



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

PASSENGER CABIN BOTTOM FOR ER/EP/EU MODELS - INSPECTION/CHECK

EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS

1. General

- A. This section gives the procedures to do the visual inspection of center fuselage III - passenger cabin bottom for general condition.
- B. Zones: 151/152/153/154/155/156.
- C. Zone Boundaries (EMB-145): STA X = 11990.0 thru STA X = 17727.0.
Zone Boundaries (EMB-135): STA X = 9984.0 thru STA X = 15721.0.
- D. 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 |
|----------------------|---|--------------------------------------|
| 05-20-27-200-801-A ♦ | CENTER FUSELAGE III - PASSENGER CABIN BOTTOM - INTERNAL GENERAL VISUAL INSPECTION | EMB-145ER/EP/EU AND EMB-135ER MODELS |
| 05-20-27-200-802-A ♦ | CENTER FUSELAGE III - WING STUB - INTERNAL GENERAL VISUAL INSPECTION | EMB-145ER/EP/EU AND EMB-135ER MODELS |



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TASK 05-20-27-200-801-A

EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS

2. CENTER FUSELAGE III - PASSENGER CABIN BOTTOM - INTERNAL GENERAL VISUAL INSPECTION

A. General

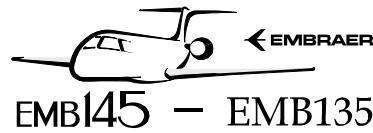
- (1) This procedure obeys the EWIS ICA requirement.
- (2) This task gives instructions to do SMRD Zonal Task 53-Z151-214-001-A00.
- (3) You must do the internal general visual inspection (GVI) of center fuselage III, at zones 151/152/153/154/155/156, within a touching distance of the items examined.
- (4) The function of the internal general visual inspection (GVI) is to find damage, failure, or irregular conditions that can be easily seen.
- (5) Apart from any specific targets defined in the Zonal Inspection task, a General Visual Inspection (GVI) must be conducted of the entire zone specified and includes all installations, components and structures. Refer to AMM Introduction for zonal inspection criteria.

B. References

| REFERENCE | DESIGNATION |
|--|--|
| AMM TASK 21-23-04-200-801-A/600 | - |
| AMM TASK 21-23-04-200-802-A/600 | - |
| AMM TASK 21-24-02-200-801-A/600 | RECIRCULATION SYSTEM - GENERAL VISUAL INSPECTION |
| AMM TASK 25-81-01-000-801-A/400 | - |
| AMM TASK 25-81-01-000-802-A/400 | - |
| AMM TASK 25-81-01-400-801-A/400 | - |
| AMM TASK 25-81-01-400-802-A/400 | - |
| AMM TASK 28-41-00-200-801-A/600 | - |
| AMM TASK 53-01-02-000-801-A/400 | - |
| AMM TASK 53-01-02-000-802-A/400 | - |
| AMM TASK 53-01-02-400-801-A/400 | - |
| AMM TASK 53-01-02-400-802-A/400 | - |
| WM 20-22-00 | - |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|-----------------------|
| 241 | 241DF | Passenger cabin floor |
| 251 | 251AF | Passenger cabin floor |
| 251 | 251BF | Passenger cabin floor |
| 251 | 251CF | Passenger cabin floor |
| 251 | 251DF | Passenger cabin floor |



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| ZONE | PANEL/DOOR | LOCATION |
|------|------------|-----------------------|
| 251 | 251EF | Passenger cabin floor |
| 251 | 251FF | Passenger cabin floor |
| 251 | 251GF | Passenger cabin floor |
| 251 | 251HF | Passenger cabin floor |
| 251 | 251JF | Passenger cabin floor |
| 252 | 252AF | Passenger cabin floor |
| 252 | 252BF | Passenger cabin floor |
| 252 | 252CF | Passenger cabin floor |
| 252 | 252DF | Passenger cabin floor |

D. Tools and Equipment

| ITEM | DESCRIPTION | PURPOSE | QTY |
|----------|-------------|---|-----|
| Standard | Flashlight | To make the inspection of the area easier | |

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 | Center fuselage III - Passenger cabin bottom |

I. Preparation ([Figure 601](#))

SUBTASK 841-002-A

- (1) Use table 601 to remove passenger-cabin floor panels as applicable to your aircraft (AMM TASK 53-01-02-000-801-A/400 or AMM TASK 53-01-02-000-802-A/400) ([Figure 601](#)).

Table 601 - PASSENGER-CABIN FLOOR PANELS

| AIRCRAFT | PANELS |
|----------|---|
| EMB-145 | 252AF, 252BF, 252CF, 252DF, 251BF, 251DF, 251FF, 251HF, 251AF, 251CF, 251JF, 251EF, and 251GF |
| EMB-135 | 252AF, 252BF, 252CF, 252DF, 241DF, 251DF, 251FF, 251HF, 251AF, 251CF, 251JF, 251EF, and 251GF |



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- (2) Remove the thermoacoustic insulation from center fuselage III to zones 151/152/153/154 (AMM TASK 25-81-01-000-801-A/400 or AMM TASK 25-81-01-000-802-A/400, as applicable).

J. Internal General Visual Inspection ([Figure 602](#))

SUBTASK 212-002-A

- (1) Examine the interior of the fuselage skin panel at stringers, frames/bulkheads, and longitudinal and circumferential splices for loose rivets, cracks, skin deformation, painting, erosion, corrosion, and deteriorated protective treatment ([Figure 602](#)).
- (2) Examine the upper fuselage to wing stub for scratches, gouges, creases, cracks, nicks, dents, corrosion, erosion, and missing rivets ([Figure 602](#)).
- (3) Examine the control cables from rudder and elevator and hydraulic lines for attachment, cracks, crushing, deformation, broken strands, deterioration, friction, and overheating.
- (4) Examine the mufflers, muffler screens, bleed air ducts, and air conditioning ducts and outlets for attachment, cracks, crushing, deformation, deterioration, signs of leakage, and over heating at the connections ([Figure 603](#)).
- (5) Do an inspection of the inlet muffler of the gasper system (AMM TASK 21-23-04-200-801-A/600 or AMM TASK 21-23-04-200-802-A/600), as applicable and do the inlet muffler of the recirculation system ([AMM TASK 21-24-02-200-801-A/600](#)) for dirt and/or obstruction.
- (6) Examine the EWIS components for signs of damage, adequate installation, chafing and general condition. Refer to WM 20-22-00.

K. Follow-on

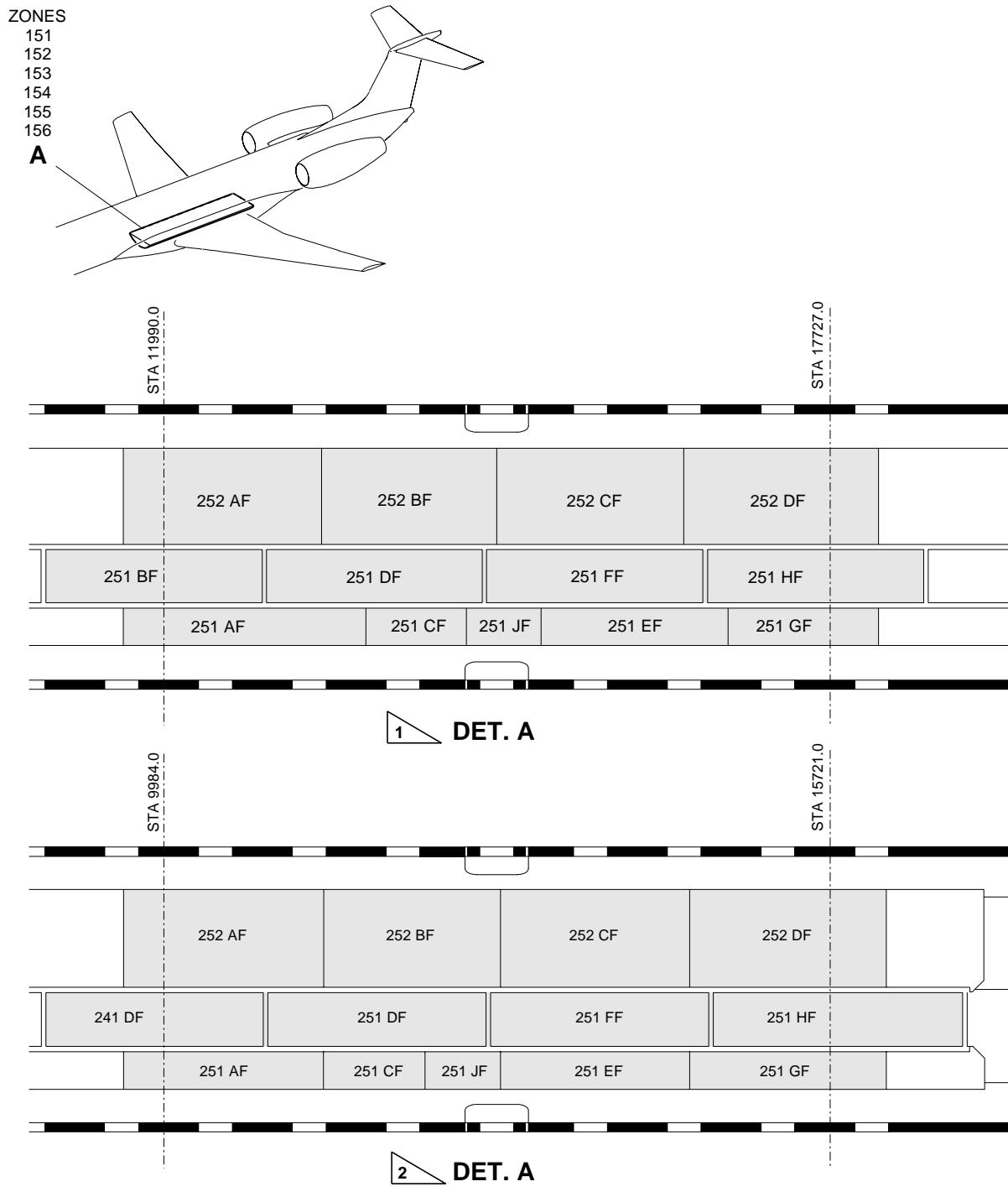
SUBTASK 842-002-A

- (1) Install the thermoacoustic insulation to zones 151/152/153/154 (AMM TASK 25-81-01-400-801-A/400 or AMM TASK 25-81-01-400-802-A/400, as applicable).
- (2) 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).

- (3) Use table 601 to install passenger-cabin floor panels as applicable to your aircraft (AMM TASK 53-01-02-400-801-A/400 or AMM TASK 53-01-02-400-802-A/400).

EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS
 Center Fuselage III - Passenger Cabin Bottom - Floor Panels
 Figure 601



1 APPLICABLE TO EMB-145 (ALL) MODELS

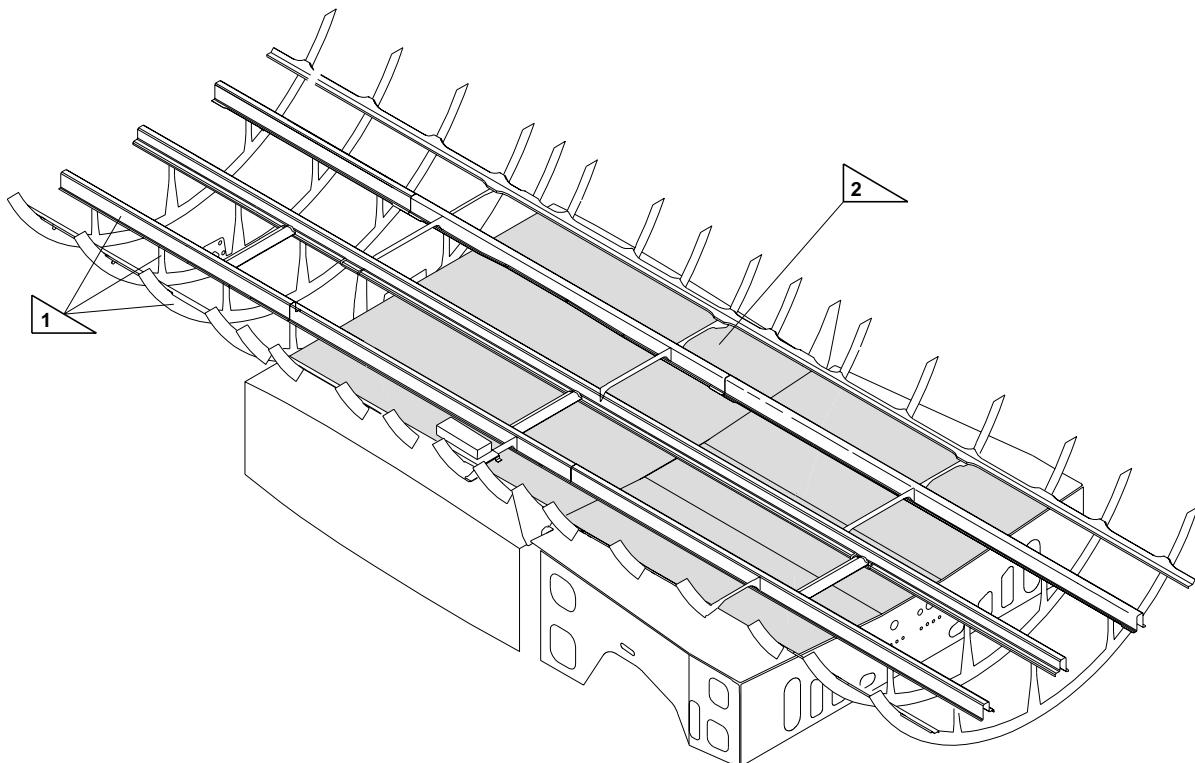
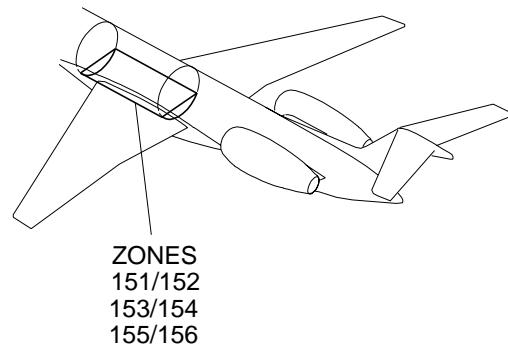
2 APPLICABLE TO EMB-135 (ALL) MODELS

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EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS

Center Fuselage III - Passenger Cabin Bottom - Internal General Visual Inspection

Figure 602

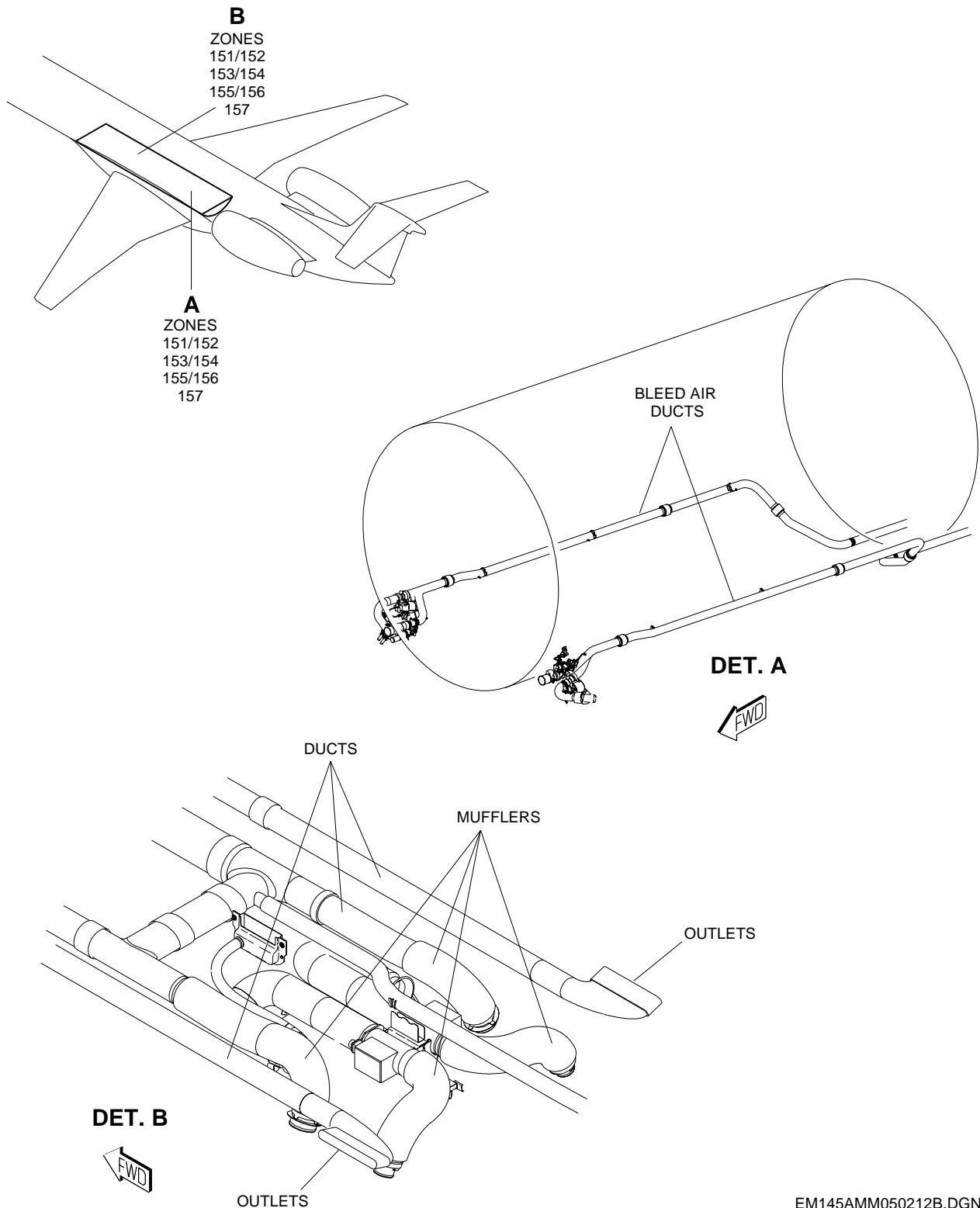


-  INTERNALLY INSPECT FUSELAGE AT FRAMES/BULKHEADS, BEAMS AND COLUMNS.
-  INTERNALLY INSPECT THE WING STUB STRUCTURE.

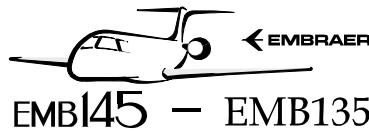
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EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS

Center Fuselage III - Passenger Cabin Bottom - Air Conditioning and Bleed Air Components
Figure 603



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TASK 05-20-27-200-802-A

EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS

3. CENTER FUSELAGE III - WING STUB - INTERNAL GENERAL VISUAL INSPECTION

A. General

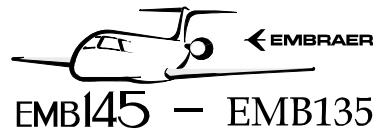
- (1) This procedure obeys the EWIS ICA requirement.
- (2) This task gives instructions to do SMRD Zonal Task 53-Z155-214-002-A00.
- (3) You must do the internal general visual inspection (GVI) of center fuselage III, wing stub internal area, at zones 155/156, within a touching distance of the items examined.
- (4) The function of the internal general visual inspection (GVI) is to find damage, failure, or irregular conditions that can be easily seen.
- (5) Apart from any specific targets defined in the Zonal Inspection task, a General Visual Inspection (GVI) must be conducted of the entire zone specified and includes all installations, components and structures. Refer to AMM Introduction for zonal inspection criteria.

B. References

| REFERENCE | DESIGNATION |
|---------------------------------|-------------|
| AMM MPP 06-41-01/100 | - |
| AMM TASK 28-41-00-200-801-A/600 | - |
| WM 20-22-00 | - |

C. Zones and Accesses

| ZONE | PANEL/DOOR | LOCATION |
|------|------------|-------------------------------|
| 155 | 155BZ | Wing stub |
| 155 | 155CZ | Wing stub |
| 155 | 155DZ | Main landing gear compartment |
| 155 | 155EZ | Main landing gear compartment |
| 155 | 155FZ | Main landing gear compartment |
| 155 | 155GZ | Main landing gear compartment |
| 155 | 155KZ | Main landing gear compartment |
| 155 | 155LZ | Main landing gear compartment |
| 155 | 155MZ | Main landing gear compartment |
| 155 | 155QZ | Main landing gear compartment |
| 156 | 156BZ | Wing stub |
| 156 | 156CZ | Wing stub |
| 156 | 156DZ | Main landing gear compartment |
| 156 | 156EZ | Main landing gear compartment |
| 156 | 156FZ | Main landing gear compartment |
| 156 | 156GZ | Main landing gear compartment |



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| ZONE | PANEL/DOOR | LOCATION |
|------|------------|-------------------------------|
| 156 | 156KZ | Main landing gear compartment |
| 156 | 156LZ | Main landing gear compartment |
| 156 | 156MZ | Main landing gear compartment |
| 156 | 156QZ | Main landing gear compartment |
| 192 | 192AL | Wing-to-fuselage fairing |
| 192 | 192BR | Wing-to-fuselage fairing |

D. Tools and Equipment

| ITEM | DESCRIPTION | PURPOSE | QTY |
|----------|-------------|---|-----|
| Standard | Flashlight | To make the inspection of the area easier | |

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 | Center fuselage III - Wing Stub internal area |

I. Preparation ([Figure 604](#)) ([Figure 603](#))

SUBTASK 841-003-A

- (1) Open wing stub access doors and panels 192AL, 192BR, 155BZ, 155CZ, 156BZ and 156CZ (AMM MPP 06-41-01/100) ([Figure 603](#)).
- (2) Open main landing gear compartment access doors and panels 155DZ, 155EZ, 155FZ, 155GZ, 155KZ, 155LZ, 155MZ, 155QZ, 156DZ, 156EZ, 156FZ, 156GZ, 156KZ, 156LZ, 156MZ and 156QZ (AMM MPP 06-41-01/100) ([Figure 604](#)).

J. Internal General Visual Inspection ([Figure 605](#))

SUBTASK 212-003-A

- (1) Examine the interior of the zone for loose rivets, skin deformation, nicks, cracks, dents, sealant poor condition, scratches, gouges, creases, erosion, corrosion, painting condition, deteriorated protective treatment, and foreign objects.
- (2) Examine the exterior of the fuselage skin panel at stringers, frames/bulkheads, and longitudinal and circumferential splices for loose rivets, cracks, skin deformation, painting, erosion, corrosion, and deteriorated protective treatment.

- (3) Examine the interior of the wing stub for general condition: deformations, nicks, cracks, dents, scratches, gouges, creases, erosion, corrosion, and foreign objects.
- (4) Examine the control cables from rudder and elevator and hydraulic lines for attachment, cracks, crushing, deformation, broken strands, deterioration, friction, and overheating.
- (5) Examine the hydraulic-system priority valve, aileron solenoid manifold, speed brake valve, brake shutoff valve, brake control valve ([Figure 605](#)).
- (6) Examine the EWIS components for signs of damage, adequate installation, chafing and general condition. Refer to WM 20-22-00.

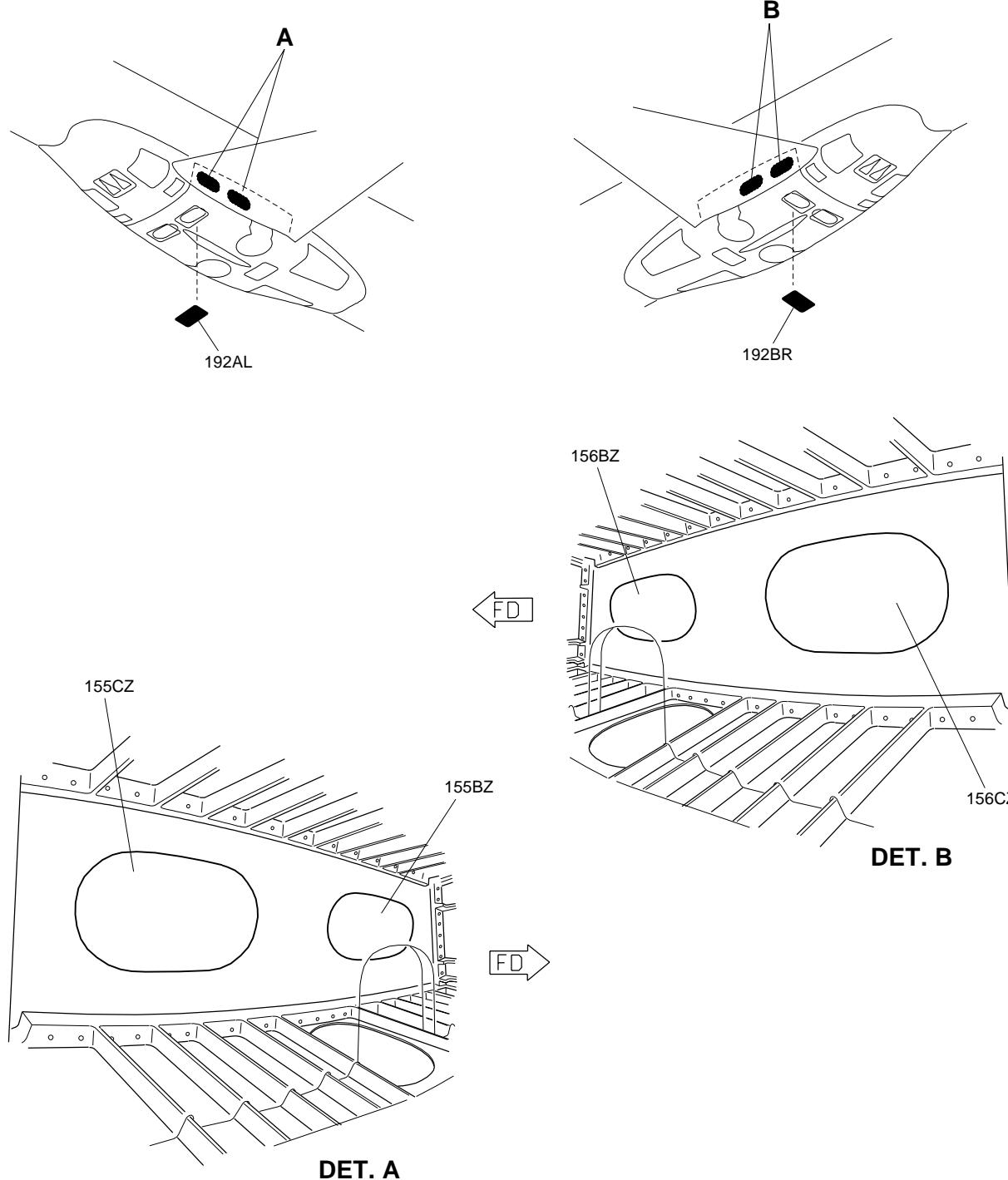
K. Follow-on

SUBTASK 842-003-A

- (1) 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).
- (2) Close wing stub access doors and panels 155BZ, 155CZ, 156BZ, 156CZ, 192AL and 192BR (AMM MPP 06-41-01/100).
- (3) Close main landing gear compartment access doors and panels 155DZ, 155EZ, 155FZ, 155GZ, 155KZ, 155LZ, 155MZ, 155QZ, 156DZ, 156EZ, 156FZ, 156GZ, 156KZ, 156LZ, 156MZ and 156QZ (AMM MPP 06-41-01/100).

EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS

Center Fuselage III - Passenger Cabin Bottom - Wing Stub Access Doors and Panels
Figure 604

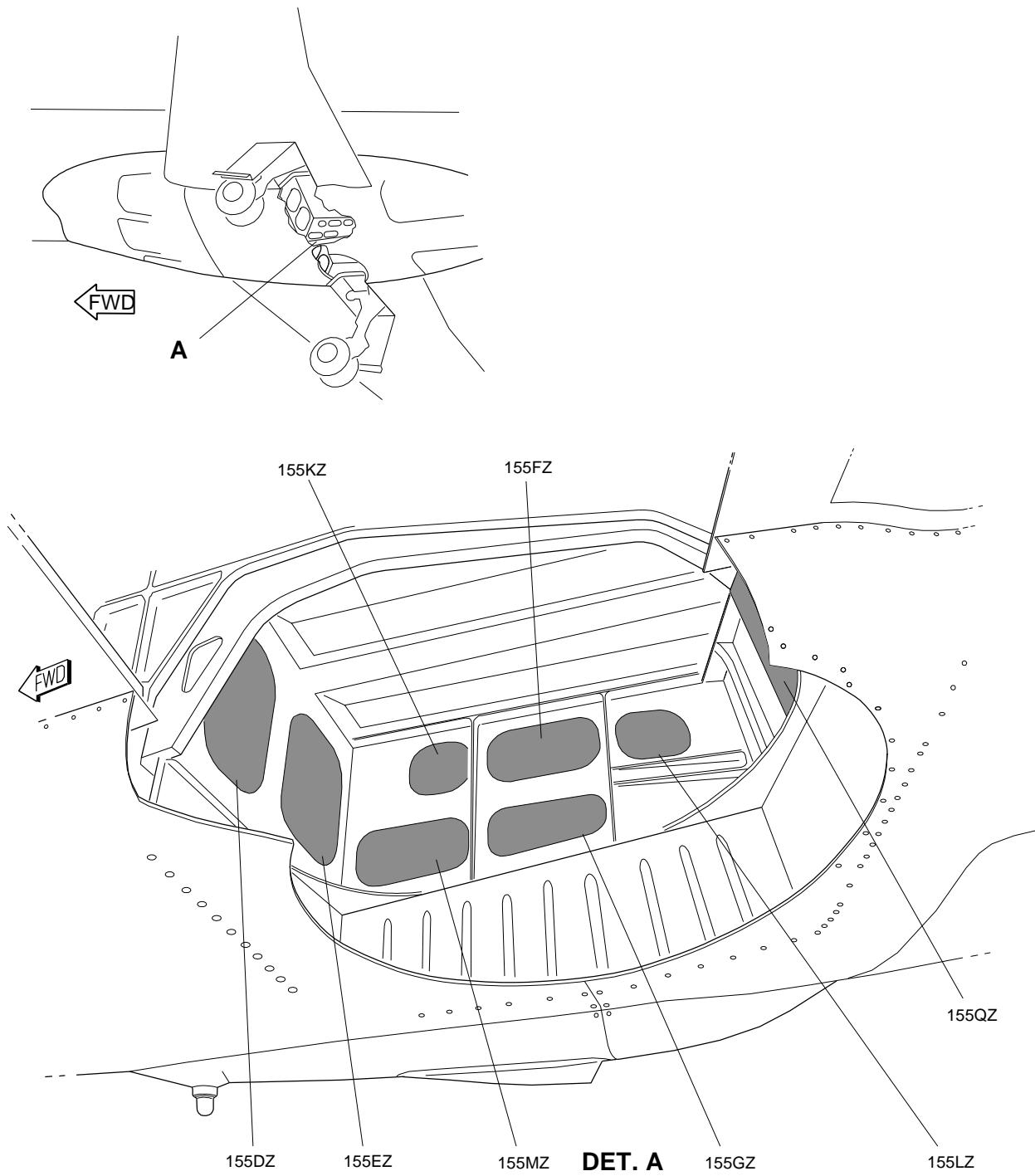


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EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS

Center Fuselage III - Passenger Cabin Bottom - Main Landing Gear Compartment Access Doors and Panels

Figure 605 - Sheet 1

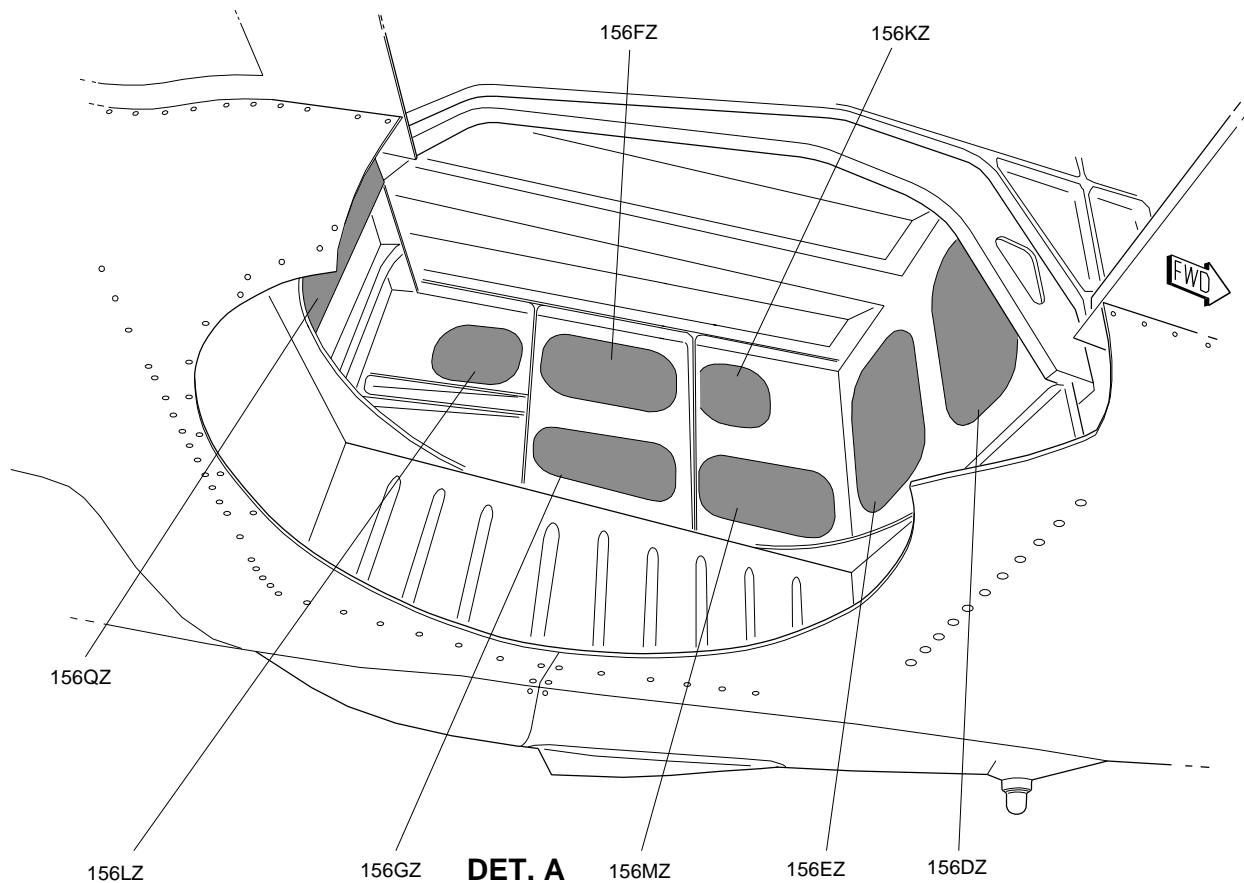
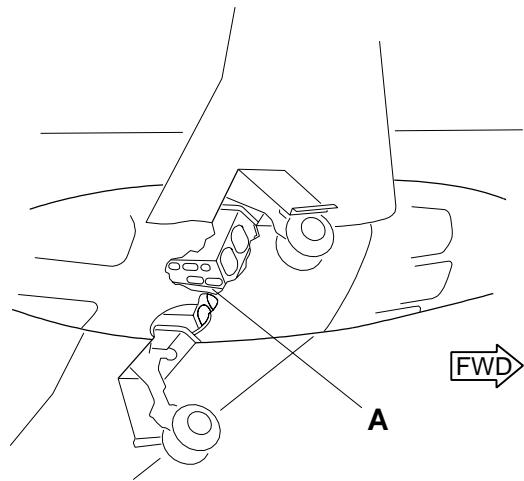


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EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS

Center Fuselage III - Passenger Cabin Bottom - Main Landing Gear Compartment Access Doors and Panels

Figure 605 - Sheet 2

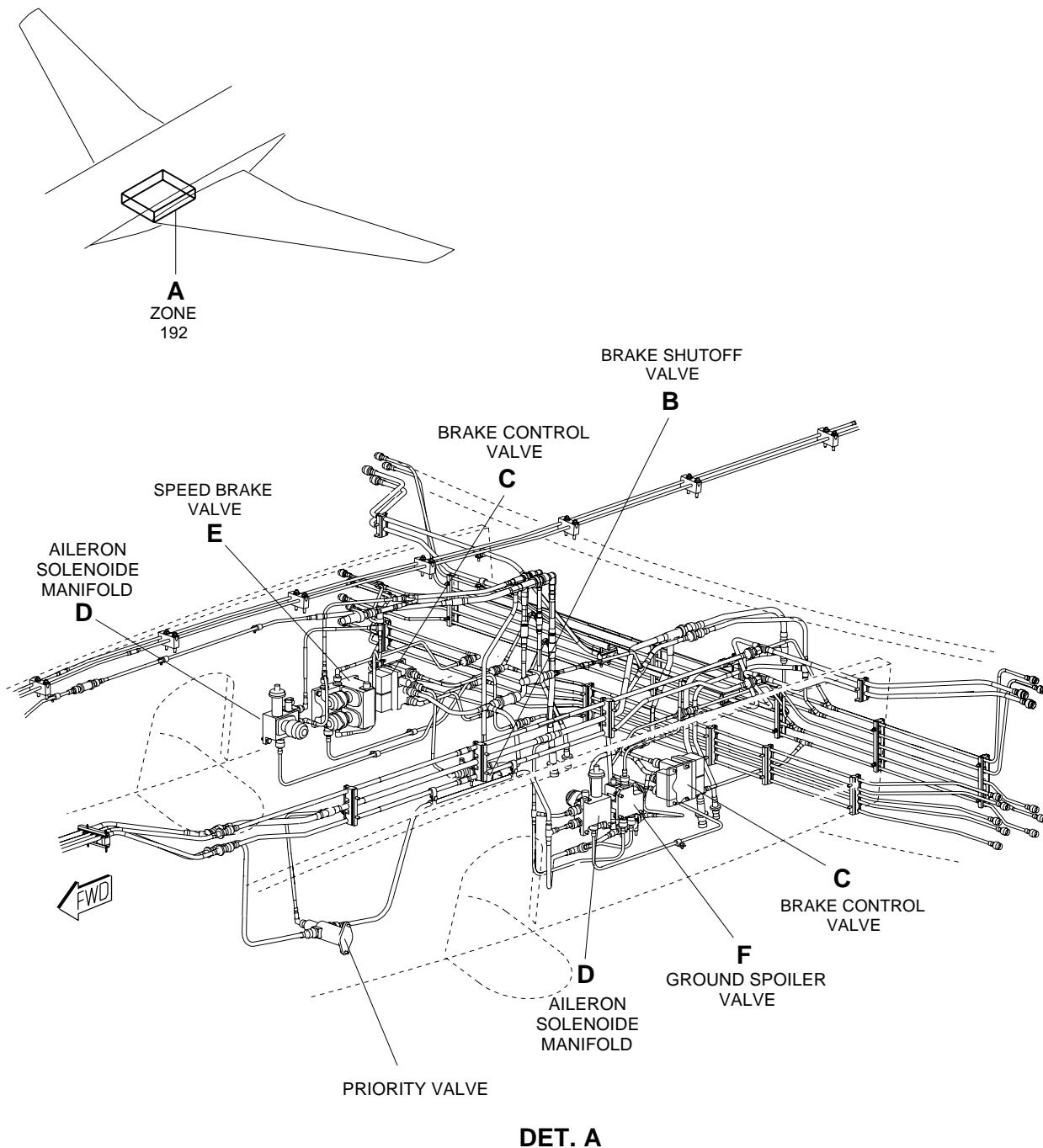


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EFFECTIVITY: EMB-145ER/EP/EU AND EMB-135ER MODELS

Center Fuselage III - Passenger Cabin Bottom - Systems and Components

Figure 606



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