



COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

CONTROL STAND PANEL LIGHTS SWITCH MODULE ASSEMBLY

**PART NUMBER
65C25449-3**

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33-11-01

Page 1
Jul 01/2009



COMPONENT MAINTENANCE MANUAL

Revision No. 6
Jul 01/2009

To: All holders of CONTROL STAND PANEL LIGHTS SWITCH MODULE ASSEMBLY 33-11-01.

Attached is the current revision to this COMPONENT MAINTENANCE MANUAL

The COMPONENT MAINTENANCE MANUAL is furnished either as a printed manual, on microfilm, or digital products, or any combination of the three. This revision replaces all previous microfilm cartridges or digital products. All microfilm and digital products are reissued with all obsolete data deleted and all updated pages added.

For printed manuals, changes are indicated on the List of Effective Pages (LEP). The pages which are revised will be identified on the LEP by an R (Revised), A (Added), O (Overflow, i.e. changes to the document structure and/or page layout), or D (Deleted). Each page in the LEP is identified by Chapter-Section-Subject number, page number and page date.

Pages replaced or made obsolete by this revision should be removed and destroyed.

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33-11-01
TRANSMITTAL LETTER
Page 1
Jul 01/2009



COMPONENT MAINTENANCE MANUAL

Location of Change

33-11-01

ILLUSTRATED PARTS LIST

Description of Change

Changed the data in the REFERENCE DESIGNATOR INDEX list.

Changed the data in the NUMERICAL INDEX list.

Changed the illustrated parts list per the latest source information.

33-11-01

HIGHLIGHTS

Page 1

Jul 01/2009



COMPONENT MAINTENANCE MANUAL

Subject/Page	Date	Subject/Page	Date	Subject/Page	Date
TITLE PAGE		33-11-01 CLEANING			
O 1	Jul 01/2009	401	Nov 01/2006		
2	BLANK	402	BLANK		
33-11-01 TRANSMITTAL LETTER		33-11-01 CHECK			
O 1	Jul 01/2009	501	Nov 01/2006		
2	BLANK	502	BLANK		
33-11-01 HIGHLIGHTS		33-11-01 REPAIR - GENERAL			
O 1	Jul 01/2009	601	Nov 01/2006		
2	BLANK	602	BLANK		
33-11-01 EFFECTIVE PAGES		33-11-01 ASSEMBLY			
1	Jul 01/2009	701	Nov 01/2006		
2	BLANK	702	BLANK		
33-11-01 CONTENTS		33-11-01 FITS AND CLEARANCES			
1	Nov 01/2006	801	Nov 01/2006		
2	BLANK	802	BLANK		
33-11-01 TR AND SB RECORD		33-11-01 SPECIAL TOOLS, FIXTURES, AND EQUIPMENT			
1	Nov 01/2006	901	Nov 01/2006		
2	BLANK	902	BLANK		
33-11-01 REVISION RECORD		33-11-01 ILLUSTRATED PARTS LIST			
1	Nov 01/2006	1001	Nov 01/2008		
2	Nov 01/2006	1002	Nov 01/2006		
33-11-01 RECORD OF TEMPORARY REVISIONS		R 1003	Jul 01/2009		
1	Nov 01/2006	R 1004	Jul 01/2009		
2	Nov 01/2006	O 1005	Jul 01/2009		
33-11-01 INTRODUCTION		O 1006	Jul 01/2009		
1	Mar 01/2009	O 1007	Jul 01/2009		
2	BLANK	O 1008	Jul 01/2009		
33-11-01 DESCRIPTION AND OPERATION		R 1009	Jul 01/2009		
1	Nov 01/2006	R 1010	Jul 01/2009		
2	BLANK				
33-11-01 TESTING AND FAULT ISOLATION					
101	Jul 01/2007				
102	Mar 01/2007				
103	Nov 01/2006				
104	Nov 01/2006				
33-11-01 DISASSEMBLY					
301	Nov 01/2006				
302	BLANK				

A = Added, R = Revised, D = Deleted, O = Overflow

33-11-01

EFFECTIVE PAGES

Page 1

Jul 01/2009

**COMPONENT MAINTENANCE MANUAL****TABLE OF CONTENTS**

<u>Paragraph Title</u>		<u>Page</u>
CONTROL STAND PANEL LIGHTS SWITCH MODULE ASSEMBLY - DESCRIPTION AND OPERATION		1
TESTING AND FAULT ISOLATION		101
DISASSEMBLY	(Not Applicable)	
CLEANING	(Not Applicable)	
CHECK	(Not Applicable)	
REPAIR	(Not Applicable)	
ASSEMBLY	(Not Applicable)	
FITS AND CLEARANCES	(Not Applicable)	
SPECIAL TOOLS, FIXTURES, AND EQUIPMENT		901
ILLUSTRATED PARTS LIST		1001

33-11-01

CONTENTS

Page 1

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL

33-11-01

TR AND SB RECORD
Page 1
Nov 01/2006



COMPONENT MAINTENANCE MANUAL

All revisions to this manual will be accompanied by transmittal sheet bearing the revision number. Enter the revision number in numerical order, together with the revision date, the date filed and the initials of the person filing.

Revision		Filed		Revision		Filed	
Number	Date	Date	Initials	Number	Date	Date	Initials

33-11-01

REVISION RECORD

Page 1

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

All temporary revisions to this manual will be accompanied by a cover sheet bearing the temporary revision number. Enter the temporary revision number in numerical order, together with the temporary revision date, the date the temporary revision is inserted and the initials of the person filing. When the temporary revision is incorporated or cancelled, and the pages are removed, enter the date the pages are removed and the initials of the person who removed the temporary revision.

Temporary Revision		Inserted		Removed		Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials	Date	Initials	Number	Date	Date	Initials



COMPONENT MAINTENANCE MANUAL

Temporary Revision		Inserted		Removed	
Number	Date	Date	Initials	Date	Initials

Temporary Revision		Inserted		Removed	
Date	Initials	Number	Date	Date	Initials

33-11-01

RECORD OF TEMPORARY REVISION

Page 2

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

INTRODUCTION

1. General

- A. The instructions in this manual supply the data necessary to do the maintenance functions together with the test, fault isolation, repair, and replacement of the defective parts.
- B. This manual is divided into different parts:
 - (1) Title Page
 - (2) Transmittal Letter
 - (3) Highlights
 - (4) List of Effective Pages
 - (5) Table of Contents
 - (6) Temporary Revision & Service Bulletin Record
 - (7) Record of Revisions
 - (8) Record of Temporary Revisions
 - (9) Introduction
 - (10) Procedures & IPL Sections
- C. Refer to the Table of Contents for the page location of the applicable procedures.
- D. All dimensions, measures, quantities and weights included are in English units. When metric equivalents are given they will be in the parentheses that follow the English units.
- E. The introduction to the Illustrated Parts List (IPL) shows how the IPL data is used.
- F. Design changes, optional parts, configuration differences and Service Bulletin modifications may cause different part numbers. These part numbers are identified in the IPL with an alphabetical letter which is added to the end of the basic item number. This new item number is referred to as an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless shown differently.
- G. Verification:

33-11-01

INTRODUCTION

Page 1

Mar 01/2009



COMPONENT MAINTENANCE MANUAL

CONTROL STAND PANEL LIGHTS SWITCH MODULE ASSEMBLY - DESCRIPTION AND OPERATION

1. Description

- A. The control stand panel light switch module assembly contains variable transformers, indicator light and wire bundle. A wire bundle assembly interconnects the indicator light and variable transformers with the connectors.

33-11-01

DESCRIPTION AND OPERATION

Page 1

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

TESTING AND FAULT ISOLATION

1. Test Equipment

NOTE: Equivalent substitutes may be used.

A. Power Supply

- (1) 28 VAC power supply, COM-6097
- (2) 28 \pm 1v dc, 5A
- (3) 5.0 Vac power supply, STD-4548

B. Test Connector

- (1) BACC45FT14A7S (Connects with D3060)
- (2) BACC45FT18A14S (Connects with D2798)

C. Multimeter: model 260 simpson voltmeter, STD-3946

D. Lamp: Lamp load with rating of 28v ac, 0.6A

2. Functional Test

A. Connect the module assembly with the test connectors.

B. Do the functional test as specified in TESTING AND FAULT ISOLATION, Table 101. Refer to TESTING AND FAULT ISOLATION, Figure 101, (Sheet 1) for the location of the components and TESTING AND FAULT ISOLATION, Figure 102, (Sheet 1) for the schematic diagram of the module.

NOTE: Continuity is defined as the resistance measurement of less than 3 ohms and Open as more than 100K ohms.

Table 101: Functional Test

Test Step	Procedure	Switch Position	Required Result	Component Tested
1	Measure the resistance between pins: D2798-9 and D2798-10 D2798-9 and D2798-13	Push S81 to LOCK	Continuity Open	S81
2				S81
3	Measure the resistance between pins: D2798-9 and D2798-10 D2798-9 and D2798-13	Push S81 to UNLOCK	Open Continuity	S81
4				S81
5				S81
6	Apply 28 \pm 1v dc between D2798-12 (+) and D2798-8 (-).		S81 indicator illuminates	S81
7	Remove 28v dc from the module.			
	Connect the lamp load between D2798-6 and ground.			

33-11-01

TESTING AND FAULT ISOLATION

Page 101

Jul 01/2007



COMPONENT MAINTENANCE MANUAL

Table 101: Functional Test (Continued)

Test Step	Procedure	Switch Position	Required Result	Component Tested
8	Apply 28v ac, 400Hz between D2798-7 (+) and D2798-5 (-).			
9	Set T27 to the fully CW position.			
10	Measure ac voltage between D2798-6 (+) and D2798-5 (-).		27 ± 1v ac	T27
11	Slowly rotate T27 to the fully CCW position while monitoring ac voltage level between D2798-6 (+) and D2798-5 (-).		Voltage level reduces to less than 1v ac as T27 rotates	T27
12	Remove 28v ac and the lamp load from the module.			
13	Connect the lamp load between D3060-3 and ground.			
14	Apply 28v ac, 400Hz between D2798-4 (+) and D2798-11 (-).			
15	Set T39 to the fully CW position.			
16	Measure ac voltage between D3060-3 (+) and D2798-11 (-).		27 ± 1v ac	T39
17	Slowly rotate T39 to the fully CCW position while monitoring ac voltage level between D3060-3 (+) and D2798-11 (-).		Voltage level reduces to less than 1v ac as T39 rotates	T39
18	Remove 28v ac and the lamp load from the module.			
19	Measure the resistance between pins: D2798-1 and D3060-2 D2798-14 and D3060-1		Continuity Continuity	Wiring Wiring
20	Apply 5v ac, 400Hz between D2798-2 (+) and D2798-3 (-).			
21	Monitor the lightplate light.		Illuminates	Lightplate
22	Measure the resistance between D3060-4 and chassis.		Continuity	Wiring
	End of Test			

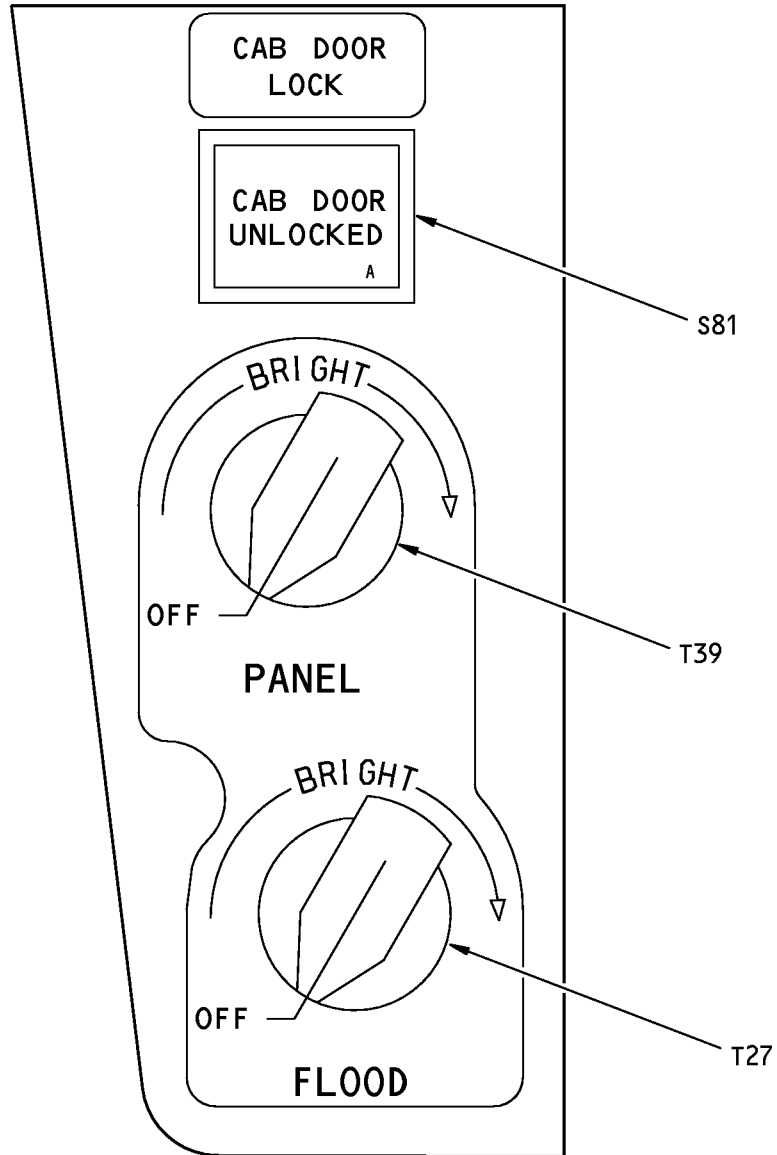
33-11-01

TESTING AND FAULT ISOLATION

Page 102

Mar 01/2007

COMPONENT MAINTENANCE MANUAL



65C25449-3 Component Location
Figure 101

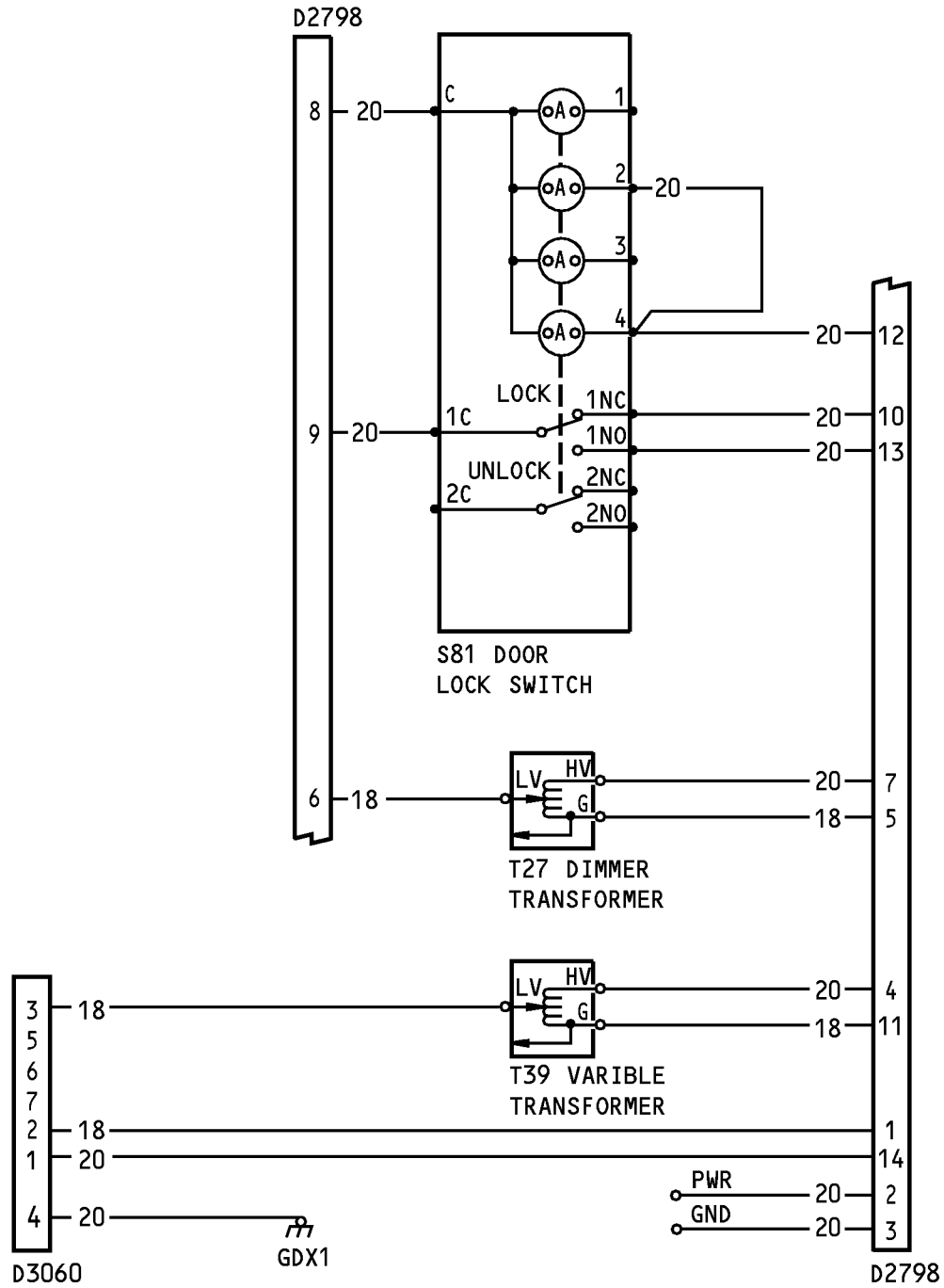
33-11-01

TESTING AND FAULT ISOLATION

Page 103

Nov 01/2006

COMPONENT MAINTENANCE MANUAL



65C25449-3

NOTE: ALL WIRES BMS 13-16 TYPE I,
CLASS 1

65C25449-3 Schematic Diagram
Figure 102

33-11-01

TESTING AND FAULT ISOLATION

Page 104

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

DISASSEMBLY

(NOT APPLICABLE)

33-11-01

DISASSEMBLY

Page 301

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

CLEANING

(NOT APPLICABLE)

33-11-01

CLEANING

Page 401

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

CHECK

(NOT APPLICABLE)

33-11-01

CHECK
Page 501
Nov 01/2006



COMPONENT MAINTENANCE MANUAL

REPAIR

(NOT APPLICABLE)

33-11-01

REPAIR - GENERAL

Page 601

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

ASSEMBLY

(NOT APPLICABLE)

33-11-01

ASSEMBLY

Page 701

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

FITS AND CLEARANCES

(NOT APPLICABLE)

33-11-01

FITS AND CLEARANCES

Page 801

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

1. General

A. This section lists the special tools, fixtures, and equipment necessary for maintenance.

NOTE: Equivalent substitutes may be used.

Commercial Tools

Reference	Description	Part Number	Supplier
COM-6097	Power Supply, AC 28V +/-1V, 400 Hz	810P	16067

Tool Supplier Information

CAGE Code	Supplier Name	Supplier Address
16067	CALIFORNIA INSTRUMENTS	9025 BALBOA AVENUE SAN DIEGO, CA 92123-1509 Telephone: (619) 279-8620 Facsimile: (619) 279-8139

33-11-01

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

Page 901

Nov 01/2006



COMPONENT MAINTENANCE MANUAL

ILLUSTRATED PARTS LIST

1. Introduction

- A. The Illustrated Parts List (IPL) contains an illustration and a list of component parts you can repair or replace. The Illustrated Parts Catalog (IPC) shows how to use the Boeing part number system.
- B. This shows how parts are related: The relation of each item to its next higher assembly (NHA) is shown in the NOMENCLATURE column. Use the indenture system that follows:

1	2	3	4	5	6	7
.	Assembly					
.	Attaching parts for assembly					
.	.	Detail parts for assembly				
.	.	Subassembly				
.	.	Attaching parts for subassembly				
.	.	.	Detail parts for subassembly			
.	.	.	Sub-subassembly			
.	.	.	Attaching parts for subassembly			
.	.	.	.	Details parts for sub-subassembly		
						Detail Installation Parts (Included only if installation parts may be sent to the shop as part of assembly)

- C. Each top assembly is given one use code letter (A, B, C, etc.) in the USAGE CODE column. All subsequent component parts in the list can have one or more of the use code letters to show effectivity to top assemblies. A component part without a use code applies to all top assemblies.
- D. An alphabetical letter is added after the item number for optional parts, parts changed by a Service Bulletin, configuration differences (except left-handed and right-handed parts), last engineering releases, and parts added between item numbers in a sequence. The alphabetical letter will not be shown on the illustration for equivalent parts of the same part number.
- E. Color-coded parts are identified with a single digit alpha following the dash number or with "SP" suffix. If the "SP" suffix is used, it represents consolidation of all color codes applicable for a given usage which are not separately listed. Orders for color-coded parts should include the registry number of the airplane for which the parts are ordered.
- F. If a part number is 15 characters long but will not fit in the part number column, the part number will be displayed with a "~" at the end of the line and will be continued on the next line. The "~" denotes that the part number continues on the next line.
- G. Parts changed by a Service Bulletin are shown by PRE SB XXXX and POST SB XXXX added to the NOMENCLATURE column.
- (1) When a new top assembly is added by a Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the top assembly level only. The configuration differences at the detail part level are shown by use code letters.
- (2) When the top assembly part number is not changed by the Service Bulletin, PRE SB XXXX and POST SB XXXX will be added at the detail level.
- H. Interchangeable Parts

33-11-01

ILLUSTRATED PARTS LIST

Page 1001

Nov 01/2008



COMPONENT MAINTENANCE MANUAL

Optional (OPT)	The part is optional to and interchangeable with other parts that have the same item number.
Replaces, Replaced by and not interchangeable with (REPLACES, REPLACED BY AND NOT INTCHG/W)	The part replaces and is not interchangeable with the initial part.
Replaces, Replaced by (REPLACES, REPLACED BY)	The part replaces and is interchangeable with, or is an alternative to, the initial part.

VENDOR CODES

Code	Name
12324	DUPREE INC STAKE FASTENER CO 14395 RAMONA PO BOX 1797 CHINO, CALIFORNIA 91708 FORMERLY DUPREE MFG CO IN SOUTH EL MONTE, CALIFORNIA FORMERLY STAKE FASTENER CO DIV OF DUPREE INC
66071	
81590	KORRY ELECTRONIC INC SUB OF CRITON CORP 901 DEXTER AVENUE NORTH SEATTLE, WASHINGTON 98109-3515 FORMERLY KORRY, BORIS VB0021 AND KORRY MFG CO
95266	O E C O CORP 4607 SE INTERNATIONAL WAY MILWAUKIE, OREGON 97222 FORMERLY OSBOURNE ELECTRIC IN PORTLAND, OREGON

33-11-01

ILLUSTRATED PARTS LIST

Page 1002

Nov 01/2006

**COMPONENT MAINTENANCE MANUAL****REFERENCE DESIGNATOR INDEX**

REFERENCE DESIGNATOR	PART NUMBER	FIG-ITEM
D2798	BACC45FN18A14P	1-150
D3060	BACC45FN14A7P	1-145

33-11-01

ILLUSTRATED PARTS LIST

Page 1003

Jul 01/2009



COMPONENT MAINTENANCE MANUAL

NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
10-61800-455		1	20	1
300-700-1049-001		1	5	1
533-043-01		1	15	2
6430A		1	30	2
65C25447-2		1	110	1
65C25447-3		1	125	1
65C25447-5		1	105	1
65C25447-6		1	50	1
65C25447-7		1	130	1
65C25449-2		1	140	1
65C25449-3		1	1A	RF
69-60085-1		1	25	2
AN960D416		1	90	1
AN960KD4L		1	40	4
AN960PD4L		1	22	2
BAC27DCT0335		1	140	1
BAC27DCT0344		1	135	1
BACC45FN14A7P		1	145	1
BACC45FN18A14P		1	150	1
BACN10JC04		1	45	4
BACN10JC3		1	95	1
BACN10KJ3		1	65	4
BACR15BA3D		1	55	8
BACR15BA5AD		1	70	7
BACR15DR3AC		1	55A	8
BACS21DD1G		1	115	4
BCREF0064		1	5	1
MS20341-46		1	24	2
MS35338-40		1	23	2
MS35489-4		1	80	1
MS35650-305T		1	100	1
NAS42DD5-13		1	75	7
NAS514P1032-10P		1	85	1
NAS600-5P		1	35	4

33-11-01

ILLUSTRATED PARTS LIST

Page 1004

Jul 01/2009

**COMPONENT MAINTENANCE MANUAL**

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
NAS623-3-1		1	60	4
SF6E2CBB3D		1	120	2
SFSW2C5DL16GY		1	10	2

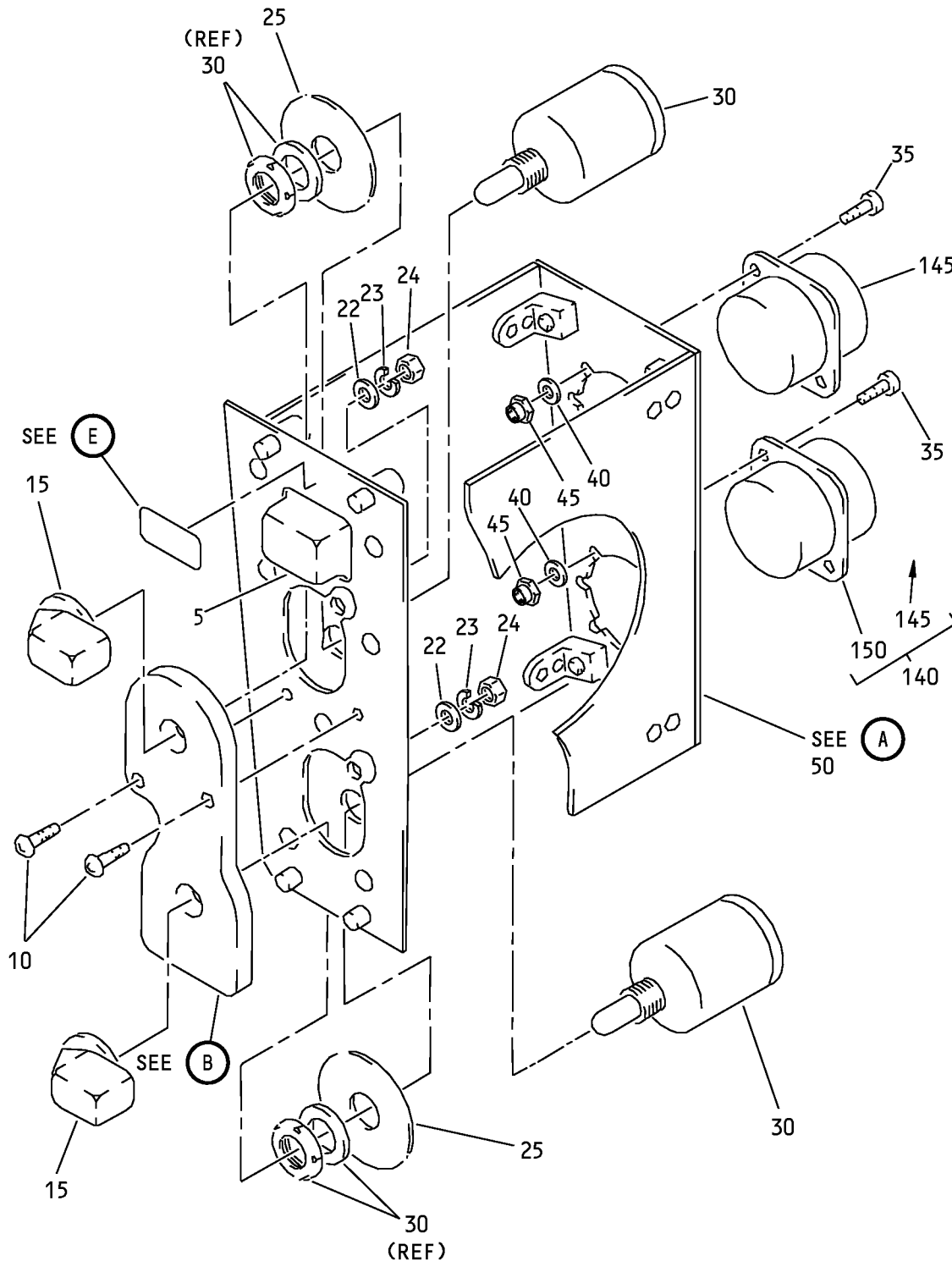
33-11-01

ILLUSTRATED PARTS LIST

Page 1005

Jul 01/2009

COMPONENT MAINTENANCE MANUAL



Control Stand Panel Lights Switch Module Assembly
IPL Figure 1 (Sheet 1 of 3)

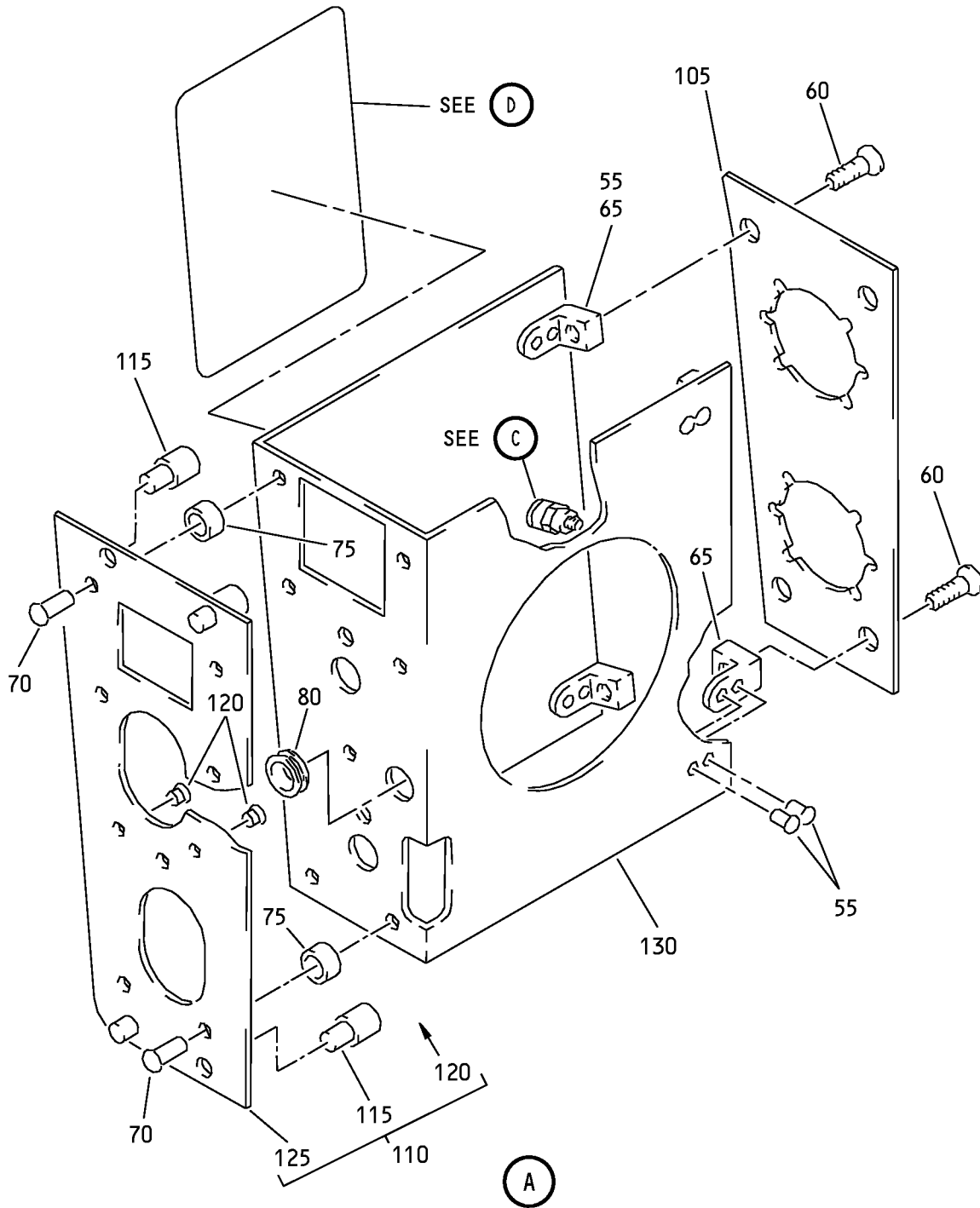
33-11-01

ILLUSTRATED PARTS LIST

Page 1006

Jul 01/2009

COMPONENT MAINTENANCE MANUAL



Control Stand Panel Lights Switch Module Assembly
IPL Figure 1 (Sheet 2 of 3)

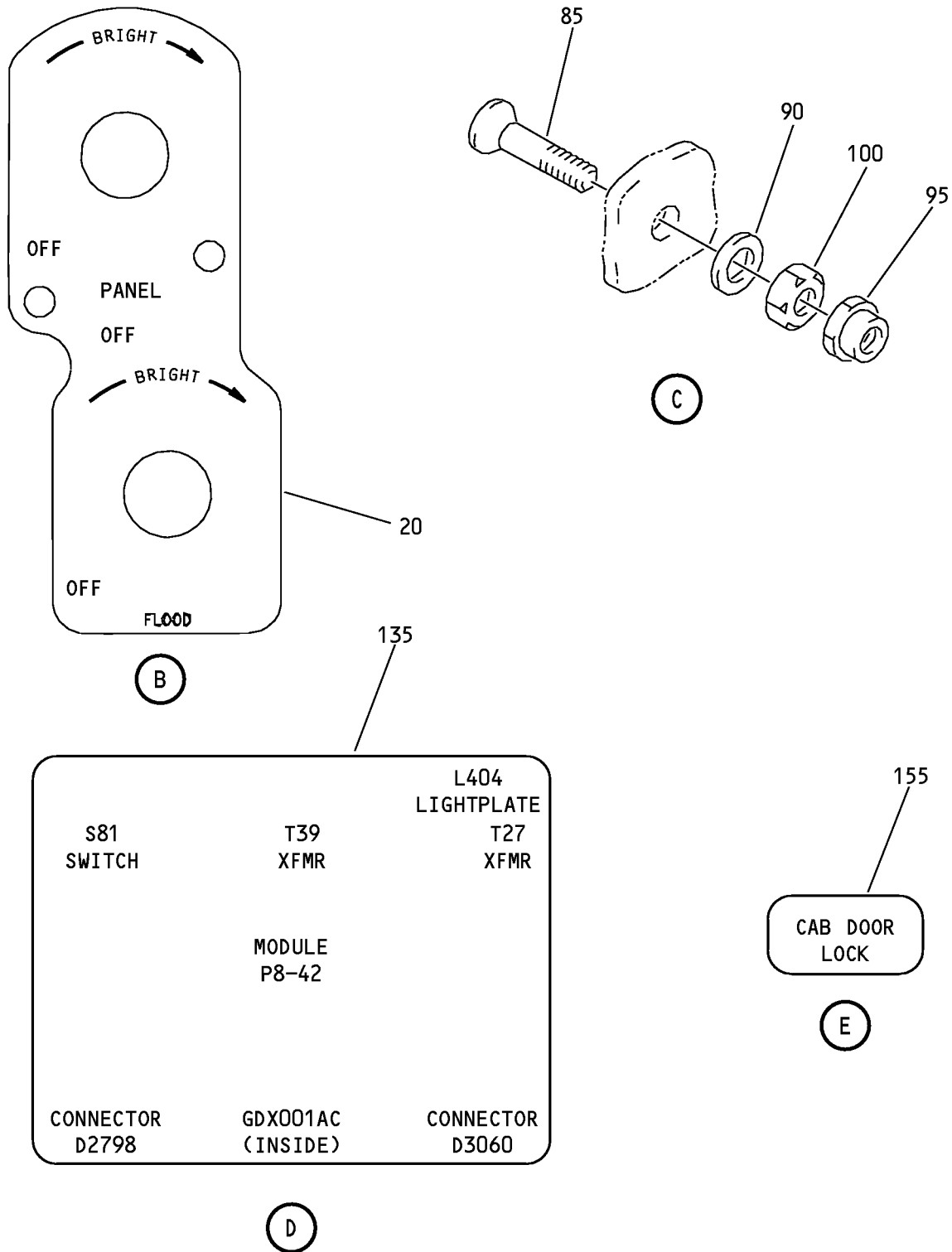
33-11-01

ILLUSTRATED PARTS LIST

Page 1007

Jul 01/2009

COMPONENT MAINTENANCE MANUAL



Control Stand Panel Lights Switch Module Assembly
IPL Figure 1 (Sheet 3 of 3)

33-11-01

ILLUSTRATED PARTS LIST

Page 1008

Jul 01/2009



COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
-1A	65C25449-3										RF
5	BCREF0064										1
10	SFSW2C5DL16GY										2
15	533-043-01										2
20	10-61800-455										1
22	AN960PD4L										2
23	MS35338-40										2
24	MS20341-46										2
25	69-60085-1										2
30	6430A										2
35	NAS600-5P										4
40	AN960KD4L										4
45	BACN10JC04										4
50	65C25447-6										1
55	BACR15BA3D										8
-55A	BACR15DR3AC										8
60	NAS623-3-1										4
65	BACN10KJ3										4
70	BACR15BA5AD										7
75	NAS42DD5-13										7
80	MS35489-4										1
85	NAS514P1032-10P										1
90	AN960D416										1

-Item not Illustrated

33-11-01

ILLUSTRATED PARTS LIST

Page 1009

Jul 01/2009



COMPONENT MAINTENANCE MANUAL

FIG/ ITEM	PART NUMBER	AIRLINE PART NUMBER	NOMENCLATURE							USAGE CODE	UNITS PER ASSY
			1	2	3	4	5	6	7		
1-											
95	BACN10JC3		.	.							1
100	MS35650-305T		.	.							1
105	65C25447-5		.	.							1
110	65C25447-2		.	.							1
115	BACS21DD1G		.	.	.						4
120	SF6E2CBB3D		.	.	.						2
125	65C25447-3		.	.	.						1
130	65C25447-7		.	.							1
135	BAC27DCT0344		.	.							1
-140	65C25449-2		.								1
145	BACC45FN14A7P		.	.							1
150	BACC45FN18A14P		.	.							1
140	BAC27DCT0335		.								1

-Item not Illustrated

33-11-01

ILLUSTRATED PARTS LIST

Page 1010

Jul 01/2009