



## AIRCRAFT MAINTENANCE MANUAL

### FIRE DETECTION SYSTEM - ADJUSTMENT/TEST

EFFECTIVITY: ACFT MODEL(S) EMB-145

#### 1. General

- A. This section gives the procedures to do the check of the fire detection 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).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
26-10-00-700-801-A	FIRE DETECTION SYSTEM - OPERATIONAL CHECK	ACFT MODEL(S) EMB-145



# AIRCRAFT MAINTENANCE MANUAL

TASK 26-10-00-700-801-A

EFFECTIVITY: ACFT MODEL(S) EMB-145

## 2. FIRE DETECTION SYSTEM - OPERATIONAL CHECK

### A. General

- (1) These procedures permit you to do the operational check of the fire detection system at the engines, APU, pylons, and smoke detection system at the baggage compartment (only for aircraft with Class-C baggage compartment).

### B. References

REFERENCE	DESIGNATION
AMM TASK 20-40-01-860-801-A/200	ENERGIZATION OF THE AIRCRAFT WITH AN EXTERNAL POWER SOURCE

### C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
220		Cockpit
270 (For aircraft with Class-C baggage compartment)		Baggage compartment

### 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	Cockpit
1	To make sure that the baggage compartment fan is off (for aircraft with Class-C baggage compartment)	Baggage compartment

### I. Preparation

SUBTASK 841-007-A

- (1) Energize the aircraft with an External DC Power Supply ( [AMM TASK 20-40-01-860-801-A/200](#)).

J. Fire Detection System - Operational Check ([Figure 501](#)) ([Figure 502](#)) ([Figure 503](#))

**SUBTASK 710-007-A**

(1) Do the check as follows:

- NOTE:**
- If the BAGG FIRE EXTG switch comes on when the aircraft is energized, push the fire test switch for two seconds at least, and then release it to cause the switch light to go off (for aircraft with Class-C baggage compartment).
  - When the FIRE TEST switch is pushed for more than 10 seconds while the APU is in operation, the APU stops.

(a) Push the FIRE TEST switch and hold it for at least two seconds.

- 1 The EICAS display shows these messages and indications:
  - ENG 1-2 FIRE (Warning).
  - APU FIRE (Warning).
  - For aircraft with Class-C baggage compartment: BAGG SMOKE (Warning).
  - E1/E2 FIRE DET FAIL (Caution).
  - APU FIRE DET FAIL (Caution).
- 2 The fire handle lights come on.
- 3 The warning/caution lights flash.
- 4 The aural warning operates (Bell).
- 5 For aircraft with Class-C baggage compartment:
  - a The BAGG FIRE EXTG switch comes on.
  - b The baggage compartment fan is off.

**NOTE:** When the baggage compartment fan is off, the check valve stays closed, as shown in figure 502.

(b) Release the FIRE TEST switch.

- 1 The messages below go out of view on the EICAS display:
  - ENG 1-2 FIRE (Warning).
  - APU FIRE (Warning).
  - E1/E2 FIRE DET FAIL.
  - APU FIRE DET FAIL.
  - For aircraft with Class-C baggage compartment: BAGG SMOKE.
- 2 The fire handle lights go out.



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3 For aircraft with Class-C baggage compartment:

- a The BAGG FIRE EXTG switch goes off.
- b The baggage compartment fan starts to operate again.

NOTE: When the baggage compartment fan is on, the check valve stays open and permits you to see the movement of the fan blades, as shown in figure 502.

(2) Push one of the master warning lights to stop the lights.

NOTE: If it is necessary to do the test again, wait 6 seconds for the system to reset.

K. Follow-on

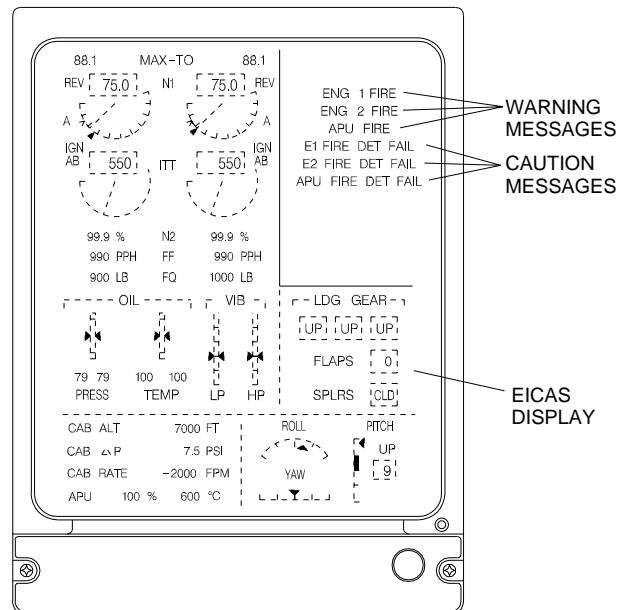
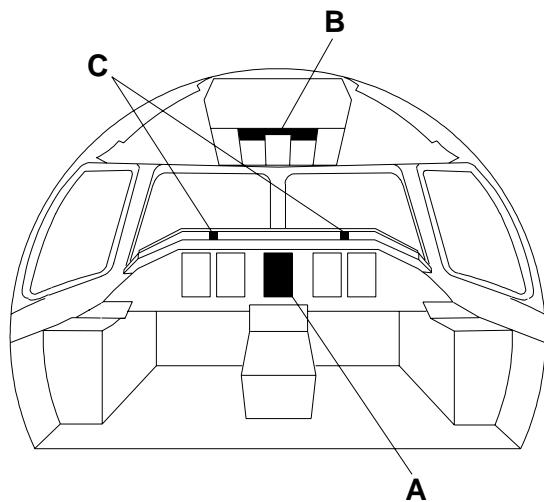
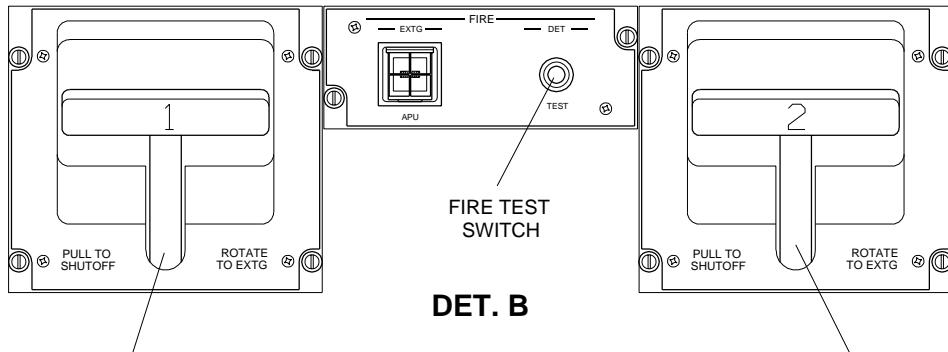
SUBTASK 842-007-A

(1) Deenergize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

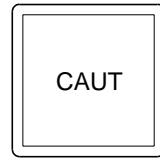
**EFFECTIVITY: CLASS-D BAGGAGE COMPARTMENT**

Fire Detection System - Component Locations

Figure 501


**DET. A**

 ENGINE 1  
FIRE HANDLE  
(ILLUMINATED)

 ENGINE 2  
FIRE HANDLE  
(ILLUMINATED)

 MASTER WARNING  
LIGHT

 MASTER CAUTION  
LIGHT

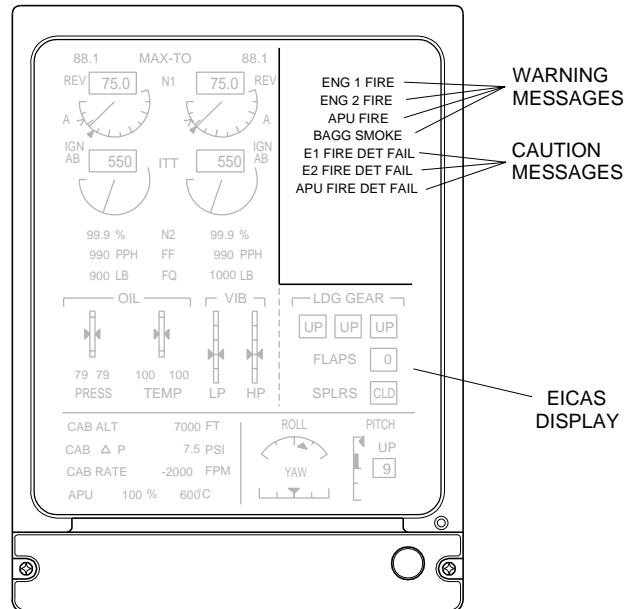
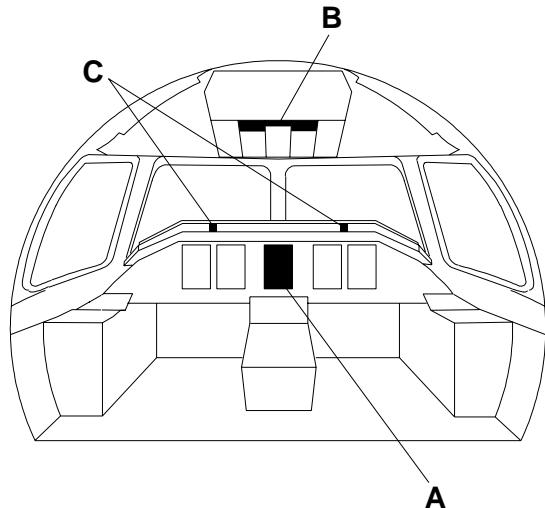
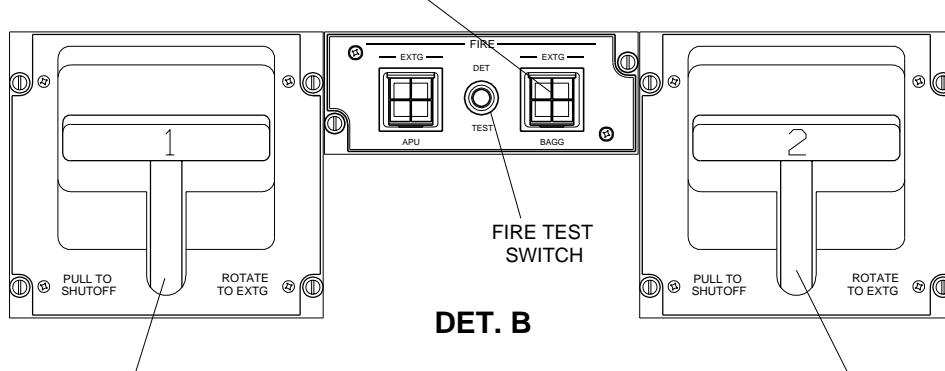
**DET. C**

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**EFFECTIVITY: CLASS-C BAGGAGE COMPARTMENT**

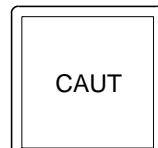
Fire Detection System - Component Locations

Figure 502 - Sheet 1


**DET. A**

 ENGINE 1  
FIRE HANDLE  
(ILLUMINATED)

 ENGINE 2  
FIRE HANDLE  
(ILLUMINATED)

**DET. C**

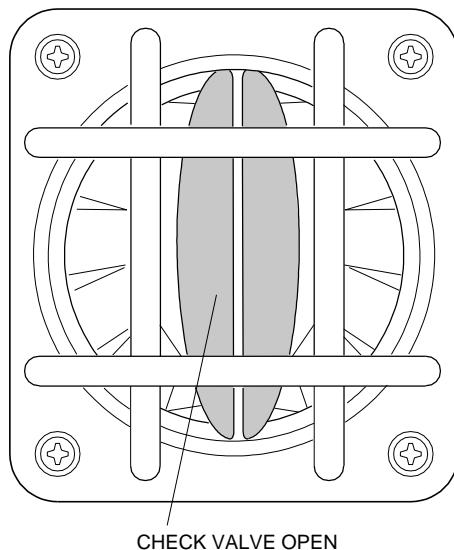
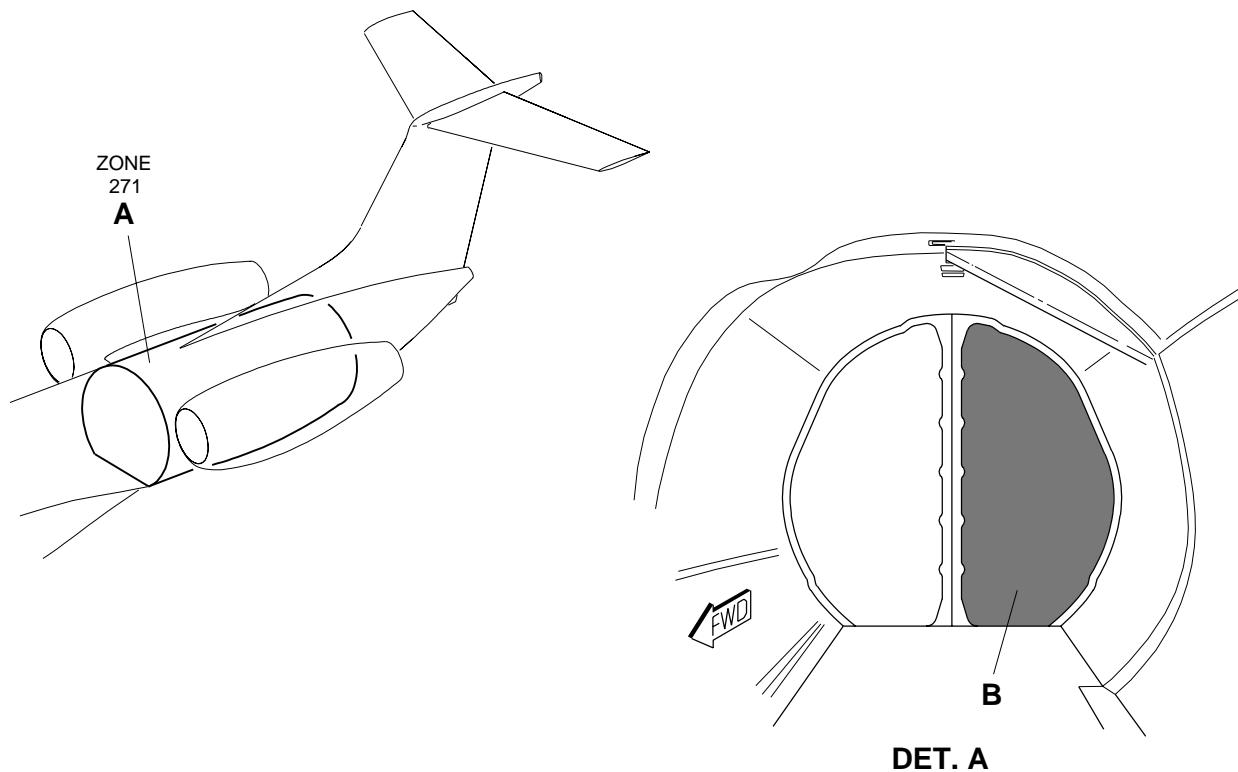
 MASTER WARNING  
LIGHT

 MASTER CAUTION  
LIGHT

145AMM260064.MCE D

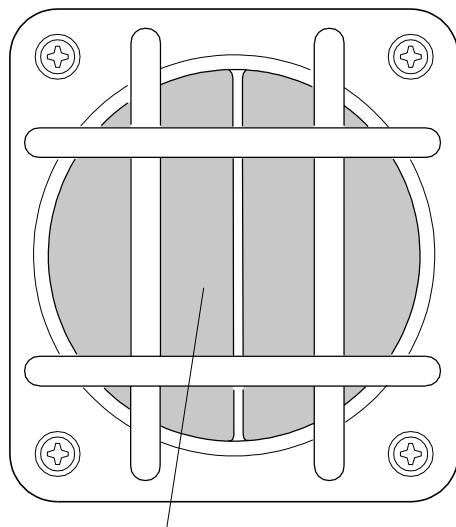
**EFFECTIVITY: CLASS-C BAGGAGE COMPARTMENT**

Fire Detection System - Component Locations

Figure 502 - Sheet 2



CHECK VALVE OPEN



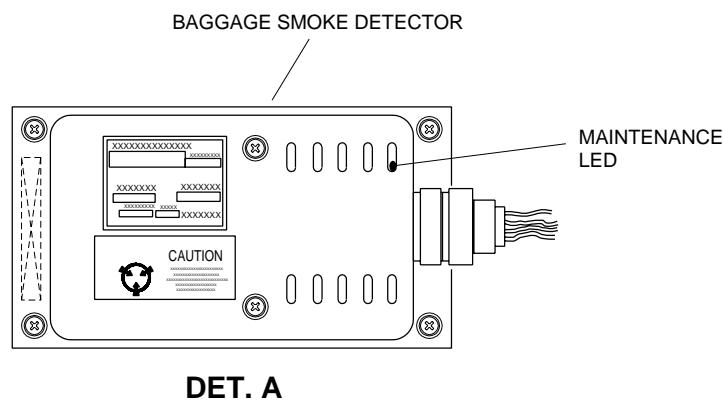
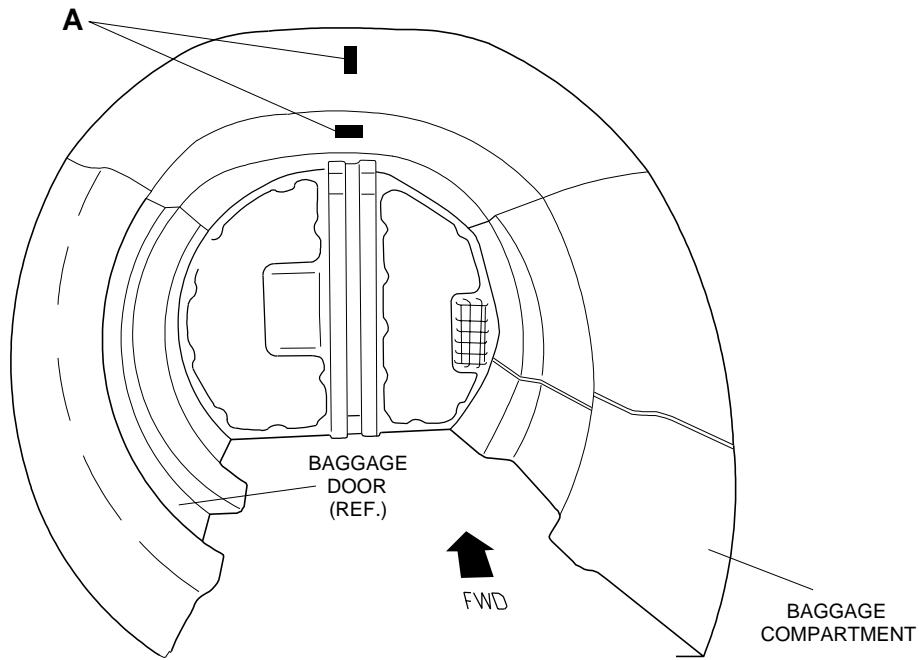
CHECK VALVE CLOSED

**DET. B**

**DET. B**

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**EFFECTIVITY: BAGGAGE COMPARTMENT WITH WALTER KIDDE AEROSPACE SMOKE DETECTORS**  
 Fire Detection System - Component Locations  
 Figure 503



**DET. A**

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