

CHEMICAL OXYGEN GENERATOR - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the chemical oxygen generator.
- 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
35-20-01-000-801-A	CHEMICAL OXYGEN GENERATOR - REMOVAL	ALL
35-20-01-400-801-A	CHEMICAL OXYGEN GENERATOR - INSTALLATION	ALL
35-20-01-000-802-A	CHEMICAL OXYGEN GENERATOR - REMOVAL	ALL
35-20-01-400-802-A	CHEMICAL OXYGEN GENERATOR - INSTALLATION	ALL

TASK 35-20-01-000-801-A

EFFECTIVITY: ALL

2. CHEMICAL OXYGEN GENERATOR - REMOVAL

A. General

(1) This task gives the procedure to remove the chemical oxygen generator.

B. References

REFERENCE	DESIGNATION
TASK 25-20-04-000-801-A	-

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Commercially available	Safety ring	1/LU

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Dispensing units installed in the right and left PSU, lavatory, and flight attendant station

I. Preparation

SUBTASK 841-002-A

(1) Open these circuit breakers:

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

J. Removal (Figure 401) (Figure 402) (Figure 403) (Figure 404) (Figure 405)

SUBTASK 020-002-A

WARNING: • ALWAYS BE CAREFUL NOT TO ACCIDENTALLY PULL THE LANYARDS OR PULL-PIN OF A GENERATOR NOT USED. THE REMOVAL OF THE PULL-PIN FROM THE OXYGEN GENERATOR CAUSES THE FLOW OF OXYGEN TO START AND YOU CANNOT STOP IT UNTIL THE GENERATOR IS EMPTY. THE EXTERNAL SURFACE WILL BECOME SUFFICIENTLY HOT TO BURN YOU.

- DO NOT USE OIL OR OTHER PETROLEUM-BASE LUBRICANTS ON THE OXYGEN EQUIPMENT. THIS CAN CAUSE DANGEROUS FIRE AND BAD INJURY TO PERSONS.
- KEEP ALL SOURCES OF IGNITION (HOT EXHAUST, SPARKS, FLAMES, SMOKE) AWAY FROM THE OXYGEN SERVICING AREA.
- AIRCRAFT WITH "PURITAN" PSU: PUT A SAFETY RING IN THE ACTUATOR HOLE.
- AIRCRAFT WITH "C&D" PSU: PUT A SAFETY PIN IN THE ACTUATOR HOLE.

NOTE: Prepare a clean area and work surface before you start the maintenance practices.

- (1) Get access to the chemical oxygen generator (1) through the doors (2) of the oxygen dispensing unit (3).

NOTE: Do not let that the oxygen mask falls down. If it occurs, the chemical oxygen generator starts and will not stop until it is empty.

- (2) Lock the activation of the chemical oxygen generator as follows:
- (a) Aircraft with "Puritan" PSU: Install a safety ring in the actuator hole. Refer to DET. C, Figure 401.
 - (b) Aircraft with "C&D" PSU: Install a safety pin in the actuator hole. Refer to DET. C, Figure 402.

- (3) Disconnect the chemical-oxygen-generator lanyard loops (4) from the passenger-mask-assembly snap hook (5). The snap hook (5) stays with the passenger mask assemblies (6).

NOTE: Do not disconnect the lanyards (7) from the pull-pin connection (8) on the chemical oxygen generator (1).

- (4) Remove the heat shield as follows:
- (a) Aircraft with "PURITAN" PSU: Push the heat shield (9) at the teeth (10) until the holes in the heat shield (9) are clear of the teeth (10). Then pull rearward until the heat shield (9) is released. Refer to DET. A, Figure 401.
 - (b) Aircraft with "C&D" PSU: Pull the heat shield (9) until it is released. Refer to DET. A, Figure 402.

- (5) Loosen the generator clamp screw until the clamp is fully open and the chemical oxygen generator (1) can be removed.
- (6) Remove from the chemical oxygen generator (1) the oxygen supply tubes (11) that supply the passenger mask assembly.
- (7) Carefully remove chemical oxygen generator (1) from the oxygen dispensing units (3).

NOTE: Be careful not to tangle the oxygen supply tubes (11) or the generator lanyards (7).

SUBTASK 020-003-A

EFFECTIVITY: AIRCRAFT WITH 12 MINUTES OXYGEN GENERATOR

WARNING: • **ALWAYS BE CAREFUL NOT TO ACCIDENTALLY PULL THE LANYARDS OR PULL-PIN OF A GENERATOR NOT USED. THE REMOVAL OF THE PULL-PIN FROM THE OXYGEN GENERATOR CAUSES THE FLOW OF OXYGEN TO START AND YOU CANNOT STOP IT UNTIL THE GENERATOR IS EMPTY. THE EXTERNAL SURFACE WILL BECOME SUFFICIENTLY HOT TO BURN YOU.**

- **DO NOT USE OIL AND OTHER PETROLEUM-BASE LUBRICANTS ON THE OXYGEN EQUIPMENT. THIS CAN CAUSE DANGEROUS FIRE AND BAD INJURY TO PERSONS.**
- **KEEP ALL SOURCES OF IGNITION (HOT EXHAUST, SPARKS, FLAMES, SMOKE) AWAY FROM THE OXYGEN SERVICING AREA.**

- (8) Carefully open the door (5) and hold the oxygen mask. Refer to [Figure 404](#).

NOTE: Do not let that the oxygen mask falls down. If it occurs, the chemical oxygen generator starts and will not stop until it is empty.

- (9) Install the safety pin (6) in the actuator hole. Refer to [Figure 404](#).
- (10) Remove the pull-pin (7). Refer to [Figure 404](#).
- (11) Remove the oxygen hose (4) from the chemical oxygen generator (2). Refer to [Figure 404](#).
- (12) Loosen the screw of the clamps (3) and remove the chemical oxygen generator (2) from the oxygen box (1). Refer to [Figure 404](#).

SUBTASK 020-004-A

EFFECTIVITY: AIRCRAFT WITH 22 MINUTES OXYGEN GENERATOR

- WARNING:** • ALWAYS BE CAREFUL NOT TO ACCIDENTALLY PULL THE LANYARDS OR PULL-PIN OF A GENERATOR NOT USED. THE REMOVAL OF THE PULL-PIN FROM THE CHEMICAL OXYGEN GENERATOR CAUSES THE FLOW OF OXYGEN TO START AND YOU CANNOT STOP IT UNTIL THE GENERATOR IS EMPTY. THE EXTERNAL SURFACE WILL BECOME SUFFICIENTLY HOT TO BURN YOU.
- DO NOT USE OIL AND OTHER PETROLEUM-BASE LUBRICANTS ON THE OXYGEN EQUIPMENT. THIS CAN CAUSE DANGEROUS FIRE AND BAD INJURY TO PERSONS.
 - KEEP ALL SOURCES OF IGNITION (HOT EXHAUST, SPARKS, FLAMES, SMOKE) AWAY FROM THE OXYGEN SERVICING AREA.

(13) Remove the headliner. Refer to TASK 25-20-04-000-801-A.

(14) Install the safety pin (6) in the actuator hole. Refer to [Figure 405](#).

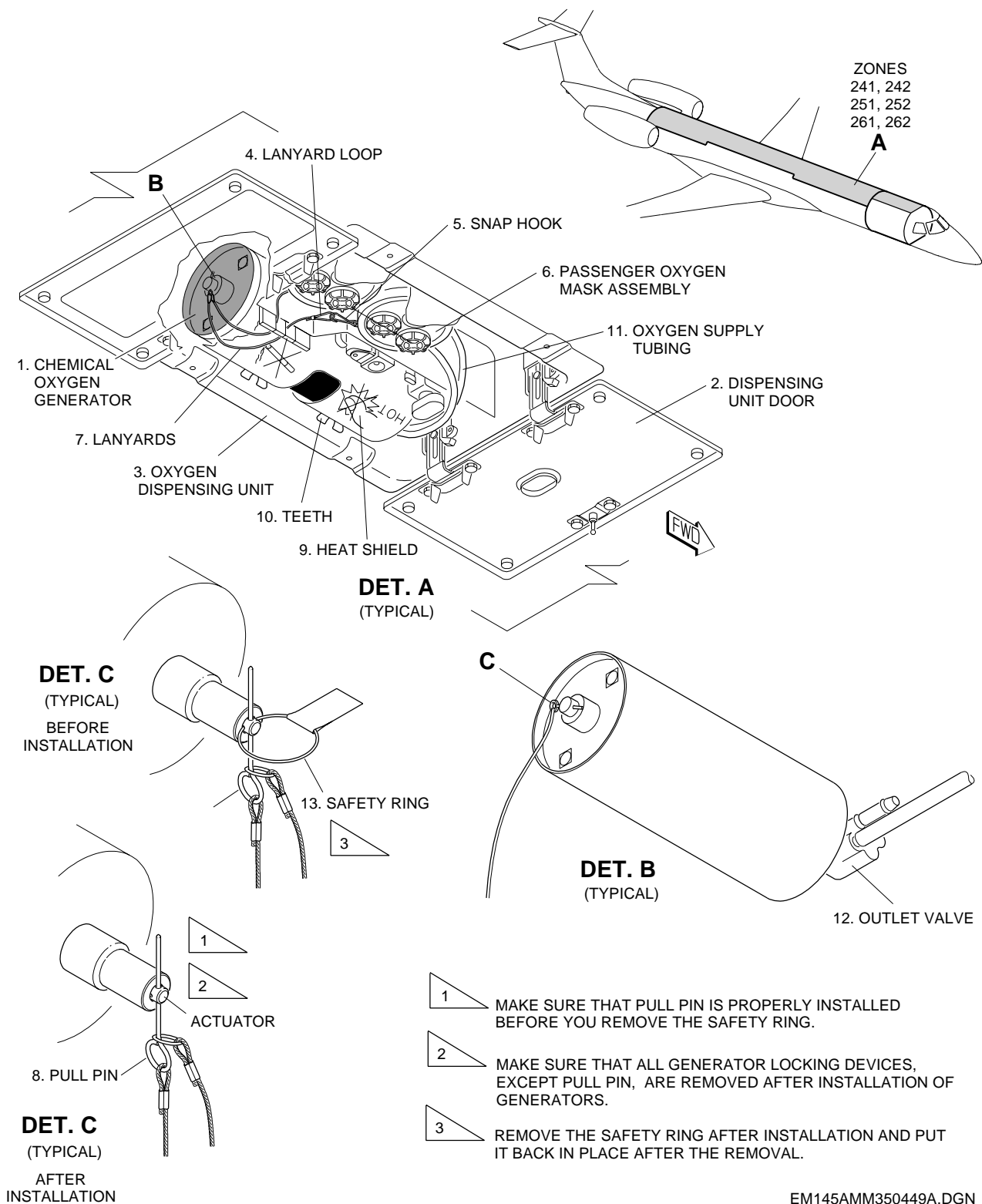
(15) Remove the pull-pin (7) and lanyard (5) from the chemical oxygen generator (1). Refer to [Figure 405](#).

(16) Remove the oxygen hose (2) from the chemical oxygen generator (1). Refer to [Figure 405](#).

(17) Loosen the screw of the clamps (4). Refer to [Figure 405](#).

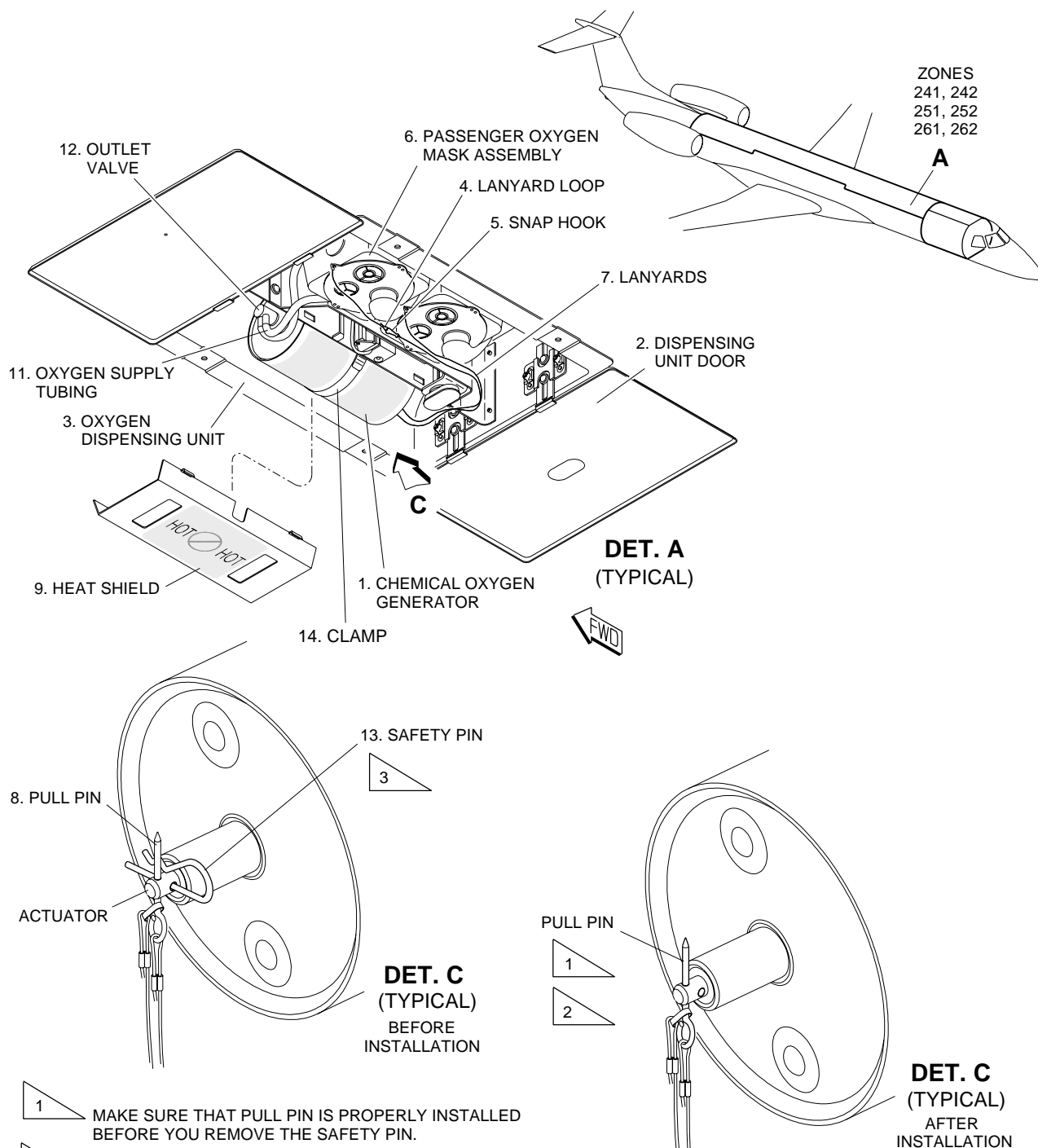
(18) Remove the insulation (3) and chemical oxygen generator (1). Refer to [Figure 405](#).

EFFECTIVITY: AIRCRAFT WITH "PURITAN" PSU
Chemical Oxygen Generator - Removal/Installation
Figure 401



EM145AMM350449A.DGN

EFFECTIVITY: AIRCRAFT WITH "C&D" PSU
Chemical Oxygen Generator - Removal/Installation
Figure 402

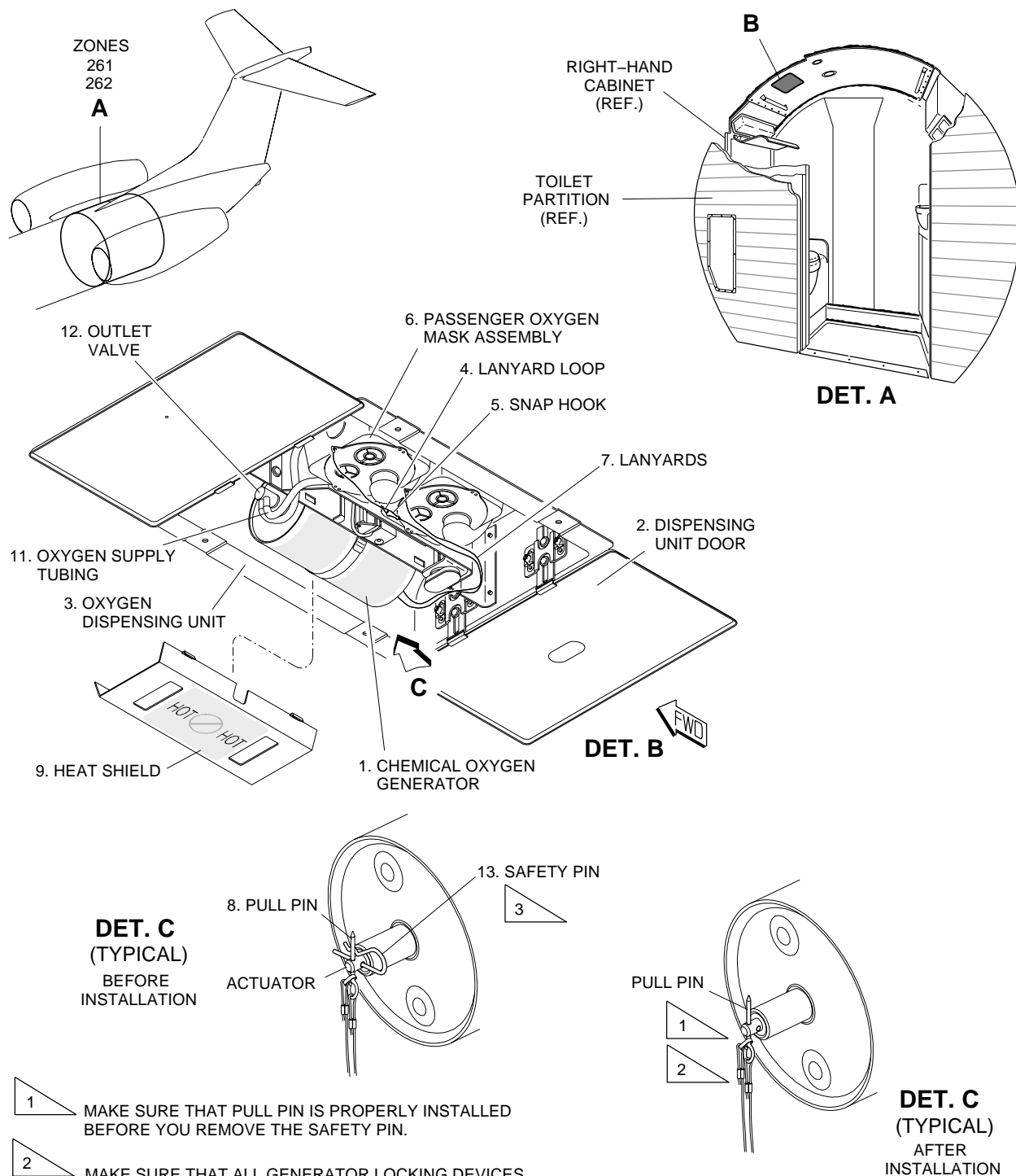


EM145AMM350451A.DGN

EFFECTIVITY: ALL

Chemical Oxygen Generator - Removal/Installation

Figure 403



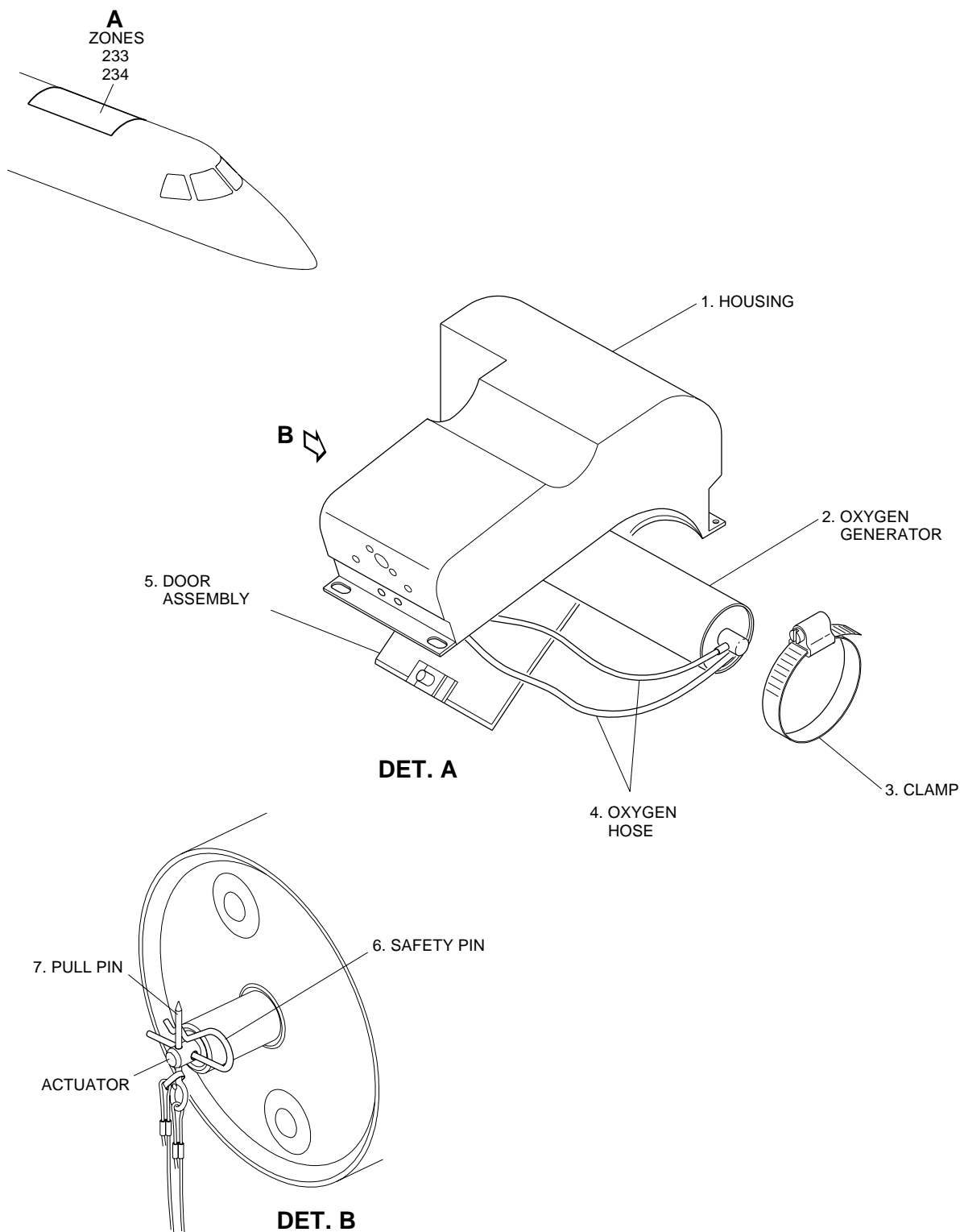
- 1 MAKE SURE THAT PULL PIN IS PROPERLY INSTALLED BEFORE YOU REMOVE THE SAFETY PIN.
- 2 MAKE SURE THAT ALL GENERATOR LOCKING DEVICES, EXCEPT PULL PIN, ARE REMOVED AFTER INSTALLATION OF GENERATORS.
- 3 REMOVE THE SAFETY PIN AFTER INSTALLATION AND PUT IT BACK IN PLACE AFTER THE REMOVAL.

EM145AMM350455A.DGN

EFFECTIVITY: AIRCRAFT WITH 12 MINUTES OXYGEN GENERATOR

Chemical Oxygen Generator - Removal/Installation

Figure 404

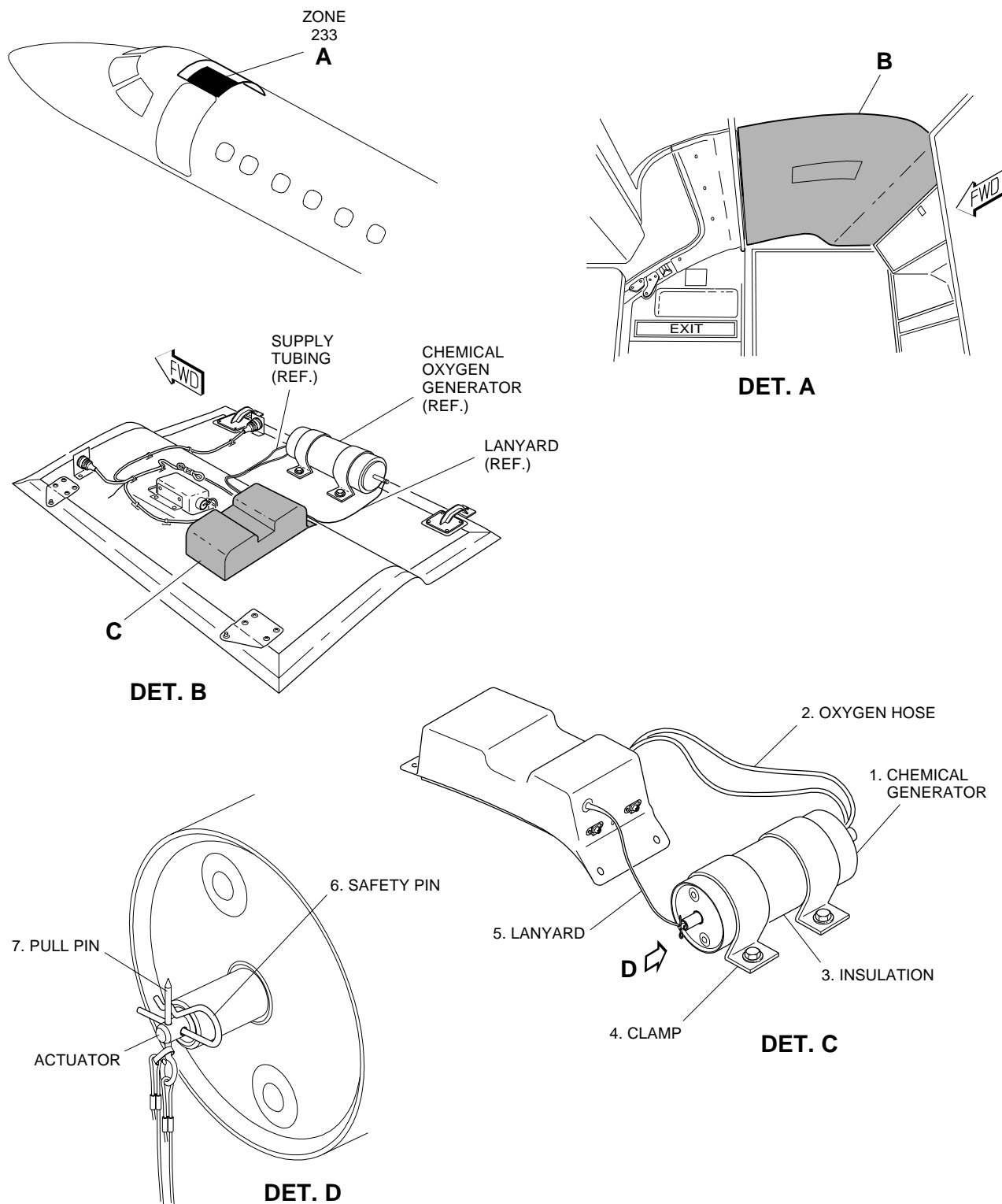


EM145AMM350382A.DGN

EFFECTIVITY: AIRCRAFT WITH 22 MINUTES OXYGEN GENERATOR

Chemical Oxygen Generator - Removal/Installation

Figure 405



EM145AMM350460A.DGN

TASK 35-20-01-400-801-A
EFFECTIVITY: ALL

3. CHEMICAL OXYGEN GENERATOR - INSTALLATION

A. General

(1) This task gives the procedure to install the chemical oxygen generator.

B. References

REFERENCE	DESIGNATION
AMM TASK 35-20-04-860-801-A/200	PASSENGER OXYGEN MASKS - STOWAGE

C. Zones and Accesses

Not Applicable

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Dispensing units installed in the right and left PSU, forward, aft lavatories, and flight attendant station

I. Installation (Figure 401) (Figure 402) (Figure 403) (Figure 404) (Figure 405)

SUBTASK 420-002-A

WARNING: • ON ITS INSTALLATION, MAKE SURE THAT DEVICES AGAINST ACCIDENTAL PULL ARE REMOVED FROM THE CHEMICAL OXYGEN GENERATOR NOT TO PREVENT OPERATION. ONLY THE PULL-PIN MUST STAY IN THE ACTUATOR.

- AIRCRAFT WITH "PURITAN" PSU: DO NOT CUT THE ACTUATOR SAFETY RING.
- AIRCRAFT WITH "C&D" PSU: DO NOT CUT THE ACTUATOR SAFETY PIN.
- ALWAYS BE CAREFUL NOT TO ACCIDENTALLY PULL THE LANYARDS OR PULL-PIN OF A GENERATOR NOT USED. THE REMOVAL OF THE PULL-PIN FROM THE OXYGEN GENERATOR CAUSES THE FLOW OF OXYGEN TO START AND YOU CANNOT STOP IT UNTIL THE GENERATOR IS EMPTY. THE EXTERNAL SURFACE WILL BECOME SUFFICIENTLY HOT TO BURN YOU.
- DO NOT USE OIL AND OTHER PETROLEUM-BASE LUBRICANTS ON THE OXYGEN EQUIPMENT. THIS CAN CAUSE DANGEROUS FIRE AND BAD INJURY TO PERSONS.
- KEEP ALL SOURCES OF IGNITION (HOT EXHAUST, SPARKS, FLAMES, SMOKE) AWAY FROM THE OXYGEN SERVICING AREA.

NOTE: Prepare a clean area and work surface before you start the maintenance practices.

NOTE: For the lavatory, do the chemical oxygen generator installation procedure as given for aircraft with "C&D" PSU.

- (1) Put the chemical oxygen generator (1) into the generator cavity in the box assembly.

NOTE: The chemical oxygen generator (1) must be installed with the outlet valve (12) pointed towards the front of the aircraft.

- (2) Turn the chemical oxygen generator (1) and outlet valve (12) until the identification nameplate of the generator points towards the door assemblies when they are closed (approximately 45°). Make sure that the pull-pin ring points towards the same angle.
- (3) Close and attach the chemical oxygen generator clamp (14).
- (4) Install to the chemical oxygen generator (1) the oxygen supply tubes (11) that supply the passenger mask assembly.
- (5) Move the two tabs on the heat shield (9) onto their retaining teeth on the box assembly wall.
- (6) Connect the chemical-oxygen-generator lanyard loops (4) to the passenger-mask-assembly snap hook (5).
- (7) After you install the chemical oxygen generator, do as follows:
- (a) Aircraft with "Puritan" PSU: Remove the safety ring in the actuator hole. Refer to DET. C, (Figure 401).

(b) Aircraft with "C&D" PSU: Remove the safety pin in the actuator hole. Refer to DET. C, (Figure 402).

(8) Stow the mask. Refer to [AMM TASK 35-20-04-860-801-A/200](#).

(9) Close the doors (2) of the oxygen dispensing unit (3).

SUBTASK 420-003-A

EFFECTIVITY: AIRCRAFT WITH 12 MINUTES OXYGEN GENERATOR

WARNING: • ON ITS INSTALLATION, MAKE SURE THAT DEVICES TO PREVENT ACCIDENTAL PULL ARE REMOVED FROM THE CHEMICAL OXYGEN GENERATOR NOT TO PREVENT OPERATION. ONLY THE PULL-PIN (7) MUST STAY IN THE ACTUATOR.

- ALWAYS BE CAREFUL NOT TO ACCIDENTALLY PULL THE LANYARDS OR PULL-PIN OF A GENERATOR NOT USED. THE REMOVAL OF THE PULL-PIN FROM THE OXYGEN GENERATOR CAUSES THE FLOW OF OXYGEN TO START AND YOU CANNOT STOP IT UNTIL THE GENERATOR IS EMPTY. THE EXTERNAL SURFACE WILL BECOME SUFFICIENTLY HOT TO BURN YOU.
- DO NOT USE OIL AND OTHER PETROLEUM-BASE LUBRICANTS ON THE OXYGEN EQUIPMENT. THIS CAN CAUSE DANGEROUS FIRE AND BAD INJURY TO PERSONS.
- KEEP ALL SOURCES OF IGNITION (HOT EXHAUST, SPARKS, FLAMES, SMOKE) AWAY FROM THE OXYGEN SERVICING AREA.

NOTE: Prepare a clean area and work surface before you start the maintenance practices.

(10) Put the chemical oxygen generator (2) in position inside the oxygen box (1). Refer to (Figure 404).

NOTE: The chemical oxygen generator (2) must be installed with the outlet valve pointed towards the front of the aircraft.

(11) Turn the chemical oxygen generator (2) until the identification nameplate of the generator points towards the door assemblies when they are closed (approximately 45°). Make sure that the pull-pin ring points towards the same angle.

(12) Install the clamps (3). Refer to (Figure 404).

(13) Install the pull-pin (7) in the actuator hole. Refer to (Figure 404).

(14) Install the oxygen hose (4). Refer to (Figure 404).

(15) Stow the mask. Refer to [AMM TASK 35-20-04-860-801-A/200](#).

(16) Remove the safety pin (6). Refer to (Figure 404).

SUBTASK 420-004-A

EFFECTIVITY: AIRCRAFT WITH 22 MINUTES OXYGEN GENERATOR

- WARNING:**
- ON ITS INSTALLATION, MAKE SURE THAT DEVICES TO PREVENT ACCIDENTAL PULL ARE REMOVED FROM THE CHEMICAL OXYGEN GENERATOR NOT TO PREVENT OPERATION. ONLY THE PULL-PIN MUST STAY IN THE ACTUATOR.
 - ALWAYS BE CAREFUL NOT TO ACCIDENTALLY PULL THE LANYARDS OR PULL-PIN OF A GENERATOR NOT USED. THE REMOVAL OF THE PULL-PIN FROM THE CHEMICAL OXYGEN GENERATOR CAUSES THE FLOW OF OXYGEN TO START AND YOU CANNOT STOP IT UNTIL THE GENERATOR IS EMPTY. THE EXTERNAL SURFACE WILL BECOME SUFFICIENTLY HOT TO BURN YOU.
 - DO NOT USE OIL AND OTHER PETROLEUM-BASE LUBRICANTS ON THE OXYGEN EQUIPMENT. THIS CAN CAUSE DANGEROUS FIRE AND BAD INJURY TO PERSONS.
 - KEEP ALL SOURCES OF IGNITION (HOT EXHAUST, SPARKS, FLAMES, SMOKE) AWAY FROM THE OXYGEN SERVICING AREA.

NOTE: Prepare a clean area and the work surface before you start the maintenance practices.

- (17) Put insulation (3) on the chemical oxygen generator (1). Refer to (Figure 405).
- (18) Put the chemical oxygen generator in position. Refer to (Figure 405).
- (19) Turn the chemical oxygen generator (1) until the identification nameplate of the generator points towards the door assemblies when they are closed (approximately 45°). Make sure that the pull-pin ring points towards the same angle.
- (20) Install the clamps (4). Refer to (Figure 405).
- (21) Install the oxygen hose (2) from the oxygen box to the chemical oxygen generator (1). Refer to (Figure 405).
- (22) Install the pull-pin (7) and lanyard (5) at the chemical oxygen generator (1). Refer to (Figure 405).
- (23) Remove the safety pin (6). Refer to (Figure 405).

J. Follow-on

SUBTASK 842-002-A

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

TASK 35-20-01-000-802-A

EFFECTIVITY: ALL

4. CHEMICAL OXYGEN GENERATOR - REMOVAL

A. General

(1) This task gives the procedures to remove the chemical oxygen generator.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

Not Applicable

D. Auxiliary Items

Not Applicable

E. Consumable Materials

<i>SPECIFICATION (BRAND)</i>	<i>DESCRIPTION</i>	<i>QTY</i>
Commercially available	Safety pin	1/LU

F. Expandable Parts

Not Applicable

G. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Forward galley

H. Preparation

SUBTASK 841-003-A

(1) Open these circuit breakers:

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

I. Removal (Figure 406)

SUBTASK 020-005-A

WARNING: • ALWAYS BE CAREFUL NOT TO ACCIDENTALLY PULL THE LANYARDS OR PULL-PIN OF A GENERATOR NOT USED. THE REMOVAL OF THE PULL-PIN FROM THE OXYGEN GENERATOR CAUSES THE FLOW OF OXYGEN TO START AND YOU CANNOT STOP IT UNTIL THE GENERATOR IS EMPTY. THE EXTERNAL SURFACE WILL BECOME SUFFICIENTLY HOT TO BURN YOU.

- DO NOT USE OIL AND OTHER PETROLEUM-BASE LUBRICANTS ON THE OXYGEN EQUIPMENT. THIS CAN CAUSE DANGEROUS FIRE AND BAD INJURY TO PERSONS.
- KEEP ALL SOURCES OF IGNITION (HOT EXHAUST, SPARKS, FLAMES, SMOKE) AWAY FROM THE OXYGEN SERVICING AREA.
- AFTER YOU REMOVE THE CHEMICAL OXYGEN GENERATOR, PUT A SAFETY PIN IN THE ACTUATOR HOLE.

- (1) **NOTE:** Prepare a clean area and work surface before you start the maintenance practices.

Get access to the chemical oxygen generator (1) through the door (7) of the forward galley.

- (2) Disconnect the chemical oxygen generator lanyard loops (5) from the mask assembly snap hook (6). The snap hook (6) stays with the mask assemblies (8).

NOTE: Do not disconnect the lanyards (4) from the pull-pin connection (10) on the chemical oxygen generator (1).

- (3) Loosen the generator clamp bolt (3) until the clamp (2) is fully open and the chemical oxygen generator (1) can be removed.

- (4) Remove from the chemical oxygen generator (1) the oxygen supply tubes (9) that supply the mask assembly (8).

- (5) Carefully remove the chemical oxygen generator (1) from the forward galley.

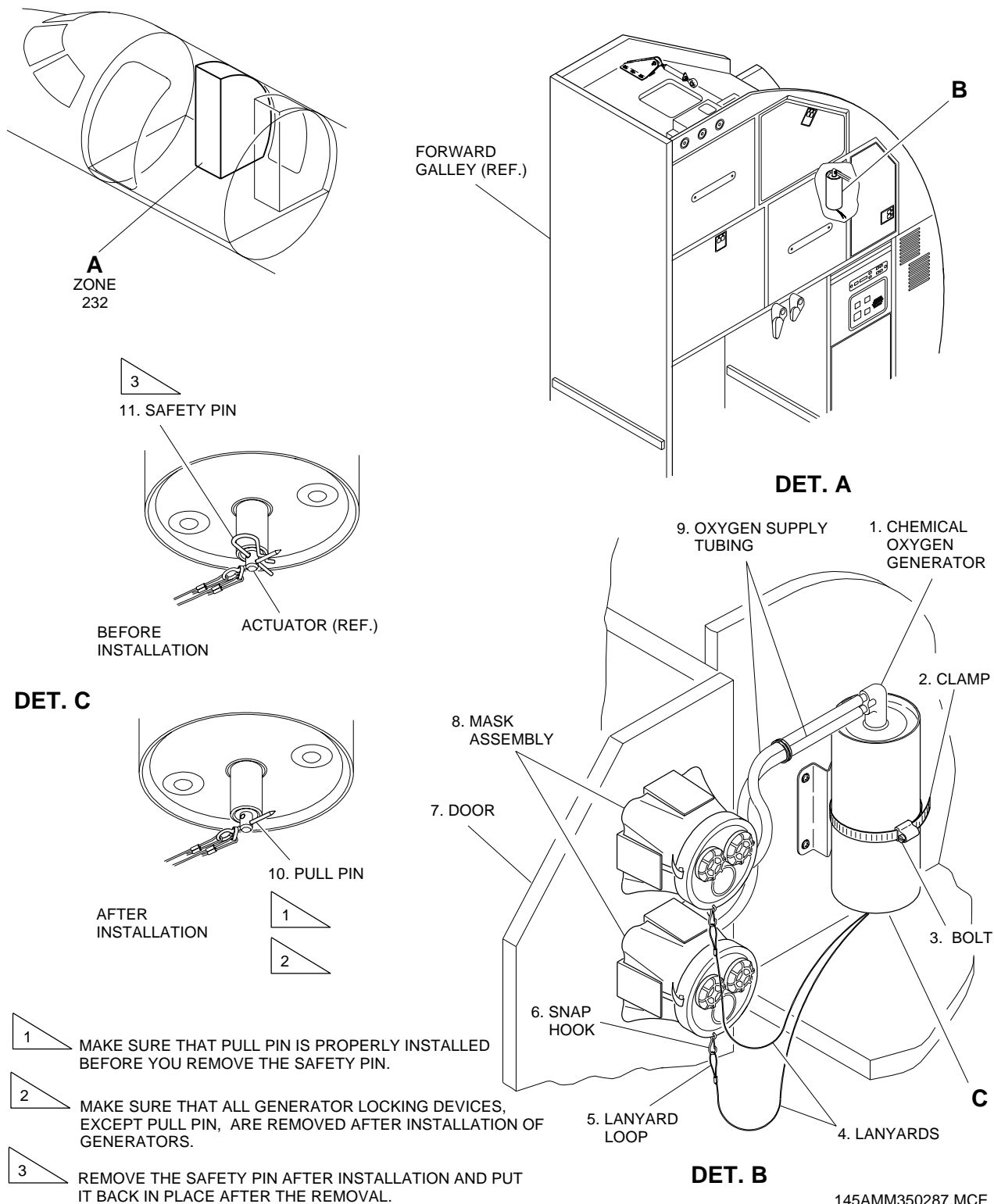
NOTE: Be careful not to tangle the oxygen supply tubes (9) or the generator lanyards (4).

- (6) After you remove the chemical oxygen generator (1), install a safety pin (11) in the actuator hole. Refer to DET. C.

EFFECTIVITY: ALL

Chemical Oxygen Generator - Removal/Installation

Figure 406



TASK 35-20-01-400-802-A

EFFECTIVITY: ALL

5. CHEMICAL OXYGEN GENERATOR - INSTALLATION

A. General

(1) This task gives the procedure to install the chemical oxygen generator.

B. Zones and Accesses

Not Applicable

C. Tools and Equipment

Not Applicable

D. Auxiliary Items

Not Applicable

E. Consumable Materials

Not Applicable

F. Expandable Parts

Not Applicable

G. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Forward galley

H. Installation (Figure 406)

SUBTASK 420-005-A

- WARNING:**
- ON INSTALLATION, MAKE SURE THAT THE DEVICES AGAINST ACCIDENTAL PULL ARE REMOVED FROM THE CHEMICAL OXYGEN GENERATOR NOT TO PREVENT OPERATION. ONLY THE PULL-PIN (8) MUST STAY IN THE ACTUATOR.
 - DO NOT CUT THE ACTUATOR SAFETY PIN (13). REFER TO FIGURE 402.
 - ALWAYS BE CAREFUL NOT TO ACCIDENTALLY PULL THE LANYARDS OR THE PULL-PIN OF A GENERATOR NOT USED. THE REMOVAL OF THE PULL-PIN FROM THE OXYGEN GENERATOR WILL START THE FLOW OF OXYGEN AND YOU CANNOT STOP IT UNTIL THE GENERATOR IS EMPTY. THE EXTERNAL SURFACE WILL BECOME SUFFICIENTLY HOT TO BURN YOU.
 - DO NOT USE OIL AND OTHER PETROLEUM-BASE LUBRICANTS ON THE OXYGEN EQUIPMENT. THIS COULD CAUSE A DANGEROUS FIRE AND BAD INJURY TO PERSONS.
 - KEEP ALL SOURCES OF IGNITION (HOT EXHAUST, SPARKS, FLAMES, SMOKE) AWAY FROM THE OXYGEN SERVICING AREA.

- (1) NOTE: Prepare a clean area and work surface before you start the maintenance practices.

Install to the chemical oxygen generator (1) the oxygen supply tubes (9) that supply the mask assembly (8).

- (2) Connect the chemical oxygen generator lanyard loops (5) from the mask assembly snap hook (6).
- (3) After you install the chemical oxygen generator (1), remove the safety pin (11) from the actuator hole. Refer to DET. C.
- (4) Close the door (7) of the forward galley.

I. Follow-on

SUBTASK 842-003-A

- (1) Close the circuit breakers below:
- PASS OXY DEPLOY 1 (location tip: ESSENTIAL DC BUS 1/MISCELLANEOUS).
 - PASS OXY DEPLOY 2 (location tip: ESSENTIAL DC BUS 2).

