

**CHAPTER**

**35**

**OXYGEN**



**777-200/300  
FAULT ISOLATION MANUAL**

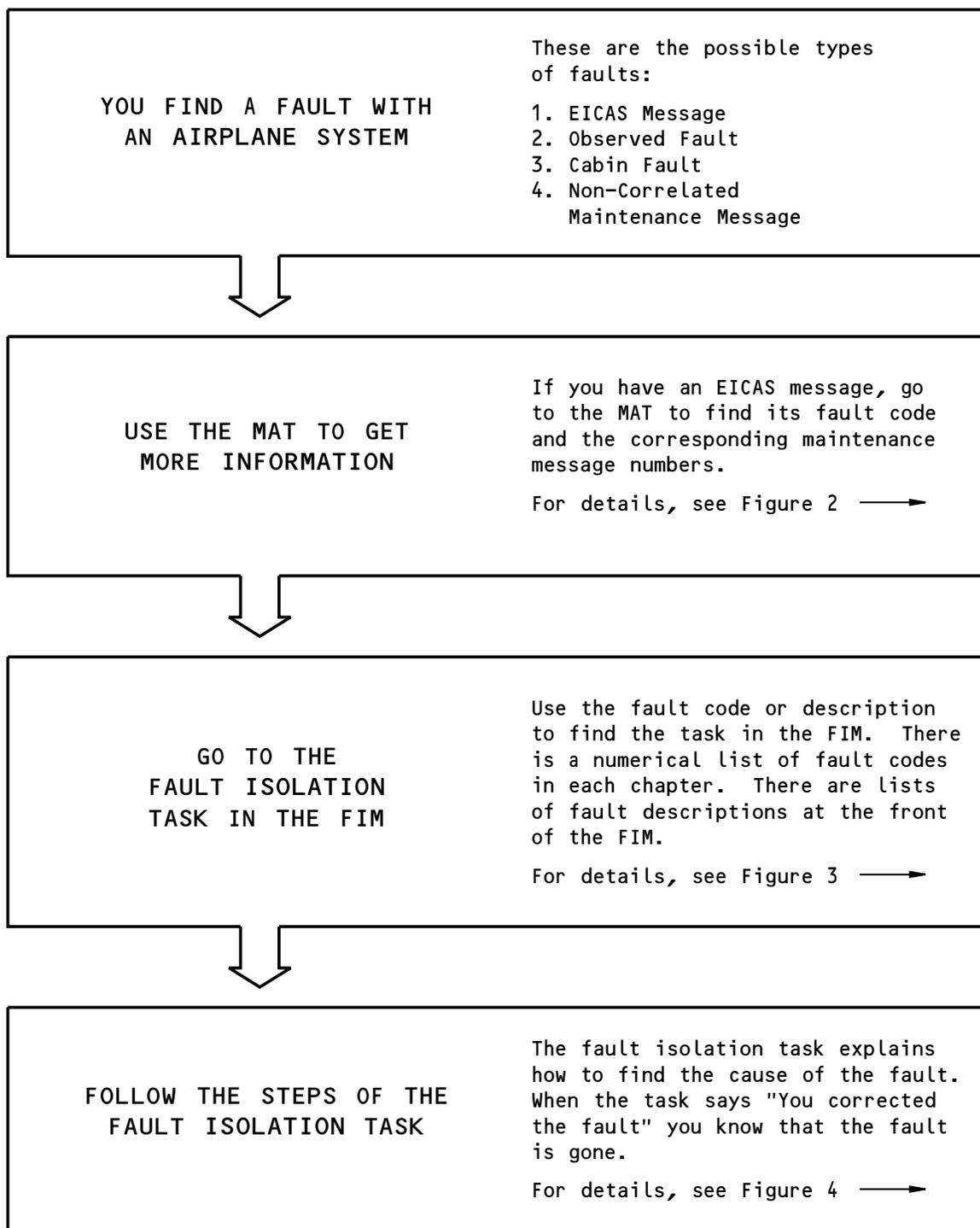
**CHAPTER 35  
OXYGEN**

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A = Added, R = Revised, D = Deleted, O = Overflow, C = Customer Originated Change

## 35-EFFECTIVE PAGES

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E84424 S0000132469\_V1

Basic Fault Isolation Process  
Figure 1

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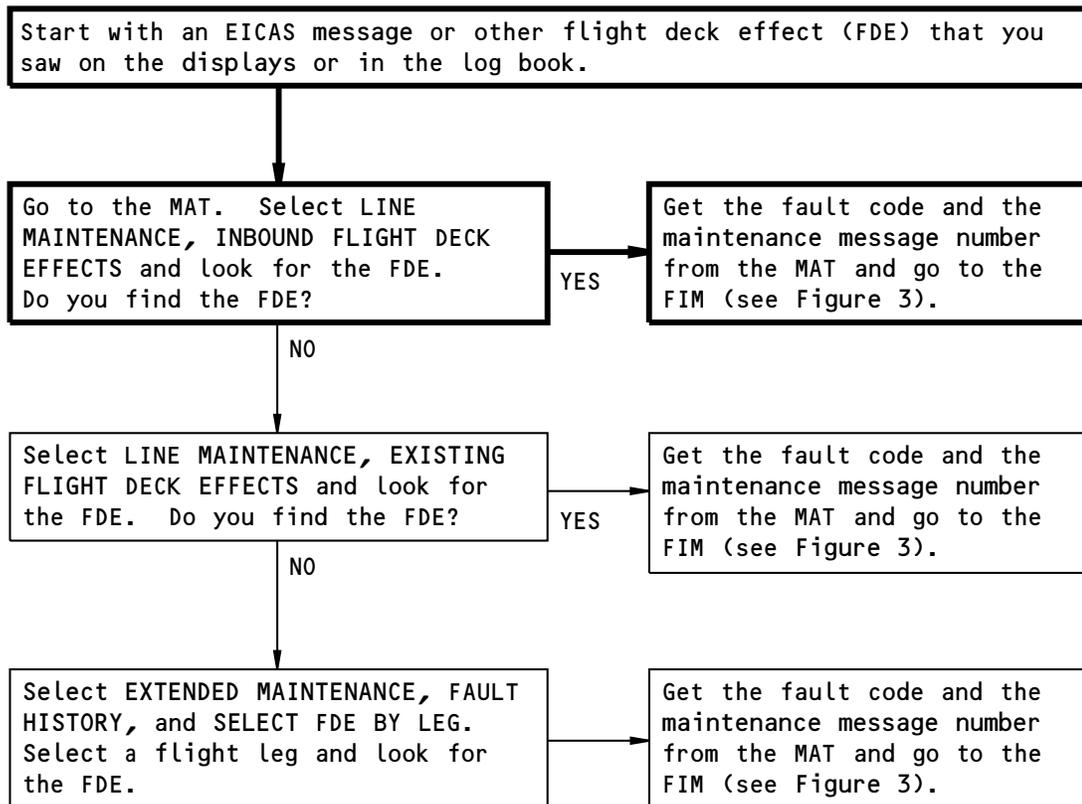
## 35-HOW TO USE THE FIM

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**NOTE:** The bold lines show the most common path.

E84425 S0000132475\_V1

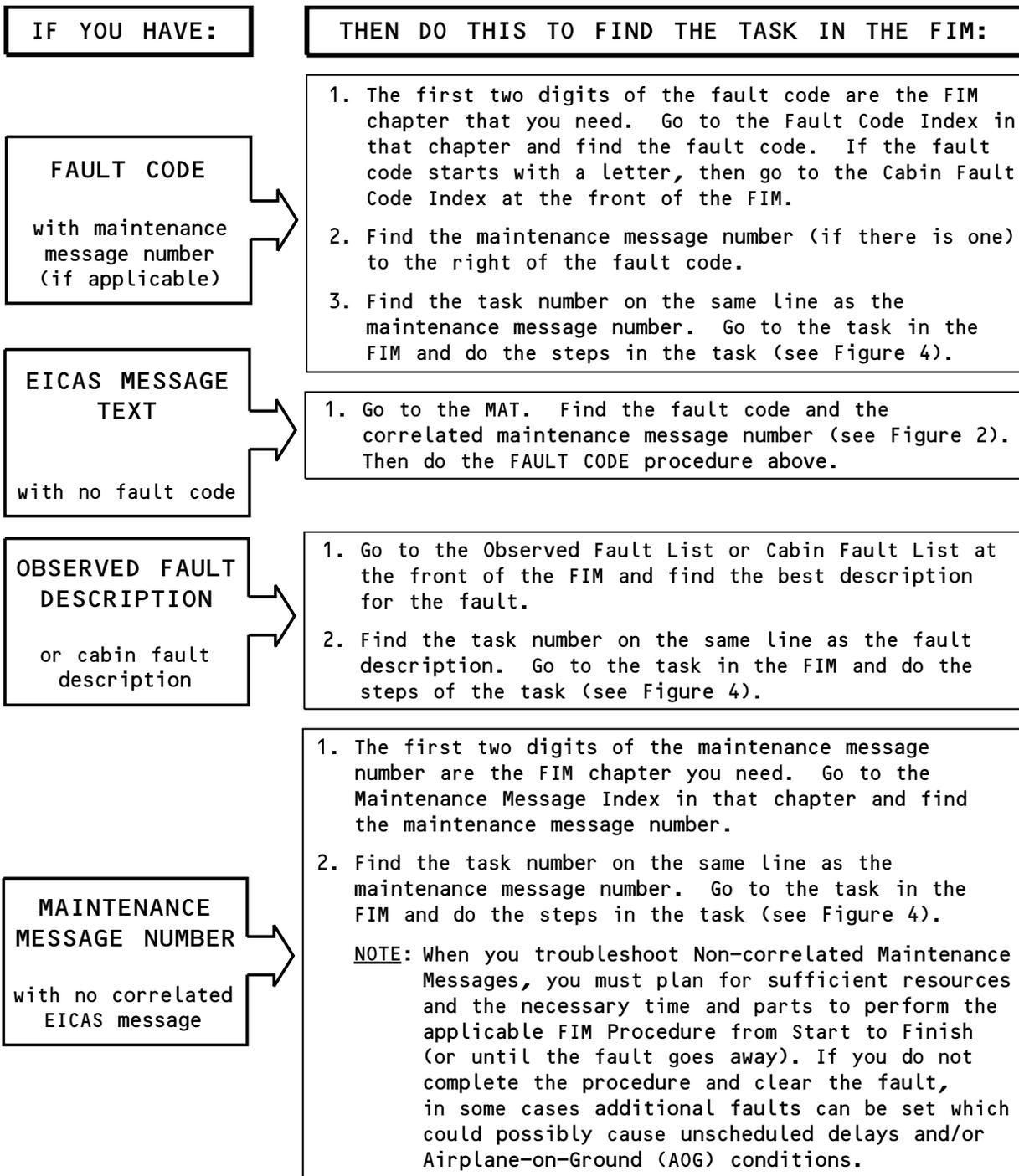
Getting Fault Information from the MAT  
Figure 2

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E84427 S0000132476\_V2

**Finding the Fault Isolation Task in the FIM  
Figure 3**

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## 35-HOW TO USE THE FIM



## 777-200/300 FAULT ISOLATION MANUAL

### ASSUMED CONDITIONS AT START OF TASK

- External electrical power is ON
- Hydraulic power and pneumatic power are OFF
- Engines are shut down
- No equipment in the system is deactivated

### INITIAL EVALUATION PARAGRAPH

- The Initial Evaluation paragraph at the start of the task helps you determine whether you can detect the fault right now.
- If you cannot detect the fault right now, then the task cannot isolate the fault and the Initial Evaluation paragraph will say that there was an intermittent fault.
- If you have an intermittent fault, you must use your judgement (and follow your airline's policy) to decide which components to replace. Then monitor the airplane to see if the fault happens again on subsequent flights.

### FAULT ISOLATION STEPS

- The FIM task steps are presented in a specified order. "The If... then" statements will guide you along a logical path. But if you do not plan to follow the FIM task exactly, make sure that you read it before you start to isolate the fault. Some FIM procedures start with important steps that have an effect on the other steps in the procedure.
- When you are at the endpoint of the path, the step says "You corrected the fault." Complete the step and exit the procedure.
- The Recommended Maintenance Action that shows on the MAT for the maintenance message gives a list of possible causes in order by probability of failure. In the FIM procedure, the possible causes can be in a different order from the MAT.

### WIRING CHECKS

When a step says "Do a wiring check", do these three types of electrical checks for the specified contacts (pins):

- continuity from contact to contact
- shorts between the contacts
- shorts from each contact to ground

E84428 S0000132477\_V3

### Doing the Fault Isolation Task Figure 4

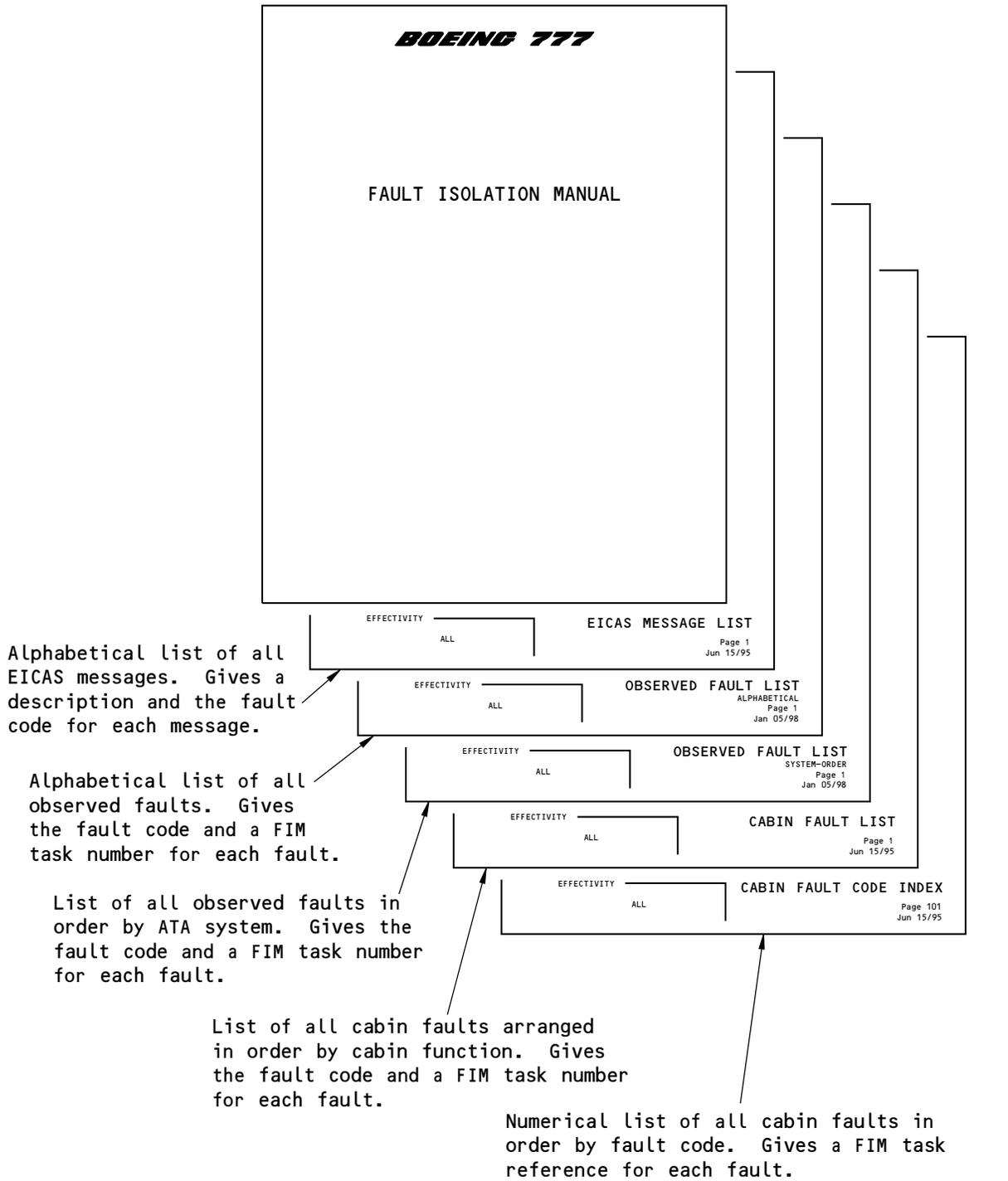
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F39750 S0000132478\_V1

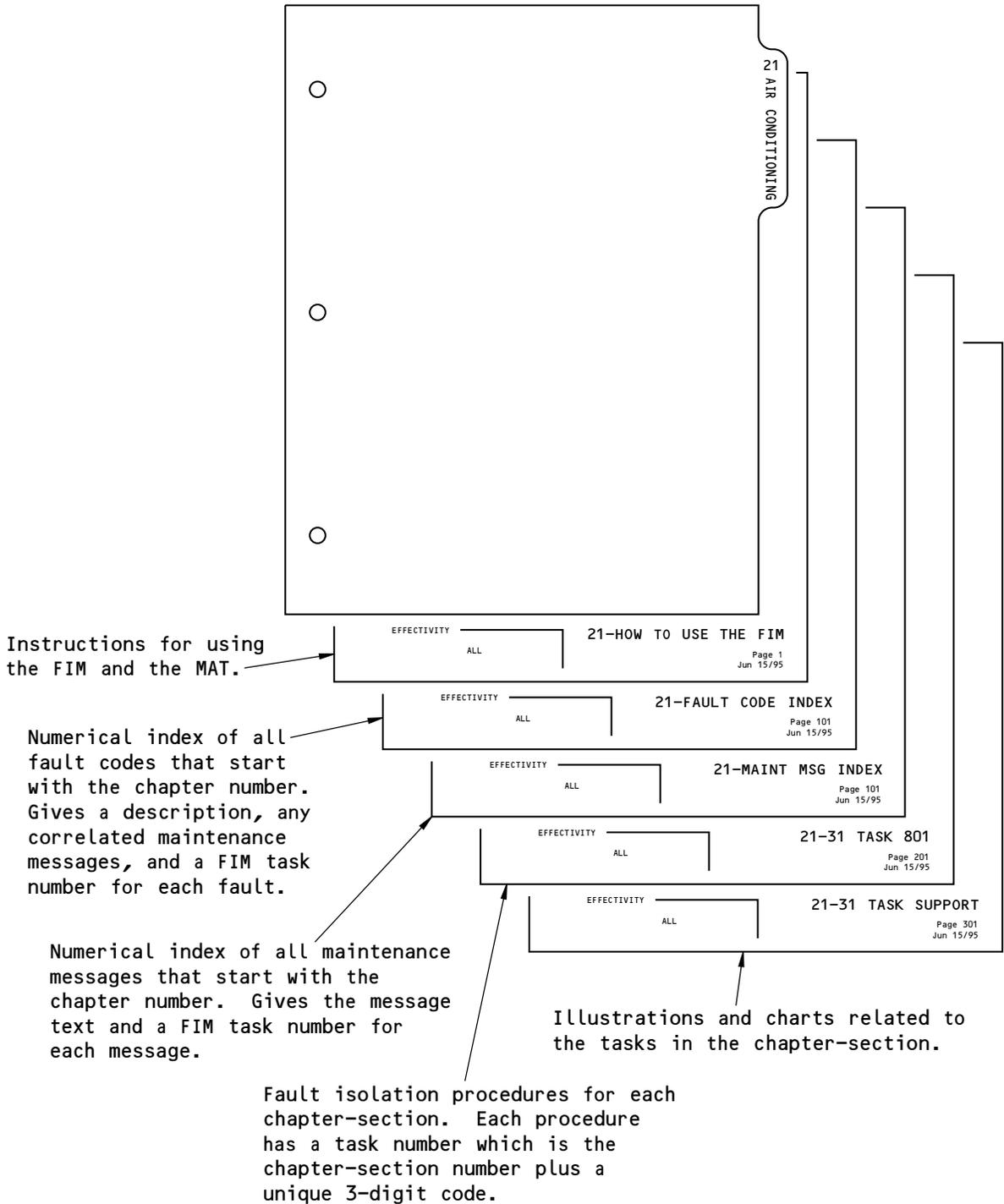
**Subjects at Front of FIM  
Figure 5**

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F39837 S0000132479\_V1

**Subjects in Each FIM Chapter  
Figure 6**

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**35-HOW TO USE THE FIM**

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FAULT CODE	FAULT DESCRIPTION	MAINT MSG	GO TO FIM TASK
351 001 00	CREW OXYGEN LOW (EICAS ADVISORY)		35-11 TASK 802
351 611 31	Oxygen mask problem - captain's.		35-98 TASK 802
351 611 32	Oxygen mask problem - first officer's.		35-98 TASK 802
351 611 33	Oxygen mask problem - first observer's.		35-98 TASK 802
351 611 34	Oxygen mask problem - second observer's.		35-98 TASK 802
351 631 31	Oxygen mask stowage compartment problem - captain's.		35-98 TASK 802
351 631 32	Oxygen mask stowage compartment problem - first officer's.		35-98 TASK 802
351 631 33	Oxygen mask stowage compartment problem - first observer's.		35-98 TASK 802
351 631 34	Oxygen mask stowage compartment problem - second observer's.		35-98 TASK 802
351 651 00	Oxygen CREW PRESS indication on EICAS status page: blank.		35-11 TASK 803
351 652 00	Oxygen CREW PRESS indication on EICAS status page: low.		23-98 TASK 803
352 021 00	PASS OXYGEN ON (EICAS ADVISORY)		35-20 TASK 802
352 811 00	Oxygen mask door in PSU: does not open during test.		35-20 TASK 811
352 812 00	Oxygen mask door in PSU: does not latch.		35-20 TASK 811

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## 35-FAULT CODE INDEX

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<b>MAINT MESSAGE</b>	<b>MESSAGE TEXT</b>	<b>GO TO FIM TASK</b>
35-13013	Relay (CHAN A OXY DEPLOY) in P310 is not in commanded position.	35-20 TASK 816
35-13015	Relay (CHAN B OXY DEPLOY) in P310 is not in commanded position.	35-20 TASK 817
35-17006	Relay (BLEED VLV SOL CNTL) in P210 is not in commanded position.	35-11 TASK 804
35-17008	<b>AIMS-2, CMCF LDI 3114-BCG-00W-16;</b> Circuit Breaker (C PAX OXY) in P310 circuit is open. <b>AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11;</b> <b>AIMS-2, CMCF LDI 3111-BCG-00W-13;</b> <b>AIMS-2, CMCF LDI 3116-BCG-00W-14;</b> <b>AIMS-2, CMCF LDI 3117-BCG-00W-15;</b> Circuit breaker (C PAX OXY) in P310 circuit is open.	35-20 TASK 818
35-17009	<b>AIMS-2, CMCF LDI 3114-BCG-00W-16;</b> Circuit Breaker (L PAX OXY) in P310 circuit is open. <b>AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11;</b> <b>AIMS-2, CMCF LDI 3111-BCG-00W-13;</b> <b>AIMS-2, CMCF LDI 3116-BCG-00W-14;</b> <b>AIMS-2, CMCF LDI 3117-BCG-00W-15;</b> Circuit breaker (L PAX OXY) in P310 circuit is open.	35-20 TASK 819
35-17010	<b>AIMS-2, CMCF LDI 3114-BCG-00W-16;</b> Circuit Breaker (R PAX OXY) in P310 circuit is open. <b>AIMS-1, CPM/Comm OPS S/W 3166-HNP-002-11;</b> <b>AIMS-2, CMCF LDI 3111-BCG-00W-13;</b> <b>AIMS-2, CMCF LDI 3116-BCG-00W-14;</b> <b>AIMS-2, CMCF LDI 3117-BCG-00W-15;</b> Circuit breaker (R PAX OXY) in P310 circuit is open.	35-20 TASK 820

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## 35-MAINT MSG INDEX

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802. EICAS Message CREW PRESS LOW - Fault Isolation

**A. Initial Evaluation**

NOTE: This message shows when the crew oxygen is low.

- (1) Do a check to see if the flight deck oxygen pressure indication agrees with the oxygen pressure indication on the oxygen cylinder pressure gage.
  - (a) If the flight deck oxygen indication does not agree with the oxygen pressure indication on the oxygen cylinder pressure gage, then do the Fault Isolation Procedure below.
  - (b) If the flight deck oxygen indication agrees with the oxygen pressure indication on the oxygen cylinder pressure gage, then continue.
- (2) Do this task: Crew Oxygen Cylinder Servicing - Remote Fill Panel, AMM TASK 12-15-08-610-801
- (3) If the problem continues, do this task: Leak Detection, AMM TASK 35-00-00-790-801.

**B. Fault Isolation Procedure**

- (1) Replace the oxygen pressure transducer, M35477.

These are the tasks:  
Pressure Transducer Removal, AMM TASK 35-11-03-000-801,  
Pressure Transducer Installation, AMM TASK 35-11-03-400-801.

  - (a) If the EICAS message CREW PRESS LOW does not show, then you corrected the fault.

————— **END OF TASK** —————

803. Oxygen CREW PRESS Indication Blank - Fault Isolation

**A. Initial Evaluation**

- (1) Look at the CREW PRESS message on the MFD status page.
  - (a) If the CREW PRESS indication is blank, then do the Fault Isolation Procedure below.
  - (b) If the CREW PRESS message shows a value, then there was an intermittent fault.

**B. Fault Isolation Procedure**

- (1) Look at the Extended Maintenance, Existing Faults display on the MAT.
  - (a) If there are maintenance messages related to the crew oxygen system, then do these steps:
    - 1) Find each message in the applicable FIM Maintenance Message Index.
    - 2) Do the specified fault isolation task.
    - 3) If the CREW PRESS indication shows a value, then you corrected the fault.
  - (b) If there are no maintenance messages related to the crew oxygen system, then continue.
- (2) Do this check of the power supply to the oxygen pressure transducer:
  - (a) Disconnect the connector DM35447 from the oxygen pressure transducer, M35447 (WDM 35-11-11).
  - (b) Do a check for 28 VDC from pin 1 (+) to pin 2 (-) of DM35447 (WDM 35-11-11).
  - (c) If there is not 28 VDC between pins 1 and 2, then do these steps:
    - 1) Do a check for 28 VDC from the load terminal of circuit breaker C35600 to structure ground.
    - 2) If there is 28 VDC at C35600, then do these steps:

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**35-11 TASKS 802-803**

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- a) Repair the wiring between circuit breaker C35600 and connector DM35447 (WDM 35-11-11).
- b) Re-connect DM35447.
- c) If the CREW PRESS indication shows a value, then you corrected the fault.
- 3) If there is not 28 VDC at C35600, then do these steps:
  - a) Replace this circuit breaker:  
(WDM 35-21-11)

**Right Power Management Panel, P210**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
N	4	C35600	OXY PRESS IND

- b) Re-connect DM35477.
- c) If the CREW PRESS indication shows a value, then you corrected the fault.
- (d) If there is 28 VDC between pins 1 and 2, then continue.
- (3) Replace the oxygen pressure transducer, M35477.

These are the tasks:

Pressure Transducer Removal, AMM TASK 35-11-03-000-801,

Pressure Transducer Installation, AMM TASK 35-11-03-400-801.

- (a) If the CREW PRESS indication shows a value, then you corrected the fault.

————— **END OF TASK** —————

**804. Relay (BLEED VLV SOL CTRL) Problems - Fault Isolation**

**A. Maintenance Messages**

- (1) This task is for maintenance message: 35-17006.

**B. Initial Evaluation**

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
  - (a) For the P210 Power Management Panel, do this task: ELMS Power Management Panel - System Test, AMM TASK 24-09-00-730-801.

NOTE: This step resets the ELMS electronics unit. This step makes sure that the operation of the bleed valve is not inhibited if this is not the first time the valve is opened in the present flight cycle.

- (b) Open these circuit breakers and install safety tags:

**Overhead Circuit Breaker Panel, P11**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C28001	L ENGINE FUEL SPAR VALVE
A	19	C28002	R ENGINE FUEL SPAR VALVE

- (c) Set the L or R FUEL CONTROL switch (P10 panel) to the RUN position for a minimum of 6 minutes.
- (d) Set the FUEL CONTROL switch back to the CUTOFF position.

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**35-11 TASKS 803-804**



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- (e) Remove the safety tags and close these circuit breakers:

**Overhead Circuit Breaker Panel, P11**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C28001	L ENGINE FUEL SPAR VALVE
A	19	C28002	R ENGINE FUEL SPAR VALVE

- (f) If the MAT shows ACTIVE or LATCHED for the maintenance message, then do the Fault Isolation Procedure below.
- (g) If the MAT shows NOT ACTIVE (or the message does not show), then there was an intermittent fault.

**C. Fault Isolation Procedure**

- (1) Replace the bleed valve solenoid control relay, K35005, in the P210 panel (WDM 35-11-11).
  - (a) Do the Repair Confirmation procedure at the end of this task.
- (2) Do a check of the signal interface unit 2, M24508, in the P210 panel.  
This is the task:  
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
  - (a) Do the Repair Confirmation procedure at the end of this task.
- (3) Do a check of the internal wiring in the P210 panel, of the bleed valve solenoid control circuit (WDM 35-11-11).
  - (a) If you find a problem with the wiring, then do these steps:
    - 1) Repair the wiring.
    - 2) Do the Repair Confirmation procedure at the end of this task.

**D. Repair Confirmation**

- (1) For the P210 Power Management Panel, do this task: ELMS Power Management Panel - System Test, AMM TASK 24-09-00-730-801.  
NOTE: This step resets the ELMS electronics unit. This step makes sure that the operation of the bleed valve is not inhibited if this is not the first time the valve is opened in the present flight cycle.
- (2) Open these circuit breakers:

**Overhead Circuit Breaker Panel, P11**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C28001	L ENGINE FUEL SPAR VALVE
A	19	C28002	R ENGINE FUEL SPAR VALVE

- (3) Set the L or R FUEL CONTROL switch in the RUN position for a minimum of 6 minutes.
- (4) Set the FUEL CONTROL switch back to the CUTOFF position.
- (5) Close these circuit breakers:

**Overhead Circuit Breaker Panel, P11**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C28001	L ENGINE FUEL SPAR VALVE
A	19	C28002	R ENGINE FUEL SPAR VALVE

- (6) If the maintenance message shows NOT ACTIVE (or the message does not show), then you corrected the fault.

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**35-11 TASK 804**



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- (7) If the MAT shows ACTIVE or LATCHED for the maintenance message, then continue with the subsequent step of this fault isolation procedure.

————— **END OF TASK** —————

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**35-11 TASK 804**

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802. EICAS Message PASS OXYGEN ON - Fault Isolation

A. Initial Evaluation

NOTE: This message shows when you set the PASS OXYGEN switch to the ON position. After approximately 2 minutes the switch will automatically set itself to the off position. No maintenance action is necessary.

————— END OF TASK —————

803. Passenger Oxygen Switch Problem - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 23-43690.

B. Initial Evaluation

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows NOT ACTIVE for the maintenance message (or if the message does not show), then there was an intermittent fault.

C. Fault Isolation Procedure

- (1) Replace the PASS OXYGEN switch, M30001S2 (WDM 35-21-11).
  - (a) Do the Repair Confirmation procedure at the end of this task.
- (2) Replace the left overhead panel card file (OPFC-L) chassis, M23117 at the maintenance panel, P5.

These are the tasks:

Overhead Panel Card File (OPCF) Removal, AMM TASK 23-93-02-000-802,  
Overhead Panel Card File (OPCF) Installation, AMM TASK 23-93-02-400-802.

- (a) Do the Repair Confirmation procedure at the end of this task.
- (3) Do this check of the wiring (WDM 35-21-11):
  - (a) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (b) Disconnect connector DM23117H from the OPCF-L, M23117 (WDM 35-21-11).
- (c) Set the PASS OXYGEN switch, S2, to the ON position.
- (d) Do a continuity check from pin B13 to pin B14 of connector DM23117H.
- (e) Set the PASS OXYGEN switch, S2, back to the off position.
- (f) Do a continuity check from pin B12 to pin B14 of connector DM23117H.
- (g) If there was not continuity between the specified pins, then do these steps:
  - 1) Re-connect connector DM23117H.
  - 2) Do the Repair Confirmation procedure at the end of this task.

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**35-20 TASKS 802-803**



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D. Repair Confirmation

- (1) Open these circuit breakers:

Standby Power Management Panel, P310

Row	Col	Number	Name
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (2) Set the PASS OXYGEN switch to the ON position.
- (3) Set the PASS OXYGEN switch back to the off position.
- (4) Close these circuit breakers:

Standby Power Management Panel, P310

Row	Col	Number	Name
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (5) If the MAT showed NOT ACTIVE for the maintenance message (or if the message does not show) while the switch was in the ON position, you corrected the fault.
- (6) If the maintenance message showed ACTIVE when the switch was in the ON position, then continue with the subsequent step of this fault isolation procedure.

————— END OF TASK —————

811. Passenger Oxygen Box Door Problems - Fault Isolation

A. Fault Isolation Procedure

- (1) If the problem occurred with a center or outboard oxygen box, then replace the applicable oxygen box.

These are the tasks:

Center and Outboard Passenger Service Unit Oxygen Box Removal, AMM  
TASK 35-21-07-000-801,

Center and Outboard Passenger Service Unit Oxygen Box Installation, AMM  
TASK 35-21-07-400-801.

- (2) If the problem occurred with an overdoor panel or lavatory oxygen box, then replace the applicable oxygen box.

These are the tasks:

Overdoor Panel, Lowered Ceiling and Lavatory Oxygen Box Removal, AMM  
TASK 35-21-07-000-802,

Overdoor Panel, Lowered Ceiling and Lavatory Oxygen Box Installation, AMM  
TASK 35-21-07-400-802.

————— END OF TASK —————

816. Relay (CHAN A OXY DEPLOY) Problems - Fault Isolation

A. Maintenance Messages

- (1) This task is for maintenance message: 35-13013.

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35-20 TASKS 803-816



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**B. Initial Evaluation**

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
  - (a) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (b) Set the PASS OXYGEN switch to the ON position.
- (c) Set the PASS OXYGEN switch to the off position.
- (d) Close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (e) Wait approximately 30 seconds.
- (f) If the MAT showed ACTIVE or LATCHED for the maintenance message, while the switch was in the ON position, then do the Fault Isolation Procedure below.
- (g) If the MAT showed NOT ACTIVE for the maintenance message (or if the message did not show) while the switch was in the ON position, then there was an intermittent fault.

**C. Fault Isolation Procedure**

- (1) Replace the channel A oxygen deploy relay, K35001, in the P310 panel (WDM 35-21-11).
  - (a) Do the Repair Confirmation procedure at the end of this task.
- (2) Do a check of the Signal Interface Unit 2, M24513, in the P310 panel.  
This is the task:  
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
  - (a) Do the Repair Confirmation procedure at the end of this task.
- (3) Do a check of the internal wiring in the P310 panel, of the CHAN A OXY DEPLOY relay circuit (WDM 35-21-11).
  - (a) If you find a problem with the wiring, then do these steps:
    - 1) Repair the wiring.
    - 2) Do the Repair Confirmation procedure at the end of this task.

**D. Repair Confirmation**

- (1) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY

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**35-20 TASK 816**



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(Continued)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (2) Set the PASS OXYGEN switch to the ON position.
- (3) Set the PASS OXYGEN switch back to the off position.
- (4) Close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (5) If the MAT showed NOT ACTIVE for the maintenance message (or if the message did not show) while the switch was in the ON position, you corrected the fault.
- (6) If the maintenance message showed ACTIVE when the switch was in the ON position, then continue with the subsequent step of this fault isolation procedure.

————— **END OF TASK** —————

**817. Relay (CHAN B OXY DEPLOY) Problems - Fault Isolation**

**A. Maintenance Messages**

- (1) This task is for maintenance message: 35-13015.

**B. Initial Evaluation**

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
  - (a) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (b) Set the PASS OXYGEN switch to the ON position.
- (c) Set the PASS OXYGEN switch to the off position.
- (d) Close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (e) Wait approximately 30 seconds.

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- (f) If the MAT showed ACTIVE or LATCHED for the maintenance message, while the switch was in the ON position, then do the Fault Isolation Procedure below.
- (g) If the MAT showed NOT ACTIVE for the maintenance message (or if the message did not show) while the switch was in the ON position, then there was an intermittent fault.

**C. Fault Isolation Procedure**

- (1) Replace the channel B oxygen deploy relay, K35003, in the P310 panel (WDM 35-21-11).
  - (a) Do the Repair Confirmation procedure at the end of this task.
- (2) Do a check of the Signal Interface Unit 2, M24513, in the P310 panel.  
This is the task:  
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
  - (a) Do the Repair Confirmation procedure at the end of this task.
- (3) Do a check of the internal wiring in the P310 panel, of the CHAN B OXY DEPLOY relay circuit (WDM 35-21-11).
  - (a) If you find a problem with the wiring, then do these steps:
    - 1) Repair the wiring.
    - 2) Do the Repair Confirmation procedure at the end of this task.

**D. Repair Confirmation**

- (1) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (2) Set the PASS OXYGEN switch to the ON position.
- (3) Set the PASS OXYGEN switch back to the off position.
- (4) Close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (5) If the MAT showed NOT ACTIVE for the maintenance message (or if the message did not show) while the switch was in the ON position, you corrected the fault.
- (6) If the maintenance message showed ACTIVE when the switch was in the ON position, then continue with the subsequent step of this fault isolation procedure.

————— **END OF TASK** —————

**818. Circuit Breaker (C PASS OXY) Open - Fault Isolation**

**A. Maintenance Messages**

- (1) This task is for maintenance message: 35-17008.

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**35-20 TASKS 817-818**



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**B. Initial Evaluation**

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
  - (a) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (b) Set the PASS OXYGEN switch to the ON position.
- (c) Set the PASS OXYGEN switch back to the off position.
- (d) Wait at least 20 seconds before closing circuit breakers.

NOTE: Mask door latches are energized for at least 15 seconds. Closing circuit breakers too soon after repositioning PASS OXYGEN switch can cause unplanned mask deployment.

- (e) Close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (f) Wait approximately 30 seconds.
- (g) If the MAT showed ACTIVE or LATCHED for the maintenance message while the switch was in the ON position, then do the Fault Isolation Procedure below.
- (h) If the MAT showed NOT ACTIVE for the maintenance message (or if the message did not show) while the switch was in the ON position, then there was an intermittent fault.

**C. Fault Isolation Procedure**

- (1) Do a check for 115 VAC from pin 2 of circuit breaker C35405 to structure ground (WDM 35-21-11).
  - (a) If there is not 115 VAC at pin 2 of circuit breaker C35405, then do these steps:
    - 1) Replace this circuit breaker:

(WDM 35-21-11)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	4	C35405	C PAX OXY

- 2) Do the Repair Confirmation procedure at the end of this task.

- (b) If there is 115 VAC at pin 2 of circuit breaker C35405, then continue.
- (2) Do a check for 28 VDC from pin 2 of circuit breaker C35607 to structure ground (WDM 35-21-11).
  - (a) If there is not 28 VDC at pin 2 of circuit breaker C35607, then do these steps:

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- 1) Replace this circuit breaker:  
(WDM 35-21-11)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	4	C35607	CHAN B OXY DEPLOY

- 2) Do the Repair Confirmation procedure at the end of this task.
- (b) If there is 28 VDC at pin 2 of the circuit breaker C35607, then continue.
- (3) Do a check for 28 VDC from pin 2 of circuit breaker C35606 to structure ground (WDM 35-21-11).
  - (a) If there is not 28 VDC at pin 2 of circuit breaker C35606, then do these steps:
    - 1) Replace this circuit breaker:  
(WDM 35-21-11)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	3	C35606	CHAN A OXY DEPLOY

- 2) Do the Repair Confirmation procedure at the end of this task.
- (b) If there is 28 VDC at pin 2 of the circuit breaker, C35606, then continue.
- (4) Do a check of the Signal Interface Unit 2, M24513, in the P310 panel.  
This is the task:  
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
  - (a) Do the Repair Confirmation procedure at the end of this task.
- (5) Do a check of the internal wiring in the P310 panel, of the C PASS OXY relay circuit, (WDM 35-21-11).
  - (a) If you find a problem with the wiring, do these steps:
    - 1) Repair the wiring.
    - 2) Do the Repair Confirmation procedure at the end of this task.

**D. Repair Confirmation**

- (1) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (2) Set the PASS OXYGEN switch to the ON position.
- (3) Set the PASS OXYGEN switch back to the off position.
- (4) Close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY

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**35-20 TASK 818**

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(Continued)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (5) If the MAT showed NOT ACTIVE for the maintenance message (or if the message did not show) while the switch was in the ON position, then you corrected the fault.
- (6) If the maintenance message showed ACTIVE while the switch was in the ON position, then continue with the subsequent step of this fault isolation procedure.

————— **END OF TASK** —————

**819. Circuit Breaker (L PAX OXY) Open - Fault Isolation**

**A. Maintenance Messages**

- (1) This task is for maintenance message: 35-17009.

**B. Initial Evaluation**

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.
- (2) If the MAT shows LATCHED for the maintenance message, then do these steps:
  - (a) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (b) Set the PASS OXYGEN switch to the ON position.
- (c) Set the PASS OXYGEN switch back to the off position.
- (d) Close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (e) Wait approximately 30 seconds.
- (f) If the MAT showed ACTIVE or LATCHED for the maintenance message while the switch was in the ON position, then do the Fault Isolation Procedure below.
- (g) If the MAT showed NOT ACTIVE for the maintenance message (or if the message did not show) while the switch was in the ON position, then there was an intermittent fault.

**C. Fault Isolation Procedure**

- (1) Do a check for 115 VAC from pin 2 of circuit breaker C35403 to structure ground (WDM 35-21-11).
  - (a) If you there is not 115 VAC at pin 2 of circuit breaker C35403, then do these steps:

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- 1) Replace this circuit breaker:  
(WDM 35-21-11)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY

- 2) Do the Repair Confirmation procedure at the end of this task.
  - (b) If there is 115 VAC at pin 2 of circuit breaker C35403, then continue.
- (2) Do a check for 28 VDC from pin 2 of circuit breaker C35606 to structure ground (WDM 35-21-11).
  - (a) If there is not 28 VDC at pin 2 of circuit breaker C35606, then do these steps:
    - 1) Replace this circuit breaker:  
(WDM 35-21-11)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	3	C35606	CHAN A OXY DEPLOY

- 2) Do the Repair Confirmation procedure at the end of this task.
  - (b) If there is 28 VDC at pin 2 of circuit breaker C35606, then continue.
- (3) Do a check for 28 VDC from pin 2 of circuit breaker C35607 to structure ground (WDM 35-21-11).
  - (a) If you there is not 28 VDC at pin 2 of circuit breaker C35607, then do these steps:
    - 1) Replace this circuit breaker:  
(WDM 35-21-11)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	4	C35607	CHAN B OXY DEPLOY

- 2) Do the Repair Confirmation procedure at the end of this task.
  - (b) If there is 28 VDC at pin 2 of circuit breaker C35607, then continue.
- (4) Do a check of the Signal Interface Unit 2, M24513, in the P310 panel.  
This is the task:  
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
  - (a) Do the Repair Confirmation procedure at the end of this task.
- (5) Do a check of the internal wiring in the P310 panel, of the L PASS OXY relay circuit, (WDM 35-21-11).
  - (a) If you find a problem with the wiring, then do these steps:
    - 1) Repair the wiring.
    - 2) Do the Repair Confirmation procedure at the end of this task.

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**35-20 TASK 819**



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**D. Repair Confirmation**

- (1) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (2) Set the PASS OXYGEN switch to the ON position.  
 (3) Set the PASS OXYGEN switch back to the off position.  
 (4) Remove the safety tags and close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (5) If the MAT showed NOT ACTIVE for the maintenance message (or if the message did not show) while the switch was in the ON position, you corrected the fault.  
 (6) If the maintenance message showed ACTIVE when the switch was in the ON position, then continue with the subsequent step of this fault isolation procedure.

————— **END OF TASK** —————

**820. Circuit Breaker (R PASS OXY) Open - Fault Isolation**

**A. Maintenance Messages**

- (1) This task is for maintenance message: 35-17010.

**B. Initial Evaluation**

- (1) If the MAT shows ACTIVE for the maintenance message, then do the Fault Isolation Procedure below.  
 (2) If the MAT shows LATCHED for the maintenance message, then do these steps:  
 (a) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (b) Set the PASS OXYGEN switch to the ON position.  
 (c) Set the PASS OXYGEN switch back to the off position.  
 (d) Close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY

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**35-20 TASKS 819-820**



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FAULT ISOLATION MANUAL**

(Continued)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C35404	R PAX OXY

- (e) Wait approximately 30 seconds.
- (f) If the MAT showed ACTIVE or LATCHED for the maintenance message while the switch was in the ON position, then do the Fault Isolation Procedure below.
- (g) If the MAT showed NOT ACTIVE for the maintenance message (or if the message does not show) while the switch was in the ON position, then there was an intermittent fault.

**C. Fault Isolation Procedure**

(1) Do a check for 115 VAC from pin 2 of circuit breaker C35404 to structure ground (WDM 35-21-11).

(a) If there is not 115 VAC at pin 2 of circuit breaker C35404, then do these steps:

1) Replace this circuit breaker:

(WDM 35-21-11)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	5	C35404	R PAX OXY

2) Do the Repair Confirmation procedure at the end of this task.

(b) If there is 115 VAC at pin 2 of circuit breaker C35404, then continue.

(2) Do a check for 28 VDC from pin 2 of circuit breaker C35607 to structure ground (WDM 35-21-11).

(a) Make sure there is 28 VDC at pin 2 of circuit breaker C35607 to structural ground.

(b) If you there is not 28 VDC at pin 2 of circuit breaker C35607, then do these step:

1) Replace this circuit breaker:

(WDM 35-21-11)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	4	C35607	CHAN B OXY DEPLOY

2) Do the Repair Confirmation procedure at the end of this task.

(c) If there is 28 VDC at pin 2 of circuit breaker C35607, then continue.

(3) Do a check for 28 VDC from pin 2 of circuit breaker C35606 to structure ground (WDM 35-21-11).

(a) If there is not 28 VDC at pin 2 of circuit breaker C35606, then do these steps:

1) Replace this circuit breaker:

(WDM 35-21-11)

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
H	3	C35606	CHAN A OXY DEPLOY

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- 2) Do the Repair Confirmation procedure at the end of this task.
- (b) If there is 28 VDC at pin 2 of circuit breaker C35606, then continue.
- (4) Do a check of the Signal Interface Unit 2, M24513, in the P310 panel.  
This is the task:  
Signal Interface Unit - Exchange Check, AMM TASK 24-09-00-700-801-002.
- (a) Do the Repair Confirmation procedure at the end of this task.
- (5) Do a check of the internal wiring in the P310 panel, of the R PASS OXY relay circuit, (WDM 35-21-11).
- (a) If you find a problem with the wiring, then do these steps:
  - 1) Repair the wiring.
  - 2) Do the Repair Confirmation procedure at the end of this task.

**D. Repair Confirmation**

- (1) Open these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	5	C35404	R PAX OXY

- (2) Set the PASS OXYGEN switch to the ON position.
- (3) Set the PASS OXYGEN switch back to the off position.
- (4) Close these circuit breakers:

**Standby Power Management Panel, P310**

<u>Row</u>	<u>Col</u>	<u>Number</u>	<u>Name</u>
A	3	C35403	L PAX OXY
A	4	C35405	C PAX OXY
A	5	C35404	R PAX OXY

- (5) If the MAT showed NOT ACTIVE for the maintenance message (or if the message did not show) while the switch was in the ON position, you corrected the fault.
- (6) If the maintenance message showed ACTIVE when the switch was in the ON position, then continue with the subsequent step of this fault isolation procedure.

————— END OF TASK —————

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801. Procedure To Be Determined - Fault Isolation

A. **Fault Isolation Procedure**

- (1) At this time the FIM does not have a procedure for this fault. The FIM will contain a procedure for this fault in the future.

————— END OF TASK —————

802. Procedure by Airline Method - Fault Isolation

A. **Initial Evaluation**

NOTE: Use the standard method of your airline to correct this fault.

————— END OF TASK —————

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