Scandinavian Airlines System

PAGE	DATE	CODE
CHAPTER 29 TAB		
HYDRAULIC POWER		
EFFECTIVE PAGES SEE LAST PAGE OF LIST FOR NUMBER OF PAGES		
29-CONTENTS		
1	AUG 22/99	01
2	APR 22/09	SAS
3	APR 22/09	SAS
R 4	AUG 22/09	SAS.101
5	DEC 22/02	SAS
6	DEC 22/02	SAS
7	DEC 22/02	SAS
8	BLANK	
29-HOW TO USE THE FIM		
1	AUG 22/99	01
2	AUG 22/99	01
3	AUG 22/99	01
4	AUG 22/99	01
5	AUG 22/99	01
6	AUG 22/99	01
29-INDEX		
1	FEB 10/91	02
2	FEB 10/91	01
3	AUG 22/00	03
4	BLANK	
29-EICAS MESSAGES		
1	FEB 10/91	01
2	FEB 10/91	01
3	APR 22/00	02
4	MAY 10/96	02
29-FAULT CODE DIAGRAM		
1	FEB 10/88	05
2	AUG 22/00	02
3	NOV 10/87	05
4	MAY 10/88	08
5	APR 22/05	01
6	MAY 10/96	03
7	AUG 22/00	04
8	AUG 10/89	01
9	AUG 22/03	01
10	AUG 22/03	01
11	AUG 22/03	01
12	AUG 22/03	01
13	AUG 22/03	02
14	AUG 22/03	01
15	AUG 22/03	01
16	AUG 22/03	01
17	AUG 22/03	01
18	AUG 22/03	06

PAGE	DATE	CODE
29-FAULT CODE INDEX		
1	AUG 22/03	02
2	AUG 22/03	04
3	APR 22/04	04
4	AUG 22/03	05
5	AUG 22/03	04
6	AUG 22/03	04
7	DEC 22/01	05
8	AUG 22/03	03
9	MAY 10/96	05
10	AUG 22/03	05
11	AUG 22/03	05
12	AUG 22/03	04
13	AUG 22/03	04
14	AUG 22/03	06
15	AUG 22/03	07
16	BLANK	
29-BITE INDEX		
1	AUG 22/99	01
2	AUG 22/99	01
3	AUG 22/99	01
4	BLANK	
29-11-00		
101	FEB 01/85	04
102	MAY 01/87	18
103	MAY 10/92	21
104	MAY 01/87	11
105	AUG 10/92	21
106	MAY 01/87	10
107	AUG 10/92	19
108	MAY 01/84	03
109	NOV 01/83	03
110	MAY 01/86	04
111	NOV 01/85	04
112	MAY 10/92	04
113	FEB 01/84	01
114	NOV 01/85	06
115	FEB 01/85	05
116	MAY 01/87	16
117	MAY 01/87	01
118	FEB 10/89	03
119	MAY 01/87	01
120	AUG 10/92	07
R 121	AUG 22/09	07.1
122	APR 22/99	02
123	APR 22/99	02
124	FEB 10/89	02
125	MAY 10/90	02
126	FEB 10/89	02
127	DEC 22/05	02
128	FEB 10/89	02
129	FEB 10/89	02
130	FEB 10/89	02
131	DEC 22/05	19
132	FEB 10/94	20
133	AUG 22/03	11
134	NOV 10/96	17

PAGE	DATE	CODE
29-11-00		CONT.
135	NOV 10/96	18
136	NOV 10/96	08
137	NOV 10/96	14
138	APR 22/99	06
139	APR 22/99	10
140	APR 22/99	11
141	APR 22/05	10
142	APR 22/99	09
143	APR 22/99	10
144	APR 22/99	09
145	AUG 22/99	11
146	APR 22/99	10
147	APR 22/05	11
148	APR 22/99	10
149	APR 22/99	11
150	APR 22/99	11
151	APR 22/99	10
152	APR 22/99	12
153	APR 22/07	13
154	APR 22/99	12
155	APR 22/99	11
156	APR 22/99	11
157	APR 22/99	11
158	APR 22/99	11
159	APR 22/99	11
160	APR 22/99	09
161	APR 22/99	11
162	DEC 22/05	13
163	DEC 22/05	03
164	DEC 22/05	08
165	AUG 22/00	08
166	AUG 22/00	08
167	AUG 22/00	08
168	AUG 22/00	10
169	AUG 22/00	10
170	AUG 22/00	11
171	AUG 22/00	12
172	APR 22/09	12
173	APR 22/09	12
174	APR 22/09	14
175	APR 22/09	13
176	APR 22/09	10
177	APR 22/09	07
178	APR 22/09	07
179	APR 22/09	07
180	APR 22/09	06
180A	APR 22/09	07
180B	APR 22/09	07
180C	APR 22/09	06
180D	BLANK	
29-18-00		
101	AUG 01/83	01
102	AUG 01/83	01

Scandinavian Airlines System

PAGE	DATE	CODE
29-21-00		
101	DEC 22/00	01
102	FEB 10/89	01
103	APR 22/02	01
104	MAY 10/89	01
105	NOV 01/83	01
106	AUG 01/83	01
107	AUG 01/83	01
108	AUG 01/83	01
109	AUG 10/98	01
110	AUG 10/98	01
111	AUG 10/98	01
112	AUG 10/98	01
113	AUG 10/98	01
114	AUG 10/98	01
115	AUG 22/00	01
116	AUG 10/98	01
117	AUG 10/98	01
118	AUG 10/98	01
119	AUG 10/98	01
120	AUG 10/98	01
121	AUG 10/98	01
122	AUG 10/98	01
29-22-00		
101	NOV 10/90	21
102	MAY 10/88	10
103	MAY 10/88	10
104	MAY 10/88	10
105	MAY 10/92	09
106	MAY 10/92	09
107	MAY 10/92	09
108	MAY 10/92	09
109	MAY 10/92	09
110	BLANK	
29-31-00		
101	DEC 22/00	01
102	MAY 10/92	01
103	DEC 22/00	01
104	MAY 10/92	05
105	AUG 01/83	01
106	MAY 10/92	01
107	AUG 01/83	01
108	NOV 01/85	01
29-32-00		
101	AUG 01/83	01
102	AUG 01/83	01
103	MAY 10/92	06
104	AUG 01/83	01
105	AUG 01/83	01
106	DEC 22/99	01
107	DEC 22/99	01
108	BLANK	

PAGE	DATE	CODE
29-33-00		
101	NOV 01/85	01
102	MAY 10/92	05
103	AUG 01/83	01
104	AUG 01/83	01
105	AUG 01/83	01
106	BLANK	

PAGE	DATE	CODE

R = REVISED, A = ADDED OR D = DELETED
F = FOLDOUT PAGE
33
AUG 22/09

D633T633

CHAPTER 29
EFFECTIVE PAGES
PAGE 2
LAST PAGE

CHAPTER 29 - HYDRAULIC

TABLE OF CONTENTS

CHAPTER 29 - HYDRAULIC

TABLE OF CONTENTS

CHAPTER 29 - HYDRAULIC

TABLE OF CONTENTS

CHAPTER 29 - HYDRAULIC

TABLE OF CONTENTS

CHAPTER 29 - HYDRAULIC

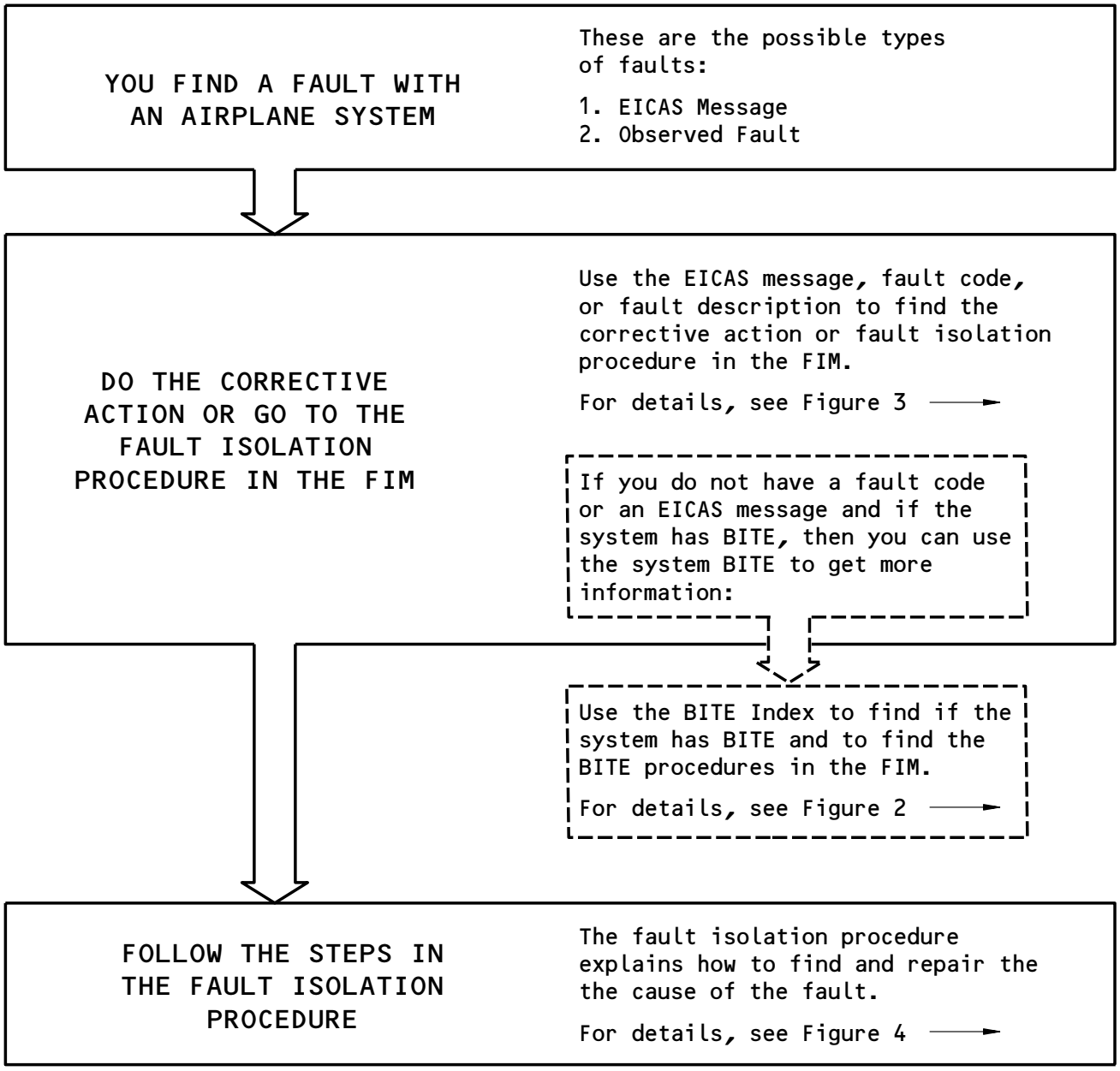
TABLE OF CONTENTS

CHAPTER 29 - HYDRAULIC

TABLE OF CONTENTS

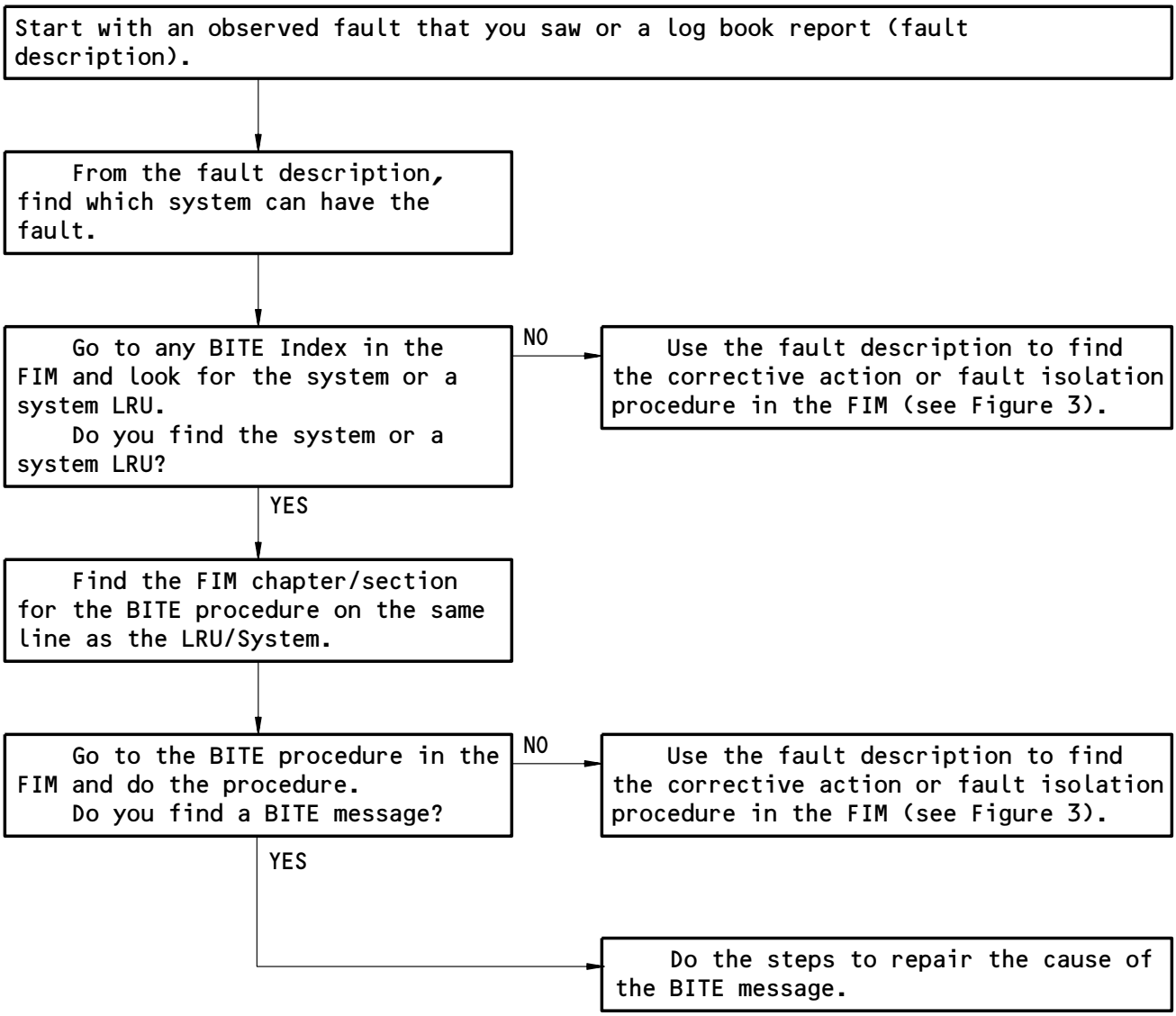
CHAPTER 29 - HYDRAULIC

TABLE OF CONTENTS



Basic Fault Isolation Process
Figure 1

K37664



How to Get Fault Information from BITE
Figure 2

IF YOU HAVE:	THEN DO THIS TO FIND THE CORRECTIVE ACTION OR FAULT ISOLATION PROCEDURE IN THE FIM:
FAULT CODE	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).
EICAS MESSAGE TEXT (with no fault code)	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).
OBSERVED FAULT DESCRIPTION	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

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

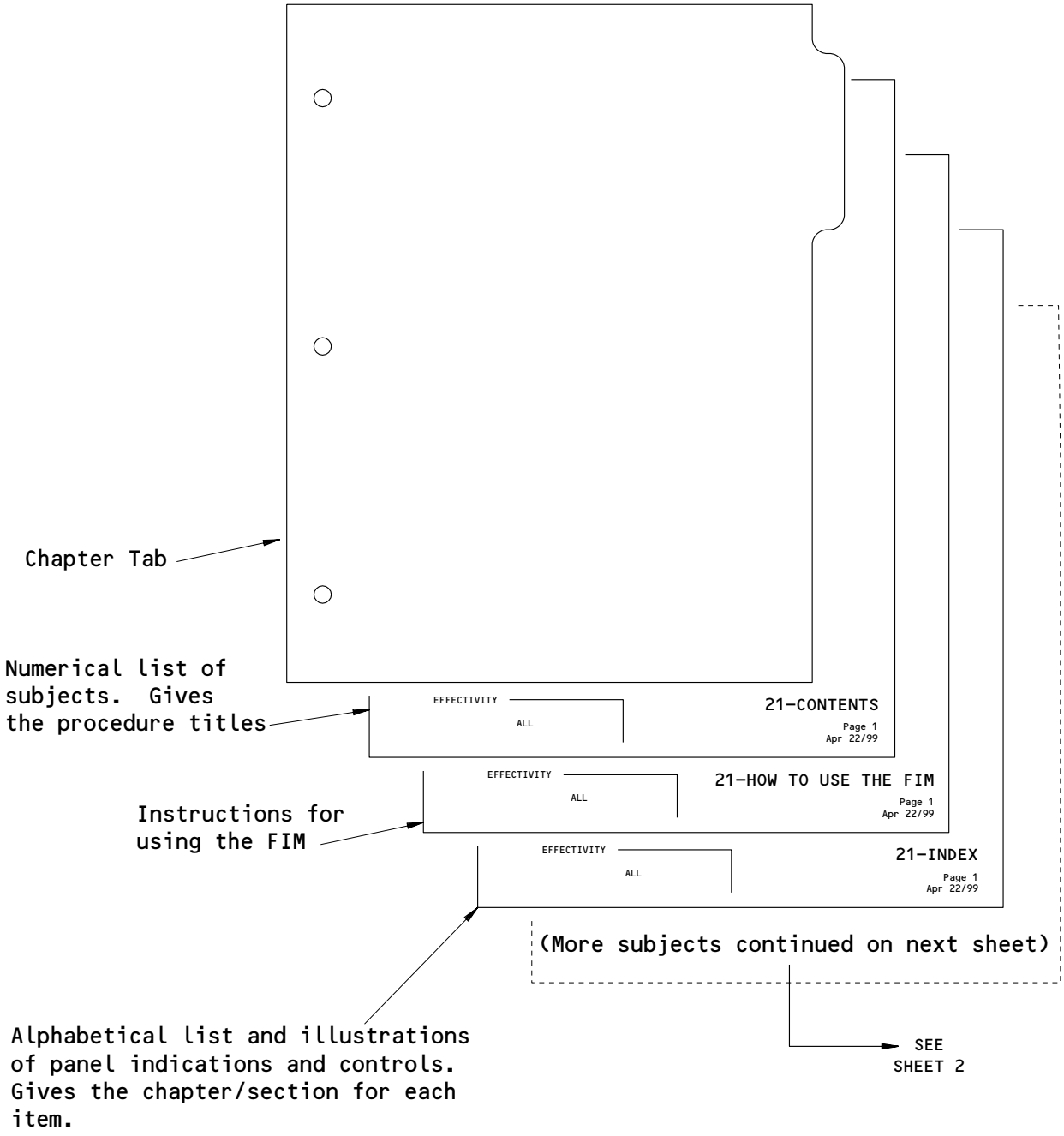
PREREQUISITES

- 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.

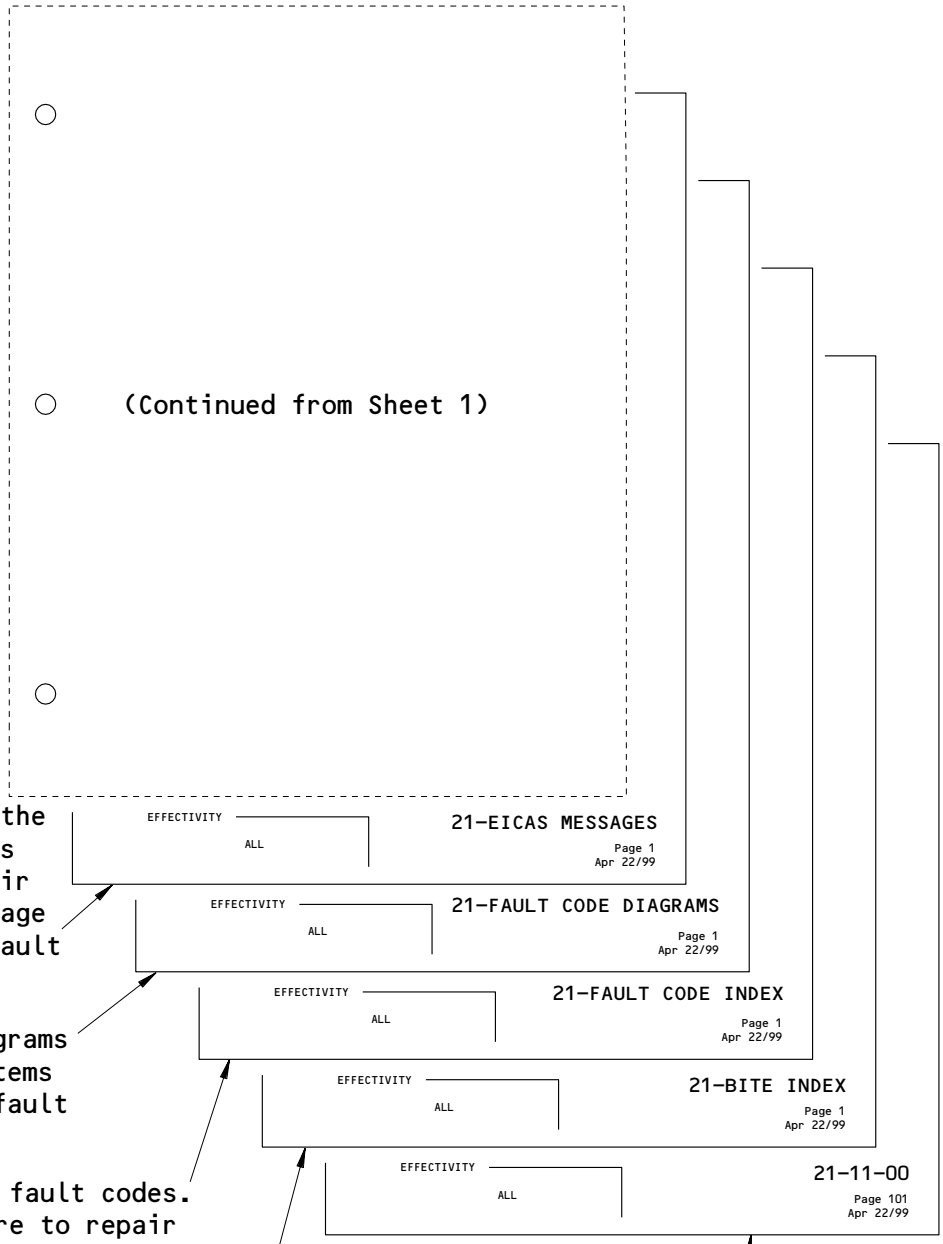
FAULT ISOLATION BLOCKS

- 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



Subjects in Each FIM Chapter
Figure 5 (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.

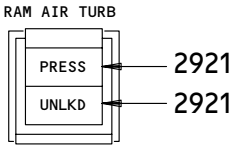
Alphabetical list of all the LRUs/systems that have BITE. Gives the chapter/ section for the BITE procedure.

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

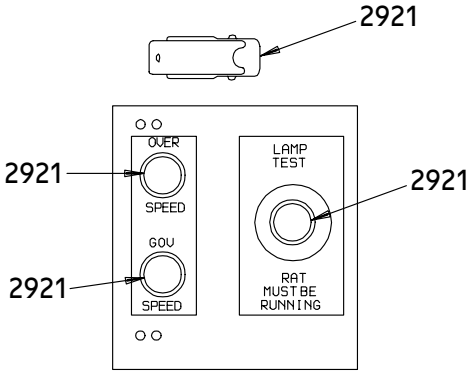
Subjects in Each FIM Chapter
Figure 5 (Sheet 2)

K37669

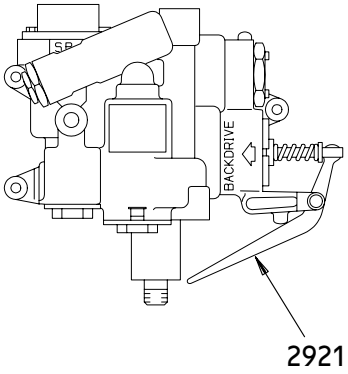
HYDRAULIC POWER – INDEX



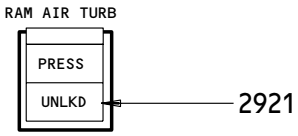
OVERHEAD PANEL



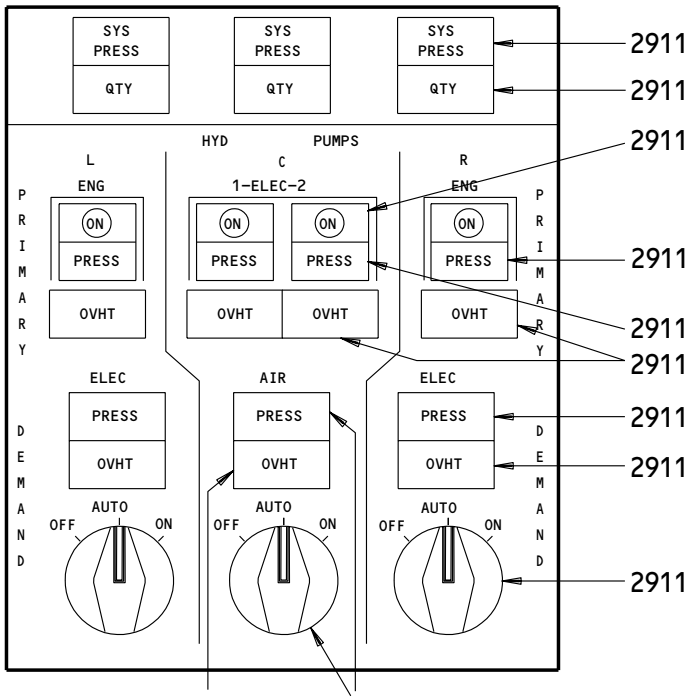
RAT TACHOMETER AND
RETRACTION SWITCH



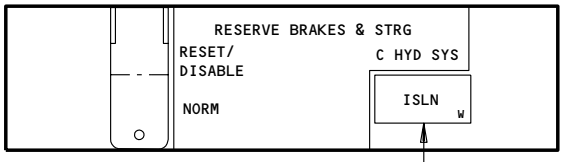
RAT GROUND
CHECKOUT MODULE

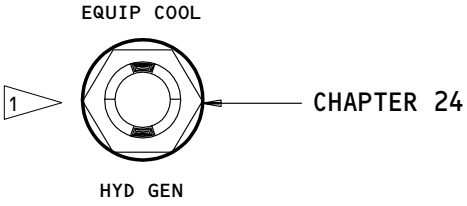


OVERHEAD PANEL

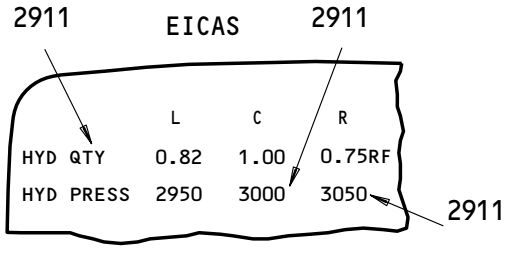


OVERHEAD PANEL





ACCESSORY PANEL



1 AS INSTALLED

HYDRAULIC POWER - INDEX

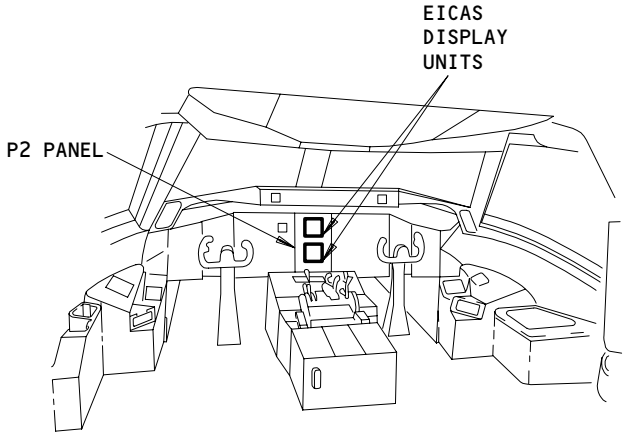
EFFECTIVITY

ALL

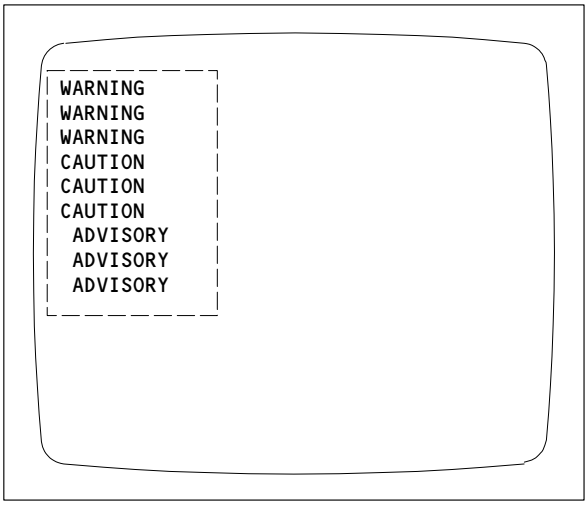
221981

HYDRAULIC POWER - EICAS MESSAGE LIST

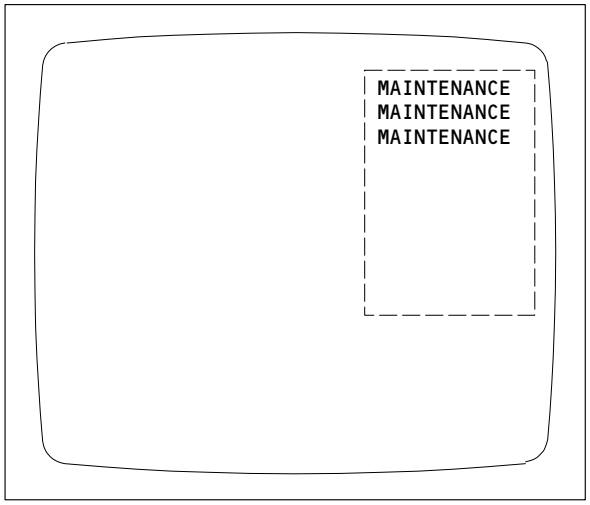
1. General
   A. This procedure shows the EICAS message locations and gives a list of procedures to find the solution for each message.
      (1) EICAS Message Locations (Fig. 1)
         (a) Figure 1 shows the location of the EICAS display units and the area where the messages show on the display units.
         (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



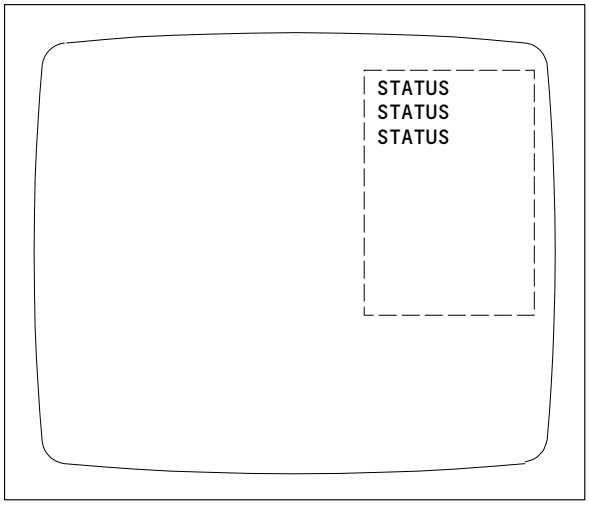
FLIGHT COMPARTMENT



ENGINE PRIMARY PAGE OR COMPACTED PAGE
(TOP DISPLAY UNIT)



ECS/MSG PAGE
(BOTTOM DISPLAY UNIT)



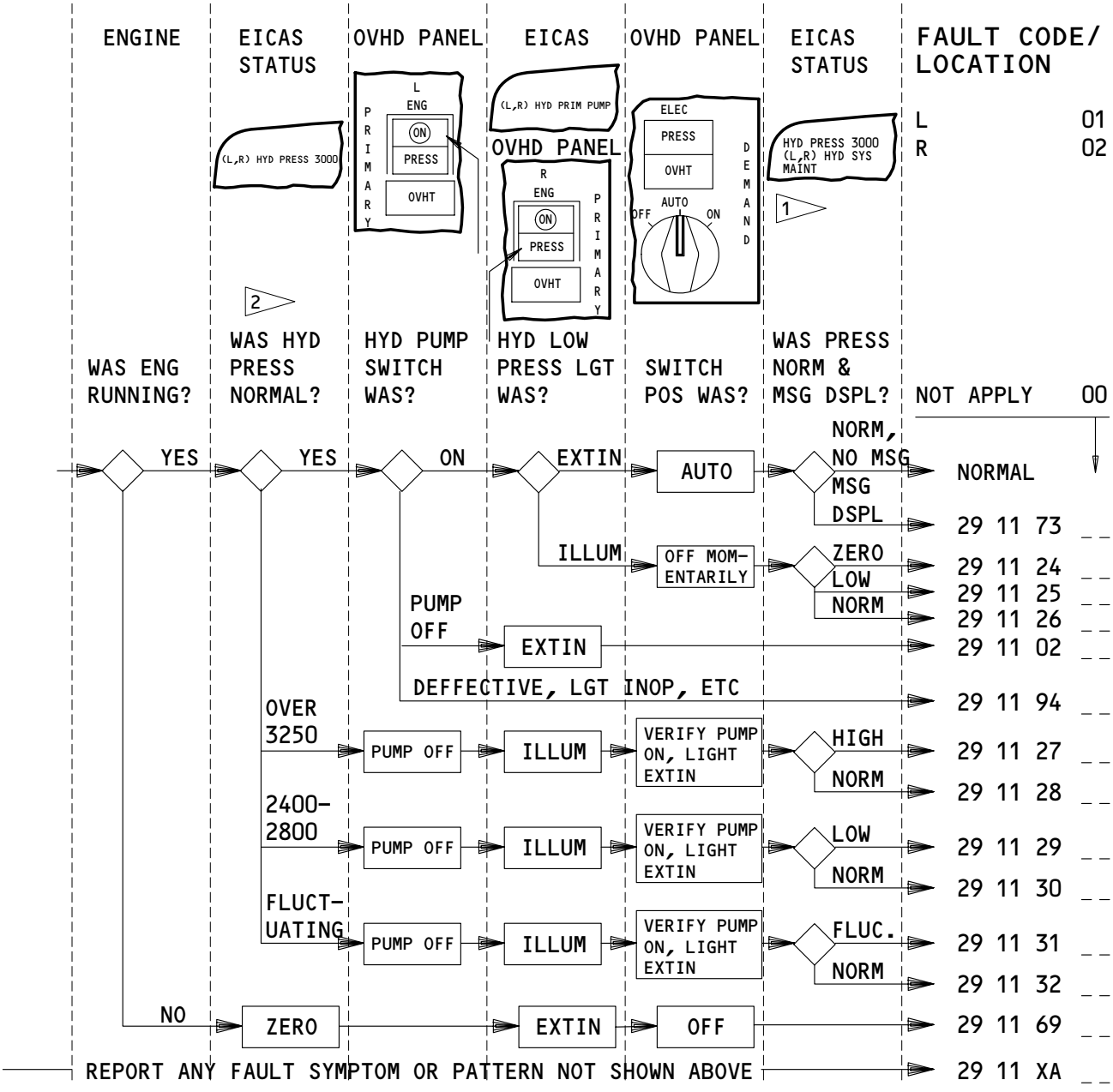
STATUS PAGE
(BOTTOM DISPLAY UNIT)

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

EICAS Message Locations
Figure 1

EICAS MESSAGE LIST		
EICAS MESSAGE	LEVEL	PROCEDURE
C DEM HYD OVHT	C	FIM 29-11-00/101, Fig. 121
C HYD DEM PUMP	C	FIM 29-11-00/101, Fig. 113
C HYD PRIM 1 (2)	C	FIM 29-11-00/101, Fig. 109
C HYD QTY	C	FIM 29-11-00/101, Fig. 119
C HYD QTY O/FULL	M	FIM 29-11-00/101, Fig. 129
C HYD SYS MAINT	S,M	FIM 29-11-00/101, Fig. 125
C HYD SYS PRESS	B	Go to the 29-FAULT CODE INDEX and look at the fault codes: 29 11 17, 29 31 01.
C HYD 1 (2) OVHT	C	FIM 29-11-00/101, Fig. 123
L (R) DEM HYD OVHT	C	FIM 29-11-00/101, Fig. 122
L (R) HYD DEM PUMP	C	FIM 29-11-00/101, Fig. 105
L (R) HYD PRIM PUMP	C	FIM 29-11-00/101, Fig. 104A
L (R) HYD QTY	C	FIM 29-11-00/101, Fig. 116
L (R) HYD QTY O/FULL	M	FIM 29-11-00/101, Fig. 129
L (R) HYD SYS MAINT	S,M	FIM 29-11-00/101, Fig. 124

EICAS MESSAGE LIST		
EICAS MESSAGE	LEVEL	PROCEDURE
L (R) HYD SYS PRESS	B	Go to the 29-FAULT CODE INDEX and look at the fault codes: 29 11 12, 29 31 01.
L (R) PRIM HYD OVHT	C	FIM 29-11-00/101, Fig. 120
RAT UNLOCKED	C	Adjust or replace the ram air turbine up limit switch, S369 (AMM 29-21-17/201)
RSV BRAKE VAL	C	FIM 29-11-00/101, Fig. 127



1 EICAS MSG DISPLAYS IF PRESS LESS THAN 2800 FOR MORE THAN 60 SEC WITH BOTH ENGINES RUNNING. MSG IS INHIBITED BY HYD SYS LOW PRESS LGT.

2 NORMAL HYDRAULIC PRESSURE IS 2900 - 3200.

APPLICABLE CIRCUIT BREAKERS

11D29	L ENG PUMP SUPPLY	11L17	SYSTEM PRESS L
11D30	R ENG PUMP SUPPLY	11L23	R ENG PUMP DEPRESS
11L14	L ENG PUMP DEPRESS	11L26	SYSTEM PRESS R

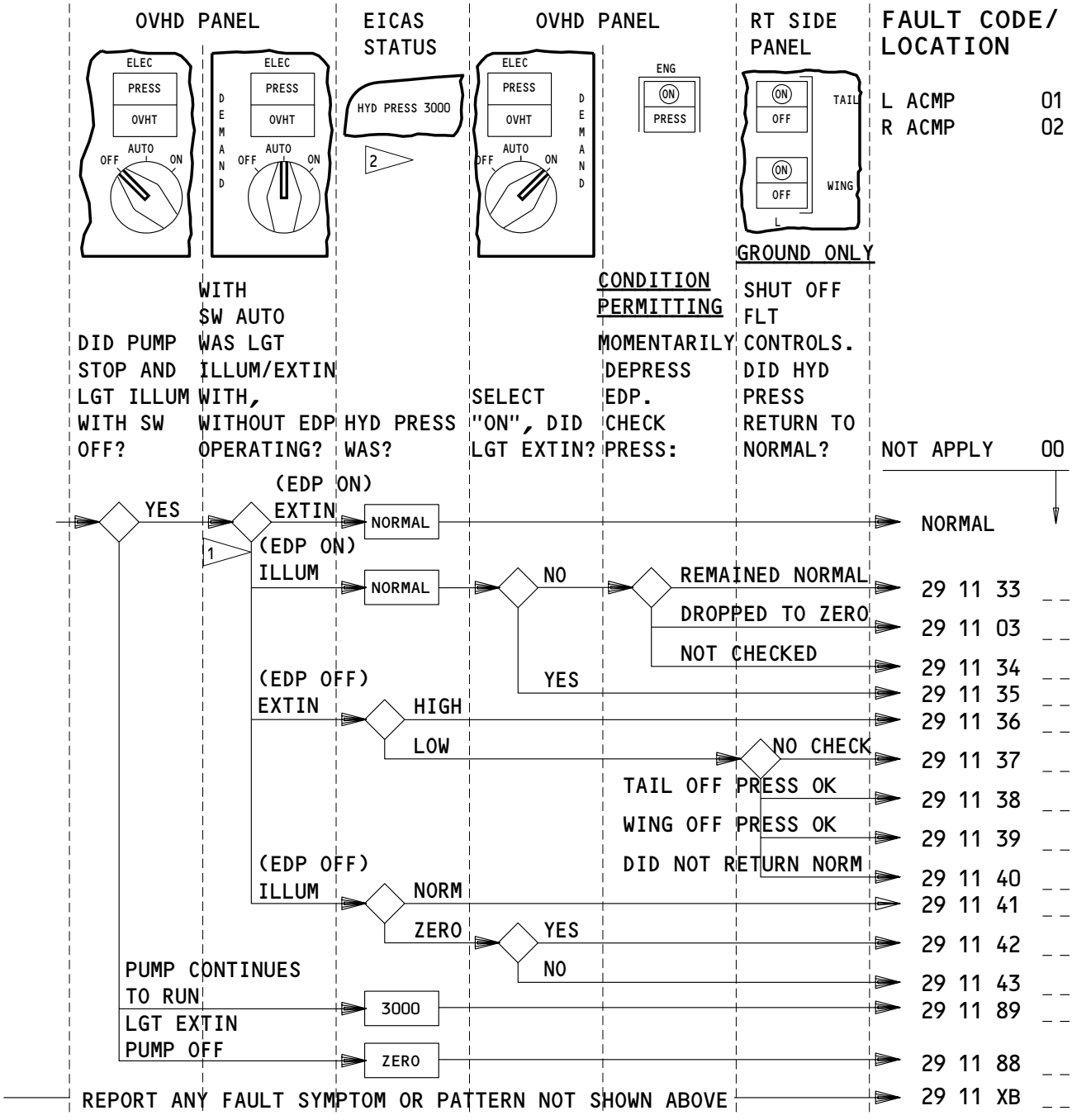
EDP (ENGINE DRIVEN PUMP) - FAULT CODES

EFFECTIVITY

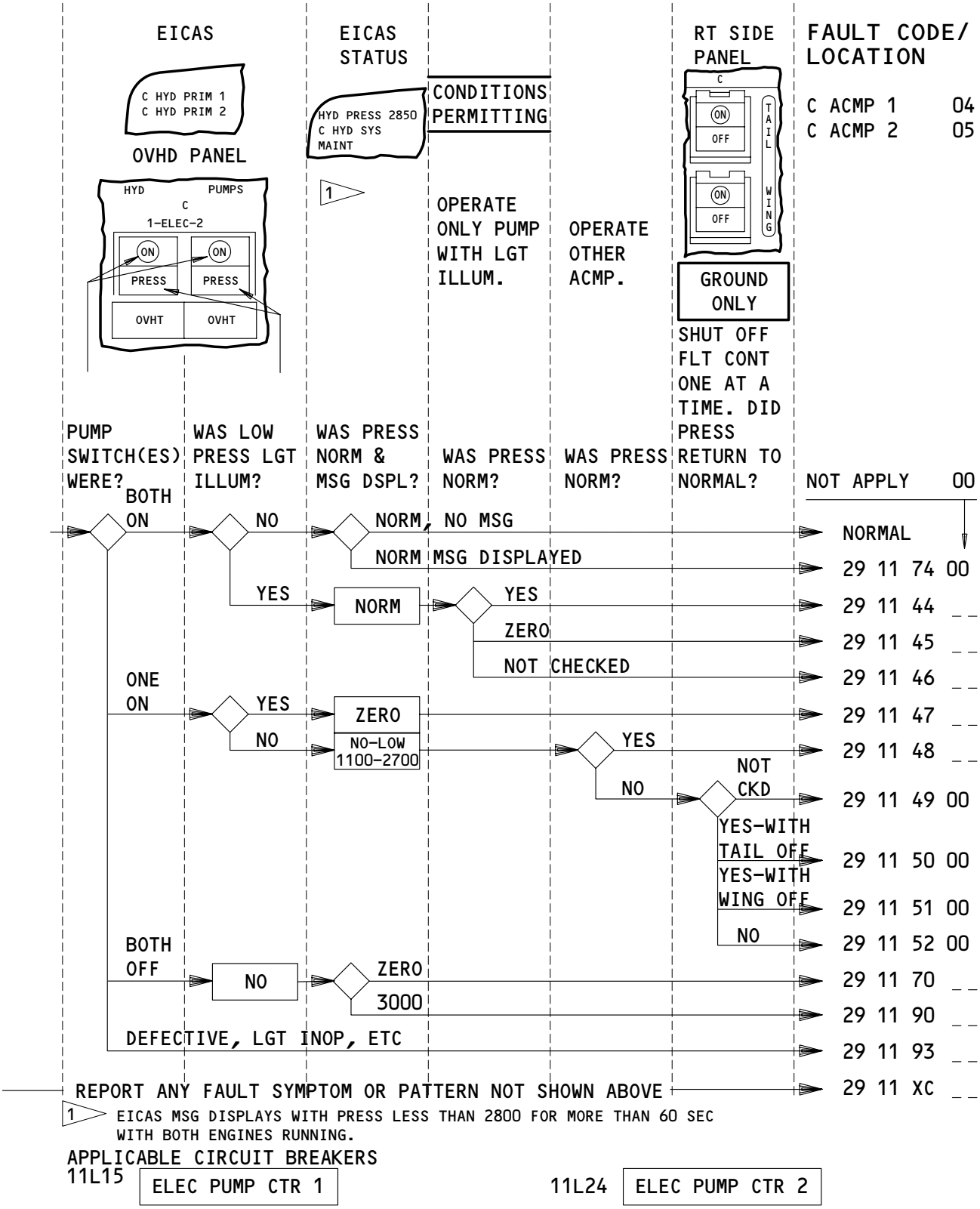
ALL

29-FAULT CODE DIAGRAM

173997



ACMP (AC MOTOR PUMP) LEFT/RIGHT - FAULT CODES



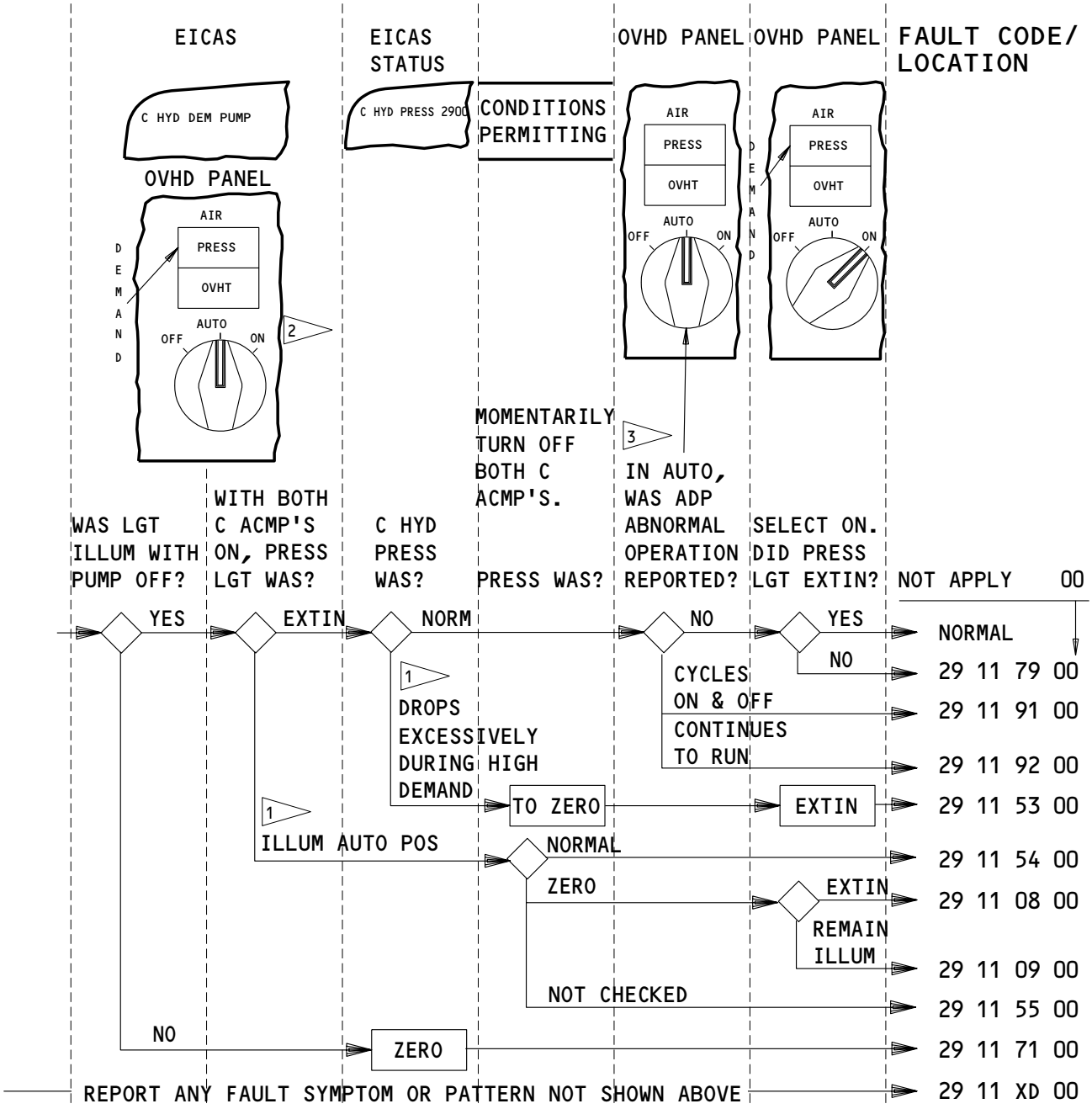
ACMP (AC MOTOR PUMP) CENTER – FAULT CODES

EFFECTIVITY

ALL

29-FAULT CODE DIAGRAM

173999



1 IF SYS PRESS DROPS LOWER THAN NORMAL AND REMAINS LOW DURING HIGH DEMAND PERIODS, FAILURE OF ADP TO OPERATE IN AUTO MODE MAY BE INDICATED. (EXAMPLE: DURING LANDING GEAR OR FLAP OPERATION)

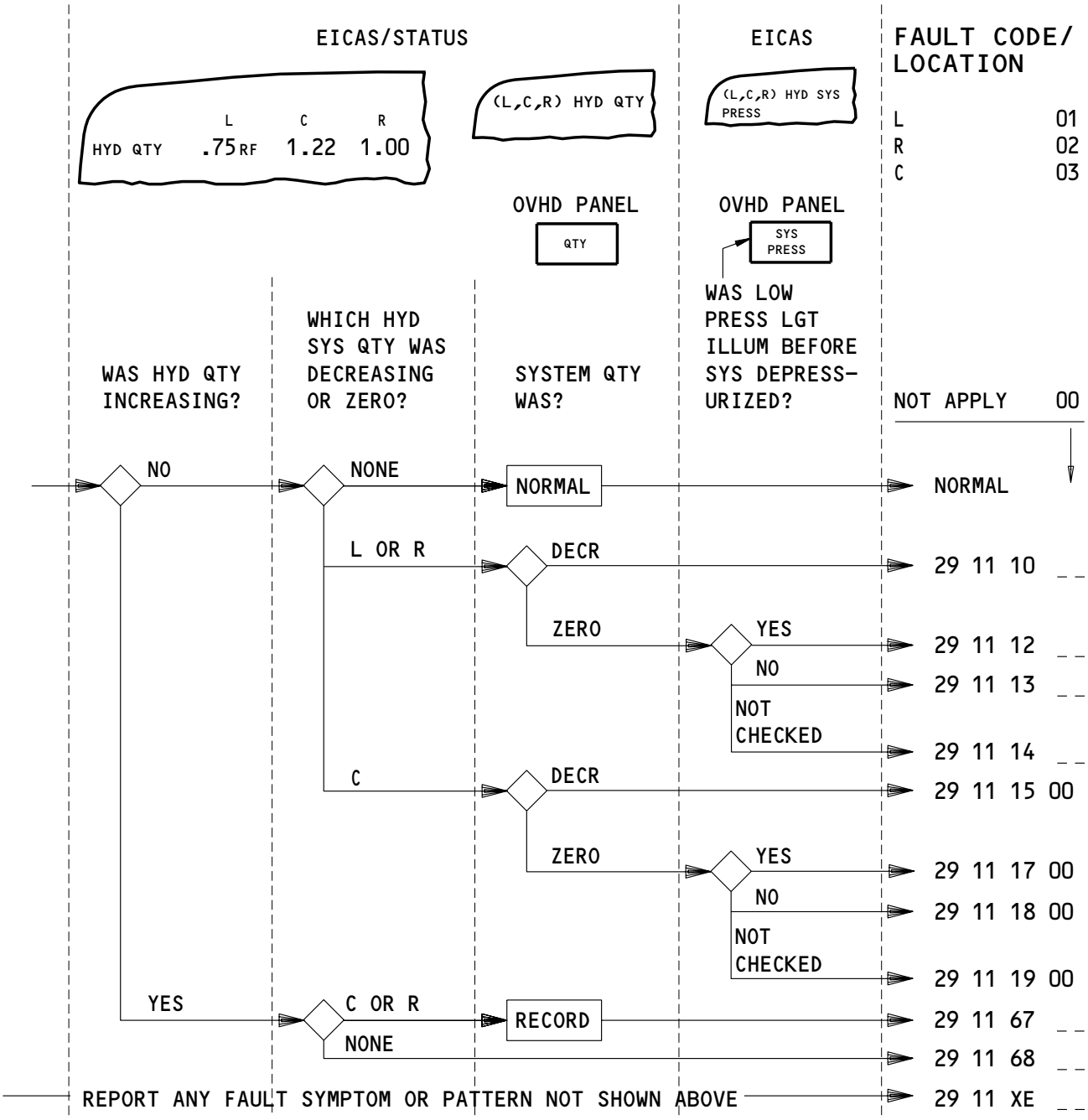
2 ADP WILL OPERATE IN AUTO POSITION IF COMMANDED ON BY THE HYD GEN.

3 CABIN STAFF NORMALLY REPORTS THIS PROBLEM AS A NOISE IN CABIN. VALIDATE ADP IS PROBLEM BEFORE USING THESE CODES.

APPLICABLE CIRCUIT BREAKERS

11D31	HYDRAULIC AIR PUMP

ADP (AIR DRIVEN PUMP) - FAULT CODES



APPLICABLE CIRCUIT BREAKERS

NONE

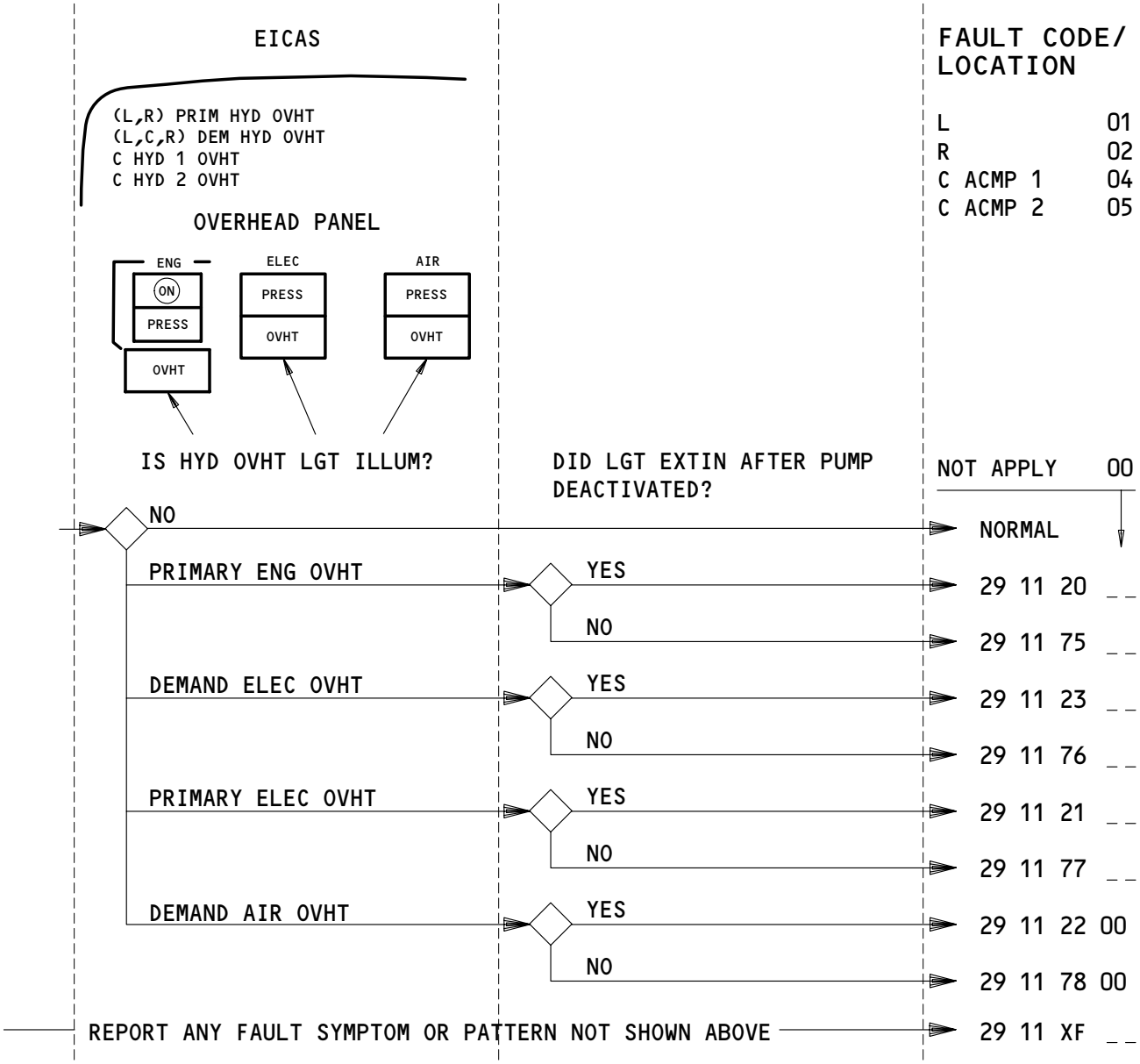
HYDRAULIC QUANTITY INCREASING/DECREASING – FAULT CODES

EFFECTIVITY

ALL

29-FAULT CODE DIAGRAM

184898



APPLICABLE CIRCUIT BREAKERS

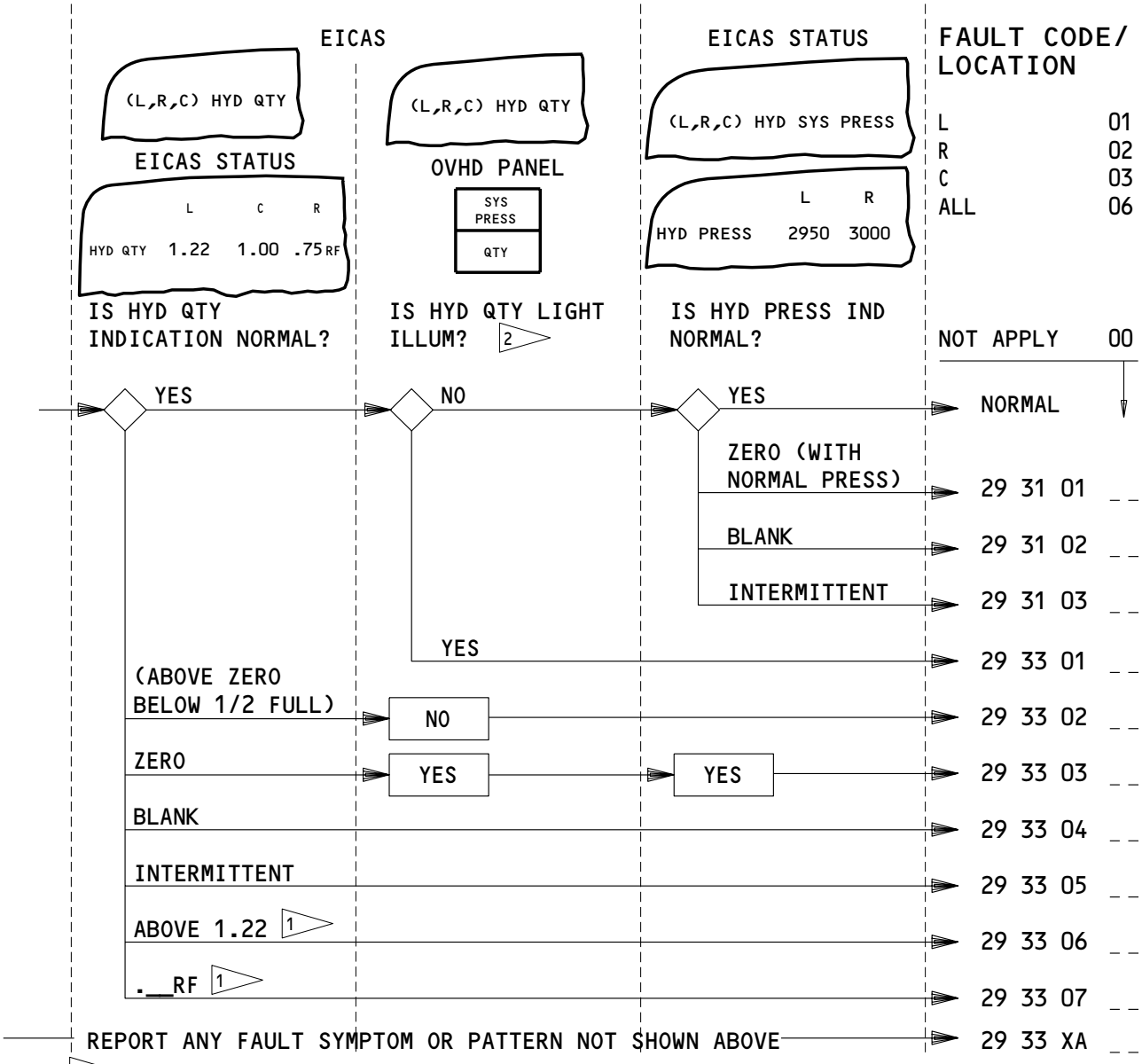
NONE

HYDRAULIC OVERHEAT – FAULT CODES

EFFECTIVITY

ALL

29-FAULT CODE DIAGRAM



1 IF HYD QTY INCREASED TO 1.22 OR LEAK INDICATED, SEE "HYDRAULIC QUANTITY INCREASING/DECREASING".

2 IF C QTY LGT ILLUMINATES, C1 ELEC PUMP IS AUTOMATICALLY ISOLATED TO ALTN BRAKES & NOSE STEERING.

APPLICABLE CIRCUIT BREAKERS

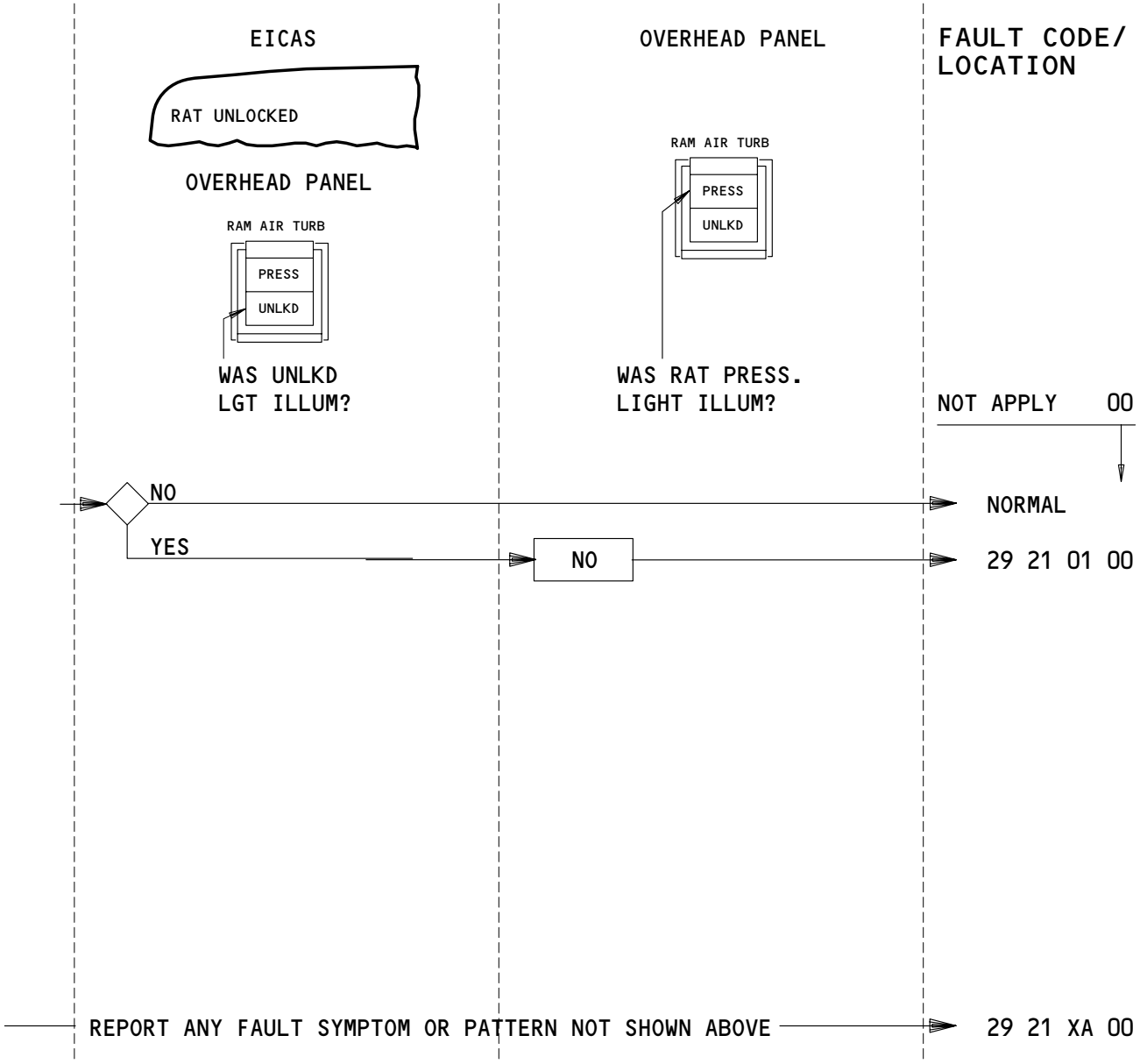
11L17	SYSTEM PRESS L
11L18	SYSTEM PRESS CTR
11L20	QTY
11L26	SYSTEM PRESS R

HYDRAULIC INDICATORS – FAULT CODES

EFFECTIVITY

ALL

29-FAULT CODE DIAGRAM



APPLICABLE CIRCUIT BREAKERS

6C1	MAN RAM AIR TURB
6C2	AUTO RAM AIR TURB
6J8	RAM AIR TURBINE PWR

RAT (RAM AIR TURBINE) - FAULT CODES

EFFECTIVITY

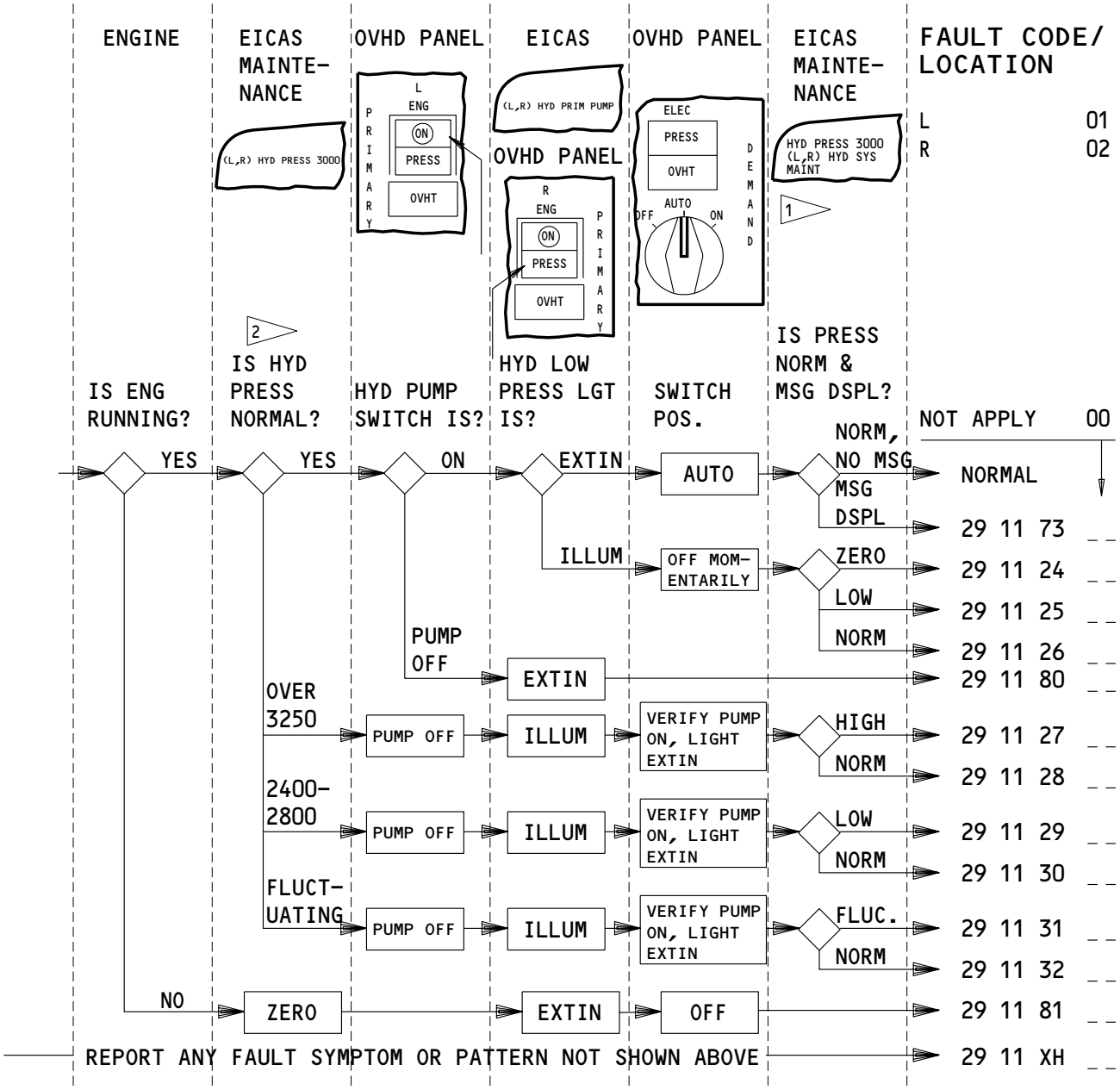
ALL

29-FAULT CODE DIAGRAM

34996

THIS PAGE INTENTIONALLY LEFT BLANK

Not Used
Figure 9



1 EICAS MSG DISPLAYS IF PRESS LESS THAN 2800 FOR MORE THAN 60 SEC WITH BOTH ENGINES RUNNING. MSG IS INHIBITED BY HYD SYS LOW PRESS LGT.

2 NORMAL HYDRAULIC PRESSURE IS 2900 - 3200.

APPLICABLE CIRCUIT BREAKERS

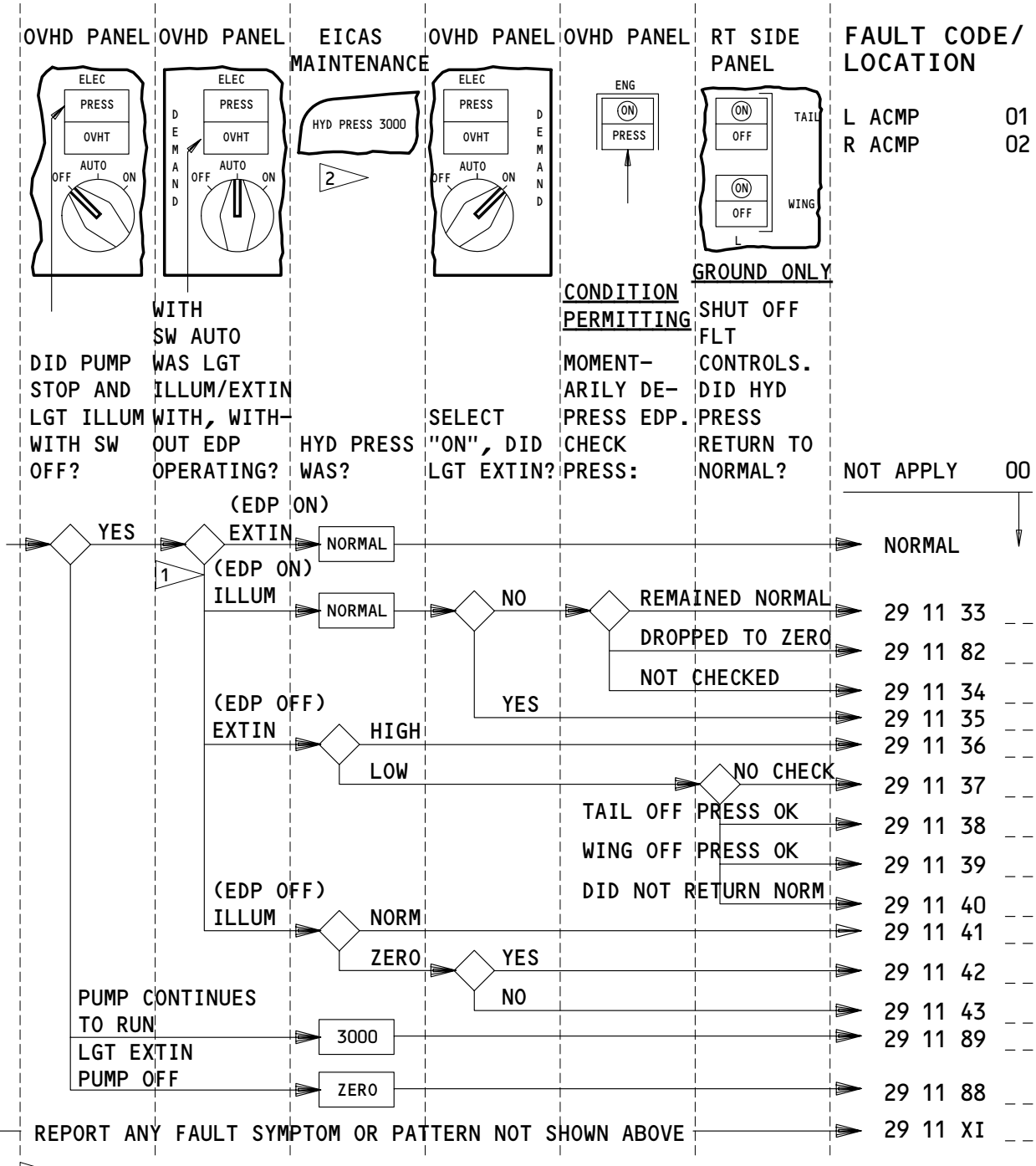
11D29	ENG PUMP SUPPLY L	11L17	SYSTEM PRESS L
11D30	ENG PUMP SUPPLY R	11L23	R ENG PUMP DEPRESS
11L14	L ENG PUMP DEPRESS	11L26	SYSTEM PRESS R

EDP (ENGINE DRIVEN PUMP) - FAULT CODES (GROUND)

EFFECTIVITY
ALL

29-FAULT CODE DIAGRAM

173956



1 ACMP STARTS AT 1900 PSI AND RUNS FOR 15 SEC AFTER PRESS EXCEEDS 2400 PSI.

2 NORMAL PRESS IS 2900 - 3200.

APPLICABLE CIRCUIT BREAKERS

11L16	ELEC PUMP R	11L17	SYSTEM PRESS L	11L25	ELEC PUMP L
				11L26	SYSTEM PRESS R

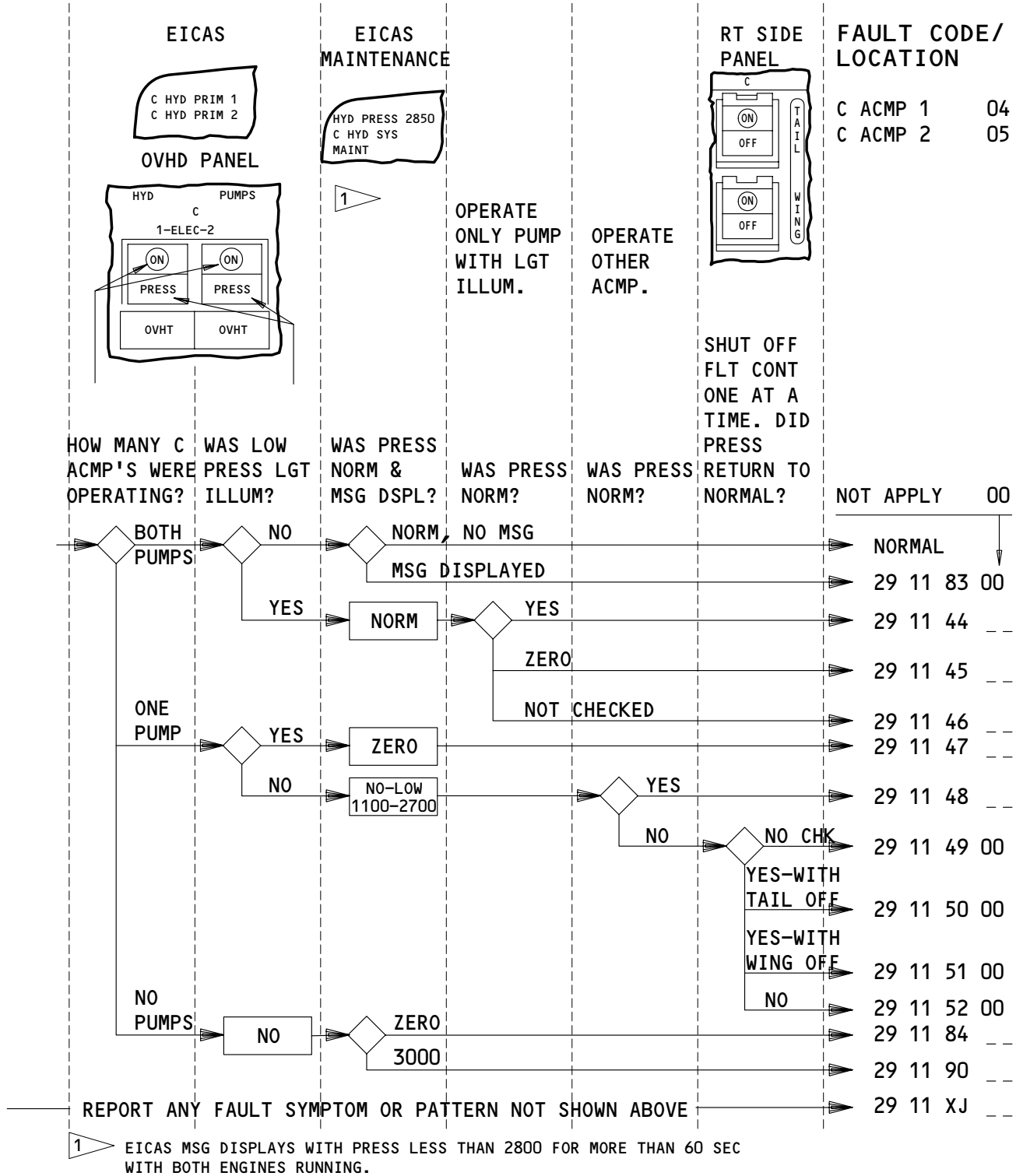
ACMP (AC MOTOR PUMP) LEFT/RIGHT - FAULT CODES (GROUND)

EFFECTIVITY
ALL

29-FAULT CODE DIAGRAM

01

173967



APPLICABLE CIRCUIT BREAKERS

11L15 ELEC PUMP C1

11L24 ELEC PUMP C2

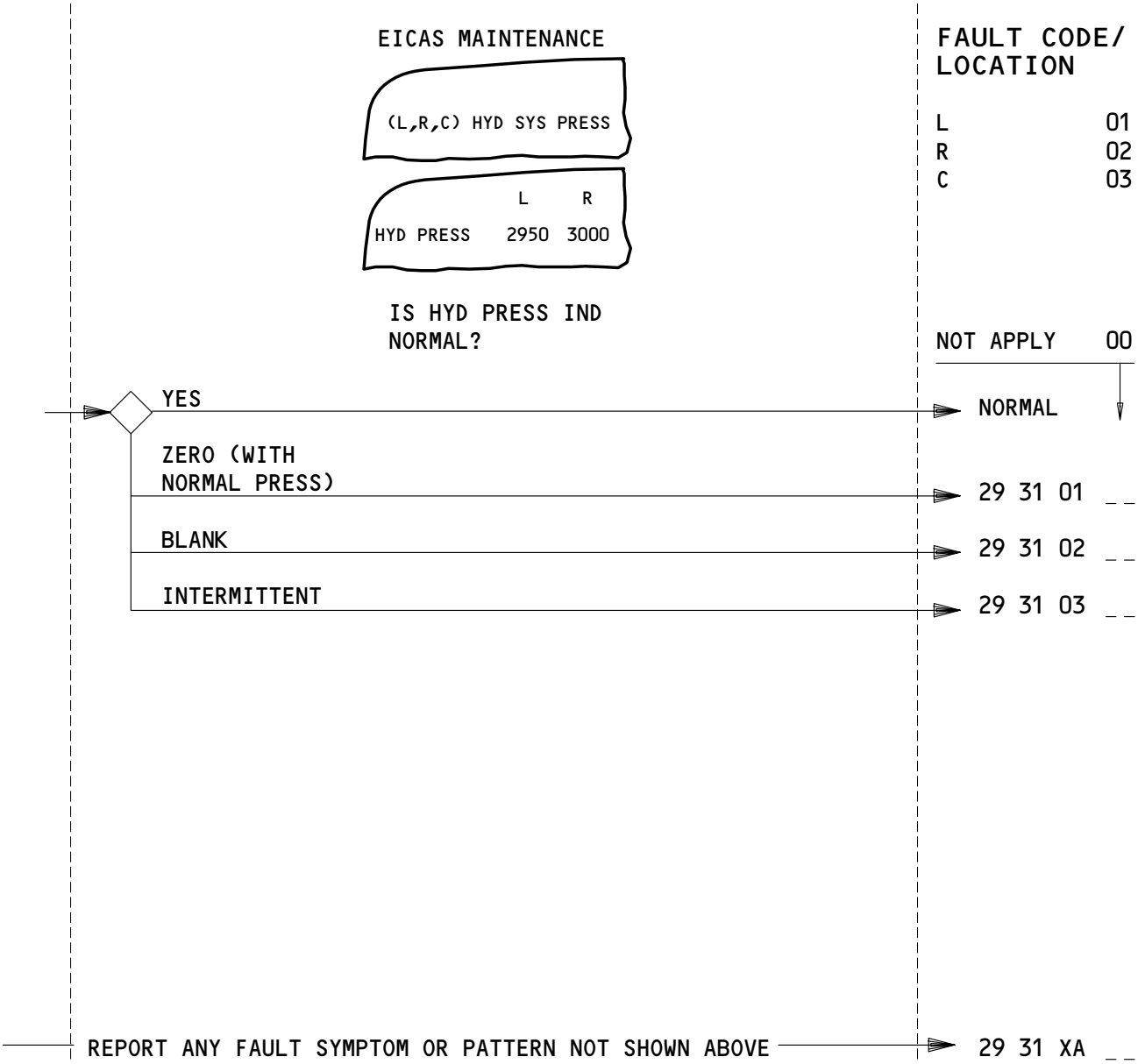
ACMP (AC MOTOR PUMP) CENTER - FAULT CODES (GROUND)

EFFECTIVITY

ALL

29-FAULT CODE DIAGRAM

173974



APPLICABLE CIRCUIT BREAKERS

11L17	SYSTEM PRESS L
11L18	SYSTEM PRESS C
11L26	SYSTEM PRESS R

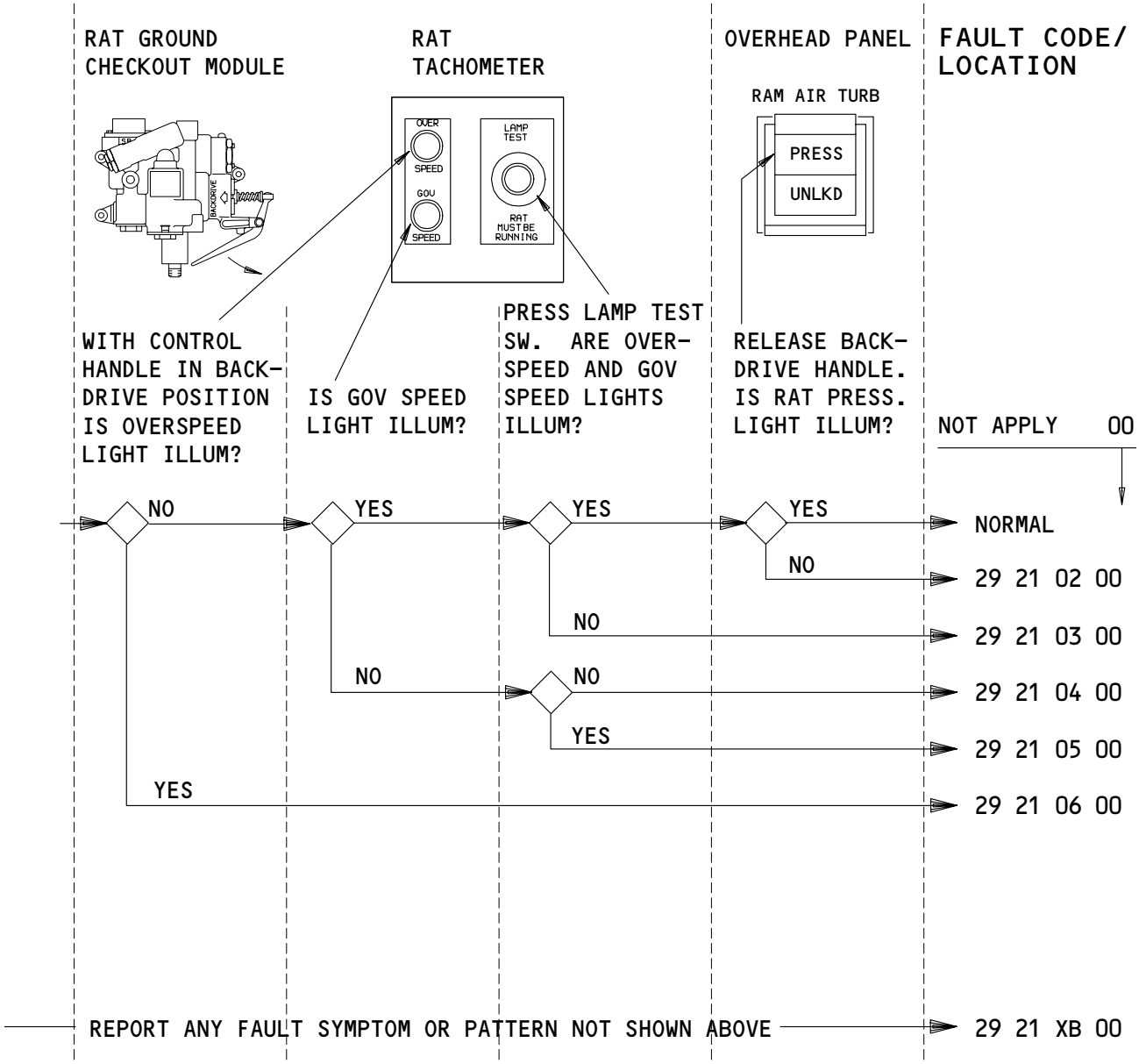
HYDRAULIC INDICATORS – FAULT CODES (GROUND)

EFFECTIVITY

ALL

29-FAULT CODE DIAGRAM

173987



APPLICABLE CIRCUIT BREAKERS

6C1	MAN RAM AIR TURB
6C2	AUTO RAM AIR TURB
6J8	RAM AIR TURBINE PWR

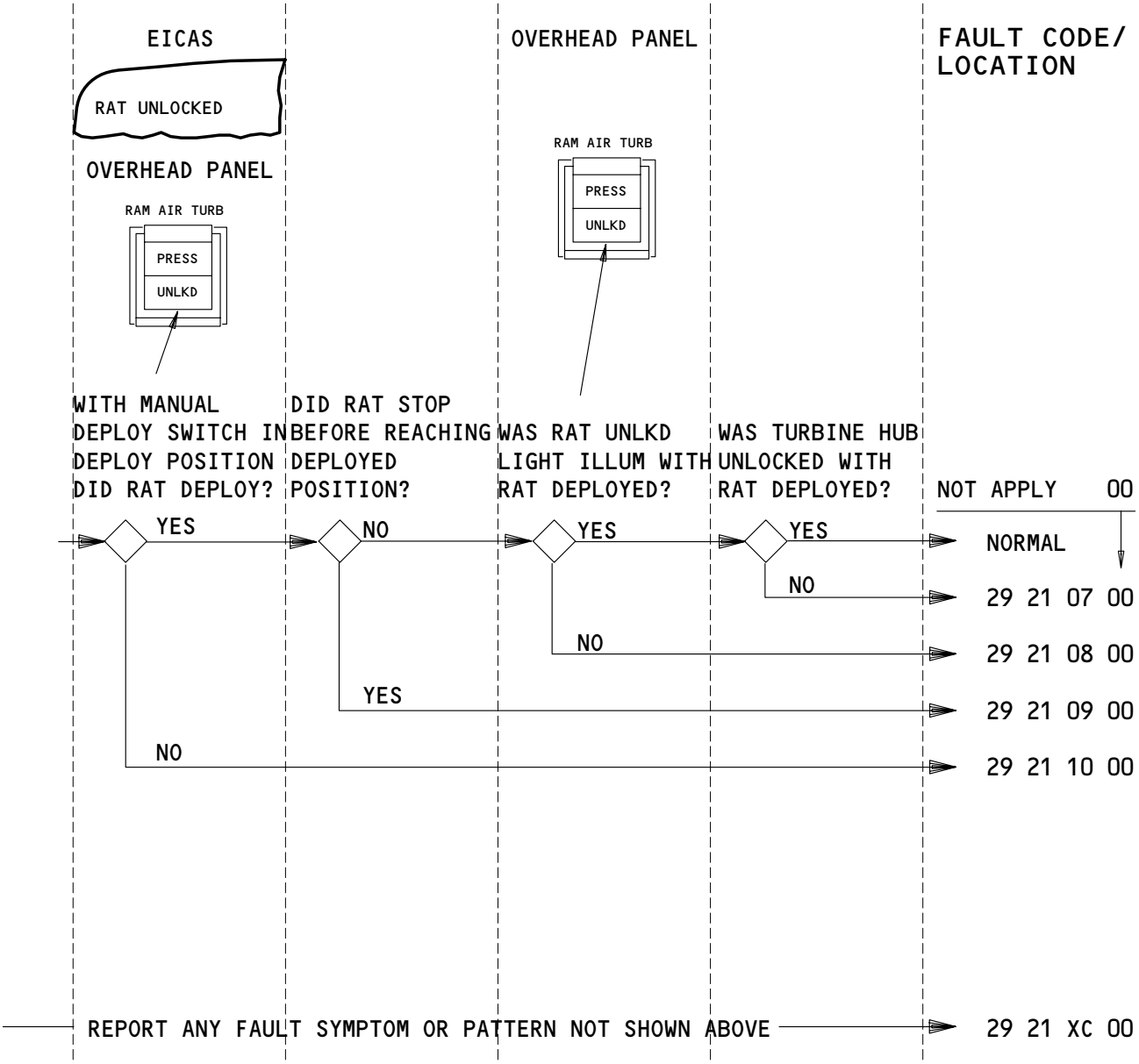
RAT HYD PUMP AND DRIVE SYSTEM – FAULT CODES (GROUND)

EFFECTIVITY

ALL

29-FAULT CODE DIAGRAM

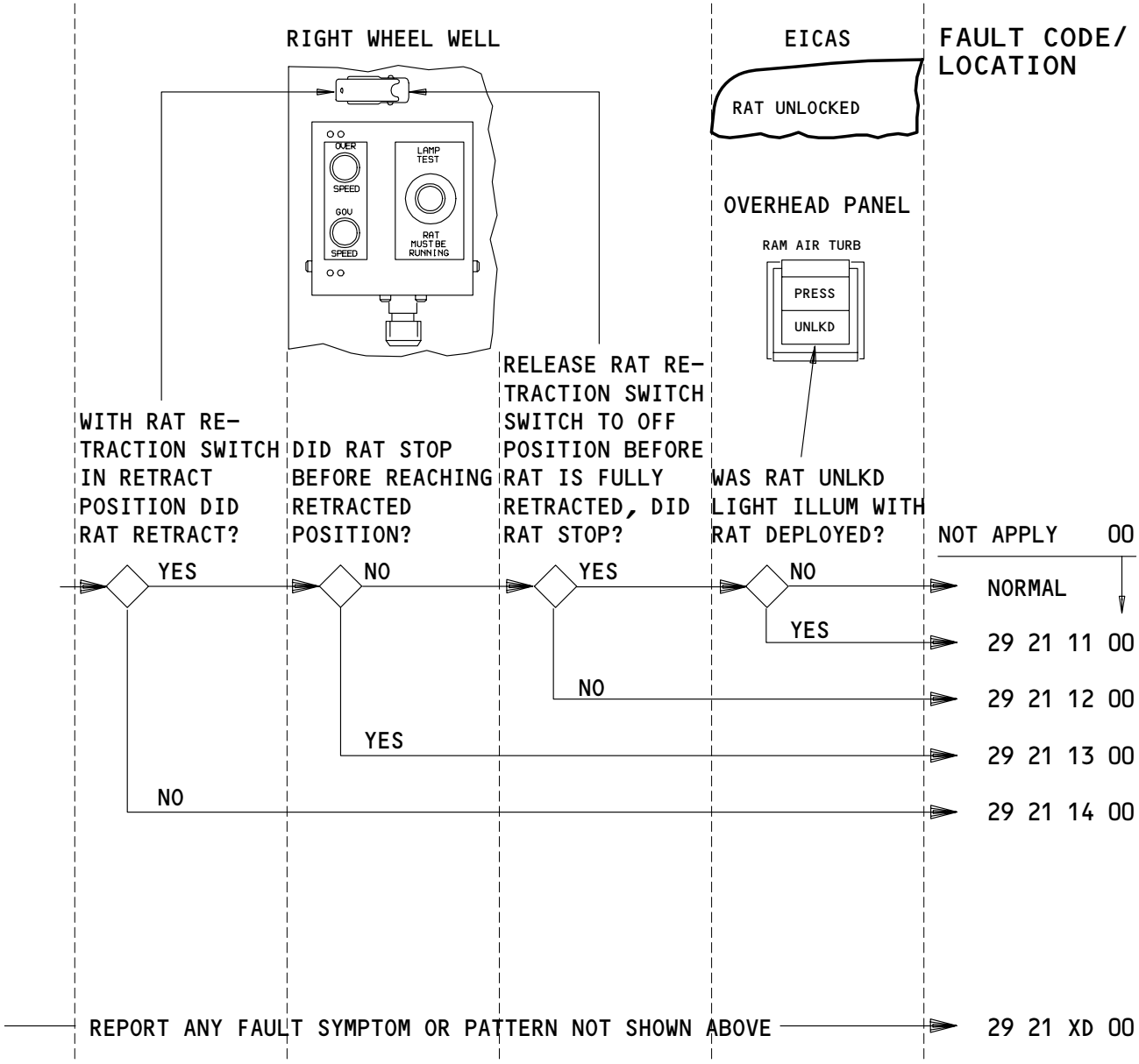
184912



APPLICABLE CIRCUIT BREAKERS

6C1	MAN RAM AIR TURB
6C2	AUTO RAM AIR TURB
6J8	RAM AIR TURBINE PWR

RAT GROUND DEPLOYMENT – FAULT CODES (GROUND)



APPLICABLE CIRCUIT BREAKERS

6C1	MAN RAM AIR TURB
6C2	AUTO RAM AIR TURB
6J8	RAM AIR TURBINE PWR

RAT GROUND RETRACTION – FAULT CODES (GROUND)

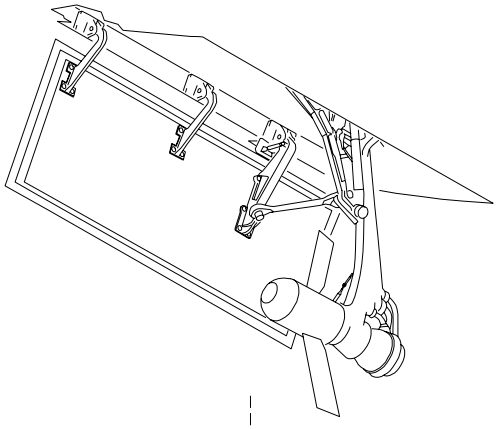
EFFECTIVITY

ALL

29-FAULT CODE DIAGRAM

184946

AFT RIGHT WING/BODY FAIRING



FAULT CODE/ LOCATION

DID RAT DEPLOY WITH AUXILIARY PITOT SYSTEM NO.2 PRESSURIZED BELOW 80 KNOTS?

NO

YES

DID RAT DEPLOY WITH AUXILIARY PITOT SYSTEM NO.2 PRESSURIZED ABOVE 80 KNOTS?

YES

NOT APPLY 00

NORMAL

NO

29 21 15 00

29 21 16 00

REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE

29 21 XE 00

APPLICABLE CIRCUIT BREAKERS

6C1	MAN RAM AIR TURB
6C2	AUTO RAM AIR TURB
6J8	RAM AIR TURBINE PWR

RAT AUTO DEPLOYMENT – FAULT CODES (GROUND)

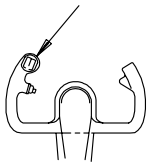
EFFECTIVITY

ALL

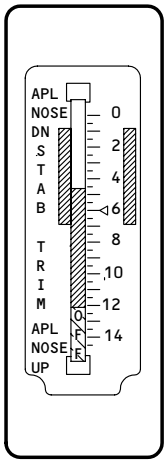
29-FAULT CODE DIAGRAM

184964

CONTROL WHEEL



CONTROL STAND



FAULT CODE/ LOCATION

WITH THE STAB TRIM SWITCH ON THE CONTROL WHEEL IN THE APL NOSE UP OR APL NOSE DN POSITION, DID THE STAB TRIM INDICATOR MOVE?

NOT APPLY 00

YES → NORMAL

NO → 29 22 01 00

REPORT ANY FAULT SYMPTOM OR PATTERN NOT SHOWN ABOVE → 29 22 XA 00

APPLICABLE CIRCUIT BREAKERS

11H11	STAB TRIM CONT LEFT
11L10	HYDRAULICS PTU CONT

A35967

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 XA --	1. A (O1=L, O2=R) EDP (engine-driven pump) problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). 2. SSM 29-00-02
29 11 XB --	1. A (O1=L, O2=R) ACMP (AC motor pump) problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). 2. SSM 29-00-02
29 11 XC --	1. A center (O4=1, O5=2) ACMP (AC motor pump) problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). 2. SSM 29-00-04
29 11 XD 00	1. An ADP (air-driven pump) problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). 2. SSM 29-00-05
29 11 XE --	1. A (O1=L, O2=R, O3=C) hydraulic quantity problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). 2. SSM 29-00-01
29 11 XF --	1. A (O1=L, O2=R, O4=C ACMP 1, O5=C ACMP 2) (or ADP) hydraulic overheat problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). 2. SSM 29-00-01

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 XG --	Not Used
29 11 XH --	1. A (01=L, 02=R) EDP (engine-driven pump) problem was encountered by the ground crew which is not covered in the fault code diagrams. (Ref fault code diagram for ground crew actions). 2. SSM 29-00-02
29 11 XI --	1. A (01=L, 02=R) ACMP (AC motor pump) problem was encountered by the ground crew which is not covered in the fault code diagrams. (Ref fault code diagram for ground crew actions). 2. SSM 29-00-02
29 11 XJ --	1. A center (04=1, 05=2) ACMP (AC motor pump) problem was encountered by the ground crew which is not covered in the fault code diagrams. (Ref fault code diagram for ground crew actions). 2. SSM 29-00-04
29 21 XA 00	1. A RAT (ram air turbine) indicating problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). 2. SSM 29-00-06
29 21 XB 00	1. A RAT hydraulic pump and drive system problem was encountered by the ground crew which is not covered in the fault code diagrams. (Ref fault code diagram for ground crew actions). 2. SSM 29-00-06
29 21 XC 00	1. A RAT ground deployment problem was encountered by the ground crew which is not covered in the fault code diagrams. (Ref fault code diagram for ground crew actions). 2. SSM 29-00-06
29 21 XD 00	1. A RAT ground retraction problem was encountered by the ground crew which is not covered in the fault code diagrams. (Ref fault code diagram for ground crew actions). 2. SSM 29-00-06
29 21 XE 00	1. A RAT auto deployment problem was encountered by the ground crew which is not covered in the fault code diagrams. (Ref fault code diagram for ground crew actions). 2. SSM 29-00-06

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 22 XA 00	1. A Pitch Enhancement System (PES) problem was encountered by the ground crew which is not covered in the fault code diagrams. (Ref fault code diagram for ground crew actions). 2. SSM 29-00-08
29 31 XA --	1. A (01=L, 02=R, 03=C, 06=ALL) hydraulic indicating problem was encountered by the ground crew which is not covered in the fault code diagrams. (Ref fault code diagram for ground crew actions). 2. SSM 29-00-07
29 33 XA --	1. A (01=L, 02=R, 03=C, 06=ALL) a hydraulic indicating problem was encountered by the flight crew which is not covered in the fault code diagrams. (Ref fault code diagram for flight crew actions). 2. SSM 29-00-01
29 11 01 --	Not Used
29 11 02 --	1. (01=L, 02=R) EDP failed to depressurize. 2. FIM 29-11-00/101, Fig. 104, Block 1
29 11 03 --	1. (01=L, 02=R) ACMP inop in AUTO or ON mode. 2. FIM 29-11-00/101, Fig. 105, Block 2
29 11 04 --	Not Used
29 11 05 --	Not Used
29 11 06 --	Not Used
29 11 07 --	Not Used
29 11 08 00	1. C ADP inop in AUTO mode, ok with ON selected. 2. FIM 29-11-00/101, Fig. 112, Block 1
29 11 09 00	1. C ADP inop in AUTO or ON mode. 2. FIM 29-11-00/101, Fig. 113, Block 3
29 11 10 --	1. (01=L, 02=R) hyd qty decreased to _____. Qty stable with EDP depressurized and ACMP off. 2. FIM 29-11-00/101, Fig. 114, Block 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 11 --	1. (O1=L, O2=R) hyd qty decreased to ____. EDP depressurized and ACMP off, qty continued to decrease. 2. FIM 29-11-00/101, Fig. 115, Block 1
29 11 12 --	1. (O1=L, O2=R) hyd qty decreased to zero and system PRESS and QTY lgt illum. EICAS msg (L, R) HYD SYS PRESS and (L, R) HYD QTY displayed. 2. FIM 29-11-00/101, Fig. 116, Block 2
29 11 13 --	1. (O1=L, O2=R) hyd qty zero. EICAS msg (L, R) HYD QTY displayed. System PRESS lgt did not illum. 2. FIM 29-11-00/101, Fig. 116, Block 1
29 11 14 --	1. (O1=L, O2=R) hyd qty zero. EICAS msg (L, R) HYD QTY displayed. Pump press not checked. 2. FIM 29-11-00/101, Fig. 116, Block 1
29 11 15 00	1. C hyd qty decreased to ____. Qty stable with system pumps OFF. 2. FIM 29-11-00/101, Fig. 117, Block 1
29 11 16 00	1. C hyd qty decreased to ____. System depressurized and leak continued. 2. FIM 29-11-00/101, Fig. 118, Block 1
29 11 17 00	1. C hyd qty decreased to zero and system PRESS and QTY lgt illum. EICAS msg C HYD SYS PRESS and C HYD QTY displayed. 2. FIM 29-11-00/101, Fig. 119, Block 2
29 11 18 00	1. C hyd qty zero. EICAS msg C HYD QTY displayed. System PRESS lgt did not illum. 2. FIM 29-11-00/101, Fig. 119, Block 1
29 11 19 00	1. C hyd qty zero. EICAS msg C HYD QTY displayed. System press not checked. 2. FIM 29-11-00/101, Fig. 119, Block 1
29 11 20 --	1. (O1=L, O2=R) EDP hyd OVHT lgt illum. EICAS msg (L, R) PRIM HYD OVHT displayed. Pump was deactivated and msg and lgt extin. 2. FIM 29-11-00/101, Fig. 120, Block 2

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 21 --	1. (O4=C ACMP 1, O5=C ACMP 2) prim elec hyd OVHT lgt illum. EICAS msg C HYD (1, 2) OVHT displayed. Pump was deactivated and msg and lgt extin. 2. FIM 29-11-00/101, Fig. 123, Block 3
29 11 22 00	1. C ADP hyd OVHT lgt illum. EICAS msg C DEM HYD OVHT displayed. Pump was deactivated and msg and lgt extin. 2. FIM 29-11-00/101, Fig. 121, Block 2
29 11 23 --	1. (O1=L, O2=R) dem elec hyd OVHT lgt illum. EICAS msg (L, R) DEM HYD OVHT displayed. Pump was deactivated and msg and lgt extin. 2. FIM 29-11-00/101, Fig. 122, Block 3
29 11 24 --	1. (O1=L, O2=R) EDP hyd press zero. 2. FIM 29-11-00/101, Fig. 104A, Block 2
29 11 25 --	1. (O1=L, O2=R) EDP hyd press low _____ psi. Low PRESS light illum. and EICAS MSG displayed: (L, R) HYD PRIM PUMP. 2. FIM 29-11-00/101, Fig. 104, Block 1
29 11 26 --	1. (O1=L, O2=R) EDP hyd low PRESS, SYS PRESS & DEMAND PRESS light illum and EICAS MSG displayed: (L, R) HYD PRIM PUMP. EDP press was normal. 2. Replace the pressure switch, S26 (S31), for the left (right) engine-driven pump (EDP) (AMM 29-11-17/401).
29 11 27 --	1. (O1=L, O2=R) Hyd press reads high (_____ psi) with EDP or ACMP operating. 2. Replace the pressure transmitter, M341 (M343), for the left (right) hydraulic system (AMM 29-31-01/401).
29 11 28 --	1. (O1=L, O2=R) EDP hyd press high (_____ psi). Press norm with ACMP operating. 2. Replace the engine-driven pump (EDP) in the left (right) hydraulic system (AMM 29-11-05/401).
29 11 29 --	1. (O1=L, O2=R) Hyd press reads low _____ psi with EDP or ACMP pump operating. EICAS msg (L,R) HYD SYS MAINT (was, was not) displayed. 2. Replace the pressure transmitter, M341 (M343), in the left (right) hydraulic system (AMM 29-31-01/401).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 30 --	1. (O1=L, O2=R) EDP hyd press low (_____ psi). Press norm with ACMP operating. EICAS msg (L,R) HYD SYS MAINT (was, was not) displayed. 2. FIM 29-11-00/101, Fig. 103, Block 1
29 11 31 --	1. (O1=L, O2=R) Hyd press fluctuates during EDP or ACMP operation. 2. Replace the pressure transmitter, M341 (M343), in the left (right) hydraulic system (AMM 29-31-01/401).
29 11 32 --	1. (O1=L, O2=R) Hyd press fluctuates during EDP operation. 2. FIM 29-11-00/101, Fig. 103, Block 1
29 11 33 --	1. (O1=L, O2=R) ACMP low PRESS light illum. EICAS MSG displayed: (L, R) HYD DEM PUMP. ACMP press norm. 2. Replace the pressure switch, S25 (S30), for the alternating current motor pump (ACMP) in the left (right) hydraulic system (AMM 29-11-18/401).
29 11 34 --	1. (O1=L, O2=R) ACMP low PRESS light illum. and EICAS MSG displayed: (L, R) HYD DEM PUMP in AUTO or ON mode. 2. FIM 29-11-00/101, Fig. 105, Block 1
29 11 35 --	1. (O1=L, O2=R) ACMP low PRESS light illum and EICAS MSG displayed: (L, R) HYD DEM PUMP in AUTO mode. OK in ON mode. 2. FIM 29-11-00/101, Fig. 108, Block 1
29 11 36 --	1. (O1=L, O2=R) ACMP press above norm _____ psi. 2. FIM 29-11-00/101, Fig. 106, Block 1
29 11 37 --	1. (O1=L, O2=R) ACMP press low. 2. FIM 29-11-00/101, Fig. 107, Block 1
29 11 38 --	1. (O1=L, O2=R) ACMP press low. Press OK with tail hyd shutoff valve closed. 2. Do the internal leakage check for the left (right) hydraulic system (AMM 29-11-00/601).
29 11 39 --	1. (O1=L, O2=R) ACMP press low. Press OK with wing hyd shutoff valve closed. 2. Do the internal leakage check for the left (right) hydraulic system (AMM 29-11-00/601).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 40 --	1. (01=L, 02=R) ACMP press low. Press still low with wing and tail hyd shutoff valves closed. 2. FIM 29-11-00/101, Fig. 107, Block 2
29 11 41 --	1. (01=L, 02=R) ACMP low PRESS light illum and EICAS MSG displayed: (L, R) HYD DEM PUMP. ACMP press norm. 2. Replace the pressure switch, S25 (S30), for the alternating current motor pump (ACMP) in the left (right) hydraulic system (AMM 29-11-18/401).
29 11 42 --	1. (01=L, 02=R) ACMP low PRESS light illum and EICAS MSG displayed: (L, R) HYD DEM PUMP in AUTO mode. OK in ON mode. 2. FIM 29-11-00/101, Fig. 108, Block 1
29 11 43 --	1. (01=L, 02=R) ACMP inop in AUTO or ON mode. 2. FIM 29-11-00/101, Fig. 105, Block 2
29 11 44 --	1. (04=1, 05=2) C ACMP low PRESS light illum. EICAS MSG displayed: C HYD PRIM (1, 2). Pump press is normal. 2. Replace the pressure switch, S33 (S34), for the alternating current motor pump (ACMP) C1 (C2) in the center hydraulic system (AMM 29-11-18/401).
29 11 45 --	1. (01=1, 02=2) C ACMP press is zero. 2. FIM 29-11-00/101, Fig. 109, Block 2
29 11 46 --	1. (01=1, 02=2) C ACMP low PRESS light illum. EICAS MSG displayed: C HYD PRIM (1, 2). Pump press not checked. 2. FIM 29-11-00/101, Fig. 109, Block 1
29 11 47 --	1. (01=1, 02=2) C ACMP press is zero. EICAS msg C HYD SYS MAINT (is, is not) displayed. 2. FIM 29-11-00/101, Fig. 109, Block 2
29 11 48 --	1. (01=1, 02=2) C ACMP press low. EICAS msg C HYD SYS MAINT (is, is not) displayed. Press norm when using other ACMP. 2. FIM 29-11-00/101, Fig. 110, Block 1
29 11 49 00	1. C hyd press low when operating on either ACMP. EICAS msg C HYD SYS MAINT (is, is not) displayed. 2. FIM 29-11-00/101, Fig. 111, Block 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 50 00	1. C hyd press low with one pump operating. EICAS msg C HYD SYS MAINT (is, is not) displayed. Press OK with Tail Hyd Shutoff Valve closed. Press _____ psi. 2. Do the internal leakage check for the center hydraulic system (AMM 29-11-00/601).
29 11 51 00	1. C hyd press low with one pump operating. EICAS msg C HYD SYS MAINT (is, is not) displayed. Press OK with Wing Hyd Shutoff Valve closed. Press _____ psi. 2. Do the internal leakage check for the center hydraulic system (AMM 29-11-00/601).
29 11 52 00	1. C hyd press low with one pump operating. EICAS msg C HYD SYS MAINT (is, is not) displayed. Press did not return to normal when Flight Control Hyd Shutoff valves closed. 2. Do the internal leakage check for the center hydraulic system (AMM 29-11-00/601).
29 11 53 00	1. C ADP inop in AUTO mode. 2. FIM 29-11-00/101, Fig. 112, Block 1
29 11 54 00	1. C ADP low PRESS light illum in AUTO. EICAS MSG displayed: C HYD DEM PUMP. ADP press is normal. 2. FIM 29-11-00/101, Fig. 138, Block 1
29 11 55 00	1. C ADP low PRESS light illum in AUTO mode, ON mode not checked. 2. FIM 29-11-00/101, Fig. 113, Block 1
29 11 56 -- thru 29 11 60 --	Not Used.
29 11 61 00	1. EICAS msg C HYD SYS MAINT displayed (Ref Chapter 31 for fault code diagram). 2. FIM 29-11-00/101, Fig. 125, Block 1
29 11 62 00	1. EICAS msg L HYD SYS MAINT displayed (Ref Chapter 31 for fault code diagram). 2. FIM 29-11-00/101, Fig. 124, Block 1
29 11 63 00	1. EICAS msg R HYD SYS MAINT displayed (Ref Chapter 31 for fault code diagram). 2. FIM 29-11-00/101, Fig. 124, Block 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 64 00	1. EICAS msg RSV BRAKE VAL did not display and reserve brake & steering sw ON lgt fails to illum with switch pressed ON (Ref Chapter 32 for fault code diagram). 2. FIM 29-11-00/101, Fig. 126, Block 1
29 11 65 00	1. EICAS msg RSV BRAKE VAL displayed and reserve brake & steering sw VALVE and ISLN lgts illum with sw (ON, OFF) (Ref Chapter 32 for fault code diagram). 2. FIM 29-11-00/101, Fig. 127, Block 1
29 11 66 --	Not Used
29 11 67 --	1. (01=L, 02=R, 03=C) hyd qty increased to ____ with a decrease in (C, R) hyd qty. 2. FIM 29-11-00/101, Fig. 128, Block 1
29 11 68 --	1. (01=L, 02=R, 03=C) hyd qty increased to ____ with no change in other hyd qtys. 2. Replace the hydraulic fluid quantity monitor unit, M122, on the electronic rack, E2-4 (AMM 29-33-01/401). If the problem continues, replace the hydraulic quantity transmitter, M340 (M338, M339), on the reservoir in the left (right, center) hydraulic system (AMM 29-33-02/401).
29 11 69 --	1. (01=L, 02=R) EDP hyd low PRESS light did not illum or EICAS msg (L, R) HYD PRIM PUMP display with engine not running. 2. Replace the pressure switch, S26 (S31), for the engine-driven pump (EDP) in the left (right) hydraulic system (AMM 29-11-17/401).
29 11 70 --	1. (04=1, 05=2) C ACMP LOW PRESS light did not illum or EICAS msg C HYD PRIM (1, 2) display with sw OFF. Pump was off. 2. Replace the pressure switch, S33 (S34), for the alternating current motor pump (ACMP) C1 (C2) in the center hydraulic system (AMM 29-11-18/401).
29 11 71 00	1. C ADP low PRESS lgt did not illum and EICAS msg C HYD DEM PUMP did not display with sw OFF. 2. FIM 29-11-00/101, Fig. 131, Block 1
29 11 72 --	Not Used
29 11 73 --	1. EICAS msg (01=L, 02=R) HYD SYS MAINT displayed. Hyd press normal. 2. FIM 29-11-00/101, Fig. 124, Block 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 74 00	1. EICAS msg C HYD SYS MAINT displayed. Hyd press normal. 2. FIM 29-11-00/101, Fig. 125, Block 1
29 11 75 --	1. (01=L, 02=R) EDP hyd OVHT lgt illum. EICAS msg (L,R) PRIM HYD OVHT displayed. Pump was deactivated but lgt and msg remained. 2. FIM 29-11-00/101, Fig. 120, Block 1
29 11 76 --	1. (01=L, 02=R) dem elec hyd OVHT lgt illum. EICAS msg (L,R) DEM HYD OVHT displayed. Pump was deactivated but lgt and msg remained. 2. FIM 29-11-00/101, Fig. 122, Block 1
29 11 77 --	1. (04=C ACMP 1, 05=C ACMP C2) prim elec hyd OVHT lgt illum. EICAS msg C HYD (1,2) OVHT displayed. Pump was deactivated but lgt and msg remained. 2. FIM 29-11-00/101, Fig. 123, Block 1
29 11 78 00	1. C ADP hyd OVHT lgt illum. EICAS msg C DEM HYD OVHT displayed. Pump was deactivated but lgt and msg remained. 2. FIM 29-11-00/101, Fig. 121, Block 1
29 11 79 00	1. C ADP inop with ON selected. AUTO mode not checked. 2. FIM 29-11-00/101, Fig. 132, Block 1
29 11 80 --	1. (01=L, 02=R) EDP failed to depressurize. 2. FIM 29-11-00/101, Fig. 104 or Fig.105, Block 1
29 11 81 --	1. (01=L, 02=R) EDP hyd low PRESS light did not illum or EICAS msg (L, R) HYD PRIM PUMP display with engine not running. 2. Replace the pressure switch, S26 (S31), for the engine-driven pump (EDP) in the left (right) hydraulic system (AMM 29-11-17/401).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 82 --	1. (O1=L, O2=R) ACMP inop in AUTO or MAN mode. 2. FIM 29-11-00/101, Fig. 105 or Fig. 106, Block 1
29 11 83 --	1. EICAS msg C HYD SYS MAINT displayed. Hyd sys normal. 2. FIM 29-11-00/101, Fig. 122 or Fig. 125, Block 1
29 11 84 --	1. (O4=1, O5=2) C ACMP LOW PRESS light did not illum or EICAS msg C HYD PRIM (1, 2) display with sw OFF. Pump was off. 2. Replace the pressure switch, S33 (S34), for the alternating current motor pump (ACMP) C1 (C2) in the center hydraulic system (AMM 29-11-18/401).
29 11 88 --	1. (O1=L, O2=R) ACMP low PRESS light extin with pump off. 2. FIM 29-11-00/101, Fig. 133, Block 5
29 11 89 --	1. (O1=L, O2=R) ACMP continues to run with pump sw off. 2. FIM 29-11-00/101, Fig. 133, Block 2
29 11 90 --	1. C ACMP (O4=1, O5=2) continues to run with sw OFF. 2. FIM 29-11-00/101, Fig. 134, Block 2
29 11 91 00	1. C ADP cycles on and off in AUTO mode. 2. FIM 29-11-00/101, Fig. 135, Block 1
29 11 92 00	1. C ADP continues to run in AUTO mode. 2. FIM 29-11-00/101, Fig. 136, Block 1
29 11 93 --	1. C ACMP (O4=1, O5=2) switch (is defective, lgt inop, etc.) (describe). 2. Replace the lamp in the switch/light, YCYS2 (YCYS3), for the alternating current motor pump (ACMP) C1 (C2) on the hydraulic control panel, M10 (AMM 33-13-00/201). If the problem continues, replace the switch/light, YCYS2 (YCYS3), for the alternating current motor pump (ACMP) C1 (C2) on the hydraulic control panel, M10 (AMM 33-13-00/201) (WDM 29-11-31).

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 11 94 --	1. (01=L, 02=R) EDP switch (was defective, lgt inop, etc.) (describe). 2. Replace the lamp in the switch/light, YCYS1 (YCYS4), for the engine-driven pump (EDP), in the left (right) hydraulic system, on the hydraulic control panel, M10 (AMM 33-13-00/201). If the problem continues, replace the switch/light, YCYS1 (YCYS4), on the hydraulic control panel, M10 (AMM 33-13-00/201) (WDM 29-11-11, WDM 29-11-21).
29 21 01 00	1. RAT UNLKD lite illum. RAT PRESS lgt extin. EICAS msg displayed: RAT UNLOCKED. 2. Adjust or replace the uplimit switch, S369, for the ram air turbine (RAT) (AMM 29-21-17/201).
29 21 02 00	1. Ram air turbine PRESS light did not illum when back-drive control handle is released. 2. FIM 29-21-00/101, Fig. 103, Block 1
29 21 03 00	1. Ram air turbine tachometer OVERSPEED light not illum. GOV SPEED light illum. OVERSPEED light remains off with LAMP TEST switch ON. 2. Replace the tachometer, N72, for the ram air turbine (RAT) (AMM 29-21-16/401).
29 21 04 00	1. Ram air turbine tachometer OVERSPEED and GOV SPEED lights did not illum during RAT back-drive. Lights remain off with LAMP TEST switch ON. 2. FIM 29-21-00/101, Fig. 105, Block 1
29 21 05 00	1. Ram air turbine tachometer OVERSPEED and GOV SPEED lights did not illum during RAT back-drive. Lights illum with LAMP TEST switch ON. 2. FIM 29-21-00/101, Fig. 105, Block 2

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 21 06 00	1. Ram air turbine tachometer OVERSPEED light illum during RAT back-drive. 2. Replace the hub on the ram air turbine (AMM 29-21-01/401).
29 21 07 00	1. Ram air turbine hub did not unlock when RAT deployed. 2. FIM 29-21-00/101, Fig. 104, Block 1
29 21 08 00	1. Ram air turbine UNLKD light did not illuminate with RAT deployed. 2. Adjust or replace the uplimit switch, S369, for the ram air turbine (AMM 29-21-10/401).
29 21 09 00	1. Ram air turbine did not fully deploy. 2. FIM 29-21-00/101, Fig. 106, Block 1
29 21 10 00	1. Ram air turbine did not deploy with manual deploy switch in deploy position. RAT UNLKD light did not illuminate. EICAS message RAT UNLOCKED was not displayed. 2. FIM 29-21-00/101, Fig. 106, Block 1
29 21 11 00	1. Ram air turbine UNLKD light was illuminated with RAT retracted. EICAS message RAT UNLOCKED was displayed. 2. FIM 29-21-00/101, Fig. 107, Block 1
29 21 12 00	1. Ram air turbine did not stop retracting with retraction switch in OFF position. 2. FIM 29-21-00/101, Fig. 108, Block 1
29 21 13 00	1. Ram air turbine did not fully retract. 2. FIM 29-21-00/101, Fig. 110, Block 1

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 21 14 00	1. Ram air turbine did not retract with retraction switch in RETRACT position. 2. FIM 29-21-00/101, Fig. 109, Block 1
29 21 15 00	1. Ram air turbine did not deploy when auxiliary pitot system No. 2 was pressurized above 80 knots. 2. FIM 29-21-00/101, Fig. 111, Block 1
29 21 16 00	1. Ram air turbine deployed when auxiliary pitot system No. 2 was pressurized below 80 knots. 2. FIM 29-21-00/101, Fig. 112, Block 1
29 22 01 00	1. The pitch enhancement system (PES) does not operate the stabilizer trim. 2. FIM 29-22-00/101, Fig. 103, Block 1
29 31 01 --	1. (01=L, 02=R, 03=C) Hyd press reads zero with normal press. EICAS msg (L, R) HYD SYS PRESS displayed. 2. Replace the pressure transmitter, M341 (M343, M342) in the left (right, center) hydraulic system (AMM 29-31-01/401).
29 31 02 --	1. (01=L, 02=R, 03=C) Hyd press indication is blank. 2. Replace the pressure transmitter, M341 (M343, M342) in the left (right, center) hydraulic system (AMM 29-31-01/401).
29 31 03 --	1. (01=L, 02=R, 03=C) Hyd press indication is intermittent. 2. Replace the pressure transmitter, M341 (M343, M342) in the left (right, center) hydraulic system (AMM 29-31-01/401).
29 33 01 --	1. (01=L, 02=R, 03=C) hyd QTY light illum. Qty reads normal. EICAS msg displayed: (L, R, C) HYD QTY. 2. Replace the hydraulic fluid quantity monitor unit, M122 (AMM 29-33-01/401). Push the ELEC/HYD and the AUTO-EVENT read switches on the EICAS MAINT panel, on the P61 panel. Push and hold the ERASE switch for 3 seconds. Make sure the (L, R, C) HYD QTY message does not show on the EICAS display.
29 33 02 --	1. (01=L, 02=R, 03=C) hyd QTY lgt failed to illum with qty below 1/2 tank. 2. Replace the hydraulic fluid quantity monitor unit, M122 (AMM 29-33-01/401)

FAULT CODE	1. LOG BOOK REPORT 2. FAULT ISOLATION REFERENCE
29 33 03 --	1. (01=L, 02=R, 03=C) hyd qty reads zero, hyd QTY lgt illum. EICAS msg displayed: (L, R, C) HYD QTY. Hydraulic low PRESS lgt is extin. 2. Replace the hydraulic fluid quantity monitor unit, M122 (AMM 29-33-01/401). If the problem continues, replace the fluid quantity transmitter, M340 (M338, M339), in the left (right, center) hydraulic system (AMM 29-33-02/401). Push the ELEC/HYD and the AUTO-EVENT read switches on the EICAS MAINT panel, on the P61 panel. Push and hold the ERASE switch for 3 seconds. Make sure the (L, R, C) HYD QTY message does not show on the EICAS display.
29 33 04 --	1. (01=L, 02=R, 03=C) hyd qty display is blank. 2. Inspect the system wireing for loose connections and/or chafed wireing (WDM 29-33-11). 3. Replace the hydraulic fluid quantity monitor unit, M122 (AMM 29-33-01/401).
29 33 05 --	1. (01=L, 02=R, 03=C, 06=ALL) hyd qty display is intermittent. 2. Inspect the system wireing for loose connections and/or chafed wireing (WDM 29-33-11). 3. Replace the hydraulic fluid quantity monitor unit, M122 (AMM 29-33-01/401). If the problem continues, replace the fluid quantity transmitter, M340 (M338, M339), in the left (right, center) hydraulic system (AMM 29-33-02/401).
29 33 06 --	1. (01=L, 02=R, 03=C) hyd qty reads above 1.22. 2. FIM 29-11-00/101, Fig. 129, Block 1
29 33 07 --	1. (01=L, 02=R, 03=C) hyd qty reads ___ RF. 2. FIM 29-11-00/101, Fig. 130, Block 1
29 33 08 00	1. EICAS msg C HYD QTY 0/FULL displayed (Ref Chapter 31 for fault code diagram). 2. FIM 29-11-00/101, Fig. 129, Block 1
29 33 09 00	1. EICAS msg L HYD QTY 0/FULL displayed (Ref Chapter 31 for fault code diagram). 2. FIM 29-11-00/101, Fig. 129, Block 1
29 33 10 00	1. EICAS msg R HYD QTY 0/FULL displayed (Ref Chapter 31 for fault code diagram). 2. FIM 29-11-00/101, Fig. 129, Block 1

BITE Index

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

LRU/System Name	Acronym	FIM Reference
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
Figure 1 (Sheet 1)

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

Bite Index
Figure 1 (Sheet 2)

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

Bite Index
Figure 1 (Sheet 3)

MAIN (LEFT, RIGHT, AND CENTER) HYDRAULIC SYSTEMS

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
BREAKER - L BUS TIE, C902 (REF 24-22-00, FIG. 101)				
BREAKER - R BUS TIE, C904 (REF 24-22-00, FIG. 101)				
CARD - SYS C ADP OVERSPEED, M1057	11	1	119AL, MAIN EQUIP CTR, P50	29-11-69
CIRCUIT BREAKER - LEFT GENERATOR, C901 (REF 24-22-00, FIG. 101)				
CIRCUIT BREAKER - RIGHT GENERATOR, C903 (REF 24-22-00, FIG. 101)				
CIRCUIT BREAKERS			FLT COMPT, P11	
BRAKE PRESS, C1180		1	11U13	*
FLIGHT CONTROL SHUTOFF TAIL - C, C1013		1	11H18	*
FLIGHT CONTROL SHUTOFF TAIL - L, C1011		1	11H17	*
FLIGHT CONTROL SHUTOFF TAIL - R, C1012		1	11H27	*
HYDRAULIC AIR PUMP, C1099		1	11D31	*
HYDRAULIC ELEC PUMP C1, C1085		1	11L15	*
HYDRAULIC ELEC PUMP C2, C1086		1	11L24	*
HYDRAULIC ELEC PUMP L, C1084		1	11L25	*
HYDRAULIC ELEC PUMP R, C1087		1	11L16	*
HYDRAULIC L ENG PUMP DEPRESS, C1095		1	11L14	*
HYDRAULIC R ENG PUMP DEPRESS, C1096		1	11L23	*
HYDRAULIC ENG PUMP SUPPLY L, C1097		1	11D29	*
HYDRAULIC ENG PUMP SUPPLY R, C1098		1	11D30	*
HYDRAULIC QTY, C1101		1	11L20	*
HYDRAULIC SYSTEM PRESS - C, C1082		1	11L18	*
HYDRAULIC SYSTEM PRESS - L, C1080		1	11L17	*
HYDRAULIC SYSTEM PRESS - R, C1081		1	11L26	*
LIGHTING - INSTRUMENT & PANEL - CAPT, C1237		1	11P2	*
WING FLT CONTROL SHUTOFF - C, C1016		1	11H16	*
WING FLT CONTROL SHUTOFF - L, C1014		1	11H14	*
WING FLT CONTROL SHUTOFF - R, C1015		1	11H26	*
COMPUTER - EICAS L, M10181 (REF 31-41-00, FIG. 101)				
COMPUTER - EICAS R, M10182 (REF 31-41-00, FIG. 101)				
CONNECTION - SYS C HYDRAULIC GROUND POWER PRESSURE	7	1	149BL, KEEL BEAM	29-11-00
CONNECTION - SYS L HYDRAULIC GROUND POWER PRESSURE	5	1	437BL, 437BR, LEFT ENGINE STRUT, EDP PRESS/CASE DRAIN FILTER MODULE	29-11-00
CONNECTION - SYS R HYDRAULIC GROUND POWER PRESSURE	5	1	447BL, 447BR, RIGHT ENGINE STRUT, EDP PRESS/CASE DRAIN FILTER MODULE	29-11-00
CONNECTION - SYS C HYDRAULIC GROUND POWER RETURN	7	1	149BL, KEEL BEAM	29-11-00
CONNECTION - SYS L HYDRAULIC GROUND POWER RETURN	5	1	437BL, 437BR, LEFT ENGINE STRUT, RETURN FILTER MODULE	29-11-00

* SEE WM EQUIPMENT LIST

Component Index
Figure 101 (Sheet 1)

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
CONNECTION - SYS R HYDRAULIC GROUND POWER RETURN	5	1	447BL,447BR, RIGHT ENGINE STRUT, RETURN FILTER MODULE, EDP PRESS/ CASE DRAIN FILTER MODULE	29-11-00
DIODE - SYS C, R276	14	1	119AL, MAIN EQUIP CTR, E1-2	*
DIODE - (REF 31-01-36, FIG. 101) SYS C, R22,R28,R132,R163,R164				
DIODE - (REF 31-01-37, FIG. 101) SYS L, R42,R160,R174,R246 SYS R, R43				
DIODE - (REF 31-01-33, FIG. 101) SYS L, R45 SYS R, R44,R68,R162,R175,R247				
DIODE - (REF 27-88-00, FIG. 101) SYS R ISOLATION, R176				
EXCHANGER - SYSTEM C HEAT	6	1	632BB RIGHT WING	29-11-27
EXCHANGER - SYSTEM L HEAT	6	1	532BB LEFT WING	29-11-27
EXCHANGER - SYSTEM R HEAT	6	1	632BB RIGHT WING	29-11-27
LIGHT - ADP CONTINUOUS SOLENOID DE-ENERGIZED INDICATOR, DS1	11	1	119AL, MAIN EQUIP CTR, P50, ADP OVERSPEED CARD, M1057	29-11-69
LIGHT - ADP DEMAND SOLENOID DE-ENERGIZED INDICATOR, DS2	11	1	119AL, MAIN EQUIP CTR, P50, ADP OVERSPEED CARD, M1057	29-11-69
LIGHT - POWER SUPPLY INDICATOR, DS3	11	1	119AL, MAIN EQUIP CTR, P50, ADP OVERSPEED CARD, M1057	29-11-69
MODULE - ADP PRESS/CASE DRAIN FILTER	7	1	LEFT WHEEL WELL	29-11-19
MODULE - SYS C ACMP C1,C2 PRESS/CASE DRAIN FILTER	8	2	RIGHT WHEEL WELL	29-11-18
MODULE - SYS C RESERVOIR PRESSURIZATION	8	1	RIGHT WHEEL WELL	29-11-26
MODULE - SYS C RETURN FILTER	8	1	RIGHT WHEEL WELL	29-11-16
MODULE - SYS L ACMP PRESS/CASE DRAIN FILTER	2	1	437BL,437BR, LEFT ENGINE STRUT	29-11-18
MODULE - SYS L EDP PRESS/CASE DRAIN FILTER	2	1	437BL,437BR, LEFT ENGINE STRUT	29-11-17
MODULE - SYS L RESERVOIR PRESSURIZATION	2	1	437BL,437BR, LEFT ENGINE STRUT	29-11-25
MODULE - SYS L RETURN FILTER	2	1	437BL,437BR, LEFT ENGINE STRUT	29-11-15
MODULE - SYS R ACMP PRESS/CASE DRAIN FILTER	2	1	447BL,447BR, RIGHT ENGINE STRUT	29-11-18
MODULE - SYS R EDP PRESS/CASE DRAIN FILTER	2	1	447BL,447BR, RIGHT ENGINE STRUT	29-11-17
MODULE - SYS R RESERVOIR PRESSURIZATION	2	1	447BL,447BR, RIGHT ENGINE STRUT	29-11-25
MODULE - SYS R RETURN FILTER	2	1	447BL,447BR, RIGHT ENGINE STRUT	29-11-15
PANEL - (REF 26-21-00, FIG. 101) FIRE CONTROL, M10443				
PANEL - HYDRAULIC CONTROL, M10	1	1	FLT COMPT, P5	29-11-00
PANEL - RESERVE BRAKES AND STEERING, M1216	1	1	FLT COMPT, P61	29-11-00
PUMP (ACMP) - SYS C ALTERNATING CURRENT MOTOR C1, M232	8	1	RIGHT WHEEL WELL	29-11-02
PUMP (ACMP) - SYS C ALTERNATING CURRENT MOTOR C2, M233	8	1	RIGHT WHEEL WELL	29-11-02
PUMP (ACMP) - SYS L ALTERNATING CURRENT MOTOR, M231	2	1	437BL,437BR, LEFT ENGINE STRUT	29-11-01

* SEE WM EQUIPMENT LIST

Component Index
Figure 101 (Sheet 2)

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
PUMP (ACMP) - SYS R ALTERNATING CURRENT MOTOR, M234	2	1	447BL,447BR, LEFT ENGINE STRUT	29-11-01
PUMP (ADP) - SYS C AIR DRIVEN, M235	5	1	195RL,195SL, AFT LEFT WING/BODY FAIRING	29-11-03
PUMP (EDP) - SYS L ENGINE DRIVEN	2	1	415AL,416AR, LEFT ENGINE	29-11-05
PUMP (EDP) - SYS R ENGINE DRIVEN	2	1	425AL,426AR, RIGHT ENGINE	29-11-05
RELAY - (24-25-00/101) HYD GEN ADP COMMAND, K865				
RELAYS - (31-01-33/101) ACMP R OFF CONTROL, K128 EDP R PRESS SENSE, K127 FLAP HANDLE SENSE, K717 SYS R ACMP ON CONTROL, K126				
RELAYS - (31-01-36/101) ADP OFF CONTROL, K153 ADP ON DEMAND, K684 ADP OVERSPEED MAG LATCH, K603				
RELAYS - (31-01-37/101) ACMP L OFF CONTROL, K134 EDP L PRESS SENSE, K131 SYS L ACMP ON CONTROL, K130				
RELAYS - (32-09-00/101) SYS NO. 1 AIR/GND, K178,K552 SYS NO. 2 AIR/GND, K204				
RELAYS - (80-11-00/101) L ENGINE START SENSE, K680 R ENGINE START SENSE, K681				
RESERVOIR - SYS C HYDRAULIC	8	1	RIGHT WHEEL WELL	29-11-21
RESERVOIR - SYS L HYDRAULIC	2	1	437BL, 437BR, LEFT ENGINE STRUT	29-11-20
RESERVOIR - SYS R HYDRAULIC	2	1	447BL, 447BR, RIGHT ENGINE STRUT	29-11-20
SENSOR - MONOPOLE, YBVTS1	5	1	195RL, 195SL, AFT LEFT WING/BODY FAIRING, ADP, M235	*
SOLENOID - CONTINUOUS, YBVV1	5	1	195RL, 195SL, AFT LEFT WING/BODY FAIRING, ADP, M235	*
SOLENOID - DEMAND, YBVV2	5	1	195RL, 195SL, AFT LEFT WING/BODY FAIRING, ADP, M235	*
SWITCHES - (26-21-00/101) L ENGINE FIRE, S37 R ENGINE FIRE, S38				
SWITCH - ADP CONTROL PRESSURE, S29	7	1	LEFT WHEEL WELL, ADP PRESS/CASE DRAIN FILTER MODULE	29-11-19
SWITCH - ADP TEST/RESET, S572	10	1	119AL, MAIN EQUIP CTR, P36	*

* SEE THE WDM EQUIPMENT LIST

Component Index
Figure 101 (Sheet 3)

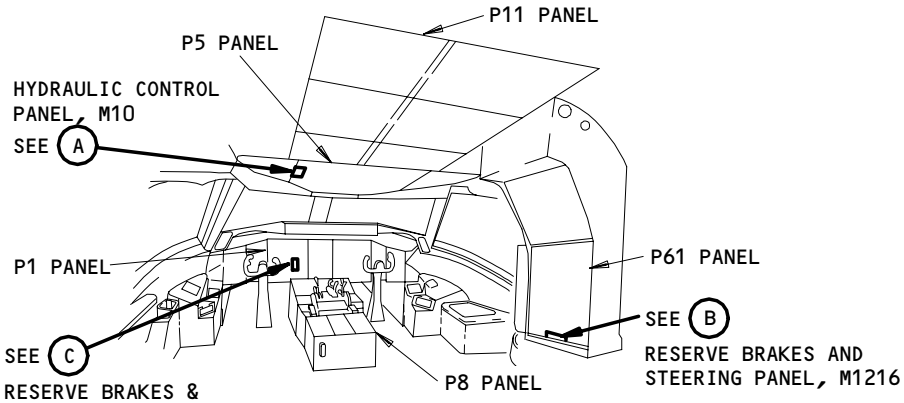
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
SWITCH – SPEEDBRAKE LEVER POSITION, S493 (REF 27-61-00, FIG. 101)				
SWITCH – SYS C ACMP C2 PRESSURE, S34	9	1	RIGHT WHEEL WELL, ACMP C2 PRESS/ CASE DRAIN FILTER MODULE	29-11-18
SWITCH – SYS C ADP SELECT, YCYS6	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
SWITCH – SYS L ACMP CONTROL PRESSURE, S27	5	1	437BL,437BR, LEFT ENGINE STRUT, EDP PRESS/CASE DRAIN FILTER MODULE	29-11-17
SWITCH – SYS L ACMP PRESSURE, S25	3	1	437BL,437BR, LEFT ENGINE STRUT, ACMP PRESS/CASE DRAIN FILTER MODULE	29-11-18
SWITCH – SYS L ACMP SELECT, YCYS5	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
SWITCH – SYS L EDP PRESSURE, S26	5	1	437BL,437BR, LEFT ENGINE STRUT, EDP PRESS/CASE DRAIN FILTER MODULE	29-11-17
SWITCH – SYS R ACMP CONTROL PRESSURE, S32	5	1	447BL,447BR, RIGHT ENGINE STRUT, EDP PRESS/CASE DRAIN FILTER MODULE	29-11-17
SWITCH – SYS R ACMP PRESSURE, S30	3	1	447BL,447BR, RIGHT ENGINE STRUT, ACMP PRESS/CASE DRAIN FILTER MODULE	29-11-18
SWITCH – SYS R ACMP SELECT, YCYS7	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
SWITCH – SYS R EDP PRESSURE, S31	5	1	447BL,447BR, RIGHT ENGINE STRUT, EDP PRESS/CASE DRAIN FILTER MODULE	29-11-17
SWITCH/LIGHT – RESERVE BRAKES AND STEERING SELECT, S547	1	1	FLT COMPT, P1	29-11-00
SWITCH/LIGHT – SYS C ACMP C1 SELECT, YCYS2	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
SWITCH/LIGHT – SYS C ACMP C2 SELECT, YCYS3	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
SWITCH/LIGHT – SYS L EDP SELECT, YCYS1	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
SWITCH/LIGHT – SYS R EDP SELECT, YCYS4	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
TIME DELAY – (REF 31-01-31, FIG. 101) SYS C ACMP C1 ON, M303				
TIME DELAY – (REF 31-01-32, FIG. 101) SYS C ACMP C2 ON, M304				
TIME DELAY – (REF 31-01-33, FIG. 101) SYS R ACMP OFF, M300 SYS R ACMP ON, M299,M500				
TIME DELAY – (REF 31-01-36, FIG. 101) SYS C ADP OFF, M497 SYS C ADP ON, M305				
TIME DELAY (REF 31-01-37, FIG. 101) SYS L ACMP OFF, M302 SYS L ACMP ON, M301,M499				

* SEE WM EQUIPMENT LIST

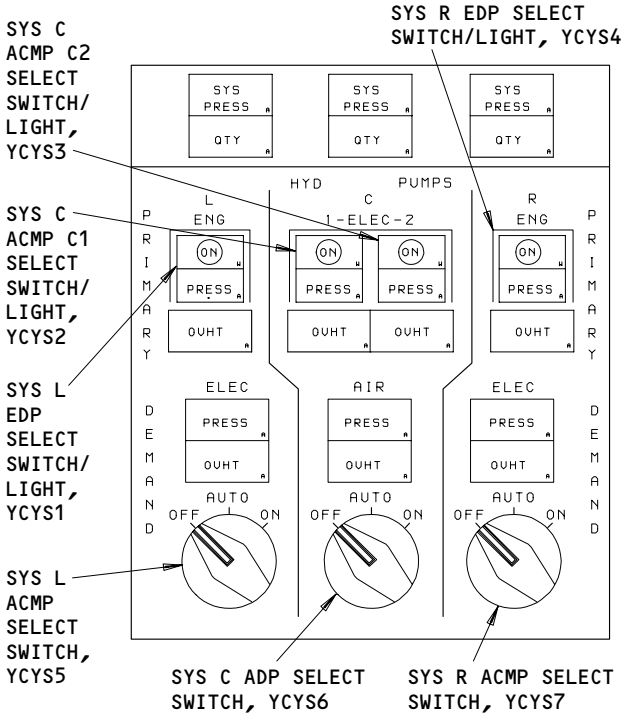
Component Index
Figure 101 (Sheet 4)

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
UNIT - (27-51-00/101) FLAP/SLATS ELEC, M545 UNIT - (32-09-03/101) PROX SW ELEC, M162 UNITS - ELECTRICAL LOAD CONTROL (31-01-31/101) SYS C ACMP C1, M897 SYS R ACMP, M896 UNITS - ELECTRICAL LOAD CONTROL (31-01-32/101) SYS C ACMP C2, M898 SYS L ACMP, M895				
VALVE - ADP PRESS REGULATOR AND SHUTOFF, V129	5	1	195RL,195SL, AFT LEFT WING/BODY FAIRING, ADP, M235	29-11-30
VALVE - ISOLATED ACMP PRESSURE SHUTOFF, V110	8	1	RIGHT WHEEL WELL	29-11-08
VALVE - ISOLATED ACMP SUPPLY SHUTOFF, V111	8	1	RIGHT WHEEL WELL	29-11-07
VALVE - SYS C RESERVOIR DRAIN	9	1	RIGHT WHEEL WELL, HYD RESVR	29-11-22
VALVE - SYS C RESERVOIR PRESSURE RELIEF	9	1	RIGHT WHEEL WELL, HYD RESVR	29-11-24
VALVE - SYS C RESERVOIR PRESSURIZATION SHUTOFF	8	1	RIGHT WHEEL WELL	29-11-28
VALVE - SYS C RESERVOIR SAMPLING	9	1	RIGHT WHEEL WELL, HYD RESVR	29-11-23
VALVE - SYS L EDP SUPPLY SHUTOFF, V6	2	1	437BL,437BR, LEFT ENGINE STRUT	29-11-06
VALVE - SYS L RESERVOIR DRAIN	3	1	437BL,437BR, LEFT ENGINE STRUT, HYD RESVR	29-11-22
VALVE - SYS L RESERVOIR PRESSURE RELIEF	3	1	437BL,437BR, LEFT ENGINE STRUT, HYD RESVR	29-11-24
VALVE - SYS L RESERVOIR PRESSURIZATION SHUTOFF	2	1	437BL,437BR, LEFT ENGINE STRUT	29-11-28
VALVE - SYS L RESERVOIR SAMPLING	3	1	437BL,437BR, LEFT ENGINE STRUT, HYD RESVR	29-11-23
VALVE - SYS R EDP SUPPLY SHUTOFF, V7	2	1	447BL,447BR, RIGHT ENGINE STRUT	29-11-06
VALVE - SYS R RESERVOIR DRAIN	3	1	447BL,447BR, RIGHT ENGINE STRUT, HYD RESVR	29-11-22
VALVE - SYS R RESERVOIR PRESSURE RELIEF	3	1	447BL,447BR, RIGHT ENGINE STRUT, HYD RESVR	29-11-24
VALVE - SYS R RESERVOIR PRESSURIZATION SHUTOFF	2	1	447BL,447BR, RIGHT ENGINE STRUT	29-11-28
VALVE - SYS R RESERVOIR SAMPLING	3	1	447BL,447BR, RIGHT ENGINE STRUT, HYD RESVR	29-11-23

Main (Left, Right, and Center) Hydraulic Systems - Component Index
Figure 101 (Sheet 5)

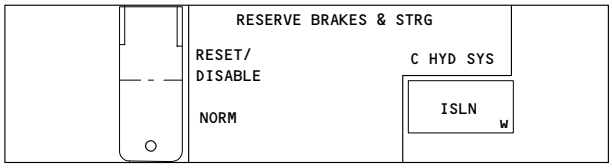


FLT COMPT



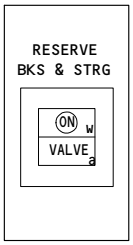
HYDRAULIC CONTROL PANEL, M10

A



RESERVE BRAKES AND STEERING PANEL, M1216

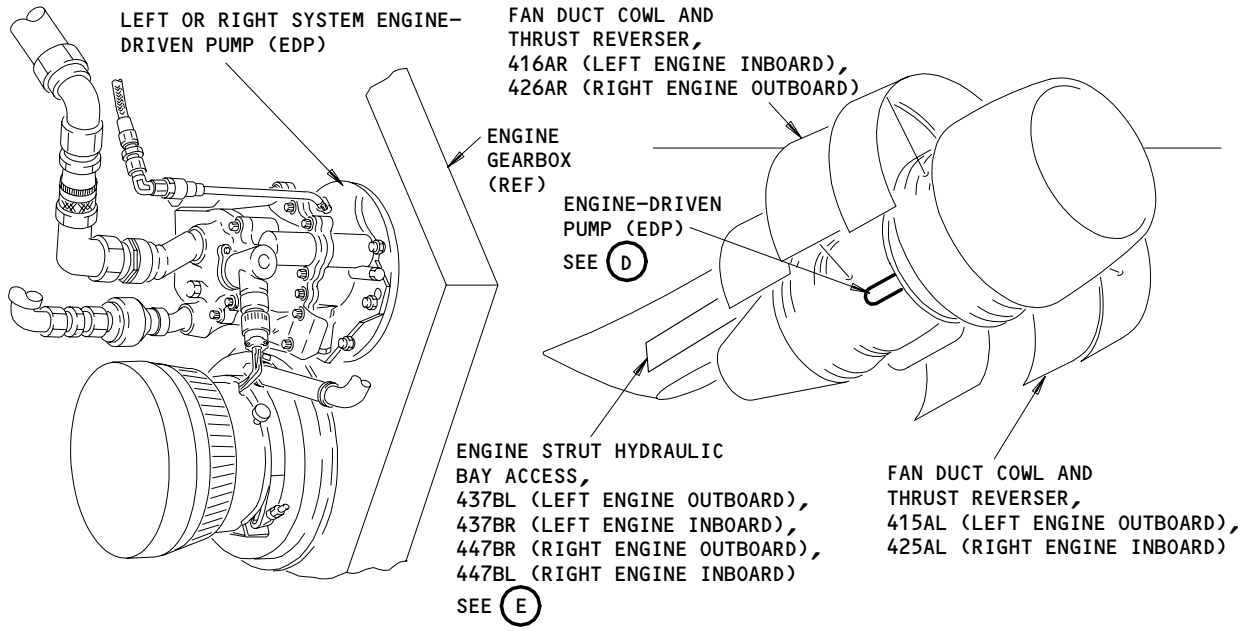
B



RESERVE BRAKES & STEERING SELECT SWITCH/LIGHT, S547

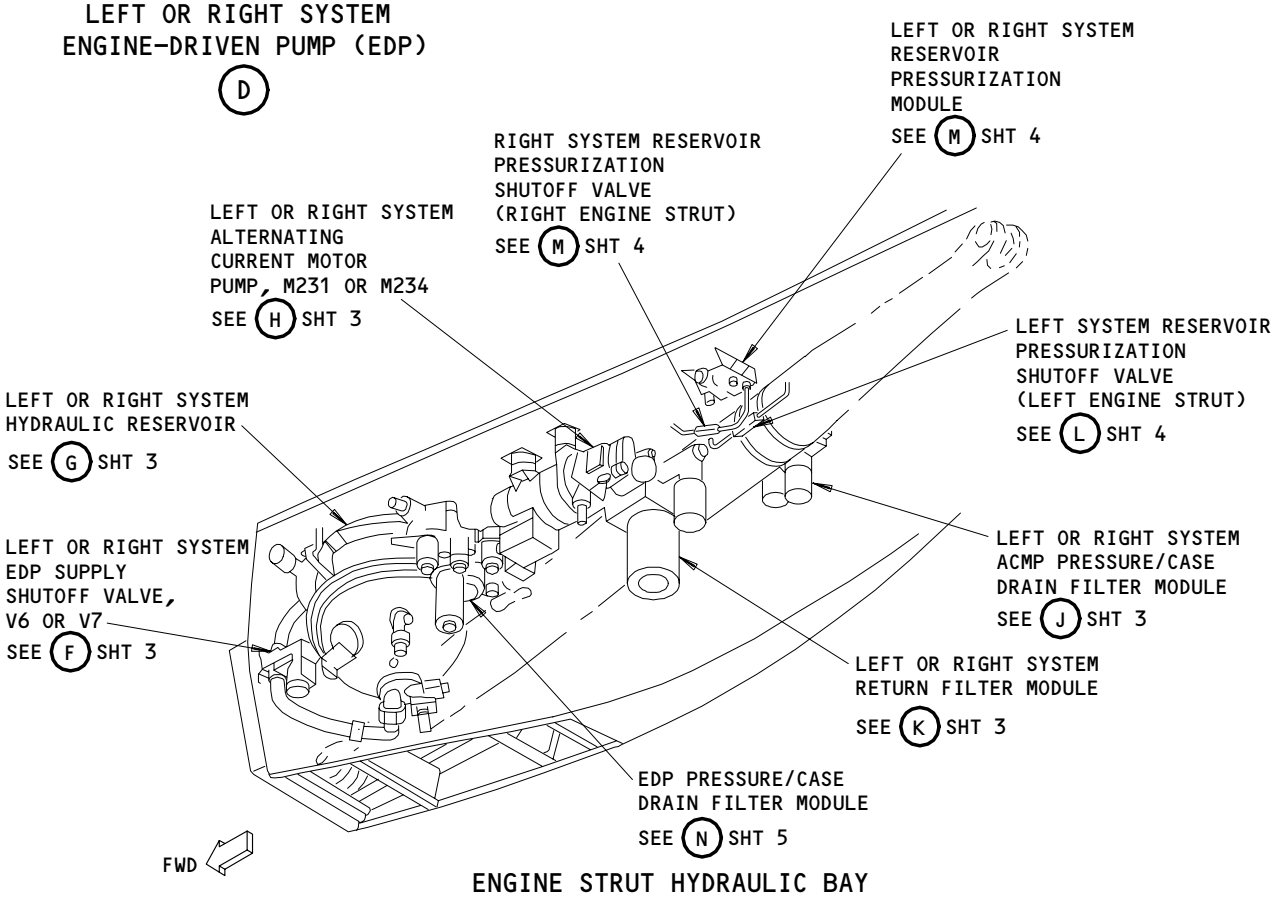
C

Component Location
Figure 102 (Sheet 1)



LEFT OR RIGHT SYSTEM ENGINE-DRIVEN PUMP (EDP)

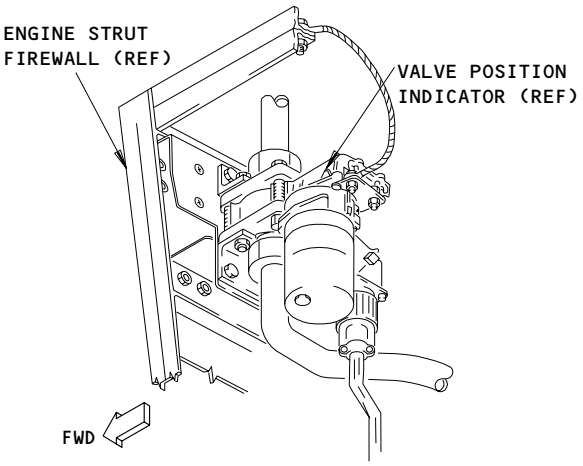
D



ENGINE STRUT HYDRAULIC BAY

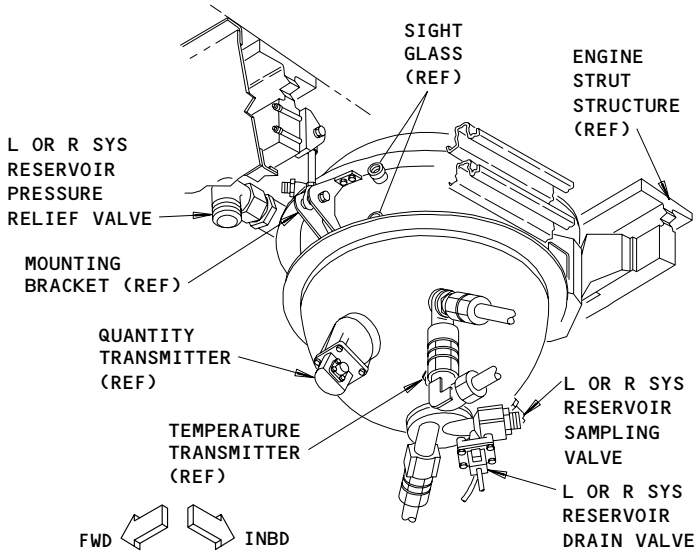
E

Main (Left, Right, and Center) Hydraulic Systems - Component Location
Figure 102 (Sheet 2)



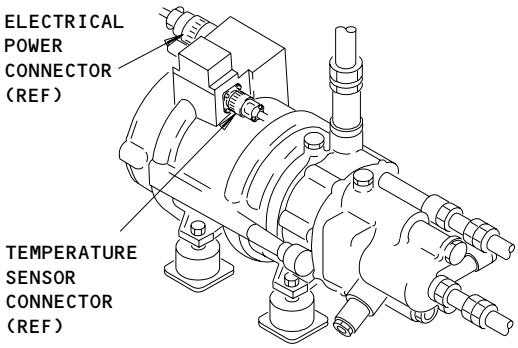
L OR R SYS EDP SUPPLY SHUTOFF VALVE, V6 OR V7

F



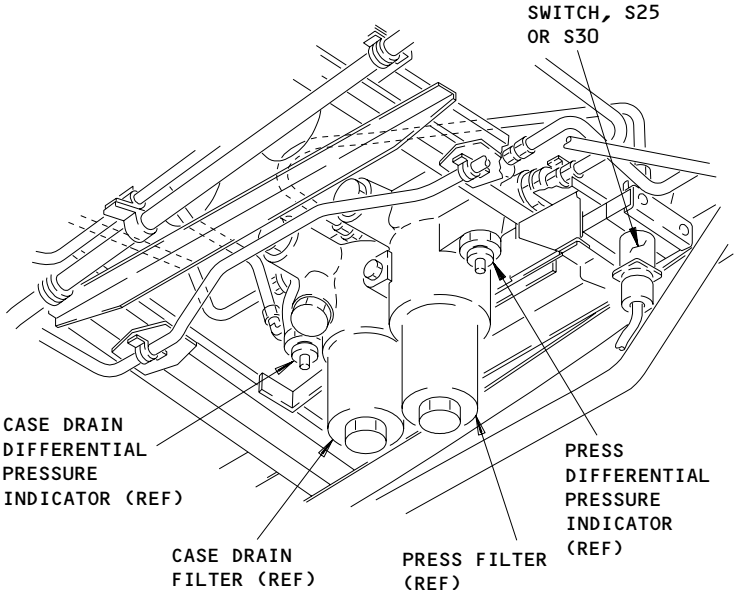
L OR R SYS RESERVOIR

G



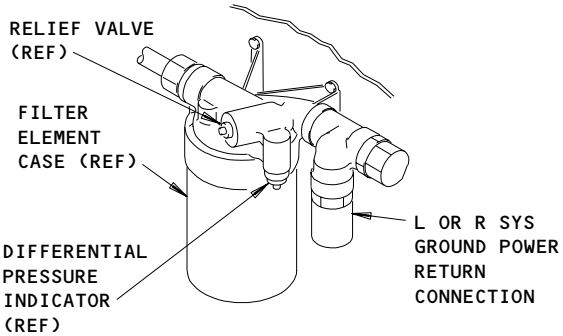
L OR R SYS ACMP ALTERNATING CURRENT MOTOR PUMP, M231 OR M234

H



L OR R SYS ACMP PRESSURE/CASE DRAIN FILTER MODULE

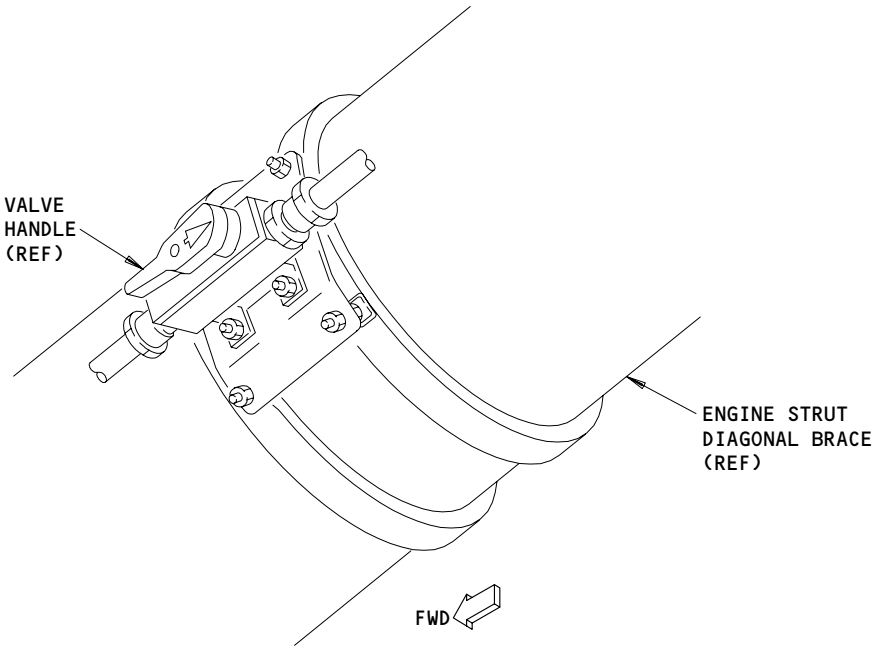
J



L OR R SYS RETURN FILTER MODULE

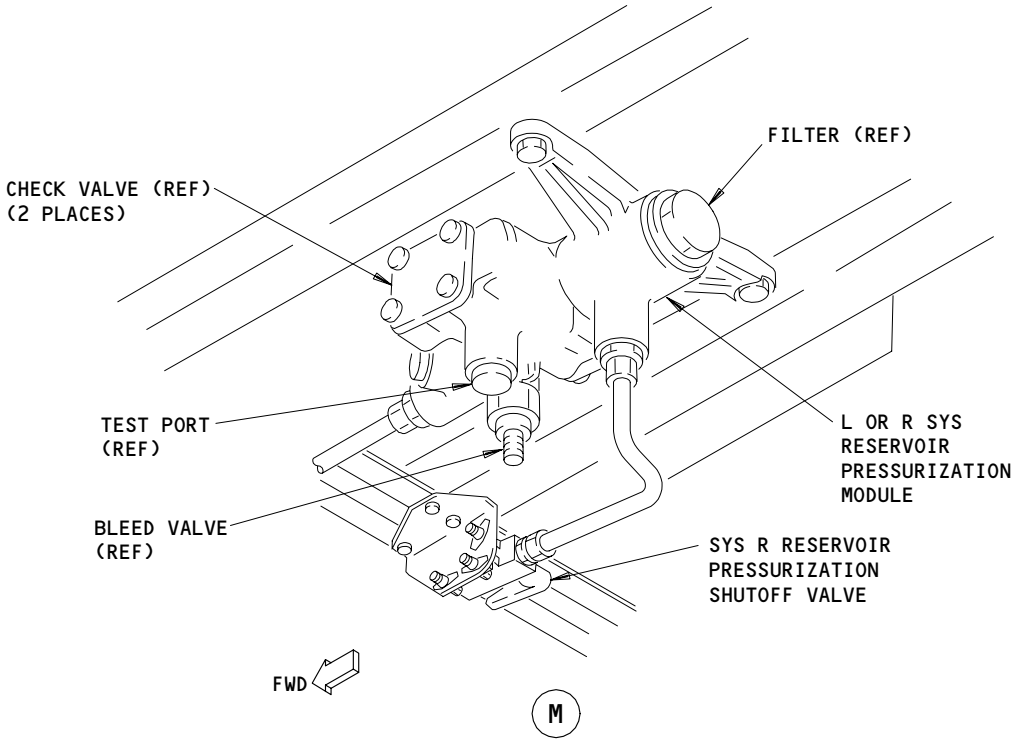
K

Component Location (Details from Sht 2)
Figure 102 (Sheet 3)



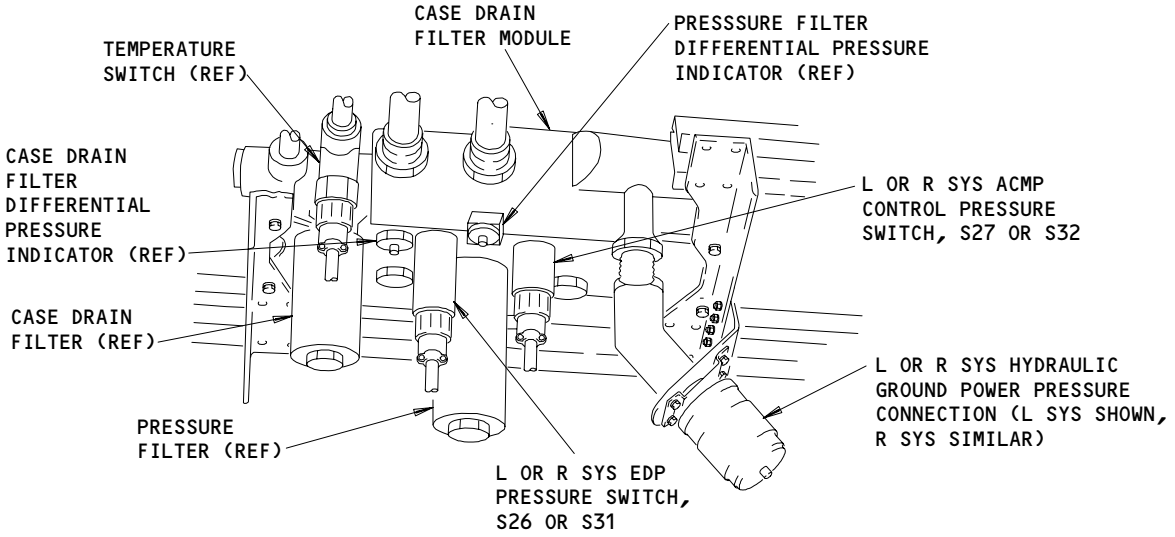
SYS L RESERVOIR PRESSURIZATION SHUTOFF VALVE

L



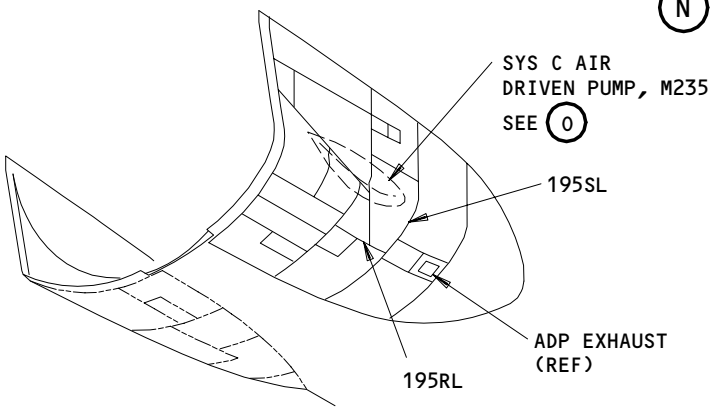
M

Component Location (Details from Sht 2)
Figure 102 (Sheet 4)

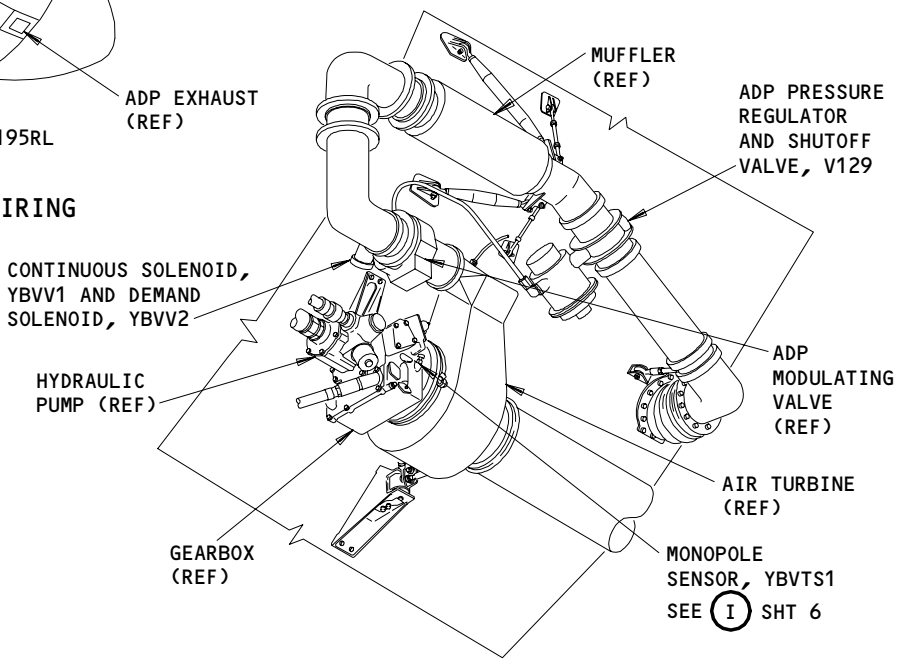


L OR R SYS EDP PRESSURE/CASE DRAIN FILTER MODULE

(N) FROM SHT 2



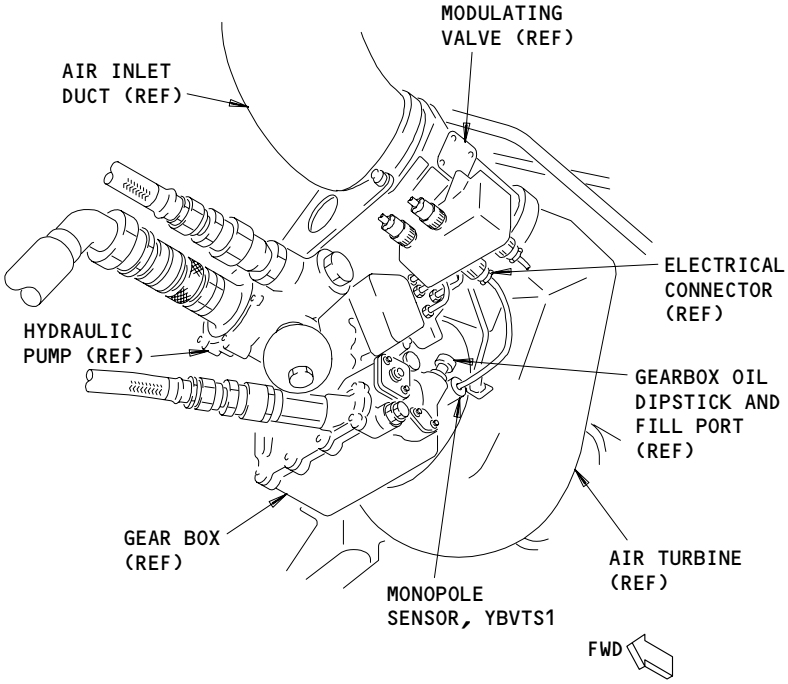
AFT LEFT WING/BODY FAIRING



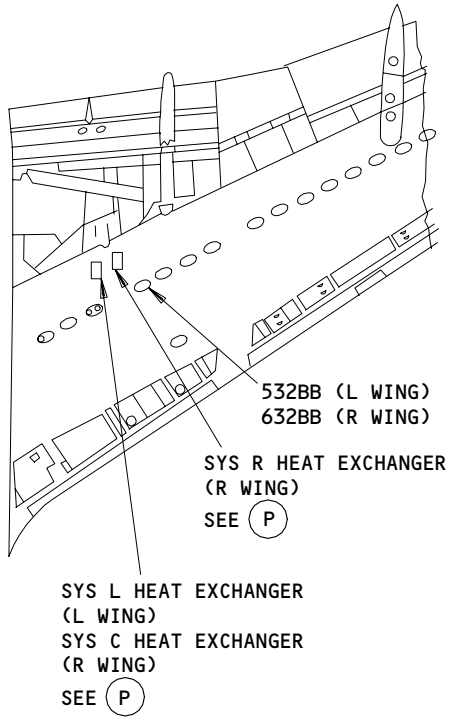
SYS C AIR DRIVEN PUMP, M235

(O)

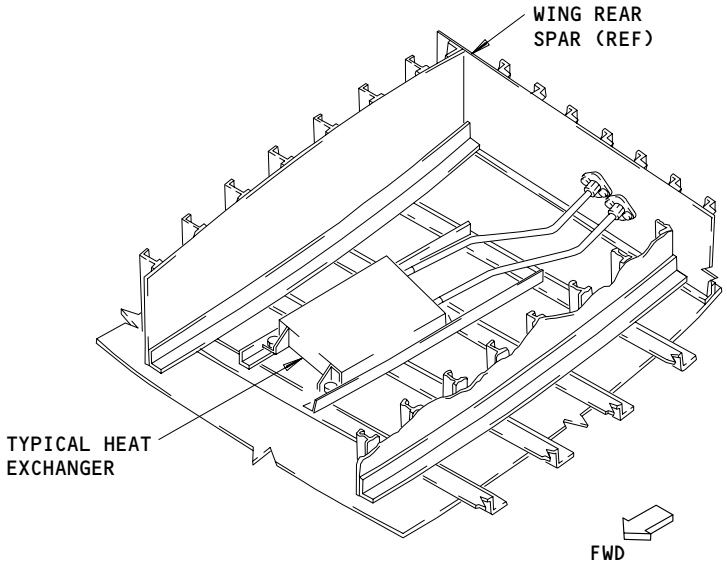
Component Location
Figure 102 (Sheet 5)



I FROM SHT 5



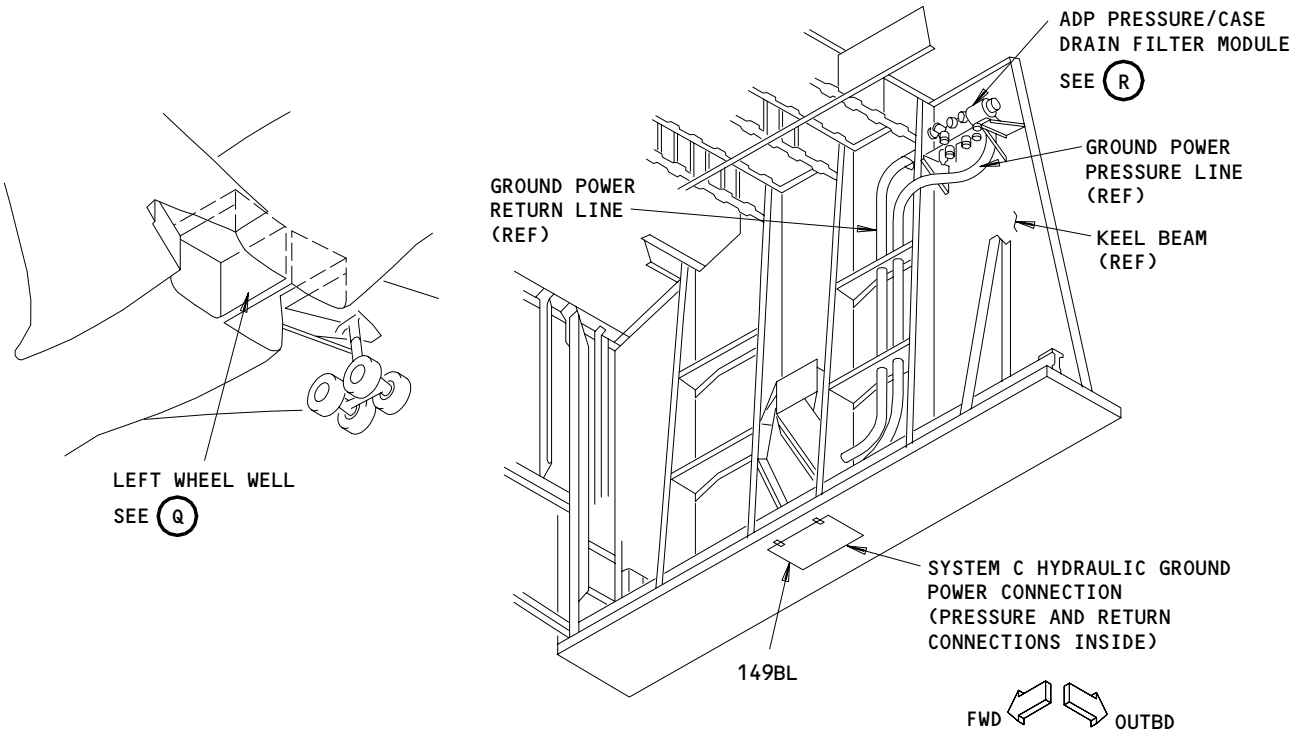
WING – BOTTOM VIEW



SYS L, R OR C HEAT EXCHANGER
(VIEW SHOWN WITH TOP SKIN REMOVED)

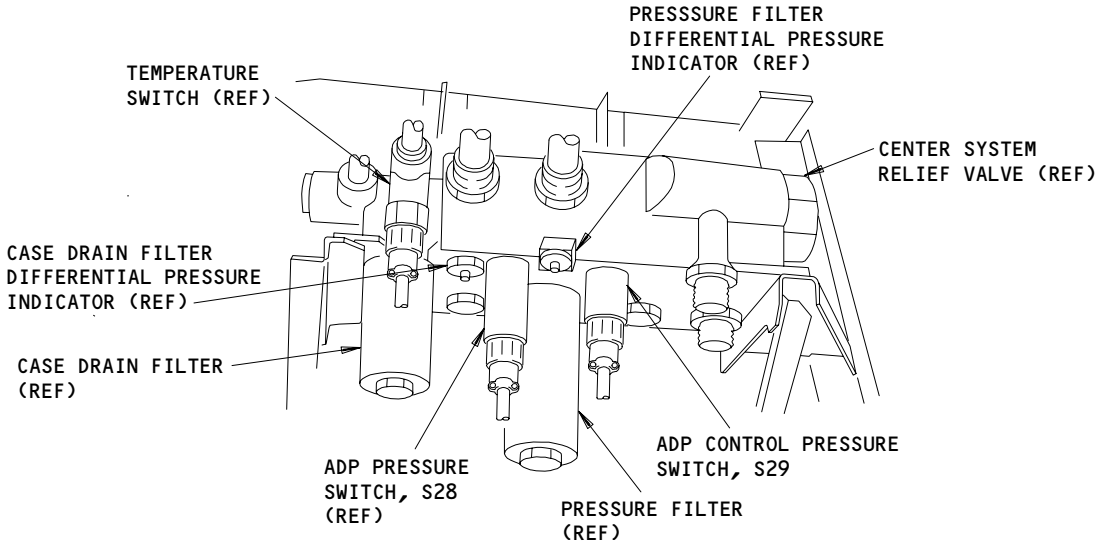
P

Component Location
Figure 102 (Sheet 6)



LEFT WHEEL WELL

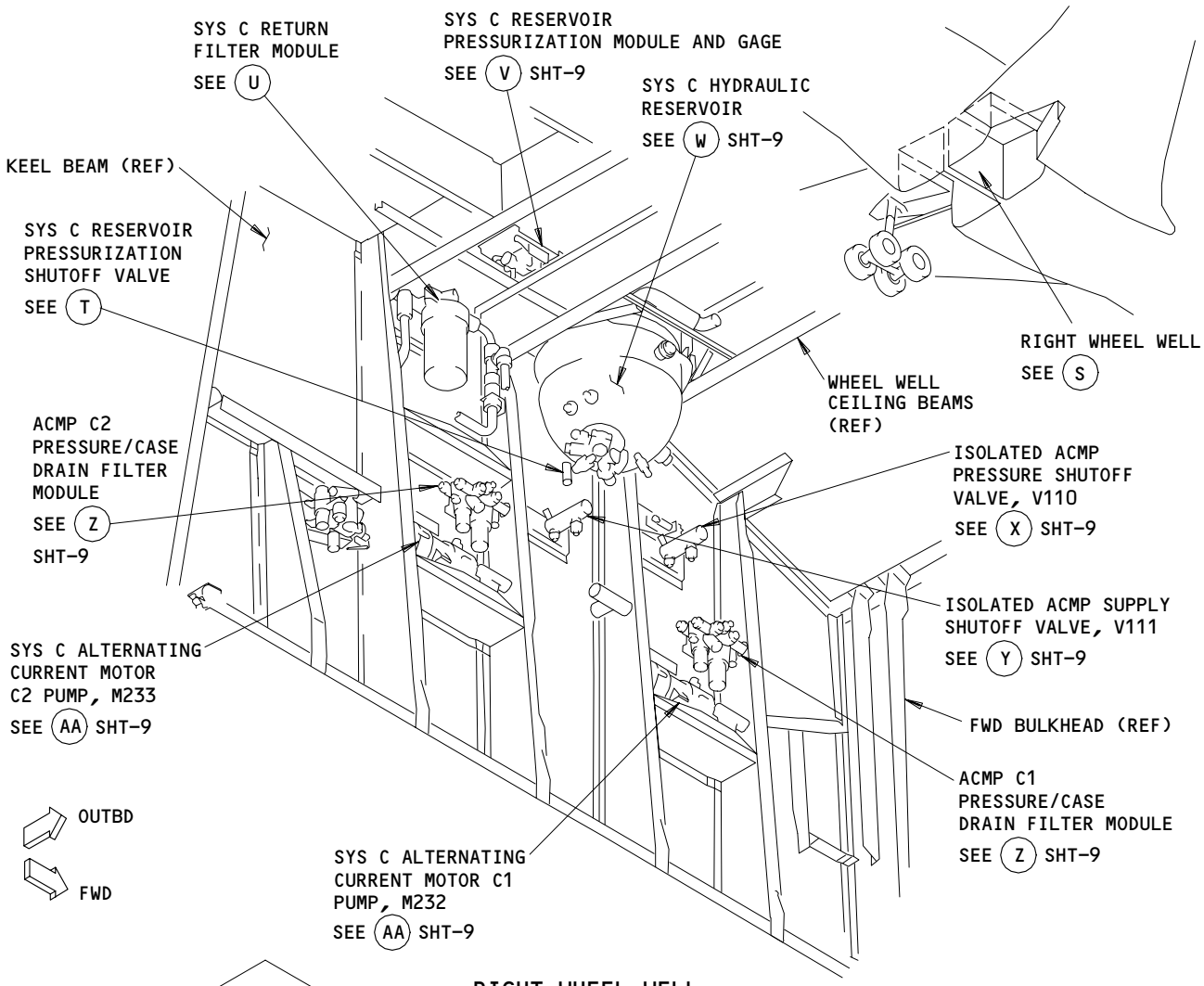
Q



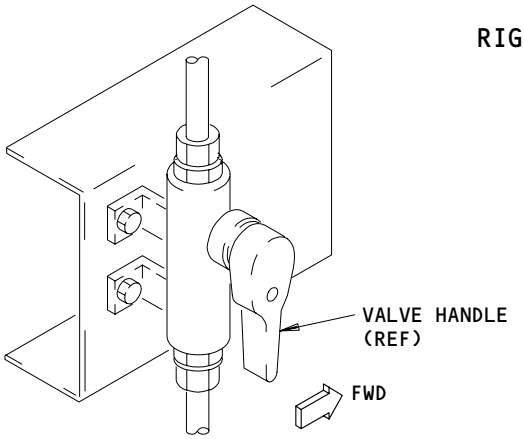
ADP PRESSURE/CASE DRAIN FILTER MODULE

R

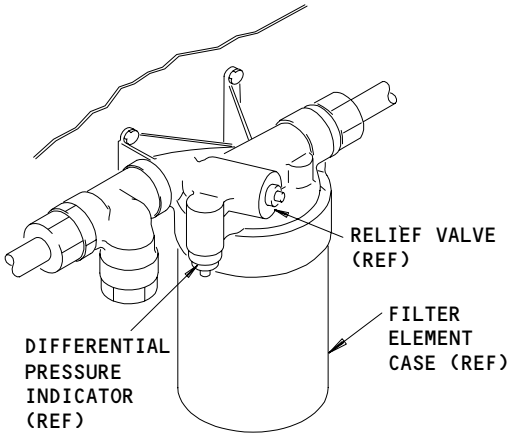
Component Location
Figure 102 (Sheet 7)



RIGHT WHEEL WELL
S

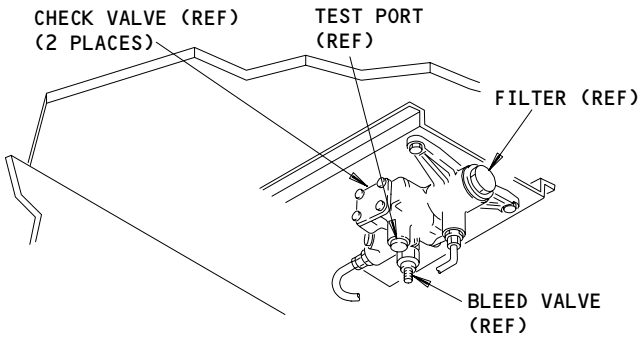


SYS C RESERVOIR PRESSURIZATION SHUTOFF VALVE
T



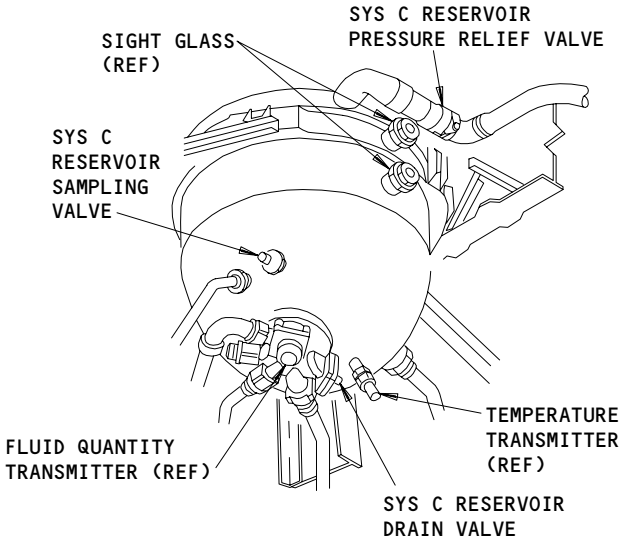
SYS C RETURN FILTER MODULE
U

Component Location
Figure 102 (Sheet 8)



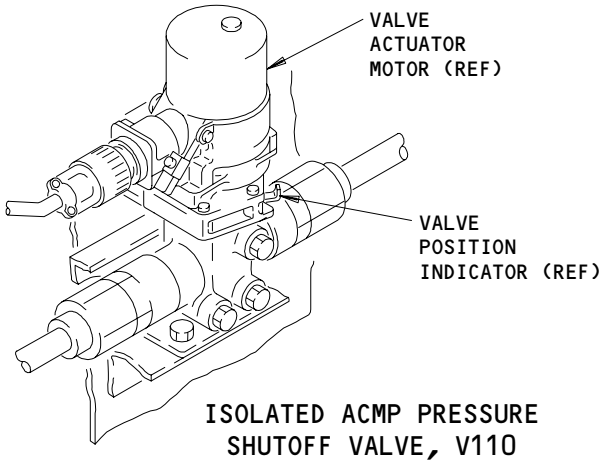
SYS C RESERVOIR PRESSURIZATION MODULE

V



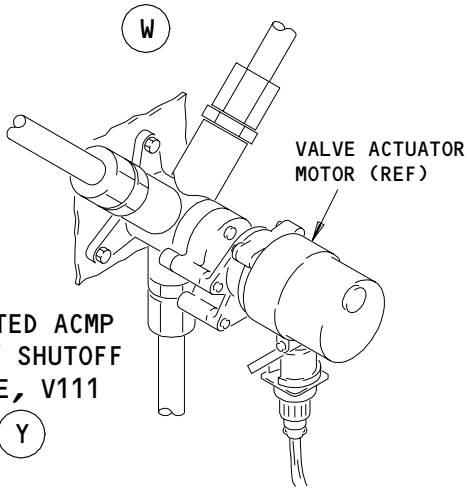
SYS C HYDRAULIC RESERVOIR

W



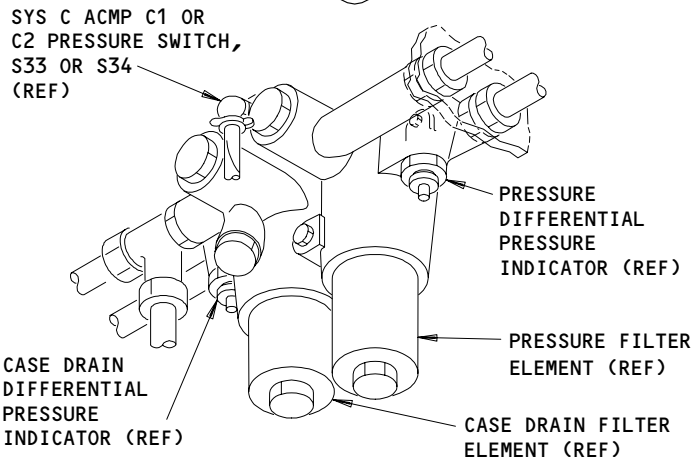
ISOLATED ACMP PRESSURE SHUTOFF VALVE, V110

X



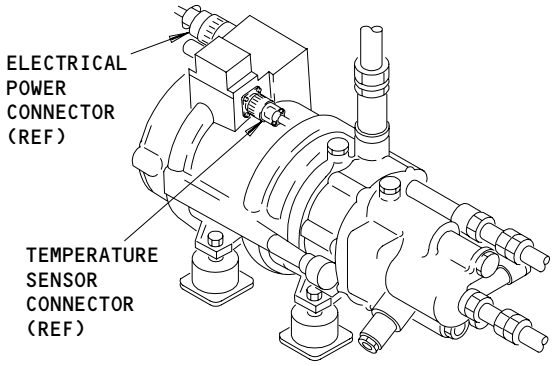
ISOLATED ACMP SUPPLY SHUTOFF VALVE, V111

Y



SYS C ACMP C1 OR C2 PRESSURE/CASE DRAIN FILTER MODULE

Z

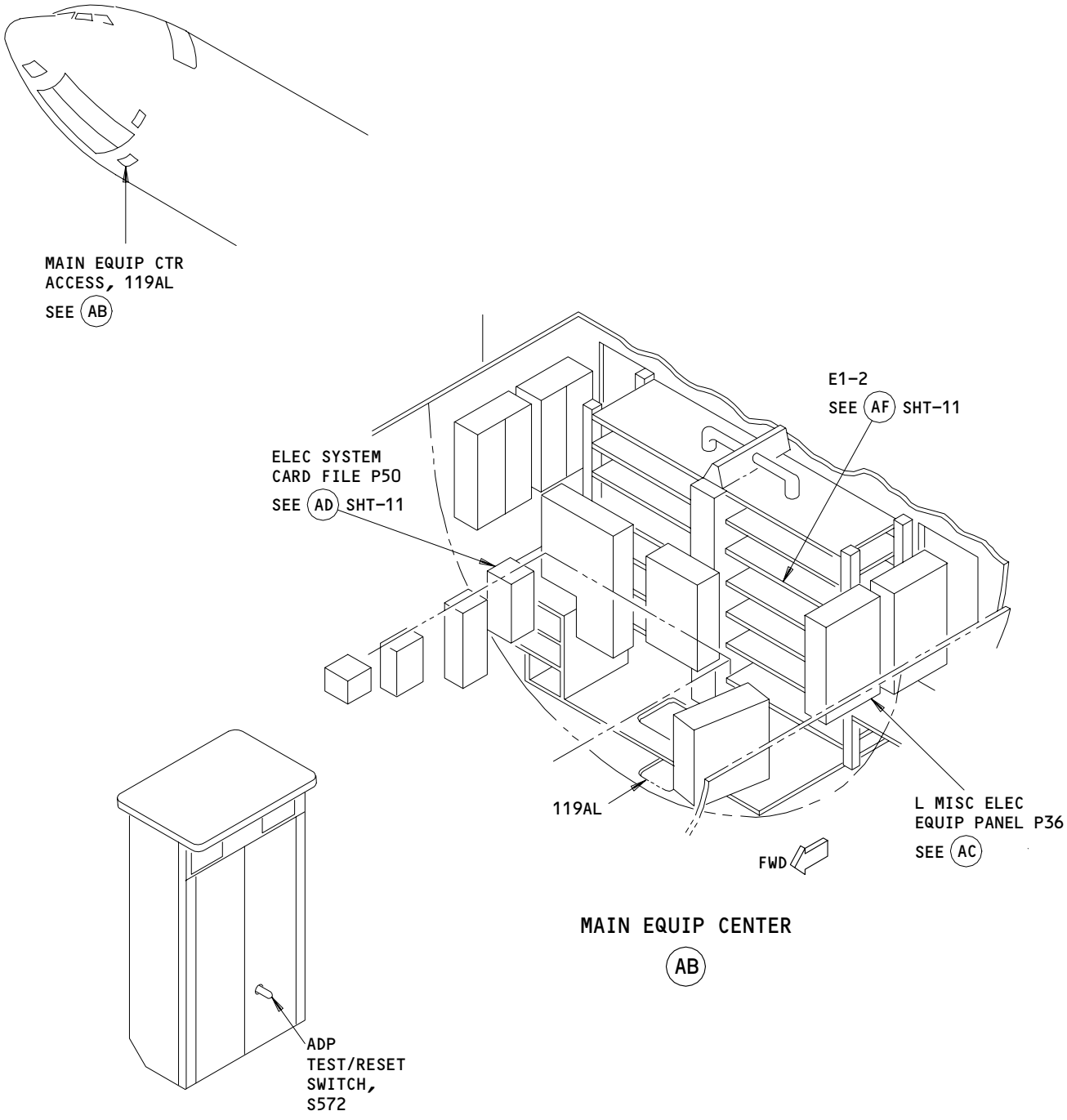


ALTERNATING CURRENT MOTOR C1 OR C2 PUMP, M232 OR M233

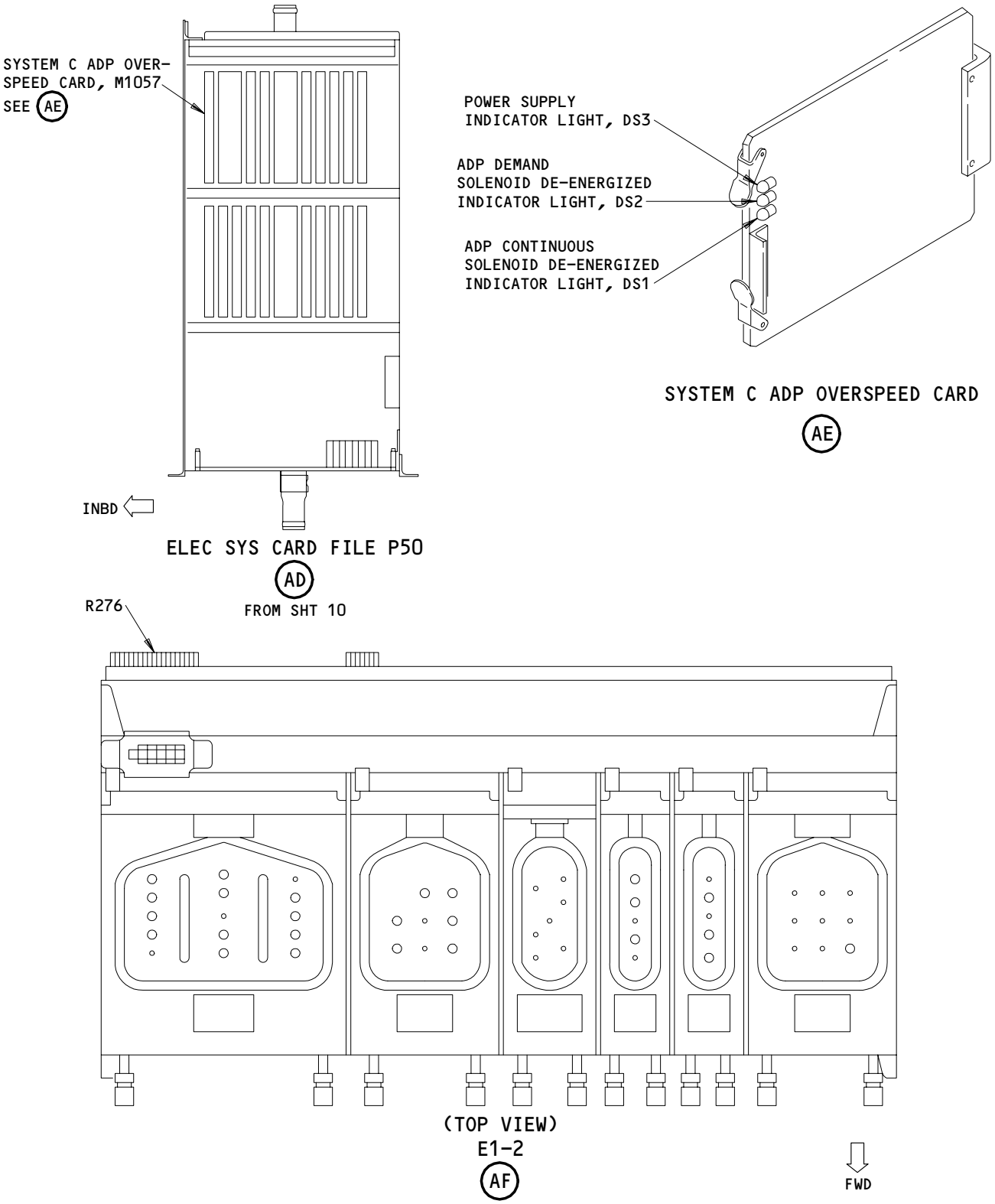
AA

Component Location (Details from Sht 8)
Figure 102 (Sheet 9)

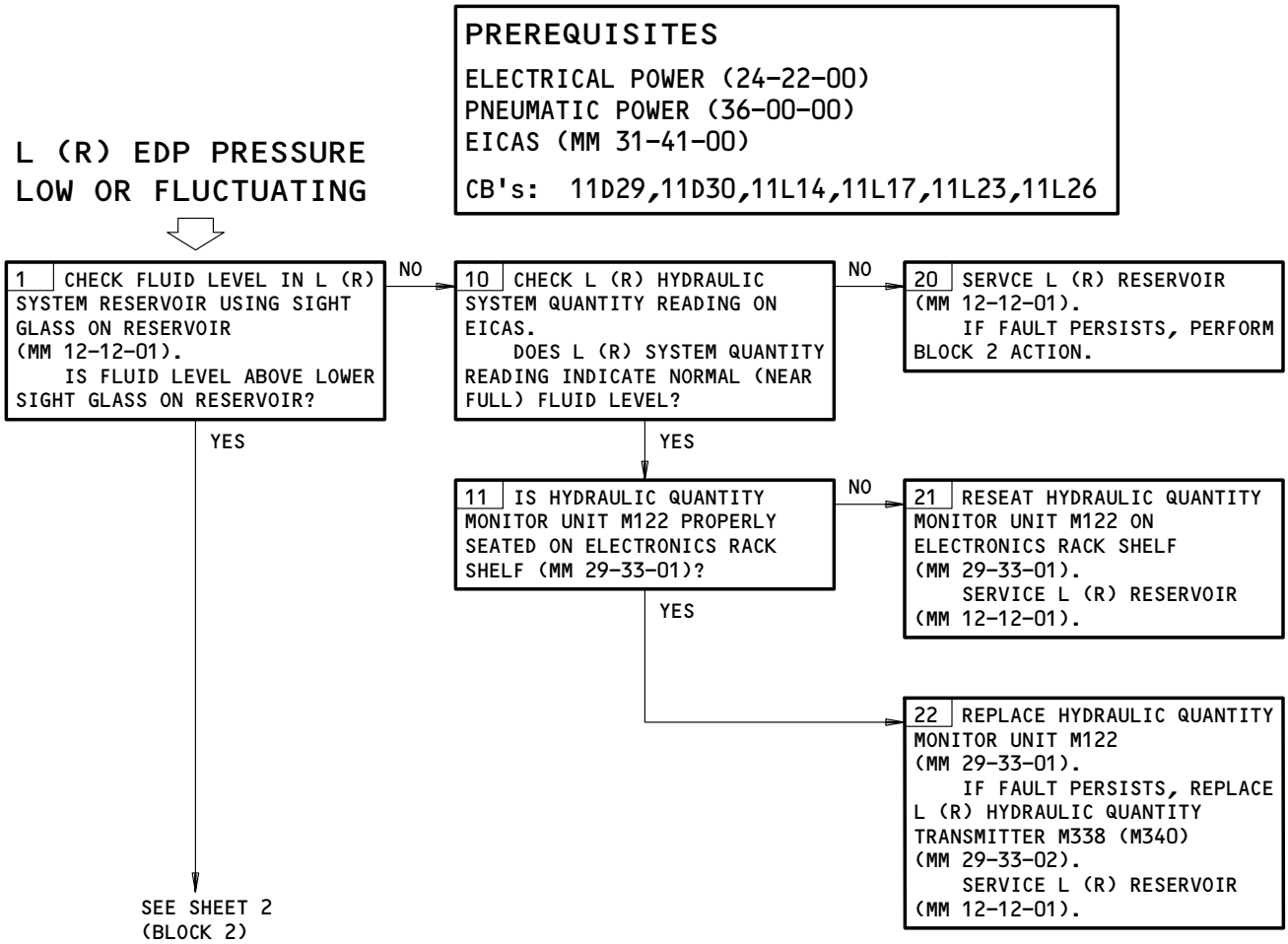
192996



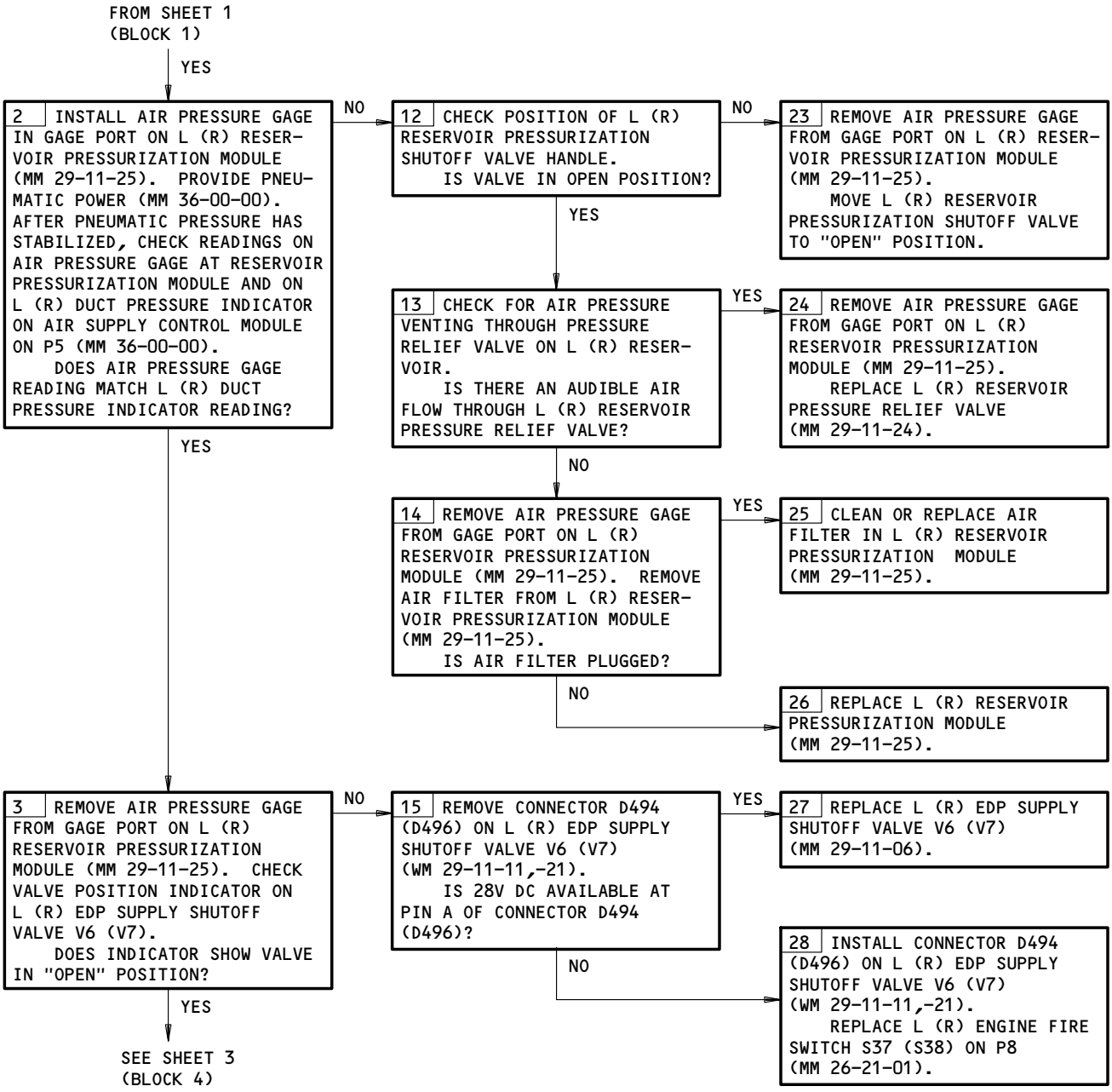
Component Location
Figure 102 (Sheet 10)



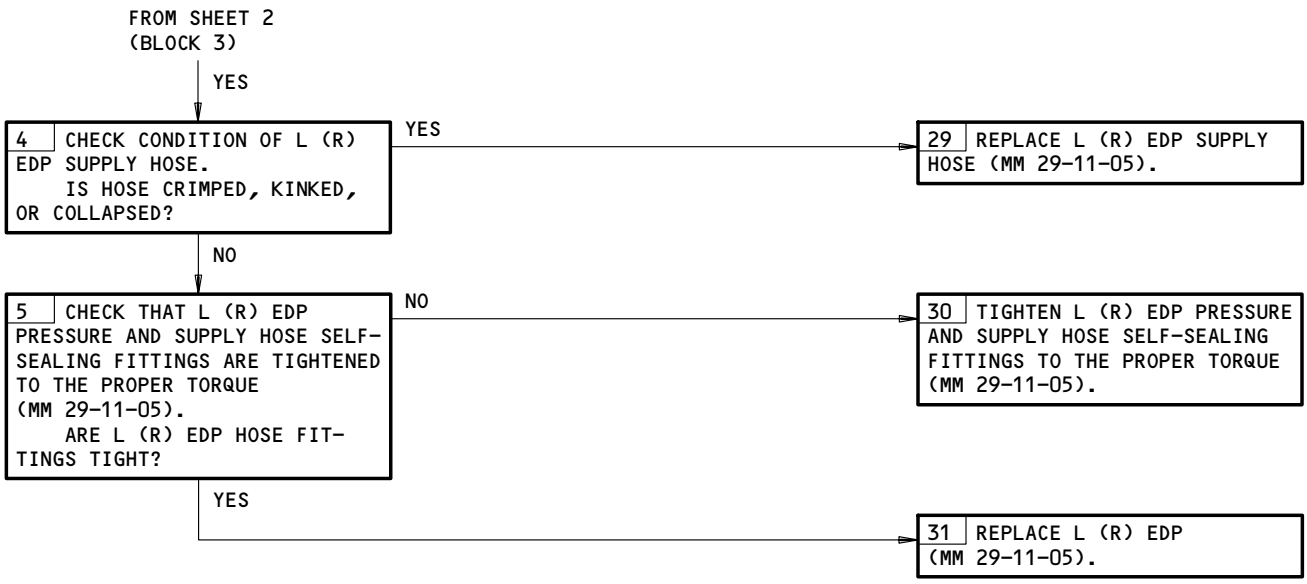
Component Location
Figure 102 (Sheet 11)



L (R) EDP Pressure Low or Fluctuating
Figure 103 (Sheet 1)



L (R) EDP Pressure Low or Fluctuating
Figure 103 (Sheet 2)



L (R) EDP Pressure Low or Fluctuating
Figure 103 (Sheet 3)

LEFT OR RIGHT EDP FAILED TO DEPRESSURIZE

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 11D29,11D30,11L14,11L16,11L23,11L25

1 WITH BOTH ENGINES NOT RUNNING, PLACE EDP L (R) "ENG" SWITCH ON P5 TO OFF POSITION. CHECK THAT L (R) ENGINE FIRE SWITCH ON P8 IS IN NORMAL POSITION. POSITION ACMP L (R) "ELEC" SWITCH ON P5 TO OFF POSITION.
IS L (R) EDP LOW PRESSURE LIGHT ILLUMINATED?

NO → 10 REPLACE L (R) EDP PRESSURE SWITCH S26 (S31) ON L (R) EDP FILTER MODULE IN ENGINE STRUT (MM 29-11-17).

YES ↓

2 POSITION ACMP L (R) "ELEC" SWITCH TO ON.
IS EDP LOW PRESSURE LIGHT ILLUMINATED?

NO → 11 REPLACE CHECK VALVE IN L (R) EDP FILTER MODULE IN ENGINE STRUT (MM 29-11-17).

YES ↓

3 REMOVE CONNECTOR D10980 FROM L (R) EDP DEPRESSURIZATION VALVE V349 (WM 29-11-11,-21).
IS 28V DC AVAILABLE AT PIN 3 OF CONNECTOR D10980 (PIN 1 GND)?

YES → 12 REPLACE L (R) EDP (MM 29-11-05).

NO → 13 INSTALL CONNECTOR D10980 ON L (R) DEPRESSURIZATION VALVE V349. REPLACE L (R) EDP SWITCH YCYS1 (YCYS4) ON HYDRAULIC SYSTEM CONTROL PANEL M10 (WM 29-11-11,-21).

Left or Right EDP Failed to Depressurize
Figure 104

LEFT OR RIGHT EDP LOW PRESSURE LIGHT ILLUMINATED WITH EDP ON

PREREQUISITES

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

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11D29, 11D30, 11L14, 11L17, 11L23, 11L26

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

1 DO A TEST OF THE L (R) RESERVOIR PRESSURIZATION SYSTEM (AMM 29-11-00/735). DID THE TEST MEET THE REQUIREMENTS?

NO → 15 CHECK THE L (R) PRESSURIZATION LINE FOR BLOCKAGE.

YES

2 CHECK THAT L (R) ENGINE FIRE SWITCH ON P8 IS IN NORMAL POSITION. CHECK THAT EDP L (R) "ENG" SWITCH ON P5 IS IN "ON" POSITION. PROVIDE EDP HYDRAULIC PRESSURE BY OPERATING ENGINE (AMM 71-00-00).
DOES L (R) SYSTEM PRESSURE STABILIZE AT 2900-3200 PSI?

YES → 16 REPLACE L (R) EDP PRESSURE SWITCH S26 (S31) ON L (R) EDP FILTER MODULE IN ENGINE STRUT (AMM 29-11-17).

NO

3 SHUTDOWN L (R) ENGINE (AMM 71-00-00). LEAVE L (R) EDP SWITCH IN ON POSITION. REMOVE CONNECTOR D10980 FROM L (R) EDP DEPRESSURIZATION VALVE V349 (WDM 29-11-11,-21).
IS 28V DC AVAILABLE AT PIN 3 OF CONNECTOR D10980 (PIN 1 GND)?

YES → 10 INSTALL CONNECTOR D10980 ON L (R) EDP DEPRESSURIZATION VALVE V349. REMOVE CONNECTOR D836 (D862) FROM L (R) ENGINE SWITCH YEGS37 (YEGS38) (WDM 29-11-11,-21). CHECK FOR CONTINUITY BETWEEN PINS 13 AND 28 ON SWITCH YEGS37 (YEGS38).
IS THERE CONTINUITY?

YES → 17 REPLACE L (R) ENGINE FIRE SWITCH YEGS37 (YEGS38) ON P8 (AMM 26-21-01).

NO → 18 INSTALL CONNECTOR D836 (D862) ON L (R) ENGINE FIRE SWITCH YEGS37 (YEGS38). REPLACE L (R) EDP SWITCH YCYS1 (YCYS4) ON HYDRAULIC SYSTEM CONTROL PANEL M10 (WDM 29-11-11,-21).

NO

4 INSTALL CONNECTOR D10980 ON L (R) EDP DEPRESSURIZATION VALVE V349 (WDM 29-11-11,-21). CHECK VALVE POSITION INDICATOR ON L (R) EDP SUPPLY SHUTOFF VALVE V6 (V7) IN ENGINE STRUT.
IS VALVE IN OPEN POSITION?

NO → 11 REMOVE CONNECTOR D494 (D496) FROM L (R) EDP SUPPLY SHUTOFF VALVE V6 (V7) IN ENGINE STRUT.
IS 28V DC AVAILABLE AT PIN A OF CONNECTOR D494 (D496) (PIN E GND)?

YES → 19 REPLACE L (R) EDP SUPPLY SHUTOFF VALVE V6 (V7) IN ENGINE STRUT (AMM 29-11-06).

NO → 20 INSTALL CONNECTOR D494 (D496) ON L (R) EDP SUPPLY SHUTOFF VALVE V6 (V7) IN ENGINE STRUT (AWM 29-11-11, -21). REPLACE L (R) ENGINE FIRE SWITCH YEGS37 (YEGS38) ON P8 (AMM 26-21-01).

YES

21 REPLACE L (R) EDP (AMM 29-11-05).

Left or Right EDP Low Pressure Light Illuminated with EDP On
Figure 104A

LEFT/RIGHT ACMP LOW PRESSURE LIGHT ILLUMINATED IN AUTO OR ON MODE

PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11L16, 11L17, 11L25, 11L26

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

1 CHECK THAT L AND R ENGINE START SWITCHES ARE IN OFF POSITION. PRESS ELEC/HYD SWITCH ON EICAS MAINTENANCE PANEL. POSITION ELEC DEMAND PUMP SWITCH TO ON.
DOES SYSTEM PRESSURE STABILIZE AT 2800-3200 PSI?

YES → 15 REPLACE L (R) ACMP PRESSURE SWITCH, S25 (S30) ON ACMP FILTER MODULE (AMM 29-11-18/401).

NO

2 REMOVE CONNECTOR D480 (D486) FROM L (R) ACMP, M231 (M234).
IS THERE 115V AC 3-PHASE ON CONNECTOR PINS A,B AND C (WDM 29-11-112, -22)?

YES → 16 REPLACE L (R) ACMP, M231 (M234) (AMM 29-11-01/401).

NO

3 INSTALL CONNECTOR D480 (D486) ON ACMP, M231 (M234).
IS 28V DC AVAILABLE AT TERMINAL B OF L (R) ACMP TIME DELAY, M499 (M500) ON P37 (P33) AFTER 5 (1.5) SECONDS (WDM 29-11-12, -22)?

YES → 10 REMOVE CONNECTOR D3452 (D3448) FROM L (R) ELCU, M895 (M896) ON P32 (P31).
IS THERE 28V DC ON CONNECTOR D3452 (D3448), PIN 18 (PIN 15, GND)?

NO → 17 CHECK THE CIRCUIT FROM CONNECTOR D3452 (D3448) PIN 18 TO SWITCH, S5 (S7) TO CB 1084 (11L25) OR CB 1087 (11L16) (WDM 29-11-12, -22). REPAIR THE PROBLEMS THAT YOU FIND.

YES

11 CHECK FOR CONTINUITY THRU CONNECTOR D3452 (D3448), PIN 10 TO GROUND.
IS THERE CONTINUITY?

YES → 18 REPLACE L (R) ELCU, M895 (M896) ON P32 (P31) (AMM 29-11-14/401).
IF THE PROBLEM CONTINUES, REPLACE L (R) ACMP, M231 (M234) (AMM 29-11-01/401).

NO

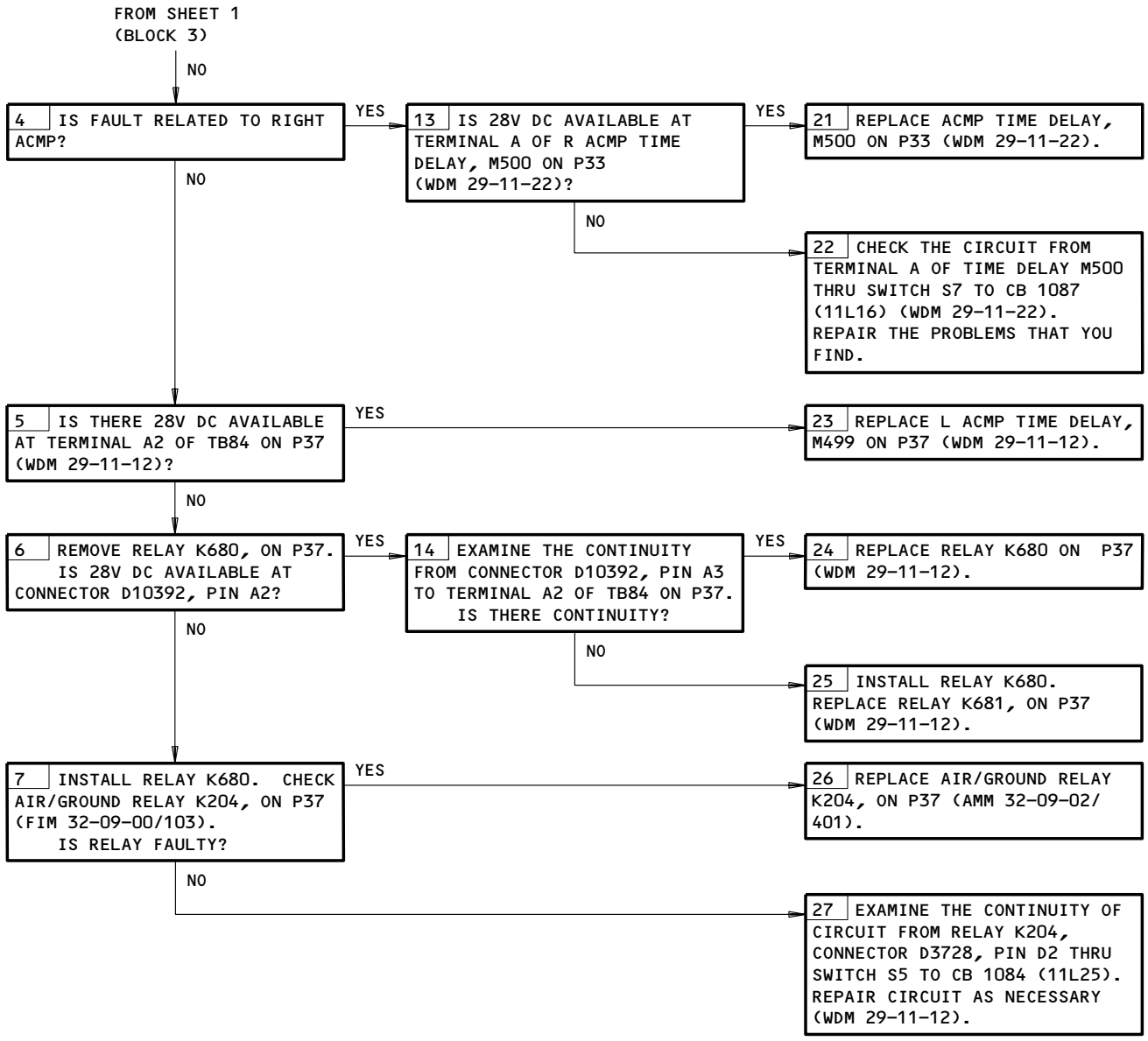
12 INSTALL CONNECTOR D3452 (D3448) ON ELC,U M895 (M896). REMOVE CONNECTOR D916 (D922) FROM L (R) ACMP, M231 (M234). CHECK FOR CONTINUITY FROM PINS 1 TO 2 ON ACMP.
IS THERE CONTINUITY?

YES → 19 CHECK THE CIRCUIT FROM CONNECTOR D916 (D922) PIN 1 TO GROUND CONNECTION (WDM 29-11-12, -22). REPAIR THE PROBLEMS THAT YOU FIND.

NO → 20 REPLACE L (R) ACMP, M231 (M234) (AMM 29-11-01/401).

SEE SHEET 2 (BLOCK 4)

Left/Right ACMP Low Pressure Light Illuminated in Auto or On Mode
Figure 105 (Sheet 1)



Left/Right ACMP Low Pressure Light Illuminated in Auto or On Mode
Figure 105 (Sheet 2)

LEFT/RIGHT ACMP PRESSURE ABOVE NORMAL

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 11L16,11L17,11L25,11L26

1 PROVIDE EDP HYDRAULIC PRESSURE BY MOTORING ENGINE (MM 71-00-00).
POSITION EDP CONTROL SWITCH TO ON.
DOES SYSTEM PRESSURE STABILIZE AT 2900-3200 PSI?

YES → 5 REPLACE ACMP M231 OR M234 (MM 29-11-01).

NO → 6 REPLACE PRESSURE TRANSMITTER M341 OR M343 ON INBOARD AILERON SUPPORT RIB (MM 29-31-01).

Left/Right ACMP Pressure Above Normal
Figure 106

PREREQUISITES

ELECTRICAL POWER (MM 24-22-00)

CB'S: 11H15,11H16,11H17,11H18,11H26,11H27,
11L16,11L17,11L25,11L26

LEFT/RIGHT ACMP PRESS LOW

1 POSITION ELEC DEMAND PUMP SWITCH TO ON.
POSITION WING AND TAIL FLIGHT CONTROL SHUTOFF VALVE SWITCHES TO OFF.
DOES PRESSURE STABILIZE AT 2800-3200 PSI?

YES → 5 PERFORM HYDRAULIC SYSTEM INTERNAL LEAKAGE CHECK (MM 29-11-00).

NO ↓

2 CHECK DIFFERENTIAL PRESSURE INDICATOR ON ACMP FILTER MODULE IN ENGINE STRUT HYDRAULIC BAY.
IS RED INDICATOR BUTTON VISIBLE?

YES → 6 REPLACE FILTER ELEMENTS ON ACMP FILTER MODULE IN ENGINE STRUT (MM 29-11-18).

NO ↓

3 OPERATE L (R) ACMP A SUFFICIENT TIME FOR L (R) HYDRAULIC SYSTEM TO REACH OPERATING TEMPERATURE. CHECK PRESSURE RELIEF TUBING ON EDP PRESS/CASE DRAIN FILTER MODULE FOR HEATING DUE TO INTERNAL LEAKAGE OF PRESSURE RELIEF VALVE.
IS PRESSURE RELIEF VALVE LEAKING?

YES → 7 REPLACE PRESSURE RELIEF VALVE IN L (R) EDP PRESS/CASE DRAIN FILTER MODULE (MM 29-11-17).

NO ↓

4 POSITION ELEC DEMAND SWITCH TO OFF. POSITION EDP CONTROL SWITCH TO ON. MOTOR ENGINE TO PROVIDE HYDRAULIC PRESSURE WITH EDP (MM 71-00-00).
DOES PRESSURE STABILIZE AT 2900-3200 PSI?

NO → 8 REPLACE PRESSURE TRANSMITTER M341 OR M343 ON INBOARD AILERON SUPPORT RIB (MM 29-31-01).
IF FAULT PERSISTS, PERFORM HYDRAULIC SYSTEM INTERNAL LEAKAGE CHECK (MM 29-11-00).

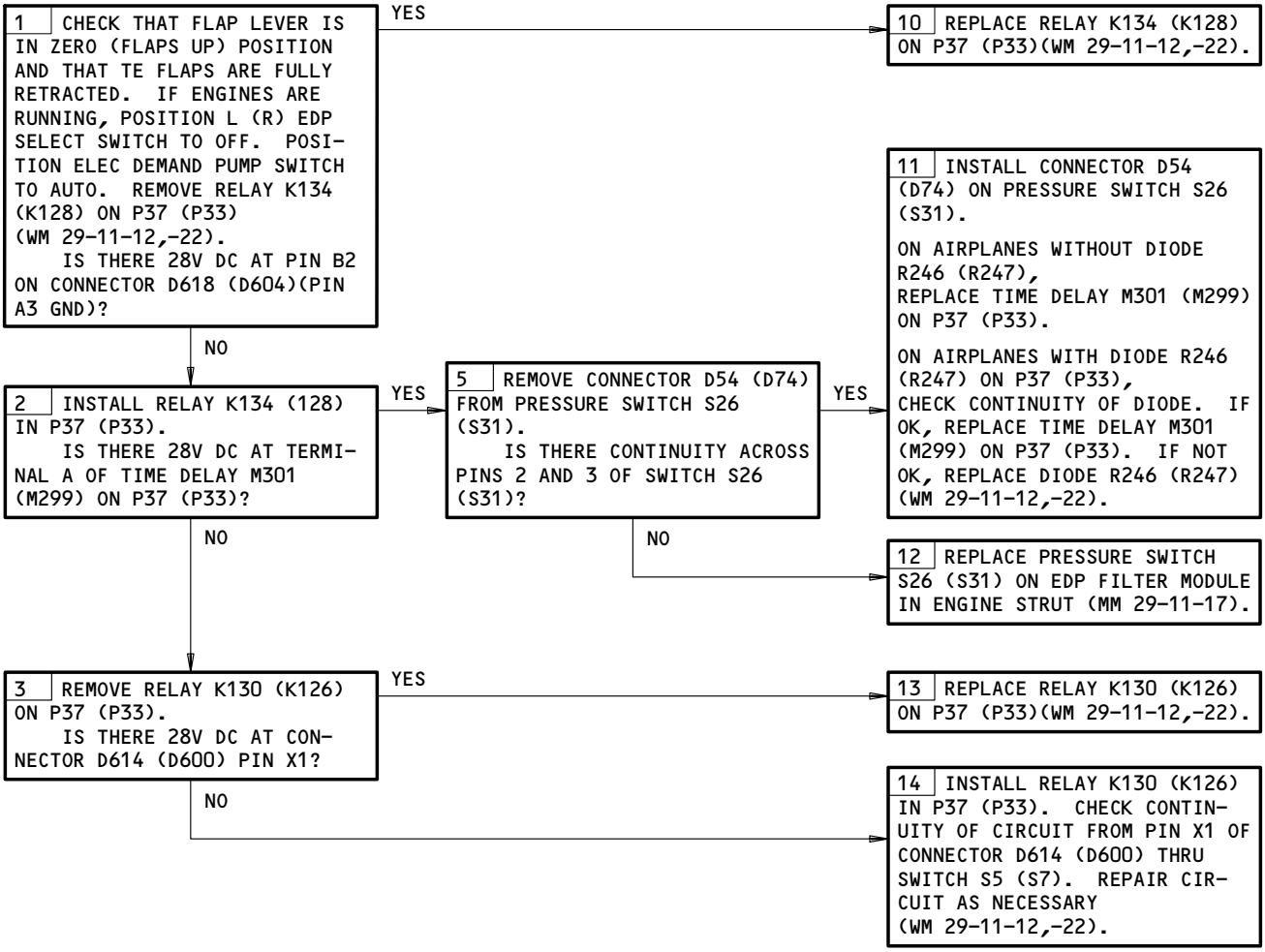
YES ↓

9 REPLACE ACMP M231 OR M234 (MM 29-11-01).
IF FAULT PERSISTS, PERFORM HYDRAULIC SYSTEM INTERNAL LEAKAGE CHECK (MM 29-11-00).

Left/Right ACMP Pressure Low
Figure 107

LEFT/RIGHT ACMP LOW PRESSURE LIGHT ILLUMINATED IN AUTO MODE, NORMAL IN ON MODE

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 11L16,11L25



Left/Right ACMP Low Pressure Light Illuminated in Auto Mode, Normal in On Mode
Figure 108

CENTER ACMP LOW PRESSURE LIGHT ILLUMINATED

PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11L15, 11L18, 11L24

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

1 IS FAULT RELATED TO ACMP C1?
- YES → 9
- NO → 2

9 POSITION RESERVE BRAKES AND STEERING SWITCH TO ON.
IS ACMP C1 LOW PRESSURE LIGHT ILLUMINATED?
- NO → 14
- YES → 2

14 REPLACE ACMP C1 SWITCH/LIGHT YCYS2 ON HYDRAULIC CONTRO PANEL M10 (AMM 33-13-00/401) OR M10 (WDM 29-11-31).

2 POSITION ADP SELECT SWITCH ON HYDRAULIC CONTROL PANEL TO OFF. POSITION RESERVE BRAKES & STEERING SWITCH TO OFF. PRESS ELEC/HYD SWITCH ON EICAS MAINTENANCE PANEL. OPERATE ONLY PUMP FOR WHICH LOW PRESSURE LIGHT IS ILLUMINATED.
IS C SYSTEM PRESSURE 2800-3200 PSI?
- YES → 15
- NO → 3

15 REPLACE C1 (C2) ACMP PRESSURE SWITCH S33 (S34) ON ACMP FILTER MODULE (AMM 29-11-18/401).

3 IS THERE 115V AC 3-PHASE ON C1 (C2) ELCU M897 (M898) TERMINALS A2, B2, AND C2 ON P31 (P32) (WDM 29-11-31)?
- YES → 16
- NO → 4

16 REPLACE C1 (C2) ACMP M232 (M233) (AMM 29-11-02/401).

4 IS 28V DC AVAILABLE AT TERMINAL B OF C1 (C2) ACMP TIME DELAY M303 (M304) ON P31 (P32) AFTER 3 (4) SECONDS (WDM 29-11-31)?
- YES → 10
- NO → SEE SHEET 2 (BLOCK 5)

10 REMOVE CONNECTOR D3450 (D3454) FROM C1 (C2) ELCU M897 (M898) ON P31 (P32).
IS THERE 28V DC ON CONNECTOR D3450 (D3454) PIN 18 (PIN 15 GND)?
- NO → 17
- YES → 11

17 EXAMIN THE CIRCUIT FROM CONNECTOR D3450 (D3454) PIN 18 THRU SWITCH S2 (S3) TO CIRCUIT BREAKER 1085 (11L15) OR CIRCUIT BREAKER 1086 (11L24) (WDM 29-11-31). REPAIR THE PROBLEMS THAT YOU FIND.

11 DO A NONTINUITY CHECK THRU CONNECTOR D3450 (D3454) PIN 10 TO GROUND.
IS THERE CONTINUITY?
- YES → 18
- NO → 12

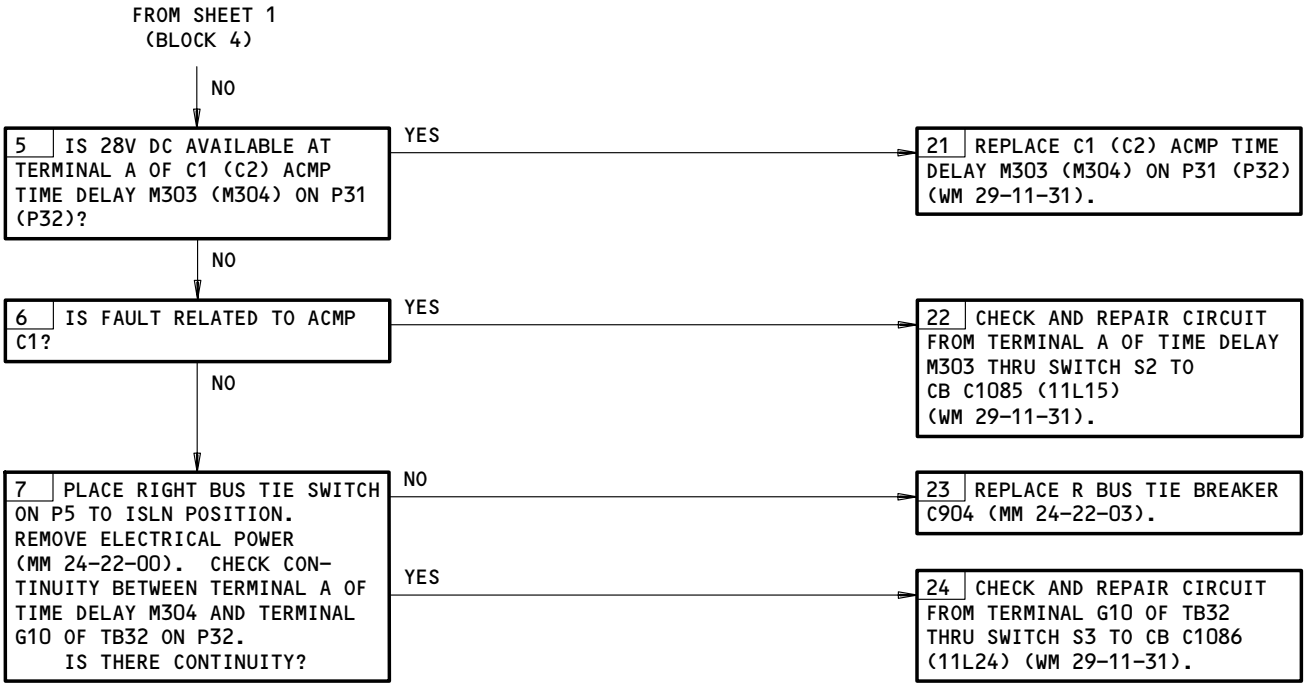
18 REPLACE C1 (C2) ACMP ELCU M897 (M898) ON P31 (P32) (AMM 29-11-14/401).

12 INSTALL CONNECTOR D3450 (D3454) ON ELCU M897 (M898). REMOVE CONNECTOR D918 (D920) FROM C1 (C2) ACMP M232 (M233).
DO A CONTINUITY CHECK FROM PIN 1 TO PIN 2, ON ACMP.
IS THERE CONTINUITY?
- YES → 19
- NO → 20

19 EXAMINE THE CIRCUIT BETWEEN CONNECTOR D918 (D920) PIN 1 AND GROUND CONNECTION (WDM 29-11-31). REPAIR THE PROBLEMS THAT YOU FIND.

20 REPLACE C1 (C2) ACMP M232 (M233) (AMM 29-11-02/401).

Center ACMP Low Pressure Light Illuminated
Figure 109 (Sheet 1)



Center ACMP Low Pressure Light Illuminated
Figure 109 (Sheet 2)

CENTER ACMP PRESSURE LOW, PRESSURE NORMAL WHEN USING OTHER ACMP

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 11L15,11L24,11L18

1 CHECK DIFFERENTIAL PRESSURE INDICATOR ON ACMP FILTER MODULE IN RIGHT WHEEL WELL.
IS RED INDICATOR BUTTON VISIBLE?

YES → 5 REPLACE FILTER ELEMENT IN ACMP FILTER MODULE IN RIGHT WHEEL WELL (MM 29-11-18).

NO → 6 REPLACE ACMP (C1) M232 OR ACMP (C2) M233 (MM 29-11-02).

Center ACMP Pressure Low, Pressure Normal When Using Other ACMP
Figure 110

CENTER ACMP PRESSURE LOW WITH EITHER ACMP OPERATING

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 11L15,11L24,11L18

1 POSITION HYDRAULIC C ELEC 1 AND ELEC 2 SWITCHES TO ON. POSITION WING AND TAIL FLIGHT CONTROL SHUTOFF VALVE SWITCHES TO OFF.
DOES SYSTEM PRESSURE STABILIZE AT 2900-3200 PSI?

YES → 5 PERFORM HYDRAULIC SYSTEM INTERNAL LEAKAGE CHECK (MM 29-11-00).

NO ↓

2 OPERATE ACMP'S FOR SUFFICIENT TIME FOR CENTER HYDRAULIC SYSTEM TO REACH OPERATING TEMPERATURE. CHECK TUBING ON ADP PRESS/CASE DRAIN FILTER MODULE FOR HEATING DUE TO INTERNAL LEAKAGE OF PRESSURE RELIEF VALVE.
IS PRESSURE RELIEF VALVE LEAKING?

YES → 6 REPLACE PRESSURE RELIEF VALVE IN ADP PRESS/CASE DRAIN FILTER MODULE (MM 29-11-19).

NO ↓

3 CHECK RAT PRESSURE RELIEF VALVE FOR HEATING DUE TO INTERNAL LEAKAGE.
IS RAT RELIEF VALVE LEAKING?

YES → 7 REPLACE RAT RELIEF VALVE (MM 29-21-18).

NO → 8 REPLACE PRESSURE TRANSMITTER M342 IN RIGHT WHEEL WELL (MM 29-31-01).
IF FAULT PERSISTS, PERFORM HYDRAULIC SYSTEM INTERNAL LEAKAGE CHECK (MM 29-11-00).

Center ACMP Pressure Low with Either ACMP Operating
Figure 111

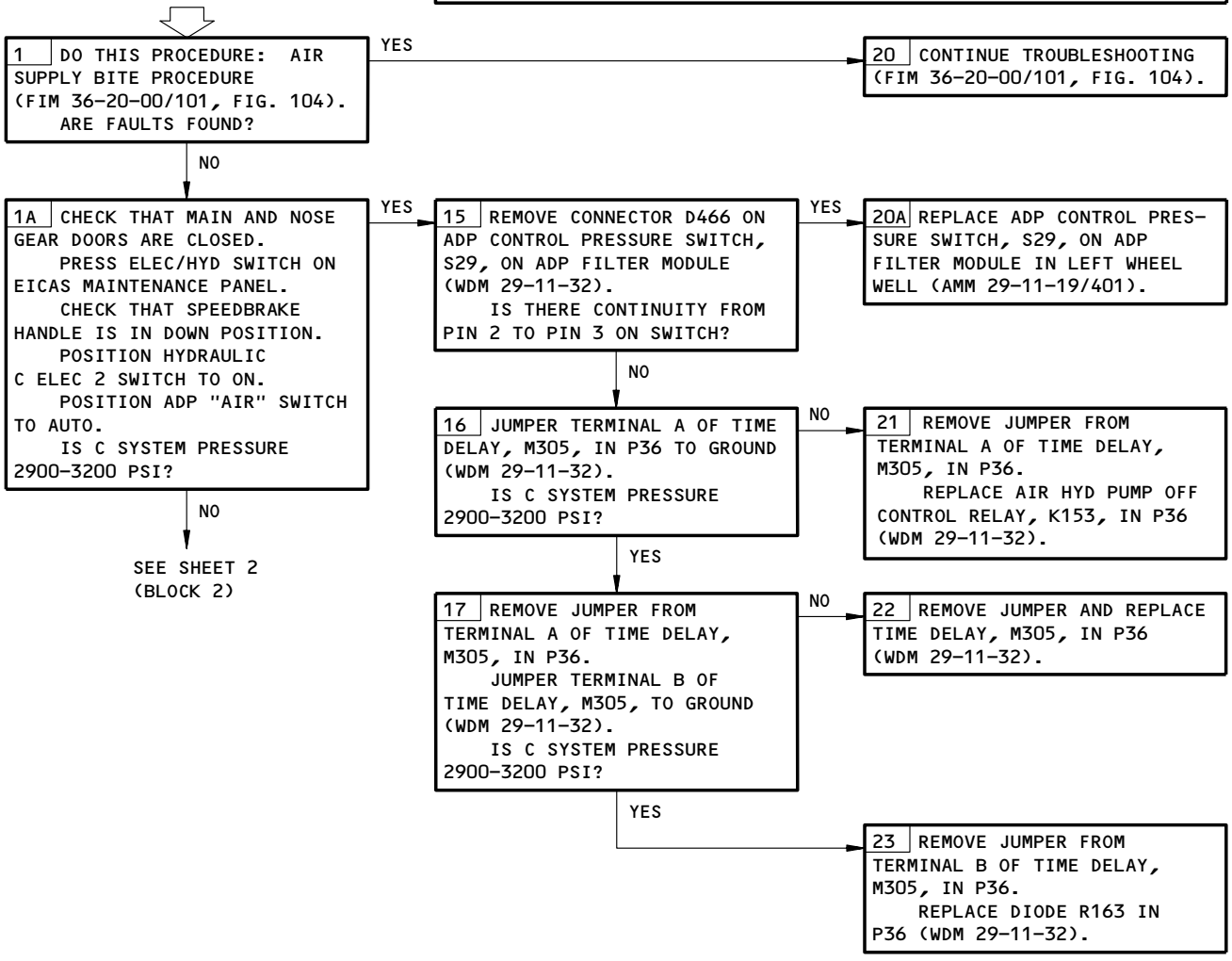
ADP INOPERATIVE IN AUTO MODE, NORMAL IN MANUAL MODE

PREREQUISITES

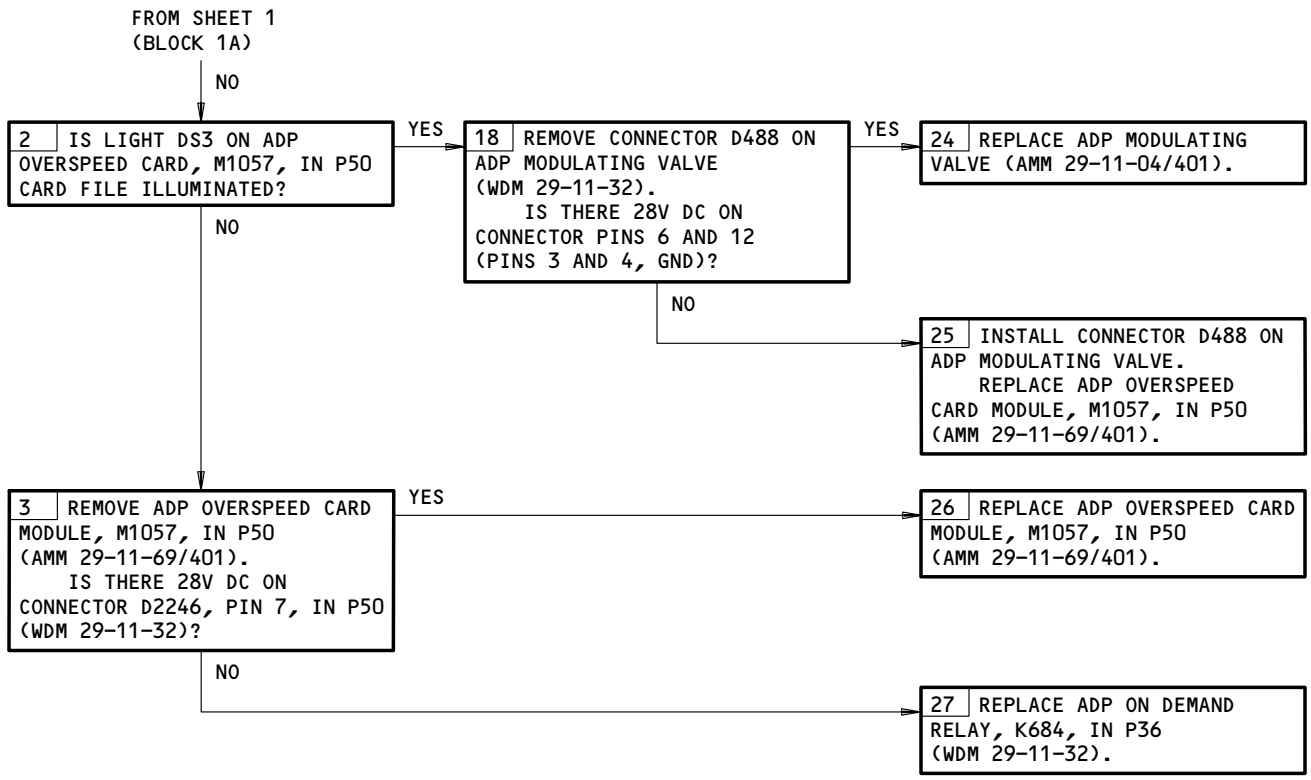
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11D31,11L18

MAKE SURE THESE CIRCUIT BREAKERS ARE OPEN AND ATTACH DO-NOT-CLOSE TAGS:
11L15,11L24

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
EICAS IS ON (AMM 31-41-00/201)
PNEUMATIC POWER IS ON (AMM 36-00-00/201)



ADP Inoperative in Auto Mode, Normal in Manual Mode
Figure 112 (Sheet 1)



ADP Inoperative in Auto Mode, Normal in Manual Mode
Figure 112 (Sheet 2)

PREREQUISITES

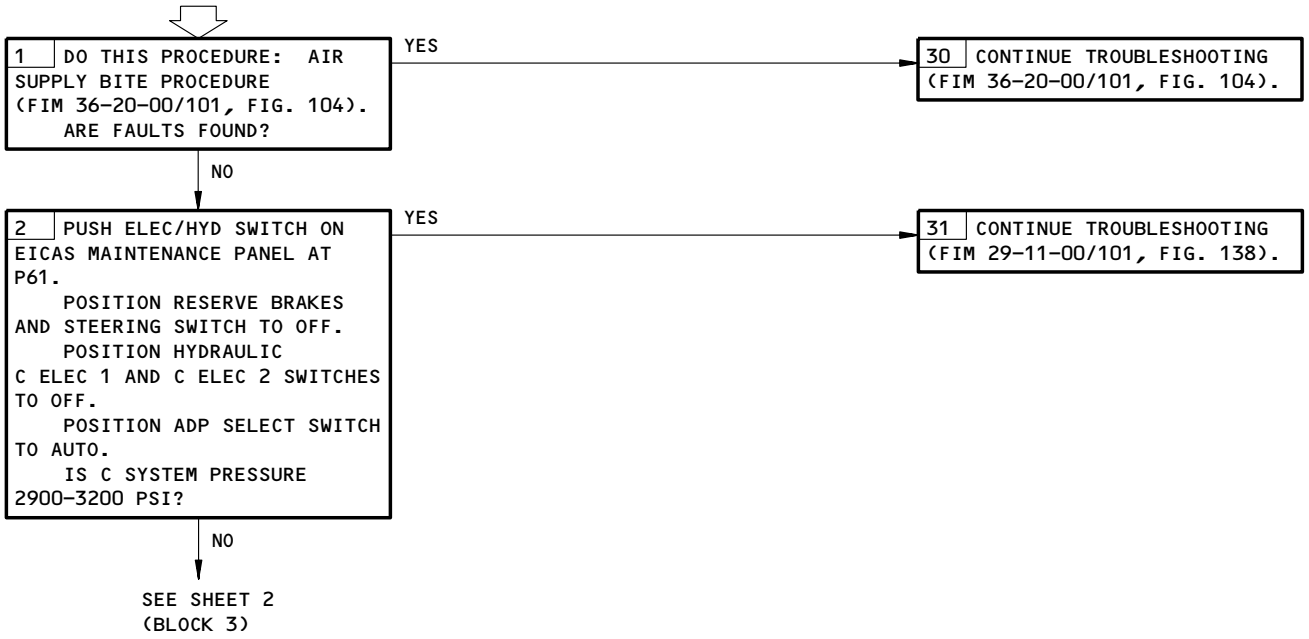
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11D31, 11L18

MAKE SURE THESE CIRCUIT BREAKERS ARE OPEN AND ATTACH DO-NOT-CLOSE TAGS:
11L15, 11L24

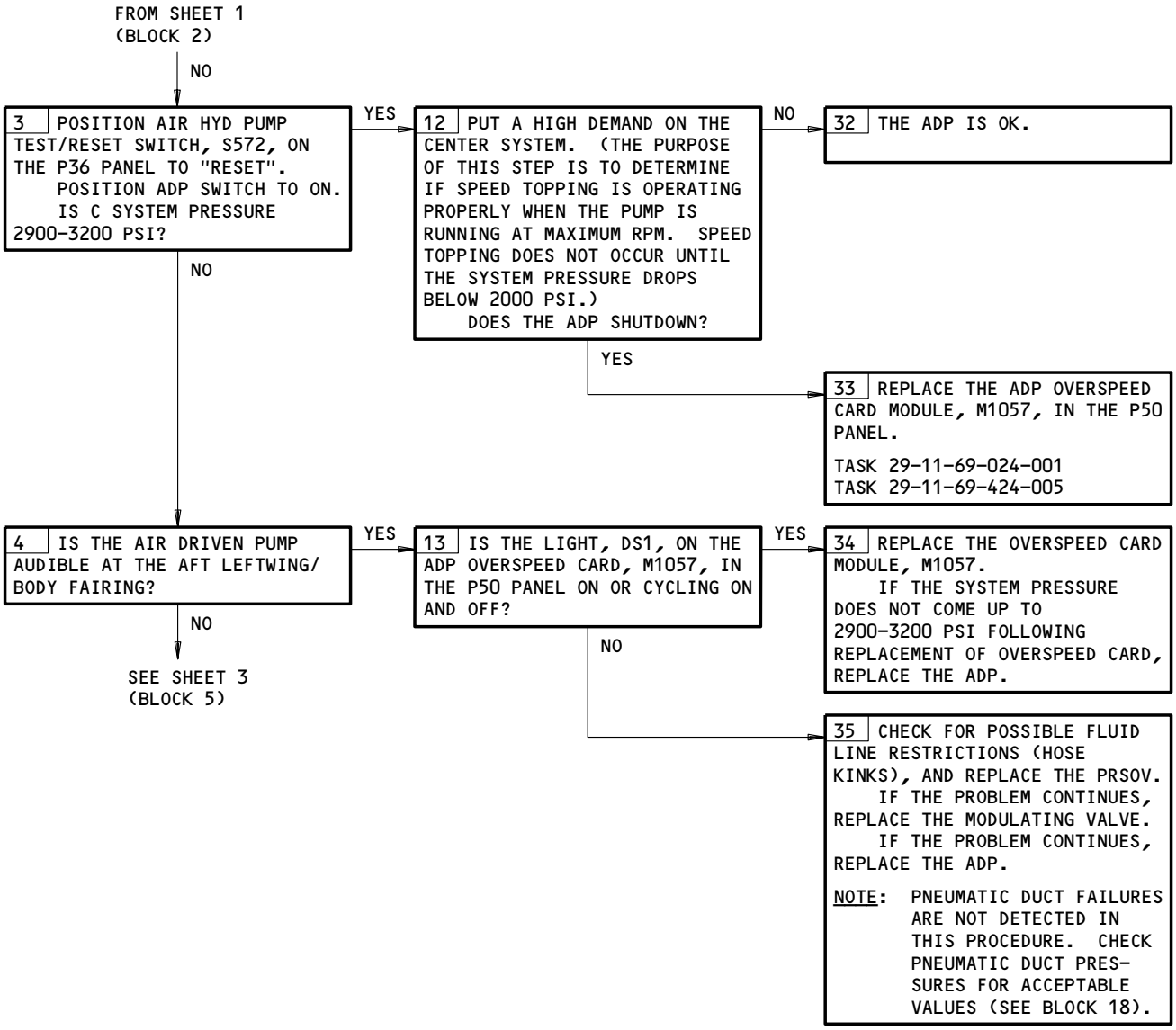
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
PNEUMATIC POWER IS ON (AMM 36-00-00/201)

ADP LOW PRESSURE LIGHT ILLUMINATED IN AUTO MODE OR MANUAL MODE

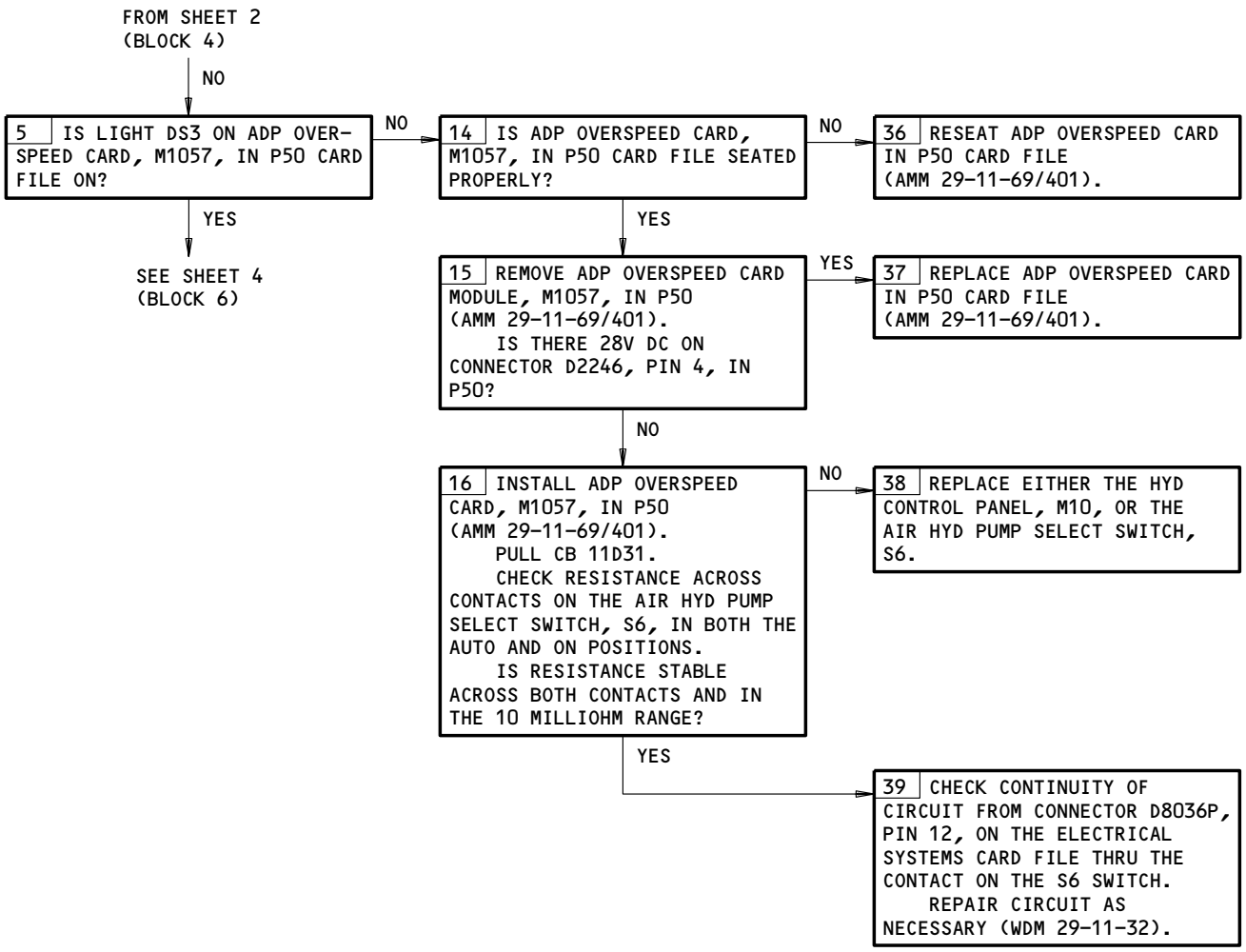
NOTE: PRESSURIZE PNEUMATIC SYSTEM USING APU POWER. ENSURE BOTH PACKS, CARGO HEAT, ADP, ENGINE START VALVES, AND ANTI-ICE ARE SELECTED OFF AND LEFT, RIGHT AND CENTER ISLN VALVES ARE OPEN, UNLESS OTHERWISE SPECIFIED.



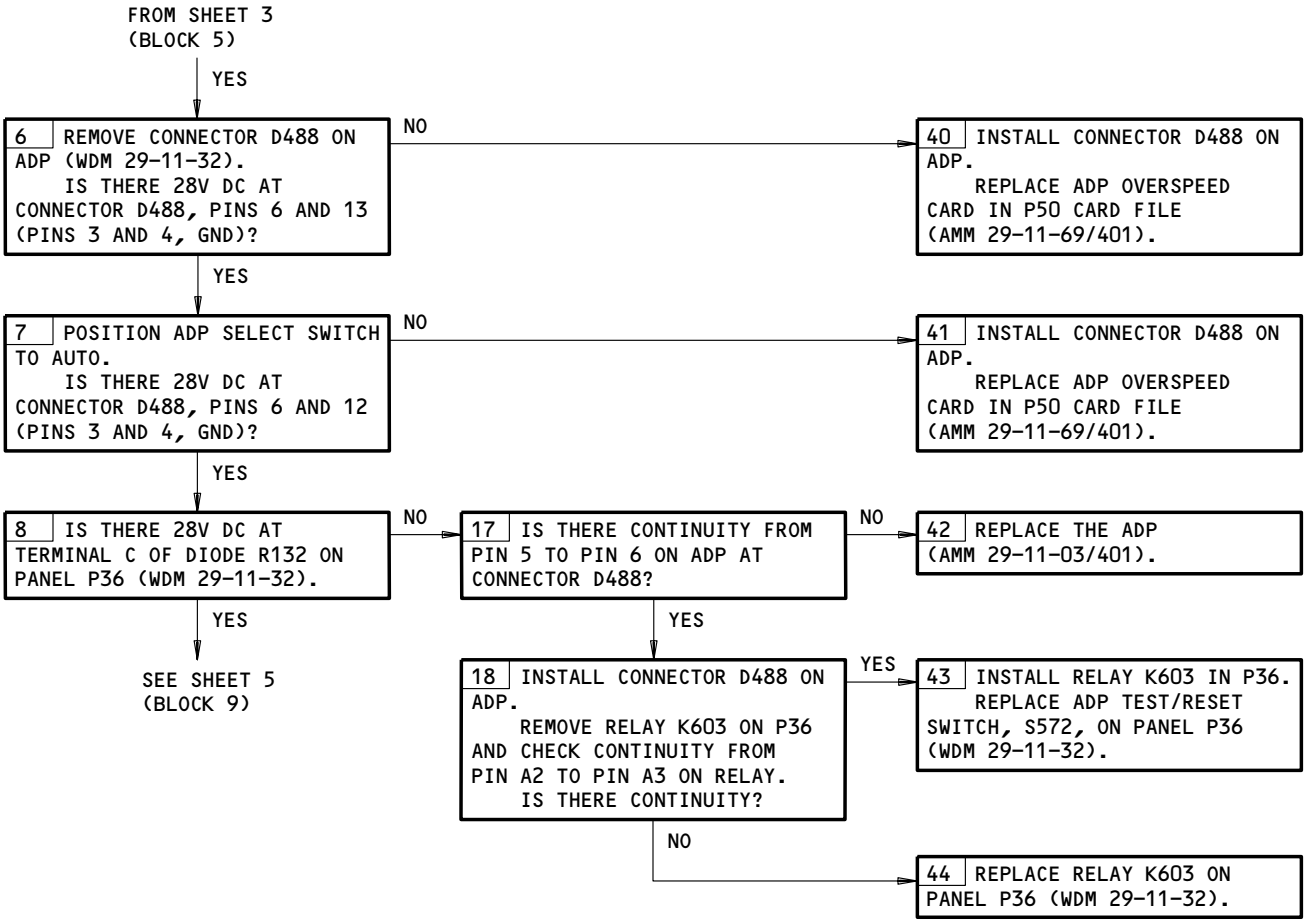
ADP Low Pressure Light Illuminated in Auto Mode or Manual Mode
Figure 113 (Sheet 1)



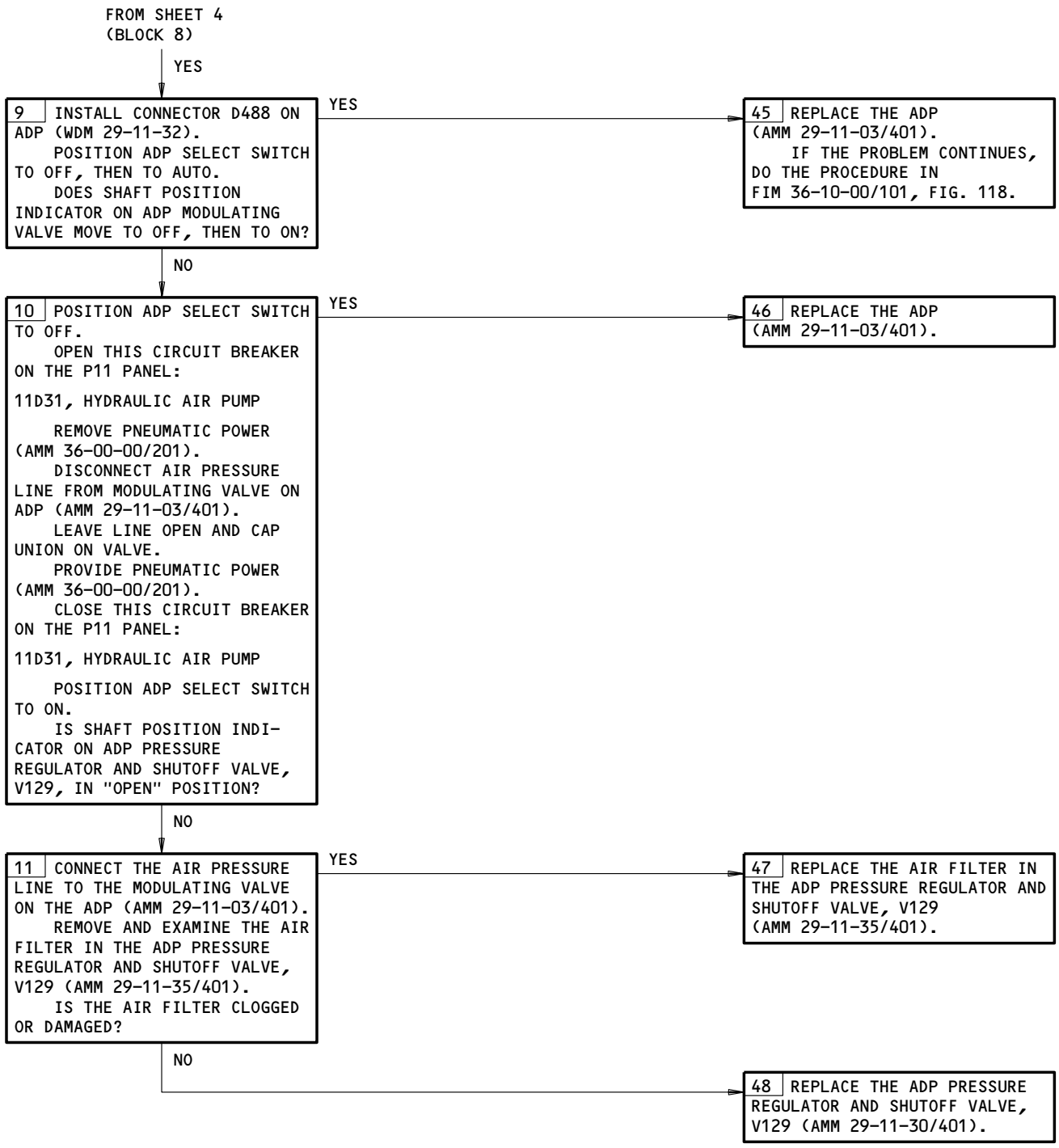
ADP Low Pressure Light Illuminated in Auto Mode or Manual Mode
Figure 113 (Sheet 2)



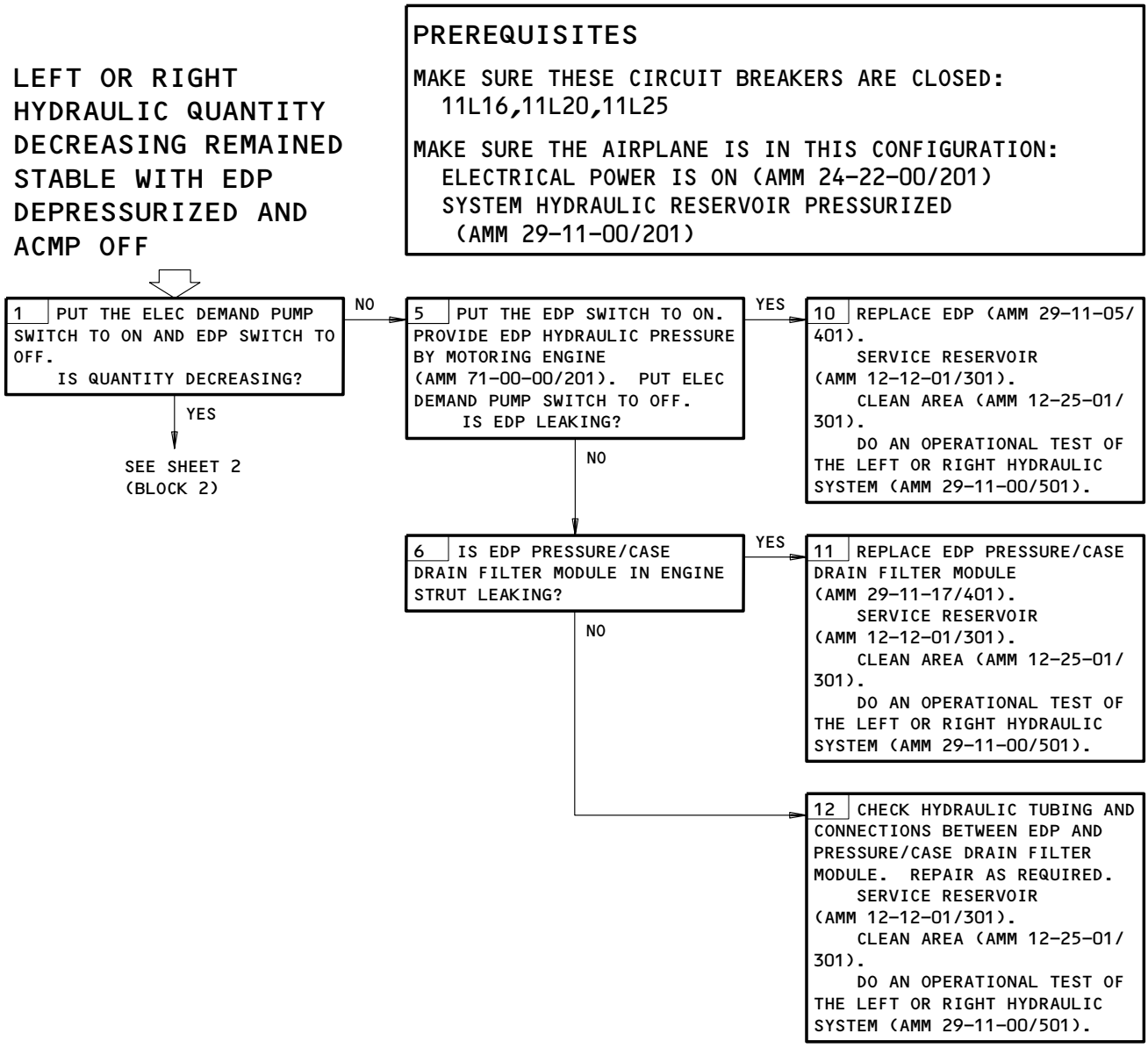
ADP Low Pressure Light Illuminated in Auto Mode or Manual Mode
Figure 113 (Sheet 3)



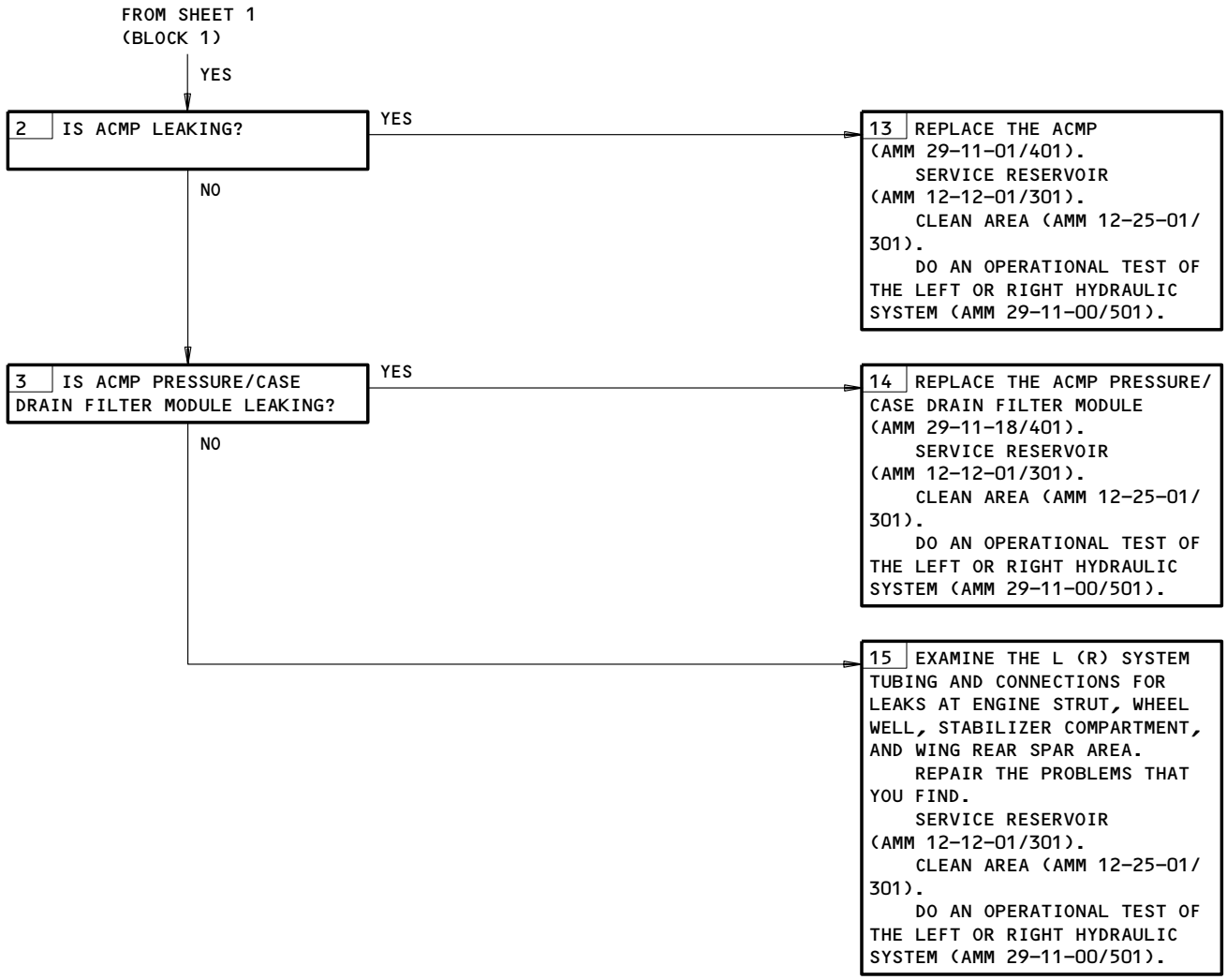
ADP Low Pressure Light Illuminated in Auto Mode or Manual Mode
Figure 113 (Sheet 4)



ADP Low Pressure Light Illuminated in Auto Mode or Manual Mode
Figure 113 (Sheet 5)



Left or Right Hydraulic Quantity Decreasing Remained Stable with EDP Depressurized and ACMP Off
Figure 114 (Sheet 1)

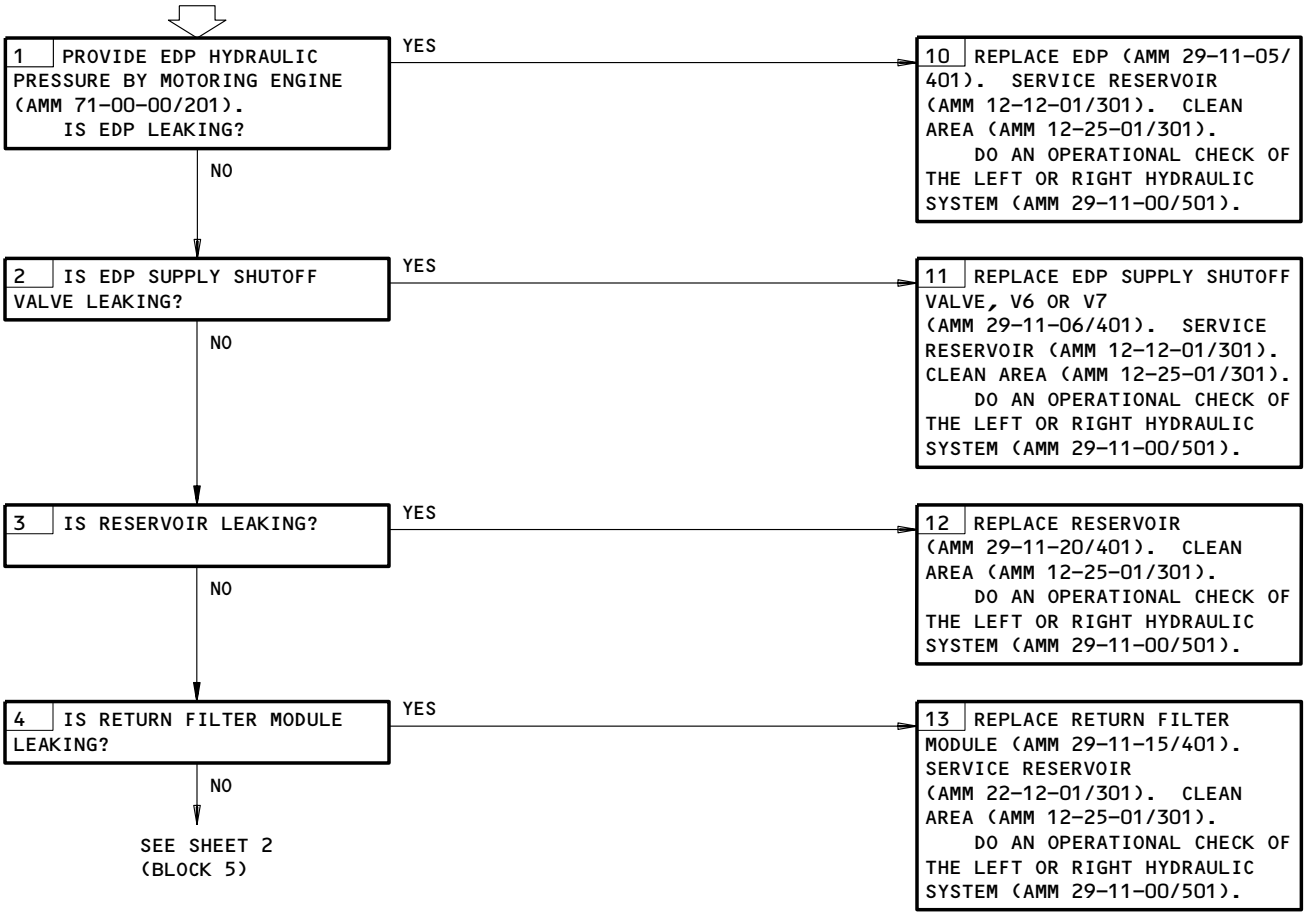


Left or Right Hydraulic Quantity Decreasing Remained Stable with EDP Depressurized and ACMP Off
Figure 114 (Sheet 2)

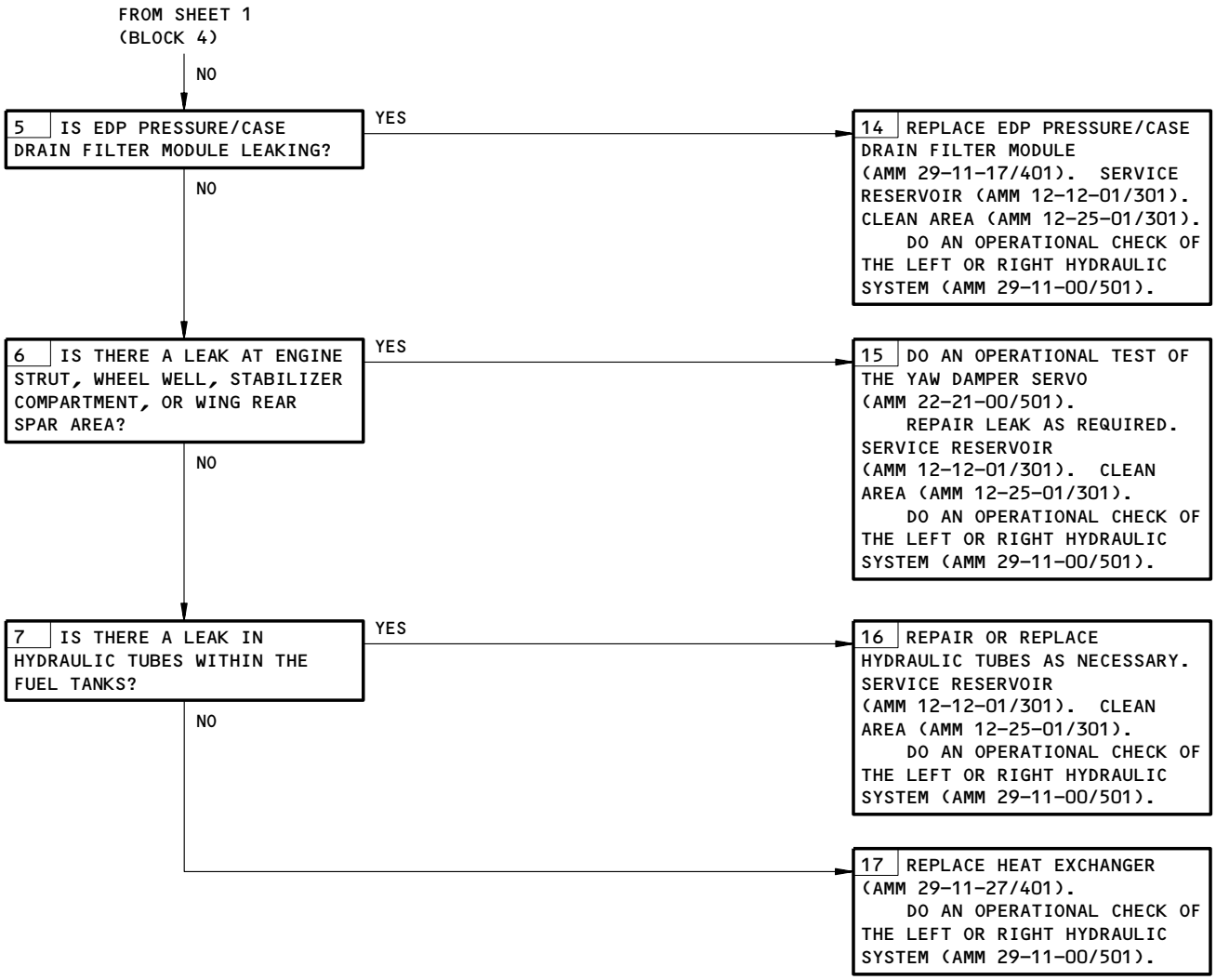
LEFT OR RIGHT HYDRAULIC QUANTITY DECREASING WITH EDP DEPRESSURIZED AND ACMP OFF

PREREQUISITES

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



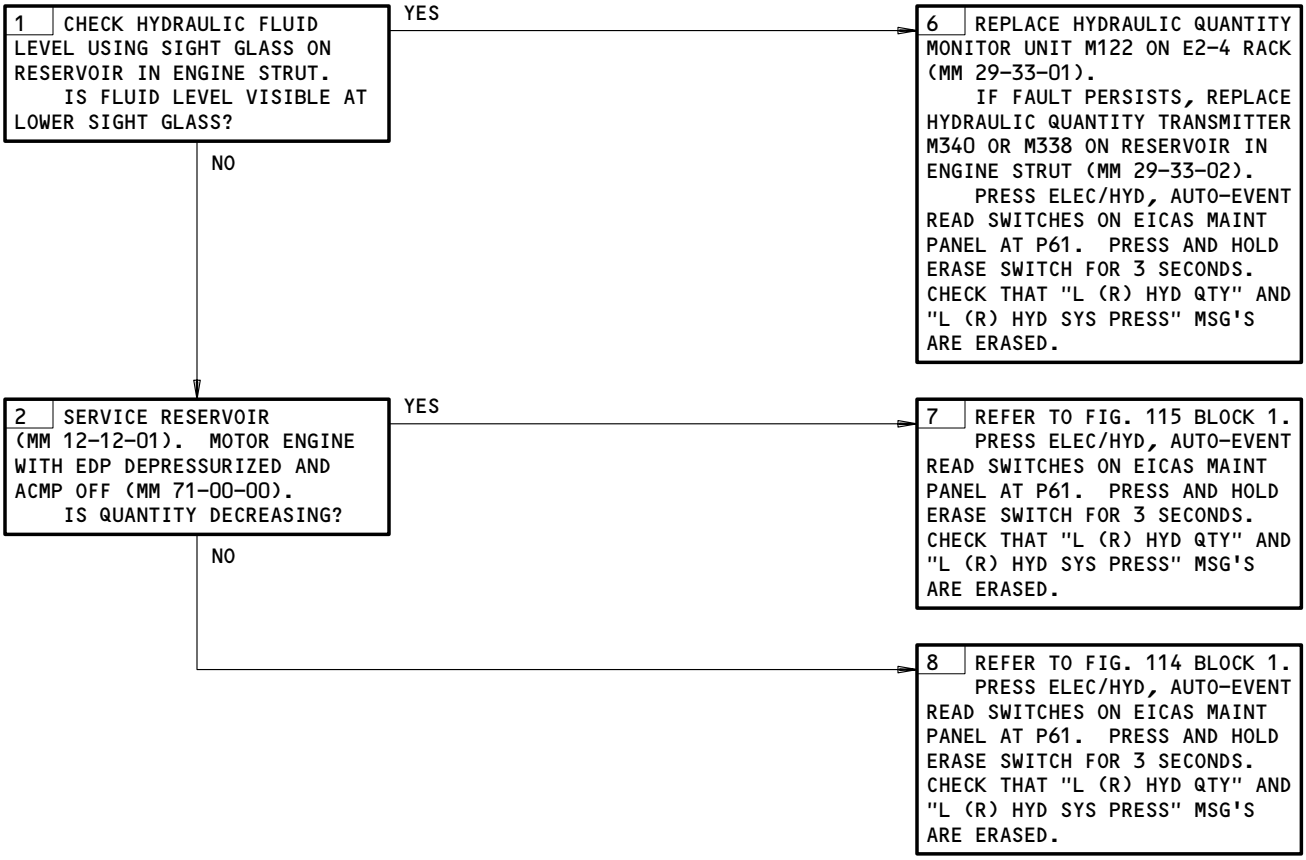
Left or Right Hydraulic Quantity Decreasing with EDP Depressurized and ACMP Off
Figure 115 (Sheet 1)



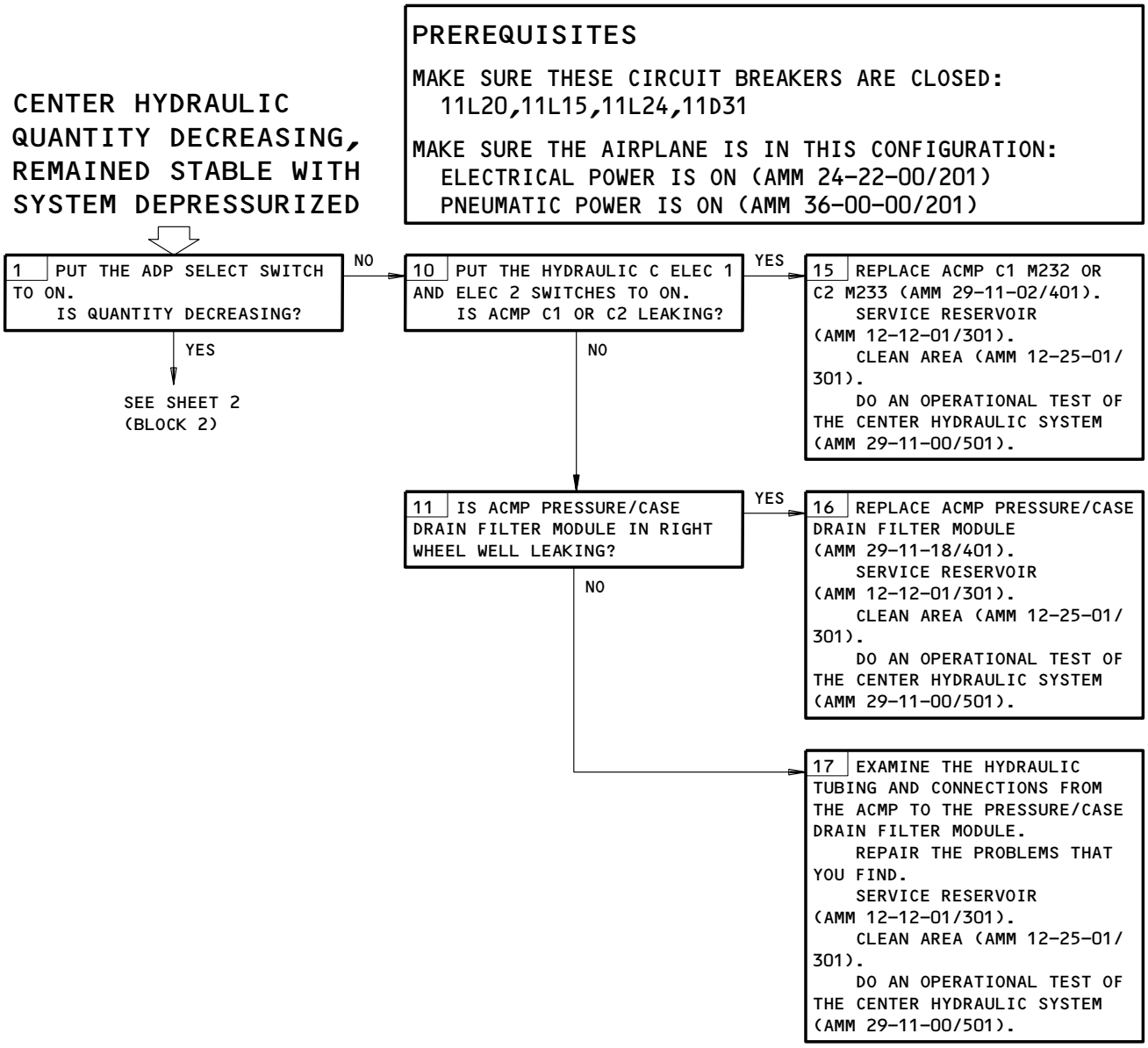
Left or Right Hydraulic Quantity Decreasing with EDP Depressurized and ACMP Off
Figure 115 (Sheet 2)

L (R) HYDRAULIC QUANTITY INDICATES ZERO, "L (R) HYD QTY" EICAS MESSAGE DISPLAYED

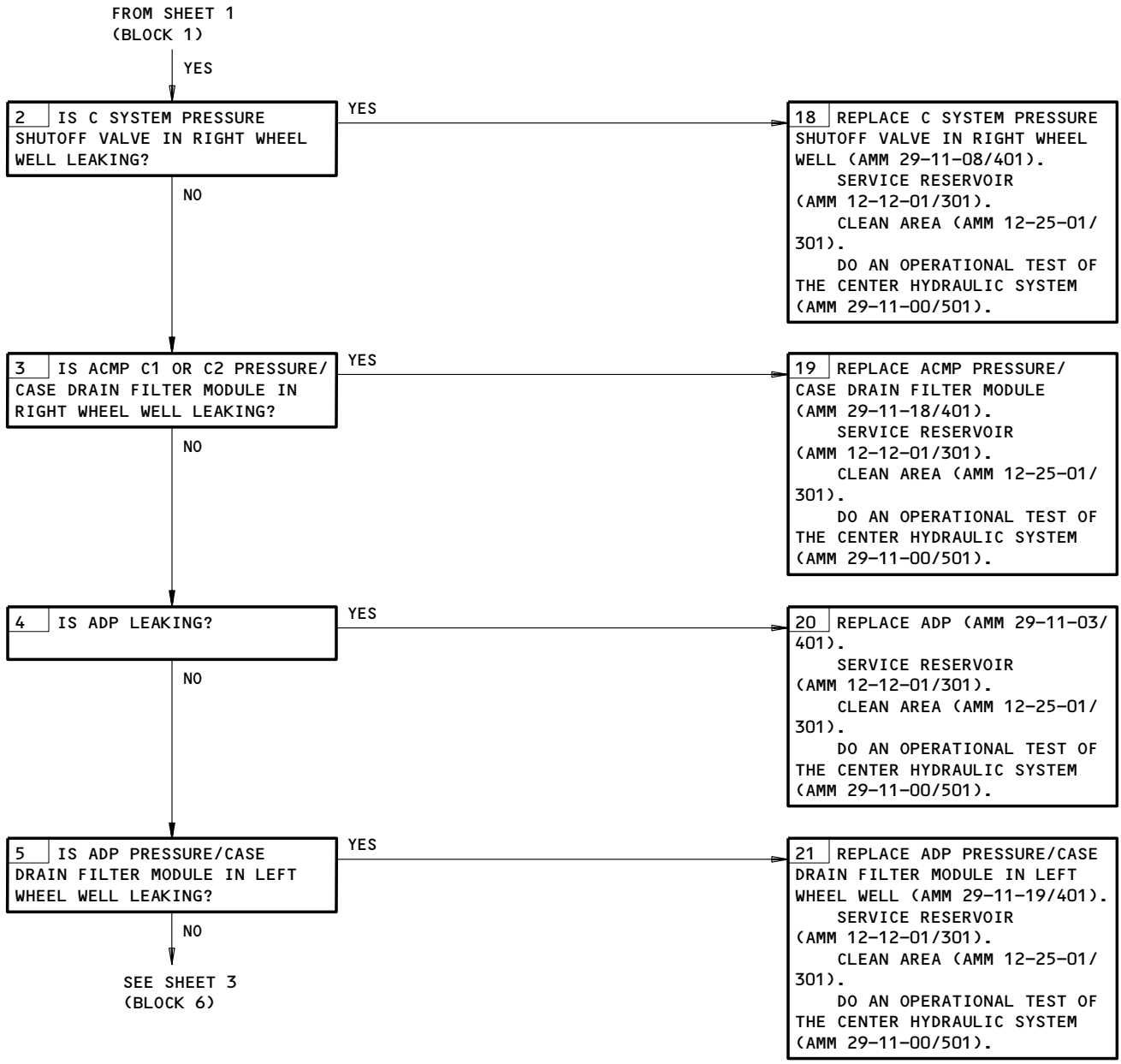
PREREQUISITES
SYSTEM HYDRAULIC RESERVOIR PRESSURIZED (MM 29-11-00)
ELECTRICAL POWER (MM 24-22-00)
CB'S: 11L20



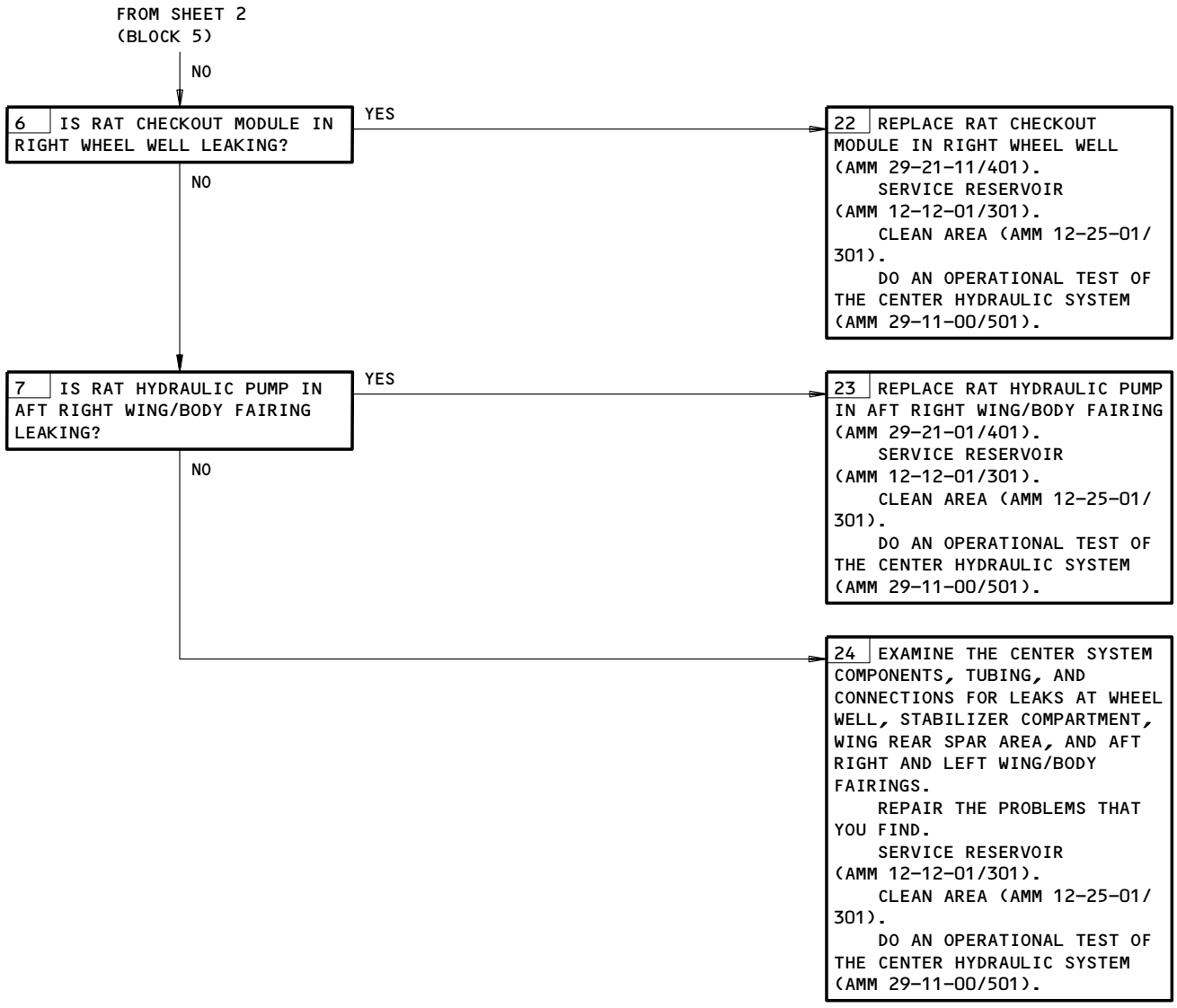
L (R) Hydraulic Quantity Indicates Zero, "L (R) HYD QTY" EICAS Message Displayed
Figure 116



Center Hydraulic Quantity Decreasing, Remained Stable With System Depressurized
Figure 117 (Sheet 1)



Center Hydraulic Quantity Decreasing, Remained Stable With System Depressurized
Figure 117 (Sheet 2)



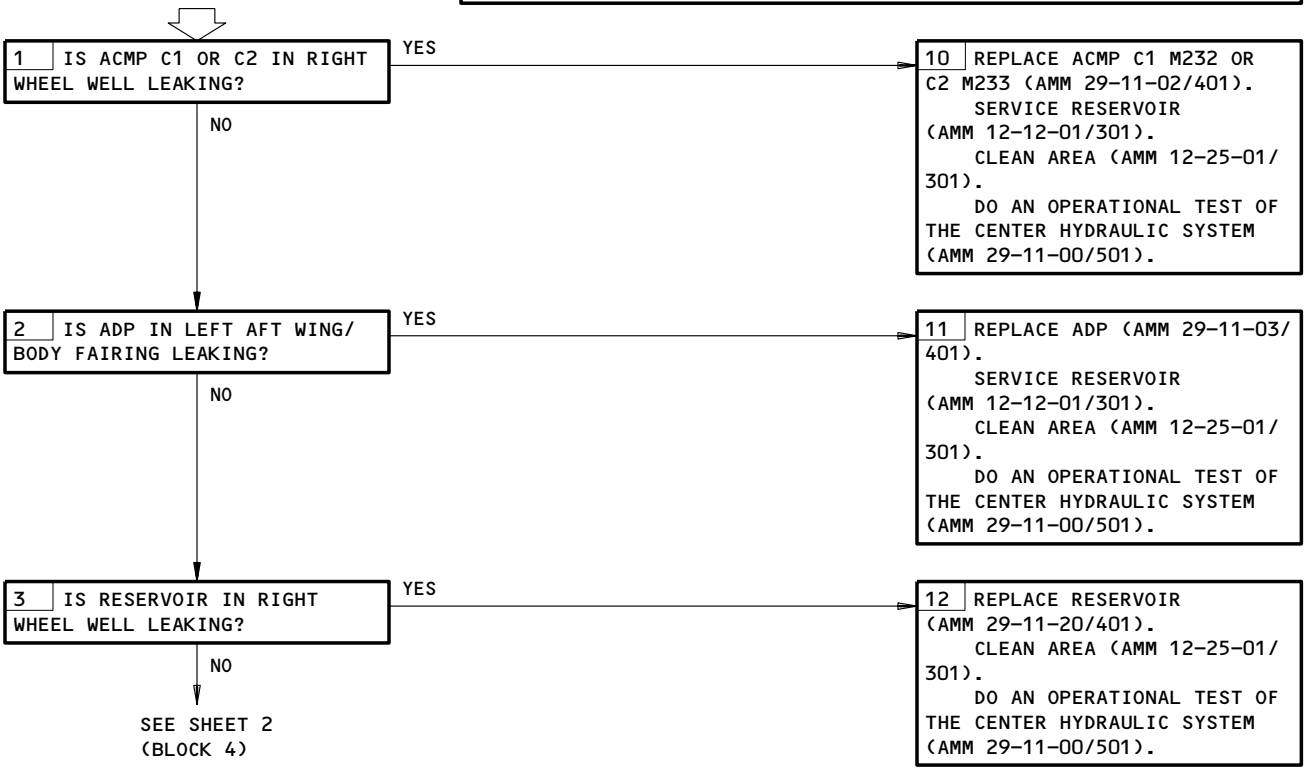
Center Hydraulic Quantity Decreasing, Remained Stable With System Depressurized
Figure 117 (Sheet 3)

K08418

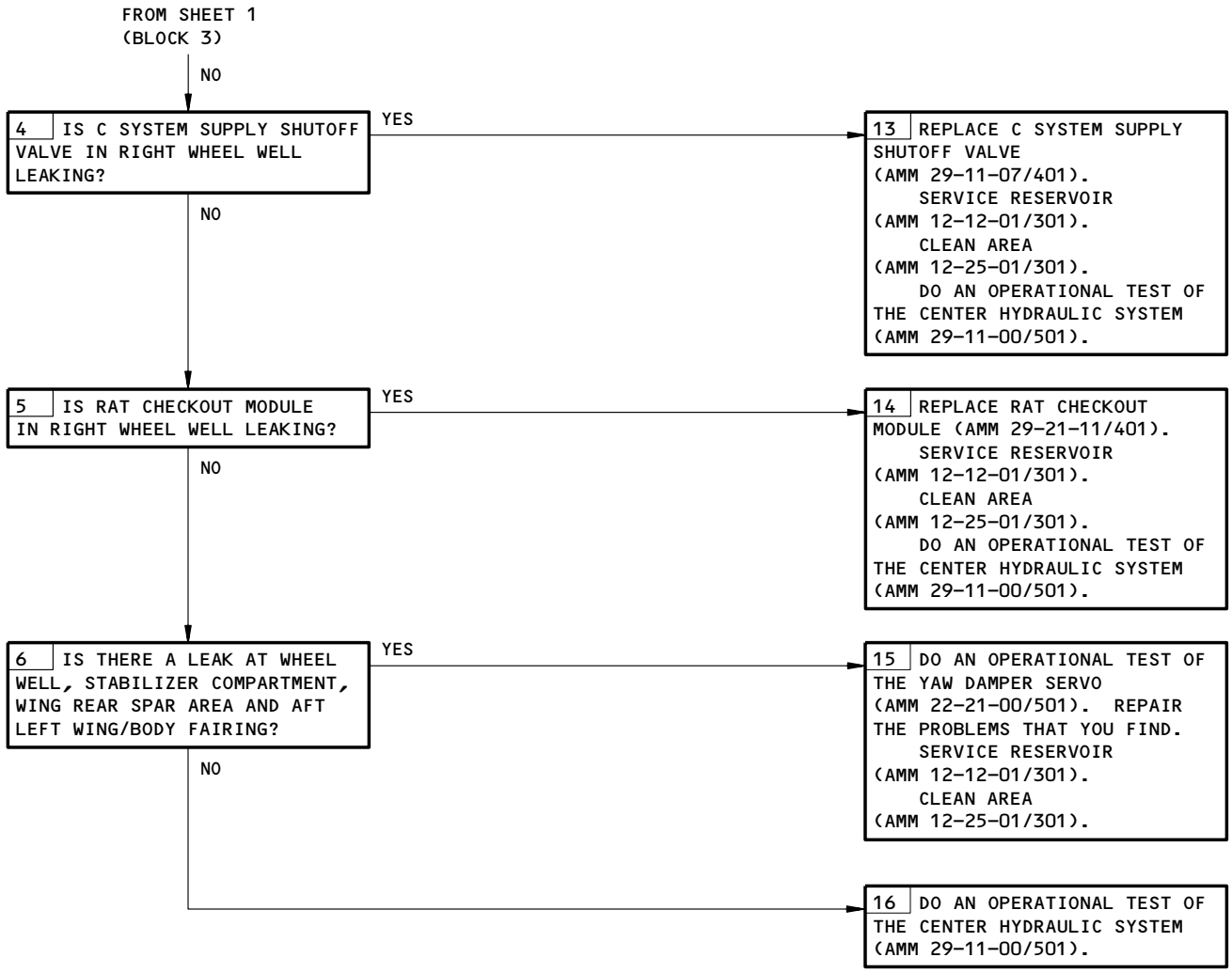
CENTER HYDRAULIC QUANTITY DECREASING WITH SYSTEM DEPRESSURIZED

PREREQUISITES

MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
SYSTEM HYDRAULIC RESERVOIR PRESSURIZED
(AMM 29-11-00/201)



Center Hydraulic Quantity Decreasing with System Depressurized
Figure 118 (Sheet 1)



Center Hydraulic Quantity Decreasing with System Depressurized
Figure 118 (Sheet 2)

CENTER HYDRAULIC QUANTITY INDICATES ZERO, "C HYD QTY" EICAS MESSAGE DISPLAYED

PREREQUISITES

ELECTRICAL POWER (MM 24-22-00)
SYSTEM HYDRAULIC RESERVOIR PRESSURIZED (MM 29-11-00)

CB'S: 11L20,11L24,11L15,11D31

1 CHECK HYDRAULIC FLUID LEVEL USING SIGHT GLASS ON RESERVOIR IN RIGHT WHEEL WELL.
IS FLUID LEVEL VISIBLE AT SIGHT GLASS?

YES → 6 REPLACE HYDRAULIC QUANTITY MONITOR UNIT M122 ON E2-4 RACK (MM 29-33-01). IF FAULT PERSISTS, REPLACE HYDRAULIC QUANTITY TRANSMITTER M339 ON RESERVOIR IN RIGHT WHEEL WELL (MM 29-33-02).
PRESS ELEC/HYD, AUTO-EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "C HYD QTY" AND "C HYD SYS PRESS" MSG'S ARE ERASED.

NO ↓

2 SERVICE RESERVOIR (MM 12-12-01).
IS QUANTITY DECREASING WITH RESERVOIR PRESSURIZED?

YES → 7 REFER TO FIG. 118 BLOCK 1.
PRESS ELEC/HYD, AUTO-EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "C HYD QTY" AND "C HYD SYS PRESS" MSG'S ARE ERASED.

NO ↓

8 REFER TO FIG. 117 BLOCK 1.
PRESS ELEC/HYD, AUTO-EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "C HYD QTY" AND "C HYD SYS PRESS" MSG'S ARE ERASED.

Center Hydraulic Quantity Indicates Zero, "C HYD QTY" EICAS Message Displayed
Figure 119

"L (R) EDP" OVERHEAT LIGHT ILLUMINATED, "L (R) PRIM HYD OVHT" EICAS MESSAGE DISPLAYED

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
EICAS (MM 31-41-00)

1 REMOVE CONNECTOR D36 FROM TEMPERATURE SWITCH S316 (L SYS) OR CONNECTOR D48 FROM SWITCH S315 (R SYS) ON EDP FILTER MODULE IN ENGINE STRUT (WM 29-32-11).
IS OVERHEAT LIGHT L4 (L SYS) OR L6 (R SYS) ILLUMINATED?

YES → 5 REPLACE DIODE CARD IN LIGHT L4 (L6) (MM 33-16-02).
IS OVERHEAT LIGHT L4 (L6) ILLUMINATED?

NO → 10 INSTALL CONNECTOR D36 (D48) ON TEMPERATURE SWITCH S316 (S315).
FAULT CORRECTED.
PRESS ELEC/HYD, AUTO-EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "L (R) PRIM HYD OVHT" MSG IS ERASED.

YES → 11 CHECK AND REPAIR CIRCUIT BETWEEN PIN 7 OF CONNECTOR D3904 (L SYS) OR D3902 (R SYS) ON PANEL M10 AND PIN 1 OF CONNECTOR D36 (L SYS) OR D48 (R SYS) ON EDP FILTER MODULE (WM 29-31-11).
PRESS ELEC/HYD, AUTO-EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "L (R) PRIM HYD OVHT" MSG IS ERASED.

NO

2 CHECK PRESSURE AND CASE DRAIN FILTERS DIFFERENTIAL PRESSURE INDICATORS ON EDP FILTER MODULE IN ENGINE STRUT.
IS DIFFERENTIAL PRESSURE INDICATOR RED BUTTON VISIBLE (PROTRUDING)?

NO → 12 REPLACE L (R) EDP FILTER MODULE TEMPERATURE SWITCH S315 (S316)(MM 29-32-03).
IF FAULT PERSISTS, REPLACE EDP (MM 29-11-05).
PRESS ELEC/HYD, AUTO-EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "L (R) PRIM HYD OVHT" MSG IS ERASED.

YES → 13 INSTALL CONNECTOR D36 (D48) ON TEMPERATURE SWITCH S316 (S315).
REPLACE PRESSURE OR CASE DRAIN FILTER ELEMENT AND RESET DIFFERENTIAL PRESSURE INDICATOR BUTTON ON EDP FILTER MODULE (MM 29-11-17).
PRESS ELEC/HYD, AUTO-EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "L (R) PRIM HYD OVHT" MSG IS ERASED.

L (R) EDP Overheat Light Illuminated, L (R) PRIM HYD OVHT EICAS Message Displayed
Figure 120

"C ADP" OVERHEAT LIGHT ILLUMINATED, "C DEM HYD OVHT" EICAS MESSAGE DISPLAYED

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
PNEUMATIC POWER (MM 36-00-00)
CB'S: 11D31

1 REMOVE CONNECTOR D2216 FROM SWITCH S317 ON ADP FILTER MODULE IN LEFT WHEEL WELL (WM 29-32-11).
IS OVERHEAT LIGHT L15 ON HYDRAULIC CONTROL PANEL M10 ILLUMINATED?

YES → 5 REPLACE DIODE CARD IN LIGHT L15 (MM 33-16-02).
IS OVERHEAT LIGHT L15 ILLUMINATED?

NO → 10 FAULT CORRECTED. [1]

YES → 11 CHECK AND REPAIR FAULTY CIRCUIT BETWEEN PIN 6 OF CONNECTOR D1406 ON PANEL M10 AND PIN 1 OF D2216 ON ADP FILTER MODULE (WM 29-32-11). [1]

NO → 2 CHECK PRESSURE AND CASE DRAIN FILTERS DIFFERENTIAL PRESSURE INDICATORS ON ADP FILTER MODULE IN LEFT WHEEL WELL.
IS DIFFERENTIAL PRESSURE INDICATOR RED BUTTON VISIBLE (PROTRUDING)?

NO → 6 REPLACE ADP FILTER MODULE TEMPERATURE SWITCH S317 (MM 29-32-03). POSITION ADP SELECT SWITCH TO ON. OPERATE ADP SUFFICIENT TIME TO REACH OPERATING TEMPERATURE (MM 29-11-00).
DOES OVERHEAT LIGHT REMAIN EXTINGUISHED?

YES → 12 FAULT CORRECTED. [1]

NO → 13 REPLACE ADP (MM 29-11-03). [1]

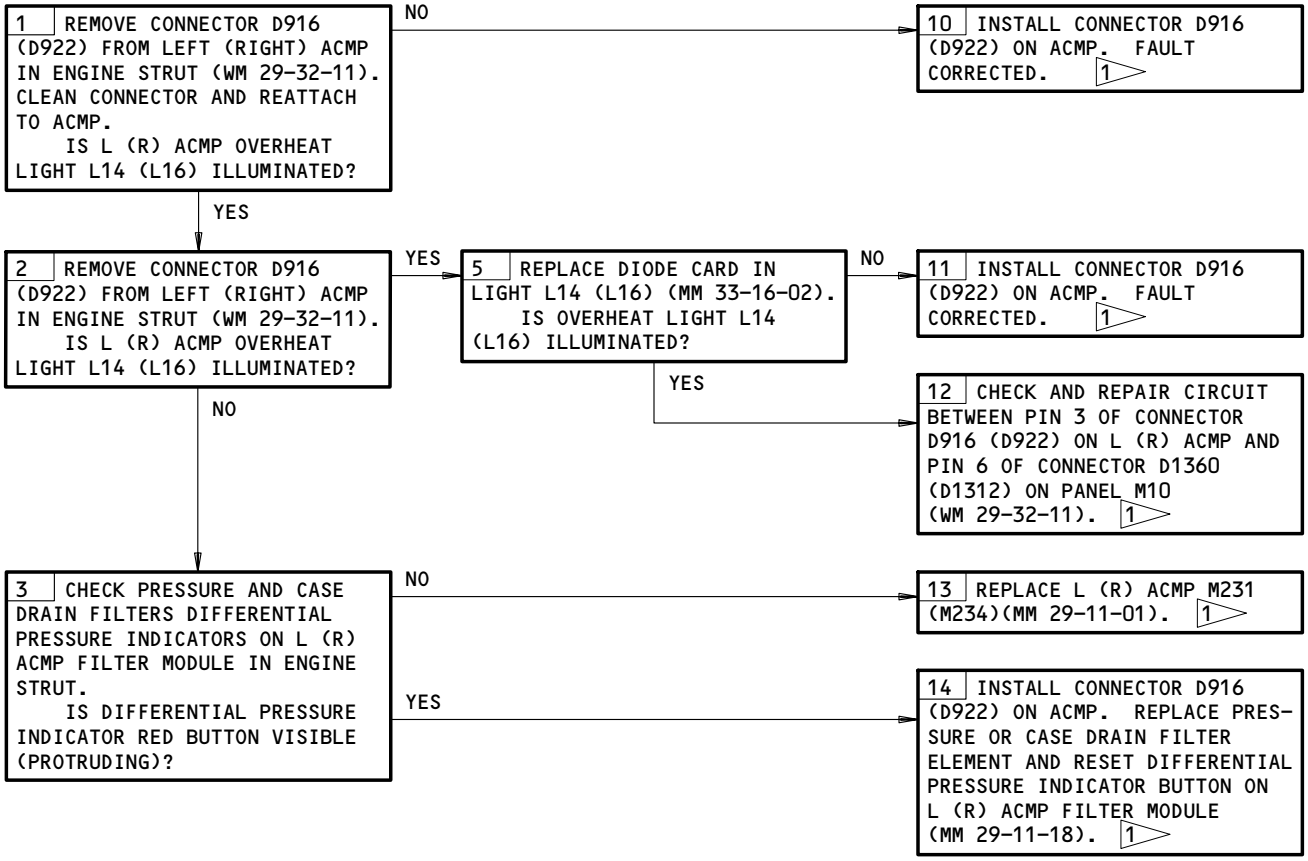
YES → 14 INSTALL CONNECTOR D2216 ON S317. REPLACE PRESSURE OR CASE DRAIN FILTER ELEMENT AND RESET DIFFERENTIAL PRESSURE INDICATOR BUTTON ON ADP FILTER MODULE (MM 29-11-19). [1]

[1] PRESS ELEC/HYD, AUTO-EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "C DEM HYD OVHT" MSG IS ERASED.

C ADP Overheat Light Illuminated, C DEM HYD OVHT EICAS Message Displayed
Figure 121

"L (R) ACMP" OVERHEAT LIGHT ILLUMINATED, "L (R) DEM HYD OVHT" EICAS MESSAGE DISPLAYED

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
EICAS (MM 31-41-00)

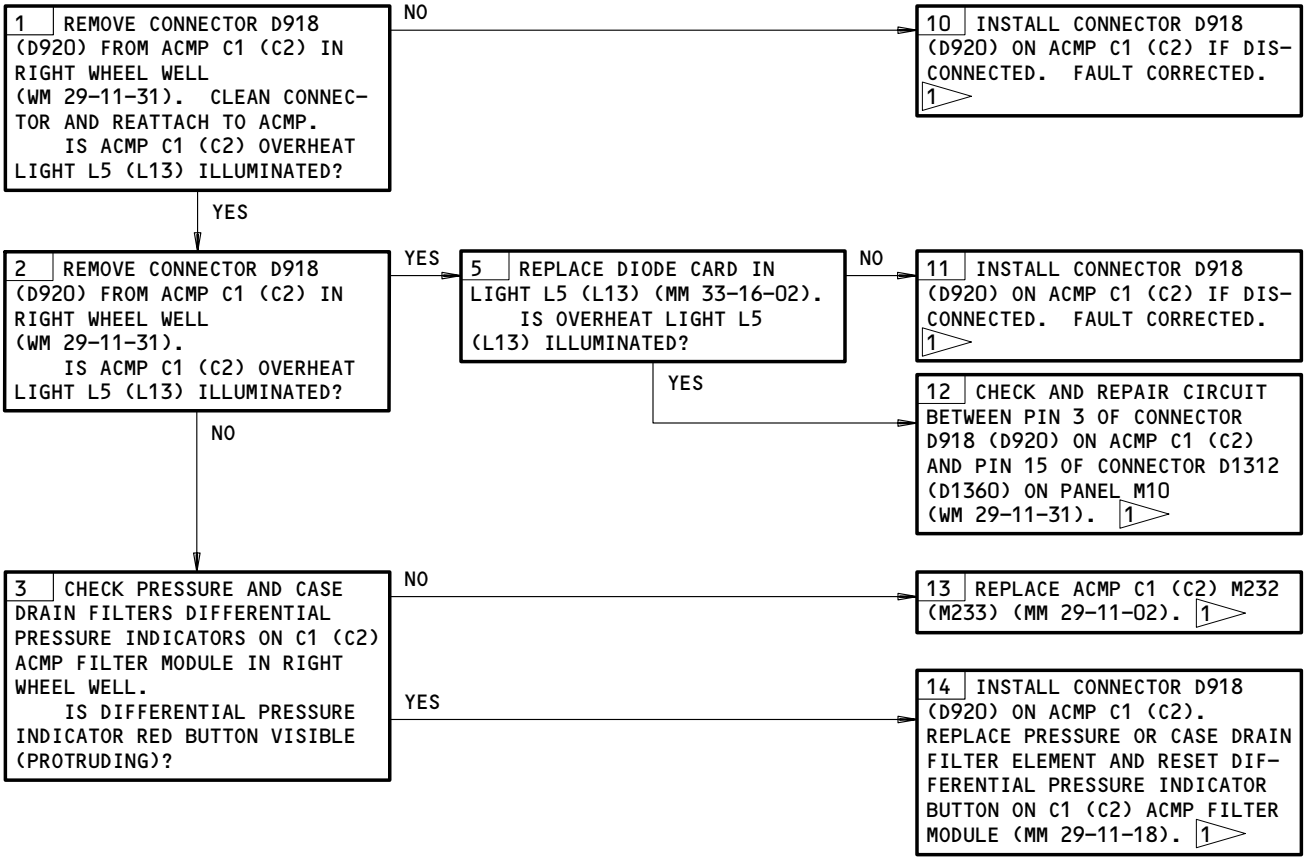


1 PRESS ELEC/HYD, AUTO EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "L (R) DEM HYD OVHT" MSG IS ERASED.

L (R) ACMP Overheat Light Illuminated, L (R) DEM HYD OVHT
EICAS Message Displayed
Figure 122

"C1/C2 ACMP" OVERHEAT LIGHT ILLUMINATED, "C HYD 1 (2) OVHT" EICAS MESSAGE DISPLAYED.

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
EICAS (MM 31-41-00)



1 PRESS ELEC/HYD, AUTO EVENT READ SWITCHES ON EICAS MAINT PANEL AT P61. PRESS AND HOLD ERASE SWITCH FOR 3 SECONDS. CHECK THAT "C HYD 1 (2) OVHT" MSG IS ERASED.

C1 (C2) ACMP Overheat Light Illuminated, C HYD 1 (2) OVHT EICAS Message Displayed
Figure 123

PREREQUISITES
EICAS (MM 31-41-00)
ELECTRICAL POWER (MM 24-22-00)
BOTH ENGINES OFF (MM 71-00-00
CB'S: 11L14,11L16,11L17,11L23,11L25,11L26

"L (R) HYD SYS MAINT" EICAS MESSAGE ILLUMINATED

1 CHECK THAT L (R) ACMP "ELEC" SWITCH IS OFF. CONNECT HYDRAULIC SERVICE CART TO L (R) SYSTEM. OPERATE SERVICE CART TO PROVIDE 2900 PSI TO L (R) SYSTEM (MM 29-11-00). REMOVE EICAS ENGINE SHUTDOWN INHIBIT (MM 31-41-00). AFTER 3 MINUTES, PERFORM EICAS STATUS/MAINTENANCE MESSAGE ERASE PROCEDURE (31-41-00, FIG. 109).
DOES "L (R) HYD SYS MAINT" STATUS MESSAGE REAPPEAR AFTER ONE MINUTE?

YES → 10 DISCONNECT HYDRAULIC SERVICE CART FROM L (R) HYDRAULIC SYSTEM (MM 29-11-00). REPLACE L (R) SYSTEM PRESSURE TRANSMITTER M341 (M343) ON INBOARD AILERON SUPPORT RIB (MM 29-31-01). 1 2

NO

2 OPERATE HYDRAULIC SERVICE CART TO REDUCE PRESSURE SUPPLIED TO L (R) SYSTEM TO 2750 PSI.
DOES "L (R) HYD SYS MAINT" STATUS MESSAGE REAPPEAR AFTER ONE MINUTE?

NO → (to 10)

YES

3 DISCONNECT HYDRAULIC SERVICE CART FROM L (R) HYDRAULIC SYSTEM (MM 29-11-00). PROVIDE L (R) EDP PRESSURE BY RUNNING L (R) ENGINE (MM 71-00-00). POSITION L (R) EDP "ENG" AND L (R) ACMP "ELEC" SWITCHES TO ON.
DOES L (R) SYSTEM PRESSURE STABILIZE AT 2800 TO 3200 PSI?

NO → 11 POSITION L (R) EDP "ENG" AND L (R) ACMP "ELEC" SWITCHES TO OFF. SHUT DOWN ENGINE (MM 71-00-00). PERFORM HYDRAULIC SYSTEM INTERNAL LEAKAGE CHECK (MM 29-11-00). 1 2

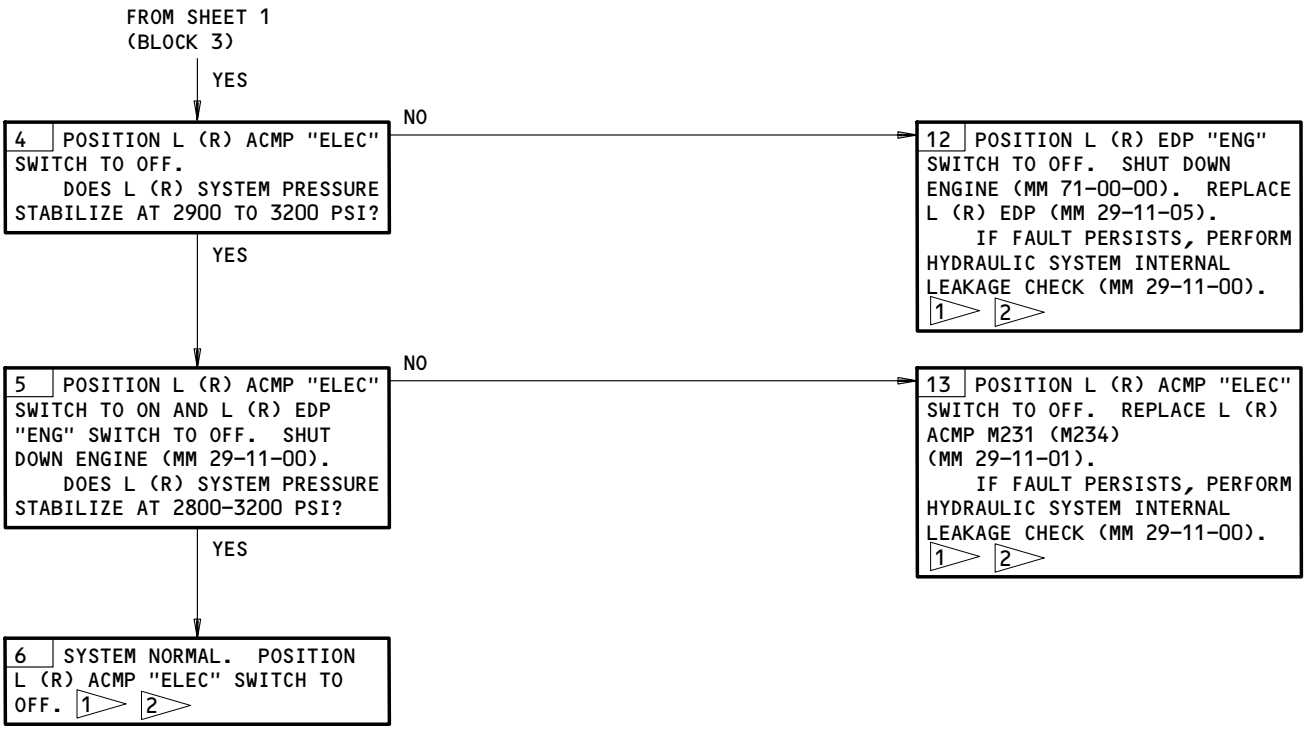
YES

SEE SHEET 2
(BLOCK 4)

1 ERASE "L (R) HYD SYS MAINT" MESSAGE (31-41-00, FIG. 109)

2 RESTORE EICAS ENGINE SHUTDOWN INHIBIT (MM 31-41-00)

L (R) HYD SYS MAINT EICAS Message Illuminated
Figure 124 (Sheet 1)



L (R) HYD SYS MAINT EICAS Message Illuminated
Figure 124 (Sheet 2)

PREREQUISITES

PNEUMATIC POWER (MM 36-00-00)
ELECTRICAL POWER (MM 24-22-00)
EICAS (MM 31-41-00)
CB'S: 11D31,11L15,11L18,11L24

"C HYD SYS MAINT" EICAS MESSAGE ILLUMINATED

1 POSITION C ACMP "ELEC 1" AND "ELEC 2" SWITCHES TO OFF. POSITION C ADP "AIR" SWITCH TO OFF. CHECK THAT "RESERVE BRKS & STRG" SWITCH ON P1 IS OFF. CONNECT HYDRAULIC SERVICE CART TO CENTER SYSTEM. OPERATE SERVICE CART TO PROVIDE 2900 PSI TO CENTER SYSTEM (MM 29-11-00). REMOVE EICAS ENGINE SHUTDOWN INHIBIT (MM 31-41-00). AFTER 3 MINUTES, PERFORM EICAS/ MAINTENANCE MESSAGE ERASE PROCEDURE (31-41-00, FIG. 109).
DOES "C HYD SYS MAINT" MESSAGE REAPPEAR AFTER ONE MINUTE?

YES → 10 DISCONNECT HYDRAULIC SERVICE CART FROM CENTER SYSTEM (MM 29-11-00). REPLACE CENTER SYSTEM PRESSURE TRANSMITTER M342 IN RIGHT WHEEL WELL (MM 29-31-01). 1 2

NO ↓

2 OPERATE HYDRAULIC SERVICE CART TO REDUCE PRESSURE SUPPLIED TO CENTER SYSTEM TO 2750 PSI.
DOES "C HYD SYS MAINT" STATUS MESSAGE REAPPEAR AFTER ONE MINUTE?

NO → 10

YES ↓

3 DISCONNECT HYDRAULIC SERVICE CART FROM CENTER SYSTEM (MM 29-11-00). POSITION C ACMP "ELEC 1" AND "ELEC 2" SWITCHES TO ON.
DOES CENTER SYSTEM PRESSURE STABILIZE AT 2900 TO 3200 PSI?

NO → 11 PERFORM HYDRAULIC SYSTEM INTERNAL LEAKAGE CHECK. (MM 29-11-00). 1 2

YES ↓

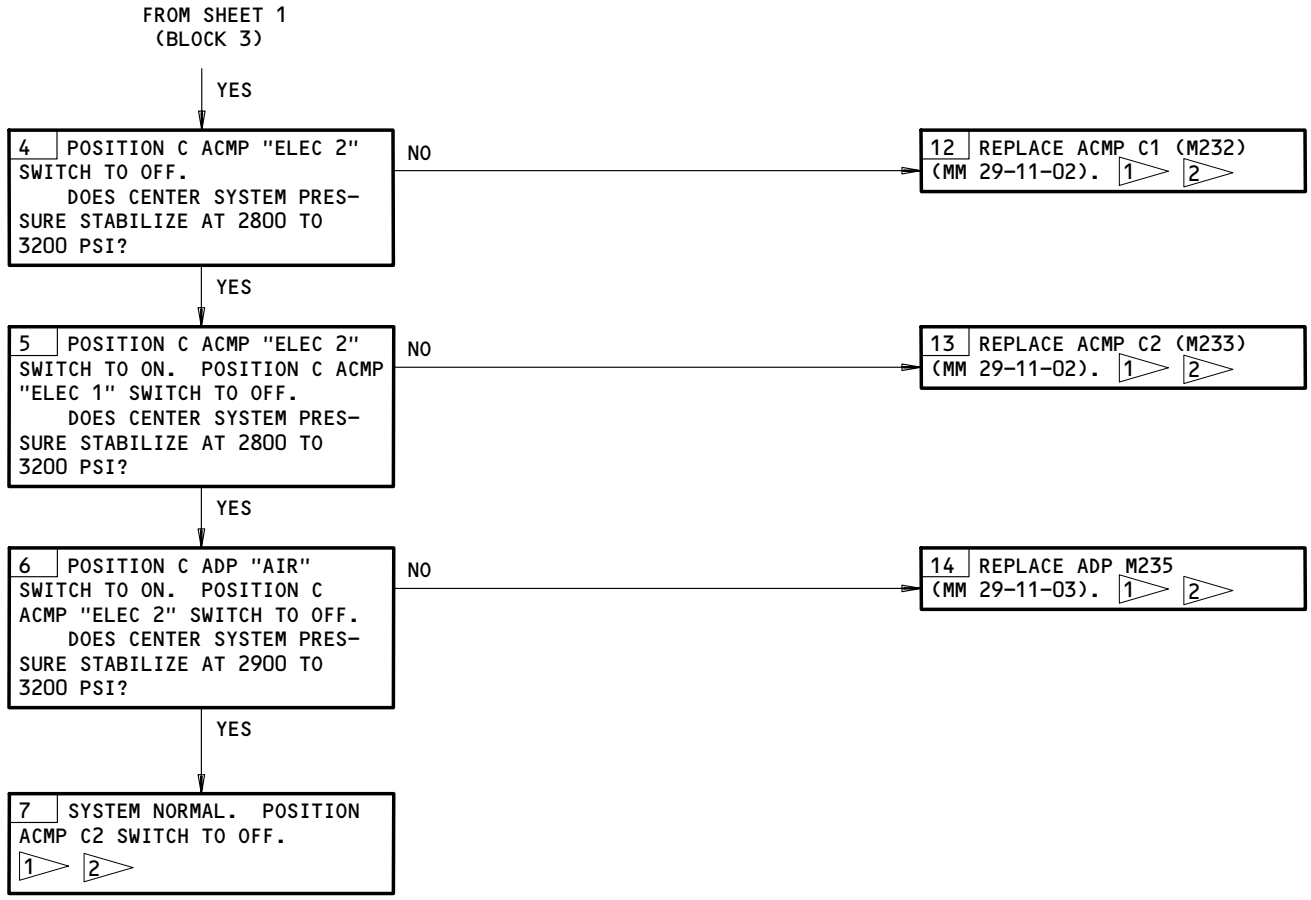
SEE SHEET 2
(BLOCK 4)

1 ERASE "C HYD SYS MAINT" MESSAGE (31-41-00, FIG. 109)

2 RESTORE EICAS ENGINE SHUTDOWN INHIBIT (MM 31-41-00)

C HYD SYS MAINT EICAS Message Illuminated
Figure 125 (Sheet 1)

69531



1> ERASE "C HYD SYS MAINT" MESSAGE (31-41-00, FIG. 109)

2> RESTORE EICAS ENGINE SHUTDOWN INHIBIT (MM 31-41-00)

C HYD SYS MAINT EICAS Message Illuminated
Figure 125 (Sheet 2)

RESERVE BRAKE & STEERING SW "ON" LGT FAILS TO ILLUM WITH SWITCH PRESSED ON, "RSV BRAKE VAL" EICAS MESSAGE NOT DISPLAYED

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 11P2

1 CHECK WHETHER LAMP(S) IN SWITCH MODULE ARE BURNED OUT. ARE LAMP(S) FAULTY?

YES → 10 REPLACE LAMP(S) (WM 29-21-32).

NO → 11 PRESS "RESERVE BRAKES & STEERING" SWITCH TO ON POSITION. CHECK FOR CONTINUITY FROM PANEL P1-3 CONNECTOR D4285P, PIN 6 THRU SWITCH TO GROUND. REPAIR CIRCUIT AS NECESSARY (WM 29-21-32, 33-13-11).

Reserve Brake & Steering Sw ON Lgt Fails to Illum with Switch Pressed On, RSV BRAKE VAL Message Not Displayed
Figure 126

RESERVE BRAKE & STEERING SW VALVE LGT ILLUM WITH SW (ON, OFF), "RSV BRAKE VAL" MESSAGE DISPLAYED

PREREQUISITES

ELECTRICAL POWER (MM 24-22-00)
EICAS (MM 31-41-00)

CB'S: 11L15,11U13

1 IS "VALVE" LIGHT ILLUMINATED WITH SWITCH "OFF"?

YES → 10 REMOVE CONNECTOR D2214 ON VALVE V111. CHECK FOR 28V DC AT PIN 3 (PIN 1 GND) (WM 29-21-32).
IS 28V DC AVAILABLE AT PIN 3?

NO → 20 INSTALL CONNECTOR D2214 ON VALVE V111. REPLACE RESERVE BRAKES AND STEERING PANEL M1216 ON P61 (RELAY K1 FAULTY) (WM 29-21-32).

NO → SEE SHEET 2

YES → 11 CHECK FOR CONTINUITY ACROSS PINS 9 AND 10 ON VALVE V111.
IS THERE CONTINUITY?

YES → 21 REPLACE ISOLATED ACMP SUPPLY SHUTOFF VALVE V111 (MM 29-11-07).

NO → 12 INSTALL CONNECTOR D2214 ON VALVE V111. REMOVE CONNECTOR D2212 ON VALVE V110 (WM 29-21-32). CHECK FOR 28V DC AT CONNECTOR D2212 PIN 3 (PIN 1 GND).
IS 28V DC AVAILABLE AT PIN 3?

NO → 22 INSTALL CONNECTOR D2212 ON VALVE V110. REPLACE ISOLATED ACMP SUPPLY SHUTOFF VALVE V111 (MM 29-11-07).

YES → 13 CHECK FOR CONTINUITY ACROSS PINS 9 AND 10 ON VALVE V110.
IS THERE CONTINUITY?

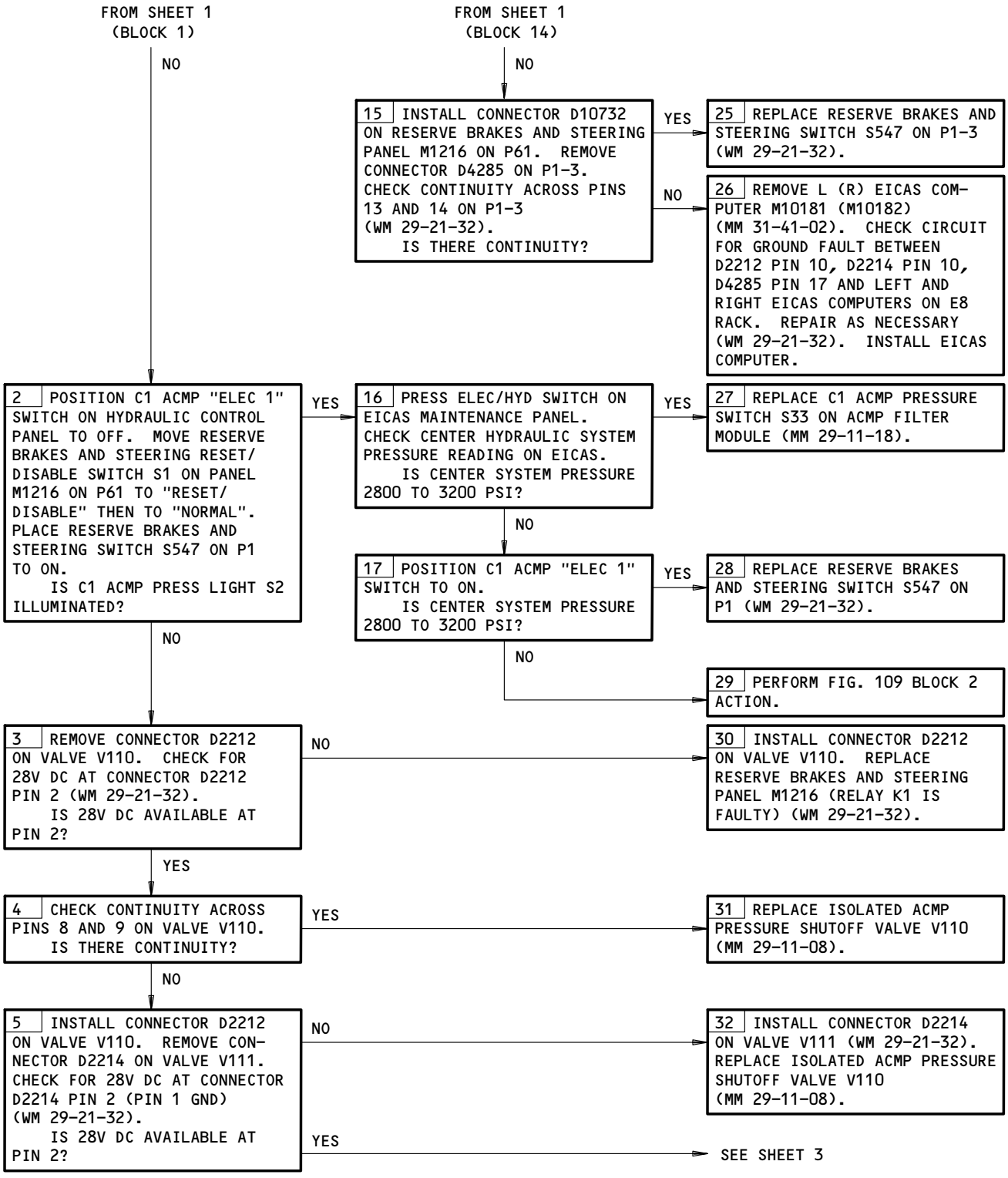
YES → 23 REPLACE ISOLATED ACMP PRESSURE SHUTOFF VALVE V110 (MM 29-11-08).

NO → 14 INSTALL CONNECTOR D2212 ON VALVE V110. REMOVE CONNECTOR D10732 ON RESERVE BRAKES AND STEERING PANEL M1216 ON P61. CHECK FOR CONTINUITY ACROSS PINS 10 AND 11 ON M1216 (WM 29-21-32).
IS THERE CONTINUITY?

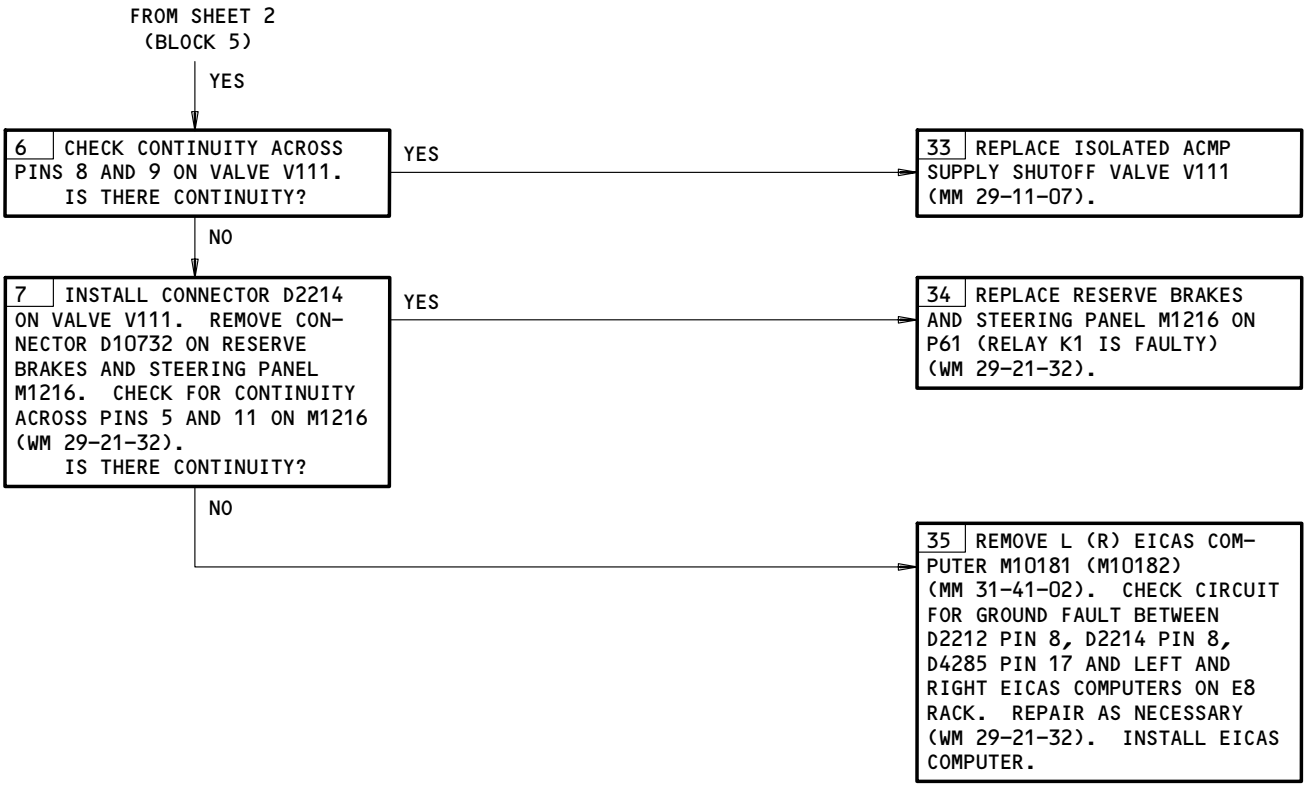
YES → 24 REPLACE RESERVE BRAKES AND STEERING PANEL M1216 ON P61 (RELAY K1 IS FAULTY) (WM 29-21-32).

NO → SEE SHEET 2

Reserve Brake & Steering Sw Valve Lgt Illum with Sw (ON, OFF), RSV BRAKE VAL Message Displayed
Figure 127 (Sheet 1)



Reserve Brake & Steering Sw Valve Lgt Illum with Sw (ON, OFF), RSV BRAKE VAL Message Displayed
Figure 127 (Sheet 2)



Reserve Brake & Steering Sw Valve Lgt Illum with Sw (ON, OFF),
RSV BRAKE VAL Message Displayed
Figure 127 (Sheet 3)

CENTER (RIGHT) HYDRAULIC SYSTEM QUANTITY INCREASED, RIGHT (CENTER) SYSTEM QUANTITY DECREASED

PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11L15,11L16,11L17,11L18,11L24,11L25,11L26

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

1 DEPRESSURIZE RIGHT AND CENTER HYDRAULIC SYSTEMS AND RESERVOIRS (AMM 29-11-00/201).
DISCONNECT ALTERNATE BRAKE SYSTEM (CENTER) HYDRAULIC LINES AT EACH END OF LEFT AND RIGHT ANTISKID SHUTTLE VALVE MODULES (AMM 32-42-07/401).
PRESSURIZE RIGHT HYDRAULIC SYSTEM (AMM 29-11-00/201).
APPLY AND SET PARKING BRAKE.
CHECK FOR HIGH PRESSURE LEAKAGE AT ALTERNATE BRAKE PORTS OF ANTISKID SHUTTLE VALVE MODULES.
IS THERE LEAKAGE AT PORTS OF MODULES?

YES → 5 REPLACE PAIR OF ANTISKID SHUTTLE VALVES ADJACENT TO MODULE PORT WHERE LEAKAGE IS OCCURRING.
CONNECT HYDRAULIC LINES TO LEFT AND RIGHT MODULES (AMM 32-42-07/401).
SERVICE CENTER AND RIGHT HYDRAULIC SYSTEMS (AMM 29-11-00/201).

NO ↓

2 DEPRESSURIZE RIGHT HYDRAULIC SYSTEM WITH RIGHT SYSTEM RESERVOIR PRESSURIZED (AMM 29-11-00/201).
RELEASE PARKING BRAKE.
CHECK FOR LOW PRESSURE LEAKAGE AT ANTISKID SHUTTLE VALVE MODULES.
IS THERE LEAKAGE AT PORTS OF MODULES?

YES → 6 REPLACE PAIR OF ANTISKID SHUTTLE VALVES ADJACENT TO MODULE PORT WHERE LEAKAGE IS OCCURRING.
CONNECT HYDRAULIC LINES TO LEFT AND RIGHT MODULES (AMM 32-42-07/401).
SERVICE CENTER AND RIGHT HYDRAULIC SYSTEMS (AMM 29-11-00/201).

NO →

7 CONNECT HYDRAULIC LINES TO LEFT AND RIGHT ANTISKID SHUTTLE VALVE MODULES (AMM 32-42-07/401).
SERVICE CENTER AND RIGHT HYDRAULIC SYSTEMS (AMM 29-11-00/201).
THE SYSTEM IS NORMAL.

NOTE

FLUID TRANSFER BETWEEN RIGHT AND CENTER HYDRAULIC SYSTEMS IS OCCURRING DUE TO SEQUENCE OF PARKING BRAKE OPERATION VERSUS SEQUENCE OF HYDRAULIC SYSTEM PRESSURIZATION/DEPRESSURIZATION (AMM 29-11-00/201, PAR. 1.C., FOR OPERATIONAL PROCEDURE TO KEEP FLUID TRANSFER TO A MINIMUM).

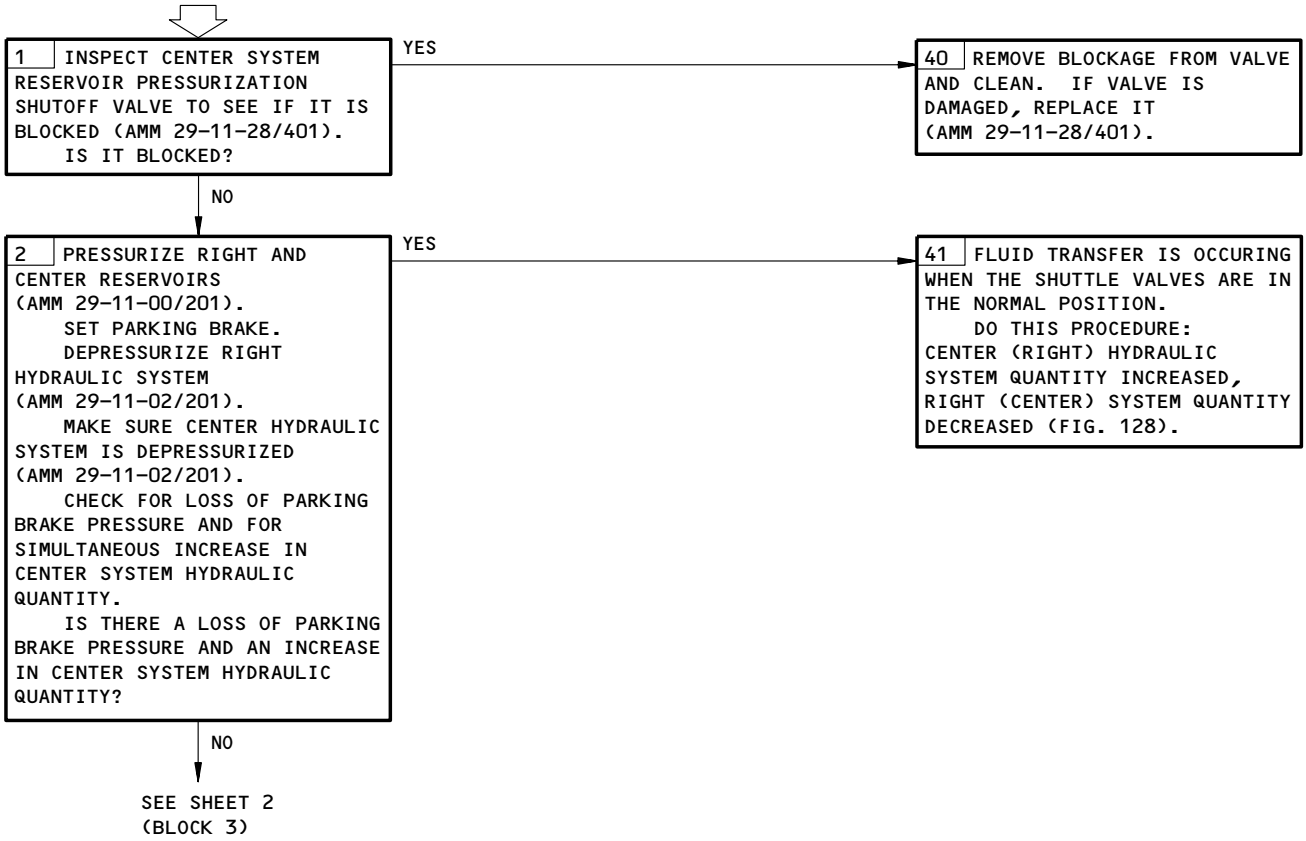
Center (Right) Hydraulic System Quantity Increased,
Right (Center) System Quantity Decreased
Figure 128

CENTER (RIGHT) HYDRAULIC SYSTEM QUANTITY INCREASED, RIGHT (CENTER) SYSTEM QUANTITY DECREASED

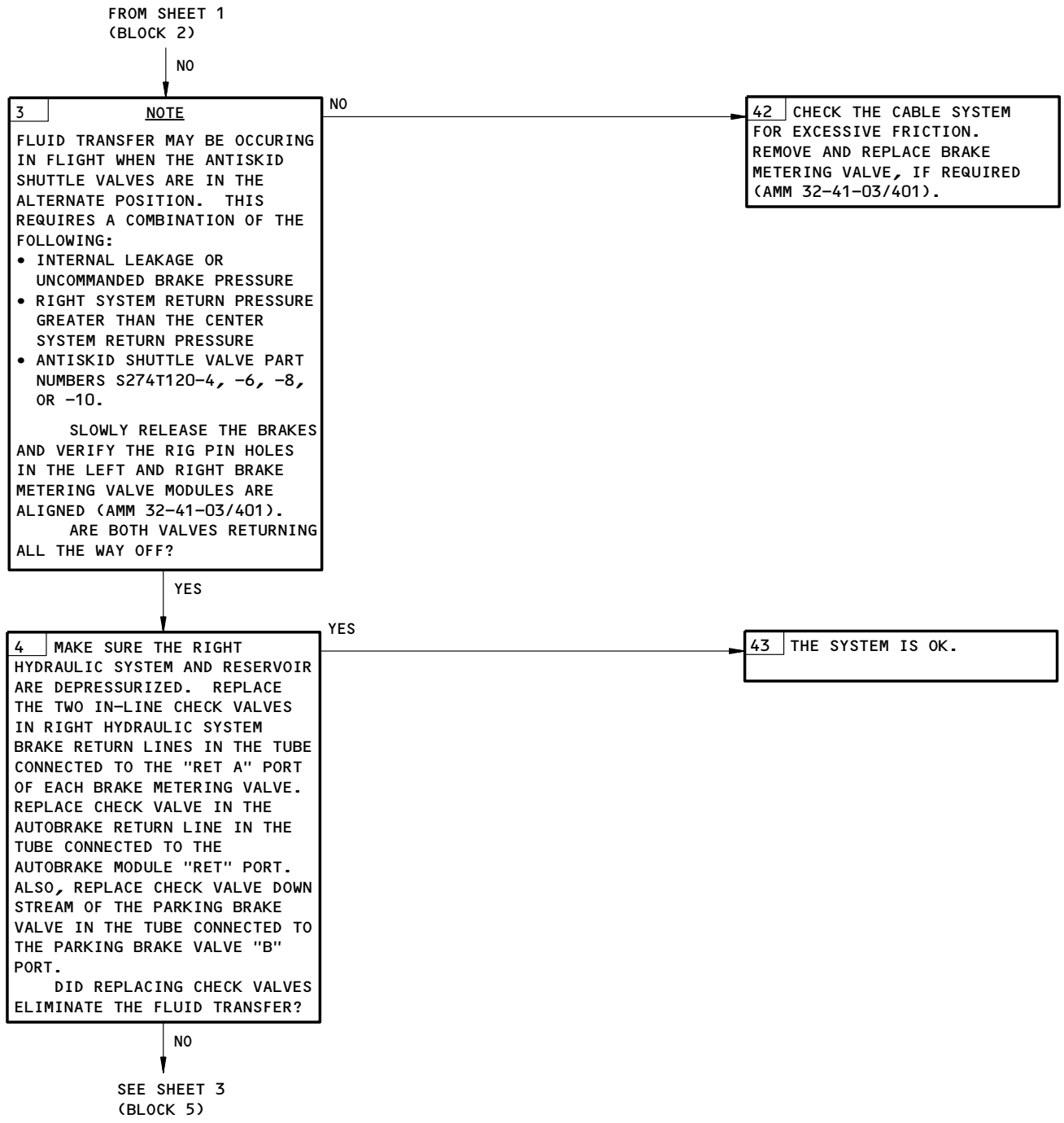
PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11L15, 11L16, 11L17, 11L18, 11L24, 11L25, 11L26

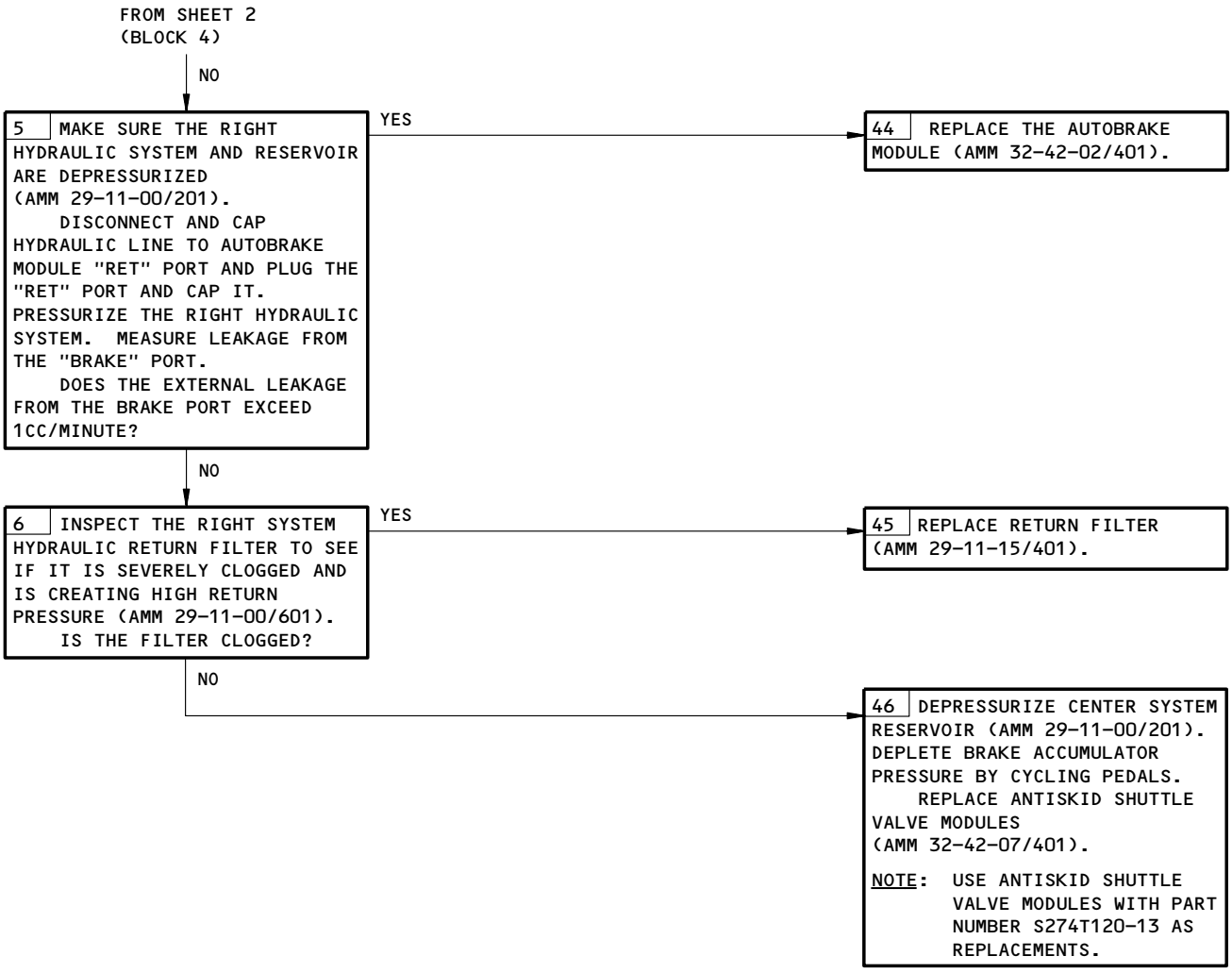
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)



Center Hydraulic System Quantity Increased, Right System Quantity Decreased
Figure 128A (Sheet 1)



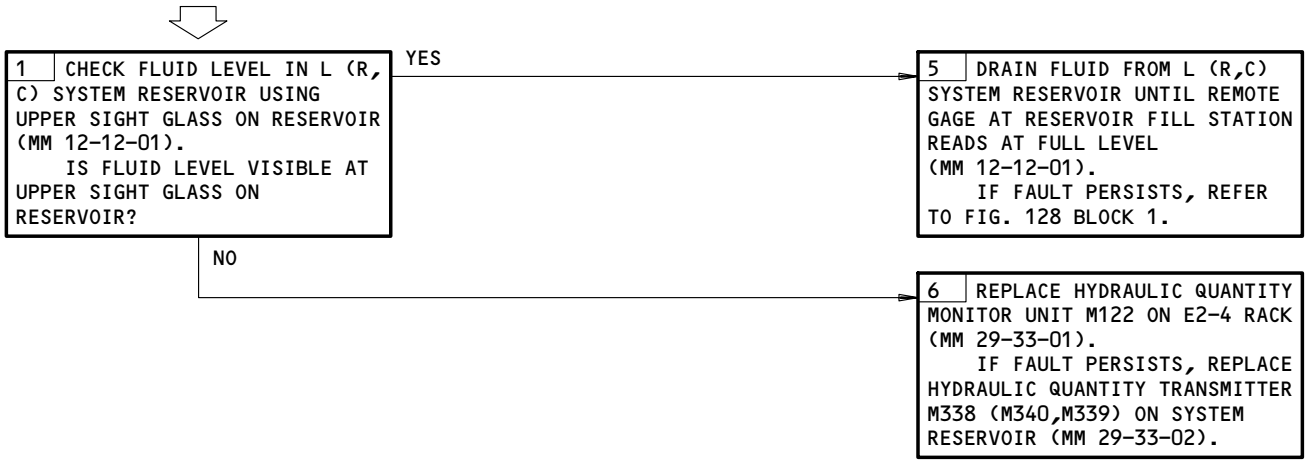
Center Hydraulic System Quantity Increased, Right System Quantity Decreased
Figure 128A (Sheet 2)



Center Hydraulic System Quantity Increased, Right System Quantity Decreased
Figure 128A (Sheet 3)

L (R,C) HYDRAULIC QUANTITY READS ABOVE 1.22

PREREQUISITES
ELECTRICAL POWER (24-22-00)
CB'S: 11L20



L (R,C) Hydraulic Quantity Reads Above 1.22
Figure 129

L (R,C) HYDRAULIC QUANTITY INDICATES RF (REFILL) NEXT TO QUANTITY READING

PREREQUISITES
ELECTRICAL POWER (24-22-00)
CB'S: 11L20

1 CHECK FLUID LEVEL IN L (R, C) SYSTEM RESERVOIR USING LOWER SIGHT GLASS ON RESERVOIR (MM 12-12-01).
IS FLUID LEVEL ABOVE LOWER SIGHT GLASS ON RESERVOIR?

NO → 5 ADD FLUID TO L (R,C) SYSTEM RESERVOIR UNTIL REMOTE GAGE AT RESERVOIR FILL STATION READS AT FULL LEVEL (MM 12-12-01).
IF FAULT PERSISTS, REFER TO FIG. 114 BLOCK 1 (L OR R SYS) OR FIG. 117 BLOCK 1 (C SYS).

YES → 6 REPLACE HYDRAULIC QUANTITY MONITOR UNIT M122 ON E2-4 RACK (MM 29-33-01).
IF FAULT PERSISTS, REPLACE HYDRAULIC QUANTITY TRANSMITTER M338 (M340,M339) ON SYSTEM RESERVOIR (MM 29-33-02).

L (R,C) Hydraulic Quantity Indicates RF (Refill) next to Quantity Reading
Figure 130

ADP LOW "PRESS" LIGHT DID NOT ILLUMINATE WITH ADP SWITCH "OFF"

PREREQUISITES
ELECTRICAL POWER (24-22-00)
CB'S: 11A33

1 POSITION HYDRAULIC C ELEC 1, C ELEC 2, AND ADP SELECT SWITCHES TO OFF.
REMOVE CONNECTOR D464 FROM ADP PRESSURE SWITCH S28 ON ADP FILTER MODULE. CHECK CONTINUITY BETWEEN PINS 2 AND 3 ON SWITCH S28 (WM 29-11-32).
IS THERE CONTINUITY?

NO → 5 REPLACE ADP PRESSURE SWITCH S28 ON ADP FILTER MODULE (MM 29-11-19).

YES ↓

2 INSTALL CONNECTOR D464 ON ADP PRESSURE SWITCH S28. INSTALL JUMPER BETWEEN TERMINALS A AND B OF ADP PRESSURE LIGHT TIME DELAY M919 ON P36 (WM 29-11-32).
IS ADP LOW PRESSURE LIGHT L8 ILLUMINATED?

NO → 6 REMOVE JUMPER FROM TIME DELAY M919. CHECK AND REPAIR CIRCUIT FROM CONNECTOR D464 PIN 3 THRU ADP SELECT SWITCH S6 TO ADP LOW PRESSURE LIGHT L8.

YES → 7 REPLACE ADP PRESSURE LIGHT TIME DELAY M919 ON P36 (WM 29-11-32).

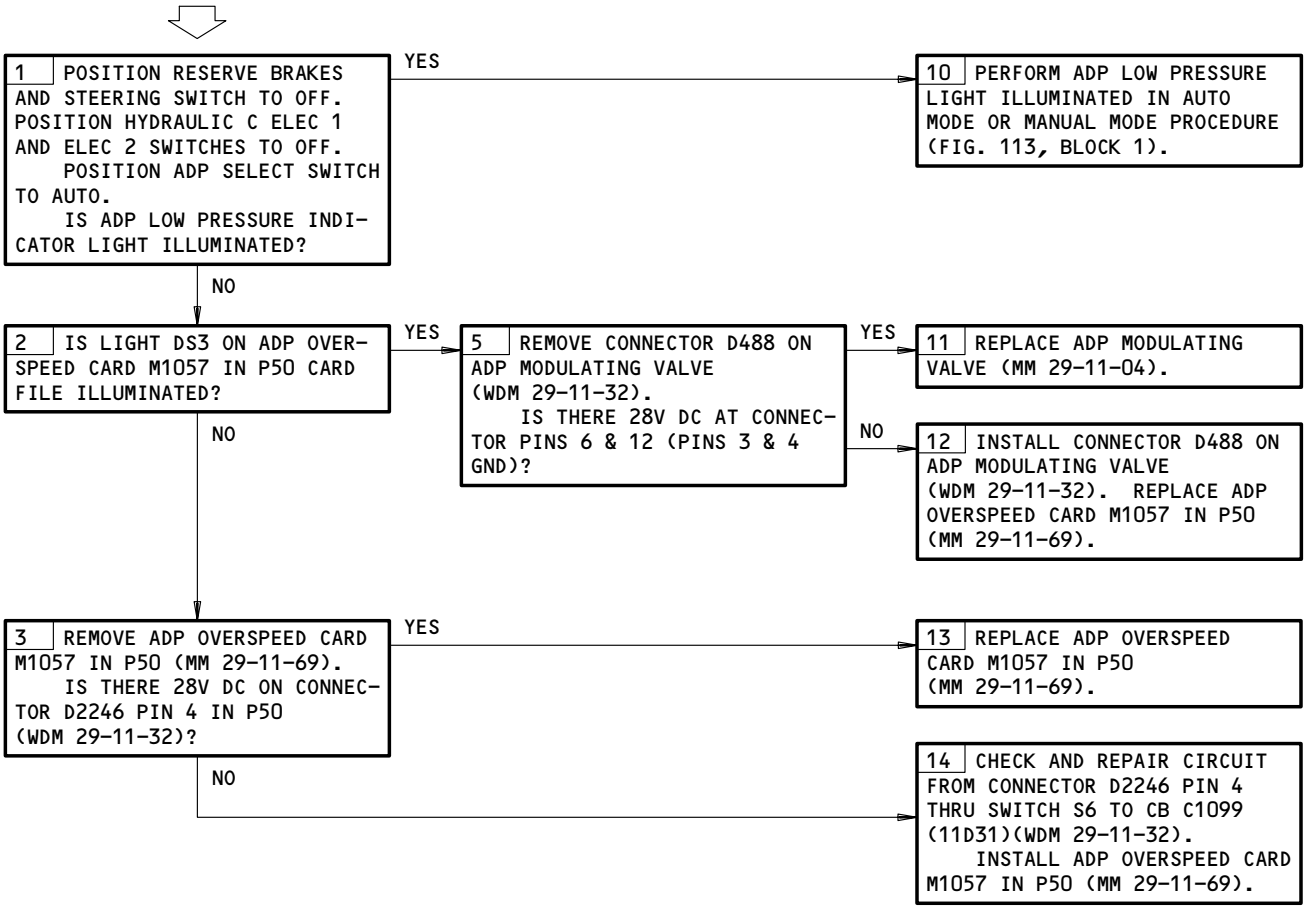
ADP Low PRESS Light did not Illuminate with ADP Switch OFF
Figure 131

ADP INOPERATIVE IN MANUAL MODE, AUTO MODE NOT CHECKED

PREREQUISITES

ELECTRICAL POWER (MM 24-22-00)
PNEUMATIC POWER (MM 36-00-00)

CB'S: 11D31



ADP Inoperative in Manual Mode, Auto Mode not Checked
Figure 132

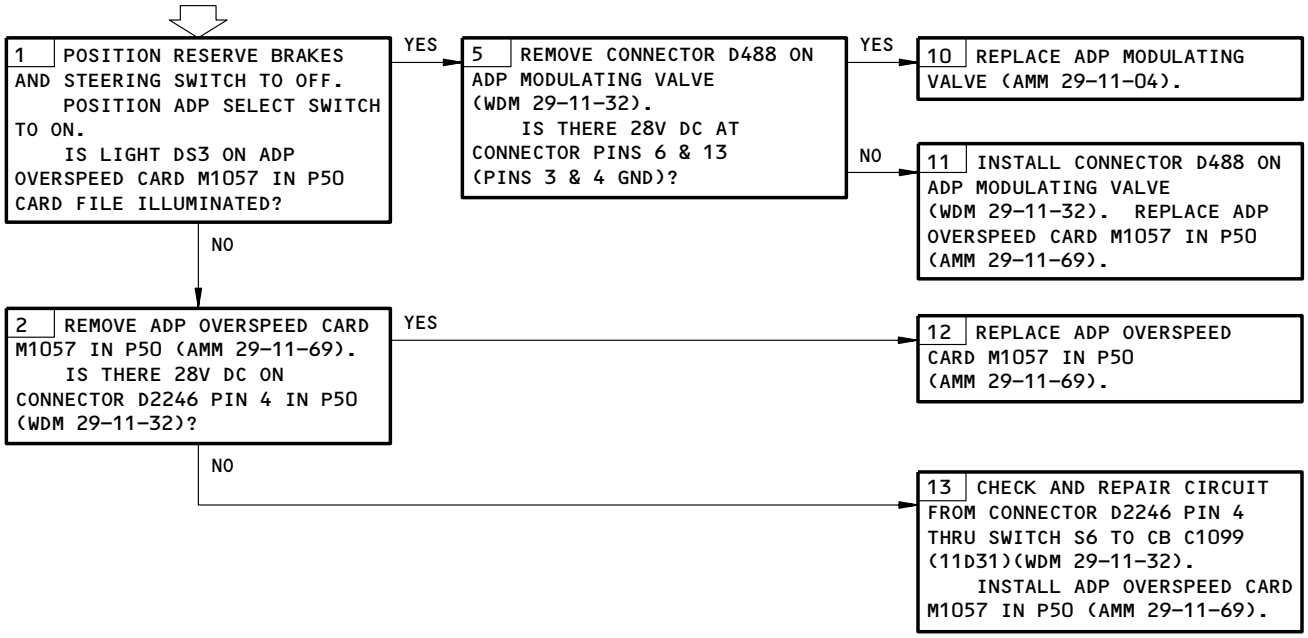
PREREQUISITES

MAKE SURE THIS SYSTEM WILL OPERATE:
PNEUMATIC POWER (AMM 36-00-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11D31

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

ADP INOPERATIVE IN MANUAL MODE, (ON), NORMAL IN AUTO MODE



ADP Inoperative in Manual Mode, (On), Normal in Auto Mode
Figure 132A

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 11L16,11L17,11L25,11L26

LEFT/RIGHT ACMP LOW PRESSURE LIGHT DID NOT ILLUMINATE WITH ACMP SWITCH OFF

1 PRESS "ELEC/HYD" SWITCH ON EICAS MAINTENANCE PANEL AT P61. POSITION L (R) ELEC DEMAND PUMP SWITCH ON P5 TO "OFF".
IS L (R) SYSTEM PRESSURE ZERO?

YES → 5 REMOVE CONNECTOR D52 (D72) FROM L (R) ACMP PRESSURE SWITCH S25 (S30) ON L (R) ACMP PRESSURE/CASE DRAIN FILTER MODULE.
INSTALL JUMPER BETWEEN CONNECTOR PINS 2 AND 3 (WM 29-11-12,-22).
IS L (R) ACMP LOW PRESSURE LIGHT ILLUMINATED AFTER 8 (4) SECONDS?

YES → 10 REMOVE JUMPER FROM CONNECTOR D52 (D72).
REPLACE L (R) ACMP PRESSURE SWITCH S25 (S30) ON L (R) ACMP PRESSURE/CASE DRAIN FILTER MODULE (MM 29-11-18).

NO → 11 REMOVE JUMPER FROM CONNECTOR D52 (D72). INSTALL CONNECTOR D52 (D72) ON L (R) ACMP PRESSURE SWITCH S25 (S30) ON L (R) ACMP PRESSURE/CASE DRAIN FILTER MODULE.
REPLACE L (R) TIME DELAY M925 (M924) IN P37 (P33) (WM 29-11-12,-22).

NO → 2 REMOVE CONNECTOR D3452 (D3448) FROM L (R) ELCU M895 (M896) IN P32 (P31) (WM 29-11-12,22).
IS 28V DC AVAILABLE AT CONNECTOR D3452 (D3448) PIN 8 (PIN 15 GND)?

NO → 12 REPLACE L (R) ELCU M895 (M896) IN P32 (P31) (MM 29-11-14).

YES → 13 INSTALL CONNECTOR D3452 (D3448) ON L (R) ELCU M895 (M896) IN P32 (P31).
REPLACE L (R) ACMP SWITCH/LIGHT YCYS5 (YCYS7) ON HYDRAULIC CONTROL PANEL M10 (MM 33-13-00) OR M10 (WM 29-11-12,-22).

Left/Right ACMP Low Pressure Light Did Not Illuminate with ACMP Switch Off
Figure 133

CENTER ACMP C1/C2 LOW PRESSURE LIGHT DID NOT ILLUMINATE WITH ACMP SWITCH OFF

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 11L15,11L24,11L18

1 POSITION ADP, ACMP C1, AND ACMP C2 SELECT SWITCHES ON HYDRAULIC CONTROL PANEL AT P5 TO "OFF". POSITION RESERVE BRAKES AND STEERING SWITCH/ LIGHT AT P1 TO "OFF". PRESS "ELEC/HYD" SWITCH ON EICAS MAINTENANCE PANEL AT P61.
IS CENTER SYSTEM PRESSURE ZERO?

YES → 10 REPLACE ACMP C1 (C2) PRESSURE SWITCH S33 (S34) ON ACMP PRESSURE/CASE DRAIN FILTER MODULE (MM 29-11-18).

NO ↓

2 REMOVE CONNECTOR D3450 (D3454) FROM ACMP C1 (C2) ELCU M897 (M898) IN P31 (P32) (WM 29-11-31).
IS 28V DC AVAILABLE AT CONNECTOR D3450 (D3454) PIN 8 (PIN 15 GND)?

NO → 11 REPLACE ACMP C1 (C2) ELCU M897 (M898) IN P31 (P32) (MM 29-11-14).

YES ↓

3 INSTALL CONNECTOR D3450 (D3454) ON ACMP C1 (C2) ELCU M897 (M898) IN P31 (P32) (WM 29-11-31).
IS FAULT RELATED TO ACMP C1?

YES → 5 REMOVE CONNECTOR D1312 FROM HYDRAULIC CONTROL PANEL M10 (WM 29-11-31).
CHECK CONTINUITY BETWEEN CONNECTOR PINS 16 AND 17.
IS THERE CONTINUITY?

NO → 12 INSTALL CONNECTOR D1312 ON HYDRAULIC CONTROL PANEL M10. REPLACE RESERVE BRAKES AND STEERING SWITCH/LIGHT S547 ON P1 (MM 33-13-00, WM 29-11-31).

YES → 13 INSTALL CONNECTOR D1312 ON HYDRAULIC CONTROL PANEL M10. REPLACE ACMP C1 SWITCH/LIGHT YCYS2 ON HYDRAULIC CONTROL PANEL M10 (MM 33-13-00) OR M10 (WM 29-11-31).

NO → 14 REPLACE ACMP C2 SWITCH/ LIGHT YCYS3 ON HYDRAULIC CONTROL PANEL M10 (MM 33-13-00) OR M10 (WM 29-11-31).

Center ACMP C1/C2 Low Pressure Light Did Not Illuminate with ACMP Switch Off
Figure 134

PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11D31, 11L18, 11L24

MAKE SURE THIS CIRCUIT BREAKER IS OPEN AND ATTACH A DO-NOT-CLOSE TAG:
11L15

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

ADP CYCLES ON AND OFF IN AUTO MODE

1 ENSURE THE APU IS OFF.
POSITION C1 ELEC PUMP TO ON AND C2 ELEC PUMP TO OFF.
POSITION THE ADP SELECT SWITCH, S6, TO AUTO.
ENSURE THE ADP DEMAND LIGHT AND C HYD SYS PRESSURE LIGHT IS ON.
POSITION THE C2 ELEC PUMP TO ON.
DOES THE ADP DEMAND LIGHT GO OFF IMMEDIATELY AFTER THE ADP SELECT SWITCH, S6, IS POSITIONED TO AUTO?

YES → 21 REPLACE THE AIR HYD PUMP OFF TIME DELAY MODULE, M497 IN THE P36 PANEL.

NO

2 POSITION THE C2 ELEC PUMP TO OFF.
POSITION THE ADP SELECT SWITCH, S6, TO OFF.
REMOVE RELAY, K684, IN THE P36.
PUT THE ADP SWLECT SWITCH, S6, TO ON.
CHECK FOR 28V DC ON CONNECTOR D10436, PIN A2, WHILE WIGGLING THE ADP SELECT SWITCH.
IS THE VOLTAGE ON CONNECTOR D10436, PIN A2, INTERMITTENT?

YES → 22 INSTALL RELAY, K684, IN P36.
REPLACE THE ADP SELECT SWITCH, S6, OR THE HYDRAULIC PANEL, M10.

NO

3 POSITION THE ADP SWLECT SWITCH, S6, TO AUTO.
CHECK FOR 28V DC ON CONNECTOR D10436, PIN A2, WHILE WIGGLING THE ADP SELECT SWITCH.
IS THE VOLTAGE ON CONNECTOR D10436, PIN A2, INTERMITTENT?

YES → 23 INSTALL RELAY, K684, IN P36.
REPLACE THE ADP SELECT SWITCH, S6, OR THE HYDRAULIC PANEL, M10.

NO

SEE SHEET 2
(BLOCK 4)

ADP Cycles On and Off in Auto Mode
Figure 135 (Sheet 1)

ADP Cycles On and Off in Auto Mode
Figure 135 (Sheet 2)

PREQUISITES

MAKE SURE THIS SYSTEM WILL OPERATE:
PNEUMATIC POWER (AMM 36-00-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11D31,11L24

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

ADP CONTINUES TO RUN IN AUTO MODE

1 CHECK THAT THE MAIN AND NOSE GEAR DOORS ARE CLOSED.
CHECK THAT THE SPEEDBRAKE HANDLE IS IN THE DOWN POSITION.
POSITION THE HYDRAULIC C ELEC 2 SWITCH TO ON AND ADP SELECT SWITCH, YCYS6, TO AUTO.
REMOVE CONNECTOR D488 FROM THE ADP MODULATING VALVE (WDM 29-11-32).
IS 28V DC AVAILABLE AT CONNECTOR D488, PIN 12 (PIN 3, GND)?

NO → 20 REPLACE THE ADP MODULATING VALVE (AMM 29-11-04/401).

YES

2 REMOVE CONNECTOR D466 ON ADP CONTROL PRESSURE SWITCH, S29 (WDM 29-11-32).
IS THERE CONTINUITY BETWEEN PINS 1 AND 2 ON SWITCH S29?

NO → 21 INSTALL CONNECTOR D488 ON THE ADP MODULATING VALVE (WDM 29-11-32).
REPLACE ADP CONTROL PRESSURE SWITCH, S29 (AMM 29-11-19/401).

YES

3 INSTALL CONNECTOR D466 ON ADP CONTROL PRESSURE SWITCH, S29, TO THE JUMPER ON TERMINAL B OF TIME DELAY RELAY, M497, TO GROUND (WDM 29-11-32).
IS 28V DC AVAILABLE AT CONNECTOR D488, PIN 12 (PIN 3, GND) AFTER 15 SECONDS?

NO → 22 INSTALL CONNECTOR D488 ON THE ADP MODULATING VALVE.
REPLACE DIODE R164 IN P36 (WDM 29-11-32).

YES

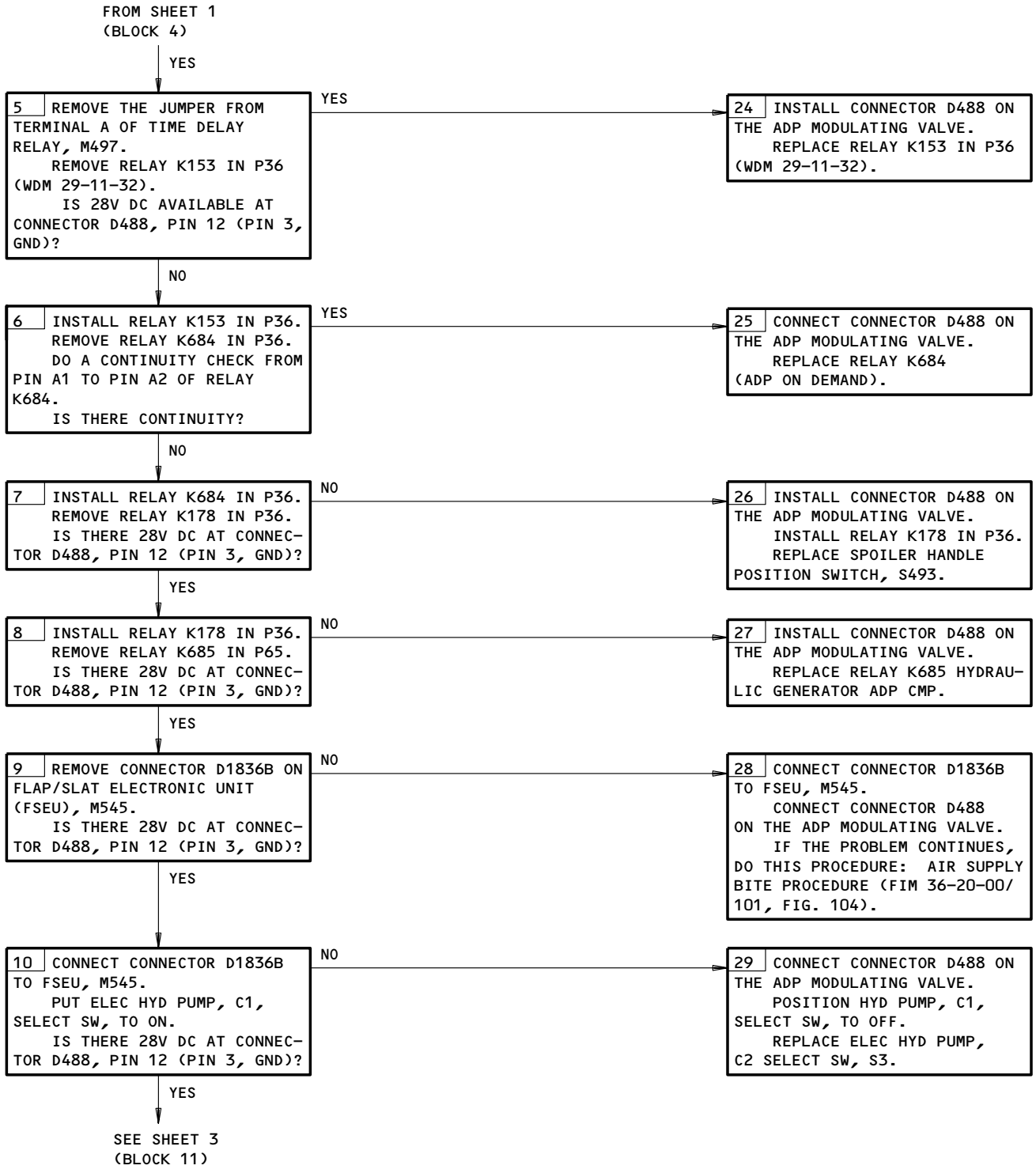
4 REMOVE THE JUMPER FROM TERMINAL B OF TIME DELAY RELAY, M497, AND THE JUMPER FROM TERMINAL A, TO GROUND (WDM 29-11-32).
IS 28V DC AVAILABLE AT CONNECTOR D488, PIN 12 (PIN 3, GND)?

NO → 23 INSTALL CONNECTOR D488 ON THE ADP MODULATING VALVE.
REMOVE THE JUMPER FROM TERMINAL A OF TIME DELAY RELAY, M497.
REPLACE TIME DELAY RELAY, M497, IN P36 (WDM 29-11-32).

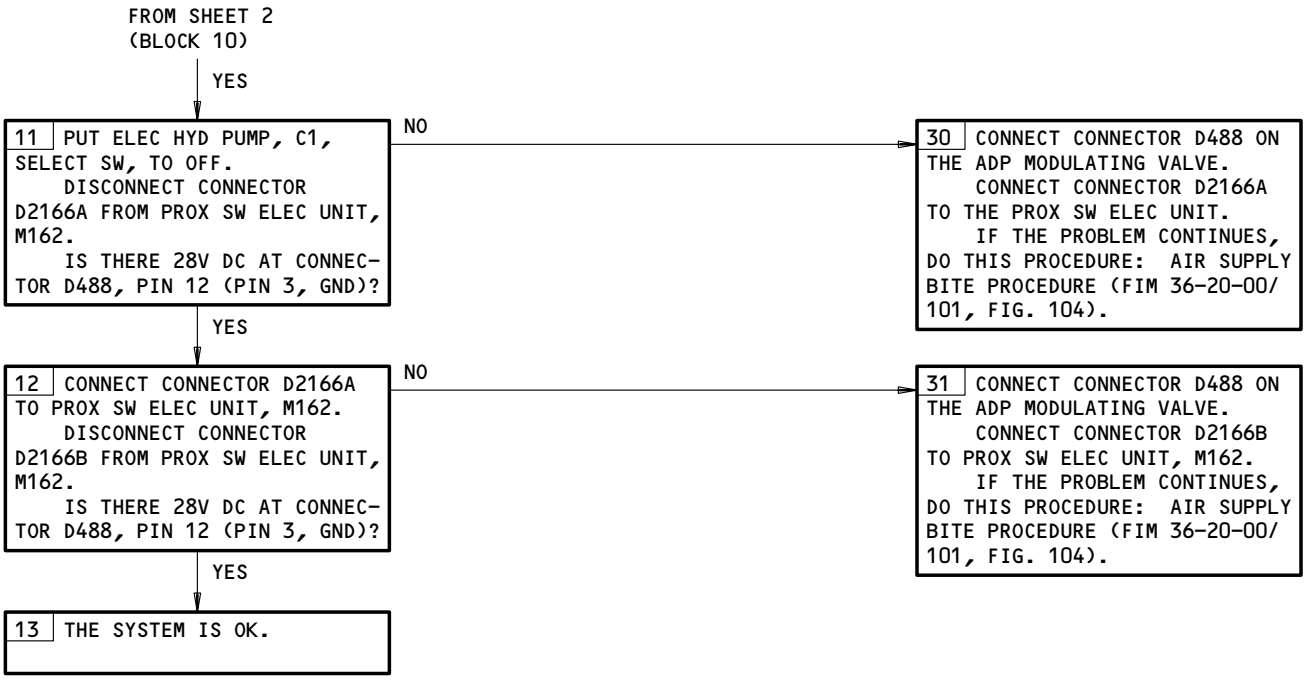
YES

SEE SHEET 2
(BLOCK 5)

ADP Continues to Run in Auto Mode
Figure 136 (Sheet 1)



ADP Continues to Run in Auto Mode
Figure 136 (Sheet 2)



ADP Continues to Run in Auto Mode
Figure 136 (Sheet 3)

Not Used
Figure 137

PREREQUISITES

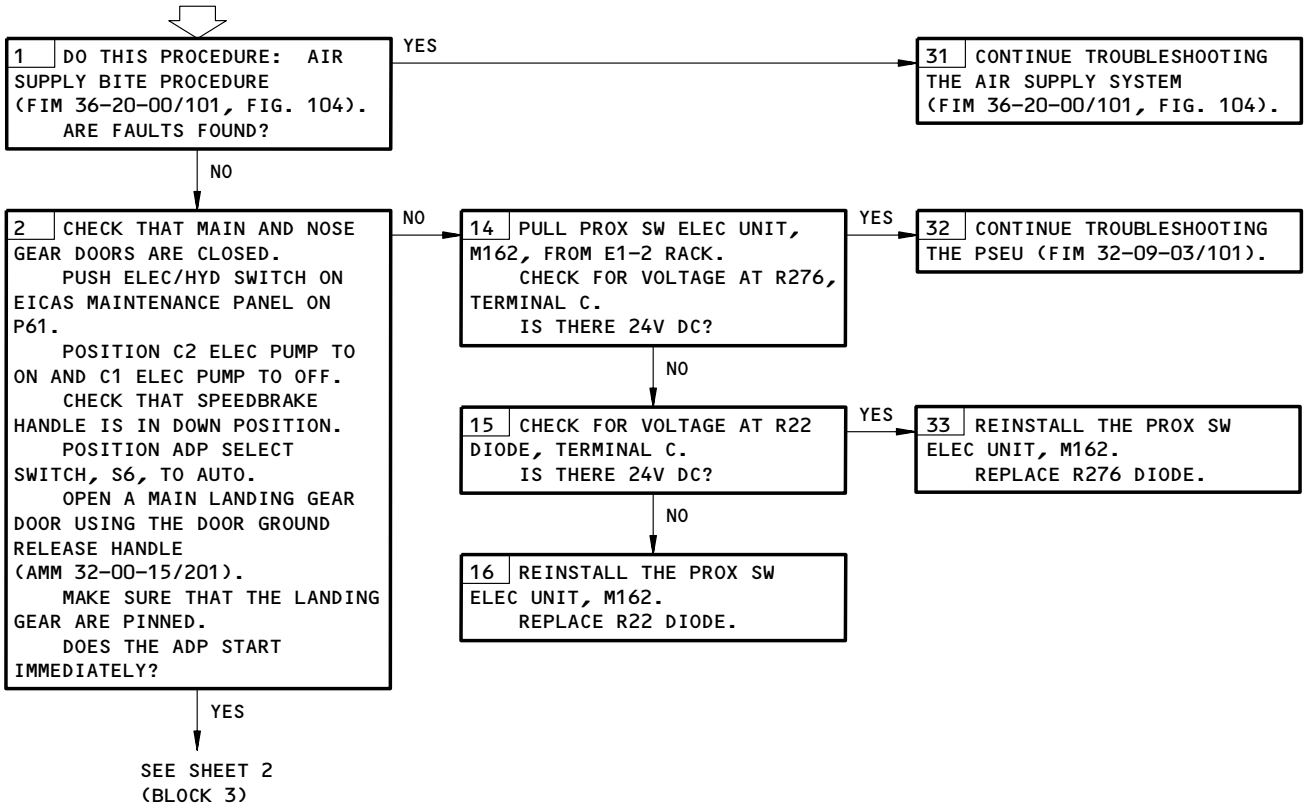
MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11D31, 11L18, 11L24

MAKE SURE THIS CIRCUIT BREAKER IS OPEN AND ATTACH A DO-NOT-CLOSE TAG:
11L15

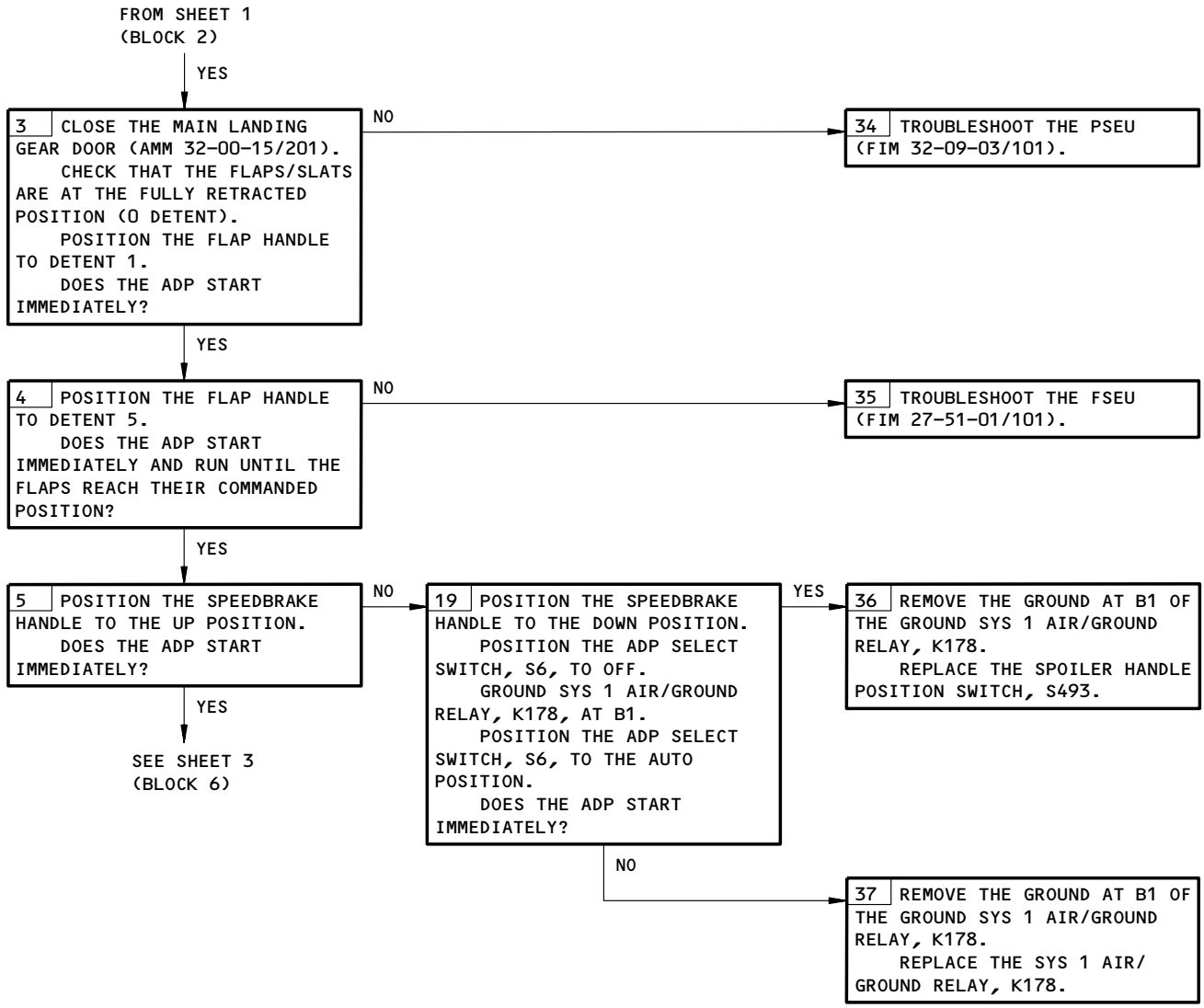
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (AMM 24-22-00/201)
PNEUMATIC POWER IS ON (AMM 36-00-00/201)

DEMAND PUMP LOW PRESSURE INDICATION DURING HIGH DEMAND CONDITIONS

NOTE: PRESSURIZE PNEUMATIC SYSTEM USING APU POWER. ENSURE BOTH PACKS, CARGO HEAT, ADP, ENGINE START VALVES, AND ANTI-ICE ARE SELECTED OFF AND L,R, AND C ISLN VALVES ARE OPEN, UNLESS OTHERWISE SPECIFIED.

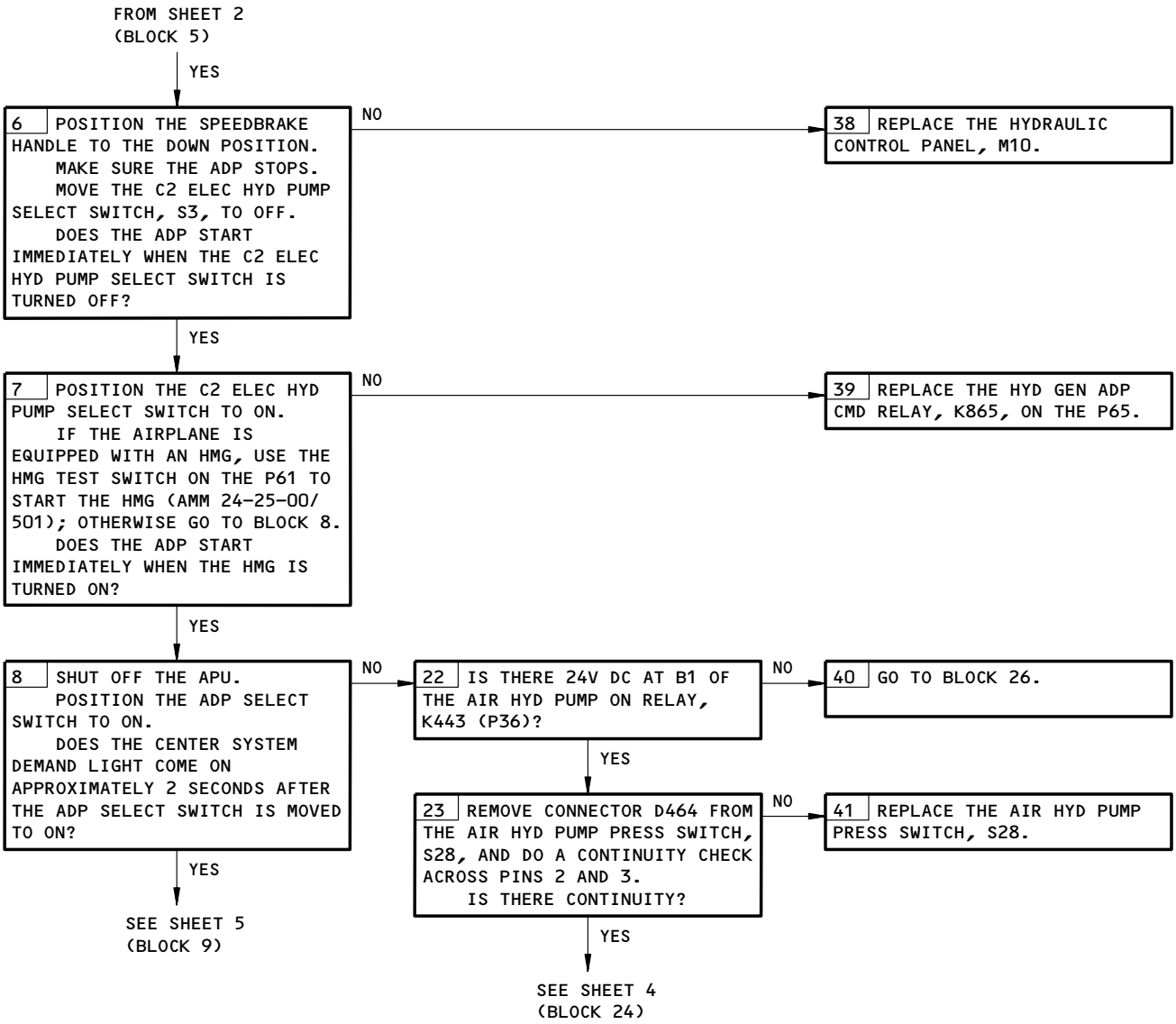


Demand Pump Low Pressure Indication During High Demand Conditions
Figure 138 (Sheet 1)

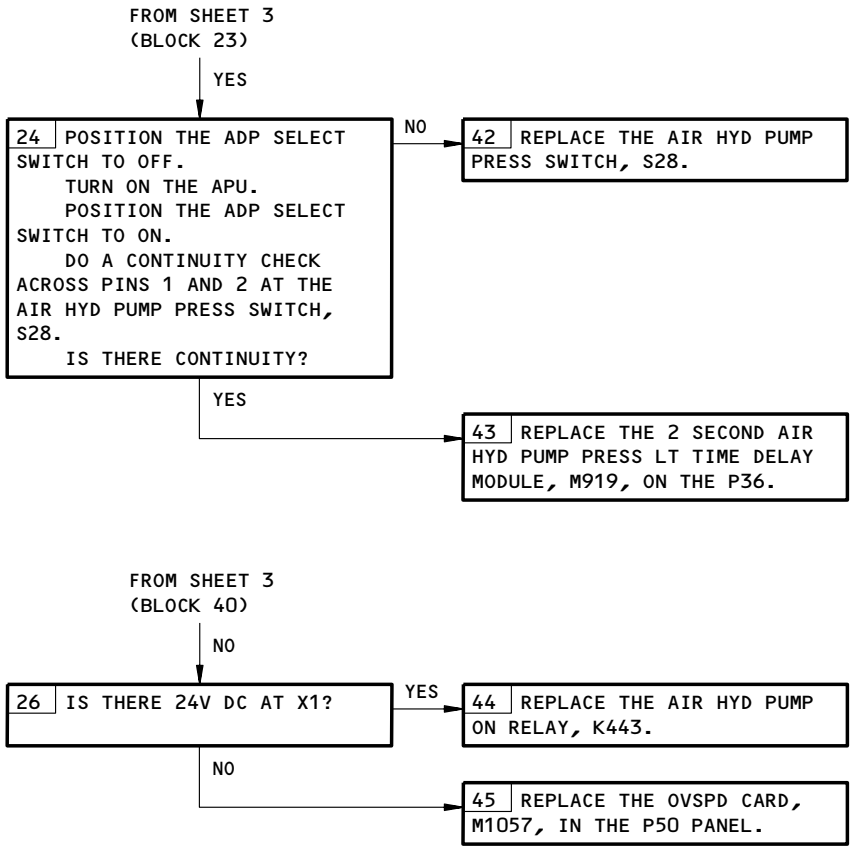


Demand Pump Low Pressure Indication During High Demand Conditions
Figure 138 (Sheet 2)

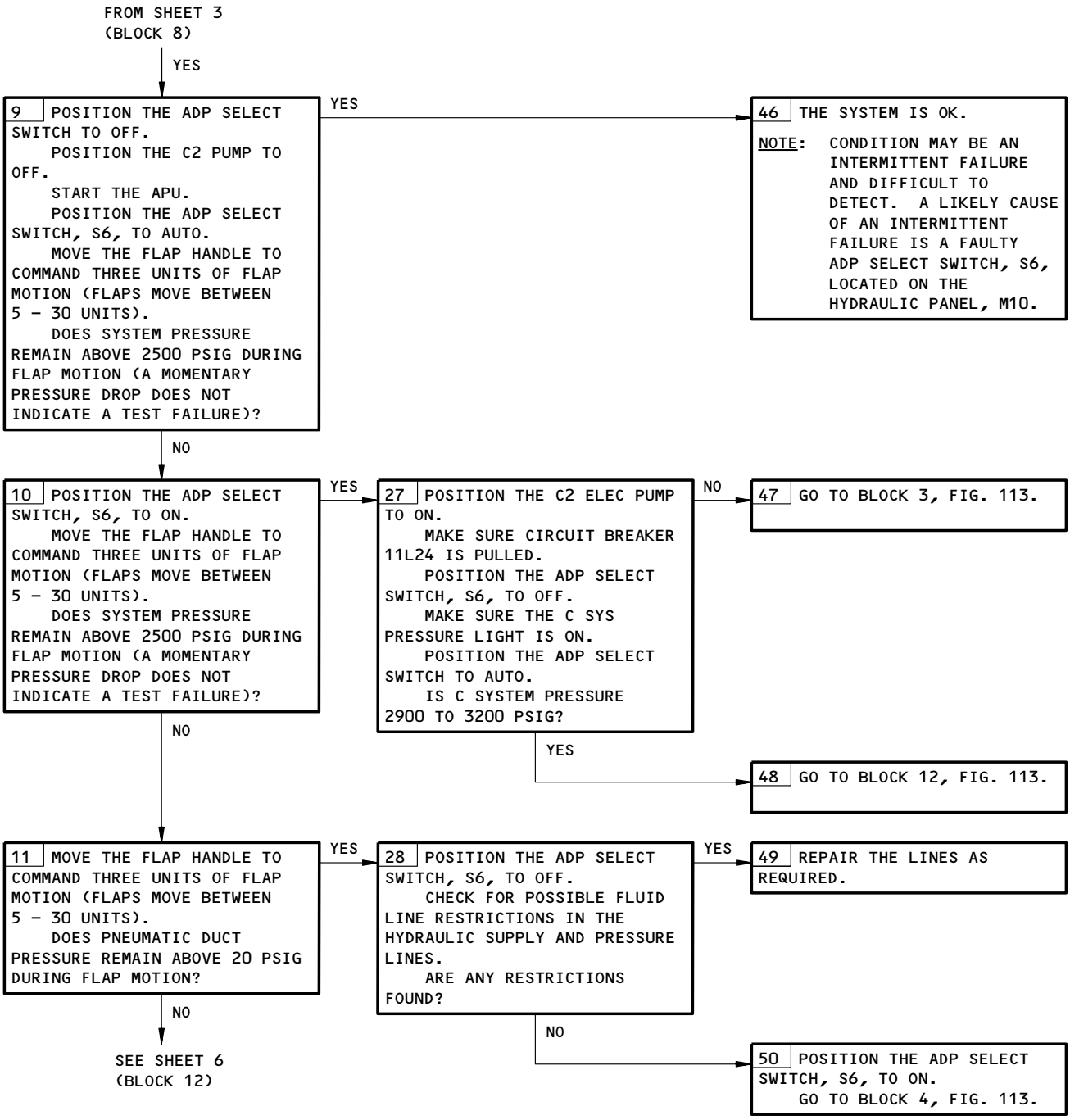
G16612



Demand Pump Low Pressure Indication During High Demand Conditions
Figure 138 (Sheet 3)

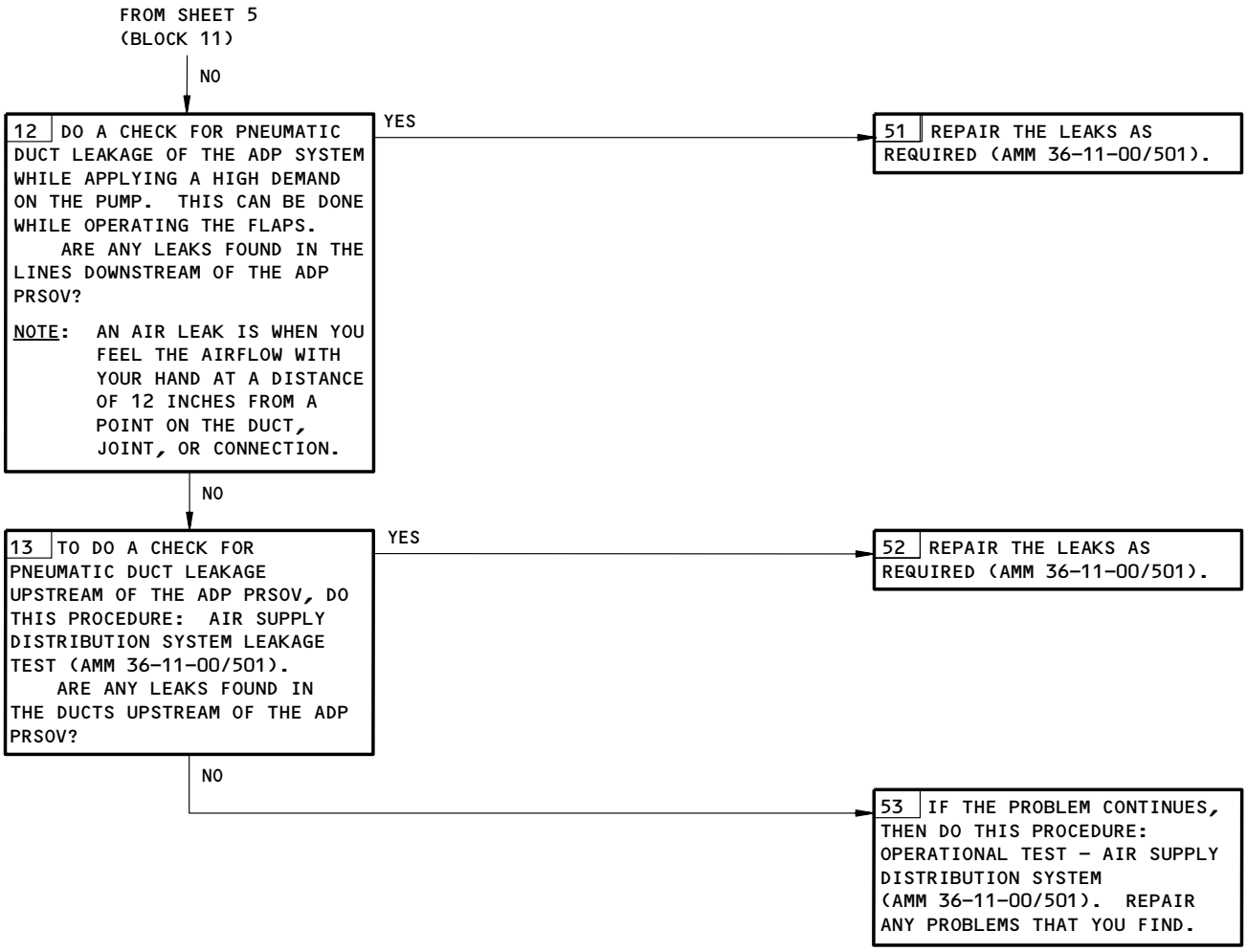


Demand Pump Low Pressure Indication During High Demand Conditions
Figure 138 (Sheet 4)



Demand Pump Low Pressure Indication During High Demand Conditions
Figure 138 (Sheet 5)

G16988



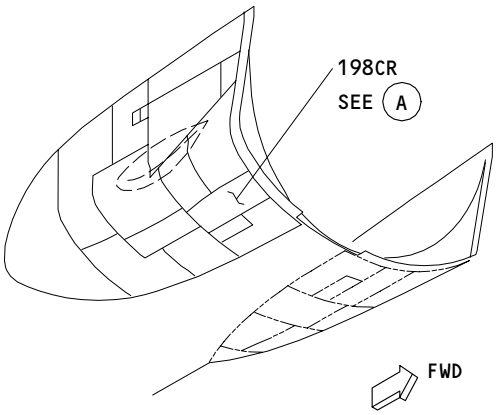
Demand Pump Low Pressure Indication During High Demand Conditions
Figure 138 (Sheet 6)

GROUND SERVICING SYSTEM

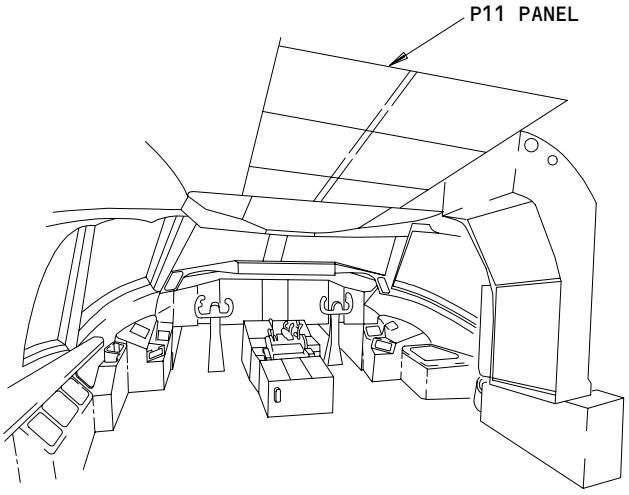
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
CIRCUIT BREAKERS			FLT COMPT, P11	
HYDRAULIC QTY, C1101		1	11L20	*
CONNECTION - PRESSURE FILL	---	1	198CR, AFT RIGHT WING/BODY FAIRING, RESERVOIR FILL STATION	29-18-00
INDICATOR - RESERVOIR FILL, N29	---	1	198CR, AFT RIGHT WING/BODY FAIRING, HYDRAULIC RESERVOIR FILL STATION	29-18-06
MODULE - RESERVOIR FILL FILTER	---	1	198CR, AFT RIGHT WING/BODY FAIRING, HYDRAULIC RESERVOIR FILL STATION	29-18-03
PUMP - RESERVOIR MANUAL FILL	---	1	198CR, AFT RIGHT WING/BODY FAIRING, HYDRAULIC RESERVOIR FILL STATION	29-18-01
SWITCH - REMOTE HYDRAULIC QUANTITY SELECT, S341	---	1	198CR, AFT RIGHT WING/BODY FAIRING, HYDRAULIC RESERVOIR FILL STATION	*
TRANSMITTER - SYS C HYDRAULIC FLUID QUANTITY, M339 (REF 29-33-00, FIG. 101)				
TRANSMITTER - SYS L HYDRAULIC FLUID QUANTITY, M338 (REF 29-33-00, FIG. 101)				
TRANSMITTER - SYS R HYDRAULIC FLUID QUANTITY, M340 (REF 29-33-00, FIG. 101)				
UNIT - HYDRAULIC FLUID QUANTITY MONITOR UNIT, M122 (REF 29-33-00, FIG. 101)				
VALVE - RESERVOIR FILL SELECTOR	---	1	198CR	29-18-02

*SEE WM EQUIPMENT LIST

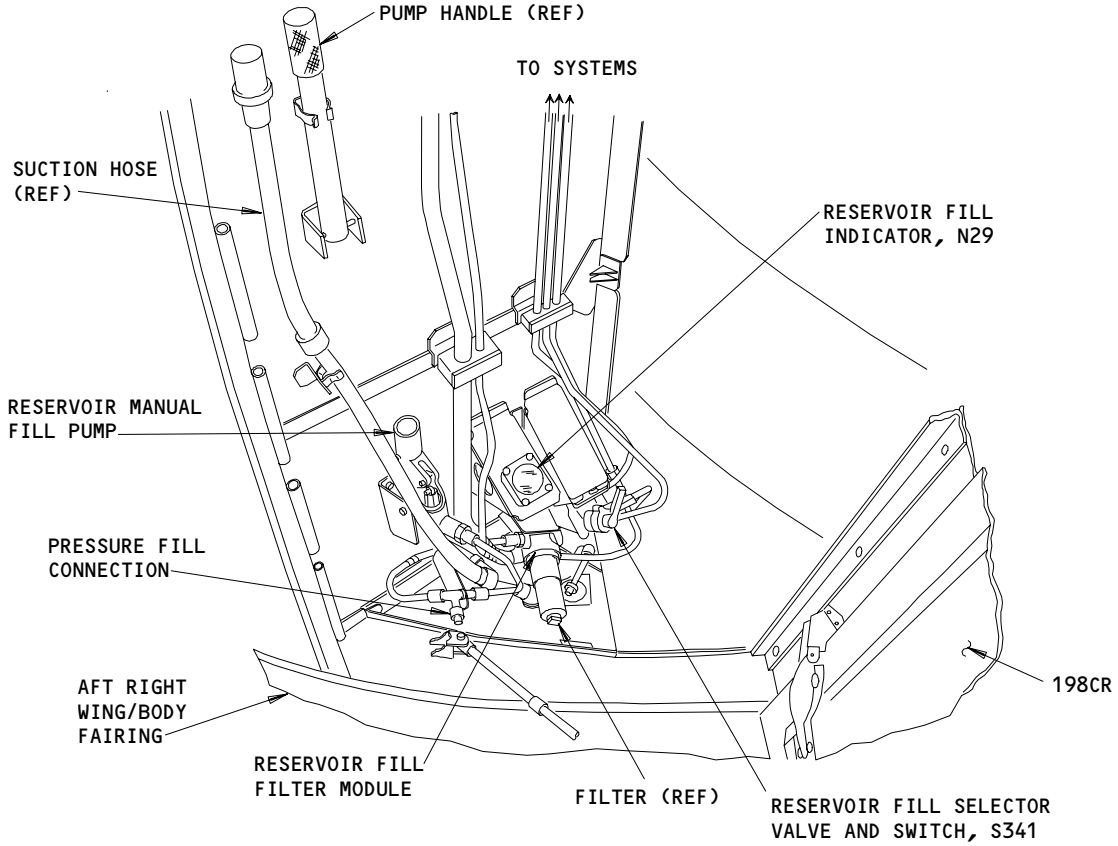
Component Index
Figure 101



AFT RIGHT WING/BODY FAIRING



FLT COMPT



HYDRAULIC RESERVOIR FILL STATION

(A)

Component Location
Figure 102

RAM AIR TURBINE (RAT) SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
ACTUATOR – RAT ROTARY	2	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-06
ARM – RAT DEPLOYMENT	2	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-07
ASSEMBLY – RAT, M614	2	1	198GR, AFT RIGHT WING/BODY FAIRING	29-21-01
CARD – (FIM 73-21-00/101, FIG. 101) L N2 ENGINE SPEED, M1093 R N2 ENGINE SPEED, M1092				
CIRCUIT BREAKERS			FLT COMPT, P6	
RAM AIR TURB AUTO, C1100		1	6C2	*
RAM AIR TURB MAN, C1089		1	6C1	*
RAM AIR TURBINE PWR, C1088		1	6J8	*
DOOR AND MOVEABLE DEPRESSOR – RAT COMPARTMENT	2	1	198GR, AFT RIGHT WING/BODY FAIRING	29-21-09
HUB – RAT	3	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-01
LINK – RAT DOOR ACTUATION	2	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-10
MODULE – RAT CHECKOUT	4	1	RIGHT WHEEL WELL	29-21-11
MOTOR – RAT ROTARY ACTUATOR ELECTRIC, M613	2	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-05
PANEL – (FIM 80-11-00/101, FIG. 101) ENG IGN & START CONT, M49				
PUMP – RAT HYDRAULIC	3	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-01
RELAY – RAT DEPLOY, K235	2	1	198GR, AFT RIGHT WING/BODY FAIRING	*
RELAY – RAT OVERRIDE, K236	2	1	198GR, AFT RIGHT WING/BODY FAIRING	*
RELAY – RAT RETRACT, K234	2	1	198GR, AFT RIGHT WING/BODY FAIRING	*
RELAY – (FIM 32-09-00/101, FIG. 101) SYS NO. 2, AIR/GND, K213				
SENSOR – RAT TACHOMETER SPEED	3	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-15
SWITCH – AIRSPEED, S614	5	1	119AL, MAIN EQUIP CTR, FLT DECK FLOOR BEAMS	29-21-24
SWITCH – RAT CTR LIMIT, YENS2	3	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-23
SWITCH – RAT DOWN LIMIT, S365	2	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-17
SWITCH – RAT HYDRAULIC PRESSURE, S367	4	1	RIGHT WHEEL WELL, RAT CHECKOUT MODULE	29-21-11

* SEE THE WDM EQUIPMENT LIST

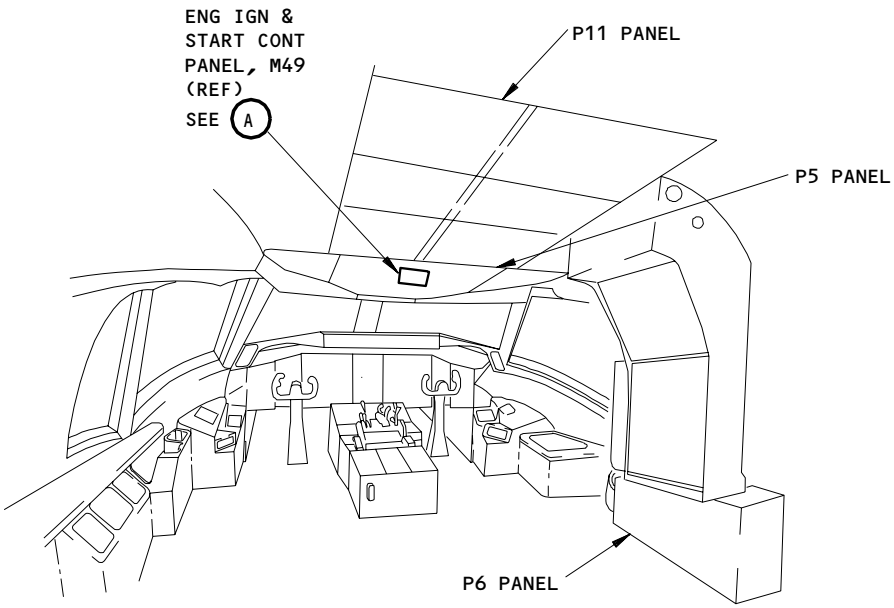
Ram Air Turbine (RAT) System – Component Index
Figure 101 (Sheet 1)

35133

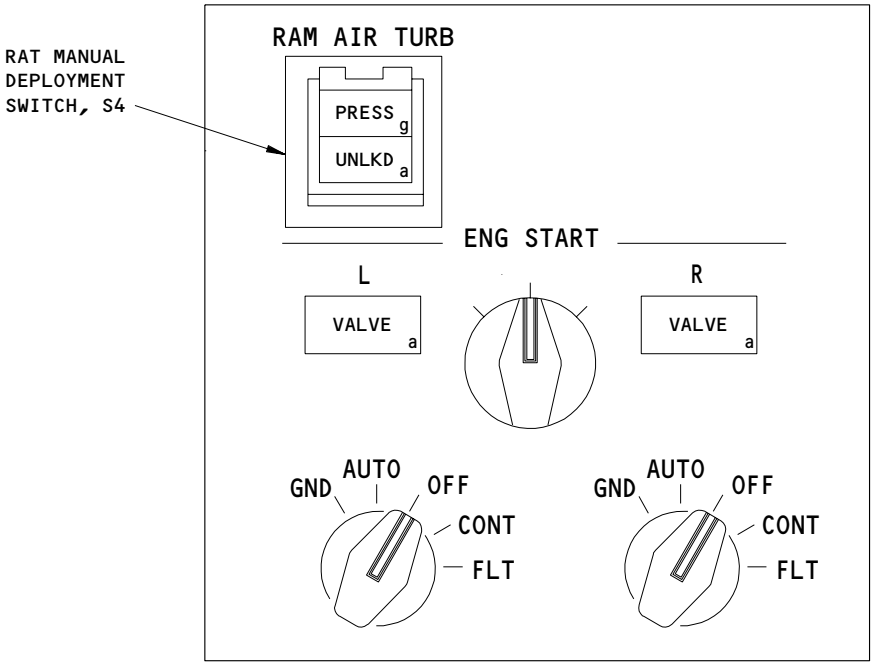
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
SWITCH - RAT MANUAL DEPLOYMENT, S4	1	1	FLT COMPT, P5	*
SWITCH - RAT OVERRIDE LIMIT, S501	2	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-17
SWITCH - RAT RETRACTION, S366	4	1	RIGHT WHEEL WELL	*
SWITCH - RAT STRUT ANGLE, YENS1	3	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-22
SWITCH - RAT UP LIMIT, S369	2	1	198GR, AFT RIGHT WING/BODY FAIRING, RAT ASSY, M614	29-21-17
TACHOMETER - RAT, N72	4	1	RIGHT WHEEL WELL	29-21-16
VALVE - RAT ISOLATION CHECK	6	1	LEFT WHEEL WELL	29-21-00
VALVE - RAT PRESSURE RELIEF	4	1	RIGHT WHEEL WELL	29-21-18

* SEE WM EQUIPMENT LIST

Component Access
Figure 101 (Sheet 2)



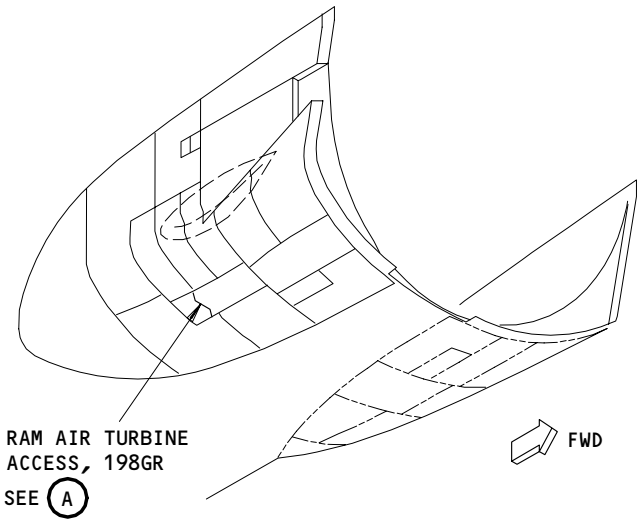
FLIGHT COMPARTMENT



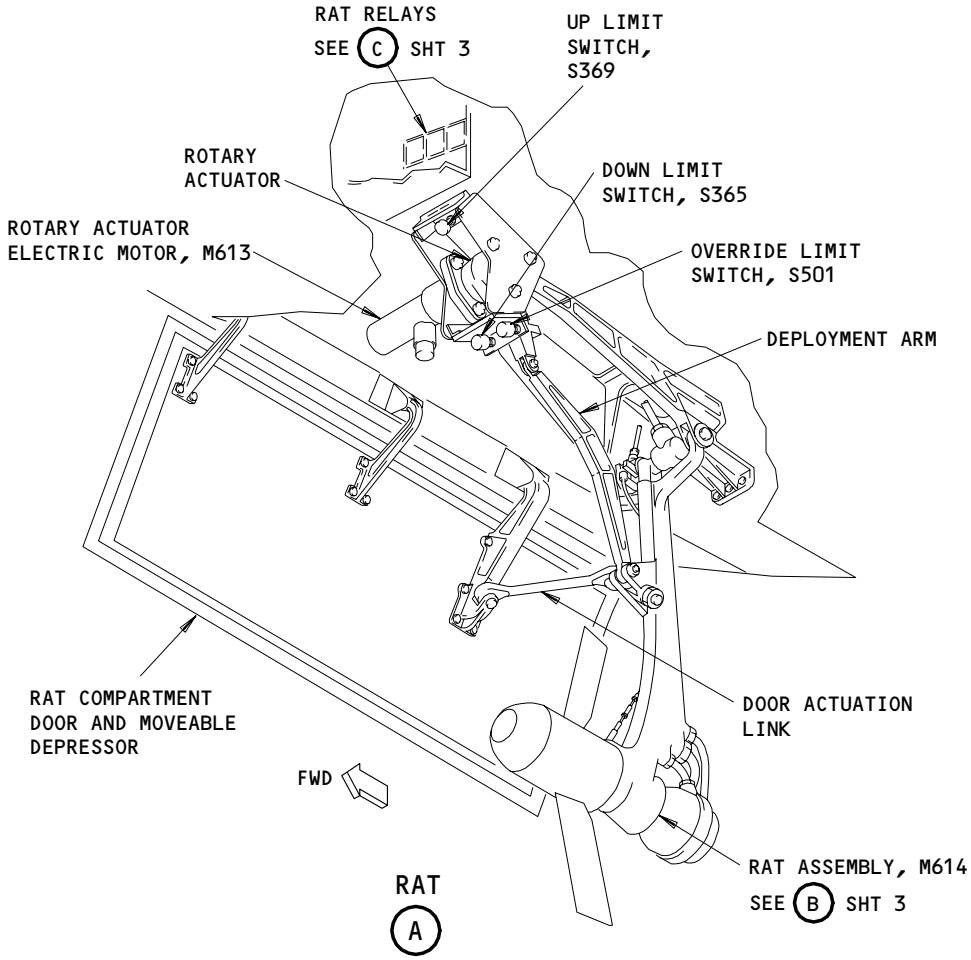
ENG IGN & START CONT PANEL, M49 (REF)

A

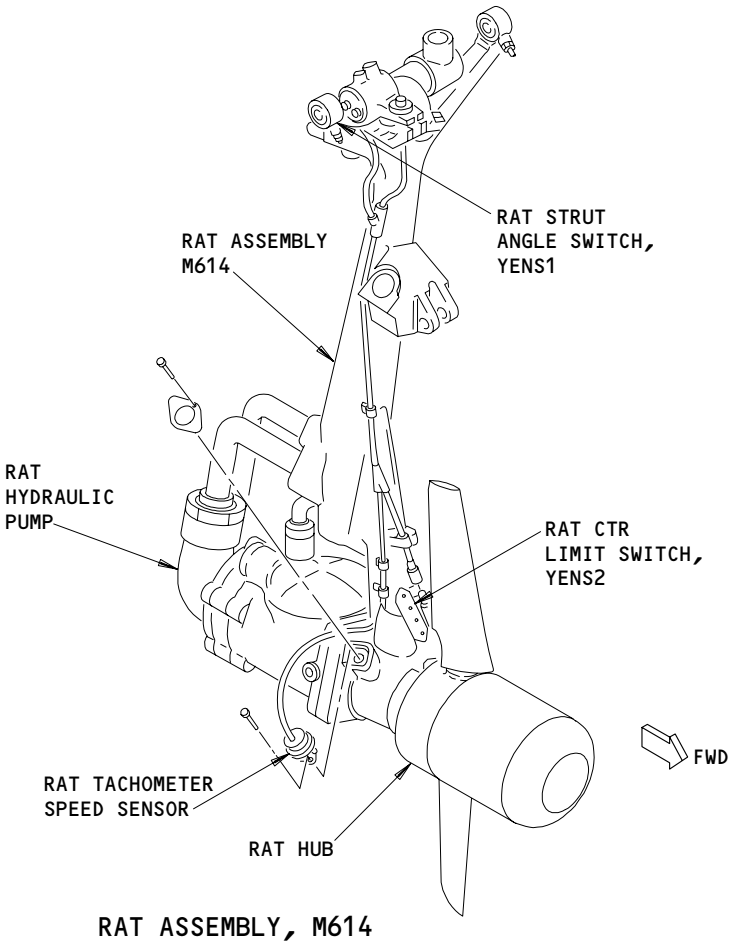
Ram Air Turbine (RAT) System – Component Location
Figure 102 (Sheet 1)



AFT RIGHT WING/BODY FAIRING

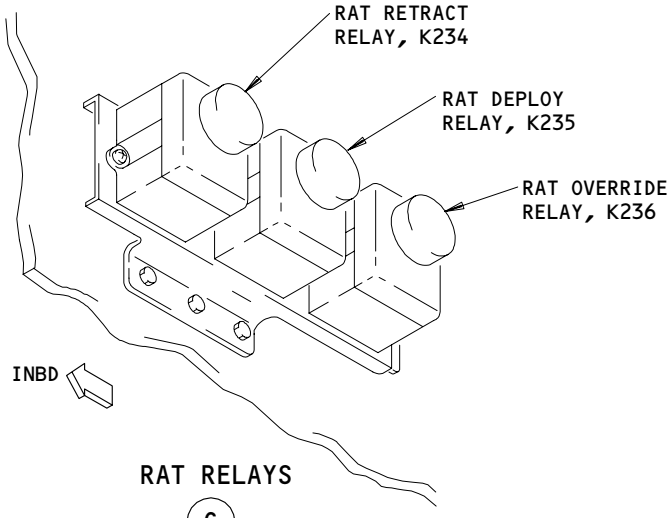


Component Location
Figure 102 (Sheet 2)



RAT ASSEMBLY, M614

B

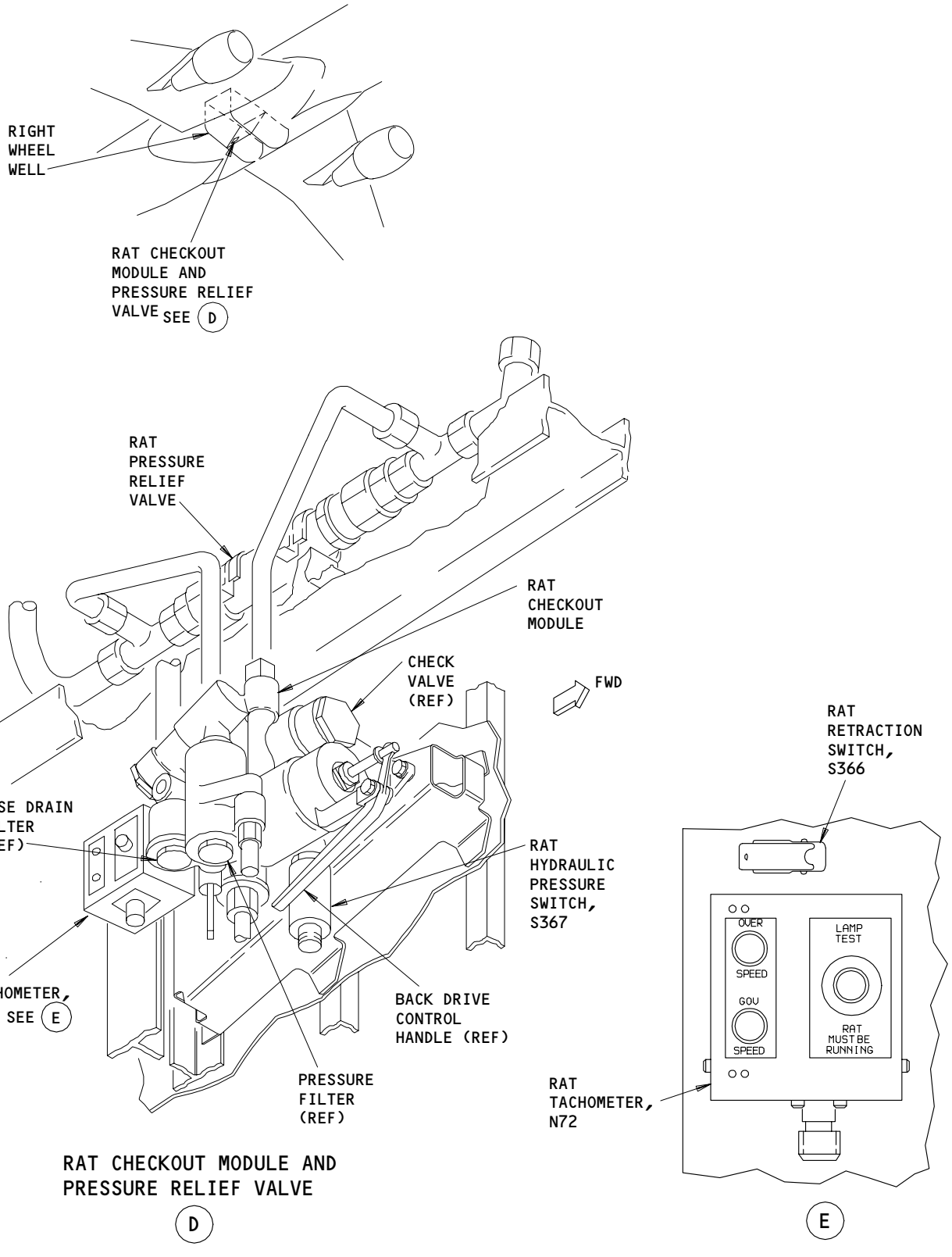


RAT RELAYS

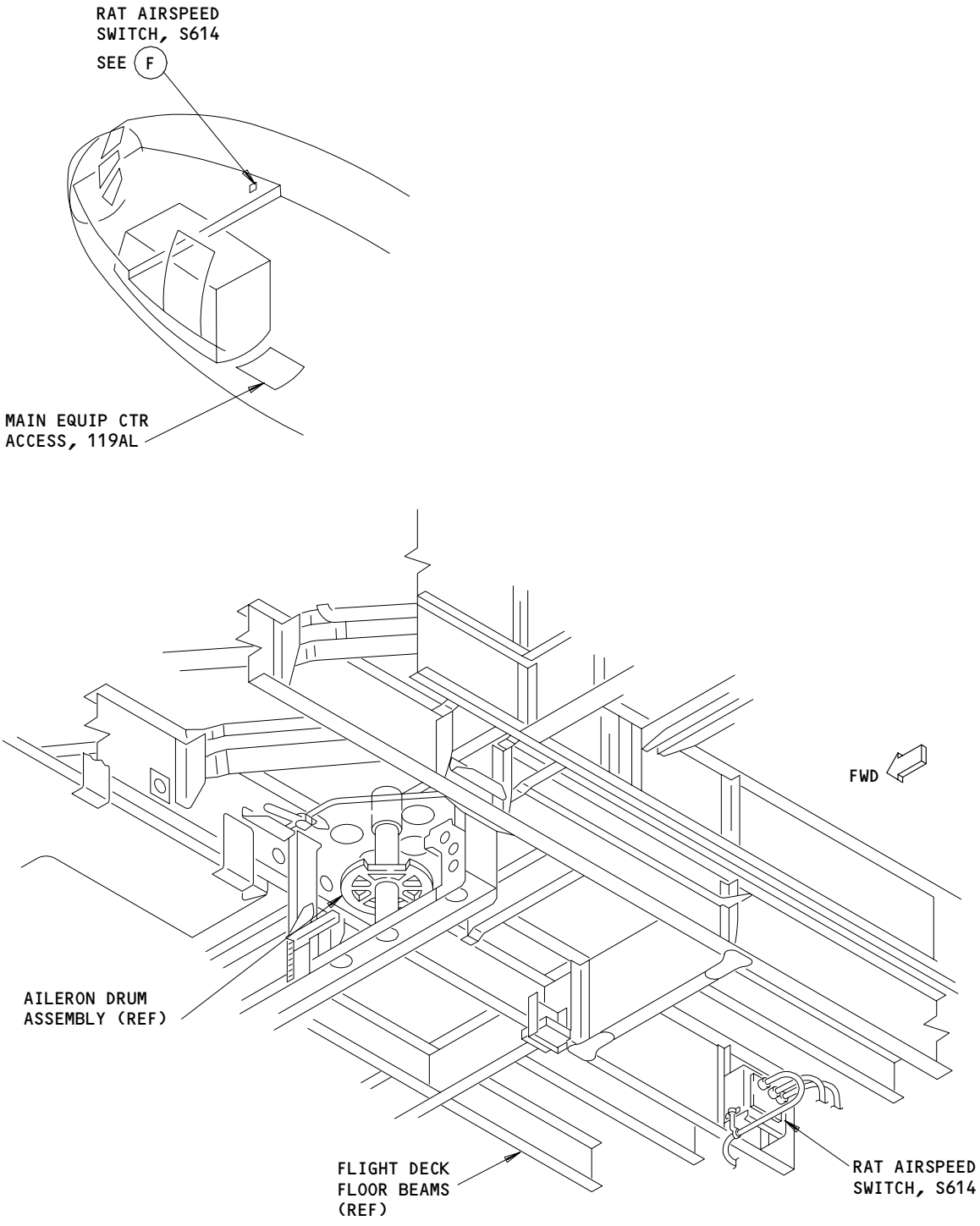
C

Component Location (Details From Sht-2)
Figure 102 (Sheet 3)

94821



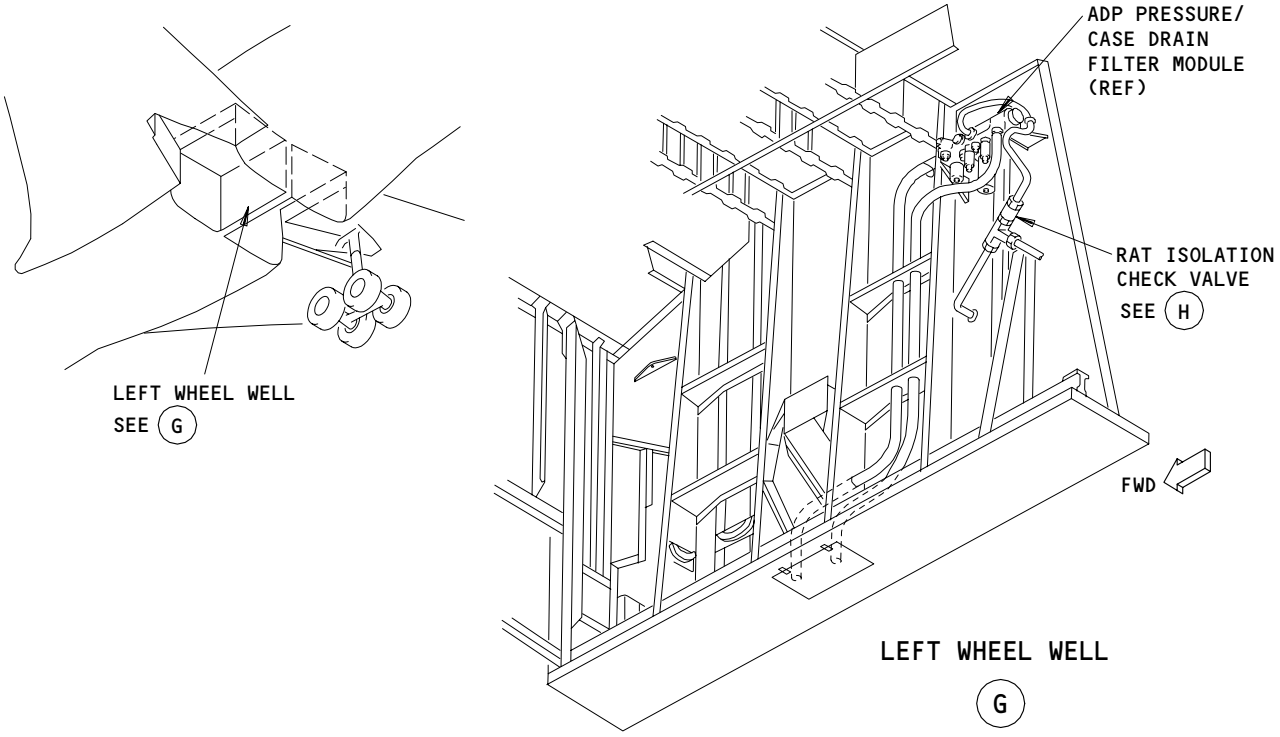
Component Location
Figure 102 (Sheet 4)



RAT AIRSPEED SWITCH, S614

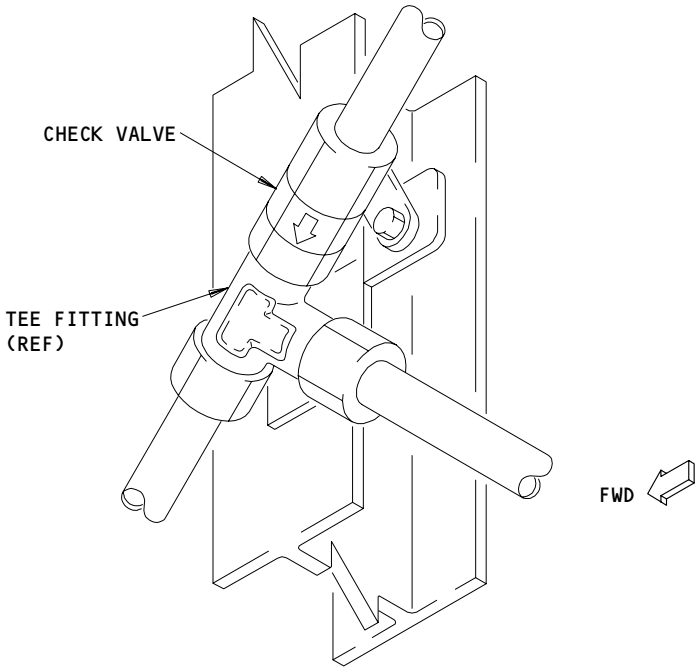
(F)

Component Location
Figure 102 (Sheet 5)



LEFT WHEEL WELL

G



RAT ISOLATION CHECK VALVE

H

Component Location
Figure 102 (Sheet 6)

94696

RAT PRESSURE LIGHT DID NOT ILLUMINATE WHEN BACK-DRIVE CONTROL HANDLE WAS RETURNED TO NORMAL

PREREQUISITES

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

1 HOLD CONTROL HANDLE ON RAT CHECKOUT MODULE IN BACK-DRIVE POSITION. WHEN RAT TURBINE HUB SPEED HAS STABILIZED RELEASE HANDLE.
DOES RAT TURBINE HUB COAST TO A STOP WHEN BACK-DRIVE CONTROL HANDLE IS RELEASED?

NO → 5 REPLACE RAT CHECKOUT MODULE (AMM 29-21-11/401).

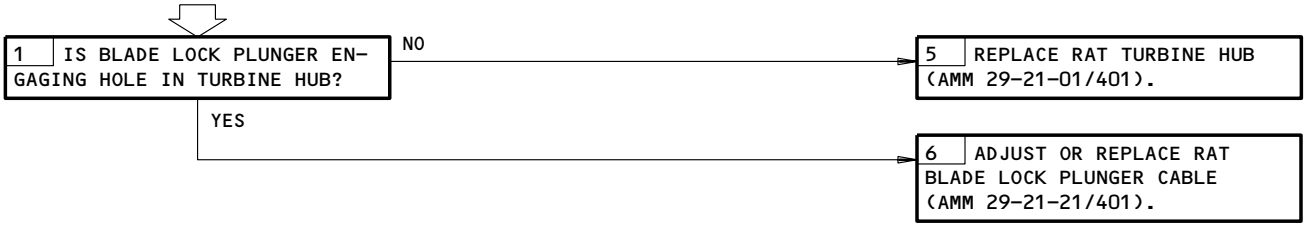
YES → 6 REPLACE RAT PRESSURE SWITCH S367 ON CHECKOUT MODULE (AMM 29-21-11/401).
IF THE PROBLEM CONTINUES, REPLACE RAT HYDRAULIC PUMP (AMM 29-21-01/401).

RAT Pressure Light Did Not Illuminate When Back-Drive Control Handle Was Returned to Normal
Figure 103

RAT TURBINE HUB DID NOT UNLOCK WHEN RAT DEPLOYED

PREREQUISITES

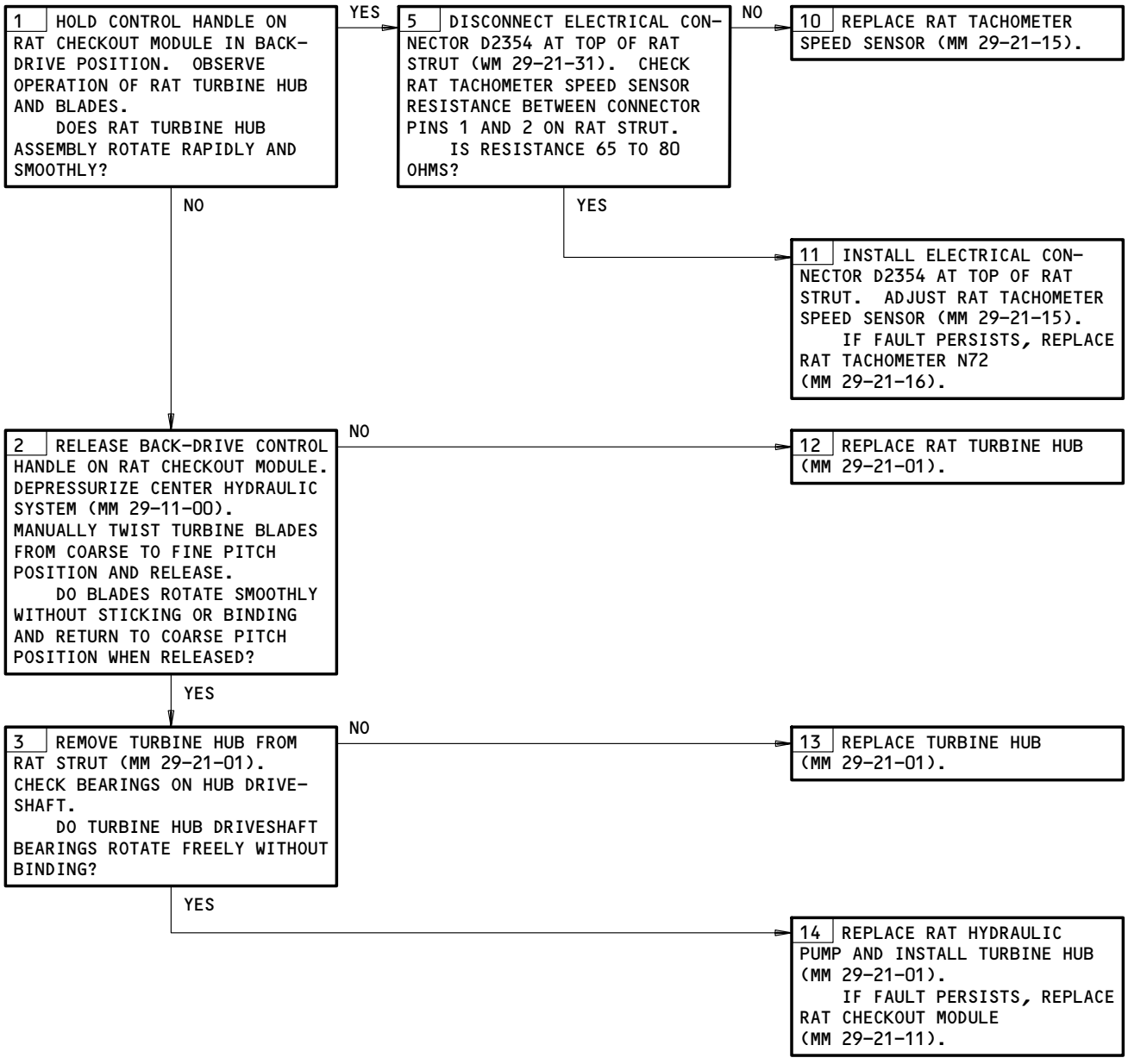
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
RAT IN DEPLOYED POSITION (AMM 29-21-00/201)



RAT Turbine Hub Did Not Unlock When RAT Deployed
Figure 104

RAT TACHOMETER OVERSPEED AND GOV SPEED LIGHTS NOT ILLUMINATED, LIGHTS REMAIN OFF WITH LAMP TEST SWITCH ON

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CENTER HYDRAULIC SYSTEM PRESSURIZED (MM 29-11-00)

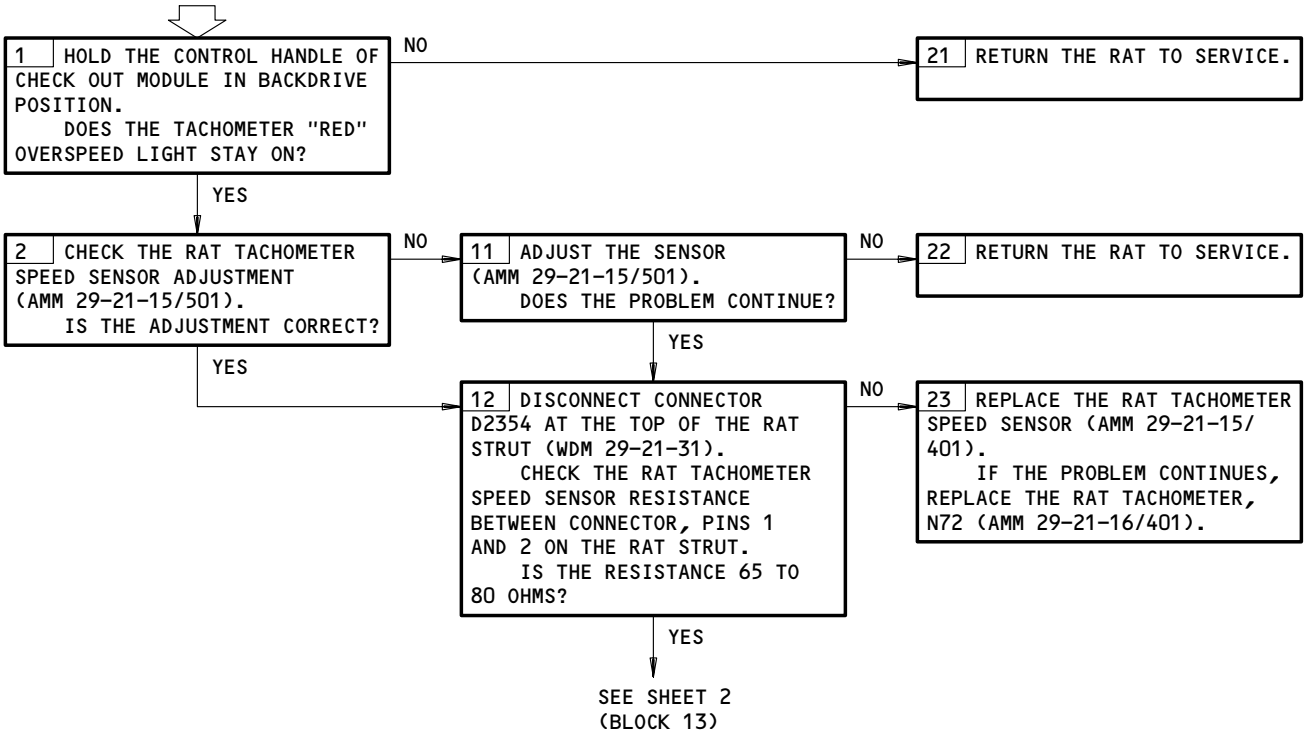


RAT Tachometer Overspeed and Gov Speed Lights Not Illuminated, Lights Remain Off with Lamp Test Switch On
Figure 105

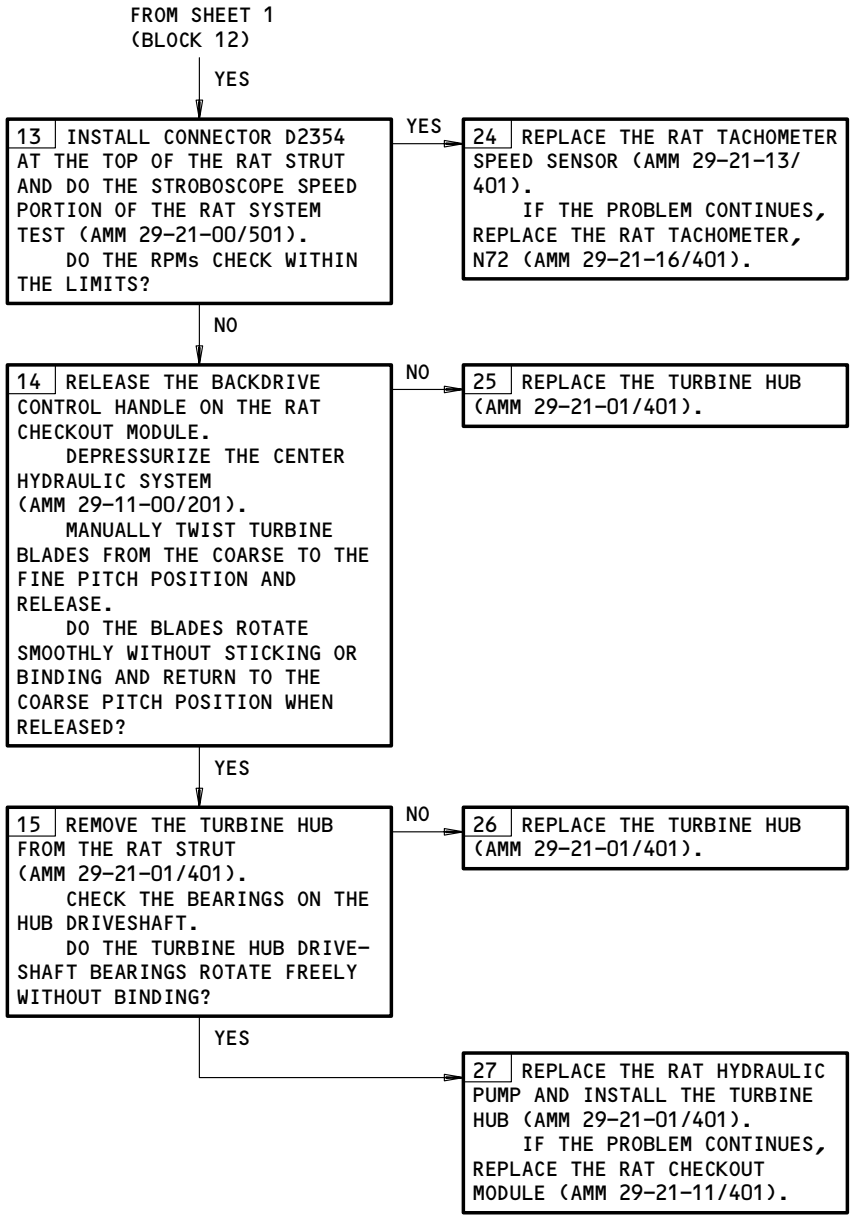
RAT TACHOMETER OVERSPEED LIGHT REMAINS ON WHILE PERFORMING RAT SYSTEM TEST

PREREQUISITES

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



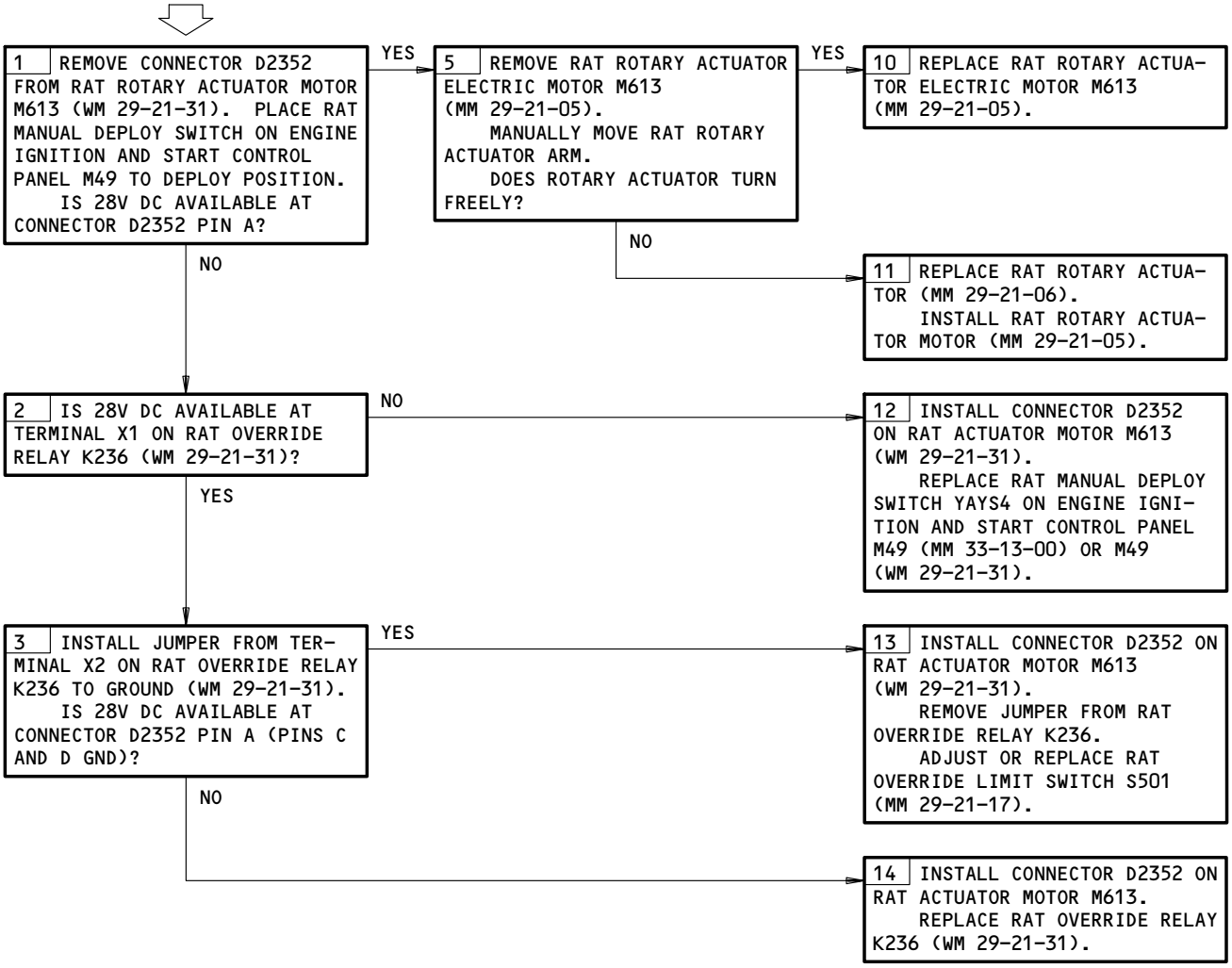
RAT Tachometer Overspeed Light Remains On While Performing RAT System Test
Figure 105A (Sheet 1)



RAT Tachometer Overspeed Light Remains On While Performing RAT System Test
Figure 105A (Sheet 2)

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 6C1,6C2,6J8

RAT DID NOT DEPLOY WITH MANUAL DEPLOY SWITCH IN DEPLOY POSITION



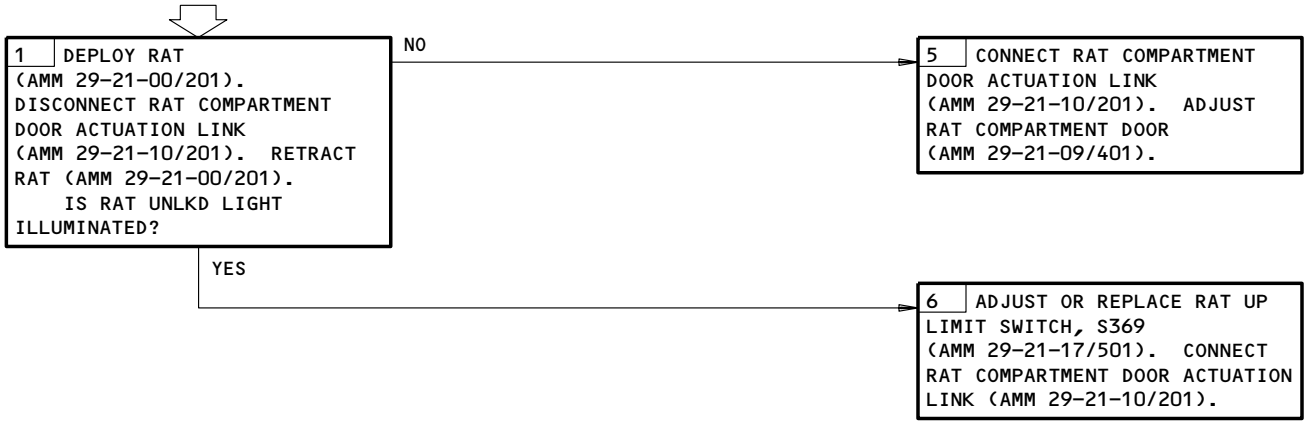
RAT Did Not Deploy with Manual Deploy Switch in Deploy Position
Figure 106

RAT UNLKD LIGHT ILLUMINATED AND EICAS MESSAGE "RAT UNLOCKED" DISPLAYED WITH RAT RETRACTED

PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
6C1, 6C2, 6J8

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



RAT UNLKD Light Illuminated and EICAS Message RAT UNLOCKED Displayed with RAT Retracted
Figure 107

RAT DID NOT STOP RETRACTING WITH RETRACTION SWITCH IN OFF POSITION

PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
6C1,6C2,6J8

1 DO A CONTINUITY CHECK FROM TERMINALS 1 AND 2 ON RAT RETRACTION SWITCH, S366 (WDM 29-21-31).
IS THERE CONTINUITY?

YES → 5 REPLACE RAT RETRACTION SWITCH, S366 (WDM 29-21-31).

NO → 6 REMOVE ACCESS PANEL 196RR IN AFT RIGHT WING/BODY FAIRING (AMM 06-41-00/401).
REPLACE RAT RETRACT RELAY K234 IN RAT COMPARTMENT (WDM 29-21-31).
INSTALL ACCESS PANEL 196RR (AMM 06-41-00/401).

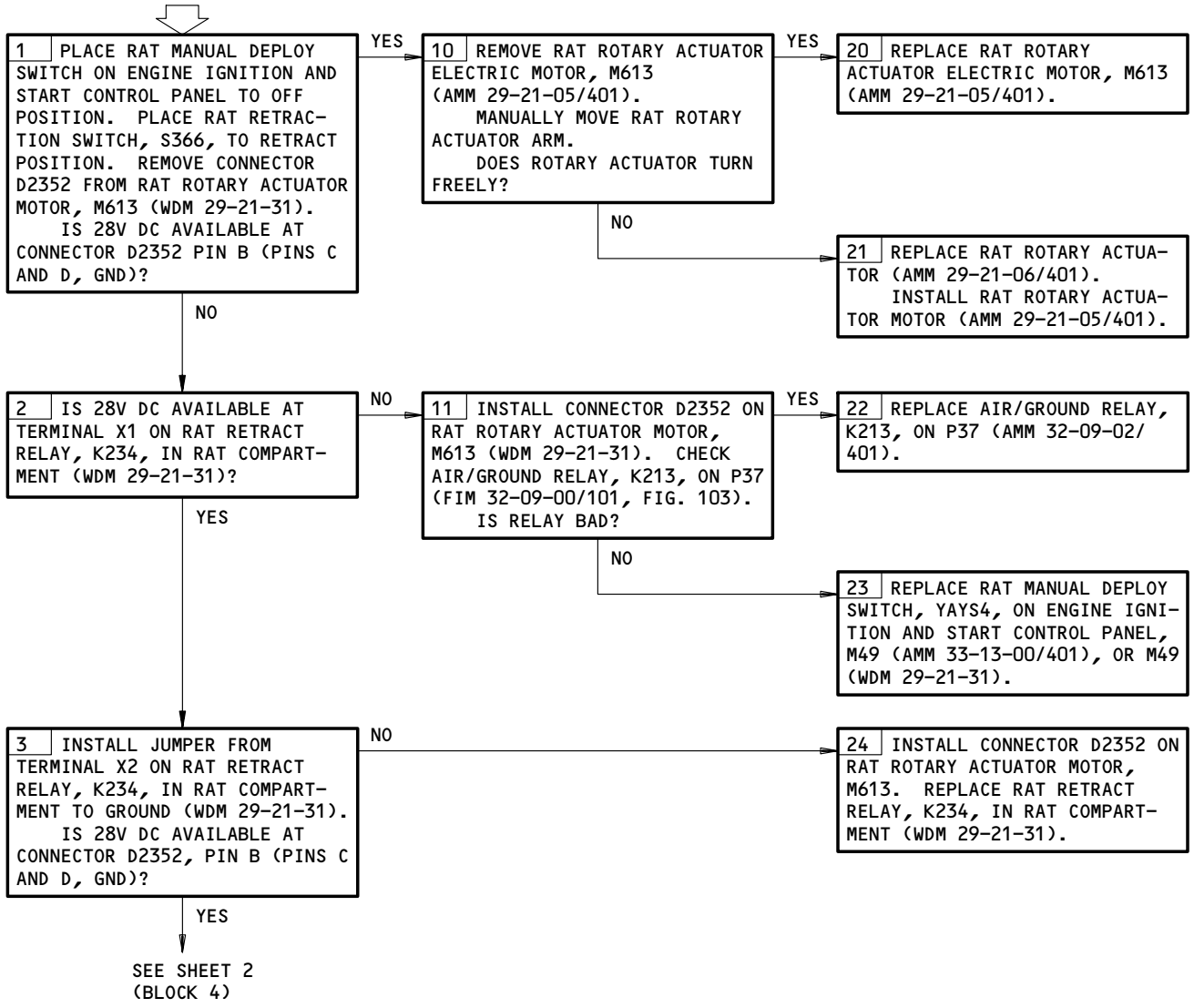
RAT Did Not Stop Retracting with Retraction Switch in OFF Position
Figure 108

RAT DID NOT RETRACT WITH RETRACTION SWITCH IN RETRACT POSITION

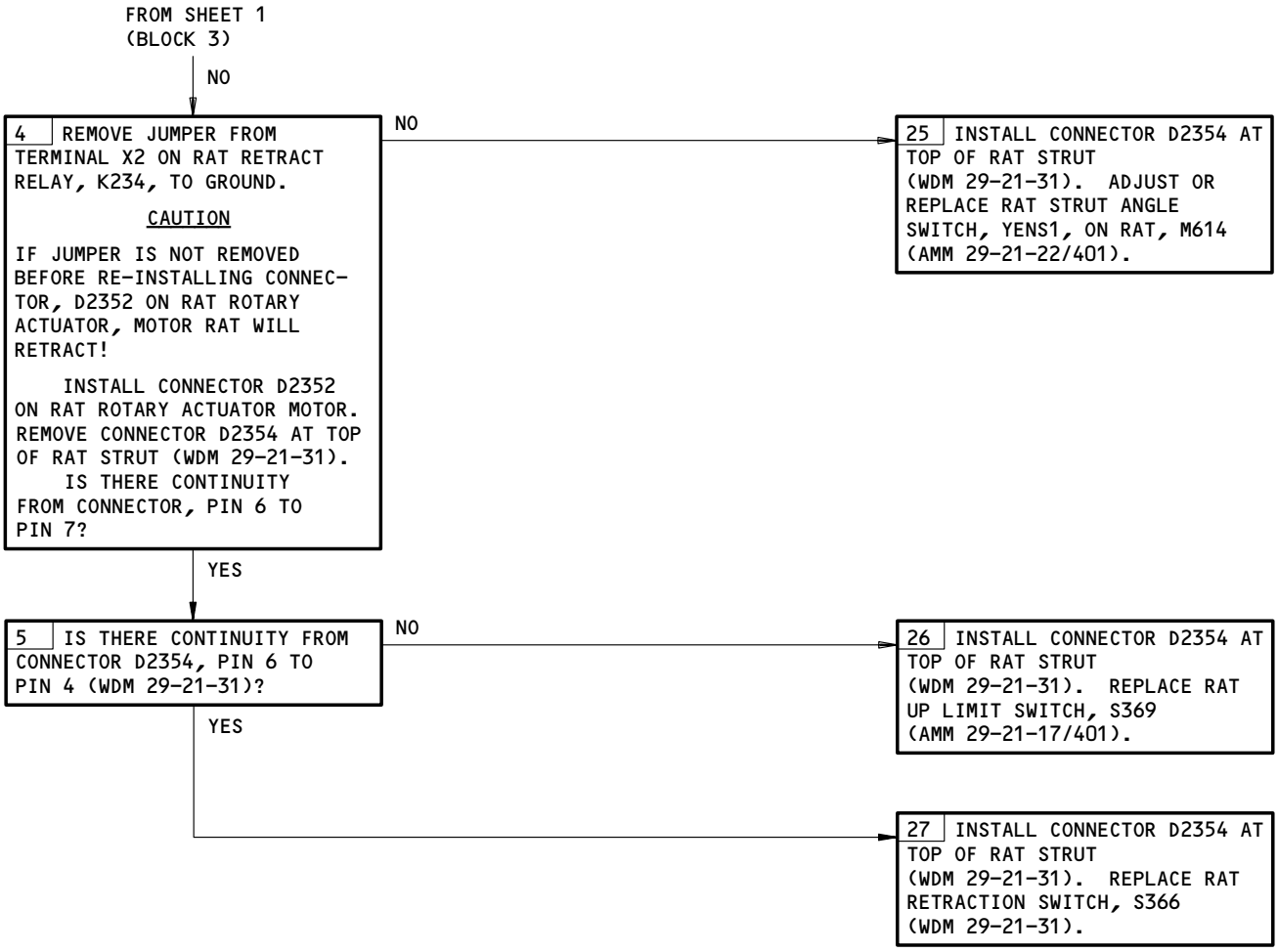
PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
6C1,6C2,6J8

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



RAT Did Not Retract with Retraction Switch in Retract Position
Figure 109 (Sheet 1)



RAT Did Not Retract with Retraction Switch in Retract Position
Figure 109 (Sheet 2)

PREREQUISITES
ELECTRICAL POWER (MM 24-22-00)
CB'S: 6C1,6C2,6J8

RAT DID NOT FULLY RETRACT

1 ARE INDEX MARKS ON RAT HUB AND STRUT ALIGNED (MM 29-21-00)?
- NO → 5 ROTATE RAT HUB UNTIL INDEX MARKS ON HUB AND RAT STRUT ARE ALIGNED (MM 29-21-00).
- YES ↓

2 REMOVE CONNECTOR D2354 AT TOP OF RAT STRUT (WM 29-21-31).
IS THERE CONTINUITY BETWEEN CONNECTOR PINS 4 AND 6?
- NO → 6 INSTALL CONNECTOR D2354 AT TOP OF RAT STRUT (WM 29-21-31).
ADJUST OR REPLACE RAT UP LIMIT SWITCH S369 (MM 29-21-17).
- YES →

7 INSTALL CONNECTOR D2354 AT TOP OF RAT STRUT (WM 29-21-31).
ADJUST OR REPLACE RAT STRUT ANGLE SWITCH YENS1 ON RAT M614 (MM 29-21-22).
IF FAULT PERSISTS, ADJUST OR REPLACE RAT CTR LIMIT SWITCH YENS2 ON RAT M614 (MM 29-21-23).

RAT Did Not Fully Retract
Figure 110

PREREQUISITES

MAKE SURE THIS SYSTEM WILL OPERATE:
AUXILIARY PITOT SYSTEM NO. 2 PRESSURIZED ABOVE 80 KNOTS (AMM 34-11-00/201)

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
6C1,6C2,6J8

MAKE SURE THIS CIRCUIT BREAKER IS OPEN:
11U24

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

RAT DID NOT DEPLOY WHEN AUXILIARY PITOT SYSTEM NO. 2 WAS PRESSURIZED ABOVE 80 KNOTS

1 REMOVE CONNECTOR D2352 FROM THE RAT ACTUATOR MOTOR, M613 (WDM 29-21-31).
IS 28V DC AVAILABLE AT THE CONNECTOR, PIN A (PINS C AND D, GND)?

YES → 10 REMOVE THE RAT ROTARY ACTUATOR ELECTRIC MOTOR, M613 (AMM 29-21-05/401).
MANUALLY MOVE THE RAT ROTARY ACTUATOR ARM.
DOES THE ROTARY ACTUATOR TURN FREELY?

YES → 20 REPLACE THE RAT ROTARY ACTUATOR ELECTRIC MOTOR, M613 (AMM 29-21-05/401).

NO → 21 REPLACE THE RAT ROTARY ACTUATOR (AMM 29-21-06/401).
INSTALL THE RAT ROTARY ACTUATOR MOTOR (AMM 29-21-05/401).

NO → 2 INSTALL CONNECTOR D2352 ON THE RAT ROTARY ACTUATOR MOTOR, M613 (WDM 29-21-31).
REMOVE THE LEFT N2 ENGINE SPEED CARD, M1093, IN P50 (AMM 73-21-54/401).
IS 28V DC AVAILABLE AT CONNECTOR D10064 PIN 30?

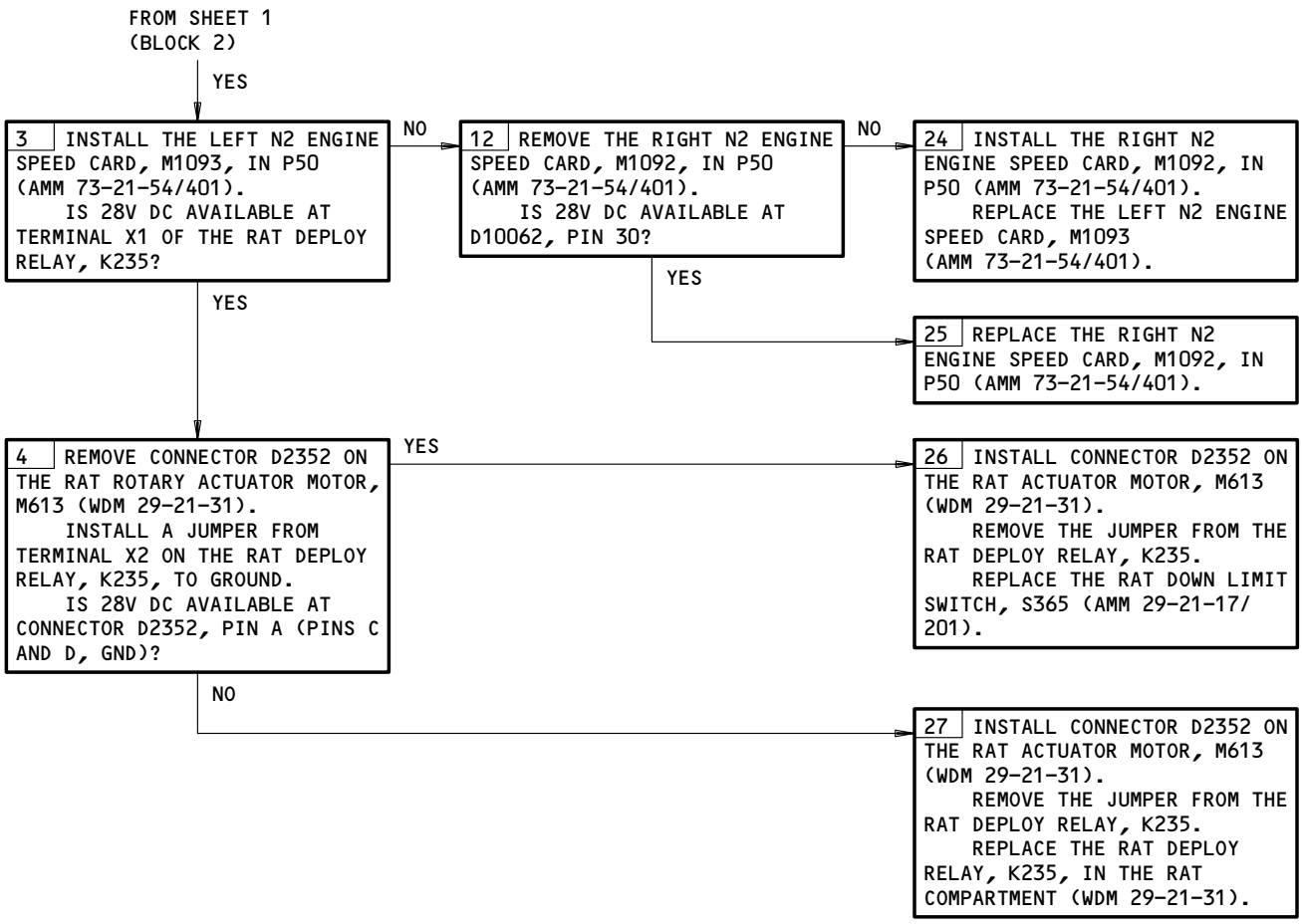
NO → 11 INSTALL THE LEFT N2 ENGINE SPEED CARD, M1093, IN P50 (AMM 73-21-54/401).
CHECK AIR/GROUND RELAY, K213, ON P37 (FIM 32-09-00/101, FIG. 103).
IS RELAY BAD?

YES → 22 REPLACE AIR/GROUND RELAY, K213, ON P37 (AMM 32-09-02/401).

NO → 23 REPLACE THE RAT AIRSPEED SWITCH, S614 (AMM 29-21-24/401).

YES → SEE SHEET 2 (BLOCK 3)

RAT Did Not Deploy When Auxiliary Pitot System No. 2 Was Pressurized Above 80 Knots
Figure 111 (Sheet 1)



RAT Did Not Deploy When Auxiliary Pitot System No. 2 Was Pressurized Above 80 Knots
Figure 111 (Sheet 2)

RAT DEPLOYED WHEN AUXILIARY PITOT SYSTEM NO. 2 WAS PRESSURIZED BELOW 80 KNOTS

PREREQUISITES

ELECTRICAL POWER (MM 24-22-00)
AUXILIARY PITOT SYSTEM NO. 2 PRESSURIZED BELOW 80 KNOTS (MM 34-11-00)

CB'S: 6C1,6C2,6J8

1 IS 28V DC AVAILABLE AT TERMINAL X1 ON RAT DEPLOY RELAY K235 IN RAT COMPARTMENT (WM 29-21-31)?

NO → 5 REPLACE RAT DEPLOY RELAY K235 IN RAT COMPARTMENT (WM 29-21-31).

YES → 6 REPLACE RAT AIRSPEED SWITCH S614 (MM 29-21-24).

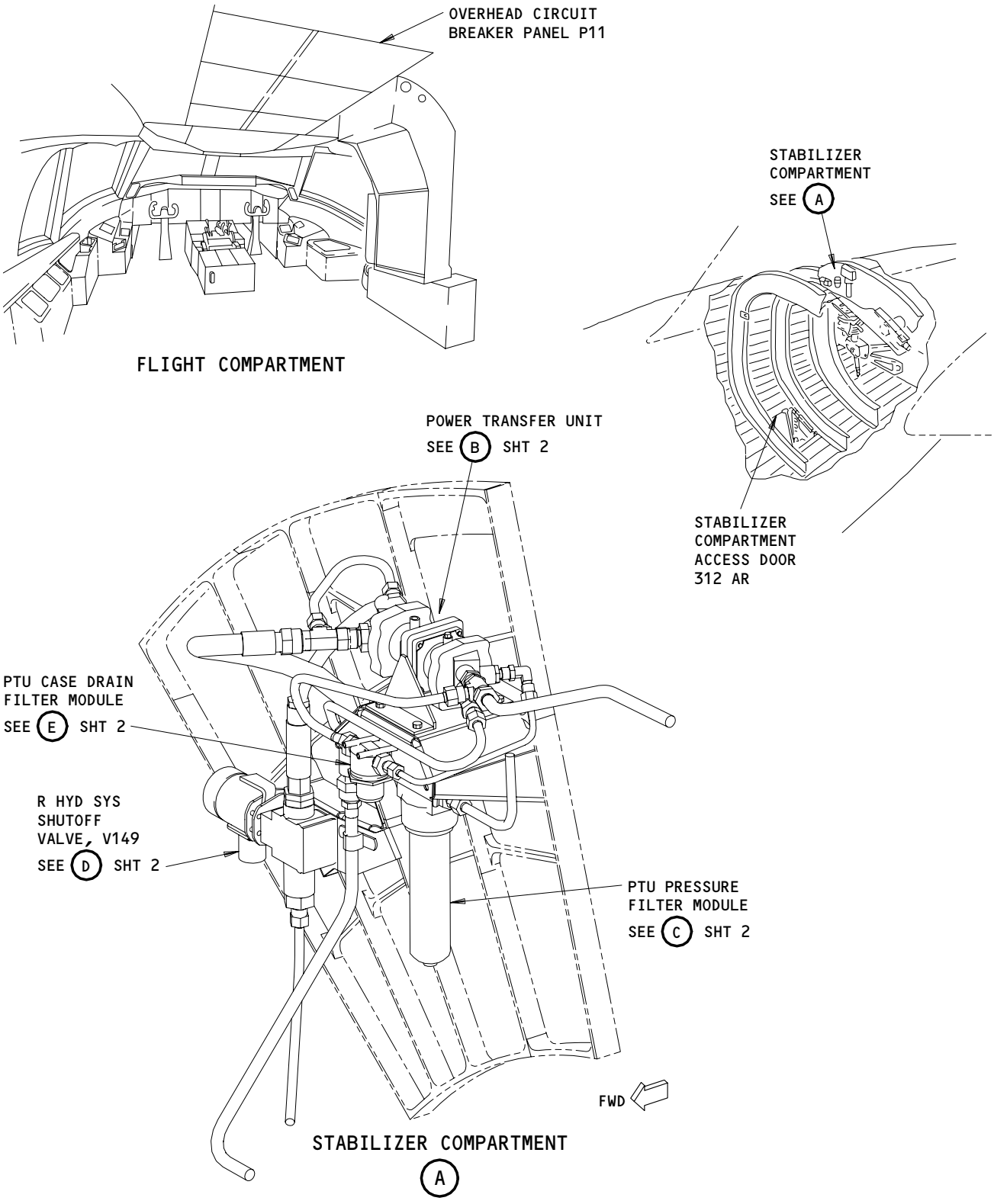
RAT Deployed When Auxiliary Pitot System No. 2 Was Pressurized Below 80 Knots
Figure 112

PITCH ENHANCEMENT SYSTEM (PES)

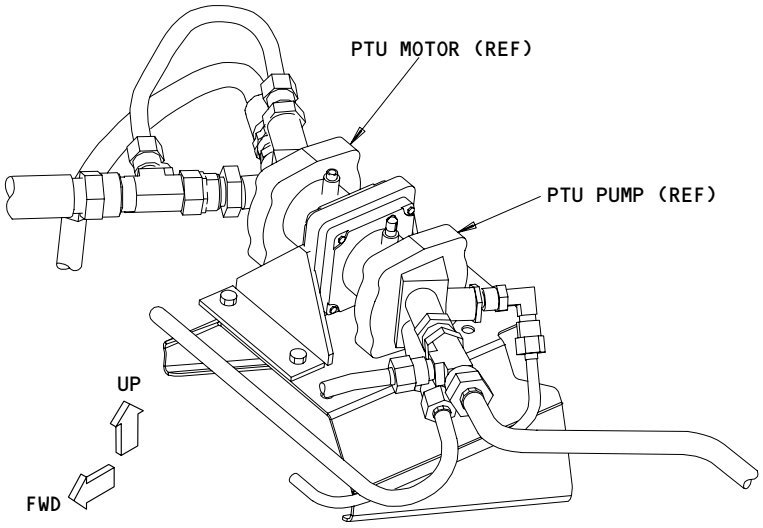
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
CIRCUIT BREAKER			FLT COMPT, P11	
HYDRAULICS PTU CONT, C1090		1	11L10	*
LEFT STAB TRIM CONT, C1017		1	11H11	*
STAB TRIM CONT R, C1018		1	11H20	*
DIODE - (REF 31-01-37, FIG. 101) R397,R398				
MODULE - PTU CASE DRAIN FILTER	1	1	312AR, FORWARD STABILIZER COMPARTMENT	29-22-03
MODULE - PTU PRESSURE FILTER	1	1	312AR, FORWARD STABILIZER COMPARTMENT	29-22-04
MODULE - PTU RETURN COMPENSATOR	3	1	312AR, FORWARD STABILIZER COMPARTMENT	29-22-02
PANEL - (REF 29-11-00, FIG. 101) RESERVE BRAKES AND STEERING, M1216				
RELAY - (REF 31-01-33, FIG. 101) L HYD SYS ISOL, K1149				
MAN STAB TRIM DOWN ARM, K1153				
MAN STAB TRIM UP ARM, K1154				
PES TIME DELAY, K1150				
R HYD SYS SHUTOFF, K1148				
RELAY - (REF 31-01-37, FIG. 101) SYS NO. 2 AIR/GND, K1064				
SWITCH - (REF 27-41-00, FIG. 101) CAPT STAB TRIM CONT WHEEL, S80				
F/O STAB TRIM CONT WHEEL, S81				
UNIT - POWER TRANSFER	1	1	312AR, FORWARD STABILIZER COMPARTMENT	29-22-01
VALVE - L HYD SYS ISOLATION, V150	3	1	312AR, FORWARD STABILIZER COMPARTMENT	29-22-05
VALVE - R HYD SYS SHUTOFF, V149	1	1	312AR, FORWARD STABILIZER COMPARTMENT	29-22-06

* SEE THE WDM EQUIPMENT LIST

Pitch Enhancement System (PES) - Component Index
Figure 101

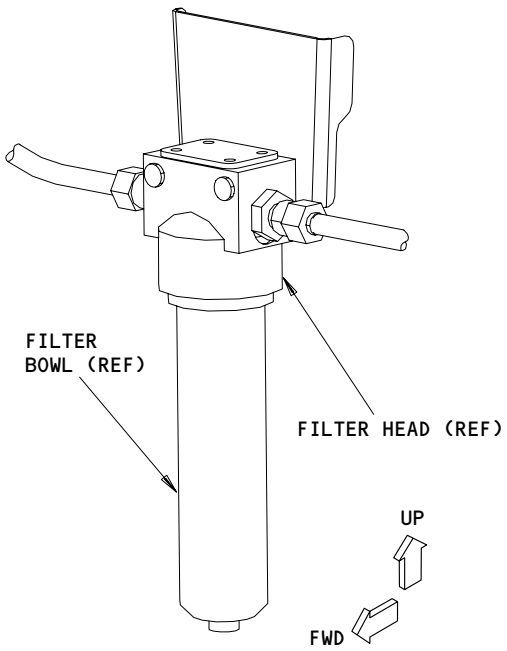


Component Location
Figure 102 (Sheet 1)



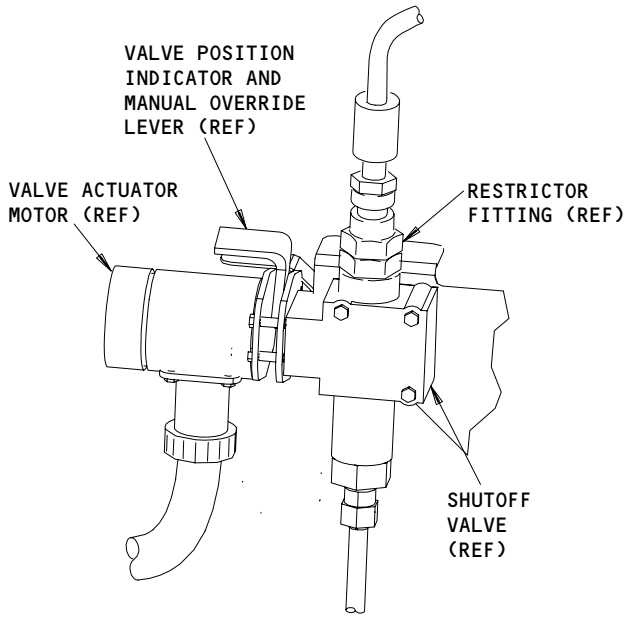
POWER TRANSFER UNIT

B



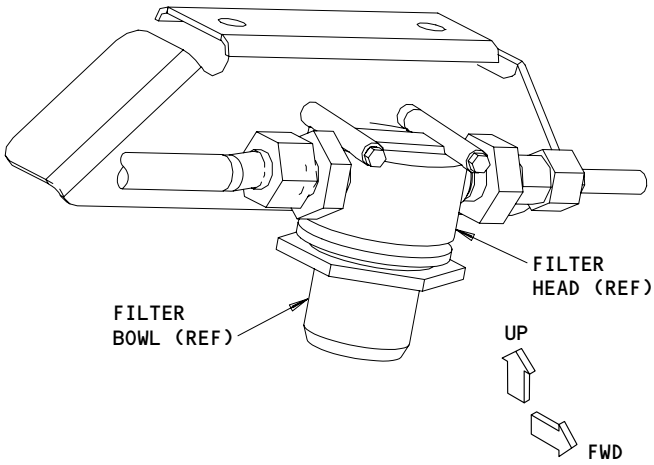
PTU PRESSURE FILTER MODULE

C



R HYD SYS SHUTOFF VALVE, V149

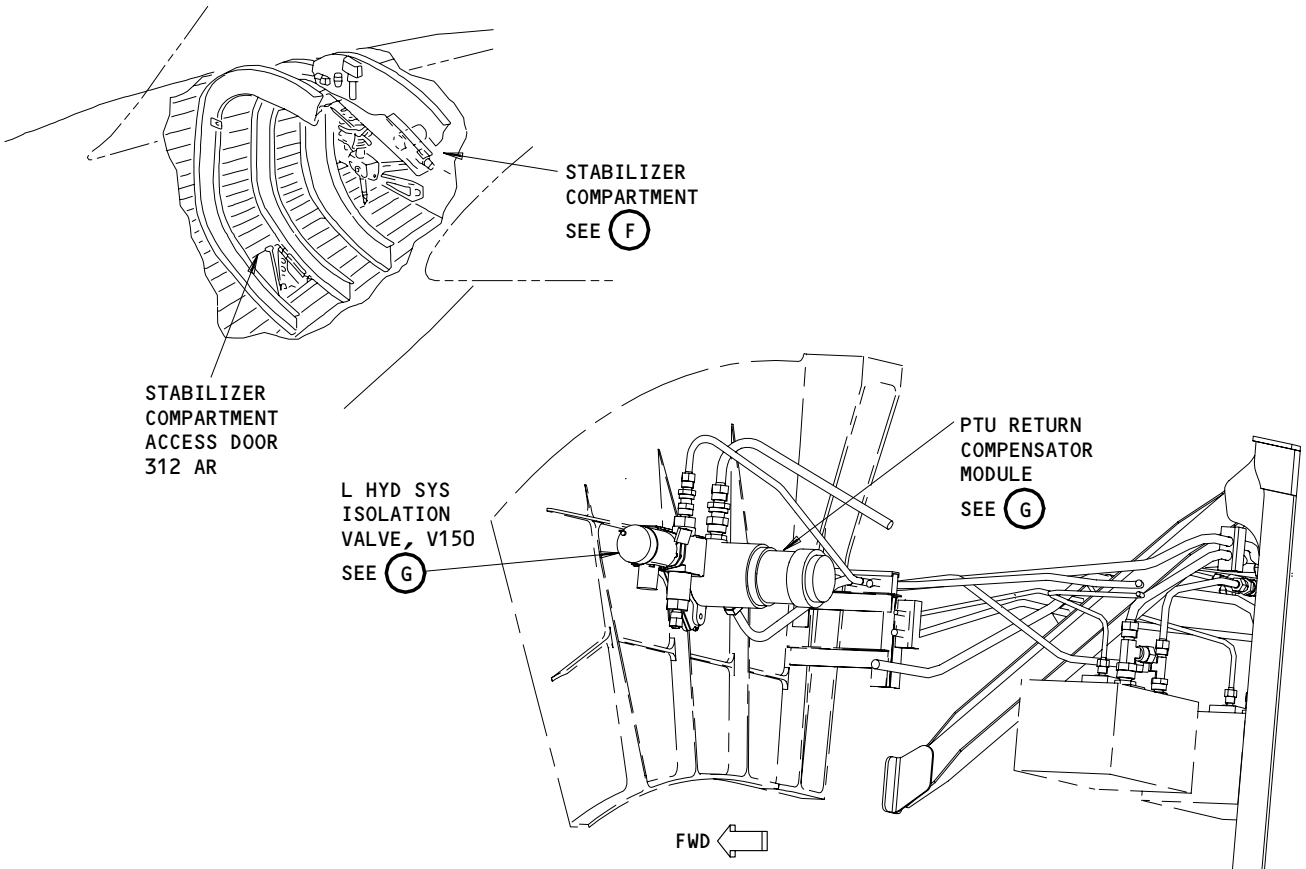
D



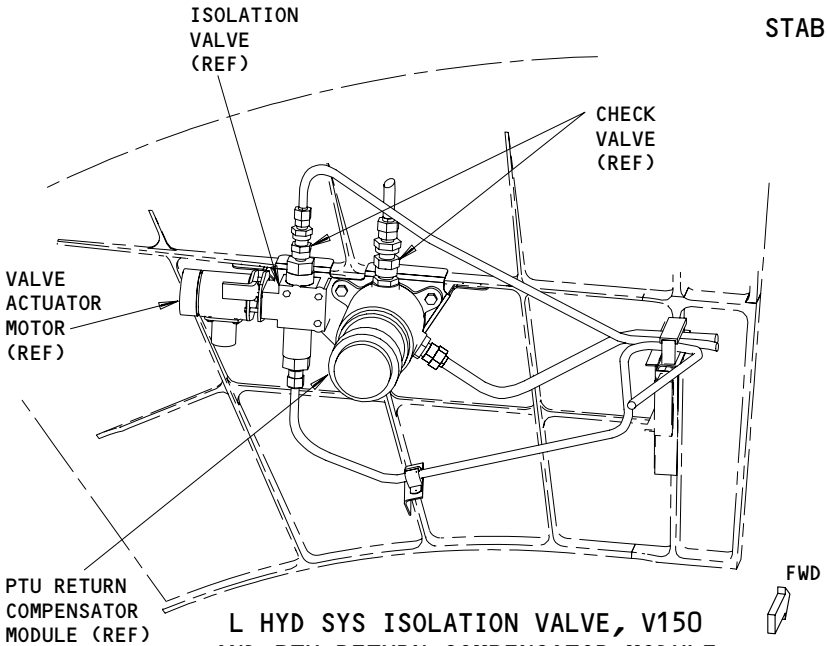
PTU CASE DRAIN FILTER MODULE

E

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



STABILIZER COMPARTMENT
F



L HYD SYS ISOLATION VALVE, V150
AND PTU RETURN COMPENSATOR MODULE
G

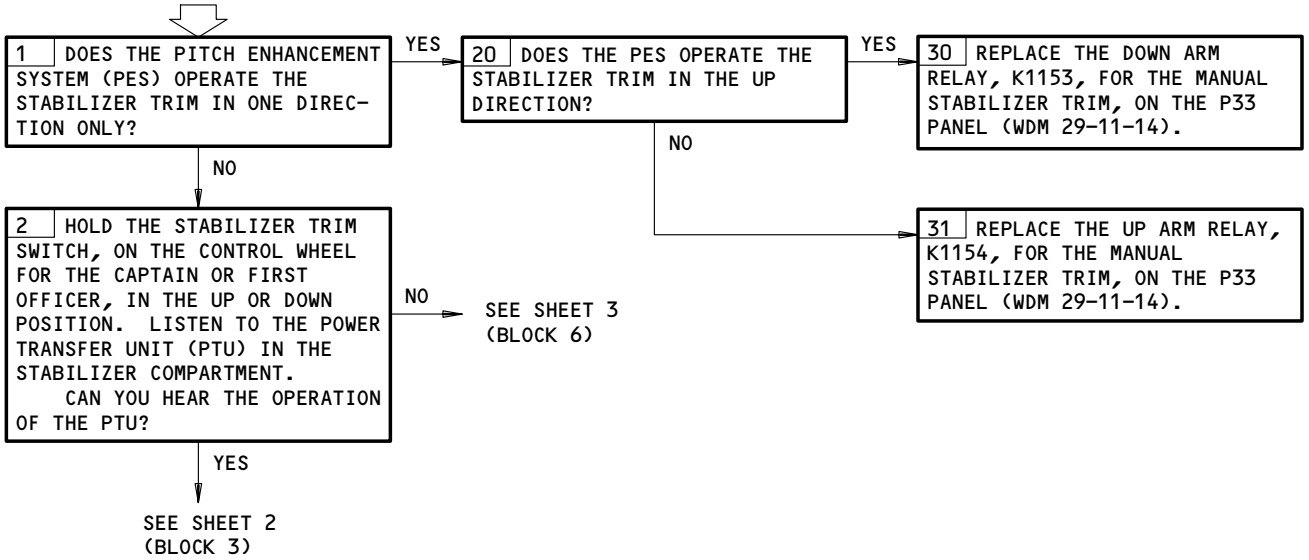
Component Location
Figure 102 (Sheet 3)

THE PITCH ENHANCEMENT SYSTEM (PES) DOES NOT OPERATE THE STABILIZER TRIM

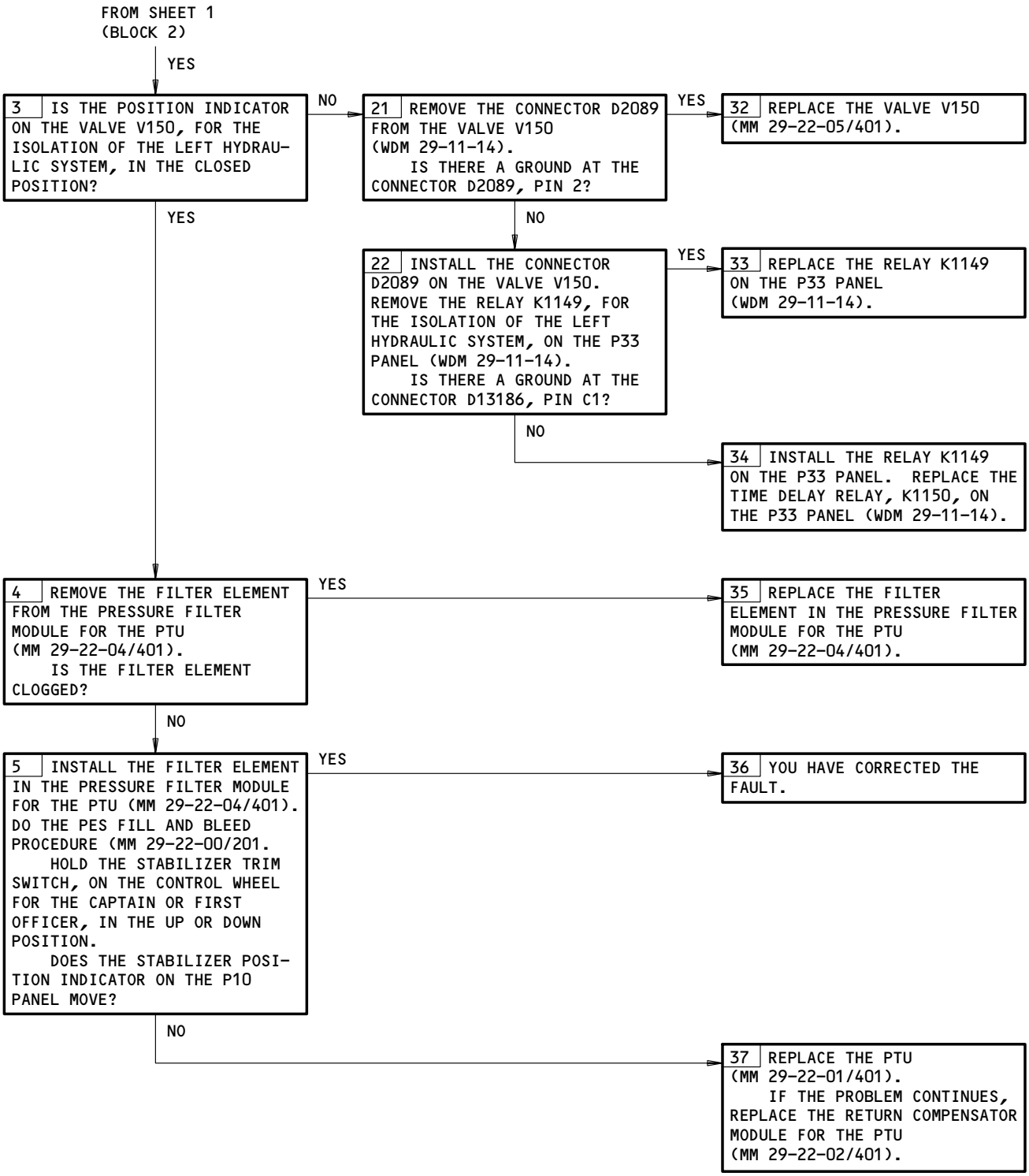
PREREQUISITES

MAKE SURE THESE CIRCUIT BREAKERS ARE CLOSED:
11H11,11L10

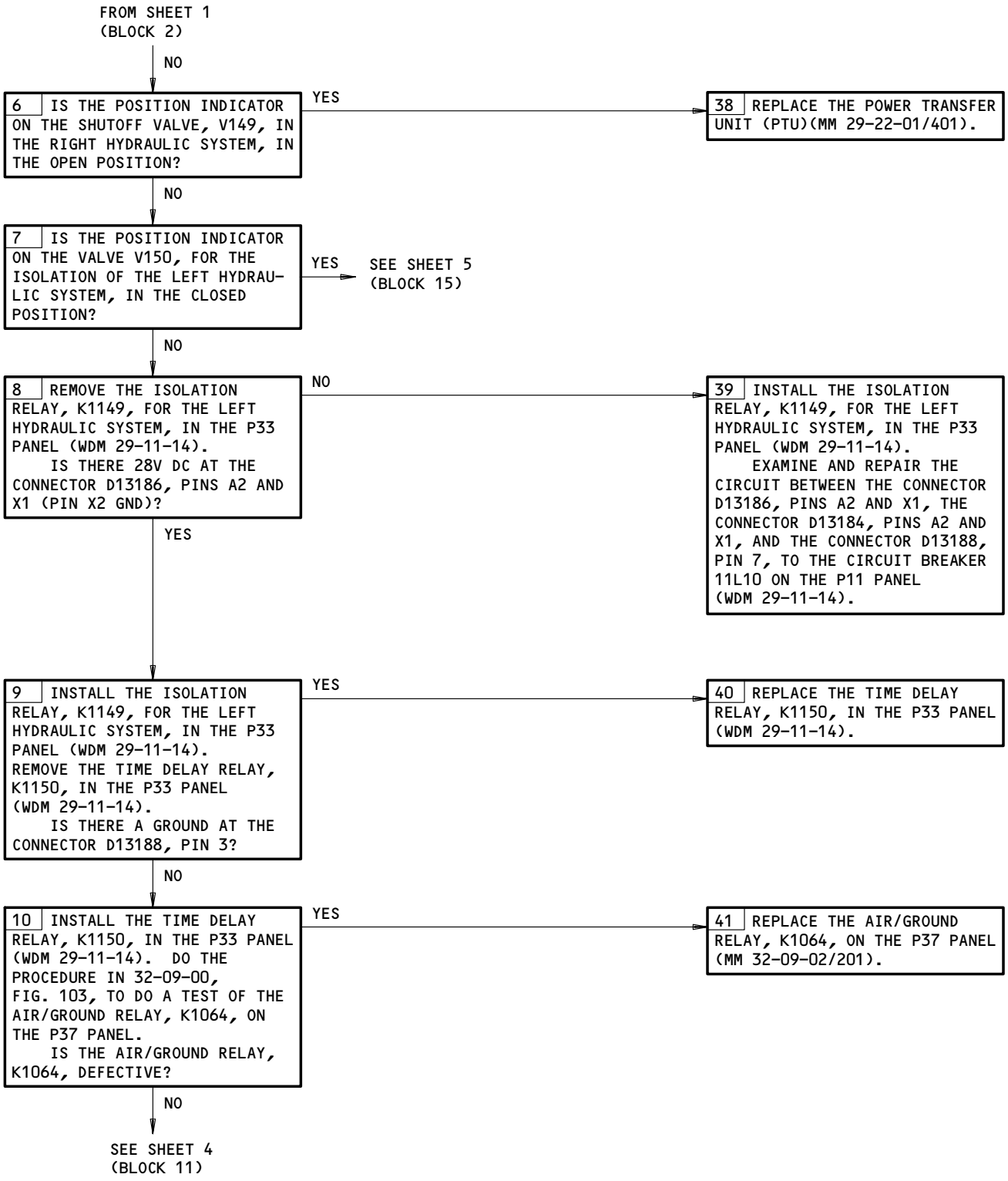
MAKE SURE THE AIRPLANE IS IN THIS CONFIGURATION:
ELECTRICAL POWER IS ON (MM 24-22-00/201)
THE LEFT AND CENTER HYDRAULIC POWER IS OFF (MM 29-11-00/201)
THE RIGHT HYDRAULIC SYSTEM IS PRESSURIZED (MM 29-11-00/201)
THE AIR/GROUND RELAYS FOR SYSTEM NO. 2 ARE SIMULATED IN THE AIR MODE (MM 32-09-02/201)



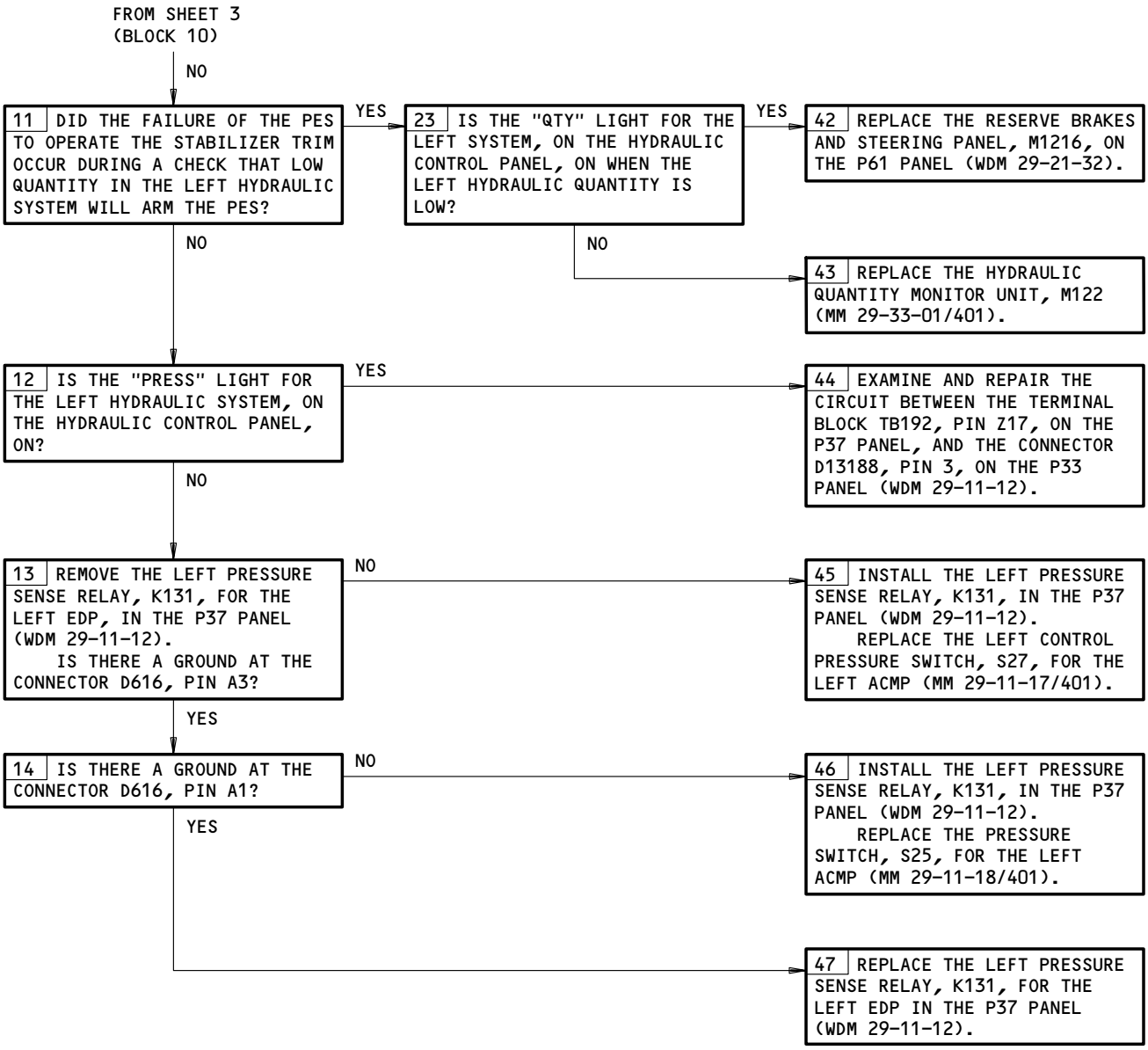
The Pitch Enhancement System (PES) Does Not Operate the Stabilizer Trim
Figure 103 (Sheet 1)



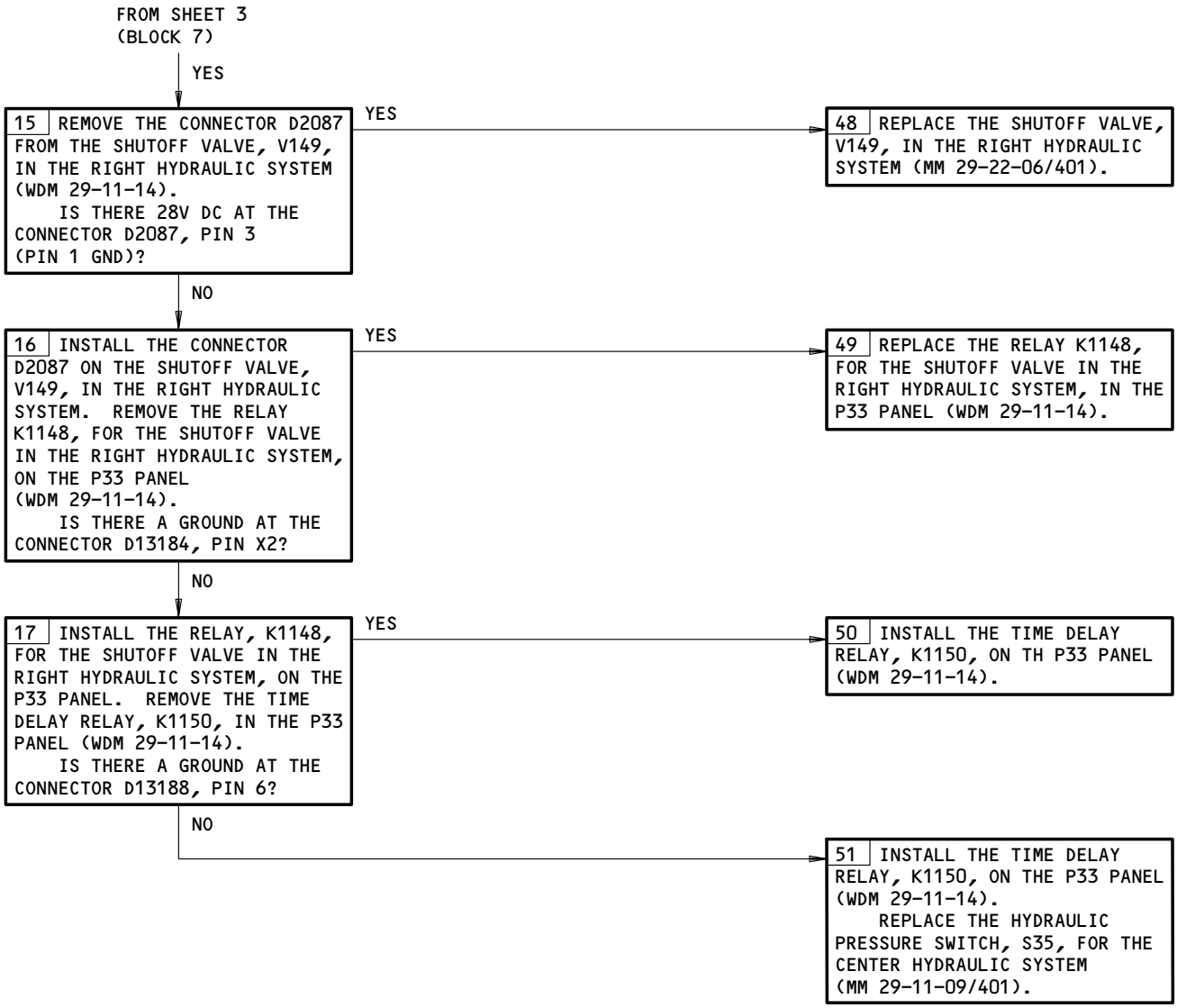
The Pitch Enhancement System (PES) Does Not Operate the Stabilizer Trim
Figure 103 (Sheet 2)



The Pitch Enhancement System (PES) Does Not Operate the Stabilizer Trim
Figure 103 (Sheet 3)



The Pitch Enhancement System (PES) Does Not Operate the Stabilizer Trim
Figure 103 (Sheet 4)



The Pitch Enhancement System (PES) Does Not Operate the Stabilizer Trim
Figure 103 (Sheet 5)

HYDRAULIC PRESSURE INDICATING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
CIRCUIT BREAKERS			FLT COMPT, P11	
HYDRAULIC SYSTEM PRESS C, C1082		1	11L18	*
HYDRAULIC SYSTEM PRESS L, C1080		1	11L17	*
HYDRAULIC SYSTEM PRESS R, C1081		1	11L26	*
DIODE - (FIM 31-01-36/101, FIG. 101) SYS C, R19				
DIODE - (FIM 31-01-37/101, FIG. 101) SYS L, R26,R159				
DIODE - (FIM 31-01-33/101, FIG. 101) SYS R, R27,R161				
LIGHT - SYS C ACMP C1 LOW PRESSURE INDICATOR	1	1	FLT COMPT, P5, HYD CONT PNL M10, SYS C ACMP C1 SELECT SWITCH/ LIGHT, YCYS2	*
LIGHT - SYS C ACMP C2 LOW PRESSURE INDICATOR	1	1	FLT COMPT, P5, HYD CONT PNL M10, SYS C ACMP C2 SELECT SWITCH/ LIGHT, YCYS3	*
LIGHT - SYS C ADP LOW PRESSURE INDICATOR, YCYL8	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS C LOW PRESSURE INDICATOR, YCYL2	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS L ACMP LOW PRESSURE INDICATOR, YCYL7	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS L EDP LOW PRESSURE INDICATOR	1	1	FLT COMPT, P5, HYD CONT PNL, M10, SYS L EDP SELECT SWITCH/ LIGHT, YCYS1	*
LIGHT - SYS L LOW PRESSURE INDICATOR, YCYL1	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS R ACMP LOW PRESSURE INDICATOR, YCYL9	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS R EDP LOW PRESSURE INDICATOR	1	1	FLT COMPT, P5, HYD CONT PNL, M10, SYS R EDP SELECT SWITCH/ LIGHT, YCYS4	*
LIGHT - SYS R LOW PRESSURE INDICATOR, YCYL3	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*

* SEE THE WDM EQUIPMENT LIST

Hydraulic Pressure Indicating System - Component Index
Figure 101 (Sheet 1)

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
MODULES - (29-11-00/101)				
SYS C ACMP C1 PRESSURE/CASE DRAIN FILTER				
SYS C ACMP C2 PRESSURE/CASE DRAIN FILTER				
SYS C ADP PRESSURE/CASE DRAIN FILTER				
PANEL - (29-11-00/101)				
HYDRAULIC CONTROL, M10				
RELAYS - (29-11-00/101)				
EDP L PRESS SENSE, K131				
EDP R PRESS SENSE, K127				
SYS L ACMP ON CONTROL, K130				
SYS R ACMP ON CONTROL, K126				
RELAY - (31-01-36/101)				
ADP ON, K443				
SWITCHES - (29-11-00/101)				
SYS C ADP SELECT, YCYS6				
SYS L ACMP CONTROL PRESSURE, S27				
SYS L ACMP PRESSURE, S25				
SYS L ACMP SELECT, YCYS5				
SYS L EDP PRESSURE, S26				
SWITCH - ADP PRESSURE, S28	3	1	LEFT WHEEL WELL, ADP PRESS/CASE DRAIN FILTER MODULE	*
SWITCH - SYS C ACMP C1 PRESSURE, S33	4	1	RIGHT WHEEL WELL, ACMP C1 PRESS/ CASE DRAIN FILTER MODULE	*
SWITCH - SYS C ACMP C2 PRESSURE, S34	4	1	RIGHT WHEEL WELL, ACMP C2 PRESS/ CASE DRAIN FILTER MODULE	*
SWITCH - SYS C HYDRAULIC PRESSURE, S35	4	1	RIGHT WHEEL WELL	29-11-09

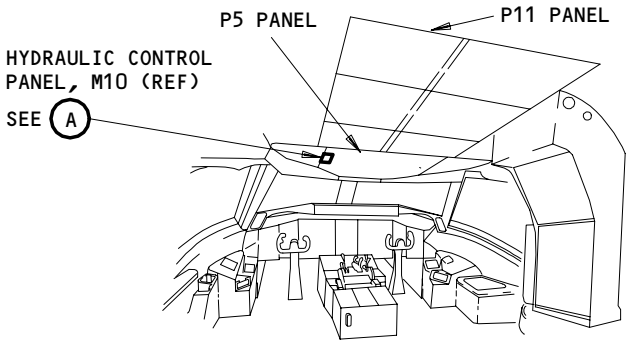
* SEE THE WDM EQUIPMENT LIST

Component Index
Figure 101 (Sheet 2)

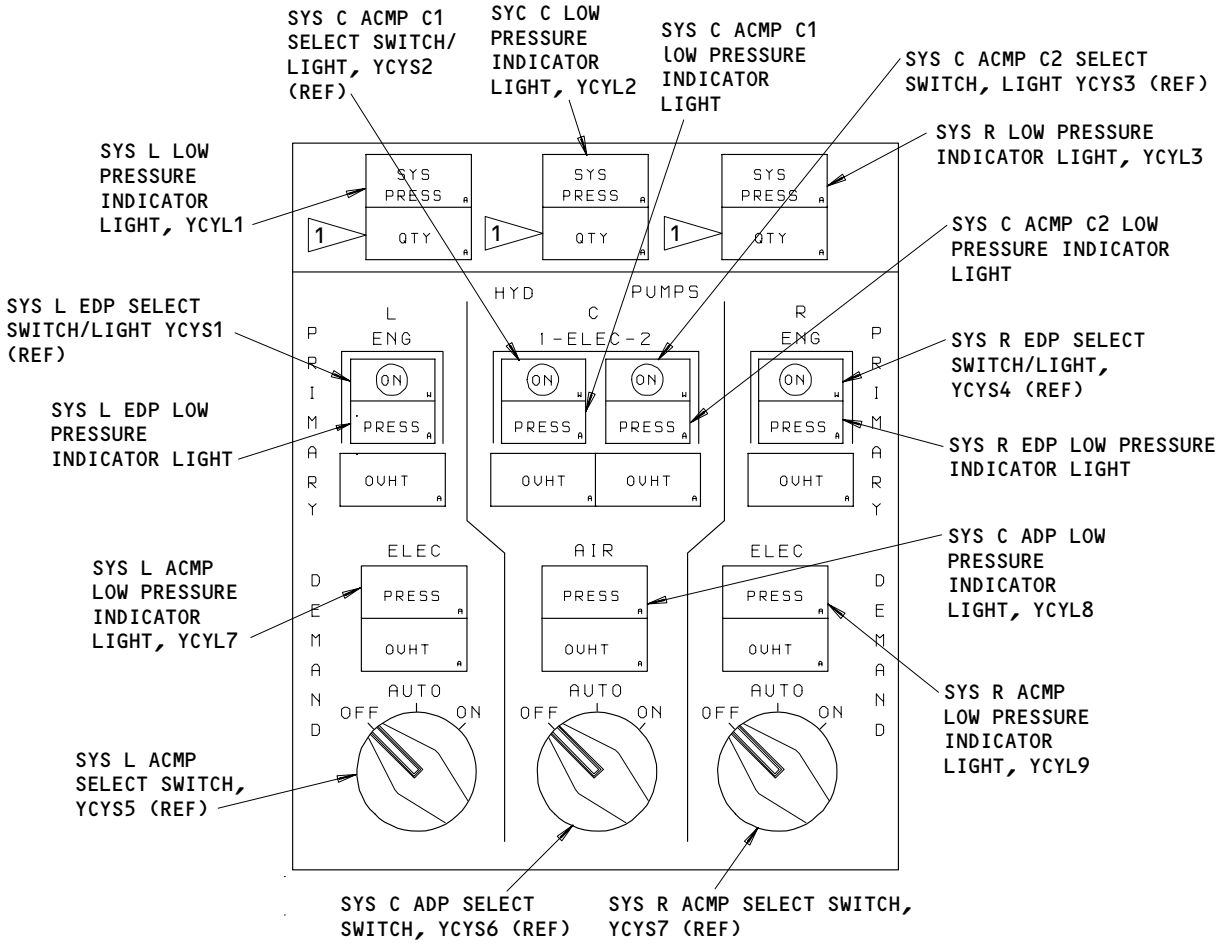
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	AMM REFERENCE
SWITCH - (FIM 29-11-00/101, FIG. 101)				
SYS R ACMP CONTROL PRESSURE, S32				
SYS R ACMP PRESSURE, S30				
SYS R ACMP SELECT, YCYS7				
SYS R EDP PRESSURE, S31				
SWITCH/LIGHT - (FIM 29-11-00/101, FIG. 101)				
SYS C ACMP C1 SELECT, YCYS2				
SYS C ACMP C2 SELECT, YCYS3				
SYS L EDP SELECT, YCYS1				
SYS R EDP SELECT, YCYS4				
TIME DELAY - (FIM 31-01-36/101, FIG. 101)				
SYS C ADP PRESSURE LIGHT, M919				
SYS C PRESSURE LIGHT, M922				
TIME DELAY - (FIM 31-01-37/101, FIG. 101)				
SYS L ACMP PRESSURE LIGHT, M925				
SYS L PRESSURE LIGHT, M921				
TIME DELAY - (FIM 31-01-33/101, FIG. 101)				
SYS R PRESSURE LIGHT, M920				
SYS R ACMP PRESSURE LIGHT, M924				
TRANSMITTER - SYS C HYDRAULIC PRESSURE, M342	4	1	RIGHT WHEEL WELL	29-31-01
TRANSMITTER - SYS L HYDRAULIC PRESSURE, M341	2	1	522HB, LEFT WING	29-31-01
TRANSMITTER - SYS R HYDRAULIC PRESSURE, M343	2	1	652HB, RIGHT WING	29-31-01

* SEE THE WDM EQUIPMENT LIST

Hydraulic Pressure Indicating System - Component Index
Figure 101 (Sheet 3)



FLIGHT COMPARTMENT

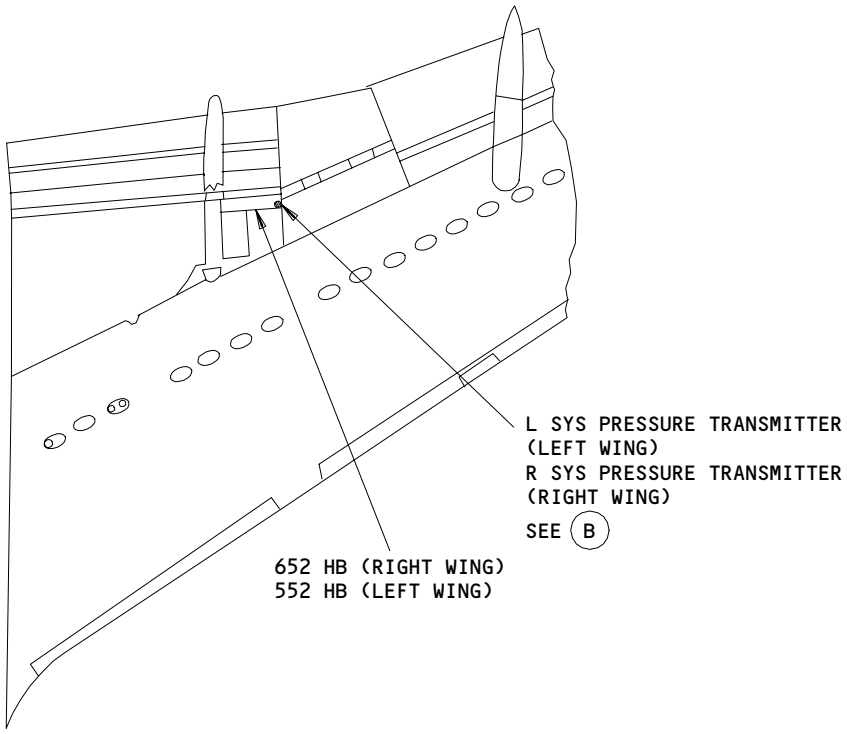


HYDRAULIC CONTROL PANEL, M10 (REF)

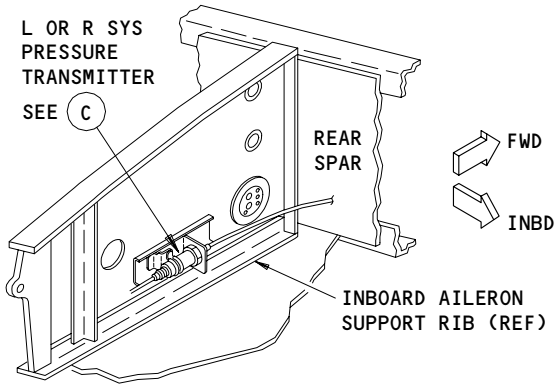
1 THE LABEL "RSVR" IS OPTIONAL TO "QTY"

A

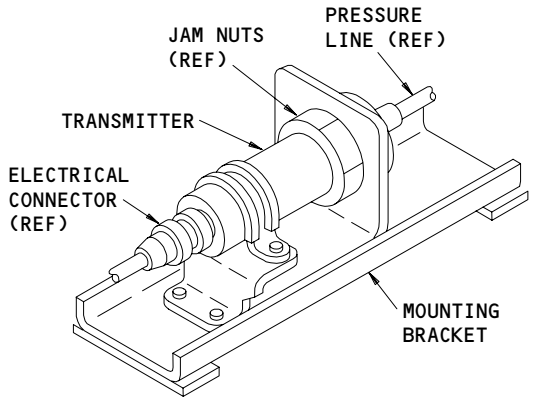
Component Location
Figure 102 (Sheet 1)



WING BOTTOM VIEW



B

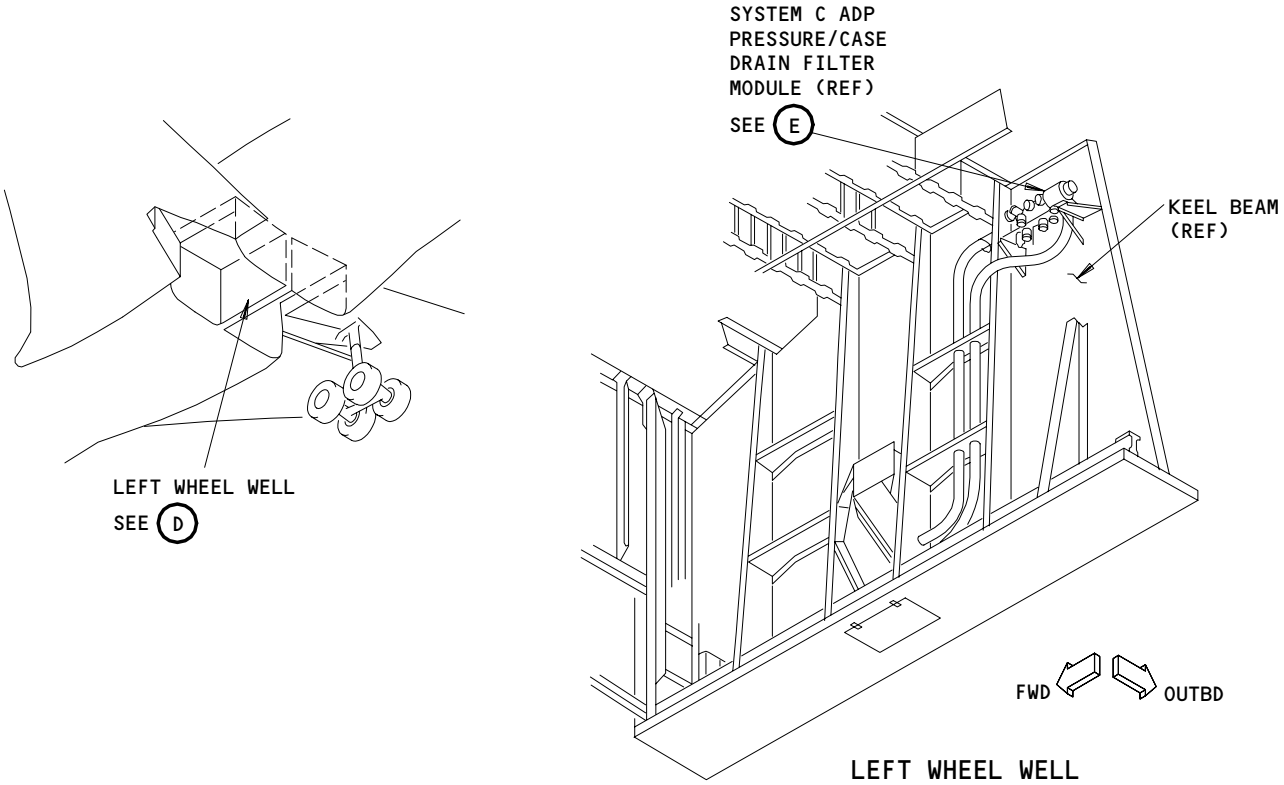


PRESSURE TRANSMITTER

C

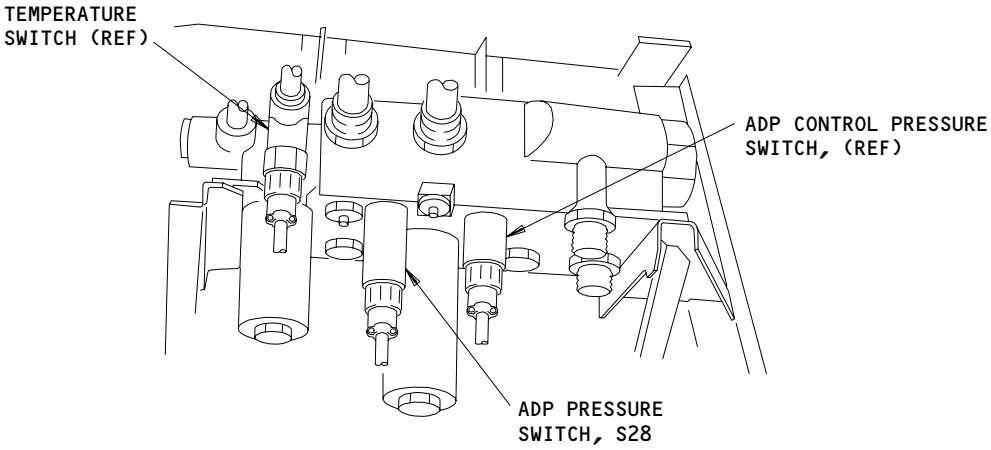
Component Location
Figure 102 (Sheet 2)

33893



LEFT WHEEL WELL

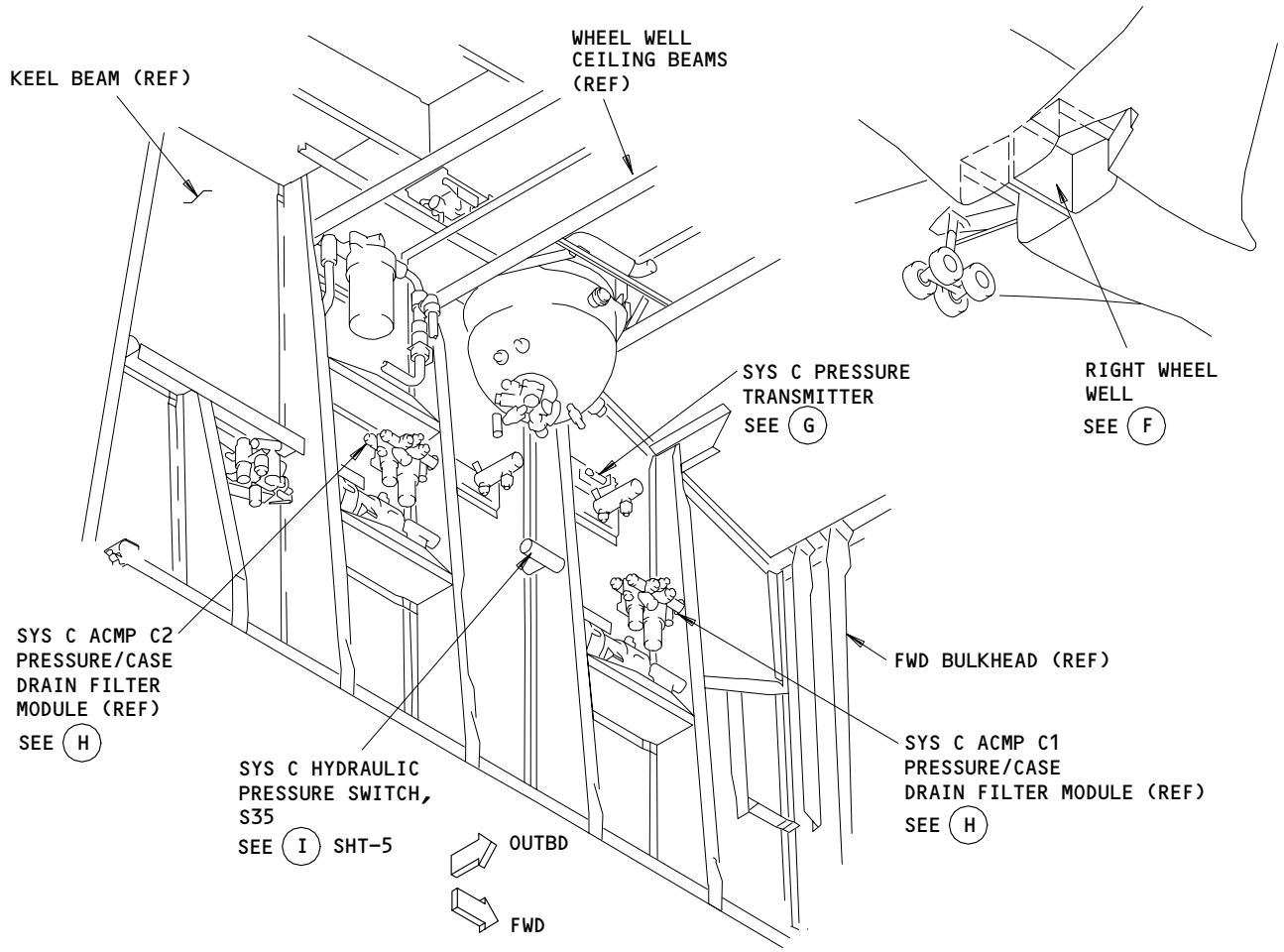
D



SYSTEM C ADP PRESSURE/CASE DRAIN FILTER MODULE (REF)

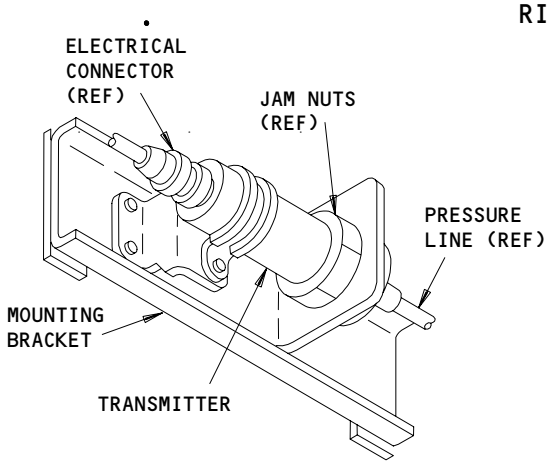
E

Component Location
Figure 102 (Sheet 3)



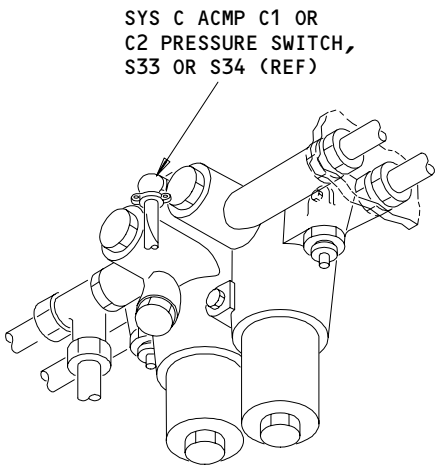
RIGHT WHEEL WELL

F



PRESSURE TRANSMITTER

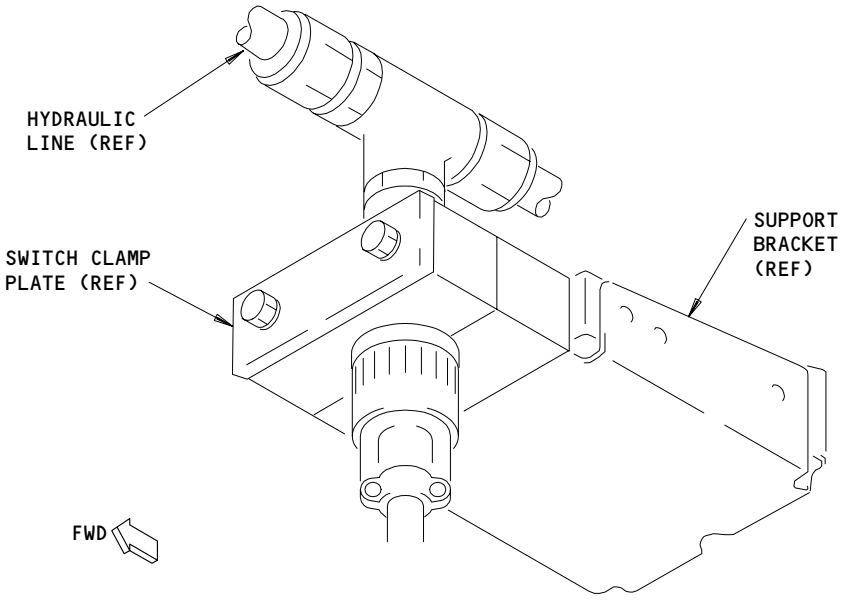
G



SYS C ACMP C1 OR C2 PRESSURE/CASE DRAIN FILTER MODULE (REF)

H

Component Location
Figure 102 (Sheet 4)



SYS C HYDRAULIC PRESSURE SWITCH, S35

I

FROM SHT 4

Component Location
Figure 102 (Sheet 5)

HYDRAULIC FLUID TEMPERATURE INDICATING SYSTEM

COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
COMPUTER - EICAS L, M10181 (REF 31-41-00, FIG. 101)				
COMPUTER - EICAS R, M10182 (REF 31-41-00, FIG. 101)				
LIGHT - SYS C ACMP C1 OVERHEAT INDICATOR, YCYL5	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS C ACMP C2 OVERHEAT INDICATOR, YCYL13	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS C ADP OVERHEAT INDICATOR, YCYL15	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS L ACMP OVERHEAT INDICATOR, YCYL14	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS L EDP OVERHEAT INDICATOR, YCYL4	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS R ACMP OVERHEAT INDICATOR, YCYL16	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS R EDP OVERHEAT INDICATOR, YCYL6	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
MODULE - SYS C ADP PRESSURE/CASE DRAIN FILTER (REF 29-11-00, FIG. 101)				
MODULE - SYS L EDP PRESSURE/CASE DRAIN FILTER (REF 29-11-00, FIG. 101)				
MODULE - SYS R EDP PRESSURE/CASE DRAIN FILTER (REF 29-11-00, FIG. 101)				
PANEL - HYDRAULIC CONTROL, M10 (REF 29-11-00, FIG. 101)				
PUMP (ACMP) - SYS C ALTERNATING CURRENT MOTOR C1, M232 (REF 29-11-00, FIG. 101)				
PUMP (ACMP) - SYS C ALTERNATING CURRENT MOTOR C2, M233 (REF 29-11-00, FIG. 101)				
PUMP (ACMP) - SYS L ALTERNATING CURRENT MOTOR, M231 (REF 29-11-00, FIG. 101)				
PUMP (ACMP) - SYS R ALTERNATING CURRENT MOTOR, M234 (REF 29-11-00, FIG. 101)				

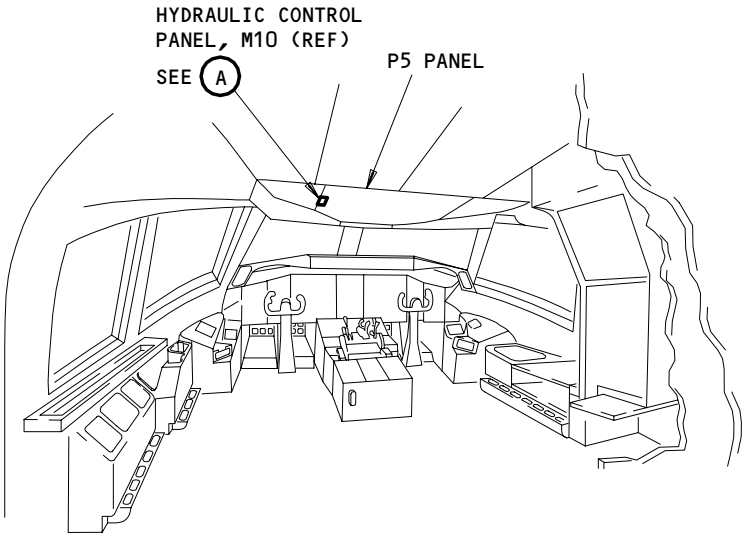
* SEE WM EQUIPMENT LIST

Component Index
Figure 101 (Sheet 1)

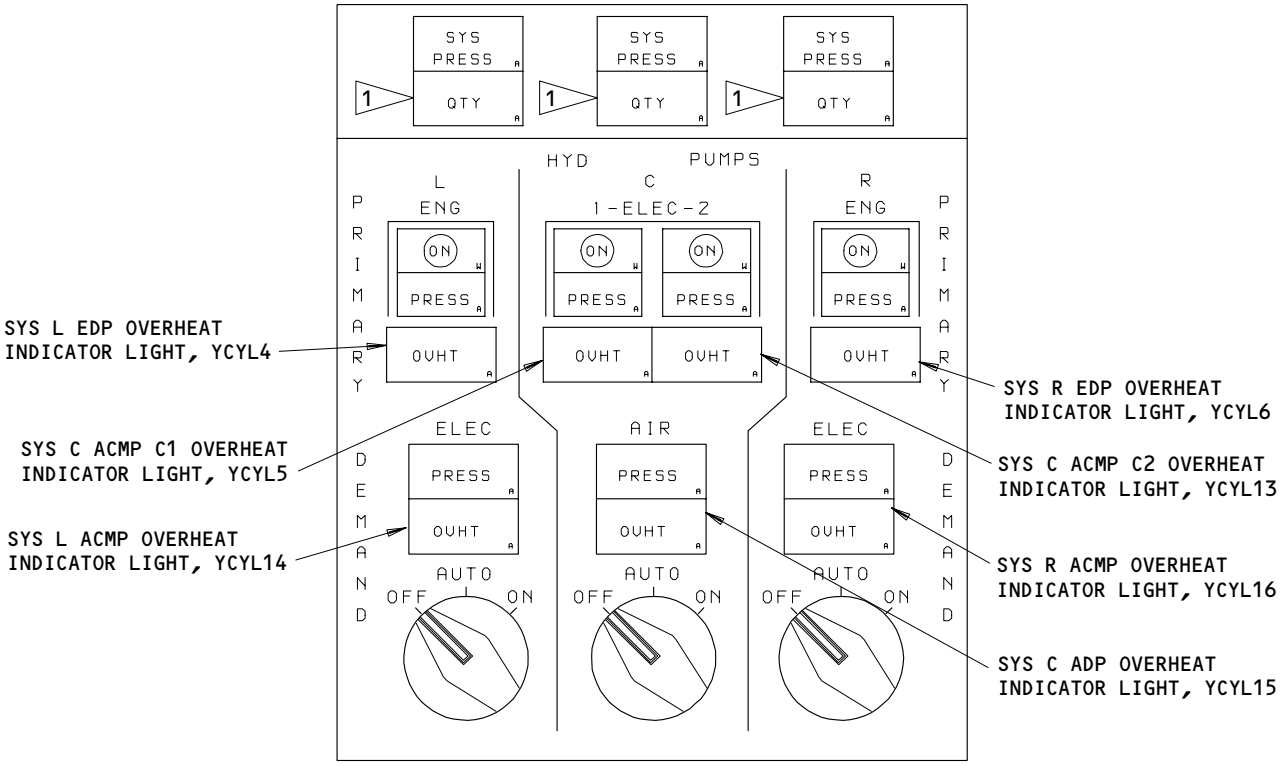
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
RESERVOIR - SYS C HYDRAULIC (REF 29-11-00, FIG. 101)				
RESERVOIR - SYS L HYDRAULIC (REF 29-11-00, FIG. 101				
RESERVOIR - SYS R HYDRAULIC (REF 29-11-00, FIG. 101)				
SWITCH - SYS C ACMP C1 TEMPERATURE		1	RIGHT WHEEL WELL, SYS C ACMP C1, M232	*
SWITCH - SYS C ACMP C2 TEMPERATURE		1	RIGHT WHEEL WELL, SYS C ACMP C2, M233	*
SWITCH - SYS C ADP FILTER MODULE TEMPERATURE, S317	3	1	LEFT WHEEL WELL, ADP PRESS/CASE DRAIN FILTER MODULE	29-32-03
SWITCH - SYS L ACMP TEMPERATURE		1	437BL,437BR, LEFT ENGINE STRUT, SYS L ACMP, M231	*
SWITCH - SYS L EDP FILTER MODULE TEMPERATURE, S316	2	1	437BL,437BR, LEFT ENGINE STRUT, SYS L EDP PRESS/CASE DRAIN FILTER MODULE	29-32-03
SWITCH - SYS R ACMP TEMPERATURE		1	447BL,447BR, RIGHT ENGINE STRUT, SYS R ACMP, M234	*
SWITCH - SYS R EDP FILTER MODULE TEMPERATURE, S315	2	1	447BL,447BR, RIGHT ENGINE STRUT, SYS R EDP PRESS/CASE DRAIN FILTER MODULE	29-32-03
TRANSMITTER - SYS C FLUID TEMPERATURE, M345	4	1	RIGHT WHEEL WELL, SYS C HYDRAULIC RESERVOIR	29-32-01
TRANSMITTER - SYS L FLUID TEMPERATURE, M344	2	1	437BL,437BR, LEFT ENGINE STRUT, SYS L HYDRAULIC RESERVOIR	29-32-01
TRANSMITTER - SYS R FLUID TEMPERATURE, M346	2	1	447BL,447BR, RIGHT ENGINE STRUT, SYS R HYDRAULIC RESERVOIR	29-32-01
UNIT - EICAS LOWER DISPLAY (REF 31-41-00, FIG. 101)				

* SEE WM EQUIPMENT LIST

Component Index
Figure 101 (Sheet 2)



FLIGHT COMPARTMENT

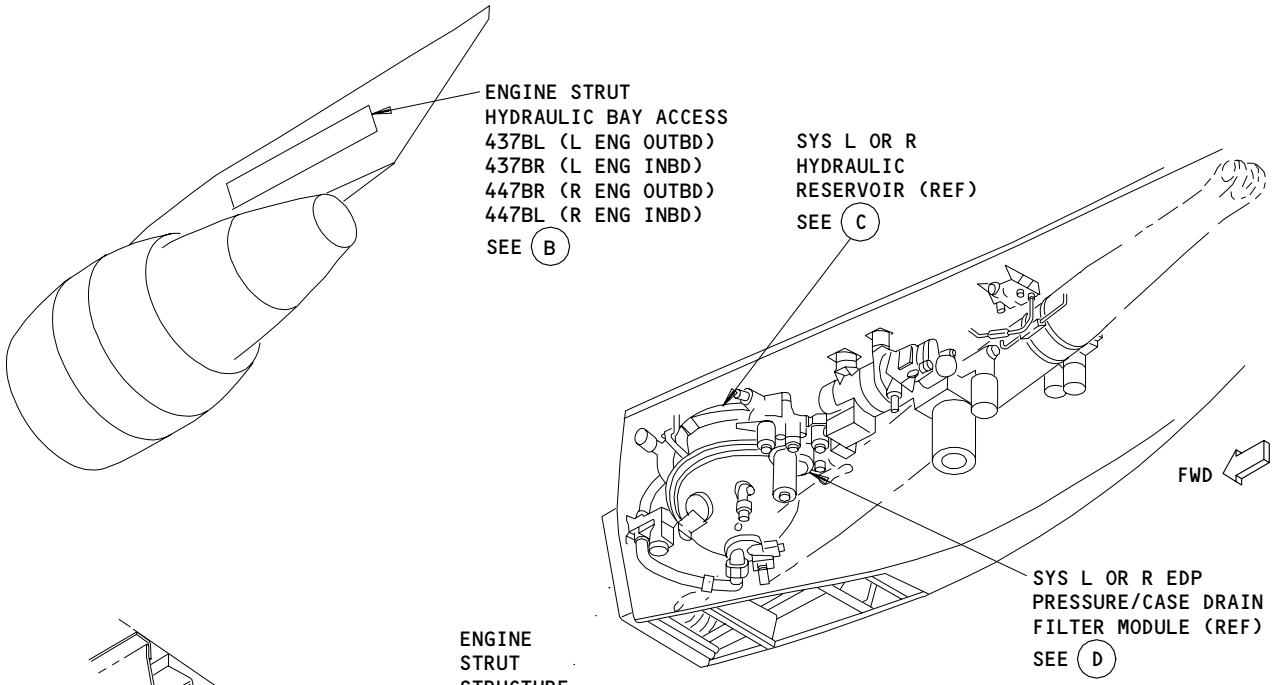


HYDRAULIC CONTROL PANEL, M10 (REF)

A

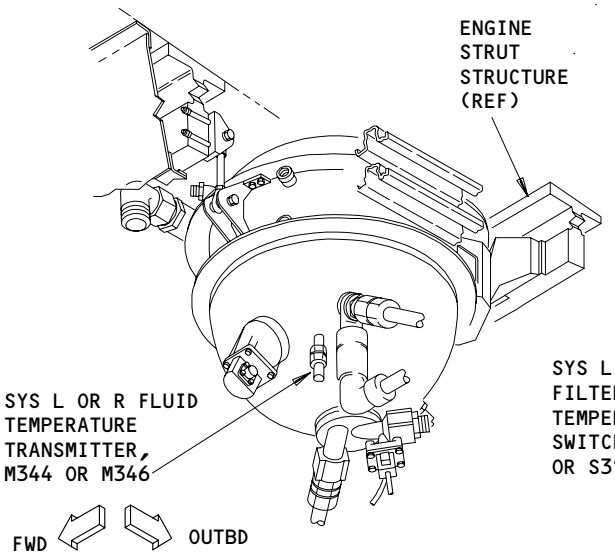
1 THE LABEL "RSVR" IS OPTIONAL TO "QTY"

Component Location
Figure 102 (Sheet 1)



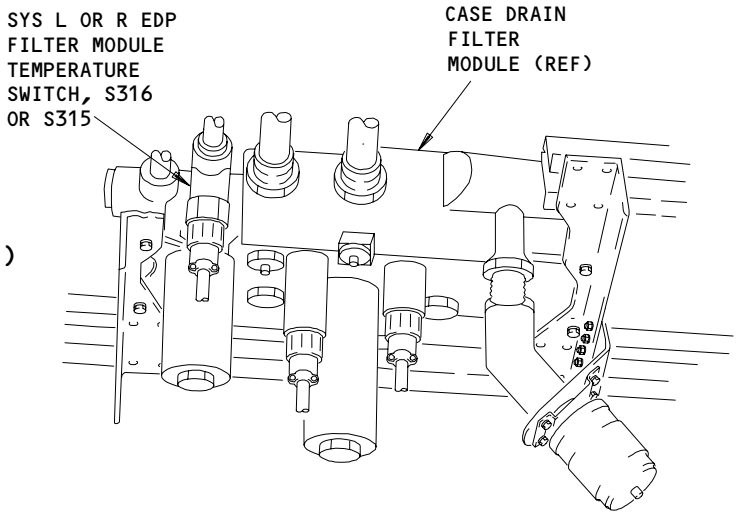
ENGINE STRUT HYDRAULIC BAY

B



L OR R SYS HYDRAULIC RESERVOIR (REF)

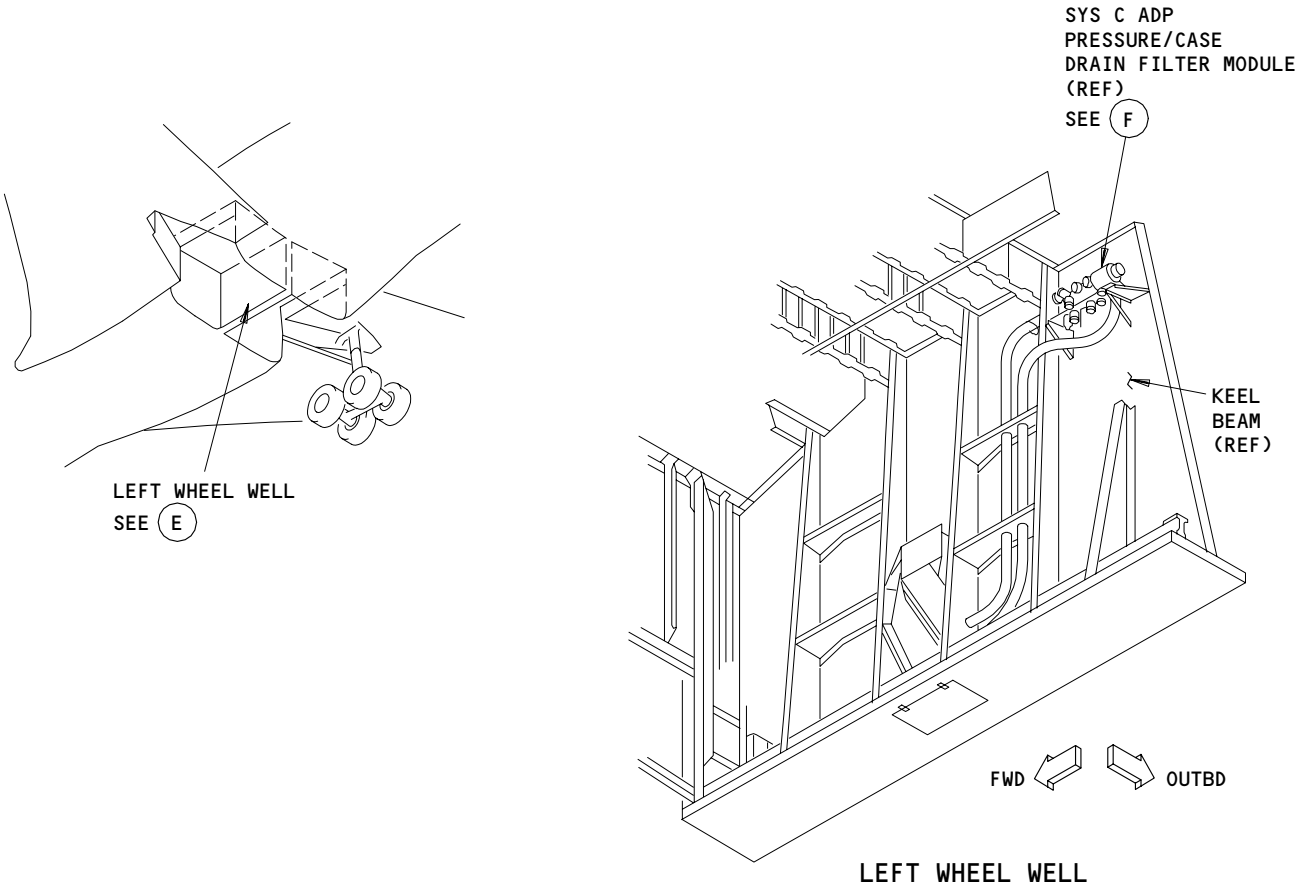
C



SYS L OR R EDP PRESSURE/CASE DRAIN FILTER MODULE (REF)

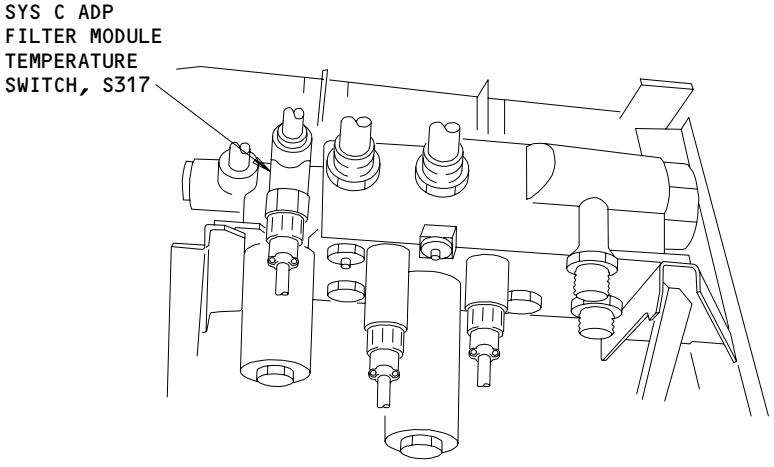
D

Component Location
Figure 102 (Sheet 2)



LEFT WHEEL WELL

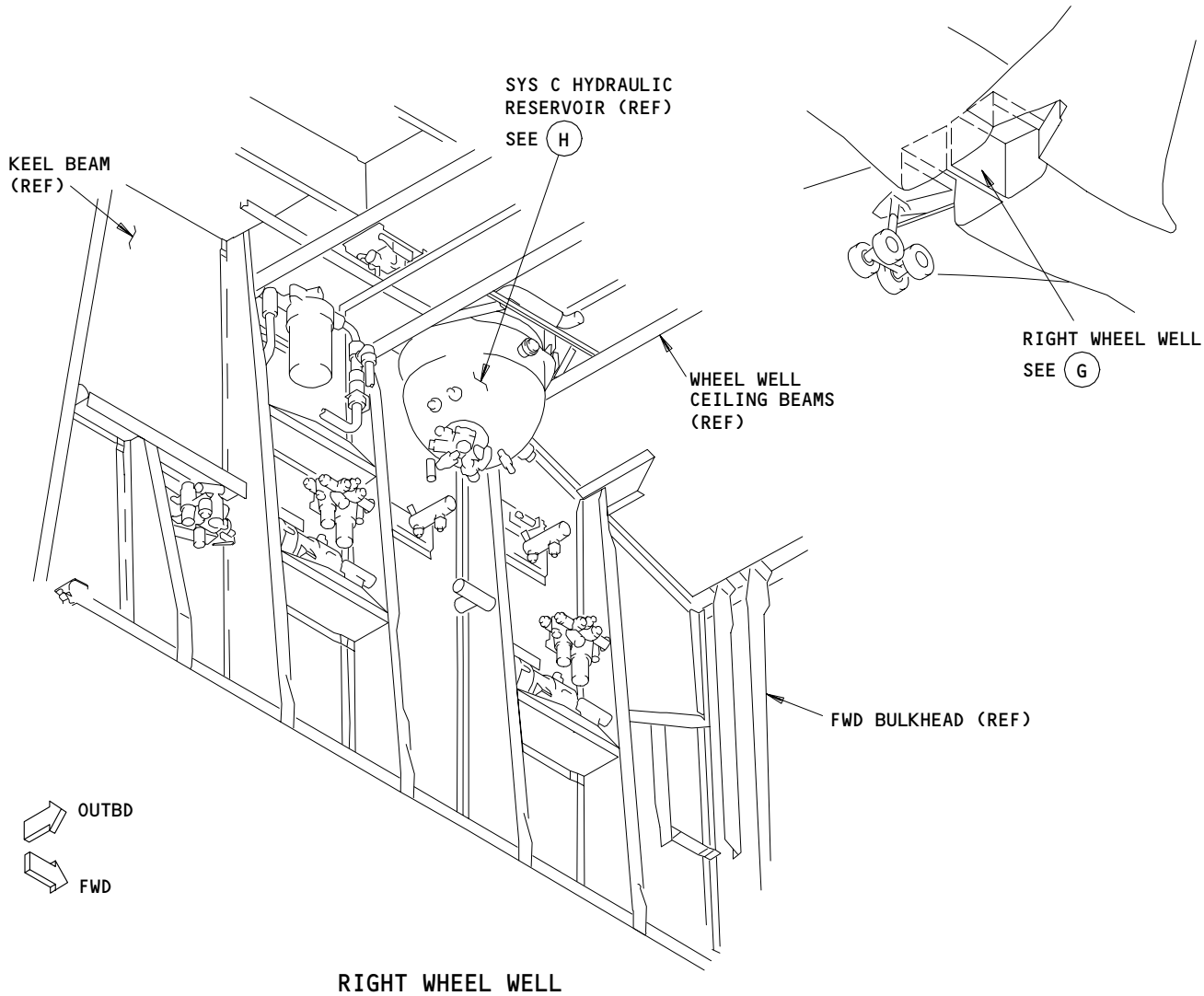
E



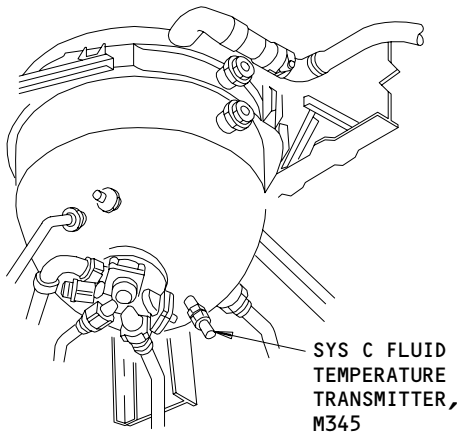
ADP PRESSURE/CASE DRAIN FILTER MODULE (REF)

F

Component Location
Figure 102 (Sheet 3)



RIGHT WHEEL WELL
G



SYS C HYDRAULIC RESERVOIR (REF)
H

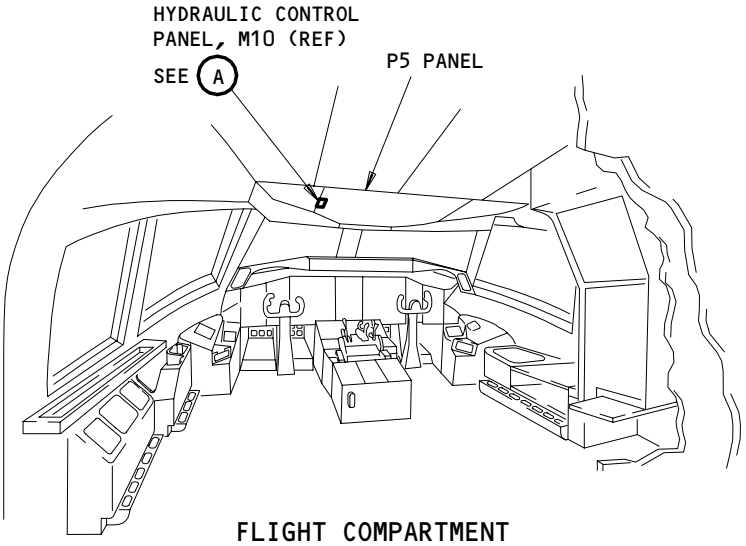
Component Location
Figure 102 (Sheet 4)

HYDRAULIC FLUID QUANTITY INDICATING SYSTEM

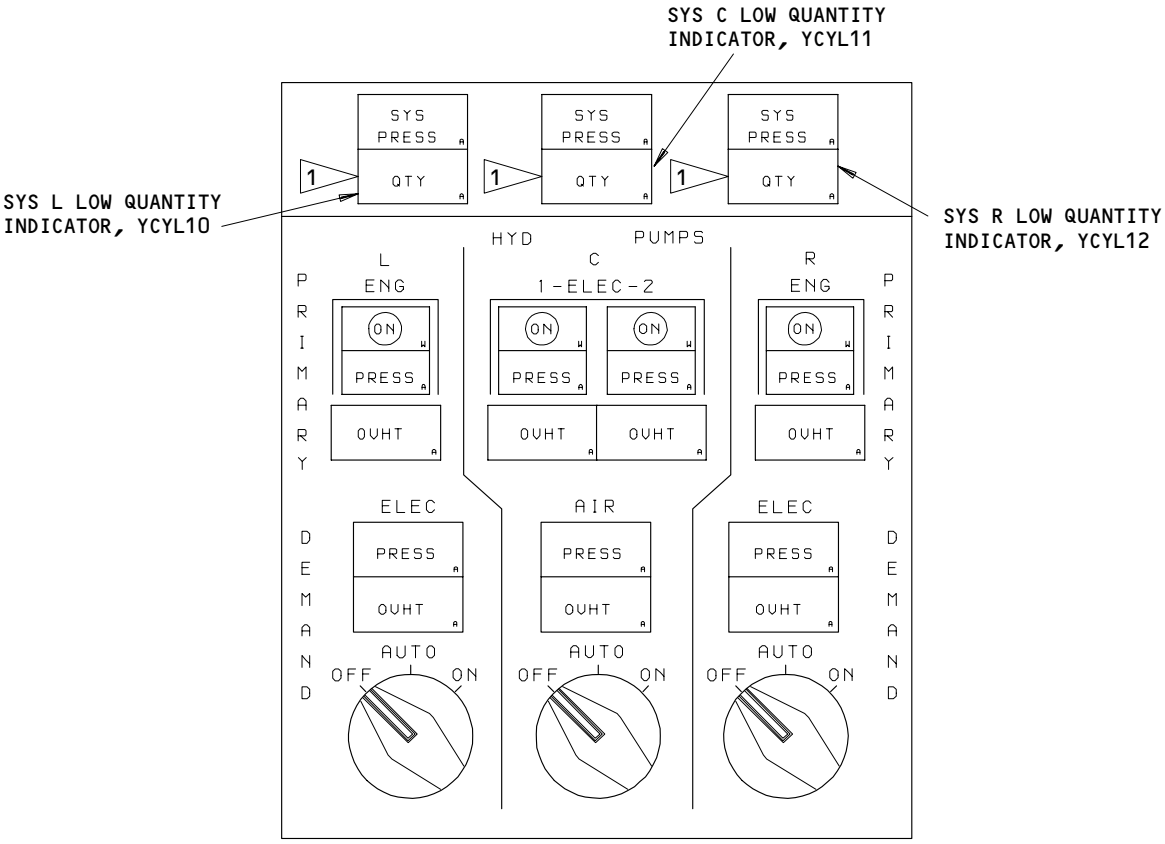
COMPONENT	FIG. 102 SHT	QTY	ACCESS/AREA	REFERENCE
CIRCUIT BREAKER		1	FLT COMPT, P11	
HYDRAULIC QTY, C1101		1	11L20	*
COMPUTER - EICAS L, M10181 (REF 31-41-00, FIG. 101)				
COMPUTER - EICAS R, M10182 (REF 31-41-000, FIG. 101)				
INDICATOR - RESERVOIR FILL, N29 (REF 29-18-00, FIG. 101)				
LIGHT - SYS C LOW QUANTITY INDICATOR, YCYL11	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS L LOW QUANTITY INDICATOR, YCYL10	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
LIGHT - SYS R LOW QUANTITY INDICATOR, YCYL12	1	1	FLT COMPT, P5, HYD CONT PNL, M10	*
PANEL - HYDRAULIC CONTROL M10 (REF 29-11-00, FIG. 101)				
RESERVOIR - SYS C HYDRAULIC (REF 29-11-00, FIG. 101)				
RESERVOIR - SYS L HYDRAULIC (REF 29-11-00, FIG. 101)				
RESERVOIR - SYS R HYDRAULIC (REF 29-11-00, FIG. 101)				
SIGHT GLASS - SYS C LOW LEVEL	3	1	RIGHT WHEEL WELL, SYS C HYDRAULIC RESERVOIR	29-33-00
SIGHT GLASS - SYS C OVERFILL	3	1	RIGHT WHEEL WELL, SYS C HYDRAULIC RESERVOIR	29-33-00
SIGHT GLASS - SYS L LOW LEVEL	2	1	437BL,437BR, LEFT ENGINE STRUT, SYS L HYDRAULIC RESERVOIR	29-33-00
SIGHT GLASS - SYS L OVERFILL	2	1	437BL,437BR, LEFT ENGINE STRUT, SYS L HYDRAULIC RESERVOIR	29-33-00
SIGHT GLASS - SYS R LOW LEVEL	2	1	447BL,447BR, RIGHT ENGINE STRUT, SYS R HYDRAULIC RESERVOIR	29-33-00
SIGHT GLASS - SYS R OVERFILL	2	1	447BL,447BR, RIGHT ENGINE STRUT, SYS R HYDRAULIC RESERVOIR	29-33-00
SWITCH - REMOTE HYDRAULIC QUANTITY SELECT, S341 (REF 29-18-00, FIG. 101)				
TRANSMITTER - SYS C HYDRAULIC FLUID QUANTITY, M339	3	1	RIGHT WHEEL WELL, SYS C HYDRAULIC RESERVOIR	29-33-02
TRANSMITTER - SYS L HYDRAULIC FLUID QUANTITY, M338	2	1	437BL,437BR, LEFT ENGINE STRUT, SYS L HYDRAULIC RESERVOIR	29-33-02
TRANSMITTER - SYS R HYDRAULIC FLUID QUANTITY, M340	2	1	447BL,447BR, RIGHT ENGINE STRUT, SYS R HYDRAULIC RESERVOIR	29-33-02
UNIT - EICAS LOWER DISPLAY N10014 (REF 31-41-00, FIG. 101)				
UNIT - HYDRAULIC FLUID QUANTITY MONITOR, M122	4	1	119AL, MAIN EQUIP CTR, E2-4	29-33-01

* SEE WM EQUIPMENT LIST

Component Index
Figure 101



FLIGHT COMPARTMENT



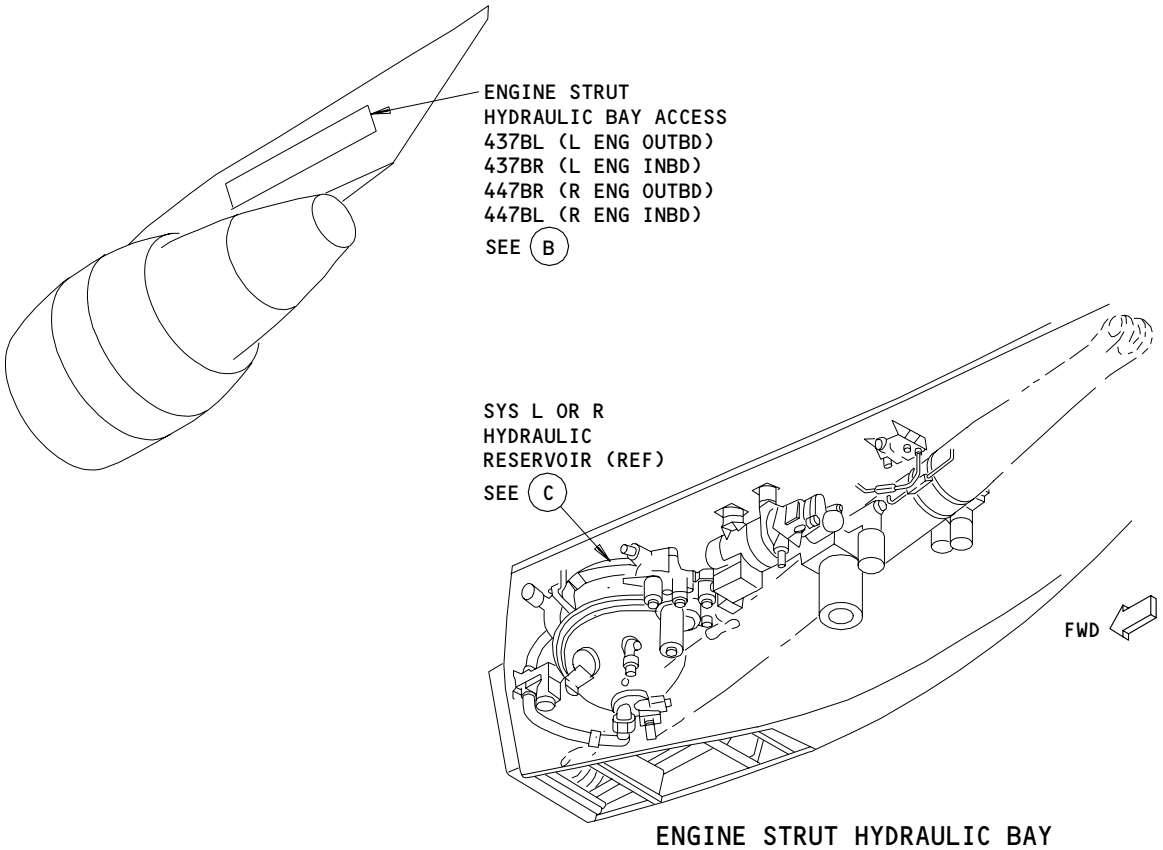
HYDRAULIC CONTROL PANEL, M10 (REF)

A

1 THE LABEL "RSVR" IS OPTIONAL TO "QTY"

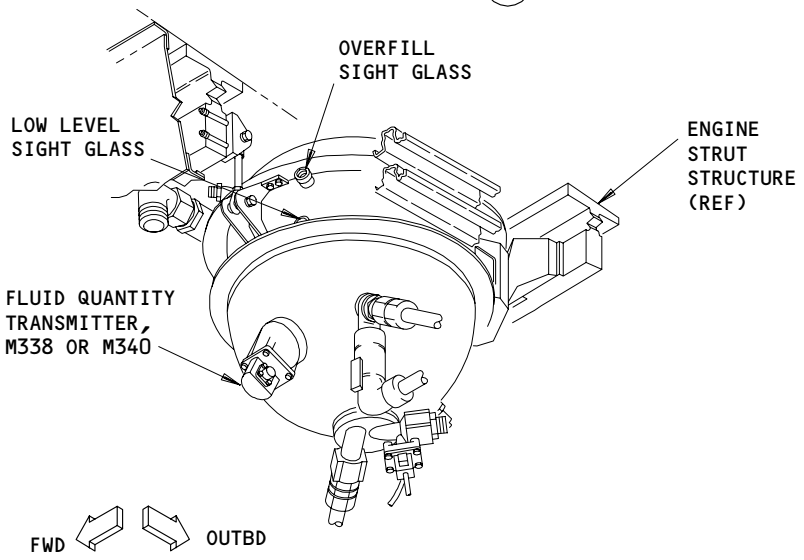
Component Location
Figure 102 (Sheet 1)

A31042



ENGINE STRUT HYDRAULIC BAY

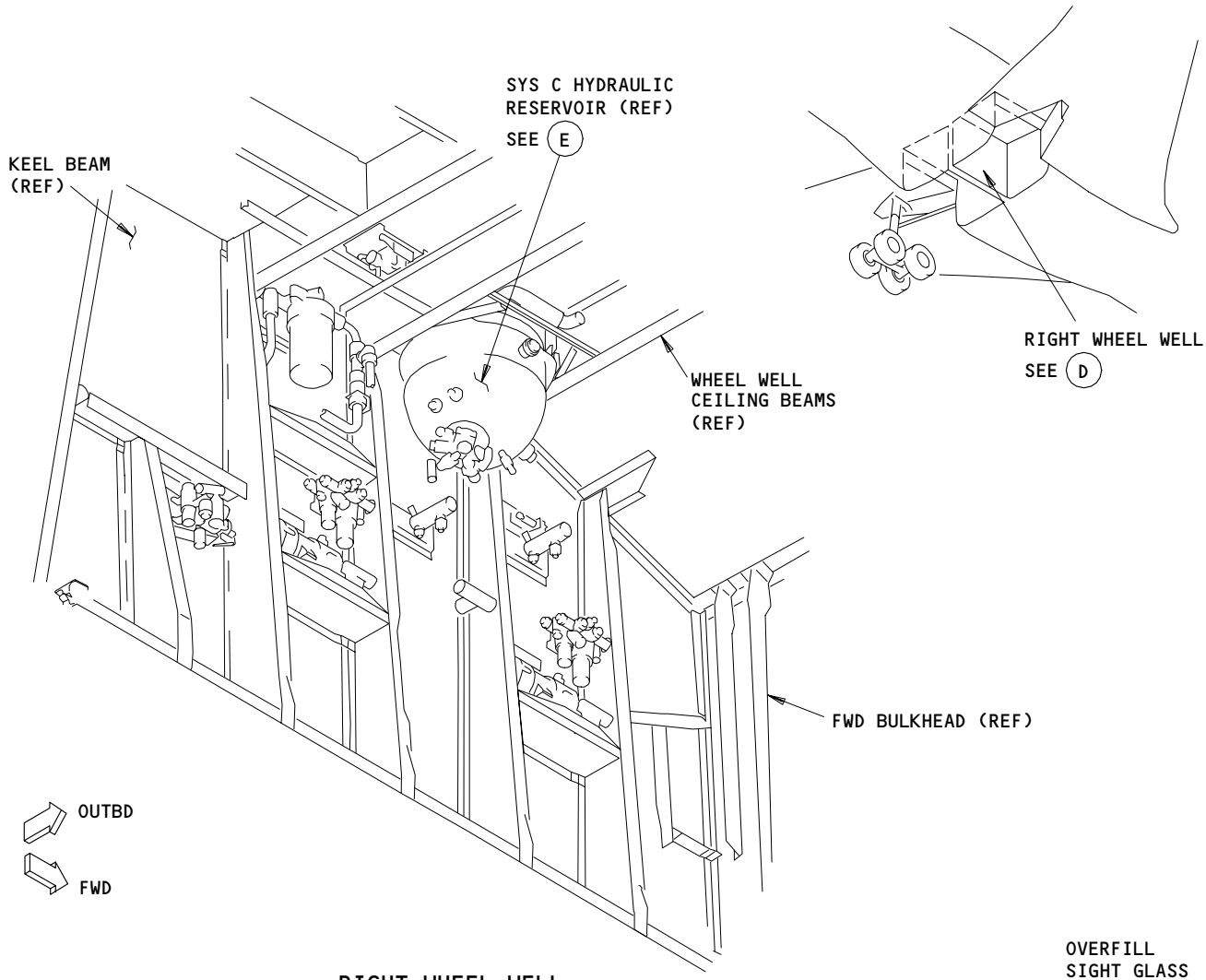
B



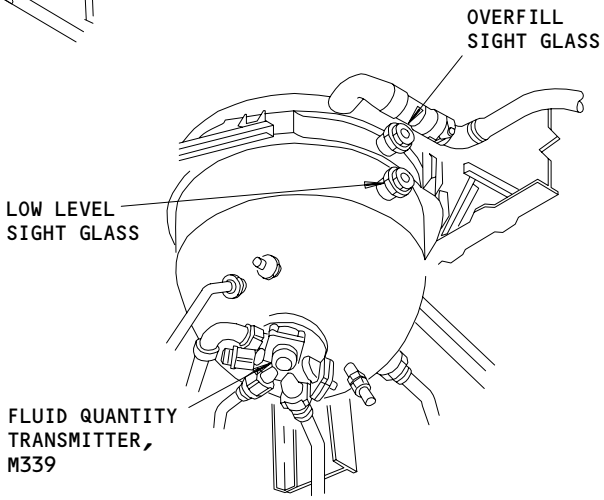
L OR R SYS HYDRAULIC RESERVOIR (REF)

C

Component Location
Figure 102 (Sheet 2)

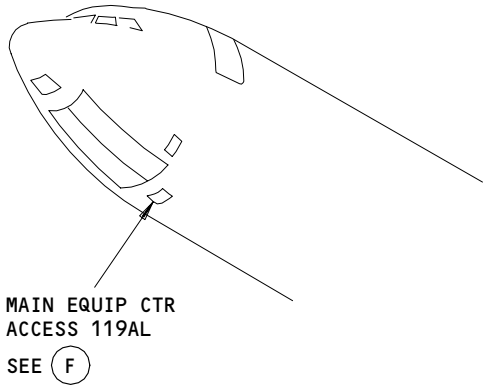


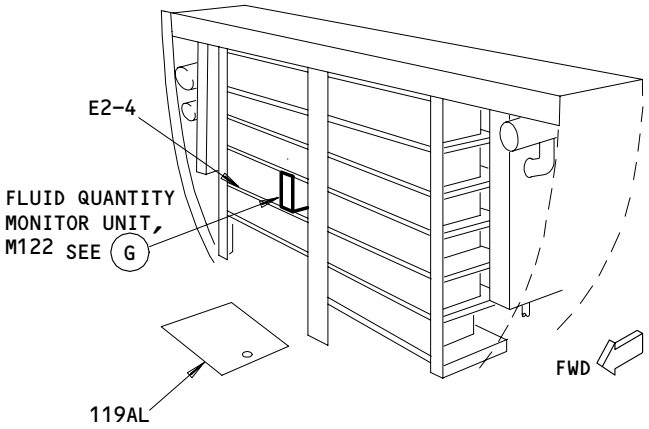
RIGHT WHEEL WELL
D



SYS C HYDRAULIC RESERVOIR (REF)
E

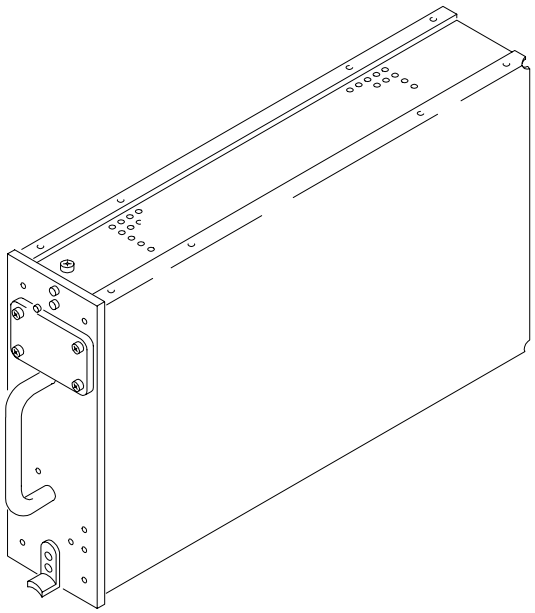
Component Location
Figure 102 (Sheet 3)





MAIN EQUIP CTR

F



HYDRAULIC FLUID QUANTITY
MONITOR UNIT, M122

G

Component Location
Figure 102 (Sheet 4)

34174