PASSENGER OXYGEN DISTRIBUTION (HP) LINES - ADJUSTMENT/TEST

EFFECTIVITY: AIRCRAFT FOR 16 PASSENGERS

1. General

A. This section gives the procedure to do a check of the high-pressure distribution lines and the crew/passenger pressure relief lines.

B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	*DESCRIPTION*	*EFFECTIVITY*
35-20-15-700-801-A ♦	PASSENGER OXYGEN (HP) DISTRIBUTION LINES - CHECK	AIRCRAFT FOR 16 PASSENGERS

TASK 35-20-15-700-801-A
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2. PASSENGER OXYGEN (HP) DISTRIBUTION LINES - CHECK

A. General

(1) Only approved persons must do the maintenance tasks related to the oxygen system.

B. References

REFERENCE	*DESIGNATION*
AMM MPP 06-41-01/100	-
AMM MPP 06-41-02/100	-
AMM MPP 06-41-03/100	- COMPONENT LOCATION
AMM MPP 06-41-04/100	-
AMM TASK 28-41-00-200-801-A/600	-
AMM TASK 35-10-00-910-801-A/200	-
AMM TASK 35-10-00-910-803-A/200	-
AMM TASK 35-10-00-910-805-A/200	-

C. Zones and Accesses

ZONE	*PANEL/DOOR*	*LOCATION*
224	224QZ	Cockpit
124	222BF	Cockpit
232	232AZ	Passenger cabin

D. Tools and Equipment

ITEM	*DESCRIPTION*	*PURPOSE*	*QTY*
Commercially available	Source of nitrogen with pressure regulator and pressure gauge with scale up to 3000 psi	To pressurize the oxygen lines	
Commercially available	Thermometer	To read the ambient temperature	
Commercially available	Piece of oxygen hose with male fittings	To connect to the oxygen lines	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	*DESCRIPTION*	*QTY*
FED STD-BB-N-411, Type I, Class I, and Grade B	Nitrogen	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	*FUNCTION*	*PLACE*
1	Does the task	Passenger cabin

I. Preparation

SUBTASK 841-004-A

(1) Make sure that the aircraft is safety for maintenance.

(2) Obey the safety precautions (AMM TASK 35-10-00-910-801-A/200) and general instructions (AMM TASK 35-10-00-910-803-A/200).

(3) Open these circuit breakers and attach DO NOT CLOSE tags to them:

- PASS OXY DEPLOY 1 (location tip: ESSENTIAL DC BUS 1/MISCELLANEOUS).
- PASS OXY DEPLOY 2 (location tip: ESSENTIAL DC BUS 2).

(4) Remove access panel 224QZ (AMM MPP 06-41-03/100) to get access to the crew oxygen cylinder.

(5) Remove access panel 232AZ to get access to the passenger oxygen cylinder(s) (AMM MPP 06-41-04/100).

(6) Do an inspection on the fuel quantity indication harness (AMM TASK 28-41-00-200-801-A/600).

NOTE: The inspection of fuel quantity indication harness is a part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations of the Maintenance Review Board Report (MRB).

(7) Remove floor panel 222BF (AMM MPP 06-41-02/100) to get access to the relief line fitting (2).

(8) Set all the cylinder pressure regulators (1) to the OFF position.

J. Check (Leak) of Oxygen Relief Lines (Figure 601)

SUBTASK 790-006-A

WARNING: OPEN THE OXYGEN FITTINGS SLOWLY TO PREVENT TOO HIGH TEMPERATURES.

(1) Disconnect the relief line fittings (2) and (3) from the discharge indicator and the oxygen cylinder(s).

NOTE: A small quantity of oxygen can flow out when you disconnect the related line.

(2) Install the nitrogen source on the relief line.

(3) Install caps to the open lines to prevent leakage during the test.

(4) Immediately after you close the nitrogen pressure regulator, open the nitrogen shutoff valve.

CAUTION: WHEN YOU PRESSURIZE THE LINE, ALWAYS DO IT SLOWLY.

(5) Slowly open the nitrogen pressure regulator up to 80 psi.

(6) Close the nitrogen shutoff valve to close the nitrogen source.

(7) Examine all the points of connection in the pressurized line (AMM TASK 35-10-00-910-805-A/200).

K. Check (Leak) Passenger Oxygen Distribution (HP) Lines (Figure 602)

SUBTASK 790-007-A

WARNING: OPEN THE OXYGEN FITTINGS SLOWLY TO PREVENT TOO HIGH TEMPERATURES.

(1) Disconnect the pressure transducer line fitting(s), and the oxygen filling line fitting(s) from the passenger oxygen cylinder(s).

NOTE: A small quantity of oxygen can flow out when you disconnect the related line.

(2) Install a piece of oxygen hose to connect the pressure transducer line to the oxygen filling line.

(3) (TWO-PASSENGER-OXYGEN-CYLINDER AIRCRAFT) Install the caps to the open lines to prevent leakage during the test.

(4) Open access door 124AR (AMM MPP 06-41-01/100).

(5) On the oxygen service panel, install the nitrogen source to the passenger charging valve (DET. A).

(6) Immediately after you close the nitrogen pressure regulator, open the nitrogen shutoff valve.

CAUTION: WHEN YOU PRESSURIZE THE LINE, ALWAYS DO IT SLOWLY.

(7) Slowly open the nitrogen pressure regulator up to 1900 psi. Let the pressure become stable.

(8) Close the nitrogen shutoff valve to close the nitrogen source.

(9) Read the pressure and write down the value.

(10) Measure the ambient temperature and write down the value.

(11) After 24 hours, read the pressure and the temperature again.

(12) If the temperature at the time when you read the two pressure indications is not the same, correct the pressure by 6 psi for each °C.

Example:

- 1st reading: 1480 psi at 20°C.
- 2nd reading: 1400 psi at 10°C.

- Correction to 2nd indication: 10 x 6 = 60 psi.
- Corrected 2nd indication: 1460 psi.

NOTE:
- The maximum permitted leakage is a pressure drop of 30 psi in 24 hours.
- If there is a pressure drop of more than 30 psi, find and repair the leaks. Refer to AMM TASK 35-10-00-910-805-A/200.

L. Follow-on

SUBTASK 842-004-A

(1) Carefully remove the charger adapter from the charging valve to release the remaining pressure from the hose.

(2) Close access door 124AR (AMM MPP 06-41-01/100).

(3) Remove the caps and the piece of oxygen hose from the fittings.

(4) Reconnect all the fittings correctly.

NOTE: Refer to Table 201 of AMM TASK 35-10-00-910-805-A/200 for the torque ranges.

(5) Open the cylinder pressure regulators (1).

(6) Install access panel 232AZ (AMM MPP 06-41-04/100).

(7) Install floor panel 222BF (AMM MPP 06-41-02/100).

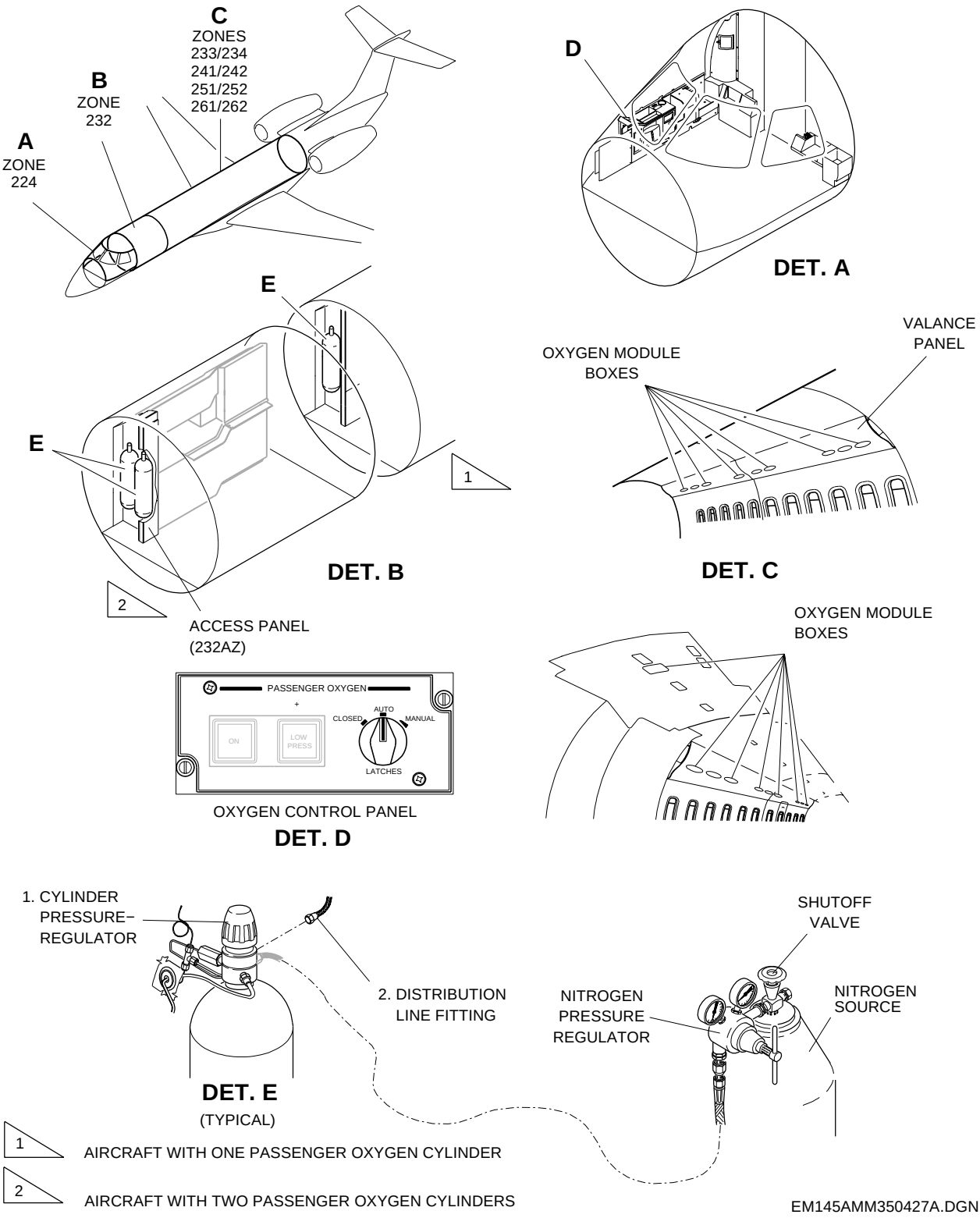
(8) Install access panel 224QZ (AMM MPP 06-41-03/100).

(9) Close the PASS OXY DEPLOY 1 and PASS OXY DEPLOY 2 circuit breakers.

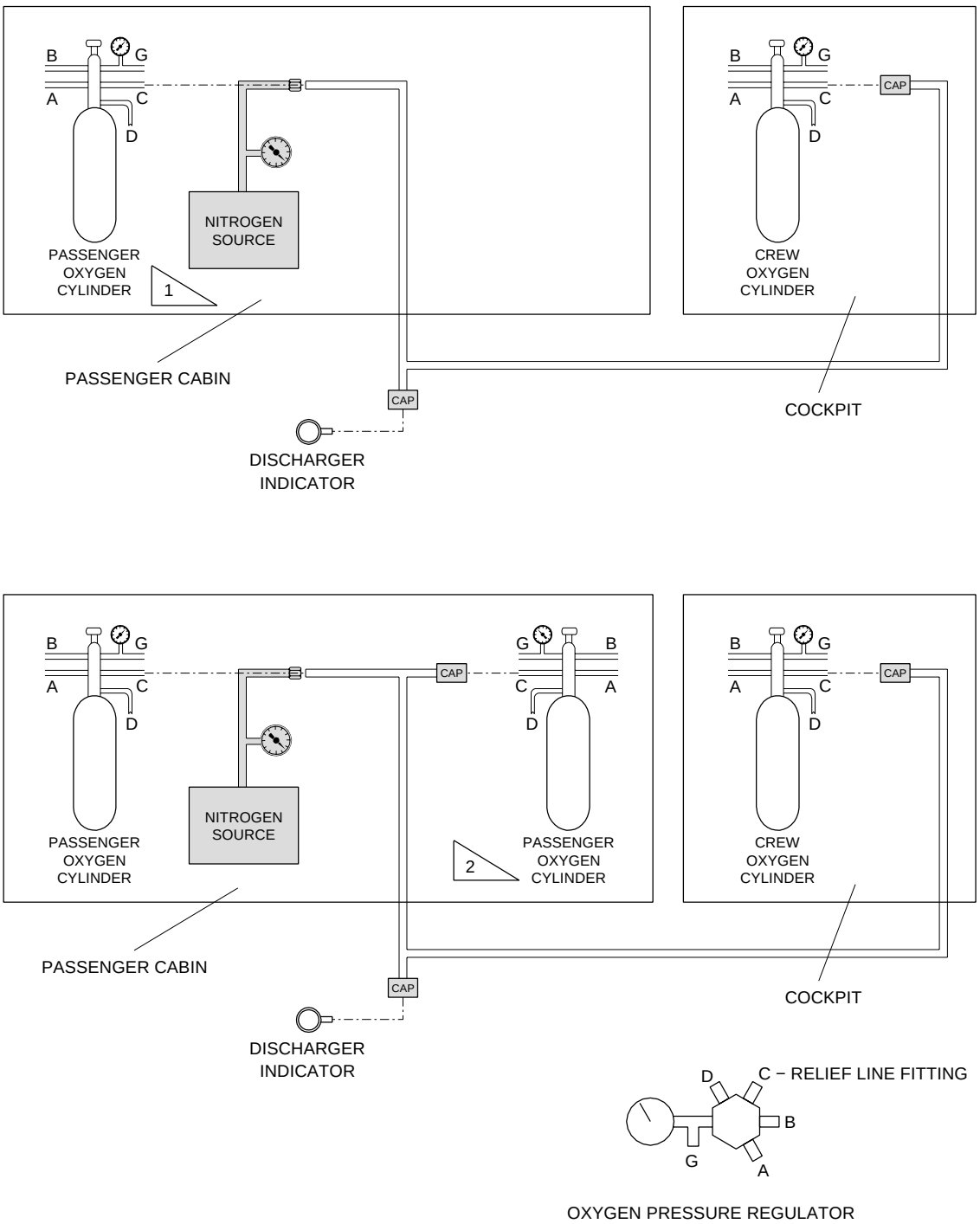
EFFECTIVITY: AIRCRAFT FOR 16 PASSENGERS

Test for Leak in Oxygen Relief Lines

Figure 501 - Sheet 1



EFFECTIVITY: AIRCRAFT FOR 16 PASSENGERS
Test for Leak in Oxygen Relief Lines
Figure 501 - Sheet 2



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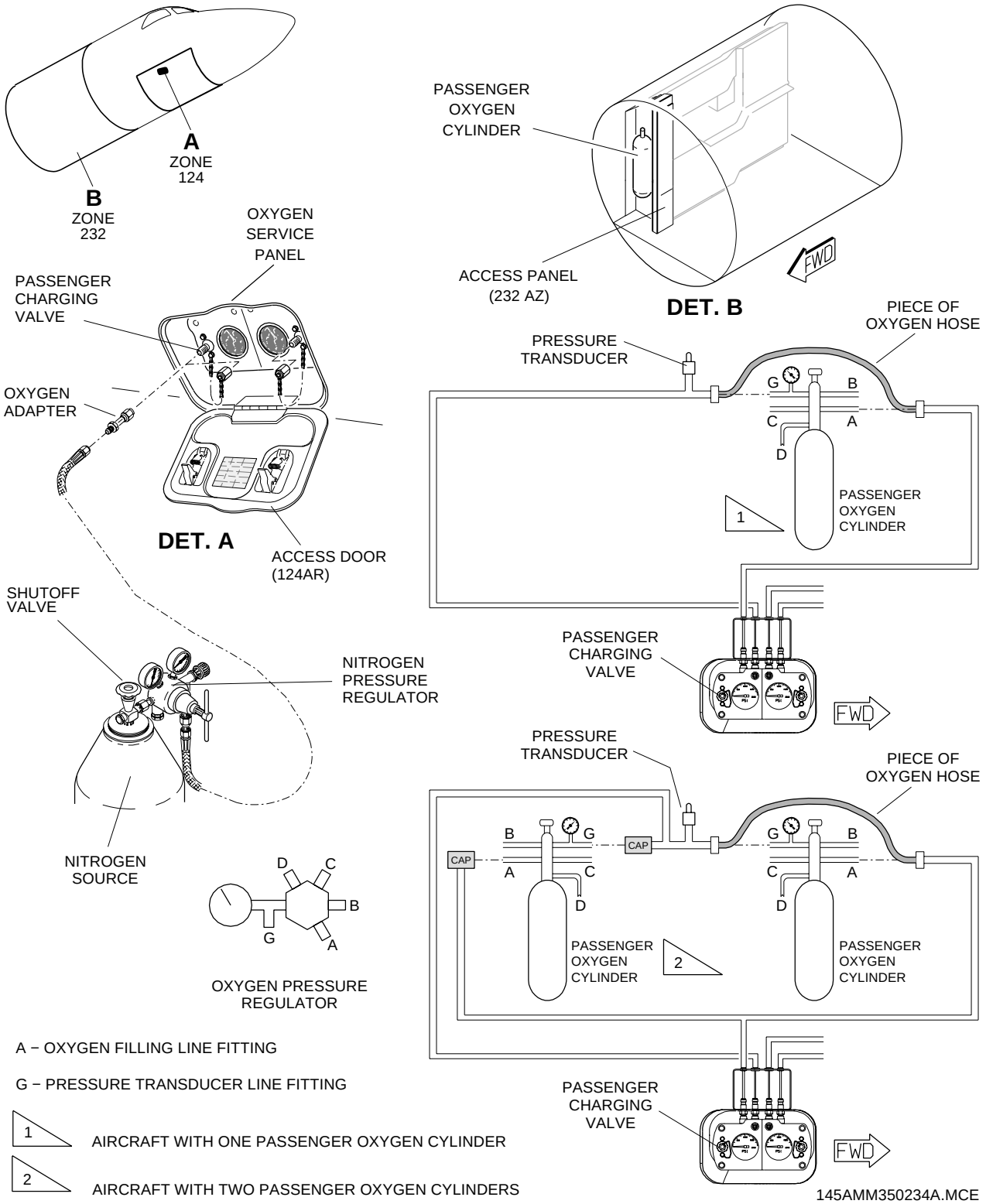
EFFECTIVITY: AIRCRAFT FOR 16 PASSENGERS

Test for Leak in Passenger Oxygen (HP) Distribution Lines

Figure 502



A − OXYGEN FILLING LINE FITTING

G − PRESSURE TRANSDUCER LINE FITTING

1 AIRCRAFT WITH ONE PASSENGER OXYGEN CYLINDER

2 AIRCRAFT WITH TWO PASSENGER OXYGEN CYLINDERS

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