



## AIRCRAFT MAINTENANCE MANUAL

### ELECTRIC FUEL PUMP - INSPECTION/CHECK

EFFECTIVITY: ALL

#### 1. General

- A. This section gives the procedures to do the inspection of the electrical fuel-pump components.
- 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
28-21-01-200-801-A ♦	WING ELECTRIC FUEL-PUMP CONNECTOR - INSPECTION	ACFT WITH WET WINGSTUB
28-21-01-200-802-A ♦	WING ELECTRIC FUEL-PUMP CONNECTOR - INSPECTION	ACFT WITH DRY WINGSTUB
28-21-01-200-803-A ♦	FUEL-PUMP ELECTRICAL HARNESS - DETAILED INSPECTION	ACFT WITH WET WINGSTUB
28-21-01-200-804-A ♦	FUEL-PUMP ELECTRICAL HARNESS - DETAILED INSPECTION	ACFT WITH DRY WINGSTUB

**TASK 28-21-01-200-801-A**
**EFFECTIVITY: ACFT WITH WET WINGSTUB**
**2. WING ELECTRIC FUEL-PUMP CONNECTOR - INSPECTION**
**A. General**

- (1) This procedure obeys the Fuel Tanks Safety and EWIS ICA requirements.
- (2) This task gives the procedure to do an inspection of the electrical connectors of the electrical fuel pump. The function of this inspection is to prevent failure of these electrical connectors.
- (3) This task is applicable to fuel pumps 1A, 1B, 1C, 2A, 2B, and 2C.
- (4) Avoid to unlac or move the electrical wiring and components during the detailed visual inspections.

**B. References**

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM MPP 06-41-01/100	-
<a href="#"><b>AMM MPP 28-00-00/200</b></a>	- MAINTENANCE PRACTICES
<a href="#"><b>AMM MPP 28-21-01/400</b></a>	- REMOVAL/INSTALLATION
AMM TASK 28-41-00-200-801-A/600	-
<a href="#"><b>AMM TASK 28-45-00-700-801-A/500</b></a>	FUEL LOW-PRESSURE WARNING SYSTEM - OPERATIONAL CHECK
WM 20-00-03	-
WM 20-22-00	-
WM 20-50-00	-
WM 20-50-01	-

**C. Zones and Accesses**

<i>ZONE</i>	<i>PANEL/DOOR</i>	<i>LOCATION</i>
157	-	Wing stub
155	155DZ	LH wing stub
155	155EZ	LH wing stub
156	156DZ	RH wing stub
156	156EZ	RH wing stub
192	192AL	Center lower fairing
192	192BR	Center lower fairing

**D. Tools and Equipment**

Not Applicable

**E. Auxiliary Items**

Not Applicable



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F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Wing stub

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 THE MATERIAL.**

- (1) Make sure that the aircraft is safe for maintenance.
- (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 (2A, 2B, 2C).
- (3) Remove the applicable access panels (AMM MPP 06-41-01/100) shown below to get access to the electrical fuel pump connectors:
  - (a) Left fuel pumps:
    - 155DZ, 155EZ and 192AL
  - (b) Right fuel pumps:
    - 156DZ, 156EZ and 192BR

J. Inspection of Electrical Fuel-Pump Connector ([Figure 601](#))

SUBTASK 220-002-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 THE MATERIAL.**

- (1) Do the fuel-pump connector inspection:
  - (a) Disconnect the electrical fuel-pump connector (4).
  - (b) Do an inspection on the electrical connector (2) for general condition ([Figure 601](#)):
    - 1 Examine the EWIS components for signs of damage, incorrect installation, or chafing and general condition. Refer to WM 20-22-00.
    - 2 Examine the surface plating for signs of corrosion, irregular conditions, or damage.

- 3 Make sure that there are no blackened pins.
  - 4 Examine the elastomeric insert for cracks or signs of erosion or charring.
- (c) If you find damage, replace the applicable electrical fuel pump (1) ([AMM MPP 28-21-01/400](#)) and do an inspection on the applicable mating fuel-pump connector (4) ([Figure 601](#)):
  - 1 If there are signs of damage, replace the applicable mating fuel-pump connector (4) (WM 20-00-03, WM 20-50-00, and WM 20-50-01).
  - 2 If there are no signs of damage, replace only the socket contacts (3) (WM 20-00-03, WM 20-50-00, and WM 20-50-01).
- (d) If there are no problems, apply anticorrosive spray to the electrical connectors (2) and (4). Cover the contacts without too much material.
- (e) Connect the electrical connector (4).

(2) Do step (1) again for all electrical fuel-pump connectors.

**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).

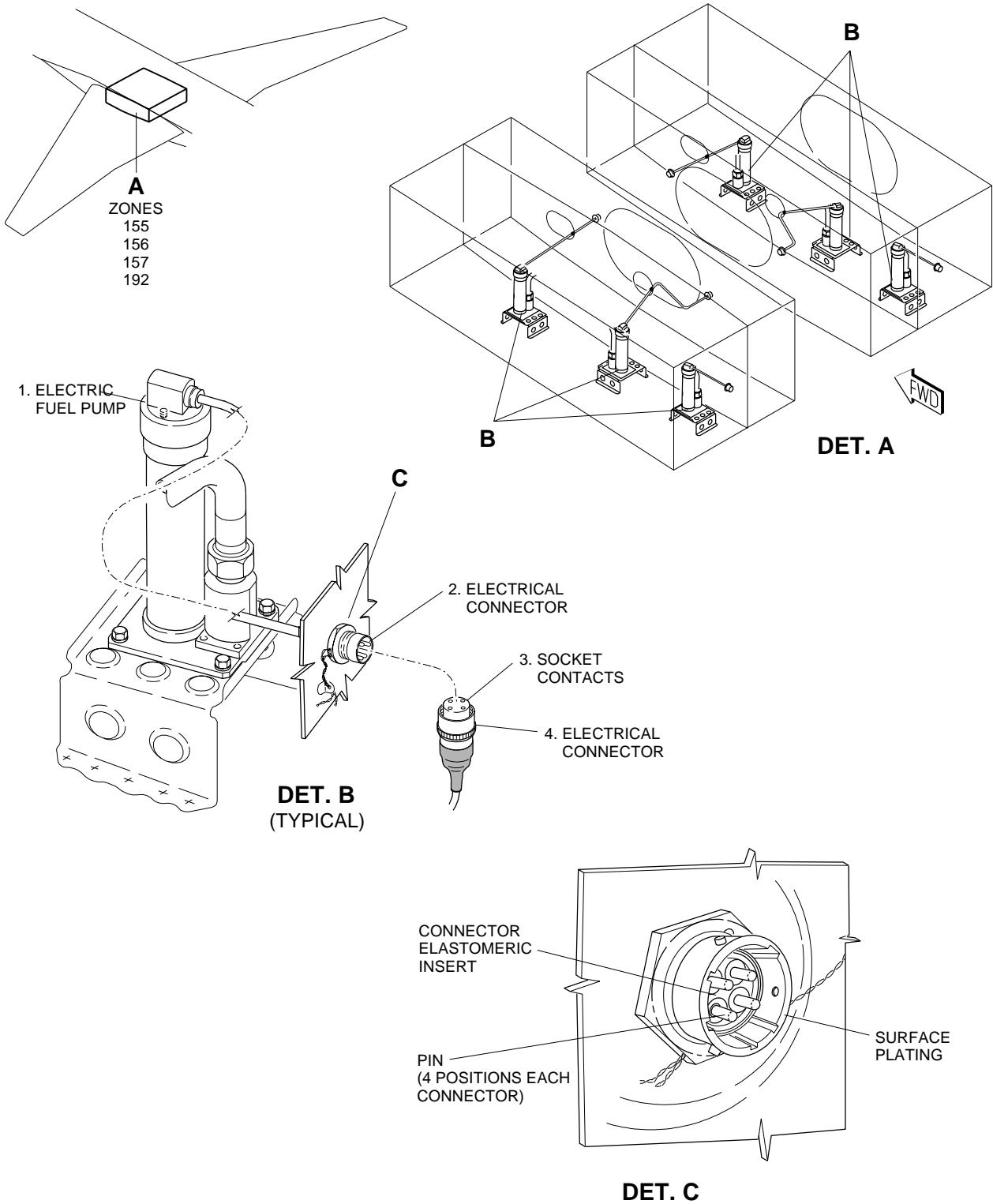
**NOTE:** The inspection of fuel-quantity indication harness is a part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations of the Aircraft Maintenance Program.

- (2) Install the access panels removed in step 3.I. Refer to AMM MPP 06-41-01/100
- (3) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them:
  - FUEL PUMPS - 1A, 1B, 1C (2A, 2B, 2C).

**CAUTION:** DAMAGE TO THE FUEL PUMP WILL OCCUR IF IT OPERATES WITH NO FUEL (DRY OPERATION). THUS, CHECK THE FUEL LEVEL IN THE FUEL TANKS BEFORE YOU TURN ON THE FUEL PUMP.

- (4) Do an operational check of the low pressure warning system. Refer to [AMM TASK 28-45-00-700-801-A/500](#).

**EFFECTIVITY: ACFT WITH WET WINGSTUB**  
**Electrical Fuel Pump Connector - Inspection**  
**Figure 601**



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**TASK 28-21-01-200-802-A**
**EFFECTIVITY: ACFT WITH DRY WINGSTUB**
**3. WING ELECTRIC FUEL-PUMP CONNECTOR - INSPECTION**
**A. General**

- (1) This procedure obeys the Fuel Tanks Safety and EWIS ICA requirements.
- (2) This task gives the procedure to do an inspection of the electrical connectors of the electrical fuel pump. The function of this inspection is to prevent failure in these electrical connectors.
- (3) This task is applicable to fuel pumps 1A, 1B, 1C, 2A, 2B, and 2C.
- (4) Avoid to unlac or move the electrical wiring and components during the detailed visual inspections.

**B. References**

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM MPP 06-41-01/100	-
<a href="#"><b>AMM MPP 28-00-00/200</b></a>	- MAINTENANCE PRACTICES
<a href="#"><b>AMM MPP 28-21-01/400</b></a>	- REMOVAL/INSTALLATION
AMM TASK 28-41-00-200-801-A/600	-
<a href="#"><b>AMM TASK 28-45-00-700-801-A/500</b></a>	FUEL LOW-PRESSURE WARNING SYSTEM - OPERATIONAL CHECK
WM 20-00-03	-
WM 20-22-00	-
WM 20-50-00	-
WM 20-50-01	-

**C. Zones and Accesses**

<i>ZONE</i>	<i>PANEL/DOOR</i>	<i>LOCATION</i>
192	192AL	Center lower fairing
192	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



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## H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Wing stub

## I. Preparation

## SUBTASK 841-003-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 THE MATERIAL.

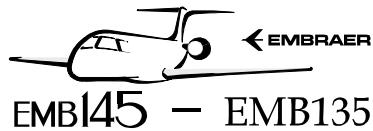
- (1) Make sure that the aircraft is safe for maintenance.
- (2) On the circuit breaker panel, open the circuit breakers below and attach a DO-NOT-CLOSE tag to them:
  - FUEL PUMPS - 1A, 1B, 1C (2A, 2B, 2C).
- (3) Remove the applicable access panels (AMM MPP 06-41-01/100) shown below to get access to the electrical fuel pump connectors:
  - (a) Left fuel pumps:
    - 192AL
  - (b) Right fuel pumps:
    - 192BR

J. Inspection of Electrical Fuel Pump Connector ([Figure 602](#))

## SUBTASK 220-003-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 THE MATERIAL.

- (1) Do the fuel-pump connector inspection:
  - (a) Disconnect the electrical fuel-pump connector (4).
  - (b) Do an inspection on the electrical connector (2) for general condition ([Figure 602](#)):
    - 1 Examine the EWIS components for signs of damage, incorrect installation, or chafing and general condition. Refer to WM 20-22-00.
    - 2 Examine the surface plating for signs of corrosion, irregular conditions, or damage.
    - 3 Make sure that there are no blackened pins.
    - 4 Examine the elastomeric insert for cracks or signs of erosion or charring.



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- (c) If there are signs of damage, replace the applicable electrical fuel pump (1) ([AMM MPP 28-21-01/400](#)) and do an inspection on the applicable mating fuel-pump connector (4) ([Figure 602](#)):
  - 1 If there are signs of damage, replace the applicable mating fuel-pump connector (4) (WM 20-00-03, WM 20-50-00, and WM 20-50-01).
  - 2 If there are no signs of damage, replace only the socket contacts (3) (WM 20-00-03, WM 20-50-00, and WM 20-50-01).
- (d) If there are no problems, apply anticorrosive spray to the electrical connectors (2) and (4). Cover the contacts without too much material.
- (e) Connect the electrical connector (4).

(2) Do step (1) again for all electrical fuel-pump connectors.

K. Follow-on

SUBTASK 842-003-A

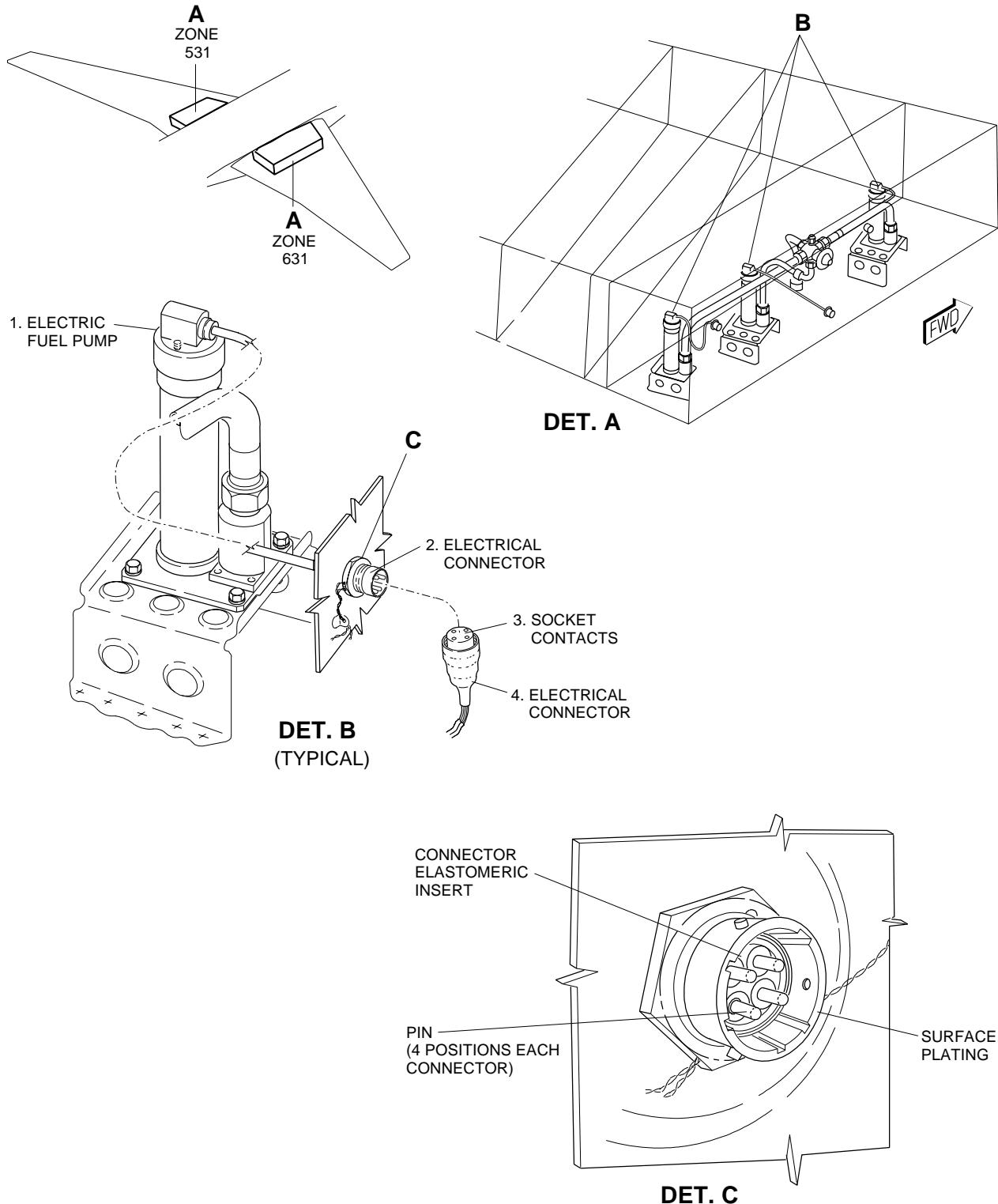
- (1) Do an inspection on the fuel-quantity indication harness (AMM TASK 28-41-00-200-801-A/600).

**NOTE:** The inspection of fuel-quantity indication harness is a part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations of the Aircraft Maintenance Program.

- (2) Install the access panels removed in step 3.I. Refer to AMM MPP 06-41-01/100
- (3) On the circuit breaker panel, close the circuit breakers below and remove the DO-NOT-CLOSE tag from them:
  - FUEL PUMPS - 1A, 1B, 1C (2A, 2B, 2C).

**CAUTION:** DAMAGE TO THE FUEL PUMP WILL OCCUR IF IT OPERATES WITH NO FUEL (DRY OPERATION). THUS, CHECK THE FUEL LEVEL IN THE FUEL TANKS BEFORE YOU TURN ON THE FUEL PUMP.

- (4) Do an operational check of the low pressure warning system. Refer to [AMM TASK 28-45-00-700-801-A/500](#).

**EFFECTIVITY: ACFT WITH DRY WINGSTUB**  
 Electrical Fuel-Pump Connector - Inspection  
 Figure 602


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TASK 28-21-01-200-803-A

EFFECTIVITY: ACFT WITH WET WINGSTUB

## 4. FUEL-PUMP ELECTRICAL HARNESS - DETAILED INSPECTION

### A. General

- (1) This procedure obeys the Fuel Tanks Safety and EWIS ICA requirements.
- (2) This task gives the procedure to do the detailed inspection on the electrical fuel-pump harness assembly in the wing fuel tanks for general conditions. The function of this inspection is to prevent failure in this harness assembly.
- (3) This task is applicable to the six electrical fuel pumps in the LH and RH wing fuel tanks.
- (4) Avoid to unlac or move the electrical wiring and components during the detailed visual inspections.

### 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 12-11-01-600-801-A/300	FUEL-TANK PRESSURE REFUELING - SERVICING
AMM TASK 12-11-01-600-802-A/300	FUEL-TANK PRESSURE DEFUELING - SERVICING
AMM TASK 12-11-02-600-802-A/300	FUEL TANK GRAVITY DEFUELING - SERVICING
AMM TASK 28-11-01-000-801-A/400	FUEL-TANK ACCESS PANELS - REMOVAL
AMM TASK 28-11-01-400-801-A/400	FUEL-TANK ACCESS PANELS - INSTALLATION
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
156	156BZ	Wing stub
192	192AL	Fuselage external access doors and panels
192	192BR	Fuselage external access doors and panels

### 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
2	Do the task	Wing fuel tank

I. Preparation

SUBTASK 841-004-A

- (1) Make sure that the aircraft is safe for maintenance.

**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.**

- (2) Defuel the tanks ( [AMM TASK 12-11-01-600-802-A/300](#) ) and ( [AMM TASK 12-11-02-600-802-A/300](#) ).
- (3) Open 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 fuel pump harness:
  - (a) LH fuel tank:
    - 155BZ/192AL
  - (b) RH fuel tank:
    - 156BZ/192BR

J. Electrical fuel-pump harness - Inspection

SUBTASK 220-004-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 THE MATERIAL.**

- (1) Get access to the electrical fuel-pump harness in the fuel tank.
- (2) Do a detailed inspection on the harness:
  - (a) Examine the wire jacket for damage and chafing.
  - (b) If applicable, examine the attachments of the clamps for damage, correct installation, and integrity and make sure that all of them are installed.
  - (c) Do a check for correct installation of the electrical connector. Make sure that there are no loose connections.
- (3) Do step (2) again for all fuel pump harnesses.
- (4) Examine the remaining EWIS components for signs of damage, incorrect installation, or chafing and general condition. Refer to WM 20-22-00.



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K. Follow-on

SUBTASK 842-004-A

- (1) Close access panels 155BZ and 156BZ (AMM MPP 06-41-01/100), ([AMM MPP 06-44-00/100](#)) and ([AMM TASK 28-11-01-400-801-A/400](#)).

- (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 Aircraft Maintenance Program.

- (3) Close access panels 192AL and 192BR (AMM MPP 06-41-01/100) and ([AMM MPP 06-44-00/100](#)).

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

**TASK 28-21-01-200-804-A**
**EFFECTIVITY: ACFT WITH DRY WINGSTUB**
**5. FUEL-PUMP ELECTRICAL HARNESS - DETAILED INSPECTION**
**A. General**

- (1) This procedure obeys the Fuel Tanks Safety and EWIS ICA requirements.
- (2) This task gives the procedure to do the detailed inspection on the electrical fuel-pump harness assembly in the wing fuel tanks for general conditions. The function of this inspection is to prevent failure in this harness assembly.
- (3) This task is applicable to the six electrical fuel pumps in the LH and RH wing fuel tanks.
- (4) Avoid to unlac or move the electrical wiring and components during the detailed visual inspections.

**B. References**

<i>REFERENCE</i>	<i>DESIGNATION</i>
AMM MPP 06-41-01/100	-
AMM MPP 06-44-00/100	- COMPONENT LOCATION
AMM MPP 28-00-00/200	- MAINTENANCE PRACTICES
AMM TASK 12-11-01-600-801-A/300	FUEL-TANK PRESSURE REFUELING - SERVICING
AMM TASK 12-11-01-600-802-A/300	FUEL-TANK PRESSURE DEFUELING - SERVICING
AMM TASK 12-11-02-600-802-A/300	FUEL TANK GRAVITY DEFUELING - SERVICING
AMM TASK 28-11-01-000-801-A/400	FUEL-TANK ACCESS PANELS - REMOVAL
AMM TASK 28-11-01-400-801-A/400	FUEL-TANK ACCESS PANELS - INSTALLATION
AMM TASK 28-41-00-200-801-A/600	-
WM 20-22-00	-

**C. Zones and Accesses**

<i>ZONE</i>	<i>PANEL/DOOR</i>	<i>LOCATION</i>
155	155BZ	Wing stub
155	155CZ	Wing stub
156	156BZ	Wing stub
156	156CZ	Wing stub
192	192AL	Fuselage external access doors and panels
192	192BR	Fuselage external access doors and panels

**D. Tools and Equipment**

Not Applicable

**E. Auxiliary Items**

Not Applicable



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F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
2	Do the task	Wing fuel tank

I. Preparation

SUBTASK 841-005-A

- (1) Make sure that the aircraft is safe for maintenance.

**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.**

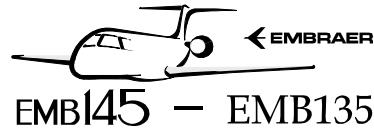
- (2) Defuel the tanks ( [AMM TASK 12-11-01-600-802-A/300](#) ) and ( [AMM TASK 12-11-02-600-802-A/300](#) ).
- (3) Open access panels (AMM MPP 06-41-01/100), ( [AMM MPP 06-44-00/100](#) ) and ( [AMM TASK 28-11-01-000-801-A/400](#) ) shown below to get access to the fuel pump harness:
  - (a) LH fuel tank:
    - 155BZ/156CZ/192AL
  - (b) RH fuel tank:
    - 156BZ/156CZ/192BR

J. Electrical Fuel Pump Harness - Inspection

SUBTASK 220-005-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 THE MATERIAL.**

- (1) Get access to the electrical fuel-pump harness in the fuel tank.
- (2) Do a detailed inspection on the harness:
  - (a) Examine the wire jacket for damage or chafing.
  - (b) If applicable, do a check of the attachments of the clamps for no damage, correct installation, and integrity and make sure that all of them are installed.
  - (c) Do a check of the electrical connector for correct installation with no loose connections.
- (3) Do step (2) again for all fuel pump harnesses.



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- (4) Examine the remaining EWIS components for signs of damage, incorrect installation, or chafing and general condition. Refer to WM 20-22-00.

K. Follow-on

SUBTASK 842-005-A

- (1) Close access panels 155BZ, 155CZ, 156BZ and 156CZ (AMM MPP 06-41-01/100), ([AMM MPP 06-44-00/100](#)) and ([AMM TASK 28-11-01-400-801-A/400](#)).

- (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 Aircraft Maintenance Program.

- (3) Close access panels 192AL and 192BR (AMM MPP 06-41-01/100) and ([AMM MPP 06-44-00/100](#)).

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

