



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

FORWARD FUSELAGE ACCESS DOOR/PANELS - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove and install the Forward Fuselage access doors/panels.
- B. The procedures in this section are given in the sequence below.
- C. 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 |
|--------------------|---|-------------|
| 52-40-01-000-801-A | FORWARD FUSELAGE ACCESS DOORS ALL - REMOVAL | |
| 52-40-01-400-801-A | FORWARD FUSELAGE ACCESS DOORS ALL - INSTALLATION | |
| 52-40-01-000-802-A | FORWARD FUSELAGE ACCESS PANELS ALL - REMOVAL | |
| 52-40-01-400-802-A | FORWARD FUSELAGE ACCESS PANELS ALL - INSTALLATION | |
| 52-40-01-000-803-A | OXYGEN EXTERNAL CHARGING DOOR - ALL REMOVAL | |
| 52-40-01-400-803-A | OXYGEN EXTERNAL CHARGING DOOR - ALL INSTALLATION | |



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TASK 52-40-01-000-801-A

EFFECTIVITY: ALL

2. FORWARD FUSELAGE ACCESS DOORS - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the forward fuselage access doors.

B. References

| REFERENCE | DESIGNATION |
|----------------------|-------------|
| AMM MPP 06-41-01/100 | - |
| SRM 51-40-07 | - |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|------------------|
| 113 | 113EL | Forward fuselage |
| 123 | 123AL | Forward fuselage |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|-------------|--------------------------------|-----|
| Commercially available | Workstand | To get access to the work area | 1 |

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|------------------|
| 1 | Does the task | Forward fuselage |

I. Preparation

SUBTASK 841-002-A

- (1) Make sure that the aircraft is safe for maintenance.
- (2) Put the workstand in the work area.
- (3) Open the Forward Fuselage access doors 113EL and 123AL. Refer to AMM MPP 06-41-01/100.



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J. Removal ([Figure 401](#))

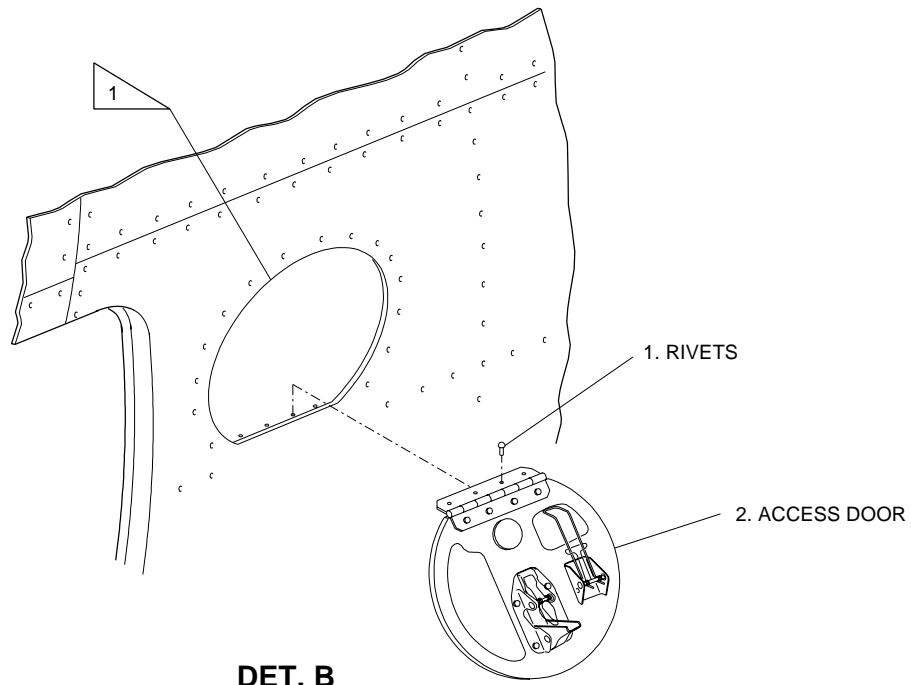
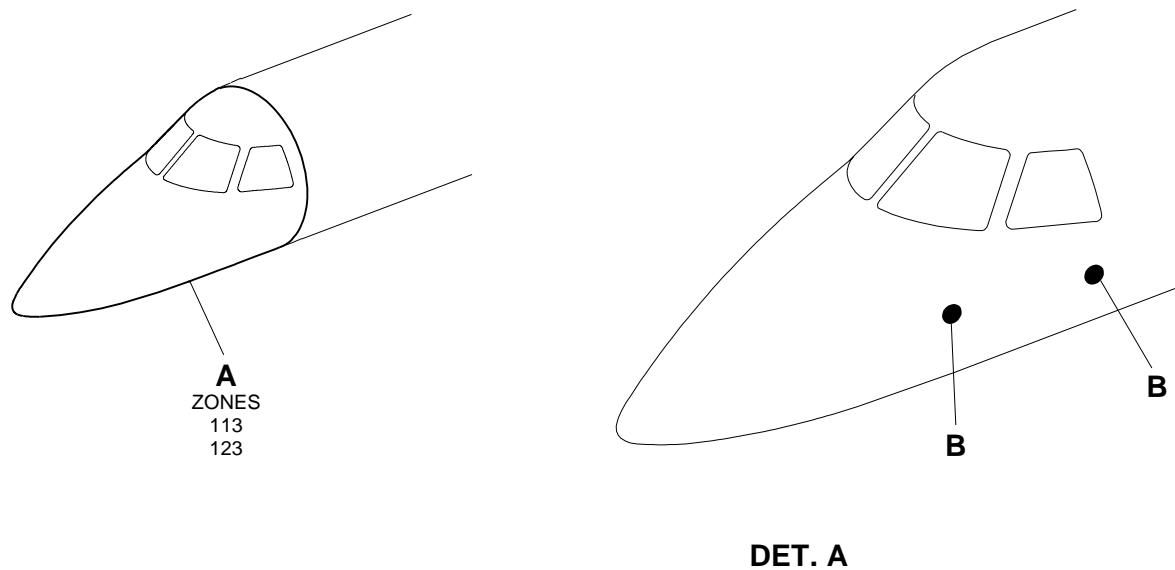
SUBTASK 020-002-A

- (1) Remove the rivets (1) that attach access door (2) on forward fuselage. Refer to SRM 51-40-07.
- (2) Remove the access door (2).

EFFECTIVITY: ALL

Forward Fuselage Access Doors - Removal/Installation

Figure 401



 **AERODYNAMIC LIMITS**

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TASK 52-40-01-400-801-A

EFFECTIVITY: ALL

3. FORWARD FUSELAGE ACCESS DOORS - INSTALLATION

A. General

(1) This procedure gives the instructions to install the forward fuselage access doors.

B. References

| REFERENCE | DESIGNATION |
|----------------------|-------------|
| AMM MPP 06-41-01/100 | - |
| SRM 51-10-01 | - |
| SRM 51-40-07 | - |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|------------------|
| 113 | 113EL | Forward fuselage |
| 123 | 123AL | Forward fuselage |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|-------------|--------------------------------|-----|
| Commercially available | Workstand | To get access to the work area | 1 |

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|------------------|
| 1 | Does the task | Forward fuselage |

I. Installation (Figure 401)

SUBTASK 420-002-A

(1) Install the access door (2) and attach it with the rivets (1). Refer to SRM 51-40-07.



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J. Follow-on (Figure 401)

SUBTASK 842-002-A

- (1) Close the Forward Fuselage access doors 113EL and 123AL. Refer to AMM MPP 06-41-01/100.
- (2) Check the Aerodynamic Limits. Refer to SRM 51-10-01).
- (3) Remove the workstand from the work area.



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TASK 52-40-01-000-802-A

EFFECTIVITY: ALL

4. FORWARD FUSELAGE ACCESS PANELS - REMOVAL

A. General

(1) This procedure gives the instructions to remove the forward fuselage access panels.

B. References

| REFERENCE | DESIGNATION |
|----------------------|-------------|
| AMM MPP 06-41-01/100 | - |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|------------------|
| 213 | 213AL | Forward fuselage |
| 213 | 213BL | Forward fuselage |
| 213 | 213CL | Forward fuselage |
| 214 | 214AR | Forward fuselage |
| 214 | 214BR | Forward fuselage |
| 214 | 214CR | Forward fuselage |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|-----------------|--------------------------------|-----|
| Commercially available | Goggles | | 1 |
| Commercially available | Rubber Gloves | | 1 |
| Commercially available | Acrylic Spatula | | 1 |
| Commercially available | Lint-Free Cloth | | 1 |
| Commercially available | Workstand | To get access to the work area | 1 |

F. Consumable Materials

| SPECIFICATION (BRAND) | DESCRIPTION | QTY |
|--------------------------|---------------------------|-----|
| ASTM-D-740 | Methyl-Ethyl-Ketone (MEK) | AR |

G. Expandable Parts

Not Applicable



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H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|------------------|
| 1 | Does the task | Forward fuselage |

I. Preparation

SUBTASK 841-003-A

- (1) Make sure that the aircraft is safe for maintenance.
- (2) Put the workstand in the work area.
- (3) Identify the Forward Fuselage access panels 213AL, 213BL, 213CL, 214AR, 214BR, and 214CR. Refer to AMM MPP 06-41-01/100.
- (4) With an Acrylic spatula, remove the old aerodynamic sealant in the forward fuselage access panels attachment area.
- (5) With a lint-free cloth soaked in MEK, clean de surface.

J. Removal (Figure 402)

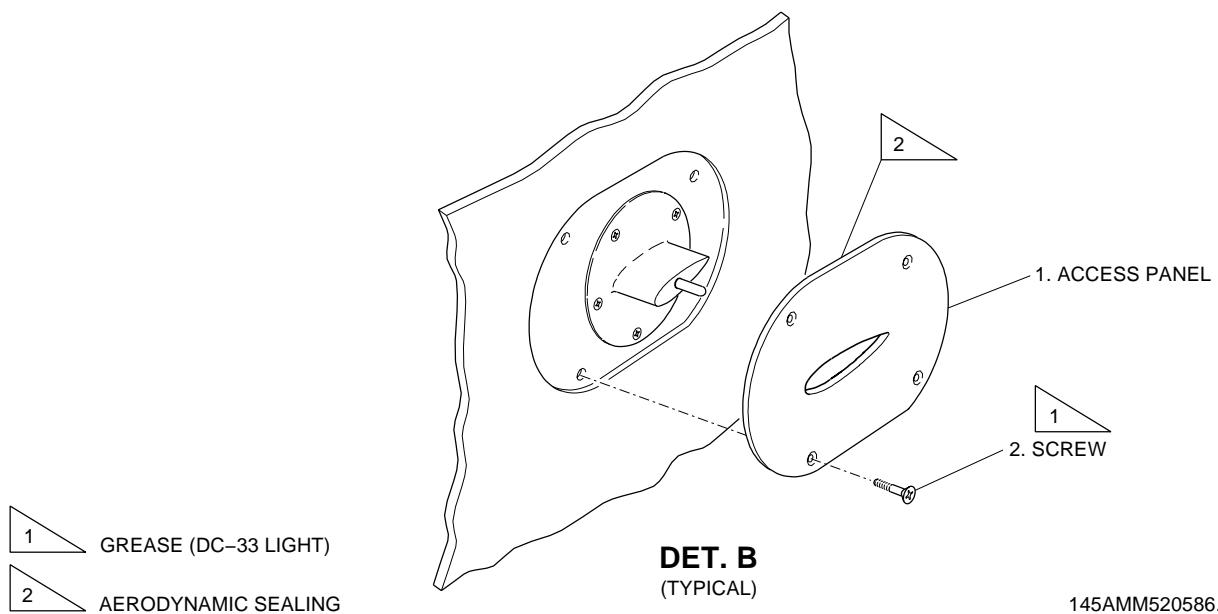
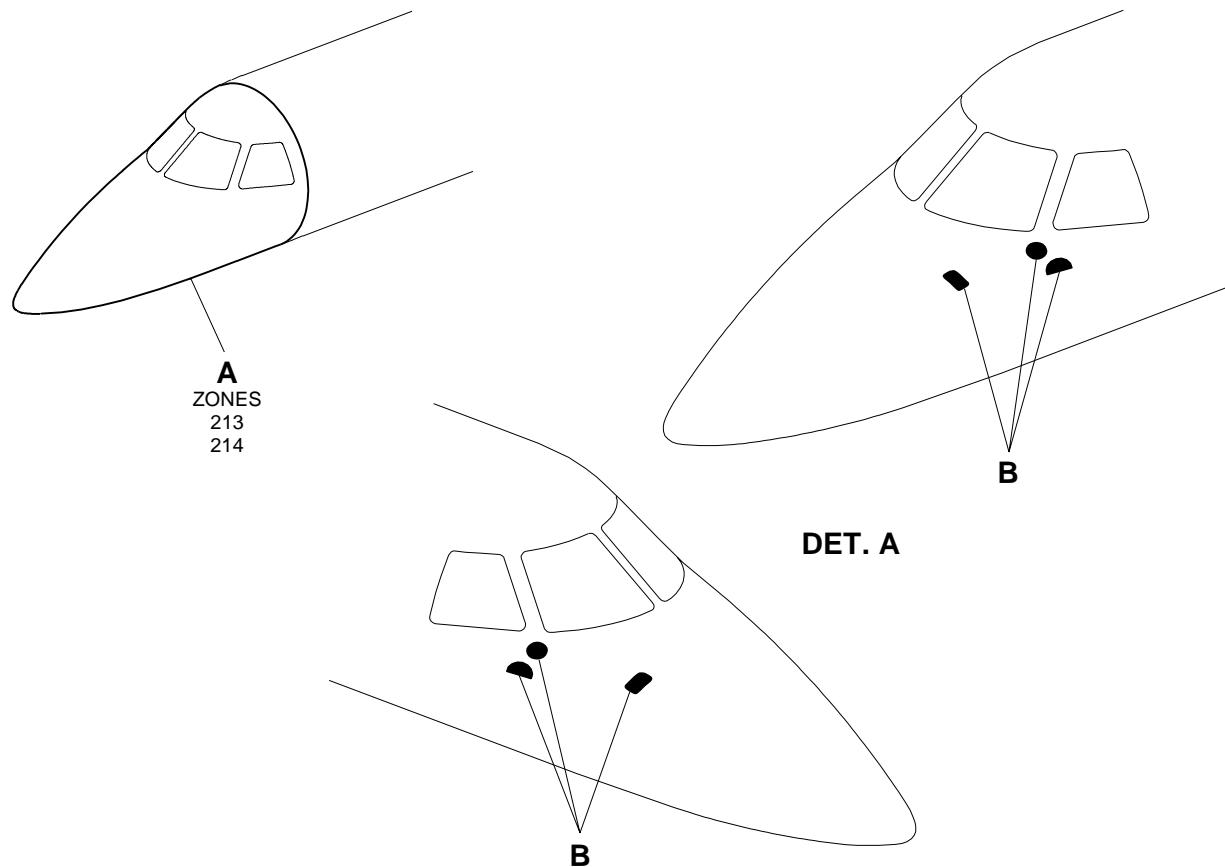
SUBTASK 020-003-A

- (1) Remove the screws (2) that attach the access panel (1).
- (2) Remove the access panel (1).

EFFECTIVITY: ALL

Forward Fuselage Access Panels - Removal/Installation

Figure 402



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TASK 52-40-01-400-802-A

EFFECTIVITY: ALL

5. FORWARD FUSELAGE ACCESS PANELS - INSTALLATION

A. General

(1) This procedure gives the instructions to install the forward fuselage access panels.

B. References

| REFERENCE | DESIGNATION |
|----------------------|-------------------------|
| AMM MPP 20-10-01/200 | - MAINTENANCE PRACTICES |
| SRM 51-10-01 | - |
| SRM 51-20-01 | - |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|------------------|
| 213 | 213AL | Forward fuselage |
| 213 | 213BL | Forward fuselage |
| 213 | 213CL | Forward fuselage |
| 214 | 214AR | Forward fuselage |
| 214 | 214BR | Forward fuselage |
| 214 | 214CR | Forward fuselage |

D. Tools and Equipment

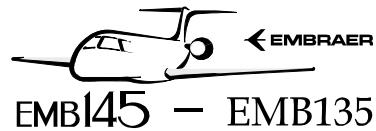
| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|---------------|----------------------------------|-----|
| Commercially available | Torque wrench | To tighten the attachment screws | |

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|---------------|--------------------------------|-----|
| Commercially available | Goggles | | 1 |
| Commercially available | Rubber Gloves | | 1 |
| Commercially available | Workstand | To get access to the work area | 1 |

F. Consumable Materials

| SPECIFICATION (BRAND) | DESCRIPTION | QTY |
|-------------------------|-------------------------------|-----|
| MIL-G-46886 | Grease, Molykote DC-33, Light | AR |
| MIL-PRF-81733 TYPE II-2 | Sealant, P/S 870 - B 2 | AR |



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(Continued)

| SPECIFICATION (BRAND) | DESCRIPTION | QTY |
|---------------------------|-----------------------------|-----|
| MIL-PRF-81733 TYPE II-1/2 | Sealant, P/S 870 - B 1/2 | AR |
| Commercially available | Adhesive Tape | AR |
| Commercially available | Aluminum Tape (AL Tape 425) | AR |
| Commercially available | Polyethylene Film | AR |

G. Expandable Parts

Not Applicable

H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|------------------|
| 1 | Does the task | Forward fuselage |

I. Installation (Figure 402)

SUBTASK 420-003-A

- (1) Apply Molykote DC-33 light grease to the screws (2).
- (2) Install the access panel (1).
- (3) Install the screws (2) that attach the access panel (1) applying the correct torque. Refer to [AMM MPP 20-10-01/200](#).

J. Follow-on (Figure 402)

SUBTASK 842-003-A

CAUTION: PRODUCTS USED FOR CLEANING AND SEALING ARE TOXIC AND INFLAMMABLE. WEAR RUBBER GLOVES AND GOGGLES. IF THE AREA OF SEALING COMPOUND APPLICATION IS NOT WELL VENTILATED, USE RESPIRATORS.

- (1) There are different methods to do the aerodynamic sealing in the forward fuselage access panels attachment area. Use the applicable procedure as necessary.

(a) Full sealant-curing time:

- 1 Apply sealant P/S 870 - B 1/2 or P/S 870 - B 2.

NOTE: Sealant curing time will change according to the environmental conditions. Refer to SRM 51-20-01.

(b) Acceleration of the sealant curing time with heating:

- 1 Apply sealant P/S 870 - B 1/2 or P/S 870 - B 2.

- 2 Wait for one hour after the sealant is applied.

CAUTION: THE TEMPERATURE MUST NOT BE HIGHER THAN 55°C (131°F).

- 3 Heat the area which received the sealant.



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NOTE: The sealant curing time versus temperature rate changes as shown in the Sealant Specification Table (SRM 51-20-01).

- (c) Application of aluminum tape after the tack-free time.

NOTE: This procedure must only be done when a faster aircraft clearance is necessary.

1 Apply sealant P/S 870 - B 1/2 or P/S 870 - B 2.

2 You can accelerate the sealant curing time as written in paragraph (b).

3 After the sealant is tack-free, apply aluminum tape.

NOTE: You can operate the aircraft immediately after the aluminum tape application.

4 Remove the aluminum tape after 150 hours.

- (d) Application of polyethylene film and aluminum tape.

1 Apply sealant P/S 870 - B 1/2 or P/S 870 - B 2.

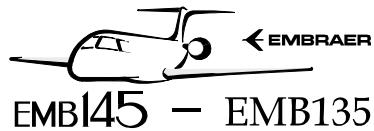
2 Apply a polyethylene film over the sealant.

3 Apply the aluminum tape.

4 Remove the aluminum tape after 10 days.

(2) Check the Aerodynamic Limits. Refer to SRM 51-10-01.

(3) Remove the workstand from the work area.



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TASK 52-40-01-000-803-A

EFFECTIVITY: ALL

6. OXYGEN EXTERNAL CHARGING DOOR - REMOVAL

A. General

- (1) This procedure gives the instructions to remove the oxygen external charging door.

B. References

| REFERENCE | DESIGNATION |
|----------------------|-------------|
| AMM MPP 06-41-01/100 | - |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|------------------|
| 124 | 124AR | Forward fuselage |

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|-------------|--------------------------------|-----|
| Commercially available | Workstand | To get access to the work area | 1 |

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|------------------|
| 1 | Does the task | Forward fuselage |

I. Preparation

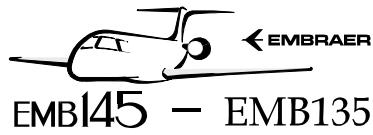
SUBTASK 841-004-A

- (1) Make sure that the aircraft is safe for maintenance.
- (2) Put the workstand in the work area.
- (3) Open the oxygen external charging door 124AR. Refer to AMM MPP 06-41-01/100.

J. Removal (Figure 403)

SUBTASK 020-004-A

- (1) Remove the bolts (3) and washers (2) that attach the spring (4).



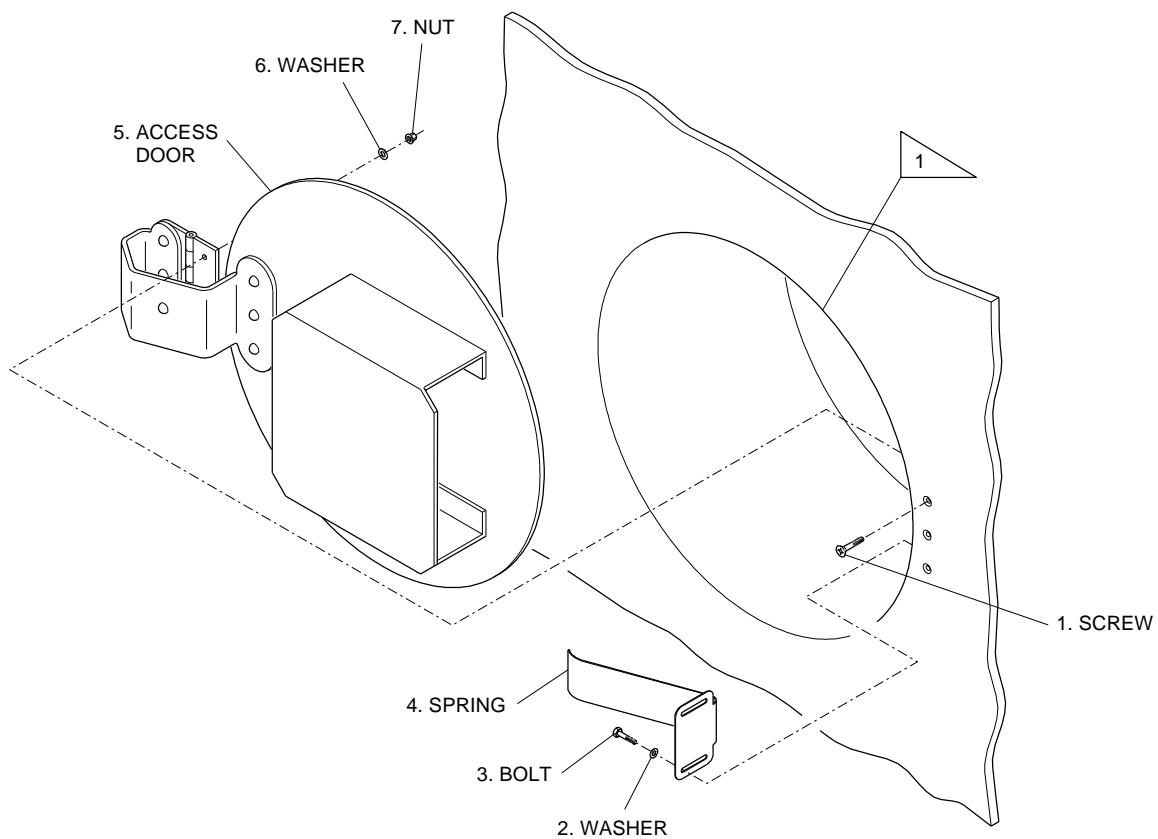
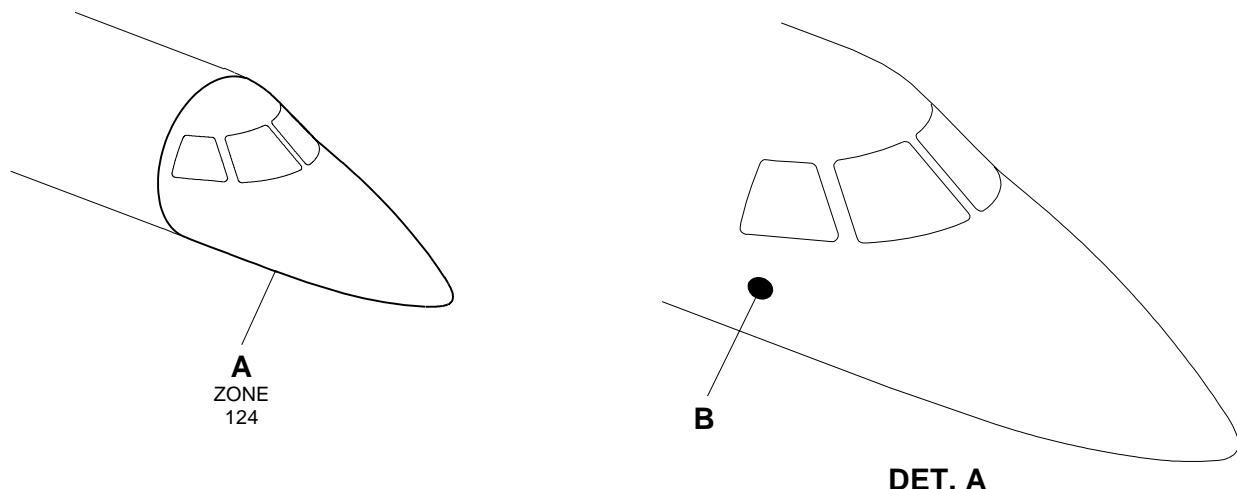
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- (2) Remove the spring (4).
- (3) Remove the nuts (7), washers (6), and screws (1) that attach access door (5) on forward fuselage.
- (4) Remove the access door (5).

EFFECTIVITY: ALL

Oxygen External Charging Door - Removal/Installation

Figure 403



AERODYNAMIC LIMITS

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TASK 52-40-01-400-803-A

EFFECTIVITY: ALL

7. OXYGEN EXTERNAL CHARGING DOOR - INSTALLATION

A. General

- (1) This procedure gives the instructions to install the oxygen external charging door.

B. References

| REFERENCE | DESIGNATION |
|--------------------------------------|-------------------------|
| AMM MPP 06-41-01/100 | - |
| AMM MPP 20-10-01/200 | - MAINTENANCE PRACTICES |
| SRM 51-10-01 | - |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|------------------|
| 124 | 124AR | Forward fuselage |

D. Tools and Equipment

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|---------------|----------------------------------|-----|
| Commercially available | Torque wrench | To tighten the attachment screws | |

E. Auxiliary Items

| ITEM | DESCRIPTION | PURPOSE | QTY |
|------------------------|-------------|--------------------------------|-----|
| Commercially available | Workstand | To get access to the work area | 1 |

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

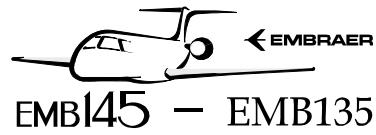
H. Persons Recommended

| QTY | FUNCTION | PLACE |
|-----|---------------|------------------|
| 1 | Does the task | Forward fuselage |

I. Installation (Figure 403)

SUBTASK 420-004-A

- (1) Install the access door (5).
- (2) Install the screws (1), washers (6), and nuts (7) applying the correct torque. Refer to [AMM MPP 20-10-01/200](#).



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- (3) Install the spring (4) with the washers (2) and bolts (3).

J. Follow-on (Figure 403)

SUBTASK 842-004-A

- (1) Close the Oxygen External Charging Door 124AR. Refer to AMM MPP 06-41-01/100.
- (2) Check the Aerodynamic Limits. Refer to SRM 51-10-01.
- (3) Remove the workstand from the work area.

