SUBJECT:

Required maintenance for the Belly-Mounted Supplemental Anti-Collision Light (P/N 350-900624)

APPLICABILITY :

Aircraft with the subject modification embodied in accordance with TCCA STC No. SH96-114 or any relevant foreign approvals.

	NAME AND SIGNATURE	DATE	COMPANY DEPARTMENT
PREPARED BY:	D. Kerr	8 Feb. /08	ECL ENGINEERING
PREPARED BY:			
CHECKED BY:	C. Timmins	8 February 2008	ECL ENGINEERING
CHECKED BY:	M. Merritt	2008-02-12	ECL QUALITY ASSURANCE
APP'D / ACCEPTED (Civil A/W Authority)	(see ICA Compliance Check Sheet)	13 Feb 08	TCCA
RELEASED BY:	R. Manson	10 Mar 08	ECL ENGINEERING

RECORD OF REVISIONS

Rev.	Pages at this Revision	Description, Reason, Changed Pages	Prepared (name and date)	Checked (name and date)	App'd/Acc'd (Civil A/W Authority) (name and date)	Released (name and date)
0	1 through 18	Original Issue	D. Kerr 9 November 2004	C. Timmins 9 November 2004	TCCA E. Cheung 10 November 2004	R. Manson 10 November 2004
1	1 through 23	Revised format. Additional information added to Description, Control and Operation and to the Inspection Schedule. Addition of a new wiring diagram to cover Pre and Post AMS 07-3274 (Pages 3 to 7, 9 to 23)	See Page 1.	See Page 1.	See Page 1.	See Page 1.

NOTE: Revisions to this document will be distributed to operators of this equipment by the STC holder.

NOTE: Revised portions of affected pages are identified by a vertical black line in the margin adjacent to the change.

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FIGURES

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TABLES

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1. GENERAL

A. Introduction

The Belly-Mounted Supplemental Anti-Collision Light provides increased visibility by means of a supplemental external light, with optional optical lens colours of red, white or red/white.

B. Description

The light is mounted on the belly of the aircraft at the lateral centerline just AFT of the rear landing gear cross tube. The standard helicopter anti-collision light power supply module is replaced with a module that can provide power to both the existing anti-collision light and the strobe light. This new anti-collision light is activated by a separate switch (BELLY STROBE) or (STROBE LT) on the switch panel located on the center console and is operated separately from the standard helicopter anti-collision light. Refer to Figure 2.

There are two configurations available, the first configuration, P/N 350-900624-01, is installed without the Radar Altimeter or the EC Flux Valve Provisions. The second configuration, P/N 350-900624-02, is installed when the Radar Altimeter or the EC Flux Valve Provisions are installed.

For instructions for initial installation, refer to Installation Procedure IP-ECL-120.

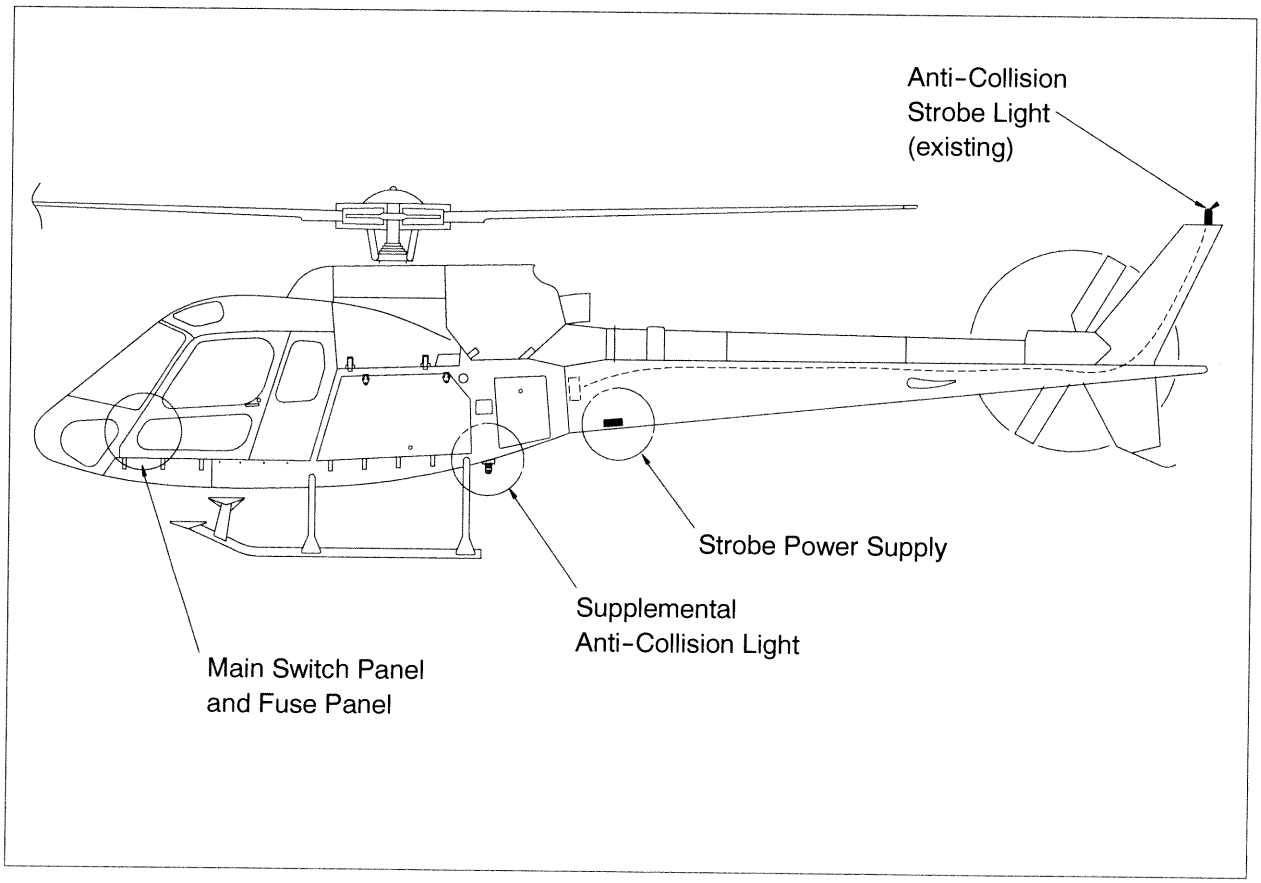

Figure 1 General Layout

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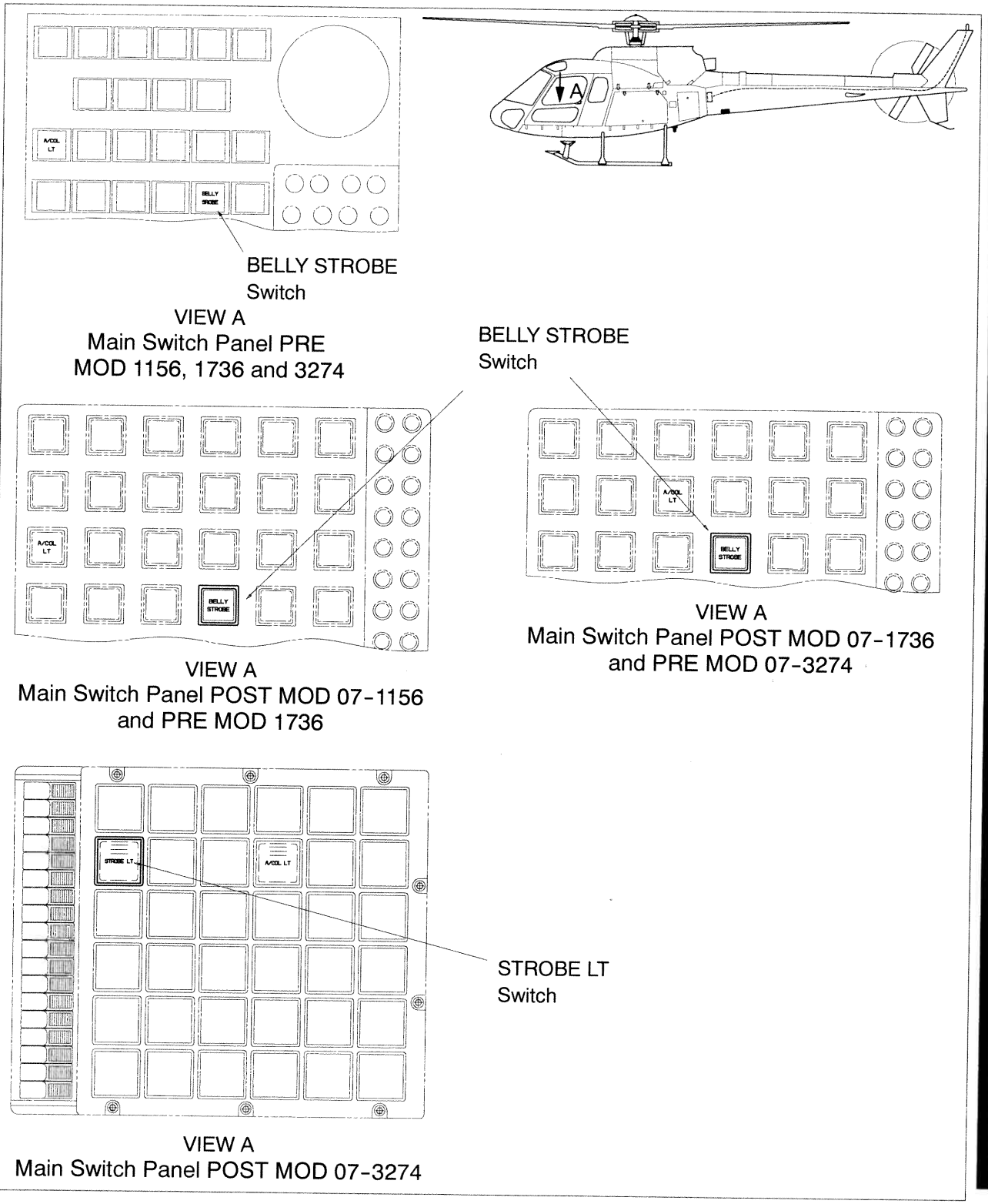

Figure 2 Switch locations on Main Switch Panel

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D. REFERENCES

DOCUMENT	DOCUMENT TITLE
AC43.13	FAA Advisory Circular No. 43.13-1B
AMS 07 1156	Avis de Modification Serie 07 1156 Option of Modification Series 07 1156 AMS 07 1156 replaces the HONEYWELL pushbuttons with leakproof pushbuttons.
AMS 07 1736	Avis de Modification Serie 07 1736 Option of Modification Series 07 1736 AMS 07 1736 provides a new arrangement of the pushbuttons.
AMS 07 3274	Avis de Modification Serie 07 3274 Option of Modification Series 07 3274 AMS 07 3274 introduces DC distribution modifications, a direct battery bus bar and a breaker panels to replace fuses.
ICA	Instructions for Continued Airworthiness
MTC	Standard Practices Manual

E. ABBREVIATIONS & DEFINITIONS

ABBREVIATION	DEFINITION
EC	Eurocopter (France)
ECL	Eurocopter Canada Limited
LT	Light
P/N	Part Number

F. UNITS OF MEASUREMENT

ABBREVIATION / SYMBOL	UNIT OF MEASUREMENT
kg	kilogram
lbs	pounds
m	meter
in	inch

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2. AIRWORTHINESS LIMITATIONS

The Airworthiness Limitations section is approved by the Minister and specifies maintenance required by any applicable airworthiness or operating rule unless an alternative program has been approved by the Minister.

No airworthiness limitations associated with this installation.

3. CONTROL AND OPERATION

Apart from the following, control and operation of the aircraft remains unchanged.

The Belly-mounted supplemental anti-collision light is activated by the "BELLY STROBE" or "STROBE LT" switch located on the main switch panel depending on the MOD status. Refer to Figure 2.

4. INSPECTION SCHEDULE AND MAINTENANCE ACTION

NOTE: Use torque per EC, MTC, Volume 2, Chapter 20.02.05.404, unless otherwise specified.

4.1. INSPECTION SCHEDULE

4.1.1. Before the first flight of every day:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
A	- Visually inspect Belly-Mounted Supplemental Anti-Collision Light for: a. security	a. Ensure screws and nuts are torqued in accordance with EC, MTC, Volume 2, Chapter 20.02.05.404.
B	- Check Belly-Mounted Supplemental Anti-Collision Light drain hole for: a. blockage	a. Clear blockage and clean area.
C	- Check Belly-Mounted Supplemental Anti-Collision Light for: a. correct operation	a. If light fails to illuminate refer to Section 6, Troubleshooting.

Table 1 Inspection Schedule and Maintenance Action
Before the first flight of every day

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4.1. INSPECTION SCHEDULE

4.1.2. Every 100 flight hrs or 12 months (to coincide with the 100 hrs or 12 month helicopter inspection) whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
A	- Visually inspect sealing compound, item 7 between Support Bracket, item 6, and Adapter Cup, item 2, in Figure 3 for: a. deterioration	a. Clean area and reseal with sealing compound (P/N PR1422-B2), in accordance with EC,MTC, Volume 4, Chapter r 20.05.01.219.
B	- Check placards and markings (refer to Section 10) for: a. legibility b. secure mounting	a. If placards have become illegible, contact ECL for replacement parts. b. Secure, reattach placards as required

Table 2 Inspection Schedule and Maintenance Action
Every 100 flight hrs or 12 months, whichever occurs first

4.1.3. Every 500 flight hrs or 24 months, whichever occurs first:

ITEM	INSPECTION OR MAINTENANCE WORK	CORRECTIVE ACTION
A	- Check mounting hardware, items 3 and 4, for strobe power supply, item 5, in Figures 4 and 5 for: a. security	a. Secure as required.
B	- Visually inspect electrical connectors ground studs, item 1, in Figures 4 and 5 for: a. security b. corrosion	a. Secure as required. b. No corrosion is allowed. If corrosion is found, contact vendor for replacement parts.

Table 3 Inspection Schedule and Maintenance Action
Every 500 flight hrs or 24 months, whichever occurs first

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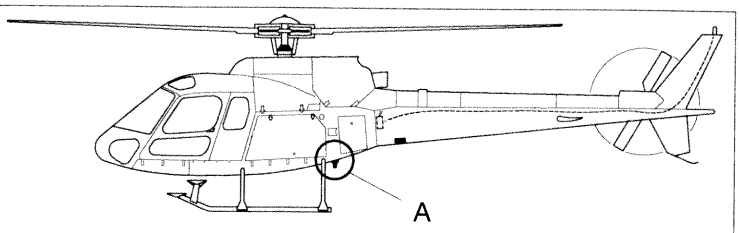
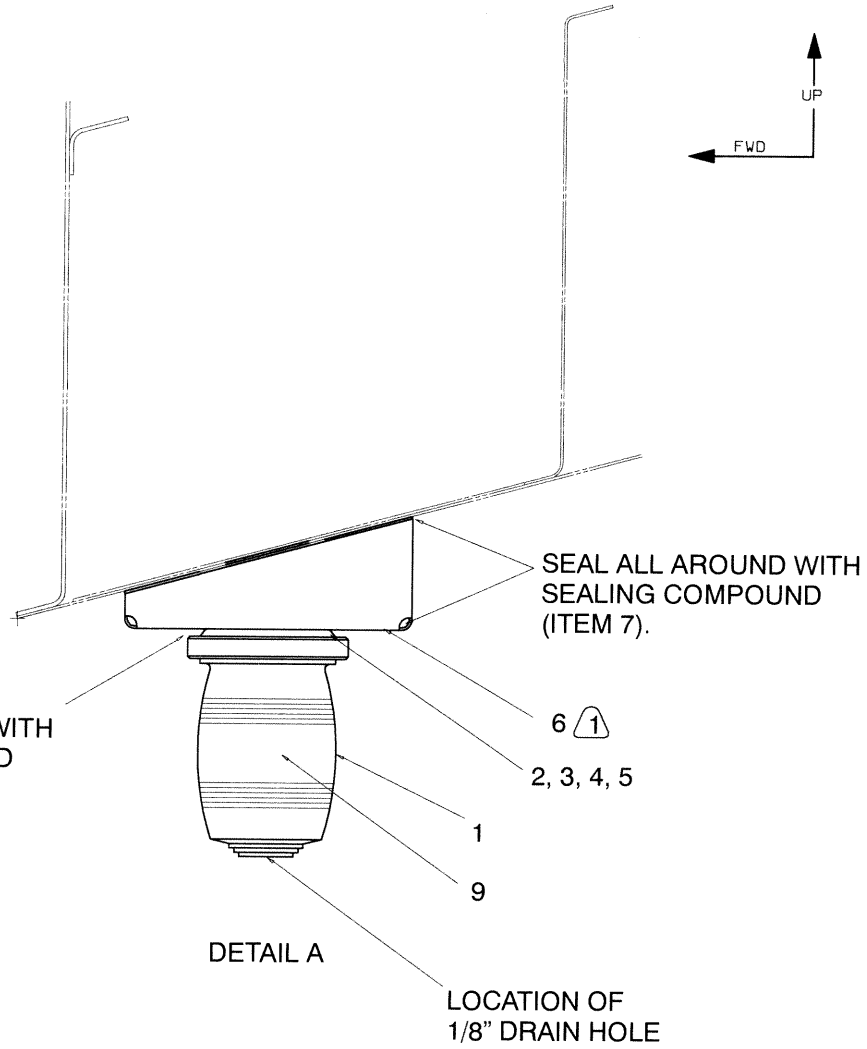
Legend (for Figure 3)

Item Description

1. Lens Assembly
2. Adapter Cup
3. Screws
4. Washers
5. Nuts
6. Support Bracket
7. Sealing Compound (P/N PR1422-B2)
8. Electrical Joint Compound (Penetrox A 13)
9. Bulb





(1) CONTACT BETWEEN MATING SURFACES TO BE KEPT FREE FROM PROTECTIVE COATING. BEFORE INSTALLATION OF EQUIPMENT, APPLY ELECTRICAL JOINT COMPOUND (ITEM 8).

NOTES:

Figure 3 Belly-Mounted Supplemental Anti-Collision Light - Details

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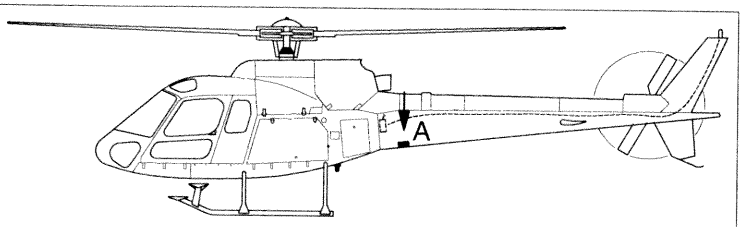
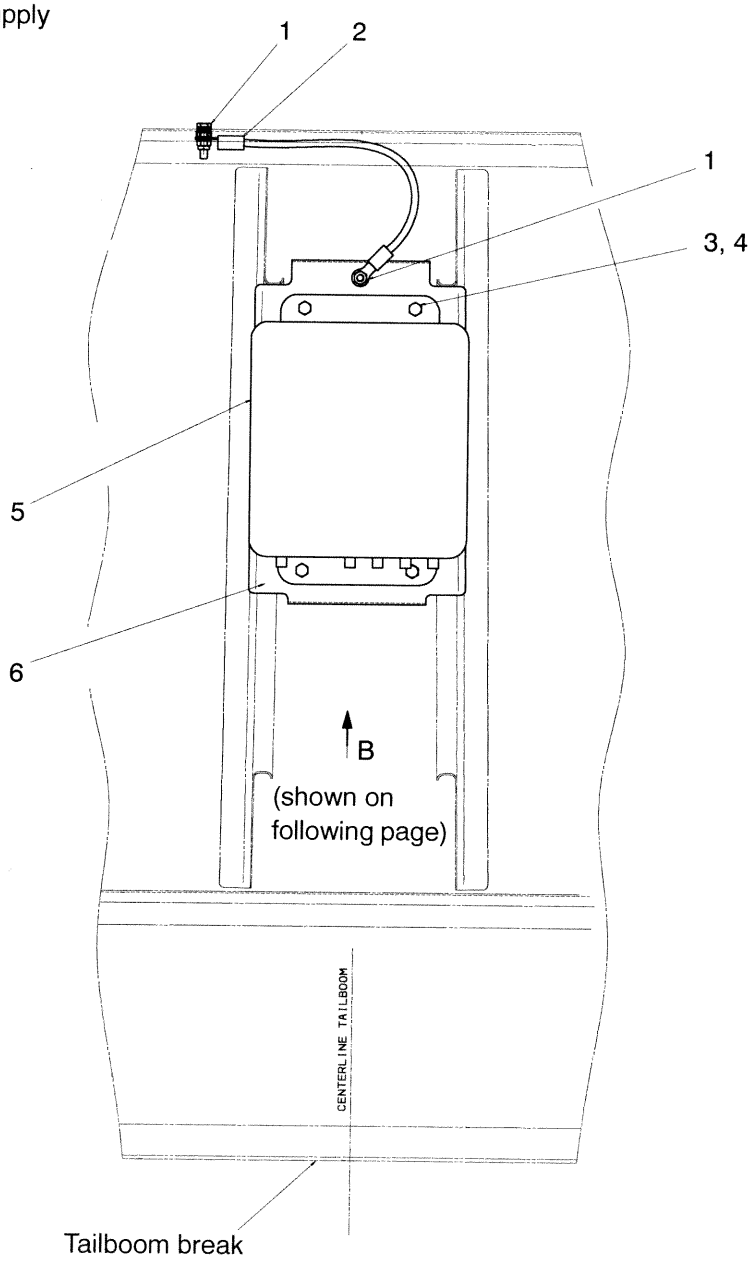
Legend (for Figure 4)

Item	Description
1.	Ground Stud
2.	Bonding Jumper
3.	Screw
4.	Washer
5.	Strobe Power Supply
6.	Support Bracket





VIEW A
ROTATED 90°

Figure 4 Strobe Power Supply (-01 Installation configuration shown)

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Legend (for Figure 5)

Item Description

1. Ground Stud
2. Bonding Jumper
3. Screw
4. Washer
5. Strobe Power Supply
6. Support Bracket Assembly

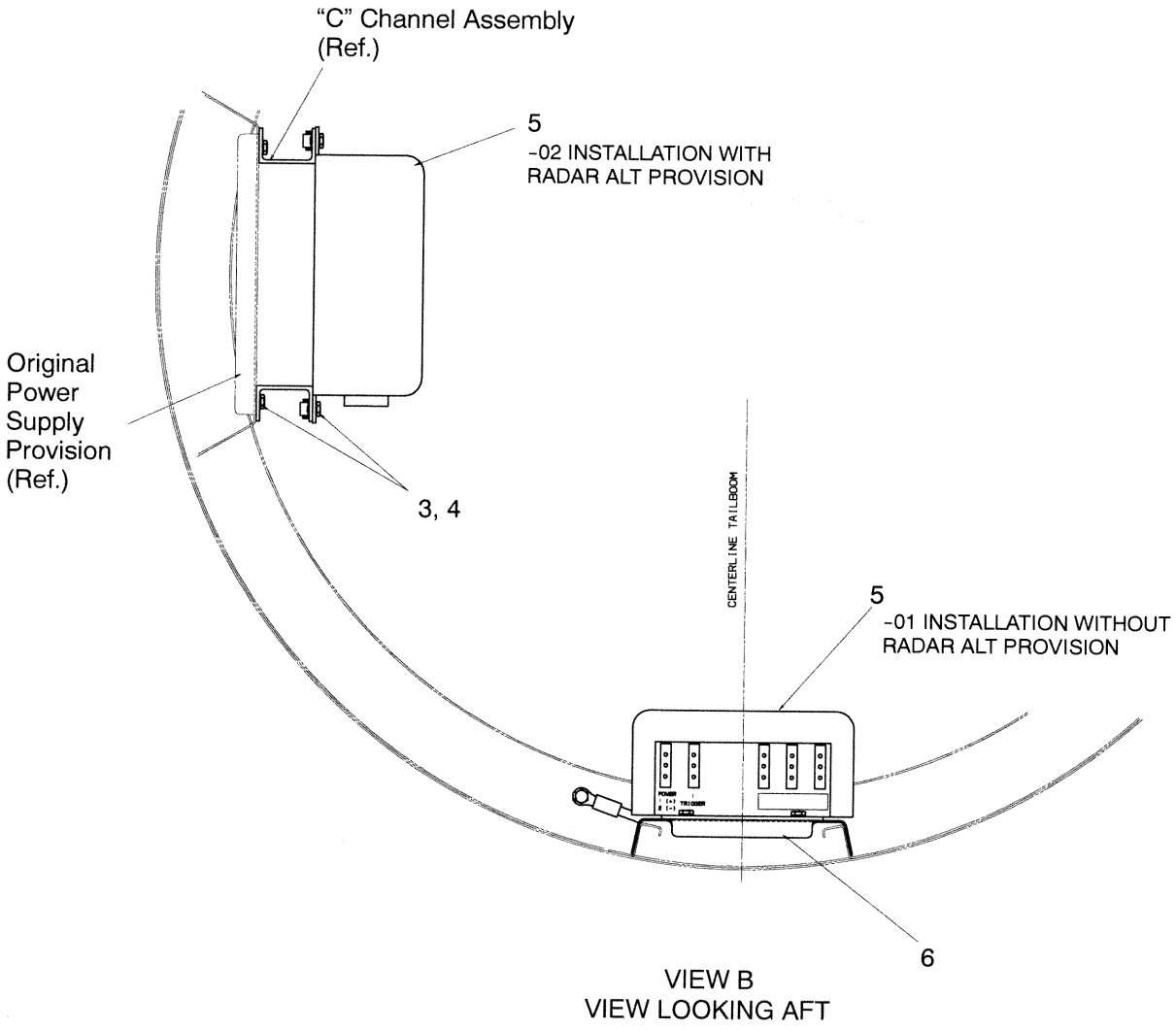

Figure 5 Strobe Power Supply location

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5. OVERHAUL REQUIREMENTS

No overhaul requirements for this installation.

6. TROUBLESHOOTING

For electrical system troubleshooting, refer to Figures 6 and 7, Belly-Mounted Supplemental Anti-Collision Light, Wiring Diagram.

ITEM	TROUBLE / SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
1	Lamp does not illuminate during Daily Preflight Inspection	Bulb burnt out.	Replace bulb P/N A469B
		Break or short in circuit	Perform circuit continuity check and repair/replace wiring as applicable in accordance with AC43.13-1B, Chapter 11, Section 1.
		Blown fuse (POST MOD 07-1156 or 07-1736) or popped circuit breaker (POST MOD 07-3274).	Determine cause.

Table 4 Troubleshooting Guide

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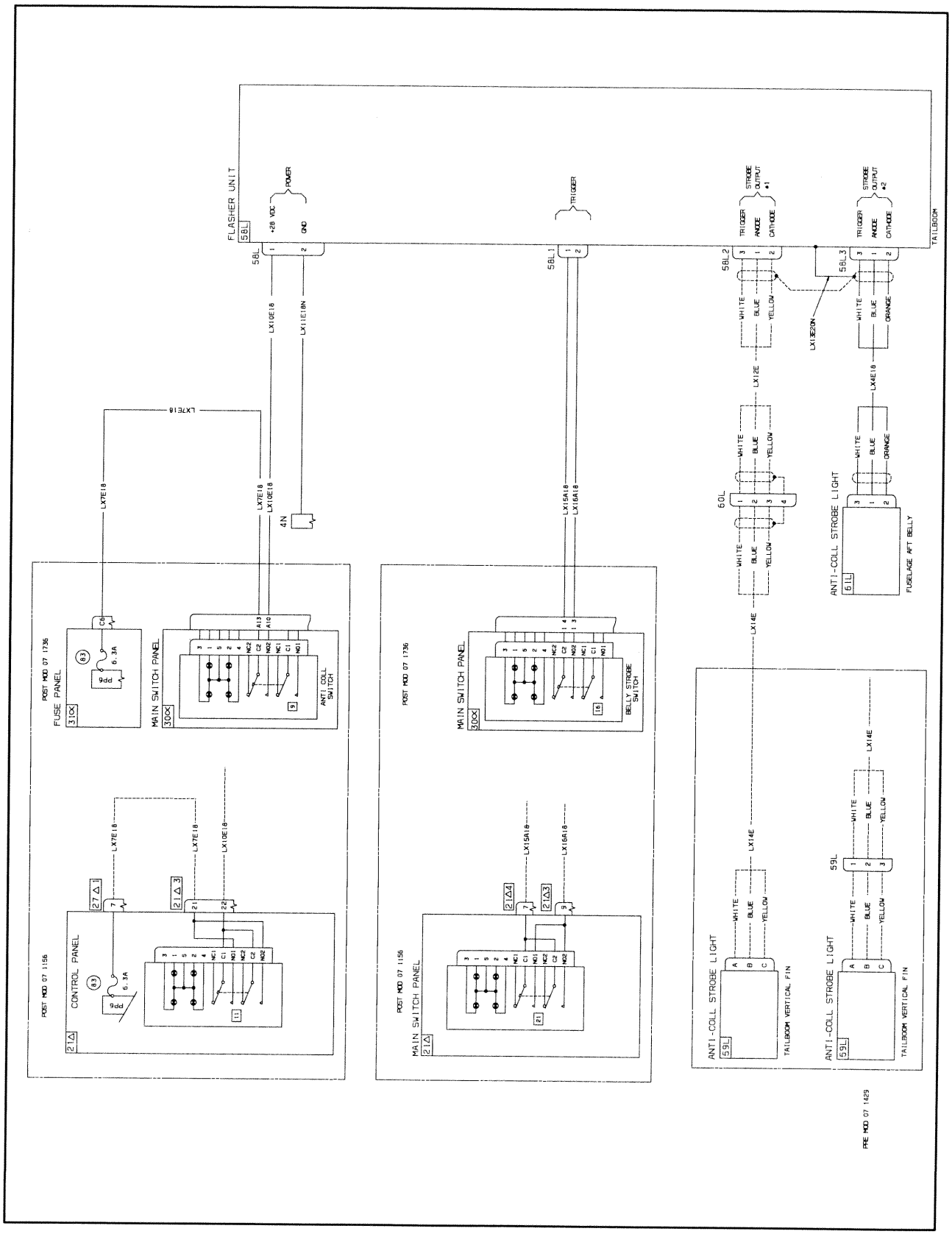

Figure 6 Wiring Diagram (Sheet 1 of 2)

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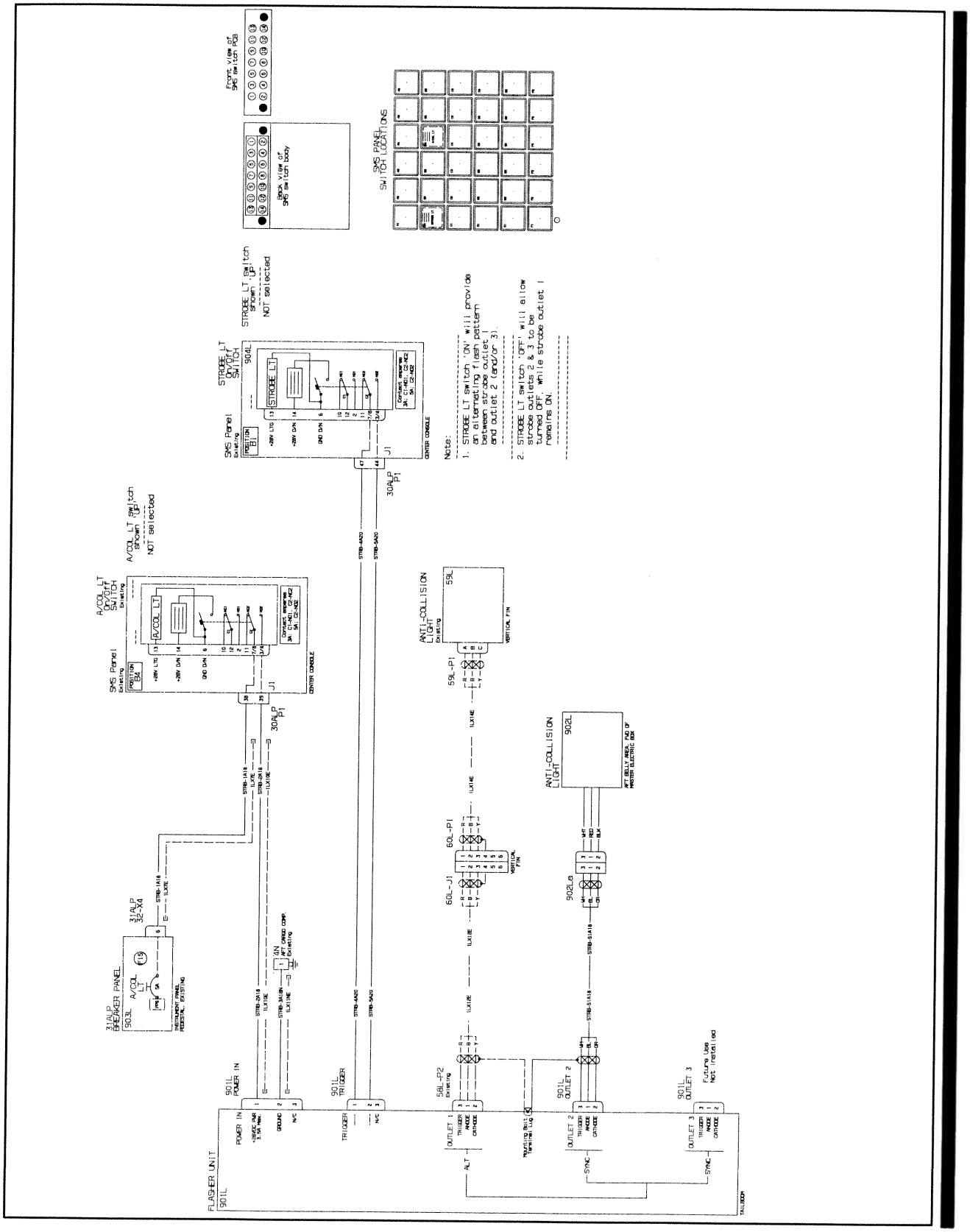

Figure 7 Wiring Diagram (Sheet 2 of 2)

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7. SPECIAL TOOLING

Not applicable

8. REMOVAL AND REPLACEMENT

PRELIMINARY

- Disconnect battery

WARNING: A MINIMUM OF 15 MINUTES MUST BE OBSERVED FROM THE TIME OF DISCONNECTING POWER FROM THE ANTI-COLLISION LIGHT CIRCUITRY UNTIL SAFE HANDLING OF THE CIRCUITRY CAN BE PERFORMED.

A. REMOVAL

1) FLASHER UNIT (Refer to Figure 3)

a) Remove the mounting clamp on the Lens Assembly (1) and carefully remove the Lens Assembly (1) from the adapter cup (2).

b) Carefully remove bulb (9).

2) STROBE POWER SUPPLY (Refer to Figure 4)

a) Open the AFT cargo bay door to allow access to the tail boom panel.

b) Remove the tail boom panel to allow access to strobe power supply (6).

c) Disconnect the harness from the strobe power supply (6) and safely store harness.

d) Remove the screws (3, 4 places) and washers (4, 4 places) securing the strobe power supply (5) to the support bracket (6).

REMOVAL AND REPLACEMENT (continued)

B. REPLACEMENT

1) FLASHER UNIT (Refer to Figure 3)

WARNING: DO NOT HANDLE BULB WITH BARE HANDS - USE A DRY TISSUE (NO OILY RAGS)

a) Carefully install bulb (9) into flasher.

b) Secure Lens Assembly (1) using the mounting clamp, into the adapter cup (2).

NOTE: In the event that the Lens Assembly (1) is of RED/WHITE colour, the red side must face in the forward direction of the aircraft when installed.

2) STROBE POWER SUPPLY (Refer to Figure 4)

a) Position strobe power supply (5) on support bracket (6) and secure using screws (3, 4 places), and washers (4, 4 places).

b) Torque screws in accordance with EC MTC, Volume 2, Chapter 20.02.05.404.

c. Connect harness to strobe power supply (5).

d. Re-install tail boom panel, and close AFT cargo bay door.

9. WEIGHT AND BALANCE

A. Removed Items

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg.m	lb.in
Not applicable	0.00	0.0	0.00	0.0	0.00	0.0
Total	0.00	0.0	0.00	0.0	0.00	0.0

B. Added items

DESCRIPTION	WEIGHT		ARM		MOMENT	
	kg	lbs	m	in	kg.m	lb.in
Belly-Mounted Supplemental Anti-Collision Light	0.82	1.8	4.34	171.0	3.56	307.8
Total	0.82	1.8	4.34	171.0	3.56	307.8

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10. PLACARDS AND MARKINGS

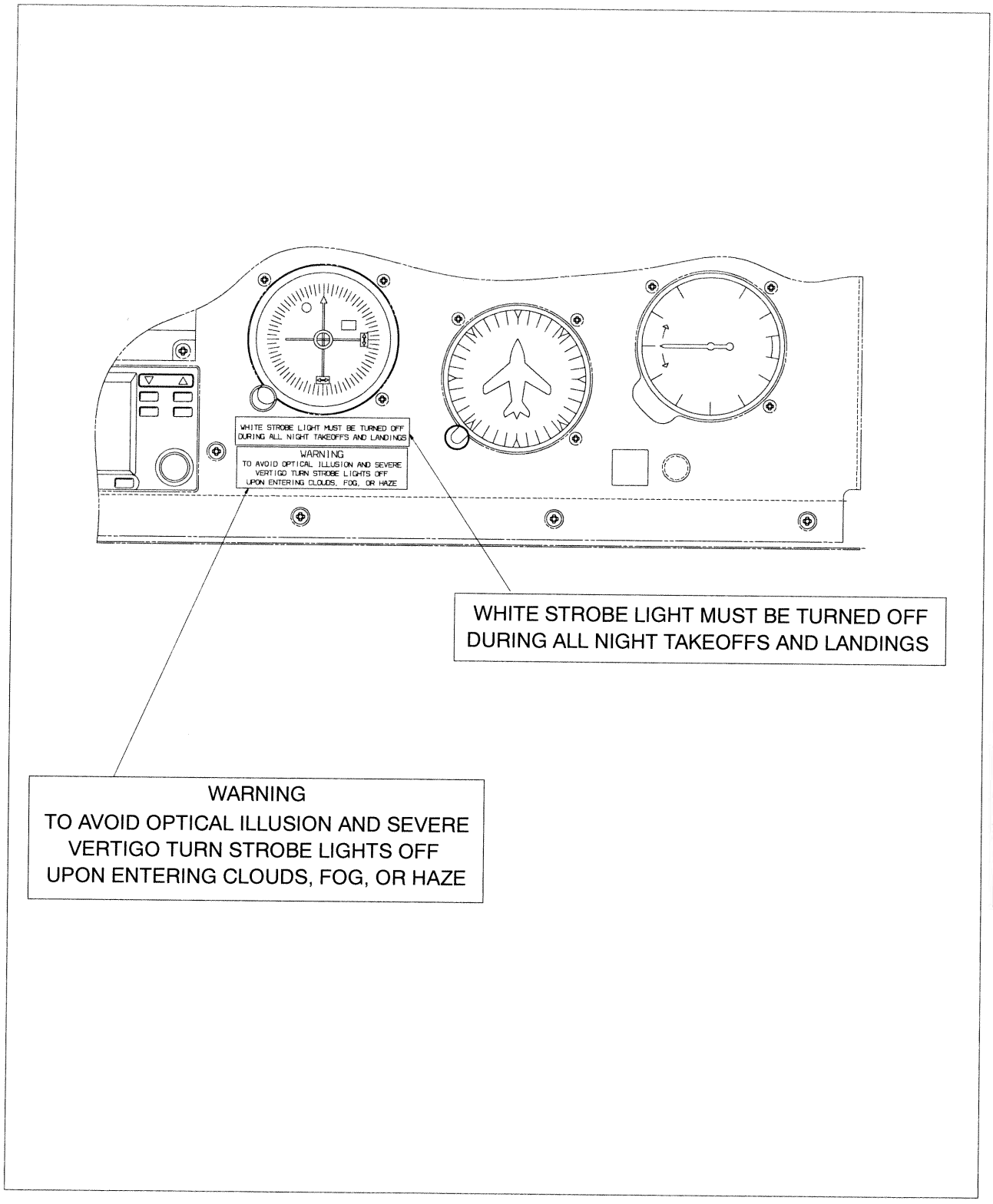

Figure 8 Placard locations on RHS of Instrument Panel

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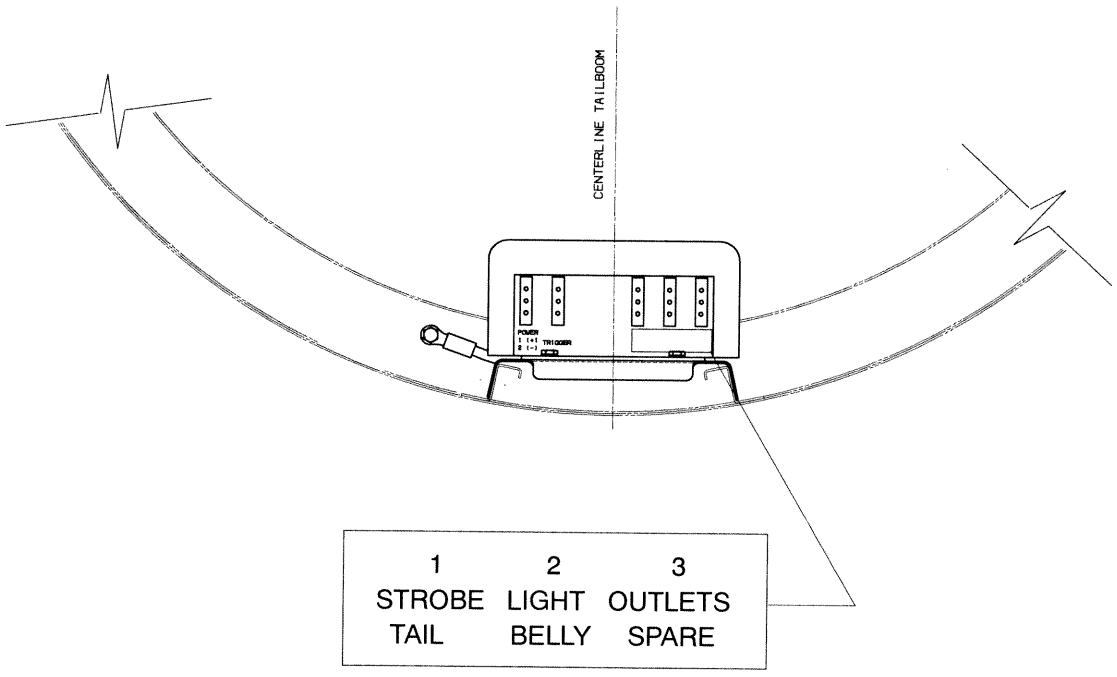
PLACARDS AND MARKINGS (continued)

VIEW LOOKING AFT
-01 INSTALLATION SHOWN



1	2	3
STROBE	LIGHT	OUTLETS
TAIL	BELLY	SPARE

Figure 9 Marking location on Strobe Light Power Supply

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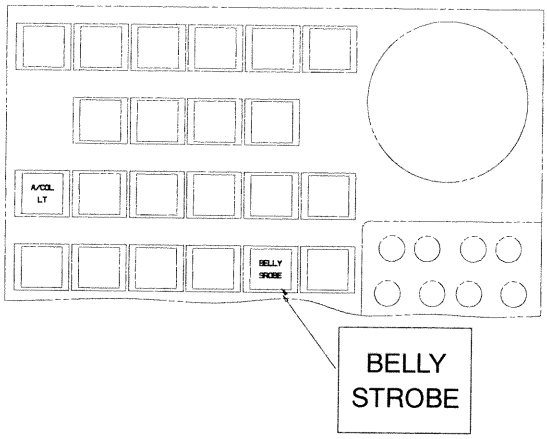
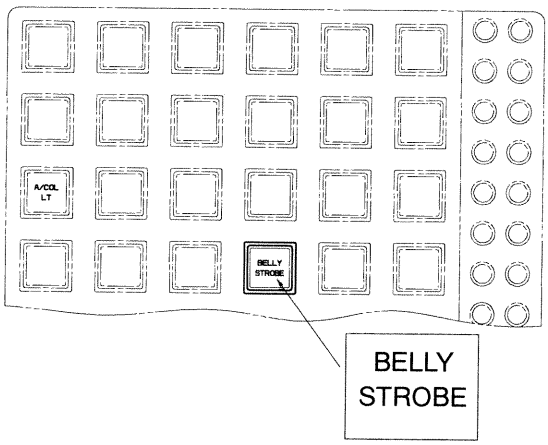
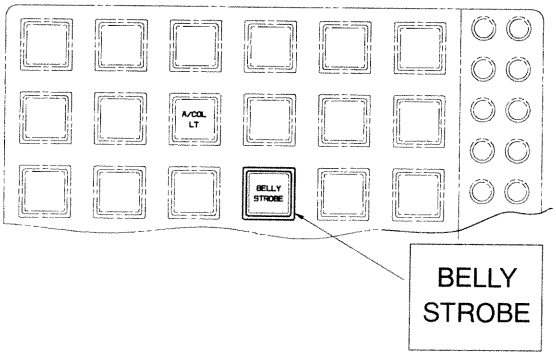
PLACARDS AND MARKINGS (continued)



MAIN SWITCH PANEL
PRE MOD 07-1156, 1736 and 3274



MAIN SWITCH PANEL
POST MOD 07-1156 and PRE MOD 07-1736



MAIN SWITCH PANEL
POST MOD 07-1736 and PRE MOD 07-3274

Figure 10 Marking locations on Switch Panels

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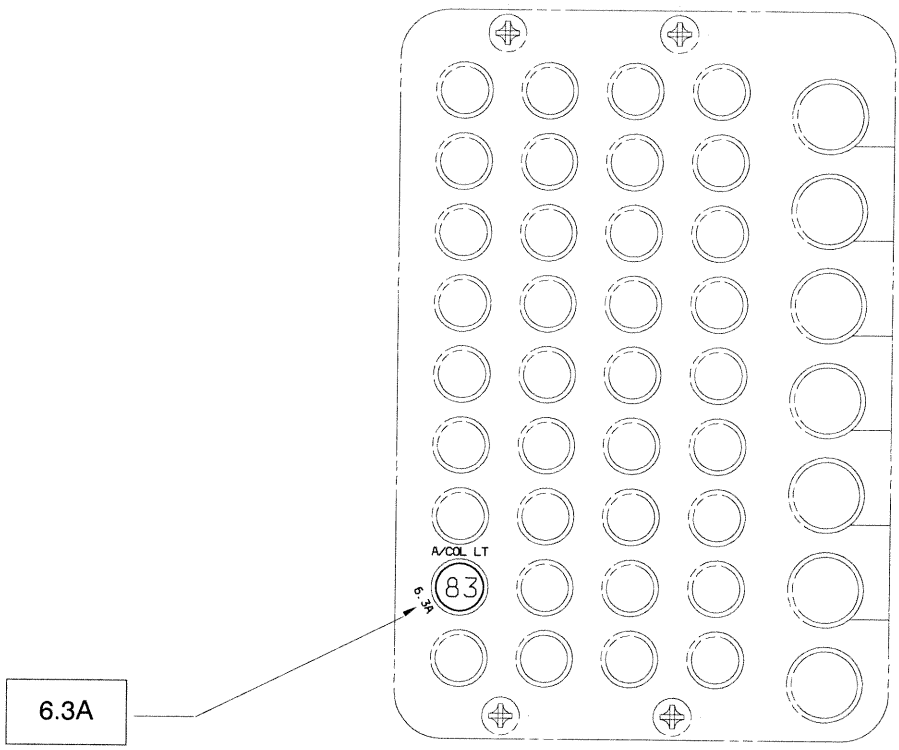
PLACARDS AND MARKINGS (continued)



FUSE PANEL
POST MOD 07-1156 and 07-1736

Figure 11 Marking location on Fuse Panel

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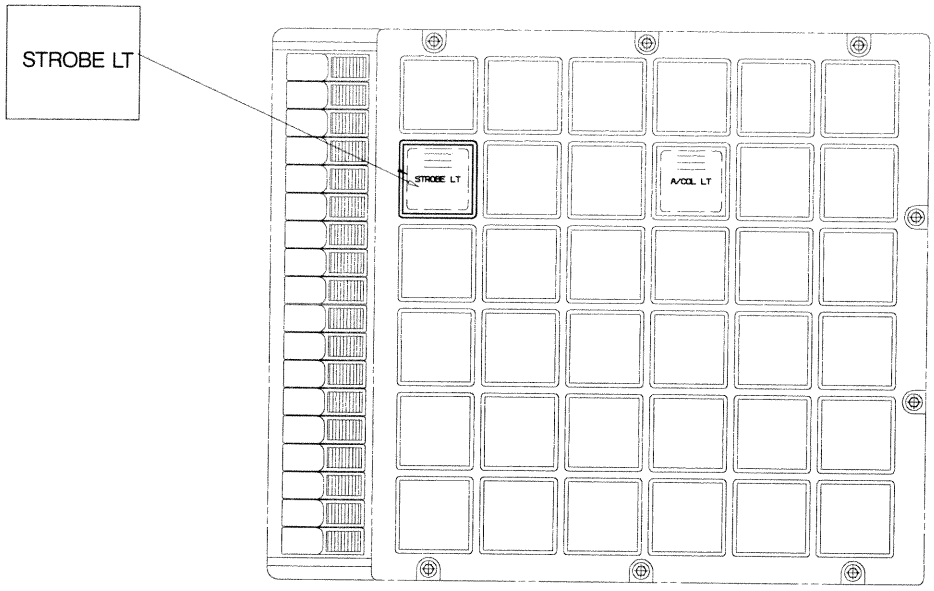
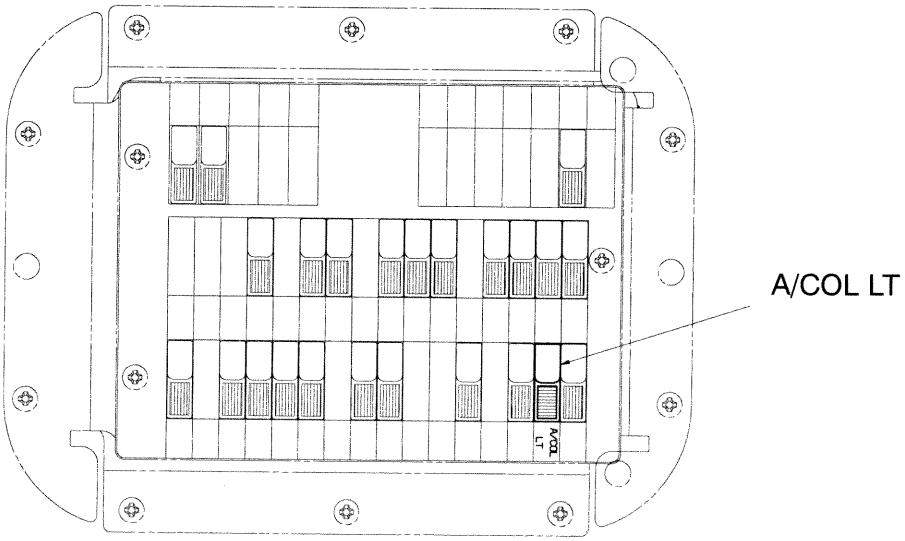
PLACARDS AND MARKINGS (continued)



MAIN SWITCH PANEL
POST MOD 07-3274



MAIN CIRCUIT BREAKER PANEL

Figure 12 Switch Panel - POST MOD 07-3274/Main Circuit Breaker Panel

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