



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

**TECHNICAL INSTRUCTION
HAC21-002, Rev. A, December 13, 2021**

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

- a) 65-0294-21FS: Indicator Light Assembly
- b) 65-0294-23FS: Indicator Light Assembly

**INSTALLED ON
BOEING 737 SERIES AIRCRAFT
(SEE SECTION 1 FOR SPECIFIC MODELS)**



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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

1. Introduction

This HEICO Aerospace Technical Instruction (TI) defines the Instructions for Continued Airworthiness when P/Ns 65-0294-21FS and 65-0294-23FS, Indicator Light Assemblies are installed on the following Boeing aircraft:

- | | | |
|------------------|------------------|-------------|
| • 737-300 Series | • 737-700 Series | • 737-900ER |
| • 737-400 Series | • 737-800 Series | • 737-8 |
| • 737-500 Series | • 737-900 Series | • 737-9 |

The P/Ns 65-0294-21FS and 65-0294-23FS Indicator Light Assemblies are FAA Approved (PMA) as a replacement for Honeywell P/Ns 65-0294-21 and 65-0294-23.

2. Description and Operation

Honeywell P/Ns 65-0294-21 and 65-0294-23 Indicator Light Assemblies, also referred to as master caution annunciators or master caution six-packs, are components of the Master Warning and Caution Lights System on various Boeing 737 aircraft. The Indicator Light Assemblies consists of six independent "dead front" legends and a single switch circuit and illuminated using incandescent lamps powered by 28 VDC via the Annunciation and Dimming Module. The functional designs of P/Ns 65-0294-21 and 65-0294-23 are identical except for two minor part variations related to key/keyway orientations and legend text.

Flight Specialties Components Corp P/Ns 65-0294-21FS and 65-0294-23FS Indicator Light Assemblies incorporate an illumination method change. P/Ns 65-0294-21FS and 65-0294-23FS provide illumination with LEDs instead of the incandescent lamps used by the Honeywell articles. The 65-0294-21FS and 65-0294-23FS LEDs have been approved as having no negative impact on the illumination of the legends. In addition, they have been approved as having no impact to the fitment of the Indicator Light Assemblies in their eligible aircraft.

The aforementioned FSCC PMA articles contain no replaceable lamps or interchangeable component parts except identical P/Ns listed in Tables 3 and 4. Parts not containing identical P/Ns are not interchangeable nor intermixable with the Honeywell counterparts. These parts are to be maintained per the instructions herein.

3. Installation

Shown below in Figure 1 is a sample installation of the Honeywell P/Ns 65-0294-21 and 65-0294-23 Indicator Light Assemblies on the Boeing 737 Series Aircraft. The Indicator Light Assemblies are mounted in two locations on the glare shield panel (Captain and First Officer locations) inside the normal field of vision of the flight crew. P/N 65-0294-21 is installed on the Captain's instrument panel and P/N 65-0294-23 is installed on the First Officer's instrument panel.

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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

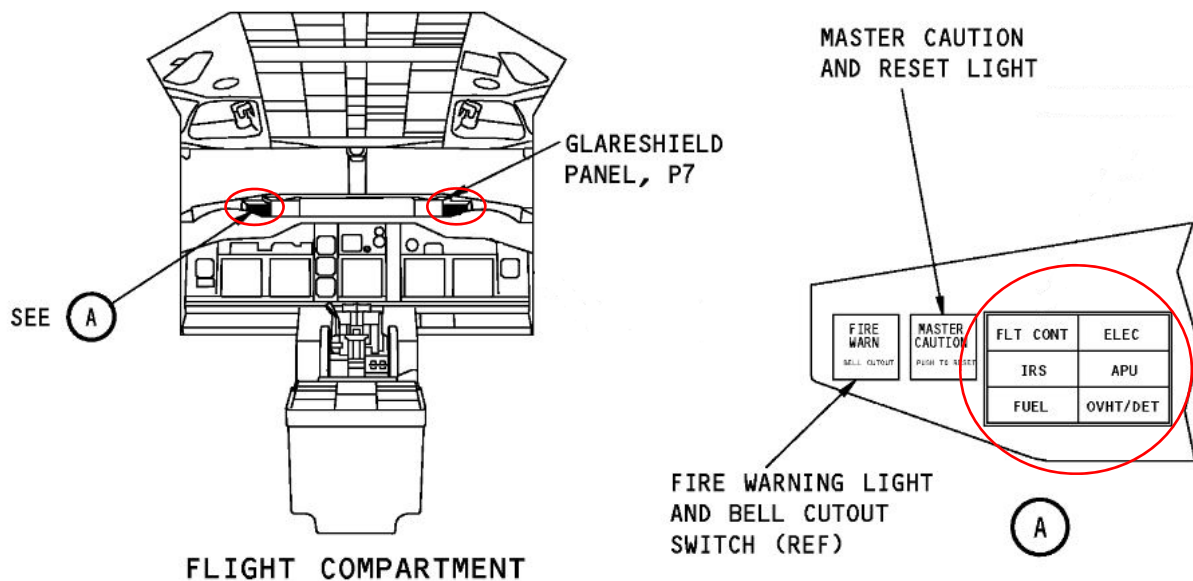


Figure 1. Indicator Light Assembly Installation Locations

4. Airworthiness Limitations

The Airworthiness Limitations section is FAA-approved and specifies maintenance required under Sec. 43.16 and 91.403 of the Federal Aviation Regulations, unless an alternative program has been FAA approved. The Instructions for Continued Airworthiness presently acceptable to the FAA for P/Ns 65-0294-21 and 65-0294-23 are valid for use on P/Ns 65-0294-21FS and 65-0294-23FS with exception that the master caution annunciator is not relampable. Due to the fact that P/Ns 65-0294-21FS and 65-0294-23FS are not life limited parts, no additional airworthiness limitations are imposed by the supplementary Instructions for Continued Airworthiness found below in Section 5.

5. Testing

All test equipment and instrumentation shall be calibrated with standards traceable to the National Institute of Standards (NIST) when required. The test equipment listed in the Table 1 below represents suggested makes and models. Alternative equipment of equal or greater accuracy may be substituted as required.



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

Table 1. Required Test Equipment

Instrument	Model	Range	Comment
ELECTRICAL TEST EQUIPMENT			
DC Power Supply	MIL-STD-704 or equivalent	0 – 30VDC	Provides DC power to the Indicator Light Assembly
Multimeter (DMM 1)	Fluke 8010A or equivalent	0 – 200VDC	Verifies DC Power Supply voltage
Multimeter (DMM 2)	Fluke 8010A or equivalent	0 – 200mA	Measures Indicator Light Assembly current
DMM Test Probes	Various	N/A	Probes Indicator Light Assembly terminals
MECHANICAL TEST EQUIPMENT			
Force Gauge	Chatillion Model DPP-50 or equivalent	0 – 10lbf or greater	Measures Indicator Light Assembly actuation force
3lb Calibrated Weight	Various	N/A	Used in determining Indicator Light Assembly retention force
2lb Calibrated Weight	Various	N/A	Used in determining Indicator Light Assembly retention force

5.1 Test setup

Use industry approved electrostatic discharge sensitive precautions. The Indicator Light Assemblies contain electrostatic discharge sensitive items.



Pretest Procedures

- Review any shipping tags or forms to determine cause for removal from aircraft.
- Wipe the Indicator Light Assembly with a MIL-C-85043 cleaning cloth to remove dirt, dust, and foreign material.
- Visually inspect the Indicator Light Assembly for signs of missing, broken, bent or cracked parts. Damaged parts must be replaced before the Indicator Light Assembly is tested.

5.1.1 Electrical Characteristics

The following describes the procedure to setup the test equipment to power the Indicator Light Assembly, verify illumination, measure current draw of each circuit/legend, and measure switch continuity.



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

5.1.1.1 Current Draw and Luminance

- (a) Ensure DC Power Supply is off.
- (b) Connect DMM 1 in parallel to the DC Power Supply outputs to monitor the power supply output voltage:
 - Connect the DC Power Supply positive (+) output to the voltage input on DMM 1
 - Connect the DC Power Supply negative (-) output to the COM input on DMM 1
- (c) Turn the DC Power Supply on.
- (d) Using DMM 1 on the DC voltage setting to monitor the DC Power Supply output voltage, adjust voltage to 27.9 – 28.1 VDC.
- (e) Turn DC Power Supply off.
- (f) Connect DC Power Supply to Indicator Light Assembly and DMM 2 in series between the DC Power Supply and Indicator Light Assembly:
 - Connect the DC Power Supply negative (-) output to DMM 2 COM input
 - Connect the DC Power Supply positive (+) output to Indicator Light Assembly terminal #9
 - Connect DMM test probe to DMM 2 400mA input
- (g) Set DMM 2 to measure DC milliamps.
- (h) Verify Indicator Light Assembly terminal screws are not loose, tighten until a slight rise in torque is felt.

5.1.1.2 Switch Continuity

- (a) Connect DMM 1 to Indicator Light Assembly:
 - Connect DMM test probes to DMM 1 COM and Ω inputs
 - Connect opposite end of DMM test probes to Indicator Light Assembly terminal #7 (Switch N.O.) and terminal #8 (Switch Common), polarity does not matter
- (b) Set DMM 1 to measure continuity.

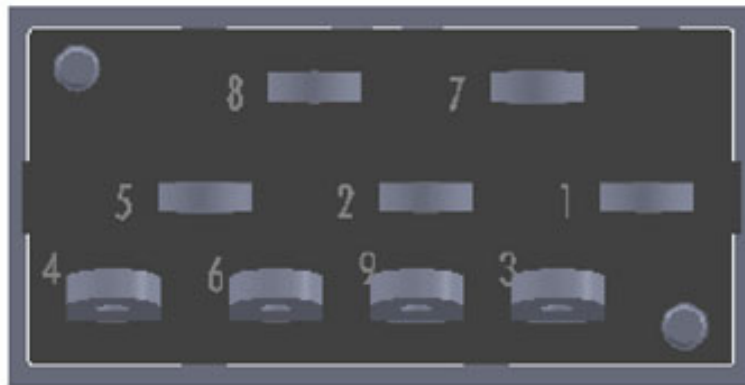


Figure 2. Indicator Light Assembly Terminals and Markings
(Illustration Shown)



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

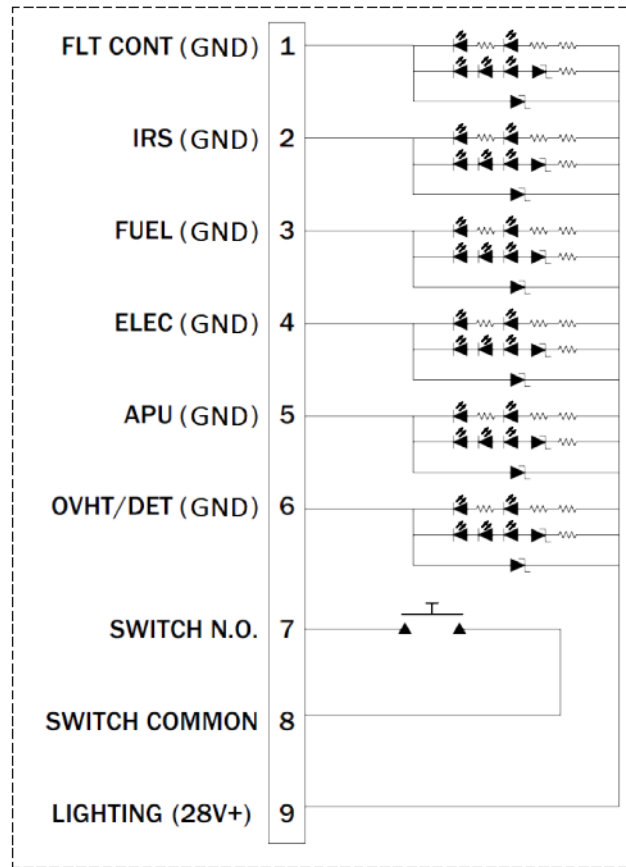


Figure 3. Indicator Light Assembly Electrical Schematic

5.1.2 Mechanical Characteristics

The following describes the procedure to setup the test equipment to measure the switch actuation force and the retention force of the LED housing.

5.1.2.1 Actuation Force

- (a) Connect DMM 1 to Indicator Light Assembly:
 - Connect DMM test probes to DMM 1 COM and Ω inputs
 - Connect opposite end of DMM test probes to Indicator Light Assembly terminal #7 (Switch N.O.) and terminal #8 (Switch Common), polarity does not matter.
- (b) Set DMM 1 to measure continuity.
- (c) Place the Indicator Light Assembly under the Force Gauge.
- (d) Set the Force Gauge to measure compression force in pounds.

5.1.2.2 Retention Force

- (a) Remove the Support Assembly (aka sleeve) from the Indicator Light Assembly.
- (b) Using standard shop materials, attach the 2lb Calibrated Weight to the LED Housing Assembly.



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

5.2 Test procedure

Use industry approved electrostatic discharge sensitive precautions. The Indicator Light Assemblies contain electrostatic discharge sensitive items.



5.2.1 Electrical Characteristics

5.2.1.1 Current Draw and Luminance

- Confirm test setup per section 5.1.1.1.
- Turn the DC Power Supply on.
- Using the DMM test probe, touch Indicator Light Assembly terminal #1.
- Confirm that the corresponding Indicator Light Assembly illumination is adequately bright, uniform, amber in color, does not bleed into the adjacent legends, and is correct for the configuration being tested (nomenclature), reference Figure 4 below.



Figure 4. Indicator Light Assembly Legend Text and Positioning

- Repeat steps 5.2.1.1 (c) and (d) for Indicator Light Assembly terminal #2 through terminal #6.
- Using the DMM test probe, touch Indicator Light Assembly terminal #1.
- Read the current measurement from DMM 2 and verify the current draw is 14.0 – 52.0mA.
- Repeat steps 5.2.1.1 (f) and (g) for Indicator Light Assembly terminal #2 through terminal #6.
- Using DMM 1 on the DC voltage setting to monitor the DC Power Supply output voltage, adjust voltage to 15.9 – 16.1 VDC.
- Using the DMM test probe, touch Indicator Light Assembly terminal #1.
- Confirm that the corresponding Indicator Light Assembly illumination is dimmer than in step 5.2.1.1 (d), uniform, amber in color, and does not bleed into the adjacent legends.
- Repeat steps 5.2.1.1 (j) and (k) for Indicator Light Assembly terminal #2 through terminal #6.



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

5.2.1.2 Switch Continuity

- (a) Confirm test setup per section 5.1.1.2.
- (b) Actuate the switch by pressing the face of the Indicator Light Assembly.
- (c) While actuated, verify continuity across the switch terminals on DMM 1.

5.2.2 Mechanical Characteristics

5.2.2.1 Actuation Force

- (a) Confirm test setup per section 5.1.2.1.
- (b) Use the Force Gauge to depress lens cap assembly (part of LED Housing Assembly) in center and all four corners individually.
- (c) Upon switch actuation; the continuity measurement from DMM 1 must activate (audible beep) and the Force Gage must read a maximum of 8.00lb for each lens cap assembly location.

5.2.2.2 Retention Force

- (a) Confirm test setup per section 5.1.2.2.
- (b) Lift the Indicator Light Assembly by the Light Subassembly to suspend the attached 2lb Calibrated Weight.
- (c) The LED Housing Assembly must stay engaged in the Light Subassembly and not separate.
- (d) With the 2lb Calibrated Weight still attached to the LED Housing Assembly, use standard shop materials to attach the 3lb Calibrated Weight to the LED Housing Assembly.
- (e) Lift the Indicator Light Assembly by the Light Subassembly to suspend the attached 2lb and 3lb Calibrated Weights.
- (f) The LED Housing Assembly must disengage from the Light Subassembly and separate.
- (g) Disconnect the Indicator Light Assembly from the 2lb and 3lb Calibrated Weights.

Posttest Procedures

- (a) If the Indicator Light Assembly passed all the tests, prepare it for shipment or storage.
- (b) If the Indicator Light Assembly did not pass all the tests, repair or replace defective parts and repeat all tests.

6. Fault Isolation of the Indicator Light Assembly

- (a) Do fault isolation (diagnostics) on the Indicator Light Assembly, as part of the test procedure.



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

Table 2. Fault Isolation

Fault	Probable Cause	Corrective Action
One or more legend does not illuminate sufficiently or does not operate within the specified current range.	1. Defective LED or other circuit component internal to LED Housing Assembly. 2. Defective connection internal to Light Subassembly.	1. Replace LED Housing Assembly P/N 65-0294-021FS-2 or 65-0294-023FS-2 as applicable per Tables 3 and 4. 2. Replace Light Subassembly P/N 65-0294-021FS-1 or P/N 65-0294-023FS-1 as applicable per Tables 3 and 4.
Switch fails continuity test.	Defective switch internal to Light Subassembly.	Replace Light Subassembly P/N 65-0294-021FS-1 or P/N 65-0294-023FS-1 as applicable per Tables 3 and 4.
Actuation force exceeds maximum.	1. Defective component internal to Light Subassembly. 2. Defective component of LED Housing Assembly.	1. Replace Light Subassembly P/N 65-0294-021FS-1 or P/N 65-0294-023FS-1 as applicable per Tables 3 and 4. 2. Replace LED Housing Assembly P/N 65-0294-021FS-2 or 65-0294-023FS-2 as applicable per Tables 3 and 4.
Retention force out of specified range.	1. Defective component internal to Light Subassembly. 2. Defective component of LED Housing Assembly.	1. Replace Light Subassembly P/N 65-0294-021FS-1 or P/N 65-0294-023FS-1 as applicable per Tables 3 and 4. 2. Replace LED Housing Assembly P/N 65-0294-021FS-2 or 65-0294-023FS-2 as applicable per Tables 3 and 4.

7. Disassembly

- Remove LED Housing Assembly from Light Subassembly by pulling outward gently with fingers, tools may mar surfaces.
- Loosen the two screws used to secure the Light Subassembly to the Support Assembly and remove Light Subassembly from Support Assembly.

8. Assembly

- Position Support Assembly over Light Subassembly and tighten the two screws used to secure Support Assembly to Light Subassembly.
- Push LED Housing Assembly into Light Subassembly until it locks into place.
- Test Indicator Light Assembly. Refer to Testing section for details.



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

9. Repair

Reference changes to Boeing Aircraft Maintenance Manuals in the following Appendices for further repair details:

- Appendix A - Boeing 737-300/400/500 Aircraft Maintenance Manual 33-15-00
- Appendix B - Boeing 737-600/700/800/900 Aircraft Maintenance Manual 33-11-00
- Appendix C - Boeing 737-7/8/8200/9 Aircraft Maintenance Manual 33-11-00

10. Illustrated Parts List

The indicator light assembly (master caution annunciator) does not contain replaceable lamps. Instead of relamping the master caution annunciator when a light is malfunctioning, removal and replacement of the LED Housing Assembly P/N 65-0294-21FS-2 or P/N 65-0294-23FS-2 for Indicator Light Assembly P/N 65-0294-21FS or P/N 65-0294-23FS will be necessary. For reference, the LED Housing Assembly is shown as Item 3 in Figure 5 below.

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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

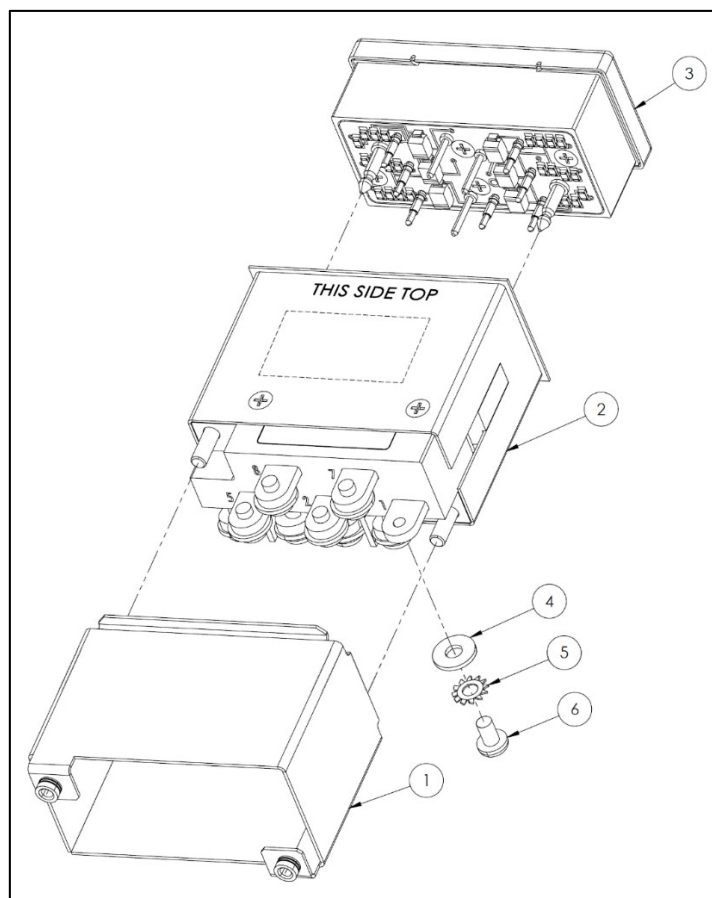


Figure 5. Exploded view of FSCC P/N 65-0294-21FS

Table 3. Captain Indicator Light Assembly P/N 65-0294-21 and P/N 65-0294-21FS
Subcomponent List (Only identical P/Ns are Cross-Compatible)

Item #	Description	Honeywell P/N	FSCC P/N
1	Support Assembly	66-3394-1	65-0294FS-0
2	Light Subassembly	66-3396-1	65-0294-021FS-1
3	LED Housing Assembly	66-3397-1	65-0294-021FS-2
4	Washer	AN961-4T	AN961-4T
5	Lock Washer	MS35335-29	MS35335-29
6	Screw	NAS600-4P	NAS600-4P



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

**Table 4. First Officer Indicator Light Assembly P/N 65-0294-23 and P/N 65-0294-23FS
Subcomponent List (Only identical P/Ns are Cross-Compatible)**

Item #	Description	Honeywell P/N	FSCC P/N
1	Support Assembly	66-3394-1	65-0294FS-0
2	Light Subassembly	66-3396-3	65-0294-023FS-1
3	LED Housing Assembly	66-3397-3	65-0294-023FS-2
4	Washer	AN961-4T	AN961-4T
5	Lock Washer	MS35335-29	MS35335-29
6	Screw	NAS600-4P	NAS600-4P

11. Material Information

This document will be maintained and the latest approved revision posted on the HEICO web site at <http://ipc.heico.com>.

12. Revision and Approval History

Rev. Level	Rev. Date	Remarks
NC	July 19, 2021	Initial release
A	December 13, 2021	Revised Indicator Light Assembly polarity per Figure 3 and current draw requirements from 23.4 - 52.0mA to 14.0 - 52.0mA



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

APPENDIX A

Boeing 737-300/400/500 Aircraft Maintenance Manual 33-15-00

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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

AMM Changes

The following changes to Boeing 737-300/400/500 Aircraft Maintenance Manual 33-15-00 dated Sep 25/2010 are recommended for proper maintenance of PMA articles P/N 65-0294-21FS and P/N 65-0294-23FS.

- **Boeing AMM 33-15-00, page 4 dated May 25/2008:**

B. Pressing the light cap operates the momentary switch and interrupts power to the master caution circuits causing the lights to go off. The light is easily relamped after pulling off the light cap.	2 LED strings
C. The system master caution annunciator is composed of six sections with two bulbs in each section, a base with an internal switch and a light cap divided into six sections. The light cap sections on the pilot's side are labeled FLT CONT, ELEC, IRS, APU, FUEL and OVHT/DET. The light cap sections on the copilot's side are labeled ANTI-ICE, ENG, HYD, OVERHEAD, DOORS, and AIR COND. Pressing the light cap operates the momentary switch which applies a ground to master caution circuits causing all lights to illuminate. When released, only those systems with detected faults will have indicator lights on and the corresponding system master caution annunciator on. The annunciator is easily relamped after pulling off the light cap.	

- **Boeing AMM 33-15-00, page 101 dated May 25/2008:**

1. <u>General</u>	LEDs
A. Trouble shooting the master caution lights and system master caution annunciators is best done in conjunction with use of the master dim and test switch. Inoperative light bulbs can be quickly located when the LIGHTS switch is positioned to TEST. If a specific section of system master caution annunciator is inoperative, the trouble can usually be traced back to the corresponding P5 or P8 module.	

- **Boeing AMM 33-15-00, page 102 dated May 25/2008:**

TROUBLE	PROBABLE CAUSE	ISOLATION PROCEDURE	REMEDY
Left (or right) system master caution annunciator section is not recalled when annunciator is momentarily pressed.	System module logic or system master caution annunciator inoperative	Observe which system indicator lights are illuminated on P5 modules. Momentarily press left (or right) system master caution annunciator. Observe corresponding system master caution annunciator sections illuminate. If none illuminate, annunciator is faulty. If only one annunciator section does not illuminate, relamp section and retest. If section still does not illuminate, corresponding system module is faulty.	Replace system master caution annunciator. Relamp annunciator. Replace system module. Replace annunciator LED Housing Assembly
	replace annunciator LED Housing Assembly		

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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

- Boeing AMM 33-15-00, page 103 dated May 25/2008:

TROUBLE	PROBABLE CAUSE	ISOLATION PROCEDURE	REMEDY
When LIGHTS switch is held to TEST position, if one of following system indicator lights does not illuminate: (1) Pilot's Autopilot Disengage Light (2) Copilot's Autopilot Disengage Light (3) Master Caution Lights and Annunciators (4) Antiskid Light	Open transistor- diode dimming circuit in M469 annunciator and dimming	Relamp system indicator light. Hold LIGHTS switch to TEST. If light is still inoperative, annunciation and dimming module is faulty.	Replace M469 annunciation and dimming module. or replace LED Housing Assembly for Master Caution Annunciators

- Boeing AMM 33-15-00, page 201 dated May 25/2008:

1. General A. This procedure contains a task for the replacement of the master caution annunciator lights. B. There is a master caution annunciator installed on each side of the pilots' light shield, P7. C. The LEDs are installed in a housing assembly. You remove the housing assembly from the annunciator assembly to get access to the lamps. The annunciator assembly stays installed in the P7 panel. D. Refer to the System Schematic Manual (SSM) or the Wiring Diagram Manual (WDM) to identify which annunciator lights come on when you do a test. TASK 33-15-00-432-001 2. Master Warning and Caution Lights - Lamp Replacement (Figure 201)	LED Housing Assembly
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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

- (1) Prepare for the replacement of the annunciator-lamp. **LED Housing Assembly**

- (a) Supply electrical power (PAGEBLOCK 24-22-00/201).
- (b) Close the applicable circuit breakers.

NOTE: Refer to the SSM or the WDM for the affected system.

- (c) Push and hold down the right or the left annunciator faceplate.
- (d) Examine the lights of the annunciator to see which of the lights are not on.
- (e) Release the annunciator faceplate.

SUBTASK 33-15-00-962-022

- (2) Replace the annunciator lamp. **LED Housing Assembly**

- (a) Open the applicable circuit breakers and attach DO-NOT-CLOSE tags.

NOTE: Refer to the SSM or the WDM for the affected system.

CAUTION: REMOVE THE **LAMP** HOUSING ASSEMBLY WITH YOUR FINGERS ONLY. IF YOU USE A TOOL TO HOLD THE **LAMP** HOUSING ASSEMBLY YOU CAN DAMAGE IT.

- (b) Hold the **lamp** housing assembly with the thumb and the finger and pull it from the annunciator assembly.

- ~~(c) Hold the rear of the lamp with the thumb and the finger.~~
- ~~(d) Remove the defective lamp.~~
- ~~(e) Put the replacement lamp into the lamp housing assembly.~~
- ~~(f) Turn the lamp housing assembly until the faceplate is away from the pilots' P7 panel.~~

Does not apply

- Boeing AMM 33-15-00, page 202 dated May 25/2008:

new LED AIRCRAFT MAINTENANCE MANUAL

- (g) Put the **lamp** housing assembly into the annunciator assembly.
- (h) Make sure you have the **lamp** housing assembly engaged correctly in the annunciator assembly.

SUBTASK 33-15-00-712-023

- (3) Do a test of the annunciator lamps. **LEDs**

- (a) Remove the DO-NOT-CLOSE tags and close the applicable circuit breakers.

NOTE: Refer to the SSM or the WDM for the affected system.

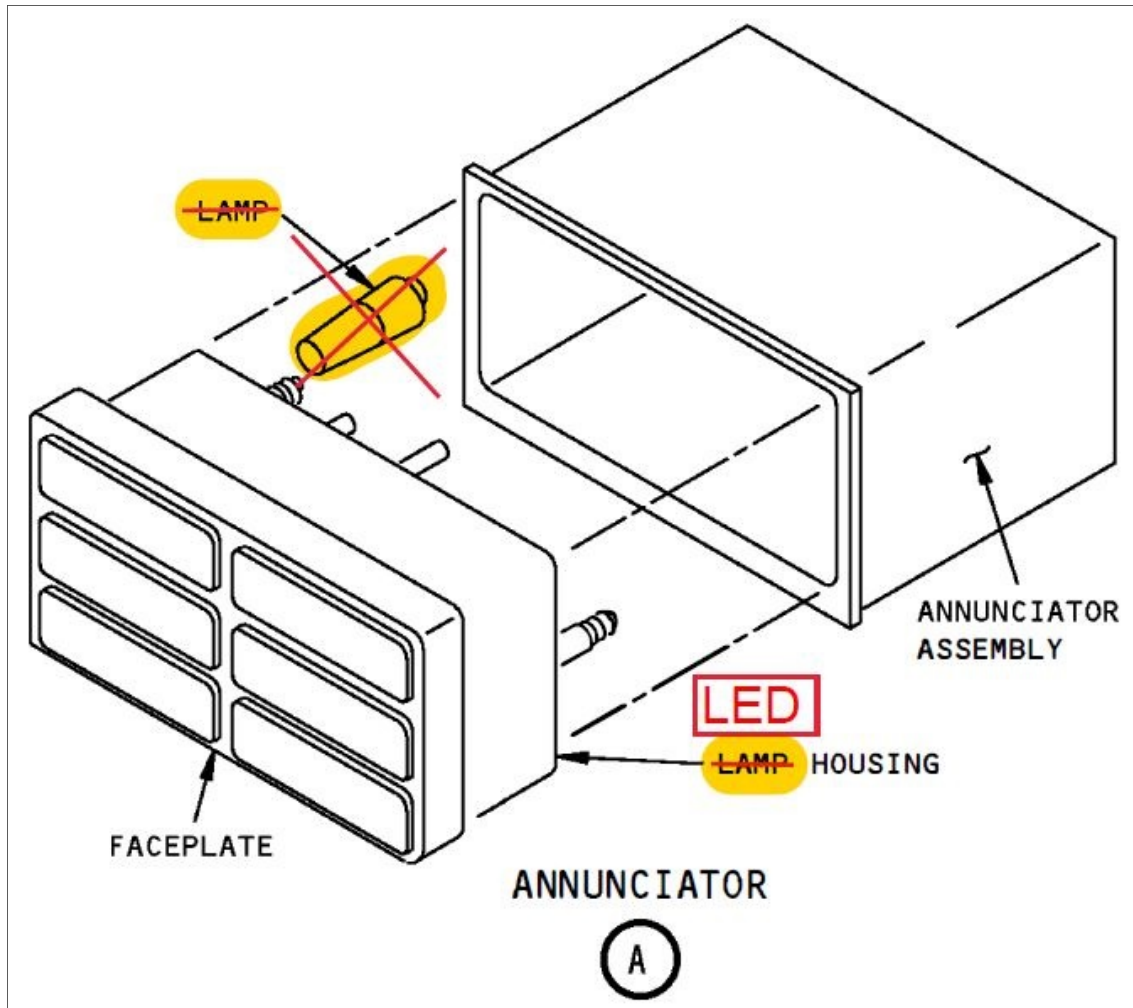
- (b) Push and hold down the annunciator faceplate.
- (c) Make sure all the annunciator **lamps** are on.
- (d) Release the annunciator faceplate. **LEDs**
- (e) Remove electrical power if it is not necessary (PAGEBLOCK 24-22-00/201).

————— **END OF TASK** —————

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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

- Boeing AMM 33-15-00, page 203 dated May 25/2008:





TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

APPENDIX B

Boeing 737-600/700/800/900 Aircraft Maintenance Manual 33-11-00

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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

AMM Changes

The following changes to Boeing 737-600/700/800/900 Aircraft Maintenance Manual 33-11-00 dated Jun 15/2011 are recommended for proper maintenance of PMA articles P/N 65-0294-21FS and P/N 65-0294-23FS.

- Boeing AMM 33-11-00, page 210 dated Jun 15/2011:

TASK 33-11-00-960-804

LED Housing Assembly

5. Master Warning And Caution System Annunciator - Lamp Replacement

Figure 203

A. References

Reference	Title
24-22-00-860-811	Supply Electrical Power (P/B 201)
24-22-00-860-812	Remove Electrical Power (P/B 201)

B. Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
23 21	Lamp	Not Specified	

LED Housing Assembly

SUBTASK 33-11-00-960-004		LED
(2) Do these steps to replace the lamp [21].		LED Housing Assembly [23]
CAUTION: REMOVE THE LAMP HOUSING WITH YOUR FINGERS ONLY. IF YOU USE A TOOL TO HOLD THE LAMP HOUSING, THE TOOL CAN CAUSE DAMAGE TO THE HOUSING.		
LED	LED	
(a) Pull the lamp housing [23] from the annunciator assembly [22].		
(b) Remove the defective lamp [21].		
(c) Put the new lamp [21] into the lamp housing [23].		
(d) Put the lamp housing [23] into the annunciator assembly [22].		
new LED	(e) Make sure that the lamp housing [23] engages correctly in the annunciator assembly [22].	
SUBTASK 33-11-00-860-014		LED

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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

- Boeing AMM 33-11-00, page 211 dated Jun 15/2011:

SUBTASK 33-11-00-710-004

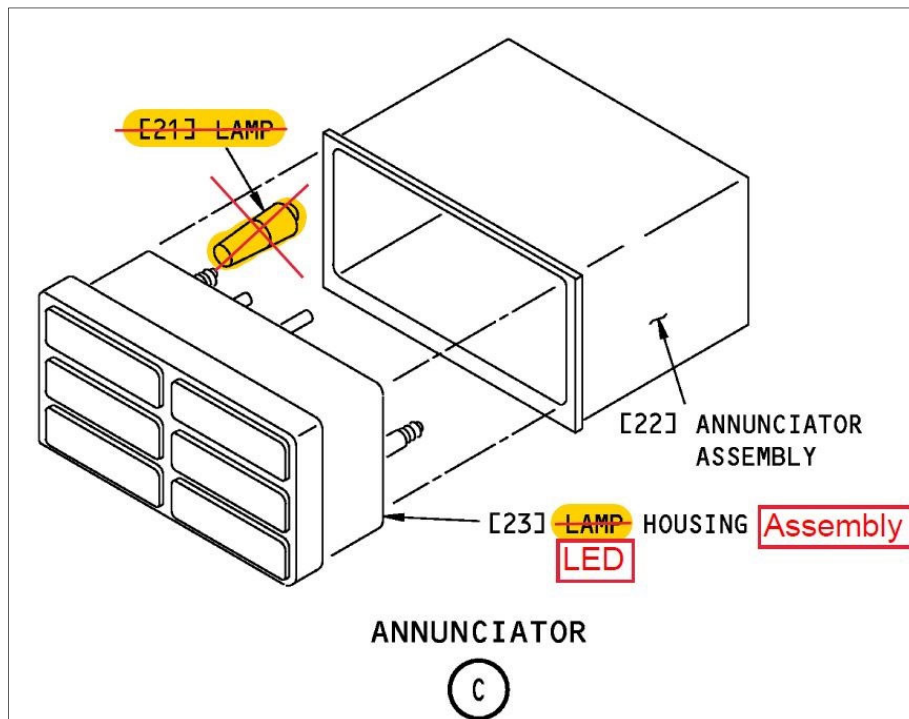
- (5) Do a test of the new ~~lamp [21]~~ **LED Housing Assembly [23]**
- (a) At the captain's main instrument panel, P1, set the switch for the master dim and test lights to TEST.
- (b) Make sure that the replaced ~~lamp [21]~~ is on.
- (c) Set the switch to the off position. **LED Housing Assembly [23]**

SUBTASK 33-11-00-860-016

- (6) Do this task: Remove Electrical Power, TASK 24-22-00-860-812.

————— END OF TASK —————

- Boeing AMM 33-11-00, page 212 dated Oct 15/2010:



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TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

- Boeing AMM 33-11-00, page 213 dated Oct 15/2010:

SUBTASK 33-11-00-960-005

(2) Do these steps to replace the light assembly [41]:

CAUTION: REMOVE THE LAMP HOUSING WITH YOUR FINGERS ONLY. IF YOU USE A TOOL TO HOLD THE LAMP HOUSING, THE TOOL CAN CAUSE DAMAGE TO THE HOUSING.

(a) Pull the lamp housing [44] from the annunciator assembly.

(b) Loosen the screws [43] and pull the light assembly [41].

(c) Loosen the screws [42] at the back of the light assembly [41] to disconnect the electrical wires.

(d) Replace the light assembly [41].

(e) Connect the electrical wires to the new light assembly [41].

(f) Tighten the screws [42] at the back of the new light assembly [41].

(g) Install the light assembly [41] to the annunciator assembly.

(h) Tighten the screws [43].

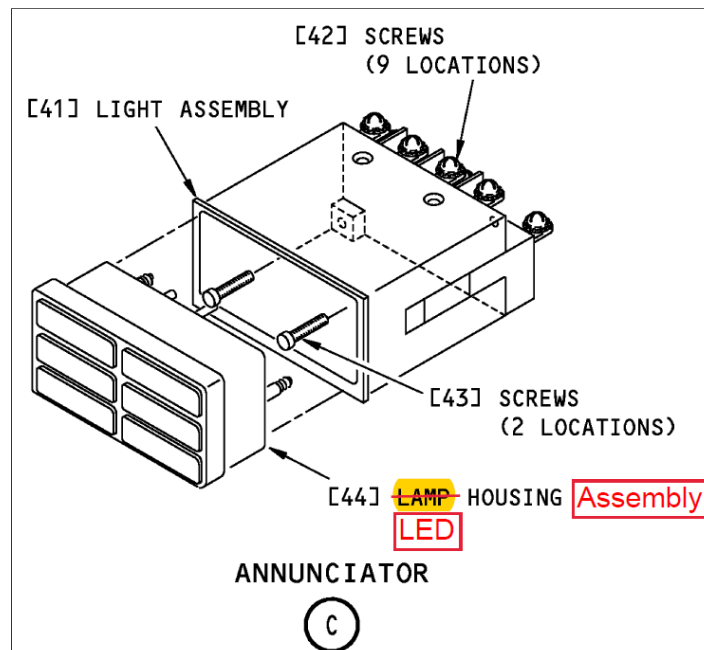
1) Make sure you tight two screws [43] evenly.

(i) Put the lamp housing [44] into the annunciator assembly.

(j) Make sure that the lamp housing [44] engages correctly in the annunciator assembly.

SUBTASK 33-11-00-860-018

- Boeing AMM 33-11-00, page 215 dated Oct 15/2010:





TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

APPENDIX C

Boeing 737-7/8/8200/9 Aircraft Maintenance Manual 33-11-00



TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

AMM Changes

The following changes to Boeing 737-7/8/8200/9 Aircraft Maintenance Manual 33-11-00 dated Jul 15/2017 are recommended for proper maintenance of PMA articles P/N 65-0294-21FS and P/N 65-0294-23FS.

- Boeing AMM 33-11-00, page 214 dated Jan 15/2017:

TASK 33-11-00-960-806

LED Housing Assembly

7.

Master Warning And Caution System Annunciator - Lamp Replacement

Figure 204

A.

Expendables/Parts

AMM Item	Description	AIPC Reference	AIPC Effectivity
21	Lamp	33-14-00-02-035	AAL ALL
23	Lamp housing Assembly	Not Specified	
	LED		

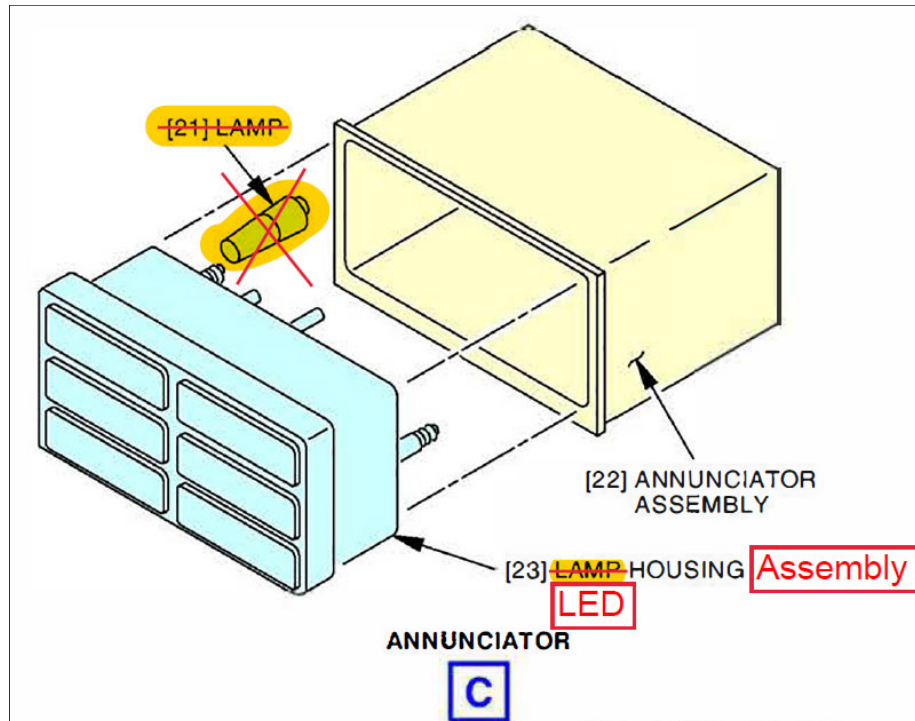
SUBTASK 33-11-00-960-006		LED
(2) Do these steps to replace the lamp [21]:		LED Housing Assembly [23]
CAUTION: REMOVE THE LAMP HOUSING WITH YOUR FINGERS ONLY. IF YOU USE A TOOL TO HOLD THE LAMP HOUSING, THE TOOL CAN CAUSE DAMAGE TO THE HOUSING.		LED
(a) Pull the lamp housing [23] from the annunciator assembly [22].		LED
(b) Remove the defective lamp [21].		
(c) Put the new lamp [21] into the lamp housing [23].		
(d) Put the lamp housing [23] into the annunciator assembly [22].		
(e) Make sure that the lamp housing [23] engages correctly in the annunciator assembly [22].		
SUBTASK 33-11-00-960-025		LED

SUBTASK 33-11-00-710-006	
(4) Do a test of the new lamp [21]:	
(a) At the captain's main instrument panel, P1, set the switch for the master dim and test lights to TEST.	
(b) Make sure that the replaced lamp [21] is on.	
(c) Set the switch to the off position.	
LED Housing Assembly [23]	
————— END OF TASK —————	

HEICO

TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

- Boeing AMM 33-11-00, page 215 dated Jan 15/2017:



- Boeing AMM 33-11-00, page 216 dated Jan 15/2017:

A. Expendables/Parts			
AMM Item	Description	AIPC Reference	AIPC Effectivity
23	Lamp housing Assembly LED	Not Specified	

HEICO

TECHNICAL INSTRUCTION HAC21-002, Rev. A, December 13, 2021

SUBTASK 33-11-00-960-007

(2) Do these steps to replace the light assembly [24]:

CAUTION: REMOVE THE LAMP HOUSING WITH YOUR FINGERS ONLY. IF YOU USE A TOOL TO HOLD THE LAMP HOUSING, THE TOOL CAN CAUSE DAMAGE TO THE HOUSING.

- (a) Pull the lamp housing [23] from the annunciator assembly.
- (b) Loosen the screws [26]. Then pull the light assembly [24].
- (c) Loosen the screws [25] at the rear of the light assembly [24] to disconnect the electrical wires.
- (d) Replace the light assembly [24].
- (e) Connect the electrical wires to the new light assembly [24].
- (f) Tighten the screws [25] at the rear of the new light assembly [24].
- (g) Install the light assembly [24] to the annunciator assembly.
- (h) Tighten the screws [26].
- (i) 1) Make sure that you tighten the screws [26] equally.
- (i) Put the lamp housing [23] into the annunciator assembly.
 - 1) Make sure that the lamp housing [23] engages correctly in the annunciator assembly.

- Boeing AMM 33-11-00, page 218 dated Jan 15/2017:

