



AIRCRAFT
MAINTENANCE MANUAL

APU FIRE EXTINGUISHING SYSTEM - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do the check of the APU fire-extinguishing system.
- 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).

<i>TASK NUMBER</i>	<i>DESCRIPTION</i>	<i>EFFECTIVITY</i>
26-22-00-700-801-A ♦	APU FIRE-EXTINGUISHING SYSTEM - FUNCTIONAL CHECK	ALL



EMB145 - EMB135

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TASK 26-22-00-700-801-A

EFFECTIVITY: ALL

2. APU FIRE-EXTINGUISHING SYSTEM - FUNCTIONAL CHECK

A. General

- (1) This task gives the procedures to do a check on the electrical circuit of the APU fire-extinguishing system for correct operation.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM MPP 06-42-00/100	-
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE
AMM TASK 28-41-00-200-801-A/600	-
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
S.B.145-26-0007	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192BR	Wing stub (For EMB-145MK, MP, ER, EP, EU, and EMB-135ER/KE models)
156	156EZ	Landing gear bay (For EMB-145LR, EMB-145LU, and EMB-135LR/KL models)
312	312AR	Tail cone compartment

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Digital Multimeter	To know about electrical continuity/voltage	

E. Auxiliary Items

ITEM	DESCRIPTION	PURPOSE	QTY
Commercially available	Ladder	To get access to the tail cone compartment	1

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable

H. Persons Recommended

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	Tail cone compartment/Wing stub or Landing gear bay
1	Does the task	Cockpit

I. Preparation
SUBTASK 841-002-A

- (1) Open access door 312AR (AMM MPP 06-42-00/100) to get access to the APU fire-extinguishing bottle.
- (2) For EMB-145MK, MP, ER, EP, EU, and EMB-135ER/KE models:
 - (a) Remove access panel 192BR (AMM MPP 06-41-01/100) to get access to the APU fuel shutoff valve.
- (3) For EMB-145LR, EMB-145LU, and EMB-135LR/KL models:

WARNING: MAKE SURE THAT THE LANDING GEAR SAFETY PINS ARE INSTALLED TO PREVENT INJURIES TO PERSONS AND DAMAGE TO MATERIAL (AMM TASK 32-00-01-910-801-A/200).

- (a) Remove access panel 156EZ (AMM MPP 06-41-01/100) to get access to the APU fuel-shutoff valve.
- (4) On the circuit breaker panel, open the circuit breaker APU FIRE EXTG.

WARNING: • WHEN YOU CONNECT OR DISCONNECT THE ELECTRIC CONNECTOR OF THE BOTTLE CARTRIDGE, OR WHEN YOU KEEP IT DISCONNECTED, YOU MUST BE VERY CAREFUL WITH THE PINS OF ITS RECEPTACLE.

• THE CARTRIDGE IS AN EXPLOSIVE DEVICE . ACCIDENTAL DETONATION OF A CARTRIDGE BY ELECTROSTATIC DISCHARGE CAN CAUSE INJURY. FOR SAFE HANDLING, DO NOT TOUCH THE CARTRIDGE CONNECTOR PINS AFTER YOU REMOVE THE PROTECTIVE CAP OR ELECTRICAL CONNECTOR.

- (5) Disconnect the electrical connector (1) from the bottle cartridge (2).
- (6) Energize the aircraft with an External DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).

J. Functionally Check APU Fire-Extinguishing System ([Figure 501](#)) ([Figure 502](#)) ([Figure 503](#))
SUBTASK 720-002-A

- (1) Do a check for continuity to the ground from pin A of the electrical connector (1).
 - (a) Set the APU master switch to the "ON" position.
 - 1 The mechanical position indicator of the APU fuel shutoff valve goes to the "OPEN" position.

CAUTION: MAKE SURE THAT THE ELECTRIC CONNECTOR OF THE EXTINGUISHING BOTTLE CARTRIDGE IS DISCONNECTED.

- (2) On the circuit breaker panel, close the APU FIRE EXTG circuit breaker.
 - (a) Push the APU fire-extinguishing switch and keep it pushed.
 - 1 The mechanical position indicator of the APU fuel shutoff valve goes to the "CLOSE" position.
 - 2 Make sure that there is 28 V DC between pins A and B and pins A and C of the connector (1).
 - (b) Release the APU fire extinguishing switch.
 - 1 Make sure that there is approximately 21.5 V DC between pins A and B and pins A and C of the connector (1).
- (3) Set the APU master switch to the OFF position.
- (4) On the circuit breaker panel, open the APU FIRE EXTG circuit breaker and attach a DO-NOT-CLOSE tag to it.
- (5) Install a jumper between pins A and B of the electrical connector (1).
- (6) On the circuit breaker panel, close the APU FIRE EXTG circuit breaker and remove the DO-NOT-CLOSE tag from it.
- (7) On the EICAS display, the APU EXTBTL INOP message goes out of view.
- (8) Do a check on the EICAS messages as follows:
 - (a) Open the jumper of the connector (1).
Result:
 - 1 The message APU EXTBTL INOP comes into view on the EICAS display.
 - (b) Close the jumper of the connector (1).
Result:
 - 1 The message APU EXTBTL INOP goes out of view on the EICAS display.
 - (c) On the circuit breaker panel, open the APU FIRE EXTG circuit breaker.
Result:
 - 1 The message APU EXTBTL INOP comes into view on the EICAS display.
 - (d) On the circuit breaker panel, close the APU FIRE EXTG circuit breaker.
Result:
 - 1 The message APU EXTBTL INOP goes out of view on the EICAS display.
- (9) For aircraft PRE-MOD. [S.B.145-26-0007](#) with EICAS versions up to 17:
 - (a) Disconnect the P922 electrical connector from the bottle pressure gauge and switch (3).
Result:
 - 1 The EICAS display shows the APU EXTBTL INOP message.

- (b) Connect the P922 electrical connector to the bottle pressure gauge and switch (3).

NOTE: Make sure that the connector colored identification and inscription match those of the ring sticker applied around the pressure gauge and switch.

Result:

- 1 The EICAS message goes out of view.

- (10) For aircraft POST-MOD. [S.B.145-26-0007](#) with EICAS versions up to 17 or with EICAS versions 18 and on:

- (a) Disconnect the P922 connector from the pressure gauge and switch (3).

- (b) Install a jumper between pins A and C of the P922 electrical connector.

Result:

- 1 The EICAS display shows the message APU EXTBTL INOP.

- (c) Remove the jumper from between pins A and C of the P922 electrical connector.

Result:

- 1 The EICAS message goes out of view.

- (d) Connect the P922 electrical connector to the pressure gauge and switch (3).

NOTE: Make sure that the connector colored identification and inscription match those of the ring sticker applied around the pressure gauge and switch.

K. Follow-on ([Figure 501](#))

SUBTASK 842-002-A

CAUTION: MAKE SURE THAT THE APU FIRE-EXTINGUISHING SWITCH IS NOT PUSHED, AND THAT THERE IS NO PERSON IN THE TAIL CONE COMPARTMENT.

- (1) On the circuit breaker panel, open the circuit breaker APU FIRE EXTG and install a DO-NOT-CLOSE tag to it.

WARNING: • WHEN YOU CONNECT OR DISCONNECT THE ELECTRIC CONNECTOR OF THE BOTTLE CARTRIDGE, OR WHEN YOU KEEP IT DISCONNECTED, YOU MUST BE VERY CAREFUL WITH THE PINS OF ITS RECEPTACLE.
• THE CARTRIDGE IS AN EXPLOSIVE DEVICE . ACCIDENTAL DETONATION OF A CARTRIDGE BY ELECTROSTATIC DISCHARGE CAN CAUSE INJURY. FOR SAFE HANDLING, DO NOT TOUCH THE CARTRIDGE CONNECTOR PINS AFTER YOU REMOVE THE PROTECTIVE CAP OR ELECTRICAL CONNECTOR.

- (2) Connect the electrical connector to the bottle cartridge.

NOTE: Make sure that the connector colored identification and inscription match those of the ring sticker applied around the bottle outlet.

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



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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).

- (4) For EMB-145MK, MP, ER, EP, EU, and EMB-135ER/KE models:
 - (a) Install access panel 192AR (AMM MPP 06-41-01/100).
- (5) For the EMB-145LR, EMB-145LU, and EMB-135LR/KL models:

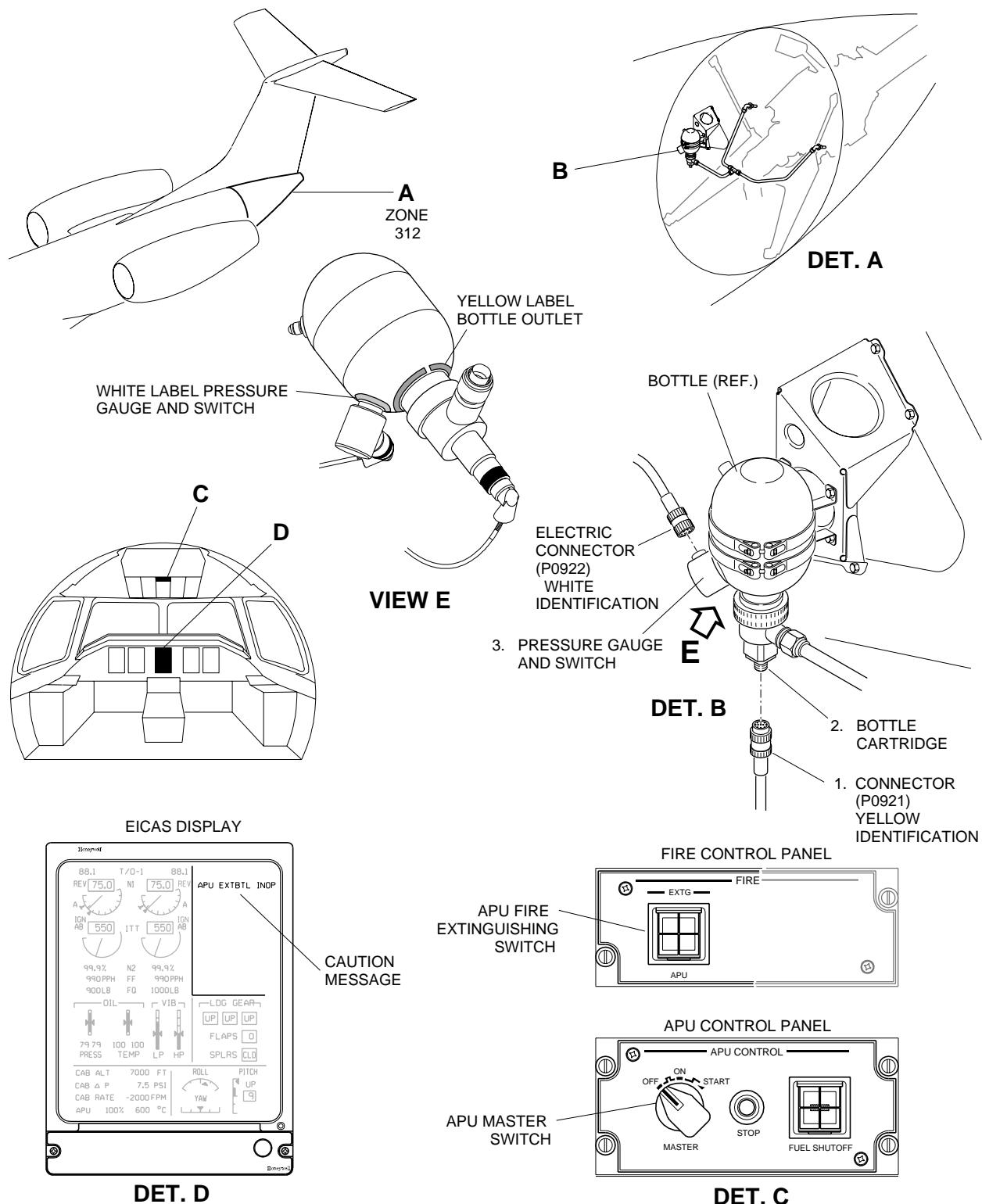
WARNING: MAKE SURE THAT THE LANDING GEAR SAFETY PINS ARE INSTALLED TO PREVENT INJURIES TO PERSONS AND DAMAGE TO MATERIAL (AMM TASK 32-00-01-910-801-A/200).

 - (a) Install access panel 156EZ (AMM MPP 06-41-01/100).
- (6) Close access door 312AR (AMM MPP 06-42-00/100).
- (7) On the circuit breaker panel, close the circuit breaker APU FIRE EXTG and remove the DO-NOT-CLOSE tag from it.
- (8) Deenergize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

EFFECTIVITY: ALL

APU Fire-Extinguishing System - Component Locations

Figure 501

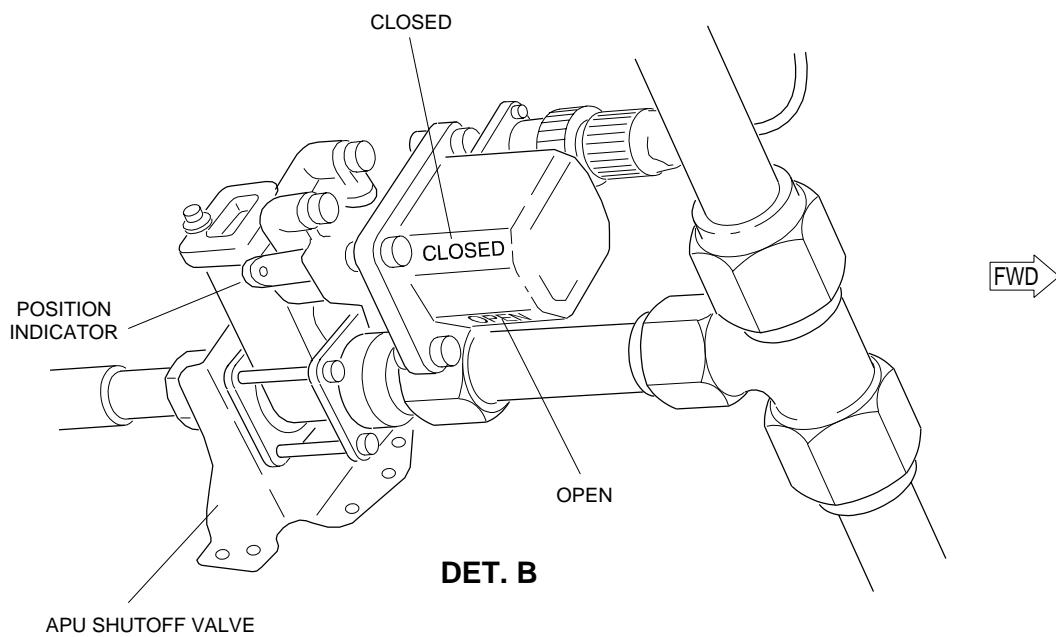
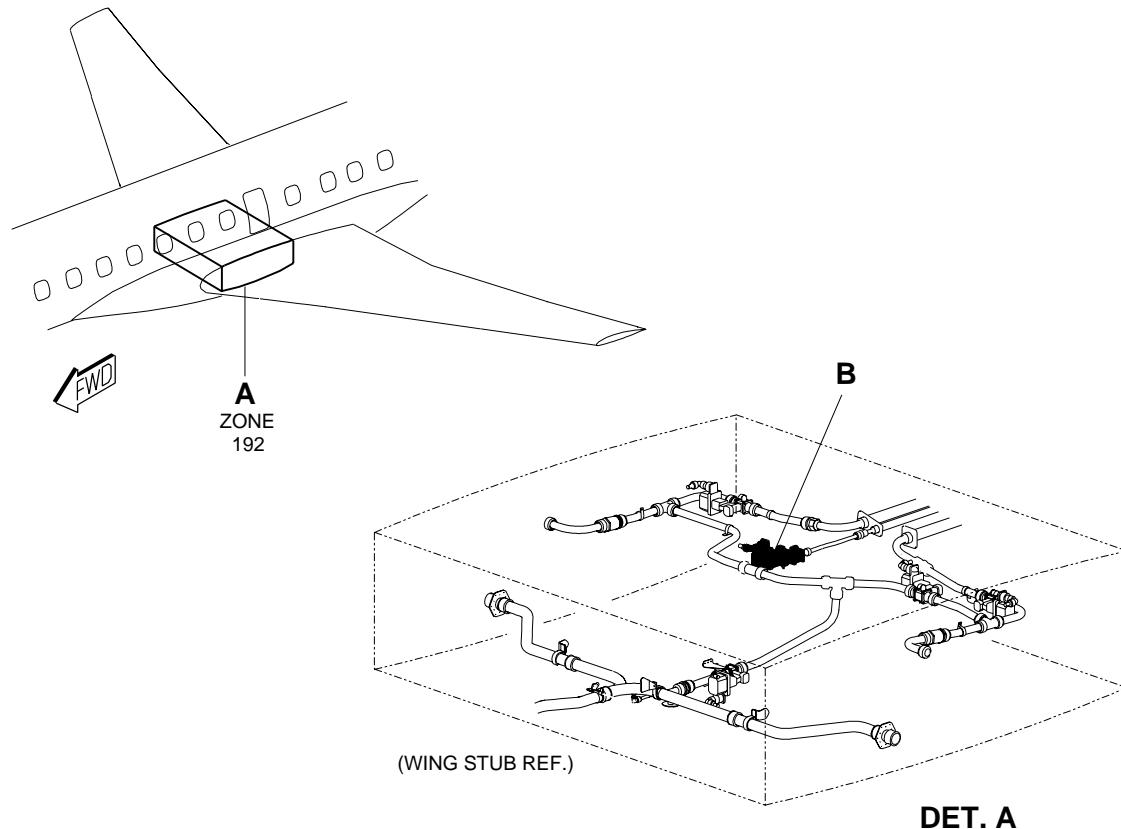


145AMM260074.MCE F

EFFECTIVITY: APPLICABLE TO EMB-145MK/MP/ER/EP/EU AND EMB-135ER/KE MODELS

APU Fire-Extinguishing System - Component Locations

Figure 502

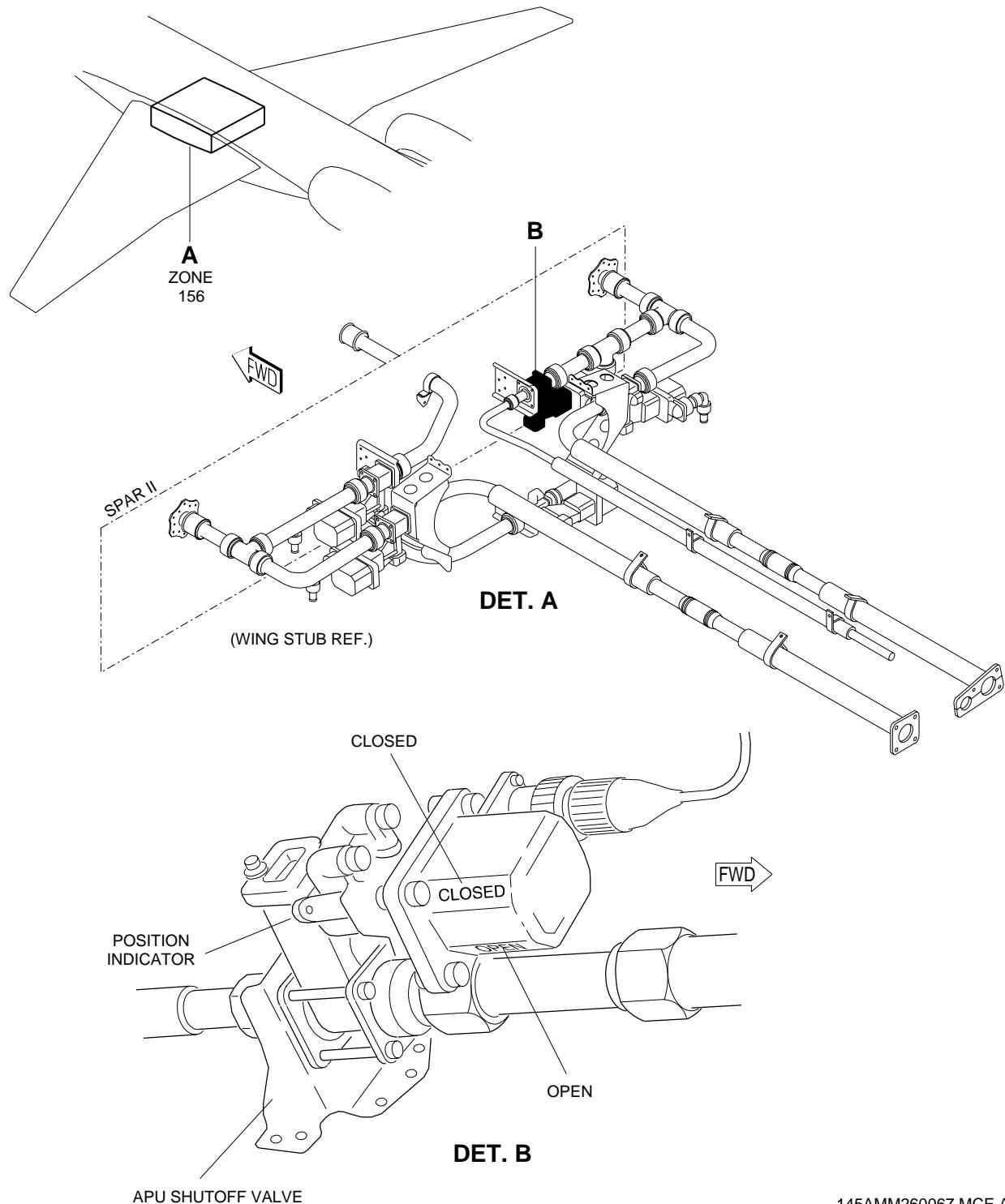


145AMM260010.MCE A

EFFECTIVITY: APPLICABLE TO EMB-145LR/LU AND EMB-135LR/KL MODELS

APU Fire-Extinguishing System - Component Locations

Figure 503



145AMM260067.MCE A

