

 **BOEING**
COMPONENT
MAINTENANCE MANUAL

TO: ALL HOLDERS OF ACARS MODE CONTROL PANEL ASSEMBLY, M1976 COMPONENT
MAINTENANCE MANUAL 23-27-13

REVISION NO. 4 DATED MAR 01/95

HIGHLIGHTS

Pages which have been added or revised are outlined below together with the highlights of the revision. Remove and insert the affected pages as listed and enter Revision No. and date on the Record of Revision Sheet.

CHAPTER/SECTION

AND PAGE NO.

DESCRIPTION OF CHANGE

102	Changed the power connector test shown in Fig. 101A.
1002	Deleted the parts substitution document reference from t section.
1004,1007-1009	Added the illustrated parts list for assembly 233T3248-3
1006	Added reference designators to the illustration, Fig. 1.

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HIGHLIGHTS

01.1

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ACARS MODE CONTROL PANEL ASSEMBLY, M1976

PART NUMBERS 233T3248-1,-300

COMPONENT MAINTENANCE MANUAL
WITH
ILLUSTRATED PARTS LIST

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TITLE PAGE

Page 1

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01.1



REVISION RECORD

- Retain this record in front of manual. On receipt of revision, insert revised pages in the manual, and enter revision number, date inserted and initial.

REVISION NUMBER	REVISION DATE	DATE FILED	BY	REVISION NUMBER	REVISION DATE	DATE FILED	BY

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REVISION RECORD

01

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Oct 01/92



TEMPORARY REVISION AND SERVICE BULLETIN RECORD

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVE	DATE OF INCORPORATION INTO MANUAL
		MC 2322MP6062 PRR B12574	OCT 01/92 DEC 01/94

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TR & SB RECORD

01.1

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 COMPONENT
 MAINTENANCE MANUAL

PAGE	DATE	CODE	PAGE	DATE	CODE
23-27-13			ILLUSTRATED PARTS LIST		CONT.
TITLE PAGE			*1006	MAR 01/95	01.1
1	DEC 01/94	01.1	*1007	MAR 01/95	01.1
2	BLANK		*1008	MAR 01/95	01.1
REVISION RECORD			*1009	MAR 01/95	01.1
1	OCT 01/92	01	*1010	BLANK	
2	BLANK				
TR & SB RECORD					
1	DEC 01/94	01.1			
2	BLANK				
LIST OF EFFECTIVE PAGES					
*1	MAR 01/95	01			
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CONTENTS					
1	DEC 01/94	01.1			
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INTRODUCTION					
1	OCT 01/93	01.1			
2	BLANK				
DESCRIPTION & OPERATION					
1	OCT 01/92	01			
2	BLANK				
TESTING & TROUBLE SHOOTING					
101	DEC 01/94	01.1			
*102	MAR 01/95	01.101			
103	DEC 01/94	01.1			
104	BLANK				
ILLUSTRATED PARTS LIST					
1001	OCT 01/92	01			
*1002	MAR 01/95	01.1			
1003	JAN 01/93	01.1			
*1004	MAR 01/95	01.1			
1005	BLANK				

* = REVISED, ADDED OR DELETED

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Testing and Trouble Shooting.	101
Disassembly*[1]
Cleaning.*[1]
Check*[1]
Repair.*[1]
Assembly.*[1]
Fits and Clearances (not applicable)	
Special Tools*[2]
Illustrated Parts List.	1001

*[1] Use applicable procedures in SOPM (Standard Overhaul Practices Manual) 20-11-04 and standard industry practices.
 *[2] Special instructions not required.

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INTRODUCTION

The instructions in this manual provide the information necessary to perform maintenance functions ranging from simple checks and replacement to complete shop-type repair.

This manual is divided into separate sections:

- | | |
|--|------------------------------|
| 1. Title Page | 4. List of Effective Pages |
| 2. Record of Revisions | 5. Table of Contents |
| 3. Temporary Revision &
Service Bulletin Record | 6. Introduction |
| | 7. Procedures & IPL Sections |

Refer to the Table of Contents for the page location of applicable sections.

An explanation of the use of the Illustrated Parts List is provided in the Introduction to that section.

All weights and measurements used in the manual are in English units, unless otherwise stated. When metric equivalents are given they will be in parentheses following the English units.

Design changes, optional parts, configuration differences and Service Bulletin modifications create alternate part numbers. These are identified in the Illustrated Parts List (IPL) by adding an alphabetical character to the basic item number. The resulting item number is called an alpha-variant. Throughout the manual, IPL basic item number references also apply to alpha-variants unless otherwise indicated.

Verification:

Testing/TS: June 29, 1993

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INTRODUCTION

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ACARS MODE CONTROL PANEL ASSEMBLY M1976

DESCRIPTION AND OPERATION

1. Description

- A. The ACARS (ARINC Communication Addressing & Reporting System) mode control panel assembly contains a rotary switch mounted on the baseplate. External connections are made through a 12-pin connector mounted on a support bracket in rear.

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DESCRIPTION & OPERATION

01

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TESTING AND TROUBLE SHOOTING

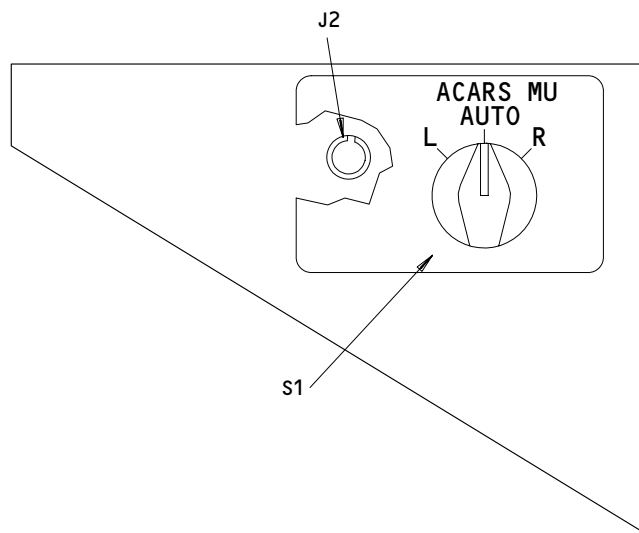
1. Test Equipment

- A. Power Supply: 5v dc, 0.5A max
- B. Multimeter: Fluke 8020A or equivalent
- C. Test Connector: BACC45FT12-12S (Boeing breakout box A33003-2 with test cable A33003-167 may be used)

2. Functional Test

- A. Do a test procedure shown in Fig. 101A (See Fig. 101 for component locations).

NOTE: Continuity is defined as 3 ohms max and Open is defined as 100K ohms min.

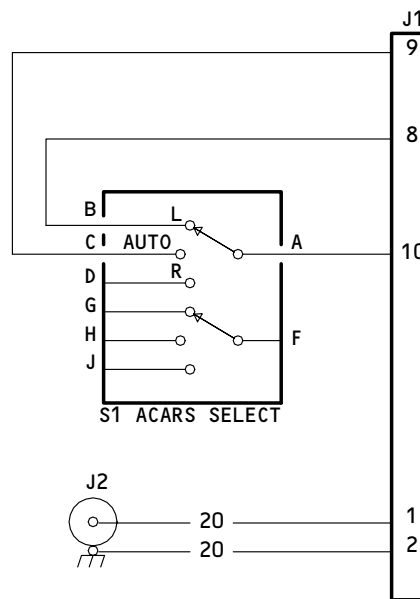


233T3248-1,-300
 Component Location
 Figure 101

STEP NO.	PROCEDURE	REQUIRED RESULT	COMPONENT TESTED
1	Measure ohms between the pins shown below with the ACARS select switch S1 set to the position specified in the required result column: J1-10 and J1-8	<u>L</u> Cont.	<u>AUTO</u> Open
2	J1-10 and J1-9	Open	<u>R</u> Open Open
	Measure ohms between the pins shown below: <u>233T3248-1 only:</u>		S1 S1
3	J1-1 and J1-2	Open	Wiring
4	J1-1 and J2 Center Post	Continuity	J2
5	J1-2 and Baseplate	Continuity	J2
	<u>233T3248-300 only:</u>		
6	Apply 5v dc to J1-1 and 5v dc return to J1-2, and monitor the lightplate lights.	All panel lights are on	Lightplate, J2
	<u>All assemblies:</u>		
7	Remove all connections.		

Functional Test Procedure
Figure 101A

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NOTE: ALL WIRES BMS 13-48, TYPE I, CLASS 1,
 SIZE 22, EXCEPT AS NOTED.

233T3248-1,-300
 Schematic Diagram
 Figure 102

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ILLUSTRATED PARTS LIST

1. This section lists and illustrates replaceable or repairable component parts. The Illustrated Parts Catalog contains a complete explanation of the Boeing part numbering system.

2. Indentures show parts relationships as follows:

Assembly

Detail Parts for Assembly

Subassembly

Attaching Parts for Subassembly

Detail Parts for Subassembly

Detail Installation Parts (Included only if installation parts may be returned to shop as part of assembly)

3. One use code letter (A, B, C, etc.) is assigned in the EFF CODE column for each variation of top assembly. All listed parts are used on all top assemblies except when limitations are shown by use code letter opposite individual part entries.

4. Letter suffixes (alpha-variants) are added to item numbers for optional parts, Service Bulletin modification parts, configuration differences (Except left- and right-hand parts), product improvement parts, and parts added between two sequential item numbers. The alpha-variant is not shown on illustrations when appearance and location of all variants of the part is the same.

5. Service Bulletin modifications are shown by the notations PRE SB XXXX and POST SB XXXX.

A. When a new top assembly part number is assigned by Service Bulletin, the notations appear at the top assembly level only. The configuration differences at detail part level are then shown by use code letter.

B. When the top assembly part number is not changed by the Service Bulletin, the notations appear at the detail part level.

6. Parts Interchangeability

Optional
(OPT)

The parts are optional to and interchangeable with other parts having the same item number.

Supersedes, Superseded By
(SUPSDS, SUPSD BY)

The part supersedes and is not interchangeable with the original part.

Replaces, Replaced By
(REPLS, REPLD BY)

The part replaces and is interchangeable with, or is an alternate to, the original part.

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|7. Deleted

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**BOEING**
COMPONENT
MAINTENANCE MANUALVENDORS

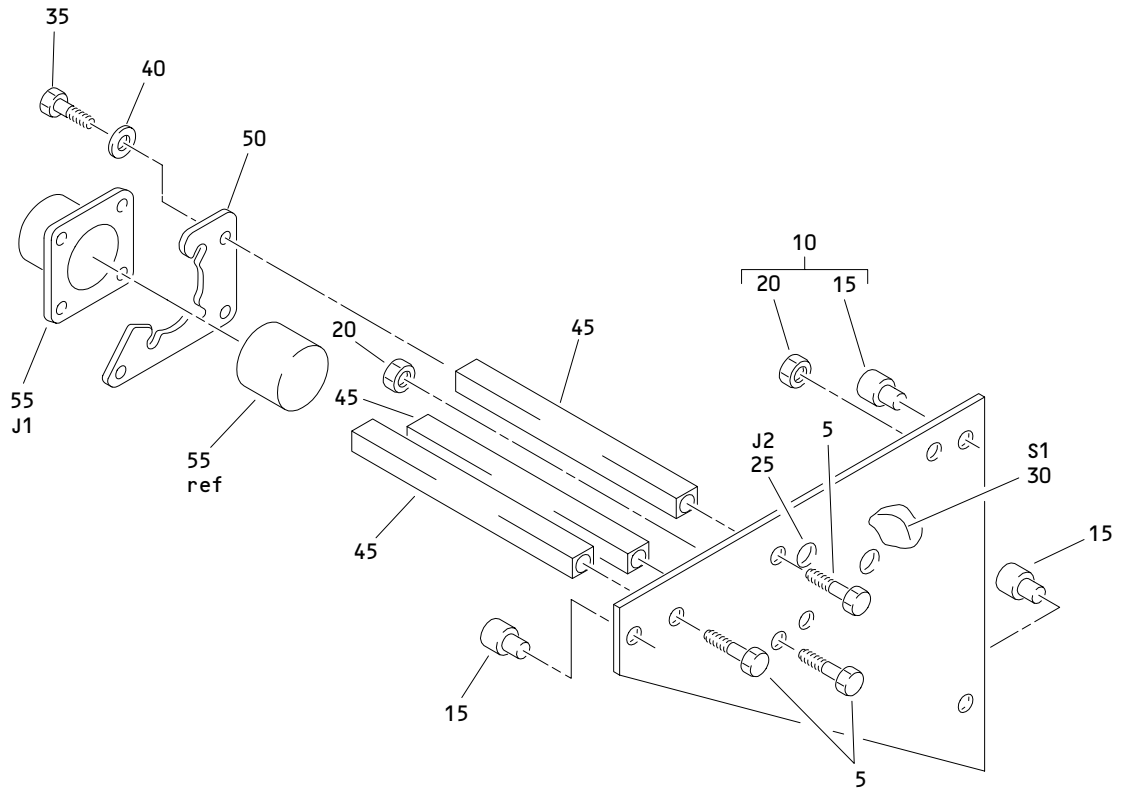
05617	BELL INDUSTRIES INC ILLUMINATED DISPLAYS DIV 18225 NORTHEAST 76TH STREET REDMOND, WASHINGTON 98052-5021
12324	DUPREE INC STAKE FASTNER CO 14395 RAMONA PO BOX 1797 CHINO, CALIFORNIA 91708
91812	JANCO CORPORATION 3111 WINONA AVENUE PO BOX 3038 BURBANK, CALIFORNIA 91504-2543

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REFERENCE DESIGNATOR INDEX (SEE SCHEMATIC DIAGRAM)		
REFERENCE DESIGNATOR	PART NUMBER	FIG-ITEM
J1	BACC45FN12-12P	1-55 2-70
J2	800000121-1	1-25 2-40
S1	AC45-0008-2	1-30 2-45

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ACARS Mode Control Panel Assembly, M1976
 Figure 1

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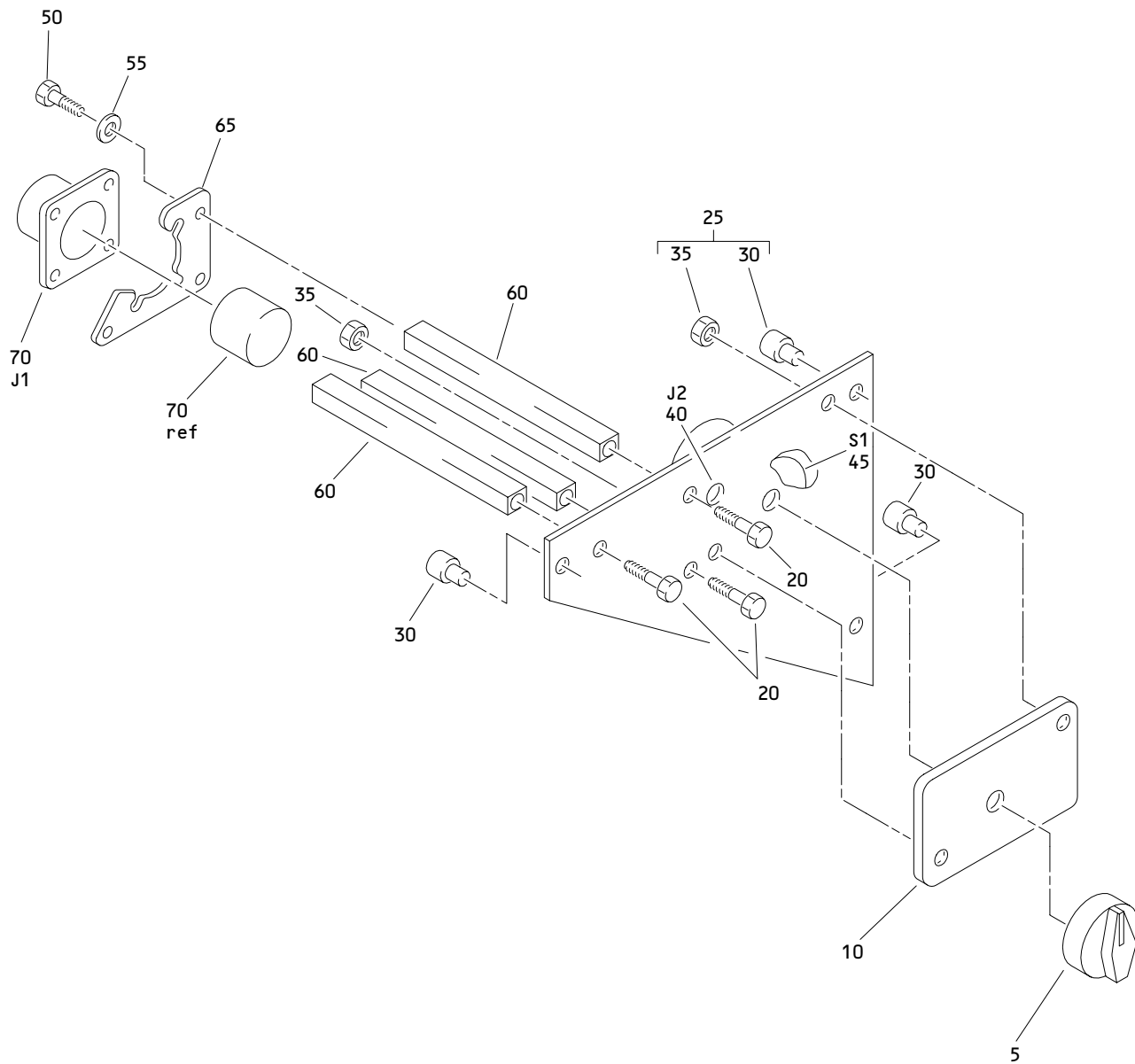
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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- -1	233T3248-1		PANEL ASSY-ACARS MODE CONT (M1976)	A	RF
-1A	233T3248-300		PANEL ASSY-ACARS MODE CONT (M1976) (FOR DETAILS SEE FIG. 2)	B	RF
5	NAS514P632-5P		. SCREW	A	3
10	233T3248-2		. BASEPLATE ASSY	A	1
15	BACS21DX1B		.. STUD ASSY	A	3
20	SF6G6CBB5D		.. NUT (V12324)	A	2
25	800000121-1		. CONNECTOR (V05617) (J2)	A	1
30	AC45-0008-2		. SWITCH-ROTARY (V91812) (S1)	A	1
35	NAS1801-06-5		. SCREW	A	3
40	MS35338-41		. WASHER	A	3
45	69B46200-7		. STANDOFF	A	3
50	233T6200-27		. BRACKET-SUPPORT	A	1
55	BACC45FN12-12P		. CONNECTOR (J1)	A	1
-60	233T3248-3		. WIRE BUNDLE ASSY	A	1

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ACARS Mode Control Panel Assembly, M1976
 Figure 2

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FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -1A	233T3248-300		PANEL ASSY-ACARS MODE CONT (M1976)	B	RF
5	BP247-192		.KNOB (V15084)	B	1
10	S233T100-1108		.LIGHTPLATE- (V51896) (OPT (V05617), (V98140)) (SPEC S233T100-1108)	B	1
-15	233T3248-1		.PANEL ASSY-	B	1
20	NAS514P632-5P		..SCREW-	B	3
25	233T3248-2		..BASEPLATE ASSY-	B	1
30	BACS21DX1B		...STUD ASSY-	B	3
35	SF6G6CBB5D		...NUT (V12324)	B	2
40	800000121-1		..CONNECTOR- (V05617) (J2)	B	1
45	AC45-0008-2		..SWITCH-ROTARY (V91812) (S1)	B	1
50	NAS1801-06-5		..SCREW-	B	3
55	MS35338-41		..WASHER-	B	3
60	69B46200-7		..STANDOFF-	B	3
65	233T6200-27		..BRACKET-SPRT	B	1
70	BACC45FN12-12P		..CONNECTOR- (J1)	B	1
-75	233T3248-3		..WIRE BUNDLE ASSY-	B	1

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