



AIRCRAFT MAINTENANCE MANUAL

FUEL-FEED-LINE SUCTION CHECK VALVE - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to remove/install the fuel-feed-line suction/check valve of the engine fuel feed line.
- 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
28-21-06-000-801-A	FUEL-FEED-LINE SUCTION/CHECK VALVE - REMOVAL	ACFT WITH WET WINGSTUB
28-21-06-400-801-A	FUEL-FEED-LINE SUCTION/CHECK VALVE - INSTALLATION	ACFT WITH WET WINGSTUB
28-21-06-000-802-A	FUEL-FEED-LINE SUCTION/CHECK VALVE - REMOVAL	ACFT WITH DRY WINGSTUB
28-21-06-400-802-A	FUEL-FEED-LINE SUCTION/CHECK VALVE - INSTALLATION	ACFT WITH DRY WINGSTUB



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 28-21-06-000-801-A

EFFECTIVITY: ACFT WITH WET WINGSTUB

2. FUEL-FEED-LINE SUCTION/CHECK VALVE - REMOVAL

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 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
155	155BZ	LH wing stub undersurface
156	156BZ	RH wing stub undersurface
192	192AL/192BR	Center lower fairing

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	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](#)).



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

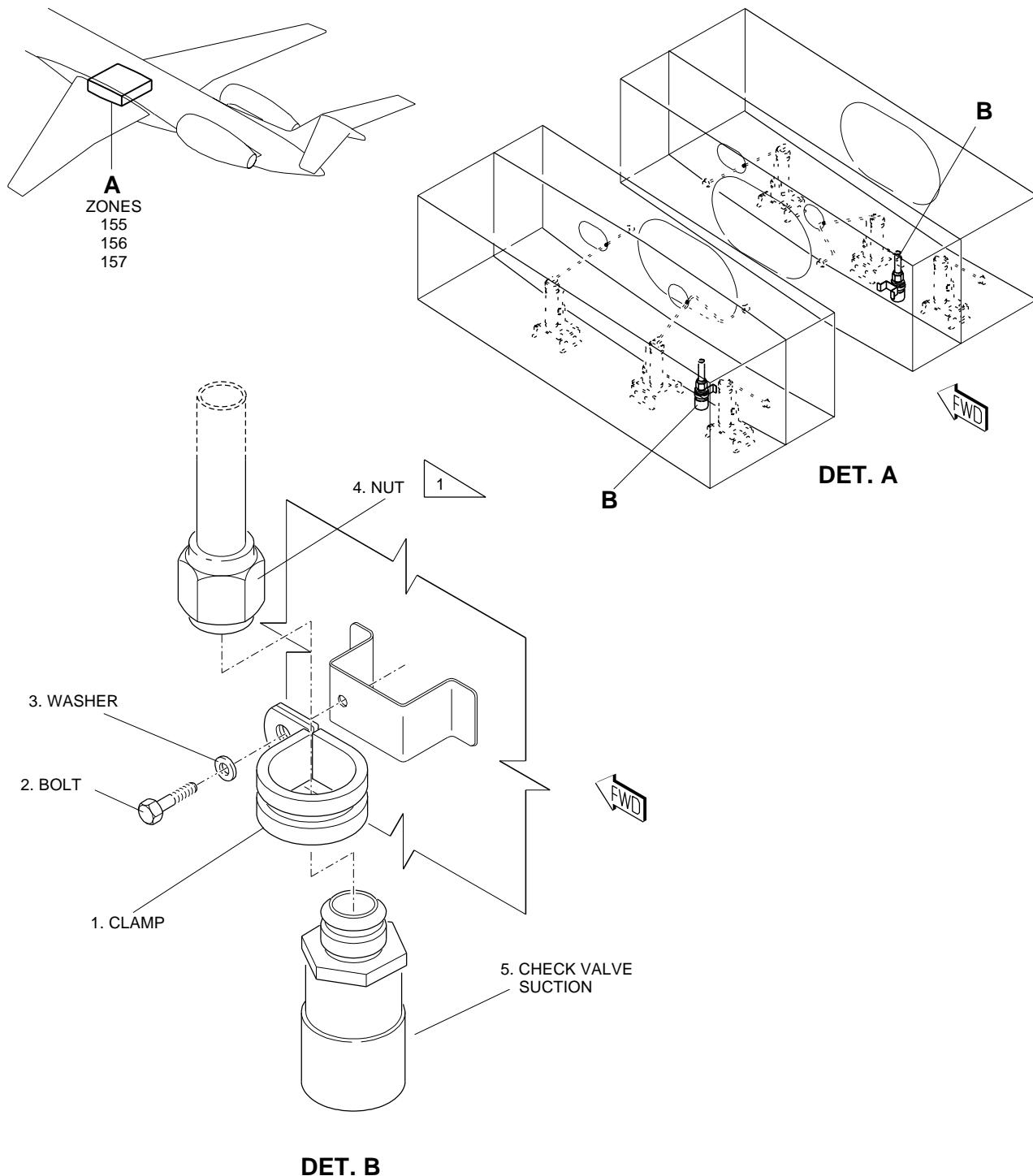
- (2) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them.
 - FUEL PUMPS 1A/1B/1C.
 - FUEL PUMPS 2A/2B/2C.
 - START 1/2.
- (3) Remove access panels (AMM MPP 06-41-01/100) and ([AMM TASK 28-11-01-000-801-A/400](#)) as shown below to get access to the Suction/Check valves:
 - (a) LH fuel tank:
 - 155BZ.
 - (b) RH fuel tank:
 - 156BZ.
 - (c) Center lower fairing:
 - 192AL/192BR.

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

SUBTASK 020-002-A

- (1) Remove the bolt (2) and washer (3).
- (2) Remove the clamp (1) on the suction/check valve body (5).
- (3) Loosen the nuts (4) and remove the suction/check valve (5).
- (4) Put applicable plugs or caps at all disconnected points to prevent contamination.

EFFECTIVITY: ACFT WITH WET WINGSTUB
Fuel-Feed-Line Suction/Check Valve - Removal/Installation
Figure 401



TORQUE: 56.5–79.1 N.m (500–700 lb.in)

145AMM280153.MCE E



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 28-21-06-400-801-A

EFFECTIVITY: ACFT WITH WET WINGSTUB

3. FUEL-FEED-LINE SUCTION/CHECK 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 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	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
155	155BZ	LH wing stub undersurface
156	156BZ	RH wing stub undersurface
192	192AL/192BR	Center lower fairing

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

Not Applicable

G. Expandable Parts

Not Applicable

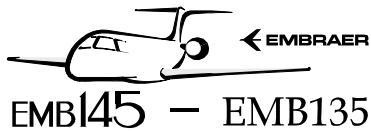
H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Wing stub undersurface

I. Preparation

SUBTASK 841-003-A

- (1) On the circuit breaker panel, make sure that the circuit breakers below are open and with a DO-NOT-CLOSE tag attached to them:



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

- FUEL PUMPS 1A/1B/1C.
- FUEL PUMPS 2A/2B/2C.
- START 1/2.

(2) Remove the protection caps or plugs from the disconnected points, if applicable.

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 and tighten the nut (4) to the suction/check valve (5).
- (2) Install the clamp (1) on the suction/check valve body (5).
- (3) Install the bolt (2) and washer (3). Tighten the bolt (2).

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 below (AMM MPP 06-41-01/100) and ([AMM MPP 28-11-01/400](#)):
 - (a) LH fuel tank:
 - 155BZ.
 - (b) RH fuel tank:
 - 156BZ.
- (3) Refuel the tanks ([AMM TASK 12-11-01-600-801-A/300](#)) as applicable.
- (4) Examine for fuel leakage the access panels which were removed on the wing stub undersurface.
- (5) Install access panels 192AL/192BR (AMM MPP 06-41-01/100).
- (6) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them:
 - FUEL PUMPS 1A/1B/1C.
 - FUEL PUMPS 2A/2B/2C.
 - START 1/2.



EMB145 - EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 28-21-06-000-802-A

EFFECTIVITY: ACFT WITH DRY WINGSTUB

4. FUEL-FEED-LINE SUCTION/CHECK VALVE - REMOVAL

A. General

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

B. References

REFERENCE	DESIGNATION
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
531	531AB/531EZ	LH Underwing area
631	631AB/631EZ	RH Underwing area

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

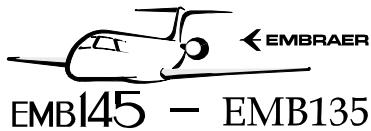
QTY	FUNCTION	PLACE
1	Does the task	LH/RH Underwing area

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.

- (1) Defuel the tanks ([AMM TASK 12-11-01-600-802-A/300](#)).
- (2) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them.



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

- FUEL PUMPS 1A/1B/1C.
- FUEL PUMPS 2A/2B/2C.
- START 1/2.

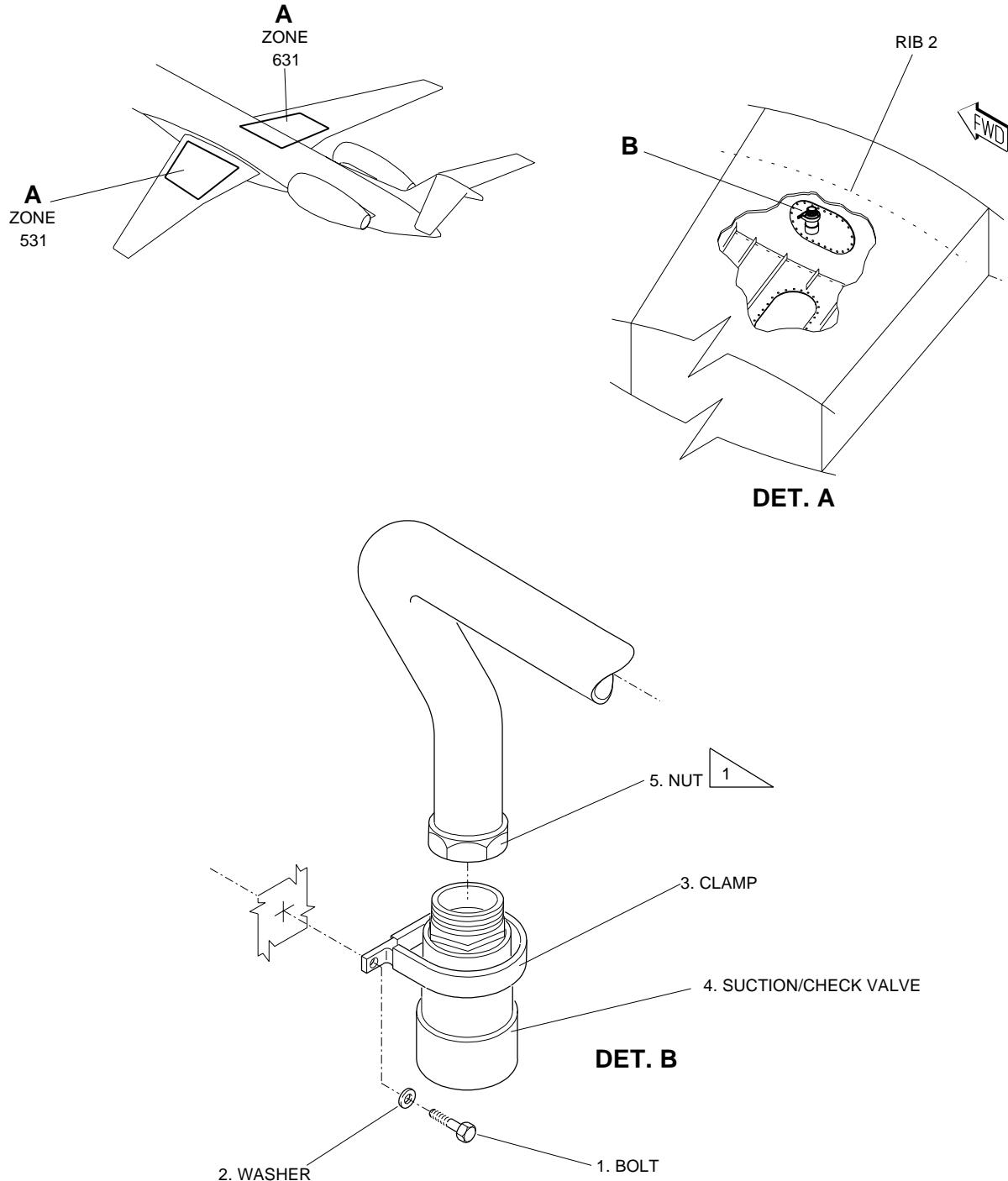
- (3) Remove the access panels ([AMM MPP 06-44-00/100](#)) and ([AMM TASK 28-11-01-000-802-A/400](#)) shown below to get access to the suction/check valves:
- (a) LH fuel tank:
 - 531AB/531EZ.
 - (b) RH fuel tank:
 - 631AB/631EZ.

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

SUBTASK 020-003-A

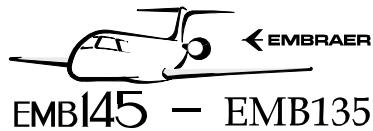
- (1) Remove the bolt (1) and washer (2).
- (2) Remove the clamp (3) from the suction/check valve (4).
- (3) Loosen the nut (5) and remove the suction/check valve (4).
- (4) Put applicable plugs or caps at all disconnected points to prevent contamination.

EFFECTIVITY: ACFT WITH DRY WINGSTUB
Fuel-Feed-Line Suction/Check Valve - Removal/Installation
Figure 402



TORQUE: 56.5–79.1 N.m (500–700 lb.in)

145AMM280092.MCE D



EMB145 – EMB135

AIRCRAFT
MAINTENANCE MANUAL

TASK 28-21-06-400-802-A

EFFECTIVITY: ACFT WITH DRY WINGSTUB

5. FUEL-FEED-LINE SUCTION/CHECK VALVE - INSTALLATION

A. General

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

B. References

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

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
531	531AB/531EZ	LH Underwing area
631	631AB/631EZ	RH Underwing area

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

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	LH/RH Underwing area

I. Preparation

SUBTASK 841-005-A

- (1) On the circuit breaker panel, make sure that the circuit breakers below are open and with a DO-NOT-CLOSE tag attached to them.
- FUEL PUMPS 1A/1B/1C.

- FUEL PUMPS 2A/2B/2C.
- START 1/2.

(2) Remove the protection caps or plugs from the disconnected points, if applicable.

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 and tighten the nut (5) to the suction/check valve (4).
- (2) Install the clamp (3) on the suction/check valve (4).
- (3) Install the bolts (1) and washers (2) on the clamp (3).

K. Follow-on

SUBTASK 842-003-A

- (1) Install the access panels below ([AMM MPP 06-44-00/100](#)) and ([AMM TASK 28-11-01-400-802-A/400](#)):
 - (a) LH fuel tank:
 - 531AB/531EZ.
 - (b) RH fuel tank:
 - 631AB/631EZ.
- (2) Refuel the tanks ([AMM TASK 12-11-01-600-801-A/300](#)) as applicable.
- (3) Examine for fuel leaks the underwing access panels which were removed.
- (4) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them:
 - FUEL PUMPS 1A/1B/1C.
 - FUEL PUMPS 2A/2B/2C.
 - START 1/2.

