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## FAULT ISOLATION/MAINT MANUAL

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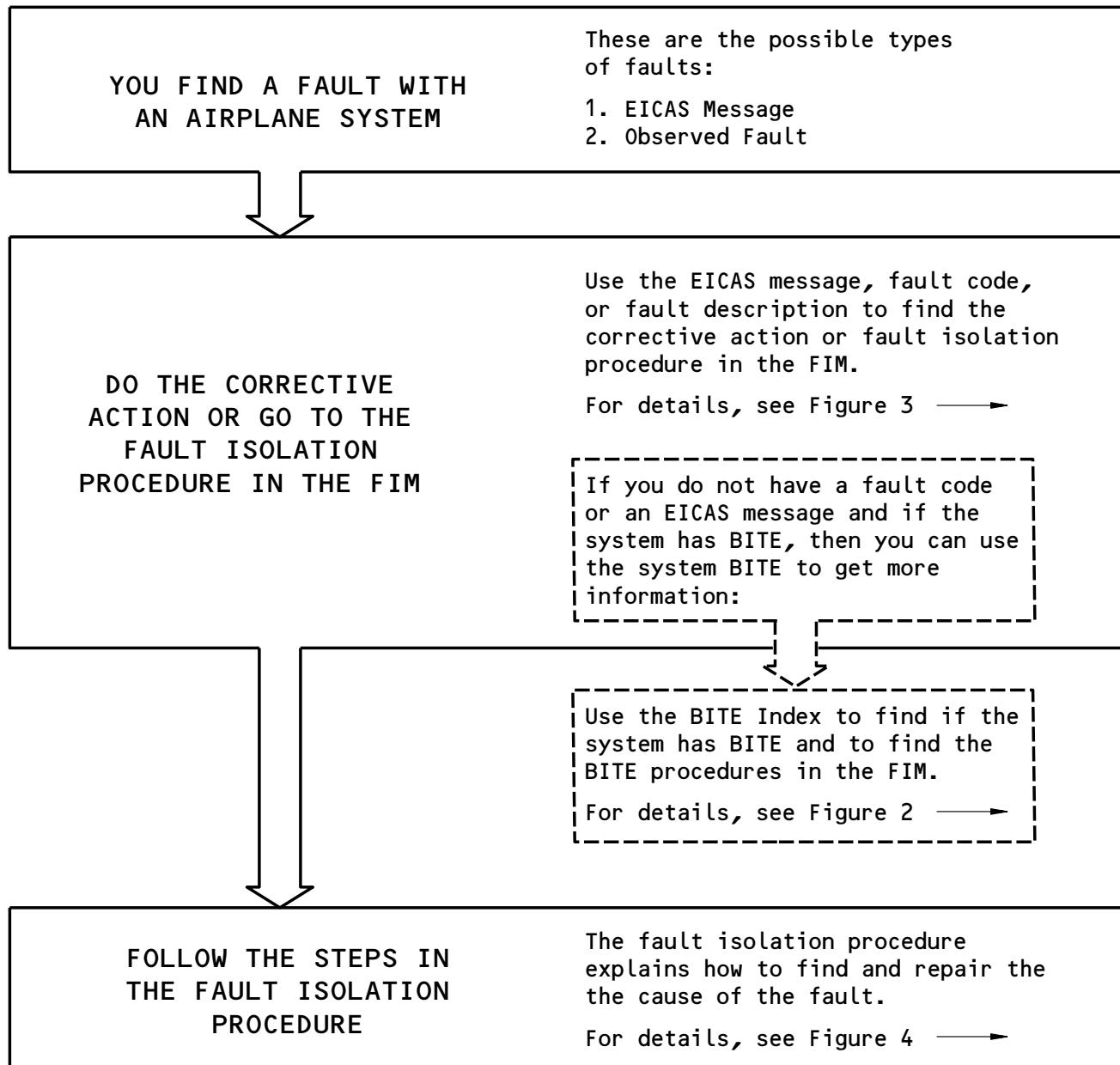
<u>Subject</u>	<u>Chapter</u> <u>Section</u> <u>Subject</u>	<u>Page</u>	<u>Effectivity</u>
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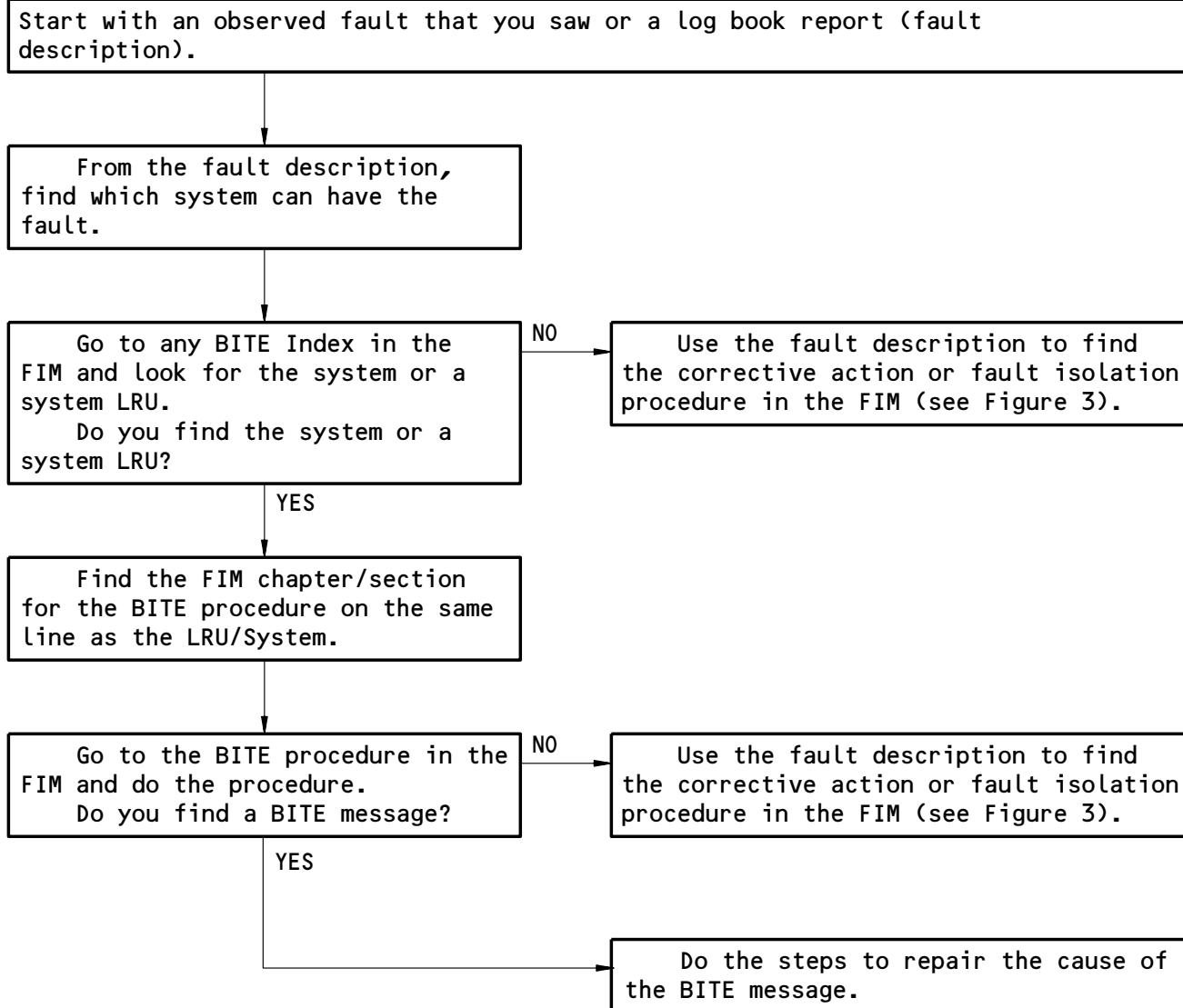


Basic Fault Isolation Process  
Figure 1

EFFECTIVITY

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**27-HOW TO USE THE FIM**



How to Get Fault Information from BITE  
Figure 2

EFFECTIVITY

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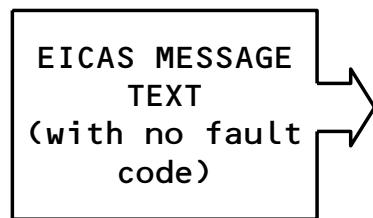
**27-HOW TO USE THE FIM**

IF YOU HAVE:

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



1. 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).



1. 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).



1. 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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27-HOW TO USE THE FIM



## 767 FAULT ISOLATION/MAINT MANUAL

### 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

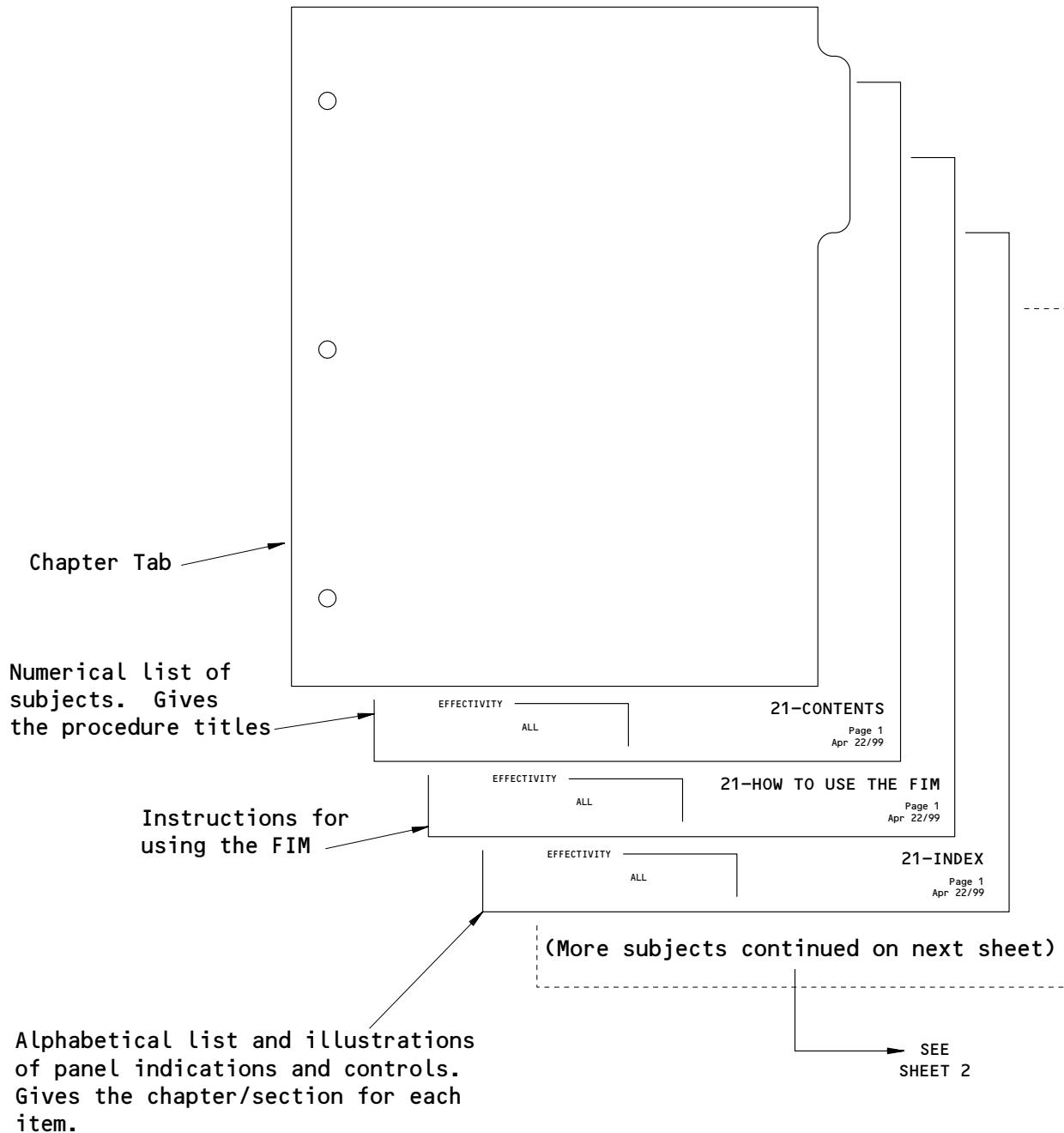
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27-HOW TO USE THE FIM

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Subjects in Each FIM Chapter  
Figure 5 (Sheet 1)

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## 27-HOW TO USE THE FIM

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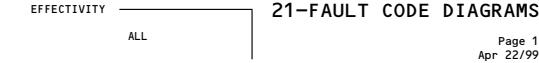
○ (Continued from Sheet 1)

○

Alphabetical list of the EICAS messages. Gives the procedure to repair the cause of the message or a reference to a fault isolation procedure.



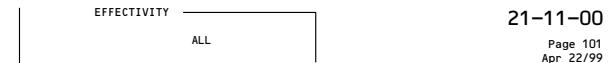
Failure analysis diagrams for the airplane systems to find the correct fault code for the fault.



Numerical list of fault codes. Gives the procedure to repair the cause of the fault or a reference to a fault isolation procedure.



Alphabetical list of all the LRUs/systems that have BITE. Gives the chapter/section for the BITE procedure.



Component index, component location, and fault isolation procedures for the systems in the chapter.

Subjects in Each FIM Chapter  
Figure 5 (Sheet 2)

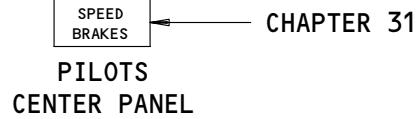
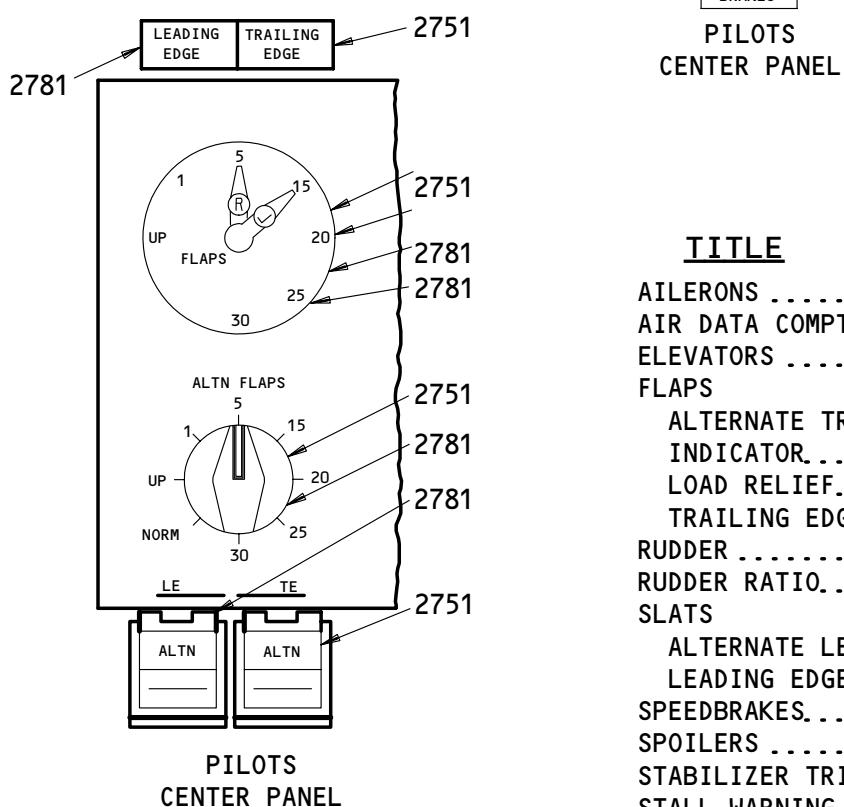
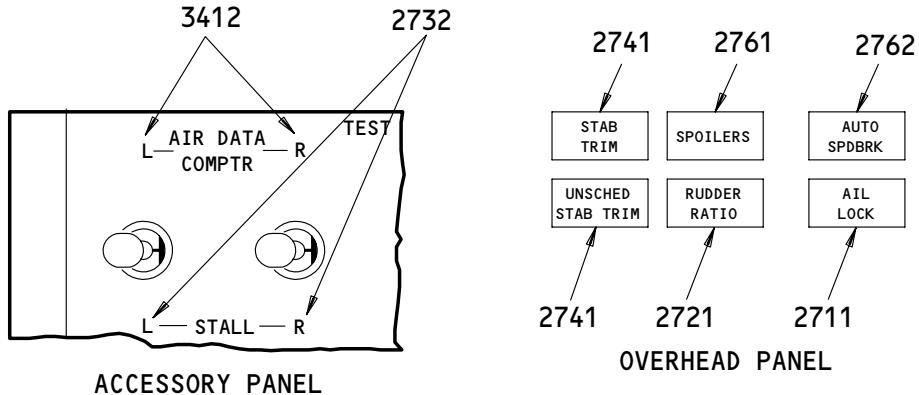
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FLIGHT CONTROLS



<u>TITLE</u>	<u>CHAP/SEC</u>
AILERONS .....	2711
AIR DATA COMPTR .....	3412
ELEVATORS .....	2731
FLAPS	
ALTERNATE TRAILING EDGE .....	2751
INDICATOR .....	2751
LOAD RELIEF .....	2751
TRAILING EDGE .....	2751
RUDDER .....	2721
RUDDER RATIO .....	2721
SLATS	
ALTERNATE LEADING EDGE .....	2781
LEADING EDGE .....	2781
SPEEDBRAKES .....	2762
SPOILERS .....	2761
STABILIZER TRIM .....	2741
STALL WARNING .....	2732
STICK NUDGER .....	2732
YAW DAMPER .....	CHAPTER 22

**FLIGHT CONTROLS - INDEX**

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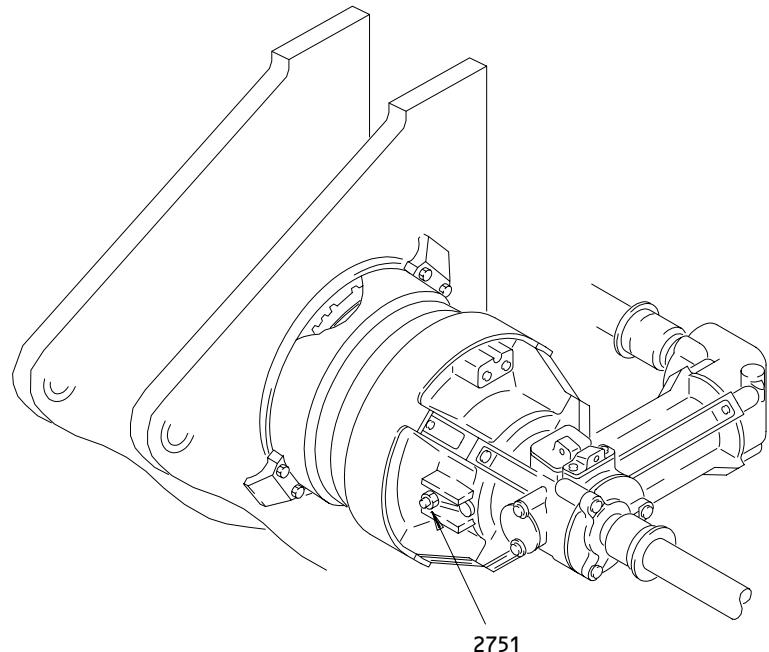
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TE FLAP ACTUATOR (TYPICAL)

<u>TITLE</u>	<u>CHAP/SEC</u>
TE FLAP ROTARY ACTUATOR OVERLOAD INDICATOR.....	2751

FLIGHT CONTROLS - INDEX (GROUND)

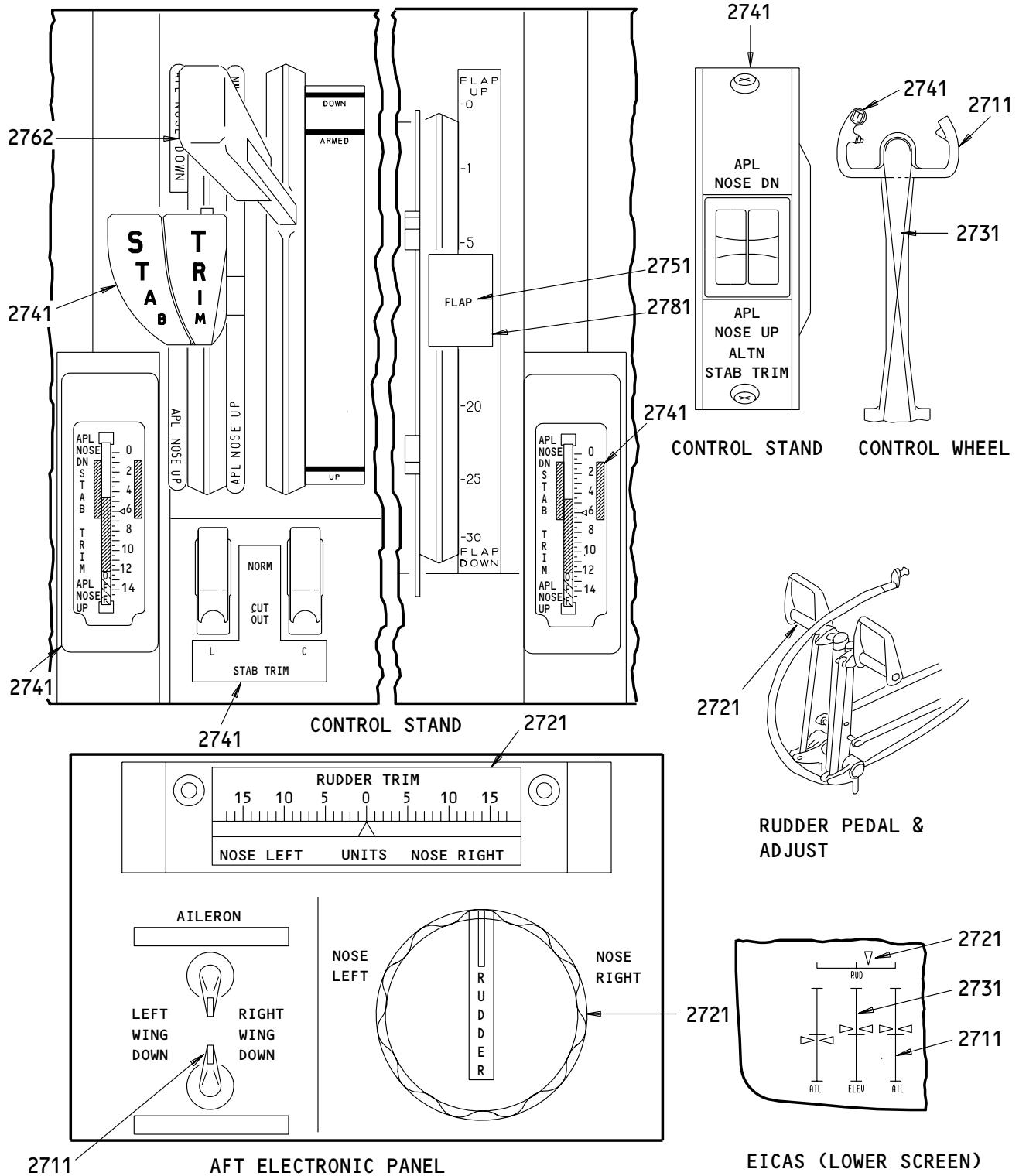
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## FLIGHT CONTROLS - INDEX

## EFFECTIVITY-

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FLIGHT CONTROLS - 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:

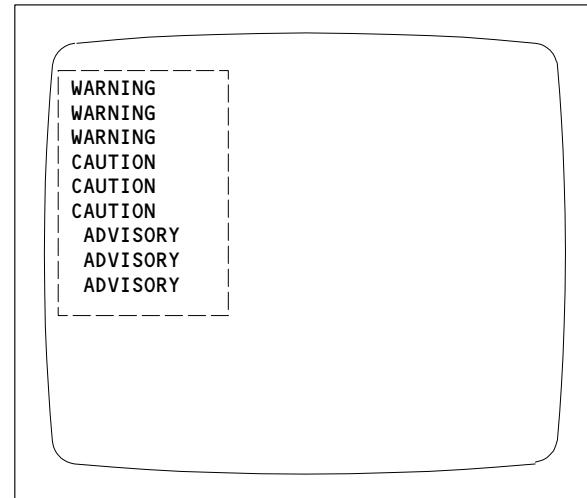
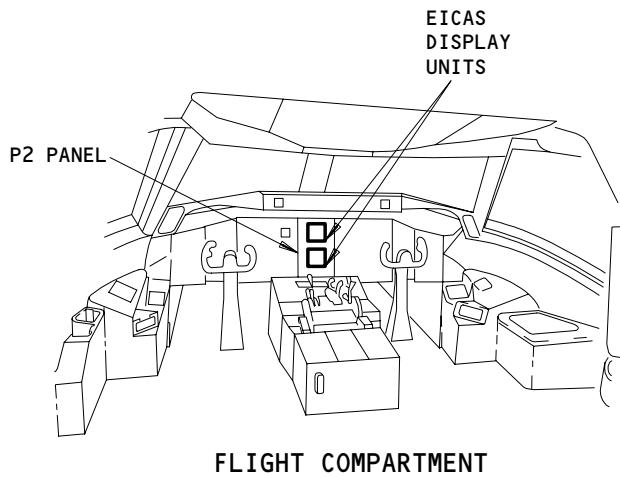
- 1) A Fault Isolation Manual procedure reference
- 2) A Maintenance Manual procedure and reference
- 3) Wiring checks and a Wiring Diagram Manual reference
- 4) A reference to an EICAS message list in a different chapter.
- 5) A reference to a FAULT CODE INDEX and specified fault codes
- 6) A step to change the airplane configuration

EFFECTIVITY

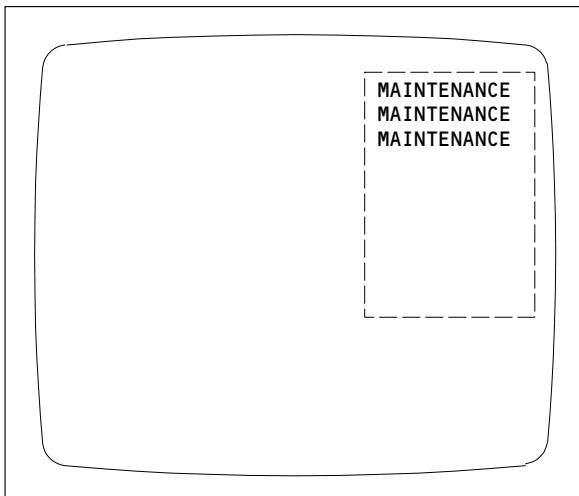
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**27-EICAS MESSAGES**

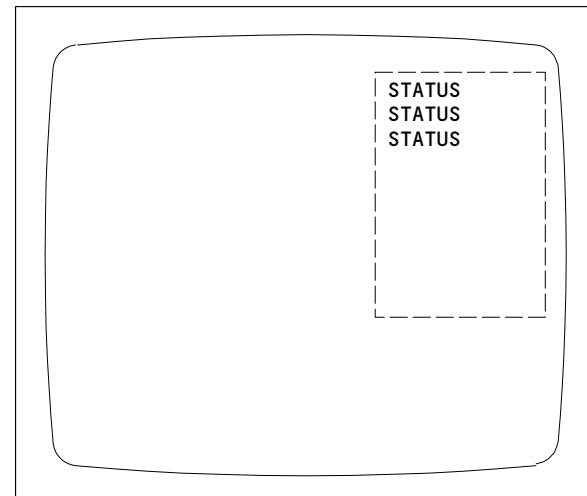
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ENGINE PRIMARY PAGE OR COMPACTED PAGE  
(TOP DISPLAY UNIT)



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

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## 27-EICAS MESSAGES

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EICAS MESSAGE LIST		
EICAS MESSAGE	LEVEL	PROCEDURE
AILERON LOCKOUT	C	FIM 27-11-00/101, Fig. 104
AUTO SPEEDBRAKE	C	FIM 27-62-00/101, Fig. 105 and FIM 27-62-00/101, Fig. 106 and FIM 27-62-00/101, Fig. 107
ELEV FEEL	S, M	FIM 27-31-00/101, Fig. 106
FLAP LD RELIEF	C	Do the FSEU BITE procedure (FIM 27-51-00/101, Fig. 104). If the message stays, replace the K352 relay on the P33 panel (WDM 27-51-51). If the message stays, do the FIM troubleshooting procedure (FIM 27-51-00/101, Fig. 107 and FIM 27-51-00/101, Fig. 108).
FLAP/SLAT ELEC	S, M	Do the FSEU BITE procedure (FIM 27-51-00/101, Fig. 104). If the message stays, do the FSPM BITE procedure (FIM 27-58-00/101, Fig. 104).
FLT CONT VALS	C	FIM 27-23-00/101, Fig. 103
(L, C, R) TAIL HYD VAL	C	Replace the rudder/elevator hydraulic shutoff valve for the (L, R, C) hydraulic system (AMM 27-23-01/201)
(L, C, R) WING HYD VAL	C	Replace the lateral control shutoff valve for the (L, C, R) hydraulic system (AMM 27-13-04/401).
(L, R) FLT CONT ELEC	M	FIM 27-09-00/101, Fig. 103, Block 1.
LE SLAT ASYM	B	Do the PSEU BITE procedure (FIM 32-09-03/101, Fig. 103). If the message stays, do the "LE SLAT ASYM is Displayed on EICAS" procedure (FIM 27-81-00/101, Fig. 107).

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## 27-EICAS MESSAGES

EICAS MESSAGE LIST		
EICAS MESSAGE	LEVEL	PROCEDURE
LE SLAT DISAGREE	B	Do the FSEU BITE procedure (FIM 27-51-00/101, Fig. 104). If the message stays, replace the K227 relay on the P36 panel (WDM 27-81-31). If the message stays, do the FIM troubleshooting procedure (FIM 27-81-00/101, Fig. 105 and FIM 27-81-00/101, Fig. 106).
LE SLAT SHUTDOWN	S, M	Do the FSEU BITE procedure (FIM 27-51-00/101, Fig. 104). If the message stays, do the "EICAS Message LE SLAT SHUTDOWN Displayed" procedure (FIM 27-81-00/101, Fig. 112A).
RUDDER RATIO	C, M	FIM 27-21-00/101, Fig. 104
SLAT ISLN VAL	M	FIM 27-81-00/101, Fig. 103.
SPOILERS	C, M	FIM 27-09-00/101, Fig. 103.
STAB TRIM	C, M	FIM 27-48-00/101, Fig. 106 and FIM 27-48-00/101, Fig. 107.
TE FLAP ASYM	B	Do the FSEU BITE procedure (FIM 27-51-00/101, Fig. 104). If the message stays, do the "TE FLAP ASYM Displayed on EICAS, No Flap Movement" procedure (FIM 27-51-00/101, Fig. 106).
TE FLAP DISAGREE	B	Do the FSEU BITE procedure (FIM 27-51-00/101, Fig. 104). If the message stays, replace the K351 relay on the P36 panel (WDM 27-51-31). If the message stays, do the FIM troubleshooting procedure (FIM 27-51-00/101, Fig. 105).

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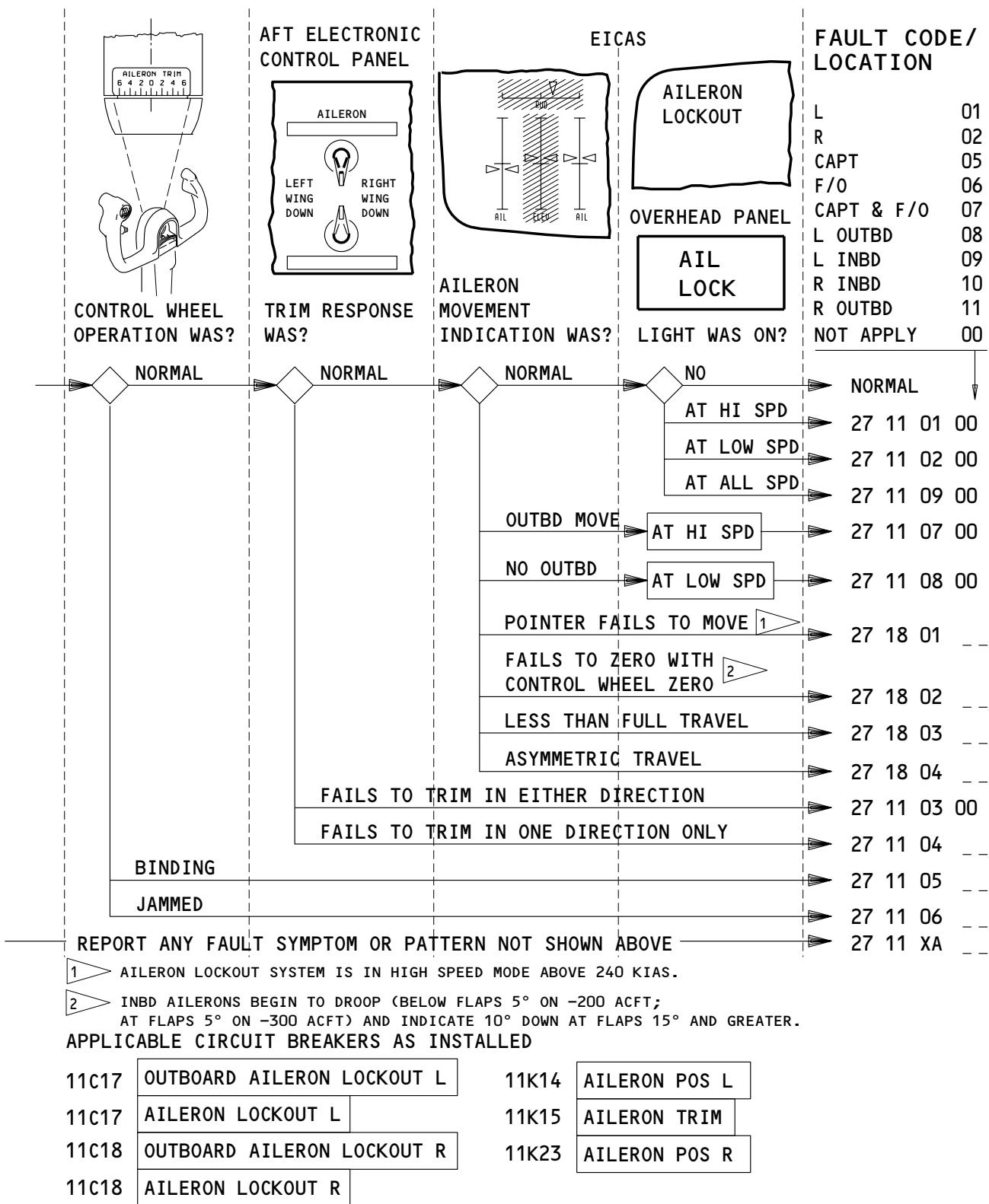
## 27-EICAS MESSAGES

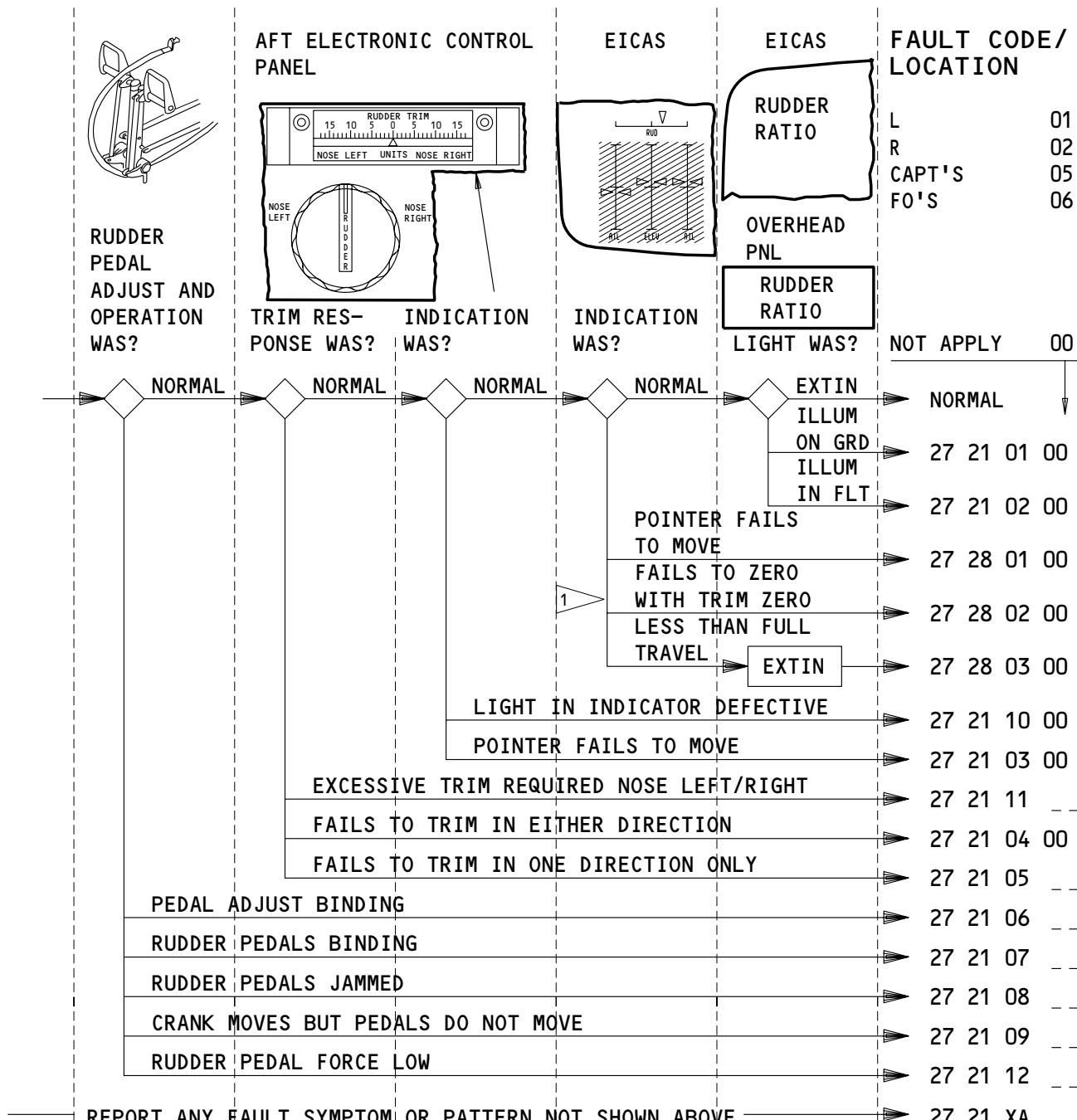
EICAS MESSAGE LIST		
EICAS MESSAGE	LEVEL	PROCEDURE
TE FLAP SHUTDOWN	S, M	<p>Do the FSEU BITE procedure (FIM 27-51-00/101, Fig. 104). If the message stays and a -53 FSEU is installed, do the FSPM BITE procedure (FIM 27-58-00/101, Fig. 104). If the message stays, do the "EICAS Message TE FLAP SHUTDOWN Displayed" procedure (FIM 27-51-00/101, Fig. 114B).</p>
UNSCHED STAB TRIM	B	FIM 27-09-00/101, Fig. 106A

EFFECTIVITY

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## 27-EICAS MESSAGES


**AILERONS - FAULT CODES**
**EFFECTIVITY**
**ALL**
**27-FAULT CODE DIAGRAM**



1 RUDDER MAY SHIFT LEFT DURING CLIMB  
AND RIGHT DURING DESCENT DUE TO COLD SOAK.

## APPLICABLE CIRCUIT BREAKERS AS INSTALLED

 11C5 **RUDDER TRIM**  
 11G10 **RUDDER RATIO**

 11K16 **RUDDER POS**  
 11K17 **RUDDER TRIM POS**

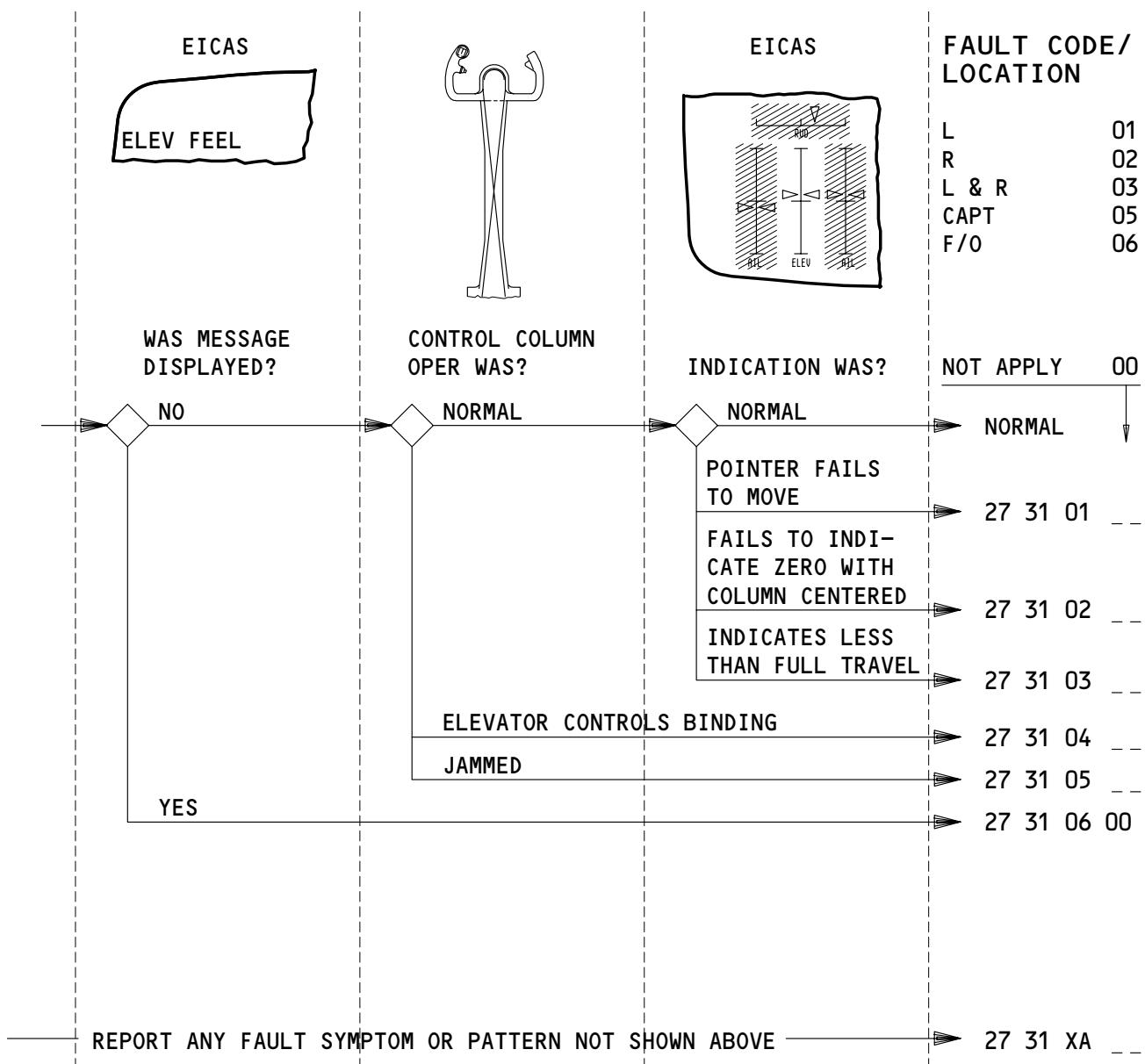
 11K18 **RUDDER TRIM**

## RUDDER - FAULT CODES

EFFECTIVITY

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## 27-FAULT CODE DIAGRAM



**APPLICABLE CIRCUIT BREAKERS**

11K13	ELEV POS L
11K22	ELEV POS R

**ELEVATOR - FAULT CODES**

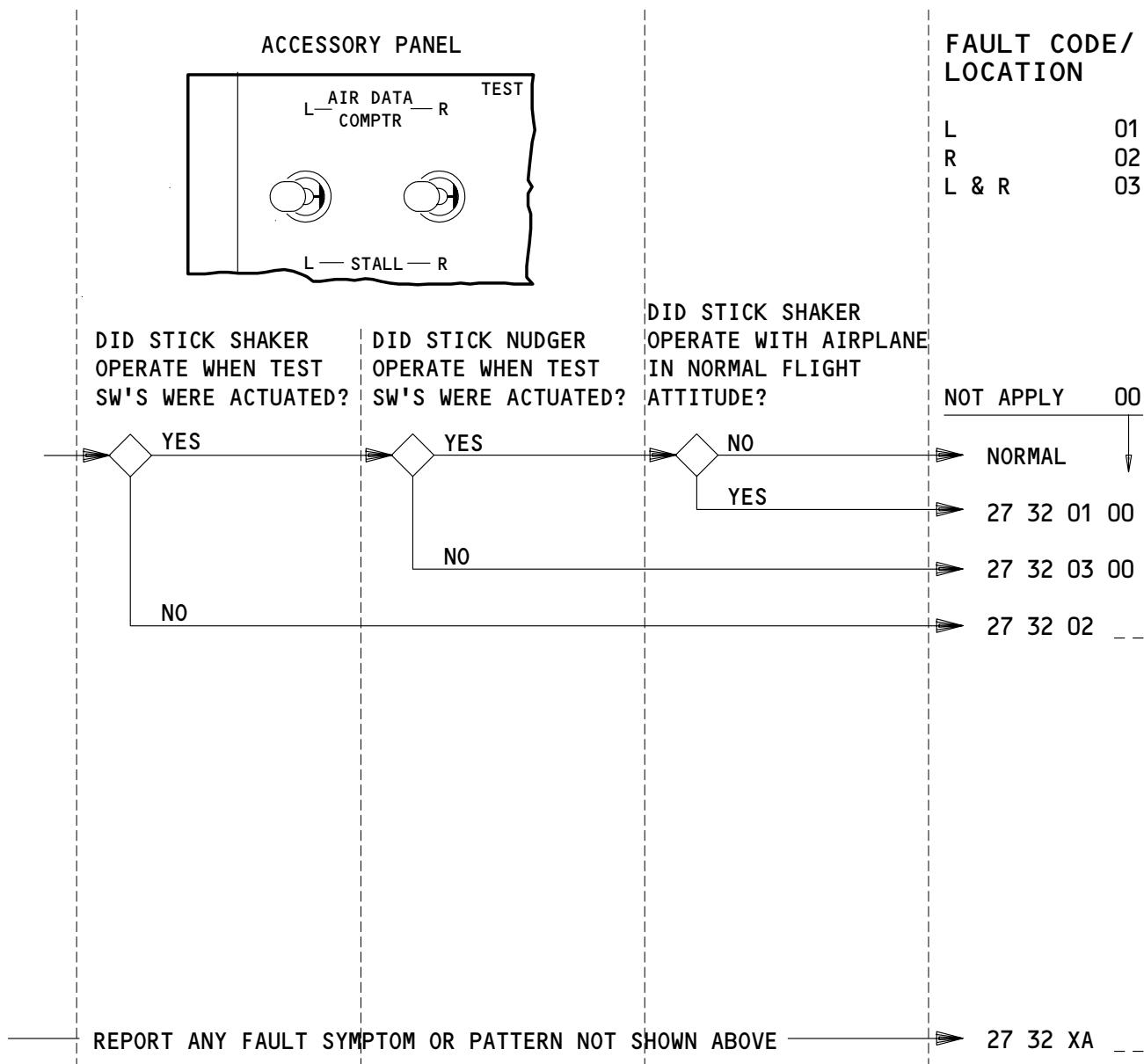
EFFECTIVITY

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**27-FAULT CODE DIAGRAM**

01

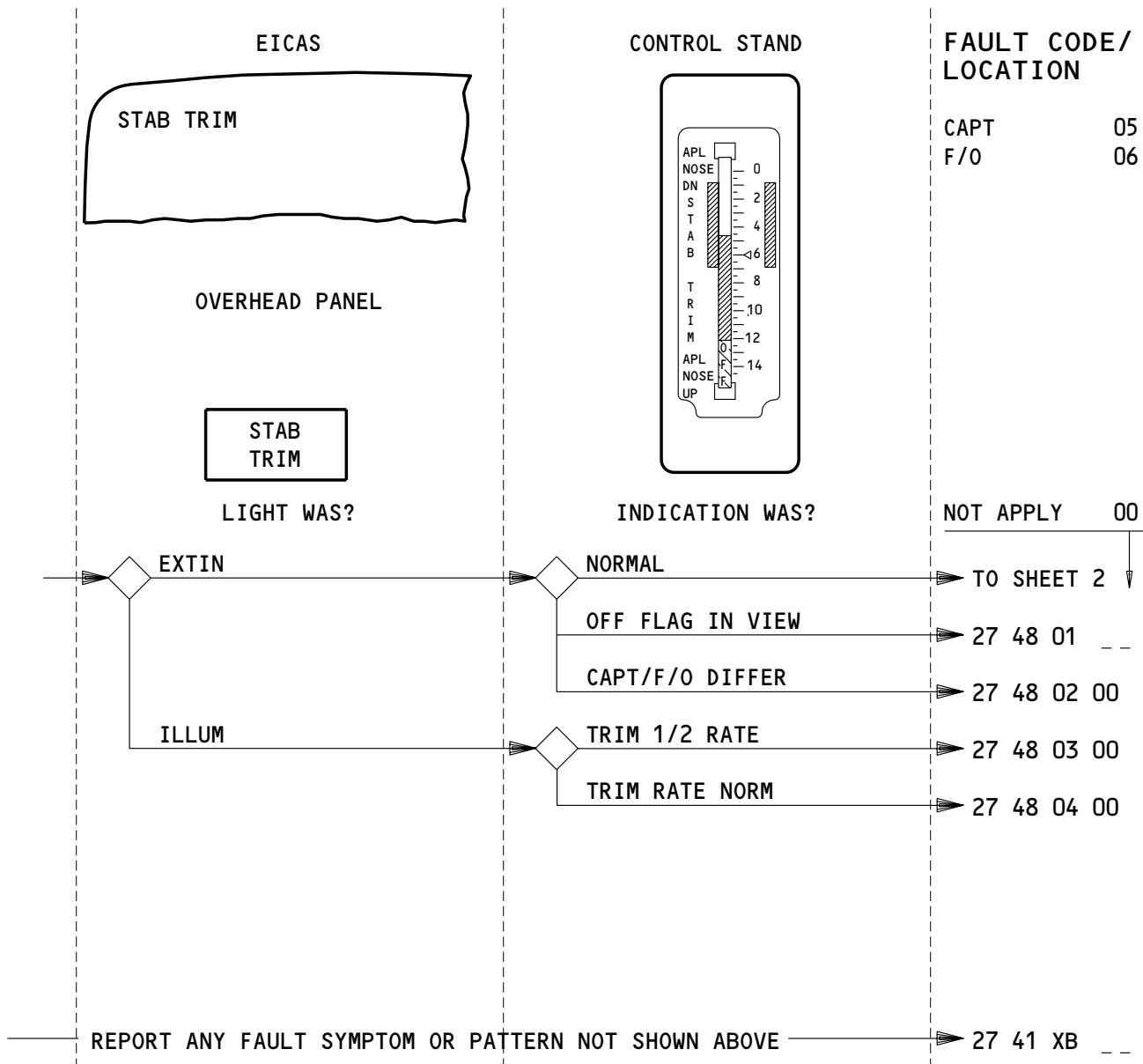
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**APPLICABLE CIRCUIT BREAKERS**

11B18	WARN ELEX B	11J34	WARN ELEX A
11C11	STICK SHAKER L	11K10	STICK NUDGER
11J22	STICK SHAKER R		

**STALL WARNING/STICK NUDGER - FAULT CODES**
**EFFECTIVITY**
**ALL**
**27-FAULT CODE DIAGRAM**

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APPLICABLE CIRCUIT BREAKERS AS INSTALLED

11C12	STAB TRIM SHUTOFF L
11C13	STAB TRIM SHUTOFF C
11C13	STAB TRIM SHUTOFF CTR
11H10	STAB TRIM POS IND L
11H10	LEFT STAB TRIM POS IND

11H11	STAB TRIM CONT L
11H11	LEFT STAB TRIM CONT
11H19	STAB TRIM POS IND R
11H20	STAB TRIM CONT R

STABILIZER TRIM (SHEET 1) – FAULT CODES

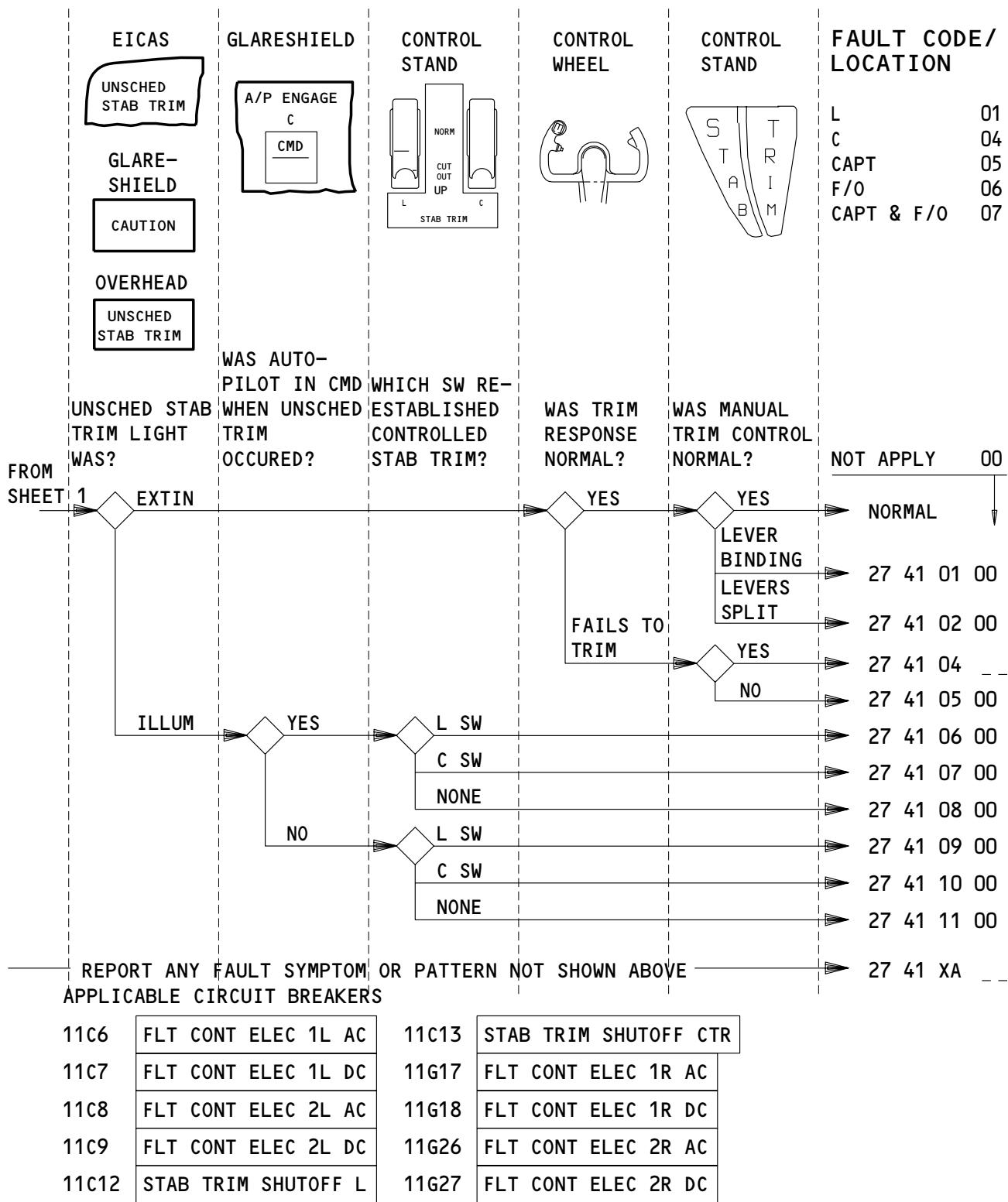
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27-FAULT CODE DIAGRAM

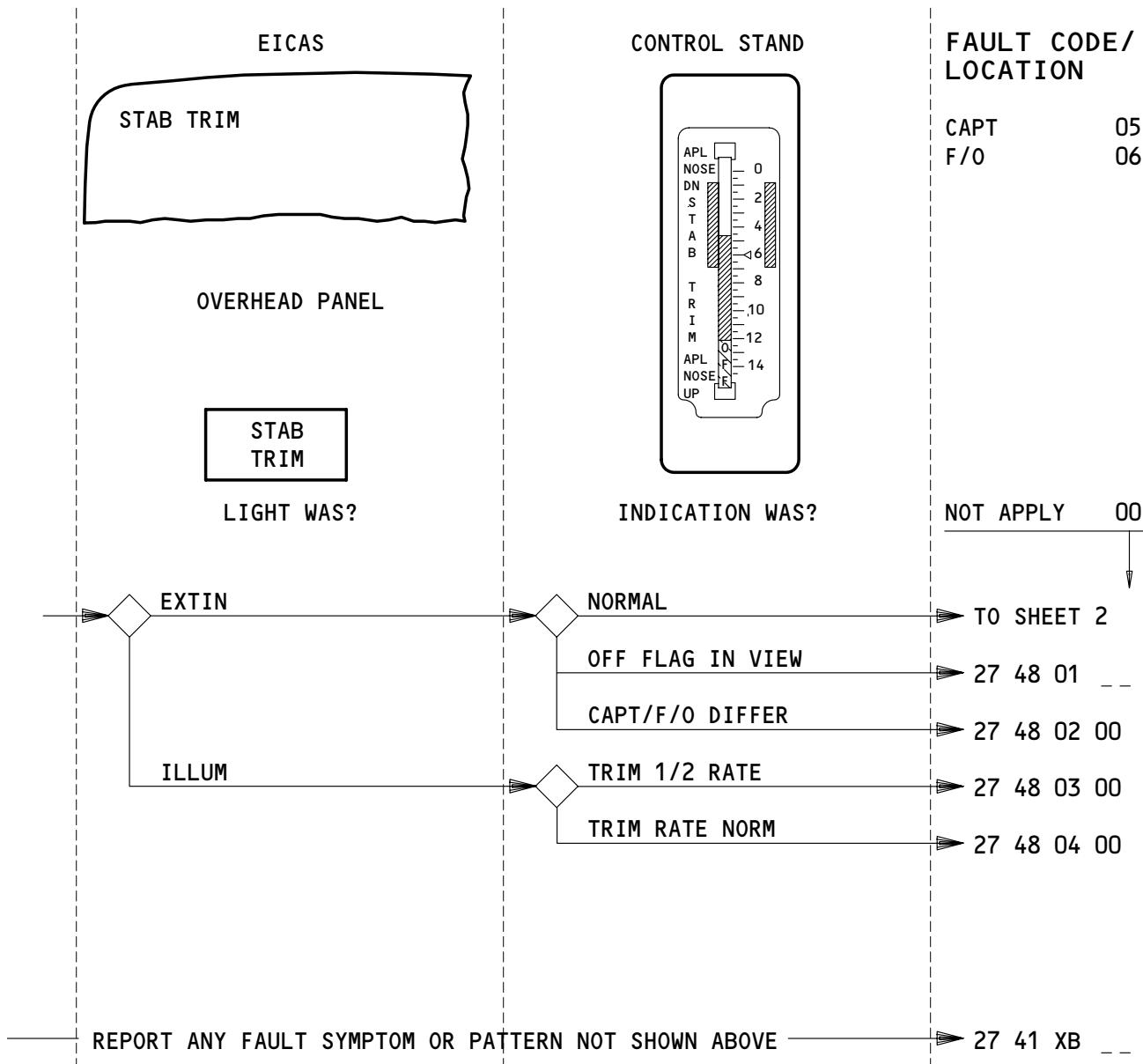
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**STABILIZER TRIM (SHEET 2) – FAULT CODES**

EFFECTIVITY  
AIRPLANES WITH STAB TRIM LEVERS ON THE  
CONTROL STAND

**27-FAULT CODE DIAGRAM**



APPLICABLE CIRCUIT BREAKERS

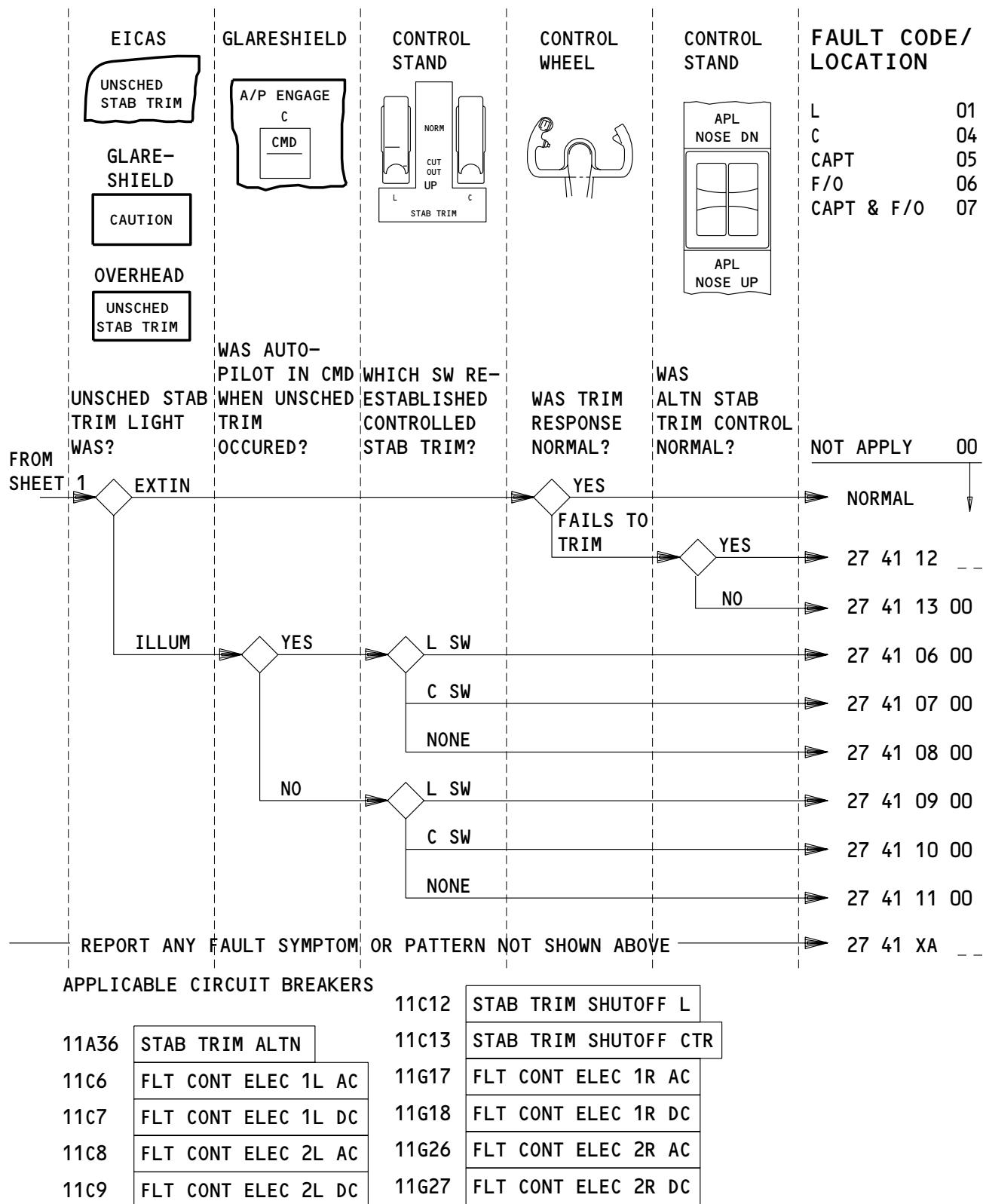
11C12	STAB TRIM SHUTOFF L
11C13	STAB TRIM SHUTOFF CTR
11H10	LEFT STAB TRIM POS IND

11H11	LEFT STAB TRIM CONT
11H19	STAB TRIM POS IND R
11H20	STAB TRIM CONT R

STABILIZER TRIM (SHEET 1) – FAULT CODES

EFFECTIVITY  
AIRPLANES WITH ALTERNATE STAB TRIM  
SWITCHES ON THE CONTROL STAND

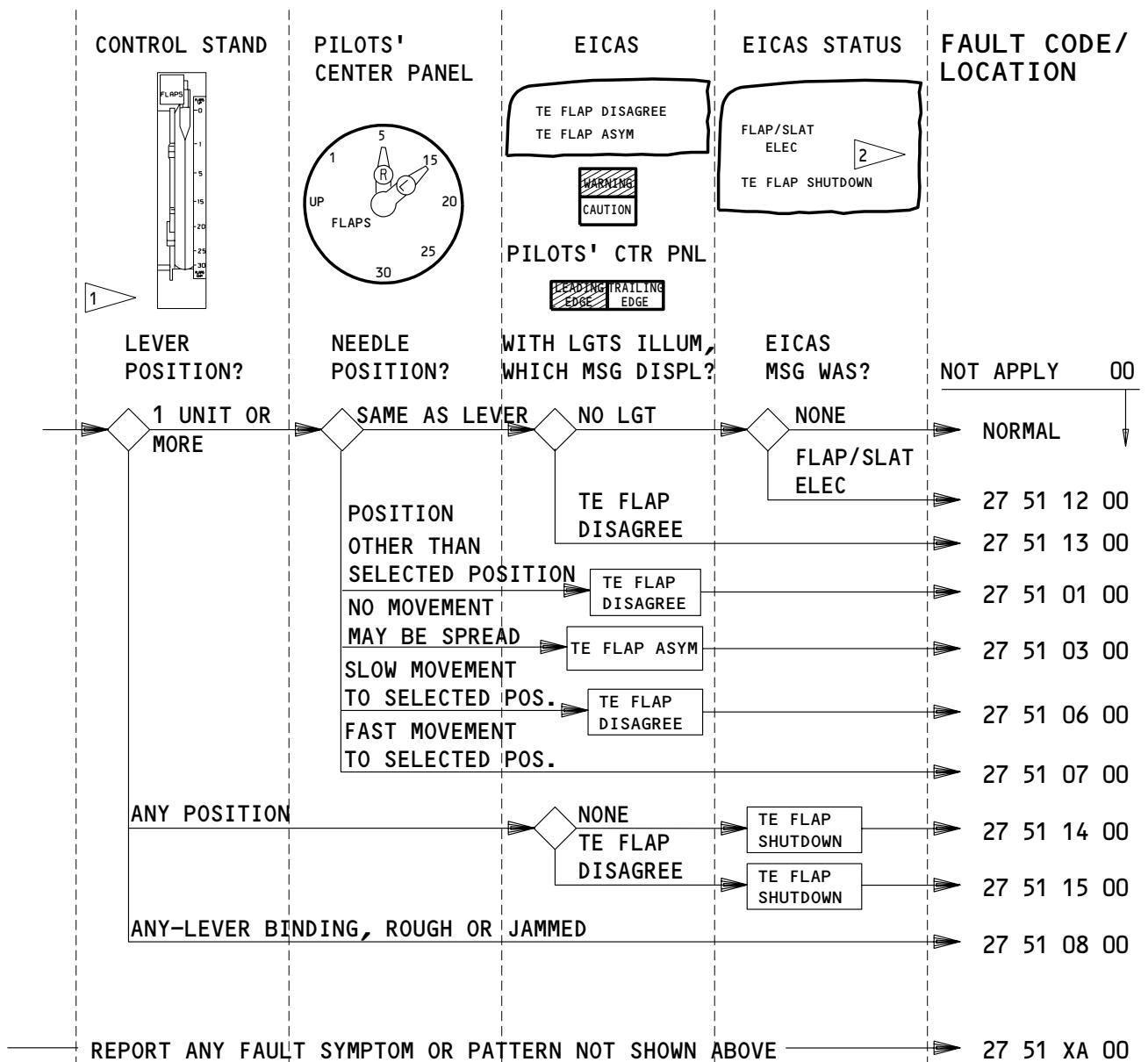
**27-FAULT CODE DIAGRAM**



## STABILIZER TRIM (SHEET 2) - FAULT CODES

EFFECTIVITY  
 AIRPLANES WITH ALTERNATE STAB TRIM  
 SWITCHES ON THE CONTROL STAND

## 27-FAULT CODE DIAGRAM



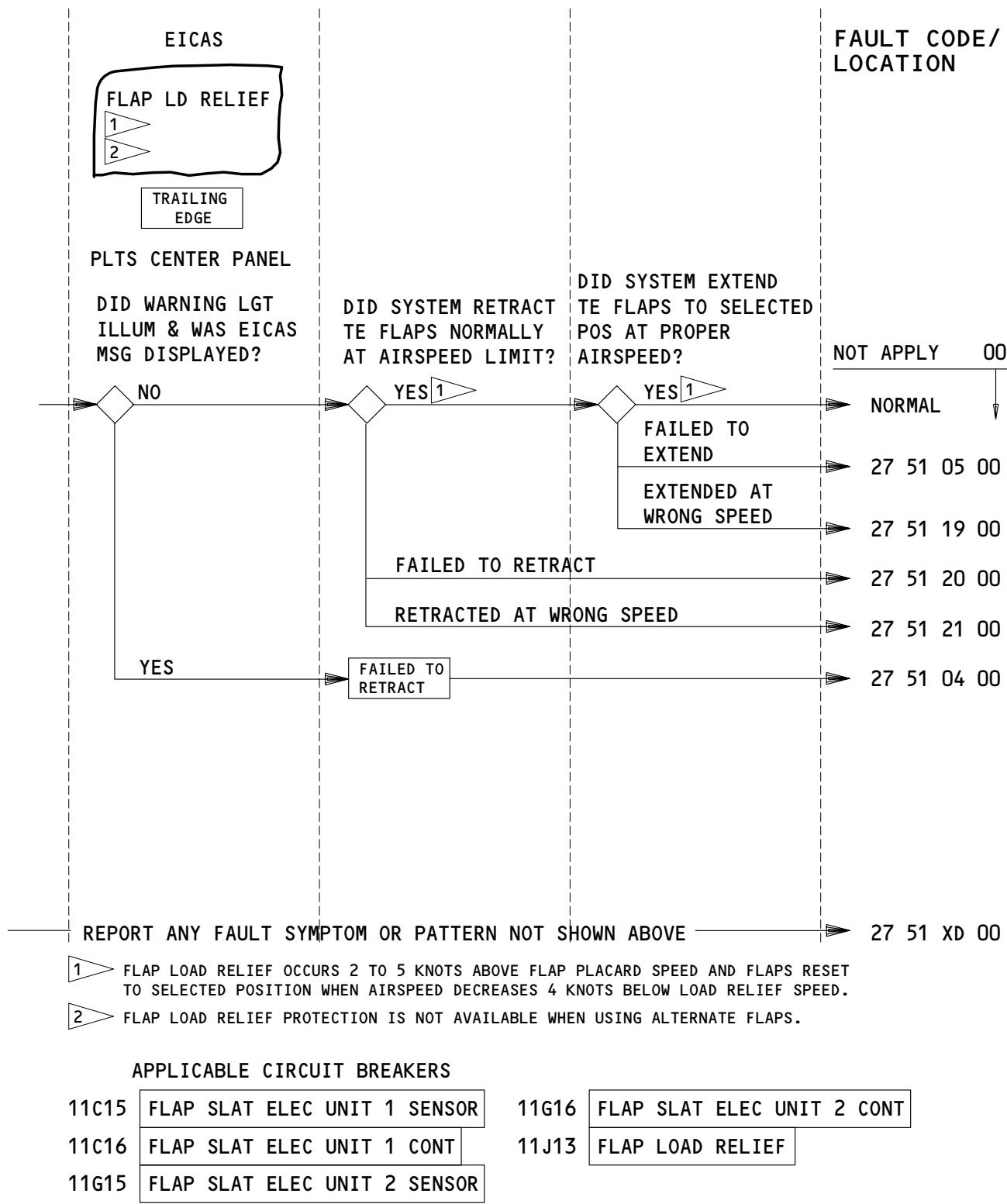
1 FOR FLAP PROBLEMS WITH FLAP LEVER FROM "0" TO "1", SEE "LEADING EDGE SLATS (POS 0 TO 1 & 25)" FAULT CODES. TRAILING EDGE FLAPS ARE FULL UP WITH FLAP LEVER IN "0" OR "1".

2 INHIBITED BY TE FLAP ASYM.

**APPLICABLE CIRCUIT BREAKERS AS INSTALLED**

11C4	FLAP/SLAT POS IND	11J13	FLAP LOAD RELIEF
11C15	FLAP SLAT ELEC UNIT 1 SENSOR	11J14	FLAP SHUTOFF
11C16	FLAP SLAT ELEC UNIT 1 CONT	11J15	FLAP POS IND L
11G15	FLAP SLAT ELEC UNIT 2 SENSOR	11J16	FLAP POS IND R
11G16	FLAP SLAT ELEC UNIT 2 CONT		

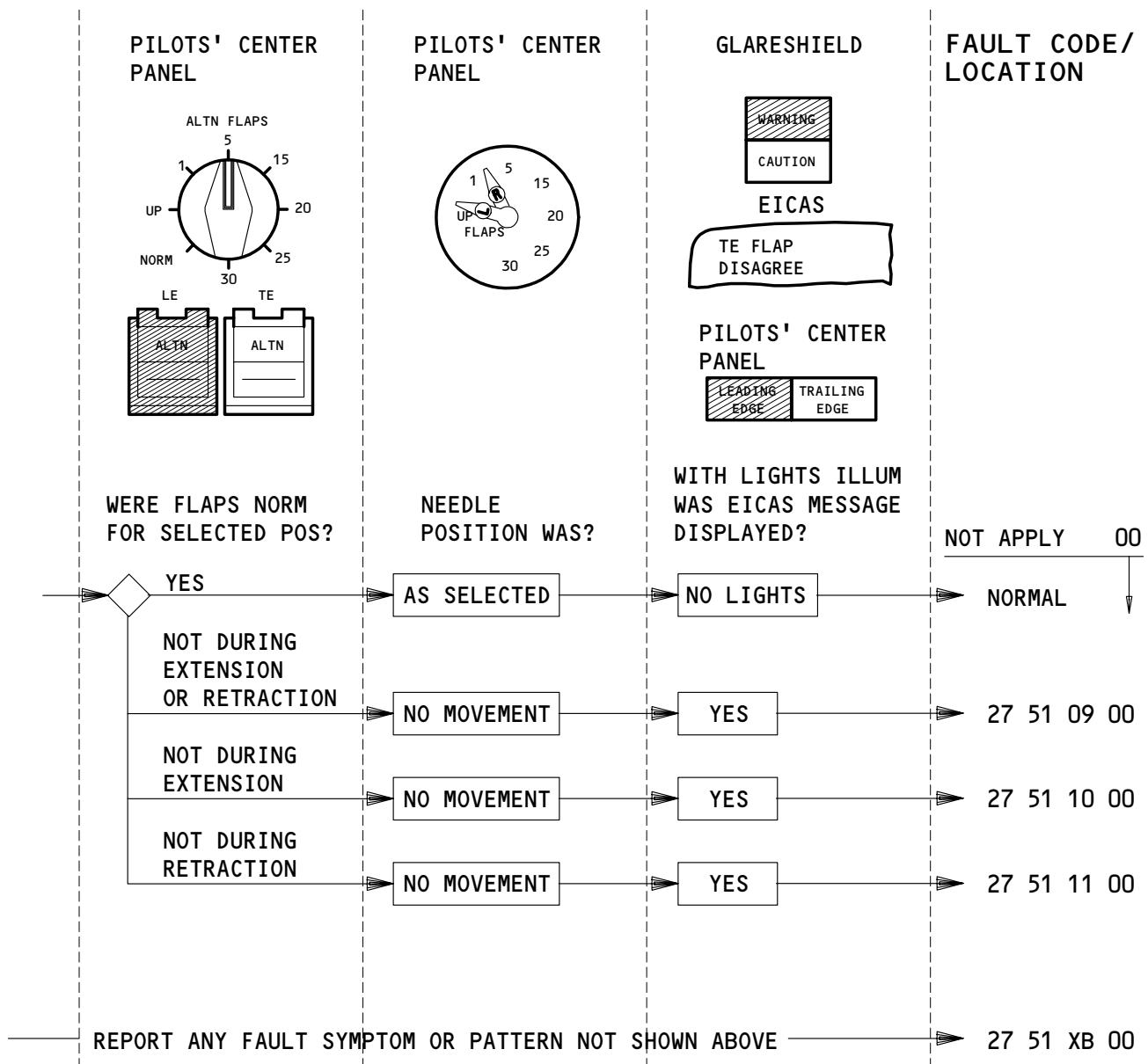
**TRAILING EDGE FLAPS (POS 1 TO 30) - FAULT CODES**
**EFFECTIVITY**
**ALL**
**27-FAULT CODE DIAGRAM**


**FLAP LOAD RELIEF - FAULT CODES**

EFFECTIVITY

ALL

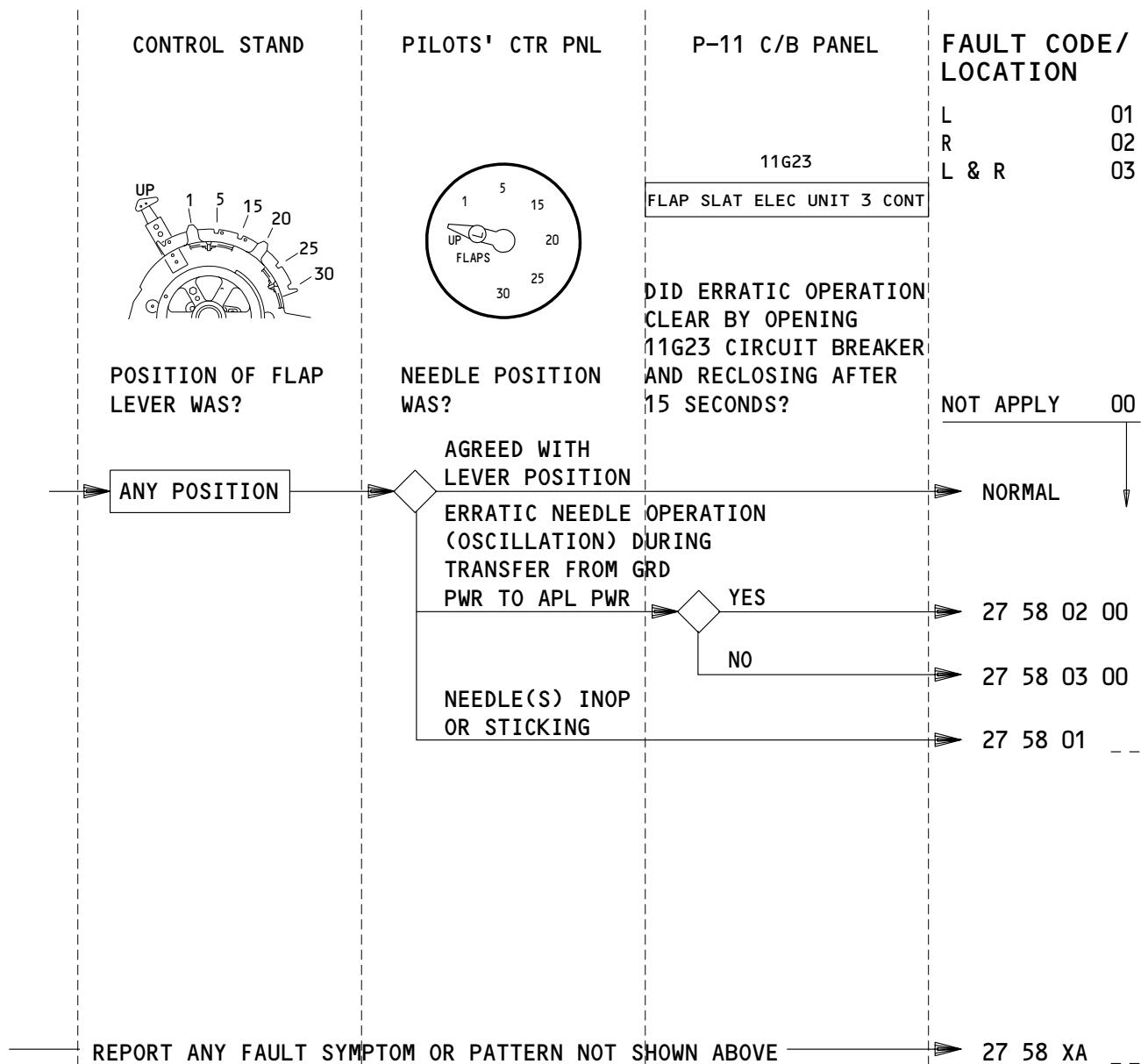
**27-FAULT CODE DIAGRAM**


**APPLICABLE CIRCUIT BREAKERS**

6D24	ALTN FLAP PWR
11G15	FLAP SLAT ELEC UNIT 2 SENSOR
11G16	FLAP SLAT ELEC UNIT 2 CONT
11G22	FLAP SLAT ELEC UNIT 3 SENSOR

11G23	FLAP SLAT ELEC UNIT 3 CONT
11J15	FLAP POS IND L
11J16	FLAP POS IND R
11J24	FLAP ALTN CONT

**ALTERNATE TRAILING EDGE FLAPS - FAULT CODES**
**EFFECTIVITY**
**ALL**
**27-FAULT CODE DIAGRAM**

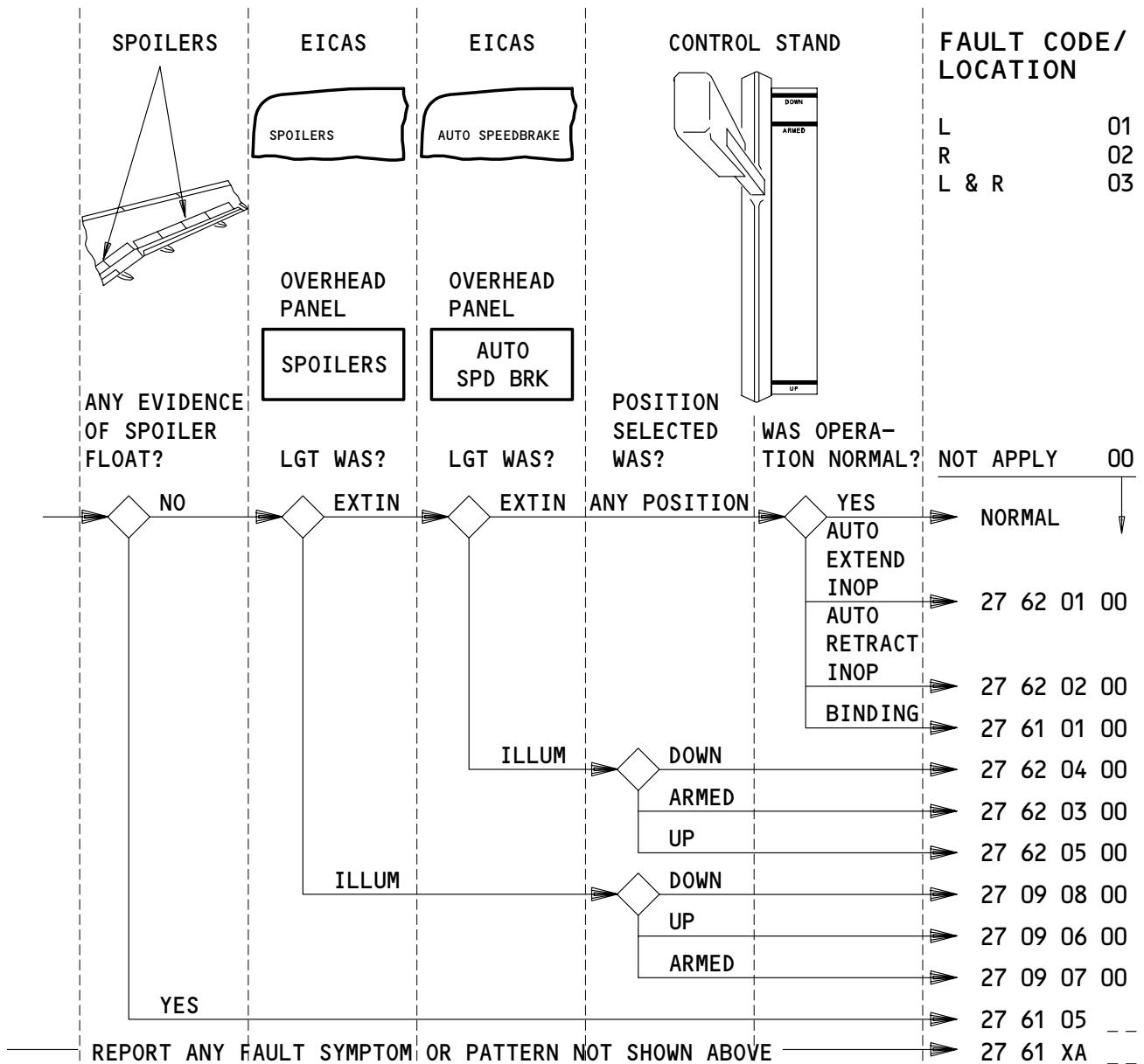

**APPLICABLE CIRCUIT BREAKERS AS INSTALLED**

11C4	FLAP/SLAT POS IND
11C15	FLAP SLAT ELEC UNIT 1 SENSOR
11C16	FLAP SLAT ELEC UNIT 1 CONT
11G15	FLAP SLAT ELEC UNIT 2 SENSOR
11G16	FLAP SLAT ELEC UNIT 2 CONT

11G22	FLAP SLAT ELEC UNIT 3 SENSOR
11G23	FLAP SLAT ELEC UNIT 3 CONT
11H14	SLAT SHUTOFF
11J11	FLAP/SLAT POS IND
11T36	PROX SW TEST
11T36	TEST PROX SW

**FLAP POSITION INDICATOR - FAULT CODES**
**EFFECTIVITY** →

**ALL**
**27-FAULT CODE DIAGRAM**



## APPLICABLE CIRCUIT BREAKERS

11C6	FLT CONT ELEC 1L AC	11G17	FLT CONT ELEC 1R AC
11C7	FLT CONT ELEC 1L DC	11G18	FLT CONT ELEC 1R DC
11C8	FLT CONT ELEC 2L AC	11G26	FLT CONT ELEC 2R AC
11C9	FLT CONT ELEC 2L DC	11G27	FLT CONT ELEC 2R DC
11G11	AUTO SPEED BRAKE		

## SPOILER/SPEEDBRAKE – FAULT CODES

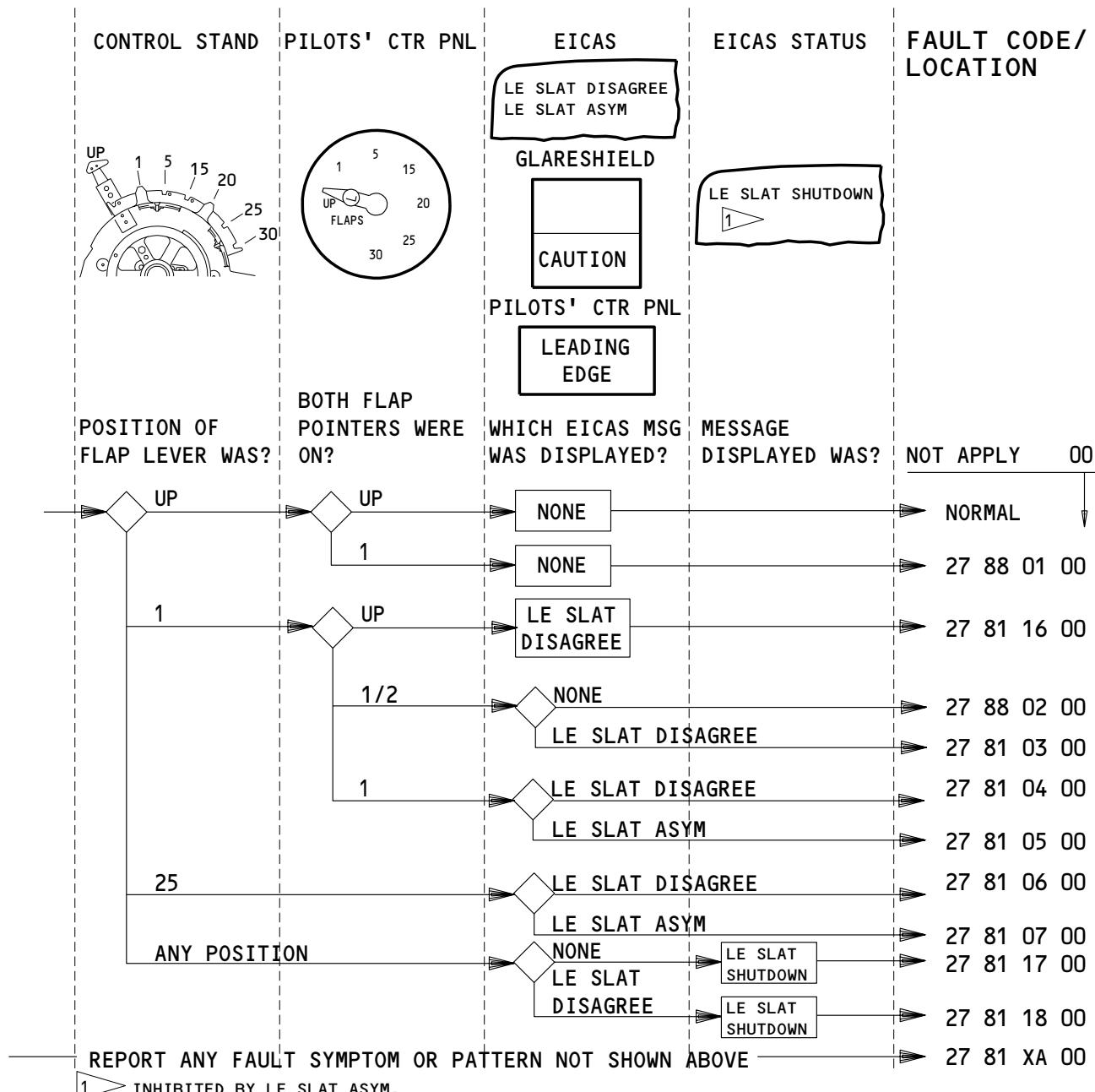
## EFFECTIVITY-

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## 27-FAULT CODE DIAGRAM

02

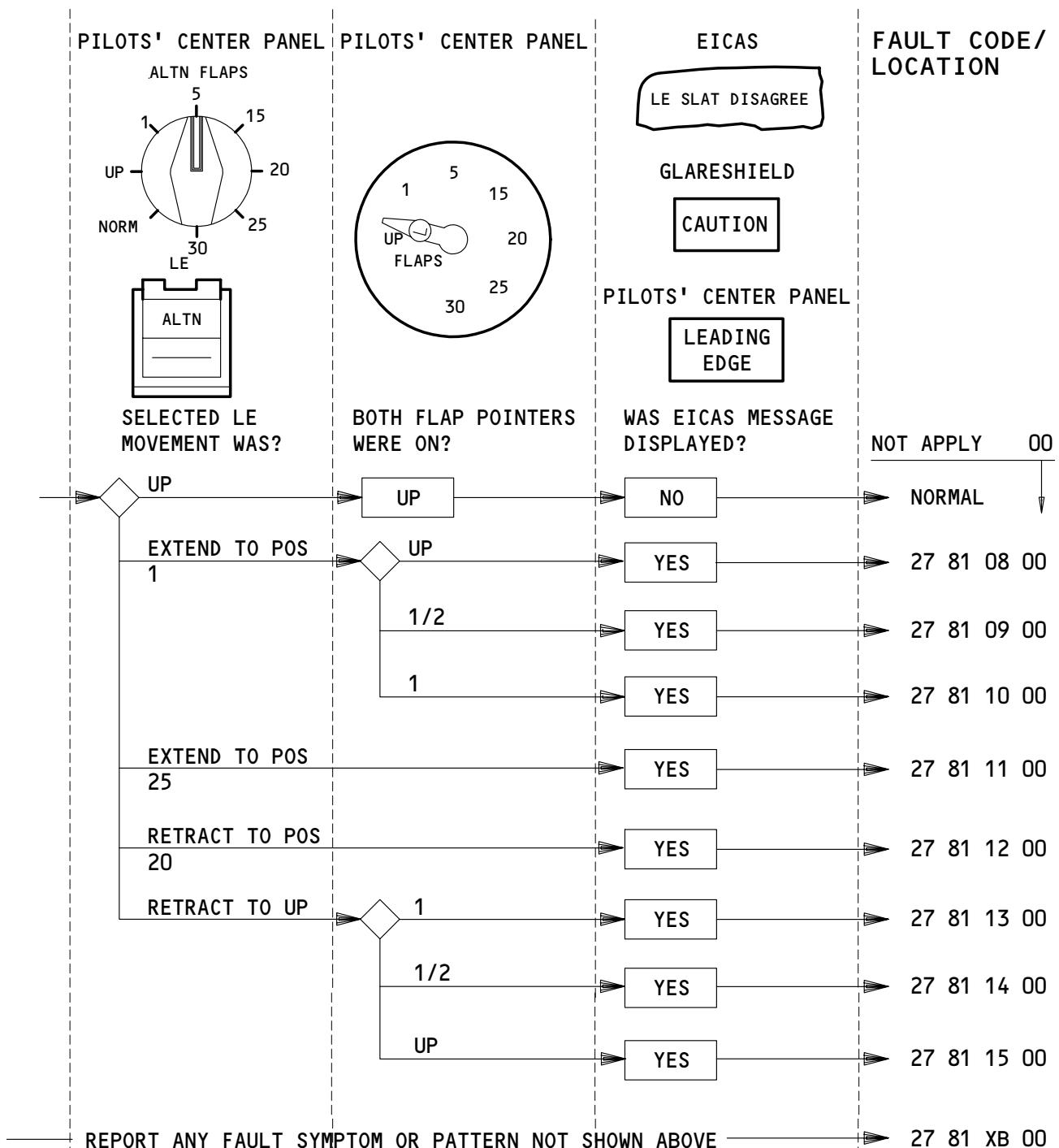
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**APPLICABLE CIRCUIT BREAKERS AS INSTALLED**

11C4	<b>FLAP/SLAT POS IND</b>
11C15	<b>FLAP SLAT ELEC UNIT 1 SENSOR</b>
11C16	<b>FLAP SLAT ELEC UNIT 1 CONT</b>
11G15	<b>FLAP SLAT ELEC UNIT 2 SENSOR</b>
11G16	<b>FLAP SLAT ELEC UNIT 2 CONT</b>

11G22	<b>FLAP SLAT ELEC UNIT 3 SENSOR</b>
11G23	<b>FLAP SLAT ELEC UNIT 3 CONT</b>
11H14	<b>SLAT SHUTOFF</b>
11J11	<b>FLAP/SLAT POS IND</b>
11T36	<b>PROX SW TEST</b>
11T36	<b>TEST PROX SW</b>

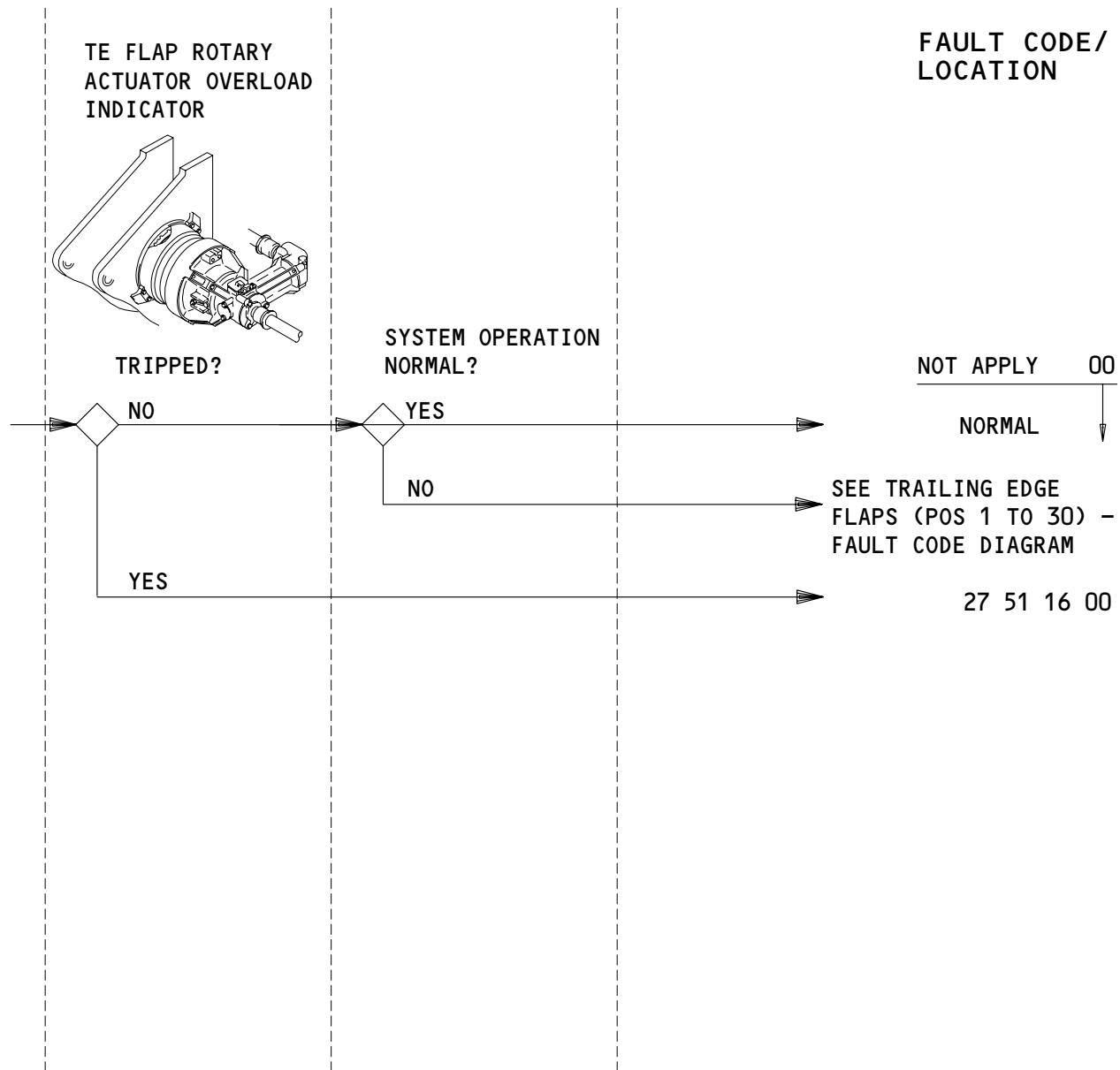
**LEADING EDGE SLATS (POS 0 TO 1 & 25) – FAULT CODES**
**EFFECTIVITY**
**ALL**
**27-FAULT CODE DIAGRAM**


**APPLICABLE CIRCUIT BREAKERS**

6D21	ALTN SLAT INBD PWR	11H23	SLAT ALTN CONT INBD
6F24	ALTN SLAT OUTBD PWR	11H24	SLAT ALTN CONT OUTBD

**ALTERNATE LEADING EDGE SLATS - FAULT CODES**
**EFFECTIVITY**
**ALL**
**27-FAULT CODE DIAGRAM**

**BOEING**  
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TRAILING EDGE FLAPS - FAULT CODES (GROUND)

EFFECTIVITY

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**27-FAULT CODE DIAGRAM**

01

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
27 11 XA --	1. An (01=L, 02=R, 03=L OUTBD, 04=L INBD, 05=R INBD, 06=R OUTBD) aileron problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions). 2. SSM 27-10-01 and SSM 27-10-02.
27 21 XA --	1. A (01=L, 02=R) rudder, (01=L, 02=R) rudder position indication, or (03=CAPT's, 04=F/O's) rudder pedal problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions). 2. SSM 27-20-01 and SSM 27-20-02.
27 31 XA --	1. An (01=L, 02=R, 03=L&R) elevator, (01=L, 02=R, 03=L&R) elevator position indication, or (04=CAPT, 05=F/O) elevator control column problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions). 2. SSM 27-30-01
27 32 XA --	1. A (01=L, 02=R, 03=L&R) stall warning problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions). 2. SSM 27-32-01 and SSM 27-32-02.
27 41 XA --	1. A (04=CAPT, 05=F/O, 06=CAPT & F/O) stabilizer trim problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions). 2. SSM 27-41-01.
27 41 XB --	1. A (01=CAPT, 02=F/O) stabilizer trim and indications problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions). 2. SSM 27-41-01.
27 51 XA 00	1. A trailing edge flaps problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions). 2. SSM 27-51-01.

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## 27-FAULT CODE INDEX

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
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27 51 XB 00      1. An alternate trailing edge flaps problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions).  
2. SSM 27-51-04.

27 51 XD 00      1. A flap load relief problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions).  
2. SSM 27-51-03

27 58 XA --      1. A flap position indicator problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions).  
2. SSM 27-58-01.

27 61 XA --      1. A spoilers/speed brakes problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions).  
2. SSM 27-60-00, SSM 27-61-01, and SSM 27-62-01.

27 81 XA 00      1. A leading edge slats problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions).  
2. SSM 27-81-01.

27 81 XB 00      1. An alternate leading edge slats problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagrams for flight crew actions).  
2. SSM 27-81-03.

27 09 01 00      1. EICAS msg L FLT CONT ELEC displayed.  
2. FIM 27-09-00/101, Fig. 103, Block 1

27 09 02 00      1. EICAS msg R FLT CONT ELEC displayed.  
2. FIM 27-09-00/101, Fig. 103, Block 1

27 09 03 00      1. EICAS msg RUDDER RATIO displayed.  
2. FIM 27-09-00/101, Fig. 103, Block 1

27 09 04 00      1. EICAS msg SPOILERS displayed.  
2. FIM 27-09-00/101, Fig. 103, Block 1

27 09 05 00      1. EICAS msg STAB TRIM displayed.  
2. FIM 27-09-00/101, Fig. 103, Block 1

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**27-FAULT CODE INDEX**

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
27 09 06 00	1. SPOILERS Lgt. illum and EICAS msg SPOILERS displayed with spoilers selected up. 2. FIM 27-09-00/101, Fig. 103, Block 1
27 09 07 00	1. SPOILERS Lgt. illum and EICAS msg SPOILERS displayed with spoilers selected to armed position. 2. FIM 27-09-00/101, Fig. 103, Block 1
27 09 08 00	1. SPOILERS light illum. EICAS msg SPOILERS displayed with spoilers selected down. 2. FIM 27-09-00/101, Fig. 103, Block 1
27 11 01 00	1. AIL LOCK lgt illum at high speed. EICAS msg AIL LOCKOUT displayed. Outbd ailerons indicated normal - locked out. 2. FIM 27-11-00/101, Fig. 104, Block 1
27 11 02 00	1. AIL LOCK lgt illum at low speed. EICAS msg AIL LOCKOUT displayed. Outbd ailerons indicated normal - unlocked. 2. FIM 27-11-00/101, Fig. 104, Block 1
27 11 03 00	1. Aileron trim failed to trim in either direction. 2. Replace aileron trim actuator (AMM 27-11-08). If fault persists, check wiring between aileron trim switches S1 and S2 on aft electronic control panel P8 for continuity. Repair circuit as necessary (WDM 27-11-11).
27 11 04 --	1. Aileron trim failed to trim in (01=L, 02=R) wing down direction. 2. Replace aileron/rudder trim control panel M74 (switches S1 and S2 faulty) (WDM 27-11-11).
27 11 05 --	1. (05=CAPT, 06=F/O) aileron control wheels binding. 2. Repair or replace control wheel as required (AMM 27-11-06). If fault persists, perform FIM 27-11-00/101, Fig. 106, Block 1 action.
27 11 05 07	1. Captain's and first officer's aileron control wheel binding. 2. FIM 27-11-00/101, Fig. 106, Block 1
27 11 06 05	1. Captain's aileron control wheel jammed. 2. FIM 27-11-00/101, Fig. 107, Block 1
27 11 06 06	1. First officer's aileron control wheel jammed. 2. FIM 27-11-00/101, Fig. 108, Block 1

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27 11 07 00      1. AIL LOCK lgt illum at high speed. EICAS msg AILERON LOCKOUT displayed. Outbd ailerons indicated movement - unlocked.  
2. FIM 27-11-00/101, Fig. 104, Block 1

27 11 08 00      1. AIL LOCK lgt illum at low speed. EICAS msg AILERON LOCKOUT displayed. Outbd ailerons did not indicate movement - locked out.  
2. FIM 27-11-00/101, Fig. 104, Block 1

27 11 09 00      1. AIL LOCK lgt illum at all speeds. EICAS msg AILERON LOCKOUT displayed. Outbd ailerons did indicate normal - locked and unlocked .  
2. FIM 27-11-00/101, Fig. 104, Block 1

27 18 01 --      1. (08=L outbd, 09=L inbd, 10=R inbd, 11=R outbd) ail ind pointer(s) failed to indicate aileron movement.  
2. (08=L outbd, 11=R outbd) FIM 27-18-00/101, Fig. 104, Block 1  
(09=L inbd, 10=R inbd) FIM 27-18-00/101, Fig. 105, Block 1

27 18 02 --      1. (08=L outbd, 09=L inbd, 10=R inbd, 11=R outbd) ail ind pointer(s) failed to zero with control wheel zero.  
2. FIM 27-18-00/101, Fig. 106, Block 1

27 18 03 --      1. (08=L outbd, 09=L inbd, 10=R inbd, 11=R outbd) ail ind pointer(s) indicate less than full travel.  
2. FIM 27-18-00/101, Fig. 107, Block 1

27 18 04 --      1. (08=L OUTBD, 09=L INBD, 10=R INBD, 11=R OUTBD) ail indicates insufficient travel in one direction and overtravel in the other direction.  
2. FIM 27-18-00/101, Fig. 108, Block 1

27 21 01 00      1. RUDDER RATIO lgt illum on the gnd. EICAS message: RUDDER RATIO displayed.  
2. FIM 27-21-00/101, Fig. 104, Block 1

27 21 02 00      1. RUDDER RATIO lgt illum in flight. EICAS message: RUDDER RATIO displayed.  
2. FIM 27-21-00/101, Fig. 104, Block 1

27 21 03 00      1. Rudder trim pointer fails to move.  
2. FIM 27-21-00/101, Fig. 105, Block 1

27 21 04 00      1. Rudder trim failed to trim in either direction.  
2. FIM 27-21-00/101, Fig. 106, Block 1

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
27 21 05 --	1. Rudder trim failed to trim in (01=L, 02=R) direction. 2. FIM 27-21-00/101, Fig. 106, Block 1
27 21 06 --	1. (05=CAPT's, 06=F/O's) rudder pedal adjustment binding. 2. FIM 27-21-00/101, Fig. 108, Block 1
27 21 07 --	1. (05=CAPT's, 06=F/O's) rudder pedals binding. 2. FIM 27-21-00/101, Fig. 107, Block 1
27 21 08 --	1. (05=CAPT's, 06=F/O's) rudder pedals jammed. 2. FIM 27-21-00/101, Fig. 107, Block 1
27 21 09 --	1. (05=CAPT's, 06=F/O's) rudder pedal adjustment crank moves but pedals do not move. 2. FIM 27-21-00/101, Fig. 108, Block 1
27 21 10 00	1. Light in rudder trim position indicator defective (out, intermittent, etc. 2. Relamp light (AMM 33-13-00). If fault persists check wiring (WDM 33-13-18).
27 21 11 --	1. ____ units rudder trim required in nose (01=L, 02=R) direction while in (climb, cruise, descent, explain condition). 2. FIM 27-21-00/101, Fig. 109, Block 1
27 21 12 --	1. RUDDER PEDAL forces low, pedal returned to center. 2. Replace rudder feel and centering springs (AMM 27-21-10).
27 28 01 00	1. RUD pos ind fails to ind rudder movement. 2. FIM 27-28-00/101, Fig. 103, Block 1A
27 28 02 00	1. RUD pos ind fails to ind zero with RUDDER TRIM zero. 2. FIM 27-28-00/101, Fig. 103, Block 3
27 28 03 00	1. RUD ind indicates less than full travel. 2. FIM 27-28-00/101, Fig. 103, Block 4
27 31 01 --	1. (01=L, 02=R, 03=L & R) elevator position ind fails to move with control column movement. 2. FIM 27-31-00/101, Fig. 104, Block 1
27 31 02 --	1. (01=L, 02=R, 03=L & R) elevator position ind fails to indicate zero with control column centered. 2. FIM 27-31-00/101, Fig. 104, Block 3

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27 31 03 -- 1. (01=L, 02=R, 03=L & R) elevator position indicates less than full travel.  
2. FIM 27-31-00/101, Fig. 104, Block 4

27 31 04 -- 1. (05=CAPT's, 06=F/O's) elevator control is binding.  
2. FIM 27-31-00/101, Fig. 105, Block 1

27 31 05 -- 1. (05=CAPT's, 06=F/O's) elevator control is jammed.  
2. FIM 27-31-00/101, Fig. 105, Block 1

27 31 06 00 1. EICAS status msg ELEV FEEL displayed (Ref Chapter 31 for fault code diagram).  
2. FIM 27-31-00/101, Fig. 106, Block 1

27 32 01 -- 1. Stick shaker operates with airplane in normal flt attitude.  
2. FIM 27-32-00/101, Fig. 103, Block 1

27 32 02 -- 1. Stick shaker failed to operate when (01=L, 02=R, 03=L & R) stall warning test switch was actuated.  
2. FIM 27-32-00/101, Fig. 104, Block 1

27 32 03 00 1. Stick nudger failed to operate when stall warning test switches were activated.  
2. FIM 27-32-00/101, Fig. 104, Block 1.

27 32 04 -- 1. SPD LIM displayed on (01=Capt, 02=F/O) ADI.  
2. FIM 27-32-00/101, Fig. 103, Block 1.

27 41 01 00 1. Stabilizer trim levers binding.  
2. FIM 27-41-00/101, Fig. 104, Block 1

27 41 02 00 1. Stabilizer trim levers split.  
2. Adjust stabilizer trim levers (AMM 27-41-02).

27 41 03 00 Not used.

27 41 04 -- 1. Stab trim failed to operate using (05=CAPT, 06=F/O, 07=CAPT & F/O) control wheel sw(s). Manual control was norm.  
2. FIM 27-09-00/101, Fig. 106, Block 1

EFFECTIVITY

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## 27-FAULT CODE INDEX

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
27 41 05 00	1. Stab trim failed to operate using electric trim SWS. Manual control is also inop. 2. Replace stabilizer trim ballscrew actuator (AMM 27-41-10).
27 41 06 00	1. EICAS msg UNSCHED STAB TRIM displayed, UNSCHED STAB TRIM lgt illum with (L, C, R) Auto-pilot in command. Stab trim cutout sw L re-established controlled stab trim. 2. FIM 22-00-04/101, Fig. 108, Block 1
27 41 07 00	1. EICAS msg UNSCHED STAB TRIM displayed, UNSCHED STAB TRIM lgt illum with (L, C, R) Auto-pilot in command. Stab trim cutout sw C re-established controlled stab trim. 2. FIM 22-00-04/101, Fig. 108, Block 1
27 41 08 00	1. EICAS msg UNSCHED STAB TRIM displayed, UNSCHED STAB TRIM lgt illum with (L, C, R) Auto-pilot in command. Neither stab trim cutout sw re-established controlled stab. 2. FIM 22-00-04/101, Fig. 108, Block 1
27 41 09 00	1. EICAS msg UNSCHED STAB TRIM displayed, UNSCHED STAB TRIM lgt illum with Auto-pilot off. Stab trim cutout sw L re-established controlled stab trim. 2. FIM 27-09-00/101, Fig. 106A, Block 3
27 41 10 00	1. EICAS msg UNSCHED STAB TRIM displayed, UNSCHED STAB TRIM lgt illum with Auto-pilot off. Stab trim cutout sw C re-established controlled stab trim. 2. FIM 27-09-00/101, Fig. 106A, Block 3
27 41 11 00	1. EICAS msg UNSCHED STAB TRIM displayed, UNSCHED STAB TRIM lgt illum with Auto-pilot off. Neither stab trim cutout sw re-established controlled stab trim. 2. FIM 27-09-00/101, Fig. 106A, Block 3

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## 27-FAULT CODE INDEX

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27 41 12 -- 1. Stab trim failed to operate using (05=Capt, 06=F/O, 07=Capt & F/O) control wheel sw(s). ALTN control was norm.  
2. FIM 27-09-00/101, Fig. 106, Block 1

27 41 13 00 1. Stab trim failed to operate using electric trim sws. ALTN control is also inop.  
2. Replace stabilizer trim ballscrew actuator (AMM 27-41-10).

27 48 01 -- 1. (05=CAPT's, 06=F/O's) control stand stab trim indicator OFF flag in view.  
2. FIM 27-48-00/101, Fig. 104, Block 1

27 48 02 00 1. Control stand stab trim indicators differ.  
2. FIM 27-48-00/101, Fig. 105, Block 1

27 48 03 00 1. EICAS msg STAB TRIM displayed & STAB TRIM light illuminated. Stabilizer trim operates at 1/2 speed.  
2. FIM 27-48-00/101, Fig. 106, Block 1

27 48 04 00 1. EICAS msg STAB TRIM displayed & STAB TRIM light illuminated. Stabilizer trim rate normal.  
2. FIM 27-48-00/101, Fig. 107

27 48 05 -- 1. EICAS msg UNSCHED STAB TRIM displayed. UNSCHED STAB TRIM light illuminated. Light extinguished when both trim cutout switch position to CUTOUT. Light remained extinguished when (01=L, 04=C) switch restored to NORM. Autopilot was OFF when unsched trim occurred.  
2. FIM 27-09-00/101, Fig. 106A, Block 1.

27 51 01 00 1. EICAS msg TE FLAP DISAGREE displayed, TRAILING EDGE light illum, when any TE flap position selected. Flaps fail to move to selected position.  
2. FIM 27-51-00/101, Fig. 105, Block 1

27 51 02 00 Not Used

27 51 03 00 1. EICAS msg TE FLAP ASYM displayed. TRAILING EDGE light illum. No flap movement.  
2. FIM 27-51-00/101, Fig. 106, Block 1

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
27 51 04 00	1. EICAS msg FLAP LD RELIEF displayed. TRAILING EDGE light illum. Flaps failed to retract when flap placard speed exceeded. Airspeed was ____ knots. 2. FIM 27-51-00/101, Fig. 107, Block 1
27 51 05 00	1. Trailing edge flaps did not extend to selected setting after flaps were retracted by load relief. 2. FIM 27-51-00/101, Fig. 108, Block 1 FIM 27-51-00/101, Fig. 108A, Block 1
27 51 06 00	1. TE flaps very slow when moving to the selected position. EICAS msg: TE FLAP DISAGREE displayed. TRAILING EDGE light illum. 2. Replace flow regulator in flap shutoff valve module (AMM 27-51-48).
27 51 07 00	1. TE flaps move to selected position at an excessive rate. 2. Replace flow regulator in flap shutoff valve module (AMM 27-51-48).
27 51 08 00	1. Flap lever (jams, binds or is rough) when selecting any TE flap position. 2. FIM 27-51-00/101, Fig. 110, Block 1
27 51 09 00	1. TRAILING EDGE FLAPS will not extend or retract when using the alternate mode. EICAS msg TE FLAP DISAGREE displayed. 2. FIM 27-51-00/101, Fig. 111, Block 1
27 51 10 00	1. TRAILING EDGE FLAPS will not extend when using the alternate mode. EICAS msg TE FLAP DISAGREE displayed. 2. FIM 27-51-00/101, Fig. 112, Block 1
27 51 11 00	1. TRAILING EDGE FLAPS will not retract when using the alternate mode. EICAS msg TE FLAP DISAGREE displayed. 2. FIM 27-51-00/101, Fig. 113, Block 1
27 51 12 00	1. EICAS msg FLAP/SLAT ELEC displayed (Ref Chapter 31 for fault code diagram). 2. FIM 27-51-00/101, Fig. 114, Block 1.
27 51 13 00	1. EICAS msg TE FLAP DISAGREE displayed and TRAILING EDGE flap light illum with flap lever and indicator in same position. 2. FIM 27-51-00/101, Fig. 114A, Block 1

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
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27 51 14 00      1. EICAS msg TE FLAP SHUTDOWN displayed.  
                    2. FIM 27-51-00/101, Fig. 114B, Block 1

27 51 15 00      1. EICAS msgs TE FLAP DISAGREE and TE FLAP SHUTDOWN displayed.  
                    2. FIM 27-51-00/101, Fig. 114C, Block 1

27 51 16 00      1. TE flap rotary actuator overload indicator tripped.  
                    2. Reset overload indicator and operate flaps. If overload indicator does not trip again, system is operative. If overload indicator trips again without accompanying TE FLAP DISAGREE or TE FLAP ASYM EICAS message, system is operative: reset overload indicator. If overload indicator trips with accompanying TE FLAP DISAGREE or TE FLAP ASYM EICAS message, examine complete flap mechanism driven by rotary actuator with tripped overload indicator for damaged or jammed condition. If no fault is found, examine flap mechanisms driven by seven remaining rotary actuators (two for each flap) for damaged or jammed condition. Correct as required. If flap mechanisms are not faulty, perform required corrective action per fault codes 27 51 01 00 or 27 51 03 00 as required by indicated EICAS message.

27 51 19 00      1. Trailing edge flaps extended to selected setting at the wrong airspeed following load relief. Airspeed was \_\_\_\_ knots.  
                    2. FIM 27-51-00/101, Fig. 103, Block 1 or  
                    FIM 27-51-00/101, Fig. 103A, Block 1

27 51 20 00      1. Trailing edge flaps failed to retract to lower flap setting when the flap placard speed was exceeded.  
                    Flap setting was \_\_\_\_\_. Airspeed was \_\_\_\_ knots.  
                    2. FIM 27-51-00/101, Fig. 109, Block 1 or  
                    FIM 27-51-00/101, Fig. 109A, Block 1

27 51 21 00      1. Trailing edge flaps retracted to lower flap setting at the wrong airspeed. Airspeed was \_\_\_\_ knots.  
                    2. FIM 27-51-00/101, Fig. 103, Block 1 or  
                    FIM 27-51-00/101, Fig. 103A, Block 1

27 58 01 --      1. (01=Left, 02=Right, 03=Left & Right) flap position indicator needle(s) (inoperative, stick) during TE flaps operation.  
                    2. FIM 27-58-00/101, Fig. 103, Block 1

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## 27-FAULT CODE INDEX

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
27 58 02 00	1. Flap position needle erratic operation (oscillation) during transfer from grd pwr to airplane pwr. Erratic operation cleared by opening circuit breaker 11G23 then reclosing after 15 seconds. 2. Nuisance indication; no maintenance action required. If condition persists, or occurs randomly, replace Flap/Slat Electronic Unit M545 (AMM 27-51-01).
27 58 03 00	1. Flap position needle erratic operation (oscillation) during transfer from grd pwr to airplane pwr. Erratic operation did not clear by opening circuit breaker 11G23 then reclosing after 15 seconds. 2. Replace Flap/Slat Electronic Unit, M545 (AMM 27-51-01).
27 61 01 00	1. Speedbrake lever is binding during manual and automatic operation. 2. FIM 27-61-00/101, Fig. 104, Block 1
27 61 02 00	Not Used
27 61 03 00	Not Used
27 61 04 00	Not Used
27 61 05 --	1. (01=L, 02=R, 03=L & R) wing spoiler(s) float. (State panel(s) and amount of float if known) 2. FIM 27-61-00/101, Fig. 103, Block 1
27 62 01 00	1. Speedbrake lever failed to extend automatically on Landing. 2. FIM 27-62-00/101, Fig. 104, Block 1
27 62 02 00	1. Speedbrakes failed to retract automatically. 2. FIM 27-62-00/101, Fig. 104, Block 1
27 62 03 00	1. AUTO SPD BRK light illum and EICAS msg AUTOSPEEDBRAKE displayed with speedbrakes selected to the armed position. 2. FIM 27-62-00/101, Fig. 105, Block 1
27 62 04 00	1. AUTO SPD BRK light illum and EICAS msg AUTO SPEEDBRAKE displayed with speedbrakes selected down. 2. FIM 27-62-00/101, Fig. 106, Block 1

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## 27-FAULT CODE INDEX



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FAULT ISOLATION/MAINT MANUAL

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FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
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27 62 05 00	1. AUTO SPD BRK light illum and EICAS msg AUTO SPEEDBRAKE displayed with speedbrakes selected up. 2. FIM 27-62-00/101, Fig. 107, Block 1
27 81 01 00	Not Used
27 81 02 00	Not Used
27 81 03 00	1. EICAS msg LE SLAT DISAGREE displayed, leading edge light illum with the flap lever in 1. Both flap pointers were on 1/2. 2. FIM 27-81-00/101, Fig. 105, Block 1
27 81 04 00	1. EICAS msg LE SLAT DISAGREE displayed, leading edge light illum with the flap lever in 1. Both flap pointers were correct. 2. FIM 27-81-00/101, Fig. 106, Block 1
27 81 05 00	1. EICAS msg LE SLAT ASYM displayed, leading edge light illum with the flap lever in 1. Both flap pointers were correct. 2. FIM 27-81-00/101, Fig. 107, Block 1
27 81 06 00	1. EICAS msg LE SLAT DISAGREE displayed, leading edge light illum with the flap lever in 25. Both flap pointers were correct. 2. FIM 27-81-00/101, Fig. 106, Block 1
27 81 07 00	1. EICAS msg LE SLAT ASYM displayed, leading edge light illum the flap lever in 25. Both flap pointers were correct. 2. FIM 27-81-00/101, Fig. 107, Block 1
27 81 08 00	1. LE SLAT DISAGREE shows on EICAS when you try to extend or retract the slat with altn slat drive system, and the position indication does not change. 2. FIM 27-81-00/101, Fig. 109, Block 1
27 81 09 00	1. EICAS msg LE SLAT DISAGREE displayed when slat extension to pos 1 was selected with ALTN slat drive system. Both flap pointers stayed halfway between UP and 1. 2. FIM 27-81-00/101, Fig. 110, Block 1
27 81 10 00	1. EICAS msg LE SLAT DISAGREE displayed when slat extension to pos 1 was selected with ALTN slat drive system. Both flap pointers indicate 1. 2. FIM 27-81-00/101, Fig. 111, Block 1

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27-FAULT CODE INDEX

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
27 81 11 00	1. EICAS msg LE SLAT DISAGREE displayed when slat extension to pos 25 was selected with ALTN slat drive system. 2. FIM 27-81-00/101, Fig. 110, Block 1
27 81 12 00	1. LE SLAT DISAGREE displayed when slat retraction to pos 20 was selected with ALTN slat drive system. 2. FIM 27-81-00/101, Fig. 112, Block 1
27 81 13 00	1. EICAS msg LE SLAT DISAGREE displayed when slat retraction to UP was selected with ALTN slat drive system. Both flap pointers stayed on 1. 2. FIM 27-81-00/101, Fig. 109, Block 1
27 81 14 00	1. EICAS msg LE SLAT DISAGREE displayed when slat retraction to UP was selected with ALTN slat drive system. Both flap pointers stayed halfway between UP and 1. 2. FIM 27-81-00/101, Fig. 112, Block 1
27 81 15 00	1. EICAS msg LE SLAT DISAGREE displayed when slat retraction to UP was selected with ALTN slat drive system. Both flap pointers indicate UP. 2. Perform FSEU BITE test per FIM 27-51-00/101, Fig. 104. If FSEU is faulty, replace FSEU per AMM 27-51-01. If not, replace PSEU per AMM 32-09-04.
27 81 16 00	1. EICAS msg LE SLAT DISAGREE displayed, leading edge light illum with the flap lever in 1. Both flap pointers were on up. 2. FIM 27-81-00/101, Fig. 104, Block 1
27 81 17 00	1. EICAS msg LE SLAT SHUTDOWN was displayed. 2. FIM 27-81-00/101, Fig. 112A, Block 1
27 81 18 00	1. EICAS msgs LE SLAT DISAGREE and LE SLAT SHUTDOWN were displayed. 2. FIM 27-81-00/101, Fig. 112B, Block 1
27 88 01 00	1. Both flap pointers were on 1 with the flap lever in up. 2. FIM 27-88-00/101, Fig. 104, Block 1
27 88 02 00	1. Both flap pointers were in 1/2 up with the flap lever 1. No LEADING EDGE EICAS messages were displayed. 2. FIM 27-88-00/101, Fig. 104, Block 1

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## 27-FAULT CODE INDEX

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

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

Bite Index  
Figure 1 (Sheet 2)

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FAULT ISOLATION/MAINT MANUAL

<u>LRU/System Name</u>	<u>Acronym</u>	<u>FIM Reference</u>
Radio Altimeter Transmitter/Receiver	RA	34-33
Rudder Ratio Changer Module	RRCM	27-09
Satellite Data Unit	SDU	23-25
Spoiler Control Module	SCM	27-09
Stabilizer Trim/Elevator Asymmetry Limit Module	SAM	27-09
Stall Warning Computer/Module (in Warning Electronic Unit)	SWC	27-32
Strut Overheat Detection System (RR Engines)		26-12
Thrust Management Computer/Autothrottle	TMC	22-00
Traffic Alert and Collision Avoidance Computer	TCAS	34-45
VHF (Very High Frequency) Communication		23-12
VOR/Marker Beacon Receiver	VOR/MKR	34-51
Warning Electronic Unit BITE Module (Stall Warning)	WEU	27-32
Weather Radar Transceiver	WXR	34-43
Wheel Well Fire Detection		26-17
Window Heat Control Unit	WHCU	30-41
Yaw Damper Module	YDM	22-21
Yaw Damper/Stabilizer Trim Module	YSM	27-09
Zone Temperature Controller	ZTC	21-60/21-61

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CONTROL SYSTEM ELECTRONICS UNIT

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKERS				
FLT CONT ELEC 1L AC - C1538	--	1	FLIGHT COMPT, P11 11C6	*
FLT CONT ELEC 1R AC - C1536		1	11G17	*
FLT CONT ELEC 1L DC - C1534		1	11C7	*
FLT CONT ELEC 1R DC - C1531		1	11G18	*
FLT CONT ELEC 2L AC - C1537		1	11C8	*
FLT CONT ELEC 2R AC - C1535		1	11G26	*
FLT CONT ELEC 2L DC - C1533		1	11C9	*
FLT CONT ELEC 2R DC - C1532		1	11G27	*
ACTUATOR - (FIM 27-61-00/101)				
INBOARD POWER CONTROL PCA				
OUTBOARD POWER CONTROL PCA				
COLUMN - (FIM 27-31-00/101)				
CONTROL				
COMPUTER - (FIM 31-41-00/101)				
EICAS LEFT, M10181				
EICAS RIGHT, M10182				
COMPUTER - (FIM 34-12-00/101)				
AIR DATA LEFT, M100				
AIR DATA RIGHT, M101				
INDICATOR - (FIM 27-48-00/101)				
STABILIZER TRIM POSITION LEFT, N68				
LEVER - (FIM 27-41-00/101)				
STABILIZER TRIM				
LEVER - (FIM 27-61-00/101)				
SPEEDBRAKE CONTROL				
MODULE - POWER SUPPLY NO. 1 LEFT, M536	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - POWER SUPPLY NO. 2 LEFT, M537	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - POWER SUPPLY NO. 1 RIGHT, M538	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - POWER SUPPLY NO. 2 RIGHT, M539	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - SPOILER CONTROL NO. 1 LEFT, M530	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - SPOILER CONTROL NO. 2 LEFT, M531	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - SPOILER CONTROL NO. 3 LEFT, M532	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - SPOILER CONTROL NO. 1 RIGHT, M533	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - SPOILER CONTROL NO. 2 RIGHT, M534	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - SPOILER CONTROL NO. 3 RIGHT, M535	2	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - STABILIZER TRIM/AILERON LOCKOUT LEFT, M524	3	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - STABILIZER TRIM/AILERON LOCKOUT RIGHT, M525	3	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - RUDDER RATIO CHANGER LEFT, M528	3	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - RUDDER RATIO CHANGER RIGHT, M529	3	1	119AL, MAIN EQUIPMENT CENTER	27-09-00
MODULE - (FIM 22-21-00/101)				
YAW DAMPER LEFT, M522				
YAW DAMPER RIGHT, M523				

\* SEE THE WDM EQUIPMENT LIST

Control System Electronics Unit - Component Index  
Figure 101 (Sheet 1)

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COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
MODULE - (FIM 27-58-00/101) FLAP/STABILIZER POSITION, M838, M839, M840 MODULE - (FIM 27-48-00/101) STABILIZER LIMIT SWITCH AND POSITION TRANSMITTER, M519, M520 MODULE - (FIM 27-48-00/101) STABILIZER TRIM CONTROL, M211, M212  STABILIZER TRIM CONTROL, M1607, M1608  SWITCH - (FIM 27-41-00/101) STABILIZER STANDBY, S538  CAPTAIN STABILIZER TRIM CONTROL WHEEL, S80 FIRST OFFICER STABILIZER TRIM CONTROL WHEEL, S81 TRANSDUCER - (FIM 27-21-00/101) RUDDER RATIO CHANGER LVDT, TS194 TRANSDUCER - (FIM 27-61-00/101) SPEEDBRAKE LVDT, TS35, TS36, TS37 SPOILER RVDT, TS5081, TS5082				

 AIRPLANES WITH ALT STAB TRIM LEVERS

 AIRPLANES WITH ALT STAB TRIM SWITCHES

Control System Electronics Unit - Component Index  
Figure 101 (Sheet 2)

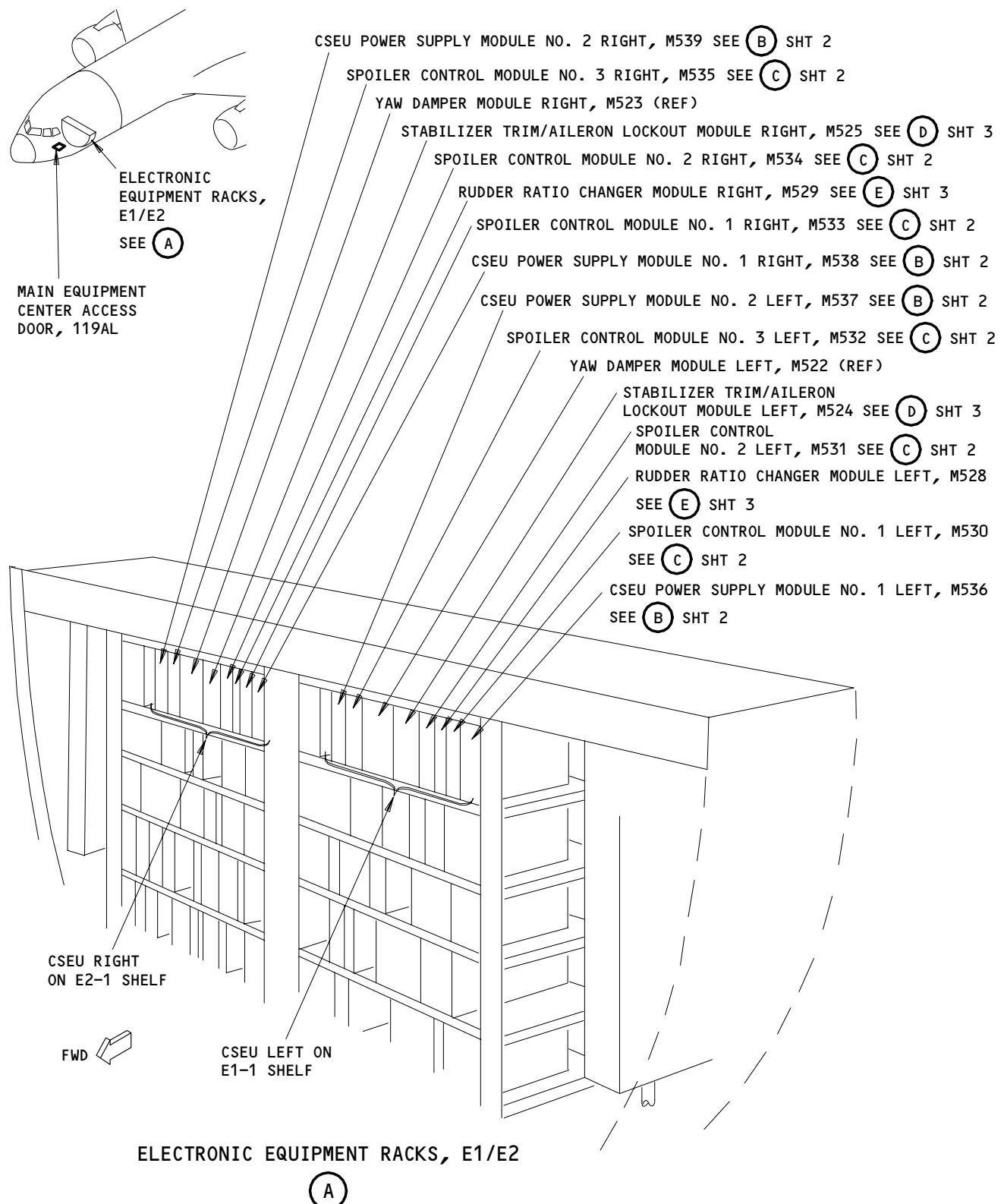
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Control System Electronics Unit - Component Location  
 Figure 102 (Sheet 1)

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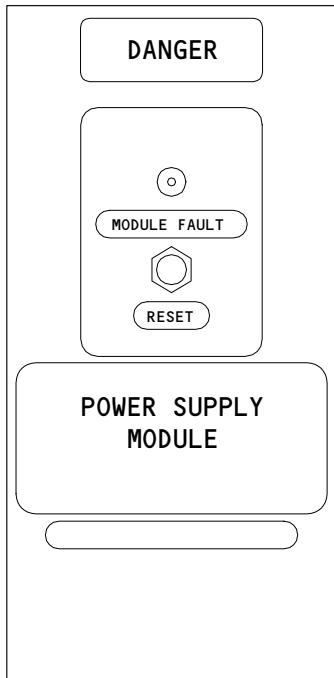
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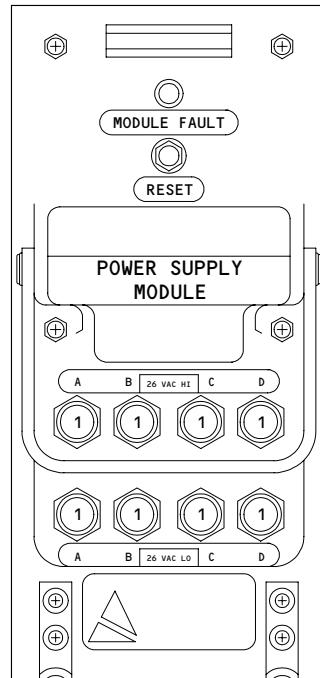
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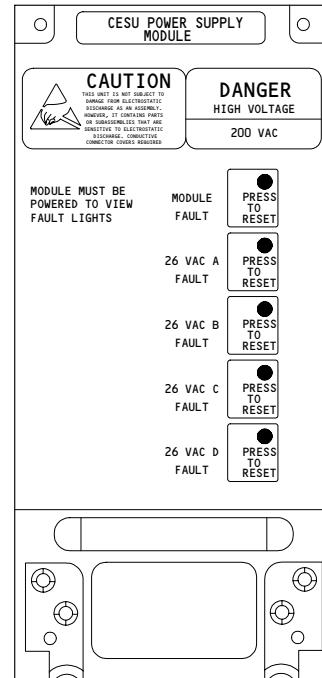
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(-103)

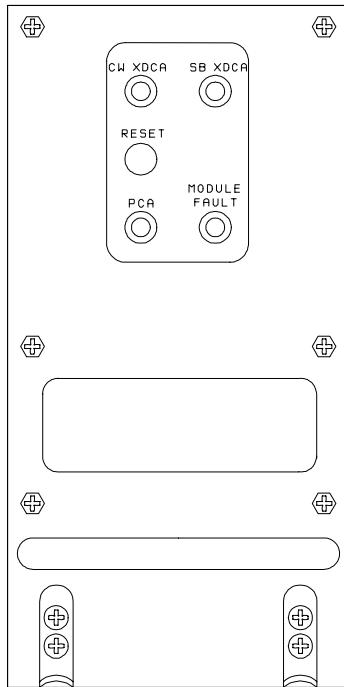


(-104)



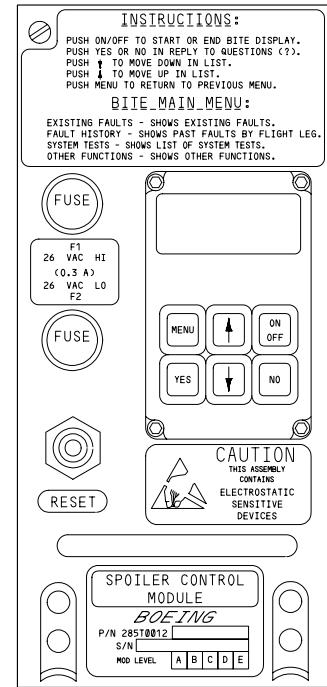
(-201)

POWER SUPPLY MODULE



(-100 SERIES)

B



(-200 SERIES)

SPOILER CONTROL MODULE

C

Control Surface Electronics Unit - Component Location (Details from Sht 1)  
Figure 102 (Sheet 2)

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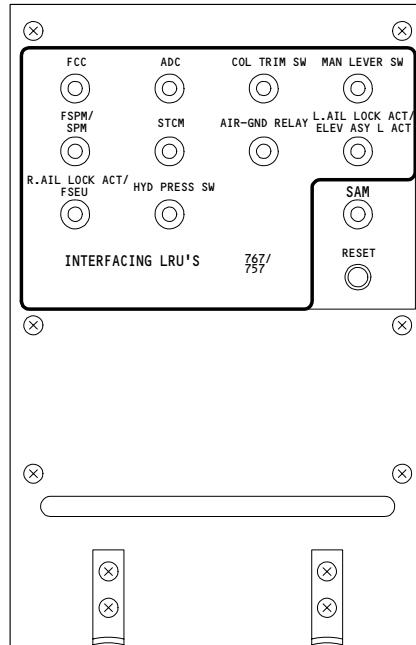
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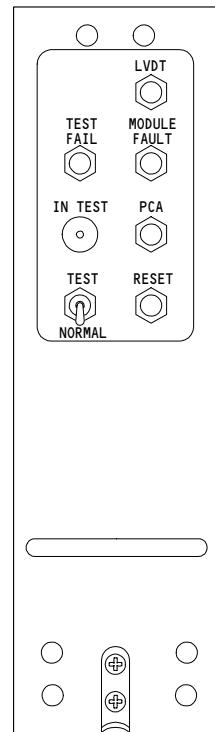
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STABILIZER TRIM/AILERON LOCKOUT MODULE (EXAMPLE)

(D)



RUDDER RATIO CHANGER MODULE (EXAMPLE)

(E)

Control System Electronics Unit - Component Location (Details from Sht 1)  
Figure 102 (Sheet 3)

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**PREREQUISITES****MAKE SURE THESE SYSTEMS WILL OPERATE:**

AUTOPilot (FLIGHT CONTROL) (AMM 22-10-00/501)  
TRAILING EDGE FLAP POSITION INDICATING SYSTEM  
(AMM 27-58-00/501)  
EICAS (AMM 31-41-00/201)  
AIR/GROUND SYSTEM (AMM 32-09-02/201)  
MASTER DIM AND TEST SYSTEM (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, 11C12, 11C13,  
11C17, 11C18, 11F34, 11G10, 11G17, 11G18,  
11G26, 11G27, 11H10, 11H11, 11H19, 11H20

**MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:**

ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
HYDRAULIC POWER IS ON (AMM 29-11-00/201)

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**NOTE:** THE CONTROL SYSTEM ELECTRONIC UNITS (CSEU) ARE THE POWER SUPPLY MODULES (PSM), SPOILER CONTROL MODULES (SCM), YAW DAMPER STABILIZER TRIM MODULE (YSM) OR YAW DAMPER MODULES (YDM), STABILIZER TRIM/ELEVATOR ASYMMETRY LIMIT MODULES (SAM), AND RUDDER RATIO CHANGER MODULES (RRCM).

Control System Electronic Units EICAS Message(s) Displayed  
Figure 103 (Sheet 1)

EFFECTIVITY

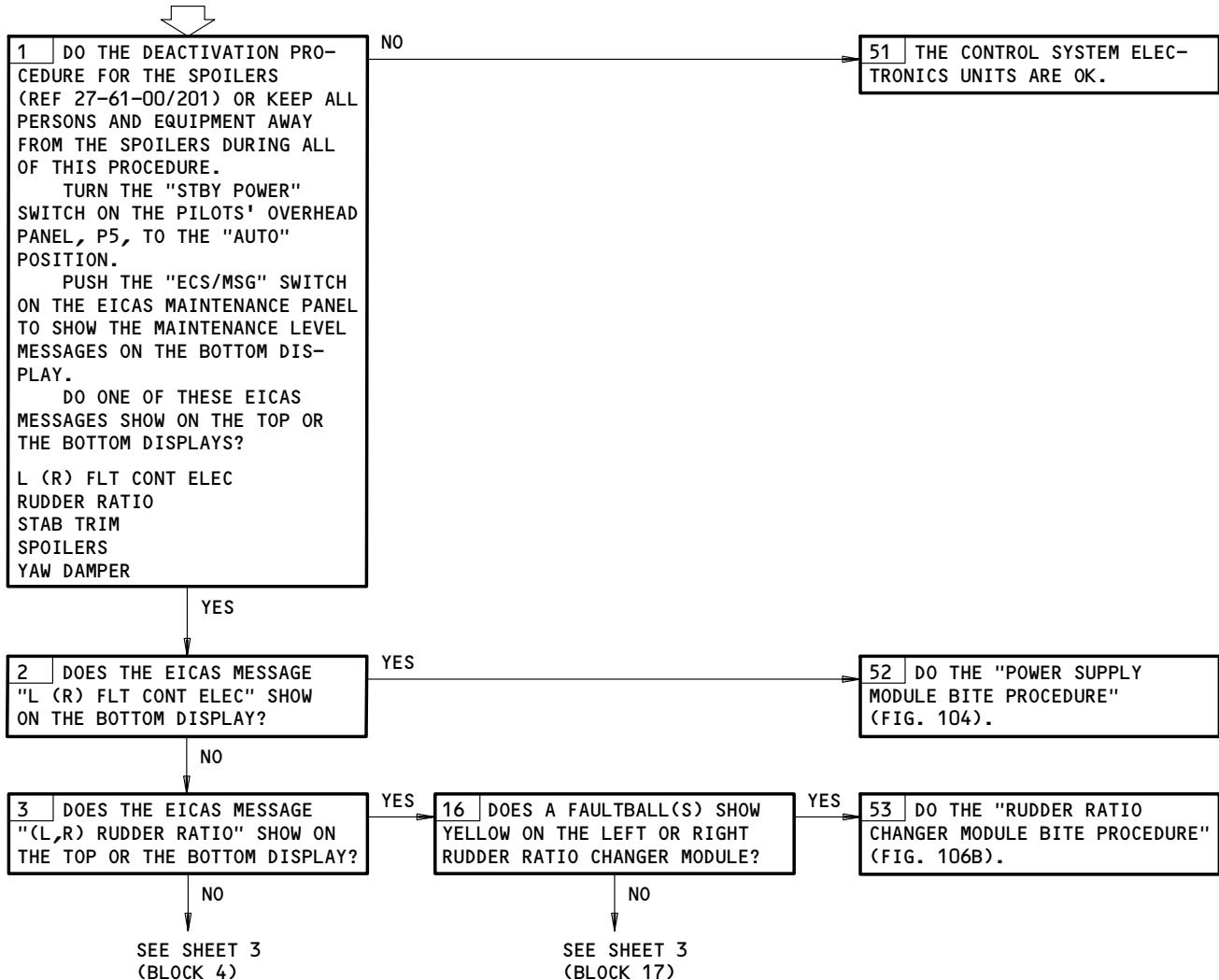
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CONTROL SYSTEM  
ELECTRONIC UNITS  
EICAS MESSAGE(S)  
DISPLAYED



Control System Electronic Units EICAS Message(s) Displayed  
Figure 103 (Sheet 2)

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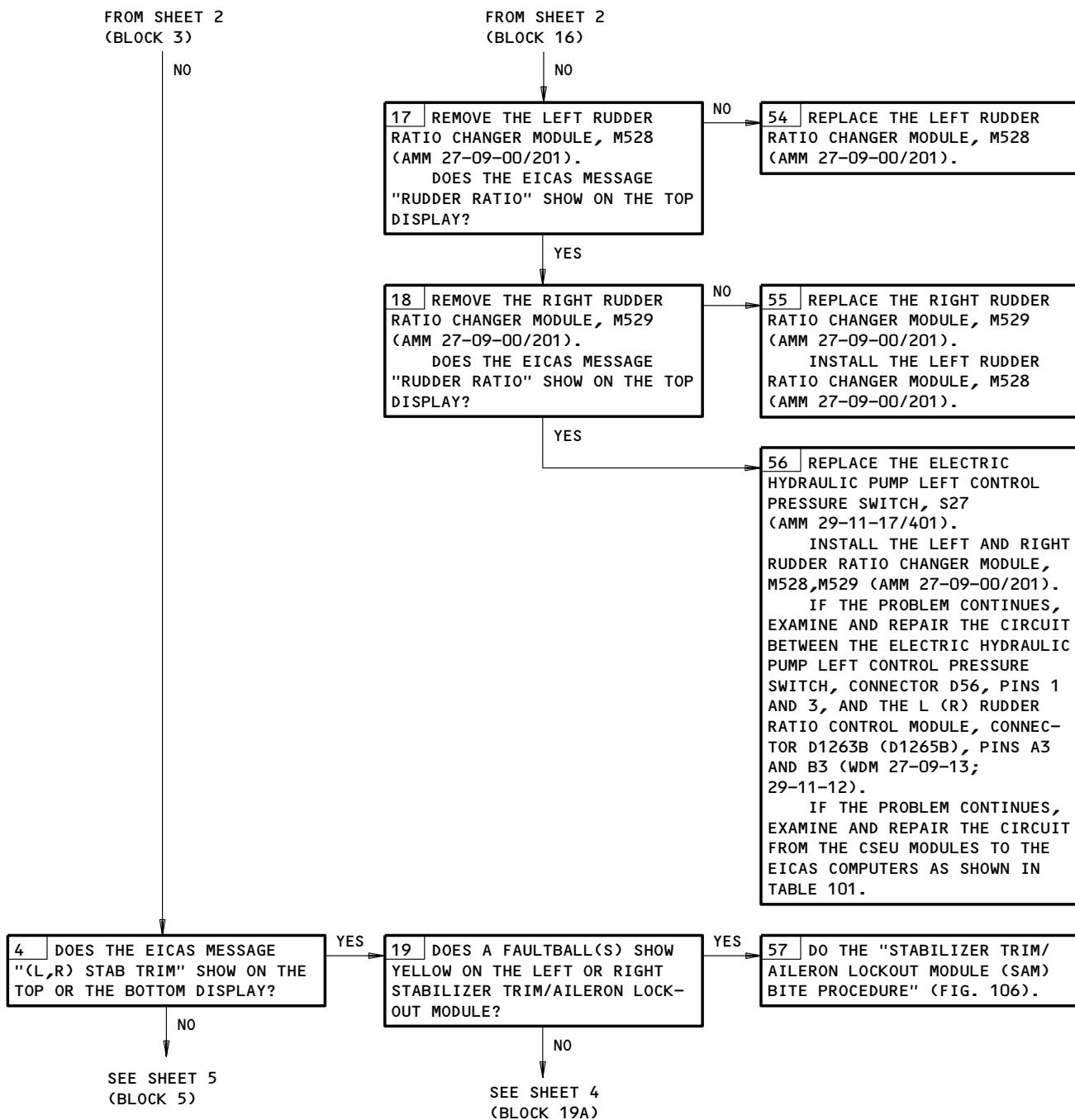
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Control System Electronic Units EICAS Message(s) Displayed  
Figure 103 (Sheet 3)

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FROM SHEET 3  
 (BLOCK 19)

NO

**19A** **WARNING**

MOVE ALL PERSONS AND EQUIPMENT AWAY FROM THE SPOILERS. THE SPOILER CAN RETRACT QUICKLY WHEN YOU OPEN THESE CIRCUIT BREAKERS AND CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

OPEN ALL OF THESE CIRCUIT BREAKERS, ON THE OVERHEAD CIRCUIT BREAKER PANEL P11, AND THEN CLOSE THESE CIRCUITS IN LESS THAN 25 SECONDS:

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

NOTE: A FAULTBALL CAN SHOW YELLOW AFTER YOU CLOSE THE CIRCUIT BREAKERS. IF A FAULTBALL SHOWS YELLOW ON A SAM, DO THE FAULTBALL RESET PROCEDURE (FIG. 106, BLOCK 2).

DOES THE EICAS MESSAGE "(L,R) STAB TRIM" SHOW ON THE TOP OR THE BOTTOM DISPLAY?

NO

**58** THE CONTROL SYSTEM ELECTRONICS UNITS ARE OK.

YES

SEE SHEET 5  
 (BLOCK 20)

Control System Electronic Units EICAS Message(s) Displayed  
 Figure 103 (Sheet 4)

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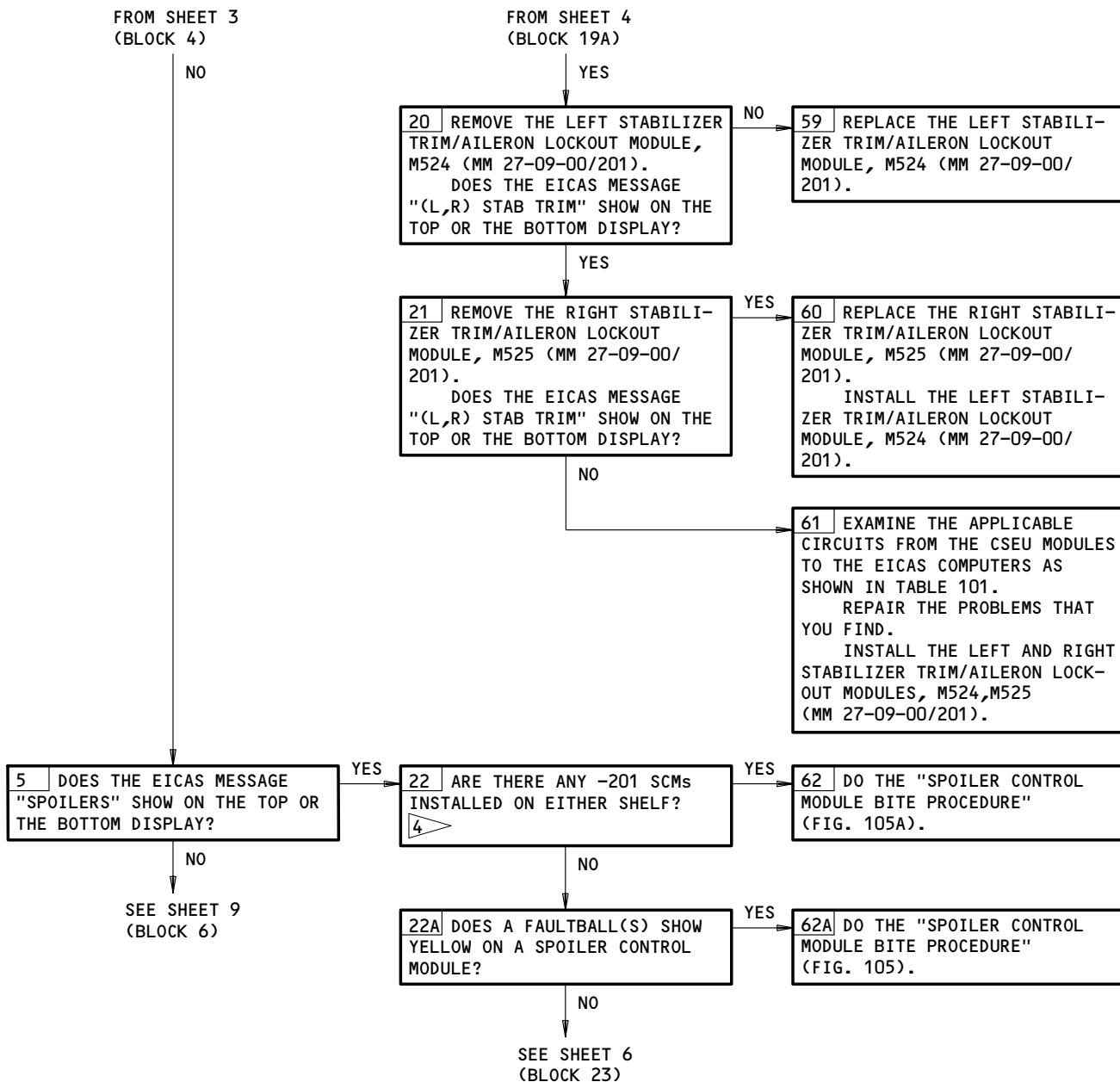
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4 WHEN A -200 SERIES SCM IS AVAILABLE, IT IS RECOMMENDED FOR INSTALLATION AT A SHELF POSITION WHERE INTERMITTENT PROBLEMS OCCUR, OR WHEN IT IS NECESSARY TO REPLACE A SCM DURING THE PROCEDURE, TO MAKE USE OF ITS EXPANDED CAPACITY FOR FAULT DETECTION AND FAULT ISOLATION.

Control System Electronic Units EICAS Message(s) Displayed  
Figure 103 (Sheet 5)

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FROM SHEET 5  
(BLOCK 22)

NO

63 THE CONTROL SYSTEM ELECTRONICS UNITS ARE OK.

23 MAKE SURE THE "STBY POWER" SWITCH, ON THE PILOTS' OVERHEAD PANEL, P5, IS IN THE "AUTO" POSITION.

OPEN THE "AUTO SPEEDBRAKE" CIRCUIT BREAKER, 11G11, ON THE OVERHEAD CIRCUIT BREAKER PANEL, P11.

NOTE

IF YOU DO NOT OPEN THE "AUTO SPEEDBRAKE" CIRCUIT BREAKER, THE "MODULE FAULT" FAULTBALL CAN SHOW YELLOW WHEN THERE IS A "PCA" FAULT.

MAKE SURE THE CONTROL WHEEL IS IN THE NEUTRAL POSITION. MAKE SURE SPEEDBRAKE LEVER IS IN THE DOWN-AND-LOCKED POSITION. MAKE SURE ALL SPOILERS ARE IN THE STOWED POSITION.

OPEN AND THEN CLOSE THESE CIRCUIT BREAKERS ON THE P11 PANEL IN LESS THAN 25 SECONDS:

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

TURN THE CONTROL WHEEL FROM THE NEUTRAL POSITION TO THE FULL COUNTERCLOCKWISE POSITION 1. STOP FOR FOUR SECONDS. TURN THE CONTROL WHEEL BACK TO THE NEUTRAL POSITION. 1

MOVE THE SPEEDBRAKE LEVER FROM THE DOWN-AND-LOCKED POSITION TO THE FULL-UP POSITION. 2 STOP FOR FOUR SECONDS. MOVE THE SPEEDBRAKE LEVER BACK TO THE DOWN-AND-LOCKED POSITION. 2

DOES THE EICAS MESSAGE "SPOILERS" SHOW ON THE TOP OR THE BOTTOM DISPLAY?

YES

SEE SHEET 7  
(BLOCK 24)

- 1 USE A TIME OF AT LEAST 10 SECONDS TO TURN THE CONTROL WHEEL FROM THE NEUTRAL POSITION TO THE FULL CCW POSITION. USE A TIME OF AT LEAST 10 SECONDS TO TURN THE CONTROL WHEEL BACK TO THE NEUTRAL POSITION.
- 2 USE A TIME OF AT LEAST 10 SECONDS TO MOVE THE SPEEDBRAKE LEVER FROM THE DOWN-AND-LOCKED POSITION TO THE FULL-UP POSITION. USE A TIME OF AT LEAST 10 SECONDS TO MOVE THE SPEEDBRAKE LEVER BACK TO THE DOWN-AND-LOCKED POSITION.

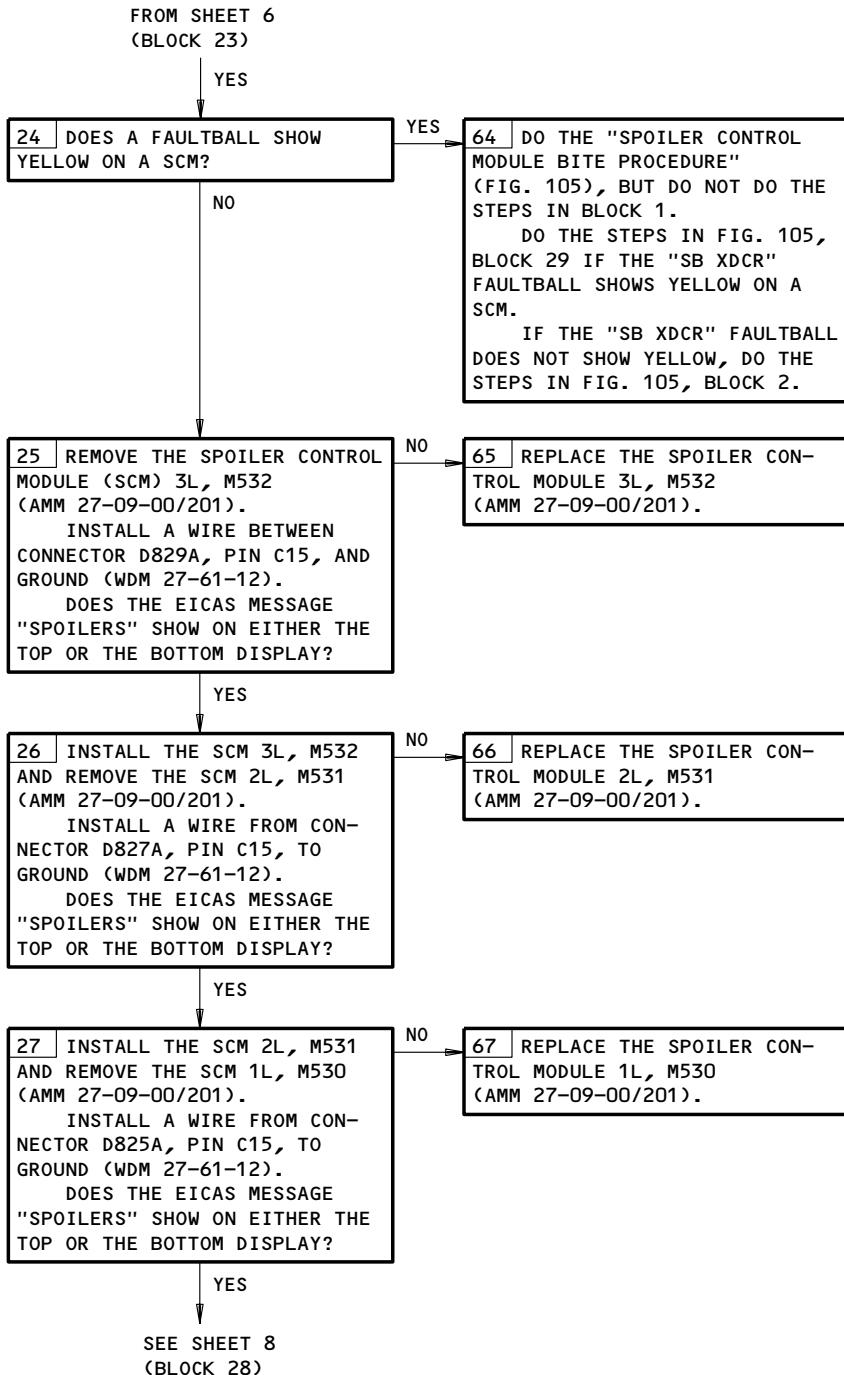
Control System Electronic Units EICAS Message(s) Displayed  
Figure 103 (Sheet 6)

EFFECTIVITY

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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL



Control System Electronic Units EICAS Message(s) Displayed  
Figure 103 (Sheet 7)

EFFECTIVITY

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FROM SHEET 7  
(BLOCK 27)

YES

28 | INSTALL THE SCM 1L, M530  
AND REMOVE THE SCM 3R, M535  
(MM 27-09-00/201).  
INSTALL A WIRE FROM CON-  
NECTOR D835A, PIN C15, TO  
GROUND (WDM 27-61-12).  
DOES THE EICAS MESSAGE  
"SPOILERS" SHOW ON THE TOP OR  
THE BOTTOM DISPLAY?

NO → 68 | REPLACE THE SPOILER CON-  
TROL MODULE 3R, M535  
(MM 27-09-00/201).

YES

29 | INSTALL THE SCM 3R, M535  
AND REMOVE THE SCM 2R, M534  
(MM 27-09-00/201).  
INSTALL A WIRE FROM CON-  
NECTOR D833A, PIN C15, TO  
GROUND (WDM 27-61-12).  
DOES THE EICAS MESSAGE  
"SPOILERS" SHOW ON THE TOP OR  
THE BOTTOM DISPLAY?

NO → 69 | REPLACE THE SPOILER CON-  
TROL MODULE 2R, M534  
(MM 27-09-00/201).

YES

30 | INSTALL THE SCM 2R, M534  
AND REMOVE THE SCM 1R, M533  
(MM 27-09-00/201).  
INSTALL A WIRE FROM CON-  
NECTOR D831A, PIN C15, TO  
GROUND (WDM 27-61-12).  
DOES THE EICAS MESSAGE  
"SPOILERS" SHOW ON THE TOP OR  
THE BOTTOM DISPLAY?

NO → 70 | REPLACE THE SPOILER CON-  
TROL MODULE 1R, M533  
(MM 27-09-00/201).

YES

71 | INSTALL THE SCM 1R, M533  
(MM 27-09-00/201).  
EXAMINE AND REPAIR THE  
APPLICABLE CIRCUITS FROM THE  
CSEU MODULE TO THE EICAS COM-  
PUTER AS FOLLOWS:  
FOR THE MAINTENANCE (WHITE)  
MESSAGE, USE TABLE 101.  
FOR THE ADVISORY (YELLOW)  
MESSAGE, USE TABLE 102.

Control System Electronic Units EICAS Message(s) Displayed  
Figure 103 (Sheet 8)

EFFECTIVITY

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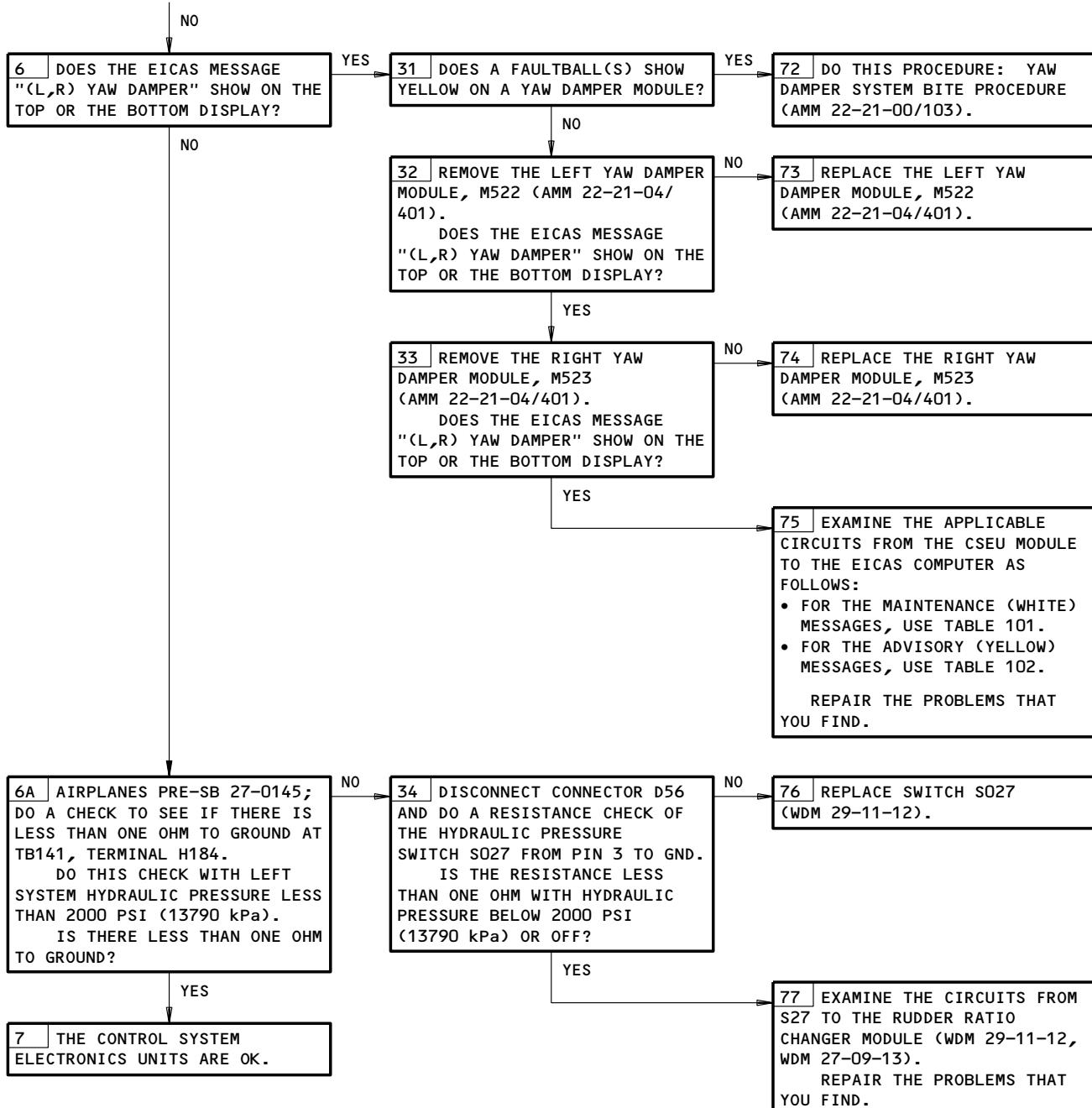
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FROM SHEET 5  
(BLOCK 5)



Control System Electronic Units EICAS Message(s) Displayed  
Figure 103 (Sheet 9)

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TABLE 101

## CSEU TO EICAS MESSAGE INTERFACES - MAINTENANCE LEVEL (WDM 27-09-14)

MODULE	CONNECTORS, PINS		MODULE	CONNECTORS, PINS	
	CSEU	EICAS		CSEU	EICAS
PSM M536 1L	D1251B,K13 D1251B,A13 D1251B,A13	D881F,D3 D883F,D3 D881F,D3	PSM M538 1R	D1255B,K13 D1255B,A13 D1255B,A13	D881E,A10 D883E,A10 D881E,A10
PSM M537 2L	D1253B,A13 D1253B,K13	D883F,D3 D881F,D3	PSM M539 2R	D1257B,A13 D1257B,K13	D883E,A10 D881E,A10
SCM M530 1L	D825A,H14 D825A,C13	D881A,H14 D883A,H14	SCM M533 1R	D831A,H14 D831A,C13	D883A,H14 D881A,H14
SCM M531 2L	D827A,H14 D827A,C13	D881A,H14 D883A,H14	SCM M534 2R	D833A,H14 D833A,C13	D883A,H14 D881A,H14
SCM M532 3L	D829A,H14 D829A,C13	D881A,H14 D883A,H14	SCM M535 3R	D835A,H14 D835A,C13	D883A,H14 D881A,H14
SAM M524	D665B,A15 D665B,A15	D881E,J11 D883E,J11	SAM M525	D667B,A15 D667B,A15	D883E,J11 D881E,J11
RRCM M528	D1263B,D14 D1263A,C15	D881E,K9 D883E,K9	RRCM M529	D1265B,D14 D1265A,C15	D883E,K9 D881E,K9
YDM M522	D1259B,G10 D1259B,G10	D881E,K13 D883E,K13	YDM M523	D1261B,G10 D1261B,G10	D883E,K13 D881E,K13

TABLE 102

## CSEU TO EICAS MESSAGE INTERFACES - ADVISORY LEVEL (WDM 27-61-12)

MODULE	CSEU	EICAS	MODULE	CSEU	EICAS
	CONNECTOR, PIN	CONNECTOR, PIN		CONNECTOR, PIN	CONNECTOR, PIN
SCM 1L	D825A,H15 D825A,B13	D5051P,A9 3> D1678,13	SCM 1R	D831A,H15 D831A,B13	D5051P,A9 3> D1678,13
SCM 2L	D827A,H15 D827A,B13	D5051P,A9 3> D1678,13	SCM 2R	D833A,H15 D833A,B13	D5051P,A9 3> D1678,13
SCM 3L	D829A,H15 D829A,B13	D5051P,A9 3> D1678,13	SCM 3R	D835A,H15 D835A,B13	D5051P,A9 3> D1678,13

3> ANNUNCIATOR PANEL, M10394, IS ON THE PILOTS' OVERHEAD PANEL, P5

Control System Electronic Units EICAS Message(s) Displayed  
 Figure 103 (Sheet 10)

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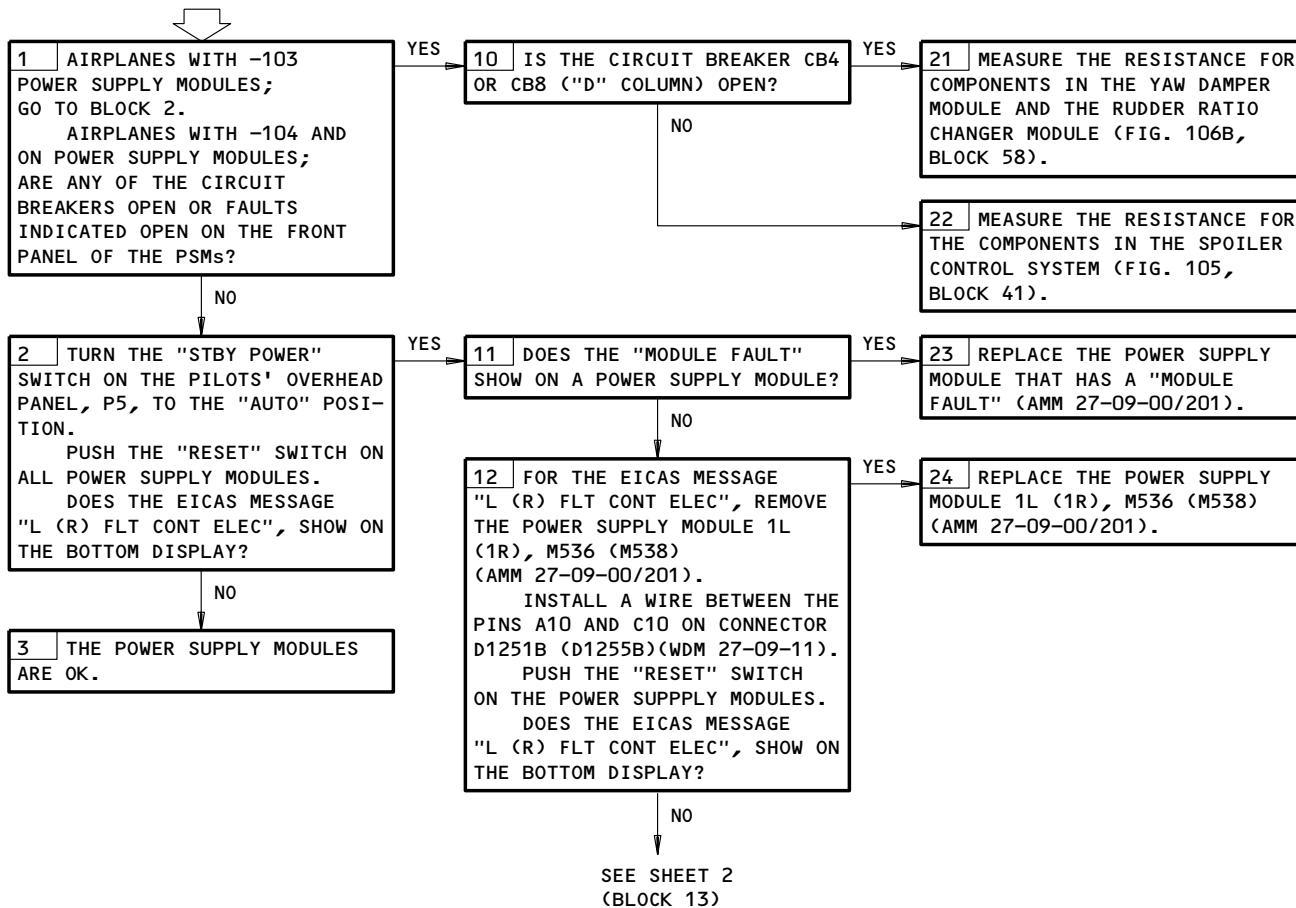
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**POWER SUPPLY MODULE  
BITE PROCEDURE**
**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
EICAS (AMM 31-41-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
11A18, 11C6, 11C7, 11C8, 11C9, 11C12, 11C13, 11C17, 11C18,  
11F34, 11G10, 11G17, 11G18, 11G26, 11G27

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



Power Supply Module BITE Procedure  
Figure 104 (Sheet 1)

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FROM SHEET 1  
(BLOCK 12)

NO

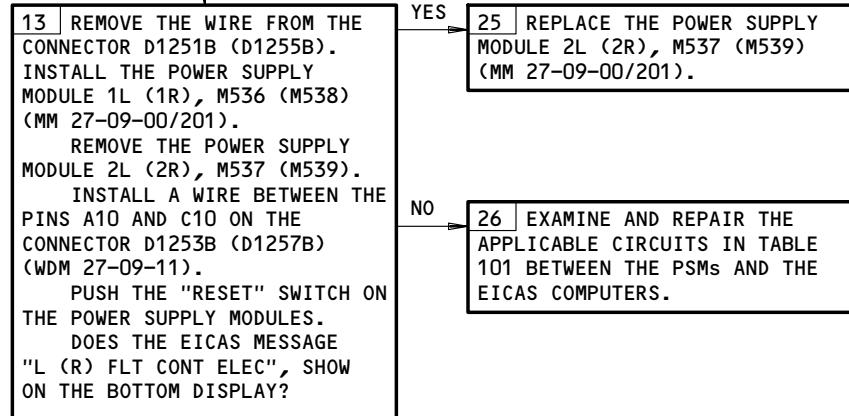


TABLE 101

PSM	CONNECTOR	PIN	EICAS	CONNECTOR	PIN
M538	D1255B D1255B	K13 A13	M10181 M10182	D881E D883E	A10 A10
M539	D1257B D1257B	K13 A13	M10181 M10182	D881E D883E	A10 A10
M536	D1251B D1251B	K13 A13	M10181 M10182	D881F D883F	D3 D3
M537	D1253B D1253B	K13 A13	M10181 M10182	D881F D883F	D3 D3

Power Supply Module BITE Procedure  
Figure 104 (Sheet 2)

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**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:

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

EICAS (AMM 31-41-00/201)

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

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11C6, 11C7, 11C8, 11C9, 11G17, 11G18, 11G27, 11G28

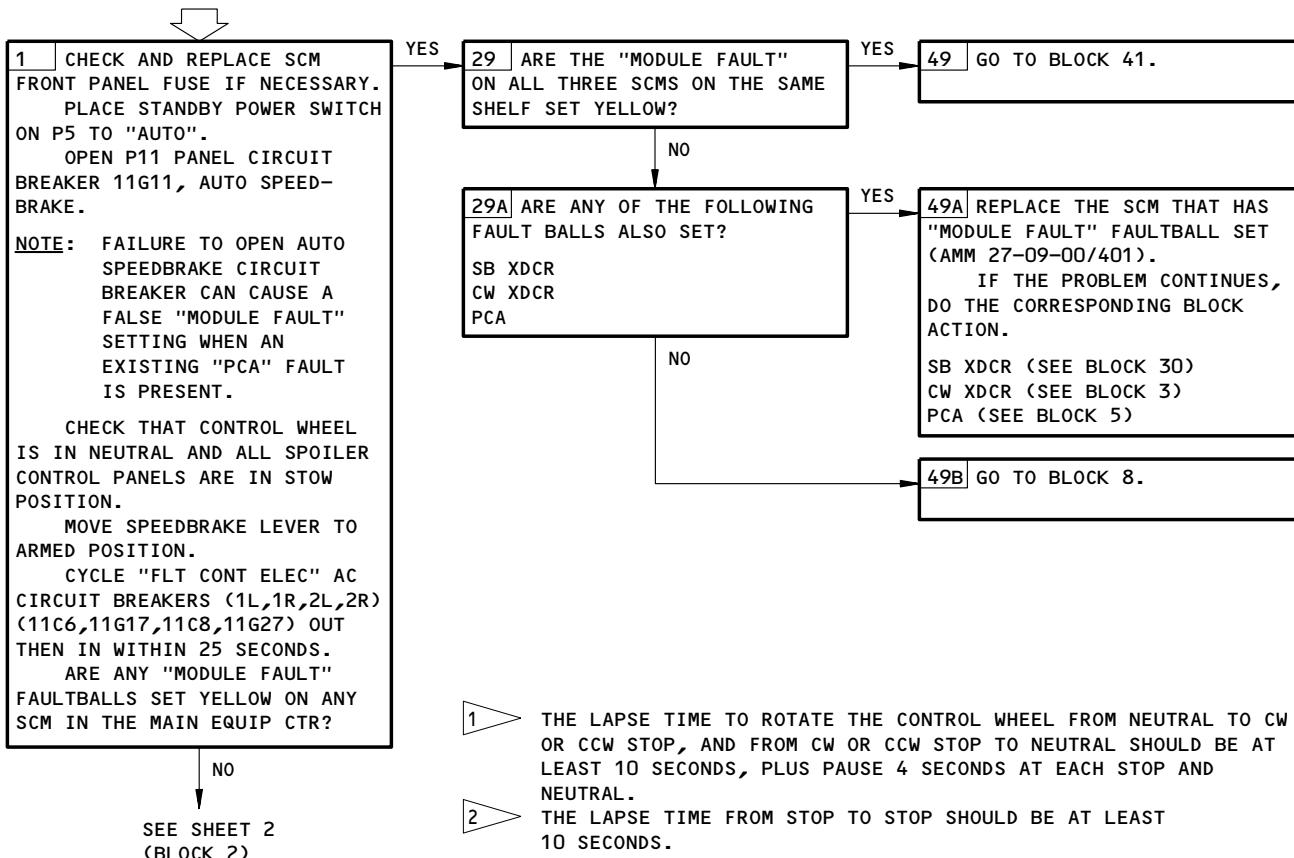
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

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

**WARNING:** TO PREVENT INJURY OR DAMAGE, CLEAR PERSONNEL AND EQUIPMENT FROM CONTROL SURFACES BEFORE PROVIDING HYDRAULIC POWER. KEEP AREA CLEAR WHEN PERFORMING FAULT ISOLATION.

**NOTE:** SPOILERS ARE NUMBERED 1-12 CONSECUTIVELY FROM LEFT WING OUTBOARD TO RIGHT WING OUTBOARD.

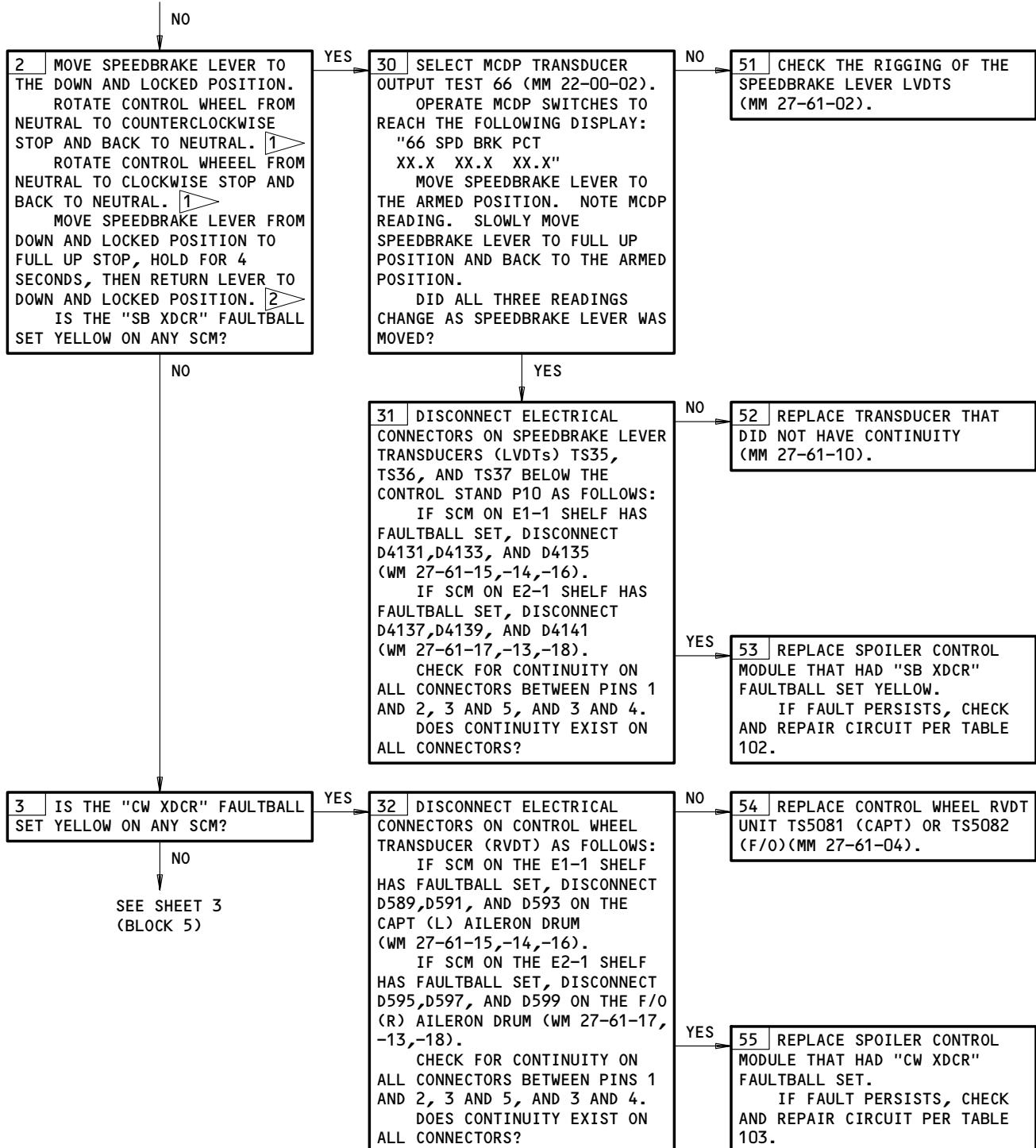
FOR SCM MODULES WITH FUSES, LOOK FOR A BLOWN FUSE.

**SPOILER CONTROL  
MODULE BITE  
PROCEDURE**

 Spoiler Control Module BITE Procedure  
 Figure 105 (Sheet 1)

 EFFECTIVITY  
 -100 SERIES SPOILER CONTROL MODULES

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FROM SHEET 1  
(BLOCK 1)

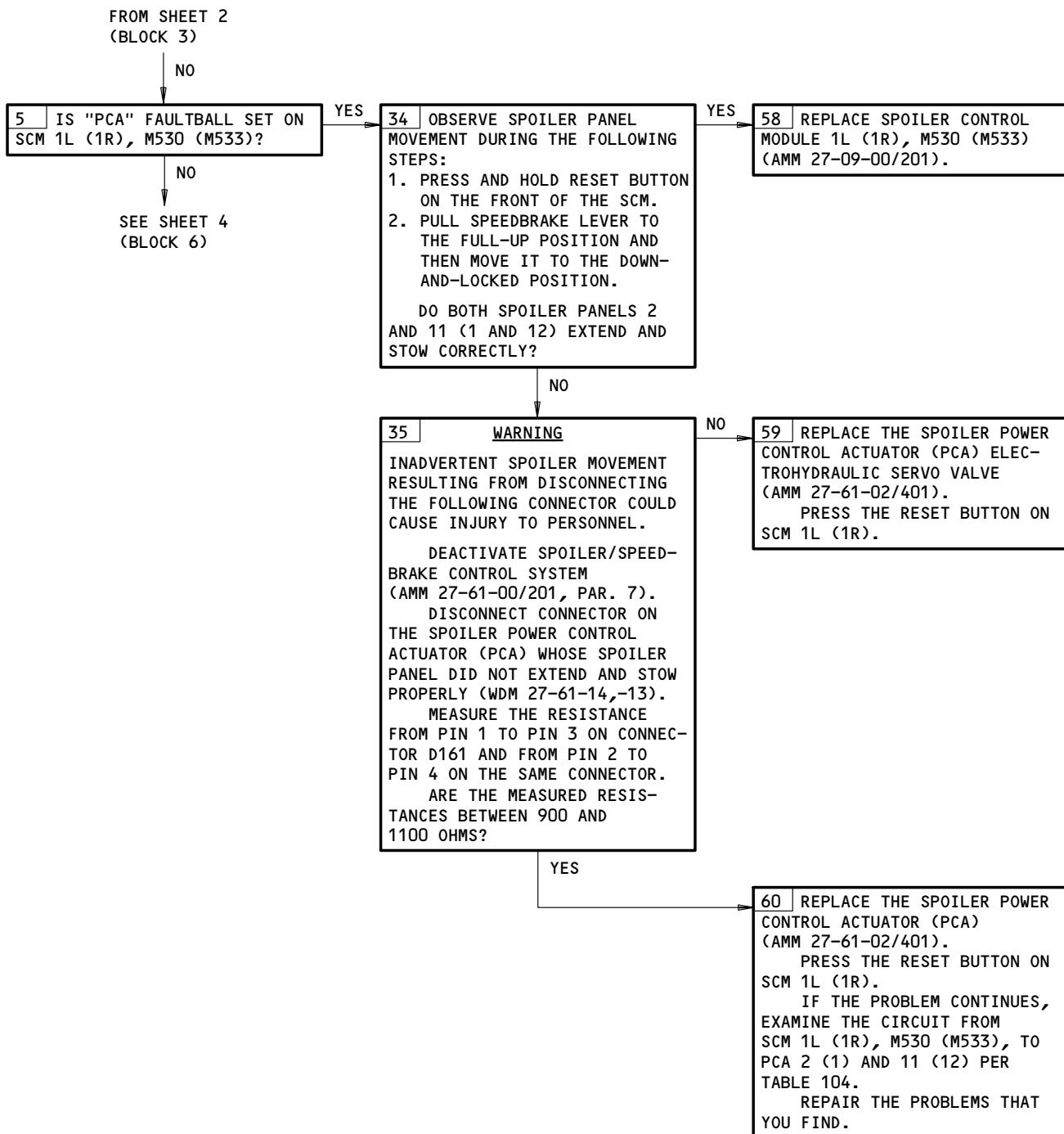


**Spoiler Control Module BITE Procedure**  
**Figure 105 (Sheet 2)**

EFFECTIVITY  
-100 SERIES SPOILER CONTROL MODULES

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Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 3)

EFFECTIVITY

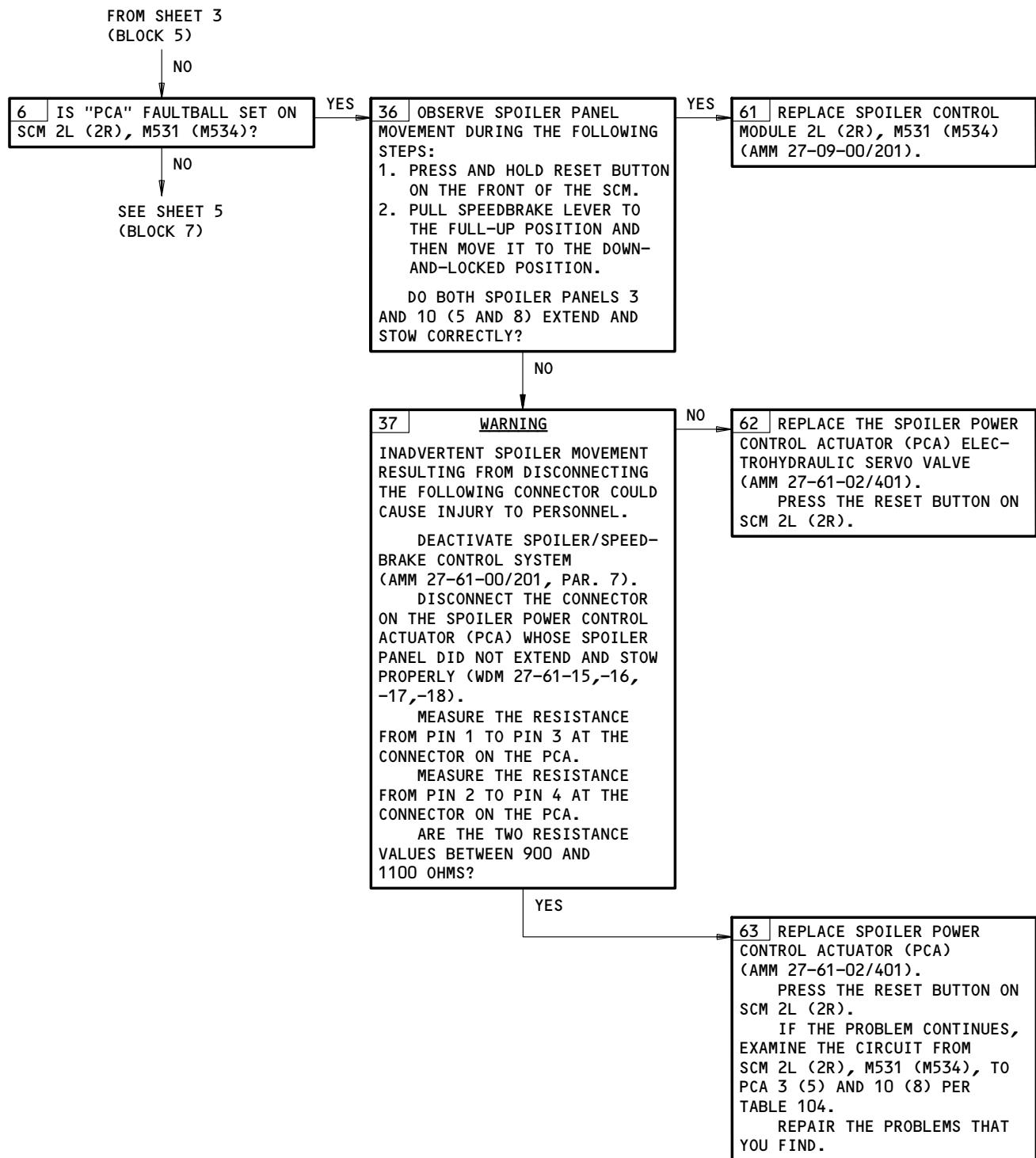
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Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 4)

EFFECTIVITY

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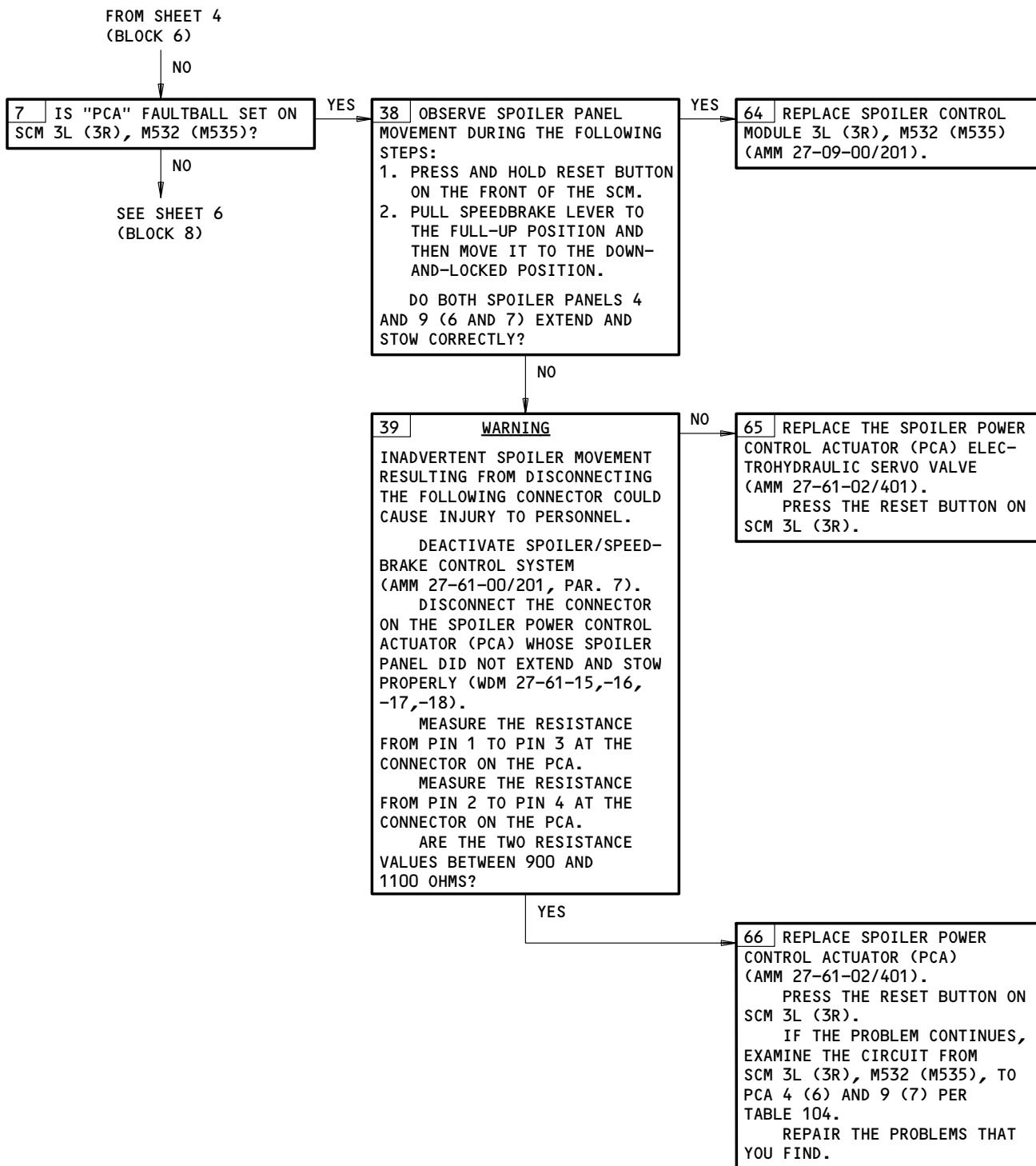
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Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 5)

EFFECTIVITY

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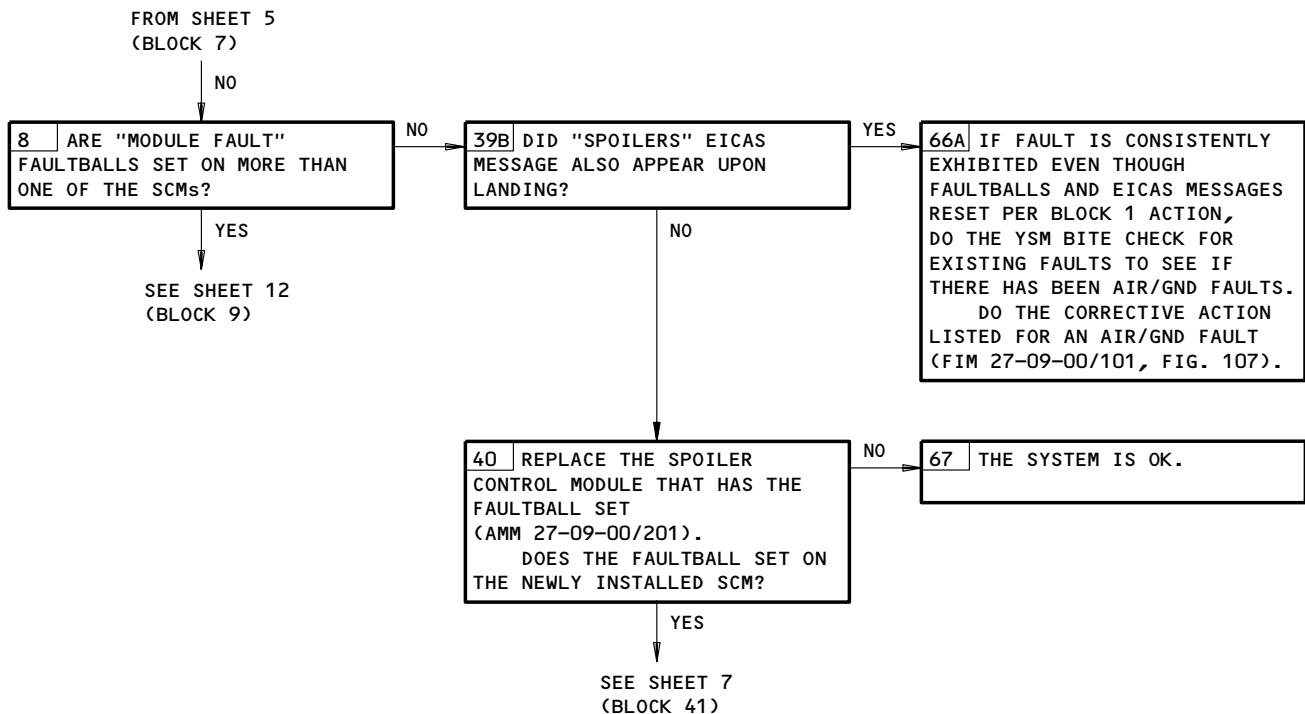
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Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 6)

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FROM SHEET 6  
(BLOCK 40)

YES

41 REMOVE THE POWER SUPPLY MODULE 1L (1R), M536 (M538), (AMM 27-09-00/201) ON THE SAME SHELF AS THE SCM(s) WITH THE FAULTBALL(s) THAT SHOW(S) YELLOW.  
MEASURE THE RESISTANCE VALUES BETWEEN THE SHELF CONNECTOR PINS AS SHOWN IN TABLE 105.  
ARE THE RESISTANCE VALUES GREATER THAN THE NOMINAL VALUES AS SHOWN IN TABLE 105? (SEE NOTE BELOW.)

YES 68 REPLACE THE POWER SUPPLY MODULE 1L (1R), M536 (M538) (AMM 27-09-00/201).

NO SEE SHEET 8  
(BLOCK 42)

6

41A ARE ANY OF THE FAULT LIGHTS SET OR CIRCUIT BREAKERS OF PAIRS A,B, OR C ON THE PSM 1L (1R) FRONT PANEL OPENED?

NO SEE SHEET 14  
(BLOCK 17)

YES

SEE SHEET 13  
(BLOCK 11)

NOTE: THE 26V AC REFERENCE VOLTAGE IS SUPPLIED TO THE THREE SCMs ON THE SAME SHELF BY THREE CIRCUITS FROM THE PRIMARY PSM 1L (1R). THIS VOLTAGE IS SUPPLIED THROUGH THREE CONNECTORS ON THE E1-1 (E2-1) SHELF. FOR A CIRCUIT WITH THE PRIMARY PSM REMOVED, THE NOMINAL RESISTANCE VALUES AT THE SHELF CONNECTOR ARE AS SHOWN IN TABLE 105.

THESE STEPS WILL ISOLATE A SHORTED OR A LOW RESISTANCE PSM WHICH WOULD CAUSE THE POWER SUPPLY FUSE TO MELT (~103 PSMs), OR THE CIRCUIT BREAKER TO OPEN (~104 PSMs):

1. THE PSMs ARE REMOVED, ONE AT A TIME, AND THE RESISTANCE IS MEASURED AT EACH SHELF CONNECTOR AND THE VALUES ARE WRITTEN DOWN.
2. IF THE RESISTANCE VALUES BETWEEN THE PINS OR FROM EITHER PIN TO GROUND ARE GREATER THAN OR EQUAL TO THE NOMINAL VALUES AS SHOWN IN TABLE 105, THE CIRCUIT IS OK BUT THE REMOVED PSM CONTAINS A SHORT OR IS DEFECTIVE.

WITH BOTH PSM 1L AND PSM 1R REMOVED, IF THE RESISTANCE VALUES FROM EITHER PIN TO GROUND ON EACH SHELF CONNECTOR ARE NOT INFINITE, WIRING CONTINUITY CHECKS ARE REQUIRED AS SHOWN IN TABLE 106.

6 AIRPLANES WITH ~103 PSMs  
7 AIRPLANES WITH ~104 PSMs

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 7)

EFFECTIVITY  
-100 SERIES SPOILER CONTROL MODULES

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(BLOCK 41)

NO

42 REMOVE SPOILER CONTROL  
MODULE 1L (1R), M530 (M533)  
(AMM 27-09-00).  
DOES RESISTANCE BETWEEN  
PINS INCREASE?

YES

69 INSTALL ALL SPOILER  
CONTROL MODULES REMOVED PRIOR  
TO THIS POINT IN THE PROCEDURE  
(AMM 27-09-00/401).

### WARNING

INADVERTENT SPOILER MOVEMENT  
RESULTING FROM DISCONNECTING  
THE FOLLOWING CONNECTOR COULD  
CAUSE INJURY TO PERSONNEL.

DEACTIVATE SPOILER/SPEED-  
BRAKE CONTROL SYSTEM  
(AMM 27-61-00/201, PAR. 7).  
DISCONNECT CONNECTOR D161  
ON SPOILER POWER CONTROL  
ACTUATOR (PCA) 2 (1), M306  
(M307).

IF RESISTANCE INCREASES,  
REPLACE PCA 2 (1)  
(AMM 27-61-02).

IF THE PROBLEM CONTINUES,  
DISCONNECT CONNECTOR D161 ON  
PCA 11 (12), M317 (M316).

IF RESISTANCE INCREASES,  
REPLACE PCA 11 (12)  
(AMM 27-61-02).

IF THE PROBLEM CONTINUES,  
CHECK AND REPAIR CIRCUIT  
BETWEEN SCM, PSM, AND PCAs PER  
TABLE 106.

CONNECT THE CONNECTOR  
THAT WAS DISCONNECTED DURING  
THE PROCEDURE.

RESTORE SPOILER/SPEEDBRAKE  
CONTROL SYSTEM (AMM 27-61-00/  
201, PAR. 7).

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 8)

EFFECTIVITY  
-100 SERIES SPOILER CONTROL MODULES

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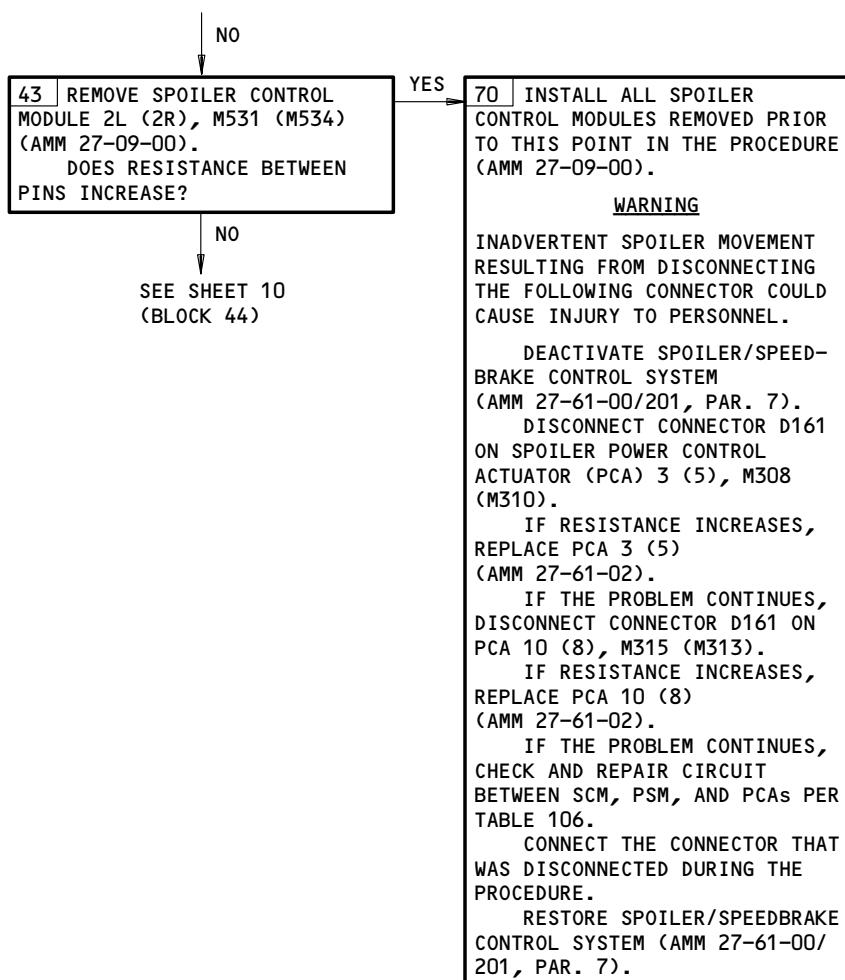
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(BLOCK 42)



Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 9)

EFFECTIVITY  
-100 SERIES SPOILER CONTROL MODULES

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FROM SHEET 9  
 (BLOCK 43)

NO

**44** REMOVE SPOILER CONTROL  
 MODULE 3L (3R), M532 (M535)  
 (AMM 27-09-00).  
 DOES RESISTANCE BETWEEN  
 PINS INCREASE?

YES

**71** INSTALL ALL SPOILER  
 CONTROL MODULES REMOVED PRIOR  
 TO THIS POINT IN THE PROCEDURE  
 (AMM 27-09-00).

**WARNING**

INADVERTENT SPOILER MOVEMENT  
 RESULTING FROM DISCONNECTING  
 THE FOLLOWING CONNECTOR COULD  
 CAUSE INJURY TO PERSONNEL.

DEACTIVATE SPOILER/SPEED-  
 BRAKE CONTROL SYSTEM  
 (AMM 27-61-00/201, PAR. 7).  
 DISCONNECT CONNECTOR D161  
 ON SPOILER POWER CONTROL  
 ACTUATOR (PCA) 4 (6), M309  
 (M311).

IF RESISTANCE INCREASES,  
 REPLACE PCA 4 (6)  
 (AMM 27-61-02).

IF THE PROBLEM CONTINUES,  
 DISCONNECT CONNECTOR D161 ON  
 PCA 9 (7), M314 (M312).

IF RESISTANCE INCREASES,  
 REPLACE PCA 9 (7)  
 (AMM 27-61-02).

IF THE PROBLEM CONTINUES,  
 CHECK AND REPAIR CIRCUIT  
 BETWEEN SCM, PSM, AND PCAs PER  
 TABLE 106.

CONNECT THE CONNECTOR THAT  
 WAS DISCONNECTED DURING THE  
 PROCEDURE.

RESTORE SPOILER/SPEEDBRAKE  
 CONTROL SYSTEM (AMM 27-61-00/  
 201, PAR. 7).

**45** DISCONNECT CAPT (F/O)  
 CONTROL WHEEL RVDTs, TS5081  
 (TS5082), CONNECTORS D589,  
 D591,D593 (D595,D597,D599)  
 (WDM 27-61-15,-14,-16,-17,  
 -13,-18).  
 DOES RESISTANCE INCREASE?

YES

**72** REPLACE CAPT (F/O)  
 CONTROL WHEEL RVDTs, TS5081  
 (TS5082)(AMM 27-61-04).

INSTALL ALL MODULES THAT  
 WERE REMOVED IN THIS PROCEDURE  
 AND CONNECT ALL CONNECTORS  
 DISCONNECTED DURING THIS  
 PROCEDURE (AMM 27-09-00).

RESTORE SPOILER/SPEEDBRAKE  
 CONTROL SYSTEM (AMM 27-61-00/  
 201, PAR. 7).

 NO  
 SEE SHEET 11  
 (BLOCK 46)

**Spoiler Control Module BITE Procedure**  
**Figure 105 (Sheet 10)**

EFFECTIVITY  
 -100 SERIES SPOILER CONTROL MODULES

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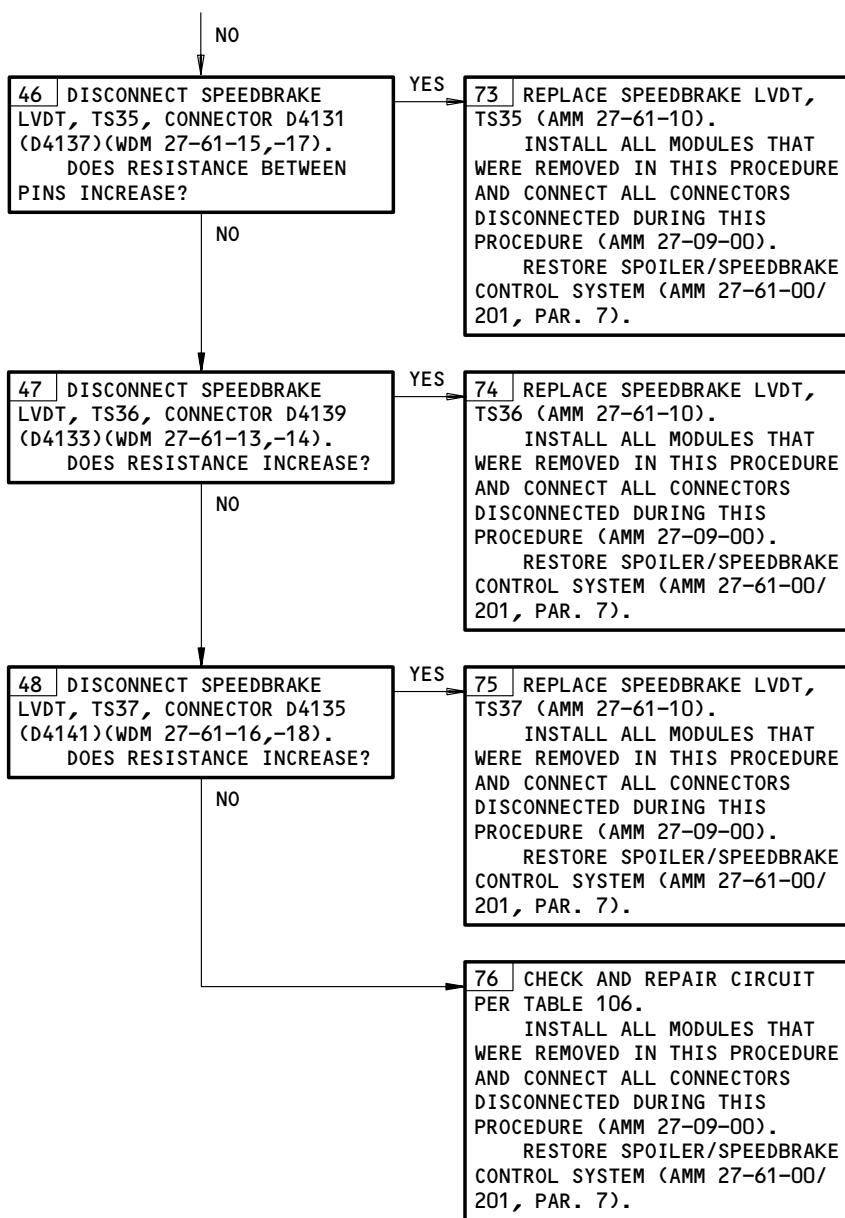
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FROM SHEET 10  
(BLOCK 45)



Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 11)

EFFECTIVITY  
-100 SERIES SPOILER CONTROL MODULES

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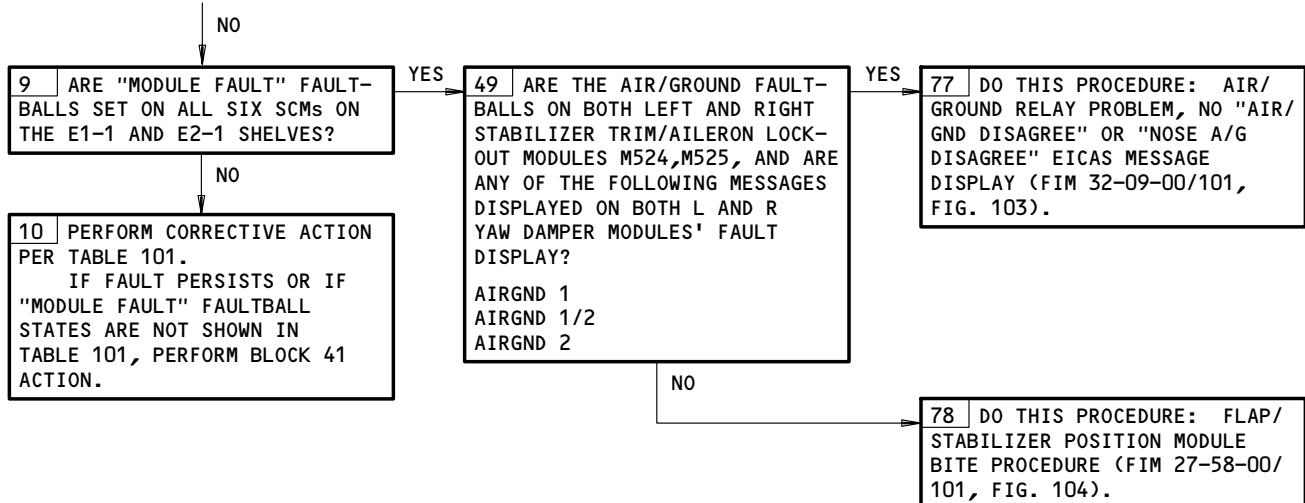
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Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 12)

EFFECTIVITY  
-100 SERIES SPOILER CONTROL MODULES

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FROM SHEET 7  
(BLOCK 41A)

YES

11 REMOVE PSM 1L (M536) FROM THE RACK.  
MEASURE RESISTANCE AT THE CONNECTOR AND PINS FOR THE TRIPPED CB OR FAULT LIGHT PER TABLE 105.  
FOR CB OR FAULT LIGHT PAIR A (B,C) ON PSM 1L (M536), REMOVE D591 (D589,D593) FROM THE CAPTAIN'S CONTROL WHEEL RVDT (TS5081).  
DOES THE RESISTANCE READING INCREASE?

NO

YES

79 REPLACE THE CAPTAIN'S CONTROL WHEEL RVDT (TS5081) ON THE CAPTAIN'S FORWARD QUADRANT (AMM 27-61-04/401).

12 REINSTALL THE CONNECTOR REMOVED IN PREVIOUS STEP.  
REMOVE CONNECTOR D4133J (D4131J,D4135J) FROM CAPTAIN'S PCA 2 (1,3) SPEEDBRAKE LEVER LVDT, TS36 (TS35,TS37).  
DOES THE RESISTANCE READING INCREASE?

YES

80 REPLACE THE CAPTAIN'S SPEEDBRAKE LEVER LVDT, TS36 (TS35,TS37) (AMM 27-61-02/401).

NO

13 REINSTALL THE CONNECTOR REMOVED IN THE PREVIOUS STEP.  
REMOVE SCM 1L (2L,3L), M530 (M531,M532).  
DOES THE RESISTANCE READING INCREASE?

YES

50 REINSTALL SCM 1L (2L,3L), M530 (M531,M532).  
REMOVE CONNECTOR D161 FROM SPOILER PCA 2 (3,4) LVDT.  
DOES THE RESISTANCE READING INCREASE?

YES

81 REPLACE SPOILER PCA 2 (3,4), M307 (M308,M309) (AMM 27-61-02/401).

NO

NO

YES

51 REINSTALL THE CONNECTOR REMOVED IN THE PREVIOUS STEP.  
REMOVE CONNECTOR D161 ON SPOILER PCA 11 (10,9) LVDT.  
DOES THE RESISTANCE READING INCREASE?

YES

82 REPLACE SPOILER PCA 11 (10,9), M316 (M315,M314) (AMM 27-61-02/401).

NO

83 REPLACE SCM 1L (2L,3L), M530 (M531,M532) (AMM 27-09-00/201).

14 REINSTALL SCM 1L (2L,3L).  
REMOVE SCM 2L (3L,1L), M531 (M532,M530).  
DOES THE RESISTANCE READING INCREASE?

YES

84 REPLACE SCM 2L (3L,1L), M531 (M532,M530) (AMM 27-09-00/201).

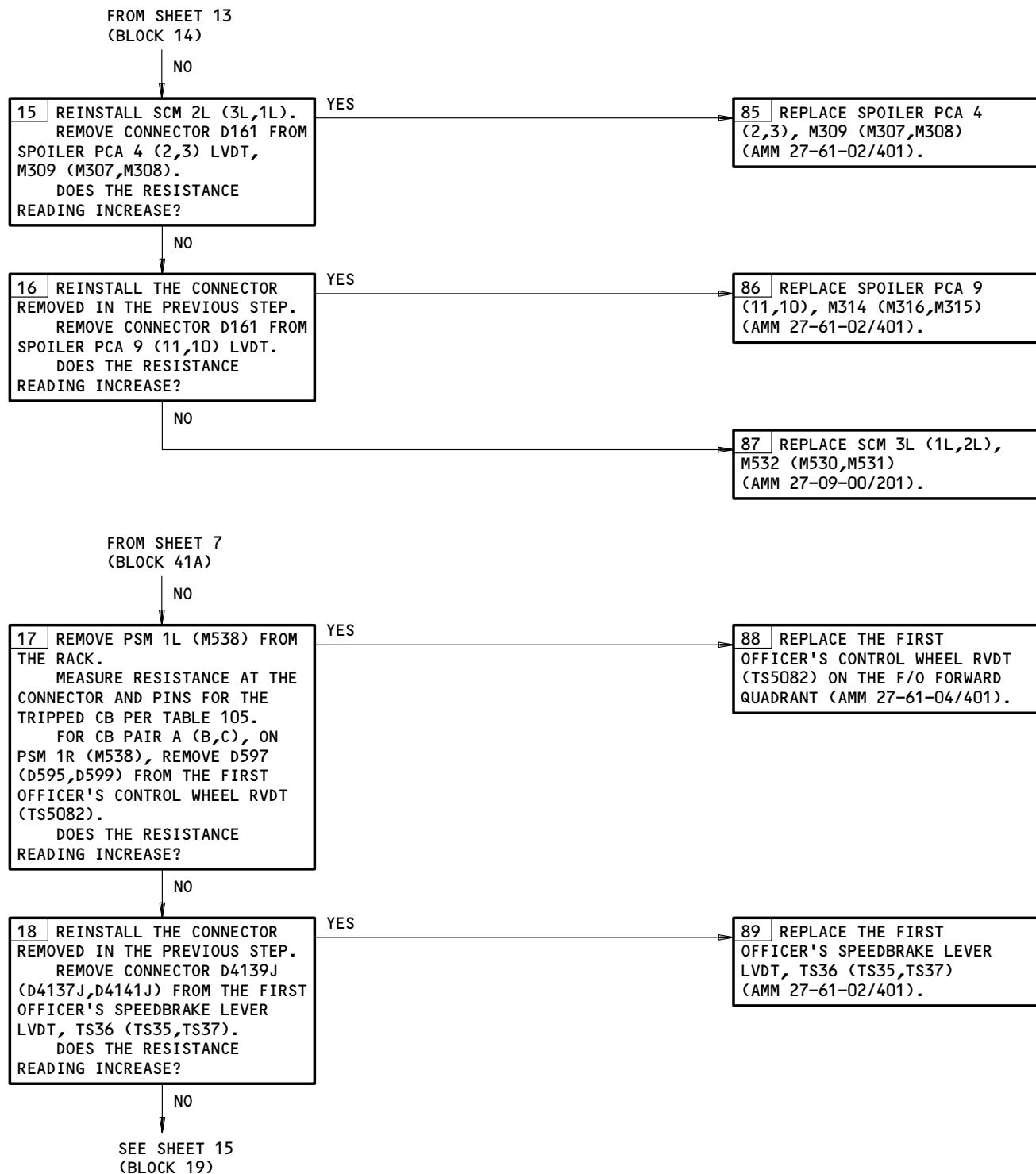
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SEE SHEET 14  
(BLOCK 15)

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 13)

EFFECTIVITY  
-100 SERIES SPOILER CONTROL MODULES

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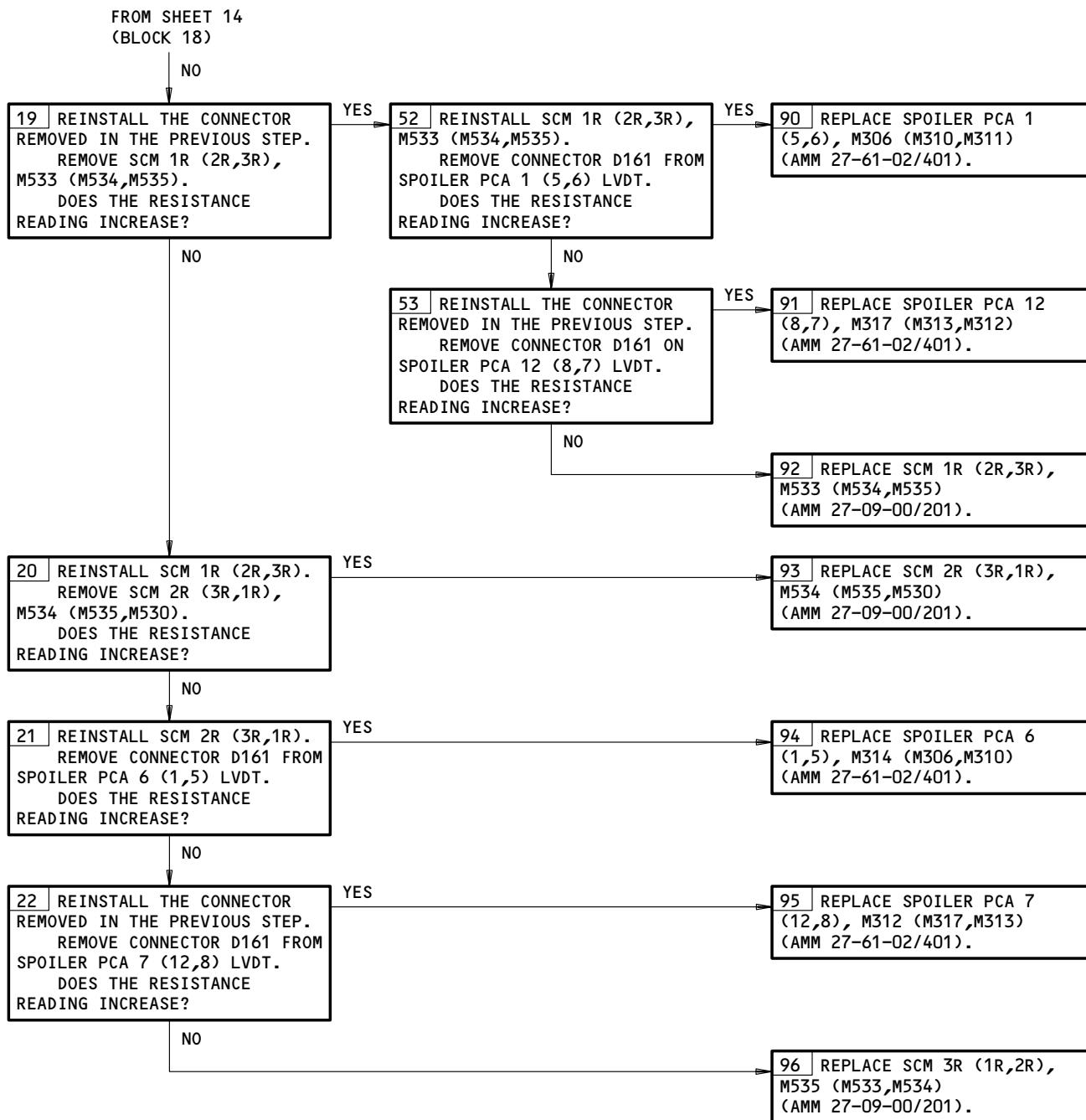


**Spoiler Control Module BITE Procedure**  
**Figure 105 (Sheet 14)**

EFFECTIVITY  
-100 SERIES SPOILER CONTROL MODULES

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**BOEING**  
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Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 15)

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-100 SERIES SPOILER CONTROL MODULES

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SYSTEM COMMAND PANEL POS	"SPOILERS" EICAS MAINT MSG	SCM "MODULE FAULT" BALL STATUS						PROBABLE CAUSE
		1L	2L	3L	1R	2R	3R	
CONTROL WHEEL FULL CW OR CCW	YES	SET	-	-	-	-	SET	GROUND MODE, PANELS IN EITHER POSITION
PANEL PAIR GROUND AIR		2/11 30° 45°	3/10 45° 45°	4/9 0° 0°	1/12 45° 45°	5/8 45° 45°	6/7 30° 15°	AIR/GROUND SYSTEM 1 OR 2 FAILED. DO THIS PROCEDURE: EICAS MSG AIR/GND DISAGREE DISPLAYED ON GND PROCEDURE (FIM 32-09-00/101, FIG. 103B).
SPEEDBRAKE LEVER FULL UP	YES	SET	SET	SET	SET	SET	SET	AIR MODE, PANELS AT "IN-AIR" POSITION
PANEL PAIR GROUND AIR		2/11 45° 30°	3/10 45° 30°	4/9 55° 0°	1/12 45° 30°	5/8 45° 20°	6/7 30° 15°	AIR/GROUND SYSTEM 1 OR 2 FAILED. DO THIS PROCEDURE: EICAS MSG AIR/GND DISAGREE DISPLAYED ON GND PROCEDURE (FIM 32-09-00/101, FIG. 103B).

EFFECTS OF AIR/GROUND FAULTS ON SPOILER/SPEEDBRAKE CONTROL SYSTEM  
(AIRPLANE - ON GROUND OR SIMULATED IN AIR)

TABLE 101

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 16)

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SPEEDBRAKE LVDT				TERMINAL BLOCK/PINS	SPOILER CONTROL MODULE				
NO.	MODULE	CONNECTOR	PINS		#	MODULE	CHAN	CONNECTOR	PINS
1 CAPT	TS35 (WDM 27-61-15)	D4131J	3 4 5	TB101	G110	M530 (WDM 27-61-14)	A	D825A	K3 K5 K4
					G111	2L M531 (WDM 27-41-15)	B	D827B	K4 K6 K5
					G112	3L M532 (WDM 27-61-16)	C	D829B	K12 K14 K13
2 CAPT	TS36 (WDM 27-61-14)	D4133J	3 4 5	TB101	G173	1L M530 (WDM 27-61-14)	B	D825B	K4 K6 K5
					G174	2L M531 (WDM 27-41-15)	C	D827B	K12 K14 K13
					G175	3L M532 (WDM 27-61-16)	A	D829A	K3 K5 K4
3 CAPT	TS37 (WDM 27-61-16)	D4135J	3 4 5	TB101	G46	1L M530 (WDM 27-61-14)	C	D825B	K12 K14 K13
					G47	2L M531 (WDM 27-41-15)	A	D827A	K3 K5 K4
					G48	3L M532 (WDM 27-61-16)	B	D829B	K4 K6 K5
1 F/O	TS35 (WDM 27-61-17)	D4137J	3 4 5	TB141	G12	1R M533 (WDM 27-61-13)	A	D831A	K3 K5 K4
					G13	2R M534 (WDM 27-61-17)	B	D833B	K4 K6 K5
					G14	3R M535 (WDM 27-61-18)	C	D835B	K12 K14 K13

SPOILER CONTROL MODULE TO SPEEDBRAKE LVDT  
TABLE 102

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 17)

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SPEEDBRAKE LVDT				TERMINAL BLOCK/PINS		SPOILER CONTROL MODULE				
NO.	MODULE	CONNECTOR	PINS			#	MODULE	CHAN	CONNECTOR	PINS
2 F/O	TS36 (WDM 27-61-13)	D4139J	3 4 5	TB141	G73 G74 G75	1R	M533 (WDM 27-61-13)	B	D831B	K4 K6 K5
						2R	M534 (WDM 27-61-17)	C	D833B	K12 K14 K13
						3R	M535 (WDM 27-61-18)	A	D835A	K3 K5 K4
3 F/O	TS37 (WDM 27-61-18)	D4141J	3 4 5	TB141	G35 G36 G37	1R	M533 (WDM 27-61-13)	C	D831B	K12 K14 K13
						2R	M534 (WDM 27-61-17)	A	D833A	K3 K5 K4
						3R	M535 (WDM 27-61-18)	B	D835B	K4 K6 K5

SPOILER CONTROL MODULE TO SPEEDBRAKE LVDT  
TABLE 102

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 18)

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CONTROL WHEEL RVDT				TERMINAL BLOCK/PINS	SPOILER CONTROL MODULE				
NO.	MODULE	CONNECTOR	PINS		#	MODULE	CHAN	CONNECTOR	PINS
1 CAPT	TS5081 (WDM 27-61-15)	D589	3 4 5	TB101	G9	M530 (WDM 27-61-14)	A	D825A	J3 J5 J4
					G10				
					G11	1L			
2 CAPT	TS5081 (WDM 27-61-14)	D591	3 4 5	TB101	G72	M530 (WDM 27-61-14)	B	D825B	J4 J6 J5
					G73				
					G74	2L			
3 CAPT	TS5081 (WDM 27-61-16)	D593	3 4 5	TB101	G43	M530 (WDM 27-61-14)	C	D825B	J12 J14 J13
					G44				
					G45	1L			
1 F/O	TS5082 (WDM 27-61-17)	D595	3 4 5	TB141	G9	M533 (WDM 27-61-13)	A	D831A	J3 J5 J4
					G10				
					G11	2R			
						M534 (WDM 27-61-17)	B	D833B	J4 J6 J5
						3R			
						M535 (WDM 27-61-18)	C	D835B	J12 J14 J13

SPOILER CONTROL MODULE TO RVDT  
TABLE 102

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 19)

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CONTROL WHEEL RVDT				TERMINAL BLOCK/PINS		SPOILER CONTROL MODULE				
NO.	MODULE	CONNECTOR	PINS			#	MODULE	CHAN	CONNECTOR	PINS
2 F/O	TS5082 (WDM 27-61-13)	D597	3 4 5	TB141	G76 G77 G78	1R	M533 (WDM 27-61-13)	B	D831B	J4 J6 J5
						2R	M534 (WDM 27-61-17)	C	D833B	J12 J14 J13
						3R	M535 (WDM 27-61-18)	A	D835A	J3 J5 J4
3 F/O	TS5082 (WDM 27-61-18)	D599	3 4 5	TB141	G32 G33 G34	1R	M533 (WDM 27-61-13)	C	D831B	J12 J14 J13
						2R	M534 (WDM 27-61-17)	A	D833A	J3 J5 J4
						3R	M535 (WDM 27-61-18)	B	D835B	J4 J6 J5

SPOILER CONTROL MODULE TO RVDT  
TABLE 103

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 20)

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CONTINUITY BETWEEN				CONTINUITY BETWEEN			
SCM MODULE CONNECTOR, PIN		PCA MODULE CONNECTOR, PIN		SCM MODULE CONNECTOR, PIN		PCA MODULE CONNECTOR, PIN	
SCM 1L	M530 D825A, G9 (G10) D825A, G9 (G10) D825A, G8 (G11) D825A, G8 (G11) D825A, K8 (J8) D825A, K10 (J10) D825A, K9 (J9) D825A, K11 D825A, J11 (WDM 27-61-14)	PCA 2 (11)	M307 (316) D161, 1 D161, 2 D161, 3 D161, 4 D161, 5 D161, 6 D161, 7 D161, 8 D161, 9	SCM 1R	M533 D831A, G9 (G10) D831A, G9 (G10) D831A, G8 (G11) D831A, G8 (G11) D831A, K8 (J8) D831A, K10 (J10) D831A, K9 (J9) D831A, K11 D831A, J11 (WDM 27-61-13)	PCA 1 (12)	M306 (317) D161, 1 D161, 2 D161, 3 D161, 4 D161, 5 D161, 6 D161, 7 D161, 8 D161, 9
SCM 2L	M531 D827A, G9 (G10) D827A, G9 (G10) D827A, G8 (G11) D827A, G8 (G11) D827A, K8 (J8) D827A, K10 (J10) D827A, K9 (J9) D827A, K11 D827A, J11 (WDM 27-61-15)	PCA 3 (10)	M308 (315) D161, 1 D161, 2 D161, 3 D161, 4 D161, 5 D161, 6 D161, 7 D161, 8 D161, 9	SCM 2R	M534 D833A, G9 (G10) D833A, G9 (G10) D833A, G8 (G11) D833A, G8 (G11) D833A, K8 (J8) D833A, K10 (J10) D833A, K9 (J9) D833A, K11 D833A, J11 (WDM 27-61-17)	PCA 5 (8)	M310 (M313) D161, 1 D161, 2 D161, 3 D161, 4 D161, 5 D161, 6 D161, 7 D161, 8 D161, 9
SCM 3L	M532 D829A, G9 (G10) D829A, G9 (G10) D829A, G8 (G11) D829A, G8 (G11) D829A, K8 (J8) D829A, K10 (J10) D829A, K9 (J9) D829A, K11 D829A, J11 (WDM 27-61-16)	PCA 4 (9)	M309 (314) D161, 1 D161, 2 D161, 3 D161, 4 D161, 5 D161, 6 D161, 7 D161, 8 D161, 9	SCM 3R	M535 D835A, G9 (G10) D835A, G9 (G10) D835A, G8 (G11) D835A, G8 (G11) D835A, K8 (J8) D835A, K10 (J10) D835A, K9 (J9) D835A, K11 D835A, J11 (WDM 27-61-18)	PCA 6 (7)	M311 (312) D161, 1 D161, 2 D161, 3 D161, 4 D161, 5 D161, 6 D161, 7 D161, 8 D161, 9

SPOILER CONTROL MODULE TO POWER CONTROL ACTUATOR INTERFACES  
TABLE 104

NOTE: ALL PCAs HAVE SAME CONNECTOR NUMBER.

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 21)

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MODULE	CB PAIR	CONNECTOR	PINS	RESISTANCE MEASUREMENT
PSM 1L M536	B	D1251A (WDM 27-61-15)	A1, C1 A1, GROUND C1, GROUND	20 OHMS NOMINAL 900 OHMS NOMINAL 900 OHMS NOMINAL
	A	D1251B (WDM 27-61-14)	A1, C1 A1, GROUND C1, GROUND	20 OHMS NOMINAL 900 OHMS NOMINAL 900 OHMS NOMINAL
	C	D1251B (WDM 27-61-16)	A5, C5 A5, GROUND C5, GROUND	20 OHMS NOMINAL 900 OHMS NOMINAL 900 OHMS NOMINAL
PSM 1R M538	B	D1255A (WDM 27-61-17)	A1, C1 A1, GROUND C1, GROUND	20 OHMS NOMINAL 900 OHMS NOMINAL 900 OHMS NOMINAL
	A	D1255B (WDM 27-61-13)	A1, C1 A1, GROUND C1, GROUND	20 OHMS NOMINAL 900 OHMS NOMINAL 900 OHMS NOMINAL
	C	D1255B (WDM 27-61-18)	A5, C5 A5, GROUND C5, GROUND	20 OHMS NOMINAL 900 OHMS NOMINAL 900 OHMS NOMINAL

POWER SUPPLY MODULE OUTPUTS  
TABLE 105

 AIRPLANES WITH -104 PSMS

Spoiler Control Module BITE Procedure  
Figure 105 (Sheet 22)

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CONTINUITY BETWEEN		CONTINUITY BETWEEN	
MODULE CONNECTOR, PIN(S)	PSM,PCA MODULE CONNECTOR, PIN(S)	MODULE CONNECTOR, PIN(S)	PSM,PCA MODULE CONNECTOR, PIN(S)
SCM 1L M530 D825B, K7 D825B, J7 D825B, J7	PSM 1L M536 D1251B, A1 D1251B, C1 PSM 2L M537 D1253B, C1	SCM 1R M533 D831B, K7 D831B, J7 D831B, J7	PSM 1R M538 D1255B, A1 D1255B, C1 PSM 2R M539 D1257B, C1
D825A, K11 (J11)	PCA 2 M307 D161, 8 (9)	D831A, K11 (J11)	PCA 1 M306 D161, 8 (9)
D825A, K11 (J11) (WDM 27-61-14)	PCA 11 M316 D161, 8 (9)	D831A, K11 (J11) (WDM 27-61-13)	PCA 12 M317 D161, 8 (9)
SCM 2L M531 D827B, K7 D827B, J7 D827B, J7	PSM 1L M536 D1251A, A1 D1251A, C1 PSM 2L M537 D1253A, C1	SCM 2R M534 D833B, K7 D833B, J7 D833B, J7	PSM 1R M538 D1255A, A1 D1255A, C1 PSM 2R M539 D1257A, C1
D827A, K11 (J11)	PCA 3 M308 D161, 8 (9)	D833A, K11 (J11)	PCA 5 M310 D161, 8 (9)
D827A, K11 (J11) (WDM 27-61-15)	PCA 10 M315 D161, 8 (9)	D833A, K11 (J11) (WDM 27-61-17)	PCA 8 M313 D161, 8 (9)
SCM 3L M532 D829B, K7 D829B, J7 D829B, J7	PSM 1L M536 D1251B, A5 D1251B, C5 PSM 2L M537 D1253B, C5	SCM 3R M535 D835B, K7 D835B, J7 D835B, J7	PSM 1R M538 D1255B, A5 D1255B, C5 PSM 2R M539 D1257B, C5
D829A, K11 (J11)	PCA 4 M309 D161, 8 (9)	D835A, K11 (J11)	PCA 6 M311 D161, 8 (9)
D829A, K11 (J11) (WDM 27-61-16)	PCA 9 M314 D161, 8 (9)	D835A, K11 (J11) (WDM 27-61-18)	PCA 7 M312 D161, 8 (9)

**SPOILER CONTROL MODULE AC INTERFACES**  
**TABLE 106**

NOTE: ALL PCAs HAVE SAME CONNECTOR NUMBER.

**Spoiler Control Module BITE Procedure**  
**Figure 105 (Sheet 23)**

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**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:

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

EICAS (AMM 31-41-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11C6, 11C7, 11C8, 11C9, 11G17, 11G18, 11G27, 11G28

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

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

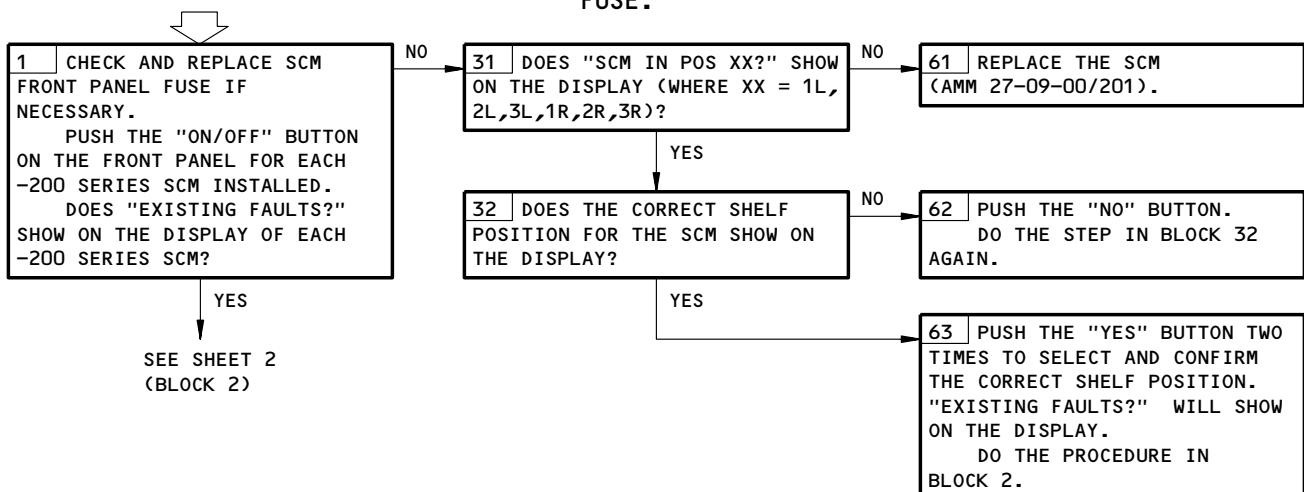
HYDRAULIC POWER IS ON (AMM 29-11-00/201)

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**NOTE:** THE SPOILERS HAVE NUMBERS 1-12 FROM THE LEFT WING TIP TO THE RIGHT WING TIP, AS YOU FACE IN THE FORWARD DIRECTION.

USE THE PROCEDURE BELOW TO EXAMINE THE EXISTING FAULTS FOR EACH -200 SERIES SPOILER CONTROL MODULE (SCM) INSTALLED ON THE AIRPLANE. THE -200 SERIES SCMs HAVE A BITE DISPLAY. THE -100 SERIES SCMs HAVE FAULTBALLS.

FOR SCM MODULES WITH FUSES, LOOK FOR A BLOWN FUSE.

**SPOILER CONTROL  
MODULE BITE  
PROCEDURE**


Spoiler Control Module BITE Procedure  
Figure 105A (Sheet 1)

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-200 SERIES SPOILER CONTROL MODULES

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FROM SHEET 1  
(BLOCK 1)

YES

2 PUSH THE "YES" BUTTON.  
DOES A FAULT SHOW ON AT  
LEAST ONE -200 SERIES SCM?

NO

33 ARE THERE -100 SERIES SCMs  
INSTALLED?

NO

64 DO THE SPOILER SYSTEM TEST  
(CMM 27-09-00/201).  
IF THE PROBLEM CONTINUES,  
DO THE STEP IN BLOCK 66.

YES

34 DO ANY OF THE -100 SERIES  
SCMs HAVE FAULTBALLS THAT SHOW  
YELLOW?

NO

YES

65 DO THIS PROCEDURE:  
SPOILER CONTROL MODULE BITE  
PROCEDURE (FIG. 105).

NOTE: TREAT THE -200 SERIES  
SCMs WITH NO EXISTING  
FAULTS AS -100 SERIES  
SCMs WITH NO FAULTBALLS  
THAT SHOW YELLOW.

3 MAKE A RECORD OF ALL THE FAULTS AND THE FAULT DETAILS FOR EACH  
OF THE -200 SERIES SCMs INSTALLED. IF THERE ARE NO EXISTING  
FAULTS, A "NO FAULTS" MESSAGE WILL SHOW.

PUSH THE DOWN ARROW BUTTON TO SCROLL THROUGH THE FAULT MES-  
AGES. AFTER EACH FAULT MESSAGE WILL BE THE OPTION TO VIEW THE  
FAULT DETAILS. PUSH THE "YES" BUTTON TO VIEW THE FAULT DETAILS.  
PUSH THE "NO" BUTTON OR THE DOWN ARROW BUTTON TO SKIP THE FAULT  
DETAILS.

NOTE: THE FAULT DETAILS WILL GIVE MORE SPECIFIC DATA ABOUT THE  
FAULT AS FOLLOWS:

1. THE EQUIPMENT NUMBER OF THE POSSIBLE DEFECTIVE PART AND  
THE APPLICABLE WIRING DIAGRAM REFERENCE
2. "ACTIVE: YES" OR "ACTIVE: NO", IF THE SCM CURRENTLY  
DOES OR DOES NOT DETECT THE FAULT
3. "TYPE: HARD", IF THE FAULT WAS ACTIVE SINCE IT WAS  
DETECTED; OR "TYPE: INTERMIT", IF THE FAULT WAS  
INACTIVE AT LEAST ONE TIME SINCE IT WAS DETECTED
4. THE FLIGHT PHASE WHEN THE FAULT OCCURRED. THE POSSIBLE  
INDICATIONS ARE:

TAXI	5 MINUTES OR LESS BEFORE A GROUND TO AIR TRANSITION
TAKEOFF	1 MINUTE OR LESS AFTER A GROUND TO AIR TRANSITION
CRUISE	AFTER TAKEOFF AND BEFORE DESCENT
DESCENT	5 MINUTES OR LESS BEFORE AN AIR TO GROUND TRANSITION
LANDING	1 MINUTE OR LESS AFTER AN AIR TO GROUND TRANSITION
ON GND	AFTER LANDING AND BEFORE TAXI
UNKNOWN	IF FLIGHT PHASE CANNOT BE DETERMINED BECAUSE OF MULTIPLE AIR/GROUND FAULTS.

AFTER THE LAST FAULT IS VIEWED, "PR RESET TO CLEAR" WILL SHOW.  
TO RETURN TO THE TOP OF THE FAULT LIST, PUSH THE DOWN ARROW BUTTON.  
TO VIEW THE FAULT LIST IN THE REVERSE DIRECTION, PUSH THE UP ARROW  
BUTTON.

DO THE PROCEDURE FOR THE FAULTS AS SHOWN IN THE TABLE OF  
CORRECTIVE ACTIONS THAT FOLLOWS.

Spoiler Control Module BITE Procedure  
Figure 105A (Sheet 2)

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-200 SERIES SPOILER CONTROL MODULES

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FAULT MESSAGE	CORRECTIVE ACTION
SCM FAULT	REPLACE THE SCM THAT SHOWS THIS FAULT (AMM 27-09-00/201). 
SCM 1L FAULT SCM 2L FAULT SCM 3L FAULT	1. MAKE SURE THE SCM SHOWN ON THE DISPLAY IS CORRECTLY INSTALLED IN THE EQUIPMENT RACK. PUSH THE RESET BUTTON ON THE SCM THAT SHOWS THIS FAULT. 2. IF THE PROBLEM CONTINUES, REPLACE THE SCM AT THE SHELF POSITION SHOWN ON THE DISPLAY (AMM 27-09-00/201).  3. IF THE PROBLEM CONTINUES, REMOVE THE SCM AT THE SHELF POSITION SHOWN ON THE DISPLAY, AND REMOVE THE SCM THAT SHOWS THIS FAULT (AMM 27-09-00/201). DO A CONTINUITY TEST ON THE WIRE BETWEEN THE APPLICABLE SHELF CONNECTORS FROM PIN C15 OF THE SCM THAT WAS SHOWN ON THE DISPLAY, TO PIN C14 OF THE SCM THAT SHOWED THIS FAULT:  <u>SCM:</u> 1L 1R 2L 2R 3L 3R <u>CONNECTOR:</u> D825A D831A D827A D833A D829A D835A 4. REPAIR THE WIRE IF IT IS NECESSARY. INSTALL THE SCMs REMOVED IN THIS STEP (AMM 27-09-00/201).  5. IF THE PROBLEM CONTINUES, REPLACE THE SCM THAT SHOWS THIS FAULT (AMM 27-09-00/201). 
26 VAC 26 VAC 27-61-13 27-61-14 26 VAC 26 VAC 27-61-15 27-61-16 26 VAC 26 VAC 27-61-17 27-61-18	DO THE PROCEDURE IN BLOCK 10.  <u>NOTE:</u> USE THE WDM REFERENCE GIVEN IN THE FAULT MESSAGE TO FIND THE APPLICABLE CIRCUIT.
A/G SYS1 FAULT A/G SYS2 FAULT AIR/GND FAULT	1. PUSH THE RESET BUTTON ON THE SCM THAT SHOWS THIS FAULT. STOP FOR 25 SECONDS. 2. IF THE PROBLEM CONTINUES, REPLACE THE RELAY SHOWN IN THE FAULT DETAILS (AMM 32-09-02/201).  3. IF THE PROBLEM CONTINUES, DO A CONTINUITY TEST ON THE APPLICABLE WIRES ON THE CONNECTORS BETWEEN THE RELAY SHOWN IN THE FAULT DETAILS, AND THE SCM THAT SHOWS THIS FAULT.   <u>NOTE:</u> WHEN YOU CHANGE THE AIR/GROUND STATE OF THE AIRPLANE, AN AIR/GROUND SYSTEM FAULT WILL OCCUR IF THE AIR/GROUND SIGNALS DISAGREE FOR MORE THAN 25 SECONDS. WHEN YOU RESET THE SCMs, ALLOW 25 SECONDS TO MAKE SURE THE AIR/GROUND FAULT DOES NOT SHOW AGAIN.
SB LVDT FAULT	1. REPLACE THE SPEEDBRAKE LVDT SHOWN IN THE FAULT DETAILS (AMM 27-62-04/201).  2. IF THE PROBLEM CONTINUES, DO A CHECK FOR CONTINUITY ON THE WIRES BETWEEN THE CONNECTOR SHOWN IN THE FAULT DETAILS AND THE SCM THAT SHOWS THIS FAULT. 
CW RVDT FAULT	1. REPLACE THE CONTROL WHEEL RVDT UNIT SHOWN IN THE FAULT DETAILS (AMM 27-61-04/401).  2. IF THE PROBLEM CONTINUES, DO A CONTINUITY TEST ON THE WIRES OF THE CONNECTORS BETWEEN THE CONTROL WHEEL RVDT UNIT SHOWN IN THE FAULT DETAILS, AND THE SCM THAT SHOWS THIS FAULT. 

 DO THE SYSTEM TEST PROCEDURE FOR THE SPOILER CONTROL MODULES (AMM 27-09-00/201).

**Spoiler Control Module BITE Procedure**  
**Figure 105A (Sheet 3)**

EFFECTIVITY  
-200 SERIES SPOILER CONTROL MODULES

**27-09-00**

FAULT MESSAGE	CORRECTIVE ACTION
L FSPM FAULT  R FSPM FAULT  C FSPM FAULT	<ol style="list-style-type: none"> <li>1. REPLACE THE FLAP/STABILIZER POSITION MODULE (FSPM) SHOWN IN THE FAULT DETAILS (AMM 27-58-01/401). </li> <li>2. IF THE PROBLEM CONTINUES, DO A CONTINUITY TEST ON THE WIRES BETWEEN THE FSPM SHOWN IN THE FAULT DETAILS, AND THE SCM THAT SHOWS THIS FAULT. </li> </ol>
PSM 1 FAULT      PSM 2 FAULT	<ol style="list-style-type: none"> <li>1. REPLACE THE PSM SHOWN IN THE FAULT DETAILS (AMM 27-09-00/201). </li> <li>2. IF THE PROBLEM CONTINUES, DO A CHECK FOR CONTINUITY ON THE PSM VALID WIRES OF THE CONNECTORS BETWEEN THE PSM SHOWN IN THE FAULT DETAILS, AND THE SCM THAT SHOWS THIS FAULT. </li> <li>3. IF THE PROBLEM CONTINUES, REPLACE THE SCM THAT SHOWS THIS FAULT (AMM 27-09-00/201). </li> </ol>
PCA 1 FAULT      PCA 12 FAULT  PCA 2 FAULT      PCA 11 FAULT  PCA 3 FAULT      PCA 10 FAULT  PCA 4 FAULT      PCA 9 FAULT  PCA 5 FAULT      PCA 8 FAULT  PCA 6 FAULT      PCA 7 FAULT	<ol style="list-style-type: none"> <li>1. IF A FUSE ON THE SCM FRONT PANEL IS OPEN:           <ul style="list-style-type: none"> <li>• FOR THE PCA FAULTS 1,2,11,12, DO THE PROCEDURE IN FIG. 105, BLOCK 5. </li> <li>• FOR THE PCA FAULTS 3,5,8,10, DO THE PROCEDURE IN FIG. 105, BLOCK 6. </li> <li>• FOR THE PCA FAULTS 4,6,7,9, DO THE PROCEDURE IN FIG. 105, BLOCK 7. </li> </ul> <p><u>NOTE:</u> IN THE PROCEDURES ABOVE, TREAT THE -200 SERIES SCM WITH A PCA FAULT MESSAGE AS A -100 SERIES SCM WITH A PCA FAULTBALL THAT SHOWS YELLOW.</p> </li> <li>2. PUSH THE SCM RESET BUTTON. STOP FOR 10 SECONDS.</li> <li>3. IF THE FAULT RETURNS, USE THE PCA NUMBER SHOWN TO IDENTIFY THE WING LOCATION, AND REPLACE THE BAD PCA SHOWN IN THE FAULT DETAILS (AMM 27-61-02/201).           <p><u>NOTE:</u> • THE FAULTS "PCA 1" TO "PCA 6" CORRESPOND TO THE SPOILERS 1 (OUTBOARD) TO 6 (INBOARD) ON THE LEFT WING. • THE FAULTS "PCA 7" TO "PCA 12" CORRESPOND TO THE SPOILERS 7 (INBOARD) TO 12 (OUTBOARD) ON THE RIGHT WING.</p> </li> <li>4. IF THE PROBLEM CONTINUES, USE THE WDM REFERENCE SHOWN IN THE FAULT DETAILS TO EXAMINE THE WIRING FROM THE SCM THAT SHOWS THIS FAULT TO THE PCA THAT IT CONTROLS.</li> <li>5. REPAIR THE PROBLEMS THAT YOU FIND.</li> </ol>
SAM FAULT	<ol style="list-style-type: none"> <li>1. REPLACE THE STABILIZER TRIM/AILERON LOCKOUT MODULE (SAM) SHOWN IN THE FAULT DETAILS (AMM 27-09-00/201). </li> <li>2. IF THE PROBLEM CONTINUES, DO A CONTINUITY TEST ON THE WIRES BETWEEN THE SAM SHOWN IN THE FAULT DETAILS, AND THE SCM THAT SHOWS THIS FAULT. </li> </ol>

 Spoiler Control Module BITE Procedure  
 Figure 105A (Sheet 4)

 EFFECTIVITY  
 -200 SERIES SPOILER CONTROL MODULES

27-09-00

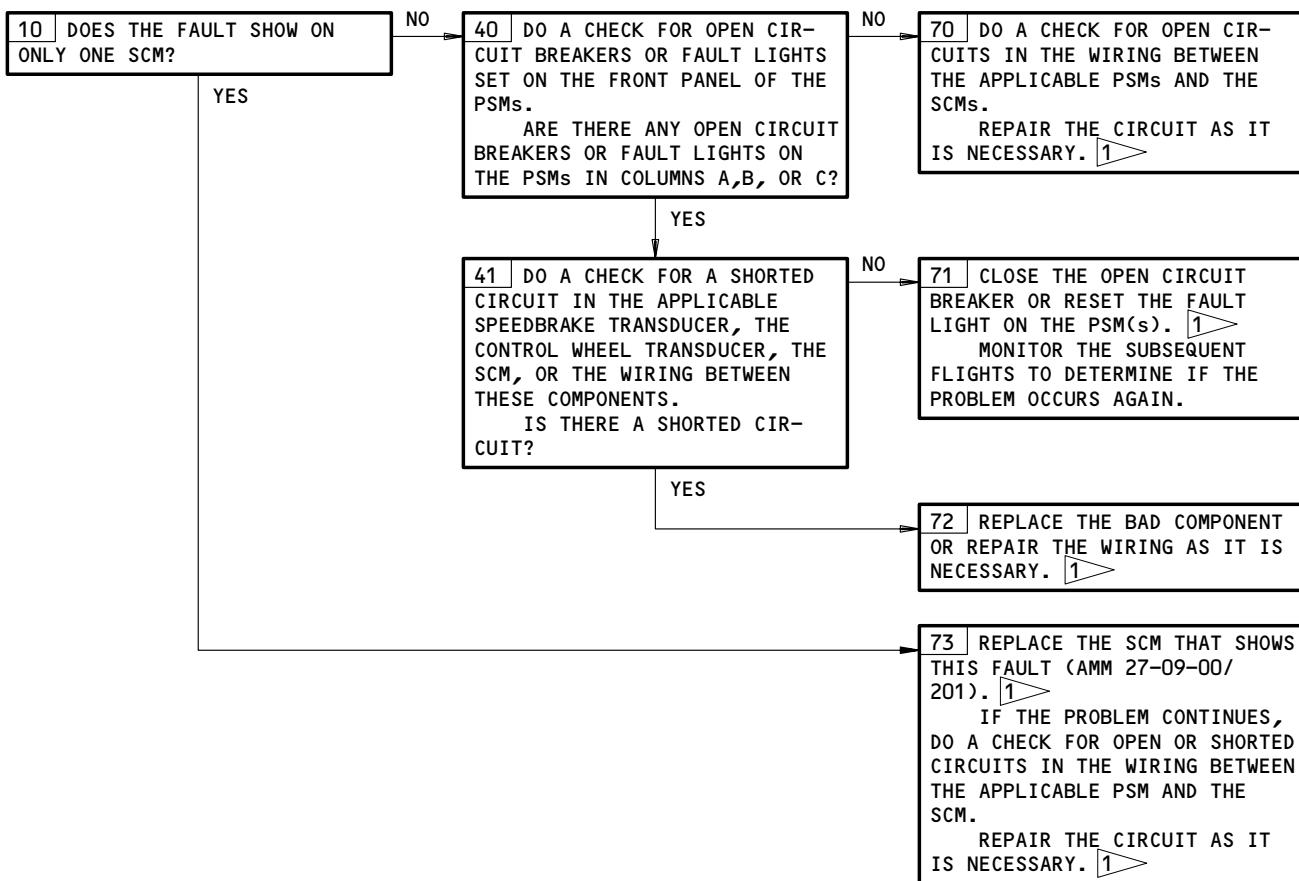
FAULT MESSAGE	CORRECTIVE ACTION
L HYD PRESS SW  R HYD PRESS SW	1. REPLACE THE HYDRAULIC SYSTEM PRESSURE SWITCH SHOWN IN THE FAULT DETAILS (AMM 29-11-17/401).  2. IF THE PROBLEM CONTINUES, DO A CHECK FOR CONTINUITY ON THE WIRES OF THE CONNECTORS BETWEEN THE HYDRAULIC SYSTEM PRESSURE SWITCH SHOWN IN THE FAULT DETAILS, AND THE SCM THAT SHOWS THIS FAULT. 
C HYD PRESS SW	1. REPLACE THE HYDRAULIC SYSTEM PRESSURE SWITCH SHOWN IN THE FAULT DETAILS (AMM 29-11-19/401).  2. IF THE PROBLEM CONTINUES, DO A CHECK FOR CONTINUITY ON THE WIRES OF THE CONNECTORS BETWEEN THE HYDRAULIC SYSTEM PRESSURE SWITCH SHOWN IN THE FAULT DETAILS, AND THE SCM THAT SHOWS THIS FAULT. 
L HYD PRESS LO  R HYD PRESS LO  C HYD PRESS LO	LOOK FOR OTHER HYDRAULIC SYSTEM AMBER LIGHTS AND EICAS MESSAGES IN ADDITION TO THIS FAULT MESSAGE, AND DO THE APPLICABLE PROCEDURE FOR LOW HYDRAULIC PRESSURE (FIM 29-11-00/101).
SPOILER SHUTDOWN	LOOK FOR OTHER EXISTING FAULTS IN ADDITION TO THIS FAULT MESSAGE, AND DO THE APPLICABLE PROCEDURE.
AMBR DUE TO HYD	PUSH THE "RESET" BUTTON. IF THE PROBLEM CONTINUES, DO THE SYSTEM TEST FOR THE SPOILER CONTROL MODULES (AMM 27-09-00/201).
27-09-13 WIRING	1. REPLACE THE SCM THAT SHOWS THIS FAULT (AMM 27-09-00/201).  2. IF THE PROBLEM CONTINUES, DO A CHECK FOR CONTINUITY ON THE WIRES OF THE CONNECTORS BETWEEN THE APPLICABLE HYDRAULIC SYSTEM PRESSURE SWITCH AND THE SCM THAT SHOWS THIS FAULT. 
SCM ERROR	1. MAKE SURE THE SCM SHOWS THE CORRECT SHELF POSITION: PUSH THE "MENU" BUTTON, AND THEN PUSH THE "NO" BUTTON UNTIL "OTHER FUNCTNS?" SHOWS. PUSH THE "YES" BUTTON TWO TIMES TO SELECT THE "SYSTEM CONFIG?" DISPLAY, AND THEN PUSH THE DOWN ARROW BUTTON TO SEE THE DISPLAY. 2. IF THE CORRECT SHELF POSITION DOES NOT SHOW, REPLACE THE SCM THAT SHOWS THIS FAULT (AMM 27-09-00/201). 
NO CSEU POWER	1. MAKE SURE ALL EIGHT OF THE FLT CONT ELEC CIRCUIT BREAKERS ON THE P11 PANEL ARE CLOSED (SEE PREREQUISITES BLOCK).  2. IF THE PROBLEM CONTINUES, DO THE POWER SUPPLY MODULE BITE PROCEDURE (FIM 27-09-00/101, FIG. 104). 

**Spoiler Control Module BITE Procedure**  
**Figure 105A (Sheet 5)**

EFFECTIVITY  
-200 SERIES SPOILER CONTROL MODULES

**27-09-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



Spoiler Control Module BITE Procedure  
Figure 105A (Sheet 6)

EFFECTIVITY  
-200 SERIES SPOILER CONTROL MODULES

27-09-00

**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:

AUTOPILOT (AMM 22-10-00/501)  
 YAW DAMPER (AMM 22-21-00/501)   
 EFIS (AMM 27-58-00/501)  
 EICAS (AMM 31-41-00/201)  
 AIR/GROUND (AMM 32-09-02/201)  
 AIR DATA (AMM 34-12-00/501)  
 IRS (AMM 34-21-00/501) 

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11C6, 11C7, 11C8, 11C9, 11C12, 11C13, 11C17, 11C18,  
 11G17, 11G18, 11G26, 11G27, 11H10, 11H11, 11H19, 11H20

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER IS ON (AMM 29-11-00/201)

NOTE: FOR THE FAULTBALLS THAT HAVE TWO NAMES, ONLY  
THE NAME THAT IS APPLICABLE TO THE 767 IS USED.

**STABILIZER TRIM/  
AILERON LOCKOUT  
MODULE (SAM)  
BITE PROCEDURE**


1  TURN THE "STBY POWER" SWITCH, ON THE PILOTS' OVER-HEAD PANEL, P5, TO THE "AUTO" POSITION (AMM 24-22-00/201).  
 SET THE L AND C STAB TRIM SWITCHES, ON THE P10 PANEL, TO THE "NORM" POSITION.

**WARNING**

MOVE ALL PERSONS AND EQUIPMENT AWAY FROM ALL CONTROL SURFACES BEFORE YOU SUPPLY HYDRAULIC POWER. THE CONTROL SURFACES CAN MOVE AND CAUSE INJURY TO PERSONS AND DAMAGE TO EQUIPMENT.

PRESSURIZE THE LEFT AND CENTER HYDRAULIC SYSTEMS AND RESERVIORS (AMM 29-11-00/201).  
 SET THE FLAP LEVER TO THE FULL "UP" POSITION.

DO ALL FAULTBALLS SHOW "BLACK" ON THE L AND R STABILIZER TRIM/AILERON LOCKOUT MODULES, M524 AND M525?

YES

 SEE SHEET 2  
(BLOCK 101)

NO

 SEE SHEET 2  
(BLOCK 2)

 THESE SYSTEMS ARE USED TO COMPARE THE AIR DATA COMPUTER, AIR/GND, AND HYDRAULIC PRESSURE SURFACES.

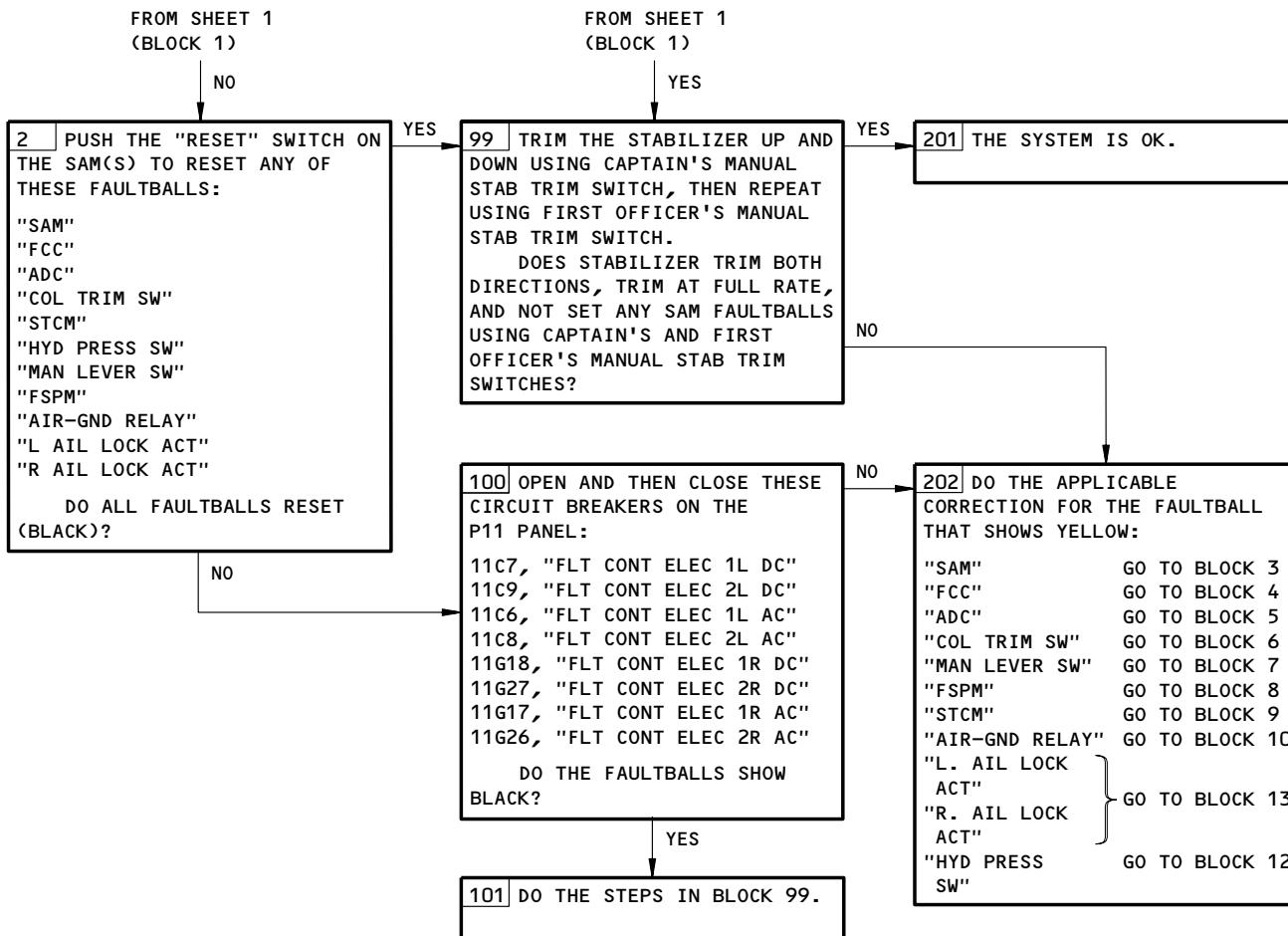
Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 1)

EFFECTIVITY

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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL



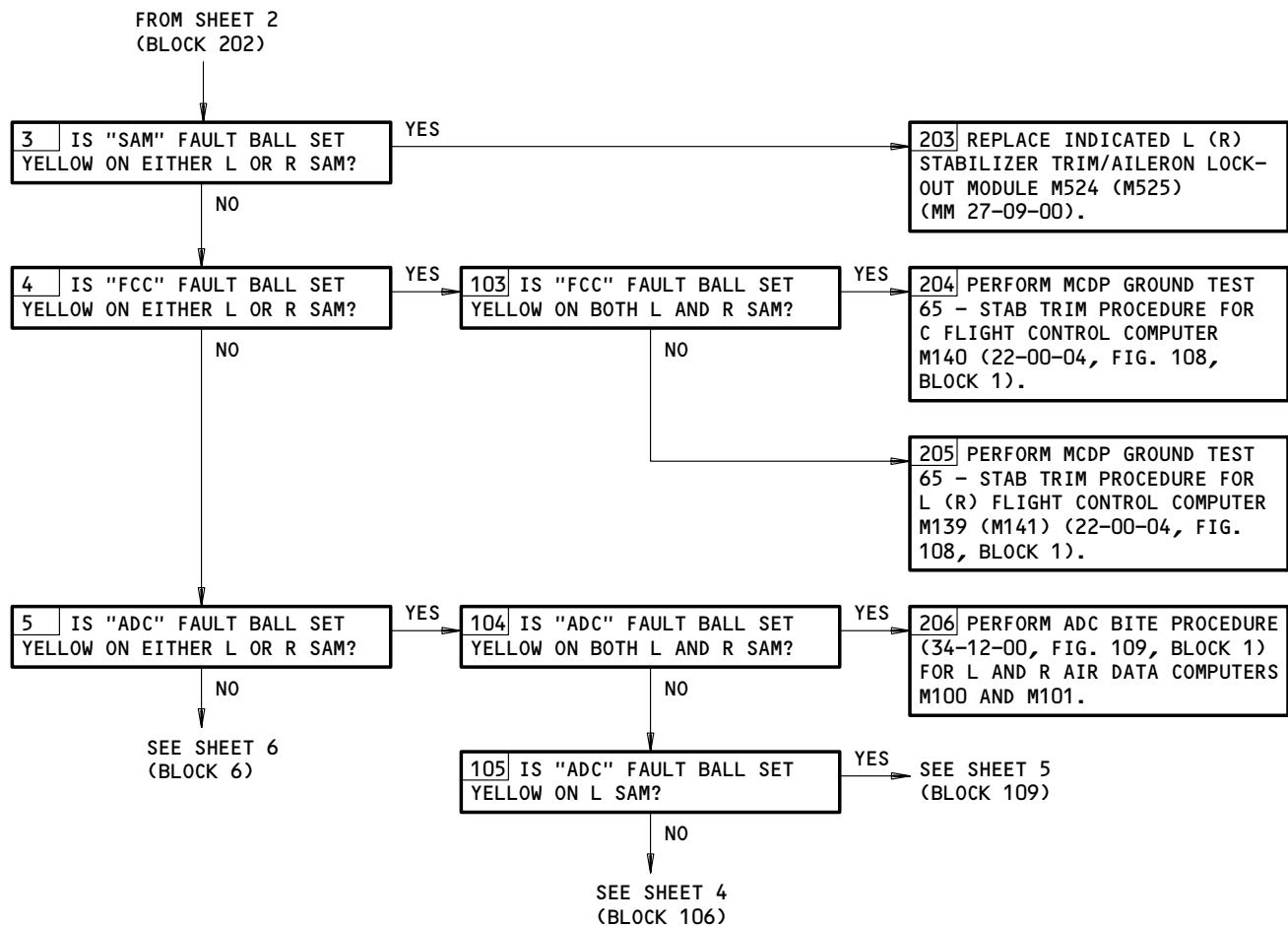
Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 2)

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FAULT ISOLATION/MAINT MANUAL



Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 3)

EFFECTIVITY

**27-09-00**

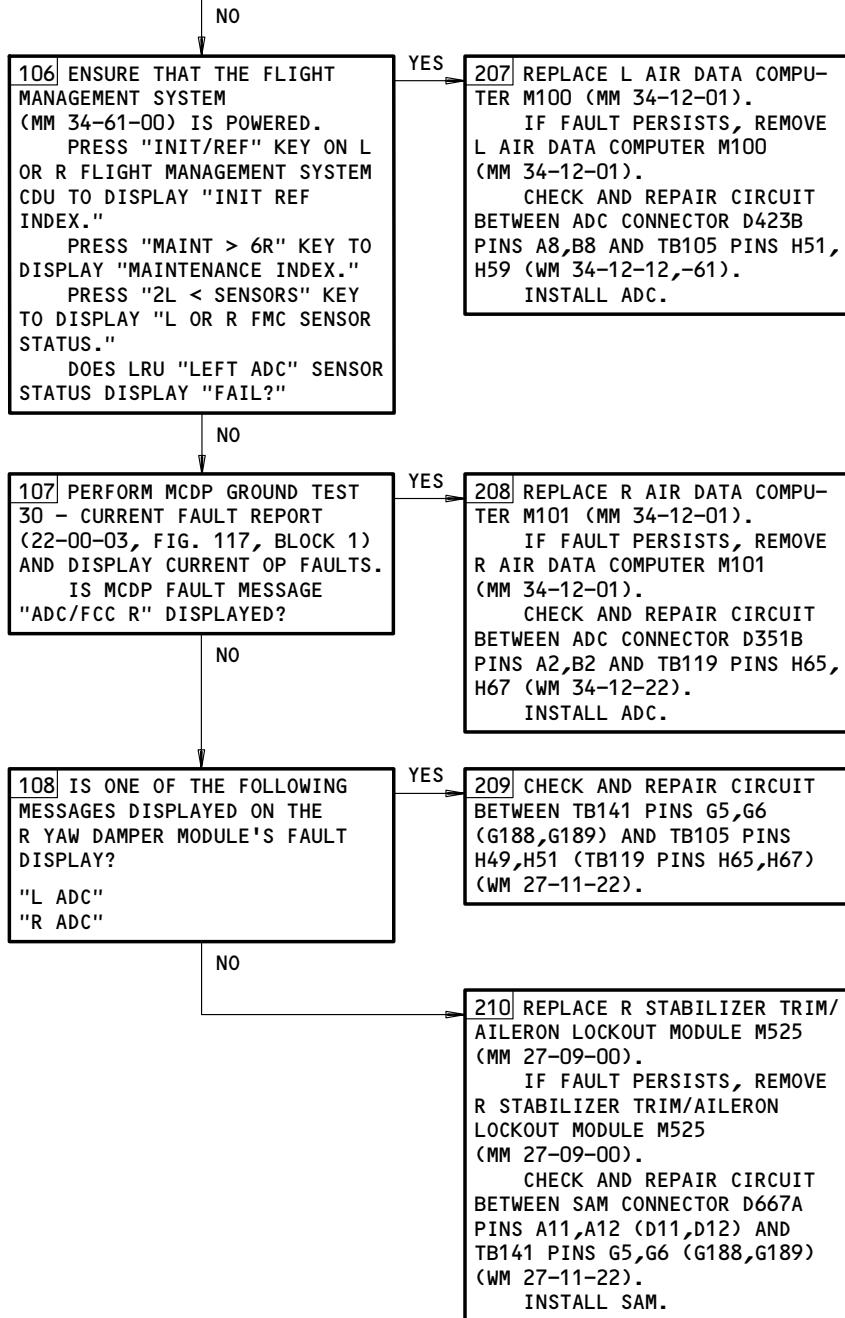
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FROM SHEET 3  
(BLOCK 105)



Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 4)

EFFECTIVITY

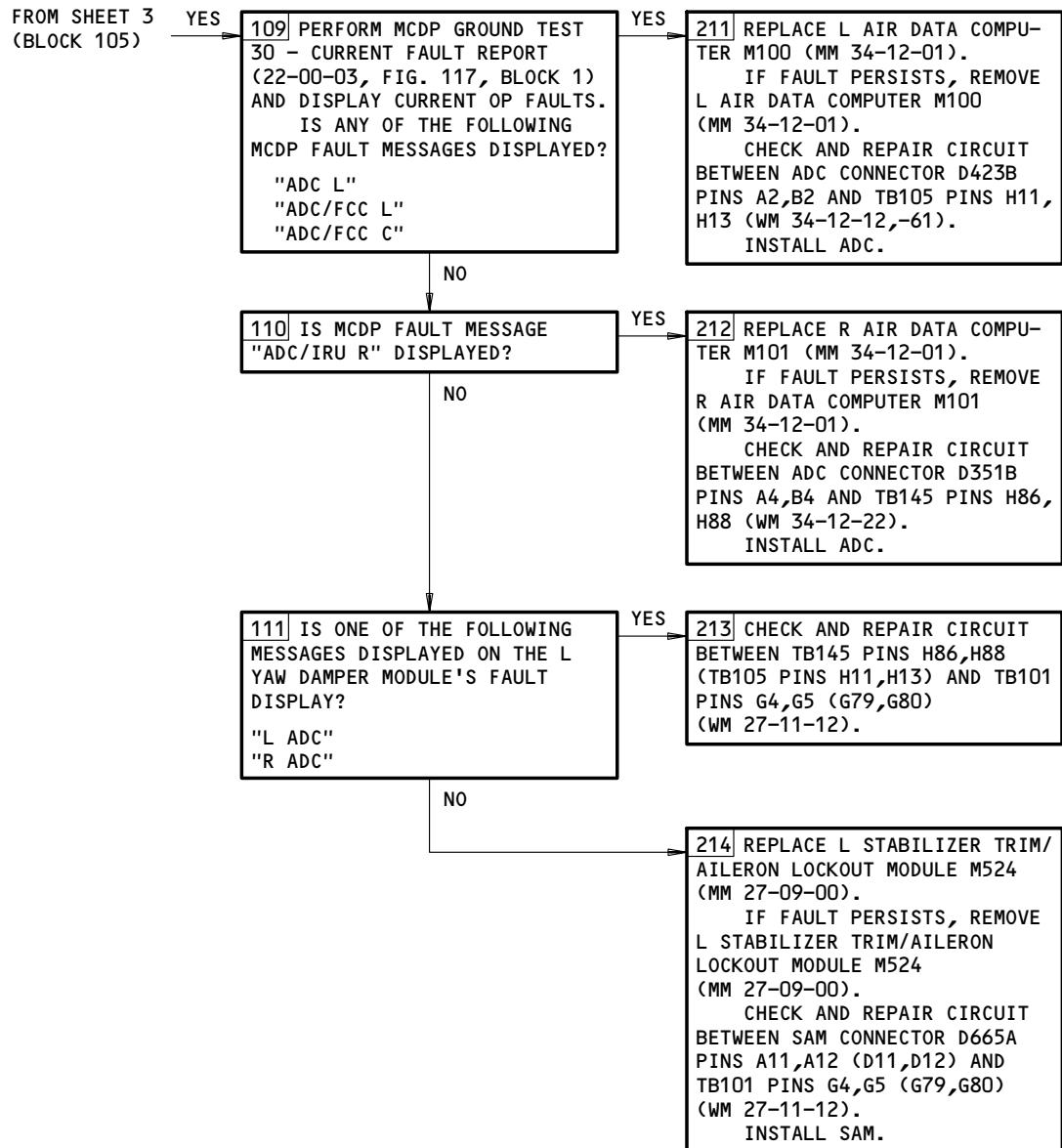
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Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 5)

EFFECTIVITY

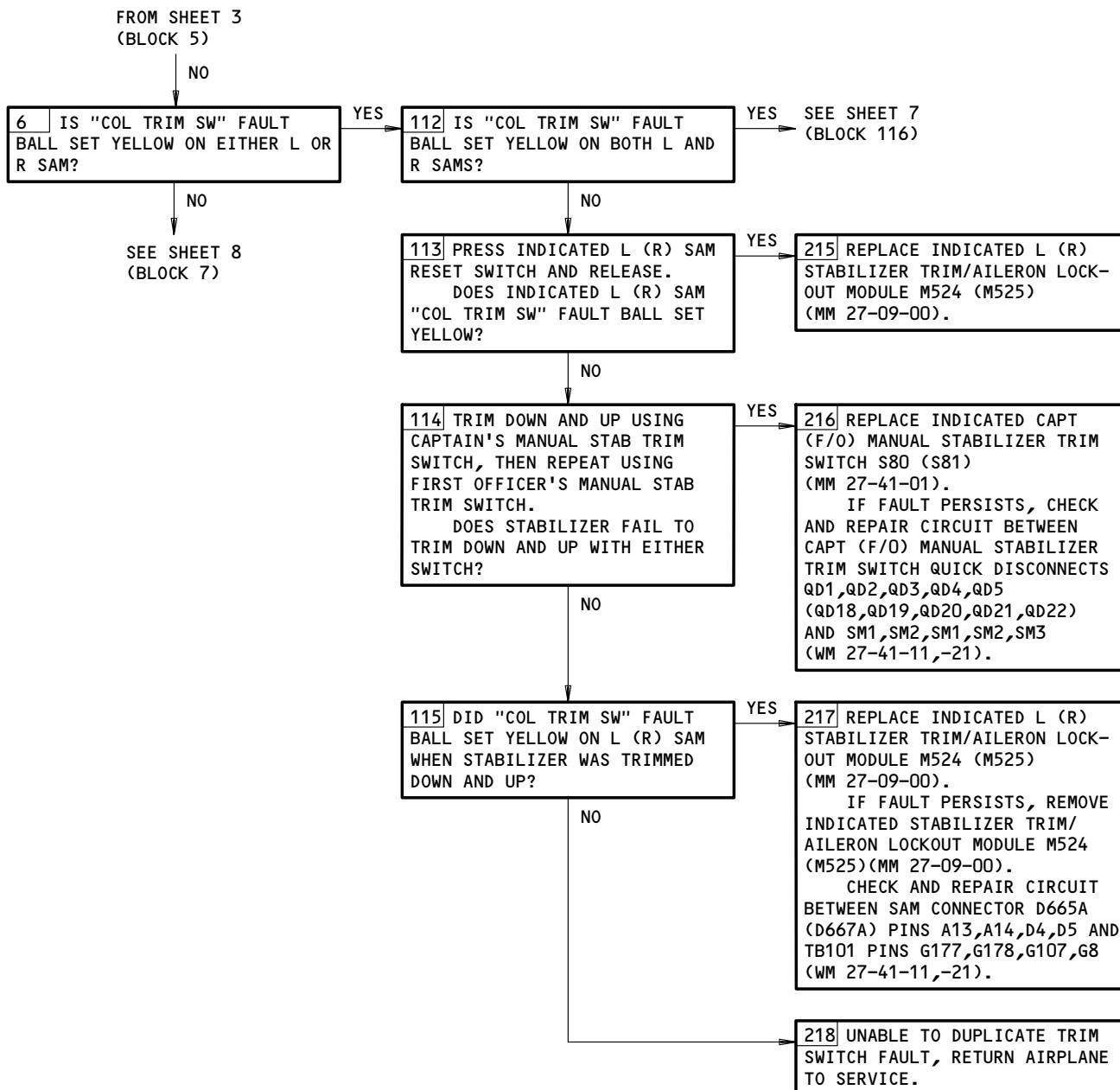
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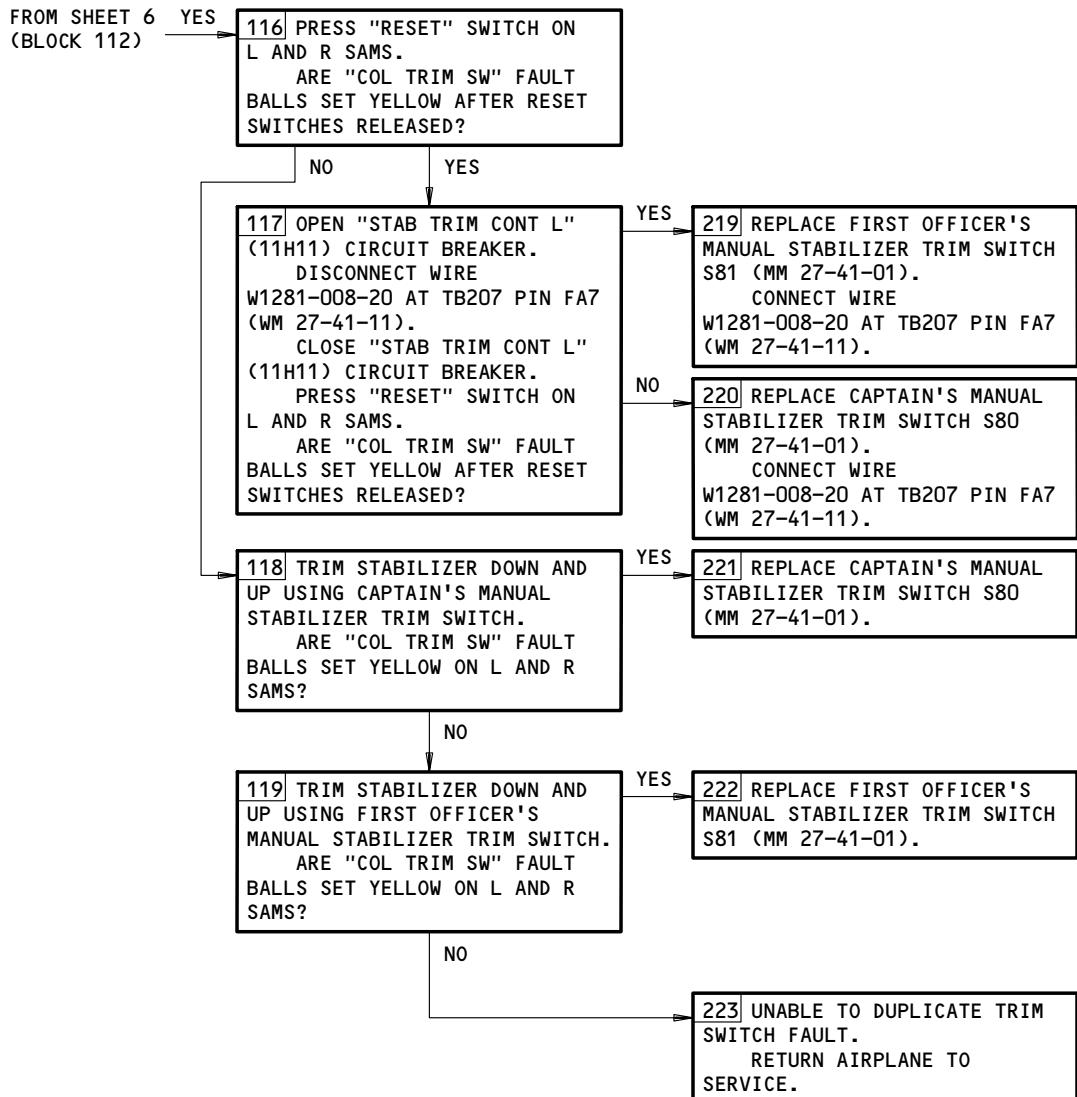


Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 6)

EFFECTIVITY

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Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 7)

EFFECTIVITY

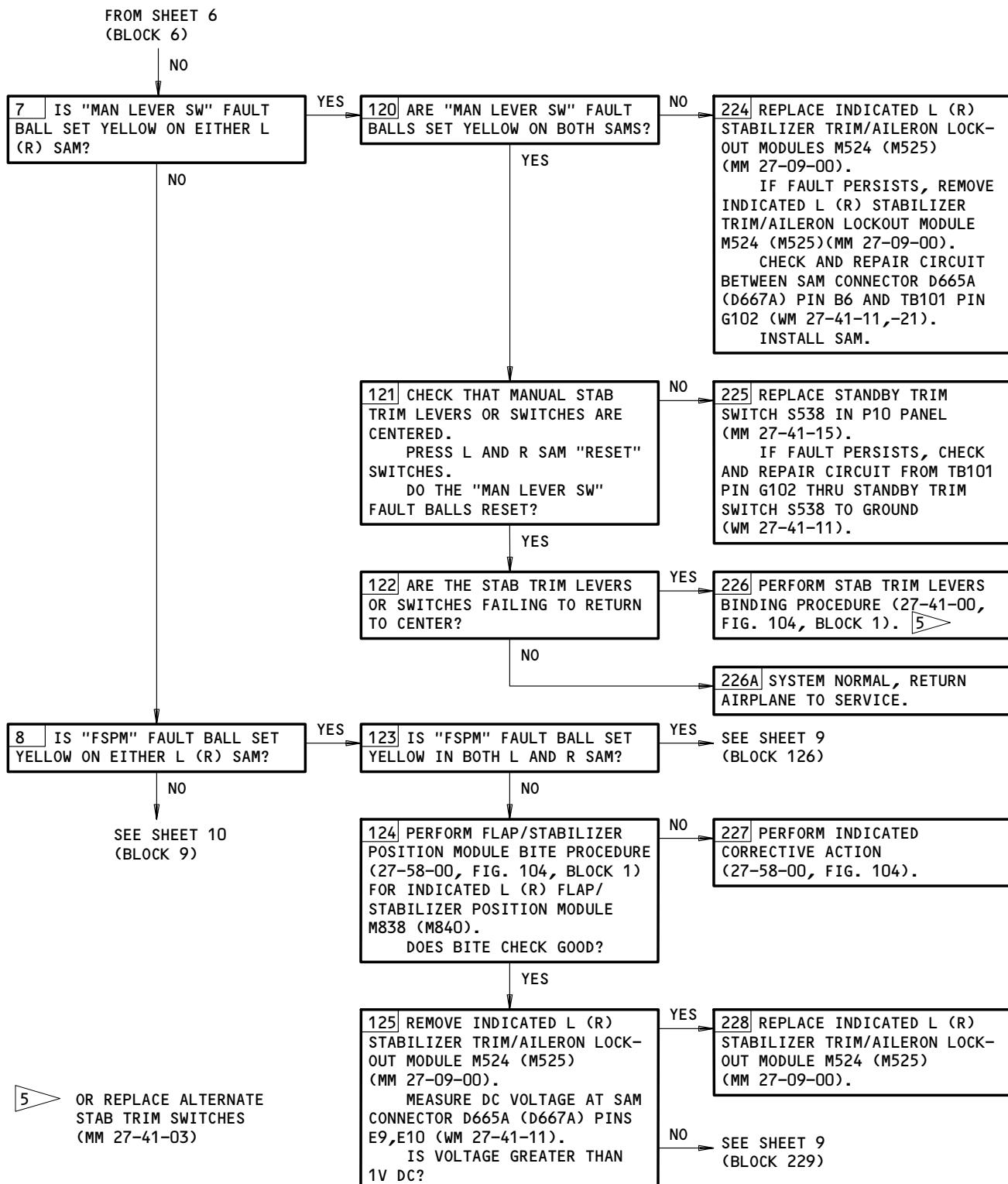
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Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 8)

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FROM SHEET 8  
 (BLOCK 123)

YES

 FROM SHEET 8  
 (BLOCK 125)

NO

**229** REPLACE L (R) FLAP/STABILIZER POSITION MODULE M838 (M840)(MM 27-58-01).  
 INSTALL L (R) STABILIZER TRIM/AILERON LOCKOUT MODULE M524 (M525) (MM 27-09-00).  
 IF FAULT PERSISTS, REMOVE INDICATED L (R) STABILIZER TRIM/AILERON LOCKOUT MODULE M524 (M525) AND L (R) FLAP/STABILIZER POSITION MODULE M838 (M840)(MM 27-58-01).  
 CHECK AND REPAIR CIRCUIT BETWEEN SAM CONNECTOR D665A (D667A) PINS E9,E10 AND FSPM CONNECTOR D2672 (D2676) PINS 40,41 (WM 27-41-11,-21).  
 INSTALL SAM AND FSPM.

**126** PERFORM FLAP/STABILIZER POSITION MODULE BITE PROCEDURE (27-58-00, FIG. 104, BLOCK 1) FOR L, C, R FSPM.  
 DOES FSPM BITE CHECK GOOD?

**229A** PERFORM INDICATED CORRECTIVE ACTION (27-58-00, FIG. 104, BLOCK 1).  
 PERFORM "FSPM" FAULT BALL RESET IN BLOCK 2.

YES

**126A** CHECK CONTINUITY TO GROUND TB101 PIN G101 (TB141 PIN G87)(WM 22-24-11,-21).  
 IS THERE CONTINUITY TO GROUND WITH FLAPS FULLY RETRACTED?

YES

**230** REPLACE INDICATED L (R) FLAP/STABILIZER POSITION UNIT M838 (M840)(MM 27-58-01).  
 IF FAULT PERSISTS, REMOVE INDICATED L (R) FLAP/STABILIZER UNIT M838 (M840) (MM 27-58-01).  
 CHECK AND REPAIR CIRCUIT BETWEEN FSPM CONNECTOR D2672 (D2676) PIN 26 AND TB101 PIN G101 (TB141 PIN G87) (WM 22-24-11,-21).  
 INSTALL FSPM.

**231** NO CONTINUITY TO GROUND AT TB101 PIN G157 (WM 22-24-11).  
 REPLACE C FLAP/STABILIZER POSITION MODULE M839 (MM 27-58-01)  
 IF FAULT PERSISTS, REMOVE C FLAP/STABILIZER POSITION MODULE M839 (MM 27-58-01).  
 CHECK AND REPAIR CIRCUIT BETWEEN FSPM CONNECTOR D2674 PIN 58 AND TB101 PIN G157 (WM 22-24-11,27-58-21).  
 INSTALL FSPM.

**Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure**  
**Figure 106 (Sheet 9)**

EFFECTIVITY

**27-09-00**

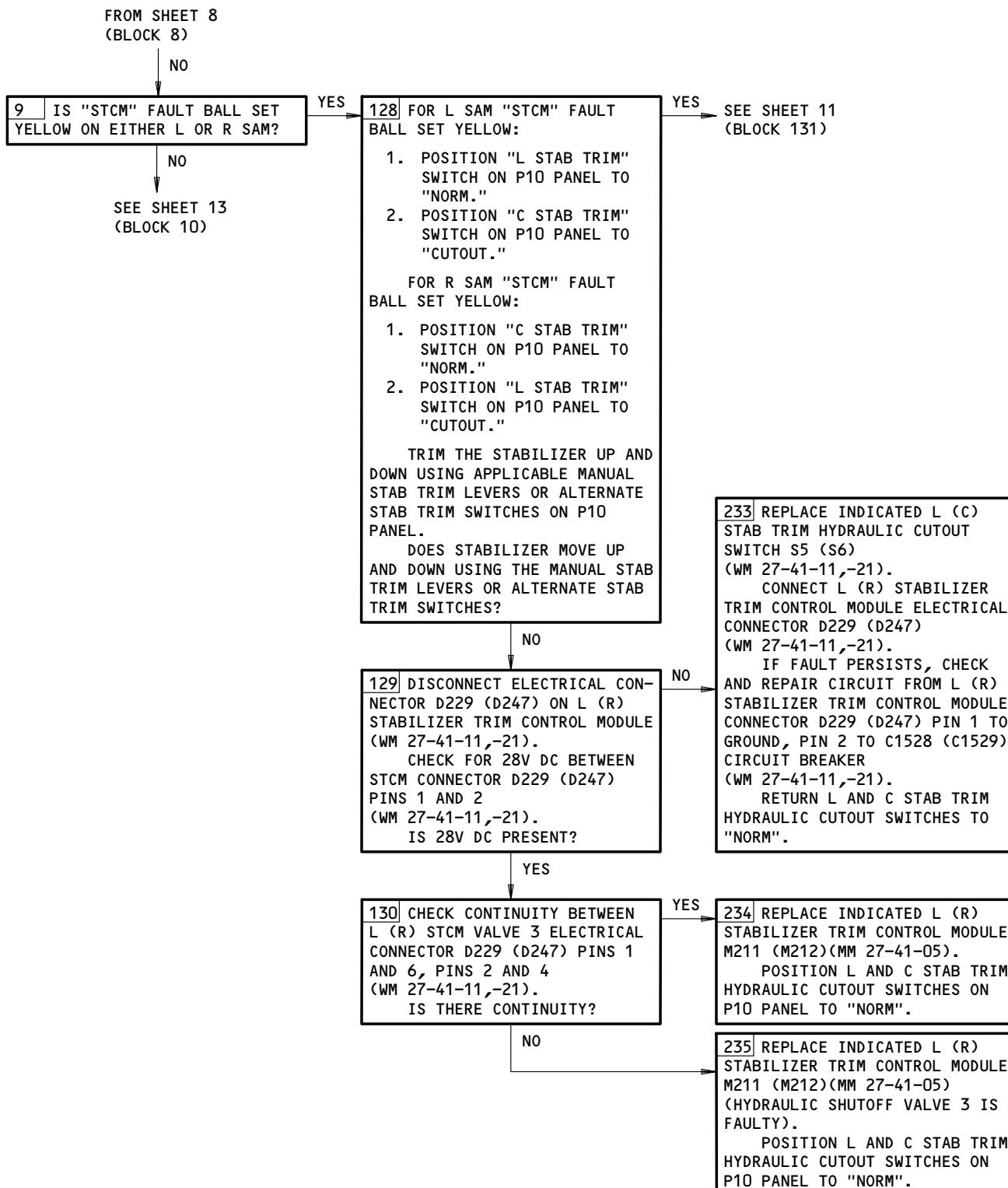
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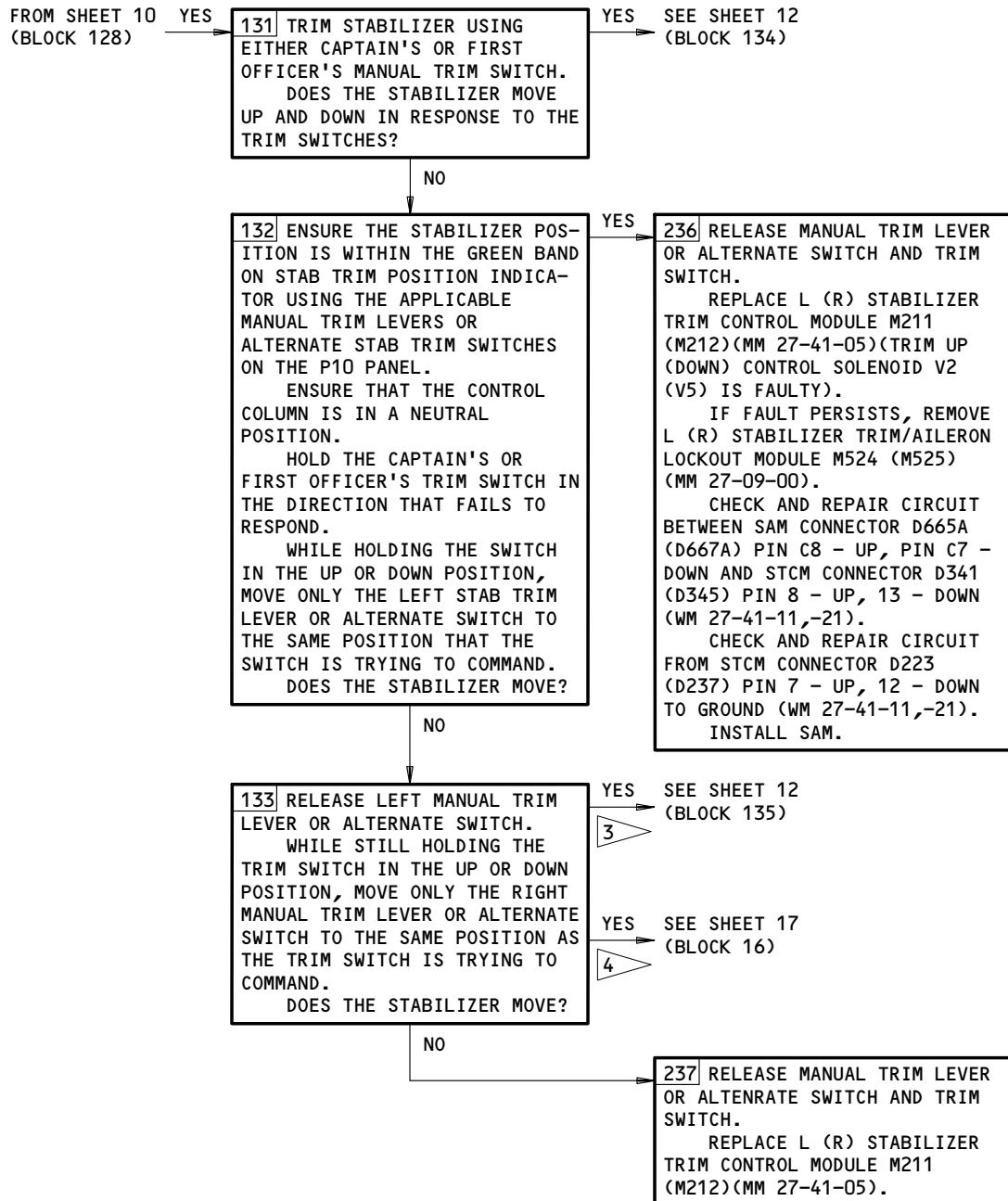


Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 10)

EFFECTIVITY

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3 767-200 AIRPLANES

4 767-300 AIRPLANES

**Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure**  
**Figure 106 (Sheet 11)**

EFFECTIVITY

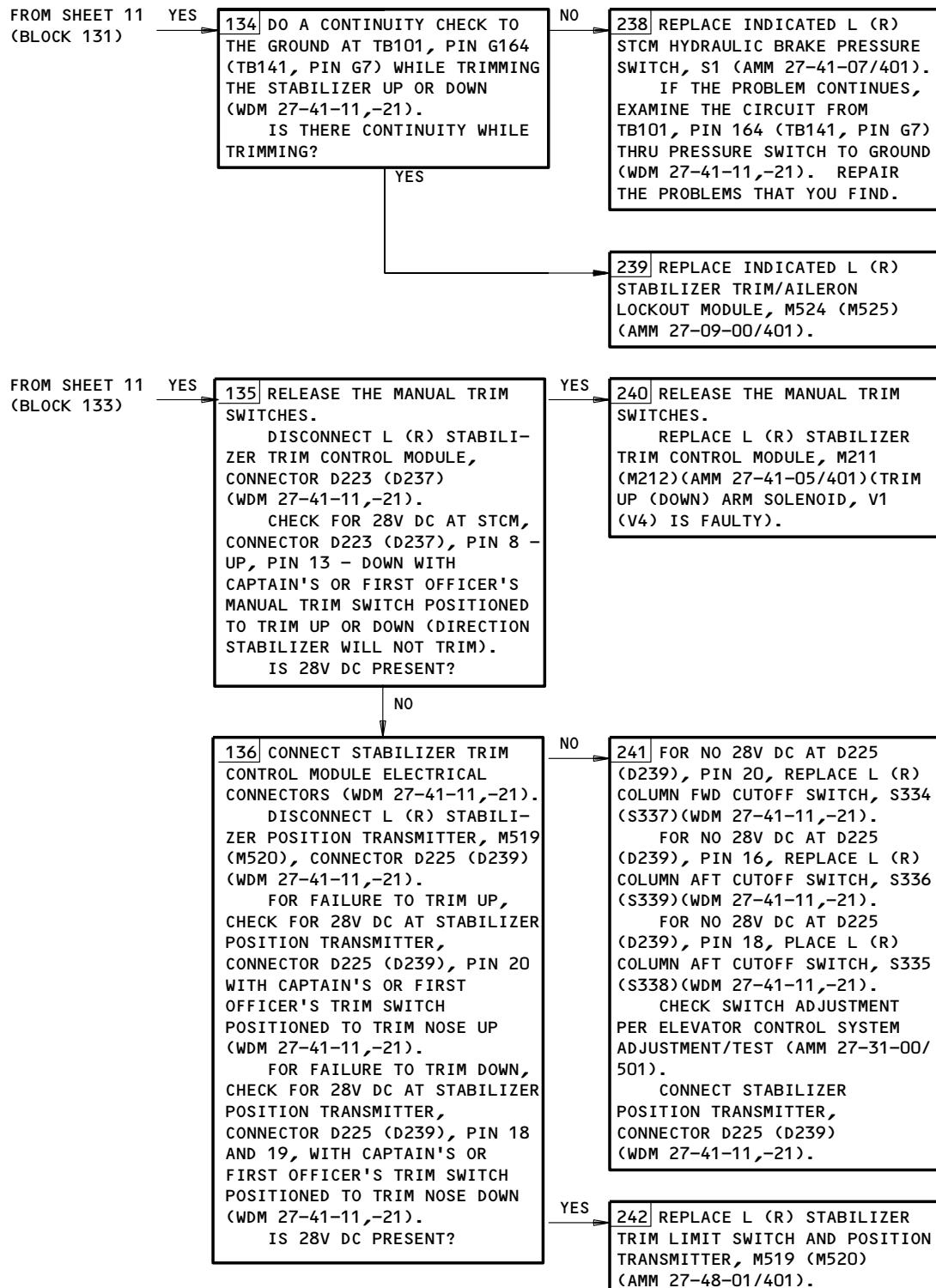
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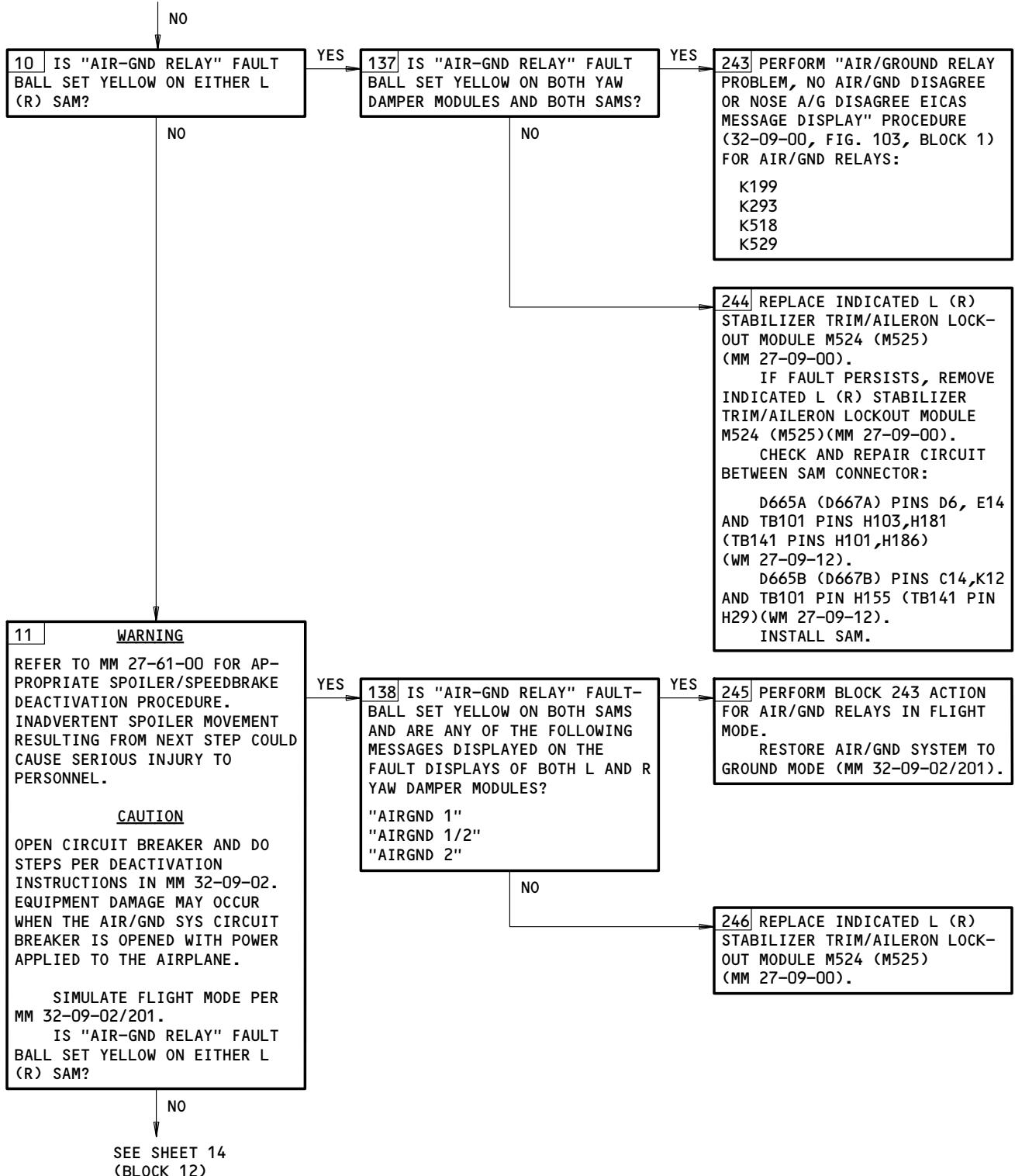
Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 12)

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FROM SHEET 10  
(BLOCK 9)



Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 13)

EFFECTIVITY

**27-09-00**

ALL

FROM SHEET 13  
(BLOCK 11)

NO

**12** IS THE "HYD PRESS SW" FAULTBALL SET YELLOW ON EITHER THE L OR R SAM?

**139** IS THE "HYD PRESS SW" FAULTBALL SET YELLOW ON BOTH THE L AND R SAMs?

NO

**247** REPLACE THE APPLICABLE L (R) STABILIZER TRIM/AILERON LOCKOUT MODULE (SAM), M524 (M525) (AMM 27-09-00/201).

IF THE PROBLEM CONTINUES, REMOVE BOTH SAMs, M524 AND M525 (AMM 27-09-00/201).

EXAMINE THE CIRCUIT FROM SAM, CONNECTORS D655B, PINS F5,F6,H5,H6, TO D667B, PINS F5,F6,H5,H6 (WDM 27-09-13).

REPAIR THE PROBLEMS THAT YOU FIND.

INSTALL THE L AND R SAMs (AMM 27-09-00/201).

SEE SHEET 15  
(BLOCK 13)

YES

**140** MAKE SURE THE YAW DAMPER SYSTEM IS POWERED (AMM 22-21-00/501).  
DOES THE "HYD SWITCH" SHOW AS A "FAULTS NOW" MESSAGE ON THE R YAW DAMPER MODULE?

YES

**248** REPLACE THE ELECTRIC HYDRAULIC PUMP LEFT CONTROL PRESSURE SWITCH, S27 (AMM 29-11-18/401).

IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM ELECTRICAL HYDRAULIC LEFT PUMP CONTROL SWITCH, CONNECTOR D56, PINS 1,3, TO TB141, PINS H184,H182 (WDM 27-09-13; 29-11-12).

REPAIR THE PROBLEMS THAT YOU FIND.

NO

**249** REPLACE THE AIR HYDRAULIC PUMP CONTROL PRESSURE SWITCH, S29 (AMM 29-11-19/401).  
IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM AIR HYDRAULIC PUMP CONTROL PRESSURE SWITCH, CONNECTOR D466, PINS 1,3, TO TB101, PINS H153, H151 (WDM 27-09-13; 29-11-32).

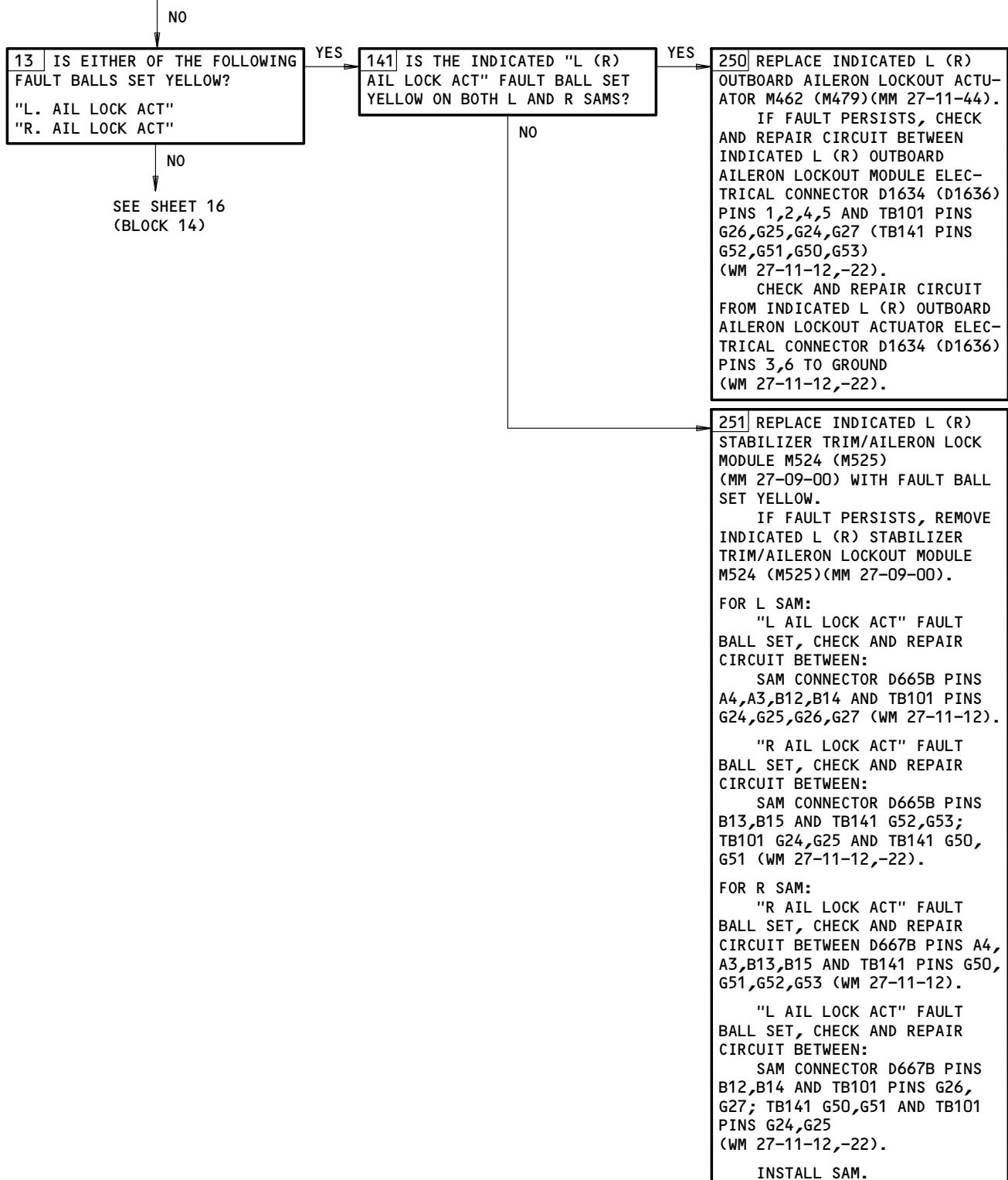
Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 14)

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FROM SHEET 14  
(BLOCK 12)



Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 15)

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FROM SHEET 14  
(BLOCK 12)

NO

**14 CAUTION**

OPERATION OF THE AIR DATA COMPUTER TEST SWITCH COULD CAUSE AILERON MOVEMENT.

PRESS AND HOLD "FUNCTIONAL TEST" SWITCH ON L OR R AIR DATA COMPUTER ON E1-3 OR E2-3 SHELF.

NOTE: LOCKOUT ACTUATORS WILL EXTEND (LOCKOUT POSITION) AND REMAIN EXTENDED AS LONG AS TEST SWITCH IS PRESSED. THE AMBER "AIR LOCK" ANNUNCIATOR WILL ILLUMINATE AND EICAS MESSAGE "AILERON LOCKOUT" WILL BE DISPLAY WHILE TEST SWITCH IS PRESSED.

PRESS TEST BUTTON FOR AT LEAST 30 SECONDS.

DOES EITHER OF THE FOLLOWING FAULT BALLS SET YELLOW AFTER 30 SECONDS?

"L. AIL LOCK ACT"  
"R. AIL LOCK ACT"

NO

**15**

RELEASE ADC "FUNCTIONAL TEST" SWITCH.

WAIT APPROXIMATELY 45 SECONDS FOR ACTUATORS TO RETRACT AND ANNUNCIATIONS TO EXTINGUISH.

SYSTEM NORMAL.

YES → **142** IS THE INDICATED "L (R) AIL LOCK ACT" FAULT BALL SET YELLOW ON BOTH L AND R SAMS?

YES

**252** REPLACE INDICATED L (R) OUTBOARD AILERON LOCKOUT ACTUATOR M462 (M479) (MM 27-11-44).

IF FAULT PERSISTS, CHECK AND REPAIR CIRCUIT BETWEEN INDICATED L (R) OUTBOARD AILERON LOCKOUT MODULE ELECTRICAL CONNECTOR D1634 (D1636) PINS 1,2,4,5 AND TB101 PINS G26,G25,G24,G27 (TB141 PINS G52,G51,G50,G53) (WM 27-11-12,-22).

CHECK AND REPAIR CIRCUIT FROM INDICATED L (R) OUTBOARD AILERON LOCKOUT ACTUATOR ELECTRICAL CONNECTOR D1634 (D1636) PINS 3,6 TO GROUND (WM 27-11-12,-22).

YES → **253** REPLACE INDICATED L (R) STABILIZER TRIM/AILERON LOCK MODULE M524 (M525) (MM 27-09-00) WITH FAULT BALL SET YELLOW.

IF FAULT PERSISTS, REMOVE INDICATED L (R) STABILIZER TRIM/AILERON LOCK MODULE M524 (M525) (MM 27-09-00).

FOR L SAM:

"L. AIL LOCK ACT" FAULT BALL SET, CHECK AND REPAIR CIRCUIT BETWEEN:  
SAM CONNECTOR D655B PINS A4,A3,B12,B14 AND TB101 PINS G24,G25,G25,G26 (WM 27-11-12).

"R. AIL LOCK ACT" FAULT BALL SET, CHECK AND REPAIR CIRCUIT BETWEEN:  
SAM CONNECTOR D665B PINS B13,B15 AND TB141 G52,G53; TB101 G24,G25 AND TB141 G50, G51 (WM 27-11-12,-22).

FOR R SAM:

"R. AIL LOCK ACT" FAULT BALL SET, CHECK AND REPAIR CIRCUIT BETWEEN D667B PINS A4, A3,B13,B15 AND TB141 PINS G50, G51,G52,G53 (WM 27-11-22).

"L. AIL LOCK ACT" FAULT BALL SET, CHECK AND REPAIR CIRCUIT BETWEEN:  
SAM CONNECTOR D667B PINS B12,B14 AND TB101 PINS G26, G27; TB141 G50,G51 AND TB101 PINS G24,G25 (WM 27-11-12,-22).

INSTALL SAM.

Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 16)

EFFECTIVITY

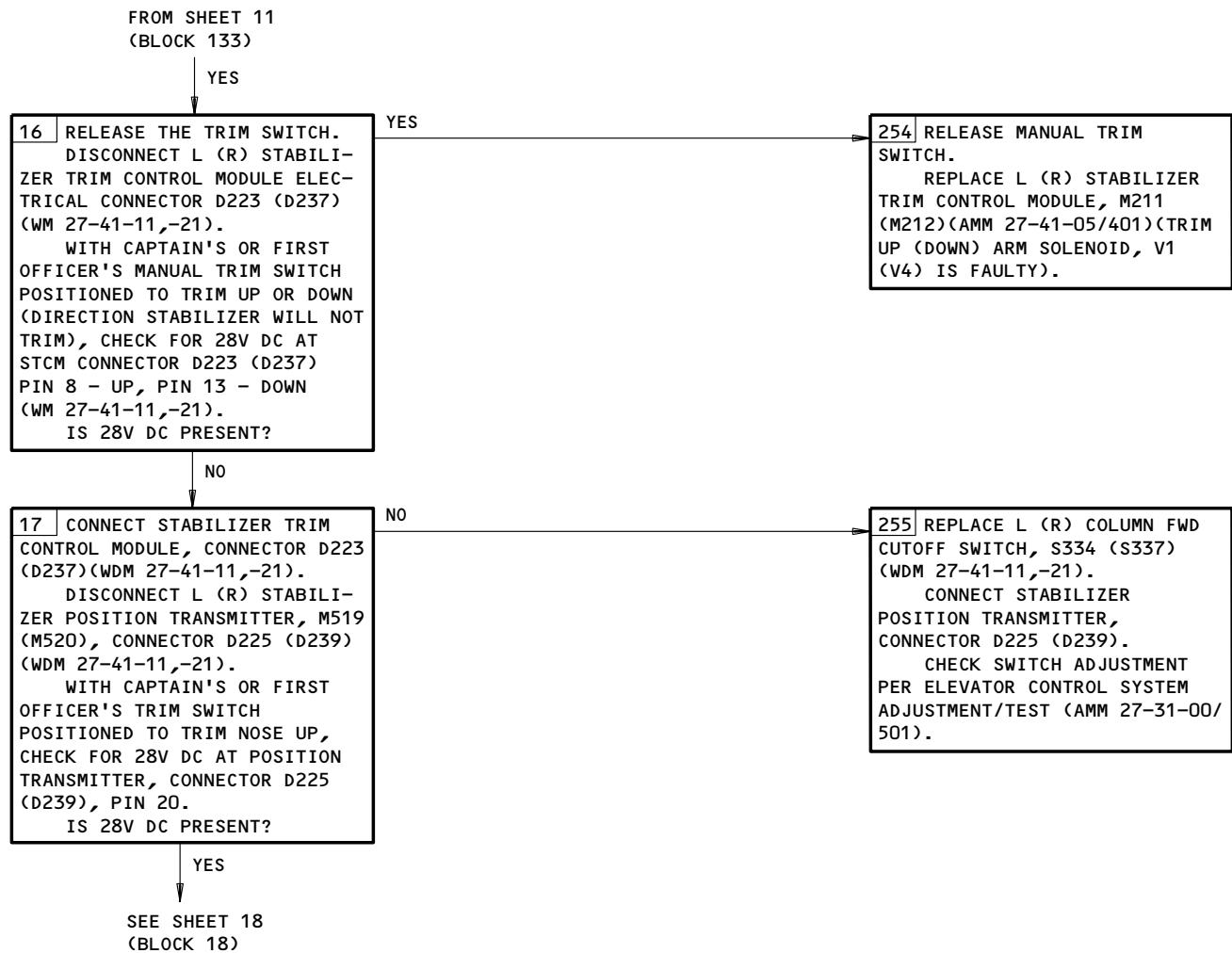
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FAULT ISOLATION/MAINT MANUAL



Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 17)

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FROM SHEET 17  
(BLOCK 17)

YES

18 ENSURE FLAPS ARE IN FULLY RETRACTED POSITION (MM 27-51-00/201). WITH CAPTAIN'S OR FIRST OFFICER'S TRIM SWITCH POSITIONED TO TRIM NOSE DOWN, CHECK FOR 28V DC AT L (R) STAB POS TRANSMITTER CONNECTOR D225 (D239) PIN 16. IS 28V DC PRESENT?

YES

SEE SHEET 19  
(BLOCK 19)

NO

143 REMOVE L (R) TRIM UNIT SELECT RELAY K1070 (K1071) ON E1-1 (E2-1) SHELF (WM 27-41-11,-21). WITH CAPTAIN'S OR FIRST OFFICER'S TRIM SWITCH POSITIONED TO NOSE DOWN, CHECK FOR 28V DC AT L (R) TRIM LIMIT SELECT RELAY CONNECTOR D11810 (D11812) PIN A2. IS 28V DC PRESENT?

YES

256 REPLACE L (R) TRIM UNIT SELECT RELAY K1070 (K1071) ON E1-1 (E2-1) SHELF (WM 27-41-11,-21). CONNECT L (R) STABILIZER POSITION TRANSMITTER ELECTRICAL CONNECTOR D225 (D239). IF FAULT PERSISTS, CHECK AND REPAIR CIRCUIT BETWEEN CONNECTOR D11810 (D11812) PIN A3 AND CONNECTOR D225 (D234) PIN 16 (WM 27-41-11,-21).

NO

257 REPLACE L (R) COLUMN AFT CUTOFF SWITCH S335 (S338) (WM 27-41-11,-21). CONNECT L (R) STABILIZER POSITION TRANSMITTER ELECTRICAL CONNECTOR D225 (D239). INSTALL L (R) TRIM LIMIT SELECT RELAY K1070 (K1071) ON E1-1 (E2-1) SHELF (WM 27-41-11,-21). CHECK SWITCH ADJUSTMENT PER ELEVATOR CONTROL SYSTEM ADJUSTMENT/TEST (MM 27-31-00). IF FAULT PERSISTS, CHECK TRIM LIMIT SELECT AND REPAIR CIRCUIT BETWEEN L (R) SAM CONNECTOR D665A (D667A) PIN F9 AND L (R) TRIM LIMIT RELAY CONNECTOR D11810 (D11812) PIN A2 THRU L (R) COLUMN AFT SWITCH S335 (S338) (WM 27-41-11,-21).

Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 18)

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FROM SHEET 18  
(BLOCK 18)

YES

19 POSITION FLAPS TO FULLY EXTENDED POSITION.  
WITH CAPTAIN'S OR FIRST OFFICER'S TRIM SWITCH POSITIONED TO TRIM NOSE DOWN, CHECK FOR 28V DC AT L (R) STAB. POS. TRANSMITTER CONNECTOR D225 (D239) PIN 18. IS 28V DC PRESENT?

NO

144 REMOVE L (R) TRIM LIMIT SELECT RELAY K1070 (K1071) ON E1-1 (E2-1) SHELF (WM 27-41-11,-21).  
WITH CAPTAIN'S OR FIRST OFFICER'S TRIM SWITCH POSITIONED TO NOSE DOWN, CHECK FOR 28V DC AT L (R) TRIM UNIT SELECT RELAY CONNECTOR D11810 (D11812) PIN A2 (WM 27-41-11,-21). IS 28V DC PRESENT?

YES

258 REPLACE L (R) TRIM UNIT SELECT RELAY K1070 (K1071) ON E1-1 (E2-1) SHELF (WM 27-41-11,-21). CONNECT L (R) STABILIZER POSITION TRANSMITTER ELECTRICAL CONNECTOR D225 (D239). IF FAULT PERSISTS, CHECK AND REPAIR CIRCUIT BETWEEN CONNECTOR D11810 (D11812) PIN A1 AND CONNECTOR D225 (D239) PIN 18 (WM 27-41-11,-21).

YES

NO

259 REPLACE L (R) COLUMN AFT CUTOFF SWITCH S335 (S338) (WM 27-41-11,-21). CONNECT L (R) STABILIZER POSITION TRANSMITTER ELECTRICAL CONNECTOR D225 (D239). INSTALL L (R) TRIM LIMIT SELECT RELAY K1070 (K1071) ON E1-1 (E2-1) SHELF (WM 27-41-11,-21). CHECK SWITCH ADJUSTMENT PER ELEVATOR CONTROL SYSTEM ADJUSTMENT/TEST (MM 27-31-00). IF FAULT PERSISTS, CHECK AND REPAIR CIRCUIT BETWEEN L (R) SAM CONNECTOR D665A (D667A) PIN F9 AND L (R) TRIM LIMIT RELAY CONNECTOR D11810 (D11812) PIN A2 THRU L (R) COLUMN AFT SWITCH S335 (S338) (WM 27-41-11,-21).

260 REPLACE L (R) STAB POS. TRANSMITTER MODULE M519 (M520) (MM 27-48-01). IF FAULT PERSISTS, CHECK AND REPAIR CIRCUIT BETWEEN L (R) STAB. POS. TRANSMITTER CONNECTOR D225 (D239) PIN 17 AND L (R) STAB. TRIM CONTROL MODULE CONNECTOR D223 (D237) PIN 13 (WM 27-41-11,-21).

Stabilizer Trim/Aileron Lockout Module (SAM) BITE Procedure  
Figure 106 (Sheet 19)

EFFECTIVITY

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## "UNSCHED STAB TRIM" PROBLEMS

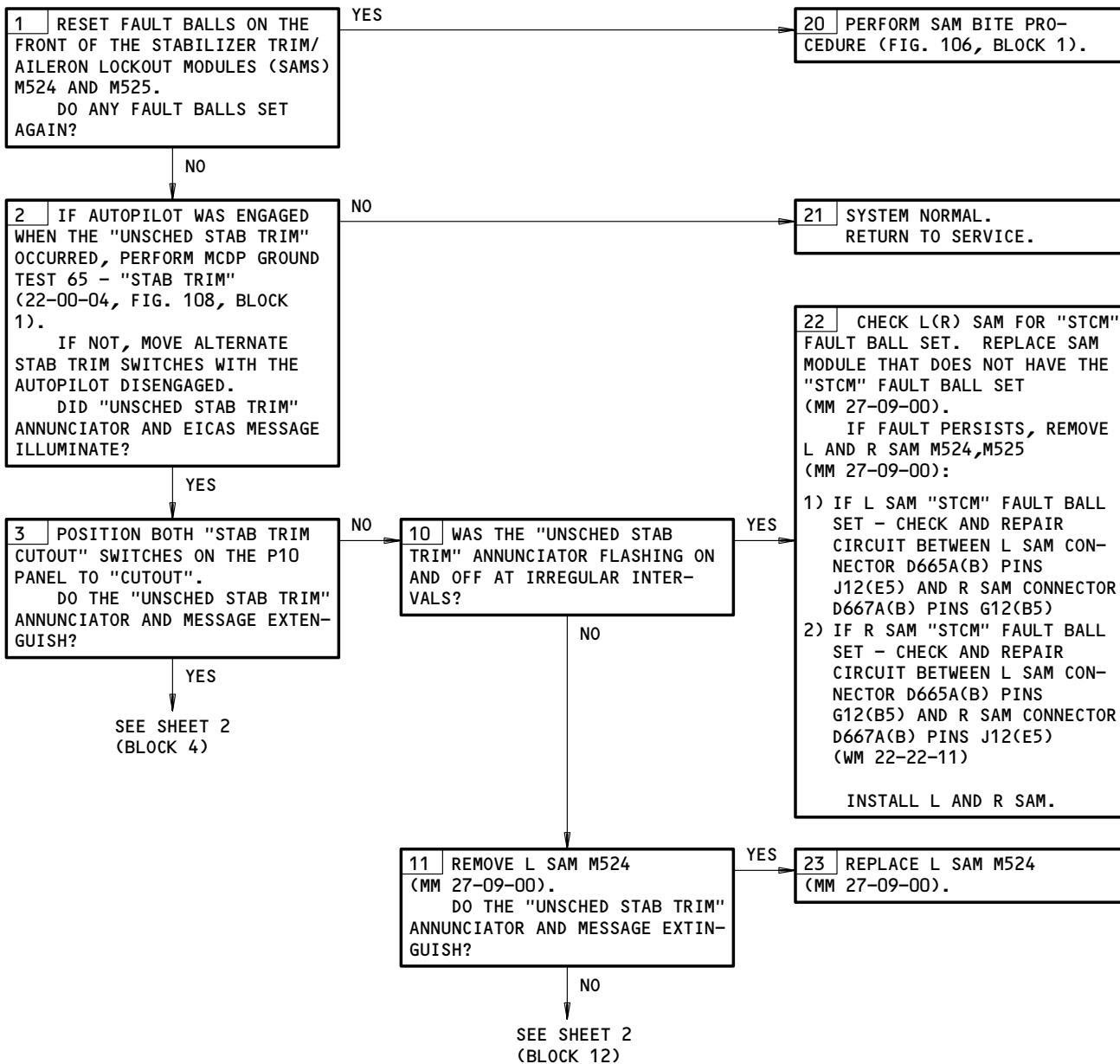
## PREREQUISITES

## ELECTRICAL POWER (MM 24-22-00)

### HYDRAULIC POWER (MM 29-11-00)

EICAS (MM 31-41-00)

CB'S: 11C6, 11C7, 11C8, 11C9, 11C12, 11C13, 11G17, 11G18,  
11G26, 11G27, 11H11, 11H20



## UNSCHED STAB TRIM Problems

### Figure 106A (Sheet 1)

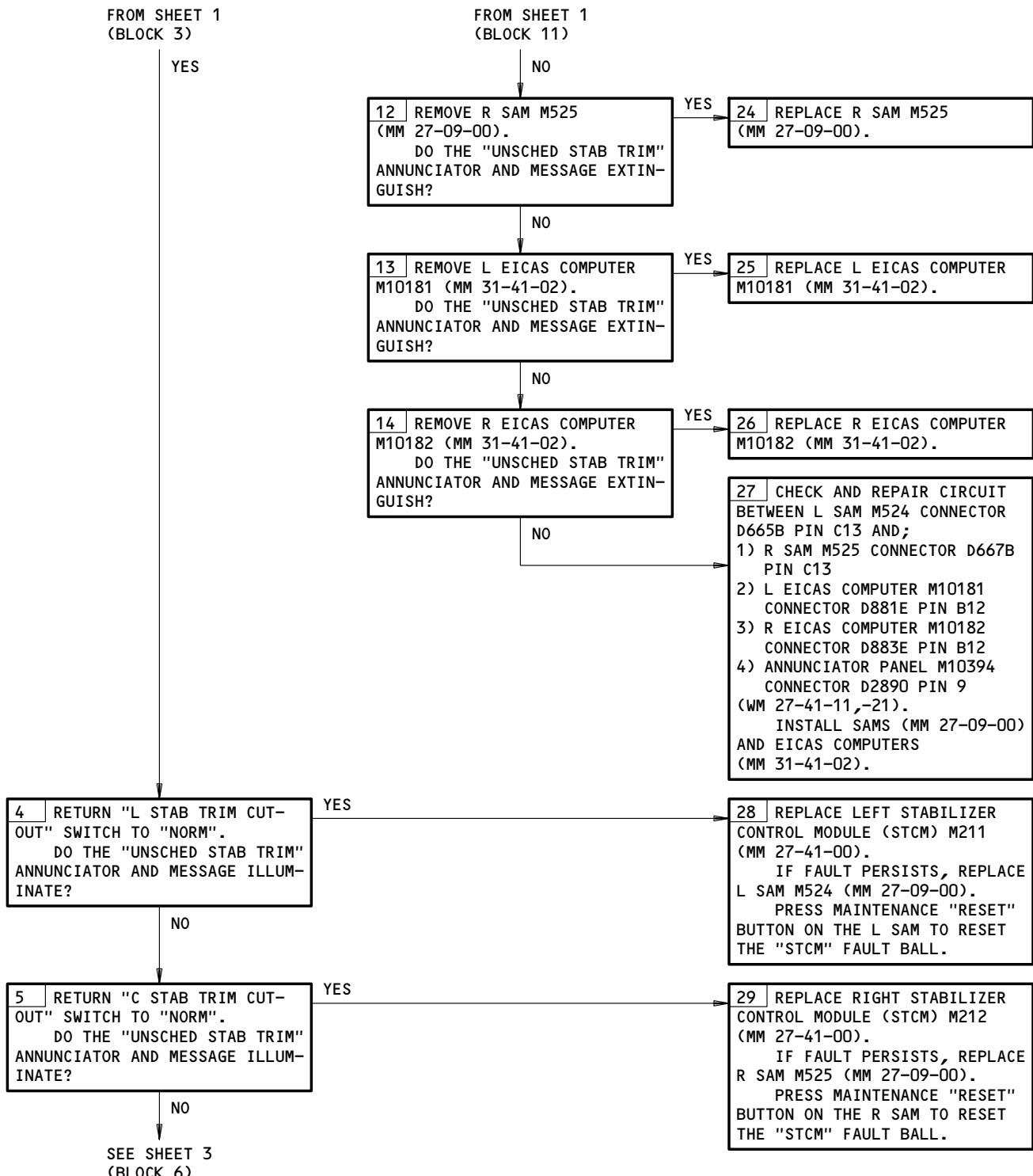
## EFFECTIVITY-

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UNSCHEDED STAB TRIM Problems  
Figure 106A (Sheet 2)

EFFECTIVITY

**27-09-00**

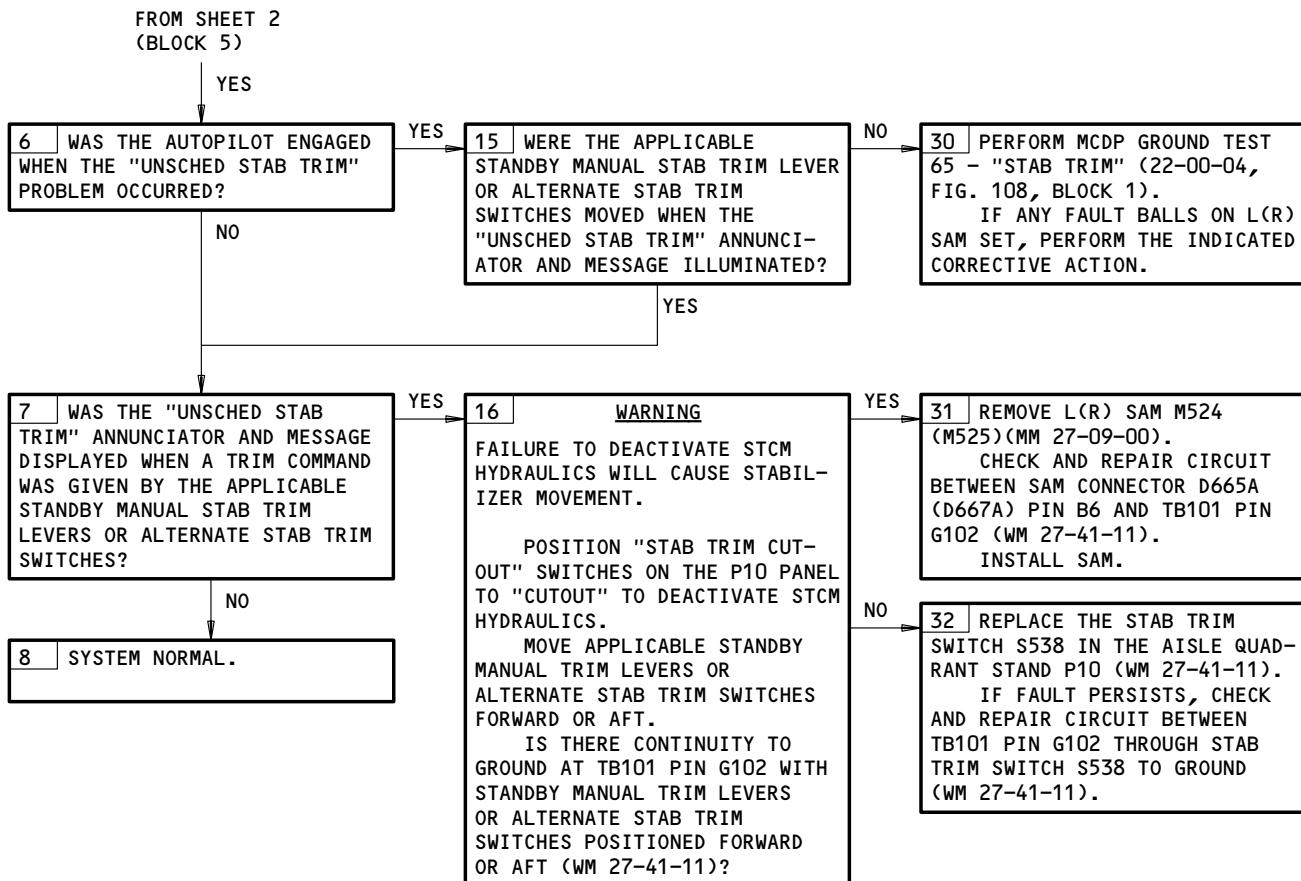
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UNSCHED STAB TRIM Problems  
Figure 106A (Sheet 3)

EFFECTIVITY

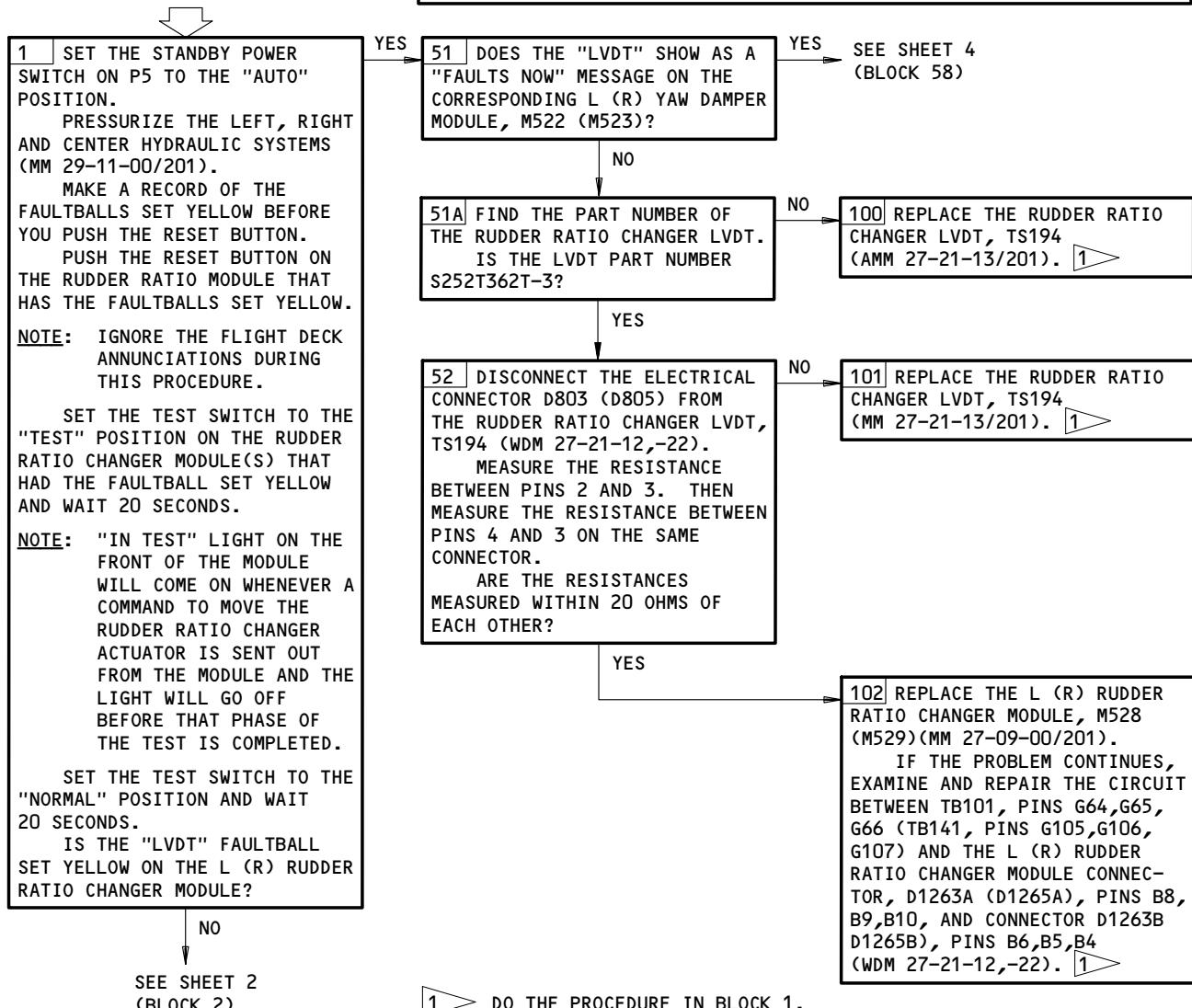
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RUDDER RATIO  
 CHANGER MODULE BITE  
 PROCEDURE

 Rudder Ratio Changer Module BITE Procedure  
 Figure 106B (Sheet 1)

EFFECTIVITY

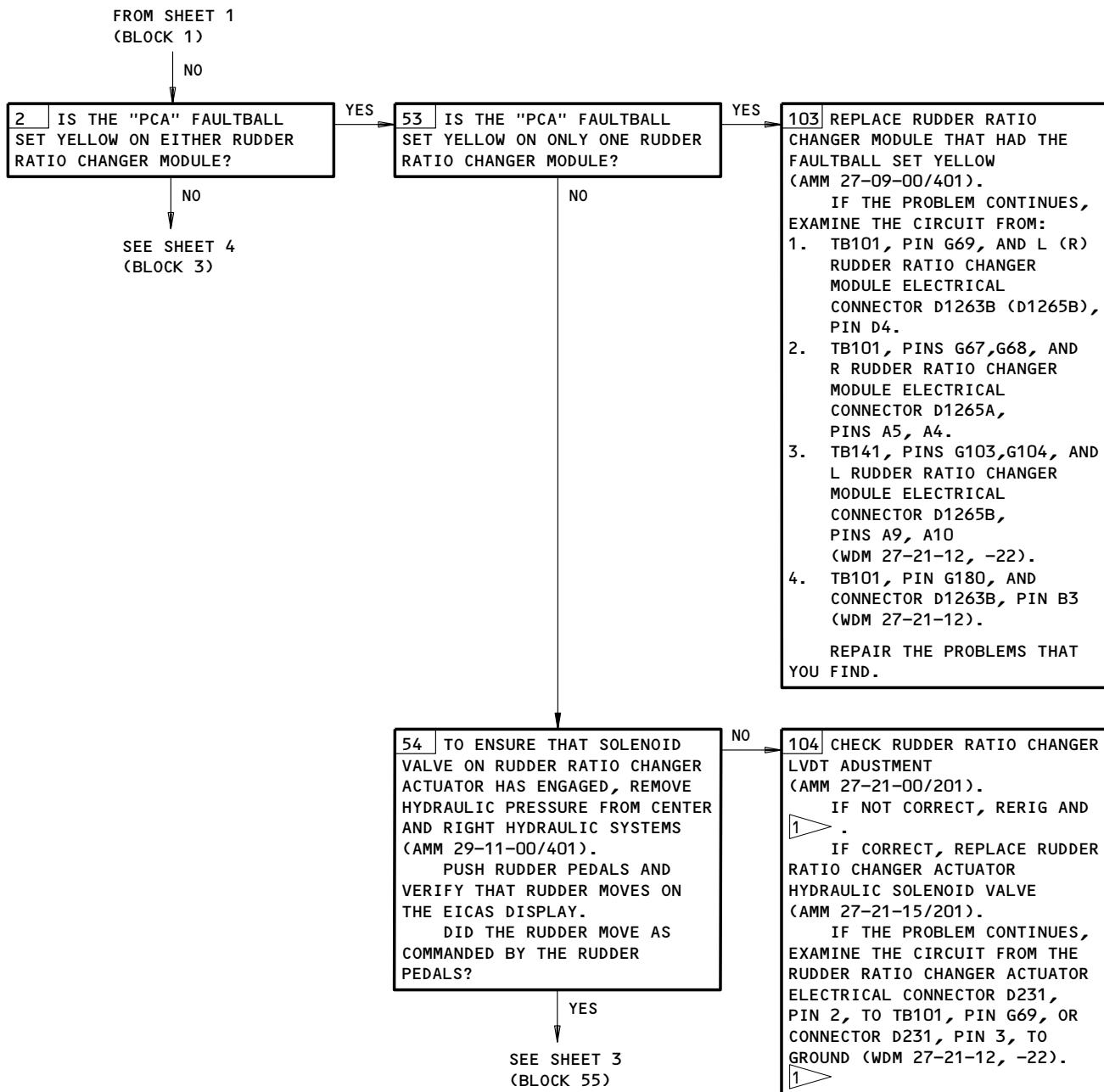
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Rudder Ratio Changer Module BITE Procedure  
Figure 106B (Sheet 2)

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FROM SHEET 2  
(BLOCK 54)

YES

55 DISCONNECT RUDDER RATIO  
CHANGER ACTUATOR ELECTRICAL  
CONNECTOR D231 AND D243  
(WDM 27-21-12, -22).  
MEASURE RESISTANCE BETWEEN  
PINS 5 AND 6, CONNECTOR D231  
AND ALSO MEASURE BETWEEN  
PIN 1 AND 2, CONNECTOR D243  
(WDM 27-21-12, -22).  
ARE BOTH RESISTANCES  
MEASURED BETWEEN 900 AND  
1100 OHMS?

NO

105 REPLACE RUDDER RATIO  
CHANGER ACTUATOR ELECTRO-  
HYDRAULIC SERVO VALVE  
(AMM 27-21-15/201).  
IF THE PROBLEM CONTINUES,  
EXAMINE THE CIRCUIT FROM:  
1) TB101, PINS G67, G68, AND  
RUDDER RATIO CHANGER  
ACTUATOR, CONNECTOR D231,  
PINS 5,6.  
2) TB141, PINS G103,G104, AND  
RUDDER RATIO CHANGER  
ACTUATOR, CONNECTOR D243,  
PINS 1,2 (WDM 27-21-12,  
-22). 

REPAIR THE PROBLEMS THAT  
YOU FIND.

YES

106 REPLACE RUDDER RATIO  
CHANGER ACTUATOR, M626  
(AMM 27-21-15/201). 

EFFECTIVITY

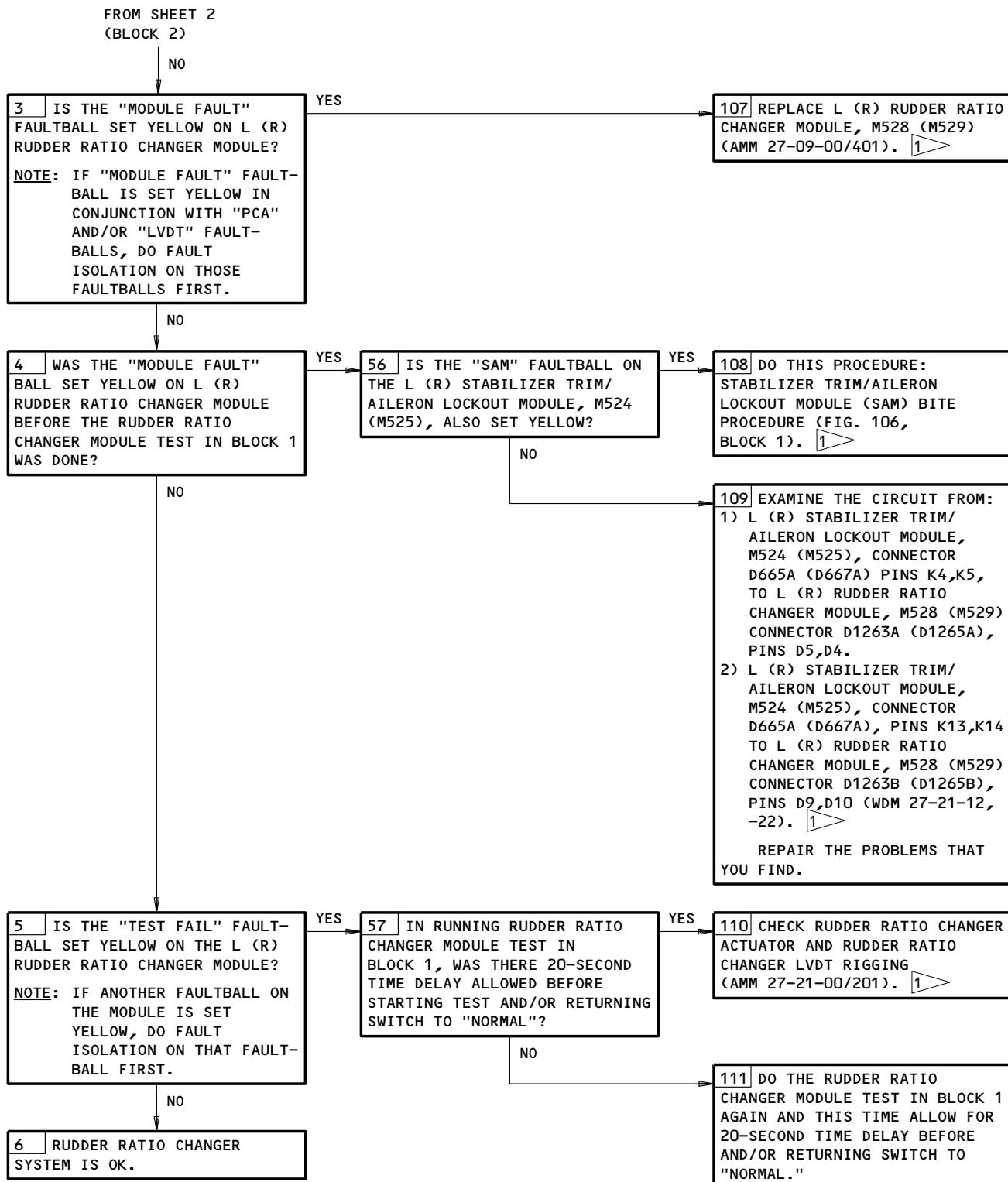
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Rudder Ratio Changer Module BITE Procedure  
Figure 106B (Sheet 4)

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FROM SHEET 1  
(BLOCK 51)

YES

58 REMOVE POWER SUPPLY MODULE 1L (1R) (AMM 27-09-00/401).  
CHECK THAT THE RESISTANCE BETWEEN PSM, CONNECTOR D1251A (D1255A), PINS A12,C12, IS GREATER THAN 20 OHMS AND HAS CONTINUITY.  
CHECK THAT THERE IS NO CONTINUITY FROM PSM, CONNECTOR D1251A (D1255A), PINS A12,C12, TO GROUND (WDM 27-21-12,-22).  
DO THE ABOVE CIRCUITS CHECK?

NO

YES

112 REPLACE POWER SUPPLY MODULE 1L (1R) (AMM 27-09-00/401). 1 ▶

59 DISCONNECT L (R) YAW DAMPER SERVO ELECTRICAL CONNECTOR D245 (D233) (WDM 22-21-11,-21).  
DO THE BLOCK 58 WIRING CHECKS.  
DO THE CIRCUITS CHECK NOW?

YES

113 REPLACE L (R) YAW DAMPER SERVO, M510 (M509) (AMM 22-21-01/401).  
INSTALL POWER SUPPLY MODULE 1L (1R) (AMM 27-09-00/401). 1 ▶

NO

60 REMOVE L (R) YAW DAMPER MODULE, M522 (M523) (AMM 22-21-04/401).  
DO THE BLOCK 58 WIRING CHECKS.  
DO THE CIRCUITS CHECK NOW?

YES

114 REPLACE L (R) YAW DAMPER MODULE, M522 (M523) (AMM 22-21-04/401).  
INSTALL POWER SUPPLY MODULE 1L (1R) (AMM 27-09-00/401).  
CONNECT L (R) YAW DAMPER SERVO, CONNECTOR D245 (D233) (WDM 22-21-11,-21). 1 ▶

NO

61 DISCONNECT RUDDER RATIO CHANGER TRANSDUCER, TS194, CONNECTOR D803 (D805) (WDM 27-21-12,-22).  
DO THE BLOCK 58 WIRING CHECKS.  
DO THE CIRCUITS CHECK NOW?

YES

115 REPLACE RUDDER RATIO CHANGER TRANSDUCER, TS194 (AMM 27-21-13/401).  
INSTALL POWER SUPPLY MODULE 1L (1R) (AMM 27-09-00/401).  
CONNECT L (R) YAW DAMPER SERVO, CONNECTOR D245 (D233) (WDM 22-21-11,-21).  
INSTALL L (R) YAW DAMPER MODULE, M522 (M523) (AMM 22-21-04/401). 1 ▶

NO

SEE SHEET 6  
(BLOCK 62)

Rudder Ratio Changer Module BITE Procedure  
Figure 106B (Sheet 5)

EFFECTIVITY

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FROM SHEET 5  
 (BLOCK 61)

NO

**62** REMOVE L (R) RUDDER RATIO CHANGER, M528 (M529) (AMM 27-21-14/401).  
 NOTE: REMOVING EITHER RRCM WILL CAUSE A WHITE "RUDDER RATIO" MESSAGE ON THE EICAS MAINTENANCE PAGE.  
 CHECK THAT THERE IS NO CONTINUITY BETWEEN PSM, CONNECTOR D1251A (D1255A), PINS A12,C12 (WDM 27-21-12, -22).  
 CHECK THAT THERE IS NO CONTINUITY TO GROUND AT PSM, CONNECTOR D1251A (D1261A), PINS A12,C12 (WDM 27-21-12, -22).  
 DO THE CIRCUITS CHECK?

YES

**116** REPLACE L (R) RUDDER RATIO CHANGER MODULE, M528 (M529) (AMM 27-21-14/401).  
 INSTALL POWER SUPPLY MODULE 1L (1R) (AMM 27-09-00/401).  
 INSTALL L (R) YAW DAMPER MODULE, M522 (M523) (AMM 22-21-04/401).  
 CONNECT L (R) YAW DAMPER SERVO, CONNECTOR D245 (D233) (WDM 22-21-11,-21).  
 CONNECT RUDDER RATIO CHANGER TRANSDUCER, TS194, CONNECTOR D803 (D805) (WDM 27-21-12,-22). 

NO

**117** EXAMINE THE CIRCUIT FROM PSM, CONNECTOR D1251A (D1261A), PINS A12,C12 AND: YDM, CONNECTOR D1259A (D1261A) PINS F14,E15 (WDM 22-21-11, -21; 27-21-12,-22). YD SERVO, CONNECTOR D245 (D233) PINS 5,6 (WDM 22-21-11,-21; 27-21-12,-22). RUDDER RATIO CHANGER MODULE, CONNECTOR D1263A (D1265A) PINS A10,A9; D1263B (D1265B) PINS A5,A4 (WDM 27-21-12, -22). RUDDER RATIO CHANGER TRANSDUCER, TS194, CONNECTOR D803 (D805) PINS 6,7 (WDM 27-21-12,-22).  
 INSTALL POWER SUPPLY MODULE 1L (1R) (AMM 27-09-00/401).  
 INSTALL L (R) YAW DAMPER MODULE, M522 (M523) (AMM 22-21-04/401).  
 CONNECT L (R) YAW DAMPER SERVO, CONNECTOR D245 (D233) (WDM 22-21-11,-21).  
 CONNECT RUDDER RATIO CHANGER TRANSDUCER, TS194, CONNECTOR D803 (D805) (WDM 27-21-12,-22).  
 INSTALL L (R) RUDDER RATIO CHANGER MODULE, M528 (M529) (AMM 27-09-00/401). 

**Rudder Ratio Changer Module BITE Procedure**  
**Figure 106B (Sheet 6)**
**EFFECTIVITY**

ALL

**27-09-00**



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FAULT ISOLATION/MAINT MANUAL

AILERON AND AILERON TRIM CONTROL SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR - INBOARD POWER CONTROL (PCA)	4	4	561BB, 661BB	27-11-48
ACTUATOR - BOTTOM LEFT LATERAL CENTRAL CONTROL (LCCA), M276	2	1	LEFT MAIN GEAR WHEEL WELL	27-11-14
ACTUATOR - LATERAL TRIM, M488	2	1	LEFT MAIN GEAR WHEEL WELL	27-11-09
ACTUATOR - LEFT OUTBOARD AILERON LOCKOUT, M462	6	1	561RBX	27-11-44
ACTUATOR - OUTBOARD POWER CONTROL (PCA)	6	4	561MB, 661MB	27-11-49
ACTUATOR - RIGHT LATERAL CENTRAL CONTROL (LCCA), M275	3	1	RIGHT MAIN GEAR WHEEL WELL	27-11-14
ACTUATOR - RIGHT OUTBOARD AILERON LOCKOUT, M479	6	1	661RBX	27-11-44
ACTUATOR - TOP LEFT LATERAL CENTRAL CONTROL (LCCA), M274	2	1	LEFT MAIN GEAR WHEEL WELL	27-11-14
AILERON - INBOARD	4	2	WING TRAILING EDGE	27-11-01
AILERON - OUTBOARD	6	2	WING TRAILING EDGE	27-11-02
ASSEMBLY - AILERON DRUM	1	2	119AL	27-11-03
CIRCUIT BREAKER -	1		FLIGHT COMPT, P11	
AILERON LOCKOUT L, C1026			11C17	*
AILERON LOCKOUT R, C1030			11C18	*
AILERON POS L, C4099			11K14	*
AILERON POS R, C4100			11K23	*
AILERON TRIM, C1035			11K15	*
AIR DATA AOA SENSOR L, C1			11A11	*
AIR DATA AOA SENSOR RIGHT, C3			11F31	*
AIR DATA BARO CORRECT L, C2			11A12	*
AIR DATA BARO CORRECT RIGHT, C4			11F32	*
AIR DATA CMPTR L, C625			11A10	*
AIR DATA CMPTR RIGHT, C626			11F30	*
FLT CONT ELEC 1L AC, C1538			11C6	*
FLT CONT ELEC 1L DC, C1534			11C7	*
FLT CONT ELEC 1R AC, C1536			11G17	*
FLT CONT ELEC 1R DC, C1531			11G18	*
FLT CONT ELEC 2L AC, C1537			11C8	*
FLT CONT ELEC 2L DC, C1533			11C9	*
FLT CONT ELEC 2R AC, C1535			11G26	*
FLT CONT ELEC 2R DC, C1532			11G27	*
COMPUTER - (FIM 31-41-00/101)				
EICAS L, M10181				
EICAS R, M10182				
COMPUTER - (FIM 34-12-00/101)				
L AIR DATA, M100				
R AIR DATA, M101				
FILTER - INBOARD PCA	4	2	561BB, 661BB	27-11-48
FILTER - LCCA	2	3	LEFT AND RIGHT MAIN GEAR WHEEL WELLS	27-11-15
FILTER - OUTBOARD PCA	6	2	561MB, 661MB	27-11-49
LEVER - DROOP SUMMING	5	2	561AB, 661AB	27-11-40
MECHANISM - AILERON CONTROL OVERRIDE	3	1	RIGHT MAIN GEAR WHEEL WELL	27-11-36
MECHANISM - FEEL, CENTERING, AND TRIM	2	1	LEFT MAIN GEAR WHEEL WELL	27-11-08
MECHANISM - OUTBOARD AILERON LOCKOUT	6	2	561RBX, 661RBX	27-11-44
PANEL - AILERON/RUDDER TRIM CONTROL, M74	1	1	FLT COMPT, P8	27-11-00

\*SEE THE WDM EQUIPMENT LIST

Aileron and Aileron Trim Control System - Component Index  
Figure 101 (Sheet 1)

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COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
QUADRANT - INBOARD DROOP	5	2	561AB, 661AB	27-11-38
QUADRANT - LEFT LCCA OUTPUT	2	1	LEFT MAIN GEAR WHEEL WELL	27-11-18
QUADRANT - OUTBOARD DROOP	5	2	561AB, 661AB	27-11-39
QUADRANT - RIGHT AILERON CONTROL	3	1	RIGHT MAIN GEAR WHEEL WELL	27-11-26
QUADRANT - RIGHT AILERON CONTROL OUTPUT	3	1	RIGHT MAIN GEAR WHEEL WELL	27-11-34
QUADRANT - RIGHT LCCA OUTPUT	3	1	RIGHT MAIN GEAR WHEEL WELL	27-11-28
ROD - BUS	1	1	119AL	27-11-03
SWITCH - AILERON TRIM CONT, YARS1, YARS2	1	2	FLT COMPT, P8, AILERON/RUDDER TRIM CONT PNL, M74	27-11-00
TUBE - LEFT LCCA TORQUE	2	1	LEFT MAIN GEAR WHEEL WELL	27-11-16
TUBE - RIGHT LCCA TORQUE	3	1	RIGHT MAIN GEAR WHEEL WELL	27-11-24
WHEEL - AILERON CONTROL	1	2	FLT COMPT	27-11-06

Aileron and Aileron Trim Control System - Component Index  
Figure 101 (Sheet 2)

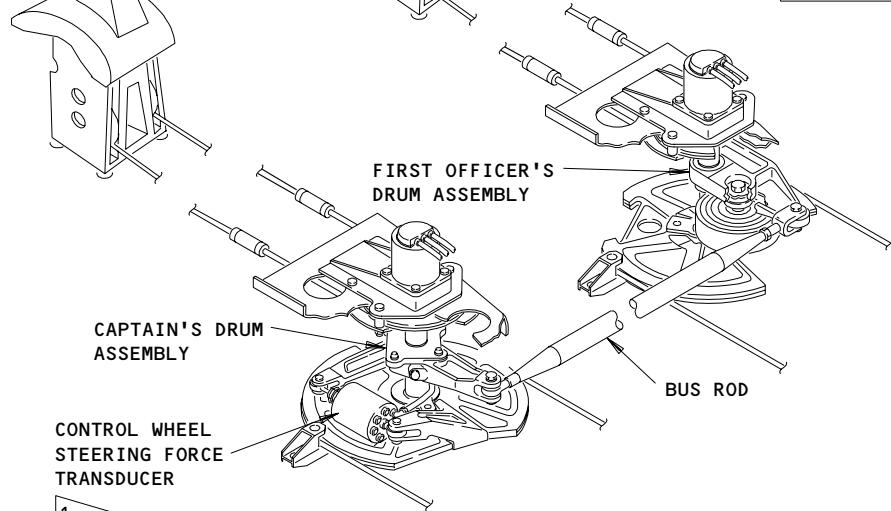
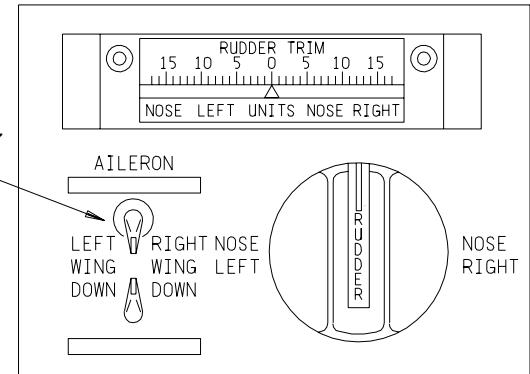
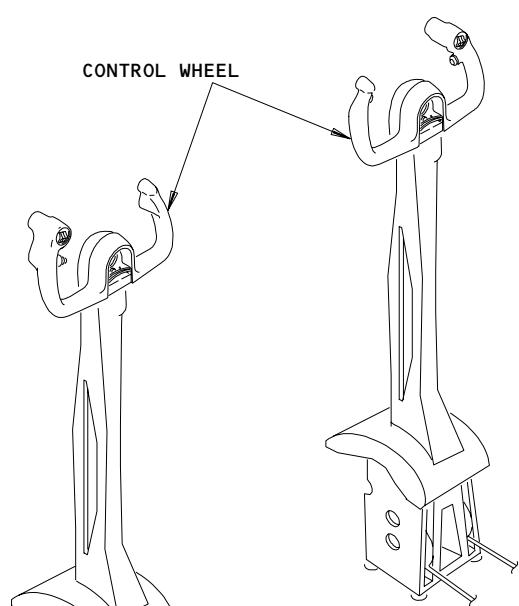
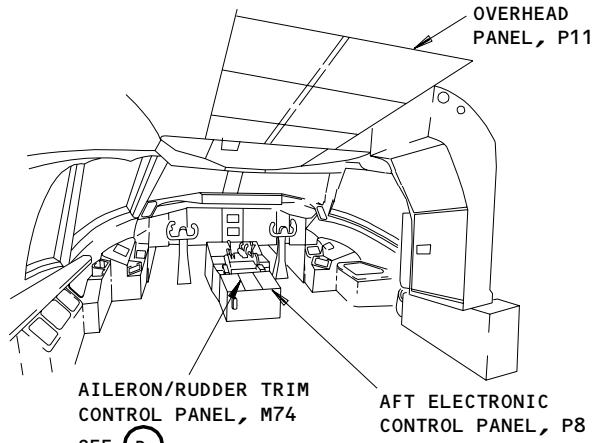
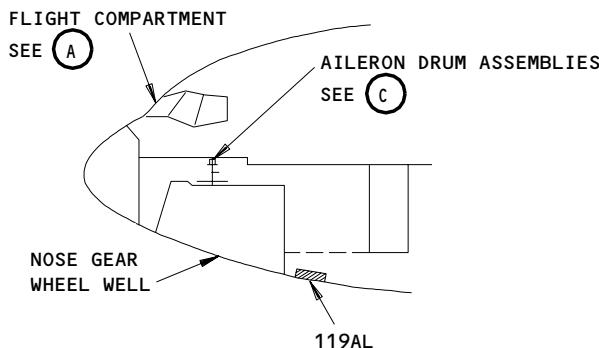
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1 SAS 050,051,150-156,162-165

Aileron and Aileron Trim Control System - Component Location  
Figure 102 (Sheet 1)

EFFECTIVITY

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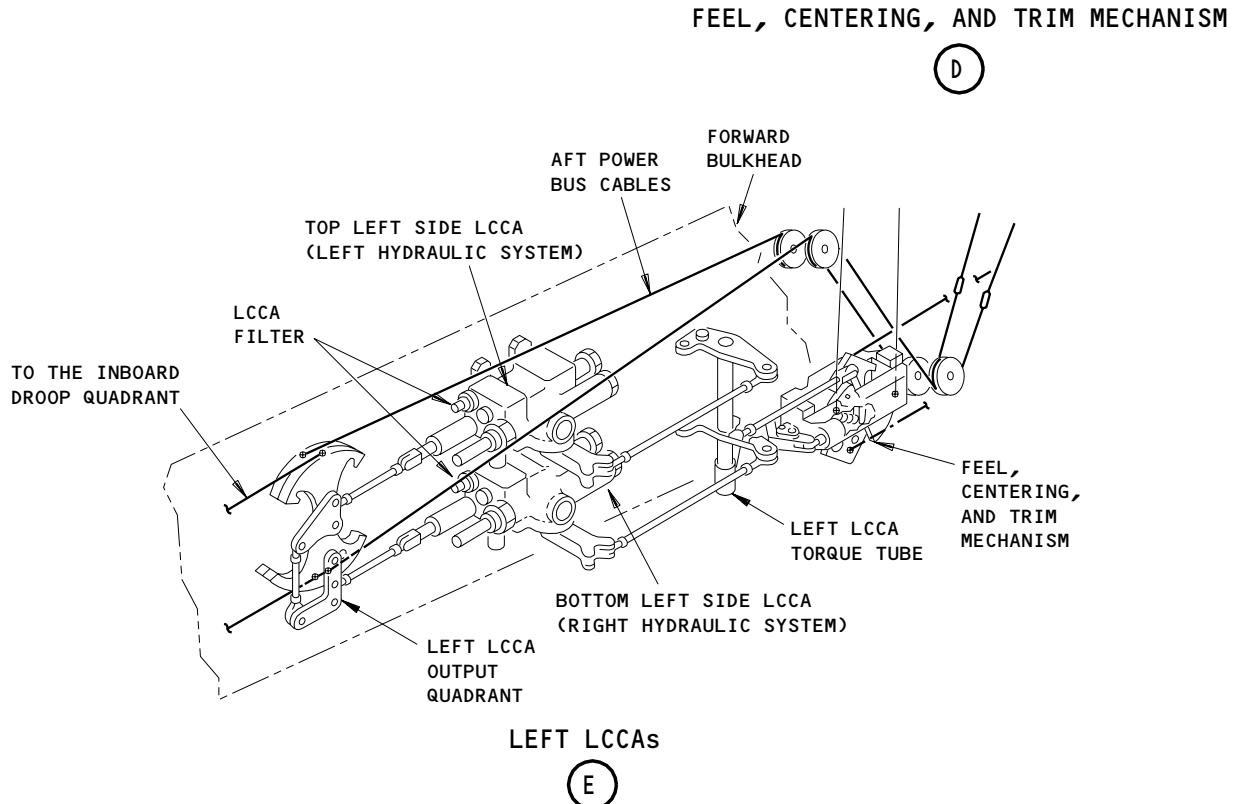
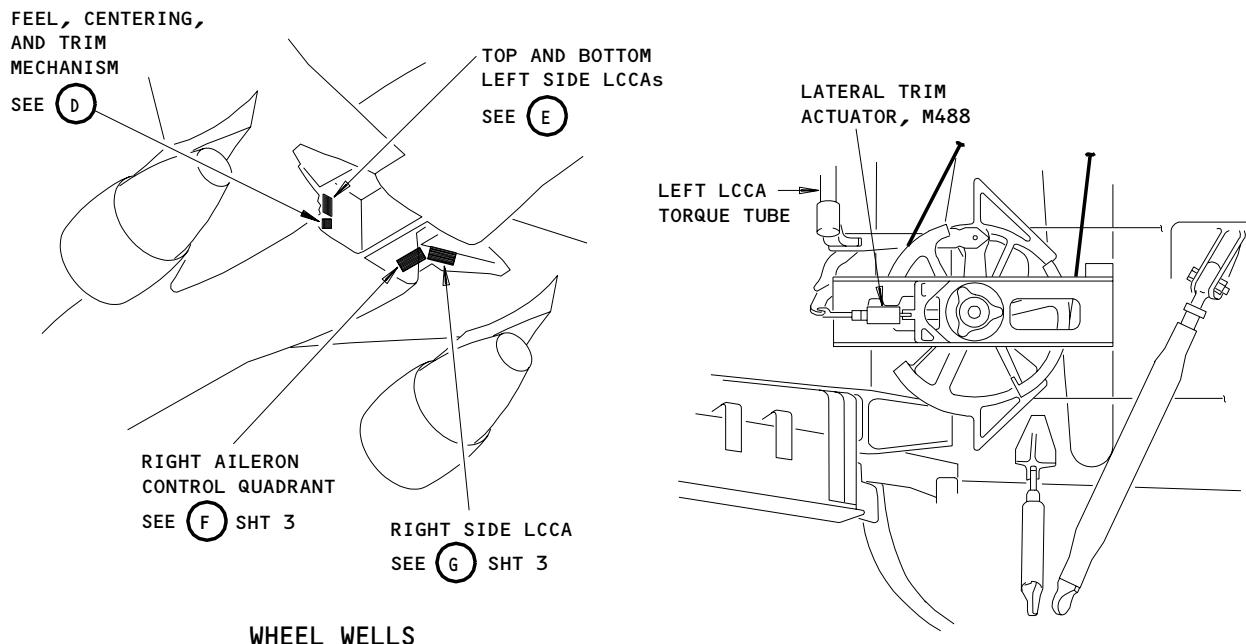
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Aileron and Aileron Control System – Component Location  
Figure 102 (Sheet 2)

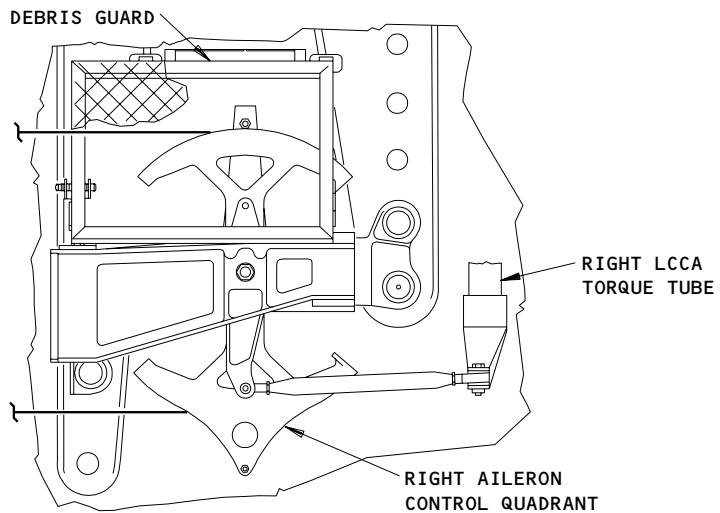
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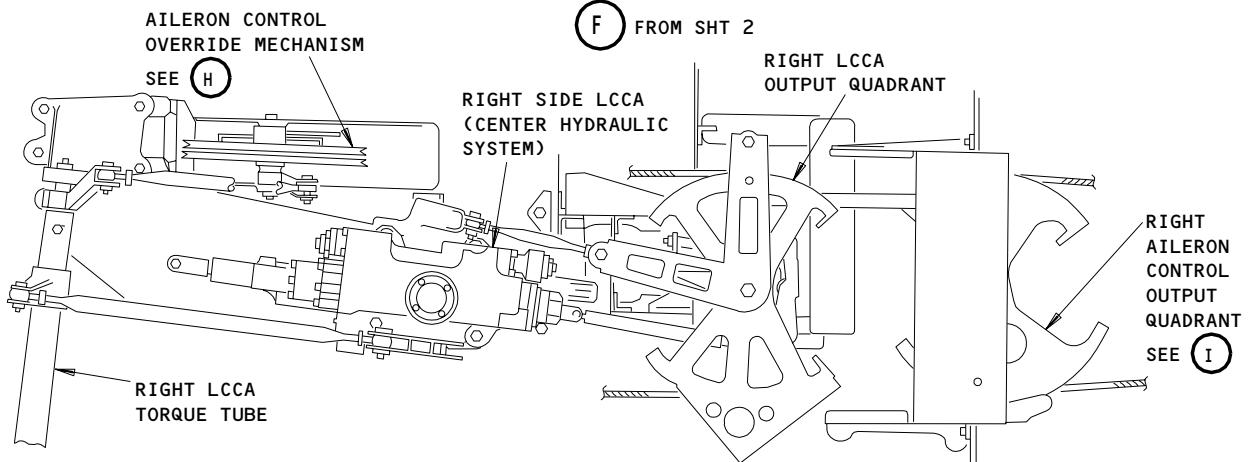
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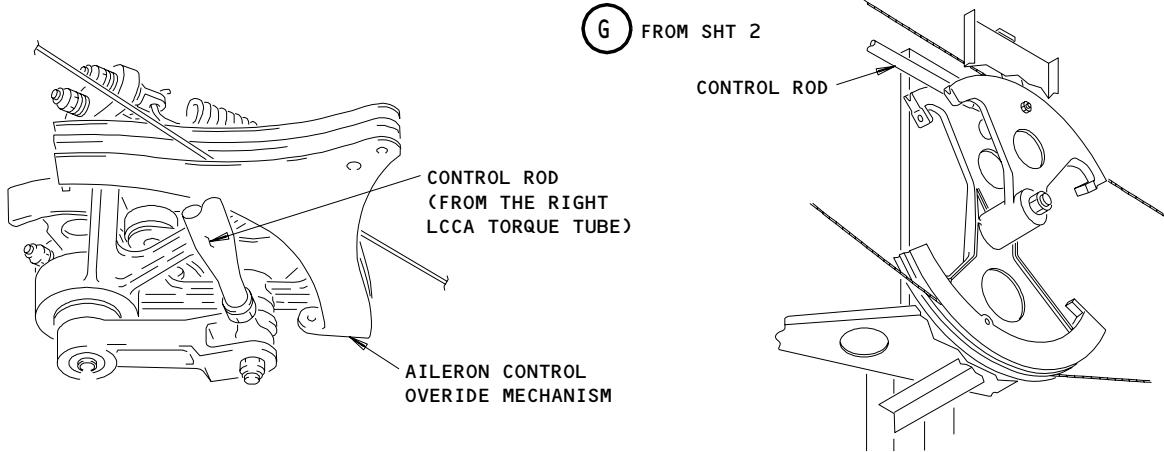
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RIGHT AILERON CONTROL QUADRANT



RIGHT SIDE LCCA



AILERON CONTROL OVERRIDE MECHANISM

(H)

RIGHT AILERON CONTROL OUTPUT QUADRANT

(I)

Aileron and Aileron Trim Control System - Component Location  
Figure 102 (Sheet 3)

EFFECTIVITY

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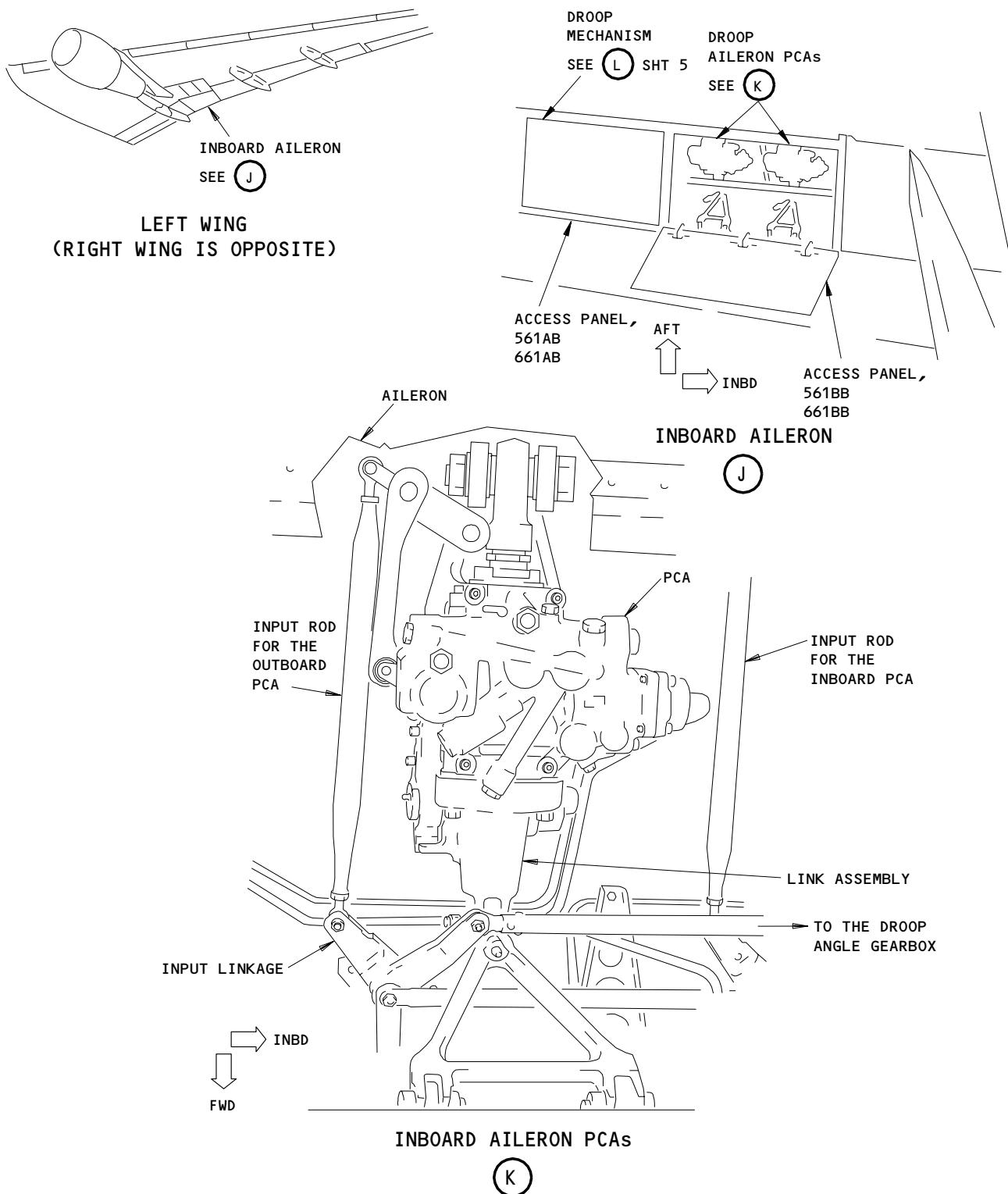
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Aileron and Aileron Trim Control System – Component Location  
Figure 102 (Sheet 4)

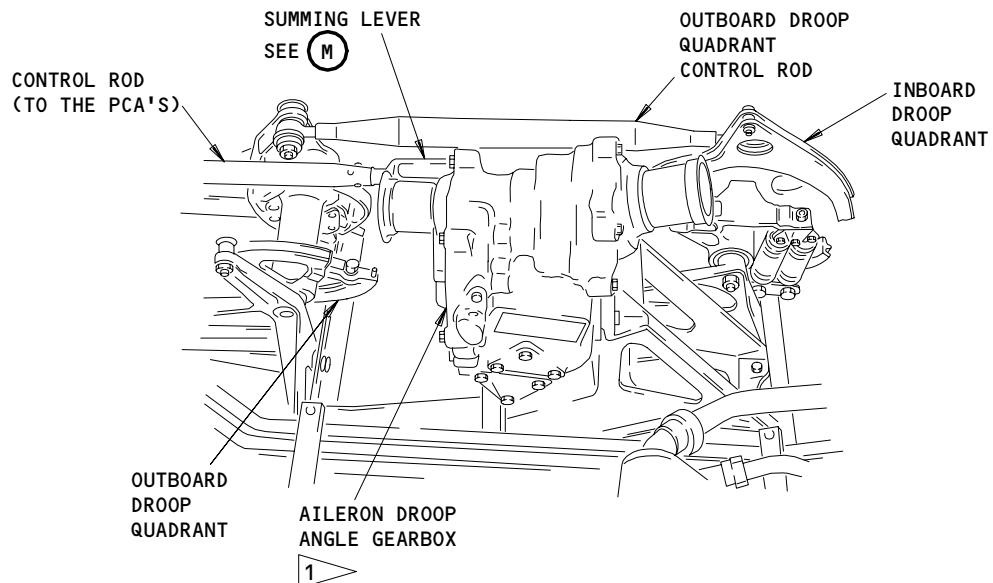
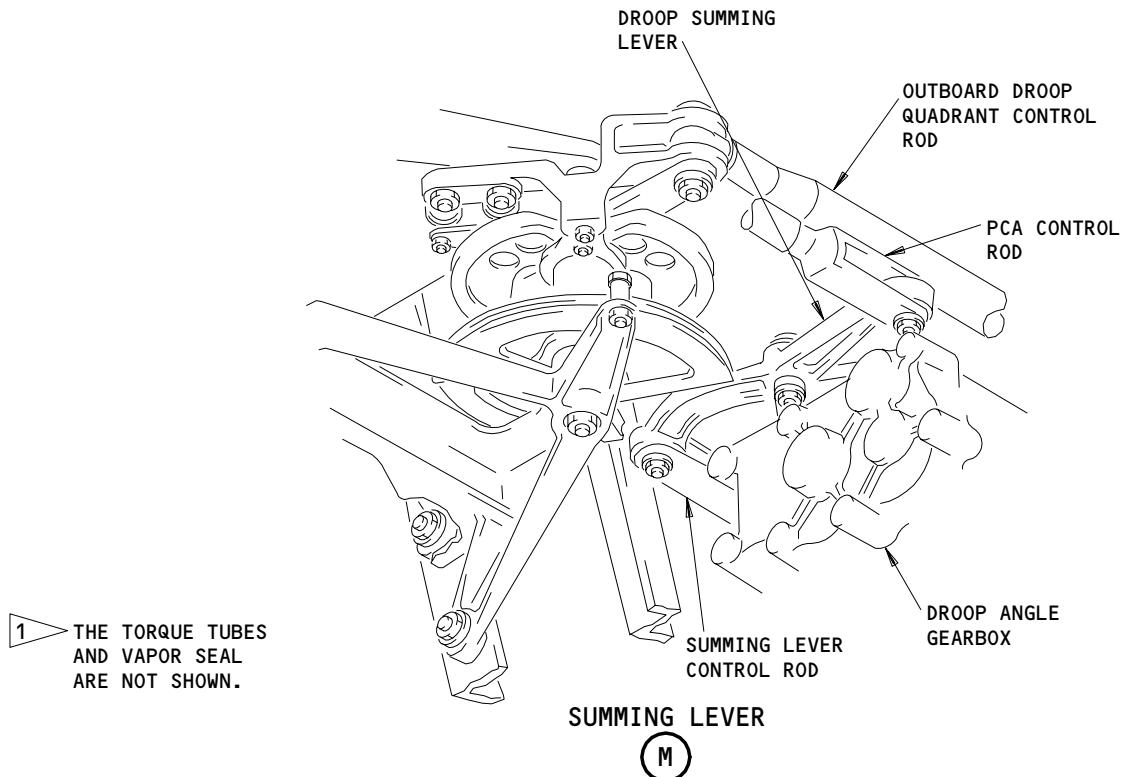
EFFECTIVITY

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**DROOP MECHANISM**
L FROM SHT 4


**Aileron and Aileron Trim Control System – Component Location**  
**Figure 102 (Sheet 5)**

**EFFECTIVITY** —

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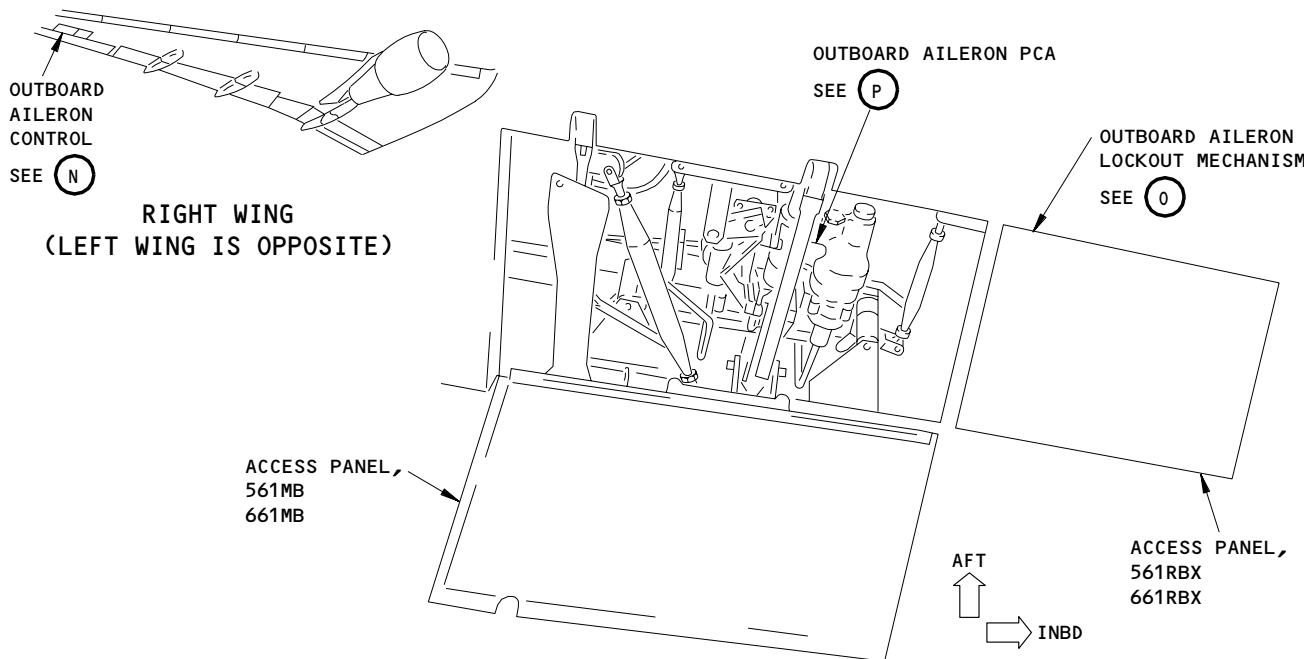
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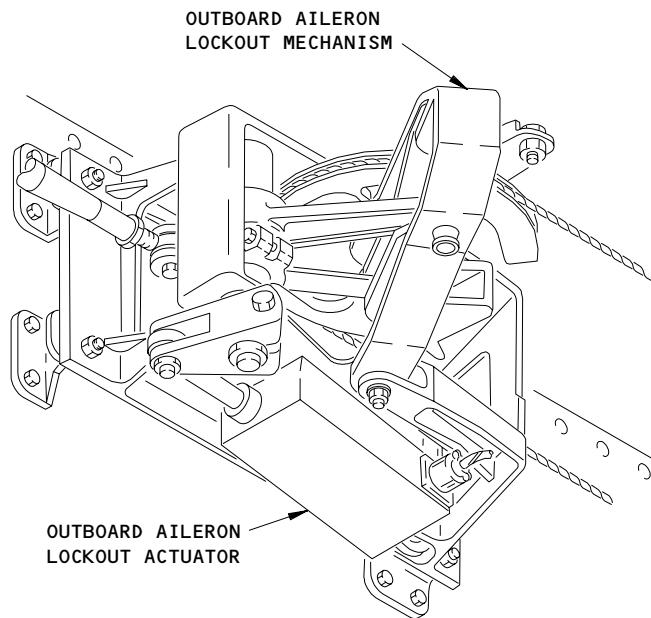
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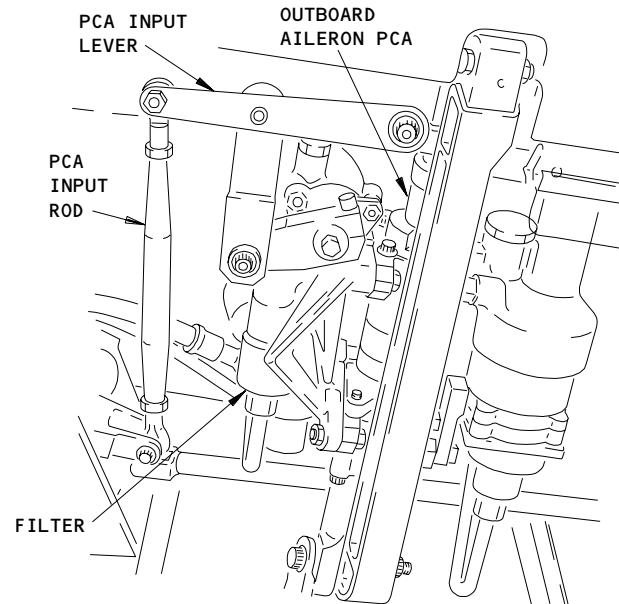
OUTBOARD AILERON CONTROL

(N)



OUTBOARD AILERON LOCKOUT MECHANISM

(O)



OUTBOARD AILERON PCA

(P)

Aileron and Aileron Trim Control System – Component Location  
Figure 102 (Sheet 6)

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Not Used  
Figure 103

EFFECTIVITY

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**"AIL LOCK" LIGHT  
ILLUM. EICAS MESSAGE  
"AILERON LOCKOUT"  
DISPLAYED**

### PREREQUISITES

MAKE SURE THESE SYSTEMS WILL OPERATE:

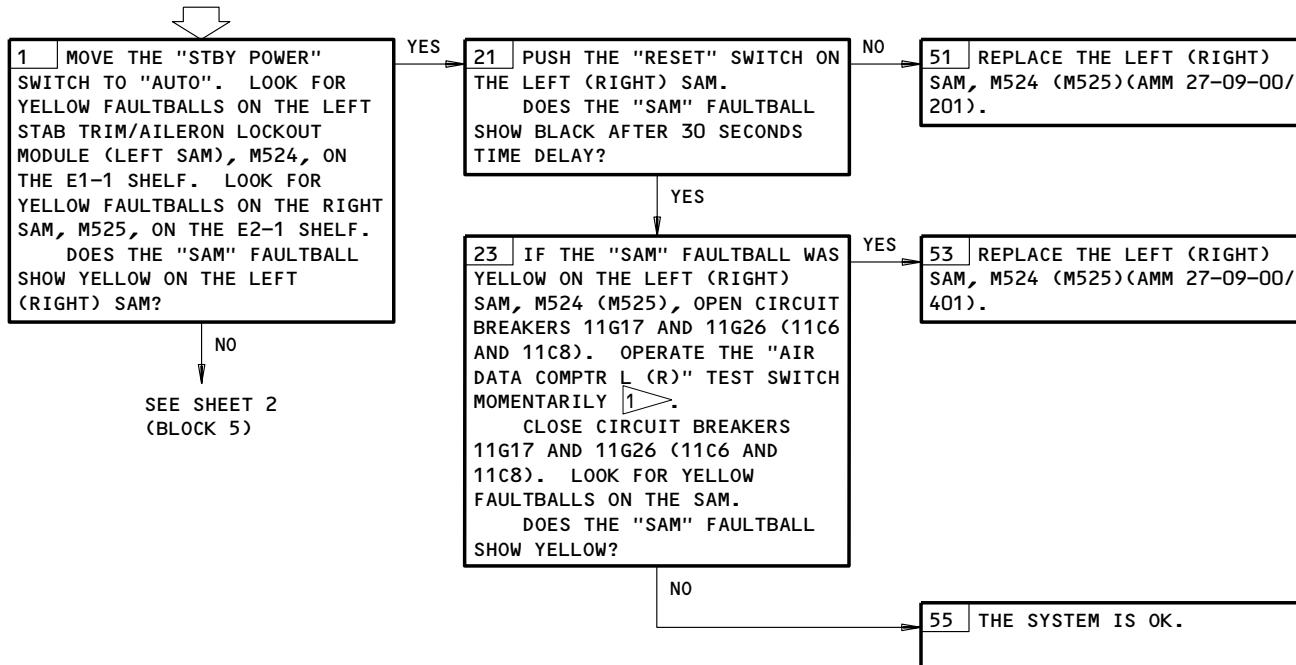
EICAS (AMM 31-41-00/201)

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

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11A10, 11A11, 11A12, 11C6, 11C7, 11C8, 11C9, 11C17, 11C18,  
11F30, 11F31, 11F32, 11G17, 11G18, 11G26, 11G27

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



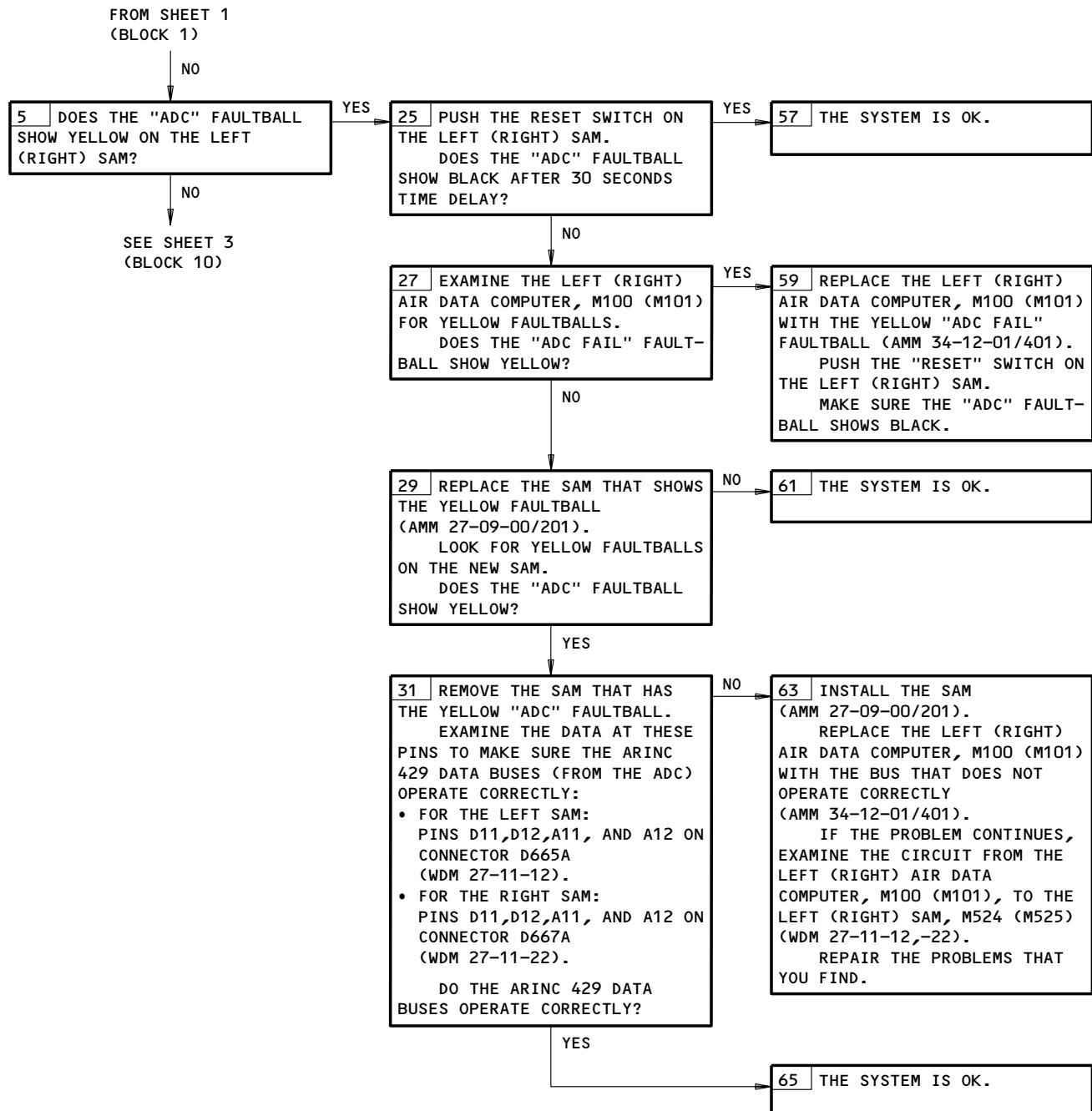
 DO NOT OPERATE THE ADC TEST SWITCH IF THE PITOT-STATIC SYSTEM HAS PRESSURE BECAUSE THE ADC WILL SHOW AN INCORRECT FAULT CONDITION. TO REMOVE THE FAULT, REMOVE THE PRESSURE FROM THE PITOT-STATIC SYSTEM AND OPERATE THE ADC TEST SWITCH.

AIL LOCK Light Illum. EICAS Message AILERON LOCKOUT Displayed  
Figure 104 (Sheet 1)

EFFECTIVITY

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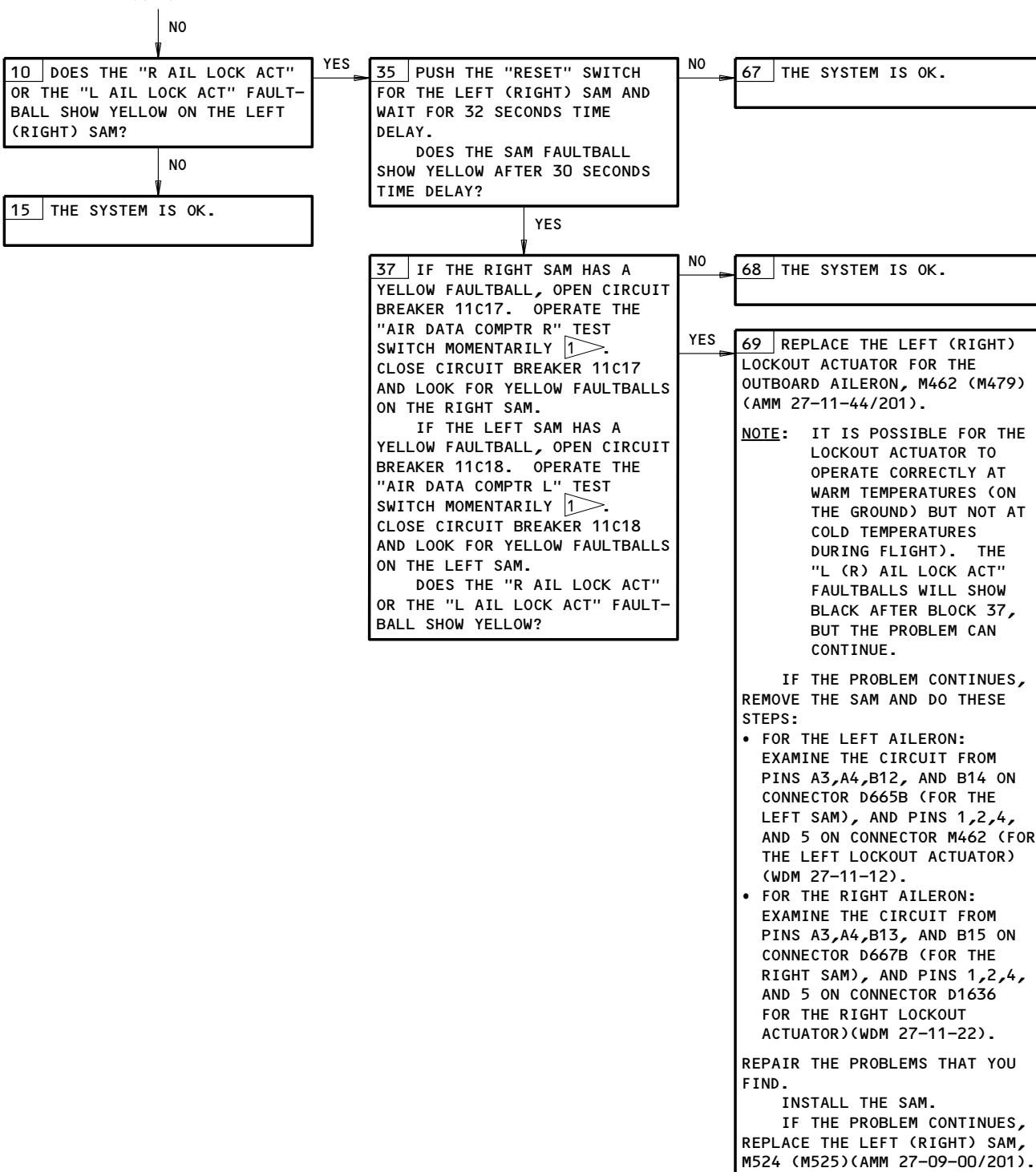
AIL LOCK Light Illum. EICAS Message AILERON LOCKOUT Displayed  
Figure 104 (Sheet 2)

EFFECTIVITY

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FROM SHEET 2  
(BLOCK 5)



AIL LOCK Light Illum. EICAS Message AILERON LOCKOUT Displayed  
Figure 104 (Sheet 3)

EFFECTIVITY

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**27-11-00**



## 767 FAULT ISOLATION/MAINT MANUAL

### FAULT ISOLATION - TIPS

SAM FAULT BALLS (767-200/300 AIRPLANES LINE POSITION 1-869):

THE STABILIZER TRIM/AILERON LOCKOUT MODULE (SAM) IS DESIGNED TO IDENTIFY THE SPECIFIC ACTUATOR CAUSING THE FAULT FOR MOST CASES. WHEN AN AILERON LOCKOUT EICAS MESSAGE IS SHOWN, EXAMINATION OF THE STABILIZER TRIM AND AILERON LOCKOUT MODULE (SAM) WILL SHOW IF THE PROBLEM IS WITH THE LEFT OR RIGHT AILERON LOCKOUT ACTUATOR IN MOST CASES. THE EXCEPTION IS WHEN THE FAILED ACTUATOR GIVES A RESULT CORRECTLY WHILE BEING COMMANDED IN THE SAME DIRECTION IN WHICH THE FAILURE WAS ORIGINALLY FOUND. FOR EXAMPLE, IF AN ACTUATOR DOES NOT INITIALLY GIVE A RESULT (DUE TO FROZEN MOISTURE INSIDE THE ACTUATOR) TO AN "UNLOCK" COMMAND DURING DESCENT, OR IF A LIMIT SWITCH IS FROZEN SUCH THAT IT DOES NOT OPERATE. THE AILERON LOCKOUT "EICAS" MESSAGE AND EITHER THE LEFT OR RIGHT LOCKOUT ACTUATOR FAULT BALL WILL BE SET ON THE "SAM" IN CONTROL. IF THE TEMPERATURE INCREASES TO A POINT WHERE THE ACTUATOR AND/OR LIMIT SWITCH THAWS AND BEGINS TO GIVE A RESULT TO THE UNLOCK COMMAND, THE FAULT BALL AND AILERON LOCKOUT "EICAS" MESSAGE WILL BOTH AUTOMATICALLY RESET. EXAMINATION OF THE "SAM" FAULT BALLS WILL SHOW EITHER A:

- "L. AIL LOCK ACT" (LEFT AILERON LOCKOUT ACTUATOR)
- "R. AIL LOCK ACT" (RIGHT AILERON LOCKOUT ACTUATOR)

IF ONE ACTUATOR IS FAULTED (VIA "SAM" FAULT BALL, FAULT CODE, OR OTHER TROUBLESHOOTING) AND REPLACEMENT OF THE ACTUATOR DID NOT RESOLVE THE CONDITION OR IF THE ACTUATOR FAULTS INTERMITTENT, THEN DO THE FOLLOWING WIRING CHECKS:

NOTE: FOR EACH WIRE CHECK STEP BELOW, DO THESE CHECKS:

DO THESE THREE TYPES OF ELECTRICAL CHECKS FOR THE SPECIFIED CONTACTS (PINS):

- A. CONTINUITY FROM PIN TO PIN
- B. SHORT CIRCUITS BETWEEN PINS (CONTINUITY AND MEGGER)
- C. SHORT CIRCUITS FROM EACH PIN TO STRUCTURE GROUND (MEGGER)

EXAMINE ANY CONNECTORS THAT YOU DISCONNECT FOR CONTAMINATION, DAMAGE, AND BENT OR PUSHED BACK PINS.

1. DO THE FAULT ISOLATION PROCEDURES PER THE 767 FIM. IF THE FAULT CANNOT BE ISOLATED FOLLOWING THE FIM PROCEDURES, THEN CONTINUE TO THE NEXT STEP.
2. REMOVE BOTH SAMS (REF 767 AMM 27-09-00/201).
3. EXAMINE THE WIRES BETWEEN THE SAMS AND THE AFFECTED ACTUATOR CONNECTOR AT PINS 1, 2, 4 AND 5. DO RESISTANCE, SHORT PIN-TO-PIN AND SHORT PIN-TO-STRUCTURE (GROUND) CHECKS AT THESE LOCATIONS.

NOTE: THE RESISTANCE MEASUREMENTS MUST BE APPROXIMATELY THE SAME FOR EACH WIRE WHEN MEASURING BETWEEN THE SAM AND THE ACTUATOR. THE INSULATION RESISTANCE MUST BE SIMILAR FOR BOTH WIRES AND MUST BE GREATER THAN 1 MEGOHM. IF THE INSULATION RESISTANCE IS LESS THAN 1 MEGOHM, EXAMINE THE CONNECTORS FOR CONTAMINATION AND THE WIRE BUNDLE FOR CHAFING.

1. MAKE SURE THE CONNECTORS BETWEEN THE AFFECTED ACTUATOR AND THE SAMS ARE FREE OF CONTAMINATION, DAMAGE, AND BENT OR PUSHED BACK PINS. CONNECTORS OUTSIDE THE PRESSURIZED AREA ARE MORE LIKELY TO BE SUSCEPTIBLE TO CONTAMINATION AND ARE GENERALLY THE BEST LOCATION TO START TROUBLESHOOTING.
2. RE-INSTALL BOTH SAMS WHEN THE CHECKS ARE COMPLETE.

IF NO FAULT BALLS OR "BITE" DISPLAYS ARE SET IN THE "SAMS", IT IS LIKELY THAT THE FAULT IS BETWEEN THE "SAMS", AND "EICAS". (ANY FAULT DOWNSTREAM TO THE "SAM" MUST RESULT IN A FAULT BALL OR "BITE" DISPLAY BEING SET.)

IN THIS CASE, DO THE FOLLOWING CHECKS:

1. WITH THE "AILERON LOCKOUT" EICAS MESSAGE DISPLAYED AND THE AIRPLANE IN THE GROUND MODE, REMOVE BOTH "SAMS" AND EXAMINE FOR GROUND AT CONNECTOR D665B, PIN A11, AND CONNECTOR D667B, PIN A11.
  - A. IF THERE IS A GROUND AT ONE OR BOTH PINS, THE FAULT IS BETWEEN THE "SAM" AND "EICAS". SKIP THE NEXT STEP.
  - B. IF NO GROUND IS FOUND, THERE IS A FAULT INTERNAL TO ONE OF THE "SAMS". SELECTIVELY REPLACE THE "SAMS" TO FIND WHICH MODULE IS SETTING THE FAULT AND REPLACE THE FAULTED "SAM".

AIL LOCK Light Illum. EICAS Message AILERON LOCKOUT Displayed  
Figure 104A (Sheet 1)

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2. IF THERE IS A GROUND AT ONE OR BOTH PINS A11, REMOVE BOTH "EICAS" COMPUTERS (AMM 31-41-02/201) AND EXAMINE FOR GROUND AT CONNECTOR D665B, PIN A11, AND CONNECTOR D667B, PIN A11.
  - A. IF A GROUND IS NO LONGER FOUND, THERE IS A FAULT INTERNAL TO ONE OF THE "EICAS" COMPUTERS. SELECTIVELY RE-INSTALL THE "EICAS" COMPUTERS UNTIL THE GROUND OCCURS AGAIN AND REPLACE THE FAULTED "EICAS" COMPUTER.
  - B. IF THERE IS STILL A GROUND, EXAMINE THE WIRING BETWEEN THE "SAMS" AND THE "EICAS" COMPUTERS FOR SHORT TO GROUND PER NEXT STEP.
3. IF THE ABOVE CHECKS DID NOT ISOLATE THE FAULT OR IF THE "AILERON LOCKOUT" EICAS MESSAGE IS NOT DISPLAYED (INTERMITTENT FAULT), EXAMINE THE WIRES BETWEEN THE "SAM" CONNECTORS CONNECTOR D665B, PIN A11, AND CONNECTOR D667B, PIN A11, THE M10394 "AIL LO" INDICATOR LIGHT (P5 PANEL), AND THE CORRESPONDING CONNECTOR CONTACTS AT THE "L" AND "R EICAS" COMPUTERS. DO A CHECK FOR EXCESSIVE WIRE RESISTANCE, AND FOR SHORTS PIN-TO-PIN AND PIN-TO-STRUCTURE (GROUND). EXAMINE CAREFULLY THE FOLLOWING CONNECTORS/PINS:

NOTE: DO THE FOLLOWING CHECKS WITH THE "SAMS" AND "EICAS" COMPUTERS REMOVED. REFER TO 767 WDM 27-11-12 AND WDM 27-11-22 FOR WIRE/CONNECTOR INFORMATION. THE INSULATION RESISTANCE FOR THE WIRES MUST BE GREATER THAN 1 MEGOHM. IF THE INSULATION RESISTANCE IS LESS THAN 1 MEGOHM, EXAMINE THE CONNECTORS FOR CONTAMINATION AND THE WIRE BUNDLE FOR CHAFING.

  - A. THE FOLLOWING CONNECTORS/PINS FOR CONTAMINATION OR DAMAGE:

D5997P/J, PIN 18  
D5035P/J, PIN 18  
D5051P/J, PIN A6  
D5307P/J, PIN 4 AND PIN 21
  - B. CHECK BURNDY BLOCK "TB101-G126" FOR CORRECT TERMINATION OF THE FOLLOWING WIRES:

W1101-050-22  
W1101-051-22  
W1101-052-22  
W1101-053-22
  - C. EXAMINE THE BURNDY BLOCK "TB068-XC9" (IN THE P5 PANEL) FOR CORRECT TERMINATION OF THE FOLLOWING WIRES:

W1307-005-22  
W0070-868-22

NOTE: REFER TO WDM 27-11-12 AND WDM 27-11-22 FOR THE ABOVE COMPONENTS.

4. RE-INSTALL "SAMS" AND "EICAS" COMPUTERS WHEN THE CHECKS ARE COMPLETE.

AIL LOCK Light Illum. EICAS Message AILERON LOCKOUT Displayed  
Figure 104A (Sheet 2)

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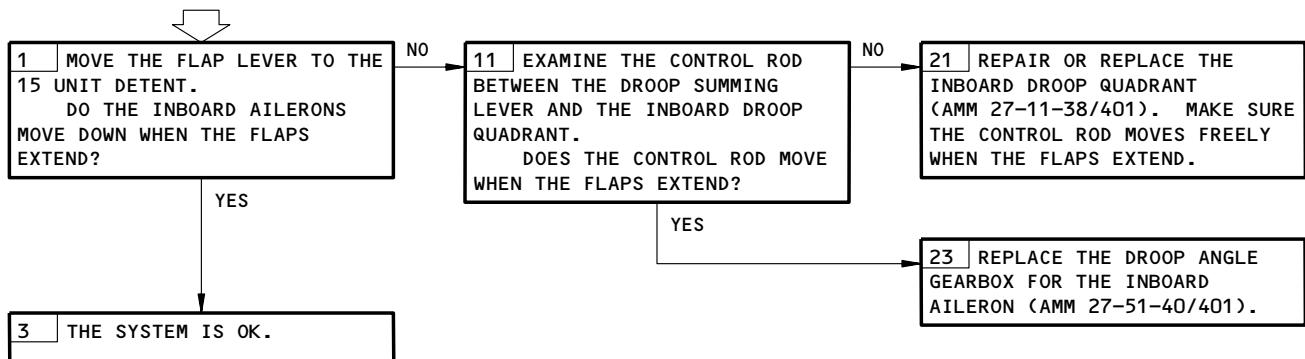
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11C17, 11C18, 11K14, 11K15, 11K23

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER IS ON (AMM 29-11-00/201)

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**AILERON DROOP PROBLEMS**


Aileron Droop Problems  
 Figure 105

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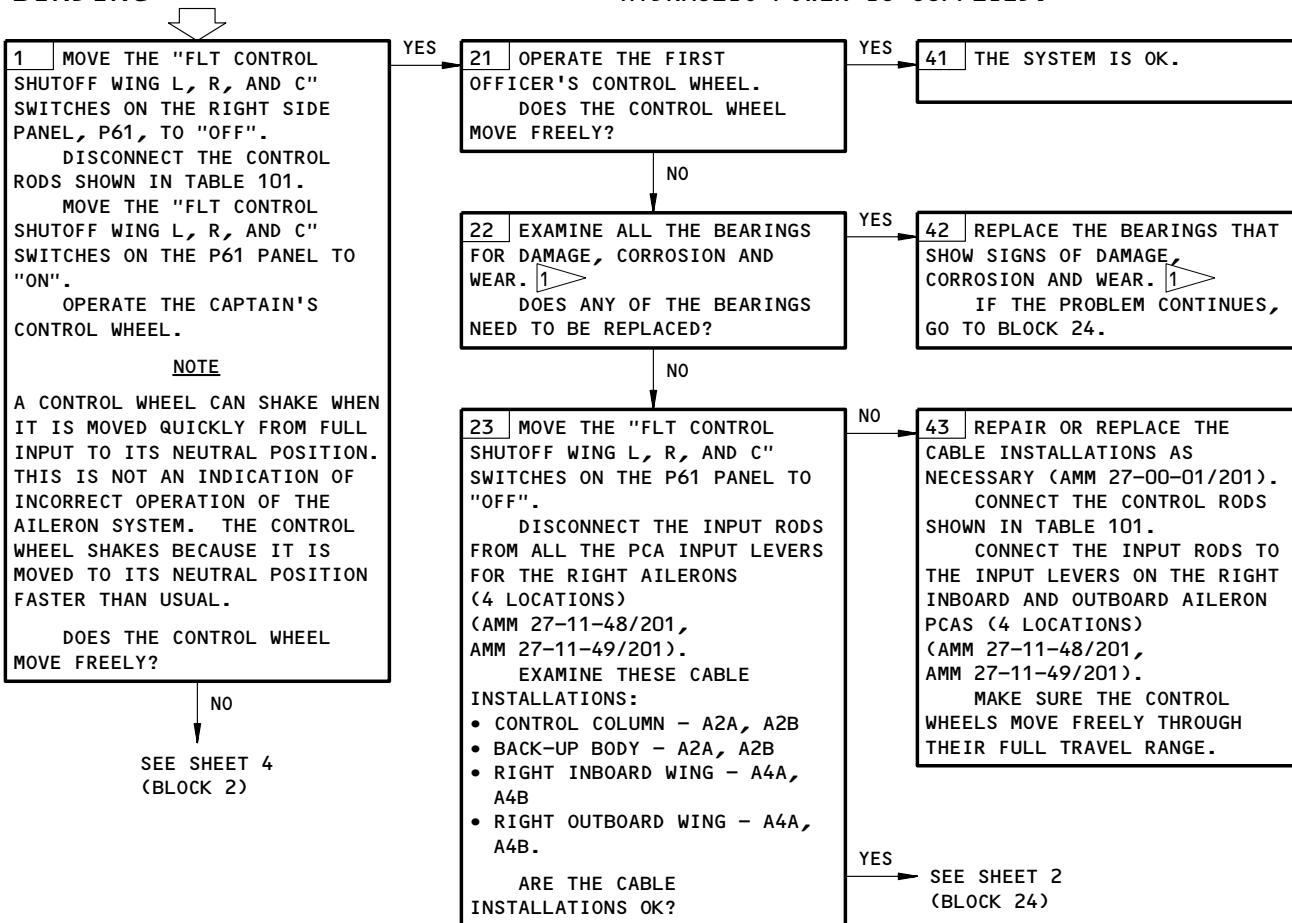
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**PREREQUISITES**

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER IS ON (AMM 29-11-00/201)  
 DOOR LOCKS FOR THE MAIN LANDING GEAR DOORS ARE  
 INSTALLED (AMM 32-00-15/201)

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**CAPTAIN'S AND FIRST OFFICER'S AILERON CONTROL WHEELS BINDING**


1 EXAMINE ALL BEARINGS IN THE AILERONS AND WHEEL WELLS (INBOARD AND OUTBOARD AILERON DROOP MECHANISM, FEEL MECHANISM, TORQUE TUBES, CONTROL RODS, AILERON LOCKOUT MECHANISM, AILERON OVERRIDE QUADRANT-SUPPORT SHAFT BEARINGS). CORRODED BEARINGS CAN CAUSE HIGH CONTROL WHEEL FORCES, OR A CONTROL WHEEL JAM. CORRODED BEARING WILL FEEL GRITTY, STIFF, OR WILL BE SEIZED. REPLACE STEEL BEARINGS WITH STAINLESS STEEL (CRES) BEARINGS

**Captain's and First Officer's Control Wheels Binding**  
**Figure 106 (Sheet 1)**

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FROM SHEET 1  
(BLOCK 23)

YES

24 EXAMINE THE FIRST OFFICER'S DRUM ASSEMBLY, BEARINGS, SPOILER RVDT, AND LOST MOTION DEVICE (AMM 27-11-03/401).  
MAKE SURE THE DRUM ASSEMBLY IS FREE TO MOVE.  
DOES THE DRUM ASSEMBLY MOVE FREELY?

YES

NO → 44 REPAIR OR REPLACE THE FIRST OFFICER'S DRUM ASSEMBLY (AMM 27-11-03/401).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101. CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE RIGHT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

25 EXAMINE THE LOCKOUT MECHANISM FOR THE RIGHT OUTBOARD AILERON.  
MAKE SURE THE MECHANISM IS FREE TO MOVE. MOVE THE "L OR R AIR DATA" TEST SWITCH ON THE P61 PANEL, TO UP AND HOLD IT THERE FOR 20 SECONDS.  
OPEN CIRCUIT BREAKERS 11C17 AND 11C18.  
RELEASE THE "AIR DATA" TEST SWITCH.  
EXAMINE THE LOCKOUT MECHANISM FOR THE OUTBOARD AILERON.  
DOES THE LOCKOUT MECHANISM MOVE FREELY?

YES

NO → 45 REPAIR OR REPLACE THE LOCKOUT MECHANISM FOR THE RIGHT OUTBOARD AILERON (AMM 27-11-44/401).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101. CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE RIGHT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

26 CLOSE CIRCUIT BREAKERS 11C17 AND 11C18.  
EXAMINE THE BEARINGS FOR THE FIRST OFFICER'S CONTROL WHEEL (AMM 27-11-06/401).  
DO THE BEARINGS OPERATE SMOOTHLY AND FREELY?

YES

NO → 46 REPLACE THE BEARINGS FOR THE FIRST OFFICER'S CONTROL WHEEL (AMM 27-11-06/401).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101. CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE RIGHT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

SEE SHEET 3  
(BLOCK 27)

Captain's and First Officer's Control Wheels Binding  
Figure 106 (Sheet 2)

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FROM SHEET 2  
 (BLOCK 27)

YES

**27** DISCONNECT THE INBOARD PCA FOR THE RIGHT INBOARD AILERON FROM THE AILERON (AMM 27-11-48/201).  
 SUPPLY PRESSURE TO THE CENTER HYDRAULIC SYSTEM ONLY (AMM 29-11-00/201).  
 OPERATE THE INPUT LEVER FOR THE INBOARD PCA ON THE RIGHT INBOARD AILERON.  
 DOES THE INPUT LEVER FOR THE PCA OPERATE FREELY?

NO → **47** REPLACE THE INBOARD PCA FOR THE RIGHT INBOARD AILERON (AMM 27-11-48/201).  
 CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
 CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE RIGHT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
 MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

YES

**28** MOVE THE "FLT CONTROL SHUTOFF WING C" SWITCH ON THE P61 PANEL TO "OFF".  
 CONNECT THE INBOARD PCA FOR THE RIGHT INBOARD AILERON TO THE AILERON.  
 DISCONNECT THE OUTBOARD PCA FOR THE RIGHT INBOARD AILERON FROM THE AILERON (AMM 27-11-48/201).  
 DISCONNECT THE INBOARD PCA FOR THE RIGHT OUTBOARD AILERON FROM THE AILERON (AMM 27-11-49/201).  
 SUPPLY PRESSURE TO THE RIGHT HYDRAULIC SYSTEM ONLY (AMM 29-11-00/201).  
 MOVE THE INPUT LEVER FOR THE OUTBOARD PCA ON THE RIGHT INBOARD AILERON.  
 DOES THE INPUT LEVER FOR THE PCA OPERATE FREELY?

NO → **48** REPLACE THE OUTBOARD PCA FOR THE RIGHT INBOARD AILERON (AMM 27-11-48/201).  
 CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
 CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE RIGHT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
 CONNECT THE INBOARD PCA FOR THE RIGHT INBOARD AILERON FROM (AMM 27-11-48/201).  
 MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

YES

**29** MOVE THE INPUT LEVER FOR THE INBOARD PCA ON THE RIGHT OUTBOARD AILERON.  
 DOES THE INPUT LEVER FOR THE PCA OPERATE FREELY?

NO → **49** REPLACE THE INBOARD PCA FOR THE RIGHT OUTBOARD AILERON (AMM 27-11-49/201).  
 CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
 CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE RIGHT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
 CONNECT THE OUTBOARD PCA FOR THE RIGHT INBOARD AILERON.  
 MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

 SEE SHEET 4  
 (BLOCK 30)

**Captain's and First Officer's Control Wheels Binding**  
**Figure 106 (Sheet 3)**

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FROM SHEET 3  
(BLOCK 29)

YES

30 MOVE THE "FLT CONTROL SHUTOFF WING R" SWITCH ON THE P61 PANEL TO "OFF".  
CONNECT THE OUTBOARD PCA FOR THE RIGHT INBOARD AILERON TO THE AILERON.  
CONNECT THE INBOARD PCA FOR THE RIGHT OUTBOARD AILERON TO THE AILERON.  
DISCONNECT THE OUTBOARD PCA FOR THE RIGHT OUTBOARD AILERON FROM THE AILERON (AMM 27-11-49/201).  
SUPPLY PRESSURE TO THE LEFT HYDRAULIC SYSTEM ONLY (AMM 29-11-00/201).  
MOVE THE INPUT LEVER FOR THE OUTBOARD PCA ON THE RIGHT OUTBOARD AILERON.  
DOES THE INPUT LEVER FOR THE PCA OPERATE FREELY?

NO → 50 REPLACE THE OUTBOARD PCA FOR THE RIGHT OUTBOARD AILERON (AMM 27-11-49/201).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
CONNECT THE INPUT RODS TO THE INPUT LEVERS, ON THE RIGHT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

YES → 51

THE SYSTEM IS OK.  
CONNECT THE OUTBOARD PCA FOR THE RIGHT OUTBOARD AILERON.  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE RIGHT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).

FROM SHEET 1  
(BLOCK 1)

NO

22 EXAMINE ALL THE BEARINGS FOR DAMAGE, CORROSION AND WEAR.   
DOES ANY OF THE BEARINGS NEED TO BE REPLACED?

NO

SEE SHEET 5  
(BLOCK 3)

YES

31 REPLACE THE BEARINGS THAT SHOW SIGNS OF DAMAGE, CORROSION AND WEAR.   
DOES THE CONTROL WHEEL MOVE FREELY?

NO

YES

52 EXAMINE ALL BEARINGS AND BUSHINGS FOR FREE PLAY.  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THE IR FULL TRAVEL RANGE.

53 GO TO BLOCK 3.

Captain's and First Officer's Control Wheels Binding  
Figure 106 (Sheet 4)

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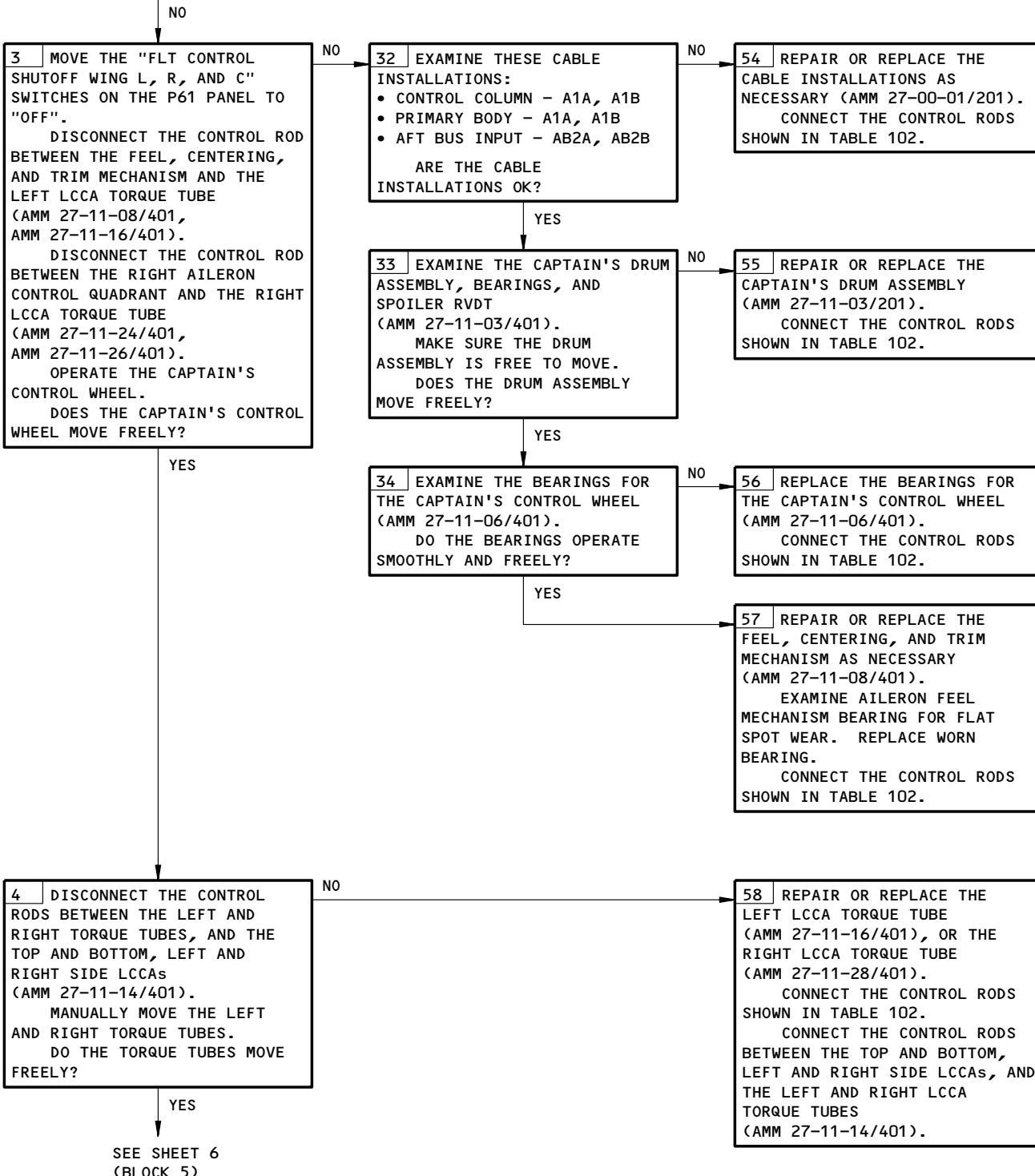
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FROM SHEET 4  
(BLOCK 2)


**Captain's and First Officer's Control Wheels Binding**  
**Figure 106 (Sheet 5)**

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FROM SHEET 5  
(BLOCK 4)

YES

5 CONNECT THE CONTROL ROD BETWEEN THE RIGHT LCCA TORQUE TUBE AND THE RIGHT LCCA (AMM 27-11-14/401).  
CONNECT THE CONTROL ROD BETWEEN THE RIGHT AILERON CONTROL QUADRANT AND THE RIGHT LCCA TORQUE TUBE.  
DISCONNECT THE CONTROL ROD BETWEEN THE RIGHT SIDE LCCA AND THE RIGHT LCCA OUTPUT QUADRANT.  
MOVE THE "FLT CONTROL SHUTOFF WING C" SWITCH ON THE P61 PANEL TO "ON".  
OPERATE THE CAPTAIN'S CONTROL WHEEL.  
DOES THE CAPTAIN'S CONTROL WHEEL OPERATE FREELY?

NO

59 REPLACE THE RIGHT SIDE LCCA (AMM 27-11-14/401).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 103.  
CONNECT THE CONTROL ROD BETWEEN THE LEFT LCCAs AND THE LEFT LCCA TORQUE TUBE (AMM 27-11-14/401).  
CONNECT THE CONTROL ROD BETWEEN THE RIGHT SIDE LCCA AND THE RIGHT LCCA OUTPUT QUADRANT.

YES

6 MOVE THE "FLT CONTROL SHUTOFF WING C" SWITCH ON THE P61 PANEL TO "OFF".  
CONNECT THE CONTROL RODS BETWEEN THE LEFT LCCA TORQUE TUBE AND THE TOP AND BOTTOM LEFT SIDE LCCAs (AMM 27-11-14/201).  
DISCONNECT THE CONTROL RODS BETWEEN THE LEFT LCCAs AND THE LEFT LCCA OUTPUT QUADRANT.  
CONNECT THE CONTROL ROD BETWEEN THE LEFT LCCA TORQUE TUBE AND THE FEEL, CENTERING, AND TRIM MECHANISM (AMM 27-11-08/401, AMM 27-11-16/401).  
MOVE THE "FLT CONTROL SHUTOFF WING L AND R" SWITCHES ON THE P61 PANEL TO "ON".  
OPERATE THE CAPTAIN'S CONTROL WHEEL.  
DOES THE CAPTAIN'S CONTROL WHEEL MOVE FREELY?

YES

35 MOVE THE "FLT CONTROL SHUTOFF WING L AND C" SWITCHES ON THE P61 PANEL TO "OFF".  
DISCONNECT THE CONTROL ROD BETWEEN THE LEFT LCCA TORQUE TUBE AND THE BOTTOM LEFT SIDE LCCA.  
MOVE THE "FLT CONTROL SHUTOFF WING L" SWITCH ON THE P61 PANEL TO "ON".  
OPERATE THE CAPTAIN'S CONTROL WHEEL.  
DOES THE CAPTAIN'S CONTROL WHEEL MOVE FREELY?

NO

60 REPLACE THE TOP LEFT LCCA (AMM 27-11-14/401).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
CONNECT THE CONTROL RODS BETWEEN THE TOP AND BOTTOM LEFT AND RIGHT SIDE LCCAs, AND THE LEFT AND RIGHT LCCA OUTPUT QUADRANTS (AMM 27-11-14/401).  
CONNECT THE CONTROL ROD BETWEEN THE BOTTOM LEFT SIDE LCCA AND THE LEFT LCCA TORQUE TUBE.

YES

61 REPLACE THE BOTTOM LEFT LCCA (AMM 27-11-14/401).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
CONNECT THE CONTROL RODS BETWEEN THE TOP AND BOTTOM LEFT AND RIGHT SIDE LCCAs AND THE LEFT AND RIGHT LCCA OUTPUT QUADRANTS (AMM 27-11-14/401).  
CONNECT THE CONTROL ROD BETWEEN THE BOTTOM LEFT SIDE LCCA AND THE LEFT LCCA TORQUE TUBE.

NO

SEE SHEET 7  
(BLOCK 7)

Captain's and First Officer's Control Wheels Binding  
Figure 106 (Sheet 6)

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FROM SHEET 6  
(BLOCK 6)

NO

7 MOVE THE "FLT CONTROL SHUTOFF WING L AND R" SWITCH ON THE P61 PANEL TO "OFF".  
DISCONNECT THE INPUT RODS FROM ALL THE PCA INPUT LEVERS FOR THE LEFT AILERONS (4 LOCATIONS)  
(CAMM 27-11-48/201,  
AMM 27-11-49/201).  
EXAMINE THESE CABLE INSTALLATIONS:  

- AFT POWER BUS - AB3A, AB3B
- LEFT INBOARD WING - A3A, A3B
- LEFT OUTBOARD WING - A3A, A3B

ARE THE CABLE INSTALLATIONS OK?

YES

NO

62 REPAIR OR REPLACE THE CABLE INSTALLATIONS AS NECESSARY (AMM 27-00-01/201).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
CONNECT THE CONTROL RODS BETWEEN THE TOP AND BOTTOM, LEFT AND RIGHT SIDE LCCAs, AND THE LEFT AND RIGHT LCCA OUTPUT QUADRANTS (AMM 27-11-14/201).  
CONNECT THE CONTROL ROD BETWEEN THE BOTTOM LEFT SIDE LCCA AND THE LEFT LCCA TORQUE TUBE.  
CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE LEFT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS)  
(CAMM 27-11-48/201,  
AMM 27-11-49/201).  
MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

8 EXAMINE THE LOCKOUT MECHANISM FOR THE LEFT OUTBOARD AILERON.  
MAKE SURE THE MECHANISM IS FREE TO MOVE.  
MOVE THE "L OR R AIR DATA" TEST SWITCH ON THE P61 PANEL UP AND HOLD IT THERE FOR 20 SECONDS.  
OPEN CIRCUIT BREAKERS 11C17 AND 11C18.  
RELEASE THE "AIR DATA" TEST SWITCH.  
EXAMINE THE LOCKOUT MECHANISM FOR THE OUTBOARD AILERON.  
DOES THE LOCKOUT MECHANISM MOVE FREELY?

YES

SEE SHEET 8  
(BLOCK 9)

NO

63 REPAIR OR REPLACE THE LOCKOUT MECHANISM FOR THE LEFT OUTBOARD AILERON  
(CAMM 27-11-44/201).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
CONNECT THE CONTROL RODS BETWEEN THE TOP AND BOTTOM, LEFT AND RIGHT SIDE LCCAs, AND THE LEFT AND RIGHT LCCA OUTPUT QUADRANTS (AMM 27-11-14/201).  
CONNECT THE CONTROL ROD BETWEEN THE BOTTOM LEFT SIDE LCCA AND THE LEFT LCCA TORQUE TUBE.  
CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE LEFT INBOARD AND OUTBOARD AILERON PCAS (4 LOCATIONS)  
(CAMM 27-11-48/201,  
AMM 27-11-49/201).  
CLOSE CIRCUIT BREAKERS 11C17 AND 11C18.  
MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

Captain's and First Officer's Control Wheels Binding  
Figure 106 (Sheet 7)

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FROM SHEET 7  
(BLOCK 8)

YES

**9** DISCONNECT THE INBOARD PCA FOR THE LEFT INBOARD AILERON FROM THE AILERON (AMM 27-11-48/201).  
SUPPLY PRESSURE TO THE CENTER HYDRAULIC SYSTEM ONLY (AMM 29-11-00/201).  
OPERATE THE INPUT LEVER FOR THE INBOARD PCA, ON THE LEFT INBOARD AILERON.  
DOES THE INPUT LEVER FOR THE PCA OPERATE FREELY?

NO

**64** REPLACE THE INBOARD PCA FOR THE LEFT INBOARD AILERON (AMM 27-11-48/201).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
CONNECT THE CONTROL RODS BETWEEN THE TOP AND BOTTOM, LEFT AND RIGHTSIDE LCCAs AND THE LEFT AND RIGHT OUTPUT QUADRANTS (AMM 27-11-14/201).  
CONNECT THE INBOARD PCA FOR THE INBOARD PCA TO THE AILERON (AMM 27-11-48/201).  
CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE LEFT INBOARD AND OUTBOARD AILERON PCAs (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

YES

**10** MOVE THE "FLT CONTROL SHUTOFF WING C" SWITCH ON THE P61 PANEL TO "OFF".  
CONNECT THE INBOARD PCA FOR THE LEFT INBOARD AILERON TO THE AILERON.  
DISCONNECT THE OUTBOARD PCA FOR THE LEFT INBOARD AILERON FROM THE AILERON (AMM 27-11-48/201).  
DISCONNECT THE OUTBOARD PCA FOR THE LEFT OUTBOARD AILERON FROM THE AILERON (AMM 27-11-49/201).  
SUPPLY PRESSURE TO THE LEFT HYDRAULIC SYSTEM ONLY (AMM 29-11-00/201).  
MOVE THE INPUT LEVER FOR THE OUTBOARD PCA ON THE LEFT INBOARD AILERON.  
DOES THE INPUT LEVER FOR THE PCA OPERATE FREELY?

NO

**65** REPLACE THE OUTBOARD PCA FOR THE LEFT INBOARD AILERON (AMM 27-11-48/201).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
CONNECT THE OUTBOARD PCA FOR THE INBOARD AILERON TO THE AILERON (AMM 27-11-48/201).  
CONNECT THE INBOARD PCA FOR THE LEFT OUTBOARD AILERON, TO THE AILERON (AMM 27-11-49/201).  
CONNECT THE CONTROL RODS BETWEEN THE TOP AND BOTTOM, LEFT AND RIGHT SIDE LCCAs, AND THE LEFT AND RIGHT LCCA OUTPUT QUADRANTS (AMM 27-11-14/201).  
CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE LEFT INBOARD AND OUTBOARD AILERON PCAs (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

YES

SEE SHEET 9  
(BLOCK 11)

**Captain's and First Officer's Control Wheels Binding**  
**Figure 106 (Sheet 8)**

EFFECTIVITY

ALL

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FROM SHEET 8  
 (BLOCK 10)

NO

**11** MOVE THE INPUT LEVER FOR THE OUTBOARD PCA ON THE LEFT OUTBOARD AILERON.  
 DOES THE INPUT LEVER FOR THE PCA OPERATE FREELY?

YES

NO

**66** REPLACE THE INBOARD PCA FOR THE LEFT OUTBOARD AILERON (AMM 27-11-49/201).  
 CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
 CONNECT THE OUTBOARD PCA FOR THE LEFT INBOARD AILERON TO THE AILERON (AMM 27-11-48/201).  
 CONNECT THE CONTROL RODS BETWEEN THE TOP AND BOTTOM, LEFT AND RIGHT SIDE LCCAS, AND THE LEFT AND RIGHT LCCA OUTPUT QUADRANTS (AMM 27-11-14/401).  
 CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE LEFT INBOARD AND OUTBOARD AILERON PCAs (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
 MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

**12** MOVE THE "FLT CONTROL SHUTOFF WING L" SWITCH, ON THE P61 PANEL TO "OFF".  
 CONNECT THE OUTBOARD PCA FOR THE LEFT INBOARD AILERON.  
 CONNECT THE INBOARD PCA FOR THE LEFT OUTBOARD AILERON.  
 DISCONNECT THE OUTBOARD PCA FOR THE LEFT OUTBOARD AILERON.  
 MOVE THE "FLT CONTROL SHUTOFF WING R" SWITCH ONLY, ON THE P61 PANEL TO ON.  
 MOVE THE INPUT LEVER FOR THE OUTBOARD PCA ON THE LEFT OUTBOARD AILERON.  
 DOES THE INPUT LEVER FOR THE PCA OPERATE FREELY?

YES

NO

**67** REPLACE THE OUTBOARD PCA FOR THE LEFT OUTBOARD AILERON (AMM 27-11-49/201).  
 CONNECT THE CONTROL RODS SHOWN IN TABLE 101.  
 CONNECT THE OUTBOARD PCA FOR THE LEFT OUTBOARD AILERON.  
 CONNECT THE CONTROL RODS BETWEEN THE TOP AND BOTTOM, LEFT AND RIGHT SIDE LCCAS, AND THE LEFT AND RIGHT LCCA OUTPUT QUADRANTS (AMM 27-11-14/401).  
 CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE LEFT INBOARD AND OUTBOARD AILERON PCAs (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
 MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

**68** THE SYSTEM IS OK.  
 CONNECT THE RODS SHOWN IN TABLE 101.  
 CONNECT THE OUTBOARD PCA FOR THE LEFT OUTBOARD AILERON.  
 CONNECT THE CONTROL RODS BETWEEN THE TOP AND BOTTOM, LEFT AND RIGHT SIDE LCCAS, AND THE LEFT AND RIGHT LCCA OUTPUT QUADRANTS (AMM 27-11-14/401).  
 CONNECT THE INPUT RODS TO THE INPUT LEVERS ON THE LEFT INBOARD AND OUTBOARD AILERON PCAs (4 LOCATIONS) (AMM 27-11-48/201, AMM 27-11-49/201).  
 MAKE SURE THE CONTROL WHEELS MOVE FREELY THROUGH THEIR FULL TRAVEL RANGE.

Captain's and First Officer's Control Wheels Binding  
 Figure 106 (Sheet 9)

EFFECTIVITY

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**27-11-00**



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FAULT ISOLATION/MAINT MANUAL

CONTROL ROD CONNECTED BETWEEN		REFERENCES
COMPONENT ONE	COMPONENT TWO	
THE CAPTAIN'S AILERON DRUM ASSEMBLY	THE FIRST OFFICER'S DRUM ASSEMBLY	AMM 27-11-03/401
THE RIGHT LCCA OUTPUT QUADRANT	THE RIGHT AILERON CONTROL OUTPUT QUADRANT	AMM 27-11-28/401 AMM 27-11-34/401
THE RIGHT LCCA TORQUE TUBE	THE AILERON CONTROL OVERRIDE MECHANISM	AMM 27-11-24/401 AMM 27-11-36/401

TABLE 101

CONTROL ROD CONNECTED BETWEEN		REFERENCES
COMPONENT ONE	COMPONENT TWO	
THE CAPTAIN'S AILERON DRUM ASSEMBLY	THE FIRST OFFICER'S DRUM ASSEMBLY	AMM 27-11-03/401
THE RIGHT LCCA OUTPUT QUADRANT	THE RIGHT AILERON CONTROL OUTPUT QUADRANT	AMM 27-11-28/401 AMM 27-11-34/401
THE RIGHT LCCA TORQUE TUBE	THE AILERON CONTROL OVERRIDE MECHANISM	AMM 27-11-24/401 AMM 27-11-36/401
THE FEEL, CENTERING, AND TRIM MECHANISM	THE LEFT LCCA TORQUE TUBE	AMM 27-11-08/401 AMM 27-11-16/401
THE RIGHT AILERON CONTROL QUADRANT	THE RIGHT LCCA TORQUE TUBE	AMM 27-11-24/401 AMM 27-11-26/401

TABLE 102

CONTROL ROD CONNECTED BETWEEN		REFERENCES
COMPONENT ONE	COMPONENT TWO	
THE CAPTAIN'S AILERON DRUM ASSEMBLY	THE FIRST OFFICER'S DRUM ASSEMBLY	AMM 27-11-03/401
THE RIGHT LCCA OUTPUT QUADRANT	THE RIGHT AILERON CONTROL OUTPUT QUADRANT	AMM 27-11-28/401 AMM 27-11-34/401
THE RIGHT LCCA TORQUE TUBE	THE AILERON CONTROL OVERRIDE MECHANISM	AMM 27-11-24/401 AMM 27-11-36/401
THE FEEL, CENTERING, AND TRIM MECHANISM	THE LEFT LCCA TORQUE TUBE	AMM 27-11-08/401 AMM 27-11-16/401

TABLE 103

Captain's and First Officer's Control Wheels Binding  
Figure 106 (Sheet 10)

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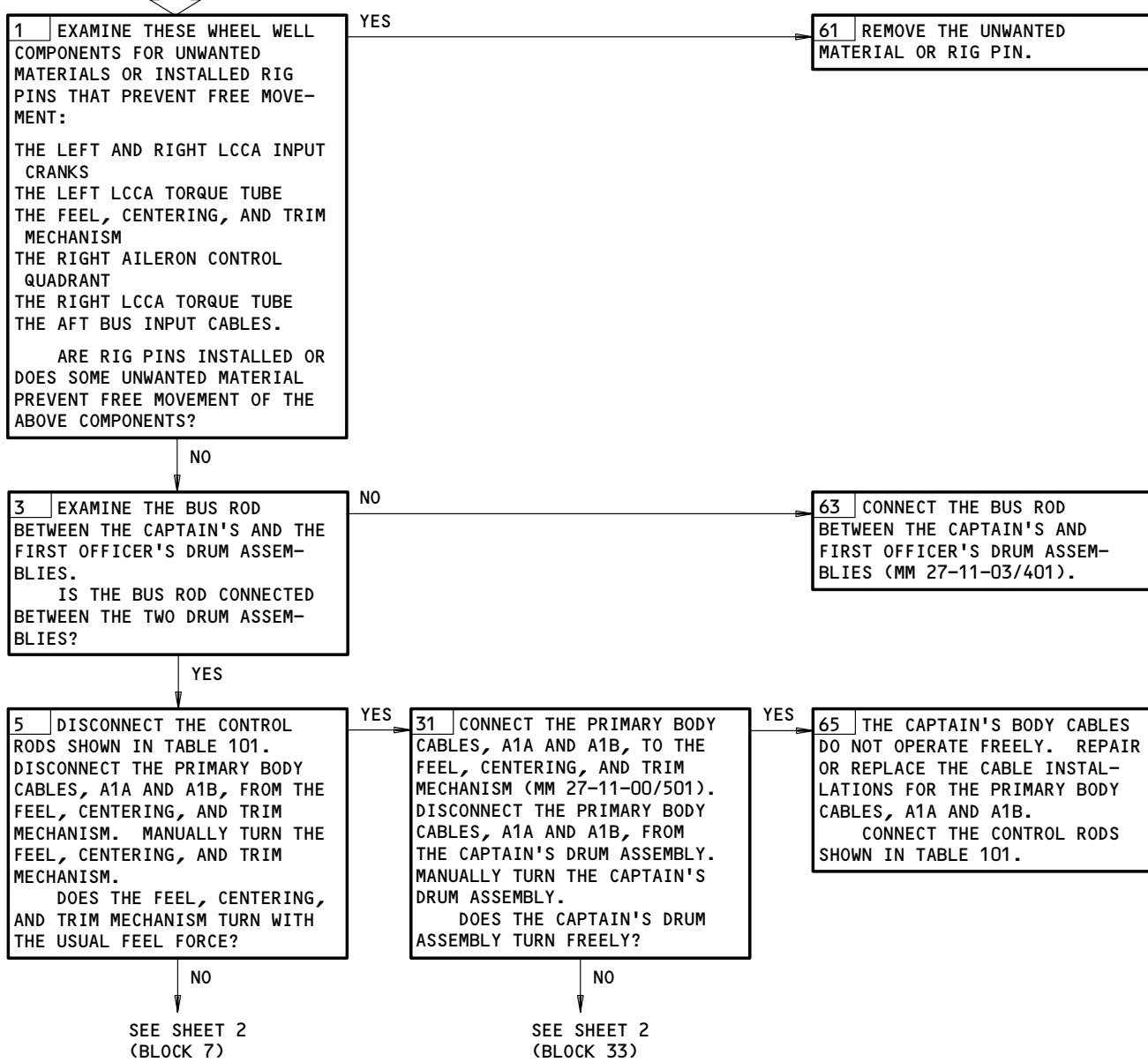
**CAPTAIN'S AILERON  
CONTROL WHEEL  
JAMMED**
**PREREQUISITES**

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

TRAILING EDGE FLAPS ARE DEACTIVATED

(MM 27-51-00/201)

DOOR LOCKS FOR THE MAIN LANDING GEAR ARE INSTALLED  
(MM 32-00-15/201)

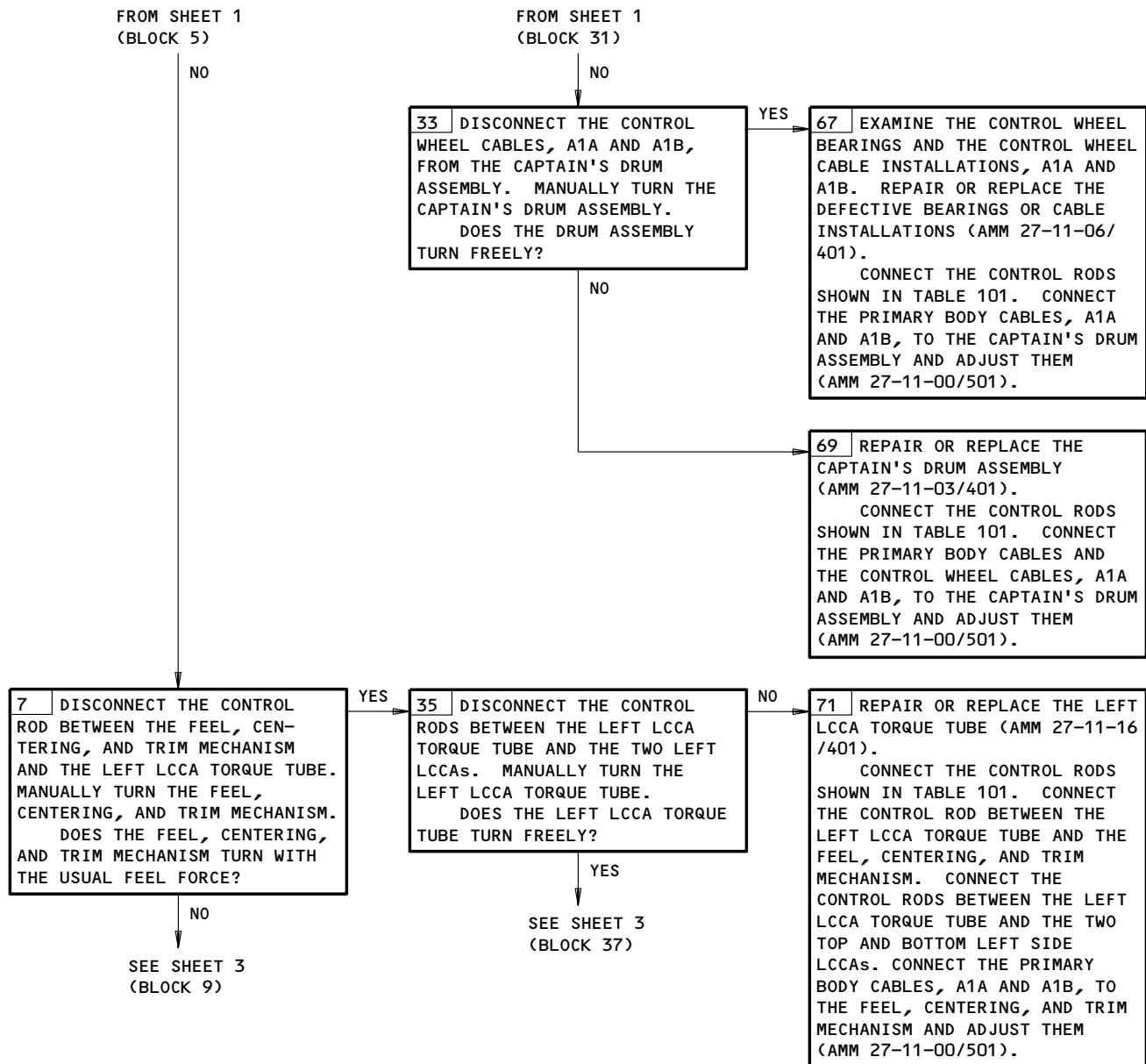


**Captain's Aileron Control Wheel Jammed**  
Figure 107 (Sheet 1)

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**Captain's Aileron Control Wheel Jammed**  
**Figure 107 (Sheet 2)**

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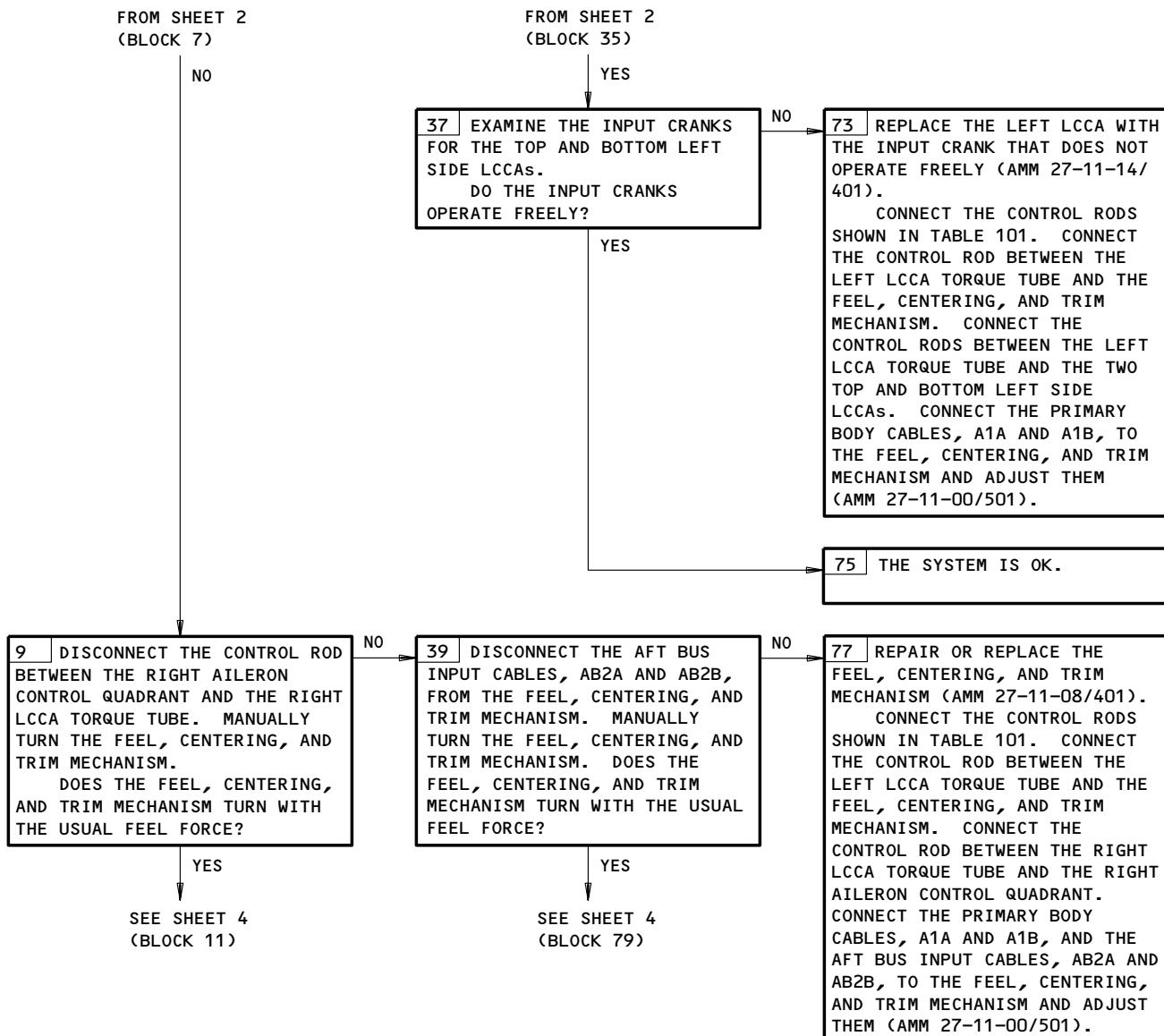
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FAULT ISOLATION/MAINT MANUAL



Captain's Aileron Control Wheel Jammed  
Figure 107 (Sheet 3)

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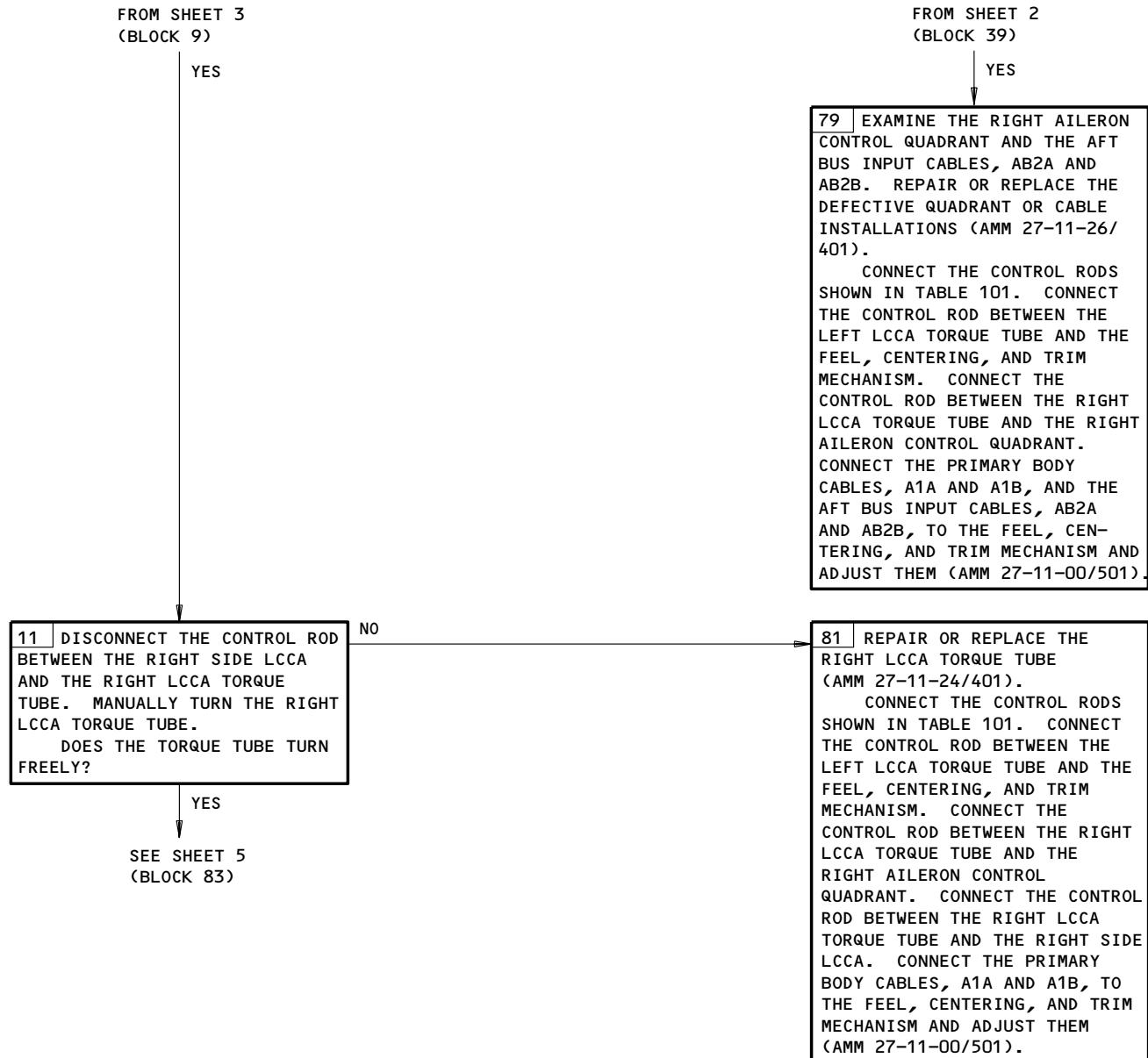
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FAULT ISOLATION/MAINT MANUAL



Captain's Aileron Control Wheel Jammed  
Figure 107 (Sheet 4)

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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 4  
(BLOCK 11)

YES

83 | THE INPUT CRANK ON THE  
RIGHT LCCA DOES NOT MOVE  
FREELY. REPLACE THE RIGHT  
LCCA (MM 27-11-14/401).  
CONNECT THE CONTROL RODS  
SHOWN IN TABLE 101. CONNECT  
THE CONTROL ROD BETWEEN THE  
LEFT LCCA TORQUE TUBE AND THE  
FEEL, CENTERING, AND TRIM  
MECHANISM. CONNECT THE  
CONTROL ROD BETWEEN THE RIGHT  
LCCA TORQUE TUBE AND THE RIGHT  
AILERON CONTROL QUADRANT.  
CONNECT THE CONTROL ROD  
BETWEEN THE RIGHT LCCA TORQUE  
TUBE AND THE RIGHT LCCA.  
CONNECT THE PRIMARY BODY  
CABLES, A1A AND A1B, TO THE  
FEEL, CENTERING, AND TRIM  
MECHANISM AND ADJUST THEM  
(MM 27-11-00/501).

TABLE 101

CONTROL ROD CONNECTED BETWEEN		REFERENCES
COMPONENT ONE	COMPONENT TWO	
THE CAPTAIN'S AILERON DRUM ASSEMBLY	THE FIRST OFFICER'S DRUM ASSEMBLY	MM 27-11-03/401
THE RIGHT LCCA TORQUE TUBE	THE AILERON CONTROL OVERRIDE MECHANISM	MM 27-11-24/401 MM 27-11-36/401

Captain's Aileron Control Wheel Jammed  
Figure 107 (Sheet 5)

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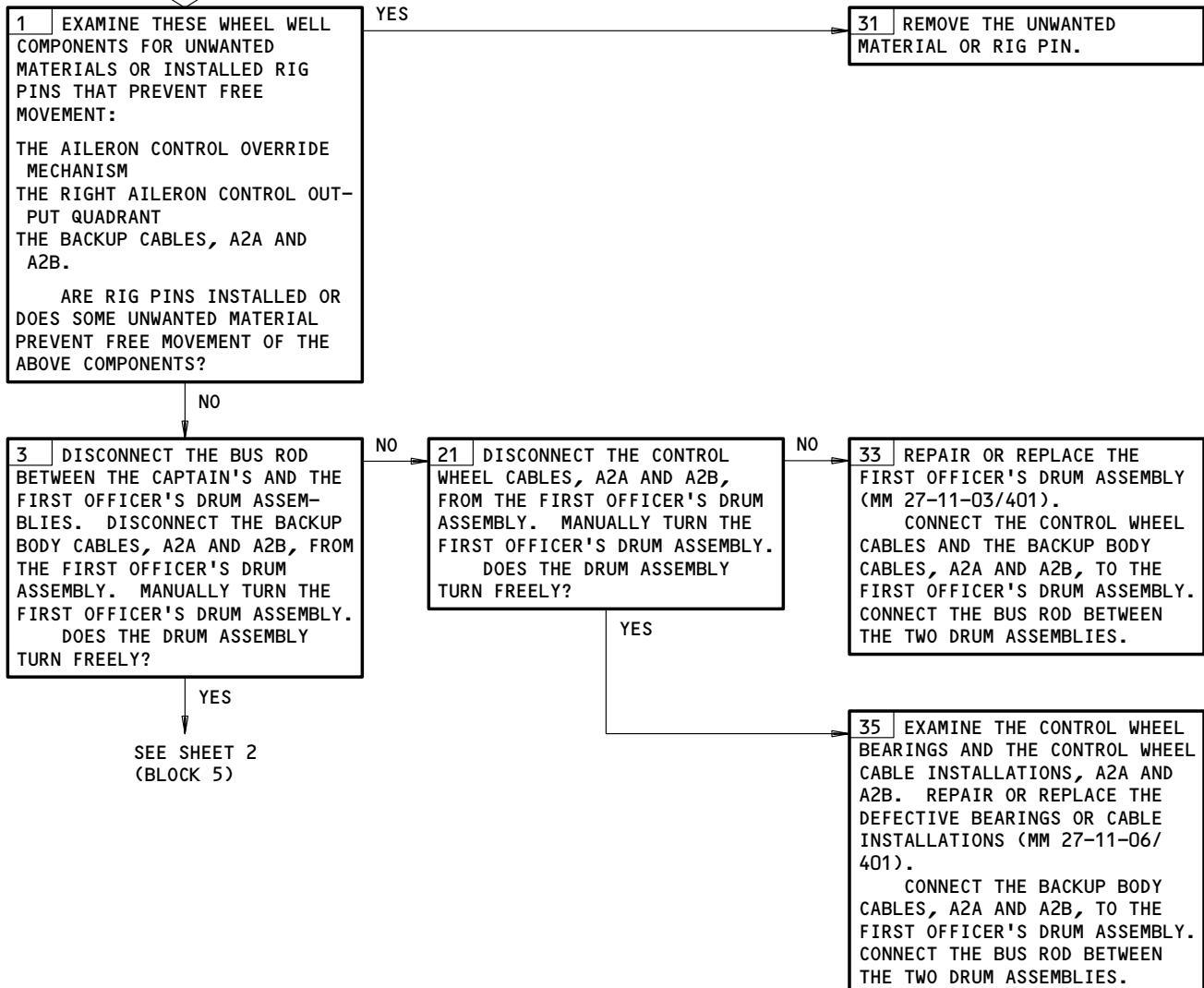
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**FIRST OFFICER'S  
AILERON CONTROL  
WHEEL JAMMED**
**PREREQUISITES**

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

TRAILING EDGE FLAPS ARE DEACTIVATED  
(MM 27-51-00/201)

DOOR LOCKS FOR THE MAIN LANDING GEAR ARE INSTALLED  
(MM 32-00-15/201)



First Officer's Aileron Control Wheel Jammed  
Figure 108 (Sheet 1)

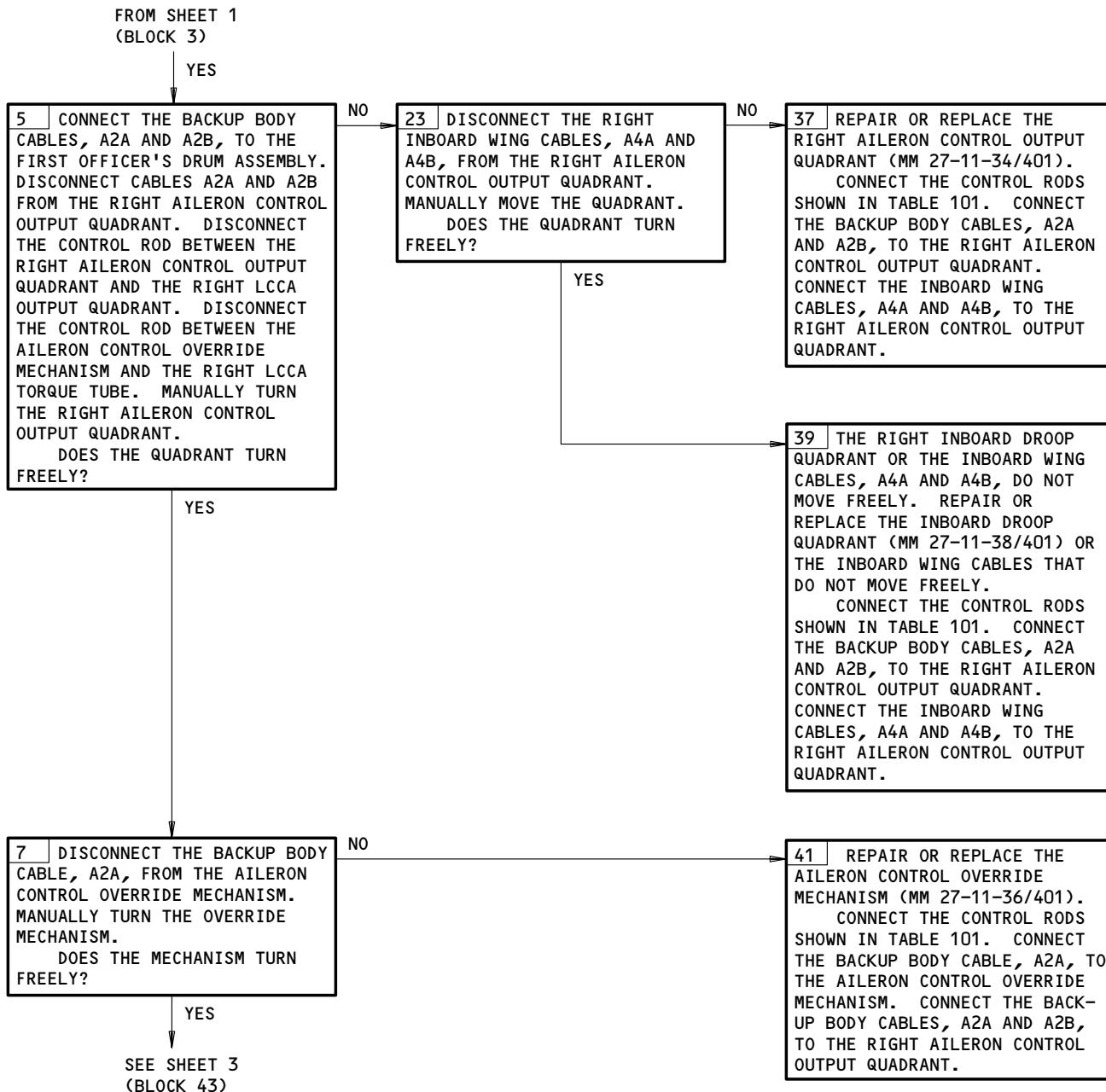
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First Officer's Aileron Control Wheel Jammed  
Figure 108 (Sheet 2)

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FROM SHEET 2  
(BLOCK 7)

YES

43. THE BACKUP BODY CABLES, A2A AND A2B, DO NOT MOVE FREELY. REPAIR OR REPLACE THE CABLE INSTALLATIONS AND ADJUST THEM (MM 27-11-00/501).  
CONNECT THE CONTROL RODS SHOWN IN TABLE 101. CONNECT THE BACKUP BODY CABLE, A2A, TO THE AILERON CONTROL OVERRIDE MECHANISM. CONNECT THE BACKUP BODY CABLES, A2A AND A2B, TO THE RIGHT AILERON CONTROL OUTPUT QUADRANT.

TABLE 101

CONTROL ROD CONNECTED BETWEEN		REFERENCES
COMPONENT ONE	COMPONENT TWO	
THE CAPTAIN'S DRUM ASSEMBLY	THE FIRST OFFICER'S DRUM ASSEMBLY	MM 27-11-03/401
THE RIGHT LCCA OUTPUT QUADRANT	THE RIGHT AILERON CONTROL OUTPUT QUADRANT	MM 27-11-28/401 MM 27-11-34/401
THE RIGHT LCCA TORQUE TUBE	THE AILERON CONTROL OVERRIDE MECHANISM	MM 27-11-24/401 MM 27-11-36/401

First Officer's Aileron Control Wheel Jammed  
Figure 108 (Sheet 3)

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AILERON AND SPOILER HYDRAULIC SHUTOFF VALVES

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER - FLT CONT SHUTOFF WING C, C1016 FLT CONT SHUTOFF WING L, C1014 FLT CONT SHUTOFF WING R, C1015	1	1 1 1	FLT COMPT, P11 11H16 11H15 11H26	*
PANEL - (FIM 24-22-00/101) GEN FIELD & HYD CONT, M1087				*
SWITCH - C FLT CONT SHUTOFF WING, YDWS3	1	1	FLT COMPT, P61, GEN FIELD & HYD CONT PNL, M1087	*
SWITCH - L FLT CONT SHUTOFF WING, YDWS5	1	1	FLT COMPT, P61, GEN FIELD & HYD CONT PNL, M1087	*
SWITCH - R FLT CONT SHUTOFF WING, YDWS1	1	1	FLT COMPT, P61, GEN FIELD & HYD CONT PNL, M1087	*
VALVE - C LATERAL CONTROL SHUTOFF, V99	2	1	LEFT MAIN GEAR WHEEL WELL,	27-13-04
VALVE - L LATERAL CONTROL SHUTOFF, V100	2	1	522HB, LEFT WING	27-13-04
VALVE - R LATERAL CONTROL SHUTOFF, V98	2	1	652HB, RIGHT WING	27-13-04

\* SEE THE WDM EQUIPMENT LIST

Aileron and Spoiler Hydraulic Shutoff Valves - Component Index  
Figure 101

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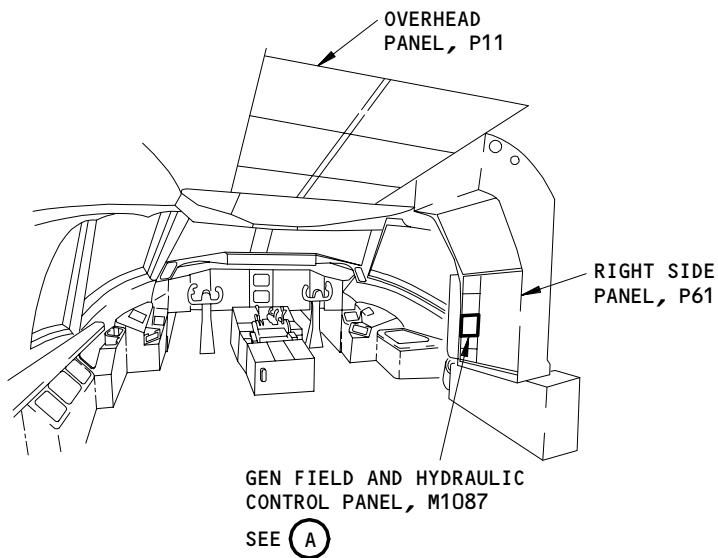
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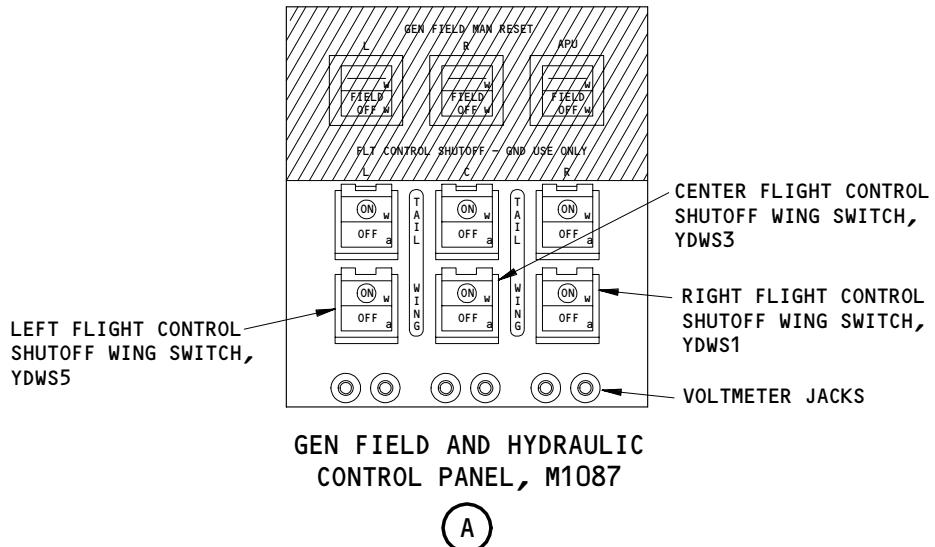
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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL



FLIGHT COMPARTMENT



Aileron and Spoiler Hydraulic Shutoff Valves – Component Location  
Figure 102 (Sheet 1)

EFFECTIVITY

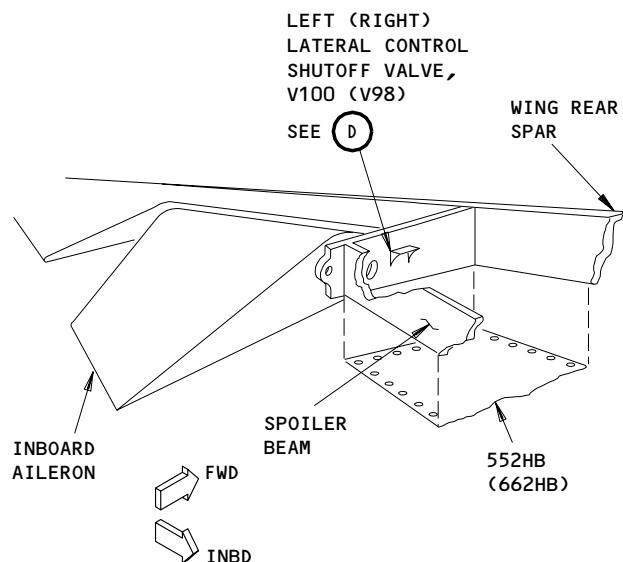
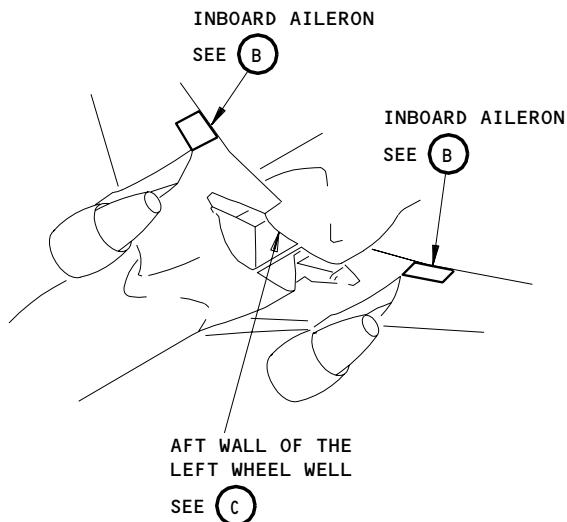
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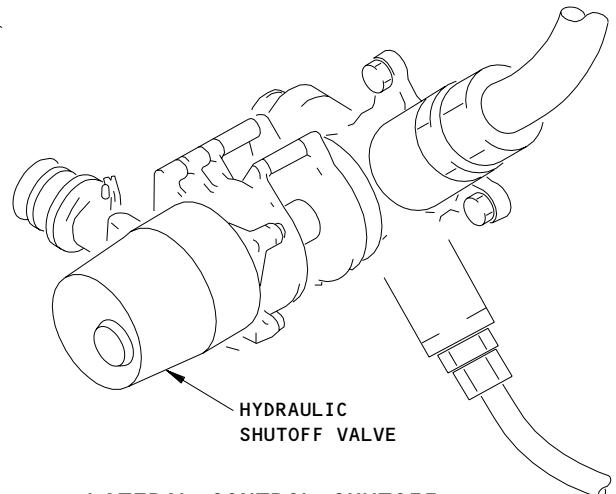
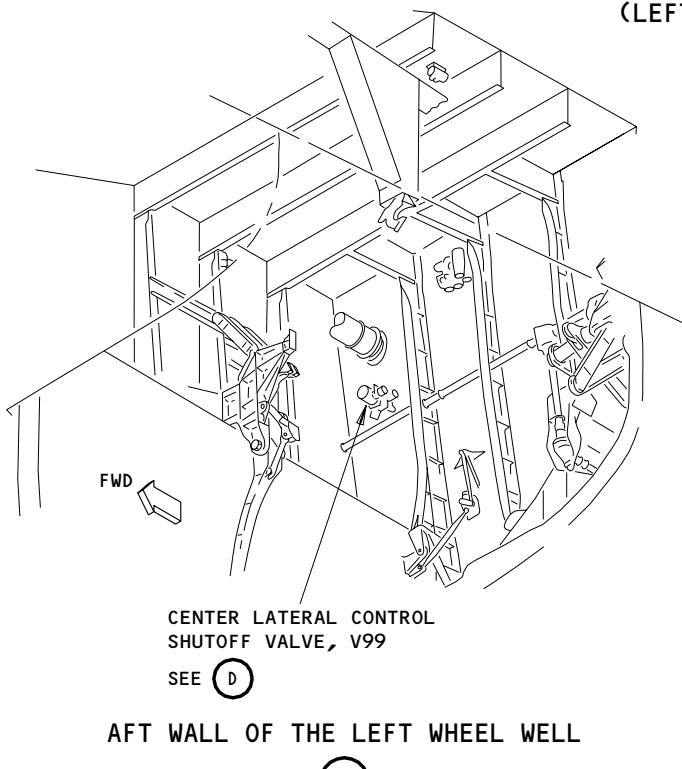
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**INBOARD AILERON**  
**(LEFT WING IS SHOWN, RIGHT WING IS OPPOSITE)**



**Aileron and Spoiler Hydraulic Shutoff Valve – Component Location**  
**Figure 102 (Sheet 2)**

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AILERON POSITION INDICATING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER – AILERON POS L C4099 AILERON POS R C4100	1		FLT COMPT, P11 11K14 11K23	*
TRANSMITTER – L INBD AILERON POSITION, M470	2	1	561CB, LEFT WING	27-18-10
TRANSMITTER – L OUTBD AILERON POSITION, M471	2	1	561QB, LEFT WING	27-18-10
TRANSMITTER – R INBD AIRLERON POSITION, M486	2	1	661CB, RIGHT WING	27-18-10
TRANSMITTER – R OUTBD AILERON POSITION, M487	2	1	661QB, RIGHT WING	27-18-10

\* SEE THE WDM EQUIPMENT LIST

Aileron Position Indicating System – Component Index  
Figure 101

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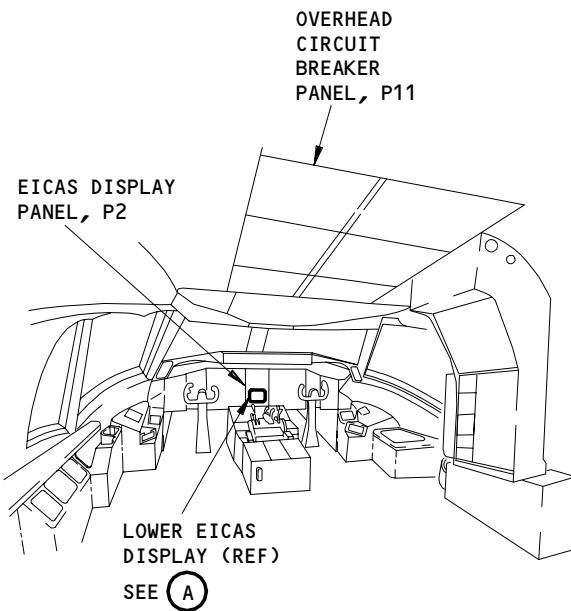
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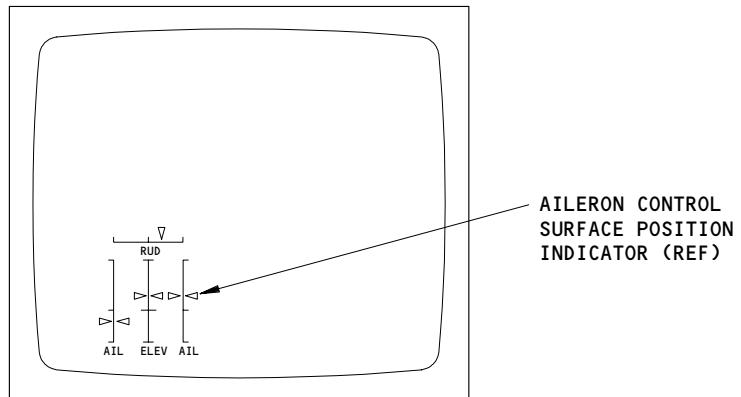
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FLIGHT COMPARTMENT



LOWER EICAS DISPLAY (REF)

A

Aileron Position Indicating System – Component Location  
Figure 102 (Sheet 1)

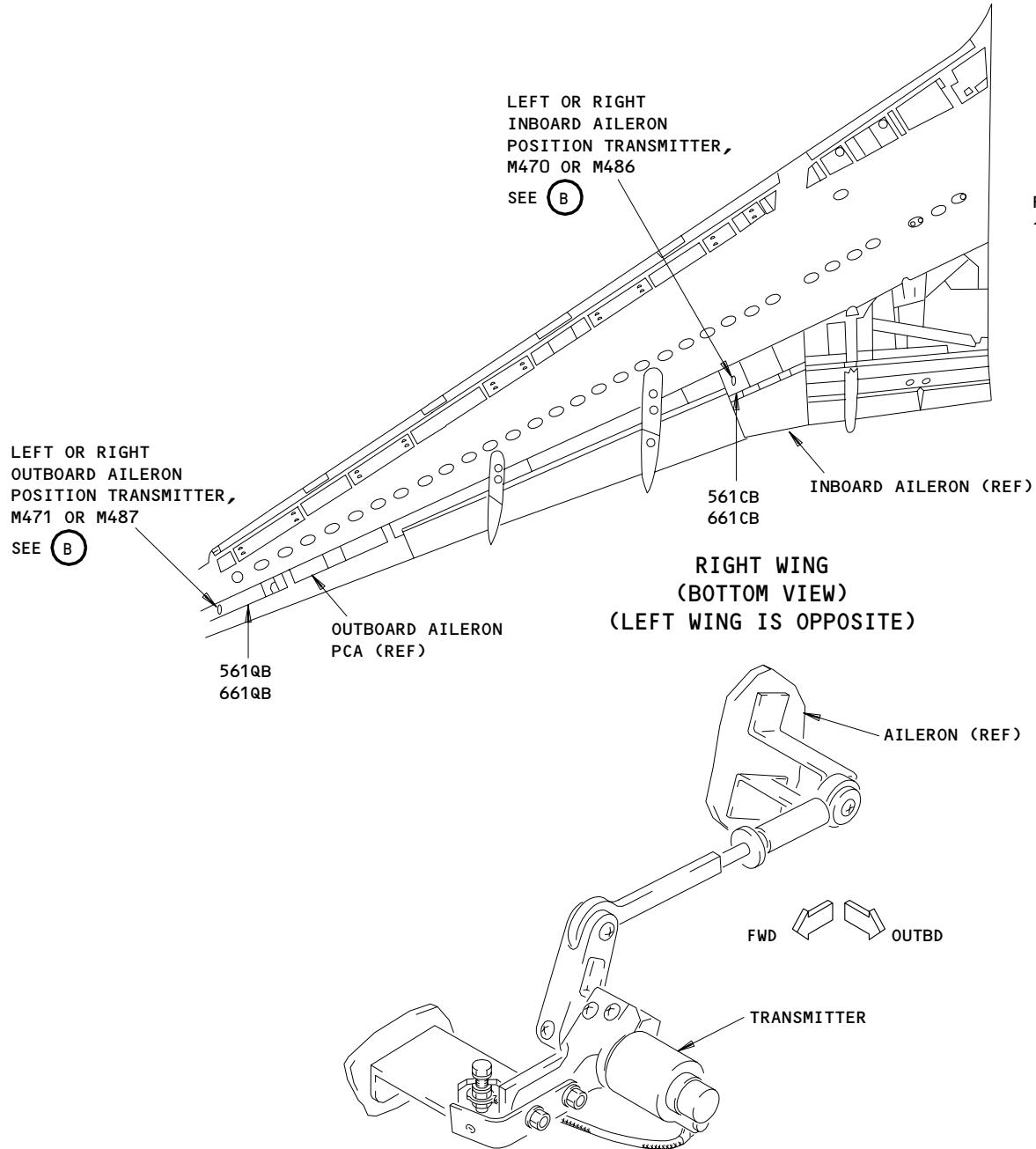
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LEFT OR RIGHT OUTBOARD AILERON POSITION TRANSMITTER, M471 OR M487 AND  
LEFT OR RIGHT INBOARD AILERON POSITION TRANSMITTER, M470 OR M486

NOTE: 500 SERIES NUMBERS ARE FOR  
THE LEFT WING ACCESS PANELS.  
600 SERIES NUMBERS ARE FOR  
THE RIGHT WING ACCESS PANELS.

**B**

**Aileron Position Indicating System – Component Location**  
**Figure 102 (Sheet 2)**

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FAULT ISOLATION/MAINT MANUAL

Not Used  
Figure 103

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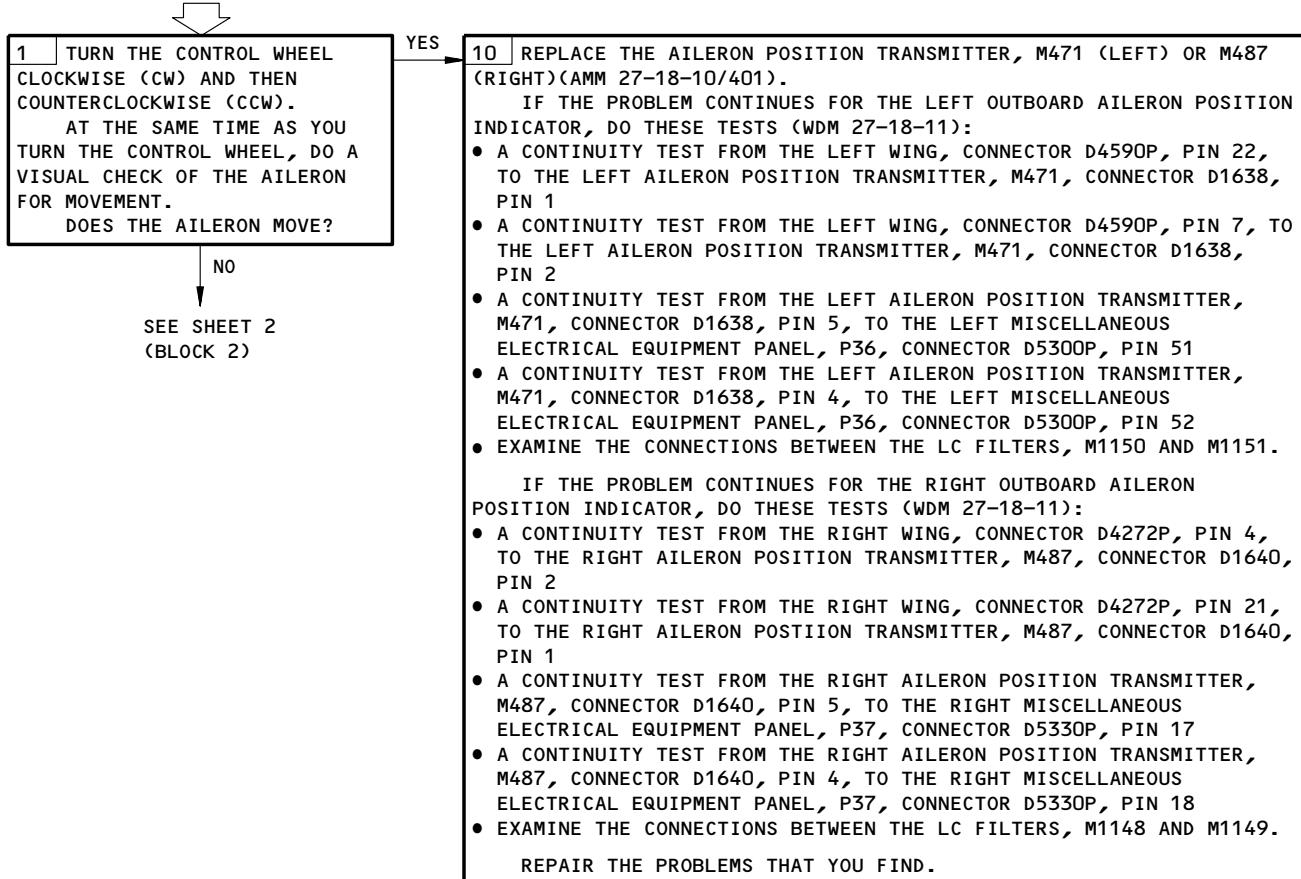
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
11K14, 11K23

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
HYDRAULIC POWER IS ON (AMM 29-11-00/201)  
TRAILING EDGE FLAPS ARE DEACTIVATED (AMM 27-51-00/201)

**OUTBOARD AILERON  
INDICATOR POINTER(S)  
FAILED TO INDICATE  
AILERON MOVEMENT**

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.



Outboard Aileron Indicator Pointer(s) Failed to Indicate Aileron Movement  
Figure 104 (Sheet 1)

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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 1)

NO

2 PUT THE WING FLIGHT CONTROL SHUTOFF SWITCHES L, C, AND R, ON THE RIGHT SIDE PANEL, P61, TO THE OFF POSITION. REMOVE THE ACCESS PANELS 561AB, 561MB, AND 561MBX (LEFT WING) OR 661AB, 661MB, AND 661MBX (RIGHT WING) (AMM 06-44-00/201). EXAMINE THE OUTBOARD WING CABLES A3A AND A3B (LEFT) OR A4A AND A4B (RIGHT). MAKE SURE THE CABLES MOVE FREELY AND ARE NOT BROKEN.  
ARE THE CABLE INSTALLATIONS CORRECT?

YES

3 EXAMINE THE AILERON LINKAGES, THE CONNECTING RODS, AND THE LOCKOUT MECHANISM.  
ARE THE AILERON LINKAGES NOT DAMAGED, THE CONNECTING RODS ATTACHED, AND THE MECHANISM IN GOOD CONDITION?

YES

4 DISCONNECT THE LEFT OR RIGHT INBOARD POWER CONTROL ACTUATOR (PCA) FOR THE OUTBOARD AILERON FROM THE AILERON AT THE ROD END.  
PUT THE FLIGHT CONTROL SHUTOFF SWITCH L ON THE RIGHT SIDE PANEL, P61, TO THE ON POSITION. THIS SUPPLIES HYDRAULIC POWER TO THE OUTBOARD PCA. TURN THE CONTROL WHEEL CLOCKWISE AND THEN COUNTERCLOCKWISE.  
DOES THE AILERON INDICATOR MOVE ON THE DISPLAY?

NO

11 REPAIR OR REPLACE OUTBOARD WING CABLES A3A AND A3B (LEFT) OR A4A AND A4B (RIGHT).  
CLOSE THE ACCESS PANELS.  
PUT THE FLIGHT CONTROL SHUTOFF SWITCHES L, C, AND R, ON THE RIGHT SIDE PANEL, P61, TO THE ON POSITION.

NO

12 CONNECT THE CONNECTING RODS, REPAIR OR REPLACE THE AILERON LINKAGES, OR REPLACE THE LOCKOUT MECHANISM (AMM 27-11-44/401).  
CLOSE THE ACCESS PANELS.  
PUT THE FLIGHT CONTROL SHUTOFF SWITCHES L, C, AND R, ON THE RIGHT SIDE PANEL, P61, TO THE ON POSITION.

YES

13 REPLACE THE LEFT OR RIGHT INBOARD PCA FOR THE OUTBOARD AILERON (AMM 27-11-49/401).  
CLOSE THE ACCESS PANELS.

NO

14 REPLACE THE LEFT OR RIGHT OUTBOARD PCA FOR THE OUTBOARD AILERON (AMM 27-11-49/401).  
CLOSE THE ACCESS PANEL.

Outboard Aileron Indicator Pointer(s) Failed to Indicate Aileron Movement  
Figure 104 (Sheet 2)

EFFECTIVITY

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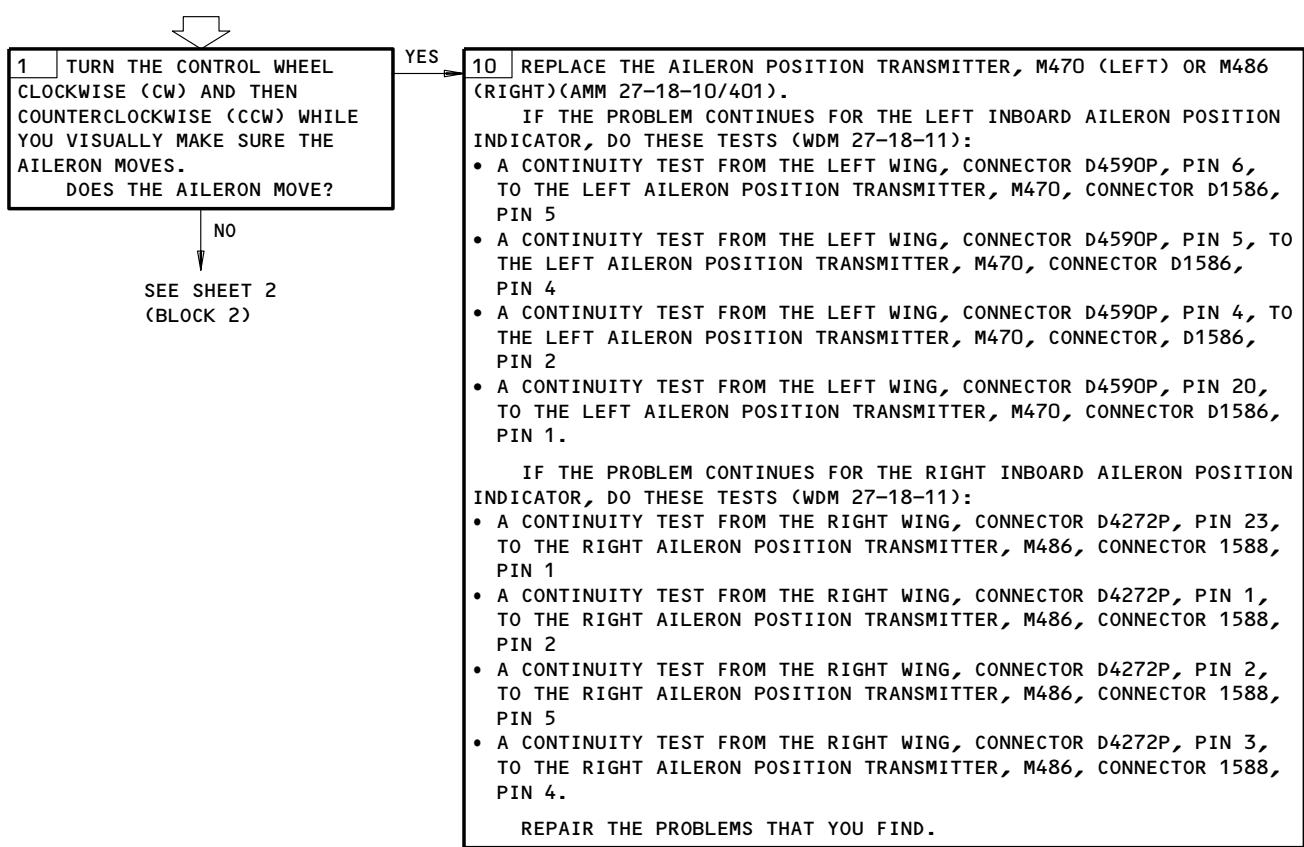
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
11K14, 11K23

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
HYDRAULIC POWER IS ON (AMM 29-11-00/201)  
TRAILING EDGE FLAPS ARE DEACTIVATED (AMM 27-51-00/201)

**INBOARD AILERON  
INDICATOR POINTER(S)  
FAILED TO INDICATE  
AILERON MOVEMENT**

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.



Inboard Aileron Indicator Pointer(s) Failed to Indicate Aileron Movement  
Figure 105 (Sheet 1)

EFFECTIVITY

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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 1)

NO

2 PUT THE FLIGHT CONTROL SHUTOFF SWITCHES, L, C, AND R, ON THE RIGHT SIDE PANEL, P61, TO THE OFF POSITION. REMOVE THE ACCESS PANELS 561AB, 561BB, AND 561CB (LEFT WING) OR 661AB, 661BB, AND 661CB (RIGHT WING) (CAMM 06-44-00/201). EXAMINE THE INBOARD WING CABLES A3A AND A3B (LEFT) OR A4A AND A4B (RIGHT). MAKE SURE THE CABLES MOVE FREELY AND ARE NOT BROKEN. ARE THE CABLE INSTALLATIONS CORRECT?

YES

3 EXAMINE THE AILERON LINKAGES, CONNECTING RODS, DROOP MECHANISM OVERRIDE SPRINGS, AND AILERON DROOP ANGLE GEARBOX. DOES THE GEARBOX NOT MOVE FREELY OR DOES IT OPERATE INCORRECTLY, ARE THE CONNECTING RODS DISCONNECTED, OR ARE THE AILERON LINKAGES DAMAGED?

NO

4 DISCONNECT THE LEFT OR RIGHT OUTBOARD POWER CONTROL ACTUATOR (PCA) FOR THE INBOARD AILERON FROM THE AILERON AT THE ROD END. PUT THE FLIGHT CONTROL SHUTOFF SWITCH C ON THE RIGHT SIDE PANEL, P61, TO THE ON POSITION. THIS SUPPLIES HYDRAULIC POWER TO THE INBOARD PCA. TURN THE CONTROL WHEEL CW AND THEN CCW. DOES THE AILERON INDICATOR MOVE ON THE DISPLAY?

NO

11 REPAIR OR REPLACE THE OUTBOARD WING CABLES A3A AND A3B (LEFT) OR A4A AND A4B (RIGHT). CLOSE THE ACCESS PANELS. PUT THE FLIGHT CONTROL SHUTOFF SWITCHES L, C, AND R, ON THE RIGHT SIDE PANEL, P61, TO THE ON POSITION.

YES

12 CONNECT THE DISCONNECTED CONNECTING RODS, REPAIR OR REPLACE THE AILERON LINKAGES OR THE SPRINGS, OR REPLACE THE GEARBOX (CAMM 27-51-40/401). CLOSE THE ACCESS PANELS. PUT THE FLIGHT CONTROL SHUTOFF SWITCHES, L, C, AND R, ON THE RIGHT SIDE PANEL, P61, TO THE ON POSITION.

YES

13 REPLACE THE LEFT OR RIGHT INBOARD AILERON OUTBOARD PCA (CAMM 27-11-48/401). CLOSE THE ACCESS PANELS.

NO

14 REPLACE THE LEFT OR RIGHT INBOARD AILERON INBOARD PCA (CAMM 27-11-48/401). CLOSE THE ACCESS PANELS.

Inboard Aileron Indicator Pointer(s) Failed to Indicate Aileron Movement  
Figure 105 (Sheet 2)

EFFECTIVITY

ALL

27-18-00

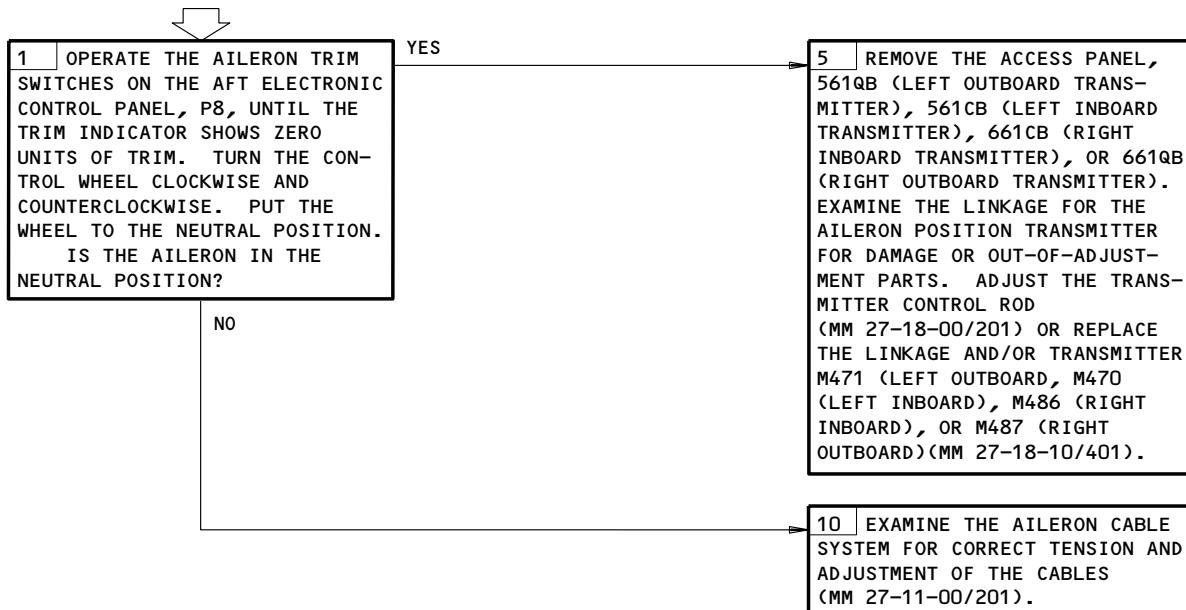
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11K14, 11K23

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (MM 24-22-00/201)  
 TRAILING EDGE FLAPS ARE RETRACTED AND DEACTIVATED  
 (MM 27-51-00/201)

**AILERON INDICATOR  
 POINTER(S) FAILED  
 TO ZERO WITH CONTROL  
 WHEEL ZERO**

**WARNING:** MAKE SURE YOU REMOVE THE POWER FROM THE LEFT, CENTER AND RIGHT HYDRAULIC SYSTEM BEFORE YOU DO WORK IN THE WING AREA (MM 29-11-00/201). THE CONTROL SURFACES ARE FULLY POWERED SURFACES. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR IF YOU DO NOT REMOVE THE HYDRAULIC POWER.



Aileron Indicator Pointer(s) Failed To Zero With Control Wheel Zero  
 Figure 106

EFFECTIVITY

ALL

**27-18-00**

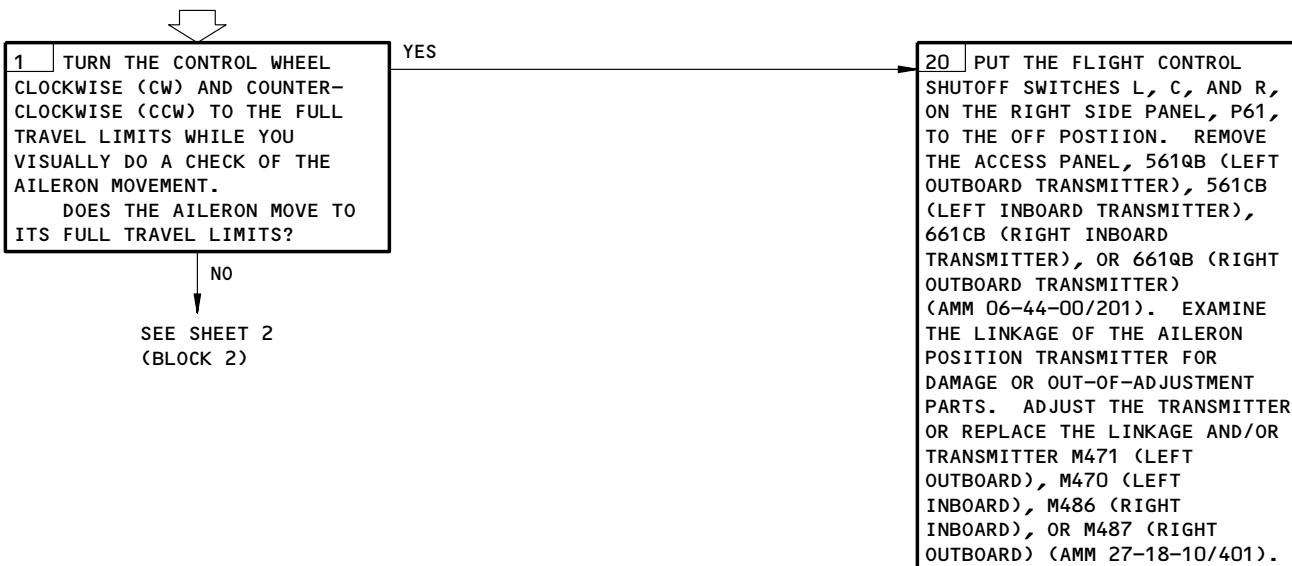
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11K14, 11K23

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER IS ON (AMM 29-11-00/201)  
 TRAILING EDGE FLAP ARE DEACTIVATED  
 (AMM 27-51-00/201)

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**AILERON INDICATOR  
POINTER(S) INDICATE  
LESS THAN FULL TRAVEL**



Aileron Indicator Pointer(s) Indicate Less Than Full Travel  
 Figure 107 (Sheet 1)

EFFECTIVITY

ALL

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FROM SHEET 1  
(BLOCK 1)

NO

**2** PUT THE FLIGHT CONTROL SHUTOFF SWITCHES L, C, AND R, ON THE RIGHT SIDE PANEL, P61, TO THE OFF POSITION. REMOVE THE ACCESS PANELS 561AB, 561MB, AND 561MBX (LEFT WING) OR 661AB, 661MB, AND 661MBX (RIGHT WING) (AMM 06-44-00/201). EXAMINE THE OUTBOARD WING CABLES A3A AND A3B (LEFT) OR A4A AND A4B (RIGHT) AND/OR THE INBOARD WING CABLES A3A AND A3B (LEFT) OR A4A AND A4B (RIGHT). ARE THE CABLES AT THE CORRECT TENSION (AMM 27-11-00/201) AND ARE THEY INSTALLED CORRECTLY?

YES

**3** CLOSE THE ACCESS PANELS. PUT THE FLIGHT CONTROL SHUTOFF SWITCHL ON THE RIGHT SIDE PANEL, P61, TO THE ON POSITION. TURN THE CONTROL WHEEL CW AND CCW WHILE YOU MONITOR THE MOVEMENT OF THE LEFT AILERONS AND THE RIGHT OUTBOARD AILERON INDICATORS ON THE DISPLAY. DOES THE LEFT OUTBOARD AILERON MOVE?

YES

**4** DOES THE LEFT INBOARD AILERON MOVE?

YES

SEE SHEET 3  
(BLOCK 5)

NO

**21** REPAIR THE INBOARD AND OUTBOARD WING CABLES A3A AND A3B (LEFT) OR A4A AND A4B (RIGHT) AND ADJUST THE TENSION (AMM 27-11-00/201). CLOSE THE ACCESS PANELS. PUT THE FLIGHT CONTROL SHUTOFF SWITCHES L, C, AND R, ON THE RIGHT SIDE PANEL, P61, TO THE ON POSITION.

NO

**22** REPLACE THE INBOARD POWER CONTROL ACTUATOR (PCA) OF THE LEFT OUTBOARD AILERON (AMM 27-11-49/401).

NO

**23** REPLACE THE OUTBOARD POWER CONTROL ACTUATOR (PCA) OF THE LEFT INBOARD AILERON (AMM 27-11-48/401).

Aileron Indicator Pointer(s) Indicate Less Than Full Travel  
Figure 107 (Sheet 2)

EFFECTIVITY

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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 2  
(BLOCK 4)

YES

5 Does the right outboard aileron move?

NO

24 Replace the outboard power control actuator (PCA) of the right outboard aileron (MM 27-11-49/401).

YES

6 Put the flight control shutoff switch L on the right side panel, P61, to the off position and the switch R to the on position. Turn the control wheel CW and CCW while you monitor the movement of the left outboard aileron and the right ailerons.  
Does the left outboard aileron move?

NO

25 Replace the outboard power control actuator (PCA) of the left outboard aileron (MM 27-11-49/401).

YES

7 Does the right inboard aileron move?

NO

26 Replace the right outboard power control actuator (PCA) of the right inboard aileron (MM 27-11-48/401).

YES

8 Does the right outboard aileron move?

NO

27 Replace the inboard power control actuator (PCA) of the right outboard aileron (MM 27-11-49/401).

YES

9 Put the flight control shutoff switch R on the right side panel, P61, to the off position and the switch C to on position. Turn the control wheel CW and CCW while you monitor the movement of the inboard ailerons.  
Does the left inboard aileron move?

NO

28 Replace the inboard power control actuator (PCA) of the left inboard aileron (MM 27-11-48/401).

YES

29 The right inboard aileron does not move. Replace the inboard power control actuator (PCA) of the right inboard aileron (MM 27-11-48/401).

Aileron Indicator Pointer(s) Indicate Less Than Full Travel  
Figure 107 (Sheet 3)

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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11K14, 11K23

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER IS ON (AMM 29-11-00/201)  
 TRAILING EDGE FLAPS ARE DEACTIVATED (AMM 27-51-00/201)

**AILERON INDICATES  
 INSUFFICIENT TRAVEL  
 IN ONE DIRECTION  
 AND OVERTRAVEL IN  
 THE OTHER DIRECTION**



**Aileron Indicates Insufficient Travel in One Direction and Overtravel in the Other Direction**  
**Figure 108 (Sheet 1)**

**EFFECTIVITY** \_\_\_\_\_

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FROM SHEET 2  
(BLOCK 2)

NO

2 IF THE AILERON TRAVEL LIMITS ARE NOT SYMMETRICAL, PUT THE FLIGHT CONTROL SHUTOFF SWITCHES, C AND R, ON THE RIGHT SIDE PANEL, P61, TO THE OFF POSITION. TURN THE CONTROL WHEEL CW AND CCW AND MONITOR THE MOVEMENT OF THE LEFT AILERONS AND THE RIGHT OUTBOARD AILERON INDICATORS ON THE DISPLAY.  
DOES THE LEFT OUTBOARD AILERON MOVE SYMMETRICALLY AND WITHIN TRAVEL LIMITS?

YES

3 DOES LEFT INBOARD AILERON MOVE SYMMETRICALLY AND IN THE TRAVEL LIMITS?

NO

22 REPLACE THE INBOARD POWER CONTROL ACTUATOR FOR THE LEFT OUTBOARD AILERON (AMM 27-11-49/401).

YES

4 DOES THE RIGHT OUTBOARD AILERON MOVE SYMMETRICALLY AND IN THE TRAVEL LIMITS?

NO

23 REPLACE THE OUTBOARD POWER CONTROL ACTUATOR FOR THE LEFT INBOARD AILERON (AMM 27-11-48/401).

YES

5 PUT THE FLIGHT CONTROL SHUTOFF SWITCH ON THE RIGHT SIDE PANEL, P61, TO THE OFF POSITION AND THE SWITCH R TO THE ON POSITION. TURN THE CONTROL WHEEL CW AND CCW AND MONITOR THE MOVEMENT OF THE LEFT OUTBOARD AILERON AND THE RIGHT AILERONS INDICATORS ON THE DISPLAY.  
DOES THE LEFT OUTBOARD AILERON MOVE SYMMETRICALLY AND IN THE TRAVEL LIMITS?

NO

24 REPLACE THE OUTBOARD POWER CONTROL ACTUATOR FOR THE RIGHT OUTBOARD AILERON (AMM 27-11-49/401).

YES

SEE SHEET 3  
(BLOCK 6)

Aileron Indicates Insufficient Travel in One Direction and  
Overtravel in the Other Direction  
Figure 108 (Sheet 2)

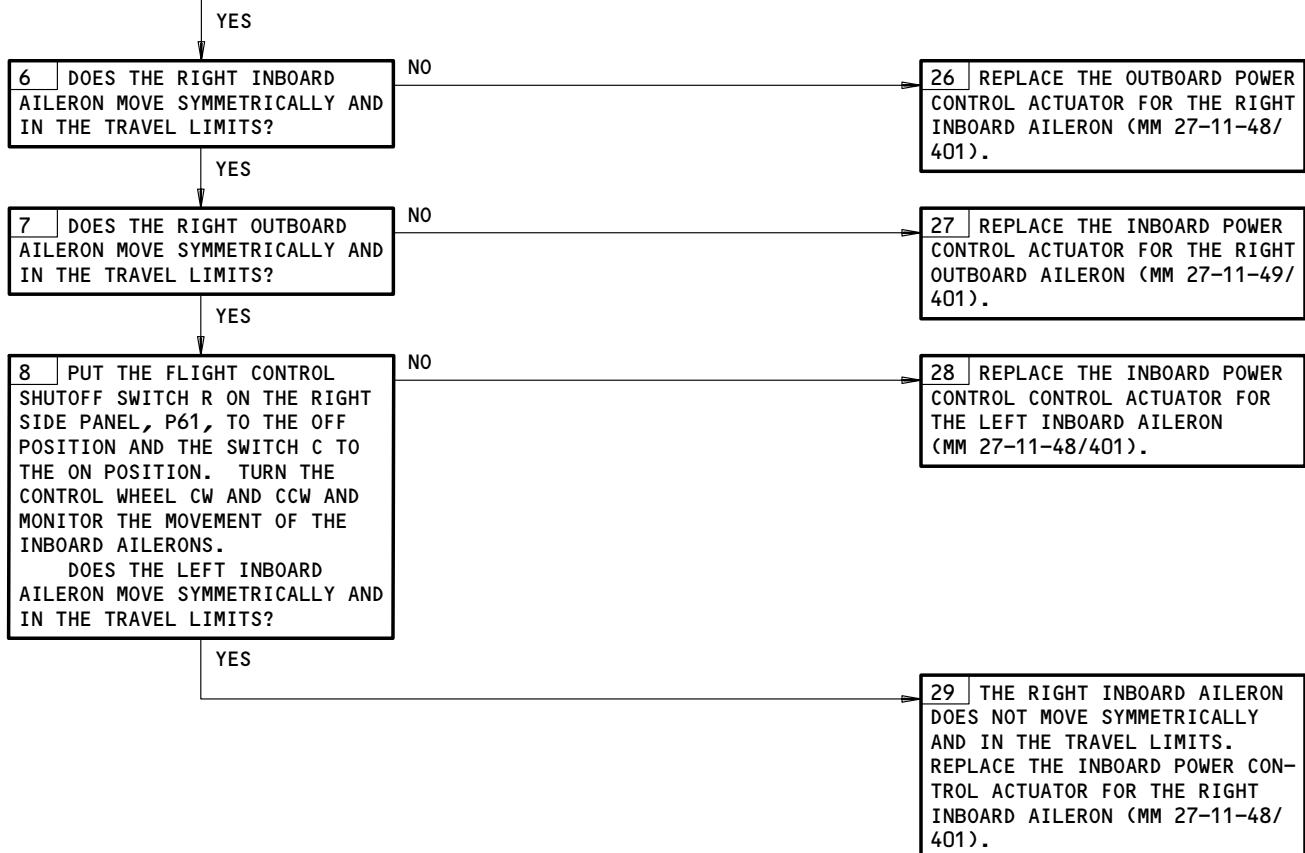
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FROM SHEET 2  
(BLOCK 5)



Aileron Indicates Insufficient Travel in One Direction and  
Overtravel in the Other Direction  
Figure 108 (Sheet 3)

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RUDDER AND RUDDER TRIM CONTROL SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR - RUDDER POWER CONTROL (PCA)	4	3	324GL,324JL,324LL	27-21-02
ACTUATOR - RUDDER RATIO CHANGER, M626	4	1	324EL	27-21-15
ACTUATOR - RUDDER TRIM, M515	3	1	324BL,324EL	27-21-11
ASSEMBLY - RUDDER FORWARD QUADRANT AND JACK-SHAFT	2	2	113AL, FWD EQUIP CTR	27-21-07
ASSEMBLY - RUDDER PEDAL	2	2	113AL, FWD EQUIP CTR	27-21-05
ASSEMBLY - YAW DAMPER SUMMING LEVER	4	1	324EL	27-21-18
CIRCUIT BREAKER -	1		FLT COMPT, P11	
RUDDER RATIO, C1031		1	11G10	*
RUDDER TRIM, C1033		1	11K18 OR 11C5	*
RUDDER TRIM POS, C1034		1	11K17	*
CRANK - RUDDER PEDAL ADJUSTMENT	2	2	113AL, FWD EQUIP CTR	27-21-06
INDICATOR - RUDDER TRIM, N83	1	1	FLT COMPT, P8	*
LIGHT - RUDDER RATIO, YDLL18	1	1	FLT COMPT, P5, ANNUN PANEL, M10394	*
LVDT - RUDDER RATIO CHANGER, TS194	4	1	324EL	27-21-13
MECHANISM - RUDDER FEEL, CENTERING AND TRIM	4	1	324BL	27-21-10
MECHANISM - RUDDER RATIO CHANGER	4	1	324EL	27-21-13
MODULE - (FIM 27-09-00/101)				
RUDDER RATIO CHANGER L, M528				
RUDDER RATIO CHANGER R, M529				
STABILIZER TRIM/AILERON LOCKOUT L, M524				
STABILIZER TRIM/AILERON LOCKOUT R, M525				
PANEL - (FIM 30-31-00/101)				
ANNUNCIATOR, M10394				
RELAY - (FIM 31-01-33/101)				
SYSTEM 2 AIR/GROUND, K518				
RELAY - (FIM 31-01-36/101)				
SYSTEM 1 AIR/GROUND, K529				
RUDDER -	3	1	320	27-21-01
SERVO - (FIM 22-12-00/101)				
LEFT YAW DAMPER, M510				
RIGHT YAW DAMPER, M509				
SERVO - (FIM 22-13-00/101)				
C DIRECTIONAL AUTOPILOT, M278				
L DIRECTIONAL AUTOPILOT, M277				
R DIRECTIONAL AUTOPILOT, M279				
SWITCH - (FIM 29-11-00/101)				
SYS L ACMP CONTROL PRESSURE, S27				
SWITCH - RUDDER TRIM CONTROL, YARS3	1	1	FLT COMPT, P8, AILERON/RUDDER TRIM CONT PANEL, M74	*
TRANSMITTER - (FIM 27-28-00/101)				
RUDDER POSITION, M516				

\* SEE THE WDM EQUIPMENT LIST

Rudder and Rudder Trim Control System - Component Index  
Figure 101

EFFECTIVITY

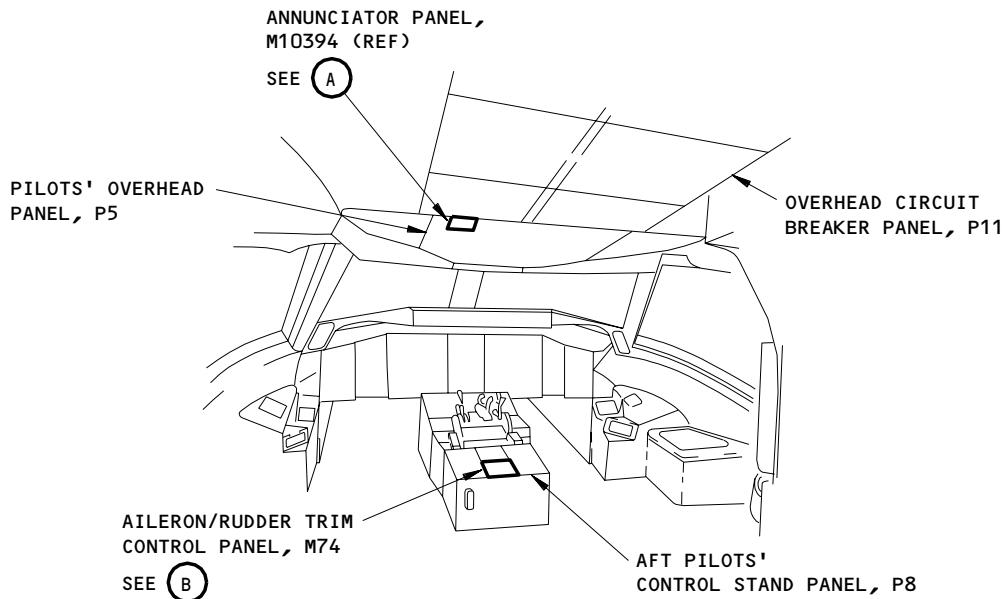
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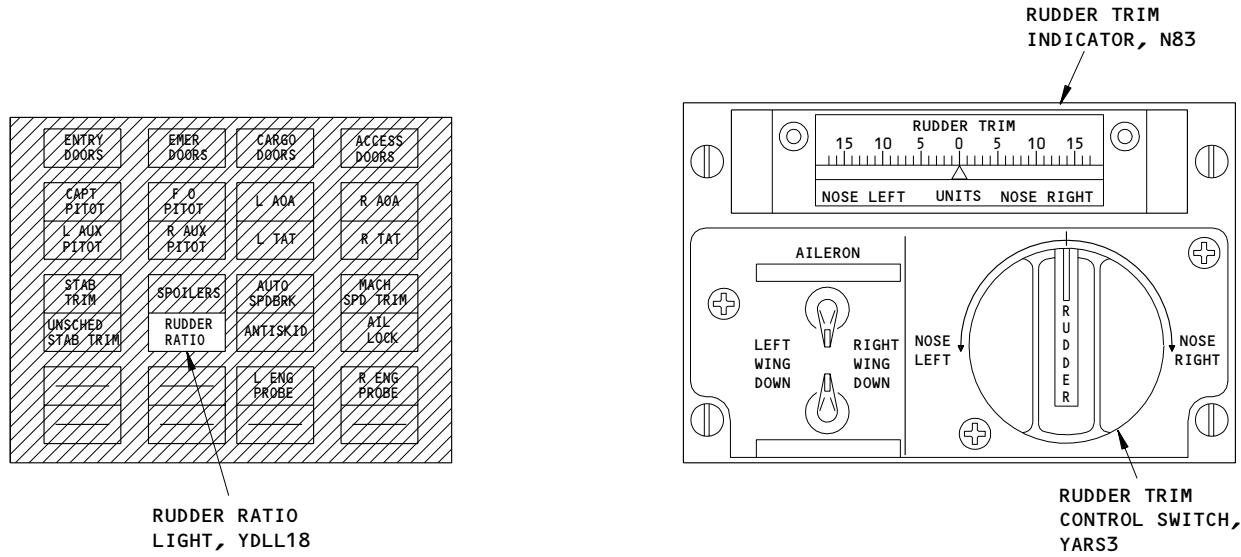
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FLIGHT COMPARTMENT



Rudder and Rudder Trim Control System - Component Location  
Figure 102 (Sheet 1)

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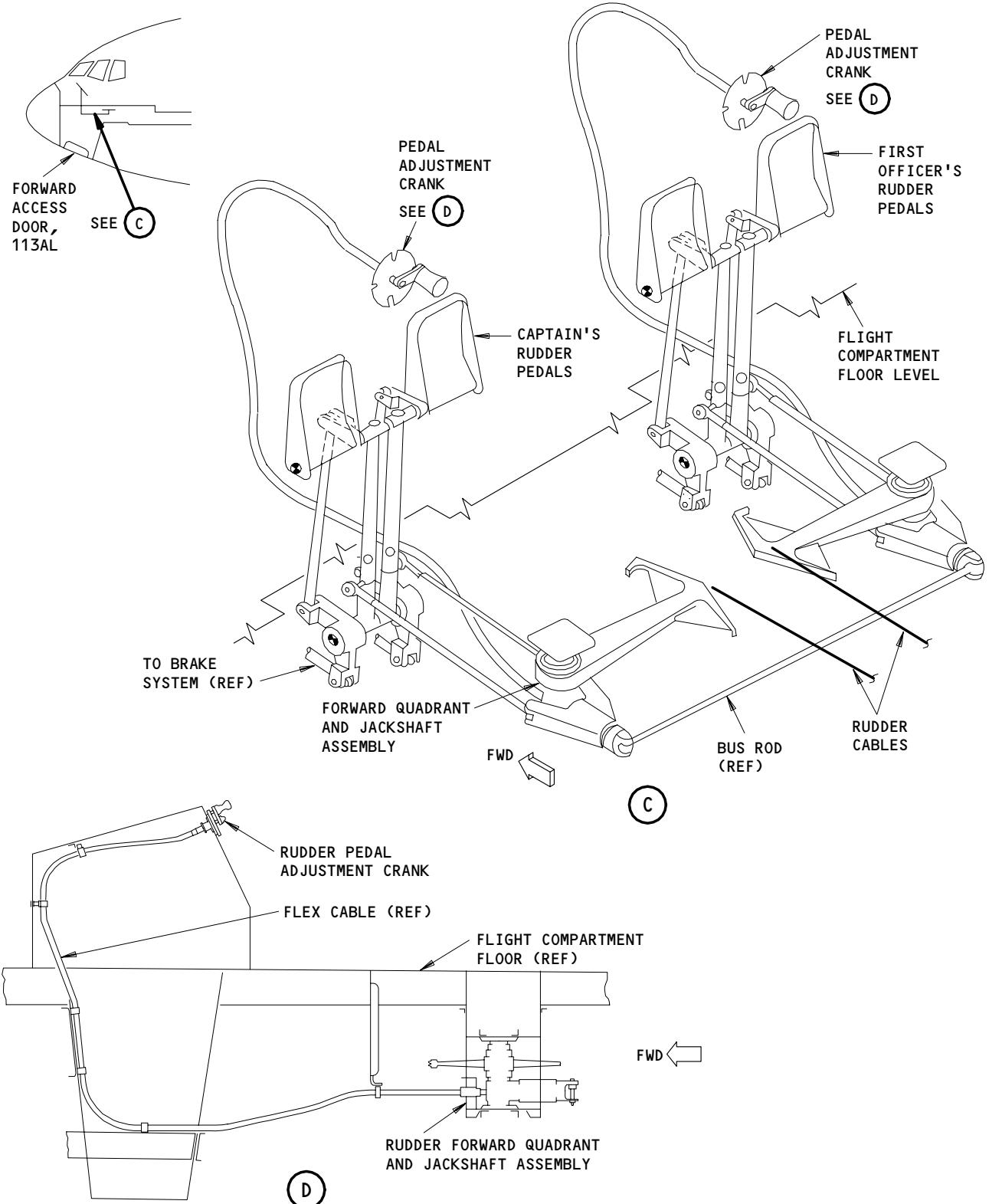
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Rudder and Rudder Trim Control System - Component Location  
Figure 102 (Sheet 2)

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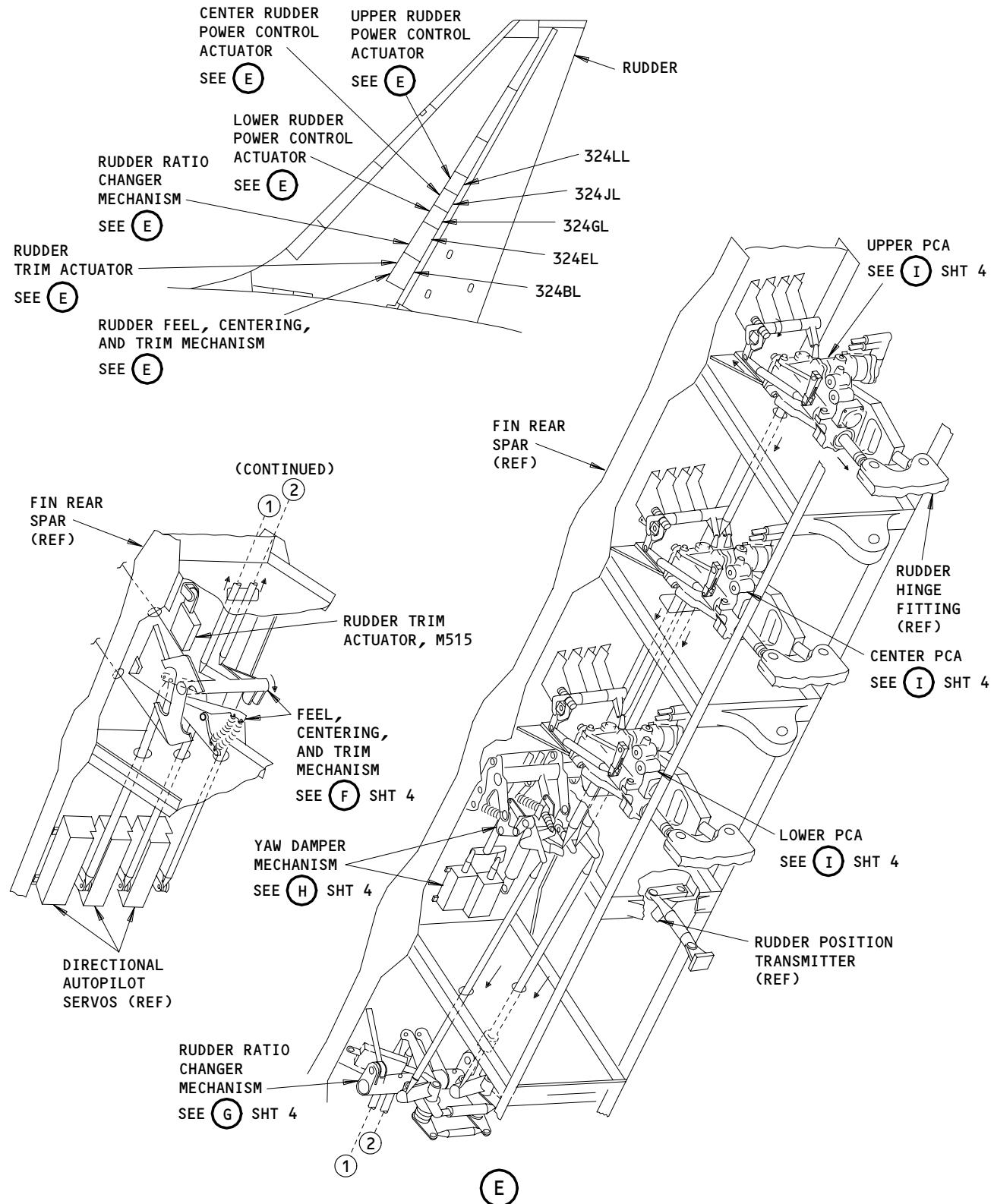
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Rudder and Rudder Trim Control System - Component Location  
Figure 102 (Sheet 3)

EFFECTIVITY

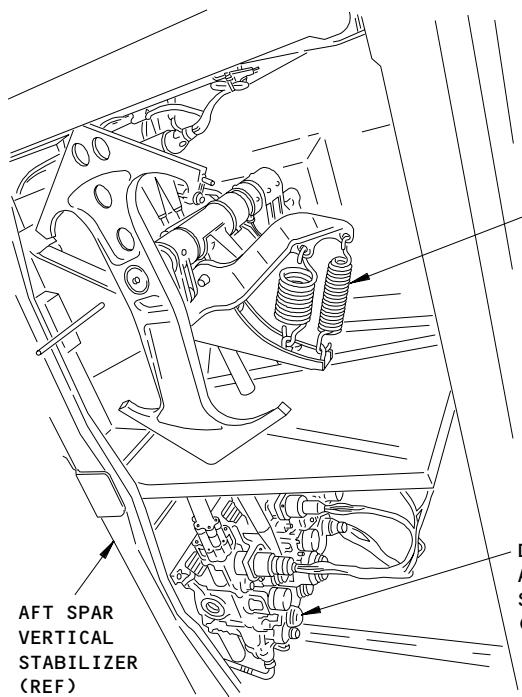
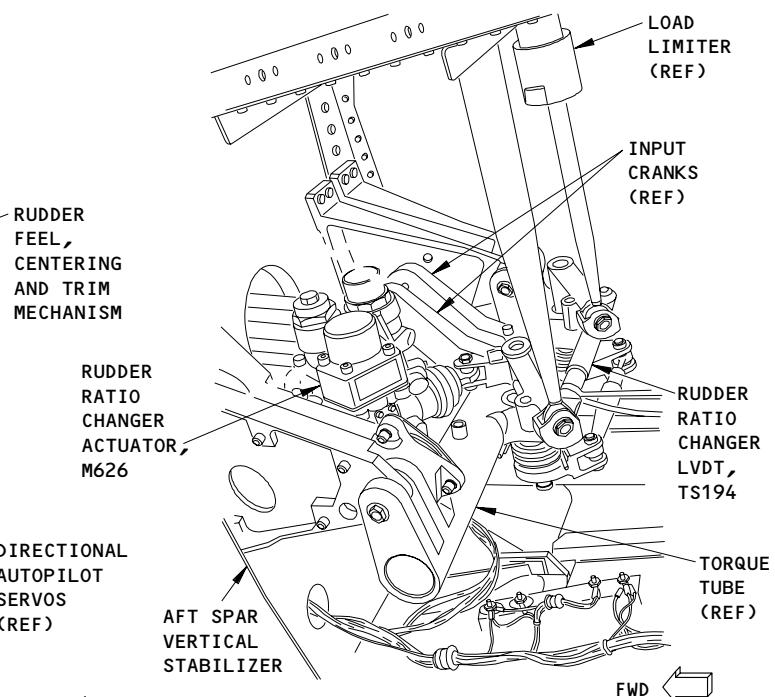
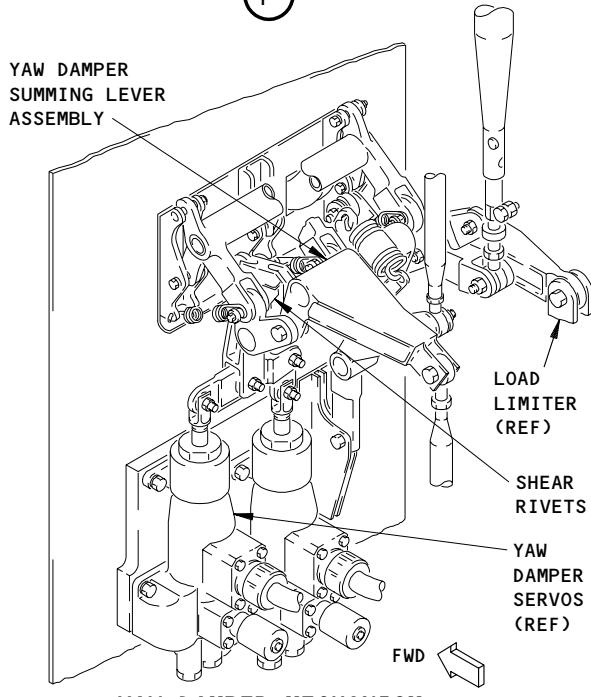
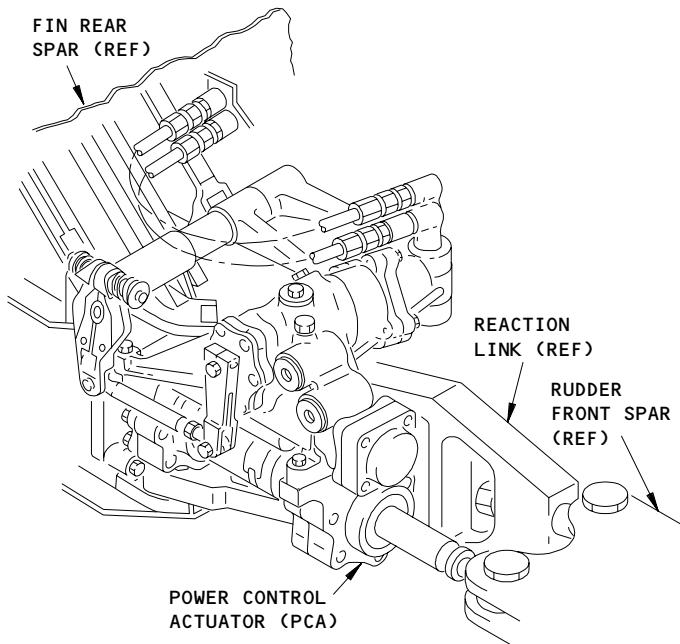
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**RUDDER FEEL, CENTERING  
AND TRIM MECHANISM**
**F**

**RUDDER RATIO CHANGER MECHANISM**
**G**

**YAW DAMPER MECHANISM**
**H**

**RUDDER POWER CONTROL ACTUATOR (PCA)  
(EXAMPLE UPPER, CENTER, LOWER)**
**I**

Rudder and Rudder Trim Control System – Component Location (Details from Sht 3)  
 Figure 102 (Sheet 4)

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Not Used  
Figure 103

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**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
 EICAS (AMM 31-41-00/201)

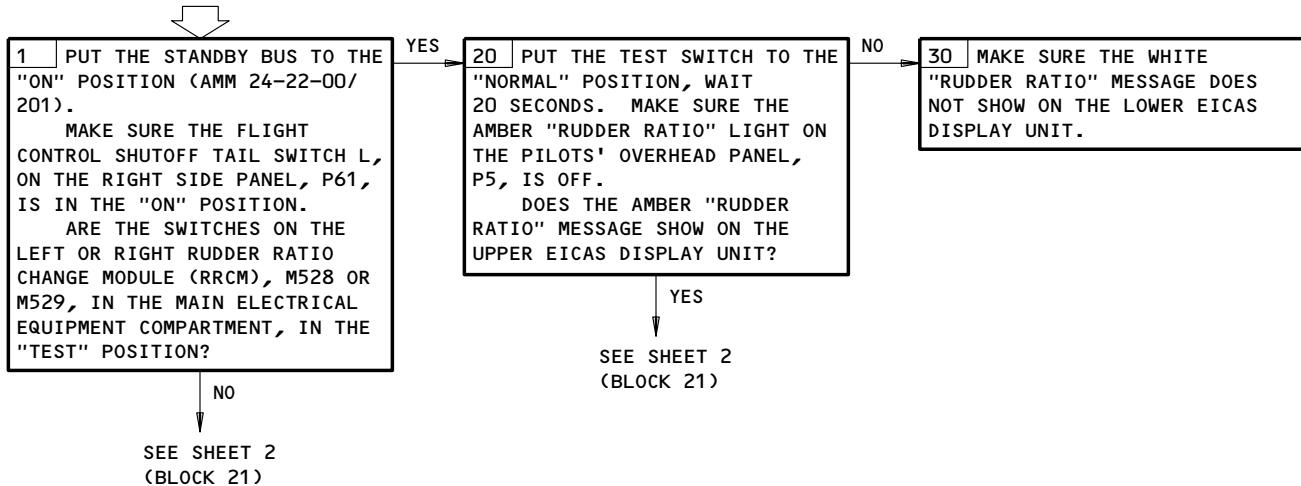
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11C6, 11C7, 11C8, 11C9, 11G10, 11G17, 11G18, 11G26,  
 11G27, 11H11, 11H17, 11H20

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

"RUDDER RATIO"  
 LIGHT ILLUMINATED  
 ON THE GROUND/IN  
 FLIGHT. EICAS  
 MESSAGE "RUDDER  
 RATIO" DISPLAYED



**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. INJURIES TO PERSONS  
 OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN  
 HYDRAULIC POWER IS SUPPLIED.



THE AMBER "RUDDER RATIO" MESSAGE SHOWS UP ON EICAS WHEN RUNNING ENGINE FOR MORE THAN 30 SECONDS TO INDICATE A FAILURE IN THE SYSTEM. IT IS NORMAL FOR THE AMBER "RUDDER RATIO" MESSAGE TO BE SHOWN ON EICAS WHEN ENGINES ARE OFF AND WHEN HYDRAULIC PRESSURE IS LOW (AMM 31-41-00/201).

RUDDER RATIO Light Illuminated on the Ground/In Flight.  
 EICAS Message RUDDER RATIO Displayed.

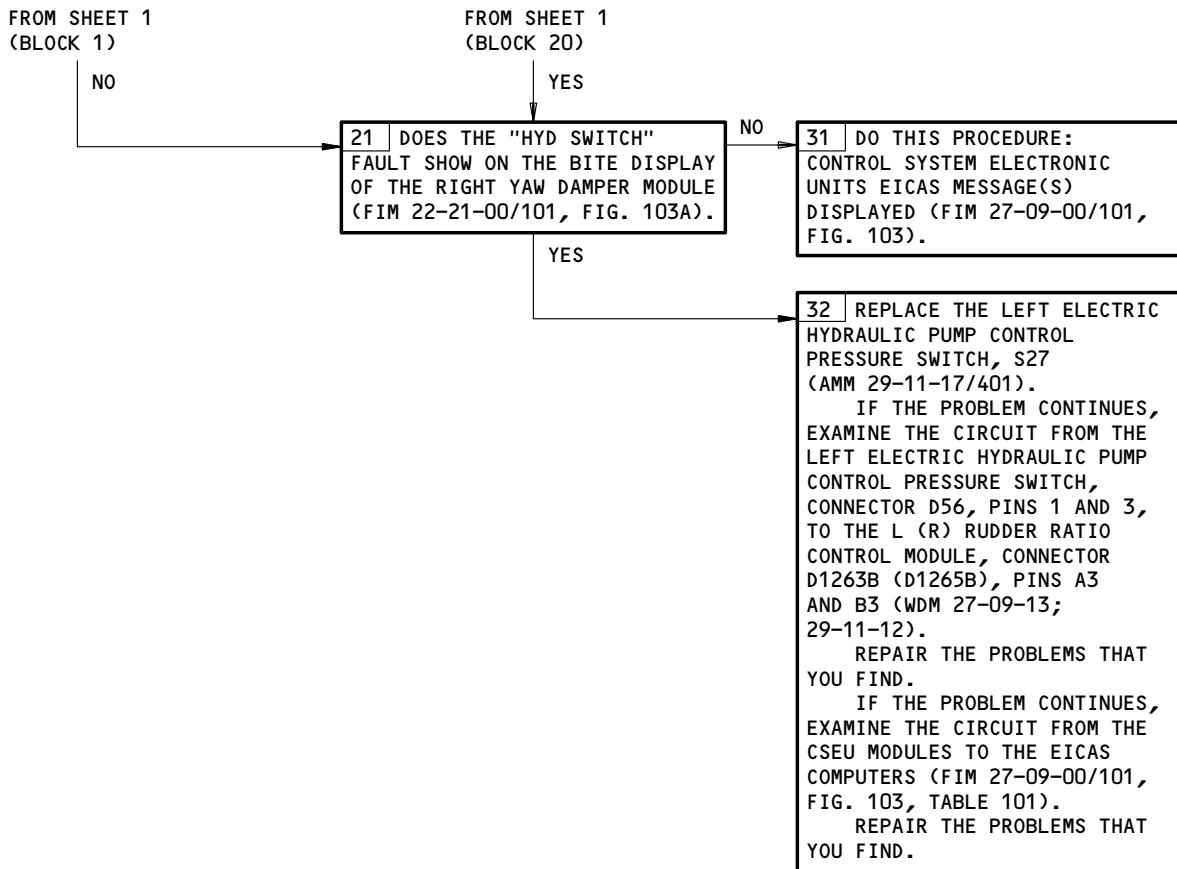
Figure 104 (Sheet 1)

EFFECTIVITY

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RUDDER RATIO Light Illuminated on the Ground/In Flight.  
EICAS Message RUDDER RATIO Displayed.  
Figure 104 (Sheet 2)

EFFECTIVITY

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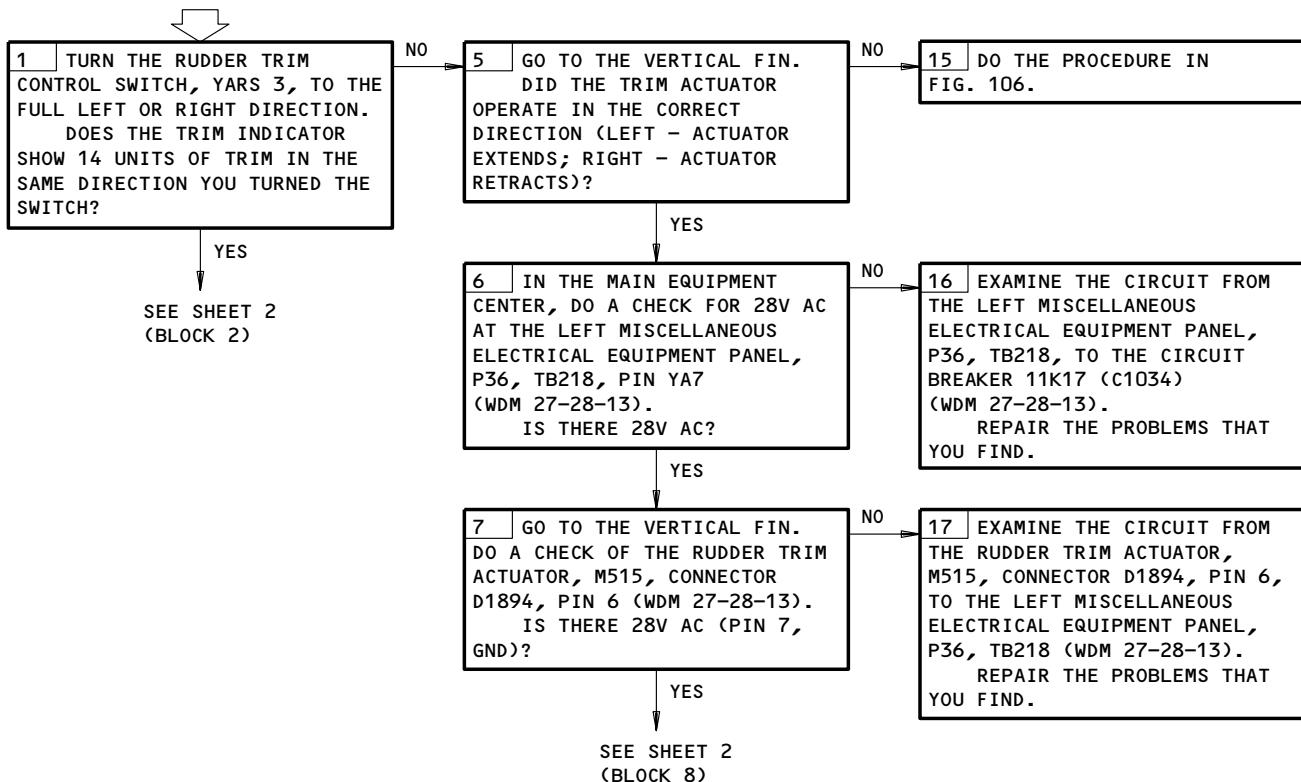
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**RUDDER TRIM  
INDICATION PROBLEMS**
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
11K17, 11K18 OR 11C5

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



Rudder Trim Indication Problems  
Figure 105 (Sheet 1)

**EFFECTIVITY** \_\_\_\_\_

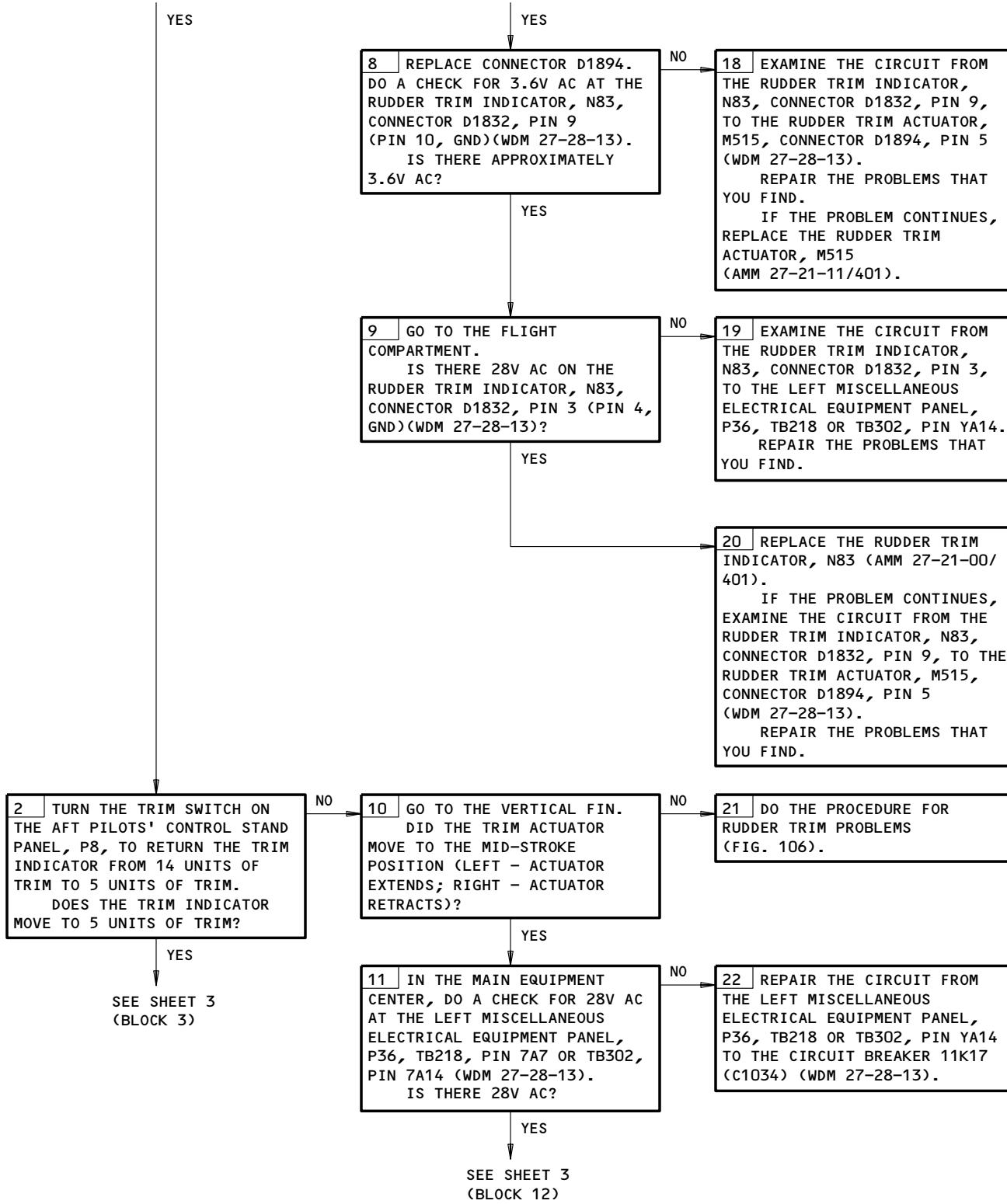
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# FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 1)

FROM SHEET 1  
(BLOCK 7)



## Rudder Trim Indication Problems Figure 105 (Sheet 2)

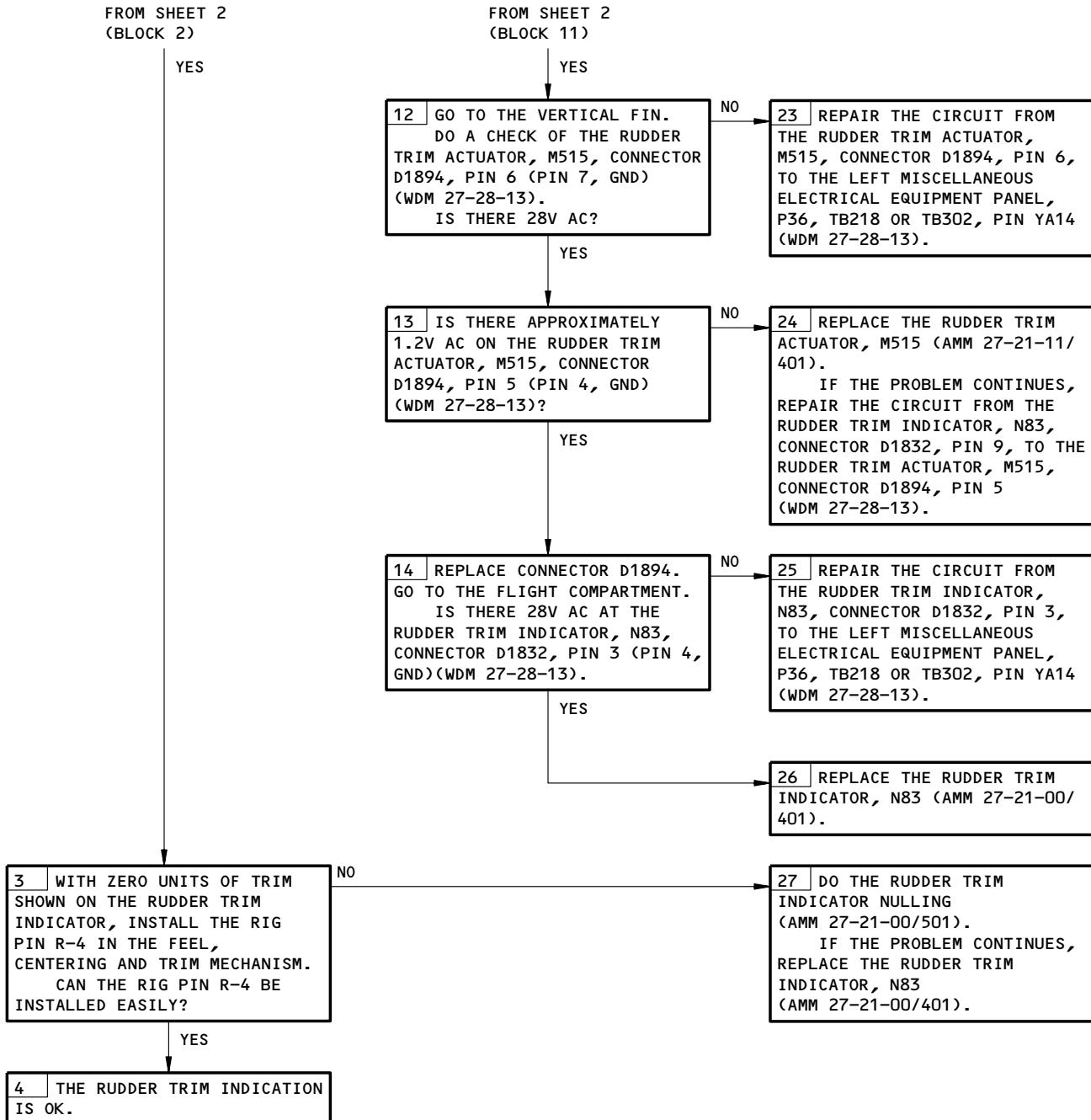
## EFFECTIVITY-

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Rudder Trim Indication Problems  
Figure 105 (Sheet 3)

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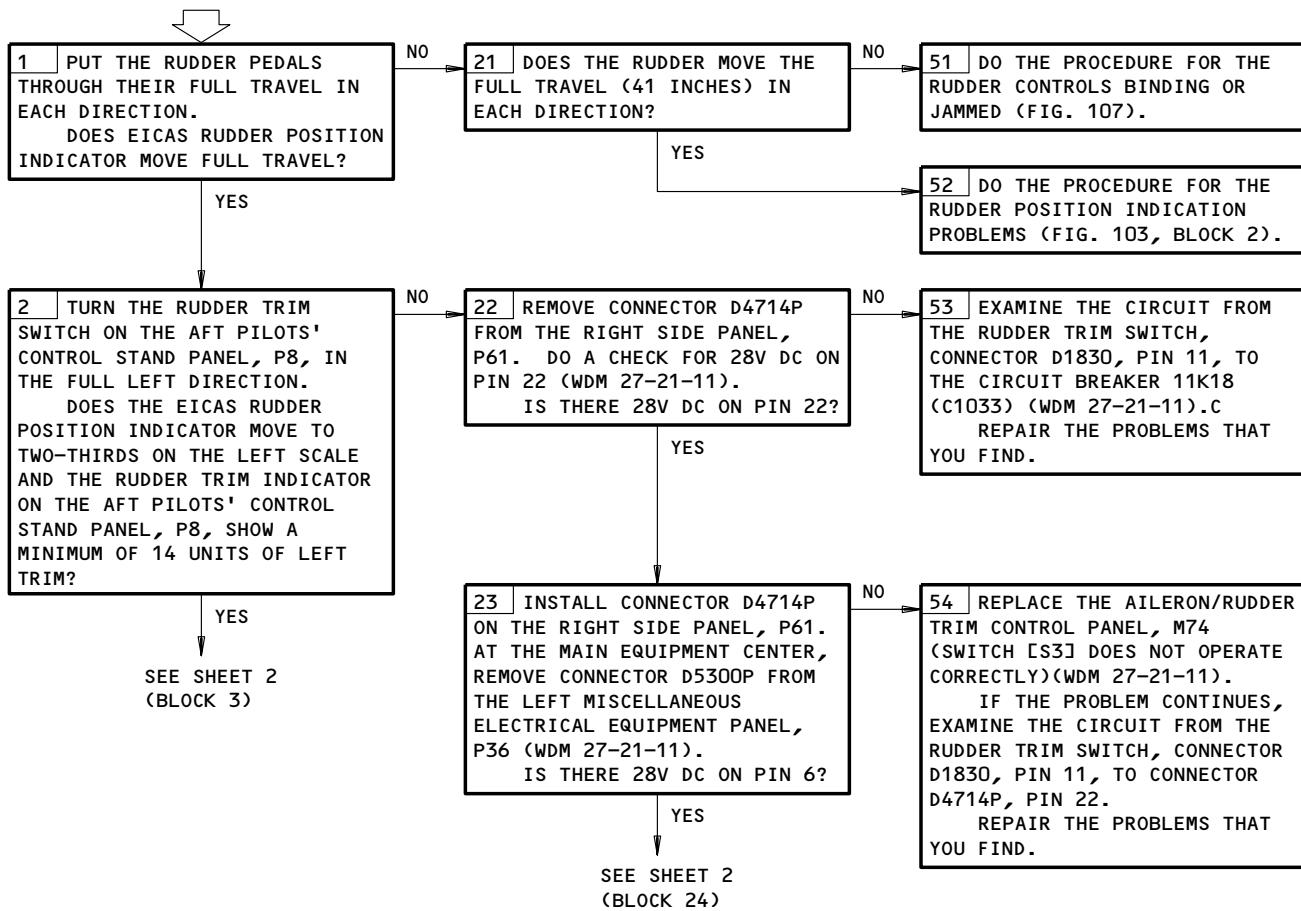
**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
 EICAS (AMM 31-41-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11K16, 11K17, 11K18 OR 11C5

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

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

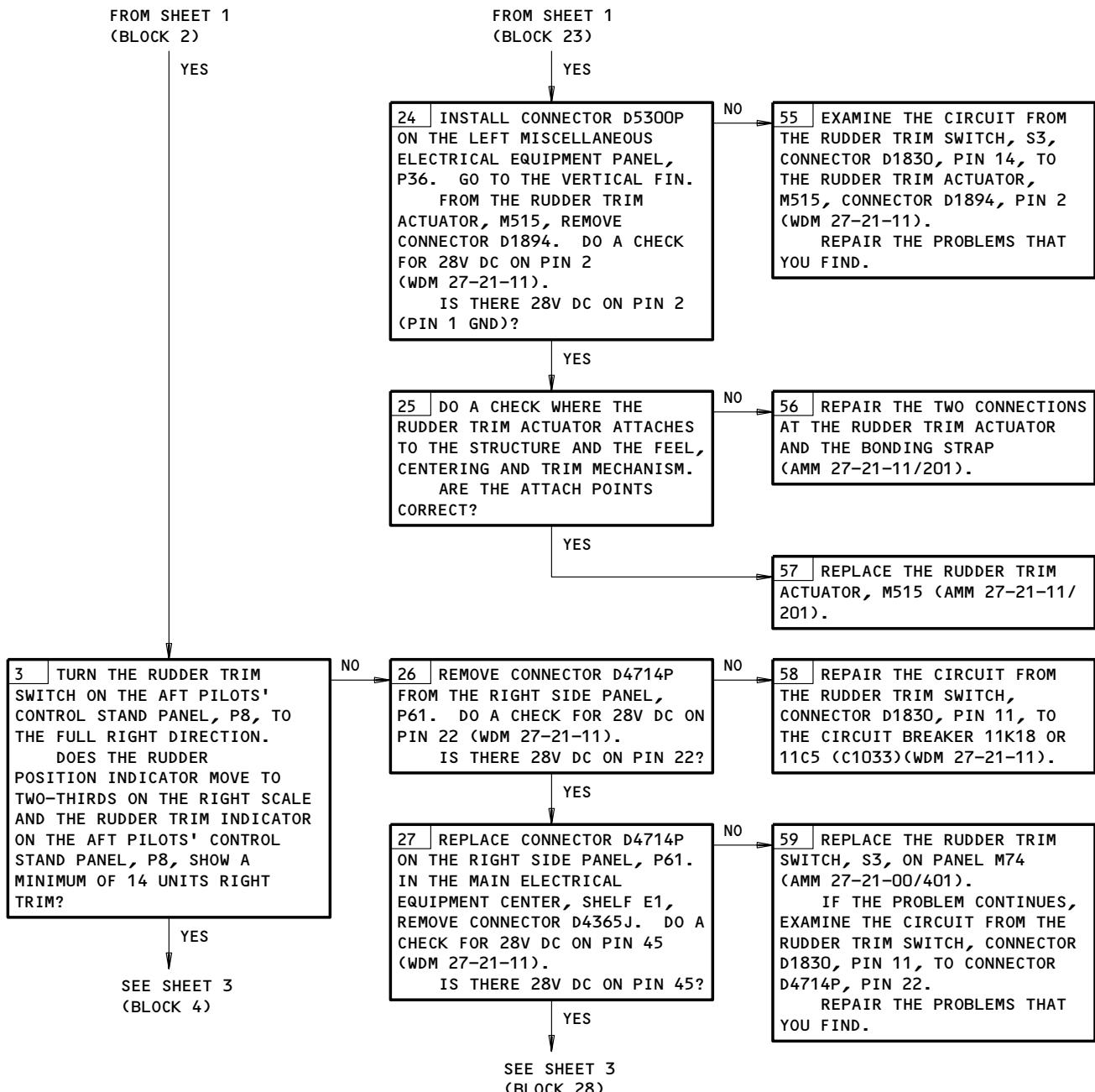
**RUDDER TRIM PROBLEMS**


Rudder Trim Problems  
 Figure 106 (Sheet 1)

EFFECTIVITY

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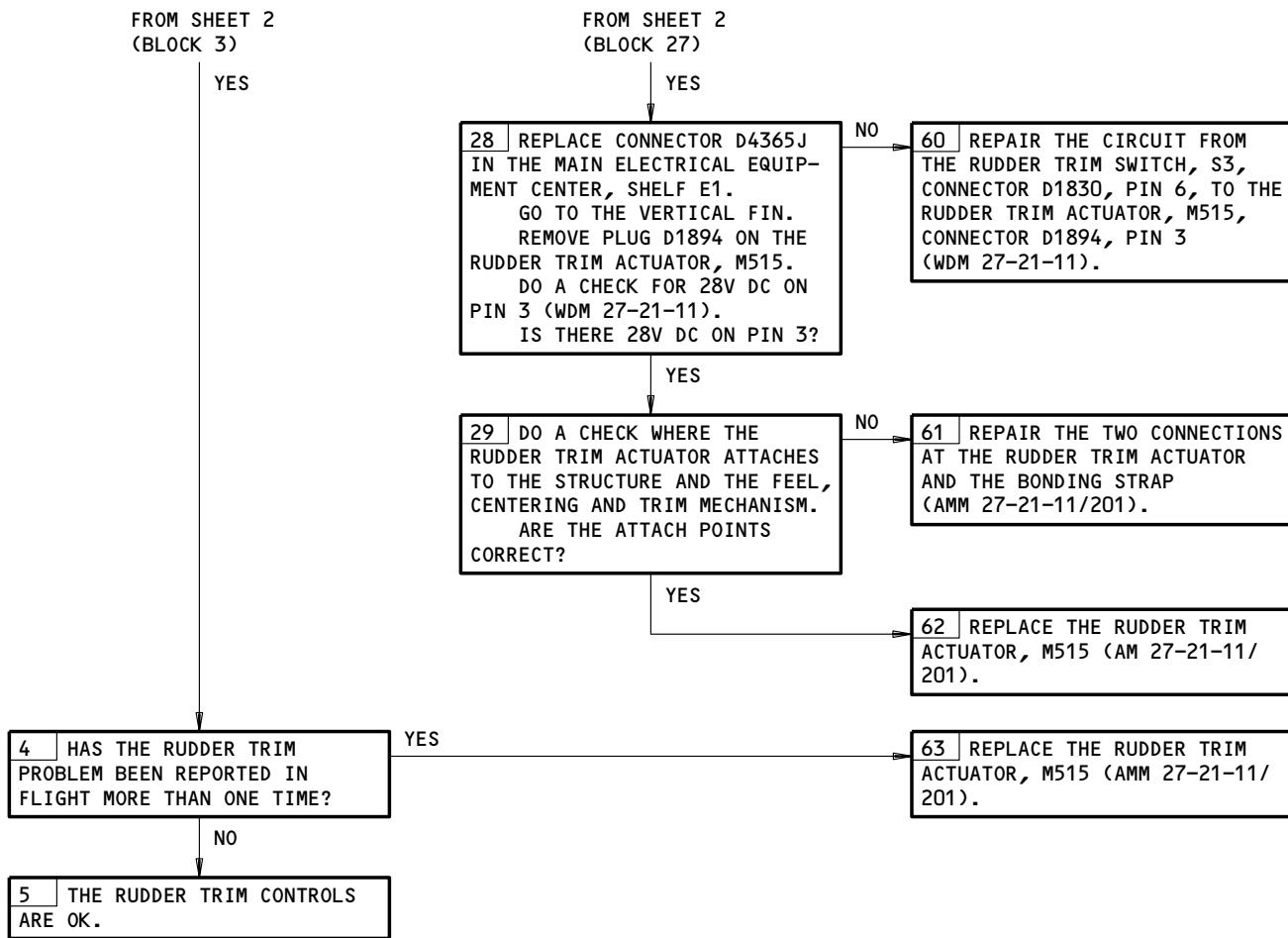
Rudder Trim Problems  
Figure 106 (Sheet 2)

EFFECTIVITY

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FAULT ISOLATION/MAINT MANUAL



Rudder Trim Problems  
Figure 106 (Sheet 3)

EFFECTIVITY

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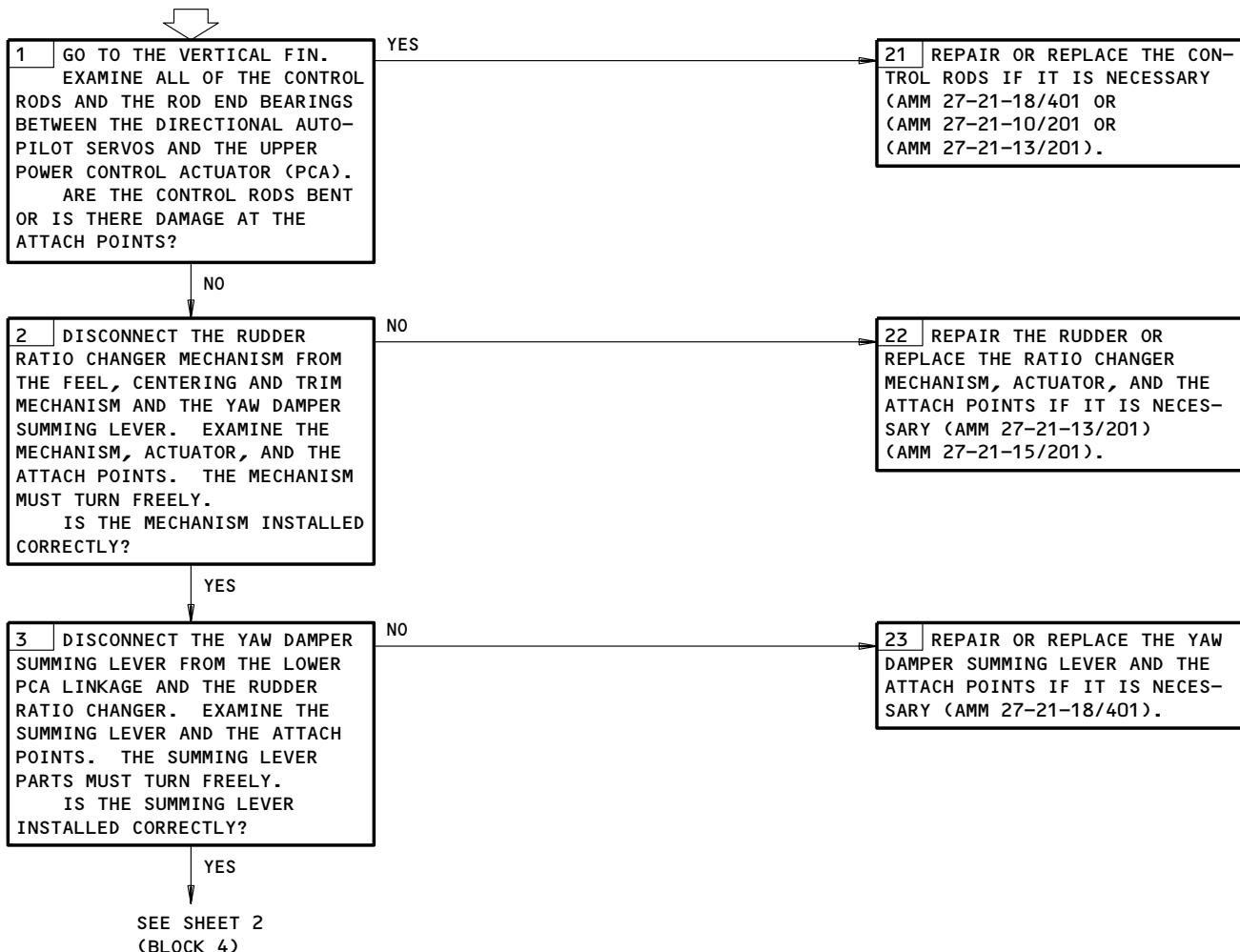
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**PREREQUISITES**

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

**CAUTION:** KEEP THE CONTROL CABLES TIGHT AFTER YOU DISCONNECT THEM FROM THE QUADRANTS. IF YOU DO NOT KEEP THE CONTROL CABLES TIGHT, THEY CAN TOUCH THE AIRPLANE STRUCTURE AND CAN CAUSE DAMAGE TO THE AIRPLANE.

**RUDDER CONTROLS  
BINDING OR JAMMED**



Rudder Controls Binding or Jammed  
Figure 107 (Sheet 1)

EFFECTIVITY

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(BLOCK 3)

YES

4 AT EACH PCA, EXAMINE THE PRIMARY AND SECONDARY CONTROL ROD PATHS, THE OVERRIDE CONTROL VALVE INPUT RODS AND THE ROTATE INPUT LINKAGE.  
IS EACH PCA INSTALLED CORRECTLY AND DOES THE LINKAGE OPERATE SMOOTHLY?

YES

5 DISCONNECT THE FEEL, CENTERING AND TRIM MECHANISM. DISCONNECT THE SPRINGS ON THE RUDDER CONTROL FEEL AND CENTERING ASSEMBLY.  
DO THE TWO BEARINGS MOVE FREELY?

YES

6 DISCONNECT THE FEEL, CENTERING AND TRIM MECHANISM FROM THE AUTOPILOT SERVOS AND THE RUDDER RATIO CHANGER. PUT THE PEDALS THROUGH THEIR FULL TRAVEL, THEN DISCONNECT THE TRIM ACTUATOR FROM THE MECHANISM. PUT THE PEDALS THROUGH THEIR FULL TRAVEL.  
DO THE PEDALS CONTINUE TO BIND OR HIT AFTER THE TRIM ACTUATOR IS REMOVED?

YES

7 GO TO THE NOSE. EXAMINE THE CONTROL RODS BETWEEN THE PEDALS AND THE JACKSHAFT. EXAMINE THE BUS ROD BETWEEN THE JACKSHAFTS AND THE ATTACH POINTS.  
ARE THE CONTROL RODS, BUS ROD AND ATTACH POINTS INSTALLED CORRECTLY?

YES

SEE SHEET 3  
(BLOCK 8)

NO

24 REPAIR OR REPLACE THE POWER CONTROL ACTUATOR INSTALLATION IF IT IS NECESSARY (AMM 27-21-02/201).

NO

25 LOOK FOR CORROSION ON THE BEARINGS.  
IF CORROSION IS FOUND, REPLACE THE BEARINGS (AMM 27-21-10/201).

NO

26 LOOK FOR UNWANTED MATERIAL ON THE CAM FACE AND ON THE ROLLER.  
REMOVE THE UNWANTED MATERIAL AND REPAIR OR REPLACE THE FEEL, CENTERING AND TRIM MECHANISM SPRINGARM, THE CAM FOLLOWER ARM, THE CAM, THE ROLLER AND THE SPRINGS IF IT IS NECESSARY (AMM 27-21-10/201).

NO

27 REPLACE OR REPAIR THE CONTROL RODS, BUS ROD AND ATTACH POINTS (AMM 27-21-05,-07/401).

Rudder Controls Binding or Jammed  
Figure 107 (Sheet 2)

EFFECTIVITY

ALL

27-21-00

FROM SHEET 2  
(BLOCK 7)

YES

8  DISCONNECT THE CONTROL RODS BETWEEN THE RUDDER PEDALS AND THE JACKSHAFT AT THE PEDAL ARMS. PUT THE PEDALS THROUGH THEIR FULL TRAVEL.  
DO THE PEDALS BIND OR HIT?

YES

28  REMOVE THE PEDAL ASSEMBLY FROM THE SUPPORT STRUCTURE. EXAMINE THE PEDAL BEARINGS FOR UNWANTED MATERIAL. REMOVE THE UNWANTED MATERIAL OR REPLACE THE PEDAL ASSEMBLY IF IT IS NECESSARY (AMM 27-21-05/401).

NO

9  CONNECT THE CONTROL RODS BETWEEN THE PEDALS AND THE JACKSHAFT. DISCONNECT THE RUDDER CONTROL CABLES, RA AND RB, BETWEEN THE FORWARD FEEL, CENTERING AND TRIM MECHANISM. PUT THE PEDALS THROUGH THEIR FULL TRAVEL.  
DO THE PEDALS BIND OR HIT?

YES

29  OPEN THE JACKSHAFT HOUSING AND REMOVE THE JACKSHAFT. EXAMINE THE BEARING HOUSING FOR UNWANTED MATERIAL. REMOVE THE UNWANTED MATERIAL OR REPLACE THE BEARING HOUSINGS IF IT IS NECESSARY (AMM 27-21-07/401).

NO

10  EXAMINE THE FEEL, CENTERING AND TRIM MECHANISM TORQUE TUBE AND THE ATTACH POINTS.  
DO THE MECHANISM AND THE AFT QUADRANT TURN FREELY?

NO

30  REPAIR OR REPLACE THE FEEL, CENTERING AND TRIM MECHANISM AND ATTACH POINTS IF IT IS NECESSARY (AMM 27-21-10/401).  
CONNECT THE CONTROL CABLES RA AND RB.

YES

31  EXAMINE THE CABLE INSTALLATION FOR CABLE WEAR, PULLEYS THAT DO NOT OPERATE CORRECTLY AND UNWANTED MATERIAL.  
REPAIR THE CABLE INSTALLATION IF IT IS NECESSARY.

Rudder Controls Binding or Jammed  
Figure 107 (Sheet 3)

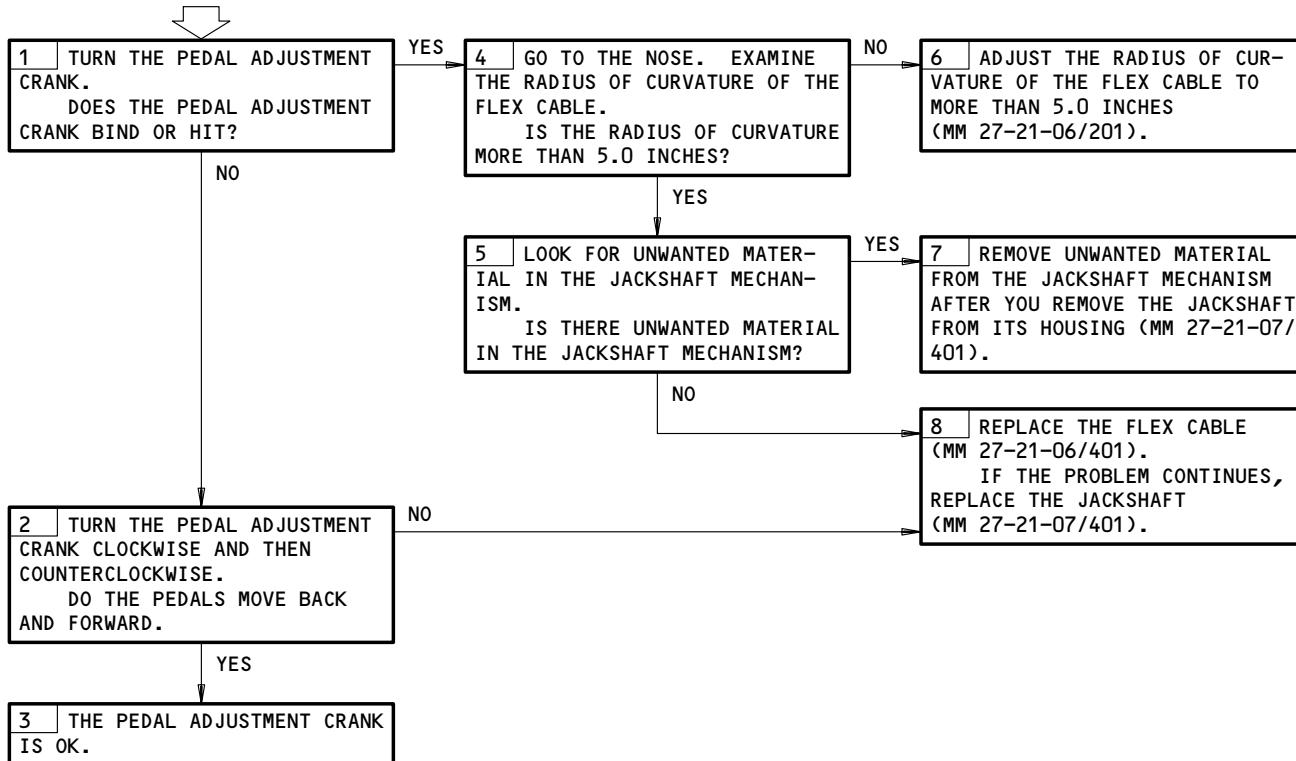
EFFECTIVITY

ALL

**27-21-00**

**RUDDER PEDAL  
ADJUSTMENT PROBLEMS**
**PREREQUISITES**

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



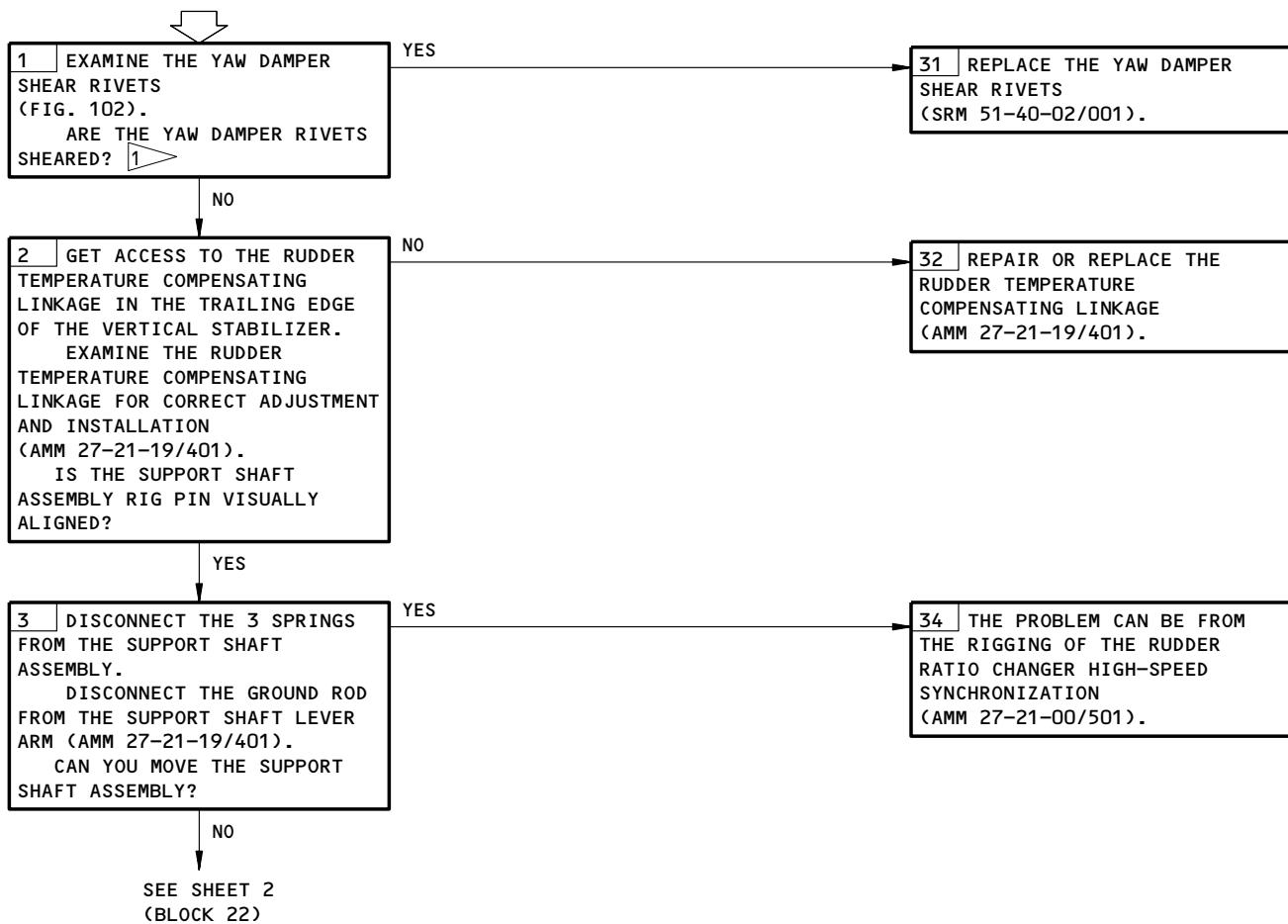
Rudder Pedal Adjustment Problems  
Figure 108

**EFFECTIVITY**
**ALL**
**27-21-00**

AIRPLANE HAS THE  
RUDDER TEMPERATURE  
COMPENSATING LINKAGE  
BUT TRIM ADJUSTMENT  
IS STILL NECESSARY  
DURING A CLIMB OR  
DESCENT

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
11A18, 11F34, 11G10, 11H17, 11H18, 11H27



 NOTE: IF AN EXCESSIVE RUDDER TRIM (MORE THAN 4 UNITS OF TRIM) AND/OR DUTCH ROLL IS REPORTED, CHECK THE YAW DAMPER SUMMING LEVER SHEAR RIVETS (2 OFF) FOR INTEGRITY. PERFORM THE ULTRASONIC TEST ON THE SHEAR RIVETS (NDT MANUAL PART 4-SECTION 27-20).

Airplane Has the Rudder Temperature Compensating Linkage but Trim Adjustment  
Is Still Necessary during a Climb or Descent  
Figure 109 (Sheet 1)

EFFECTIVITY

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FROM SHEET 1  
(BLOCK 3)

NO

22 LOOSEN THE SCREWS WHICH  
HOLD THE RETAINER AND SEAL TO  
THE FIN REAR SPAR.  
EXAMINE THE AREA WHERE THE  
SUPPORT SHAFT LEVER ARMS GOES  
THROUGH THE FIN REAR SPAR FOR  
BLOCKAGE.  
IS THERE BLOCKAGE?

YES 35 REMOVE THE BLOCKAGE AND  
MAKE THE REPAIRS THAT ARE  
NECESSARY (AMM 27-21-19/401).

NO

36 THE PROBLEM CAN BE FROM  
THE RIGGING OF THESE SYSTEMS:  

- RUDDER RATIO CHANGER HIGH  
SPEED SYNCHRONIZATION  
(AMM 27-21-00/501)
- AILERONS AND AILERON DROOP  
(AMM 27-11-00/501)
- ELEVATORS (AMM 27-31-00/501)
- LEADING EDGE SLATS  
(AMM 27-81-00/501)
- TRAILING EDGE FLAPS  
(AMM 27-51-00/501)

Airplane Has the Rudder Trim Compensating Linkage but Trim Adjustment Is Still  
Necessary during a Climb or Descent  
Figure 109 (Sheet 2)

EFFECTIVITY

ALL

**27-21-00**

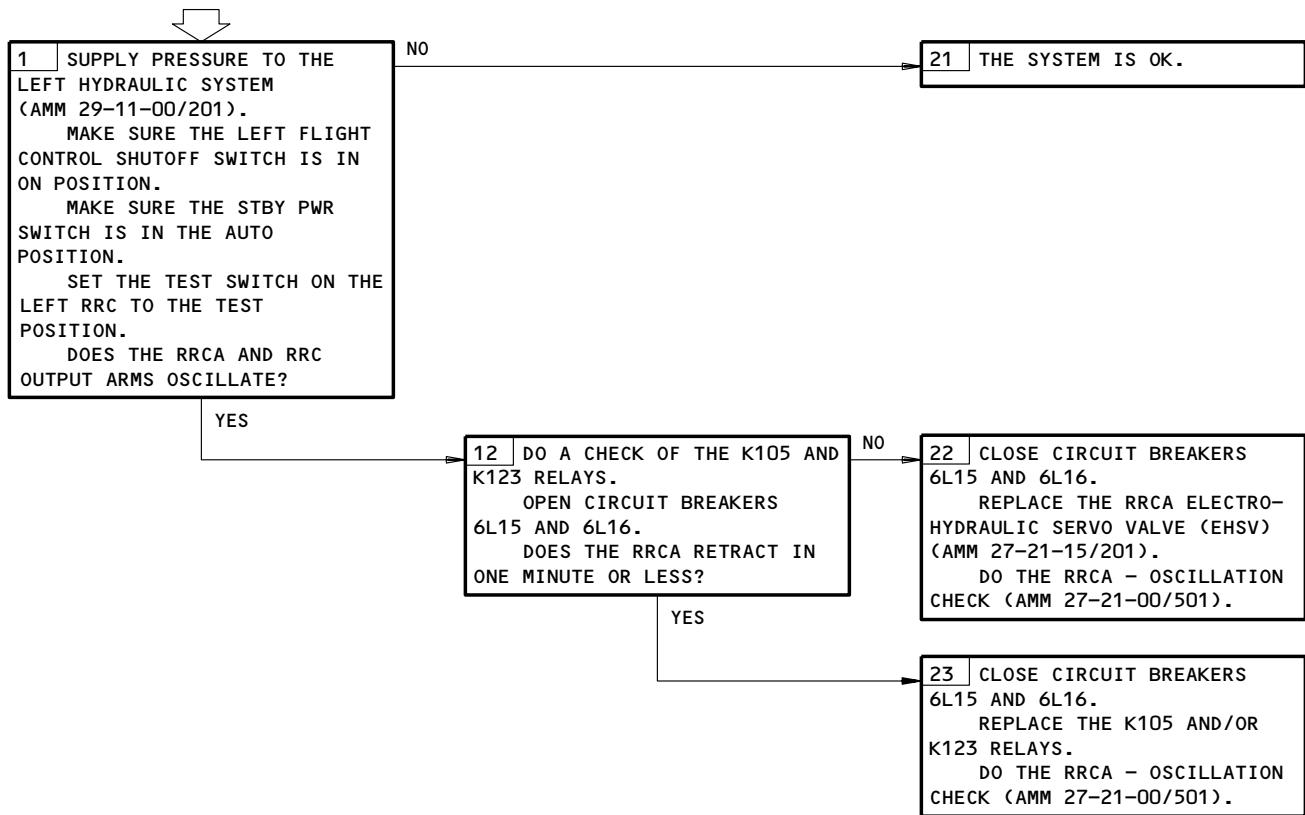
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**PREREQUISITES**

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

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

**OSCILLATION OF THE RRCA OR RUDDER TRAILING EDGE**


Oscillation of the RRCA or Rudder Trailing Edge  
 Figure 110

EFFECTIVITY

ALL

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FAULT ISOLATION/MAINT MANUAL

RUDDER AND ELEVATOR SHUTOFF VALVES

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER – FLT CONT SHUTOFF TAIL L, C1011 FLT CONT SHUTOFF TAIL C, C1013 FLT CONT SHUTOFF TAIL R, C1012 PANEL – (FIM 24-22-00/101) GEN FIELD & HYD CONT, M1087	1		FLT COMPT, P11 11H17 11H18 11H27	*
SWITCH – C FLT CONT SHUTOFF TAIL, YDWS4	1	1	FLT COMPT, P61, GEN FIELD & HYD CONT PNL, M1087	*
SWITCH – L FLT CONT SHUTOFF TAIL, YDWS6	1	1	FLT COMPT, P61, GEN FIELD & HYD CONT PNL, M1087	*
SWITCH – R FLT CONT SHUTOFF TAIL, YDWS2	1	1	FLT COMPT, P61, GEN FIELD & HYD CONT PNL, M1087	*
VALVE – C RUDDER/ELEVATOR HYDRAULIC SHUTOFF, V103	2	1	312AR	27-23-01
VALVE – L RUDDER/ELEVATOR HYDRAULIC SHUTOFF, V101	2	1	312AR	27-23-01
VALVE – R RUDDER/ELEVATOR HYDRAULIC SHUTOFF, V102	2	1	312AR	27-23-01

\* SEE THE WDM EQUIPMENT LIST

Rudder and Elevator Shutoff Valves – Component Index  
Figure 101

EFFECTIVITY

ALL

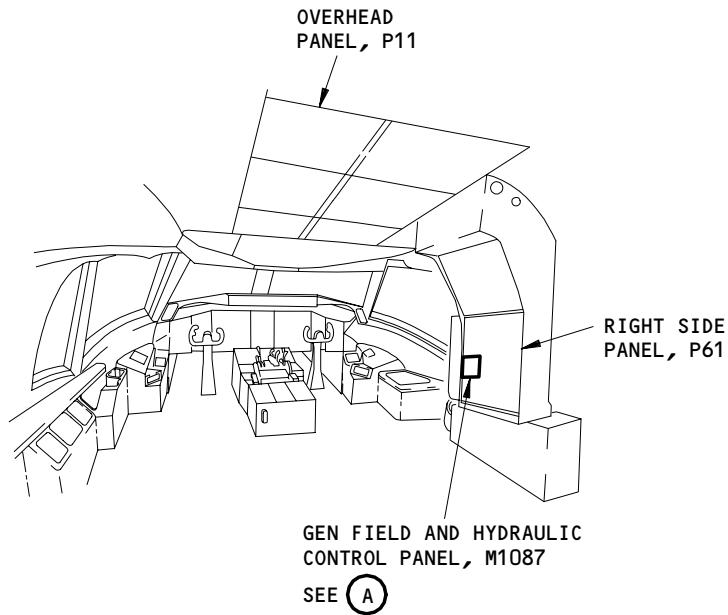
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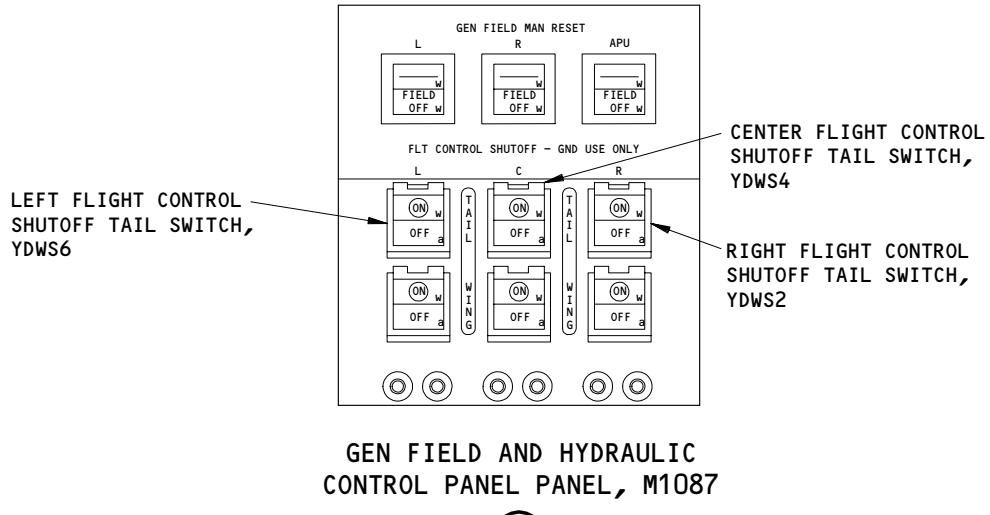
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FAULT ISOLATION/MAINT MANUAL



FLIGHT COMPARTMENT



Rudder and Elevator Shutoff Valves – Component Location  
Figure 102 (Sheet 1)

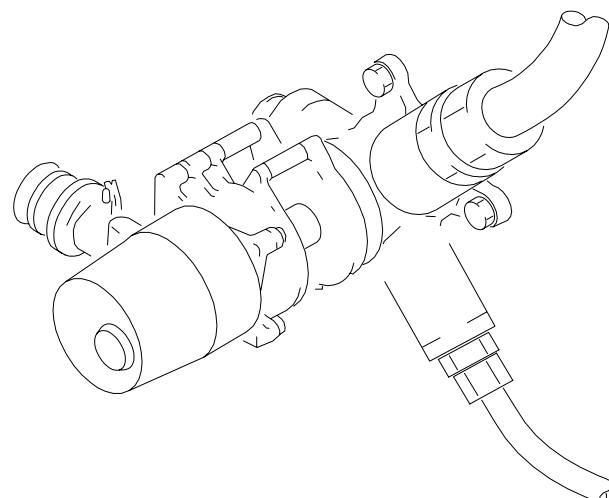
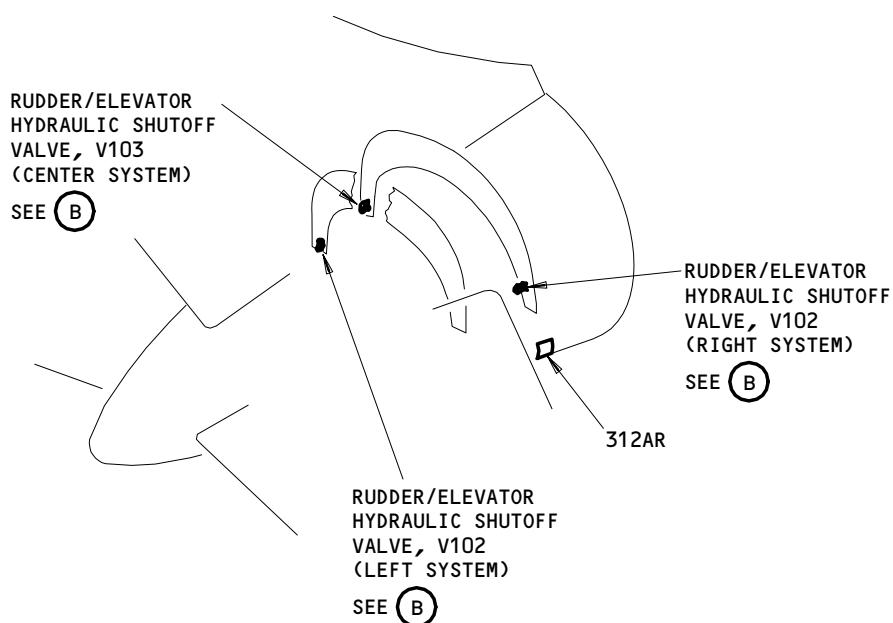
EFFECTIVITY

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RUDDER/ELEVATOR HYDRAULIC SHUTOFF VALVE  
(V101, V102, V103)

(B)

Rudder and Elevator Shutoff Valves – Component Location  
Figure 102 (Sheet 2)

EFFECTIVITY

ALL

**27-23-00**

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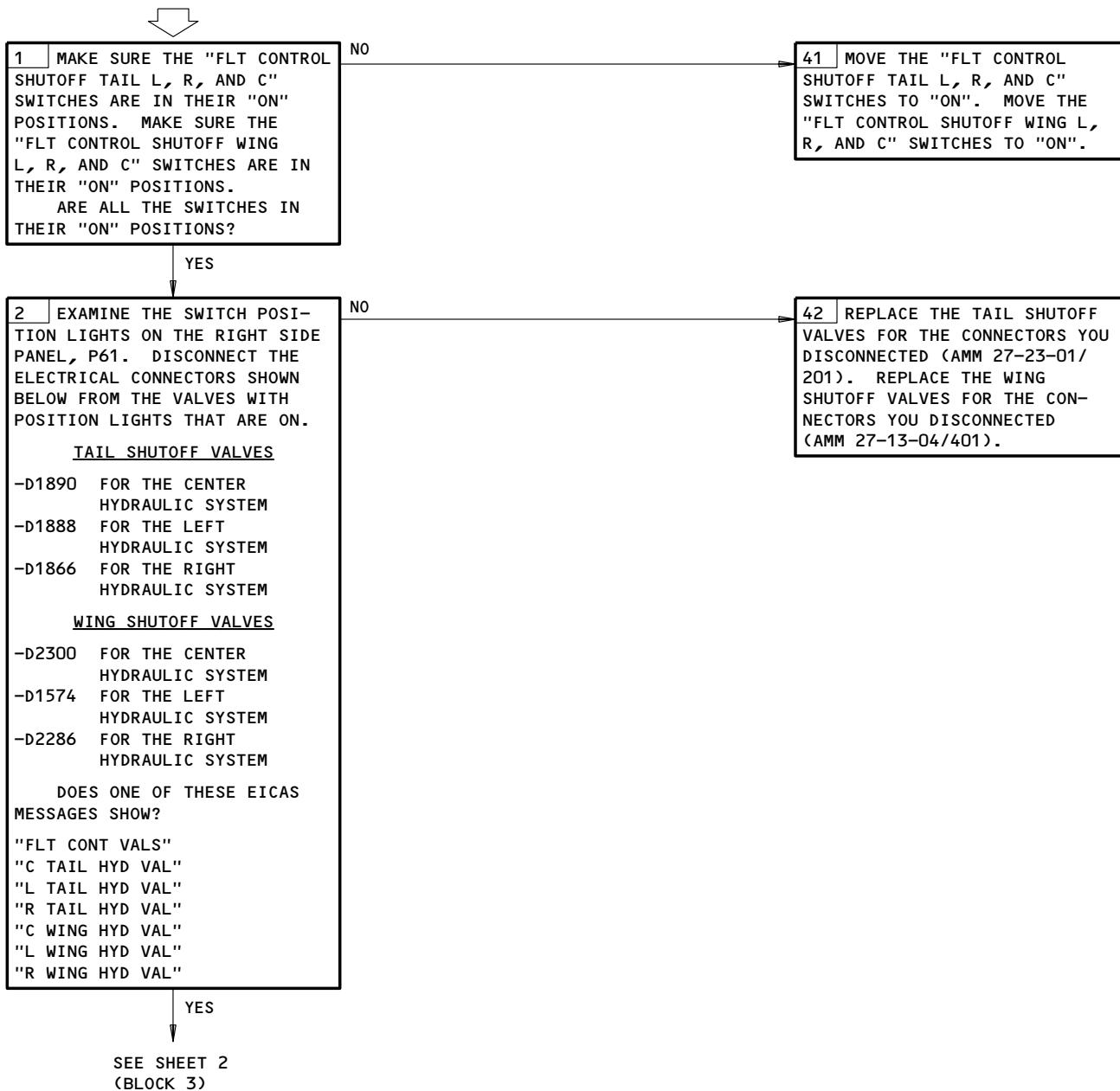
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**EICAS MESSAGE  
"FLT CONT VALS"  
DISPLAYED**
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11H15, 11H16, 11H17, 11H18, 11H26, 11H27

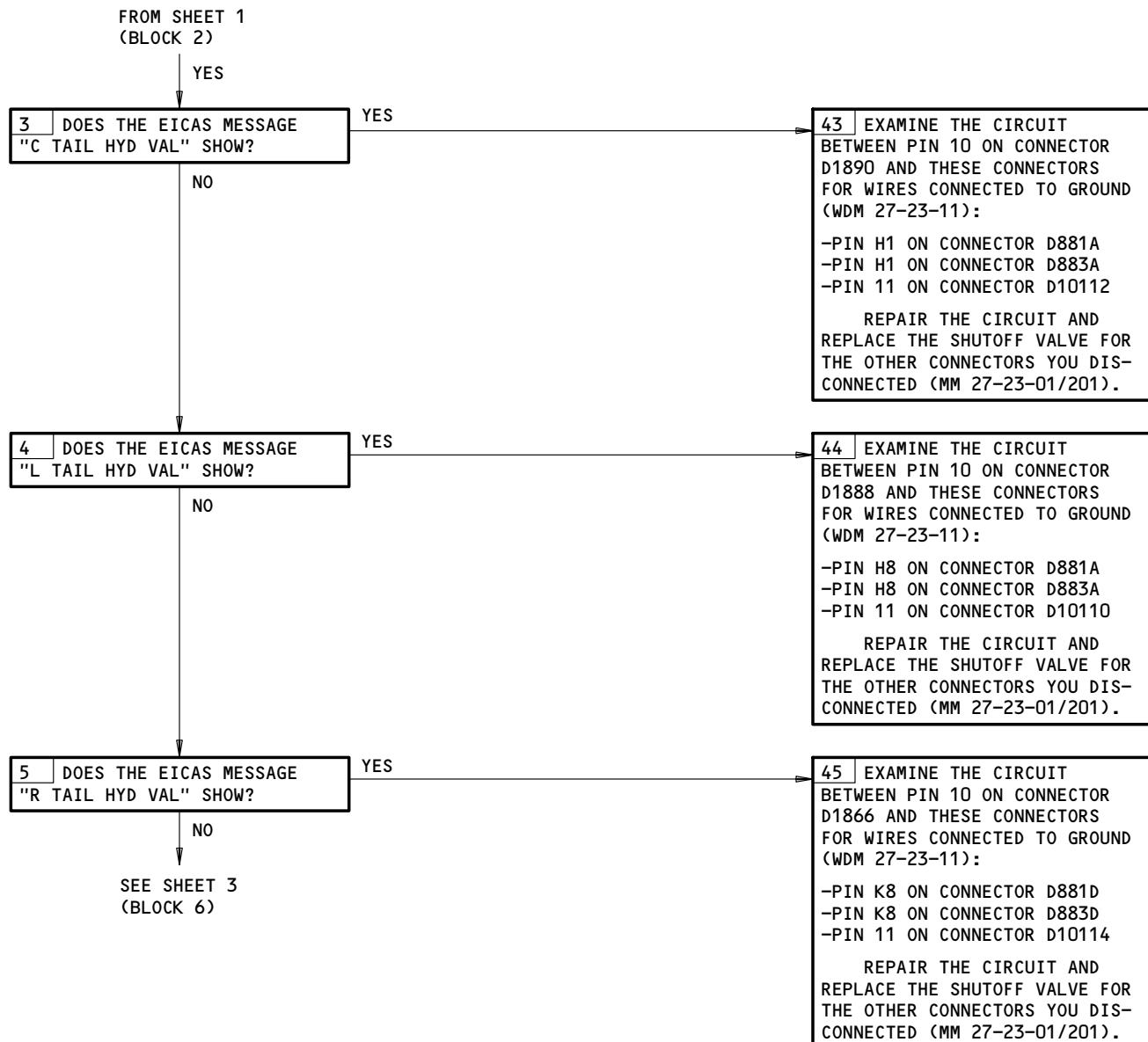
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)



**EICAS Message FLT CONT VALS Displayed**  
**Figure 103 (Sheet 1)**

**EFFECTIVITY**
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EICAS Message FLT CONT VALS Displayed  
Figure 103 (Sheet 2)

EFFECTIVITY

**27-23-00**

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FROM SHEET 2  
(BLOCK 5)

NO

YES

6 | DOES THE EICAS MESSAGE  
"C WING HYD VAL" SHOW?

NO

46 | EXAMINE THE CIRCUIT  
BETWEEN PIN 10 ON CONNECTOR  
D2300 AND THESE CONNECTORS  
FOR WIRES CONNECTED TO GROUND  
(WDM 27-13-11):

-PIN J6 ON CONNECTOR D881E  
-PIN J6 ON CONNECTOR D883E  
-PIN 1 ON CONNECTOR D10112

REPAIR THE CIRCUIT AND  
REPLACE THE SHUTOFF VALVE FOR  
THE OTHER CONNECTORS YOU DIS-  
CONNECTED (MM 27-13-04/401).

7 | DOES THE EICAS MESSAGE  
"L WING HYD VAL" SHOW?

NO

47 | EXAMINE THE CIRCUIT  
BETWEEN PIN 10 ON CONNECTOR  
D1574 AND THESE CONNECTORS  
FOR WIRES CONNECTED TO GROUND  
(WDM 27-13-11):

-PIN K13 ON CONNECTOR D881B  
-PIN K13 ON CONNECTOR D883B  
-PIN 1 ON CONNECTOR D10110

REPAIR THE CIRCUIT AND  
REPLACE THE SHUTOFF VALVE FOR  
THE OTHER CONNECTORS YOU DIS-  
CONNECTED (MM 27-13-04/401).

8 | DOES THE EICAS MESSAGE  
"R WING HYD VAL" SHOW?

NO

48 | EXAMINE THE CIRCUIT  
BETWEEN PIN 10 ON CONNECTOR  
D2286 AND THESE CONNECTORS  
FOR WIRES CONNECTED TO GROUND  
(WDM 27-13-11):

-PIN J2 ON CONNECTOR D881E  
-PIN J2 ON CONNECTOR D883E  
-PIN 11 ON CONNECTOR D10114

REPAIR THE CIRCUIT AND  
REPLACE THE SHUTOFF VALVE FOR  
THE OTHER CONNECTORS YOU DIS-  
CONNECTED (MM 27-13-04/401).

9 | DOES THE EICAS MESSAGE  
"FLT CONT VALS" SHOW?

NO

49 | DO THE APPLICABLE STEPS  
CONTAINED IN BLOCKS 43 THRU  
48 TO EXAMINE THE CIRCUITS FOR  
THE CONNECTORS YOU DISCON-  
NECTED.

10 | THE SYSTEM IS OK.

EICAS Message FLT CONT VALS Displayed  
Figure 103 (Sheet 3)

EFFECTIVITY

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FAULT ISOLATION/MAINT MANUAL

RUDDER POSITION INDICATING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER – RUDDER POS, C1005 RUDDER RATIO, C1031 RUDDER TRIM, C1033 RUDDER TRIM POS, C1034	1		FLT COMPT, P11 11K16 11G10 11C5 11K17	*
PLATE – INDEX SWITCH – RUDDER TRIM CONTROL, YARS3	2 1	1	BELOW RUDDER FLT COMPT, P8, AILERON/RUDDER TRIM CONT PNL, M74	27-28-00 *
TRANSMITTER – RUDDER POSITION, M516	2	1	324EL, VERTICAL FIN	27-28-01

\* SEE THE WDM EQUIPMENT LIST

Rudder Position Indicating System – Component Index  
Figure 101

EFFECTIVITY

ALL

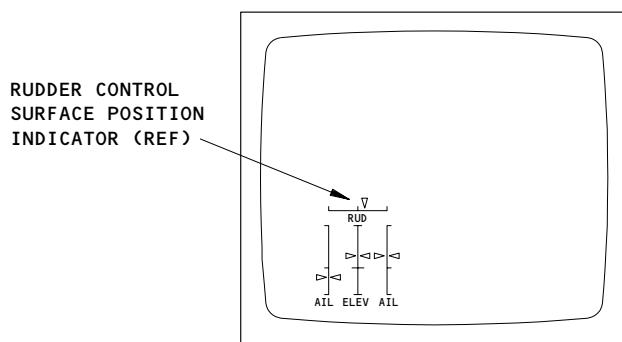
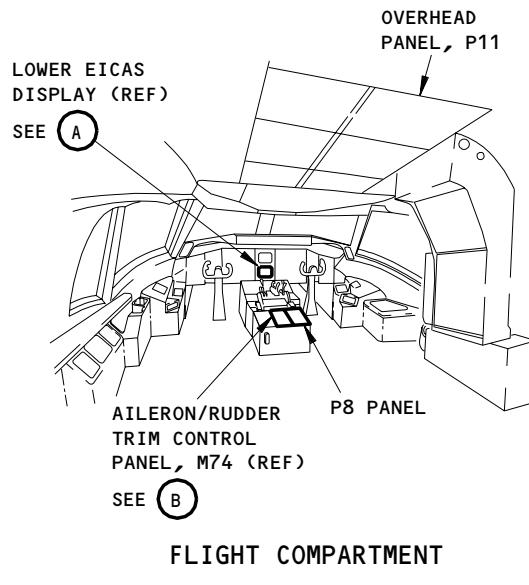
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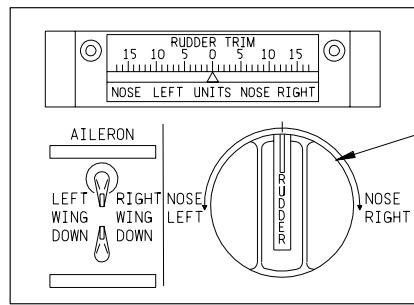
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FAULT ISOLATION/MAINT MANUAL



LOWER EICAS DISPLAY (REF)

A



AILERON/RUDDER TRIM CONTROL PANEL, M74 (REF)

B

Rudder Position Indicating System - Component Location  
Figure 102 (Sheet 1)

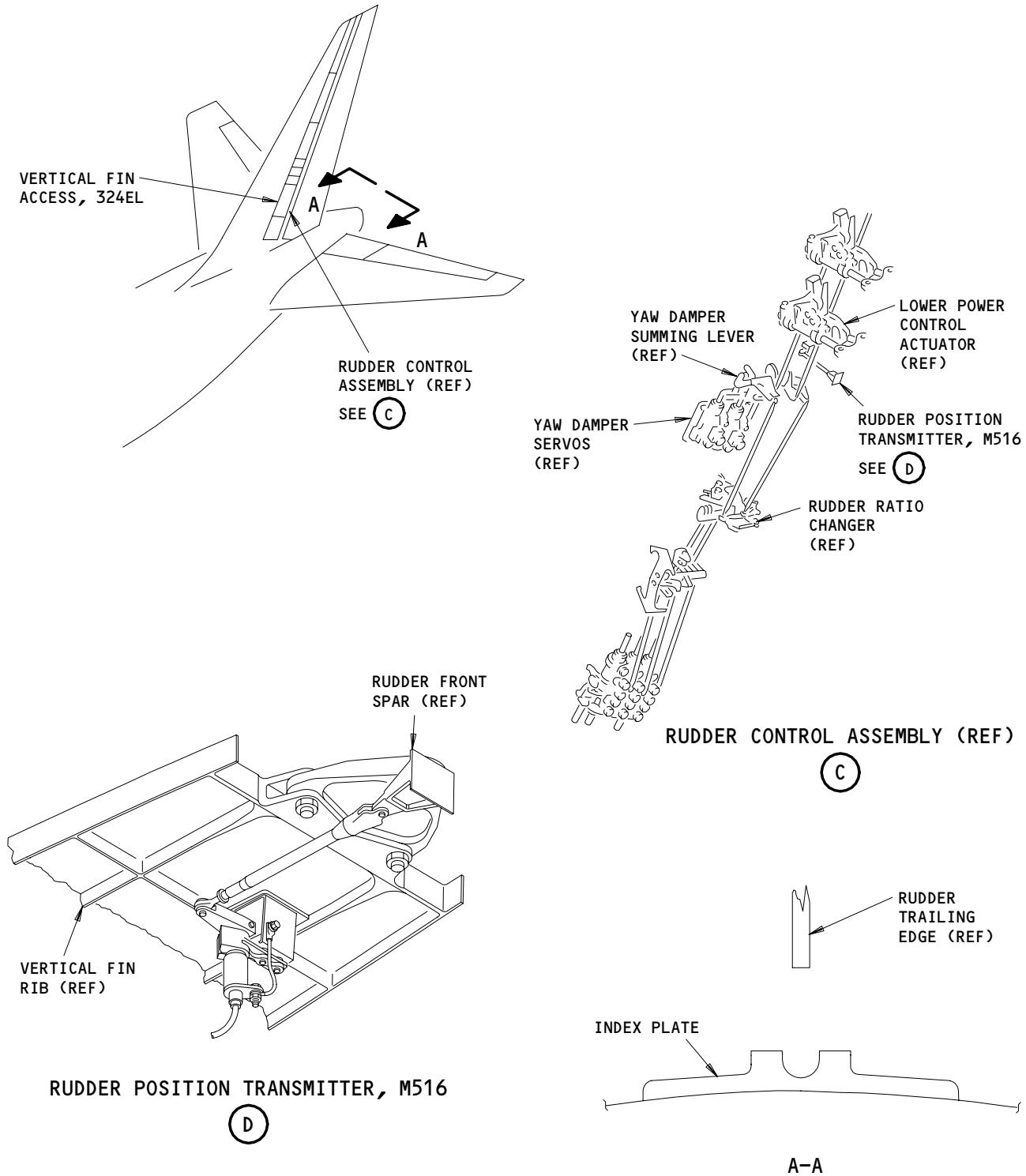
EFFECTIVITY

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Rudder Position Indicating System - Component Location  
Figure 102 (Sheet 2)

EFFECTIVITY

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**27-28-00**

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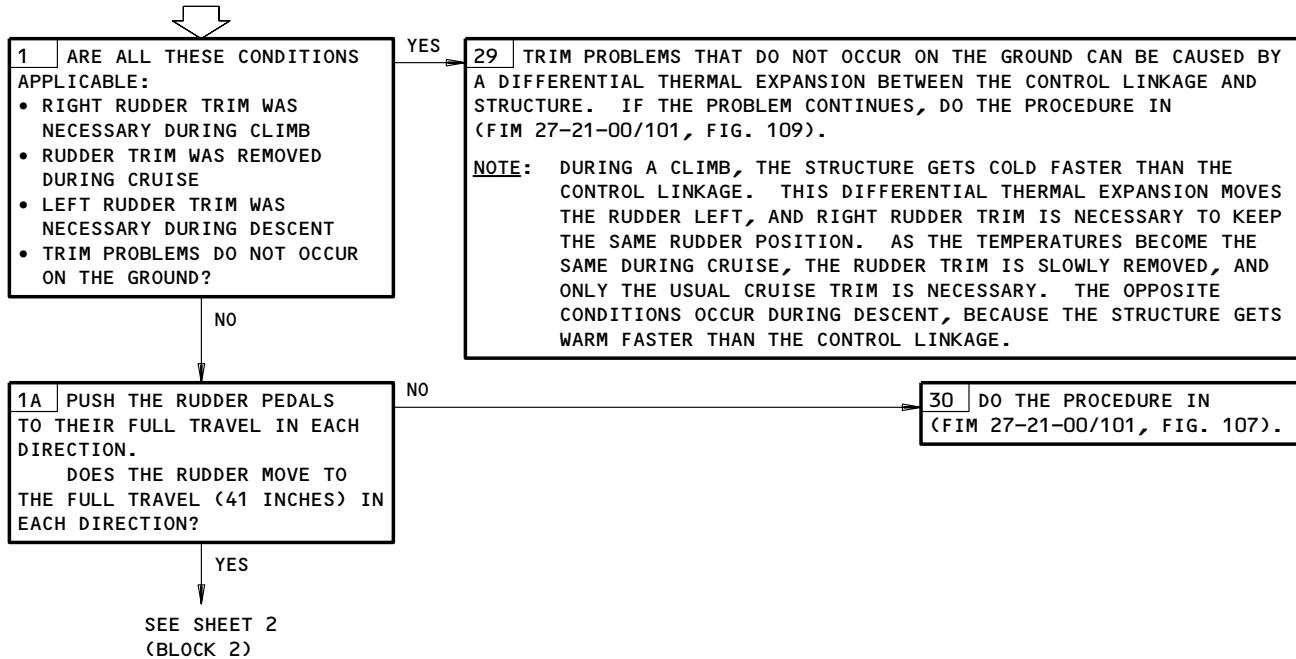
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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11C5, 11G10, 11K16, 11K17

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

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

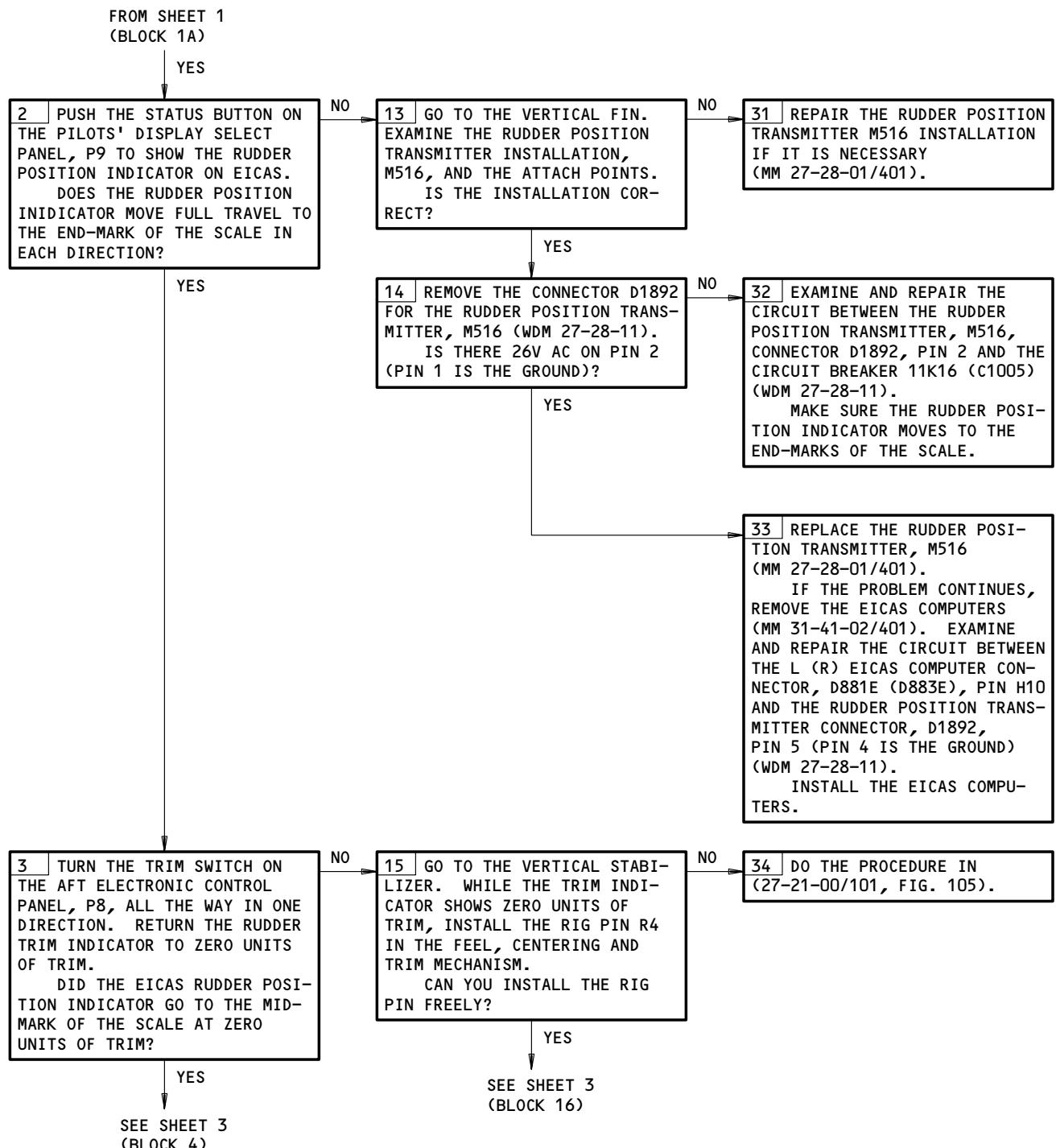
**RUDDER POSITION  
INDICATION  
PROBLEMS**


Rudder Position Indication Problems  
Figure 103 (Sheet 1)

EFFECTIVITY

ALL

**27-28-00**



Rudder Position Indication Problems  
Figure 103 (Sheet 2)

EFFECTIVITY

**27-28-00**

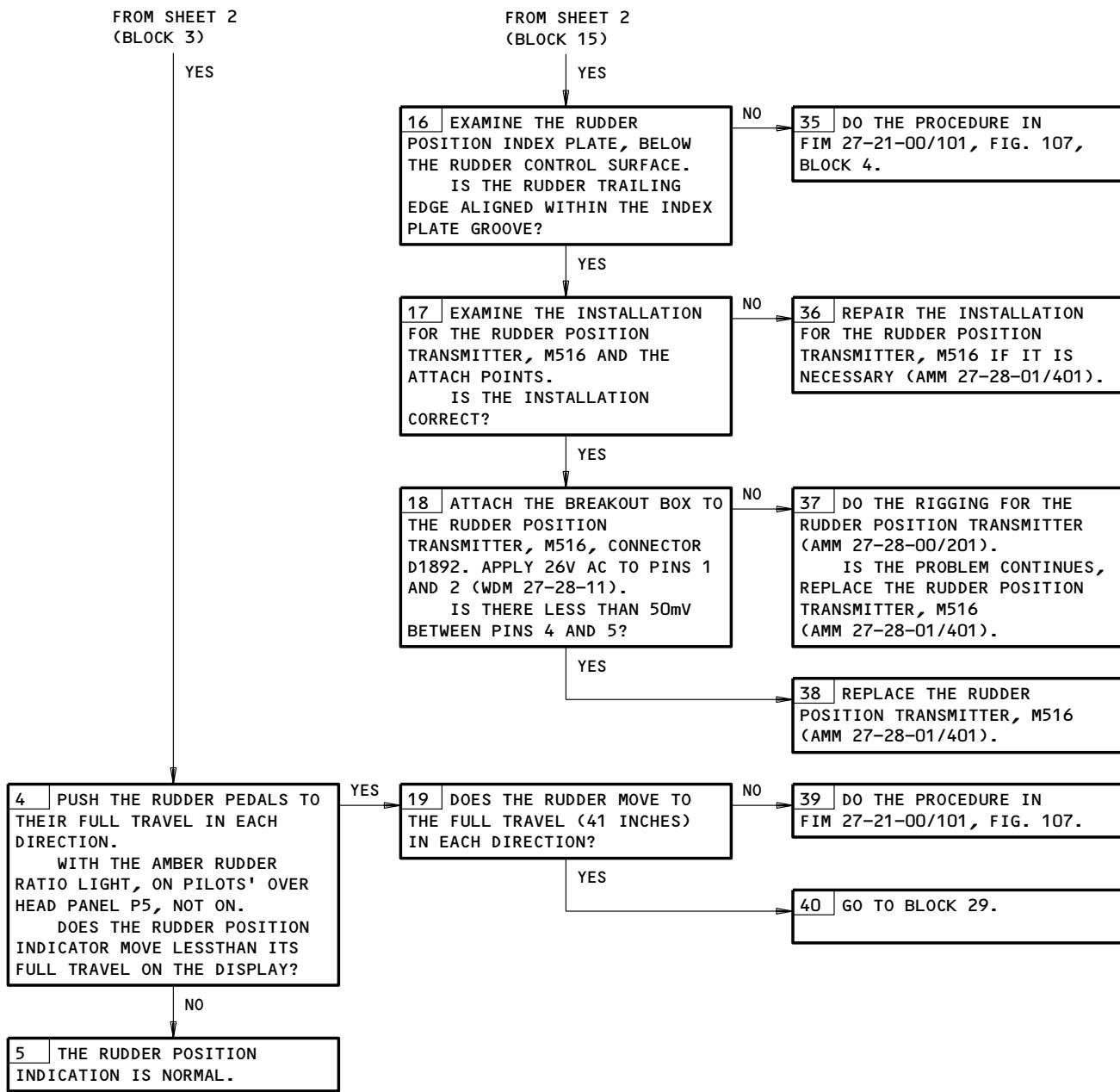
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FAULT ISOLATION/MAINT MANUAL



Rudder Position Indication Problems  
Figure 103 (Sheet 3)

EFFECTIVITY

ALL

**27-28-00**

ELEVATOR CONTROL SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
ACTUATOR - ELEVATOR FEEL	3	1	313AL, ELEV MECH LINKAGES	27-31-17
ACTUATOR - ELEVATOR POWER CONTROL	4	6	335EB,335GB,335HB, L STAB 345EB,345GB,345HB, R STAB	27-31-05
COLUMN - CONTROL	1	2	113AL, FWD EQUIP BAY	27-31-10
COMPUTER - ELEVATOR FEEL, M950	2	1	312AR, STAB JACKSCREW	27-31-19
COMPUTERS - (31-41-00/101)				
LEFT EICAS, M10181				
RIGHT EICAS, M10182				
DEVICE - LOST MOTION	4	2	335JB,345JB, STAB	27-31-00
ELEVATOR - INBOARD	4	2	REAR SPAR OF HORIZONTAL STAB	27-31-01
ELEVATOR - OUTBOARD	4	2	REAR SPAR OF HORIZONTAL STAB	27-31-02
INDICATOR - (27-38-00/101)				
ELEVATOR POSITION				
MECHANISM - NEUTRAL SHIFT AND OVERRIDE  1	3	1	313AL, ELEV MECH LINKAGES	27-31-21
MECHANISM - OVERRIDE  2	3	1	313AL, ELEV MECH LINKAGES	27-31-21
MECHANISM - AFT QUADRANT OVERRIDE	3	1	313AL, ELEV MECH LINKAGES	27-31-00
OVERRIDE - CONTROL COLUMN	1	1	113AL, FWD EQUIP BAY	27-31-00
PLATE - INDEX	4	2	OPPOSITE ELEV TRAILING EDGE ON EMPENNAGE	27-31-00
QUADRANT - ELEVATOR AFT	3	2	313AL, ELEV MECH LINKAGES	27-31-15
QUADRANT - ELEVATOR CONTROL TENSION REGULATOR	1	2	113AL, FWD EQUIP BAY	27-31-12
QUADRANT - SLAVE CABLE	4	2	335JB,345JB, STAB	27-31-00
SERVO - (22-12-00/101)				
ELEVATOR AUTOPILOT				
TRANSMITTER - (27-38-00/101)				
ELEVATOR POSITION				
UNIT - ELEVATOR FEEL	3	1	313AL, ELEV MECH LINKAGES	27-31-17

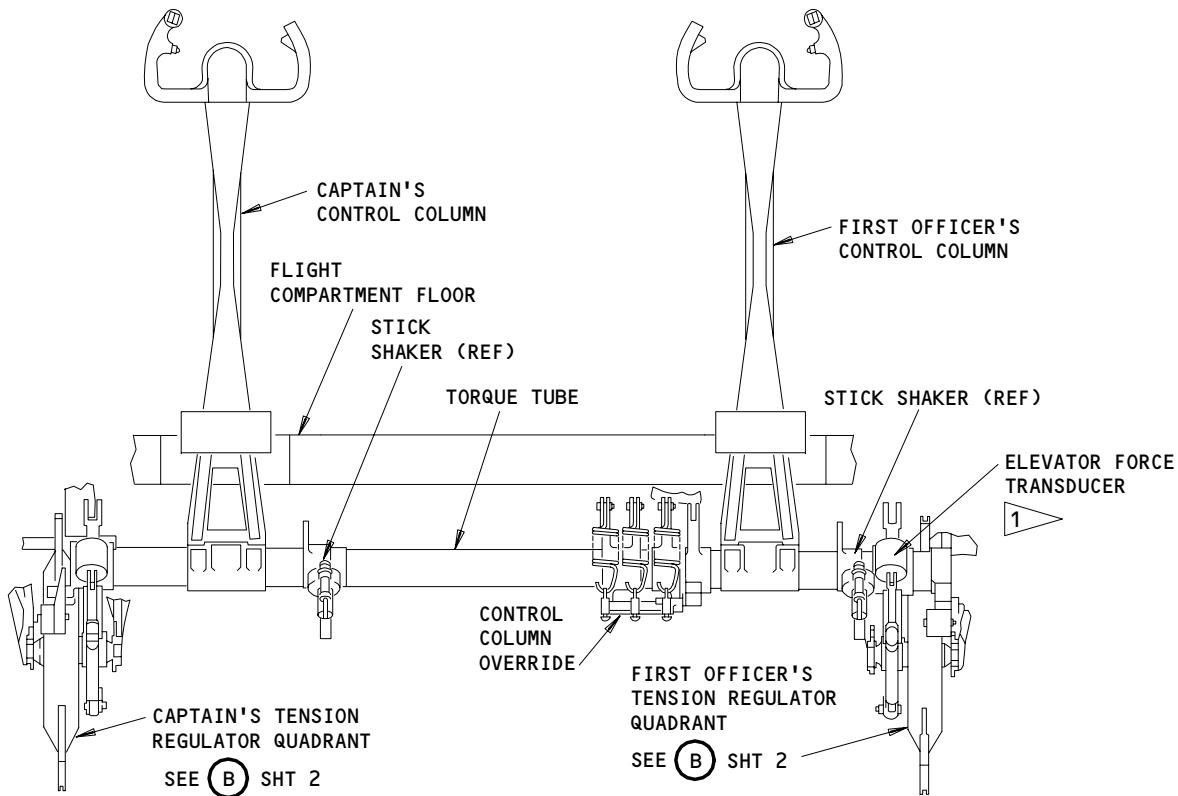
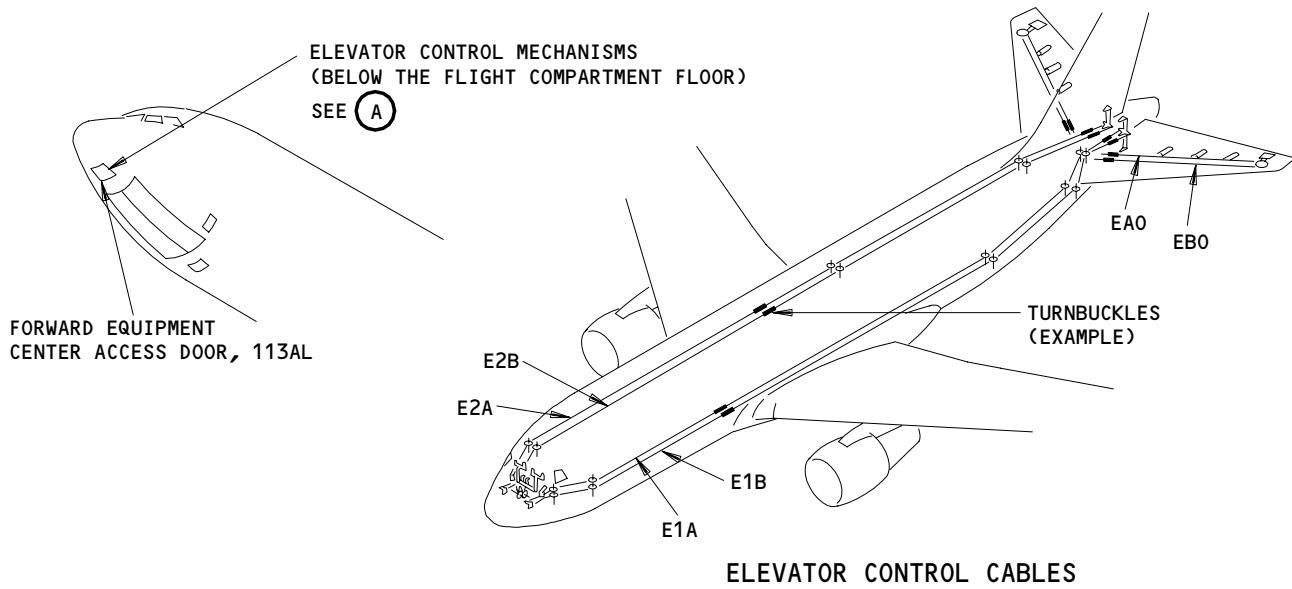
 1 767-200 AIRPLANES

 2 767-300 AIRPLANES

**Elevator Control System - Component Index**  
**Figure 101**
**EFFECTIVITY** —

**27-31-00**
**ALL**
**02**
**Page 101**  
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767  
FAULT ISOLATION/MAINT MANUAL



ELEVATOR CONTROL MECHANISMS  
(VIEW IN THE FORWARD DIRECTION)

1 ▶ SAS 050,051,150-156,162-166

A

Elevator Control System - Component Location  
Figure 102 (Sheet 1)

EFFECTIVITY

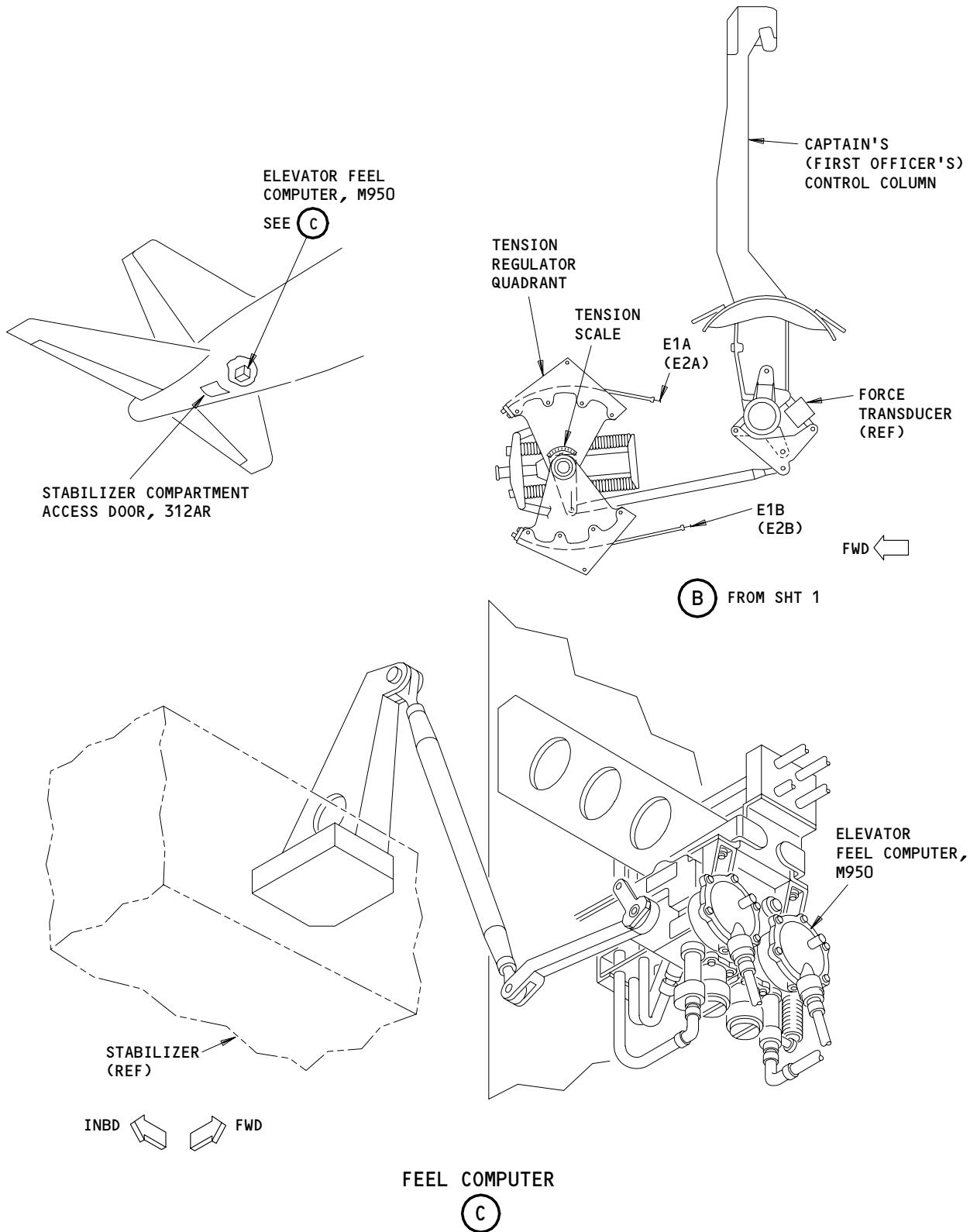
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FAULT ISOLATION/MAINT MANUAL



Elevator Control System - Component Location  
Figure 102 (Sheet 2)

EFFECTIVITY

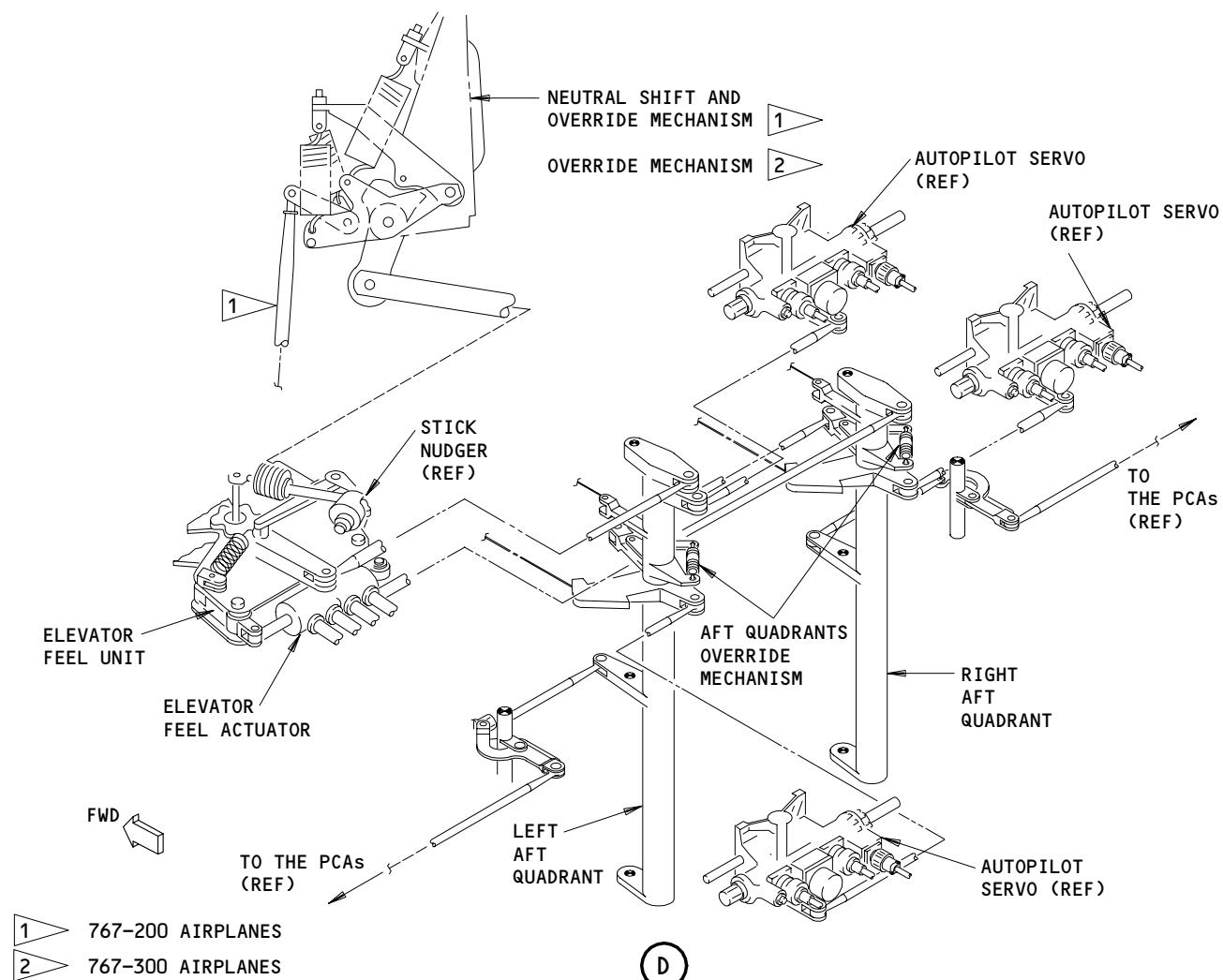
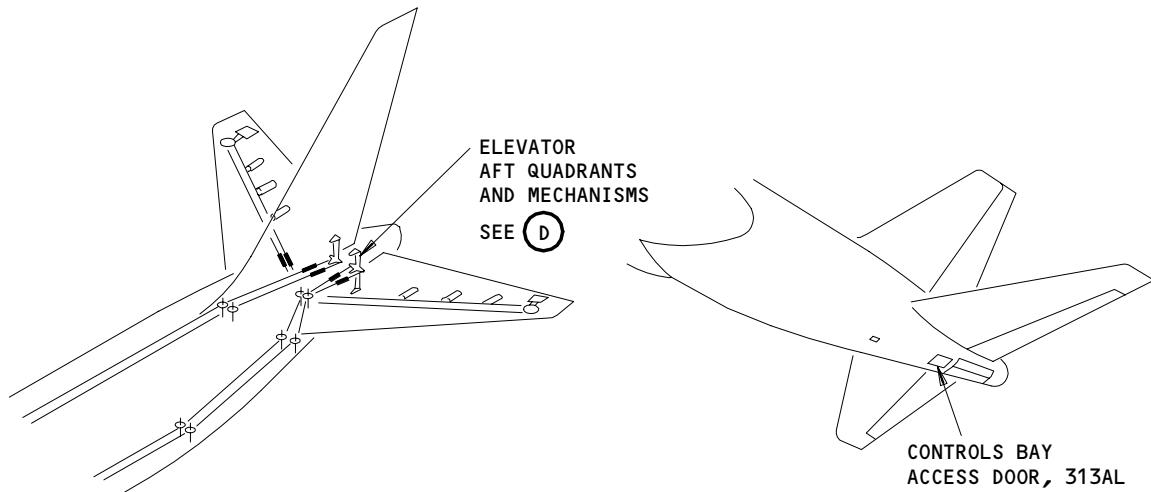
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FAULT ISOLATION/MAINT MANUAL



Elevator Control System - Component Location  
Figure 102 (Sheet 3)

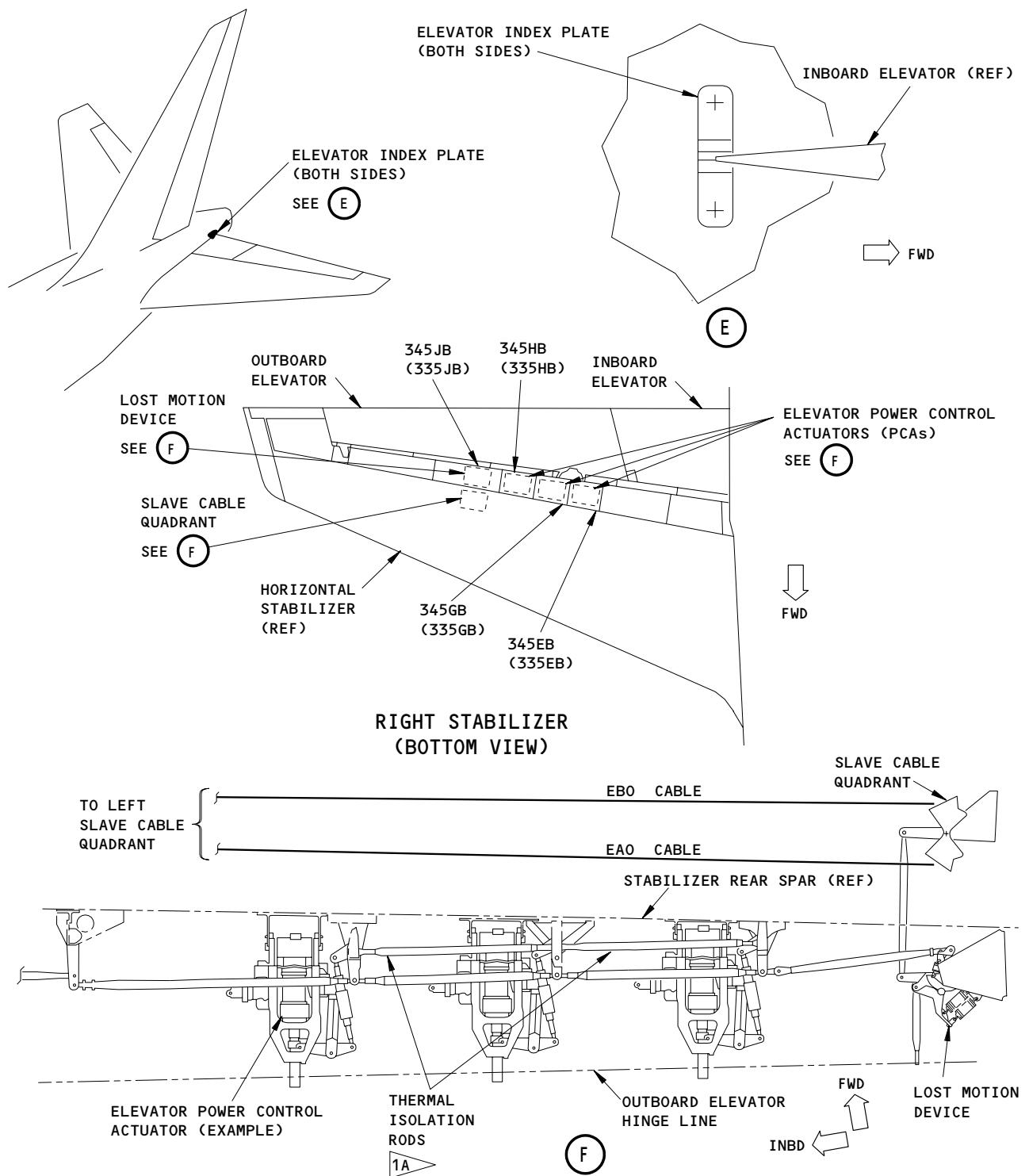
EFFECTIVITY

ALL

**27-31-00**

02

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**Elevator Control System - Component Location**  
**Figure 102 (Sheet 4)**

EFFECTIVITY

ALL

**27-31-00**

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FAULT ISOLATION/MAINT MANUAL

Not Used  
Figure 103

EFFECTIVITY

ALL

**27-31-00**

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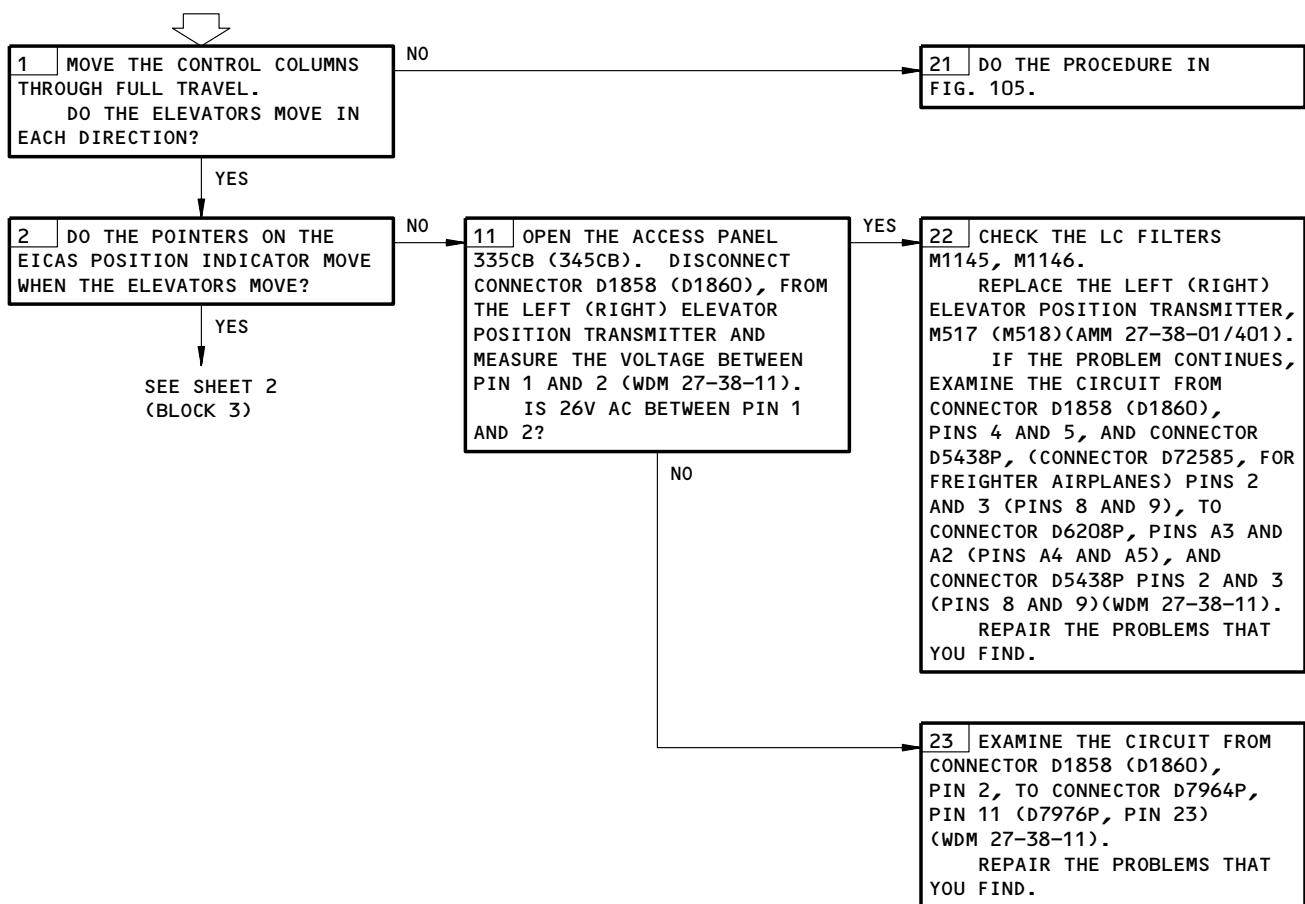
**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
EICAS (AMM 31-41-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
11H17, 11H18, 11H27, 11K13, 11K22

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

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**ELEVATOR POSITION INDICATION PROBLEMS**


Elevator Position Indication Problems  
Figure 104 (Sheet 1)

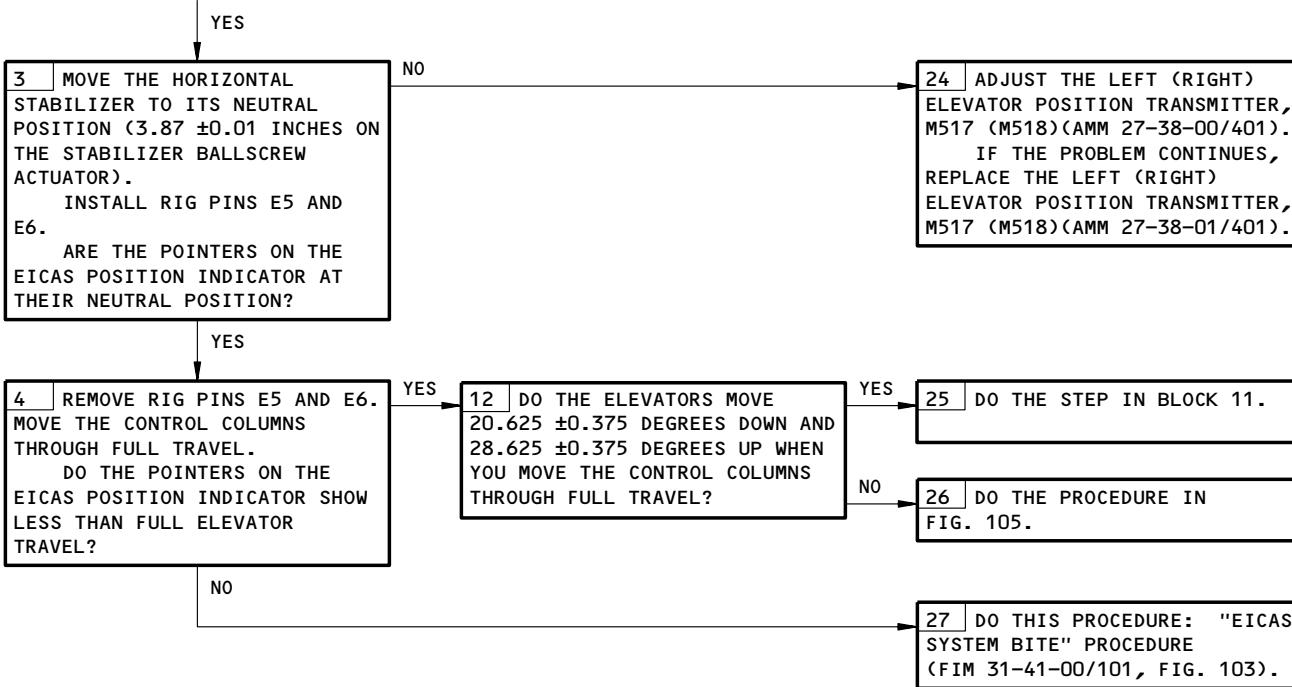
EFFECTIVITY

ALL

**27-31-00**

**BOEING**  
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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 2)



Elevator Position Indication Problems  
Figure 104 (Sheet 2)

EFFECTIVITY

ALL

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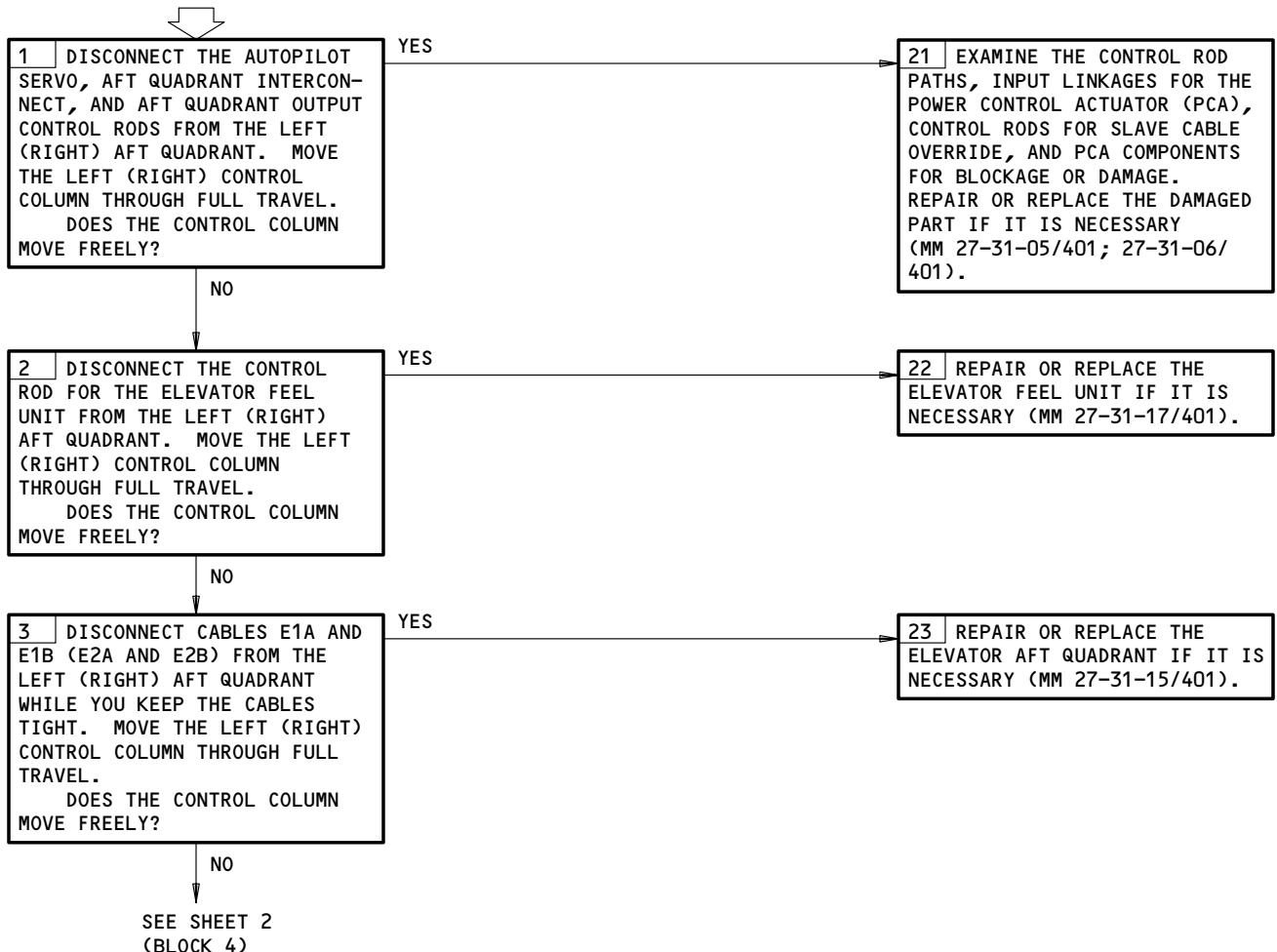
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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL

CONTROL COLUMN  
BINDING OR JAMMED

PREREQUISITES

NONE



Control Column Does Not Move Freely  
Figure 105 (Sheet 1)

EFFECTIVITY

ALL

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FROM SHEET 1  
(BLOCK 3)

NO

4 CONNECT CABLES E1A AND E1B (E2A AND E2B) TO THE LEFT (RIGHT) AFT QUADRANT. DISCONNECT CABLES E1A AND E1B (E2A AND E2B) FROM THE LEFT (RIGHT) TENSION REGULATOR QUADRANT WHILE YOU KEEP THE CABLES TIGHT. MOVE THE LEFT (RIGHT) CONTROL COLUMN THROUGH FULL TRAVEL.  
DOES THE CONTROL COLUMN MOVE FREELY?

YES

24 EXAMINE THE CABLE INSTALLATION FOR WEAR ON THE CABLES, DAMAGED PULLEYS, AND UNWANTED OBJECTS. REPAIR THE CABLE INSTALLATION IF IT IS NECESSARY (MM 27-00-01/201).

NO

5 DISCONNECT THE LEFT (RIGHT) CONTROL ROD FOR THE TENSION REGULATOR QUADRANT FROM THE TORQUE TUBE FOR THE CONTROL COLUMN. MOVE THE LEFT (RIGHT) CONTROL COLUMN THROUGH FULL TRAVEL.  
DOES THE CONTROL COLUMN MOVE FREELY?

NO

25 REPAIR OR REPLACE THE LEFT (RIGHT) TENSION REGULATOR QUADRANT IN THE ELEVATOR CONTROL SYSTEM IF IT IS NECESSARY (MM 27-31-12/401).

YES

26 EXAMINE THE TORQUE TUBE AND THE CONTROL COLUMN INSTALLATION FOR UNWANTED OBJECTS AND DAMAGED COMPONENTS. REPAIR OR REPLACE DAMAGED COMPONENTS IF IT IS NECESSARY (MM 27-31-10/401).

Control Column Does Not Move Freely  
Figure 105 (Sheet 2)

EFFECTIVITY

ALL

**27-31-00**



## 767 FAULT ISOLATION/MAINT MANUAL

### PREREQUISITES

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

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
11H17, 11H18, 11H27

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

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**CAUTION:** DO NOT LET THE PRESSURE GO ABOVE 4.75 PSI (426 KNOTS). THIS WILL PREVENT DAMAGE TO THE FEEL COMPUTER. MAKE PRESSURE CHANGES SUCH THAT THE INDICATED RATE OF CLIMB (OR DESCENT) IS LESS THAN 5000 FEET PER MINUTE FOR THE STATIC SYSTEM AND 300 KNOTS PER MINUTE FOR THE PITOT SYSTEM. APPLICABLE GAUGE SAVER RESTRICTORS OR EQUIVALENT DEVICES MUST BE USED.

THE PITOT PRESSURE MUST BE THE SAME OR HIGHER THAN THE STATIC PRESSURE. THE DIFFERENCE MUST BE LESS THAN 10.00 INCHES OF MERCURY. THE DIFFERENCE MUST NOT GO BELOW ZERO. DAMAGE TO EQUIPMENT CAN OCCUR.

EICAS Message ELEV FEEL Is Shown  
Figure 106 (Sheet 1)

EFFECTIVITY

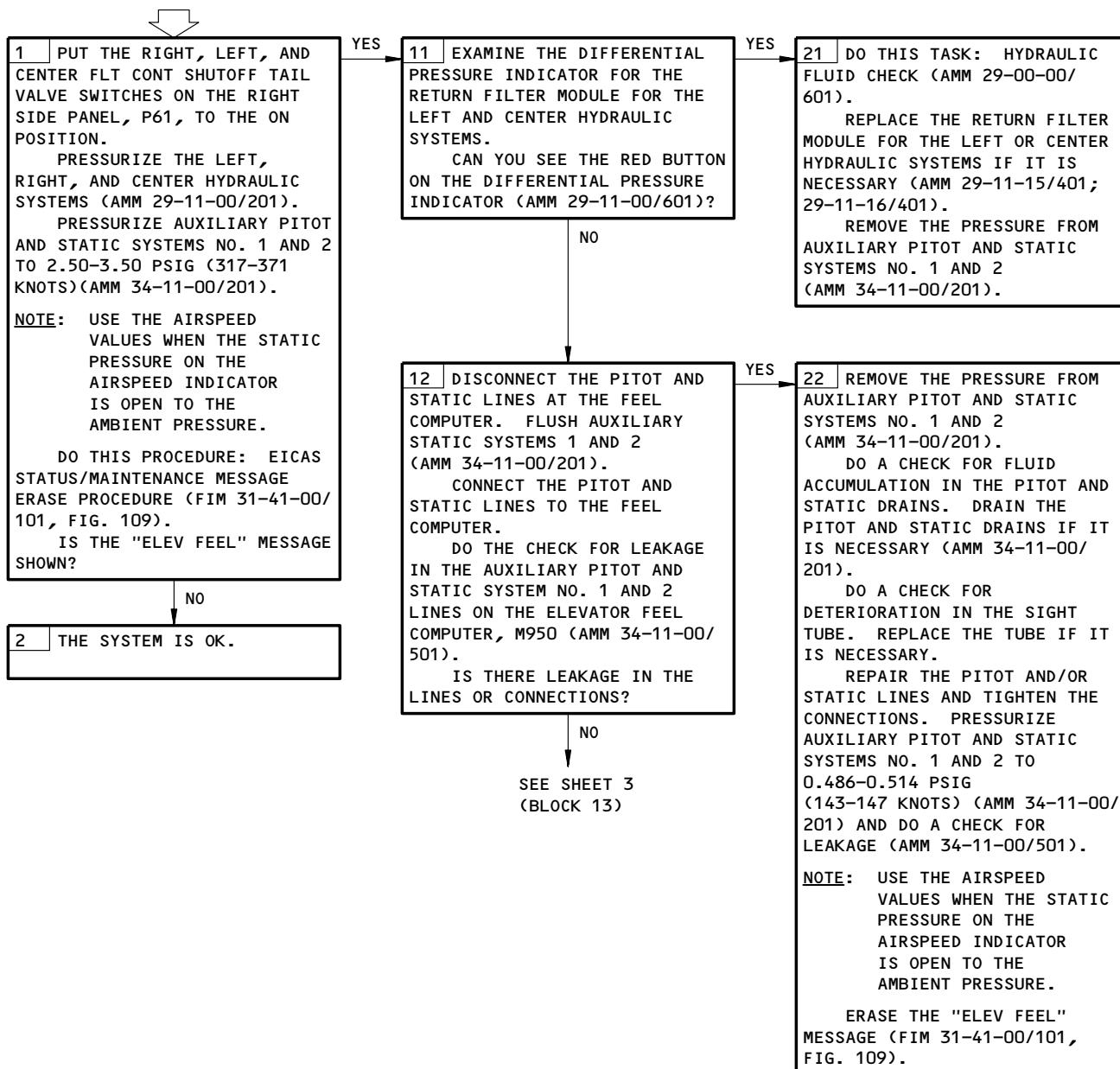
ALL

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**EICAS MESSAGE "ELEV  
FEEL" IS SHOWN**

**EICAS Message ELEV FEEL Is Shown  
Figure 106 (Sheet 2)**
**EFFECTIVITY**
**ALL**
**27-31-00**

**BOEING**  
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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 2  
(BLOCK 12)

NO

13 REMOVE THE PRESSURE FROM THE LEFT, CENTER AND RIGHT HYDRAULIC SYSTEMS (AMM 29-11-00/201).  
DISCONNECT THE LEFT AND CENTER HYDRAULIC LINES FROM THE FEEL COMPUTER.  
REMOVE THE REDUCER, PACKING FILTER AND JET PLUG FROM THE LEFT AND CENTER HYDRAULIC PORTS OF THE FEEL COMPUTER.  
IF THE FEEL COMPUTER FILTERS ARE CLOGGED, REPLACE THEM.  
CHECK HYDRAULIC FLUID FOR CONTAMINATION.  
IF CONTAMINATION IS SUSPECTED, FLUSH THE LEFT AND CENTER SYSTEMS 3 TO 4 TIMES (AMM 29-11-00/201).  
RECONNECT THE LEFT AND CENTER HYDRAULIC LINES TO THE FEEL COMPUTER.  
PRESSURIZE THE LEFT, CENTER AND RIGHT HYDRAULIC SYSTEMS (AMM 29-11-00/201).  
ERASE THE "ELEV FEEL" MESSAGE (FIM 31-41-00/101, FIG. 109).  
DOES THE "ELEV FEEL" MESSAGE STILL EXIST?

YES

23 CHECK TO SEE IF THE FEEL COMPUTER IS CONTAMINATED BY INSTALLING A PRESSURE GAGE ON THE HYDRAULIC LINES BETWEEN THE FEEL COMPUTER AND FEEL ACTUATOR ON THE LEFT AND CENTER HYDRAULIC SYSTEMS AND CHECK FOR A DIFFERENCE IN PRESSURE.  
REMOVE THE PRESSURE FROM AUXILIARY PITOT AND STATIC SYSTEMS NO. 1 AND 2 (AMM 34-11-00/201).  
REPLACE THE ELEVATOR FEEL COMPUTER, M950 (AMM 27-31-19/401).  
ERASE THE "ELEV FEEL" MESSAGE (FIM 31-41-00/101, FIG. 109).  
IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM CONNECTOR D432, PINS 4 AND 2, TO CONNECTOR D6202P, PIN B19 (WDM 27-31-11). REPAIR THE PROBLEMS THAT YOU FIND.  
ERASE THE "ELEV FEEL" MESSAGE (FIM 31-41-00/101, FIG. 109).  
IF THE PROBLEM CONTINUES, REPLACE THE ELEVATOR FEEL ACTUATOR (AMM 27-31-17/401).  
ERASE THE "ELEV FEEL" MESSAGE (FIM 31-41-00/101, FIG. 109).

NO

14 THE SYSTEM IS OK.

EICAS Message ELEV FEEL Is Shown  
Figure 106 (Sheet 3)

EFFECTIVITY

ALL

**27-31-00**

K18387

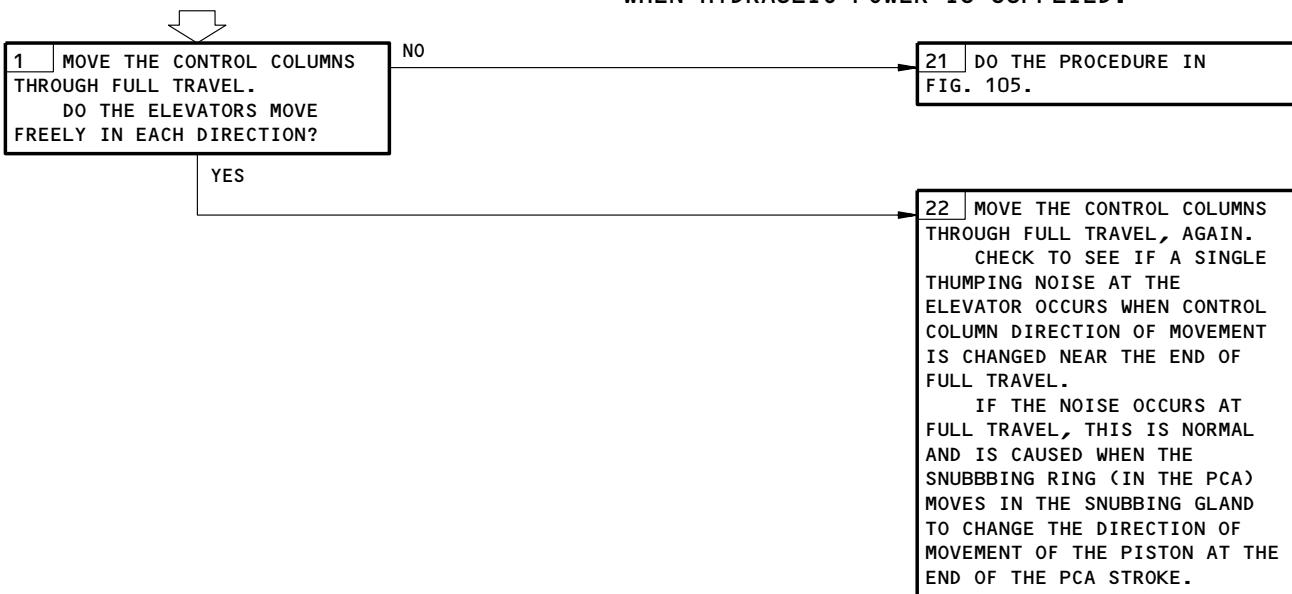
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**PREREQUISITES**

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

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**ELEVATOR NOISE PROBLEMS**


Elevator Noise Problems  
Figure 107

EFFECTIVITY

ALL

27-31-00



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FAULT ISOLATION/MAINT MANUAL

STALL WARNING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER - LEFT STICK SHAKER, C1039 RIGHT STICK SHAKER, C1548 STICK NUDGER, C1024 COMPUTER - (FIM 31-41-00/101) LEFT EICAS, M10181 RIGHT EICAS, M10182	1	1	FLT COMPT, P11 11C11	*
COMPUTER - (FIM 34-12-00/101) LEFT AIR DATA, M100 RIGHT AIR DATA, M101		1	11J22	*
DIODE - (FIM 27-58-00/101) ISOLATION, R183 ISOLATION, R184		1	11K10	*
GENERATOR - (FIM 34-22-00/101) CENTER EFIS SYMBOL, M149 LEFT EFIS SYMBOL, M148 RIGHT EFIS SYMBOL, M150				
INDICATOR - (FIM 34-22-00/101) LEFT ELEX ATT DIR (EADI) N4 RIGHT ELEX ATT DIR (EADI) N44				
MODULE - (FIM 27-09-00/101) SPOILER CONTROL NO. 1R, M533 SPOILER CONTROL NO. 2L, M531				
MODULE - (FIM 27-58-00/101) CENTER FLAP/STAB POSITION, M839 RIGHT FLAP/STAB POSITION, M840				
MODULE - (FIM 31-51-00/101) POWER SUPPLY A, M616 POWER SUPPLY B, M621				
MODULE - (FIM 32-09-03/101) PROXIMITY SWITCH ELECTRONICS UNIT (PSEU), M162				
MODULE - LEFT STALL WARNING, M615 MODULE - RIGHT STALL WARNING, M938	2	1	119AL, MAIN EQUIP CTR	27-32-01
MODULE - WEU BITE, M1411 NUDGER - STICK, M1139	2	1	119AL, MAIN EQUIP CTR	27-32-01
PANEL - (FIM 30-32-00/101) MISCELLANEOUS TEST, M10398	2	1	119AL, MAIN EQUIP CTR	27-32-02
RELAY - (FIM 31-01-36/101) LEFT IRS SEL, K511 LEFT STICK NUDGER, K760	3	1	313AL, ELEVATOR FEEL UNIT	27-32-07
RIGHT STICK NUDGER, K759 SYSTEM 1 AIR/GROUND, K170				
RELAY - (FIM 31-01-37/101) RIGHT IRS SEL, K510 SYSTEM 2 AIR/GROUND, K215			119AL, MAIN EQUIP CTR, P36	*
				*
				*
				*
				*
			119AL, MAIN EQUIP CTR, P37	*
				*

\* SEE THE WDM EQUIPMENT LIST

Stall Warning System - Component Index  
Figure 101 (Sheet 1)

EFFECTIVITY

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FAULT ISOLATION/MAINT MANUAL

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
SHAKER - LEFT STICK, M240	1	1	113AL, FWD EQUIP CENTER	27-32-05
SHAKER - RIGHT STICK, M952	1	1	113AL, FWD EQUIP CENTER	27-32-05
SWITCH - LEFT STALL TEST, S1	1	1	FLT COMPT, P61, MISC TEST PNL, M10398	*
SWITCH - RIGHT STALL TEST, S2	1	1	FLT COMPT, P61, MISC TEST PNL, M10398	*
UNIT - (REF 27-31-00, FIG. 101) ELEVATOR FEEL				
UNIT - (REF 27-51-00, FIG. 101) FLAP/SLAT ELECTRONIC, M545				
UNIT - (REF 34-21-00, FIG. 101) CENTER INERTIAL REFERENCE, M160				
LEFT INERTIAL REFERENCE, M159				
RIGHT INERTIAL REFERENCE, M161				

\* SEE THE WDM EQUIPMENT LIST

Stall Warning System - Component Index  
Figure 101 (Sheet 2)

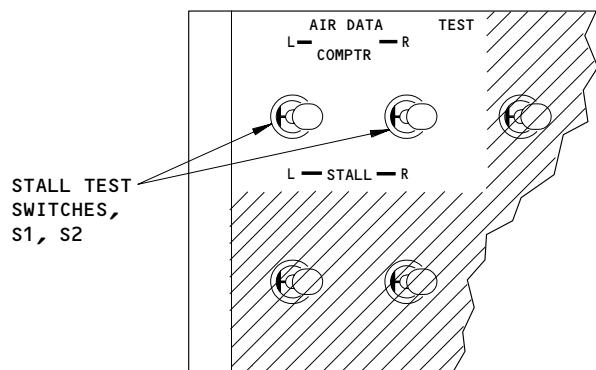
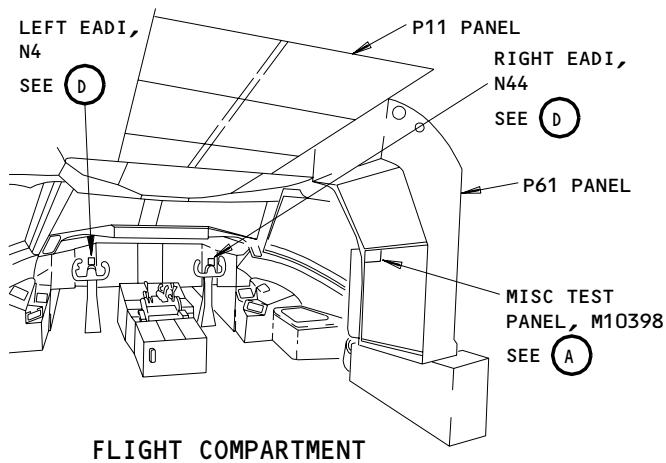
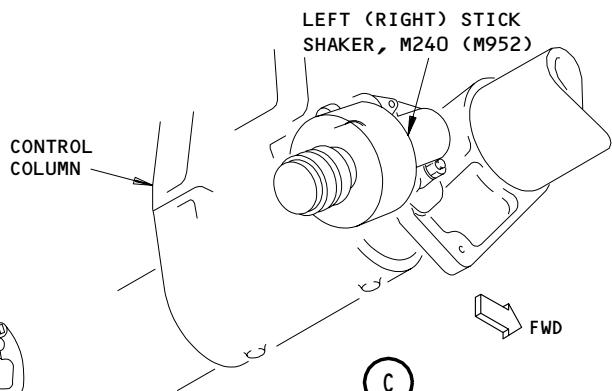
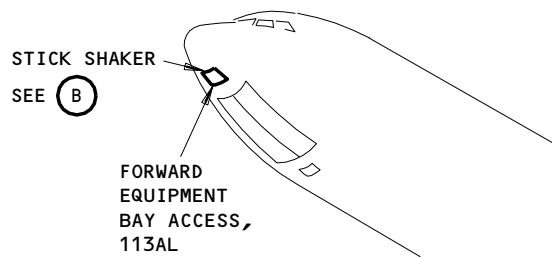
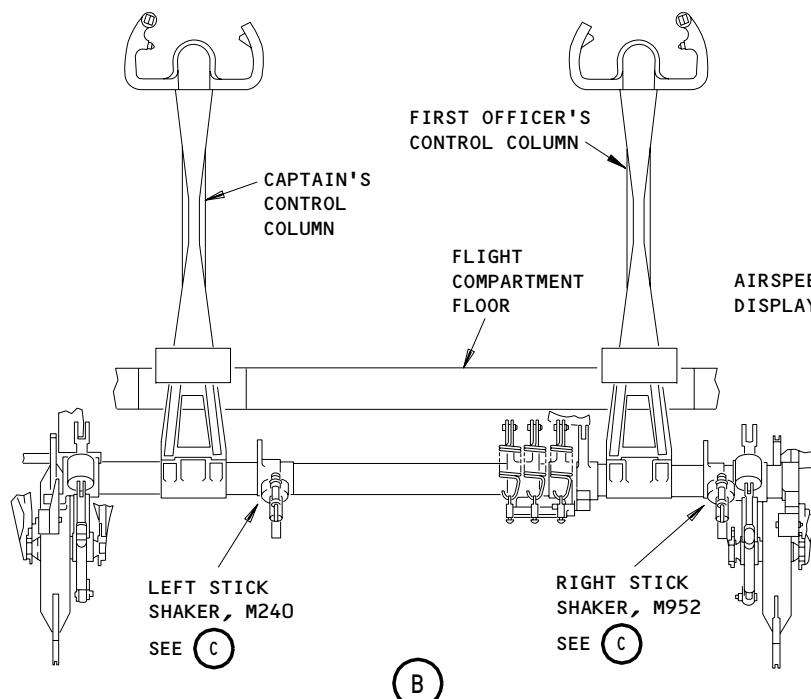
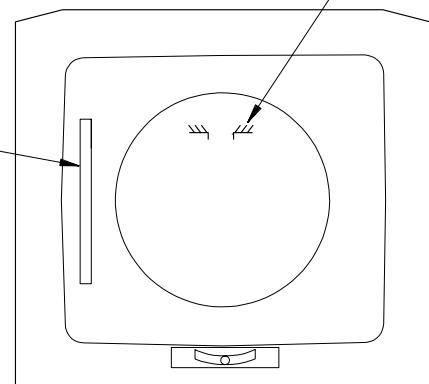
EFFECTIVITY

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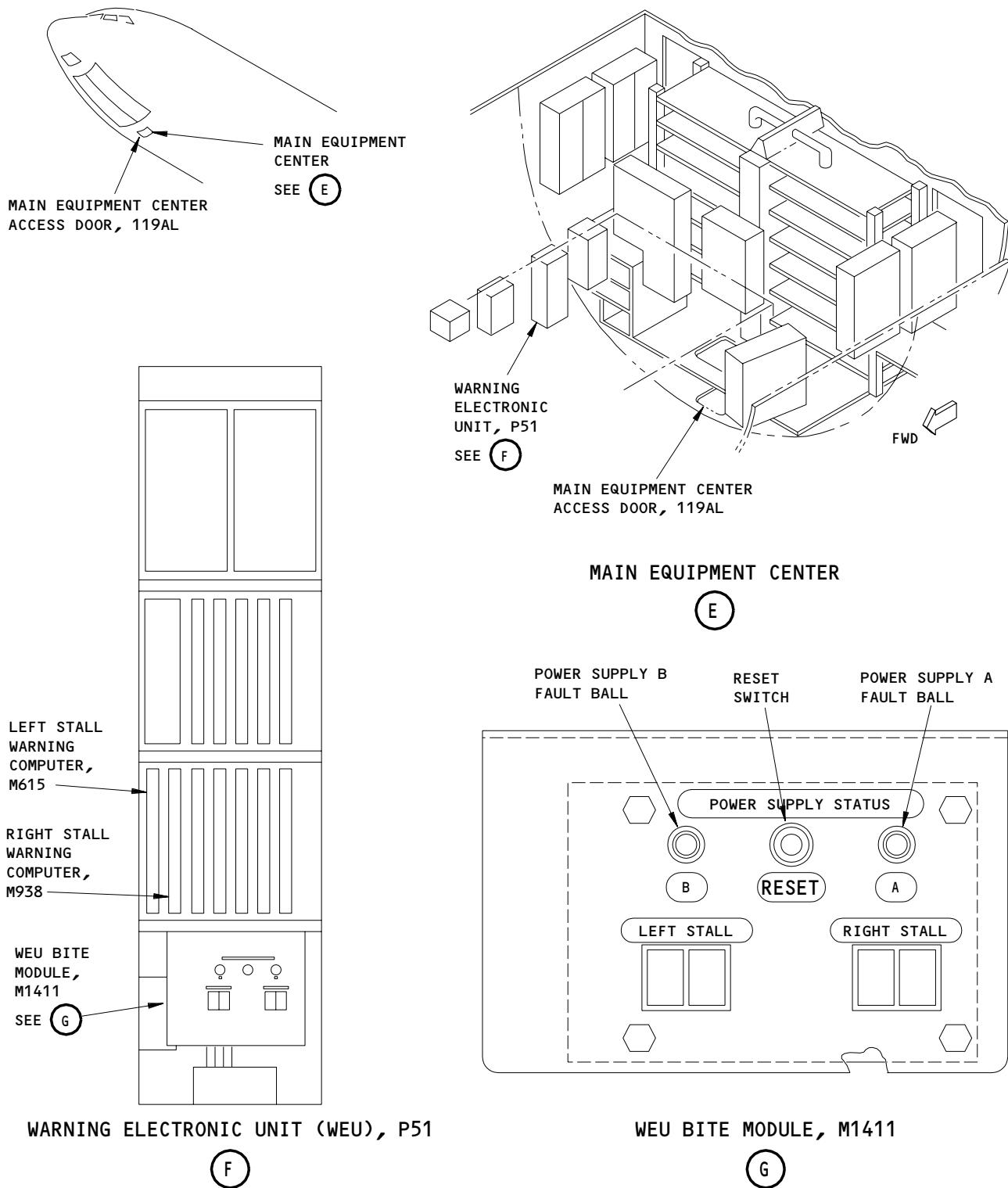
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**MISCELLANEOUS TEST PANEL,  
M10398**
**(A)**

**(C)**

**(B)**

**LEFT (RIGHT)  
ELEX ATTITUDE DIRECTION  
INDICATOR (EADI), N4 (N44)**
**(D)**
**Stall Warning System - Component Location**  
**Figure 102 (Sheet 1)**
**EFFECTIVITY** —

**ALL**
**27-32-00**

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FAULT ISOLATION/MAINT MANUAL



Stall Warning System - Component Location  
Figure 102 (Sheet 2)

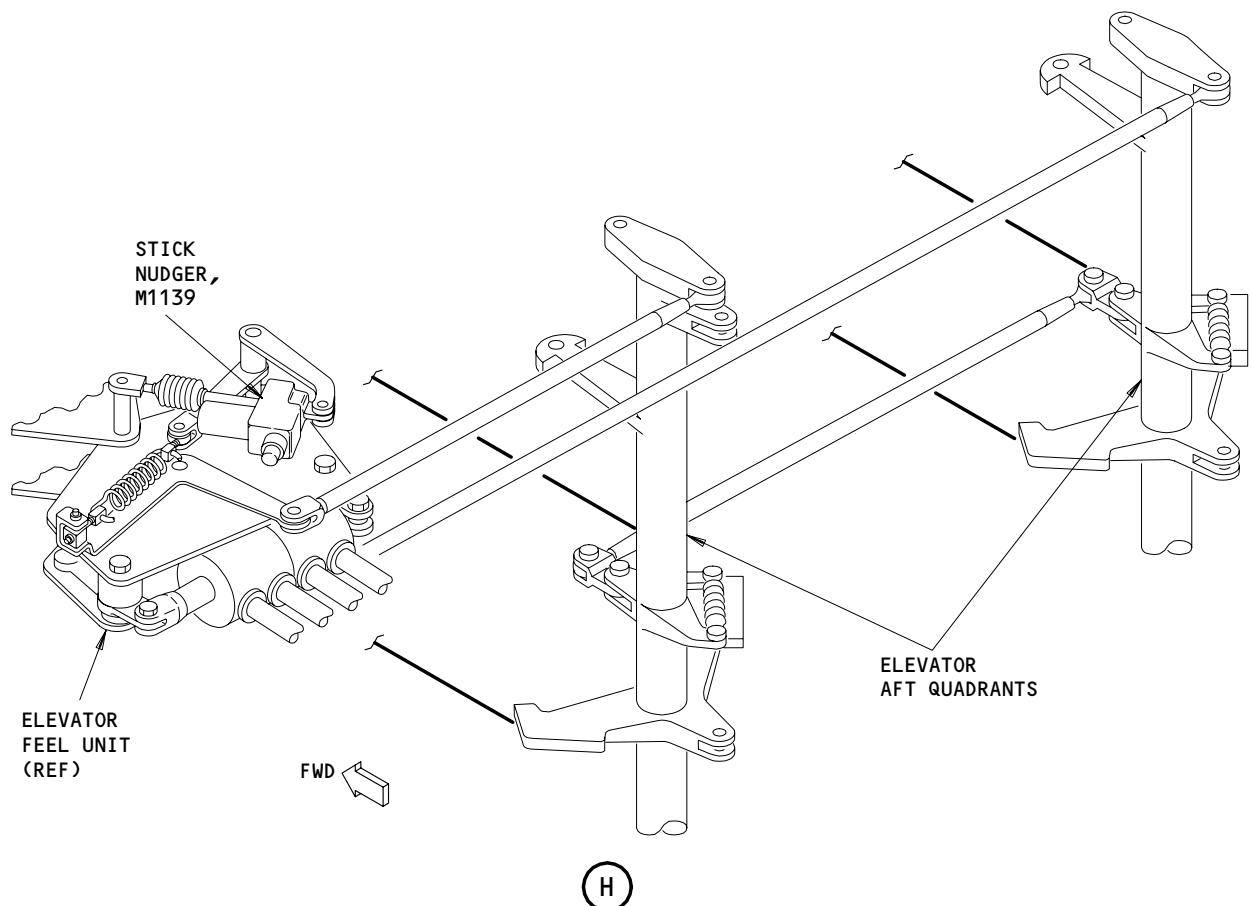
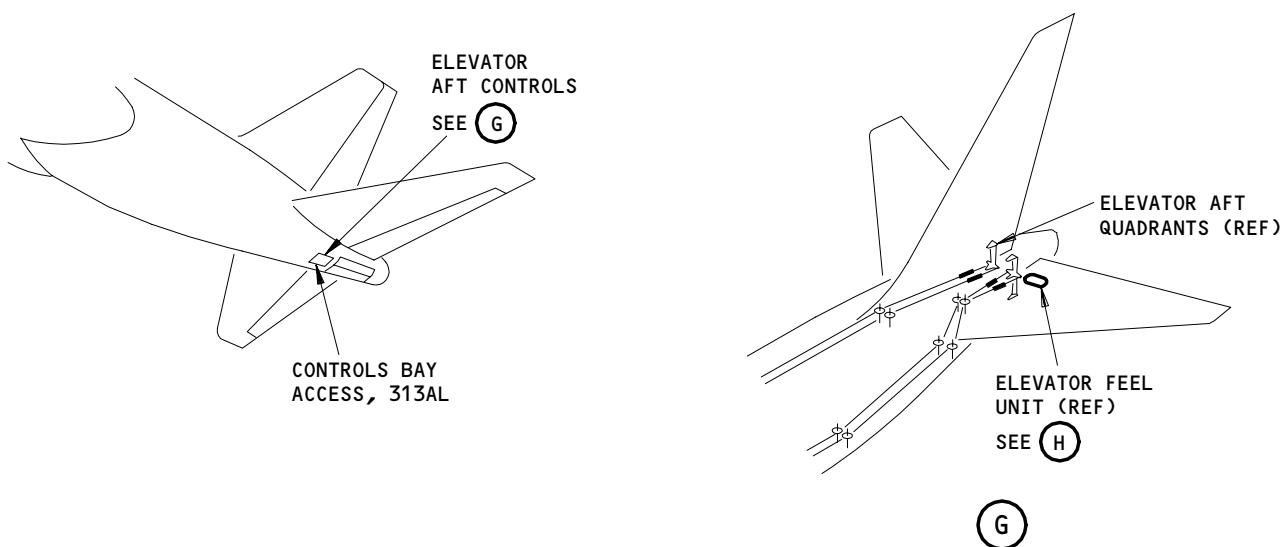
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**Stall Warning System - Component Location**  
**Figure 102 (Sheet 3)**

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**STALL WARNING  
MODULE (SWM)  
BITE PROCEDURE**
**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:

AIR DATA COMPUTER SYSTEM (AMM 34-12-00/501)

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

ENGINE INDICATING CREW ALERT SYSTEM  
(AMM 31-41-00/501)

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

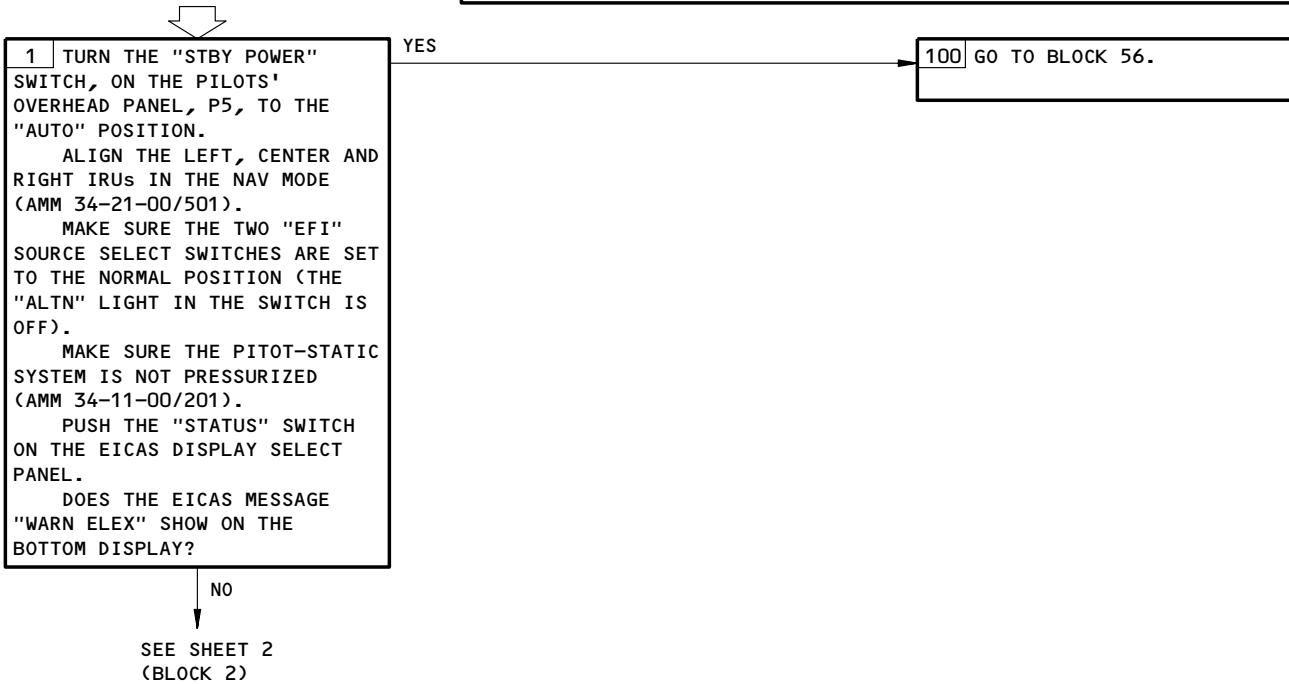
INERTIAL REFERENCE SYSTEM (AMM 34-21-00/501)

SPOILER/SPEEDBRAKE CONTROL SYSTEM  
(AMM 27-61-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11B18, 11C11, 11C30, 11E8, 11E9, 11E29, 11E30,  
11J22, 11J34, 11U15

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



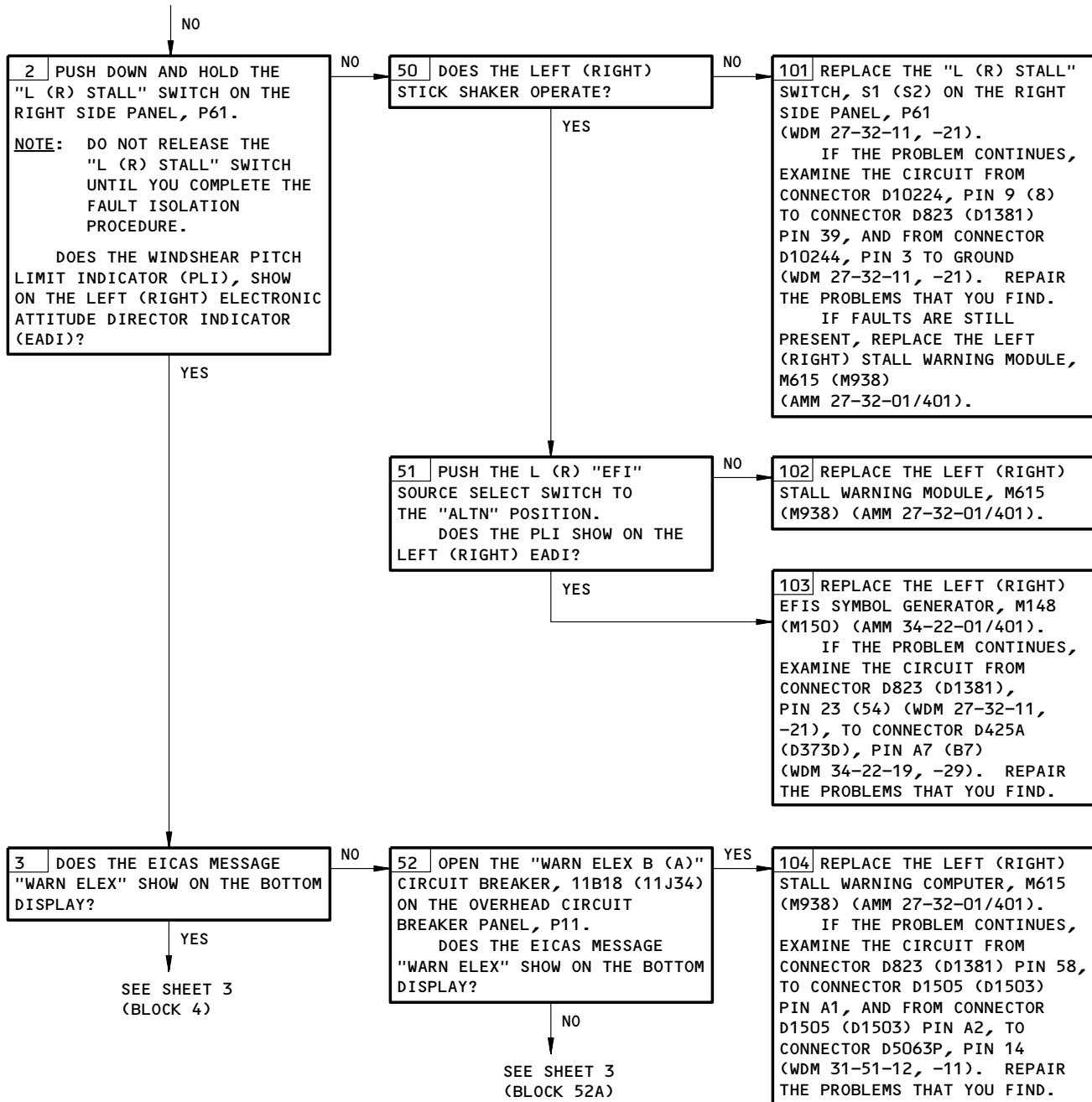
Stall Warning Module (SWM) BITE Procedure  
Figure 103 (Sheet 1)

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FROM SHEET 1  
(BLOCK 1)



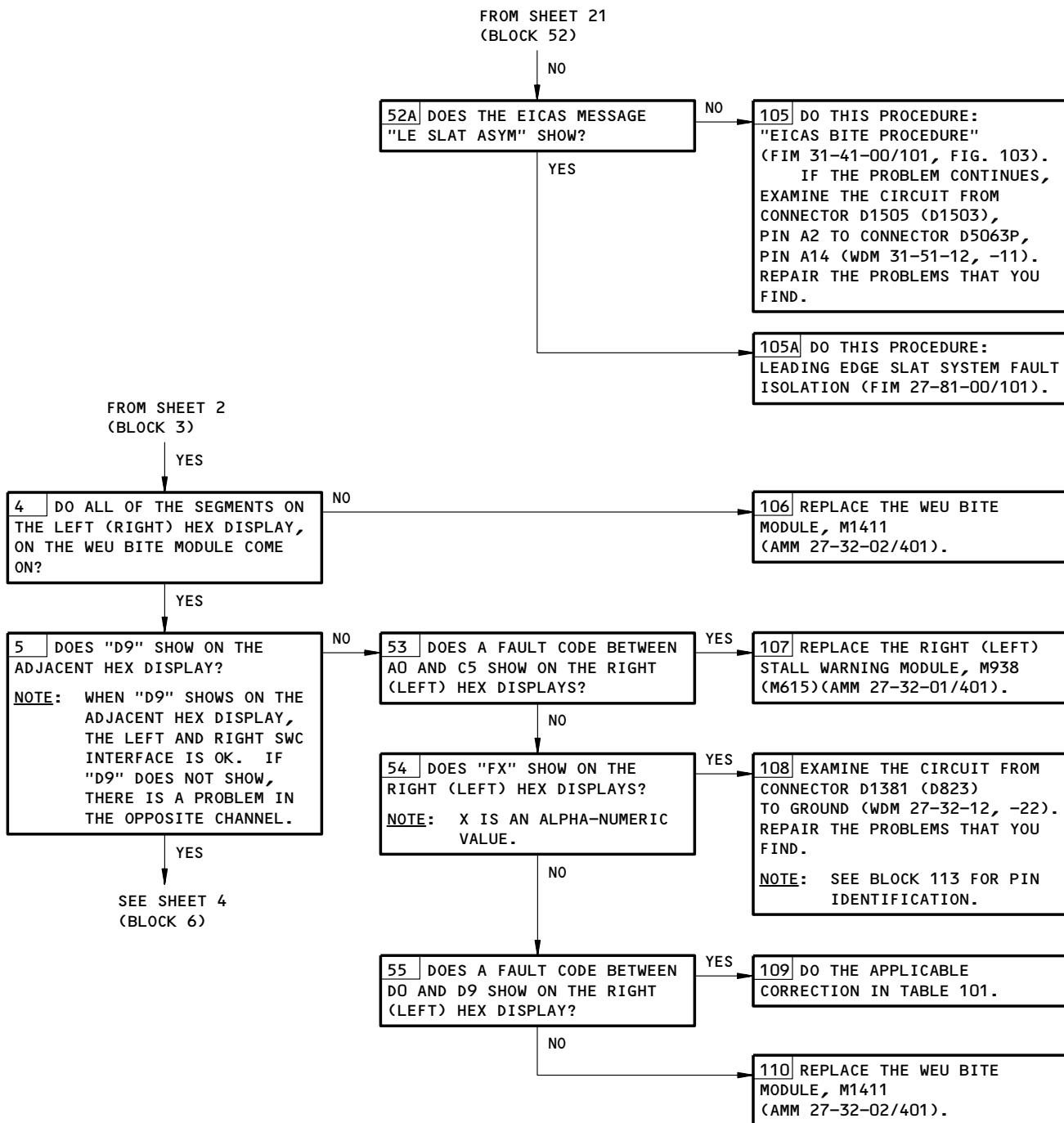
Stall Warning Module (SWM) BITE Procedure  
Figure 103 (Sheet 2)

EFFECTIVITY

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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL



Stall Warning Module (SWM) BITE Procedure  
Figure 103 (Sheet 3)

EFFECTIVITY

ALL

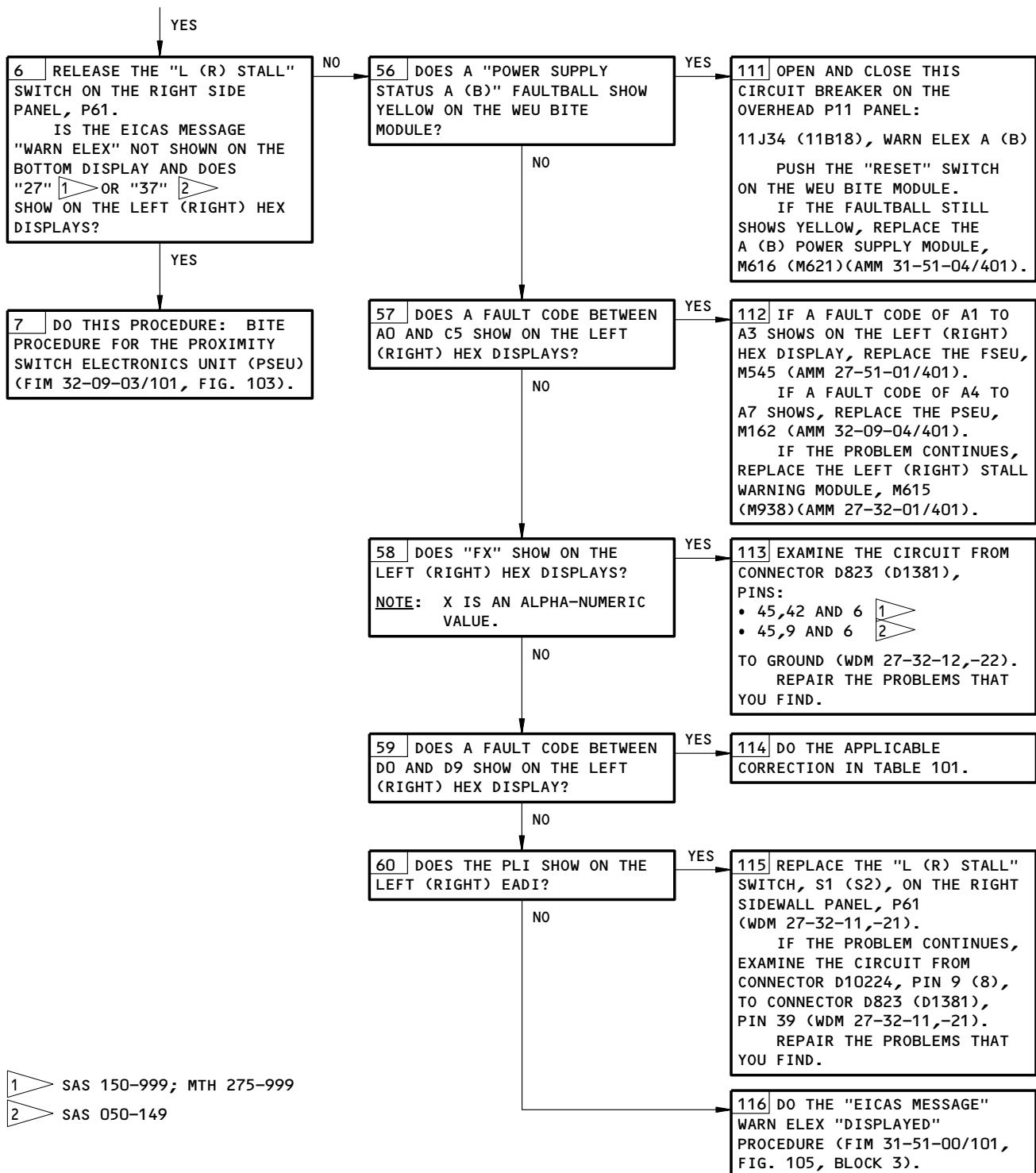
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FROM SHEET 3  
 (BLOCK 5)



Stall Warning Module (SWM) BITE Procedure  
 Figure 103 (Sheet 4)

EFFECTIVITY

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FAULT ISOLATION/MAINT MANUAL

TABLE 101

FAULT CODE	CORRECTION
D0	REPLACE THE LEFT (RIGHT) STICK SHAKER, M240 (M952) (MM 27-32-05/401). IF THE PROBLEM CONTINUES, EXAMINE AND REPAIR THE CIRCUIT FROM THE "LEFT (RIGHT) STICK SHAKER" CIRCUIT BREAKER, C1309 (C1548) TO CONNECTOR D823 (D1381), PIN 34 (WDM 27-32-11,-21).
D1	DO THE "L (R) ADC BITE PROCEDURE" (34-12-00, FIG. 109, BLOCK 1).
D2	DO THE "FLAP/STABILIZER POSITION MODULE (FSPM) BITE PROCEDURE" (27-58-00, FIG. 104, BLOCK 1). IF THE PROBLEM CONTINUES, EXAMINE AND REPAIR THESE CIRCUITS (WDM 27-32-11,-21): FROM CONNECTOR D2674 (D2676), PIN 19 TO CONNECTOR D823 (D1381), PIN 31. FROM CONNECTOR D2674 (D2676), PIN 21 TO GROUND.
D3	DO THE "SPOILER CONTROL MODULE BITE PROCEDURE" (27-09-00, FIG. 105, BLOCK 1). DO THE "STALL WARNING MODULE BITE PROCEDURE" AGAIN. IF THE PROBLEM CONTINUES, EXAMINE AND REPAIR THE CIRCUIT FROM THE SPOILER CONTROL MODULE, CONNECTOR D827B (D831B), PIN H12 TO THE LEFT (RIGHT) STALL WARNING MODULE, CONNECTOR D823 (D1381), PIN 64 (WDM 27-32-11,-21).
D4	DO THE "PROXIMITY SWITCH ELECTRONICS UNIT (PSEU) BITE PROCEDURE" (32-09-03, FIG. 103, BLOCK 1). DO THE "STALL WARNING MODULE BITE PROCEDURE" AGAIN. IF THE PROBLEM CONTINUES, DO THE "FSEU BITE PROCEDURE" (27-51-00, FIG. 104, BLOCK 1). DO THE "STALL WARNING MODULE BITE PROCEDURE" AGAIN. IF THE PROBLEM CONTINUES, EXAMINE AND REPAIR THE CIRCUIT FROM CONNECTOR D2166B, PINS K13,F15, G13 (A8,K1,K8) TO CONNECTOR D823 (D1381), PINS 37,38,4 (WDM 27-32-11,-21). IF THE PROBLEM CONTINUES, EXAMINE AND REPAIR THE CIRCUIT FROM CONNECTOR D1836A (D1836B) PINS F4,G4,H4,J4 (A8,B8,C8,D8) TO CONNECTOR D823 (D1381) PINS 9,42,41,43 (WDM 27-32-11,-21).

(CONTINUED)

NOTE: FAULT CODES THAT DO NOT SHOW ARE NOT USED.

Stall Warning Module (SWM) BITE Procedure  
Figure 103 (Sheet 5)

EFFECTIVITY

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FAULT ISOLATION/MAINT MANUAL

TABLE 101

FAULT CODE	CORRECTION
D5	DO THE "PROXIMITY SWITCH ELECTRONICS UNIT (PSEU) BITE PROCEDURE" (32-09-03, FIG. 103 BLOCK 1). IF THE PROBLEM CONTINUES, EXAMINE AND REPAIR THE CIRCUIT FROM CONNECTOR D2166B, PINS K13,F15, G13 (A8,K1,K8) TO CONNECTOR D823 (D1381), PINS 37,38,4 (WDM 27-32-11,-21).
D6	DO THE "IRS BITE TEST" (34-21-00, FIG. 107, BLOCK 1).
D7	DO THE "FLIGHT MANAGEMENT COMPUTER BITE PROCEDURE" (34-61-00, FIG. 111, BLOCK 1).
D8	PUSH THE LEFT (RIGHT) "IRS" SOURCE SELECT SWITCH TO THE "ALTN" POSITION. IF FAULT CODE D8 STILL SHOWS, DO THE "ADC BITE PROCEDURE" (34-12-00, FIG. 109, BLOCK 1). IF FAULT CODE D8 DOES NOT SHOW, DO THE "IRS BITE TEST" (34-21-00, FIG. 107, BLOCK 1).
D9	REPLACE THE OPPOSITE STALL WARNING MODULE (MM 27-32-01/401). IF THE PROBLEM CONTINUES, EXAMINE AND REPAIR THE CIRCUIT FROM CONNECTOR D823 (D1381), PIN 56 TO CONNECTOR D1381 (D823), PIN 11 (WDM 27-32-12).

Stall Warning Module (SWM) BITE Procedure  
Figure 103 (Sheet 6)

EFFECTIVITY

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**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:

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

LEADING EDGE SLAT SYSTEM (27-81-00/501)

FUEL QUANTITY INDICATING SYSTEM (28-41-00/501)

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

PITOT-STATIC SYSTEM (34-11-00/501)

AIR DATA COMPUTER SYSTEM (34-12-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11B18, 11C11, 11C30, 11J22, 11J34, 11U15

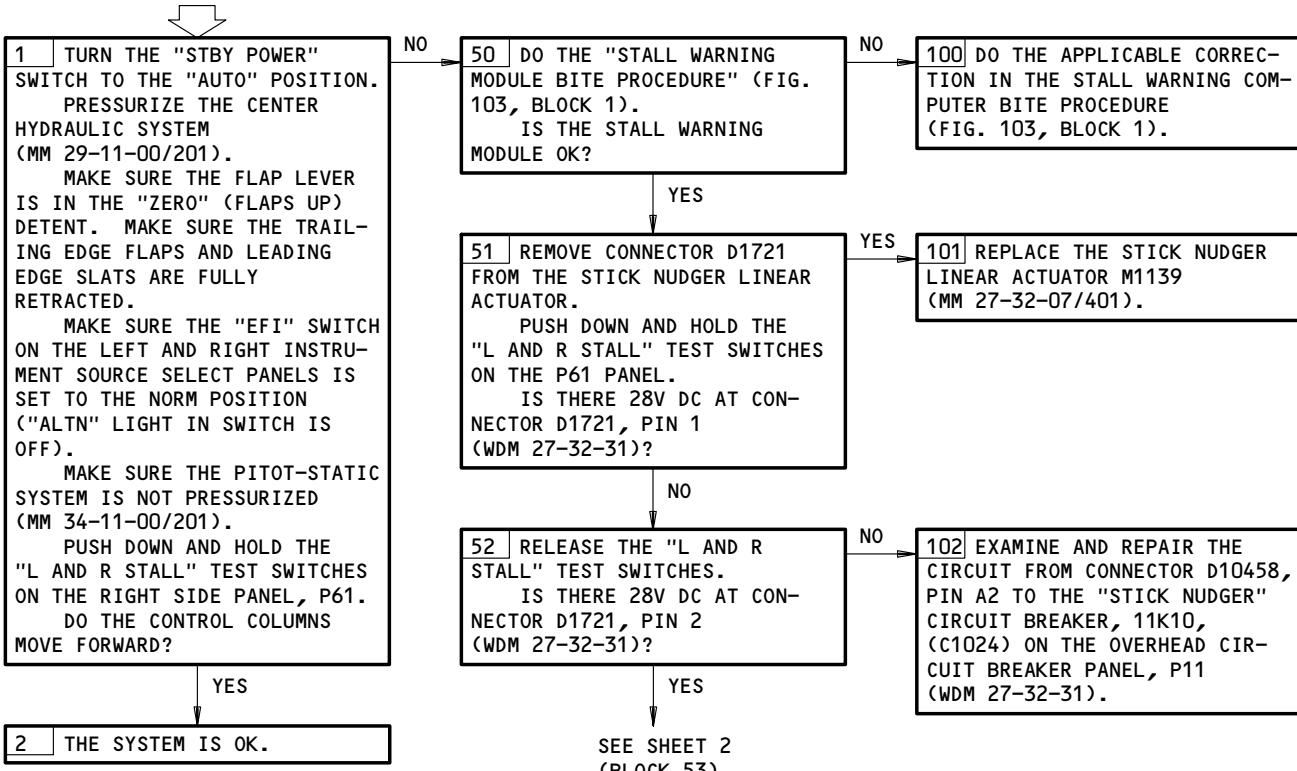
MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

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

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

STICK NUDGER FAILED TO OPERATE WHEN STALL WARNING TEST SWITCHES WERE ACTUATED

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.



Stick Nudger Failed To Operate When Stall Warning Test Switches Were Actuated  
Figure 104 (Sheet 1)

EFFECTIVITY  
767-200/300;

**27-32-00**

FROM SHEET 1  
(BLOCK 52)

YES

53 REMOVE THE STICK NUDGER RELAY, K760, FROM THE LEFT MISCELLANEOUS ELECTRICAL EQUIPMENT PANEL, P36 (WDM 27-32-31).  
PUSH DOWN AND HOLD THE "L STALL" TEST SWITCH.  
IS THERE A GROUND AT RELAY CONNECTOR D1045B, PIN X2 (WDM 27-32-31).

NO → 103 REPLACE THE LEFT STALL WARNING MODULE, M615 (MM 27-32-01/401). INSTALL THE STICK NUDGER RELAY, K760 (WDM 27-32-31).  
IF THE PROBLEM CONTINUES, EXAMINE AND REPAIR THE CIRCUIT FROM CONNECTOR D10458, PIN X2 TO CONNECTOR D823, PIN 66 (WDM 27-32-31).

YES

54 PUSH DOWN AND HOLD THE "STALL R" TEST SWITCH ON THE P61 PANEL.  
IS THERE 28V DC AT CONNECTOR D10458, PIN X1.

YES → 104 REPLACE THE STICK NUDGER, K760 (WDM 27-32-31).  
IF THE PROBLEM CONTINUES, EXAMINE AND REPAIR THE CIRCUIT FROM CONNECTOR D10458, PIN A1 TO CONNECTOR D1721, PIN 1 (WDM 27-32-31).

NO

55 REMOVE THE STICK NUDGER RELAY, K759, FROM THE LEFT MISCELLANEOUS ELECTRICAL EQUIPMENT PANEL, P36 (WDM 27-32-31).  
PUSH DOWN AND HOLD THE "STALL R" TEST SWITCH ON THE P61 PANEL.  
IS THERE A GROUND AT CONNECTOR D10456, PIN X2.

NO → 105 REPLACE THE RIGHT STALL WARNING COMPUTER, M938 (MM 27-32-01/401).  
INSTALL THE STICK NUDGER RELAYS, K759 AND K760 (WDM 27-32-31).  
IF THE PROBLEM CONTINUES, REMOVE RELAY K759. EXAMINE AND REPAIR THE CIRCUIT FROM CONNECTOR D10456, PIN X2 TO CONNECTOR D1381, PIN 66 (WDM 27-32-21).  
INSTALL RELAY K759.

YES  
SEE SHEET 3  
(BLOCK 56)

Stick Nudger Failed To Operate When Stall Warning Test Switches Were Actuated  
Figure 104 (Sheet 2)

EFFECTIVITY  
767-200/300;

27-32-00

**767**  
**FAULT ISOLATION/MAINT MANUAL**

FROM SHEET 2  
 (BLOCK 55)

YES

56 IS THERE 28V DC AT CON-  
 NECTOR D10456, PINS A2 AND X1  
 (WDM 27-32-31).

YES

106 REPLACE THE STICK NUDGER  
 RELAY, K759 (WDM 27-32-31).  
 INSTALL THE STICK NUDGER  
 RELAY, K760.  
 IF THE PROBLEM CONTINUES,  
 REMOVE RELAY K759. EXAMINE  
 AND REPAIR THE CIRCUIT FROM  
 CONNECTOR D10456, PIN A1 TO  
 CONNECTOR D10458, PIN X1  
 (WDM 27-32-31).  
 INSTALL RELAY, K759.

NO

107 EXAMINE AND REPAIR THE  
 CIRCUIT FROM TERMINAL BLOCK  
 TB252, PIN G3 TO CONNECTOR  
 D10456, PINS X1 AND A2  
 (WDM 27-32-31).  
 INSTALL THE STICK NUDGER  
 RELAYS K759 AND K760  
 (WDM 27-32-31).

Stick Nudger Failed To Operate When Stall Warning Test Switches Were Actuated  
 Figure 104 (Sheet 3)

EFFECTIVITY  
 767-200/300;

**27-32-00**

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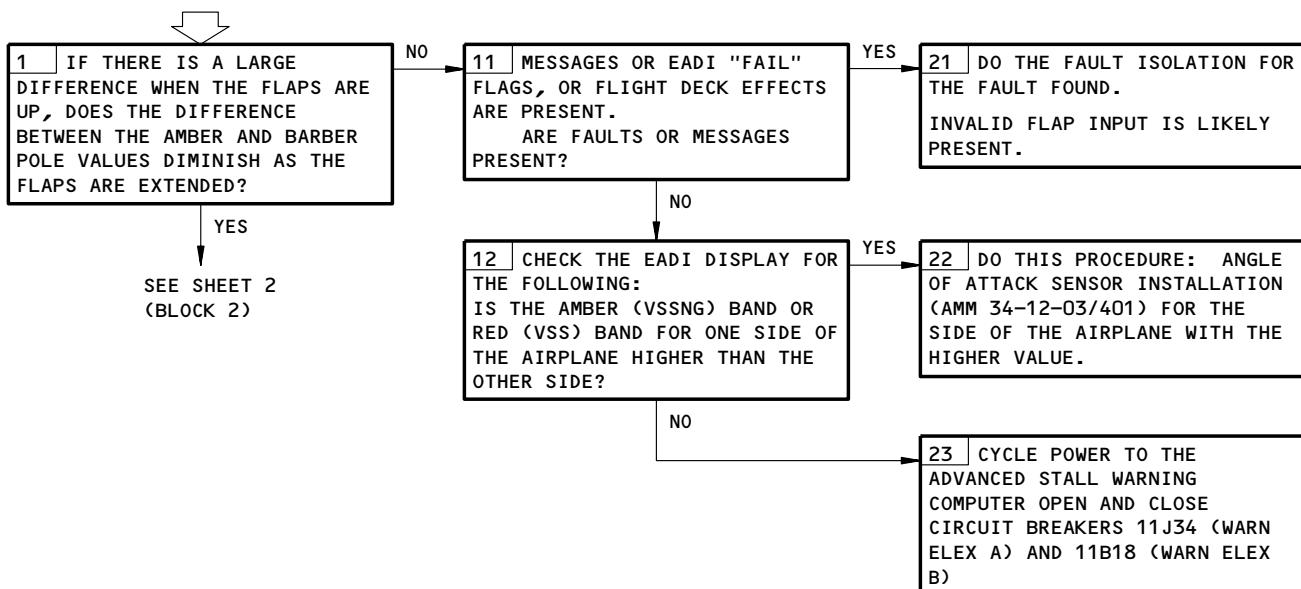
**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:  
 COMPUTER SYSTEM (AMM 34-12-00/501)  
 AIR/GROUND SYSTEM (AMM 27-61-00/201)  
 SPOILER/SPEEDBRAKE CONTROL SYSTEM  
 (AMM 27-61-00/201)  
 FLAP POSITION INDICATION SYSTEM (AMM 27-58-00/501)  
 ENGINE INDICATING CREW ALERT SYSTEM  
 (AMM 31-41-00/501)  
 ELECTRONIC FLIGHT INSTRUMENT SYSTEM  
 (AMM 34-22-00/501)  
 INERTIAL REFERENCE SYSTEM (AMM 34-21-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11B18, 11C11, 11C30, 11E8, 11E9, 11E29, 11E30,  
 11J22, 11J34, 11U15

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

**EXCESSIVE  
DIFFERENCES BETWEEN  
AMBER OR RED BAND  
VALUES ON THE SPEED  
TAPE EFIS DISPLAY**



**Excessive Differences Between AMBER or RED BAND Values  
On the Speed Tape EFIS Display  
Figure 105 (Sheet 1)**

EFFECTIVITY

ALL

**27-32-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 1)

YES

2 DO THIS PROCEDURE: STALL  
WARNING MODULE (SWM) BITE  
PROCEDURE (FIG. 103).  
IS THE WEU BITE MODULE HEX  
CODE NORMAL (NO FAULT CODES)?

NO

24 DO APPLICABLE CORRECTION  
USING TABLE 101 (FIG. 103).

YES

3 SWAP THE FSPM AND SEE IF  
THE FAULT FOLLOWS OR REPLACE  
IT.  
DOES FAULT CONTINUE?

NO

25 DO THIS PROCEDURE:  
FLAP/STABILIZER POSITION  
MODULE (FSPM) BITE PROCEDURE  
(FIM 27-58-00/101, FIG. 104).

YES

4 CHECK WIRING FROM THE  
FLAP/STABILIZER MODULE (FSPM)  
TO PIN 31 OF THE ASWC. REPAIR  
ANY PROBLEMS FOUND  
(SSM 27-32-01, LEFT ASWC) OR  
(SSM 27-32-02, RIGHT ASWC).

Excessive Differences Between AMBER or RED BAND Values  
On the Speed Tape EFIS Display  
Figure 105 (Sheet 2)

EFFECTIVITY

ALL

**27-32-00**

01.1

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Aug 22/09



767  
FAULT ISOLATION/MAINT MANUAL

ELEVATOR POSITION INDICATING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER – ELEV POS L, C4101 ELEV POS R, C4102	--	1	FLIGHT COMPARTMENT, P11 PANEL 11K13	*
FILTER – INDUCTANCE CAPACITANCE (LC), M1144, M1145, M1146, M1147	--	1	11K22	*
TRANSMITTER – LEFT ELEVATOR POSITION, M517	--	4	311BL, FORWARD STABILIZER COMPARTMENT	*
TRANSMITTER – RIGHT ELEVATOR POSITION, M518	--	1	335C, LEFT STABILIZER REAR SPAR	
	--	1	345C, RIGHT STABILIZER REAR SPAR	

\* SEE THE WDM EQUIPMENT LIST

Elevator Position Indicating System – Component Index  
Figure 101

EFFECTIVITY

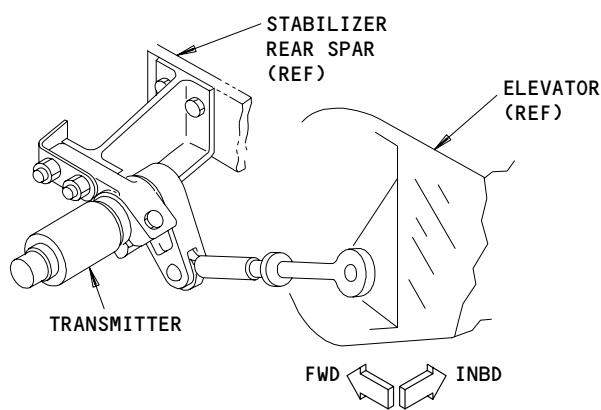
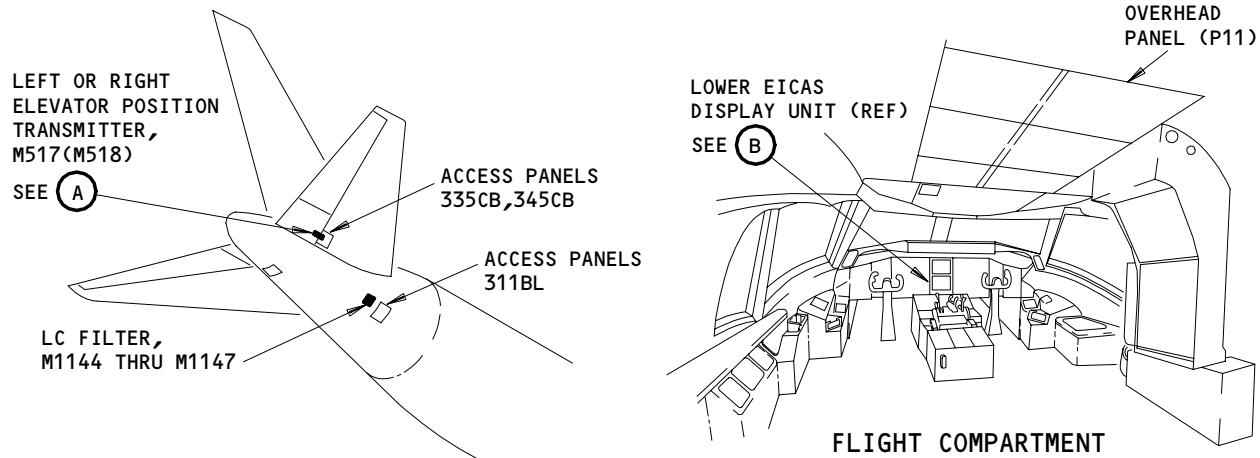
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27-38-00

01

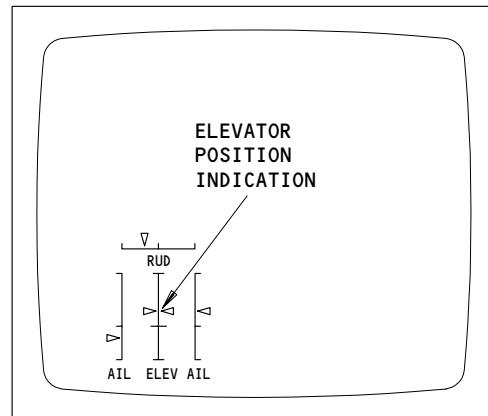
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Dec 22/05

33602



POSITION TRANSMITTER

(A)



LOWER EICAS DISPLAY UNIT

(B)

Elevator Position Indicating System – Component Location  
Figure 102

EFFECTIVITY

ALL

**27-38-00**



767  
FAULT ISOLATION/MAINT MANUAL

HORIZONTAL STABILIZER TRIM CONTROL SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR - STAB TRIM BALLSCREW	2	1	312AR, 48 SECT	27-41-10
BRAKE - STAB TRIM SECONDARY	2	2	312AR, 48 SECT, STAB TRIM BALLSCREW ACTUATOR	27-41-13
CIRCUIT BREAKER -	1		FLT COMPT, P11	
ALT STAB TRIM, C1010 		1	11A36	*
STAB TRIM CONTROL LEFT, C1017		1	11H11	*
STAB TRIM CONTROL R, C1018		1	11H20	*
STAB TRIM SHUTOFF CENTER, C1529		1	11C13	*
STAB TRIM SHUTOFF L, C1528		1	11C12	*
COMPUTER - (FIM 31-61-00/101)				
L EICAS, M10181				
R EICAS, M10182				
INDICATOR - (FIM 27-48-00/101)				
STAB POSITION, N68, N69 				
LEVER - STAB TRIM 	1	2	FLT COMPT, CONTROL STAND (P10)	27-41-02
LIGHT - STAB TRIM CAUTION, L13	1		FLT COMPT, P5, ANNUNCIATOR PNL, M10394	*
LIGHT - UNSCHED STAB TRIM CAUTION, L17	1		FLT COMPT, P5, ANNUNCIATOR PNL, M10394	*
MODULE - (FIM 27-51-00/101)				
C FLAP/STAB POS, M839				
L FLAP/STAB POS, M838				
R FLAP/STAB POS, M840				
MODULE - (FIM 27-09-00/101)				
STAB TRIM/AILERON LOCKOUT L, M524				
STAB TRIM/AILERON LOCKOUT R, M525				
MODULE - STAB TRIM CONTROL L, M211	2	1	312AR, 48 SECT	27-41-05
MODULE - STAB TRIM CONTROL R, M212	2	1	312AR, 48 SECT	27-41-05
MODULE - (FIM 27-48-00/101)				
STAB TRIM LIMIT SW AND POS XMTR, M519, M520, M521				
MOTOR - STAB TRIM DRIVE HYDRAULIC	2	2	312AR, 48 SECT, STAB TRIM BALLSCREW ACTUATOR	27-41-11
PANEL - ANNUNCIATION, M10394	1		FLT COMPT, P5	*
QUADRANT - STAB TRIM CONTROL MODULE 	2	2	312AR, 48 SECT	27-41-06
RELAY - TRIM LIMIT SELECT L, K1070	3	1	119AL, E1-1 SHELF	*
RELAY - TRIM LIMIT SELECT R, K1071	3	1	119AL, E2-1 SHELF	*

\* SEE THE WDM EQUIPMENT LIST

Horizontal Stabilizer Trim Control System - Component Index  
Figure 101 (Sheet 1)

EFFECTIVITY

ALL

**27-41-00**

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
SOLENOID - ARM NOSE DOWN, YB4V4,YB5V4	2	2	312AR, 48 SECT, STAB TRIM CONT MOD	*
SOLENOID - ARM NOSE UP, YB4V1,YB5V1	2	2	312AR, 48 SECT, STAB TRIM CONT MOD	*
SOLENOID - CONTROL NOSE DOWN, YB4V5,YB5V5	2	2	312AR, 48 SECT, STAB TRIM CONT MOD	*
SOLENOID - CONTROL NOSE UP, YB4V2,YB5V2	2	2	312AR, 48 SECT, STAB TRIM CONT MOD	*
SWITCH - ALT STAB TRIM, S790 	1	1	FLT COMPT, CONTROL STAND (P10)	27-41-03
SWITCH - BRAKE PRESS, YB4S1,YB5S1	2	2	312AR, 48 SECT, STAB TRIM CONT MOD	27-41-07
SWITCH - CAPT STAB TRIM CONT WHEEL, S80 	1	1	FLT COMPT, CAPT CONT WHEEL	27-41-01
SWITCH - CAPT STAB TRIM CUTOFF, S334,S335 	5	2	113AL, CAPT COLUMN TORQUE TUBE	*
SWITCH - CAPT STAB TRIM CUTOFF, S334,S335, S336 	5	3	113AL, CAPT COLUMN TORQUE TUBE	*
SWITCH - CAPT STAB TRIM CUTOFF, S334,S335, S336,S838,S839 	6	5	113AL, CAPT COLUMN TORQUE TUBE	*
SWITCH - CAPT STAB TRIM CUTOFF, S334,S335, S838,S839 	6	4	113AL, CAPT COLUMN TORQUE TUBE	*
SWITCH - F/O STAB TRIM CONT WHEEL, S81 	1	1	FLT COMPT, F/O CONT WHEEL	27-41-01
SWITCH - F/O STAB TRIM CUTOFF, S337,S338 	5	2	113AL, F/O COLUMN TORQUE TUBE	*
SWITCH - F/O STAB TRIM CUTOFF, S337,S338, S339 	5	3	113AL, F/O COLUMN TORQUE TUBE	*
SWITCH - F/O STAB TRIM CUTOFF, S337,S338, S339,S836,S837 	6	5	113AL, F/O COLUMN TORQUE TUBE	*
SWITCH - F/O STAB TRIM CUTOFF, S337,S338, S836,S837 	6	4	113AL, F/O COLUMN TORQUE TUBE	*
SWITCH - STAB TRIM SHUTOFF L, S5	1	1	FLT COMPT, CONTROL STAND	*
SWITCH - STAB TRIM SHUTOFF R, S6	1	1	FLT COMPT, CONTROL STAND	*
SWITCH - STAB TRIM STANDBY, S538	1	1	FLT COMPT, CONTROL STAND	27-41-14
VALVE - ELEV FEEL PRESS RELIEF	2	1	312AR, 48 SECT, STAB TRIM CONT MOD	27-41-00

\* SEE THE WDM EQUIPMENT LIST

-  SAS 150-154
-  ALL MTH AIRPLANES AND ALL EXCEPT SAS 150-154
-  767-200 AIRPLANES
-  767-300 AIRPLANES
-  SAS 050,051 WITHOUT SB 27-102
-  SAS 050,051 WITH SB 27-102, AND SAS 052-149
-  SAS 150-166,275-277,279 WITHOUT SB 27-102
-  SAS 150-166,275-277,279 WITH SB 27-102, AND SAS 167-274,278,280-999

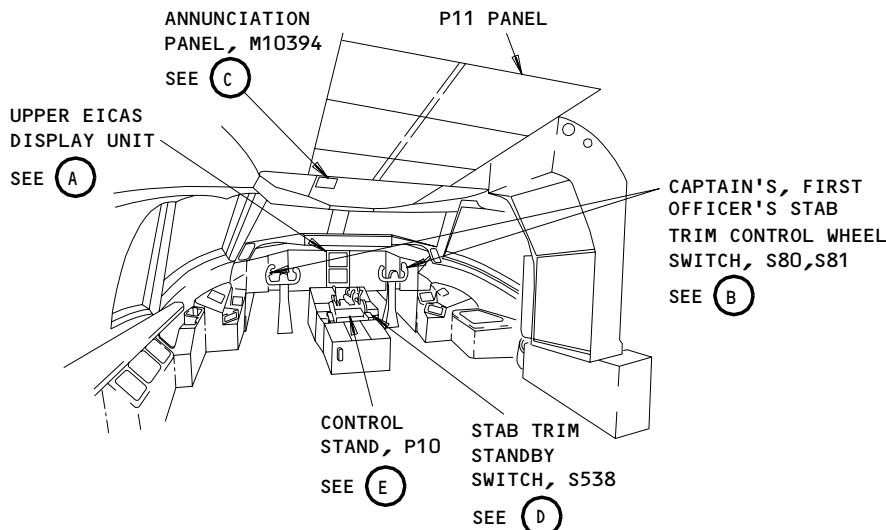
Horizontal Stabilizer Trim Control System - Component Index  
Figure 101 (Sheet 2)

EFFECTIVITY

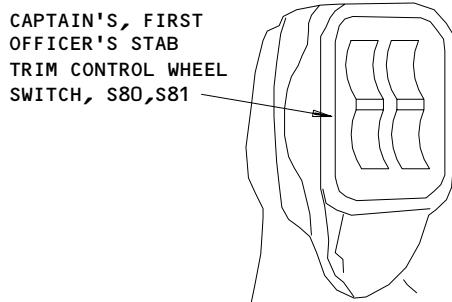
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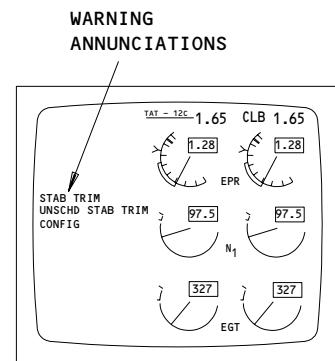
**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



FLIGHT COMPARTMENT



B

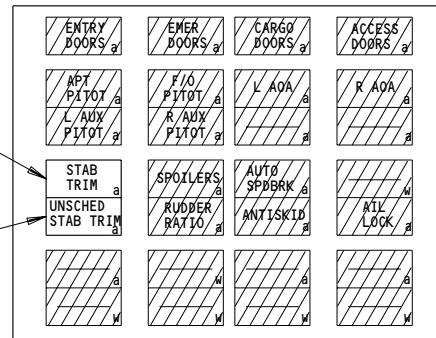


UPPER EICAS DISPLAY UNIT

A

STAB TRIM CAUTION LIGHT, L13

UNSCHEDULED STAB TRIM CAUTION LIGHT, L17



ANNUNCIATION PANEL, M10394

C



SAS 150-154

ALL MTH AIRPLANES AND ALL  
EXCEPT SAS 150-154

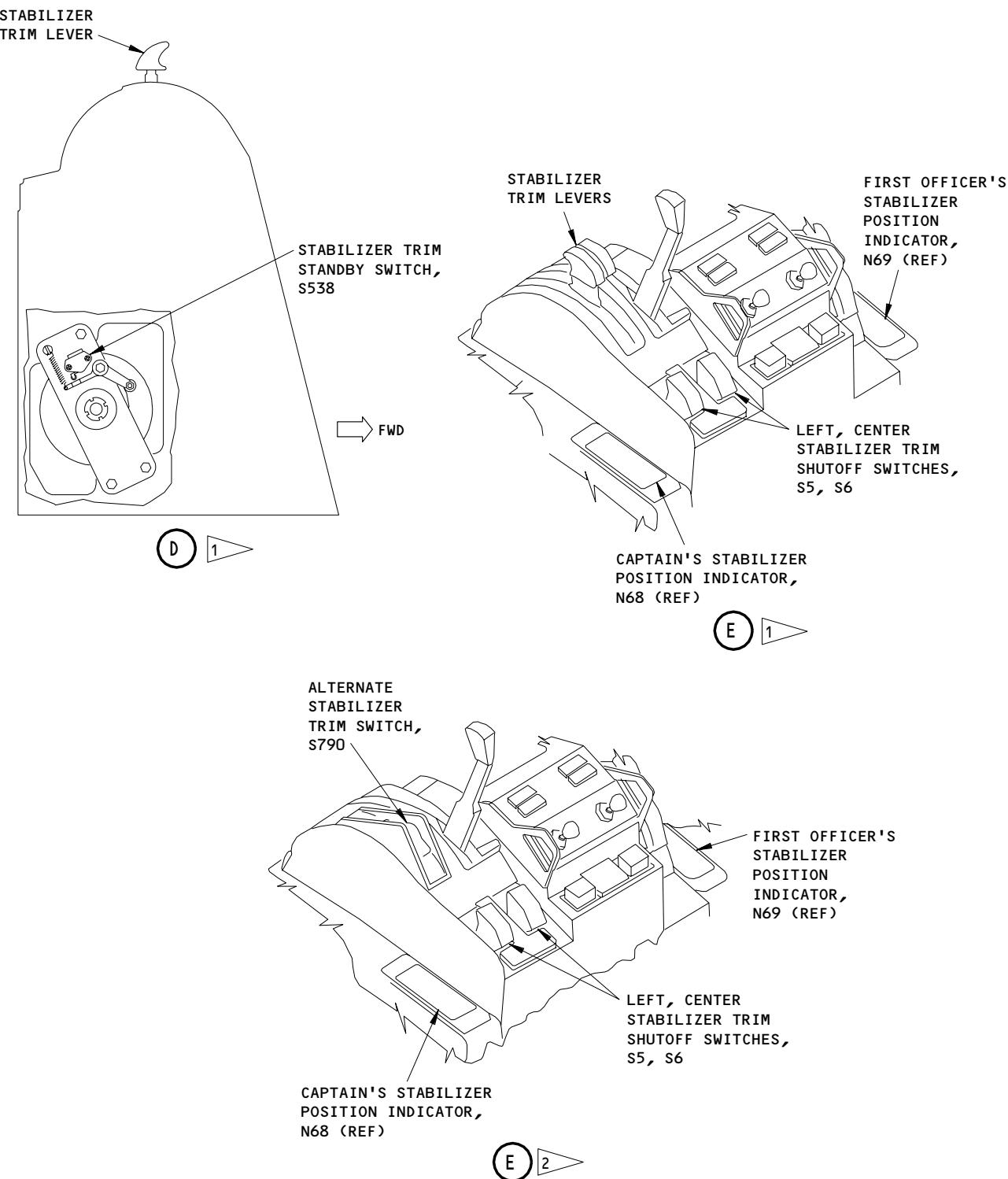
Horizontal Stabilizer Trim Control System - Component Location  
Figure 102 (Sheet 1)

EFFECTIVITY

ALL

27-41-00

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



Horizontal Stabilizer Trim Control System - Component Location  
Figure 102 (Sheet 2)

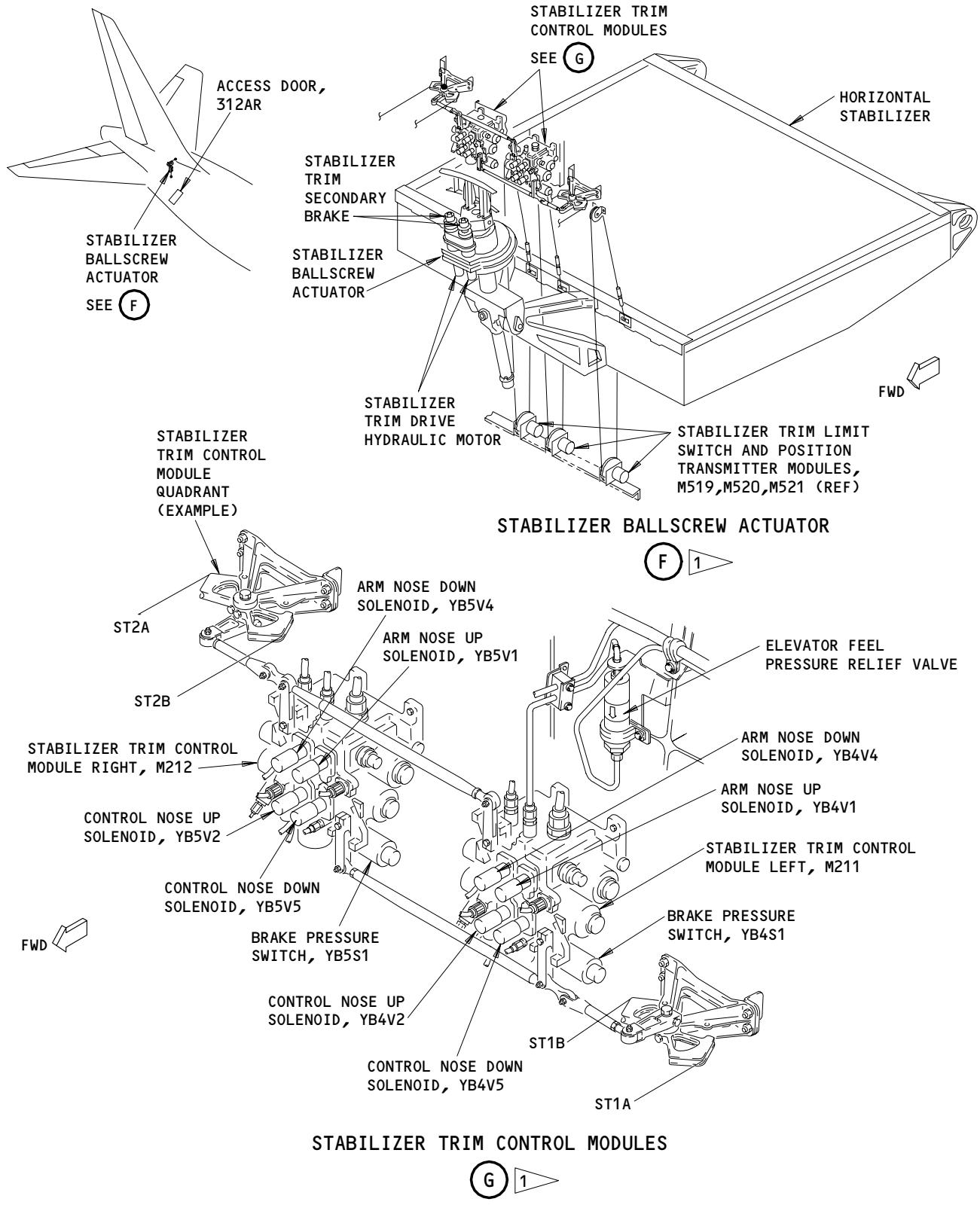
EFFECTIVITY

ALL

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09

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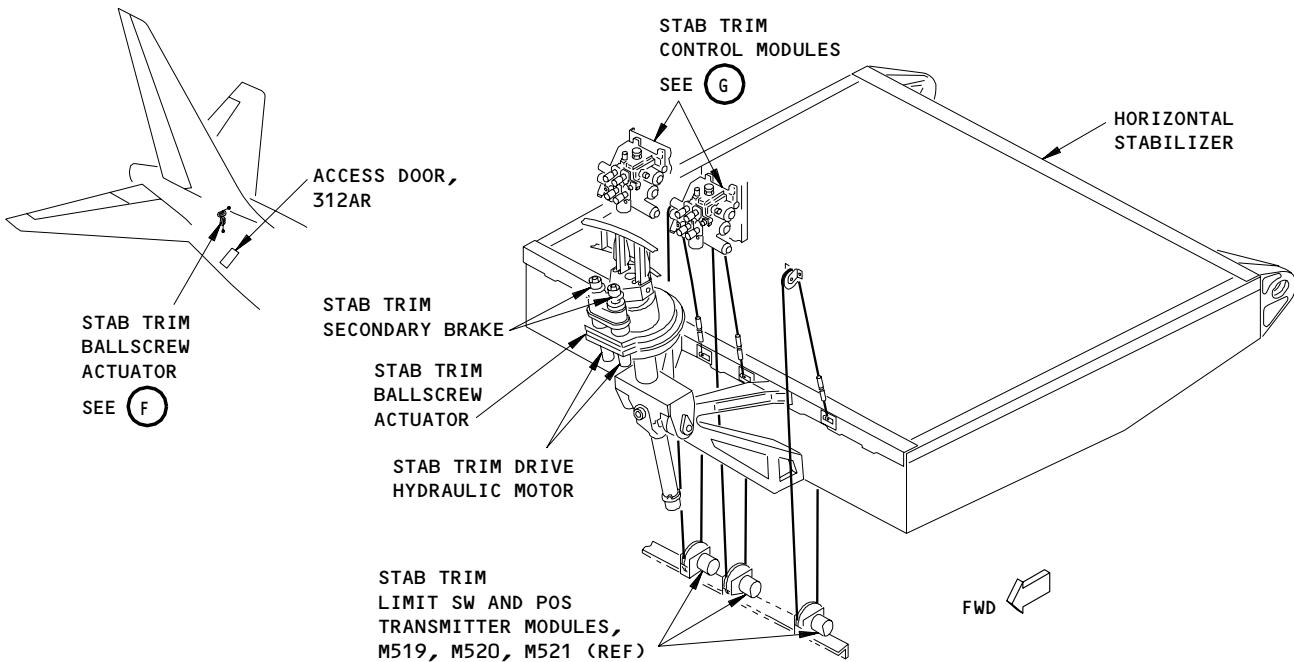

**Component Location**  
**Figure 102 (Sheet 3)**

EFFECTIVITY  
 AIRPLANES WITH MANUAL STAB TRIM LEVERS  
 ON THE CONTROL STAND

**27-41-00**

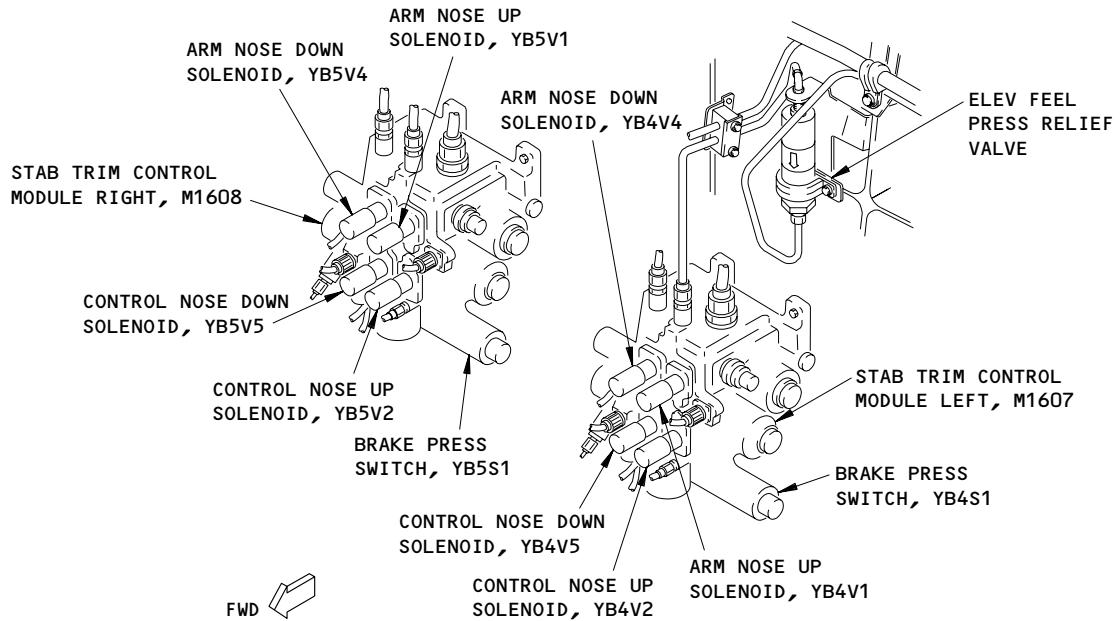
669463

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



**STAB TRIM BALLSCREW ACTUATOR**

(F) 2



**STAB TRIM CONTROL MODULES**

(G) 2

Horizontal Stabilizer Trim Control System – Component Location  
Figure 102 (Sheet 4)

EFFECTIVITY  
AIRPLANES WITH ALTERNATE STAB TRIM  
SWITCHES ON THE CONTROL STAND

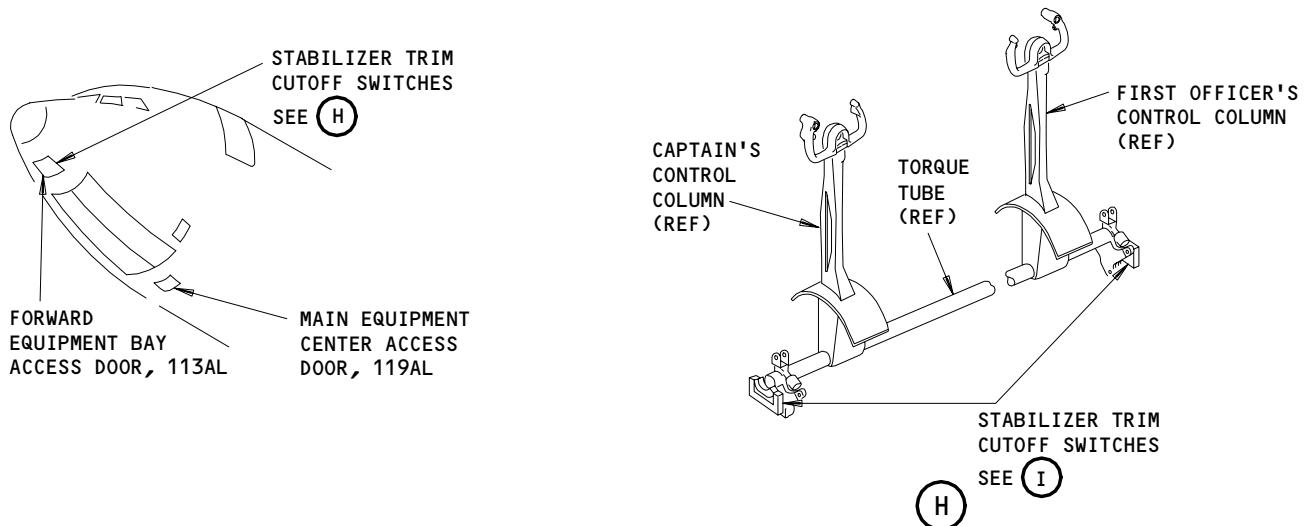
670423

**27-41-00**

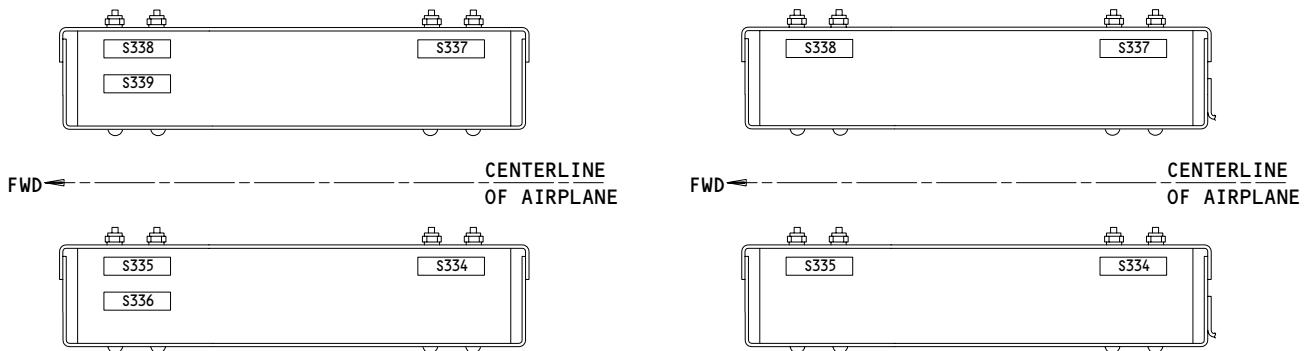
27

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**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



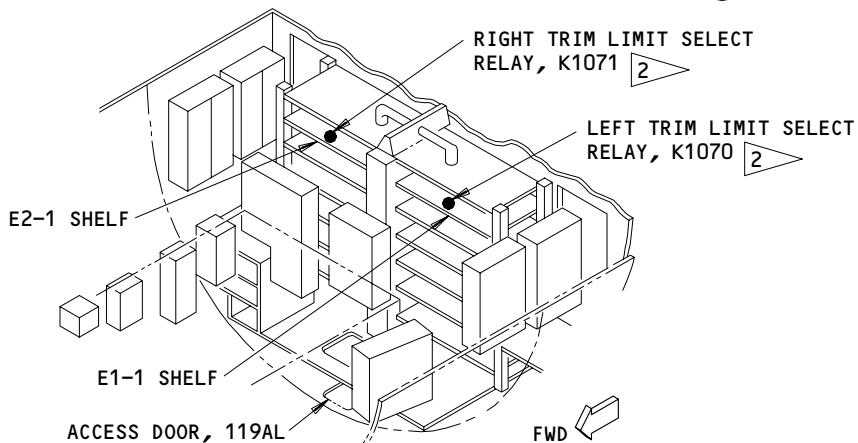
**FIRST OFFICER'S STABILIZER TRIM CUTOFF SWITCHES**



**CAPTAIN'S STABILIZER TRIM CUTOFF SWITCHES**

767-200 AIRPLANES      767-300 AIRPLANES

(I)      (I)



**MAIN EQUIPMENT CENTER**

Horizontal Stabilizer Trim Control System - Component Location  
Figure 102 (Sheet 5)

EFFECTIVITY  
SAS 050, 051, 150-166, 275-277, 279  
PRE-SB 27-102

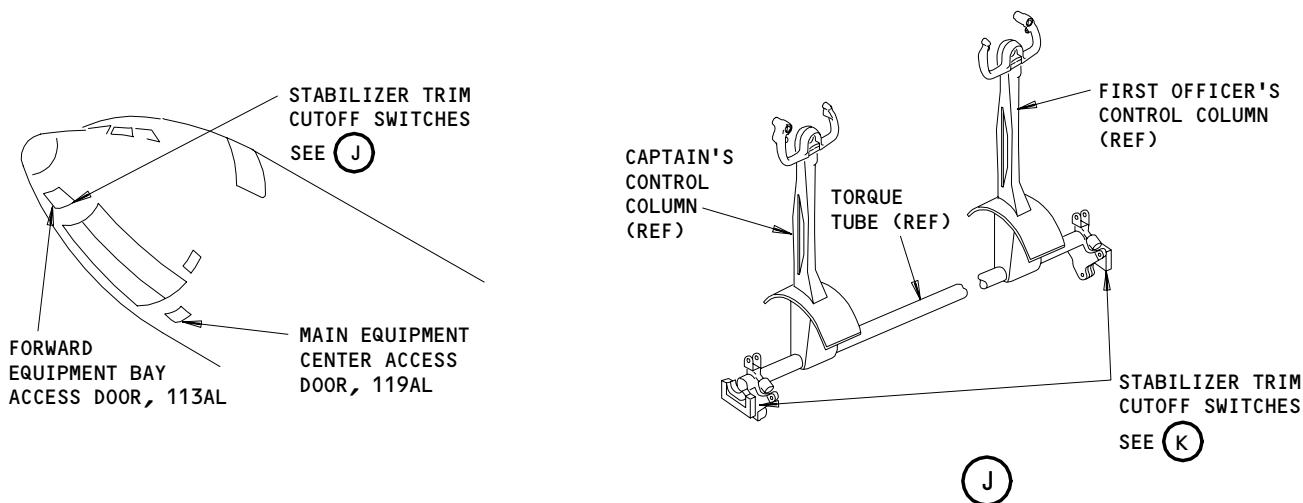
**27-41-00**

670469

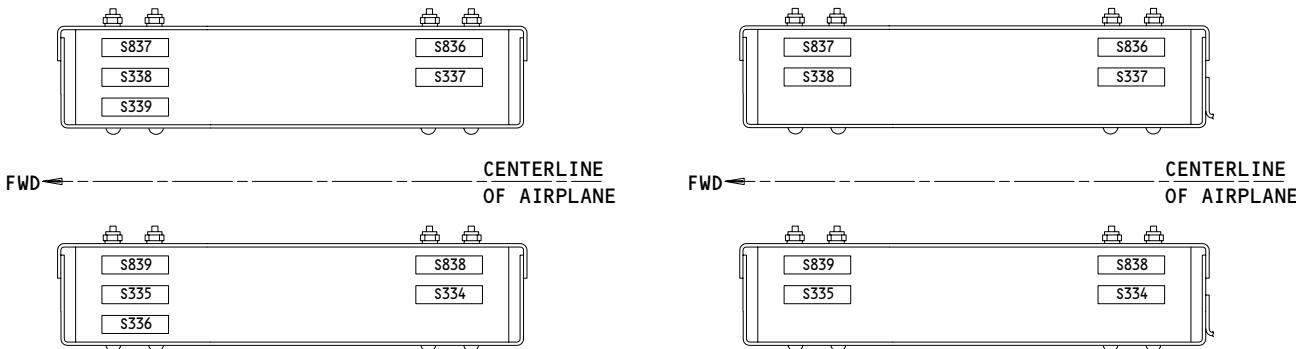
22

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**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



**FIRST OFFICER'S STABILIZER TRIM CUTOFF SWITCHES**



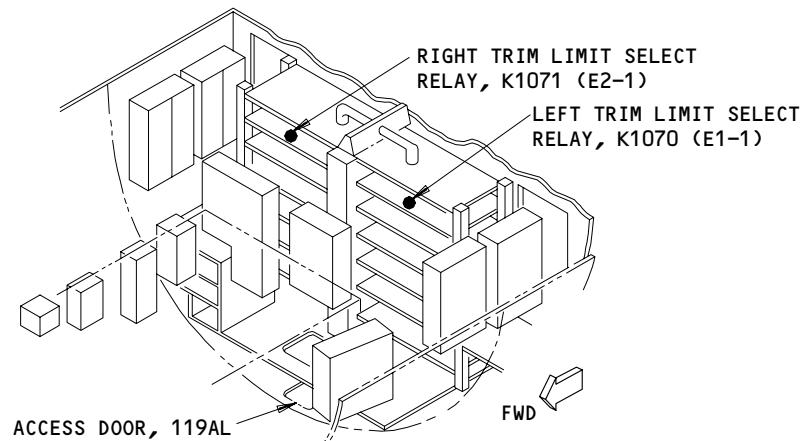
**CAPTAIN'S STABILIZER TRIM CUTOFF SWITCHES**

767-200 AIRPLANES

**K**

767-300 AIRPLANES

**K**



**MAIN EQUIPMENT CENTER**

Horizontal Stabilizer Trim Control System - Component Location  
Figure 102 (Sheet 6)

EFFECTIVITY  
SAS 050, 051, 150-166, 275-277  
POST-SB 27-102;  
SAS 052-149, 167-274, 278, 280-999

957011

**27-41-00**

18

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 **BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

Not Used  
Figure 103

EFFECTIVITY

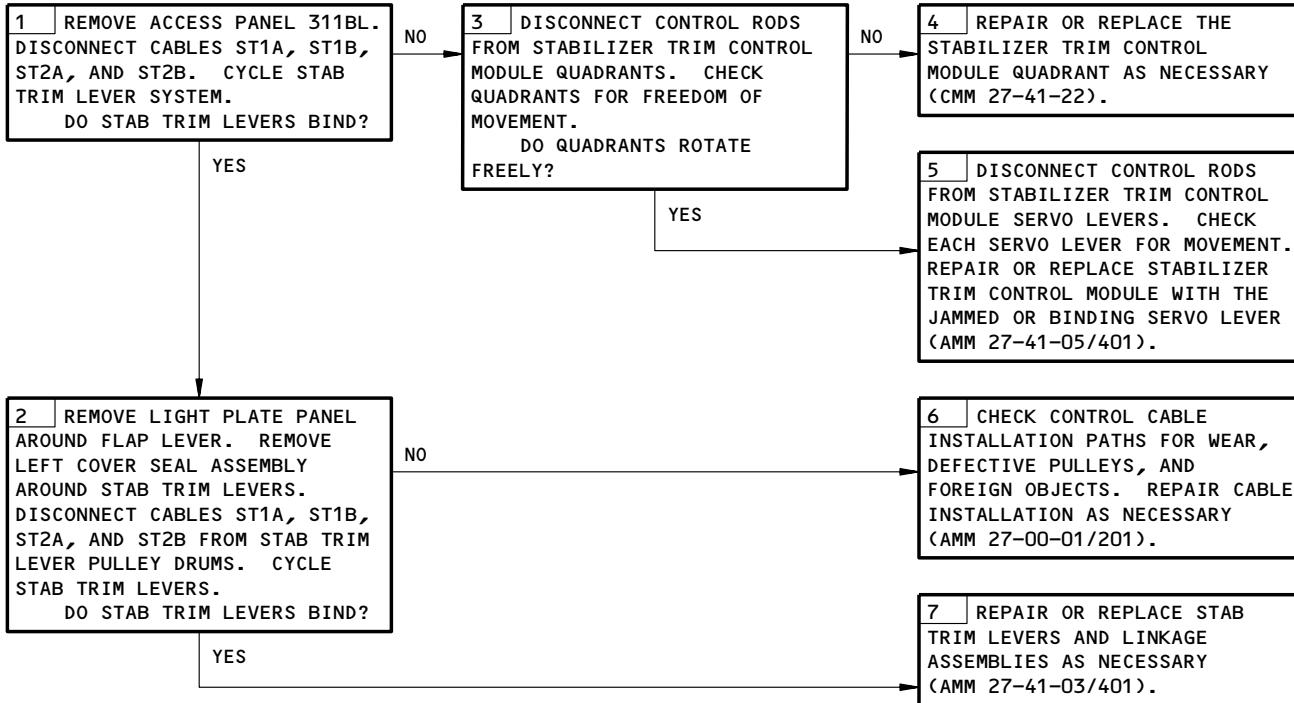
ALL

**27-41-00**

01

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235886

**STAB TRIM LEVERS  
BINDING**
**PREREQUISITES**
**NONE**

**Stab Trim Levers Binding  
Figure 104**
**EFFECTIVITY**  
 SAS 150-154

**27-41-00**

 **BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

Not Used  
Figure 105

EFFECTIVITY

ALL

27-41-00

01

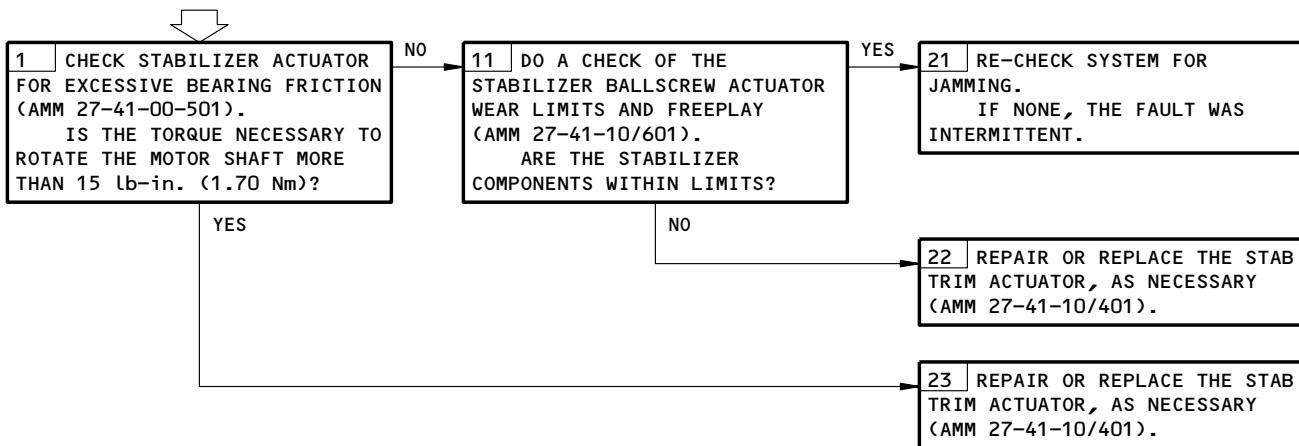
Page 111  
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42093

**STABILIZER TRIM  
BALLSCREW ACTUATOR  
JAMMED**
**PREREQUISITES**

MAKE SURE (THESE) CIRCUIT BREAKERS ARE CLOSED:  
 11C12, 11C13, 11H11 OR 11C5, 11H20

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS OFF (AMM 24-22-00/201)  
 RIGHT AND CENTER HYDRAULIC SYSTEMS ARE OFF  
 (AMM 29-11-00/201)



Stabilizer Trim Ballscrew Actuator Jammed  
 Figure 106

EFFECTIVITY

ALL

**27-41-00**



767  
FAULT ISOLATION/MAINT MANUAL

STABILIZER TRIM POSITION INDICATING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKER - STAB TRIM POS IND L, C1002 STAB TRIM POS IND R, C1009	1	1	FLT COMPT, P11 11H10	*
INDICATOR - STAB TRIM POSITION, N68,N69 MODULE - STAB TRIM LIMIT SW AND POS XMTR, M519,M520,M521	1 2	2 3	11H19 FLT COMPT, P10 312AR, 48 SECT STAB TRIM BALLSCREW ACTUATOR	27-48-06 27-48-01

\* SEE THE WDM EQUIPMENT LIST

Stabilizer Trim Position Indicating System - Component Index  
Figure 101

EFFECTIVITY

ALL

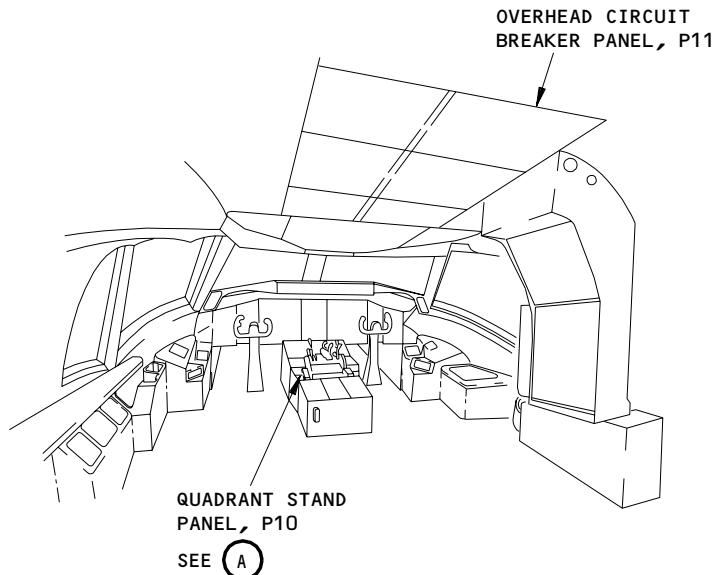
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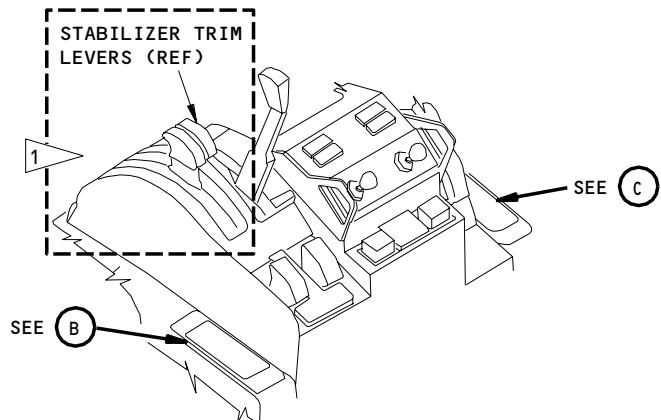
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**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



FLIGHT COMPARTMENT

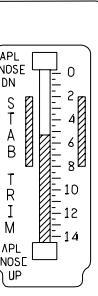


CAPTAIN'S  
STABILIZER POSITION  
INDICATOR, N68

B

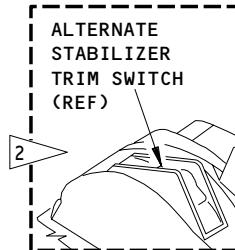
1 SAS 150-154

2 ALL MTH AIRPLANES, AND ALL EXCEPT SAS 150-154



FIRST/OFFICER'S  
STABILIZER POSITION  
INDICATOR, N69

C



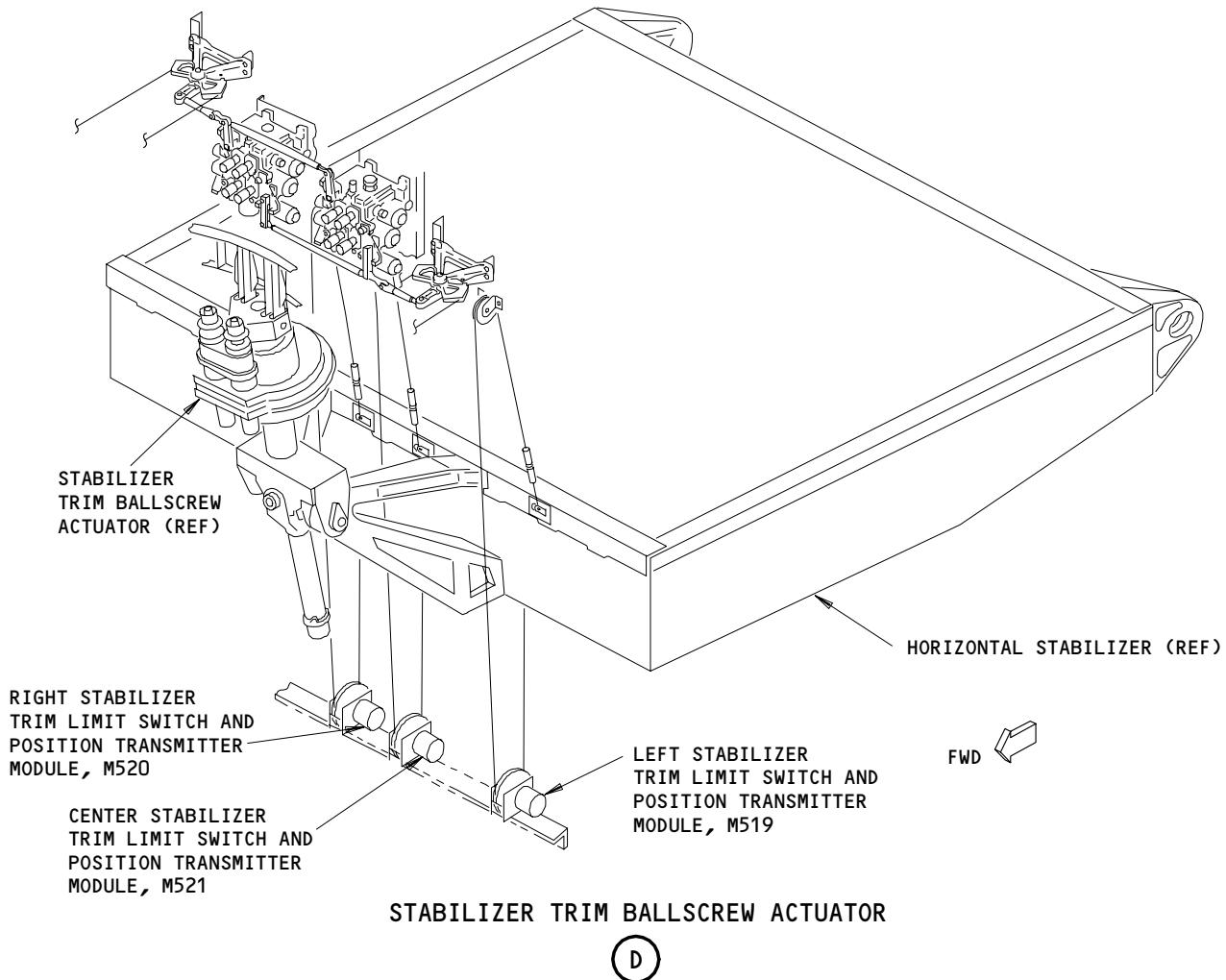
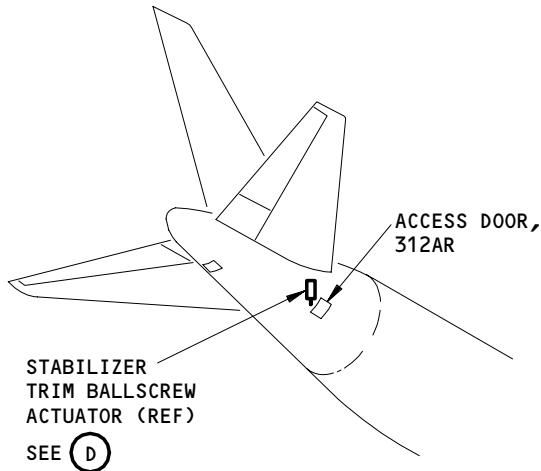
Stabilizer Trim Position Indicating System - Component Location  
Figure 102 (Sheet 1)

EFFECTIVITY

ALL

27-48-00

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



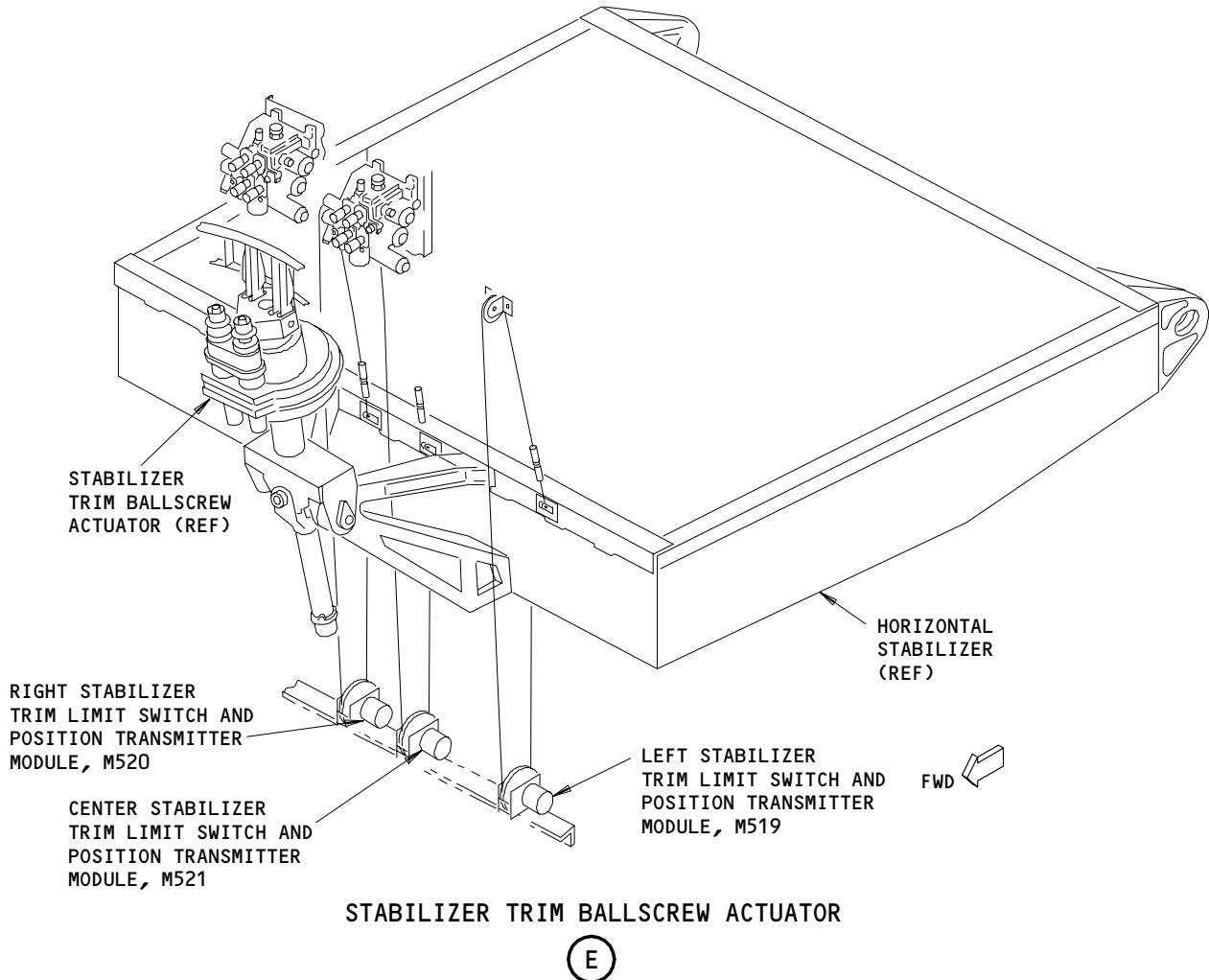
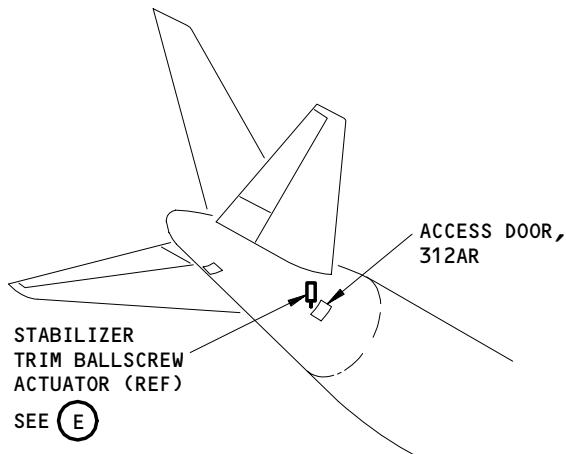
Stabilizer Trim Position Indicating System - Component Location  
Figure 102 (Sheet 2)

EFFECTIVITY  
SAS 150-154

**27-48-00**

34377

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



Stabilizer Trim Position Indicating System - Component Location  
Figure 102 (Sheet 3)

679177

EFFECTIVITY  
ALL MTH AIRPLANES AND ALL EXCEPT  
SAS 150-154

**27-48-00**

 **BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

Not Used  
Figure 103

EFFECTIVITY

ALL

**27-48-00**

02

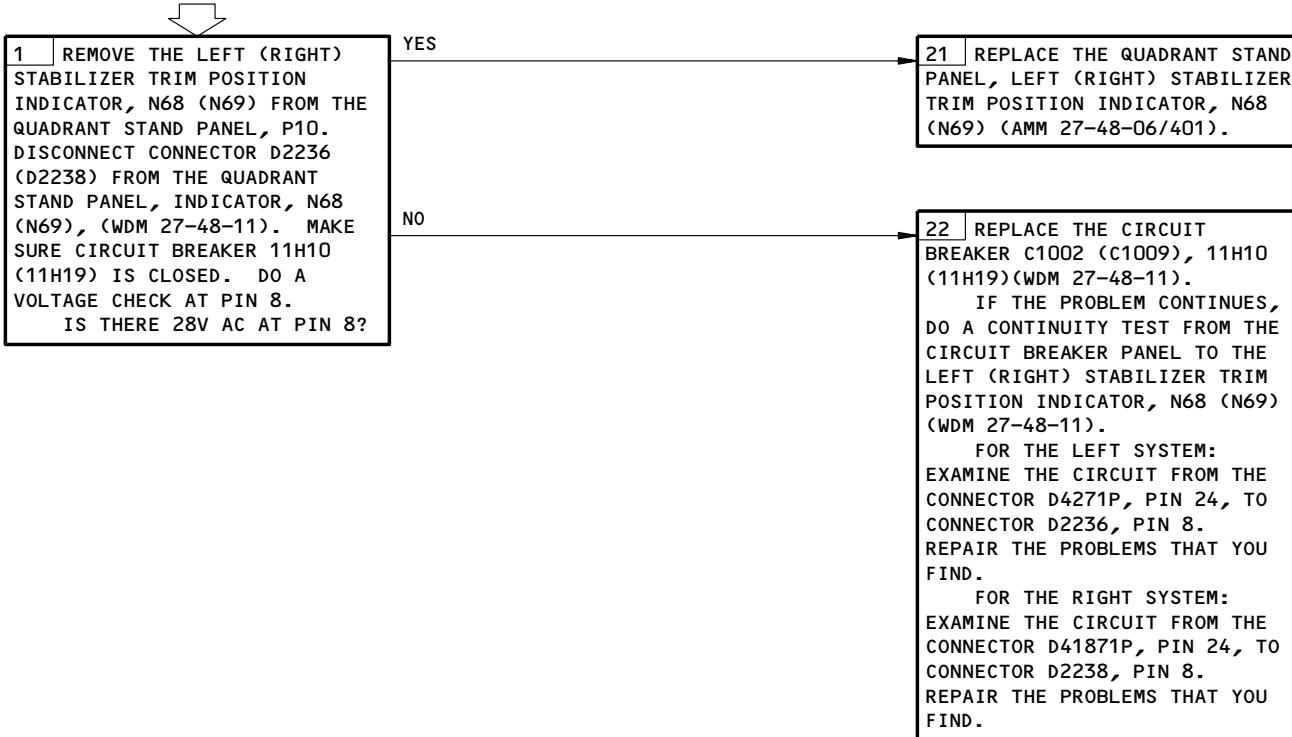
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234504

**STABILIZER POSITION  
INDICATOR OFF FLAG  
IN VIEW**

**PREREQUISITES**

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



**Stabilizer Position Indicator "Off" Flag in View**  
**Figure 104**

**EFFECTIVITY**\_\_\_\_\_

**ALL**

**27-48-00**

**02**

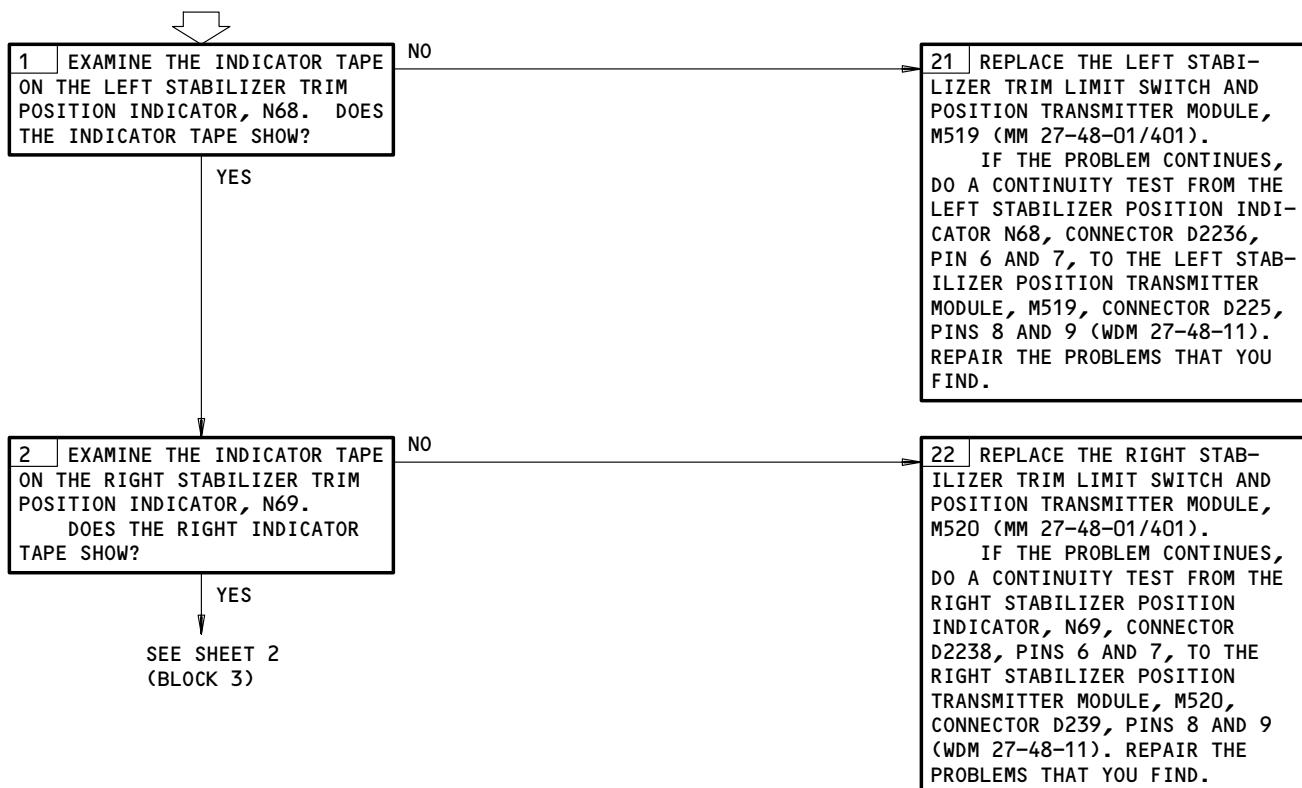
**Page 106**  
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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11C12, 11C13, 11H10, 11H19

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

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**STABILIZER POSITION INDICATORS DIFFER**


Stabilizer Position Indicators Differ  
 Figure 105 (Sheet 1)

EFFECTIVITY

**27-48-00**

50805

ALL

02

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**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 2)

YES

3 OPEN THE ACCESS DOOR 311BL.  
EXAMINE THE CABLES WHICH CONNECT THE LEFT AND RIGHT STABILIZER TRIM LIMIT SWITCH AND THE LEFT AND RIGHT POSITION TRANSMITTER MODULES, M519 AND M520 TO THE HORIZONTAL STABILIZER.  
IS THERE A CABLE DISCONNECTED OR BROKEN?

YES

23 REPLACE OR REPAIR THE BROKEN OR DISCONNECTED CABLES (AMM 27-00-01/201).

NO

4 PUT THE HORIZONTAL STABILIZER TO THE LEADING EDGE UP LIMIT.  
EXAMINE THE STABILIZER TRIM POSITION INDICATORS.  
DOES THE LEFT POSITION INDICATOR SHOW ZERO UNITS OF TRIM?

NO

24 REPLACE THE LEFT STABILIZER TRIM LIMIT SWITCH AND POSITION TRANSMITTER MODULE, M519 (AMM 27-48-01/401).  
IF THE PROBLEM CONTINUES REPLACE THE LEFT STABILIZER TRIM POSITION INDICATOR N68 (AMM 27-48-06/401).

YES

25 REPLACE THE RIGHT STABILIZER TRIM LIMIT SWITCH AND POSITION TRANSMITTER MODULE, M520 (AMM-27-48-01/401).  
IF THE PROBLEM CONTINUES REPLACE THE RIGHT STABILIZER TRIM POSITION INDICATOR N69 (AMM 27-48-06/401).

Stabilizer Position Indicators Differ  
Figure 105 (Sheet 2)

EFFECTIVITY

ALL

**27-48-00**

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02

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**PREREQUISITES**

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

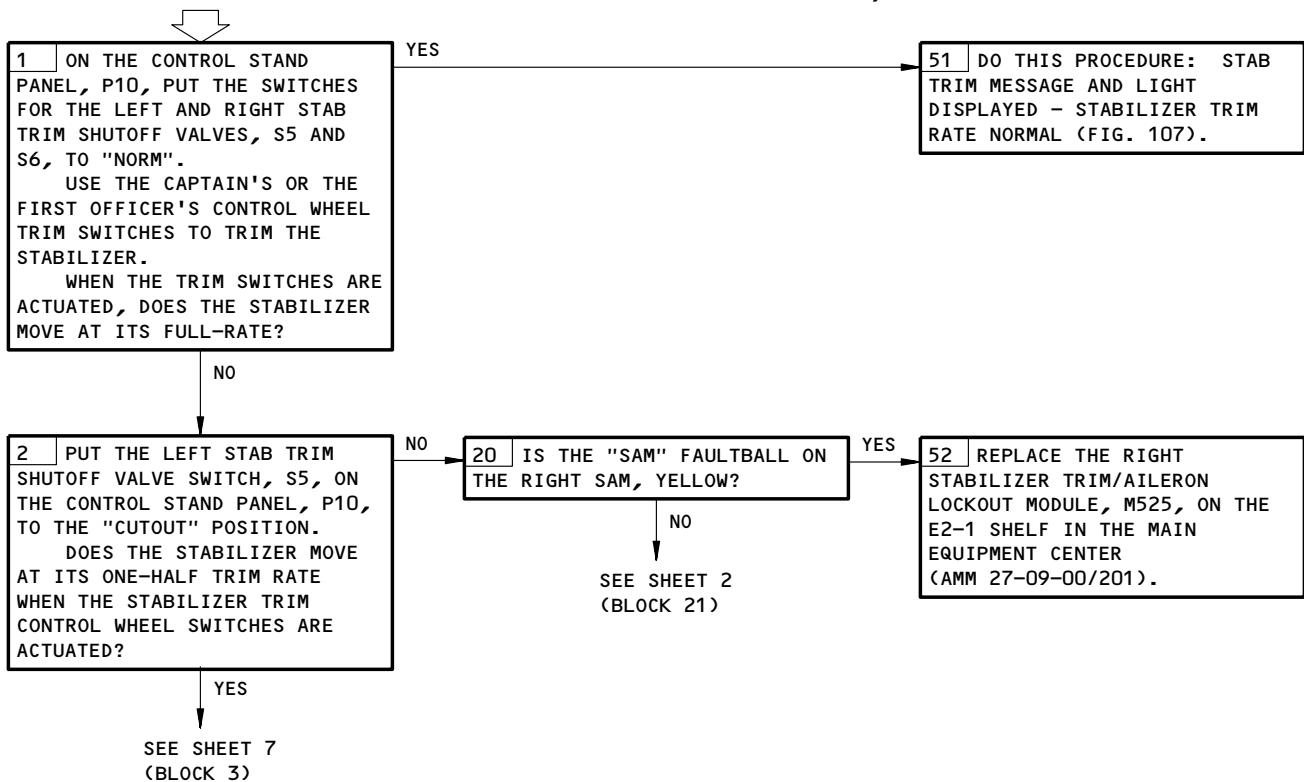
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
11C6, 11C7, 11C8, 11C9, 11C12, 11C13, 11G17, 11G18,  
11G26, 11G27, 11H11, 11H20

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

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**"STAB TRIM" WARNING INDICATION**

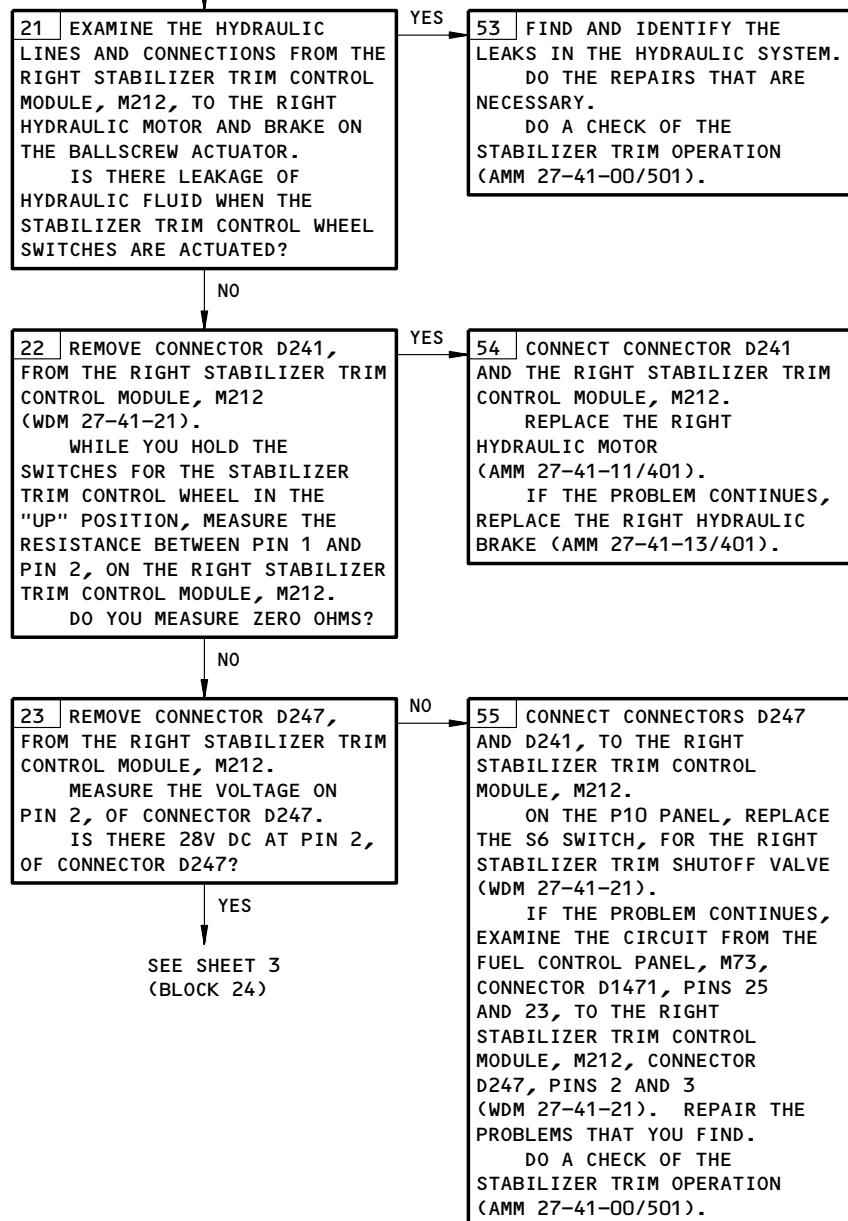
**NOTE:** THE DATA FOR THE PITCH ENHANCEMENT SYSTEM IS IN FIM 29-22-00/101, FIG. 103.



STAB TRIM Warning Indication  
Figure 106 (Sheet 1)

EFFECTIVITY  
AIRPLANES WITH ALT STAB TRIM  
LEVERS ON THE CONTROL STAND

**27-48-00**

FROM SHEET 1  
 (BLOCK 20)

 STAB TRIM Warning Indication  
 Figure 106 (Sheet 2)

 EFFECTIVITY  
 AIRPLANES WITH ALT STAB TRIM  
 LEVERS ON THE CONTROL STAND

27-48-00

FROM SHEET 2  
 (BLOCK 23)

YES

**24** REMOVE CONNECTORS D237 AND D345 FROM THE RIGHT STABILIZER TRIM CONTROL MODULE, M212.  
 PUSH THE STABILIZER TRIM CONTROL WHEEL SWITCH, S81, TO THE "DOWN" POSITION AND MAKE SURE THERE IS OV DC ON PIN 8, OF CONNECTORS D237 AND D345.  
 MEASURE THE VOLTAGE AT PIN 13.  
 IS THERE 28V DC ON PIN 13, OF CONNECTORS D237 AND D345, WHEN THE SWITCH IS ACTUATED?

 NO → SEE SHEET 5  
 (BLOCK 28)

YES

**25** PUSH THE STABILIZER TRIM CONTROL WHEEL SWITCH, S81, TO THE "UP" POSITION AND MAKE SURE THERE IS OV DC ON PIN 13, OF CONNECTORS D237 AND D345.  
 MEASURE THE VOLTAGE ON PIN 8, OF CONNECTORS D237 AND D345.  
 IS THERE 28V DC AT PIN 8, OF CONNECTORS D237 AND D345, WHEN THE SWITCH IS ACTUATED?

**56** REPLACE THE RIGHT STABILIZER TRIM CONTROL MODULE, M212  
 (CAMM 27-41-05/401).

NO

**26** NO 28V DC ON PIN 8 OF BOTH CONNECTORS D237 AND D345?

YES

 SEE SHEET 4  
 (BLOCK 27)

**57** CONNECT THE CONNECTORS D241, D247, D237, D345 AND REPLACE THE RIGHT STLM, M520 (CAMM 27-48-01/401).  
 IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM CONNECTOR D667A, PINS C7 AND C8, ON THE SAM, M525, TO CONNECTOR D345, PINS 8 AND 13 ON THE RIGHT STCM, M212.  
 EXAMINE THE CIRCUIT FROM CONNECTOR D667A, PINS F7 AND F10 ON THE SAM, M525, TO CONNECTOR D239, PINS 16 AND 20 ON RIGHT STLM, M520; AND CONNECTOR D239, PINS 17 AND 21, TO CONNECTOR D237, PINS 8 AND 13 (WDM 27-41-21). REPAIR THE PROBLEMS THAT YOU FIND.  
 IF THE PROBLEM IS DEPENDENT ON FLAP POSITION, EXAMINE THE RIGHT TRIM LIMIT SELECT RELAY, K1071, AND/OR THE CIRCUIT ASSOCIATED WITH K1071.  
 DO A CHECK OF THE STAB TRIM MANUAL-ELECTRIC OPERATION (CAMM 27-41-00/501).  
 DO A CHECK OF THE CONTROL COLUMN CUTOUT SWITCHES (CAMM 27-41-00/501).

**STAB TRIM Warning Indication**  
**Figure 106 (Sheet 3)**

 EFFECTIVITY  
 AIRPLANES WITH ALT STAB TRIM  
 LEVERS ON THE CONTROL STAND

**27-48-00**

M16581

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FROM SHEET 3  
 (BLOCK 26)

NO

 27 NO 28V DC ON PIN 8 OF  
 CONNECTOR D237?

YES

 58 CONNECT THE CONNECTORS  
 D241, D247, D237, D345 AND  
 REPLACE THE RIGHT STLM, M520  
 (AMM 27-48-01/401).

 IF THE PROBLEM CONTINUES,  
 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D667A, PINS F9  
 AND F10, ON THE SAM, M525, TO  
 CONNECTOR D239, PINS 16 AND  
 20 ON THE RIGHT STLM, M520;  
 AND CONNECTOR D239, PINS 17  
 AND 21, TO CONNECTOR D237,  
 PINS 8 AND 13 (WDM 27-41-21).  
 REPAIR THE PROBLEMS THAT YOU  
 FIND.

 IF THE PROBLEM IS  
 DEPENDENT ON FLAP POSITION,  
 EXAMINE THE RIGHT TRIM LIMIT  
 SELECT RELAY, K1071, AND/OR  
 THE CIRCUIT ASSOCIATED WITH  
 K1071.

 DO A CHECK OF THE STAB  
 TRIM MANUAL-ELECTRIC OPERATION  
 (AMM 27-41-00/501).

 DO A CHECK OF THE CONTROL  
 COLUMN CUTOUT SWITCHES  
 (AMM 27-41-00/501).

NO

 59 CONNECT THE CONNECTORS  
 D241, D247, D237 AND D345.

 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D667A, PINS C7  
 AND C8, ON THE SAM, M525, TO  
 CONNECTOR D345, PINS 8 AND  
 13 ON THE RIGHT STCM, M212  
 (WDM 27-41-21). REPAIR THE  
 PROBLEMS THAT YOU FIND.

 DO A CHECK OF THE STAB  
 TRIM MANUAL-ELECTRIC OPERATION  
 (AMM 27-41-00/501).

 DO A CHECK OF THE CONTROL  
 COLUMN CUTOUT SWITCHES  
 (AMM 27-41-00/501).

**STAB TRIM Warning Indication**  
**Figure 106 (Sheet 4)**
**EFFECTIVITY**  
 AIRPLANES WITH ALT STAB TRIM  
 LEVERS ON THE CONTROL STAND

**27-48-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 3  
(BLOCK 24)

NO

28 NO 28V DC ON PIN 13 OF  
BOTH CONNECTORS D237 AND D345?

YES

60 CONNECT THE CONNECTORS  
D241, D247, D237, D345 AND  
REPLACE THE RIGHT STLM, M520  
(AMM 27-48-01/401).

IF THE PROBLEM CONTINUES,  
EXAMINE THE CIRCUIT FROM  
CONNECTOR D667A, PINS C7  
AND C8, ON THE SAM, M525, TO  
CONNECTOR D345, PINS 8 AND  
13 ON THE RIGHT STCM, M212.

EXAMINE THE CIRCUIT FROM  
CONNECTOR D667A, PINS F9 AND  
F10 ON THE SAM, M525, TO  
CONNECTOR D239, PINS 16 AND 20  
ON RIGHT STLM, M520; AND  
CONNECTOR D239, PINS 17 AND  
21, TO CONNECTOR D237, PINS 8  
AND 13 (WDM 27-41-21). REPAIR  
THE PROBLEMS THAT YOU FIND.

IF THE PROBLEM IS  
DEPENDENT ON FLAP POSITION,  
EXAMINE THE RIGHT TRIM LIMIT  
SELECT RELAY, K1071, AND/OR  
THE CIRCUIT ASSOCIATED WITH  
K1071.

DO A CHECK OF THE STAB  
TRIM MANUAL-ELECTRIC OPERATION  
(AMM 27-41-00/501).

DO A CHECK OF THE CONTROL  
COLUMN CUTOUT SWITCHES  
(AMM 27-41-00/501).

SEE SHEET 6  
(BLOCK 29)

EFFECTIVITY  
AIRPLANES WITH ALT STAB TRIM  
LEVERS ON THE CONTROL STAND

STAB TRIM Warning Indication  
Figure 106 (Sheet 5)

**27-48-00**

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FROM SHEET 5  
 (BLOCK 28)

NO

 29 NO 28V DC ON PIN 13 OF  
 CONNECTOR D237?

YES

 61 CONNECT THE CONNECTORS  
 D241, D247, D237, D345 AND  
 REPLACE THE RIGHT STLM, M520  
 (AMM 27-48-01/401).

 IF THE PROBLEM CONTINUES,  
 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D667A, PINS F9  
 AND F10, ON THE SAM, M525, TO  
 CONNECTOR D239, PINS 16 AND  
 20 ON THE RIGHT STLM, M520;  
 AND CONNECTOR D239, PINS 17  
 AND 21, TO CONNECTOR D237,  
 PINS 8 AND 13 (WDM 27-41-21).  
 REPAIR THE PROBLEMS THAT YOU  
 FIND.

 IF THE PROBLEM IS  
 DEPENDENT ON FLAP POSITION,  
 EXAMINE THE RIGHT TRIM LIMIT  
 SELECT RELAY, K1071, AND/OR  
 THE CIRCUIT ASSOCIATED WITH  
 K1071.

 DO A CHECK OF THE STAB  
 TRIM MANUAL-ELECTRIC OPERATION  
 (AMM 27-41-00/501).

 DO A CHECK OF THE CONTROL  
 COLUMN CUTOUT SWITCHES  
 (AMM 27-41-00/501).

NO

 62 CONNECT THE CONNECTORS  
 D241, D247, D237 AND D345.

 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D667A, PINS C7  
 AND C8, ON THE SAM, M525, TO  
 CONNECTOR D345, PINS 8 AND  
 13 ON THE RIGHT STCM, M212  
 (WDM 27-41-21). REPAIR THE  
 PROBLEMS THAT YOU FIND.

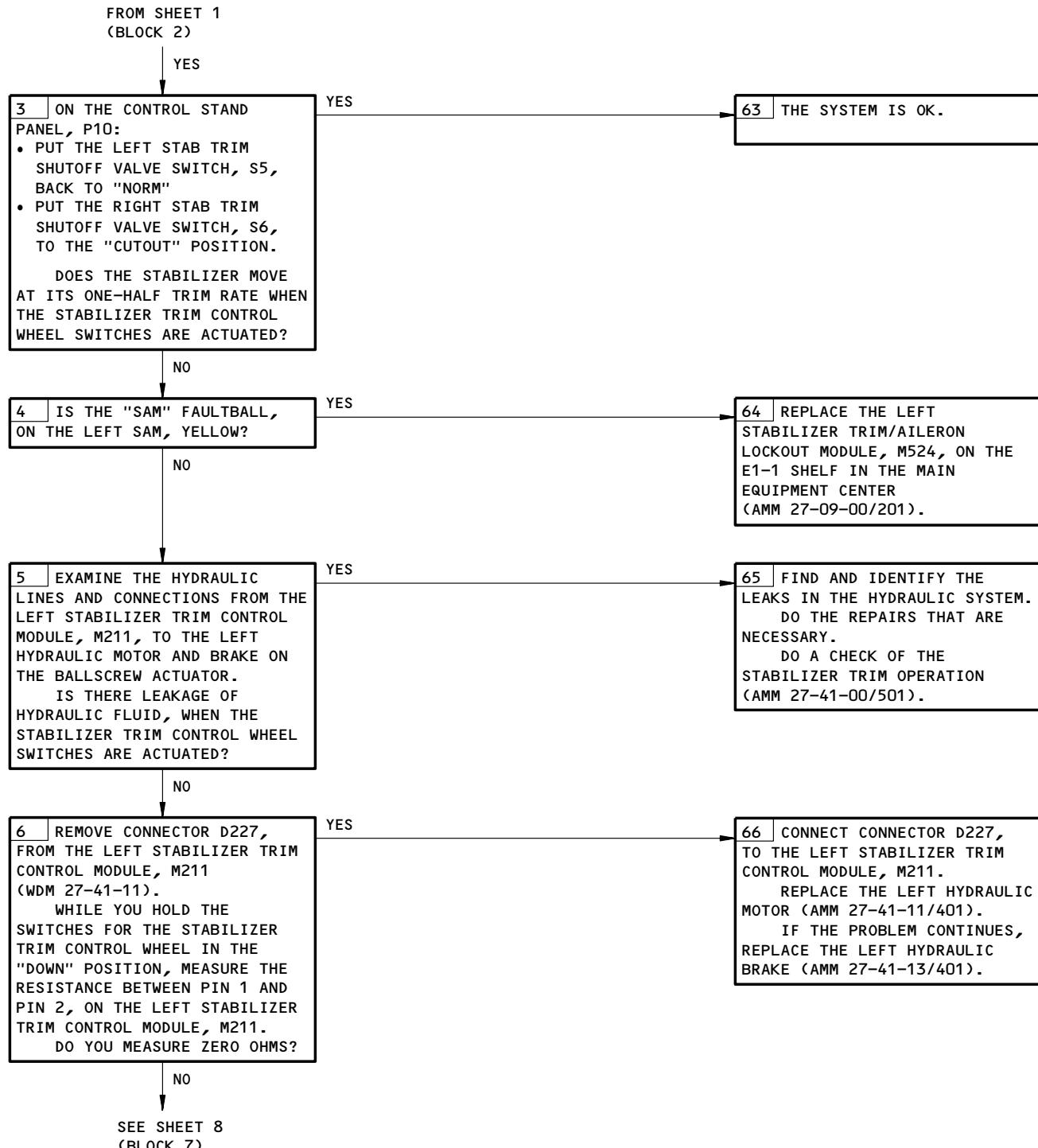
 DO A CHECK OF THE STAB  
 TRIM MANUAL-ELECTRIC OPERATION  
 (AMM 27-41-00/501).

 DO A CHECK OF THE CONTROL  
 COLUMN CUTOUT SWITCHES  
 (AMM 27-41-00/501).

**STAB TRIM Warning Indication**  
**Figure 106 (Sheet 6)**
**EFFECTIVITY** \_\_\_\_\_

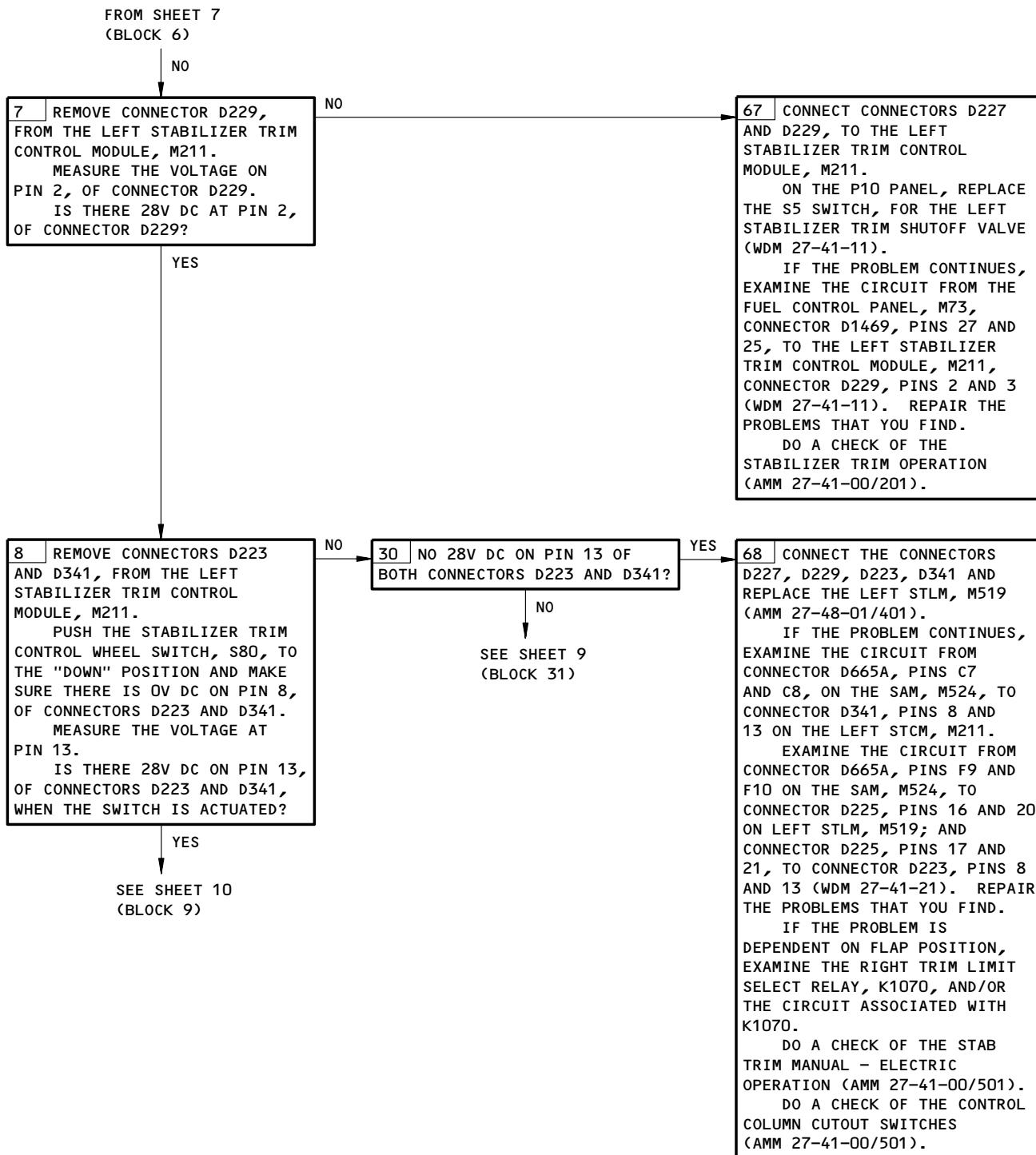
 AIRPLANES WITH ALT STAB TRIM  
 LEVERS ON THE CONTROL STAND

**27-48-00**


 STAB TRIM Warning Indication  
 Figure 106 (Sheet 7)

EFFECTIVITY  
 AIRPLANES WITH ALT STAB TRIM  
 LEVERS ON THE CONTROL STAND

27-48-00



STAB TRIM Warning Indication  
Figure 106 (Sheet 8)

EFFECTIVITY  
AIRPLANES WITH ALT STAB TRIM  
LEVERS ON THE CONTROL STAND

27-48-00

FROM SHEET 8  
 (BLOCK 30)

NO

 31 NO 28V DC ON PIN 13 OF  
 CONNECTOR D223?

YES

 69 CONNECT THE CONNECTORS  
 D227, D229, D223, D341 AND  
 REPLACE THE LEFT STLM, M519  
 (AMM 27-48-01/401).

NO

IF THE PROBLEM CONTINUES,  
 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D665A, PINS F9 AND  
 F10 ON THE SAM, M524, TO  
 CONNECTOR D225, PINS 16 AND 20  
 ON LEFT STLM, M519; AND  
 CONNECTOR D225, PINS 17 AND  
 21, TO CONNECTOR D223, PINS 8  
 AND 13 (WDM 27-41-21). REPAIR  
 THE PROBLEMS THAT YOU FIND.  
 IF THE PROBLEM IS  
 DEPENDENT ON FLAP POSITION,  
 EXAMINE THE RIGHT TRIM LIMIT  
 SELECT RELAY, K1070, AND/OR  
 THE CIRCUIT ASSOCIATED WITH  
 K1070.

DO A CHECK OF THE STAB  
 TRIM MANUAL - ELECTRIC  
 OPERATION (AMM 27-41-00/501).  
 DO A CHECK OF THE CONTROL  
 COLUMN CUTOUT SWITCHES  
 (AMM 27-41-00/501).

70 CONNECT THE CONNECTORS  
 D227, D229, D223, AND D341.  
 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D665A, PINS C7 AND  
 C8 ON THE SAM, M524, TO  
 CONNECTOR D341, PINS 8 AND 13  
 ON LEFT STCM, M212  
 (WDM 27-41-21). REPAIR THE  
 PROBLEMS THAT YOU FIND.  
 DO A CHECK OF THE STAB  
 TRIM MANUAL - ELECTRIC  
 OPERATION (AMM 27-41-00/501).  
 DO A CHECK OF THE CONTROL  
 COLUMN CUTOUT SWITCHES  
 (AMM 27-41-00/501).

**STAB TRIM Warning Indication**  
**Figure 106 (Sheet 9)**

 EFFECTIVITY  
 AIRPLANES WITH ALT STAB TRIM  
 LEVERS ON THE CONTROL STAND

**27-48-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 8  
(BLOCK 8)

YES

9 PUSH THE STABILIZER TRIM CONTROL WHEEL SWITCH, S80, TO THE "UP" POSITION AND MAKE SURE THERE IS OV DC ON PIN 13, OF CONNECTORS D223 AND D341.  
MEASURE THE VOLTAGE ON PIN 8, OF CONNECTORS D223 AND D341.  
IS THERE 28V DC AT PIN 8, WHEN THE SWITCH IS ACTUATED?

YES

71 REPLACE THE LEFT STABILIZER TRIM CONTROL MODULE, M211 (AMM 27-41-05/401).

NO

10 NO 28V DC ON PIN 8 OF BOTH CONNECTORS D223 AND D341?

YES

72 CONNECT THE CONNECTORS D227, D229, D223, D341 AND REPLACE THE LEFT STLM, M519 (AMM 27-48-01/401).

IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM CONNECTOR D665A, PINS C7 AND C8, ON THE SAM, M524, TO CONNECTOR D341, PINS 8 AND 13 ON THE LEFT STCM, M211.

EXAMINE THE CIRCUIT FROM CONNECTOR D665A, PINS F9 AND F10 ON THE SAM, M524, TO CONNECTOR D225, PINS 16 AND 20 ON LEFT STLM, M519; AND CONNECTOR D225, PINS 17 AND 21, TO CONNECTOR D223, PINS 8 AND 13 (WDM 27-41-21). REPAIR THE PROBLEMS THAT YOU FIND.

IF THE PROBLEM IS DEPENDENT ON FLAP POSITION, EXAMINE THE RIGHT TRIM LIMIT SELECT RELAY, K1070, AND/OR THE CIRCUIT ASSOCIATED WITH K1070.

DO A CHECK OF THE STAB TRIM MANUAL - ELECTRIC OPERATION (AMM 27-41-00/501).

DO A CHECK OF THE CONTROL COLUMN CUTOUT SWITCHES (AMM 27-41-00/501).

SEE SHEET 11  
(BLOCK 11)

EFFECTIVITY  
AIRPLANES WITH ALT STAB TRIM  
LEVERS ON THE CONTROL STAND

27-48-00

FROM SHEET 10  
(BLOCK 10)

NO

**11** NO 28V DC ON PIN 8 OF  
CONNECTOR D223?

YES

NO

**73** CONNECT THE CONNECTORS  
D227, D229, D223, D341 AND  
REPLACE THE LEFT STLM, M519  
(AMM 27-48-01/401).

IF THE PROBLEM CONTINUES,  
EXAMINE THE CIRCUIT FROM  
CONNECTOR D665A, PINS F9 AND  
F10 ON THE SAM, M524, TO  
CONNECTOR D225, PINS 16 AND 20  
ON LEFT STLM, M519; AND  
CONNECTOR D225, PINS 17 AND  
21, TO CONNECTOR D223, PINS 8  
AND 13 (WDM 27-41-21). REPAIR  
THE PROBLEMS THAT YOU FIND.  
IF THE PROBLEM IS  
DEPENDENT ON FLAP POSITION,  
EXAMINE THE RIGHT TRIM LIMIT  
SELECT RELAY, K1070, AND/OR  
THE CIRCUIT ASSOCIATED WITH  
K1070.

DO A CHECK OF THE STAB  
TRIM MANUAL - ELECTRIC  
OPERATION (AMM 27-41-00/501).  
DO A CHECK OF THE CONTROL  
COLUMN CUTOUT SWITCHES  
(AMM 27-41-00/501).

**74** CONNECT THE CONNECTORS  
D227, D229, D223, AND D341.  
EXAMINE THE CIRCUIT FROM  
CONNECTOR D665A, PINS C7 AND  
C8 ON THE SAM, M524, TO  
CONNECTOR D341, PINS 8 AND 13  
ON LEFT STCM, M212  
(WDM 27-41-21). REPAIR THE  
PROBLEMS THAT YOU FIND.  
DO A CHECK OF THE STAB  
TRIM MANUAL - ELECTRIC  
OPERATION (AMM 27-41-00/501).  
DO A CHECK OF THE CONTROL  
COLUMN CUTOUT SWITCHES  
(AMM 27-41-00/501).

STAB TRIM Warning Indication  
Figure 106 (Sheet 11)

EFFECTIVITY  
AIRPLANES WITH ALT STAB TRIM  
LEVERS ON THE CONTROL STAND

**27-48-00**

**PREREQUISITES**

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

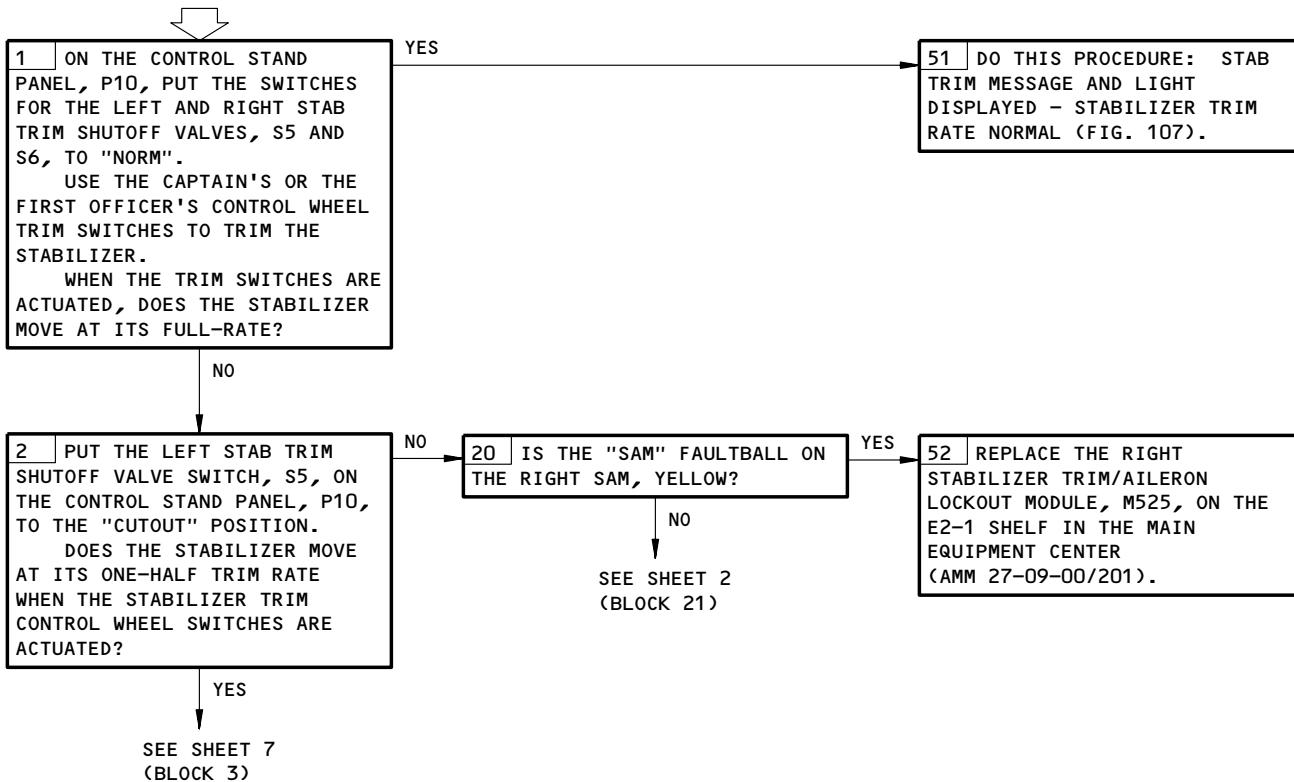
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 11C6, 11C7, 11C8, 11C9, 11C12, 11C13, 11G17, 11G18,  
 11G26, 11G27, 11H11, 11H20

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

**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. INJURIES TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**"STAB TRIM" WARNING INDICATION**

**NOTE:** THE DATA FOR THE PITCH ENHANCEMENT SYSTEM IS IN FIM 29-22-00/101, FIG. 103.



STAB TRIM Warning Indication  
 Figure 106A (Sheet 1)

EFFECTIVITY  
 AIRPLANES WITH ALTERNATE STAB TRIM SWITCHES ON THE CONTROL STAND

**27-48-00**

FROM SHEET 1  
(BLOCK 20)

NO

21 EXAMINE THE HYDRAULIC LINES AND CONNECTIONS FROM THE RIGHT STABILIZER TRIM CONTROL MODULE, M1608, TO THE RIGHT HYDRAULIC MOTOR AND BRAKE ON THE BALLSCREW ACTUATOR.  
IS THERE LEAKAGE OF HYDRAULIC FLUID WHEN THE STABILIZER TRIM CONTROL WHEEL SWITCHES ARE ACTUATED?

YES → 53 FIND AND IDENTIFY THE LEAKS IN THE HYDRAULIC SYSTEM. DO THE REPAIRS THAT ARE NECESSARY.  
DO A CHECK OF THE STABILIZER TRIM OPERATION (AMM 27-41-00/501).

NO

22 REMOVE CONNECTOR D2221, FROM THE RIGHT STABILIZER TRIM CONTROL MODULE, M1608 (WDM 27-41-21). WHILE YOU HOLD THE SWITCHES FOR THE STABILIZER TRIM CONTROL WHEEL IN THE "UP" POSITION, MEASURE THE RESISTANCE BETWEEN PIN 1 AND PIN 2, ON THE RIGHT STABILIZER TRIM CONTROL MODULE, M1068.  
DO YOU MEASURE ZERO OHMS?

YES → 54 CONNECT CONNECTOR D2221 AND THE RIGHT STABILIZER TRIM CONTROL MODULE, M1608. REPLACE THE RIGHT HYDRAULIC MOTOR (AMM 27-41-11/401).  
IF THE PROBLEM CONTINUES, REPLACE THE RIGHT HYDRAULIC BRAKE (AMM 27-41-13/401).

NO

23 REMOVE CONNECTOR D2219, FROM THE RIGHT STABILIZER TRIM CONTROL MODULE, M1608.  
MEASURE THE VOLTAGE ON PIN 2, OF CONNECTOR D2219.  
IS THERE 28V DC AT PIN 2, OF CONNECTOR D2219?

NO → 55 CONNECT CONNECTORS D2219 AND D2221, TO THE RIGHT STABILIZER TRIM CONTROL MODULE, M1608.  
ON THE P10 PANEL, REPLACE THE S6 SWITCH FOR THE RIGHT STABILIZER TRIM SHUTOFF VALVE (WDM 27-41-21).

YES

SEE SHEET 3  
(BLOCK 24)

IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM THE FUEL CONTROL PANEL, M73, CONNECTOR D1471, PINS 25 AND 23, TO THE RIGHT STABILIZER TRIM CONTROL MODULE, M1608, CONNECTOR D2219, PINS 2 AND 3 (WDM 27-41-21). REPAIR THE PROBLEMS THAT YOU FIND.  
DO A CHECK OF THE STABILIZER TRIM OPERATION (AMM 27-41-00/501).

STAB TRIM Warning Indication  
Figure 106A (Sheet 2)

EFFECTIVITY  
AIRPLANES WITH ALTERNATE STAB TRIM  
SWITCHES ON THE CONTROL STAND

27-48-00

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FROM SHEET 2  
 (BLOCK 23)

YES

**24** REMOVE CONNECTORS D2217 AND D2215 FROM THE RIGHT STABILIZER TRIM CONTROL MODULE, M1608.  
 PUSH THE STABILIZER TRIM CONTROL WHEEL SWITCH, S81, TO THE "DOWN" POSITION AND MAKE SURE THERE IS OV DC ON PIN 6, OF CONNECTORS D2217 AND D2215.  
 MEASURE THE VOLTAGE AT PIN 2.  
 IS THERE 28V DC ON PIN 2, OF CONNECTORS D2217 AND D2215, WHEN THE SWITCH IS ACTUATED?

 NO → SEE SHEET 5  
 (BLOCK 28)

YES

**25** PUSH THE STABILIZER TRIM CONTROL WHEEL SWITCH, S81, TO THE "UP" POSITION AND MAKE SURE THERE IS OV DC ON PIN 2, OF CONNECTORS D2217 AND D2215.  
 MEASURE THE VOLTAGE ON PIN 6, OF CONNECTORS D2217 AND D2215.  
 IS THERE 28V DC AT PIN 6, WHEN THE SWITCH IS ACTUATED?

**56** REPLACE THE RIGHT STABILIZER TRIM CONTROL MODULE, M1608  
 (AMM 27-41-05/401).

NO

**26** NO 28V DC ON PIN 6 OF BOTH CONNECTORS D2217 AND D2215?

**57** CONNECT THE CONNECTORS D2221, D2219, D2217, D2215 AND REPLACE THE RIGHT STLM, M520  
 (AMM 27-48-01/401).

IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM CONNECTOR D667A, PINS C7 AND C8, ON THE SAM, M525, TO CONNECTOR D2215, PINS 8 AND 13 ON THE RIGHT STCM, M1608.

EXAMINE THE CIRCUIT FROM CONNECTOR D667A, PINS F9 AND F10 ON THE SAM, M525, TO CONNECTOR D239, PINS 16 AND 20 ON RIGHT STLM, M520; AND CONNECTOR D239, PINS 17 AND 21, TO CONNECTOR D2217, PINS 2 AND 6 (WDM 27-41-21). REPAIR THE PROBLEMS THAT YOU FIND.

IF THE PROBLEM IS DEPENDENT ON FLAP POSITION, EXAMINE THE RIGHT TRIM LIMIT SELECT RELAY, K1071, AND/OR THE CIRCUIT ASSOCIATED WITH K1071.

DO A CHECK OF THE STAB TRIM MANUAL-ELECTRIC OPERATION (AMM 27-41-00/501).

DO A CHECK OF THE CONTROL COLUMN CUTOUT SWITCHES (AMM 27-41-00/501).

**STAB TRIM Warning Indication**  
**Figure 106A (Sheet 3)**
**EFFECTIVITY** \_\_\_\_\_

 AIRPLANES WITH ALTERNATE STAB TRIM  
 SWITCHES ON THE CONTROL STAND

**27-48-00**



## 767 FAULT ISOLATION/MAINT MANUAL

FROM SHEET 3  
(BLOCK 26)

NO

27 NO 28V DC ON PIN 6 OF  
CONNECTOR D2217?

YES

58 CONNECT THE CONNECTORS  
D2221, D2219, D2217, D2215 AND  
REPLACE THE RIGHT STLM, M520  
(AMM 27-48-01/401).

IF THE PROBLEM CONTINUES,  
EXAMINE THE CIRCUIT FROM  
CONNECTOR D667A, PINS F9  
AND F10, ON THE SAM, M525, TO  
CONNECTOR D239, PINS 16 AND  
20 ON THE RIGHT STLM, M520;  
AND CONNECTOR D239, PINS 17  
AND 21, TO CONNECTOR D2217,  
PINS 2 AND 6 (WDM 27-41-21).  
REPAIR THE PROBLEMS THAT YOU  
FIND.

IF THE PROBLEM IS  
DEPENDENT ON FLAP POSITION,  
EXAMINE THE RIGHT TRIM LIMIT  
SELECT RELAY, K1071, AND/OR  
THE CIRCUIT ASSOCIATED WITH  
K1071.

DO A CHECK OF THE STAB  
TRIM MANUAL-ELECTRIC OPERATION  
(AMM 27-41-00/501).

DO A CHECK OF THE CONTROL  
COLUMN CUTOUT SWITCHES  
(AMM 27-41-00/501).

NO

59 CONNECT THE CONNECTORS  
D2221, D2219, D2217, AND  
D2215.

EXAMINE THE CIRCUIT FROM  
CONNECTOR D667A, PINS C7  
AND C8, ON THE SAM, M525, TO  
CONNECTOR D2215, PINS 8 AND  
13 ON THE RIGHT STCM, M1608  
(WDM 27-41-21). REPAIR THE  
PROBLEMS THAT YOU FIND.

DO A CHECK OF THE STAB  
TRIM MANUAL-ELECTRIC OPERATION  
(AMM 27-41-00/501).

DO A CHECK OF THE CONTROL  
COLUMN CUTOUT SWITCHES  
(AMM 27-41-00/501).

### STAB TRIM Warning Indication Figure 106A (Sheet 4)

EFFECTIVITY  
AIRPLANES WITH ALTERNATE STAB TRIM  
SWITCHES ON THE CONTROL STAND

27-48-00

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FROM SHEET 3  
 (BLOCK 24)

 28 NO 28V DC ON PIN 2 OF BOTH  
 CONNECTORS D2217 AND D2215?

 YES → 60 CONNECT THE CONNECTORS  
 D2221, D2219, D2217, D2215 AND  
 REPLACE THE RIGHT STLM, M520  
 (AMM 27-48-01/401).

 NO  
 SEE SHEET 6  
 (BLOCK 29)

 IF THE PROBLEM CONTINUES,  
 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D667A, PINS C7  
 AND C8, ON THE SAM, M525, TO  
 CONNECTOR D2215, PINS 8 AND  
 13 ON THE RIGHT STCM, M1608.

 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D667A, PINS F9 AND  
 F10 ON THE SAM, M525, TO  
 CONNECTOR D239, PINS 16 AND 20  
 ON RIGHT STLM, M520; AND  
 CONNECTOR D239, PINS 17 AND  
 21, TO CONNECTOR D2217, PINS 2  
 AND 6 (WDM 27-41-21). REPAIR  
 THE PROBLEMS THAT YOU FIND.

 IF THE PROBLEM IS  
 DEPENDENT ON FLAP POSITION,  
 EXAMINE THE RIGHT TRIM LIMIT  
 SELECT RELAY, K1071, AND/OR  
 THE CIRCUIT ASSOCIATED WITH  
 K1071.

 DO A CHECK OF THE STAB  
 TRIM MANUAL-ELECTRIC OPERATION  
 (AMM 27-41-00/501).

 DO A CHECK OF THE CONTROL  
 COLUMN CUTOUT SWITCHES  
 (AMM 27-41-00/501).

**STAB TRIM Warning Indication**  
**Figure 106A (Sheet 5)**
**EFFECTIVITY**  
 AIRPLANES WITH ALTERNATE STAB TRIM  
 SWITCHES ON THE CONTROL STAND

**27-48-00**



## 767 FAULT ISOLATION/MAINT MANUAL

FROM SHEET 5  
(BLOCK 28)

NO

29 NO 28V DC ON PIN 2 OF  
CONNECTOR D2217?

NO

YES  
61 CONNECT THE CONNECTORS  
D2221, D2219, D2217, D2215 AND  
REPLACE THE RIGHT STLM, M520  
(AMM 27-48-01/401).

IF THE PROBLEM CONTINUES,  
EXAMINE THE CIRCUIT FROM  
CONNECTOR D667A, PINS F9  
AND F10, ON THE SAM, M525, TO  
CONNECTOR D239, PINS 16 AND  
20 ON THE RIGHT STLM, M520;  
AND CONNECTOR D239, PINS 17  
AND 21, TO CONNECTOR D2217,  
PINS 2 AND 6 (WDM 27-41-21).  
REPAIR THE PROBLEMS THAT YOU  
FIND.

IF THE PROBLEM IS  
DEPENDENT ON FLAP POSITION,  
EXAMINE THE RIGHT TRIM LIMIT  
SELECT RELAY, K1071, AND/OR  
THE CIRCUIT ASSOCIATED WITH  
K1071.

DO A CHECK OF THE STAB  
TRIM MANUAL-ELECTRIC OPERATION  
(AMM 27-41-00/501).

DO A CHECK OF THE CONTROL  
COLUMN CUTOUT SWITCHES  
(AMM 27-41-00/501).

62 CONNECT THE CONNECTORS  
D2221, D2219, D2217, AND  
D2215.

EXAMINE THE CIRCUIT FROM  
CONNECTOR D667A, PINS C7  
AND C8, ON THE SAM, M525, TO  
CONNECTOR D2215, PINS 8 AND  
13 ON THE RIGHT STCM, M1608  
(WDM 27-41-21). REPAIR THE  
PROBLEMS THAT YOU FIND.

DO A CHECK OF THE STAB  
TRIM MANUAL-ELECTRIC OPERATION  
(AMM 27-41-00/501).

DO A CHECK OF THE CONTROL  
COLUMN CUTOUT SWITCHES  
(AMM 27-41-00/501).

### STAB TRIM Warning Indication Figure 106A (Sheet 6)

EFFECTIVITY  
AIRPLANES WITH ALTERNATE STAB TRIM  
SWITCHES ON THE CONTROL STAND

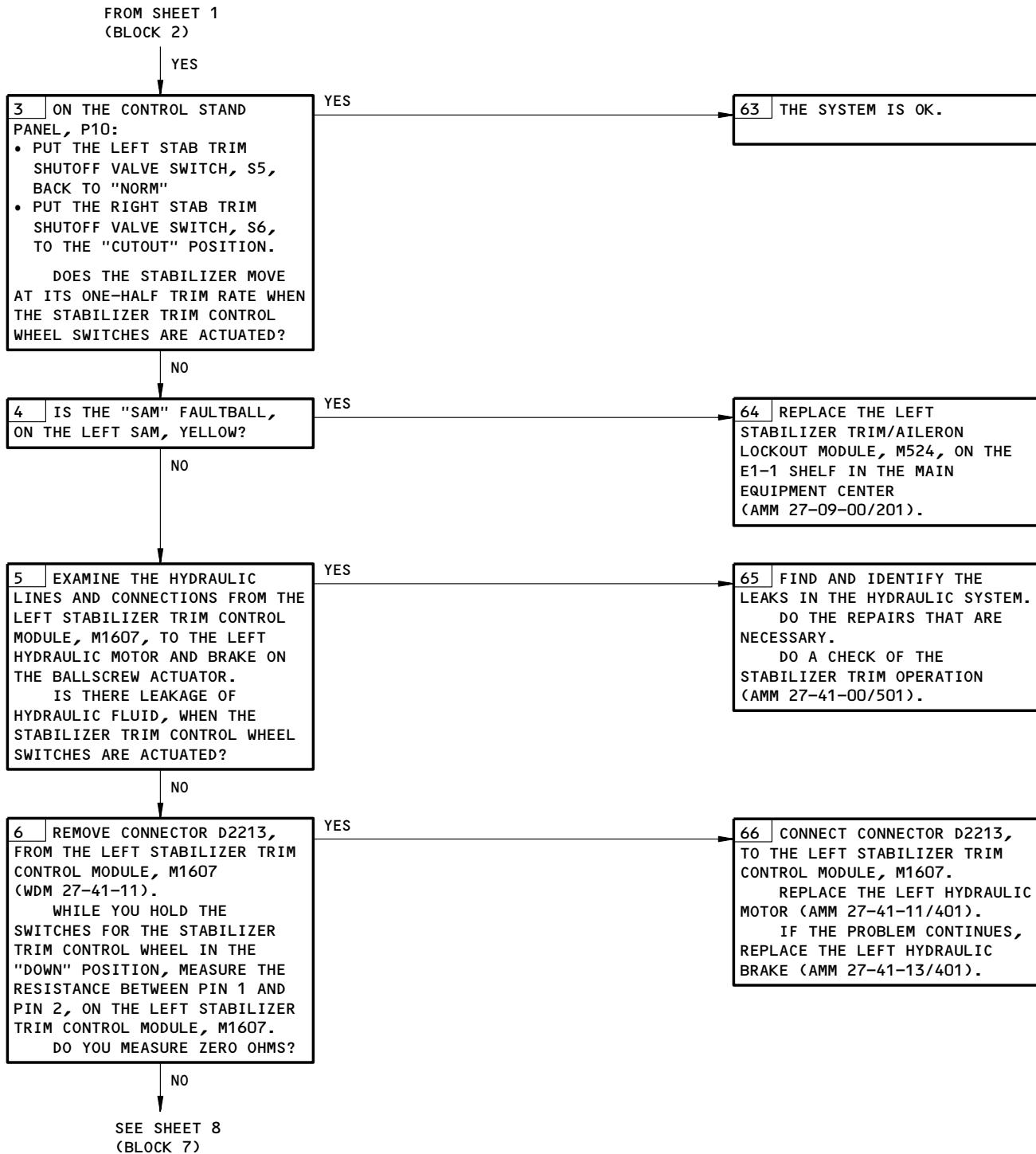
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STAB TRIM Warning Indication  
Figure 106A (Sheet 7)

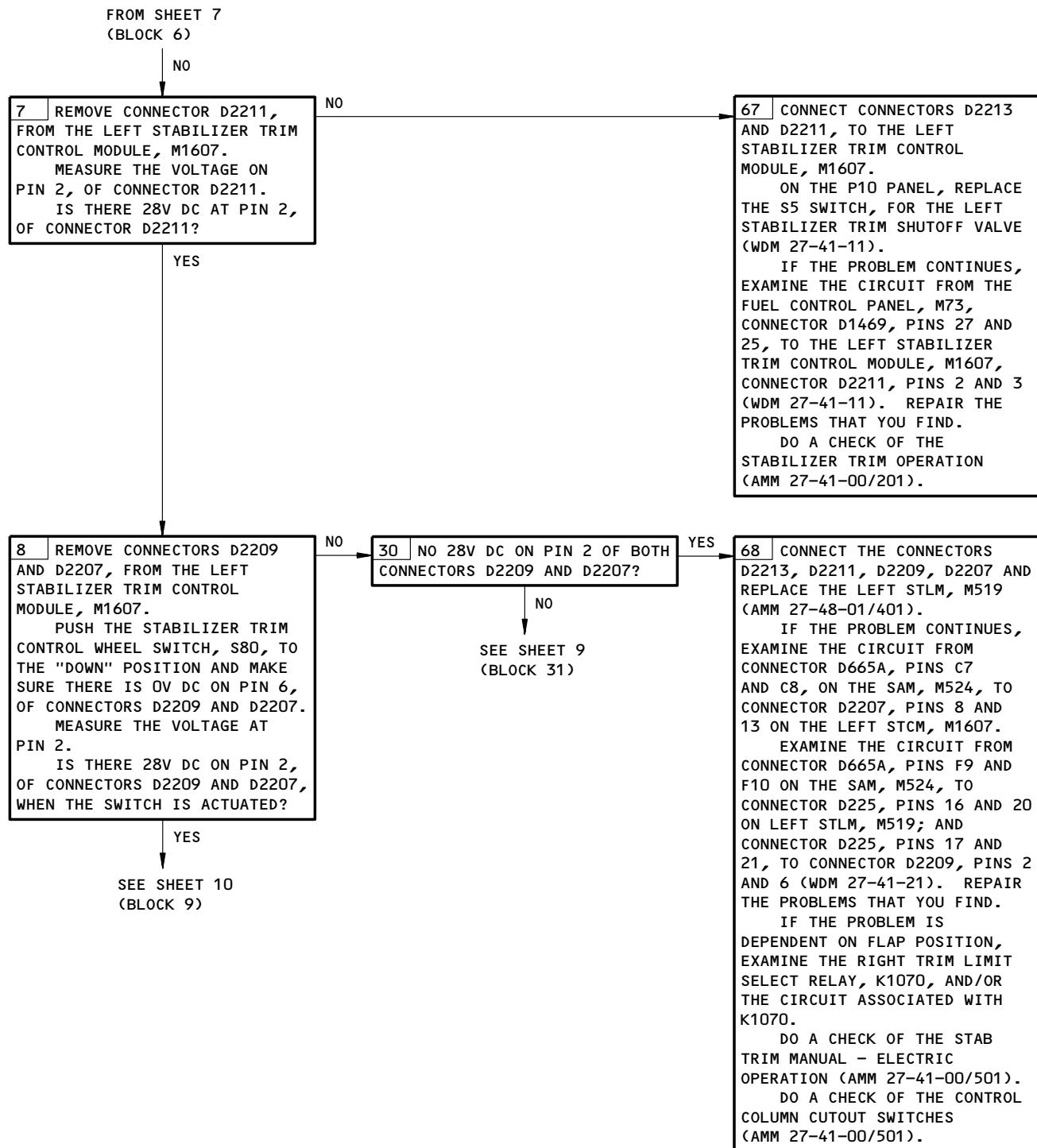
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EFFECTIVITY  
AIRPLANES WITH ALTERNATE STAB TRIM  
SWITCHES ON THE CONTROL STAND

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STAB TRIM Warning Indication  
Figure 106A (Sheet 8)

EFFECTIVITY  
AIRPLANES WITH ALTERNATE STAB TRIM  
SWITCHES ON THE CONTROL STAND

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FROM SHEET 8  
 (BLOCK 30)

NO

 31 NO 28V DC ON PIN 2 OF  
 CONNECTOR D2209?

YES

 69 CONNECT THE CONNECTORS  
 D2213, D2211, D2209, D2207 AND  
 REPLACE THE LEFT STLM, M519  
 (AMM 27-48-01/401).

 IF THE PROBLEM CONTINUES,  
 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D665A, PINS F9  
 AND F10, ON THE SAM, M524, TO  
 CONNECTOR D225, PINS 16 AND  
 20 ON THE LEFT STLM, M519; AND  
 CONNECTOR D225, PINS 17 AND  
 21, TO CONNECTOR D2209, PINS 2  
 AND 6 (WDM 27-41-21). REPAIR  
 THE PROBLEMS THAT YOU FIND.

 IF THE PROBLEM IS  
 DEPENDENT ON FLAP POSITION,  
 EXAMINE THE RIGHT TRIM LIMIT  
 SELECT RELAY, K1070, AND/OR  
 THE CIRCUIT ASSOCIATED WITH  
 K1070.

 DO A CHECK OF THE STAB  
 TRIM MANUAL - ELECTRIC  
 OPERATION (AMM 27-41-00/501).

 DO A CHECK OF THE CONTROL  
 COLUMN CUTOUT SWITCHES  
 (AMM 27-41-00/501).

NO

 70 CONNECT THE CONNECTORS  
 D2213, D2211, D2209, D2207.  
 EXAMINE THE CIRCUIT FROM  
 CONNECTOR D665A, PINS C7 AND  
 C8, ON THE SAM, M524, TO  
 CONNECTOR D2207, PINS 8 AND  
 13 ON THE LEFT STCM, M1607  
 (WDM 27-41-21). REPAIR THE  
 PROBLEMS THAT YOU FIND.

 DO A CHECK OF THE STAB  
 TRIM MANUAL - ELECTRIC  
 OPERATION (AMM 27-41-00/501).

 DO A CHECK OF THE CONTROL  
 COLUMN CUTOUT SWITCHES  
 (AMM 27-41-00/501).

**STAB TRIM Warning Indication**  
**Figure 106A (Sheet 9)**
**EFFECTIVITY** \_\_\_\_\_

 AIRPLANES WITH ALTERNATE STAB TRIM  
 SWITCHES ON THE CONTROL STAND

**27-48-00**

FROM SHEET 8  
(BLOCK 8)

YES

9  PUSH THE STABILIZER TRIM CONTROL WHEEL SWITCH, S80, TO THE "UP" POSITION AND MAKE SURE THERE IS OV DC ON PIN 2, OF CONNECTORS D2209 AND D2207.  
MEASURE THE VOLTAGE ON PIN 6, OF CONNECTORS D2209 AND D2207.  
IS THERE 28V DC AT PIN 6, WHEN THE SWITCH IS ACTUATED?

YES

71  REPLACE THE LEFT STABILIZER TRIM CONTROL MODULE, M1607 (AMM 27-41-05/401).

NO

10  NO 28V DC ON PIN 6 OF BOTH CONNECTORS D2209 AND D2207?

YES

72  CONNECT THE CONNECTORS D2213, D2211, D2209, D2207 AND REPLACE THE LEFT STLM, M519 (AMM 27-48-01/401).

IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM CONNECTOR D665A, PINS C7 AND C8, ON THE SAM, M524, TO CONNECTOR D2207, PINS 8 AND 13 ON THE LEFT STCM, M1607.

EXAMINE THE CIRCUIT FROM CONNECTOR D665A, PINS F9 AND F10 ON THE SAM, M524, TO CONNECTOR D225, PINS 16 AND 20 ON LEFT STLM, M519; AND CONNECTOR D225, PINS 17 AND 21, TO CONNECTOR D2209, PINS 2 AND 6 (WDM 27-41-21). REPAIR THE PROBLEMS THAT YOU FIND.

IF THE PROBLEM IS DEPENDENT ON FLAP POSITION, EXAMINE THE RIGHT TRIM LIMIT SELECT RELAY, K1070, AND/OR THE CIRCUIT ASSOCIATED WITH K1070.

DO A CHECK OF THE STAB TRIM MANUAL - ELECTRIC OPERATION (AMM 27-41-00/501).

DO A CHECK OF THE CONTROL COLUMN CUTOUT SWITCHES (AMM 27-41-00/501).

SEE SHEET 11  
(BLOCK 11)

M16595

**STAB TRIM Warning Indication**  
**Figure 106A (Sheet 10)**

EFFECTIVITY  
AIRPLANES WITH ALTERNATE STAB TRIM  
SWITCHES ON THE CONTROL STAND

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FROM SHEET 10  
(BLOCK 10)

NO

11 NO 28V DC ON PIN 6 OF  
CONNECTOR D2209?

YES

NO

73 CONNECT THE CONNECTORS  
D2213, D2211, D2209, D2207 AND  
REPLACE THE LEFT STLM, M519  
(AMM 27-48-01/401).

IF THE PROBLEM CONTINUES,  
EXAMINE THE CIRCUIT FROM  
CONNECTOR D665A, PINS F9  
AND F10, ON THE SAM, M524, TO  
CONNECTOR D225, PINS 16 AND  
20 ON THE LEFT STLM, M519; AND  
CONNECTOR D225, PINS 17 AND  
21, TO CONNECTOR D2209, PINS 2  
AND 6 (WDM 27-41-21). REPAIR  
THE PROBLEMS THAT YOU FIND.

IF THE PROBLEM IS  
DEPENDENT ON FLAP POSITION,  
EXAMINE THE RIGHT TRIM LIMIT  
SELECT RELAY, K1070, AND/OR  
THE CIRCUIT ASSOCIATED WITH  
K1070.

DO A CHECK OF THE STAB  
TRIM MANUAL - ELECTRIC  
OPERATION (AMM 27-41-00/501).

DO A CHECK OF THE CONTROL  
COLUMN CUTOUT SWITCHES  
(AMM 27-41-00/501).

74 CONNECT THE CONNECTORS  
D2213, D2211, D2209, D2207.  
EXAMINE THE CIRCUIT FROM  
CONNECTOR D665A, PINS C7 AND  
C8, ON THE SAM, M524, TO  
CONNECTOR D2207, PINS 8 AND  
13 ON THE LEFT STCM, M1607  
(WDM 27-41-21). REPAIR THE  
PROBLEMS THAT YOU FIND.

DO A CHECK OF THE STAB  
TRIM MANUAL - ELECTRIC  
OPERATION (AMM 27-41-00/501).

DO A CHECK OF THE CONTROL  
COLUMN CUTOUT SWITCHES  
(AMM 27-41-00/501).

STAB TRIM Warning Indication  
Figure 106A (Sheet 11)

EFFECTIVITY

AIRPLANES WITH ALTERNATE STAB TRIM  
SWITCHES ON THE CONTROL STAND

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**"STAB TRIM"  
MESSAGE AND LIGHT  
DISPLAYED –  
STABILIZER TRIM  
RATE NORMAL**

**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:

EICAS (AMM 31-41-00/501)  
AUTOPILOT (FLT CONTROL)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

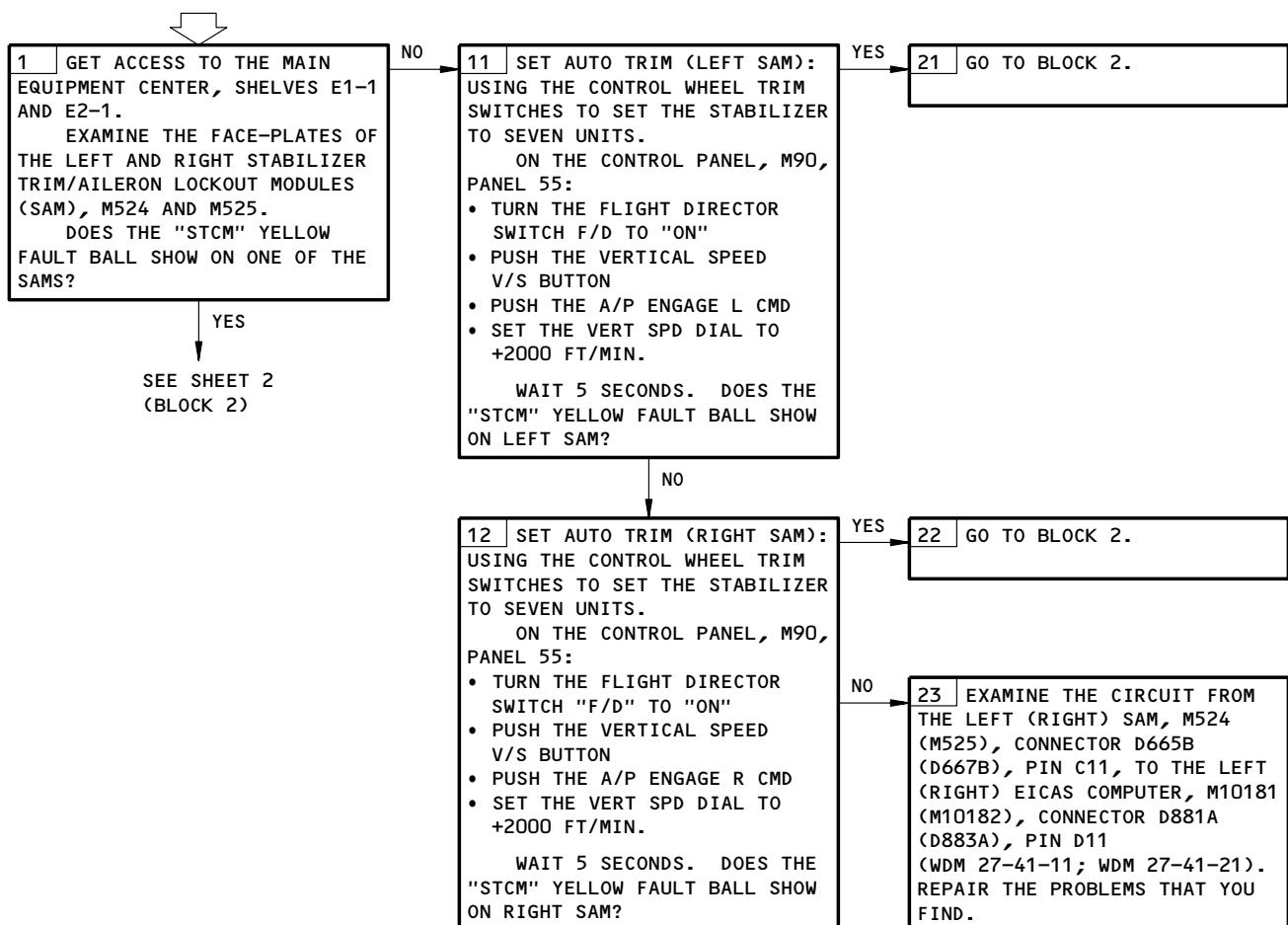
11C6, 11C7, 11C8, 11C9, 11C12, 11C13, 11G17, 11G18,  
11G26, 11G27, 11H11, 11H20

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

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

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

IRUs MUST BE POWERED UP AND ALIGNED



**STAB TRIM Message and Light Displayed – Stabilizer Trim Rate Normal**  
Figure 107 (Sheet 1)

EFFECTIVITY

ALL

**27-48-00**

FROM SHEET 1  
(BLOCK 1)

YES

2 REPLACE THE HYDRAULIC BRAKE PRESSURE SWITCH, S1, ON THE APPLICABLE STABILIZER TRIM CONTROL MODULE,  M211 OR M212;  M1607 (M1608) (WDM 27-41-11; WDM 27-41-21). PUSH THE RESET BUTTON ON LEFT (RIGHT) SAM, M524 (M525), TO CLEAR THE FAULT BALL. RECHECK: SET AUTO TRIM (LEFT SAM): USING THE CONTROL WHEEL TRIM SWITCHES TO SET THE STABILIZER TO SEVEN UNITS. ON THE CONTROL PANEL, M90, PANEL 55:

- TURN FLIGHT DIRECTOR SWITCH F/D TO "ON"
- PUSH THE VERTICAL SPEED V/S BUTTON
- PUSH THE A/P ENGAGE L CMD
- SET THE VERT SPD DIAL TO +2000 FT/MIN.

WAIT 5 SECONDS. DOES THE "STCM" YELLOW FAULT BALL SHOW ON LEFT SAM?

YES

24 EXAMINE THE CIRCUIT FROM THE LEFT (RIGHT) STABILIZER TRIM CONTROL MODULE,  M211 (M212);  M1607 (M1608), CONNECTOR D227 (D241), PIN 1, TO THE LEFT (RIGHT) SAM, M524 (M525), CONNECTOR D665A (D667A), PIN C9 (WDM 27-41-11; WDM 27-41-21). REPAIR THE PROBLEMS THAT YOU FIND.

NO

3 SET AUTO TRIM (RIGHT SAM): USING THE CONTROL WHEEL TRIM SWITCHES TO SET THE STABILIZER TO SEVEN UNITS. ON THE CONTROL PANEL, M90, PANEL 55:

- TURN FLIGHT DIRECTOR SWITCH F/D TO "ON"
- PUSH THE VERTICAL SPEED V/S BUTTON
- PUSH THE A/P ENGAGE R CMD
- SET THE VERT SPD DIAL TO +2000 FT/MIN.

WAIT 5 SECONDS. DOES THE "STCM" YELLOW FAULT BALL SHOW ON LEFT SAM?

YES

25 EXAMINE THE CIRCUIT FROM THE LEFT (RIGHT) STABILIZER TRIM CONTROL MODULE,  M211 (M212);  M1607 (M1608), CONNECTOR D227 (D241), PIN 1, TO THE LEFT (RIGHT) SAM, M524 (M525), CONNECTOR D665A (D667A), PIN C9 (WDM 27-41-11; WDM 27-41-21). REPAIR THE PROBLEMS THAT YOU FIND.

NO

26 THE SYSTEM IS OK.

 AIRPLANES WITH ALT STAB TRIM LEVERS  
 AIRPLANES WITH ALT STAB TRIM SWITCHES

STAB TRIM Message and Light Displayed – Stabilizer Trim Rate Normal  
Figure 107 (Sheet 2)

EFFECTIVITY

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**27-48-00**



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FAULT ISOLATION/MAINT MANUAL

TRAILING EDGE FLAP SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
ACTUATOR - BYPASS VALVE ROTARY	2	1	RIGHT GEAR WHEEL WELL, TE FLAP BYPASS VALVE	27-51-32
ACTUATOR - INBOARD FLAP INBOARD	4	2	195FL,195GL,195HL,195JL,195KL, 196FR,196GR,196HR,196JR,196KR	27-51-05
ACTUATOR - INBOARD FLAP OUTBOARD	3	2	571EL,671EL,571ER,671ER	27-51-11
ACTUATOR - FLAP LOAD RELIEF, M576	2	1	RIGHT WHEEL WELL, AFT BULKHEAD	27-51-30
ACTUATOR - OUTBOARD FLAP	3	4	572BB,672BB,573BB,673BB	27-51-22
CIRCUIT BREAKERS	1		FLIGHT COMPARTMENT, P6	
ALTN FLAP PWR, C323		1	6D24	*
ALTN SLAT INBD PWR, C324		1	6D21	*
ALTN SLAT OUTBD PWR, C325		1	6F24	*
CIRCUIT BREAKERS	1		FLIGHT COMPARTMENT, P11	
AIR DATA AOA SENSOR L, C1		1	11A11	*
AIR DATA AOA SENSOR R, C3		1	11F31	*
AIR DATA BARO CORRECT L, C2		1	11A12	*
AIR DATA BARO CORRECT R, C4		1	11F32	*
AIR DATA CMPTR L, C625		1	11A10	*
AIR DATA CMPTR R, C626		1	11F30	*
FLAP ALTN CONT, C1027		1	11J24	*
FLAP LOAD RELIEF, C1022		1	11J13	*
FLAP POS IND L, C1008		1	11J15	*
FLAP POS IND R, C1522		1	11J16	*
FLAP SHUTOFF, C1019		1	11J14	*
FLAP SLAT ELEC UNIT 1 CONT, C1025		1	11C16	*
FLAP SLAT ELEC UNIT 2 CONT, C1521		1	11G16	*
FLAP SLAT ELEC UNIT 3 CONT, C1036		1	11G23	*
FLAP SLAT ELEC UNIT 1 SENSOR, C1037		1	11C15	*
FLAP SLAT ELEC UNIT 2 SENSOR, C1524		1	11G15	*
FLAP SLAT ELEC UNIT 3 SENSOR, C1038		1	11G22	*
FLAP/STAB POS SENSING C, C1025		1	11C14	*
FLAP/STAB POS SENSING L, C1523		1	11J17	*
FLAP/STAB POS SENSING R, C1526		1	11J26	*
FLIGHT CONTROLS FLAP/SLAT POS IND, C1021		1	11C4	*
SLAT ALTN CONT INBD, C1028		1	11H23	*
SLAT ALTN CONT OUTBD, C1024		1	11H24	*
SLAT POS IND, C1001		1	11C10	*
SLAT SHUTOFF, C1020		1	11H14	*
TEST PROX SW, C1178		1	11T36	*
COMPUTER (REF 31-41-00, FIG. 101)				
EICAS L, M10181				
EICAS R, M10182				
COMPUTER (REF 34-12-00, FIG. 101)				
AIR DATA L, M100				
AIR DATA R, M101				
DOOR - FLAP FAIRING	5	2	WING/BODY FAIRING	27-51-07
TORQUE TUBE - TE FLAP	3	--	AFT BULKHEAD LEFT AND RIGHT WHEEL WELLS. AFT OF MAIN LANDING GEAR SUPPORT BEAM, SPOILER SUPPORT BEAM, WING REAR SPAR, SEE SPECIFIC FLAP FOR ACCESS PANELS	27-51-41

\* SEE THE WDM EQUIPMENT LIST

Trailing Edge Flap System - Component Index  
Figure 101 (Sheet 1)

EFFECTIVITY

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COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
FLAP - INBOARD	3	2	WING TRAILING EDGE	27-51-03
FLAP - INBOARD FLAP AFT	3	2	INBOARD FLAP TRAILING EDGE	27-51-06
FLAP - OUTBOARD	3	2	WING TRAILING EDGE	27-51-20
GEARBOX - ACTUATOR INPUT ANGLE	4	2	196FR,196GR,196HR,196JR,196KR, 195FL,195GL,195HL,195JL,195KL	27-51-42
GEARBOX - BULKHEAD ANGLE	4	2	AFT BULKHEAD MAIN WHEEL WELLS	27-51-36
GEARBOX - BULKHEAD TEE	4	2	AFT BULKHEAD MAIN WHEEL WELLS	27-51-35
GEARBOX - DROOP ANGLE, AILERON	3	2	561AB,661AB,561BB,661BB,561CB, 661CB	27-51-40
GEARBOX - FLAP LEVER POSITION TRANSMITTER	1	1	FLT COMPARTMENT, P10	27-51-26
GEARBOX - FLAP PDU	2	1	RIGHT WHEEL WELL, FLAP PDU	27-51-34
GEARBOX - OFFSET	4	2	555EB,655EB,555AB,655AB,552DB, 652DB	27-51-38
GEARBOX - OFFSET, TEE	3	2	555BB,655BB,555CB,655CB,555DB, 655DB,555EB,655EB	27-51-39
GEARBOX - SIDE OF BODY, ANGLE	4	2	AFT BULKHEAD MAIN WHEEL WELL	27-51-37
INDICATOR - (REF 27-58-00, FIG. 101) FLAP POSITION, N15				
LEVER - FLAP CONTROL	1	1	FLT COMPARTMENT, P10	27-51-25
LIGHT - TRAILING EDGE, L660	1	1	FLT COMPARTMENT, P3	*
MECHANISM - INBOARD FLAP	5	4	INBOARD FLAP FAIRING, 195FL, 195GL,195HL,195JL,195KL,196FR, 196GR,196HR,196JR,196KR	27-51-04
MECHANISM - OUTBOARD FLAP	6	4	OUTBOARD FLAP FAIRINGS 561KB,661KB	27-51-27
MODULE - (REF 27-58-00, FIG. 101) FLAP/STAB POS-C, M839 FLAP/STAB POS-L, M838 FLAP/STAB POS-R, M840				
MODULE - FLAP PDU CONTROL VALVE, M10182	2	1	RIGHT GEAR WHEEL WELL, BOTTOM OF FLAP PDU	27-51-32
MODULE - FLAP/SLAT SHUTOFF VALVE, V104	2	1	AFT END RIGHT GEAR WHEEL WELL	27-51-48
MOTOR - TE FLAP ELECTRIC, M547	2	1	RIGHT GEAR WHEEL WELL, FLAP PDU	27-51-34
MOTOR - TE FLAP HYDRAULIC	2	1	RIGHT GEAR WHEEL WELL, FLAP PDU	27-51-34
QUADRANT - TE FLAP AFT	2	1	FORWARD WALL AFT CARGO COMPART- MENT	27-51-30

\* SEE THE WDM EQUIPMENT LIST

**Trailing Edge Flap System - Component Index**  
**Figure 101 (Sheet 2)**

EFFECTIVITY

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COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
REGULATOR, FLAP/SLAT FLOW RELAYS - (31-01-33/101) ALTN TE FLAP ARM, K361 ALTN TE FLAPS EXT, K359 ALTN TE FLAPS RTR, K360 CONTROL FLAP LOAD RELIEF, K352 FLAP BYP VLV NORM, K623 FLAP FAILURE PROTECTION AND ASYM, K350 FLAP INTMD/RETRACT, K353 FLAP/REF TRANSFER, K216 RELAY - (31-01-36/101) TE FLAPS SHUTOFF, K351 RELAY - (31-01-37/101) FSEU FAULT, K730	2	1	RIGHT WHEEL WELL, FLAP/SLAT SHUTOFF VALVE MODULE	27-51-48
SWITCH - ALTN FLAP ARM, S601 SWITCH - ALTN FLAP/SLAT SELECT, S598 SWITCH - SLAT HYD PRESSURE, S846	1 1 8	1 1 1	FLIGHT COMPARTMENT, P3 FLIGHT COMPARTMENT, P3 RIGHT WHEEL WELL	* * 27-51-48
TRANSFORMER - (31-01-37/101) FSEU SENSOR, T191 TRANSMITTERS - (27-58-00/101) FLAP POSITION 1, M473 FLAP POSITION 3, M475 FLAP POSITION 4, M476 FLAP POSITION 5, M492 FLAP POSITION 8, M489 SLATS INTMD REF SIGNAL, M606 SLATS RETRACTED REF SIGNAL, M605				
TRANSMITTER - FLAP LEVER POSITION NO. 1, M604	1	1	FLIGHT COMPARTMENT, P10, FLAP LEVER POSITION GEARBOX	27-51-26
TRANSMITTER - FLAP LEVER POSITION NO. 2, M603	1	1	FLIGHT COMPARTMENT, P10, FLAP LEVER POSITION GEARBOX	27-51-26
UNIT - TE FLAP PDU CONTROL UNIT - FLAPS/SLATS ELEC, M545	2 6	1 1	RIGHT WHEEL WELL, TE FLAPS PDU 119AL, MAIN EQUIPMENT CENTER, E2-4	27-51-34 27-51-01
UNIT - TE FLAP POWER DRIVE VALVE - TE FLAPS, BYPASS, V105	1 2	1 1	AFT END RIGHT GEAR WHEEL WELL RIGHT GEAR WHEEL WELL, FLAP PDU CONTROL VALVE MODULE	27-51-33 27-51-32
VALVE - TE FLAP PRIORITY	2	1	RIGHT WHEEL WELL, FLAP/SLAT SHUTOFF VALVE MODULE	27-51-48
VALVE - TE FLAP SOLENOID, (YB6V1)	2	1	AFT END RIGHT GEAR WHEEL WELL. FLAP/SLAT SHUTOFF VALVE MODULE	27-51-48

\* SEE THE WDM EQUIPMENT LIST

Trailing Edge Flap System - Component Index  
Figure 101 (Sheet 3)

EFFECTIVITY

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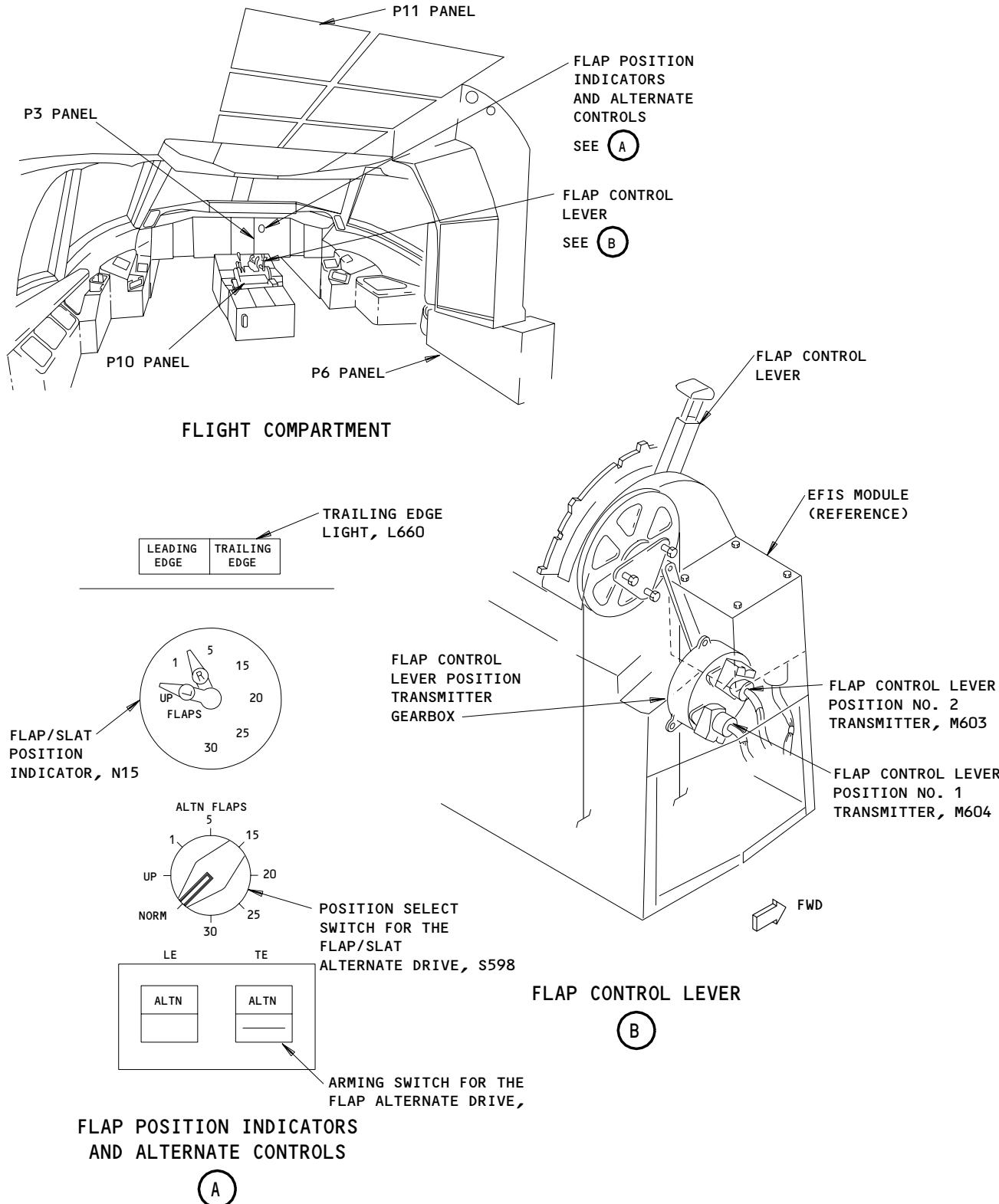
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Trailing Edge Flap System - Component Location  
Figure 102 (Sheet 1)

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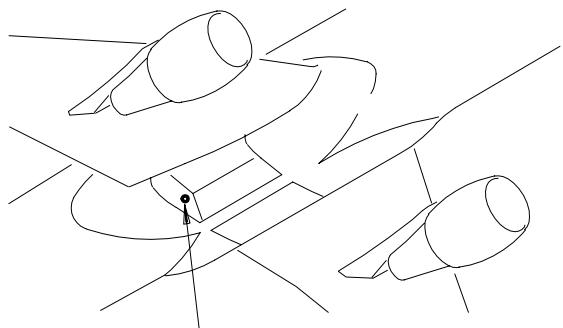
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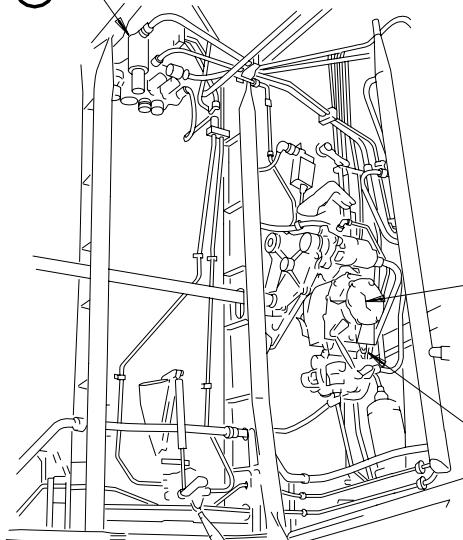
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RIGHT WHEEL WELL,  
AFT BULKHEAD  
SEE **C**

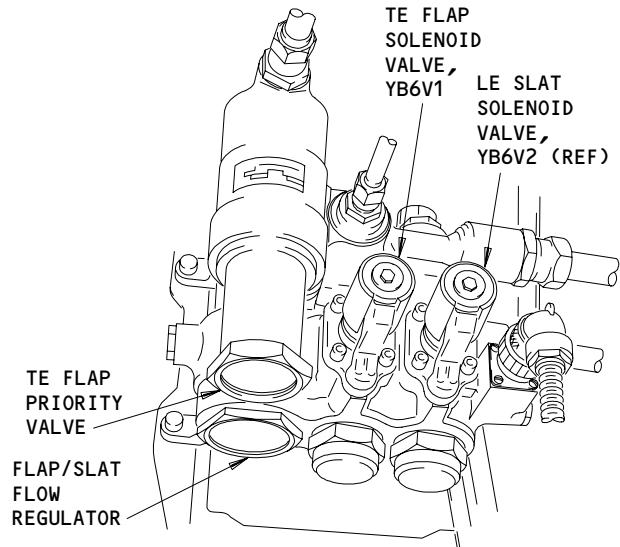
FLAP/SLAT SHUTOFF  
VALVE MODULE, V104  
SEE **D**



RIGHT WHEEL WELL, AFT BULKHEAD

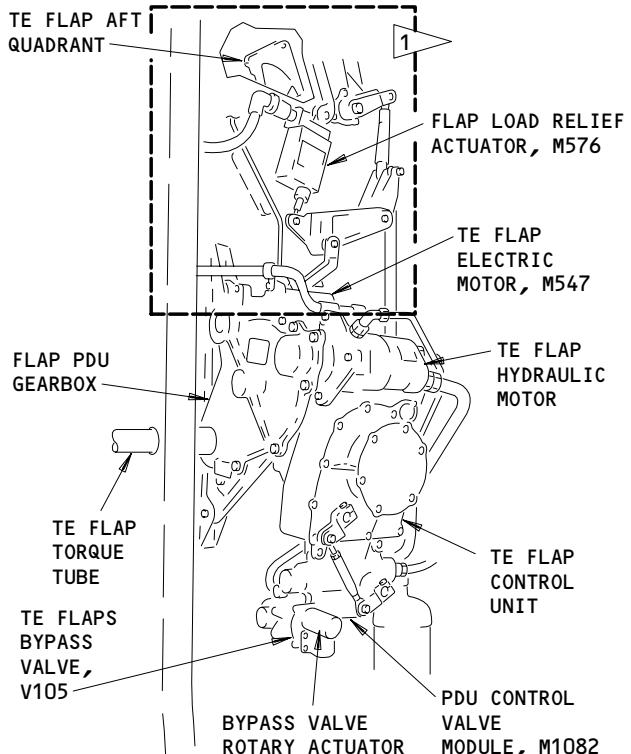
**C**

1 ▶ 767-200 AIRPLANES  
2 ▶ 767-300 AIRPLANES



FLAP/SLAT SHUTOFF VALVE MODULE, V104

**D**



TE FLAP PDU COMPONENTS

**E**

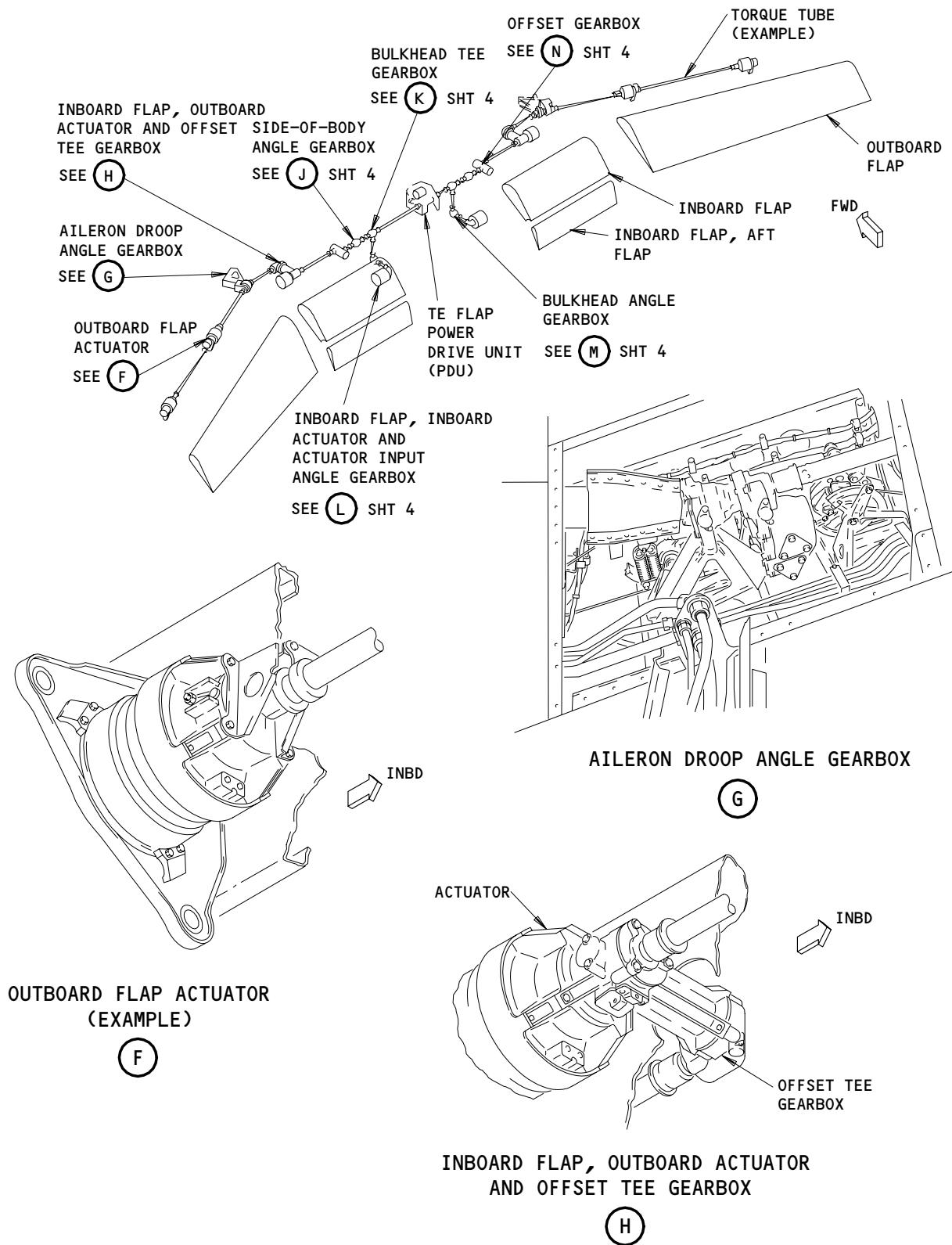
Trailing Edge Flap System - Component Location  
Figure 102 (Sheet 2)

EFFECTIVITY

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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL



Trailing Edge Flap System - Component Location  
Figure 102 (Sheet 3)

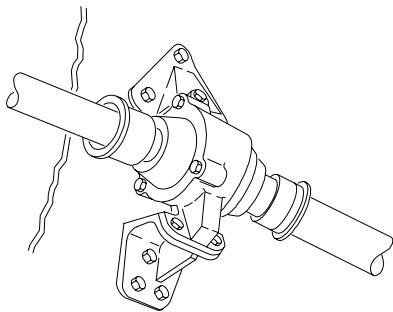
EFFECTIVITY

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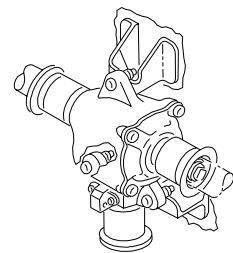
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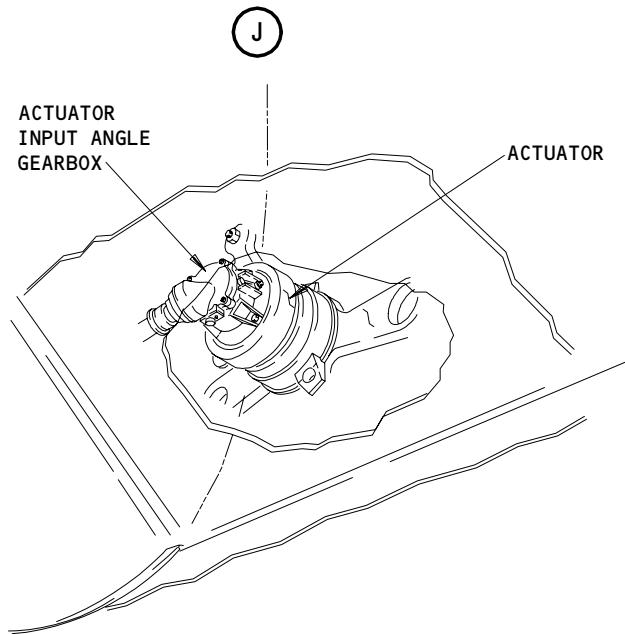
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SIDE-OF-BODY ANGLE GEARBOX

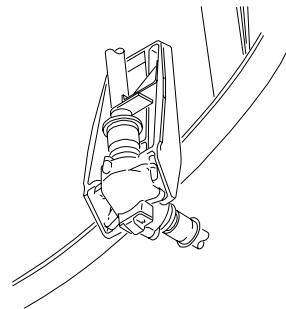


BULKHEAD TEE GEARBOX



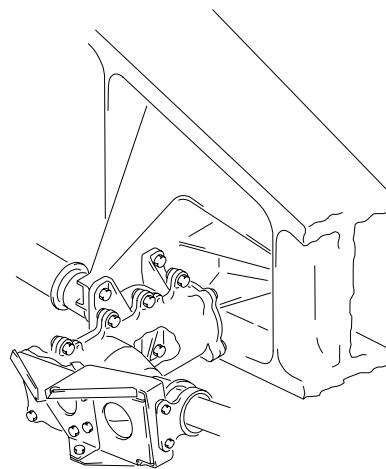
INBOARD FLAP, INBOARD ACTUATOR AND ACTUATOR INPUT ANGLE GEARBOX

(J)



BULKHEAD ANGLE GEARBOX

(K)



OFFSET GEARBOX

(L)

Trailing Edge Flap System - Component Location (Details from Sht 3)  
Figure 102 (Sheet 4)

EFFECTIVITY

ALL

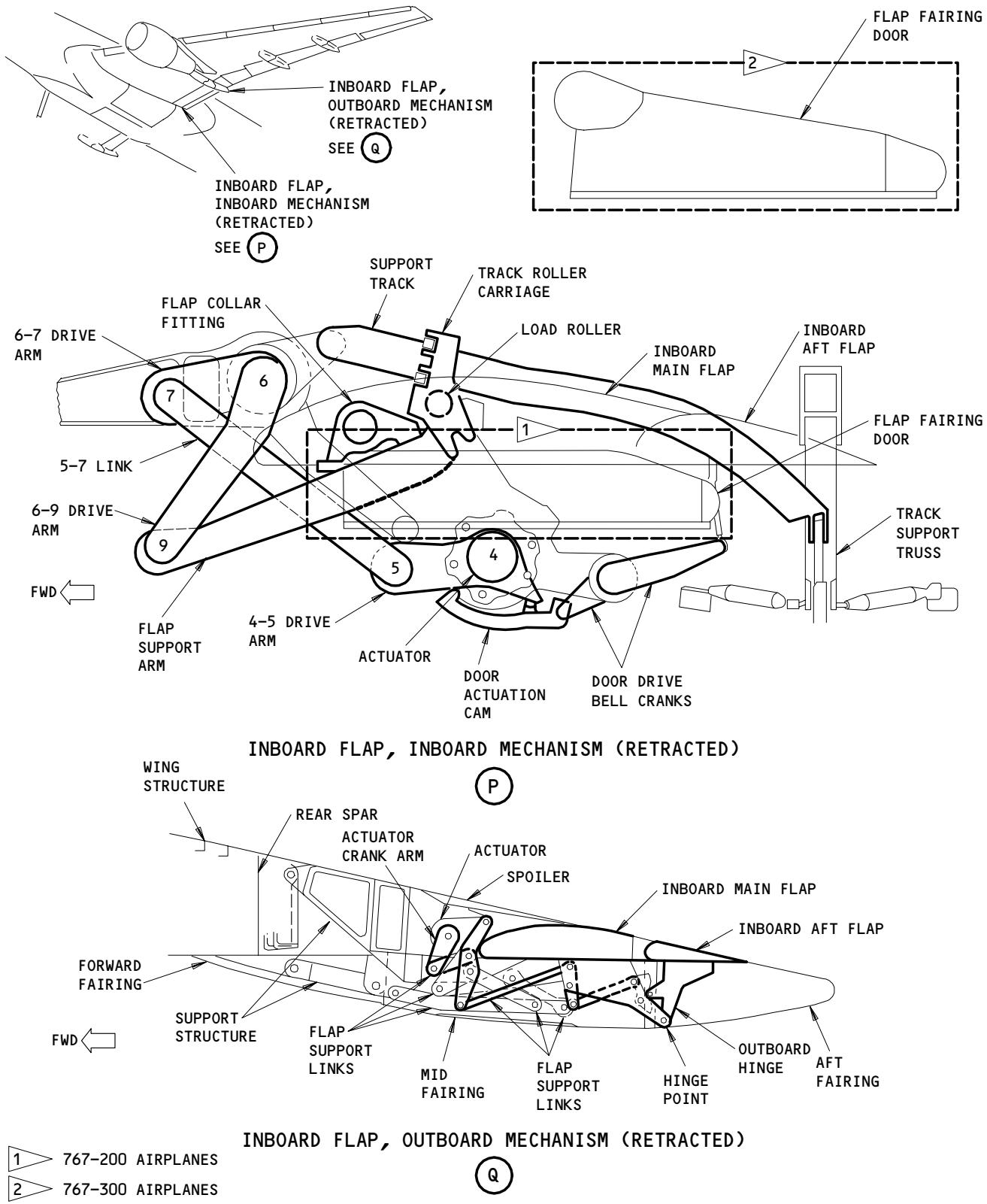
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FAULT ISOLATION/MAINT MANUAL



Trailing Edge Flap System - Component Location  
Figure 102 (Sheet 5)

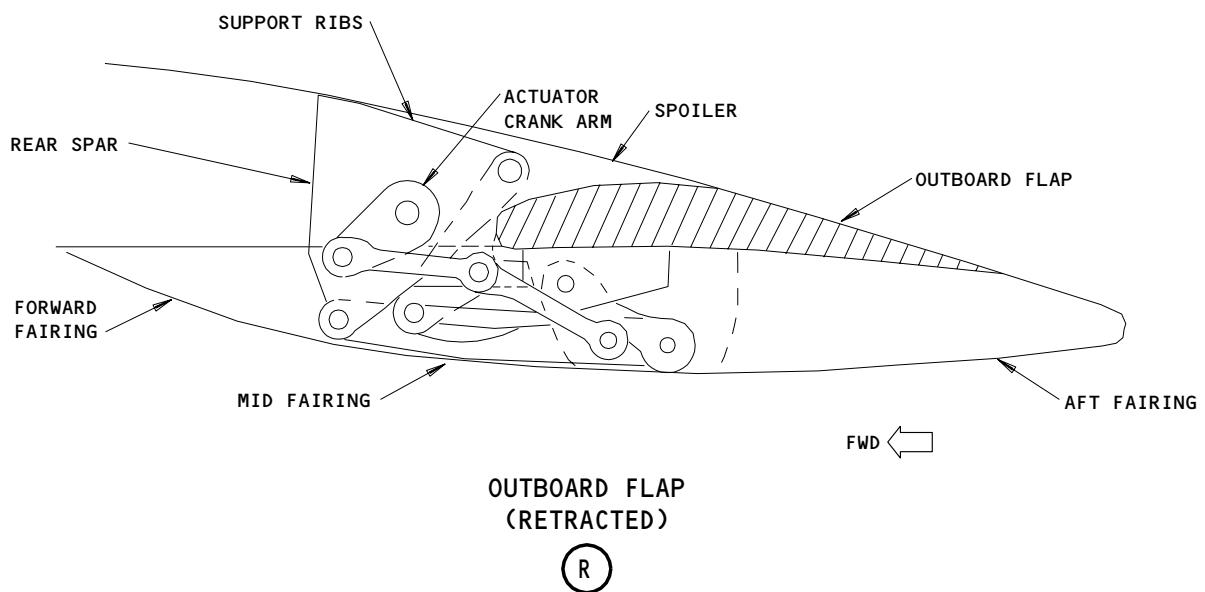
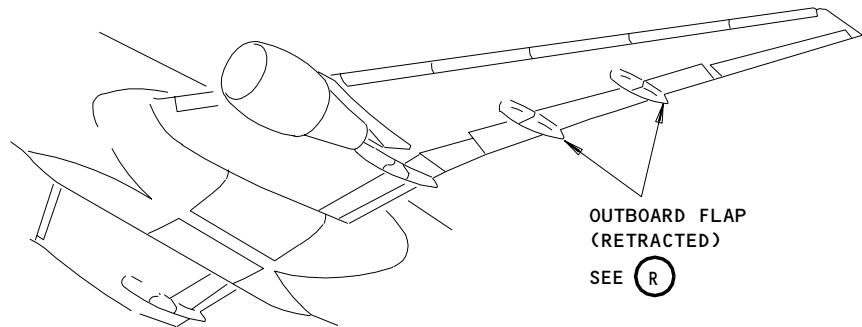
EFFECTIVITY

ALL

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Trailing Edge Flap System - Component Location  
Figure 102 (Sheet 6)

EFFECTIVITY

ALL

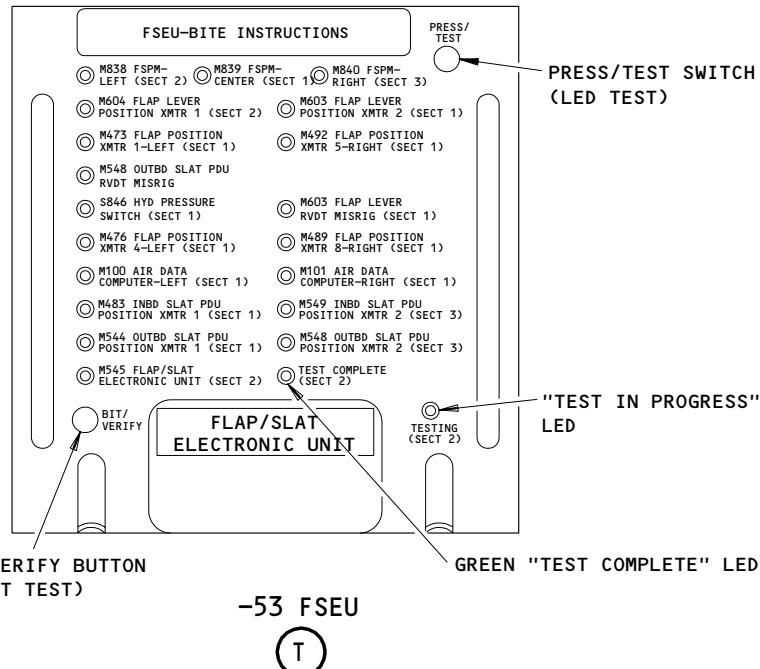
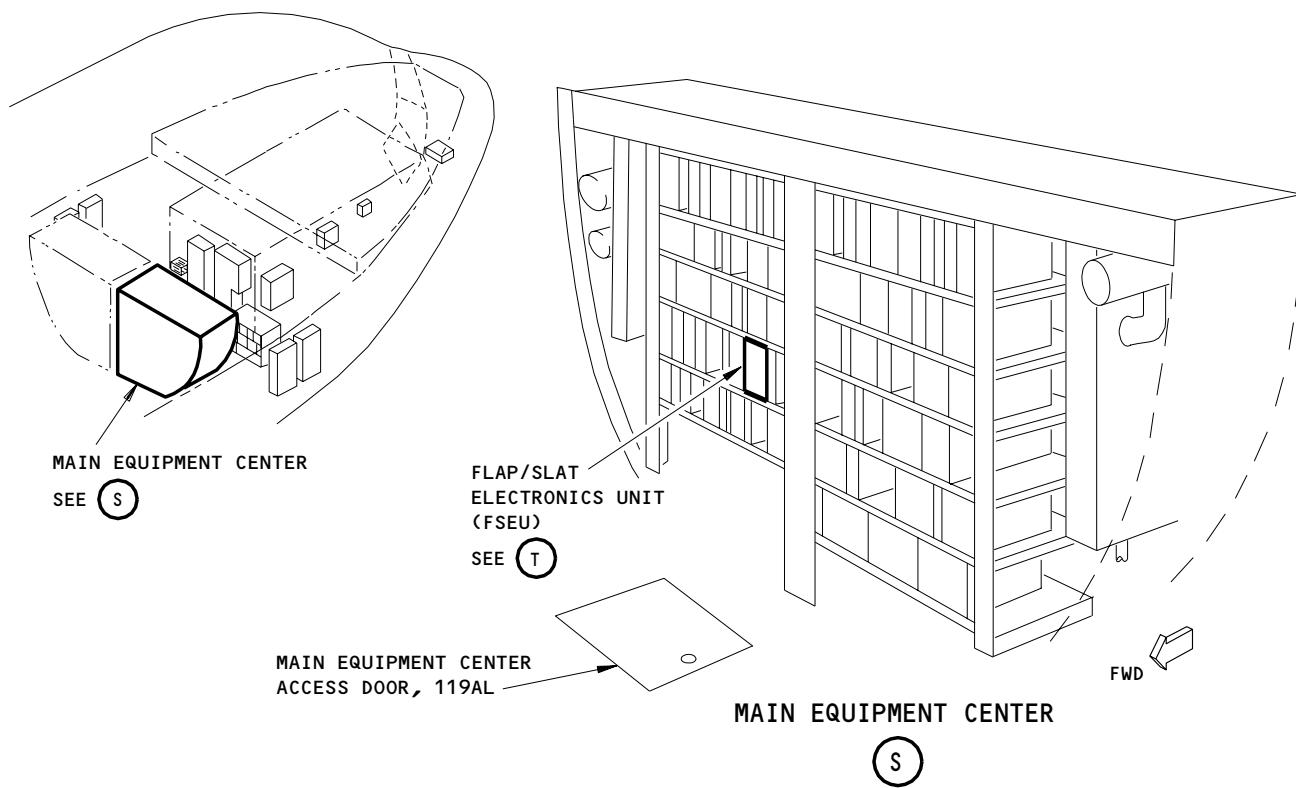
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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL

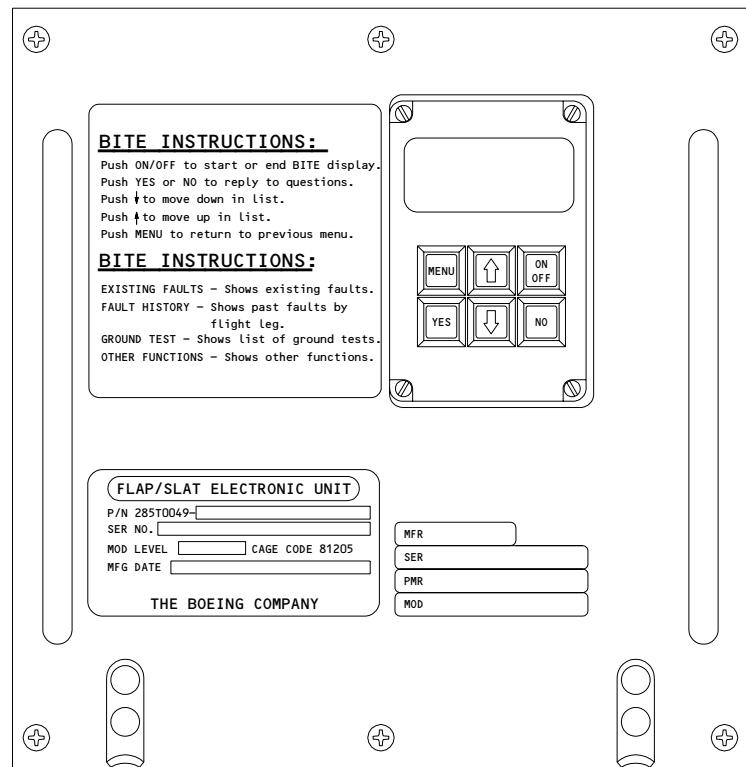
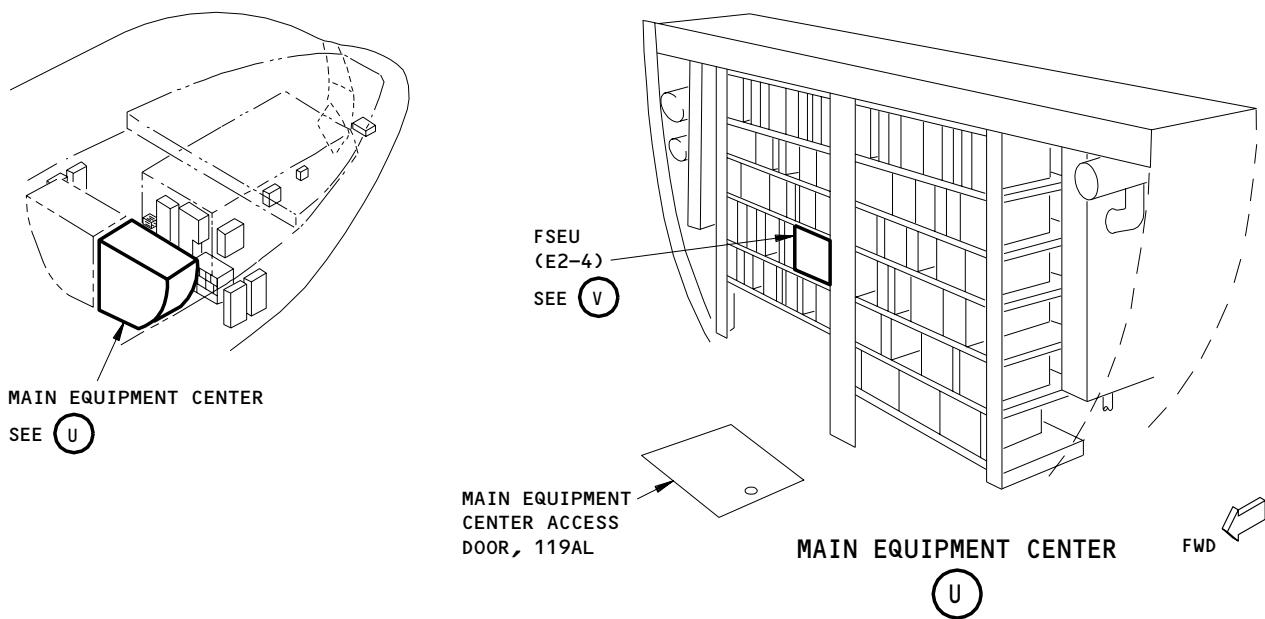


Trailing Edge Flap System - Component Location  
Figure 102 (Sheet 7)

EFFECTIVITY  
AIRPLANES WITH A -53 FSEU

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FAULT ISOLATION/MAINT MANUAL



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Trailing Edge Flap System - Component Location  
Figure 102 (Sheet 8)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

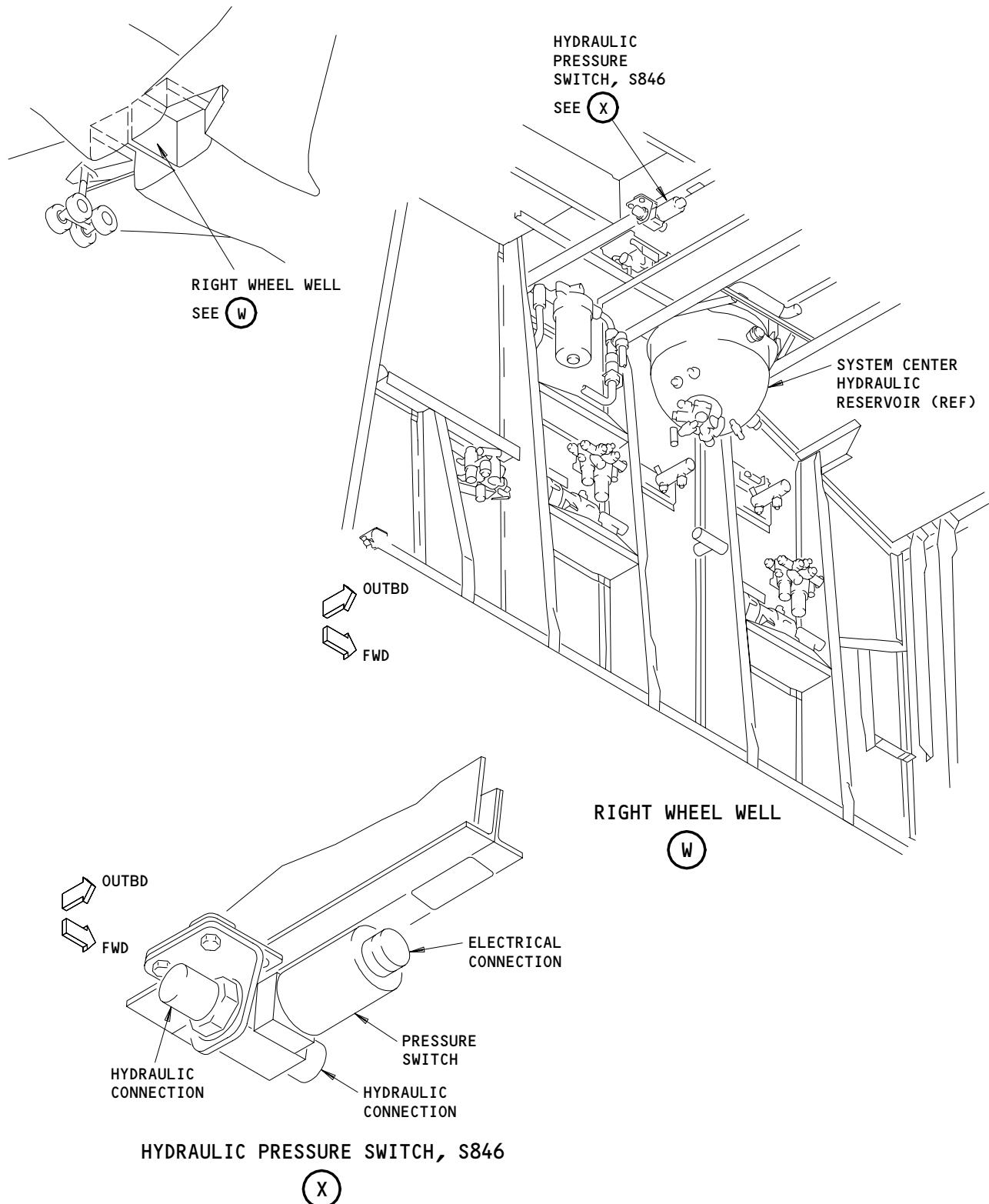
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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL



Trailing Edge Flap System - Component Location  
Figure 102 (Sheet 9)

EFFECTIVITY

ALL

27-51-00

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FLAP CONTROL LEVER AT 30-UNIT DETENT. FLAPS RETRACTED AT THE WRONG AIRSPEED  
 1 DURING A LOAD RELIEF CONDITION, OR FLAPS EXTEND AT THE WRONG AIRSPEED  
 2 AFTER A LOAD RELIEF CONDITION.

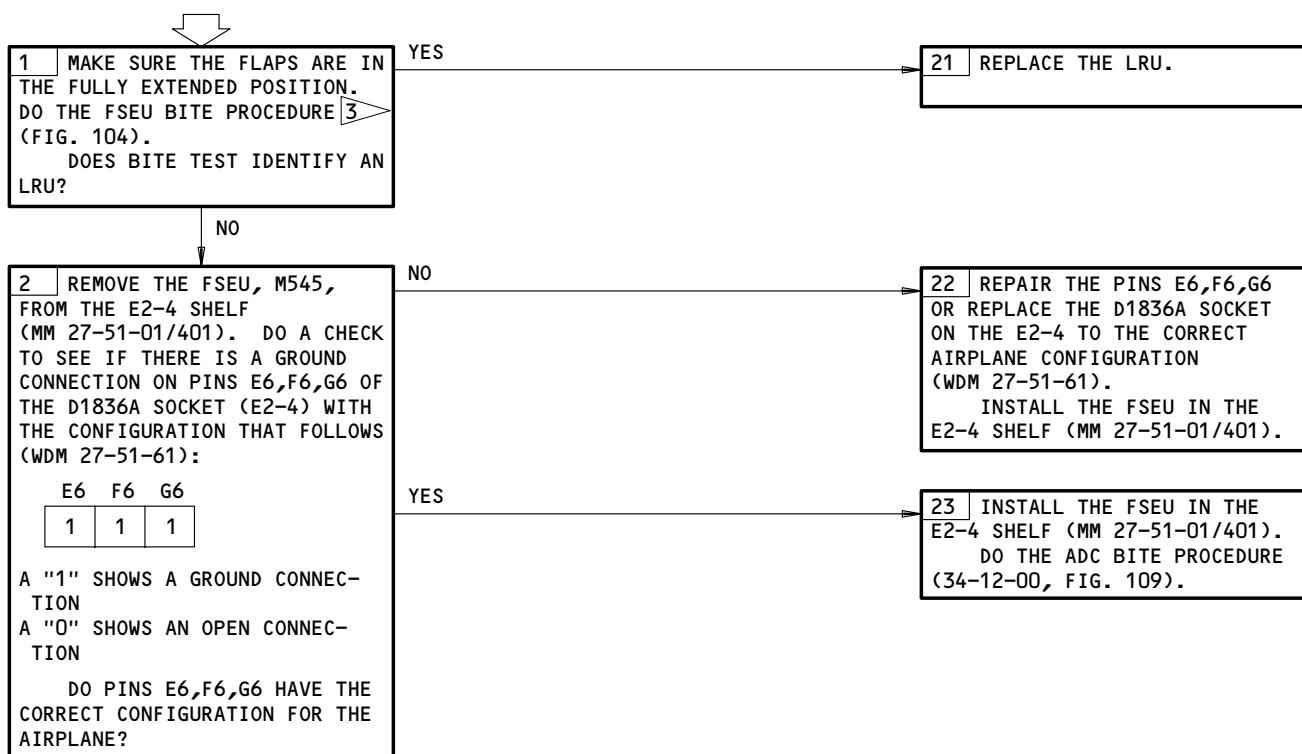
**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
 AIR DATA COMPUTER (MM 34-12-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D24,11A10,11A11,11A12,11C15,11C16,11E01,11E02,  
 11E22,11E23,11F30,11F31,11F32,11G15,11G16,11G22,  
 11G23,11J13,11J14,11J15,11J16,11J24

MAKE SURE THE AIRPLANE IS IN THE CONFIGURATION THAT FOLLOWS:

ELECTRICAL POWER IS ON (MM 24-22-00/201)  
 HYDRAULIC POWER IS ON (MM 29-11-00/201)



- 1 FLAP CONTROL LEVER AT 30 UNITS, THE CORRECT FLAP RETRACT AIRSPEED IS: 171-174 KNOTS
- 2 FLAP CONTROL LEVER AT 30 UNITS, THE CORRECT FLAP EXTEND AIRSPEED IS: 167-170 KNOTS
- 3 THE FSEU BITE TEST WILL EXAMINE THE FSEU M545 AND THE CONTINUITY OF THE CIRCUITS BETWEEN FSEU AND THE FLAP POSITION TRANSMITTERS 1,4,5,8 (M473,M476,M492 AND M489).

Flap Control Lever at 30-Unit Detent. Flaps Retracted at the Wrong Airspeed 1 During a Load Relief Condition, or Flaps Extended at the Wrong Airspeed 2 After a Load Relief Condition.

Figure 103

EFFECTIVITY  
 767-200 AIRPLANES

**27-51-00**

754682

FLAP CONTROL LEVER AT 25- OR 30-UNIT DETENT. FLAPS RETRACTED AT THE WRONG AIRSPEED

- 1 DURING A LOAD RELIEF CONDITION, OR FLAPS EXTEND AT THE WRONG AIRSPEED
- 2 AFTER A LOAD RELIEF CONDITION.

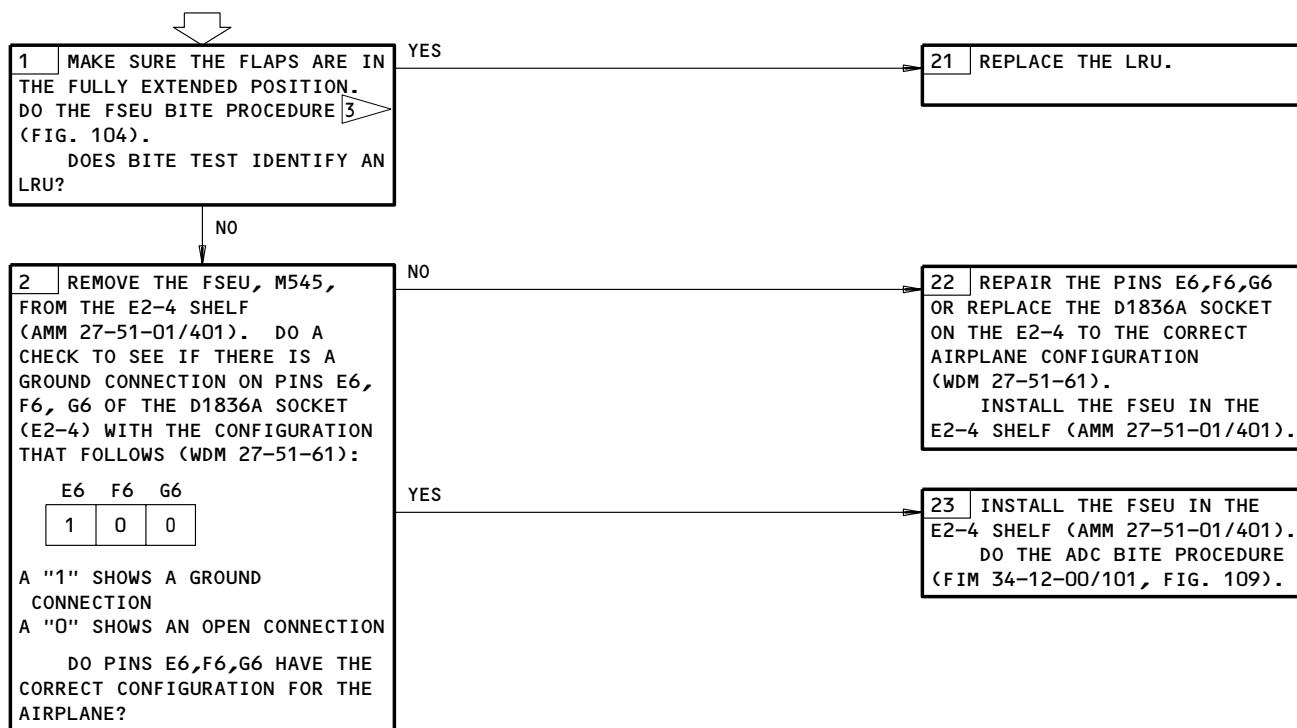
#### PREREQUISITES

MAKE SURE THIS SYSTEM WILL OPERATE:  
AIR DATA COMPUTER (AMM 34-12-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

6D24, 11A10, 11A11, 11A12, 11C15, 11C16, 11E01, 11E02, 11E22, 11E23, 11F30, 11F31, 11F32, 11G15, 11G16, 11G22, 11G23, 11J13, 11J14, 11J15, 11J16, 11J24

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



- 1 FLAP CONTROL LEVER AT 25 UNITS, THE CORRECT FLAP RETRACT AIRSPEED IS: 181-184 KNOTS  
FLAP CONTROL LEVER AT 30 UNITS, THE CORRECT FLAP RETRACT AIRSPEED IS: 171-174 KNOTS
- 2 FLAP CONTROL LEVER AT 25 UNITS, THE CORRECT FLAP EXTEND AIRSPEED IS: 177-180 KNOTS  
FLAP CONTROL LEVER AT 30 UNITS, THE CORRECT FLAP EXTEND AIRSPEED IS: 167-170 KNOTS
- 3 THE FSEU BITE TEST WILL EXAMINE THE FSEU M545 AND THE CONTINUITY OF THE CIRCUITS BETWEEN THE FSEU AND THE FLAP POSITION TRANSMITTERS (FIG. 101).

Flap Control Lever at 25- or 30-Unit Detent. Flaps Retracted at the Wrong Airspeed 1 DURING A LOAD RELIEF CONDITION, OR FLAPS EXTENDED AT THE WRONG AIRSPEED 2 AFTER A LOAD RELIEF CONDITION.

Figure 103A

EFFECTIVITY  
767-300 AIRPLANES

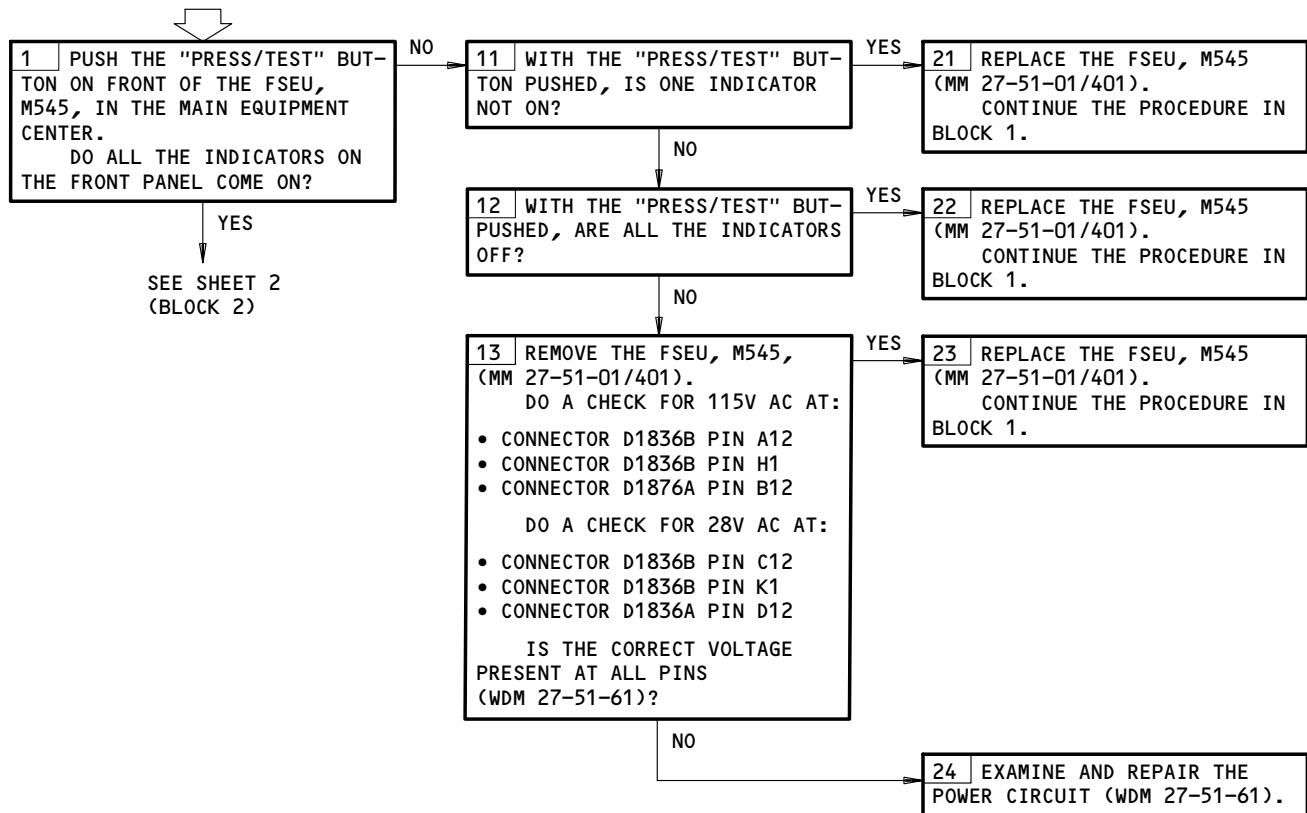
**27-51-00**

**FLAP/SLAT  
ELECTRONIC UNIT  
BITE PROCEDURE**
**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
AIR DATA COMPUTER (MM 34-12-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
6D21, 6D24, 6F24, 11C4, 11C10, 11C14, 11C15, 11C16, 11G15,  
11G16, 11G22, 11G23, 11H14, 11H23, 11H24, 11J13-11J17,  
11J24, 11J26, 11T36

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
ELECTRICAL POWER IS ON (MM 24-22-00/201)  
FLAP CONTROL LEVER AT ZERO DETENT  
FLAPS AND SLATS IN FULLY RETRACTED POSITION



Flap/Slat Electronic Unit BITE Procedure  
Figure 104 (Sheet 1)

EFFECTIVITY  
AIRPLANES WITH A -53 OR EARLIER FSEU

**27-51-00**

FROM SHEET 1  
(BLOCK 1)

YES

**2** PUSH THE "BIT/VERIFY" BUTTON ("TESTING" LIGHT WILL COME ON DURING THE TEST). DO ANY COMPONENT FAULT INDICATORS COME ON?

NO

YES

**25** ADJUST THE COMPONENT IDENTIFIED BY THE FAULT INDICATOR:  
 • OUTBD SLAT PDU POS TRANSMITTER 1, M544 (AMM 27-81-11/401) 1  
 • FLAP LEVER POS TRANSMITTER M603 (AMM 27-51-26/401) 1  
 REPLACE THE COMPONENTS IDENTIFIED BY THE FAULT INDICATORS:  
 • FLAP LEVER POS TRANSMITTER 1, M604 (AMM 27-51-26/401) 2  
 • FLAP POS TRANSMITTER 1-LEFT, M473 (AMM 27-51-45/201) 2  
 • OUTBD SLAT PDU RVDT MISRIG, M548 (AMM 27-81-11/401) 2  
 • HYD PRESSURE SWITCH (SECT 1), S846 (AMM 27-51-48/201) 2  
 • FLAP POS TRANSMITTER 4-LEFT, M476 (AMM 27-51-45/201) 2  
 • AIR DATA COMPUTER-LEFT, M100 (AMM 34-12-01/401) 2  
 • INBD SLAT PDU POS TRANSMITTER 1, M483 (AMM 27-81-11/401) 2  
 • OUTBD SLAT PDU POS TRANSMITTER 1, M544 (AMM 27-81-11/401) 2  
 • FLAP/SLAT ELECTRONIC UNIT, M545 (AMM 27-51-01/401)  
 • FLAP LEVER POS TRANSMITTER 2, M603 (AMM 27-51-26/401) 2  
 • FLAP POS TRANSMITTER 5-RIGHT, M492 (AMM 27-51-45/201) 2  
 • FLAP LEVER RVDT MISRIG, (SECT 1), M603 (AMM 27-51-26/401) 2  
 • FLAP POS TRANSMITTER 8-RIGHT, M489 (AMM 27-51-45/201) 2  
 • AIR DATA COMPUTER-RIGHT, M101 (AMM 34-12-01/401) 2  
 • INBD SLAT PDU POS TRANSMITTER 2, M549 (AMM 27-81-11/401) 2  
 • OUTBD SLAT PDU POS TRANSMITTER 2, M548 (AMM 27-81-11/401) 2  
 • FSPM-LEFT, M838 (AMM 27-58-01/401) 3  
 • FSPM-CENTER, M839 (AMM 27-58-01/401) 3  
 • FSPM-RIGHT, M840 (AMM 27-58-01/401) 3

**3** DOES THE GREEN "TEST COMPLETE" LIGHT COME ON WITHIN 20 SECONDS?

NO

YES

**4** THE FSEU COMPONENTS AND THE INTERFACE WIRING ARE OK.

**26** CONTINUE THE PROCEDURE IN BLOCK 1. IF THE "TEST COMPLETE" LIGHT COMES ON WHEN YOU PUSH THE "PRESS/TEST" THE SECOND TIME, BUT DOES NOT STAY ON TO SHOW THE TEST IS COMPLETE, REPLACE THE FSEU (AMM 27-51-01/401).

- 1 IF ADJUSTMENT OF THE COMPONENT DOES NOT CORRECT THE FAULT, REPLACE THE COMPONENT.
- 2 IF REPLACEMENT OF THE COMPONENT DOES NOT CORRECT THE FAULT, REPAIR THE CIRCUIT BETWEEN THE COMPONENT AND THE FSEU, M545.
- 3 DO THE FSPM BITE PROCEDURE (FIM 27-58-00/101, FIG. 104). IF THE FSPM BITE PROCEDURE SHOWS NO FAULT, REPAIR THE WIRING BETWEEN FSPM, M838, M839, OR M840, AND FSEU, M545 (WDM 27-58-21).
- 4 IF THE "TE FLAP ASYMMETRY" MESSAGE SHOWS ON EICAS WHEN YOU DO THE BITE PROCEDURE, THE TWO FLAP POSITION TRANSMITTERS IN A TRANSMITTER PAIR CAN BE FAULTED. THE TRANSMITTER PAIRS ARE:  
 TRANSMITTER-1, M473, AND TRANSMITTER-8, M489  
 TRANSMITTER-4, M476, AND TRANSMITTER-5, M492  
 IF NO MECHANICAL FAULTS ARE FOUND, EITHER ONE OF THE PAIRS CAN BE FAULTY (WIRING OR TRANSMITTER).
- 5 MAKE SURE THE FLAPS AND FLAP HANDLE ARE IN THE FULLY RETRACTED POSITION BEFORE YOU DO THE FSEU BITE TEST.

**Flap/Slat Electronic Unit BITE Procedure**  
**Figure 104 (Sheet 2)**

EFFECTIVITY  
 AIRPLANES WITH A -53 OR EARLIER FSEU

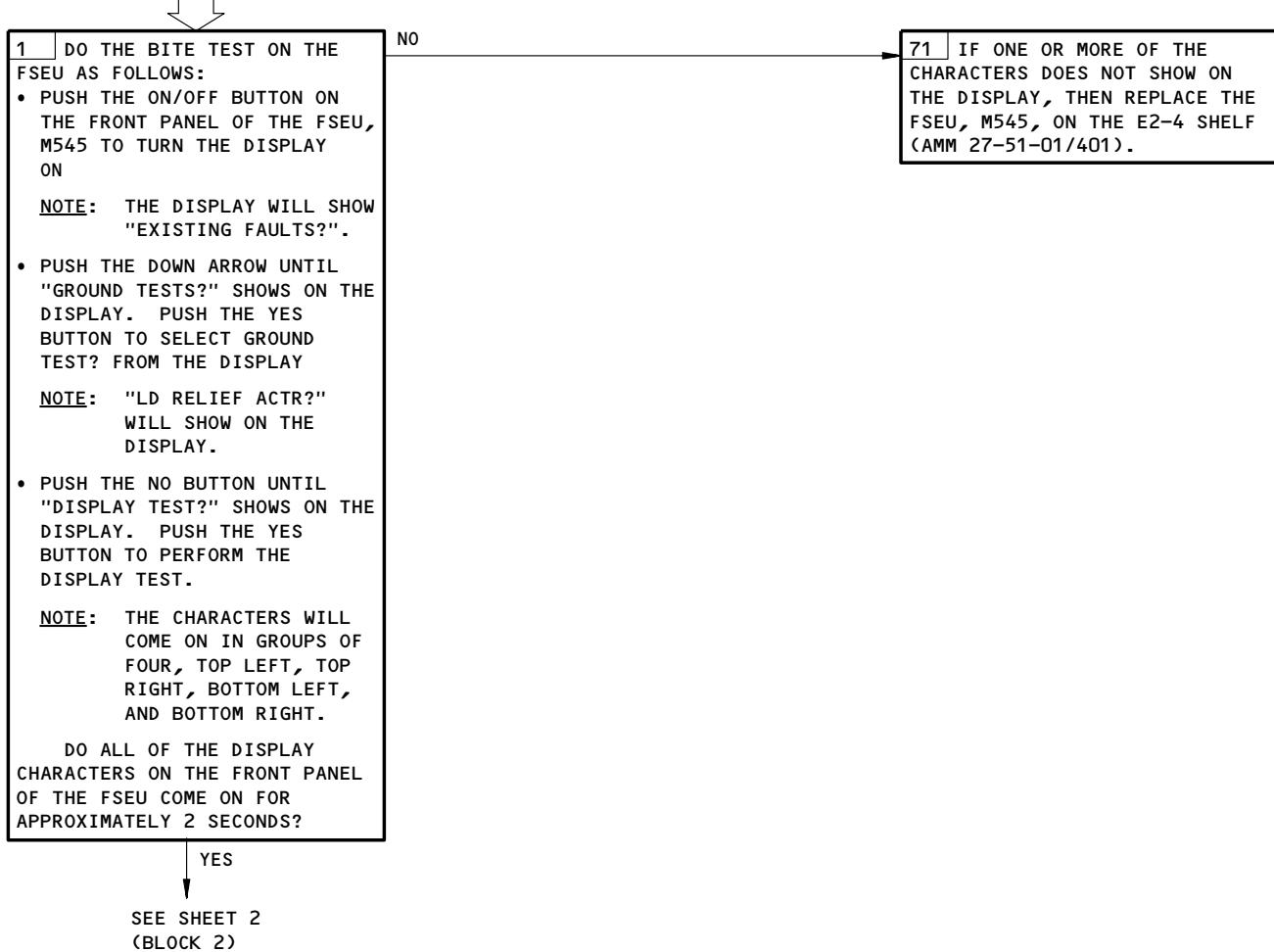
**27-51-00**

**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
 AIR DATA COMPUTER (AMM 34-12-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D21, 6D24, 6F24, 11C10, 11C14, 11C15, 11C16, 11G15,  
 11G16, 11G22, 11G23, 11H14, 11H23, 11H24, 11J13,  
 11J14, 11J15, 11J16, 11J17, 11J24, 11J26, 11T36;  
 FLAP/SLAT POSITION IND (11J11 OR 11C4)

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 FLAP CONTROL LEVER AT ZERO DETENT  
 FLAPS AND SLATS IN FULLY RETRACTED POSITION

**FLAP/SLAT ELECTRONIC  
UNIT (FSEU) BITE  
PROCEDURE**


FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure  
 Figure 104A (Sheet 1)

EFFECTIVITY  
 AIRPLANES WITH A -63 FSEU

**27-51-00**

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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 1)

YES

2. DO THE EXISTING FAULTS TEST ON THE FSEU TO FIND EXISTING FAULTS:  
 • PUSH THE LE AND TE ARMING SWITCHES FOR THE SLAT/FLAP ALTERNATE DRIVE. MAKE SURE THE "ALT" FLAPS SELECTOR SWITCH IS TURNED TO THE "UP" POSITION. MAKE SURE THE "ALTN" SWITCH LIGHTS COME ON.  
NOTE: DO NOT RUN THE TEST IF THE FLAPS ARE MOVING IN ALTERNATE-DRIVE MODE.  
 • PUSH THE MENU BUTTON TWICE, ON THE FRONT PANEL OF THE FSEU TO SHOW "EXISTING FAULTS" ON THE DISPLAY.  
 • PUSH THE YES BUTTON TO PERFORM THE EXISTING FAULTS TEST DISPLAY.  
NOTE: "TEST IN PROGRESS" WILL SHOW ON THE DISPLAY.  
 DOES "NO FAULTS" SHOW ON THE DISPLAY?

YES  
 SEE SHEET 3  
(BLOCK 3)

NO

72 "N FAULTS FOUND" WILL SHOW ON THE FSEU BITE DISPLAY.

NOTE: "N" REPRESENTS THE NUMBER OF FAULTS.

MAKE A LIST OF ALL THE FAULT MESSAGES AND MAINTENANCE MESSAGE NUMBERS:

NOTE: YOU CAN USE THE UP AND DOWN ARROW BUTTONS TO SCROLL THROUGH THE LIST OF MESSAGES:

- THE MESSAGE NAME WILL SHOW. "MORE DETAILS" WILL SHOW BETWEEN EACH FAULT MESSAGE.
- PUSH YES TO SELECT "MORE DETAILS?" THE MESSAGE NUMBER WILL SHOW. USE THE "DOWN" ARROW BUTTON TO FIND THE FLIGHT DECK EFFECT AND STATUS FOR THE MESSAGE. IF MORE INFORMATION IS NECESSARY, PUSH YES FOR "SHOP DETAILS"
- PUSH THE "MENU" BUTTON TO GO BACK TO THE LIST OF MESSAGES.

NOTE: IF YOU PUSH THE YES BUTTON WITH A MAINTENANCE MESSAGE DISPLAYED, "SWITCH INACTIVE" WILL SHOW AND THEN THE MESSAGE NAME WILL SHOW AGAIN.

DO THE CORRECTIVE ACTION SHOWN IN TABLE A FOR THE FAULTS SHOWN.

FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure  
Figure 104A (Sheet 2)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

27-51-00

FROM SHEET 2  
(BLOCK 2)

YES

<p><b>3</b> DO A CHECK OF THE FAULT HISTORY ON THE FSEU AS FOLLOWS:</p> <ul style="list-style-type: none"> <li>PUSH THE MENU BUTTON ON THE FRONT PANEL OF THE FSEU, M545.</li> </ul> <p><b>NOTE:</b> THE DISPLAY WILL SHOW "EXISTING FAULTS?".</p> <ul style="list-style-type: none"> <li>PUSH THE NO BUTTON UNTIL "FAULT HISTORY?" SHOWS ON THE DISPLAY. PUSH THE YES BUTTON TO SELECT FAULT HISTORY. USE THE UP AND DOWN ARROW BUTTONS TO CHOOSE THE APPLICABLE FLIGHT LEG.</li> </ul> <p><b>NOTE:</b> THE FLIGHT LEGS ARE 0 TO -99. FLIGHT LEG 0 SHOWS THE PRESENT LEG FAULTS. FLIGHT LEG -1 IS THE FLIGHT LEG PRIOR TO THE PRESENT LEG ETC:</p> <ul style="list-style-type: none"> <li>PUSH THE YES BUTTON TO SHOW THE FAULTS FOR THE APPLICABLE FLIGHT LEG.</li> </ul> <p><b>NOTE:</b> YOU CAN USE THE UP AND DOWN ARROW BUTTONS TO SCROLL THROUGH THE LIST OF MESSAGES:</p> <ul style="list-style-type: none"> <li>THE MESSAGE NAME WILL SHOW. "MORE DETAILS" WILL SHOW BETWEEN EACH FAULT MESSAGE.</li> <li>PUSH YES TO SELECT "MORE DETAILS?" THE MESSAGE NUMBER WILL SHOW. USE THE DOWN ARROW BUTTON TO FIND THE FLIGHT DECK EFFECT, AND STATUS FOR THE MESSAGE. IF MORE INFORMATION IS NECESSARY, PUSH YES FOR "SHOP DETAILS"</li> <li>PUSH THE "MENU" BUTTON TO GO BACK TO THE LIST OF MESSAGES.</li> </ul> <p><b>NOTE:</b> IF YOU PUSH THE YES BUTTON WITH A MAINTENANCE MESSAGE DISPLAYED, "SWITCH INACTIVE" WILL SHOW AND THEN THE MESSAGE NAME WILL SHOW AGAIN.</p> <p>ARE THERE FAULTS LISTED IN THE FAULT HISTORY?</p>	<p>YES</p>
---	------------

**73** DO THE CORRECTIVE ACTION SHOWN IN TABLE A FOR THE FAULTS SHOWN.

**74** TEST IS COMPLETE.

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

**27-51-00**



## 767 FAULT ISOLATION/MAINT MANUAL

MESSAGE NUMBER	FAULT MESSAGE	FAILURE CAUSES	CORRECTIVE ACTION
27-51000	FSEU FAILED	INTERNAL FSEU FAILURE	REPLACE THE FSEU, M545, E2-4 SHELF (AMM 27-51-01/401).
27-51001	PROGRAM PIN	ONE OF THE FSEU SECTIONS IS RECEIVING AN INVALID PROGRAM PIN COMBINATION.	CHECK THE INPUT WIRES FOR THE FSEU PROGRAM PINS AND MAKE SURE THAT THE WIRES THAT SHOULD BE GROUNDED, ARE GROUNDED (WDM 27-51-61).
27-51002	FSEU POS SENSOR 1	THE EXCITATION VOLTAGE FOR THE SENSOR IS OUTSIDE AN ACCEPTABLE RANGE.	CIRCUIT BREAKER NO. C1037 SHOULD BE CHECKED.
27-51003	FSEU POS SENSOR 2	THE EXCITATION VOLTAGE FOR THE SENSOR IS OUTSIDE AN ACCEPTABLE RANGE.	CIRCUIT BREAKER NO. C1524 SHOULD BE CHECKED.
27-51004	FSEU POS SENSOR 3	THE EXCITATION VOLTAGE FOR THE SENSOR IS OUTSIDE AN ACCEPTABLE RANGE.	CIRCUIT BREAKER NO. C1038 SHOULD BE CHECKED.
27-51005	FLAP POS XMTR 1	THE RESOLVER SIGNAL VOLTAGE IS NOT IN THE ACCEPTABLE RANGE. A FLAP POSITION TRANSMITTER HAS FAILED AT THE LOCATION INDICATED IN THE FAULT MESSAGE.	REPLACE THE APPLICABLE POSITION SENSOR (AMM 27-51-45/201): IF THE PROBLEM CONTINUES, THEN EXAMINE THE WIRING FROM THE SENSOR TO THE FSEU (WDM 27-58-11). XMTR 1 = POSITION SENSOR M473
27-51006	FLAP POS XMTR 2		XMTR 2 = POSITION SENSOR M474
27-51007	FLAP POS XMTR 3		XMTR 3 = POSITION SENSOR M475
27-51008	FLAP POS XMTR 4		XMTR 4 = POSITION SENSOR M476
27-51009	FLAP POS XMTR 5		XMTR 5 = POSITION SENSOR M492
27-51010	FLAP POS XMTR 6		XMTR 6 = POSITION SENSOR M491
27-51011	FLAP POS XMTR 7		XMTR 7 = POSITION SENSOR M490
27-51012	FLAP POS XMTR 8		XMTR 8 = POSITION SENSOR M489
27-51013	FLAP POS XMTR 1	A SHORT EXISTS EITHER IN THE M473 POSITION SENSOR, OR FROM THE SENSOR TO THE FSEU.	REPLACE THE M473 POSITION SENSOR (AMM 27-51-45/201). IF THE PROBLEM CONTINUES, THEN EXAMINE THE WIRING FROM THE SENSOR TO THE FSEU (WDM 27-58-11). <u>NOTE:</u> CYCLE THE POWER ON THE FSEU TO CLEAR THE MESSAGE.
27-51014	FLAP POS XMTR 8	A SHORT EXISTS EITHER IN THE M473 POSITION SENSOR, OR FROM THE SENSOR TO THE FSEU.	REPLACE THE M489 POSITION SENSOR (AMM 27-51-45/201). IF THE PROBLEM CONTINUES, THEN EXAMINE THE WIRING FROM THE SENSOR TO THE FSEU (WDM 27-58-11). <u>NOTE:</u> CYCLE THE POWER ON THE FSEU TO CLEAR THE MESSAGE.

TABLE A

### FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure Figure 104A (Sheet 4)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

27-51-00



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FAULT ISOLATION/MAINT MANUAL

MESSAGE NUMBER	FAULT MESSAGE	FAILURE CAUSES	CORRECTIVE ACTION
27-51015	FLAP LVR POS1 XMT	A SHORT EXISTS EITHER IN THE M604 POSITION RVDT, OR FROM THE RVDT TO THE FSEU.	REPLACE THE M604 POSITION RVDT (AMM 27-51-26/401). IF THE PROBLEM CONTINUES, THEN EXAMINE THE WIRING FROM THE RVDT TO THE FSEU (WDM 27-58-31).
27-51016	FLAP LVR POS2 XMT	A SHORT EXISTS EITHER IN THE M603 POSITION RVDT, OR FROM THE RVDT TO THE FSEU.	REPLACE THE M603 POSITION RVDT (AMM 27-51-26/401). IF THE PROBLEM CONTINUES, THEN EXAMINE THE WIRING FROM THE RVDT TO THE FSEU (WDM 27-58-31).
27-51017	C FLAP/STAB POS	THE CENTER FSPM, M839 HAS FAILED, OR THERE IS A PROBLEM WITH THE WIRING.	REPLACE THE CENTER FSPM, M839 (AMM 27-58-01/401). IF THE PROBLEM CONTINUES, EXAMINE THE WIRING FROM THE FSPM TO THE FSEU (WDM 27-51-31). REPAIR THE PROBLEM THAT YOU FIND.
27-51018	L FLAP/STAB POS	THE LEFT FSPM, M838 HAS FAILED, OR THERE IS A PROBLEM WITH THE WIRING.	REPLACE THE LEFT FSPM, M838 (AMM 27-58-01/401). IF THE PROBLEM CONTINUES, EXAMINE THE WIRING FROM THE FSPM TO THE FSEU (WDM 27-51-31). REPAIR THE PROBLEM THAT YOU FIND.
27-51019	R FLAP/STAB POS	THE RIGHT FSPM, M840 HAS FAILED, OR THERE IS A PROBLEM WITH THE WIRING.	REPLACE THE RIGHT FSPM, M840 (AMM 27-58-01/401). IF THE PROBLEM CONTINUES, EXAMINE THE WIRING FROM THE FSPM TO THE FSEU (WDM 27-51-31). REPAIR THE PROBLEM THAT YOU FIND.
27-51020	CENTER FSPM IN BITE	CENTER FSPM, M839 BITE FAILURE WAS FOUND.	IF THE APPLICABLE FSPM IS IN BITE, THEN DO THE FSEU BITE TEST AGAIN WHEN THE FSPM BITE TEST IS COMPLETE.
27-51021	LEFT FSPM IN BITE	LEFT FSPM, M838 BITE FAILURE WAS FOUND.	IF THE FSPM IS NOT IN BITE, OR IF THE FAULT MESSAGE STILL SHOWS, THEN REPLACE THE APPLICABLE FSPM (AMM 27-58-01/401). IF THE PROBLEM CONTINUES, EXAMINE THE WIRING FROM THE FSPM TO THE FSEU (WDM 27-51-31). REPAIR THE PROBLEM THAT YOU FIND.
27-51022	RIGHT FSPM IN BITE	RIGHT FSPM, M840 BITE FAILURE WAS FOUND.	IF THE APPLICABLE FSPM IS IN BITE, THEN DO THE FSEU BITE TEST AGAIN WHEN THE FSPM BITE TEST IS COMPLETE.
27-51023	LVR RVDT 2 MISRIG	FLAP LEVER MISRIG	CHECK THE RIGGING OF THE FLAP CONTROL LEVER (AMM 27-51-25/401). <u>NOTE:</u> IF THE FAULT OCCURRED DURING THE GROUND TEST, THEN RERUN THE TEST TO CLEAR THE FAULT.
27-51332	SECT 2 NO DATA	SECTION 1 IS NOT RECEIVING ARINC DATA FROM SECTION 2.	CHECK THE SECTION 2 CIRCUIT BREAKER. IF THE PROBLEM CONTINUES, REPLACE THE FSEU (AMM 27-51-01/401).
27-51333	SECT 3 NO DATA	SECTION 1 IS NOT RECEIVING ARINC DATA FROM SECTION 3.	CHECK THE SECTION 3 CIRCUIT BREAKER. IF THE PROBLEM CONTINUES, REPLACE THE FSEU (AMM 27-51-01/401).

TABLE A

FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure  
Figure 104A (Sheet 5)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

27-51-00

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FAULT ISOLATION/MAINT MANUAL

MESSAGE NUMBER	FAULT MESSAGE	FAILURE CAUSES	CORRECTIVE ACTION
27-81001	OB RVDT 2 MISRIG	OUTBOARD SLAT MISRIG	CHECK THE RIGGING OF THE OUTBOARD SLAT RVDT (AMM 27-81-11/401).
27-81002	SW-HYDR PRESS	HYDRAULIC PRESSURE SWITCH FAILURE	REPLACE THE HYDRAULIC PRESSURE SWITCH, S846 (AMM 27-51-48/201). IF THE FAULT MESSAGE STILL EXISTS, THEN RUN THE EXISTING FAULTS TEST. IF THE PROBLEM CONTINUES, EXAMINE THE WIRING BETWEEN THE SWITCH AND THE FSEU (WDM 27-51-60).
27-81003	IB SLATS PDU XMT1	INBOARD SLAT POSITION TRANSMITTER (RVDT) FAILURE	REPLACE THE FAILED POSITION TRANSMITTER (AMM 27-81-11/401). IF THE PROBLEM CONTINUES, THEN EXAMINE THE WIRING FROM THE SLAT POSITION TRANSMITTER AND THE FSEU (WDM 27-51-61).
27-81004	IB SLATS PDU XMT2		REPAIR THE PROBLEMS THAT YOU FIND.
27-81005	OB SLATS PDU XMT1	OUTBOARD SLAT POSITION TRANSMITTER (RVDT) FAILURE	
27-81006	OB SLATS PDU XMT2		
27-81007	SHUTOFF VALVE LE	LE SLAT SHUTOFF VALVE FAILURE	REPLACE THE FLAP/SLAT SHUTOFF VALVE (AMM 27-51-48/201). IF THE PROBLEM CONTINUES, THEN EXAMINE THE WIRING FROM THE FLAP/SLAT SHUTOFF VALVE AND THE FSEU (WDM 27-51-61). REPAIR THE PROBLEMS THAT YOU FIND.
27-81020	LE INBD ASYM	THE PSEU INDICATES AN INBOARD SLAT ASYMMETRY TO THE FSEU.	USE THE PSEU BITE TO ISOLATE THE PROXIMITY SWITCH CAUSING THE INDICATION (FIM 32-09-03/101).
27-81021	LE OUTBD ASYM	THE PSEU INDICATES AN OUTBOARD SLAT ASYMMETRY TO THE FSEU.	
27-81022	LE OUTBD SKEW	INPUT FROM THE SLAT SKEW SWITCHES IS OPEN INSTEAD OF GROUNDED, OR THE SLATS ARE SKEWED.	VISUALLY INSPECT THE SLATS FOR A SKEW CONDITION. IF THE SLATS ARE SKEWED, THEN RIG THE SLATS (AMM 27-81-01/401 OR AMM 27-81-02/401). CHECK THE SKEW SWITCH MODULES FOR A TRIPPED INDICATOR (AMM 27-81-42/401). CHECK THE WIRING FROM THE GROUND POINT THROUGH THE LEFT WING SWITCH THROUGH THE RIGHT WING SWITCH TO THE SKEW RELAY AND FROM THE SKEW RELAY TO THE FSEU, M545. REPAIR THE PROBLEMS THAT YOU FIND.

TABLE A

FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure  
Figure 104A (Sheet 6)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

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MESSAGE NUMBER	FAULT MESSAGE	FAILURE CAUSES	CORRECTIVE ACTION
27-81040	LE INBD PDU RVDT	THE DISCRETE VALUES OF THE RVDTs ON THE INBOARD PDU DO NOT AGREE.	EXAMINE THE RIGGING OF THE INBOARD PDU RVDTs (AMM 27-81-11/401). REPAIR THE PROBLEMS THAT YOU FIND.
27-81041	LE OUTBD PDU RVDT	THE DISCRETE VALUES OF THE RVDTs ON THE OUTBOARD PDU DO NOT AGREE.	EXAMINE THE RIGGING OF THE OUTBOARD PDU RVDTs (AMM 27-81-11/401). REPAIR THE PROBLEMS THAT YOU FIND.
27-81042	LE SLATS NO HYDR	THE SLAT POSITION DISAGREES WITH THE COMMANDED POSITION AND THE HYDRAULIC PRESSURE SWITCH INDICATES LOW PRESSURE. THE ALTERNATE SLATS ARE NOT ARMED AND THE SLAT SHUTOFF VALVE IS NOT COMMANDED CLOSED.	VERIFY THAT THE HYDRAULIC POWER IS AVAILABLE TO THE SLATS (AMM 29-11-00/201).
27-81043	LE INBD SLATS	THE INBOARD SLAT PDU RVDT IS NOT IN THE UP, TAKEOFF, OR LANDING RANGE WHEN THE FLAP LEVER COMMANDS THOSE POSITIONS.	DO THIS PROCEDURE: LE SLAT DISAGREE PROCEDURE (FIM 27-81-00/101, FIG. 106).
27-81044	LE OUTBD SLATS	THE OUTBOARD SLAT PDU RVDT IS NOT IN THE UP, TAKEOFF, OR LANDING RANGE WHEN THE FLAP LEVER COMMANDS THOSE POSITIONS.	
27-81045	LE SLATS SEE FIM	THE PSEU INDICATES SLATS DISAGREE WHILE BOTH INBOARD OUTBOARD SLAT PDUS EITHER AGREE OR DISAGREE WITH THE FLAP LEVER.	
27-51040	LVR1 NOT IN DETNT	THE INDICATED FLAP LEVER RVDT SIGNAL IS NOT IN THE DETENT RANGE, WHILE THE OTHER RVDT SIGNAL IS.	EXAMINE THE RIGGING OF THE INDICATED LEVER RVDT (AMM 27-51-26/401). REPAIR THE PROBLEMS THAT YOU FIND.
27-51041	LVR2 NOT IN DETNT	ALTERNATE IS NOT ARMED.	

TABLE A

FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure  
Figure 104A (Sheet 7)

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MESSAGE NUMBER	FAULT MESSAGE	FAILURE CAUSES	CORRECTIVE ACTION
27-51042	LVR XMTR DISAGREE	FLAP LEVER RVDTs DISAGREE. THE RVDTs ARE EITHER BOTH IN, OR BOTH NOT IN, THE DETENT. THE FLAP OR SLAT DISAGREE IS INDICATED. ALT IS NOT ARMED.	EXAMINE THE FLAP LEVER RVDT RIGGING (AMM 27-51-26/401).
27-51043	ALT UP DISAGREE	ONE OF THE ALTERNATE SWITCH INPUTS TO SECTION 2 AND SECTION 3 IS IN THE INDICATED RANGE WHILE THE OTHER IS NOT. THE SLAT OR FLAP DISAGREE IS INDICATED WITH ALTERNATE SLATS OR FLAPS ARMED.	REPLACE THE ALTERNATE FLAPS POSITION SWITCH, S598. DO THE EXISTING FAULTS TEST AGAIN (FIG. 104). IF THE PROBLEM CONTINUES, EXAMINE THE WIRES FROM THE SWITCH CONNECTOR D10032, AND THE CONNECTOR D1836B, OF THE FSEU (WDM 27-51-61). REPAIR THE PROBLEMS THAT YOU FIND.
27-51044	ALT 1 DISAGREE		
27-51045	ALT 5 DISAGREE		
27-51046	ALT 15 DISAGREE		
27-51047	ALT 20 DISAGREE		
27-51048	ALT 25 DISAGREE		
27-51049	ALT 30 DISAGREE		
27-51050	ALT SW IN NORM	THE ALTERNATE SWITCH INPUT TO SECTION 3 IS IN NORM. THE SLAT OR FLAP DISAGREE IS INDICATED WITH ALTERNATE SLATS OR FLAPS ARMED.	IF ALTERNATE FLAPS IS IN NORM, THEN MOVE THE SWITCH OUT OF NORM. IF THE PROBLEM CONTINUES, REPLACE THE ALTERNATE FLAPS POSITION SWITCH, S598. DO THE EXISTING FAULTS TEST AGAIN (FIG. 104). IF THE PROBLEM CONTINUES, EXAMINE THE WIRES FROM THE SWITCH CONNECTOR D10032, AND THE CONNECTOR D1836B, OF THE FSEU (WDM 27-51-61). REPAIR THE APPLICABLE WIRING. USE THE INPUT WIRING MONITOR FUNCTION OF BITE.
27-51070	TE SKEW LEFT OB	THERE WAS A SKEW DETECTED ON THE LEFT OUTBOARD FLAP.	EXAMINE THE RIGGING OF SENSOR 1. EXAMINE THE INTEGRITY OF THE TORQUE TUBES FROM SENSOR 1 TO SENSOR 2 (AMM 27-51-45/201). REPAIR THE PROBLEMS THAT YOU FIND.
27-51071	TE SKEW RIGHT OB	THERE WAS A SKEW DETECTED ON THE RIGHT OUTBOARD FLAP.	EXAMINE THE RIGGING OF SENSOR 8. EXAMINE THE INTEGRITY OF THE TORQUE TUBES FROM SENSOR 8 TO SENSOR 7 (AMM 27-51-45/201). REPAIR THE PROBLEMS THAT YOU FIND.
27-51072	TE ASYM ACT 2-3	THERE WAS A DIFFERENCE BETWEEN SENSOR N-TO-M.	EXAMINE THE INTEGRITY OF THE TORQUE TUBES FROM SENSOR N TO SENSOR M (AMM 27-51-45/201). <u>NOTE:</u> SENSORS N AND M REPRESENT THE SENSORS THAT SHOW THE GREATEST DIFFERENCE. REPAIR THE PROBLEMS THAT YOU FIND.
27-51073	TE ASYM ACT 3-4		
27-51074	TE ASYM ACT 4-5		
27-51075	TE ASYM ACT 5-6		
27-51076	TE ASYM ACT 6-7		

TABLE A

### FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure Figure 104A (Sheet 8)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

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MESSAGE NUMBER	FAULT MESSAGE	FAILURE CAUSES	CORRECTIVE ACTION
27-51077	TE SKEW XMT 2	THERE WAS A FLAP SKEW DETECTED AND NO 1-TO-8 ASYMMETRY. SENSOR N IS THE MOST DIFFERENT FROM THE OTHERS.	EXAMINE THE RIGGING OF SENSOR N (AMM 27-51-45/201). REPAIR THE PROBLEMS THAT YOU FIND.  <u>NOTE:</u> SENSOR N REPRESENTS THE SENSOR THAT SHOWS THE GREATEST DIFFERENCE.
27-51078	TE SKEW XMT 3		
27-51079	TE SKEW XMT 4		
27-51080	TE SKEW XMT 5		
27-51081	TE SKEW XMT 6		
27-51082	TE SKEW XMT 7		
27-51083	TE ASYM XMT 1-8	THERE WAS A FLAP ASYMMETRY DETECTED, AND THERE IS A DIFFERENCE BETWEEN SENSORS 1 AND 8, WHILE THERE IS NO DIFFERENCE BETWEEN SENSORS 4, AND 5.	EXAMINE THE RIGGING OF SENSORS 1 AND 8 (AMM 27-51-45/201). DO A VISUAL INSPECTION OF THE TORQUE TUBES ON BOTH WINGS OUTBOARD OF THE SIDE-OF-BODY TEE GEARBOXES. REPAIR THE PROBLEMS THAT YOU FIND.
27-51084	TE ASYM XMT 4-5	THERE WAS A FLAP ASYMMETRY DETECTED, AND THERE IS A DIFFERENCE BETWEEN SENSORS 4 AND 5, WHILE THERE IS NO DIFFERENCE BETWEEN SENSORS 1 AND 8.	EXAMINE THE RIGGING OF SENSORS 4 AND 5 (AMM 27-51-45/201). DO A VISUAL INSPECTION OF THE TORQUE TUBES ON BOTH WINGS BETWEEN THE SIDE-OF-BODY TEE GEARBOXES AND ACTUATORS 4 AND 5. REPAIR THE PROBLEMS THAT YOU FIND.
27-51085	TE ASYM SEE FIM	THERE WAS A FLAP ASYMMETRY DETECTED, AND THERE IS A DIFFERENCE BETWEEN SENSORS 1 AND 8, AND BETWEEN SENSORS 4 AND 5.	DO A VISUAL INSPECTION OF THE TORQUE TUBE RUNS ON BOTH WINGS FROM THE FLAP PDU OUTBOARD. REPAIR THE PROBLEMS THAT YOU FIND.
27-51100	UNCMNDED LD RELIF	NO LOAD RELIEF WAS COMMANDED, BUT THE ACTUATOR WAS EXTENDED.  AIRCRAFT RETROFITTED WITH A -63 FSEU; MESSAGE WILL SHOW WHEN YOU RUN THE BITE TEST. NO MAINTENANCE ACTION REQUIRED.	NO MAINTENANCE ACTION REQUIRED.
27-51101	C FLAP/STAB POS	THE FLAP POSITION INFORMATION FROM THE INDICATED FSPM, DISAGREES WITH THE OTHER TWO, OR ALL THREE DISAGREE.  <u>NOTE:</u> IF ALL THREE DISAGREE, YOU WILL NOT GET ALL THREE FAULT MESSAGES.	DO THIS PROCEDURE: FSPM-CENTER, M839 BITE PROCEDURE (FIM 27-58-00/101, FIG. 104).
27-51102	L FLAP/STAB POS		DO THIS PROCEDURE: FSPM-LEFT, M838 BITE PROCEDURE (FIM 27-58-00/101, FIG. 104).
27-51103	R FLAP/STAB POS		DO THIS PROCEDURE: FSPM-RIGHT, M840 BITE PROCEDURE (FIM 27-58-00/101, FIG. 104).

TABLE A

 FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure  
 Figure 104A (Sheet 9)

 EFFECTIVITY  
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MESSAGE NUMBER	FAULT MESSAGE	FAILURE CAUSES	CORRECTIVE ACTION
27-51104	TE FLAPS SEE FIM	FLAP DISAGREE INDICATED BUT BITE CANNOT IDENTIFY THE SPECIFIC FAULT.	DO THIS PROCEDURE: TE FLAPS DISAGREE TROUBLESHOOTING (FIG. 105).
27-51120	LD RELIF ACTUATOR	LOAD RELIEF ACTUATOR RETRACTED, ACTUATOR NOT EXTENDED, AND LOAD RELIEF INOPERATIVE.  AIRCRAFT RETROFITTED WITH A -63 FSEU; MESSAGE WILL SHOW WHEN YOU RUN THE BITE TEST. NO MAINTENANCE ACTION REQUIRED.	NO MAINTENANCE ACTION REQUIRED.
27-51121	LD RELIF SEE FIM	THE LOAD RELIEF IS INOPERATIVE AND THE ACTUATOR IS NEITHER RETRACTED NOR EXTENDED.	DO THE LOAD RELIEF ACTUATOR BITE (FIG. 115).  EXAMINE THE LOAD RELIEF SYSTEM (AMM 27-51-00/501).  IF THE PROBLEM CONTINUES, THEN EXAMINE THE WIRES BETWEEN THE LOAD RELIEF ACTUATOR AND THE FSEU (WDM 27-51-51). REPAIR THE PROBLEMS THAT YOU FIND.
27-51130	AIRDATA1 L OR C	AIRSPEED OR ALTITUDE DATA INVALID MESSAGE RECEIVED FROM L OR C ADIRU.	CHECK ADIRU ADC BITE (FIM 34-21-00/101).
27-51131	AIRDATA2 R OR C	AIRSPEED OR ALTITUDE DATA INVALID MESSAGE RECEIVED FROM R OR C ADIRU.	
27-51200	LD RELIF ACTUATOR	LOAD RELIEF ACTUATOR FAILED DURING THE GROUND TEST.  AIRCRAFT RETROFITTED WITH A -63 FSEU; MESSAGE WILL SHOW WHEN YOU RUN THE BITE TEST. NO MAINTENANCE ACTION REQUIRED.	NO MAINTENANCE ACTION REQUIRED.
27-51203	LD RELIF FROM 25	THE FLAPS FAILED TO LOAD RELIEVE FROM 25 DURING THE GROUND TEST.	CHECK/REPLACE THE FLAP LOAD RELIEF ACTUATOR, M576 (AMM 27-51-30/401).  <u>NOTE:</u> IF THE FAULT OCCURRED DURING THE GROUND TEST, THEN RERUN THE TEST TO CLEAR THE FAULT.
27-51204	LD RELIF FROM 30	THE FLAPS FAILED TO LOAD RELIEVE FROM 30 DURING THE GROUND TEST.	EXAMINE/REPLACE THE FLAP LOAD RELIEF ACTUATOR, M576 (AMM 27-51-30/401).  IF THE PROBLEM CONTINUES, EXAMINE THE WIRING FROM THE FLAP LOAD RELIEF ACTUATOR, M576 TO THE FSEU, M545 (WDM 27-51-61).  <u>NOTE:</u> IF THE FAULT OCCURRED DURING THE GROUND TEST, THEN RERUN THE TEST TO CLEAR THE FAULT.

TABLE A

### FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure Figure 104A (Sheet 10)

EFFECTIVITY  
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## 767 FAULT ISOLATION/MAINT MANUAL

MESSAGE NUMBER	FAULT MESSAGE	FAILURE CAUSES	CORRECTIVE ACTION
27-51205	LVR NOT RQD POSN	THE FLAP LEVER IS NOT PLACED IN THE PROPER POSITION FOR THE GROUND TEST.	CHECK THE LEVER POSITION. IF THE LEVER IS IN THE PROPER POSITION, REPLACE THE FLAP CONTROL LEVER POSITION TRANSMITTER RVDTs, M603, M604 (AMM 27-51-26/401).  <u>NOTE:</u> IF THE FAULT OCCURRED DURING THE GROUND TEST, THEN RERUN THE TEST TO CLEAR THE FAULT.
27-51206	TE FAIL TO DRIVE	THE FLAPS FAILED TO REACH 30 WHEN THE FLAP LEVER MOVED TO 30 DURING THE GROUND TEST.	MAKE SURE THE SYSTEM IS OPERATIONAL.
27-51300	GRP OF 4 SHORTED	OVERCURRENT OR SHORT AT A-F04, A-G04, A-H04, A-J04	EXAMINE FOR AN OPEN CIRCUIT BREAKER, OPEN CIRCUIT LOAD, SHORT OR OPEN IN THE WIRES.
27-51301	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT A-D02, A-A03, A-C04	IF THE PROBLEM CONTINUES, REPLACE THE APPLICABLE INDICATED LRU.
27-51302	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT A-C03, A-E02, A-E03	
27-51303	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT A-F03, A-G03, A-H03	<u>NOTE:</u> REFER TO TABLE B TO FIND THE INDICATED LRU, THE APPLICABLE WIRING PINS AND THE WDM REFERENCE FOR THE APPLICABLE MESSAGE.
27-51304	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT A-J03, A-B03, A-D04	
27-51305	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT A-D03, A-G02, A-H02	
27-51306	GRP OF 4 SHORTED	OVERCURRENT OR SHORT AT B-A03, B-B03, A-D03, B-E06	DO THE EXISTING FAULTS TEST AGAIN (FIG. 104, SHEET 2, BLOCK 2).  IF THE PROBLEM CONTINUES, REPLACE THE FSEU, M545 (AMM 27-51-01/401).
27-51307	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT B-C03, B-F03, B-H03	
27-51308	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT B-K06, B-G03, B-E03	
27-51309	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT B-J06, B-A04, B-E04	DO THE EXISTING FAULTS TEST AGAIN (FIG. 104, SHEET 2, BLOCK 2).
27-51310	GRP OF 4 SHORTED	OVERCURRENT OR SHORT AT B-A08, B-B08, B-C08, B-D08	
27-51311	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT B-G08, B-B11, B-A11	
27-51312	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT B-J08, B-C11, B-D11	
27-51313	GRP OF 3 SHORTED	OVERCURRENT OR SHORT AT B-E11, B-F11, B-G15	

TABLE A

### FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure Figure 104A (Sheet 11)

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MESSAGE NUMBER	FAULT MESSAGE	FAILURE CAUSES	CORRECTIVE ACTION
27-51314	A-B03<9VDC	SLAT SHUTOFF LOAD FAULT	
27-51315	A-A03<9VDC	FLAP SHUTOFF LOAD FAULT	
27-51316	A-F03<9VDC	LOAD RELIEF COMMAND LOAD FAULT	
27-51317	A-C03<9VDC	FLAP FAIL ASYMMETRY LOAD FAULT	
27-51318	A-D03<9VDC	INBOARD SLAT FAIL ASYMMETRY LOAD FAULT	
27-51319	A-E03<9VDC	OUTBOARD SLAT FAIL ASYMMETRY LOAD FAULT	<u>NOTE:</u> REFER TO TABLE B TO FIND THE INDICATED LRU, THE APPLICABLE WIRING PINS AND THE WDM REFERENCE FOR THE APPLICABLE MESSAGE.
27-51320	A-G03<9VDC	FLAP BYPASS IN NORMAL LOAD FAULT	
27-51321	A-H03<9VDC	INBOARD SLAT BYPASS NORMAL LOAD FAULT	DO THE EXISTING FAULTS TEST AGAIN (FIG. 104, SHEET 2, BLOCK 2). IF THE PROBLEM CONTINUES, REPLACE THE FSEU, M545 (AMM 27-51-01/401).
27-51322	A-J03<9VDC	OUTBOARD SLAT BYPASS NORMAL LOAD FAULT	
27-51323	A-G03<9VDC	S2 SLAT LIGHT LOAD FAULT	
27-51324	B-C03<9VDC	S2 FLAP LIGHT LOAD FAULT	
27-51325	B-B11<9VDC	S3 FLAP ALT RETRACT ENABLE LOAD FAULT	DO THE EXISTING FAULTS TEST AGAIN (FIG. 104, SHEET 2, BLOCK 2).
27-51326	B-A11<9VDC	S3 FLAP ALT EXTEND ENABLE LOAD FAULT	
27-51327	B-D11<9VDC	S3 INBOARD SLAT RETRACT ENABLE LOAD FAULT	
27-51328	B-C11<9VDC	S3 INBOARD SLAT EXTEND ENABLE LOAD FAULT	
27-51329	B-F11<9VDC	S3 OUTBOARD SLAT RETRACT ENABLE LOAD FAULT	
27-51330	B-E11<9VDC	S3 OUTBOARD SLAT EXTEND ENABLE LOAD FAULT	
27-51331	B-G08<9VDC	S3 REF XMTR SELECT LOAD FAULT	

TABLE A

FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure  
Figure 104A (Sheet 12)

EFFECTIVITY  
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MESSAGE NUMBER	INDICATED LRU	FSEU PINS	LRU PINS	WDM REFERENCE
27-51300	LEFT STALL WARNING MODULE	D1836A, PINS F04, G04, H04, J04	M615, PINS 36, 3, 43, 2	27-32-11
27-51301	SLAT ISOLATION VALVES FLAP SHUTOFF VALVE SLAT ASYMMETRY INDICATION	D1836A, PIN D02 D1836A, PIN A03 D1836A, PIN C04	M603, PIN 2 Not Connected	27-51-31
27-51302	FLAP FAIL PROTECTION & ASYM RELAY OUTBD SLAT FAIL PROTECTION & ASYM RELAY	D1836A, PIN C03 D1836A, PIN E02 D1836A, PIN E03	K350, PIN X2 K349, PIN X2	27-51-11 27-81-21
27-51303	FLAP LOAD RELIEF RELAY FLAP BYPASS VALVE NORMAL RELAY INBD SLAT BYPASS VALVE NORMAL RELAY	D1836A, PIN F03 D1836A, PIN G03 D1836A, PIN H03	K352, PIN X2 K623, PIN X2 K624, PIN X2	27-51-51 27-51-11 29-11-32
27-51304	OUTBD SLAT BYPASS VALVE NORMAL RELAY SHUTOFF VALVE CONTROL RELAY INBD SLAT FAIL PROTECTION & ASYM RELAY	D1836A, PIN J03 D1836A, PIN B03 D1836A, PIN D03	K625, PIN X2 K227, PIN X2 K348, PIN X2	27-51-61 27-81-31 27-81-11
27-51305	INBD SLAT FAIL PROTECTION & ASYM RELAY	D1836A, PIN D03 D1836A, PIN G02 D1836A, PIN H02	K348, PIN X2	27-81-11
27-51306	CONFIGURATION WARNING (T/O) MODULE CENTER FLAP/STAB POSITION MODULE ELEX UNIT PROXIMITY SWITCH	D1836B, PIN A03 D1836B, PIN B03 D1836B, PIN B03 D1836B, PIN D03 D1836B, PIN E06	Not Connected M620, PIN 44 M839, PIN 58 M162, PIN D9 Not Connected	31-51-41 31-51-42 27-88-11
27-51307	ELEX UNIT PROXIMITY SWITCH LEFT MISC ELECTRICAL EQUIPMENT PANEL	D1836B, PIN C03 D1836B, PIN F03 D1836B, PIN H03	Not Connected M162, PIN H9 P36, PIN B10	27-88-11 29-11-32
27-51308	ELEX UNIT PROXIMITY SWITCH	D1836B, PIN K06 D1836B, PIN G03 D1836B, PIN E03	Not Connected M162, PIN B9	27-88-11
27-51309	FASTEN SEAT BELTS SWITCH	D1836B, PIN J06 D1836B, PIN A04 D1836B, PIN E04	S1, PIN C	33-24-11
27-51310	RIGHT STALL WARNING MODULE RIGHT STALL WARNING MODULE RIGHT STALL WARNING MODULE RIGHT STALL WARNING MODULE	D1836B, PIN A08 D1836B, PIN B08 D1836B, PIN C08 D1836B, PIN D08	M938, PIN 36 M938, PIN 3 M938, PIN 43 M938, PIN 2	27-32-21 27-32-21 27-32-21 27-32-21
27-51311	ALTERNATE TE FLAPS EXTEND RELAY ALTERNATE TE FLAPS RETRACT RELAY	D1836B, PIN G08 D1836B, PIN B11 D1836B, PIN A11	Not Connected K359, PIN 14 K360, PIN 14	27-51-11 27-51-11
27-51312	ALTERNATE INBD SLAT EXTEND RELAY ALTERNATE INBD SLAT RETRACT RELAY	D1836B, PIN J08 D1836B, PIN C11 D1836B, PIN D11	K224, PIN X2 K225, PIN X2	27-81-11 27-81-11
27-51313	ALTERNATE OUTBD SLAT EXTEND RELAY ALTERNATE OUTBD SLAT RETRACT RELAY	D1836B, PIN E11 D1836B, PIN F11 D1836B, PIN G15	K221, PIN X2 K222, PIN X2	27-81-21 27-81-21

TABLE B

FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure  
Figure 104A (Sheet 13)

EFFECTIVITY  
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MESSAGE NUMBER	INDICATED LRU	FSEU PINS	LRU PINS	WDM REFERENCE
27-51314	SHUTOFF VALVE CONTROL RELAY	D1836A, PIN B03	K227, PIN X2	27-81-31
27-51315	FLAP LEVER POSITION TRANSMITTER	D1836A, PIN A03	K351, PIN X2	27-51-31
27-51316	FLAP LOAD RELIEF RELAY	D1836A, PIN F03	K352, PIN X2	27-51-51
27-51317	FLAP FAIL PROTECTION & ASYM RELAY	D1836A, PIN C03	K350, PIN X2	27-51-11
27-51318	INBD SLAT FAIL PROTECTION & ASYM RELAY	D1836A, PIN D03	K348, PIN X2	27-81-11
27-51319	OUTBD SLAT FAIL PROTECTION & ASYM RELAY	D1836A, PIN E03	K349, PIN X2	27-81-21
27-51320	FLAP BYPASS VALVE NORMAL RELAY	D1836A, PIN G03	K623, PIN X2	27-51-11
27-51321	INBD SLAT BYPASS VALVE NORMAL RELAY	D1836A, PIN H03	K624, PIN X2	27-81-11
27-51322	OUTBD SLAT BYPASS VALVE NORMAL RELAY	D1836A, PIN J03	K625, PIN X2	27-51-61
27-51325	ALTERNATE TE FLAPS EXTEND RELAY	D1836B, PIN B11	K359, PIN 14	27-51-11
27-51326	ALTERNATE TE FLAPS RETRACT RELAY	D1836B, PIN A11	K360, PIN 14	27-51-11
27-51327	ALTERNATE INBD SLAT RETRACT RELAY	D1836B, PIN D11	K225, PIN X2	27-81-11
27-51328	ALTERNATE INBD SLAT EXTEND RELAY	D1836B, PIN C11	K224, PIN X2	27-81-11
27-51329	ALTERNATE OUTBD SLAT RETRACT RELAY	D1836B, PIN F11	K222, PIN X2	27-81-21
27-51330	ALTERNATE OUTBD SLAT EXTEND RELAY	D1836B, PIN E11	K221, PIN X2	27-81-21

TABLE B

FLAP/SLAT ELECTRONIC UNIT (FSEU) BITE Procedure  
Figure 104A (Sheet 14)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23,  
 11J13, 11J14, 11J15, 11J16, 11J24

MAKE SURE THE AIRPLANE IS IN THESE CONFIGURATIONS:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER IS OFF (AMM 29-11-00/201)

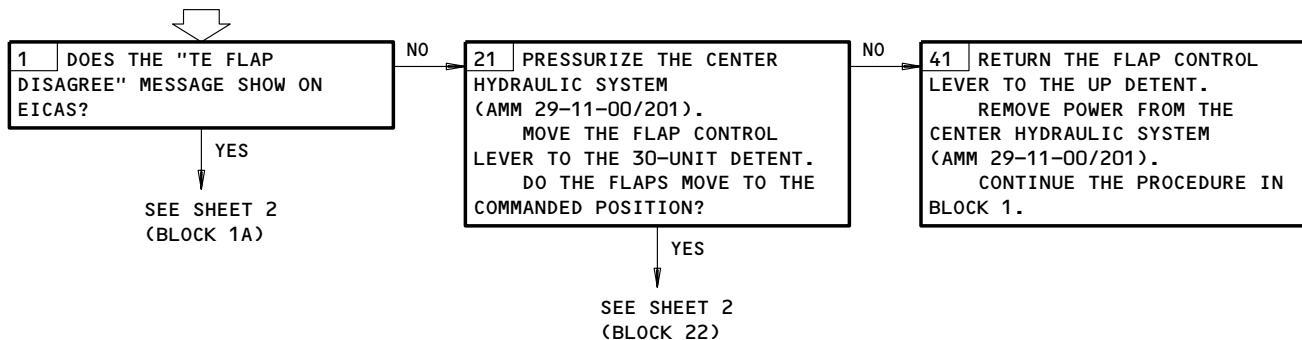
**WARNING:** KEEP PERSONS AND EQUIPMENT AWAY FROM ALL CONTROL SURFACES WHEN HYDRAULIC POWER IS SUPPLIED. AILERONS, ELEVATORS, RUDDER, FLAPS, SLATS, SPOILERS, AND STABILIZER ARE FULLY POWERED SURFACES. INJURY TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**WARNING:** AIRPLANES WITH OTHER THAN GE C2 SERIES ENGINES;  
 DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THE ACCESS DOOR FOR THE ENGINE STRUT, THE INBOARD FAN COWLING, AND THE THRUST REVERSER COWLING ARE CLEAR FROM THE MOVEMENT OF THE SLATS. IF THE MOVEMENT OF THE SLATS IS BLOCKED, IT CAN CAUSE DAMAGE TO THE AIRPLANE.

**NOTE:** RESET THE OVERLOAD TRIP INDICATOR ON THE ROTARY ACTUATORS AFTER YOU COMPLETE THIS PROCEDURE.

"TE FLAP DISAGREE"  
 SHOWN ON EICAS WHEN  
 ANY FLAP POSITION  
 SELECTED. FLAPS  
 DID NOT MOVE TO THE  
 SELECTED POSITION



TE FLAP DISAGREE Displayed on EICAS When Any Flap Position Selected.  
 Flaps Fail to Move to Selected Position  
 Figure 105 (Sheet 1)

EFFECTIVITY

27-51-00

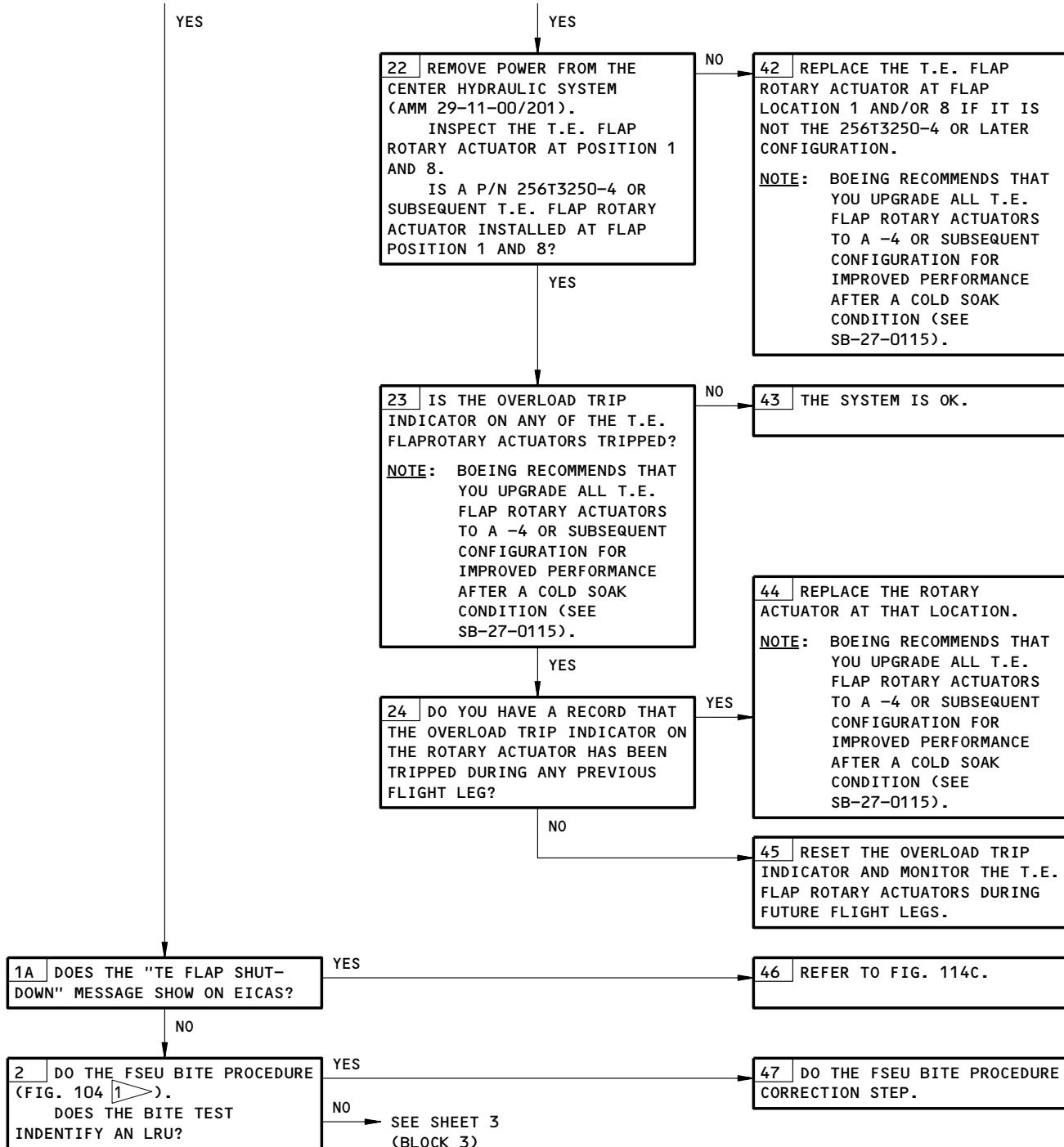
ALL



## FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 1)

FROM SHEET 1  
(BLOCK 21)



**1** DO NOT MOVE THE FLAP CONTROL LEVER BEFORE YOU START THE BITE PROCEDURE.

TE FLAP DISAGREE Displayed on EICAS When Any Flap Position Selected.  
Flaps Fail to Move to Selected Position  
Figure 105 (Sheet 2)

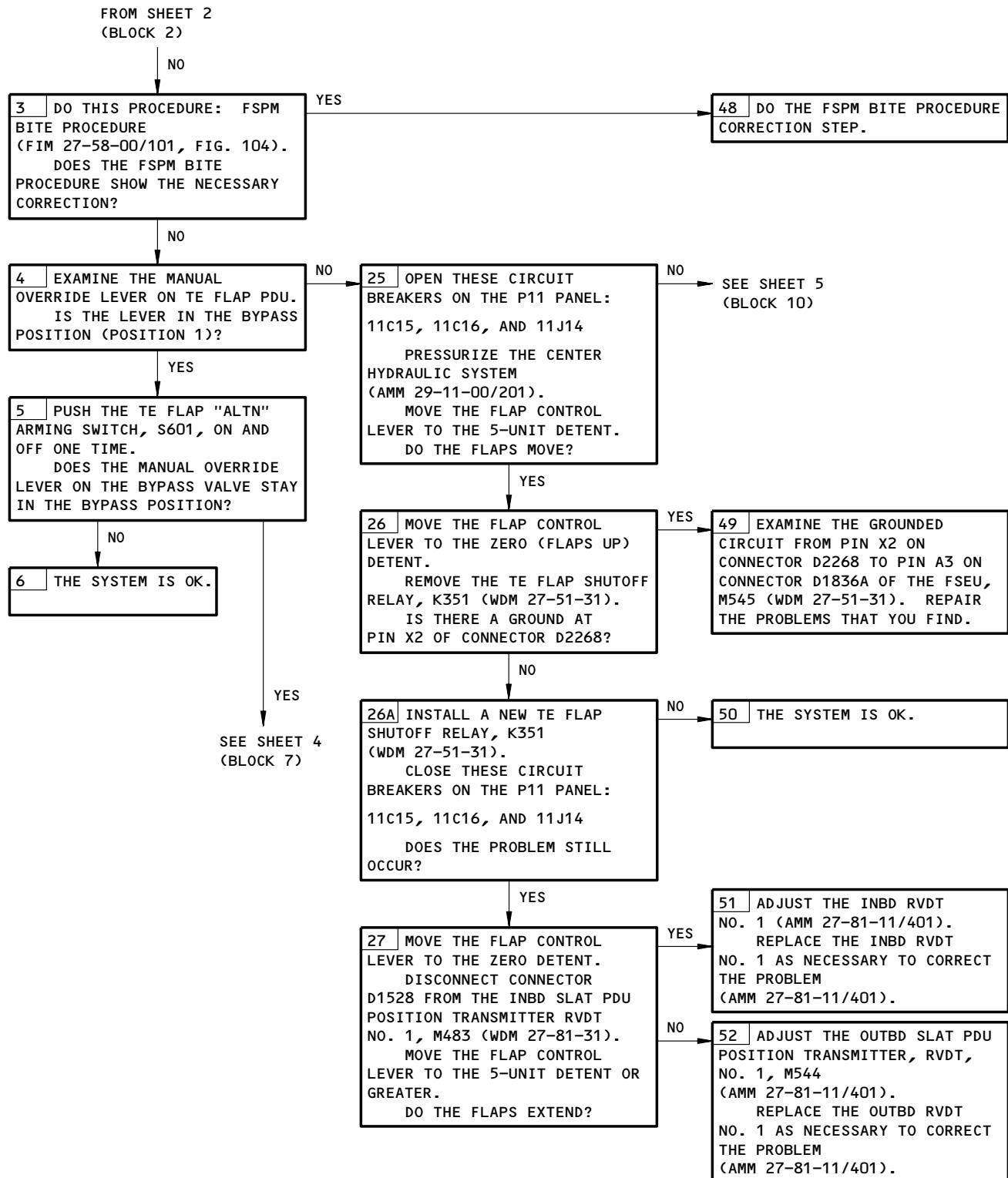
## EFFECTIVITY-

ALL

27-51-00

05

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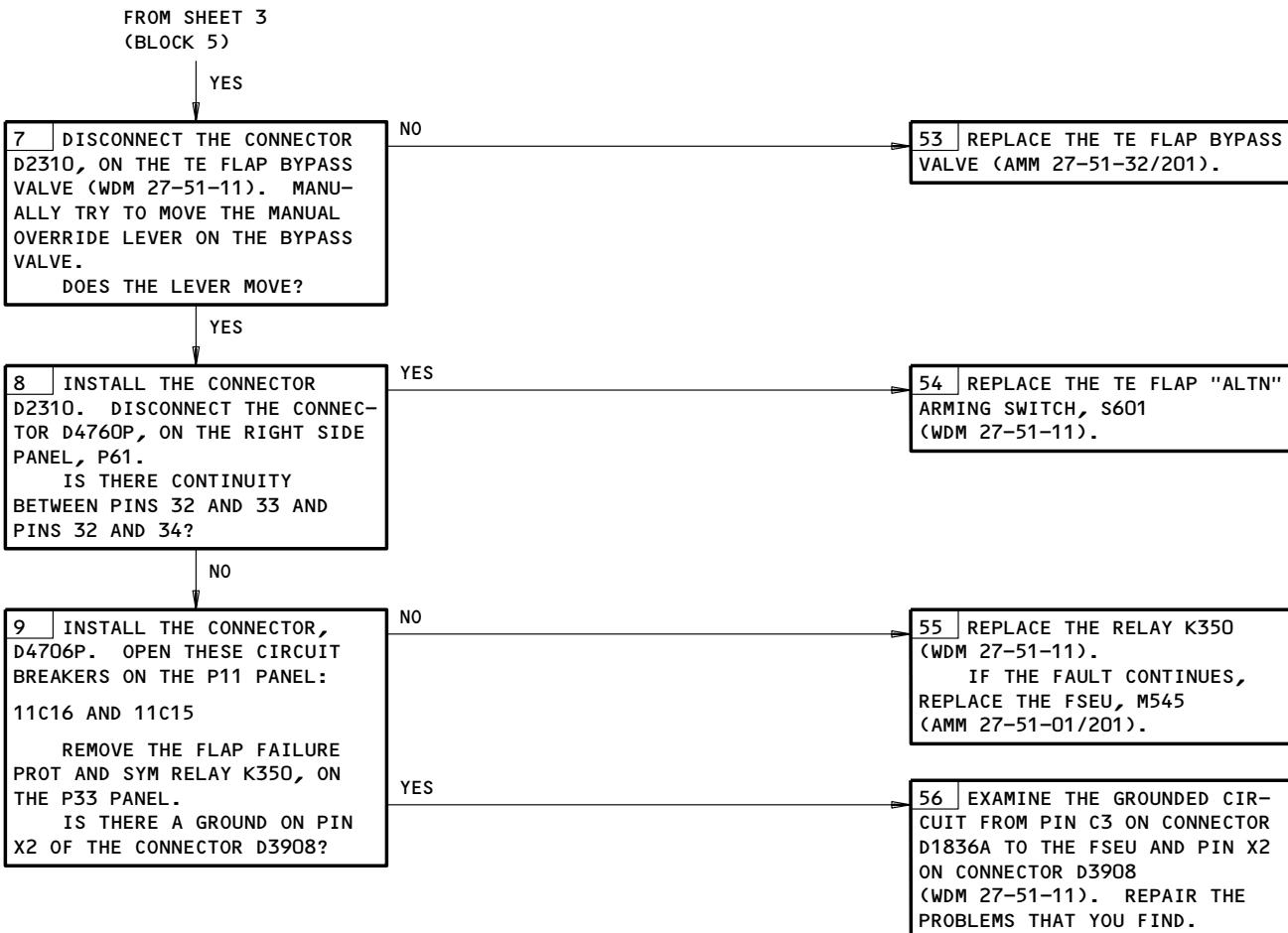
TE FLAP DISAGREE Displayed on EICAS When Any Flap Position Selected.  
Flaps Fail to Move to Selected Position  
Figure 105 (Sheet 3)

EFFECTIVITY

ALL

**27-51-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



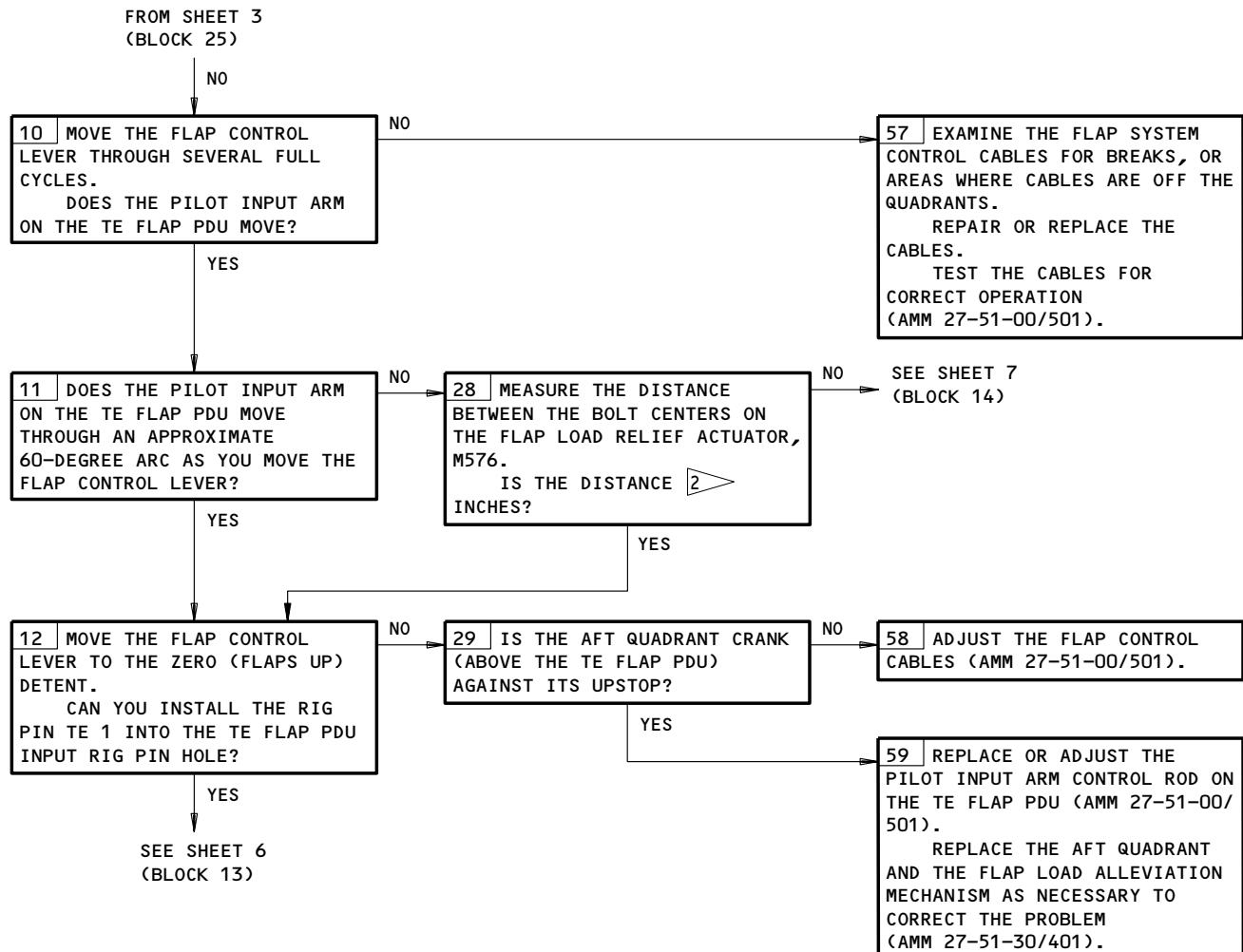
TE FLAP DISAGREE Displayed on EICAS when any Flap Position Selected.  
Flaps Fail to Move to Selected Position  
Figure 105 (Sheet 4)

EFFECTIVITY

ALL

27-51-00

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



2 767-200 AIRPLANES;  
09.77 ±0.02  
767-300 AIRPLANES;  
08.22 ±0.02

TE FLAP DISAGREE Shown on EICAS When Any Flap Position Selected.  
Flaps Did Not Move to the Selected Position  
Figure 105 (Sheet 5)

EFFECTIVITY

ALL

**27-51-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 5  
(BLOCK 12)

YES

13] PUSH THE TE FLAP "ALTN" ARMING SWITCH ON THE P3 PANEL TO ARM THE TE FLAP ALTERNATE DRIVE.  
OPEN THIS CIRCUIT BREAKER ON THE P11 PANEL:  
11J24  
MANUALLY TRY TO TURN THE TORQUE TUBES.  
CAN YOU TURN THE TORQUE TUBES?

YES

60] REPLACE THE FLAP SOLENOID VALVE, YB6V1 (AMM 27-51-48/201).

NO

13A] REMOVE THE TE FLAP ALT DRIVE MOTOR AND MANUALLY TRY TO TURN THE TORQUE TUBES.  
CAN YOU TURN THE TORQUE TUBES?

NO

30] DISCONNECT THE TORQUE TUBES AT THE FLAP PDU.  
MARK THE POSITION OF THE TORQUE TUBES FOR SUBSEQUENT CONNECTION. **3**  
MANUALLY TURN THE OUTPUT SHAFT OF THE TE FLAP PDU.  
IS THE PDU JAMMED?

YES

61] REPLACE THE TE FLAP PDU (AMM 27-51-33/401).

NO

62] CONNECT THE TORQUE TUBE AT THE PDU. **3**  
CONTINUE OUTBOARD IN THE WING; DISCONNECT THE TORQUE TUBE UNTIL YOU FIND THE JAM.  
REPLACE THE JAMMED COMPONENTS (SEE TABLE A).

63] REPLACE THE ALTERNATE DRIVE MOTOR (AMM 27-51-34/201).



IF THE ORIGINAL TORQUE TUBE POSITION IS LOST, IT WILL BE NECESSARY TO ADJUST THE FLAP DRIVE SYSTEM (AMM 27-51-01/501).

TE FLAP DISAGREE Shown on EICAS When Any Flap Position Selected.  
Flaps Did Not Move to the Selected Position  
Figure 105 (Sheet 6)

EFFECTIVITY

ALL

27-51-00

FROM SHEET 5  
(BLOCK 28)

NO

**14** OPEN THIS CIRCUIT BREAKER  
ON THE P11 PANEL:  
  
11J13  
DISCONNECT CONNECTOR  
D5414J.  
CLOSE THIS CIRCUIT BREAKER  
ON THE P11 PANEL:  
  
11J13  
IS THERE 28V DC BETWEEN  
PIN 6 AND PIN 9 (GND)  
(WDM 27-51-51)?

NO

**64** REPLACE THE FLAP LOAD  
RELIEF ACTUATOR, M576  
(AMM 27-51-30/401).

YES

**15** REMOVE THE FLAP LOAD  
RELIEF RELAY, K352  
(WDM 27-51-51).  
IS THERE A GROUND AT  
PIN X2 OF CONNECTOR D2088?

NO

**65** REPLACE THE FLAP LOAD  
RELIEF RELAY, K352, ON THE P33  
PANEL (WDM 27-51-51).

YES

**16** OPEN THESE CIRCUIT  
BREAKERS ON THE P11 PANEL:  
  
11C16,11C15  
IS THERE A GROUND AT  
PIN X2 OF CONNECTOR D2088?

NO

**66** REPLACE THE FSEU, M545  
(AMM 27-51-01/401).

YES

**67** EXAMINE THE GROUNDED  
CIRCUIT FROM PIN X2 ON D2088  
TO PIN F3 ON D1836A OF THE  
FSEU, M545 (WDM 27-51-51).  
REPAIR THE PROBLEMS THAT  
YOU FIND.

COMPONENT	AMM REF
ACTUATOR, INBD FLAP, INBD	27-51-05/401
ACTUATOR, INBD FLAP, OUTBD	27-51-11/401
ACTUATOR, OUTBD FLAP	27-51-22/401
GEARBOX - ACTUATOR INPUT ANGLE	27-51-42/401
GEARBOX - BULKHEAD ANGLE	27-51-36/401
GEARBOX - BULKHEAD TEE	27-51-35/401
GEARBOX - DROOP ANGLE	27-51-40/401
GEARBOX - OFFSET	27-51-38/401
GEARBOX - OFFSET TEE	27-51-39/401
GEARBOX - SIDE-OF-BODY ANGLE	27-51-37/401

TABLE A

TE FLAP DISAGREE Shown on EICAS When Any Flap Position Selected.  
Flaps Did Not Move to the Selected Position  
Figure 105 (Sheet 7)

EFFECTIVITY

ALL

**27-51-00**

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23, 11J13,  
11J14, 11J15, 11J16, 11J24

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

**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 TO PERSONS  
OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN  
HYDRAULIC POWER IS SUPPLIED.

**WARNING:** DO THE THRUST REVERSER DEACTIVATION PROCE-  
DURE TO PREVENT THE OPERATION OF THE THRUST  
REVERSER. ACCIDENTAL OPERATION OF THE  
THRUST REVERSER CAN CAUSE INJURY TO PERSONS  
OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THE ACCESS DOOR FOR THE ENGINE  
STRUT, THE INBOARD FAN COWLING, AND THE  
THRUST REVERSER COWLING ARE CLEAR FROM THE  
MOVEMENT OF THE SLATS. IF THE MOVEMENT OF  
THE SLATS IS BLOCKED, IT CAN CAUSE DAMAGE  
TO THE AIRPLANE.

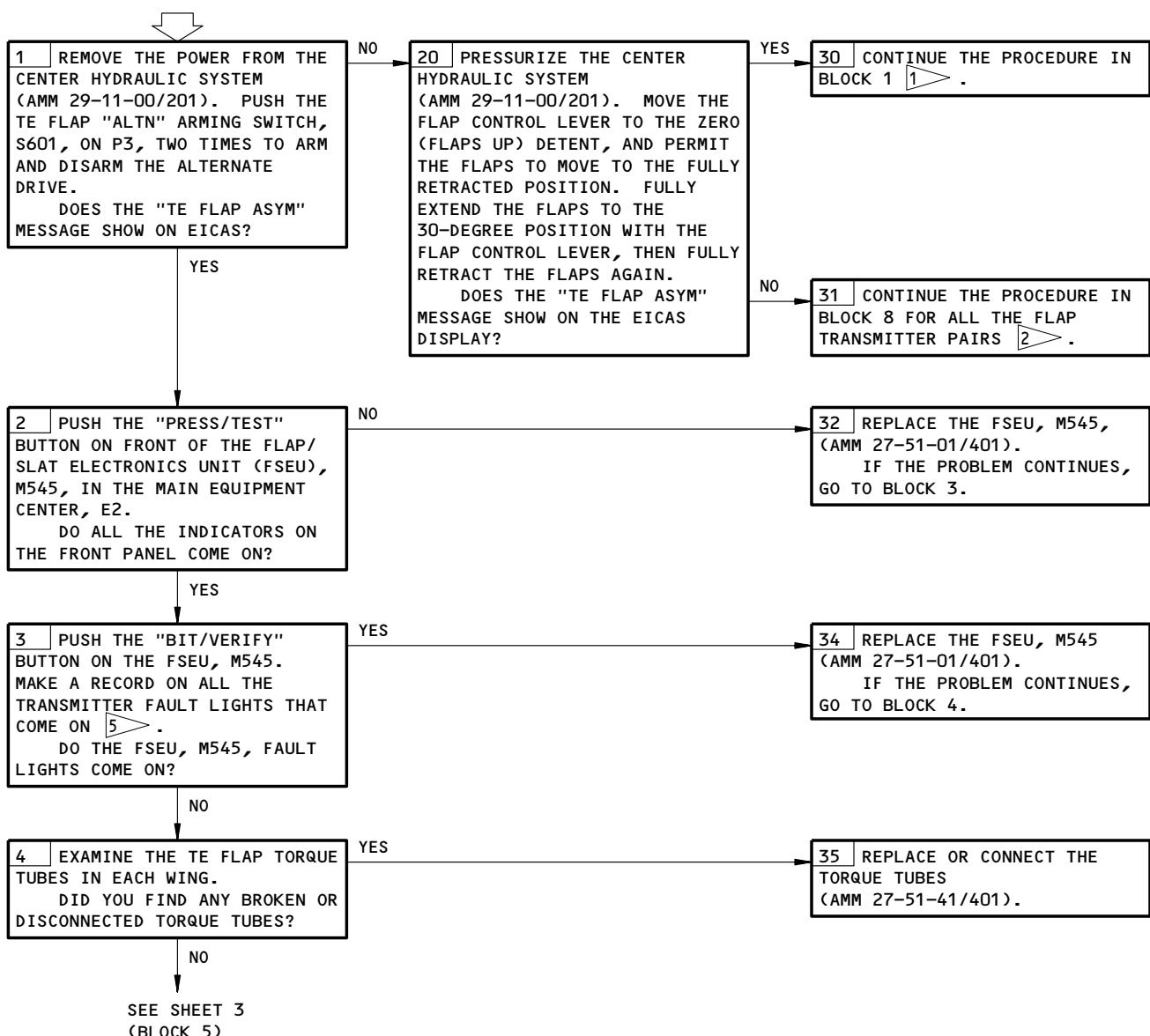
**CAUTION:** DO NOT OPERATE THE ALTERNATE DRIVE MOTOR  
CONTINUOUSLY FOR MORE THAN 4 MINUTES. DO  
NOT OPERATE THE MOTOR AGAIN UNTIL IT IS  
COOL FOR AT LEAST 20 MINUTES TO PREVENT  
DAMAGE TO THE MOTOR.

TE FLAP ASYM Shown on EICAS, No Flap Movement  
Figure 106 (Sheet 1)

EFFECTIVITY  
AIRPLANES WITH A -53 OR EARLIER FSEU

**27-51-00**

**"TE FLAP ASYM"  
SHOWN ON EICAS,  
NO FLAP MOVEMENT**



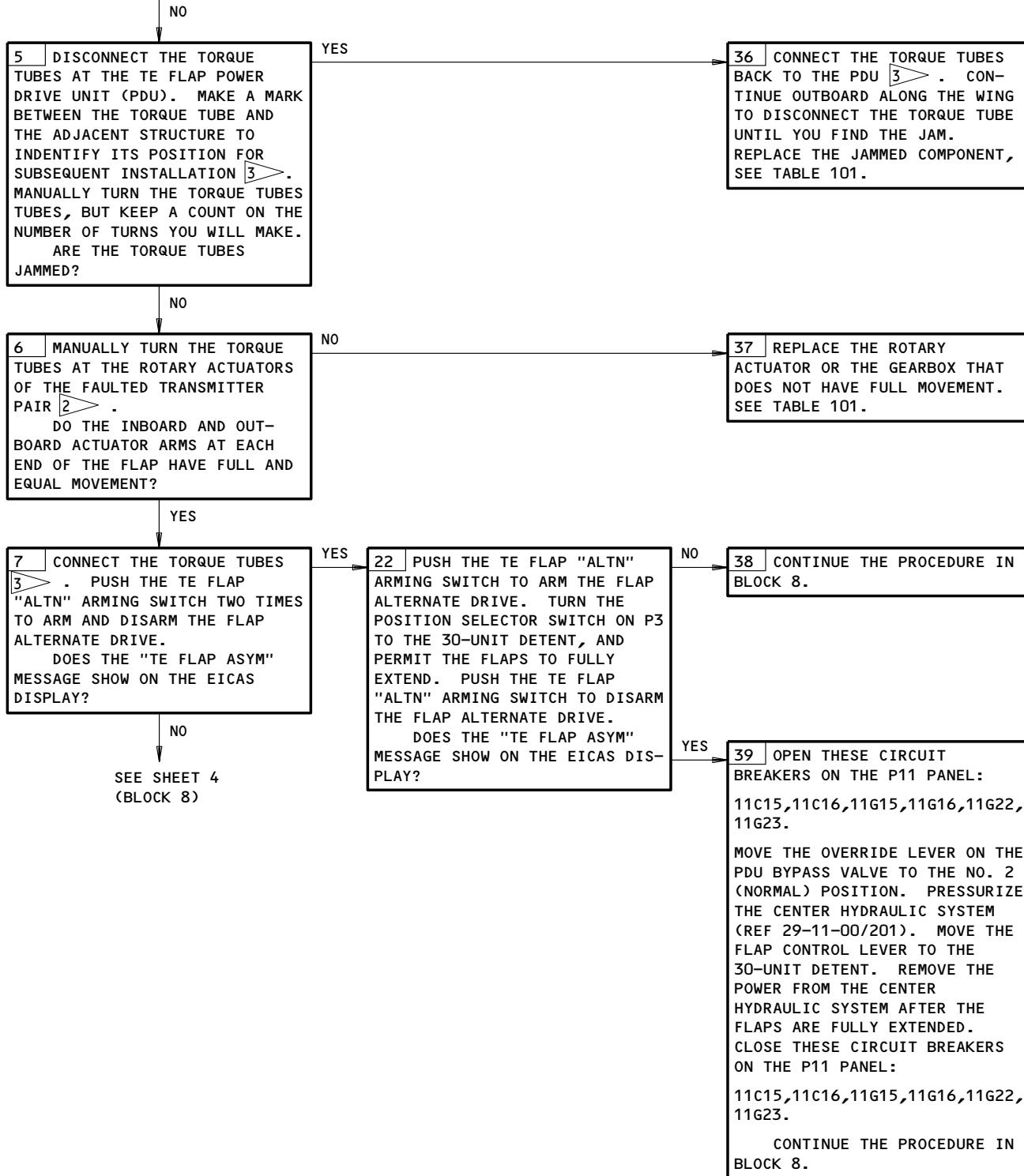
**TE FLAP ASYM Shown on EICAS, No Flap Movement**  
**Figure 106 (Sheet 2)**

EFFECTIVITY  
AIRPLANES WITH A -53 OR EARLIER FSEU

**27-51-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 2  
(BLOCK 4)

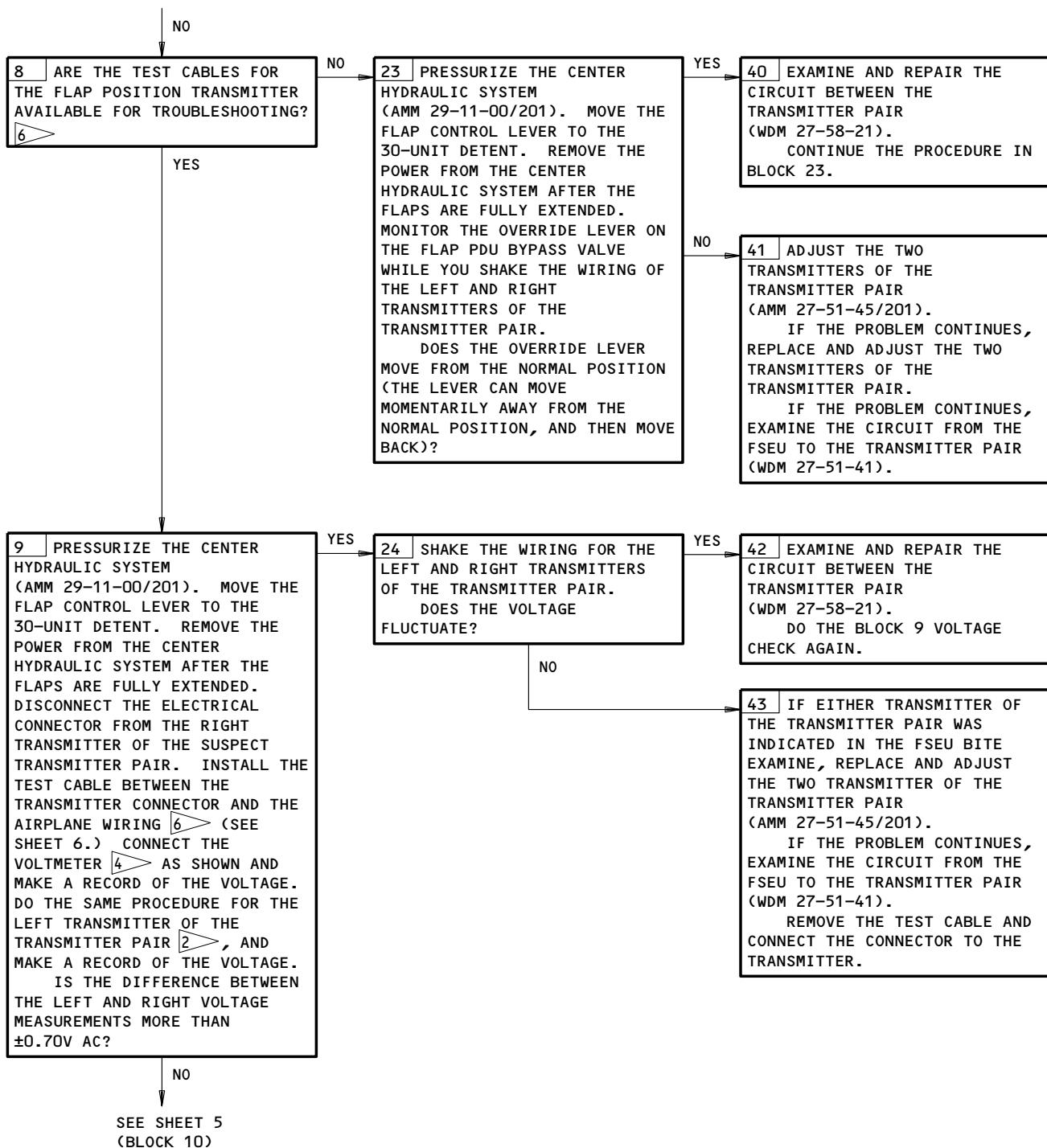


TE FLAP ASYM Shown on EICAS, No Flap Movement  
Figure 106 (Sheet 3)

EFFECTIVITY  
AIRPLANES WITH A -53 OR EARLIER FSEU

27-51-00

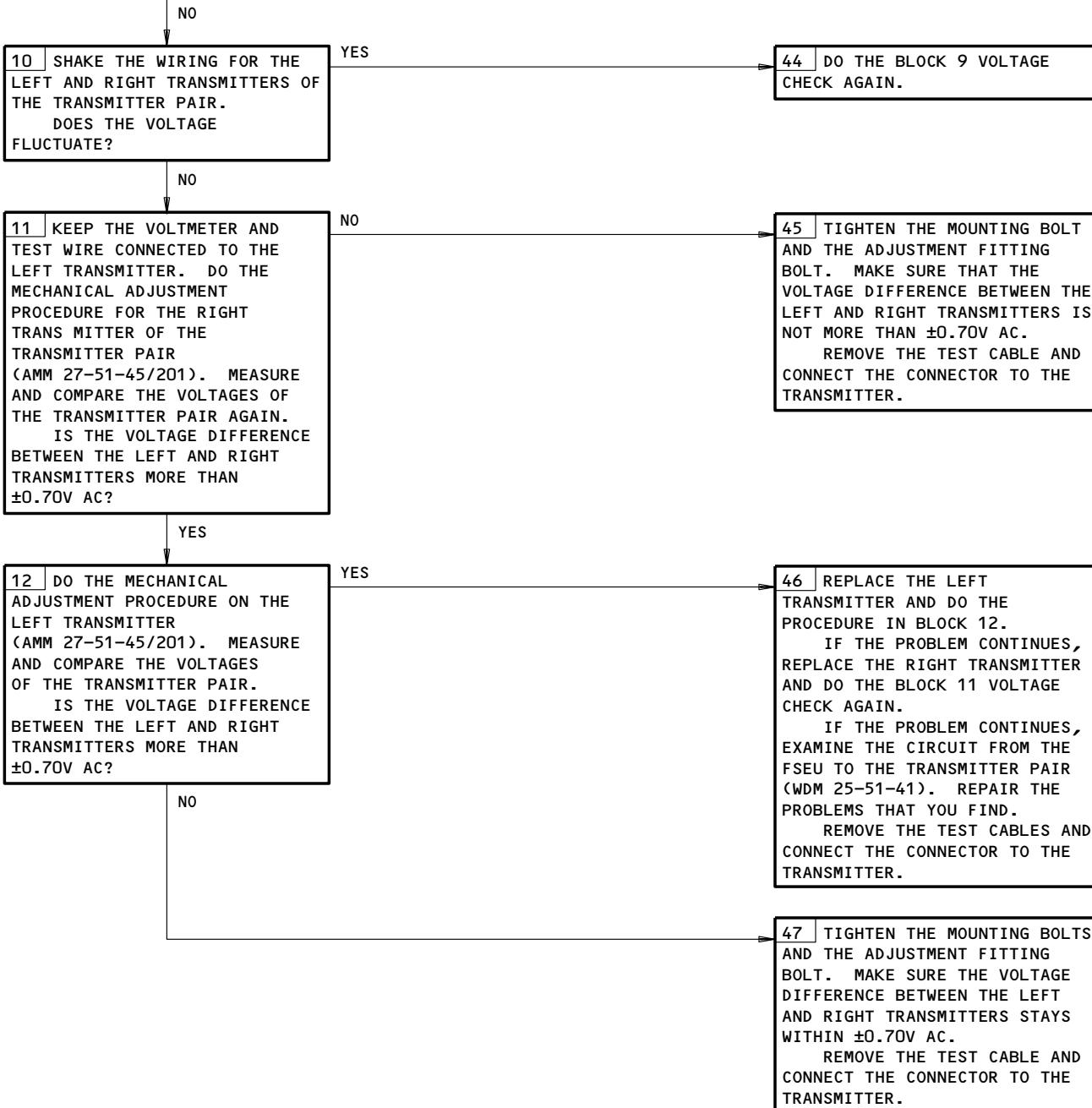
FROM SHEET 4  
(BLOCK 7)



TE FLAP ASYM Shown on EICAS, No Flap Movement  
Figure 106 (Sheet 4)

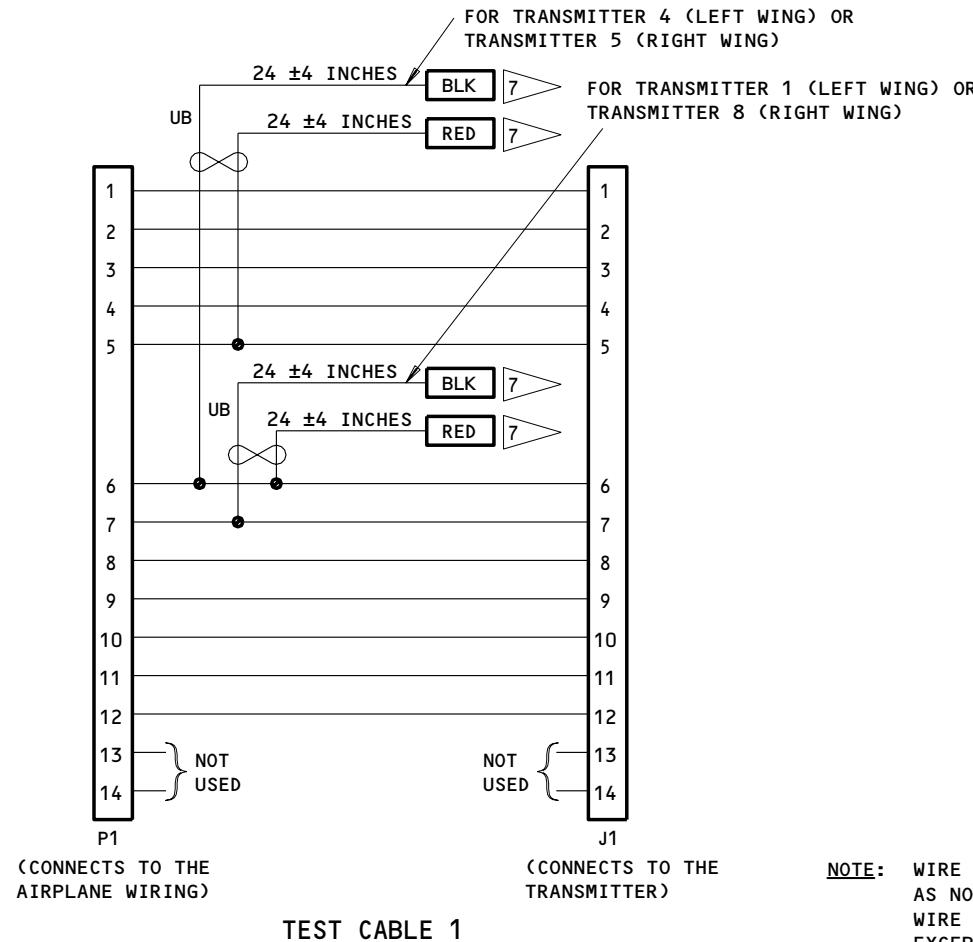
EFFECTIVITY  
AIRPLANES WITH A -53 OR EARLIER FSEU

**27-51-00**

FROM SHEET 4  
 (BLOCK 9)

 TE FLAP ASYM Shown on EICAS, No Flap Movement  
 Figure 106 (Sheet 5)

 EFFECTIVITY  
 AIRPLANES WITH A -53 OR EARLIER FSEU

**27-51-00**



NOTE: WIRE TYPE UA EXCEPT AS NOTED.  
 WIRE LENGTH 8" ±1" EXCEPT AS NOTED.  
 P1 P/N BACC45FS18C14P  
 J1 P/N BACC45FM18C14S

- 1 ▶ IF THE "TE FLAP SHUTDOWN" CONDITION OCCURS AGAIN AND AGAIN, DO THE TROUBLE SHOOTING PROCEDURE IN BLOCK 2.
- 2 ▶ THE FLAP TRANSMITTERS ARE WIRED IN PAIRS:  
 NO. 1, M473 AND NO. 8, M489  
 NO. 4, M476 AND NO. 5, M492.
- 3 ▶ IT IS NECESSARY TO ADJUST THE FLAP DRIVE (AMM 27-51-00/501) IF THE ORIGINAL TORQUE TUBE POSITION IS LOST.
- 4 ▶ DIGITAL VOLTMETER, FLUKE MODEL 8020A OR EQUIVALENT.
- 5 ▶ THE TWO TRANSMITTERS IN THE TRANSMITTER PAIR CAN BE THE CAUSE OF THE PROBLEM EVEN IF THE PROBLEM IS DETECTABLE ONLY IN ONE OF THE TWO TRANSMITTER.
- 6 ▶ BOEING TOOL NUMBER A27093-27, TE FLAPS ASYM FAULT ISOLATION TEST EQUIPMENT OR EQUIVALENT.
- 7 ▶ BANANA JACKS, CONNECTED TO THE VOLTMETER.

TE FLAP ASYM Shown on EICAS, No Flap Movement  
 Figure 106 (Sheet 6)

EFFECTIVITY  
 AIRPLANES WITH A -53 OR EARLIER FSEU

**27-51-00**

COMPONENT	AMM REF
ACTUATOR, INBD FLAP, INBD	27-51-05/401
ACTUATOR, INBD FLAP, OUTBD	27-51-11/401
ACTUATOR, OUTBD FLAP	27-51-22/401
GEARBOX - ACTUATOR INPUT ANGLE	27-51-42/401
GEARBOX - BULKHEAD ANGLE	27-51-36/401
GEARBOX - BULKHEAD TEE	27-51-35/401
GEARBOX - DROOP ANGLE	27-51-40/401
GEARBOX - OFFSET	27-51-38/401
GEARBOX - OFFSET TEE	27-51-39/401
GEARBOX - SIDE-OF-BODY ANGLE	27-51-37/401

TABLE A

TE Flap ASYM Shown on EICAS, No Flap Movement  
 Figure 106 (Sheet 7)

EFFECTIVITY  
 AIRPLANES WITH A -53 OR EARLIER FSEU

**27-51-00**

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23,  
 11J13, 11J14, 11J15, 11J16, 11J24

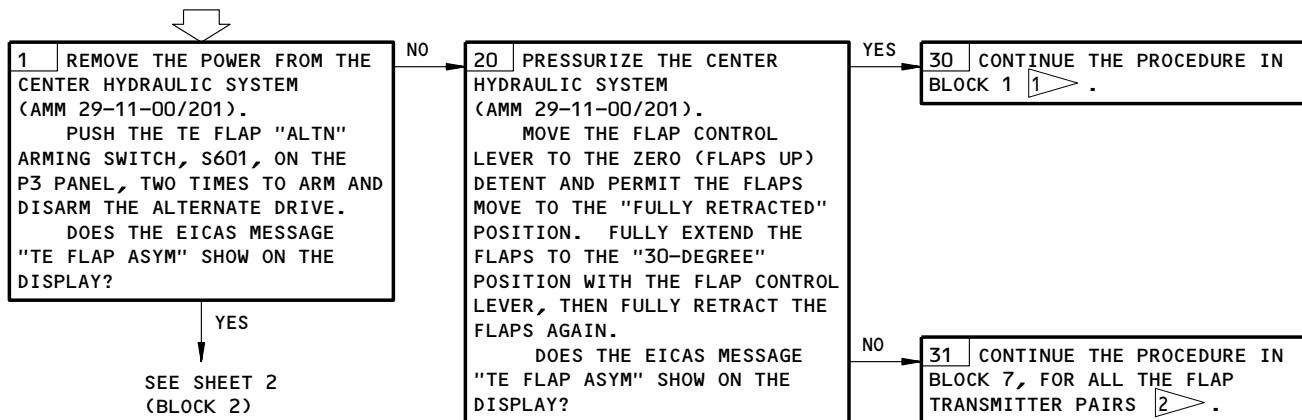
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**CAUTION:** MAKE SURE THE ACCESS DOOR FOR THE ENGINE STRUT, THE INBOARD FAN COWLING, AND THE THRUST REVERSER COWLING ARE CLEAR FROM THE MOVEMENT OF THE SLATS. IF THE MOVEMENT OF THE SLATS IS BLOCKED, IT CAN CAUSE DAMAGE TO THE AIRPLANE.

"TE FLAP ASYM"  
 EICAS MESSAGE  
 IS DISPLAYED,  
 NO FLAP MOVEMENT

**CAUTION:** DO NOT OPERATE THE ALTERNATE DRIVE MOTOR CONTINUOUSLY FOR MORE THAN 4 MINUTES. DO NOT OPERATE THE MOTOR AGAIN UNTIL IT IS COOL FOR AT LEAST 20 MINUTES TO PREVENT DAMAGE TO THE MOTOR.



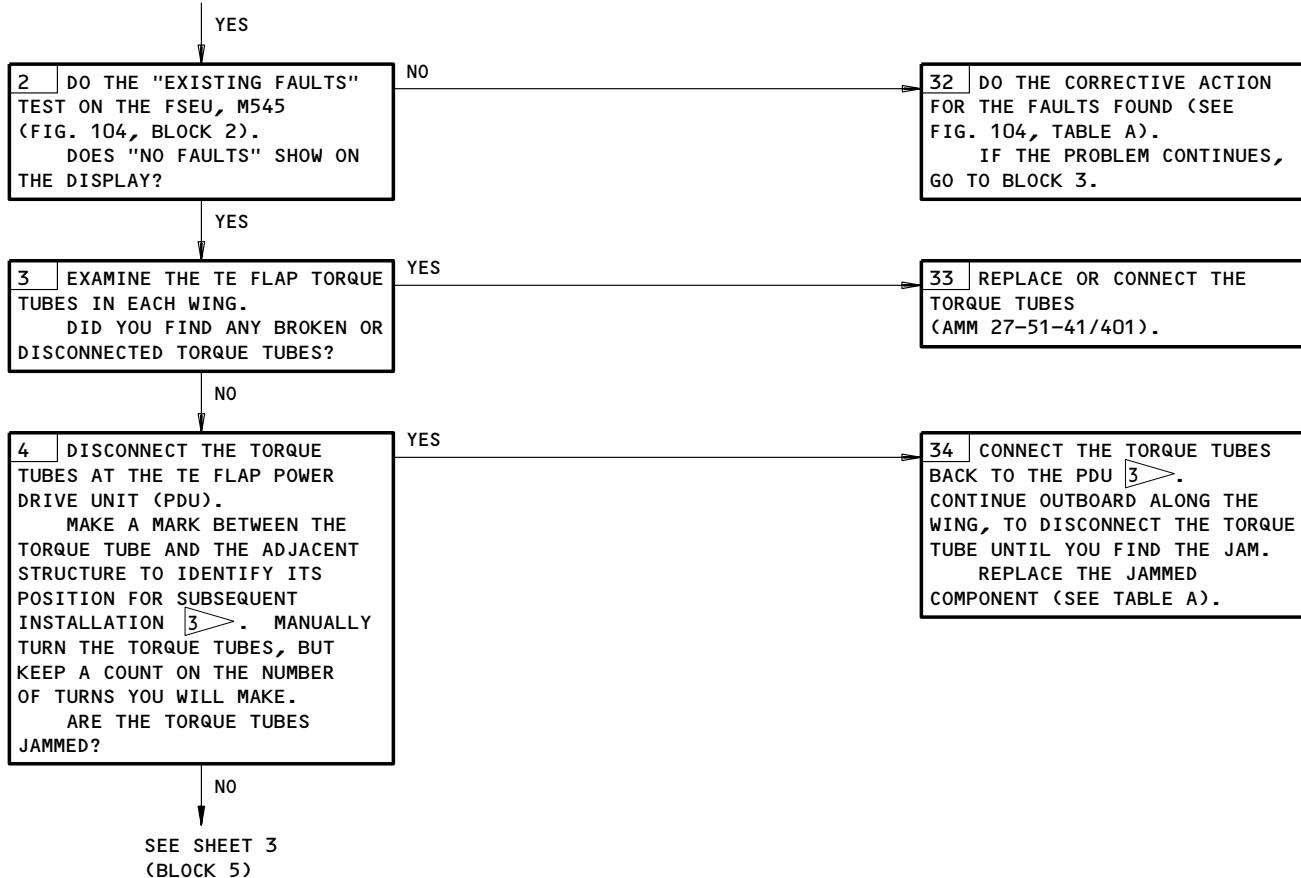
TE FLAP ASYM EICAS Message Is Displayed, No Flap Movement  
 Figure 106A (Sheet 1)

EFFECTIVITY  
 AIRPLANES WITH A -63 FSEU

**27-51-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 2  
(BLOCK 1)



TE FLAP ASYM EICAS Message Is Displayed, No Flap Movement  
Figure 106A (Sheet 2)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

27-51-00

FROM SHEET 2  
(BLOCK 4)

NO

5  MANUALLY TURN THE TORQUE TUBES AT THE ROTARY ACTUATORS OF THE FAULTED TRANSMITTER PAIR .  
DO THE INBOARD AND OUTBOARD ACTUATOR ARMS AT EACH END OF THE FLAP HAVE FULL AND EQUAL MOVEMENT?

NO

35  REPLACE THE ROTARY ACTUATOR OR THE GEARBOX THAT DOES NOT HAVE FULL MOVEMENT (SEE TABLE A).

YES

6  CONNECT THE TORQUE TUBES .  
PUSH THE TE FLAP "ALTN" ARMING SWITCH TWO TIMES TO ARM AND DISARM THE FLAP ALTERNATE DRIVE.  
DOES THE MESSAGE "TE FLAP ASYM" SHOW ON THE DISPLAY?

YES

22  PUSH THE TE FLAP "ALTN" ARMING SWITCH TO ARM THE FLAP ALTERNATE DRIVE. TURN THE "POSITION SELECTOR" SWITCH TO THE 30-UNIT DETENT. ALLOW THE FLAPS TO FULLY EXTEND.  
PUSH THE TE FLAP "ALTN" ARMING SWITCH TO DISARM THE FLAP ALTERNATE DRIVE.  
DOES THE MESSAGE "TE FLAP ASYM" SHOW ON THE DISPLAY?

NO

36  CONTINUE THE PROCEDURE IN BLOCK 7.

SEE SHEET 4  
(BLOCK 7)

YES

37  OPEN THESE CIRCUIT BREAKERS ON THE P11 PANEL:  
11C15, 11C16, 11G15, 11G16,  
11G22, 11G23

MOVE THE OVERRIDE LEVER ON THE PDU BYPASS VALVE TO THE NO. 2 "NORMAL" POSITION.  
PRESSURIZE THE CENTER HYDRAULIC SYSTEM (AMM 29-11-00/201).

MOVE THE FLAP CONTROL LEVER TO THE 30-UNIT DETENT.  
REMOVE THE POWER FROM THE CENTER HYDRAULIC SYSTEM AFTER THE FLAPS ARE FULLY EXTENDED.  
CLOSE THESE CIRCUIT BREAKERS ON THE P11 PANEL:

11C15, 11C16, 11G15, 11G16,  
11G22, 11G23

CONTINUE THE PROCEDURE IN BLOCK 7.

TE FLAP ASYM EICAS Message Is Displayed, No Flap Movement  
Figure 106A (Sheet 3)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

**27-51-00**

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FROM SHEET 4  
(BLOCK 6)

NO

7 | CHECK THE FLAP POSITION TRANSMITTER ADJUSTMENT WITH THE INPUT/OUTPUT MONITOR FUNCTION OF THE FSEU (AMM 27-51-45/201). IS THE MEASURED VALUE WITHIN THE LOWER AND UPPER LIMIT?

NO

YES

23 | PRESSURIZE THE CENTER HYDRAULIC SYSTEM (AMM 29-11-00/201). MOVE THE FLAP CONTROL LEVER TO THE 30-UNIT DETENT. REMOVE THE POWER FROM THE CENTER HYDRAULIC SYSTEM AFTER THE FLAPS ARE FULLY EXTENDED. MONITOR THE OVERRIDE LEVER ON THE FLAP PDU BYPASS VALVE WHILE YOU SHAKE THE WIRING OF THE LEFT AND RIGHT TRANSMITTERS OF THE TRANSMITTER PAIR. DOES THE OVERRIDE LEVER MOVE FROM THE NORMAL POSITION (THE LEVER CAN MOVE MOMENTARILY AWAY FROM THE NORMAL POSITION, AND THEN MOVE BACK)?

YES

38 | EXAMINE THE CIRCUIT BETWEEN THE TRANSMITTER PAIR (WDM 27-58-21). REPAIR THE PROBLEMS THAT YOU FIND. DO THE BLOCK 7 ADJUSTMENT CHECK AGAIN.

NO

39 | ADJUST THE TWO TRANSMITTERS OF THE TRANSMITTER PAIR (AMM 27-51-45/201). TIGHTEN THE MOUNTING BOLTS AND THE ADJUSTMENT FITTING BOLT. IF THE PROBLEM CONTINUES, REPLACE AND ADJUST THE TWO TRANSMITTERS OF THE TRANSMITTER PAIR. IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM THE FSEU TO THE TRANSMITTER PAIR (WDM 27-51-41). REPAIR THE PROBLEMS THAT YOU FIND.

40 | IF EITHER TRANSMITTER OF THE TRANSMITTER PAIR WAS INDICATED IN THE FSEU ADJUSTMENT CHECK - EXAMINE, REPLACE AND ADJUST THE TWO TRANSMITTERS OF THE TRANSMITTER PAIR (AMM 27-51-45/201). IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM THE FSEU TO THE TRANSMITTER PAIR (WDM 27-51-41). REPAIR THE PROBLEMS THAT YOU FIND.

TE FLAP ASYM EICAS Message Is Displayed, No Flap Movement  
Figure 106A (Sheet 4)

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

**27-51-00**

**BOEING**  
**767**  
**FAULT ISOLATION/MAINT MANUAL**

COMPONENT	AMM REF
ACTUATOR, INBD FLAP, INBD	27-51-05/401
ACTUATOR, INBD FLAP, OUTBD	27-51-11/401
ACTUATOR, OUTBD FLAP	27-51-22/401
GEARBOX - ACTUATOR INPUT ANGLE	27-51-42/401
GEARBOX - BULKHEAD ANGLE	27-51-36/401
GEARBOX - BULKHEAD TEE	27-51-35/401
GEARBOX - DROOP ANGLE	27-51-40/401
GEARBOX - OFFSET	27-51-38/401
GEARBOX - OFFSET TEE	27-51-39/401
GEARBOX - SIDE-OF-BODY ANGLE	27-51-37/401

TABLE A

- 1** IF THE "TE FLAP SHUTDOWN" CONDITION OCCURS AGAIN AND AGAIN, DO THE TROUBLE SHOOTING PROCEDURE IN BLOCK 2.
- 2** THE FLAP TRANSMITTERS ARE WIRED IN PAIRS:  
 NO. 1, M473 AND NO. 8, M489  
 NO. 2, M474 AND NO. 7, M490  
 NO. 3, M475 AND NO. 6, M491  
 NO. 4, M476 AND NO. 5, M492.
- 3** IT IS NECESSARY TO ADJUST THE FLAP DRIVE (AMM 27-51-00/501) IF THE ORIGINAL TORQUE TUBE POSITION IS LOST.

TE FLAP ASYM EICAS Message Is Displayed, No Flap Movement  
 Figure 106A (Sheet 5)

EFFECTIVITY  
 AIRPLANES WITH A -63 FSEU

**27-51-00**

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01

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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23,  
 11J13, 11J14, 11J15, 11J16, 11J24

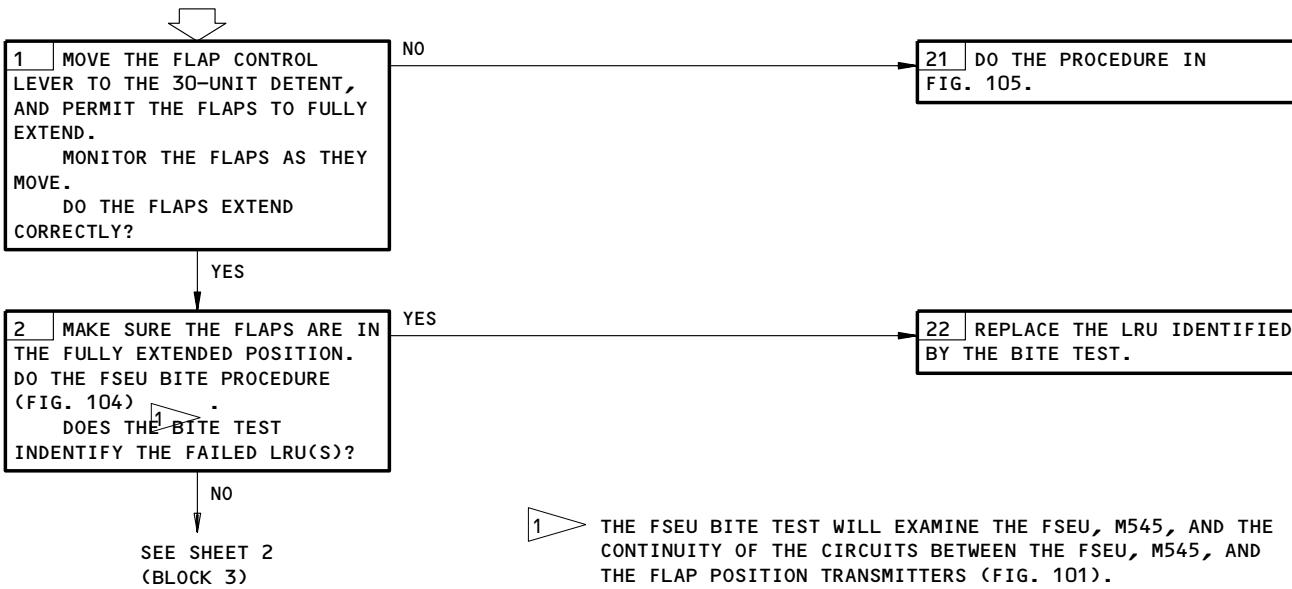
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER IS ON (AMM 29-11-00/201)

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**WARNING:** DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THE ACCESS DOOR FOR THE ENGINE STRUT, THE INBOARD FAN COWLING, AND THE THRUST REVERSER COWLING ARE CLEAR FROM THE MOVEMENT OF THE SLATS. IF THE MOVEMENT OF THE SLATS IS BLOCKED, IT CAN CAUSE DAMAGE TO THE AIRPLANE.

EICAS MESSAGE "FLAP LD RELIEF" SHOWN.  
 TRAILING EDGE LIGHT ON. FLAPS 30 SELECTED, 30 UNITS INDICATED. AIR-SPEED EXCEEDS 171-174 KNOTS.

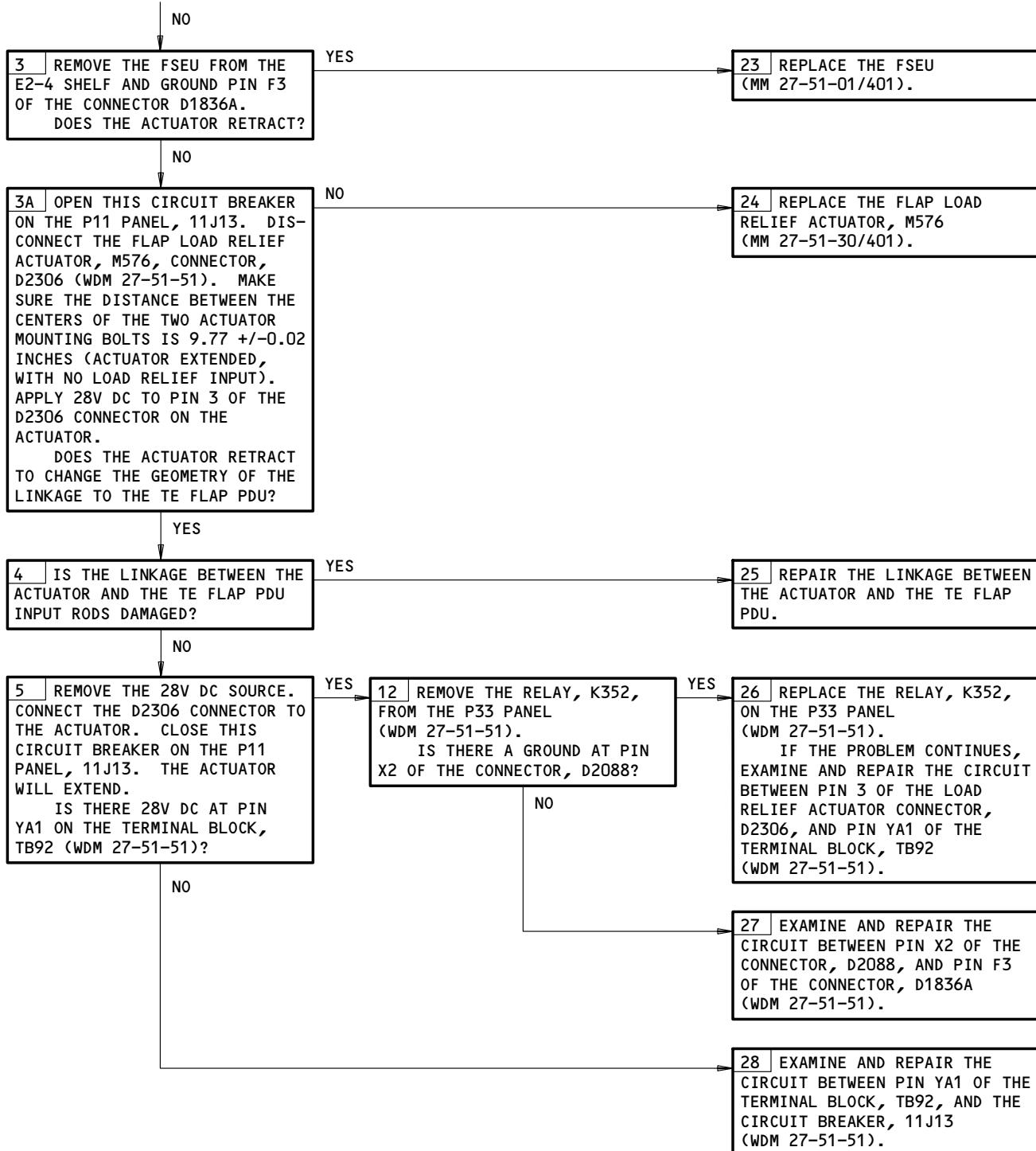


EICAS Message FLAP LD RELIEF Shown. Trailing Edge Light on.  
 Flaps 30 Selected, 30 Units Indicated. Airspeed Exceeds 171-174 Knots.  
 Figure 107 (Sheet 1)

EFFECTIVITY  
 767-200 AIRPLANES

**27-51-00**

FROM SHEET 1  
(BLOCK 2)



EICAS Message FLAP LD RELIEF Shown. Trailing Edge Light on.  
Flaps 30 Selected, 30 Units Indicated. Airspeed Exceeds 171-174 Knots  
Figure 107 (Sheet 2)

EFFECTIVITY  
767-200 AIRPLANES

**27-51-00**

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23,  
 11J13, 11J14, 11J15, 11J16, 11J24

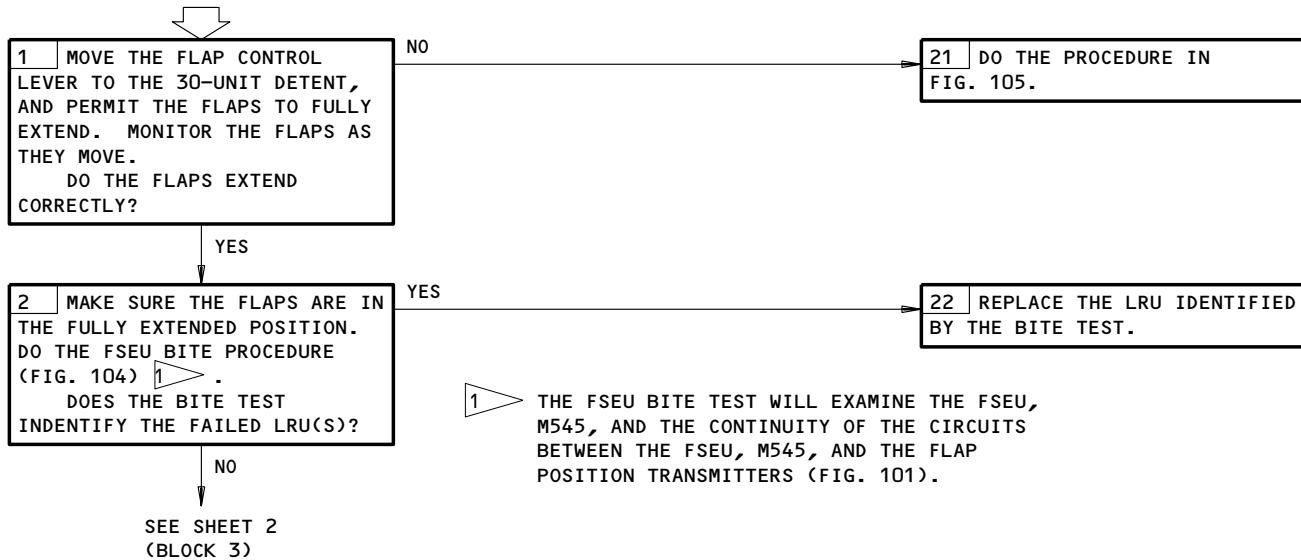
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER IS ON (AMM 29-11-00/201)

EICAS MESSAGE "FLAP LD RELIEF" SHOWN.  
 TRAILING EDGE LIGHT ON. FLAPS 30 SELECTED, 30 UNITS INDICATED.  
 AIRSPEED EXCEEDS 171-174 KNOTS.  
 FLAPS 25 SELECTED, 25 UNITS INDICATED, AIRSPEED EXCEEDS 181-184 KNOTS.

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**WARNING:** DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THE ACCESS DOOR FOR THE ENGINE STRUT, THE INBOARD FAN COWLING, AND THE THRUST REVERSER COWLING ARE CLEAR FROM THE MOVEMENT OF THE SLATS. IF THE MOVEMENT OF THE SLATS IS BLOCKED, IT CAN CAUSE DAMAGE TO THE AIRPLANE.



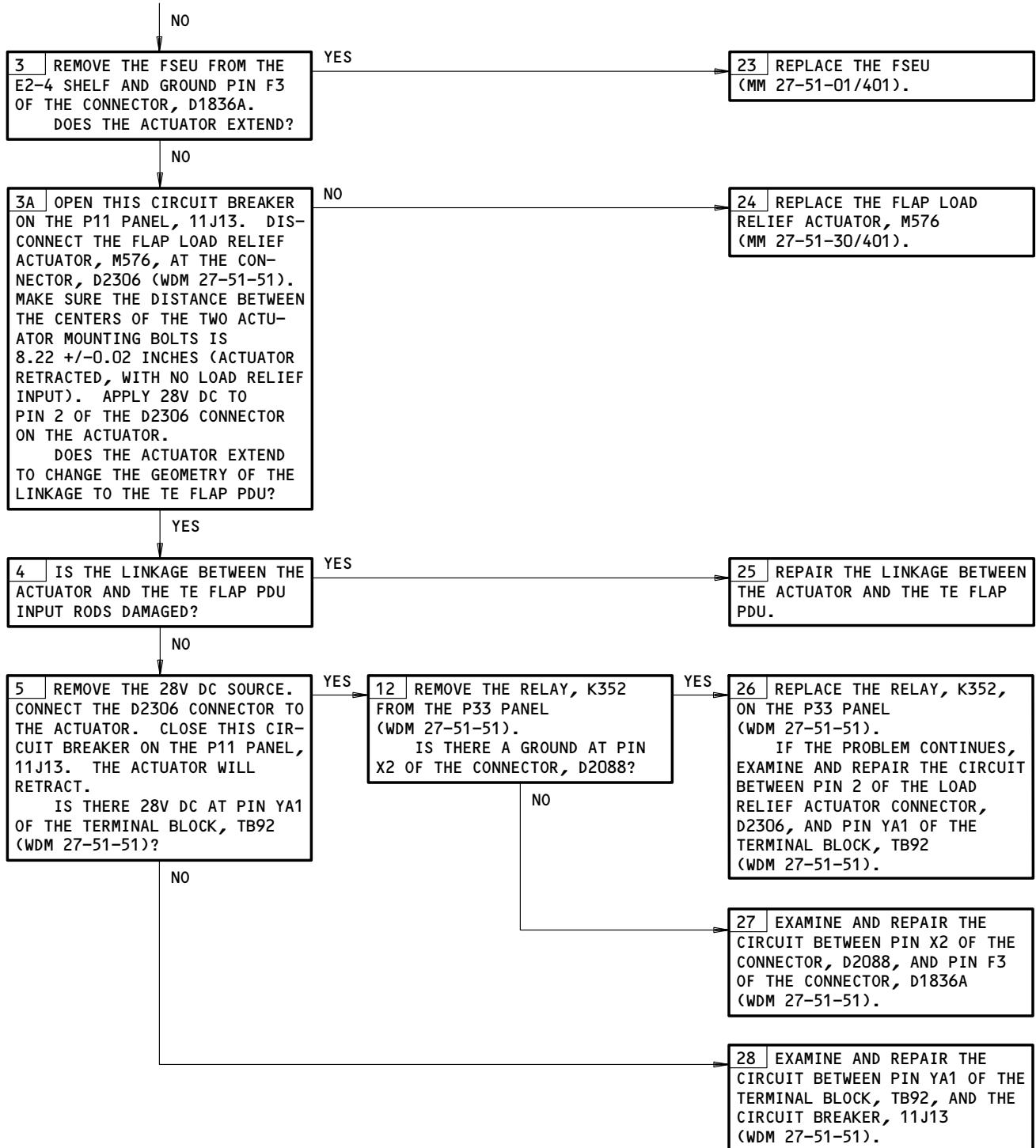
EICAS Message FLAP LD RELIEF Shown. Trailing Edge Light On.  
 Flaps 30 Selected, 30 Units Indicated. Airspeed Exceeds 171-174 Knots.  
 Flaps 25 Selected, 25 Units Indicated. Airspeed Exceeds 181-184 Knots.

Figure 107A (Sheet 1)

EFFECTIVITY  
 767-300 AIRPLANES

**27-51-00**

FROM SHEET 1  
(BLOCK 2)



EICAS Message FLAP LD RELIEF Shown. Trailing Edge Light On.  
 Flaps 30 Selected, 30 Units Indicated. Airspeed Exceeds 171-174 Knots.  
 Flaps 25 Selected, 25 Units Indicated. Airspeed Exceeds 181-184 Knots.  
 Figure 107A (Sheet 2)

EFFECTIVITY  
767-300 AIRPLANES

**27-51-00**

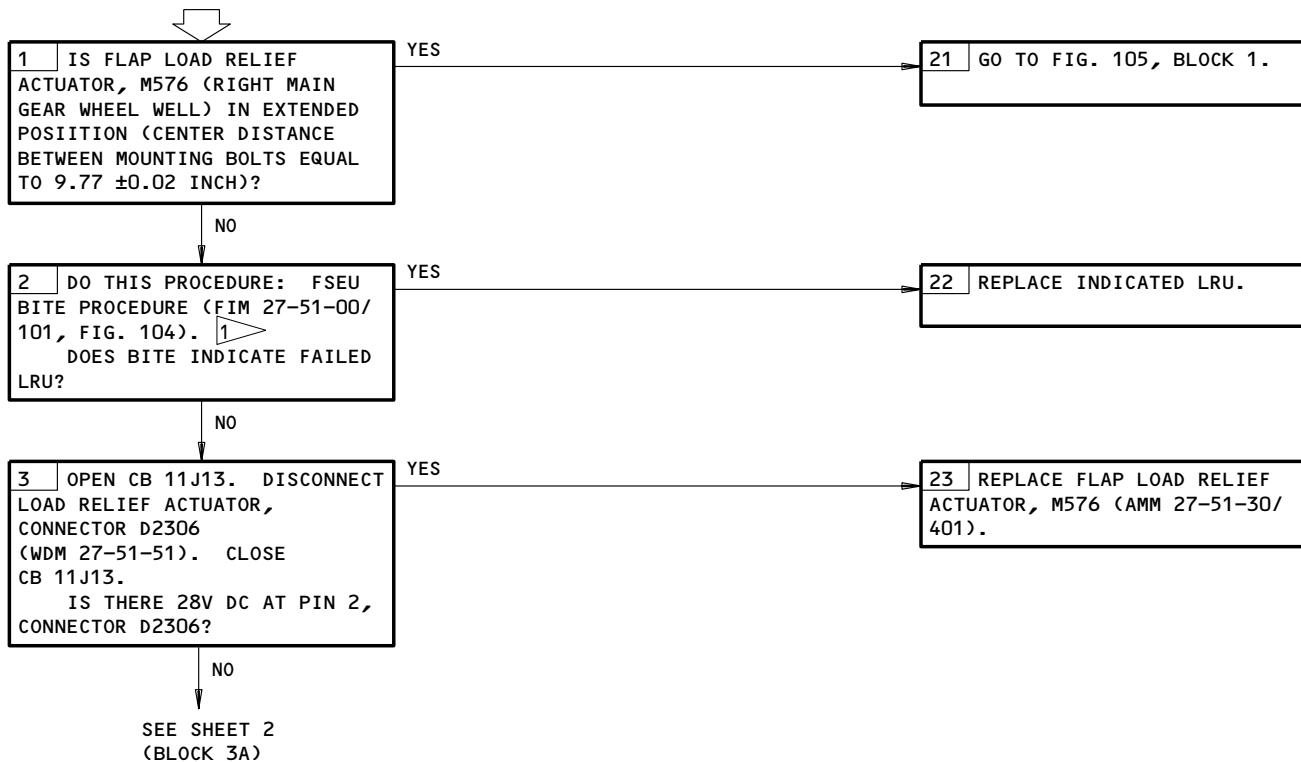
EICAS MESSAGE "TE  
 FLAP DISAGREE"  
 DISPLAYED. TRAILING  
 EDGE LIGHT ILLUM.  
 FLAPS 30 SELECTED,  
 25 UNITS INDICATED,  
 AIRSPEED LESS THAN  
 167-170 KNOTS

**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
 HYDRAULIC POWER (AMM 29-11-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23,  
 11J13, 11J14, 11J15, 11J16, 11J24

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



1 FSEU BITE TEST WILL CHECK VALIDITY OF FSEU, M545, AND CONTINUITY OF CIRCUITS BETWEEN THE FSEU, M545, AND FLAP POSITION TRANSMITTERS (FIG. 101).

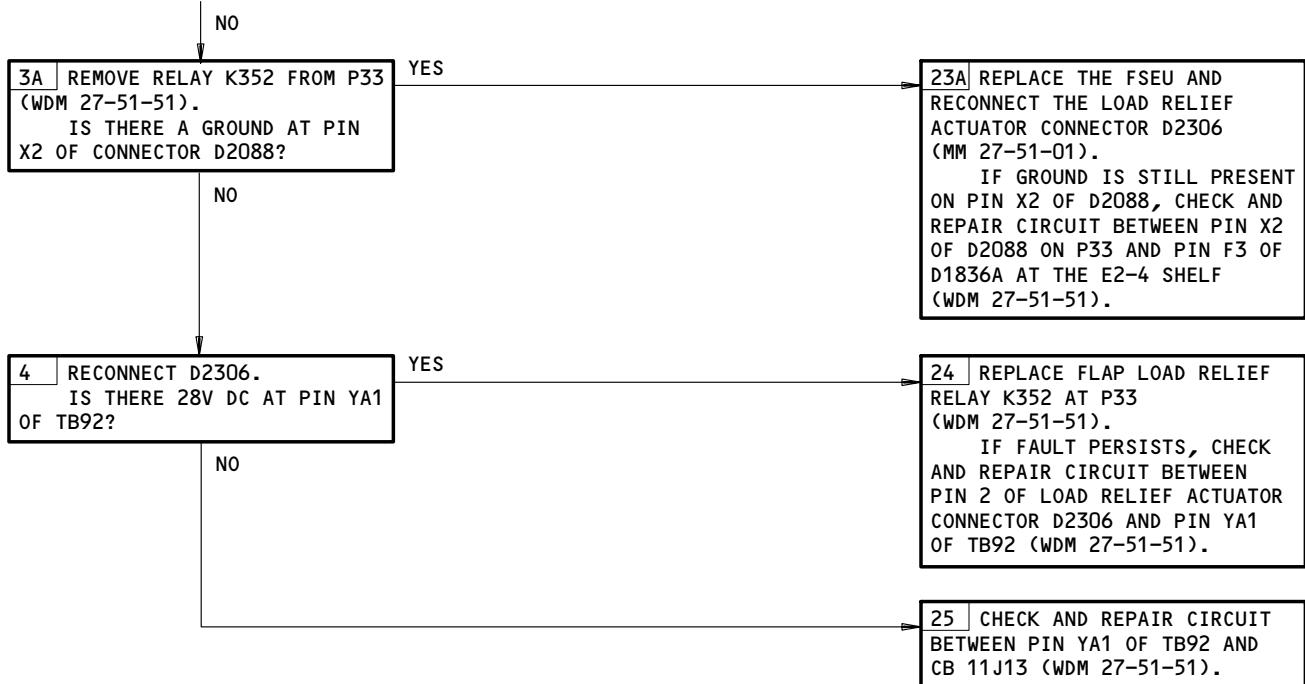
EICAS Message TE FLAP DISAGREE Displayed. Trailing Edge Light Illum.  
 Flaps 30 Selected, 25 Units Indicated, Airspeed Less Than 167-170 Knots  
 Figure 108 (Sheet 1)

EFFECTIVITY  
 767-200 AIRPLANES

**27-51-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 3)



EICAS Message TE FLAP DISAGREE Displayed. Trailing Edge Light Illum.  
Flaps 30 Selected, 25 Units Indicated, Airspeed Less Than 167-170 Knots  
Figure 108 (Sheet 2)

EFFECTIVITY  
767-200 AIRPLANES

**27-51-00**

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## FAULT ISOLATION/MAINT MANUAL

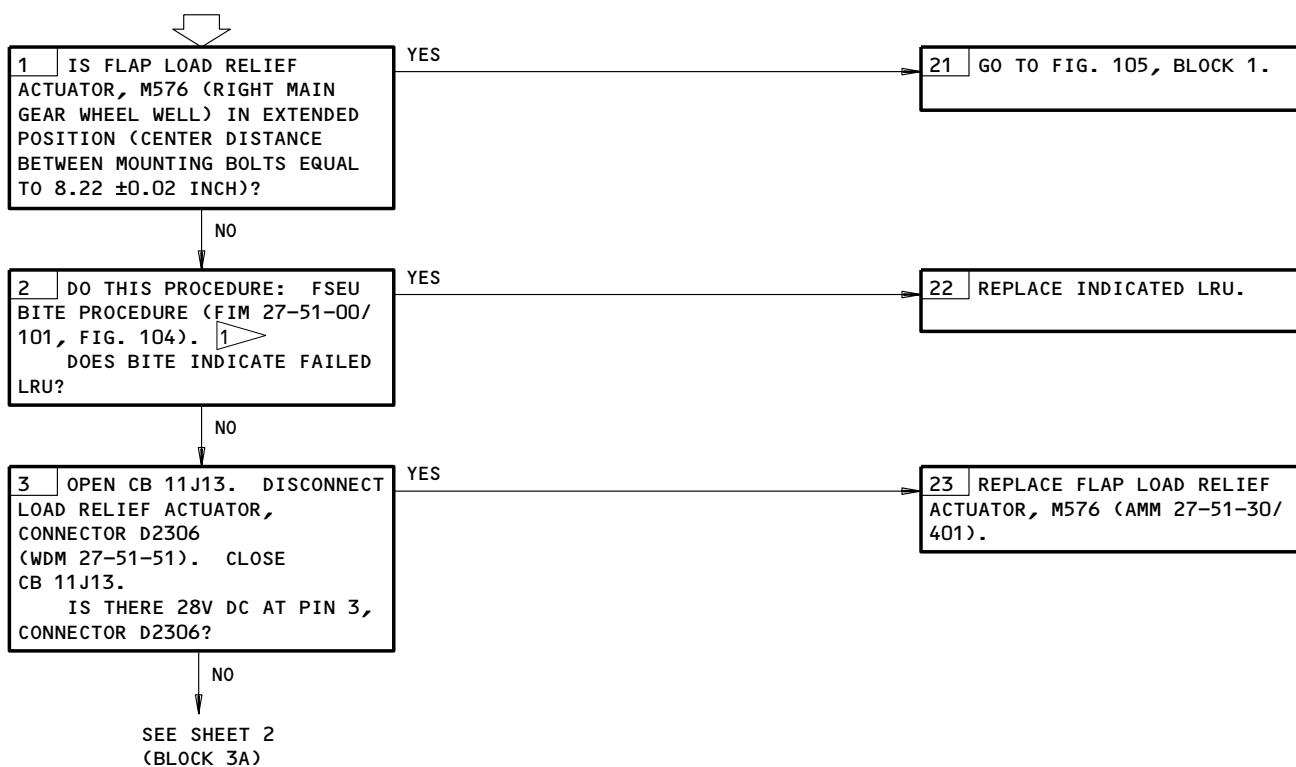
EICAS MESSAGE "TE  
FLAP DISAGREE"  
DISPLAYED. TRAILING  
EDGE LIGHT ILLUM.  
FLAPS 30 SELECTED,  
20 UNITS INDICATED,  
AIRSPEED LESS THAN  
167-170 KNOTS.  
FLAPS 25 SELECTED,  
20 UNITS INDICATED,  
AIRSPEED LESS THAN  
177-180 KNOTS.

## PREREQUISITES

MAKE SURE THAT THIS SYSTEM WILL OPERATE:  
HYDRAULIC POWER (AMM 29-11-00/201)

MAKE SURE THAT THESE CIRCUIT BREAKERS ARE CLOSED:  
6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23,  
11J13, 11J14, 11J15, 11J16, 11J24

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



1 FSEU BITE TEST WILL CHECK VALIDITY OF FSEU, M545, AND CONTINUITY OF CIRCUITS BETWEEN THE FSEU, M545, AND FLAP POSITION TRANSMITTERS (FIG. 101).

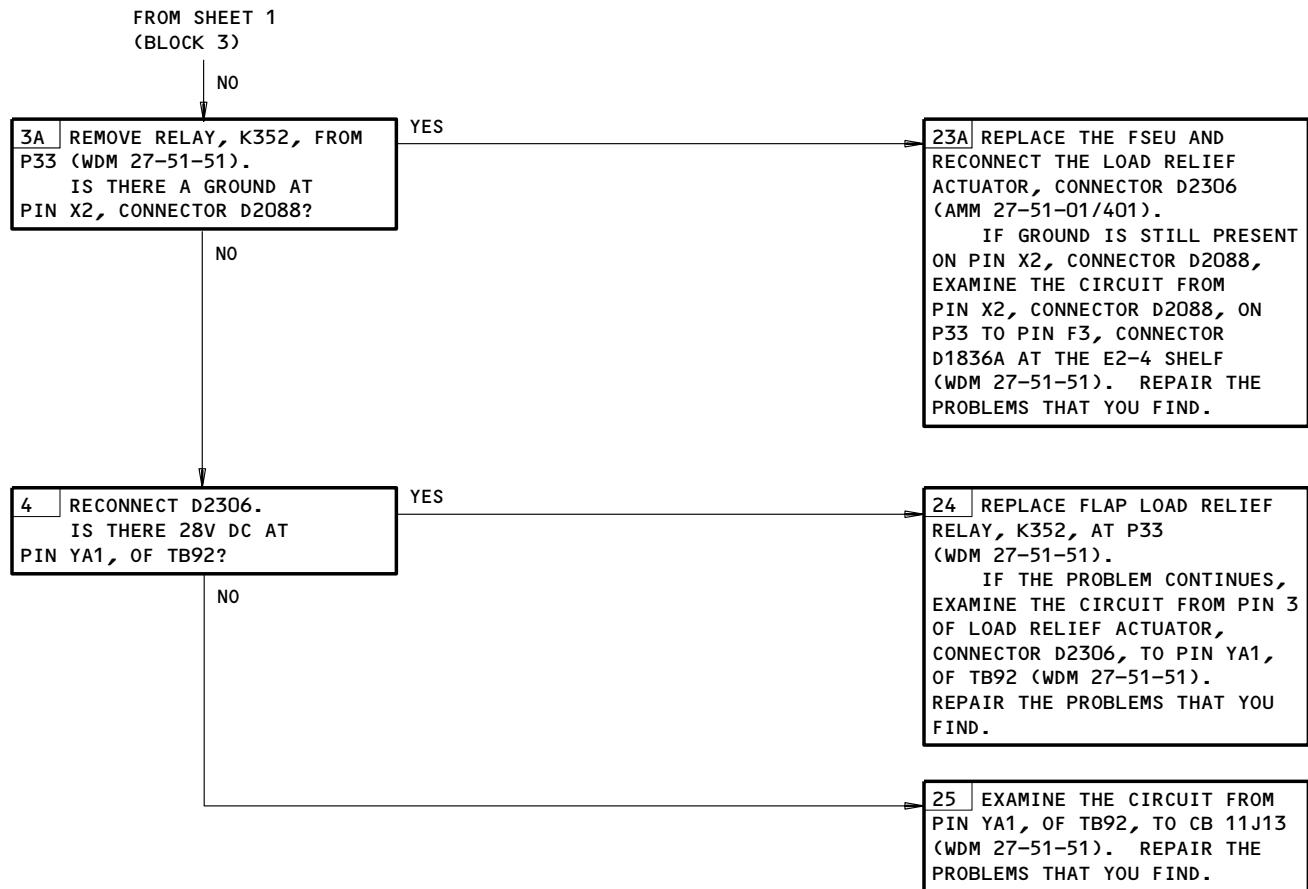
EICAS Message TE FLAP DISAGREE Displayed. Trailing Edge Light Illum.  
Flaps 30 Selected, 20 Units Indicated, Airspeed Less Than 167-170 Knots.  
Flaps 25 Selected, 20 Units Indicated, Airspeed Less Than 177-180 Knots.

Figure 108A (Sheet 1)

## EFFECTIVITY— 767-300 AIRPLANES

27-51-00

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



EICAS Message TE FLAP DISAGREE Displayed. Trailing Edge Light Illum.  
Flaps 30 Selected, 25 Units Indicated, Airspeed Less Than 167-170 Knots.  
Flaps 25 Selected, 15 Units Indicated, Airspeed Less Than 177-180 Knots.

Figure 108A (Sheet 2)

EFFECTIVITY  
767-300 AIRPLANES

**27-51-00**

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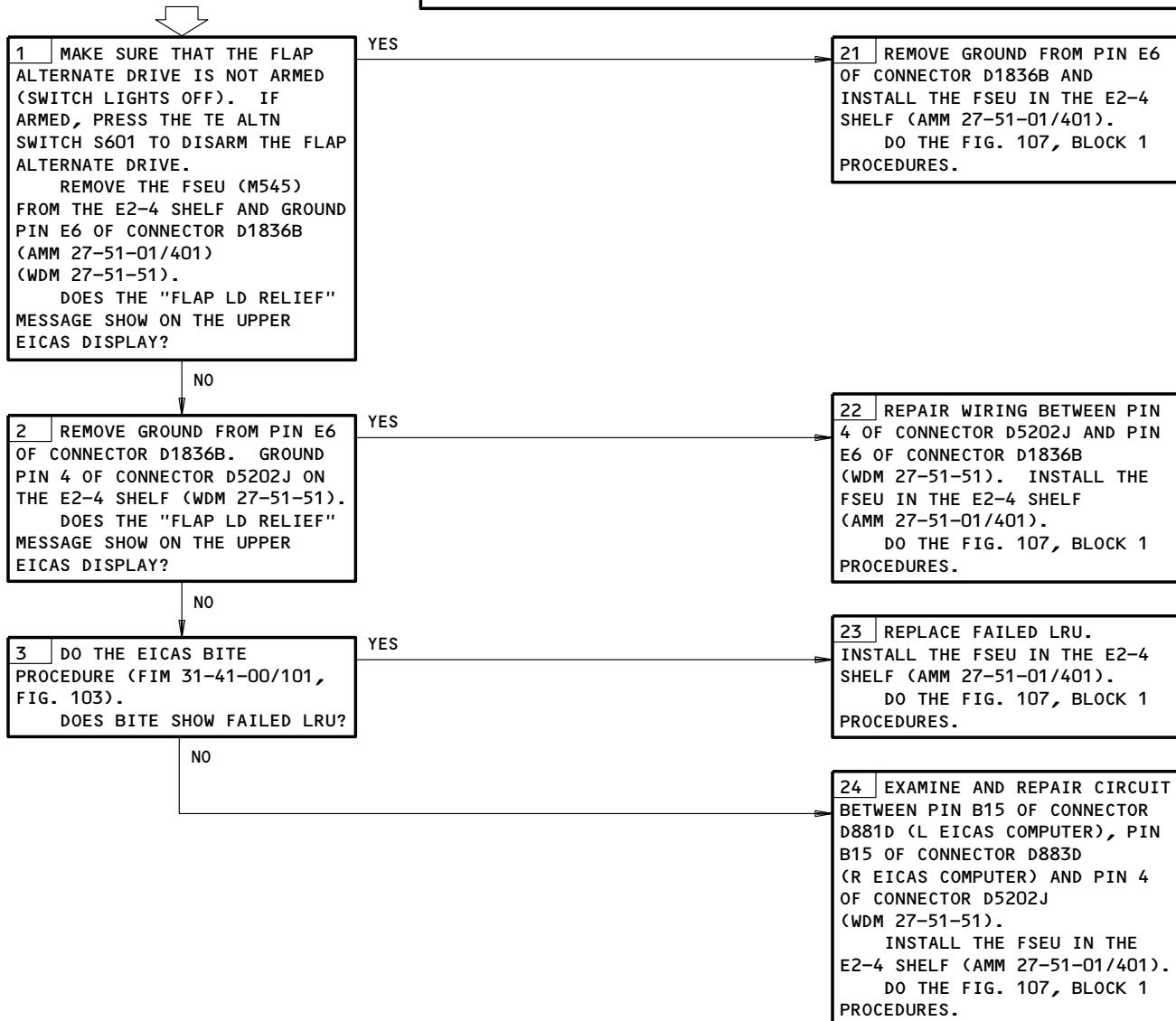
NO "FLAP LD RELIEF"  
 MESSAGE SHOWN ON  
 EICAS. FLAPS 30  
 SELECTED, 30 UNITS  
 INDICATED, AIRSPEED  
 EXCEEDS 171-174  
 KNOTS.

**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
 EICAS (AMM 31-41-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23,  
 11J2, 11J13, 1J14, 11J15, 11J16, 11J24, 11J29,  
 11J30, 11J31, 11J32

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER IS ON (AMM 29-11-00/201)  
 EICAS (AMM 31-41-00/201)



No FLAP LD RELIEF Message Shown on EICAS. Flaps 30 Selected,  
 30 Units Indicated, Airspeed Exceeds 171-174 Knots.

Figure 109

EFFECTIVITY  
 767-200 AIRPLANES

**27-51-00**

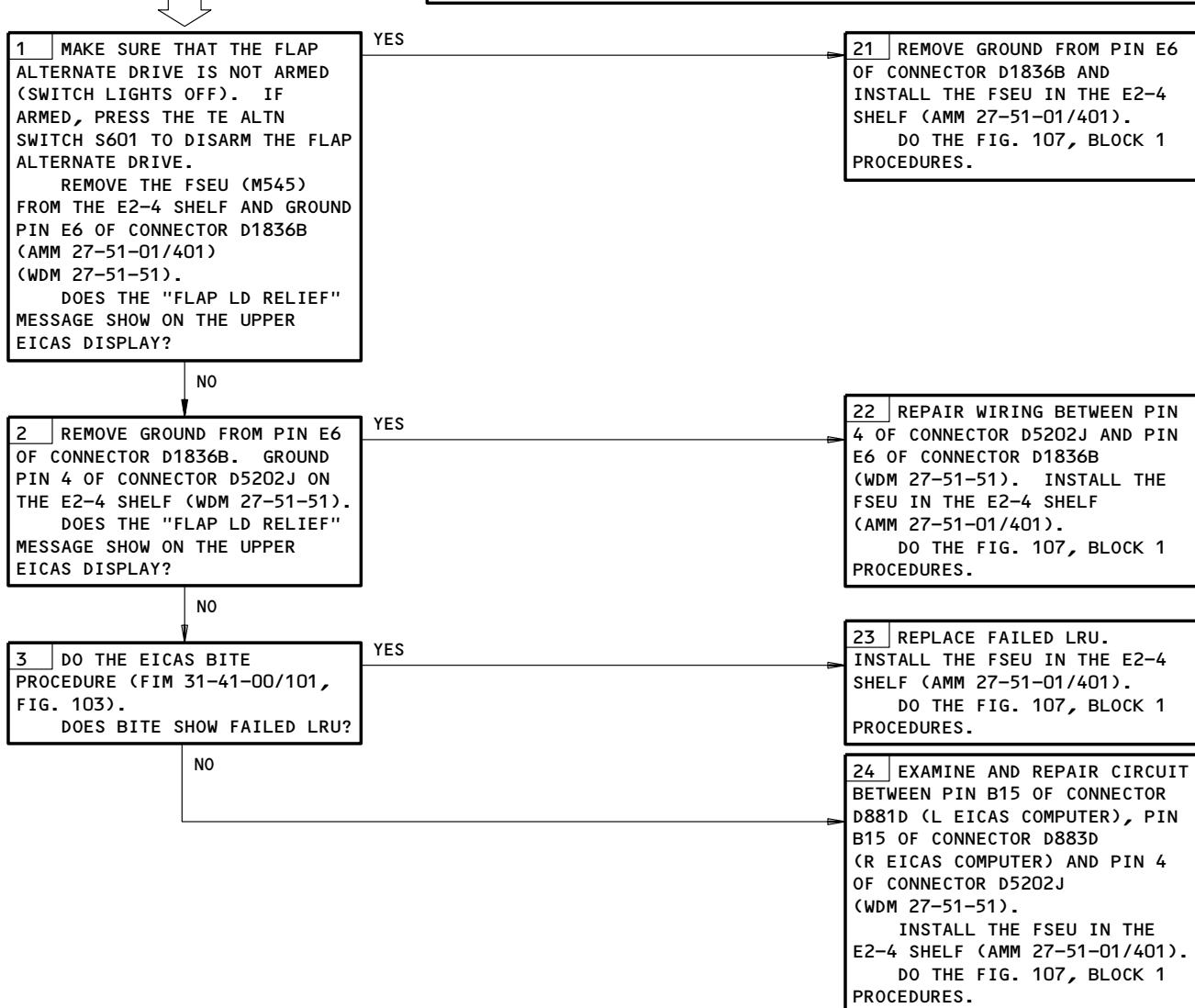
NO "FLAP LD RELIEF" MESSAGE SHOWN ON EICAS. FLAPS 30 SELECTED, 30 UNITS INDICATED, AIRSPEED EXCEEDS 171-174 KNOTS. FLAPS 25 SELECTED, 25 UNITS INDICATED, AIRSPEED EXCEEDS 181-184 KNOTS.

**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
EICAS (AMM 31-41-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23, 11J2, 11J13, 1J14, 11J15, 11J16, 11J24, 11J29, 11J30, 11J31, 11J32

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
HYDRAULIC POWER IS ON (AMM 29-11-00/201)  
EICAS (AMM 31-41-00/201)



No FLAP LD RELIEF Message Shown on EICAS.

Flaps 30 Selected, 30 Units Indicated. Airspeed Exceeds - 171-174 Knots.

Flaps 25 Selected, 25 Units Indicated. Airspeed Exceeds - 181-184 Knots.

Figure 109A

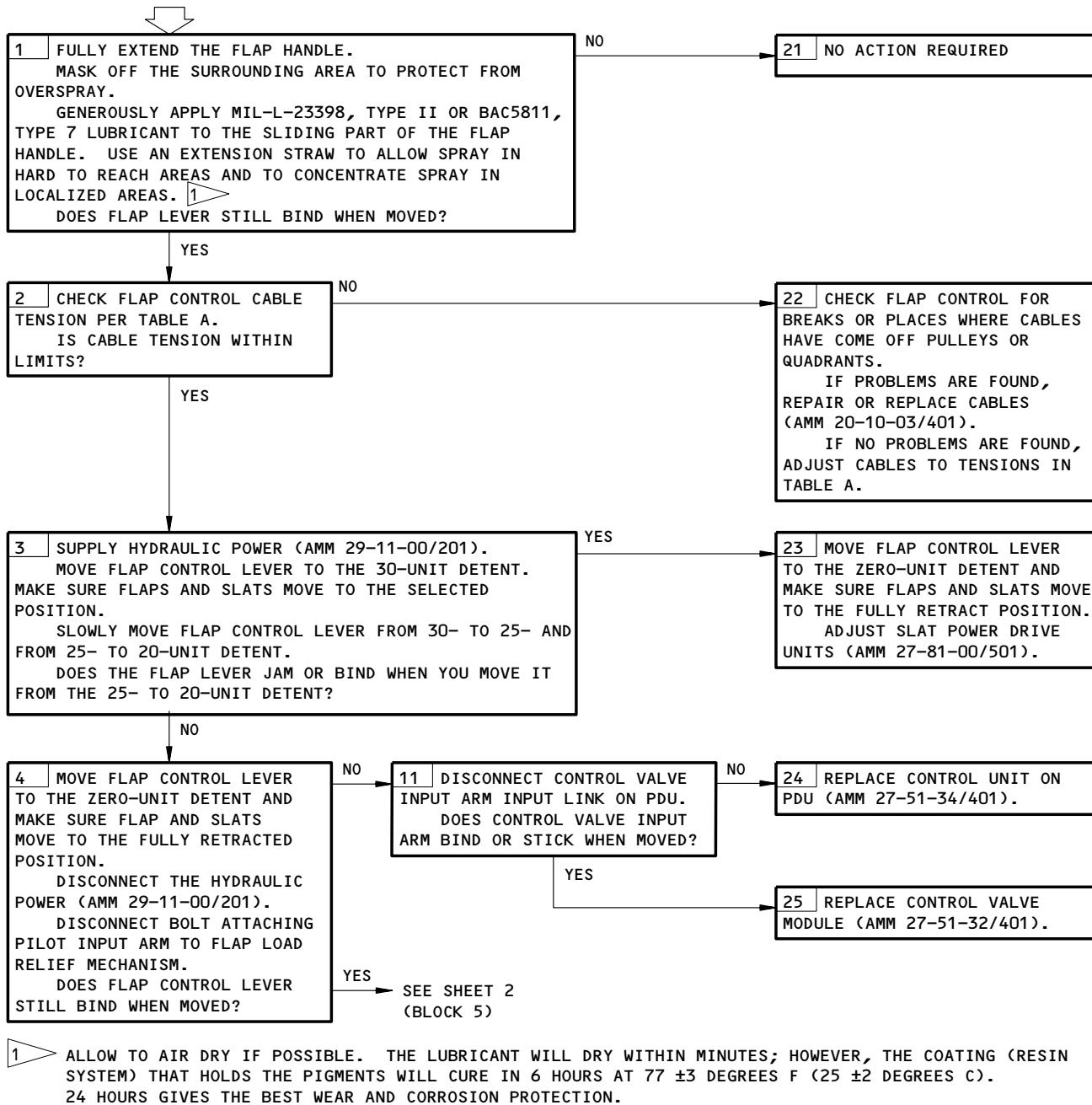
EFFECTIVITY  
767-300 AIRPLANES

**27-51-00**

FLAP LEVER JAMS,  
BINDS OR IS ROUGH  
WHEN SELECTING ANY  
TE FLAP POSITION.

## PREREQUISITES

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
HYDRAULIC POWER OFF (AMM 29-11-00/2011)



**Flap Lever Jams, Binds or Is Rough When Selecting Any TE Flap Position  
Figure 110 (Sheet 1)**

## EFFECTIVITY-

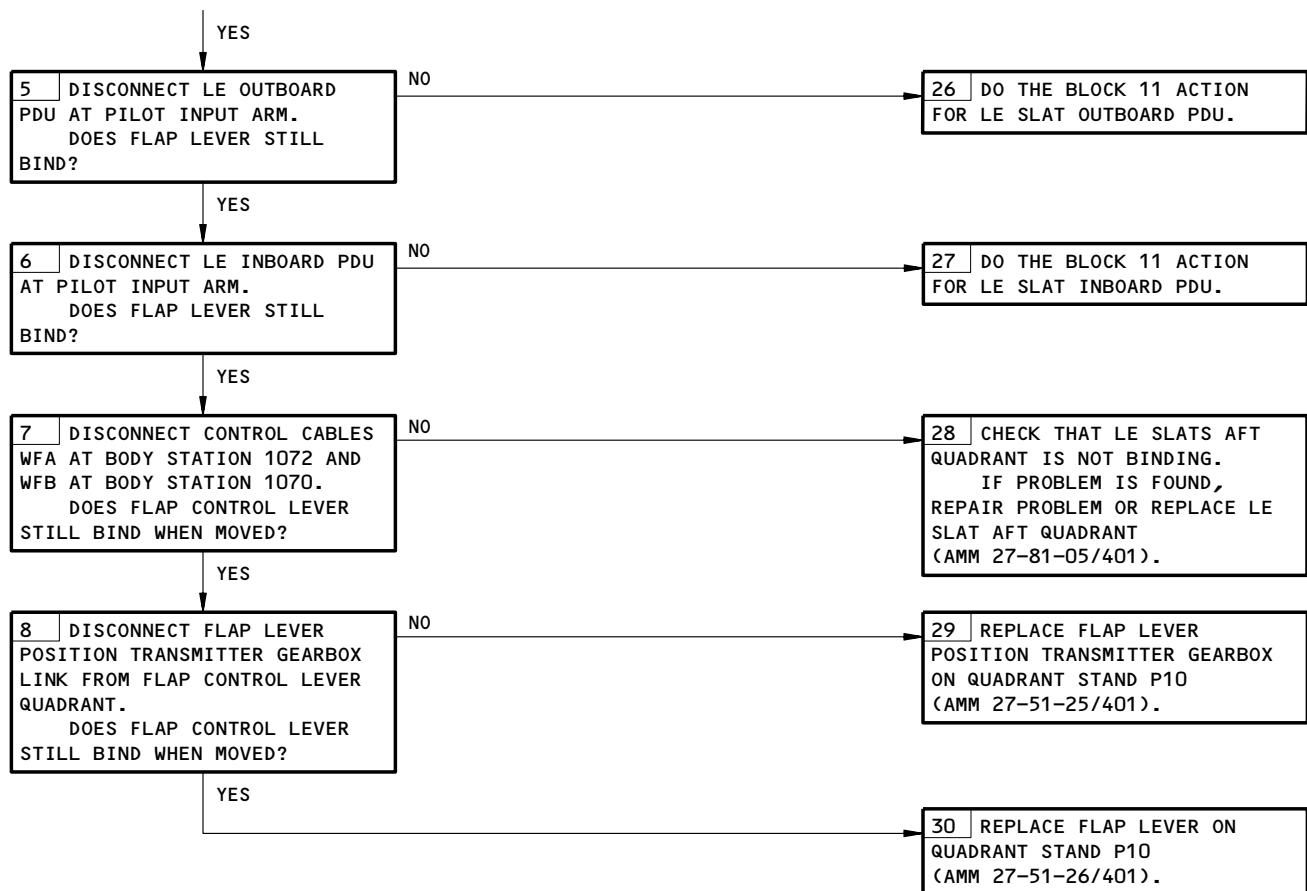
ALL

27-51-00

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FROM SHEET 1  
 (BLOCK 4)



AIR  TEMPERATURE (°F)	CABLE RIGGING LOAD (POUNDS) 
110	67
90	61
70	55
50	49
30	43
10	37
-10	31
-30	25
-40	22

TABLE A

 ALLOW A MINIMUM OF ONE HOUR AT CONSTANT TEMPERATURE,  $\pm 5^{\circ}\text{F}$ , PRIOR TO CABLE RIGGING.  
 DURING RIGGING, TEMPERATURE SHOULD NOT VARY MORE THAN  $\pm 5^{\circ}\text{F}$ .

 TIGHTEN CABLES WITHIN 10 POUNDS OF VALUES SHOWN.

Flap Lever Jams, Binds or Is Rough When Selecting Any TE Flap Position  
 Figure 110 (Sheet 2)

EFFECTIVITY

ALL

**27-51-00**

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

 6D24, 11A10, 11A11, 11A12, 11C15, 11C16, 11F30,  
 11F31, 11F32, 11G15, 11G16, 11G22, 11G23,  
 11J13, 11J14, 11J15, 11J16, 11J24

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

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** ENSURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS TO PREVENT DAMAGE.

TE FLAPS FAIL TO MOVE TO COMMANDED POSITION WHILE FLAP DRIVE SYSTEM IS UNDER ALTERNATE CONTROL

1  PRESSURIZE CENTER HYDRAULIC SYSTEM (AMM 29-11-00/201) AND ENSURE FLAPS ARE IN PRIMARY DRIVE. FLAP PDU BYPASS VALVE, V105, SHOULD BE IN THE NO. 2 (NORMAL) POSITION AND TE ALTERNATE SWITCH, S601, IN NORMAL (UNLIGHTED). IF ALTN LEGEND IS LIGHTED, PUSH SWITCH TO UNARM.  
 MOVE FLAP LEVER TO THE 15-UNIT POSITION AND RETURN TO UP.  
 DO FLAPS MOVE PROPERLY?

YES

2  DEPRESSURIZE CENTER HYDRAULIC SYSTEM (AMM 29-11-00/201). PUSH ALTERNATE FLAP ARM SWITCH, S601, TO ARM THE ALTERNATE DRIVE SYSTEM.  
 IS TE FLAPS BYPASS VALVE, V105, IN THE NO. 1 (BYPASS) POSITION?  
**NOTE:** ENSURE BYPASS VALVE HAS MOVED FULLY TO THE NO. 1 (BYPASS) POSITION.

SEE SHEET 2  
(BLOCK 3)

NO

30  GO TO FIG. 105, BLOCK 1.

NO

20  IS THERE 28V DC AT PIN 3, OF TE FLAPS BYPASS VALVE, V105 (WDM 27-51-11)?

YES  31  REPLACE TE FLAPS BYPASS VALVE, V105 (AMM 27-51-32/201).

NO

21  IS THERE 28V DC AT PIN 5, OF ALTERNATE FLAP ARM SWITCH, S601?

YES  32  EXAMINE THE CIRCUIT FROM PIN 3, OF TE FLAPS BYPASS VALVE, V105, AND PIN 5, OF ALTERNATE FLAP ARM SWITCH, S601 (WDM 27-51-11).

NO

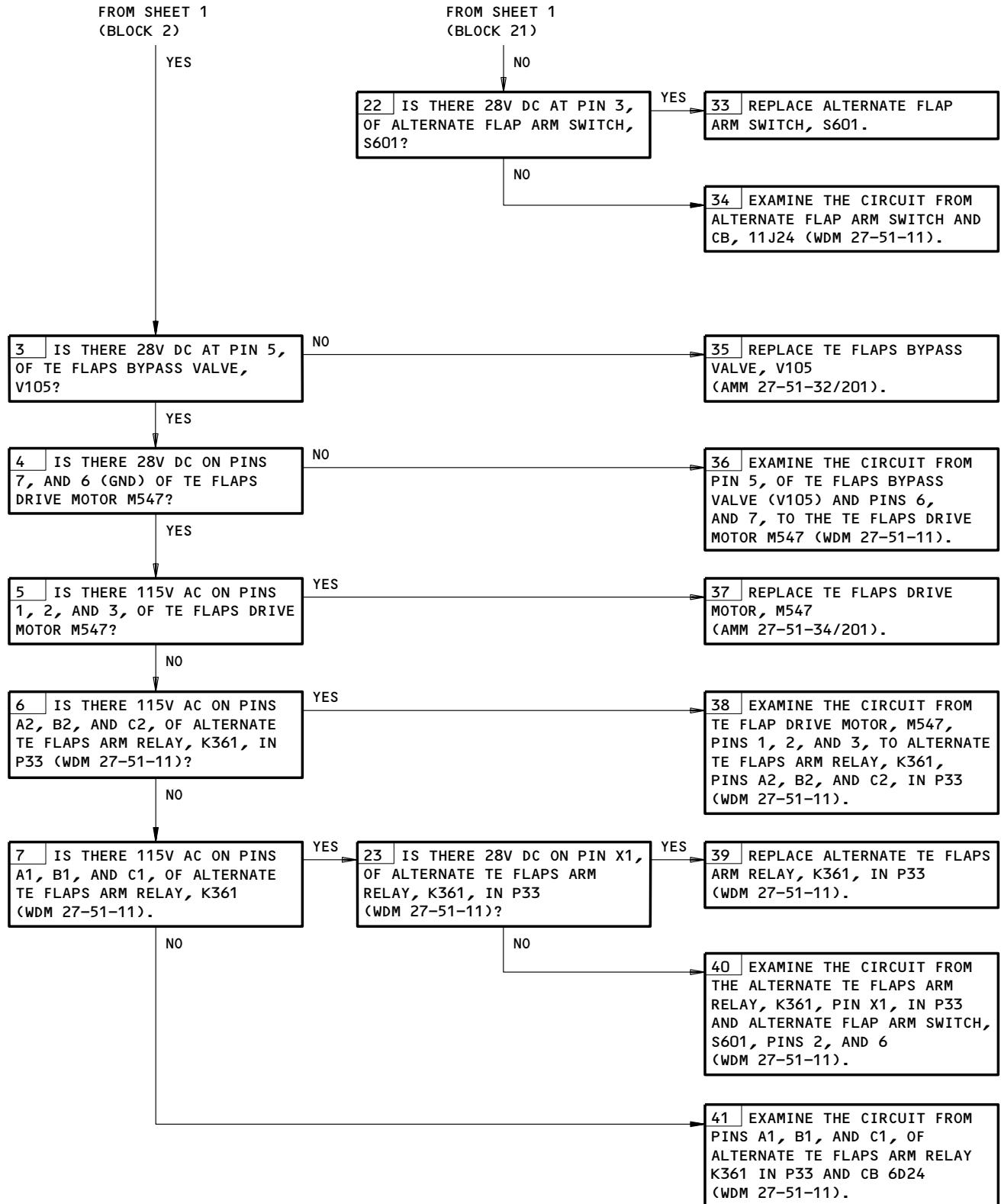
SEE SHEET 2  
(BLOCK 22)

Trailing Edge Flaps Fail to Reach Commanded Positions Under Alternate Control  
 Figure 111 (Sheet 1)

EFFECTIVITY

ALL

**27-51-00**



Trailing Edge Flaps Fail to Reach Commanded Positions Under Alternate Control  
Figure 111 (Sheet 2)

EFFECTIVITY

ALL

**27-51-00**

**PREREQUISITES**
**MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:**

 6D24, 11A10, 11A11, 11A12, 11C15, 11C16, 11F30,  
 11F31, 11F32, 11G15, 11G16, 11G22, 11G23,  
 11J13, 11J14, 11J15, 11J16, 11J24

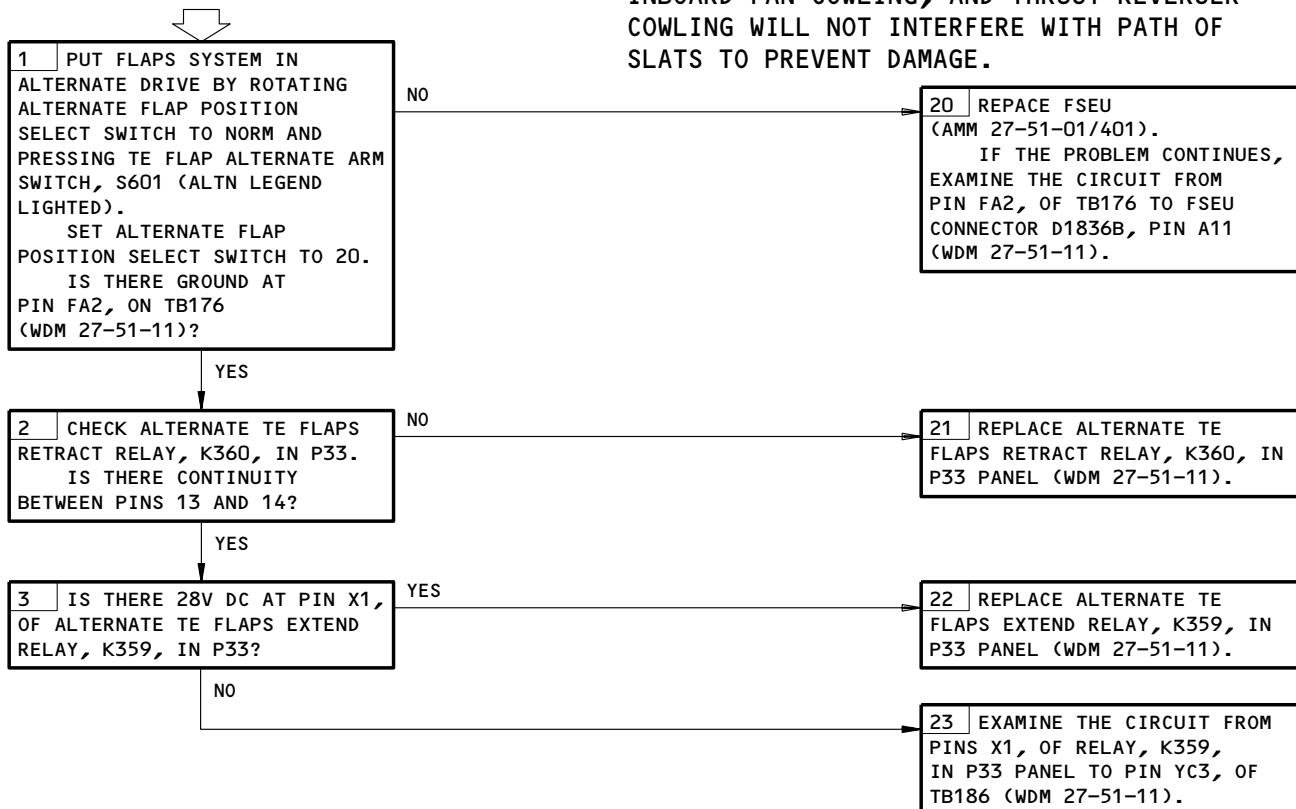
**MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)**

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** ENSURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS TO PREVENT DAMAGE.

**TE FLAPS RETRACT  
 BUT FAIL TO EXTEND  
 WHILE FLAP DRIVE  
 SYSTEM IS UNDER  
 ALTERNATE CONTROL**



**TE Flaps Retract but Fail to Extend while Flap Drive System is Under Alternate Control**  
**Figure 112**

**EFFECTIVITY**
**ALL**
**27-51-00**

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D24, 11A10, 11A11, 11A12, 11C15, 11C16, 11F30,  
 11F31, 11F32, 11G15, 11G16, 11G22, 11G23,  
 11J13, 11J14, 11J15, 11J16, 11J24

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

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

TE FLAPS EXTEND  
 BUT FAIL TO RETRACT  
 WHILE FLAP DRIVE  
 SYSTEM IS UNDER  
 ALTERNATE CONTROL

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** ENSURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS TO PREVENT DAMAGE.

1  PUT FLAPS SYSTEM IN ALTERNATE DRIVE BY ROTATING ALTERNATE FLAP POSITION SELECT SWITCH TO NORMAL AND PRESSING TE FLAP ALTERNATE ARM SWITCH, S601 (ALTN LEGEND LIGHTED). EXTEND FLAPS BY MOVING ALT FLAP POSITION SELECT SW TO 15. AFTER FLAP MOTION STOPS, SET ALTERNATE FLAP POSITION SELECT SWITCH TO UP.  
 IS THERE GROUND AT PIN FC2 ON TB176?

NO

20  REPLACE FSEU (AMM 27-51-01/401).  
 IF THE PROBLEM CONTINUES, EXAMINE THE CIRCUIT FROM THE PIN FC2, OF TB176 TO PIN B11, OF CONNECTOR D1836B, OF FSEU, M545 (WDM 27-51-11).

YES

2  CHECK ALTERNATE TE FLAPS EXTEND RELAY, K359, IN P33.  
 IS THERE CONTINUITY BETWEEN PINS 13 AND 14?

NO

21  REPLACE ALTERNATE TE FLAPS EXTEND RELAY, K359, IN P33 PANEL (WDM 27-51-11).

YES

3  IS THERE 28V DC AT PIN X1, OF ALTERNATE TE FLAPS RETRACT RELAY, K360?

YES

22  REPLACE ALTERNATE TE FLAPS RETRACT RELAY, K360, IN P33 PANEL (WDM 27-51-11).

NO

23  EXAMINE THE CIRCUIT FROM PINS X1, OF ALTERNATE TE FLAPS RETRACT RELAY, K360, IN P33 TO PIN YC3, OF TB186 (WDM 27-51-11).

TE Flaps Extend but Fail to Retract While Flap Drive System Is Under Alternate Control  
 Figure 113

EFFECTIVITY

ALL

**27-51-00**

**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
 AIR DATA COMPUTER (AMM 34-12-00/501)  
 EICAS (AMM 31-41-00/201)

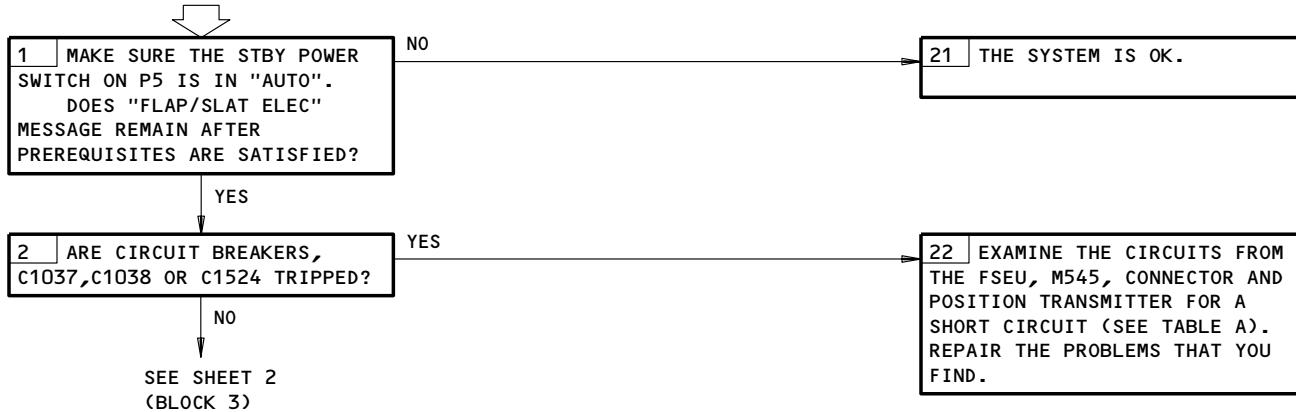
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D21, 6D24, 6F24, 11C4, 11C10, 11C14, 11C15, 11C16,  
 11G15, 11G16, 11G22, 11G23, 11H14, 11H23, 11H24,  
 11J13, 11J14, 11J15, 11J16, 11J17, 11J24, 11J26,  
 11T36

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 FLAP CONTROL LEVER IN THE ZERO DETENT  
 FLAPS AND SLATS IN THE FULLY RETRACTED POSITION

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**CAUTION:** MAKE SURE THE ACCESS DOOR FOR THE ENGINE STRUT, THE INBOARD FAN COWLING, AND THE THRUST REVERSER COWLING ARE CLEAR FROM THE MOVEMENT OF THE SLATS. IF THE MOVEMENT OF THE SLATS IS BLOCKED, IT CAN CAUSE DAMAGE TO THE AIRPLANE.

**EICAS MESSAGE**  
**"FLAP/SLAT ELEC"**  
**DISPLAYED**



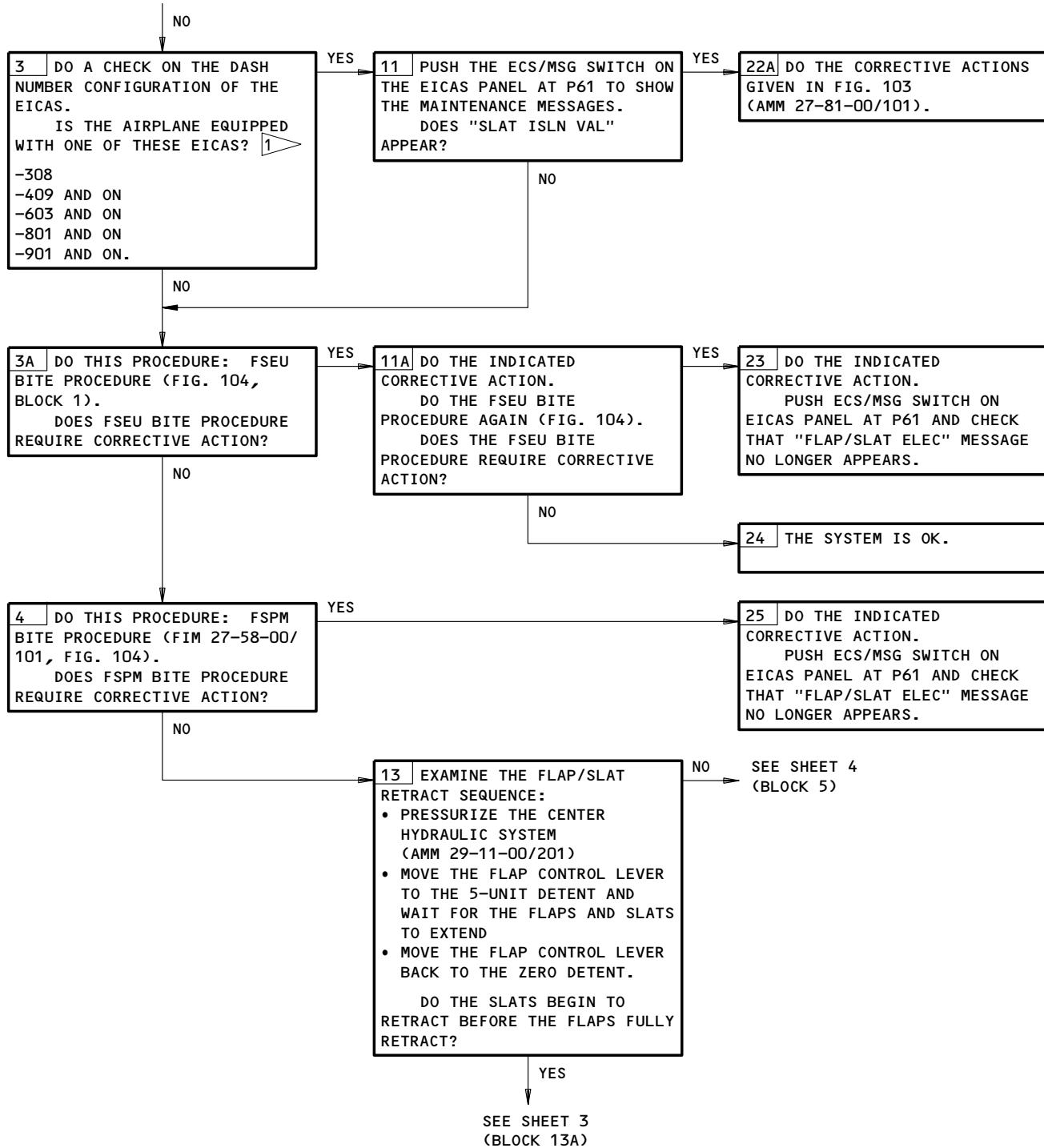
EICAS Message FLAP/SLAT ELEC Displayed  
 Figure 114 (Sheet 1)

EFFECTIVITY

ALL

**27-51-00**

FROM SHEET 1  
(BLOCK 2)



1 A SIGNAL CONSOLIDATION CARD, M10727, IS ALSO REQUIRED IN THE P51 CARD FILE PANEL, TO SHOW THE "SLAT ISLN VAL" MESSAGE.

**EICAS Message FLAP/SLAT ELEC Displayed**  
**Figure 114 (Sheet 2)**

EFFECTIVITY

ALL

**27-51-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 2  
(BLOCK 13)

YES

13A ADJUST RVDT NO. 1 (M483 ON INBD SLAT PDU AND M544 ON OUTBD SLAT PDU) ON SLAT PDU WITH BYPASS VALVE IN BYPASS (POS 1) (AMM 27-81-11/401). EXAMINE THE FLAP/SLAT RETRACT SEQUENCE AGAIN (BLOCK 13). DO THE SLATS BEGIN TO RETRACT BEFORE THE FLAPS FULLY RETRACT?

NO → 26 PUSH THE ECS/MSG SWITCH ON THE P6 EICAS PANEL, AND MAKE SURE THE "FLAP/SLAT ELEC" MESSAGE DOES NOT SHOW ON EICAS.

YES

14 REPLACE THE SHUTOFF VALVE CONTROL RELAY, K227 (WDM 27-81-31). MAKE SURE THIS CIRCUIT BREAKER IS CLOSED ON THE P11 PANEL: 11H14, SLAT SHUTOFF. EXAMINE THE FLAP/SLAT RETRACT SEQUENCE AGAIN (BLOCK 13). DO THE SLATS BEGIN TO RETRACT BEFORE THE FLAPS FULLY RETRACT?

NO → 26A PUSH THE ECS/MSG SWITCH ON THE P6 EICAS PANEL, AND MAKE SURE THE "FLAP/SLAT ELEC" MESSAGE DOES NOT SHOW ON EICAS.

YES

15 REPLACE THE FLAP/SLAT SHUTOFF VALVE MODULE, V104 (AMM 27-51-48/201). EXAMINE THE FLAP/SLAT RETRACT SEQUENCE AGAIN (BLOCK 13). DO THE SLATS BEGIN TO RETRACT BEFORE THE FLAPS FULLY RETRACT?

NO → 27 PUSH THE ECS/MSG SWITCH ON THE P6 EICAS PANEL, AND MAKE SURE THE "FLAP/SLAT ELEC" MESSAGE DOES NOT SHOW ON EICAS.

YES

28 EXAMINE THE CIRCUIT FROM PIN 3 OF D2304 (F/S SHUTOFF VALVE) AND PIN B3 OF D1836A (FSEU) (WDM 27-81-31). REPAIR THE PROBLEMS THAT YOU FIND. PUSH THE ECS/MSG SWITCH ON THE P6 EICAS PANEL, AND MAKE SURE THE "FLAP/SLAT ELEC" MESSAGE DOES NOT SHOW ON EICAS.

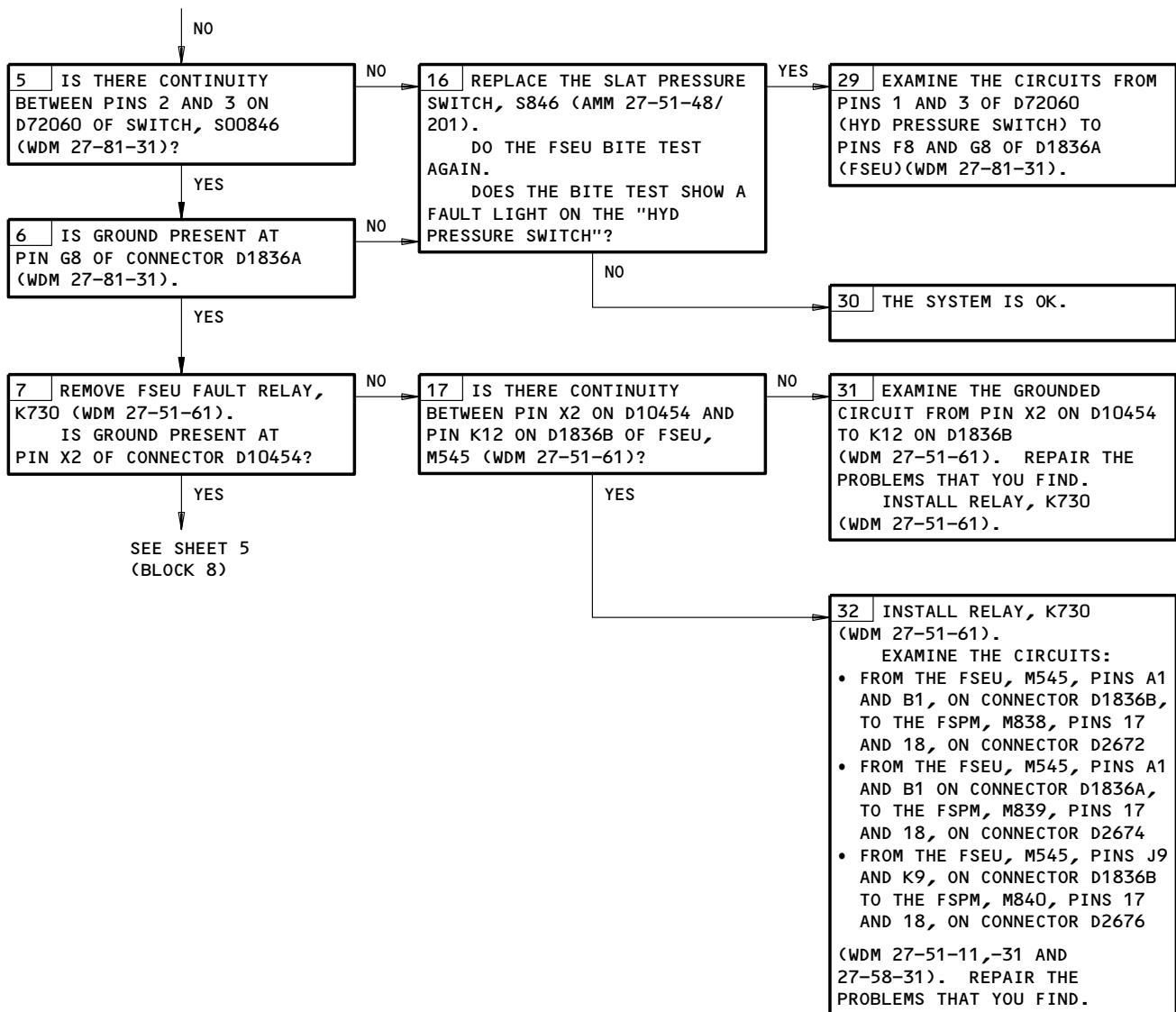
EICAS Message FLAP/SLAT ELEC Displayed  
Figure 114 (Sheet 3)

EFFECTIVITY

ALL

27-51-00

FROM SHEET 2  
(BLOCK 13)



EICAS Message FLAP/SLAT ELEC Displayed  
Figure 114 (Sheet 4)

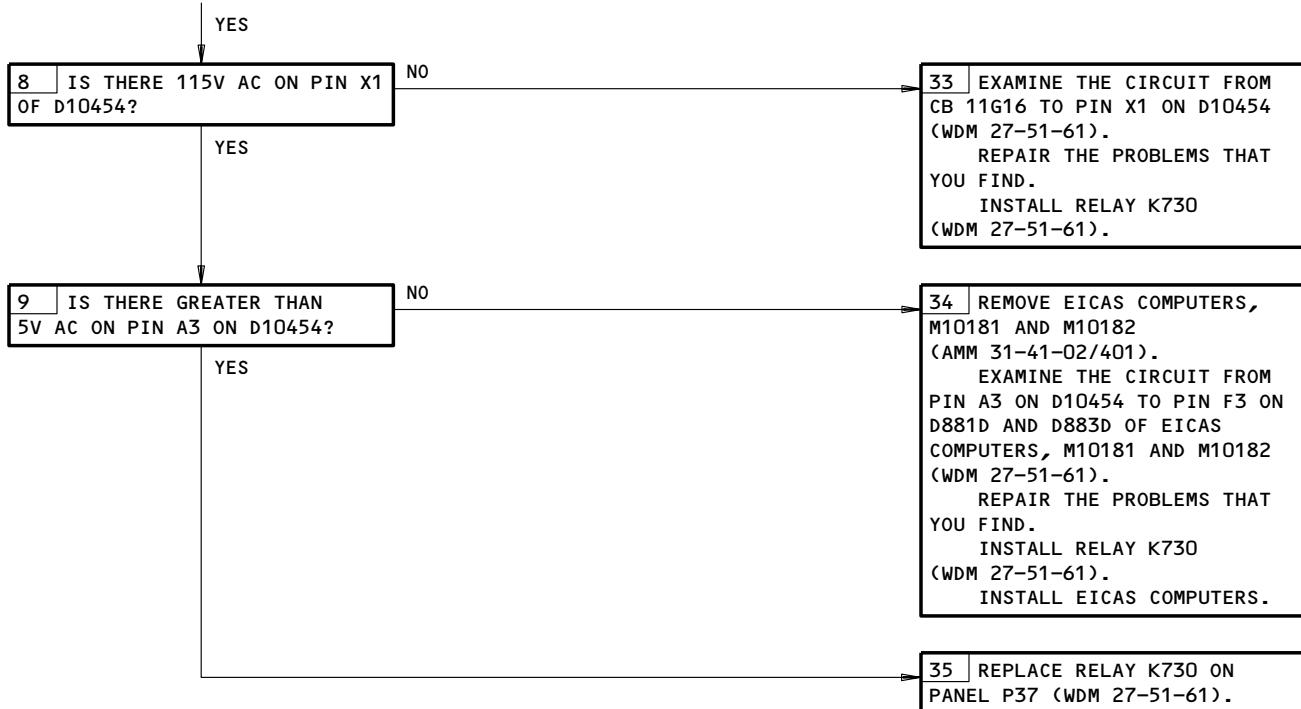
EFFECTIVITY

ALL

**27-51-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 4  
(BLOCK 7)



EICAS Message FLAP/SLAT ELEC Displayed  
Figure 114 (Sheet 5)

EFFECTIVITY

ALL

27-51-00



767  
FAULT ISOLATION/MAINT MANUAL

CB TRIPPED	POSITION TRANSMITTER			FSEU, M545		WDM REF
	EQUIP NO.	CONNECTOR NO.	PIN NO.	CONNECTOR NO.	PIN NO.	
C1037	M473	D1630	9	D1836A	C11	27-51-41
C1037	M476	D1546	2	D1836A	C14	27-51-41
C1037	M489	D1632	9	D1836A	G9	27-51-41
C1037	M492	D1548	2	D1836A	C10	27-51-41
C1037	M603	---	RWH	D1836A	A9	27-51-31
C1037	M483	D1528	1	D1836A	C9	27-81-31
C1038	M544	D2298	1	D1836A	E9	27-81-31
C1038	M548	D2296	1	D1836B	C10	27-81-21
C1038	M549	D2294	1	D1836B	A10	27-81-11
C1524	M604	---	RWH	D1836B	F1	27-58-31

TABLE A

EICAS Message FLAP/SLAT ELEC Displayed  
Figure 114 (Sheet 6)

EFFECTIVITY

ALL

27-51-00

A32107

18

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**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:

EICAS (AMM 31-41-00/201)

AIR DATA SYSTEM (AMM 34-12-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23, 11J13,  
 11J14, 11J15, 11J16, 11J24

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

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

AIRPLANES WITH OTHERS THAN GE C2 SERIES ENGINES;  
 FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** ENSURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS TO PREVENT DAMAGE.

EICAS MSG "TE FLAP DISAGREE" AND  
 TRAILING EDGE FLAP  
 LIGHT ILLUM WITH  
 FLAP LEVER AND  
 INDICATOR IN SAME  
 POSITION

1 DO THIS PROCEDURE: FSEU  
 BITE PROCEDURE (FIM 27-51-00/101, FIG. 104).   
 DOES BITE INDICATE FAILED  
 LRU?

YES

21 DO THE INDICATED  
 CORRECTIVE ACTION.

NO

SEE SHEET 2  
 (BLOCK 2)

 DO NOT MOVE FLAP LEVER.

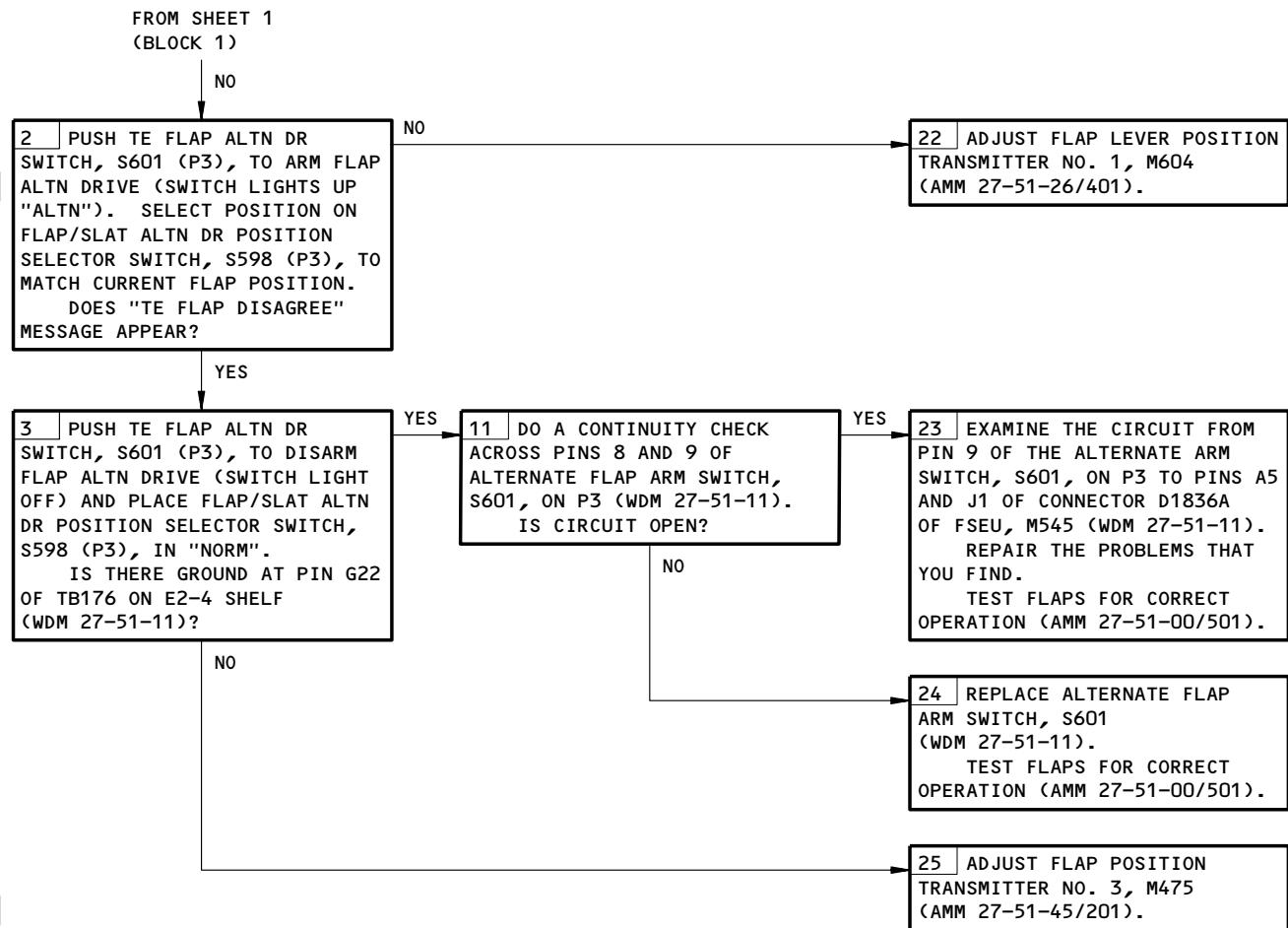
EICAS Msg TE FLAP DISAGREE and TRAILING EDGE Flap Light Illum  
 With Flap Lever and Indicator in Same Position  
 Figure 114A (Sheet 1)

EFFECTIVITY

ALL

**27-51-00**

**BOEING**  
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FAULT ISOLATION/MAINT MANUAL



EICAS Msg TE FLAP DISAGREE and TRAILING EDGE Flap Light Illum  
With Flap Lever and Indicator in Same Position  
Figure 114A (Sheet 2)

EFFECTIVITY

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**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:

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

EICAS (AMM 31-41-00/201)

AIR DATA SYSTEM (AMM 34-12-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11C10,11C14,11C15,11C16,11G15,11G16,11G22,11G23,

11H14,11J13,11J14,11J15,11J16,11J17,11J24,

11J26,11T36

FLAP/SLAT POSITION IND (11J11 OR 11C4)

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

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

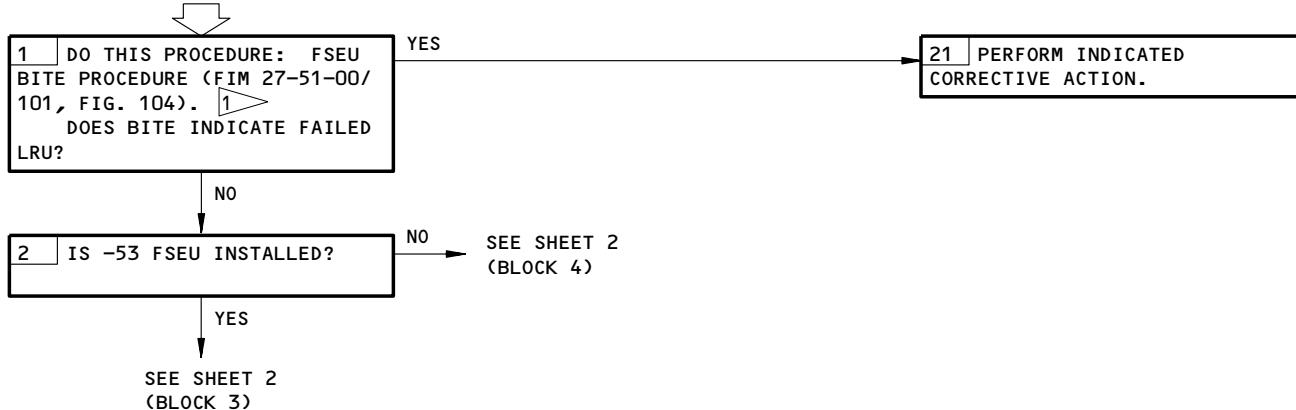
**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

AIRPLANES WITH OTHERS THAN GE C2 SERIES ENGINES;

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**EICAS MESSAGE**  
**"TE FLAP SHUTDOWN"**  
**DISPLAYED**

**CAUTION:** ENSURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS TO PREVENT DAMAGE.



 DO NOT MOVE FLAP LEVER.

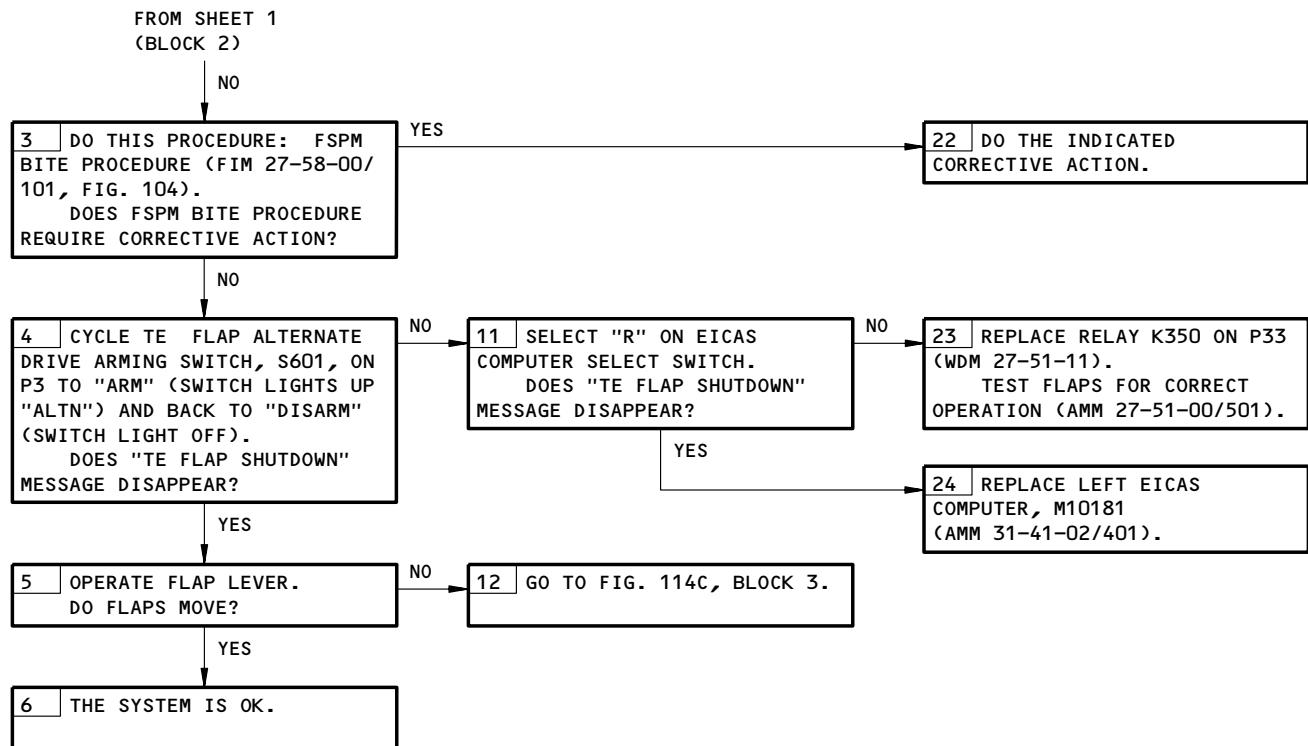
**EICAS Message TE FLAP SHUTDOWN Displayed**  
**Figure 114B (Sheet 1)**

EFFECTIVITY

ALL

**27-51-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

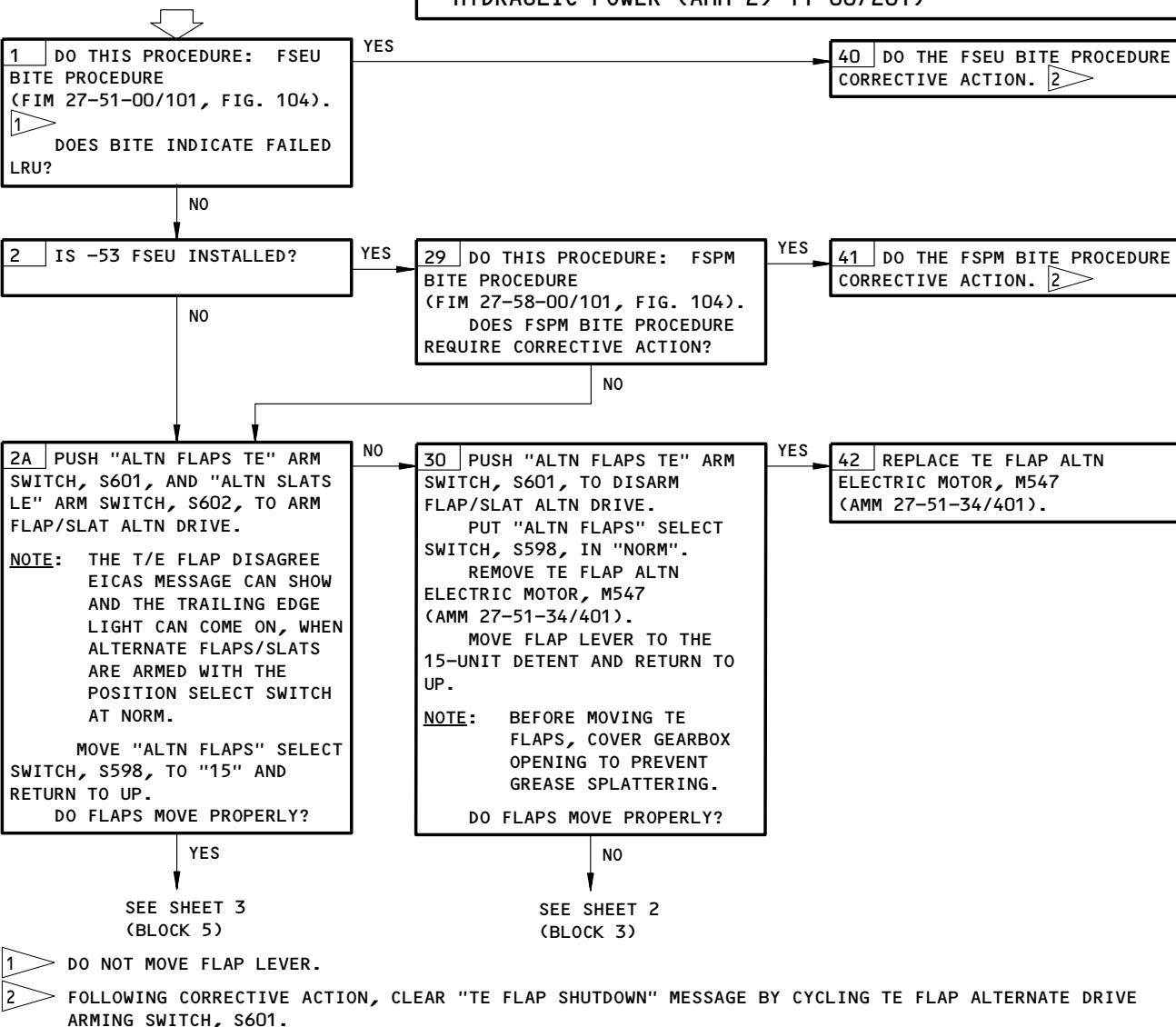


EICAS Message TE FLAP SHUTDOWN Displayed  
Figure 114B (Sheet 2)

EFFECTIVITY

ALL

**27-51-00**

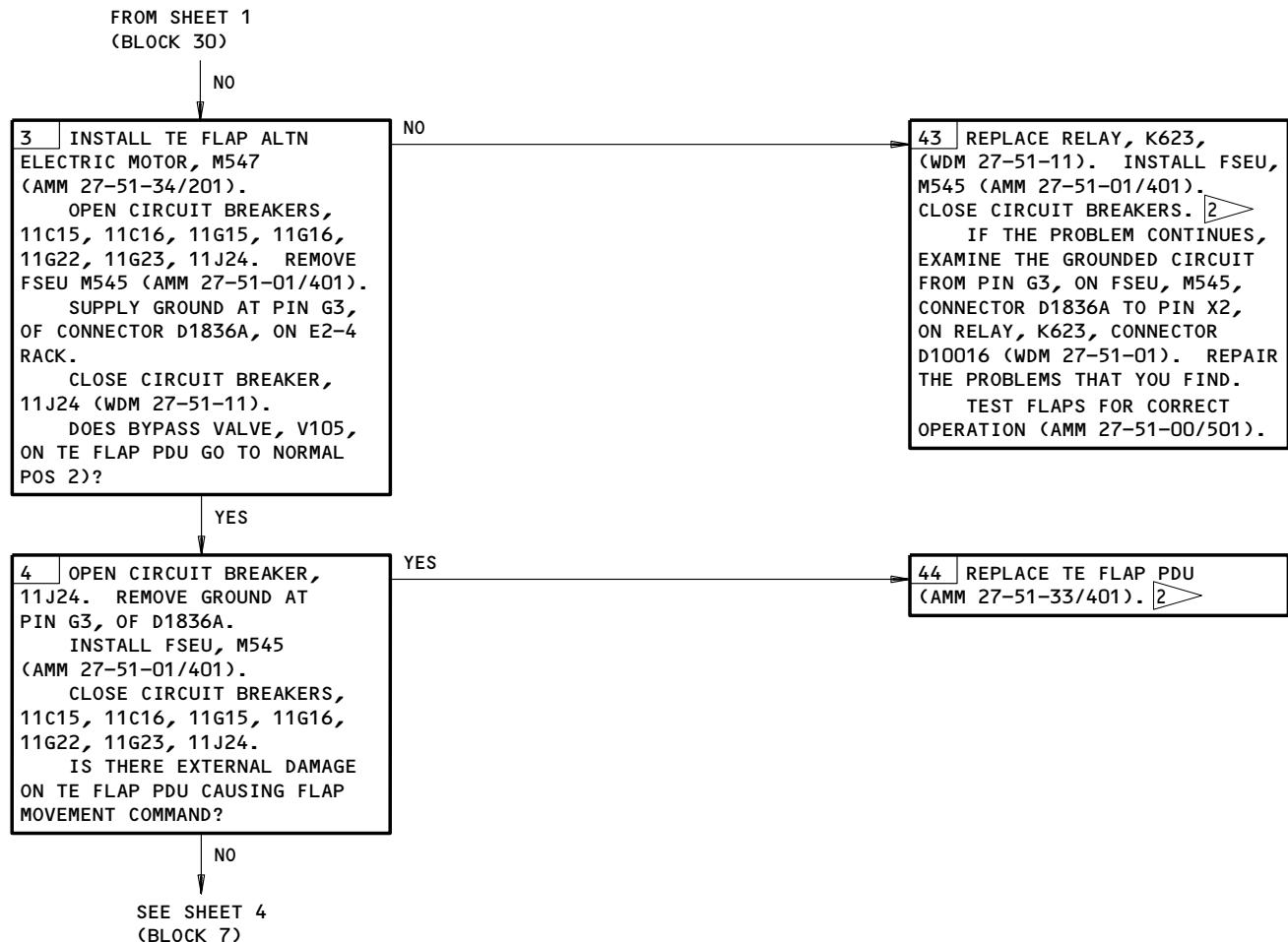
**EICAS MESSAGES "TE FLAP DISAGREE" AND "TE FLAP SHUTDOWN" DISPLAYED**


EICAS Messages TE FLAP DISAGREE and TE FLAP SHUTDOWN Displayed  
Figure 114C (Sheet 1)

EFFECTIVITY

ALL

**27-51-00**



EICAS Messages TE FLAP DISAGREE and TE FLAP SHUTDOWN Displayed  
Figure 114C (Sheet 2)

EFFECTIVITY

ALL

**27-51-00**

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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 2A)

YES

5] PUSH "ALTN FLAPS TE" ARM SWITCH, S601, TO DISARM FLAP ALTN DRIVE. PLACE "ALTN FLAPS" SELECT SWITCH, S598, IN "NORM".  
OPEN CIRCUIT BREAKERS, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23, 11J24 REMOVE FSEU, M545 (AMM 27-51-01/401). SUPPLY GROUND AT PIN G3, OF CONNECTOR D1836A, ON E2-4 RACK.  
CLOSE CIRCUIT BREAKER, 11J24 (WDM 27-51-11). DOES BYPASS VALVE, V105, ON TE FLAP PDU GO TO NORMAL (POS 2)?

NO

45] REPLACE RELAY, K623, (WDM 27-51-11). INSTALL FSEU, M545 (AMM 27-51-01/401). CLOSE CIRCUIT BREAKERS. 2 ▶ IF THE PROBLEM CONTINUES, EXAMINE GROUNDED CIRCUIT FROM PIN G3, ON FSEU, M545, CONNECTOR D1836A, TO PIN X2, ON RELAY, K623, CONNECTOR D10016 (WDM 27-51-01). REPAIR THE PROBLEMS THAT YOU FIND. TEST FLAPS FOR CORRECT OPERATION (AMM 27-51-00/501).

YES

6] OPEN CB 11J24. REMOVE GROUND AT PIN G3, OF D1836A. INSTALL FSEU, M545 (AMM 27-51-01/401). CLOSE CIRCUIT BREAKER'S, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23, 11J24. IS THERE EXTERNAL DAMAGE ON TE FLAP PDU CAUSING FLAP MOVEMENT COMMAND?

YES

46] REPLACE TE FLAP PDU (AMM 27-51-33/401). 2 ▶

NO

SEE SHEET 4  
(BLOCK 7)

EICAS Messages TE FLAP DISAGREE and TE FLAP SHUTDOWN Displayed  
Figure 114C (Sheet 3)

EFFECTIVITY

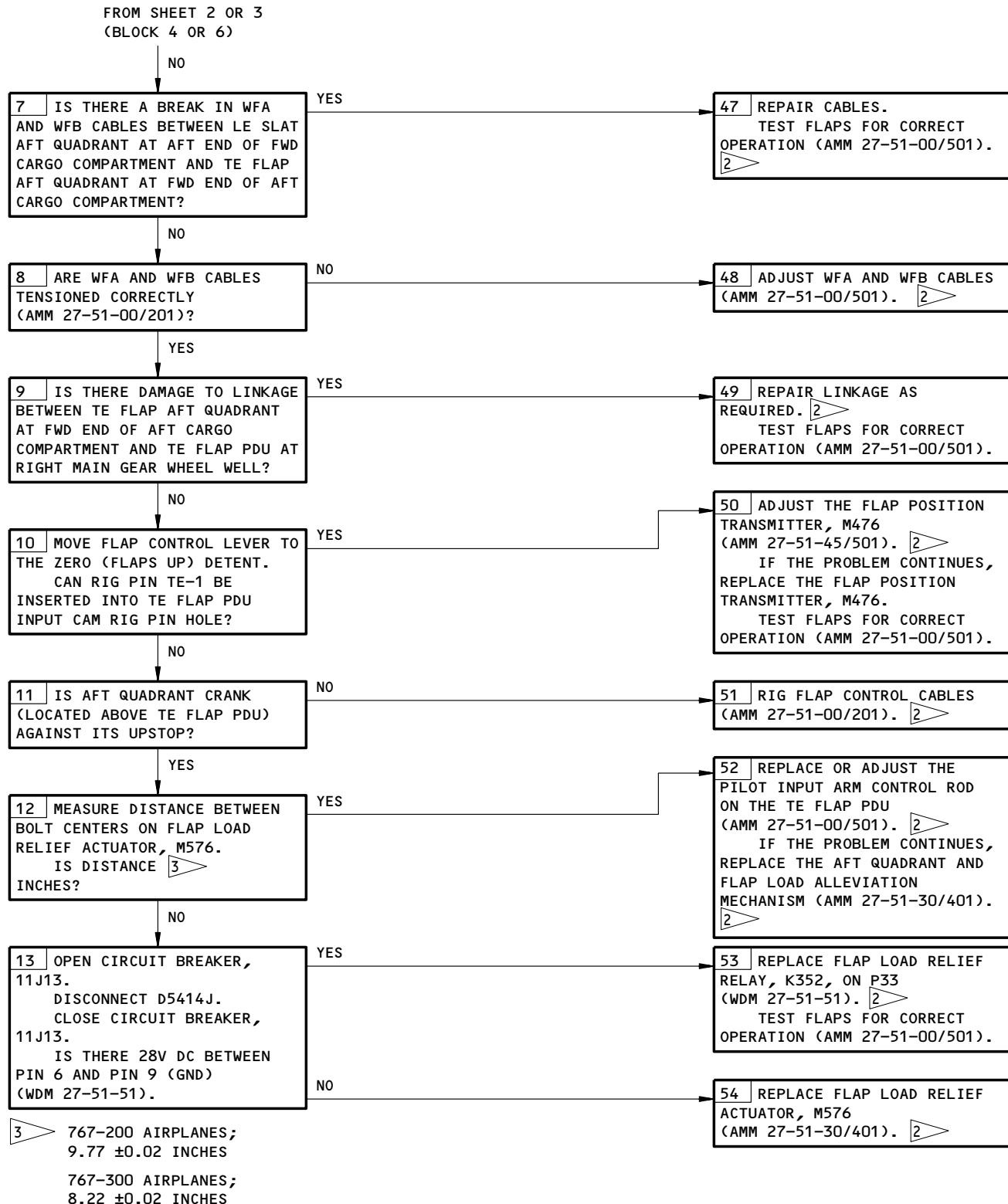
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EICAS Messages TE FLAP DISAGREE and TE FLAP SHUTDOWN Displayed  
Figure 114C (Sheet 4)

EFFECTIVITY

ALL

**27-51-00**

**LOAD RELIEF  
ACTUATOR BITE  
PROCEDURE**
**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

6D23, 11C14, 11C15, 11C16, 11C17, 11G12, 11G13,  
11G14, 11G22, 11G23, 11H12, 11H13, 11H23, 11H24,  
11J18

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

1 DO THE LOAD RELIEF ACTUATOR BITE TEST ON THE FSEU AS FOLLOWS:

- PUSH THE ON/OFF BUTTON ON THE FRONT PANEL OF THE FSEU, M545 TO TURN THE DISPLAY ON.

NOTE: THE DISPLAY WILL SHOW "EXISTING FAULTS?".

PUSH THE NO BUTTON UNTIL "GROUND TESTS?" SHOWS ON THE DISPLAY.

PUSH THE YES BUTTON TO SELECT GROUND TESTS? FROM THE DISPLAY.

NOTE: "LD RELIEF ACTR?" WILL SHOW ON THE DISPLAY.

PUSH THE YES BUTTON TO PERFORM THE LOAD RELIEF ACTUATOR BITE TEST.

NOTE: "TEST IN PROGRESS" WILL SHOW ON THE DISPLAY.

NOTE: THE DISPLAY WILL CHANGE TO "WHL WELL CLEAR?". MAKE SURE THE WHEEL WELL IS CLEAR, AND SELECT YES.

NOTE: "TEST IN PROGRESS" WILL SHOW ON THE DISPLAY AGAIN.

DOES "TEST PASSED" SHOW ON THE DISPLAY?

YES

NO

31 "N FLTS FOUND" SHOWS ON THE FSEU BITE DISPLAY.

NOTE: "N" IS THE NUMBER OF FAULTS DETECTED DURING THE LOAD RELIEF ACTUATOR TEST. "N" IS A NUMBER FROM 1 TO 999.

MAKE A LIST OF ALL THE FAULT MESSAGES AND MAINTENANCE MESSAGE NUMBERS:

NOTE: YOU CAN USE THE UP AND DOWN ARROW BUTTONS TO SCROLL THROUGH THE LIST OF MESSAGES.

THE MESSAGE NAME WILL SHOW.

NOTE: "MORE DETAILS?" WILL SHOW BETWEEN EACH FAULT MESSAGE.

PUSH THE YES BUTTON TO SELECT "MORE DETAILS?". THE MAINTENANCE MESSAGE NUMBER WILL SHOW. USE THE DOWN ARROW BUTTON TO FIND THE FLIGHT DECK EFFECT, TYPE AND STATUS FOR THE MESSAGE. IF MORE INFORMATION IS NECESSARY, PUSH YES FOR "SHOP DETAILS"

NOTE: IF YOU PUSH THE YES BUTTON WITH A MAINTENANCE MESSAGE DISPLAYED, "SWITCH INACTIVE" WILL SHOW AND THEN THE MESSAGE NAME WILL SHOW AGAIN.

DO THE CORRECTIVE ACTION SHOWN IN FIG. 104, TABLE A FOR THE FAULTS SHOWN.

32 TEST COMPLETE.

Load Relief Actuator BITE Procedure  
Figure 115

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

**27-51-00**

LOAD RELIEF  
SYSTEM BITE  
PROCEDURE


## PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

 6D23, 11C14, 11C15, 11C16, 11C17, 11G12, 11G13,  
11G14, 11G22, 11G23, 11H12, 11H13, 11H23, 11H24,  
11J18

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

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

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

ALTERNATE SLATS/FLAPS NOT ARMED (AMM 27-51-00/501)

1  DO THE LOAD RELIEF SYSTEM BITE TEST ON THE FSEU AS FOLLOWS:

- PUSH THE ON/OFF BUTTON ON THE FRONT PANEL OF THE FSEU, M545 TO TURN THE DISPLAY ON.

NOTE: THE DISPLAY WILL SHOW "EXISTING FAULTS?".

PUSH THE NO BUTTON UNTIL "GROUND TESTS?" SHOWS ON THE DISPLAY.

PUSH THE YES BUTTON TO SELECT GROUND TESTS? FROM THE DISPLAY.

NOTE: "LD RELIEF ACTR?" WILL SHOW ON THE DISPLAY.

PUSH THE NO BUTTON UNTIL LD RELIEF SYSTEM? SHOWS ON THE DISPLAY.

PUSH THE YES BUTTON TO DO THE LOAD RELIEF SYSTEM BITE TEST.

NOTE: "TEST IN PROGRESS" WILL SHOW ON THE DISPLAY.

IF TEST INHIBITED AND ALT MODE ARMED SHOW, PUSH THE TE FLAP ARM SWITCH TO DISARM THE ALTERNATE SYSTEM AND SELECT THE TEST AGAIN.

NOTE: THE DISPLAY WILL CHANGE TO "WARNING FLP CLR?". MAKE SURE THE FLAP AREA IS CLEAR, AND SELECT YES.

NOTE: IT WILL BE NECESSARY TO MOVE THE FLAP CONTROL LEVER DURING THE TEST WHEN THE FSEU ASKS IF IT IS IN A SPECIFIC POSITION.

DOES "TEST PASSED" SHOW ON THE DISPLAY?

NO

31  "N FLTS FOUND" SHOWS ON THE FSEU BITE DISPLAY.

NOTE: "N" IS THE NUMBER OF FAULTS DETECTED DURING THE LOAD RELIEF ACTUATOR TEST. "N" IS A NUMBER FROM 1 TO 999.

MAKE A LIST OF ALL THE FAULT MESSAGES AND MAINTENANCE MESSAGE NUMBERS:

NOTE: YOU CAN USE THE UP AND DOWN ARROW BUTTONS TO SCROLL THROUGH THE LIST OF MESSAGES.

THE MESSAGE NAME WILL SHOW.

NOTE: "MORE DETAILS?" WILL SHOW BETWEEN EACH FAULT MESSAGE.

PUSH THE YES BUTTON TO SELECT "MORE DETAILS?". THE MAINTENANCE MESSAGE NUMBER WILL SHOW. USE THE DOWN ARROW BUTTON TO FIND THE FLIGHT DECK EFFECT, TYPE AND STATUS FOR THE MESSAGE. IF MORE INFORMATION IS NECESSARY, PUSH YES FOR "SHOP DETAILS"

NOTE: IF YOU PUSH THE YES BUTTON WITH A MAINTENANCE MESSAGE DISPLAYED, "SWITCH INACTIVE" WILL SHOW AND THEN THE MESSAGE NAME WILL SHOW AGAIN.

DO THE CORRECTIVE ACTION SHOWN IN FIG. 104, TABLE A FOR THE FAULTS SHOWN.

YES

32  TEST COMPLETE.

 Load Relief System BITE Procedure  
Figure 116

 EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

27-51-00

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

6D23, 11C14, 11C15, 11C16, 11C17, 11G12, 11G13,  
11G14, 11G22, 11G23, 11H12, 11H13, 11H23, 11H24,  
11J18

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

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

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

**LEVER SENSOR CHECK  
BITE PROCEDURE**

1 DO THE LEVER SENSOR CHECK BITE TEST ON THE FSEU AS FOLLOWS:  
 • PUSH THE ON/OFF BUTTON ON THE FRONT PANEL OF THE FSEU, M545 TO TURN THE DISPLAY ON.  
NOTE: THE DISPLAY WILL SHOW "EXISTING FAULTS?".  
 PUSH THE NO BUTTON UNTIL "GROUND TESTS?" SHOWS ON THE DISPLAY.  
 PUSH THE YES BUTTON TO SELECT GROUND TESTS? FROM THE DISPLAY.  
NOTE: PUSH NO UNTIL "LEVER SENSOR?" SHOWS ON THE DISPLAY.  
 PUSH THE YES BUTTON TO PERFORM THE LEVER SENSOR CHECK BITE TEST.  
NOTE: "TEST IN PROGRESS" WILL SHOW ON THE DISPLAY.  
 DOES "TEST PASSED" SHOW ON THE DISPLAY?

NO

31 "N FLTS FOUND" SHOWS ON THE FSEU BITE DISPLAY.

NOTE: "N" IS THE NUMBER OF FAULTS DETECTED DURING THE LEVER SENSOR CHECK TEST. "N" IS A NUMBER FROM 1 TO 999.

MAKE A LIST OF ALL THE FAULT MESSAGES AND MAINTENANCE MESSAGE NUMBERS:

NOTE: YOU CAN USE THE UP AND DOWN ARROW BUTTONS TO SCROLL THROUGH THE LIST OF MESSAGES.

THE MESSAGE NAME WILL SHOW.

NOTE: "MORE DETAILS?" WILL SHOW BETWEEN EACH FAULT MESSAGE.

PUSH THE YES BUTTON TO SELECT "MORE DETAILS?". THE MAINTENANCE MESSAGE NUMBER WILL SHOW. USE THE DOWN ARROW BUTTON TO FIND THE FLIGHT DECK EFFECT, TYPE AND STATUS FOR THE MESSAGE. IF MORE INFORMATION IS NECESSARY, PUSH YES FOR "SHOP DETAILS"

NOTE: IF YOU PUSH THE YES BUTTON WITH A MAINTENANCE MESSAGE DISPLAYED, "SWITCH

THEN THE MESSAGE NAME WILL SHOW AGAIN.

DO THE CORRECTIVE ACTION SHOWN IN FIG. 104, TABLE A FOR THE FAULTS SHOWN.

32 TEST COMPLETE.

Lever Sensor Check BITE Procedure  
Figure 117

EFFECTIVITY  
AIRPLANES WITH A -63 FSEU

**27-51-00**

**OB SLAT SENSOR  
BITE PROCEDURE**
**PREREQUISITES**

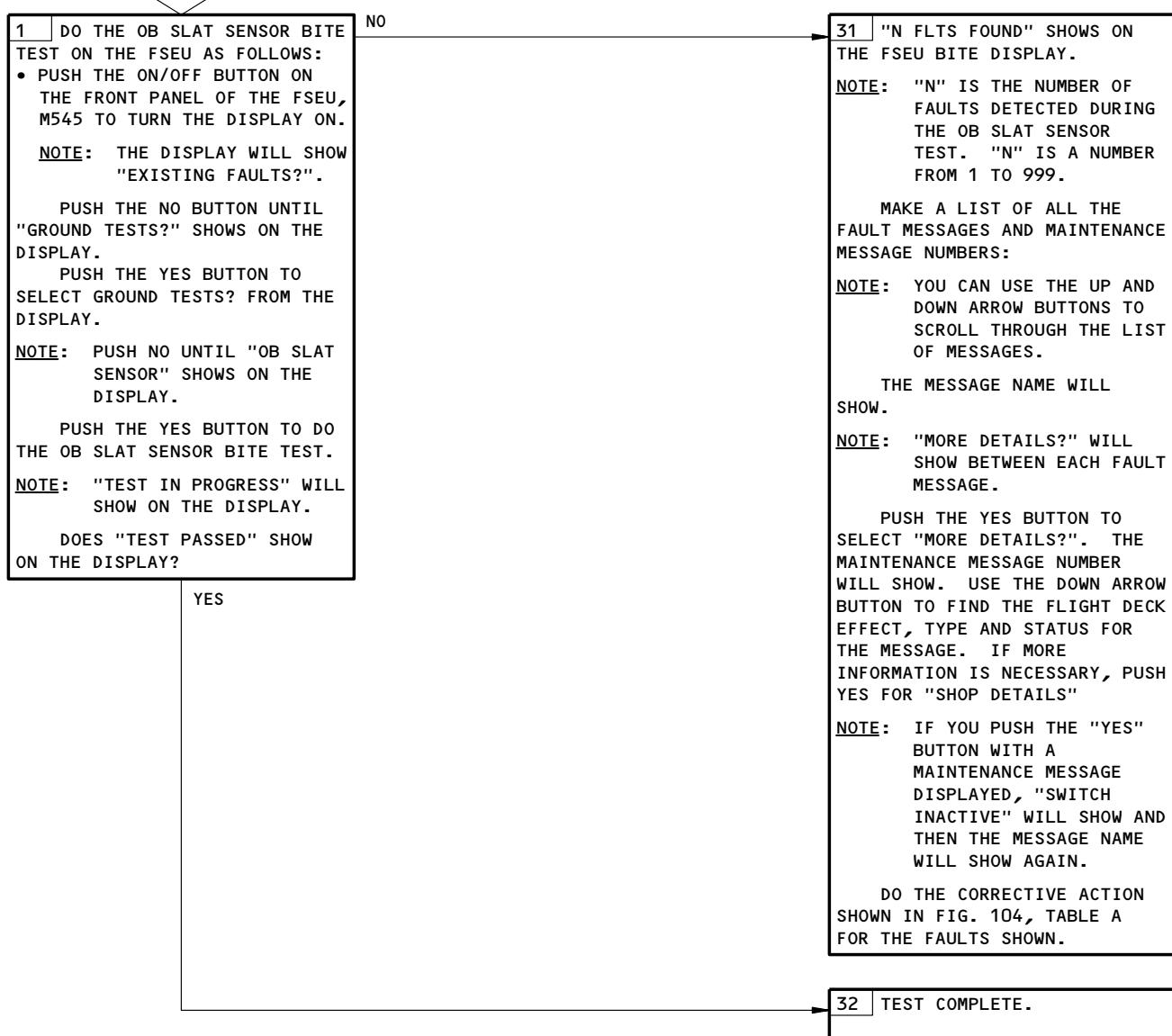
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

 6D23, 11C14, 11C15, 11C16, 11C17, 11G12, 11G13,  
 11G14, 11G22, 11G23, 11H12, 11H13, 11H23, 11H24,  
 11J18

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

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

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


 OB Slat Sensor BITE Procedure  
 Figure 118

 EFFECTIVITY  
 AIRPLANES WITH A -63 FSEU

**27-51-00**



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FAULT ISOLATION/MAINT MANUAL

TRAILING EDGE FLAP POSITION INDICATING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
CIRCUIT BREAKERS				
FLAP/STAB POS SENSING C, C1525	1	1	FLT COMPT, P11 11C14	*
FLAP/STAB POS SENSING L, C1523		1	11J17	*
FLAP/STAB POS SENSING R, C1526		1	11J26	*
FLAP/SLAT POS IND, C1021		1	11C4	*
FLAP POS IND L, C1008		1	11J15	*
FLAP POS IND R, C1522		1	11J16	*
INDICATOR - FLAP/SLAT POSITION, N15	1	1	FLT COMPT, P3	*
MODULE				
L FLAP/STAB POS, M838	2	1	119AL, MAIN EQUIP CTR, P50	27-58-01
C FLAP/STAB POS, M839		1	119AL, MAIN EQUIP CTR, P50	27-58-01
R FLAP/STAB POS, M840	2	1	119AL, MAIN EQUIP CTR, P50	27-58-01
RELAY - (REF 31-01-33, FIG. 101)				
FLAPS INTMD/RETRACT, K353				
FLAPS/REF TRANSFER, K216				
TRANSFORMER - (REF 31-01-36, FIG. 101)				
FLAP POSITION C POWER, T153				
TRANSMITTER				
FLAP POSITION 1, M473	1	1	WING TRAILING EDGE, FLAP ACTUATOR	27-51-45
FLAP POSITION 3, M475		1	WING TRAILING EDGE, FLAP ACTUATOR	27-51-45
FLAP POSITION 4, M476		1	195JL, L WING BODY FAIRING	27-51-45
FLAP POSITION 5, M492		1	196JR, R WING BODY FAIRING	27-51-45
FLAP POSITION 8, M489	1	1	WING TRAILING EDGE, FLAP ACTUATOR	27-51-45
TRANSMITTER - (REF 31-01-33, FIG. 101)				
SLATS INTMD REF SIGNAL, M606				
SLATS RETRACTED REF SIGNAL, M605				
TRANSMITTER - (REF 27-48-00, FIG. 101)				
STAB POSITION - C, M521				
STAB POSITION - L, M519				
STAB POSITION - R, M520				
UNIT - (REF 27-51-00, FIG. 101)				
FLAPS/SLATS ELEC, M545				
UNIT - (REF 32-09-03, FIG. 101)				
PROX SW ELEC, M162				

\* SEE THE WDM EQUIPMENT LIST

Trailing Edge Flap Position Indicating System - Component Index  
Figure 101

EFFECTIVITY

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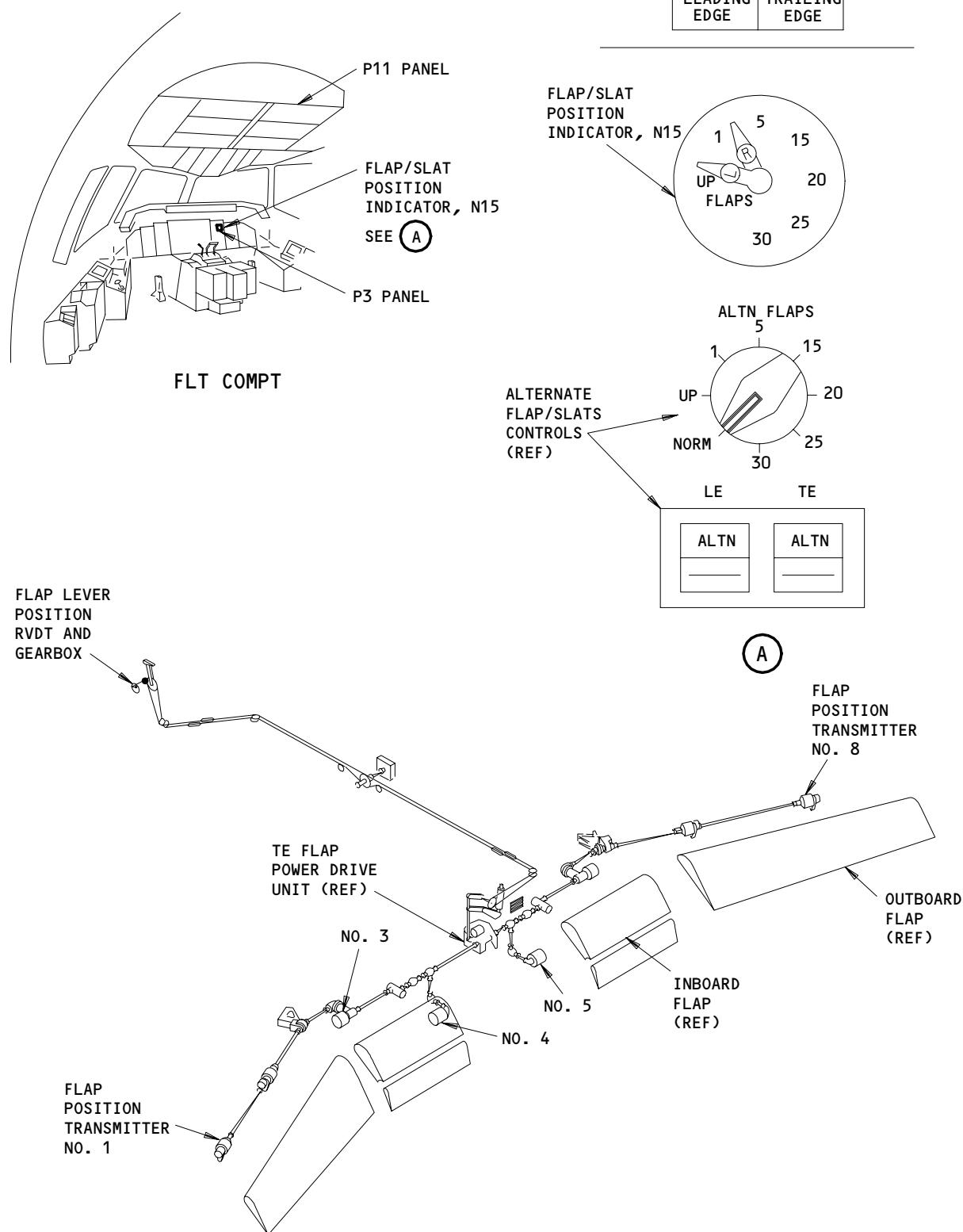
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FAULT ISOLATION/MAINT MANUAL

LEADING EDGE	TRAILING EDGE
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Component Location  
Figure 102 (Sheet 1)

EFFECTIVITY

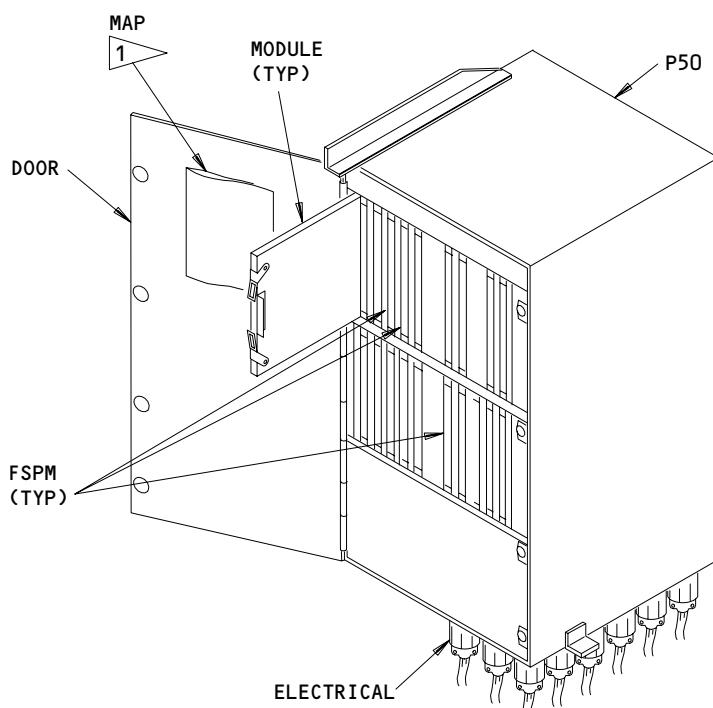
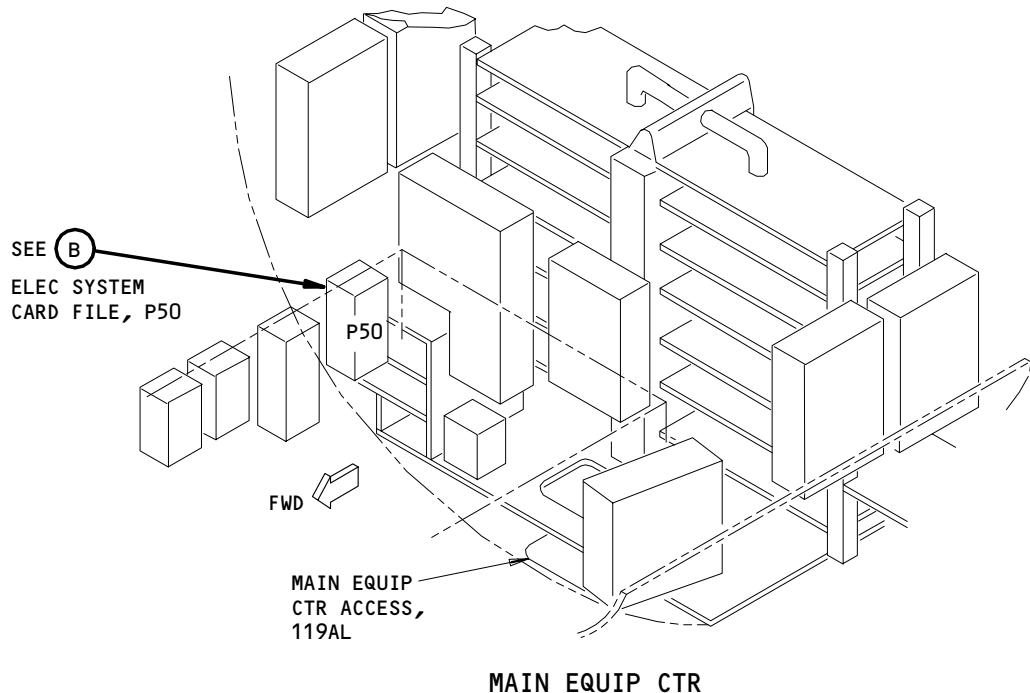
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FAULT ISOLATION/MAINT MANUAL



1 MAP INDICATES  
LOCATION OF  
FSPM M838, M839,  
AND M840

(B)

Component Location  
Figure 102 (Sheet 2)

EFFECTIVITY

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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D24, 11C15, 11C16, 11G15, 11G16, 11G22, 11G23, 11J13,  
 11J14, 11J15, 11J16, 11J24, 11J11 OR 11C4

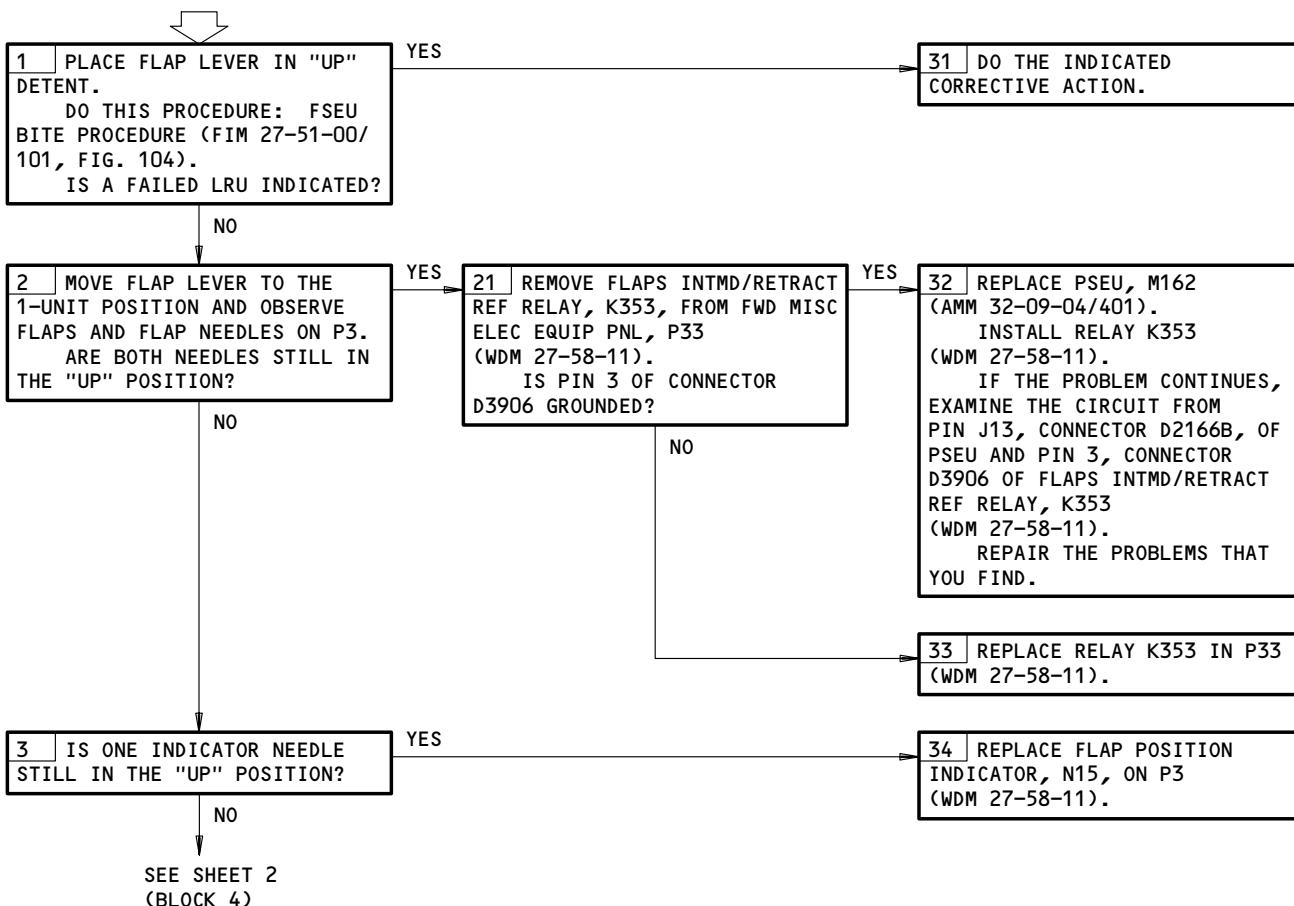
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
 HYDRAULIC POWER (AMM 29-11-00/201)

**WARNING:** TO PREVENT INJURY OR DAMAGE, CLEAR PERSONNEL AND EQUIPMENT FROM CONTROL SURFACES BEFORE PROVIDING HYDRAULIC POWER. KEEP AREA CLEAR WHEN PERFORMING FAULT ISOLATION.

**CAUTION:** ENSURE THAT THRUST REVERSER COWLING, INBOARD FAN COWLING, AND ENGINE STRUT ACCESS PANELS WILL NOT BE IN PATH OF LEADING EDGE SLATS, TO PREVENT DAMAGE.

**FLAP POSITION**

**INDICATOR NEEDLE(S) INOPERATIVE (STICK) DURING TE FLAPS OPERATION**



Flap Position Indicator Needle(s) Inoperative (Stick) During TE Flap Operation  
 Figure 103 (Sheet 1)

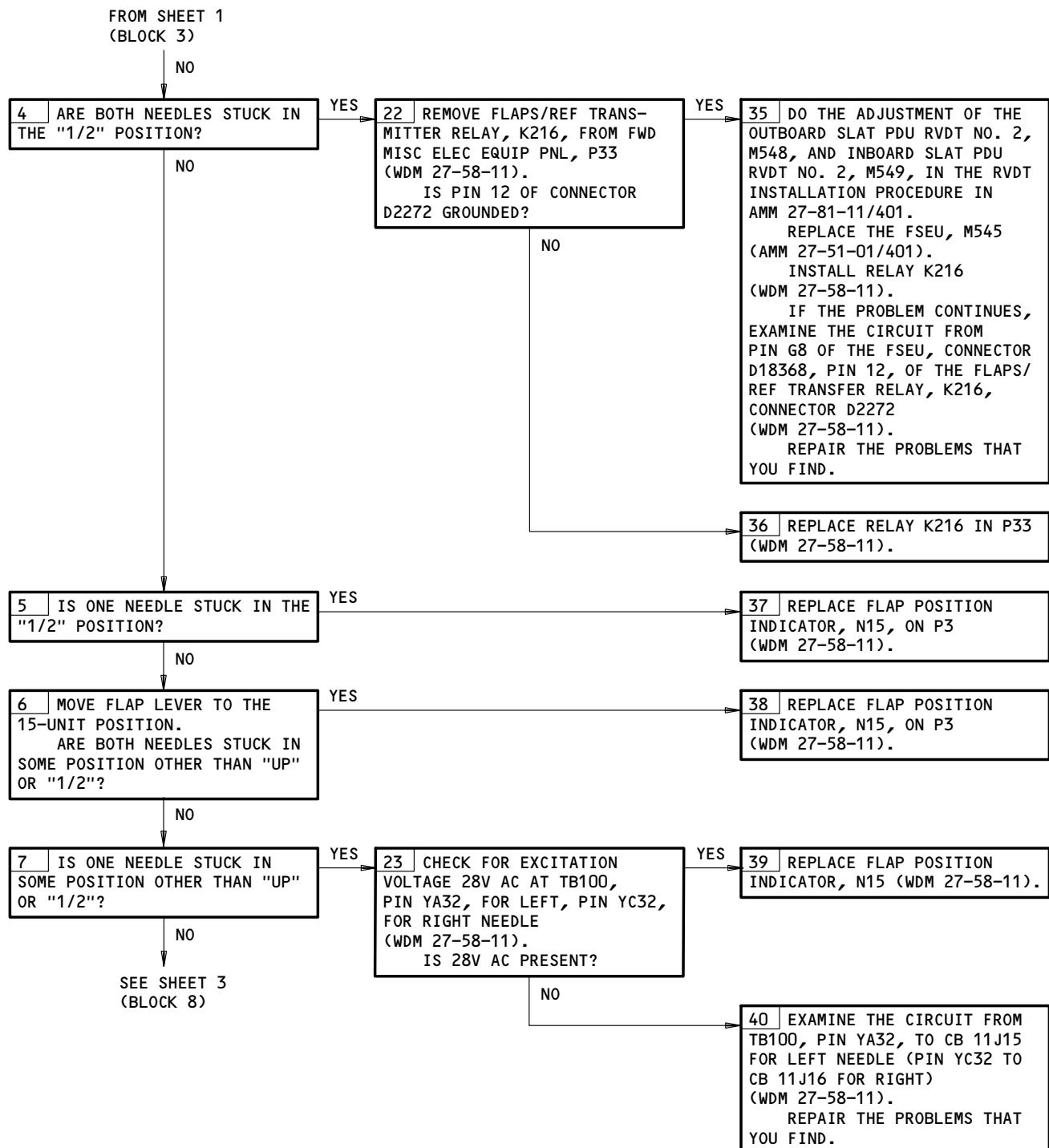
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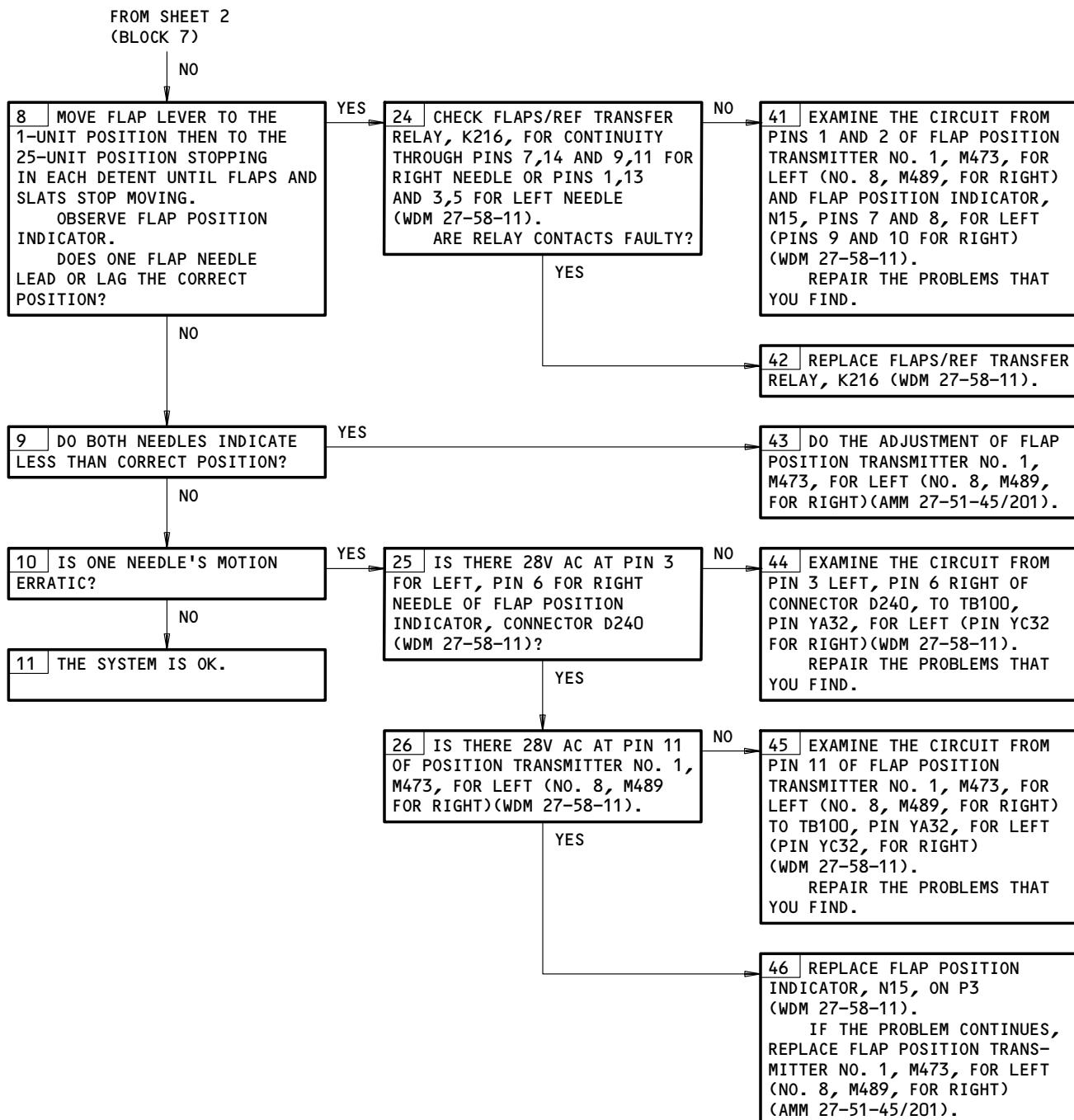
Flap Position Indicator Needle(s) Inoperative (Stick) During TE Flap Operation  
Figure 103 (Sheet 2)

EFFECTIVITY

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FAULT ISOLATION/MAINT MANUAL

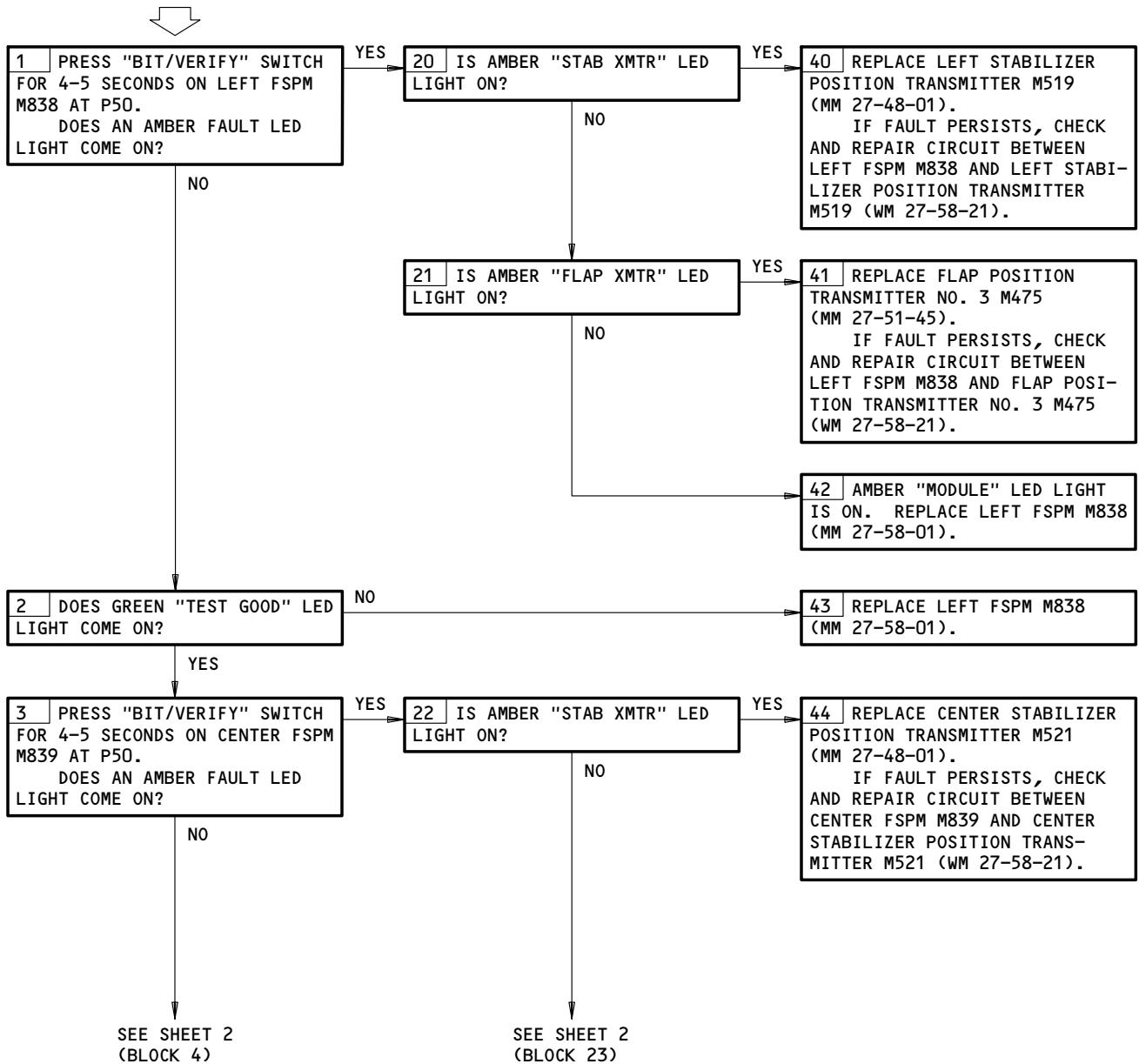


Flap Position Indicator Needle(s) Inoperative (Stick) During TE Flap Operation  
Figure 103 (Sheet 3)

EFFECTIVITY

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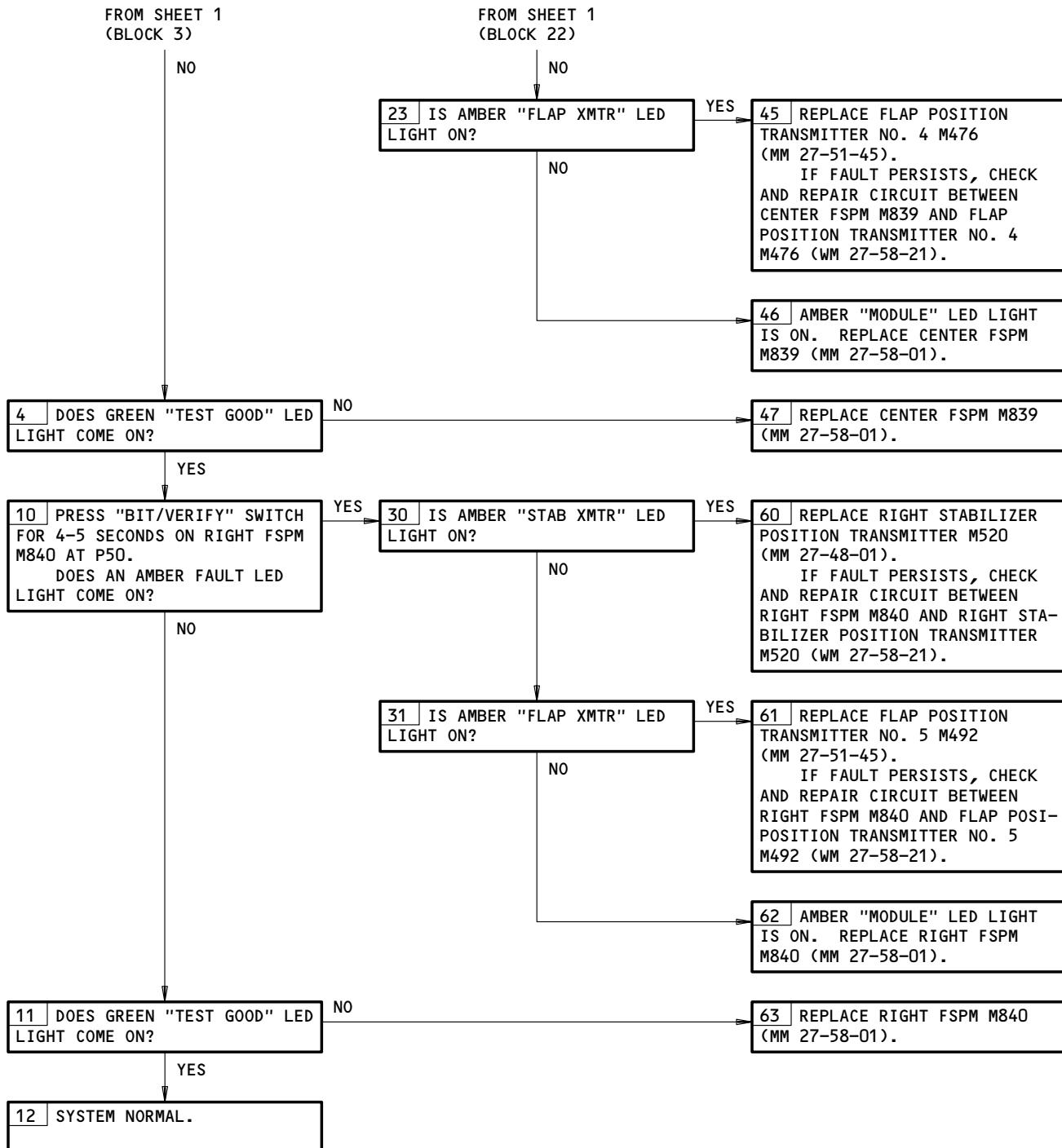
**27-58-00**

**FLAP/STABILIZER  
POSITION MODULE  
(FSPM) BITE  
PROCEDURE**
**PREREQUISITES**
**ELECTRICAL POWER (MM 24-22-00)**
**CB'S: 11C14,11J17,11J26**

**Flap/Stabilizer Position Module (FSPM) BITE Procedure  
Figure 104 (Sheet 1)**
**EFFECTIVITY**
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FAULT ISOLATION/MAINT MANUAL



Flap/Stabilizer Position Module (FSPM) BITE Procedure  
Figure 104 (Sheet 2)

EFFECTIVITY

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FAULT ISOLATION/MAINT MANUAL

SPOILER/SPEEDBRAKE CONTROL SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR - (FIM 25-65-00/101) OFF-WING ESCAPE SPOILER OVERRIDE				
ACTUATOR - SPOILER POWER CONTROL (PCA)				
1, M306	3	1	LIFT SPOILER, EXTEND FLAPS	27-61-02
2, M307	3	1	LIFT SPOILER, EXTEND FLAPS	27-61-02
3, M308	3	1	LIFT SPOILER, EXTEND FLAPS	27-61-02
4, M309	3	1	LIFT SPOILER, EXTEND FLAPS	27-61-02
5, M310	3	1	552GB AND LIFT SPOILER	27-61-02
6, M311	3	1	552BB AND LIFT SPOILER	27-61-02
7, M312	3	1	652BB AND LIFT SPOILER	27-61-02
8, M313	3	1	652GB AND LIFT SPOILER	27-61-02
9, M314	3	1	LIFT SPOILER, EXTEND FLAPS	27-61-02
10, M315	3	1	LIFT SPOILER, EXTEND FLAPS	27-61-02
11, M316	3	1	LIFT SPOILER, EXTEND FLAPS	27-61-02
12, M317	3	1	LIFT SPOILER, EXTEND FLAPS	27-61-02
CIRCUIT BREAKERS		1	FLT COMPT, P11	
FLT CONT ELEC 1L AC, C1538		1	11C6	*
FLT CONT ELEC 1L DC, C1534		1	11C7	*
FLT CONT ELEC 1R AC, C1536		1	11G17	*
FLT CONT ELEC 1R DC, C1531		1	11G18	*
FLT CONT ELEC 2L AC, C1537		1	11C8	*
FLT CONT ELEC 2L DC, C1533		1	11C9	*
FLT CONT ELEC 2R AC, C1535		1	11G26	*
FLT CONT ELEC 2R DC, C1532		1	11G27	*
COMPUTER - (FIM 31-41-00/101)				
EICAS L, M10181				
EICAS R, M10182				
FILTER - SPOILER PCA			(SEE SPOILER PCA ACCESS)	27-61-02
LEVER - SPEEDBRAKE CONTROL	1	1	FLT COMPT, P10	27-61-08
LIGHT - SPOILERS, YDLL14	1	1	FLT COMPT, P5, ANNUN PANEL M10394	*
MECHANISM - SPEEDBRAKE CONTROL	1	1	FLT COMPT, P10	
MODULE - (FIM 27-09-00/101)				
SPOILER CONTROL (SCM) 1L, M530				
SPOILER CONTROL (SCM) 2L, M531				
SPOILER CONTROL (SCM) 3L, M532				
SPOILER CONTROL (SCM) 1R, M533				
SPOILER CONTROL (SCM) 2R, M534				
SPOILER CONTROL (SCM) 3R, M535				
SPOILER - INBOARD	3	4	WING TRAILING EDGE	27-61-01
SPOILER - OUTBOARD	3	8	WING TRAILING EDGE	27-61-01
TRANSDUCER -				
SPEEDBRAKE (LVDT) 1, TS35	1	1	FLT COMPT, P10	27-61-10
SPEEDBRAKE (LVDT) 2, TS36	1	1	FLT COMPT, P10	27-61-10
SPEEDBRAKE (LVDT) 3, TS37	1	1	FLT COMPT, P10	27-61-10
TRANSDUCER -				
CAPTAIN'S SPOILER (RVDT), TS5081	2	1	119AL, BELOW FLT COMPT FLOOR	27-61-04
FIRST OFFICER'S SPOILER (RVDT), TS5082	2	1	119AL, BELOW FLT COMPT FLOOR	27-61-04
VALVE - INBOARD PCA ELECTROHYDRAULIC SERVO (EHSV)	3	4	552BB, 552GB, LEFT WING, 652BB, 652GB, RIGHT WING	27-61-02
VALVE - OUTBOARD PCA ELECTROHYDRAULIC SERVO (EHSV)	3	8	EXTEND TRAILING EDGE FLAPS	27-61-02

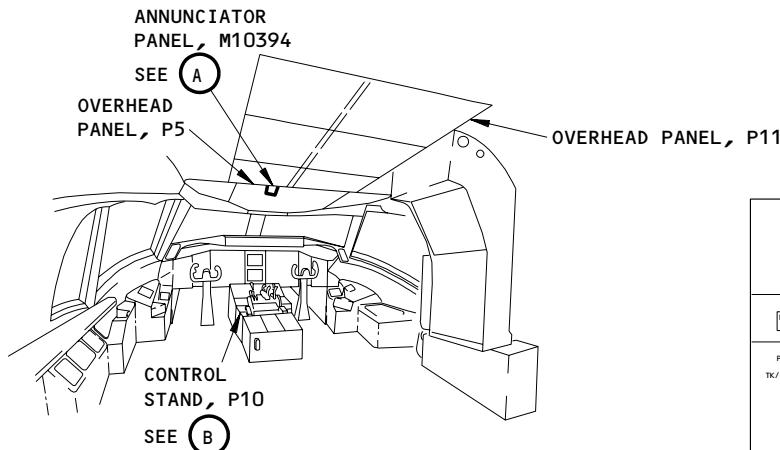
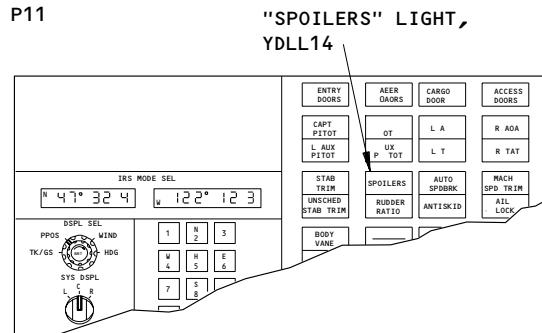
\* SEE THE WDM EQUIPMENT LIST

Spoiler/Speedbrake Control System - Component Index  
Figure 101

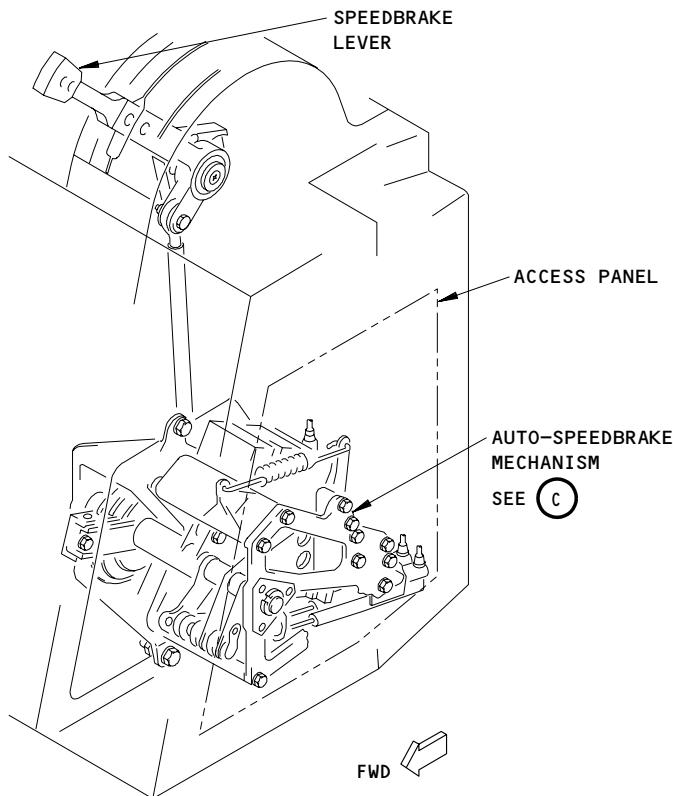
EFFECTIVITY

ALL

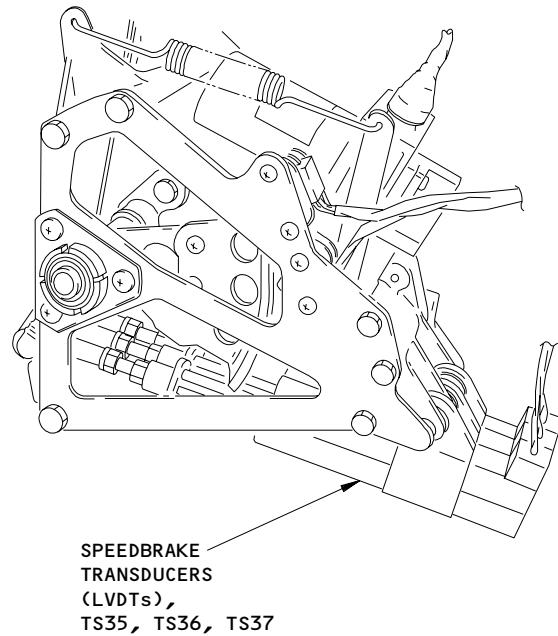
27-61-00


**FLIGHT COMPARTMENT**

**ANNUNCIATOR PANEL, M10394**

A


**CONTROL STAND**

B


**SPEEDBRAKE MECHANISM**

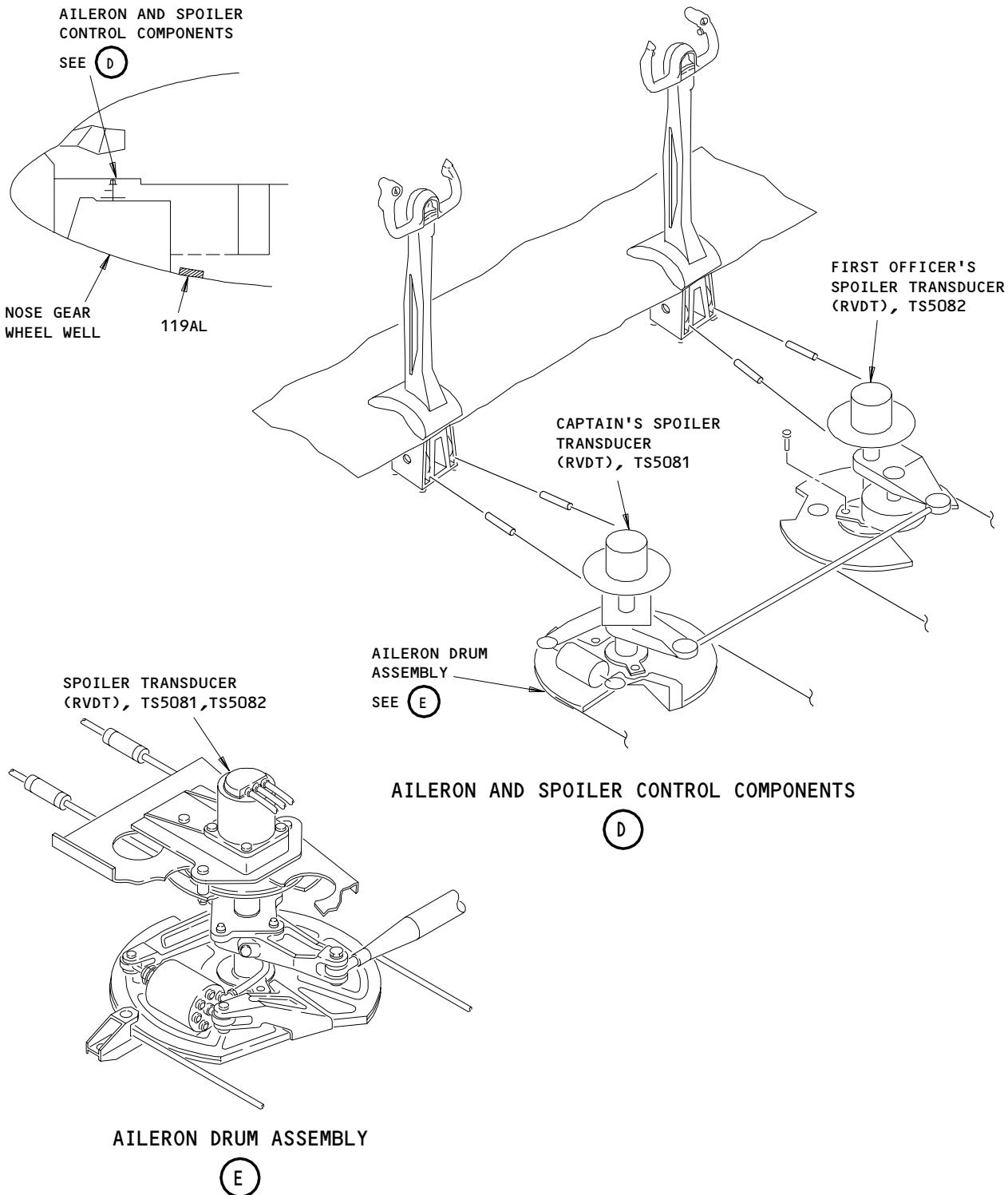
C

**Spoiler/Speedbrake Control System – Component Location**  
**Figure 102 (Sheet 1)**

EFFECTIVITY

ALL

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



Spoiler/Speedbrake Control System – Component Location  
Figure 102 (Sheet 2)

EFFECTIVITY

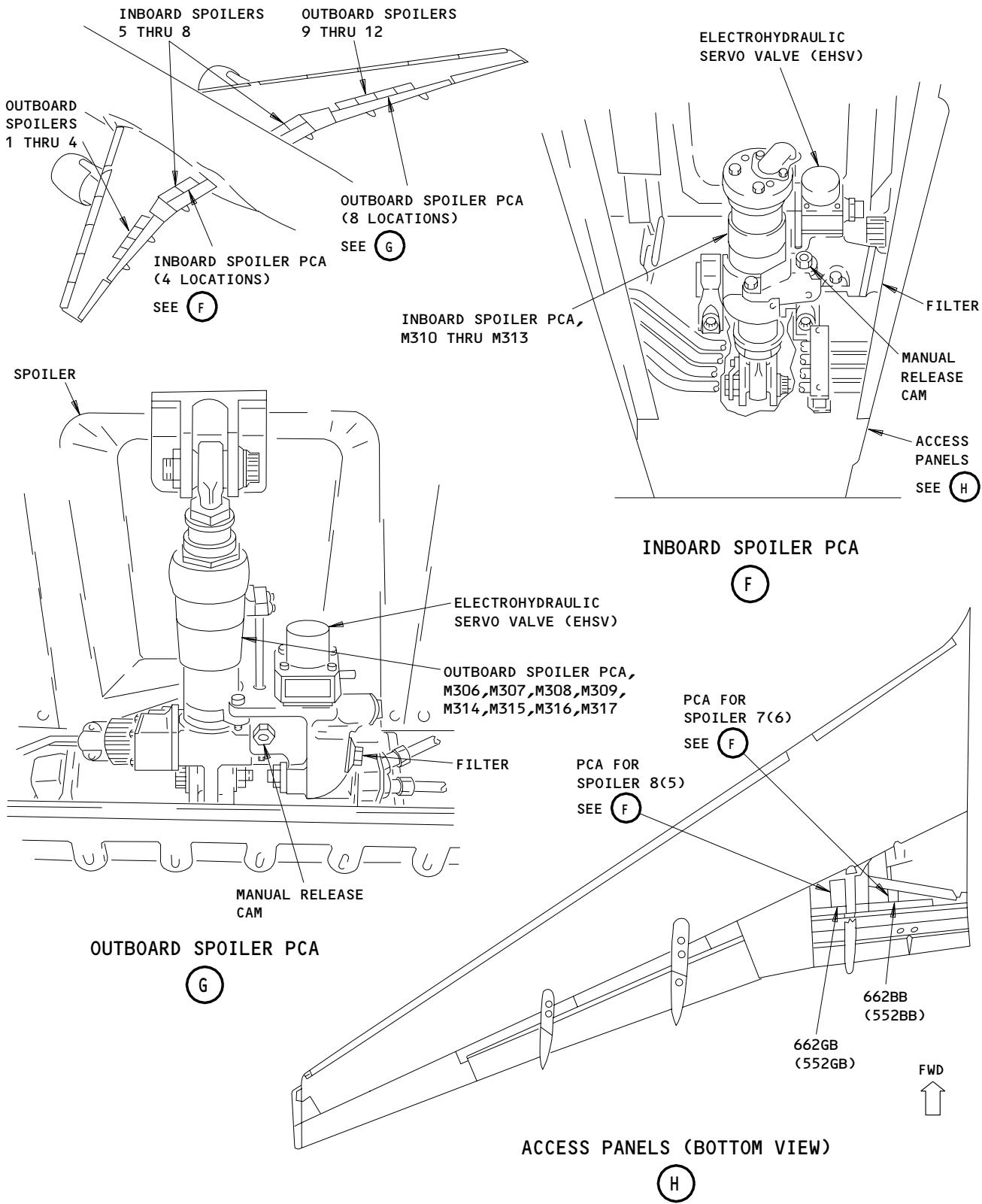
ALL

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**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



Spoiler/Speedbrake Control System - Component Location  
Figure 102 (Sheet 3)

EFFECTIVITY

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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

11C6, 11C7, 11C8, 11C9, 11G17, 11G18, 11G27, 11G28

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

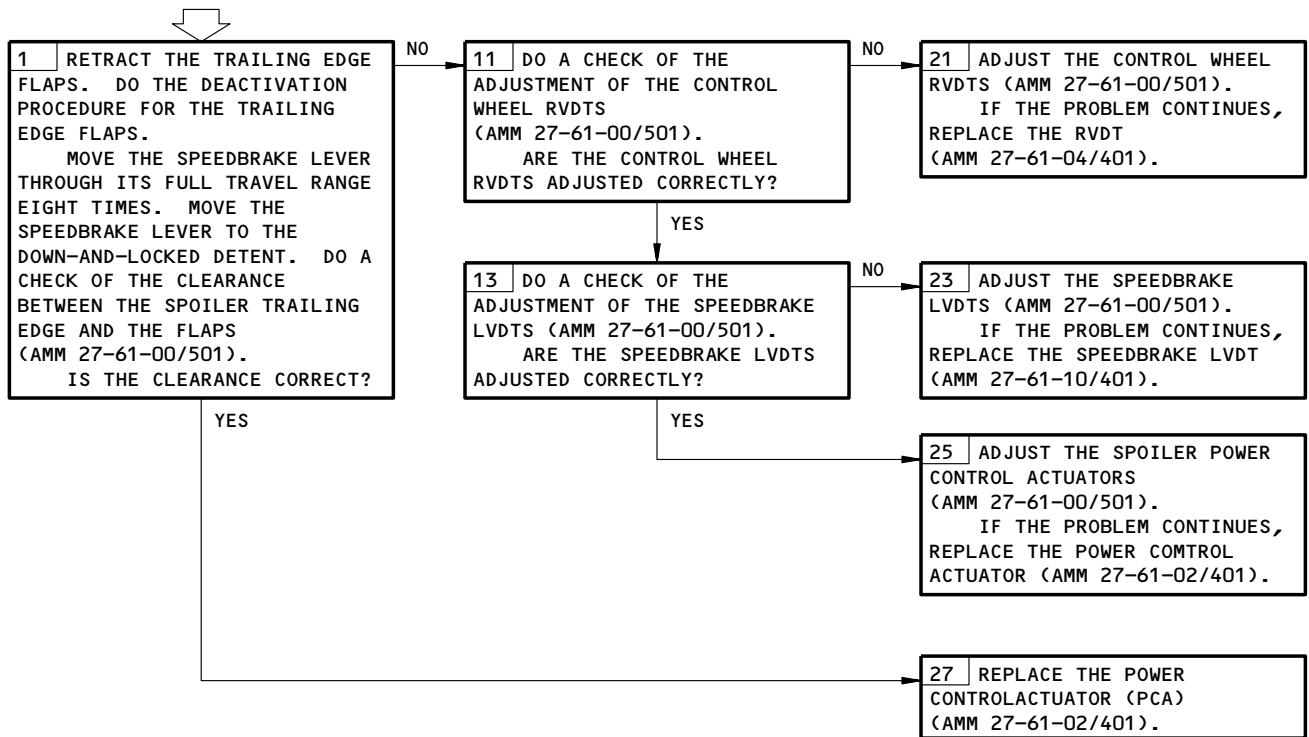
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

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

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**NOTE:** AFTER YOU MOVE THE SPEEDBRAKE LEVER, STOP FOR AT LEAST 20 SECONDS TO LET THE SYSTEM FIND AND SHOW ALL THE APPLICABLE FAULTS.

SPOILER FLOAT OF 4 INCHES OR LESS AT THE SPOILER TRAILING EDGE, MAY OCCUR WHEN HYDRAULIC POWER IS REMOVED.

**SPOILER(S) FLOAT**


Spoiler(s) Float  
Figure 103

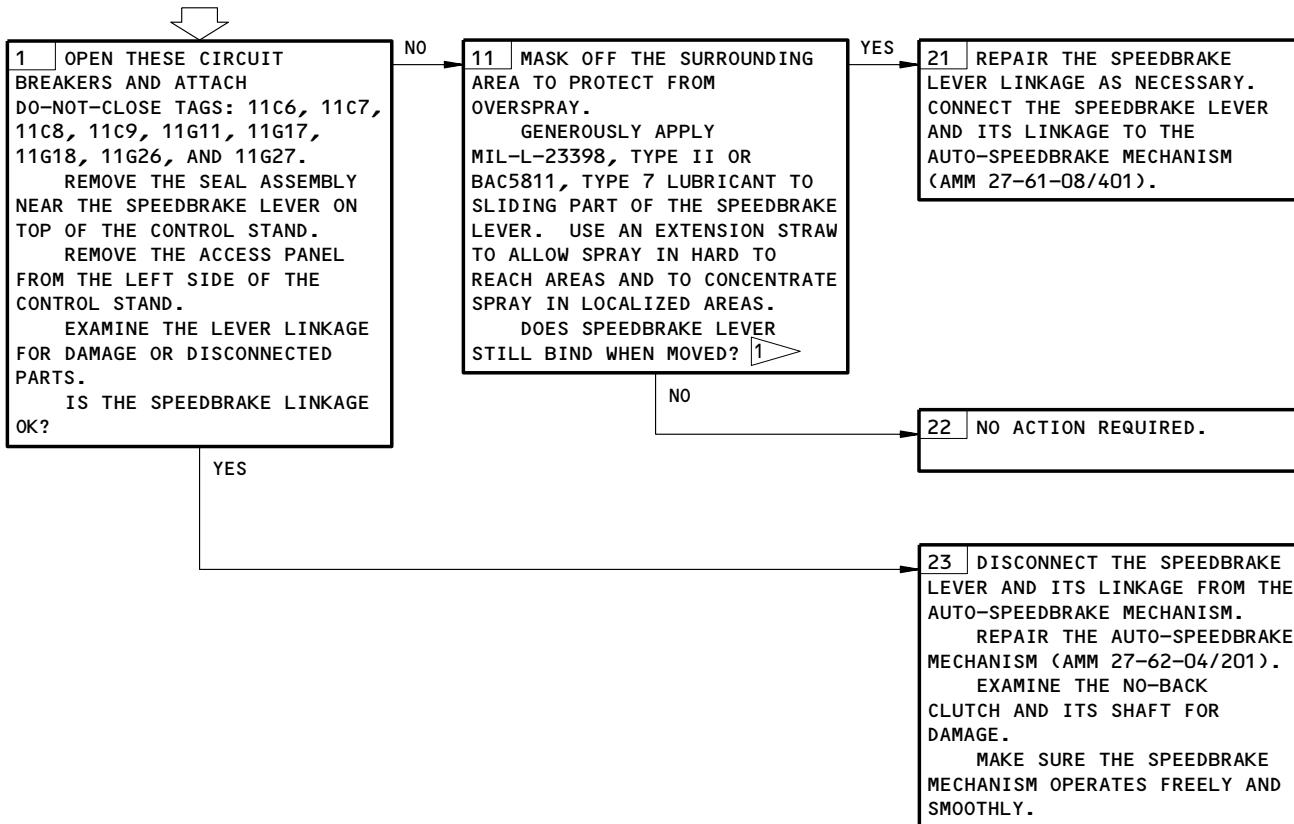
EFFECTIVITY

ALL

**27-61-00**

**PREREQUISITES**  
**NONE**
**SPEEDBRAKE LEVER  
IS BINDING DURING  
MANUAL OR AUTOMATIC  
OPERATION**

**WARNING: MAKE SURE YOU REMOVE HYDRAULIC POWER (AMM 29-11-00/201) BEFORE YOU OPEN THE "FLT CONT ELEC" CIRCUIT BREAKERS. THE SPOILERS WILL RETRACT IN LESS THAN ONE SECOND AND CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.**



**1** ALLOW TO AIR DRY IF POSSIBLE. THE LUBRICANT WILL DRY WITHIN MINUTES; HOWEVER, THE COATING (RESIN SYSTEM) THAT HOLDS THE PIGMENTS WILL CURE IN 6 HOURS AT 77 +/-3 DEGREES F (25 +/-2 DEGREES C) 24 HOURS GIVES THE BEST WEAR AND CORROSION PROTECTION.

**Speedbrake Lever is Binding During Manual or Automatic Operation**  
**Figure 104**

**EFFECTIVITY**
**ALL**
**27-61-00**



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FAULT ISOLATION/MAINT MANUAL

AUTO-SPEEDBRAKE CONTROL SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR - (FIM 27-61-00/101) SPOILER PCA, M306 THRU M317				
ACTUATOR - AUTO SPEEDBRAKE, M577	1	1	FLT COMPT, P10	27-62-04
ASSEMBLY - (FIM 22-32-00/101) MICROSWITCH PACK				
CIRCUIT BREAKER AUTO SPEEDBRK, C1023		1	FLT COMPT, P11 11G11	*
CLUTCH - AUTO SPEEDBRAKE NO-BACK	2	1	FLT COMPT, P10	27-62-04
DIODE - (FIM 31-01-33/101) AUTO SPEEDBRAKE, R244				
LIGHT - "AUTO SPDBK", YDLL15	1	1	FLT COMPT, P5, ANNUNCIATOR PNL M10394	*
MECHANISM - (FIM 27-61-00/101) SPEEDBRAKE CONTROL				
MODULE - (FIM 27-09-00/101)				
SPOILER CONTROL (SCM) 1L, M530				
SPOILER CONTROL (SCM) 2L, M531				
SPOILER CONTROL (SCM) 3L, M532				
SPOILER CONTROL (SCM) 1R, M533				
SPOILER CONTROL (SCM) 2R, M534				
SPOILER CONTROL (SCM) 3R, M535				
PANEL - (FIM 30-31-00/101) ANNUNCIATOR, M10394				
RELAYS - (FIM 31-01-33/101)				
AUTO-SPEEDBRAKE AIR/GND 1, K87				
AUTO-SPEEDBRAKE AIR/GND 2, K88				
AUTO-SPEEDBRAKE EXTEND, K217				
AUTO-SPEEDBRAKE RETRACT, K218				
AUTO-SPEEDBRAKE WARNING, K220				
LANDING GEAR TILT PRESSURE, K550				
RELAYS - (FIM 32-09-00/101)				
SYS NO. 1 AIR/GND, K552				
SYS NO. 2 AIR/GND, K518				
SPOILERS 1 THRU 12 - (FIM 27-61-00/101)				
SWITCH - AUTO SPEEDBRAKE ARMING, S371	1	1	FLT COMPT, P10	27-62-06
SWITCH - SPEED BRAKE RETRACT L, S10	1	1	AUTOTHROTTLE DRIVE ASSY, MICRO- SWITCH PACK ASSY, M966	27-62-07
SWITCH - SPEED BRAKE RETRACT R, S14	1	1	AUTOTHROTTLE DRIVE ASSY, MICRO- SWITCH PACK ASSY, M966	27-62-07
SWITCH - L GEAR TILT PRESS, S452	2	1	551TB, LEFT WING	27-62-10
SWITCH - R GEAR TILT PRESS, S453	2	1	651TB, RIGHT WING	27-62-10
SWITCH - REVERSE THRUST LVR POS, S375	1	1	FLT COMPT, P10	27-62-08
TIME DELAY - (FIM 31-01-33/101) AUTO SPEEDBRAKE WARNING, M963				
TRANSDUCER - (FIM 27-61-00/101)				
SPEEDBRAKE (LVDT), TS35				
SPEEDBRAKE (LVDT), TS36				
SPEEDBRAKE (LVDT), TS37				

\* SEE WDM EQUIPMENT LIST

Auto-Speedbrake Control System - Component Index  
Figure 101

EFFECTIVITY

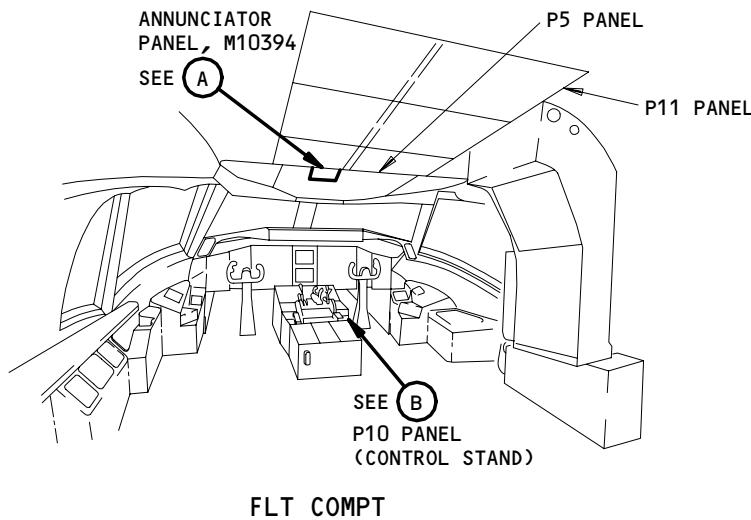
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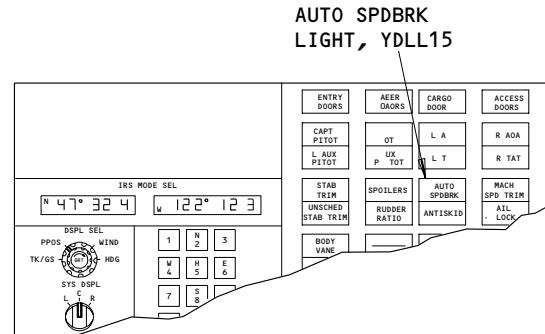
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**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

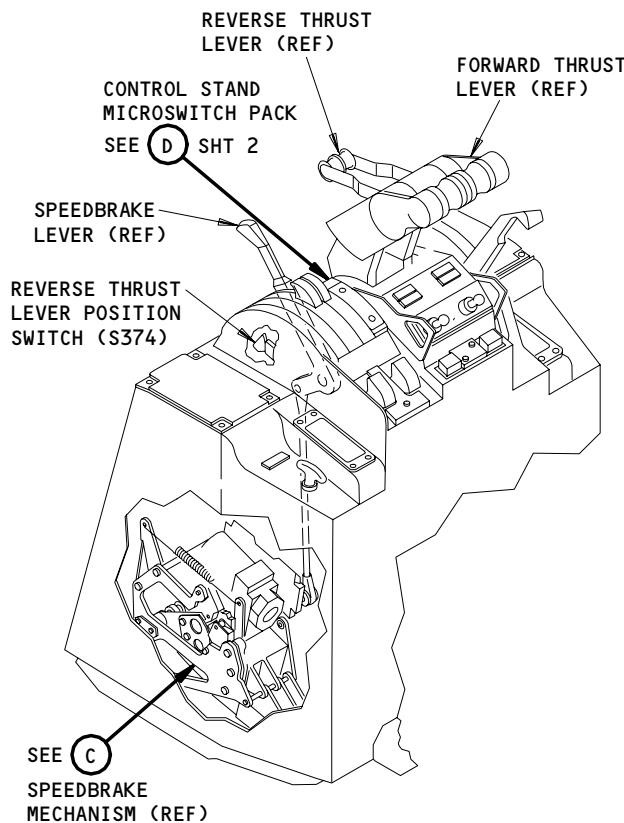


FLT COMPT



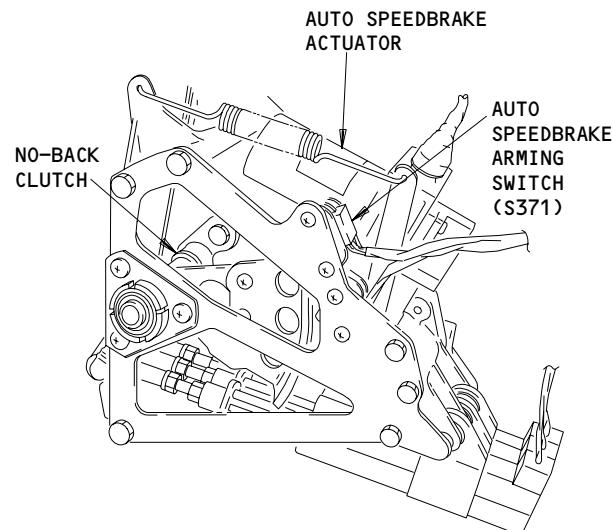
OVERHEAD PANEL (P5)

(A)



CONTROL STAND (REF)

(B)



SPEEDBRAKE MECHANISM (REF)

(C)

Component Location  
Figure 102 (Sheet 1)

EFFECTIVITY

ALL

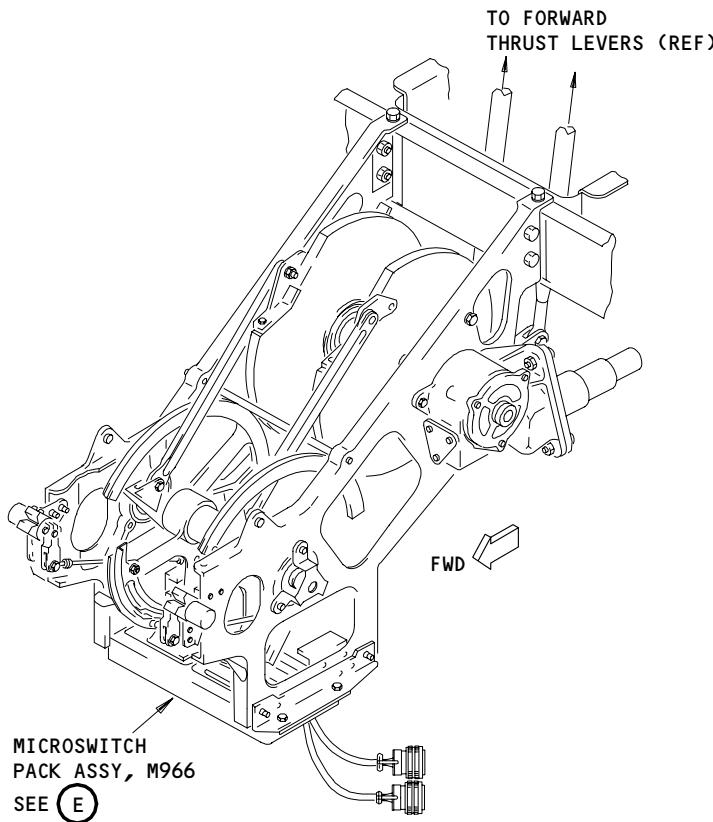
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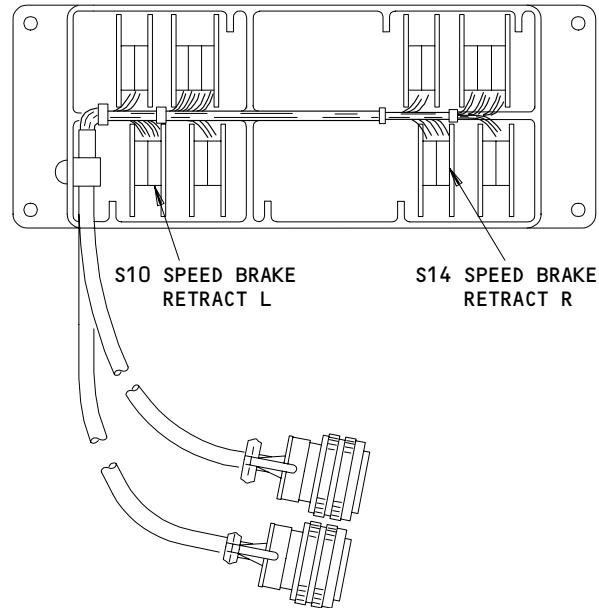
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Nov 01/86

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



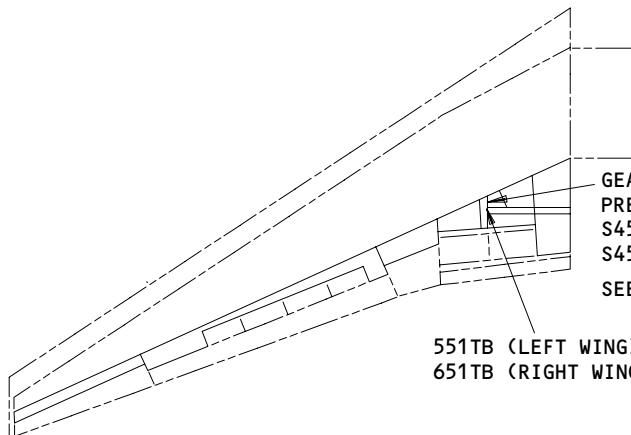
AUTOTHROTTLE DRIVE ASSEMBLY (REF)

(D) FROM SHT 1

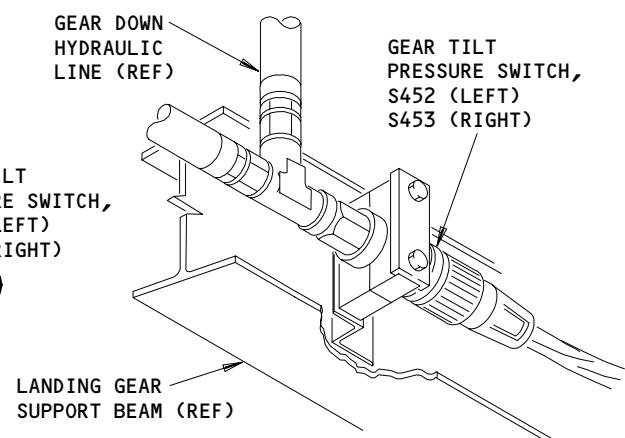


MICROSWITCH PACK ASSEMBLY, M966

(E)



BOTTOM VIEW OF WING



GEAR TILT PRESSURE SWITCH, S452 OR S453

(F)

Component Location  
Figure 102 (Sheet 2)

EFFECTIVITY

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 **BOEING**  
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FAULT ISOLATION/MAINT MANUAL

Not Used  
Figure 103

EFFECTIVITY

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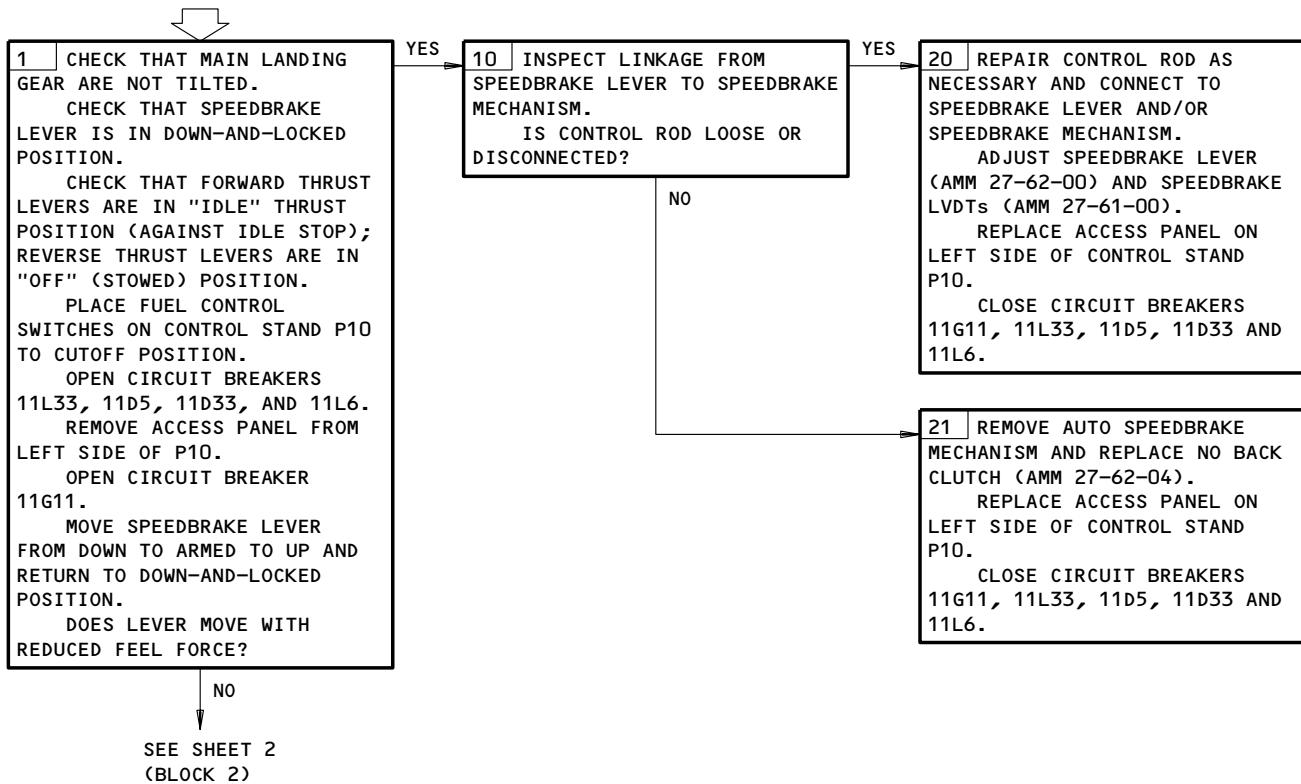
**SPEEDBRAKE LEVER FAILED TO EXTEND AUTOMATICALLY ON LANDING ("AUTO SPD BRK" LIGHT NOT ILLUMINATED)**

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
11G11, 11L33, 11D5, 11D33, 11L6

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

**WARNING:** TO PREVENT INJURY OR DAMAGE, CLEAR PERSONNEL AND EQUIPMENT FROM CONTROL SURFACES BEFORE PROVIDING HYDRAULIC POWER. KEEP AREA CLEAR WHEN DOING FAULT ISOLATION.



**Speedbrake Lever Failed To Extend Automatically On Landing  
(AUTO SPD BRK Light not Illuminated)**  
Figure 104 (Sheet 1)

**EFFECTIVITY** \_\_\_\_\_

**ALL**
**27-62-00**

FROM SHEET 1  
(BLOCK 1)

YES

**2** CLOSE CIRCUIT BREAKER  
11G11.  
CHECK FOR 28V DC AT  
PIN, FC4 ON TERMINAL BLOCK,  
TB219 IN P10 (WDM 27-62-11).  
IS 28V DC AVAILABLE?

NO

**22** REPLACE ACCESS PANEL ON  
LEFT SIDE OF CONTROL STAND  
P10.

ADJUST L SPEEDBRAKE  
RETRACT SWITCH, S10, AND  
R SPEEDBRAKE RETRACT SWITCH,  
S14 (AMM 22-32-04/501).

IF THE PROBLEM CONTINUES,  
PLACE FORWARD THRUST LEVERS IN  
IDLE, CHECK AND REPLACE SWITCH  
AS FOLLOWS:

ON SWITCH S10, CHECK FOR  
28V DC AT CONTACT NO  
(WDM 27-62-11). IF 28V DC  
IS PRESENT, REPLACE S10  
(AMM 22-32-04/401).

ON SWITCH S14, CHECK FOR  
28V DC AT CONTACT NO. IF  
28V DC IS PRESENT, REPLACE  
S14 (AMM 22-32-04/401).

AFTER COMPLETING SWITCH  
INSTALLATION, TEST PER  
(AMM 27-62-07/401).

CLOSE CIRCUIT BREAKERS  
11L33, 11D33, 11L6 AND 11D5  
(LEFT ENGINE T/R CONT).

YES

**3** MOVE SPEEDBRAKE LEVER TO  
ARMED POSITION.  
CHECK FOR 28V DC AT  
PIN, G6 ON TB219, IN P10.  
IS 28V DC AVAILABLE?

NO

**23** RETURN SPEEDBRAKE LEVER TO  
THE DOWN-AND-LOCKED POSITION.  
REPLACE AUTO SPEEDBRAKE  
ARMING SWITCH, S371  
(AMM 27-62-04/401).

REPLACE ACCESS PANEL ON  
LEFT SIDE OF CONTROL STAND  
P10.

CLOSE CIRCUIT BREAKERS  
11L33, 11D33, 11L6 AND 11D5  
(LEFT ENGINE T/R CONT).

YES

**24** RETURN SPEEDBRAKE LEVER TO  
THE DOWN-AND-LOCKED POSITION.  
REPLACE AUTO SPEEDBRAKE  
ACTUATOR, M577  
(AMM 27-62-04/401).

REPLACE ACCESS PANEL ON  
LEFT SIDE OF CONTROL STAND  
P10.

CLOSE CIRCUIT BREAKERS  
11L33, 11D33, 11L6 AND 11D5  
(LEFT ENGINE T/R CONT).

Speedbrake Lever Failed To Extend Automatically On Landing  
(AUTO SPD BRK Light not Illuminated)  
Figure 104 (Sheet 2)

EFFECTIVITY

ALL

**27-62-00**

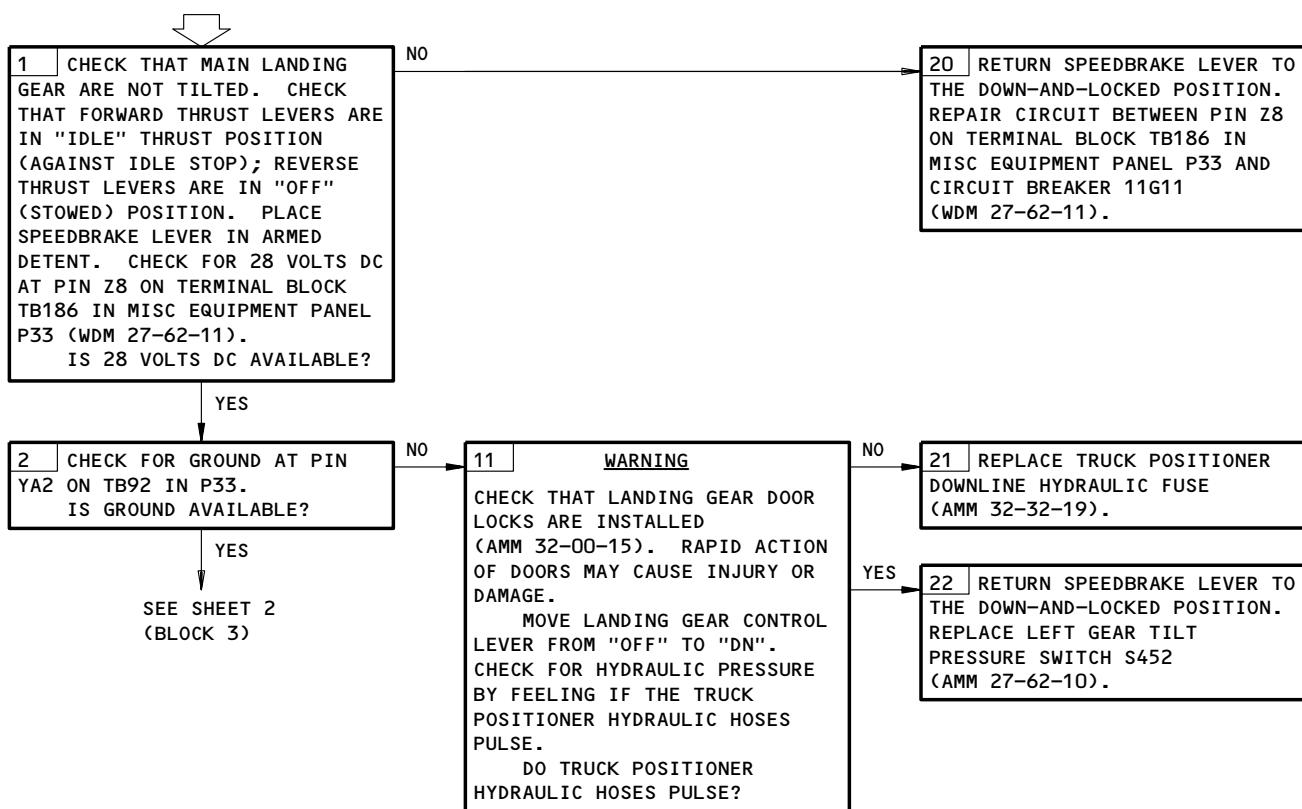
**PREREQUISITES**

MAKE SURE THIS CIRCUIT BREAKER IS CLOSED:  
**11G11**

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

**"AUTO SPD BRK" LIGHT  
 ILLUMINATE WITH  
 SPEED BRAKE LEVER  
 ARMED EICAS MSG  
 "AUTO SPEEDBRAKE"  
 DISPLAYED.**

**WARNING:** TO PREVENT INJURY OR DAMAGE, CLEAR PERSONNEL  
 AND EQUIPMENT FROM CONTROL SURFACES BEFORE  
 PROVIDING HYDRAULIC POWER. KEEP AREA CLEAR  
 WHEN PERFORMING FAULT ISOLATION.

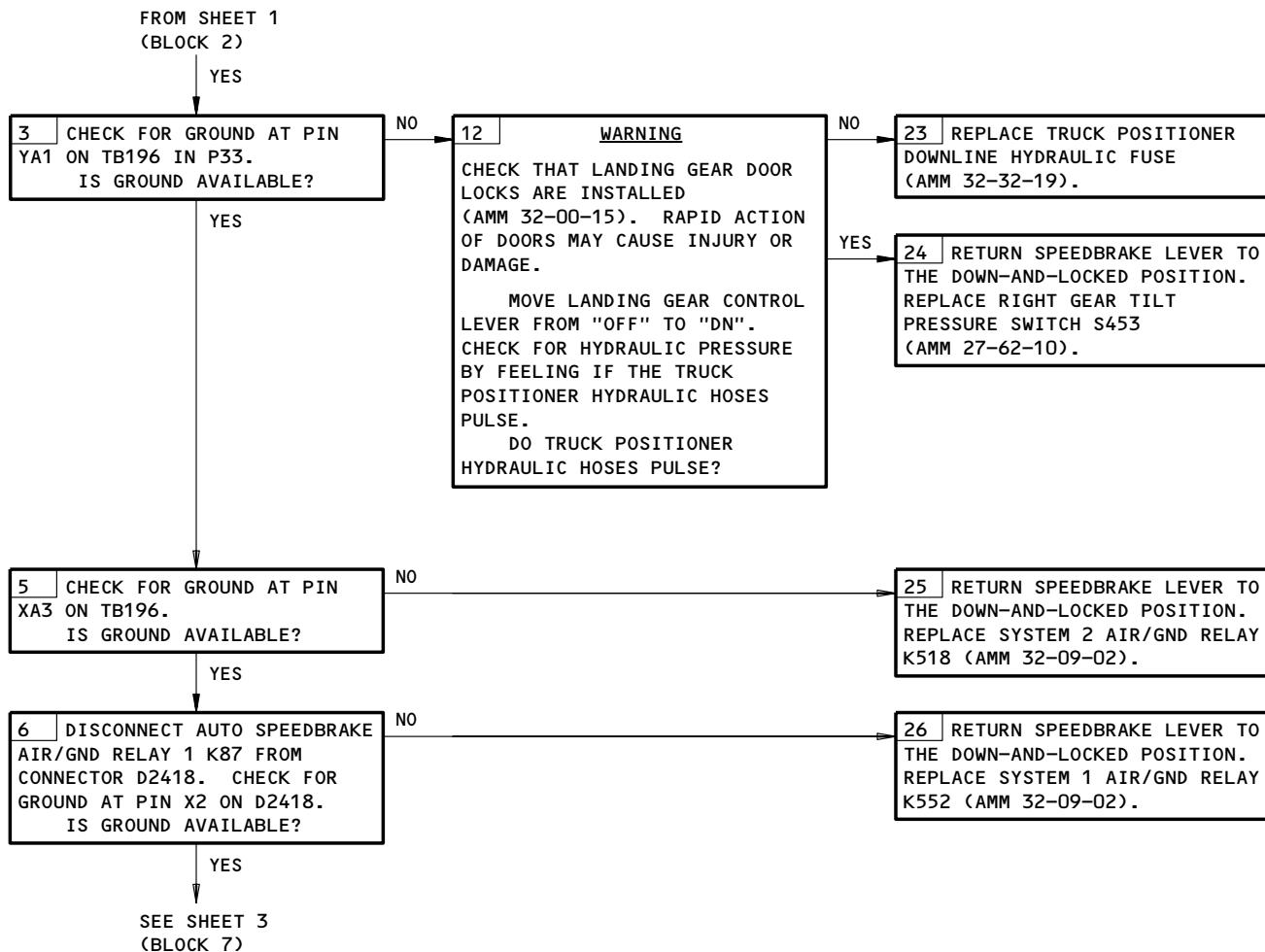


**AUTO SPDBRK Light Illuminated with Speedbrake Lever Armed.  
 EICAS Message AUTO SPEEDBRAKE Displayed.  
 Figure 105 (Sheet 1)**

EFFECTIVITY  
 AIRPLANES WITHOUT GEAR TILT RIGHT GEAR  
 SWITCH

**27-62-00**

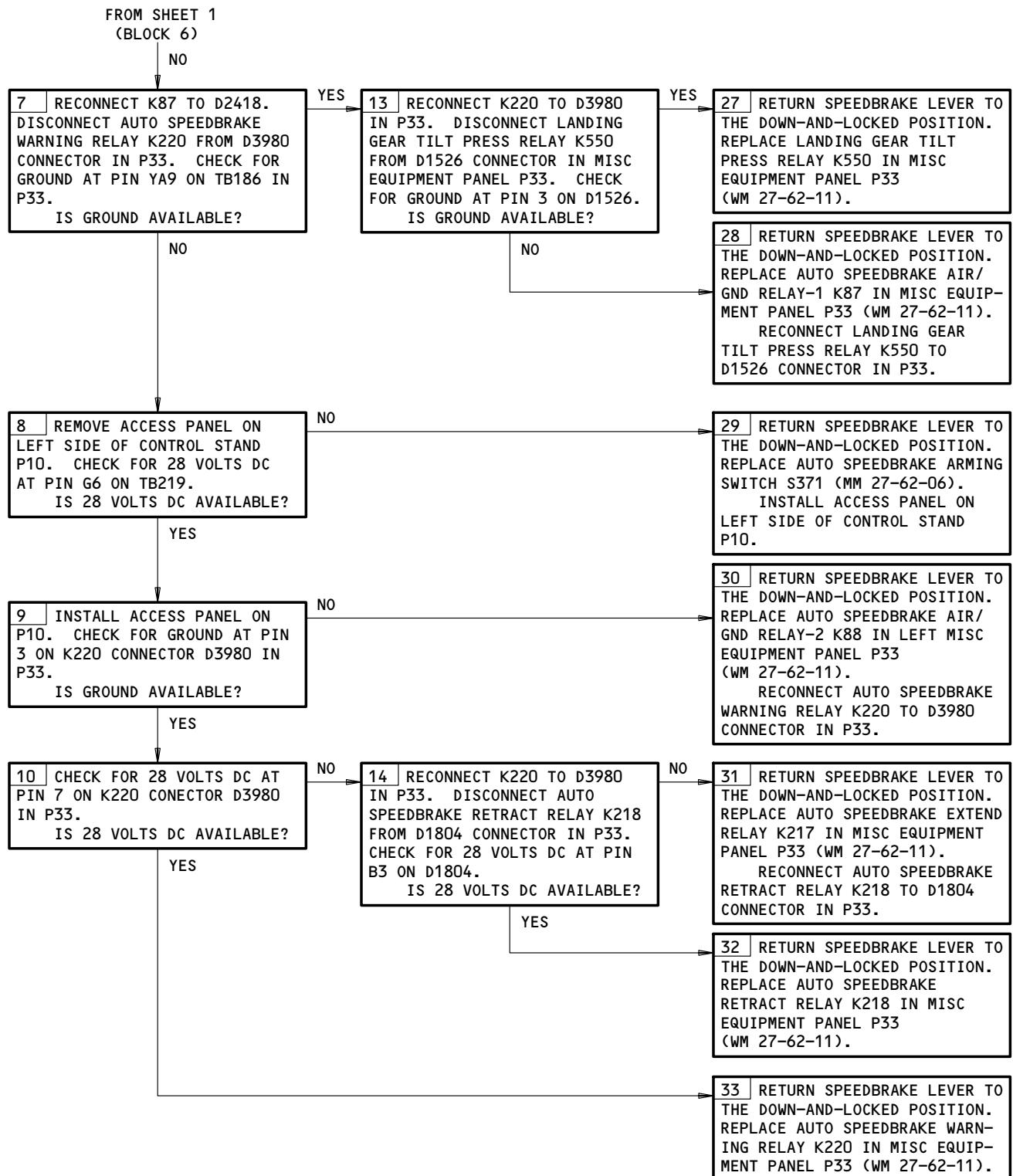
**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



AUTO SPDBRK Light Illuminated with Speedbrake Lever Armed.  
EICAS Message AUTO SPEEDBRAKE Displayed.  
Figure 105 (Sheet 2)

EFFECTIVITY  
AIRPLANES WITHOUT GEAR TILT RIGHT GEAR  
SWITCH

**27-62-00**



AUTO SPDBRK Light Illuminated with Speedbrake Lever Armed.  
EICAS Message AUTO SPEEDBRAKE Displayed.

Figure 105 (Sheet 3)

EFFECTIVITY  
AIRPLANES WITHOUT GEAR TILT RIGHT GEAR  
SWITCH

**27-62-00**

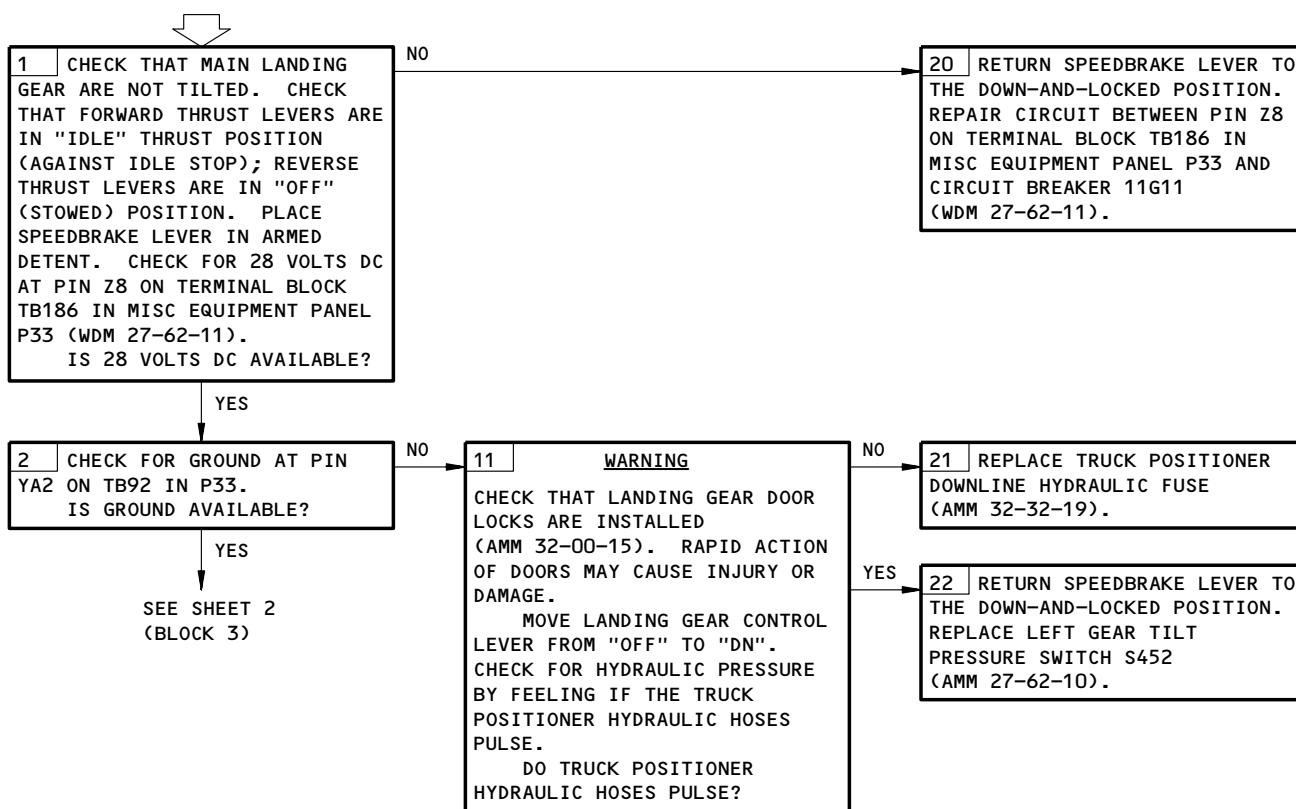
**PREREQUISITES**

MAKE SURE THIS CIRCUIT BREAKER IS CLOSED:  
 11G11

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

"AUTO SPD BRK" LIGHT  
 ILLUMINATE WITH  
 SPEED BRAKE LEVER  
 ARMED EICAS MSG  
 "AUTO SPEEDBRAKE"  
 DISPLAYED.

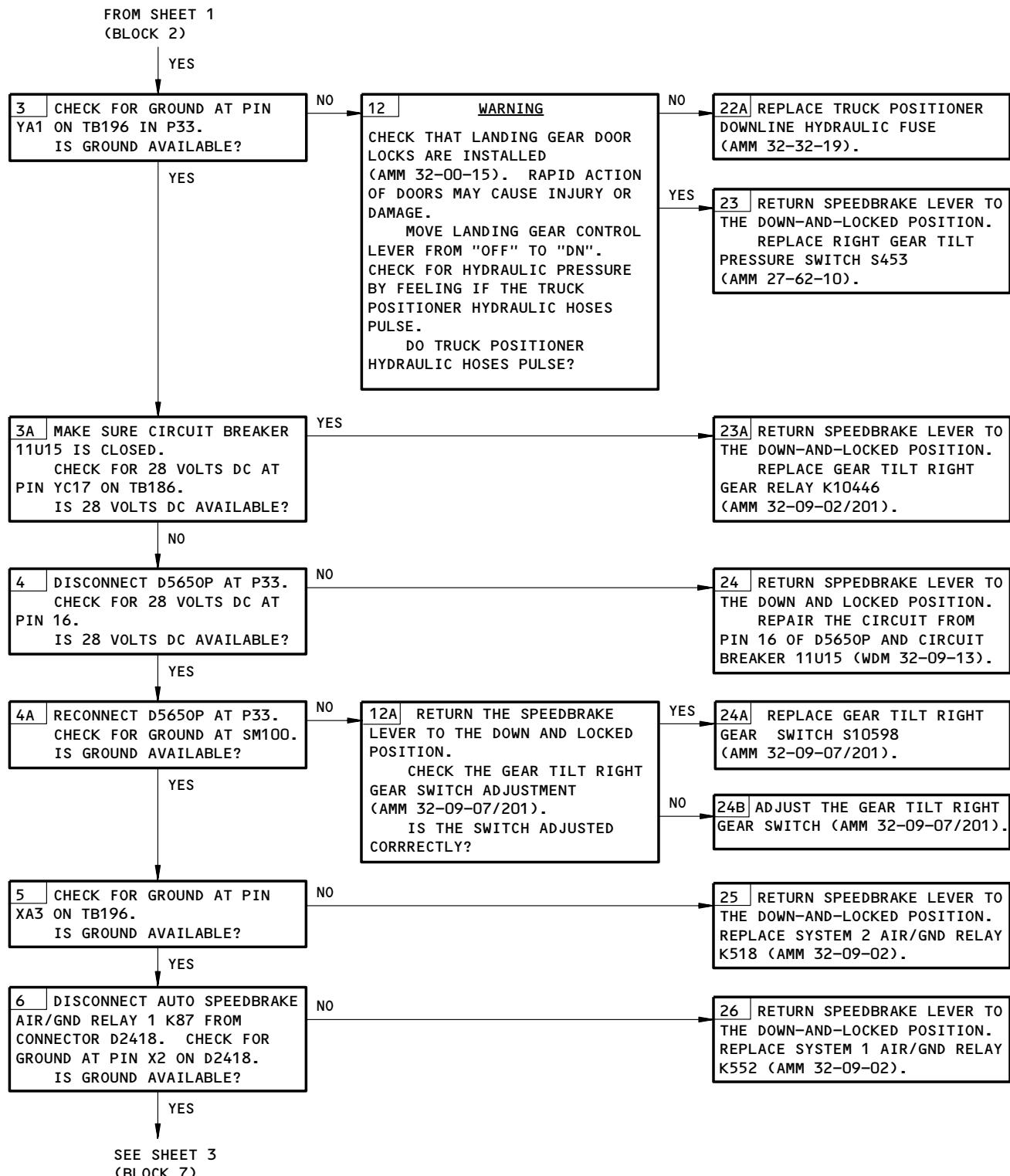
**WARNING:** TO PREVENT INJURY OR DAMAGE, CLEAR PERSONNEL  
 AND EQUIPMENT FROM CONTROL SURFACES BEFORE  
 PROVIDING HYDRAULIC POWER. KEEP AREA CLEAR  
 WHEN PERFORMING FAULT ISOLATION.



AUTO SPDBRK Light Illuminated with Speedbrake Lever Armed.  
 EICAS Message AUTO SPEEDBRAKE Displayed.  
 Figure 105A (Sheet 1)

EFFECTIVITY  
 AIRPLANES WITH TILT GEAR TILT RIGHT TILT  
 SWITCH

**27-62-00**



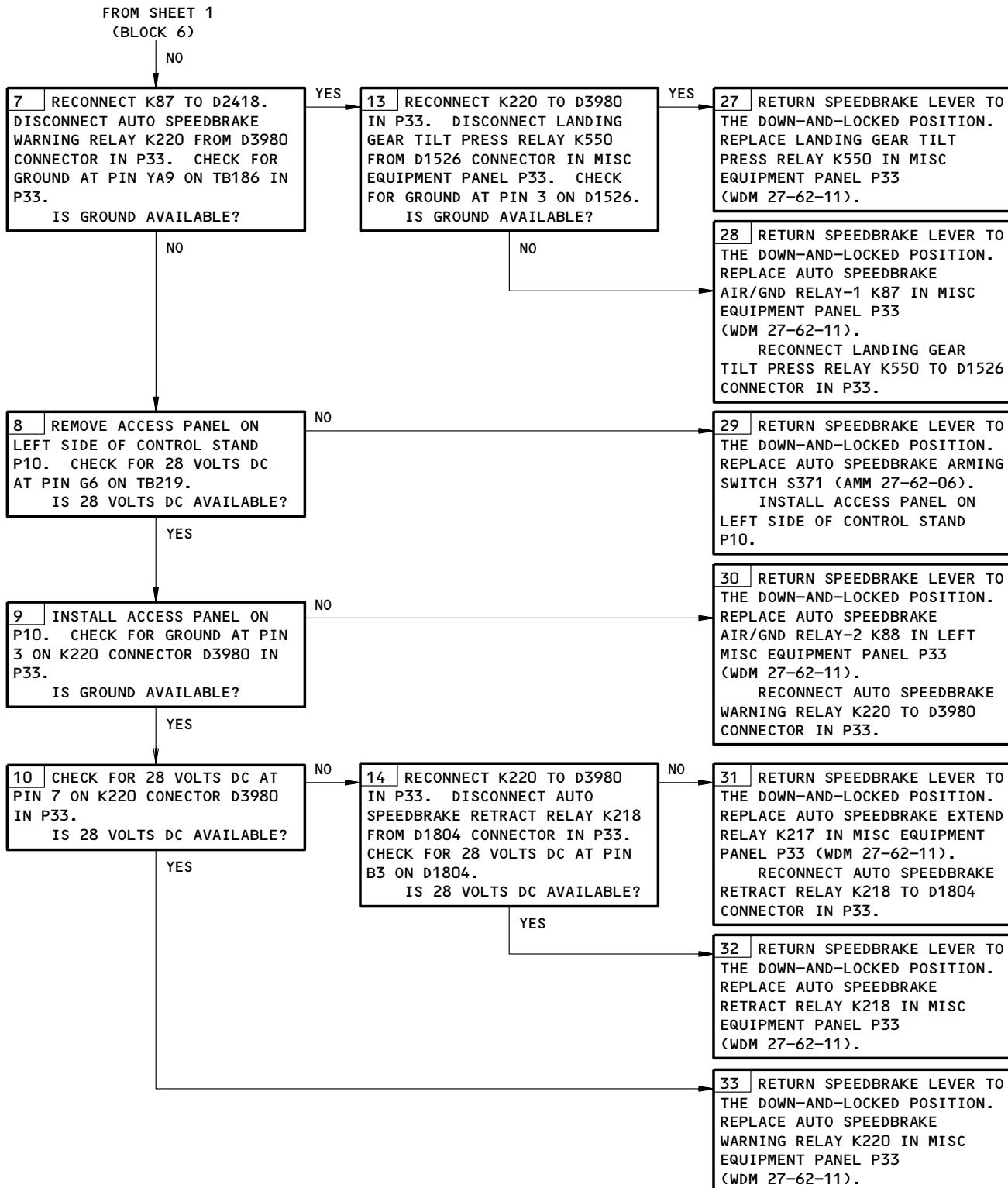
AUTO SPDBRK Light Illuminated with Speedbrake Lever Armed.  
EICAS Message AUTO SPEEDBRAKE Displayed.

Figure 105A (Sheet 2)

EFFECTIVITY  
AIRPLANES WITH GEAR TILT RIGHT GEAR  
SWITCH

**27-62-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL



AUTO SPDBRK Light Illuminated with Speedbrake Lever Armed.

EICAS Message AUTO SPEEDBRAKE Displayed.

Figure 105A (Sheet 3)

EFFECTIVITY  
AIRPLANES WITH GEAR TILT RIGHT GEAR  
SWITCH

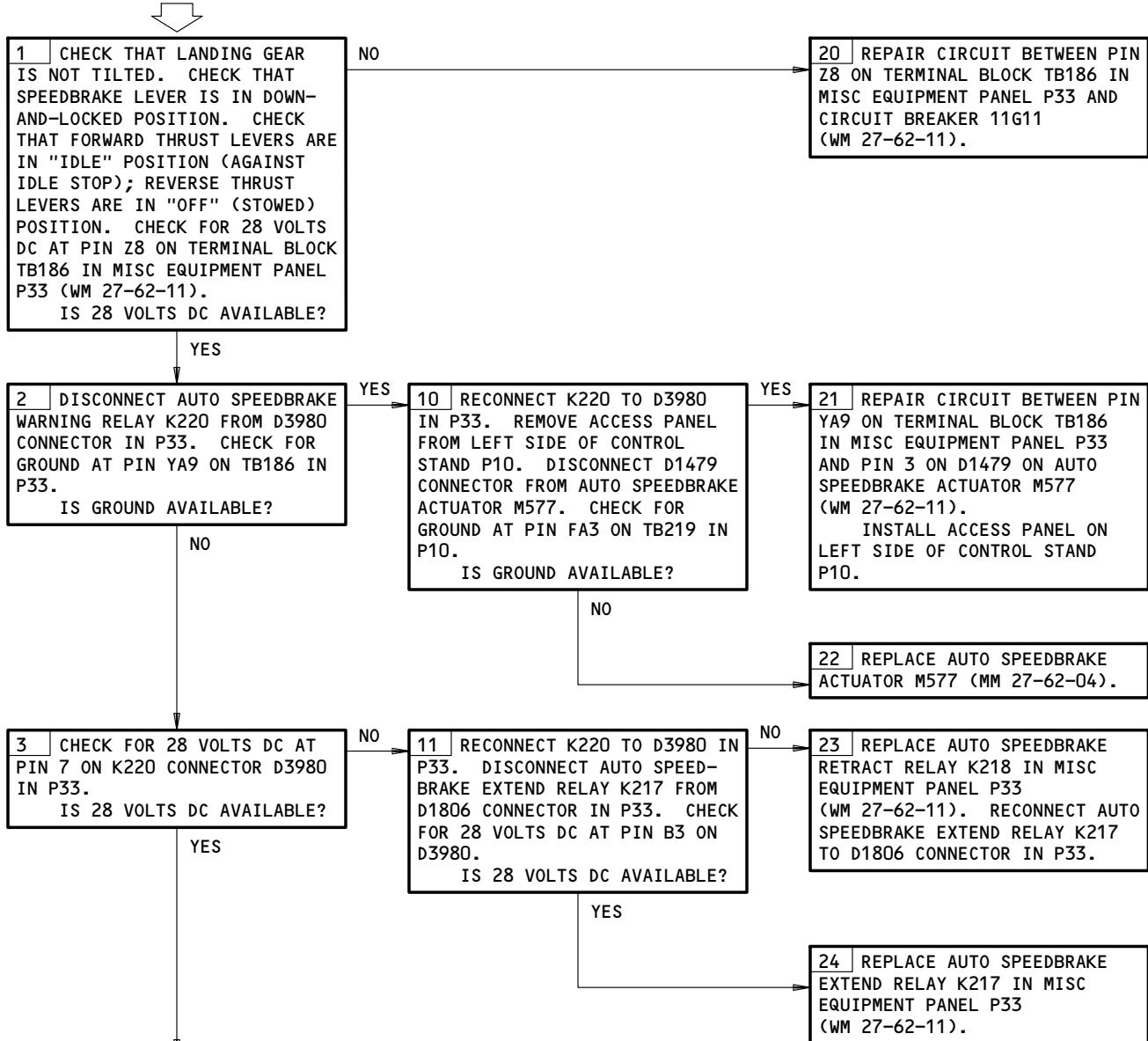
27-62-00

"AUTO SPD BRK" LGT  
ILLUM WITH SPEED-  
BRAKE LEVER DOWN.  
EICAS MSG "AUTO  
SPEEDBRAKE" DIS-  
PLAYED.

**PREREQUISITES**

ELECTRICAL POWER (MM 24-22-00)  
HYDRAULIC POWER (MM 29-11-00)  
CB: 11G11

**WARNING:** TO PREVENT INJURY OR DAMAGE, CLEAR PERSONNEL  
AND EQUIPMENT FROM CONTROL SURFACES BEFORE  
PROVIDING HYDRAULIC POWER. KEEP AREA CLEAR  
WHEN PERFORMING FAULT ISOLATION.



SEE SHEET 2

AUTO SPD BRK Light Illuminated with Speedbrake Lever Down.  
EICAS Message AUTO SPEEDBRAKE Displayed.

Figure 106 (Sheet 1)

EFFECTIVITY

**27-62-00**

ALL

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 3)

YES

4 CHECK FOR GROUND AT PIN 3  
ON K220 CONNECTOR D3980 IN  
P33.  
IS GROUND AVAILABLE?

NO

12 RECONNECT K220 TO D3980  
IN P33. DISCONNECT AUTO  
SPEEDBRAKE AIR/GND RELAY-1 K87  
FROM D2418 CONNECTOR IN P33.  
CHECK FOR GROUND AT PIN C1 ON  
D2418.  
IS GROUND AVAILABLE?

YES

NO

25 REPLACE AUTO SPEEDBRAKE  
AIR/GND RELAY-2 K88 IN MISC  
EQUIPMENT PANEL P33  
(WM 27-62-11). RECONNECT AUTO  
SPEEDBRAKE AIR/GND RELAY-1  
K87 TO D2418 CONNECTOR IN P33.

YES

26 REPLACE AUTO SPEEDBRAKE  
AIR/GND RELAY-1 K87 IN MISC  
EQUIPMENT PANEL P33  
(WM 27-62-11).

27 REPLACE AUTO SPEEDBRAKE  
WARNING RELAY K220 IN MISC  
EQUIPMENT PANEL P33  
(WM 27-62-11).

AUTO SPD BRK Light Illuminated with Speedbrake Lever Down.  
EICAS Message AUTO SPEEDBRAKE Displayed.  
Figure 106 (Sheet 2)

EFFECTIVITY

ALL

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**PREREQUISITES**

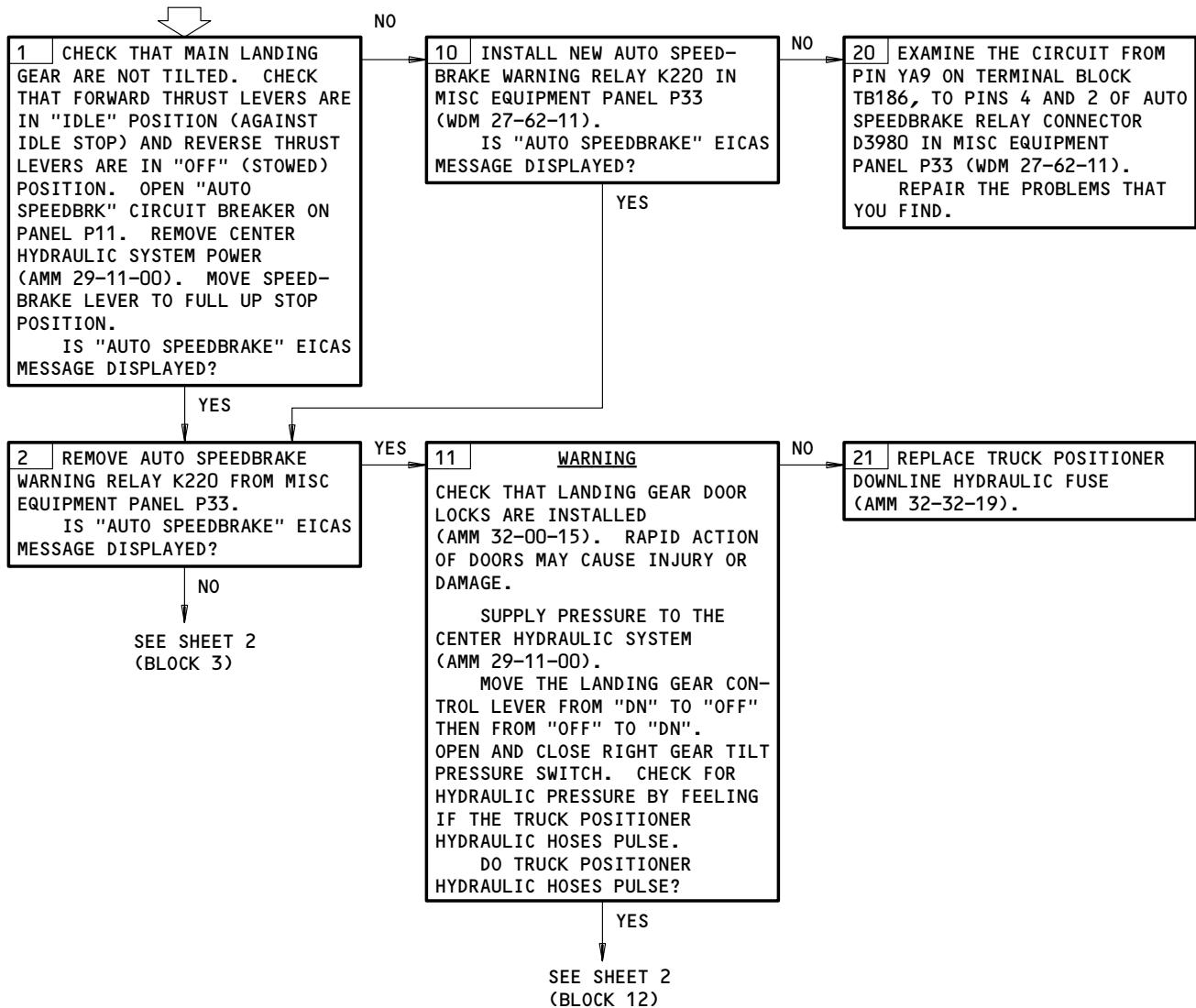
MAKE SURE THIS SYSTEM WILL OPERATE:  
 HYDRAULIC POWER (AMM 29-11-00/201)

MAKE SURE THIS CIRCUIT BREAKER IS CLOSED:  
 11G11

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

"AUTO SPD BRK" LIGHT  
 ILLUM WITH SPEED-  
 BRAKE LEVER UP.  
 EICAS MSG "AUTO  
 SPEEDBRAKE" DIS-  
 PLAYED.

**WARNING:** TO PREVENT INJURY OR DAMAGE, CLEAR PERSONNEL  
 AND EQUIPMENT FROM CONTROL SURFACES BEFORE  
 PROVIDING HYDRAULIC POWER. KEEP AREA CLEAR  
 WHEN PERFORMING FAULT ISOLATION.



AUTO SPD BRK Light Illuminated with Speedbrake Lever Up.  
 EICAS Message AUTO SPEEDBRAKE Displayed.

Figure 107 (Sheet 1)

EFFECTIVITY

**27-62-00**

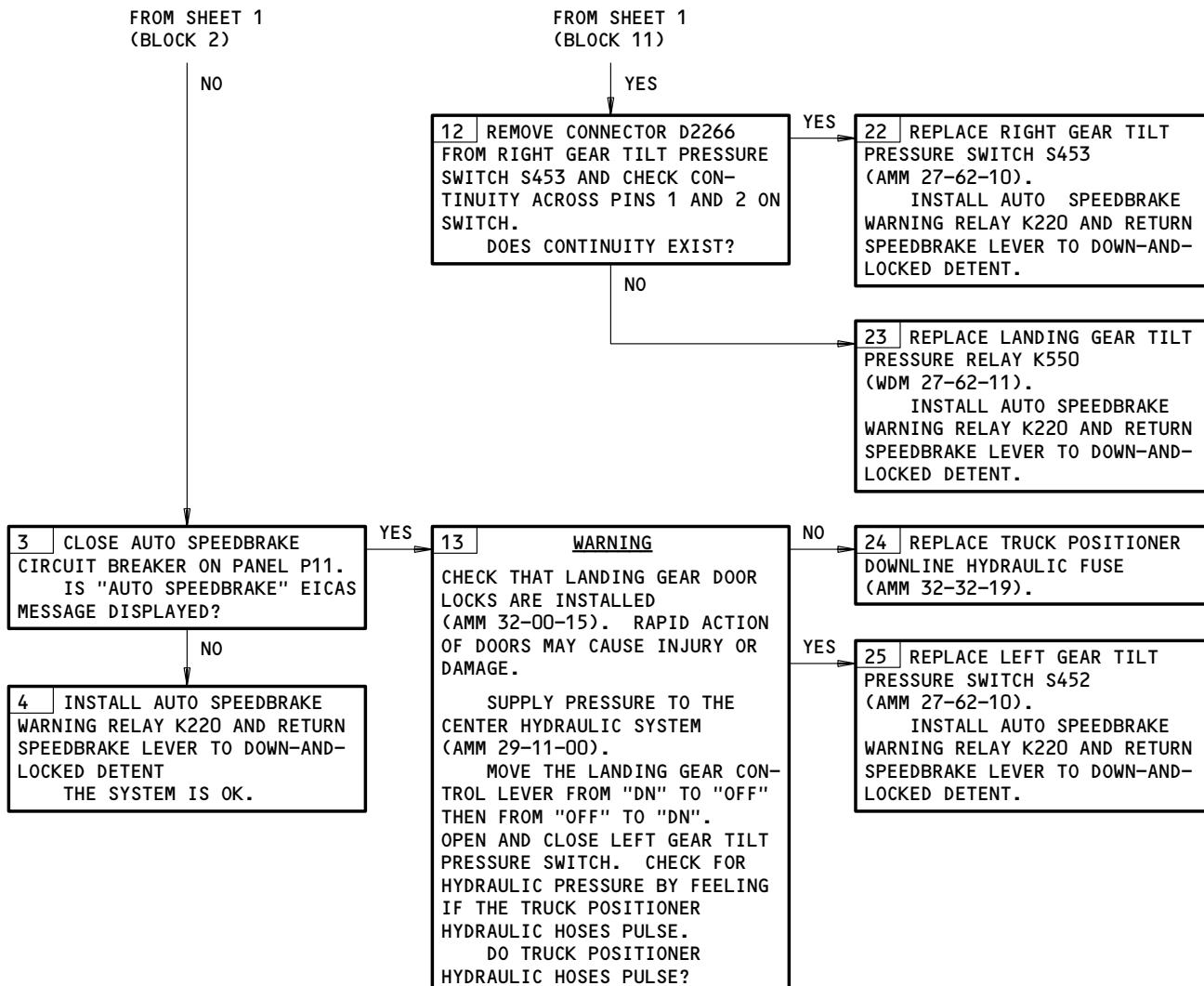
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**BOEING**  
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AUTO SPD BRK Light Illuminated with Speedbrake Lever Up.  
EICAS Message AUTO SPEEDBRAKE Displayed.  
Figure 107 (Sheet 2)

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FAULT ISOLATION/MAINT MANUAL

LEADING EDGE SLAT SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR - BYPASS VALVE ROTARY (LE SLAT PDU)	7	2	511BB,611BB, LE WING ROOT	27-81-12
ACTUATOR - KRUEGER SEAL FLAP (LEFT & RIGHT)	2	2	511QB,511RB,611QB,611RB, WING LE	27-81-19
ACTUATOR - LE SLAT NO. 1 INBD DRIVE ROTARY	3	1	521AEB,521AFB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 1 OUTBD DRIVE ROTARY	3	1	521AFB,521ALB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 2 INBD DRIVE ROTARY	3	1	521YB,521ZB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 2 OUTBD DRIVE ROTARY	3	1	521ZB,521AEB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 3 INBD DRIVE ROTARY	3	1	521RB,521TB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 3 OUTBD DRIVE ROTARY	3	1	521TB,521YB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 4 INBD DRIVE ROTARY	3	1	521HB,521JB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 4 OUTBD DRIVE ROTARY	3	1	521JB,521PB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 5 INBD DRIVE ROTARY	3	1	521AB,521BB,521EB,521AMB,521ANB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 5 OUTBD DRIVE ROTARY	3	1	521EB,521HB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 6 INBD DRIVE ROTARY	2	1	521EB,511FB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 6 OUTBD DRIVE ROTARY	2	1	511GB,511JB,511KB,511LB,511NB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 7 INBD DRIVE ROTARY	2	1	611EB,611FB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 7 OUTBD DRIVE ROTARY	2	1	611GB,611JB,611KB,611LB,611NB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 8 INBD DRIVE ROTARY	3	1	611AB,621BB,621EB,621AMB,621ANB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 8 OUTBD DRIVE ROTARY	3	1	621EB,621HB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 9 INBD DRIVE ROTARY	3	1	621HB,621JB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 9 OUTBD DRIVE ROTARY	3	1	621JB,621SB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 10 INBD DRIVE ROTARY	3	1	621SB,621TB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 10 OUTBD DRIVE ROTARY	3	1	621TB,621YB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 11 INBD DRIVE ROTARY	3	1	621YB,621ZB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 11 OUTBD DRIVE ROTARY	3	1	621AEB,621AZB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 12 INBD DRIVE ROTARY	3	1	621AEB,621AFB, WING LE	27-81-20
ACTUATOR - LE SLAT NO. 12 OUTBD DRIVE ROTARY	3	1	621AFB,621ALB, WING LE	27-81-20
CIRCUIT BREAKERS -	1		FLT COMPT, P6	
ALTN SLAT INBD PWR, C324		1	6D21	*
ALTN SLAT OUTBD PWR, C325		1	6F24	*
CIRCUIT BREAKERS -	1		FLT COMPT, P11	
FLAP ALTN CONT, C1027		1	11J24	*
FLAP POS IND L, C1008		1	11J15	*
FLAP POS IND R, C1522		1	11J16	*
FLAP SHUTOFF, C1019		1	11J14	*
FLAP/SLAT POS IND, C1021		1	11C4 OR 11J11	*
FSEU-1 CONT, C1025		1	11C16	*
FSEU-1 SENSOR, C1037		1	11C15	*
FSEU-2 CONT, C1521		1	11G16	*
FSEU-2 SENSOR, C1524		1	11G15	*
FSEU-3 CONT, C1036		1	11G23	*
FSEU-3 SENSOR, C1038		1	11G22	*
FLAP STAB POS SENSING CENTER, C1525		1	11C14	*
FLAP/STAB POS SENSING L, C1523		1	11J17	*

\* SEE THE WDM EQUIPMENT LIST

Leading Edge Slat System - Component Index  
Figure 101 (Sheet 1)

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COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
FLAP/STAB POS SENSING R, C1526		1	11J26	*
PROX SW TEST, C1178		1	11T36	*
SLAT ALTN CONT INBD, C1028		1	11H23	*
SLAT ALTN CONT OUTBD, C1029		1	11H24	*
SLAT POS IND, C1001		1	11C10	*
SLAT SHUTOFF, C1020		1	11H14	*
COMPUTER - (FIM 31-41-00/101)				
EICAS L, M10181				
EICAS R, M10182				
DRIVE - KRUEGER SEAL FLAP (LEFT & RIGHT)	2	2	511QB,511RB,611QB,611RB, WING LE	27-81-04
GEARBOX - LE SLAT DRIVE BODY ANGLE	2	1	AFT END OF FWD CARGO COMPARTMENT	27-81-15
GEARBOX - LE SLAT DRIVE OUTBD ANGLE	2	2	511PT,511ST,611PT,611ST, WING LE	27-81-17
GEARBOX - LE SLAT DRIVE SIDE-OF-BODY ANGLE	2	4	511BB,611BB, WING LE	27-81-16
GEARBOX - LE SLAT NO. 1 INBD DRIVE OFFSET	3	1	521AEB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 1 OUTBD DRIVE OFFSET	3	1	521ALB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 2 INBD DRIVE OFFSET	3	1	521AEB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 2 OUTBD DRIVE OFFSET	3	1	521YB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 3 INBD DRIVE OFFSET	3	1	521QB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 3 OUTBD DRIVE OFFSET	3	1	521YB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 4 INBD DRIVE OFFSET	3	1	521HB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 4 OUTBD DRIVE OFFSET	3	1	521PB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 5 INBD DRIVE OFFSET	3	1	521AB,521AMB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 5 OUTBD DRIVE OFFSET	3	1	521HB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 6 INBD DRIVE OFFSET	2	1	511EB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 6 OUTBD DRIVE OFFSET	2	1	511LB,511NB, WING LE 	27-81-20
GEARBOX - LE SLAT NO. 7 INBD DRIVE OFFSET	2	1	611EB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 7 OUTBD DRIVE OFFSET	2	1	611LB,611NB, WING LE 	27-81-20
GEARBOX - LE SLAT NO. 8 INBD DRIVE OFFSET	3	1	621AB,621AMB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 8 OUTBD DRIVE OFFSET	3	1	621HB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 9 INBD DRIVE OFFSET	3	1	621HB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 9 OUTBD DRIVE OFFSET	3	1	621PB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 10 INBD DRIVE OFFSET	3	1	621RB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 10 OUTBD DRIVE OFFSET	3	1	621YB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 11 INBD DRIVE OFFSET	3	1	621YB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 11 OUTBD DRIVE OFFSET	3	1	621AEB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 12 INBD DRIVE OFFSET	3	1	621AEB, WING LE	27-81-20
GEARBOX - LE SLAT NO. 12 OUTBD DRIVE OFFSET	3	1	621AEB, WING LE	27-81-20
INDICATOR - FLAP/SLAT POSITION, N15	1	1	FLT COMPT, P3	27-81-00
LEVER - (FIM 27-51-00/101), FLAP				
MODULE - (FIM 27-51-00/101)				
FLAP/SLAT SHUTOFF VALVE, V104				
MODULE - LE SLAT CONTROL VALVE	7	1	611BB, LE WING ROOT	27-81-12
INBD SLAT PDU, M1080		1	511BB, LE WING ROOT	27-81-12
OUTBD SLAT PDU, M1081				

\* SEE THE WDM EQUIPMENT LIST

 SOME AIRPLANES DO NOT HAVE PANELS 511LB/611LB COMBINED WITH PANELS 511NB/611NB (AMM 6-44-00/201).

Leading Edge Slat System - Component Index  
Figure 101 (Sheet 2)

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COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
MOTOR - ALTERNATE ELECTRIC INBD SLAT PDU, M494 OUTBD SLAT PDU, M469	7	1 1	611BB, LE WING ROOT 511BB, LE WING ROOT	27-81-11 27-81-11
MOTOR - PRIMARY HYDRAULIC INBD SLAT PDU OUTBD SLAT PDU	7	1 1	611BB, LE WING ROOT 511BB, LE WING ROOT	27-81-11 27-81-11
QUADRANT - LE SLAT AFT RELAY - (FIM 31-01-37/101) ALT INBD SLAT ARM, K226 ALT INBD SLAT EXT, K224 ALT INBD SLAT RETR, K225 ALT OUTBD SLAT ARM, K223 ALT OUTBD SLAT EXT, K221 ALT OUTBD SLAT RETR, K222 INBD SLAT BYPASS VALVE NORMAL, K624 INBD SLAT FAIL PROTECTION, K648 OUTBD SLAT BYPASS VALVE NORMAL, K625 OUTBD SLAT FAIL PROTECTION, K349	11	1	FWD CARGO COMPT (AFT END)	27-81-05
SHAFT - LE SLAT DRIVE	2	--	REF SPECIFIC SLAT AND AFT END OF FWD CARGO COMPARTMENT	27-81-24
SLAT - INBOARD LE SLAT NO. 6 SLAT NO. 7	2	1 1	LEFT WING LE RIGHT WING LE	27-81-01 27-81-01
SLAT - OUTBOARD LE SLAT NO. 1 THRU 5 SLAT NO. 8 THRU 12	2	5 5	LEFT WING LE RIGHT WING LE	27-81-02 27-81-02
SWITCH - ALTERNATE SLAT ARM, S602 SWITCH - SLAT HYD PRESSURE, S846	1 12	1 1	FLT COMPT, P3 RIGHT WHEEL WELL	* 27-51-48
TRACK - LE SLAT INBD AUXILIARY TRACK - LE SLAT INBD MAIN	9 9	6 2	INBD LE SLATS INBD LE SLATS	27-81-32 27-81-34
TRACK - LE SLAT OUTBD AUXILIARY TRACK - LE SLAT OUTBD MAIN	10 10	20 20	OUTBD LE SLATS OUTBD LE SLATS	27-81-32 27-81-34
TRANSFORMER - (FIM 27-51-00/101) FLAP LEVER RVDT NO. 1, M604 FLAP LEVER RVDT NO. 2, M603				
TRANSFORMERS - ROTARY VARIABLE DIFFERENTIAL INBD SLAT PDU RVDT NO. 1, M483 INBD SLAT PDU RVDT NO. 2, M549 OUTBD SLAT PDU RVDT NO. 1, M544 OUTBD SLAT PDU RVDT NO. 2, M548	7	1 1 1 1	611BB, LE WING ROOT 611BB, LE WING ROOT 511BB, LE WING ROOT 511BB, LE WING ROOT	27-81-11 27-81-11 27-81-11 27-81-11
UNIT - (FIM 27-51-00/101) FLAP/SLAT ELECTRONIC (FSEU)				
UNIT - (FIM 32-09-03/101) PROX SW ELEC, M162				
UNIT - INBD LE SLAT POWER DRIVE UNIT - OUTBD LE SLAT POWER DRIVE	7 7	1 1	611BB, LE WING ROOT 511BB, LE WING ROOT	27-81-11 27-81-11
VALVE - (FIM 27-51-00/101) SLATS SHUTOFF, V2				
VALVE - BYPASS INBD SLATS PDU, V56 OUTBD SLATS PDU, V51	7	1 1	611BB, LE WING ROOT 511BB, LE WING ROOT	27-81-12 27-81-12
* SEE THE WDM EQUIPMENT LIST				

Leading Edge Slat System - Component Index  
Figure 101 (Sheet 3)

EFFECTIVITY

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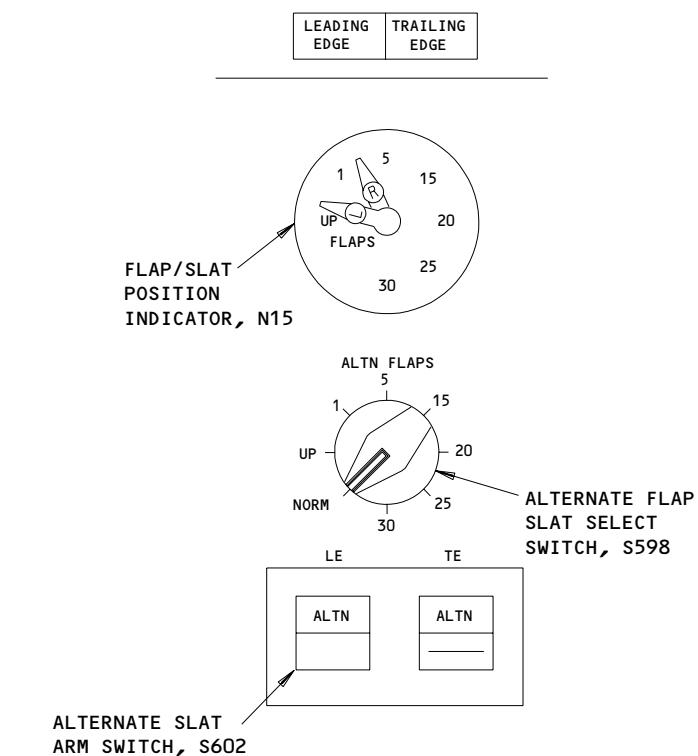
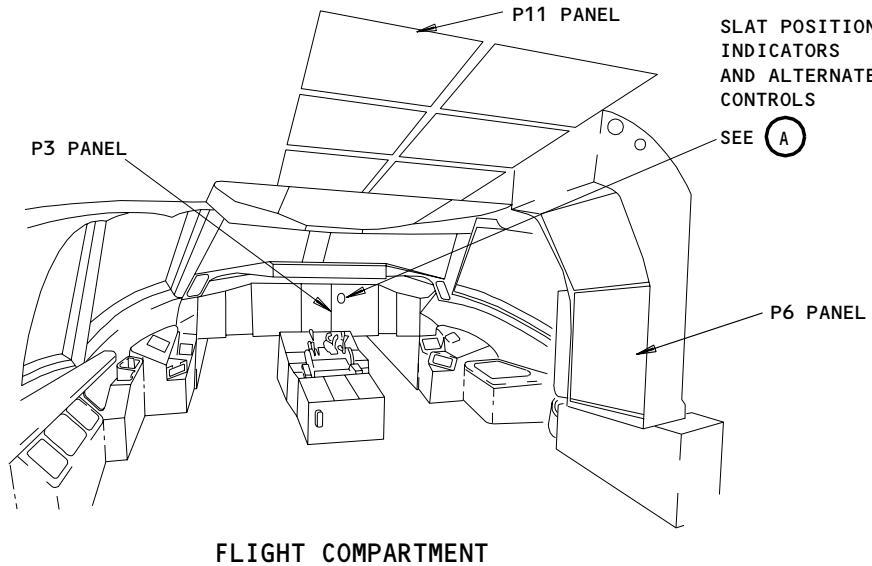
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SLAT POSITION INDICATORS  
AND ALTERNATE CONTROLS

(A)

Leading Edge Slat System - Component Location  
Figure 102 (Sheet 1)

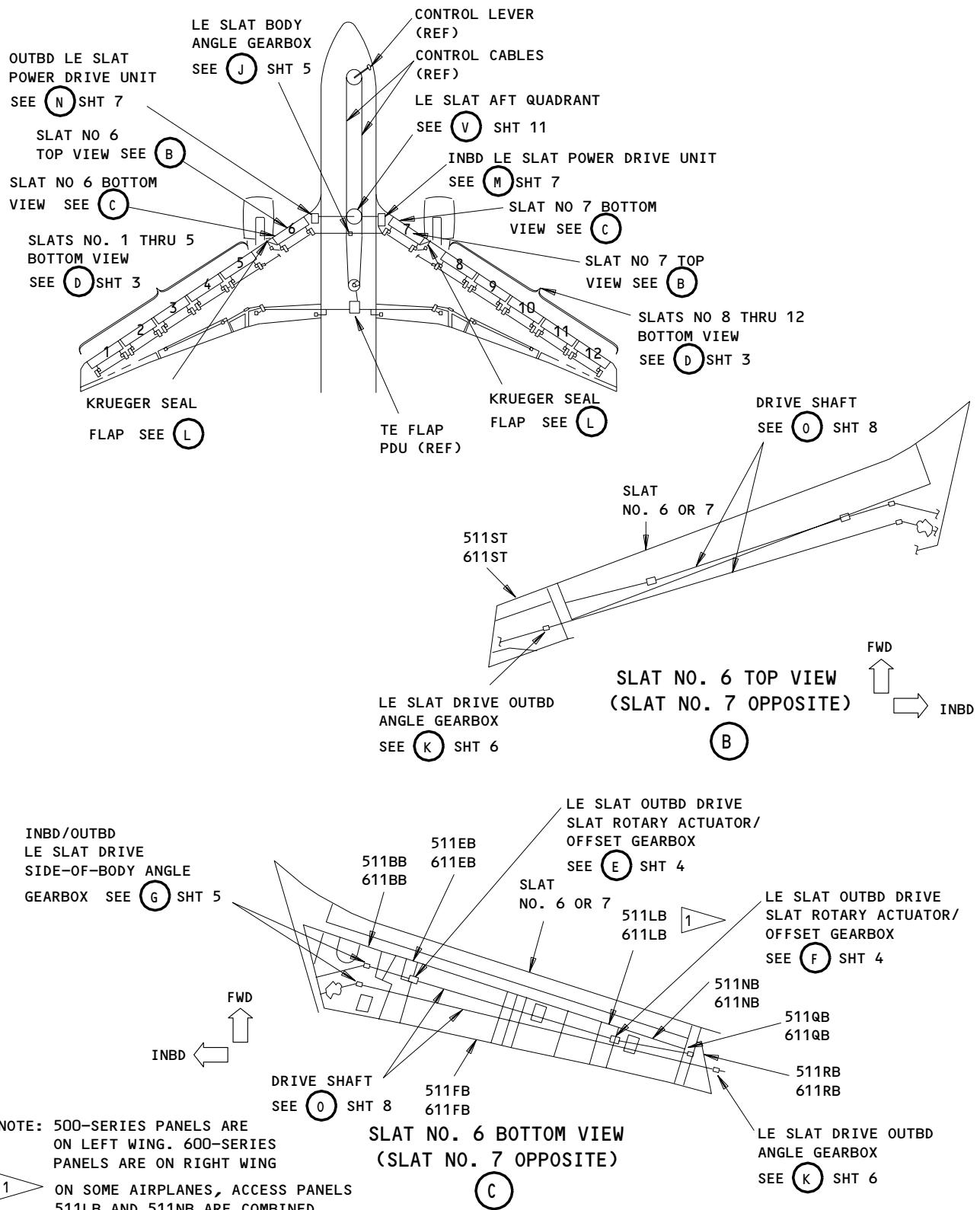
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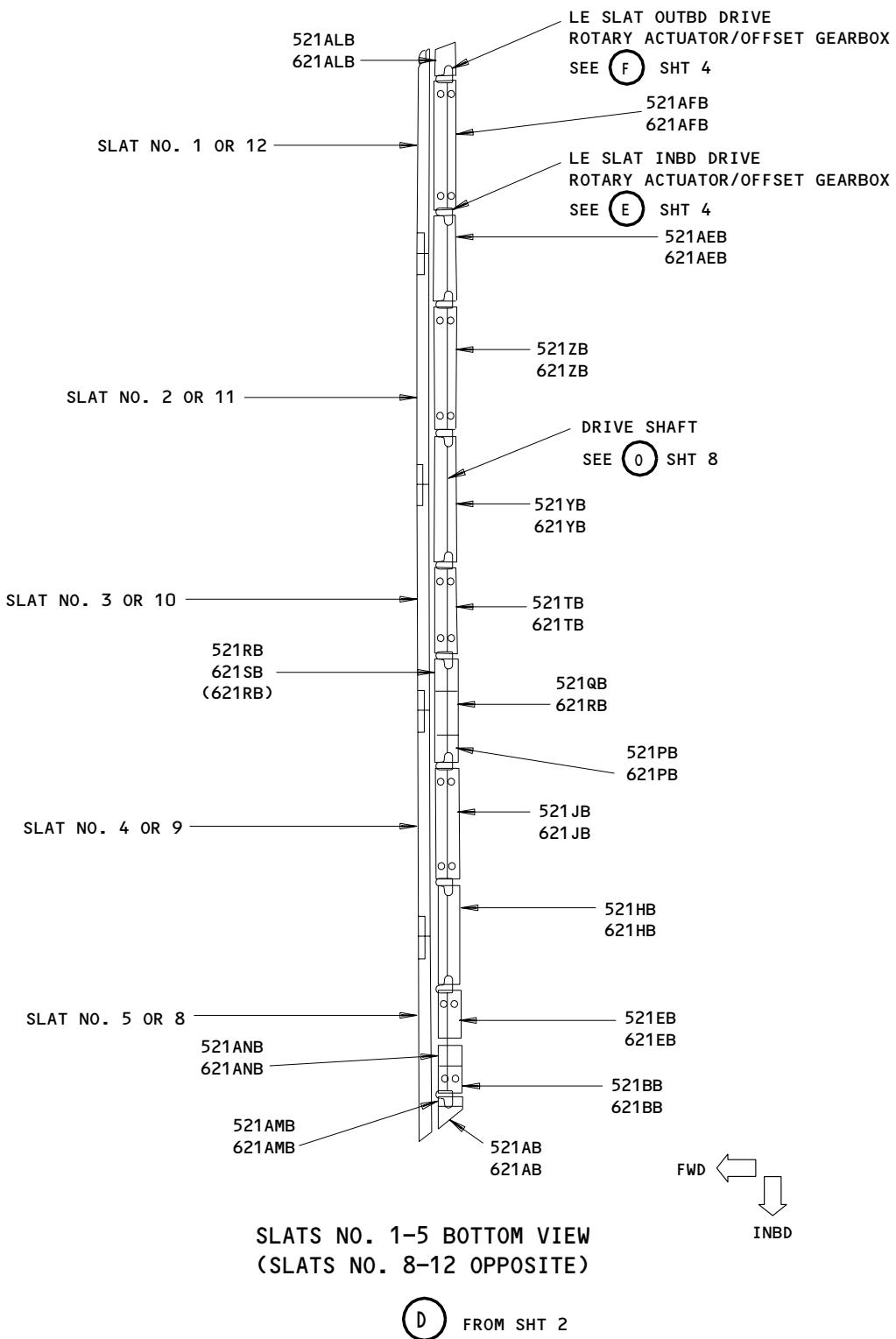
Leading Edge Slat System - Component Location  
 Figure 102 (Sheet 2)

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Leading Edge Slat System - Component Location  
Figure 102 (Sheet 3)

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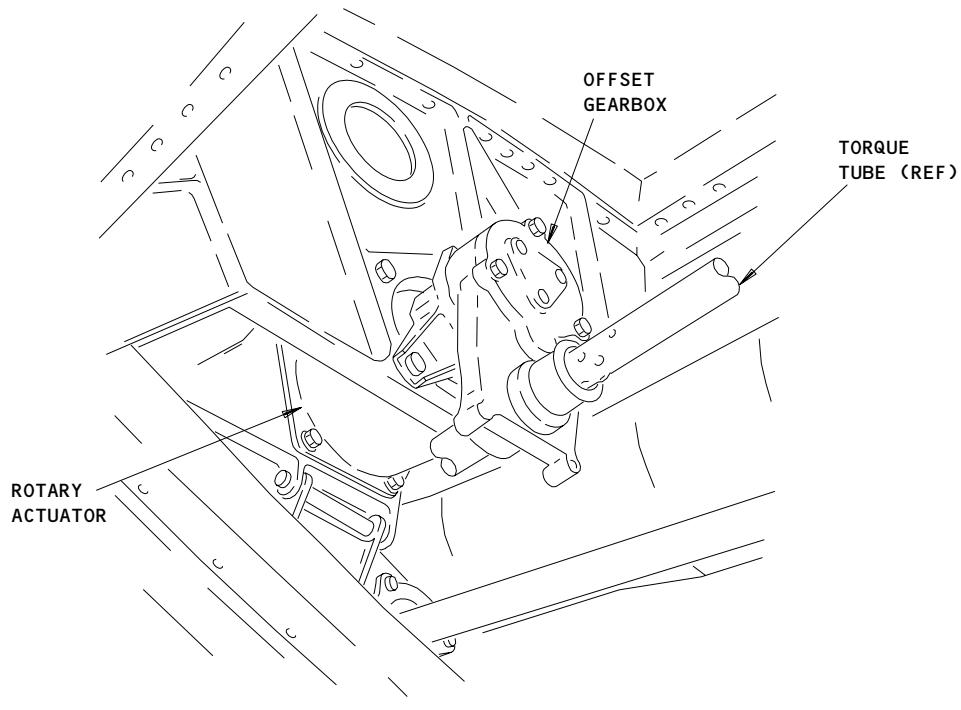
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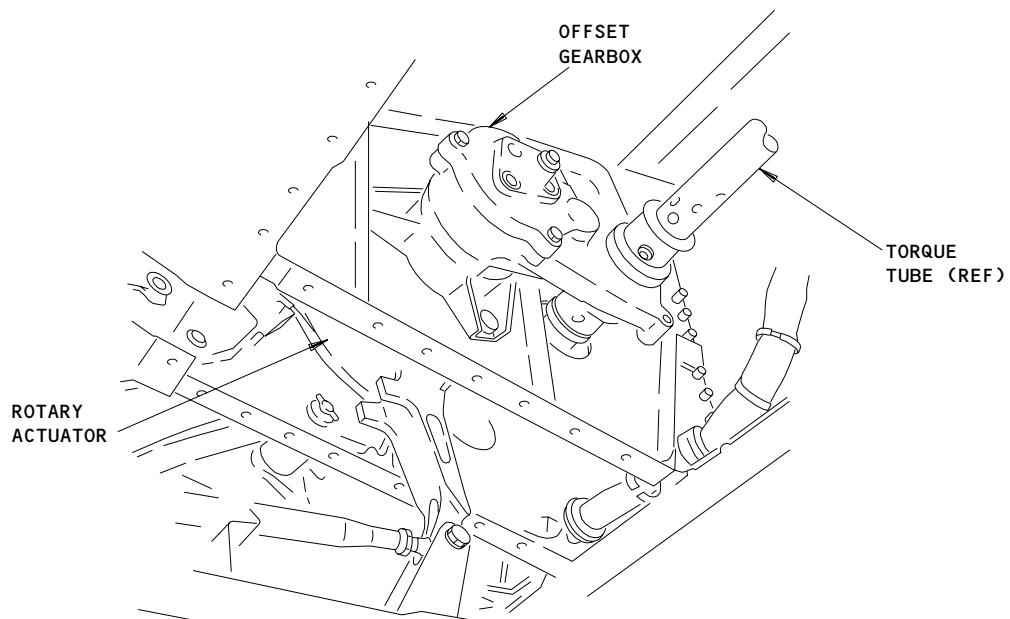
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LE SLAT INBD DRIVE SLAT  
ROTARY ACTUATOR / OFFSET GEARBOX

(E) FROM SHT 2 AND 3



LE SLAT OUTBD DRIVE SLAT  
ROTARY ACTUATOR/OFFSET GEARBOX

(F) FROM SHT 2 AND 3

Leading Edge Slat System - Component Location  
Figure 102 (Sheet 4)

EFFECTIVITY

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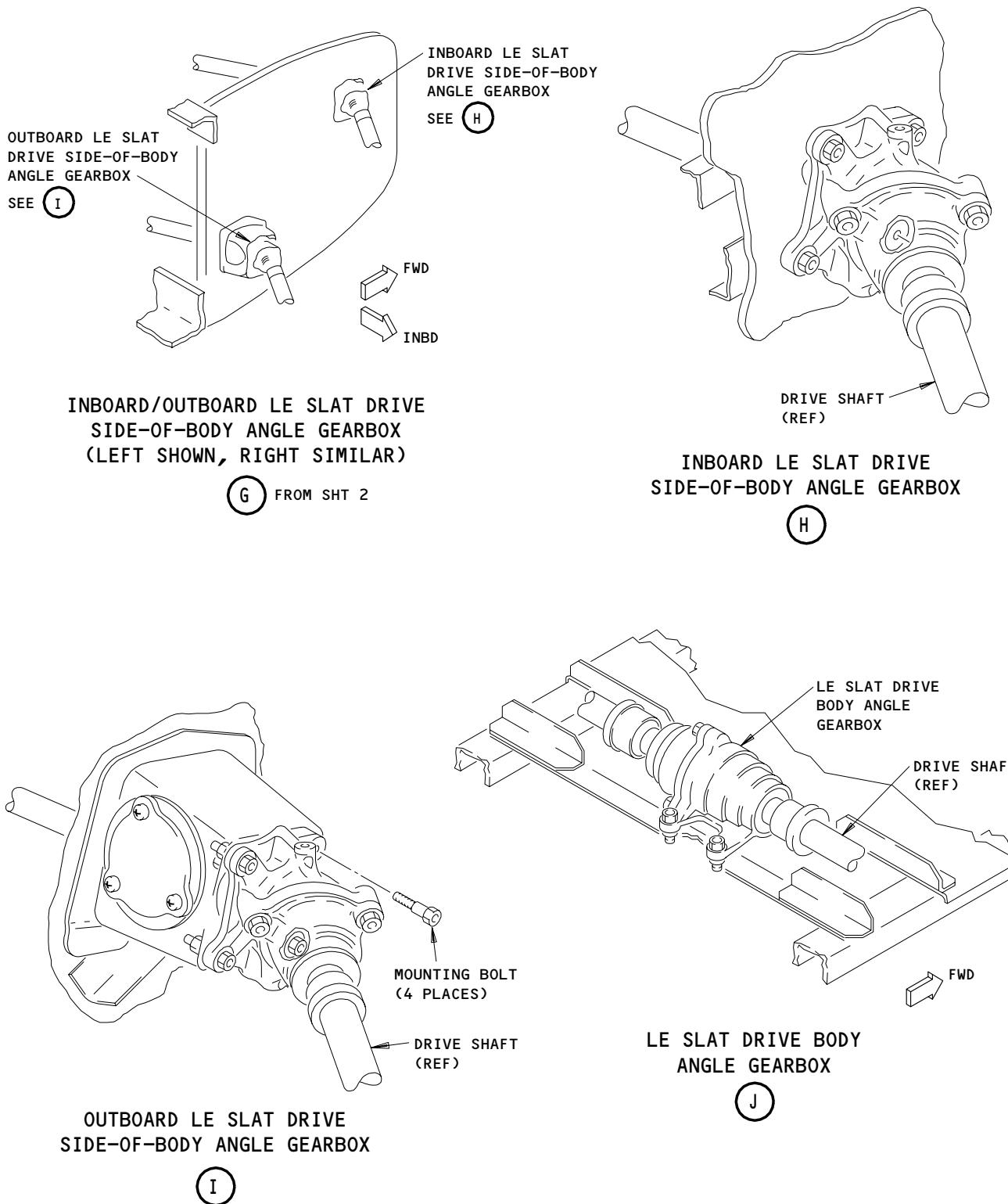
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Leading Edge Slat System - Component Location  
Figure 102 (Sheet 5)

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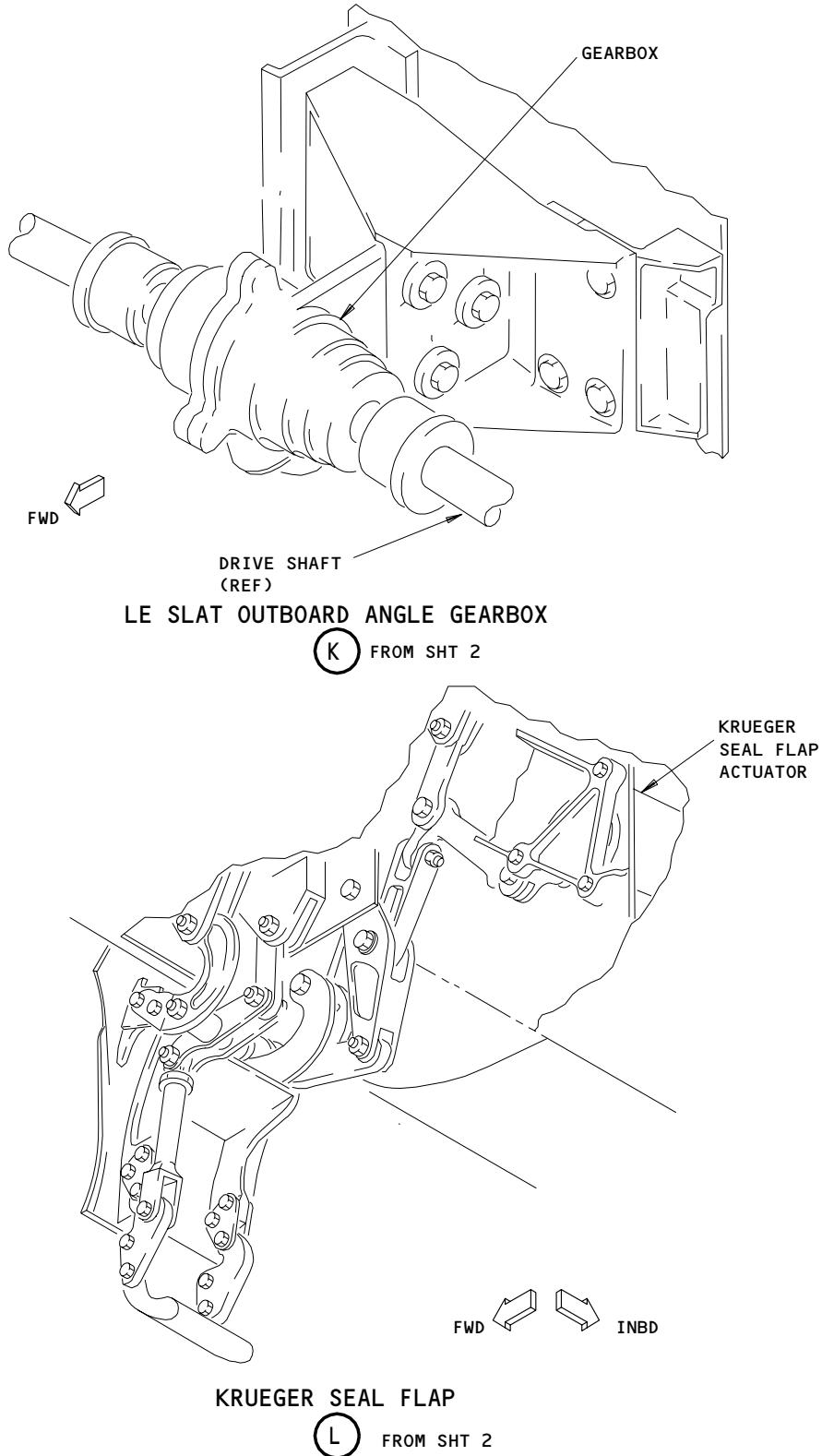
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Leading Edge Slat System - Component Location  
Figure 102 (Sheet 6)

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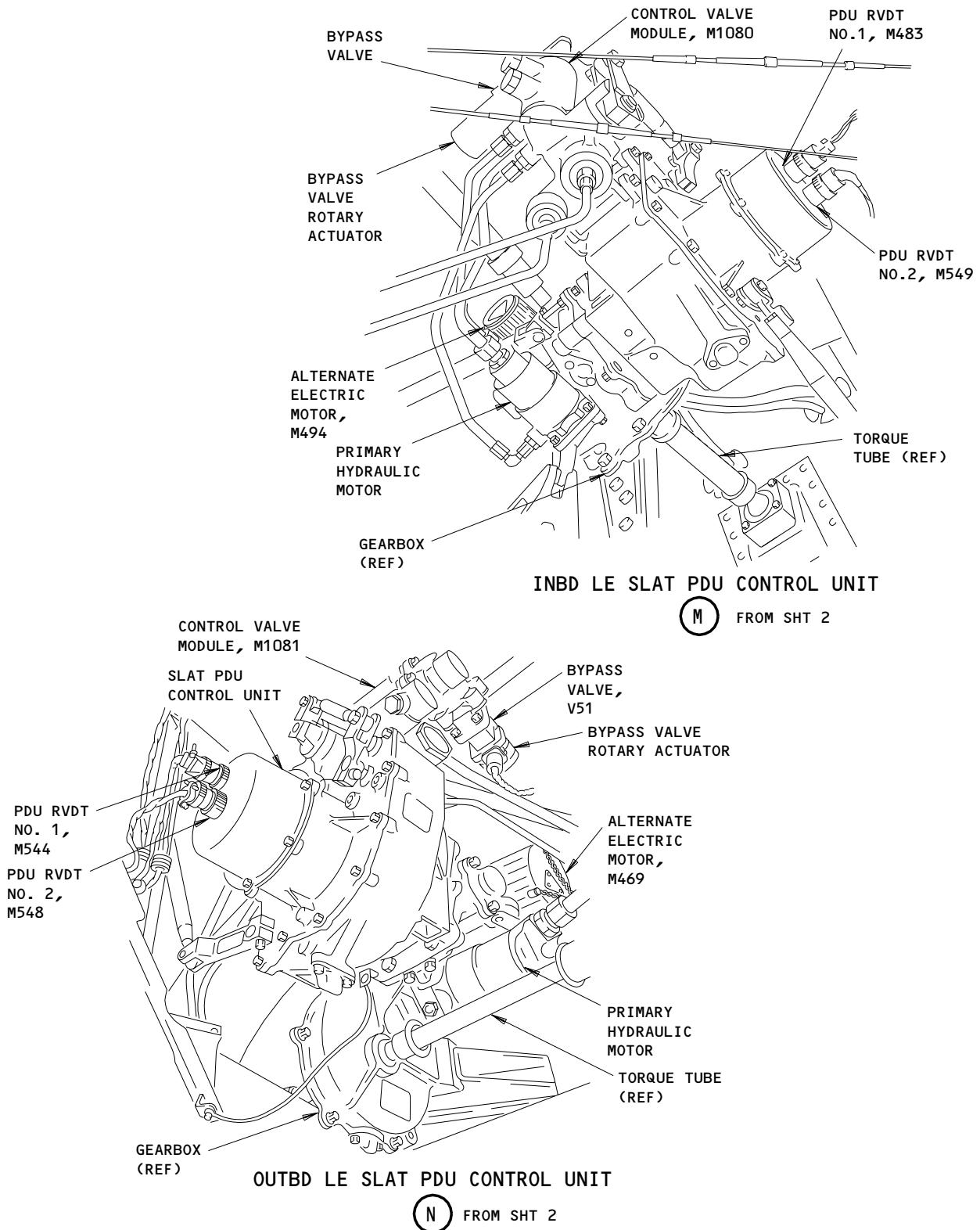
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Leading Edge Slat System - Component Location  
Figure 102 (Sheet 7)

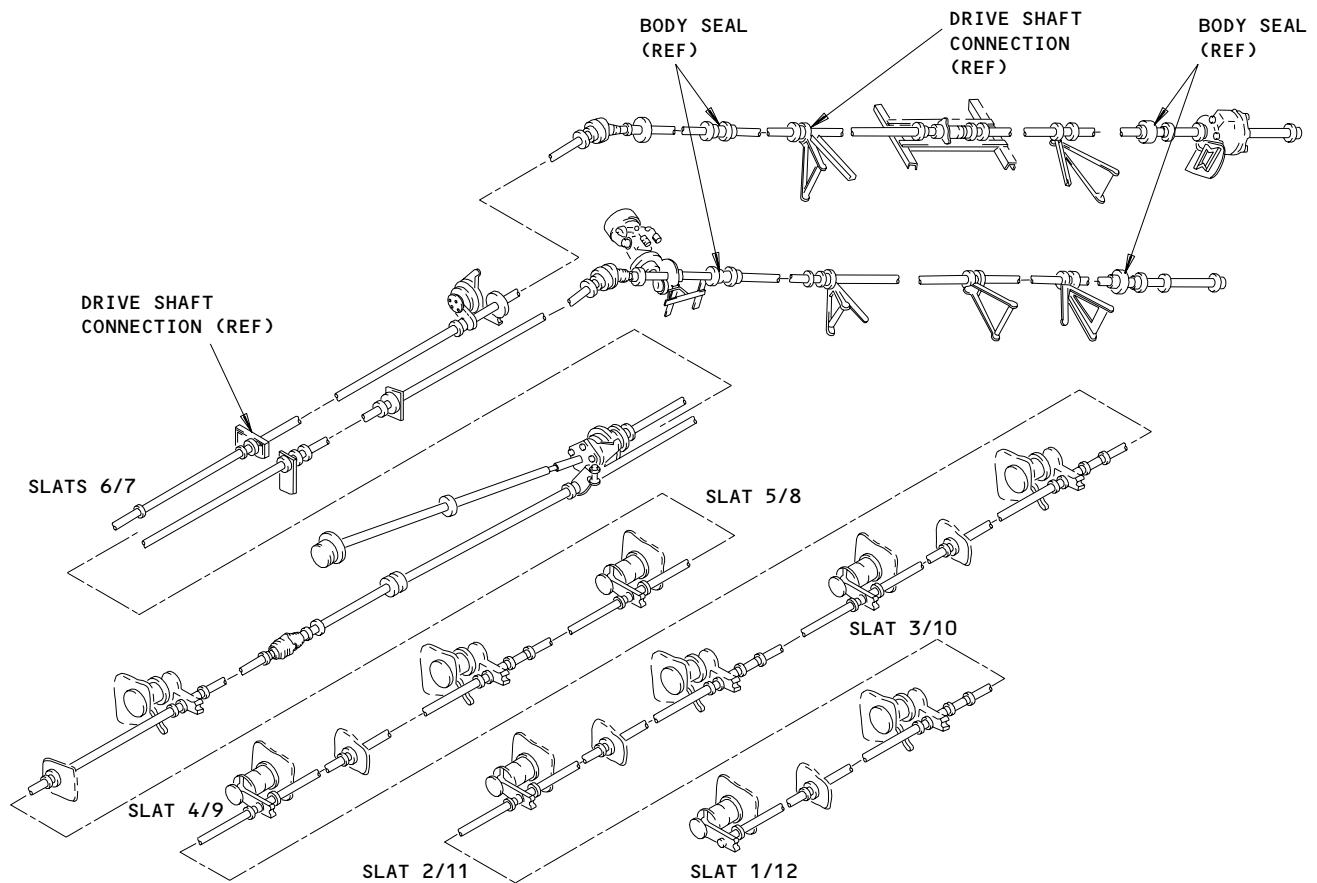
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DRIVE SHAFT  
(LEFT WING SHOWN; RIGHT WING SIMILAR)

0 FROM SHT 2 AND 3

Leading Edge Slat System - Component Location  
Figure 102 (Sheet 8)

EFFECTIVITY

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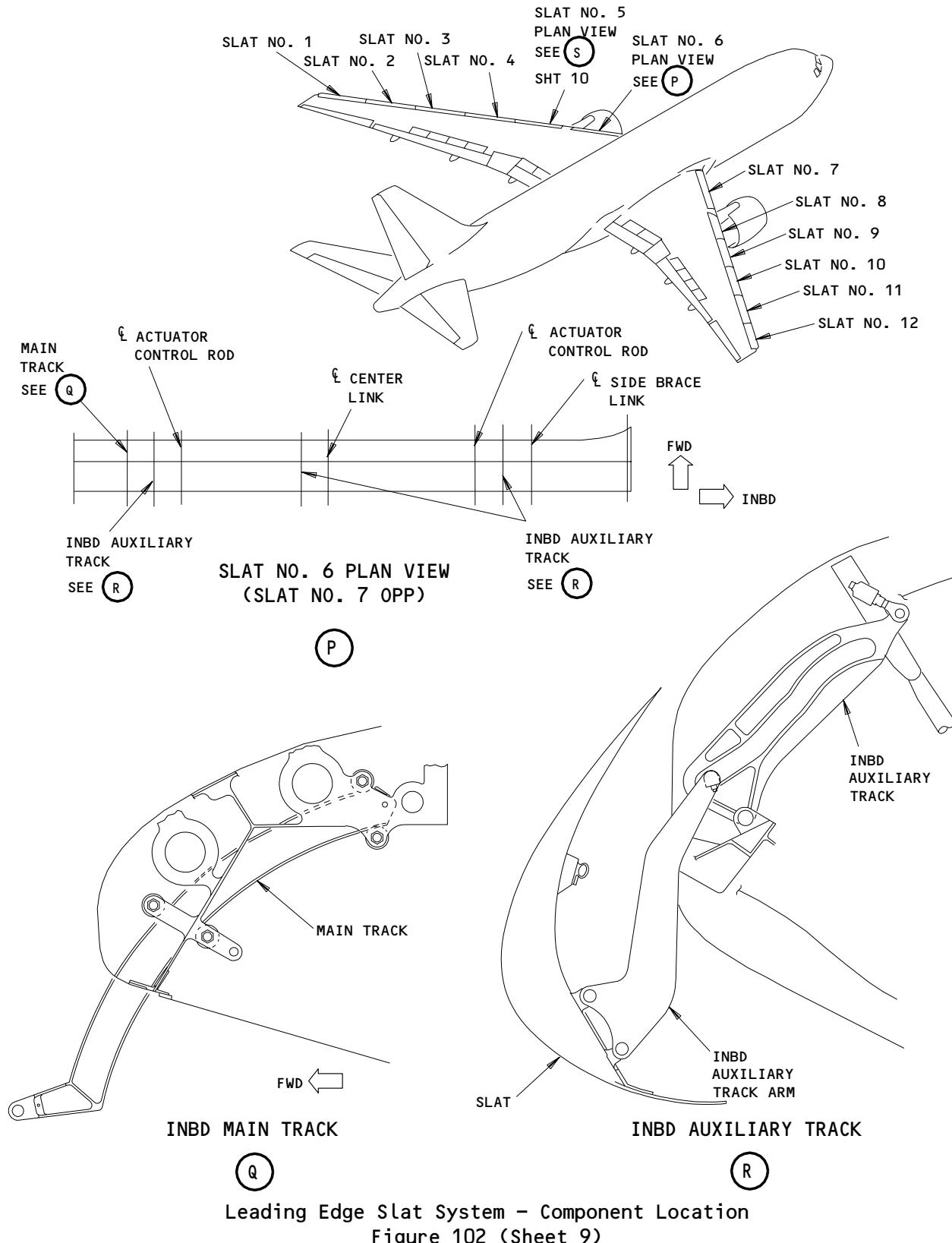
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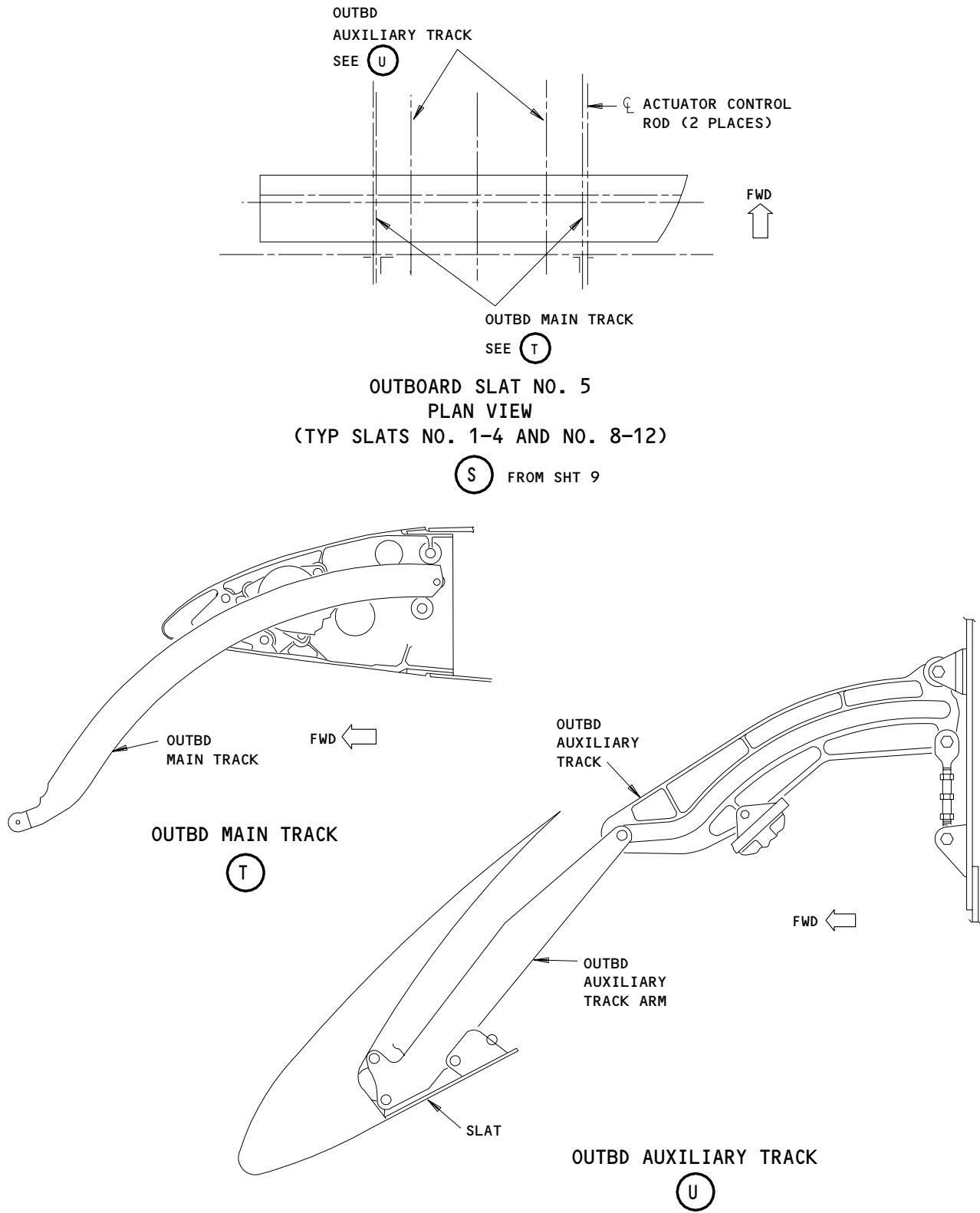
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Leading Edge Slat System - Component Location  
Figure 102 (Sheet 10)

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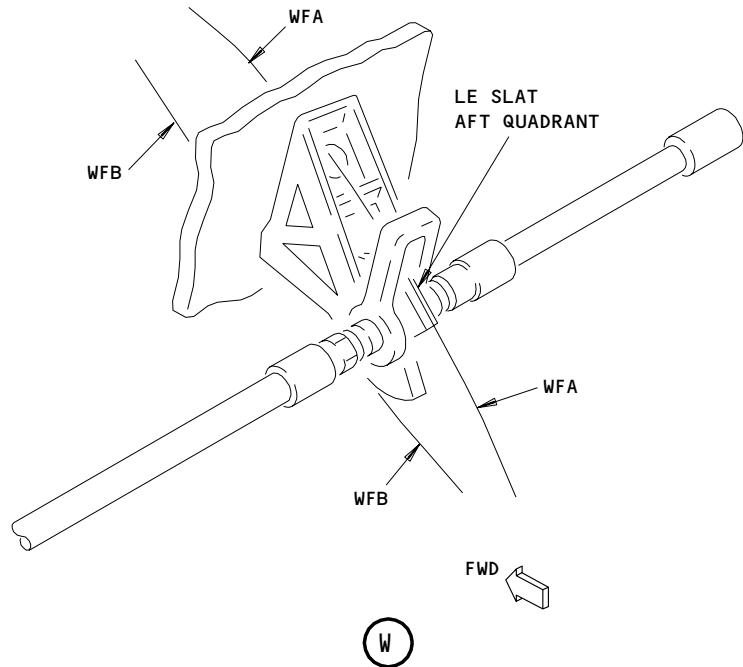
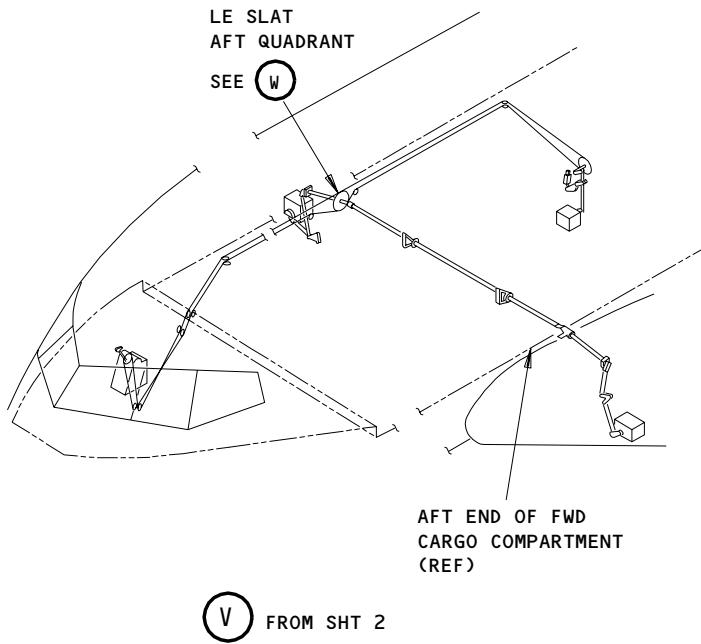
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Leading Edge Slat System - Component Location  
Figure 102 (Sheet 11)

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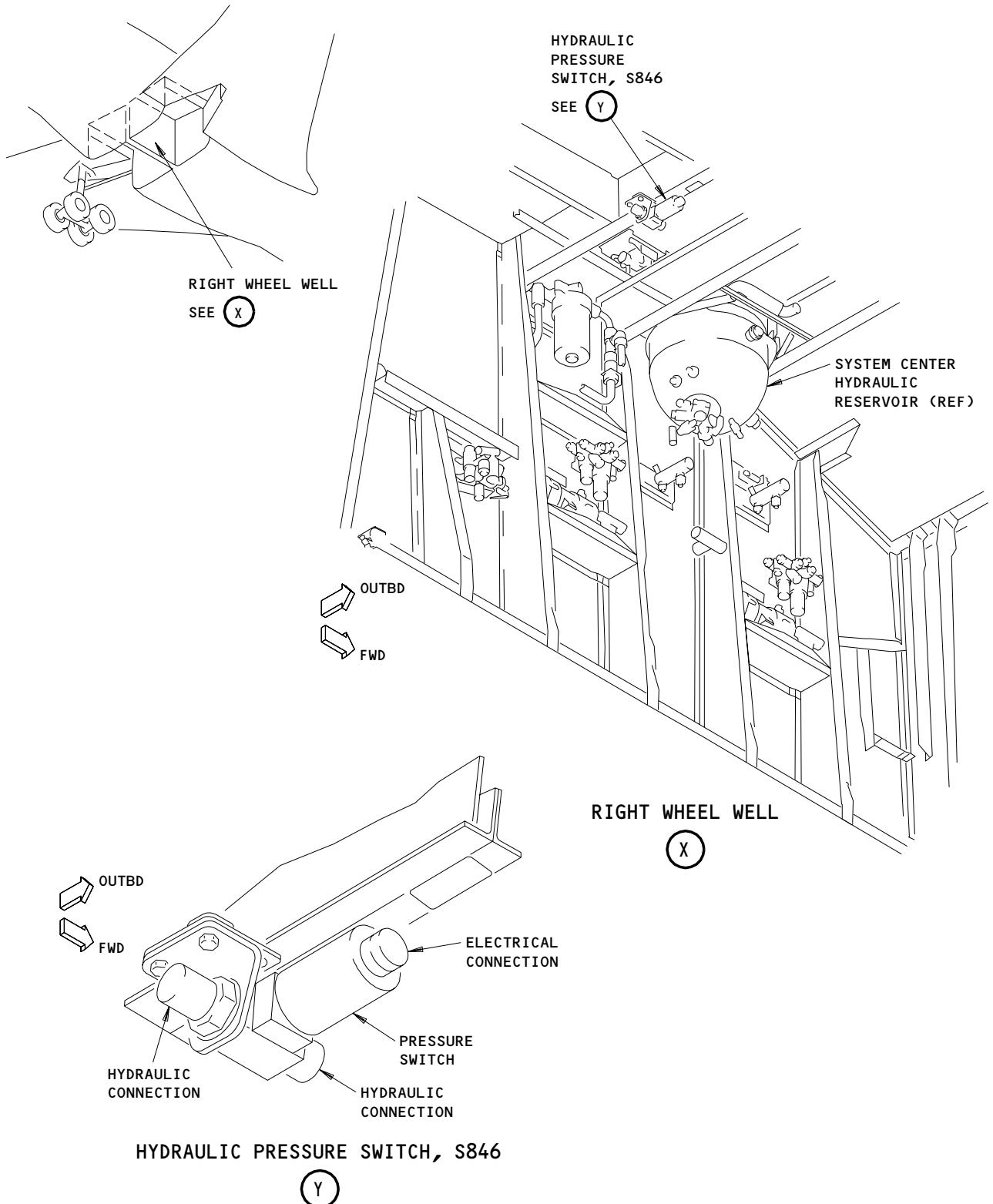
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Leading Edge Slat System - Component Location  
Figure 102 (Sheet 12)

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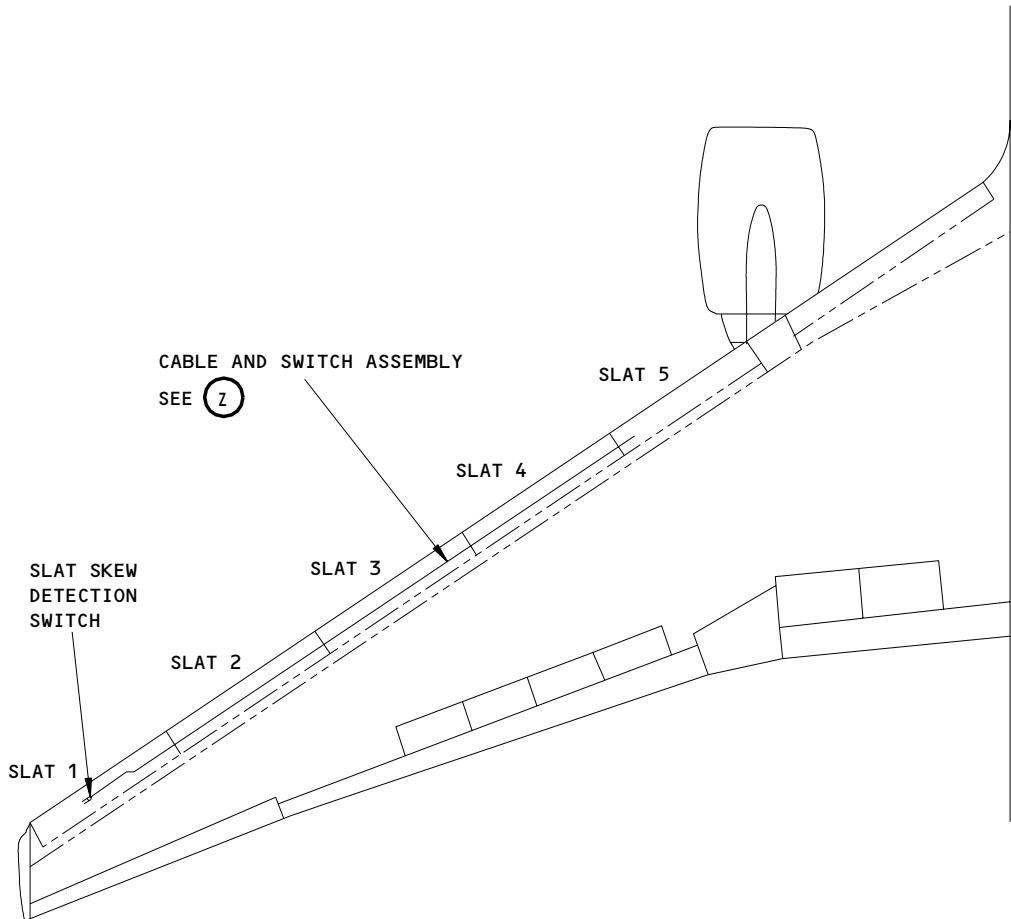
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Leading Edge Slat System - Component Location  
Figure 102 (Sheet 13)

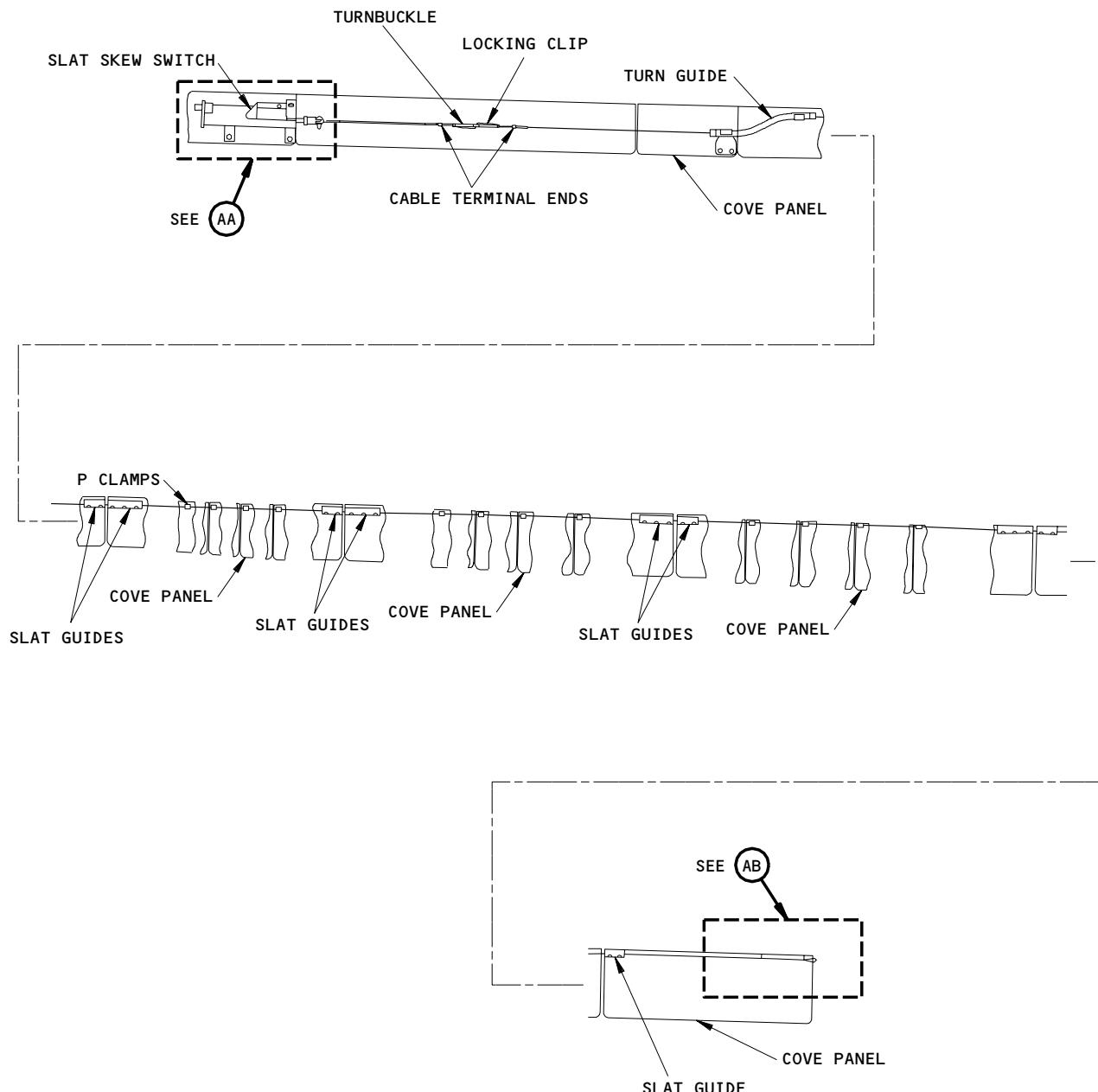
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**CABLE AND SWITCH ASSEMBLY**

(7)

Leading Edge Slat System - Component Location  
Figure 102 (Sheet 14)

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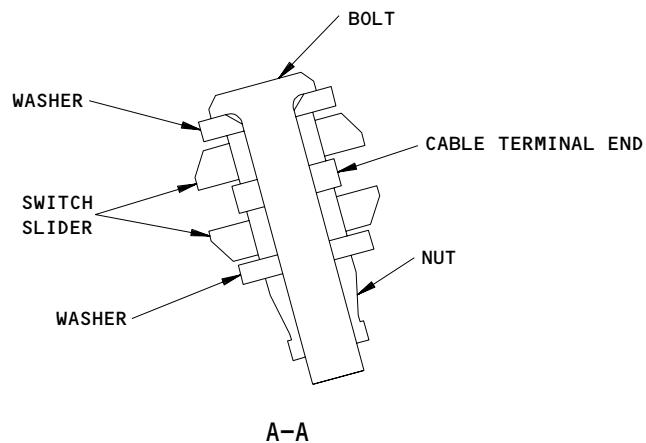
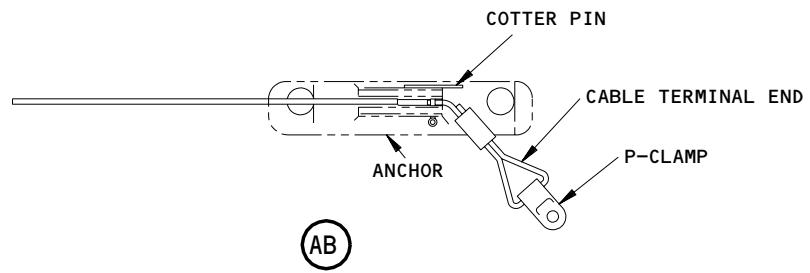
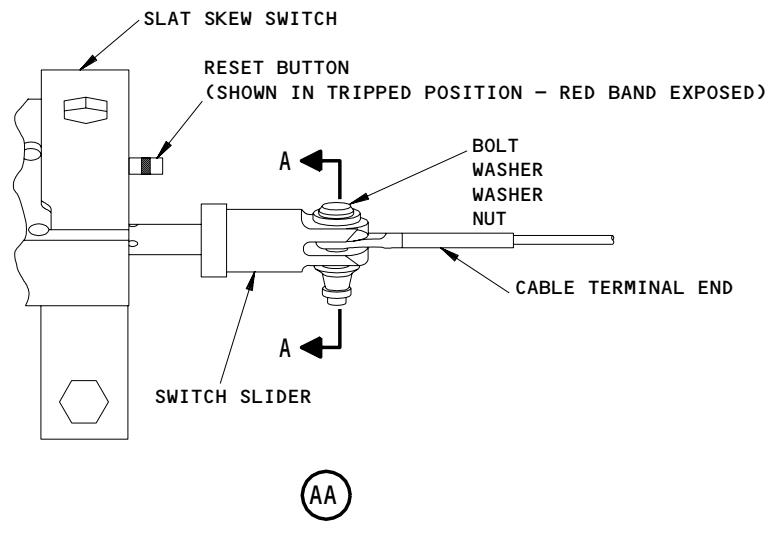
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**BOEING**  
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Leading Edge Slat System - Component Location  
Figure 102 (Sheet 15)

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**PREREQUISITES**

MAKE SURE THIS SYSTEM WILL OPERATE:  
AIR DATA COMPUTER (AMM 34-12-00/501)

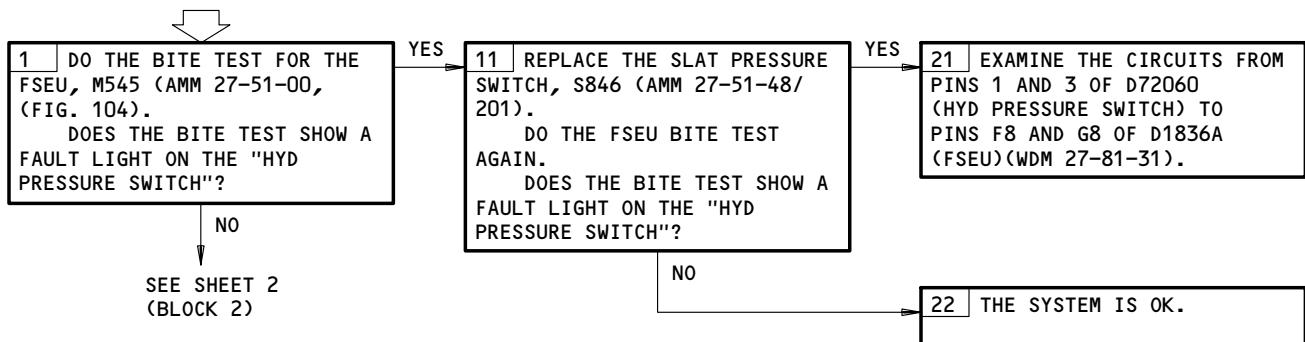
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
6D21, 6D24, 6F24, 11C4, 11C10, 11C14, 11C15, 11C16, 11G15,  
11G16, 11G22, 11G23, 11H14, 11H23, 11H24, 11J13, 11J14,  
11J15, 11J16, 11J17, 11J24, 11J26, 11T36

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
ELECTRICAL POWER IS ON (AMM 24-22-00/201)  
FLAP CONTROL LEVER IN THE ZERO DETENT  
FLAPS AND SLATS IN THE FULLY RETRACTED POSITION  
HYDRAULIC POWER IS OFF (AMM 29-11-00/201)

**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 TO PERSONS OR DAMAGE TO EQUIPMENT CAN OCCUR WHEN HYDRAULIC POWER IS SUPPLIED.

**CAUTION:** MAKE SURE THE ACCESS DOOR FOR THE ENGINE STRUT, THE INBOARD FAN COWLING, AND THE THRUST REVERSER COWLING ARE CLEAR FROM THE MOVEMENT OF THE SLATS. IF THE MOVEMENT OF THE SLATS IS BLOCKED, IT CAN CAUSE DAMAGE TO THE AIRPLANE.

"SLAT ISLN VAL" AND  
"FLAP/SLAT ELEC"  
MESSAGES SHOWN ON  
THE LOWER EICAS.



SLAT ISLN VAL and FLAP/SLAT ELEC Messages Shown on the Lower EICAS.  
Figure 103 (Sheet 1)

EFFECTIVITY  
AIRPLANES WITH -603 AND SUBSEQUENT EICAS COMPUTERS

**27-81-00**

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FROM SHEET 1  
(BLOCK 1)

NO

**2 EXAMINE THE FLAP/SLAT RETRACT SEQUENCE:**  
• PRESSURIZE THE CENTER HYDRAULIC SYSTEM (AMM 29-11-00/201). MOVE THE FLAP CONTROL LEVER TO THE 5-UNIT DETENT AND WAIT FOR THE FLAPS AND SLATS TO EXTEND. MOVE THE FLAP CONTROL LEVER BACK TO THE ZERO DETENT.

DO THE SLATS BEGIN TO RETRACT BEFORE THE FLAPS FULLY RETRACT?

YES  
SEE SHEET 3  
(BLOCK 3)

NO → **12 WHILE THE SLATS RETRACT, DO THE BITE TEST ON THE FSEU. DOES THE BITE TEST SHOW A FAULT LIGHT ON THE "HYD PRESSURE SWITCH"?**

NO

YES → **23 REPLACE THE SLAT HYDRAULIC PRESSURE SWITCH, S846 (AMM 27-51-48/201) AND DO THE FSEU BITE. IF THE BITE TEST SHOWS A FAULT LIGHT ON THE HYD PRESSURE SWITCH, EXAMINE THE CIRCUITS FROM PIN 1 TO PIN 3 OF D72060 (HYD PRESSURE SWITCH) AND PIN F8 TO PIN G8 OF D1836A (FSEU) (WDM 27-81-31). REPAIR THE PROBLEMS THAT YOU FIND.**

**13 AFTER THE SLATS ARE IN THE FULLY RETRACTED POSITION, WAIT FOR 30 SECONDS, THEN REMOVE CONNECTOR D72060 ON SLAT PRESSURE SWITCH, S846. EXAMINE SWITCH S846 TO MAKE SURE THAT THERE IS A GROUND FROM PIN 2 TO PIN 3, AND NO GROUND FROM PIN 2 TO PIN 1.**  
IS THE GROUNDING CORRECT?

YES

NO → **24 REPLACE THE SLAT HYDRAULIC PRESSURE SWITCH, S846 (AMM 27-51-48/201) AND DO THE FSEU BITE.**

**14 OPEN CIRCUIT BREAKER C1020, LE SLAT S/O VLV, ON THE P11-2 PANEL.**  
EXAMINE SWITCH S846 TO MAKE SURE THAT THERE IS A GROUND FROM PIN 2 TO PIN 1, AND NO GROUND FROM PIN 2 TO PIN 3.

IS THE GROUNDING CORRECT?

YES

NO → **25 CLOSE CIRCUIT BREAKER C1020, LE SLAT S/O VLV, ON THE P11-2 PANEL.**  
REPLACE THE SLAT HYDRAULIC PRESSURE SWITCH, S846 (AMM 27-51-48/201) AND DO THE FSEU BITE.

SEE SHEET 3  
(BLOCK 15)

SLAT ISLN VAL and FLAP/SLAT ELEC Messages Shown on the Lower EICAS.  
Figure 103 (Sheet 2)

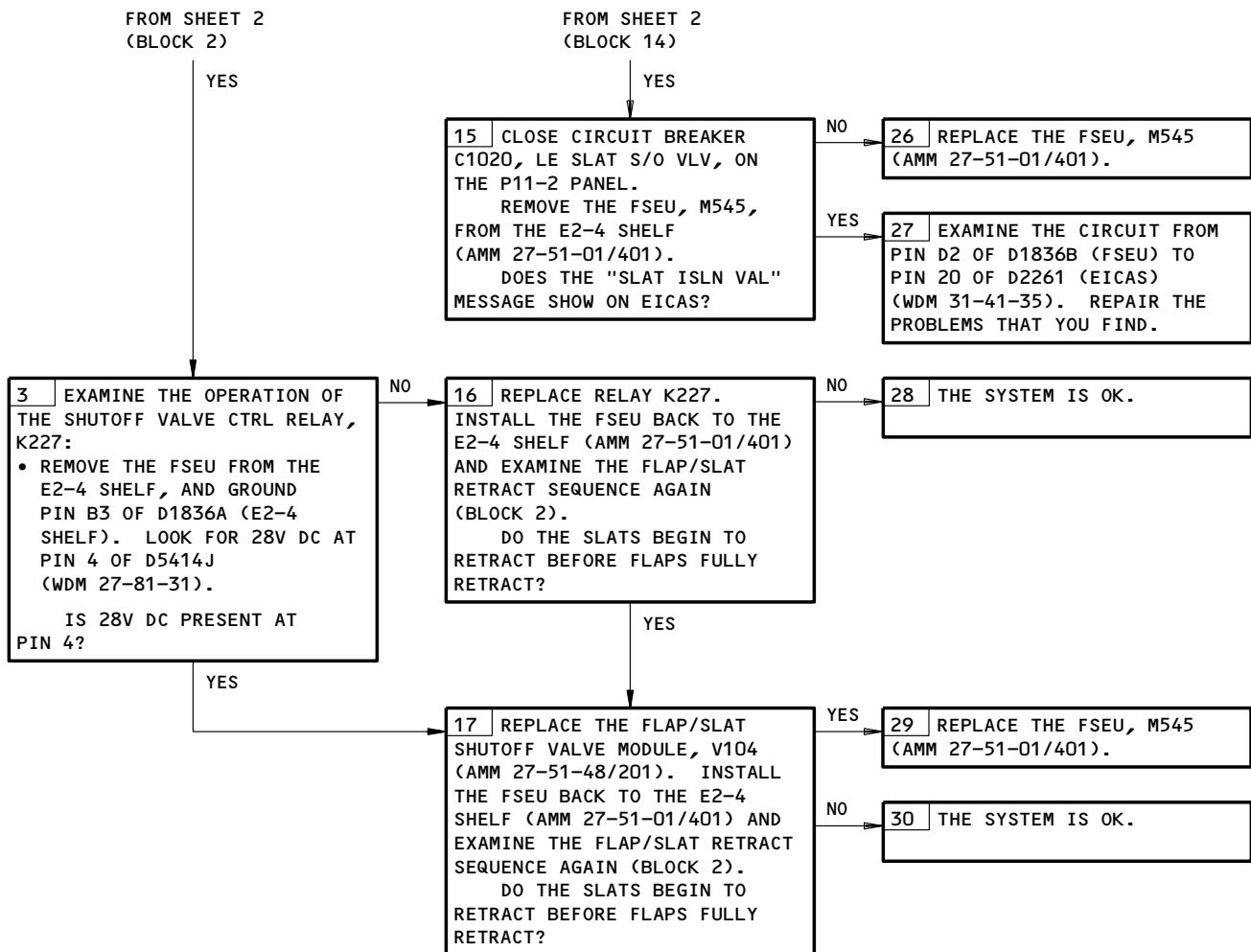
EFFECTIVITY  
AIRPLANES WITH -603 AND SUBSEQUENT EICAS COMPUTER

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SLAT ISLN VAL and FLAP/SLAT ELEC Messages Shown on the Lower EICAS.  
 Figure 103 (Sheet 3)

EFFECTIVITY

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**PREREQUISITES**

MAKE SURE THESE SYSTEMS WILL OPERATE:

EICAS (AMM 31-41-00/201)

AIR DATA SYSTEM (AMM 34-12-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

 6D21, 6F24, 11C10, 11C15, 11C16, 11G15, 11G16,  
 11H14, 11H23, 11H24, 11T36

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:

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

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

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

**WARNING:** DO THE THRUST REVERSER DEACTIVATION PROCEDURE TO PREVENT THE OPERATION OF THE THRUST REVERSER. ACCIDENTAL OPERATION OF THE THRUST REVERSER CAN CAUSE INJURY TO PERSONS OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS, TO PREVENT DAMAGE.

"LE SLAT DISAGREE" IS DISPLAYED ON EICAS WITH THE FLAP LEVER IN 1. BOTH FLAP POINTERS ARE ON "UP"



1 ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (AMM 78-31-00/201).

LE SLAT DISAGREE Is Displayed on EICAS with the Flap Lever in 1.  
 Both Flap Pointers Are on UP  
 Figure 104 (Sheet 1)

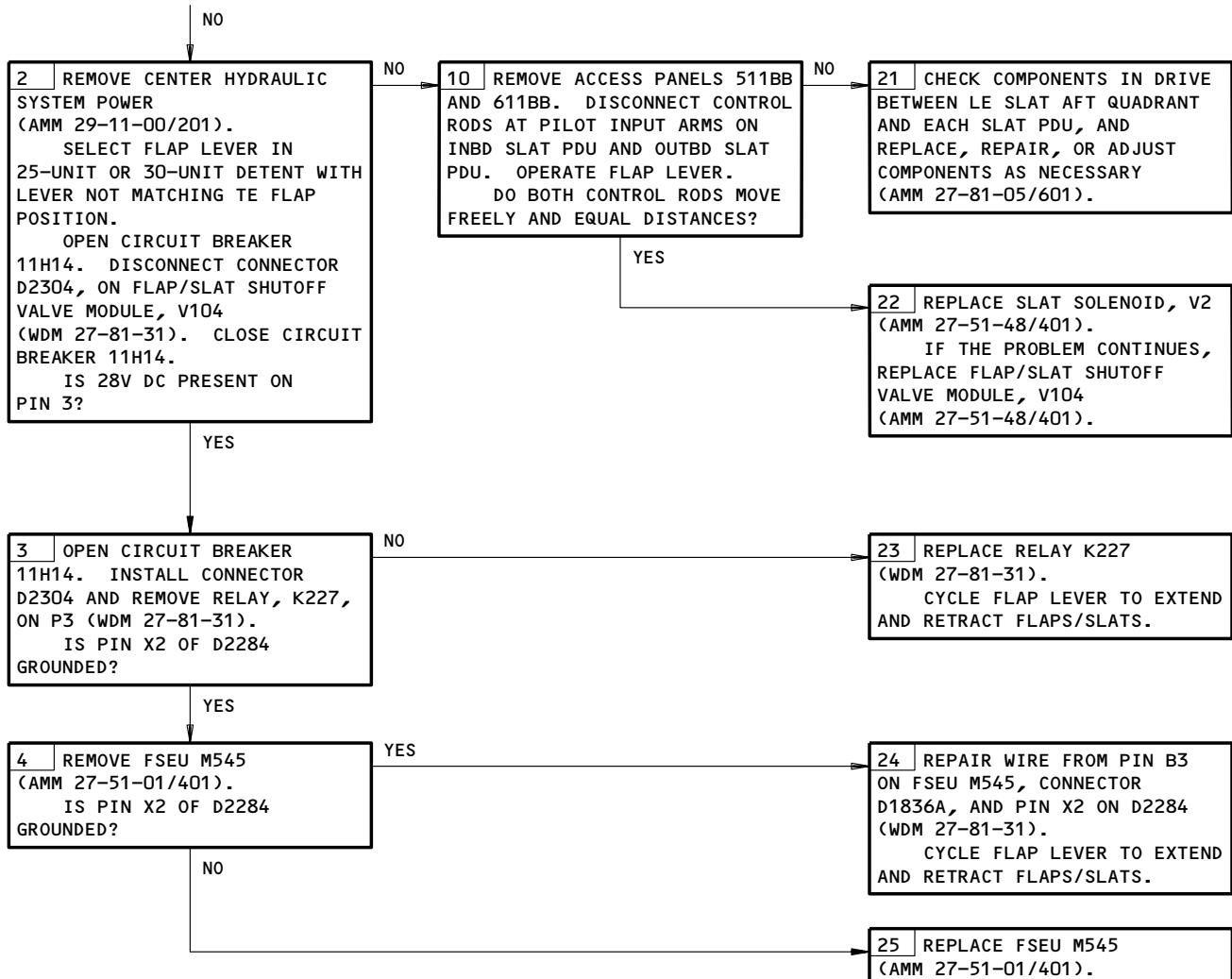
EFFECTIVITY

ALL

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**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 1)



LE SLAT DISAGREE Is Displayed on EICAS with the Flap Lever in 1.  
Both Flap Pointers Are on UP  
Figure 104 (Sheet 2)

EFFECTIVITY

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ALL

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**PREREQUISITES**
**MAKE SURE THIS SYSTEMS WILL OPERATE:**

EICAS (AMM 31-41-00/201)

AIR DATA SYSTEM (AMM 34-12-00/501)

**MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:**

 6D21, 6F24, 11C10, 11C15, 11C16, 11G15, 11G16,  
 11H14, 11H23, 11H24, 11T36

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

**WARNING:** CENTER HYD SYSTEM PROVIDES POWER TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15, CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS, TO PREVENT DAMAGE.

**"LE SLAT DISAGREE"**  
**EICAS MESSAGE IS DISPLAYED ON THE FLIGHT COMPARTMENT DISPLAY WITH THE FLAP LEVER IN 1.**  
**FLAP POSITION INDICATIONS ARE ON 1/2**

1. DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE (AMM 78-31-00/201).   
 CHECK THAT FLAP LEVER IS IN 1. REMOVE CENTER HYDRAULIC SYSTEM POWER (AMM 29-11-00/201).  
 REMOVE ACCESS PANEL 611B, IF INBD SLATS ARE OUT OF POSITION, OR 511BB, IF OUTBD SLATS ARE OUT OF POSITION. ON SLAT PDU FOR OUT-OF-POSITION SET OF SLATS, REMOVE DRIVE SHAFTS ON BOTH SIDES OF PDU GEARBOX. ATTEMPT TO DRIVE LEFT AND RIGHT DRIVES MANUALLY.  
 IS THERE A JAM IN ONE DRIVE?

YES

20. REPLACE OR REPAIR COMPONENTS AS REQUIRED IN JAMMED DRIVE.

**INBD SLATS:**

- DRIVE SHAFTS (AMM 27-81-24/401)
- BODY ANGLE GEARBOX (AMM 27-81-15/401)
- BODY SEAL (AMM 27-81-24/401)
- SIDE-OF-BODY ANGLE GEARBOX (AMM 27-81-20/201)
- ROTARY ACTUATOR AND OFFSET GEARBOX (AMM 27-81-20/201)
- SLAT COMPONENTS (AMM 27-81-01/401)
- KRUEGER SEAL FLAP ROTARY ACTUATOR (AMM 27-81-19/401)
- KRUEGER SEAL FLAP COMPONENTS (AMM 27-81-04/201)

**OUTBD SLATS:**

- DRIVE SHAFTS (AMM 27-81-24/401)
- BODY SEAL (AMM 27-81-24/401)
- SIDE-OF-BODY ANGLE GEARBOX (AMM 27-81-16/401)
- OUTBD ANGLE GEARBOX (AMM 27-81-17/401)
- ROTARY ACTUATOR AND OFFSET GEARBOX (AMM 27-81-20/201)
- SLAT COMPONENTS (AMM 27-81-02/401)

NO

 SEE SHEET 2 (BLOCK 2)

 ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (AMM 78-31-00/201)

LE SLAT DISAGREE EICAS Message Is Displayed On the Flight Compartment Display with the Flap Lever in 1. Both Flap Position Indications are on 1/2  
 Figure 105 (Sheet 1)

**EFFECTIVITY**

ALL

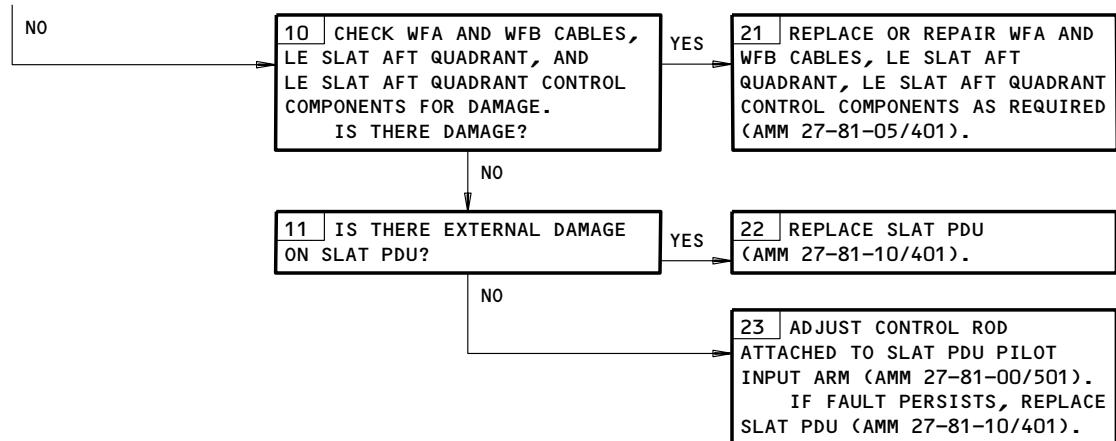
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**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 1  
(BLOCK 1)



LE SLAT DISAGREE EICAS Message Is Displayed On the Flight Compartment Display  
with the Flap Lever in 1. Both Flap Position Indications are on 1/2  
Figure 105 (Sheet 2)

EFFECTIVITY

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**PREREQUISITES**
**MAKE SURE THIS SYSTEMS WILL OPERATE:**

EICAS (AMM 31-41-00/201)

AIR DATA SYSTEM (AMM 34-12-00/501)

**MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:**

 11C10, 11C14, 11C15, 11C16, 11G15, 11G16, 11G22,  
 11G23, 11H14, 11H23, 11H24, 11C4, 11J14, 11J15,  
 11J16, 11J17, 11J26, 11T36

**MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:**

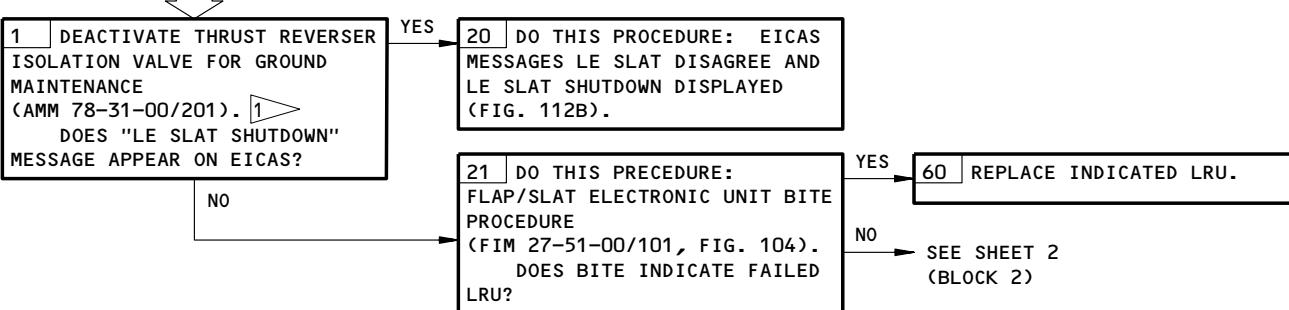
ELECTRICAL POWER IS ON (AMM 24-22-00/201)

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS, TO PREVENT DAMAGE.

**"LE SLAT DISAGREE"**  
**EICAS MESSAGE IS**  
**DISPLAYED ON THE**  
**FLIGHT COMPARTMENT**  
**DISPLAY WITH FLAP**  
**LEVER IN ANY DETENT**  
**BETWEEN UP AND 30.**  
**FLAP POSITION**  
**INDICATIONS ARE**  
**CORRECT**



1 ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (AMM 78-31-00/201)

REQUIRED TARGET INDICATIONS				
	SENSOR SWITCH	SLATS RETRACTED	SLATS TAKEOFF	SLATS LANDING
OUTBD	S276	NEAR	FAR	NEAR
	S282	NEAR	NEAR	FAR
INBD	S281	NEAR	FAR	NEAR
	S287	NEAR	NEAR	FAR

**TABLE A**

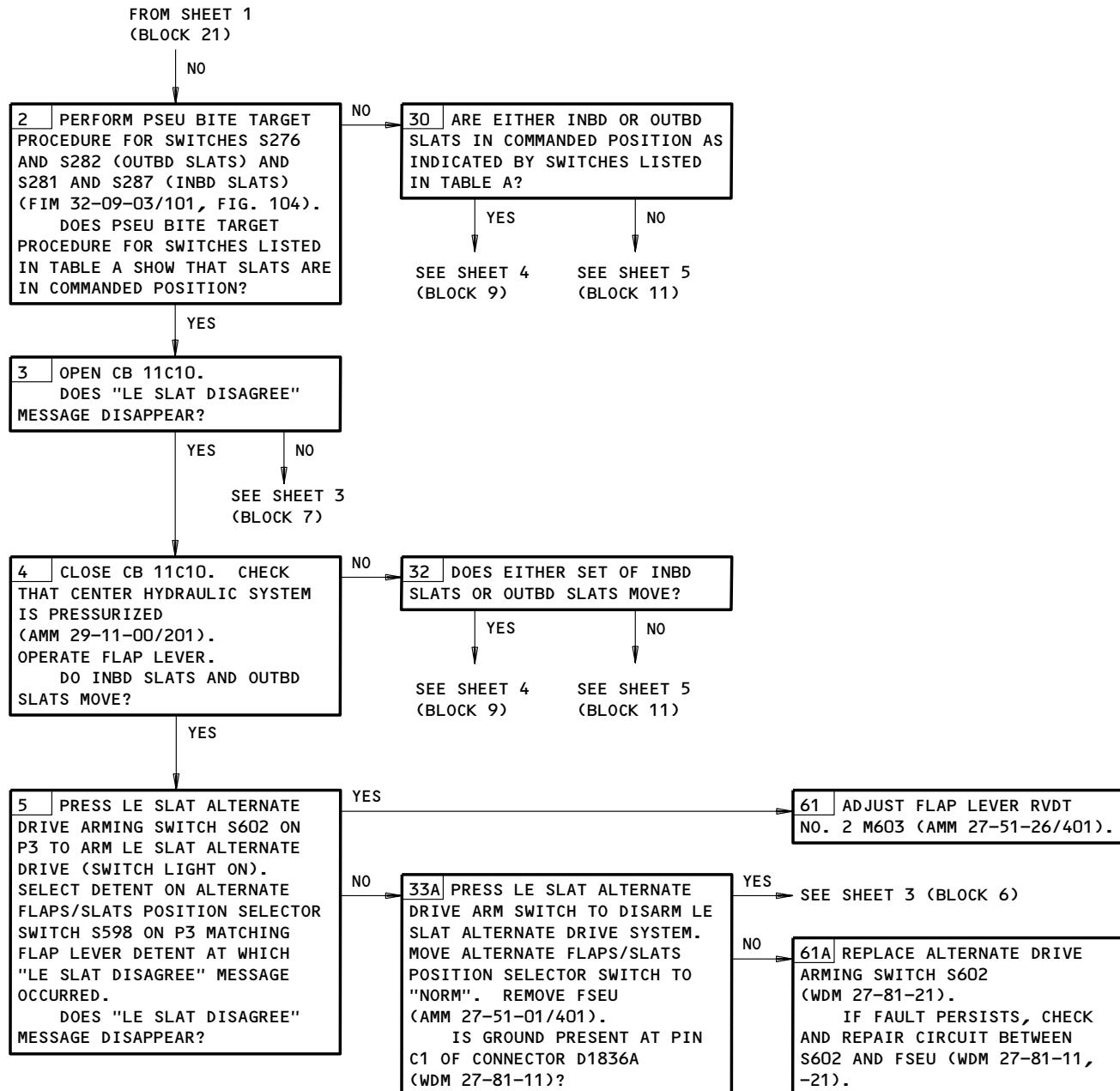
LE SLAT DISAGREE EICAS Message is Displayed On the Flight Compartment Display with Flap Lever In Any Detent Between UP and 30. Flap Position Indications Are Correct  
 Figure 106 (Sheet 1)

**EFFECTIVITY**

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**BOEING**  
 767  
 FAULT ISOLATION/MAINT MANUAL



LE SLAT DISAGREE EICAS Message is Displayed On the Flight Compartment Display with Flap Lever In Any Detent Between UP and 30. Flap Position Indications Are Correct  
 Figure 106 (Sheet 2)

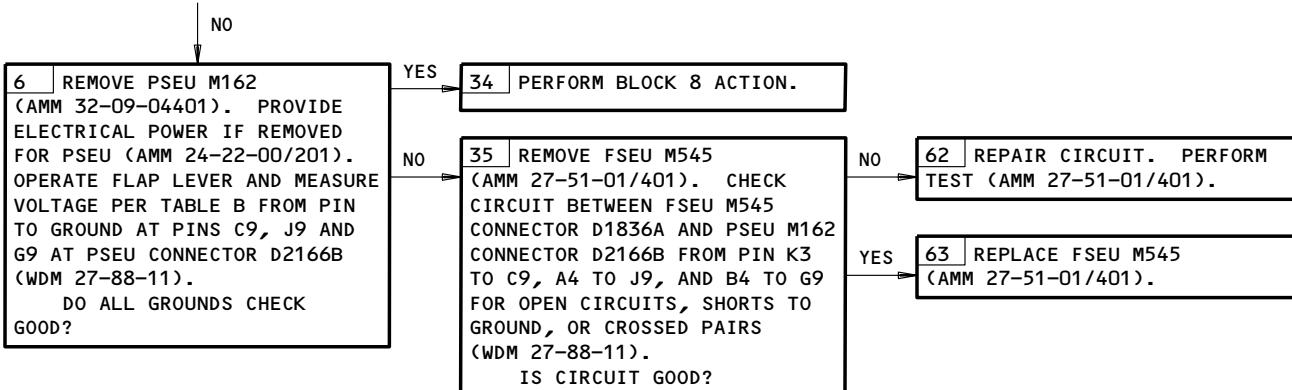
EFFECTIVITY

ALL

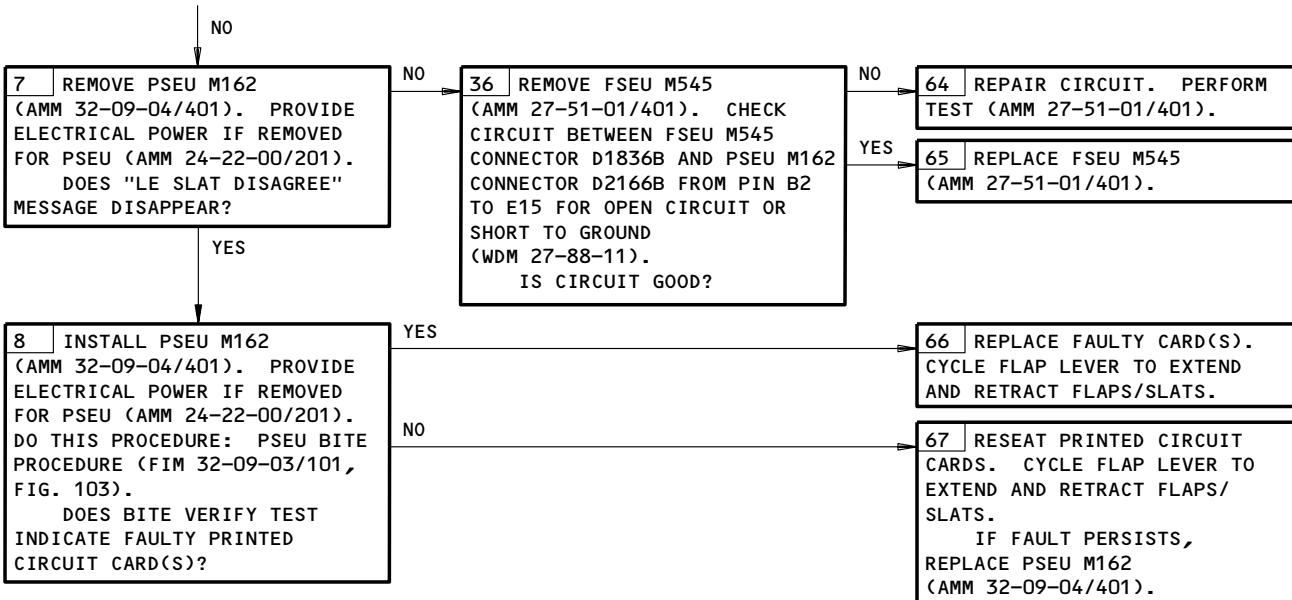
**27-81-00**

**BOEING**  
767  
FAULT ISOLATION/MAINT MANUAL

FROM SHEET 2  
(BLOCK 33A)



FROM SHEET 2  
(BLOCK 3)



PSEU CONN. D2166B	FLAP LEVER POSITION		
	UP	1-20	25-30
PIN C9	GROUNDED	OPEN	OPEN
PIN J9	OPEN	GROUNDED	OPEN
PIN G9	OPEN	OPEN	GROUNDED

OPEN = GREATER THAN 4.0V  
GROUNDED = 0.25V TO 1.5V

TABLE B

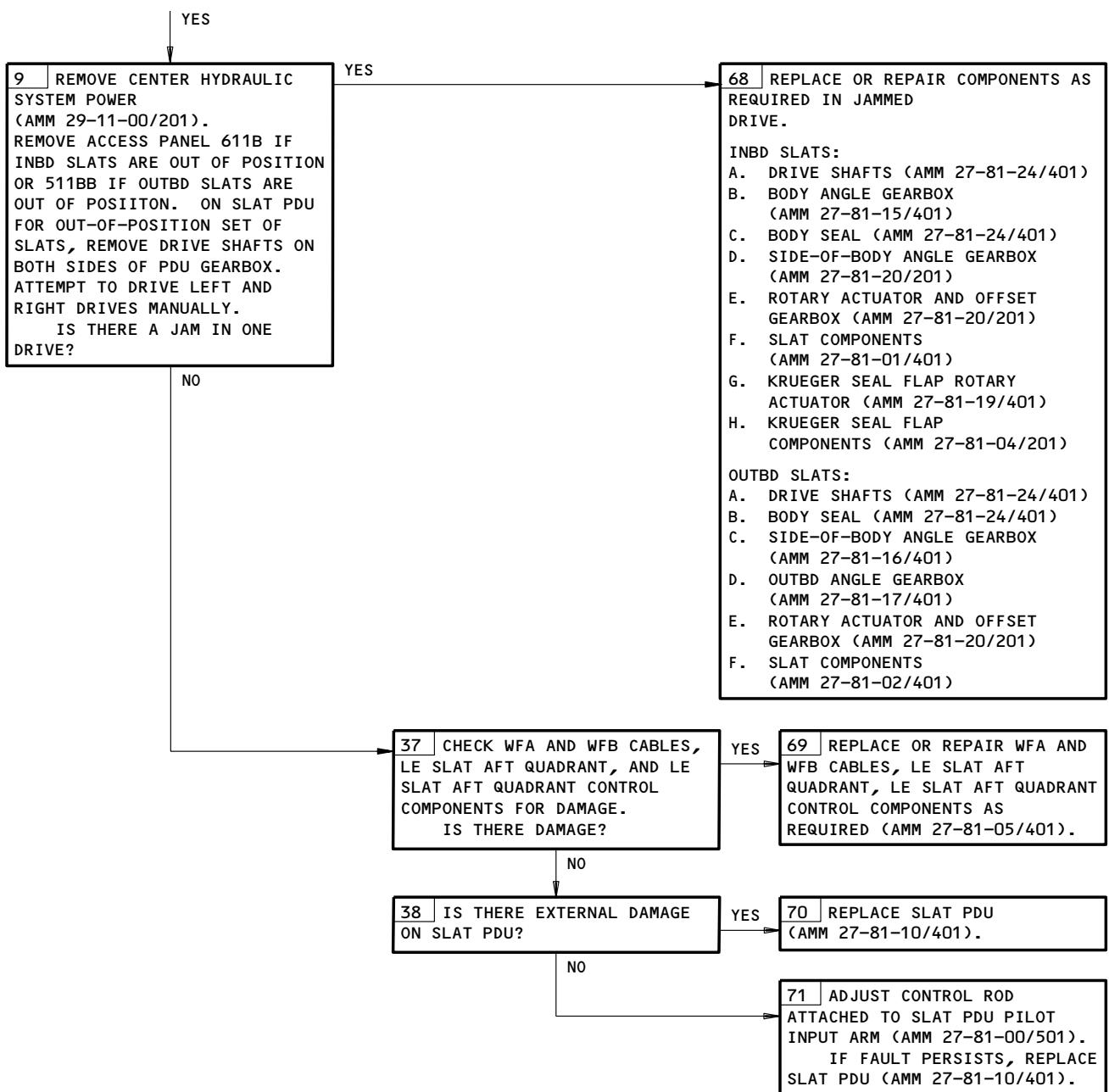
LE SLAT DISAGREE EICAS Message is Displayed On the Flight Compartment Display with Flap Lever In Any Detent Between UP and 30. Flap Position Indications Are Correct  
Figure 106 (Sheet 3)

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FROM SHEET 2  
(BLOCK 30 AND 32)



LE SLAT DISAGREE EICAS Message is Displayed On the Flight Compartment Display with Flap Lever In Any Detent Between UP and 30. Flap Position Indications Are Correct  
Figure 106 (Sheet 4)

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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 2  
(BLOCKS 30 AND 32)

NO

11 REMOVE CENTER HYDRAULIC SYSTEM POWER (AMM 29-11-00/201). SELECT FLAP LEVER IN 25-UNIT OR 30-UNIT DETENT WITH LEVER NOT MATCHING TE FLAP POSITION. OPEN CB 11H14. DISCONNECT CONNECTOR D2304 ON FLAP/SLAT SHUTOFF VALVE MODULE V104 (WM 27-81-31). CLOSE CB 11H14. IS 28V DC PRESENT ON PIN 3?

YES

12 OPEN CB 11H14. INSTALL CONNECTOR D2304 AND REMOVE RELAY K227 ON P3 (WDM 27-81-31). IS PIN X2 OF D2284 GROUNDED?

YES

13 REMOVE FSEU M545 (AMM 27-51-01/401). IS PIN X2 OF D2284 GROUNDED?

NO

NO

40 REMOVE ACCESS PANELS 511BB AND 611BB. DISCONNECT CONTROL RODS AT PILOT INPUT ARMS ON INBD SLAT PDU AND OUTBD SLAT PDU. OPERATE FLAP LEVER. DO BOTH CONTROL RODS MOVE FREELY AND EQUAL DISTANCES?

NO

75 CHECK COMPONENTS IN DRIVE BETWEEN LE SLAT AFT QUADRANT AND EACH SLAT PDU, AND REPLACE, REPAIR, OR ADJUST COMPONENTS AS REQUIRED (AMM 27-81-05/401).

YES

76 REPLACE SLAT SOLENOID V2 (AMM 27-51-48/201). IF FAULT PERSISTS, REPLACE FLAP/SLAT SHUTOFF VALVE MODULE V104 (AMM 27-51-48/201).

NO

77 REPLACE RELAY K227 (WDM 27-81-31). CYCLE FLAP LEVER TO EXTEND AND RETRACT FLAPS/SLATS.

YES

78 REPAIR WIRE BETWEEN PIN B3 ON FSEU M545 CONNECTOR D1836A AND PIN X2 ON D2284 (WDM 27-81-31). CYCLE FLAP LEVER TO EXTEND AND RETRACT FLAPS/SLATS.

79 REPLACE FSEU M545 (AMM 27-51-48/201).

LE SLAT DISAGREE EICAS Message is Displayed On the Flight Compartment Display with Flap Lever In Any Detent Between UP and 30. Flap Position Indications Are Correct  
Figure 106 (Sheet 5)

EFFECTIVITY

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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

6D21, 6F24, 11C10, 11C15, 11C16, 11G15, 11G16,  
11H14, 11H23, 11H24, 11T36

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

**WARNING:** CENTER HYD SYSTEM PROVIDES POWER TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

**WARNING:** FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS, TO PREVENT DAMAGE.

"LE SLAT ASYM" EICAS MESSAGE IS DISPLAYED ON THE FLIGHT COMPARTMENT DISPLAY



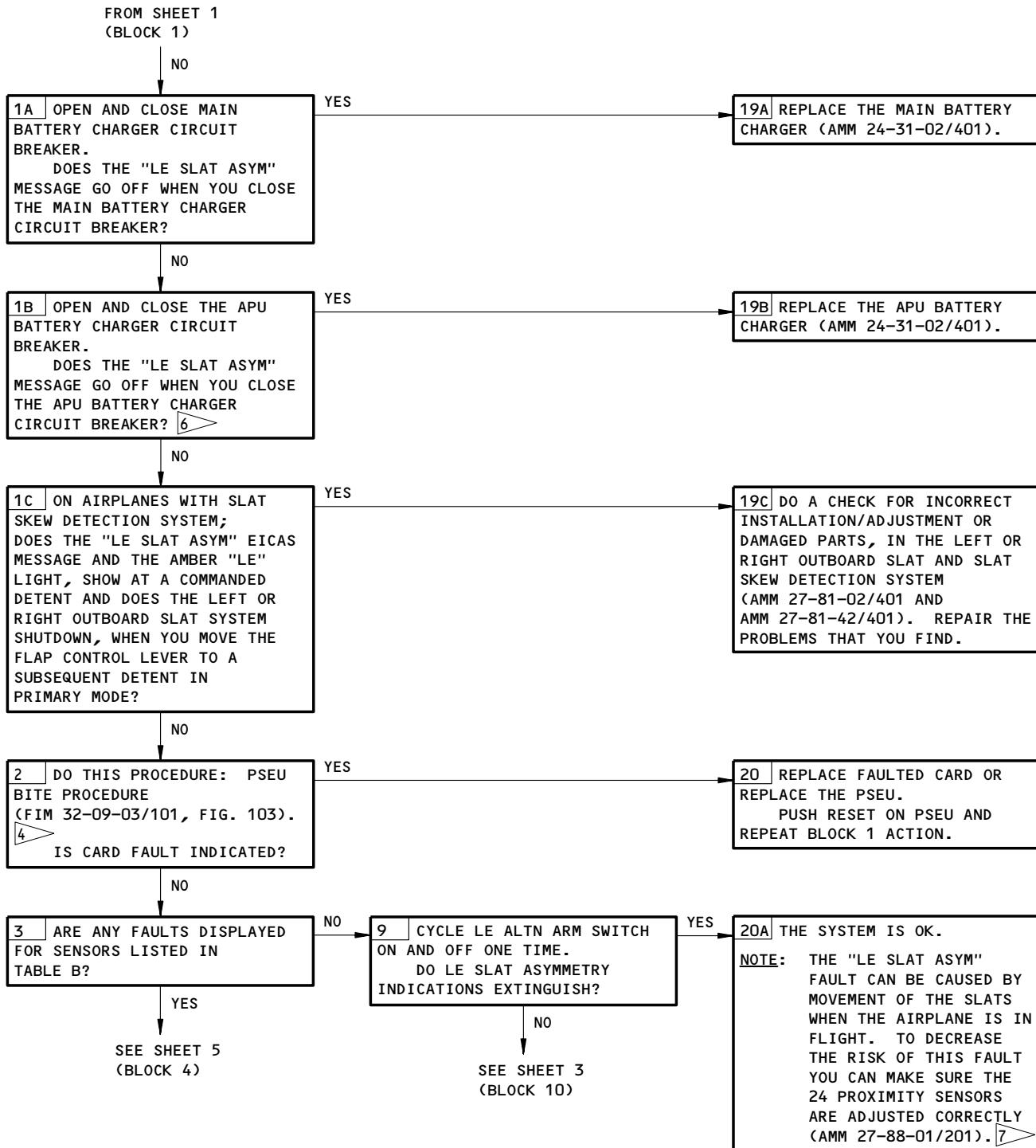
LE SLAT ASYM EICAS Message Is Displayed On The Flight Compartment Display  
Figure 107 (Sheet 1)

EFFECTIVITY

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767  
FAULT ISOLATION/MAINT MANUAL



LE SLAT ASYM EICAS Message Is Displayed On The Flight Compartment Display  
Figure 107 (Sheet 2)

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FROM SHEET 2  
 (BLOCK 9)

NO

**10** DO THIS PROCEDURE:  
 FLAP/SLAT ELECTRONIC UNIT  
 BITE PROCEDURE  
 (FIM 27-51-00/101, FIG. 104).  
 IS FAULT INDICATED?

**YES** **21** DO THE INDICATED  
 CORRECTIVE ACTION.  
 REPEAT BLOCK 10 ACTION.

NO

**10A** MAKE SURE THE OUTBOARD  
 LE SLATS ARE CORRECTLY RIGGED.  
 DO AN ADJUSTMENT AS  
 NECESSARY (AMM 27-81-00/501).  
 VISUALLY INSPECT THE  
 COMPONENTS OF THE OUTBOARD  
 LE SLAT DRIVE SYSTEM FOR  
 DAMAGE.  
 IS THERE ANY COMPONENT  
 DAMAGE?

**YES** **21A** REPAIR THE PROBLEMS THAT  
 YOU FIND.

**10B** ON AIRPLANES WITH LE SLAT  
 SKEW/LOSS DETECTION SYSTEM;  
 VISUALLY INSPECT THE LEFT  
 OB SLAT SKEW SWITCH ASSEMBLY,  
 S2313, AND THE RIGHT OB SLAT  
 SKEW SWITCH ASSEMBLY, S2314.  
 IS A TRIP INDICATOR IN  
 THE "TRIPPED" STATE, ON EITHER  
 THE SLAT SKEW OR LOSS  
 DETECTION SWITCH?

**YES** MAKE SURE THE CABLE  
 ASSEMBLY IS ROUTED STRAIGHT  
 (WITHOUT OVERHANGS) AND THE  
 P-CLAMP AT THE CABLE LOOP  
 IS INSTALLED CORRECTLY  
 (AMM 27-81-42/401).

 MAKE SURE THE SLAT SKEW  
 DETECTION SYSTEM IS PROPERLY  
 ADJUSTED AND TESTED  
 (AMM 27-81-42/401). REPAIR  
 THE PROBLEMS THAT YOU FIND.  
 RESET THE EXTENDED TRIP  
 INDICATOR.

NO

**10C** REMOVE THE FSEU  
 (AMM 27-51-01/401).  
 IS A GROUND PRESENT AT  
 THE FSEU, CONNECTOR D1836A,  
 PIN K1?

**YES** **23** EXAMINE THE CIRCUIT FROM  
 THE FSEU, CONNECTOR D1836A,  
 PIN K1, TO THE PSEU,  
 CONNECTOR D2166B, PIN C14  
 (TABLE A). REPAIR THE  
 PROBLEMS THAT YOU FIND.

NO

**10D** IS A GROUND PRESENT AT  
 THE FSEU, CONNECTOR D1836A,  
 PIN A2?

**NO** **24** REPLACE THE FSEU  
 (AMM 27-51-01/401).

YES

**10E** ON AIRPLANES WITH LE SLAT  
 SKEW/LOSS DETECTION SYSTEM;  
 REMOVE THE SLAT SKEW DETECTION  
 RELAY, K2307.  
 IS A GROUND PRESENT ON  
 CONNECTOR D21190, PIN X2?

**NO** **25** EXAMINE THE CIRCUIT FROM  
 THE RELAY, K2307, CONNECTOR  
 D21190, PIN X2, TO GROUND  
 GD3554-DC (WDM 27-89-11).  
 REPAIR THE PROBLEMS THAT YOU  
 FIND.

YES

 SEE SHEET 4  
 (BLOCK 10F)

 LE SLAT ASYM EICAS Message Is Displayed On The Flight Compartment Display  
 Figure 107 (Sheet 3)

EFFECTIVITY

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**BOEING**  
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FAULT ISOLATION/MAINT MANUAL

FROM SHEET 3  
(BLOCK 10E)

YES

10F ON AIRPLANES WITH LE SLAT  
SKEW/LOSS DETECTION SYSTEM;  
IS 28V DC PRESENT ON RELAY,  
K2307, CONNECTOR D21190,  
PIN X1?

NO **26** EXAMINE THE CIRCUIT FROM  
THE RELAY, K2307, CONNECTOR  
D21190, PIN X1, TO THE CIRCUIT  
BREAKER 11C10, SLATS POSITION  
INDICATION. REPAIR THE  
PROBLEMS THAT YOU FIND.

YES

10G ON AIRPLANES WITH LE SLAT  
SKEW/LOSS DETECTION SYSTEM;  
IS A GROUND PRESENT AT THE  
FSEU, CONNECTOR D1836, PIN A2?

NO **27** REPLACE THE RELAY, K2307.

YES

**28** EXAMINE THE CIRCUITS FROM  
THE FSEU, CONNECTOR D1836A,  
PIN A2, TO THE RELAY, K2307,  
CONNECTOR D21190, PIN C2, AND  
FROM THE FSEU, CONNECTOR  
D1836A, PIN A2 TO THE PSEU,  
CONNECTOR D2166B, PIN D14.  
IF THE PROBLEM CONTINUES,  
DO A CHECK FOR HIGH RESISTANCE  
ON THE WIRES, FROM THE  
PROXIMITY SWITCH ELEX UNIT,  
TO THE FSEU THAT MONITORS THE  
LE SLAT ASYM MESSAGE.  
DO A CHECK FOR GROUND  
SIGNALS FROM THE STALL  
WARNING MODULE TO THE FSEU  
(WDMs 27-32-11, 27-32-12,  
27-32-21, 27-32-22, 27-32-31,  
27-89-11; FIM 27-32-00/101).  
MAKE SURE WIRES ARE NOT  
PULLED OUT OF THE CONNECTORS  
BECAUSE OF FLEX CONDUIT  
INSTALLATION (WIRE BINDING  
CAUSED BY INADEQUATE WIRE  
LENGTH AND BY TOO-TIGHT WIRE  
INSTALLATION). REPAIR THE  
PROBLEMS THAT YOU FIND.  
**NOTE:** WHEN CONDUIT FAILS AT  
THE ELBOW, IT CUTS THE  
WIRES AND A LE SLAT  
ASYMMETRY INDICATION  
RESULTS.

LE SLAT ASYM EICAS Message Is Displayed On The Flight Compartment Display  
Figure 107 (Sheet 4)

EFFECTIVITY

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FROM SHEET 2  
 (BLOCK 3)

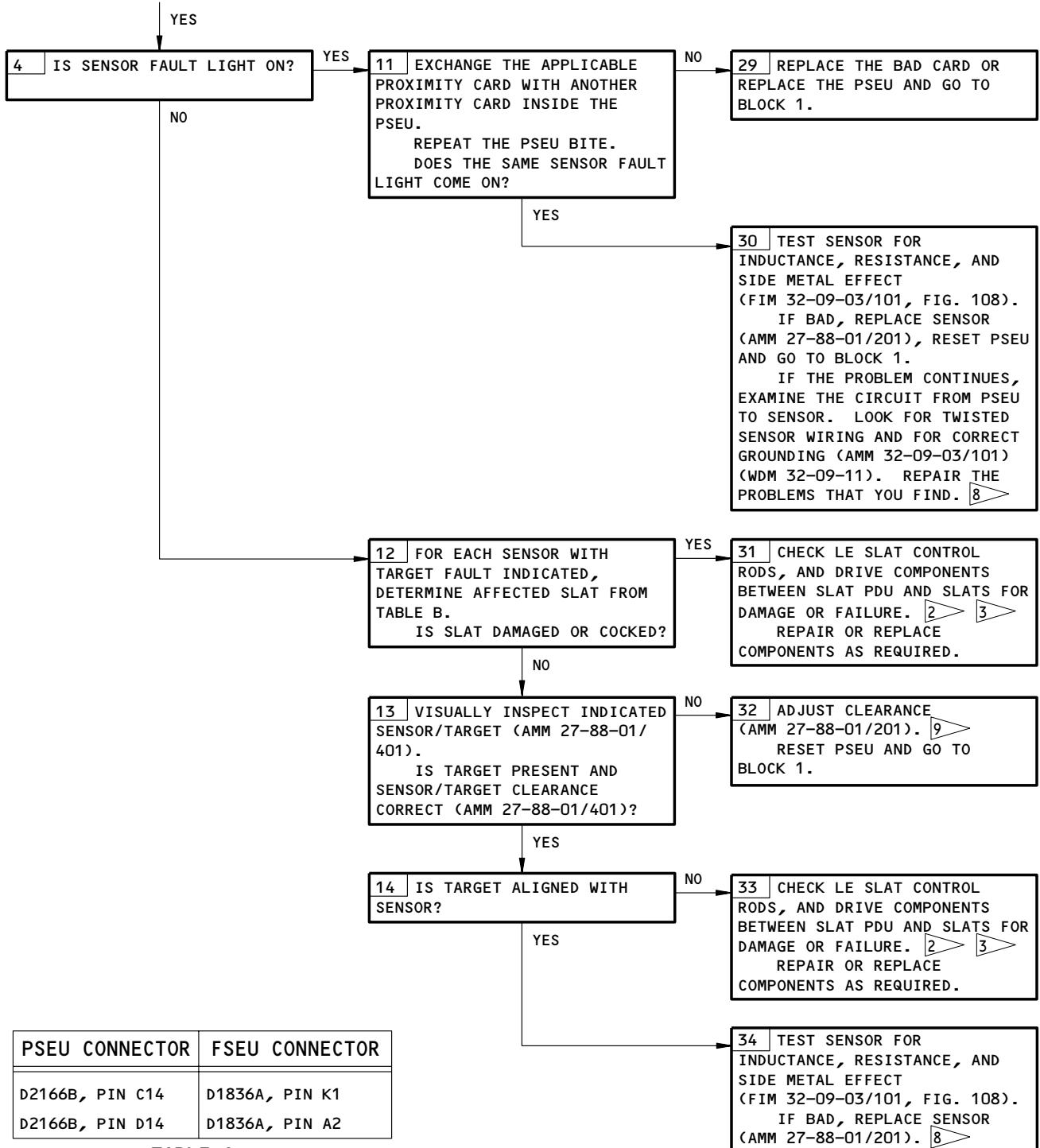


TABLE A

LE SLAT ASYM EICAS Message is Displayed On The Flight Compartment Display  
 Figure 107 (Sheet 5)

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SLAT NO.	SENSOR NO.	A SLATS FULLY RETR. (FLAP LEVER UP)	B SLATS TAKEOFF (FLAP LEVER 1-20)	C SLATS FULLY EXTENDED (FLAP LEVER 25-30)
1	S276 (OUTBD) S282 (INBD)	N2 N2	F N1	N1 F
2	S277 (OUTBD) S283 (INBD)	N2 N2	F N1	N1 F
3	S278 (OUTBD) S284 (INBD)	N2 N2	F N1	N1 F
4	S279 (OUTBD) S285 (INBD)	N2 N2	F N1	N1 F
5	S280 (OUTBD) S286 (INBD)	N2 N2	F N1	N1 F
6	S281 (INBD) S287 (OUTBD)	N2 N2	F N1	N1 F
7	S299 (INBD) S305 (OUTBD)	N2 N2	F N1	N1 F
8	S298 (OUTBD) S304 (INBD)	N2 N2	F N1	N1 F
9	S297 (OUTBD) S303 (INBD)	N2 N2	F N1	N1 F
10	S296 (OUTBD) S302 (INBD)	N2 N2	F N1	N1 F
11	S295 (OUTBD) S301 (INBD)	N2 N2	F N1	N1 F
12	S294 (OUTBD) S300 (INBD)	N2 N2	F N1	N1 F

TABLE B

N1 = TARGET NEAR (TARGET ON AUXILIARY TRACK ROLLER BOLT OPPOSITE SWITCH)  
 F = TARGET FAR (TARGET ON AUXILIARY TRACK ROLLER BOLT OFFSET FROM SWITCH)  
 N2 = TARGET NEAR (TARGET ON AUXILIARY TRACK ARM OPPOSITE SWITCH)

- 1  ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (AMM 78-31-00/201).
- 2  INBD SLATS (NUMBER 6 OR 7):
  1. DRIVE SHAFTS (AMM 27-81-24/401)
  2. BODY ANGLE GEARBOX (AMM 27-81-15/401)
  3. BODY SEAL (AMM 27-81-24/401)
  4. SIDE-OF-BODY ANGLE GEARBOX (AMM 27-81-16/401)
  5. ROTARY ACTUATOR AND OFFSET GEARBOX (AMM 27-81-20/201)
  6. SLAT COMPONENTS (AMM 27-81-01/401)
  7. KRUEGER SEAL FLAP ROTARY ACTUATOR (AMM 27-81-19/401)
  8. KRUEGER SEAL FLAP COMPONENTS (AMM 27-81-04/401)
- 3  OUTBD SLATS (NUMBER 1-5, 8-12):
  1. DRIVE SHAFTS (AMM 27-81-24/401)
  2. BODY SEAL (AMM 27-81-24/401)
  3. SIDE-OF-BODY ANGLE GEARBOX (AMM 27-81-16/401)
  4. OUTBD ANGLE GEARBOX (AMM 27-81-17/601)
  5. ROTARY ACTUATOR AND OFFSET GEARBOX (AMM 27-81-20/201)
  6. SLAT COMPONENTS (AMM 27-81-02/401)
- 4  IF YOU HAVE INTERMITTENT OR NUISANCE FAULTS, DO THIS PROCEDURE:  
 PROXIMITY SENSOR/WIRING RESISTANCE CHECK  
 (FIM 32-09-03/101, FIG. 105).

LE SLAT ASYM EICAS Message Is Displayed On The Flight Compartment Display  
 Figure 107 (Sheet 6)

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5 POWER THE PASSENGER ENTERTAINMENT SYSTEM SO THAT THE CONTROLS MOUNTED IN PASSENGER SEATS ARE OPERATIONAL. MONITOR EICAS FOR THE LEADING EDGE ASYMMETRY INDICATION. IF INDICATION IS PRESENT, ISOLATE THE SEATS CAUSING THE INDICATION BY REMOVING POWER TO EACH COLUMN, THEN DISCONNECT SEAT ELECTRONIC BOXES FOR SEATS IN THAT SECTION. ONCE THE SEAT BOX CAUSING THE CONDITION IS ISOLATED, LOOK FOR CHAFFED WIRE INTERNAL TO THE ASSEMBLY.

IF THERE IS AN INTERMITTENT FAULT PRESENT IN THE PASSENGER ENTERTAINMENT SYSTEM, IT MAY BE POSSIBLE TO RECREATE THE FAULT BY MOVING THE ARMREST. THIS CAN BE DIFFICULT TO RECREATE DUE TO THE DELAY ASSOCIATED WITH THE ASYMMETRY INDICATION (APPROXIMATELY 3 SECONDS). THE SERVICE LETTER 767-SL-23-0038 PROVIDES ADDITIONAL DETAILS REGARDING MODIFICATIONS THAT CAN BE DONE TO THE SEAT ELECTRONIC BOXES.

6 OPEN MAIN BATTERY CHARGER CIRCUIT BREAKER, AND WITH AIRPLANE ON STANDBY POWER, ALLOW THE MAIN BATTERY TO DISCHARGE FOR APPROXIMATELY 5 MINUTES. RESTORE AIRPLANE POWER TO NORMAL GROUND POWER SOURCE AND CLOSE THE MAIN BATTERY CHARGER CIRCUIT BREAKER. MONITOR THE EICAS DISPLAY FOR INTERMITTENT DISPLAY OF THE LEADING EDGE ASYMMETRY INDICATION.

IF LEADING EDGE ASYMMETRY INDICATION IS DISPLAYED, REPLACE MAIN BATTERY CHARGER.

OPEN THE APU BATTERY CHARGER CIRCUIT BREAKER. WITH BATTERY CHARGER CIRCUIT BREAKER OPEN, INITIATE APU START (THIS WILL DISCHARGE THE BATTERY). IF GROUND POWER IS BEING USED TO POWER THE AIRPLANE, THE APU CAN BE SHUT DOWN AFTER THE START SEQUENCE IS COMPLETED.

RESTORE AIRPLANE POWER TO NORMAL GROUND POWER SOURCE AND CLOSE THE APU BATTERY CHARGER CIRCUIT BREAKER. MONITOR THE EICAS DISPLAY FOR INTERMITTENT DISPLAY OF THE LEADING EDGE ASYMMETRY INDICATION.

IF LEADING EDGE ASYMMETRY INDICATION IS DISPLAYED, REPLACE APU BATTERY CHARGER.

7 TO FURTHER ISOLATE A SPECIFIC SET OF SENSORS, DFDR OR QAR DATA CAN BE REVIEWED TO DETERMINE WHICH SET OF SENSORS CHANGED STATE RESULTING IN THE ASYMMETRY INDICATION.

8 DO THE INDUCTANCE AND RESISTANCE CHECK FOR ANY SLAT SENSOR FAULT IDENTIFIED IN THE PSEU FAULT HISTORY. THE TABLE C SHOWS THE INFORMATION NEEDED TO IDENTIFY THE CORRESPONDING PSEU CONNECTOR PINS, AND A LOCATION TO DOCUMENT THE DATA COLLECTED.

MEASURING FROM THE PSEU SHELF CONNECTOR, MAKE SURE THE RESISTANCE FOR THE IDENTIFIED SENSOR INSTALLATIONS IS 20 OHMS OR LESS<sup>11</sup>. NOTE THE RESISTANCE WILL BE LOWER FOR THE INBOARD INSTALLATIONS DUE TO THE DECREASED WIRE LENGTH. IF THE RESISTANCE IS GREATER THAN 20 OHMS<sup>11</sup>, USE THE WDM TO ISOLATE THE SEGMENT OF WIRE THAT IS CAUSING THE HIGH RESISTANCE STARTING AT THE PROXIMITY SENSOR SPLICE AND WORKING BACK TOWARD THE PSEU SHELF CONNECTOR.

IF HIGH RESISTANCE IS MEASURED, CUT THE WIRES ADJACENT TO THE SUSPECT SENSOR AND MEASURE RESISTANCE THROUGH THE SENSOR. IF THE RESISTANCE IS GREATER THAN 18 OHMS REPLACE THE SENSOR. IF THE RESISTANCE THROUGH THE SENSOR IS 18 OHMS OR LESS<sup>10</sup>, USE THE WDM TO ISOLATE THE SEGMENT OF WIRE THAT IS CAUSING THE HIGH RESISTANCE STARTING AT THE PROXIMITY SENSOR SPLICE AND WORKING BACK TOWARD THE PSEU SHELF CONNECTOR.

MAKE SURE THAT THE PROXIMITY SENSOR INDUCTANCE IS GREATER THAN 4.7 MILLIHENRIES AT TARGET FAR (SLATS EXTENDED). IF THE INDUCTANCE IS LESS THAN 4.7 MILLIHENRIES, THE SENSOR IS FAILED AND NEEDS TO BE REPLACED. PLEASE NOTE THAT S281 AND S291 ARE AFFECTED BY SIDE-METAL AND WILL READ SLIGHTLY LOWER VALUES THAN OTHER SENSOR INSTALLATIONS.

WITH SLATS IN THE POSITION WHERE CONDITION WAS REPORTED (RETRACTED, PARTIAL, FULL EXTEND), MAKE SURE THE TARGET NEAR INDUCTANCE IS GREATER THAN 5.4 MILLIHENRIES FOR THE FAULTED SENSOR(S). IF THE SLAT POSITION AT THE TIME OF THE REPORT CANNOT BE CONFIRMED, MAKE SURE THERE IS SENSOR INDUCTANCE AT BOTH SLAT POSITIONS WHERE THE SENSOR WOULD BE AT A TARGET NEAR CONDITION. IF THE VALUE IS LESS THAN 5.4 MILLIHENRIES, MAKE SURE SENSOR/TARGET CLEARANCE IS WITHIN THE PERMITTED AMM LIMITS. NOTE ADJUSTMENT OF THE SENSOR/TARGET CLEARANCE TO THE MINIMUM TOLERANCE WILL INCREASE THE INDUCTANCE VALUE AND MAKE BETTER THE SENSOR PERFORMANCE.

9 FOR TARGETS INSTALLED WITH THE AUXILIARY TRACK BEARING BOLTS, MAKE SURE THE BOLT IS NOT BROKEN AND IT IS CORRECTLY TORQUED. ALSO CHECK THE CORRECT TARGET/WASHER IS INSTALLED AND IT IS TIGHTEN.

FOR TARGETS RIVETED INTO POSITION, MAKE SURE THE RIVETS ARE INSTALLED AND THE TARGET IS TIGHTEN.

10 SENSOR RESISTANCE VARIES BY PART NUMBER.

11 USE 20 OHMS FOR ALL SENSORS EXCEPT SENSOR P/N S283T006-33 (ELDEC P/N 8-935-01). USE 25 OHMS FOR SENSOR P/N S283T006-33 (ELDEC P/N 8-935-01) DUE TO HIGHER RESISTANCE SENSOR.

LE SLAT ASYM EICAS Message is Displayed On The Flight Compartment Display  
Figure 107 (Sheet 7)

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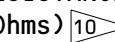
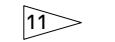
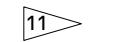
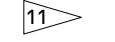
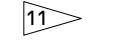
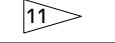
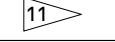
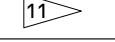
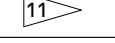
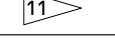
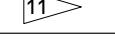
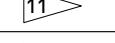
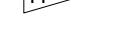
767 PROXIMITY SENSOR - LEADING EDGE SLATS				CRUISE	TAKEOFF	LANDING
SENSOR	PSEU CONNECTOR	PIN NUMBERS	RESISTANCE (Ohms) 	INDUCTANCE (mH)	INDUCTANCE (mH)	INDUCTANCE (mH)
S276 L OUTBD SLAT 1	D2166A	F9 E9		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)
S282 L INBD SLAT 1	D2166A	H11 G11		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S277 L OUTBD SLAT 2	D2166A	H9 G9		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)
S283 L INBD SLAT 2	D2166A	K11 J11		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S278 L OUTBD SLAT 3	D2166A	F10 E10		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)
S284 L INBD SLAT 3	D2166A	F12 E12		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S279 L OUTBD SLAT 4	D2166A	H10 G10		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)
S285 L INBD SLAT 4	D2166A	H12 G12		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S280 L OUTBD SLAT 5	D2166A	K10 J10		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)
S286 L INBD SLAT 5	D2166A	K12 J12		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S287 L OUTBD SLAT 6	D2166A	F13 E13		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.2-6.0)	TARGET FAR (4.7-5.0)
S281 L INBD SLAT 6	D2166A	F11 E11		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0) (SIDE METAL)	TARGET NEAR (5.2-6.0)

TABLE C

LE SLAT ASYM EICAS Message Is Displayed On The Flight Compartment Display  
Figure 107 (Sheet 8)

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767 PROXIMITY SENSOR - LEADING EDGE SLATS				CRUISE	TAKEOFF	LANDING
SENSOR	PSEU CONNECTOR	PIN NUMBERS	RESISTANCE (Ohms) 	INDUCTANCE (mH)	INDUCTANCE (mH)	INDUCTANCE (mH)
S299 R INBD SLAT 7	D2166B	F5 E5		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0) (SIDE METAL)	TARGET NEAR (5.2-6.0)
S305 R OUTBD SLAT 7	D2166B	F7 E7		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.2-6.0)	TARGET FAR (4.7-5.0)
S304 R INBD SLAT 8	D2166B	K6 J6		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S298 R OUTBD SLAT 8	D2166B	K4 J4		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)
S303 R INBD SLAT 9	D2166B	H6 G6		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S297 R OUTBD SLAT 9	D2166B	H4 G4		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)
S302 R INBD SLAT 10	D2166B	F6 E6		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S296 R OUTBD SLAT 10	D2166B	F4 E4		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)
S301 R INBD SLAT 11	D2166B	K5 J5		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S295 R OUTBD SLAT 11	D2166A	K15 J15		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)
S300 R INBD SLAT 12	D2166B	H5 G5		TARGET NEAR (5.4-6.3)	TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)
S294 R OUTBD SLAT 12	D2166A	H15 G15		TARGET NEAR (5.4-6.3)	TARGET FAR (4.7-5.0)	TARGET NEAR (5.4-6.3)

TABLE C

LE SLAT ASYM EICAS Message Is Displayed On The Flight Compartment Display  
Figure 107 (Sheet 9)

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Not Used  
Figure 108

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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D21, 6F24, 11C10, 11C15, 11C16, 11G15, 11G16,  
 11H14, 11H23, 11H24, 11T36

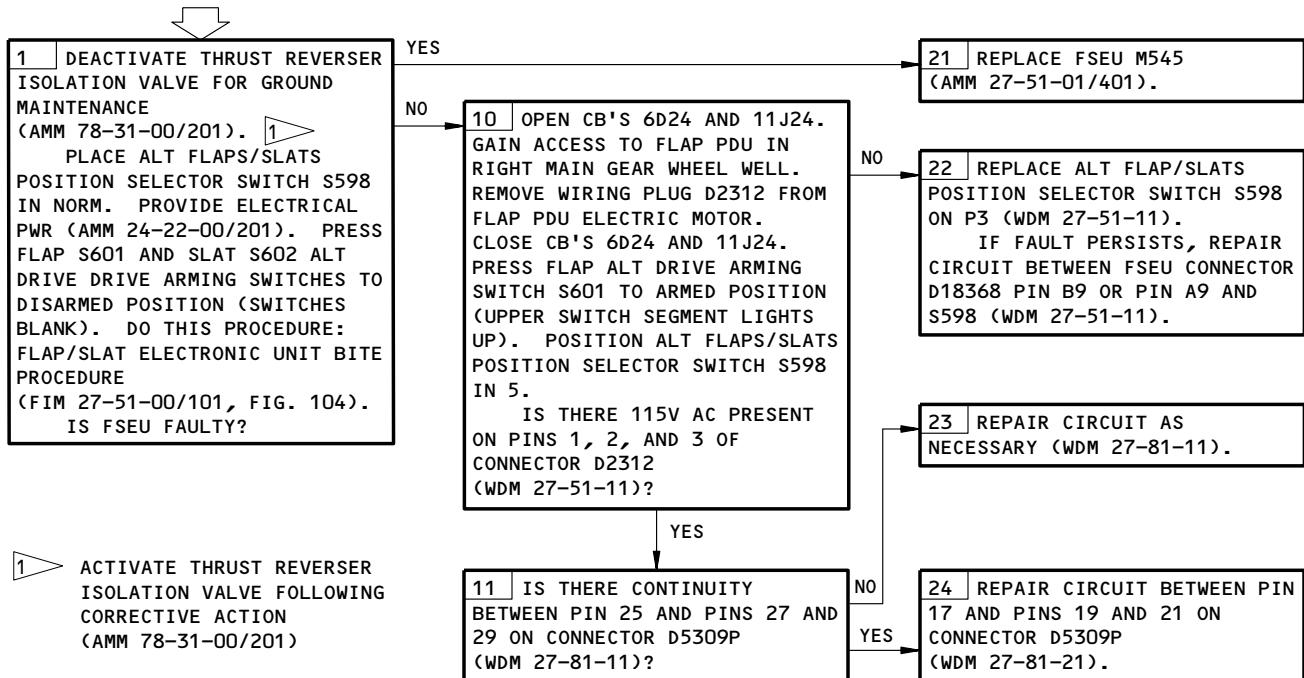
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS OFF (AMM 24-22-00/201)  
 HYDRAULIC POWER IS OFF (AMM 29-11-00/201)

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

"LE SLAT DISAGREE"  
 SHOWS ON EICAS WHEN  
 YOU TRY TO EXTEND OR  
 RETRACT THE SLAT  
 WITH ALTN SLAT DRIVE  
 SYSTEM, AND THE  
 POSITION INDICATION  
 DOES NOT CHANGE.

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS, TO PREVENT DAMAGE.



"LE SLAT DISAGREE" Shows On EICAS When You Try To Extend Or Retract The Slat With Altn Slat Drive System, And The Position Indication Does Not Change.

Figure 109

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**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D21, 6F24, 11C10, 11C15, 11C16, 11G15, 11G16,  
 11H14, 11H23, 11H24, 11T36

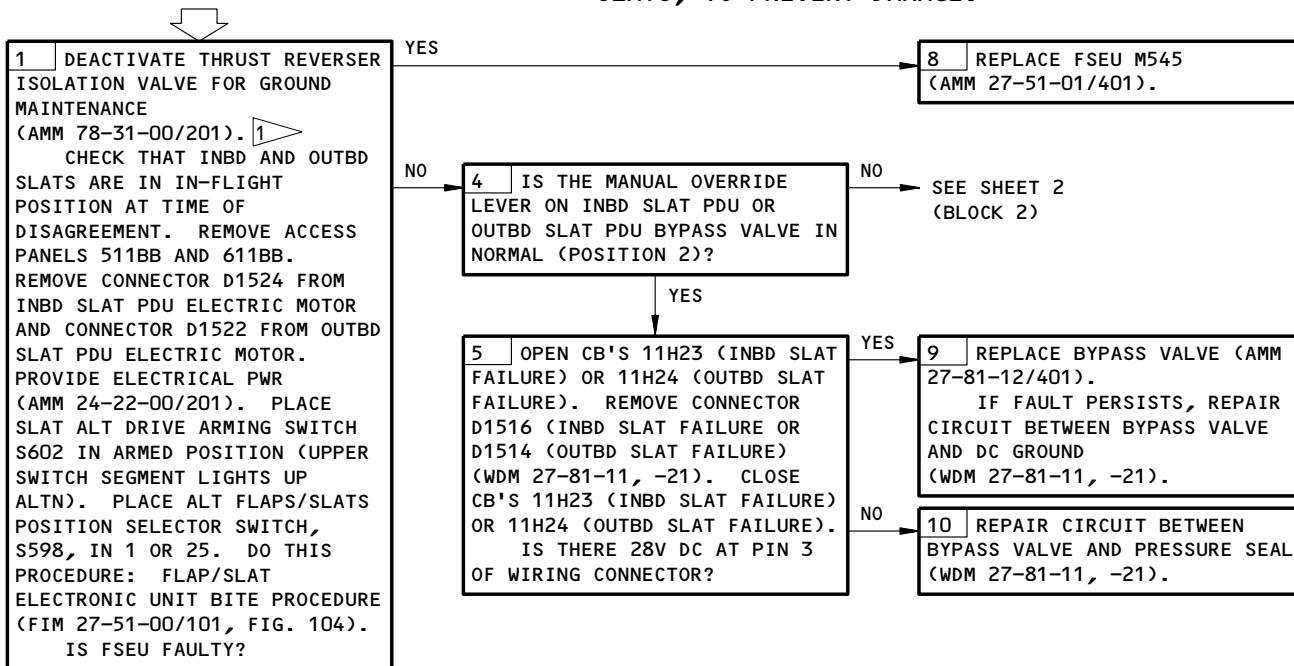
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS OFF (AMM 24-22-00/201)  
 HYDRAULIC POWER IS OFF (AMM 29-11-00/201)

LE SLAT DISAGREE EICAS MESSAGE IS DISPLAYED WHEN SLAT EXTENSION TO POS 1 OR 25 IS SELECTED WITH ALTN SLAT DRIVE SYSTEM. POSITION INDICATION STAYED HALFWAY BETWEEN UP AND 1 WHEN POSITION 1 WAS SELECTED.

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS, TO PREVENT DAMAGE.



1 ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (AMM 78-31-00/201)

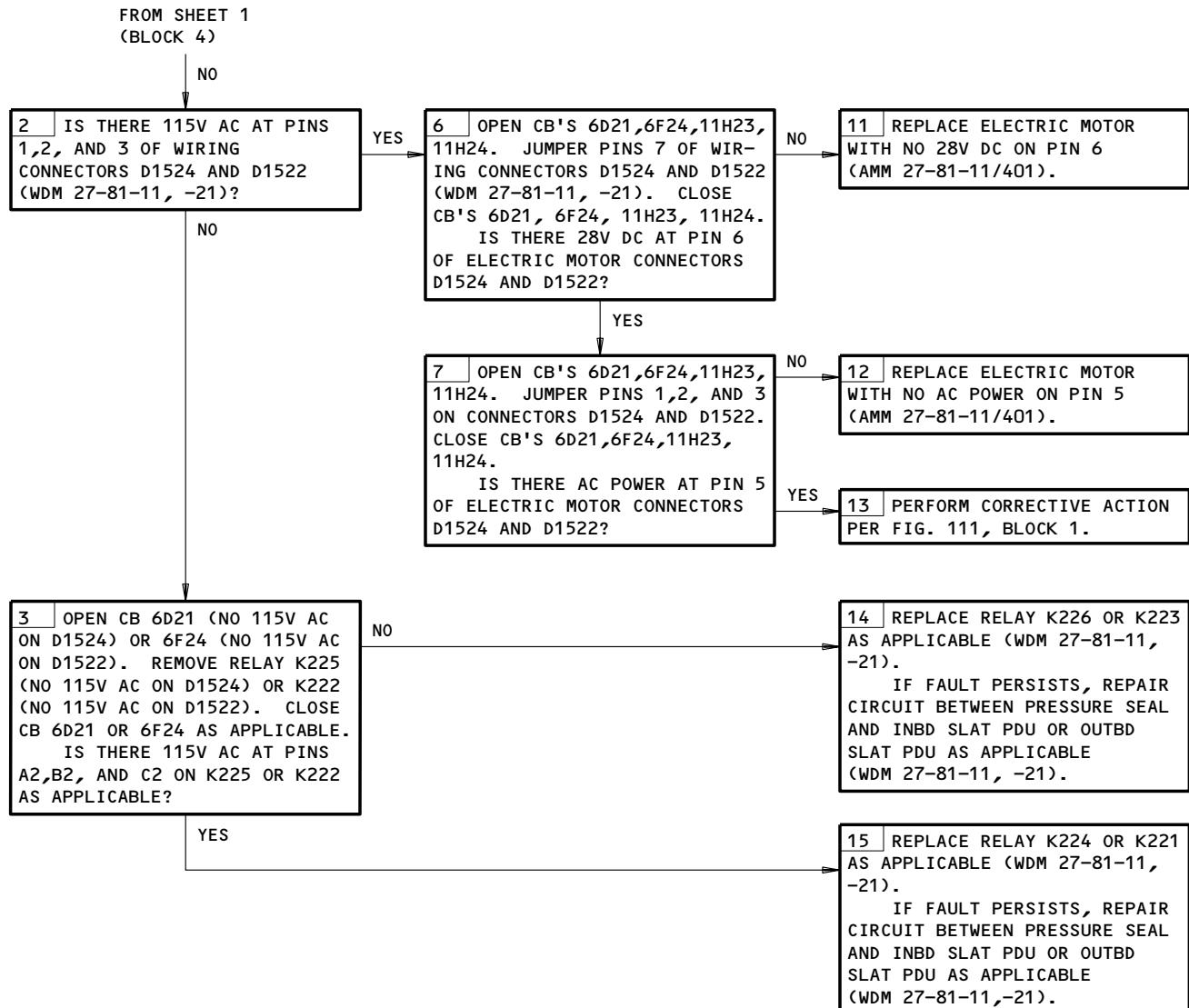
LE SLAT DISAGREE EICAS Message Is Displayed When Slat Extension To Pos 1 Or 25 Is Selected With Altn Slat Drive System. Position Indication Stayed Halfway Between UP and 1 When Position 1 Was Selected.

Figure 110 (Sheet 1)

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LE SLAT DISAGREE EICAS Message Is Displayed When Slat Extension To Pos 1 Or 25 Is Selected With Altn Slat Drive System. Position Indication Stayed Halfway Between UP and 1 When Position 1 Was Selected.

Figure 110 (Sheet 2)

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**PREREQUISITES**

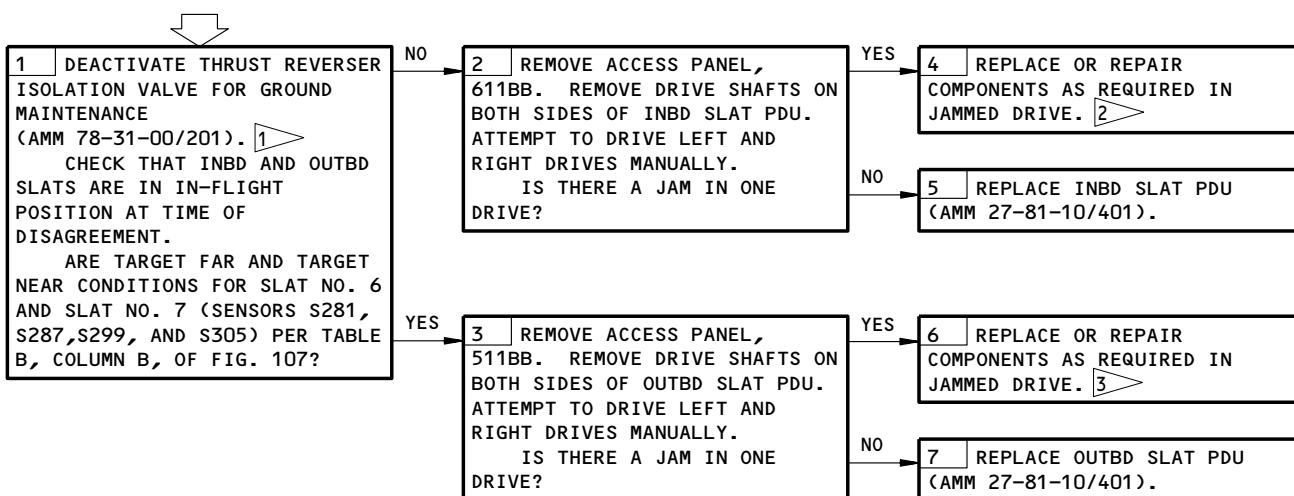
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS OFF (AMM 24-22-00/201)  
 HYDRAULIC POWER IS OFF (AMM 29-11-00/201)

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** MAKE SURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS, TO PREVENT DAMAGE.

**"LE SLAT DISAGREE"**  
**EICAS MESSAGE IS DISPLAYED WHEN SLAT EXTENSION TO POS 1 IS SELECTED WITH ALTN SLAT DRIVE SYSTEM. POSITION INDICATIONS ARE AT 1.**



 1 ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (AMM 78-31-00/201)

 2 INBD SLATS:

1. DRIVE SHAFTS (AMM 27-81-24/401)
2. BODY ANGLE GEARBOX (AMM 27-81-15/401)
3. BODY SEAL (AMM 27-81-24/401)
4. SIDE-OF-BODY ANGLE GEARBOX (AMM 27-81-16/401)
5. ROTARY ACTUATOR AND OFFSET GEARBOX (AMM 27-81-20/201)
6. SLAT COMPONENTS (AMM 27-81-01/401)
7. KRUEGER SEAL FLAP ROTARY ACTUATOR (AMM 27-81-19/401)
8. KRUEGER SEAL FLAP COMPONENTS (AMM 27-81-04/201).

1. DRIVE SHAFTS (AMM 27-81-24/401)
2. BODY SEAL (AMM 27-81-24/401)
3. SIDE-OF-BODY ANGLE GEARBOX (AMM 27-81-16/401)
4. OUTBD ANGLE GEARBOX (AMM 27-81-17/401)
5. ROTARY ACTUATOR AND OFFSET GEARBOX (AMM 27-81-20/201)
6. SLAT COMPONENTS (AMM 27-81-02/401).

LE SLAT DISAGREE EICAS Message is Displayed When Slat Extension to Pos 1 is Selected With Altn Slat Drive System. Position Indications Are At 1.

Figure 111

EFFECTIVITY

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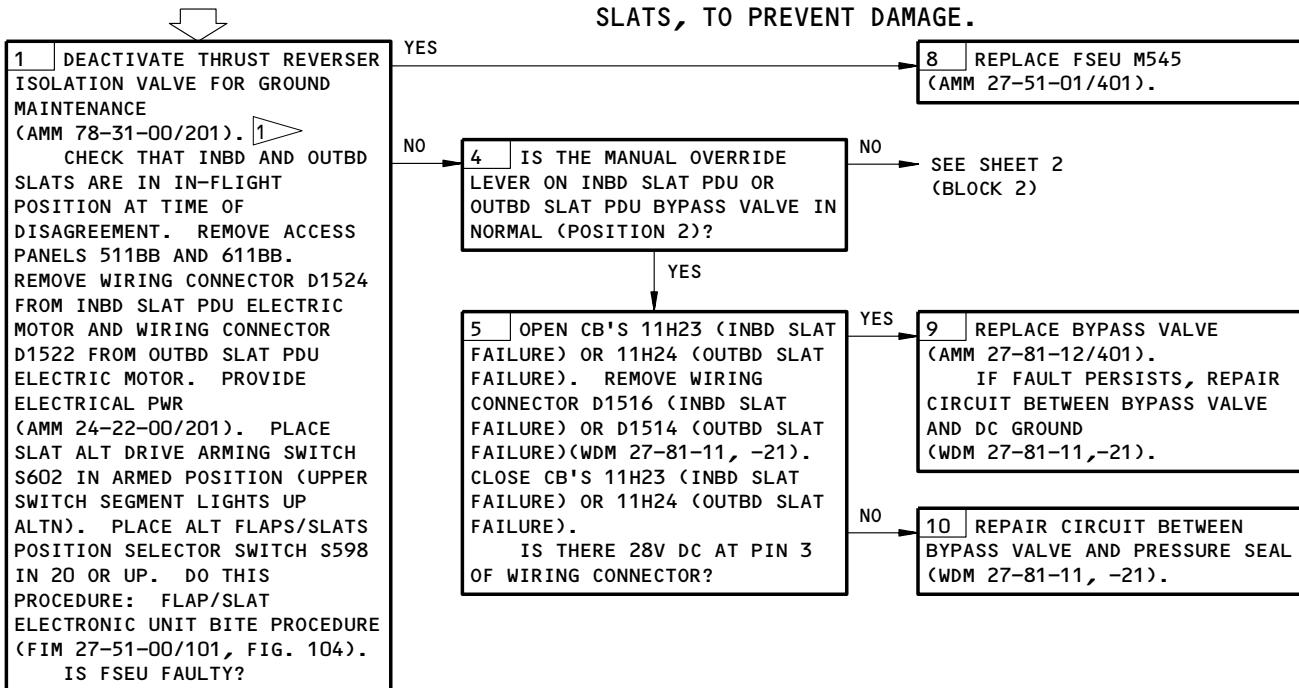
**27-81-00**

**PREREQUISITES**

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:  
 6D21, 6F24, 11C10, 11C15, 11C16, 11G15, 11G16,  
 11H14, 11H23, 11H24, 11T36

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

LE SLAT DISAGREE EICAS MESSAGE IS DISPLAYED WHEN SLAT RETRACTION TO UP OR POS 20 IS SELECTED WITH ALTN SLAT DRIVE SYSTEM. POSITION INDICATION STAYED HALFWAY BETWEEN UP AND 1 WHEN RETRACTION TO UP WAS SELECTED.



1 ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (AMM 78-31-00/201)

LE SLAT DISAGREE EICAS Message Is Displayed When Slat Retraction To UP Or Pos 20 Is Selected With Altn Slat Drive System. Position Indication Stayed Halfway Between UP and 1 When Retraction To Up Was Selected.

Figure 112 (Sheet 1)

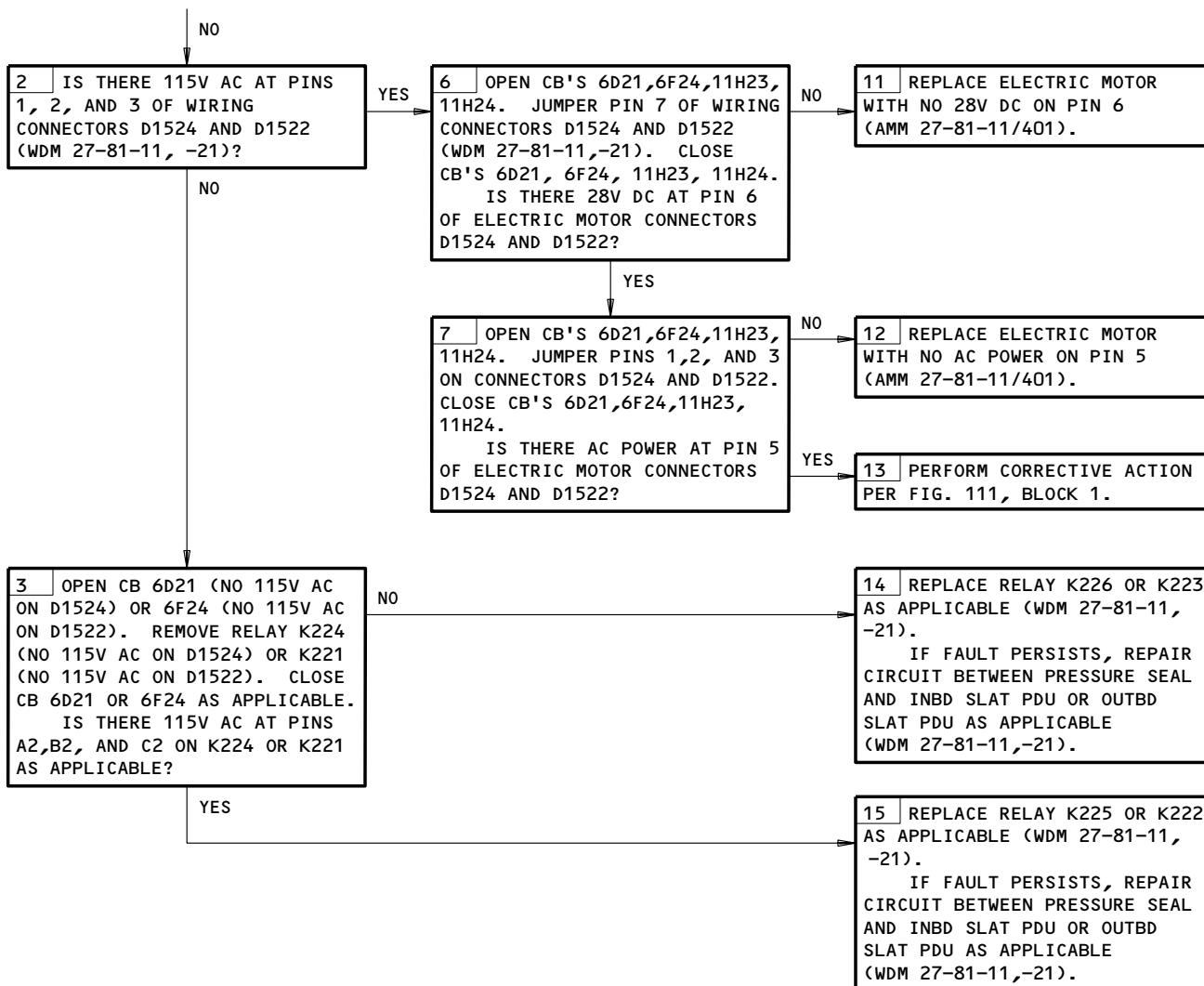
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FAULT ISOLATION/MAINT MANUAL

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(BLOCK 4)



LE SLAT DISAGREE EICAS Message Is Displayed When Slat Retraction To UP Or Pos 20 Is Selected With Altn Slat Drive System. Position Indication Stayed Halfway Between UP and 1 When Retraction To Up Was Selected.

Figure 112 (Sheet 2)

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**PREREQUISITES**

MAKE SURE THIS SYSTEMS WILL OPERATE:

EICAS (AMM 31-41-00/201)

AIR DATA SYSTEM (AMM 34-12-00/501)

HYDRAULIC POWER (AMM 29-11-00/501)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

 11C10, 11C14, 11C15, 11C16, 11G15, 11G16, 11G22,  
 11G23, 11H14, 11H23, 11H24, 11C4, 11J14, 11J15,  
 11J16, 11J17, 11J26, 11T36

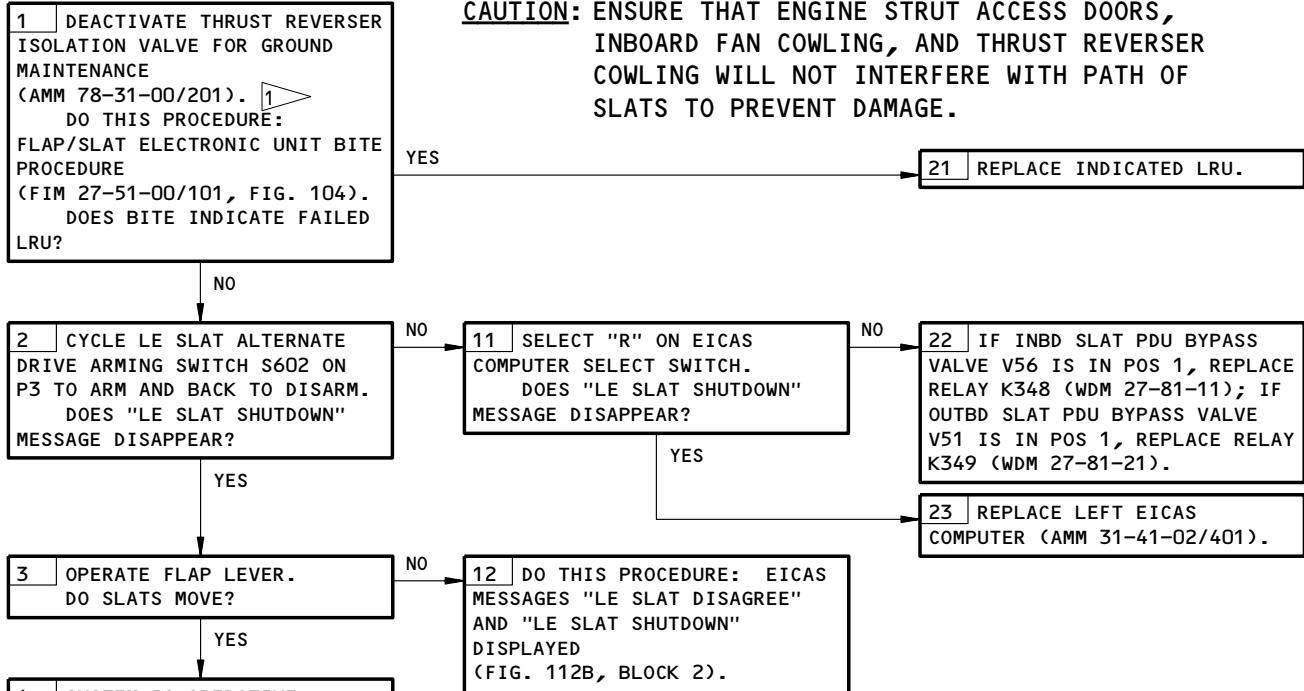
 MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:  
 ELECTRICAL POWER IS ON (AMM 24-22-00/201)

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

**EICAS MESSAGE "LE SLAT SHUTDOWN" DISPLAYED**

FAILURE TO DEACTIVATE THRUST REVERSER ISOLATION VALVE FOR GROUND MAINTENANCE COULD RESULT IN INADVERTENT THRUST REVERSER OPERATION WITH POSSIBLE INJURY TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** ENSURE THAT ENGINE STRUT ACCESS DOORS, INBOARD FAN COWLING, AND THRUST REVERSER COWLING WILL NOT INTERFERE WITH PATH OF SLATS TO PREVENT DAMAGE.



1. ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (AMM 78-31-00/201)

 EICAS Message LE SLAT SHUTDOWN Displayed  
 Figure 112A

EFFECTIVITY

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ALL

**PREREQUISITES**

MAKE SURE THIS SYSTEMS WILL OPERATE:

EICAS (AMM 31-41-00/201)

AIR DATA SYSTEM (AMM 34-12-00/501)

HYDRAULIC POWER (AMM 29-11-00/501)

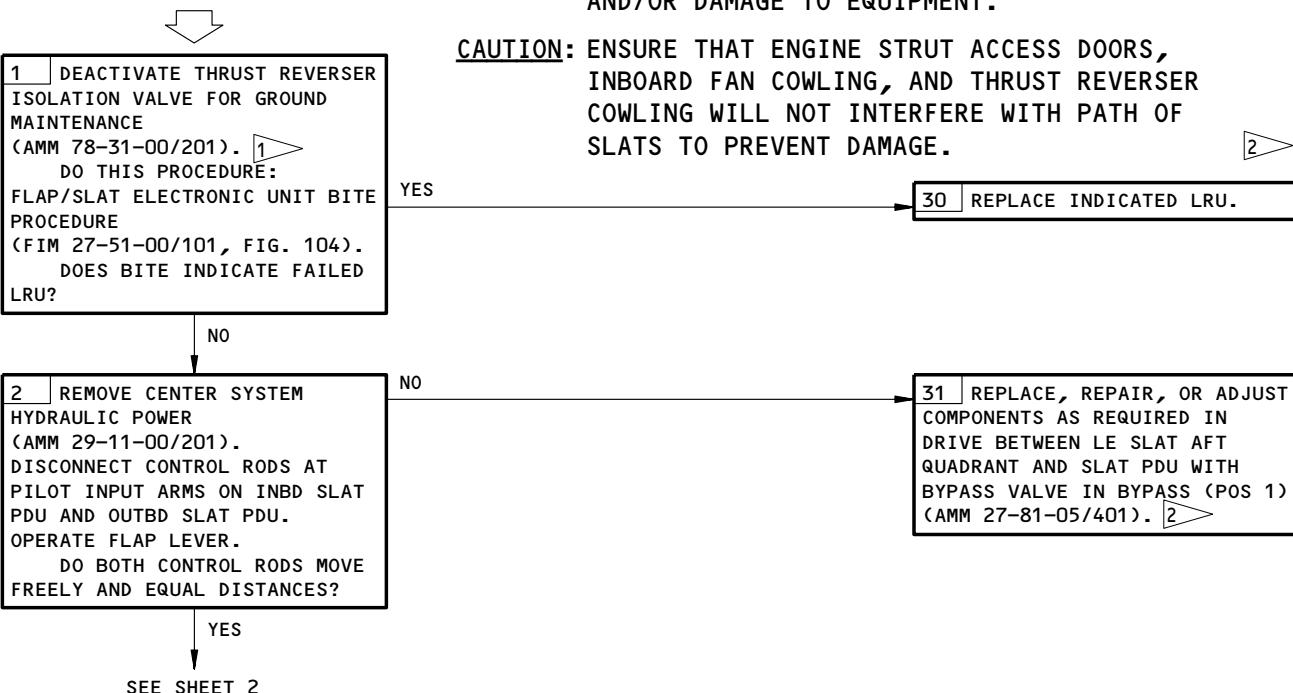
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:

 11C10, 11C14, 11C15, 11C16, 11G15, 11G16, 11G22,  
 11G23, 11H14, 11H23, 11H24, 11C4, 11J14, 11J15,  
 11J16, 11J17, 11J26, 11T36

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

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP LEVER DETENTS 5 AND 15 CAUSES INBD AILERON DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR OF ALL CONTROL SURFACES TO PREVENT INJURY AND DAMAGE.

**EICAS MESSAGES "LE SLAT DISAGREE" AND "LE SLAT SHUTDOWN" DISPLAYED**



1 ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (AMM 78-31-00/201)  
 2 FOLLOWING CORRECTIVE ACTION, CLEAR "LE SLAT SHUTDOWN" MESSAGE BY CYCLING LE SLAT ALTERNATE DRIVE ARMING SWITCH ON P3

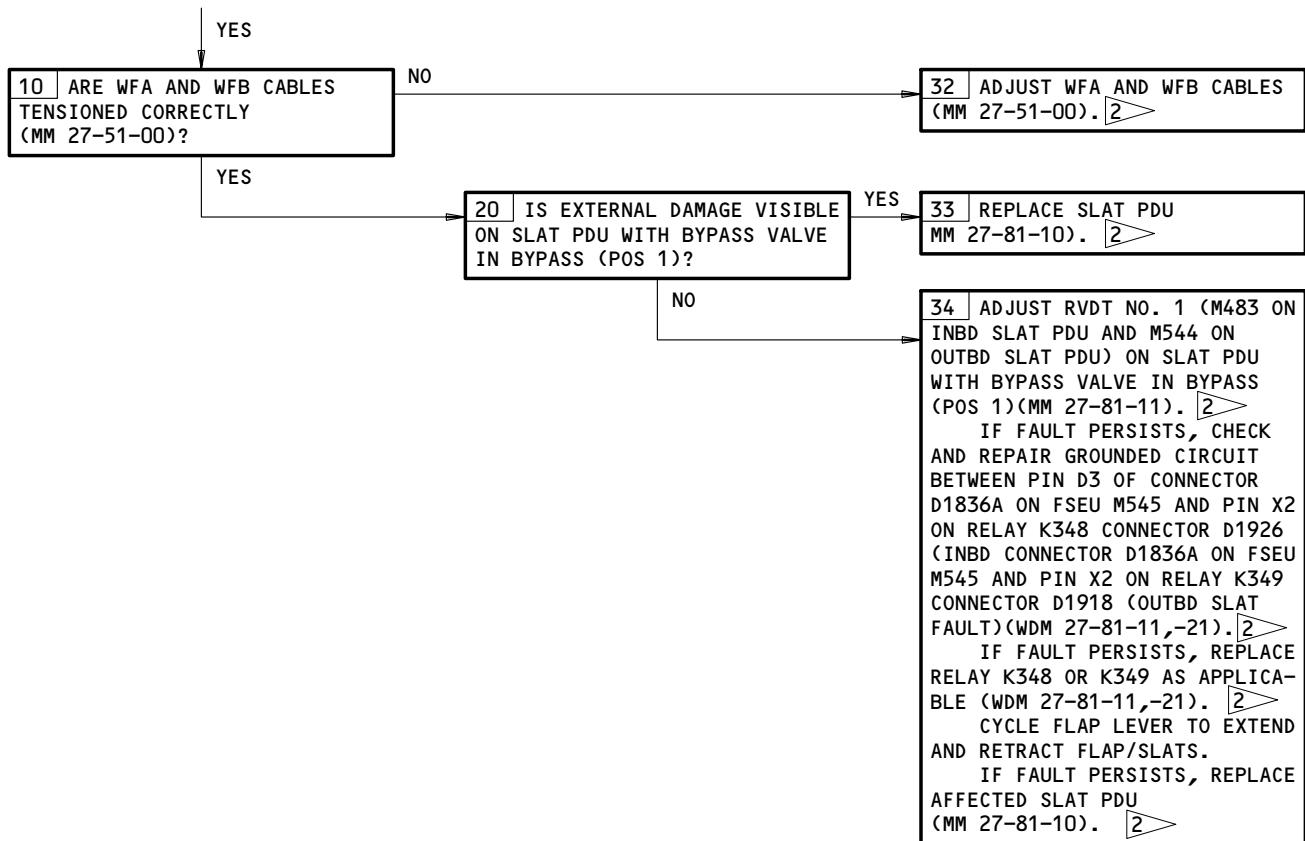
EICAS Messages LE SLAT DISAGREE and LE SLAT SHUTDOWN Displayed  
 Figure 112B (Sheet 1)

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FROM SHEET 1  
(BLOCK 2)



EICAS Messages LE SLAT DISAGREE and LE SLAT SHUTDOWN Displayed  
 Figure 112B (Sheet 2)

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FAULT ISOLATION/MAINT MANUAL

LEADING EDGE SLAT POSITION INDICATING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
CIRCUIT BREAKERS				
ALTN SLAT INBD PWR, C324	3	1	FLT COMPT, P6	*
ALTN SLAT OUTBD PWR, C325		1	6D21	*
CIRCUIT BREAKERS				
FLAP SLAT ELEC UNIT 1 CONT, C1025	3	1	6F24	*
FLAP SLAT ELEC UNIT 2 CONT, C1521		1	FLT COMPT, P11	*
FLAP SLAT ELEC UNIT 1 SENSOR, C1037		1	11C16	*
FLAP SLAT ELEC UNIT 2 SENSOR, C1524		1	11G16	*
SLAT ALTN CONT INBD, C1028		1	11C15	*
SLAT ALTN CONT OUTBD, C1029		1	11G15	*
SLAT SHUTOFF, C1020		1	11H23	*
SLAT POS IND, C1001		1	11H24	*
PROX SW TEST, C1178		1	11H14	*
COMPUTER - (REF 31-41-00, FIG. 101)				*
EICAS L, M10181				*
EICAS R, M10182				*
DIODES - R176,R178,R213,R214,R215,R216	3	6	119AL, MAIN EQUIP CTR, E2-4	*
LIGHT - LEADING EDGE, L661		1	FLT COMPT, P3	*
SWITCH - SENSOR				
SLAT NO. 1, S276 AND S282		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 2, S277 AND S283		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 3, S278 AND S284		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 4, S279 AND S285		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 5, S280 AND S286		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 6, S281 AND S287		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 7, S299 AND S305		1	INBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 8, S298 AND S304		1	INBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 9, S297 AND S303		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 10, S296 AND S302		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 11, S295 AND S301		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
SLAT NO. 12, S294 AND S300		1	OUTBD SLATS, SLATS EXTENDED	27-88-01
UNIT - (REF 27-51-00, FIG. 101)				
FLAPS/SLATS ELEC (FSEU), M545				
UNIT - (REF 32-09-03, FIG. 101)				
PROX SW ELEC (PSEU), M162				

\* SEE WM EQUIPMENT LIST

Component Index  
Figure 101

EFFECTIVITY

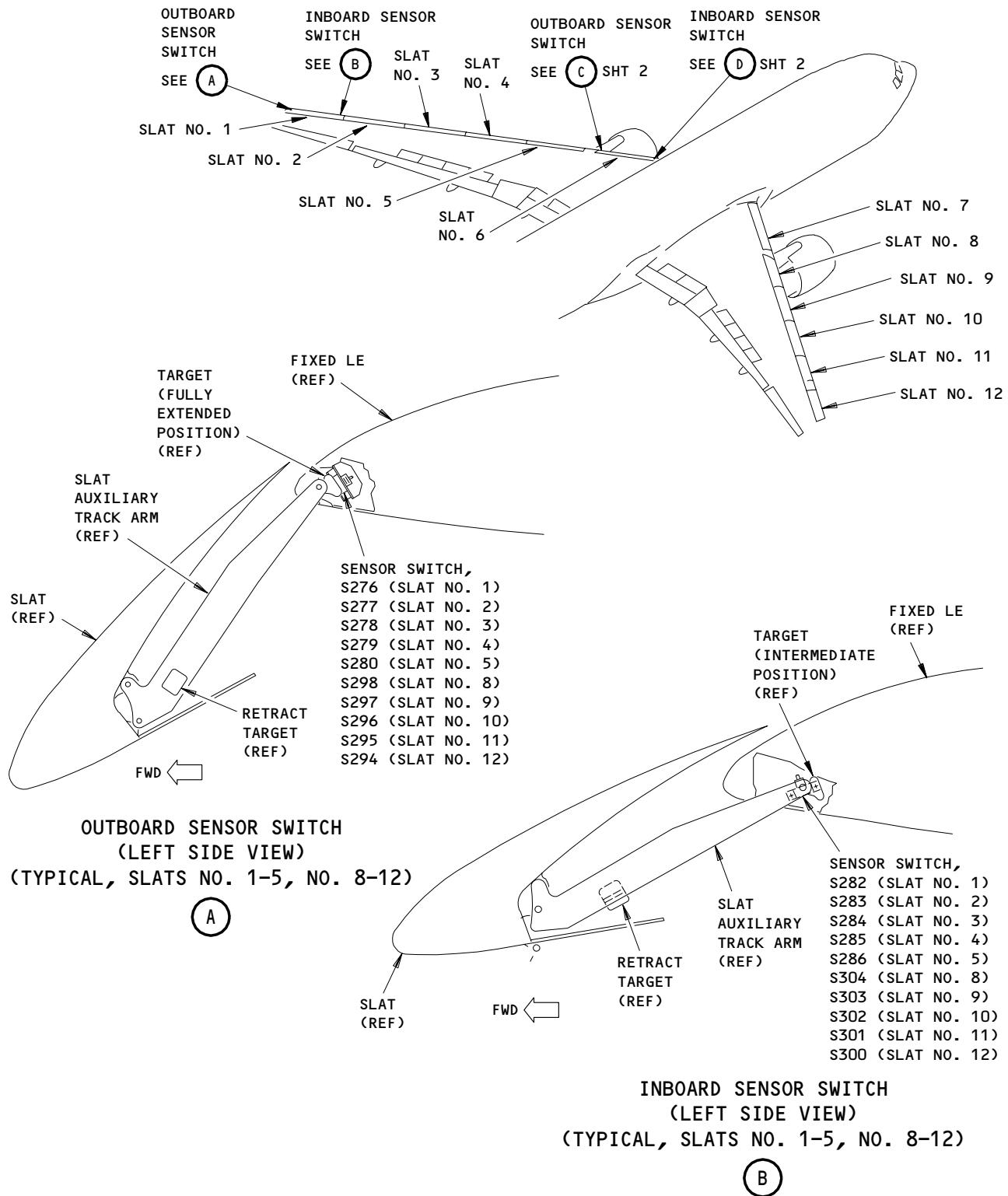
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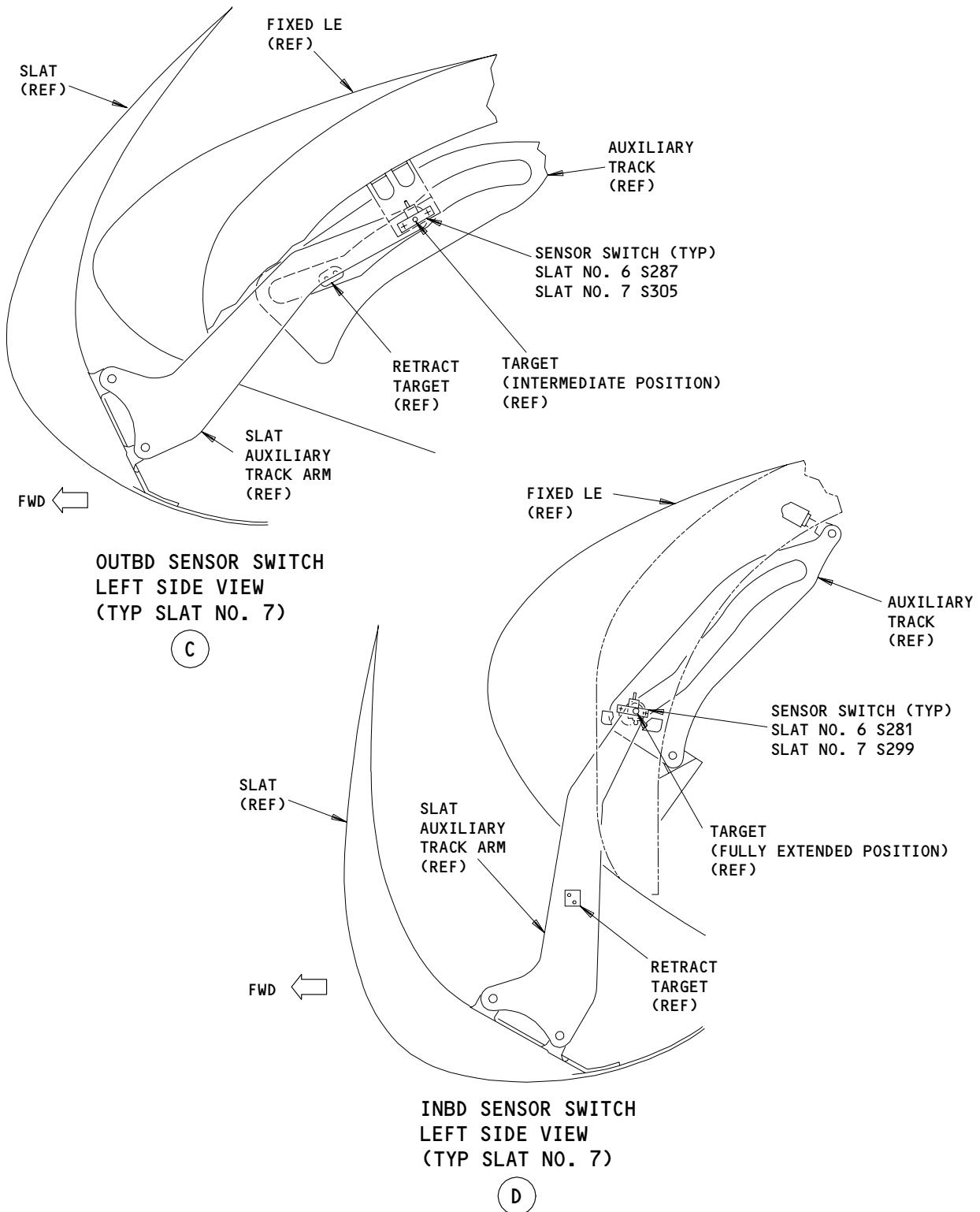
Leading Edge Slat Position Indication System - Component Location  
Figure 102 (Sheet 1)

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FAULT ISOLATION/MAINT MANUAL



Component Location  
Figure 102 (Sheet 2)

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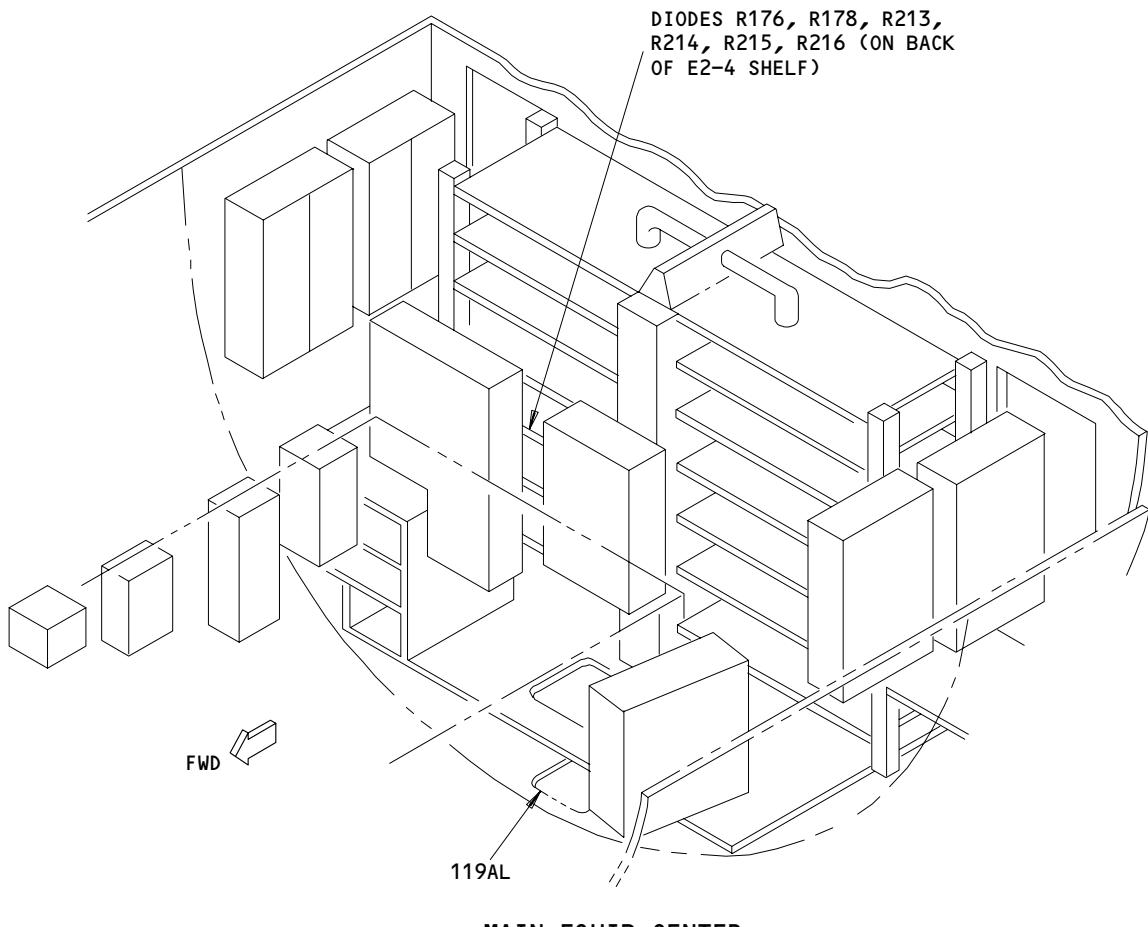
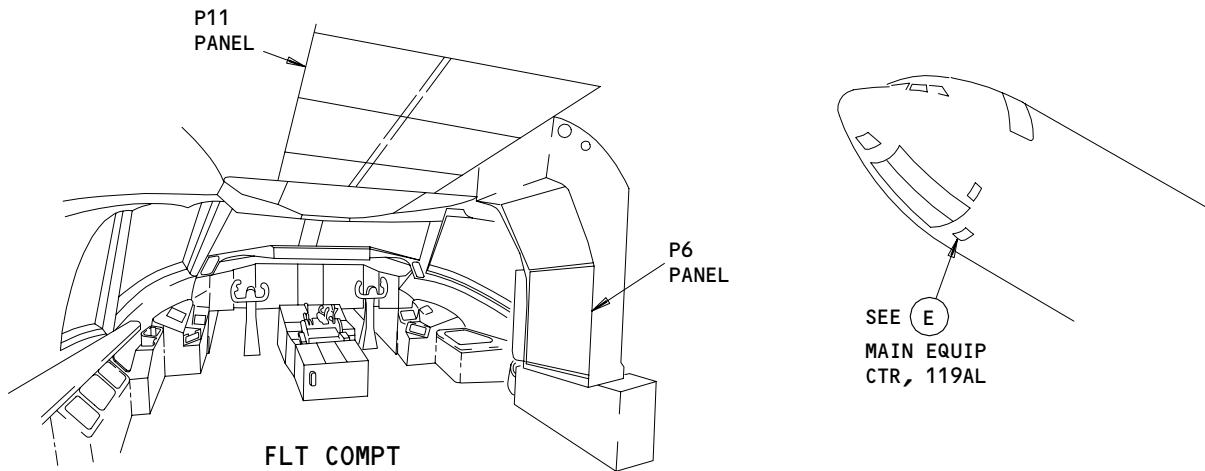
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FAULT ISOLATION/MAINT MANUAL



Component Location  
Figure 102 (Sheet 3)

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Not Used  
Figure 103

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**PREREQUISITES**

ELECTRICAL POWER (AMM 24-22-00)

AIR DATA SYSTEM (AMM 34-12-00)

EICAS (AMM 31-41-00)

 CB'S: 11C16, 11G16, 11C15, 11G15, 6F24, 6D21,  
 11H23, 11H24, 11C10, 11T36, 11H14

BOTH FLAP POINTERS  
 ARE ON 1 WITH THE  
 FLAP LEVER IN UP.  
 NO LEADING EDGE  
 EICAS MESSAGES ARE  
 DISPLAYED.

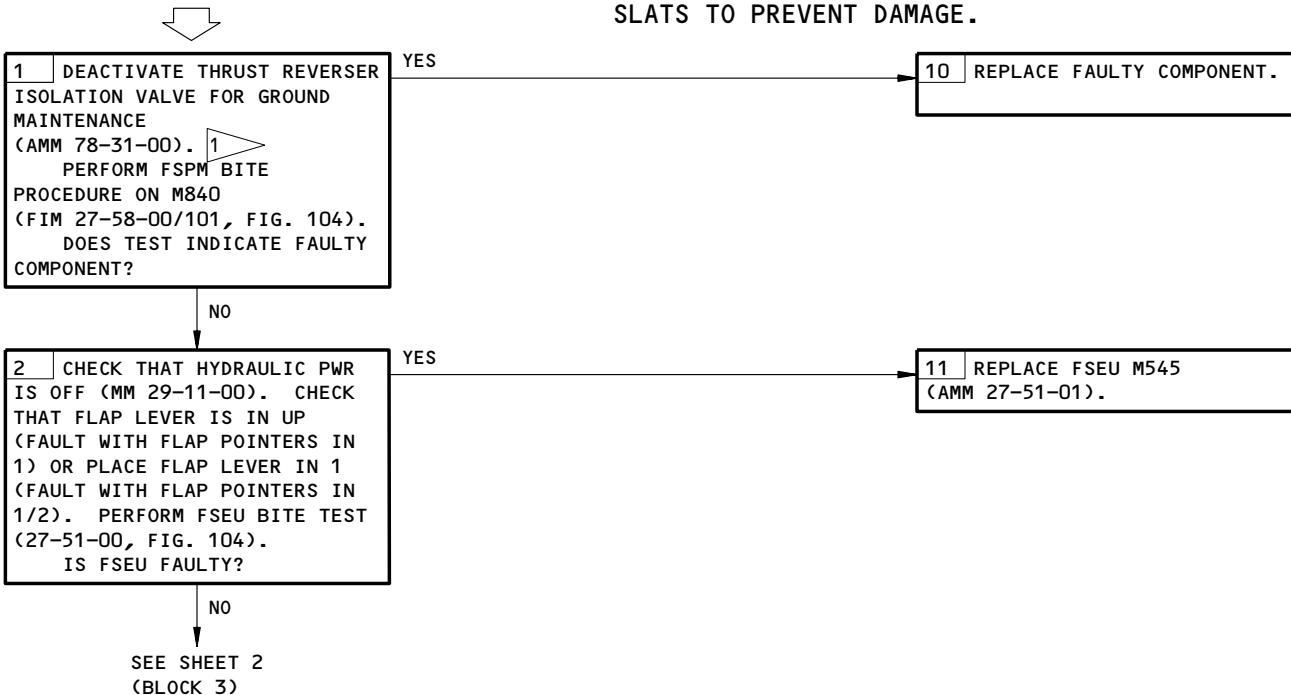
OR

BOTH FLAP POINTERS  
 ARE IN 1/2 WITH THE  
 FLAP LEVER IN 1.  
 NO LEADING EDGE  
 EICAS MESSAGES ARE  
 DISPLAYED.

**WARNING:** CENTER HYD SYSTEM PROVIDES PWR TO ALL  
 CONTROL SURFACES. FLAP TRAVEL BETWEEN FLAP  
 LEVER DETENTS 5 AND 15 CAUSES INBD AILERON  
 DROOP. KEEP PERSONNEL AND EQUIPMENT CLEAR  
 OF ALL CONTROL SURFACES TO PREVENT INJURY  
 AND DAMAGE.

FAILURE TO DEACTIVATE THRUST REVERSER  
 ISOLATION VALVE FOR GROUND MAINTENANCE  
 COULD RESULT IN INADVERTENT THRUST REVERSER  
 OPERATION WITH POSSIBLE INJURY TO PERSONNEL  
 AND/OR DAMAGE TO EQUIPMENT.

**CAUTION:** ENSURE THAT ENGINE STRUT ACCESS DOORS,  
 INBOARD FAN COWLING, AND THRUST REVERSER  
 COWLING WILL NOT INTERFERE WITH PATH OF  
 SLATS TO PREVENT DAMAGE.



 ACTIVATE THRUST REVERSER ISOLATION VALVE FOLLOWING CORRECTIVE ACTION (MM 78-31-00)

Both Flap Pointers Are On 1 With The Flap Lever In UP. No Leading Edge EICAS  
 Messages Are Displayed. or Both Flap Pointers Are In 1/2 With The Flap Lever In 1.  
 No Leading Edge EICAS Messages Are Displayed.

Figure 104 (Sheet 1)

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NO

**3**  PRESSURIZE CENTER HYDRAULIC SYSTEM (AMM 29-11-00). MOVE FLAP LEVER TO 30, ALLOW FLAPS/SLATS TO TRAVEL, THEN MOVE FLAP LEVER TO 1, ALLOW FLAPS/SLATS TO TRAVEL. PLACE ALT FLAPS/SLATS POSITION SELECTOR SWITCH S598 ON P3 IN 1. PRESS LE SLAT ALT DRIVE ARMING SWITCH S602 ON P3 TO ARM LE SLAT ALT DRIVE (SWITCH LIGHT ON).  
DOES INBD OR OUTBD SET OF SLATS MOVE AS ARMING SWITCH S602 IS PRESSED?

NO

**12**  REPLACE RELAY K216 IN P33 (WDM 27-58-11).

IF FAULT PERSISTS, FAULT WITH FLAP POINTERS IN 1/2: REPAIR CIRCUIT BETWEEN G43 ON TB200 AND FSEU PIN J2 ON D1836B (WDM 27-58-11). FAULT WITH FLAP POINTERS IN 1: REPAIR CIRCUIT BETWEEN PIN 12 ON K216 AND FSEU PIN G8 ON D1836B (WDM 27-58-11).

IF FAULT PERSISTS, REPLACE FLAP POSITION TRANSMITTER 5-RIGHT (AMM 27-51-45). CHECK AND REPAIR CIRCUITS BETWEEN THE FOLLOWING PINS (WDM 27-58-21):

1. D1548, PIN 8 AND D2676, PIN 10
2. D1548, PIN 9 AND D2676, PIN 9
3. D1548, PIN 11 AND D2676, PIN 11
4. D1548, PIN 10 and D2676, PIN 13
5. D1548, PIN 12 and D2676, PIN 12

YES

**13**  ADJUST RVDT NO. 2 ON SLAT PDU FOR SET OF SLATS THAT MOVED (M549 ON INBD SLAT PDU OR M548 ON OUTBD SLAT PDU) (AMM 27-81-11).

Both Flap Pointers Are On 1 With The Flap Lever In UP. No Leading Edge EICAS Messages Are Displayed. or Both Flap Pointers Are In 1/2 With The Flap Lever In 1. No Leading Edge EICAS Messages Are Displayed.

Figure 104 (Sheet 2)

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