

TO: ALL HOLDERS OF FLIPPER FLAP ASSEMBLY OVERHAUL MANUAL, 57-53-23

REVISION NO. 5, DATED NOV 1/00
HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D & O	D / Assy	Cleaning	Inspect / Check	Repair	Assy	F / C	Test	T / Shooting	S / Tools	Storage	IP L	L / Overhaul
Clarify that magnetic or penetrant check is only required if visual check finds defects				X									

# FLIPPER FLAP ASSEMBLY

## 57-53-23

BOEING P/N 65-71926-1, -2, -59, -60, -65 thru -68, -77, -78, -81, -82

AIRLINE P/N

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THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
78-1005, Rev 1		PRR 31030 PRR 32121-21 PRR 32335 PRR 32430 PRR 33191 PRR 33180-30	Sep 10/71 Dec 25/72 Jun 25/74 Dec 25/74 Dec 5/83 Mar 5/84

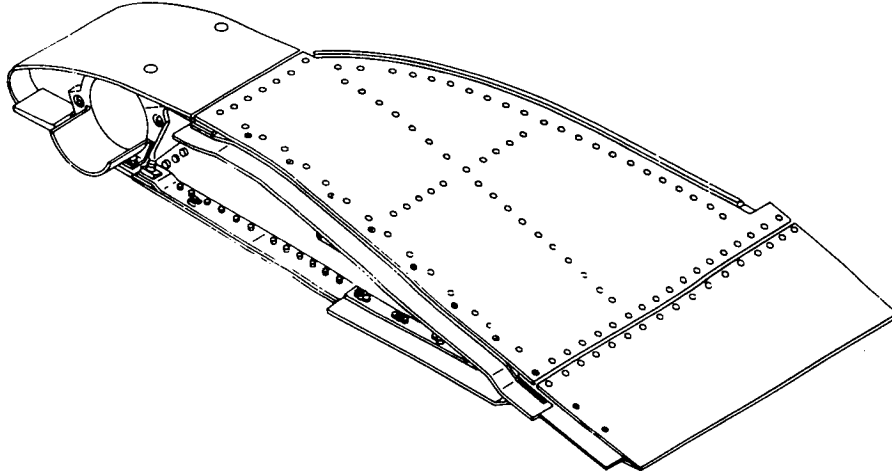
LIST OF EFFECTIVE PAGES					
* Indicates pages revised, added or deleted in latest revision					
F Indicates foldout pages - print one side only					
PAGE	DATE	PAGE	DATE	PAGE	DATE
57-53-23					
T-1	Mar 5/92				
T-2	BLANK				
* LEP-1	Nov 1/00				
LEP-2	BLANK				
T/C-1	Mar 5/92				
T/C-2	BLANK				
1	Jun 25/74				
* 2	Nov 1/00				
2A	Mar 5/92				
2B	BLANK				
3	Mar 5/92				
4	Mar 5/85				
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\*[1] Special instructions not required. Use standard industry practices.

FLIPPER FLAP ASSEMBLY

Flipper Flap Assembly  
Figure 1

1. DESCRIPTION AND OPERATION

A. Description

- (1) The flipper flap assembly consists of a flap structure, actuator support assembly, bearing support housing assembly and seals.

B. Operation

- (1) The flipper flap is sequenced in operation by the engine nacelle fairing and the mid flap assembly to augment lift of the inboard flaps during various aircraft operating configurations.

C. Leading Particulars

Length (overall) -- 39 inches  
Width (overall) -- 17 inches  
Height (overall) -- 6 inches

NOTE: Deleted.

## 2. DISASSEMBLY

- A. Use standard industry practices for disassembly of this unit, and additional procedures in steps (1) thru (3) (Fig. 3).
- (1) Do not remove identification plate (2), housing (31) and retainer (67), unless repair or replacement is necessary.
  - (2) Retainers (46, 54) may or may not be removable, depending on whether they are slotted or drilled for fasteners.

**CAUTION:** BEARING HOUSINGS (30 AND 31) FORM A MATCHED HOUSING ASSEMBLY (26). INDIVIDUAL HOUSINGS ARE NOT INTERCHANGEABLE.

- (3) Check support assembly (6) per Inspection/Check prior to disassembly.

## 3. INSPECTION/CHECK (Fig. 3)

- A. Examine all parts for defects by standard industry practices. Do the magnetic and penetrant checks only if the visual check finds possible defects.
- B. Perform penetrant examination per SOPM 20-20-02 on spacer (5), plug (11), housing (12), deflector (16) and housings (30, 31).
- C. Perform magnetic particle examination on plunger (8).
- D. Check support assembly (6).

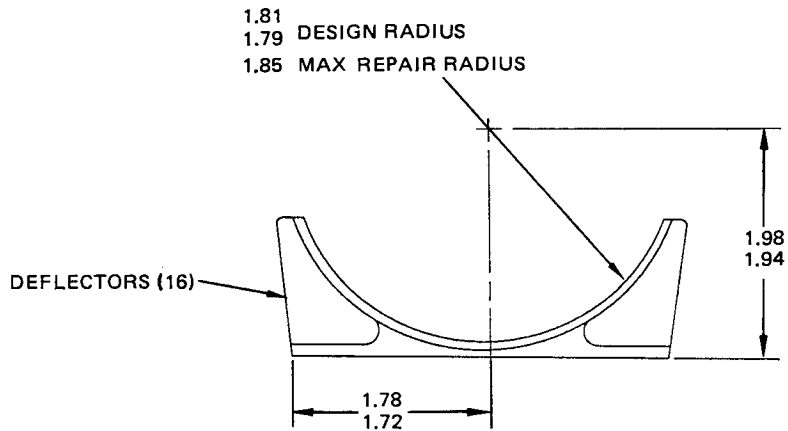
**NOTE:** This step should be performed before disassembly.

- (1) Check that plunger (8) rotates and slides freely, with no evidence of binding or sticking.
- (2) Check that there is no perceptible radial play of plunger (8) in support assembly (6).

4. REPAIR

A. Repair (Fig. 3)

- (1) Use standard industry practices for repair of this component and additional procedure in step (2).
- (2) Defects within limits shown on Fig. 1A on deflector (16) may be welded using 17-4PH filler per BMS 7-150. Solution heat-treat and precipitation heat-treat per AMS 5344 after welding.



Repair of Deflector  
Figure 1A

B. Refinish (Fig. 3)

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

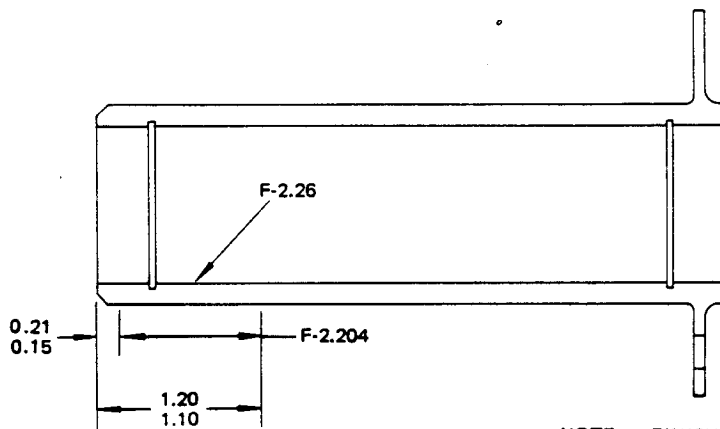
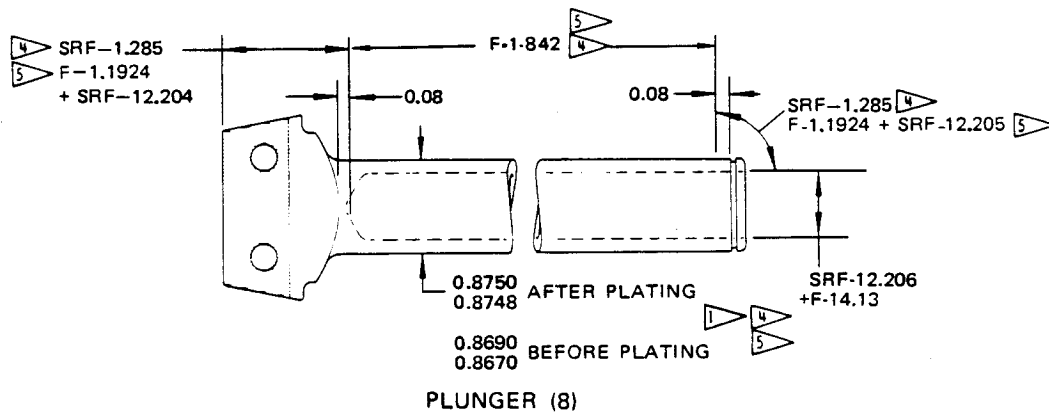
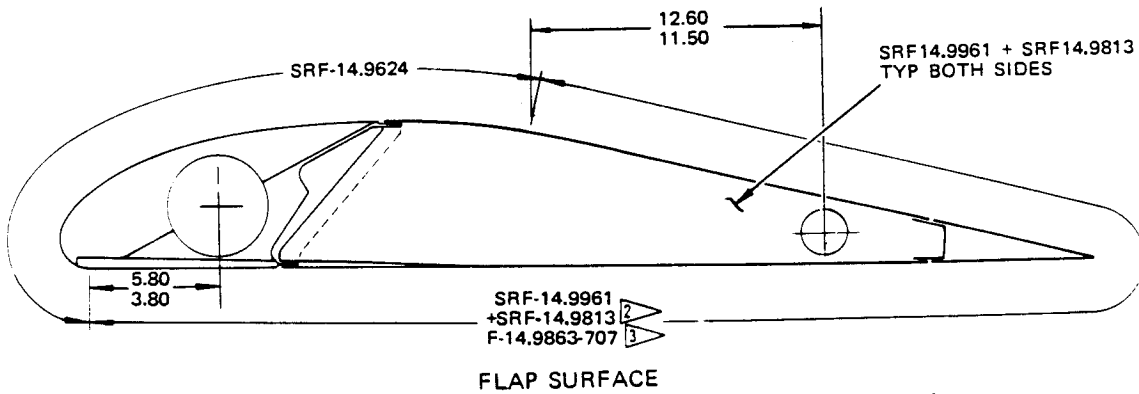
- (1) Spacer (5), plug (11), housing (30), housing (31, P/N 65-71908-11 thru -14), retainers (35, 36, 58, 63B and 67) and channel (75) -- colored film alodize, plus one coat BMS 10-11, Type 1 primer (SRF-2.30) all over. Material: Al alloy.
- (2) Plunger (8) -- Fig. 2. Plunger 65-71914-1 is steel AMS 4330M, 180-200 ksi; 65-88957-1 is steel 9310, 150-190 ksi.
- (2A) Housing (12) -- Fig. 2. Material: Al alloy.
- (2B) Flap assembly -- Fig. 2. 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.
- (3) Deflector (16) -- cadmium plate plus one coat BMS 10-11, Type 1 primer (SRF-1.285) all over. Material: CRES 17-4PH.
- (4) Housing (31, P/N 65-71908-15, -16) -- Apply colored chemical coating and one coat of BMS 10-11, Type 1 primer (F-18.01) all over. Material: Al alloy.
- (5) Retainers (46 and 54) -- finish according to D6-15442, process 1 (SRF-14.08) all over. (Optional, colored film alodize plus one coat BMS 10-11, Type 1 primer [SRF-2.30] all over.) Material: Al alloy.

C. Replacement (Fig. 3)

- (1) Replace complete housing assembly (26) if housing (30) or housing (31) is damaged beyond repair.
- (2) Replace all seals which are cut, worn or frayed.



**OVERHAUL MANUAL**



NOTE: FINISH SRF-2.30 ALL OVER EXCEPT AS NOTED.

**HOUSING (12)**

ALL DIMENSIONS ARE IN INCHES

1 MACHINE SURFACE FINISH IS 10 MICROINCHES

2 P/N 65-71926-1, -2

3 P/N 65-71926-59, -60, -65 THRU -68. F-14.9863-707 MAY BE APPLIED TO ANY PREVIOUSLY PAINTED FITTING ATTACHED TO OR PROTRUDING THROUGH FLAP EXTERIOR. MASK ALL BEARINGS AND BUSHINGS.

4 P/N 65-71914-1

5 P/N 65-88957-1

Refinish Details  
Figure 2

**BOEING**   
**COMMERCIAL JET**  
**OVERHAUL MANUAL**

5. ASSEMBLY

A. Standard aircraft shop practices are sufficient for assembly of this unit except for the following. (See figure 3.)

(1) Assemble support assembly (6) as follows:

(a) Fill cavities between ID of bearings (10) and OD of plunger (8) with MIL-G-25760 grease prior to assembly.

(b) Insert bearings (10) and plug (11) in housing (12). Secure with retainers (9).

(c) Press plunger (8) through bearings (10) until shoulder of plunger contacts housing (12).

NOTE: Shoulder of plunger (8) must contact housing (12) at extreme limit of stroke.

(d) Secure plunger (8) with retainer (7).

(e) Wipe excess grease from support assembly (6).

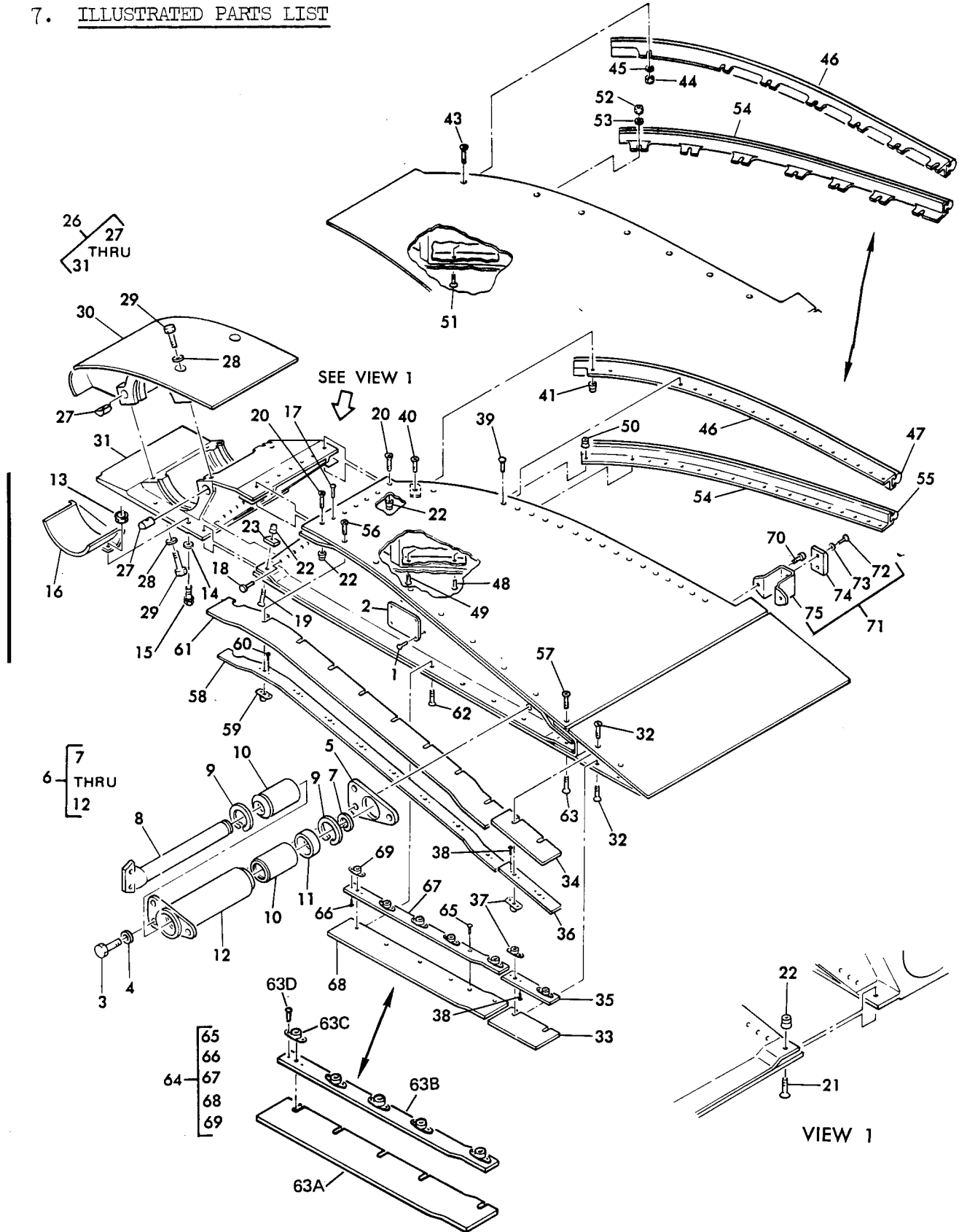
6. STORAGE INSTRUCTIONS

A. Wrap assembly in vapor-barrier paper, tag with overhaul date, and store in a container that will provide protection from physical damage.

B. For further information, refer to 20-44-02, Temporary Protective Coatings, and to 20-70-01, Protection, Storage and Handling of Airplane Components.

OVERHAUL MANUAL

7. ILLUSTRATED PARTS LIST



Flipper Flap Assembly  
Figure 3

## OVERHAUL MANUAL

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		
3-	65-71926-1									A	RF
	65-71926-2									B	RF
	65-71926-59									C	RF
	65-71929-60									D	RF
	65-71926-65									E	RF
	65-71926-66									F	RF
	65-71926-67									G	RF
	65-71926-68									H	RF
	65-71926-77									I	RF
	65-71926-78									J	RF
	65-71926-81									K	RF
	65-71926-82									L	RF
1	BACR15BB3D										4
2	MS27253-1										1
3	BACB3ONE4-3										3
3	BACB3ONM4K3										3
4	AN960-416L										3
5	65-71926-46										1
6	65-71920-1									A-DG-J	1
6	65-71920-2									EFKL	1
7	MS16624-4087										1
8	65-71914-1										1
8	65-88957-1										1
9	MS16625-4150										2
10	ML875-15001-1A										2
11	69-57809-1										1
12	69-57807-1										1
13	BACN10JC4										2
14	AN960-416L										2
15	BACB3ONE4-4										2
15	BACB3ONM4K4										2
16	69-57856-3										1
17	BACR15BA5D										10
18	BACR15BB6D										14
19	BACB30FN6-8										1
20	BACB30FN6-5										2
21	BACB30FN6-4										1
22	BACC30M6										4
23	65-71926-34										1
24	BACS40R10B10										1
25	BACS40R9B13										1
26	65-71908-1									ACEGI	1
26	65-71908-2									BDFHJ	1
26	65-71908-17									K	1
26	65-71908-18									L	1

OVERHAUL MANUAL

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		
3-27	BACN10HC4		.	.	.	.	.	.	.		4
28	BACW10BN4C		.	.	.	.	.	.	.		4
29	BACB30FD4-12		.	.	.	.	.	.	.		4
30	65-71908-7		.	.	.	.	.	.	.	ACEGI	1
30	65-71908-3		.	.	.	.	.	.	.	ACEGI	1
30	65-71908-7		.	.	.	.	.	.	.	KL	1
30	65-71908-8		.	.	.	.	.	.	.	BDFHJ	1
30	65-71908-4		.	.	.	.	.	.	.	BDFHJ	1
30	65-71908-8		.	.	.	.	.	.	.	KL	1
31	65-71908-13		.	.	.	.	.	.	.	ACEGI	1
31	65-71908-11		.	.	.	.	.	.	.	ACEGI	1
31	65-71908-15		.	.	.	.	.	.	.	KL	1
31	65-71908-14		.	.	.	.	.	.	.	BDFHJ	1
31	65-71908-12		.	.	.	.	.	.	.	BDFHJ	1
31	65-71908-16		.	.	.	.	.	.	.	KL	1
32	BACB30LU3-3		.	.	.	.	.	.	.	A-DF-J	4
32	BACB30NN3K3		.	.	.	.	.	.	.	EKL	4
33	65-71926-23		.	.	.	.	.	.	.		1
34	65-71926-26		.	.	.	.	.	.	.		1
35	65-71926-24		.	.	.	.	.	.	.		1
36	65-71926-27		.	.	.	.	.	.	.		1
37	BACN10JN3		.	.	.	.	.	.	.		4
38	BACR15BA3D		.	.	.	.	.	.	.		8
39	BACR15BA5D		.	.	.	.	.	.	.		17
40	BACB30FN6-6		.	.	.	.	.	.	.		1
41	BACC30M6		.	.	.	.	.	.	.		1
42	BACS40R7B12		.	.	.	.	.	.	.		1
43	BACB30LU3-3		.	.	.	.	.	.	.	A-DF-J	7
43	BACB30NN3K3		.	.	.	.	.	.	.	EKL	7
44	BACN10JC3		.	.	.	.	.	.	.		7
45	AN960PD10		.	.	.	.	.	.	.		7
46	65-71926-39		.	.	.	.	.	.	.	A	1
46	65-71926-39		.	.	.	.	.	.	.	ACEGIK	1
46	65-71926-40		.	.	.	.	.	.	.	B	1
46	65-71926-40		.	.	.	.	.	.	.	BDFHJL	1
47	65-71926-30		.	.	.	.	.	.	.		1
48	BACR15BA5D		.	.	.	.	.	.	.		18
49	BACB30FN6-4		.	.	.	.	.	.	.		1
50	BACC30M6		.	.	.	.	.	.	.		1
51	BACB30LU3-3		.	.	.	.	.	.	.	A-DF-J	7
51	BACB30NN3K3		.	.	.	.	.	.	.	EKL	7

## OVERHAUL MANUAL

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		
3-											
52	BACN10JC3										7
53	AN960PD10								A-DF-J		7
54	65-71926-35								A		1
54	65-71926-35								ACEGIK		1
54	65-71926-36								B		1
54	65-71926-36								BDFHJL		1
55	65-71926-31										1
56	BACB30LU3-4								A-DF-J		7
56	BACB30NN3K4								EKL		7
57	BACB30LU3-5								A-DF-J		1
57	BACB30NN3K5								EKL		1
58	65-71926-22								ACEGIK		1
58	65-71926-51								BDFHJL		1
59	BACN10JN3										8
60	BACR15BA3D										16
61	65-71926-21										1
62	BACB30LU3-4								A-DF-J		4
62	BACB30NN3K4								EKL		4
63	BACB30LU3-5								A-DF-J		1
63	BACB30NN3K5								EKL		1
63A	65-71926-74								EFI-L		1
63B	65-71926-73								EFI-L		1
63C	BACN10JN3								EFI-L		5
63D	BACR15BA3B								EFI-L		10
64	65-71926-53								ACG		1
64	65-71926-54								BDH		1
65	BACR15BA4B								A-DGH		1
66	BACR15BA3B								A-DGH		10
67	65-71926-20								A-DGH		1
68	65-71926-55								A-DGH		1
69	BACN10JN3								A-DGH		5
70	BACB30LU3-3								A-DF-J		2
70	BACB30NN3K3								EKL		2
71	69-57818-1										1
72	BACR15BB5B										2
73	AN960PD8L										2
74	69-57818-2										1
75	69-57818-3										1
76	*[5]										1

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- \*[1] DENOTES USE WITH 65-71926-39 & -40 "UNSLOTTED" RETAINER
- \*[2] DENOTES USE WITH 65-71926-39 & -40 "SLOTTED" RETAINER
- \*[3] DENOTES USE WITH 65-71926-35 & -36 "UNSLOTTED" RETAINER
- \*[4] DENOTES USE WITH 65-71926-35 & -36 "SLOTTED" RETAINER
- \*[5] NO BOEING PART NUMBER ASSIGNED. REPAIR USING STANDARD AIRPLANE SHOP PRACTICES. REFER TO D6-15565, STRUCTURAL REPAIR MANUAL, 57-5-2, FIG. 3, FOR MATERIAL IDENTIFICATION.

VENDORS

V75523      LANDIS & GYR INC., 45 WEST 45TH STREET, NEW YORK, N.Y. 10036