

DRAIN VALVE - REMOVAL/INSTALLATION
EFFECTIVITY: ALL
1. General

- A. This section gives the procedures to remove/install the drain valve.
- B. You can remove/install the drain valve five times maximum .
- 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
28-11-02-000-801-A	DRAIN VALVE - REMOVAL	ACFT WITH WET WINGSTUB
28-11-02-400-801-A	DRAIN VALVE - INSTALLATION	ACFT WITH WET WINGSTUB
28-11-02-000-802-A	DRAIN VALVE SEAT O-RING - REMOVAL	ALL
28-11-02-400-802-A	DRAIN-VALVE SEAT O-RING - INSTALLA- TION	ALL
28-11-02-000-803-A	DRAIN VALVE - REMOVAL	ACFT WITH DRY WINGSTUB
28-11-02-400-803-A	DRAIN VALVE - INSTALLATION	ACFT WITH DRY WINGSTUB



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TASK 28-11-02-000-801-A

EFFECTIVITY: ACFT WITH WET WINGSTUB

2. DRAIN VALVE - REMOVAL

A. General

(1) This task is applicable to the LH fuel tank and to the RH fuel tank.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-44-00/100	- COMPONENT LOCATION
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 12-11-01-600-802-A/300	FUEL-TANK PRESSURE DEFUELING - SERVICING
AMM TASK 28-11-01-000-801-A/400	FUEL-TANK ACCESS PANELS - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192AL/192BR	Center lower fairing
192	192CL/192DR	Center lower fairing
192	192HL/192JR	Center lower fairing
155	155BZ	LH wing stub undersurface
156	156BZ	RH wing stub undersurface
531	531AB	LH underwing surface
631	631AB	RH underwing surface

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	LH/RH underwing surface/wing stub undersurface



I. Preparation

SUBTASK 841-002-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 28-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.

- (1) Defuel the tanks ([AMM TASK 12-11-01-600-802-A/300](#)).
- (2) Remove the access panels (AMM MPP 06-41-01/100), ([AMM MPP 06-44-00/100](#)) and ([AMM TASK 28-11-01-000-801-A/400](#)) shown below to get access to the drain valves as applicable:
 - (a) LH fuel tank:
 - 155BZ/531AB.
 - (b) RH fuel tank:
 - 156BZ/631AB.
 - (c) Center lower fairing:
 - 192AL/192BR/192CL/192DR/192HL/192JR.

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

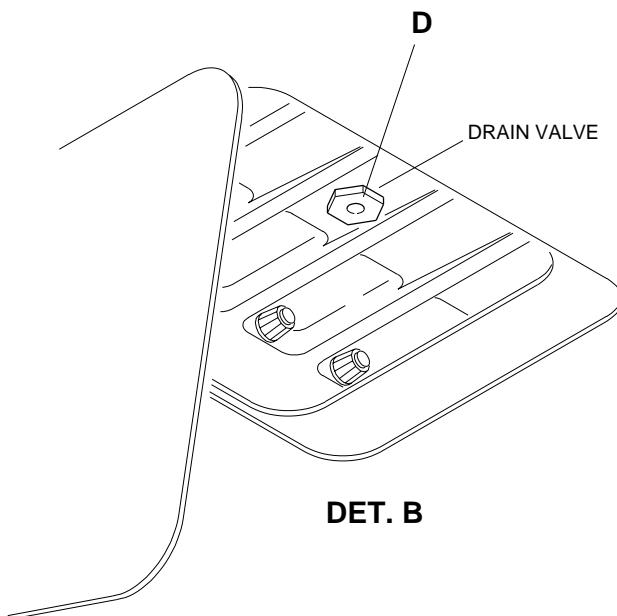
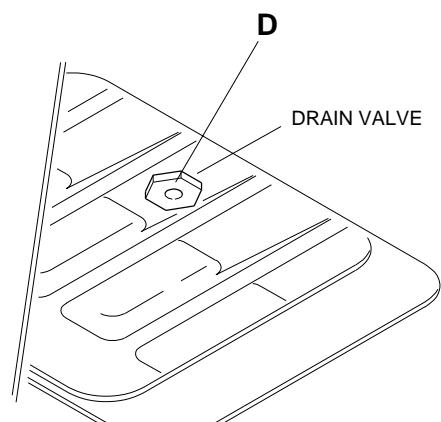
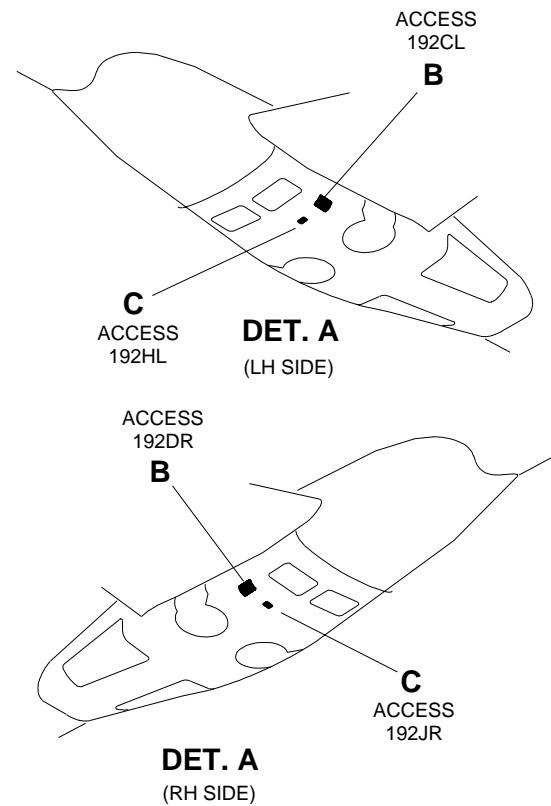
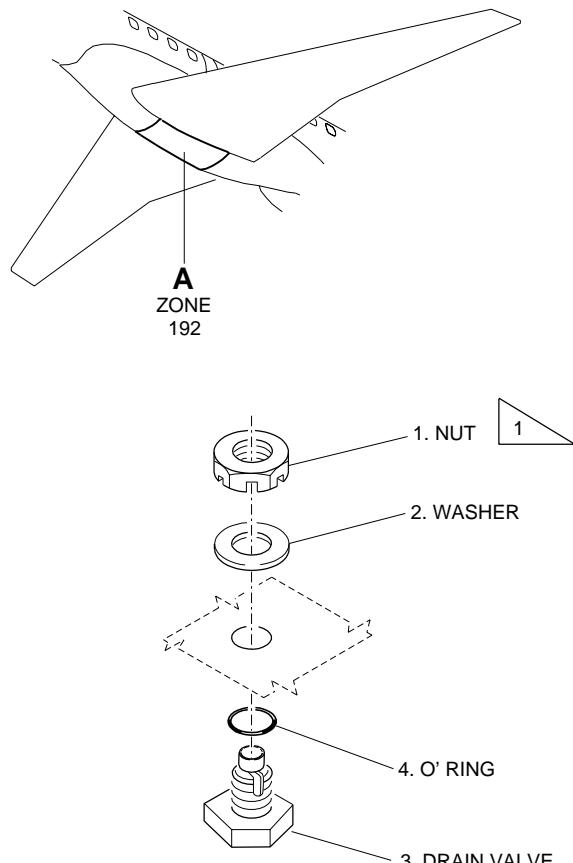
SUBTASK 020-002-A

- (1) Remove the nut (1) and washer (2) from the drain valve (3).
- (2) Remove the drain valve (3) and O-ring (4). Discard the O-ring.
- (3) Examine the self-locking fastener and bolt threads of the drain valve. Discard the drain valve if necessary.

EFFECTIVITY: ACFT WITH WET WINGSTUB

Drain Valve - Removal/Installation

Figure 401



TORQUE: 9.0 TO 11.3 N.m (80 TO 100 lb.in)

145AMM280143.MCE B



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TASK 28-11-02-400-801-A

EFFECTIVITY: ACFT WITH WET WINGSTUB

3. DRAIN VALVE - INSTALLATION

A. General

(1) This task is applicable to the LH fuel tank and RH fuel tank.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-44-00/100	- COMPONENT LOCATION
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM MPP 28-11-01/400	- REMOVAL/INSTALLATION
AMM TASK 12-11-01-600-801-A/300	FUEL-TANK PRESSURE REFUELING - SERVICING
AMM TASK 28-41-00-200-801-A/600	-
IPC 28-10-00	STORAGE

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192AL/192BR	Center lower fairing
192	192CL/192DR	Center lower fairing
192	192HL/192JR	Center lower fairing
155	155BZ	LH wing stub undersurface
156	156BZ	RH wing stub undersurface
531	531AB	LH underwing surface
631	631AB	RH underwing surface

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench	To tighten the attachment nuts	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Molykote DC-33 Light	Lubricant	AR



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G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	IPC 28-10-00	4

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	LH/RH underwing area/wing stub surface

I. Preparation

SUBTASK 841-003-A

- (1) Lightly apply Molykote lubricant to the O-ring (4).

J. Installation (Figure 401)

SUBTASK 420-002-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 28-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.

- (1) Install the O-ring (4) to the drain valve (3).
- (2) Install the drain valve (3), washer (2), and nut (1).
- (3) Torque the nut (1).

K. Follow-on

SUBTASK 842-002-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) Install the access panels (AMM MPP 06-41-01/100), ([AMM MPP 06-44-00/100](#)) and ([AMM MPP 28-11-01/400](#)) shown below as applicable:

- (a) LH fuel tank:
 - 155BZ/531AB.
- (b) RH fuel tank:
 - 156BZ/631AB.
- (c) Center lower fairing:
 - 192AL/192BR/192CL/192DR/192HL/192JR.

- (3) Refuel the tanks ([AMM TASK 12-11-01-600-801-A/300](#)) as applicable.



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- (4) Examine the access panels which were removed for fuel leakage. Correct as necessary.



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TASK 28-11-02-000-802-A

EFFECTIVITY: ALL

4. DRAIN VALVE SEAT O-RING - REMOVAL

A. General

(1) This task is applicable to the LH fuel tank and to the RH fuel tank.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 28-11-01-000-801-A/400	FUEL-TANK ACCESS PANELS - REMOVAL
AMM TASK 28-11-01-000-802-A/400	FUEL-TANK ACCESS PANELS - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192CL/192DR	Center lower fairing
192	192HL/192JR (for ACFT with wet wingstub)	Center lower fairing

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 016	Draining device	To turn the bottom of the drain valve down to get access to the O-ring seat.	

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	Bottom of the inboard tanks

I. Preparation

SUBTASK 841-004-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 28-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.



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- (1) Remove these access panels (AMM MPP 06-41-01/100 and [AMM TASK 28-11-01-000-801-A/400](#) or [AMM TASK 28-11-01-000-802-A/400](#), as applicable) to get access to the drain valves as applicable:
 - (a) Center lower fairing:
 - 192CL/192DR.
 - 192HL/192JR (for aircraft with wet wingstub).

J. Removal ([Figure 402](#))

SUBTASK 020-003-A

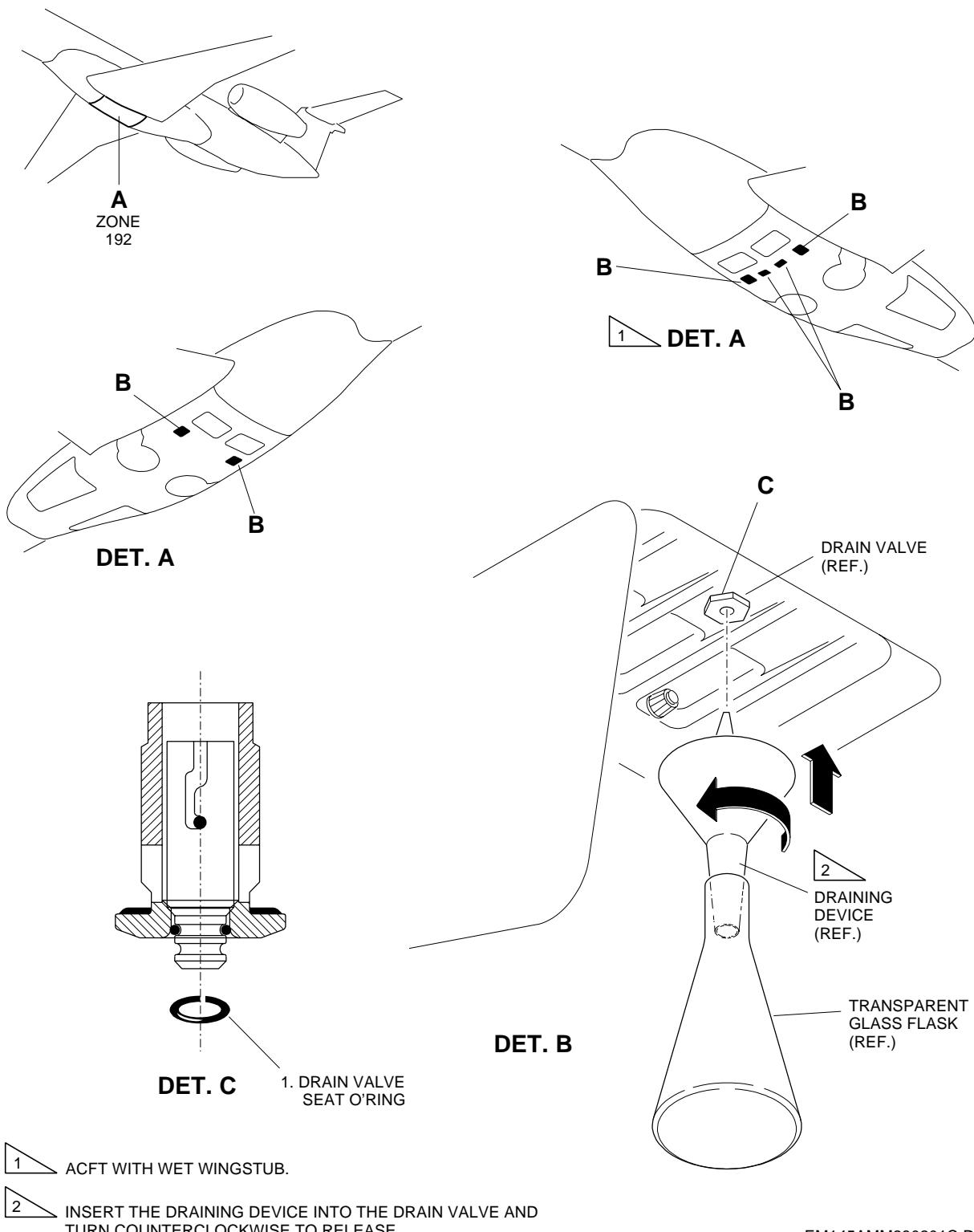
CAUTION: DO NOT TURN THE DRAINING DEVICE CLOCKWISE TO OPEN THE DRAIN VALVE. IT CAN CAUSE DAMAGE TO THE DRAIN VALVE.

- (1) Turn the bottom of the drain valve counterclockwise and let the O-ring seat be exposed.
- (2) Remove the O-ring (1). Discard the O-ring.

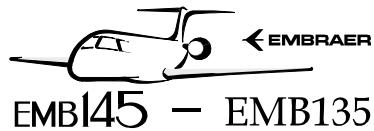
EFFECTIVITY: ALL

Drain-Valve Seat O-ring - Removal/Installation

Figure 402



EM145AMM280201C.DGN



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TASK 28-11-02-400-802-A

EFFECTIVITY: ALL

5. DRAIN-VALVE SEAT O-RING - INSTALLATION

A. General

(1) This task is applicable to the LH fuel tank and to the RH fuel tank.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM MPP 28-11-01/400	- REMOVAL/INSTALLATION
IPC 28-10-00	STORAGE

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192CL/192DR	Center lower fairing
192	192HL/192JR (for ACFT with wet wingstub)	Center lower fairing

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 016	Draining device	To turn the bottom of the drain valve back in-to position	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Molykote DC-33 Light	Lubricant	AR

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	IPC 28-10-00	1

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Bottom of the inboard tanks



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I. Preparation

SUBTASK 841-005-A

- (1) Lightly apply Molykote lubricant to the O-ring (1).

J. Installation (Figure 402)

SUBTASK 420-003-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 28-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.

- (1) Install the O-ring (1) to the drain valve seat.

NOTE: Make sure that the O-ring and the valve are fully cleaned to prevent leaks.

- (2) Push and turn the bottom of the drain valve clockwise.

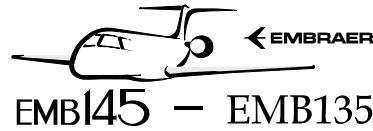
K. Follow-on

SUBTASK 842-003-A

- (1) Install these access panels (AMM MPP 06-41-01/100 and [AMM MPP 28-11-01/400](#), as applicable):

- (a) Center lower fairing:

- 192CL/192DR.
- 192HL/192JR (for aircraft with wet wingstub).



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TASK 28-11-02-000-803-A

EFFECTIVITY: ACFT WITH DRY WINGSTUB

6. DRAIN VALVE - REMOVAL

A. General

(1) This task is applicable to the LH fuel tank and to the RH fuel tank.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-44-00/100	- COMPONENT LOCATION
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 12-11-01-600-802-A/300	FUEL-TANK PRESSURE DEFUELING - SERVICING
AMM TASK 28-11-01-000-802-A/400	FUEL-TANK ACCESS PANELS - REMOVAL

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192AL/192BR	Center lower fairing
192	192CL/192DR	Center lower fairing
531	531AB	LH fuel tank
631	631AB	RH fuel tank

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	LH/RH fuel tank

I. Preparation

SUBTASK 841-006-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 28-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.



EMB145 – EMB135

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- (1) Defuel the tanks ([AMM TASK 12-11-01-600-802-A/300](#)).
- (2) Remove the access panels (AMM MPP 06-41-01/100), ([AMM MPP 06-44-00/100](#)) and ([AMM TASK 28-11-01-000-802-A/400](#)) shown below to get access to the drain valves as applicable:
 - (a) LH fuel tank:
 - 531AB.
 - (b) RH fuel tank:
 - 631AB.
 - (c) Center lower fairing:
 - 192AL/192BR/192CL/192DR.

J. Removal ([Figure 403](#))

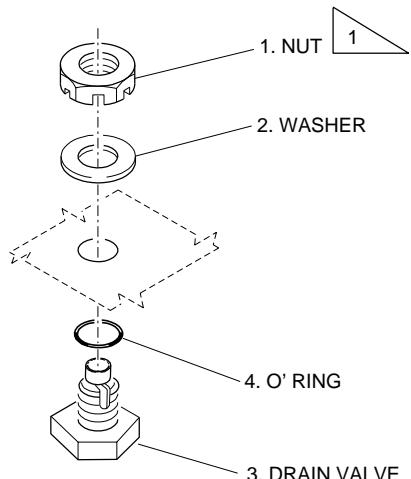
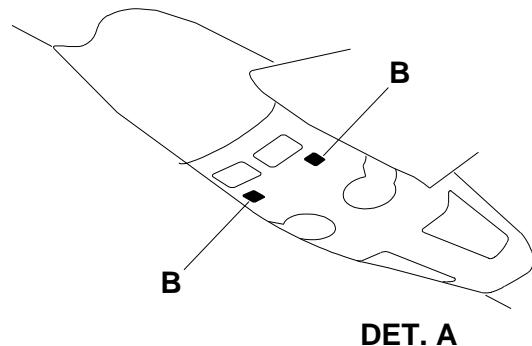
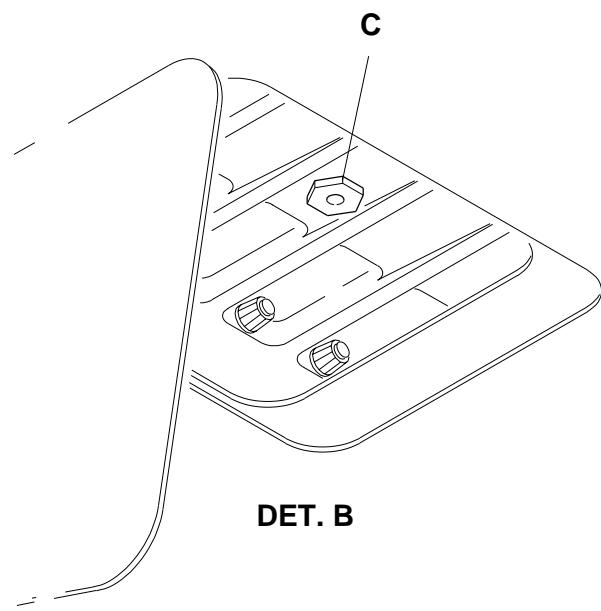
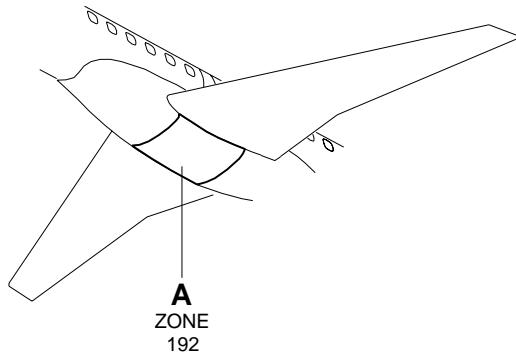
SUBTASK 020-004-A

- (1) Remove the nut (1) and washer (2) from the drain valve (3).
- (2) Remove the drain valve (3) and O-ring (4). Discard the O-ring.
- (3) Examine the self-locking fastener and bolt threads of the drain valve. Discard the drain valve if necessary.

EFFECTIVITY: ACFT WITH DRY WINGSTUB

Drain Valve - Removal/Installation

Figure 403



DET. C



TORQUE: 9.0 TO 11.3 N.m (80 TO 100 lb.in)

145AMM280090.MCE B



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TASK 28-11-02-400-803-A

EFFECTIVITY: ACFT WITH DRY WINGSTUB

7. DRAIN VALVE - INSTALLATION

A. General

(1) This task is applicable to the LH fuel tank and to the RH fuel tank.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-44-00/100	- COMPONENT LOCATION
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM MPP 28-11-01/400	- REMOVAL/INSTALLATION
AMM TASK 12-11-01-600-801-A/300	FUEL-TANK PRESSURE REFUELING - SERVICING
AMM TASK 28-41-00-200-801-A/600	-
IPC 28-10-00	STORAGE

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192AL/192BR	Center lower fairing
192	192CL/192DR	Center lower fairing
531	531AB	LH fuel tank
631	631AB	RH fuel tank

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Torque wrench	To tighten the attachment nuts	

E. Auxiliary Items

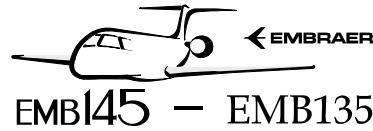
Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Molykote DC-33 Light	Lubricant	AR

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	IPC 28-10-00	4



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H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	LH/RH fuel tank

I. Preparation

SUBTASK 841-007-A

- (1) Lightly apply Molykote lubricant to the O-ring (4).

J. Installation (Figure 403)

SUBTASK 420-004-A

WARNING: BEFORE YOU DO THE TASK, OBEY THE SAFETY PRECAUTIONS GIVEN IN AMM MPP 28-00-00/200 TO PREVENT INJURY TO PERSONS AND DAMAGE TO MATERIAL.

- (1) Install the O-ring (4) to the drain valve (3).
- (2) Install the drain valve (3), washer (2), and nut (1).
- (3) Torque the nut (1).

K. Follow-on

SUBTASK 842-004-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) Install the access panels (AMM MPP 06-41-01/100), (AMM MPP 06-44-00/100) and (AMM MPP 28-11-01/400) shown below:
 - (a) LH fuel tank:
 - 531AB.
 - (b) RH fuel tank:
 - 631AB.
 - (c) Center lower fairing:
 - 192AL/192BR/192CL/192DR.
- (3) Refuel the tanks (AMM TASK 12-11-01-600-801-A/300) as applicable.
- (4) Examine the access panels which were removed for fuel leakage. Correct as necessary.

