

TO: ALL HOLDERS OF GROUND SPOILER PANEL ASSEMBLY OVERHAUL MANUAL, 57-56-61

REVISION NO. 8, DATED MAR 1/09
HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / Assy	Cleaning	Inspect / Check	Repair	Assy	F / C	Test	T / Shooting	S / Tools	Storage	IPL	L / Overhaul
Added improved corrosion protection compound per 737-SL-57-092						X							
Removed "Dash Numbers Limited" from Header page	X	X	X	X	X	X	X				X	X	
Added shot peening data						X							
Added 65-46452-62, -65, -68, -70 to IPL illustration												X	

GROUND SPOILER PANEL ASSEMBLY

57-56-61

BOEING P/N 65-46452-31, -32, -35, -39, -56, -58, -62, -65, -68, -70
 65-79950-1, -13, -14
 65-79952-4 thru -6

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
57-1042 57-1053, Rev 2		PRR 30680-26 PRR 31295 PRR 31987 PRR 31995 PRR 32121-15 PRR 33033 MC 5754MP3001 737-SL-57-092	Aug 15/69 Jun 10/71 Jun 10/71 Dec 25/72 Dec 25/72 Jan 5/81 Mar 1/95 Mar 1/09
57-1227			

LIST OF EFFECTIVE PAGES

* Indicates pages revised, added or deleted in latest revision
 F Indicates foldout pages - print one side only

PAGE	DATE	PAGE	DATE	PAGE	DATE
57-56-61		* 1117	Mar 1/09		
* T-1	Mar 1/09	1118	BLANK		
T-2	BLANK				
* LEP-1	Mar 1/09				
LEP-2	BLANK				
* T/C-1	Mar 1/09				
T/C-2	BLANK				
* 1	Mar 1/09				
* 2	Mar 1/09				
* 101	Mar 1/09				
102	BLANK				
* 201	Mar 1/09				
202	BLANK				
* 301	Mar 1/09				
302	BLANK				
* 401	Mar 1/09				
* 402	Mar 1/09				
* 403	Mar 1/09				
* 404	Mar 1/09				
* 501	Mar 1/09				
* 502	Mar 1/09				
* 601	Mar 1/09				
* 602	Mar 1/09				
* 603	Mar 1/09				
604	BLANK				
* 901	Mar 1/09				
902	BLANK				
* 1101	Mar 1/09				
* 1102	Mar 1/09				
* 1103	Mar 1/09				
* 1104	Mar 1/09				
* 1105	Mar 1/09				
* 1106	Mar 1/09				
* 1107	Mar 1/09				
* 1108	Mar 1/09				
* 1109	Mar 1/09				
* 1110	Mar 1/09				
* 1111	Mar 1/09				
* 1112	Mar 1/09				
* 1113	Mar 1/09				
* 1114	Mar 1/09				
* 1115	Mar 1/09				
* 1116	Mar 1/09				

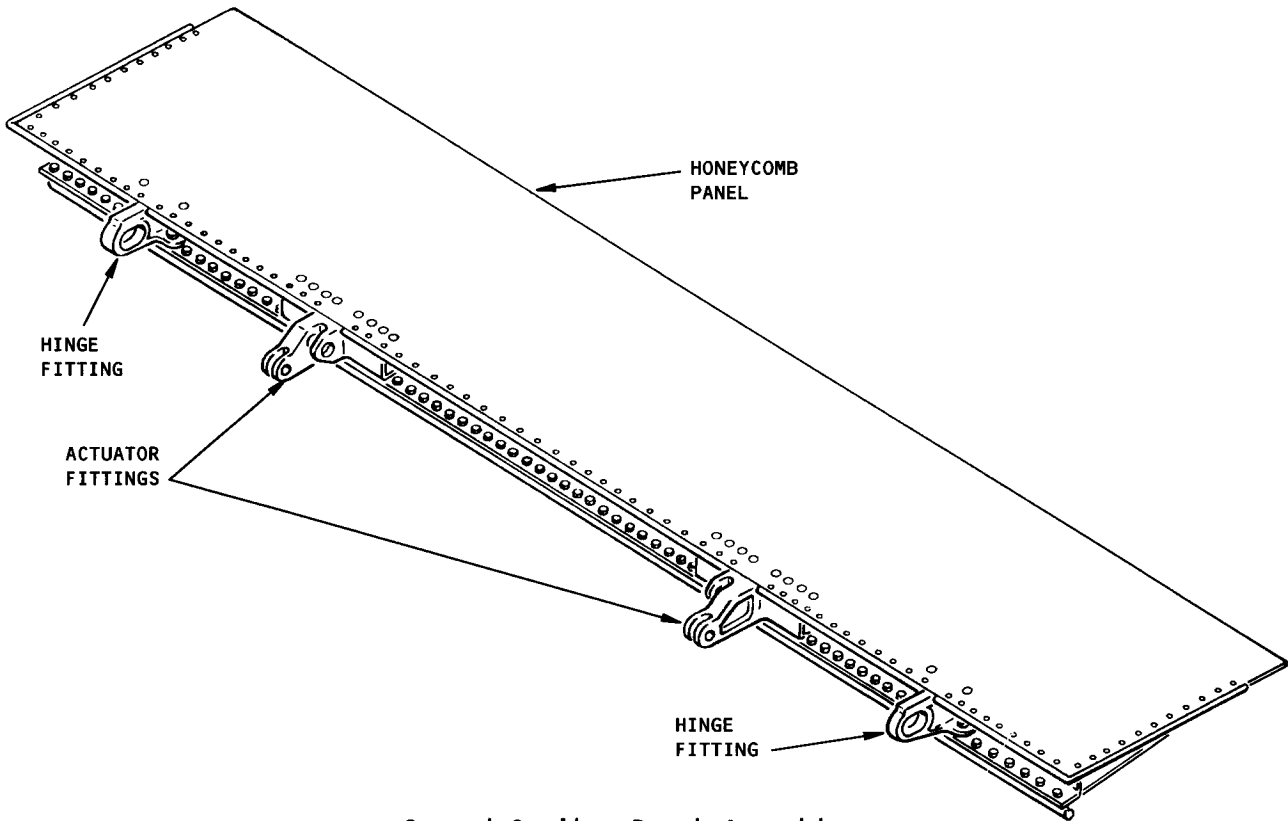
Mar 1/09

 57-56-61
 Page LEP-1

TABLE OF CONTENTS

<u>Paragraph Title</u>	<u>Page</u>
General	1
Description and Operation	1
Disassembly.....	101
Cleaning.....	201
Inspection/Check	301
Repair.....	401
Assembly.....	501
Fits and Clearances	601
Testing (not applicable)	
Trouble Shooting (not applicable)	
Storage Instructions	901
Special Tools, Fixtures, and Equipment (not applicable)	
Illustrated Parts List	1101

GROUND SPOILER PANEL ASSEMBLY



Ground Spoiler Panel Assembly
Figure 1

DESCRIPTION AND OPERATION

1. Description

- A. The ground spoiler is a bonded aluminum honeycomb panel with four forged aluminum alloy fittings. Two of these fittings are combination actuator and hinge fittings, and two are eccentric hinges.

2. Operation

- A. The ground spoiler is used only when the airplane is on the ground. It is operated hydraulically with the speed brake to help stabilize the airplane and slow it down.
- B. During flight, the spoiler is locked in closed position by a lockout valve which is operated by extension or compression of the main landing gear shock strut. When the airplane becomes airborne, the shock strut is extended, and, through a push-pull cable attached to the upper torsion link, actuates the lockout valve to close the spoiler. When the airplane touches down, the shock strut is compressed, which operates the lockout valve to open the spoiler.
- C. Leading Particulars (Approximate)

Length -- 93 inches
Width -- 21 inches
Height -- 2 inches
Weight -- 35 pounds

DISASSEMBLY

1. Disassembly (Fig. 1101)
 - A. Remove nuts (1), washers (2), and screws (3). Remove seal (4).
 - B. Remove nuts (6), washers (7), and screws (8). Remove seal (9).
 - C. Remove nuts (10), washers (11), and screws (12). Remove seal (13).
 - D. Remove nuts (14), washers (15), and screws (16). Remove seal (17).
 - E. Remove nuts (18), washers (19), and screws (20). Remove seal (21).
 - F. Remove nuts (22), washers (23), and screws (24). Remove seal (25).
 - G. Remove nuts (26), washers (27), and screws (28). Remove seal (29).
 - H. Remove nuts (31), washers (32), and bolts (33). Remove retainer (34) or retainers (35, 36, 37, 38). Remove seal (39) or seals (40, 41).
 - I. Remove nuts (42), washers (43), and bolts (44). Remove angle (45). Do not remove parts (46 thru 53, and 94) unless repair or replacement is necessary.
 - J. Remove nuts (54, 60), washers (55, 61), and bolts (56 thru 59, 62, 63) and washers (95). Remove actuator fitting assemblies (64, 72) and shims (80, 81). Measure and note thickness of shims to help during assembly.
 - K. If applicable, remove rub strip (82) from honeycomb panel assembly (83) by scraping off with a sharp-edged wooden or plastic tool.

NOTE: Fillers (5, 30) are bonded in place. Do not remove unless the bond is bad.
 - L. If applicable, remove parts (84 thru 91). Do not remove parts (92, 93, 96 thru 101) unless repair or replacement is necessary.

65-46452
65-79950
65-79952



CLEANING

1. Clean all parts, but bearings, by standard industry practices and the instructions in SOPM 20-30-03.
2. Clean all bearings by the instructions in SOPM 20-30-01.

INSPECTION/CHECK

1. Examine all parts for defects by standard industry practices. Do the penetrant check if you think there are defects on the hinge fittings.
2. Examine honeycomb panels for signs of delamination, internal moisture, scratches, and contour defects.
 - A. Tap the surface of honeycomb structure lightly with a coin or a plastic rod. Go over all of the surface. Normal structure will give a solid metallic sound. Delaminated areas will give a dull, hollow sound. Areas which contain moisture will give a dull solid sound.
 - B. Radiographically examine areas that could contain moisture to see how much damage there is.
 - C. Look for contour defects with a straightedge across the surface of the panel. Raised areas could be delamination. Warped panels can also be found with the straightedge.
 - D. Examine the edges of the panels carefully for cuts and abrasions. Delamination starts very easily from damage to an edge member of a honeycomb panel.
3. If you think there are defects, penetrant check (SOPM 20-20-02) hinge fittings (53, 65, 73)

REPAIR

1. Repair (Fig. 1101)

- A. Remove small defects by standard industry practices.
- B. For repairs to honeycomb panel assembly (83 or 83A), refer to the Boeing 737 Structural Repair Manual, D6-15565, 51-40-06.

2. Refinish

NOTE: Refer to SOPM 20-30-02 for stripping of protective finishes, and to SOPM 20-41-01 for explanation of F and SRF finish codes.

- A. Filler (5) -- Chemical treat and apply BMS 10-11, Type 1 primer (SRF-2.30) all over. Material: Al alloy.
- B. Hinge fitting (53) -- Chemical treat and apply BMS 10-11, Type 1 primer (SRF-2.30) all over, including bushing and bearing holes. Material: Al alloy.
- C. Fittings (65, 73) -- Fig. 401, 402
- D. Honeycomb panel assembly (83):
 - (1) 65-46452-2 and -27 -- Chemical treat and apply BMS 10-11, Type 1 primer (SRF-2.31) followed by one coat of BMS 10-60 gray gloss enamel (SRF-14.9813) all over.
 - (2) 65-46452-57 and -59 -- Apply BMS 10-79 primer and BMS 10-60, Type 2, enamel (F-14.9863-707) to all exposed bare areas including fastener heads. No finish in bearing holes.
- E. Honeycomb panel (83A):
 - (1) 65-46452-43 -- Apply BMS 5-89 primer (F-20.26) followed by BMS 10-60 gray gloss enamel (SRF-14.9813) all over. Material: Al alloy.
 - (2) 65-46452-60 -- Apply BMS 5-89 primer (F-20.26) followed by BMS 10-79 primer and BMS 10-60 gray gloss enamel (F-14.9863-707) all over. Material: Al alloy.

3. Replacement (Fig. 1101)

- A. Replace all parts worn or damaged beyond easy repair.
- B. Replace all worn or damaged attaching hardware.
- C. Replace all fabric aerodynamic seals at each overhaul.
- D. Replace rub strip (82) at each overhaul. Bond new rub strip in place with Type 44 adhesive per SOPM 20-50-12.
- E. Bushings (67, 68, 69, 75, 76, 77)

NOTE: Bushings should be replaced in pairs.

(1) Press old bushing out of housing.

(2) Install replacement bushings by the press fit method per SOPM 50-50-03.

F. Bearing (66 or 74)

(1) Remove old bearing from housing.

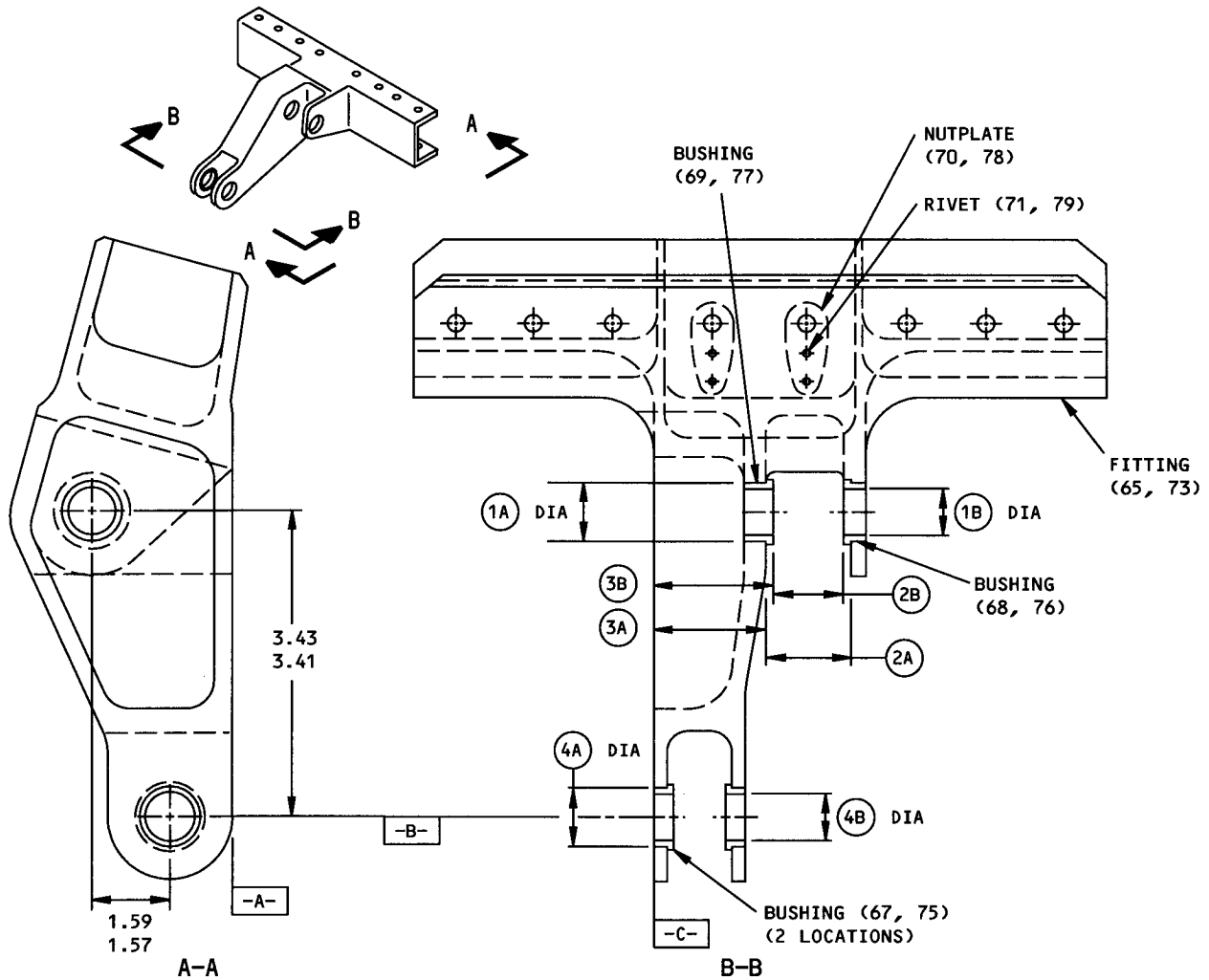
(2) Install and roller swage replacement bearings per SOPM 20-50-03.

G. Shims (51, 52, 80, 81)

(1) Remove 0.003-inch laminations, as necessary to adjust thickness of new shim to dimension recorded when shim was removed.

(2) Drill holes through shim to match holes in adjacent parts.

(3) Deburr and coat shim with primer, BMS 10-11, Type 1.



	1A	1B	2A	2B	3A	3B	4A	4B
DESIGN DIM	0.6254 0.6247	0.5015 0.5000	0.790 0.750	0.703 0.700	1.26 1.24	1.32 1.30	0.6254 0.6247	0.5015 0.5000
REPAIR LIMIT	---	---	---	---	---	---	---	---

REFINISH

FITTINGS 65-50738-3,-4,-9,-10,-13,-14:
CHEMICAL TREAT OR CHROMIC ACID AND APPLY PRIMER
BMS 10-11, TYPE 1 (SRF-2.30)
FITTINGS 65-50738-17 THRU -20:
CHROMIC ACID ANODIZE AND APPLY PRIMER
BMS 10-11, TYPE 1 (F-18.13)

REPAIR

(SAME AS REFINISH)

125 ✓ ALL MACHINED SURFACES UNLESS SHOWN DIFFERENTLY

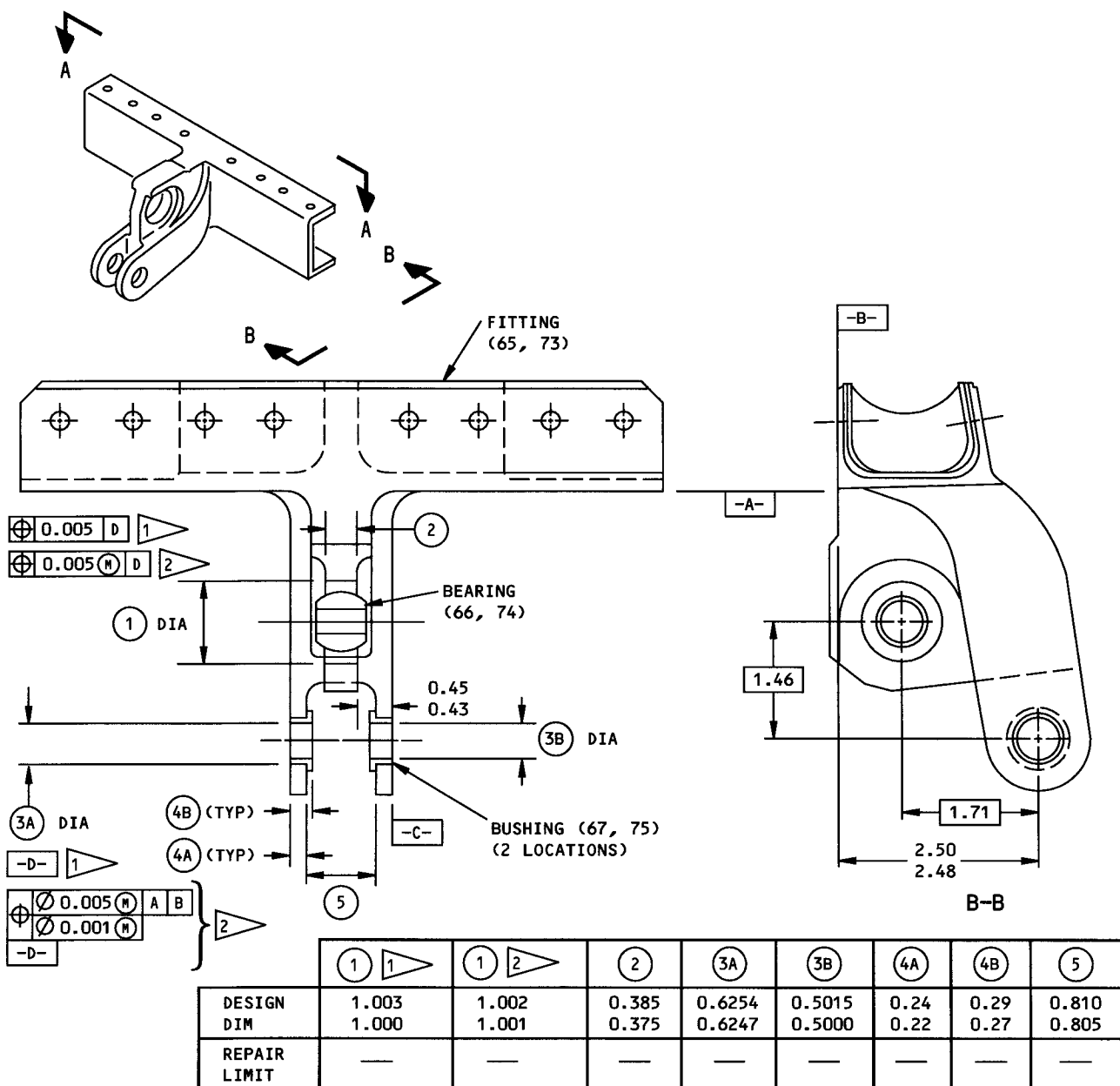
MATERIAL: AL ALLOY

ITEM NUMBERS REFER TO FIG. 1101

ALL DIMENSIONS ARE IN INCHES

**FITTING ASSEMBLY (64, 72)
65-50738-SERIES**

**Fitting Repair and Refinish
Figure 401**



REFINISH

FITTINGS 65-67186-4,-9,-10:
CHEMICAL TREAT OR CHROMIC ACID ANODIZE AND
APPLY PRIMER BMS 10-11, TYPE 1 (SRF-2.30)
FITTING 65-67186-15:
CHEMICAL TREAT OR CHROMIC ACID ANODIZE AND
APPLY PRIMER BMS 10-11, TYPE 1 (F-18.05),
BUT NOT IN HOLES FOR BUSHINGS

1 65-67186-4,-9,-10
2 65-67186-15

REPAIR

(SAME AS REFINISH)

125/ ALL MACHINED SURFACES UNLESS SHOWN
DIFFERENTLY
SHOT PEEN (SOPM 20-10-03):
0.005-0.010 A2 INTENSITY. ADJUST HOLES TO
DESIGN DIMENSIONS AFTER SHOT PEENING.
MATERIAL: AL ALLOY
ITEM NUMBERS REFER TO FIG. 1101
ALL DIMENSIONS ARE IN INCHES

FITTING ASSEMBLY (64, 72)
65-67186-SERIES
Fitting Repair and Refinish
Figure 402

ASSEMBLY

1. Materials

NOTE: Equivalent substitutes can be used.

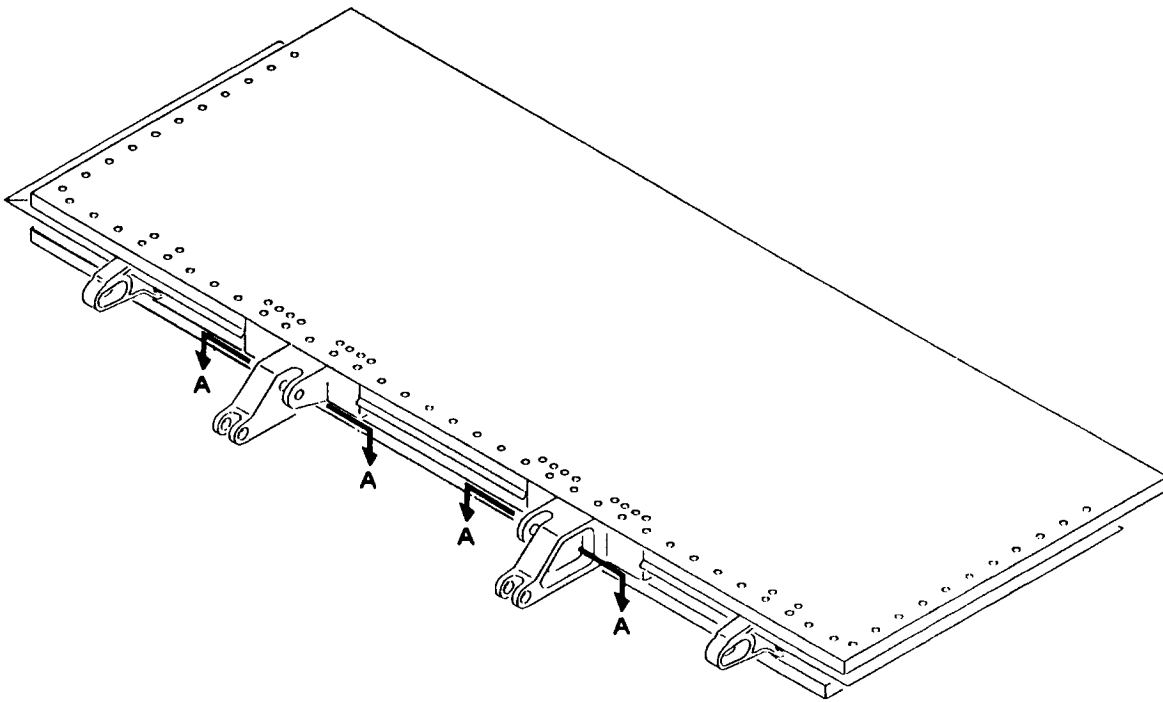
- A. Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)
- B. Sealant -- BMS 5-95 (SOPM 20-60-04)
- C. Corrosion Preventive Compound -- MIL-C-11796, Class 3 (SOPM 20-60-02)
- D. Corrosion Preventive Compound -- BMS 3-38 (SOPM 20-60-02)
- E. Corrosion Preventive Compound -- BMS 3-27 (SOPM 20-60-02)
- F. Adhesive -- Type 38 (SOPM 20-50-12)

2. Assembly (Fig. 1101)

- A. Locate actuator fitting assembly (72) and shims (80, 81). Install shims of thickness necessary to adjust gap between actuator fitting and structure to 0.005 inch maximum. Coat shims with primer, BMS 10-11, Type 1 after delamination.
- B. Install two each of bolts (58, 59, 62, 63), four each of bolts (56, 57), washers (95), washers (55), and nuts (54). Install fasteners on bottom side of spoiler panel with corrosion preventive compound. Install fasteners on top side of panel with BMS 5-95 sealant. Wipe off excess sealant.
- C. Locate actuator fitting assembly (64) and shims (80, 81). Install shims of thickness necessary to adjust gap between actuator fitting and structure to 0.005 inch maximum. Coat shims with primer, BMS 10-11, Type 1 after delamination.
- D. Install two each of bolts (58, 59, 62, 63), four each of bolts (56, 57), washers (95), washers (55), and nuts (54). Install fasteners on bottom side of spoiler panel with corrosion preventive compound. Install fasteners on top side of panel with BMS 5-95 sealant. Wipe off excess sealant.
- E. Install angle (45) with bolts (44), washers (43), and nuts (42).
- F. Install seals (40, 41) and retainers (35 thru 38), or seal (39) and retainer (34), with bolts (33), washers (32), and nuts (31).
- G. Install seal (29) and filler (30) with screws (28), washers (27), and nuts (26). Bond filler (30) in place with Type 38 adhesive per SOPM 20-50-12. Use corrosion preventive compound on fasteners.

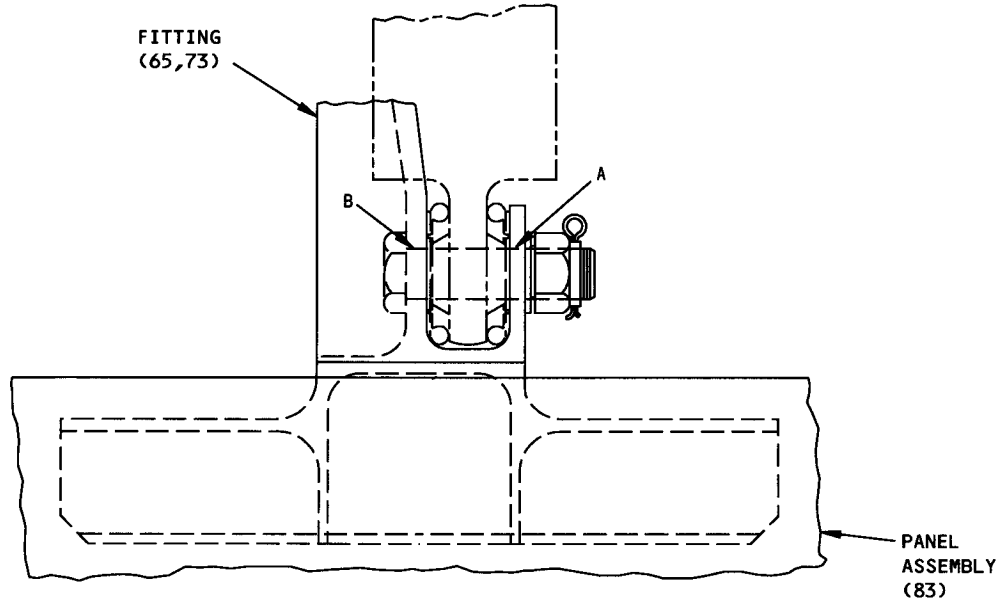
- H. Install seal (25) with screws (24), washers (23), and nuts (22). Use corrosion preventive compound on fasteners.
- I. Install seal (21) with screws (20), washers (19), and nuts (18). Use corrosion preventive compound on fasteners.
- J. Install seal (17) with screws (16), washers (15), and nuts (14). Use MIL-C-11796, Class 3 corrosion preventive compound on fasteners (SOPM 20-60-02).
- K. Install seal (13) with screws (12), washers (11), and nuts (10), with corrosion preventive compound on fasteners.
- L. Install seal (9) with screws (8), washers (7), and nuts (6), with corrosion preventive compound on fasteners.
- M. Install seal (4) and filler (5) with screws (3), washers (2), and nuts (1). Bond filler (5) in place, with Type 38 adhesive per SOPM 20-50-12. Use corrosion preventive compound on fasteners.
- N. Touch up finish as necessary on entire assembly after buildup.
- O. If applicable, position spacers (90, 91), seals (88 and 89), and retainer (87) on panel. Secure with bolts (85, 86) and nuts (84). Apply corrosion preventive compound on bolts (85) and nuts (84) before installation.
- P. Install the actuator fitting assembly (64, 72) with corrosion preventive compound BMS 3-38 (Cor-Ban) or BMS 3-27 (Mastinox 6856K) (SOPM 20-60-02).

FITS AND CLEARANCES

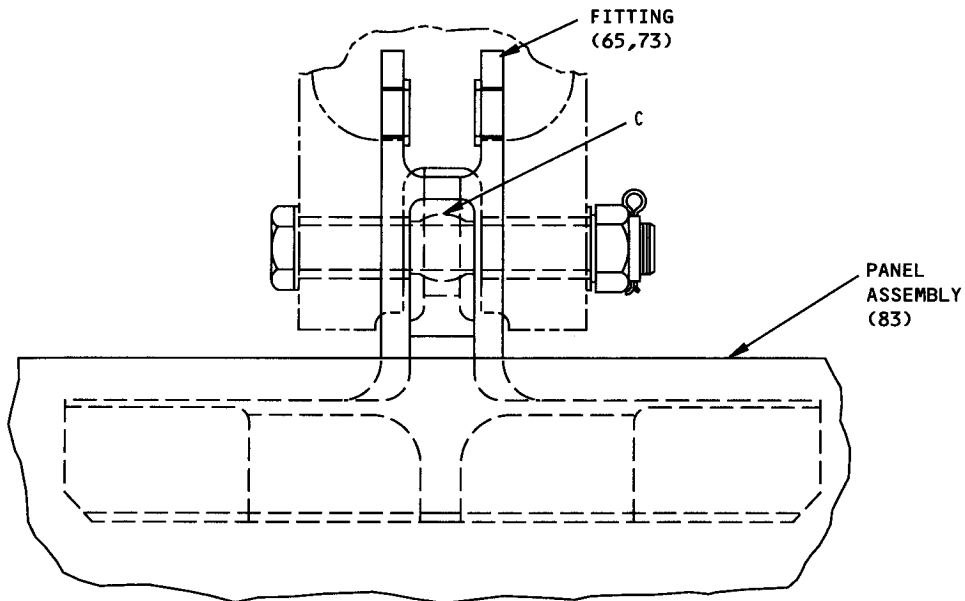


ASSEMBLY 65-46452-13, 65-79950-13, 65-79952 SHOWN
65-46452-32, -35, -39, -56, -58, -62, -65, -68, -70
65-79950-1, 65-79952-5, -6 SIMILAR

Fits and Clearances
Figure 601 (Sheet 1)



65-46452-31,
65-79950-13,
65-79952-4
A-A



65-46452-32,-35,-39,
-56, -58, -62, -65, -68, -70,
65-79950-1, 65-79952-5, -6
A-A

Fits and Clearances
Figure 601 (Sheet 2)

		Design Dimensions				Service Wear Limits		
Ref Letter Fig.801	Mating Item No. Fig.1101	Dimensions		Assembly Clearance		Dimension		Maximum Clearance
		Min	Max	Min	Max	Min	Max	
A	ID 68,76	0.5000	0.5015	0.0005	0.0030	0.4950	0.5045	0.005
	OD *[1]	0.4985	0.4995					
B	ID 69,77	0.5000	0.5015	0.0005	0.0030	0.4950	0.5045	0.005
	OD *[1]	0.4985	0.4995					
C	ID 66,74	0.4995	0.5000	0.0000	0.0015	0.4965	0.5025	0.003
	OD *[2]	0.4985	0.4995					

*[1] INSTALLATION BOLT BACB30LM8DU-21 (Ref)

*[2] INSTALLATION BOLT BACB30NM8KD53 (Ref)

ALL DIMENSIONS ARE IN INCHES

Fits and Clearances
 Figure 601 (Sheet 3)

STORAGE INSTRUCTIONS

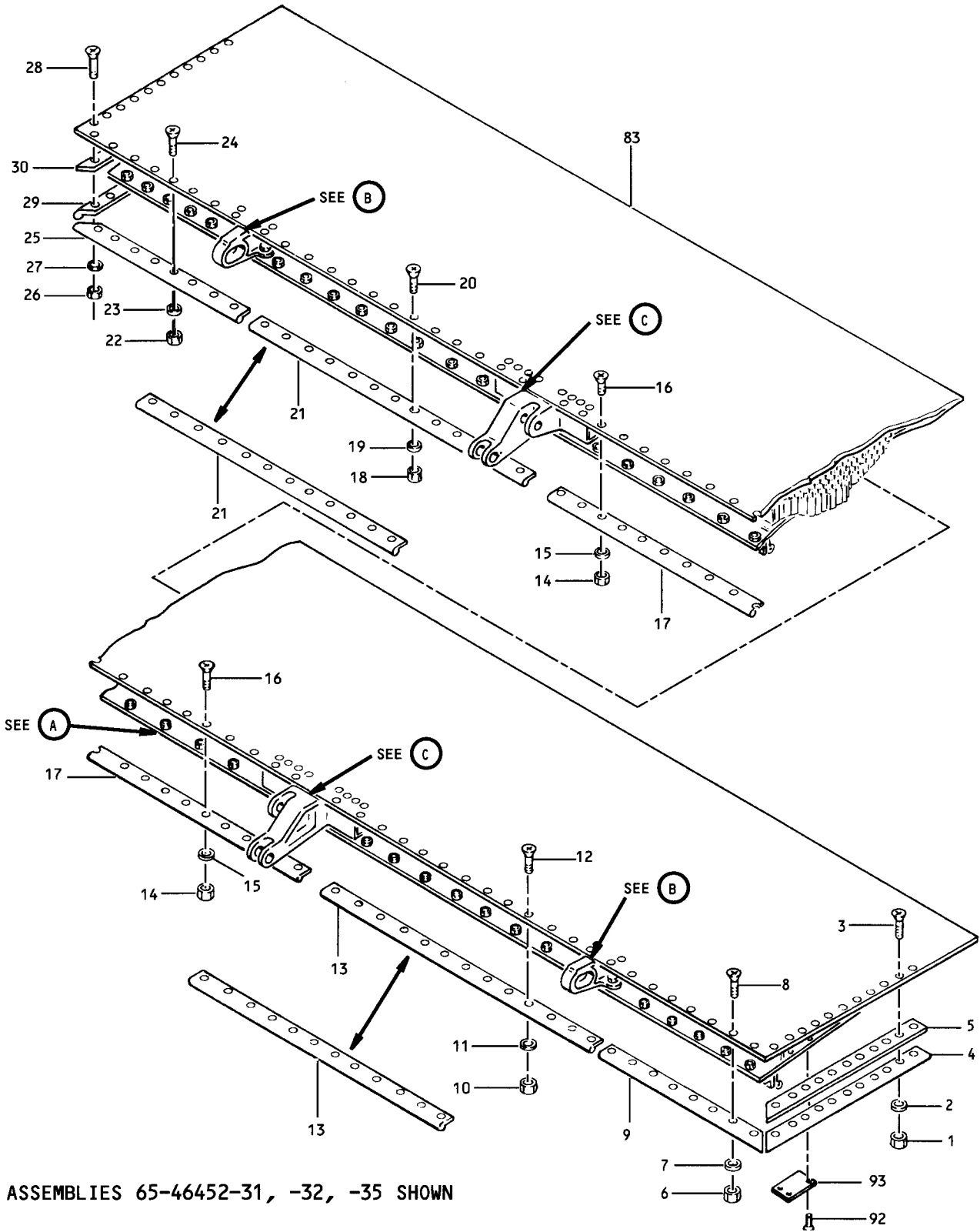
1. Apply a film of MIL-G-23827 grease to all exposed bearing or bushing surfaces.
2. Give the unit protection and put it away with standard industry practices and the instructions in SOPM 20-44-02 and SOPM 20-70-01.

65-46452
65-79950
65-79952



ILLUSTRATED PARTS LIST

THIS PAGE
INTENTIONALLY
LEFT BLANK



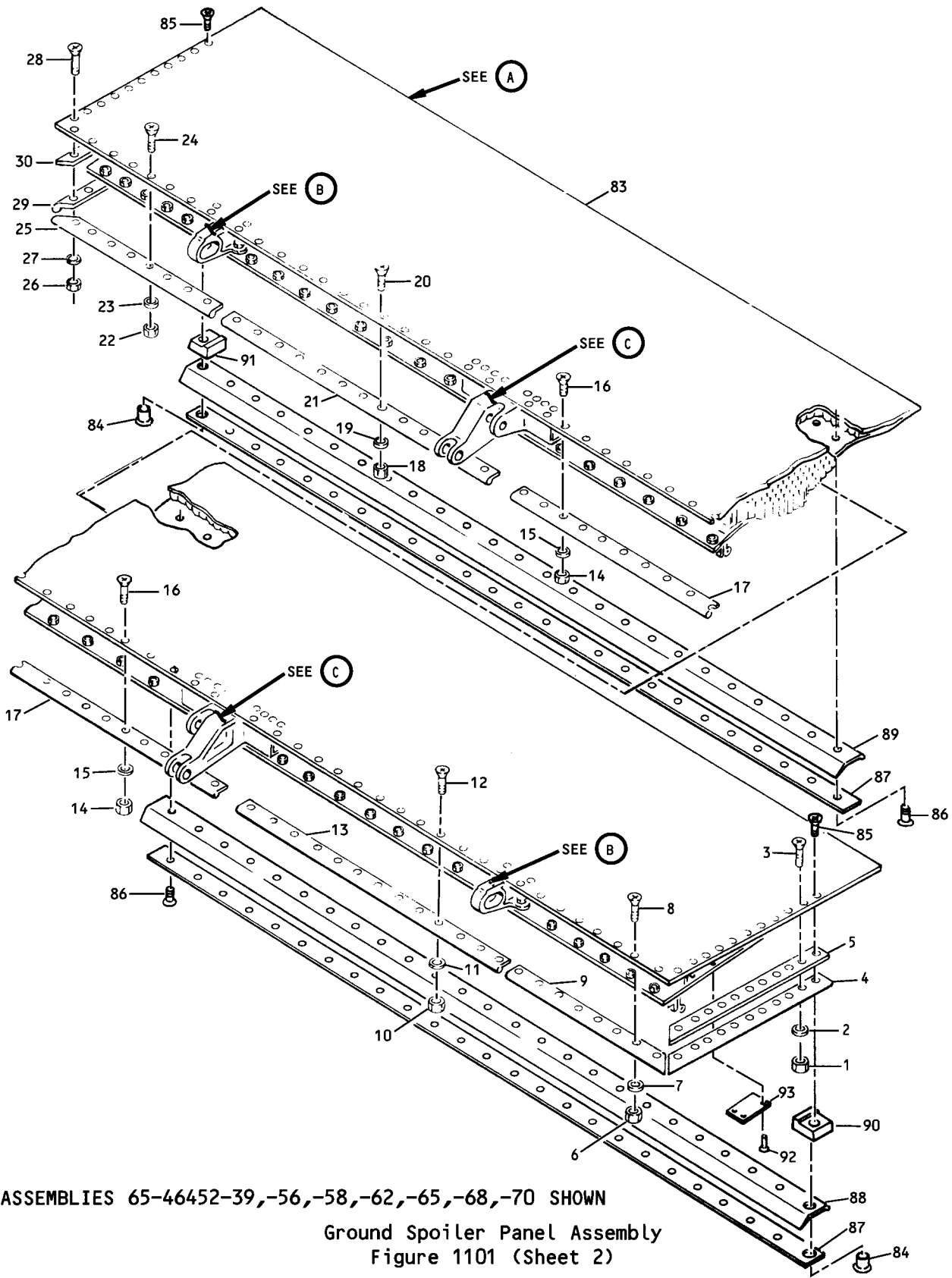
ASSEMBLIES 65-46452-31, -32, -35 SHOWN

Ground Spoiler Panel Assembly
Figure 1101 (Sheet 1)

65-46452
65-79950
65-79952

BOEING

OVERHAUL MANUAL

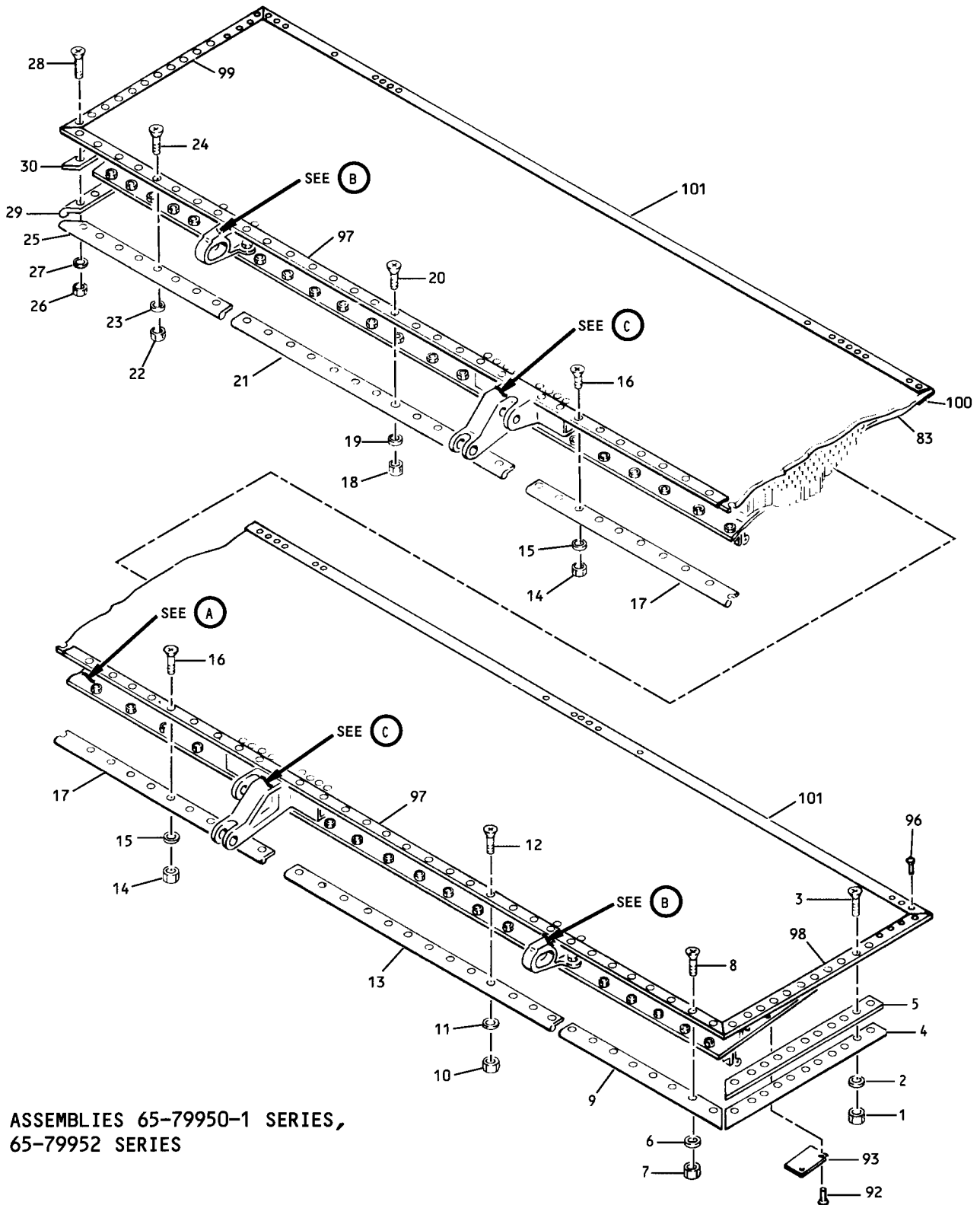


ASSEMBLIES 65-46452-39, -56, -58, -62, -65, -68, -70 SHOWN

Ground Spoiler Panel Assembly
Figure 1101 (Sheet 2)

F39639

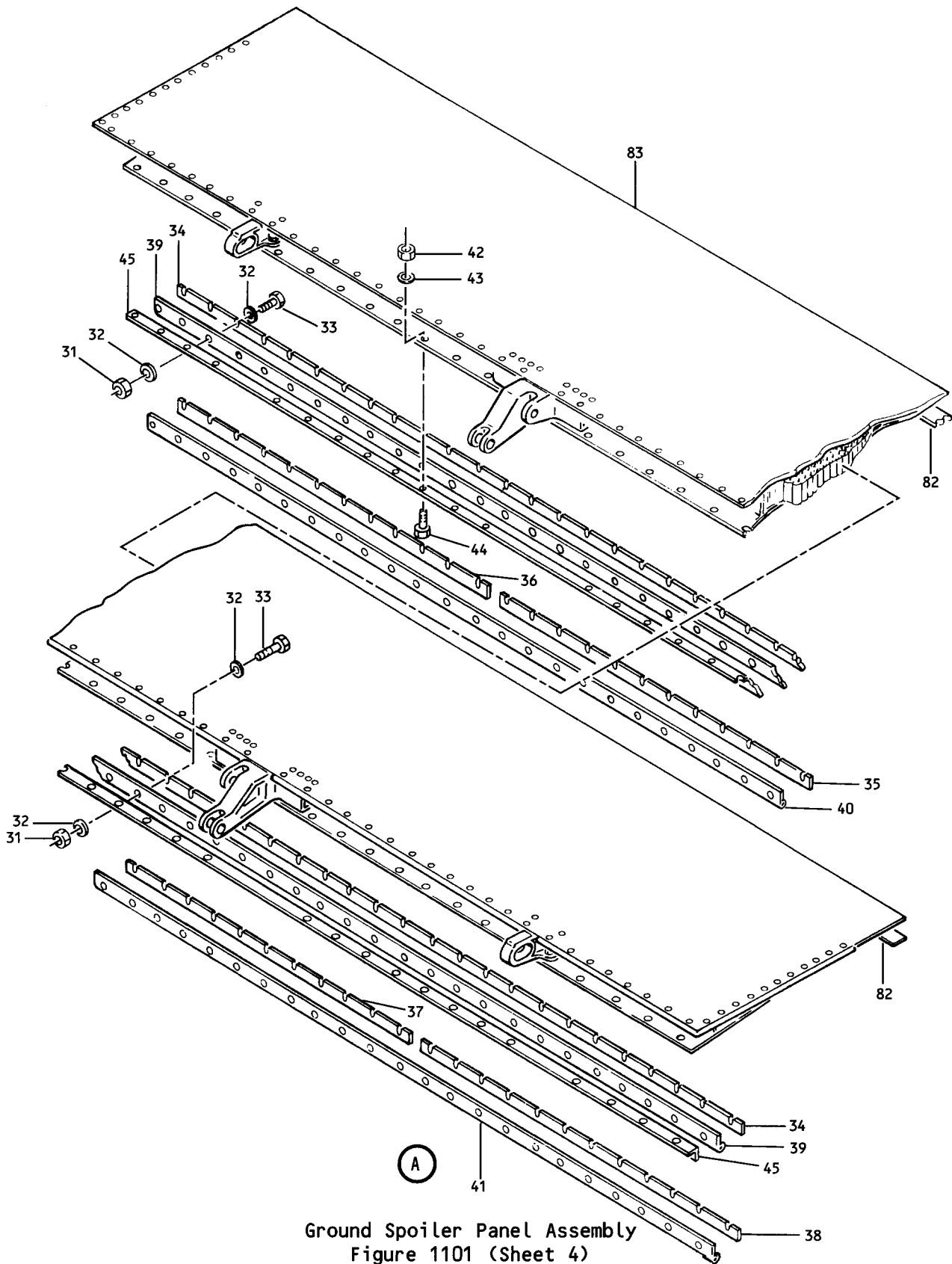
Mar 1/09



ASSEMBLIES 65-79950-1 SERIES,
65-79952 SERIES

Ground Spoiler Panel Assembly
Figure 1101 (Sheet 3)

65-46452
65-79950
65-79952

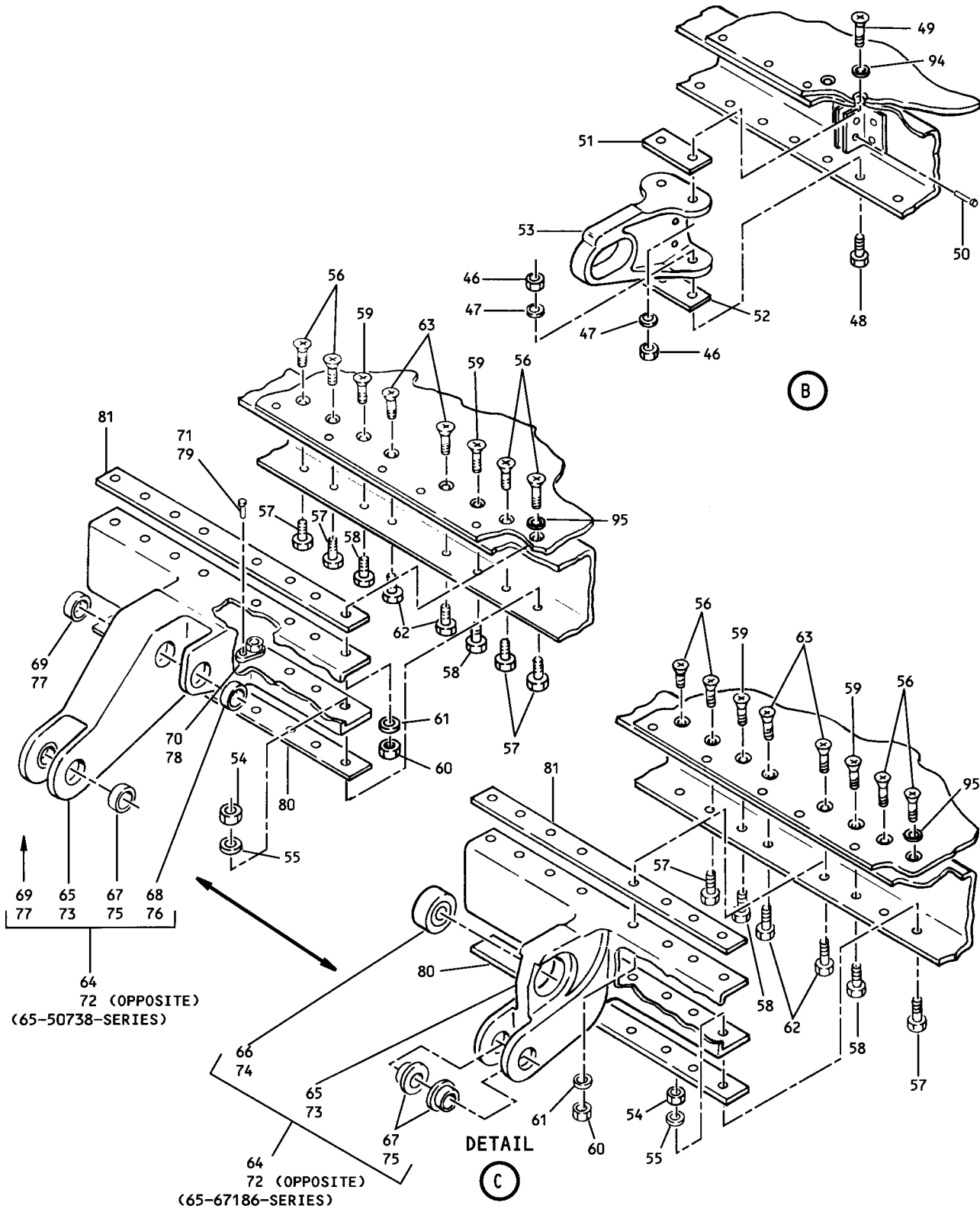


Ground Spoiler Panel Assembly
Figure 1101 (Sheet 4)

F39667

Mar 1/09

57-56-61
Page 1105



Ground Spoiler Panel Assembly
Figure 1101 (Sheet 5)

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-	65-46452-31		PANEL ASSY, GROUND SPOILER							A	RF
	65-46452-32		PANEL ASSY, GROUND SPOILER							B	RF
	65-46452-35		PANEL ASSY, GROUND SPOILER (SB 57-1042)							C	RF
	65-46452-39		PANEL ASSY, GROUND SPOILER							D	RF
	65-79950-1		PANEL ASSY, GROUND SPOILER							E	RF
	65-79950-13		PANEL ASSY, GROUND SPOILER							F	RF
	65-79950-14		PANEL ASSY, GROUND SPOILER							G	RF
	65-79952-4		PANEL ASSY, GROUND SPOILER (SB 57-1053)							H	RF
	65-79952-5		PANEL ASSY, GROUND SPOILER (SB 57-1053)							I	RF
	65-79952-6		PANEL ASSY, GROUND SPOILER (SB 57-1053)							J	RF
	65-46452-56		PANEL ASSY, GROUND SPOILER							K	RF
	65-46452-58		PANEL ASSY, GROUND SPOILER							L	RF
	65-46452-62		PANEL ASSY, GROUND SPOILER (PRE SB 57-1227)							M	RF
	65-46452-65		PANEL ASSY, GROUND SPOILER (POST SB 57-1227)							N	RF
	65-46452-68		PANEL ASSY, GROUND SPOILER							O	RF
	65-46452-70		PANEL ASSY, GROUND SPOILER							P	RF
1	BACN10JC08		. NUT							ABFHI	11
1	BACN10JC08		. NUT							CDEJ-P	10
2	AN960PD8L		. WASHER							ABFHI	11
2	AN960PD8L		. WASHER							CDEJ-P	10
3	NAS514P832-7		. SCREW							ABFHI	11
3	NAS514P832-7		. SCREW							CDEJ-P	10
4	65-46452-15		. SEAL							ABFHI	1
4	65-46452-37		. SEAL (SB 57-1042)							CDEJ-P	1
5	65-46452-11		. FILLER							ABFHI	1
5	65-46452-36		. FILLER (SB 57-1042)							CDEJ-P	1
6	BACN10JC08		. NUT								8
7	AN960PD8L		. WASHER								8
8	NAS514P832-7		. SCREW								8
9	65-46452-17		. SEAL								1
10	BACN10JC08		. NUT								*[1]
11	AN960PD8L		. WASHER								*[1]
12	NAS514P832-7		. SCREW								*[1]
13	65-46452-19		. SEAL							AFH	1
13	65-46452-23		. SEAL							B-EI-P	1
14	BACN10JC08		. NUT								19
15	AN960PD8L		. WASHER								19
16	NAS514P832-7		. SCREW								19
17	65-46452-21		. SEAL							AFH	1
17	65-46452-25		. SEAL							B-EI-P	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-18	BACN10JC08		.								*[1]
19	AN960PD8L		.								*[1]
20	NAS514P832-7		.								*[1]
21	65-46452-20		.						AFH		1
21	65-46452-24		.						B-EI-P		1
22	BACN10JC08		.								8
23	AN960PD8L		.								8
24	NAS514P832-7		.								8
25	65-46452-18		.								1
26	BACN10JC08		.						ABFHI		11
26	BACN10JC08		.						CDEJ-P		10
27	AN960PD8L		.						ABFHI		11
27	AN960PD8L		.						CDEJ-P		10
28	NAS514P832-7		.						ABFHI		11
28	NAS514P832-7		.						CDEJ-P		10
29	65-46452-16		.						ABFHI		1
29	65-46452-38		.						CDEJ-P		1
30	65-46452-11		.						ABFHI		
30	65-46452-36		.						CDEJ-P		1
31	BACN10JC3		.								46
32	AN960PD10L		.								92
33	BACB30NF3-5		.								46
34	65-68280-12		.								1
35	65-68280-53		.								1
36	65-68280-54		.								1
37	65-68280-55		.								1
38	65-68280-56		.								1
39	65-68280-13		.								1
40	65-68280-48		.								1
41	65-68280-49		.								1
42	BACN10JC3		.								35
43	AN960PD10L		.								35
44	BACB30NE3-3		.								35
45	65-68280-11		.								1
45	65-68280-47		.								1
46	BACN10JC3		.								8
47	AN960PD10		.								8
48	NAS1103-4		.						ABCEF		4
									GIJ		
48	BACB30NE3-4		.						DK-P		4
49	BACB30LU3-4		.								4
50	BACR15BB5D		.								2
51	BACS40A18-30		.						AFH		1
51	BACS40R12C19F		.						B-EI-P		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-52	BACS40A26-30		.							AFH	1
52	BACS40R17C19F		.							B-EI-P	1
53	69-37871-1		.							A-FH-K	2
53	69-37871-3		.							L-P	2
54	BACN10JC4		.							AFH	12
54	BACN10JC4		.							B-EI-P	16
55	AN960PD416		.							AFH	12
55	AN960PD416		.							B-EI-P	16
56	BACB30LU4-5		.							AFH	8
56	BACB30LU4-4		.							B-EI-P	8
57	NAS1104-4		.							ABCEF GIJ	8
57	BACB130NF4-4		.							DK-P	8
58	NAS1104-4		.							AFH	4
58	NAS1104-6		.							BCEIJ	4
58	BACB30NF4-6		.							DK-P	4
59	BACB30LU4-5		.							AFH	4
59	BACB30LU4-7		.							B-E I-P	4
60	BACN10JC4		.							AFH	12
60	BACN10JC4		.							B-E	16
61	AN960PD416		.							AFH	12
61	AN960PD416		.							B-E	16
62	NAS1104-6		.							AFH	4
62	NAS1104-7		.							BCEIJ	4
62	BACB30NF4-7		.							DK-P	4
63	BACB30LU4-5		.							AFH	4
63	BACB30LU4-7		.							B-E I-P	4
64	65-67186-7		.							BCEIJ	1
64	65-67186-7		.							DKLM	1
64	65-67186-11		.							DKLM	1
64	65-67186-11		.							N	1
64	65-67186-13		.							O	1
64	65-67186-17		.							P	1
64	65-67186-5		.							BCEIJ	1
64	65-67186-1		.							BCEIJ	1
64	65-50738-11		.							AFH	1
64	65-50738-7		.							AFH	1
64	65-50738-1		.							AFH	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-65	65-67186-10		.	.							1
65	65-67186-15		.	.							1
65	65-67186-9		.	.							1
65	65-67186-4		.	.							1
65	65-50738-13		.	.							1
65	65-50738-9		.	.							1
65	65-50738-3		.	.							1
66	03-729-0500		.	.							1
66	WSBS16ATC32		.	.							1
66	YTA136		.	.							1
66	BLF8-024		.	.							1
66	KSBY8N5		.	.							1
66	BLF8-024		.	.							1
66	KSBY8N5		.	.							1
66	WSBS16ATC32		.	.							1
66	VTA136		.	.							1
66	03-729-0500		.	.							1
66	KSC111008V		.	.							1
66	KSC111008V		.	.							1
67	BACB28X8C22		.	.							2
67	BACB28X8C022		.	.							2
67	NAS77A8-12P		.	.							2
68	69-37867-15		.	.							1
69	69-37867-16		.	.							1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-70	BACN10KB4		.	.	NUTPLATE (USED ON 65-50738-1, -7,-11)						4
71	BACR15BB5D		.	.	RIVET						8
72	65-67186-8		.		FITTING ASSY, ACTUATOR (PREF)				BCEIJ		1
72	65-67186-8		.		FITTING ASSY, ACTUATOR (PRE SB 57-1227)				DKLM		1
72	65-67186-12		.		FITTING ASSY, ACTUATOR (POST SB 57-1227)				DKLM		1
72	65-67186-12		.		FITTING ASSY, ACTUATOR				N		1
72	65-67186-14		.		FITTING ASSY, ACTUATOR				O		1
72	65-67186-18		.		FITTING ASSY, ACTUATOR				P		1
72	65-67186-6		.		FITTING ASSY, ACTUATOR (OPT TO 65-67186-8,-2)				BCEIJ		1
72	65-67186-2		.		FITTING ASSY, ACTUATOR (OPT TO 65-67186-6,-8)				BCEIJ		1
72	65-50738-12		.		FITTING ASSY, ACTUATOR (PREF)				AFH		1
72	65-50738-8		.		FITTING ASSY, ACTUATOR (OPT TO 65-50738-12,-2)				AFH		1
72	65-50738-2		.		FITTING ASSY, ACTUATOR (OPT TO 65-50738-8,-12)				AFH		1
73	65-67186-10		.	.	FITTING (USED ON 65-67186-8,-12)						1
73	65-67186-15		.	.	FITTING (USED ON 65-67186-14,-18)						1
73	65-67186-9		.	.	FITTING (USED ON 65-67186-6)						1
73	65-67186-4		.	.	FITTING (USED ON 65-67186-2)						1
73	65-50738-14		.	.	FITTING (USED ON 65-50738-12)						1
73	65-50738-10		.	.	FITTING (USED ON 65-50738-12)						1
73	65-50738-4		.	.	FITTING (USED ON 65-50738-2,-8)						1
74	176198		.	.	BEARING, V09455 (BOEING 10-60545-45)(USED ON 65-67186-2,-6,-8) (PRE SB 57-1227)						1
74	BLFN8-142		.	.	BEARING, V81376 (BOEING 10-60545-45)(USED ON 65-67186-2,-6,-8) (PRE SB 57-1227)						1
74	KSSN8-1		.	.	BEARING, V97613 (BOEING 10-60545-45) (USED ON 65-67186-2,-6,-8)(PRE SB 57-1227)						1
74	BLFN8-142		.	.	BEARING, V81376 (BOEING 10-60545-45)(USED ON 65-67186-14)						1
74	KSSN8-1		.	.	BEARING, V97613 (BOEING 10-60545-45) (USED ON 65-67186-14)						1
74	HSPR8BAC		.	.	BEARING, V73134 (BOEING 10-60545-45)(USED ON 65-67186-14)						1
74	NHSB8V201		.	.	BEARING, V15860 (BOEING 10-60545-45)(USED ON 65-67186-14)						1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-74	176198		.	.	BEARING, V09455 (BOEING 10-60545-45) (USED ON 65-67186-14)						1
74	KSC234708V		.	.	BEARING, V50632 (BOEING 10-60545-45) (USED ON 65-67186-12, -18)						1
74	KSC234708V		.	.	BEARING, V50632 (USED ON 65-67186-2,-6,-8)(POST SB 57-1227)						1
75	BACB28X8C22		.	.	BUSHING (USED ON 65-67186-2,-6,-8)						2
75	BACB28X8C022		.	.	BUSHING (USED ON 65-67186-14,-18)						2
75	NAS77A8-12P		.	.	BUSHING (USED ON 65-50738-2,-8,-12)						2
76	69-37867-15		.	.	BUSHING (USED ON 65-50738-2,-8,-12)						1
77	69-37867-16		.	.	BUSHING (USED ON 65-50738-2,-8,-12)						1
78	BACN10KB4		.	.	NUTPLATE (USED ON 65-50738-2,-8,-12)						4
79	BACR15BB5D		.	.	RIVET						8
80	BACS40A19-126		.		SHIM				AFH		1
80	65-46452-26		.		SHIM				B-E I-P		1
81	BACS40A28-126		.		SHIM				AFH		1
81	BACS40R17C86F		.		SHIM				B-E I-P		1
82	65-46452-10		.		STRIP, RUB				A-D		1
83	65-46452-2		.		PANEL ASSY, HONEYCOMB				AFH		1
83	65-46452-27		.		PANEL ASSY, HONEYCOMB				BCEIJ		1
83	65-46452-44		.		PANEL ASSY, HONEYCOMB				D		1
83	65-46452-57		.		PANEL ASSY, HONEYCOMB				K		1
83	65-46452-59		.		PANEL ASSY, HONEYCOMB				L		1
83	65-46452-63		.		PANEL ASSY, HONEYCOMB (PRE SB 57-1227)				M		1
83	65-46452-66		.		PANEL ASSY, HONEYCOMB (POST SB 57-1227)				M		1
83	65-46452-63		.		PANEL ASSY				N		1
83	65-46452-67		.		PANEL ASSY				O		1
83	65-46452-69		.		PANEL ASSY				P		1
83A	65-46452-43		.	.	PANEL, HONEYCOMB (USED ON 65-46452-44)						1
83A	65-46452-60		.	.	PANEL, HONEYCOMB (USED ON 65-46452-57,-59,-63,-67,-69)						1
84	BACN10RB08		.		NUT				DK-P		2
85	BACB30LU2-4		.		BOLT				DK-P		2
86	BACB30LU3-1		.		BOLT				DK-P		46
87	65-46452-40		.		RETAINER				DK-P		2
88	65-46452-41		.		SEAL (LIMITED)				D		1
88	65-46452-53		.		SEAL (LIMITED)				D		1
88	65-46452-53		.		SEAL				K-P		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-											
89	65-46452-42		.	SEAL (LIMITED)					D		1
89	65-46452-54		.	SEAL (LIMITED)					D		1
89	65-46452-54		.	SEAL					K-P		1
90	65-76165-5		.	SPACER					DK-P		1
91	65-76165-6		.	SPACER					DK-P		1
92	BACR15BB3D4		.	RIVET							2
93	AN7510-1		.	PLATE, IDENTIFICATION							1
94	BACW10UC10		.	WASHER					D-P		4
95	BACW10UC416		.	WASHER					D-P		16
96	MS20426A4-4		.	RIVET					EFIJM		100
97	65-79950-2		.	STRIP, CAP					E-J		1
98	65-79950-3		.	STRIP, CAP					E-J		1
99	65-79950-4		.	STRIP, CAP					E-J		1
100	65-79950-5		.	STRIP, CAP					E-J		1
101	65-79950-6		.	STRIP, RUB (SB 57-1053)					E-J		1

*[1] USE 12 PIECES WITH 65-46452-19 OR -20. USE 13 PIECES WITH 65-46452-23 OR -24.

*[2] COMBINATION OF 65-68280-53, -54, -55, AND -56 IS OPTIONAL TO 65-68280-12.

*[3] COMBINATION OF 65-68280-48 AND -49 IS OPTIONAL TO 65-68280-13.

VENDORS

V09455 RBC TRANSPORT DYNAMICS CORP., 3131 WEST SEGERSTROM AVE., SANTA ANA,
CALIFORNIA 92704-5811

V15860 NEW HAMPSHIRE BALL BEARINGS, INC., 155 LEXINGTON DR., LACONIA,
NEW HAMPSHIRE 03246-2937

V21335 TIMKEN US CORPORATION, 336 MECHANIC ST., LEBANON, NEW HAMPSHIRE
03766-2614

V50632 KAMATICS CORPORATION, 1335 BLUE HILLS AVE., BLOOMFIELD, CT. 06002-5303

V73134 ROLLER BEARING COMPANY OF AMERICA, INC., DBA RBC HEIM BEARINGS DIV., 60
ROUND HILL RD., P.O. BOX 430, FAIRFIELD, CONNECTICUT 06824-5172

V77896 REXNORD, INC., BEARING OPERATION, 2400 CURTIS ST., DOWNER'S GROVE,
ILLINOIS 60515-4037

V81376 RBC SOUTHWEST PRODUCTS, INC., 5001 B COMMERCE DR., BALDWIN PARK,
CALIFORNIA 91706-1424

V97613 DOVER ENGINEERED SYSTEMS, INC., DBA KAHR BEARING, 5675 BURLINGAME RD.,
TUCSON, ARIZONA 85743-9453

Part No.	Fig. and Index No.	Qty. per Assy.
AN7510-1	1101-93	1
AN960PD10	47	8
AN960PD10L	32	92
AN960PD10L	43	35
AN960PD416	55	12
AN960PD416	55	16
AN960PD416	61	12
AN960PD416	61	16
AN960PD8L	2	11
AN960PD8L	2	10
AN960PD8L	7	8
AN960PD8L	11	*[1]
AN960PD8L	15	19
AN960PD8L	19	*[1]
AN960PD8L	23	8
AN960PD8L	27	11
AN960PD8L	27	10
BACB130NF4-4	57	8
BACB28X8C022	67	2
BACB28X8C022	75	2
BACB28X8C22	67	2
BACB28X8C22	75	2
BACB30LU2-4	85	2
BACB30LU3-1	86	46
BACB30LU3-4	49	4
BACB30LU4-4	56	8
BACB30LU4-5	56	8
BACB30LU4-5	59	4
BACB30LU4-5	63	4
BACB30LU4-7	59	4
BACB30LU4-7	63	4
BACB30NE3-3	44	35
BACB30NE3-4	48	4
BACB30NF3-5	33	46
BACB30NF4-6	58	4
BACB30NF4-7	62	4
BACN10JC08	1	11
BACN10JC08	1	10
BACN10JC08	6	8
BACN10JC08	10	*[1]
BACN10JC08	14	19
BACN10JC08	18	*[1]
BACN10JC08	22	8
BACN10JC08	26	11
BACN10JC08	26	10
BACN10JC3	31	46
BACN10JC3	42	35

Part No.	Fig. and Index No.	Qty. per Assy.
BACN10JC3	54	12
BACN10JC4	54	12
BACN10JC4	54	16
BACN10JC4	60	12
BACN10JC4	60	16
BACN10KB4	70	4
BACN10KB4	78	4
BACN10RB08	84	2
BACR15BB3D4	92	2
BACR15BB5D	50	2
BACR15BB5D	71	8
BACR15BB5D	79	8
BACS40A18-30	51	1
BACS40A19-126	80	1
BACS40A26-30	52	1
BACS40A28-126	81	1
BACS40R12C19F	51	1
BACS40R17C19F	52	1
BACS40R17C86F	81	1
BACW10UC10	94	4
BACW10UC416	95	16
BLF8-024	66	1
BLFN8-142	74	1
HSPR8BAC	74	1
KSBY8N5	66	1
KSC111008V	66	1
KSC234708V	74	1
KSSN8-1	74	1
KSSN8-1	74	1
MS20426A4-4	96	100
NAS1103-4	48	4
NAS1104-4	57	8
NAS1104-4	58	4
NAS1104-6	58	4
NAS1104-6	62	4
NAS1104-7	62	4
NAS514P832-7	3	11
NAS514P832-7	3	10
NAS514P832-7	8	8
NAS514P832-7	12	*[1]
NAS514P832-7	16	19
NAS514P832-7	20	*[1]
NAS514P832-7	24	8
NAS514P832-7	28	11
NAS514P832-7	28	10
NAS77A8-12P	67	2
NAS77A8-12P	75	2

Part No.	Fig. and Index No.	Qty. per Assy.
NHSB8V201	1101-74	1
VTA136	66	1
WSBS16ATC32	66	1
YTA136	66	1
03-729-0500	66	1
176198	74	1
65-46452-10	82	1
65-46452-11	5	1
65-46452-11	30	
65-46452-15	4	1
65-46452-16	29	1
65-46452-17	9	1
65-46452-18	25	1
65-46452-19	13	1
65-46452-2	83	1
65-46452-20	21	1
65-46452-21	17	1
65-46452-23	13	1
65-46452-24	21	1
65-46452-25	17	1
65-46452-26	80	1
65-46452-27	83	1
65-46452-31		RF
65-46452-32		RF
65-46452-35		RF
65-46452-36	5	1
65-46452-36	30	1
65-46452-37	4	1
65-46452-38	29	1
65-46452-39		RF
65-46452-40	87	2
65-46452-41	88	1
65-46452-42	89	1
65-46452-43	83A	1
65-46452-44	83	1
65-46452-53	88	1
65-46452-54	89	1
65-46452-56		RF
65-46452-57	83	1
65-46452-58		RF
65-46452-59	83	1
65-46452-60	83A	1
65-46452-62		RF
65-46452-63	83	1
65-46452-65		RF
65-46452-66	83	1
65-46452-67	83	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-46452-68	83	RF
65-46452-69		1
65-46452-70		RF
65-50738-1	64	1
65-50738-10	73	1
65-50738-11	64	1
65-50738-12	72	1
65-50738-13	65	1
65-50738-14	73	1
65-50738-2	72	1
65-50738-3	65	1
65-50738-4	73	1
65-50738-7	64	1
65-50738-8	72	1
65-50738-9	65	1
65-67186-1	64	1
65-67186-10	65	1
65-67186-10	73	1
65-67186-11	64	1
65-67186-12	72	1
65-67186-13	64	1
65-67186-14	72	1
65-67186-15	65	1
65-67186-15	73	1
65-67186-17	64	1
65-67186-18	72	1
65-67186-2	72	1
65-67186-4	65	1
65-67186-4	73	1
65-67186-5	64	1
65-67186-6	72	1
65-67186-7	64	1
65-67186-8	72	1
65-67186-9	65	1
65-67186-9	73	1
65-68280-11	45	1
65-68280-12	34	1
65-68280-13	39	1
65-68280-47	45	1
65-68280-48	40	1
65-68280-49	41	1
65-68280-53	35	1
65-68280-54	36	1
65-68280-55	37	1
65-68280-56	38	1
65-76165-5	90	1
65-76165-6	91	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-79950-1	1101-	RF
65-79950-13		RF
65-79950-14		RF
65-79950-2	97	1
65-79950-3	98	1
65-79950-4	99	1
65-79950-5	100	1
65-79950-6	101	1
65-79952-4		RF
65-79952-5		RF
65-79952-6		RF
69-37867-15	68	1
69-37867-15	76	1
69-37867-16	69	1
69-37867-16	77	1
69-37871-1	53	2
69-37871-3	53	2

Part No.	Fig. and Index No.	Qty. per Assy.
----------	--------------------	----------------