

ABBREVIATED COMPONENT MAINTENANCE MANUAL
LIGHTED ICING INDICATOR
P/N 864-001 AMDT A

LIST OF REVISIONS

| | | | | | |
|----------|-----------|-----------|-----------|------------|--|
| Rev No. | 1 | 2 | 3 | 4 | |
| Rev Date | May 26/98 | Oct 10/01 | Aug 01/07 | July 17/08 | |

LIST OF EFFECTIVES PAGES

| | | | | | | |
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| July 17/08 | July 17/08 | July 17/08 | July 17/08 | July 17/08 | July 17/08 | |

LIST OF SERVICE BULLETINS

| SB No. | Rev No. | MOD. No | INCORP. DATE | TITLE |
|--------------------|---------|------------|--------------|---|
| SB 864-30-0001-001 | 1 | EDES 07-61 | Oct 2007 | Improvement of illumination device reliability (upgrade the unit to AMDT A) |

TASK 30-81-12-870-801-A01

1 Description and Operation

The Lighted Icing Indicator is installed on the central strut of the windshield to be visible by both pilots. The system informs the crew when, icing conditions are encountered, by accretion of ice on Lighted Icing Indicator, and is the initial point for the formation of ice on the aircraft. The Icing Indicator is illuminated by an internal light source (green LED) for night operation where ice accretion masks this light source.

Approximate dimensions and weights

| | | |
|--------------|------------------------|------------|
| Diameter: | 10 mm | (0.39 in), |
| Length | 131mm | (5.16 in) |
| Weight: | 0.07 kg | (0.15 lb). |
| Consumption: | Inferior to 10mA@28VDC | |

TASK 30-81-12-700-801-A01

Testing and Fault Isolation

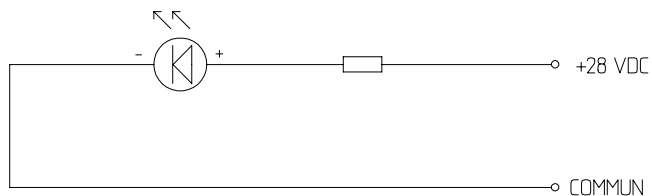
Not applicable

TASK 30-81-12-878-801-A01

Schematics and wiring diagrams

The Lighted Icing Indicator is connected to the power supply with 2 wires:

- Red wire: +28VDC
- Blue wire: common (0VDC)



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TASK 30-81-12-000-801-A01

Disassembly

NOTE: IF NECESSARY, DO NOT FORGET TO UPGRADE PNR 864-001 to 864-001 AMDT A WITH RELEVANT SB.

CAUTION: ENSURE THAT PAINTED PARTS ARE NOT DAMAGED DURING DISASSEMBLY.

A: Reason for the job

The disassembly of the unit provides access to the GREEN LED (30) for replacement if it found defective.

B: Job set up information

- (1) Fixtures, tools, test and support equipment

| Reference | Qty | Designation |
|-------------|-----|------------------|
| No specific | 1 | Fork wrench N°13 |

C: Job set up

Not applicable

D: Procedure

SUBTASK 30-81-12-000-001-A01

- (1) Disassembly of the equipment. See IPL figure 01.

- (a) With applicable tool, unscrew the COVER (10) which attach the DIFFUSER (20) and remove the SEAL (40).
- (b) If necessary, pull to remove the DIFFUSER
- (c) Pull the GREEN LED (30) and remove it.
- (d) If necessary, remove the AMDT A MARKER SLEEVE AMDT A (70) and pull (in direction of the removed GREEN LED) to extract the WIRE ASSY (50) from the MAIN PART (60).

TASK 30-81-12-100-801-A01

Cleaning

A: Reason for the job

Self-Explanatory

B: Job set up information

- (1) Fixtures, tools, test and support equipment

| Reference | Qty | Designation |
|-------------|-----|-------------|
| No specific | 1 | Dry rag |

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C: Job set up
Not applicable

D: Procedure
SUBTASK 30-81-12-100-001-A01
Clean the housing carefully with specified tool.

TASK 30-81-12-200-801-A01
Inspection/check
Not applicable

TASK 30-81-12-300-801-A01
Repair

A. Reason for the job
Repainting of titanium parts after disassembly (if applicable).

B. Job Set Up information
(1) Fixtures, tools, test and support equipment
Not applicable

(2) Consumable material

| Reference | Designation |
|-------------------------------------|---|
| ASNA 3646-5063 Surface treatment | Matt Black paint Blue anodizing (for titanium) |

(3) Referenced information

| Reference | Designation |
|--|--|
| IGP 08-27 Painting Repair Station | Madelec's procedure – Repair solution for repainting titanium parts Madelec Aero F9503 Rambouillet (F78120) |

C Job Set up
Subtask 30-81-12-350-001-A01

- (1) Select the defective painted parts.
 - (a) Select the COVER (10) and/or MAIN PART (60) with some painted defects.
 - (b) Shipped them with appropriated packaging to the authorized and qualified repair shops for repainting.

D. Procedure
Subtask 30-81-12-350-002-A01

- (1) Remove the painting and treatment on damaged parts.
(REFER to IGP 08-27)

Subtask 30-81-12-350-003-A01

- (2) Re-treat with protective treatment and repaint the damaged parts.
(REFER to IGP 08-27)

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TASK 30-81-12-400-801-A01
Assembly

CAUTION: AFTER EACH DISASSEMBLY, REPLACE SEAL (40) AND USE ADHESIVE LOCTITE 243 TO REASSEMBLE THE COVER (10).

CAUTION: ENSURE THAT PAINTED PARTS ARE NOT DAMAGED DURING THE ASSEMBLY

A: Reason for the job
 Self-Explanatory

B: Job set up information

(1) Fixtures, tools, test and support equipment

| Reference | Qty | Designation |
|-------------|-----|-----------------------------------|
| No specific | 1 | Fork wrench N°13 |
| No specific | 1 | Heating tool |
| No specific | 1 | Torquemeter with fork wrench N°13 |

(3) Consumables

| Reference | Specification | Source |
|----------------------|---------------|--------------|
| Adhesive Loctite 243 | MIL S 46163 | Local supply |

C: Job set up
 Not Applicable

D: Procedure

SUBTASK 30-81-12-440-001-A01

(1) Assembly of the parts. See IPL figure 01

- (a) If necessary, put in place the WIRE ASSY (50) inside the MAIN PART (60).
- (b) Slot the GREEN LED (30) in its socket on the WIRE ASSY (50) and check the polarization with the following electrical test:
 - Energize the equipment with 28VDC by the applicable input wires (refer to TASK 30-81-12-800-801-A01) and a green light must be visible on GREEN LED.
- (c) If necessary, put in place the DIFFUSER (20) inside the COVER (10).
- (d) Install the SEAL (40) in the COVER (10) against the DIFFUSER (20).
- (e) Apply adhesive Loctite on thread of MAIN PART (60) assy and torque the COVER (10) with applicable fork wrench to between 3.95N.m and 4.05N.m
- (f) If necessary, at the REAR OF THE MAIN PART body (60), put to size and shape the AMDT A MARKER SLEEVE by heating with dedicated heating tool.
- (g) Apply sealing at the rear of the MAIN PART (60) at wires junction as and wait at ambient not less than 24 hours.

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TASK 30-81-12-820-801-A01
Fits and clearances

| IPL Fig. Item No | Designation | Torque Value | |
|---------------------|-------------|--------------|-------------------|
| | | N.m | Lbf.in |
| 1-10 | COVER | 4 +/-0.05 | 35.4 +/-0.44 - |

TASK 30-81-12-940-801-A01
Special tools, Equipment and consumable Materials
 Not applicable

TASK 30-81-12-840-801-A01
 Rework

A. Service Bulletin SB 864-30-0001-001
 (a) Change PNR 864-001 into PNR 864-001 Amendment A

B. Equipment and Materials
 Refer to SB 864-30-0001-001

C. Consumables Material List
 Refer to SB 864-30-0001-001

D. Modification Kit SB 864-30-0001-001

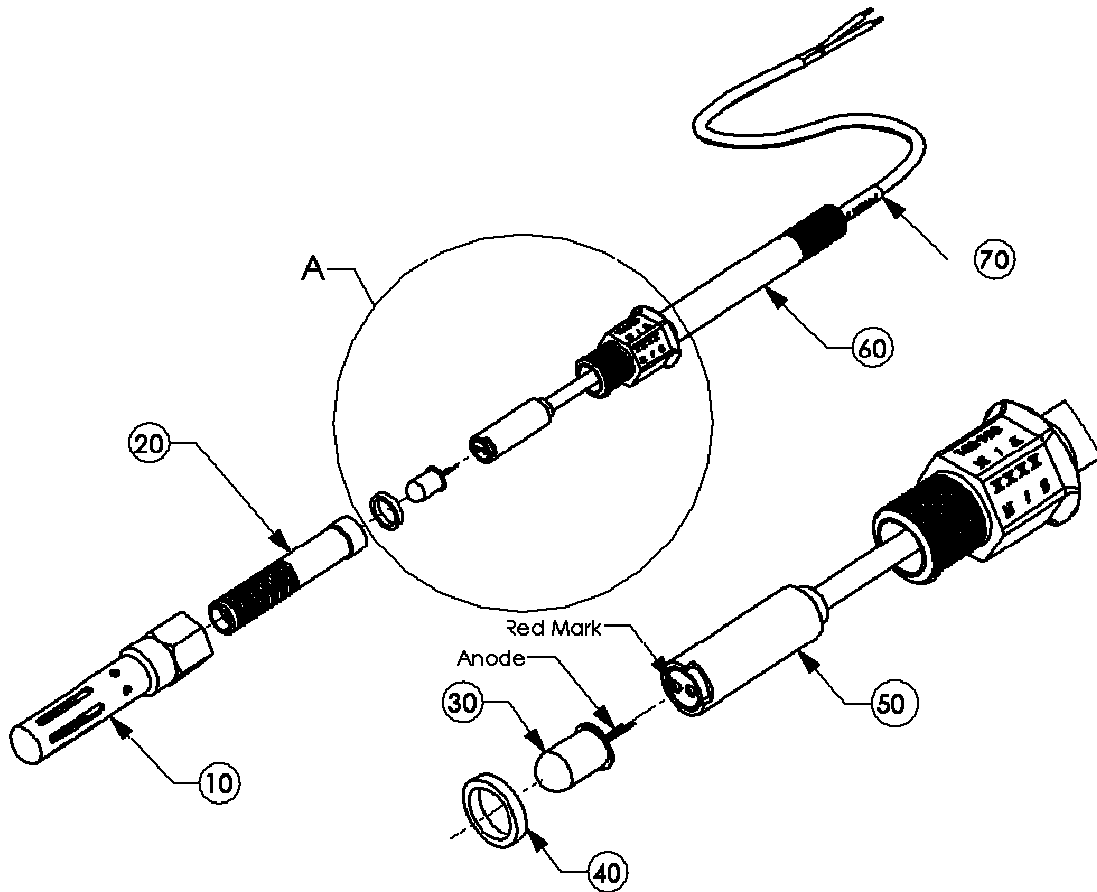
E. Disassembly
 Refer to SB 864-30-0001-001

F. Rework
 Refer to SB 864-30-0001-001

G. .Assembly
 Refer to SB 864-30-0001-001

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TASK 30-81-12-870-801-A01
Illustrated Parts List



Lighted Icing Indicator
 Figure 1/GRAPHIC 30-81-12-991-001-A01

A: Detailed Parts List

| FIG.-ITEM | PART NUMBER | AIRLINE PART NO | NOMENCLATURE | USAGE FROM TO | UNITS PER ASSY |
|-----------|-------------|-----------------|----------------------------------|---------------|----------------|
| 1 - 1A | 864-001 | | LIGHTED ICING INDICATOR (AMDT A) | | RF |
| 10 | 864-102 | | .COVER | | 1 |
| 20 | 864-103 | | .DIFFUSER | | 1 |
| 30 | 864-106 | | .GREEN LED | | 1 |
| 40 | 864-105 | | .SEAL | | 1 |
| 50 | 864-10311 | | .WIRE ASSY | | 1 |
| 60 | 864-101 | | .MAIN PART | | 1 |
| 70 | 864-1032 | | .AMDT A MARKER SLEEVE | | 1 |