

TO: ALL HOLDERS OF AILERON ASSEMBLY, CONTROL TAB ASSEMBLY, AND BALANCE PANEL ASSEMBLY OVERHAUL MANUAL, 57-50-21

REVISION NO. 18, DATED MAR 1/06

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / A s s y	C l e a n i n g	I n s p / C h k	R e p a i r	A s s y	F / C	T e s t	T / S h o o t i n g	S / T o o l s	S t o r a g e	I P L	L / O v e r h a u l
Updated Assembly section to specify 0.01-0.02 inch gap on WBL 439.04 aileron tab hinge						X							
Updated Assembly section to provide electrical bonding, grounding and fillet sealing information for electrical jumpers						X							

AILERON ASSEMBLY, CONTROL TAB ASSEMBLY, AND BALANCE PANEL ASSEMBLY

57-50-21

BOEING P/N 65-46454-1, -2, -21, -22, -23SP, -24SP, -31SP, -32SP, -503, -504
 65-46455-13 thru -18, -19SP thru -24SP, -27SP, -28SP, -527, -528
 65-46457-1, -6
 65C25911-1SP, -2SP, -7SP thru -12SP, -17SP, -18SP, -23SP, -24SP,
 -27SP thru -30SP

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 30372	Nov 15/67
		PRR 30565	Nov 15/67
		PRR 30622	Nov 15/67
		PRR 30877	Nov 10/69
27-1007		PRR 30935	Nov 10/69
		PRR 31394	Nov 10/69
27-1025, Rev 1		PRR 31394-1	Nov 10/69
		PRR 31761	Nov 10/69
57-1040, Rev 1		PRR 31772	Nov 10/69
		PRR RC 11080	Nov 10/69
		MR 39062	Nov 10/69
		MR 39204	Nov 10/69
27-1025, Rev 2			Jun 10/72
		PRR 32107	Jun 25/73
		PRR 32121-8	Jun 25/73
		PRR 32420	Dec 25/74
		PRR 33191	Dec 5/83
		PRR 33200-5	Jun 5/84
		PRR 33180-83	Mar 5/85

Nov 1/03

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737-27-1223		PRR 34630 PRR 38275-2	Sep 5/90 Nov 1/03

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
57-50-21		1101	Jun 5/84		
T-1	Nov 1/03	1102	Jun 5/84		
T-2	Nov 1/03	1103	Jun 5/84		
* LEP-1	Mar 1/06	1104	Jun 5/84		
LEP-2	BLANK	1105	Jul 1/99		
T/C-1	Jun 25/73	1106	Jul 1/99		
T/C-2	BLANK	1107	Nov 1/03		
1	Jun 5/84	1108	Nov 1/03		
2	Jul 1/99	1108A	Nov 1/03		
101	Jun 5/84	1108B	BLANK		
102	Jun 5/84	1109	Nov 1/03		
103	Jun 5/84	1110	Jul 1/99		
104	Jun 5/84	1111	Jun 5/91		
201	Jun 5/84	1112	Jul 1/99		
202	BLANK	1113	Jul 1/99		
301	Jun 5/84	1114	Jun 5/91		
302	Jun 5/84	1115	Jun 5/84		
401	Jun 5/84	1116	Dec 5/86		
402	Nov 1/03	1117	Jul 1/99		
402A	Jun 5/84	1118	Jul 1/99		
402B	BLANK	1119	Jul 1/99		
403	Jul 1/99	1120	Jun 5/84		
404	Jun 5/84	1121	Jun 5/84		
405	Jul 1/03	1122	Jun 5/84		
406	Jun 5/84	1123	Dec 1/95		
407	Jun 5/84	1124	Nov 1/03		
408	Jul 1/03	1125	Jun 5/91		
501	Jun 5/84	1126	Nov 1/03		
* 502	Mar 1/06				
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504	Jun 5/84				
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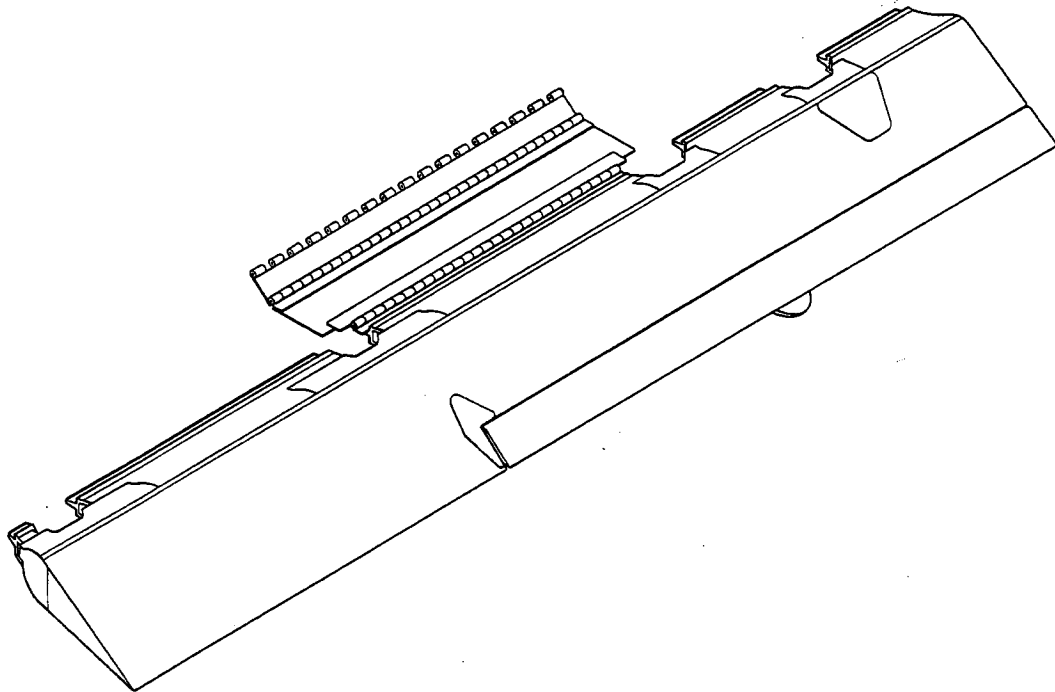
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AILERON ASSEMBLY, CONTROL TAB ASSEMBLY, AND BALANCE PANEL ASSEMBLY



Aileron Assembly, Control Tab Assembly, and Balance Panel Assembly
Figure 1

DESCRIPTION AND OPERATION

1. Description

- A. The aileron buildup consists of the aileron assembly, tab assembly, balance panel assembly, seal installation, control installation and attaching parts. The aileron assembly consists of a bonded aluminum alloy frame structure, with front and rear spar and honeycomb core, plus seal installations, tab bearing support fittings, hinge bearing support assemblies, hinge fitting assembly, and balance weights as required. The tab assembly is a thin, tapered lightweight control surface with an aluminum spar, fiberglass honeycomb core, fiberglass skin, and an aluminum alloy nose. It is attached to the aileron rear spar by four hinge bearings. Left and right tabs are identical except for mounting of the mast fitting and related fairing. A balance panel assembly is attached to each aileron at the No. 3 bay. The balance panel is connected to the aileron nose by a continuous hinge at the aft edge. The forward edge of each panel is attached to wing structure by an idler hinge. The balance panel is bounded by seals made of dacron fabric, impregnated with silicone rubber.

- B. Three hinge fittings and one combination hinge and control fitting are located on the front spar of the aileron assembly for attachment to the wing trailing edge hinge fittings and the control pushrod. The nose of the aileron extends forward between the hinge points and the aileron balance weights are attached to these extensions at bay positions 1, 2 and 4. Adjust weights, to compensate for weight of the tab, are attached to the lower aft edge of the aileron balance panel. The tab is attached to the aileron with four mating hinge fittings mounted on the aft spar of aileron and front spar of the tab. The required number of adjustment weights for each tab is stamped on a data plate attached to the tab.
- C. Refer to Component Maintenance Manual 57-50-25 for Maintenance Data and Detailed Breakdown of Graphite/Epoxy Aileron Assembly 65C25911-1SP, -2SP, -7SP thru -12SP, -17SP, -18SP, -23SP, -24SP, -27SP, -28SP.

2. Operation

- A. Dual pushrods pass through the aileron and connect tab, on the tab, on the inboard trailing edge of the aileron, to the wing structure. The balance tab functions to reduce the force required to position the aileron. Tab travel is opposite in direction to aileron travel and is controlled by aileron motion. The balance panel, located at No. 3 bay, also aids in reducing the force required to position the aileron in flight. The aerodynamic seals, located at the forward and aft balance panel hinge connections, control movement of air through the aileron nose cavity area. The nylon type seals, attached to the perimeter of the nose extensions at the other bay positions (1, 2 and 4), also control airflow around the front of the aileron. Operation of the aileron is controlled mechanically with a hydraulic boost system upon a signal from the Captain's or First Officer's control wheel.

3. Leading Particulars

Length -- 110.0 inches (approximately)
Width -- 32.0 inches (approximately)
Thickness -- 4.0 inches (maximum)
Weight -- 71.0 pounds (approximately) (total buildup)

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DISASSEMBLY

1. Disassembly of Aileron Buildup (Fig. 1101.)
 - A. Mount aileron, tab and balance panel assemblies, as a unit, on suitable work stand with top side down.
 - B. Loosen bolt (4, Fig. 1104) on aft edge of panel (20) and slide pin retainer (6) forward sufficiently to release pins (4 and 5, Fig. 1101).
 - C. Remove hinge pins (4 and 5) and separate balance panel assembly from aileron.
 - D. Remove bolts (1) and washers (2) from hinge cover assemblies (3, 4, and 5, Fig. 1103), if installed on aileron tab assembly (2, Fig. 1101), and slide covers back from hinges.
 - E. Remove nuts (7), washers (8), and bolts (9) which connect bonding jumpers (10) to aft spar of aileron.
 - F. Remove cotter pin (11), nut (12), washer (13), bolt (14), and washers (15) at four places and separate tab assembly from aileron.
 - G. Remove nuts (16 and 28), washers (17 and 29), shims (17A), if installed, bolts (18 and 30), and rod assemblies (19 or 23B).

NOTE: Do not disassemble items (20 through 23A) from rod assembly (19), or items (23C through 23R) from rod assembly (23B) unless repair or replacement is necessary.
 - H. Remove nuts (24), washers (25), screws (26) and bonding jumpers (10) from forward spar of tab.
 - I. Remove bolts (31), washers (32), and seals (33 or 33A and 33B), as applicable, from ends of balance panel assembly (3).
 - J. Remove bolts (34), washers (35) and seals (36) from balance panel assembly (3).
 - K. Remove bolts (37 and 39), washers (38 and 40), and seal retainer (41).
 - L. Remove bolts (42), washers (43), and seal retainer (44).
 - M. Remove bolts (52), washers (53) and retainer (54) from hinge (51), if installed. Remove seal (45).

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- N. Remove inboard and outboard hinge pins (49 and 50) and hinge (51), if installed.
- O. Remove bolts (46), washers (47) and tab adjust weights (48) from aft edge of balance panel assembly (3).

NOTE: If tab adjust weights (48) are not installed at each weight mounting location, remove bolts (55) and washers (56) which should be installed at locations not requiring weights. Note positions from which weights are removed, to facilitate reassembly.

- P. Remove nuts (7), washers (8), bolts (57 and 58) and bonding jumpers (59 and 60) from forward spar of aileron.
 - Q. Remove cotter pins (61), nuts (62), washers (63 and 64), bolts (65 and 66) and bushing (67) from hinge bearing support assemblies (69, Fig. 1102), if installed.
2. Disassembly of Aileron Assembly (Fig. 1102)

NOTE: For maintenance of Graphite/Epoxy Aileron Assmblies, see Component Maintenance Manual, 57-50-25.

- A. Remove bolts (1), washers (2) and seal (3) from aileron nose at bay 3 position.
- B. Remove bolts (4 and 18), washers (5 and 19), seal retainer (5A), if applicable, and seal (6) from aileron nose at bay position 4.
- C. Remove bolts (7 and 18), washers (8 and 19), seal retainers (8A and 8B), if applicable, and seals (9 and 10) from aileron nose at bay positions 1 and 2.
- D. Remove bolts (11), washers (12) and seal supports (13 thru 17) at all bay positions.
- E. Remove bolts (18), washers (19) and seals (20 thru 24) from seal supports (13 thru 17).
- F. Remove nuts (25), washers (26), bolts (27) and hinge (28) from aileron nose at bay position 3.
- G. Remove bolts (29 and 30) and coverplate (31) from top side of aileron nose.
- H. Remove bolts (32, 33, 35 and 37) and coverplates (34, 36 and 38) from top side of aileron nose.
- I. Remove bolts (39, 40, 42, 43 and 45) and coverplates (41, 44 and 46) from bottom side of aileron nose.

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- J. Remove bolts (47, 48, 50, 51, 53, 54, 56, and 57) and skins (49, 52, 55, and 58) from lower surface of aileron nose.
- K. Remove nuts (59), washers (60) or bushings (61), if installed, bolts (62) and weights (63) from aileron nose at bay positions 1, 2, and 4.
- L. Remove cotter pins (63A), nuts (64), washers (65), bolts (66 and 67), washers (68), and support assemblies (69) from hinges (81, 85, and 88) on aileron front spar.

NOTE: Do not remove swaged-in roller bearing (71) or lubrication fitting (72) from bearing support (70) unless replacement is necessary.

- M. Remove nuts (73), washers (74), bolts (75), washers (76) or lockwires, pins (76A), and rod end bearings (77) from tab bearing support fittings (79).

NOTE: Do not remove rivets (78) and tab bearing support fittings (79) unless repair is necessary. Do not remove hinges (81, 85, and 88) unless hinges are damaged.

Bushings (82, 83, and 89) and washers (83A) may be replaced without removing hinges.

- N. Do not remove tab mast fairing (91) unless repair or replacement is necessary.
- O. Do not remove identification plate (92) and rivets (93) unless replacement is necessary.

3. Disassembly of Tab Assembly (Fig. 1103)

- A. Remove bolts (1), washers (2), and hinge cover assemblies (3, 4, and 5) from forward spar of tab.

NOTE: Do not remove rivets (6), filler (7), and nutplate (8) from slide (9) unless repair or replacement is necessary.

Do not remove rivets (12 through 18), nose cap (19), shims (20), and fitting assembly (21) unless repair or replacement is necessary.

Do not remove bushings (23 through 26) or rub strips (27 and 28) unless replacement of defective parts is required.

- B. Remove nuts (29), washers (30), bolts (31), and hinge assemblies (32) from front spar.

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- C. Do not remove bushings (33 and 34) from hinge (35) unless replacement is required.

NOTE: Do not remove tab fairing (36) or rivets (37) and Metal-Cal (38) unless replacement is necessary.

4. Disassembly of Balance Panel Assembly (Fig. 1104.)

- A. Remove bolts (1) from each end of panel assembly (13).
B. Remove pin retainers (2 and 3) from ends of panel assembly.
C. Remove bolts (4), washers (5) and pin retainers (6) from both forward and aft edge of balance panel assembly.
D. Remove hinge pin (7) and hinge assembly (8).

NOTE: Do not remove rivets (9) and seal support assemblies (10 and 11) from hinge (12) unless repair or replacement is necessary.

Do not remove rivets (11A) and anchor nuts (11B) from supports (11C) unless replacement is necessary.

- E. Remove nuts (14), washers (15), bolts (16) and hinge (17) from aft side of panel (20).

NOTE: Do not remove rivets (18) and hinge (19) from panel (20) unless repair or replacement is necessary.

Do not remove nameplate (21) and rivets (22) unless replacement is necessary.

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CLEANING

1. General

NOTE: For maintenance of Graphite/Epoxy Aileron Assemblies, see Component Maintenance Manual, 57-50-25.

- A. Wash and rinse all metal parts except bearings in solvent, Specification P-D-680 or equivalent.

CAUTION: DO NOT IMMERSE METAL PARTS WITH PLASTIC, RUBBER OR FABRIC MATERIAL CEMENTED TO THEM IN SOLVENT.

- B. Remove stubborn accumulations of dirt with a stiff-bristle brush. Do not use a metal brush.
- C. Dry parts thoroughly with clean, lint-free cloth, or with clean, moisture-free air.
- D. For further cleaning information, refer to Subject 20-30-03, "General Cleaning Procedures."

2. Bearings

- A. Clean all bearings per Subject 20-30-01, "Cleaning and Relubricating Antifriction Bearings."

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INSPECTION/CHECK

NOTE: For maintenance of Graphite/Epoxy Aileron Assemblies, see Components Maintenance Manual, 57-50-25.

1. Visual Check

- A. Examine all metal parts for pits, scratches, cracks, corrosion and damage , using strong light and a minimum of 10-power magnification.
- B. Check honeycomb and bonded parts for evidence of delamination, internal moisture, scratches and contour defects.
 - (1) Tap surface of honeycomb or bonded structure lightly with coin or plastic rod. Go over entire surface. Normal structure will produce a solid metallic sound; delaminated areas will produce a dull, hollow sound; and areas containing moisture will produce a dull, solid sound.
 - (2) Examine areas suspected of containing moisture radiographically to determine extent of damage.
 - (3) Determine contour defects by laying a straightedge across surface of panel. Raised areas indicate delamination. Warp of panels also can be determined with straightedge.
 - (4) Examine edges of panel carefully for cuts and abrasions. Delamination starts very easily from damage to an edge member of a honeycomb panel.
- C. Check bonding jumpers for broken or frayed cables and broken terminals.
- D. Examine internal areas of aileron through hole at end of aileron nose for loose fasteners or corrosion.
- E. Examine bearings for roughness, binding and excessive radial or axial play.
- F. Examine all bushings for excessive wear.
- G. Examine all nutplates to assure they are properly secured.
- H. Examine all threaded parts for cross-threading or stripping.
- I. Examine all painted or plated surfaces for defects.
- J. Check parts listed in Fig. 601 for wear beyond allowable limits.

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2. Special Check

A. If visual examination discloses evidence of defects in any of listed parts, perform following checks:

(1) Penetrant Check --

- (a) Rods (22 and 23R, Fig. 1101)
- (b) Bushings (67, Fig. 1101; 82 and 89, Fig. 1102)
- (c) Fittings (79, Fig. 1102; 22, Fig. 1103)
- (d) Hinges (81, 85 and 88, Fig. 1102; 35, Fig. 1103; 12, 17, and 19, Fig. 1104)

(2) Magnetic Particle Check --

- (a) Adapter (23H, Fig. 1101)
- (b) Nut (23J, Fig. 1101)
- (c) Barrel (23K, Fig. 1101)
- (d) Plug (23N, Fig. 1101)

REPAIR

NOTE: For maintenance of Graphite/Epoxy Aileron Assemblies, see Component Maintenance Manual, 57-50-25

1. Materials

NOTE: Use materials listed or equivalent substitutes.

- A. Corrosion Preventive Compound -- Specification MIL-C-11796, class 3
- B. Grease -- Specification MIL-G-23827 (Ref 20-60-03)
- C. Primer -- BMS 10-11, type 1 (Ref 20-60-02)
- D. Primer -- Loctite grade T, Loctite Corporation, 705 North Mountain Road, Newington, Connecticut 06111
- E. Adhesive -- Loctite Bushing Mount No. 35, Loctite Corporation
- F. Primer, Adhesive -- BMS 5-51, type 1
- G. Adhesive -- BMS 5-51, type 2, grade 10
- H. Adhesive -- Types 38, 44, 54, grade 1, 68 and 71 (Ref 20-50-12)
- I. Adhesive -- Epon 933, Shell Chemical Company, Willow Pass Road, P.O. Box 831, Pittsburg, California 94565
- J. Primer -- BMS 10-79, type 2 (Ref 20-60-02)

2. Repair

- A. For structural repairs to ailerons and tabs, refer to Boeing Structural Repair Manual 57-50-02.
- B. Machine worn 0.254/0.250 inch diameter holes in bearing support (70, Fig. 1102) and install repair bushings BACB28Y4M064 with wet primer (Fig. 401).

3. Refinish (Fig. 1101)

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

- A. Installation items components (Fig. 1101).
 - (1) Pins (4, 5) -- Apply dry film lubricant BMS 3-8, class A, all over. Material: CRES 304.
 - (2) Shim or washer (17A) -- Apply two coats primer BMS 10-11, type 1 (SRF-12.206) all over.
 - (3) Rod (22, 23R) -- Alodize or chromic acid anodize and apply one coat primer BMS 10-11, type 1 (SRF-2.30) all over, except omit primer in rod end hole. Material: Al alloy.

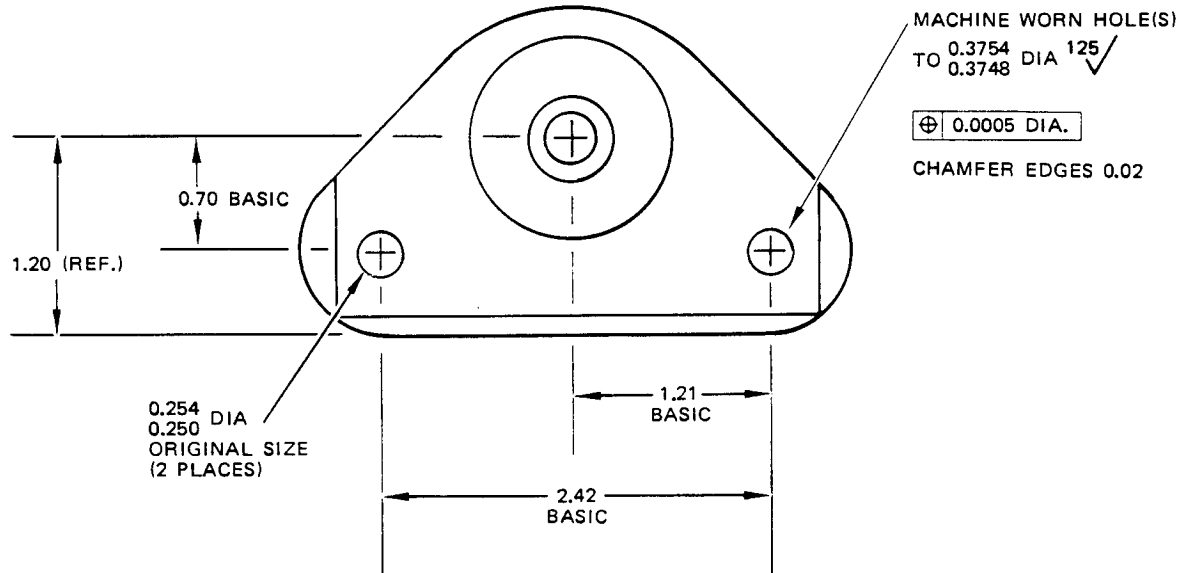
- (4) Adapter (23H) -- Cadmium-titanium alloy plate and apply chromate post-plate treatment (F-1.62) followed by one coat primer BMS 10-11, Type 1 (SRF-12.205) and one coat white enamel, BAC color 702, BMS 10-11, Type 2 (SRF-12.64) except omit F-1.62 and SRF-12.64 from 0.375-inch diameter hole, and omit SRF-12.205 and SRF-12.64 from threads. Material: Steel, AMS 4340M, 270-300 ksi.
- (5) Nut (23J) -- Cadmium plate (F-15.02) all over. Material: 4340 Steel, MIL-S-5000, 125-145 ksi.
- (6) Barrel (23K, 69-60083-1) -- Cadmium plate (F-15.02) with post-plate chromate treatment (F-1.1926) all over followed by one coat BMS 10-11, Type 1 primer (F-20.02) and one coat white BMS 10-60 enamel, BAC color 702, (SRF-14.9812) on exterior surfaces only. Material: 4340 alloy steel, AMS 6409, 180-200 ksi.
- (7) Barrel (23K, 69-60083-2, -3) -- Cadmium plate (F-15.02) with post- chromate treatment (F-1.1926) all over. Apply one coat BMS 10-11, Type 1 primer (F-20.02) and one coat gray enamel, BAC color 707 (F-14.9813) on exterior surfaces only. Material: 4340 alloy steel, AMS 6409, 180-200 ksi.
- (8) Plug (23N) -- Cadmium plate with post-plate chromate treatment (F- 1.1926) all over except in 0.156-inch hole. Apply rust preventive compound MIL-C-11796, class 1 (F-1.73) in hole. Material: Steel, AMS 4340, 180-200 ksi.
- (9) Retainer (41, 44, 45) -- Alodize or chromic acid anodize plus one coat primer BMS 10-11, Type 1 (SRF-2.30). Material: Al alloy.
- (10) Weight (48) -- Cadmium plate and apply one coat primer BMS 10-11, Type 1 (SRF-1.283) plus one coat gloss orange enamel, BAC color 201, BMS 10-11, Type 2, all over. Material: CRES 347.
- (11) Hinge (51) -- Alodize or chromic acid anodize plus one coat primer BMS 10-11, Type 1 (SRF-2.30). Material: Al alloy.
- (12) Bushing (67) -- Passivate (F-8.07) on inside diameter and apply hard chrome plate (F-1.842) on outside diameter. Material: CRES 17-4PH, 180-200 ksi.

B. Aileron assembly components (Fig. 1102).

- (1) Retainers (5A, 8A, 8B) -- Alodize or chromic acid anodize plus one coat primer BMS 10-11, Type 1 (SRF-2.30). Material: Al alloy.
- (2) Supports (13, 14, 15, 16, 17) -- Alodize or chromic acid anodize plus one coat primer BMS 10-11, Type 1 (SRF-2.30). Material: Al alloy.
- (3) Hinge (28) -- Cadmium plate with post-plate chromate treatment (F- 4.201) all over. Apply one coat primer BMS 10-11, Type 1 (SRF-12.205) all over. Material: Al alloy.

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- (4) Plates (31, 34, 36, 38, 41, 44, 46) -- Apply alodine (SRF-14.01) all over. Material: Al alloy.
- (5) Skin (49, 52, 55, 58) -- Apply alodine (SRF-14.01) all over.
- (6) Weight (63) -- Cadmium plate and apply one coat primer BMS 10-11, Type 1 (SRF-1.283) all over. Material: Steel, AMS 4130.
- (7) Support (70) -- Alodize or chromic acid anodize plus one coat primer BMS 10-11, Type 1 (SRF-2.30) except omit primer in bearing and lubrication fitting holes. Material: Al alloy.
- (8) Fitting (79) -- Alodize or chromic acid anodize plus one coat primer BMS 10-11, Type 1 (SRF-2.30) except omit primer in 0.375-inch diameter hole. Material: Al alloy.
- (9) Bushings (82, 89) -- Cadmium plate plus post-plate chromate treatment (F-4.201). Single plating thickness 0.0005 to 0.0007 inch. Material: Al-Ni-Br.
- (10) Fairing (91) -- Apply static conditioner Dexter 28-C-1 plus Dexter surfacer 8-W-5 (SRF-14.672) plus conductive coating BMS 10-21, Type 1 (SRF-14.68) plus one coat enamel BMS 10-11, Type 2 (SRF-12.63), BAC color 707, on exterior surfaces except upper (bonding surface) edges. Material: Al alloy.

C. Tab assembly components (Fig. 1103).

- (1) Fairing (11, 36) -- Apply static conditioner Dexter 28-C-1 plus Dexter surfacer 8-W-5 (SRF-14.672) plus conductive coating BMS 10-21, Type 1 (SRF-14.68) plus one coat enamel BMS 10-11, Type 2 (SRF-12.63), BAC color 707, on exterior surfaces except upper (bonding surface) edges. Material: Composite.
- (2) Cap (19) -- Alodize and apply one coat primer BMS 10-11, Type 1 (SRF-2.31) on interior surface only. Material: Al alloy.
- (3) Fitting assy (21, 65-50701-501, -505) -- Apply one coat enamel BMS 10-11, Type 2 (SRF-12.63), BAC color 707, all over, except inside diameter of bushings and on work surfaces of bushing flanges. Material: Al alloy.
- (4) Fitting assy (21; 65-50701-506) -- Apply gray gloss enamel BMS 10- 60 (SRF-14.9813), BAC color 707, all over, except in fitting holes, in bushings, on work surfaces of bushing flanges and fitting bonding surfaces. Material: Al alloy.

- (5) Fitting (22, 65-50701-502, -504) -- Anodize and apply two coats primer BMS 10-11, type 1 (SRF-3.30) all over except no primer in holes. Material: Al alloy.
- (6) Fitting (22, 65-50701-507) -- Alodize or chromic acid anodize and apply one coat primer BMS 10-11, type 1 (SRF-2.30) all over, except no primer in holes. Material: Al alloy.
- (7) Fitting (22, 65-76757-1) -- Alodize and apply one coat primer BMS 10-11, type 1 (SRF-2.31) all over except no primer in holes. Material: Al alloy.
- (8) Hinge assy (32, 69-37805-1) -- Apply one coat enamel BMS 10-11, type 2 (SRF-12.63), BAC color 707, except omit enamel in bushing and on work surfaces of bushing flanges. Material: Al alloy.
- (9) Hinge assy (32, 69-37805-503) -- Apply gray gloss enamel BMS 10-60 (SRF-14.9813), BAC color 707, except omit enamel in bushing and on work surfaces of bushing flanges. Material: Al alloy.
- (10) Hinge (35, 69-37805-2) -- Anodize and apply two coats primer BMS 10-11, type 1 (SRF-3.30) all over except no primer in holes. Material: Al alloy.
- (11) Hinge (35, 69-37805-504) -- Alodize or chromic acid anodize and apply one coat primer BMS 10-11, type 1 (SRF-2.30) all over except no primer in holes. Material: Al alloy.

D. Balance panel assembly components (Fig. 1104).

- (1) Support (1C) -- Alodize or chromic acid anodize and apply one coat primer BMS 10-11, type 1 (SRF-2.30) all over. Material: Al alloy.
- (2) Retainers (2, 3) -- Cadmium plate with post-plate chromate treatment and apply one coat primer BMS 10-11, type 1 (SRF-1.285) all over. Material: Steel, AMS 4130, 125-140 ksi.
- (3) Retainer (6) -- Passivate (F-8.07) and apply two coats primer BMS 10-11, type 1 (SRF-12.206) all over. Material: CRES 301.
- (4) Hinges (12, 19) -- Alodize or chromic acid anodize and apply one coat primer BMS 10-11, type 1 (SRF-2.30) all over. Material: Al alloy.
- (5) Hinge (17) -- Cadmium plate with post-plate chromate treatment (F-4.201) plus one coat primer BMS 10-11, type 1 (SRF-12.205) all over. Material: Al-Br.

(6) Panel (20) -- Alodize or chromic acid anodize and apply one coat primer BMS 10-11, Type 1 (SRF-2.30) all over. Material: Al alloy.

(7) Weather-seal ends of tab and aileron with BMS 5-28, Type 2 or 5 sealant.

E. Use primer BMS 10-79, Type 2 (F-19.46) under decorative surfaces. BMS 10-79, Type 2 is the preferred option to primer BMS 10-11, Type 1.

4. Replacement

A. Assemble rod end bearings (23, 23A, 23D, 23G, 23Q, Fig. 1101), barrel (23K, Fig. 1101), adapter (23H, Fig. 1101), and plug (23N, Fig. 1101) with rod (22, 23R, Fig. 1101). Adjust rod assembly lengths as shown in Fig. 403. Drill rod end and plug fastener holes as shown in Fig. 403. Install rivets (20, 21, 21A, 23F, 23M, 23P, Fig. 1101). Torque jam nuts (23C, 23J, Fig. 1101) as shown in SOPM 20-50-01.

B. If necessary to replace bearing (71, Fig. 1102), press old bearing out. Coat external surfaces of new bearing with light film of grease MIL-G-23827, install bearing and roller swage in place per SOPM 20-50-03.

C. If necessary to replace tab bearing support fittings (79, Fig. 1102), carefully drill out rivets (78) and install replacement fitting with new rivets.

NOTE: Install rivets (78) with heads on outside surfaces.

D. If necessary to replace bushings (82, 83, 89, Fig. 1102 and 34, Fig. 1103) press out old part and install new bushing with wet BMS 10-11, Type 1 primer.

E. If necessary to replace washers (83A, Fig. 1102) bond new washer to hinge (81) using adhesive, Type 38, per SOPM 20-50-12.

F. If necessary to replace fairing (91, Fig. 1102) bond new fairing in place using adhesive, Type 44, per SOPM 20-50-12; install rivets (90).

G. If necessary to replace fitting assembly (21, Fig. 1103) remove old fitting using a cutting, prying action to destroy bond. Locate new fitting using tool, MIT65-46455. Drill new fitting assembly and new shim (20) using existing hole pattern. Position nose cap (19) and install fasteners (12 thru 18), as applicable, with wet BMS 10-11, Type 1 primer.

NOTE: Use shim (20) if and as required. Remove 0.003-inch laminations as required and finish shim with BMS 10-11, type primer. (Optional shimming method is to use adhesive, Epon 933 or Type 71, per SOPM 20-50-12, and shim to a maximum thickness of 0.036 inch. Drill fitting assembly and install fasteners after adhesive, Epon 933, has cured 72 hours or Type 71 has cured a minimum of 30 minutes at room temperature.)

- H. If necessary to replace bushing (23, Fig. 1103), press out old bushing. Coat all surfaces of replacement part with light film of MIL-G-23827 grease, and press into fitting (22).
- I. If necessary to replace bushings (24, 25, 26 and 33, Fig. 1103), press out old bushing and install replacement part with Loctite Bushing Mount No. 35, as follows:
- (1) Remove chromate-treated surface from outside diameter of cadmium-plated bushings by light sanding (600 grit emery) until silver color of plating is exposed.
 - (2) Degrease surfaces to be bonded by wiping with trichlorethylene or by spraying with Loctite primer, grade T, and wiping dry.
 - (3) Spray surfaces to be bonded with Loctite primer, grade T, and allow to dry 2 minutes.
 - (4) Coat bushing liberally with Loctite Bushing Mount No. 35 such that on installation excess material is extruded as a bead. Rotate bushings 1/4 to 1/2 turn to ensure complete distribution of adhesive on mating surfaces.
 - (5) Harden for 2 hours at 72°F. Heat lamps may be used to meet specified temperature.

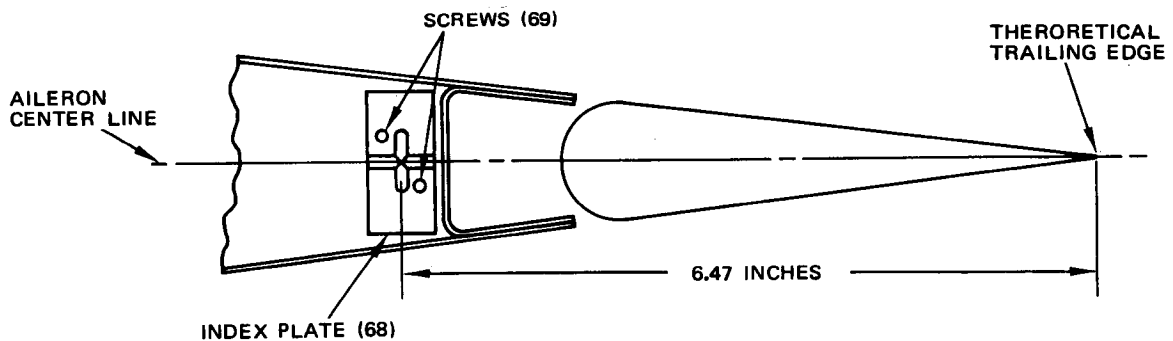
CAUTION: DO NOT DISTURB BUSHING DURING CURING PERIOD.

- (6) After curing wip off excess adhesive from surfaces and from between bushings with trichlorethylene or other degreasing solvent.
- J. If necessary to replace fairing (36, Fig. 1103) bond new fairing in place using one layer of BMS 5-51, type 1 and 2, grade 10 adhesive.
- K. If necessary to replace phenolic rub strips (27 and 28, Fig. 1103), bond new rub strip in place per 20-50-12, type 54, grade 1.

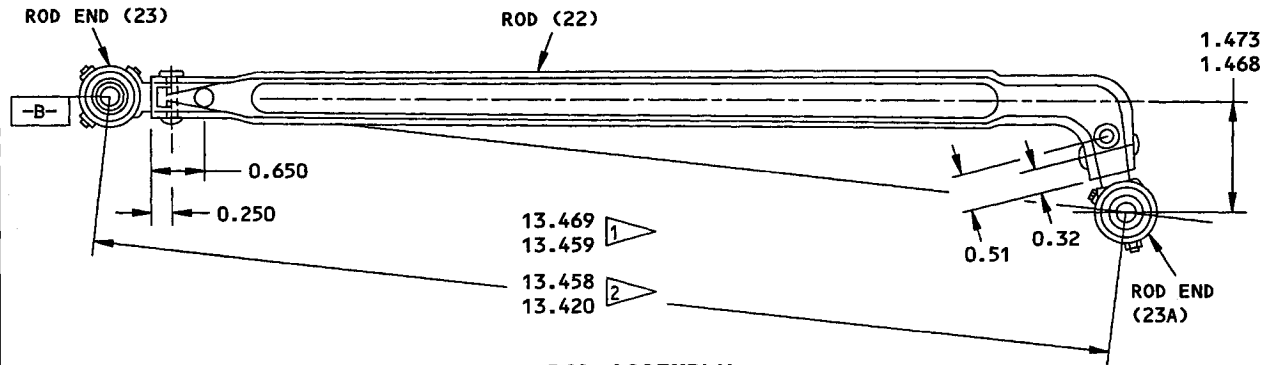
NOTE: It is not necessary to remove primer from bonding surfaces of fitting (22).

- L. If index plate (68, Fig. 1101) require replacement, locate per Fig. 402 and proceed as follows:
- (1) Index plate 69-44689-3.
 - (a) Bond per 20-50-12, type 68, and allow to cure.

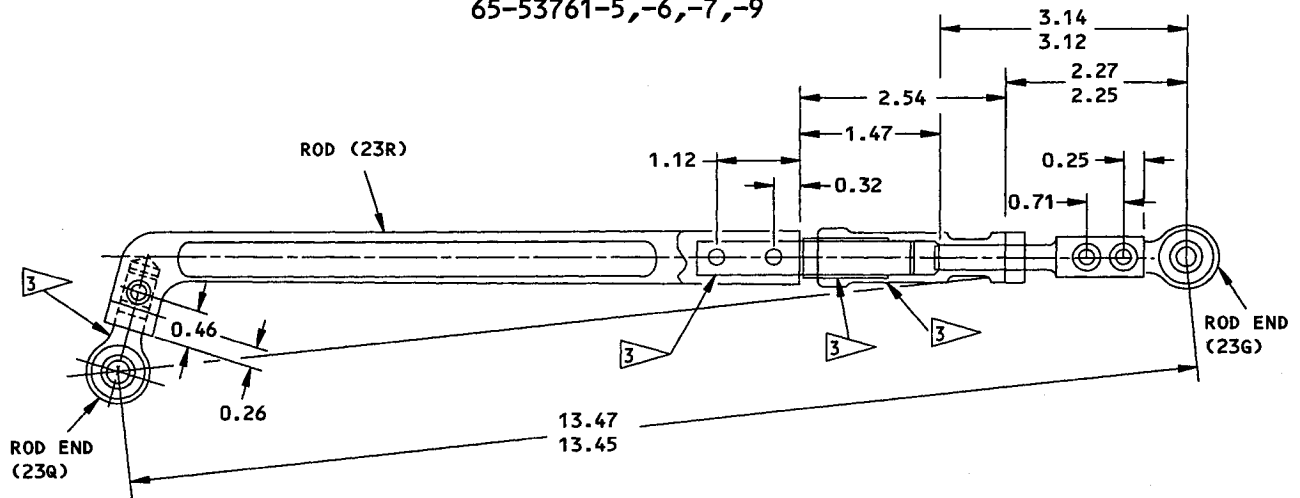
- (2) Index plate 69-44689-501.
 - (a) Fill screw holes in weather seal with type 68 adhesive.
 - (b) Bond plate to weather seal per 20-50-12, type 68 adhesive, making sure screw holes in plate match holes in weather seal.
 - (c) Immediately apply type 68 adhesive to screws (69) and insert thru plate and into weather seal.
 - (d) Allow to cure.



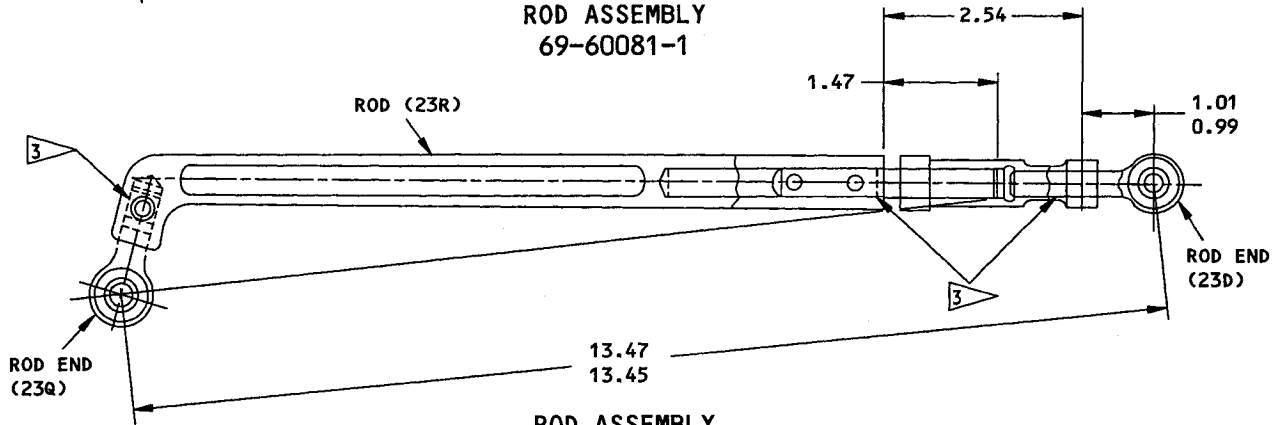
Index Plate Replacement
Figure 402



ROD ASSEMBLY
65-53761-5,-6,-7,-9



ROD ASSEMBLY
69-60081-1



ROD ASSEMBLY
69-60081-4,-6

1 65-53761-5,-6,-7

2 65-53761-9

3 COAT THREADED SURFACES WITH MIL-C-11796,
CLASS 3 CORROSION PREVENTIVE COMPOUND.

ALL DIMENSIONS ARE IN INCHES.

ITEM NUMBERS REFER TO IPL FIGURE 1101.

65-53761-5,-6,-7,-9

69-60081-1,-4,-6

Aileron Tab Rod Assembly
Figure 403

OVERHAUL MANUAL

ASSEMBLY

1. Buildup of Balance Panel Assembly (Fig. 1104)

- A. Attach hinge (17) to aft side of panel (20) with bolts (16), washers (15) and nuts (14).

NOTE: Install bolts (16) with head of bolt on top side of hinge (17).

- B. Attach panel assembly (13) to hinge assembly (8) with hinge pin (7).

NOTE: Coat hinge pin (7) with corrosion preventive compound, MIL-C-11796, class 3, before installing.

- C. Install pin retainers (6) on both forward and aft edges of balance panel assembly with washers (5) and bolts (4).

- D. Install pin retainers (2 and 3) on ends of panel assembly (13) with bolts (1).

2. Buildup of Tab Assembly (Fig. 1103)

- A. Install hinge assemblies (32) on front spar with bolts (31), washers (30) and nuts (29).

- B. Install hinge cover assemblies (3, 4 and 5) on forward spar of tab.

3. Buildup of Aileron Assembly (Fig. 1102)

NOTE For maintenance of Graphite/Epoxy Aileron Assemblies, see Component Maintenance Manual, 57-50-25.

- A. Install rod end bearings (77) on tab bearing support fittings (79) with bolts (75), washers (74 and 76) and nuts (73) or pins (76A). Secure (76A) with safety wire, MS20995NC32 or equivalent, using double twist method per 20-50-02, Installation of Safetying Devices.

NOTE: Install rod end bearings (77) with lubrication fitting down. Lubricate with grease, MIL-G-23827. Cover surface of bolts (75) with corrosion preventive compound, MIL-C-11796, class 3, before installing.

- B. Install hinge bearing support assemblies (69) on hinges (81, 85, and 88) with bolts (66 and 67), washers (65 and 68), and nuts (64); tighten nuts to within torque range of 10 to 20 pound-inches. Install cotter pins (63A).

NOTE: Install support assemblies (69) with lubrication fitting (72) down. Cover surface of bolts (66 and 67) with corrosion preventive compound MIL-C-11796, class 3, before installing. Lubricate bearings (71) through lubrication fittings (72) with grease, MIL-G-23827. Wipe off excess grease.

- C. Install weights (63) on aileron nose at bay positions 1, 2, and 4 with bolts (62), bushings (61), washers (60), and nuts (59), as applicable.

NOTE: Add up to 16 weights (63), as required to maintain aileron weight distribution per Boeing Document D6-9510. Aileron should be balanced as directed in 51-80 of the Boeing 737 Structural Repair Manual, D6-15565.

- D. Install skins (49, 52, 55, and 58) on lower surface of aileron nose with bolts (47, 48, 50, 51, 53, 54, 56, and 57).
- E. Install coverplates (41, 44, and 46) on bottom side of aileron nose with bolts (39, 40, 42, 43, and 45).
- F. Install coverplates (31, 34, 36, and 38) on top side of aileron nose with bolts (29, 30, 32, 33, 35, and 37).
- G. Install hinge (28) on aileron nose at bay position 3 with bolts (27), washers (26), and nuts (25).
- H. Install seals (20 thru 24) on seal supports (13 thru 17) with bolts (18) and washers (19).
- I. Install seal supports (13 through 17) with bolts (11) and washers (12).
- J. Install seals (9 and 10), and seal retainers (8A and 8B) on aileron nose at bay positions 1 and 2 with bolts (7 and 18), and washers (8 and 19), as applicable.
- K. Install seal (6), and seal retainer (5A) on aileron nose at bay position 4 with bolts (4 and 18) and washers (5 and 19), as applicable.
- L. Install seal (3) on aileron nose at bay 3 position with bolts (1) and washers (2).

4. Assembly of Aileron Buildup (Fig. 1101)

- A. Install bonding jumpers (59 and 60) on forward spar of aileron with bolts (57 and 58), washers (8), and nuts (7).

| (1) Refer to SOPM 20-10-06 for electrical bonding and grounding instructions.

| (2) Fillet seal the nuts with the jumper using BMS 5-95 sealant.

- B. Attach bonding jumpers (10) to forward spar of tab with screws (26), washers (25), and nuts (24).

| (1) Refer to SOPM 20-10-06 for electrical bonding and grounding instructions.

| (2) Fillet seal the nuts with the jumper using BMS 5-95 sealant.

- C. Attach rod assemblies (19 or 23B) to tab assembly (2) with bolts (18), washers (17), shims (17A), and nuts (16). Install fairing (11, Fig. 1103) with screws (10).

NOTE: Install shims (17A, Fig. 1101) if and as required to limit gap to 0.001 inch maximum with bolts (18) untightened. Tighten nuts (16) to within torque range of 50 to 70 pound-inches after shimming.

- D. Mount tab adjust weights (48) on aft edge of balance panel assembly (3) with washers (47) and bolts (46).

NOTE: Weights (48) should be installed and distributed per Subject 51-80 of the Boeing 737 Structural Repair Manual.

- E. Install washers (56) and bolts (55) at each weight mounting hole not used for weight.

- F. Attach hinge (51), if removed during disassembly, to balance panel assembly (3) with hinge pins (49 and 50).

NOTE: Cover surfaces of hinge pins (49 and 50) with corrosion preventive compound, MIL-C-11796, class 3, before installing.

- G. Slide pin retainer (6, Fig. 1104), on forward edge of panel, sufficiently aft to allow insertion of hinge pins (49 and 50, Fig. 1101); secure pins and retainer in place by tightening bolt (4, Fig. 1104).

- H. Lay seal (45, Fig. 1101) in place on forward portion of balance panel assembly and partially secure by installing retainer (54) on hinge (51), if removed during disassembly, with washers (53) and bolts (52).

- I. Install seal retainer (44) on balance panel assembly (3) with washers (43) and bolts (42).

- J. Install seal retainer (41) on balance panel assembly (3) with washers (40 and 38) and bolts (39 and 37).

- K. Install seals (36) with washers (35) and bolts (34).

- L. Install seals (33 or 33A and 33B) with washers (32) and bolts (31).

- M. Carefully slide rod assemblies (19 or 23B) through applicable holes in aileron and install tab assembly with washers (15), bolts (14), washers (13), nuts (12) and cotter pins (11).

NOTE: Assure that two washers (15) are installed under heads of bolts (14). Coat surface of bolts (14) with a light film of MIL-G-23827 grease before installing.

NOTE: Make sure to maintain the 0.01-0.02 inch gap on the WBL 439.04 aileron tab hinge location as shown in the Fits and Clearances section flagnote 14.

Tighten nuts (12) to within torque range of 7 to 17 pound-inches.

- N. Connect bonding jumpers (10) to aft spar of aileron with bolts (9), washers (8) and nuts (7).

(1) Refer to SOPM 20-10-06 for electrical bonding and grounding instructions.

(2) Fillet seal the nuts with the jumper using BMS 5-95 sealant.

- O. Connect balance panel assembly to aileron assembly by installing hinge pins (4 and 5).

P. Loosen bolt (4, Fig. 1104) on aft edge of panel (20) and adjust pin retainer (6) to allow insertion of hinge pins (4 and 5, Fig. 1101). Secure pins in place by tightening bolt (4, Fig. 1104).

Q. Install bolts (65 and 66, Fig. 1101), bushings (67), washers (63 and 64), nuts (62) and cotter pins (61) temporarily in bearing support assemblies (69, Fig. 1102), if removed during disassembly.

NOTE: Install bolts (65, Fig. 1101) with bolt head outboard and install bolt (66) with bolt head inboard.

R. Install bolts (30), washers (29) and nuts (28) in forward end of rod assemblies (19 or 23B).

S. Close access areas at fitting assembly (21) and hinge assemblies (32, Fig. 1103) by adjusting hinge cover assemblies (3, 4 and 5); secure with bolts (1) and washers (2).

5. Balancing

A. Balance aileron and tab as directed in Subject 51-80 of the Boeing 737 Structural Repair Manual.

6. Materials

NOTE: Use materials listed or equivalent.

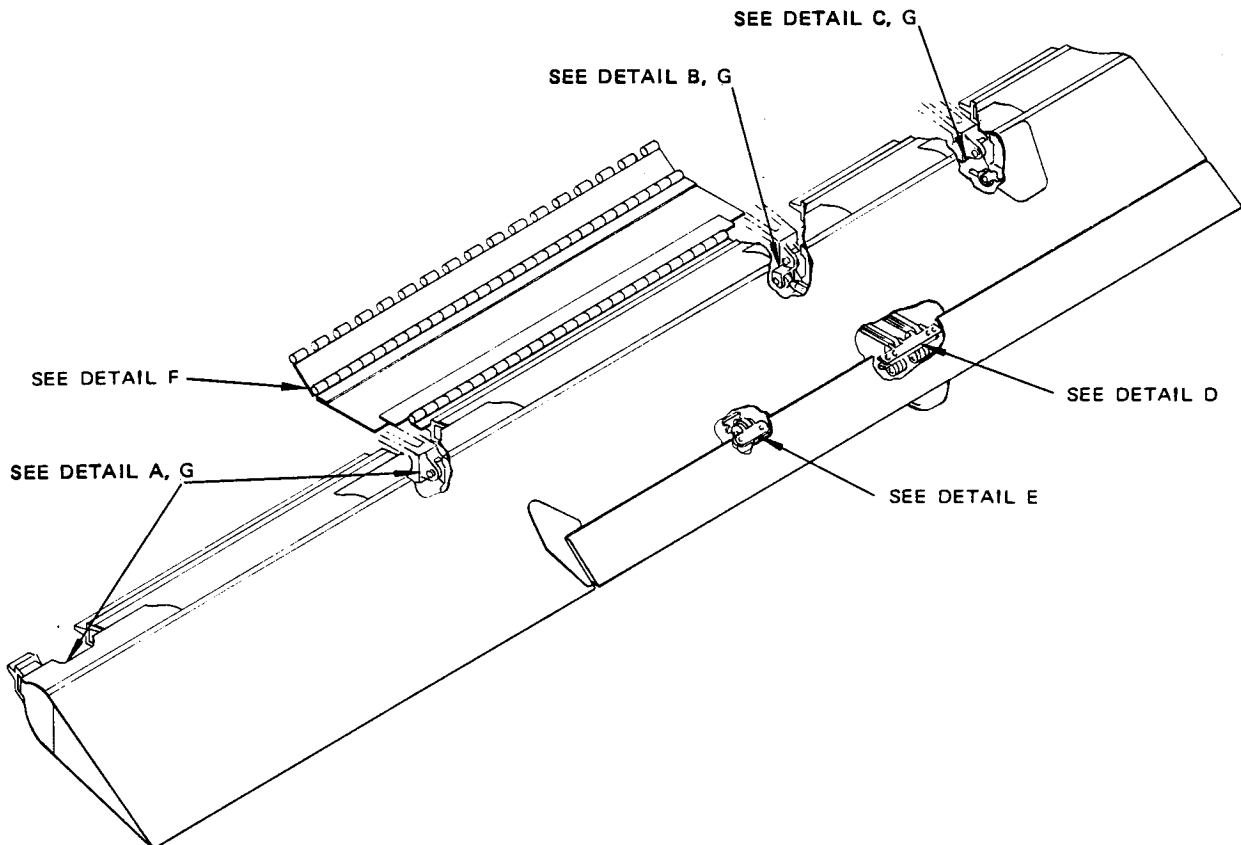
A. Corrosion Preventive Compound -- MIL-C-11796, class 3

B. Grease -- Specification MIL-G-23827

FITS AND CLEARANCES

NOTE: For maintenance of Graphite/Epoxy Aileron Assemblies, see Component Maintenance Manual, 57-50-25

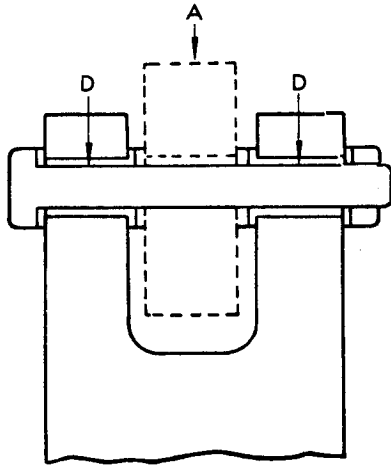
1. The fits and clearances table lists design dimensions and service wear limits for close tolerance parts of the assembly that are subject to wear or corrosion. Unless otherwise specified, parts should be returned to the design dimensions whenever rework is accomplished.
2. Clearances are given to aid assembly of the components. The values given in the Maximum Allowable Clearance column are the maximum permitted to ensure proper functioning of the unit. If assembled parts fail to meet this requirement, one or more of the parts must be rejected. Parts that are rejected should be reworked if within the rework limits given in the Repair procedure; if not within rework limits, the parts should be scrapped. It is recommended that the design clearances be used as the guiding assembly criteria when newly reworked parts are assembled.



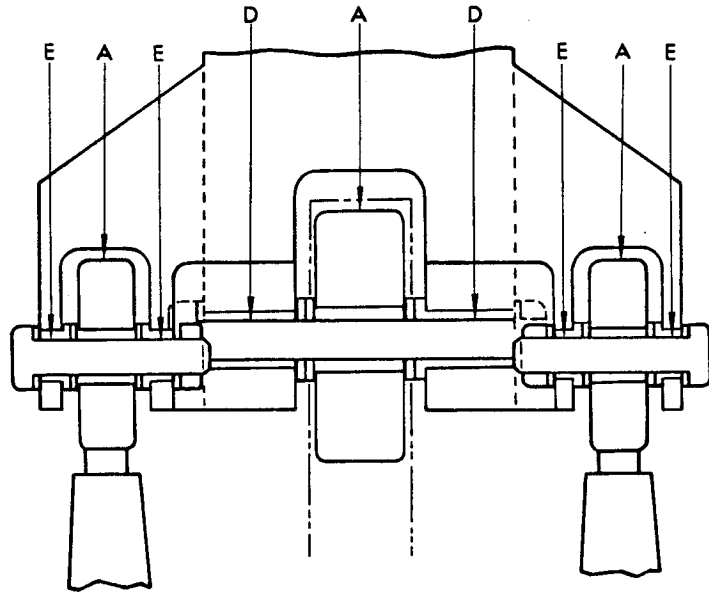
Fits and Clearances
Figure 601 (Sheet 1)

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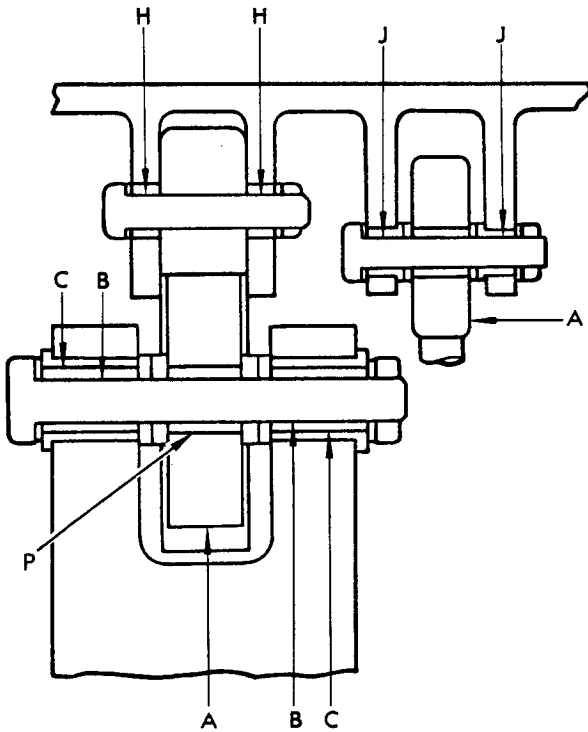
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COMMERCIAL JET
OVERHAUL MANUAL



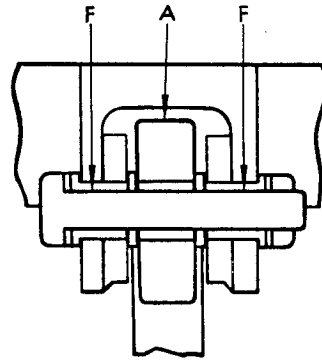
DETAIL A



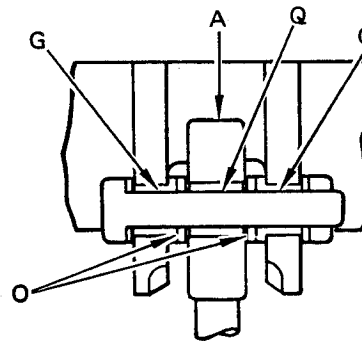
DETAIL B



DETAIL C



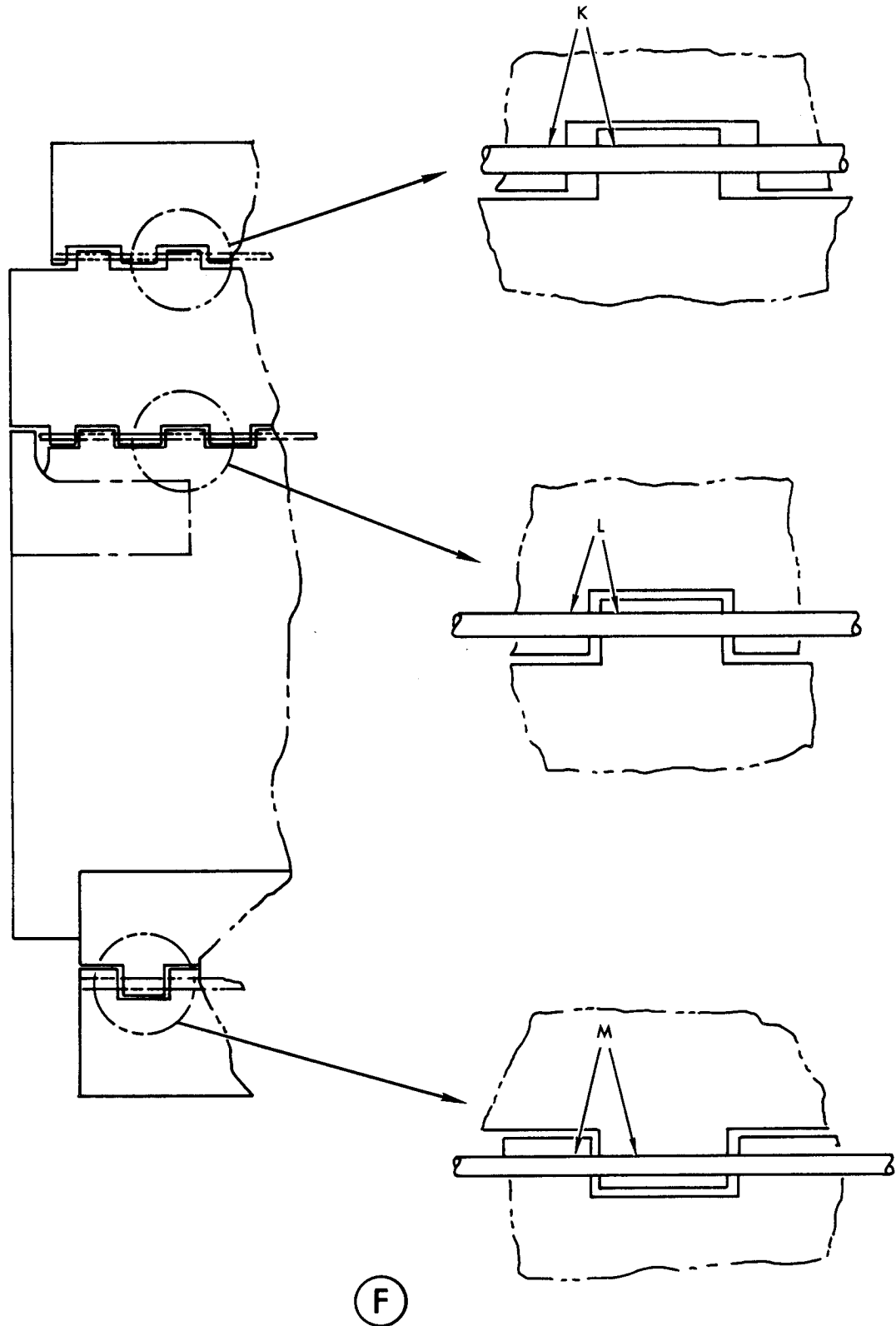
DETAIL D



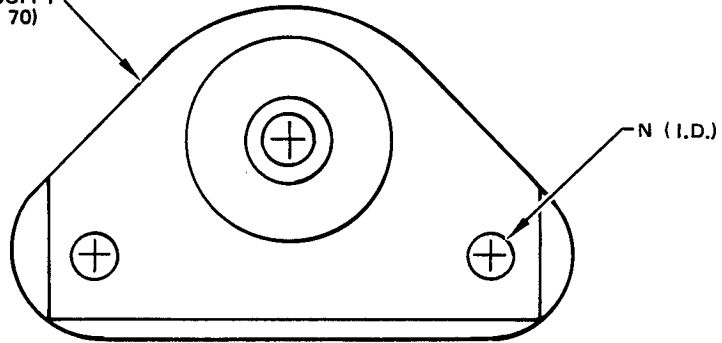
DETAIL E

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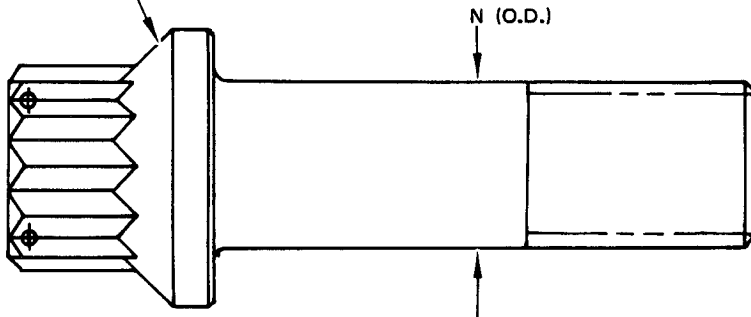


BEARING SUPPT
(FIG. 1102, 70)



DETAIL G

BOLT (FIG. 1102, 66, 67)



DETAIL G

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OVERHAUL MANUAL

		Design Dimensions				Service Wear Limits		
Ref Letter Fig.601	Mating Item No. Fig. No.	Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inches)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
A	ID *[1] OD					*[2]		*[2]
B	ID 1101-67 OD 1101-66	0.3125 0.3115	0.3140 0.3120	0.0005	0.0025	*[3] 0.3075	0.3180 *[3]	*[4] 0.006
B	ID 1101-67 OD 1101-66A	0.3125 0.3115	0.3140 0.3120	0.0005	0.0025		0.3155 0.3100	0.0030
C	ID *[5] OD 1101-67	0.4375 0.4360	0.4390 0.4370	0.0005	0.0030	*[3] 0.4345	0.4415 *[3]	*[4] 0.0045
D	ID *[6] OD 1101-65	0.3125 0.3115	0.3140 0.3120	0.0005	0.0025	*[3] 0.3075	0.3180 *[3]	0.006
E	ID *[7] OD 1101-30	0.2500 0.2485	0.2515 0.2495	0.0005	0.0030	*[3] 0.2445	0.2555 *[3]	0.006
F	ID 1103-25 OD 1101-18	0.2500 0.2485	0.2515 0.2495	0.0005	0.0030	*[3] 0.2445	0.2555 *[3]	0.006
F	ID 1103-23 OD 1101-18A	0.2500 0.2485	0.2515 0.2495	0.0005	0.0030		0.2535 0.2475	0.0040
F	ID 1103-26 OD 1101-18A	0.2500 0.2485	0.2515 0.2495	0.0005	0.0030		0.2535 0.2475	0.0040

		Design Dimensions				Service Wear Limits		
Ref Letter Fig. 601	Mating Item No. Fig. No.	Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inches)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
G	ID 1103-33	0.2500	0.2515	0.0005	0.0025	*[3]	0.2535	0.006
	OD 1101-14	0.2490	0.2495			0.2450	*[3]	
G	ID 1103-33	0.2500	0.2515	0.0005	0.0025		0.2530	0.0035
	OD 1101-14A	0.2490	0.2495			0.2480		
H	ID 1102-82	0.2525	0.2540	0.0030	0.0055			
	OD 1102-66	0.2485	0.2495					
J	ID 1102-83	0.3125	0.3140	0.0005	0.0030			
	OD *[8]	0.3110	0.3120					
K	ID 1101-51 1104-12	0.093	0.098	0.003	0.009	*[3]	0.104	0.0165 *[9]
	OD 1101-49,-50	0.089	0.090			0.080	*[3]	
L	ID 1104-12,-19	0.093	0.098	0.003	0.009	*[3]	0.104	0.0165 *[9]
	OD 1104-7	0.090				0.080	*[3]	
M	ID 1102-28 1104-17	0.125	0.127	0.007	0.010	*[3]	0.133	0.0175 *[10]
	OD 1104-4,-5	0.117	0.118			0.1155	*[3]	
N	ID 1102-70	0.250	0.254	0.0005	0.0055		0.2585	0.0090
	OD 1102-67,-66	0.2485	0.2495			0.2410		
O	*[11] 1103-32	0.466	0.486	0.029	0.054			
	*[12] 1102-77	0.432	0.437	*[14]	*[14]			

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		Design Dimensions				Service Wear Limits		
Ref Letter Fig.601	Mating Item No. Fig. No.	Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inches)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
O	*[13] 1103-33	0.057	0.062			0.050		
P	ID *[16]	0.3120	0.3125	0.0000	0.0010		0.3140	0.0020
	OD 1101-66A	0.3115	0.3120			0.3104		
P	ID *[17]	0.3120	0.3125	0.0000	0.0010		0.3140	0.0020
	OD 1101-65A	0.3115	0.3120			0.3104		
P	ID *[18]	0.3120	0.3125	0.0000	0.0010		0.3140	0.0020
	OD 1101-65A	0.3115	0.3120			0.3104		
Q	ID 1102-77	0.2495	0.2500	0.0000	0.0010		0.2515	0.0020
	OD 1101-14A	0.2490	0.2495			0.2480		
	ID 1103-24	0.3761	0.3766	0.0000	0.0010		0.3780	0.0025
	OD 1103-23	0.3756	0.3761			0.3740		

- *[1] All bearings.
- *[2] Bearing is considered failed when there is 0.005 radial clearance between the outer race and the ball.
- *[3] Replace part.
- *[4] Any combination of wear at points B and C shall not exceed 0.006.
- *[5] 66-23238-1 Ref.
- *[6] NAS77A5-62P, 65-46518, 65-46519, 65-46524 Ref.
- *[7] NAS77A4-10P, 65-46519 Ref.
- *[8] NAS1105-23D Ref.
- *[9] Total play in joint is 0.033 inch.
- *[10] Total play in joint is 0.035 inch.
- *[11] Dimension between faces of bushings.
- *[12] Thickness of bearing.

- *[13] Thickness of bushing flange.
- *[14] Clearance between bushing face and bearing inner race is reduced to 0.010-0.020 at WBL 439.04 using AN960 PD416L washers.
- *[15] Deleted
- *[16] BACB10CH50 Bearing installed in 69-73066-1.
- *[17] BACB10CH50 Bearing installed in 65C25919-1.
- *[18] BACB10CH50 Bearing installed in 69-73006-1.

Fits and Clearances
Figure 601 (Sheet 8)

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BOEING 
COMMERCIAL JET
OVERHAUL MANUAL

STORAGE INSTRUCTIONS

NOTE: For maintenance of Graphite/Epoxy Aileron Assemblies, see Component Maintenance Manual, 57-50-25.

1. Coat all exposed bearings and bushings with grease, Specification MIL-G-23827, and wrap in plastic or nonabsorbent material.
2. Store in a dry, cool area, preferably humidity controlled. Protect by wrapping or covering with heavy Kraft paper or a similar material.
3. For general storage information, refer to Subject 20-44-02, "Temporary Protective Coatings," and to Subject 20-70-01, "Protection, Storage, and Handling of Airplane Components."

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OVERHAUL MANUAL

SPECIAL TOOLS, FIXTURES, AND EQUIPMENT

NOTE: For maintenance of Graphite/Epoxy Aileron Assemblies, see Component Maintenance Manual, 57-50-25.

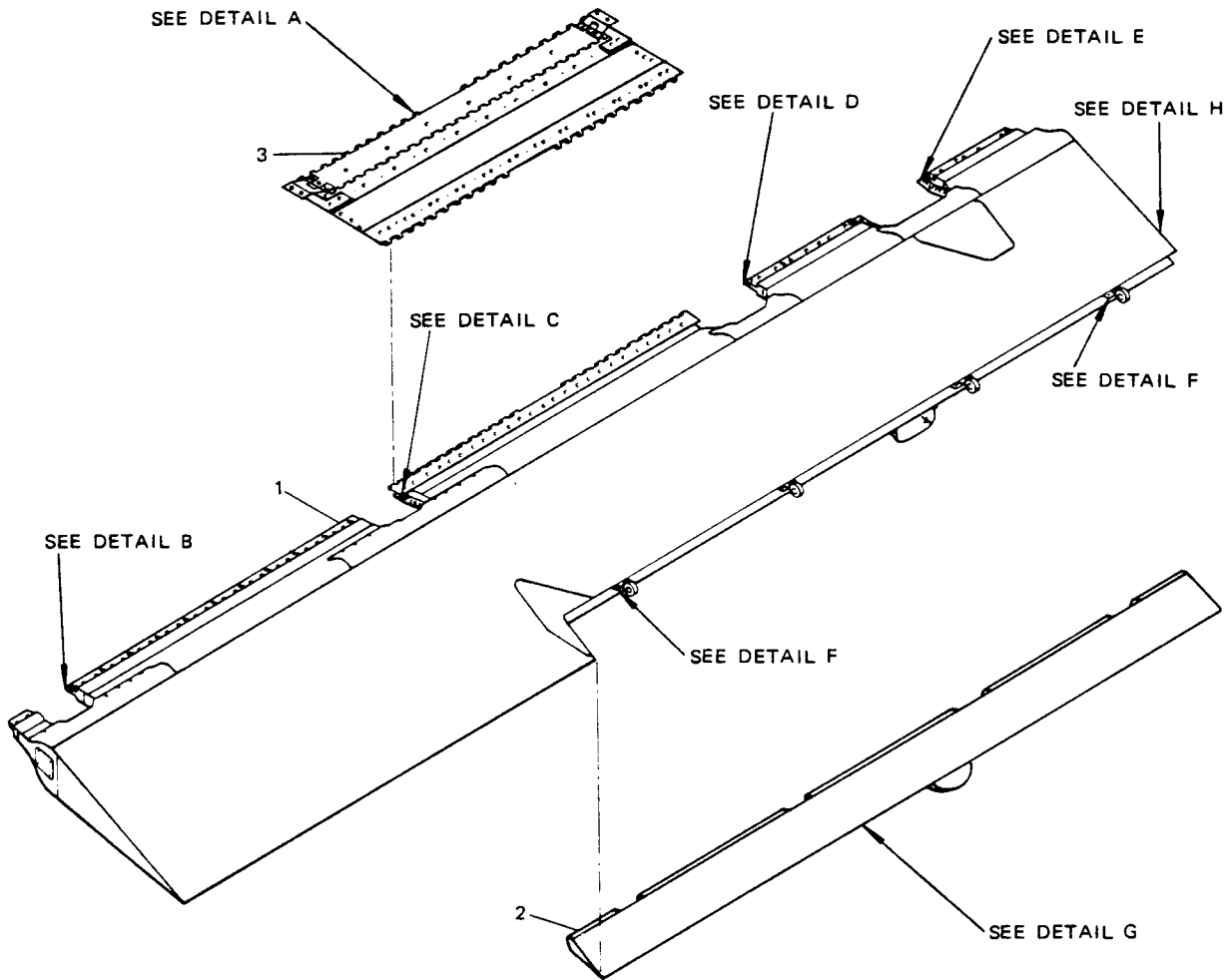
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OVERHAUL MANUAL

ILLUSTRATED PARTS LIST

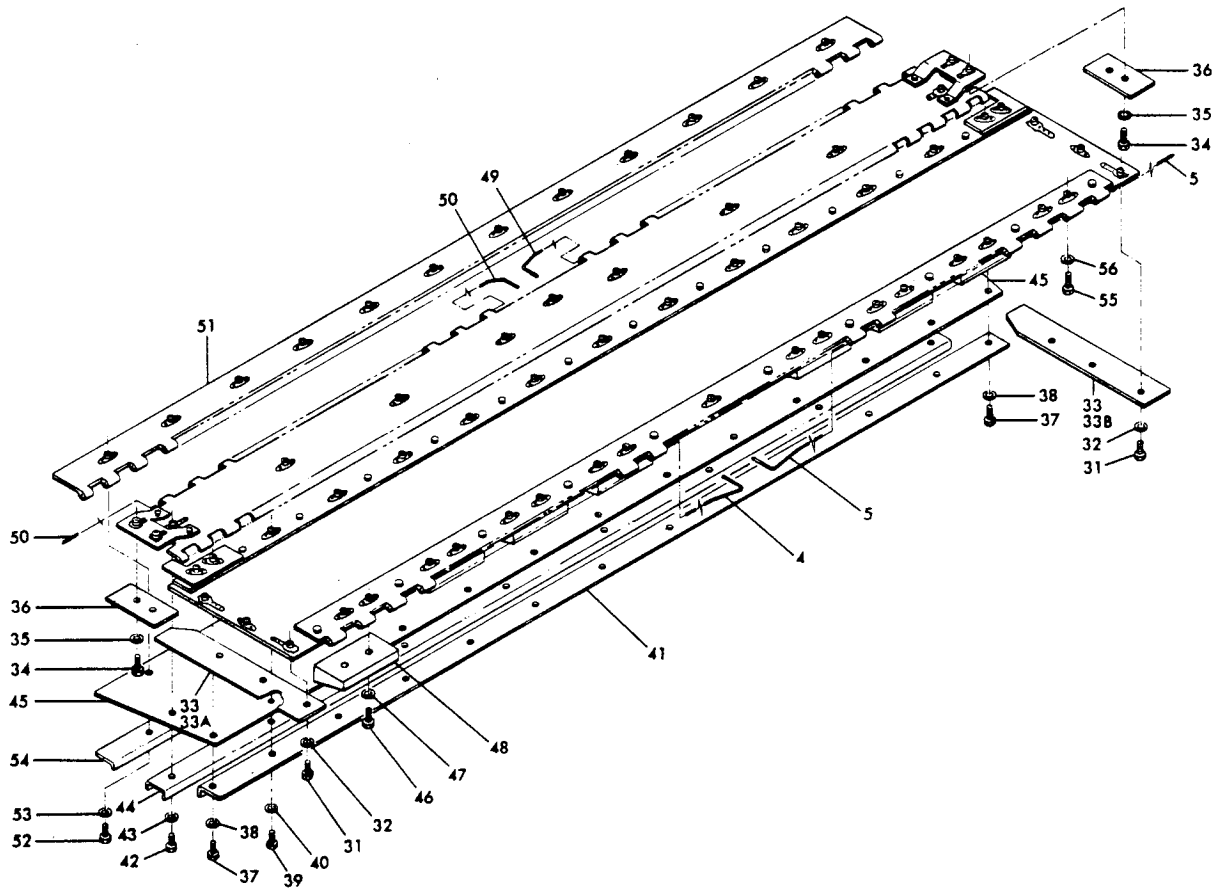


Aileron Assembly, Control Tab Assembly, and Balance Panel Assembly

Figure 1101 (Sheet 1)

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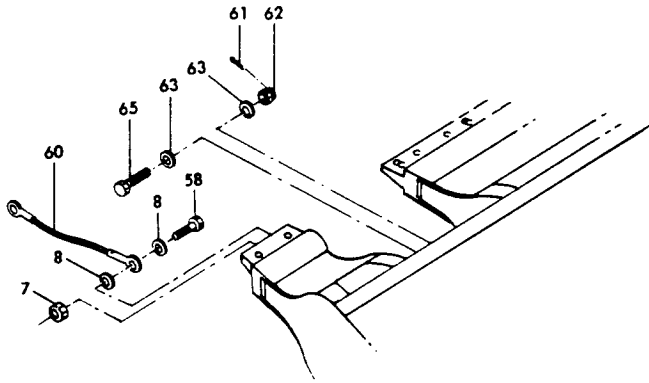


DETAIL A

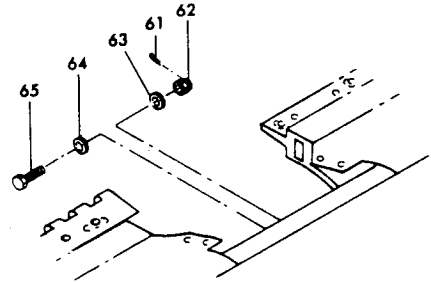
65-46454
65-46455
65-46457
65C25911

BOEING 
COMMERCIAL JET

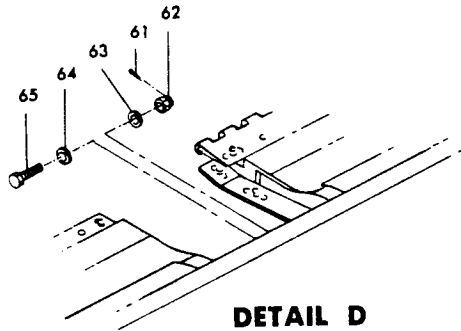
OVERHAUL MANUAL



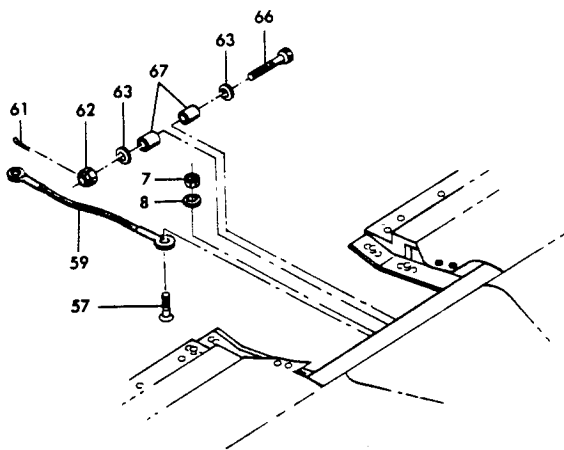
DETAIL B



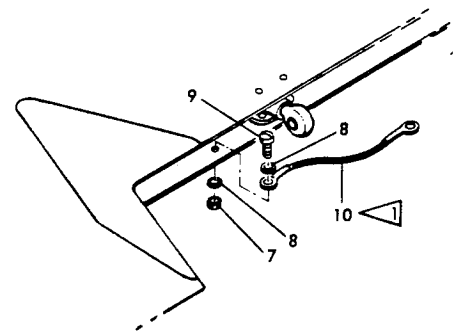
DETAIL C




DETAIL D



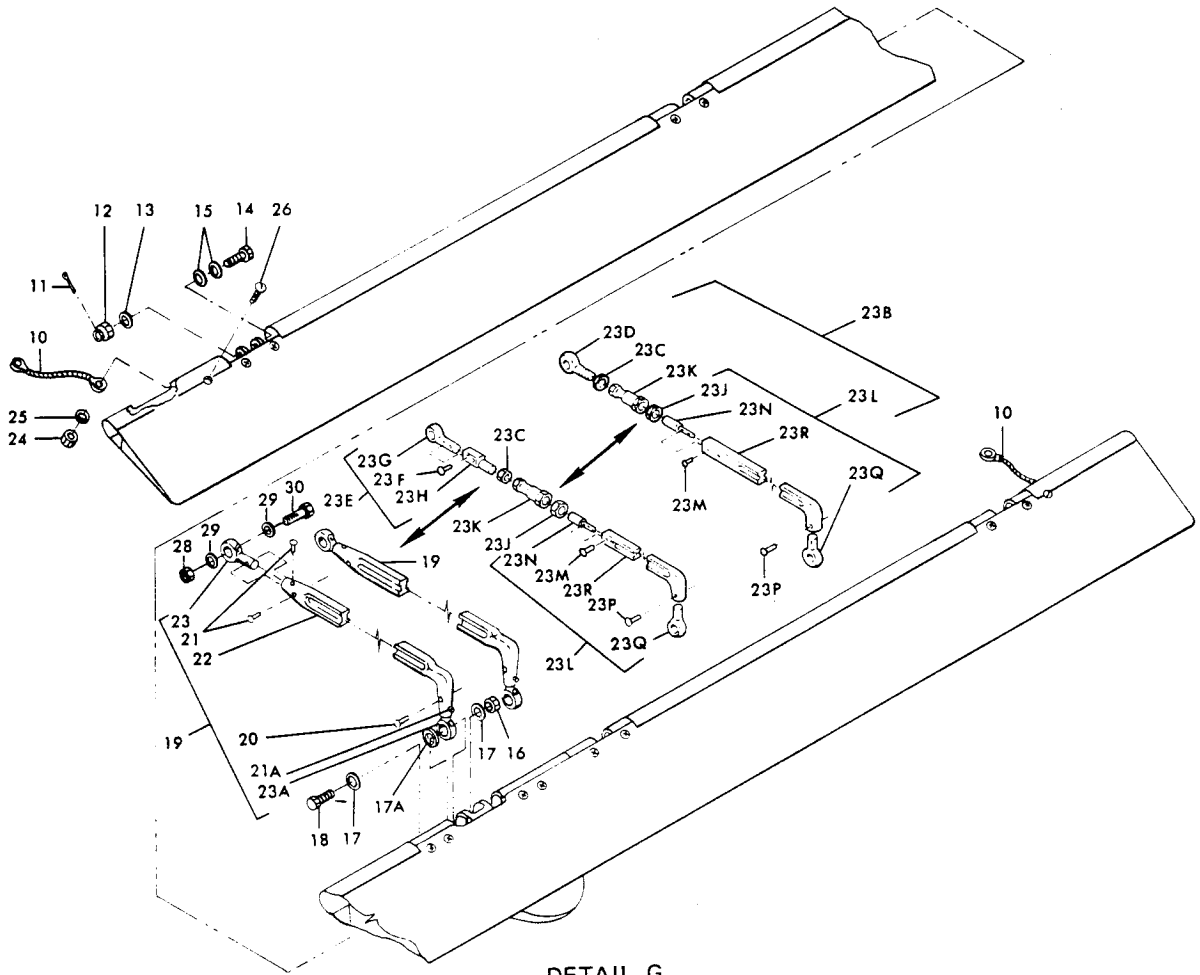
DETAIL E



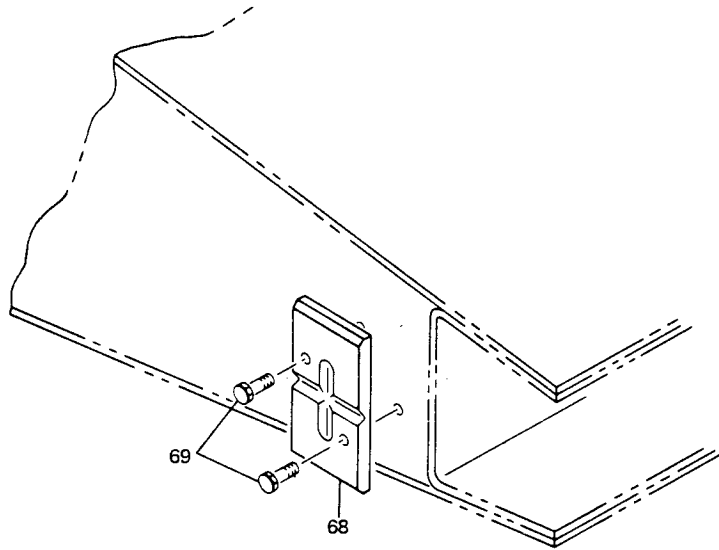
DETAIL F
(TYP)

 JUMPER MAY BE ON INBOARD SIDE OF HINGE ON SOME AIRPLANES.

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DETAIL G



DETAIL H

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-			AILERON ASSY, CONTROL TAB ASSY, AND BALANCE PANEL ASSY								RF
1	65-46454-1		. AILERON ASSY, LH (FIG. 1102)								1
1	65-46454-2		. AILERON ASSY, RH (FIG. 1102)								1
1	65-46454-21		. AILERON ASSY, LH (FIG. 1102)								1
1	65-46454-22		. AILERON ASSY, RH (FIG. 1102)								1
1	65-46454-23SP		. AILERON ASSY, LH (FIG. 1102)*[1]								1
1	65-46454-24SP		. AILERON ASSY, RH (FIG. 1102)*[1]								1
1	65-46454-503		. AILERON ASSY, LH (FIG. 1102)								1
1	65-46454-504		. AILERON ASSY, RH (FIG. 1102)								1
1	65-46454-31SP		. AILERON ASSY, LH (FIG. 1102)*[1]								1
1	65-46454-32SP		. AILERON ASSY, RH (FIG. 1102)*[1]								1
1	65C25911-1SP		. AILERON ASSY, LH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-2SP		. AILERON ASSY, RH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-7SP		. AILERON ASSY, LH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-8SP		. AILERON ASSY, RH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-9SP		. AILERON ASSY, LH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-10SP		. AILERON ASSY, RH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-11SP		. AILERON ASSY, LH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-12SP		. AILERON ASSY, RH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-17SP		. AILERON ASSY, LH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-18SP		. AILERON ASSY, RH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-23SP		. AILERON ASSY, LH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-24SP		. AILERON ASSY, RH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-27SP		. AILERON ASSY, LH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-28SP		. AILERON ASSY, RH (FOR DETAILS, SEE 57-50-25)*[1]								1
1	65C25911-29SP		. AILERON ASSY, LH (FOR DETAILS, SEE 57-50-25)								1
1	65C25911-30SP		. AILERON ASSY, RH (FOR DETAILS, SEE 57-50-25)								1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-											
2	65-46455-13										1
2	65-46455-14										1
2	65-46455-15										1
2	65-46455-16										1
2	65-46455-17										1
2	65-46455-18										1
2	65-46455-19SP'										1
2	65-46455-20SP										1
2	65-46455-527										1
2	65-46455-528										1
2	65-46455-21SP										1
2	65-46455-22SP										1
2	65-46455-23SP										1
2	65-46455-24SP										1
2	65-46455-27SP										1
2	65-46455-28SP										1
3	65-46457-1										1
3	65-46457-6										1
4	69-43508-3										1
5	69-43508-4										1
6	DELETED										
7	BACN10JC3										4
7A	BACN10JC3CD										4
8	NAS1197-10										7
8A	AN960JD10L										2
9	AN525-10R6										2
9A	BACB30LH3-4										2
10	BACJ40K5A5A4										2
10A	BACJ40AB20-4										2

65-46454
65-46457

65-46455
65C25911



FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-11	MS24665-132		PIN, COTTER								4
12	BACN10JD4		NUT (REPLS AN310-4)								4
13	NAS1197-416		WASHER								4
13A	BACW10BP4DP		WASHER (USED ON 65C25911-1SP,-2SP,-7SP THRU -12SP,-17SP,-18SP,-23SP,-24SP,-27SP THRU -30SP)								4
14	BACB30DM4-15D		BOLT								4
14A	MS6704DU15		BOLT ((USED ON 65C25911-1SP,-2SP,-7SP THRU -12SP,-17SP,-18SP,-23SP,-24SP,-27SP THRU -30SP)								4
15	NAS1197-416L		WASHER								8
15A	BACW10BP4NDP		WASHER								8
16	BACN10JC4		NUT (REPLS NAS679A4W)								2
17	AN960D416L		WASHER								4
17A	AN960C416L		WASHER (MODIFIED)(SB 57-1040)								AR
17A	BACS40R05U05		SHIM (SB 57-1040)								AR
18	NAS1104-16		BOLT (LIMITED USE)								2
18A	BACB30NF4-17		BOLT (LIMITED USE)(SB 57-1040)								2
19	65-53761-5		ROD ASSEMBLY (SB 27-1007, 27-1025)								2
19	65-53761-6		ROD ASSEMBLY (LIMITED USE) (SB 27-1007, 27-1025)								2
19	65-53761-7		ROD ASSEMBLY (LIMITED USE) (SB 27-1025)								2
19	65-53761-9		ROD ASSEMBLY (LIMITED USE)(OPT TO 65-53761-7)(SB 27-1025)								2
20	BACR15BA5B		. RIVET (REPLS MS20426B5)								1
21	BACR15BB5B		. RIVET (REPLS MS20470B5)								3
21A	BACR15BB5B		. RIVET (REPLS MS20470B5)(USED ON 65-53761-5 and -6)								1
21A	BACR15CE5B		. RIVET (USED ON 65-53761-7 AND -9)								1
22	65-53761-4		. ROD (USED ON 65-53761-5 AND -6)								1
22	65-53761-8		. ROD (USED ON 65-53761-7 AND -9)								1
23	RF4F		. ROD END, V77896 (USED ON 65-53761-5)								1
23	RF4S		. ROD END, V77896 (USED ON 65-53761-6,-7 AND -9)								1
23A	RF4G		. ROD END, V77896 (USED ON 65-53761-5)								1
23A	RF4P		. ROD END, V77896 (USED ON 65-53761-6,-7 AND -9)								1
23B	69-60081-7		ROD ASSEMBLY (LIMITED) *[2]								2
23B	69-60081-4		ROD ASSEMBLY (LIMITED) *[2]								2
23B	69-60081-1		ROD ASSEMBLY (OPT TO 69-60081-4) (SB 27-1025)(LIMITED) *[2]								2
23B	69-60081-6		ROD ASSEMBLY (LIMITED) *[2]								2
23C	NAS509-5		. NUT, JAM (USED ON 69-60081-1,-4,-6,-7)								1

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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-23D	SM4-5E1-501		.								1
23D	SM4-5E1-503		.								1
23E	69-60081-3		.								1
23F	BACR15BB5D		.	.							2
23G	RF4S		.	.							1
23H	69-60147-1		.	.							1
23J	NAS509-7		.								1
23J	69-60138-1		.								1
23K	69-60083-3		.								1
23K	69-60083-2		.								1
23K	69-60083-1		.								1
23L	69-60081-2		.								1
23L	69-60081-5		.								1
23M	BACR15BB5D		.	.							2
23N	69-60084-1		.	.							1
23P	BACR15BA5D		.	.							2
23Q	RF4P		.	.							1
23R	65-76623-1		.	.							1
23R	69-60082-1		.	.							1
23R	65-76623-2		.	.							1
24	BACN10JC3										2
24A	NAS1804-3										2
25	NAS1197-10										4
25A	AN960JD10L										4
26	AN525-10R6										2
26A	NAS623-3-6										2
27	DELETED										

65-46454
65-46457

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 **BOEING**
OVERHAUL MANUAL

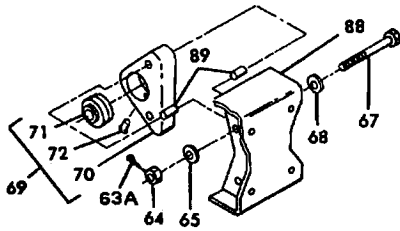
FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-											
28	BACN10JC4										2
29	AN960D416L										4
30	NAS1104-12										2
30	BACB30NF4-12										2
31	BACB30NE3-1										6
32	AN960PD10L										6
32	BACW10P43AL										6
33	65-55519-9										2
33A	65-55519-505										1
33B	65-55519-506										1
34	BACB30NE3-1										4
35	AN960PD10L										4
35	BACW10P43AL										4
36	65-55519-10										2
36	65-55519-512										2
37	BACB30NE3-4										2
38	AN960PD10L										2
39	BACB30NE3-3										11
40	AN960PD10L										11
41	69-40685-1										1
42	BACB30NE3-4										8
43	AN960PD10L										8
44	69-40685-2										1
45	65-55519-3										1
46	BACB30NE3-7										AR
47	AN960-10L										AR
48	69-44997-1										AR
48	69-44997-2										AR
48	69-67500-1										AR
49	69-43508-1										1
50	69-43508-2										1
51	65-46458-5										1
52	BACB30NE3-3										12
53	AN960PD10L										10
54	69-40685-3										1
54	69-40685-4										1
55	BACB30NE3-3										AR
56	AN960PD10										AR
57	BACB30LU3-3										1
58	BACB30NE3-3										1
59	BACJ40K5A5A9										1
60	BACJ40K5A5A5										1
61	MS24665-134										4
62	BACN10JD5										4
63	AN960PD516										6

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1101-64	AN960PD516L										2
65	BACB30DM5-36D										3
65A	NAS6705DU36										3
66	BACB30DM5-38D										1
66A	NAS6705DU38										1
67	69-40613-1										2
68	69-44689-3										
68	69-44689-501										
68	69-44689-501										
69	NAS514P440-3										1
											2

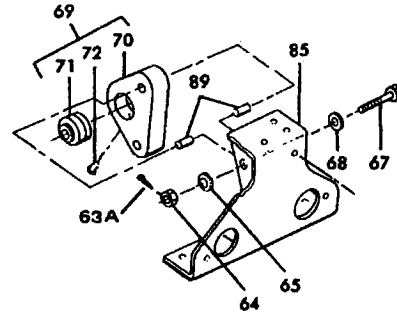
*[1] Color coded parts are identified with an alpha "SP" suffix. This entry represents consolidation of all color codes applicable for a given usage. Orders for color coded parts should include the registry number of the airplane for which the parts are ordered.

*[2] Part number 69-60081-7 can replace but cannot be replaced by part numbers 69-60081-1, -4, -6.

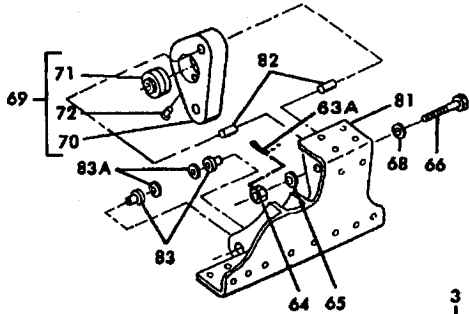
*[3] Part numbers 69-60083-2 or 69-60083-3 can replace but cannot be replaced by part number 69-60083-1.



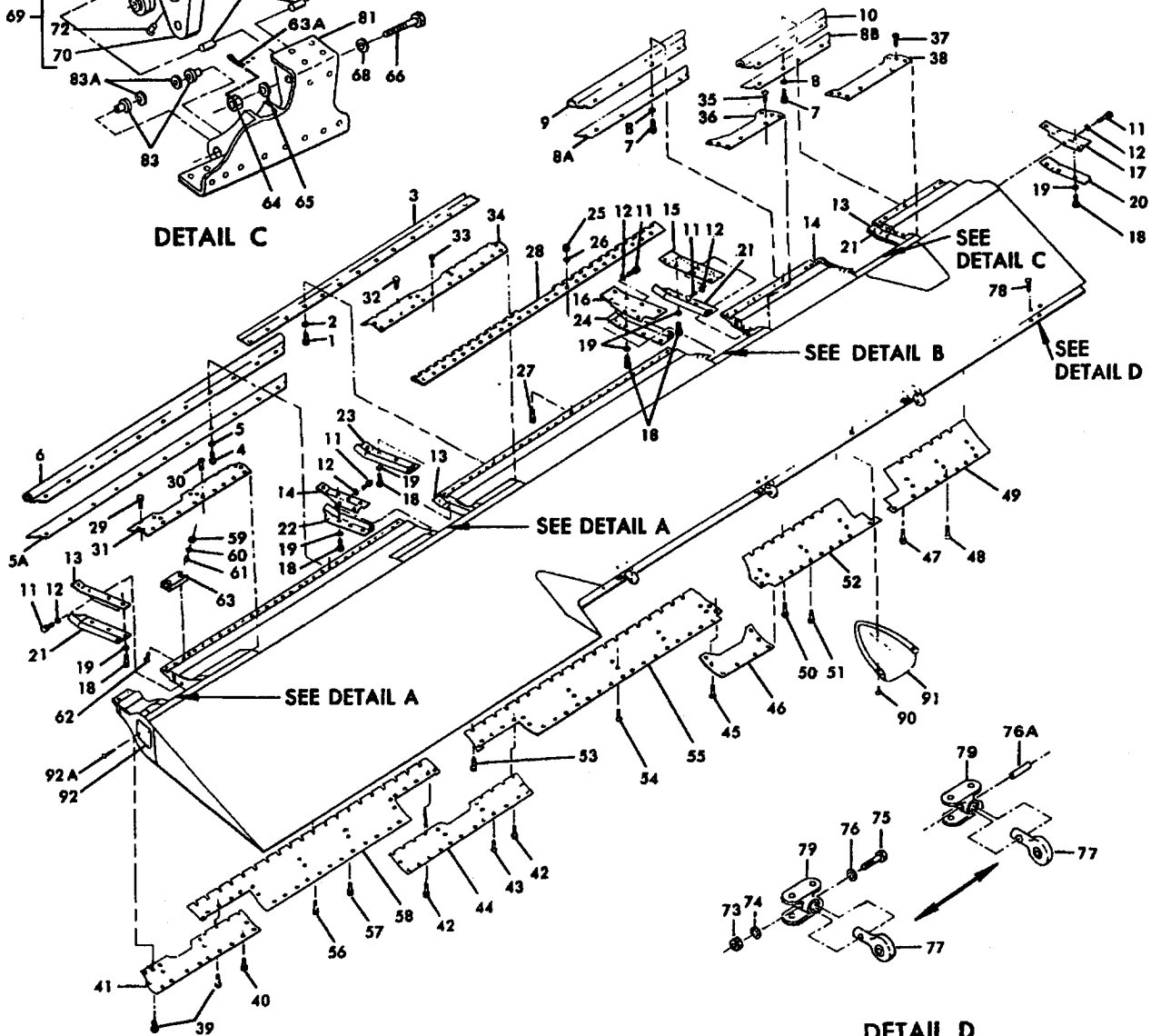
DETAIL A



DETAIL B



DETAIL C



DETAIL D

**Aileron Assembly
Figure 1102**



FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1102-	65-46454-1		AILERON ASSY, LH							A	RF
	65-46454-2		AILERON ASSY, RH							B	RF
	65-46454-21		AILERON ASSY, LH							C	RF
	65-46454-22		AILERON ASSY, RH							D	RF
	65-46454-23SP		AILERON ASSY, LH							E	RF
	65-46454-24SP		AILERON ASSY, RH							F	RF
	65-46454-503		AILERON ASSY, LH							G	RF
	65-46454-504		AILERON ASSY, RH							H	RF
	65-46454-31SP		AILERON ASSY, LH							I	RF
	65-46454-32SP		AILERON ASSY, RH							J	RF
1	BACB3ONE3-6		. BOLT (REPLACES NAS1303-6)								13
2	AN96OPD10L		. WASHER								13
3	65-55519-1		. SEAL							ACEGI	1
3	65-55519-15		. SEAL (REPLACES 65-55519-1)							ACEGI	1
3	65-55519-2		. SEAL							BDFHJ	1
3	65-55519-16		. SEAL (REPLACES 65-55519-2)							BDFHJ	1
4	NAS1103-5		. BOLT								11
5	AN96OPD10L		. WASHER								11
5A	65-52142-501		. RETAINER, SEAL *[1]								1
6	65-55519-4		. SEAL *[1]								1
6	65-55519-511		. SEAL *[1]								1
7	NAS1103-5		. BOLT								8
8	AN96OPD10L		. WASHER								8
8A	65-52142-502		. RETAINER, SEAL *[1]								1
8B	65-52142-503		. RETAINER, SEAL *[1]								1
9	65-55519-7		. SEAL *[1]								1
9	65-55519-503		. SEAL *[1]								1
10	65-55519-8		. SEAL *[1]								1
10	65-55519-504		. SEAL *[1]								1
11	BACB3ONE3-1		. BOLT (REPLACES NAS1303-1)								16
12	AN96OPD10L		. WASHER								16
13	69-40686-1		. SUPPORT, SEAL							ACEGI	3
13	69-40686-2		. SUPPORT, SEAL							BDFHJ	3
14	69-40686-1		. SUPPORT, SEAL							BDFHJ	2
14	69-40686-2		. SUPPORT, SEAL							ACEGI	2
15	69-40686-3		. SUPPORT, SEAL							ACEGI	1
15	69-40686-4		. SUPPORT, SEAL							BDFHJ	1
16	69-40686-3		. SUPPORT, SEAL							BDFHJ	1
16	69-40686-4		. SUPPORT, SEAL							ACEGI	1
17	69-40686-7		. SUPPORT, SEAL							ACEGI	1
17	69-40686-8		. SUPPORT, SEAL							BDFHJ	1
18	BACB3ONE3-1		. BOLT (REPLACES NAS1303-1)								32
19	AN96OPD10L		. WASHER *[1]								32
19	BACW10P43AL		. WASHER *[1]								32

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1102-											
20	65-55519-5		.	SEAL	*	[1]				ACEGI	1
20	65-55519-501		.	SEAL	*	[1]				ACEGI	1
20	65-55519-6		.	SEAL	*	[1]				BDFHJ	1
20	65-55519-502		.	SEAL	*	[1]				BDFHJ	1
21	65-55519-11		.	SEAL	*	[1]				ACEGI	3
21	65-55519-507		.	SEAL	*	[1]				ACEGI	3
21	65-55519-12		.	SEAL	*	[1]				BDFHJ	3
21	65-55519-508		.	SEAL	*	[1]				BDFHJ	3
22	65-55519-11		.	SEAL	*	[1]				BDFHJ	2
22	65-55519-507		.	SEAL	*	[1]				BDFHJ	2
22	65-55519-12		.	SEAL	*	[1]				ACEGI	2
22	65-55519-508		.	SEAL	*	[1]				ACEGI	2
23	65-55519-13		.	SEAL	*	[1]				ACEGI	1
23	65-55519-509		.	SEAL	*	[1]				ACEGI	1
23	65-55519-14		.	SEAL	*	[1]				BDFHJ	1
23	65-55519-510		.	SEAL	*	[1]				BDFHJ	1
24	65-55519-13		.	SEAL	*	[1]				BDFHJ	1
24	65-55519-509		.	SEAL	*	[1]				BDFHJ	1
24	65-55519-14		.	SEAL	*	[1]				ACEGI	1
24	65-55519-510		.	SEAL	*	[1]				ACEGI	1
25	BACN10JC3		.	NUT	(REPLS	NAS679A3W)					12
26	AN960PD10L		.	WASHER							12
27	BACB30LH3-3		.	BOLT	(REPLS	BACB30LU3-3)					12
28	65-46458-1		.	HINGE	, BALANCE						1
29	NAS428-3-4		.	BOLT	(REPLS	BACB30NE3-2, NAS1303-2)					5
				(PREF)							
30	BACB30LR3-1		.	BOLT	(REPLS	BACB30LU3-1)					16
31	65-46456-34		.	PLATE	, COVER				ACEGI		1
31	65-46456-33		.	PLATE	, COVER				BDFHJ		1
32	NAS428-3-4		.	BOLT	(REPLS	BACB30NE3-2, NAS1302-2)					8
				(PREF)							
33	BACB30LR3-1		.	BOLT	(REPLS	BACB30LU3-1)					18
34	65-46456-31		.	PLATE	, COVER				ACEGI		1
34	65-46456-32		.	PLATE	, COVER				BDFHJ		1
35	BACB30LR3-1		.	BOLT	(REPLS	BACB30LU3-1)					8
36	65-46456-27		.	PLATE	, COVER						1
37	BACB30LR3-1		.	BOLT	(REPLS	BACB30LU3-1)					8
38	65-46456-23		.	PLATE	, COVER				ACEGI		1
38	65-46456-24		.	PLATE	, COVER				BDFHJ		1
39	NAS428-3-4		.	BOLT	(REPLS	BACB30NE3-2, NAS1303-2)					5
				(PREF)							
40	BACB30LR3-1		.	BOLT	(REPLS	BACB30LU3-1)					11

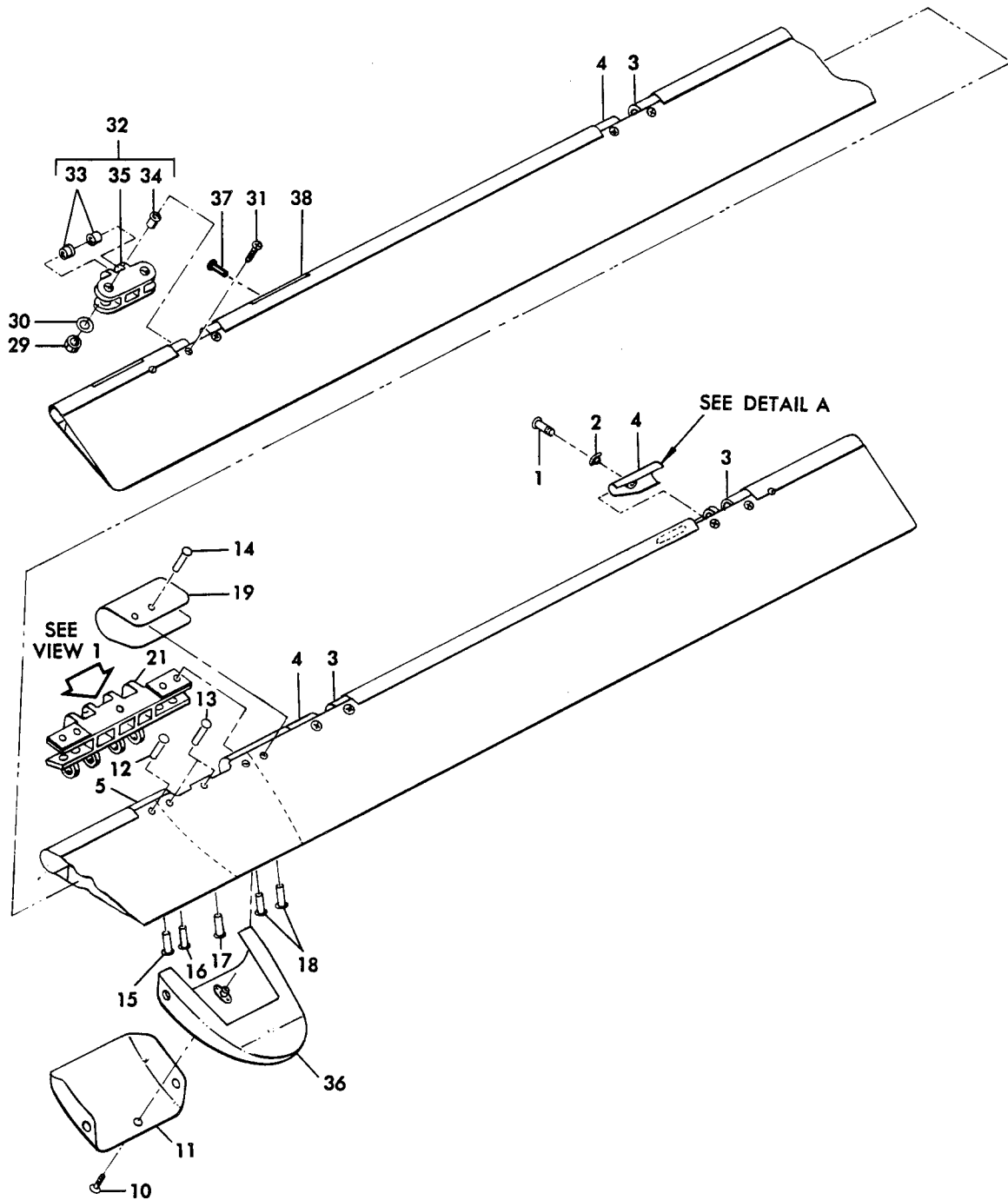
FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1102-											
41	65-46456-501		.							ACEGI	1
41	65-46456-502		.							BDFHJ	1
42	NAS428-3-4		.								8
43	BACB30LR3-1		.								18
44	65-46456-29		.							ACEGI	1
44	65-46456-30		.							BDFHJ	1
45	BACB30LR3-1		.								8
46	65-46456-25		.								1
47	BACB30NE3-2		.								6
48	BACB30LR3-1		.								14
49	65-46456-7		.							ACEGI	1
49	65-46456-8		.							BDFHJ	1
50	BACB30NE3-2		.								8
51	BACB30LR3-1		.								17
52	65-46456-9		.							ACEGI	1
52	65-46456-10		.							BDFHJ	1
53	BACB30NE3-2		.								20
53	BACB30NE3-2		.								16
54	BACB30LR3-1		.								26
55	65-46456-11		.							ACEGI	1
55	65-46456-12		.							BDFHJ	1
56	BACB30NE3-2		.								20
56	BACB30NE3-2		.								12
57	BACB30LR3-1		.								20
58	65-46456-13		.							ACEGI	1
58	65-46456-14		.							BDFHJ	1
59	BACN10JC3		.								AR
60	AN960PD10L		.								AR
61	NAS77A3-6P		.								AR
62	BACB30LU3-5		.								AR
62	BACB30LU3-4		.								AR
63	69-38850-4		.								AR
63	69-46492-1		.								AR
63A	MS24665-134		.								8
64	BACN10JD104		.								8

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1102-65	AN960PD416		.								8
66	BACB3ONF4D16		.								2
67	BACB3ONF4D21		.								6
68	AN960PD416L		.								8
69	69-36639-1		.								4
70	69-36639-2		.	.							1
71	BACB10C135H		.	.							1
72	NAS516-1		.	.							1
	BACB28Y4M064		.	.							2
73	BACN10JC3		.								4
74	AN960PD10		.								4
75	BACB3ONE3-9		.								4
76	AN960PD10L		.								4
76A	MS39086-158		.								4
77	BACB10C237		.								4
78	BACR15CE5D		.								16
79	6937806-1		.								4
80	DELETED										
80	DELETED										
81	65-67171-3		.						ACEGI		1
81	65-67171-503		.						ACEGI		1
81	65-46522-3		.						ACEGI		1
81	65-67171-4		.						BDFHJ		1
81	65-67171-504		.						BDFHJ		1
81	65-46522-4		.						BDFHJ		1
82	69-38828-17		.								4
83	BACB28X5B24		.								2
83A	BACW10P297G		.								2
84	DELETED										
85	65-46523-2		.								1
86	DELETED										
87	DELETED										
88	65-46521-2		.								2
89	69-38828-16		.								12
90	BACR15CE4D		.								2
91	69-53918-1		.						ACEGI		1
91	69-39212-1		.						ACEGI		1
91	69-53918-2		.						BDFHJ		1
91	69-53918-2		.						BDFHJ		1
92	MS27253-1		.								1
93	BACR15BB3D		.								4

*[1] LIMITED USE
- NOT ILLUSTRATED

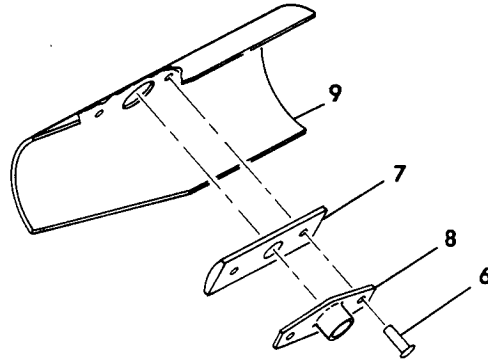
65-46454
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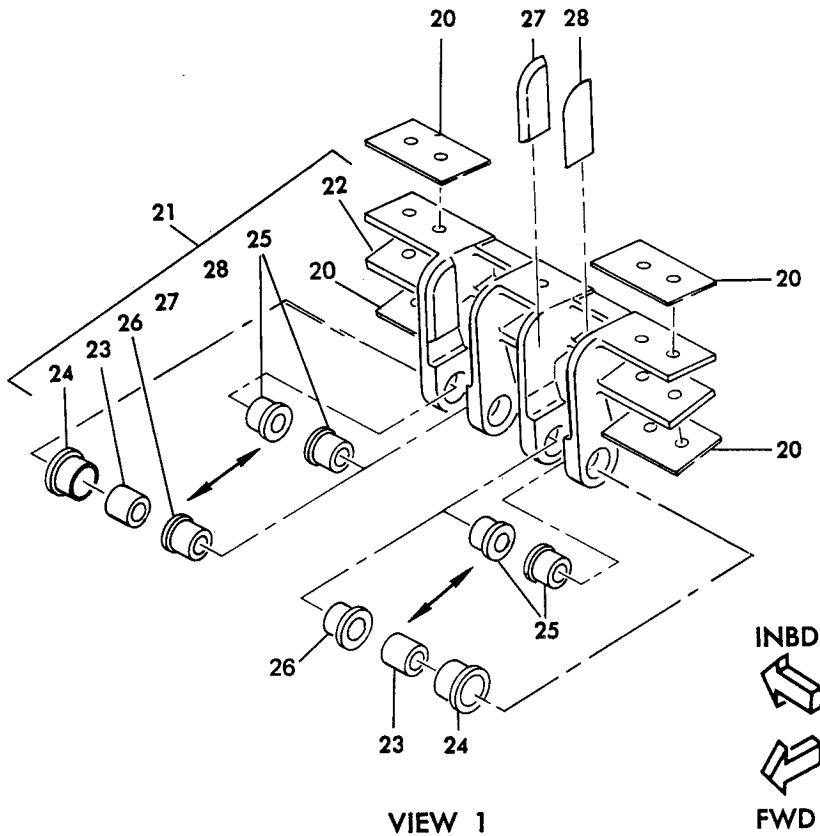


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Tab Assembly
Figure 1103 (Sheet 1)



DETAIL A



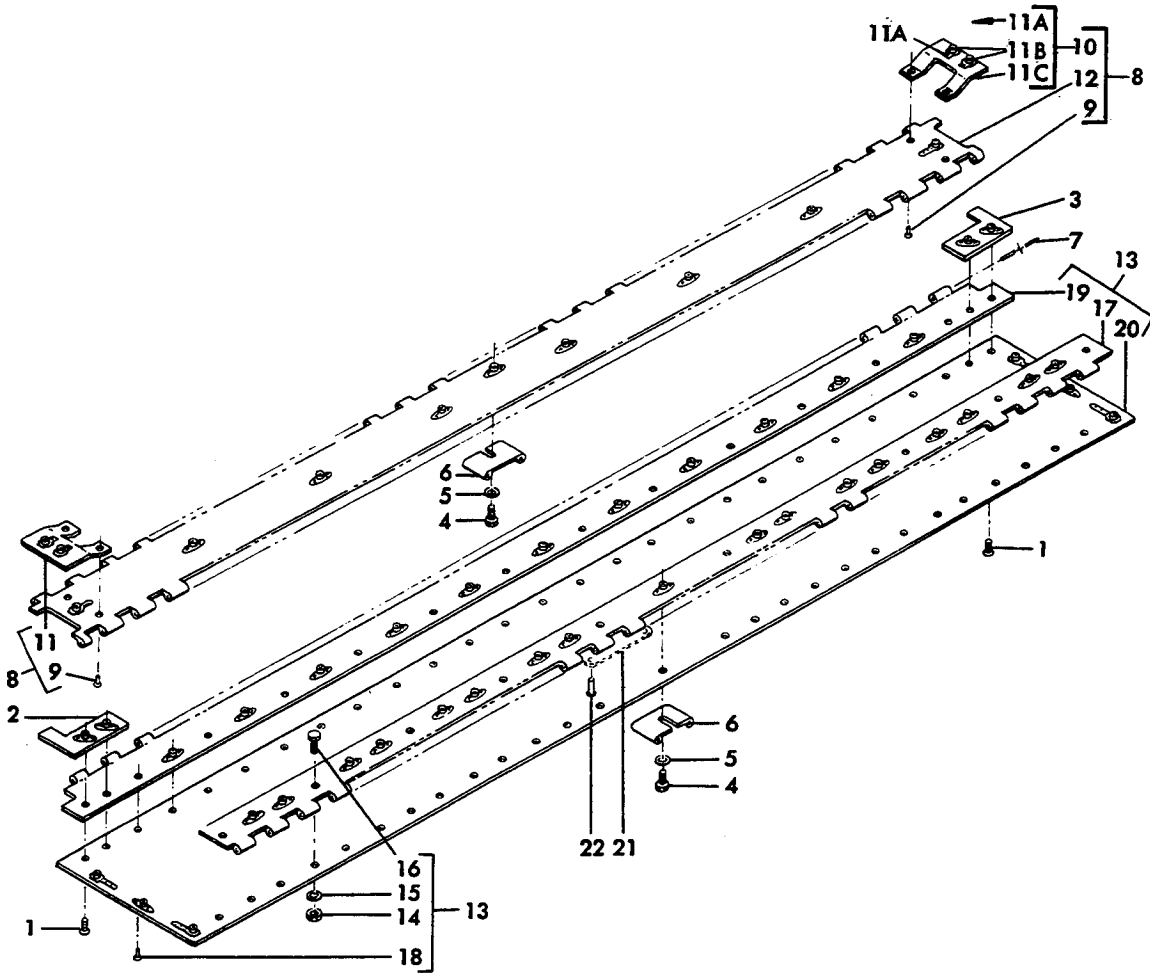
VIEW 1

Tab Assembly
 Figure 1103 (Sheet 2)

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1103-	65-46455-13		AILERON TAB ASSY, LH (SB 57-1040)							A	RF
	65-46455-14		AILERON TAB ASSY, RH (SB 57-1040)							B	RF
	65-46455-15		AILERON TAB ASSY, LH (SB 57-1040)							C	RF
	65-46455-16		AILERON TAB ASSY, RH (SB 57-1040)							D	RF
	65-46455-17		AILERON TAB ASSY, LH (SB 57-1040)							E	RF
	65-46455-18		AILERON TAB ASSY, RH (SB 57-1040)							F	RF
	65-46455-19SP		AILERON TAB ASSY, LH							G	RF
	65-46455-20SP		AILERON TAB ASSY, RH							H	RF
	65-46455-527		AILERON TAB ASSY, LH (SB 57-1040)							I	RF
	65-46455-528		AILERON TAB ASSY, RH (SB 57-1040)							J	RF
	65-46455-21SP		AILERON TAB ASSY, LH							K	RF
	65-46455-22SP		AILERON TAB ASSY, RH							L	RF
	65-46455-23SP		AILERON TAB ASSY, LH							M	RF
	65-46455-24SP		AILERON TAB ASSY, RH							N	RF
	65-46455-27SP		AILERON TAB ASSY, LH							O	RF
	65-46455-28SP		AILERON TAB ASSY, RH							P	RF
1	BACB30LU2-2		. BOLT (LIMITED USE)							ABIJ	8
1	BACB30LU2-2		. BOLT							C-HK-P	9
2	65-46455-508		. WASHER (LIMITED USE)							ABIJ	8
2	65-46455-508		. WASHER							CDGH	9
										K-P	
3	65-46455-503		. COVER ASSY, HINGE (LIMITED USE)							AI	4
3	65-46455-503		. COVER ASSY, HINGE							CEGKO	4
3	65-46455-504		. COVER ASSY, HINGE (OPP 65-46455-503) (LIMITED USE)							BJ	4
3	65-46455-504		. COVER ASSY, HINGE							DFHLP	4
4	65-46455-504		. COVER ASSY, HINGE (LIMITED USE)							AI	4
4	65-46455-504		. COVER ASSY, HINGE							CE	4
4	65-46455-504		. COVER ASSY, HINGE (OPP 65-46455-504) (LIMITED USE)							BJ	4
4	65-46455-504		. COVER ASSY, HINGE							DF	4
5	65-46455-504		. COVER ASSY, HINGE							CEGKO	1
5	65-46455-503		. COVER ASSY, HINGE (OPP 65-46455-504)							DFHLP	1
6	BACR15CE3B		. . RIVET								2
7	65-46455-507		. . FILLER								1
8	BACN10JR08F		. . NUTPLATE (REPLS NAS686A08)								1
9	65-46455-505		. . SLIDE (USED ON 65-46455-503)								1
9	65-46455-506		. . SLIDE (USED ON 65-46455-504)								1
10	AN525-10R6		. SCREW								3
11	69-53913-3		. FAIRING, TAB MAST							ACEGI	1
11	69-53913-4		. FAIRING, TAB MAST							BDFHJ	1
11	69-53913-5		. FAIRING, TAB MAST							KO	1
11	69-53913-6		. FAIRING, TAB MAST							LP	1
12	BACR15BA6B		. RIVET (REPLS MS20426B6)(SB 57-1040)							ABIJ	1
12	BACR15AD7B		. RIVET (OPT TO BACR15BA6B) (SB 57-1040)							IJ	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1103-12	NAS1399MW6-5		.							C-HK-P	1
12	BACB30LA6C5CD		.							EF	1
13	BACR15BA6B		.								2
13	BACR15AD7B		.								2
14	BACR15BA6B		.							ABIJ	1
14	BACR15AD7B		.							IJ	1
14	NAS1398MW6-5		.							AB	1
14	NAS1398MW6-5		.							C-HK-P	1
14	BACB30LA6C5CD		.							E-HK-P	1
15	BACR15BB6B		.							ABIJ	1
15	BACR15ET7B		.							IJ	1
15	NAS1398MW6-5		.							C-HK-P	1
15	BACB30LA6C5CD		.							EF	1
16	BACR15BB6B		.								1
16	BACR15ET7B		.								1
17	BACR15BB6D		.								1
17	BACR15ET7D		.								1
18	BACR15BB6B		.							ABIJ	1
18	BACR15ET7B		.							IJ	1
18	NAS1398MW6-5		.							AB	1
18	NAS1398MW6-5		.							C-HK-P	1
18	BACB30LA6C5CD		.							E-HK-P	1
19	65-46455-517		.							AI	1
19	65-46455-518		.							BJ	1
19	65-46455-525		.							HKL	1
19	65-46455-25		.							CEGO	1
19	65-46455-26		.							DFHP	1
20	BACS40R08A15		.							AB	4
20	BACS40R08A13		.							C-P	4
21	65-50701-501		.							AB	1
21	65-50701-505		.							CD	1
21	65-50701-506		.							E-P	1
22	65-50701-502		.								1
22	65-50701-504		.								1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE							USE CODE	QTY PER ASSY	
			1	2	3	4	5	6	7			
1103-22	65-76757-1		.	.	FITTING (PREF)(USED ON 65-50701-506)						1	
22	65-50701-507		.	.	FITTING (OPT TO 65-76757-1) (USED ON 65-50701-506)						1	
23	BACB28Y4B40		.	.	BUSHING (USED ON 65-50701-506)						2	
24	BACB28W6B22		.	.	BUSHING (USED ON 65-50701-506)						2	
25	NAS77A4-22P		.	.	BUSHING (USED ON 65-50701-501 AND -505)						4	
26	NAS77A4-22P		.	.	BUSHING (USED ON 65-50701-506)						2	
27	65-50701-8		.	.	STRIP, RUB						2	
28	65-50701-9		.	.	STRIP, RUB (OPP 65-50701-8)						2	
29	BACN10JC3		.	.	NUT (REPLS NAS679A3W)						16	
30	NAS1197-10L		.	.	WASHER						16	
31	AN525-10R7		.	.	BOLT						16	
32	69-37805-1		.	.	HINGE ASSY, TAB (SB 57-1040)				A-D		4	
32	69-37805-503		.	.	HINGE ASSY, TAB (SB 57-1040)				E-P		4	
33	NAS77A4-13P		.	.	BUSHING						2	
34	NAS537B3P8		.	.	BUSHING (USED ON 69-37805-1)						4	
35	69-37805-2		.	.	HINGE (USED ON 69-37805-1)						1	
35	69-37805-504		.	.	HINGE (USED ON 69-37805-503)						1	
36	69-53913-1		.	.	FAIRING, TAB MAST				ACEGIK		1	
36	69-53913-2		.	.	FAIRING, TAB MAST				O		1	
37	M7885/2		.	.	RIVET (REPLS MS20604AD3-1 AND MS20604B3W1)				BDFHJL		4	
37	NAS1398D3-1		DELETED							P		
37	MS20604AD3-1		.	.	RIVET (OPT MS20604B3W1)						4	
37	MS20604B3W1		.	.	RIVET (OPT TO MS20604AD3-1)						4	
38	BACM10L1CVR		.	.	MARKER (SB 57-1040)						1	



Balance Panel Assembly
Figure 1104

65-46454
 65-46455
 65-46457
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FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	N O M E N C L A T U R E							USE CODE	QTY PER ASSY
			1	2	3	4	5	6	7		
1104	65-46457-1										RF
	65-46457-6										RF
1	BACB30LU3-3										2
2	66-15369-1										1
3	66-15369-2										1
4	NAS1103-5										2
5	AN960PD10L										2
6	66-15950-1										2
7	65-46457-4										1
8	65-46457-5										1
9	BACR15BA4D										4
10	65-26755-47										1
11	65-26755-48										1
11A	BACR15BA3A										4
11B	BACN10KH3										2
11C	65-26755-45										1
11C	65-26755-46										1
12	65-46458-4										1
13	65-46457-2										1
13	65-46457-7										1
14	BACN10JC3										10
15	AN960PD10										10
16	NAS1103-3										10
17	65-46458-2										1
18	BACR15CE5D										12
19	65-46458-3										1
20	65-46457-3										1
20	65-46457-8										1
21	MS27253-1										1
22	BACR15BB3A										4

VENDORS

V77896 REX CHAINBELT, INC., BEARING DIVISION, 2400 CURTIS STREET,
 DOWNERS GROVE, ILLINOIS 60515

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Part No.	Fig. and Index No.	Qty per. Assy	Part No.	Fig. and Index No.	Qty per. Assy
AN310-4		AR	BACB30LU3-1	1102-35	8
AN310-5		AR	BACB30LU3-1	1102-37	8
AN525-10R6		AR	BACB30LU3-1	1102-40	11
AN525-10R7		AR	BACB30LU3-1	1102-43	18
AN7510-1		AR	BACB30LU3-1	1102-45	8
AN960-10L		AR	BACB30LU3-1	1102-48	14
AN960C416L		AR	BACB30LU3-1	1102-51	17
AN960D416		AR	BACB30LU3-1	1102-54	26
AN960D416L		AR	BACB30LU3-1	1102-57	20
			BACB30LU3-3	1101-57	1
AN960PD10L	1101-8A	7	BACB30LU3-3	1102-27	12
AN960JD10L	1101-25A	4	BACB30LU3-3	1104-1	2
AN960PD10		AR	BACB30LU3-4	1102-62	AR
AN960PD10L		AR	BACB30LU3-5	1102-62	AR
AN960PD416		AR	BACB30NE3-1	1101-31	6
AN960PD416L		AR	BACB30NE3-1	1101-34	4
AN960PD516		AR	BACB30NE3-1	1102-11	16
AN960PD516L		AR	BACB30NE3-1	1102-18	32
BACB10C135H	1102-71	1	BACB30NE3-1	1102-18	32
BACB10C237	1102-77	4	BACB30NE3-2	1102-29	5
BACB28W6B22	1103-24	2	BACB30NE3-2	1102-32	8
BACB28X5B24	1102-83	2	BACB30NE3-2	1102-39	4
BACB28Y4B40	1103-23	2	BACB30NE3-2	1102-39	5
BACB30DM4-15D	1101-14	4	BACB30NE3-2	1102-42	8
BACB30DM5-36D	1101-65	3	BACB30NE3-2	1102-47	6
BACB30DM5-38D	1101-66	1	BACB30NE3-2	1102-50	8
BACB30LA6C5CD	1103-12	1	BACB30NE3-2	1102-53	20
BACB30LA6C5CD	1103-14	1	BACB30NE3-2	1102-56	20
BACB30LA6C5CD	1103-15	1	BACB30NE3-3	1101-39	11
BACB30LA6C5CD	1103-18	1	BACB30NE3-3	1101-52	12
BACB30LH3-3	1102-27	12	BACB30NE3-3	1101-55	AR
BACB30LH3-4	1101-9A	2	BACB30NE3-3	1101-58	1
BACB30LR3-1	1102-30	16	BACB30NE3-4	1101-37	2
BACB30LR3-1	1102-33	1	BACB30NE3-4	1101-42	8
BACB30LR3-1	1102-35	8	BACB30NE3-6	1102-1	13
BACB30LR3-1	1102-37	8	BACB30NE3-7	1101-46	AR
BACB30LR3-1	1102-40	11	BACB30NE3-9	1102-75	4
BACB30LR3-1	1102-43	18	BACB30NE4-16	1102-66	2
BACB30LR3-1	1102-45	8	BACB30NE4-20	1102-67	6
BACB30LR3-1	1102-48	14	BACB30NF4-18	1101-18	2
BACB30LR3-1	1102-51	17	BACB30NF4D16	1102-66	2
BACB30LR3-1	1102-54	26	BACB30NF4D21	1102-67	6
BACB30LR3-1	1102-57	20	BACJ40AB20-4	1101-10A	4
BACB30LU2-2	1103-1	8	BACJ40K5A5A4	1101-10	2
BACB30LU2-2	1103-1	9	BACJ40K5A5A5	1101-60	1
BACB30LU3-1	1102-30	16	BACJ40K5A5A9	1101-59	1
BACB30LU3-1	1102-33	18			

Part No.	Fig. and Index No.	Qty. per Assy.	Part No.	Fig. and Index No.	Qty. per Assy.
BACM10L1CVR	1103-38	1	BACS40R05U05	1101-17A	AR
BACN10JC3	1101-7	4	BACS40R08A13	1103-20	4
BACN10JC3	1101-24	2	BACS40R08A15	1103-20	4
BACN10JC3	1102-25	12	BACW10BP4DP	1101-13A	4
BACN10JC3	1102-59	AR	BACW10BP4NDP	1101-15A	8
BACN10JC3	1102-73	4	BACW10P297G	1102-83A	2
BACN10JC3	1103-29	16	BACW10P43AL	1101-32	6
BACN10JC3	1104-14	10	BACW10P43AL	1101-35	4
BACN10JC3CD	1101-7A	4	BACW10P43AL	1102-19	32
BACN10JC4	1101-16	2			
BACN10JC4	1101-28	2	MS20426A3		AR
BACN10JC4	1102-64	8	MS20426B5		AR
BACN10JD104	1102-64	8	MS20426B6		AR
BACN10JD4	1101-12	4	MS20426D4		AR
BACN10JD5	1101-62	4	MS20426D5		AR
BACN10JR08F	1103-8	2	MS20470A3		AR
BACN10KH3	1104-11B	2	MS20470B5		AR
BACN10PC3	1104-11B	2	MS20470B6		AR
BACR15AD7B	1103-12	1	MS20470D3		AR
BACR15AD7B	1103-13	2	MS20470D5		AR
BACR15AD7B	1103-14	1	MS20470D6		AR
BACR15BA3A	1104-11A	4	MS20604AD3-1		AR
BACR15BA4D	1104-9	4	MS20604B3W1	1103-37	4
BACR15BA5B	1101-20	1	MS20995NC32		AR
BACR15BA5D	1101-23P	2	MS24665-132		AR
BACR15BA6B	1103-12	1	MS24665-134		AR
BACR15BA6B	1103-13	2	MS27253-1		AR
BACR15BA6B	1103-14	1	MS39086-158		AR
BACR15BB3A	1104-22	4	MS6704DU15	1101-14A	4
BACR15BB3D	1102-93	4	M7885/2	1103-37	4
BACR15BB5B	1101-21	2			
BACR15BB5B	1101-21A	1	NAS1103-3		AR
BACR15BB5D	1101-23F	2	NAS1103-5		AR
BACR15BB5D	1101-23M	2	NAS1104-12		AR
BACR15BB6B	1103-15	1	NAS1104-16		AR
BACR15BB6B	1103-16	1	NAS1197-10		AR
BACR15BB6B	1103-18	1	NAS1197-10L		AR
BACR15BB6D	1103-17	1	NAS1197-416		AR
BACR15CE3B	1103-6	2	NAS1197-416L		AR
BACR15CE4D	1102-90	2	NAS1303-1		AR
BACR15CE5B	1101-21A	1	NAS1303-2		AR
BACR15CE5D	1102-78	16	NAS1303-3		AR
BACR15CE5D	1104-18	12	NAS1303-4		AR
BACR15ET7B	1103-15	1	NAS1303-6		AR
BACR15ET7B	1103-16	1	NAS1303-7		AR
BACR15ET7B	1103-18	1	NAS1303-9		AR
BACR15ET7D	1103-17	1	NAS1304-16		AR
BACR15W7B	1103-15	1	NAS1304-20		AR
BACR15W7B	1103-18	1	NAS1398MW6-5		AR

Part No.	Fig. and Index No.	Qty. per Assy.	Part No.	Fig. and Index No.	Qty. per Assy.
NAS1399MW6-5		AR	65-46454-503	1102	RF
NAS1804-3	1101-24A	2	65-46454-504	1101-1	1
NAS428-3-4		AR	65-46454-504	1102	RF
NAS509-5		AR	65-46455-13	1101-2	1
NAS509-7	1101-23J	1	65-46455-13	1103	RF
NAS514P440-3	1101-69	1	65-46455-14	1101-2	1
NAS516-1		AR	65-46455-14	1103	RF
NAS537B3P8		AR	65-46455-15	1101-2	1
NAS623-3-6	1101-26A	2	65-46455-15	1103	RF
NAS6705DU36	1101-65A	3	65-46455-16	1101-2	1
NAS6705DU38	1101-66A	1	65-46455-16	1103	RF
NAS679A3W		AR	65-46455-17	1101-2	1
NAS679A4W		AR	65-46455-17	1103	RF
NAS686A08		AR	65-46455-18	1101-2	1
NAS77-4-13P		AR	65-46455-18	1103	RF
NAS77A3-6P		AR	65-46455-19SP	1103	RF
NAS77A4-22P		AR	65-46455-19SP	1101-2	1
			65-46455-20SP	1103	RF
RF4F	1101-23	1	65-46455-20SP	1101-2	1
RF4G	1101-23A	1	65-46455-21SP	1101-2	1
RF4P	1101-23A	1	65-46455-21SP	1103	RF
RF4P	1101-23Q	1	65-46455-22SP	1101-2	1
RF4S	1101-23	1	65-46455-22SP	1103	RF
RF4S	1101-23G	1	65-46455-23SP	1101-2	1
			65-46455-23SP	1103	RF
SM4-5E1-501	1101-23D	1	65-46455-24SP	1101-2	1
			65-46455-24SP	1103	RF
65-26755-45	1104-11C	1	65-46455-27SP	1101-2	1
65-26755-46	1104-11C	1	65-46455-27SP	1103	RF
			65-46455-28SP	1101-2	1
65-26755-47	1104-10	1	65-46455-28SP	1103	RF
65-26755-48	1104-11	1	65-46455-503	1103-3	4
65-46454-1	1101-1	1	65-46455-503	1103-4	4
65-46454-1	1102	RF	65-46455-503	1103-5	1
65-46454-2	1101-1	1	65-46455-504	1103-3	4
65-46454-2	1102	RF	65-46455-504	1103-4	4
65-46454-21	1101-1	1	65-46455-504	1103-5	1
65-46454-21	1102	RF	65-46455-505	1103-9	1
65-46454-22	1101-1	1	65-46455-506	1103-9	1
65-46454-22	1102	RF	65-46455-507	1103-7	1
65-46454-23SP	1101-1	1	65-46455-508	1103-2	8
65-46454-23SP	1102	RF	65-46455-508	1103-2	9
65-46454-24SP	1101-1	1	65-46455-517	1103-19	1
65-46454-24SP	1102	RF	65-46455-518	1103-19	1
65-46454-31SP	1101-1	1	65-46455-525	1103-19	1
65-46454-31SP	1102	RF	65-46455-527	1101-2	1
65-46454-32SP	1101-1	1	65-46455-527	1103	RF
65-46454-32SP	1102	RF	65-46455-528	1101-2	1
65-46454-503	1101-1	1			

65-46454 65-46455
65-46457 65C25911

 **BOEING**
OVERHAUL MANUAL

Part No.	Fig. and Index No.	Qty per Assy
65-46455-528	1103	RF
65-46456-10	1102-52	1
65-46456-11	1102-55	1
65-46456-12	1102-55	1
65-46456-13	1102-58	1
65-46456-14	1102-58	1
65-46456-23	1102-38	1
65-46456-24	1102-38	1
65-46456-25	1102-46	1
65-46454-24	1102	RF
65-46456-27	1102-36	1
65-46456-29	1102-44	1
65-46456-30	1102-44	1
65-46456-31	1102-34	1
65-46456-32	1102-34	1
65-46456-33	1102-31	1
65-46456-34	1102-31	1
65-46456-501	1102-41	1
65-46456-502	1102-41	1
65-46456-7	1102-49	1
65-46456-8	1102-49	1
65-46456-9	1102-52	1
65-46457-1	1101-3	1
65-46457-1	1104	RF
65-46457-2	1104-13	1
65-46457-3	1104-20	1
65-46457-4	1104-7	1
65-46457-5	1104-8	1
65-46457-6	1101-3	1
65-46457-6	1104	RF
65-46457-7	1104-13	1
65-46457-8	1104-20	1
65-46458-1	1102-28	1
65-46458-2	1104-17	1
65-46458-3	1104-19	1
65-46458-4	1104-12	1
65-46458-5	1101-51	1
65-46521-2	1102-88	2
65-46522-3	1102-81	1
65-46522-4	1102-81	1
65-46523-2	1102-85	1
65-50701-501	1103-21	1
65-50701-502	1103-22	1
65-50701-504	1103-22	1
65-50701-505	1103-21	1
65-50701-506	1103-21	1
65-50701-507	1103-22	1

Part No.	Fig. and Index No.	Qty per Assy
65-50701-8	1103-27	2
65-50701-9	1103-28	2
65-52142-501	1102-5A	1
65-52142-502	1102-8A	1
65-52142-503	1102-8B	1
65-53761-4	1101-22	1
65-53761-5	1101-19	2
65-53761-6	1101-19	2
65-53761-7	1101-19	2
65-53761-8	1101-22	1
65-53761-9	1101-19	2
65-55519-1	1102-3	1
65-55519-10	1101-36	2
65-55519-11	1102-21	3
65-55519-11	1102-22	2
65-55519-12	1102-21	3
65-55519-12	1102-22	2
65-55519-13	1102-23	1
65-55519-13	1102-24	1
65-55519-14	1102-23	1
65-55519-14	1102-24	1
65-55519-15	1102-3	1
65-55519-16	1102-3	1
65-55519-2	1102-3	1
65-55519-3	1101-45	1
65-55519-4	1102-6	1
65-55519-5	1102-20	1
65-55519-501	1102-20	1
65-55519-502	1102-20	1
65-55519-503	1102-9	1
65-55519-504	1102-10	1
65-55519-505	1101-33A	1
65-55519-506	1101-33B	1
65-55519-507	1102-21	3
65-55519-507	1102-22	2
65-55519-508	1102-21	3
65-55519-508	1102-22	2
65-55519-509	1102-23	1
65-55519-509	1102-24	1
65-55519-510	1102-23	1
65-55519-510	1102-24	1
65-55519-511	1102-6	1
65-55519-512	1101-36	2
65-55519-6	1102-20	1
65-55519-7	1102-9	1
65-55519-8	1102-10	1

Part No.	Fig. and Index No.	Qty. per Assy.	Part No.	Fig. and Index No.	Qty. per Assy.
65-55519-9	1101-33	2	69-40686-2	1102-14	2
65-67171-3	1102-81	1	69-40686-3	1102-15	1
65-67171-4	1102-81	1	69-40686-3	1102-16	1
65-67171-503	1102-81	1	69-40686-4	1102-15	1
65-67171-504	1102-81	1	69-40686-4	1102-16	1
65-76623-1	1101-23R	1	69-40686-7	1102-17	1
65-76623-2	1101-23R	1	69-40686-8	1102-17	1
65-76757-1	1103-22	1	69-43508-1	1101-49	1
65C25911-1SP	1101-1	1	69-43508-2	1101-50	1
65C25911-2SP	1101-1	1	69-43508-3	1101-4	1
65C25911-7SP	1101-1	1	69-43508-4	1101-5	1
65C25911-8SP	1101-1	1	69-44689-3	1101-68	1
65C25911-9SP	1101-1	1	69-44689-501	1101-68	1
65C25911-10SP	1101-1	1	69-44997-1	1101-48	AR
65C25911-11SP	1101-1	1	69-44997-2	1101-48	AR
65C25911-12SP	1101-1	1	69-46492-1	1102-63	AR
65C25911-17SP	1101-1	1	69-53913-1	1103-36	1
65C25911-18SP	1101-1	1	69-53913-2	1103-36	1
65C25911-23SP	1101-1	1	69-53913-3	1103-11	1
65C25911-24SP	1101-1	1	69-53913-4	1103-11	1
65C25911-27SP	1101-1	1	69-53913-5	1103-11	1
65C25911-28SP	1101-1	1	69-53913-6	1103-11	1
65C25911-29SP	1101-1	1	69-53918-1	1102-91	1
65C25911-30SP	1101-1	1	69-53918-2	1102-91	1
66-15369-1	1104-2	1	69-60081-1	1101-23B	2
66-15369-2	1104-3	1	69-60081-2	1101-23L	1
66-15950-1	1104-6	2	69-60081-3	1101-23E	1
69-36639-1	1102-69	4	69-60081-4	1101-23B	2
69-36639-2	1102-70	1	69-60081-5	1101-23L	1
69-37805-1	1103-32	4	69-60082-1	1101-23R	1
69-37805-2	1103-35	1	69-60083-1	1101-23K	1
69-37805-503	1103-32	4	69-60083-2	1101-23K	1
69-37805-504	1103-35	1	69-60083-3	1101-23K	1
69-37806-1	1102-79	4	69-60084-1	1101-23N	1
69-38828-16	1102-89	12	69-60138-1	1101-23J	1
69-38828-17	1102-82	4	69-60147-1	1101-23H	1
69-38850-4	1102-63	AR	69-67500-1	1101-48	AR
69-39212-1	1102-91	1			
69-39212-2	1102-91	1			
69-40613-1	1101-67	2			
69-40685-1	1101-41	1			
69-40685-2	1101-44	1			
69-40685-3	1101-54	1			
69-40685-4	1101-54	1			
69-40686-1	1102-13	3			
69-40686-1	1102-14	2			
69-40686-2	1102-13	3			