

AIDS PANEL ASSEMBLY, M1201

PART NUMBERS 233T6206-1,-300

COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST

Page 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	ВҮ



TEMPORARY REVISION AND SERVICE BULLETIN RECORD

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

31-35-03

01



PAGE	DATE	CODE	PAGE	DATE	CODE
•			TILUSTRATED	PARTS LIST	
31-35-03			1001	MAR 01/01	01
			1002	MAR 01/01	01
TITLE PAGE			1003	MAR 01/01	01
1	MAR 01/01	01	1004	MAR 01/01	01
2	BLANK		1005	MAR 01/01	01
			1006	MAR 01/01	01
REVISION RE	CORD		1007	MAR 01/01	01
1	MAR 01/01	01	1008	BLANK	
2	BLANK		1009	MAR 01/01	01
			1010	MAR 01/01	01
TR & SB REC	ORD		1011	MAR 01/01	01
1	MAR 01/01	01	1012	MAR 01/01	01
2	BLANK		1013	MAR 01/01	01
İ			1014	MAR 01/01	01
LIST OF EFF	ECTIVE PAGES		1015	MAR 01/01	01
1	MAR 01/01	01	1016	MAR 01/01	01
THRU L	AST PAGE				
CONTENTS					
1	MAR 01/01	01			
2	BLANK	•			
 INTRODUCTIO	N				
1	MAR 01/01	01			
2	BLANK				
DESCRIPTION	& OPERATION				
1	MAR 01/01	01	1		
2	BLANK	.			
TESTING & T	ROUBLE SHOOTING	;			
101	MAR 01/01	, 01			
102	MAR 01/01	01			
103	MAR 01/01	01			
104	MAR 01/01	01	1		
105	MAR 01/01	01	1		
106	BLANK				
 REPAIR-GENE	RAI				
601	MAR 01/01	01	1		
602	BLANK	01			
1					

^{* =} REVISED, ADDED OR DELETED



TABLE OF CONTENTS

Paragraph litte	Page
Description and Operation	1
Testing and Trouble Shooting	101
Disassembly	
Cleaning	
Check	
Repair	601
Assembly	
Fits and Clearances (not applicable)	
Special Tools	
Illustrated Parts List	1001
*E1] Use applicable procedures in SOPM 20-11-04 and standard industry pra *E2] Special instructions not required.	ctices.



INTRODUCTION

The instructions in this manual provide the information necessary to perform maintenance functions including test, fault isolation, and replacement of defective components.

This manual is divided into separate sections:

- 1. Title Page
- 2. Record of Revisions
- 3. Temporary Revision & Service Bulletin Record
- 4. List of Effective Pages
- 5. Table of Contents
- 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



AIDS PANEL ASSEMBLY, M1201

DESCRIPTION AND OPERATION

1. <u>Description</u>

A. The Aids Panel Assembly is located on the P8 panel and consists of three switches S1, S2 and S3. The S1 switch is the PILOT IN COMMAND (PIC) switch and has two positions, the CAPT and the F/O position. The S2 switch is the PRINT function switch, and the S3 switch is the EVENT switch. Both the S2 and the S3 are momentarily switches. The wire bundle connects the above three switches to the J1 connector. Electrical power for this panel is 28v dc provided by the FLIGHT RECORDER DC circuit breaker.

2. Operation

A. the Pilot in Command or PIC switch (S1) switches from left position (CAPT) to the right position (F/O) that indicates which pilot is in command. The PRINT (S2) pushbutton switch, when pressed, gives the command to the Printer to print out data. The EVENT (S3) pushbutton switch, when pressed, allows the flight crew to mark certain events on the DFDR (Digital Flight Data Recorder). When S2 or S3 is released, they go back to their normally closed position.



TESTING AND TROUBLE SHOOTING

1. <u>Test Equipment</u>

A. Test Connector: BACC45FT12-12S6 to mate with J1

B. AC Power Supply: $5 \pm 0.1v$, $400 \pm 20 \text{ Hz}$

C. Multimeter: Simpson 260P

2. Functional Test

A. See Component Location Fig. 101

B. See Schematic Fig. 102

C. See Table 101 for Functional Test

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



STAT NUMBER	PROCEDURE	REQUIRED RESULTS	SUSPECT COMPONENT(s)
1	Connect test connector with the J1 connector.		
2	Set switch S1 to Capt position.		
3	Measure ohms between the pins J1-9 and J1-10.	0pen	S1
4	Measure ohms between the pins J1-8 and J1-10.	Continuity	S1
5	Set switch S1 to F/O position.		
6	Measure ohms between the pins J1-8 and J1-10.	0pen	S1
7	Measure ohms between the pins J1-9 and J1-10.	Continuity	S1
8	Press and hold switch S2.		
9	Measure ohms between the pins J1-5 and J1-7.	0pen	S2
10	Release switch S2.		
11	Measure ohms between the pins J1-5 and J1-7.	Continuity	s2
12	Press and hold switch S3.		

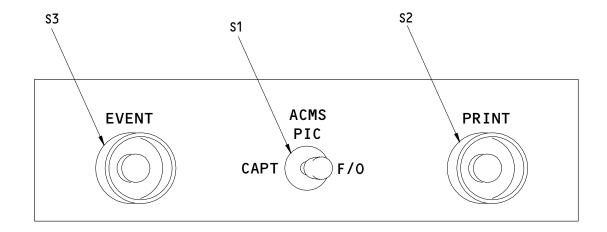
Functional Test Table 101 (Sheet 1)



STAT NUMBER	PROCEDURE	REQUIRED RESULTS	SUSPECT COMPONENT(s)
13	Measure ohms between the pins J1-4 and J1-6.	0pen	\$3
14	Release switch S3.		
15	Measure ohms between the pins J1-4 and J1-6.	Continuity	\$3
	Applicable to Assembly P/N 233T6206-1 Only		
16	Measure ohms between the pins shown below:		
	(+) (-) J1-1 J1-2 J1-2 Baseplate J1-1 J2 Center Post	Open Continuity Continuity	J2 Baseplate,J2 J2
	Applicable to Assembly P/N 233T6206-300 Only		
17	Connect 5v ac between the pins J1-1(+) and J1-2(-).		
18	Monitor the lightplate light.	Lightplate comes on	Lightplate,J2
19	Remove all connections.		
	END OF TEST		

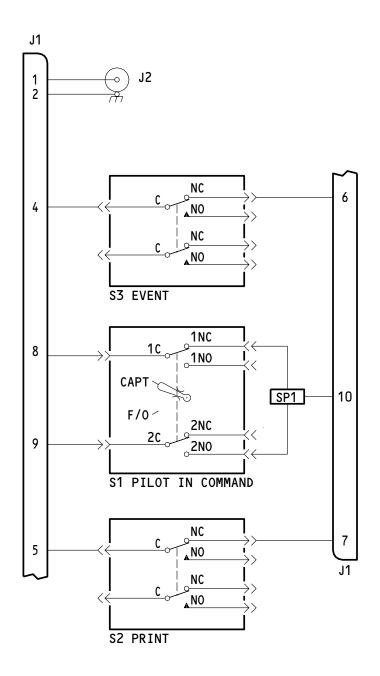
Functional Test Table 101 (Sheet 2)





233T6206-1,-300 Component Location Figure 101





NOTE: ALL WIRES ARE BMS 13-48 TYPE I, CLASS 1, AWG 22.

233T6206-1,-300 Aids Panel Assembly Schematic Diagram Figure 102



REPAIR - GENERAL

1. Material

- A. Loctite sealant, type 242 or 222 without primer (Loctite Corp., 705 North Mounting Road, Newington, connecticut 06111-1411)
- 2. All repair can be done with standard industry practices and procedures contained in SOPM 20-11-04 except as follows:
 - A. When replacing the baseplate IPL Fig. 1-30, apply loctite sealant (type 242 or 222 without primer) to the threaded parts of the screws (Fig. 1-25) before you tight on.



ILLUSTRATED PARTS LIST

- 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 The parts are optional to and interchangeable (OPT) with other parts having the same item number.

Supersedes, Superseded By The part supersedes and is not interchangeable (SUPSDS, SUPSD BY) with the original part.

Replaces, Replaced By

The part replaces and is interchangeable with, (REPLS, REPLD BY)

or is an alternate to, the original part.



- 7. The MOD level codes in the nomenclature column, such as MOD A and MOD B, identify interchangeable top assemblies which have the same part number but which have differences at the subassembly or component levels. The IPL identifies each MOD level of a top assembly with a different item number and use code. The nameplate label identifies the MOD level of each assembly in the MOD LEVEL block.
- 8. Use substitute parts only as specified in the document D906-10182, Electrical/Electronic/Electromechanical and Mechanical Parts Substitution.

VENDORS

00779 TYCO ELECTRONICS CORP
2800 FULLING MILL ROAD PO BOX 3608
MIDDLETOWN, PENNSYLVANIA 17057
FORMERLY AMP INC

O5617 IDD AEROSPACE CORP
18225 NORTHEAST 76TH STREET PO BOX 97056
REDMOND, WASHINGTON 98073-9756
FORMERLY FARWEST ELEC INC; FORMERY IN BELLEVUE, WA;
FORMERLY BELL IND FARWEST MFG DIV; FORMERLY BELL IND
ILLUMINATED DISPLAYS DIV

O8524 DEUTSCH FASTENER CORP SEE CODE V97928

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

FAIRCHILD FASTENERS KAYNAR PRODUCTS DIV

800 S STATE COLLEGE BLVD

FULLERTON, CALIFORNIA 92831-3001

FORMERLY VK6405 MICRODOT AEROSP LTD; FORMERLY KAYNAR TECH

KAYNAR DIV

51896 SPECTRA LUX CORP
11825 120TH AVENUE NORTHEAST
KIRKLAND, WASHINGTON 98034
FORMERLY IN BELLEVUE, WASHINGTON

MONADNOCK CO THE

18301 ARENTH AVENUE PO BOX 1222
CITY OF INDUSTRY, CALIFORNIA 91749
FORMERLY UNITED CARR FASTENER CORP VB0051 VB0056 VB0076
FORMERLY TRW ELECTRONIC COMPONENTS CINCH-MONADNOCK DIV
FORMERLY CINCH-MONADNOCK DIV OF TRW INC V76530

72962 HARVARD INDUSTRIES INC
3 WERNER WAY SUITE 210
LEBANON, NEW JERSEY 08833
FORMERLY AMERACE CORP ESNA DIV
FORMERLY ELASTIC STOP NUT IN UNION, NJ



VENDORS

81640 EATON CORP AEROSPACE AND COMMERCIAL CONTROLS DIV

2250 WHITFIELD AVENUE EAST SARASOTA, FLORIDA 34243-9703

FORMERLY SINGER CO CONTROLS DIV AND CONTROLS CO OF AMERICA

AND CONTROL SWITCH A CUTLER-HAMMER CO AND EATON CORP

CUTLER-HAMMER GROUP V97198, V81641 IN FOLCROFT, PENNSYLVANIA

91929 HONEYWELL INC MICRO SWITCH DIV

11 WEST SPRING STREET FREEPORT, ILLINOIS 61032

FORMERLY MICRO SWITCH A DIV OF HONEYWELL

FORMERLY V74059 AND V40228



REFERENCE DESIGNATOR INDEX (SEE SCHEMATIC DIAGRAM)					
REFERENCE DESIGNATOR	PART NUMBER	FIG-ITEM			
J1	BACC45FN12-12P6	1–60			
J1	BACC45FN12-12P6	2–70			
J2	800000121-1	1–20			
J2	800000121-1	2–30			
S1	62AT22-3	1–15			
S1	62AT22-3	2–25			
S2	702PB1	1–10			
S2	702PB1	2–20			
S 3	702PB1	1–10			
S 3	702PB1	2–20			



PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
BACC45FN12-12P6		1	60	1
BACN1ONW1		2 1	70 55	1 2
BACN10PA06-6		2 1	65 40	2 2
BACP10U0150N		2 1	50 45	2 1
		2	55	1
BACS21DD1B		1 2	35 45	2 2
DBMB1400-6A1		1	35	2
K19798-04		2 1	45 55	2 2
		2	65	2
MS35338-41		1 2	70 80	3 3
NAS1801-04-5		1	50	2
NAS1801-06-5		2 1	60 65	2
		2	75	3 3 3 3 2
NAS514P632-5		1 2	25 35	3
RMA4812-160-40		1	55	
SF6G6CBB5D		2 1	65 40	2 2
00777400 577		2	50	2
\$233T100-577 120092		2 1	5 5	1 2
		2	15	2
233T6200-105		1 2	80 90	1 1
233T6206-1		1	1A	RF
233T6206-2		2 1	10 30	1 1
		2	40	1
233T6206-3		1 2	85 95	1 1
233т6206-300		1	1B	RF
293162		2 1	1A 55	RF 2
		2	65	2

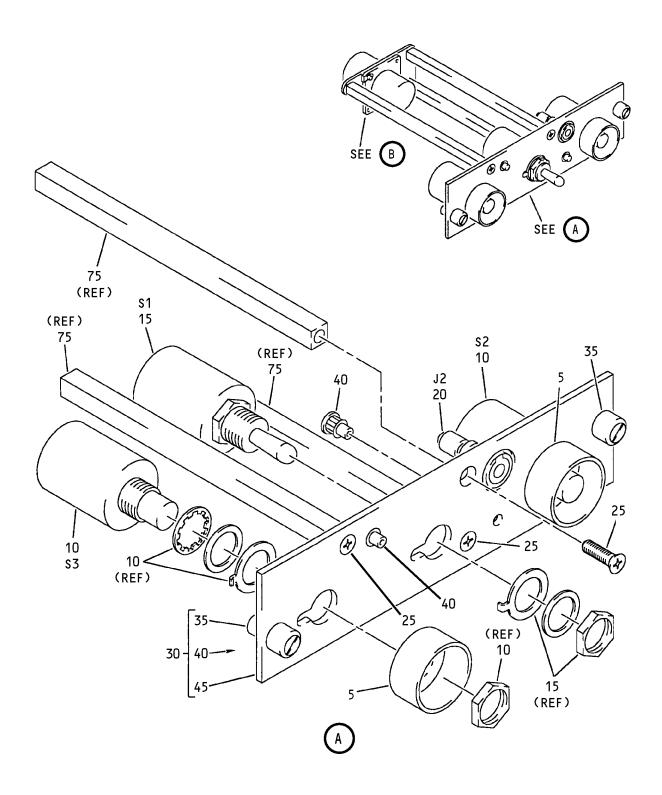
31-35-03

ILLUSTRATED PARTS LIST
01 Page 1006
Mar 01/01



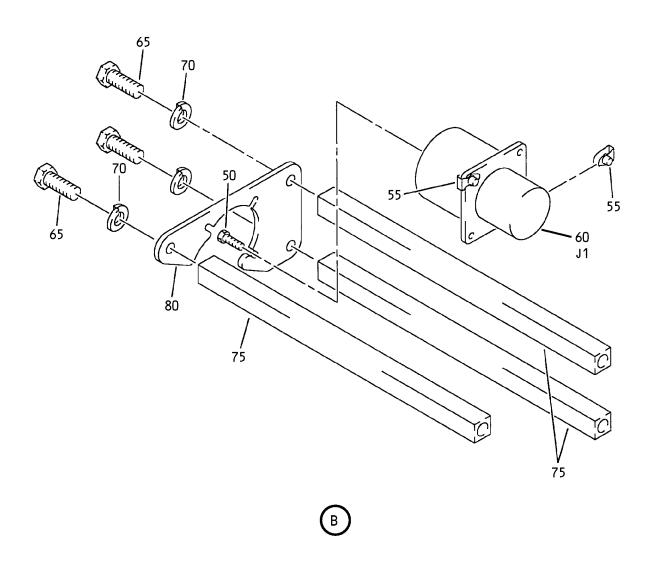
PART NUMBER	AIRLINE PART NO.	FIG.	ITEM	TTL REQ
60789-2		1	90	4
		2	100	4
62AT22-3		1	15	1
62AT22-3		2	25	1
69B46200-11		1	75	3
İ		2	85	3
702PB1		1	10	2
1		2	20	2
800-008155		2	5	1
800000121-1		1	20	1
		2	30	1
ı		ı	I	I





Aids Panel Assembly, M1201 Figure 1 (Sheet 1)





Aids Panel Assembly, M1201 Figure 1 (Sheet 2)

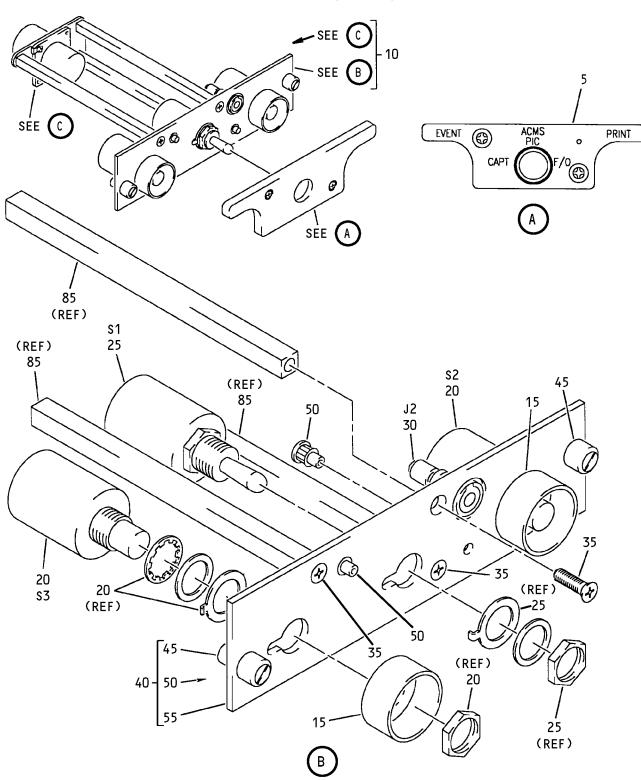
FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01-					
−1 A −1 B	233T6206-1 233T6206-300		PANEL ASSY-AIDS, (M1201) PANEL ASSY-AIDS, (M1201)	A B	RF RF
5	120092		(FOR DETAILS SEE FIG. 2) .GUARD-SWITCH	Α	2
10	702PB1		(V81640) .SWITCH-PUSHBUTTON	A	2
			(V91929) (S2, S3)		_
15	62AT22-3		.SWITCH- (V91929)	А	1
20	800000121-1		(S1) CONNECTOR- (V05617)	А	1
25	NAS514P632-5		(J2) .SCREW	Α	3
30	233T6206-2		.BASEPLATE ASSY	Α	1
35	DBMB1400-6A1		STUD ASSY- (VO8524) (SPEC BACS21DD1B)	Α	2
40	SF6G6CBB5D		NUT- (V12324) (SPEC BACN10PA06-6)	Α	2
45	BACP10U0150N		PANEL	Α	1
50	NAS1801-04-5		.SCREW	Α	2
55	K19798-04		.NUT-CLIP (V15653) (SPEC BACN1ONW1) (OPT RMA4812-160-40 (V72962)) (OPT 293162	Α	2
60	BACC45FN12-12P6		(V60119)) .CONNECTOR-	Α	1
65	NAS1801-06-5		(J1)	,	7
70	MS35338-41		.SCREW .WASHER	A A	3 3
75	69B46200-11		STANDOFF	A	3



FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
01- 80 -85 -90	233T6200-105 233T6206-3 60789-2		.BRACKET-SPRT .WIRE BUNDLE ASSYPIN-CONTACT (V00779) BOEING LETTER HISTORY	A A A	1 1 4

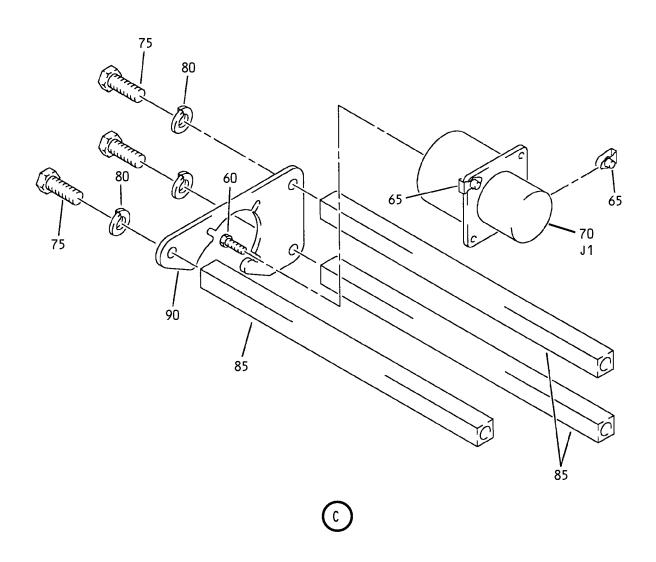
- Item Not Illustrated





Aids Panel Assembly, M1201 Figure 2 (Sheet 1)





Aids Panel Assembly, M1201 Figure 2 (Sheet 2)

FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- -1A 5	233T6206-300 800-008155		PANEL ASSY-AIDS, (M1201) .LIGHTPLATE- (V05617) (SPEC S233T100-577) (OPT S233T100-577	B B	RF 1
10 15	233T6206-1 120092		(V51896)) .PANEL ASSY GUARD-SWITCH	B B	1 2
20	702PB1		(V81640) SWITCH-PUSHBUTTON (V91929)	В	2
25	62AT22-3		(S2, S3) SWITCH- (V91929)	В	1
30	800000121-1		(S1) CONNECTOR- (V05617)	В	1
35	 NAS514P632-5		(J2)	В	3
40	233T6206-2		BASEPLATE ASSY	В	1
45	DBMB1400-6A1		STUD ASSY- (V08524) (SPEC BACS21DD1B)	В	2
50	SF6G6CBB5D		NUT- (V12324) (SPEC BACN10PA06-6)	В	2
55	BACP10U0150N		PANEL	В	1
60	NAS1801-04-5		SCREW	В	2
65	K19798-04		NUT-CLIP (V15653) (SPEC BACN1ONW1) (OPT RMA4812-160-40 (V72962)) (OPT 293162 (V60119))	В	2
70	BACC45FN12-12P6		CONNECTOR- (J1)	В	1
75	NAS1801-06-5		SCREW	В	3
80	MS35338-41		WASHER	В	3
85	69B46200-11		STANDOFF	В	3



FIG. & ITEM	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1234567	EFF CODE	QTY PER ASSY
02- 90 -95 -100	233T6200-105 233T6206-3 60789-2		BRACKET-SPRTWIRE BUNDLE ASSYPIN-CONTACT (V00779) BOEING LETTER HISTORY	В В В	1 1 4

- Item Not Illustrated