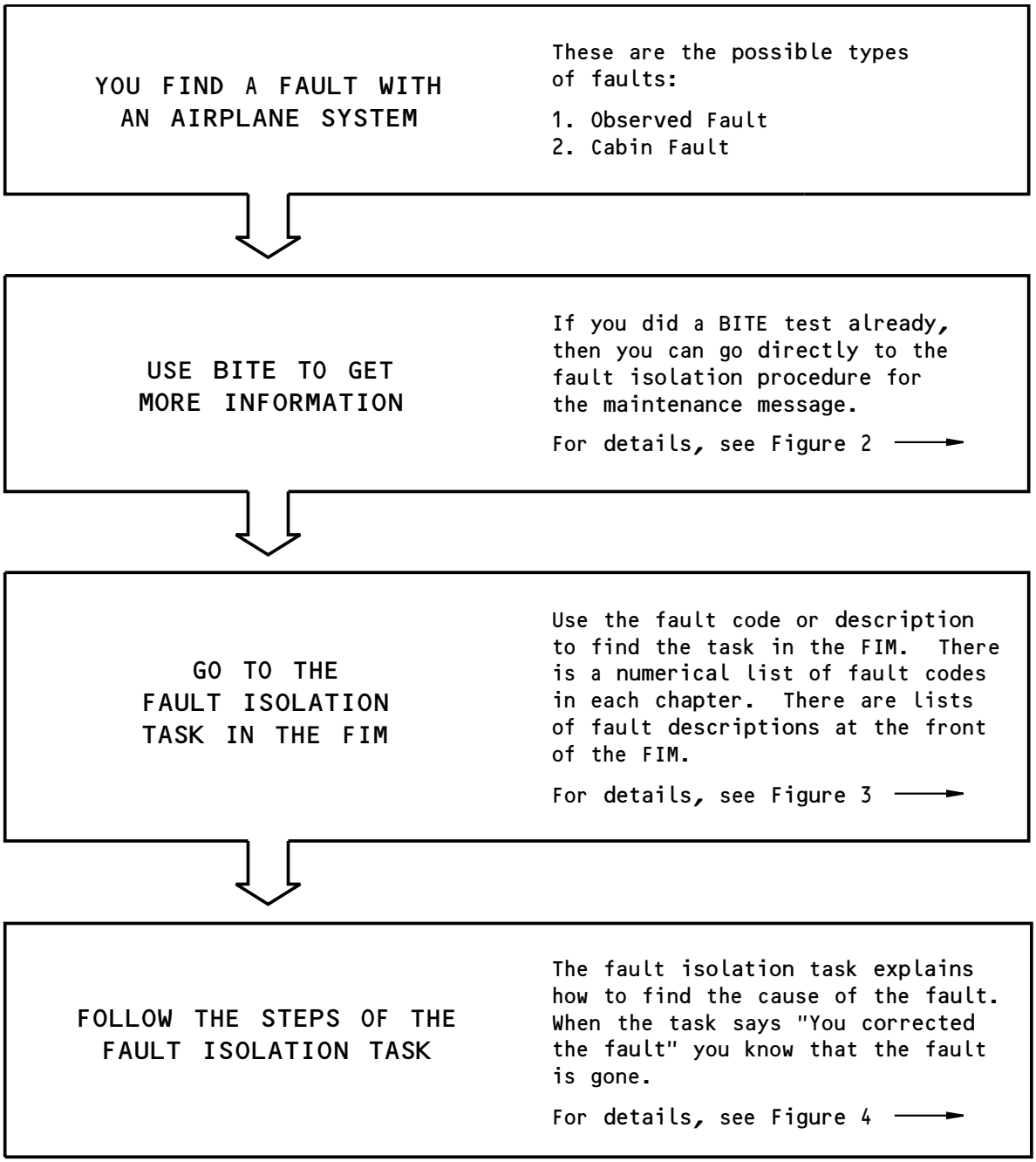
CHAPTER 35

OXYGEN

CHAPTER 35
OXYGEN

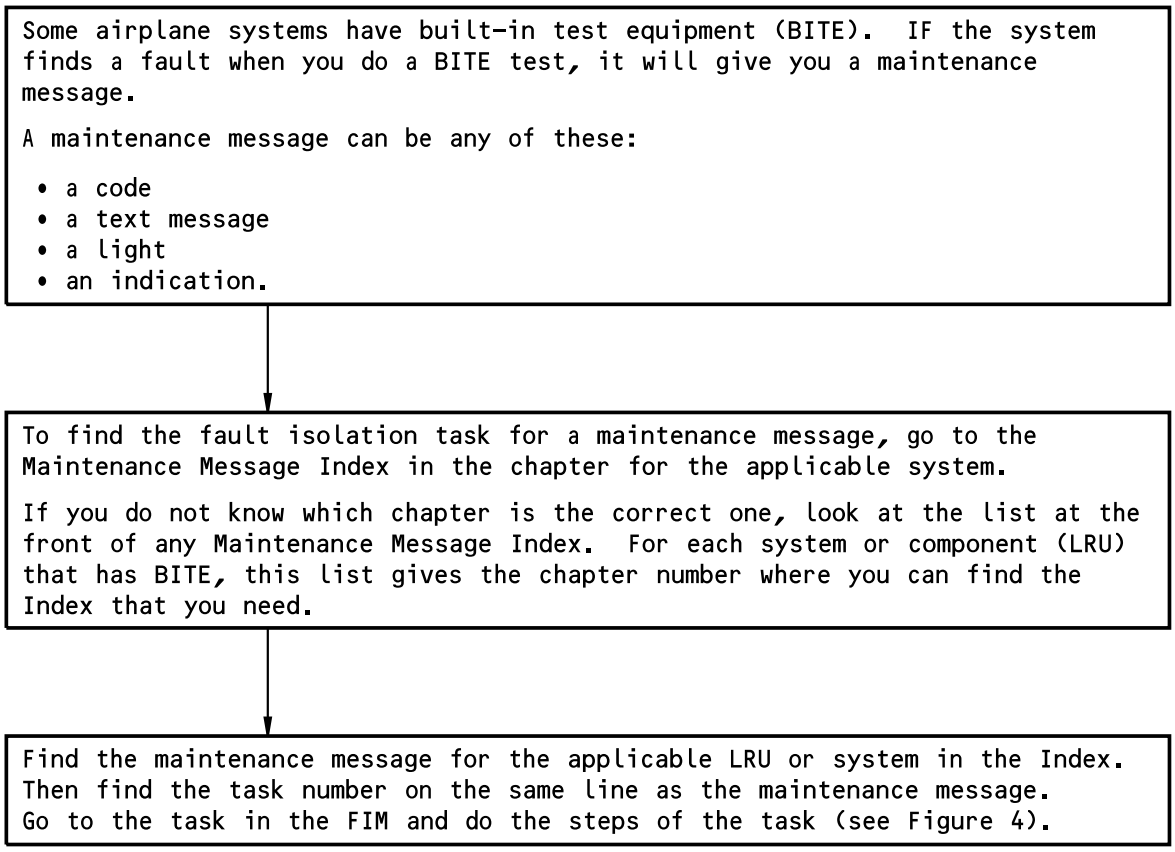
A = Added, R = Revised, D = Deleted, O = Overflow, C = Customer Originated Change

35-EFFECTIVE PAGES



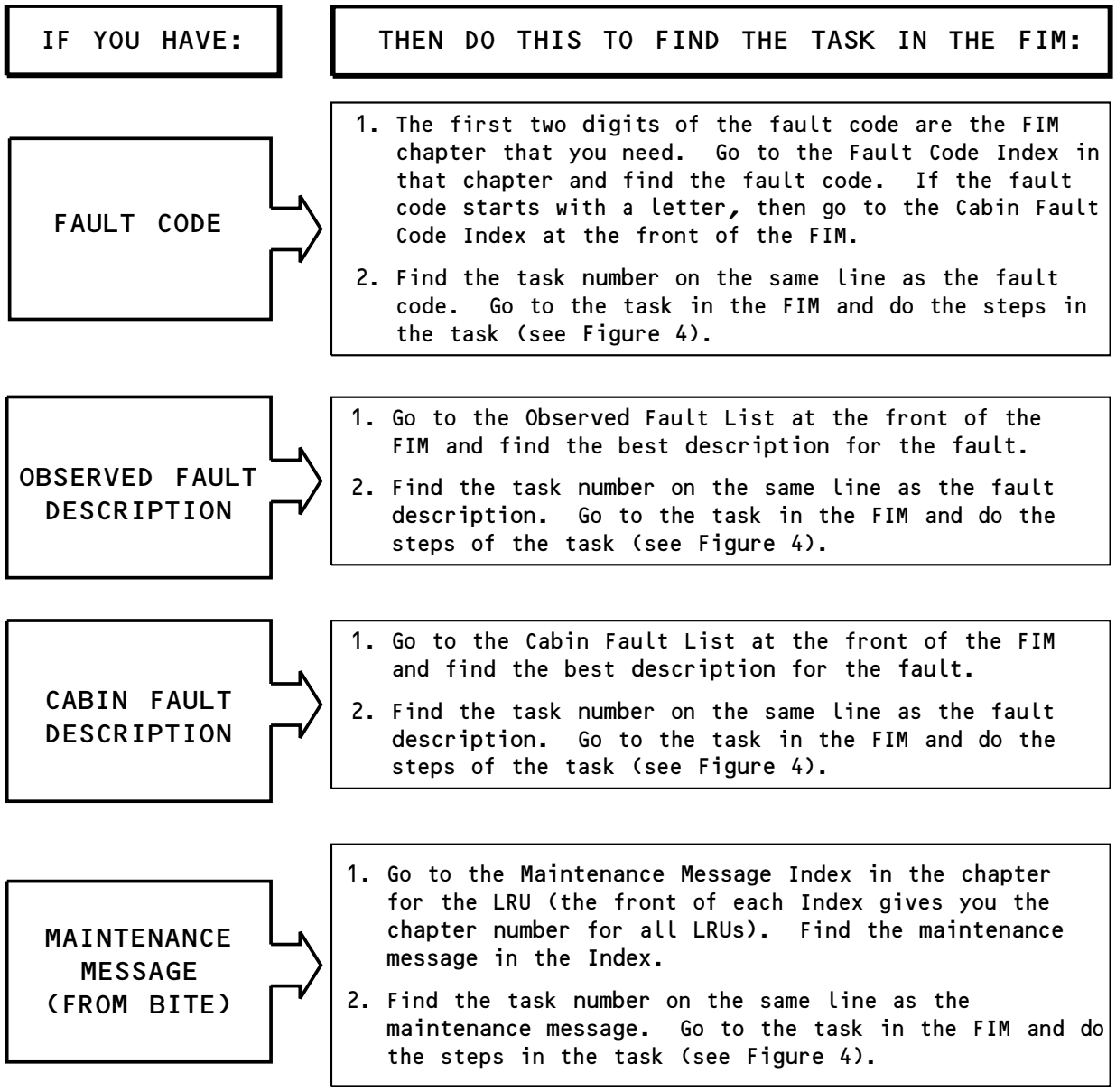
G04902 S0000148576_V1

Basic Fault Isolation Process
Figure 1



G04950 S0000148578_V1

Getting Fault Information from BITE
Figure 2



G04979 S0000148579_V2

Finding the Fault Isolation Task in the FIM
Figure 3

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

POSSIBLE CAUSES

- The list of possible causes has the most likely cause first and the least likely cause last.
- You can use the maintenance records of your airline to determine if the fault occurred before. Compare the list of possible causes to the past maintenance actions. This will help prevent repetition of the same maintenance actions.

INITIAL EVALUATION PARAGRAPH

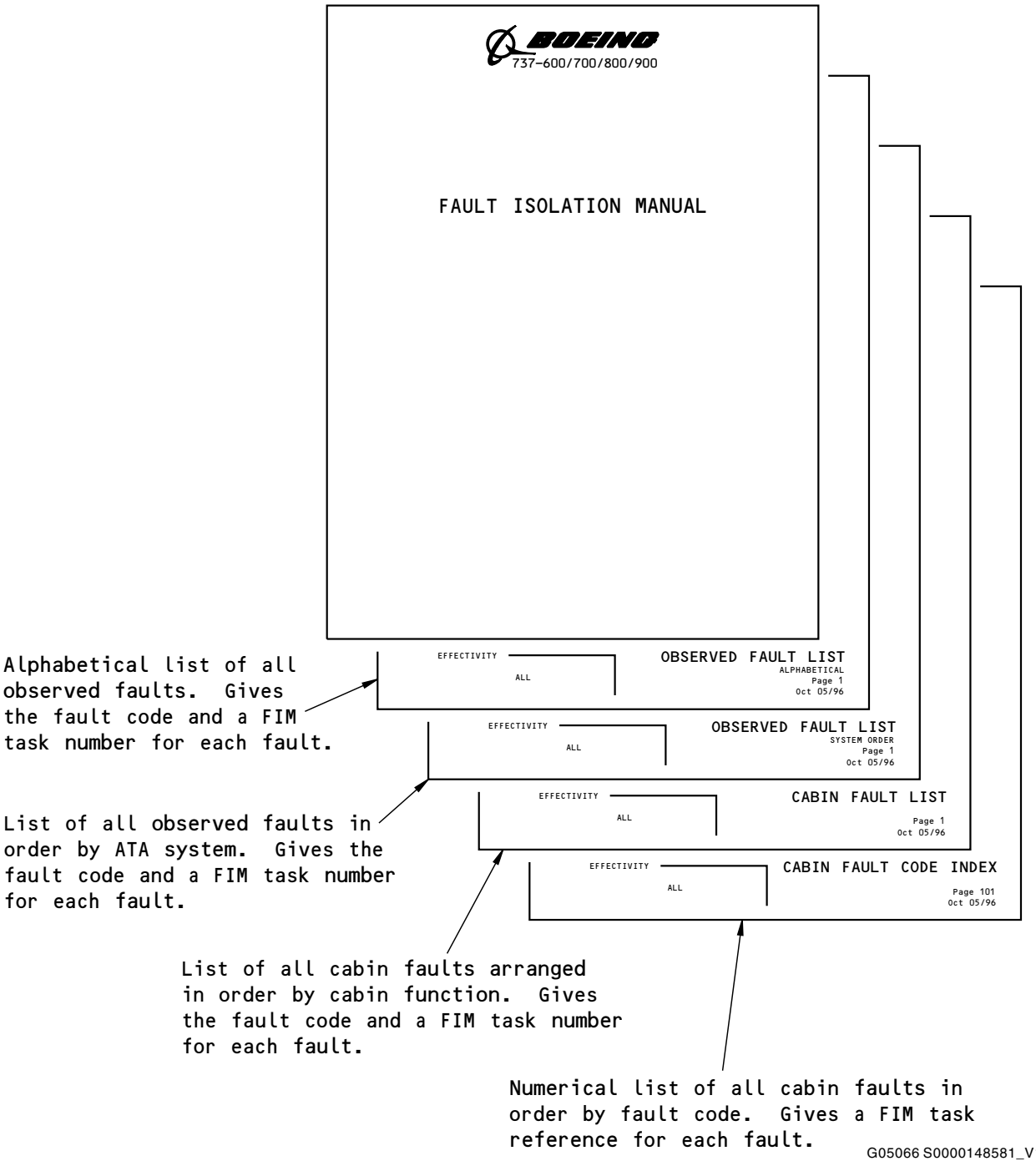
- The primary purpose of the Initial Evaluation paragraph at the start of the task is to help you find out if you can detect the fault right now:
  - If you cannot detect the fault right now, then the task cannot isolate the fault and the Initial Evaluation paragraph will say that there was an intermittent fault.
  - If you have an intermittent fault, you must use your judgement (and follow your airline's policy) to decide which maintenance action to take. Then monitor the airplane to see if the fault happens again on subsequent flights.
- The Initial Evaluation paragraph can also help you find out which Fault Isolation Procedure to use to isolate and correct the fault.

FAULT ISOLATION STEPS

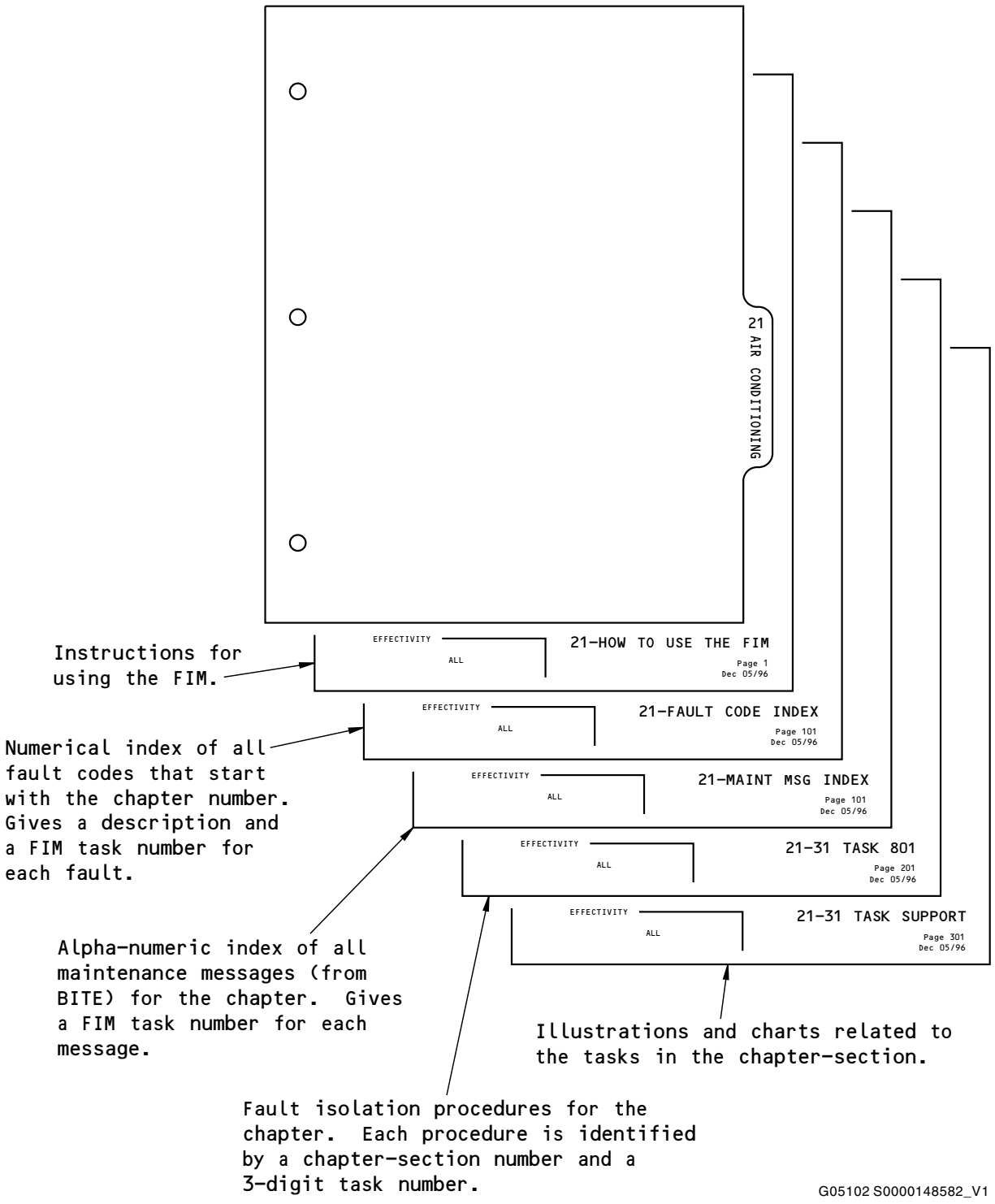
- The FIM task steps are presented in a specified order. The "If... then" statements will guide you along a logical path. But if you do not plan to follow the FIM task exactly, make sure that you read it before you start to isolate the fault. Some FIM procedures start with important steps that have an 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.

G05009 S0000148580_V3

Doing the Fault Isolation Task
Figure 4



Subjects at Front of FIM
Figure 5



Subjects in Each FIM Chapter
Figure 6

FAULT CODE	FAULT DESCRIPTION	GO TO FIM TASK
351 010 00	Crew oxygen pressure indicator: does not agree with bottle pressure.	35-12 TASK 801
351 020 00	Crew oxygen pressure indicator: pressure decreases.	35-12 TASK 802
351 030 00	Crew oxygen pressure indicator: pressure low.	35-12 TASK 803
351 040 00	Crew oxygen pressure indicator: Pressure zero.	35-12 TASK 804
351 050 31	Oxygen mask, flight crew: damaged - captain's.	35-12 TASK 805
351 050 32	Oxygen mask, flight crew: damaged - first officer's.	35-12 TASK 805
351 050 33	Oxygen mask, flight crew: damaged - observer's.	35-12 TASK 805
351 060 31	Oxygen mask, flight crew: difficult to release from stowage - captain's.	35-12 TASK 806
351 060 32	Oxygen mask, flight crew: difficult to release from stowage - first officer's.	35-12 TASK 806
351 060 33	Oxygen mask, flight crew: difficult to release from stowage - first observer's.	35-12 TASK 806
351 070 31	Oxygen mask, flight crew: harness fails to deflate - captain's.	35-12 TASK 805
351 070 32	Oxygen mask, flight crew: harness fails to deflate - first officer's.	35-12 TASK 805
351 070 33	Oxygen mask, flight crew: harness fails to deflate - first observer's.	35-12 TASK 805
351 080 31	Oxygen mask, flight crew: harness fails to inflate - captain's.	35-12 TASK 805
351 080 32	Oxygen mask, flight crew: harness fails to inflate - first officer's.	35-12 TASK 805
351 080 33	Oxygen mask, flight crew: harness fails to inflate - first observer's.	35-12 TASK 805
351 090 31	Oxygen mask, flight crew: harness leaking - captain's.	35-12 TASK 805
351 090 32	Oxygen mask, flight crew: harness leaking - first officer's.	35-12 TASK 805
351 090 33	Oxygen mask, flight crew: harness leaking - first observer's.	35-12 TASK 805
351 100 31	Oxygen mask, flight crew: hose problem - captain's.	35-12 TASK 805
351 100 32	Oxygen mask, flight crew: hose problem - first officer's.	35-12 TASK 805
351 100 33	Oxygen mask, flight crew: hose problem - observer's.	35-12 TASK 805
351 110 31	Oxygen mask, flight crew: panel (door, pin, etc.) damaged - captain's.	35-12 TASK 807
351 110 32	Oxygen mask, flight crew: panel (door, pin, etc.) damaged - first officer's.	35-12 TASK 807
351 110 33	Oxygen mask, flight crew: panel (door, pin, etc.) damaged - observer's.	35-12 TASK 807
351 120 31	Oxygen regulator operation: Difficult to exhale - captain's.	35-12 TASK 805
351 120 32	Oxygen regulator operation: Difficult to exhale - first officer's.	35-12 TASK 805
351 120 33	Oxygen regulator operation: Difficult to exhale - first observer's.	35-12 TASK 805
351 130 31	Oxygen regulator operation: leaking - captain's.	35-12 TASK 805

FAULT CODE	FAULT DESCRIPTION	GO TO FIM TASK
351 130 32	Oxygen regulator operation: leaking - first officer's.	35-12 TASK 805
351 130 33	Oxygen regulator operation: leaking - first observer's.	35-12 TASK 805
351 140 31	Oxygen regulator operation: no pressure breathing available - captain's.	35-12 TASK 805
351 140 32	Oxygen regulator operation: no pressure breathing available - first officer's.	35-12 TASK 805
351 140 33	Oxygen regulator operation: no pressure breathing available - first observer's.	35-12 TASK 805
352 010 00	PASS OXY ON light: light on, all masks dropped automatically, switch was not moved, cabin pressure was normal.	35-22 TASK 801
352 020 00	PASS OXY ON light: light on, all masks failed to drop automatically, masks dropped after PASS OXY switch was moved.	35-22 TASK 802
352 030 00	Oxygen masks, passenger: Masks (all) do not drop when PASS OXYGEN switch manually set to ON.	35-22 TASK 803
352 040 00	PASS OXY ON light: light does not come on during manual oxygen system deployment.	35-22 TASK 805
352 050 00	PASS OXY ON light: light does not come on during automatic oxygen system deployment.	35-22 TASK 806
353 010 00	Crew portable oxygen: damaged.	35-99 TASK 801
353 020 00	Crew portable oxygen: pressure low.	35-99 TASK 801
353 030 00	Crew portable oxygen: was used.	35-99 TASK 801

801. Crew Oxygen Pressure Indicator Does Not Agree With Bottle Pressure Indication - Fault Isolation

A. Description

(1) The difference between the Crew Oxygen Pressure Gage and the Pressure Gage on the Crew Oxygen Cylinder is more than 100 psi (689 kPa).

(2) (SDS SUBJECT 35-10-00)

B. Possible Causes

(1) Shutoff Valve (SOV) on the Oxygen Cylinder is closed

(2) Crew Oxygen Pressure Transducer, T404

(3) Crew Oxygen Pressure Indication Gage, N20

(4) Crew Oxygen Cylinder Pressure Gage

(5) Wiring

C. Circuit Breakers

(1) This is the primary circuit breaker related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND

D. Related Data

(1) SSM 35-11-11

(2) WDM 35-11-11

E. Initial Evaluation

(1) Make sure that the SOV on the Crew Oxygen Cylinder is in the open position.

(2) Do this task: Crew Oxygen Pressure Indication Operational Test, AMM TASK 35-12-00-710-801.

(a) Compare the Crew Oxygen Pressure Gage in the Flight Compartment with the Pressure Gage on the Crew Oxygen Cylinder.

1) If the difference between the two Pressure Gages is less than 100 psi (689 kPa), then there was an intermittent fault.

2) If the difference between the two Pressure Gages is more than 100 psi (689 kPa), then do the Fault Isolation Procedure below.

F. Fault Isolation Procedure

(1) Do this check for power at the Pressure Transducer, T404 (WDM 35-11-11):

(a) Disconnect connector D438 from the Crew Oxygen Pressure Transducer, T404.

NOTE: The Pressure Transducer, T404 is on the Crew Oxygen Cylinder.

(b) Do a check for 28 VDC between pin 1 of D438 and Structure Ground.

1) If there is not 28 VDC at pin 1 of D438, then do these steps:

a) Do a wiring check between pin 1 of D438 and the OXYGEN IND circuit breaker, C156, on the P18-3 Circuit Breaker Panel.

b) If you find a problem with the wiring, then do these steps:

<1> Repair the wiring.

<2> Re-connect connector D438 to the Pressure Transducer, T404.

c) Do the Repair Confirmation at the end of this task.

2) If there is 28 VDC at pin 1 of D438, then do these steps:

a) Replace the Pressure Transducer, T404. These are the tasks:

- Pressure Transducer Removal, AMM TASK 35-12-21-000-801
- Pressure Transducer Installation, AMM TASK 35-12-21-400-801

b) Do the Repair Confirmation at the end of this task.

(2) Replace the Crew Oxygen Pressure Indication Gage N20.

NOTE: The Crew Oxygen Pressure Indication Gage N20 is on the P5 Aft Overhead Panel.

(a) Do the Repair Confirmation at the end of this task.

(3) Do this check of the wiring (WDM 35-11-11):

(a) Disconnect these connectors:

1) D432 from the Crew Oxygen Pressure Indication Gage N20.

2) D438 from the Pressure Transducer, T404.

(b) Do a wiring check between these pins of connector D432 and D438:

CREW OXYGEN PRESSURE IND, N20 D432		CREW OXYGEN TRANSMITTER, T404 D438
pin 1	. . . . .	pin 3

1) If you find a problem with the wiring, then do these steps:

a) Repair the wiring.

b) Re-connect these connectors:

<1> D432 to the Crew Oxygen Pressure Indication Gage N20.

<2> D438 to the Pressure Transducer, T404.

c) Do the Repair Confirmation at the end of this task.

2) If you do not find a problem with the wiring, then re-connect these connectors and continue:

a) D432 to the Crew Oxygen Pressure Indication Gage N20.

b) D438 to the Pressure Transducer, T404.

(4) Do these steps to do a check of the Crew Oxygen Cylinder Pressure Gage.

NOTE: The Pressure Gage is a component of the Crew Oxygen Cylinder.

(a) Do this task: Crew Oxygen Cylinder Replacement, AMM TASK 12-15-21-600-801.

(b) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

(1) Do this task: Crew Oxygen Pressure Indication Operational Test, AMM TASK 35-12-00-710-801.

(a) Compare the Crew Oxygen Pressure Gage in the Flight Compartment with the Pressure Gage on the Crew Oxygen Cylinder.

1) If the difference between the two Pressure Gages is less than 100 psi (689 kPa), then you corrected the problem.

2) If the difference between the two Pressure Gages is more than 100 psi (689 kPa), then continue the Fault Isolation Procedure at the subsequent step.

——— END OF TASK ———

802. Crew Oxygen Pressure Indicator - Pressure Decreases - Fault Isolation

A. Description

(1) The Crew Oxygen Pressure Gage shows a decrease in indicated pressure. The reason for the decrease is not known.

(2) It is possible that a decrease in air temperature can cause a decrease in Oxygen System Cylinder pressure.

(3) Special Tooling Information

(a) The tools listed below are the recommended equipment to find leaks in the Crew Oxygen System:

- ultrasonic leak probe, SPL-1473, more information can be found in Ultrasonic Leak Detection Checks, AMM TASK 20-10-79-270-801.
- Pressure test equipment, SPL-1934, more information can be found in Crew Oxygen System Pressure Decay Leak Check, AMM TASK 35-12-00-710-802.

B. Possible Causes

(1) SOV on the Oxygen Cylinder is closed

(2) A decrease in air temperature

(3) Leak at the Crew Oxygen Cylinder

(4) Leak in the Oxygen Supply Line

(5) Leak at the Oxygen Mask Stowage Box

C. Circuit Breakers

(1) This is the primary circuit breaker related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND

D. Related Data

(1) SDS SUBJECT 35-10-00

E. Initial Evaluation

(1) Make sure that the SOV on the Crew Oxygen Cylinder is in the open position.

(2) Make sure that the Crew Oxygen Cylinder, Oxygen System components, supply line and mask hose connections are installed correctly.

(3) Do this task: Crew Oxygen System Pressure Decay Leak Check, AMM TASK 35-12-00-710-802.

(a) If the leak rate is less than 7.5 psi (51.7 kPa) per 30 minutes (allowable leak rate), then there was an intermittent fault.

(b) If the leak rate is more than 7.5 psi (51.7 kPa) per 30 minutes, then do the Fault Isolation Procedure below.

F. Fault Isolation Procedure

(1) Do this check of the oxygen stowage box:

(a) Do this task: Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box), AMM TASK 35-12-00-700-801

1) If the FLOW INDICATOR shows a leak, replace the oxygen stowage box. These are the tasks:

- Oxygen Mask Stowage Box Removal, AMM TASK 35-12-85-000-801
- Oxygen Mask Stowage Box Installation, AMM TASK 35-12-85-400-801

a) Do the Repair Confirmation at the end of this task.

2) If the FLOW INDICATOR does not show a leak, then continue.

(2) Do this task: Crew Oxygen Operational Leak Check, AMM TASK 35-12-00-800-803

(a) Use the leak detection (bubble solution) to find any leaks.

(b) Do a leak check for these crew oxygen system components:

- Regulator, transducer and coupling assembly
- Crew oxygen supply line and connections
- Crew oxygen masks hose connections
- Oxygen stowage box hose connections.

1) If you find a leak, then repair the leak(s) that you found.

NOTE: If the leak cannot be repaired, then replace the bad component(s).

a) Do the Repair Confirmation at the end of this task.

2) If you do not find a leak, then continue.

(3) Do a check of the Oxygen Stowage Boxes.

(a) Open all of the Oxygen Stowage Boxes.

(b) Do this task: Crew Oxygen System Pressure Decay Leak Check, AMM TASK 35-12-00-710-802.

(c) If the system is not leaking, close the Oxygen Stowage Boxes one at a time to isolate the leaking box.

1) If you find an Oxygen Stowage Box with a leak, then replace it. These are the tasks:

- Oxygen Mask Stowage Box Removal, AMM TASK 35-12-85-000-801
- Oxygen Mask Stowage Box Installation, AMM TASK 35-12-85-400-801

a) Do the Repair Confirmation at the end of this task.

2) If you do not find a leak at any Oxygen Stowage Boxes, then continue.

(4) Do a check of the Oxygen Stowage Box receptacles.

(a) Remove the Oxygen Stowage Boxes and install the pressure test equipment on the Oxygen Stowage Boxes connections.

(b) Do this task: Crew Oxygen System Pressure Decay Leak Check, AMM TASK 35-12-00-710-802)..

1) If you find a leak at a stowage box connection, then repair it.

a) Do the Repair Confirmation at the end of this task.

2) If you do not find a leak at a stowage box connection, then continue.

(5) Do a check of the Oxygen Stowage Box lines and routing.

(a) Remove the Oxygen Stowage Boxes and install caps on the oxygen lines. These are the tasks:

- Oxygen Mask Stowage Box Removal, AMM TASK 35-12-85-000-801
- Installation of Caps on Open Oxygen Lines, AMM TASK 35-00-00-420-801

(b) Do this task Crew Oxygen System Pressure Decay Leak Check, AMM TASK 35-12-00-710-802

1) If the system is not leaking, isolate and replace the faulty oxygen stowage box. These are the tasks:

- Oxygen Mask Stowage Box Removal, AMM TASK 35-12-85-000-801
- Oxygen Mask Stowage Box Installation, AMM TASK 35-12-85-400-801

2) If the system is leaking, then locate the leak along the oxygen supply line.

a) Install the pressure test equipment on the lines, joints, and connections along the oxygen supply line.

b) Repair any leaks that you find.

NOTE: If the leak cannot be repaired, replace the bad component(s).

c) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

(1) Do this task: Crew Oxygen System Pressure Decay Leak Check, AMM TASK 35-12-00-710-802.

(a) If the leak rate is less than 7.5 psi (51.7 kPa) per 30 minutes (allowable leak rate), then you corrected the fault.

(b) If the leak rate is more than 7.5 psi (51.7 kPa) per 30 minutes, then continue the Fault Isolation Procedure at the subsequent step.

——— END OF TASK ———

803. Crew Oxygen Pressure Indicator - Pressure Low - Fault Isolation

A. Description

(1) The Crew Oxygen Pressure Indicator shows an indicated pressure that is too low for dispatch.

(2) It is possible a decrease in air temperature can cause a decrease in Oxygen System Cylinder pressure.

(3) (SDS SUBJECT 35-10-00)

B. Possible Causes

(1) SOV on the Oxygen Cylinder is closed

(2) The Crew Oxygen Cylinder is serviced incorrectly

(3) A decrease in air temperature

(4) Crew Oxygen Pressure Indication Gages disagree

(5) Leak in the Crew Oxygen System

C. Circuit Breakers

(1) This is the primary circuit breaker related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND

D. Initial Evaluation

(1) Make sure that the SOV on the Crew Oxygen Cylinder is in the open position.

(2) Make sure that the Crew Oxygen Cylinder is serviced correctly (enough pressure to permit dispatch).

(a) If it is necessary, do this task: Crew Oxygen Cylinder Replacement, AMM TASK 12-15-21-600-801.

1) If the Oxygen Pressure Gages now shows the correct oxygen pressure, then you corrected the problem.

2) If the oxygen pressure indication is still low, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

(1) Do these steps to do a check of the Oxygen Pressure Indication Gages:

(a) Do this task: Crew Oxygen Pressure Indicator Does Not Agree With Bottle Pressure Indication - Fault Isolation, 35-12 TASK 801.

1) Compare the Crew Oxygen Pressure Gage in the Flight Compartment with the Pressure Gage on the Crew Oxygen Cylinder.

a) If the difference between the two Pressure Gages is more than 100 psi (689 kPa), then do this task: Crew Oxygen Pressure Indicator - Pressure Decreases - Fault Isolation, 35-12 TASK 802.

b) If the difference between the two Pressure Gages is less than 100 psi (689 kPa), then continue.

(2) Do these steps to do a check for leaks:

(a) Do this task: Crew Oxygen Pressure Indicator - Pressure Decreases - Fault Isolation, 35-12 TASK 802.

(b) When you satisfactorily complete the Fault Isolation Manual (FIM) Procedure, do this task: Crew Oxygen Cylinder Replacement, AMM TASK 12-15-21-600-801.

1) If the oxygen pressure does not decrease, then you corrected the problem.

——— END OF TASK ———

804. Crew Oxygen Pressure Indicator - Pressure Zero - Fault Isolation

A. Description

(1) The Crew Oxygen Cylinder is serviced for dispatch, the Crew Oxygen Pressure Indicator shows zero indicated pressure.

(2) (SDS SUBJECT 35-10-00)

B. Possible Causes

(1) SOV on the Oxygen Cylinder is closed

(2) The Crew Oxygen Cylinder is not serviced

(3) Crew Oxygen Pressure Indication Gages disagree

(4) Leak in the Crew Oxygen System

(5) Bad Pressure Regulator

(6) The Overboard Discharge Port line is open (over-pressurization)

C. Circuit Breakers

(1) This is the primary circuit breaker related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND

D. Initial Evaluation

(1) Make sure that the SOV on the Crew Oxygen Cylinder is in the open position.

(2) Make sure that the Crew Oxygen Cylinder is serviced correctly (enough pressure to permit dispatch).

(a) If it is necessary, do this task: Crew Oxygen Cylinder Replacement, AMM TASK 12-15-21-600-801.

1) If the Oxygen Pressure Gages show the correct oxygen pressure, then you corrected the problem.

2) If the oxygen pressure indication is still zero, then do the Fault Isolation Procedure below.

E. Fault Isolation Procedure

(1) Do these steps to do a check of the Oxygen Pressure Indication Gages:

(a) Do this task: Crew Oxygen Pressure Indicator Does Not Agree With Bottle Pressure Indication - Fault Isolation, 35-12 TASK 801.

1) Compare the Crew Oxygen Pressure Gage in the Flight Compartment with the Pressure Gage on the Crew Oxygen Cylinder.

a) If the difference between the two Pressure Gages is more than 100 psi (689 kPa), then do this task: Crew Oxygen Pressure Indicator - Pressure Decreases - Fault Isolation, 35-12 TASK 802.

b) If the difference between the two Pressure Gages is less than 100 psi (689 kPa), then continue.

(2) Do these steps to check for leaks:

(a) Do this task: Crew Oxygen Pressure Indicator - Pressure Decreases - Fault Isolation, 35-12 TASK 802.

(b) When you satisfactorily complete the FIM Procedure, do this task: Crew Oxygen Cylinder Replacement, AMM TASK 12-15-21-600-801.

1) If the oxygen pressure does not decrease, then you corrected the problem.

(3) Do this check of the Overboard Discharge Disk:

NOTE: A broken Overboard Discharge Disk usually shows an over-pressure condition.

(a) Go to the Overboard Discharge Port.

NOTE: The Overboard Discharge Port is found on the bottom right side of the fuselage skin, aft of the Electronic Equipment (EE) Access Door.

(b) If the Overboard Discharge Disk is broken, replace the disk. These are the tasks:

- Discharge Indicator Disk Removal, AMM TASK 35-12-51-000-801
- Discharge Indicator Disk Installation, AMM TASK 35-12-51-400-801

(c) Do this task: Crew Oxygen Cylinder Replacement, AMM TASK 12-15-21-600-801.

(d) If the oxygen pressure does not decrease, then you corrected the problem.

——— END OF TASK ———

805. Crew Oxygen Mask - Incorrect Operation or Damage - Fault Isolation

A. Fault Isolation Procedure

(1) Replace the crew oxygen mask/regulator. These are the tasks:

- Oxygen Mask/Regulator Removal, AMM TASK 35-12-85-000-802
- Oxygen Mask/Regulator Installation, AMM TASK 35-12-85-400-802

(a) Do this task: Crew Oxygen Mask-Regulator Test, AMM TASK 35-12-00-700-802.

1) If the operational test is satisfactory, then you corrected the fault.

——— END OF TASK ———

806. Crew Oxygen Mask - Difficult to Remove From Stowage Box - Fault Isolation

A. Fault Isolation Procedure

(1) Do the applicable task(s) to re-pack the oxygen mask correctly.

(a) Do this task: Crew Oxygen Mask Stowage, AMM TASK 35-12-85-910-801.

(b) Do this task: Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box), AMM TASK 35-12-00-700-801.

1) If the operational test is satisfactory, then you corrected the fault.

——— END OF TASK ———

807. Oxygen Stowage Box - Incorrect Operation or Damage - Fault Isolation

A. Fault Isolation Procedure

(1) If an oxygen stowage box does not operate correctly or there is a damaged component, then replace the stowage box. These are the tasks:

- Oxygen Mask Stowage Box Removal, AMM TASK 35-12-85-000-801
- Oxygen Mask Stowage Box Installation, AMM TASK 35-12-85-400-801

(a) Do this task: Crew Oxygen Stowage Box Test (Mask Stowed in Stowage Box), AMM TASK 35-12-00-700-801.

1) If the operational test is satisfactory, then you corrected the fault.

——— END OF TASK ———

801. PASS OXY ON Light On, All Masks Dropped Automatically, Switch Was Not Moved, Cabin Pressure Normal - Fault Isolation

A. Description

(1) This fault isolation procedure gives troubleshooting steps for these conditions:

(a) The automatic oxygen deployment system caused the passenger oxygen masks to drop prior to the preset cabin altitude of 13,650 ft (4160.5 m).

(b) A short circuit in the manual oxygen deployment circuit caused an unwanted deployment of the passenger oxygen masks.

B. Possible Causes

(1) Altitude Pressure Switch, S813

(2) Auto Oxygen Deploy Relay, R322

(3) Manual Oxygen Deploy Relay, R323

(4) PASS OXYGEN switch, S1

(5) Wiring

(6) Oxygen System Module, N1

C. Circuit Breaker

(1) These are the primary circuit breakers related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND
F	8	C00785	OXYGEN MAN CONT
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

D. Related Data

(1) SSM 35-21-11

(2) WDM 35-21-11

E. Initial Evaluation

(1) Do this check of the automatic and manual deployment systems:

(a) Make sure the PASS OXYGEN switch, S1, on the aft overhead panel, P5, is in the NORMAL position.

(b) Look at the PASS OXY ON Light.

1) If the PASS OXY ON Light is not ON, then do the Fault Isolation Procedure - Altitude Pressure Switch below.

2) If the PASS OXY ON Light is ON, then continue.

(c) Open this circuit breaker and install safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	8	C00785	OXYGEN MAN CONT

(d) Open and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND

1) Wait for a minimum of 5 seconds.

(e) Look at the PASS OXY ON Light.

1) If the PASS OXY ON Light stays ON, then do the Fault Isolation Procedure - Automatic Deployment System Circuit below.

2) If the PASS OXY ON Light goes OFF, then do the Fault Isolation Procedure - Manual Deployment System Circuit below.

(f) Remove the safety tag and close this circuit breaker:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	8	C00785	OXYGEN MAN CONT

F. Fault Isolation Procedure - Altitude Pressure Switch

(1) Replace the Altitude Pressure Switch, S813.

NOTE: The altitude pressure switch is in the junction box 23 in the electronics equipment (EE) compartment.

(a) Do this task: Passenger Oxygen System - Automatic Actuation Functional Test, AMM TASK 35-22-00-700-801.

(b) If the automatic deploy system activates at the correct simulated altitude pressure, then you corrected the fault.

(c) If the automatic deploy system does not activate at the correct simulated altitude pressure, then do the Fault Isolation Procedure - Automatic Deployment Circuit below.

G. Fault Isolation Procedure - Automatic Deployment System Circuit

(1) Replace the Automatic Oxygen Deploy Relay, R322.

NOTE: The automatic oxygen deploy relay is in the junction box 23 in the electronic equipment (EE) compartment.

(a) If the PASS OXY ON Light goes OFF, then you corrected the fault.

(b) If the PASS OXY ON Light stays ON, then continue.

(2) Do this check of the wiring:

(a) Disconnect the connector D2886 from the Altitude Pressure Switch, S813.

NOTE: The altitude pressure switch is in junction box 23 in the electronic equipment (EE) compartment.

(b) Disconnect the connector D2880 from the Automatic Oxygen Deploy Relay, R322.

(c) Do a wiring check between these pins of connector D2886 and connector D2880:

D2886		D2880
pin 1	. . . . .	pin X2

(d) If you find a problem with the wiring, then do these steps:

1) Repair the wiring.

2) Re-connect connector D2886 to the Altitude Pressure Switch, S813.

3) Re-connect connector D2880 to the Automatic Oxygen Deploy Relay, R322.

4) If the PASS OXY ON Light goes OFF, then you corrected the fault.

5) If the PASS OXY ON Light stays ON, then continue.

(3) Replace the Altitude Pressure Switch, S813.

(a) If the PASS OXY ON Light goes OFF, then you corrected the fault.

H. Fault Isolation Procedure - Manual Deployment System Circuit

(1) Replace the PASS OXYGEN switch, S1 of the Oxygen System Module, N1.

NOTE: The PASS OXYGEN, S1 switch is on the aft overhead panel, P5.

(a) If the PASS OXY ON Light goes OFF, then you corrected the fault.

(b) If the PASS OXY ON Light stays ON, then continue.

(2) Replace the Manual Oxygen Deploy Relay, R323.

NOTE: The Manual Oxygen Deploy Relay is in junction box 23 in the electronic equipment (EE) compartment.

(a) If the PASS OXY ON Light goes OFF, then you corrected the fault.

(b) If the PASS OXY ON Light stays ON, then continue.

(3) Do this check of the wiring:

(a) Remove the Oxygen System Module P5-14 from the aft overhead panel.

1) Loosen the 4 quarter-turn fasteners that hold the P5-14 overhead panel.

2) Carefully pull the P5-14 overhead panel away from the rest of the overhead panel, P5.

(b) Disconnect the connector D2882 from the Manual Oxygen Deploy Relay, R323.

(c) Do a wiring check between these pins of connector D440 in the flight compartment and connector D2882 in the EE compartment.

D440		D2882
pin 3	. . . . .	pin X2

(d) If you find a problem with the wiring, then do these steps:

1) Repair the wiring.

2) Re-install the Oxygen System Module P5-14.

3) Re-connect connector D2882 to the Manual Oxygen Deploy Relay, R323.

4) If the PASS OXY ON Light goes OFF, then you corrected the fault.

5) If you do not find a problem with the wiring, then continue.

(4) Replace the Oxygen System Module P5-14.

NOTE: The Oxygen System Module P5-14 is on the aft overhead panel, P5.

(a) If the PASS OXY ON Light goes OFF, then you corrected the fault.

——— END OF TASK ———

802. PASS OXY ON light On, All Masks Failed to Drop Automatically, Masks Dropped After PASS OXYGEN Switch, S1 was Moved - Fault Isolation

A. Description

(1) The automatic oxygen deployment system did not deploy the passenger oxygen masks when cabin altitude increased above 13,650 ft (4161 m).

B. Possible Causes

(1) Altitude pressure switch, S813

(2) Auto oxygen deploy relay, R322

(3) Wiring problem

C. Circuit Breaker

(1) These are the primary circuit breakers related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND
F	8	C00785	OXYGEN MAN CONT
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

D. Related Data

(1) (SSM 35-21-11)

(2) (WDM 35-21-11)

E. Initial Evaluation

(1) Do this check of the automatic deployment system:

(a) Make sure the PASS OXYGEN switch, S1 is in the NORMAL position.

NOTE: The PASS OXYGEN switch, S1, is on the P5 aft overhead panel.

(b) Do this task: Passenger Oxygen System - Automatic Actuation Functional Test, AMM TASK 35-22-00-700-801.

1) If there is a problem with the automatic deployment system, then do the Fault Isolation Procedure below.

2) If the passenger oxygen system functional test is OK, then there was an intermittent fault.

NOTE: Before you return the airplane to service, make sure all of the oxygen generators are serviceable, the passenger oxygen masks are stowed correctly and all of the service unit doors are closed.

F. Fault Isolation Procedure

(1) Do this check of the altitude pressure switch S813:

NOTE: The altitude pressure switch is in the junction box 23 in the electronics equipment (EE) compartment.

(a) Disconnect connector D2886 from the altitude pressure switch.

(b) Do a check for 28 VDC from pin 1 to pin 2 (ground) of D2886.

(c) If there is 28 VDC at pin 1 of D2886, then do these steps:

1) Replace the altitude pressure switch, S813.

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

(d) If there is not 28 VDC at pin 1 of D2886, then continue.

1) Re-connect the connector D2886 to the altitude pressure switch.

(2) Do this check of the automatic oxygen deployment relay R322:

NOTE: The automatic oxygen deployment relay R322 is in the junction box 23 in the electronics equipment (EE) compartment.

(a) Disconnect connector D2880 from the automatic oxygen deployment relay R322.

(b) Do a check for 28 VDC from pin X1 of D2280 and structure ground.

(c) If there is 28 VDC at pin X1 of D2880, then do these steps:

1) Replace the automatic oxygen deployment relay R322.

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

(d) If there is not 28 VDC at pin X1 of D2880, then continue.

(3) Do this check of the wiring:

(a) Disconnect the connector D2882 from the manual oxygen deploy relay R323.

NOTE: The manual oxygen deployment relay R323 is in the junction box 23 in the electronics equipment (EE) compartment.

(b) Do a check for an open circuit between these pins of connector D2880 and connector D2882:

D2880		D2882
pin X1	. . . . .	pin C2

(c) If there is an open circuit, then do these steps:

1) Repair the wiring.

2) Re-connect the connector D2882 to the manual oxygen deploy relay.

3) Re-connect the connector D2880 to the automatic oxygen deploy relay.

4) Do the Repair Confirmation at the end of this task.

(d) If there is not an open circuit, then continue.

1) Re-connect the connector D2882 to the manual oxygen deploy relay.

(e) Disconnect the connector D2886 from the altitude pressure switch, S813.

(f) Do a check for an open circuit between these pins of connector D2880 and connector D2886:

D2880		D2886
pin X2	. . . . .	pin 1

(g) If you find a problem with the wiring, then do these steps:

1) Repair the wiring.

2) Re-connect the connector D2886 to the altitude pressure switch.

3) Re-connect the connector D2880 to the automatic oxygen deploy relay.

4) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

(1) Do this task: Passenger Oxygen System - Automatic Actuation Functional Test, AMM TASK 35-22-00-700-801.

(a) If the automatic deploy system activates at the correct simulated altitude pressure, then you corrected the fault.

——— END OF TASK ———

803. All Masks Failed to Drop Manually, PASS OXYGEN Switch, S1 ON - Fault Isolation

A. Description

(1) The passenger oxygen masks did not drop when the PASS OXYGEN switch, S1, was put in the ON position.

B. Possible Causes

(1) Manual oxygen deploy relay, R323

(2) PASS OXYGEN switch, S1

(3) Oxygen system module, N1

(4) Wiring problem

C. Circuit Breaker

(1) This is the primary circuit breaker related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	8	C00785	OXYGEN MAN CONT

D. Related Data

(1) (SSM 35-21-11)

(2) (WDM 35-21-11)

E. Initial Evaluation

(1) Do this check of the manual deployment system:

(a) Make sure the PASS OXYGEN switch, S1 is in the NORMAL position.

NOTE: The PASS OXYGEN switch, S1, is on the P5 aft overhead panel.

(b) Do this task: Passenger Oxygen System - Automatic Actuation Functional Test, AMM TASK 35-22-00-700-801.

1) If there is a problem with the manual deployment system, then do the Fault Isolation Procedure below.

2) If the passenger oxygen system functional test is satisfactory, then there was an intermittent fault.

NOTE: Before you return the airplane to service, make sure all of the oxygen generators are serviceable, the passenger oxygen masks are stowed correctly and all of the service unit doors are closed.

F. Fault Isolation Procedure

(1) Do this check of the PASS OXYGEN, S1:

NOTE: The PASS OXYGEN switch, S1, is on the oxygen system module P5-14.

(a) Disconnect connector D440 from the oxygen system module, N1.

(b) Do a check for 28 VDC between pin 3 and pin 4 (ground) of connector D440.

(c) If there is 28 VDC between pin 3 and pin 4 of D440, then do these steps:

1) Replace the PASS OXYGEN switch, S1.

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

(d) If there is not 28 VDC at pin 3 and pin 4 of D440, then continue.

(2) Do this check of the manual oxygen deployment relay R323:

NOTE: The manual oxygen deployment relay R323 is in the junction box 23 in the electronics equipment (EE) compartment.

(a) Disconnect connector D2882 from the manual oxygen deployment relay R323.

(b) Do a check for 28 VDC between pin X1 of D2282 and structure ground.

(c) If there is 28 VDC between pin X1 of D2882 and structure ground, then do these steps:

1) Replace the manual oxygen deployment relay R323.

2) Re-connect connector D2882 to the manual oxygen deployment relay R323.

3) Do the Repair Confirmation at the end of this task.

(d) If there is not 28 VDC between pin X1 of D2882 and structure ground, then continue.

(3) Do this check of the wiring:

(a) Do a wiring check between these pins of the manual oxygen deploy relay, connector D2882, and the OXYGEN MAN CTRL circuit breaker, C785, on the P18-3 circuit breaker panel:

D2882		C785
pin X1	. . . . .	term L

(b) If you find a problem with the wiring, then do these steps:

1) Repair the wiring.

2) Re-connect the connector D2882 to the manual oxygen deploy relay.

3) Do the Repair Confirmation at the end of this task.

(c) If you do not find a problem with the wiring, then continue.

(4) Do this check of the wiring:

(a) Disconnect the connector D440 from the oxygen system module, N1.

(b) Do a wiring check between these pins of connector D2882 and connector D440:

D2882		D440
pin X2	. . . . .	pin 3

(c) If there is a problem with the wiring, then do these steps:

1) Repair the wiring.

2) Re-connect the connector D2882 to the manual oxygen deploy relay.

3) Re-connect the connector D440 to the oxygen system module, N1.

4) Do the Repair Confirmation at the end of this task.

(d) If there is not a problem with the wiring, then do these steps:

1) Re-connect the connector D2882 to the manual oxygen deploy relay.

2) Replace the oxygen system module, N1.

3) Re-connect the connector D440 to the oxygen system module, N1.

4) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

(1) Do this task: Passenger Oxygen System - Automatic Actuation Functional Test, AMM TASK 35-22-00-700-801.

(a) If the manual deploy system deploys the masks, then you corrected the fault.

——— END OF TASK ———

804. Oxygen Mask - Passenger Mask(s) Dropped - Fault Isolation

A. Description

(1) One or more Passenger Oxygen Masks deploy without the Automatic or Manual Deployment System Activation.

B. Possible Causes

(1) Oxygen Box (Door Latch)

(2) Automatic Oxygen Deploy Relay, R322

(3) Manual Oxygen Deploy Relay, R323

C. Circuit Breakers

(1) These are the primary circuit breakers related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND
F	8	C00785	OXYGEN MAN CONT
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

D. Related Data

(1) WDM 35-21-11

(2) SSM 35-21-11

E. Initial Evaluation

(1) Do a check of the Passenger Compartment to find which Oxygen Mask Doors have opened.

NOTE: The Oxygen Boxes are in these Service Units:

- Passenger Service Unit (PSU)s
- Attendant Service Unit (ASU)s
- Lavatory Service Unit (LSU)s

(2) If all of the Passenger Oxygen Mask Doors opened, do this task: PASS OXY ON Light On, All Masks Dropped Automatically, Switch Was Not Moved, Cabin Pressure Normal - Fault Isolation, 35-22 TASK 801.

(3) If one or more, but not all, of the Mask Doors opened, do these steps:

(a) Temporarily close and latch the Oxygen Mask Door(s).

(b) If the Oxygen Box door does not close correctly, then do the Fault Isolation Procedure below.

(c) If the Oxygen Mask Door closes correctly, then there was an intermittent problem.

1) For the PSU's, do this task: PSU Oxygen Mask Packing, AMM TASK 35-22-31-440-801 or ASU and LSU Oxygen Mask Packing, AMM TASK 35-22-31-000-804-001.

2) For ASU's and LSU's, do this task: ASU and LSU Oxygen Mask Packing, AMM TASK 35-22-31-000-804-001.

F. Fault Isolation Procedure

(1) Do a check of the Oxygen Box Door Latches:

(a) Go to the Passenger Compartment where the Oxygen Mask Door(s) opened.

NOTE: The Oxygen Boxes are in these Service Units:

- PSUs
- ASUs
- LSUs

(b) Replace the Door Latch on the applicable Oxygen Box.

1) For the PSU's, replace the Door Latch Actuator. These are the tasks:

- PSU Door Latch Actuator Removal, AMM TASK 35-22-21-000-801-001
- PSU Door Latch Actuator Installation, AMM TASK 35-22-21-400-801-001

2) For the ASU's, replace the Door Latch Actuator. These are the tasks:

- ASU Door Latch Actuator Removal, AMM TASK 35-22-21-000-802-001
- ASU Door Latch Actuator Installation, AMM TASK 35-22-21-400-802-001

3) For the LSU's, replace the Door Latch Actuator. These are the tasks:

- LSU Door Latch Actuator Removal, AMM TASK 35-22-21-000-803-001
- LSU Door Latch Actuator Installation, AMM TASK 35-22-21-400-803-001

(c) Temporarily close and latch the Oxygen Mask Door.

1) If the Oxygen Box Door closes correctly, then you corrected the problem.

a) For the PSU's, do this task: PSU Oxygen Mask Packing, AMM TASK 35-22-31-440-801 or ASU and LSU Oxygen Mask Packing, AMM TASK 35-22-31-000-804-001.

b) For the ASU's and LSU's, do this task: ASU and LSU Oxygen Mask Packing, AMM TASK 35-22-31-000-804-001.

2) If the Oxygen Box Door does not close correctly, then replace the Oxygen Box.

——— END OF TASK ———

805. PASS OXY ON Light Not On, All Masks Dropped During Manual Oxygen System Deployment - Fault Isolation

A. Description

(1) This fault isolation procedure gives troubleshooting steps for this condition:

(a) The PASS OXY ON light did not come on when the PASS OXYGEN switch S1, was moved to the ON position. All of the passenger oxygen masks dropped.

B. Possible Causes

(1) Passenger oxygen on light, L1

(2) Oxygen indication relay, R324

(3) Manual oxygen deploy relay, R323

(4) Oxygen system module, N1

(5) Wiring problem

C. Circuit Breaker

(1) These are the primary circuit breakers related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND
F	8	C00785	OXYGEN MAN CONT
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

D. Related Data

(1) (SSM 35-21-11)

(2) (WDM 35-21-11)

E. Initial Evaluation

(1) Do this check of the indication system for the manual oxygen deployment system:

(a) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

(b) Momentarily put the PASS OXYGEN switch, S1, to the ON position.

NOTE: The PASS OXYGEN switch, S1, is located on the oxygen system panel, P5-14.

1) If the PASS OXY ON light L1, does not come on, then do the Fault Isolation Procedure below.

NOTE: The PASS OXY ON light L1, is located on the oxygen system panel, P5-14.

2) If the PASS OXY ON light comes on, then there was an intermittent fault. Do these steps to complete this task:

a) Close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

F. Fault Isolation Procedure

(1) Make sure that this circuit breaker is open and has safety tag:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	10	C00783	OXYGEN PASS LEFT

(2) Do this check of the PASS OXY ON light, L1:

(a) Do this task: Master Dim and Test - Operational Test, AMM TASK 33-18-00-710-802.

(b) If the test shows a problem with the PASS OXY ON light, then do these steps:

1) Replace the PASS OXY ON light, L1.

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

a) If the Repair Confirmation is not satisfactory, then continue.

(3) Do this check of the oxygen system module, N1.

(a) Disconnect connector D440 from the oxygen system module, N1.

NOTE: The oxygen system module N1, is located on the oxygen system panel, P5-14.

(b) Momentarily jumper Pins 3 and 4 of connector D440.

(c) Do a check for 28 VDC between pin 5 and pin 8 (ground) of connector D440.

(d) If there is 28 VDC between pin 5 and pin 8 (ground) of connector D440, then do these steps:

1) Replace the oxygen system module, N1..

2) Remove the jumper between Pins 3 and 4 and connect connector D440..

3) Do the Repair Confirmation at the end of this task.

(e) If there is not 28 VDC between pin 5 and pin 8 of connector D440, then do these steps and continue:

1) Put the PASS OXYGEN switch, S1 to the NORMAL position.

2) Re-connect connector D440 to the oxygen system module, N1.

(4) Replace the oxygen indication relay, R324.

NOTE: The oxygen indication relay is in junction box 23 in the electronics equipment (EE) compartment.

(a) Do the Repair Confirmation at the end of this task.

1) If the Repair Confirmation is not satisfactory, then continue.

(5) Replace the manual oxygen deploy relay, R323.

NOTE: The oxygen indication relay is in junction box 23 in the electronics equipment (EE) compartment.

(a) Do the Repair Confirmation at the end of this task.

1) If the Repair Confirmation is not satisfactory, then continue.

(6) Do this check for 28 VDC power at the oxygen indication relay, R324:

(a) Remove the oxygen indication relay, R324.

(b) Momentarily put the PASS OXYGEN switch, S1, to the ON position.

(c) Do a check for 28 VDC between connector D2884, pin A2 and structure ground.

(d) If there is not 28 VDC at pin A2 of connector D2884, then do these steps:

1) Put the PASS OXYGEN switch, S1 to the NORMAL position.

2) Do a wiring check between these pins of the oxygen indication relay connector, D2884, and the OXYGEN IND circuit breaker, C156, on the P18-3 circuit breaker panel:

D2884		C156
pin A2	. . . . .	term L

3) If you find a problem with the wiring, then do these steps:
   a) Repair the wiring.
   b) Re-install the oxygen indication relay, R324.
   c) Do the Repair Confirmation at the end of this task.

(e) If there is 28 VDC at pin A2 of connector D2884, then do these steps and continue:
   1) Put the PASS OXYGEN switch, S1 to the NORMAL position.
   2) Re-install the oxygen indication relay, R324.

(7) Do this check for 28 VDC power at the manual oxygen deploy relay, R323:
   (a) Remove the manual oxygen deploy relay, R323.
   (b) Momentarily put the PASS OXYGEN switch, S1 to the ON position.
   (c) Do a check for 28 VDC between connector D2882, pin C2 and structure ground.
   (d) If there is not 28 VDC at pin C2 of connector D2882, then do these steps:
      1) Put the PASS OXYGEN switch, S1 to the NORMAL position.
      2) Do a wiring check between these pins of the manual oxygen deploy relay connector, D2882, and the OXYGEN IND circuit breaker, C156, on the P18-3 circuit breaker panel:

D2882		C156
pin C2	. . . . .	term L

      3) If you find a problem with the wiring, then do these steps:
         a) Repair the wiring.
         b) Re-install the manual oxygen deploy relay, R323.
         c) Do the Repair Confirmation at the end of this task.
   (e) If there is 28 VDC at pin C2 of connector D2882, then do these steps and continue:
      1) Put the PASS OXYGEN switch, S1 to the NORMAL position.
      2) Re-install the manual oxygen deploy relay, R323.

(8) Do this check of the wiring between the oxygen indication relay, R324 and the manual oxygen deploy relay, R323:
   (a) Remove the oxygen indication relay, R324.
   (b) Momentarily put the PASS OXYGEN switch, S1 to the ON position.
   (c) Do a check for 28 VDC between connector D2884, pin X1 and structure ground.
   (d) If there is not 28 VDC at pin X1 of connector D2884, then do these steps:
      1) Remove the manual oxygen deploy relay, R323.
      2) Do a wiring check between these pins of connector D2884 and connector D2882:

D2884		D2882
pin X1	. . . . .	pin C1
pin A1	. . . . .	pin C1

   (e) If you find a problem with the wiring, then do these steps:
      1) Repair the wiring.
      2) Re-install the oxygen indication relay, R324.

3) Re-install the manual oxygen deploy relay, R323.

4) Do the Repair Confirmation at the end of this task.

(f) If you do not find a problem with the wiring, then re-install the manual oxygen deploy relay, R323 and continue.

(9) Do this check of the ground wiring for the oxygen indication relay, R324:

(a) Do a wiring check of the ground wire at pin X2 of connector D2884 and the applicable ground stud.

(b) If you find a problem with the wiring, then do these steps:

1) Repair the wiring.

2) Re-install the oxygen indication relay, R324.

3) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

(1) Do these steps to make sure the PASS OXY ON light comes on.

(a) Make sure that these circuit breakers are open:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

(b) Momentarily put the PASS OXYGEN switch, S1 to the ON position.

NOTE: The PASS OXYGEN switch, S1 is located on the oxygen system module, P5-14.

(c) If the PASS OXY ON light comes on, then you corrected the fault.

1) Close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

——— END OF TASK ———

806. PASS OXY ON Light Not On, All Masks Dropped During Automatic Oxygen System Deployment - Fault Isolation

A. Description

(1) This fault isolation procedure gives troubleshooting steps for this condition:

(a) The PASS OXY ON light did not come on when the automatic oxygen system deployed all of the passenger oxygen masks.

B. Possible Causes

(1) Passenger oxygen on light, L1

(2) Oxygen indication relay, R324

(3) Automatic oxygen deploy relay, R322

(4) Oxygen system module, N1

(5) Wiring problem

C. Circuit Breaker

(1) These are the primary circuit breakers related to the fault:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	7	C00156	OXYGEN IND
F	8	C00785	OXYGEN MAN CONT
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

D. Related Data

(1) (SSM 35-21-11)

(2) (WDM 35-21-11)

E. Initial Evaluation

(1) Do these steps to prepare for the initial evaluation and fault isolation:

(a) Open these circuit breakers and install safety tags:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

(b) Disconnect connector D2886 from the altitude pressure switch S813.

NOTE: The altitude pressure switch S813, is located in junction box 23 in the electronics equipment (EE) compartment.

(c) Put a jumper wire between pin 1 and pin 2 of connector D2886.

(2) Do this check of the indication system for the automatic oxygen deployment system:

(a) Look at the PASS OXY ON light.

NOTE: The PASS OXY ON light L1, is located on the oxygen system panel, P5-14.

1) If the PASS OXY ON light L1, does not come on, then do the Fault Isolation Procedure below.

2) If the PASS OXY ON light comes on, then there was an intermittent fault. Do these steps to complete this task:

a) Remove the jumper wire from connector D2886.

b) Re-connect connector D2886 to the altitude pressure switch S813.

c) Close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

F. Fault Isolation Procedure

NOTE: You must do the steps to prepare for fault isolation that are in the Initial Evaluation before you can do these steps.

(1) Do this check of the PASS OXY ON light, L1:

(a) Do this task: Master Dim and Test - Operational Test, AMM TASK 33-18-00-710-802.

(b) If the test shows a problem with the PASS OXY ON light, then do these steps:

1) Replace the PASS OXY ON light, L1.

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

(c) If the test shows the PASS OXY ON light L1, is satisfactory, then continue.

(2) Do this check of the oxygen system module, N1:

(a) Disconnect connector D440 from the oxygen system module, N1.

NOTE: The oxygen system module N1, is located on the oxygen system panel, P5-14.

(b) Momentarily jumper Pins 3 and 4 of connector D440.

(c) Do a check for 28 VDC between pin 5 and pin 8 (ground) of connector D440.

(d) If there is 28 VDC between pin 5 and pin 8 of connector D440, then do these steps:

1) Replace the oxygen system module, N1.

2) Remove the jumper between pins 3 and 4 and connect connector D440.

3) Do the Repair Confirmation at the end of this task.

(e) If there is not 28 VDC between pin 5 and pin 8 of connector D440, then re-connect connector D440 to the oxygen system module and continue.

(3) Replace the oxygen indication relay, R324.

NOTE: The oxygen indication relay is in junction box 23 in the electronics equipment (EE) compartment.

(a) Do the Repair Confirmation at the end of this task.

1) If the Repair Confirmation is not satisfactory, then continue.

(4) Replace the manual oxygen deploy relay, R323.

NOTE: The oxygen indication relay is in junction box 23 in the electronics equipment (EE) compartment.

(a) Do the Repair Confirmation at the end of this task.

1) If the Repair Confirmation is not satisfactory, then continue.

(5) Do this check for 28 VDC power at the oxygen indication relay, R324:

(a) Make sure that these circuit breakers are open:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

(b) Make sure the jumper wire is installed between pin 1 and pin 2 of connector D2886 of the altitude pressure switch S813.

(c) Remove the oxygen indication relay, R324 from the junction box, J23.

(d) Do a check for 28 VDC between connector D2884, pin A2 and structure ground.

(e) If there is not 28 VDC at pin A2 of connector D2884, then do these steps:

1) Do a wiring check between these pins of the oxygen indication relay connector, D2884, and the OXYGEN IND circuit breaker, C156, on the P18-3 circuit breaker panel:

D2884		C156
pin A2	. . . . .	term L

2) If you find a problem with the wiring, then do these steps:
   a) Repair the wiring.
   b) Re-install the oxygen indication relay, R324.
   c) Do the Repair Confirmation at the end of this task.

(f) If there is 28 VDC at pin A2 of connector D2884, then re-install the oxygen indication relay, R324 and continue.

(6) Do this check for 28 VDC power at the automatic oxygen deploy relay, R322:
   (a) Remove the automatic oxygen deploy relay, R322 from the junction box, J23.
   (b) Make sure the jumper wire is installed between pin 1 and pin 2 of connector D2886 of the altitude pressure switch S813.
   (c) Do a check for 28 VDC between connector D2880, pin C2 and structure ground.
   (d) If there is not 28 VDC at pin C2 of connector D2880, then do these steps:
      1) Do a wiring check between these pins of the automatic oxygen deploy relay connector, D2880, and the OXYGEN IND circuit breaker, C156, on the P18-3 circuit breaker panel:

D2880		C156
pin C2	. . . . .	term L

      2) If you find a problem with the wiring, then do these steps:
         a) Repair the wiring.
         b) Re-install the automatic oxygen deploy relay, R322.
         c) Do the Repair Confirmation at the end of this task.
   (e) If there is 28 VDC at pin C2 of connector D2880, then re-install the automatic oxygen deploy relay, R322 and continue.

(7) Do this check of the wiring between the oxygen indication relay, R324 and the automatic oxygen deploy relay, R322:
   (a) Remove the oxygen indication relay, R324.
   (b) Make sure the jumper wire is installed between pin 1 and pin 2 of connector D2886 of the altitude pressure switch S813.
   (c) Do a check for 28 VDC between connector D2884, pin X1 and structure ground.
   (d) If there is not 28 VDC at pin X1 of connector D2884, then do these steps:
      1) Remove the automatic oxygen deploy relay, R322.
      2) Do a wiring check between these pins of connector D2884 and connector D2880:

D2884		D2880
pin X1	. . . . .	pin C1
pin A1	. . . . .	pin C1

   (e) If you find a problem with the wiring, then do these steps:
      1) Repair the wiring.

2) Re-install the oxygen indication relay, R324.

3) Re-install the automatic oxygen deploy relay, R322.

4) Do the Repair Confirmation at the end of this task.

(f) If you do not find a problem with the wiring, then re-install the automatic oxygen deploy relay, R322 and continue.

(8) Do this check of the ground wiring for the oxygen indication relay, R324:

(a) Do a wiring check of the ground wire at pin X2 of D2884 and the applicable ground stud.

(b) If you find a problem with the wiring, then do these steps:

1) Repair the wiring.

2) Re-install the oxygen indication relay, R324.

3) Do the Repair Confirmation at the end of this task.

G. Repair Confirmation

(1) Do these steps to make sure the PASS OXY ON light comes on.

(a) Make sure that these circuit breakers are open:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

(b) Make sure the jumper wire is installed between pin 1 and pin 2 of connector D2886.

(c) If the PASS OXY ON light L1, comes on, then you corrected the fault. Do these steps to complete this task:

1) Remove the jumper wire from connector D2886.

2) Re-connect connector D2886 to the altitude pressure switch S813.

3) Re-install the cover on the J23 junction box.

4) Close these circuit breakers:

CAPT Electrical System Panel, P18-3

Row	Col	Number	Name
F	9	C00784	OXYGEN PASS RIGHT
F	10	C00783	OXYGEN PASS LEFT

——— END OF TASK ———

801. Procedure by Airline Method - Fault Isolation

A. Initial Evaluation

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

END OF TASK