



## AIRCRAFT MAINTENANCE MANUAL

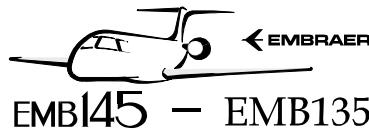
### FUELING/DEFUELING ADAPTER - REMOVAL/INSTALLATION

EFFECTIVITY: ALL

#### 1. General

- A. This section gives the procedures to remove/install the pressure fueling/defueling adapter.
- 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
28-23-01-000-801-A	PRESSURE FUELING/DEFUELING ADAPTER - REMOVAL	ALL
28-23-01-400-801-A	PRESSURE FUELING/DEFUELING ADAPTER - INSTALLATION	ALL



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 28-23-01-000-801-A

EFFECTIVITY: ALL

2. PRESSURE FUELING/DEFUELING ADAPTER - REMOVAL

A. General

- (1) Obey the instructions below to remove the pressure fueling/defueling adapter.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
191	191BR	Wing-to-fuselage 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-to-fuselage fairing

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) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them:
  - DEFUELING.
  - REFUELING 1/2/3.
- (2) Open access panel 191BR (AMM MPP 06-41-01/100) to get access to the pressure fueling/defueling adapter.



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

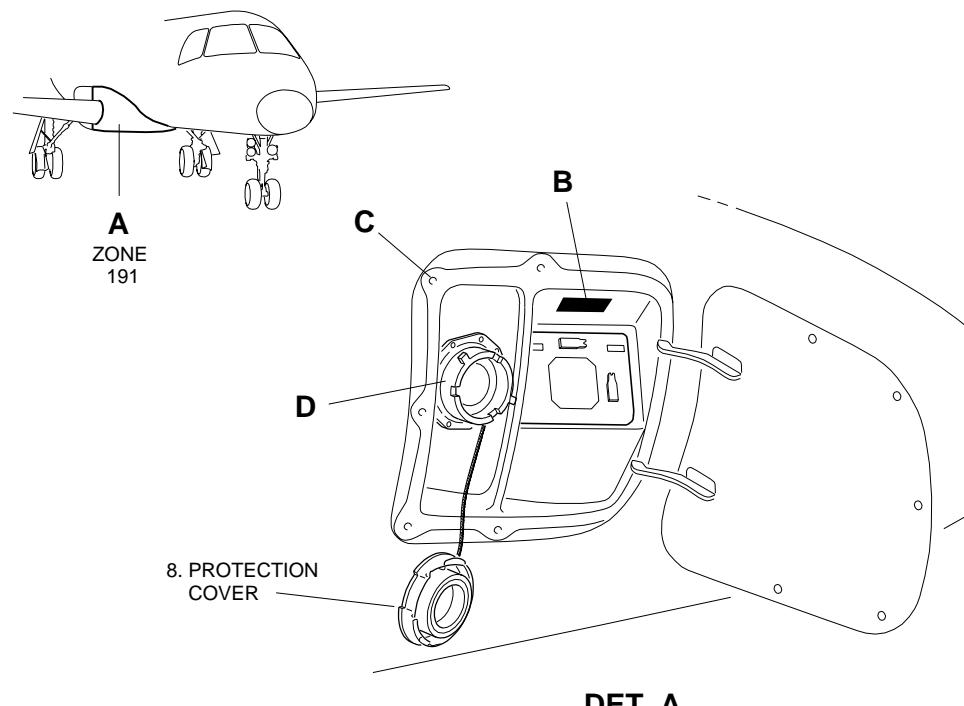
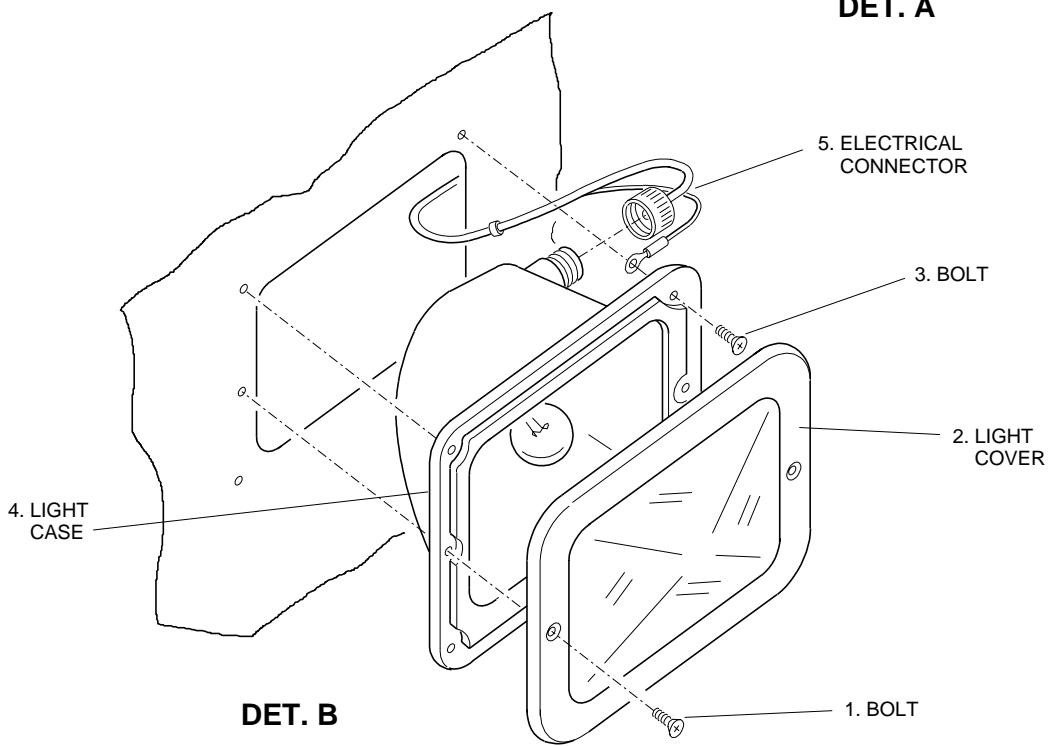
SUBTASK 020-002-A

- (1) Remove the light cover bolts (1) and light cover (2).
- (2) Remove the light case bolts (3) and light case (4).
- (3) Remove the light case electrical connector (5) and install a protection cap to it.
- (4) Remove all formed plate bolts (6) and formed plate (7).
- (5) Remove the protection cover (8).
- (6) Loosen the nut (10) to remove the elbow (9).
- (7) Remove and discard the O-ring (11).
- (8) Remove the clamp (12).
- (9) Open and remove the coupling-cover connection (13).
- (10) Open and remove the Gamah clamp (14), sleeve (15), and O-rings (16).
- (11) Discard the O-rings (16).
- (12) Remove the bolts (17), washers (18), and spring washers (19).
- (13) Remove the pressure fueling/defueling adapter (20).

**EFFECTIVITY: ALL**

Pressure Fueling/Defueling Adapter - Removal/Installation

Figure 401 - Sheet 1

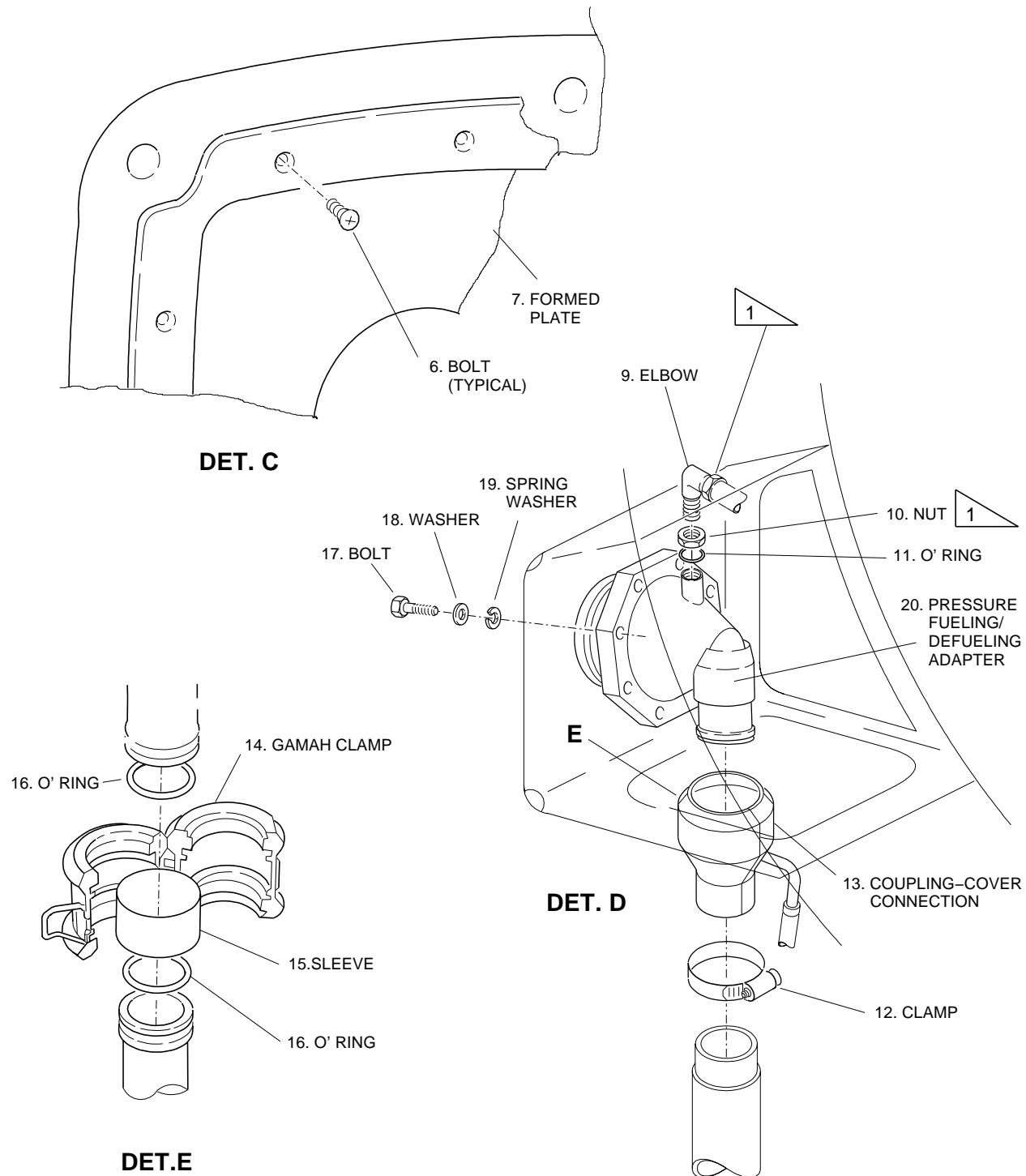

**DET. A**


145AMM280081.MCE B

**EFFECTIVITY: ALL**

Pressure Fueling/Defueling Adapter - Removal/Installation

Figure 401 - Sheet 2



**1** TORQUE: 5,6 N.m TO 7,3 N.m (50 TO 65 lb.in)

145AMM280082.MCE A



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

TASK 28-23-01-400-801-A

EFFECTIVITY: ALL

3. PRESSURE FUELING/DEFUELING ADAPTER - INSTALLATION

A. General

(1) Obey the instructions below to install the pressure fueling/defueling adapter.

B. References

REFERENCE	DESIGNATION
28-23-00	-
AMM MPP 06-41-01/100	-
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 28-41-00-200-801-A/600	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
191	191BR	Wing-to-fuselage fairing

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Extrusion Gun/spatula	To seal the coupling-cover connection	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
MS 20995-C32	Lockwire	AR
Molykote DC-33 Light	Lubricant	AR
MIL-S-8802B	Sealant, type II class B2	AR
TT-N-95, Type I or Type II	Solvent	AR
P-D-680, Type I	Solvent	AR

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
O-ring	28-23-00	3



EMB145 - EMB135

AIRCRAFT  
MAINTENANCE MANUAL

---

## H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Wing-to-fuselage fairing

## I. Preparation

SUBTASK 841-003-A

**WARNING: FUEL LINE CLEANING PRODUCTS ARE TOXIC AND FLAMMABLE. A GOOD FLOW OF AIR MUST BE AVAILABLE WHEN THE WORK IS DONE IN A CLOSED AREA.**

**CAUTION:** • DO NOT PERMIT THE CLEANING PRODUCT TO TOUCH PAINT-FINISH SURFACES, NOT TO CAUSE DAMAGE TO THEM.

- USE CLEAN, SOFT (COTTON), NON-SYNTHETIC AND LINT-FREE CLOTHS ONLY. DO NOT PUT REMAINING CLEANING MATERIAL BACK INTO ORIGINAL CONTAINERS TO PREVENT CONTAMINATION.
- DO NOT POUR CLEANING PRODUCT DIRECTLY ON THE SURFACE TO BE CLEANED.
- DO NOT PERMIT CLEANING PRODUCT TO EVAPORATE BEFORE IT IS DRIED WITH THE CLOTH.

- (1) Remove as much old sealant as possible from the surface to be sealed of the coupling-cover connection (13).
- (2) Soak a cloth with solvent, remove the unwanted quantity of product, and apply the cloth to the area to be cleaned/sealed of the coupling-cover connection (13).
- (3) Dry the area with other clean and dry cloth before the solvent evaporates.
- (4) Do steps 3 and 4 again. Replace the cloths when they become dirty. Stop only when no signs of discoloration stay in the dry cloth.
- (5) Put a protection against contamination (dust and grease) in the cleaned area until the sealant is applied.
- (6) Make sure that, on the circuit breaker panel, the circuit breakers below are open and tagged:
  - DEFUELING.
  - REFUELING 1/2/3.

## 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 pressure fueling/defueling adapter (20).

- (2) Install the bolts (17), washers (18), and spring washers (19).
- (3) Lightly apply Molykote lubricant to the new O-rings (16), to the exposed surface of the flanges, and to the internal face of the sleeve (15), and install them.
- (4) Install the Gamah clamp (14).
- (5) Install the coupling-cover connection (13).

**WARNING: BEFORE YOU USE IT, MAKE SURE THAT THE PERMITTED LIFE OF THE SEALANT COMPOUND TO BE USED IS NOT EXPIRED AND THAT IS CORRECTLY STORED.**

- (6) Add catalyst to the base compound in the proportion recommended by the manufacturer. Fully mix them until the color is the same in all the points of the mixture and there are no air bubbles in it.
- (7) Fillet sealing:

**NOTE:**

- Apply the sealant immediately after the mixture is completed.
- Do not apply the sealant on surfaces at temperatures lower than 16°C (60.8°F). Keep the surface temperature between 16°C (60.8°F) and 26°C (78.8°F), to make sure that the sealant bonds satisfactorily and there are no runouts during the cure.
- Discard the sealant which becomes very thick or is difficult to be applied.
- Hot and filtered (to prevent contamination) air or applicable lamps can be used for the acceleration of the sealant cure time. But do not let the surface temperature be more than 55°C (131°F).
- The application life is 2 h, at a temperature of 25°C (75.8°F) and air relative humidity of 50%.
- The curing time is approximately 30 h at a temperature of 25°C (75.8°F) and approximately 5 h at a temperature of 50°C (119°F), with a resistance-heated air circulation.
- The sealing fillet must have no air bubbles. The thickest part of the fillet must be aligned with the edge of the adjacent line of the overlapped structural elements.

- (8) Apply sealant on the joint of the coupling-cover connection (13) with an extrusion gun or a spatula, to make it fill the empty spaces and in the shape of a continuous fillet which touches the adjacent fillets.
- (9) Install the clamp (12) and safety it.
- (10) Lightly apply Molykote lubricant to the new O-ring (11).
- (11) Install the O-ring (11), nut (10), and elbow (9) to the pressure fueling/defueling adapter (20).
- (12) Close the protection cover (8).

- (13) Install the formed plate (7) and all the bolts (6).
- (14) Remove the protection cap of the light case electrical connector (5) and install it.
- (15) Install the light case (4) and light case bolts (3).
- (16) Install the light cover (2) and light cover bolts (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) Close access panel 191BR (AMM MPP 06-41-01/100) after the installation.
- (3) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them:
  - DEFUELING.
  - REFUELING 1/2/3.

