

INSTRUMENT AND CONTROL PANEL LIGHTS - ADJUSTMENT/TEST

EFFECTIVITY: ALL

1. General

- A. This section gives the procedures to do the test of the Instrument and Control Panel Lights.
- 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
33-12-00-700-801-A	INSTRUMENT AND CONTROL PANEL LIGHTS - OPERATIONAL TEST	ALL
33-12-00-700-802-A ♦	COCKPIT PUSHBUTTON LIGHTING - OPERATIONAL CHECK	AIRCRAFT WITH PUSHBUTTON-LIGHTING TEST SWITCH

TASK 33-12-00-700-801-A

EFFECTIVITY: ALL

2. INSTRUMENT AND CONTROL PANEL LIGHTS - OPERATIONAL TEST

A. General

- (1) This task gives the procedures to do the Operational Test of the lights on the Instrument and Control Panels.
- (2) The Instrument and Control Panels panel lights are controlled with rotatory switches. The location of these switches are listed as follows:
 - (a) On the left glareshield panel:
 - Pilot panel lights.
 - Pedestal panel lights.
 - Left PFD panel lights.
 - Left MFD panel lights.
 - (b) On the right glareshield panel:
 - Copilot panel lights.
 - EICAS display lights.
 - Right PFD display lights.
 - Right MFD display lights.
 - (c) On the overhead panel:
 - Overhead panel lights.

B. References

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

C. Zones and Accesses

<i>ZONE</i>	<i>PANEL/DOOR</i>	<i>LOCATION</i>
223		Cockpit - LH
224		Cockpit - RH
225		Cockpit ceiling - LH
226		Cockpit ceiling - RH

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

I. Preparation

SUBTASK 841-002-A

- (1) Energize the aircraft with the External DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).
- (2) On the circuit breaker panel, make sure that these circuit breakers are closed:
 - OVHD PANEL light (Location tip: DC BUS 1/LIGHTS/OVHD PANEL).
 - PILOT PANEL light (Location tip: ESSENTIAL DC BUS 1/LIGHTS/PILOT PANEL).
 - PEDESTAL PANEL light (Location tip: ESSENTIAL DC BUS 2/LIGHTS/PEDESTAL PANEL).
 - PUSHBUTTONS light (Location tip: DC BUS 2/LIGHTS/PUSHBUTTONS).
 - COPILOT PANEL light (Location tip: ESSENTIAL DC BUS 2/LIGHTS/COPILOT PANEL).

J. Operationally Test Instrument and Control Panel Lighting

SUBTASK 710-002-A

- (1) To test the pilot panel lights, refer to ([Figure 501](#)) and do as follows:
 - (a) Turn the pilot panel lights rotatory switch clockwise and make sure that the brightness increase proportionally.
 - (b) Turn the pilot panel lights rotatory switch counterclockwise and make sure that the brightness decrease until the light is deactivated when the switch is set at the OFF position.
- (2) To test the copilot panel lights refer to ([Figure 502](#)).
 - (a) Turn the copilot panel lights rotatory switch clockwise and make sure that the brightness increase proportionally.
 - (b) Turn the copilot panel lights rotatory switch counterclockwise and make sure that the brightness decrease until the light is deactivated when the switch is set at the OFF position.

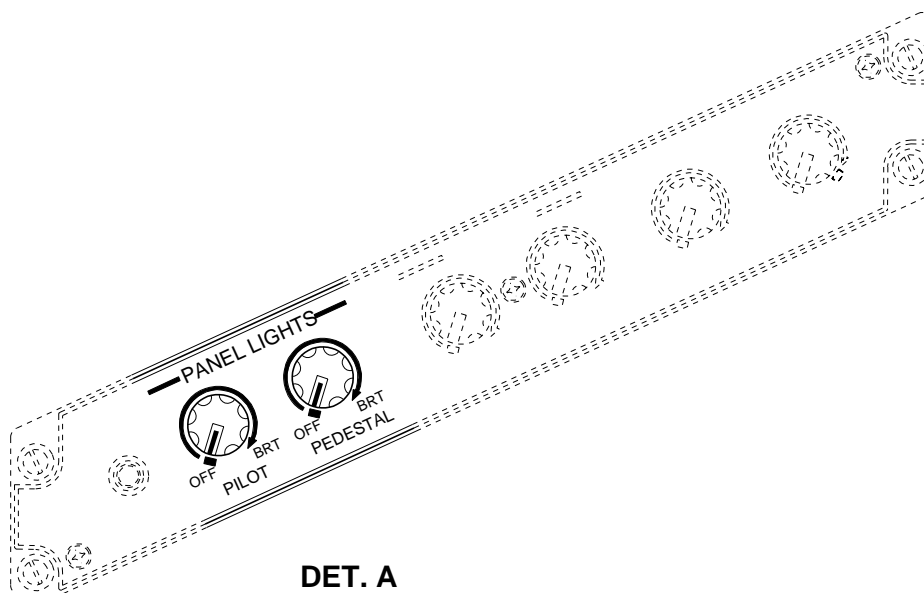
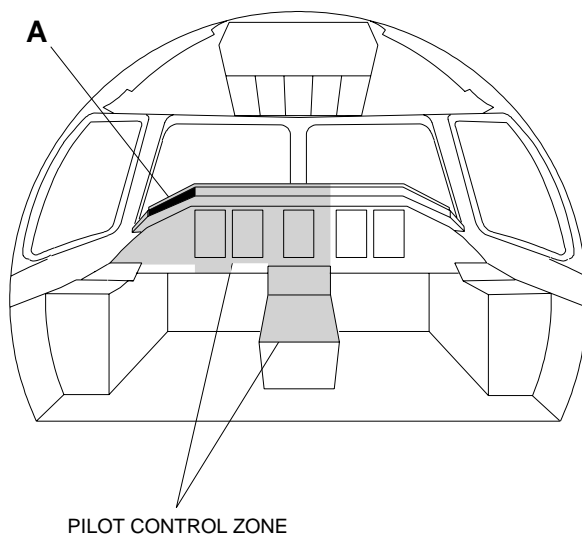
- (3) To test the overhead panel lights refer to (Figure 503) and do as follows:
 - (a) Turn the overhead panel lights rotatory switch clockwise and make sure that the brightness increase proportionally.
 - (b) Turn the overhead panel lights rotatory switch counterclockwise and make sure that the brightness decrease until the light is deactivated when the switch is set at the OFF position.
- (4) To test the pedestal panel lights, refer to (Figure 504) and do as follows:
 - (a) Turn the pedestal panel lights rotatory switch clockwise and make sure that the brightness increase proportionally.
 - (b) Turn the pedestal panel lights rotatory switch counterclockwise and make sure that the brightness decrease until the light is deactivated when the switch is set at the OFF position.
- (5) To test the PFD display lights refer to (Figure 505) or (Figure 506) and do as follows:
 - (a) Turn the PFD display lights rotatory switch clockwise and make sure that the brightness increase proportionally.
 - (b) Turn the PFD display lights rotatory switch counterclockwise and make sure that the brightness decrease proportionally.
- (6) To test the MFD display lights refer to (Figure 505) or (Figure 506) do as follows:
 - (a) Turn the MFD display lights rotatory switch clockwise and make sure that the brightness increase proportionally.
 - (b) Turn the MFD display lights rotatory switch counterclockwise and make sure that the brightness decrease proportionally.
- (7) To test the EICAS display lights refer to (Figure 506) and do as follows:
 - (a) Turn the EICAS display lights rotatory switch clockwise and make sure that the brightness increase proportionally.
 - (b) Turn the EICAS display lights rotatory switch counterclockwise and make sure that the brightness decrease proportionally.

K. Follow-on

SUBTASK 842-002-A

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

EFFECTIVITY: ALL
Pilot and Pedestal Panel Light
Figure 501



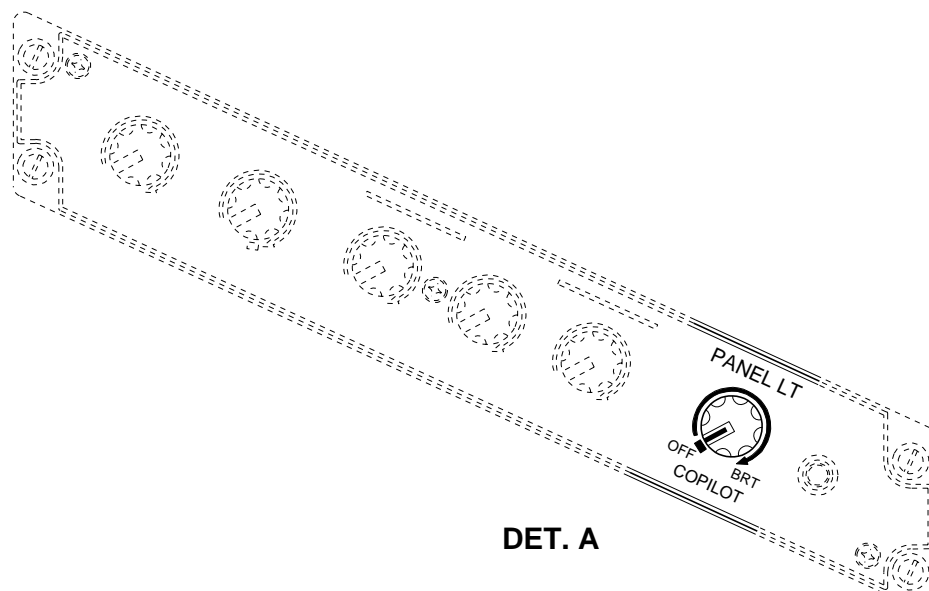
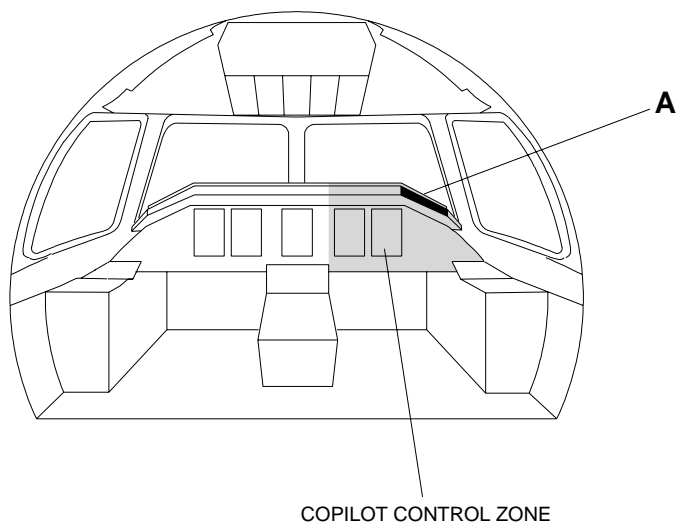
DET. A

145AMM330027.MCE A

EFFECTIVITY: ALL

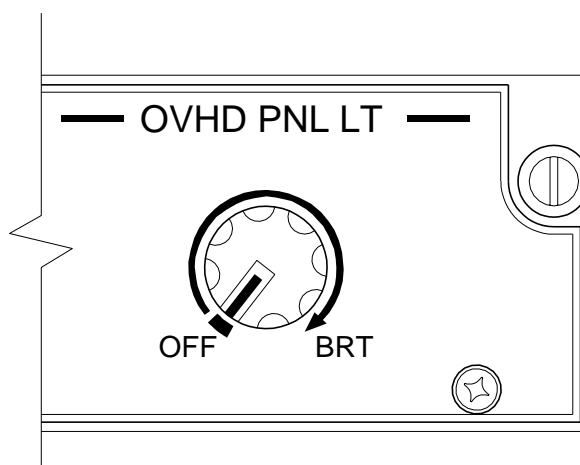
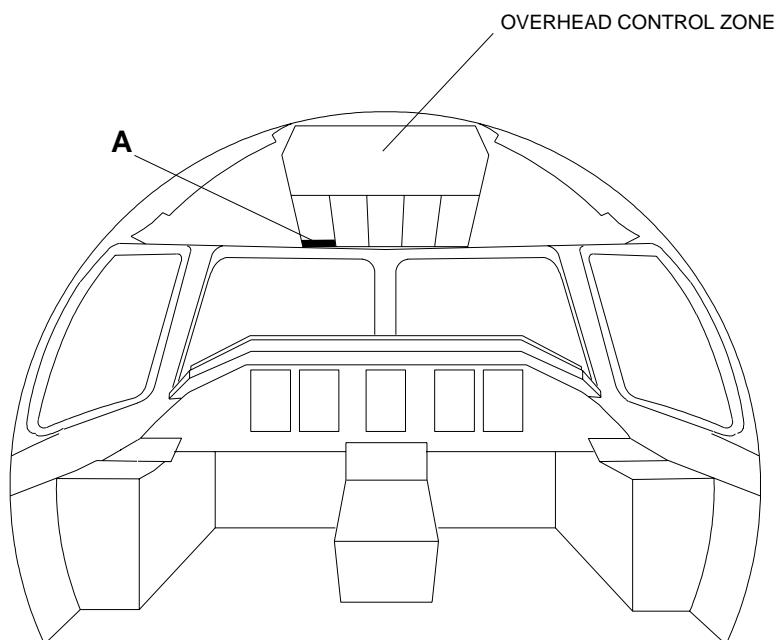
Copilot Panel Light

Figure 502



145AMM330028.MCE A

EFFECTIVITY: ALL
Overhead Panel Light
Figure 503



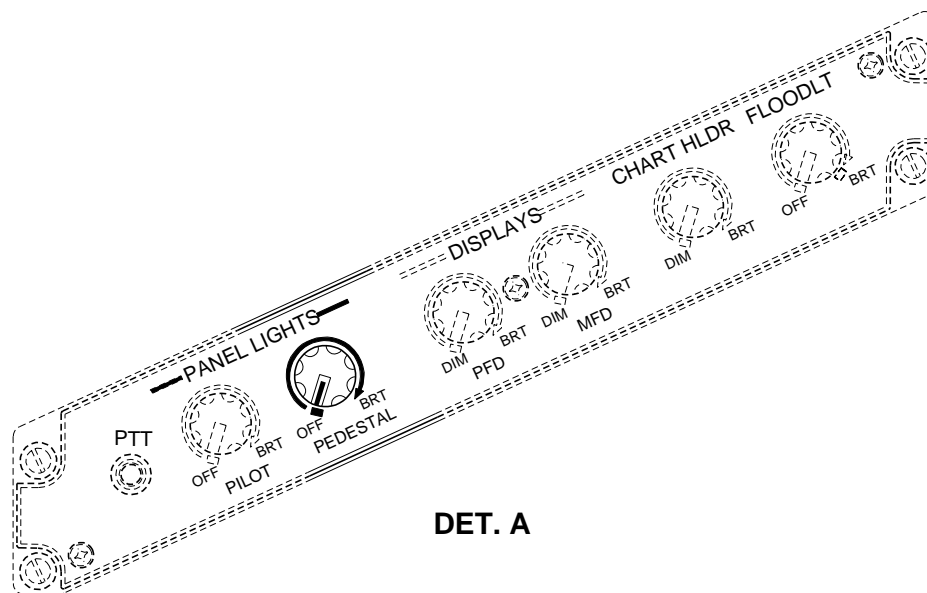
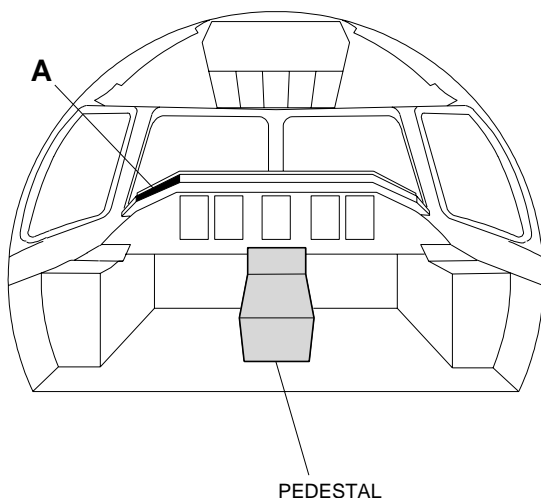
DET. A

145AMM330029.MCE A

EFFECTIVITY: ALL

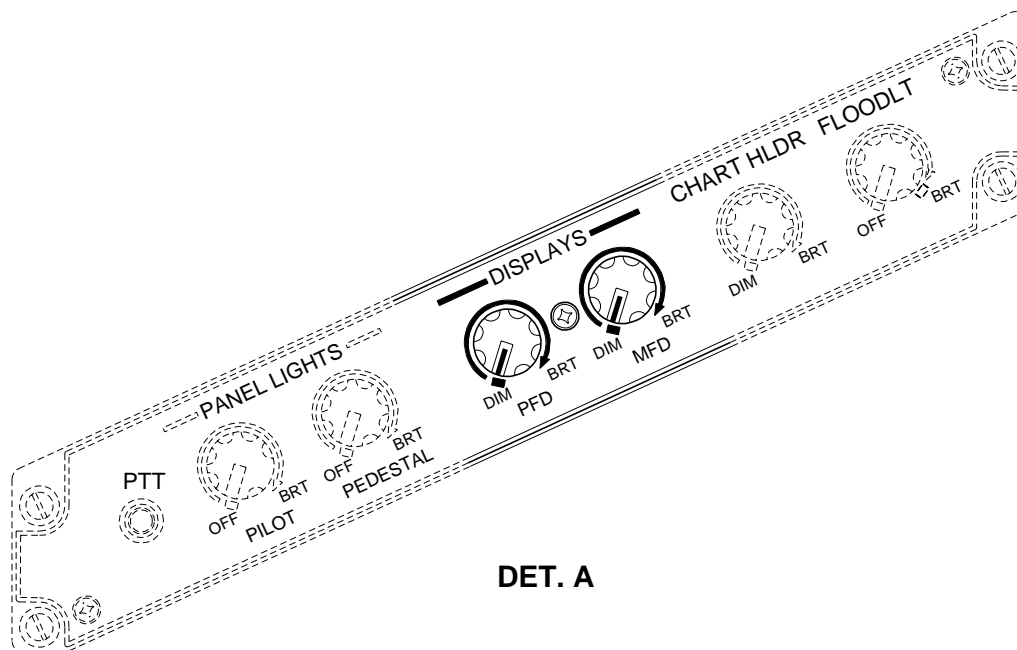
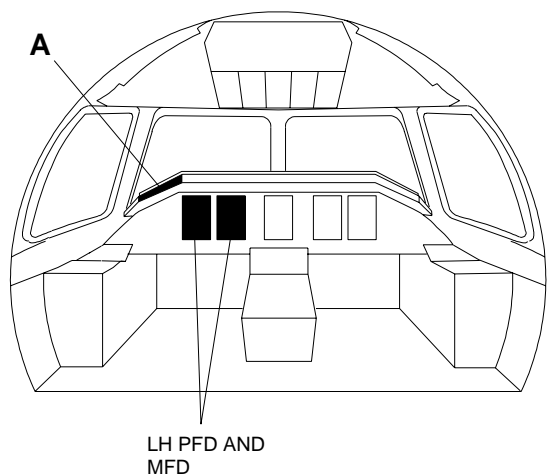
Pedestal Light

Figure 504



145AMM330030.MCE A

EFFECTIVITY: ALL
LH PFD and MFD Dimmer Lights
Figure 505

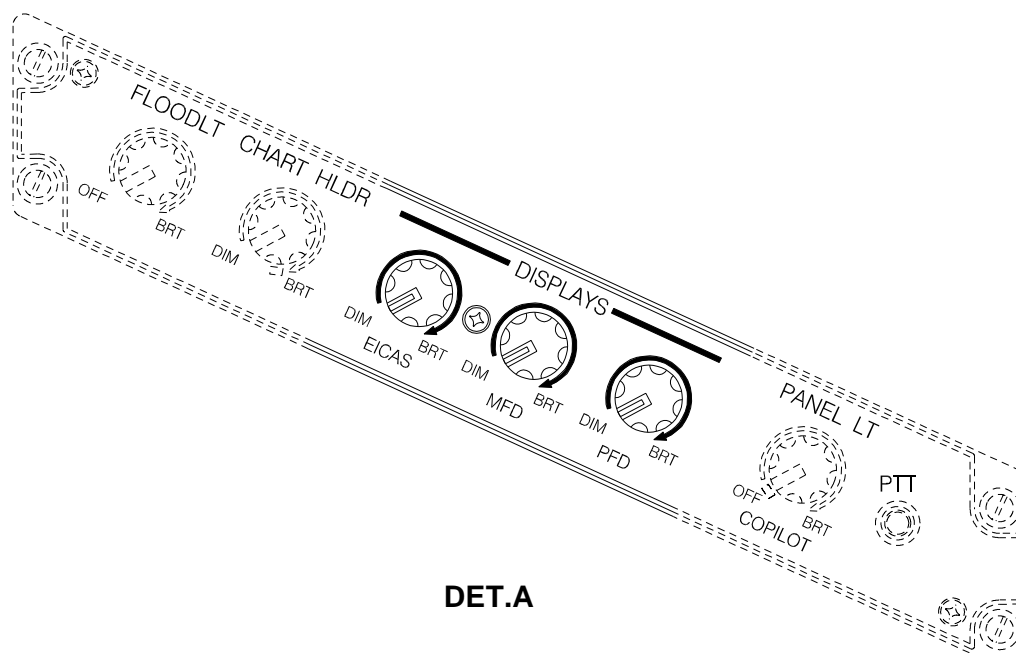
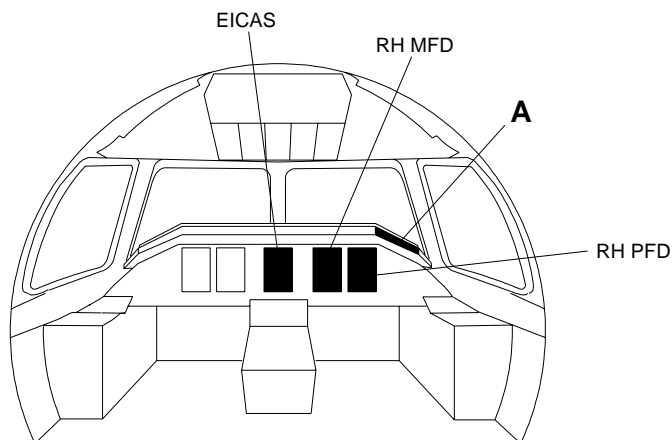


145AMM330031.MCE A

EFFECTIVITY: ALL

RH PFD and MFD Dimmer Lights and EICAS Dimmer Light

Figure 506



DET.A

EM145AMM331029A.DGN

TASK 33-12-00-700-802-A

EFFECTIVITY: AIRCRAFT WITH PUSHBUTTON-LIGHTING TEST SWITCH

3. COCKPIT PUSHBUTTON LIGHTING - OPERATIONAL CHECK

A. General

- (1) This task gives the procedures to do the Operational Check of the lamps of the striped bars and caption indications of the pushbuttons.
- (2) This check is applicable to the pushbuttons in overhead panel, instrument panel, pedestal, and RH lateral console.
- (3) The check is done through the test switch in the EMERG LT/PB LT/OVHD PNL LT control panel, in the overhead panel.

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
223		Cockpit - LH
224		Cockpit - RH
225		Cockpit ceiling - LH
226		Cockpit ceiling - RH

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

I. Preparation

SUBTASK 841-003-A

EFFECTIVITY: AIRCRAFT WITH PUSHBUTTON-LIGHTING TEST SWITCH

- (1) Energize the aircraft with the External DC Power Supply ([AMM TASK 20-40-01-860-801-A/200](#)).
- (2) Make sure that the PUSH BUTTON circuit breaker, on the Circuit Breaker panel is closed.

J. Operationally Check Pushbutton Lighting ([Figure 507](#))

SUBTASK 710-003-A

EFFECTIVITY: AIRCRAFT WITH PUSHBUTTON-LIGHTING TEST SWITCH

- (1) Do the check of the lamps of the pushbuttons, as follows:
 - (a) On the overhead panel, set and hold the PB LT switch to TEST position, and verify the lights on the overhead panel, instrument panel, pedestal, and RH lateral console.

Result:

- 1 Make sure that in the pushbuttons, all the striped bars and the caption indications listed in the tables below light on:

Table 501

LOCATION	PANEL	PUSHBUTTON	CAPTION	STRIPED BAR
OVER-HEAD PAN-EL	ELECTRI-CAL	GEN 1	-	YES
		GEN 3	-	YES
		GEN 2	-	YES
		GEN 4	-	YES
		APU GEN	-	YES
		ESSENTIAL POWER	-	YES
		AC POWER	-	YES
		BACK UP	-	YES
		AVIONICS MASTER 1	-	YES
		AVIONICS MASTER 2	-	YES
	ICUFT-505	CABIN	-	YES
		CABIN EMER	-	YES
		BACK UP INPH	-	YES

Table 502

LOCATION	PANEL	PUSHBUTTON	CAPTION	STRIPED BAR
OVERHEAD PANEL	APU CON-TROL	FUEL SHUTOFF	-	YES
	FLIGHT CONTROLS	AILERON SHUTOFF/SYS 1	-	YES
		AILERON SHUTOFF/SYS 2	-	YES
		RUDDER SHUTOFF/SYS 1	-	YES
		RUDDER SHUTOFF/SYS 2	-	YES
	HYDRAUL-IC	SYS 1/ENG PUMP SHUTOFF	-	YES
		SYS 2/ENG PUMP SHUTOFF	-	YES
	ICE PRO-TECTION	ENG AIR INLET/1	OPEN	YES
		ENG AIR INLET/2	OPEN	YES
		WING	OPEN	YES
		STAB	OPEN	YES
		WINDSHIELD/1	-	YES
		WINDSHIELD/2	-	YES

Table 502 (Continued)

LOCATION	PANEL	PUSHBUTTON	CAPTION	STRIPED BAR
		SENSORS/PITOT 1 TAT1/AOA 1	-	YES
		SENSORS/PITOT 3	-	YES
		SENSORS/PITOT 2 TAT 2/AOA 2	-	YES
	AIR CONDI- TIONING/ PNEUMAT- IC	RECIRC	-	YES
		PACK 1	-	YES
		GASPER	-	YES
		PACK 2	-	YES
		BLEED 1	LEAK	YES
		APU BLEED	OPEN	YES
		BLEED 2	LEAK	YES

Table 503

LOCATION	PANEL	PUSHBUTTON	CAPTION	STRIPED BAR
MAIN IN- STRUMENT PANEL	REVER- SIONARY PANEL (PI- LOT)	ADC	-	YES
		AHRS/IRS ^[1]	-	YES
		SG	-	YES
	REVER- SIONARY PANEL (COPILOT)	ADC	-	YES
		AHRS/IRS ^[1]	-	YES
		SG	-	YES
	SELCAL	VHF 2	-	YES
	-	INDICATION LIGHT	BRAKE ON	-
	-	LG WRN CUTOUT ^[2]	-	YES
	-	GPWS ^[3]	-	YES ^[4]
CONTROL PEDESTAL	EICAS REV	DAU 1	-	YES
		DAU 2	-	YES
		LG WRN CUTOUT ^[2]	-	YES
		GPWS ^[3]	-	YES
	ELEV DISC	INDICATION LIGHT	-	YES
	AIL DISC	INDICATION LIGHT	-	YES
	PITCH TRIM	MAIN SYS CUTOUT	-	YES
		BACK UP SYS CUTOUT	-	YES

[1] Aircraft with AHRS or IRS, as applicable.

[2] LG WRN CUTOUT pushbutton installed on the main instrument panel or on the control pedestal, as applicable.

[3] (Aircraft with EGPWS) GPWS Terrain Sys Override pushbutton installed on the main instrument panel or on the control pedestal, as applicable.

[4] On aircraft with EGPWS installed but configured as GPWS, the striped bar of the GPWS pushbutton does not come on.

[5] For aircraft with ICU panel.

Table 503 (Continued)

LOCATION	PANEL	PUSHBUTTON	CAPTION	STRIPED BAR
	STALL PROTECTION	CUTOUT 1	-	YES
		TEST	TEST	-
		CUTOUT 2	-	YES
	-	LG WRN CUTOUT	-	YES
RH LATERAL CONSOLE	PASSENGER OXYGEN	INDICATION LIGHT	ON	-

[5] For aircraft with ICU panel.

(b) On the overhead panel, release the PB LT switch.

Result:

1 All the striped bars and the caption indications in the table above go off.

K. Follow-on

SUBTASK 842-003-A

EFFECTIVITY: AIRCRAFT WITH PUSHBUTTON-LIGHTING TEST SWITCH

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

EFFECTIVITY: AIRCRAFT WITH PUSHBUTTON-LIGHTING TEST SWITCH

Cockpit Pushbutton Lighting - Operational Check

Figure 507

