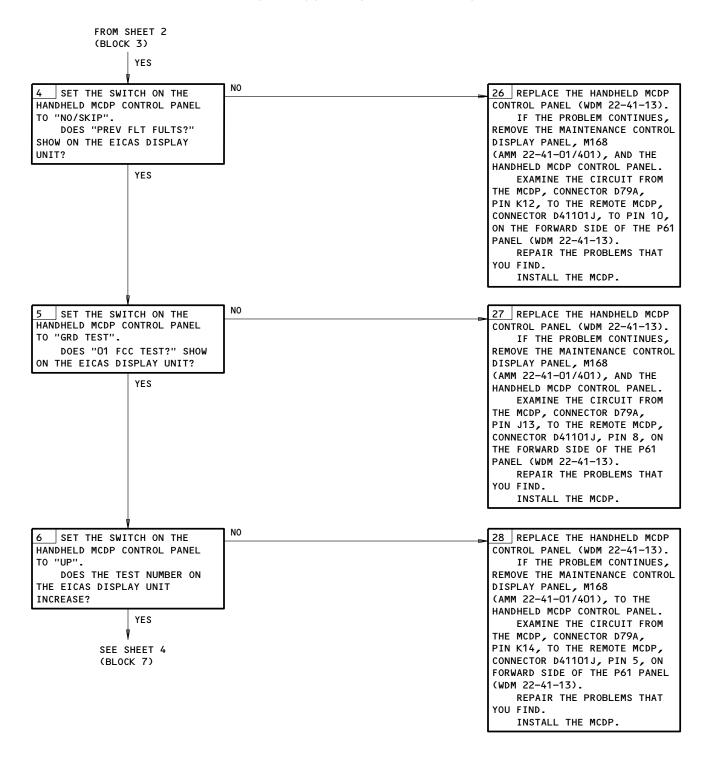
Remote Maintenance Control Display Panel Fault Isolation Procedure Figure 103A (Sheet 1)

22-00-02

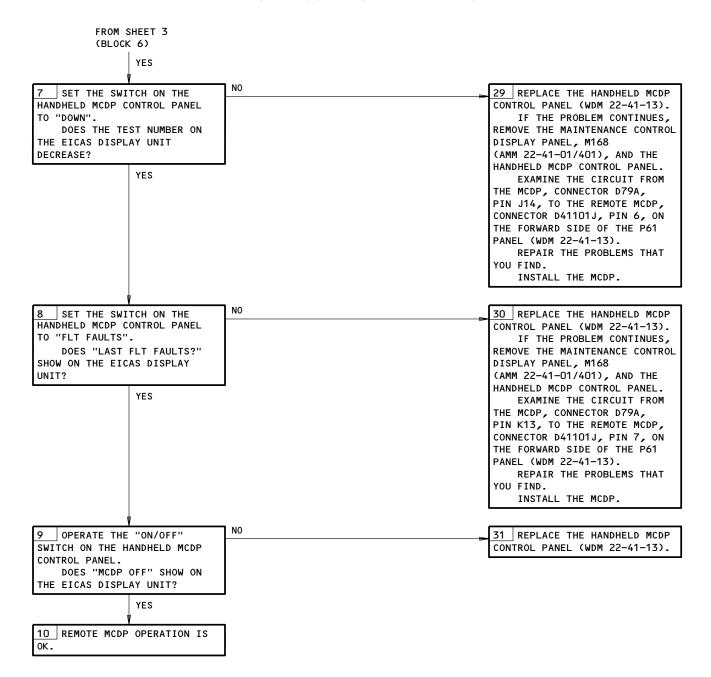


Remote Maintenance Control Display Panel Fault Isolation Procedure Figure 103A (Sheet 2)

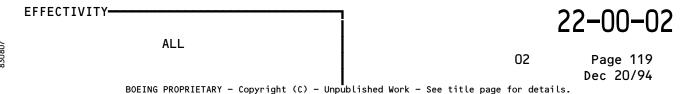




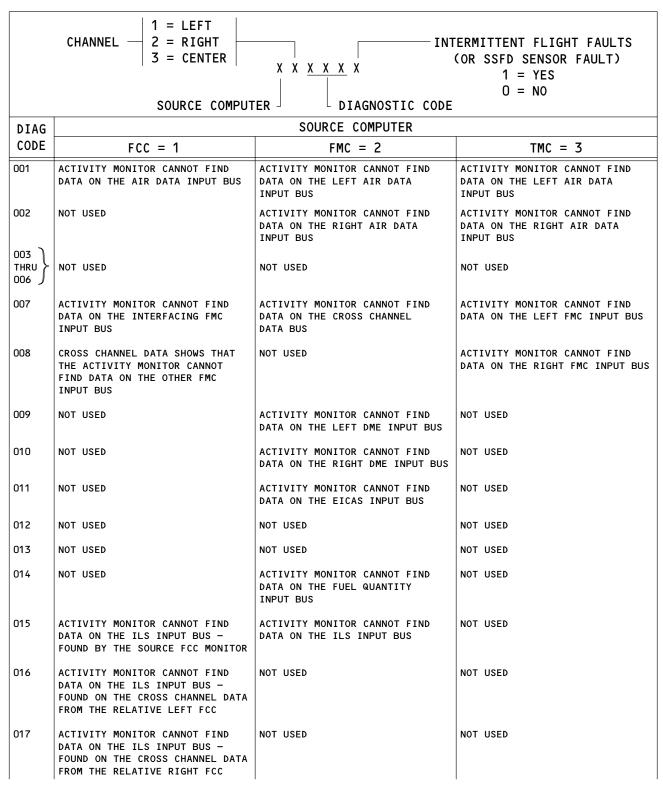
Remote Maintenance Control Display Panel Fault Isolation Procedure Figure 103A (Sheet 3)



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







MCDP Diagnostic Codes Figure 104 (Sheet 1)

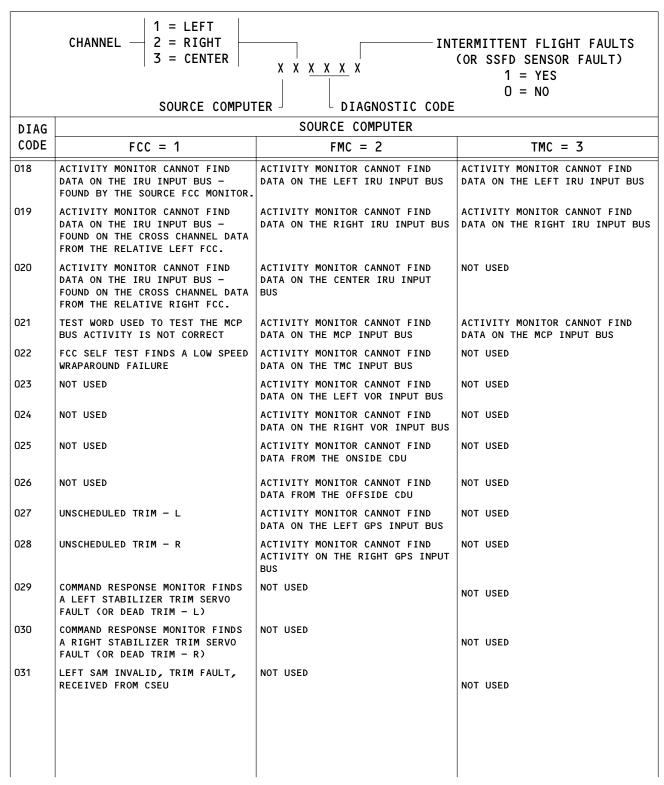
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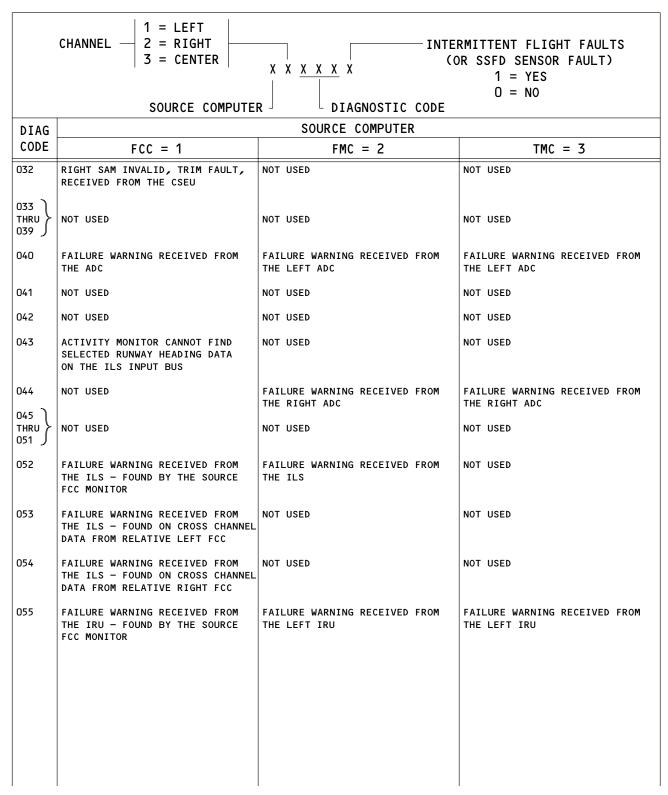
MCDP Diagnostic Codes Figure 104 (Sheet 2)

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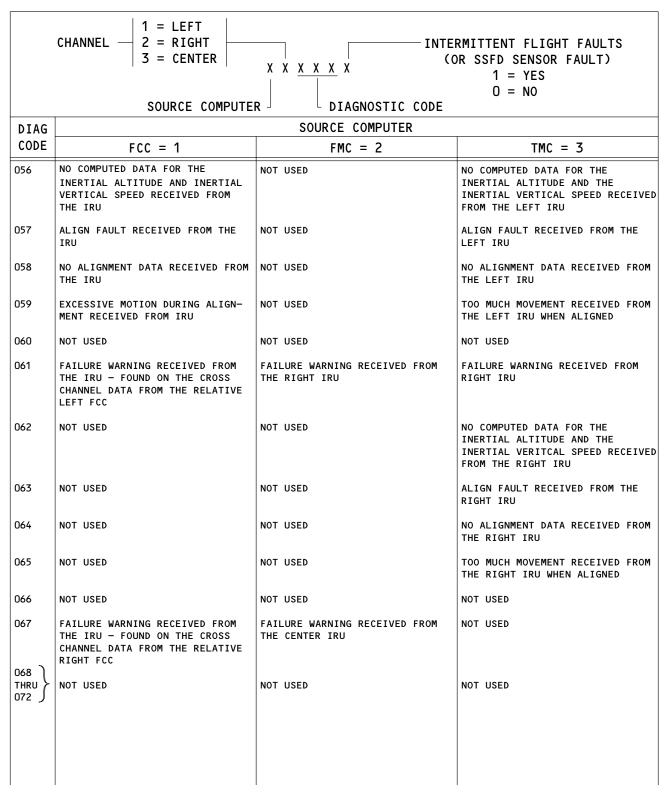
MCDP Diagnostic Codes Figure 104 (Sheet 3)

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MCDP Diagnostic Codes Figure 104 (Sheet 4)

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	CHANNEL — 1 = LEFT 2 = RIGHT 3 = CENTER SOURCE COMPUTE	RMITTENT FLIGHT FAULTS OR SSFD SENSOR FAULT) 1 = YES 0 = NO	
DIAG		SOURCE COMPUTER	
CODE	FCC = 1	FMC = 2	TMC = 3
073	NOT USED	FAILURE WARNING RECEIVED FROM THE MCP	FAILURE WARNING RECEIVED FROM THE MCP
074	NOT USED	NOT USED	NOT USED
075	NOT USED	NOT USED	FAILURE WARNING RECEIVED FROM LEFT EICAS
076	NOT USED	NOT USED	FAILURE WARNING RECEIVED FROM RIGHT EICAS
077	NOT USED	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE LEFT EICAS INPUT BUS
)78	VERTICAL SPEED MODE ERROR - NOT ENOUGH THRUST FOR THE GIVEN VERTICAL SPEED OR ALTITUDE HOLD	NOT USED	ACTIVITY MONITOR CANNOT FIND DATA ON THE RIGHT EICAS INPUT BUS
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
184	NOT USED	NOT USED	AUTOTHROTTLE SERVO 1 FAULT
085	NOT USED	NOT USED	NOT USED
086	FAILURE WARNING RECEIVED FROM THE RA - FOUND BY SOURCE FCC MONITOR	NOT USED	FAILURE WARNING RECEIVED FROM THE LEFT EEC
087	FAILURE WARNING RECEIVED FROM THE RA - FOUND ON THE CROSS CHANNEL DATA FROM RELATIVE RIGHT FCC	NOT USED	FAILURE WARNING RECEIVED FROM THE RIGHT EEC
088	FAILURE WARNING RECEIVED FROM THE RA - FOUND ON THE CROSS CHANNEL DATA FROM THE RELATIVE RIGHT FCC	NOT USED	NOT USED

MCDP Diagnostic Codes Figure 104 (Sheet 5)

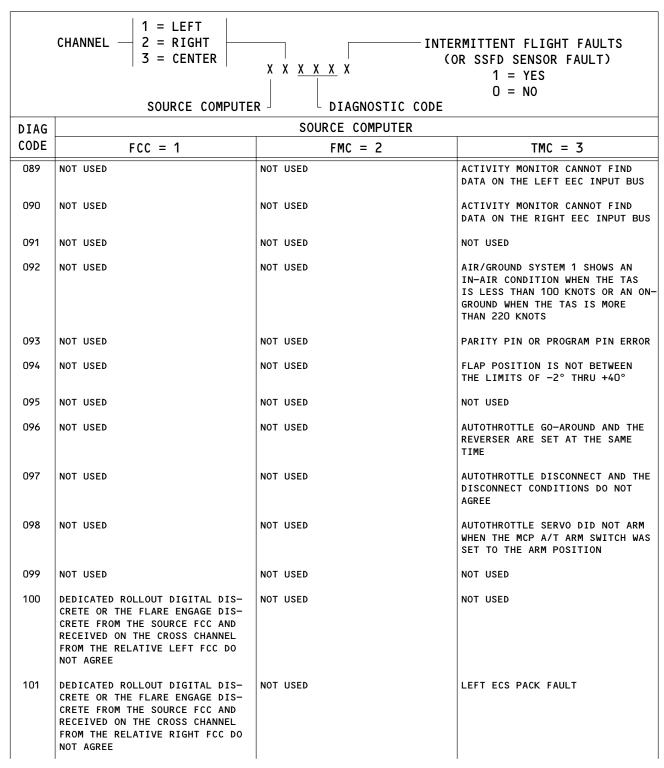
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MCDP Diagnostic Codes Figure 104 (Sheet 6)

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	CHANNEL — 1 = LEFT 2 = RIGHT 3 = CENTER SOURCE COMPUTE	INTERMITTENT FLIGHT FAULTS (OR SSFD SENSOR FAULT) 1 = YES 0 = NO DIAGNOSTIC CODE	
DIAG CODE		SOURCE COMPUTER	
CODE	FCC = 1	FMC = 2	TMC = 3
102	THE RELATIVE RIGHT FCC CHANNEL ENGAGE STATUS FROM THE CROSS CHANNEL DATA AND FROM THE RECEIVED DISCRETE DO NOT AGREE	NOT USED	LEFT ECS PACK H/L FAULT
103	THE RELATIVE LEFT FCC CHANNEL ENGAGE STATUS FROM THE CROSS CHANNEL DATA AND FROM THE RECEIVED DISCRETE DO NOT AGREE	NOT USED	RIGHT ECS PACK FAULT
104	NOT USED	NOT USED	RIGHT ECS PACK H/L FAULT
105	NOT USED	NOT USED	LEFT SHUTOFF VALVE IMPEDANCE FAULT
106	NOT USED	NOT USED	RIGHT SHUTOFF VALVE IMPEDANCE FAULT
107	NOT USED	NOT USED	NOT USED
108	IMPACT PRESSURE FROM THE LEFT ADC AND THE RIGHT ADC ARE DIF- FERENT BY MORE THAN 10 LB/SQUARE FOOT	NOT USED	ISOLATION VALVE FAULT
109	NOT USED	NOT USED	NOT USED
110	RELATIVE LEFT FCC CROSS CHANNEL WRAPAROUND TEST WORD IS NOT CORRECT	NOT USED	NOT USED
111	RELATIVE RIGHT FCC CROSS CHANNEL WRAPAROUND TEST WORD IS NOT CORRECT	NOT USED	LEFT COWL ANTI-ICE FAULT
112	NOT USED	NOT USED	RIGHT COWL ANTI-ICE FAULT
113	RUNWAY HEADING RECEIVED ON THE ILS INPUT BUS IS DIFFERENT THAN THE CROSS CHANNEL DATA MORE THAN 1°	NOT USED	NOT USED
114	USUAL ACCELERATION FAILURE WARNING RECEIVED FROM IRU (SSFD)	NOT USED	WING ANTI-ICE FAULT

MCDP Diagnostic Codes Figure 104 (Sheet 7)

EFFECTIVITY-

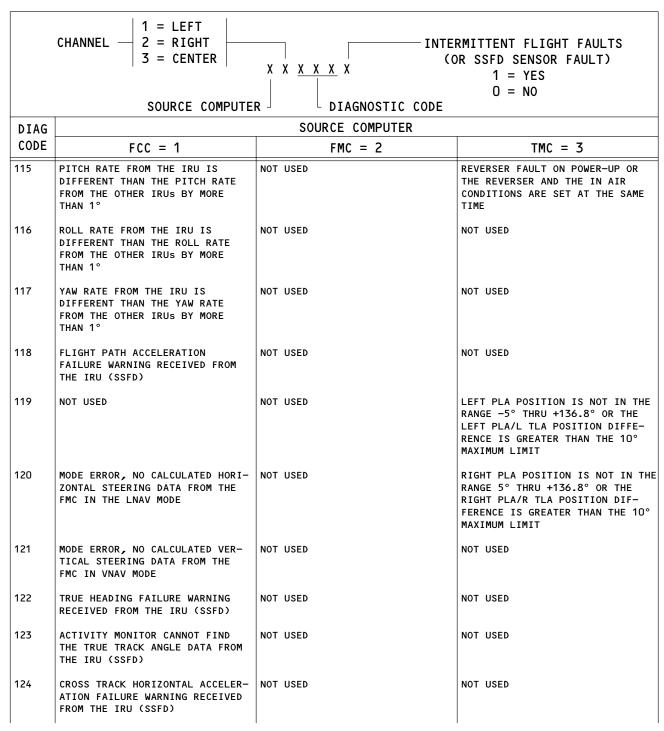
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MCDP Diagnostic Codes Figure 104 (Sheet 8)

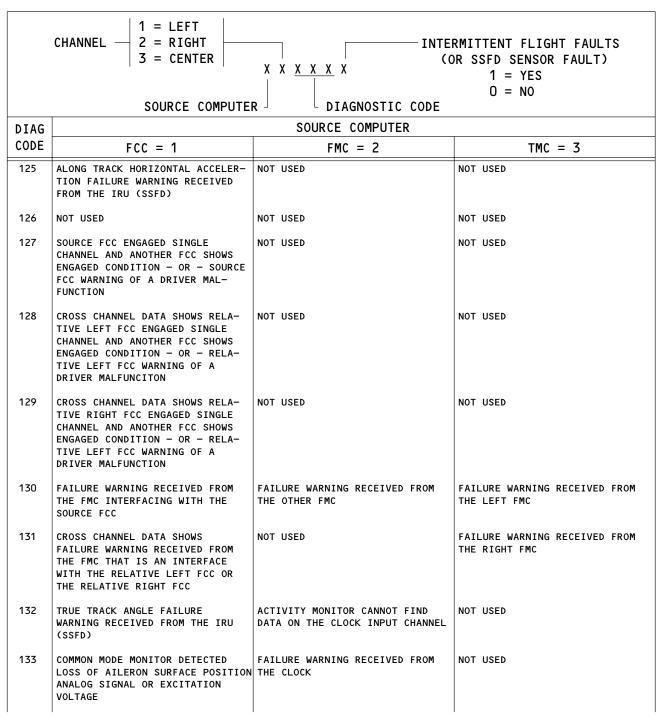
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MCDP Diagnostic Codes Figure 104 (Sheet 9)

EFFECTIVITY-

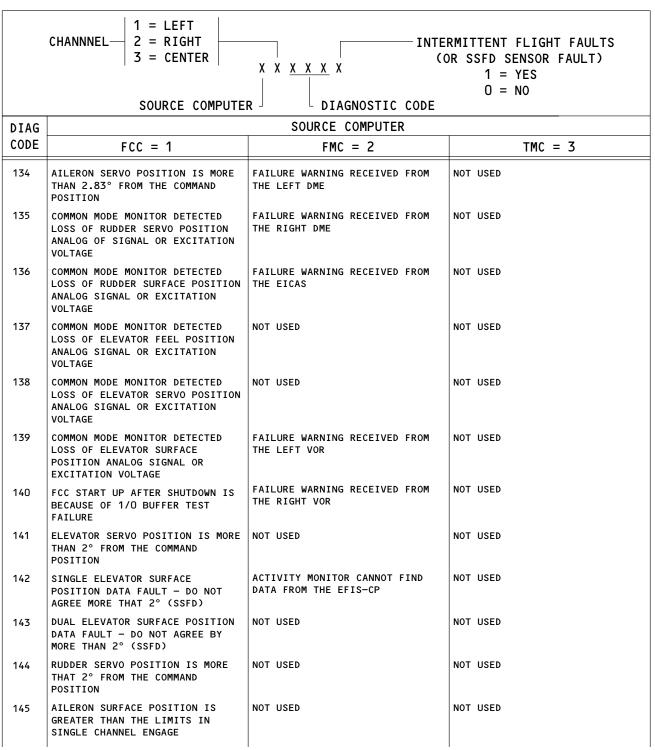
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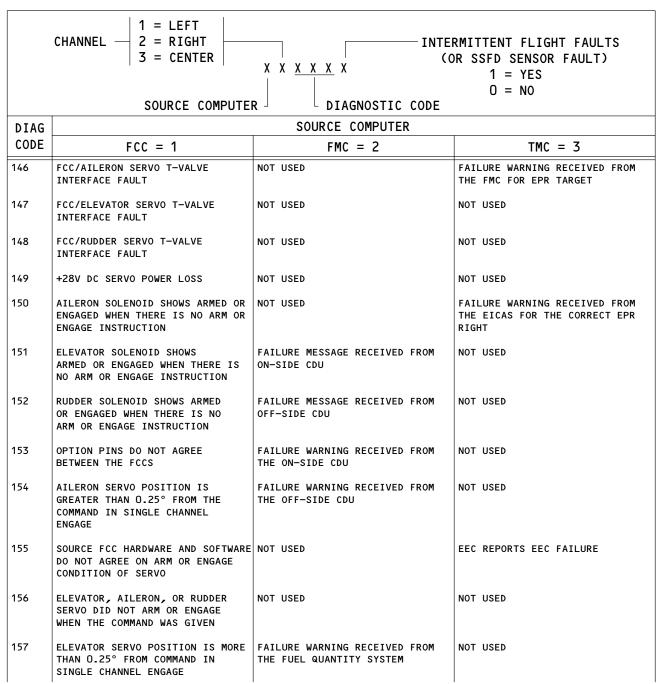
MCDP Diagnostic Codes Figure 104 (Sheet 10)

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MCDP Diagnostic Codes Figure 104 (Sheet 11)

EFFECTIVITY-

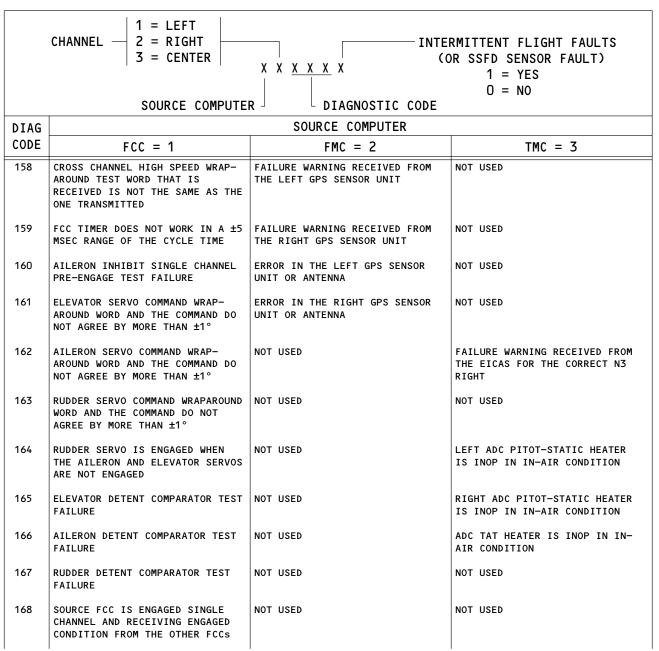
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MCDP Diagnostic Codes Figure 104 (Sheet 12)

EFFECTIVITY

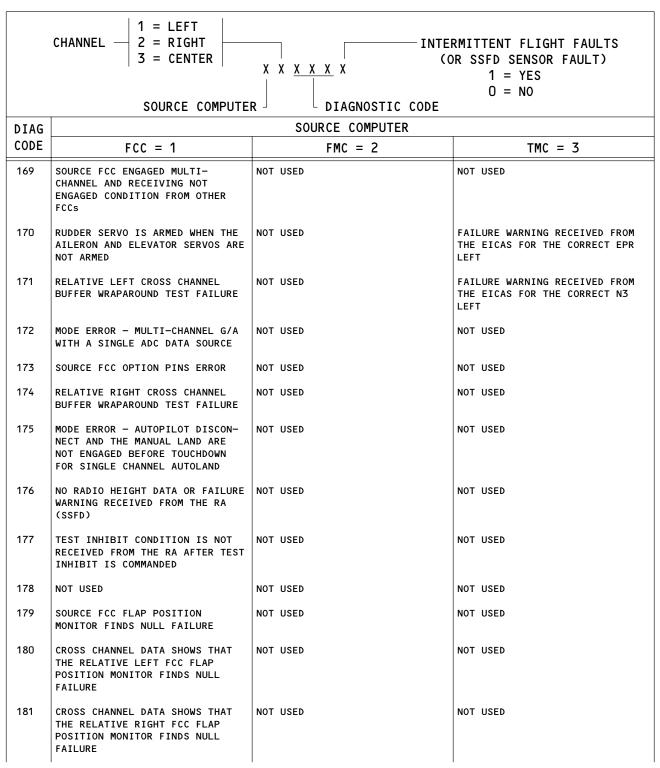
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MCDP Diagnostic Codes Figure 104 (Sheet 13)

EFFECTIVITY-

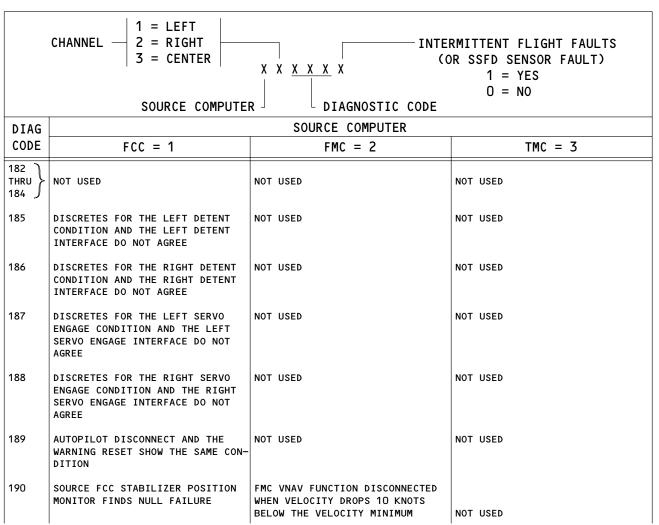
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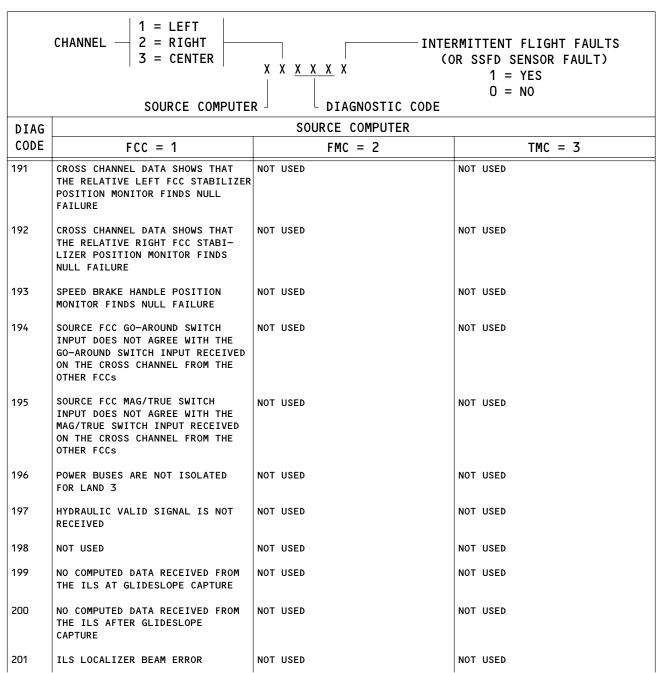
MCDP Diagnostic Codes Figure 104 (Sheet 14)

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MCDP Diagnostic Codes Figure 104 (Sheet 15)

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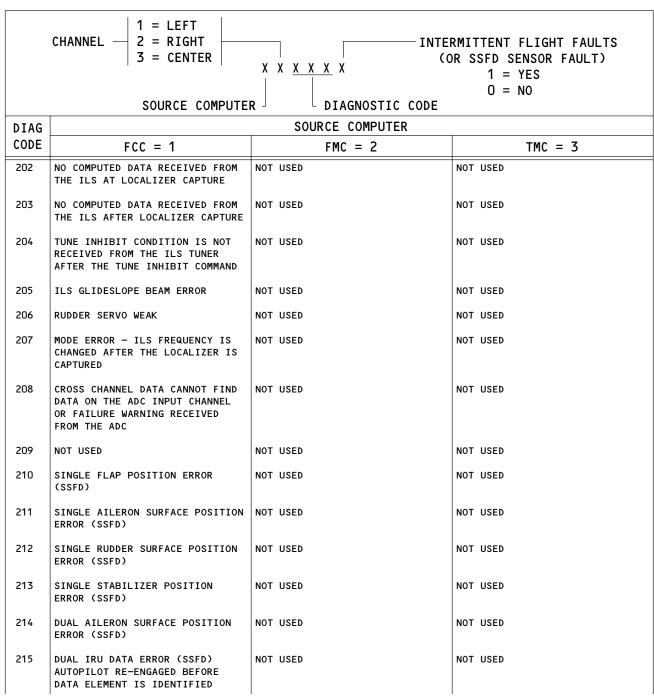
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MCDP Diagnostic Codes Figure 104 (Sheet 16)

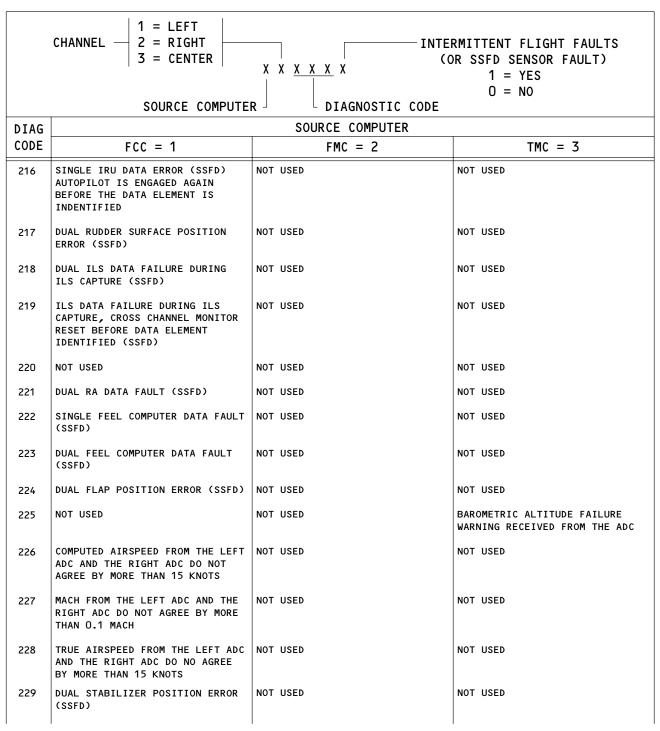
EFFECTIVITY-

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MCDP Diagnostic Codes Figure 104 (Sheet 17)

EFFECTIVITY-

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	CHANNEL — 1 = LEFT 2 = RIGHT 3 = CENTER SOURCE COMPUTE	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	RMITTENT FLIGHT FAULTS OR SSFD SENSOR FAULT) 1 = YES 0 = NO			
DIAG	SOURCE COMPUTER					
CODE	FCC = 1	FMC = 2	TMC = 3			
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 AGREE BY MORE THAN 3° FROM THE ROLL ANGLE DATA FROM THE OTHER IRS (SSFD)	NOT USED	NOT USED			
232	MAXIMUM OPERATING SCHEDULE FROM THE LEFT ADC AND THE RIGHT ADC DO NOT AGREE BY MORE THAN 15 KNOTS	NOT USED	NOT USED			
233	INERTIAL ALTITUDE COMPUTED USING THE LEFT ADC DATA AND THE RIGHT ADC DATA DO NOT AGREE BY MORE THAN 800 FT	NOT USED	NOT USED			
234	INERTIAL VERTICAL SPEED COM- PUTED USING THE LEFT ADC DATA AND THE RIGHT ADC DATA 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 CROSS 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 SPEED BRAKE HANDLE POSITION			
238	LATERAL ACCELERATION FROM THE IRS DOES NOT AGREE WITH THE LATERAL ACCELERATION RECEIVED FROM THE CROSS CHANNEL DATA BY MORE THAN .04G° (SSFD)	NOT USED	NOT USED			
239	NOT USED	NOT USED	NOT USED			
240	MAGNETIC HEADING FROM THE IRS DOES NOT AGREE WITH THE MAG- NETIC HEADING RECEIVED FROM THE CROSS CHANNEL DATA BY MORE THAN 6° (SSFD)	NOT USED	NOT USED			

MCDP Diagnostic Codes Figure 104 (Sheet 18)

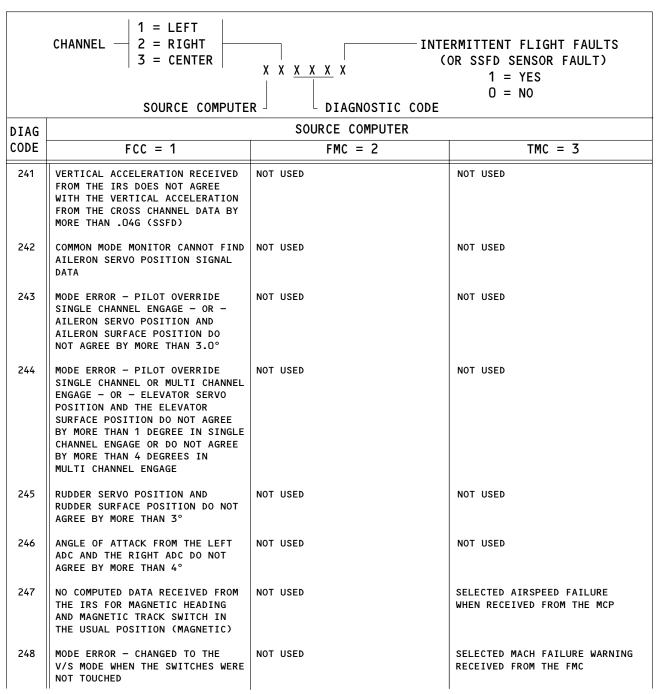
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MCDP Diagnostic Codes Figure 104 (Sheet 19)

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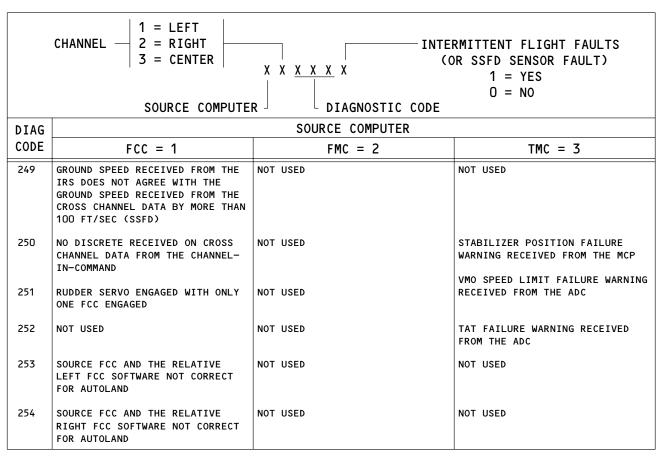
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REPORTING FCC		RELATIVE LEFT FCC		RELATIVE RIGHT FCC	
LEFT	FCC	RIGHT	FCC	CENTER	FCC
CENTER	FCC	LEFT	FCC	RIGHT	FCC
RIGHT	FCC	CENTER	FCC	LEFT	FCC

MCDP Diagnostic Codes Figure 104 (Sheet 20)

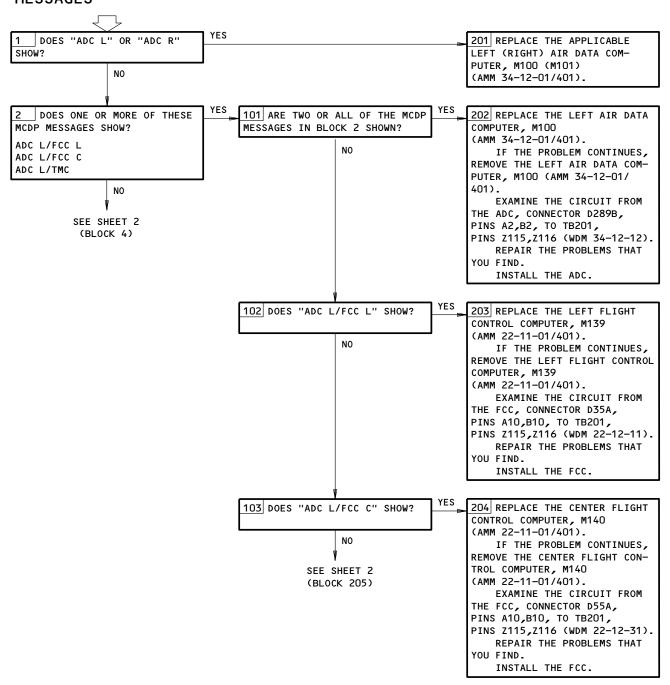
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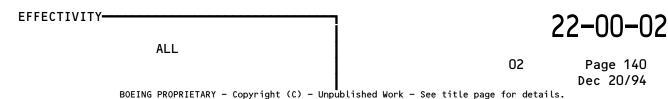
Page 139 Dec 20/94



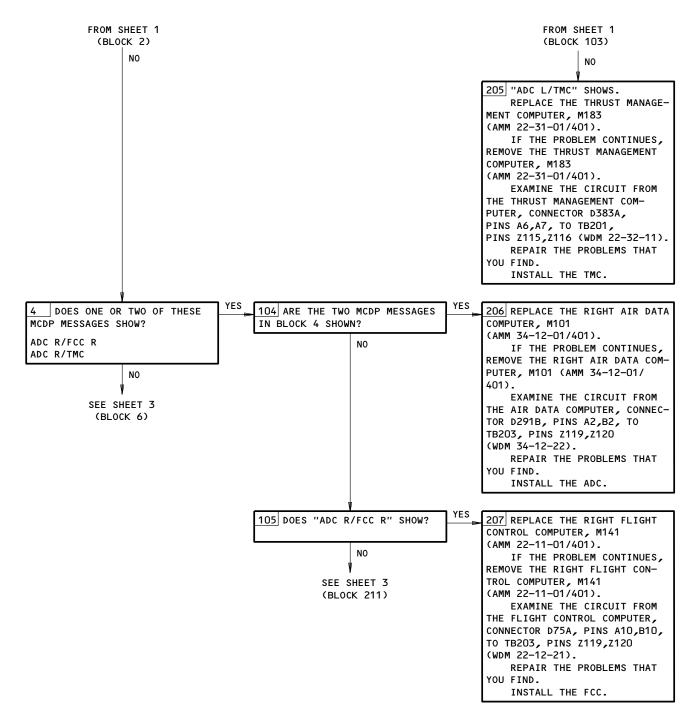
AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "A" MESSAGES PREREQUISITES NONE



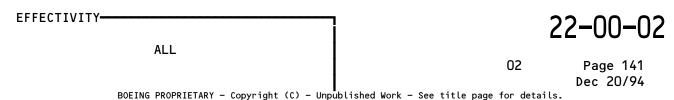
Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 1)

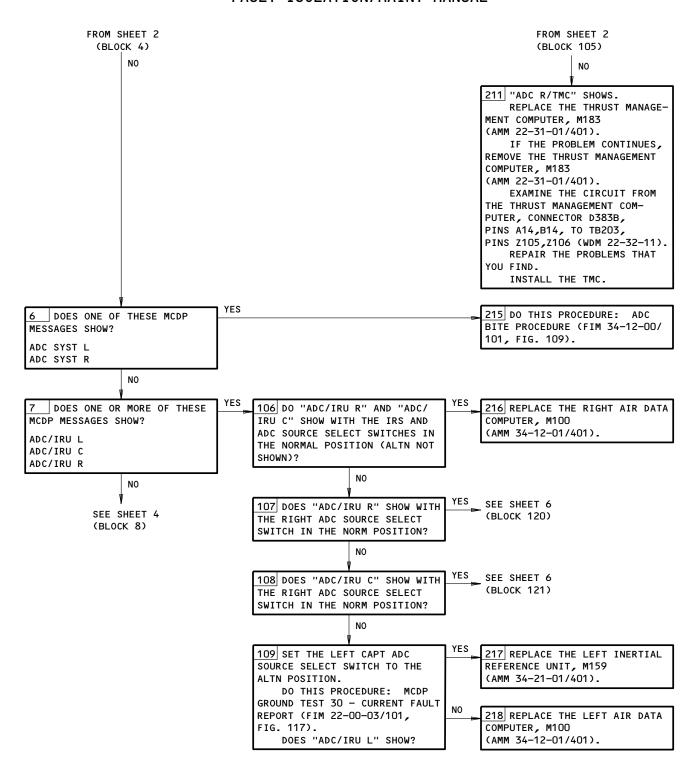




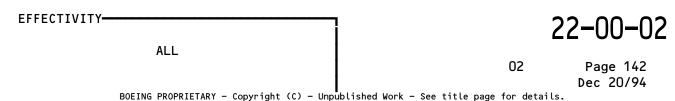


Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 2)

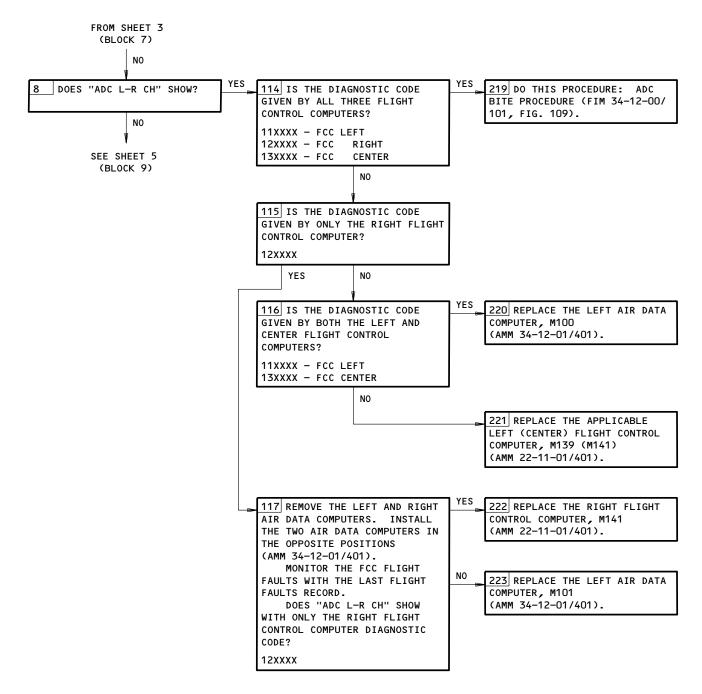




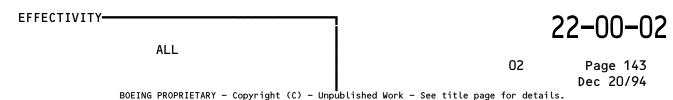
Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 3)

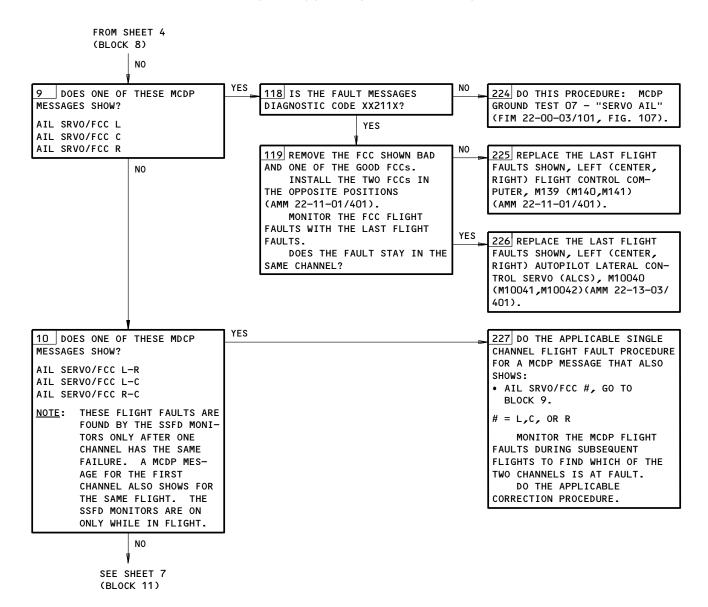






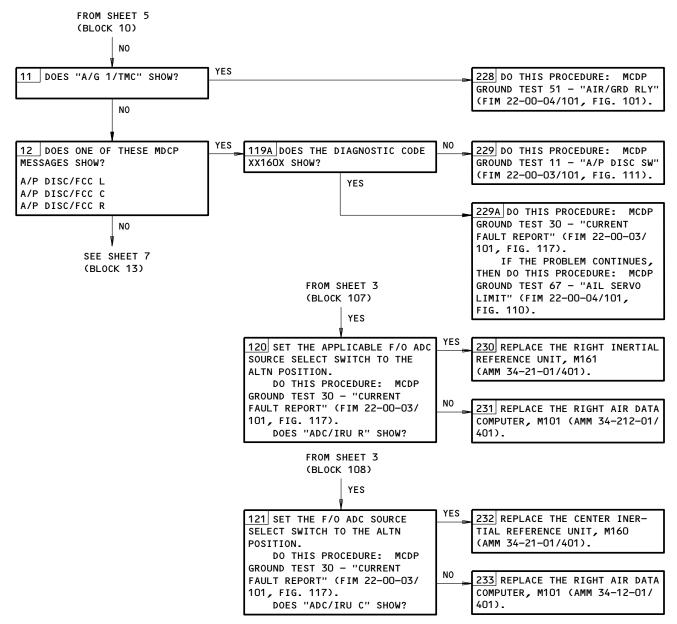
Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 4)



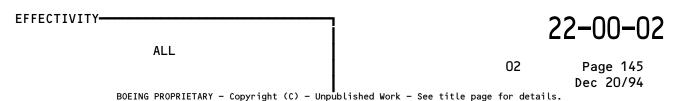


Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 5)

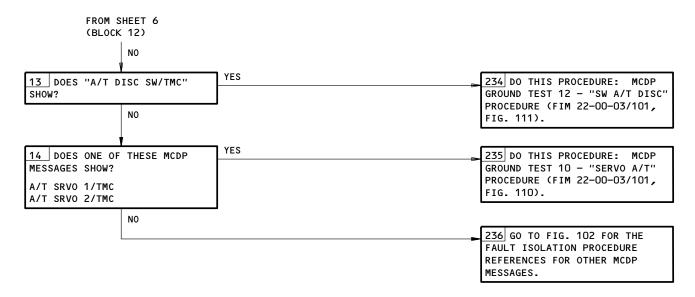




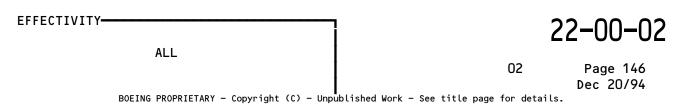
Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 6)







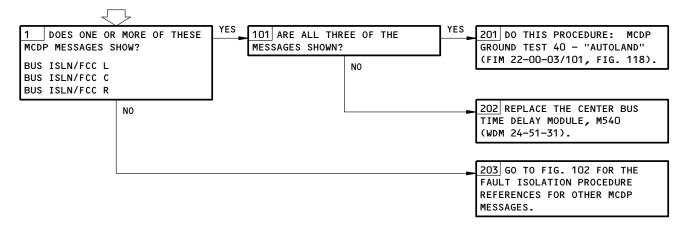
Autoflight BITE Fault Isolation Procedures - A Messages Figure 105 (Sheet 7)





AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "B" MESSAGES

PREREQUISITES	
NONE	



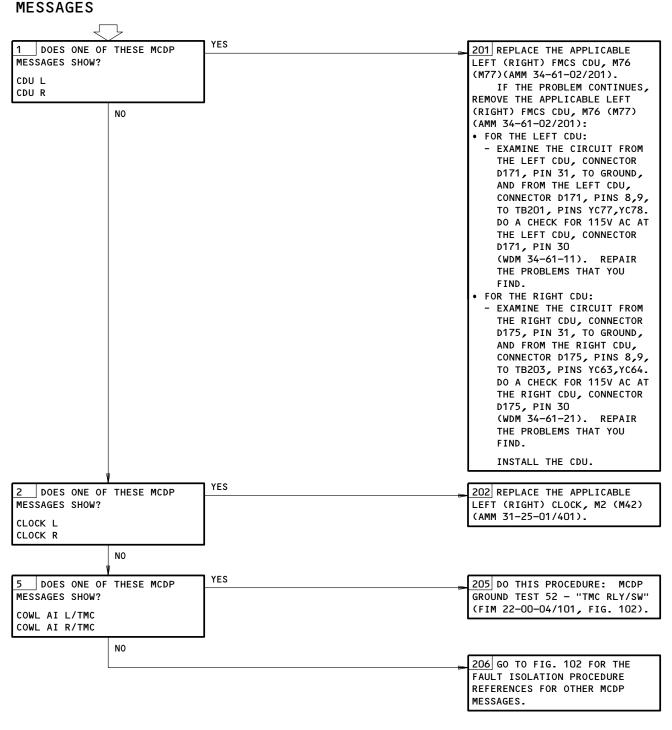
Autoflight BITE Fault Isolation Procedures - B Messages Figure 106

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AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "C"

PREREQUISITES	
NONE	

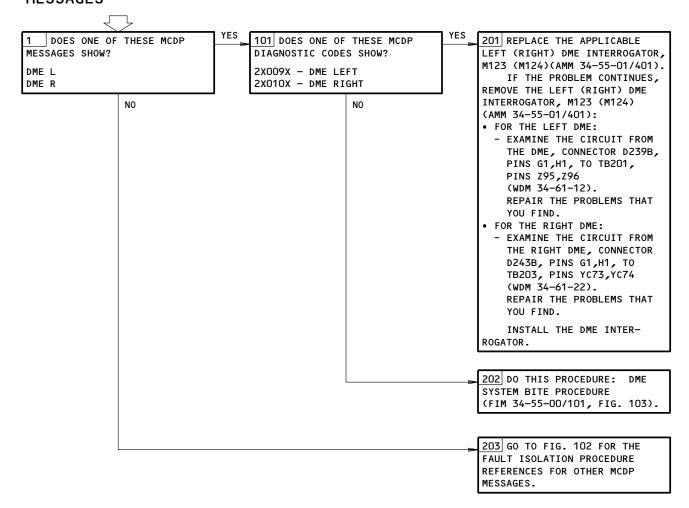


Autoflight BITE Fault Isolation Procedures - C Messages Figure 107



AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "D" MESSAGES

PREREQUISITES	
NONE	

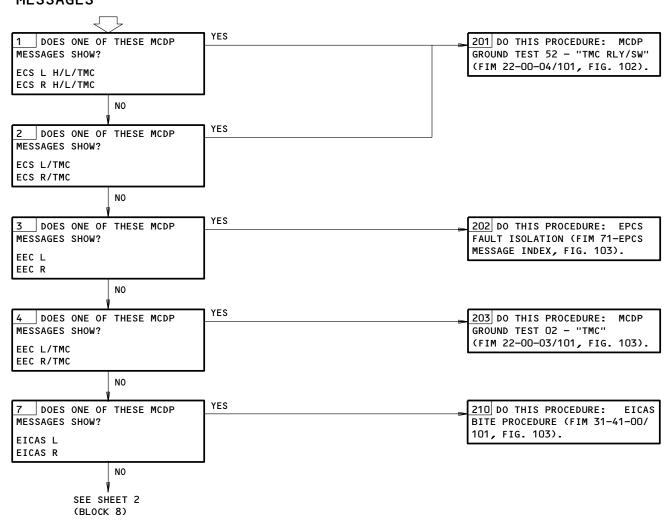


Autoflight BITE Fault Isolation Procedures - D Messages Figure 108

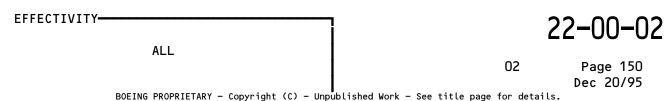
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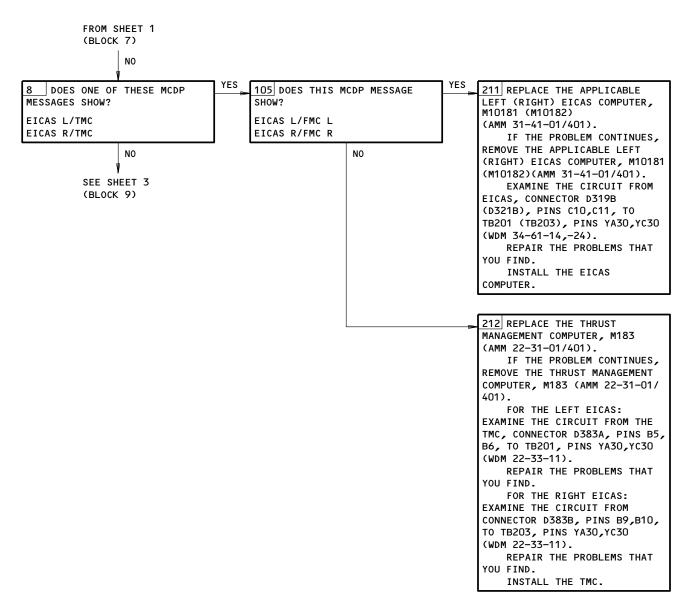
Page 149 Dec 20/94 AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "E" MESSAGES PREREQUISITES
NONE



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







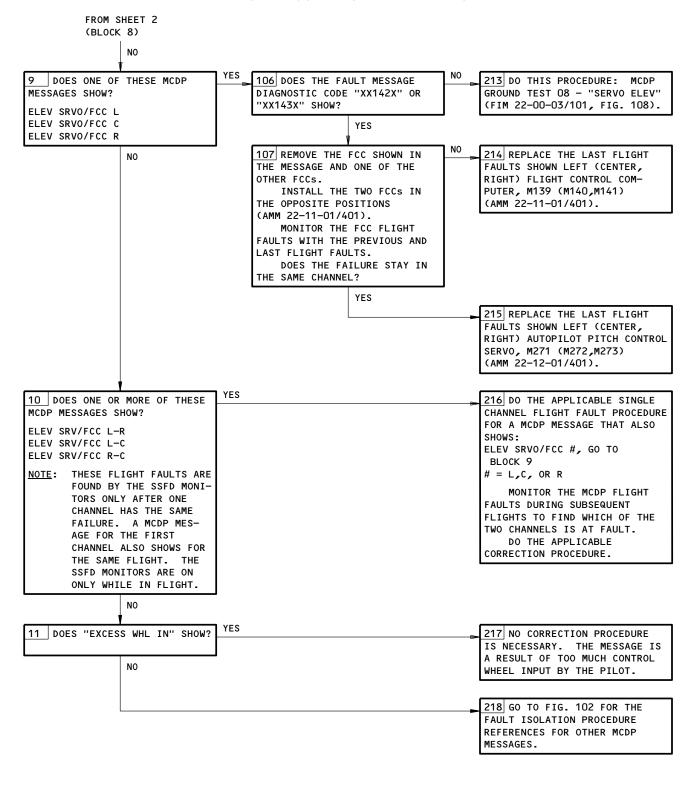
Autoflight BITE Fault Isolation Procedures - E Messages Figure 109 (Sheet 2)

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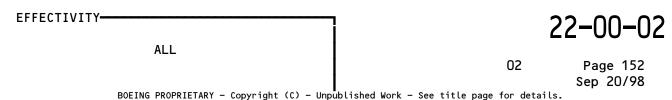
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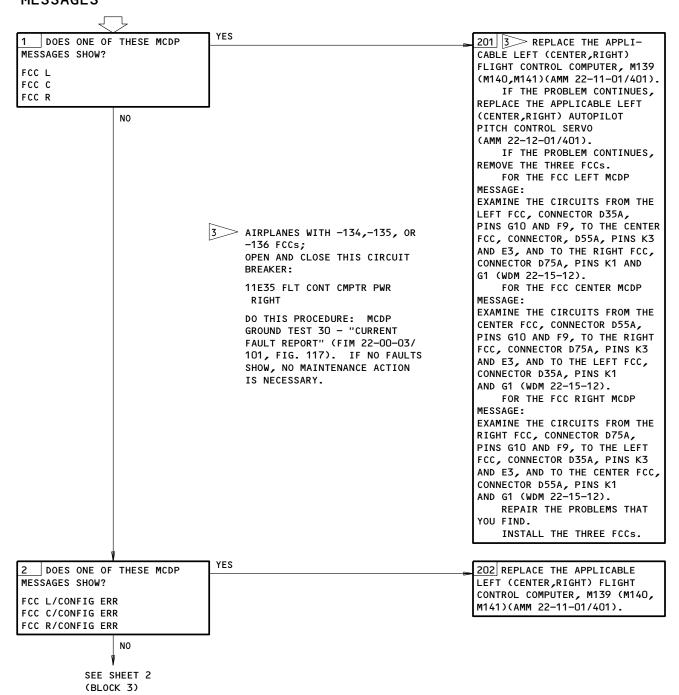


Autoflight BITE Fault Isolation Procedures - E Messages Figure 109 (Sheet 3)





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



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

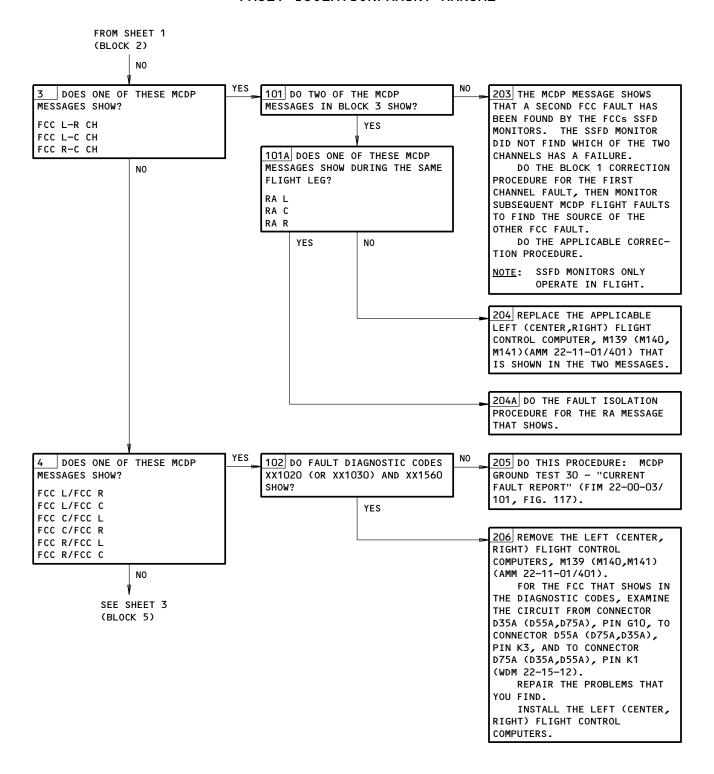
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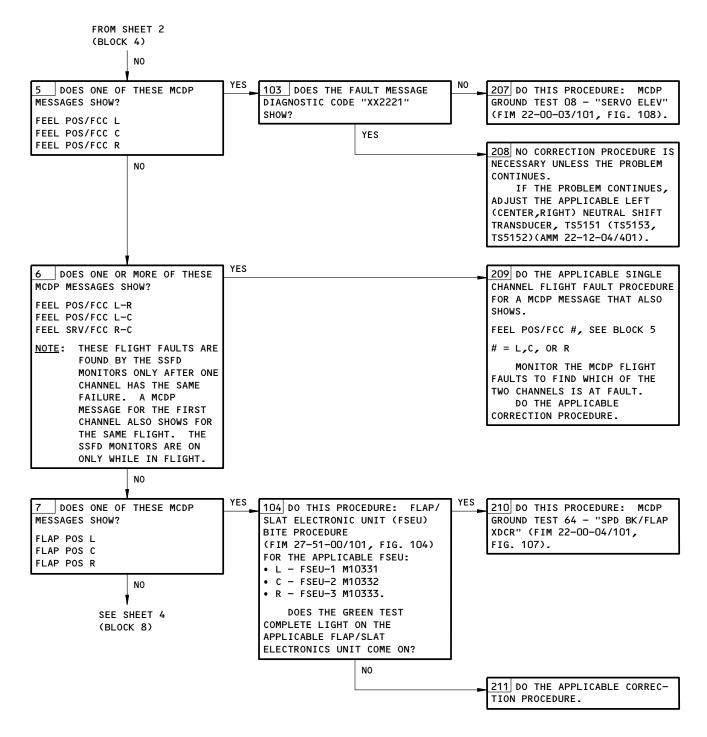
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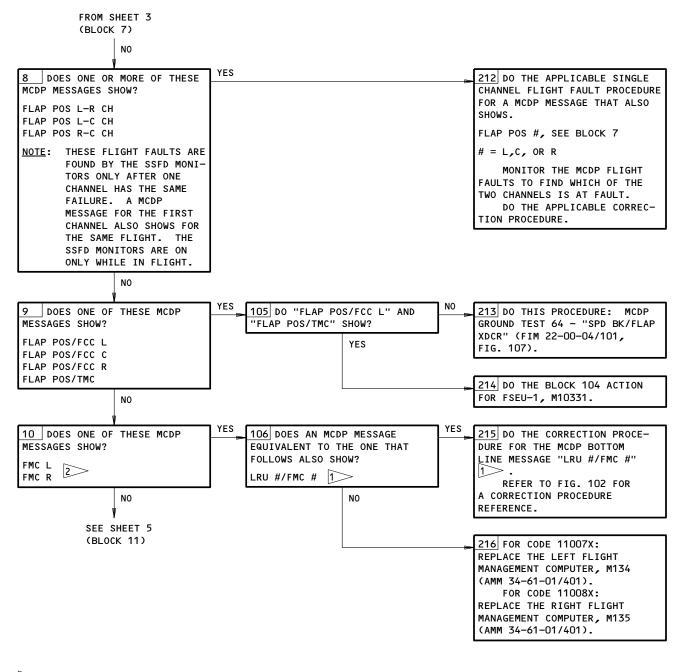
Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 2)





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

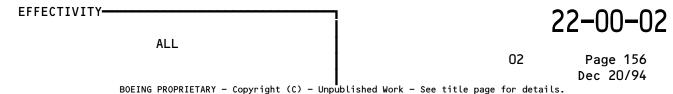


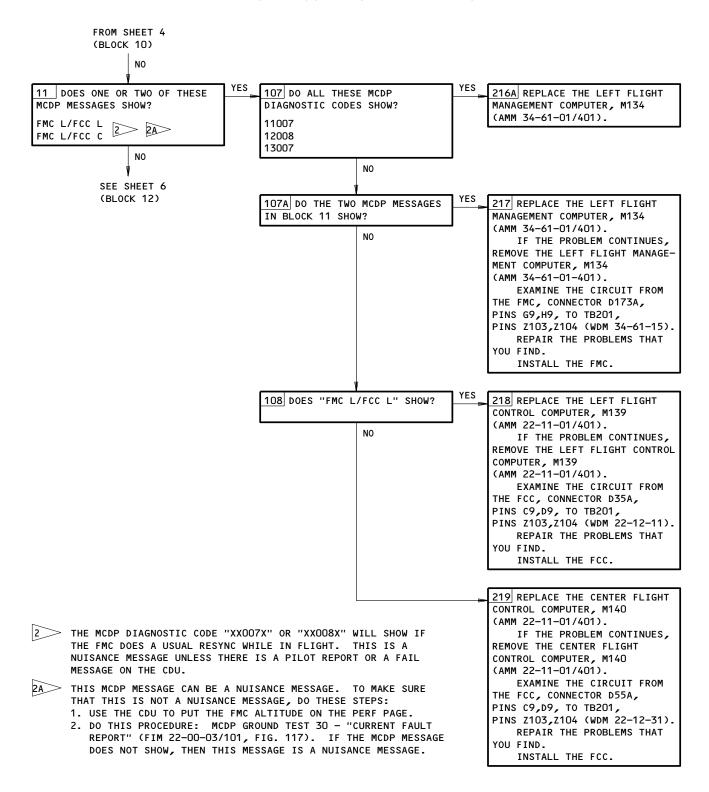


LRU REFERS TO A LINE REPLACABLE UNIT, # REFERS TO THE LEFT, RIGHT OR CENTER CHANNEL

MCDP DIAGNOSTIC CODE XXOO7X OR XXOO8X WILL SHOW IF THE FMC DID A NORMAL RESYNC DURING FLIGHT. IGNORE THIS MESSAGE UNLESS THERE IS A PILOT REPORT OR A FAILURE MESSAGE ON THE CDU.

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



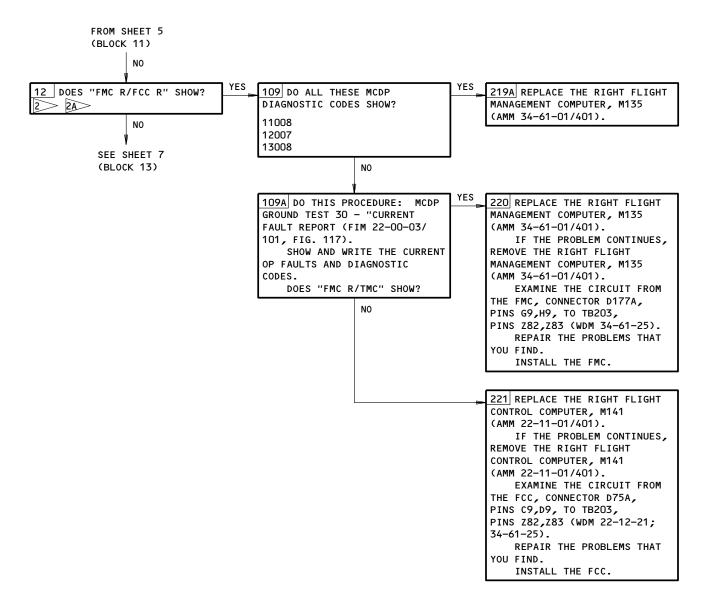


Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 5)

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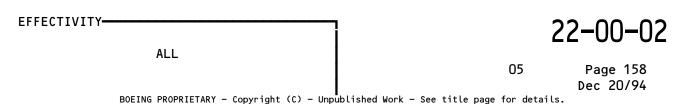
THE MCDP DIAGNOSTIC CODE XXOO7X OR XXOO8X WILL SHOW IF THE FMC DOES A USUAL RESYNC WHILE IN FLIGHT. IGNORE THIS MESSAGE UNLESS THERE IS A PILOT REPORT OR A FAIL MESSAGE ON THE CDU.

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

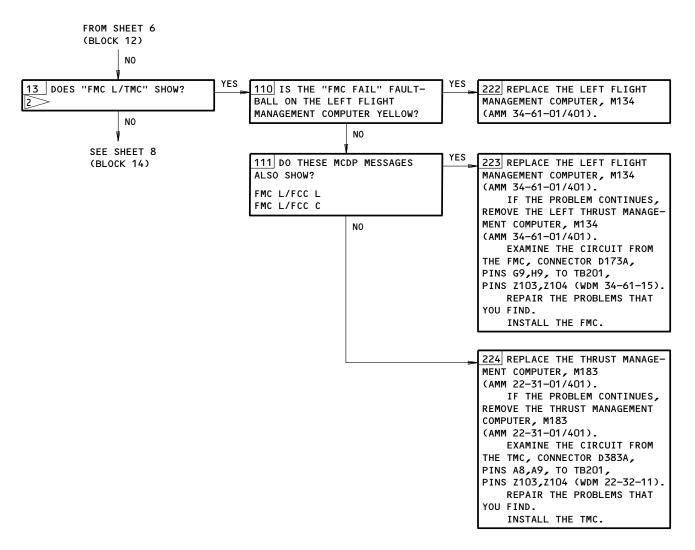
1. USE THE CDU TO PUT THE FMC ALTITUDE ON THE PERF PAGE.

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.

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

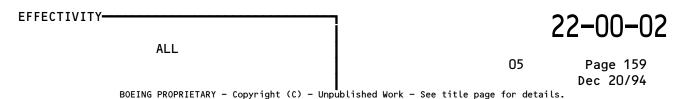




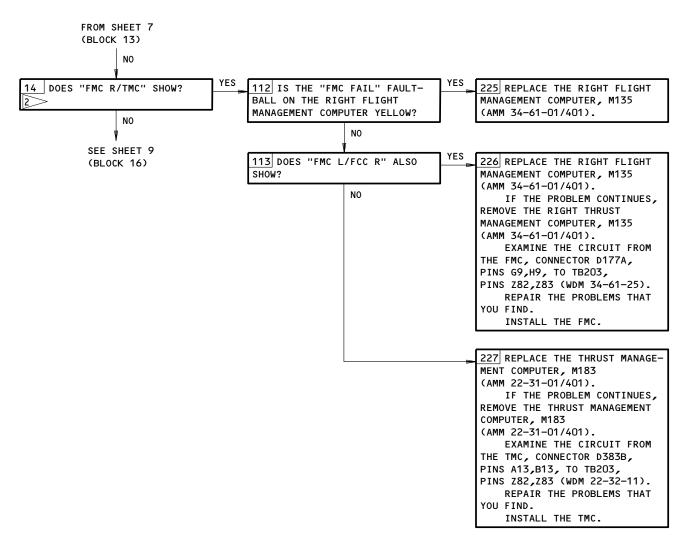


THE MCDP DIAGNOSTIC CODE "XX007X" OR "XX008X" WILL SHOW IF THE FMC DOES A USUAL RESYNC WHILE IN FLIGHT. THIS IS A NUISANCE MESSAGE UNLESS THERE IS A PILOT REPORT OR A FAIL MESSAGE ON THE CDU.

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

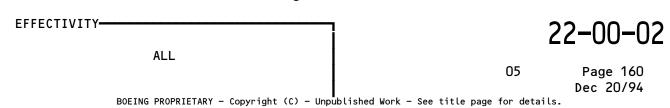


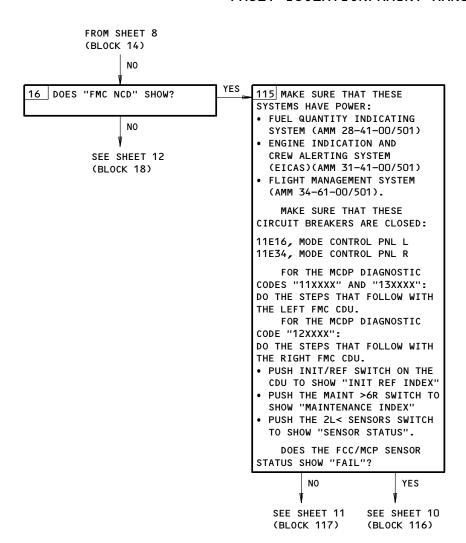




THE MCDP DIAGNOSTIC CODE "XX007X" OR "XX008X" WILL SHOW IF THE FMC DOES A USUAL RESYNC WHILE IN FLIGHT. THIS IS A NUISANCE MESSAGE UNLESS THERE IS A PILOT REPORT OR A FAIL MESSAGE ON THE CDU.

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





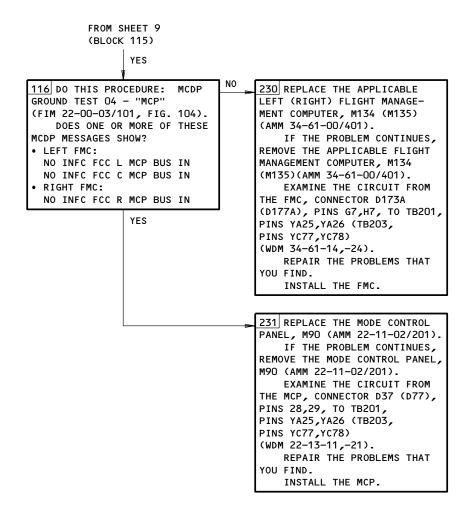
Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 9)

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Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 10)

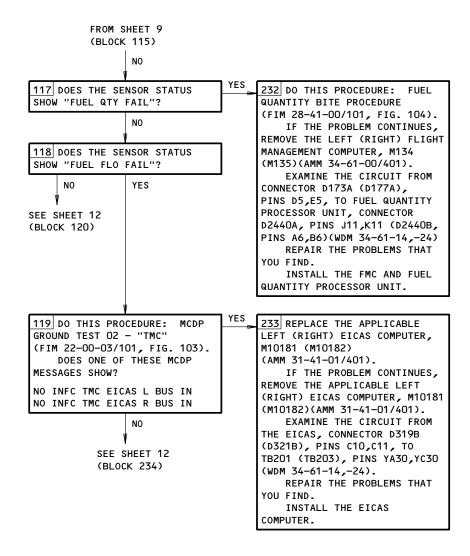
ALL

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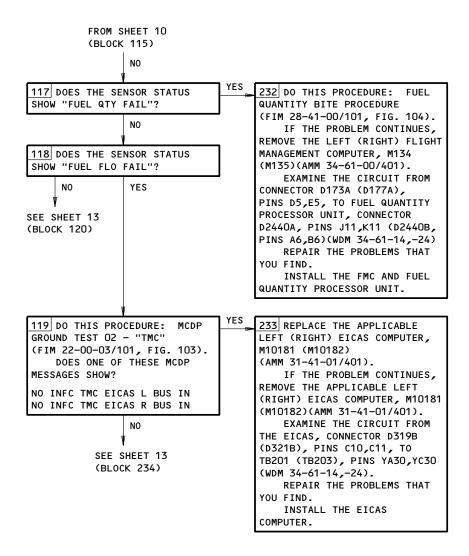
Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 11)

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Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 12)

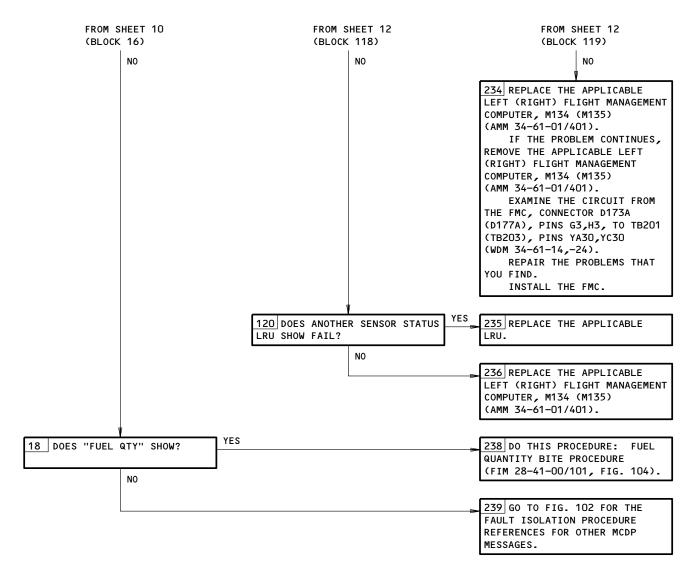
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22-00-02

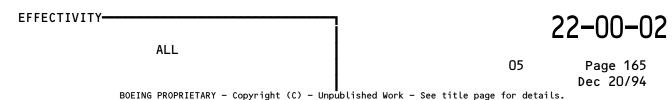
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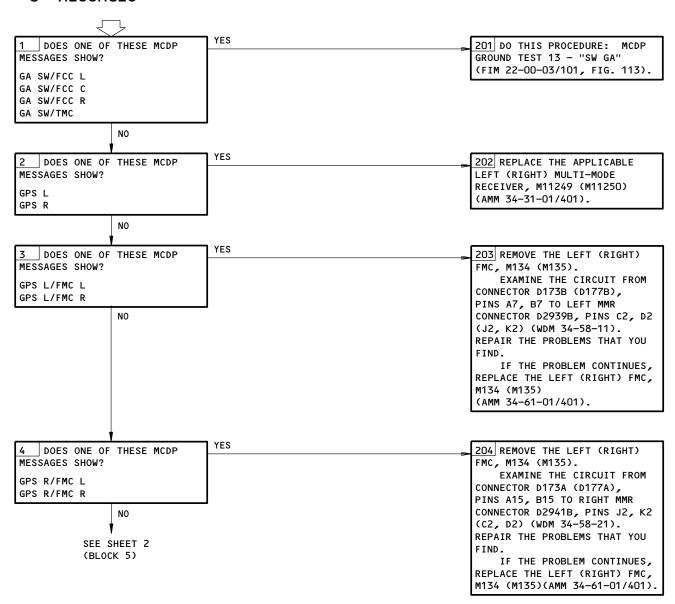
Autoflight BITE Fault Isolation Procedures - F Messages Figure 110 (Sheet 13)



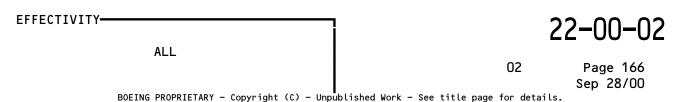


AUTOFLIGHT BITE FAULT ISOLATION "G" MESSAGES

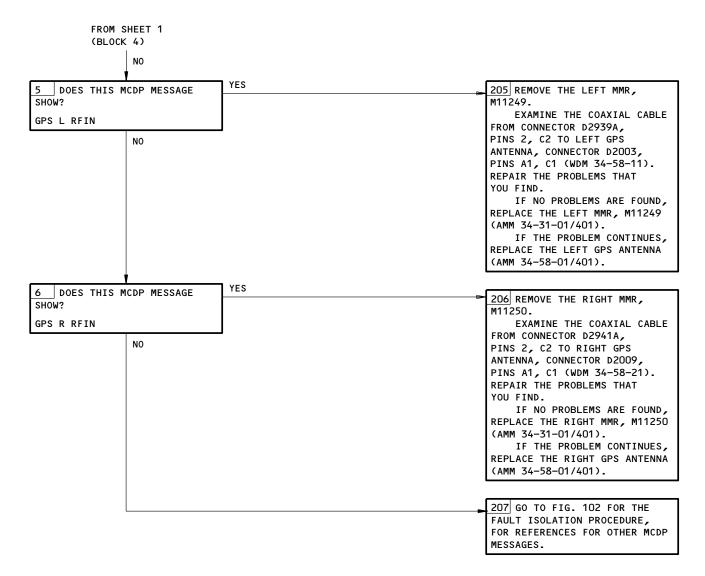
PREREQUISITES
NONE



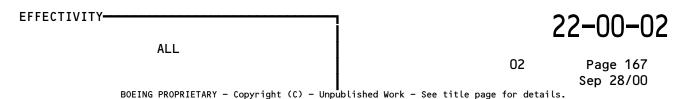
Autoflight BITE Fault Isolation Procedures - G Messages Figure 111 (Sheet 1)







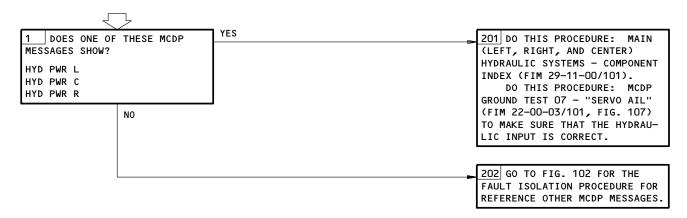
Autoflight BITE Fault Isolation Procedures - G Messages Figure 111 (Sheet 2)





AUTOFLIGHT BITE FAULT ISOLATION "H" MESSAGES

PREREQUISITES NONE

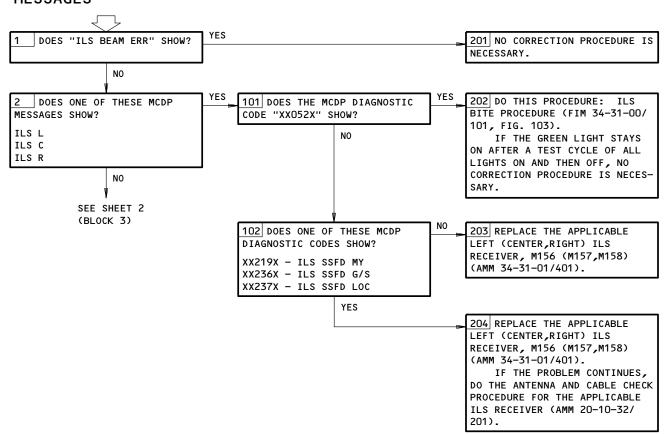


Autoflight BITE Fault Isolation Procedures - H Messages Figure 112

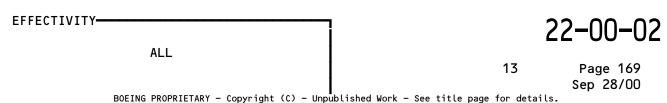
22-00-02

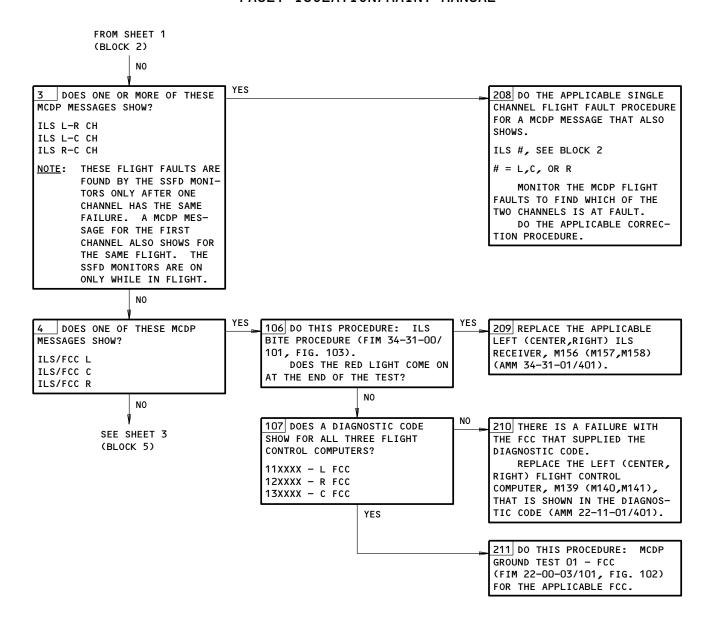


AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "I" MESSAGES PREREQUISITES
NONE

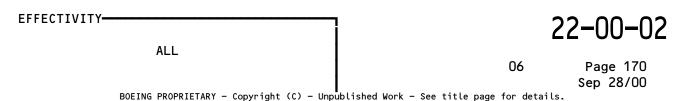


Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 1)

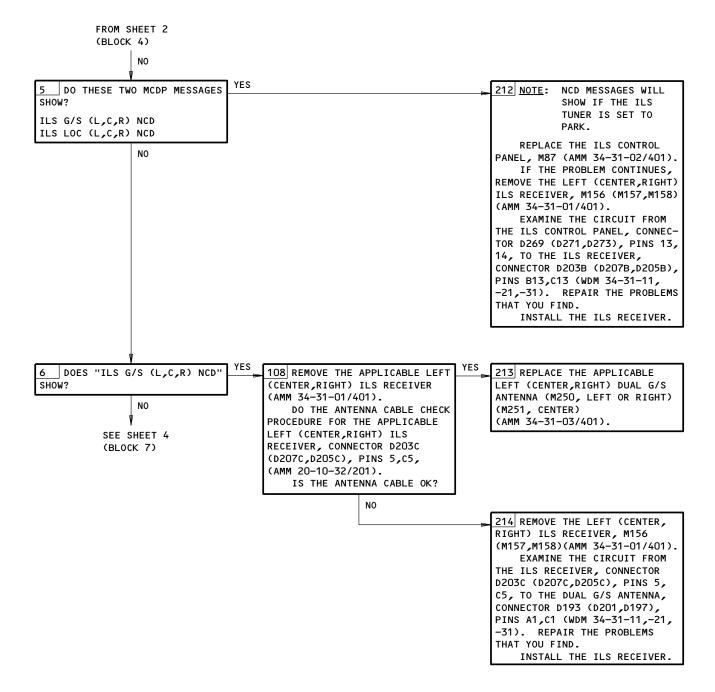




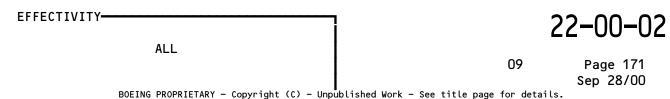
Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 2)



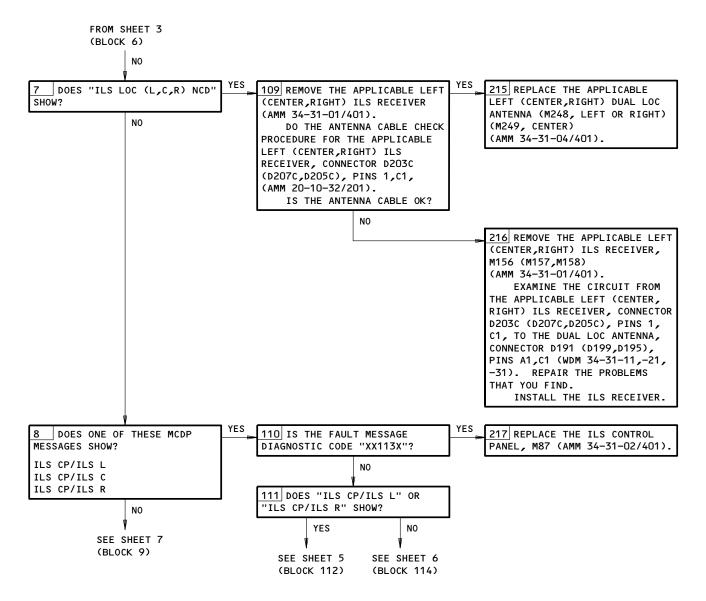




Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 3)







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

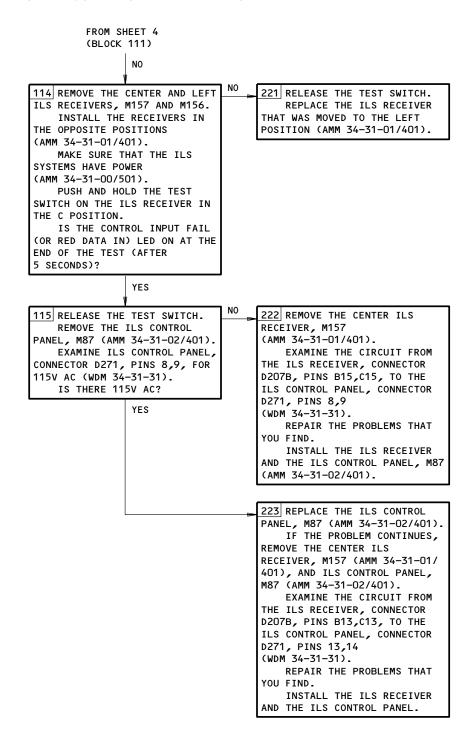
FROM SHEET 4 (BLOCK 111) YES 112 MAKE SURE THAT THE SYSTEMS 218 RELEASE THE TEST SWITCH. THAT FOLLOW HAVE POWER: REPLACE THE APPLICABLE • EFIS (AMM 34-22-00/501) LEFT (RIGHT) ILS RECEIVER, • ILS (AMM 34-31-00/501) M156 (M158)(AMM 34-31-01/401). • VOR (AMM 34-51-00/501) IF THE PROBLEM CONTINUES, • DME (AMM 34-55-00/501). REMOVE THE APPLICABLE LEFT (RIGHT) ILS RECEIVER, M156 SET THE APPLICABLE LEFT (M158)(AMM 34-31-01/401). (RIGHT) EFIS CONTROL PANEL EXAMINE THE CIRCUIT FROM MODE SELECT SWITCH TO THE ILS THE ILS RECEIVER, CONNECTOR POSITION. D203B (D205B), PINS B13,C13, PUSH AND HOLD THE TEST TO TB205, PINS YA15, YA16 SWITCH ON THE APPLICABLE LEFT (TB203, PINS YA47, YA48) (RIGHT) DME INTERROGATOR. (WDM 34-31-11,-21). IS THE RED CONTROL INPUT REPAIR THE PROBLEMS THAT FAIL (OR DATA IN) LED LIT AT YOU FIND THE END OF THE TEST (AFTER INSTALL THE ILS RECEIVER. 6 SECONDS). YES 113 RELEASE THE TEST SWITCH. 219 REMOVE THE APPLICABLE LEFT REMOVE THE ILS CONTROL (RIGHT) RECEIVER, M156 (M158) PANEL, M87 (AMM 34-31-02/401). (AMM 34-31-01/401). EXAMINE THE ILS CONTROL EXAMINE THE CIRCUIT FROM PANEL, CONNECTOR LEFT-D269 THE ILS RECEIVER, CONNECTOR (RIGHT-D273), PINS 8,9, FOR D203B (D205B), PINS B15,C15, 115V AC (WDM 34-31-11,-21). TO THE ILS CONTROL PANEL, IS THERE 115V AC? CONNECTOR D269 (D273), PINS 8,9 (WDM 34-31-11,-21). YES REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE ILS RECEIVER AND ILS CONTROL PANEL, M87 (AMM 34-31-02/401). 220 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, CONNEC-TOR D269 (D273), PINS 13,14, TO TB205, PINS YA15, YA16 (TB203, PINS YA47, YA48) (WDM 34-31-11,-21). REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE ILS CONTROL

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

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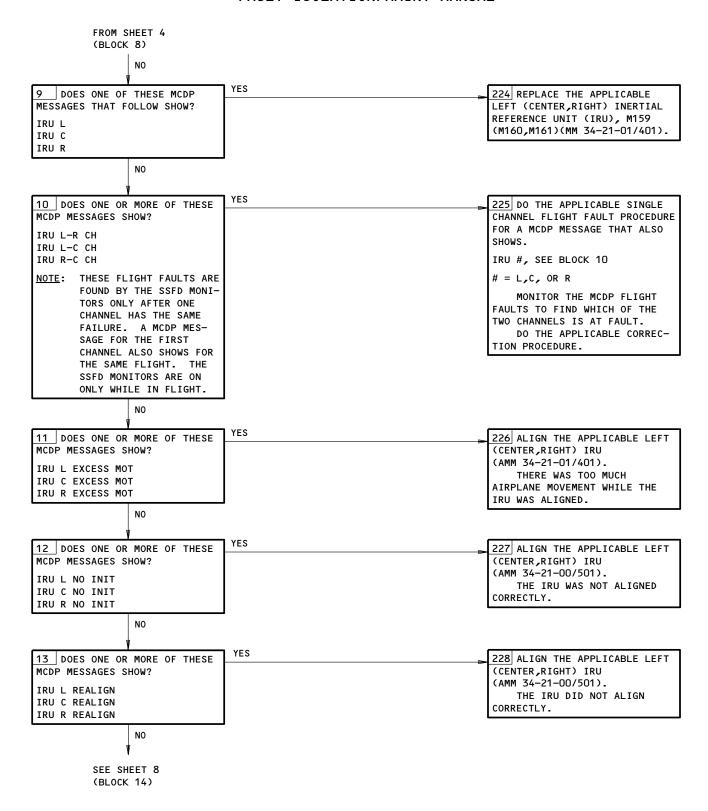


Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 6)

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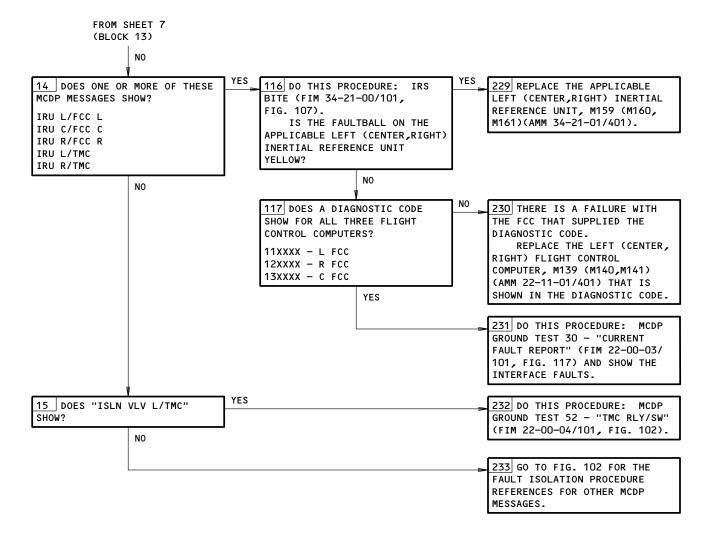
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Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 7)



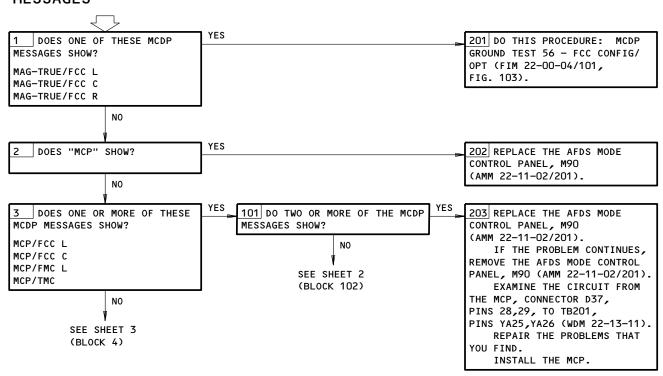




Autoflight BITE Fault Isolation Procedures - I Messages Figure 113 (Sheet 8)

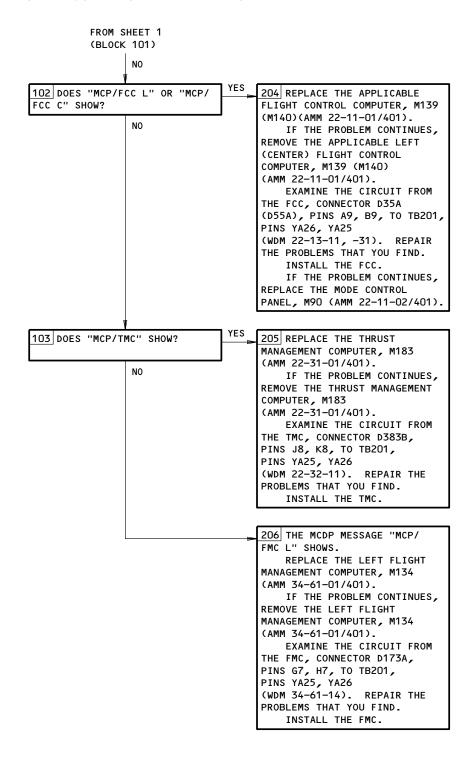


AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "M" MESSAGES PREREQUISITES
NONE



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

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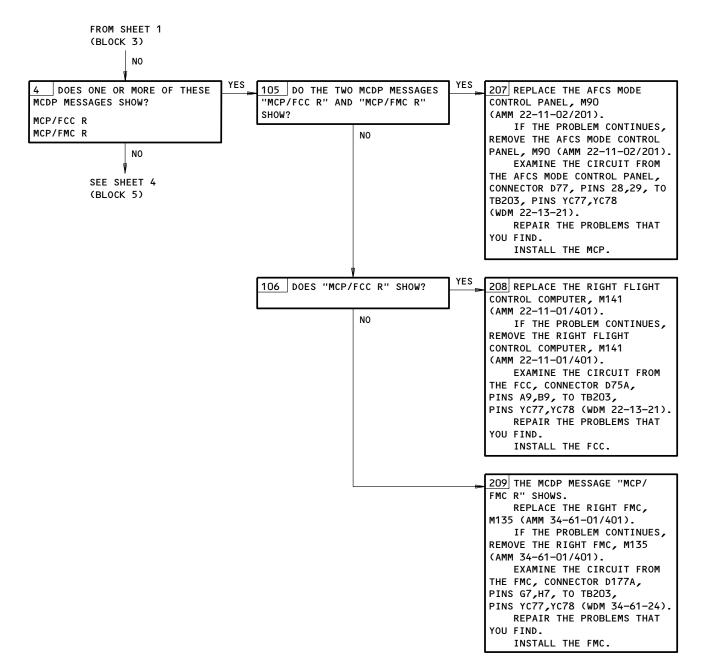


Autoflight BITE Fault Isolation Procedures - M Messages Figure 114 (Sheet 2)

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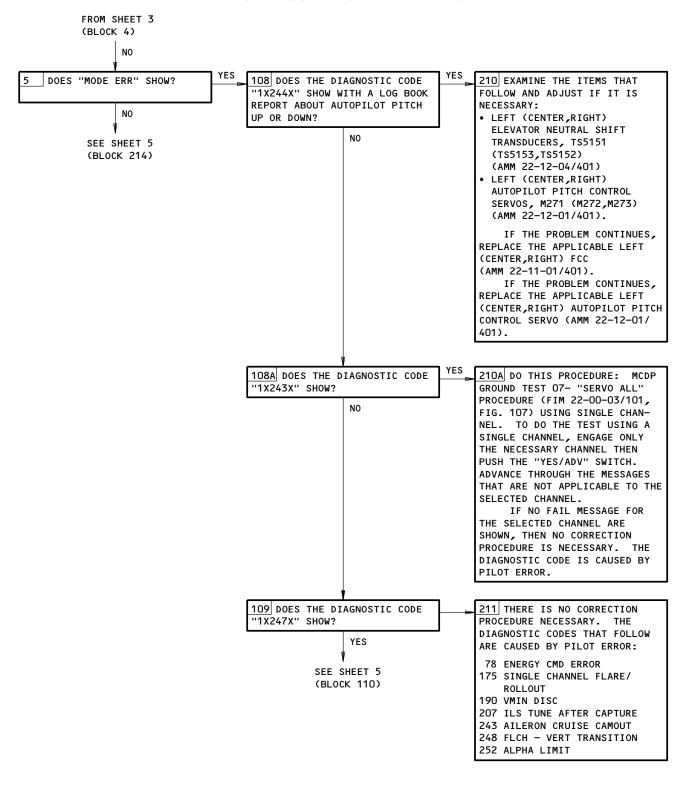
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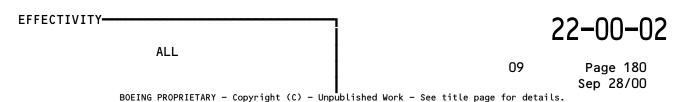


Autoflight BITE Fault Isolation Procedures - M Messages Figure 114 (Sheet 3)

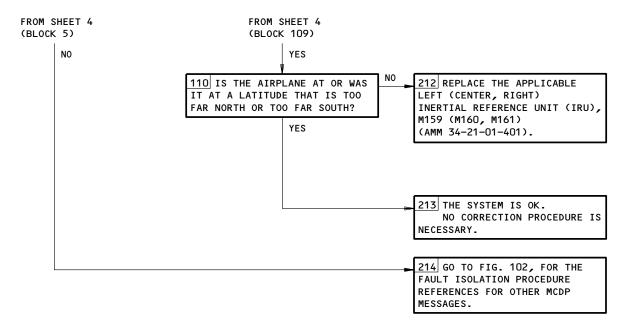




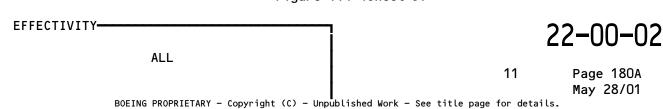
Autoflight BITE Fault Isolation Procedures - M Messages Figure 114 (Sheet 4)



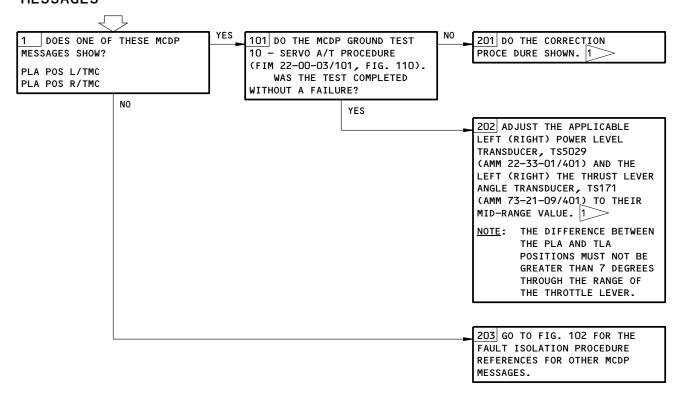




Autoflight BITE Fault Isolation Procedures - M Messages Figure 114 (Sheet 5)



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



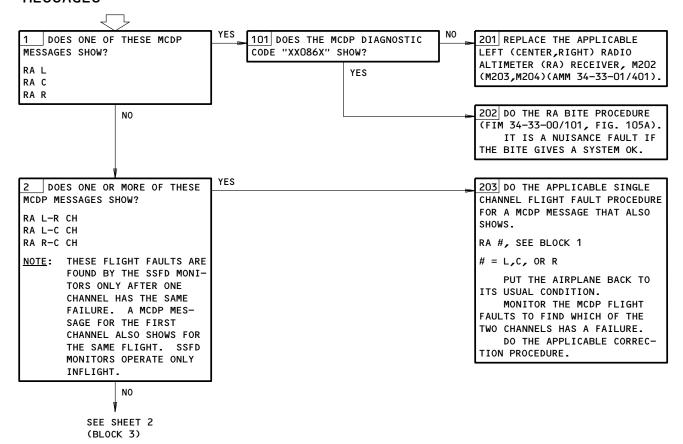
1 IF NO FAULT IS FOUND AFTER YOU TROUBLESHOOT, DO AN INSPECTION OF THE MODULAR TERMINAL BLOCK/TERMINAL BLOCK FOR A POSIBLE WIRING FAULT (AMM 71-51-01/601).

Autoflight BITE Fault Isolation Procedures - P Messages Figure 114A

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

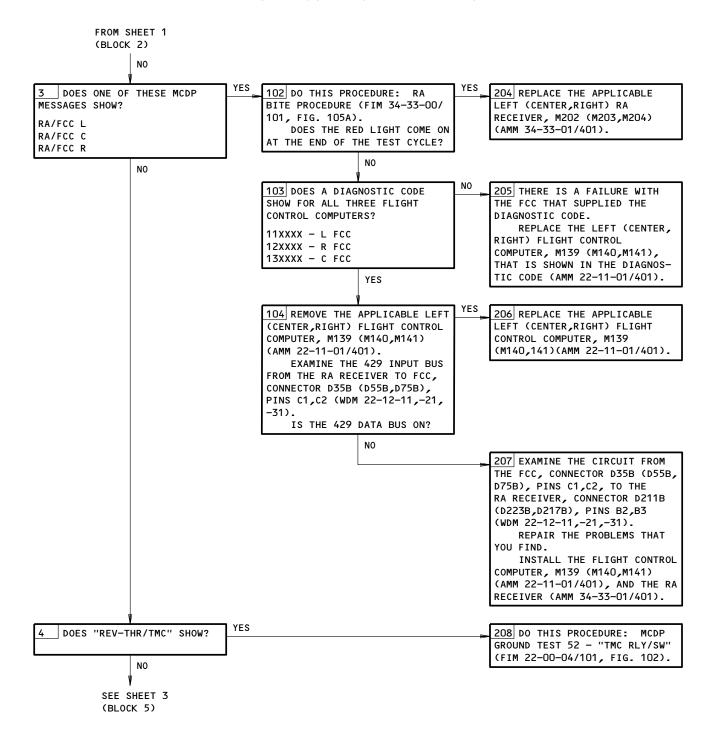


Autoflight BITE Fault Isolation Procedures - R Messages Figure 115 (Sheet 1)

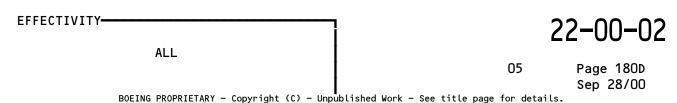
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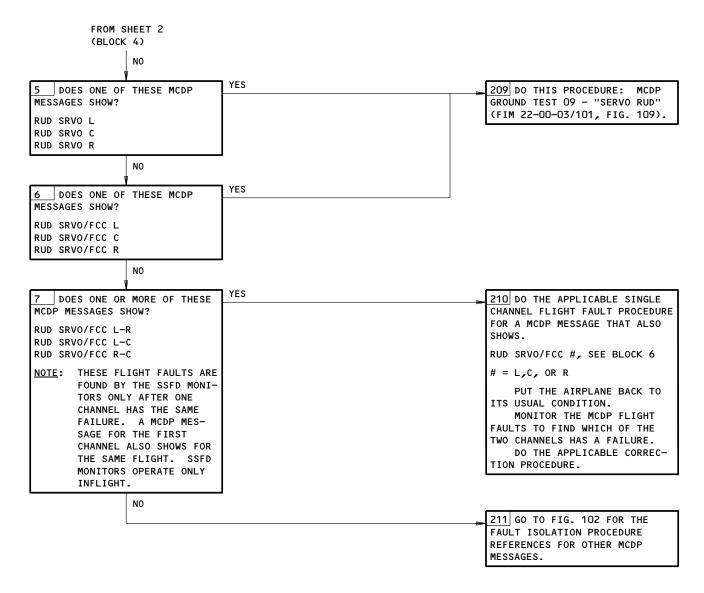
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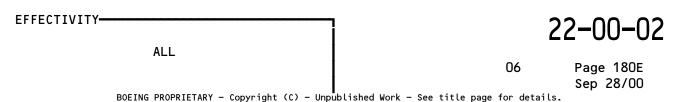
Autoflight BITE Fault Isolation Procedures - R Messages Figure 115 (Sheet 2)





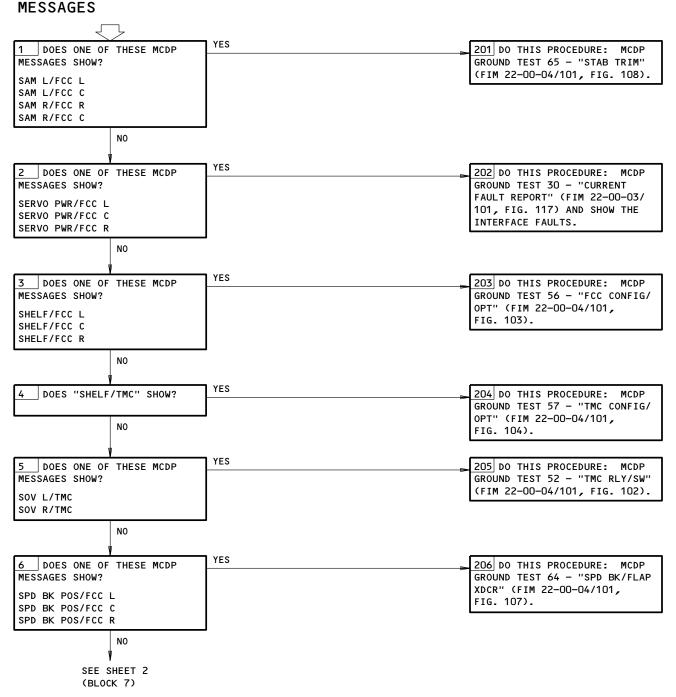


Autoflight BITE Fault Isolation Procedures - R Messages Figure 115 (Sheet 3)

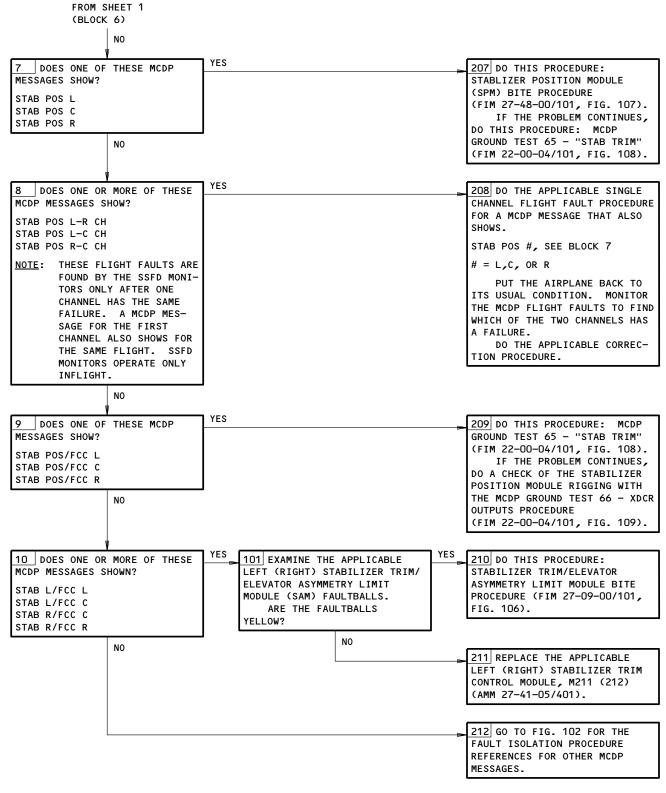




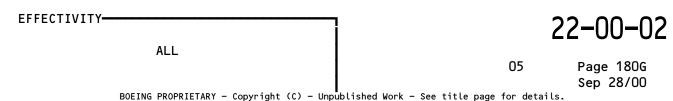
AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "S" PREREQUISITES
NONE



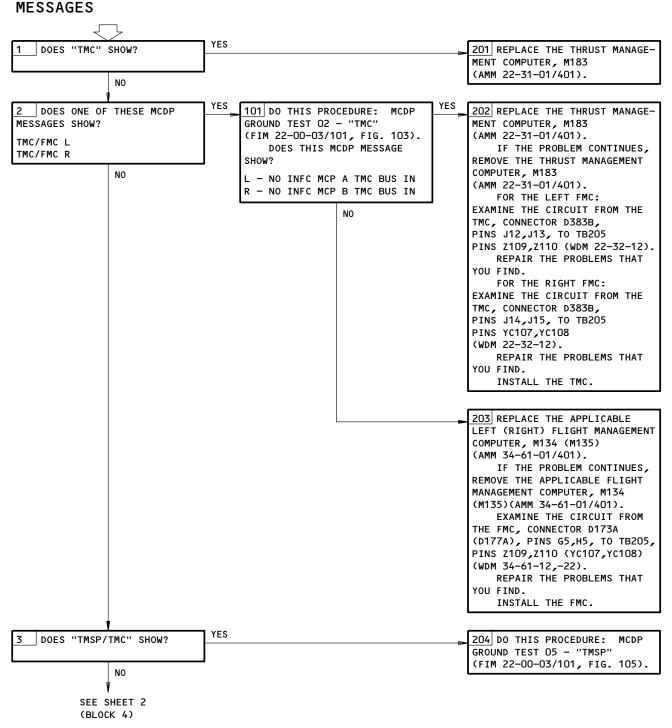
Autoflight BITE Fault Isolation Procedures - S Messages Figure 116 (Sheet 1)



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

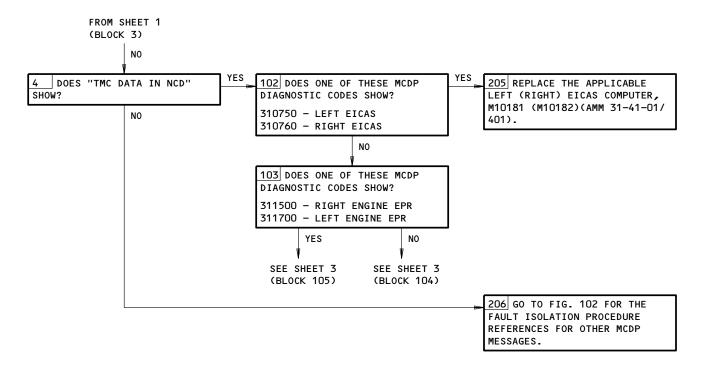


AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "T" PREREQUISITES
NONE

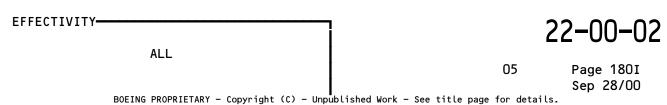


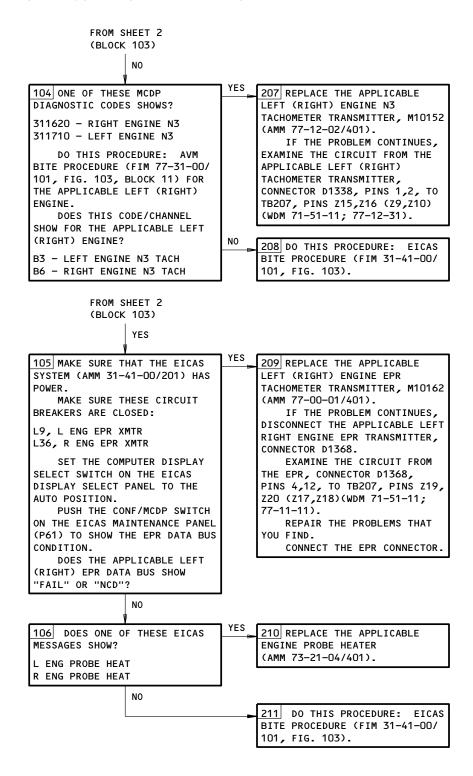
Autoflight BITE Fault Isolation Procedures - T Messages Figure 117 (Sheet 1)





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





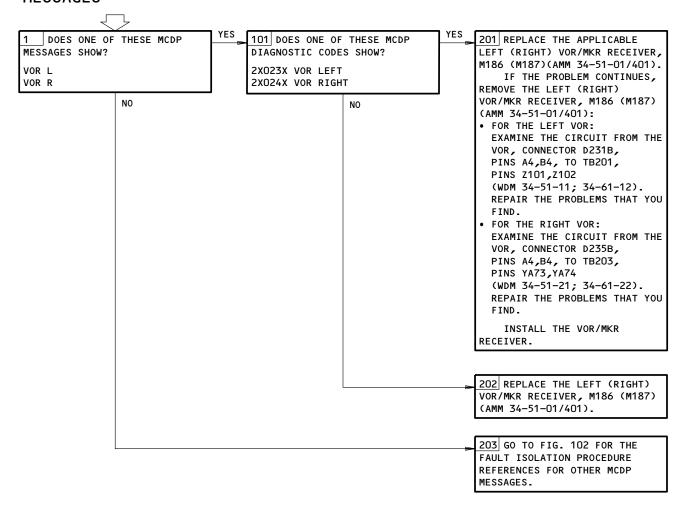
Autoflight BITE Fault Isolation Procedures - T Messages Figure 117 (Sheet 3)

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AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "V" MESSAGES

PREREQUISITES	
NONE	



Autoflight BITE Fault Isolation Procedures - V Messages Figure 118

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AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - "W" MESSAGES

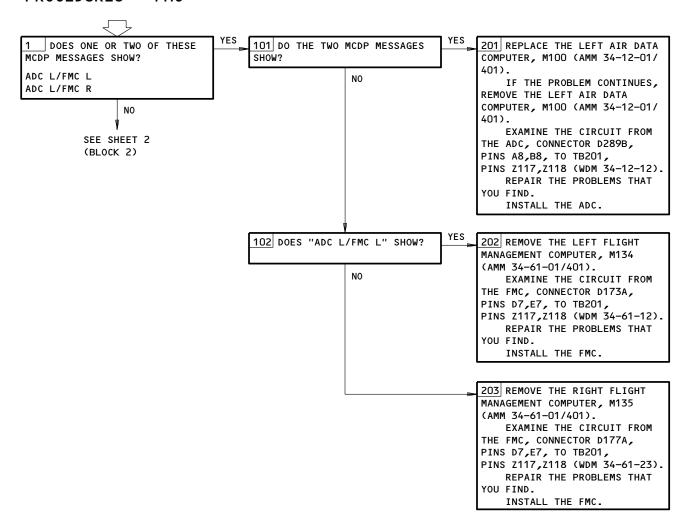
PREREQUISITES	
NONE	

	<u> </u>		
1 DOES "WG A/I/		YES	201 DO THIS PROCEDURE: MCDP GROUND TEST 52 - "TMC RLY/SW" (FIM 22-00-04/101, FIG. 102).
N	NO		202 GO TO FIG. 102 FOR THE
			FAULT ISOLATION PROCEDURE REFERENCES FOR OTHER MCDP MESSAGES.

Autoflight BITE Fault Isolation Procedures - W Messages Figure 119



AUTOFLIGHT BITE FAULT ISOLATION PROCEDURES - FMC PREREQUISITES
NONE



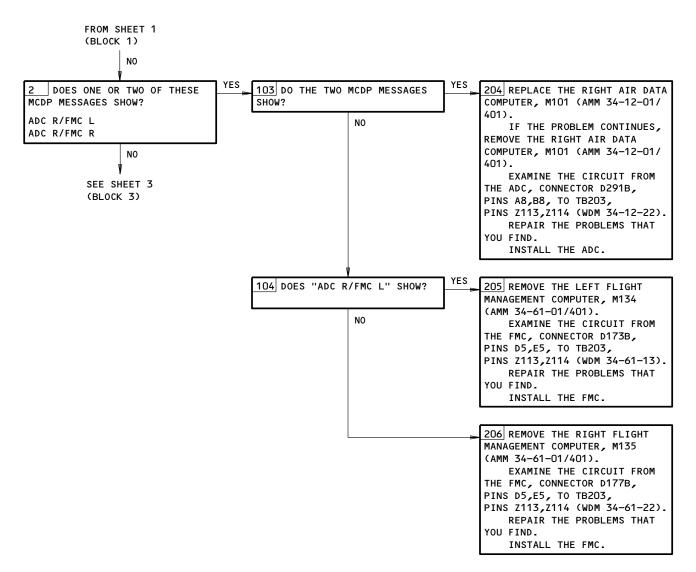
Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 1)

22-00-02

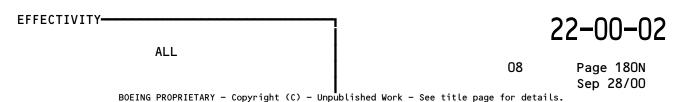
80

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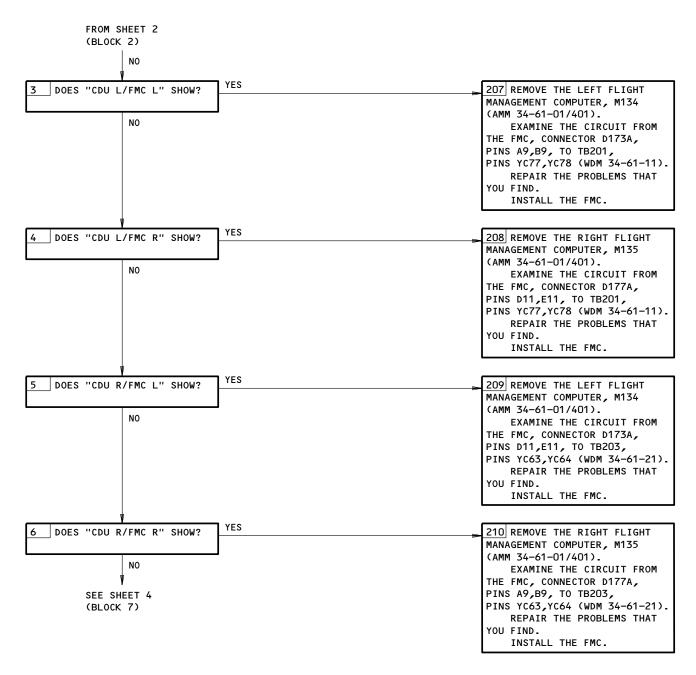




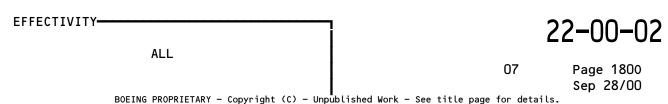
Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 2)



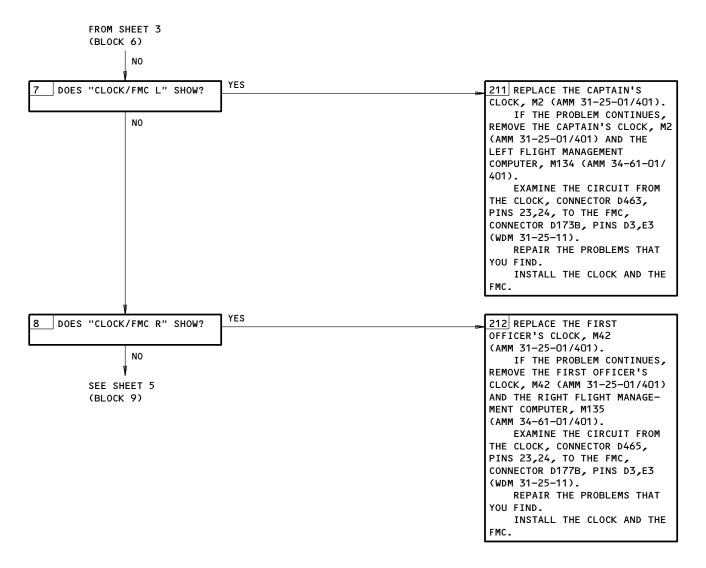




Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 3)



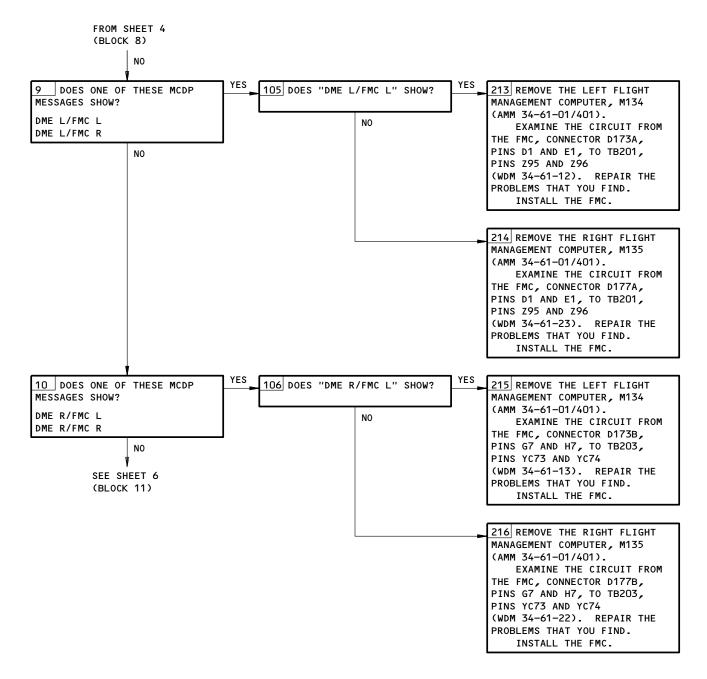




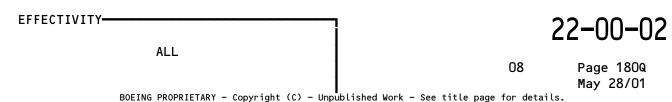
Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 4)

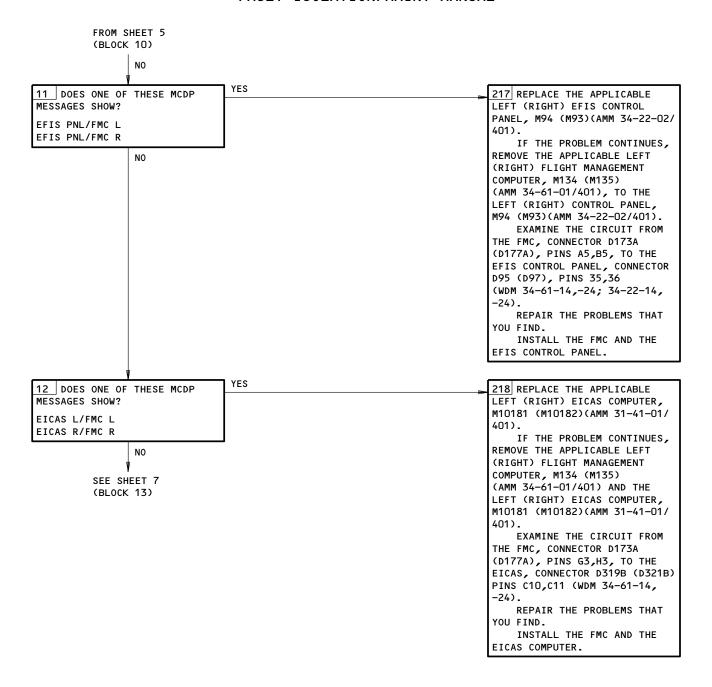




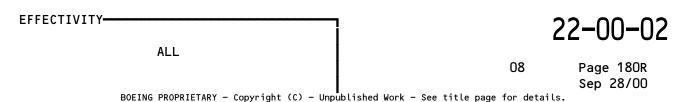


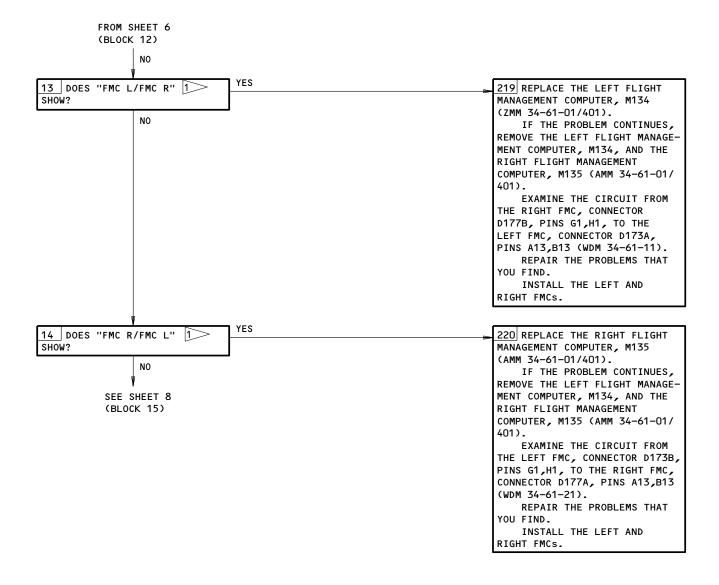
Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 5)





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





THE MCDP DIAGNOSTIC CODE "XXOO7X" OR "XXOO8X" WILL SHOW IF THE FMC DOES A USUAL RESYNC DURING FLIGHT. IGNORE THIS MESSAGE UNLESS THERE IS A PILOT REPORT OR A FAIL MESSAGE ON THE CDU.

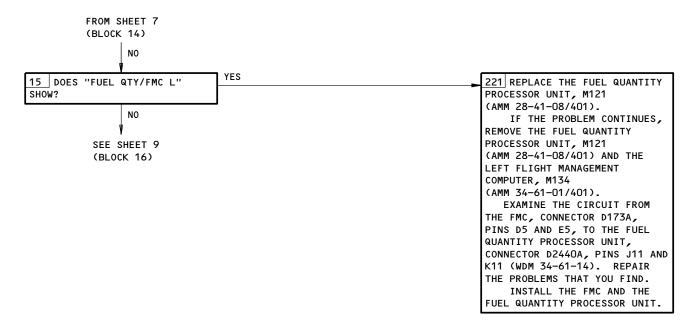
Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 7)

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

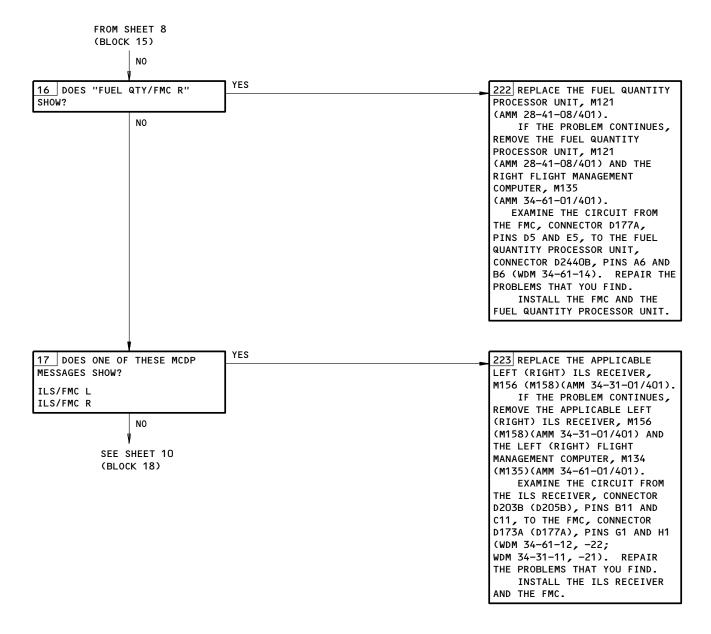
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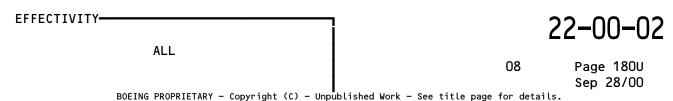
80

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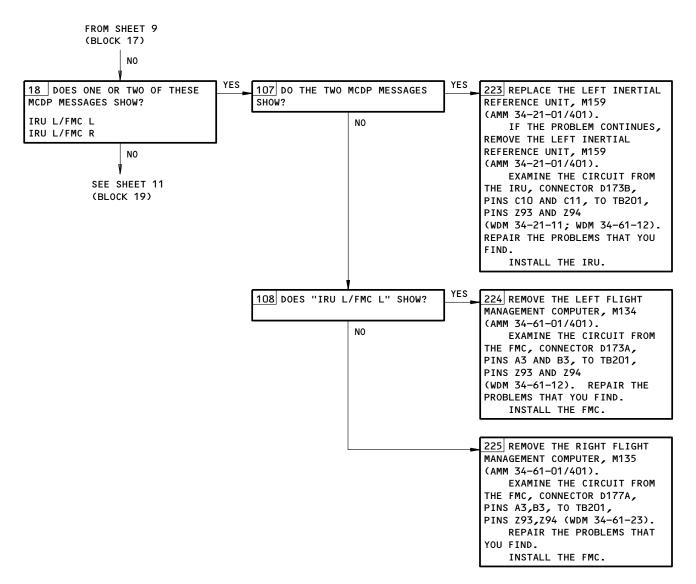




Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 9)

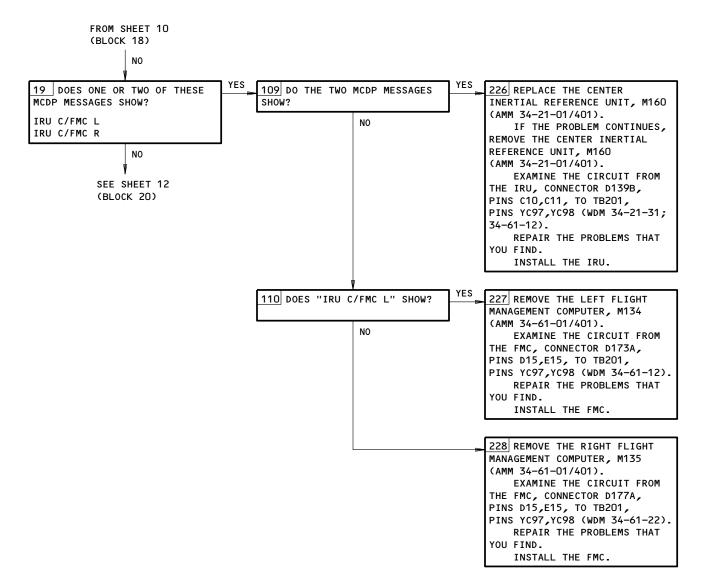






Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 10)

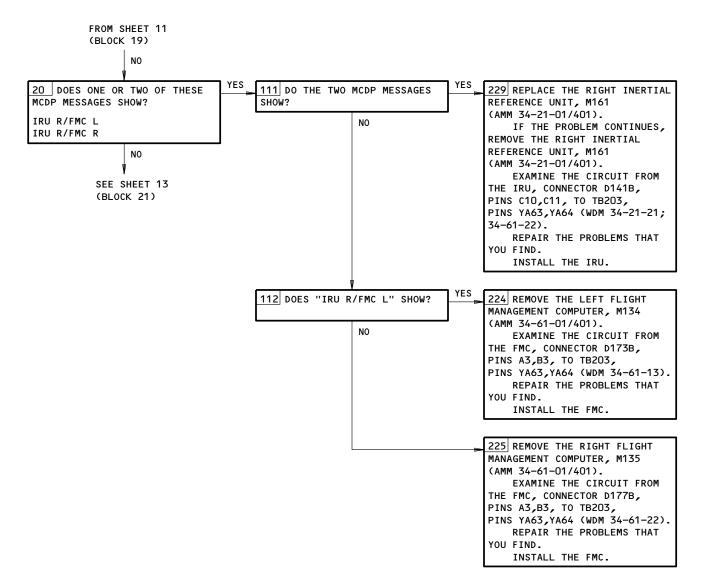




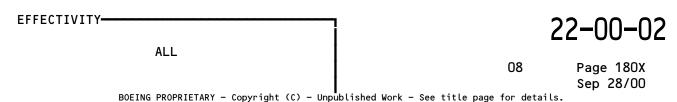
Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 11)



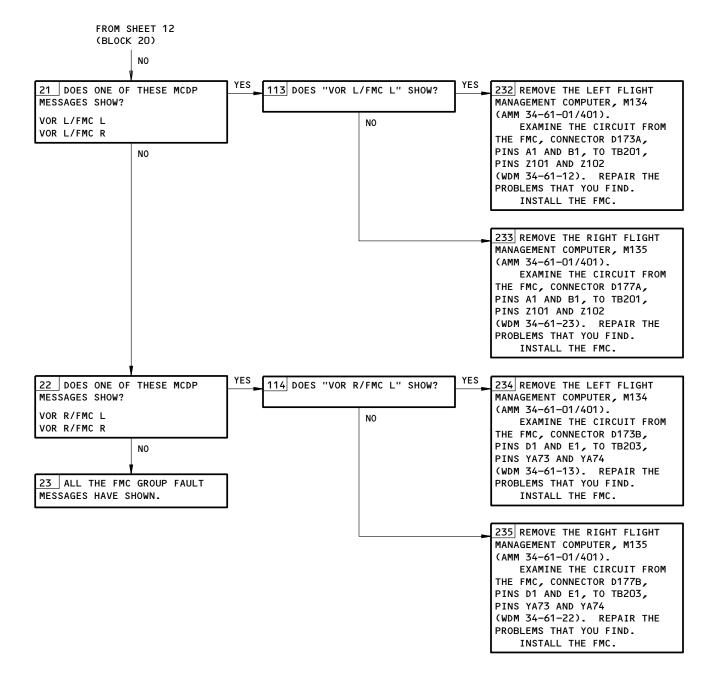




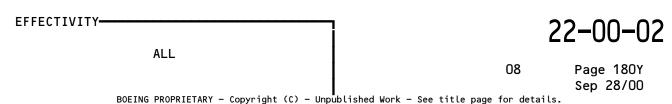
Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 12)







Autoflight BITE Fault Isolation Procedures - FMC Figure 120 (Sheet 13)





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 ANNUNCIATOR 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 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).
 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 EPR MODE WILL NOT ENGAGE. NOTE: THE EPR MODE WILL NOT ENGAGE 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.	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 FREEPLAY CHECK PART OF THE FLIGHT CONTROLS SURFACE INSPECTION/CHECK AND DO THE CORRECTION PROCEDURES. 2. IF THE PROBLEM CONTINUES, DO THE ELEVATOR CONTROL SYSTEM ADJUSTMENT/TEST (AMM 27-31-00/501).



> GUI 001-114,116-999; P/RST SWITCH

GUI 115; STATUS SWITCH

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 FREEPLAY 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. THE BANK ANGLE HAS A LIMIT OF 8 DEGREES IN ALL OF THE AUTOPILOT MODES OR IRREGULAR ELEVATOR MOVEMENT IN CRUISE OR OTHER MODES. 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 FOR EACH SYSTEM (FIM 34-33-00/101, FIG. 105A). 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 CONNECTORS CAN CAUSE THESE 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: RA BITE FOR EACH SYSTEM (FIM 34-33-00/101, FIG. 105A).
12. "NO LAND 3" IS SHOWN ON THE AUTOLAND STATUS ANNUNCIATOR AND THERE ARE NO RELATED MCDP FLIGHT FAULTS SHOWN.	DO THIS PROCEDURE: MCDP GROUND TEST 40 - "AUTOLAND" (FIM 22-00-03/101, FIG. 118).
13. "NO LAND 3" IS SHOWN ON THE AUTOLAND STATUS ANNUNCIATOR AND THERE ARE RELATED MCDP FLIGHT FAULTS SHOWN	IF THE FOLLOWING MCDP FAULT MESSAGES ARE DISPLAYED AFTER FLIGHT WITH DIAGNOSTIC CODES 110 AND 111, DO THE FOLLOWING PROCEDURE: MESSAGE FCC C/FCC L FCC R/FCC C FCC R/FCC C FCC L/FCC C FCC L/FCC R FCC L/FCC R FCC L/FCC R FCC C/FCC R FCC L/FCC R FC
14. 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 AND 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 D55C, PINS 1, 2 AND 5 TO CTR BUS DC CIRCUIT BREAKER C899, PIN B (WDM 22-11-32; 24-31-11; 24-51-31). REPAIR THE PROBLEMS THAT YOU FIND.

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

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FAULT SYMPTOM	CORRECTION PROCEDURE
15. 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).
16. THE FLIGHT DIRECTOR COMMANDS A TARGET AIRSPEED OF V2 INSTEAD OF V2 + 15	AIRPLANES WITHOUT -134 AND SUBSEQUENT FCCs; IF YOU TURN THE MCP IAS/MACH SPEED KNOB TOO QUICKLY (MORE THAN 15 KNOTS IN APPROXIMATELY 1/10 SECOND) DURING NORMAL TAKEOFF, THIS SYMPTOM CAN OCCUR. NO ACTION IS NECESSARY. THE INSTALLATION OF -134 AND SUBSEQUENT FCCS WILL CORRECT THE PROBLEM.
17. "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 OPERATE
18. AIRPLANE ALIGNMENT PROBLEMS DURING AUTO-LAND APPROACH.	DO THE MCDP GROUND TEST 40 - AUTO-LAND (FIM 22-00-03/101, FIG. 118, 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 DETAIL. TO DOWNLOAD THE DATA FROM THE FLIGHT DATA RECORDER, (AMM 31-31-01/201).

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

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PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11SX 2 , REFER TO FIGURE 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 ISOLATION PROCEDURE.

NO 10 DO THIS PROCEDURE: MCDP MOMENTARILY PUSH THE MCDP "ON/OFF" SWITCH. BITE FAULT ISOLATION DOES THE MCDP SHOW THE PROCEDURE (FIM 22-00-02/101, "O1 LAST FLT FAULTS?" MESSAGE FIG. 103). AFTER THE SELF-TEST SEQUENCE? YES 2 DO THE PREREQUISITES THAT 11 DO THIS PROCEDURE: ARE NECESSARY. BITE FAULT ISOLATION MOMENTARILY PUSH THE MCDP PROCEDURE (FIM 22-00-02/101, "GRD TEST" MODE SWITCH. FIG. 103). DOES THE "GRD TEST" LIGHT COME ON AND THE MCDP SHOWS "01 FCC TEST?" AFTER THESE MESSAGES SHOW: SYST ENG IN PROGRESS COMPT TEST IN PROGRESS INFC DATA IN PROGRESS YES 12 USE THE "NO/SKIP, "UP," AND "ON" SWITCHES TO SET THE APPLICABLE GROUND TEST. REFER TO TABLE 101 FOR THE FIGURE NUMBER OF THE

NOTE: AFTER YOU CORRECT THE FAILURES SHOWN DURING A GROUND TEST, YOU MUST GO OUT OF THE MCDP GRD TEST MODE AND THEN GO

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.

WHERE X = 3,4, OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE
"MAINT CONT DSPL"

MCDP Ground Test Mode Figure 101 (Sheet 1)

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APPLICABLE GROUND TEST FAULT ISOLATION PROCEDURE. 1

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FAULT ISOLATION/MAINT MANUAL

TEST NO.	MCDP TEST	CH-SEC-SUB/FIG.	TEST NO.	MCDP TEST	CH-SEC-SUB/FIG.
01 02	FCC TMC	22-00-03/102 22-00-03/103	30 40	CURRENT FAULT REPORT AUTOLAND	22-00-03/117 22-00-03/118
04 04 05 06	MCP MCP TMSP ASA	22-00-03/104 3 22-00-03/104A 4 22-00-03/105 22-00-03/106	51 52 56 57 59	AIR/GRD RLY TMC RLY/SW FCC CONFIG/OPT TMC CONFIG/OPT FCC INSTR	22-00-04/101 22-00-04/102 22-00-04/103 22-00-04/104 22-00-04/105
06	ASA	3 22-00-03/106A 4	60 64 65 66	TMC INSTR SPD BK/FLAP XDCR STAB TRIM XDCR OUTPUTS	22-00-04/106 22-00-04/107 22-00-04/108 22-00-04/109
07 08 09 10 11	SERVO AIL SERVO ELEV SERVO RUD SERVO A/T SW A/P DISC	22-00-03/107 22-00-03/108 22-00-03/109 22-00-03/110 22-00-03/111	67 68 69	AIL SERVO LIMIT ELEV SERVO LIMIT RUD SERVO LIMIT	22-00-04/110 22-00-04/111 22-00-04/112
12 13 14 15 16	SW A/T DISC SW G/A XDCR COL L XDCR COL R XDCR WHL	22-00-03/112 22-00-03/113 22-00-03/114 22-00-03/115 22-00-03/116			

MCDP GROUND TEST REFERENCE - TABLE 101

3 GUI 001-114,116-999

MCDP Ground Test Mode Figure 101 (Sheet 2)

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	29				×		×	××××		***
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CIRCUIT BREAKER	NOMENCLATURE	VOR MKR LEFT ILS CENTER EFTS DSPL SW LEFT AIR DATA CMPTR LEFT AIR DATA ADA SENSOR LEFT AIR DATA BARO CORRECT LEFT	AUTOFLIGHT WARN INDICATOR LIGHTS 2 ISOL VALUE CONT ISOL VALUE PHR ICOCK TND LEFT WARN ELET FLT CONT ELEC 1 AC	FLT CONT ELEC 1L DC FLT CONT ELEC 2L AC FLT CONT ELEC 2L DC FLAP SLAT ELEC UNIT 2 POWER FLAP/SLAT ELEC UNIT 2 CONT	FLAP/SLAT ELEC UNIT 2 SENSOR LANDING GEAR POS SYS 1 FUEL GTY 1 CAT III BUS ISOL BAT ENGINE HP BLD VLV LEFT ENGINE HP BLD VLV RIGHT	IAS MACH LEFT ADI LEFT EFIS CONT PNL LEFT HSI LEFT	FMCS CDU LEFT FMCS CMPTR LEFT ILS L DME LEFT MODE CONT PNL LEFT	FLT CONT COMPUTER POWER LEFT FLT CONT COMPUTER SERVO LEFF FLIGHT CONT COMPTR PWR CENTER FLIGHT CONT COMPTR SERVO CENTER IAS MACH RIGHT	ADI RIGHT EFIS CONT PNL RIGHT FMCS CDU RIGHT FMCS CMPTR RIGHT ILS RIGHT	DME RIGHT VOR RIGHT MODE CONT PNL RIGHT FLT CONT CMPTR PWR RIGHT FLT CONT CMPTR SERVO RIGHT
		VOI IL: AIF AIF AIR				AD. EF.		5552	AD FREE ILS	MO MO
	8	C595 C606 C622 C625 D C625 C1 C1	C1201 C1338 C1338 C1337 C1337 C573 B C566 C1538	C1534 C1537 C1533 4 C1521 5 C1541	C1524 C1175 C1048 C826 C4113	C580 C593 C633 C588	C597 C609 C603 C603 C582 C516	7 C513 8 C522 0 C515 1 C524 2 C581	6 C594 5 C634 9 C598 0 C610 1 C605	2 C583 5 C596 4 C517 5 C514 5 C523
	707 T	11 A2 11 A3 11 A7 11 A10 11 A11	11 A17 11 A33 11 B2 11 B3 11 B17 11 B18	11C8 11C8 11C9 11C14	11016 11030 11034 1106 11021	11E1 11E3 11E4 11E6	11E8 11E9 11E10 11E11	11E18 11E20 11E21 11E21	11E24 11E25 11E29 11E30 11E31	11E32 11E33 11E34 11E35 11E35

MCDP Ground Test Circuit Breaker Requirements Figure 101A (Sheet 1)



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11F21 11F22 11F24 11F26 11F29	c613 c612 c623 c601 c638	IRS CENTER IRS RIGHT EFIS DSPL SW RIGHT RADIO ALTM RIGHT EFIS SYM GEN RIGHT	****	×														****	×× ×					× ×									
11F30 11F31 11F32 11G10	C626 C3 C4 C1031	AIR DATA CMPTR RIGHT AIR DATA AOA SENSOR RIGHT AIR DATA BARO CORRECT RIGHT RUD RATIO	×××	×														×××	×××								SUD O						
11612 11613 11614 11615	C1025 C1539 C1037 C1523 C1523	FLAP/SLAT ELEC UNIT 1 POWER FLAP/SLAT ELEC UNIT 1 CONT FLAP/SLAT ELEC UNIT 1 SENSOR STAB POS MOD LEFT FLT CONT ELEC 1R AC	**	×××														****	××××						*** *	××	****						
11618 11621 11622 11623 11624	C1531 C4210 C1540 C1038 C1526	FLT CONT ELEC 1R DC FLAP/SLAT ELEC UNIT 3 POWER FLAP/SLAT ELEC UNIT 3 CONT FLAP/SLAT ELEC UNIT 3 SENSOR STAB POS MOD RIGHT	****															****	****						****	× ×	****						
11627 11628 11110 11111	C1535 C1532 C1002 C1017 C1008	FLT CONT ELEC 2R AC FLT CONT ELEC 2R DC STAB TRIM LEFT POS IND STAB TRIM LEFT CONT FLAP POS IND LEFT	××															××	××						** *	****	****						
11H13 11H19 11H20 11J2 11J3	C1522 C1009 C1018 C4078 C4078	FLAP POS IND RIGHT STAB TRIM POS IND RIGHT STAB TRIM CONT RIGHT ELGAS CMPTR LEFT ELGAS UMPRE DISPLAY	**	×	~ ~	××	ж	~	ч	~	~	~	~					**	**	~	~	œ	œ	~	× ×	××פ	××× œ	~	~	~			
11,113 11,114 11,115 11,116	C4101 C4099 C1035 C1005	ELEVATOR POS LEFT AILERON POS LEFT ALBRON TRIM RUDDER POS											₺	- ½	- ₹												AIL AIL RUD						

MCDP Ground Tests Circuit Breaker Requirements Figure 101A (Sheet 2)



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CIRCUIT BREAKER	02 04	RUDDER TRIM POS ELEV POS RIGHT ELERON POS RIGHT ELGAS CMPIR RIGHT X X R ELGAS LOWER RIGHT X X R	EICAS DISPLAY SW	LEFT ENGINE ELECTRONIC ENGINE CONTROL SUPO. LEFT ENGINE EPR XMTR LEFT ENGINE EPR XMTR RIGHT GTV CONTROL LIMITER CONTROL LIMITER CONTROL SUPV	RIGHT ENGINE EPR XMTR X I IND LTS 2 EN BLEED L X X R ENG BLEED L X X	CAT III BUS ISOL LEFT X CAT III BUS ISOL RIGHT X MAINT CONT DSPL X X X AIR/GND SYS 1 X X X AIR/GND SYS 2 X X	POS SYS 2 X X X X X X X X X X X X X X X X X X	IRS R CLOCK TIME BASE L X X CLOCK TIME BASE R X INV PAR BAT AC STBY BUS OFF X X
CIRCUIT BREAKER	01 02 04	× × ×	~ ~ × × ×		E EPR XMTR X	***	Y BUS OFF X X X X	

AIL = THIS CIRCUIT BREAKER MUST BE CLOSED TO DO A TEST OF THE ELEVATOR POSITION
ELE = THIS CIRCUIT BREAKER MUST BE CLOSED TO DO A TEST OF THE ELEVATOR POSITION
A = THIS CIRCUIT BREAKER MUST BE CLOSED TO DO A TEST OF THE PLA POSITION
R = THIS CIRCUIT BREAKER MUST BE CLOSED TO USE THE REMOTE MCOP CONTROL PAMEL
RUD = THIS CIRCUIT BREAKER MUST BE CLOSED TO DO A TEST OF THE RUDDER POSITION
NT = THERE IS NO TEST FOR THIS A/C CONFIGURATION

MCDP Ground Test Circuit Breaker Requirements Figure 101A (Sheet 3)



FAULT ISOLATION/MAINT MANUAL

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CIRCUIT BREAKER	NOMENCLATURE	VOR MKR LEFT ILS CENTER TRE DATA CHOPTR LEFT AIR DATA AOA SENSOR LEFT AIR DATA BARO CORRECT LEFT	AUTOFLIGHT WARN THORGATOR LIGHTS 2 TSOL VALUE CONT TSOL VALUE PARR CLOCK IND LEFT WARN ELEX 8 EFTS DSPL SN LEFT CSDU IL AC	11. DC 21. AC 22. DC 2 PWR 2 CONT	FSEU 2 SENSOR LANDING GEAR POS SYS 1 FUEL GIYL L CAT III BUS ISOL ENGINE HP BLD VLV LEFT	ENGINE HP BLD VLV RIGHT AND MACH LEFT ADI LEFT EFTS CONT PNL LEFT HSI LEFT	FMCS CDU LEFT FMCS CMPTR LEFT ILS L DNE LEFT MODE CONT PNL LEFT	FLT CONT COMPUTER POWER LEFT ELT CONT COMPUTER SERVO LEFT FLT CONT CMPTR PWR CENTER FLT CONT CMPTR SERVO CENTER 1AS MACH RIGHT	ADI RIGHT EFIS CONT PNI RIGHT ENCS CON RIGHT FMCS CHPTR RIGHT ILS RIGHT	DME RIGHT VOR RIGHT DODG COMT PNL RIGHT FLT CONT GMPTR PWR RIGHT FLT CONT GMPTR SERVO RIGHT
IRCU		MKR LEI CENTER DATA CI DATA A(AUTOFLIGHT INDICATOR L. ISOL VALVE ISOL VALVE CLOCK IND L WARN ELEX B EFIS DSPL S CSEU 1L AC	CSEU 1L DC CSEU 2L AC CSEU 2L DC FSEU 2 PWR FSEU 2 CONT	FSEU 2 SENS LANDING GE/ FUEL QTY L CAT III BUS	ENGINE HI IAS MACH ADI LEFT EFIS CON'	FMCS CDU FMCS CMP ILS L DME LEFT MODE CON	CON	ADI RIGHT EFIS CONT FMCS CDU I FMCS CMPTI ILS RIGHT	DME RIGHT VOR RIGHT MODE CONT FLT CONT
CI		VOR ILS AIR AIR	AUT I SOI I SOI CLO CLO WARP	CSEU CSEU CSEU FSEU FSEU	F SEI LANI F UEI CAT ENG1	ENG IAS ADI EFIS HSI	FMCS FMCS ILS L DME L MODE	FLT FLT IAS	ADI EFI; FMC; FMC; ILS	VOR MODE FLT
	СВ	C595 C606 C625 C1 C2	C1201 C1338 C1337 C573 C566 C622 C1538	C1534 C1537 C1533 C1521 C1521	C1524 C1175 C1048 C826 C4113	C4114 C580 C593 C633 C588	C597 C609 C603 C582 C516	C513 C522 C515 C515 C524 C581	C594 C634 C598 C610 C605	C583 C596 C517 C514 C523
	LOC	11 A2 11 A3 11 A10 11 A11	11A17 11A33 11B2 11B3 11B17 11B18	1107 1108 1109 11014 11015	11 C16 11 C30 11 C34 11 D6 11 D21	11022 11E1 11E3 11E4 11E6	11E8 11E9 11E10 11E11	11E17 11E18 11E20 11E21 11E21	11E24 11E25 11E29 11E30 11E31	11E32 11E33 11E34 11E35 11E35

MCDP Ground Test Circuit Breaker Requirements Figure 101A (Sheet 4)

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CIRCUIT BREAKER	NOMENCLATURE	IRS LEFT RADIO ALTM LEFT EFTS SYM GEN LEFT EFIS SYM GEN CENTER EFIS INSTR COMPARATOR	TMC AC TMC DC TMC SERVO STAB POS MOD CENTER RAD ALTM CENTER	IRS CENTER IRS RIGHT EFIS DSPL SW RIGHT RADIO ALTM RIGHT EFIS SYM GEN RIGHT	AIR DATA CMPTR RIGHT AIR DATA AOA SENSOR RIGHT AIR DATA BARO CORRECT RIGHT RUB RATIO	FSEU 1 PWR FSEU 1 CONT FSEU 1 SENSOR STAB POS MOD LEFT CSEU 1R AC	CSEU 1R DC FSEU 3 PWR FSEU 3 CONT FSEU 3 SENSOR STAB POS MOD RIGHT	CSEU ZR AC CSEU ZR DC STAB TRIM POS IND L STAB TRIM CONT L FLAP POS IND LEFT	FLAP POS IND RIGHT STAB TRIM POS IND RIGHT STAB TRIM CONT RIGHT EICAS CMPTR LEFT EICAS UPPER IND	ELEVATOR POS LEFT AILERON POS LEFT AILERON TRIM RUDDER POS
	CB	C611 C600 C637 C639 C4263	C501 C525 C512 C1525 C602	C613 C612 C623 C601 C638	C626 C3 C4 C1031	C1025 C1539 C1037 C1523 C1536	C1531 C4210 C1540 C1038 C1526	C1535 C1002 C1017 C1008	C1522 C1009 C1018 C4078 C4078	C4101 C4099 C1035 C1005
	707	11F1 11F5 11F8 11F9	11F14 11F15 11F16 11F19 11F20	11F21 11F22 11F24 11F26 11F29	11F30 11F31 11F32 11G10	11612 11613 11614 11615	11618 11621 11622 11623 11624	11628 11628 11H10 11H11	11H13 11H20 11 J2 11 J3	11.113 11.114 11.115

MCDP Ground Test Circuit Breaker Requirements Figure 101A (Sheet 5)

EFFECTIVITY-GUI 115



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	10	**	××××	*		****	××××	××××
CIRCUIT BREAKER	NOMENCLATURE	RUDDER TRIM POS ELEV POS RIGHT ALIERON POS RIGHT EIGAS CHPIR RIGHT EIGAS LOWER IND	EICAS DSPL SW EICAS LIOTS DSP WARN ELEK A CLOCK IND RIGHT LET ENGINE ELECTRONIC ENGINE CONTROL LIMITER	LEFT ENGINE ELECTRONIC ENGINE COURTOL SUPV FUEL GTY R RUGH T R RUGHT ENGINE ELECTRONIC ENGINE RUGHT ENGINE ELECTRONIC ENGINE RUGHT ENGINE ELECTRONIC ENGINE CONTROL LIMITER	RIGHT ENGINE EPR XMTR L IND LTS 2 R IND LTS 2 ENG BLEED L R ENG BLEED CONT	CAT III BUS ISOL LEFT CAT III BUS ISOL RIGHT MAINT CONT DSPL AIR/GND SYS 1 AIR/GND SYS 2	POS SYS 2 DC STBY BUS OFF IRS L IRS C	IRS R CLOCK TIME BASE L CLOCK TIME BASE R INV PWR BAT AC STBY BUS OFF
	CB	C1034 C4102 C4100 C400 C4079 C4082	C4189 C4094 C565 C574 C4119	C4129 C4103 C1053 C4127 C4130	C4104 C1298 C1284 C1339 C1340	C824 C825 C520 C1182	C4279 C811 C614 C621	c620 c563 c576 c813 c892
	70T	11,117 11,122 11,123 11,129 11,130	11,131 11,132 11,133 11,135	111.5 111.9 111.31 111.32	11L36 11P2 11P29 11Q10	11R3 11R30 11S6 11S15	11S23 6A3 6D3 6D4	6D5 6G2 6G3 6L11 6M13

= THIS CIRCUIT BREAKER MUST BE CLOSED TO DO A TEST OF THE ELEVATOR POSITION
= THIS CIRCUIT BREAKER MUST BE CLOSED TO DO A TEST OF THE ELEVATOR POSITION
= THIS CIRCUIT BREAKER MUST BE CLOSED TO DO A TEST OF THE PLA POSITION
= THIS CIRCUIT BREAKER MUST BE CLOSED TO DO A TEST OF THE RADDER POSITION
= THIS CIRCUIT BREAKER MUST BE CLOSED TO DO A TEST OF THE RUDDER POSITION
= THERE IS NO TEST FOR THIS A/C CONFIGURATION

MCDP Ground Test Circuit Breaker Requirements Figure 101A (Sheet 6)

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AIL ELE PLA RUD NT



	SOURCE	GROUND	FAULT ISOLATION PROCEDURES			
# = L, C, or R XX = DECIMAL NO.	CMPTR(S)	TEST(S) NO.	(FIM) CH-SEC-SUB/FIG.	SHEET	BLOCK	
AIL SRVO DEG ±XX.X ±XX.X ±XX.X	FCC	66	22-00-04/109	4	5	
AIL SRVO # FAIL	FCC	07, 08, 09, 40	22-00-03/XXX 22-00-04/109	-	-	
AIL SURF DEG	FCC	66	22-00-04/109	4	5	
±XX.X ±XX.X ±X.XX		67	22-00-04/110	3	106	
A/G PROGRAM/XX	TMC	57	22-00-04/110	2	4	
A/G 1/FCC # FAIL	FCC	51	22-00-04/101	2	12	
A/G 1/FCC # 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	4	6	
		40	22-00-03/118	8	109, 111	
A/P WARN RST FCC # FAIL	FCC	11	22-00-03/111	2,3	103, 104	
		40	22-00-03/118	8, 9	110, 112	
ASA RST FCC # FAIL	FCC	06	22-00-03/106	2	102	
A/T CUST OPT/XX	TMC	57	22-00-04/104	2	5	
A/T DISC RST TMC FAIL	TMC	12	22-00-03/112	2,3	12, 14	
A/T DISC TMC FAIL	TMC	12	22-00-03/112	2, 3	12, 14	
W F DIGG THE PAIL		1.2	22 00 03/112			
BUS # ISLN FAIL	FCC	40	22-00-03/118	4	104	
COWL AI L/R XXX XXX (XXX = ON OR OFF)	ТМС	52	22-00-04/102	9	12	
CUST OPT XX	тмс	57	22-00-04/104	3	7	
ECS PACK L/R/XX XX (XX = HI OR LO)	тмс	52	22-00-04/102	6	7	
ELEV SRVO DEG ±XX.X ±XX.X ±XX.X	FCC	66	22-00-04/109	4	6	
ELEV SRVO # FAIL	FCC	04, 07, 08, 40	22-00-03/XXX			
ELEV OURE DEC		65	22-00-04/108	,	,	
ELEV SURF DEG	FCC	66	22-00-04/109	4	6	
±XX.X ±XX.X		68	22-00-04/111	6	7	
ENG FAIL #	FCC	04, 07, 08, 09, 40	22-00-03/XXX			
	11	67, 68, 69	22-00-04/XXX	1	1	

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

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FAULT ISOLATION/MAINT MANUAL

	SOURCE	GROUND	FAULT ISOLATION PROCEDURES			
# = L, C, or R XX = DECIMAL NO.	CMPTR(S)	TEST(S) NO.	(FIM) CH-SEC-SUB/FIG.	SHEET	BLOCK	
CC CONFG LCR/XX XX XX	FCC	56	22-00-04/103	2	3	
CC INTLK LCR/XX XX XX	FCC	56	22-00-04/103	2	4	
CC OPT 1 LCR/XX XX XX	FCC	56	22-00-04/103	2	5	
CC OPT 2 LCR/XX XX	FCC	56	22-00-04/103	2	6	
CC OPT 3 LCR/XX XX XX	FCC	56	22-00-04/103	3	7	
CC OPT 4 LCR/XX XX XX	FCC	56	22-00-04/103	3	8	
CC # CH IDENT FAIL	FCC	FAILS GND TEST MODE ENTRY	22-00-02/103	7	113	
CC # FAIL	FCC	01,04,06,07,08, 09,11,13,14,15, 16,30,40	22-00-03/XXX			
		51,56,59,64,65 66,67,68,69	22-00-04/XXX			
EEL POS DEG ±XX.X ±XX.X ±XX.X	FCC	66	22-00-04/109	5	7	
EEL POS FAIL	FCC	08	22-00-03/108	5	8	
LAP DEG/FCC XX.X XX.X XX.X	FCC	66	22-00-04/109	7	10	
LAP DEG/TMC XX.X	TMC	66	22-00-04/109	9	11	
LAP O FCC # FAIL	FCC	64	22-00-04/107	6	106	
LAP O TMC FAIL	FCC	64	22-00-04/107	6	106	
LAP 1 FCC # FAIL	FCC	40	22-00-03/118	24	52	
		64	22-00-04/107	5	214	
LAP 1 TMC FAIL	TMC	64	22-00-04/107	5	214	
LAP 15 FCC # FAIL	FCC	40	22-00-03/118	24	51	
		64	22-00-04/107	5	213	
LAP 15 TMC FAIL	TMC	64	22-00-04/107	5	213	
LAP 25 FCC # FAIL	FCC	40	22-00-03/118	23	50	
		64	22-00-04/107	5	212	
LAP 25 TMC FAIL	TMC	64	22-00-04/107	5	212	
GA SW FCC # FAIL	FCC	13 40	22-00-03/113 22-00-03/118	2,3	104,107 113,114,	
GA SW TMC FAIL	тмс	13 40	22-00-03/113 22-00-03/118	2,3 29 30	115,116 104,107 63,64	
NYD VLD # FAIL	FCC FCC	07,08,09,14,15, 16,40 64,65,67,68,69	22-00-03/XXX 22-00-04/XXX	30	65,66	

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

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MCDP MESSAGE	SOURCE	GROUND	FAULT ISOLATION PROCEDURES			
# = L, C, or R XX = DECIMAL NO.	CMPTR(S)	TEST(S) NO.	(FIM) CH-SEC-SUB/FIG.	SHEET	BLOCK	
ILS # TUNE INHIB FAIL	FCC	40	22-00-03/118	3	103	
IN AIR-NO GRD TEST/FCC #	MCDP		22-00-02/103	6	109	
IN AIR-NO GRD TEST/TMC	MCDP		22-00-02/103	6	110	
IRU # EXCESS MOT	ALL	30	22-00-02/102	17	59	
IRU # NO INIT	ALL	30	22-00-02/102	17	60	
IRU # REALIGN	ALL	30	22-00-02/102	17	61	
NO INFC FCC # ADC BUS IN	FCC	01,30	22-00-05/101	2,3	1,3	
NO INFC FCC # ALL DETNT ENG	FCC	01,07,30,40,67	22-00-05/101	3	1,3	
NO INFO FCC # AIL HYD ARM	FCC	01,07,30,40,67	22-00-05/101	4	5	
NO INFC FCC # AIL HTD ARM	FCC	01,07,30,40,67	22-00-05/101	5	6	
NO INFC FCC # AIL SRVO CMD	FCC	01,07,30,40,66,	22-00-05/101	6	7	
NO THE FEC # MIL SKVU PUS		67	22-00-03/101	_	'	
NO INFC FCC # AIL SURF POS	FCC	01,07,30,40,66, 67	22-00-05/101	8	8	
NO INFC FCC # ASA 1	FCC	01,06,30,40	22-00-05/101	9	9	
NO INFC FCC # ASA 2	FCC	01,06,30,40	22-00-05/101	10	10	
NO INFC FCC # ASA 3	FCC	01,06,30,40	22-00-05/101	10	11	
NO INFC FCC # ASA 4	FCC	01,06,30,40	22-00-05/101	10	12	
NO INFC FCC # AUTO TRIM ARM	FCC	01,30,40,65	22-00-05/101	11	13,14	
NO INFC FCC # AUTO TRIM VLD 1	FCC	01,30,40,65	22-00-05/101	12,13	15,18	
NO INFC FCC # AUTO TRIM VLD 2	FCC	01,30,40,65	22-00-05/101	12,14	15,19	
NO INFC FCC # A/L BUS ISLN IN	FCC	01,30,40	22-00-05/101	17	21	
NO INFC FCC # A/L BUS ISLN OUT	FCC	01,30,40	22-00-05/101	15	20	
NO INFC FCC # A/P CTN-1 NRM	FCC	01,30	22-00-05/101	19	22	
NO INFC FCC # A/P CTN-2 NRM	FCC	01,30	22-00-05/101	20	23	
NO INFC FCC # A/P DISC SW	FCC	01,04,11,30,40	22-00-05/101	20	24	
NO INFC FCC # A/P WARN-2 BAT	FCC	01,30,40	22-00-05/101	21	25	
NO INFC FCC # A/P WARN-1 NRM	FCC	01,30,40	22-00-05/101	21	26	
NO INFC FCC # A/P WARN-2 NRM	FCC	01,30,40	22-00-05/101	22	27	
NO INFC FCC # BAT PWR/GRD	FCC	01,30,40	22-00-05/101	23	28	
NO INFC FCC # CAPT F/D SEL IN	FCC	59	22-00-04/105	2,3,4	101,106,	
NO INFC FCC # ELEV DETNT ENG	FCC	01,08,30,40,68	22-00-05/101	25	110 30	
				1		
				l		
NO INFC FCC # ELEV FEEL XDCR NO INFC FCC # ELEV HYD ARM	FCC FCC	01,08,30,68 01,08,30,40,68	22-00-05/101 22-00-05/101	23 26	29 31	

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

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FAULT ISOLATION/MAINT MANUAL

# = L, C, or R XX = DECIMAL NO. NO INFC FCC # ELEV SRVO CMD NO INFC FCC # ELEV SRVO POS NO INFC FCC # ELEV SURF POS NO INFC FCC # FCC TO MCP BUS NO INFC FCC # FMC BUS IN NO INFC FCC # FLAP POS NO INFC FCC # F/O F/D SEL IN NO INFC FCC # GA SW NO INFC FCC # ILS BUS IN NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN NO INFC FCC # RA BUS IN	FCC FCC FCC FCC FCC FCC FCC FCC FCC FCC	GROUND TEST(S) NO. 01,08,30,40,68 01,08,30,40,66,68 01,08,30,40,66,68 01,04,07,08,09,30,40,67,68,69 01,30 01,30,64,66 59	(FIM) CH-SEC-SUB/FIG. 22-00-05/101 22-00-05/101 22-00-05/101 22-00-05/101 22-00-05/101 22-00-05/101	27 28 29 31,32 32,33	BLOCK 32 33 34 35,36,37
NO INFC FCC # ELEV SRVO POS NO INFC FCC # ELEV SURF POS NO INFC FCC # FCC TO MCP BUS NO INFC FCC # FMC BUS IN NO INFC FCC # FLAP POS NO INFC FCC # F/O F/D SEL IN NO INFC FCC # GA SW NO INFC FCC # ILS BUS IN NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN	FCC FCC FCC FCC FCC FCC	01,08,30,40,66, 68 01,08,30,40,66, 68 01,04,07,08,09, 30,40,67,68,69 01,30 01,30,64,66	22-00-05/101 22-00-05/101 22-00-05/101 22-00-05/101 22-00-05/101	28 29 31,32	33
NO INFC FCC # ELEV SURF POS NO INFC FCC # FCC TO MCP BUS NO INFC FCC # FMC BUS IN NO INFC FCC # FLAP POS NO INFC FCC # GA SW NO INFC FCC # ILS BUS IN NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN	FCC FCC FCC FCC FCC	68 01,08,30,40,66, 68 01,04,07,08,09, 30,40,67,68,69 01,30 01,30,64,66	22-00-05/101 22-00-05/101 22-00-05/101 22-00-05/101	29 31,32	34
NO INFC FCC # FCC TO MCP BUS NO INFC FCC # FMC BUS IN NO INFC FCC # FLAP POS NO INFC FCC # F/O F/D SEL IN NO INFC FCC # GA SW NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN	FCC FCC FCC FCC	68 01,04,07,08,09, 30,40,67,68,69 01,30 01,30,64,66	22-00-05/101 22-00-05/101 22-00-05/101	31,32	
NO INFC FCC # FMC BUS IN NO INFC FCC # FLAP POS NO INFC FCC # F/O F/D SEL IN NO INFC FCC # GA SW NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN	FCC FCC FCC FCC	30,40,67,68,69 01,30 01,30,64,66 59	22-00-05/101 22-00-05/101		35,36,37
NO INFC FCC # FLAP POS NO INFC FCC # F/O F/D SEL IN NO INFC FCC # GA SW NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN	FCC FCC FCC	01,30,64,66	22-00-05/101	32,33	
NO INFC FCC # F/O F/D SEL IN NO INFC FCC # GA SW NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN	FCC FCC	59			38,39
NO INFC FCC # GA SW NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN	FCC FCC		00 00 0//405	34	40
NO INFC FCC # ILS BUS IN NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN	FCC	01 -13 -30 -40	22-00-04/105	2,3,4	101,106, 110
NO INFC FCC # ILS TUNE INHIB NO INFC FCC # IRU BUS IN	II ' '	0.7.07007.0	22-00-05/101	34	41
NO INFC FCC # IRU BUS IN	11	01,30,40	22-00-05/101	35	42
	FCC	01,30,40	22-00-05/101	35	43
NO INFC FCC # RA BUS IN	FCC	01,30,40	22-00-05/101	36	44
	FCC	01,30,40	22-00-05/101	38	45
NO INFC FCC # RA TEST INHIB	FCC	01,30,40	22-00-05/101	39	46
NO INFC FCC # MCP A/P ARM IN	FCC	01,04,07,08,09, 30,40,67,68,69	22-00-05/101	39	47
NO INFC FCC # MCP A/P ENG DIS	C FCC	01,04,07,08,09, 30,40,67,68,69	22-00-05/101	40	48
NO INFC FCC # MCP BUS IN	FCC	01,04,07,08,09, 30,40,67,68,69	22-00-05/101	41	49,50
NO INFC FCC # RUD DETENT ENG	FCC	01,09,30,40,69	22-00-05/101	42	51
NO INFC FCC # RUD HYD ARM	FCC	01,09,30,40,69	22-00-05/101	43	52
NO INFC FCC # RUD SRVO CMD	FCC	01,09,30,40,69	22-00-05/101	44	53
NO INFC FCC # RUD SERVO POS	FCC	01,09,30,40,66,	22-00-05/101	45	54
NO INFC FCC # RUD SURF POS	FCC	01,09,30,40,66,	22-00-05/101	46	55
NO INFC FCC # SHELF	FCC	01,30,40,56	22-00-05/101	48	56
NO INFC FCC # SPD BRK POS	FCC	01,30,64,66	22-00-05/101	49	57
NO INFC FCC # STAB POS	FCC	01,30,40,65,66	22-00-05/101	50	58
NO INFC FCC # X-CH DETNT L IN	FCC	01,30	22-00-05/101	50,51, 52	59,60,61
NO INFC FCC # X-CH DETNT R IN	FCC	01,30	22-00-05/101	50,51, 52	59,60,61
NO INFC FCC # ENG L IN	FCC	01,30,40	22-00-05/101	53,54	62,63,64
NO INFC FCC # ENG R IN	FCC	01,30,40	22-00-05/101	53,54	62,63,64
NO INFC FCC # X-CH L BUS IN	FCC	01,30,40	22-00-05/101	55	65
NO INFC FCC # X-CH R BUS IN	FCC	01,30,40	22-00-05/101	56	66

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

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MCDP MESSAGE	SOURCE	GROUND	FAULT ISOLATION PROCEDURES			
# = 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	57	67	
NO INFC FCC # 28V DC ENG PWR	FCC	01,07,08,09,30,	22-00-05/101	58	68	
NO INFC FCC # 28V DC/WARN-1 BAT	FCC	01,30,40	22-00-05/101	58	69	
NO INFC FCC C MCDP	MCDP	0.7007.0	22-00-02/103	7	115	
NO INFC FCC L MCDP	MCDP		22-00-02/103	7	115	
NO INFC FCC R MCDP	MCDP		22-00-02/103	7	115	
NO INFC FMC L MCDP	MCDP		22-00-02/103	9	12	
NO INFC FMC R MCDP	MCDP		22-00-02/103	9	12	
NO INFC MCDP SHELF	MCDP		22-00-02/103	2	204	
NO INFC TMC MCDP	MCDP		22-00-02/103	8	11	
NO INFO MCP A TMC BUS IN	L,C,FCC	04,30	22-00-05/103	1	1	
NO INFC MCP B TMC BUS IN	R,FCC	04,30	22-00-05/103	2	12	
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 A/T DISC SW	TMC	02,12,30	22-00-05/102	4	3	
NO INFC TMC A/T WARN-1 BAT	TMC	02,30	22-00-05/102	5	4	
NO INFC TMC A/T WARN-2 BAT	TMC	02,30	22-00-05/102	6	5	
NO INFC TMC A/T WARN-1 NRM	TMC	02,30	22-00-05/102	6	6	
NO INFC TMC A/T WARN-2 NRM	TMC	02,30	22-00-05/102	6	7	
NO INFC TMC COWL AI L	TMC	02,30,40,52	22-00-05/102	7	8	
NO INFC TMC COWL AI R	TMC	02,30,40,52	22-00-05/102	7	8	
NO INFC TMC ECS L	TMC	02,30,40,52	22-00-05/102	7	9	
NO INFC TMC ECS L H/L	TMC	02,30,40,52	22-00-05/102	8	10	
NO INFC TMC ECS R	TMC	02,30,40,52	22-00-05/102	7	9	
NO INFC TMC ECS R H/L	TMC	02,30,40,52	22-00-05/102	8	10	
NO INFC TMC EEC L BUS IN	TMC	02,30	22-00-05/102	9	11	
NO INFC TMC EEC R BUS IN	TMC	02,30	22-00-05/102	10	12	
NO INFC TMC EICAS L BUS IN	TMC	02,30,40	22-00-05/102	11	13	
NO INFC TMC EICAS R BUS IN	TMC	02,30,40	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 INFC 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 INFC TMC ISLN VLV L	TMC	02,30,40,52	22-00-05/102	15	18	
NO INFC TMC MCP BUS IN	TMC	02,30,40	22-00-05/102	15	19	
NO INFC TMC PLA POS L	TMC	02,30	22-00-05/102	16	20	
NO INFC TMC PLA POS R	TMC	02,30	22-00-05/102	16	20	

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

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FAULT ISOLATION/MAINT MANUAL

SOURCE	GROUND	FAULT ISOLATION PROCEDURES			
CMPTR(S)	TEST(S) NO.	(FIM) CH-SEC-SUB/FIG.	SHEET	BLOCK	
тмс	02,30,52	22-00-05/102	17	21	
TMC	02,30,40,57	22-00-05/102	19	22	
TMC	02,30,40,52	22-00-05/102	20	23	
TMC	02,30,40,52	22-00-05/102	20	23	
TMC	02,30	22-00-05/102	21	24	
TMC		22-00-05/102	21	25	
TMC	02,30,40,52	22-00-05/102	22	157	
MCDP	09	22-00-03/109	4	103	
	69	22-00-04/112	3	208	
TMC	66	22-00-04/109	9	12	
TMC	10	22-00-03/110	6	9	
	40	22-00-03/118	29	61	
TMC	10	22-00-03/110	5	7	
	40	22-00-03/118	28	59	
TMC	10	22-00-03/110	3	5	
	40	22-00-03/118	26	57	
F.C.C	/0	22 00 07/119	7	205	
			-	8	
	00	22-00-04/109	0	0	
FCC	00	22 00 07/100	_		
			_	8	
100	69	22-00-04/112	4	5,6	
FCC	64	22-00-04/107	3	207	
FCC	64	22-00-04/107	3	104	
FCC	64	22-00-04/107	3	206	
FCC	66	22-00-04/109	6	9	
				7	
MCDP	FAILS GND TEST MODE ENTRY	22-00-02/103	6	111	
MCDP	FAILS GND TEST MODE ENTRY	22-00-02/103	7	112	
FCC	66	22-00-04/109	3	4	
FCC	65	22-00-04/108	3,5	6,9	
TMC	10	22-00-03/110	6	10	
''''				62	
TMC				8	
•				60	
TMC				6	
TMC	02,04,05,10,12,	22-00-02/XXX	_	-	
11	10,00,70	22-00-04/XXX	I	I	
	TMC	TMC 02,30,52 TMC 02,30,40,57 TMC 02,30,40,52 TMC 02,30,40,52 TMC 02,30 TMC 02,30,40,52 TMC 02,30,40,52 MCDP 09 69 TMC 10 40 TMC 10 40 TMC 10 40 TMC 10 40 FCC 40 FCC 66 FCC 67 FCC 66 FCC 67 FCC 66 FCC 65	SOURCE CMPTR(S) TEST(S) NO. (FIM) TEST(S) NO. (FIM) CH-SEC-SUB/FIG. TMC 02,30,40,57 22-00-05/102 TMC 02,30,40,52 22-00-05/102 TMC 09 22-00-03/109 69 22-00-03/110 TMC 10 22-00-03/110 40 22-00-03/118 TMC 10 22-00-03/110 40 22-00-03/118 FCC 40 22-00-03/118 FCC 66 22-00-04/109 FCC 66 22-00-04/109 FCC 66 22-00-04/109 FCC 66 22-00-04/109 FCC 66 22-00-04/107 FCC 66 22-00-04/109 FCC 66 22-00-04/109 TMC 10 22-00-03/118 TMC 10 22-00-03/118 TMC 10 22-00-03/118 TMC 10 22-00-03/110 TMC 10 22-00-03/118 TMC 10 22-00-03/110 TMC 10 22-00-03/118 TMC 10 22-00-03/110 TMC 10 22-00-03/118 TMC 10 22-00-03/118 TMC 10 22-00-03/110 TMC 22-00-03/118	SOURCE CMPTR(S) TEST(S) NO.	

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

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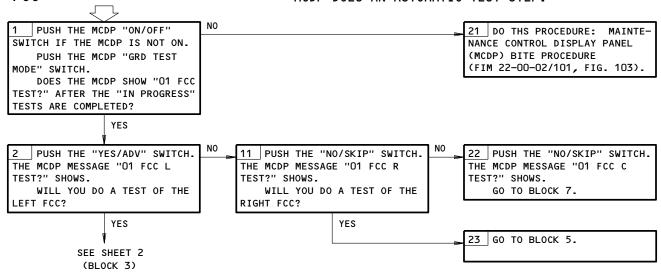
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PREREQUISITES MAKE SURE THESE SYSTEMS WILL OPERATE: FLIGHT CONTROL SYSTEM ELECTRONICS UNIT (FSEU) (AMM 27-09-00/201) STABILIZER TRIM POSITION INDICATING SYSTEM (AMM 27-48-00/501) TRAILING EDGE FLAP POSITION INDICATING SYSTEM (AMM 27-58-00/501) ENGINE 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) AIR DATA COMPUTING SYSTEM (AMM 34-12-00/501) INERTIAL REFERENCE SYSTEM (AMM 34-21-00/501) ILS (AMM 34-31-00/501) RADIO ALTIMETER SYSTEM (AMM 34-33-00/501) FLIGHT MANAGEMENT SYSTEM (AMM 34-61-00/501) MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36; 1>>11SX MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER (AMM 24-22-00/201)

MCDP GROUND TEST 01 FCC

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



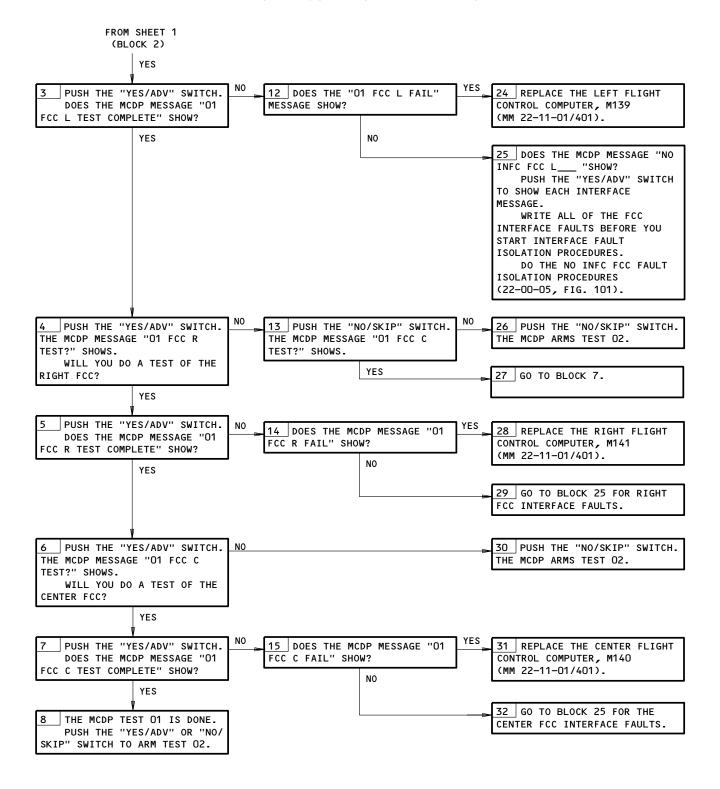
1 WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

MCDP Ground Test 01 FCC Figure 102 (Sheet 1)

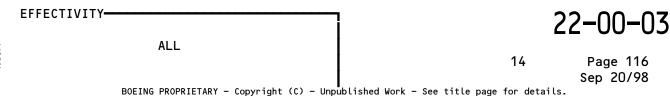
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MCDP Ground Test 01 FCC Figure 102 (Sheet 2)





PREREQUISITES

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

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

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

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11F14,11F15,11F16,11L4,11L5,11L9,11L31, 11L32,11L36,11Q10,11Q19; 1 11SX

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

WARNING: THIS TEST INCLUDES AUTOMATIC MOVEMENT OF THE

THRUST LEVERS AND THUS CAN NOT BE OPERATED

WHEN AN ENGINE OPERATES.

NOTE: THE "XX IN PROGRESS" MESSAGE SHOWS WHEN THE

MCDP DOES AN AUTOMATIC TEST STEP.

WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE 'MAINT CONT DSPL'.

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

EFFECTIVITY-

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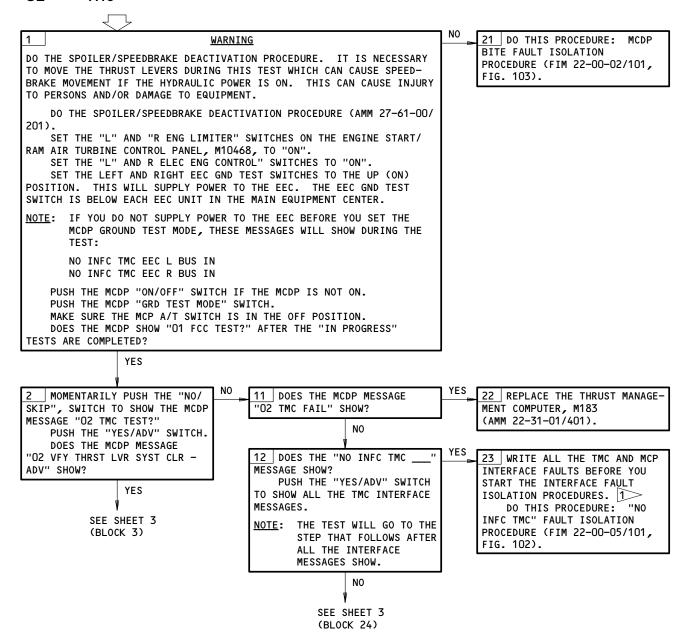
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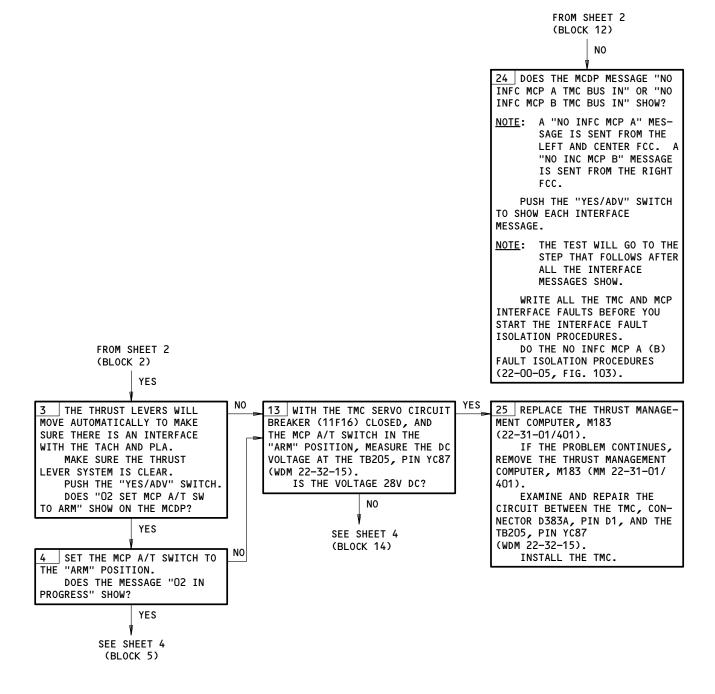
MCDP GROUND TEST 02 - "TMC"



1> IF MANY "NO INFC TMC" MESSAGES ARE SHOWN, GO OUT OF THE GROUND TEST MODE. GO BACK INTO THE GROUND TEST MODE AND DO THE GROUND TEST 02 AGAIN. IF THE MESSAGES STAY, DO THE CORRECTION PROCEDURE.

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



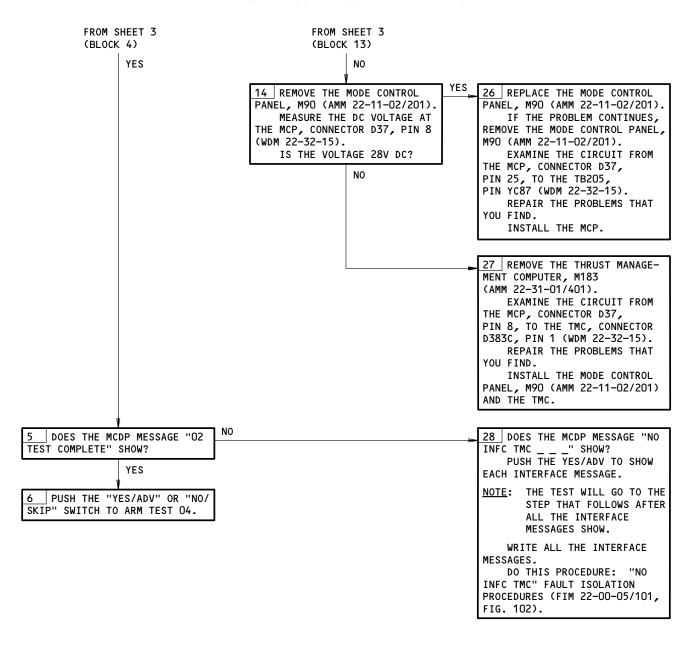


MCDP Ground Test 02 - TMC Figure 103 (Sheet 3)

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



PREREQUISITES

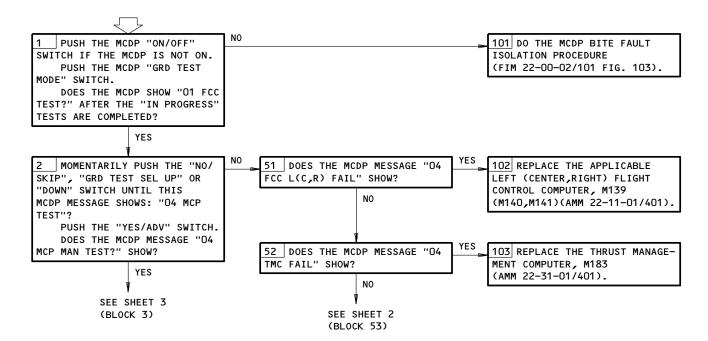
MAKE SURE THESE SYSTEMS WILL OPERATE: ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (AMM 31-41-00/501)(WHEN YOU USE THE REMOTE MCDP CONTROL PANEL) AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11F14,11F15,11F16; 1>11SX

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

MCDP GROUND TEST 04 - MCP

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

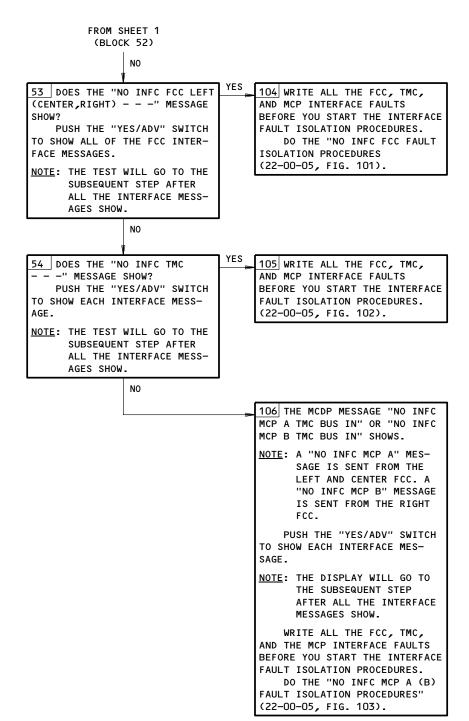


1 >> WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

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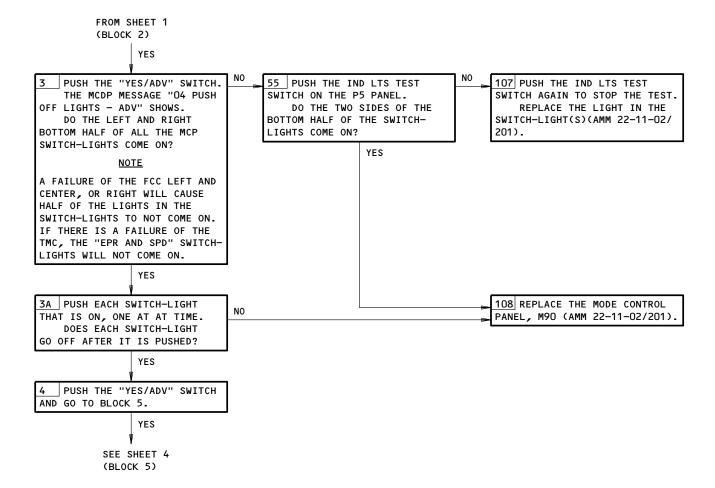
MCDP Ground Test 04 - MCP Figure 104 (Sheet 2)

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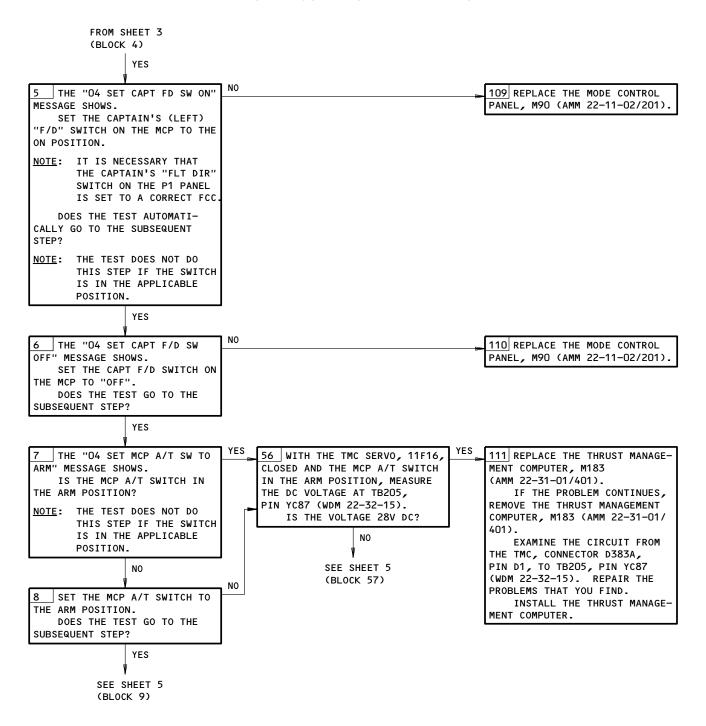


MCDP Ground Test 04 - MCP Figure 104 (Sheet 3)

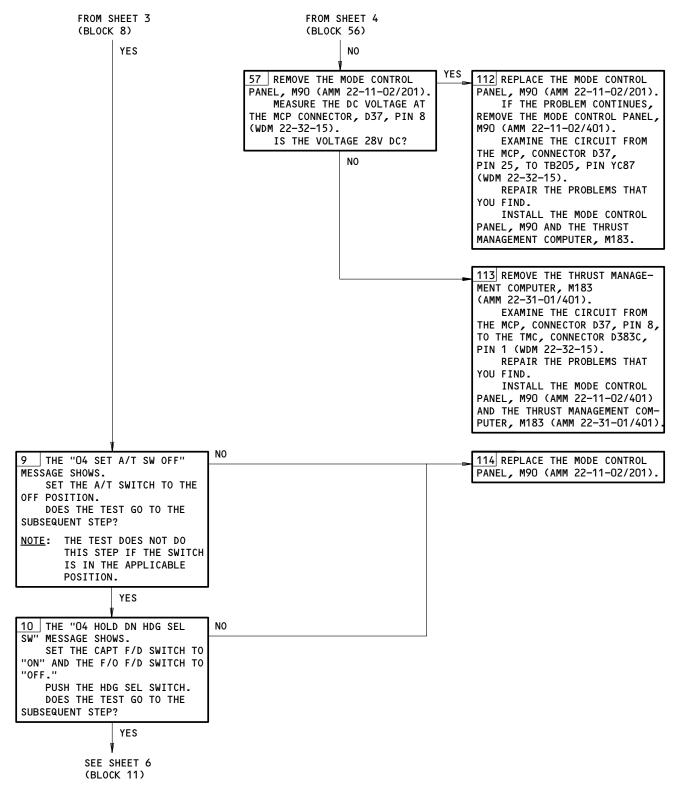
EFFECTIVITY
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MCDP Ground Test 04 - MCP Figure 104 (Sheet 4)



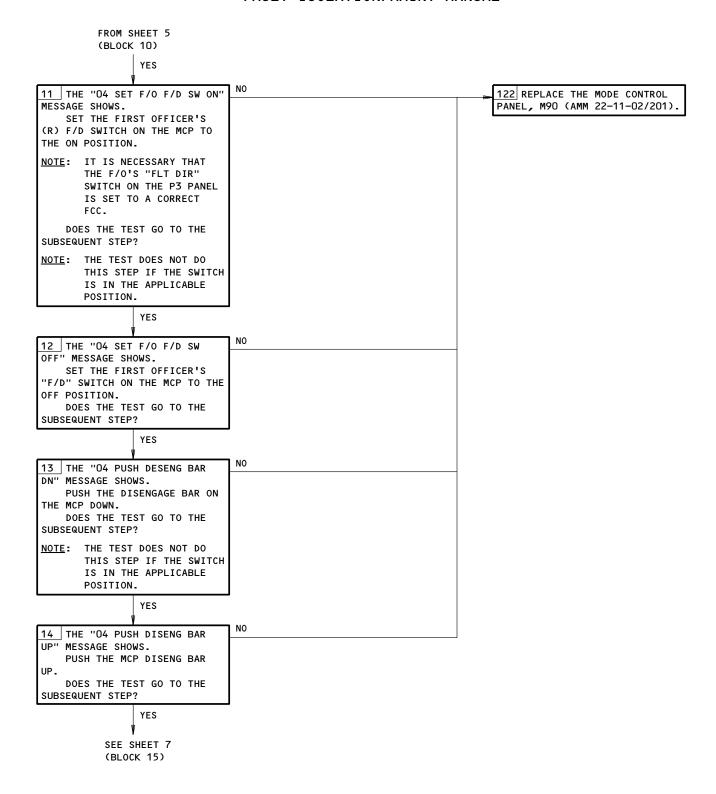
MCDP Ground Test 04 - MCP Figure 104 (Sheet 5)

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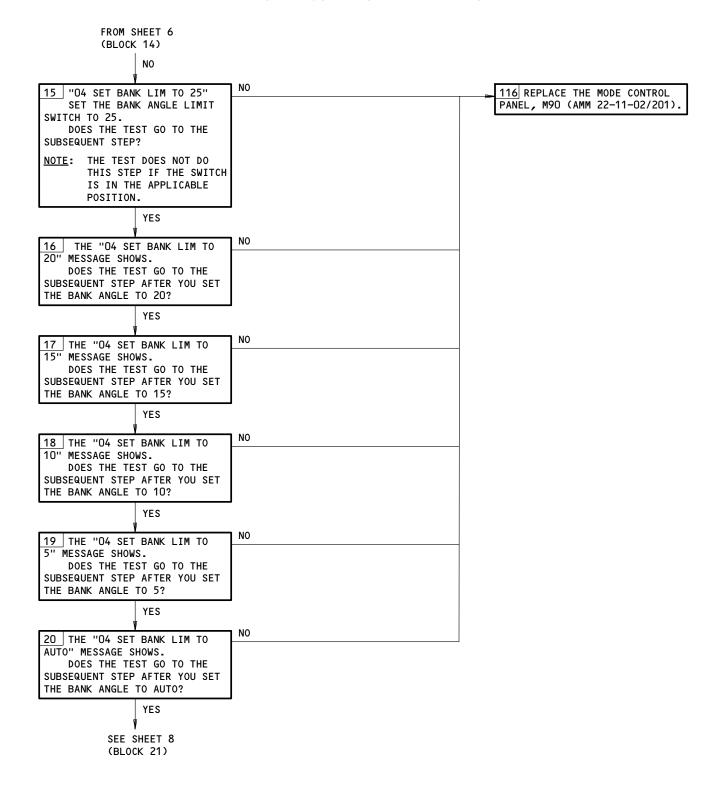


MCDP Ground Test 04 - MCP Figure 104 (Sheet 6)

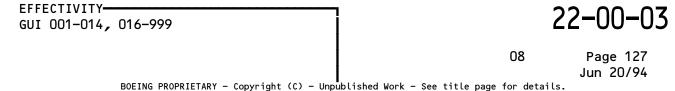
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GUI 001-014, 016-999

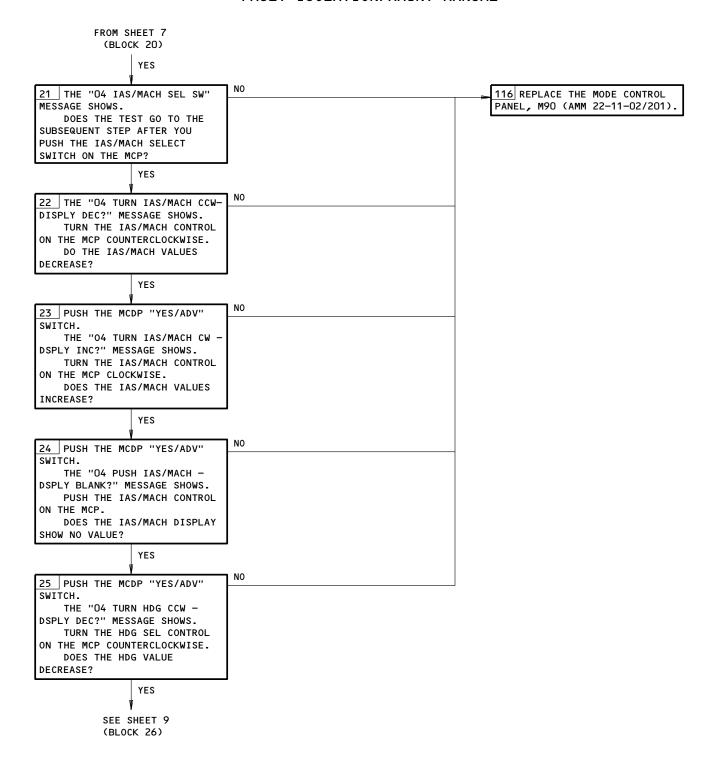
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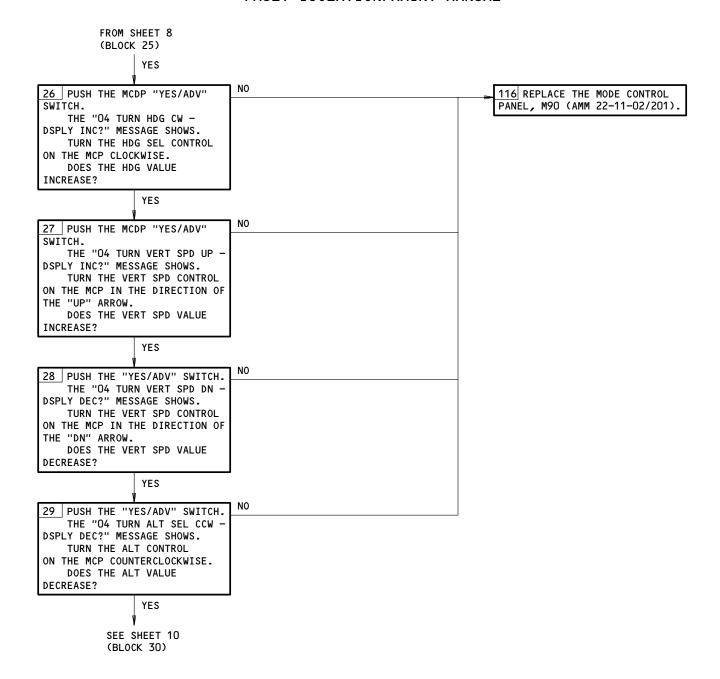


MCDP Ground Test 04 - MCP Figure 104 (Sheet 7)





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



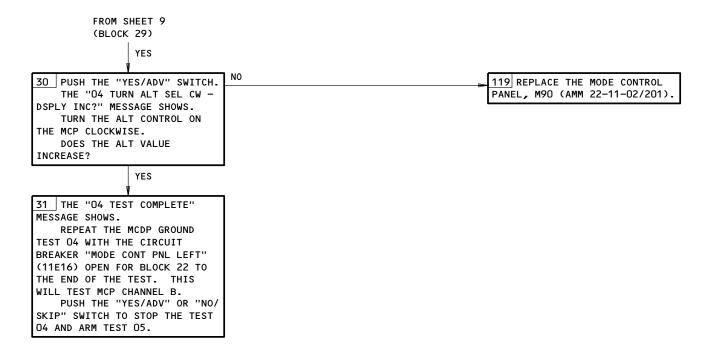
MCDP Ground Test 04 - MCP Figure 104 (Sheet 9)

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

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE: ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (AMM 31-41-00/501)(WHEN YOU USE THE REMOTE MCDP CON-TROL PANEL)

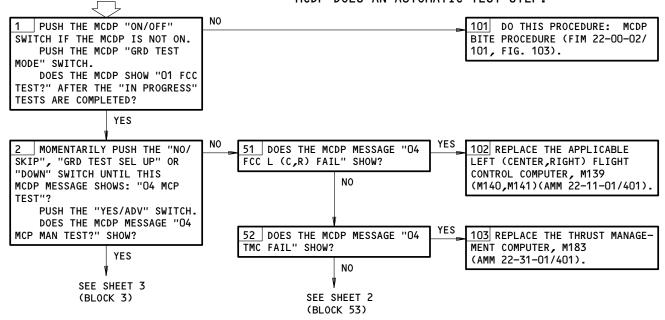
AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11F14,11F15,11F16,11S6

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

MCDP GROUND TEST 04 - MCP

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



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

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FROM SHEET 1 (BLOCK 52) NO 104 WRITE ALL THE FCC, TMC, 53 DOES THE "NO INFC FCC LEFT (CENTER, RIGHT) - - -" MESSAGE AND MCP INTERFACE FAULTS BEFORE YOU START THE INTERFACE SHOW? PUSH THE "YES/ADV" SWITCH FAULT ISOLATION PROCEDURES. TO SHOW ALL OF THE FCC INTER-DO THIS PROCEDURE: "NO INFC FCC" FAULT ISOLATION FACE MESSAGES. PROCEDURES (FIM 22-00-05/101, NOTE: THE TEST WILL GO TO THE FIG. 101). SUBSEQUENT STEP AFTER ALL THE INTERFACE MES-SAGES SHOW. 54 DOES THE "NO INFC TMC 105 WRITE ALL THE FCC, TMC, - -" MESSAGE SHOW? AND MCP INTERFACE FAULTS PUSH THE "YES/ADV" SWITCH BEFORE YOU START THE INTERFACE TO SHOW EACH INTERFACE MES-FAULT ISOLATION PROCEDURES SAGE. (FIM 22-00-05/101, FIG. 102). NOTE: THE TEST WILL GO TO THE SUBSEQUENT STEP AFTER ALL THE INTERFACE MES-SAGES SHOW. NO 106 THE MCDP MESSAGE "NO INFC MCP A TMC BUS IN" OR "NO INFC MCP B TMC BUS IN" SHOWS. NOTE: A "NO INFC MCP A" MES-SAGE IS SENT FROM THE LEFT AND CENTER FCC. A "NO INFC MCP B" MESSAGE IS SENT FROM THE RIGHT FCC. PUSH THE "YES/ADV" SWITCH TO SHOW EACH INTERFACE MES-SAGE. NOTE: THE DISPLAY WILL GO TO THE SUBSEQUENT STEP AFTER ALL THE INTERFACE MESSAGES SHOW. WRITE ALL THE FCC, TMC, AND THE MCP INTERFACE FAULTS BEFORE YOU START THE INTERFACE FAULT ISOLATION PROCEDURES. DO THIS PROCEDURE: "NO INFC MCP" FAULT ISOLATION PROCEDURES (FIM 22-00-05/101, FIG. 103).

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

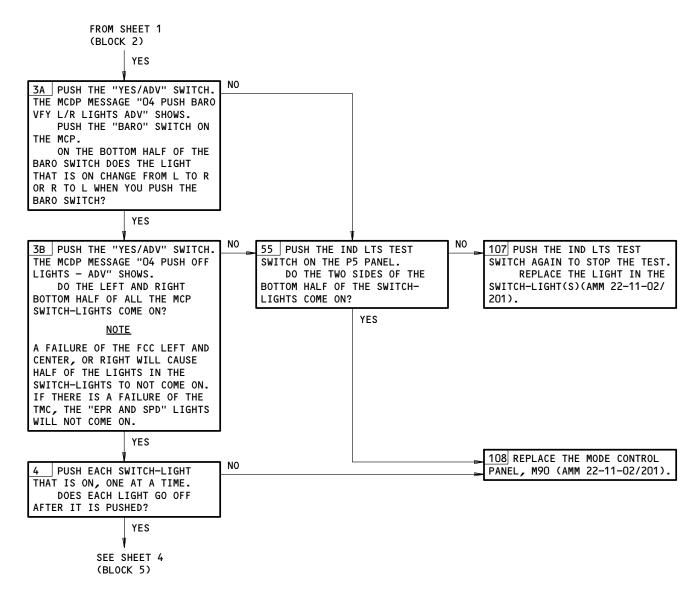
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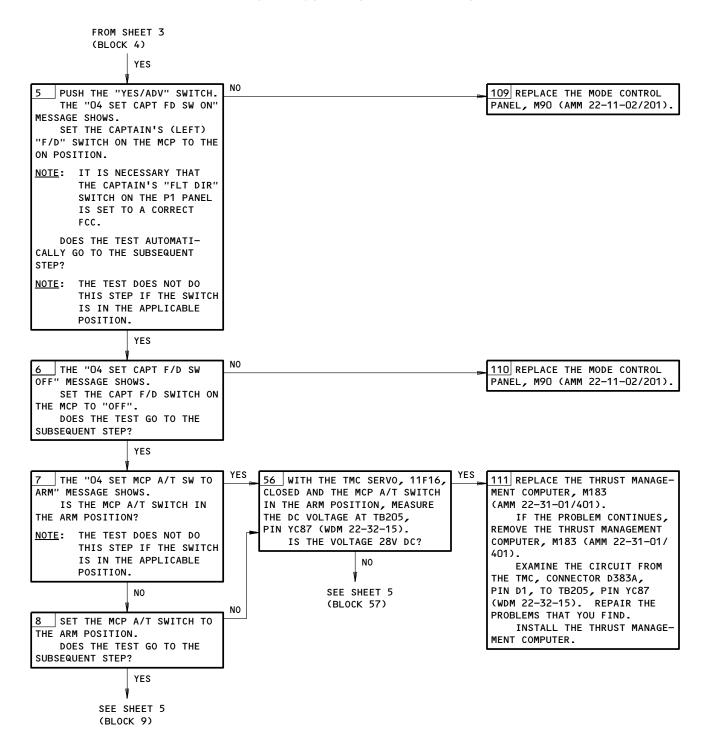
MCDP Ground Test 04 - MCP Figure 104A (Sheet 3)

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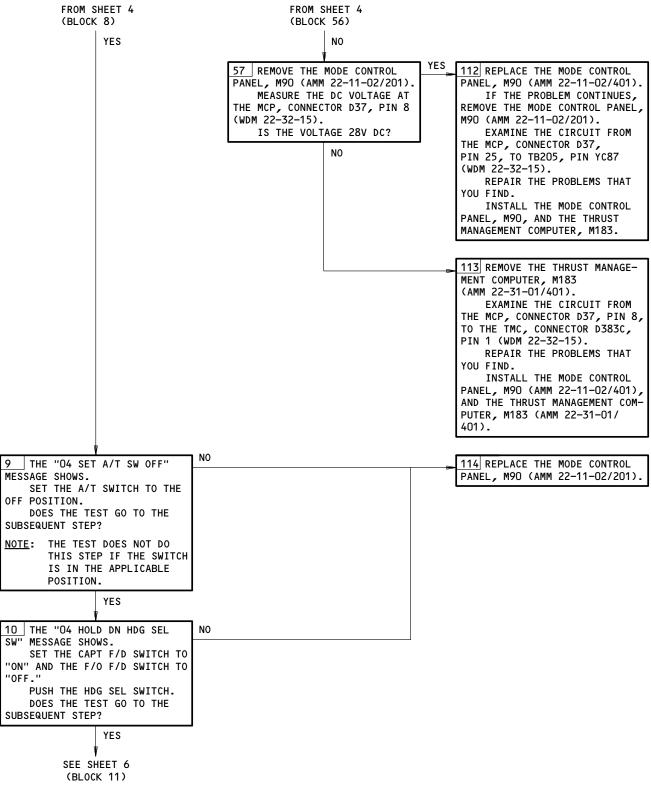
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MCDP Ground Test 04 - MCP Figure 104A (Sheet 4)



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

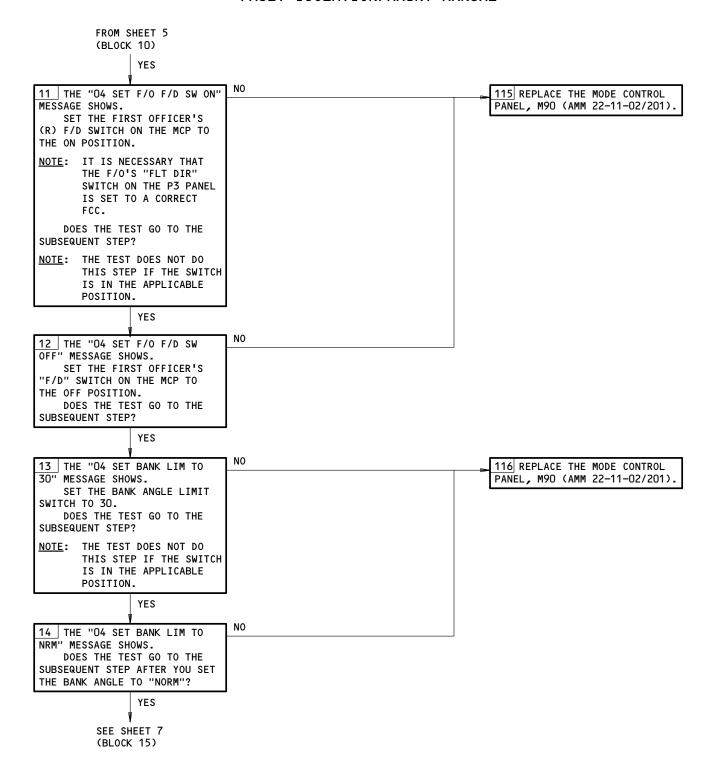
GUI 115

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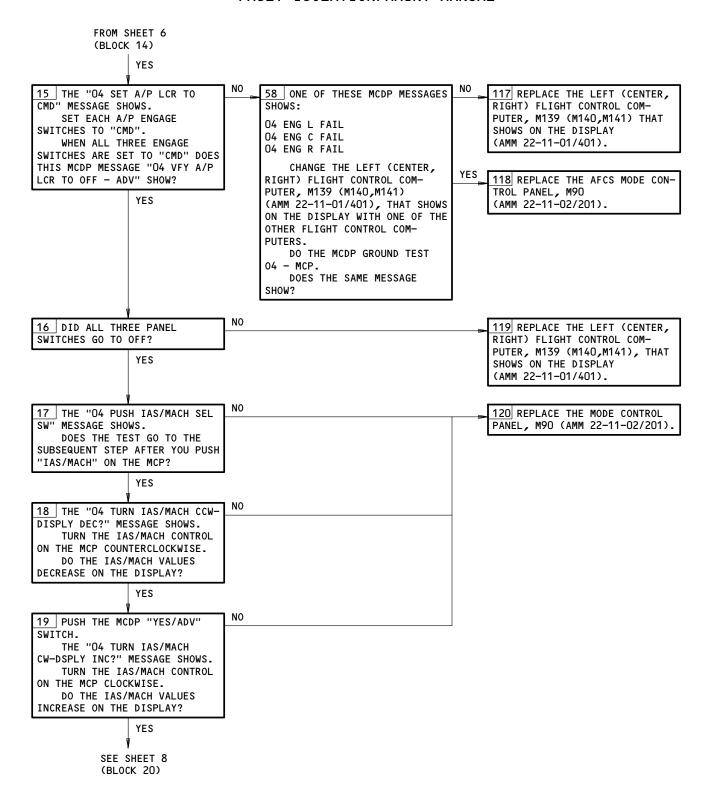
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MCDP Ground Test 04 - MCP Figure 104A (Sheet 6)



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

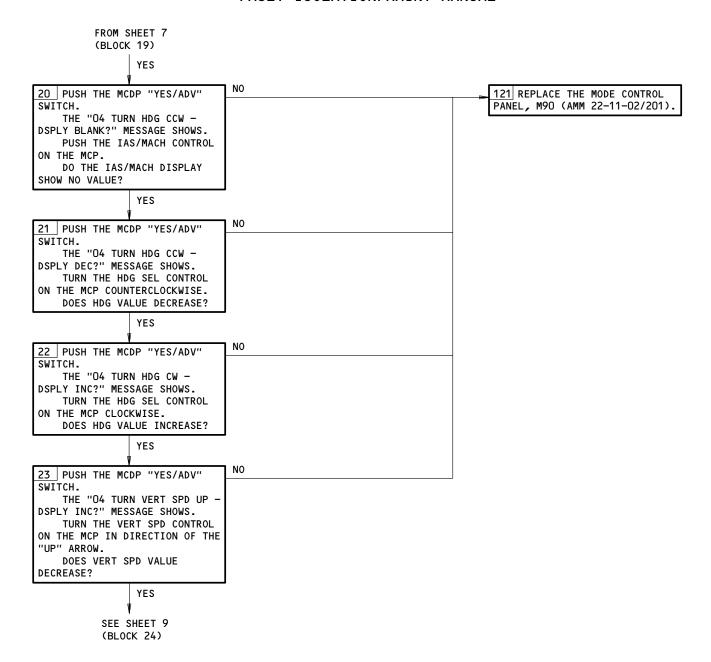
GUI 115

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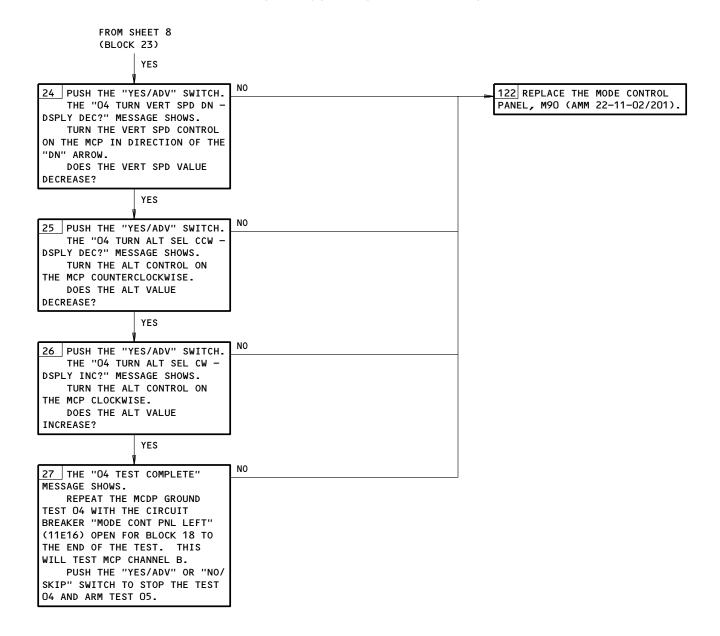
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MCDP Ground Test 04 - MCP Figure 104A (Sheet 8)



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

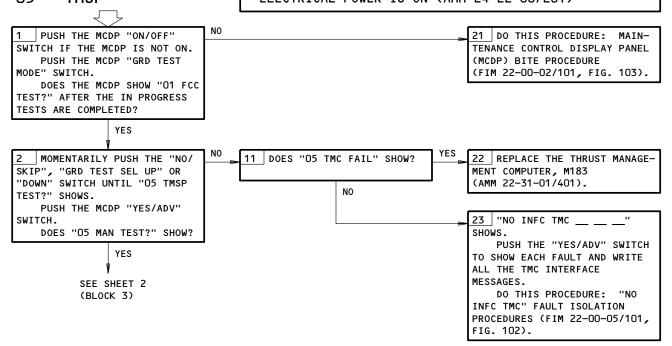
PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(AMM 31-41-00/201)
AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F14,11F15,11F16; 1 11SX

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

MCDP GROUND TEST 05 - TMSP



WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

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FROM SHEET 1 (BLOCK 2) YES PUSH THE "YES/ADV" SWITCH TO START THE TMSP MANUAL TEST. 24 REPLACE THE THRUST MODE "O5 PUSH OFF SW PER MODE DSPLY" SHOWS. SELECT PANEL (TMSP), M10258 A THRUST MODE SHOWS ABOVE THE EPR DISPLAY ON THE EICAS DISPLAY. (MM 22-31-02/401). PUSH THE APPLICABLE THRUST MODE SWITCH ON THE TMSP. (EXAMPLE -THE EICAS SHOWS "TO" (TAKEOFF), PUSH THE TMSP "TO" SWITCH. THE EICAS SHOWS A DIFFERENT THRUST MODE AFTER YOU PUSH THE TMSP MODE SWITCH. PUSH THE APPLICABLE TMSP MODE SWITCH SHOWN ON THE EICAS REFERENCE THRUST MODE DISPLAY (SEE A ON SHEET 3)(FOUND ABOVE THE EPR DISPLAY ON THE TOP EICAS DISPLAY). NOTE: WHEN THE EICAS SHOWS "D TO 1", PUSH THE TMSP SWITCH IDENTI-FIED WITH LABEL 1. WHEN THE EICAS SHOWS "D TO 2", PUSH THE TMSP SWITCH IDENTIFIED WITH LABEL 2. DOES THE EICAS SHOW A DIFFERENT THRUST MODE AFTER YOU PUSH THE TMSP MODE SWITCH OR DOES "05 TURN TEMP SEL CW-DSPLY INC?" SHOW AFTER YOU PUSH ALL THE SWITCHES? YES NO 4 "05 TURN TEMP SEL CW -25 REPLACE THE THRUST MODE SELECT PANEL (TMSP), M10258 DSPLY INC?" SHOWS. TURN TMSP "TEMP SEL" (MM 22-31-02/401).SWITCH CLOCKWISE. DOES THE TEMPERATURE VALUE INCREASE? NOTE: THE TEMPERATURE SHOWS ON THE TOP OF THE EICAS DISPLAY ABOVE THE REFER-**ENCE THRUST MODE** DISPLAY. YES SEE SHEET 3

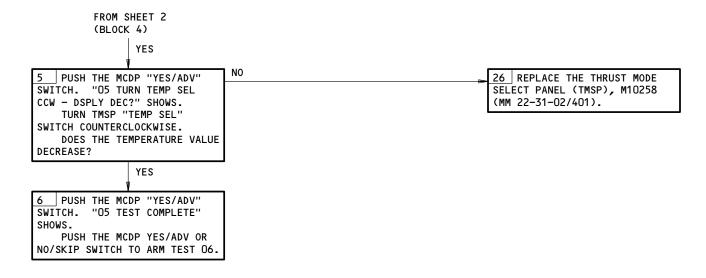
MCDP Ground Test 05 - TMSP
 Figure 105 (Sheet 2)

(BLOCK 5)

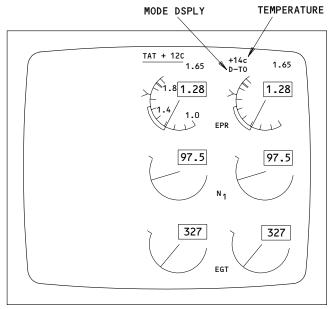
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MODE DISPLAYED ON UPPER EICAS	PRESS TMSP SWITCH
ТО	TO/GA
CLB	CLB
CON	CON
CR2	CR2
D-TO 1	1
D-T0 2	2



EICAS DISPLAY YPS242-T-404-601

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

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PREREQUISITES

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)

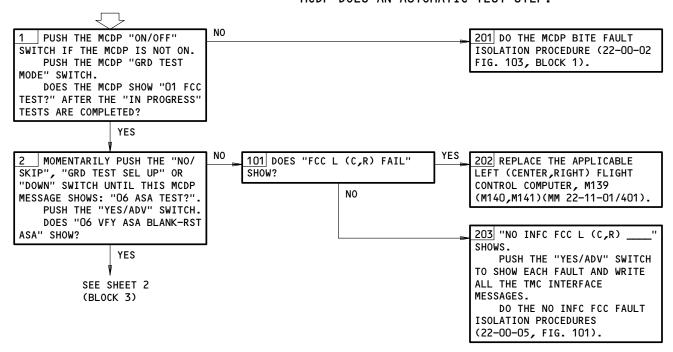
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11S3

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

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

MCDP GROUND TEST 06 - "ASA"

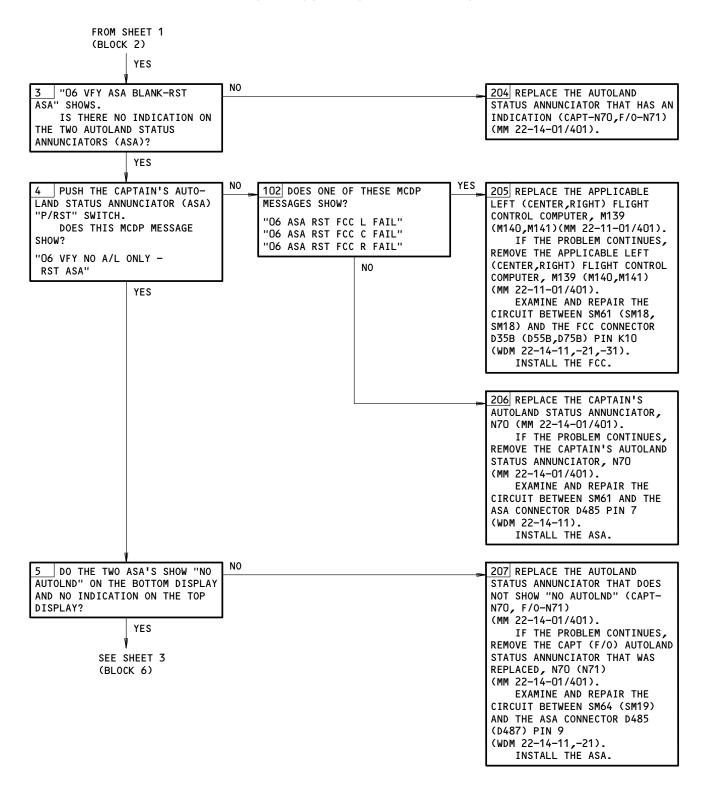
THE "XX IN PROGRESS" MESSAGE SHOWS WHEN THE NOTE: MCDP DOES AN AUTOMATIC TEST STEP.



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

EFFECTIVITY-GUI 001-114, 116-999

22-00-03



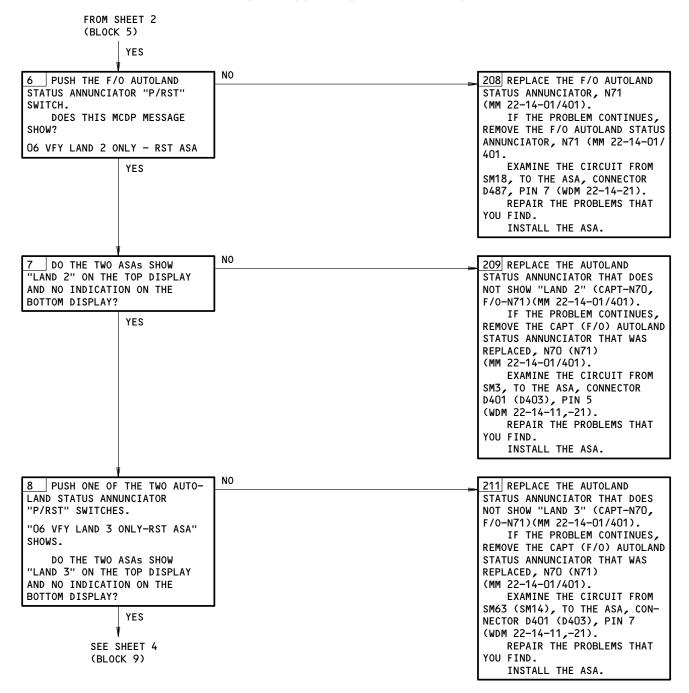
MCDP Ground Test 06 - ASA Figure 106 (Sheet 2)

GUI 001-114, 116-999

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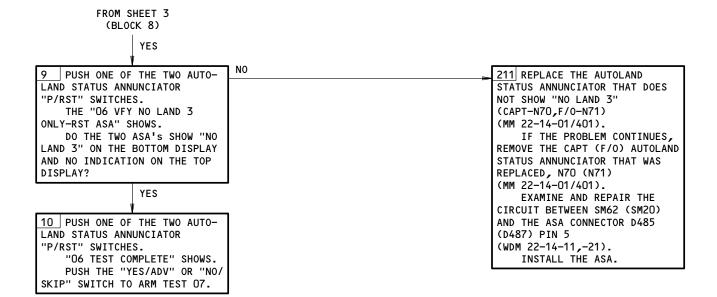
MCDP Ground Test 06 - ASA Figure 106 (Sheet 3)

GUI 001-114, 116-999

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

GUI 001-114, 116-999

22-00-03



PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:

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

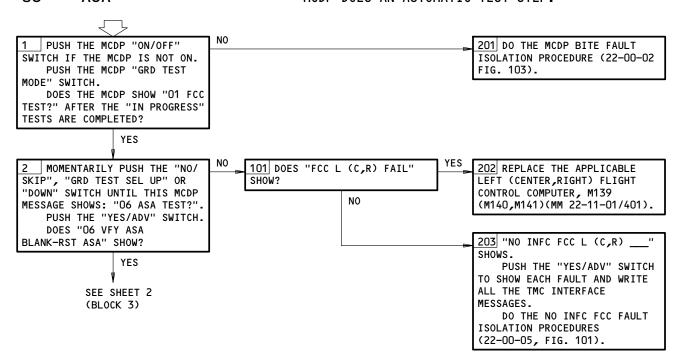
AIR/GROUND RELAYS (MM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11S6

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

MCDP GROUND TEST 06 - "ASA"

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



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

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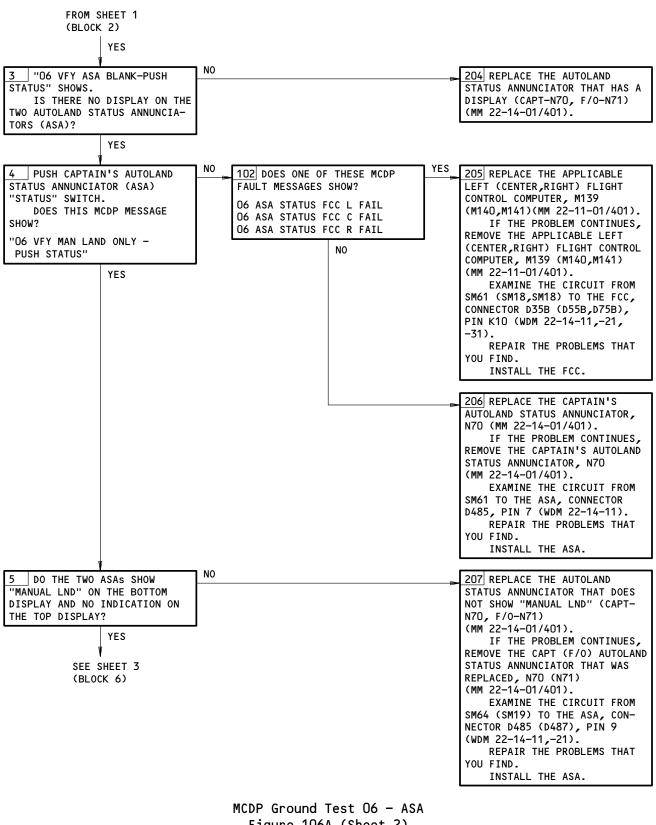
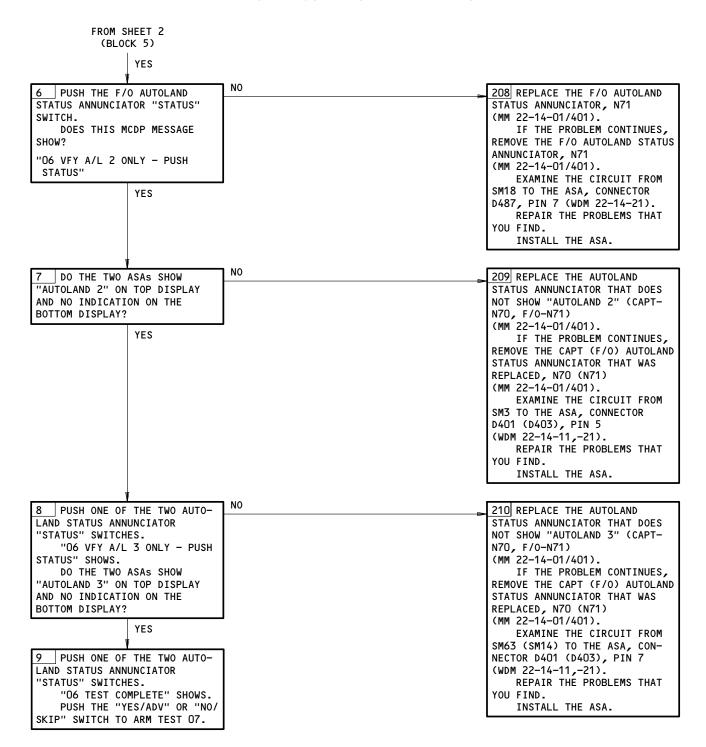
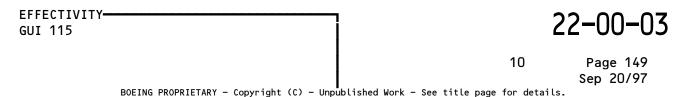


Figure 106A (Sheet 2)

EFFECTIVITY-22-00-03 **GUI 115** 80 Page 148 Sep 20/97 BOEING PROPRIETARY - Copyright (C) - Unpublished Work - See title page for details.



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



PREREQUISITES

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: 11A17,11A33,11E16,11E17,11E18,11E20,11E21,11E34, 11E35,11E36; 1 11SX

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

MCDP GROUND TEST O7 - "SERVO AIL"

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

201 DO THIS PROCEDURE:

(MCDP) BITE PROCEDURE

TENANCE CONTROL DISPLAY PANEL

(FIM 22-00-02/101, FIG. 103).

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 SUR-FACES CAN CAUSE INJURY TO PER-SONS 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)

WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

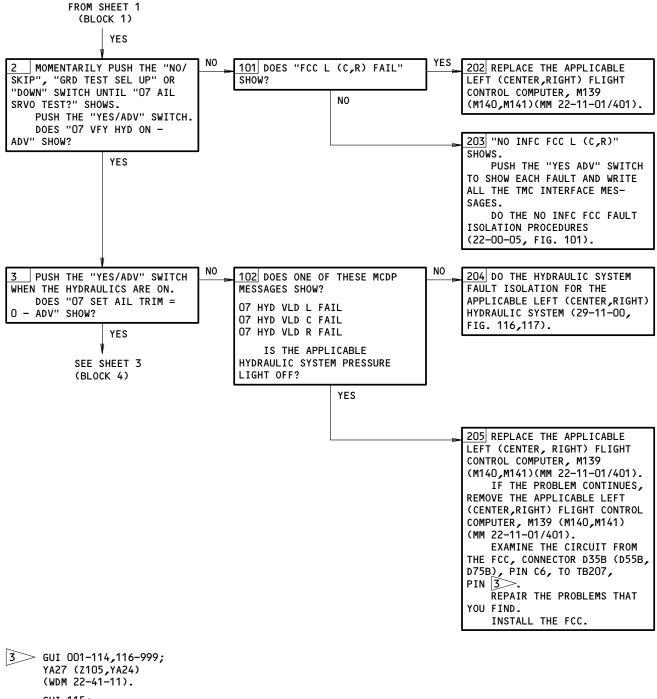
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(WDM 22-41-11).

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Z28 (Z105,YA24)
(WDM 22-41-11).

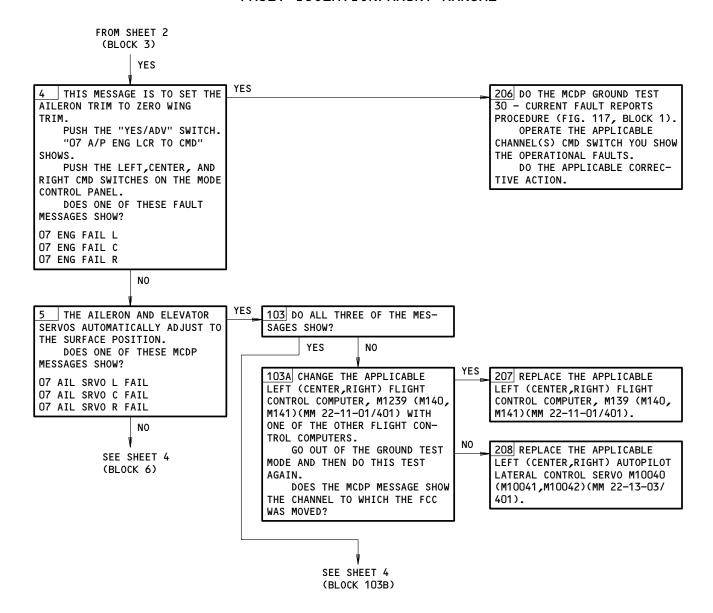
A73760

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

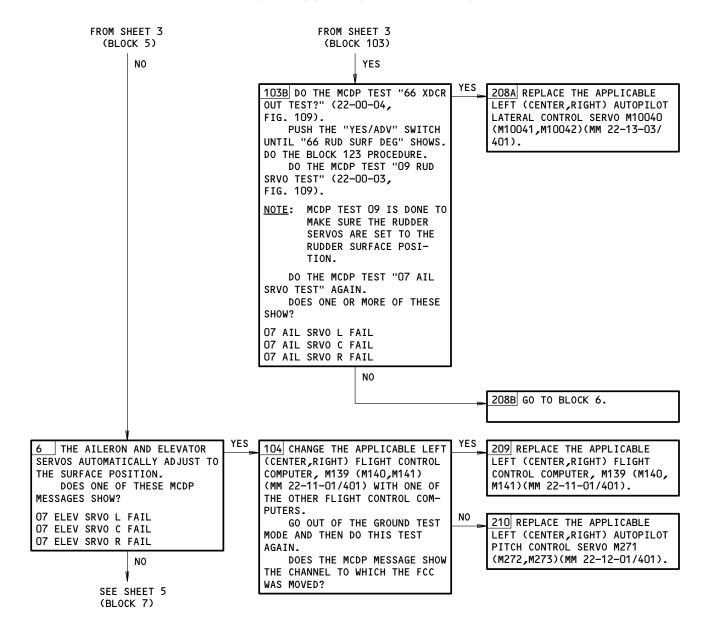
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MCDP Ground Test 07 - SERVO AIL Figure 107 (Sheet 3)



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

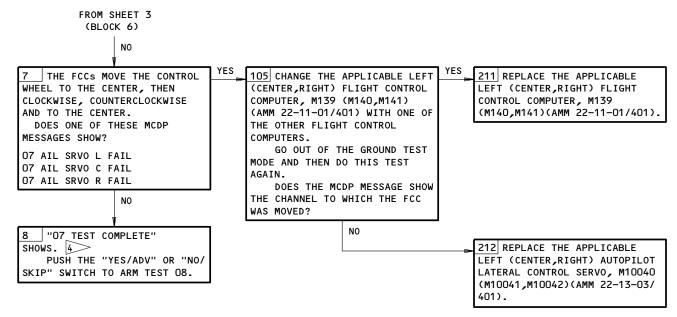
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> IF THIS TEST WAS DONE TO ISOLATE A PROBLEM, BUT THE TEST PASSED, REPEAT THE TEST ONLY FOR THE CHANNEL WITH A POSSIBLE FAILURE. OPEN THE APPLICABLE CIRCUIT BREAKERS (11E17, FLT CONT CMPTR PWR LEFT; 11E20, FLT CONT CMPTR PWR CENTER; OR 11E35, FLT CONT CMPTR PWR RIGHT) FOR THE TWO CHANNELS YOU WILL NOT DO THE TEST FOR.

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

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; 1>>11SX

MCDP GROUND TEST

NO

08 - "SERVO ELEV"

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

> 201 DO THE MCDP BITE FAULT ISOLATION PROCEDURE

(FIM 22-00-02/101, FIG. 103).

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

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 SUR-FACES CAN CAUSE INJURY TO PER-SONS 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 "O1 FCC TEST?" AFTER THE "IN PROGRESS" TESTS ARE COMPLETED?

> SEE SHEET 2 (BLOCK 2)

YES

1 WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE

NOMENCLATURE "MAINT CONT DSPL".

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

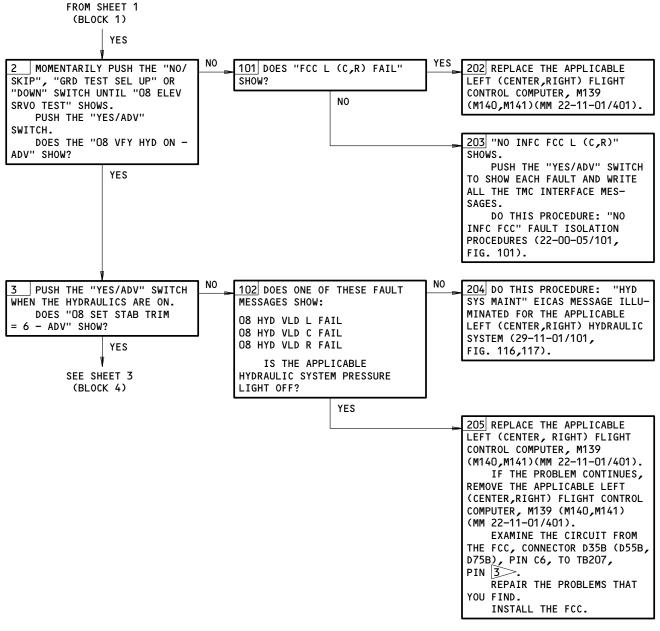
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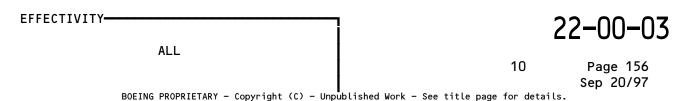
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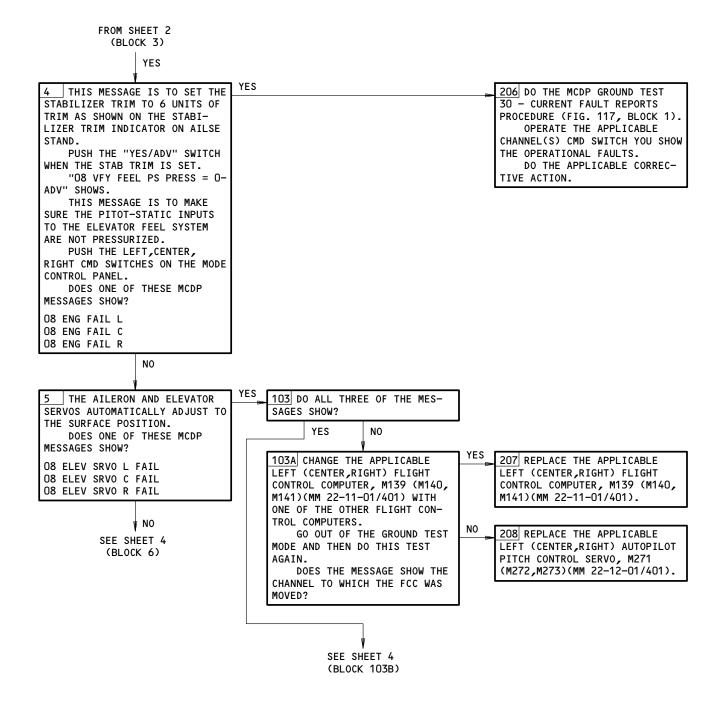
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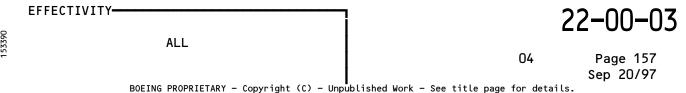
GUI 001-114,116-999; YA27 (Z105,YA24) (WDM 22-41-11). GUI 115; Z28 (Z105,YA24) (WDM 22-41-11).

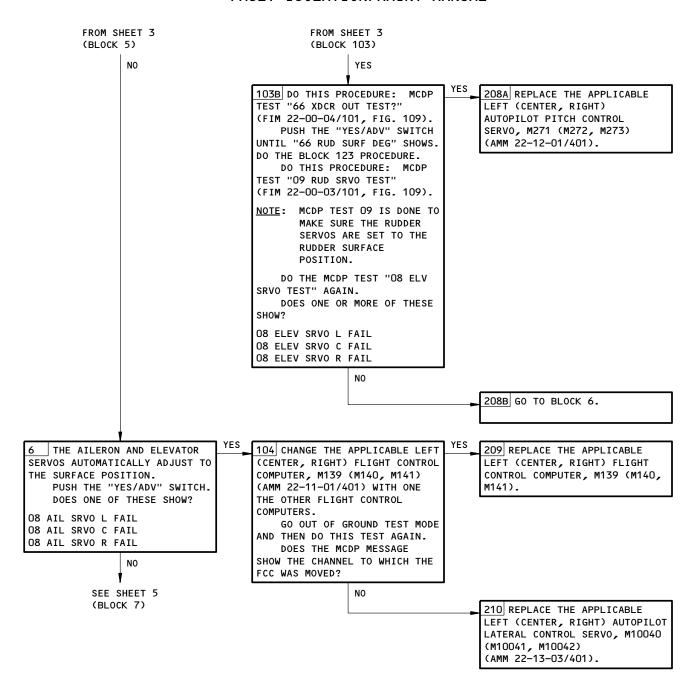
> MCDP Ground Test 08 - SERVO ELEV Figure 108 (Sheet 2)



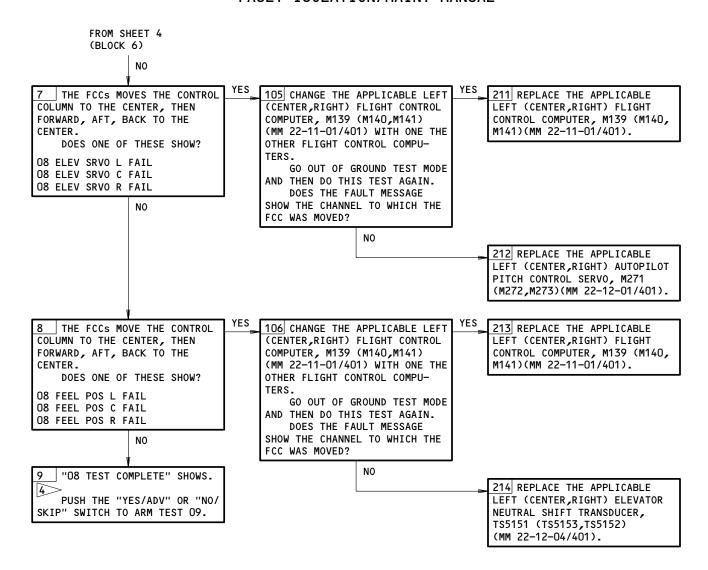


MCDP Ground Test 08 - SERVO ELEV Figure 108 (Sheet 3)





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



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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 08 - SERVO ELEV Figure 108 (Sheet 5)

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PREREQUISITES

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

RUDDER POSITION INDICATING SYSTEM (AMM 27-28-00/ 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; 1>>11SX

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201) INSTALL NOSE GEAR STEERING VALVE LOCKPIN (AMM 09-11-00/201)

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

1 WHERE X = 3.4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

EFFECTIVITY-

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MCDP GROUND TEST 09 - "SERVO RUD"

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WARNING

NO

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

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?

SEE SHEET 3
(BLOCK 2)

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

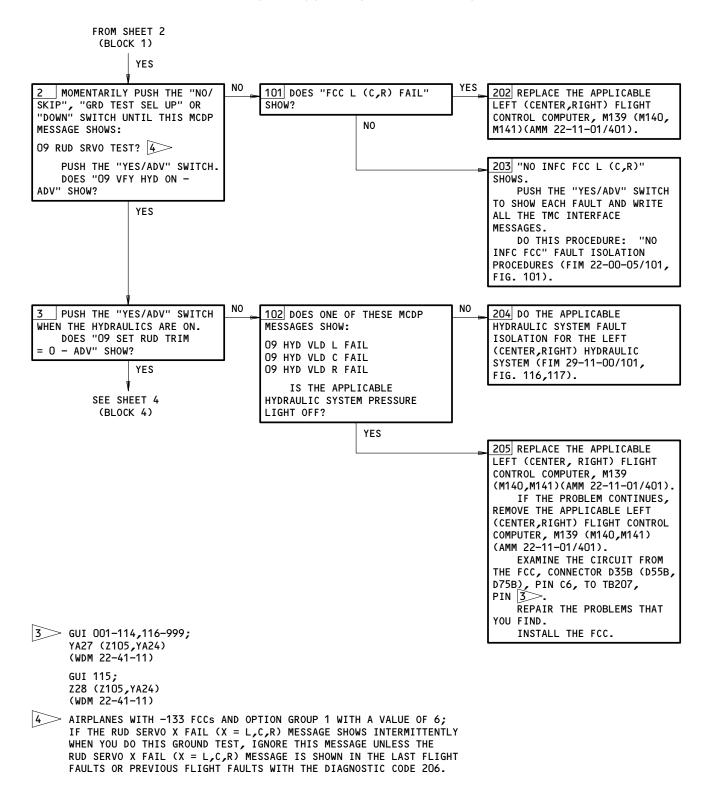
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201 DO THE MCDP BITE FAULT

FIG. 103, BLOCK 1).

ISOLATION PROCEDURE (22-00-02,

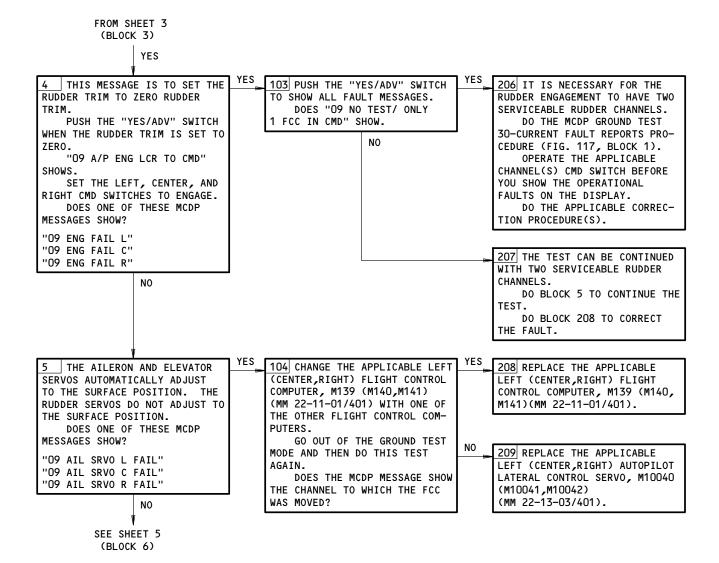


MCDP Ground Test 09 - SERVO RUD Figure 109 (Sheet 3)

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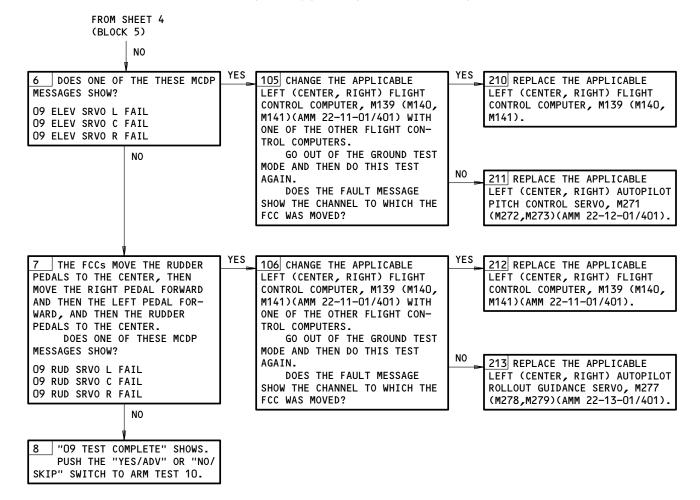


MCDP Ground Test 09 - SERVO RUD Figure 109 (Sheet 4)

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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; 1>11SX

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.

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.

NOTE: THE "XX IN PROGRES" MESSAGE SHOWS WHEN THE

MCDP DOES AN AUTOMATIC TEST STEP.

NOTE:

NO

IF THIS TEST FAILS, OPERATE THE ENGINES FOR 5 MINUTES OR MORE THEN REPEAT THIS TEST WITHIN

5 MINUTES AFTER ENGINE OPERATION.

MCDP GROUND TEST 10 - "SERVO A/T"

1 MOVE ALL PERSONS AND
EQUIPMENT AWAY FROM THE
SPOILERS/SPEEDBRAKES DURING
ALL OF THIS 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
PROGRESS" 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).

WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER
WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

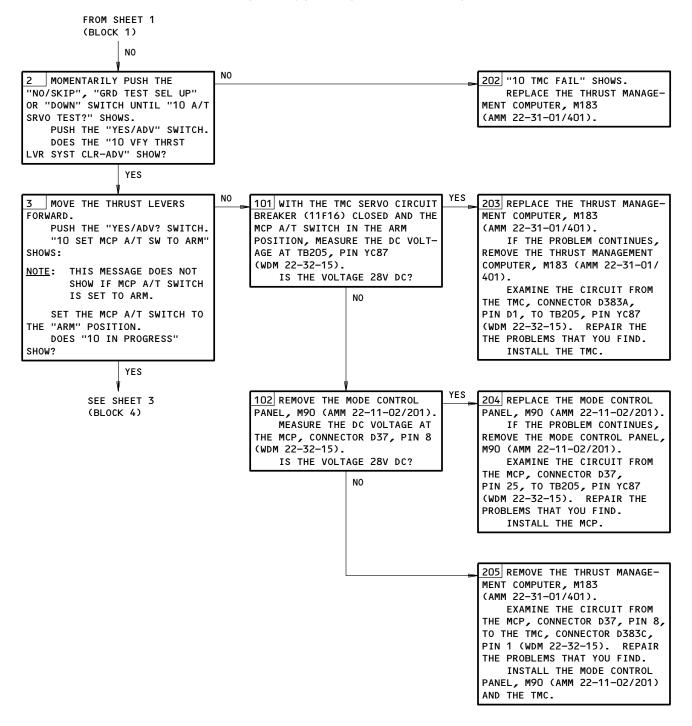
EFFECTIVITY-

22-00-03

ALL

07

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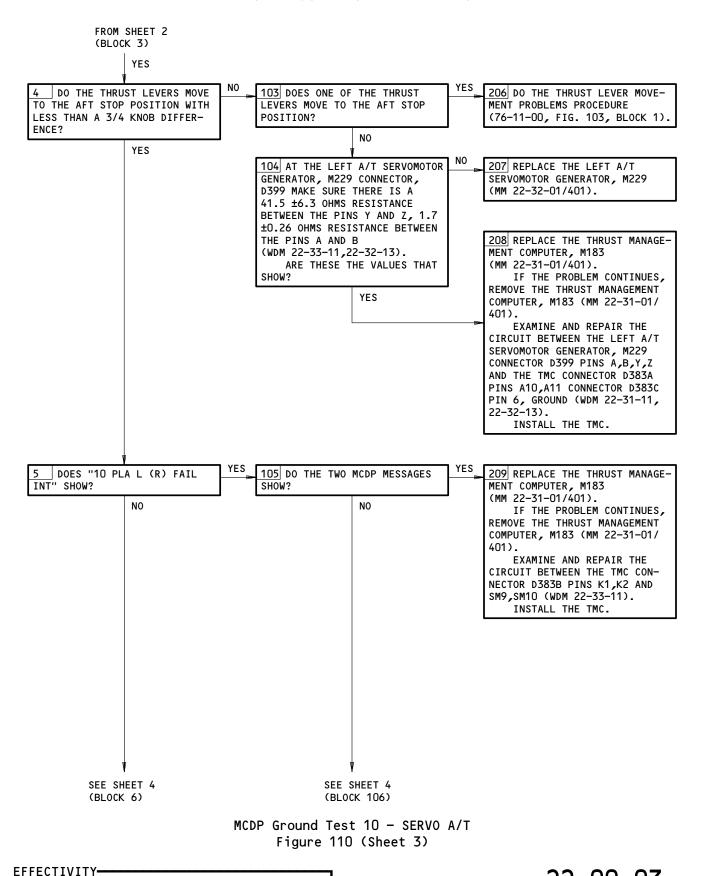
MCDP Ground Test 10 - SERVO A/T Figure 110 (Sheet 2)

ALL

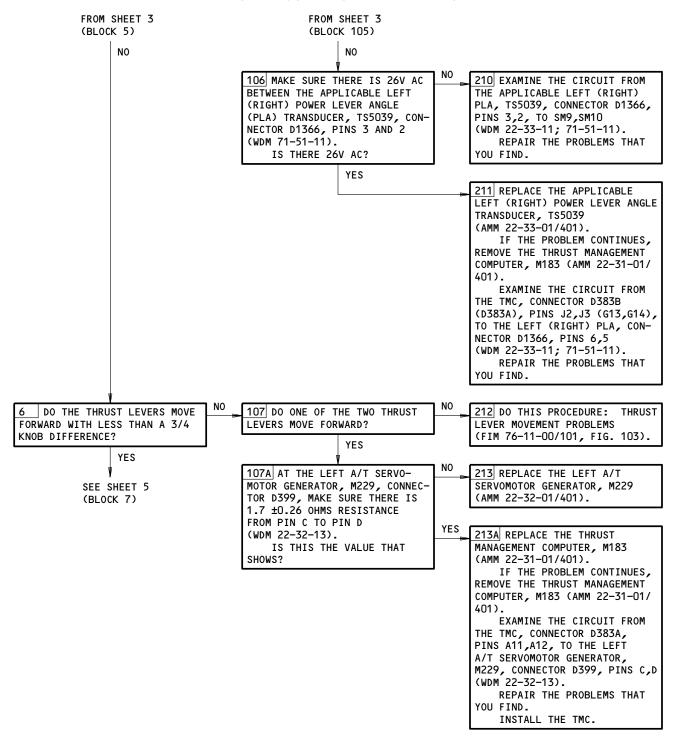
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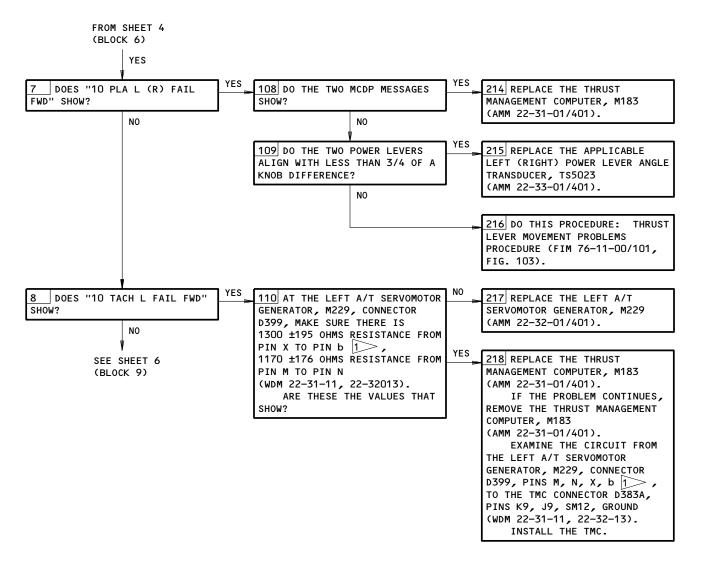


ALL



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





1> ON WIRING DIAGRAMS "b" SHOWS AS "B-"

MCDP Ground Test 10 - SERVO A/T Figure 110 (Sheet 5)

ALL

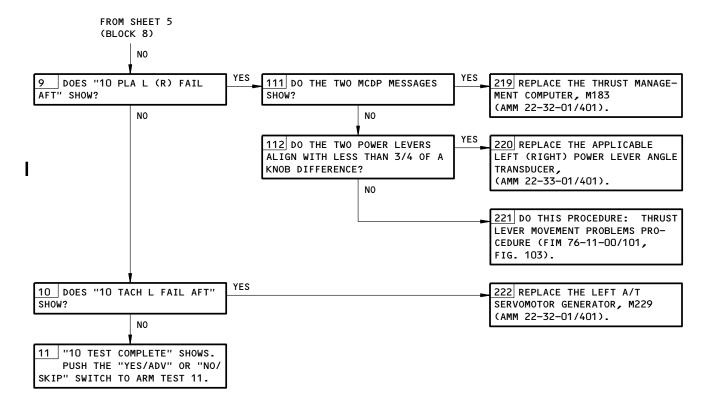
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MCDP Ground Test 10 - SERVO A/T Figure 110 (Sheet 6)



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)

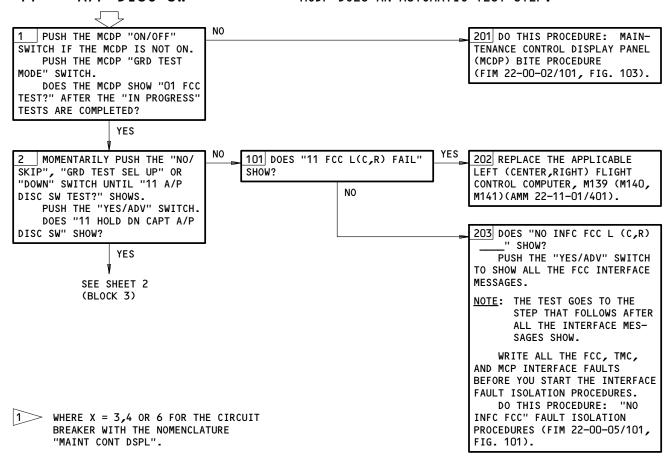
AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36; 1>11SX

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

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

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

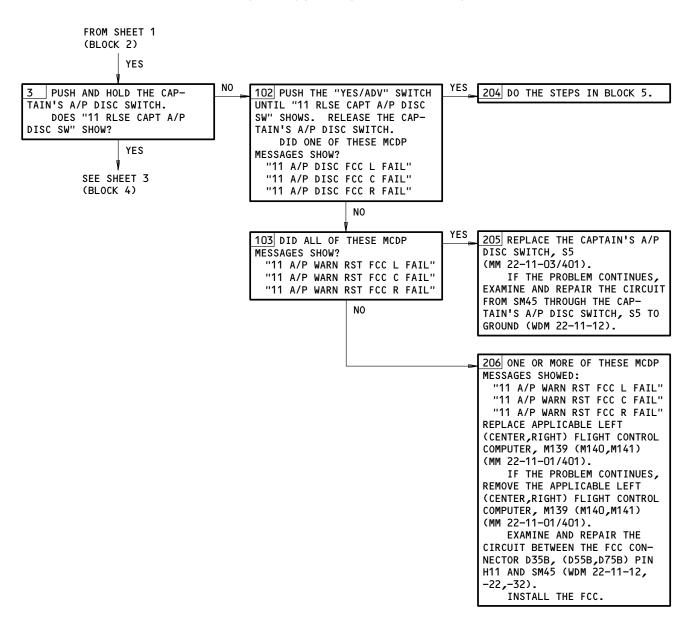


MCDP Ground Test 11 - A/P DISC SW Figure 111 (Sheet 1)

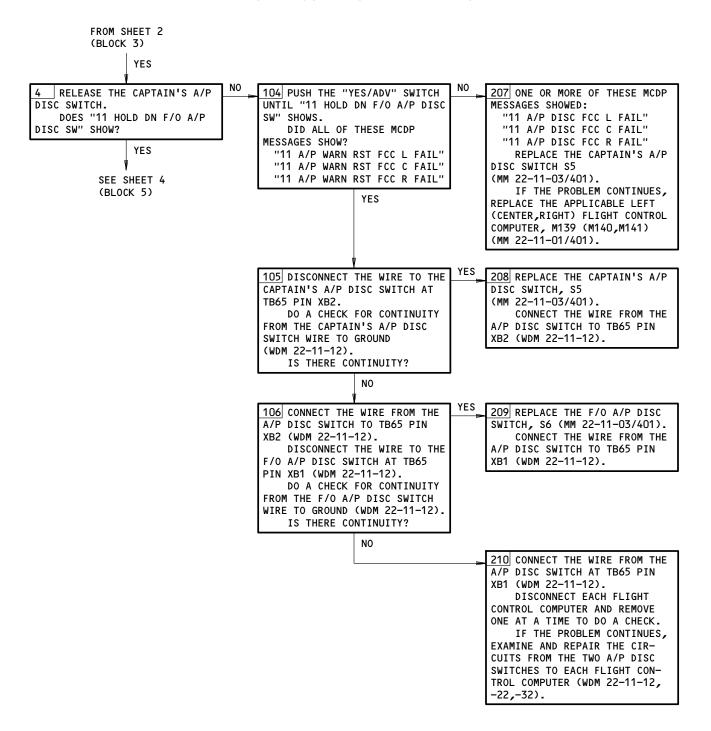
ALL 22-00-03

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



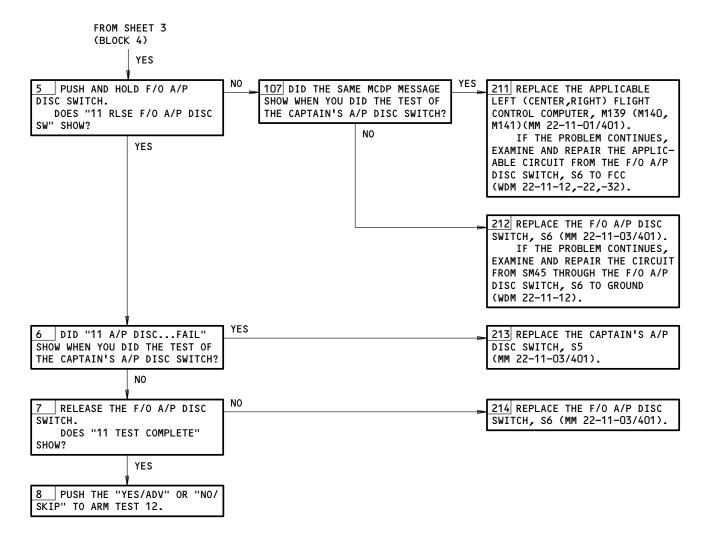
MCDP Ground Test 11 - SW A/P DISC Figure 111 (Sheet 3)

EFFECTIVITY-ALL

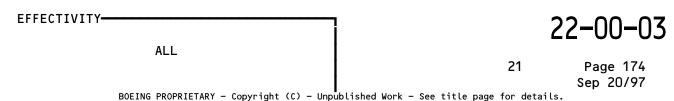
22-00-03

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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)

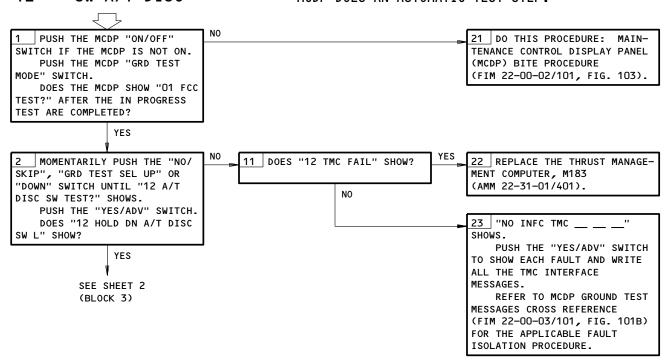
AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F14,11F15,11F16; 1>11SX

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



WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

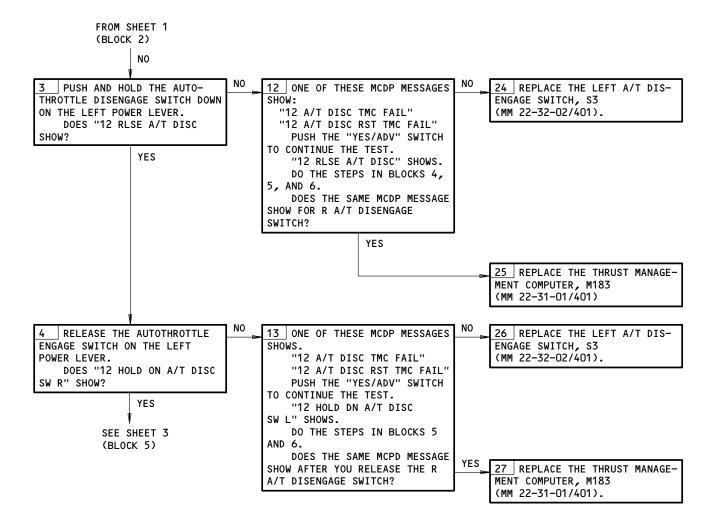
ALL

ALL

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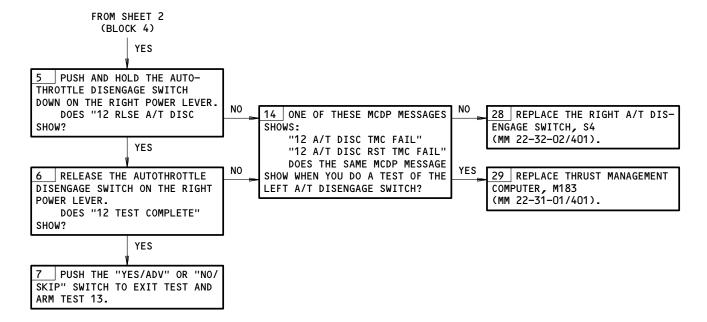
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MCDP Ground Test 12 - SW A/T DISC Figure 112 (Sheet 2)





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

ALL

ALL

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PREREQUISITES

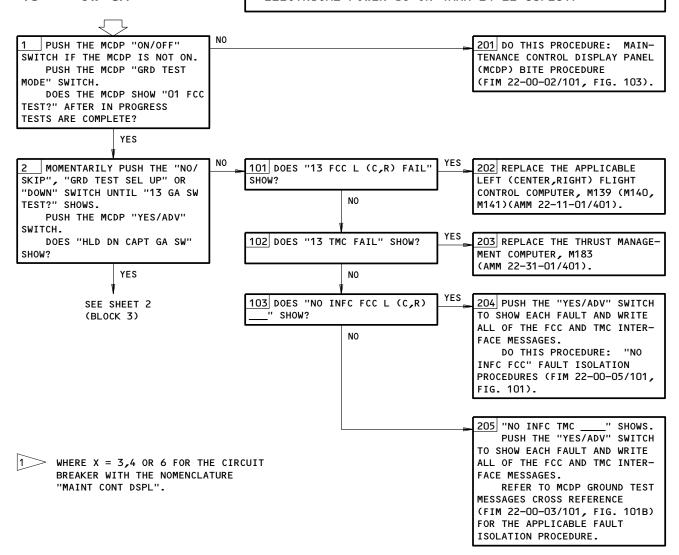
MAKE SURE THESE SYSTEMS WILL OPERATE:
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(AMM 31-41-00/201)(WHEN YOU USE THE REMOTE MCDP
CONTROL PANEL)

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

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11F14,11F15,11F16; 1 11SX

MCDP GROUND TEST 13 - "SW GA"

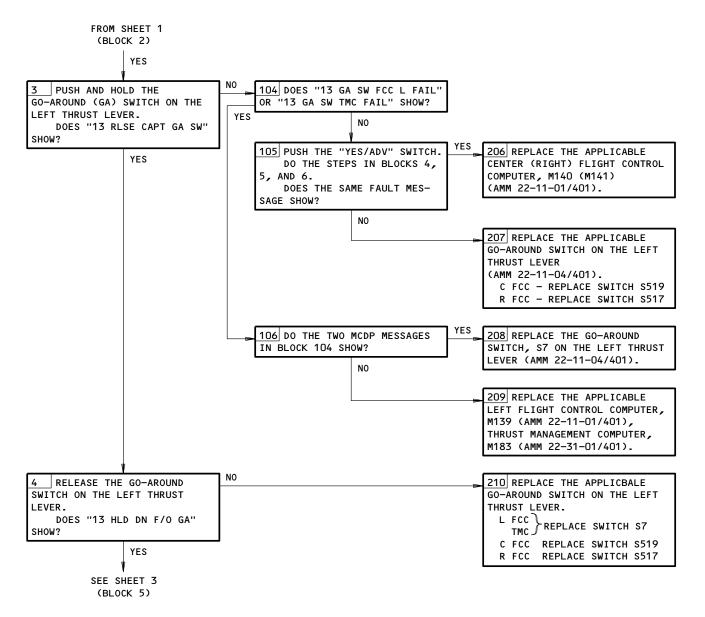
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)



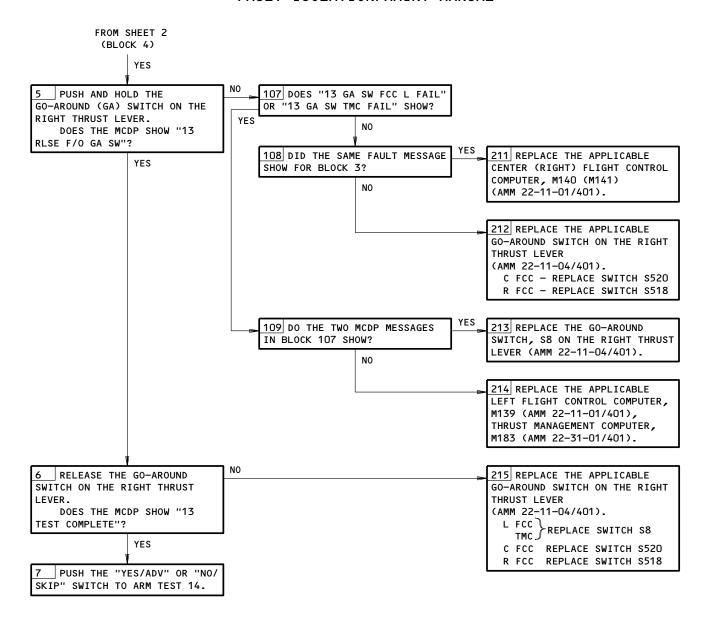
MCDP Ground Test 13 - SW GA Figure 113 (Sheet 1)

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



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



THIS TEST IS NOT USED

MCDP Ground Test 14 - XDCR COL L Figure 114

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THIS TEST IS NOT USED

MCDP Ground Test 15 - XDCR COL R Figure 115

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THIS TEST IS NOT USED

MCDP Ground Test 16 - XDCR WHL Figure 116

154075

22-00-03

09

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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 (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 30-21-00/501) 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) FLIGHT MANAGEMENT SYSTEM (MM 34-61-00/501)

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

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

ALL

22-00-03

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PREREQUISITES (CONTINUED)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17, 11E16, 11E17, 11E18, 11E20, 11E21, 11E34, 11E35, 11E36, 11F14, 11F15, 11F16; 2 11SX

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: THE "XX IN PROGRESS" MESSAGE SHOWS WHEN THE

MCDP DOES AN AUTOMATIC TEST STEP.

THE A/T DISC LIGHT WILL REMAIN ILLUMINATED

DURING GROUND TESTING.

WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

EFFECTIVITY-

22-00-03

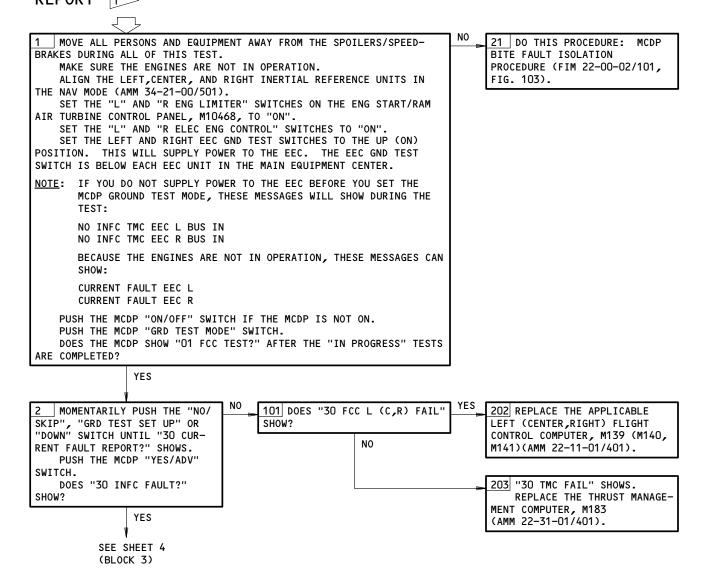
ALL

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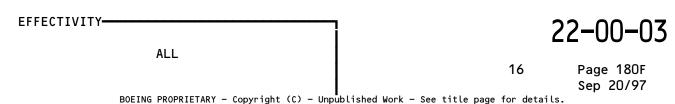


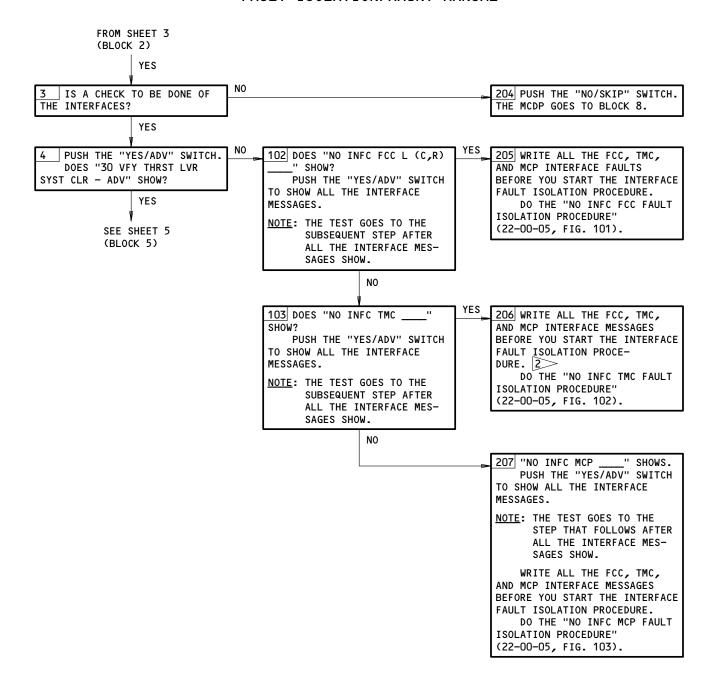
MCDP GROUND TEST 30 - "CURRENT FAULT REPORT"



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.

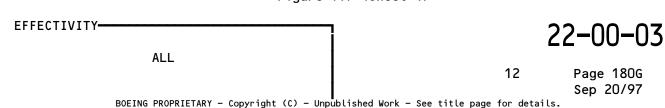
MCDP Ground Test 30 - CURRENT FAULT REPORT Figure 117 (Sheet 3)

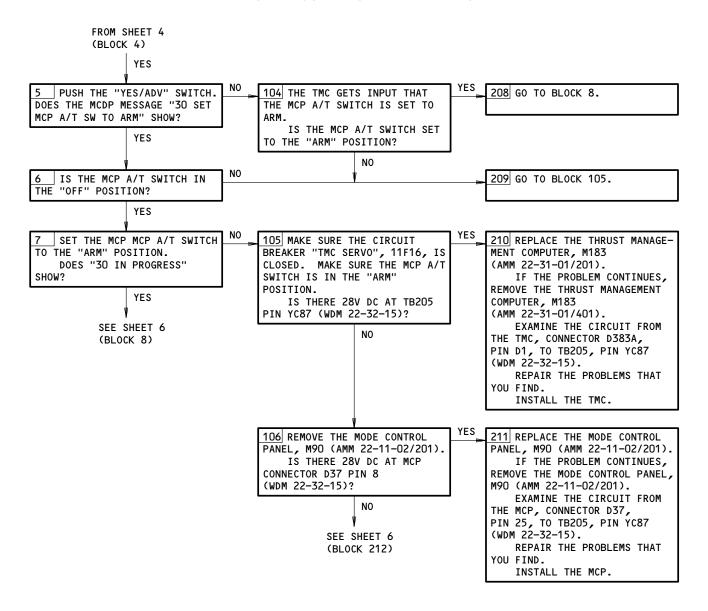




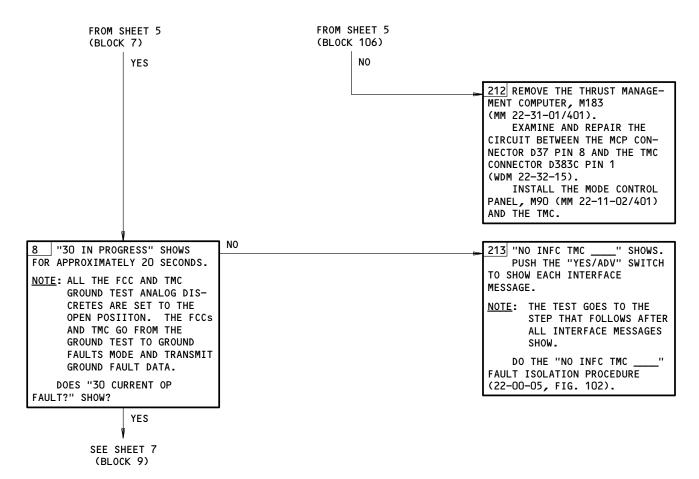
2 IF MANY "NO INFC TMC" MCDP MESSAGES ARE SHOWN, GO OUT OF GROUND TEST MODE. GO BACK INTO GROUND TEST 30 AGAIN. IF MESSAGES REMAIN, DO CORRECTIVE ACTION.

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





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



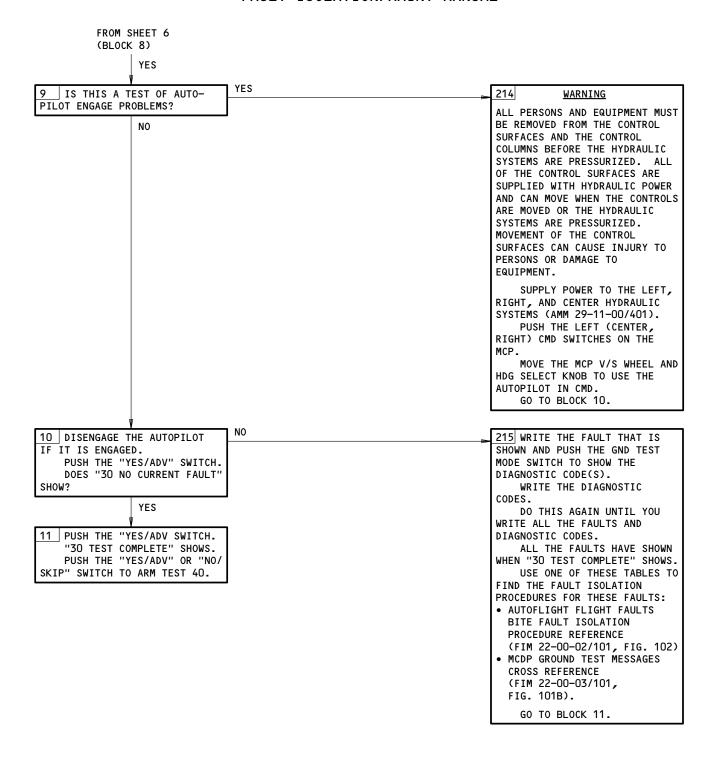
MCDP Ground Test 30 - CURRENT FAULT REPORT Figure 117 (Sheet 6)

ALL

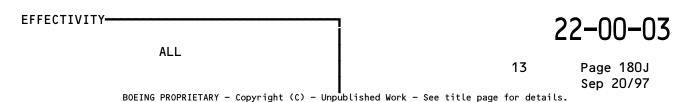
ALL

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



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)

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

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

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; 1>>11SX

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

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

NOSE GEAR STEERING VALVE LOCKPIN INSTALLATION (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.

WHERE X = 3,4, OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

EFFECTIVITY-

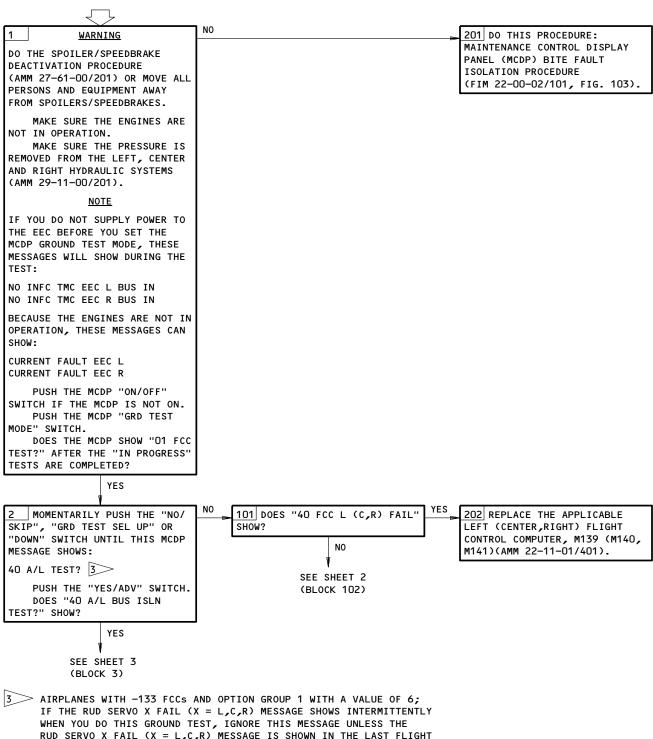
22-00-03

ALL

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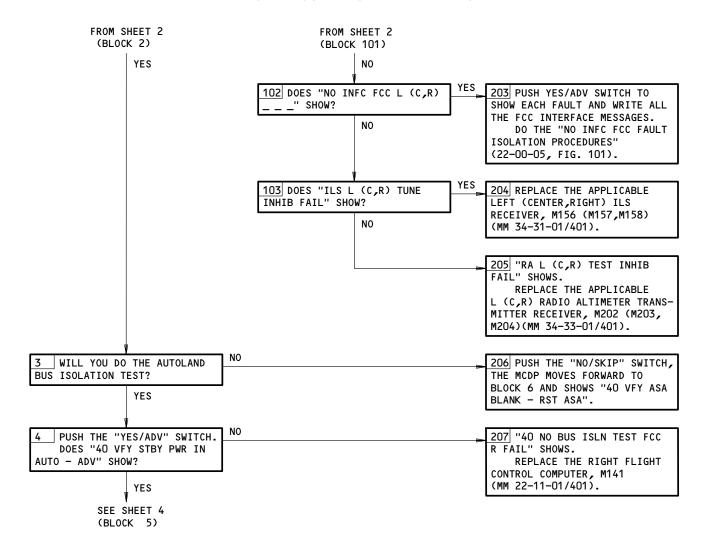
MCDP GROUND TEST 40 - "AUTOLAND"



RUD SERVO X FAIL (X = L,C,R) MESSAGE IS SHOWN IN THE LAST FLIGHT FAULTS OR PREVIOUS FLIGHT FAULTS WITH THE DIAGNOSTIC CODE 206.

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

EFFECTIVITY-22-00-03 ALL 12 Page 180L Sep 20/97 BOEING PROPRIETARY - Copyright (C) - Unpublished Work - See title page for details.



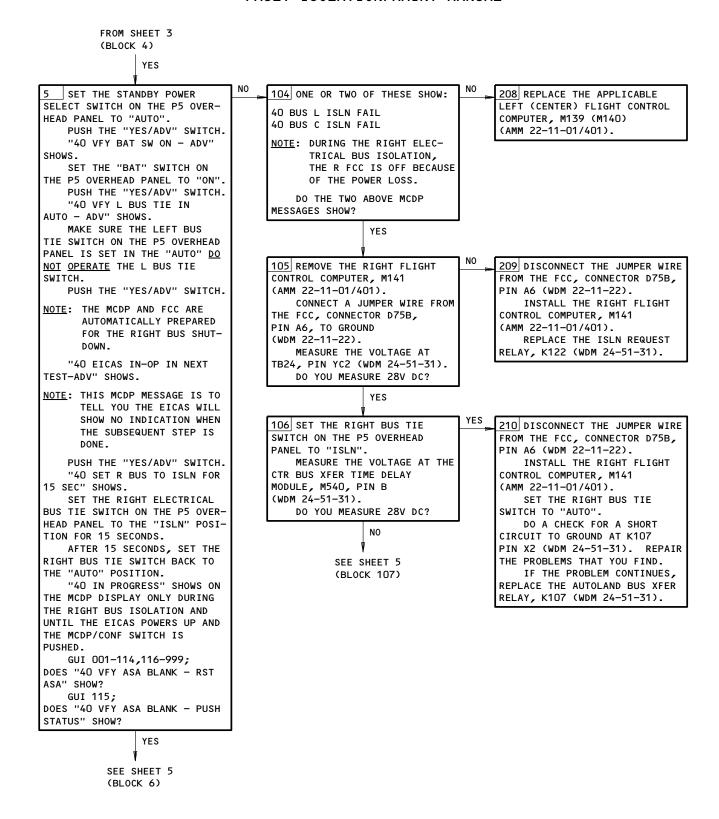
MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 3)

ALL

ALL

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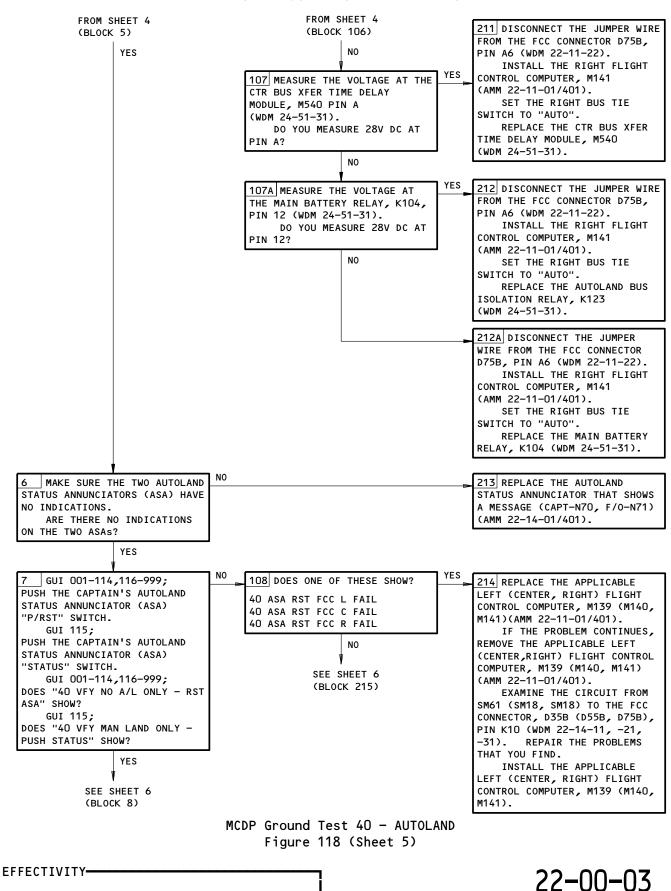


MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 4)

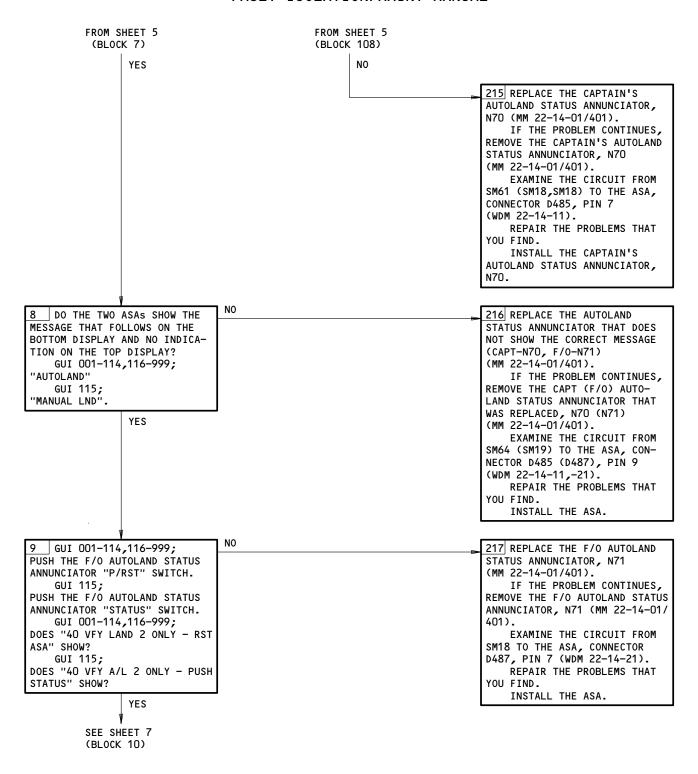
22-00-03

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ALL

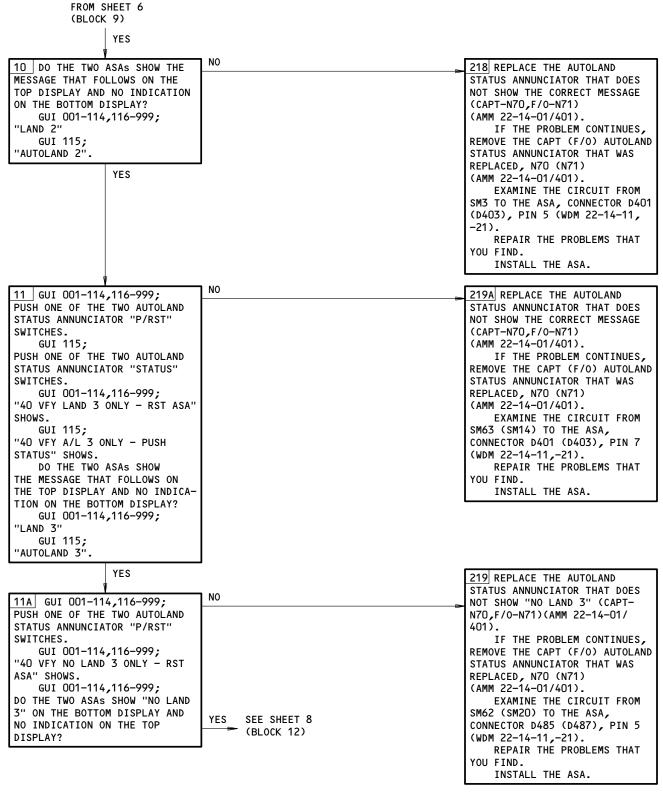


MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 6)

ALL 22-00-03

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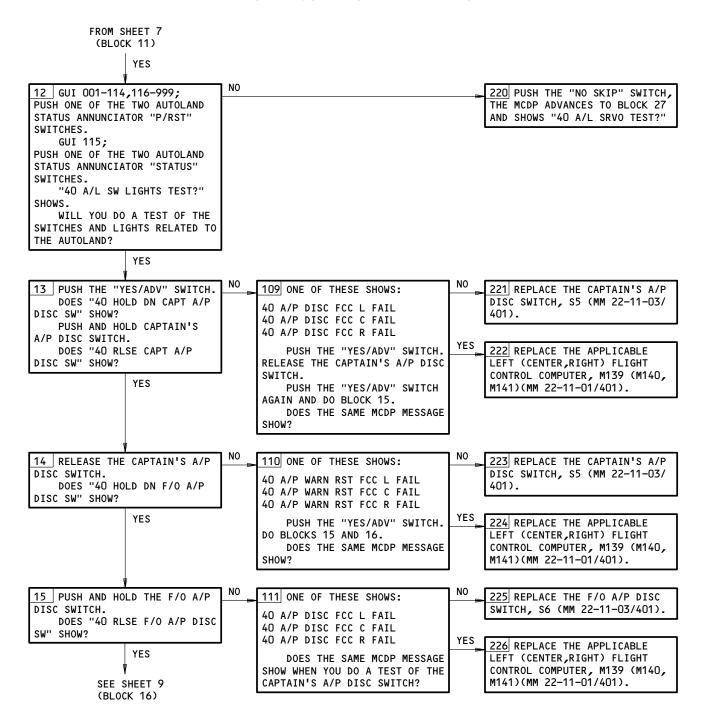
MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 7)

ALL

ALL

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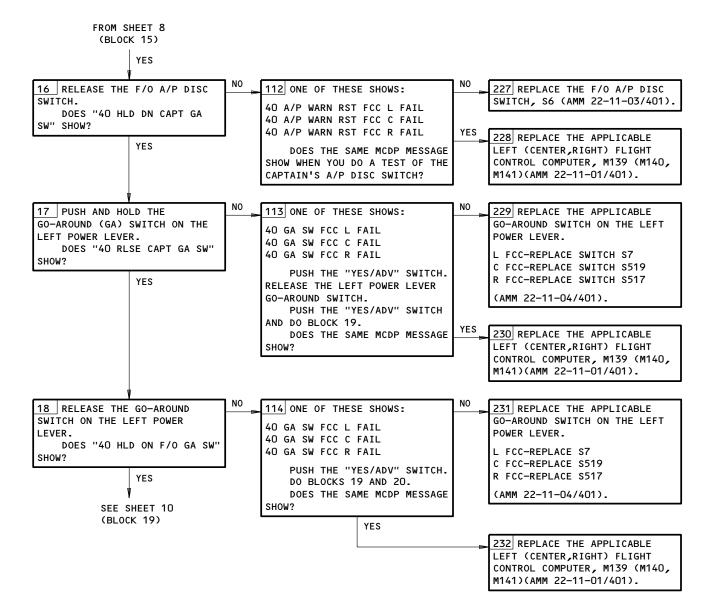
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MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 8)

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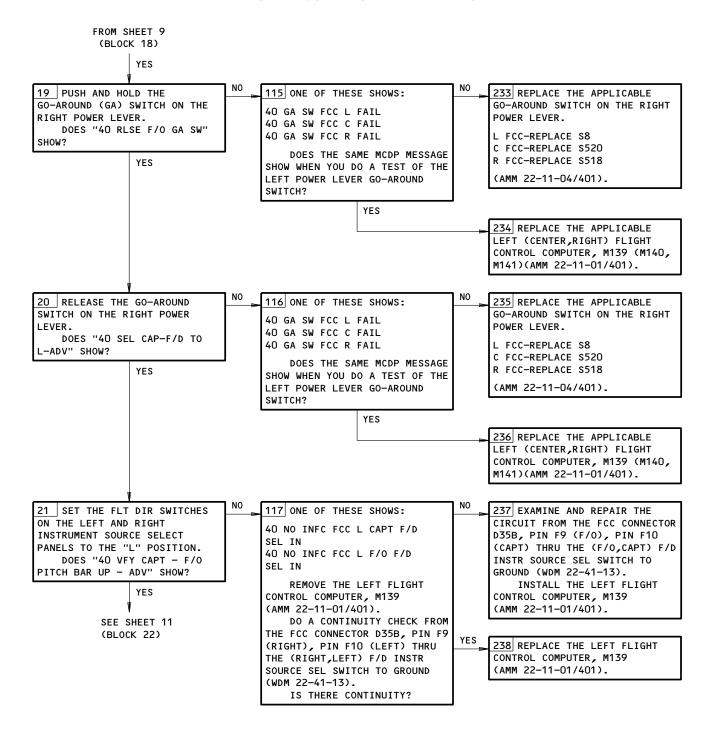


MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 9)

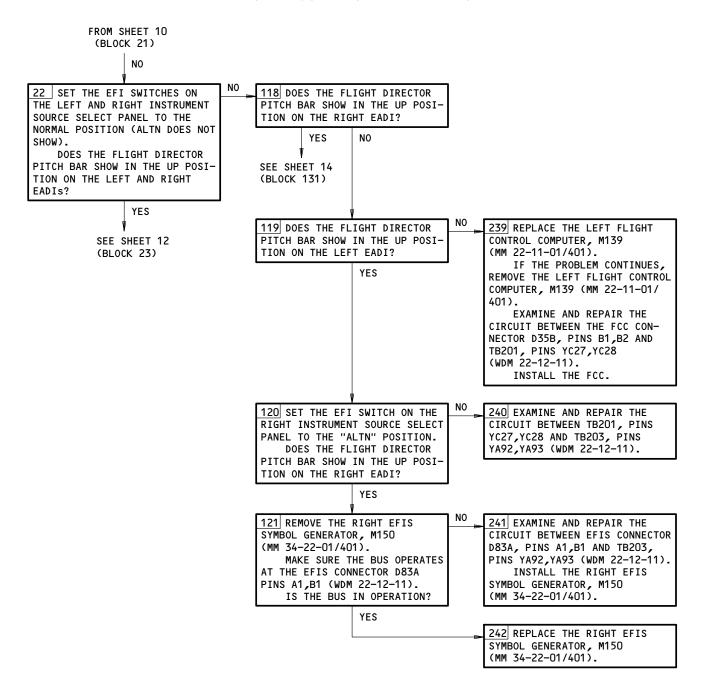
EFFECTIVITY-ALL

22-00-03

14



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

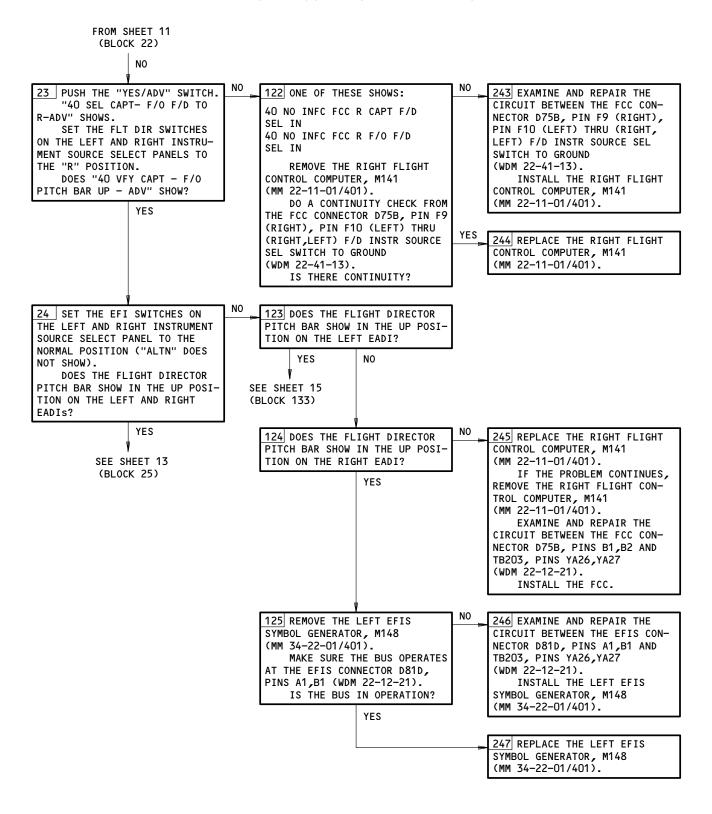


MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 11)

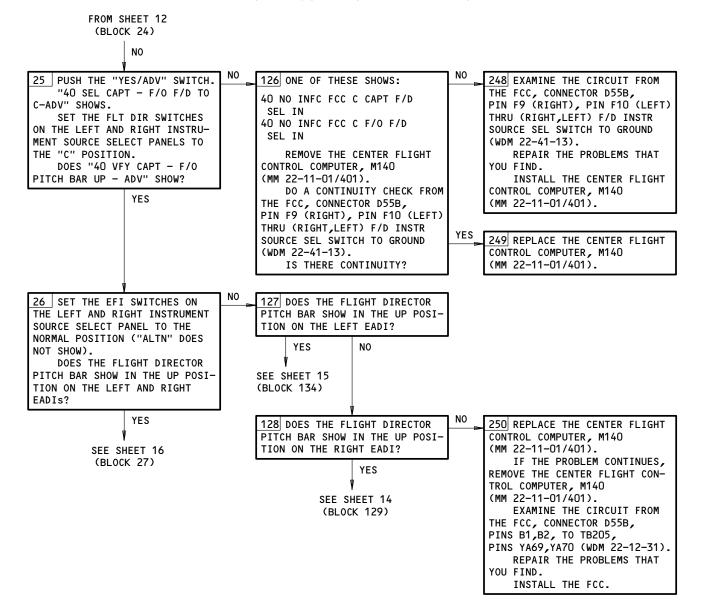
22-00-03

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

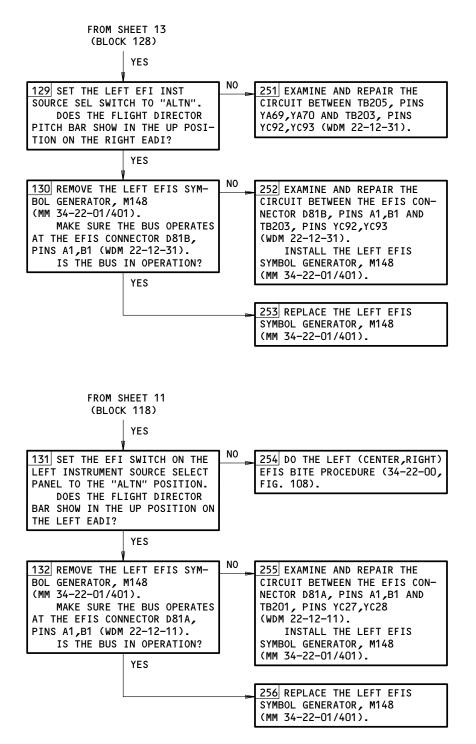


MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 13)

EFFECTIVITY ALL

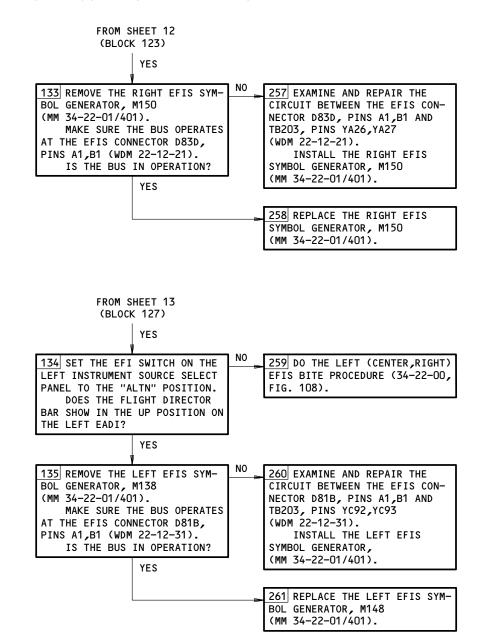
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MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 14)

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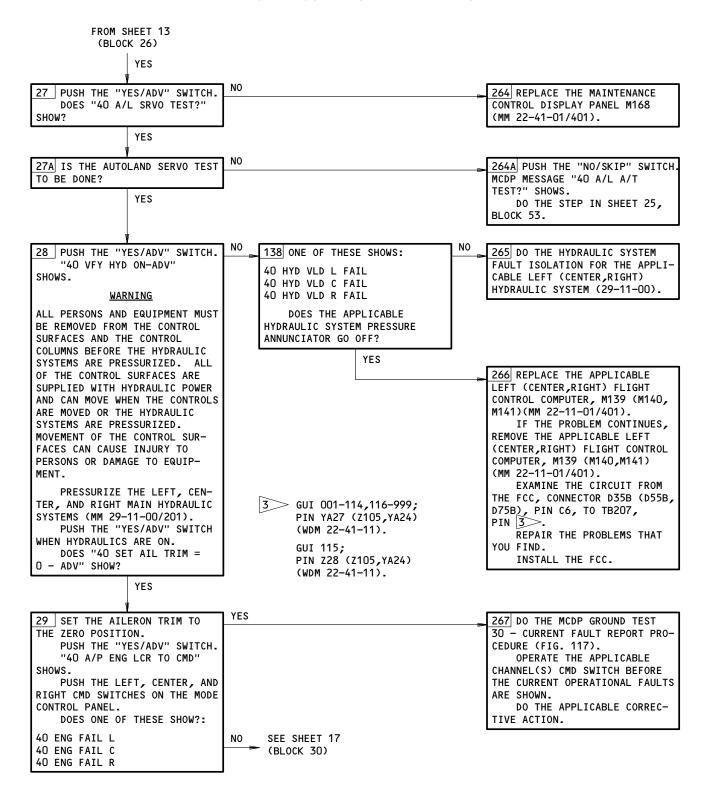


MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 15)

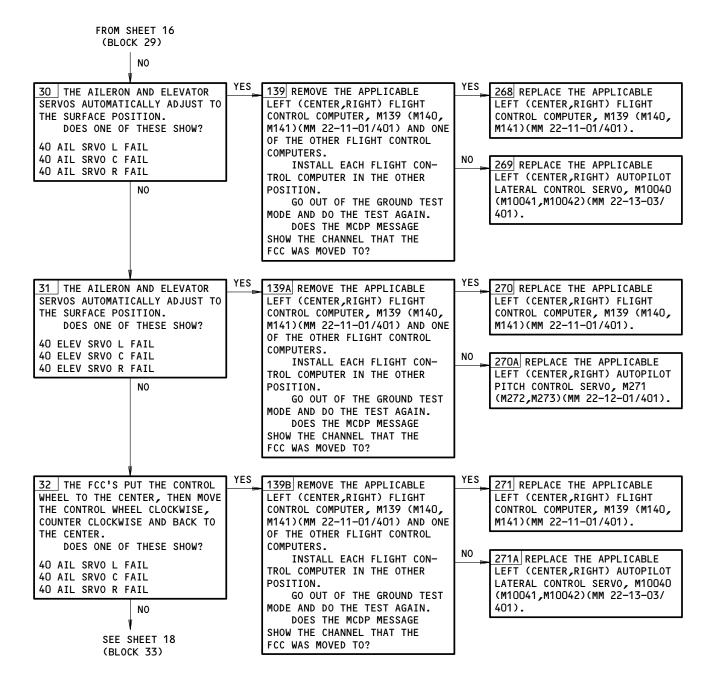
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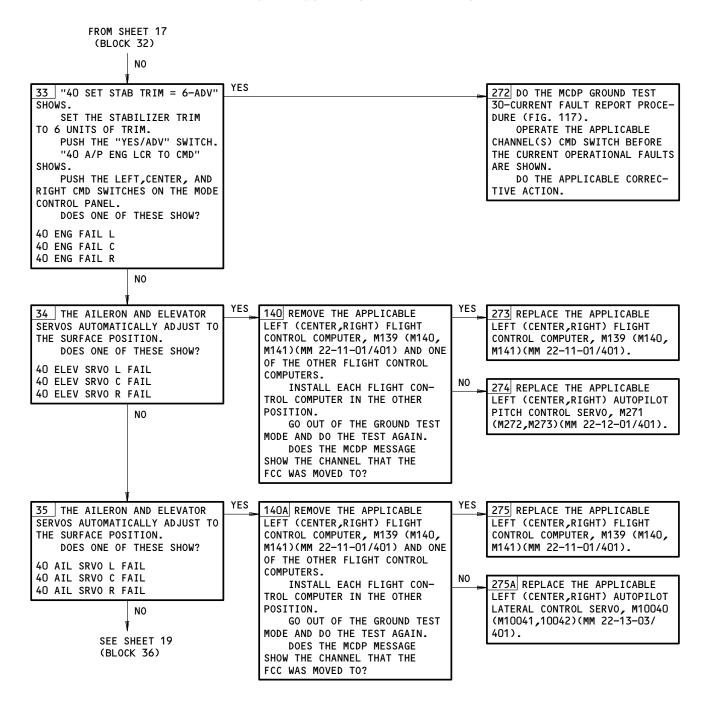
MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 16)



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

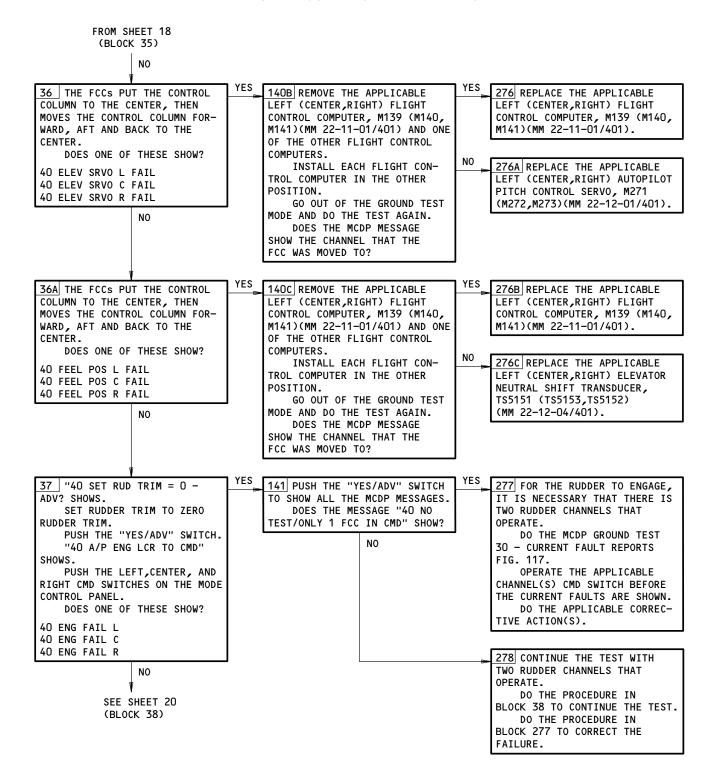
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MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 18)

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

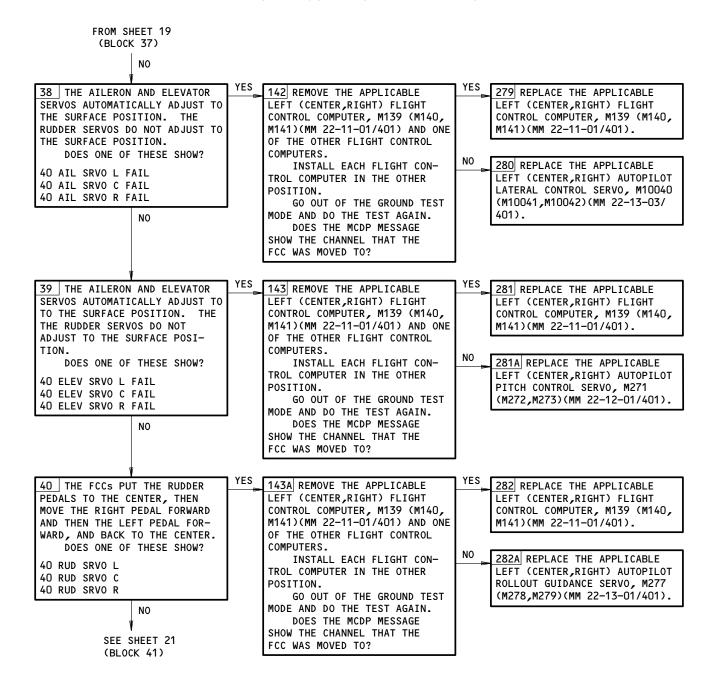
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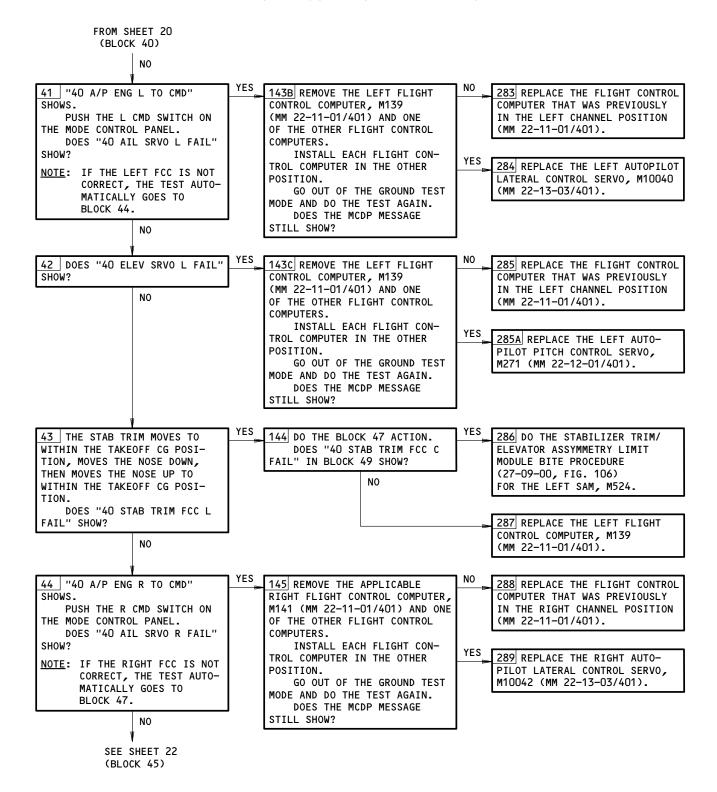
MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 20)

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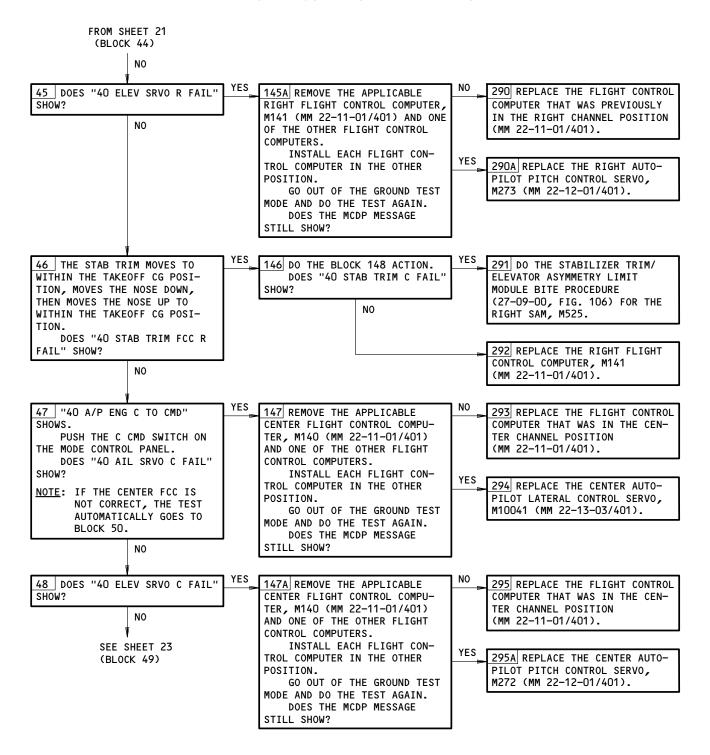
MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 21)

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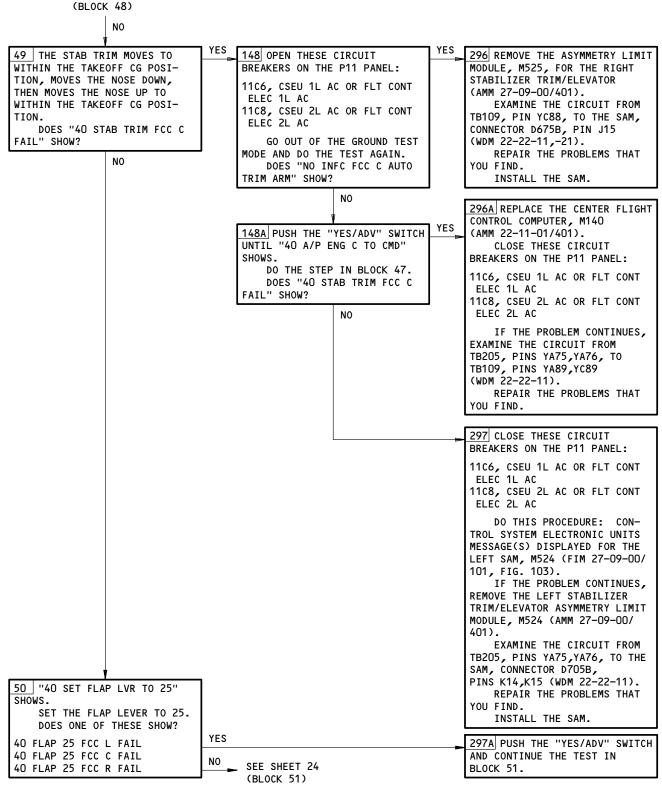
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MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 22)

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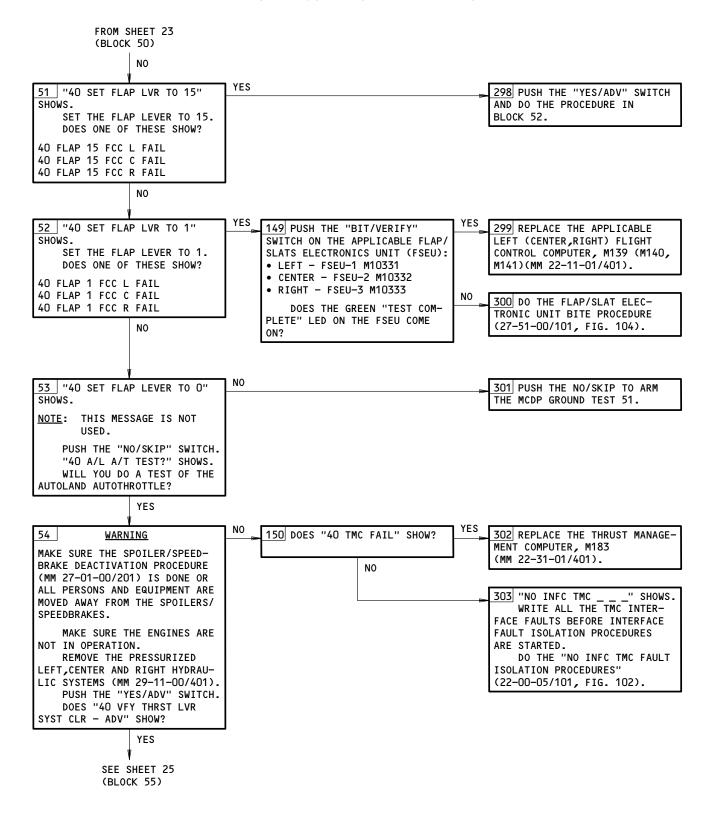


MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 23)

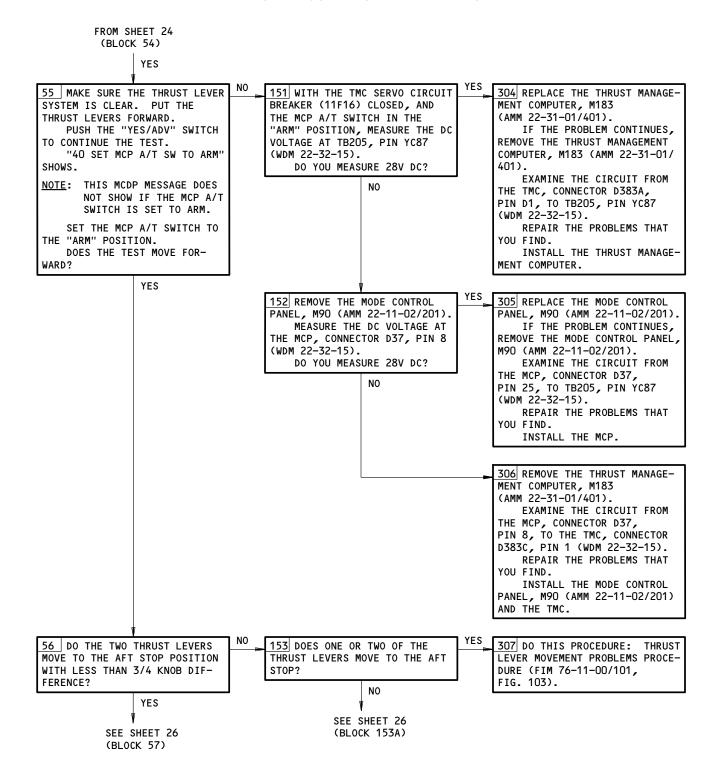
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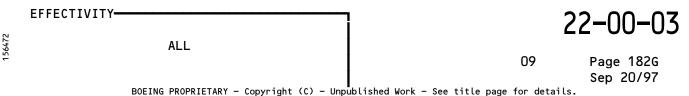
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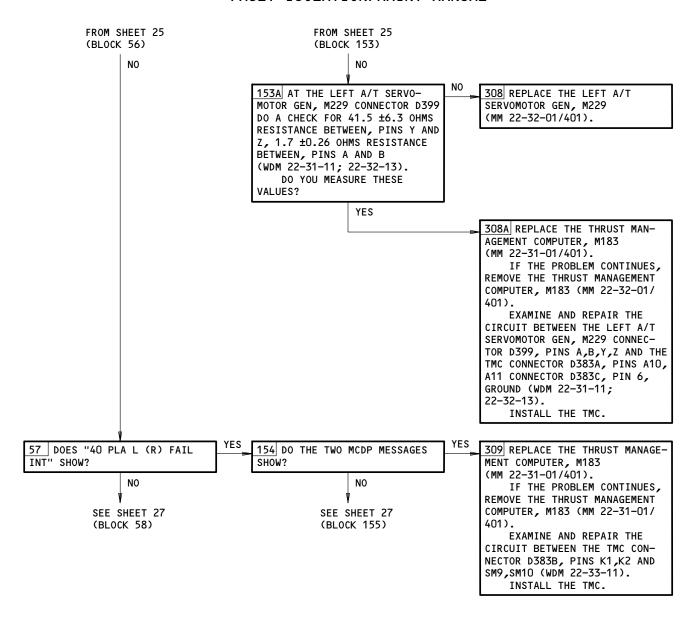


MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 24)



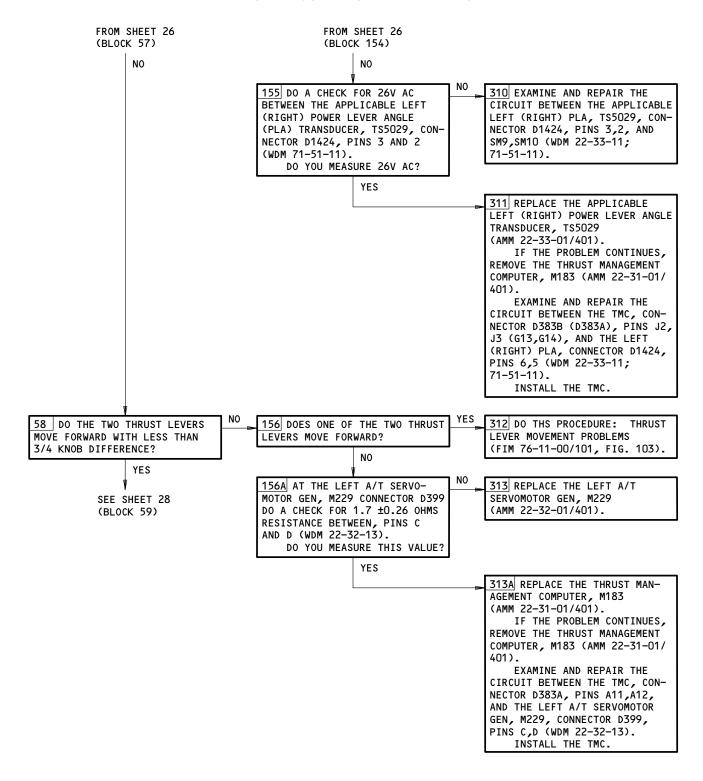
MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 25)





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

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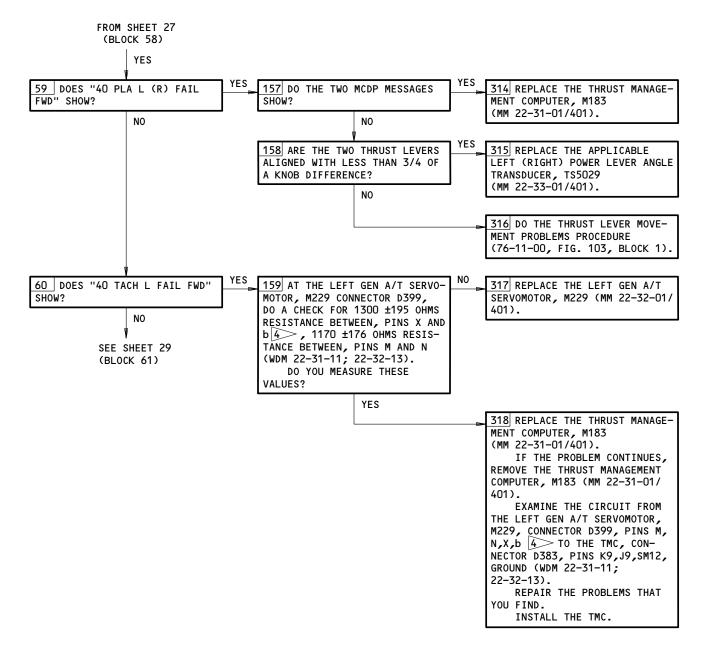
MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 27)

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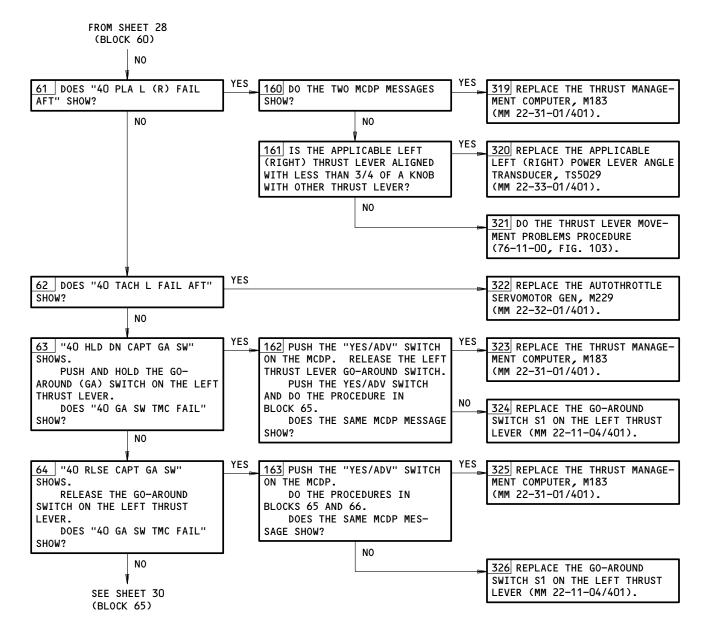




4> ON WIRING DIAGRAMS, "b" SHOWS AS "B-"

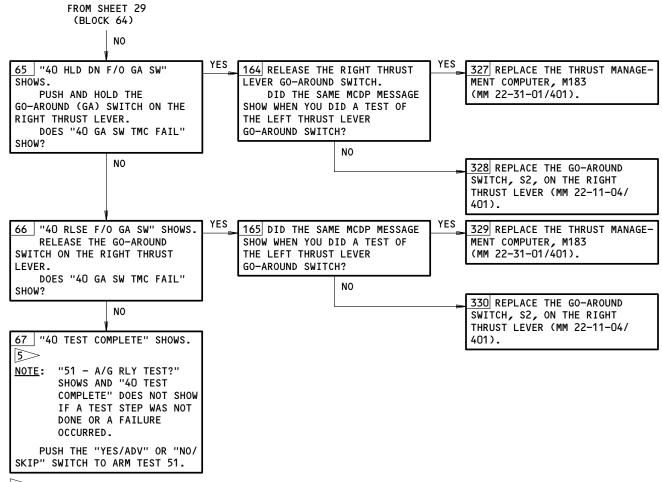
MCDP Ground Test 40 - AUTOLAND Figure 118 (Sheet 28)





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

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

WARNING

DO THE DEACTIVATION PROCEDURE FOR THE SPOILERS (MM 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 CIRCUIT BREAKERS THAT FOLLOW THEN CLOSE THEM WITHIN 25 SECONDS:

- 11C6 CSEU 1L AC OR FLT CONT ELEC 1L AC
 11C8 CSEU 2L AC OR FLT CONT ELEC 2L AC
- 11G17 CSEU 1R AC OR FLT CONT ELEC 1R AC
- 11G27 CSEU 2R AC OR FLT CONT ELEC 2R AC

NOTE: MAKE SURE THE INDICATIONS THAT FOLLOW DO NOT SHOW AFTER YOU OPEN AND THEN CLOSE THE ABOVE CIRCUIT BREAKERS:

"ELEV ASY L ACT" FAULTBALL SET ON A SAM

"ELEV ASYM" SHOWS ON THE EICAS

IF THESE INDICATIONS SHOW, DO THE FAULTBALL RESET (27-09-00, FIG. 106, BLOCK 2) AND THE EICAS MESSAGE ERASE PROCEDURE (31-41-00, FIG. 109).

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

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PREREQUISITES

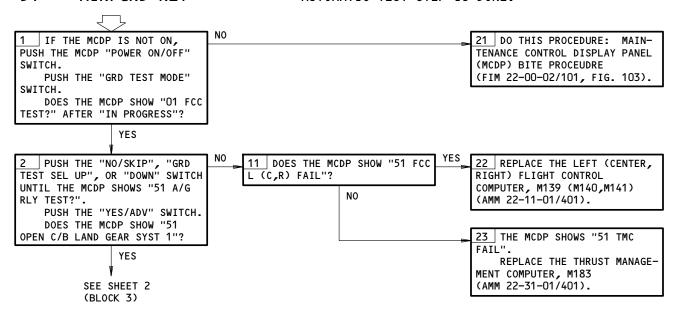
MAKE SURE THESE SYSTEMS WILL OPERATE:
EICAS (AMM 31-41-00/501)(IF A REMOTE MCDP CONTROL
PANEL IS USED)
AIR/GROUND RELAY SYSTEM (AMM 32-09-02/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A17,11E16,11E17,11E18,11E20,11E21,11E34,11E35, 11E36,11F14,11F15,11F16; 1> 11SX

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 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.



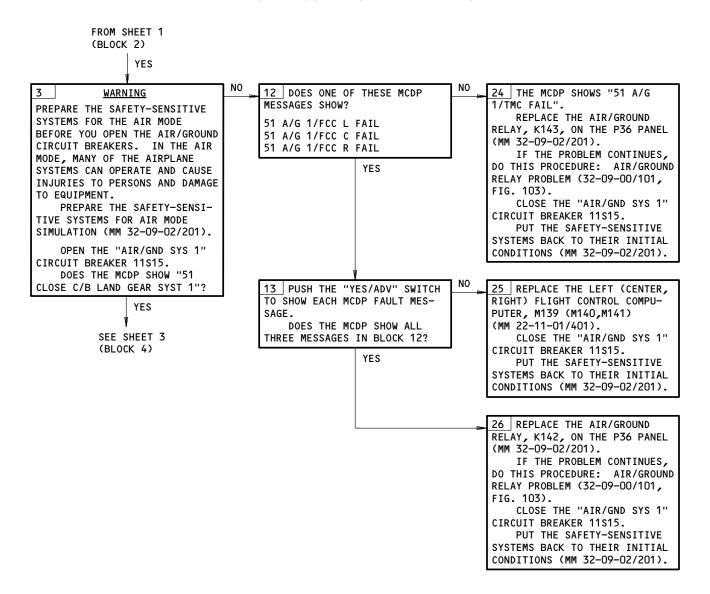
1 WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

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

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(BLOCK 3) YES N0 CLOSE THIS CIRCUIT BREAKER 14 ONE OR MORE OF THESE MCDP 27 REPLACE THE LEFT (CENTER, ON THE P11 PANEL: MESSAGES IS SHOWN: RIGHT) FLIGHT CONTROL COM-PUTER, M139 (M140,M141) 11S15, AIR/GND SYS 1 51 A/G 2/FCC L FAIL (AMM 22-11-01/401). 51 A/G 2/FCC C FAIL THE MCDP SHOWS "51 OPEN CLOSE THIS CIRCUIT BREAKER 51 A/G 2/FCC R FAIL C/B LAND GEAR SYST 2". ON THE P11 PANEL: PUSH THE "YES/ADV" SWITCH OPEN THIS CIRCUIT BREAKER 11S19, AIR/GND SYS 2 ON THE P11 PANEL: TO SHOW EACH MCDP FAULT MES-PUT THE SAFETY-SENSITIVE 11S19, AIR/GND SYS 2 DOES THE MCDP SHOW ALL SYSTEMS BACK TO THEIR INITIAL CONDITIONS (AMM 32-09-02/201). DOES THE MCDP SHOW "51 THREE MESSAGES? CLOSE C/B LAND GEAR SYST 2"? YES YES 28 | REPLACE THE AIR/GROUND RELAY, K202, ON THE P37 PANEL 5 | CLOSE THIS CIRCUIT BREAKER (AMM 32-09-02/201).ON THE P11 PANEL: IF THE PROBLEM CONTINUES, DO THIS PROCEDURE: AIR/GROUND 11S19, AIR/GND SYS 2 RELAY PROBLEM (FIM 32-09-00/ THE MCDP SHOWS "51 TEST 101, FIG. 103). CLOSE THIS CIRCUIT BREAKER COMPLETE". PUSH THE "YES/ADV" OR "NO/ ON THE P11 PANEL: SKIP" SWITCH TO STOP THE TEST 11S19, AIR/GND SYS 2 AND TO ARM TEST 52. PUT THE SAFETY-SENSITIVE PUT THE SAFETY-SENSITIVE SYSTEMS BACK TO THEIR INITIAL SYSTEMS BACK TO THEIR INITIAL CONDITIONS (AMM 32-09-02/201). CONDITIONS (AMM 32-09-02/201).

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

ALL

FROM SHEET 2

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:

AIR CONDITIONING (AMM 21-00-00/201)

SPOILER SPEEDBRAKE CONTROL SYSTEM (AMM 27-61-00/201)

WING THERMAL ANTI-ICING (AMM 30-11-00/501)

ENGINE INLET THERMAL ANTI-ICING (AMM 30-21-00/501)

EICAS (AMM 31-41-00/501)(IF A REMOTE MCDP CONTROL

PANEL IS USED)

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

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

PNEUMATIC (AMM 36-00-00/201)

AIR SUPPLY DISTRIBUTION SYSTEM (AMM 36-11-00/501)

THRUST REVERSER SYSTEM (AMM 78-31-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F14,11F15,11F16; 1>> 11SX

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

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

WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

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MCDP GROUND TEST 52 - TMC RLY/SW

- SET THESE SWITCHES AS FOLLOWS:
- 1. SET THE L AND R PACK CONTROLS TO "OFF" ON THE AIR CONDITIONING CONTROL PANEL, M10193 (ON THE P5 PANEL).
- 2. SET THE ISOLATION VALVE SWITCH TO OPEN (THE BAR ON THE SWITCH SHOWS) ON THE BLEED AIR CONTROL PANEL, M10259 (ON THE P5 PANEL).
- 3. SET THE WING ANTI-ICE AND THE ENG L AND R SWITCHES TO OFF ("ON" DOES NOT SHOW) ON THE WING & ENGINE ANTI-ICE PANEL, M10397 (ON THE P5 PANEL).

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 (AMM 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).

WARNING

DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPER-ATION OF THE THRUST REVERSER. ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

DO THIS PROCEDURE: THRUST REVERSER DEACTIVATION FOR GROUND MAINTENANCE (AMM 78-31-00/201).

PRESSURIZE THE PNEUMATIC SYSTEM (AMM 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" SHOWS?

YES

SEE SHEET 3 (BLOCK 2)

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

- DO THE ACTIVATION PROCEDURE FOR THE THRUST REVERSER (AMM 78-31-00/201)
- DO THE ACTIVATION PROCEDURE FOR THE SPOILERS IF YOU DID THE DEACTIVATION PROCEDURE (AMM 27-61-00/201).

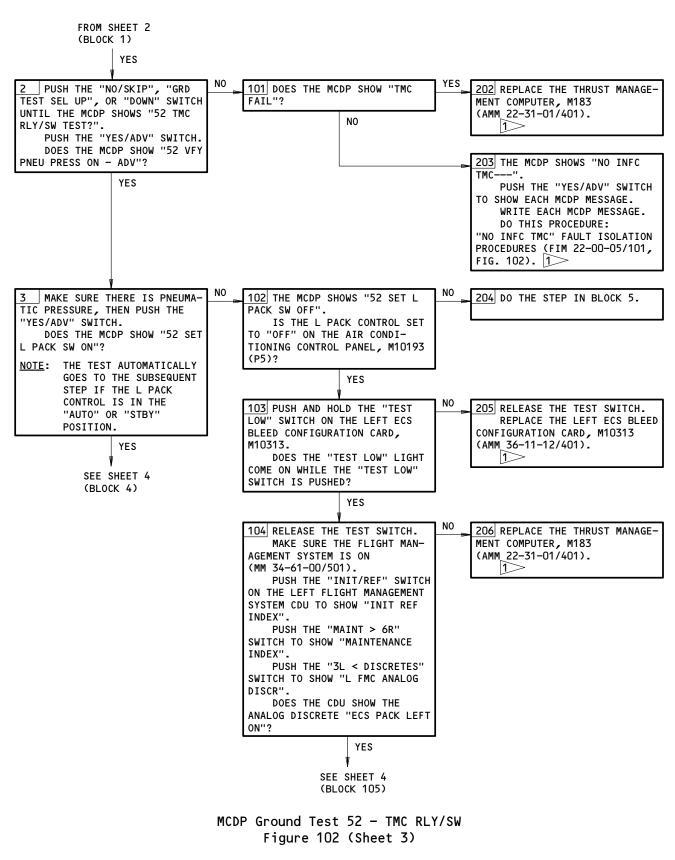
201 DO THIS PROCEDURE: MAIN-TENANCE CONTROL DISPLAY PANEL (MCDP) BITE PROCEDURE (FIM 22-00-02/101, FIG. 103).

1>>

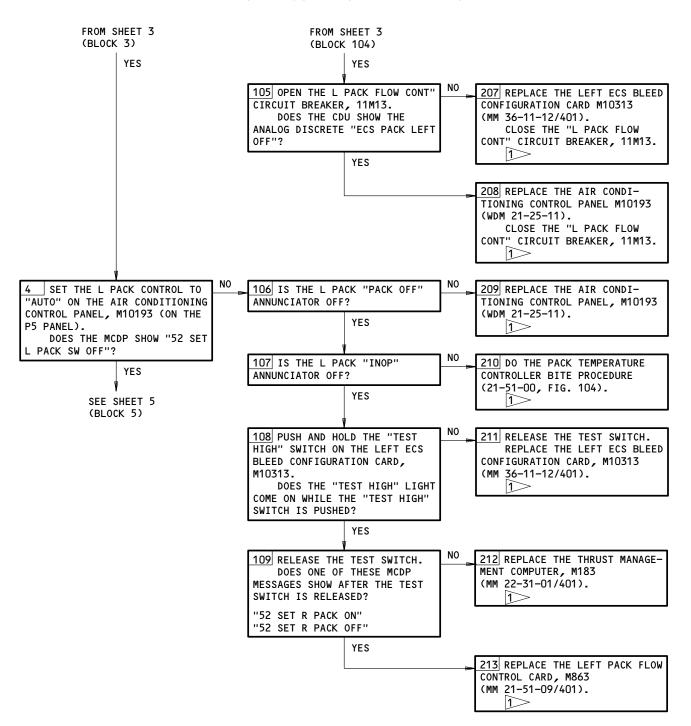
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 2)

EFFECTIVITY-

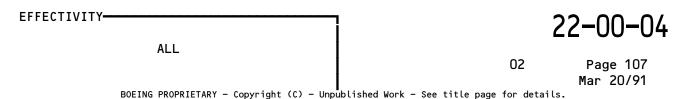
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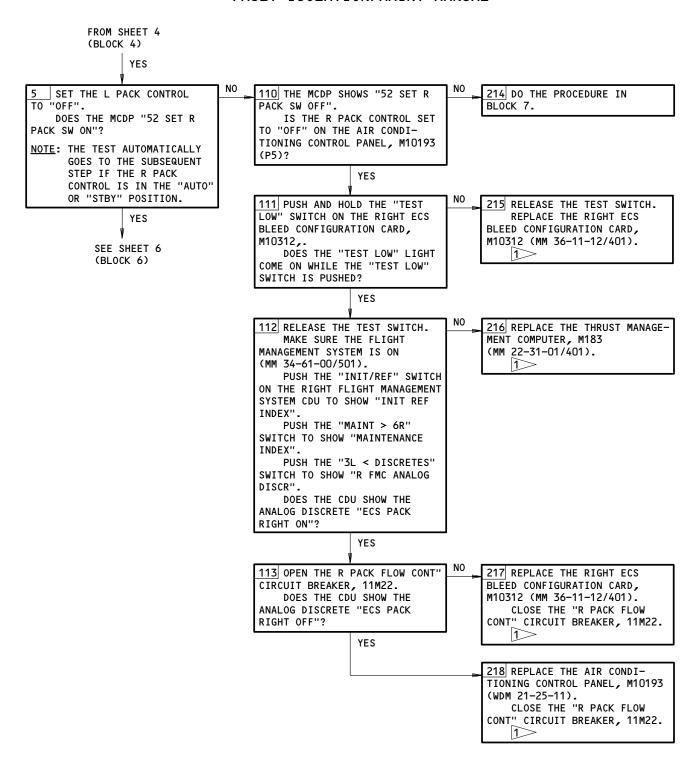
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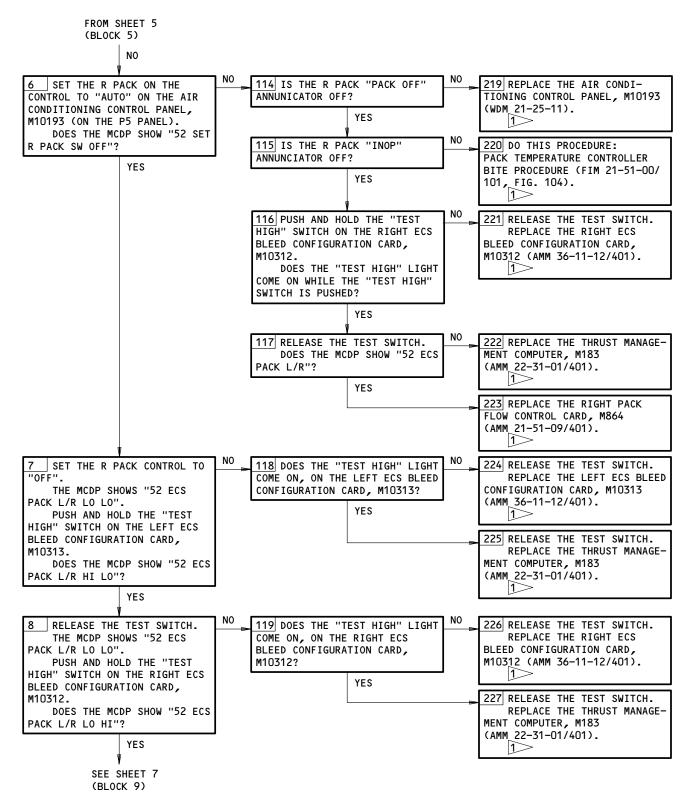
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 4)



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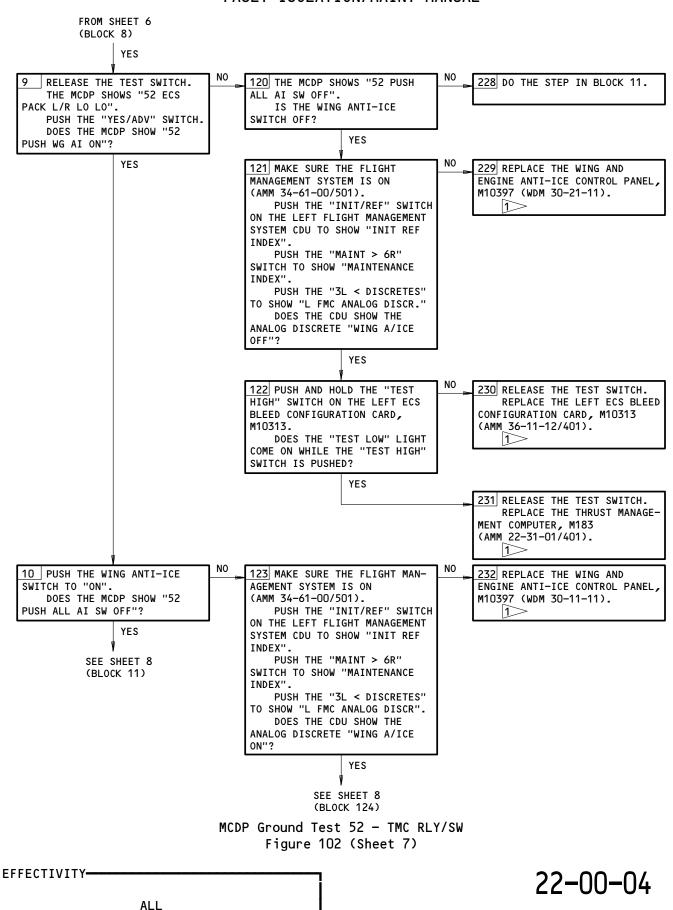


MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 5)



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

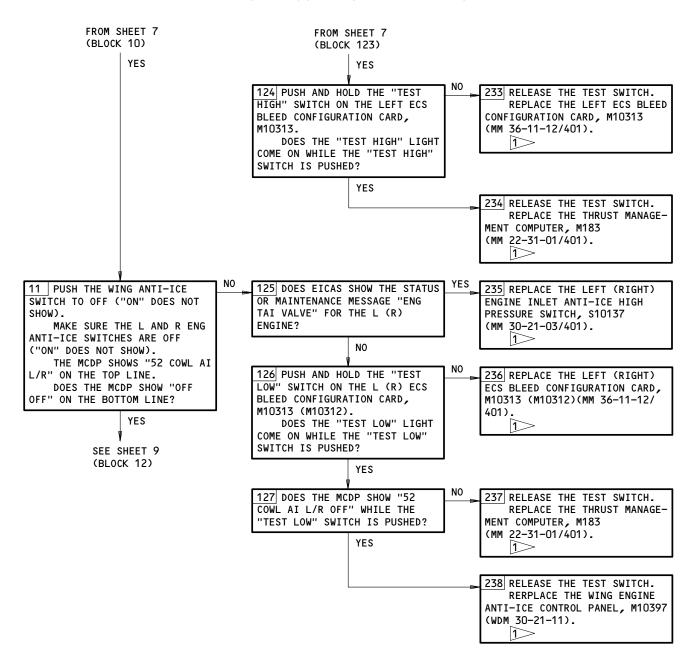
FAULT ISOLATION/MAINT MANUAL



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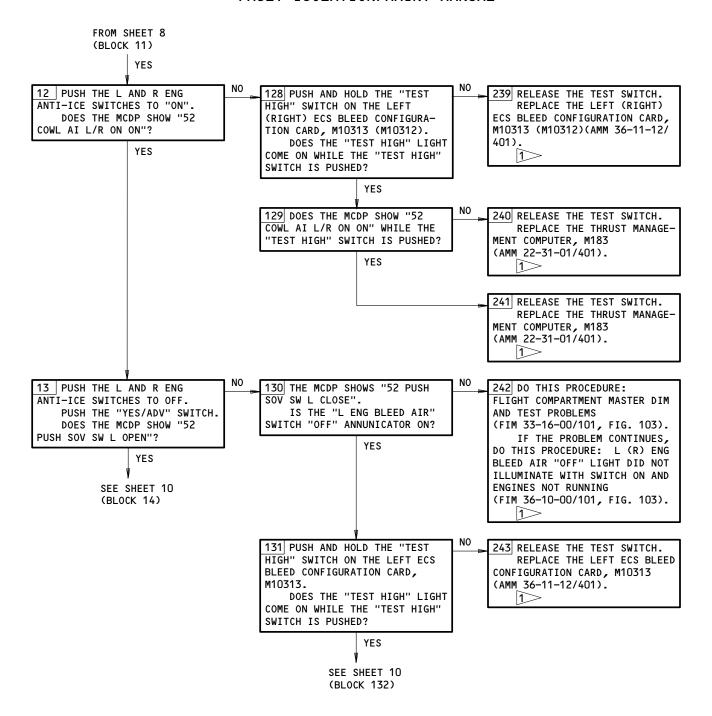
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 8)

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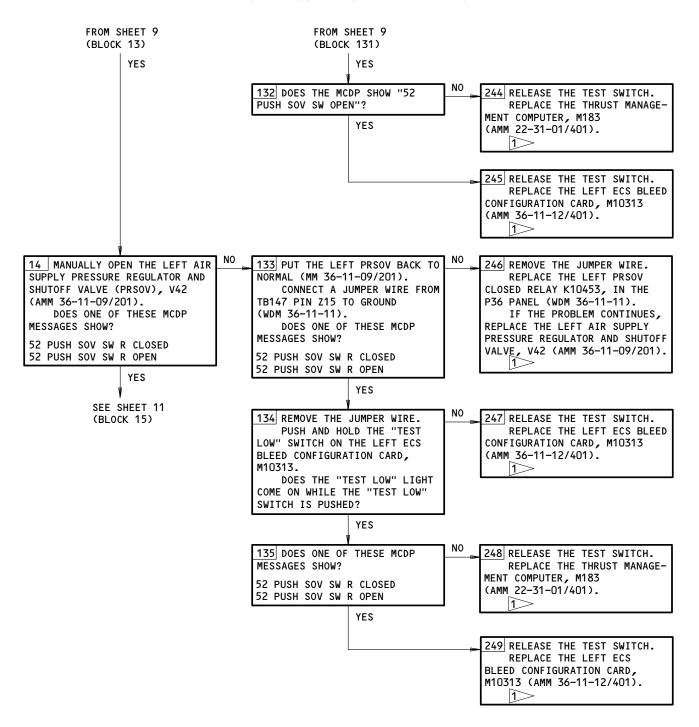
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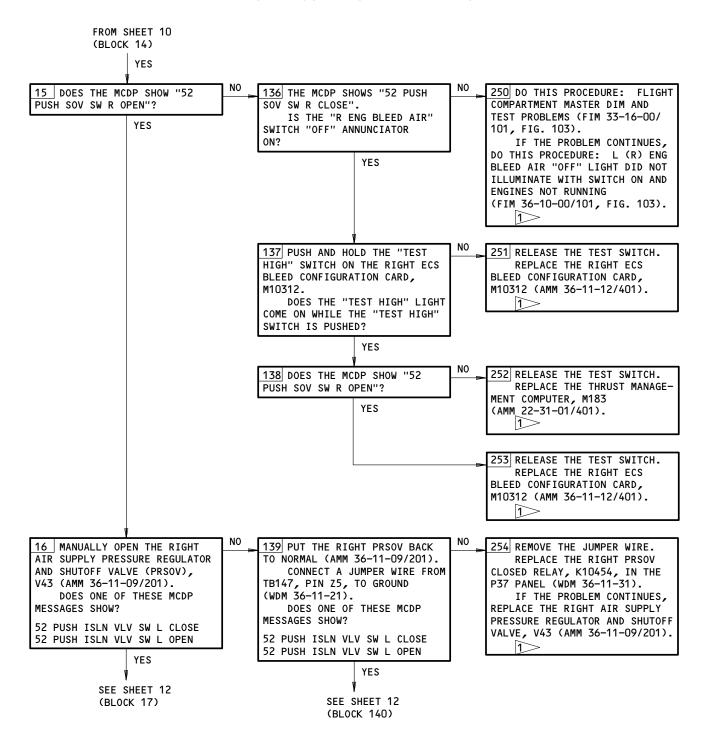


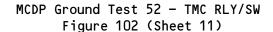
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 9)

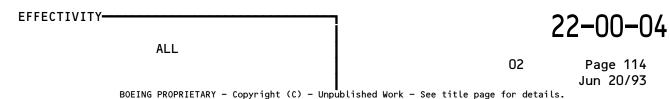


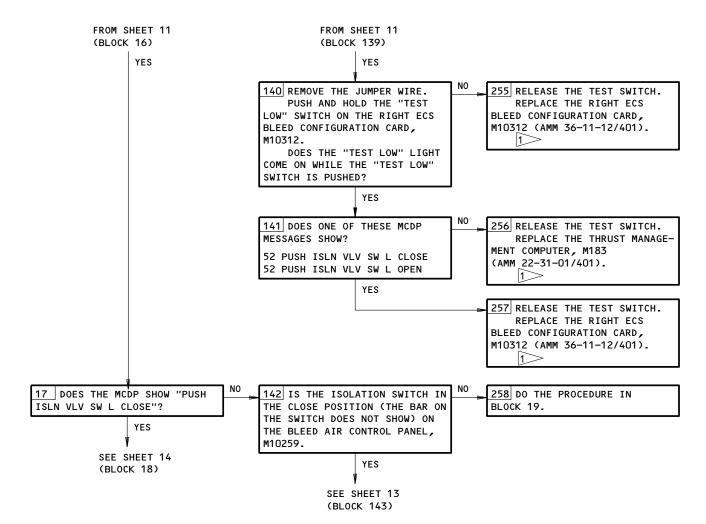
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 10)

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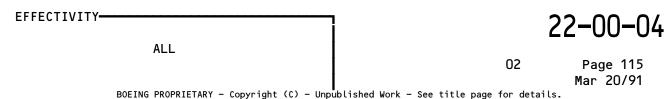


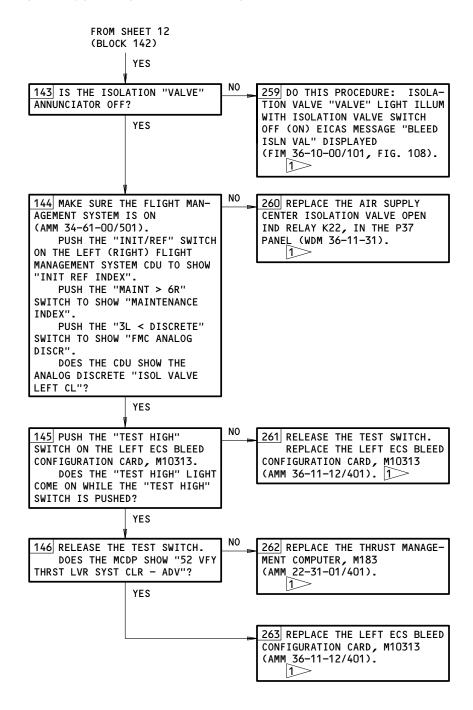






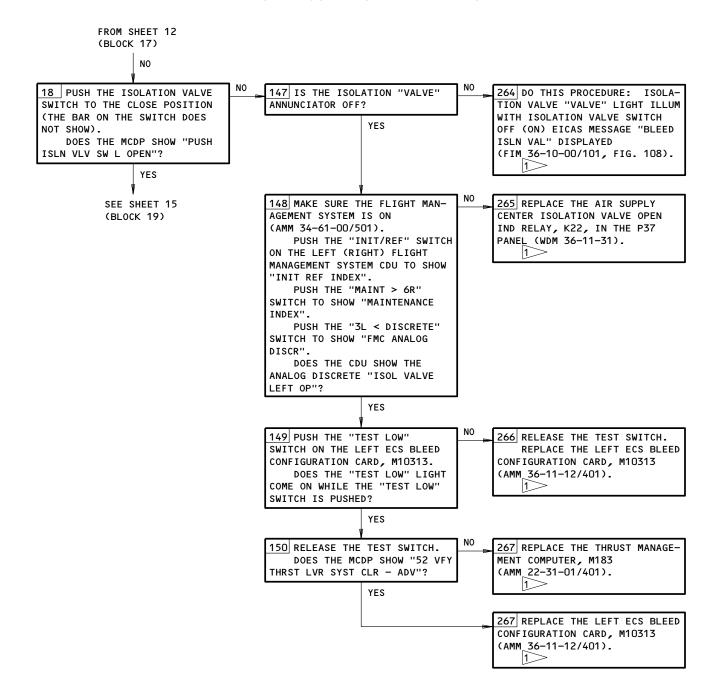
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 12)





MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 13)

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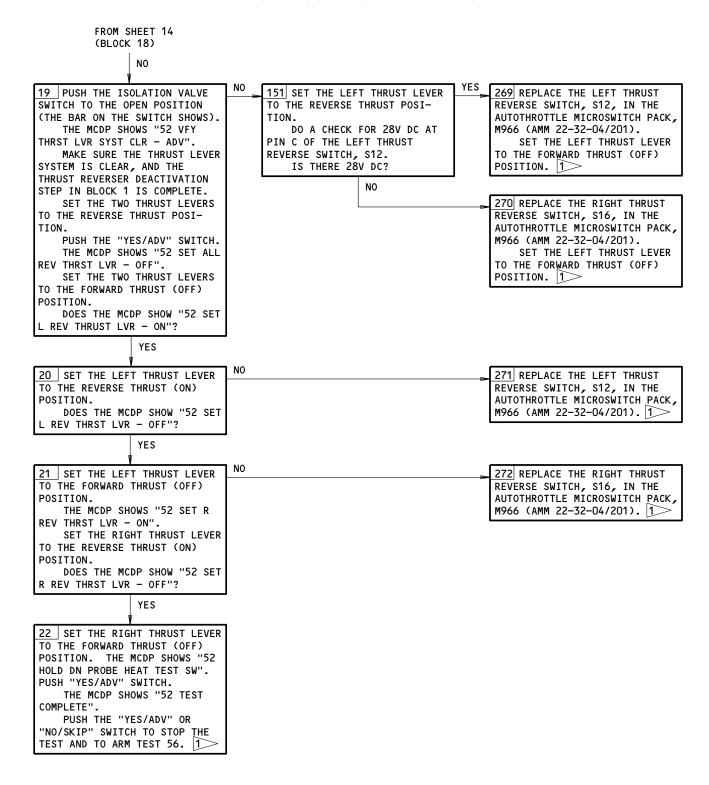
MCDP Ground Test 52 - TMC RLY/SW Figure 102 (Sheet 14)

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

PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:

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

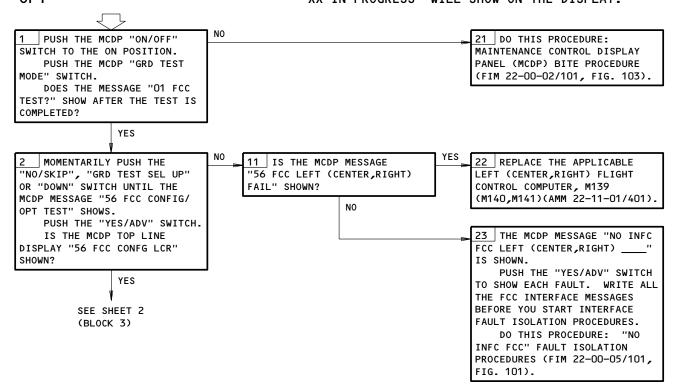
AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11E16,11E17,11E18,11E20,11E21,11E34,11E35,11E36; A > 11SX

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

MCDP GROUND TEST
56 - "FCC CONFIG/
OPT"

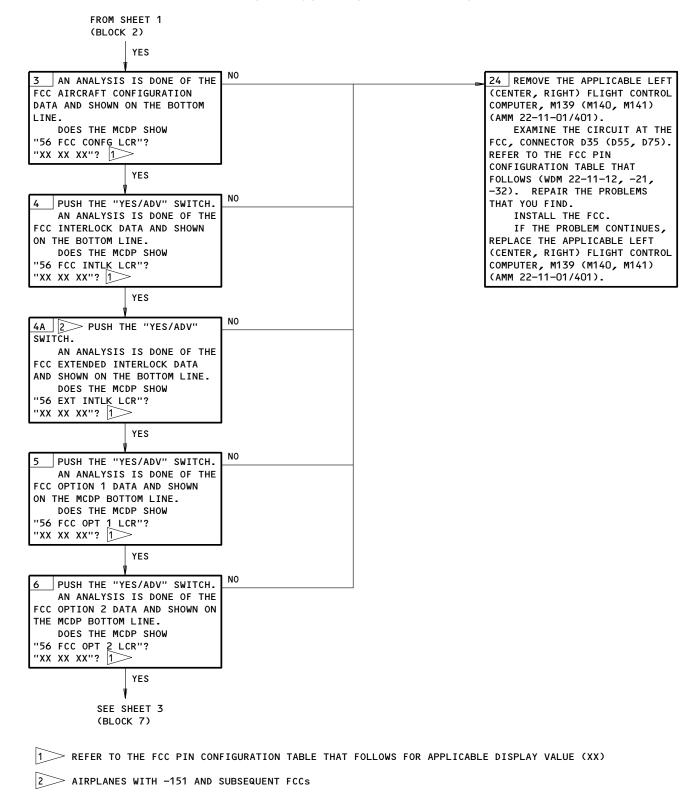
NOTE: WHEN AN AUTOMATIC TEST STEP IS BEING DONE, "XX IN PROGRESS" WILL SHOW ON THE DISPLAY.



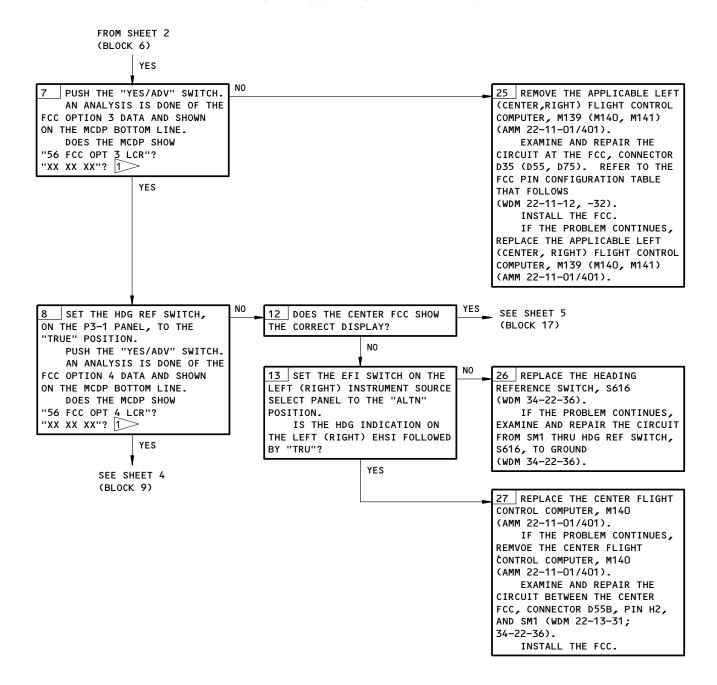
WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

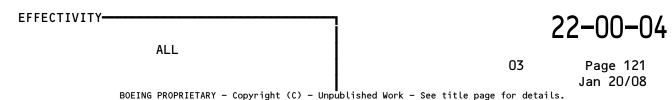
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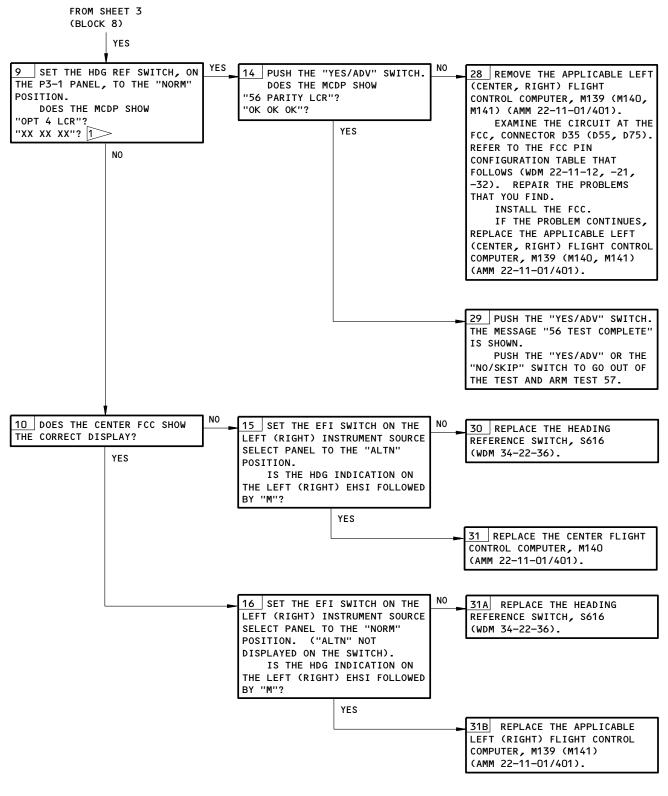


MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 2)

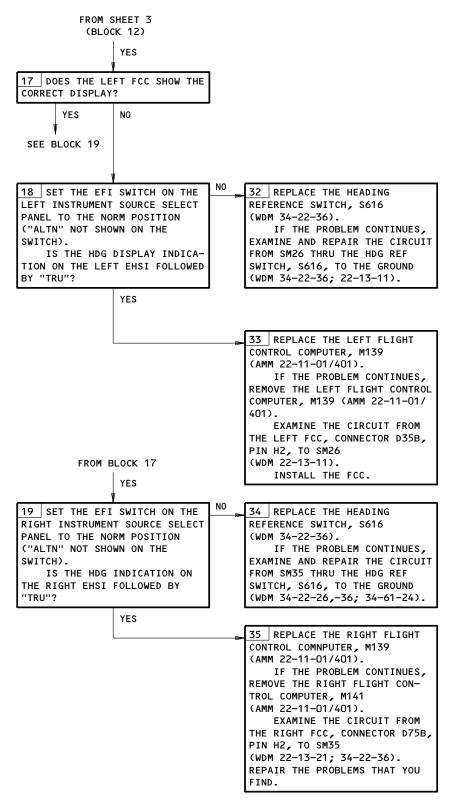


MCDP Ground Test 56 - FCC CONFIG/OPT Figure 103 (Sheet 3)





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



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

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FAULT ISOLATION/MAINT MANUAL

	FCC PIN CO	NFIGURATION				
OPTION DESCRIPTION		TO INSERT-PIN	PIN CONNECTION CODE 9 1 = CONN O = OPEN	MCDP TEST 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	SEE WDM 22-11-12, 22-11-22, 22-11-32, OR WDM	SEE BINARY TABLE 9		
FCC INTERLOCK - PIN 1 PIN 2 PIN 3 PIN 4 PIN 5	B-C11 -F11 -D12 -F12 -H12	B-J8 -K9 -D15 -K7 -J15	22-11-13, 22-11-23, 22-11-33			
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				
FCC OPTION 2 A/P MODE ENGAGE DOUBLE/SINGLE PUSH 1 GS CAP INHIBIT FULL TIME NO LAND METHOD 1/METHOD 2 AUTOLAND STATUS ANNUNCIATOR LATERAL COMMAND ENGAGE	B-A3 -H13 -H13 -K13 -G13 -C8 -C10	B-E4 -J14 -J14 -K14 -H14 -E8 -C14				
FCC OPTION 3 4 F/D BAR BIAS/CWS INHIBIT FULL TIME F/D F/D AUTOMATIC ON F/D DISPLAY ON ROLLOUT OPT SPARE 5 OPT SPARE 6	B-J2 -D3 -A4 -D4 -G1 -H1	B-J4 -K4 A-D4 B-H4 A-G2 -H2				
FCC OPTION 3 CWS INHIBIT FULL TIME F/D F/D AUTOMATIC ON ILS ANOM DLY A/P ENG TO/GA OPT SYS ARCHITECTURE	B-J2 -D3 -A4 -D4 -G1 -H1	B-J4 -K4 A-D4 B-H4 A-G2 -H2				

1>>	PIN GROUNDED - SINGLE PUSH
2	PIN GROUNDED - METHOD 2
3	CONNECTED TO THE MAG/TRUE HDG SWITCH ON THE P3-1 PANEL; PIN GROUNDED - TRUE HEADING, PIN OPEN - MAG HEADING
4	AIRPLANES WITH FCC -103 THRU -109
5>>	AIRPLANES WITH FCC -133 THRU -999

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

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OPTION DESCRIPTION	BARRIER GROUN	ND CONNECTIONS	PIN CONNECTION CODE 9	
	INSERT-PIN 1	O INSERT-PIN	1 = CONN O = OPEN	MCDP TEST 56 READOUT
FCC OPTION 4 4 6 OPT SPARE 7 MAG/TRUE IN OPT SPARE 10	B-G2 -H2 -D7	A-G4 3 B-G4	SEE WDM 22-11-12, 22-11-22, 22-11-32, OR 22-11-13,	SEE BINARY TABLE 9
OPT SPARE 13 FCC OPTION 4 5 6	-G10	A-G8	22-11-23,	
GS RELAY STATUS MAG/TRUE IN	B-G2 -H2	A-G4 3		
LOC RELAY STATUS EO A/L INHIBIT SINGLE SOURCE A/P	−D7 −G10 −J10	B-G4 A-G8 -E10		
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		7>8

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

P/N	PIN CONNECTION CODES (BINARY-LOW AT TOP)										
1	0	1	0	1	0	1	0	1	0	0	0
2	0	0	1	1	0	0	1	1	0	0	0
3	0	0	0	0	1	1	1	1	0	0	0
4	0	0	0	0	0	0	0	0	1	0	0
5	0	0	0	0	0	0	0	0	0	1	0
6	0	0	0	0	0	0	0	0	0	0	1
MCDP READ OUT "XX"	00	01	02	03	04	05	06	07	08	16	32

BINARY TABLE 9>>

6 FCC's -103 THRU -109;

FCC OPTION 4 GROUP IS NOT IN THE PARITY CHECK

FCC's -133 THRU -999;

GS RELAY STATUS, MAG/TRUE IN AND LOG RELAY STATUS ARE NOT INCLUDED IN THE PARITY CHECK

7 FCC's -103 THRU -109;

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

FCC's -133 THRU -999;

THE PARITY SHOWS ON THE DISPLAY. IF THE PARITY IS INCORRECT, THE STATUS WILL BE SHOWN AS "ADD" OR "DEL" FOR THE ASSOCIATED CHANNEL.

> IF THE PARITY IS INCORRECT, CHECK THE CH IDENT PINS.

> FIND THE PIN CONNECTION (CODE 0 OR 1) FROM WDM 22-11-XX FOR EACH PIN IN THE SAME ORDER AS THE "BARRIER GROUND CONNECTIONS" COLUMN SHOWN ON THE FCC PIN CONFIGURATION TABLE. USE THE BINARY TABLE TO FIND THE MCDP READOUT VALVE "XX".

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

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PREREQUISITES

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

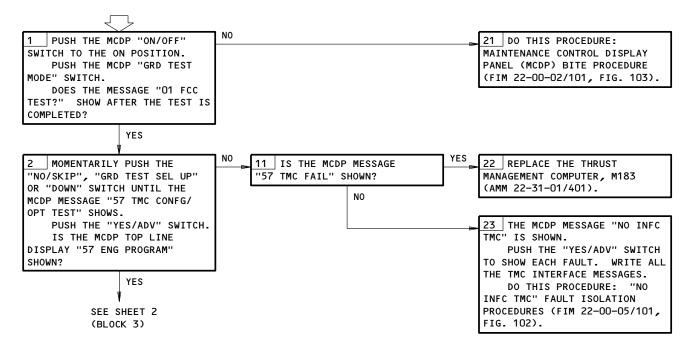
AIR/GROUND RELAYS (AMM 32-09-02/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F14,11F15,11F16; B 11SX

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

MCDP GROUND TEST 57 - "TMC CONFIG/ OPT"

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



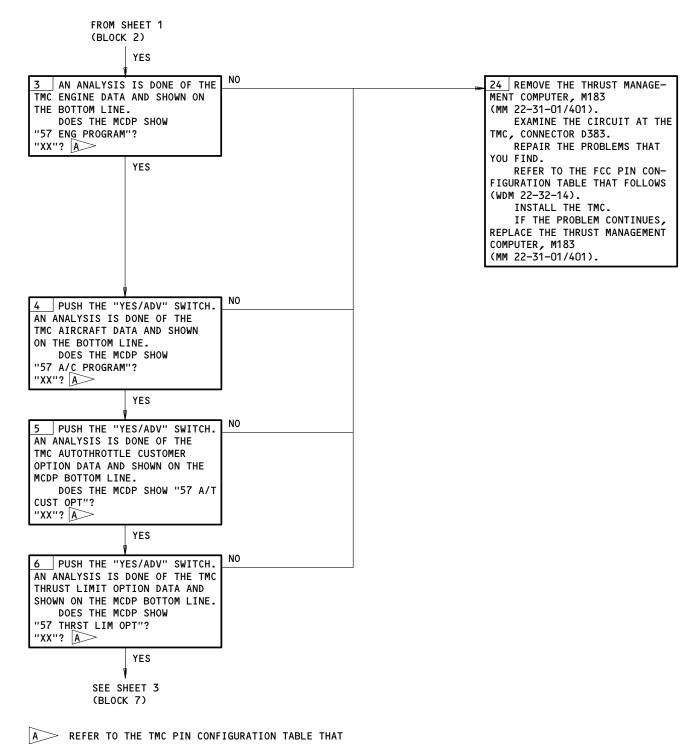
WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

ALL

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FOLLOWS FOR THE APPLICABLE DISPLAY VALUE (XX)

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

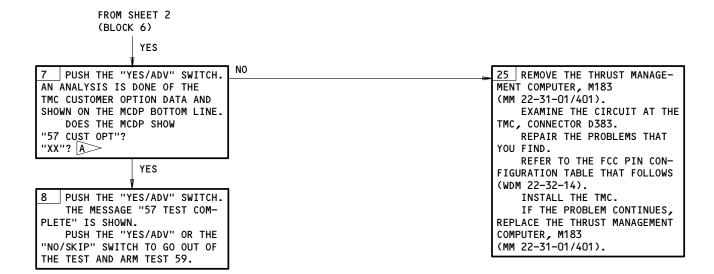
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MCDP Ground Test 57 - TMC CONFIG/OPT Figure 104 (Sheet 3)

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	PLUG	PIN 5	PIN	CONNECTIO	ON CODE 5	
CONFIGURATION/OPTION	NUMBER	NUMBER	GND=0	OPEN=1	+28V DC=1	MCDP READOUT 5
ENGINE PROGRAM 1 2 3 4	D383B	D10 F6 G11 C1		WDM 22-32- PIN CONNEC		57 ENG PROGRAM
5	D383A	E15				
AIRCRAFT PROGRAM 1 2 3 4	D383B D383A	F2 F4 B11 E14				57 A/C PROGRAM
AUTOTHROTTLE CUSTOMER OPTION 1 2 3 4	D383A	J10 H6 F3 J12				57 A/T CUST OPT
THRUST LIMIT OPTION 1 2 3 4	D383A	F7 F9 K5 H10				57 THRUST LIM OPT
CUSTOMER OPTION 1 5 4 3 2 1	D383A	C11 D11 G8 D10 D12				57 CUST OPT
PARITY THE SUM OF THE GROUND PINS (TOGETHER WITH PARITY PINS) MUST BE EQUAL TO AN ODD NUMBER.	D383A	D13 3 H15 2				4

TMC PIN CONFIGURATION TABLE

1 IS NOT COVERED BY PARITY	
2 PARITY FOR THE AIRCRAFT PROGRAM AND THE AUTOTHROTTLI	E CUSTOMER OPTION
3 PARITY FOR THE ENGINE PROGRAM AND THE THRUST LIMIT (OPTION
4> "NO INFC TMC SHELF" WILL SHOW IF THE PARITY IS NOT	CORRECT

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

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P/N	PIN CONNECTION CODES (BINARY-LOW AT TOP)										
1	0	1	0	1	0	1	0	1	0	0	0
2	0	0	1	1	0	0	1	1	0	0	0
3	0	0	0	0	1	1	1	1	0	0	0
4	0	0	0	0	0	0	0	0	1	0	1
5	0	0	0	0	0	0	0	0	0	1	1
MCDP											
READ OUT	00	01	02	03	04	05	06	07	08	16	24

BINARY TABLE 5

FIND THE PIN CONNECTION (CODE O OR 1) FROM WDM 22-32-14 FOR EACH PIN IN THE SAME ORDER AS THE "PIN NUMBER" COLUMN SHOWN ON THE TMC PIN CONFIGURATION TABLE. USE THE BINARY TABLE TO FIND THE MCDP READOUT DISPLAY VALUE "XX".

MCDP Ground Test 57 - TMC CONFIG/OPT Figure 104 (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 USING 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; 1>11S3; 2>11S6

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

MCDP GROUND TEST 59 - "FCC INSTR"

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

1 SET THE EFI SWITCHES ON THE LEFT AND RIGHT INSTRUMENT SOURCE SELECT PANELS TO THE NORM POSITION ("ALTN" NOT SHOWN ON THE SWITCH). AIRPLANES WITH ROTARY FMC SOURCE SELECT SWITCHES;

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. PUSH THE MCDP "ON/OFF"

SWITCH TO THE ON POSITION. PUSH THE MCDP "GRD TEST

MODE" SWITCH. DOES MCDP DISPLAY "01 FCC TEST?" AFTER "IN PROGRESS" TESTS COMPLETED?

YFS

AIRPLANES WITH ROTARY FMC

YES

SEE SHEET 2 (BLOCK 2)

SOURCE SELECT SWITCHES; HAVE

FAULTS BEEN WRITTEN DOWN FROM

ALL THE FCC AND TMC INFC

30 - CURRENT FAULT REPORT?

THE MCDP GROUND TEST

1A AIRPLANES WITH PUSHBUTTON 100 DO THIS PROCEDURE: MCDP GROUND TEST 30-CURRENT FMC SOURCE SELECT SWITCHES; FAULT REPORT

> (FIM 22-00-03/101, FIG. 117). LOOK AT AND WRITE DOWN ALL THE FCC AND TMC INFC FAULTS. WERE ANY OF THESE INFC FAULTS SHOWN?

201A GET OUT OF THE MCDP GROUND TEST 30-CURRENT FAULT REPORT.

GO TO BLOCK 2.

201 DO THIS PROCEDURE:

PANEL (MCDP) BITE FAULT

ISOLATION PROCEDURE

MAINTENANCE CONTROL DISPLAY

(FIM 22-00-02/101, FIG. 103).

"NO INFC FCC L FMC BUS IN" "NO INFC FCC C FMC BUS IN" "NO INFC FCC R FMC BUS IN" 201B DO THE APPLICABLE CORRECTION IN THE NO INFC FCC FAULT ISOLATION PROCEDURE (FIM 22-00-05/101 FIG. 101, TABLE 101).

GO TO BLOCK 2.

> GUI 001-114, 116-999

> GUI 115

GO TO BLOCK 2.

> AIRPLANES WITH PUSHBUTTON FMC SOURCE SELECT SWITCHES

YFS

4 AIRPLANES WITH ROTARY FMC SOURCE SELECT SWITCHES

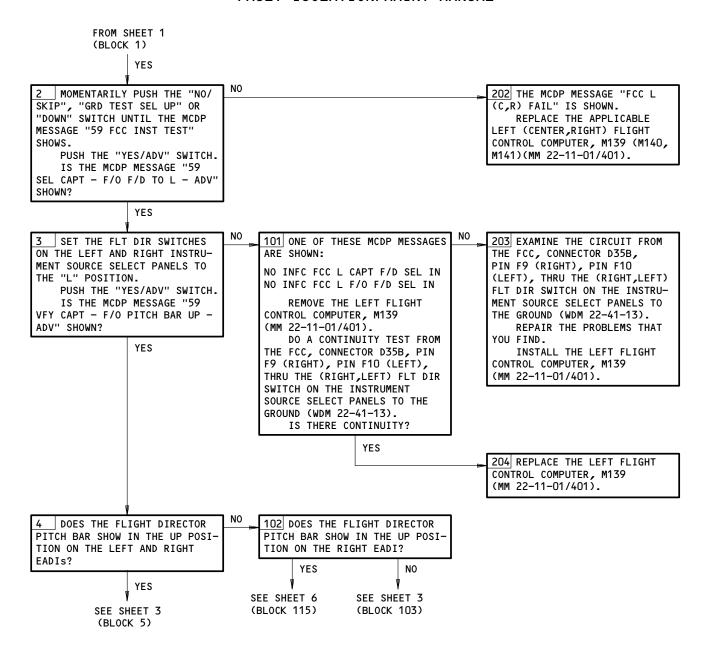
MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 1)

EFFECTIVITY-ALL

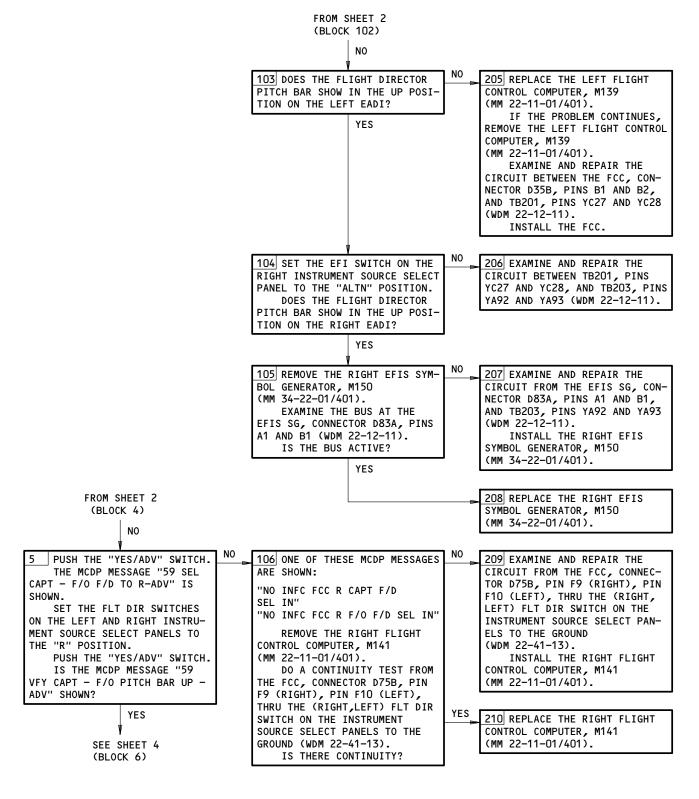
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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 2)



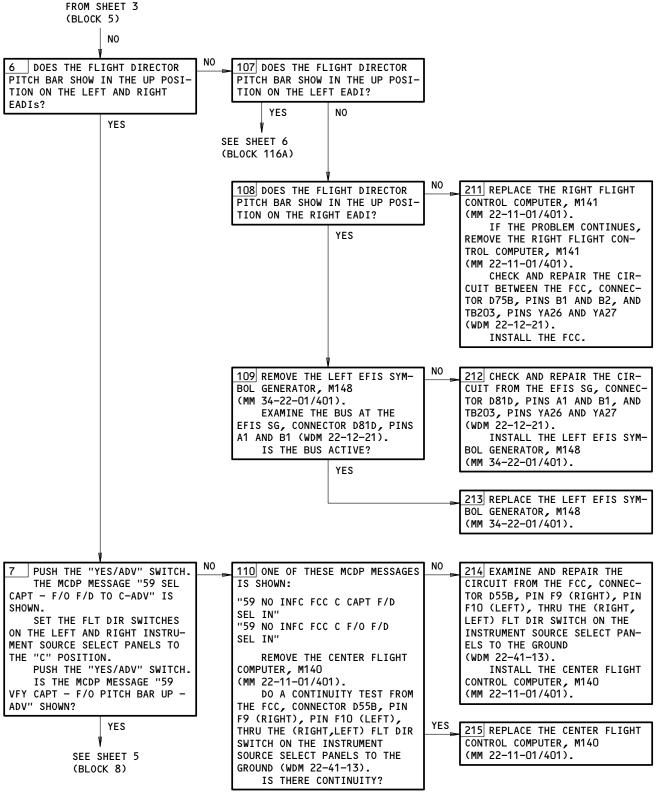
MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 3)

ALL

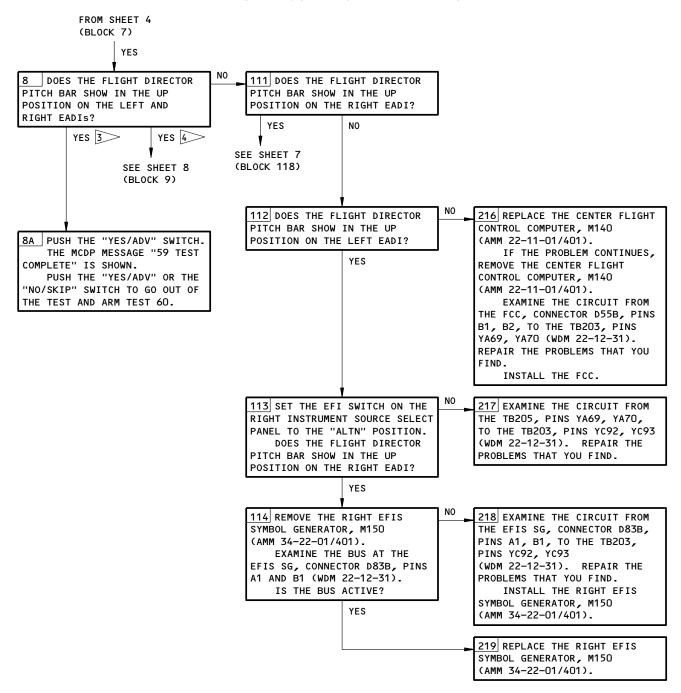
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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 4)

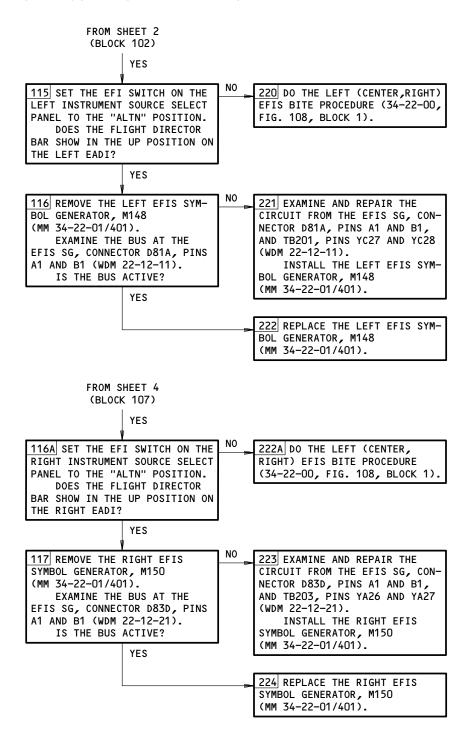


MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 5)

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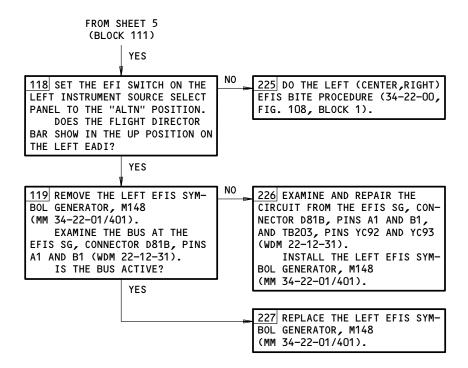
MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 6)

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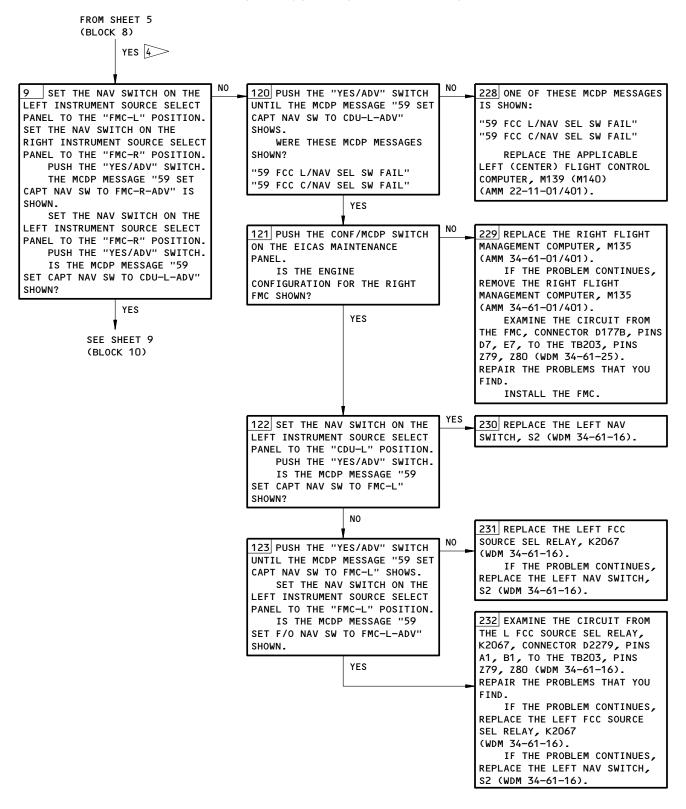
MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 7)

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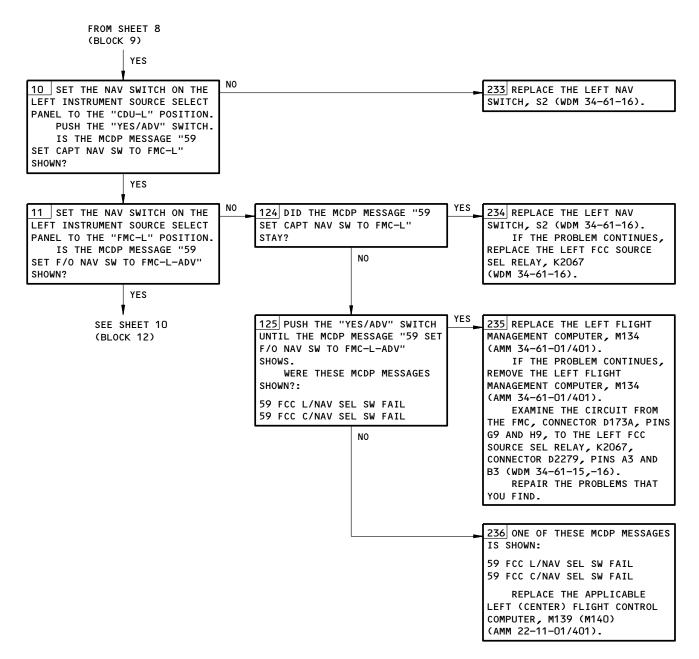
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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 8)





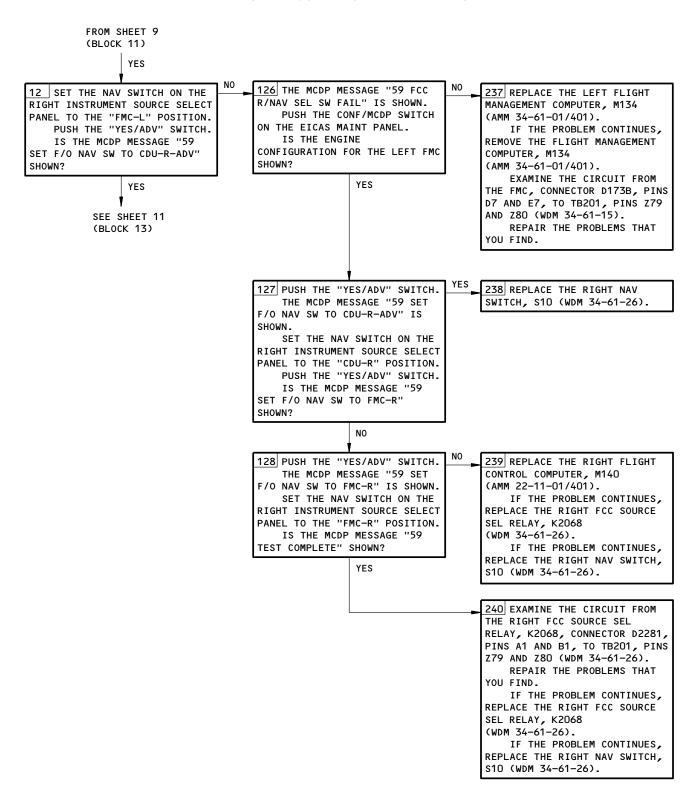
MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 9)

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ALL

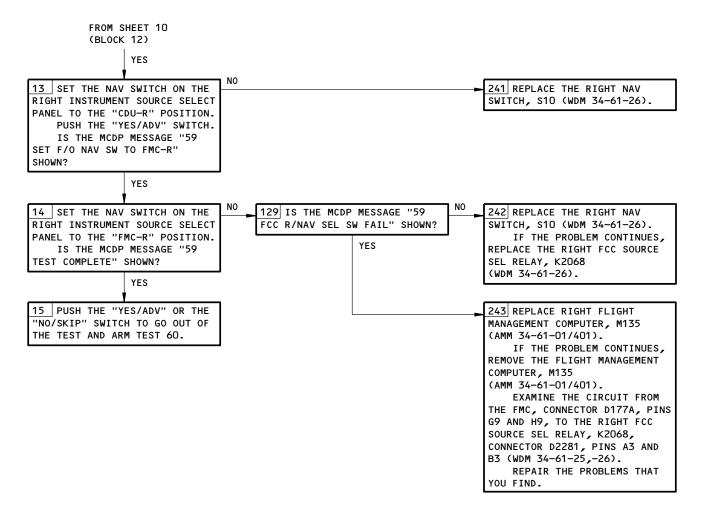
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MCDP Ground Test 59 - FCC INSTR Figure 105 (Sheet 10)





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

ALL

ALL

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PREREQUISITES

MAKE SURE THIS SYSTEM WILL OPERATE:
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(AMM 31-41-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11F14,11F15,11F16; 1>> 11SX

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

MCDP GROUND TEST 60 - "TMC INSTR"

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

NO 1 ON THE EICAS DISPLAY 21 DO THIS PROCEDURE: MAIN-SELECT PANEL, DO THESE STEPS: TENANCE CONTROL DISPLAY PANEL SET THE INNER "THRUST REF (MCDP) BITE PROCEDURE SET" SWITCH TO THE IN POSI-(FIM 22-00-02/101, FIG. 103). TION. SET THE OUTER "THRUST REF SET" SWITCH TO THE "BOTH" POSITION. SET THE "COMPUTER" SWITCH TO THE "AUTO" POSITION. PUSH THE "POWER ON/OFF" SWITCH, ON THE MCDP, IF THE MCDP IS NOT ON. PUSH THE "GRD TEST MODE" SWITCH ON THE MCDP. DOES "01 FCC TEST?" SHOW AFTER "IN PROGRESS" TESTS ARE COMPLETED? YES NO 2 MOMENTARILY PUSH THE "NO/ "60 TMC FAIL" SHOWS. SKIP", "GRD TEST SEL UP" OR "DOWN" SWITCH, ON THE MCDP, REPLACE THE THRUST MANAGE-MENT COMPUTER, M183 UNTIL "60 TMC INST TEST?" (AMM 22-31-01/401). SHOWS. PUSH THE "YES/ADV" SWITCH. DOES "60 EPR L=1.50" SHOW? NOTE: IGNORE THE MESSAGE "N1 L=100?" YES SEE SHEET 2 (BLOCK 3)

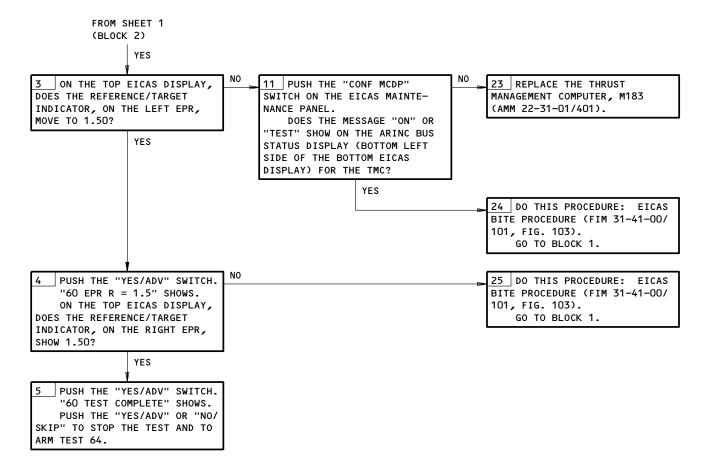
WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

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

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE: TRAILING EDGE FLAP SYSTEM (AMM 27-51-00/201) TRAILING EDGE FLAP POSITION INDICATING SYSTEM (AMM 27-58-00/501)

SPOILER/SPEEDBRAKE CONTROL SYSTEM (AMM 27-61-00/201) HYDRAULIC POWER (AMM 29-11-00/201)

ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS) (AMM 31-41-00/201)(WHEN USING 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; 1 11SX

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"

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

SET THE FLAPS AND FLAP HANDLE TO O.

WARNING

MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS. THE SPOILERS MOVE TO THEIR COMMANDED POSITION IN LESS THAN 1 SECOND AND CAN CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

REMOVE THE POWER FROM THE HYDRAULIC SYSTEM FOR THE SPEEDBRAKE TEST. THE MCDP GROUND TEST WILL CAUSE THE SPOILER/SPEEDBRAKES TO MOVE IF THE HYDRAULIC POWER IS ON AND INJURY TO PERSONS AND DAMAGE TO EQUIPMENT CAN OCCUR.

REMOVE THE POWER FROM THE LEFT, CENTER, AND 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?" SHOW AFTER "IN PROGRESS" TESTS ARE
COMPLETED?

YES ▼
SEE SHEET 2

(BLOCK 2)

WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL". 201 DO THIS PROCEDURE: MAIN-TENANCE CONTROL DISPLAY PANEL (MCDP) BITE PROCEDURE (FIM 22-00-02/101, FIG. 103).

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

EFFECTIVITY-

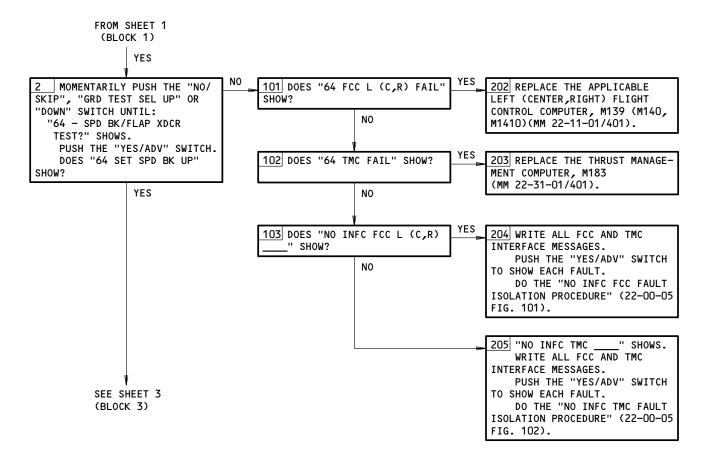
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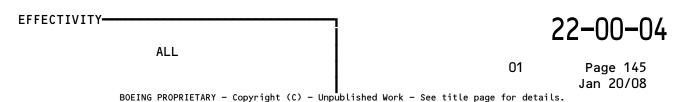
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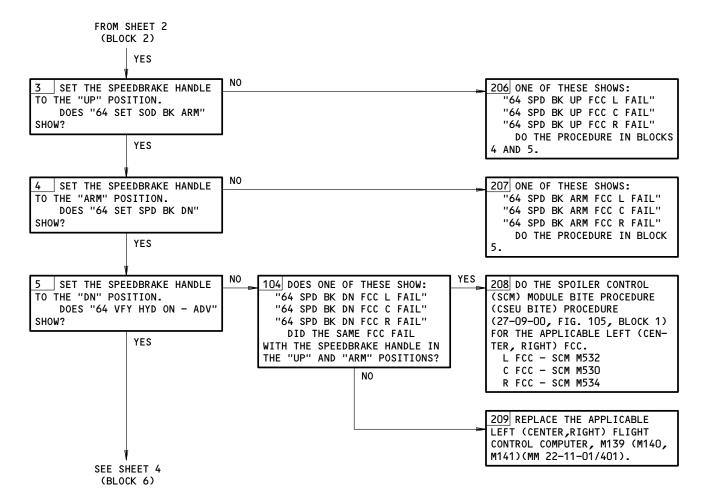
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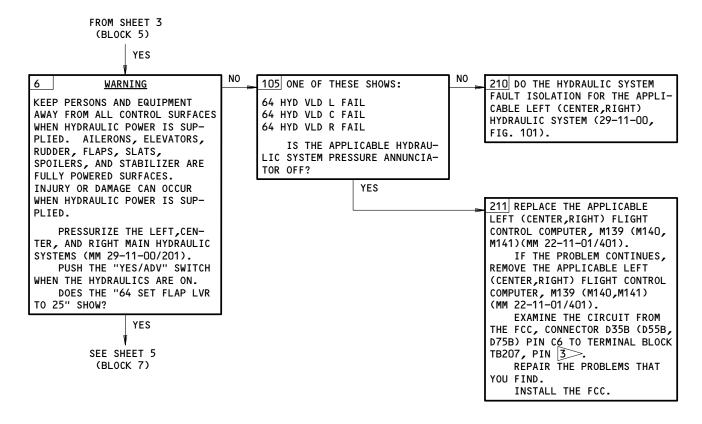










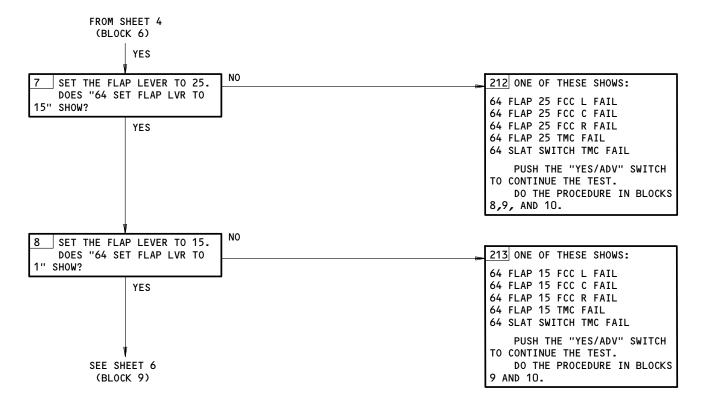


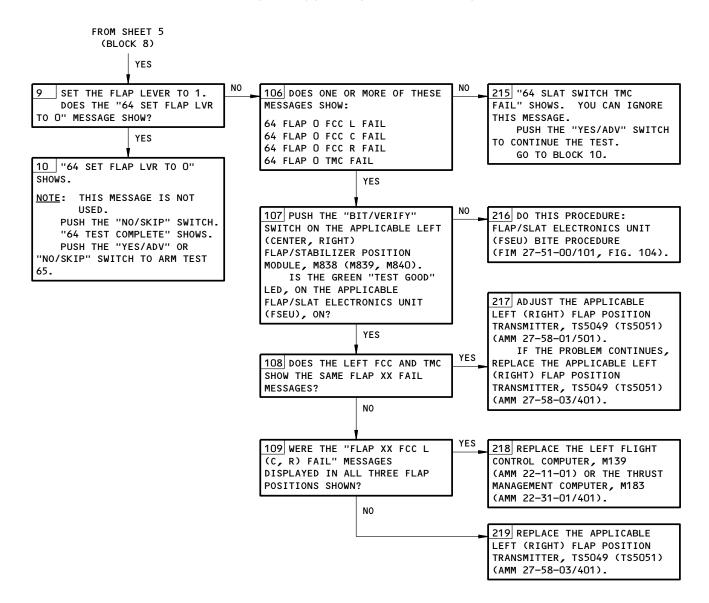
GUI 001-114,116-999; YA27 (Z105,YA24)(WDM 22-41-11). GUI 115; Z28 (Z105,YA24)(WDM 22-41-11).

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

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
FLIGHT CONTROL SYSTEM ELECTRONICS UNIT (FSEU)
(AMM 27-09-00/201)
HORIZONTAL STABILIZER TRIM CONTROL SYSTEM
(AMM 27-41-00/201)
STABILIZER TRIM POSITION INDICATING SYSTEM
(AMM 27-48-00/201)
HYDRAULIC POWER (AMM 29-11-00/201)
ENGINE INDICATING AND CREW ALERTING SYSTEM (EICAS)
(AMM 31-41-00/201)(WHEN USING 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; 1>11SX

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

MCDP GROUND TEST 65 - "STAB TRIM"

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

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. 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 "O1 FCC TEST?" SHOW AFTER THE "IN PROGRESS" 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).

BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

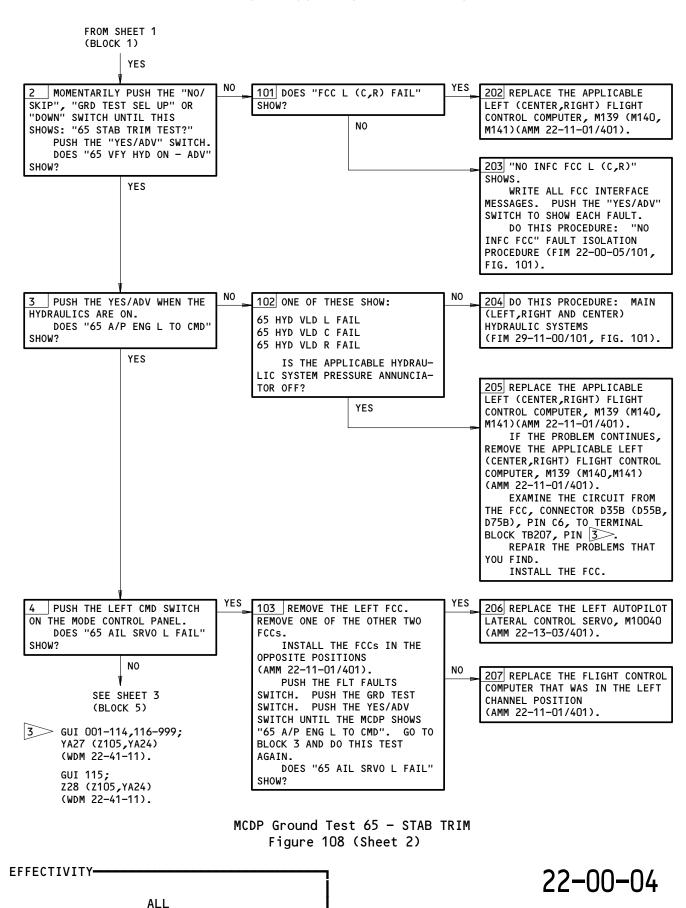
ALL

WHERE X = 3.4 OR 6 FOR THE CIRCUIT

22-00-04

01

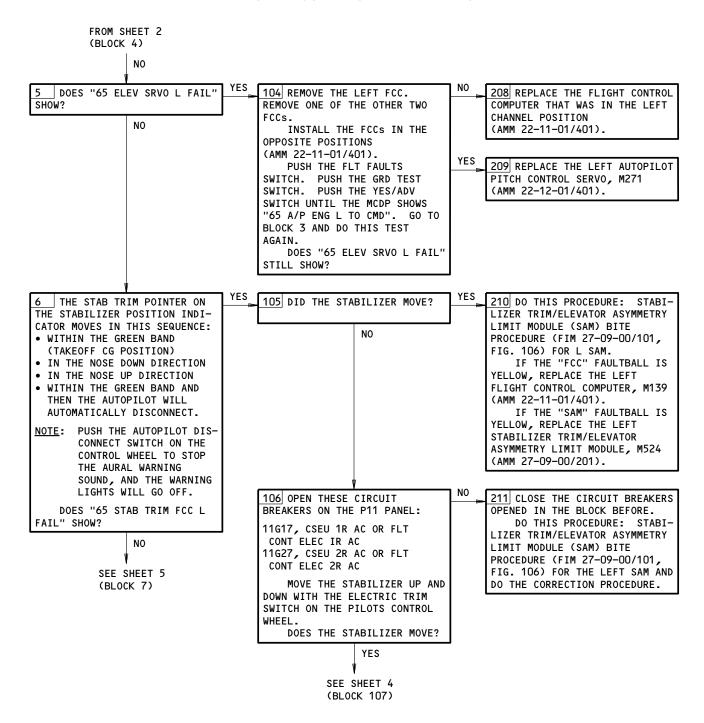
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MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 3)

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FROM SHEET 3 (BLOCK 106)

NO

107 CLOSE THE CIRCUIT BREAKERS
OPENED IN THE BLOCK BEFORE.
PUSH THE "YES/ADV" SWITCH
UNTIL "65 A/P ENG C TO CMD"
SHOWS.

DO THE BLOCK 10 ACTION.
DOES "65 STAB TRIM/FCC
C FAIL" SHOW?

212 REPLACE THE LEFT STABILI-ZER TRIM/ELEVATOR ASYMMETRY LIMIT MODULE, M524 (AMM 27-09-00/201).

NO

213 REPLACE THE LEFT FLIGHT CONTROL COMPUTER, M139 (AMM 22-11-01/401).

IF THE PROBLEM CONTINUES, DO THESE WIRING CHECKS:

- 1. REMOVE THE THREE FCCs
- 2. EXAMINE THE CIRCUIT FROM THE LEFT FCC, CONNECTOR D35A, PIN G10 (WDM 22-15-12), TO THE CENTER FCC, CONNECTOR D55A, PIN K3 (WDM 22-15-12), AND TO THE RIGHT FCC, CONNECTOR D75A, PIN K1 (WDM 22-15-12). REPAIR THE PROBLEMS THAT YOU FIND
- 3. INSTALL THE THREE FCCs (AMM 22-11-01/401).

IF THE PROBLEM CONTINUES, REMOVE THE LEFT STABILIZER TRIM/ELEVATOR ASYMMETRY LIMIT MODULE, M524 (AMM 27-09-00/ 201).

EXAMINE THE CIRCUIT FROM TERMINAL BLOCK TB201, PINS YA11, YA12, TO THE LEFT SAM, CONNECTOR D705A, PINS D7, D8 (WDM 22-22-11).

REPAIR THE PROBLEMS THAT YOU FIND.

INSTALL THE LEFT SAM.

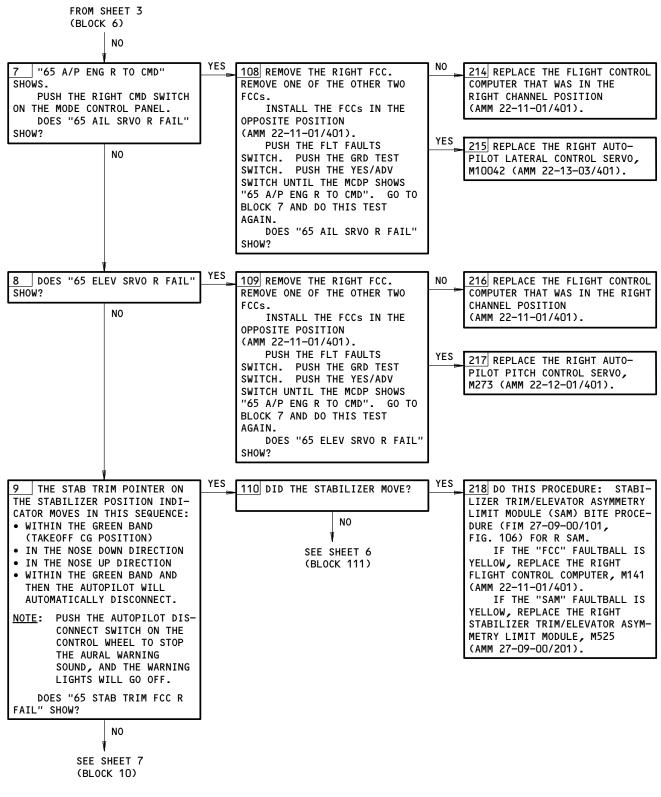
MCDP Ground Test 65 - STAB TRIM Figure 108 (Sheet 4)

EFFECTIVITY ALL

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

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FROM SHEET 5 (BLOCK 110) 111 OPEN THESE CIRCUIT 219 CLOSE THE CIRCUIT BREAKERS BREAKERS ON THE P11 PANEL: OPENED IN THE BLOCK BEFORE. DO THIS PROCEDURE: STABI-11C6, CSEU 1L AC OR FLT CONT ELEC 1L AC LIZER TRIM/ELEVATOR ASYMMETRY LIMIT MODULE (SAM) BITE PROCE-11C8, CSEU 2L AC OR FLT CONT DURE (FIM 27-09-00/101, ELEC 2L AC FIG. 106) FOR THE RIGHT SAM MOVE THE STABILIZER UP AND AND DO THE CORRECTION DOWN WITH THE ELECTRIC TRIM PROCEDURE. SWITCH ON THE PILOTS' CONTROL WHFFL. DOES THE STABILIZER MOVE? YES 112 PUSH THE "YES/ADV" SWITCH 220 REPLACE THE RIGHT STABILI-UNTIL "64 A/P ENG C TO CMD" ZER TRIM/ELEVATOR ASYMMETRY SHOWS. LIMIT MODULE, M525 DO THE BLOCK 10 ACTION. (AMM 27-09-00/201). DOES "65 STAB TRIM FCC C CLOSE THE CIRCUIT BREAKERS FAIL" SHOW? OPENED IN THE BLOCK BEFORE. NO 221 REPLACE THE RIGHT FLIGHT CONTROL COMPUTER, M141 (AMM 22-11-01/401). CLOSE THE CIRCUIT BREAKERS OPENED IN THE BLOCK BEFORE. IF THE PROBLEM CONTINUES, DO THESE WIRING CHECKS: 1. REMOVE THE THREE FCCs 2. EXAMINE THE CIRCUIT FROM THE RIGHT FCC, CONNECTOR D75A, PIN G10 (WDM 22-15-12), LEFT FCC, CONNECTOR D35A, PIN K3 (WDM 22-15-12), AND TO THE CENTER FCC, CONNECTOR D55A, PIN K1 (WDM 22-15-12). REPAIR THE PROBLEMS THAT YOU FIND 3. INSTALL THE THREE FCCs (AMM 22-11-01/401). IF THE PROBLEM CONTINUES, REMOVE THE RIGHT STABILIZER TRIM/ELEVATOR ASYMMETRY LIMIT MODULE, M525 (AMM 27-09-00/ 201). EXAMINE THE CIRCUIT FROM TERMINAL BLOCK TB203, PINS YC26, YC27, TO R SAM, CONNECTOR D675A, PINS D7,D8

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

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REPAIR THE PROBLEMS THAT

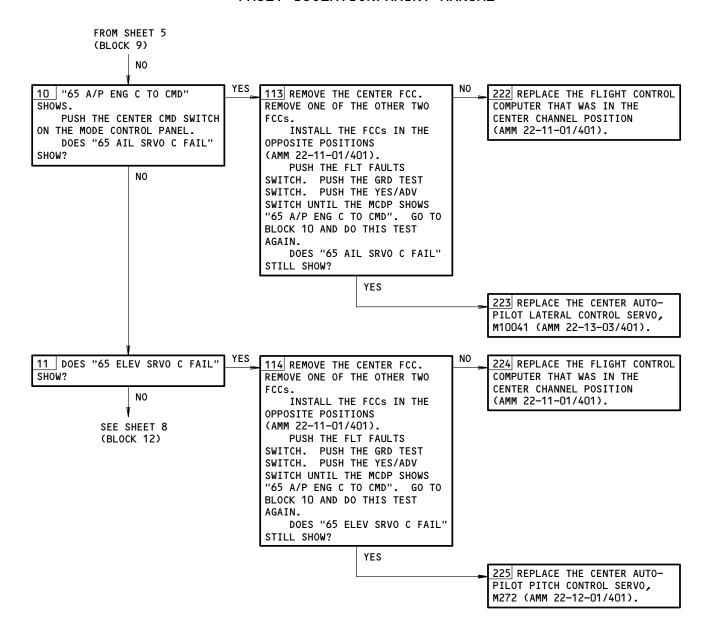
INSTALL THE RIGHT SAM.

09

(WDM 22-22-21).

YOU FIND.

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

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FROM SHEET 7 (BLOCK 11) NO 12 | THE STAB TRIM POINTER ON 115 OPEN THESE CIRCUIT 226 REPLACE THE CENTER FLIGHT CONTROL COMPUTER, M140 THE STABILIZER POSITION INDI-BREAKERS ON THE P11 PANEL: CATOR MOVES IN THIS SEQUENCE: (AMM 22-11-01/401). 11C6, CSEU 1L AC OR FLT CONT ELEC 1L AC • WITHIN THE GREEN BAND CLOSE THE CIRCUIT BREAKERS (TAKEOFF CG POSITION) OPENED IN THE BLOCK BEFORE. 11C8, CSEU 2L AC OR FLT CONT IF THE PROBLEM CONTINUES, • IN THE NOSE DOWN DIRECTION ELEC 2L AC • IN THE NOSE UP DIRECTION DO THESE WIRING CHECKS: 1. REMOVE THE THREE FCCs • WITHIN THE GREEN BAND AND PUSH THE FLT FAULTS THEN THE AUTOPILOT WILL SWITCH. PUSH THE GRD TEST 2. EXAMINE THE CIRCUIT FROM SWITCH. PUSH THE YES/ADV THE CENTER FCC, CONNECTOR AUTOMATICALLY DISCONNECT. SWITCH UNTIL THE MCDP SHOWS D55A, PIN G10 NOTE: PUSH THE AUTOPILOT DIS-(WDM 22-15-12), TO THE "65 A/P ENG C TO CMD". GO TO CONNECT SWITCH ON THE BLOCK 10 AND DO THIS TEST RIGHT FCC, CONNECTOR D75A, CONTROL WHEEL TO STOP PIN K3 (WDM 22-15-12), AND AGAIN. THE AURAL WARNING TO THE LEFT FCC, CONNECTOR SOUND, AND THE WARNING NOTE: WHEN THE ABOVE CIRCUIT D35A, PIN K1 BREAKERS ARE OPEN, LIGHTS WILL GO OFF. (WDM 22-15-12). IGNORE THESE MCDP DOES "65 STAB TRIM FCC C REPAIR THE PROBLEMS THAT MESSAGES: FAIL" SHOW? YOU FIND 65 NO INFC FCC L AUTO 3. INSTALL THE THREE FCCs N0 TRIM VLD 1 (AMM 22-11-01/401). 65 NO INFC FCC L AUTO SEE SHEET 9 TRIM VLD 2 65 NO INFC FCC C AUTO (BLOCK 13) TRIM VLD 1 DOES "65 STAB TRIM FCC C FAIL" SHOW IN BLOCK 12?

NO

227 REPLACE THE LEFT STABILI-ZER TRIM/ELEVATOR ASYMMETRY LIMIT MODULE, M524 (AMM 27-09-00/201).

CLOSE THE CIRCUIT BREAKERS
OPENED IN THE BLOCK BEFORE.
IF THE PROBLEM CONTINUES,
REMOVE THE LEFT STABILIZER
TRIM/ELEVATOR ASYMMETRY LIMIT
MODULE, M524 (AMM 27-09-00/401).

EXAMINE THE CIRCUIT FROM TERMINAL BLOCK TB109, PINS YA89,YC89, TO THE LEFT SAM, CONNECTOR D705B, 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 8)

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NO YES 13 OPEN THESE CIRCUIT BREAKERS ON THE P11 PANEL: 11C6, CSEU 1L AC OR FLT CONT ELEC 1L AC 11C8, CSEU 2L AC OR FLT CONT ELEC 2L AC PUSH THE FLT FAULTS SWITCH. PUSH THE GRD TEST SWITCH. PUSH THE YES/ADV SWITCH UNTIL THE MCDP SHOWS "65 A/P ENG C TO CMD". GO TO BLOCK 10 AND DO THIS TEST AGAIN. NOTE: WHEN THE ABOVE CIRCUIT BREAKERS ARE OPEN, IGNORE THESE MCDP **MESSAGES:** 65 NO INFC FCC L AUTO TRIM VLD 1 65 NO INFC FCC L AUTO TRIM VLD 2 65 NO INFC FCC C AUTO

FROM SHEET 8 (BLOCK 12)

228 REPLACE THE RIGHT STABILI-ZER TRIM/ELEVATOR ASYMMETRY LIMIT MODULE, M525 (AMM 27-09-00/401). IF THE PROBLEM CONTINUES, REMOVE THE RIGHT STABILIZER TRIM/ELEVATOR ASYMMETRY LIMIT MODULE, M525 (AMM 27-09-00/ EXAMINE THE CIRCUIT FROM TERMINAL BLOCK TB109, PINS YA89, YC89, TO THE RIGHT SAM, CONNECTOR D675B, PINS K14,K15 (WDM 22-22-11,-21). REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE RIGHT SAM.

CLOSE THE CIRCUIT BREAKERS

OPENED IN THE BLOCK BEFORE.

PUSH THE "YES/ADV" OR
"NO/SKIP" TO ARM THE TEST 66.
CLOSE THE CIRCUIT BREAKERS
OPENED IN THE BLOCK BEFORE.

14 "65 TEST COMPLETE" SHOWS.

TRIM VLD 1

FAIL" SHOW IN BLOCK 12?

DOES "65 STAB TRIM FCC C

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

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE: FLIGHT CONTROL SYSTEM ELECTRONICS UNIT (FSEU) (AMM 27-09-00/201) AILERON AND AILERON TRIM CONTROL SYSTEM (AMM 27-11-00/501) AILERON POSITION INDICATING SYSTEM (AMM 27-11-00/501) RUDDER AND RUDDER TRIM CONTROL SYSTEM (AMM 27-21-00/401) 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 27-51-00/201) 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 THE REMOTE MCDP CONTROL PANEL IS USED) AIR/GROUND RELAYS (AMM 32-09-02/201) FUEL CONTROL (AMM 73-21-00/001) 11E16,11E17,11E18,11E20,11E21,11E34,11E35,11E36, 11F14,11F15,11F16; 1>> 11SX

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201) TOWING (AMM 09-11-00/201) - NOSE GEAR STEERING VALVE LOCKPIN INSTALLATION

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

> WHERE X = 3,4, OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

ALL

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

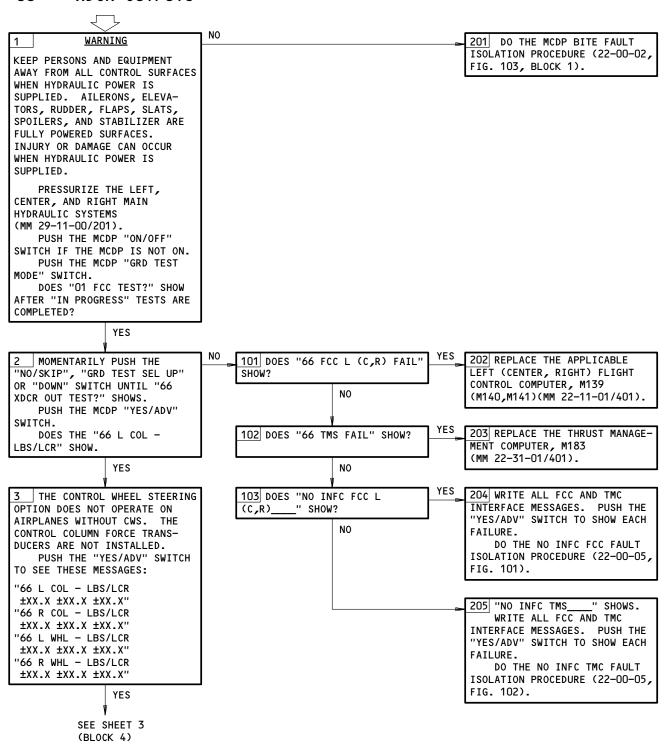
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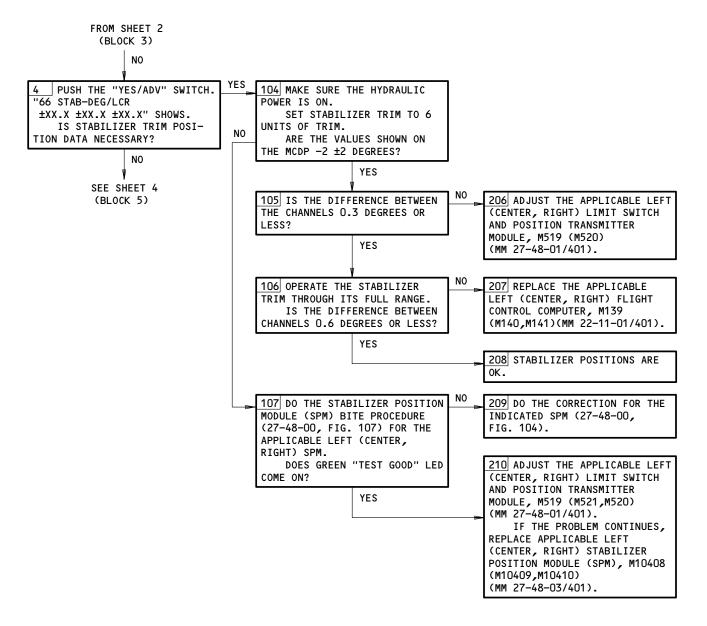
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MCDP GROUND TEST 66 - "XDCR OUTPUTS"



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





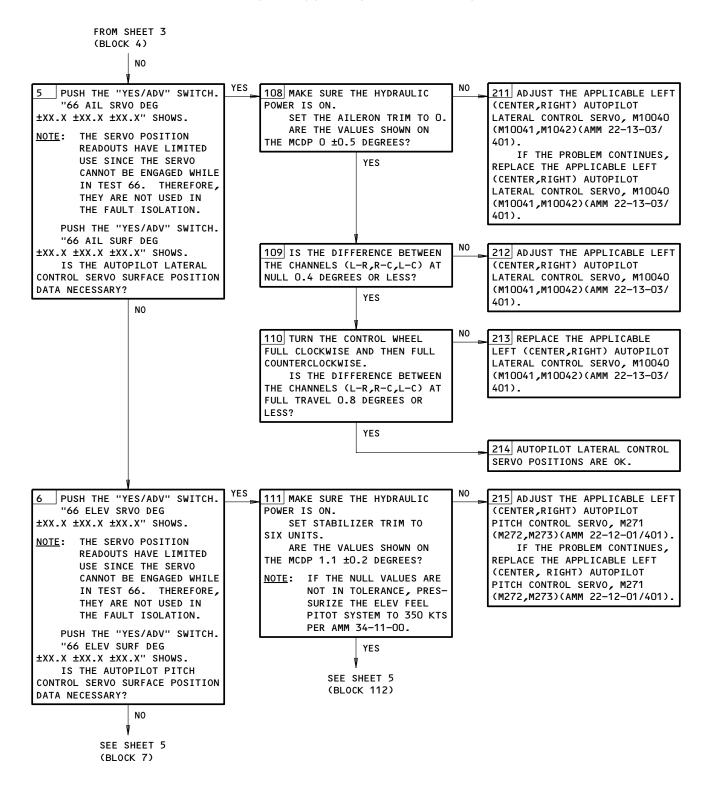
MCDP Ground Test 66 - XDCR OUTPUTS Figure 109 (Sheet 3)

ALL

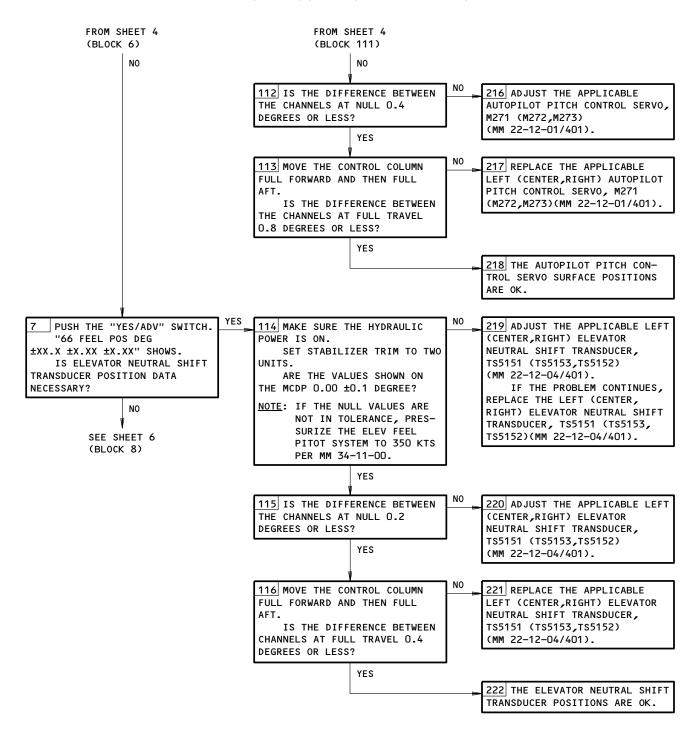
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MCDP Ground Test 66 - XDCR OUTPUTS Figure 109 (Sheet 4)



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

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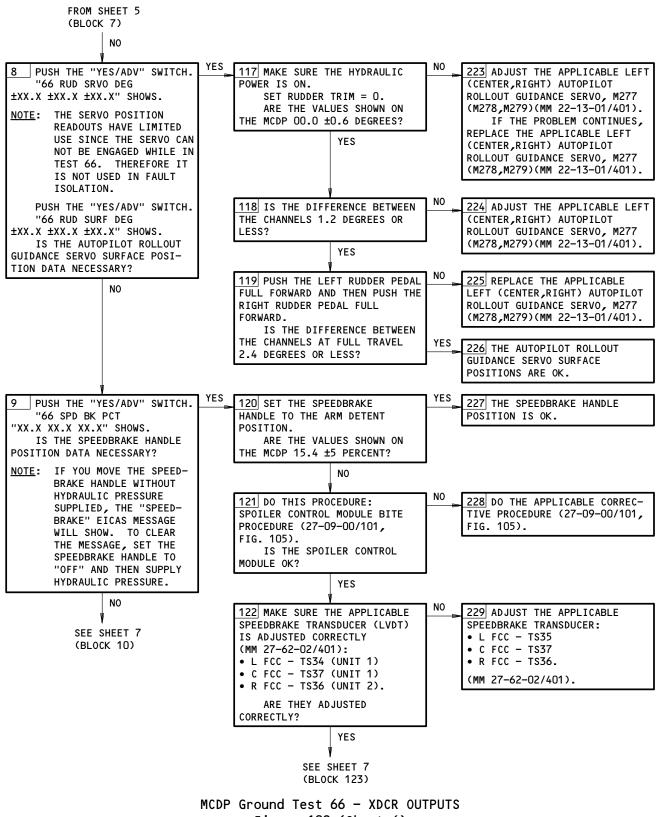
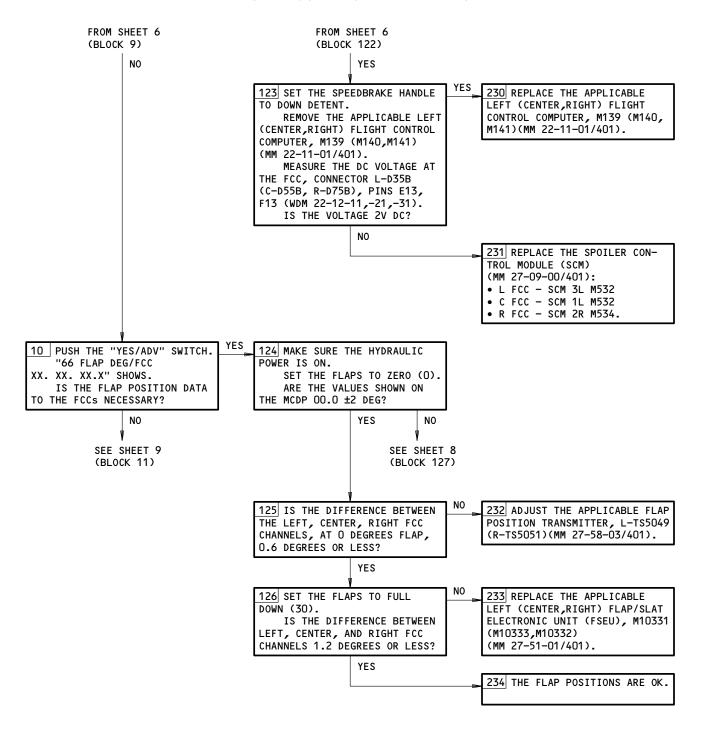
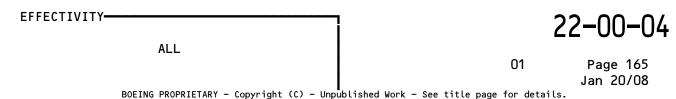


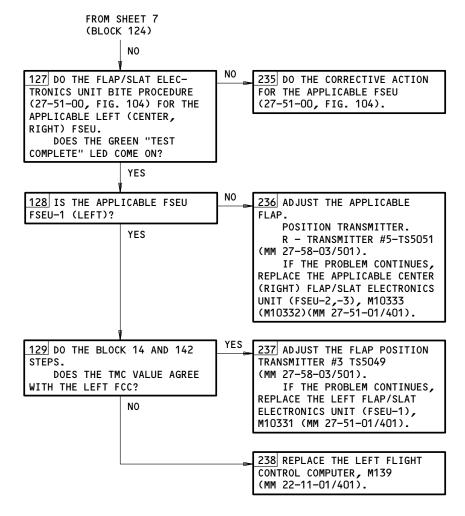
Figure 109 (Sheet 6)

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MCDP Ground Test 66 - XDCR OUTPUTS Figure 109 (Sheet 7)





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

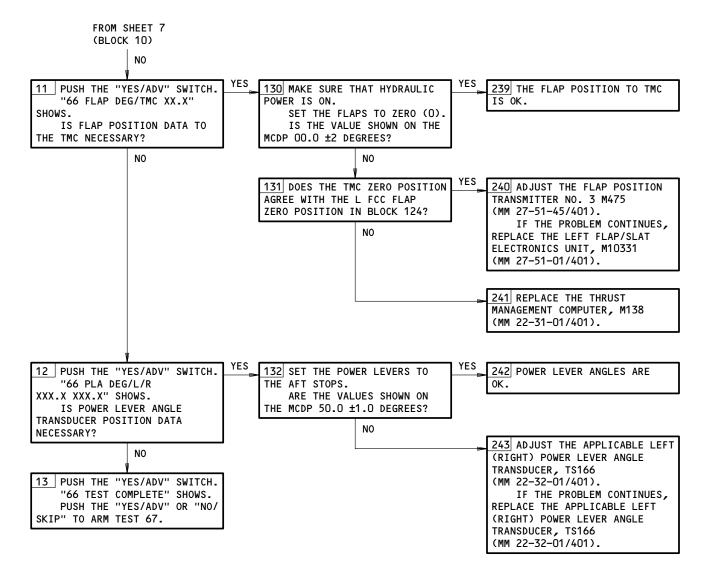
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MCDP Ground Test 66 - XDCR OUTPUTS Figure 109 (Sheet 9)

PREREQUISITES

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 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; 1>> 11SX MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201)

MCDP GROUND TEST 67 - "AIL SERVO LIMIT"

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

> 201 DO THIS PROCEDURE: TENANCE CONTROL DISPLAY PANEL

(FIM 22-00-02/101, FIG. 103).

(MCDP) BITE PROCEDURE

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. PRESSURIZE THE LEFT, CENTER AND RIGHT HYDRAULIC SYSTEMS AND RESEVIORS (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? YFS SEE SHEET 2 (BLOCK 2)

1 WHERE X = 3.4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

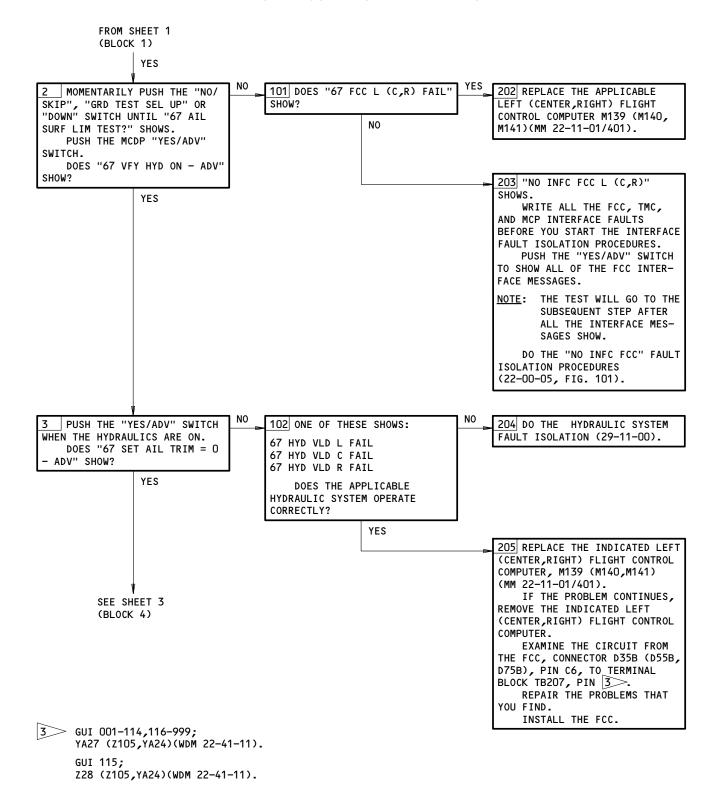
> MCDP Ground Test 67 - AIL SERVO LIMIT Figure 110 (Sheet 1)

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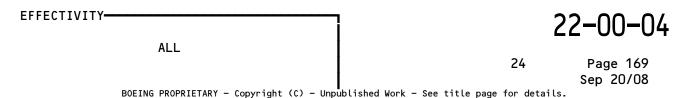
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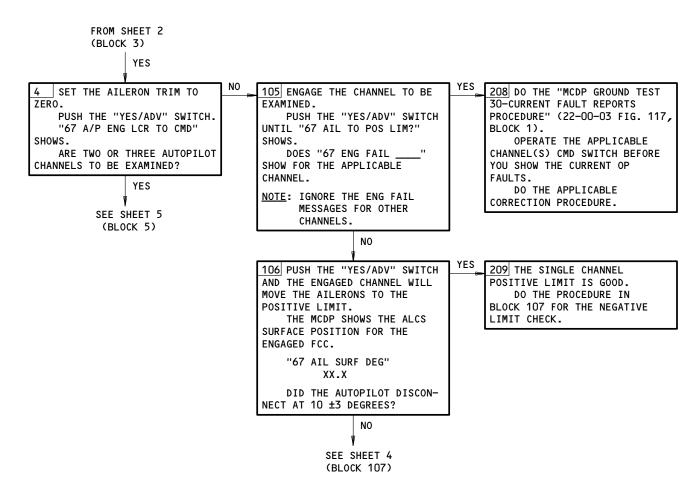
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MCDP Ground Test 67 - AIL SERVO LIMIT Figure 110 (Sheet 2)

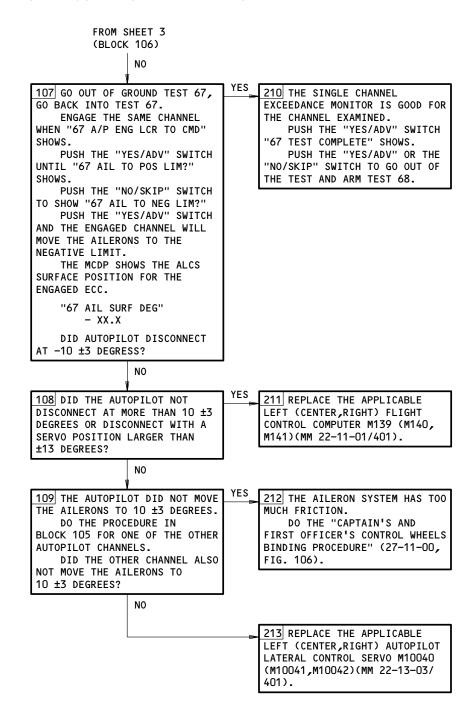




MCDP Ground Test 67 - AIL SERVO LIMIT Figure 110 (Sheet 3)

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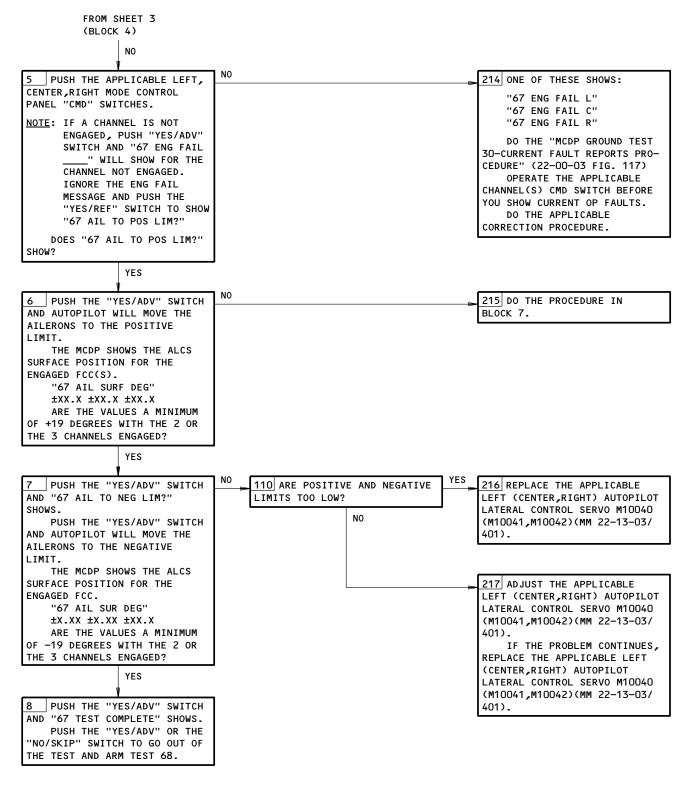
MCDP Ground Test 67 - AIL SERVO LIMIT Figure 110 (Sheet 4)

EFFECTIVITY-ALL

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



PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
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 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; 1>> 11SX

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

MCDP GROUND TEST 68 - "ELEV SERVO LIMIT"

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

NO PRESSURIZE THE 201 TO EXAMINE A SINGLE AUTO-1 <u>NOTE</u>: HYDRAULIC RESER-PILOT ELEV SERVO LIMITS, DO VOIRS TO BETWEEN 40 THE MCDP GROUND TEST 66 - XDCR OUTPUTS AND DISPLAY "66 ELEV TO 60 PSI AND MAKE SURE THE HYDRAULIC SURF DEG ±XX.X ±XX.X ±XX.X". FLUID IS 28°C WRITE THE SERVO POSITION MINIMUM BEFORE YOU VALUES AT NULL. START THE TEST. NOTE: MOVE THE CONTROL COLUMN ARE TWO OR THREE AUTOPILOT TO THE FORWARD AND AFT CHANNELS TO BE EXAMINED? POSITIONS AND SHAKE THE CONTROL COLUMN AT THE YES NEUTRAL POSITION TO MAKE SURE THE SERVO IS SEE SHEET 2 AT NULL. (BLOCK 2) GO TO BLOCK 2.

WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

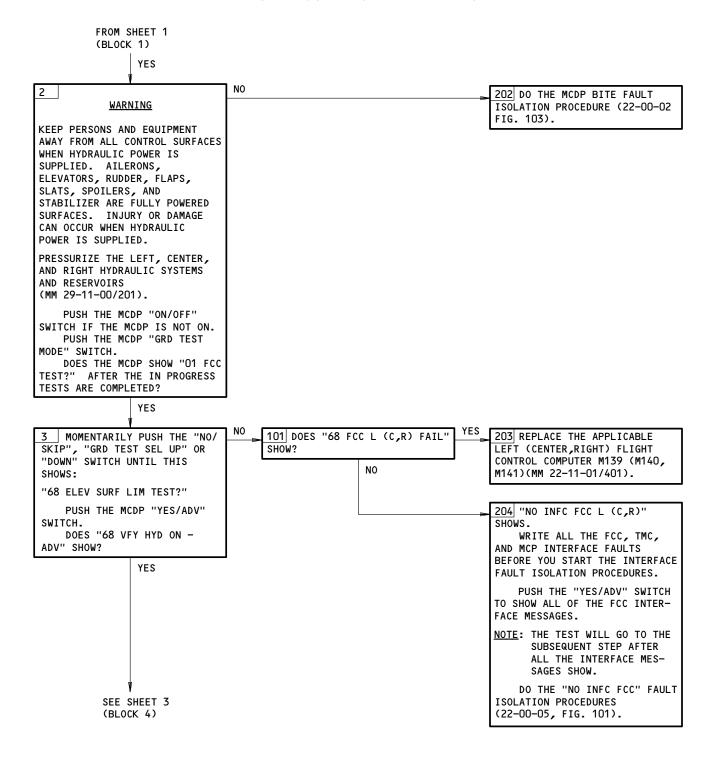
MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 1)

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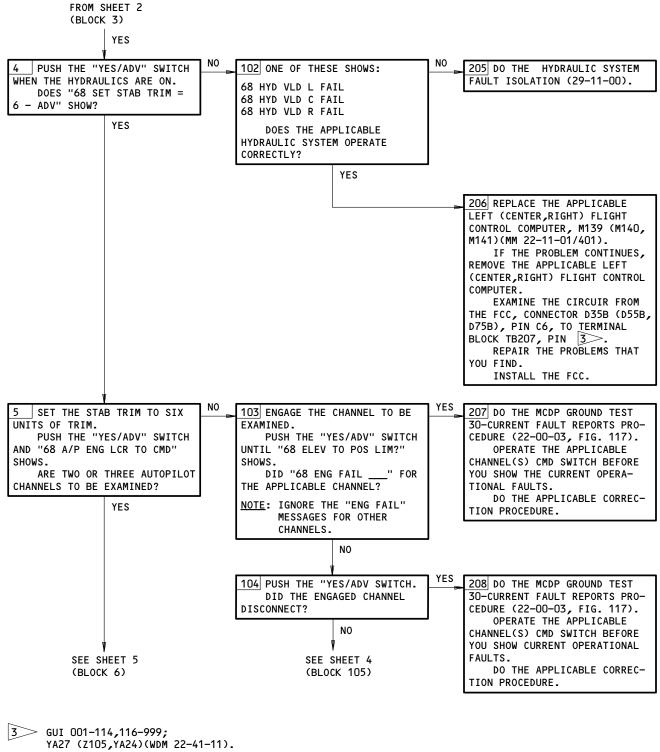
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MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 2)



GUI 001-114,116-999; YA27 (Z105,YA24)(WDM 22-41-11) GUI 115; Z28 (Z105,YA24)(WDM 22-41-11).

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

FROM SHEET 3 (BLOCK 104) NO 105 THE ENGAGED CHANNEL WILL 209 THE SINGLE CHANNEL MOVE THE ELEVATORS TO THE POSITIVE LIMIT IS GOOD. POSITIVE LIMIT (TRAILING EDGE GO TO BLOCK 106 FOR THE NEGATIVE LIMIT CHECK. DOWN) -THE MCDP SHOWS THE APCS SURFACE POSITION FOR ENGAGED "68 ELEV SURF DEG" XX.X SUBTRACT THE NULL VALUE WRITTEN IN BLOCK 201 FROM THE CHANNELS POSITIVE LIMIT THAT SHOWS. IS THE DIFFERENCE A MINIMUM OF 6.2 DEGREES? YES 106 PUSH THE "YES/ADV" SWITCH 210 THE SINGLE CHANNEL IS GOOD TO SHOW "68 ELEV TO NEG LIM?" FOR THE CHANNEL EXAMINED. PUSH THE "YES/ADV" SWITCH PUSH THE "YES/ADV" SWITCH "68 TEST COMPLETE" SHOWS. AND THE ENGAGED CHANNEL WILL MOVE THE ELEVATORS TO THE PUSH THE "YES/ADV" OR THE NEGATIVE LIMIT (TRAILING EDGE "NO/SKIP" SWITCH TO GO OUT OF THE TEST AND ARM TEST 69. THE MCDP SHOWS THE APCS SURFACE POSITION FOR THE ENGAGED FCC. "68 ELEV SURF DEG" $-XX_X$ ADD THE NULL VALUE WRITTEN IN BLOCK 201 TO THE CHANNELS **NEGATIVE LIMIT THAT SHOWS** (IGNORE THE NEGATIVE SIGN). IS THE SUM A MINIMUM OF 5.5 DEGREES? NO SEE SHEET 5 (BLOCK 107)

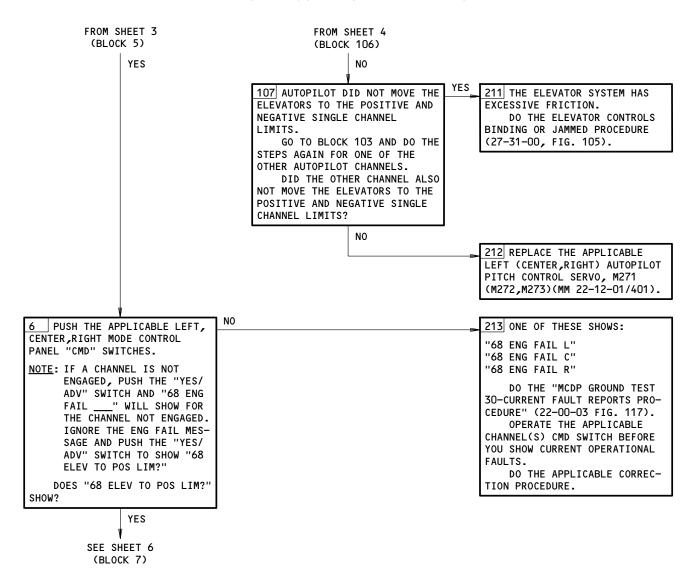
MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 4)

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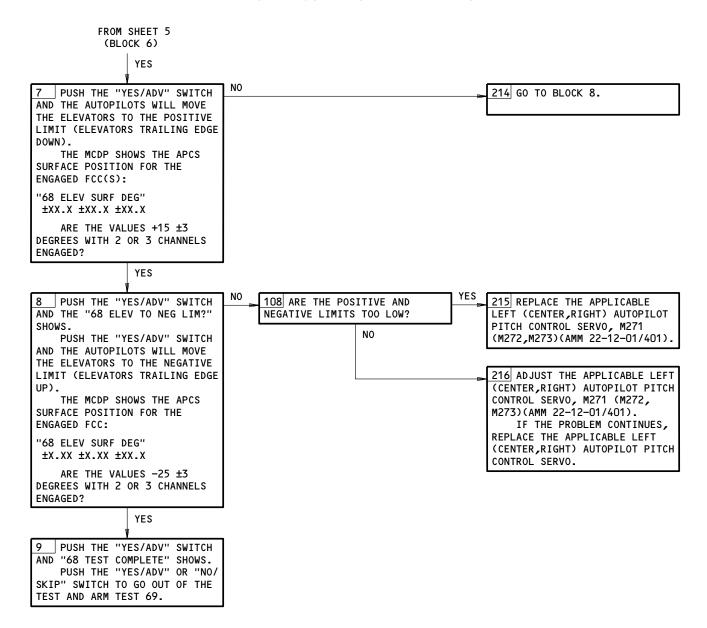
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MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 5)



MCDP Ground Test 68 - ELEV SERVO LIMIT Figure 111 (Sheet 6)

PREREQUISITES

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

RUDDER POSITION INDICATING SYSTEM (AMM 27-28-00/501) 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; 1> 11SX

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201) INSTALL NOSE GEAR STEERING VALVE LOCKPIN (AMM 09-11-00/201)

MCDP GROUND TEST 69 - "RUD SERVO LIMIT"

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

MARNING

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

NO

SYSTEMS AND RESERVOIRS
(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)

WHERE X = 3,4 OR 6 FOR THE CIRCUIT BREAKER WITH THE NOMENCLATURE "MAINT CONT DSPL".

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

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

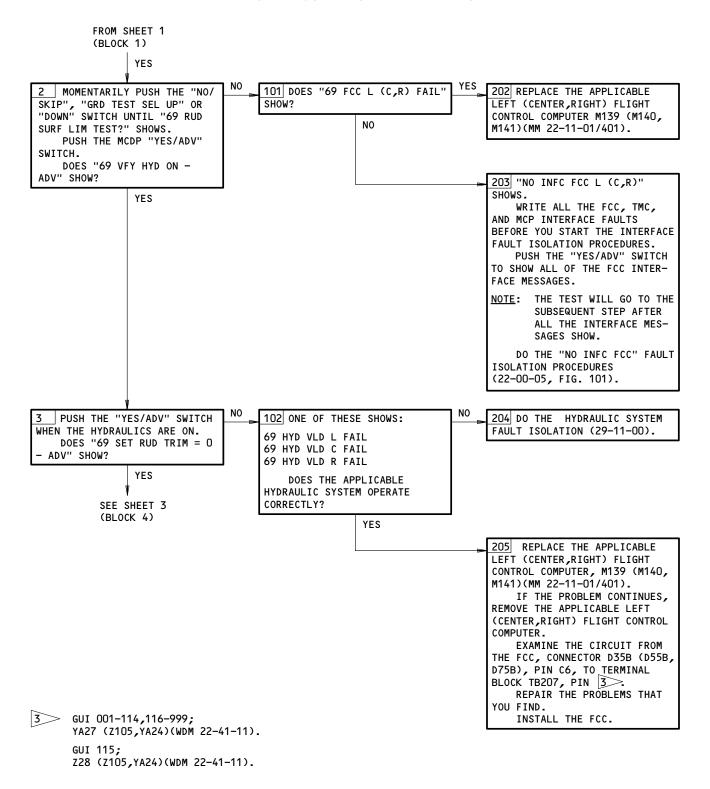
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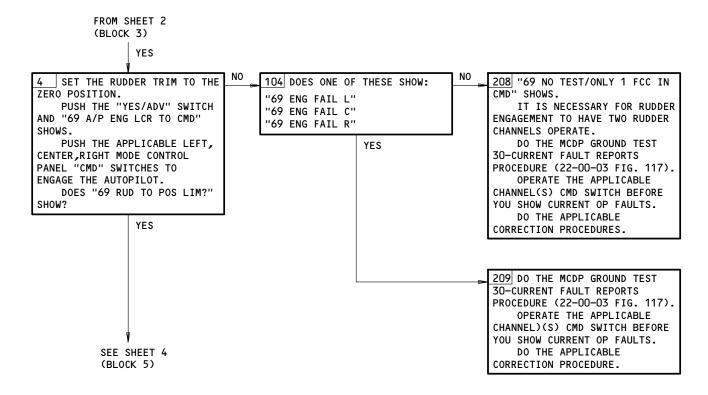
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MCDP Ground Test 69 - RUD SERVO LIMIT Figure 112 (Sheet 2)





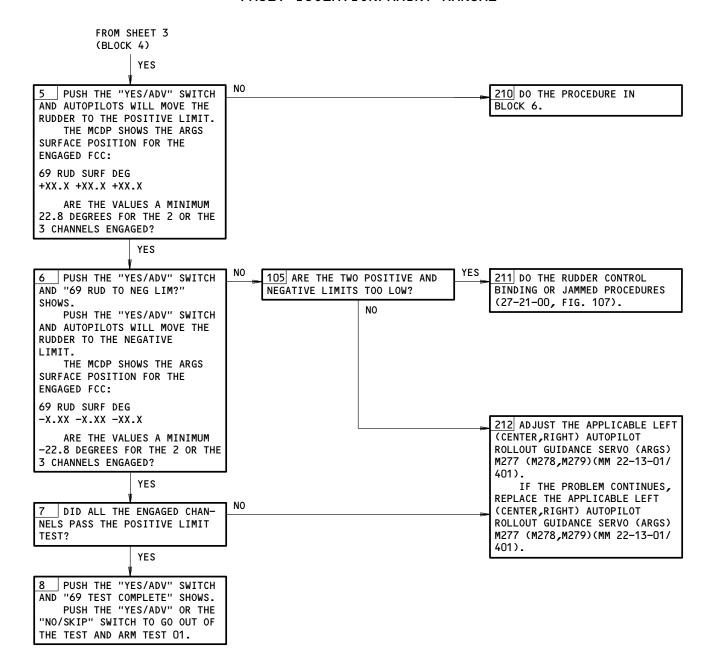
MCDP Ground Test 69 - RUD SERVO LIMIT Figure 112 (Sheet 3)

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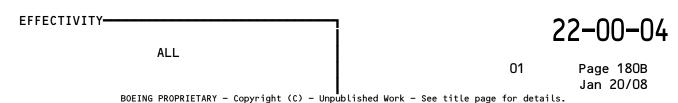
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MCDP Ground Test 69 - RUD SERVO LIMIT Figure 112 (Sheet 4)





NOTE: TABLE 101 GIVES THE SHEET-BLOCK REFERENCES TO

WHERE THE FAULT ISOLATION AND CORRECTION PROCEDURE FOR EACH FCC INTERFACE FAULT CAN BE FOUND. THE PREREQUISITES FOR EACH FAILURE IS THE SAME AS THE GROUND TEST WHICH SHOWED THE

"NO INFC FCC" FAULT ISOLATION PROCEDURES

FAILURE.

	FAILU		
FCC INFC CORRECTION PROCEDURE REFERENCE TABLE 101			
FCC INFC MESSAGE 2	CORRECTION PROCEDURE SHT-BLK	FCC INFC MESSAGE 2	CORRECTION PROCEDURE 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 C ADC BUS IN NO INFC FCC C ADC BUS IN NO INFC FCC C 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 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 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 VLD 1 NO INFC FCC C AUTO TRIM VLD 1 NO INFC FCC C AUTO TRIM VLD 1 NO INFC FCC C 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 DISC SW 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 BELEV BETNT ENG NO INFC FCC L,C, OR R BELEV BELTN ENG NO INFC FCC L,C, OR R ELEV FEEL XDCR NO INFC FCC L,C, OR R ELEV FEEL XDCR NO INFC FCC L,C, OR R ELEV SVO CMD NO INFC FCC L,C, OR R ELEV SVO POS NO INFC FCC L,C, OR R ELEV SVO POS NO INFC FCC L,C, OR R ELEV SVO POS NO INFC FCC L,C, OR R ELEV SVO POS NO INFC FCC L,C, OR R ELEV SVO 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 FCC TO MCP BUS NO INFC FCC L FCC TO MCP BUS NO INFC FCC C FCC TO MCP BUS	2-1 2-1 3-3 3-4 4-5 5-6 6-7 8-8 9-9 10-10 10-11 10-12 11-14 11-13 11-13 11-13 11-15 12-15 12-15 12-15 12-15 12-15 22-27 23-28 25-30 23-29 26-31 27-32 28-33 29-34 31-36 31-35 32-37 32-38 33-39	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 TUNE INHIB 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 C MCP BUS IN NO INFC FCC C MCP BUS IN 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 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 SPD BK 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 DETNT R 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 ENG R IN NO INFC FCC C X-CH ENG R IN NO INFC FCC L,C, OR R X-CH L BUS IN NO INFC FCC L,C, OR R X-CH R BUS IN NO INFC FCC L,C, OR R 28 VDC ARM PWR NO INFC FCC L,C, OR R 28 VDC ENG PWR NO INFC FCC L,C, OR R 28 VDC ENG PWR NO INFC FCC L,C, OR R 28 VDC ENG PWR NO INFC FCC L,C, OR R 28 VDC WARN-1 BAT	34-40 34-41 35-42 35-43 36-44 38-45 39-46 39-47 40-48 41-49 41-49 41-50 42-51 43-52 44-53 45-54 46-55 48-56 49-57 50-58 51-60 52-61 50-59 52-61 50-59 51-60 53-63 54-64 53-62 53-63 55-65 56-66 57-67 58-68 58-69

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, BLOCK 1) 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)

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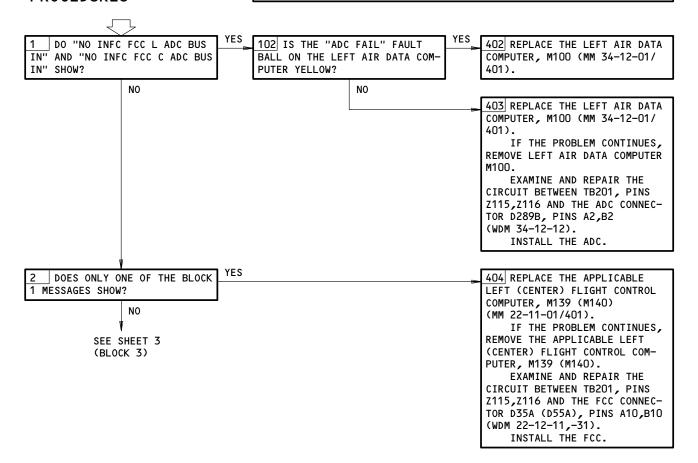
PREREQUISITES

MAKE SURE THE MCDP GROUND TEST PREREQUISITES ARE COMPLETED

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

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

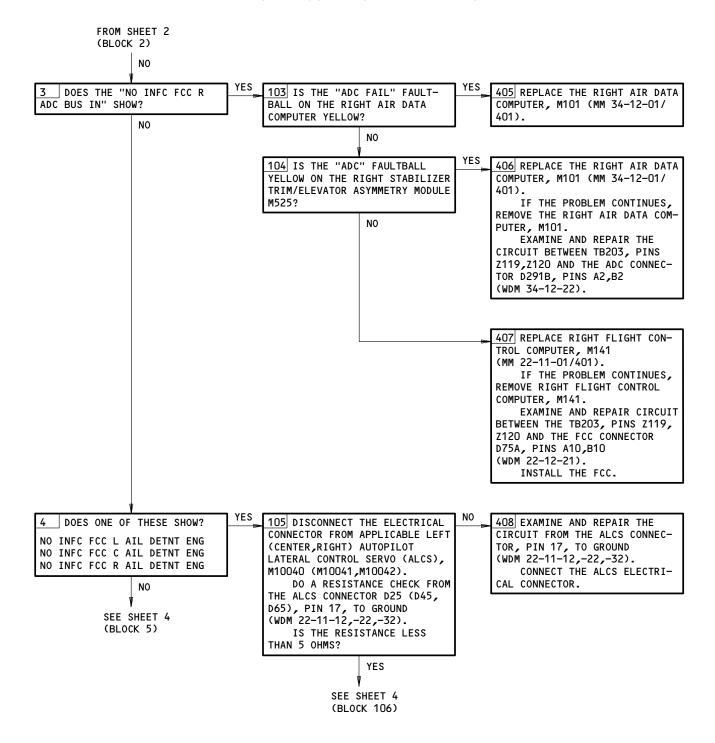
"NO INFC FCC" FAULT ISOLATION **PROCEDURES**



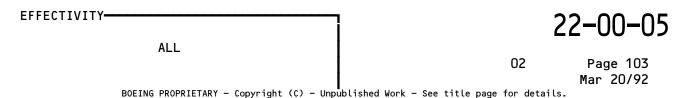
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 2)

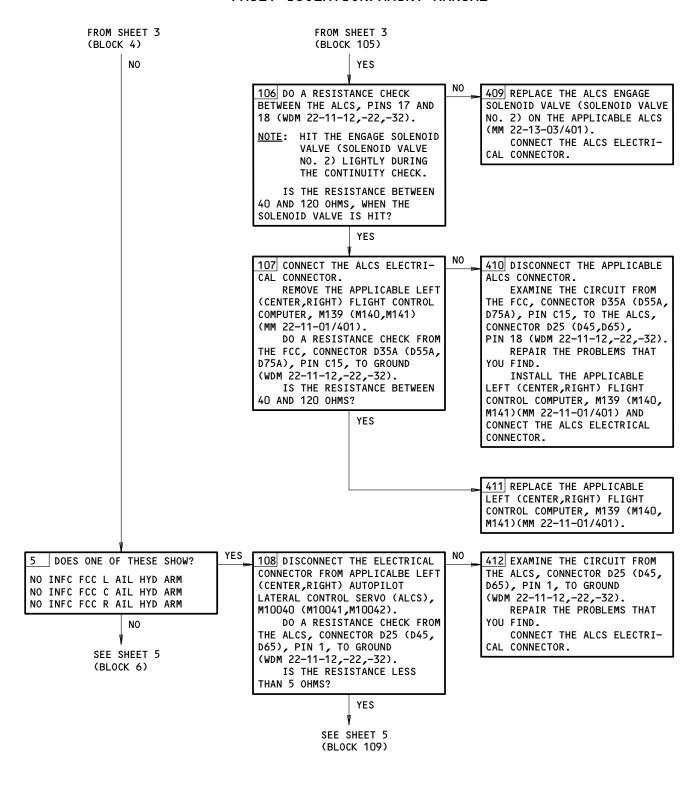
EFFECTIVITY-ALL

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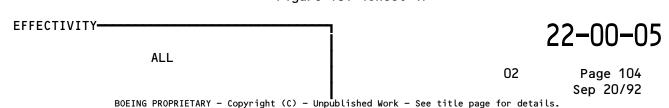


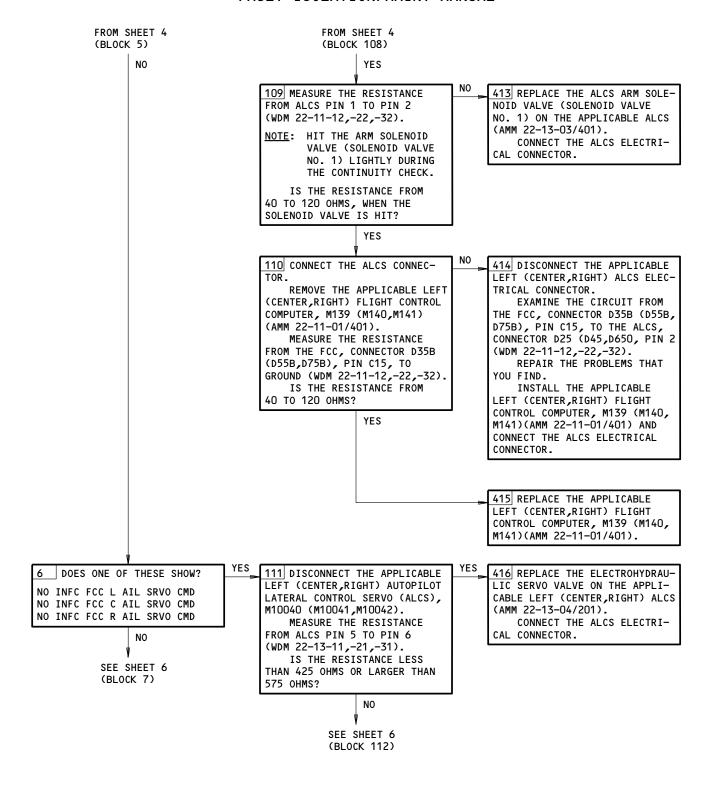
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 3)





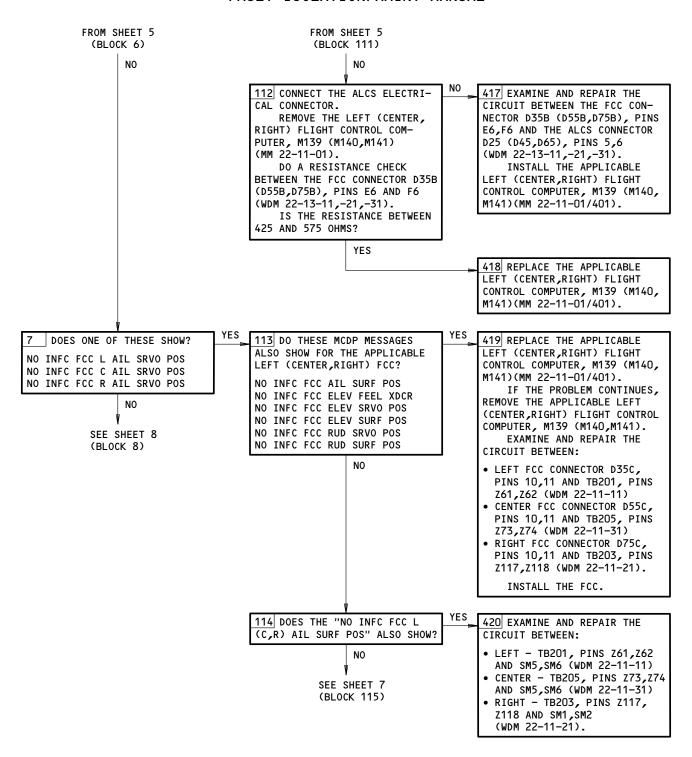
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 4)





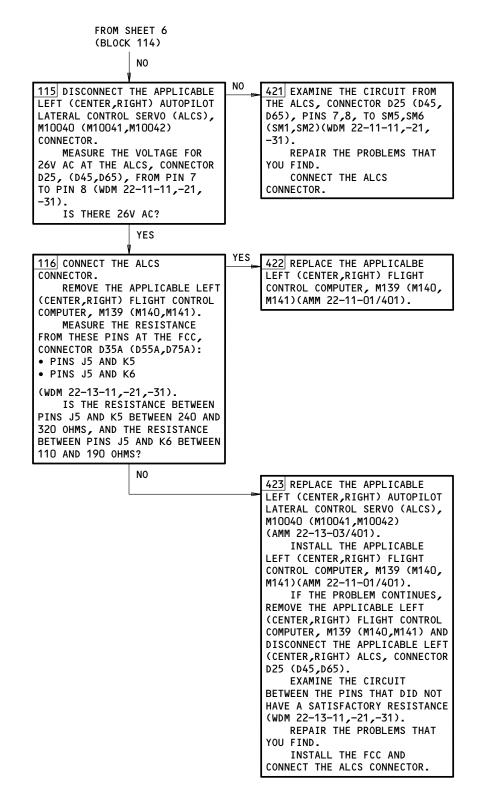
NO INFC FCC Fault Isolation Procedures
Figure 101 (Sheet 5)





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





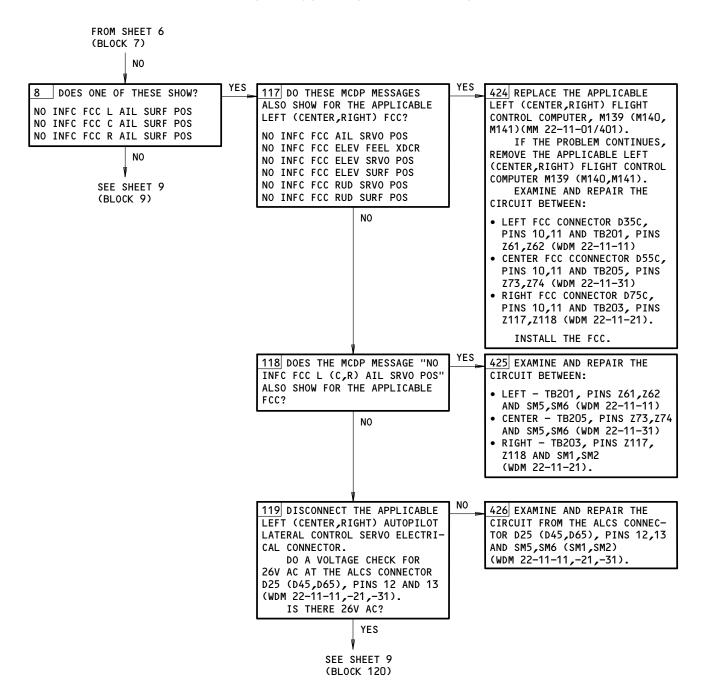
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 7)

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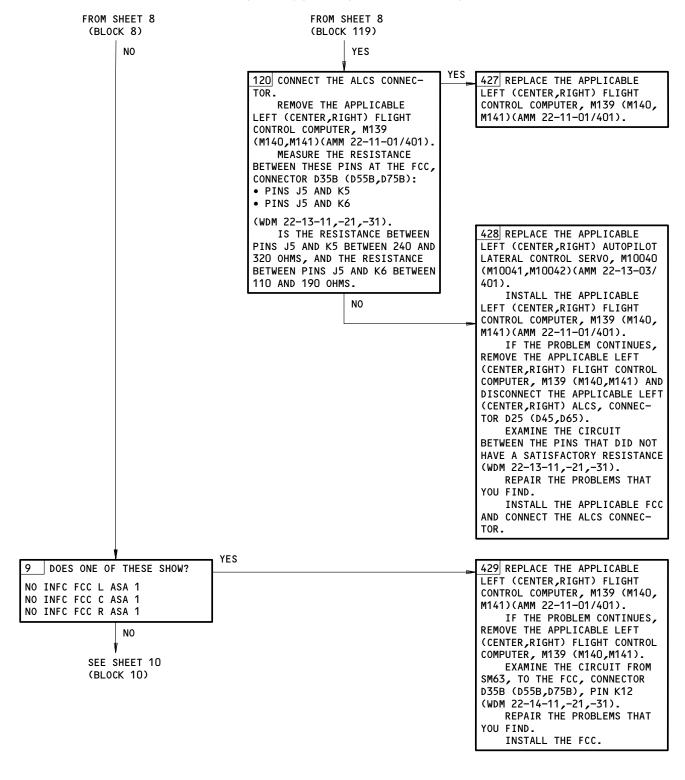
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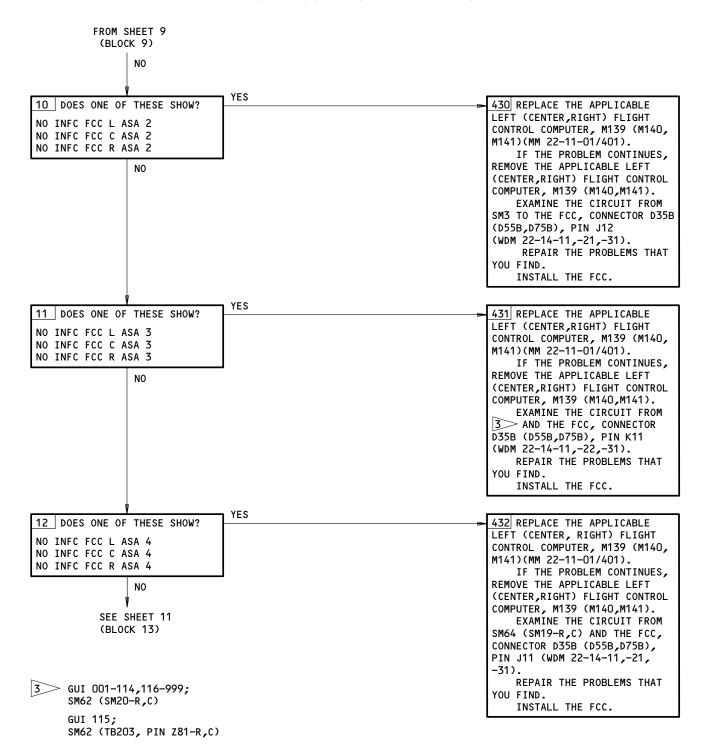
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 8)



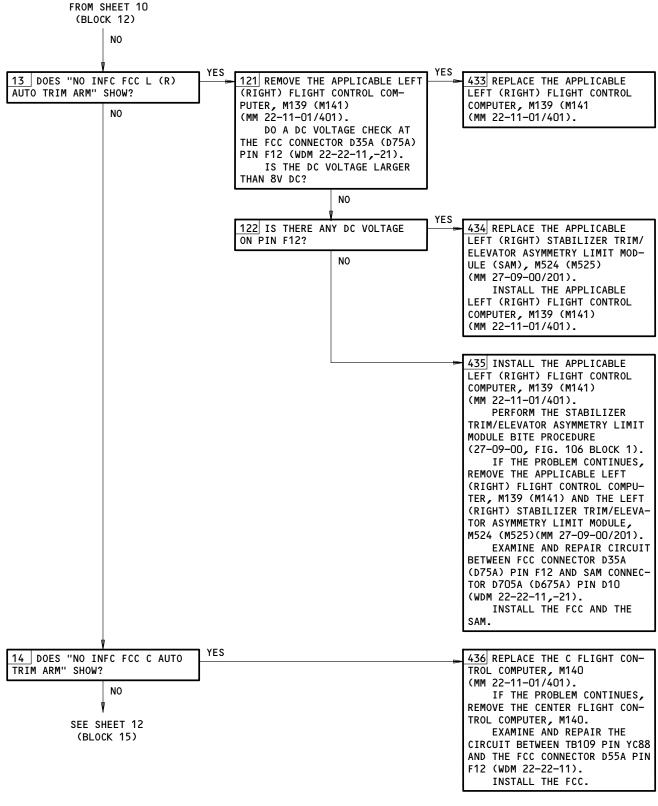


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 9)

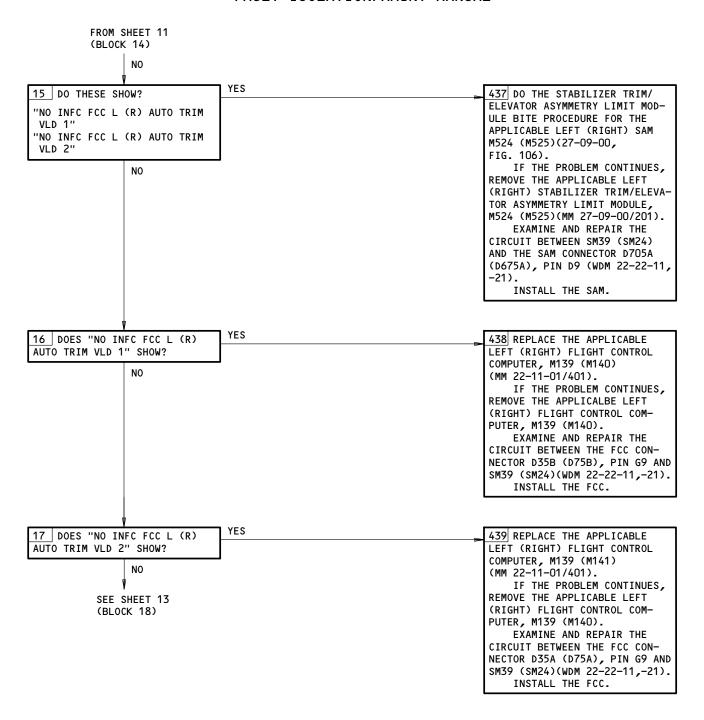
ALL 02 Page 109
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 10)

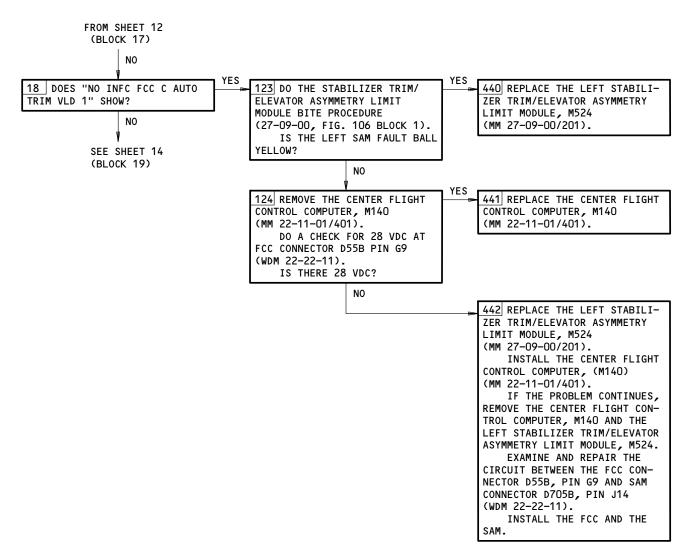


NO INFC FCC Fault Isolation Procedures
Figure 101 (Sheet 11)



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



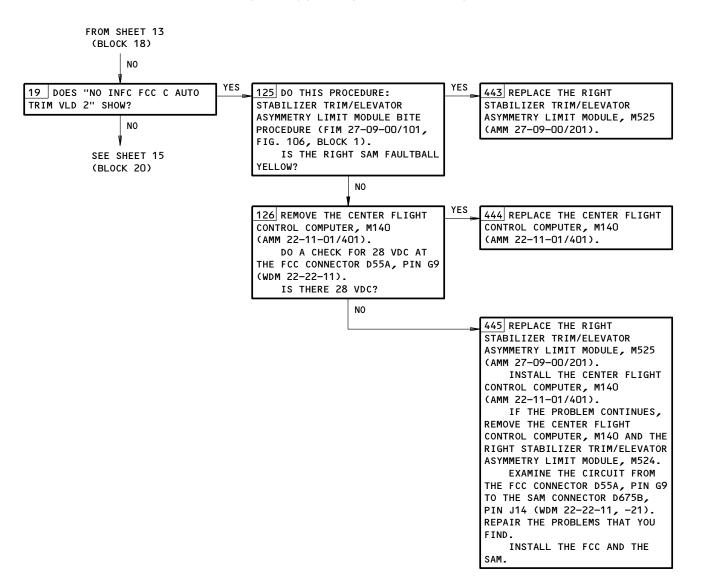


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 13)

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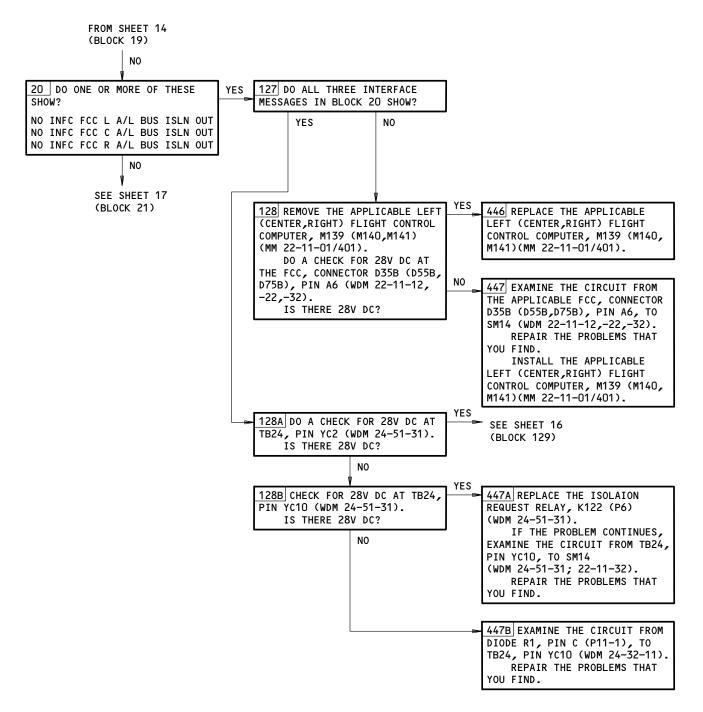
02 Page 113
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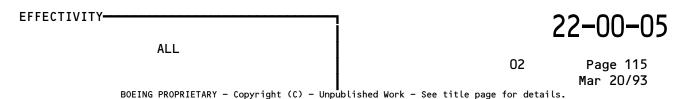


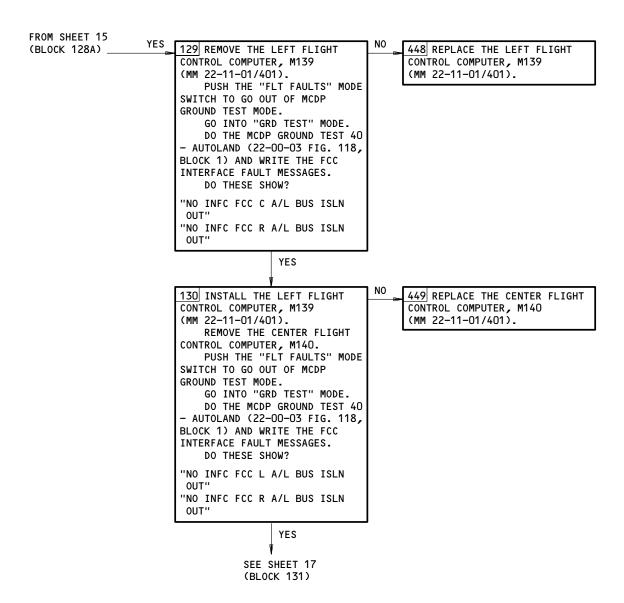
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 14)





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



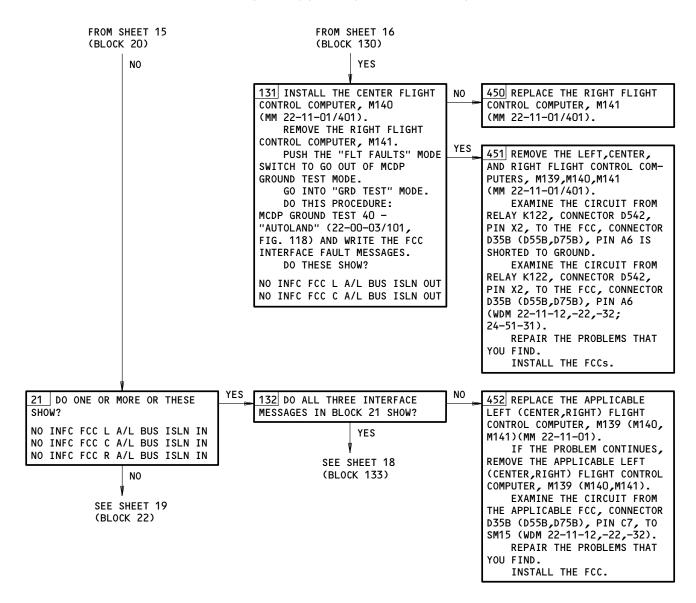


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 16)

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

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FROM SHEET 17 (BLOCK 132) NO 133 MAKE SURE THE LEFT AND 453 EXAMINE THE CIRCUIT FROM RIGHT BUS TIE SWITCHES ARE SET THE SM15, TO THE CAPT INSTR TO "AUTO" BUS VOLTAGE SENSE UNIT, OPEN THE "CAPT PRIM INST M10374, CONNECTOR D4118P, BUS $\phi A''$ (6M16) CIRCUIT PIN 5 (WDM 24-51-72). BREAKER. REPAIR THE PROBLEMS THAT MOMENTARILY PUSH THE MCDP YOU FIND. CLOSE THE "CAPT PRIM INST "FLT FAULTS" MODE SWITCH TO GO OUT OF THE "GRD TEST" MODE. BUS ØA" (6M16) CIRCUIT PUSH THE MCDP "GRD TEST" BREAKER. MODE SWITCH TO GO INTO THE GRD IF THE PROBLEM CONTINUES, TEST MODE. DO THE MCDP GROUND REPLACE THE CAPT INSTRUMENT TEST 30 - CURRENT FAULT REPORT BUS VOLTAGE SENSE UNIT, M10374 (22-00-03/101, FIG. 117), AND (WDM 24-51-72). 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 134 CLOSE THE "CAPT PRIM INST 454 EXAMINE THE CIRCUIT FROM BUS \$\phi A'' (6M16) CIRCUIT THE CAPT INSTR BUS VOLTAGE BREAKER. SENSE UNIT, M10374, CONNECTOR D4118P, PIN 14, TO THE F/O OPEN THE "F/O PRIM INST BUS ØA" (6M22) CIRCUIT INSTR BUS VOLTAGE SENSE UNIT, BREAKER. M10375, CONNECTOR D4010P, PIN 5 (WDM 24-51-72). MOMENTARILY PUSH THE MCDP "FLT FAULTS" MODE SWITCH TO REPAIR THE PROBLEMS THAT GO OUT OF THE GRD TEST MODE. YOU FIND. PUSH THE MCDP "GRD TEST" CLOSE THE "F/O PRIM INST BUS \$\phi A'' (6M22) CIRCUIT MODE SWITCH TO GO INTO THE GRD TEST MODE. DO THE MCDP GROUND BREAKER. TEST 30 - CURRENT FAULT REPORT IF THE PROBLEM CONTINUES, REPLACE THE F/O INSTRUMENT BUS (22-00-03/101, FIG. 117), AND WRITE ALL THE INTERFACE VOLTAGE SENSE UNIT, M10375 (WDM 24-51-72). 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 NO SEE SHEET 19

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

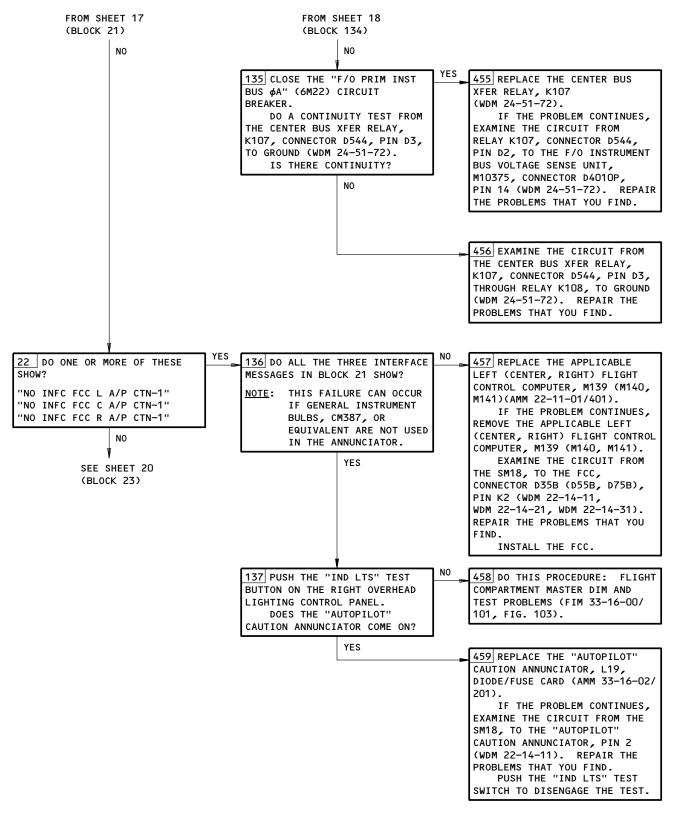
(BLOCK 135)

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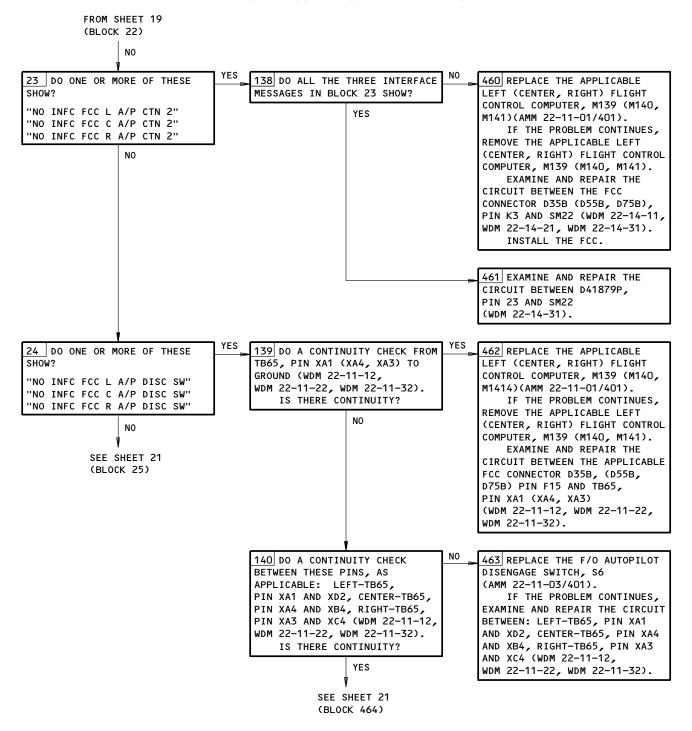
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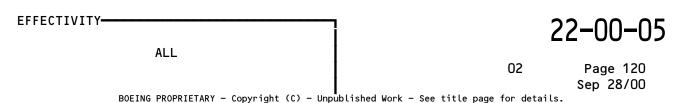
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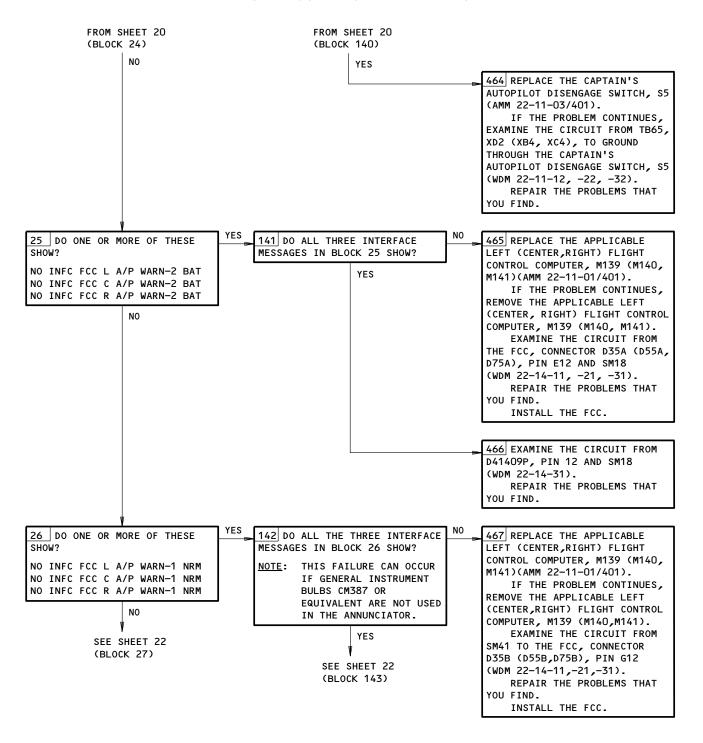


NO INFC FCC Fault Isolation Procedures
Figure 101 (Sheet 19)

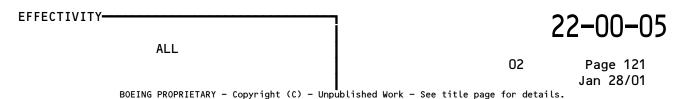


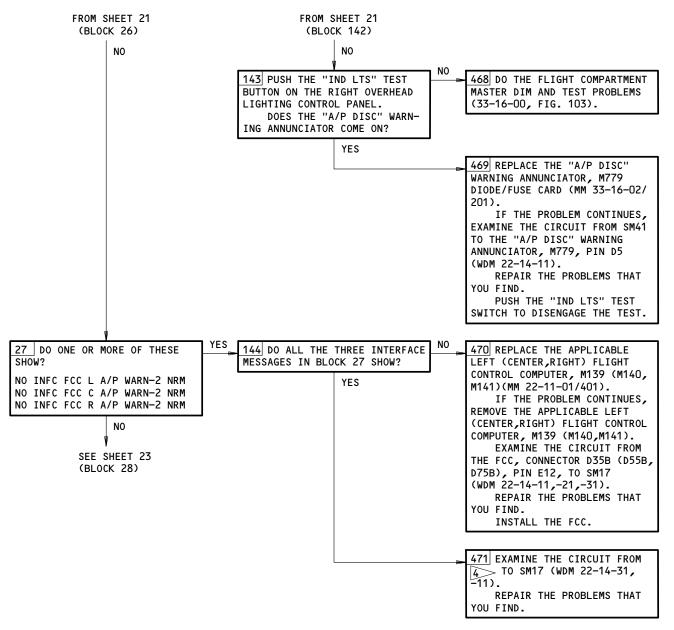
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 20)





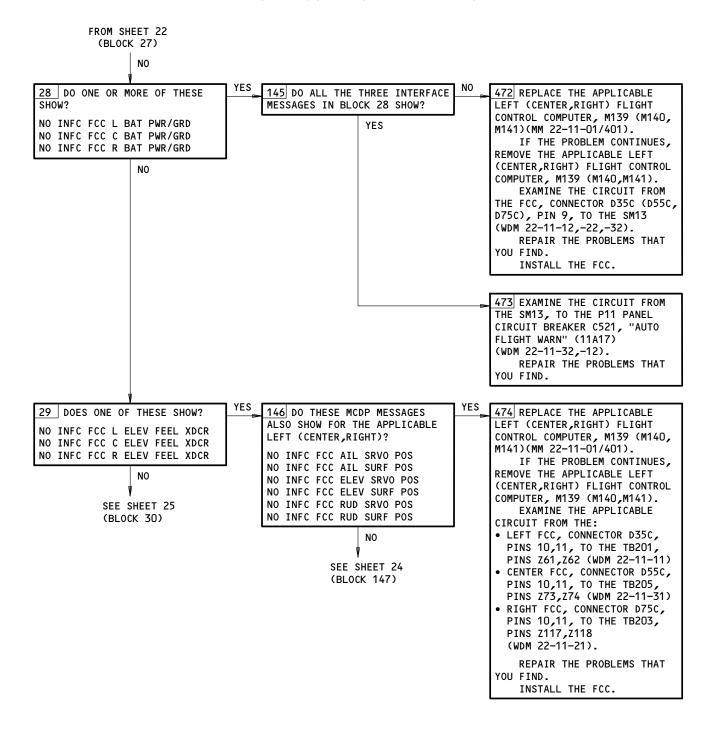
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 21)



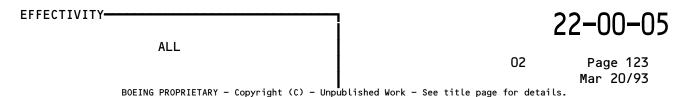


GUI 001-114,116-999; SM36 GUI 115; D41879P, PIN 19

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



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



FROM SHEET 23 (BLOCK 146)

147 DISCONNECT THE APPLICABLE 475 EXAMINE THE CIRCUIT FROM LEFT (CENTER, RIGHT) ELEVATOR THE LEFT (CENTER, RIGHT) **ELEVATOR NEUTRAL SHIFT** NEUTRAL SHIFT TRANSDUCER TRANSDUCER, TS5151 (TS5152, ELECTRICAL CONNECTOR. DO A CHECK FOR 26V AC TS5153) ELECTRICAL CONNECTOR: BETWEEN THE CONNECTOR PINS, 1 • LEFT - D913, PINS, 1, 2 AND TB201, PINS, Z61, Z62 AND 2 (WDM 22-11-11, WDM 22-11-21, WDM 22-11-31). (WDM 22-11-11) IS THERE 26V AC? CENTER - D833, PINS, 1, 2 AND TB205, PINS, Z73, Z74 YES (WDM 22-11-31) RIGHT - D831, PINS 1, 2 AND TB203, PINS, Z117, Z118 (WDM 22-11-21). REPAIR THE PROBLEMS THAT YOU FIND. CONNECT THE ELECTRICAL CONNECTOR. 148 CONNECT THE ELECTRICAL 476 REPLACE THE APPLICABLE CONNECTOR. LEFT (CENTER, RIGHT) FLIGHT REMOVE THE APPLICABLE LEFT CONTROL COMPUTER, M139 (M140, (CENTER, RIGHT) FLIGHT CONTROL M141)(AMM 22-11-01/401). COMPUTER, M139 (M140, M141) (AMM 22-11-01/401). DO A RESISTANCE CHECK BETWEEN THESE PINS AT THE FCC 477 REPLACE THE APPLICABLE CONNECTOR D35B (D55B, D75B): LEFT (CENTER, RIGHT) ELEVATOR • PINS, C5 TO D6 NEUTRAL SHIFT TRANSDUCER, • PINS, C5 TO D5 TS5151 (TS5152, TS5153) (WDM 22-12-11, WDM 22-12-21, (AMM 22-12-04/401). INSTALL THE APPLICABLE WDM 22-12-31). LEFT (CENTER, RIGHT) FLIGHT IS THE RESISTANCE FROM CONTROL COMPUTER, M139 (M140, PINS, C5 TO D6, BETWEEN 356 M141)(AMM 22-11-01/401). AND 535 OHMS, AND THE IF THE PROBLEM CONTINUES, RESISTANCE FROM PINS, C5 TO REMOVE THE APPLICABLE LEFT D5, BETWEEN 536 AND 1248 OHMS? (CENTER, RIGHT) FLIGHT CONTROL COMPUTER, M139 (M140, M141) AND DISCONNECT THE APPLICABLE LEFT (CENTER, RIGHT) ELEVATOR NEUTRAL SHIFT TRANSDUCER, CONNECTOR D913 (D833, D831). EXAMINE THE CIRCUIT BETWEEN THE PINS IN BLOCK 148 THAT DID NOT HAVE A SATISFACTORY RESISTANCE (WDM 22-12-11, WDM 22-12-21, WDM 22-12-31). REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE FCC AND CONNECT THE TRANSDUCER ELECTRICAL CONNECTOR.

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

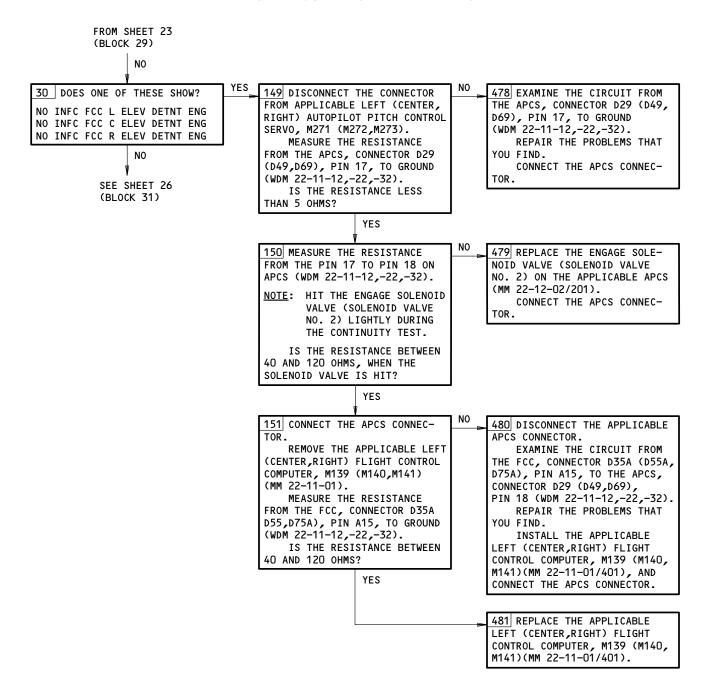
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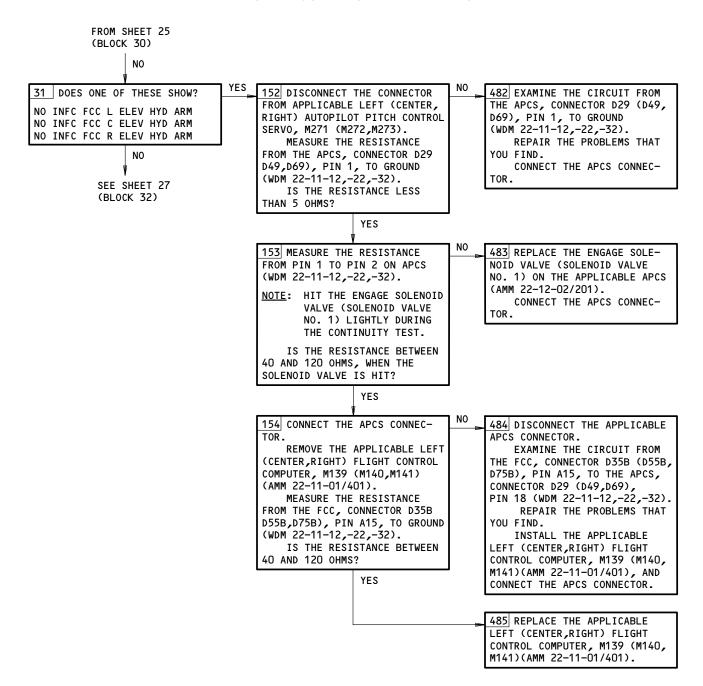
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 25)

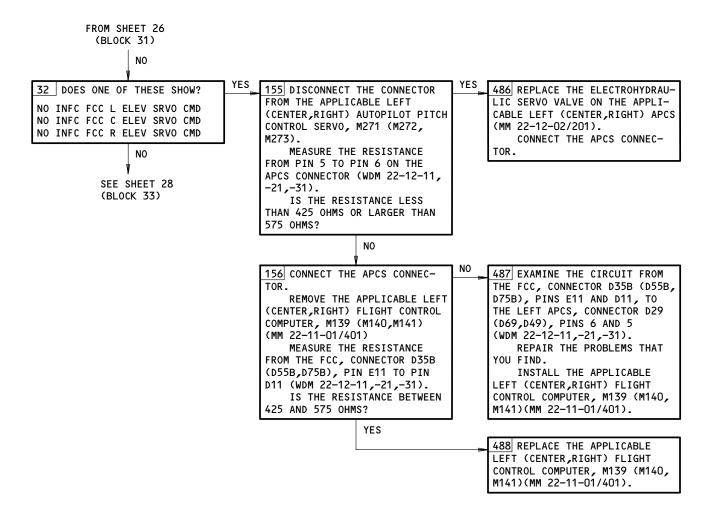
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 26)

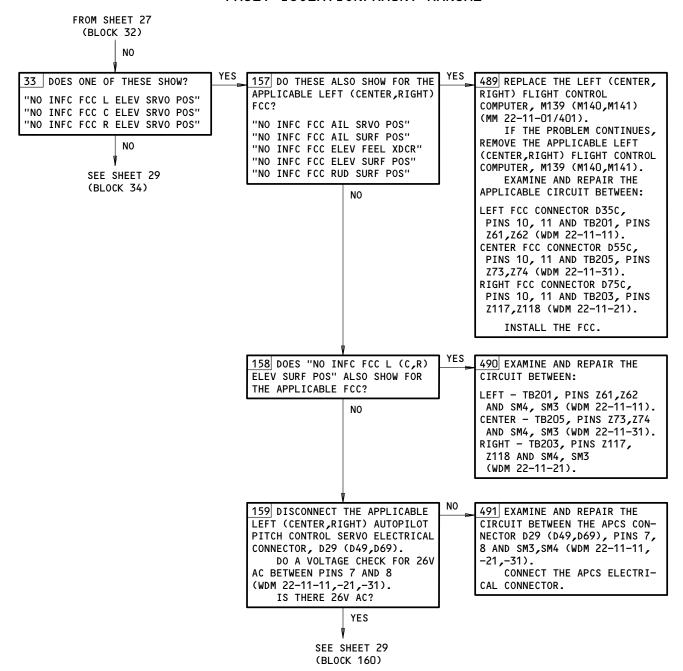
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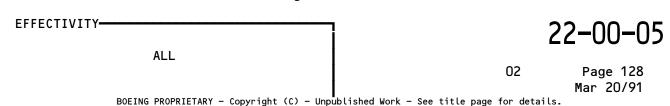
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 27)

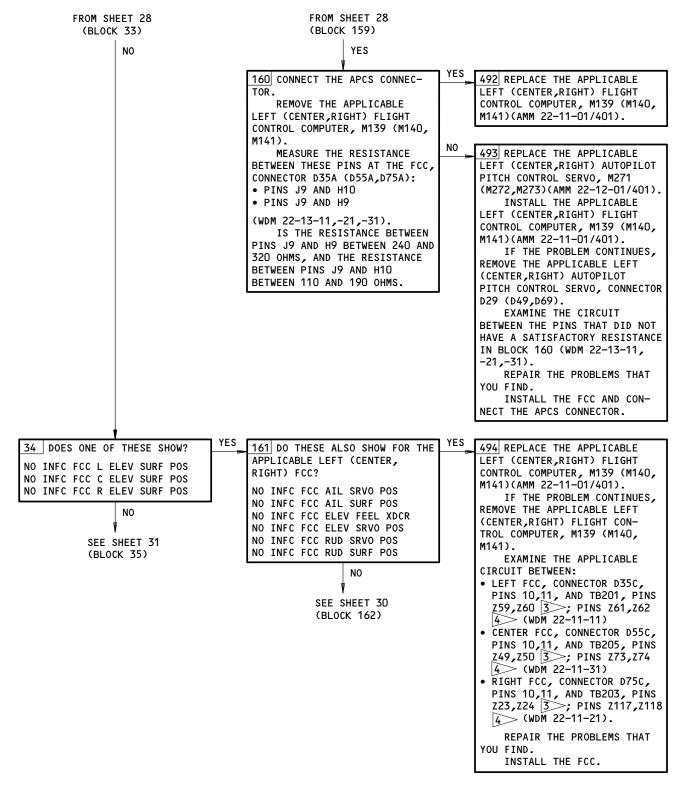
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 28)





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

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836175

FROM SHEET 29 (BLOCK 161) 162 DOES "NO INFC FCC L (C,R) 495 EXAMINE THE CIRCUIT ELEV SURF POS" ALSO SHOW FOR **BETWEEN:** THE APPLICABLE FCC? • LEFT - TB201, PINS Z61,Z62 AND SM3,SM4 (WDM 22-11-11) NO • CENTER - TB205, PINS Z73, Z74 AND SM3,SM4 (WDM 22-11-31) • RIGHT - TB203, PIN Z117,Z118 AND SM3,SM4 (WDM 22-11-21). REPAIR THE PROBLEMS THAT YOU FIND. 496 EXAMINE THE CIRCUIT FROM 163 DISCONNECT THE APPLICABLE LEFT (CENTER, RIGHT) AUTOPILOT THE APCS, CONNECTOR D29 (D49, PITCH CONTROL SERVO, CONNECTOR D69), PINS 12,13, TO SM3,SM4 (WDM 22-11-11,-21,-31). D29 (D49,D69). MEASURE THE VOLTAGE FROM REPAIR THE PROBLEMS THAT PIN 12 TO PIN 13 YOU FIND. (WDM 22-11-11,-21,-31). CONNECT THE APCS CONNEC-IS THE VOLTAGE 26V AC? TOR. YES YES 164 CONNECT THE APCS CONNEC-497 REPLACE THE APPLICABLE TOR. LEFT (CENTER, RIGHT) FLIGHT CONTROL COMPUTER, M139 (M140, REMOVE THE APPLICABLE LEFT (CENTER, RIGHT) FLIGHT CONTROL M141)(AMM 22-11-01/401). COMPUTER, M139 (M140,M141) (AMM 22-11-01/401). MEASURE THE RESISTANCE BETWEEN THESE PINS AT THE FCC, 498 REPLACE THE APPLICABLE CONNECTOR D35B (D55B,D75B): LEFT (CENTER, RIGHT) AUTOPILOT PITCH CONTROL SERVO, M271 • PINS J9 AND H10 • PINS J9 AND H9 (M272,M273)(AMM 22-12-01/401). INSTALL THE APPLICABLE (WDM 22-12-11,-21,-31). LEFT (CENTER, RIGHT) FLIGHT IS THE RESISTANCE BETWEEN CONTROL COMPUTER, M139 (M140, PINS J9 AND H9 BETWEEN 240 AND M141)(AMM 22-11-01/401). 320 OHMS, AND THE RESISTANCE IF THE PROBLEM CONTINUES, BETWEEN J9 AND H10 BETWEEN REMOVE THE APPLICABLE LEFT 110 AND 190 OHMS? (CENTER, RIGHT) FLIGHT CONTROL COMPUTER, M139 (M140,M141) AND DISCONNECT THE APPLICABLE LEFT (CENTER, RIGHT) AUTOPILOT PITCH CONTROL SERVO, CONNECTOR D29 (D49,D69). EXAMINE THE CIRCUIT BETWEEN THE PINS THAT DID NOT HAVE A SATISFACTORY RESISTANCE IN BLOCK 164 (WDM 22-12-11, -21,-31). REPAIR THE PROBLEMS THAT YOU FIND. INSTALL THE FCC AND CON-NECT THE APCS CONNECTOR.

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

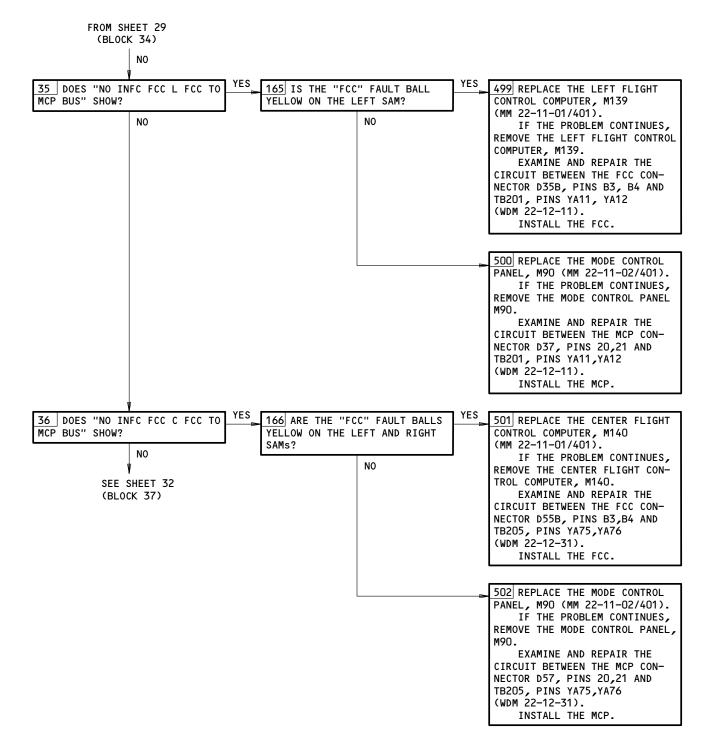
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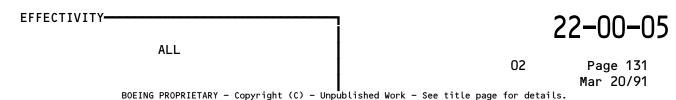
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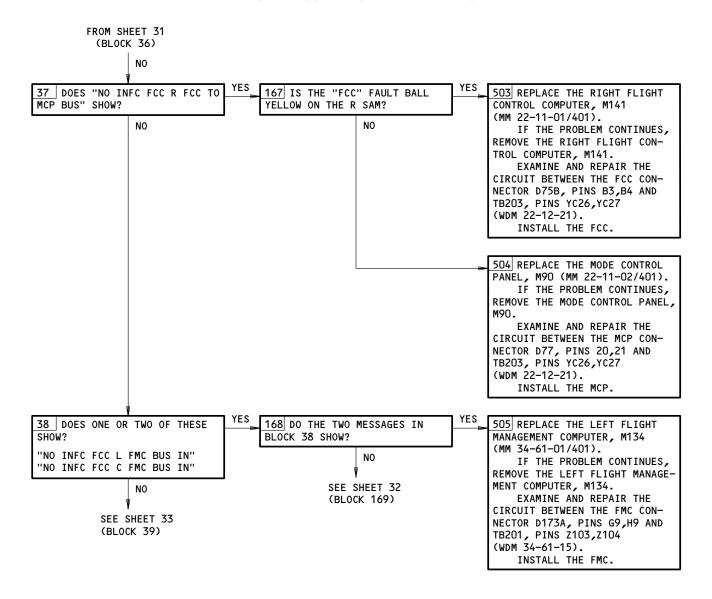
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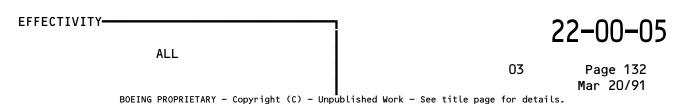


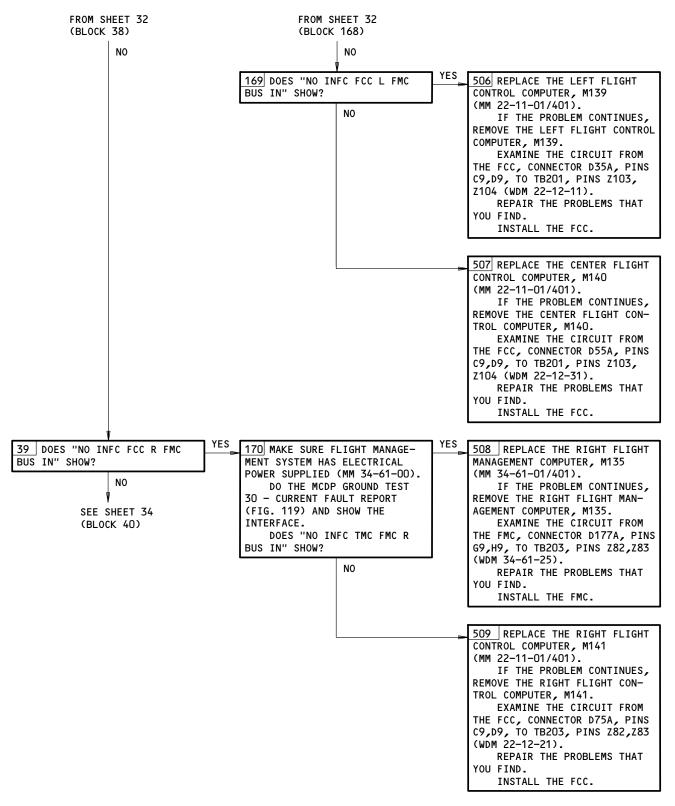
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 31)





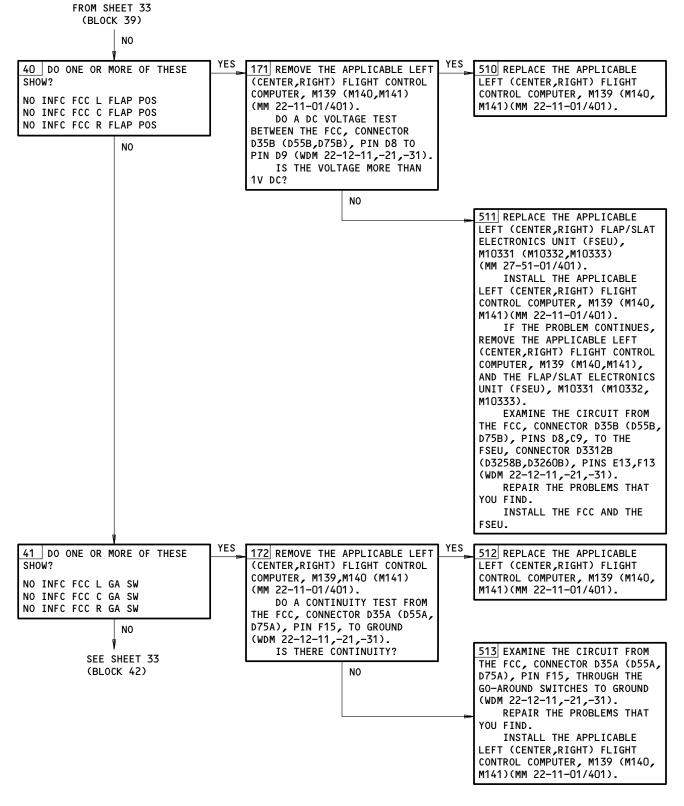
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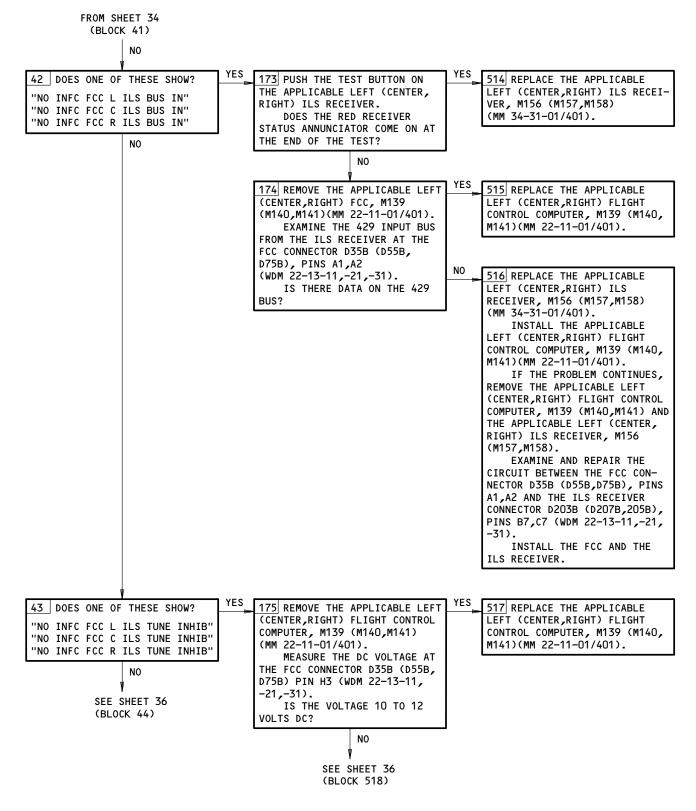


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 33)

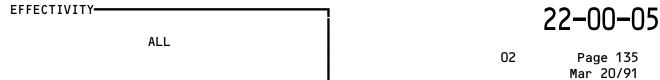


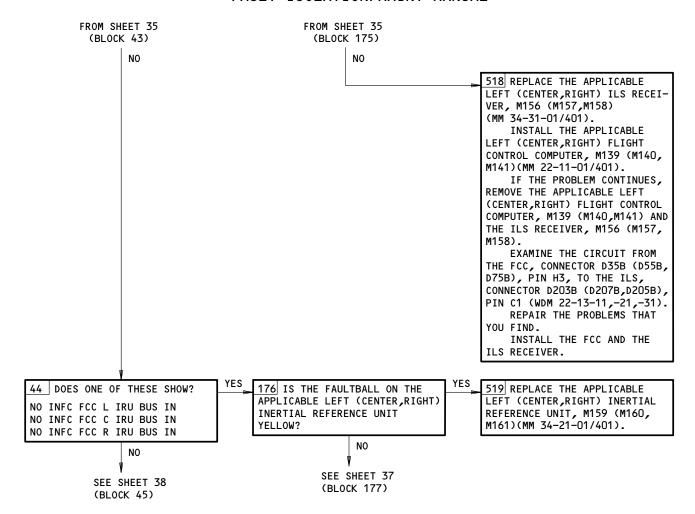


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 34)



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





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

FROM SHEET 36 (BLOCK 176)

NO

177 REMOVE THE LEFT (CENTER, RIGHT) FCC, M139 (M140,M141) (AMM 22-11-01/401).

EXAMINE THE 429 INPUT BUS FROM THE IRU TO THE FCC CON-NECTOR D35B (D55B,D75B), PINS E1,E2 (WDM 22-13-11,-21,-31). IS THERE DATA ON THE 429 BUS?

NO

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

521 REPLACE THE APPLICABLE
LEFT (CENTER, RIGHT) INERTIAL
REFERENCE UNIT, M159 (M160,
M161)(AMM 34-21-01/401).
INSTALL THE APPLICABLE
LEFT (CENTER, RIGHT) FLIGHT

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 THE APPLICABLE LEFT (CENTER, RIGHT) INERTIAL REFERENCE UNIT, M159 (M160,M161).

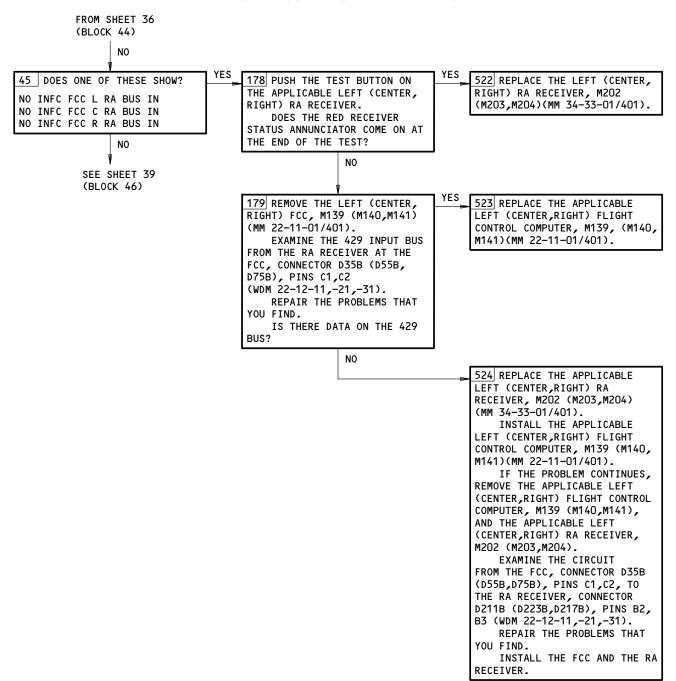
EXAMINE AND REPAIR THE CIRCUIT BETWEEN THE FCC CON-NECTOR D35B (D55B,D75B), PINS E1,E2 AND THE IRU CONNECTOR D137B (D139B,D141B), PINS E5, E6 (WDM 22-13-11,-21,-31).

INSTALL THE FCC AND THE

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

ALL

22-00-05

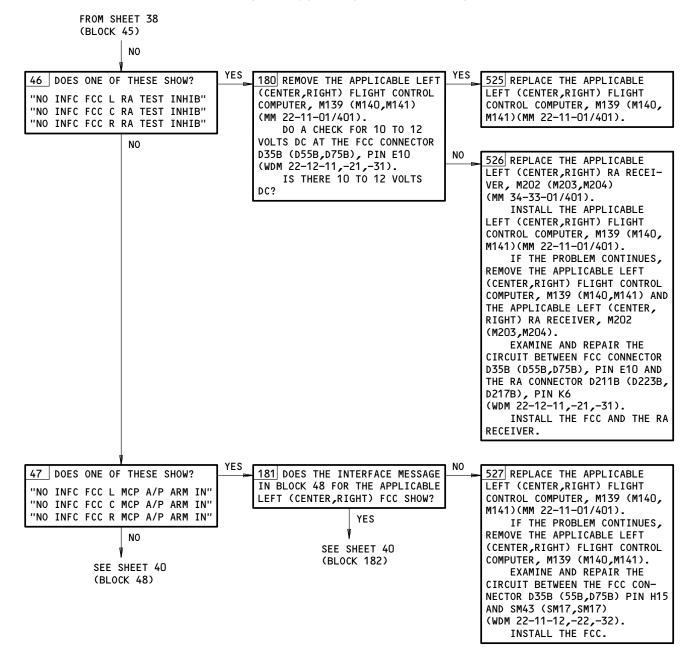


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 38)

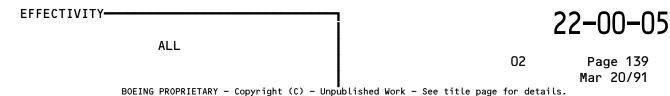
22-00-05
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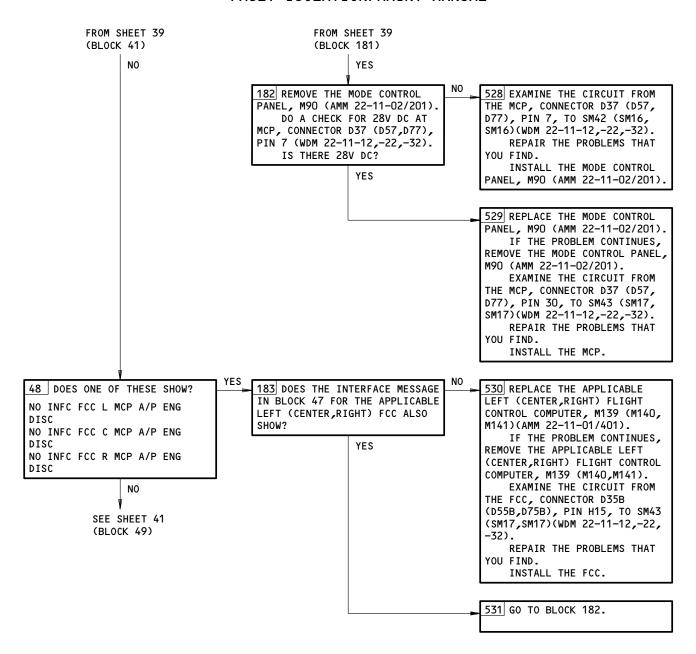
02 Page 138
Mar 20/93

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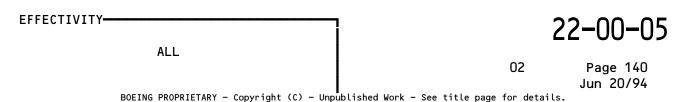


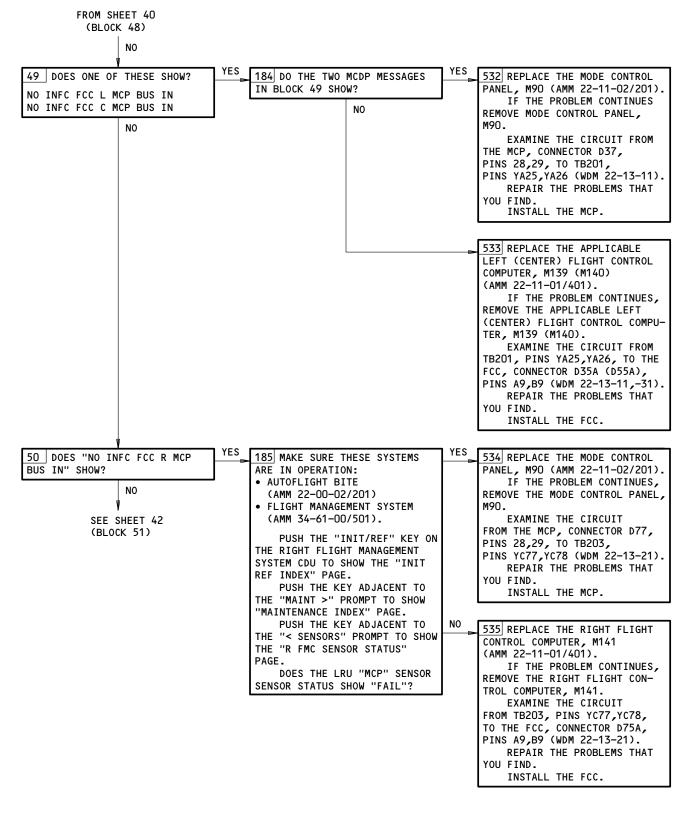
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 39)





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





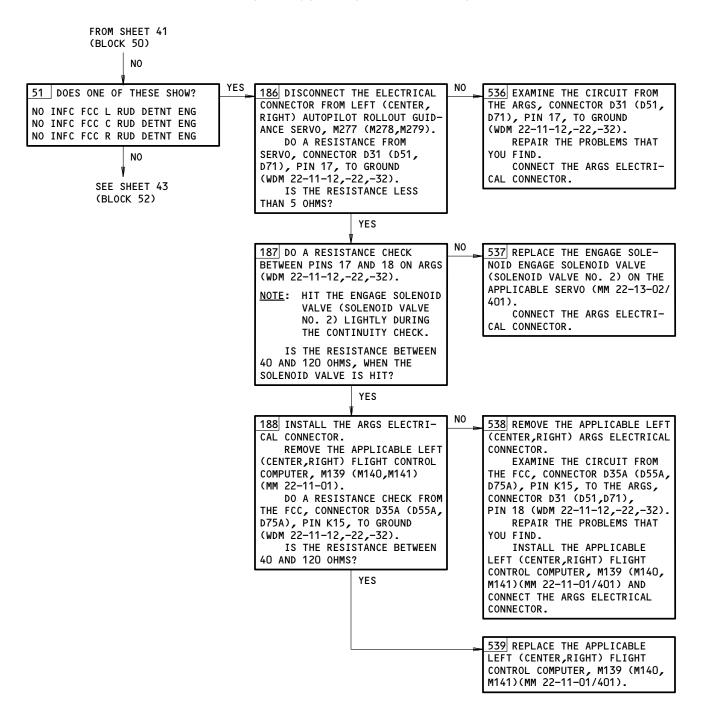
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 41)

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O2 Page 141

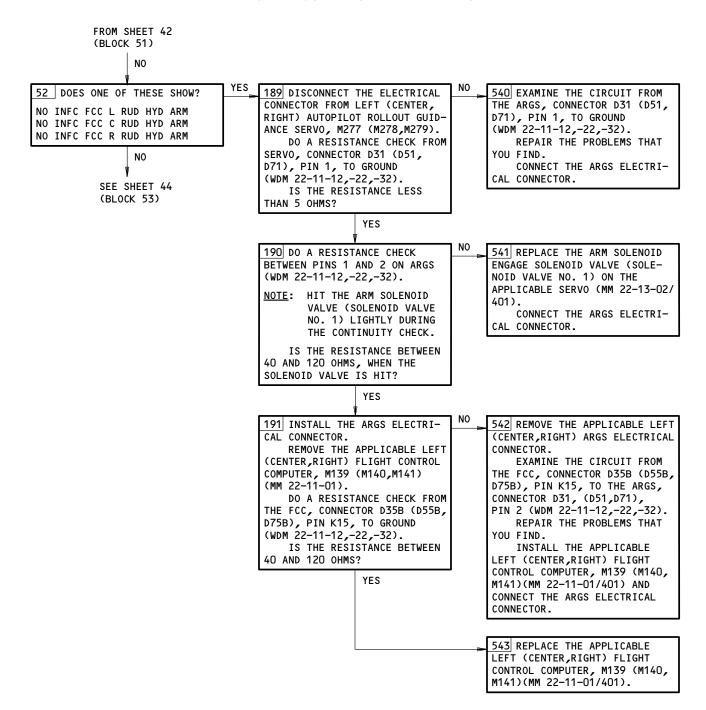
Jun 20/94

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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 42)

ALL 02 Page 142 Sep 20/92

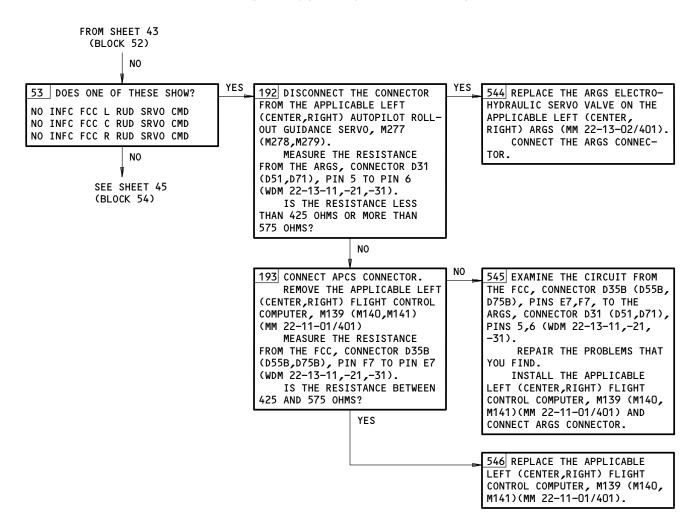


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 43)

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ALL

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Sep 20/92

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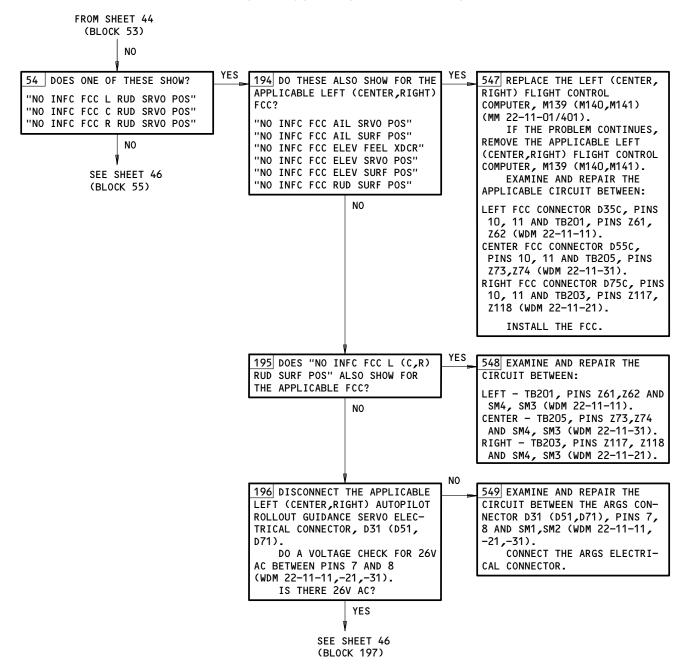
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 44)

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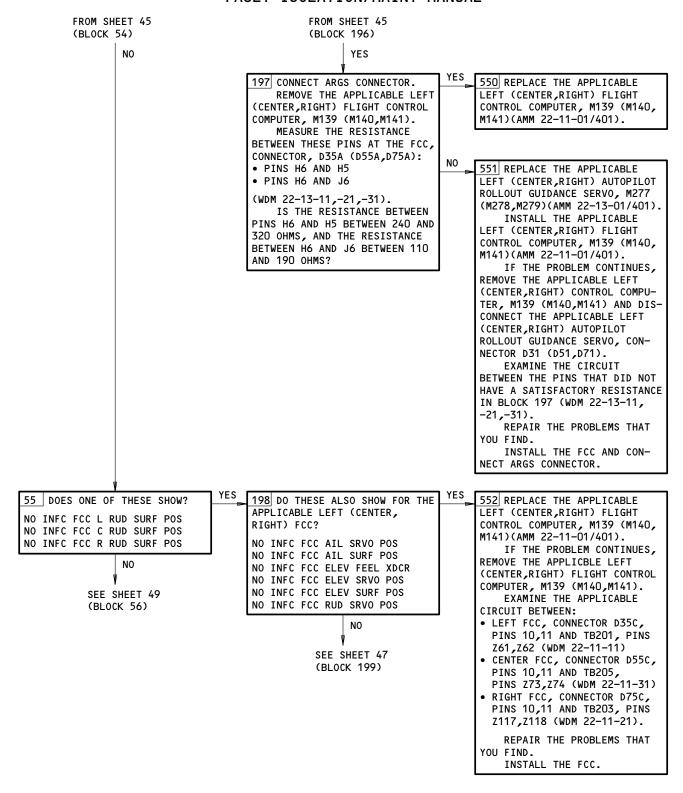


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 45)

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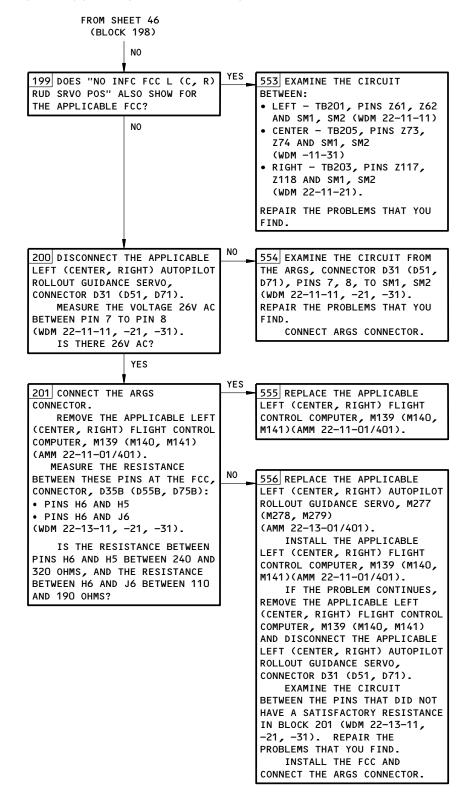
02 Page 145
Mar 20/91

FAULT ISOLATION/MAINT MANUAL



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





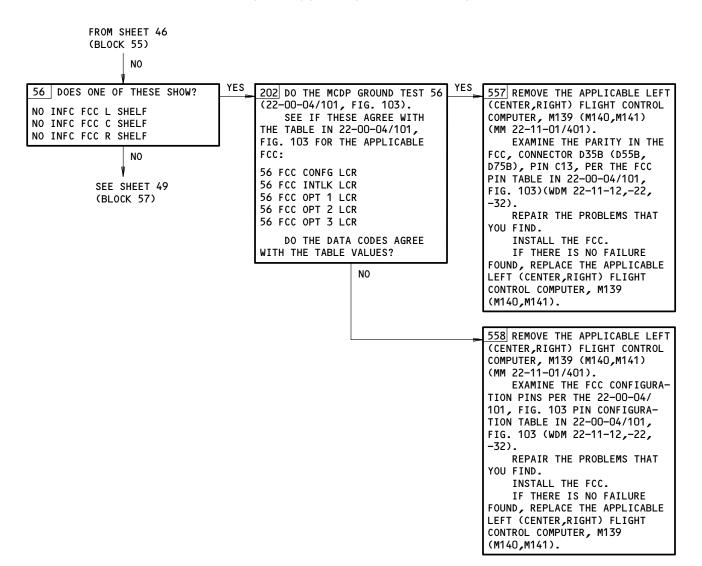
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 47)

EFFECTIVITY-ALL

22-00-05

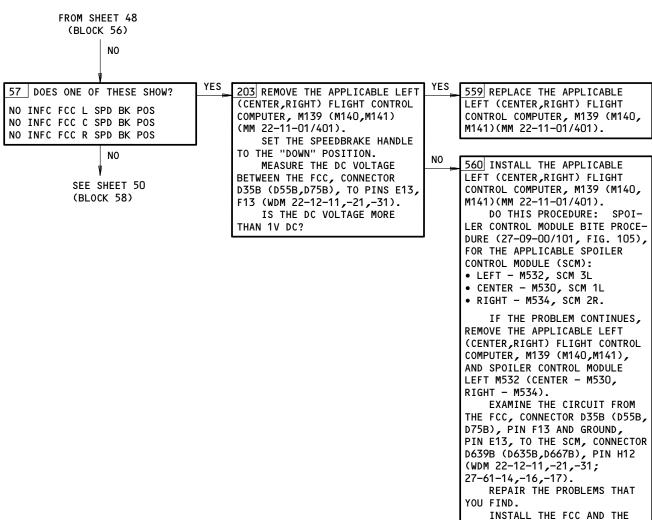
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NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 48)

22-00-05



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

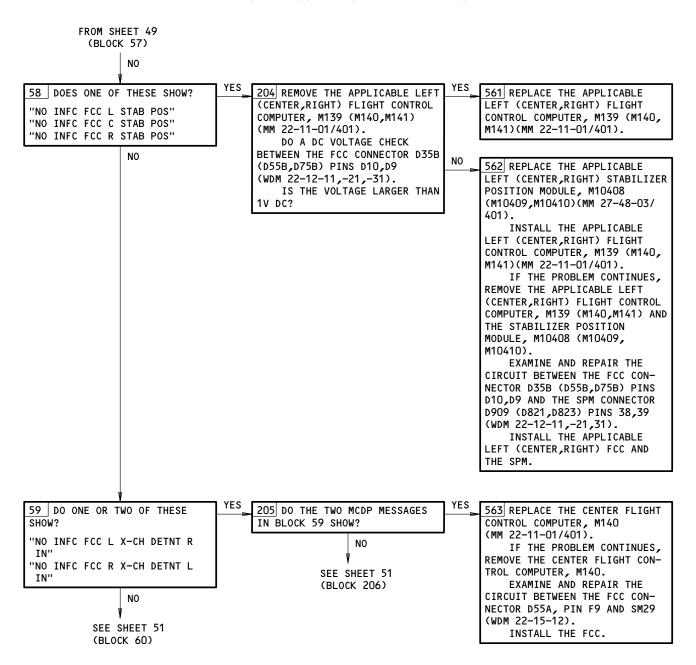
EFFECTIVITY-ALL

22-00-05

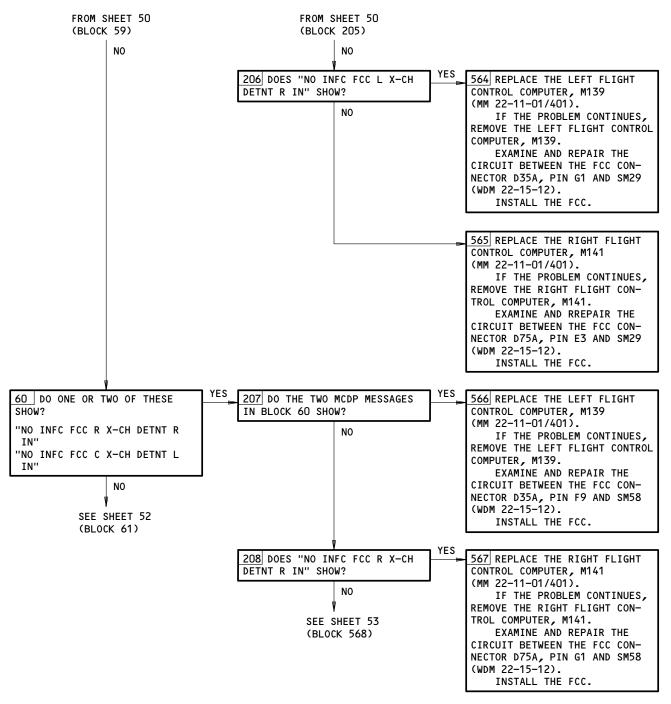
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SCM.

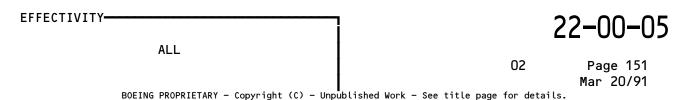
Page 149 Mar 20/93

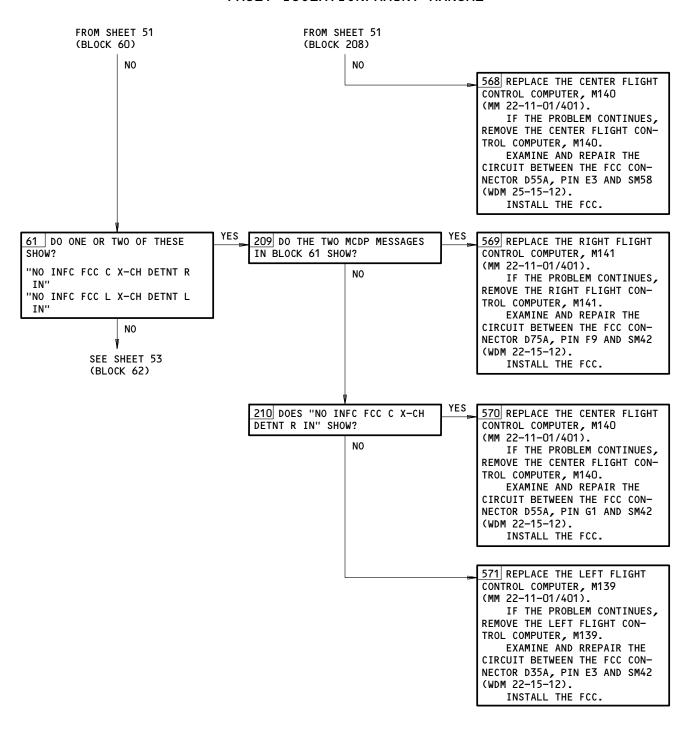


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 50)

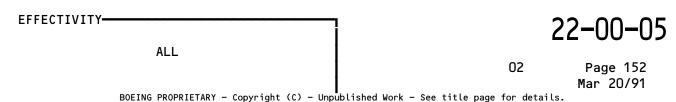


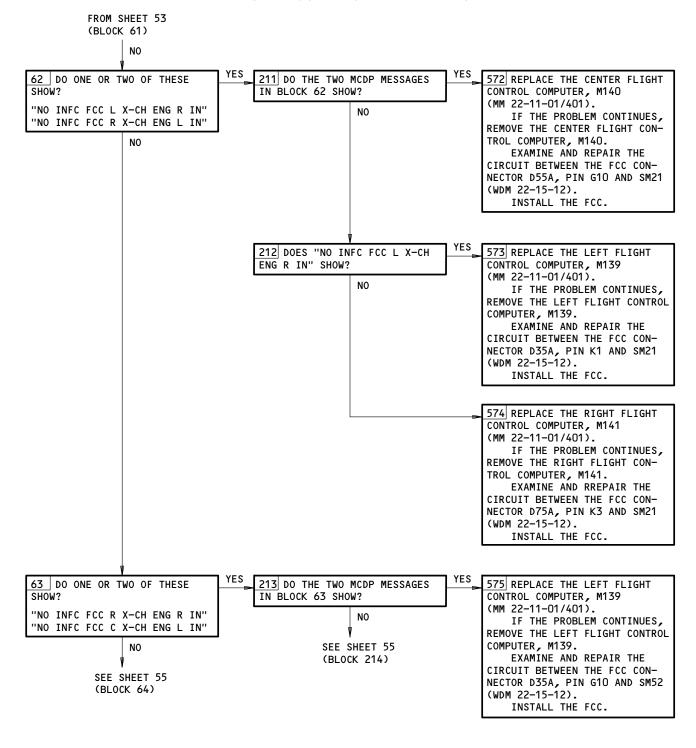
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 51)



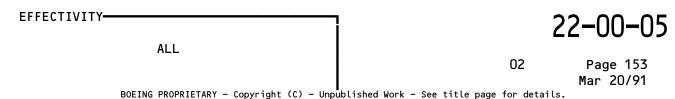


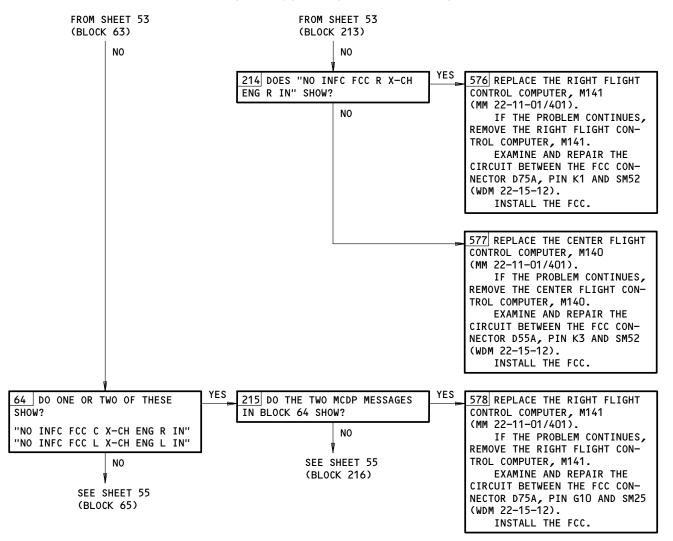
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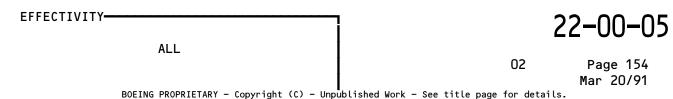


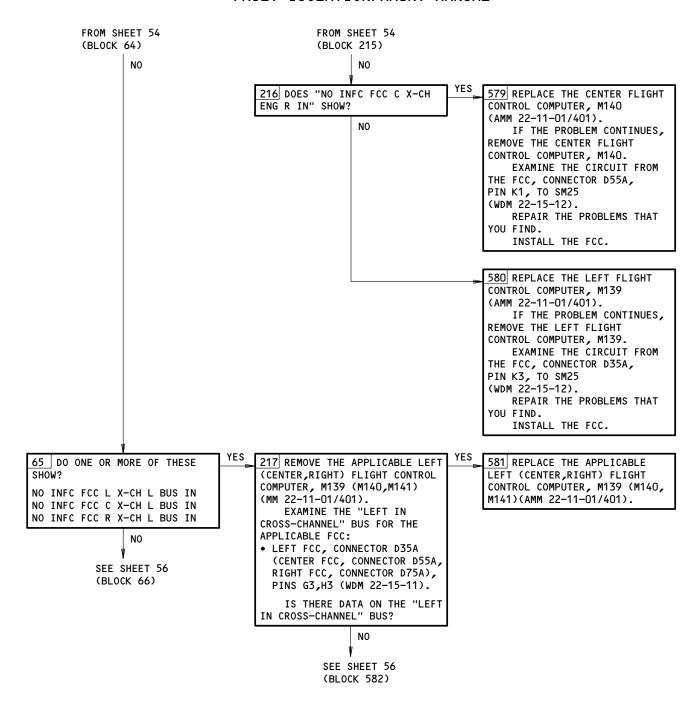
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 53)



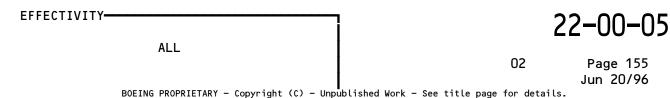


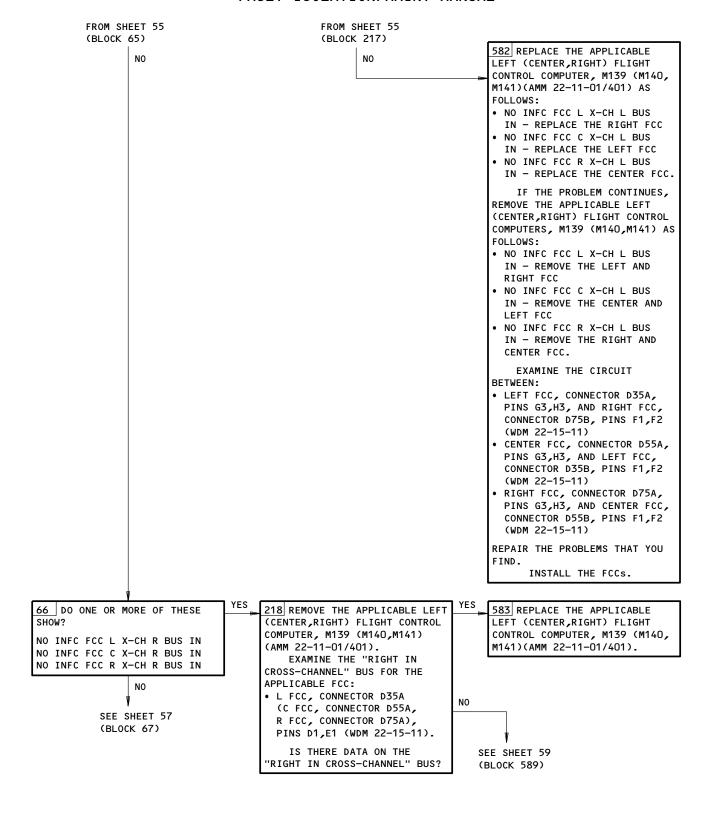
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 54)



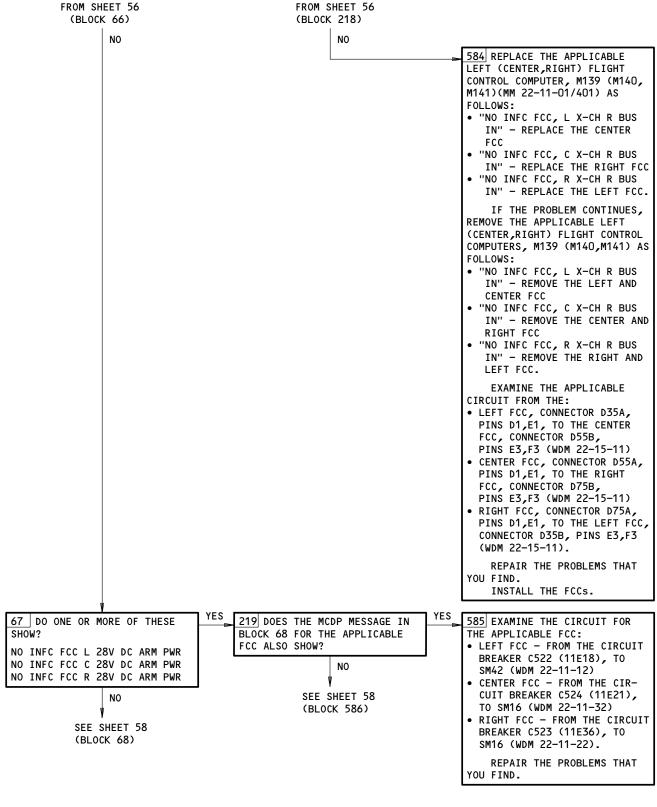


NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 55)

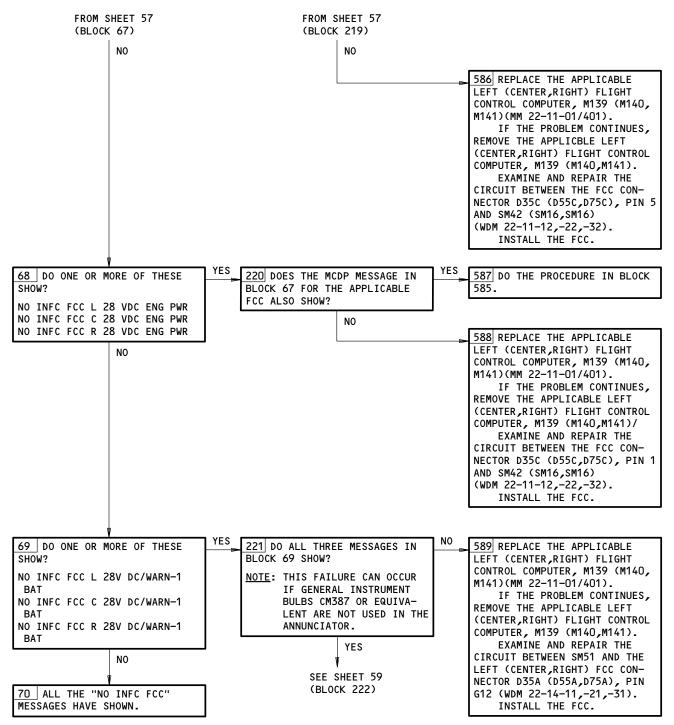




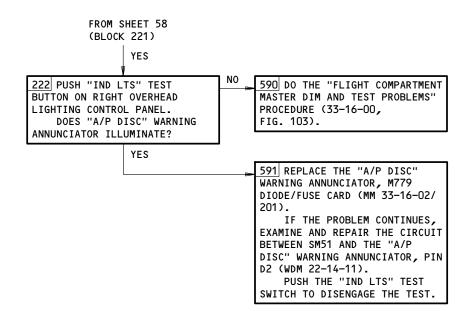
NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 56)



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



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



NO INFC FCC Fault Isolation Procedures Figure 101 (Sheet 59)

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NOTE: TABLE 101 GIVES THE SHEET-BLOCK REFERENCES TO

WHERE THE FAULT ISOLATION AND CORRECTION PRO-CEDURE FOR EACH FCC INTERFACE FAULT CAN BE FOUND. THE PREREQUISITES FOR EACH INTERFACE FAILURE IS THE SAME AS THE GROUND TEST WHICH

"NO INFC TMC" FAULT ISOLATION PROCEDURES

SHOWED THE FAILURE.

TMC INFC CORRECTION PROCEDURE REFERENCE TABLE 101										
TMC INFC MESSAGE 4	CORRECTION PROCEDURE SHT - BLOCK	TMC INFC MESSAGE 4>>	CORRECTION PROCEDURE SHT - BLOCK							
NO INFC TMC ADC L BUS IN 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 - 1 3 - 2 4 - 3 5 - 4 6 - 5 6 - 6 6 - 7 7 - 8 7 - 9 7 - 9 8 - 10 8 - 10 2 9 - 11 3 10 - 12 11 - 13 11 - 13	NO INFC TMC FMC L BUS IN 1 NO INFC TMC FMC R BUS IN 1 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 MCP BUS IN 1 NO INFC TMC PLA POS L NO INFC TMC PLA POS R NO INFC TMC REV THRST NO INFC TMC SOV L NO INFC TMC SOV L NO INFC TMC SOV L NO INFC TMC SOV R NO INFC TMC TACH L NO INFC TMC TACH L NO INFC TMC TMSP NO INFC TMC TMSP NO INFC TMC WG AI	12 - 14 12 - 14 13 - 15 13 - 16 14 - 17 14 - 17 15 - 18 15 - 19 16 - 20 16 - 20 17 - 21 19 - 22 20 - 23 20 - 23 21 - 24 21 - 25 22 - 157							

1>>	BEFORE 1	THE S	TART	OF THE	INTERFAC	E FAULT	ISOLATI	ON PROCE	DURE, D	THE MCDP	GROUND	TEST	30-CURRENT
	FAULT RE	EPORT	(FIG	. 119	, BLOCK 1)	AND WR	ITE 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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^{2&}gt;> GUI 001-114,116-999

>> GUI 115

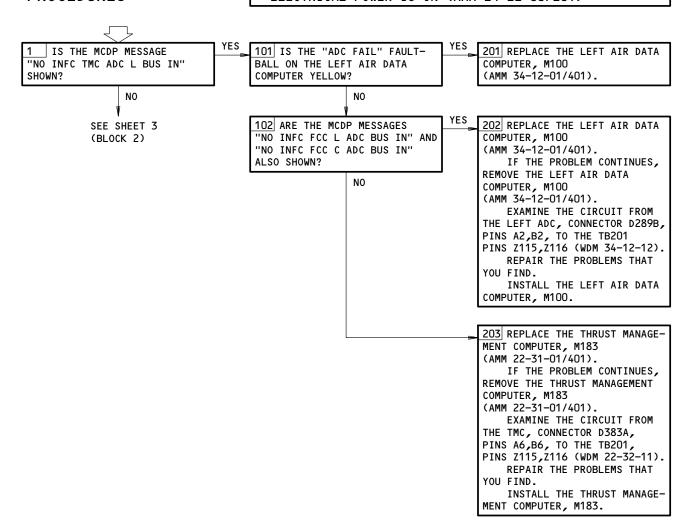


PREREQUISITES

"NO INFC TMC"
FAULT ISOLATION
PROCEDURES

MAKE SURE THE MCDP GRD TEST PREREQUISITES ARE COMPLETED

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

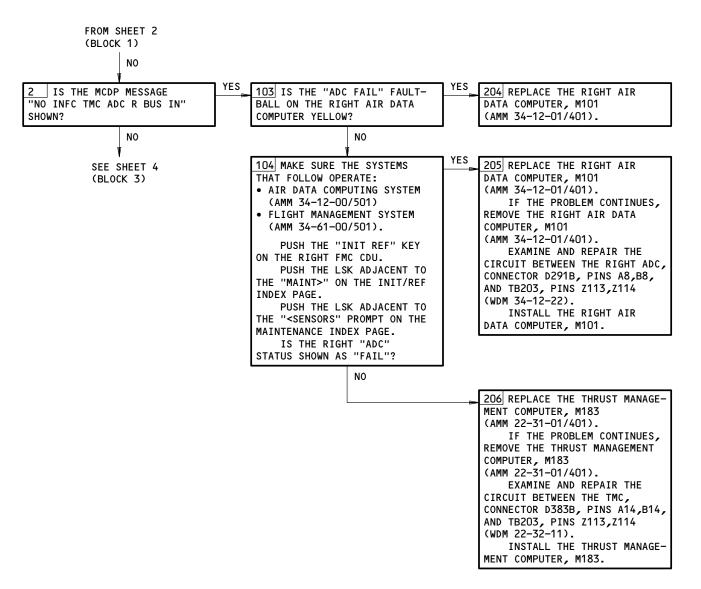


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 2)

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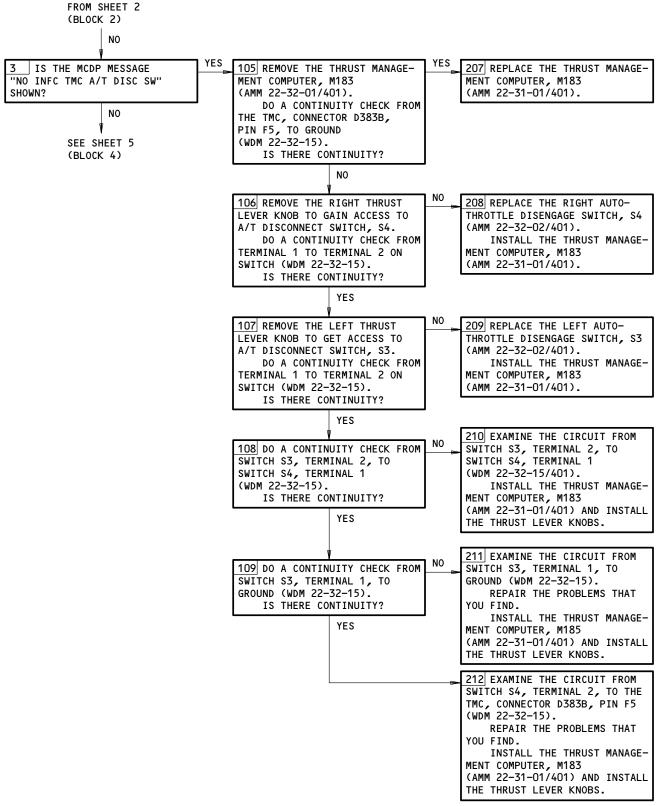
Page 161 Mar 20/93



NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 3)

EFFECTIVITY-ALL

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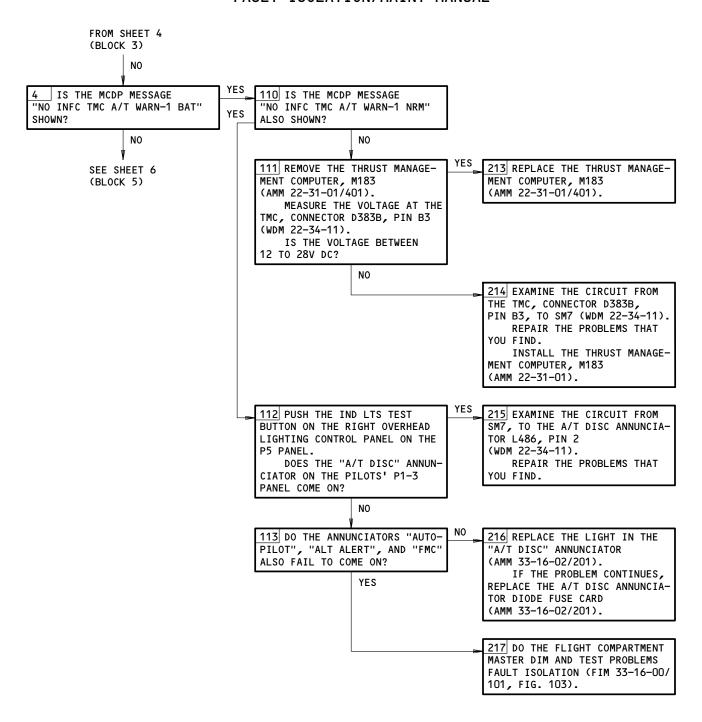


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 4)

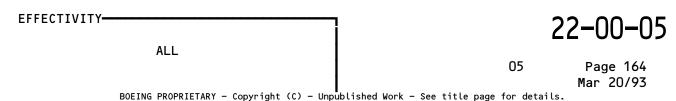
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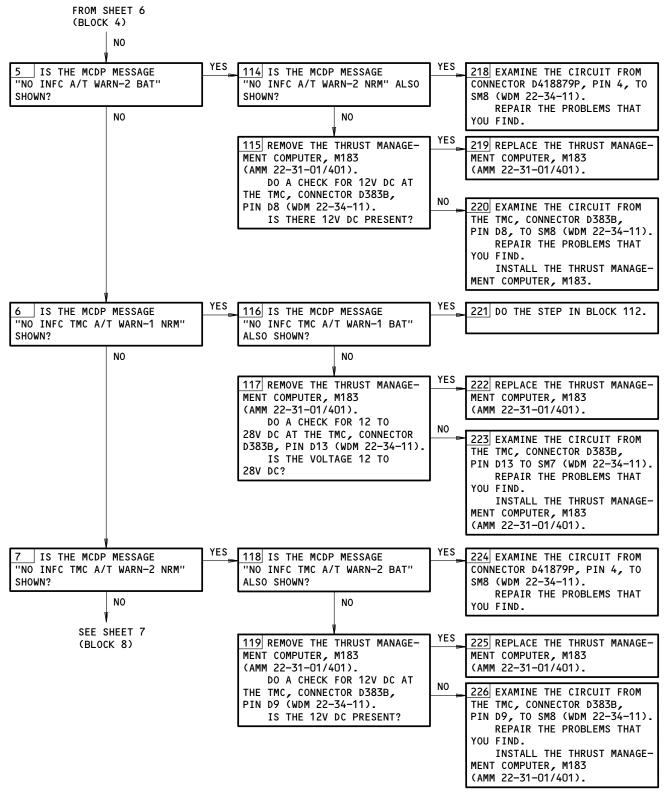
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Page 163
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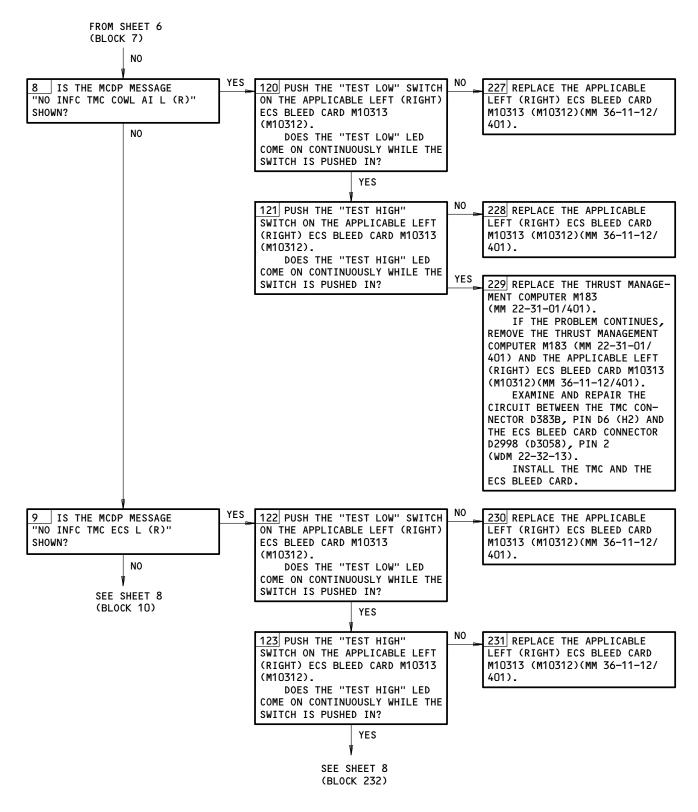


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 5)



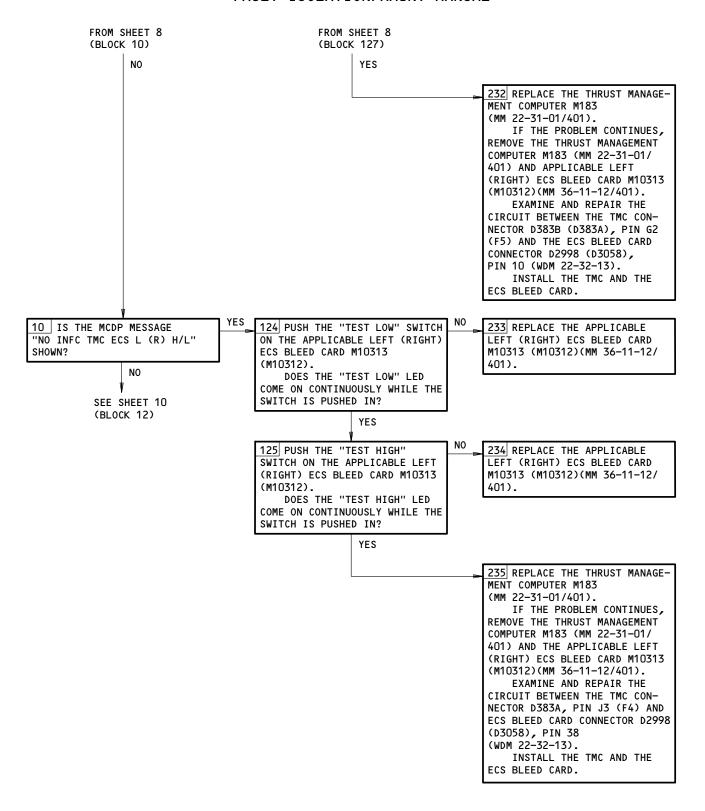


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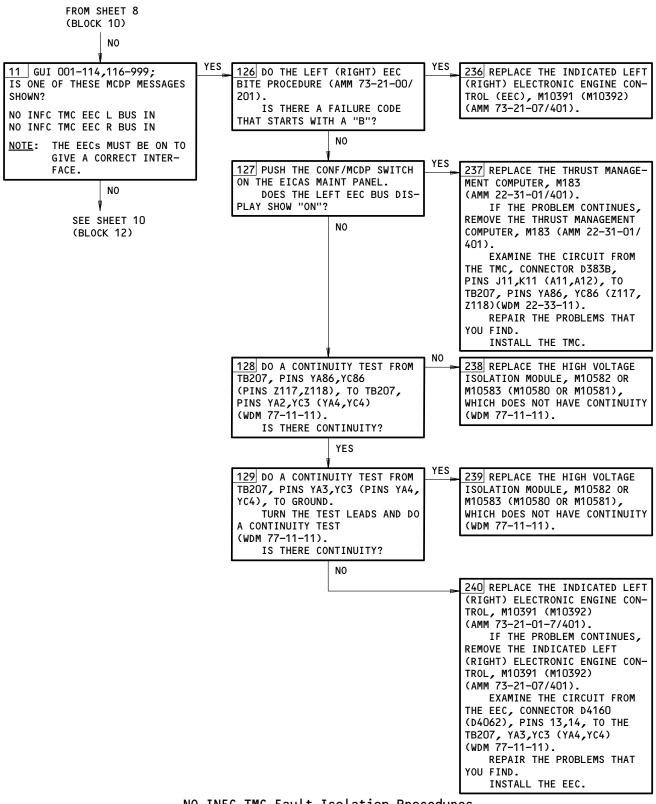
NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 7)

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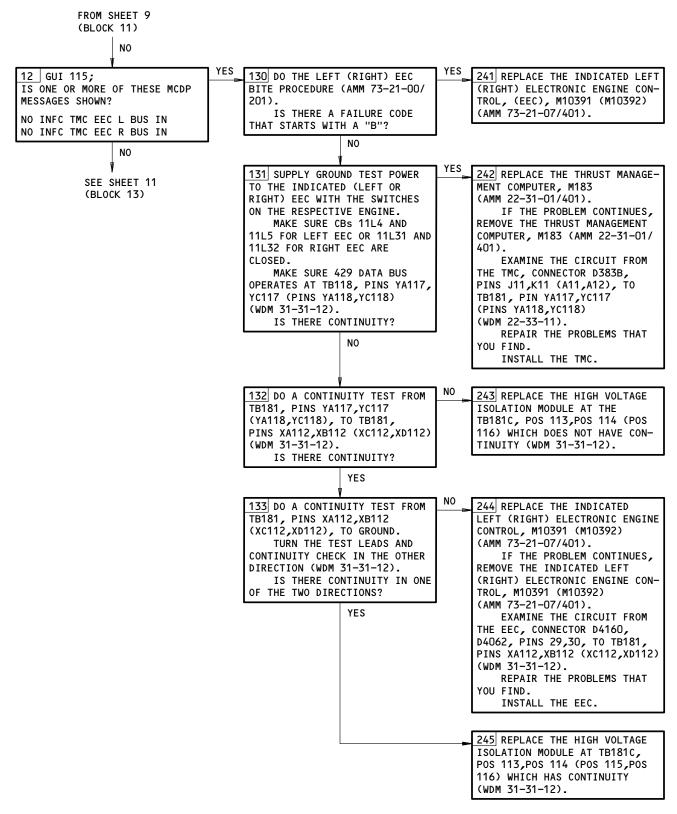


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 8)





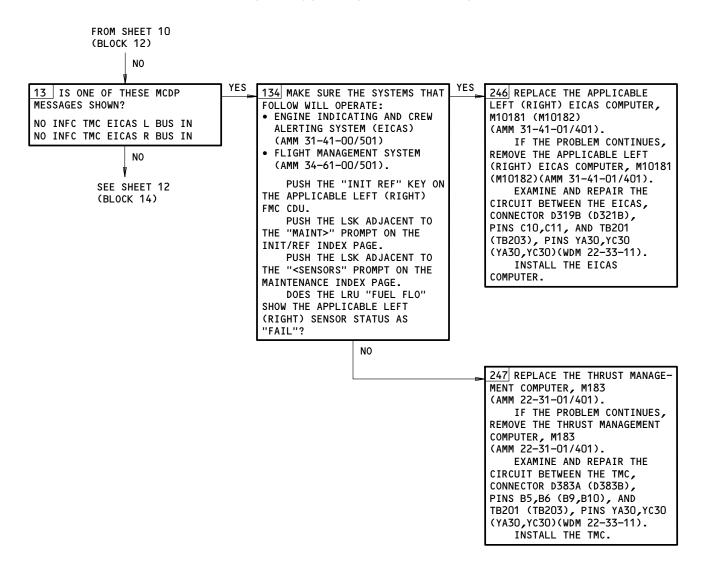
NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 9)



NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 10)

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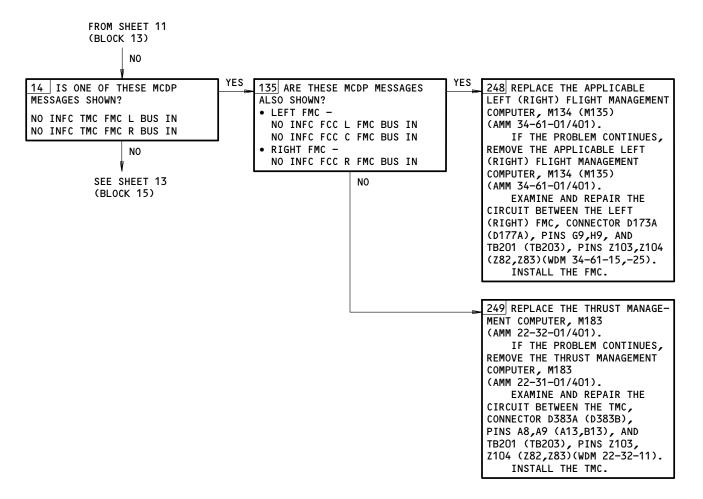


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 11)

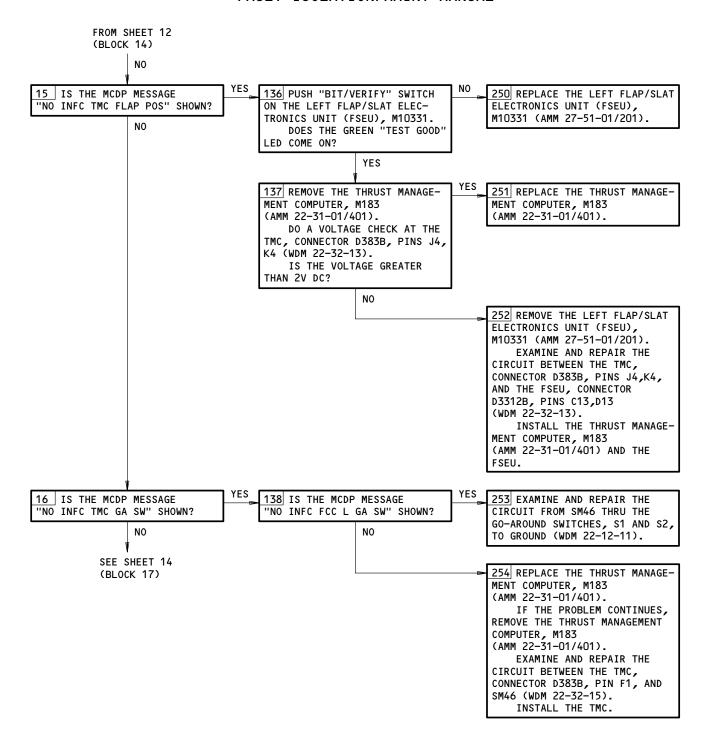
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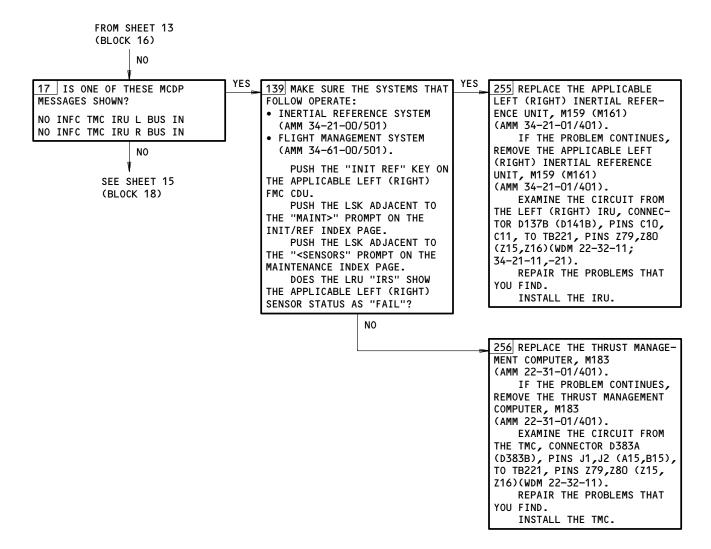




NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 12)



NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 13)



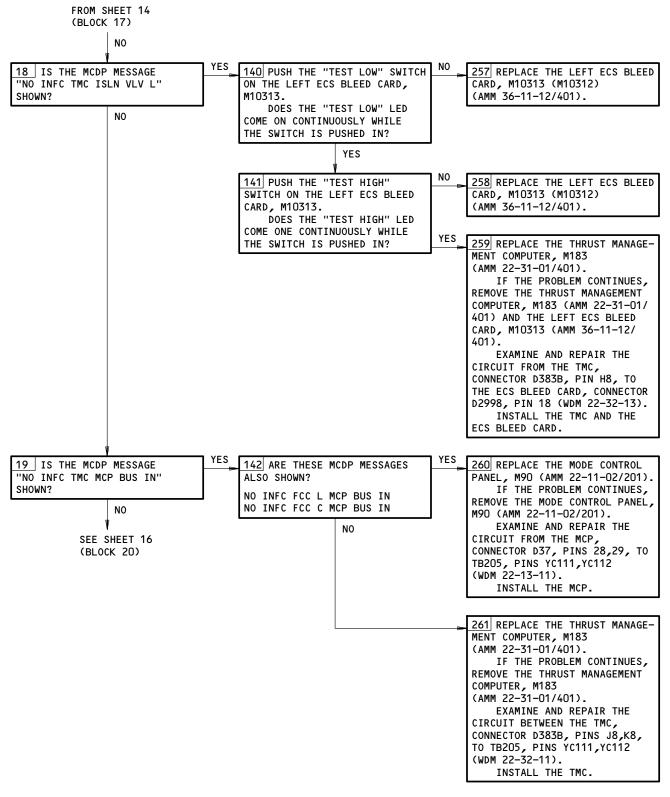
NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 14)

ALL ALL

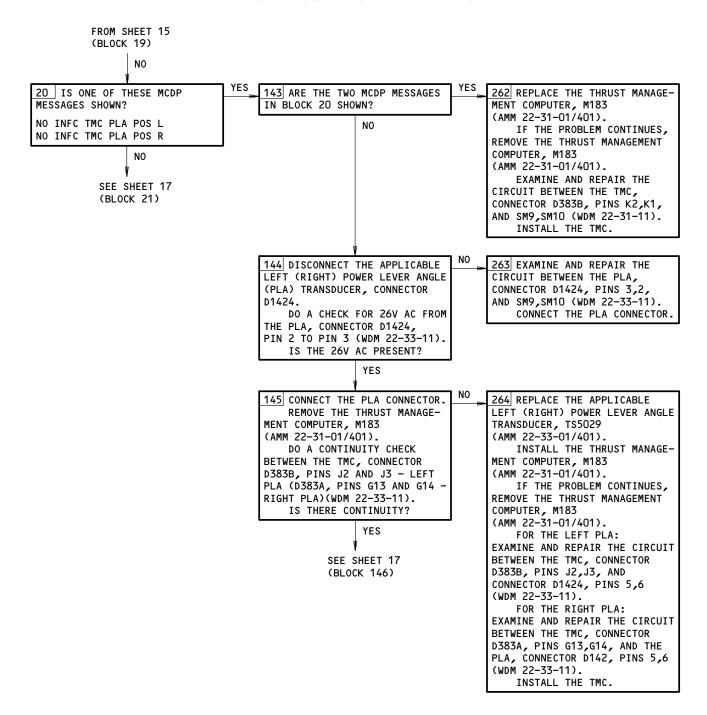
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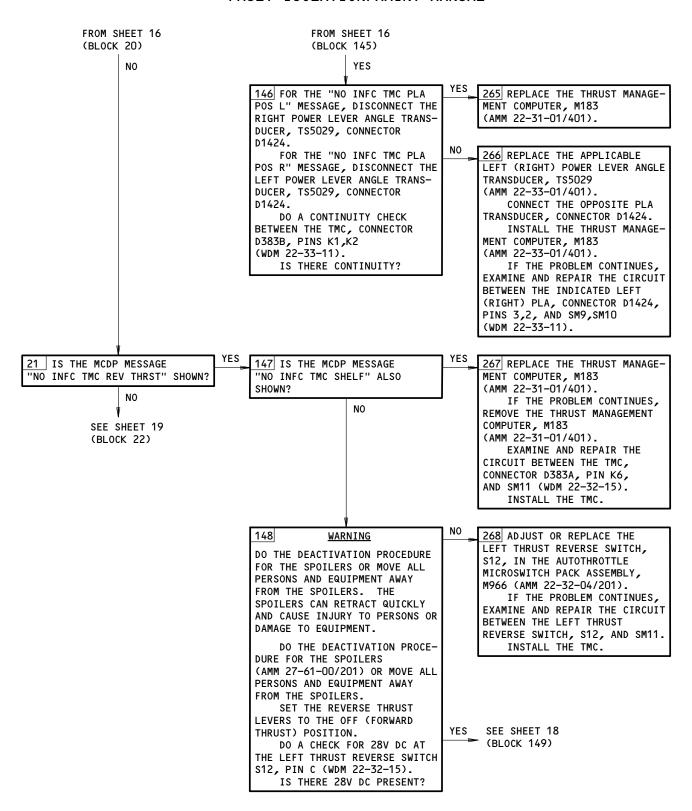


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 15)

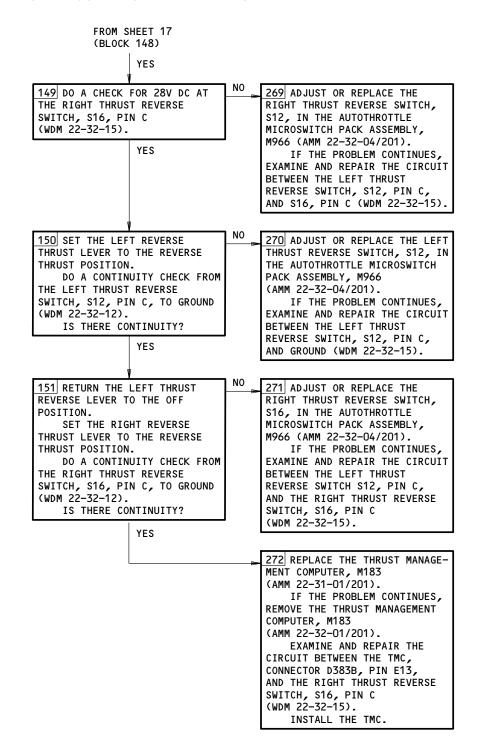


NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 16)





NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 17)



NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 18)

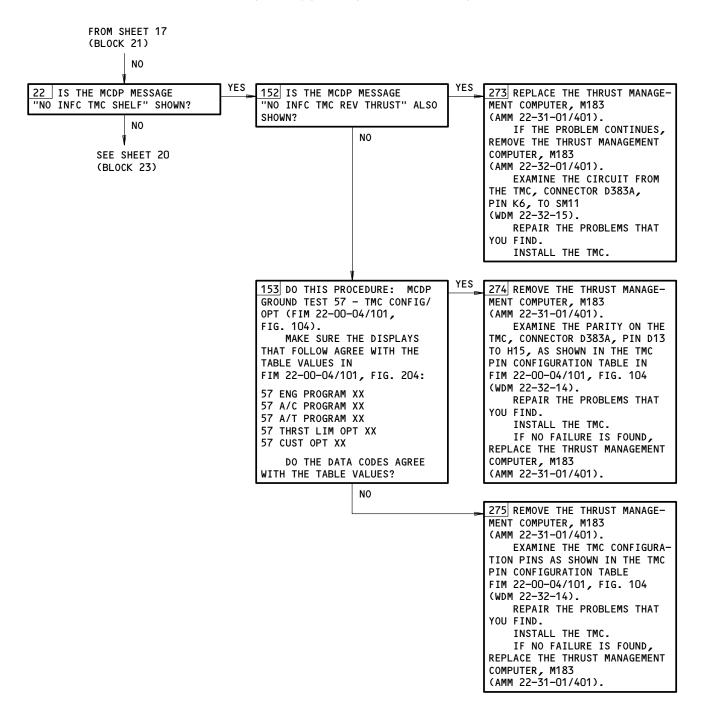
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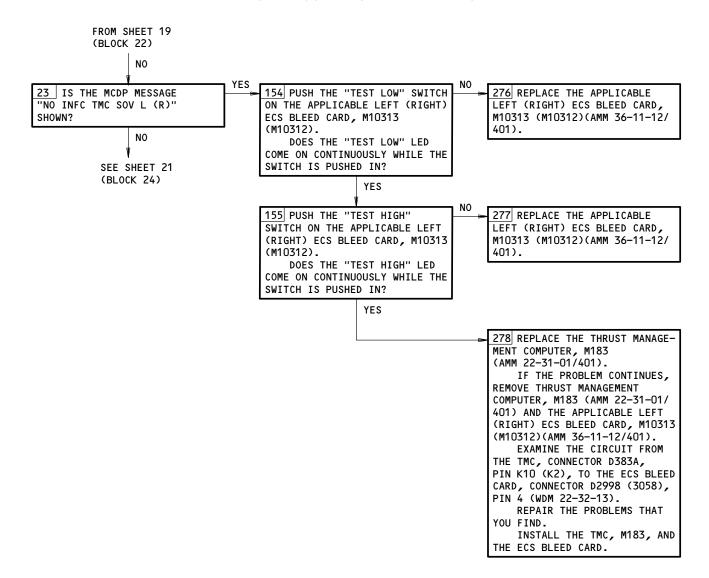
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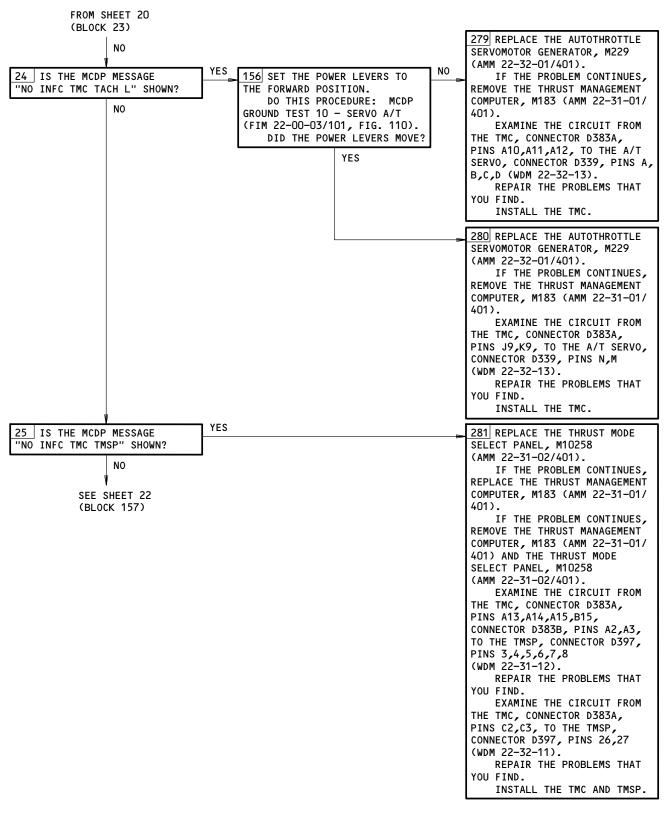
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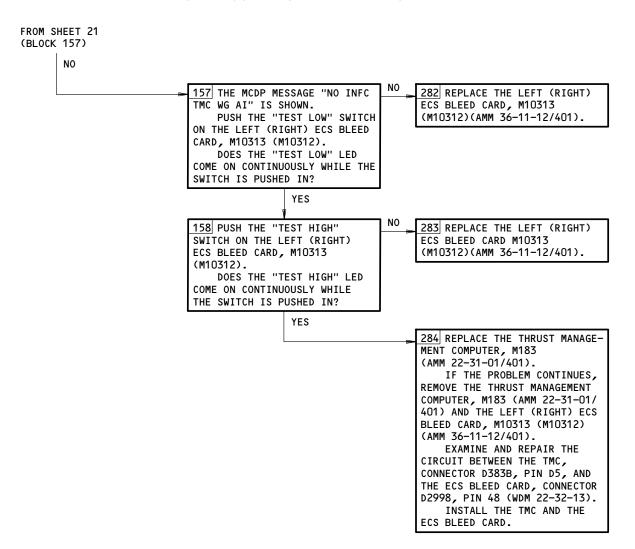
NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 20)

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NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 21)



NO INFC TMC Fault Isolation Procedures Figure 102 (Sheet 22)

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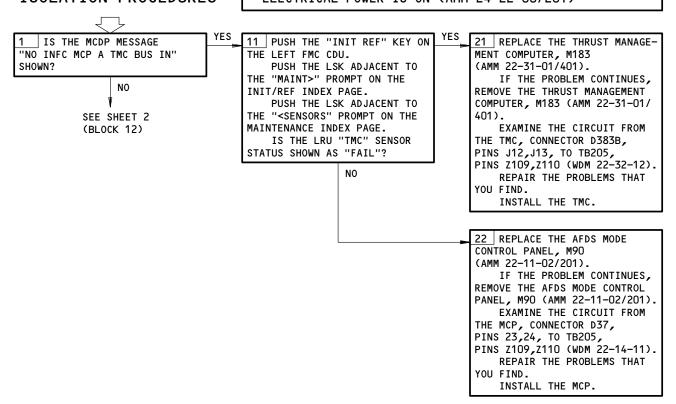
PREREQUISITES

MAKE SURE THE MCDP GRD TEST PREREQUISITES ARE COMPLETED.

MAKE SURE THESE SYSTEMS WILL OPERATE: FLIGHT MANAGEMENT SYSTEM (AMM 34-61-00)

"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.

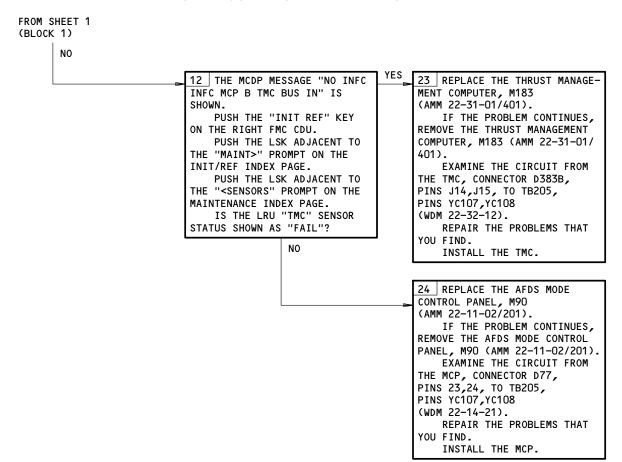
NO INFC MCP Fault Isolation Procedures
Figure 103 (Sheet 1)

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NO INFC MCP Fault Isolation Procedures Figure 103 (Sheet 2)

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FAULT ISOLATION/MAINT MANUAL

AUTOPILOT/FLIGHT DIRECTOR POWER

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ANNUNCIATOR — (FIM 22—14—00/101) AUTOLAND STATUS, CAPT, N70 AUTOLAND STATUS, F/O, N71 CIRCUIT BREAKER — AUTOFLIGHT WARN, C521 FLIGHT CONT CMPTR PWR CENTER, C515 FLT CONT CMPUTER POWER LEFT, C513 FLT CONT CMPTR PWR RIGHT, C514 FLIGHT CONT CMPTR SERVO CENTER, C524 FLT CONT CMPTR SERVO RIGHT, C522 FLT CONT CMPTR SERVO RIGHT, C523 MAINT CONT DSPL, C520 MODE CONT PNL LEFT, C516 MODE CONT PNL LEFT, C516 MODE CONT PNL RIGHT, C517 COMPUTER — C FLIGHT CONTROL, M140 COMPUTER — R FLIGHT CONTROL, M141 COMPUTER — (FIM 22—31—00/101) THRUST MANAGEMENT, M183 COMPUTER — (FIM 31—41—00/101) L EICAS, M10181 R EICAS, M10182 COMPUTER — (FIM 34—12—00/101) L AIR DATA, M100 R AIR DATA, M101 COMPUTER — (FIM 34—61—00/101) L FLIGHT MANAGEMENT, M134 R FLIGHT MANAGEMENT, M135 INDICATOR — (FIM 29—31—00/101) MACH AIRSPEED, CAPT, N1 MACH AIRSPEED, F/O, N41 LIGHT — (FIM 22—14—00/101) A/P DISC AUTOPILOT CAUTION, L269 MODULE — (FIM 27—09—00/101) 1L SPOILER CONTROL, M530 2R SPOILER CONTROL, M532 MODULE — (FIM 27—48—00/101) C STABILIZER POSITION, M10409		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FLT COMPT, P11 11A17 11E19 OR 11E20 11E17 11E35 11E20 OR 11E21 11E18 11E36 11S6 11E16 11E34 119BL, MAIN EQUIP CTR, E2-3 119BL, MAIN EQUIP CTR, E2-1 119BL, MAIN EQUIP CTR, E2-2	* * * * * * * 22-11-01 22-11-01 22-11-01
L STABILIZER POSITION, M10408 R STABILIZER POSITION, M10410 MODULE - (FIM 34-16-00/101) ALTITUDE ALERT, M617 PANEL - AFCS MODE CONTROL, M90 PANEL - (FIM 22-41-00/101) MAINTENANCE CONTROL DISPLAY, M168 RECEIVER - (FIM 34-31-00/101) C ILS, M157 L ILS, M156 R ILS, M158		1	FLT COMPT, P55	22-11-02

* SEE THE WDM EQUIPMENT LIST

1 GUI 001-114, 116-999

2 GUI 115

Autopilot/Flight Director Power - Component Index Figure 101 (Sheet 1)

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COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
RELAY - (FIM 31-01-06/101) CENTER BUS ISOLATION, K122 RELAY - (FIM 31-01-36/101) AIR/GROUND, SYS NO. 1, K142 RELAY - (FIM 31-01-37/101) AIR/GROUND, SYS NO. 2, K202 SERVO - (FIM 22-12-00/101) C AUTOPILOT PITCH CONTROL, M272 L AUTOPILOT PITCH CONTROL, M273 SERVO - (FIM 22-13-00/101) C AUTOPILOT LATERAL CONTROL, M10041 C AUTOPILOT LATERAL CONTROL, M10040 L AUTOPILOT LATERAL CONTROL, M10040 L AUTOPILOT ROLLOUT GUIDANCE, M277 R AUTOPILOT LATERAL CONTROL, M10040 L AUTOPILOT ROLLOUT GUIDANCE, M277 R AUTOPILOT ROLLOUT GUIDANCE, M279 SWITCH - (FIM 34-22-00/101) INSTRUMENT SOURCE SELECT, CAPT, S1 INSTRUMENT SOURCE SELECT, CAPT, S5 SWITCH - AUTOPILOT DISENGAGE, CAPT, S5 SWITCH - AUTOPILOT DISENGAGE, F/O, S6 SWITCH - GO-AROUND, S7,S8,S517,S518,S519,S520 SYMBOL GENERATOR - (FIM 34-22-00/101) C EFIS, M148 R EFIS, M150 TRANSDUCER - (FIM 22-12-00/101) C ELEVATOR NEUTRAL SHIFT, TS5153 L ELEVATOR NEUTRAL SHIFT, TS5151 R ELEVATOR NEUTRAL SHIFT, TS5152 TRANSMITTER/RECEIVER - (FIM 34-33-00/101) C RADIO ALTIMETER, M204 L RADIO ALTIMETER, M204 L RADIO ALTIMETER, M203 UNIT - (FIM 27-51-00/101) FLAP/SLAT ELECTRONICS 1, M10331 FLAP/SLAT ELECTRONICS 3, M10333 UNIT - (FIM 31-01-06/101) INSTRUMENT BUS SENSING, CAPT, M10374 INSTRUMENT BUS SENSING, CAPT, M10374 INSTRUMENT BUS VOLTAGE SENSE, M1079 UNIT - (FIM 31-51-00/101) WARNING ELECTRONICS, P51 UNIT - (FIM 34-21-00/101) C INERTIAL REFERENCE, M160 L INERTIAL REFERENCE, M160		1 1 6	FLT COMPT CONTROL WHEEL, CAPT FLT COMPT CONTROL WHEEL, F/O FLT COMPT, P10, THRUST LEVERS	22-11-03 22-11-03 22-11-04

Autopilot/Flight Director Power - Component Index Figure 101 (Sheet 2)

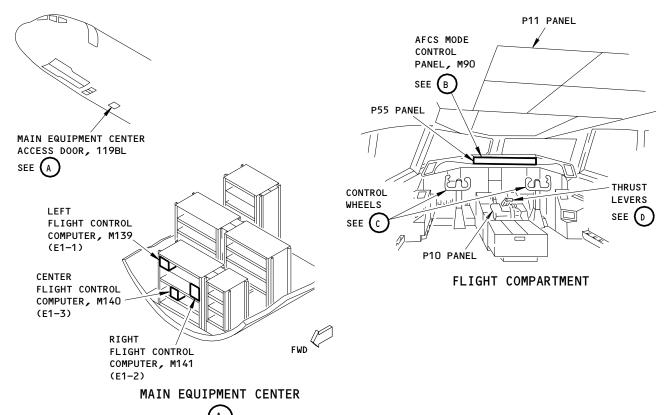
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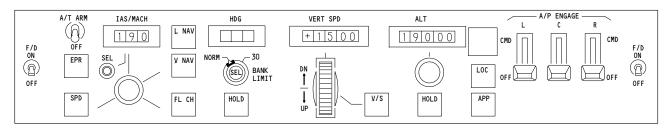
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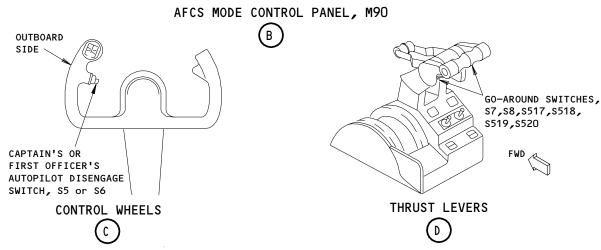
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Autopilot/Flight Director Power - Component Location Figure 102 (Sheet 1)

GUI 115

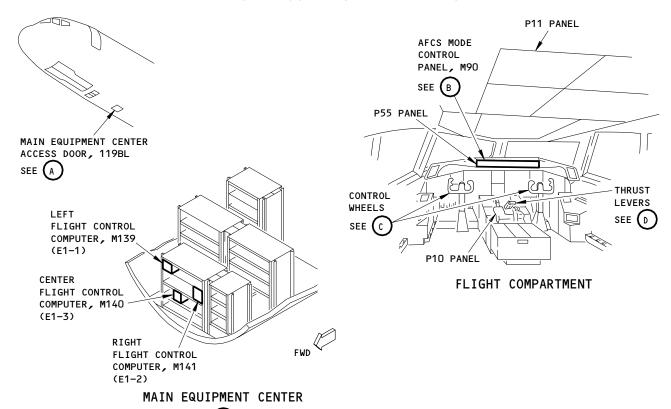
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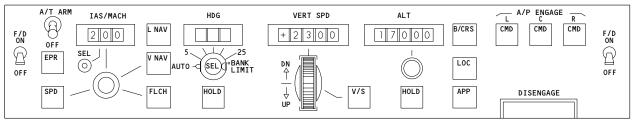
11

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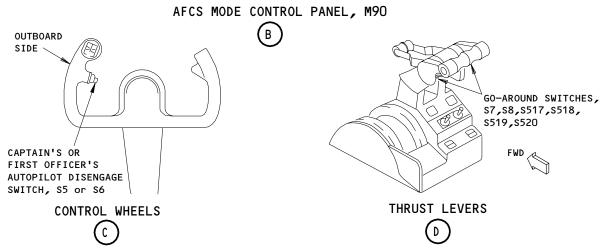


FAULT ISOLATION/MAINT MANUAL





Α



Autopilot/Flight Director Power - Component Location Figure 102 (Sheet 2)

EFFECTIVITY-GUI 001-114, 116-999

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04

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Autopilot (Flight Control) Flight Faults BITE Procedure is part of the Autoflight BITE. See the Autoflight BITE Fault Isolation Procedure (FIM 22-00-02/101).

> Autopilot (Flight Control) Flight Faults BITE Procedure Figure 103

EFFECTIVITY-ALL

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153078



1. ARINC Data Bus Charts

A. General

<u>CAUTION</u>: DO NOT DIRECTLY TOUCH THE CONNECTORS. USE A BREAKOUT BOX OR YOU CAN CAUSE DAMAGE TO THE CONNECTORS.

(1) The ARINC 429 data bus charts give data necessary to make an analysis of ARINC 429 transmitters, receivers, and data buses. For the test, use a breakout box at the available terminal or at the LRU connectors.

B. Equipment

- (1) Standard multimeter
- (2) 429EBP Data Bus Analyzer (recommended) JcAIR Instrumentation 400 Industrial Parkway Industrial Airport, KS 66031

429-2 Data Bus Analyzer (alternative) Interface Technology 150 E. Arrow Highway, San Dimas, CA 91773

(3) A34011-1 Breakout Box (recommended)
A34011-112 Breakout Box (alternative)

FCC										
•	DIGITAL OUTPUT BUS CHART									
	BUS NAME			Buo		ВІТ				
•	SOURCE	TYPE	BUS	CON	PINS	BUS FORMAT	RATE	DATA BUS		
FCC	(LCR)	А	1	P1B	B03 B04	429	LO	МСР		
FCC	(LCR)	В	2	P1B	CO3 CO4	429	LO	MCDP		
FCC	(LCR)	А	3	P1B	B01 B02	429	LO	EFISSG		
FCC	(LCR)	А	4	Р1В	DO1 DO2	429	LO	FDAU		
FCC	(LCR)	С	5	P1B	F01 F02	V/U*[1]	HI	X CHANNEL RIGHT		
FCC	(LCR)	С	6	Р1В	E03 F03	V/U*[1]	ні	X CHANNEL LEFT		

*[1] NOT ARINC 429 DATA FORMAT

ALL

22-11-00

02



FCC ID=01											
	OCTAL LABELS CHART										
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS			
RUNWAY DIST TO GO	Α	004	BCD	5	N/A	0-79900	ALWAYS POS	FEET			
SELECT RUNWAY HDG	Α	017	BCD	5	N/A	0-359.9	TBD	DEG			
HEADING SELECTED	Α	101	BNR	16	N/A	± 180	CW FROM NORTH	DEG			
CAS	Α	103	BNR	5	N/A	± 512	ALWAYS POS	KNOTS			
V/S	Α	104	BNR	5	N/A	± 16,384	UPWARDS	FT/MIN			
MACH NO.	Α	106	BNR	5	N/A	± 4.096	ALWAYS POS	MACH			
TEST WORD #1	Α	111	BNR	5	N/A	N/A	N/A	N/A			
FLAP POSITION	Α	137	BNR	5	N/A	± 180	ALWAYS POS	DEG			
FLT DIR-ROLL	Α	140	BNR	16	N/A	± 180	RIGHT	DEG			
FLT DIR-PITCH	Α	141	BNR	16	N/A	± 180	UP	DEG			
FMC AIRSPEED REF	Α	206	BNR	5	N/A	± 512	ALWAYS POS	KNOTS			
TEST WORD #2	Α	266	BNR	5	N/A	N/A	N/A	N/A			
AFDS MODE STATUS-1	Α	272	DIS	10	N/A	N/A	N/A	N/A			
AFDS MODE STATUS-2	Α	273	DIS	10	N/A	N/A	N/A	N/A			
AFDS MODE STATUS-3	Α	274	DIS	10	N/A	N/A	N/A	N/A			
AFDS MODE STATUS-4	Α	275	DIS	10	N/A	N/A	N/A	N/A			
STAB POSITION	Α	315	BNR	10	N/A	± 180	TRAILING EDGE	DEG			
TEST WORD #3	В	300	BNR	TBD	N/A	N/A	N/A	N/A			
FAULT DATA	В	356	BLK	1	N/A	N/A	N/A	N/A			
GROUND TEST DATA	В	356	BLK	5	N/A	N/A	N/A	N/A			
INTFC FAULT DATA	В	357	BLK	5	N/A	N/A	N/A	N/A			

ALL



FCC							
	DISCRE	ETE OCT	AL LABELS/BIT CHART				
SIGNAL	OCTAL LABEL	l .	ONE-STATE	ZERO-STATE			
SLAT EXTENDED	137	11	FLAPS>=1	FLAPS=0			
A/P ENGA DETENT	272	11	A/P IN CTL	NOT IN CTL			
FMA FAULT 1	272	13	MODE FAIL	NO MODE FL			
TEST BIT 1	272	14	TEST ON	TEST OFF			
LAND 3 (GREEN)	272	17	LAND 3	LAND 3 NOT			
LAND 2 (GREEN)	272	18	LAND 2	LAND 2 NOT			
FLT DIR ON-F/O	272	22	F/O ON	F/O OFF			
FLT DIR ON-CAPT	272	23	CAPT ON	CAPT OFF			
A/P CMD C ENGA	272	24	CMD C ENGA	ENGA NOT			
A/P CMD R ENGA	272	25	CMD R ENGA	ENGA NOT			
A/P CMD L ENGA	272	26	CMD L ENGA	ENGA NOT			
A/P CWS C ENGA	272	27	CWS C ENGA	ENGA NOT			
A/P CWS R ENGA	272	28	CWS R ENGA	ENGA NOT			
A/P CWS L ENGA	272	29	CWS L ENGA	ENGA NOT			
L-NAV MODE ARM	273	11	LNAV ARM	ARMED NOT			
V-NAV MODE (A/O)	273	12	VNAV A+E	A+E NOT			
APPR MODE OPER	273	13	APPR ENGA	ENGA NOT			
B/CRS MODE (A/O)	273	14	B/CRS A+E	A+E NOT			
LOC MODE (A/O)	273	15	LOC A+E	A+E NOT			
APPR MODE (A/O)	273	16	APPR A+E	A+E NOT			

ALL



FCC				
	DISCR	ETE OCT	AL LABELS/BIT CHART	
SIGNAL	OCTAL LABEL	ı	ONE-STATE	ZERO-STATE
FLARE MODE ARM	273	17	FLARE ARM	ARMED NOT
G/S MODE ARM	273	18	G/A ARM	ARM NOT
ROLLOUT MODE ARM	273	19	ROLLOUT AR	ARMED NOT
B/CRS MODE ARM	273	20	B/CRS ARM	ARM NOT
LOC MODE ARM	273	21	LOC ARM	ARM NOT
AUTOTRIM GROWTH 2	273	22	TRM RUNAWY	RUNAWY NOT
AUTOTRIM GROWTH 1	273	23		
AUTOTRIM UP CONT	273	24	TRIM UP	NO TRIM UP
AUTOTRIM UP ARM	273	25	TRIM UP	NO TRIM UP
AUTOTRIM ENG R SAM	273	26	ENGAGE	ENGAGE NOT
AUTOTRIM ENG L SAM	273	27	ENGAGE	ENGAGE NOT
AUTOTRIM DOWN CONT	273	28	TRIM DOWN	NO TRIM DN
AUTOTRIM DOWN ARM	273	29	TRIM DOWN	NO TRIM DN
PITCH SPEED CNTRL	274	10	IN CONTROL	CNTRL NOT
ALT MODE OPER	274	11	ALT ENGA	ENGA NOT
FMA FAULT 2	274	12	MODE FAIL	NO MODE FL
FLAP LIMIT	274	13	FLAP ENGA	ENGA NOT
MIN SPEED	274	14	MIN SPD EN	ENGA NOT
MACH LIMIT OPER	274	15	MMO ENGA	ENGA NOT
IAS LIMIT OPER	274	16	VMO ENGA	ENGA NOT



FCC									
	DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	ı	ONE-STATE	ZERO-STATE					
MACH	274	17	MACH ENGA	ENGA NOT					
IAS	274	18	IAS ENGA	ENGA NOT					
MACH MODE SET	274	19	SET MACH	SET NOT					
IAS MODE SET	274	20	SET IAS	SET NOT					
THROTTLE RETARD	274	21	RETARD REQ	REQ NOT					
FL CH MODE OPER	274	22	FL CH ENGA	ENGA NOT					
V-NAV MODE OPER	274	23	V-NAV ENGA	ENGA NOT					
V/S MODE OPER	274	24	V/S ENGA	ENGA NOT					
ALT HOLD MODE OPER	274	25	ALT HLD EN	ENGA NOT					
T/O MODE OPER-P	274	26	P T/O ENGA	ENGA NOT					
G/A MODE OPER-P	274	27	P G/A ENGA	ENGA NOT					
FLARE OPER	274	28	FLARE	FLARE NOT					
G/S MODE OPER	274	29	G/S ENGA	ENGA NOT					
T/O MODE OPER-R	275	19	R T/O ENGA	ENGA NOT					
G/A MODE OPER-R	275	20	R G/A ENGA	ENGA NOT					
FMA FAULT 3	275	21	MODE FAIL	NO MODE FL					
ATT HOLD MODE OPER	275	22	ATT ENGA	ENGA NOT					
TRK HOLD MODE OPER	275	23	TRACK ENGA	ENGA NOT					
L-NAV MODE OPER	275	24	L-NAV ENGA	ENGA NOT					
HDG SEL MODE OPER	275	25	HDG SEL EN	ENGA NOT					

ALL ALL



FCC								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE				
HDG HOLD MODE OPER	275	26	HDG HLD EN	ENGA NOT				
LOC MODE OPER	275	27	LOC ENGA	ENGA NOT				
ROLLOUT MODE OPER	275	28	ROLLOUT EN	ENGA NOT				
B/CRS MODE OPER	275	29	B/CRS ENGA	ENGA NOT				

ALL



МСР	CP									
	DIGITAL OUTPUT BUS CHART									
	BU	JS NAME						BUS	ВІТ	
	SOURCE	<u> </u>	TYPE	BUS	CON	ΡI	NS	FORMAT		DATA BUS
МСР	(L)	А	1	J1	28	29	429	LO	FMS-A
MCP	(L)	A	1	J3	28	29	429	LO	FMS-B
МСР	(L)	А	2	J1	26	27	429	LO	INSTR-A
MCP	(L)	А	2	J3	26	27	429	LO	INSTR-B

22-11-00

ALL



MCP ID=1D									
OCTAL LABELS CHART									
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS	
HEADING SELECTED	Α	101	BNR	16	N/A	± 180	CW FROM NORTH	DEG	
ALTITUDE SELECTED	Α	102	BNR	5	N/A	± 65,536	ABOVE SEA LEV	FEET	
SPEED SELECTED	Α	103	BNR	5	N/A	0 то 512	ALWAYS POS	KNOTS	
VERT SPEED SELECTD	Α	104	BNR	5	N/A	± 16,384	UPWARDS	FT/MIN	
MACH SELECTED	Α	106	BNR	5	N/A	± 4.096	ALWAYS POS	MACH	
TEST WORD #1	Α	111	BNR	5	N/A	N/A	N/A	N/A	
FLAP POSITION	Α	137	BNR	5	N/A	± 180	ALWAYS POS	DEG	
TEST WORD #2	Α	266	BNR	5	N/A	N/A	N/A	N/A	
AFCS REQ MODES-1	Α	270	DIS	10	N/A	N/A	N/A	N/A	
AFCS REQ MODES-2	Α	271	DIS	10	N/A	N/A	N/A	N/A	
AFCS MODE STATUS-1	Α	272	DIS	10	N/A	N/A	N/A	N/A	
AFCS MODE STATUS-2	Α	273	DIS	10	N/A	N/A	N/A	N/A	
STAB POSITION	Α	315	BNR	10	N/A	± 180	TRAILING EDGE	DEG	
MCP MAINT DATA	Α	350	DIS	5	N/A	N/A	N/A	N/A	

ALL



МСР								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE				
SLAT EXTENDED	137	11	FLAPS>=1	FLAPS=0				
(SPARE)	270	9						
(SPARE)	270	10						
IAS/MACH TOG	270	11	MACH	IAS				
A/T ARM	270	12	ARM	NOT ARM				
FLT DIR ON-F/O	270	13	F/O ON	F/O OFF				
FLT DIR ON-CAPT	270	14	CAPT ON	CAPT OFF				
(SPARE)	270	15						
(SPARE)	270	16						
(SPARE)	270	17						
(SPARE)	270	18						
REQ 1 VALID (RESV)	270	19	PB DEPR	NO PB DEPR				
A/P CWS R REQ	270	20	CWS R	CWS R NOT				
A/P CWS C REQ	270	21	cws c	CWS C NOT				

ALL

22-11-00

02



MCP								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE				
A/P CWS L REQ	270	22	CWS L	CWS L NOT				
A/P CMD R REQ	270	23	CMD R	CMD R NOT				
A/P CMD C REQ	270	24	CMD C	CMD C NOT				
A/P CMD L REQ	270	25	CMD L	CMD L NOT				
B/A LIMIT-3	270	26	CODED	VALUE				
B/A LIMIT-2	270	27	O=AUTO	1=5,2=10				
B/A LIMIT-1	270	28	3=15,4=20	5=25,6=30				
(SPARE)	271	9						
(SPARE)	271	10						
HDG SEL MODE REQ	271	11	HDG SEL	HDG SELNOT				
HDG HOLD MODE REQ	271	12	HDG HLD	HDG HLDNOT				
(SPARE)	271	13						
(SPARE)	271	14						
V-NAV MODE REQ	271	15	V-NAV	V-NAV NOT				
L-NAV MODE REQ	271	16	L-NAV	L-NAV NOT				
FL CH MODE REQ	271	17	FL CH	FL CH NOT				
(SPARE)	271	18						
REQ 2 VALID (RESV)	271	19	PB DEPR	NO PB DEPR				
SPD MODE REQ	271	20	SPD	SPD NOT				
THRUST MODE REQ	271	21	THRUST	THRUST NOT				
(SPARE)	271	22						
(SPARE)	271	23						

22-11-00

02



MCP					
	DISCRE	TE OCT	AL LABELS/BIT CHART		
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE	
APPR MODE REQ	271	24	APPR	APPR NOT	
LOC MODE REQ	271	25	LOC	LOC NOT	
B/CRS MODE REQ	271	26	B/CRS	B/CRS NOT	
ALT HLD MODE REQ	271	27	ALT HLD	ALT HLDNOT	
V/S MODE REQ	271	28	V/S	V/S NOT	
ALT HOLD MODE OPER	272	9	ALT HLD EN	ENGA NOT	
HDG SEL MODE OPER	272	10	HDG SEL EN	ENGA NOT	
HDG HOLD MODE OPER	272	11	HDG HLD EN	ENGA NOT	
FL CH MODE OPER	272	12	FL CH ENGA	ENGA NOT	
V-NAV MODE (A/O)	272	13	VNAV (A+E)	(A+E) NOT	
L-NAV MODE (A/O)	272	14	LNAV (A+E)	(A+E) NOT	
SPD MODE OPER	272	15	SPD ENGA	ENGA NOT	
THRUST MODE OPER	272	16	THRUST EN	ENGA NOT	
G/S MODE OPER	272	17	G/S ENGA	ENGA NOT	
THROTTLE RETARD	272	18	RETARD REQ	REQ NOT	
PITCH SPEED CNTRL	272	19	IN CONTROL	CNTRL NOT	
(SPARE)	272	20			
LOC MODE OPER	272	21	LOC ENGA	ENGA NOT	
A/P CWS C ENGA	272	22	CWS C ENGA ENGA NOT		
A/P CWS L ENGA	272	23	CWS L ENGA ENGA NOT		
A/P CMD C ENGA	272	24	CMD C ENGA ENGA NOT		
A/P CMD L ENGA	272	25	CMD L ENGA	ENGA NOT	

ALL



MCP					
	DISCRE	TE OCT	AL LABELS/BIT CHART		
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE	
A/P CWS R ENGA	272	26	CWS R ENGA	ENGA NOT	
A/P CMD R ENGA	272	27	CMD R ENGA	ENGA NOT	
SPD DISPLAY BLANK	272	28	DSPLY BLNK	NOT BLANK	
(SPARE)	273	9			
V/S MODE OPER	273	10	V/S ENGA	ENGA NOT	
(SPARE)	273	11			
(SPARE)	273	12			
(SPARE)	273	13			
EEC VALID	273	14	VALID	NOT VALID	
(SPARE)	273	15			
(SPARE)	273	16			
ENGINE OUT	273	17	ENGINE VAL	ENGINE FAIL	
B/CRS MODE (A/O)	273	18	B/CRS A+E	A+E NOT	
APPR MODE (A/O)	273	19	APPR A+E	A+E NOT	
LOC MODE (A/O)	273	20	LOC A+E	A+E NOT	
(SPARE)	273	21			
(SPARE)	273	22			
(SPARE)	273	23			
(SPARE)	273	24			
(SPARE)	273	25			
(SPARE)	273	26			
(SPARE)	273	27			

ALL



МСР						
DISCRETE OCTAL LABELS/BIT CHART						
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE		
TMC VALID	273	28	VALID	NOT VALID		
TMC INFC STATUS	350	11	VALID	NOT VALID		
CONFIG 1	350	17	-251	-201		

ALL



AUTOPILOT/FLIGHT DIRECTOR PITCH CHANNEL

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
SERVO - C AUTOPILOT PITCH CONTROL, M272	1	1	313BL, SECT 48	22-12-01
SERVO - L AUTOPILOT PITCH CONTROL, M271	1	1	313BL, SECT 48	22-12-01
SERVO - R AUTOPILOT PITCH CONTROL, M273	1	1	313BL, SECT 48	22-12-01
TRANSDUCER - C ELEVATOR NEUTRAL SHIFT, TS5153	2	1	313BL, SECT 48	22-12-04
TRANSDUCER - L ELEVATOR NEUTRAL SHIFT, TS5151	2	1	313BL, SECT 48	22-12-04
TRANSDUCER - R ELEVATOR NEUTRAL SHIFT, TS5152	2	1	313BL, SECT 48	22-12-04
VALVE - ELECTROHYDRAULIC SERVO	2	1	313BL, SECT 48, EA AUTOPILOT	22-12-02
VALVE - ELECTROHYDRAULIC SOLENOID	2	2	PITCH CONTROL SERVO 313BL, SECT 48, EA AUTOPILOT PITCH CONTROL SERVO	22-12-02

Autopilot/Flight Director Pitch Channel - Component Index Figure 101

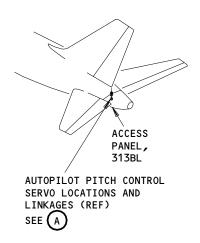
EFFECTIVITY ALL

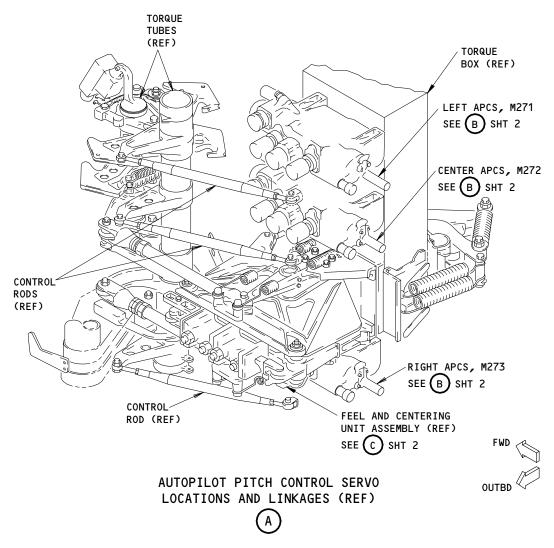
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Autopilot/Flight Director Pitch Channel - Component Location Figure 102 (Sheet 1)

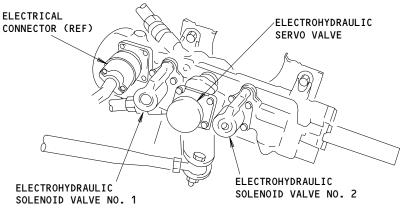
EFFECTIVITY-ALL

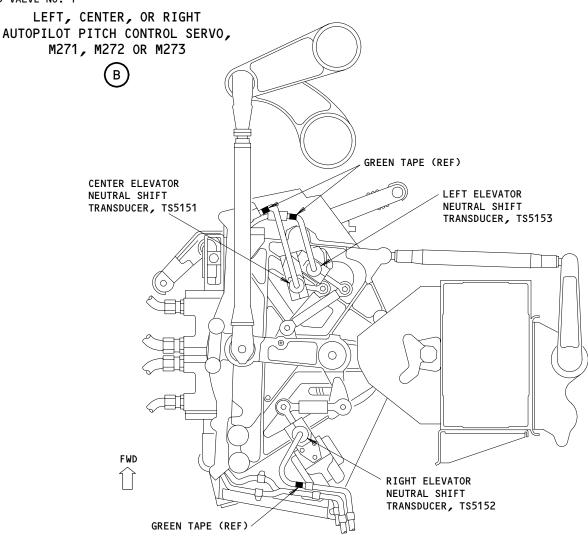
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FEEL AND CENTERING UNIT ASSEMBLY (REF)



Component Location (Details from Sht 1) Figure 102 (Sheet 2)

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AUTOPILOT/FLIGHT DIRECTOR ROLL AND YAW CHANNEL

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
SERVO - C AUTOPILOT LATERAL CONTROL, M10041	1	1	L/R WHEEL WELL	22-13-03
SERVO - C AUTOPILOT ROLLOUT GUIDANCE, M278	2	1	VERT STAB., 324AL	22-13-01
SERVO - L AUTOPILOT LATERAL CONTROL, M10040	1	1	L/R WHEEL WELL	22-13-03
SERVO - L AUTOPILOT ROLLOUT GUIDANCE, M277	2	1	VERT STAB., 324AL	22-13-01
SERVO - R AUTOPILOT LATERAL CONTROL, M10042	1	1	L/R WHEEL WELL	22-13-03
SERVO - R AUTOPILOT ROLLOUT GUIDANCE, M279	2	1	VERT STAB., 324AL	22-13-01
VALVE - ALCS ELECTROHYDRAULIC SERVO	1	1	L/R WHEEL WELL, EA AUTOPILOT LATERAL CONTROL SERVO	22-13-04
VALVE - ALCS ELECTROHYDRAULIC SOLENOID	1	2	L/R WHEEL WELL, EA AUTOPILOT LATERAL CONTROL SERVO	22-13-04
VALVE - ARGS ELECTROHYDRAULIC SERVO	2	1	VERT STAB., 324AL, EA AUTOPILOT ROLLOUT GUIDANCE SERVO	22-13-02
VALVE - ARGS ELECTROHYDRAULIC SOLENOID	2	2	VERT STAB., 324AL, EA AUTOPILOT ROLLOUT GUIDANCE SERVO	22-13-02

^{*} SEE THE WDM EQUIPMENT LIST

Autopilot/Flight Director Roll and Yaw Channel - Component Index Figure 101

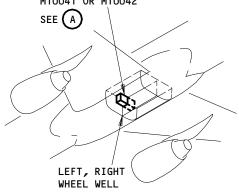
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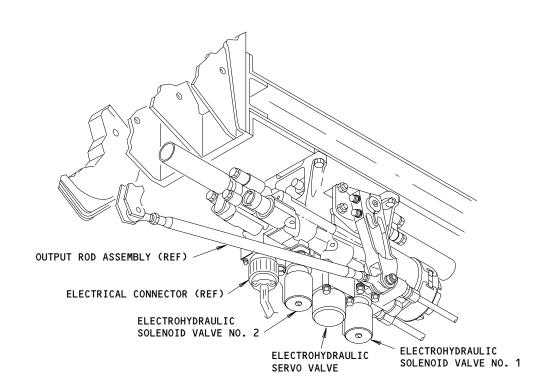
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LEFT, CENTER, OR RIGHT AUTOPILOT LATERAL CONTROL SERVO, M10040, M10041 OR M10042





LEFT, CENTER, OR RIGHT AUTOPILOT LATERAL CONTROL SERVO, M10040, M10041 OR M10042



Autopilot/Flight Director Roll and Yaw Channel - Component Location Figure 102 (Sheet 1)

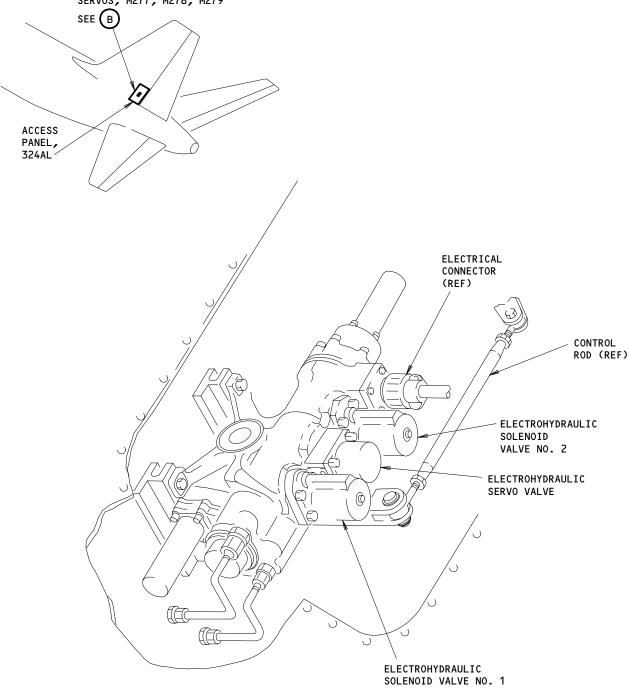
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LEFT, CENTER, OR RIGHT AUTOPILOT ROLLOUT GUIDANCE SERVOS, M277, M278, M279



LEFT, CENTER, OR RIGHT AUTOPILOT ROLLOUT GUIDANCE SERVO, M277, M278, OR M279



Autopilot/Flight Director Roll and Yaw Channel - Component Location Figure 102 (Sheet 2)

EFFECTIVITY-ALL

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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 - AUTOPILOT DISC LIGHT - AUTOPILOT CAUTION, L269 MODULE - (FIM 33-16-00/101) DISCRETE WARNING DISPLAY		1 1 1	FLT COMPT, P1 FLT COMPT, P3 FLT COMPT, P1, DISCRETE WARNING DISPLAY MODULE, M779 (REF) FLT COMPT, P1	22-14-01 22-14-01 *

^{*} SEE WDM EQUIPMENT LIST

Autopilot/Flight Director Warning and Annunciation - Component Index Figure 101

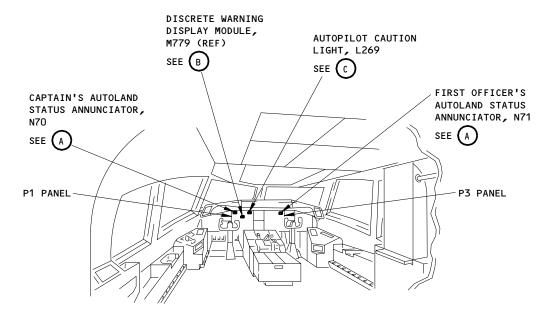
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22-14-00

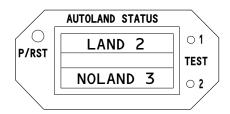
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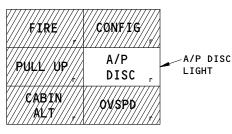


FLIGHT COMPARTMENT



CAPTAIN'S OR FIRST OFFICER'S AUTOLAND STATUS ANNUNCIATOR, N70 OR N71





AUTO PILOT

DISCRETE WARNING DISPLAY MODULE, M779 (REF)

AUTOPILOT CAUTION LIGHT, L269

(B)

 \odot

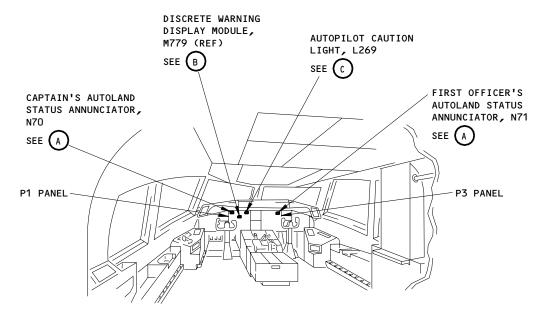
Autopilot/Flight Director Warning and Annunciation - Component Location Figure 102 (Sheet 1)

22-14-00

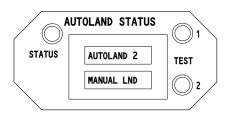
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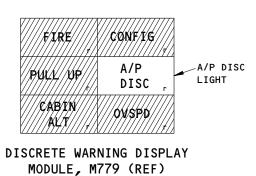


FLIGHT COMPARTMENT



CAPTAIN'S OR FIRST OFFICER'S AUTOLAND STATUS ANNUNCIATOR, N70 OR N71





AUTO PILOT a

AUTOPILOT CAUTION LIGHT, L269

(c

Autopilot/Flight Director Warning and Annunciation - Component Location Figure 102 (Sheet 2)

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YAW DAMPER SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
ACCELEROMETER - MODAL SUPPRESSION L, M10734	2	1	822, AFT CARGO DOOR, AFT CARGO	22-21-05
ACCELEROMETER - MODAL SUPPRESSION R, M10735	2	1	COMPT CEILING 822, AFT CARGO DOOR, AFT CARGO	22-21-05
CIRCUIT BREAKERS -	1		COMPT CEILING FLT COMPT, P11	*
CSEU 1L AC (OR FLT CTRL ELEC 1L AC), C1538 CSEU 1L DC (OR FLT CTRL ELEC 1L DC), C1534		1 1	11c6 11c7	*
CSEU 1R AC (OR FLT CTRL ELEC 1R AC), C1536		1	11G17	*
CSEU 1R DC (OR FLT CTRL ELEC 1R DC), C1531 CSEU 2L AC (OR FLT CTRL ELEC 2L AC), C1537		1 1	11G18 11C8	*
CSEU 2L DC (OR FLT CTRL ELEC 2L DC), C1533 CSEU 2R AC (OR FLT CTRL ELEC 2R AC), C1535		1 1	11C9 11G27	*
CSEU 2R DC (OR FLT CTRL ELEC 2R DC), C1532		1	11627	*
YAW DAMPER L, C1560 YAW DAMPER R, C1561		1 1	11A18 11F34	*
COMPUTERS - (31-41-00/101)			11134	
EICAS L, M10181 EICAS R, M10182				
COMPUTERS - (34-12-00/101)				
AIR DATA L, M100 AIR DATA R, M101				
MODULES - (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 - YAW DAMPER L, M522 MODULE - YAW DAMPER R, M523	2 2	1 1	119BL, MAIN EQUIP CTR, E3-1 119BL, MAIN EQUIP CTR, E4-1	22-21-04 22-21-04
PANEL - YAW DAMPER, M10250	1	1	FLT COMPT, P5	22-21-04
RELAYS - (31-01-36/101) AIR/GND SYS NO. 1, K135				
AIR/GND SYS NO. 1, K10384				
RELAYS - (31-01-37/101) AIR/GND SYS NO. 2, K215				
AIR/GND SYS NO. 2, K10387	,	_	72/DL VEDT CTAD (ADL L CIDE)	22 24 02
SERVO - LEFT YAW DAMPER, M509 SERVO - RIGHT YAW DAMPER, M510	2 2	1 1	324BL, VERT STAB (APL L SIDE) 324BL, VERT STAB (APL R SIDE)	22-21-02 22-21-02
SWITCHES - (29-31-00/101) SYS C HYDRAULIC PRESSURE, S10002				
SYS L EDP CONTROL PRESSURE, S27				
SWITCH - YAW DMPR TEST, YPHS7 UNITS - (34-21-00/101)	1	1	FLT COMPT, P61, MISC TEST PANEL, M10398	*
INTERTIAL REFERENCE C, M160				
INTERTIAL REFERENCE L, M159 INTERTIAL REFERENCE R, M161				
VALVE - YDS ELECTROHYDRAULIC SERVO	2	2	324BL, VERTICAL STABILIZER, EACH YAW DAMPER SERVO	22-21-03
VALVE - YDS ELECTROHYDRAULIC SOLENOID	2	2	324BL, VERTICAL STABILIZER, EACH YAW DAMPER SERVO	22-21-03

^{*} SEE THE WDM EQUIPMENT LIST

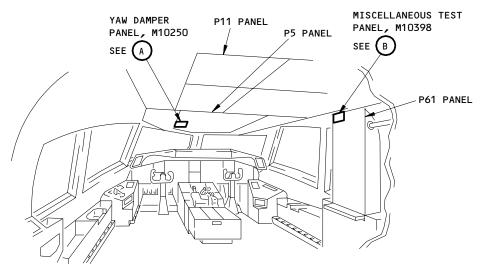
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Yaw Damper System - Component Index Figure 101

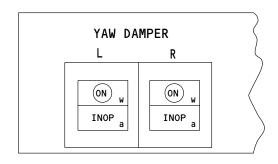
EFFECTIVITY ALL



FAULT ISOLATION/MAINT MANUAL

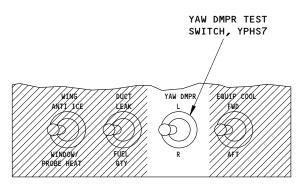


FLIGHT COMPARTMENT



YAW DAMPER PANEL, M10250





MISCELLANEOUS TEST PANEL, M10398



Yaw Damper System - Component Location Figure 102 (Sheet 1)

EFFECTIVITY ALL

22-21-00

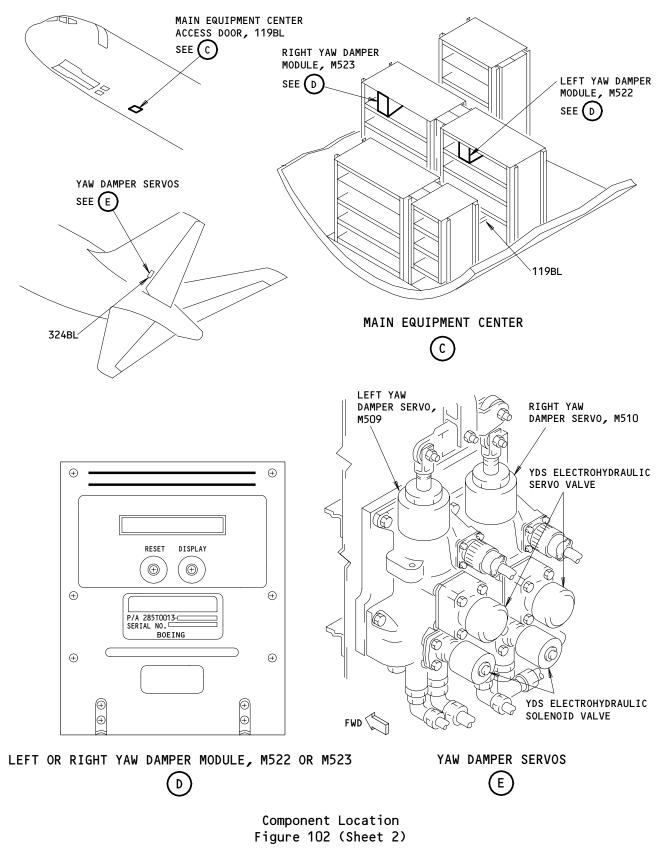
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FAULT ISOLATION/MAINT MANUAL



EFFECTIVITY-ALL

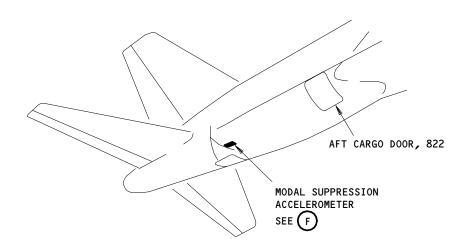
22-21-00

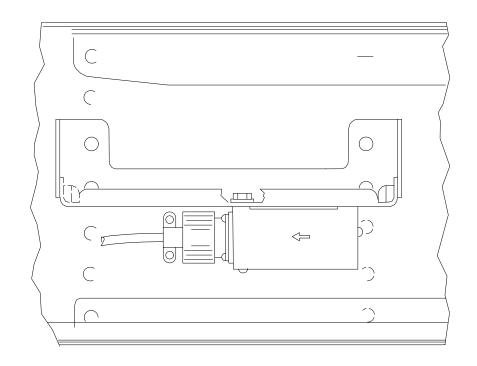
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${\tt MODAL \ SUPPRESSION \ ACCELEROMETER}$



Component Location Figure 102 (Sheet 3)

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Not Used Figure 103

ALL

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22-21-00

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PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:
ENGINE INDICATION AND CREW ALERTING SYSTEM (EICAS)
(AMM 31-41-00/201)

AIR/GROUND RELAYS (AMM 32-09-02/201)
MASTER DIM AND TEST (AMM 33-16-00/501)
AIR DATA COMPUTING SYSTEM (AMM 34-12-00/501)
INERTIAL REFERENCE SYSTEM (AMM 34-21-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED: 11A18, 11C6, 11C7, 11C8, 11C9, 11F34, 11G17, 11G18, 11G27, 11G28

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION: ELECTRICAL POWER IS ON (AMM 24-22-00/201) 1 HYDRAULIC POWER IS ON (AMM 29-11-00/201) 1

YAW DAMPER SYSTEM BITE PROCEDURE

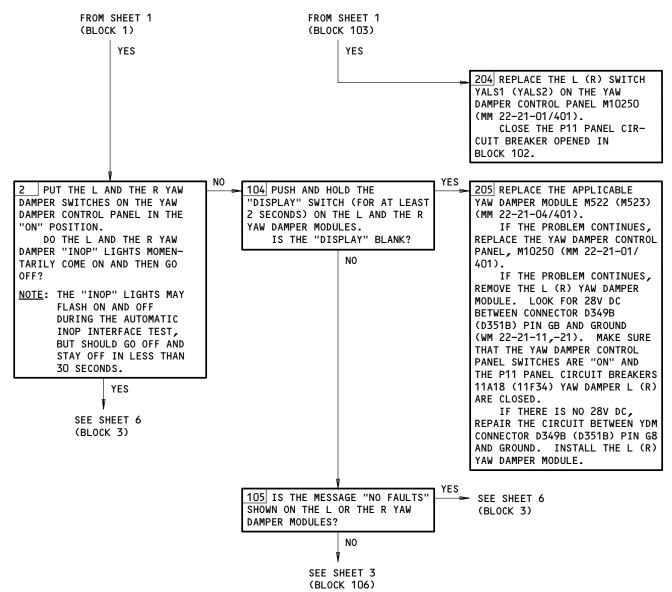
HYDRAULIC POWER IS ON (AMM 29-11-00/201) 1 > 1N0 NO 1 ALIGN THE L,C, AND R IRUS 101 PUSH THE "IND LTS TEST" 201 IF NECESSARY, PUSH THE IN THE NAV MODE SWITCH ON THE R OVERHEAD "IND LTS TEST" SWITCH TO STOP THE TEST. (AMM 34-21-00/501). LIGHTING CONTROL PANEL. PRESSURIZE THE L AND C DO THE L AND THE R YAW DO THIS PROCEDURE: DAMPER "INOP" LIGHTS ON THE HYDRAULIC SYSTEMS FLIGHT COMPARTMENT MASTER DIM (AMM 29-11-00/201). YAW DAMPER CONTROL PANEL, AND TEST PROBLEMS PUT THE RUDDER TRIM IN M10250, COME ON? (FIM 33-16-00/101, FIG. 103). THE NEUTRAL POSITION. YES PUT THE L AND R YAW DAMPER SWITCHES, ON THE YAW DAMPER CONTROL PANEL, M10250, IN THE 102 IF NECESSARY, PUSH THE 202 REPLACE THE YAW DAMPER CONTROL PANEL, M10250 "OFF" POSITION ("ON" "IND LTS TEST" SWITCH TO STOP INDICATION IS NOT SHOWN ON THE THE TEST. (AMM 22-21-01/401). SWITCH). OPEN THESE CIRCUIT CLOSE THE P11 PANEL DO THE L AND R YAW DAMPER BREAKERS ON THE P11 PANEL FOR CIRCUIT BREAKER OPENED IN "INOP" LIGHTS ON THE YAW THE YAW DAMPER: BLOCK 102. DAMPER PANEL COME ON? IF THE PROBLEM CONTINUES, 11A18, YAW DAMPER LEFT EXAMINE AND REPAIR THE 11F34, YAW DAMPER RIGHT YFS CIRCUIT BETWEEN YAW DAMPER DOES THE L (R) "INOP" CONTROL PANEL CONNECTOR D3511 LIGHT ON THE YAW DAMPER (D3513), PIN 7 AND TB109 SEE SHEET 2 CONTROL PANEL STAY OFF? (TB108), PIN YA118 (YC49) (BLOCK 2) (WDM 22-21-11,-21). 203 REPLACE THE APPLICABLE 103 IS ONE OF THESE EICAS L (R) YAW DAMPER MODULE M522 MESSAGES SHOWN? (M523)(AMM 22-21-04/401). L YAW DAMPER CLOSE THE P11 PANEL R YAW DAMPER CIRCUIT BREAKER OPENED IN BLOCK 102. YES IF THE PROBLEM CONTINUES, REMOVE THE L (R) YAW DAMPER SEE SHEET 2 MODULE, M522 (M523) (BLOCK 204) (AMM 22-21-04). EXAMINE AND REPAIR THE >> THE "HYD SWITCH" "FAULTS NOW" MESSAGE CAN BE CIRCUIT BETWEEN YDM CONNECTOR SHOWN IF THE HYDRAULIC SYSTEM IS NOT PRESSURIZED, D349B (D351B), PIN F7 AND THE AC AND DC MAIN BUSES ARE NOT ON, THE STDY POWER TB109 (TB108), PIN YA118 IS SET TO AUTO, AND THE BATTERY SWITCH IS ON. THE (YC49)(WDM 22-21-11,-21). "HYD SWITCH" "FAULTS NOW" MESSAGE WILL CLEAR WHEN INSTALL THE YAW DAMPER ELECTRICAL POWER IS SUPPLIED AGAIN MODULE.

Yaw Damper System BITE Procedure Figure 103A (Sheet 1)

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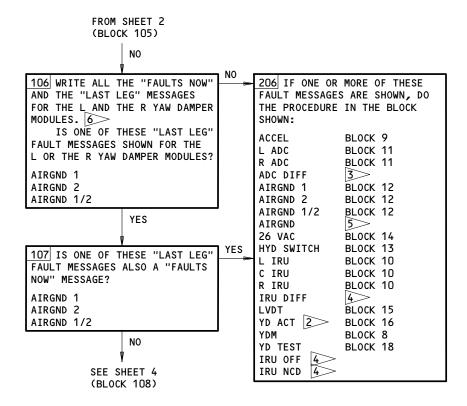
Yaw Damper System BITE Procedure Figure 103A (Sheet 2)

EFFECTIVITY-AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT

22-21-00

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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 26 VAC, OR THE YDM FIRST.
- FOR AN "ADC DIFF" FAULT MESSAGE, DO THE PROCEDURE FOR THE L (R) ADC FIRST.
- DO THE PROCEDURE FOR THE L (C,R) 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)

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Page 108 Sep 28/03 FROM SHEET 3
(BLOCK 107)
NO

108

WARNING

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 L AND THE R YAW DAMPER MODULES.

IS ONE OF THESE "FAULTS NOW" MESSAGES SHOWN ON THE L OR THE R YAW DAMPER MODULE?

"AIRGND 1"
"AIRGND 2"

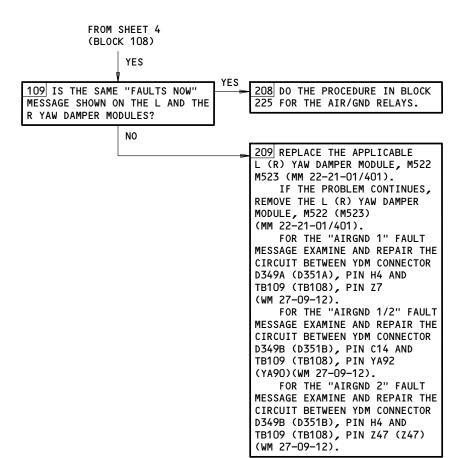
"AIRGND 1/2"

SEE SHEET 5 (BLOCK 109)

YES

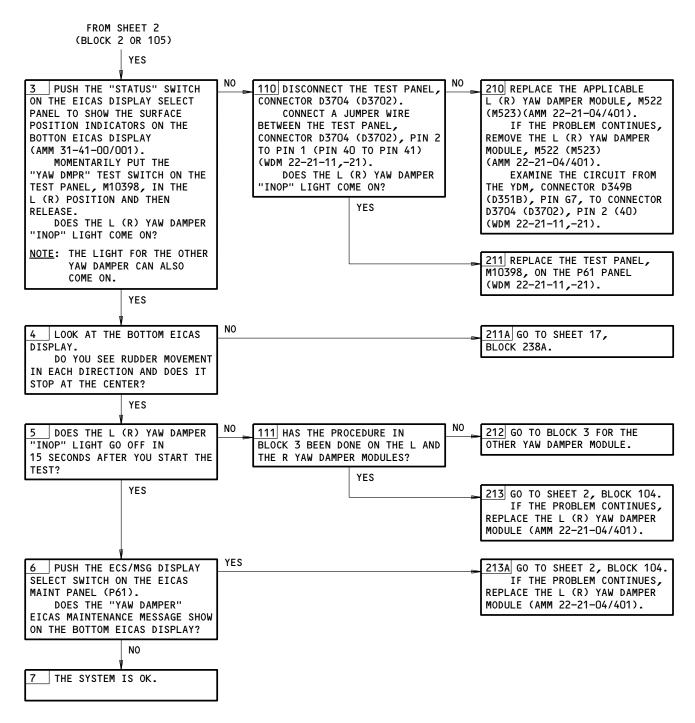
207 PUT THE AIR/GND SYSTEM
BACK IN TO GROUND MODE
(MM 32-09-02/201).
DO THE PROCEDURE IN
BLOCK 206 FOR THE REMAINING
"FAULTS NOW" MESSAGES.
DO THE PROCEDURE IN
BLOCK 3 IF THERE ARE NO OTHER
"FAULTS NOW" MESSAGES.

Yaw Damper System BITE Procedure Figure 103A (Sheet 4)



Yaw Damper System BITE Procedure Figure 103A (Sheet 5)





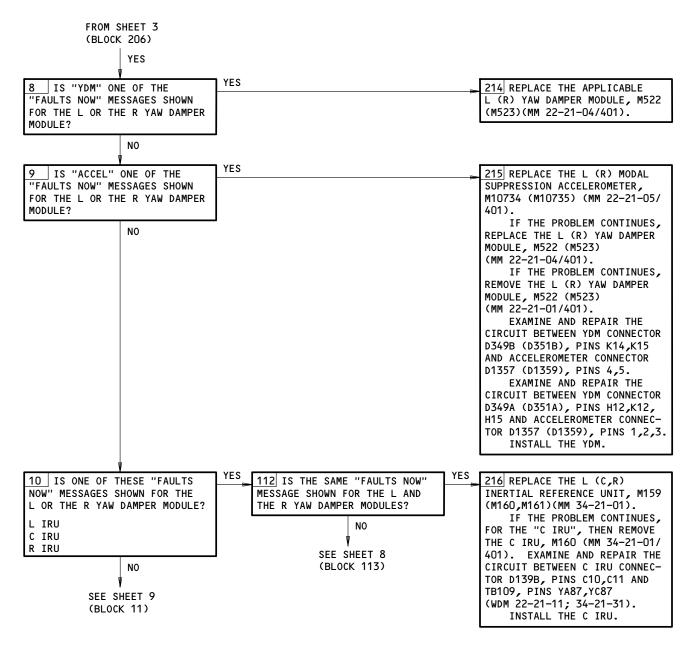
Yaw Damper System BITE Procedure Figure 103A (Sheet 6)

EFFECTIVITY—AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT

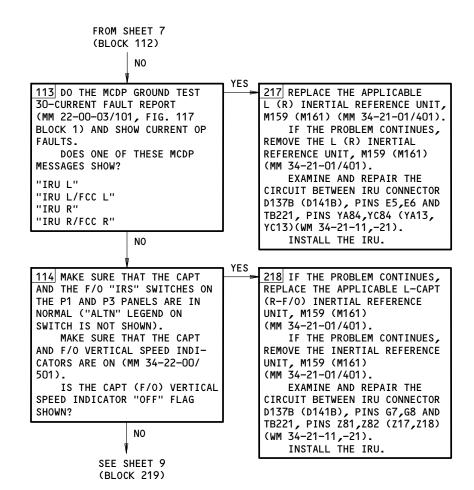
03 Page 111
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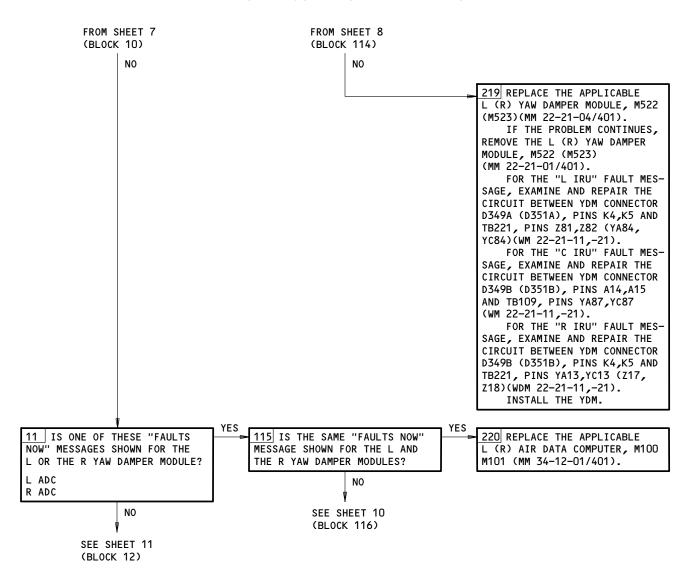




Yaw Damper System BITE Procedure Figure 103A (Sheet 7)



Yaw Damper System BITE Procedure Figure 103A (Sheet 8)

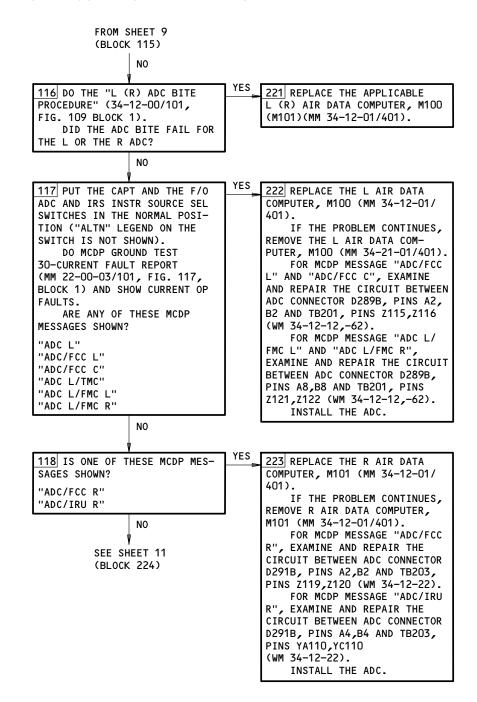


Yaw Damper System BITE Procedure Figure 103A (Sheet 9)

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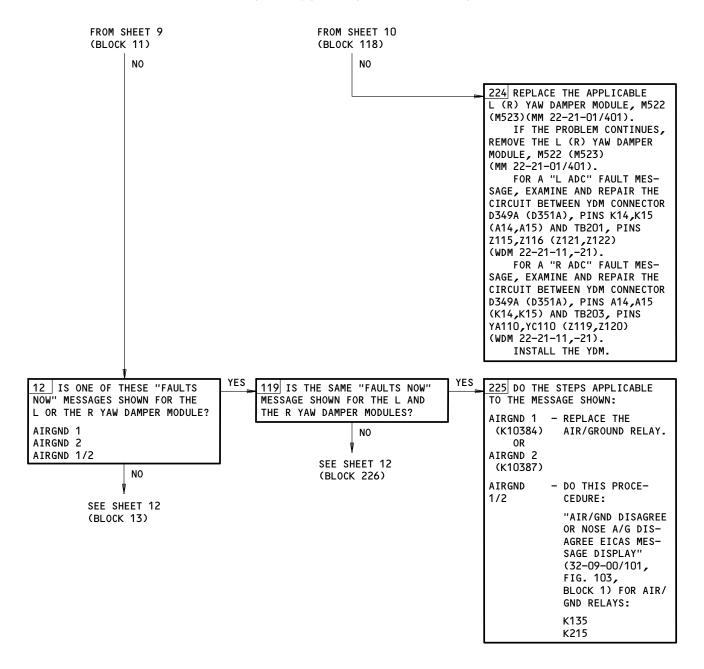


Yaw Damper System BITE Procedure Figure 103A (Sheet 10)

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Yaw Damper System BITE Procedure Figure 103A (Sheet 11)

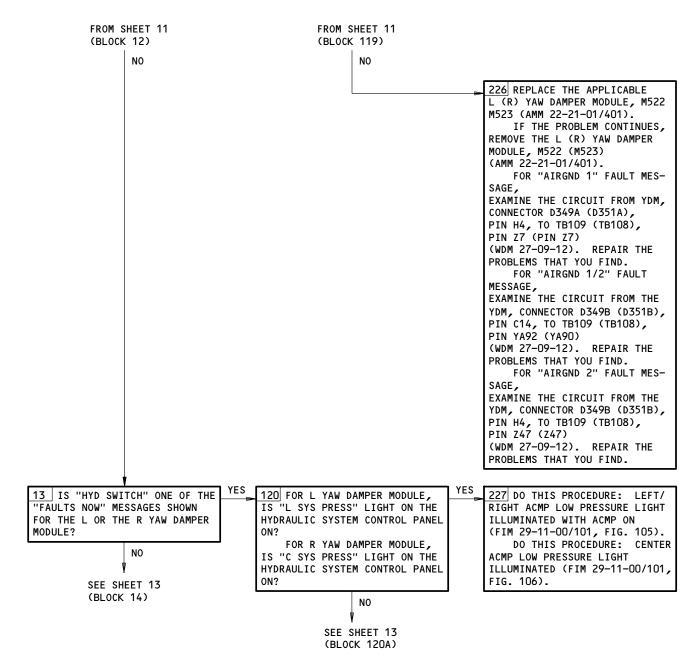
AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT

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Yaw Damper System BITE Procedure Figure 103A (Sheet 12)

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FAULT ISOLATION/MAINT MANUAL

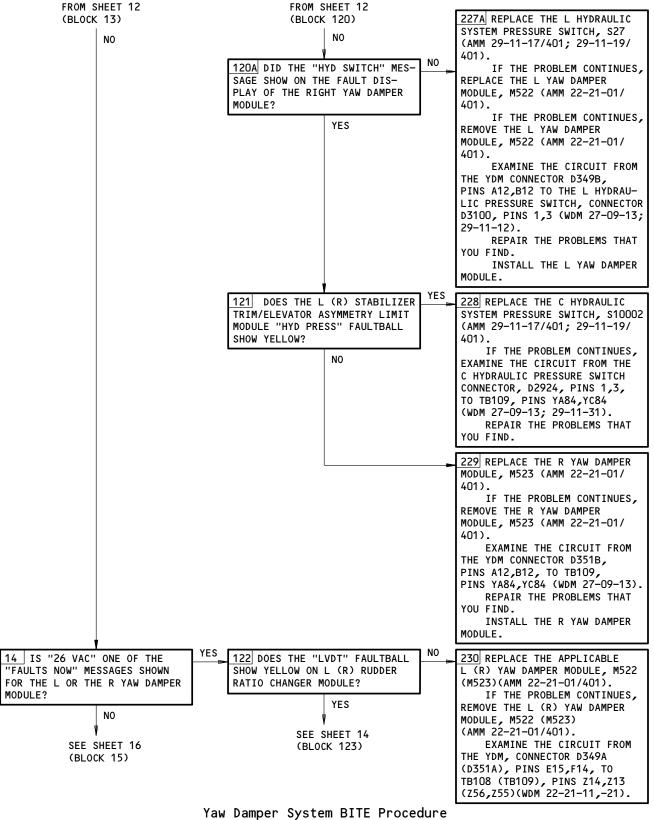


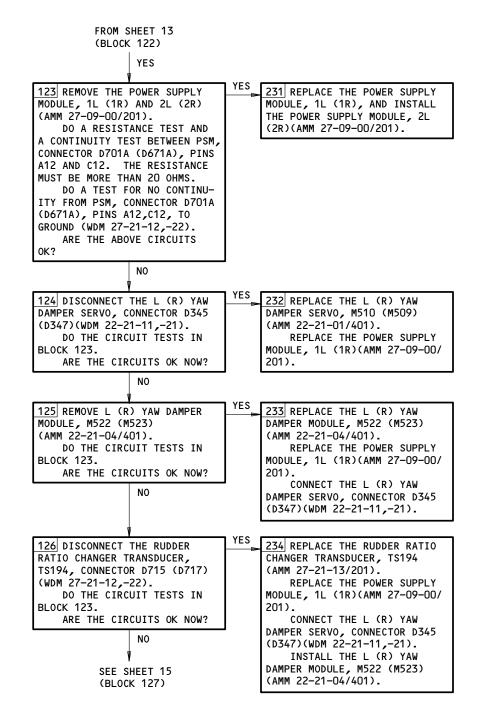
Figure 103A (Sheet 13)

EFFECTIVITY-AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT

22-21-00

02

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Yaw Damper System BITE Procedure Figure 103A (Sheet 14)

EFFECTIVITY
AIRPLANES WITH YDM'S 285T0013-122 AND SUBSEQUENT

22-21-00

02

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127 REMOVE THE L (R) RUDDER RATIO CHANGER, M528 (M529) (MM 27-09-00/201).

MAKE SURE THAT THERE IS NO CONTINUITY BETWEEN PSM CON-NECTOR D701A (D671A) PINS A12,C12 (WM 27-21-12,-22).

MAKE SURE THAT THERE IS NO CONTINUITY TO GROUND AT PSM CONNECTOR D701A (D671A) PINS A12,C12 (WM 27-21-12, -22).

ARE THE CIRCUITS O.K.?

NO

235 REPLACE THE L (R) RUDDER RATIO CHANGER MODULE, M528 M529 (MM 27-09-00/201).

YES

REPLACE THE POWER SUPPLY MODULE, 1L (1R) (MM 27-09-00/201).

INSTALL THE L (R) YAW DAMPER MODULE, M522 (M523) (MM 22-21-04/401).

CONNECT THE L (R) YAW DAMPER SERVO CONNECTOR, D345 (D347)(WM 22-21-11,-21).

CONNECT THE RUDDER RATIO CHANGER TRANSDUCER, TS194, CONNECTOR, D715 (D717) (WM 27-21-12,-22).

236 EXAMINE AND REPAIR THE CIRCUIT BETWEEN PSM CONNECTOR D701A (D671A), PINS A12,C12 AND:

YDM CONNECTOR D349A (D351A),
PINS F14,E15 (WM 22-21-11,
-21; 27-21-12,-22).
YD SERVO CONNECTOR D345
(D347), PINS 5,6
(WM 22-21-11,-21;
27-21-12,-22).
RUDDER RATIO CHANGER MODULE
CONNECTOR D709A (D711A),
PINS A10,A9; D709B (D711B),
PINS A5,A4 (WM 27-21-12,-22).
RUDDER RATIO CHANGER TRANSDUCER, TS194, CONNECTOR D715
(D717), PINS 6,7

REPLACE THE POWER SUPPLY MODULE, 1L (1R) (MM 27-09-00/201).

INSTALL THE L (R) YAW DAMPER MODULE, M522 (M523) (MM 22-21-04/401).

(WM 27-21-12,-22).

CONNECT THE L (R) YAW DAMPER SERVO CONNECTOR, D345 (D347)(WM 22-21-11,-21).

CONNECT THE RUDDER RATIO CHANGER TRANSDUCER, TS194, CONNECTOR, D715 (D717) (WM 27-21-12,-22).

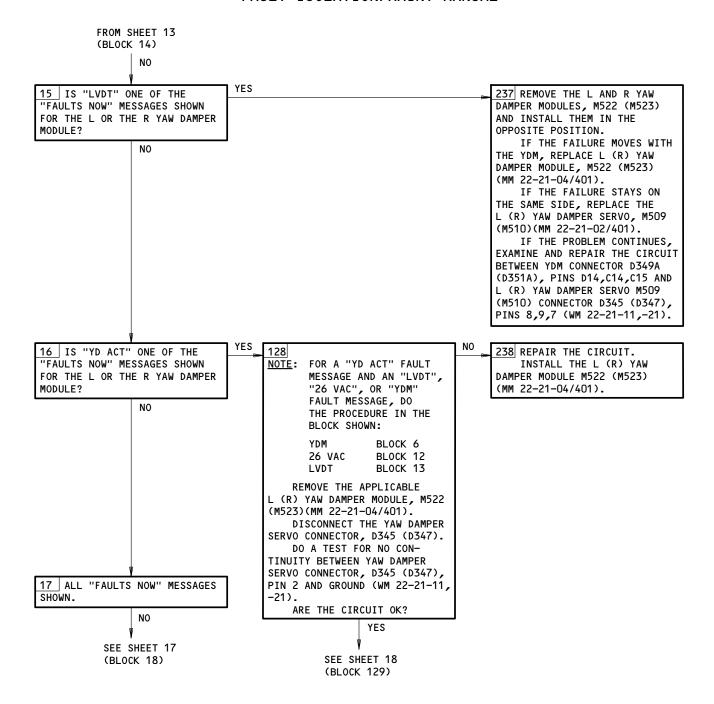
INSTALL THE L (R) RUDDER RATIO CHANGER MODULE, M528 (M529)(MM 27-09-00/201).

Yaw Damper System BITE Procedure Figure 103A (Sheet 15)

22-21-00

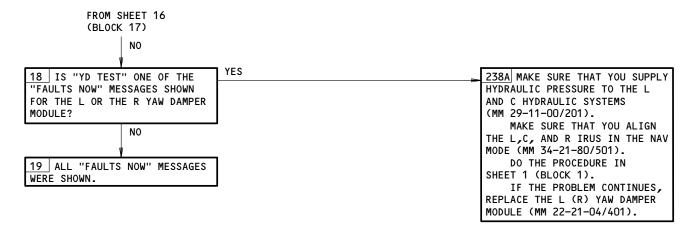
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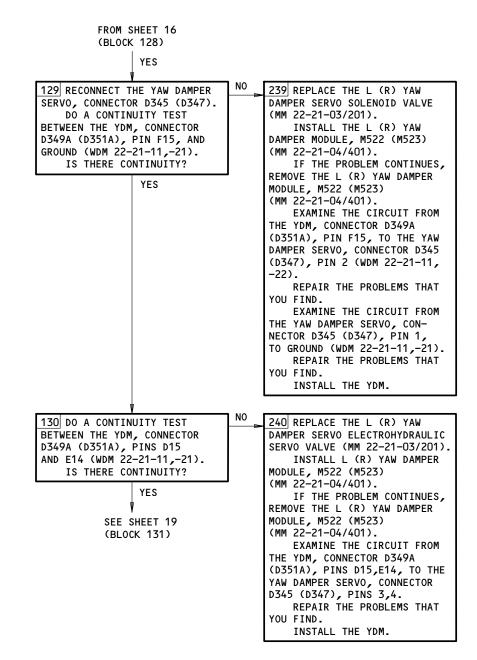


Yaw Damper System BITE Procedure Figure 103A (Sheet 16)





Yaw Damper System BITE Procedure Figure 103A (Sheet 17)

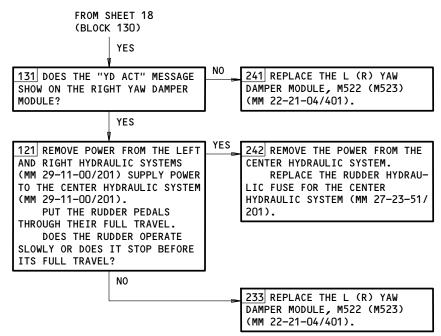


Yaw Damper System BITE Procedure Figure 103A (Sheet 18)

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Yaw Damper System BITE Procedure Figure 103A (Sheet 19)



THRUST MANAGEMENT POWER

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER - AUTOFLIGHT WARN, C521 TMC AC, C501 TMC DC, C525 TMC SERVO, C512		1 1 1 1	FLT COMPT, P11 11A17 11F14 OR 11F16 11F15 OR 11F17 11F16 OR 11F18	* * *
COMPUTER - THRUST MANAGEMENT, M183 PANEL - THRUST MODE SELECT, M10258		1	119BL, MAIN EQUIP CTR, E2-3 FLT COMPT, P3	22-31-01 22-31-02

^{*} SEE THE WDM EQUIPMENT LIST

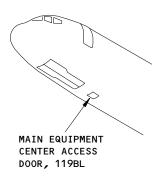
Thrust Management Power - Component Index Figure 101

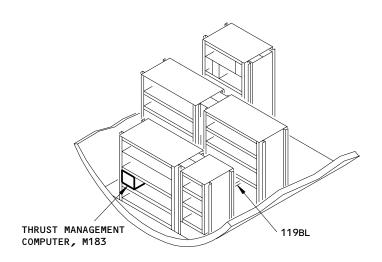
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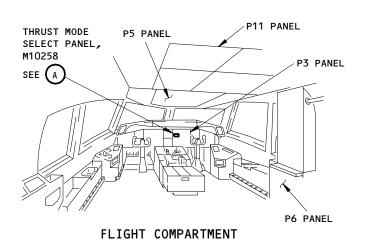
Page 101 Jan 28/05

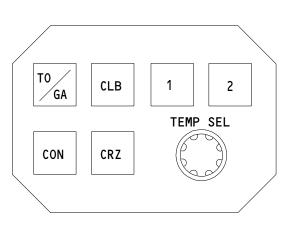






MAIN EQUIPMENT CENTER





THRUST MODE SELECT PANEL, M10258

Thrust Management Power - Component Location Figure 102

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THRUST MANAGEMENT SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CARD - (FIM 36-10-00/101) L ECS BLEED, M10313 R ECS BLEED, M10312 CIRCUIT BREAKER - AUTOFLIGHT WARN, C521 FIRE DET ALTN PWR ENG LEFT, C763 FLAP SLAT ELEC UNIT 2 POWER, C1521 RUDDER TRIM POS, C1034 TMC AC, C501 TMC DC, C525 TMC SERVO, C512 COMPUTER - (FIM 22-31-00/101) THRUST MANAGEMENT, M183 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 34-61-00/101) FLIGHT MANAGEMENT L, M134 FLIGHT MANAGEMENT R, M135 CONTROL - (FIM 73-21-00/101) ELECTRONIC ENGINE L, M10391		1 1 1 1 1 1	FLT COMPT, P11 11A17 11J26 11C14 11J17 11F14 OR 11F16 11F15 OR 11F17 11F16 OR 11F18	* * * * * *
ELECTRONIC ENGINE R, M10392 GENERATOR - AUTOTHROTTLE SERVOMOTOR, M229 PACK - AUTOTHROTTLE CLUTCH PACK - AUTOTHROTTLE MICROSWITCH, M966 PANEL - (FIM 22-11-00/101) AFCS MODE CONTROL, M90 PANEL - (FIM 22-41-00/101) MAINTENANCE CONTROL DISPLAY, M168 RELAY - (FIM 31-01-36/101)	=======================================	1 1 1	113AL, FORWARD EQUIP BAY 113AL, FORWARD EQUIP BAY 113AL, FORWARD EQUIP BAY	22-32-01 22-32-05 22-32-04
SYSTEM 1 AIR/GROUND, K143 SWITCH - L THRUST REVERSE, S12 SWITCH - R THRUST REVERSE, S16 SWITCH - SYS L AUTOTHROTTLE DISENGAGE, S3 SWITCH - SYS R AUTOTHROTTLE DISENGAGE, S4 SWITCH - (FIM 22-11-00/101) GO AROUND, S7, S8, OF M985 TRANSDUCER - (FIM 22-33-00/101) L POWER LEVEL ANGLE, TS5029 R POWER LEVEL ANGLE, TS5029 UNIT - (FIM 27-51-00/101) FLAP/SLAT ELECTRONICS, M10331 UNIT - (FIM 34-21-00/101) L INERTIAL REFERENCE, M159 R INERTIAL REFERENCE, M161	=======================================	1 1 1 1	113AL, FORWARD EQUIP BAY 113AL, FORWARD EQUIP BAY FLT COMPT, P10 FLT COMPT, P10	22-32-04 22-32-04 22-32-02 22-32-02

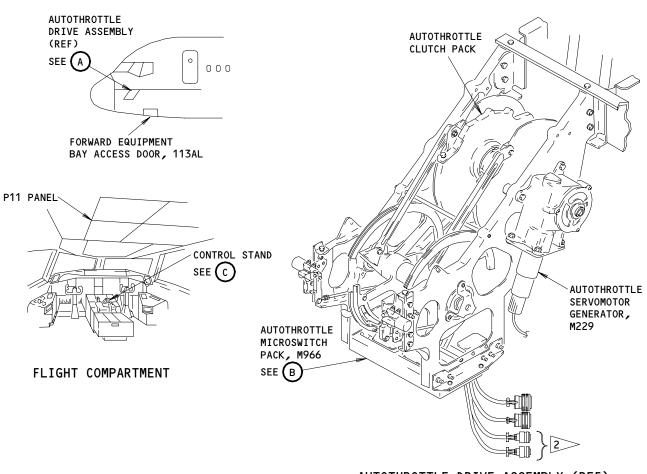
^{*} SEE THE WDM EQUIPMENT LIST

Thrust Management System - Component Index Figure 101

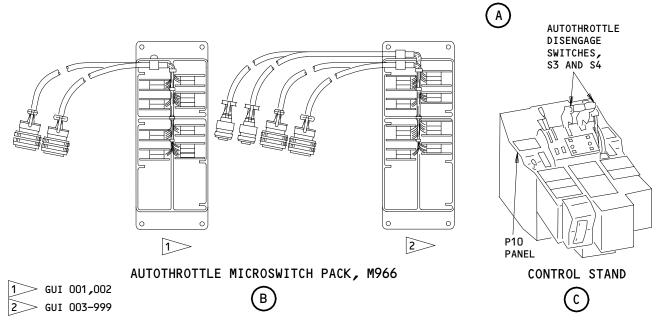
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FAULT ISOLATION/MAINT MANUAL



AUTOTHROTTLE DRIVE ASSEMBLY (REF)



Thrust Management System - Component Location Figure 102





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. ARINC Data Bus Charts

A. General

<u>CAUTION</u>: DO NOT DIRECTLY TOUCH THE CONNECTORS. USE A BREAKOUT BOX OR YOU CAN CAUSE DAMAGE TO THE CONNECTORS.

(1) The ARINC 429 data bus charts give data necessary to make an analysis of ARINC 429 transmitters, receivers, and data buses. For the test, use a breakout box at the available terminal or at the LRU connectors.

B. Equipment

- (1) Standard Multimeter
- (2) 429EBP Data Bus Analyzer (recommended) JcAIR Instrumentation 400 Industrial Parkway Industrial Airport, KS 66031

429-2 Data Bus Analyzer (alternative) Interface Technology 150 E. Arrow Highway, San Dimas, CA 91773

(3) A34011-1 Breakout Box (recommended)
A34011-112 Breakout Box (alternative)

тмс	FMC									
	DIGITAL OUTPUT BUS CHART									
BUS NAME							BUS	ВІТ		
	SOURCE		TYPE	BUS	CON	PINS	FORMAT	:	DATA BUS	
ТМС	(L)	Α	1	P1A	CO4 CO5	429	LO	TMC-TMSP	
ТМС	(L)	В	2	P1B	J12 J13	429	LO	TMC-BUS L	
ТМС	(L)	С	3	P1B	J15 J14	429	LO	TMC-BUS R	
тмс	(L)	D	4	P1B	H06 G06	429	L0	TMC-MAINT	

EFFECTIVITY-



							 		
OCTAL LABELS CHART									
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS	
TEST WORD	А	300	BNR	5	00	N/A	N/A	N/A	
MODE DISPLAY	А	301	BCD	10	00	N/A	N/A	N/A	
REFERENCE DISPLAY	А	302	BCD	10	00	N/A	ALWAYS POS		
MAX LIMIT DISPLAY	А	303	BCD	5	00	N/A	ALWAYS POS		
TEMP SELECTED	A	304	BCD	5	00	N/A	ABOVE FREEZ	DEG (
TAT DISPLAY	А	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 *[3]	В	142	BNR	16	00	± 32	OVERSPEED	KNOTS	
TEMP SELECTED	В	213	BNR	5	00	± 512	ABOVE FREEZ	DEG (
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/SI	
EPR ACTUAL-L	В	340	BNR	5	10	± 4	ALWAYS POS	RATI	
EPR ACTUAL-R	В	340	BNR	5	01	± 4	ALWAYS POS	RATI	

ALL



TMC ID=02A									
OCTAL LABELS CHART									
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS	
EPR BUG DRIVE-L	В	341	BNR	5	10	± 4	ALWAYS POS	RATIO	
EPR REFERENCE	В	342	BNR	5	00	± 4	ALWAYS POS	RATIO	
FLAP POSITION	С	137	BNR	5	00	± 180	ALWAYS POS	DEG	
A/T FAST/SLOW CMD *[3]	С	142	BNR	16	00	± 32	OVERSPEED	KNOTS	
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	
VERT SPD CMD	С	304	BNR	20	00	± 256	UPWARDS	FT/SE	

ALL



TMC ID=02A										
OCTAL LABELS CHART										
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS		
POWER LEVR ANGLE-L	D	134	BNR	5	10	± 180	FORWARD THRUS	DEG		
POWER LEVR ANGLE-R	D	134	BNR	5	01	± 180	FORWARD THRUS	DEG		
A/T FAST/SLOW CMD *[3]	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		
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		

ALL

22-32-00

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TMC ID=02A										
	OCTAL LABELS CHART									
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS		
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		

*[3] GUI 115



тмс							
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			
SHUTOFF VALVE-L	145	15	OPEN	CLOSED			
SHUTOFF VALVE-R	145	16	OPEN	CLOSED			
ISOL VALVE	145	17	OPEN	CLOSED			
A/T G/A MODE ANNUN	145	19	OPER	INOPER			
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			
THROTTLE HLD ANNUN	145	25	HOLD	NO HOLD			

ALL ALL



TMC								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	ВІТ	ONE-STATE	ZERO-STATE				
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				
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				



тмс								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE				
A/T ENGAGED	146	27	EXCEED	NOT EXCEED				
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					
ENGINE IDENT 9	270	20	CODED					
ENGINE IDENT 10	270	21	CODED					

ALL



TMC								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE				
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				



TMC								
DISCRETE OCTAL LABELS/BIT CHART								
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE				
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 VNAV ENABLE	272	26	ENABLED	DISABLED				
AIRSPEED SYNC	272	27	SYNC	NOT SYNC				
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	273	17	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				

22-32-00

ALL



TMC				
	DISCR	ETE OCT	AL LABELS/BIT CHART	
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE
ENIGNE OUT-L	273	25	ENG FAIL	ENG VAL
ENGINE OUT-R	273	26	ENG FAIL	ENG VAL
SHUTOFF VALVE-L	273	27	OPEN	CLOSED
SHUTOFF VALVE-R	273	28	OPEN	CLOSED
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
IAS LIMIT ANNUN	274	21	LIMIT	NO LIMIT
RSV 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

ALL



ТМС				
	DISCRE	ETE OCT	AL LABELS/BIT CHART	
SIGNAL	OCTAL LABEL	BIT	ONE-STATE	ZERO-STATE
TMC FLCH OPER	304	11	FLCH ENGA	ENGA NOT
TAT VALID	305	19	VALID	INVALID

ALL ALL



THRUST MANAGEMENT ENGINE

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
TRANSDUCER - AUTOTHROTTLE POWER LEVER ANGLE, TS5029		1	413AL,423AL, FAN COWL PANEL INTERMEDIATE GEARBOX ASSY (REF)	22-33-01

Thrust Management Engine - Component Index Figure 101

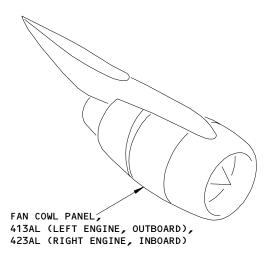
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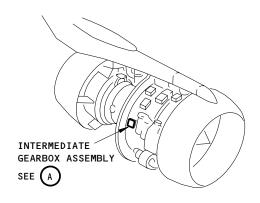
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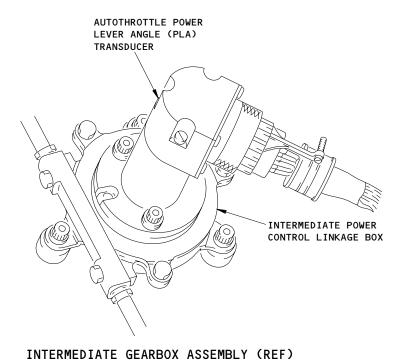
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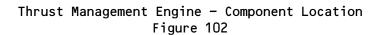
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THRUST MANAGEMENT WARNING AND ANNUNCIATION

COMPONENT		QTY	ACCESS/AREA	AMM REFERENCE	
LIGHT - AUTOTHROTTLE DISCONNECT, L591		1	FLT COMPT, P1	22-34-00	

Thrust Management Warning and Annunciation - Component Index Figure 101

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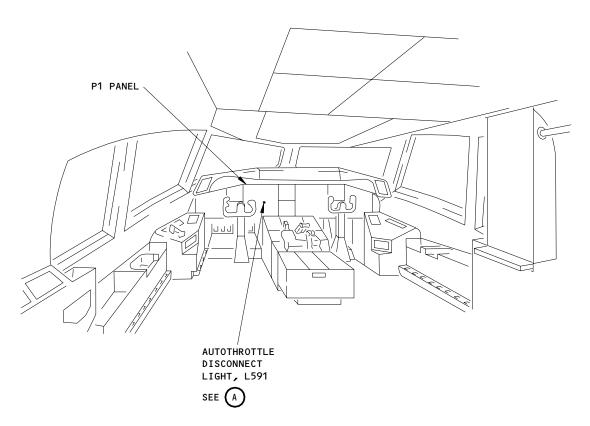
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E45790





FLIGHT COMPARTMENT

A/T DISC A

AUTOTHROTTLE DISCONNECT LIGHT, L591



Thrust Management Warning and Annunciation - Component Location Figure 102

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MAINTENANCE MONITOR

COMPONENT		QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER - MAINT CONT DISPLAY, C520 CONNECTOR - MCDP REMOTE CONTROL PANEL, D4110J PANEL - MAINTENANCE CONTROL DISPLAY, M168	2 2 1	1 1 1	FLT COMPT, P11 11S3 1 11S6 2 FLT COMPT, P61 MAIN EQUIP CTR, 119BL, E3-2	* 22-41-00 22-41-01

^{*} SEE THE WDM EQUIPMENT LIST

1 GUI 001-114,116-999

2>> GUI 115

Maintenance Monitor - Component Index Figure 101

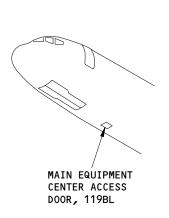
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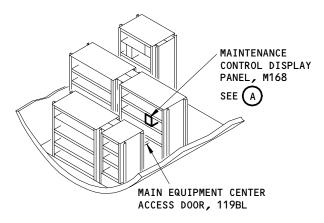
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12

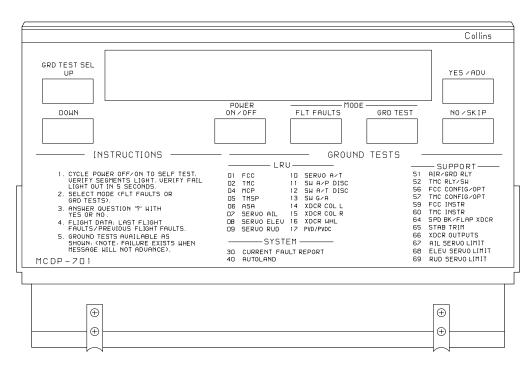
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MAIN EQUIPMENT CENTER



MAINTENANCE CONTROL DISPLAY PANEL, M168



Maintenance Monitor - Component Location Figure 102 (Sheet 1)

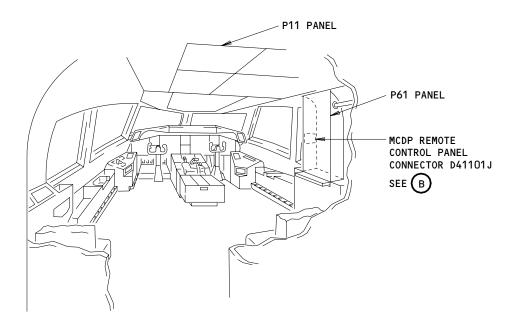
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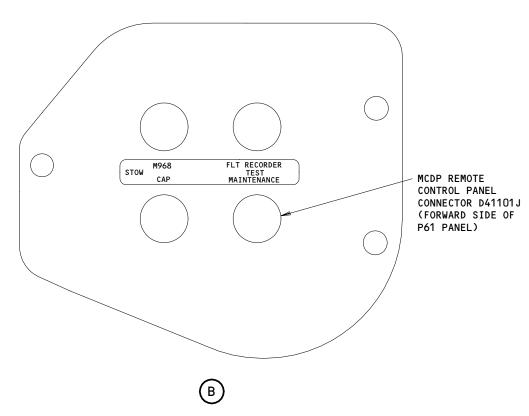
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B06590





FLIGHT COMPARTMENT



Maintenance Monitor - Component Location Figure 102 (Sheet 2)

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Maintenance Monitor BITE Procedure is part of Autoflight BITE. See the Autoflight BITE Fault Isolation Procedure (FIM 22-00-02/101).

Maintenance Monitor BITE Procedure Figure 103

ALL ALL

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1. ARINC Data Bus Charts

22-41-00

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A. General

<u>CAUTION</u>: DO NOT DIRECTLY TOUCH THE CONNECTORS. USE A BREAKOUT BOX OR YOU CAN CAUSE DAMAGE TO THE CONNECTORS.

(1) The ARINC 429 data bus charts give data necessary to make an analysis of ARINC 429 transmitters, receivers, and data buses. For the test, use a breakout box at the available terminal or at the LRU connectors.

B. Equipment

- (1) Standard multi-meter
- (2) 429EBP Data Bus Analyzer (recommended) JcAIR Instrumentation 400 Industrial Parkway Industrial Airport, KS 66031

429-2 Data Bus Analyzer (alternative) Interface Technology 150 E. Arrow Highway, San Dimas, CA 91773

(3) A34011-1 Breakout Box (recommended) A34011-112 Breakout Box (alternative)

MCDP										
DIGITAL OUTPUT BUS CHART										
	BUS	NAME			CON	PINS	BUS	BIT	DATA	
	SOURCE		TYPE	BUS			FORMAT	RATE	BUS	
MCDP	(L)	А	1	P1A	J15 K15	429	HI	RMDSPL	
MCDP	(L)	В	2	P1A	A11 B11	429	LO	F/T-L	
MCDP	(L)	В	3	P1A	A10 B10	429	LO	F/T-C	
MCDP	(L)	В	4	P1A	A09 B09	429	L0	F/T-R	

EFFECTIVITY-



MCDP ID NOT DEFINED										
OCTAL LABELS CHART										
SIGNAL	TYPE	LABEL	FORMAT	MIN UPDATE RATE	SDI	BINARY RANGE	POSITIVE SENSE	UNITS		
DISPLAY DATA	А	357	AIM	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL- 1	В	001	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL- 2	В	002	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL- 3	В	003	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL- 4	В	004	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL- 5	В	005	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL- 6	В	006	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL- 7	В	007	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL- 8	В	010	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL- 9	В	011	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL-10	В	012	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL-11	В	013	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL-12	В	014	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL-13	В	015	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL-14	В	016	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL-15	В	017	BNR	N/A	N/A	N/A	N/A	N/A		
TEST CONTROL-16	В	020	BNR	N/A	N/A	N/A	N/A	N/A		

ALL