

BAGGAGE SMOKE DETECTION SYSTEM - ADJUSTMENT/TEST

EFFECTIVITY: ACFT MODEL(S) EMB-145

1. General

- A. This section gives the procedures to do the check (applicable to aircraft with Class-D or Class-C baggage compartment) of the baggage smoke 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
26-15-00-700-801-A ◆	BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - OPERATIONAL TEST	AIRCRAFT WITH CLASS-D BAGGAGE COMPARTMENT AND WITH JAMCO SMOKE DETECTORS
26-15-00-700-802-A ◆	BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - OPERATIONAL TEST	AIRCRAFT WITH CLASS-D BAGGAGE COMPARTMENT AND WITH WALTER KIDDE SMOKE DETECTORS
26-15-00-700-803-A	BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - OPERATIONAL TEST	AIRCRAFT WITH CLASS-C BAGGAGE COMPARTMENT AND WITH JAMCO SMOKE DETECTORS
26-15-00-700-804-A ◆	BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - OPERATIONAL TEST	AIRCRAFT WITH CLASS-C BAGGAGE COMPARTMENT AND WITH WALTER KIDDE SMOKE DETECTORS
26-15-00-700-805-A ◆	BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - FUNCTIONAL TEST	AIRCRAFT WITH JAMCO SMOKE DETECTORS

TASK 26-15-00-700-801-A

EFFECTIVITY: AIRCRAFT WITH CLASS-D BAGGAGE COMPARTMENT AND WITH JAMCO SMOKE DETECTORS

2. BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - OPERATIONAL TEST

A. General

(1) To do the procedure, obey the instructions in the paragraphs below.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-03/100	- COMPONENT LOCATION
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
223	223LZ	Maintenance panel in the cockpit
270		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 and baggage compartment

I. Preparation

SUBTASK 841-007-B

- (1) Make sure that the aircraft is safe for maintenance.
- (2) Energize the aircraft with a DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).
- (3) Open access panel 223LZ ([AMM MPP 06-41-03/100](#)).

J. Operationally Check Baggage Smoke Detection System (Figure 501)

SUBTASK 710-006-B

- (1) Make sure that the BAGG SMOKE warning message is out of view on the EICAS display.
- (2) Make sure that the green light is ON on the baggage smoke detector(s).
- (3) Do the operational check as follows:
 - (a) On the maintenance panel, set the BAGG SMK DET switch to position 1 for 5 seconds minimum.
Result:
 - 1 The BAGG SMOKE warning message comes into view on the EICAS display.
 - 2 The aural warning will operate.
 - 3 The master warning light will come on.
 - (b) Push the master warning lights.
Result:
 - 1 The warning lights go off.
 - 2 The aural warning stops.
 - (c) Release the BAGG SMK DET switch.
Result:
 - 1 The BAGG SMOKE warning message goes out of view on the EICAS display.
 - (d) On the maintenance panel, set the BAGG SMK DET switch to position 2 for 5 seconds minimum.
Result:
 - 1 The BAGG SMOKE warning message comes into view on the EICAS display.
 - 2 The aural warning will operate.
 - 3 The master warning light will come on.
 - (e) Push the master warning lights.
Result:
 - 1 The warning lights go off.
 - 2 The aural warning stops.
 - (f) Release the BAGG SMK DET switch.
Result:
 - 1 The BAGG SMOKE warning message goes out of view on the EICAS display.

K. Follow-on

SUBTASK 842-007-B

- (1) Remove the DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)) from the aircraft.

- (2) Close access panel 223LZ ([AMM MPP 06-41-03/100](#)).

TASK 26-15-00-700-802-A

EFFECTIVITY: AIRCRAFT WITH CLASS-D BAGGAGE COMPARTMENT AND WITH WALTER KIDDE SMOKE DETECTORS

3. BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - OPERATIONAL TEST

A. General

(1) To do the procedure, obey the instructions below.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-03/100	- COMPONENT LOCATION
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
223	223LZ	Maintenance panel in the cockpit
270		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	Does the task	Baggage compartment

I. Preparation

SUBTASK 841-008-A

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

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

(3) Open access panel 223LZ ([AMM MPP 06-41-03/100](#)).

J. Operationally Check Baggage Smoke Detection System (Figure 501)

SUBTASK 710-007-A

- (1) Make sure that the BAGG SMOKE warning message is out of view on the EICAS display.
- (2) Make sure that the maintenance LED is OFF on the baggage smoke detector(s).
- (3) Do the operational check as follows:
 - (a) On the maintenance panel, set the BAGG SMK DET switch to position 1 for 5 seconds minimum.

Result:

 - 1 The BAGG SMOKE warning message comes into view on the EICAS display.
 - 2 The aural warning will operate.
 - 3 The master warning light will come on.
 - 4 The maintenance LED will come on on the baggage smoke detector 1.
 - (b) Push the master warning lights.

Result:

 - 1 The warning lights go off.
 - 2 The aural warning stops.
 - (c) Release the BAGG SMK DET switch.

Result:

 - 1 The BAGG SMOKE warning message goes out of view on the EICAS display.
 - 2 The maintenance LED will come off on the baggage smoke detector 1.
 - (d) On the maintenance panel, set the BAGG SMK DET switch to position 2 for 5 seconds minimum.

Result:

 - 1 The BAGG SMOKE warning message comes into view on the EICAS display.
 - 2 The aural warning will operate.
 - 3 The master warning light will come on.
 - 4 The maintenance LED will come on on the baggage smoke detector 2.
 - (e) Push the master warning lights.

Result:

 - 1 The warning lights go off.
 - 2 The aural warning stops.
 - (f) Release the BAGG SMK DET switch.

Result:

 - 1 The BAGG SMOKE warning message goes out of view on the EICAS display.
 - 2 The maintenance LED will come off on the baggage smoke detector 2.

K. Follow-on

SUBTASK 842-008-A

- (1) Close access panel 223LZ ([AMM MPP 06-41-03/100](#)).
- (2) Deenergize the aircraft ([AMM TASK 20-40-01-860-801-A/200](#)).

TASK 26-15-00-700-803-A

EFFECTIVITY: AIRCRAFT WITH CLASS-C BAGGAGE COMPARTMENT AND WITH JAMCO SMOKE DETECTORS

4. BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - OPERATIONAL TEST

A. General

(1) To do the procedure, obey the instructions below.

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		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	Does the task	Baggage Compartment

I. Preparation

SUBTASK 841-009-A

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

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

J. Baggage Smoke Detection System - Operational Test (Figure 501) (Figure 502)

SUBTASK 710-008-A

- (1) Make sure that the BAGG SMOKE warning message is out of view on the EICAS display and that the BAGG FIRE EXTG switch light is off.

NOTE: If the BAGG EXTG switch comes on with the energization of the aircraft, push the FIRE TEST switch for two seconds at least, and then release it to cause the switch light to go off.

- (2) Make sure that the green light is ON on both smoke detectors.
- (3) Do the check as follows:

NOTE: 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 the BAGG SMOKE (Warning) message.
- 2 The BAGG EXTG switch comes on.
- 3 The Warning/Caution lights flash.
- 4 The aural warning operates (Bell).
- 5 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 BAGG SMOKE message goes out of view on the EICAS display:
- 2 The BAGG EXTG switch light goes off.
- 3 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).

- (4) 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 842-009-A

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

TASK 26-15-00-700-804-A

EFFECTIVITY: AIRCRAFT WITH CLASS-C BAGGAGE COMPARTMENT AND WITH WALTER KIDDE SMOKE DETECTORS

5. BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - OPERATIONAL TEST

A. General

(1) To do the procedure, obey the instructions in the paragraphs below.

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		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	Does the task	Baggage compartment

I. Preparation

SUBTASK 841-010-A

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

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

J. Baggage Smoke Detection System - Operational Test (Figure 501) (Figure 502)

SUBTASK 710-016-B

(1) Make sure that the BAGG SMOKE warning message is out of view on the EICAS display and that the BAGG FIRE EXTG switch light is off.

NOTE: If the BAGG EXTG switch comes on with the energization of the aircraft, push the FIRE TEST switch for three seconds at least, and then release it to cause the switch light to go off.

(2) Do the check as follows:

NOTE: 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 the BAGG SMOKE (Warning) message.

2 The BAGG EXTG switch comes on.

3 The Warning/Caution lights flash.

4 The aural warning operates (Bell).

5 The baggage compartment fan is off.

NOTE: When the baggage-compartment fan is off, the check valve stays closed, as shown in (Figure 502).

6 The maintenance LED on both smoke detectors comes on.

(b) Release the FIRE TEST switch.

1 The BAGG SMOKE message goes out of view on the EICAS display:

2 The BAGG EXTG switch light goes off.

NOTE: If the BAGG EXTG switch stays on after releasing the FIRE TEST switch, push again the FIRE TEST switch for three seconds at least, and then release it to cause the switch light to go off.

3 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).

4 The maintenance LED on both smoke detectors comes off.

(3) 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 842-010-A

(1) Remove the DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)) from the aircraft.

TASK 26-15-00-700-805-A

EFFECTIVITY: AIRCRAFT WITH JAMCO SMOKE DETECTORS

6. BAGGAGE COMPARTMENT SMOKE DETECTION SYSTEM - FUNCTIONAL TEST

A. General

(1) To do the procedure, obey the instructions in the paragraphs below.

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		Baggage compartment

D. Tools and Equipment

Not Applicable

E. Auxiliary Items

Not Applicable

F. Consumable Materials

SPECIFICATION (BRAND)	DESCRIPTION	QTY
Commercially available	Smoke Detector Tester Model No. 25S - Home Safeguard Industries, INC (spray can)	AR

G. Expandable Parts

Not Applicable

H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	Cockpit
1	Does the task	Baggage compartment

I. Preparation

SUBTASK 841-011-A

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

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

J. Functionally Check Baggage Smoke Detection System (Figure 501) (Figure 502)

SUBTASK 720-003-A

- (1) Make sure that the BAGG SMOKE warning message is out of view on the EICAS display.
- (2) For aircraft with Class-C baggage compartment:
 - (a) Make sure that the BAGG FIRE EXTG switch light is off.

NOTE: If the BAGG FIRE EXTG switch comes on when the aircraft is energized, push the FIRE TEST switch and, after 3 seconds, release it to cause the switch light to go off.

- (3) Make sure that the green light is ON on both smoke detectors.
- (4) Do the functional check as follows:
 - (a) Hold the smoke-detector-tester can at a minimum of 8 inches away from the smoke detector and apply the smoke-detector-tester spray to the smoke detector.
 - 1 The BAGG SMOKE warning message comes into view on the EICAS display (cockpit).
 - 2 The aural warning operates (cockpit).
 - 3 The master warning light comes on (cockpit).
 - 4 The red light, on the sensor of the baggage smoke detector, comes on.
 - 5 For aircraft with Class-C baggage compartment:
 - a The BAGG FIRE EXTG switch comes on (cockpit).

CAUTION: DO NOT PUSH THE BAGG EXTG SWITCH TO RESET IT BECAUSE THE BAGGAGE FIRE EXTINGUISHING BOTTLES WILL BE FIRED.

- 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) Stop until the smoke dissipates.
 - 1 The BAGG SMOKE warning message goes out of view on the EICAS display.
 - 2 The red light, on the sensor of the baggage smoke detector, goes off.
 - (c) Push the master warning lights (cockpit).
 - 1 The warning lights go off.
 - 2 The aural warning stops.
 - (d) For aircraft with Class-C baggage compartment:

1 Push the fire test switch and, after 3 seconds, release it.

a The BAGG FIRE EXTG switch light 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](#).

(5) Do steps (2) , (3) and (4) again for the other baggage smoke detector.

K. Follow-on

SUBTASK 842-011-A

(1) Remove the DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)) from the aircraft.

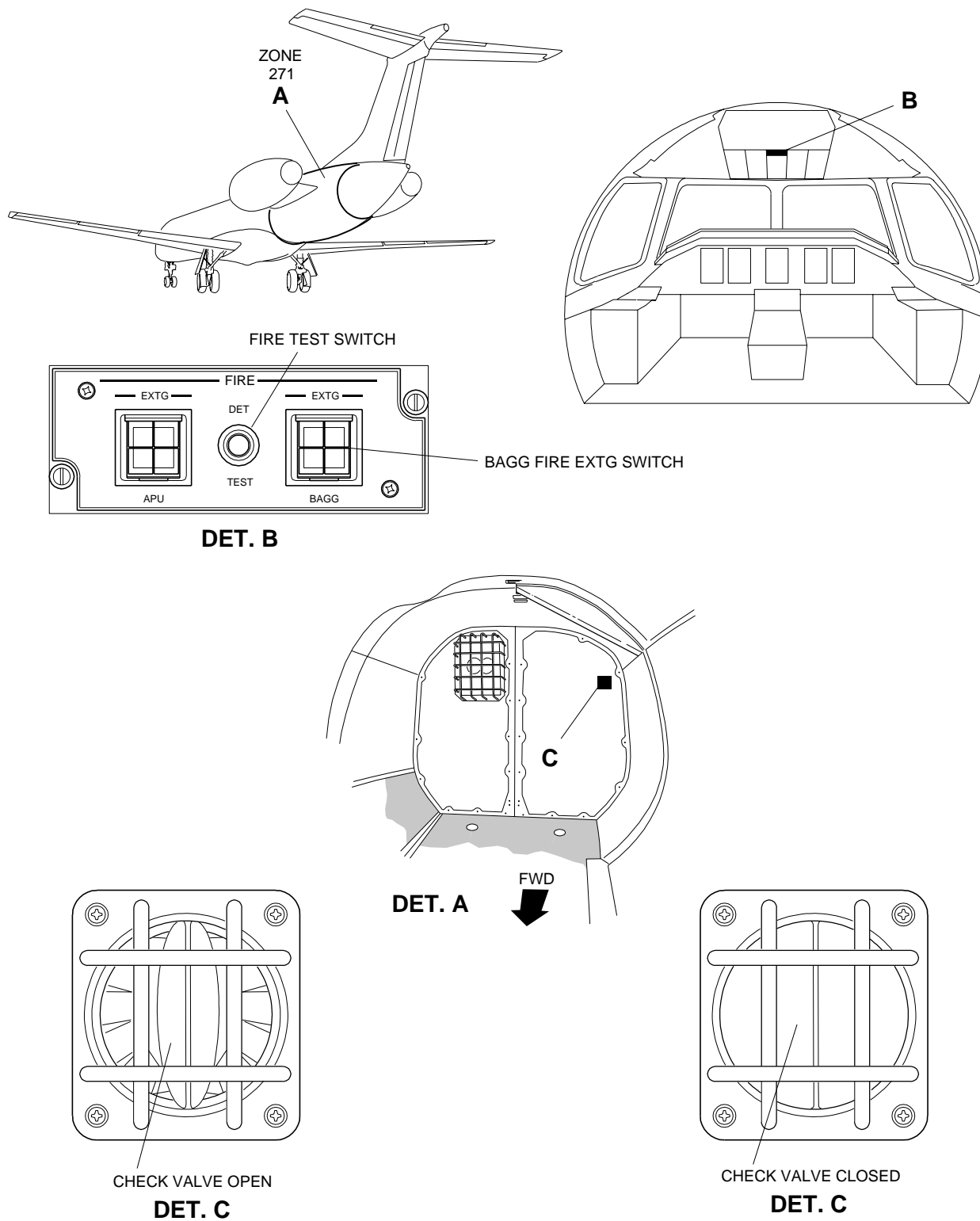
Figure 501



EFFECTIVITY: CLASS-C BAGGAGE COMPARTMENT

Baggage Compartment Smoke Detection System - Component Locations

Figure 502



145AMM260102.MCE A