



**COMPONENT MAINTENANCE  
MANUAL  
WITH  
ILLUSTRATED PARTS LIST**

**BROADCAST RADIO CONTROL MODULE  
ASSEMBLY**

**PART NUMBER  
69-76497-1**

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## COMPONENT MAINTENANCE MANUAL

Revision No. 8  
Jul 01/2009

To: All holders of BROADCAST RADIO CONTROL MODULE ASSEMBLY 23-50-03.

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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## COMPONENT MAINTENANCE MANUAL

Location of Change

Description of Change

NO HIGHLIGHTS

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HIGHLIGHTS

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2	BLANK				
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302	BLANK				
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A = Added, R = Revised, D = Deleted, O = Overflow

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TEMPORARY REVISION AND SERVICE BULLETIN RECORD

<b>BOEING SERVICE BULLETIN</b>	<b>BOEING TEMPORARY REVISION</b>	<b>OTHER DIRECTIVE</b>	<b>DATE OF INCORPORATION INTO MANUAL</b>

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TR AND SB RECORD

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# 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



## COMPONENT MAINTENANCE MANUAL

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

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### 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

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## 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:

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INTRODUCTION

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## COMPONENT MAINTENANCE MANUAL

### BROADCAST RADIO CONTROL MODULE ASSEMBLY - DESCRIPTION AND OPERATION

#### 1. Description

- A. The Broadcast Radio Control Module Assembly contains an ON-OFF switch. External connections are made through a circular connector mounted on rear bracket.

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DESCRIPTION AND OPERATION

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## COMPONENT MAINTENANCE MANUAL

### TESTING AND FAULT ISOLATION

#### 1. General

A. This procedure contains the data necessary to do a test of the broadcast radio control module assembly.

#### 2. Functional Test

**NOTE:** Use model 260 simpson voltmeter, STD-3946 and mating connector, SPL-4517, or breakout box assembly, SPL-4435 with test cable assembly, SPL-4663 for functional test.

**NOTE:** Continuity is defined as 3 ohms max, and open is defined as 900K ohms min.

A. Do the functional test as shown in TESTING AND FAULT ISOLATION, Table 101.

**Table 101:** Functional Test table

STEP NO.	PROCEDURE	REQUIRED RESULTS	SUSPECT COMPONENTS	
1	Connect the module to the test connector.			
2	Set S1 to the ON position and hold.			
3	Measure ohms between P1-3 (+) and P1-4 (-).	Open	S1, P1	
4	Release S1 to the OFF position and measure ohms between P1-3 (+) and P1-4 (-).	Continuity	S1, P1	
Measure ohms between the pins shown below:				
	(+)	(-)		
5	P1-1	P1-2	Open	L1, P1
6	P1-1	Baseplate	Continuity	L1, P1
7	P1-2	L1 Center Post	Continuity	L1, P1
8	Remove all connections.			

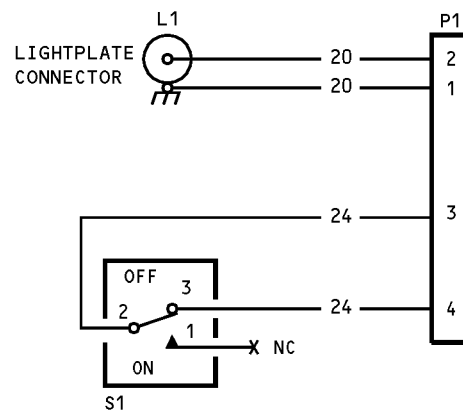
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TESTING AND FAULT ISOLATION

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69-76497-1 Broadcast Radio Control Module Assembly Schematic Diagram  
Figure 101

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TESTING AND FAULT ISOLATION

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DISASSEMBLY

**(NOT APPLICABLE)**

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DISASSEMBLY

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CLEANING

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CHECK

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REPAIR

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ASSEMBLY

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FITS AND CLEARANCES

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FITS AND CLEARANCES

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## 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.

#### Special Tools

Reference	Description	Part Number	Supplier
SPL-4435	Breakout Box Assembly (-2 is included in the A33003-359 kit)	A33003-2	81205
SPL-4517	Mating Connector	BACC45FT12-12S	81205
SPL-4663	Test Cable Assembly	A33003-9	81205

#### Tool Supplier Information

CAGE Code	Supplier Name	Supplier Address
81205	THE BOEING COMPANY	17930 INTERNATIONAL BLVD. SOUTH SEATAC, WA 98188-4321 Telephone: 206-662-6650 Facsimile: 206-662-7145

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SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

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## 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

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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

<b>Code</b>	<b>Name</b>
05617	IDD AEROSPACE CORP 18225 NORTHEAST 76TH STREET PO BOX 97056 REDMOND, WASHINGTON 98073-9756 FORMERLY FARWEST ELEC INC; FORMERLY IN BELLEVUE, WA; FORMERLY BELL IND FARWEST MFG DIV; FORMERLY BELL IND ILLUMINATED DISPLAYS DIV
11815	CHERRY AEROSPACE FASTENERS DIV OF TEXTRON 1224 EAST WARNER AVENUE PO BOX 2157 SANTA ANA, CALIFORNIA 92707-0157 FORMERLY IN LOS ANGELES, CALIF , FORMERLY CHERRY FASTENERS TOWNSEND DIV OF TEXTRON INC V71087
15653	ALCOA GLOBAL FASTENERS INC DIV KAYNAR PRODUCTS 800 S STATE COLLEGE BLVD FULLERTON, CALIFORNIA 92831-3001 FORMERLY VK6405 MICRODOT AEROSP LTD; FORMERLY KAYNAR TECH FORMERLY FAIRCHILD FASTENERS KAYNAR DIV
52828	REPUBLIC FASTENER MFG CORP 1300 RANCHO CONEJO BLVD NEWBURY PARK, CALIFORNIA 91320-1405 FORMERLY IN SYLMAR, CALIFORNIA
60119	MONADNOCK CO THE 18301 ARENTH AVENUE ROWLAND HEIGHTS, CALIFORNIA 91748-1288 FORMERLY UNITED CARR FASTENER CORP VB0051 VB0056 VB0076 FORMERLY TRW ELECTRONIC COMPONENTS CINCH-MONADNOCK DIV FORMERLY CINCH-MONADNOCK DIV OF TRW INC V76530 FORMERLY IN CITY OF INDUSTRY, CALIFORNIA

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<b>Code</b>	<b>Name</b>
72962	HARVARD INDUSTRIES INC 3 WERNER WAY SUITE 210 LEBANON, NEW JERSEY 08833 FORMERLY ESNA V7A079 FORMERLY ELASTIC STOP NUT IN UNION, NJ
80539	SPS TECHNOLOGIES INC DIV AERPSOACE - SANTA ANA 2701 SOUTH HARBOR BOULEVARD SANTA ANA, CALIFORNIA 92704-5803 FORMERLY NUTT-SHEL DIV OF SPC WESTERN CO V80539 AND STANDARD PRESSED STEEL WESTERN DIV V17279
92215	FAIRCHILD IND INC FAIRCHILD AEROSPACE FASTENER DIV 3010 W LOMITA BLVD TORRANCE, CALIFORNIA 90505-5102 FORMERLY VOI-SHAN IN CULVER CITY, CALIF

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

<b>REFERENCE DESIGNATOR</b>	<b>PART NUMBER</b>	<b>FIG-ITEM</b>
L2	800000121-1	1-35
S1	MS24524-26	1-15

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### NUMERICAL INDEX

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	UNITS PER ASSEMBLY
293162		1	70	3
66-13524-12		1	60	3
69-43873-30		1	45	1
69-76497-1		1	1A	RF
69-76497-2		1	50	1
69-76497-3		1	75	1
69-76530-1		1	30	1
69-76530-2		1	25	1
800000121-1		1	35	1
BACC45FN12-12P		1	80	1
BACN10JP06A		1	10	2
BACN10NW1		1	70	3
BACR15BA3D		1	20	2
BACR15BB3AD		1	5	4
BRM200A06L		1	10	2
K19798-04		1	70	3
MK1000-06BAC		1	10	2
MS24524-26		1	15	1
NAS1801-04-5		1	65	3
NAS1801-06-5		1	55	3
NAS514P632-6		1	40	3
NS103197-62		1	10	2
RMA4812-160-40		1	70	3
RMA9201M62		1	10	2
T8076S632		1	10	2
VN202A1-62L		1	10	2

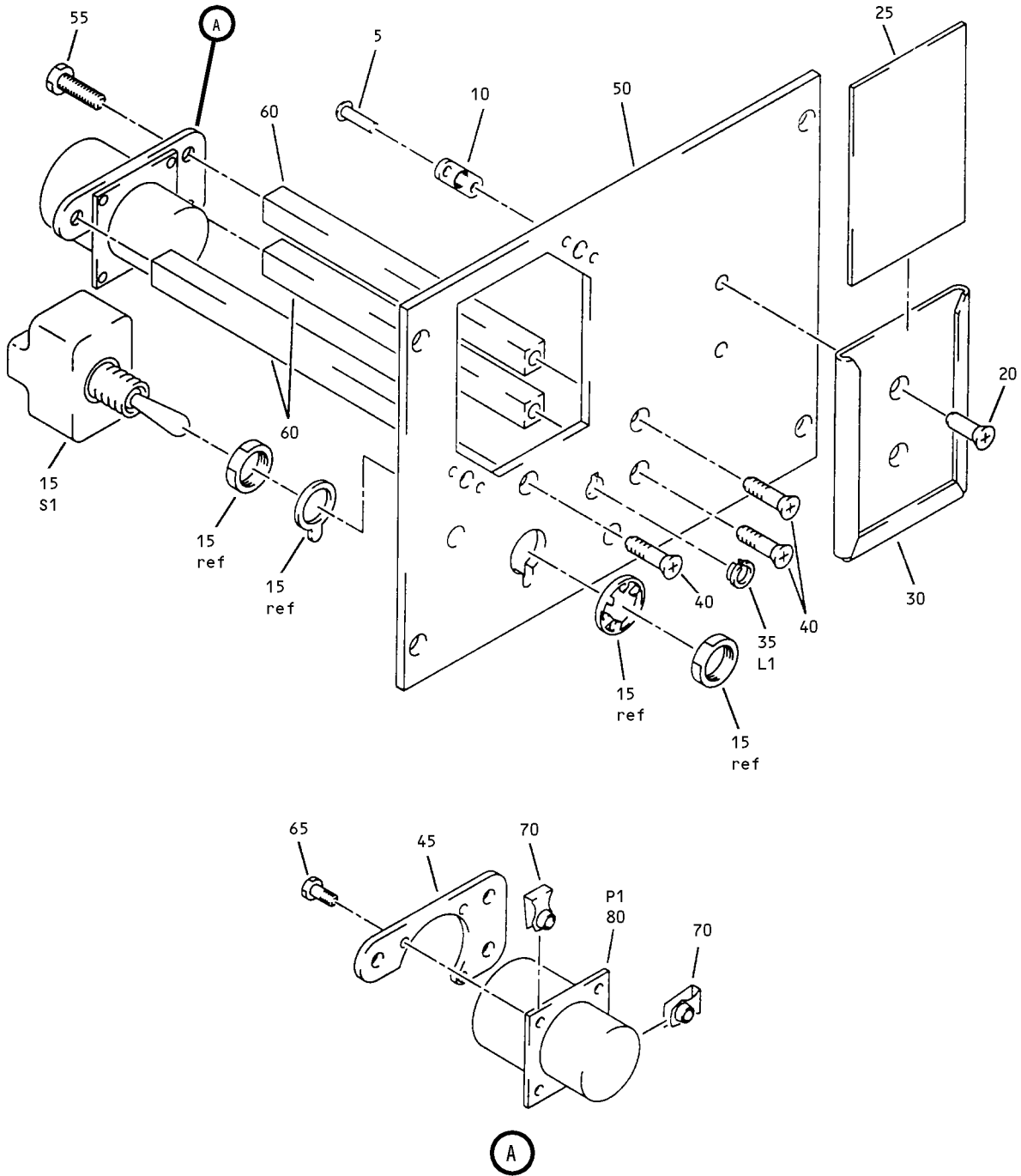
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Broadcast Radio Control Module Assembly  
IPL Figure 1

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## 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	69-76497-1										RF
5	BACR15BB3AD										4
10	BRM200A06L										2
15	MS24524-26										1
20	BACR15BA3D										2
25	69-76530-2										1
30	69-76530-1										1
35	800000121-1										1
40	NAS514P632-6										3
45	69-43873-30										1
50	69-76497-2										1
55	NAS1801-06-5										3
60	66-13524-12										3
65	NAS1801-04-5										3
70	K19798-04										3
-75	69-76497-3										1
80	BACC45FN12-12P										1

-Item not Illustrated

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