TO: ALL HOLDERS OF HORIZONTAL TAIL CENTER SECTION ASSEMBLY OVERHAUL MANUAL, 55-10-05

REVISION NO. 14, DATED JUL 1/02

HIGHLIGHTS

DESCRIPTION OF CHANGE	TOPICS AFFECTED												
	D&O	D/Assy	Cleaning	Insp/Chk	Repair	Assy	F/C	Test	T/Shooting	S/Tools	Storage	IPL	L/Overhaul
Added F80253-1, spanner wrench to the assembly section						X				X			

HORIZONTAL TAIL CENTER SECTION ASSEMBLY

55-10-05

BOEING P/N 65-73781-2, -501, -7

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
55A1031R3		PRR 31322	Dec 5/90
		PRR 31913	Jan 5/80
		PRR 32070-8	Jan 5/80
		PRR 32950-1	Jan 5/80
		PRR 33358	Dec 5/86
55-1034R2			Dec 5/90
	55-1		Sep 5/91
55-1045			Mar 5/92
55-1045 R1			Jun 5/92
737-55-1056			Mar 1/96
737-55-1028			Nov 1/98
737-55-1058			Nov 1/98
737-55-1028 R8		PRR 33081R	Mar 1/01

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
	55-10-05			21	Mar 1/01			
	T-1	Mar 1/01		22	Mar 1/01			
	T-2	BLANK						
*	LEP-1	Jul 1/02						
	LEP-2	BLANK						
	T/C-1	Mar 5/91						
	T/C-2	BLANK						
	1	Jan 5/80						
	2	Mar 1/01						
	2A	Mar 1/94						
	2B	Mar 1/94						
	2C	Mar 1/01						
	2D	Mar 1/01						
	3	Mar 1/01						
	4	Mar 1/94						
	4A	Mar 1/01						
	4B	Mar 1/01						
	4C	Nov 1/98						
	4D	Nov 1/98						
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	20	Mar 1/01						

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*[1] Special instructions not required. Use standard industry practices.

HORIZONTAL TAIL CENTER SECTION ASSEMBLY

1. DESCRIPTION AND OPERATION

A. Description

(1) The horizontal tail center section assembly consists of front and rear spar sections with bushed fittings for attaching the stabilizer panels; longitudinal and diagonal members to connect the spar sections and provide rigidity for the entire structure; hinge fittings attached to the aft side of the rear spar with bushed holes at the stabilizer pivot axis; and a jackscrew support fitting assembly attached to the forward side of the front spar.

B. Leading Particulars (Approximate)

Width — 61 inches
Length — 55 inches
Height — 15 inches
Weight — 248 pounds

2. DISASSEMBLY

A. Disassemble only those components that need to be removed for examination of bushed holes and replacement of faulty bushings. Use standard industry practices.

B. Remove interference-fit bushings per 20-50-03.

C. Do not remove front or rear spar assembly from basic structure.

3. INSPECTION/CHECK

A. Check all accessible surfaces for corrosion and other damage. Use industry standard practices to do the visual check for defects. Do the magnetic or penetrant checks on the parts as specified below if you find possible defects during the visual check.

B. Check all parts listed in Fig. 2 for wear beyond allowable limits.

C. Check bearings (185, 225, Fig. 3) for radial play exceeding 0.003 inch, maximum allowable.

D. Do the magnetic particle check as specified in SOPM 20-20-01 for the parts specified below if you found possible defect during the visual check. Repair or replace the part if you find a defect.

(1) Bolts (15, 100, 170, 315, 600, 650, 665, 670, 675), nuts (180, 190, 220, 230), and sleeves (195, 235).

E. Do the penetrant check as specified in SOPM 20-20-02 for the parts specified below if you found possible defect during the visual check. Repair or replace the part if you find a defect.

(1) Fitting (25, 27, 40, 70, 72, 260), link (135), bonded assemblies (210, 250), and attachment lugs on fitting assembly (330, 340).

4. REPAIR

A. Materials

NOTE: Use listed materials or equivalent substitutes.

(1) Coating -- Alodine 1200, Amchem Products Inc., Spring Garden St., Ambler, Pennsylvania 19002

(a) Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

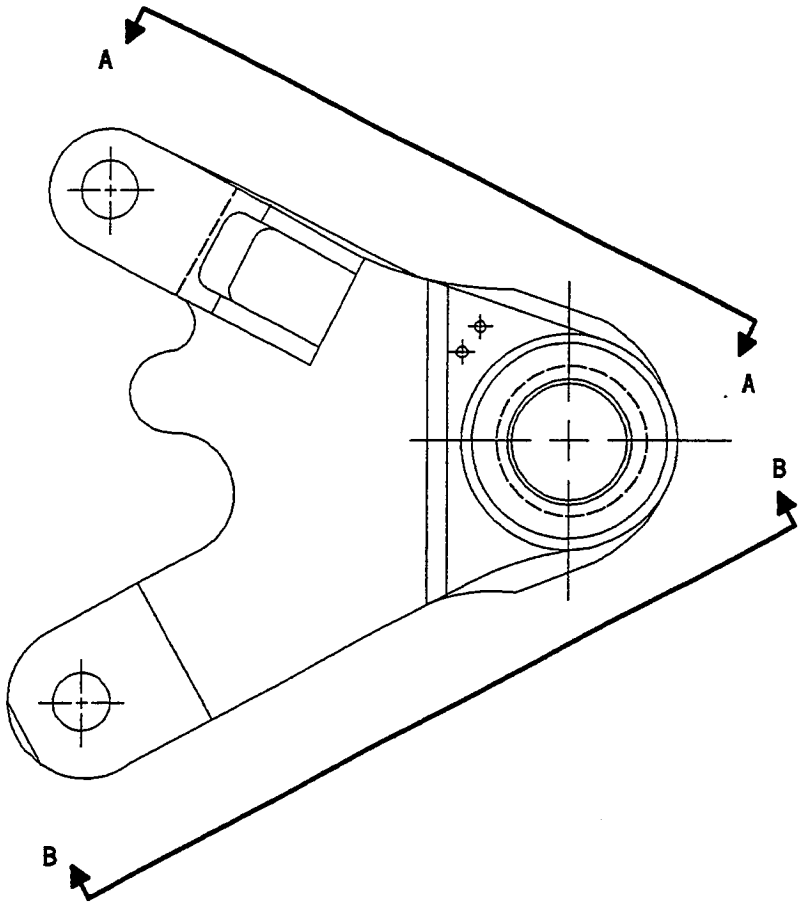
(b) Sealant -- BMS 5-95 (SOPM 20-60-04)

B. Repair

(1) Corrosion and fretting repair of bonded assembly (250).

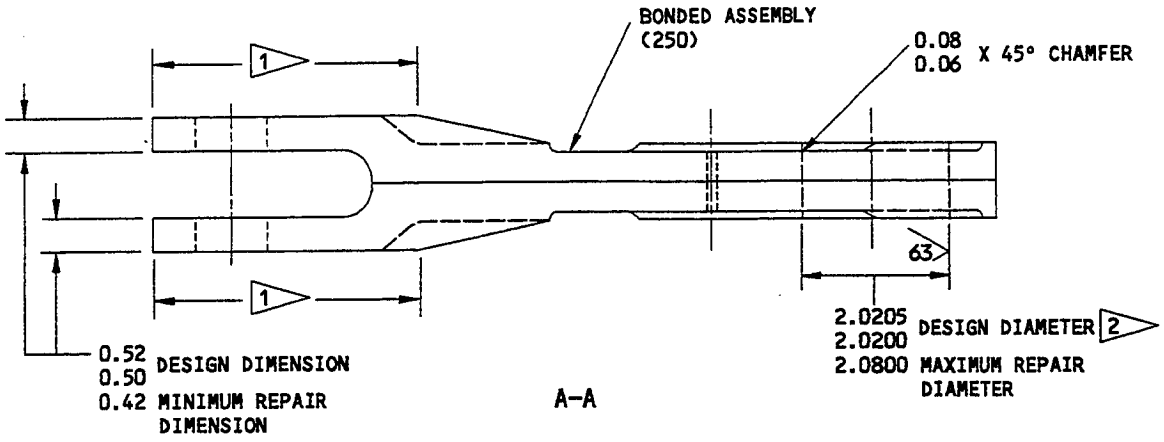
(a) Remove minimum amount of material to remove all corrosion up to minimum repair dimension specified in Fig. 1.

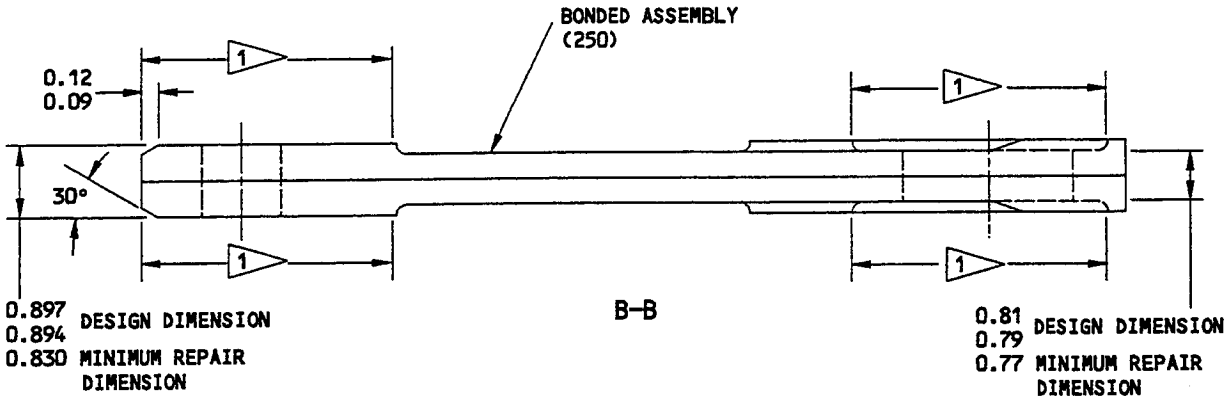
(2) Repair of all other parts of the horizontal tail center section assembly is limited to refinishing components for protection against corrosion, and replacement of defective parts that can be removed without disturbing the structural integrity or dimensional accuracy of the box structure.



65-46845-10, -503, -515

Bonded Assembly Repair
Figure 1 (Sheet 1)





REFINISH

CHEMICAL TREAT OR CHROMIC ACID ANODIZE PER SOPM 20-43-01 ALL OVER AND APPLY TWO COATS OF PRIMER (SRF-2.150) ALL OVER EXCEPT BUSHING BORE.

1 SHOT PEEN CW-47 STAINLESS STEEL SHOT 0.015 A2 INTENSITY

2 SHOT PEEN CW-47 STAINLESS STEEL SHOT 0.015 A2 INTENSITY MACHANICAL FEED, MANUAL FEED OPTIONAL ON CHAMFER ONLY

REPAIR

MATERIAL: 7075-T7351 OR 7079-T6

125 FINISH ALL MACHINED SURFACES EXCEPT AS NOTED.

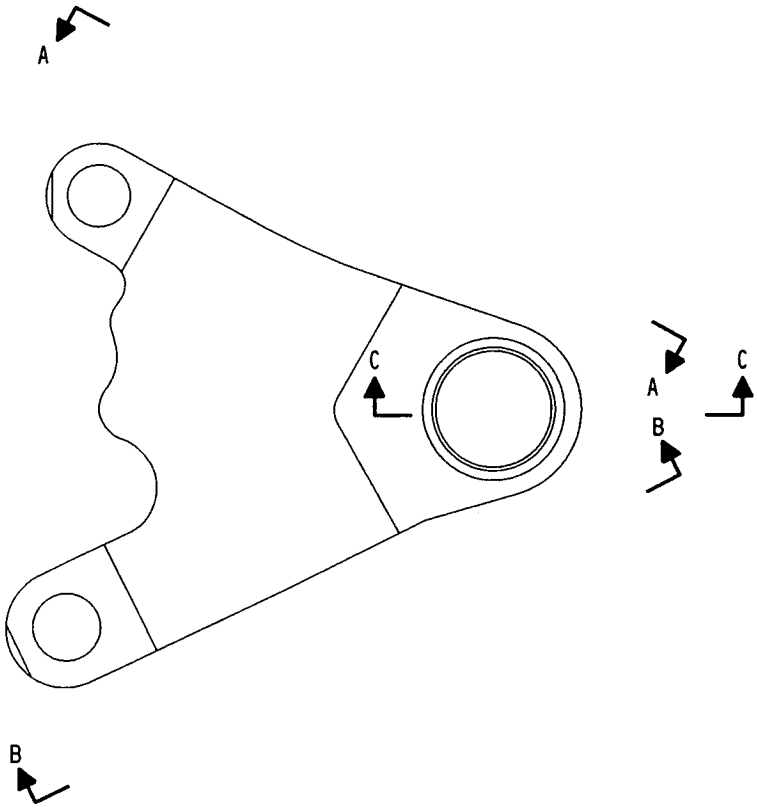
BREAK SHARP CORNERS 0.01-0.03 EXCEPT FOR HOLES

BREAK HOLE EDGES 0.01 MAXIMUM

ALL DIMENSIONS ARE IN INCHES

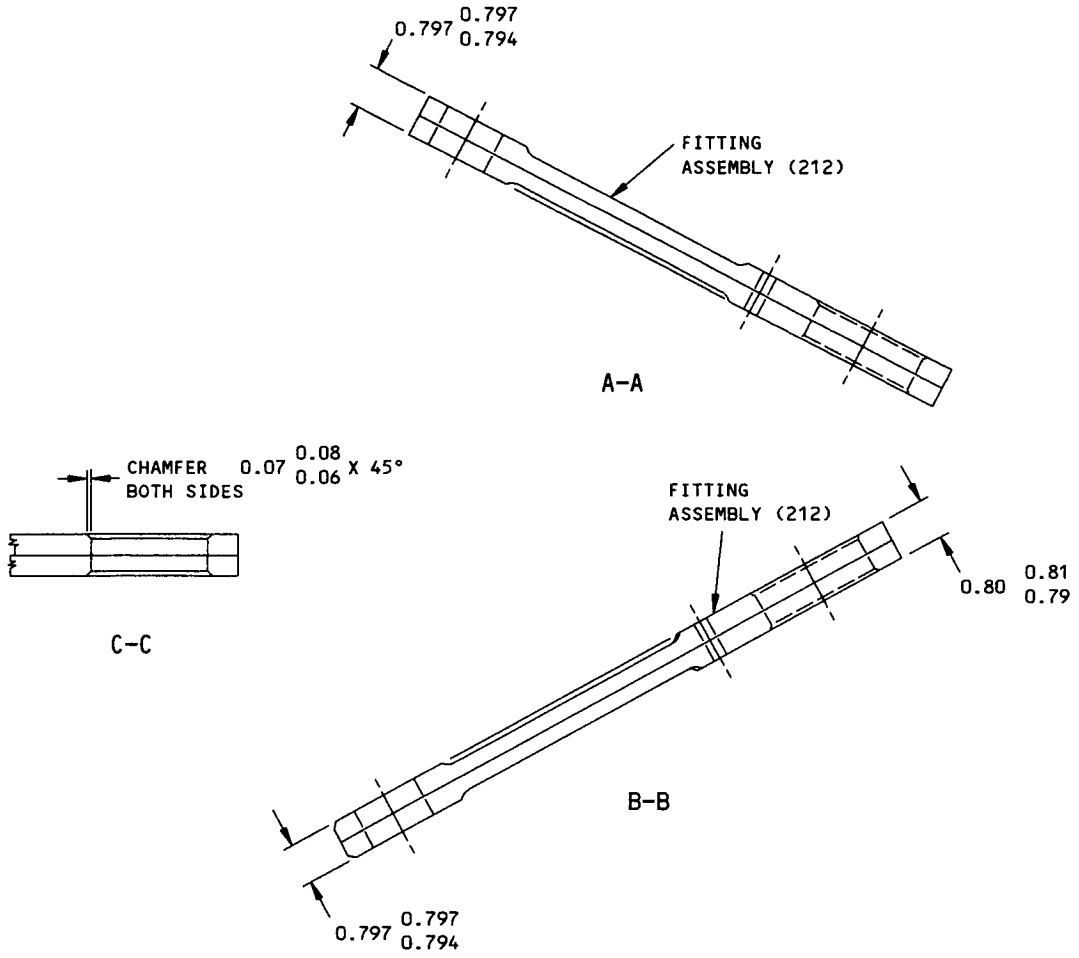
65-46845-10, -503, -515

Bonded Assembly Repair
Figure 1 (Sheet 2)



65C25170-2, -503, -13

Fitting Assembly Repair
Figure 1 (Sheet 3)



REFINISH

APPLY BMS 10-11, TYPE 1 PRIMER

REPAIR

MATERIAL: TI-6AL-4V

125 FINISH ALL MACHINED SURFACES EXCEPT AS NOTED.

BREAK SHARP CORNERS 0.02-0.04 BEFORE SHOT PEENING

ALL DIMENSIONS ARE IN INCHES

65C25170-2, -503, -13

Fitting Assembly Repair
Figure 1 (Sheet 4)

L80376

C. Refinish

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

(1) Bolts (15, 100, 170, 315, Fig. 3) --

(a) Chrome plate shank (F-1.842). Do not allow plating runout to extend into fillet radius at base of head.

(b) Cadmium plate (F-1.1926) all other surfaces.

(c) Grind shank OD to design dimension given in Fig. 2.

(d) Material: Alloy steel, 160-180 ksi.

(2) Fittings (27, 72) -- Chromic acid anodize and apply BMS 10-11, Type 1 primer (F-18.13). Material: Al alloy.

(3) Fittings (25, 40, 70) and link (135) -- Chemical treat or chromic acid anodize and apply BMS 10-11, Type 1 primer (SRF-2.30) all over except in bushing holes. Material: Al alloy.

(4) Nuts (180, 190, 220, 230) -- Cadmium plate (F-1.1926). Material: 4340 steel, 180-200 ksi.

(5) Sleeves (195, 235) -- Cadmium plate (F-1.1926), except plating thickness should be 0.0002-0.0003 inch. Material: Alloy steel, 180-200 ksi.

(6) Bonded assemblies (210, 250) -- Chemical treat or anodize and apply BMS 10-11, Type 1 primer (SRF-2.150) all over except in bushing holes. Material: Al alloy.

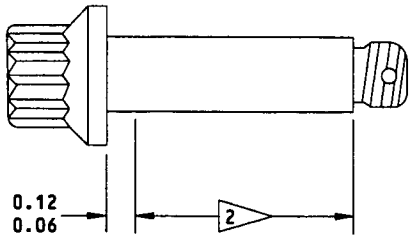
(7) Spar assemblies (255, 270) and basic structure -- Touch up bared surfaces with Alodine 1200 and apply BMS 10-11, Type 1 primer (SRF-12.205) except in bushing holes.

(8) Bolt (600) -- See Fig. 1A.

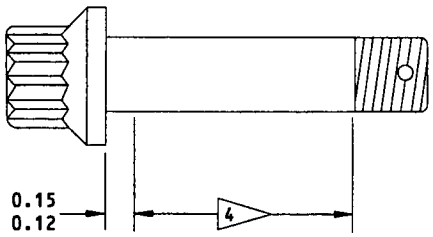
(9) Washer (605, 680) -- Anodize (F-17.05) all over. Material: Al alloy.

(10) Bolt (650) -- Cadmium plate and bake at 3 hours minimum at 350-400°F (F-1.1926). Do not plug the hole during plating. Material ***.

(11) Washer (655, P/N 69-53032-1) -- Chemical treat and apply one coat of BMS 10-11, Type 1 primer (F-18.06) all over. Material: Al alloy.



BOLT (600) 1



BOLT (665, 670, 675; P/N 69-37966-1, -4, -501, -502, -503) 3

ITEM NUMBERS REFER TO IPL FIG. 1
ALL DIMENSIONS ARE IN INCHES

1 APPLY WATER DISPLACING, CORROSION INHIBITING COMPOUND BMS 3-23 (F-19.26) ON BOLT EXCEPT AS NOTED

2 CADMIUM PLATE, 0.0002-0.0004 INCH THICKNESS, (F-15.05) ON AREA INDICATED

3 CADMIUM-TITANIUM ALLOY PLATE AND APPLY CHROMATE POST-PLATE TREATMENT (F-15.01) ON BOLT EXCEPT IN AREA NOTED. OPTIONAL: CADMIUM-TITANIUM PLATE (F-1.309)

4 CHROMIUM PLATE IN AREA INDICATED AND BAKE (F-15.04), MINIMUM THICKNESS 0.002 CHROMIUM PLATE MUST NOT EXTEND INTO FILLET RADIUS

Bolt Refinish
Figure 1A

C67423

(12) Washer (655, P/N 69-73715-501) -- Chemical treat and apply one coat of BMS 10-11, Type 1 primer (SRF-2.30) all over. Material: Al alloy.

(13) Lock (660) -- Anodize and apply one coat of BMS 10-11, Type 1 primer (F-18.04) all over except no primer in fluted surfaces. Material: Al alloy.

(14) Bolt (665, 670, 675) -- For P/N 69-37966-X only (Fig. 1A).

(15) Nut (192) -- Passivate (F-17.25). Material: 15-5PH Steel CRES 150-170 ksi.

(16) Lock plate (197) -- Passivate (F-17.25). Material: Steel CRES.

D. Replacement

(1) If any bushing needs to be replaced, install new bushing with wet primer, using procedures of SOPM 20-50-03 and Fig. 1B, 1C, 1D, and 1E. Machine to design dimension given in Fig. 2, using horizontal stabilizer and fin bushing replacement tool kit F80231 maintaining 63-microinch or better finish on all machined surfaces.

(2) When machining new bushings in any joint affecting alignment of hinge housing assemblies (175, 177, 215) attach hinge housing assemblies to rear spar with sufficient fasteners to hold hinge housing assemblies in position while machining bushing bores.

(a) On assemblies using bearings (185, 225, 10-60545-39) maintain 42.28-42.32 inches between bearing (185, 225) ball element inner faces. Do not preload hinge housing assemblies to achieve required dimension.

NOTE: Bearing 10-60545-39 has a cylindrical section approximately 0.10 inch long on inner face of ball element.

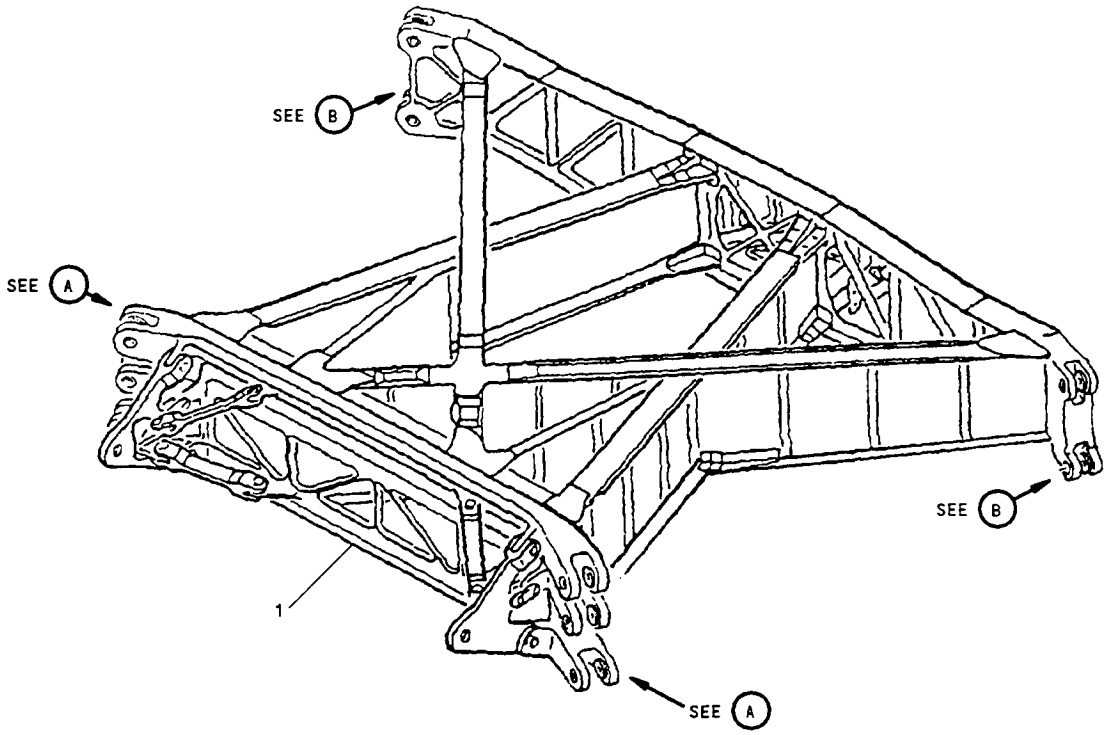
(b) On assemblies using bearings (185, 225, 10-60545-54) maintain 42.54-42.58 inches between bearing (185, 225) ball element faces. Do not preload hinge housing assemblies to achieve required dimension.

NOTE: Bearing 10-60545-54 has no cylindrical section as an integral part of the ball element.

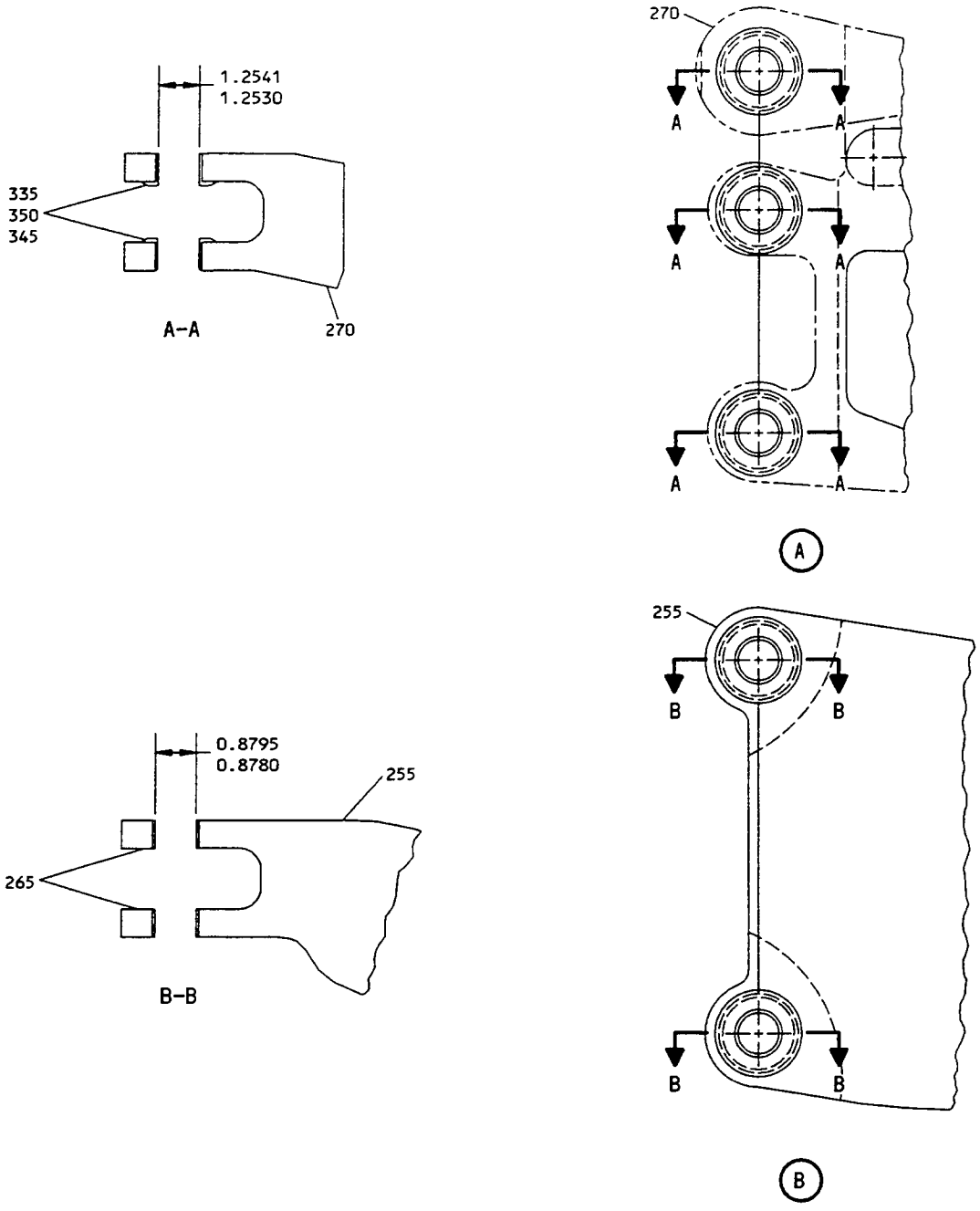
(3) Replace bearings (185, 225) if radial play between ball and outer race exceeds 0.003 inch.

Item No. Fig. 3	Type Fit	Special Requirements
30, 45	Press	Chamfer ID under bolt head 0.02-0.04 inch by 45 degrees after final machining. Maintain bushing wall thickness 0.050 inch, minimum.
75	Press	Install bushings flush. Maintain bushing wall thickness 0.050 inch minimum
140	Press	Install bushing flush.
200, 240	Press	Install bushings flush to 0.005 inch below flush on inside fitting surface. If bushing protrudes on outside fitting surface machine flush to 0.005 inch above flush.
205, 245	Press	Maintain bushing wall thickness 0.080 inch, minimum, after final machining.
265	Press	Dry-prime bushing holes, then install bushings with wet primer. Apply fillet seal of BMS 5-95 sealant around bushing flange. Machine bushing flange faces after installation to 1.726-1.728 inch gap, with remaining flange thickness not less than 0.05 inch. Machine bushing inside diameter to dimension shown in Fig. 1D using tool kit F80231.
275, 280	Press	Maintain bushing wall thickness 0.080 inch minimum after final machining.
285, 290, 291, 292, 293, 294, 295	Press	Maintain bushing wall thickness 0.050 inch after final machining.
320, 325	Press	
335, 330	Shrink	Dry-prime bushing holes, then install bushings with wet primer. Apply fillet seal of BMS 5-95 sealant around bushing flange. Machine bushing flange faces after installation to 1.726-1.728 inch gap, with remaining flange thickness not less than 0.05 inch. Machine bushing inside diameter to dimension shown in Fig. 1D using tool kit F80231.
345, 350, 340	Shrink	Dry-prime bushing holes, then install bushings with wet primer. Apply fillet seal of BMS 5-95 sealant around bushing flange. Machine bushing flange faces after installation to 1.726-1.728 inch gap, with remaining flange thickness not less than 0.05 inch. Machine bushing inside diameter to dimension shown in Fig. 1D using tool kit F80231.

Bushing Installation Special Requirements
Figure 1B

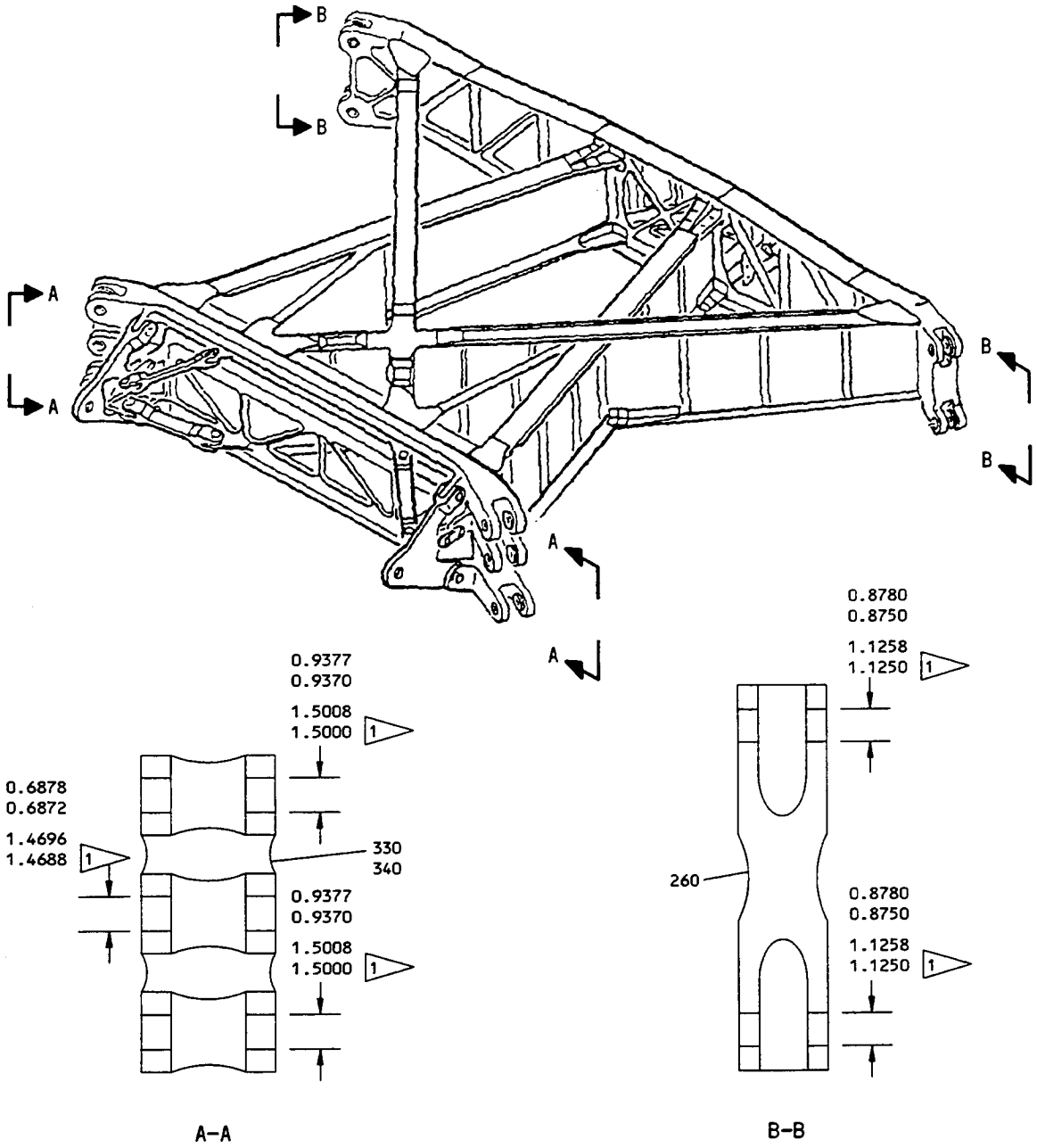


Horizontal Tail Center Section Assembly
Figure 1C



ALL DIMENSIONS ARE IN INCHES

Horizontal Tail Center Section Bushing Bores
Figure 1D



1 POST SB 55-1028 DIAMETER

ALL DIMENSIONS ARE IN INCHES

Horizontal Tail Center Section Lug Bores
Figure 1E

5. ASSEMBLY

A. Materials

NOTE: Use listed materials or equivalent substitutes.

(1) Grease -- MIL-G-23827 (SOPM 20-60-03)

(2) Lockwire -- MS20995C32, MS20995N32 or MS20995F41

(3) Primer -- BMS 10-11, Type 1 (SOPM 20-60-02)

B. Assembly

(1) Assemble this component using standard industry practices and additional procedures in following steps:

(2) Install bolts (315) with wet primer, with washers (310, Fig. 3) under heads and washers (300) under nuts (295). Tighten nuts (295) to 95-100 pound-inches.

NOTE: With no gap at head end of bolts (315) a gap of 0.01-0.04 inch is permissible under washers (300).

(3) Preassemble hinge housing assemblies (175, 177, 215).

(a) Install sleeves (195, 235) in bonded assemblies (210, 250) with wet primer, press fit per SOPM 20-50-03.

(b) Tighten nuts (190, 230) to 2200-2300 pound-inches.

(c) Coat outer surface of bearing (185, 225) outer races with grease, MIL-G-23827 prior to installation.

(d) Use the F80253-1, spanner wrench to tighten nuts (180, 220) to 100-300 pound-inches.

(e) Lockwire nuts (180, 220, 190, 230) to bonded assembly (210, 250) per SOPM 20-50-02, double-twist method.

(4) Assemble hinge housing assemblies (175, 177, 215) to rear spar assembly (270).

(a) Apply coat of grease, MIL-G-23827, to shank and threads of bolts (170); install with washers (165) under heads and washers (160) under nuts (155). Tighten nuts (155) to 1300-1500 pound-inches.

NOTE: If required for alignment of cotter pin holes, torque may be increased to 2150 pound-inches, maximum.

(5) Install failsafe link assembly (130).

(a) Apply coat of grease to shank and threads of bolts (100); install with washers (95) under heads and washers (90) under nuts. Tighten nuts (85) to 480-600 pound-inches.

NOTE: If required for alignment of cotter pin holes, torque may be increased to 920 pound-inches, maximum.

(b) Measure gap on each side between hinge housing assemblies (175, 177, 215) and failsafe link assemblies (130).

(c) Taper shims (145) as necessary to limit gap to 0.01 inch or less, each side.

(d) Apply primer to shank of bolts (125) and install wet, with washers (120) under heads and washers (115) under nuts (110). Tighten nuts (110) to 95-110 pound-inches.

NOTE: If required for alignment of cotter pin holes, torque may be increased to 200 pound-inches.

(6) Install thrust brace fitting assemblies (20, 23, 65, 67).

(a) Apply coating of grease, MIL-G-23827, to shank and threads of bolts (15) prior to installation.

(b) Tighten nuts (5) to 270-300 pound-inches. Back off to nearest castellation, if necessary, to align castellations and cotter pin hole.

NOTE: With no gap at head end of bolts (15) a gap of 0.01 inch is permissible under washers (10).

6. FITS AND CLEARANCES

A. 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.

B. 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.

Ref Letter Fig.	Mating Item No. Fig. 3	Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
	30, 45 ID	0.5620 *[1]	0.5630 *[1]	0.0005	0.0025		0.5680	0.005
	15 OD	0.5605	0.5615			0.5565		
	75 ID	0.5620 *[1]	0.5630 *[1]	0.0005	0.0025		0.5680	0.005
	15 OD	0.5605	0.5615			0.5565		
	140 ID	0.5620	0.5630	0.0005	0.0025		0.5665	0.0065
	100 OD	0.5605	0.5615			0.5565		
	200, 205 ID 240, 245	0.7495 *[1]	0.7505 *[1]	0.0005	0.0025		0.7555	0.0065
	170 OD	0.7480	0.7490			0.7450		
	265 ID	0.8780 *[2]	0.8795 *[2]	0.0040	0.0065		0.8840	0.010
	*[3] OD	0.8730	0.8740			0.8680		
	275, 280 ID	0.7495 *[4]	0.7505 *[4]	0.0005	0.0025		0.7555	0.0065
	170 OD	0.7480	0.7490			0.7450		
	285 ID	0.5620 *[4]	0.5630 *[4]	0.0005	0.0025		0.5665	0.0065
	100 OD	0.5605	0.5615			0.5570		
	290 THRU 294 ID	0.5620 *[5]	0.5630 *[5]	0.0005	0.0025		0.5680	0.005
	15 OD	0.5605	0.5615			0.5565		
	320, 325 ID	0.4995	0.5005	0.0000	0.0020			
	315 OD	0.4985	0.4995					

Fits and Clearances
Figure 2 (Sheet 1)

		Design Dimensions				Service Wear Limits		
Ref Letter Fig.	Mating Item No. Fig. 3	Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
	335 ID *[6] OD	1.2530 1.2480	1.2541 1.2490	0.0040	0.0061	1.2450	1.2590	0.010
	345 ID *[6] OD	1.2530 1.2480	1.2541 1.2490	0.0040	0.0061	1.2450	1.2590	0.010
	350 ID *[6] OD	1.2530 1.2480	1.2541 1.2490	0.0040	0.0061	1.2450	1.2590	0.010
	*[7] ID 195, 235 OD	2.0200 2.0200 *[8]	2.0205 2.0205	-0.0005	0.0005	2.0190	2.0800	0.0010
	195, 235 ID 185, 225 OD	1.7496 *[9] 1.7495	1.7501 1.7500	-0.0004	0.0006	1.7484	1.7512	0.0012
	335 ID 665 OD	1.2530 1.2480	1.2541 1.2490	0.0040	0.0061			
	345 ID 675 OD	1.2530 1.2480	1.2541 1.2490	0.0040	0.0061			
	350 ID 670 OD	1.2530 1.2480	1.2541 1.2490	0.0040	0.0061			
	350 ID 665 OD	1.2530 1.2480	1.2541 1.2490	0.0040	0.0061			
	265 ID 600 OD	0.8780 0.8735	0.8795 0.8740	0.0040	0.0060			

*[1] Machine to this dimension on installation to horizontal tail center section assembly

*[2] Machine to this dimension to match stabilizer (Ref)

*[3] Bolt 66-24117-1 (Ref)

*[4] Machine in-line with hinge housing assembly (215)

*[5] Machine in-line with thrust brace fitting assembly (20 or 35)

*[6] Bolt 69-37966-( ) (Ref)

*[7] 65-46845-10, -503, -515

*[8] After shot peening and honing

*[9] After plating

*[10] Minus sign indicates interference fit

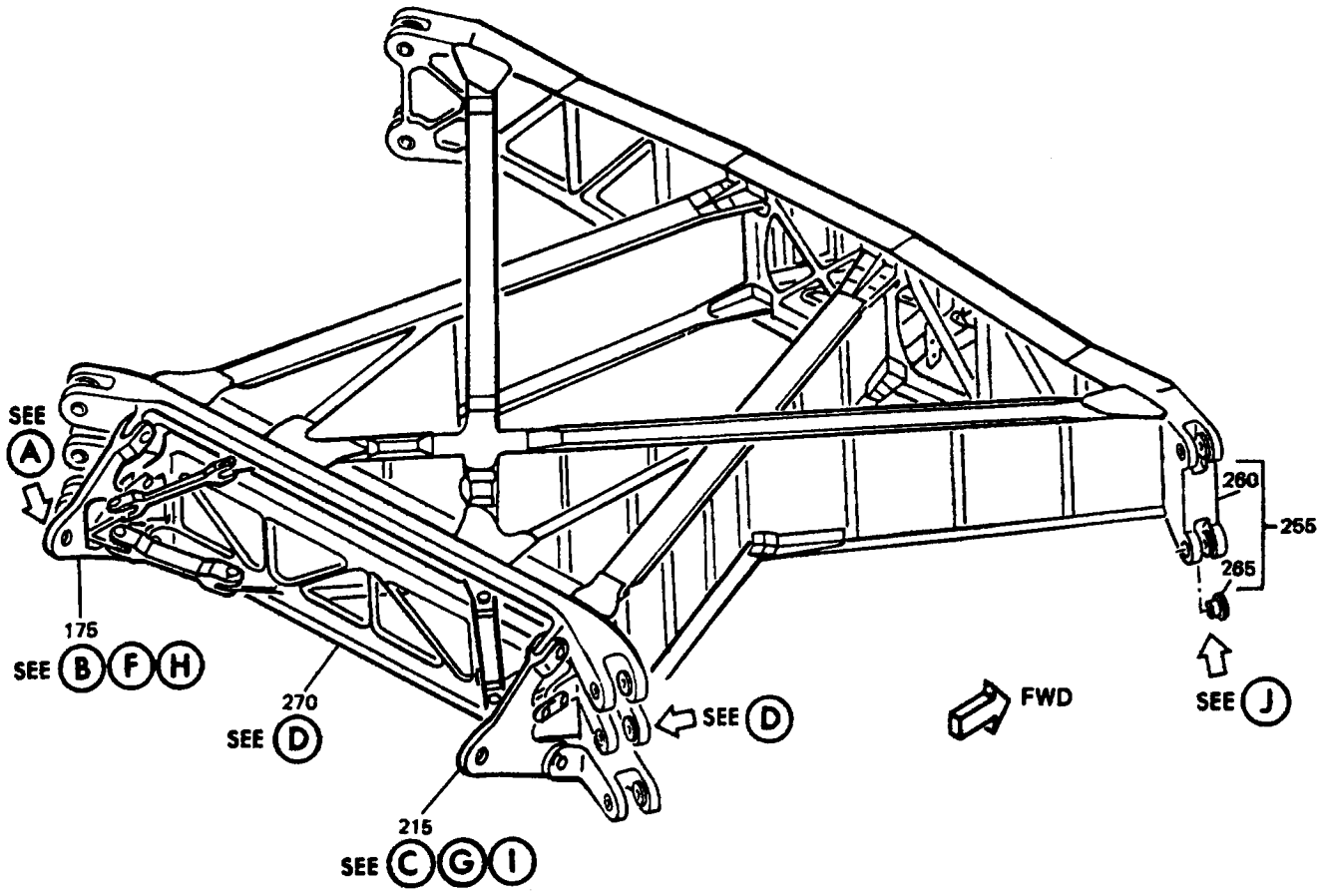
7. SPECIAL TOOLS, FIXTURES AND EQUIPMENT

NOTE: Equivalent substitutes may be used for listed items.

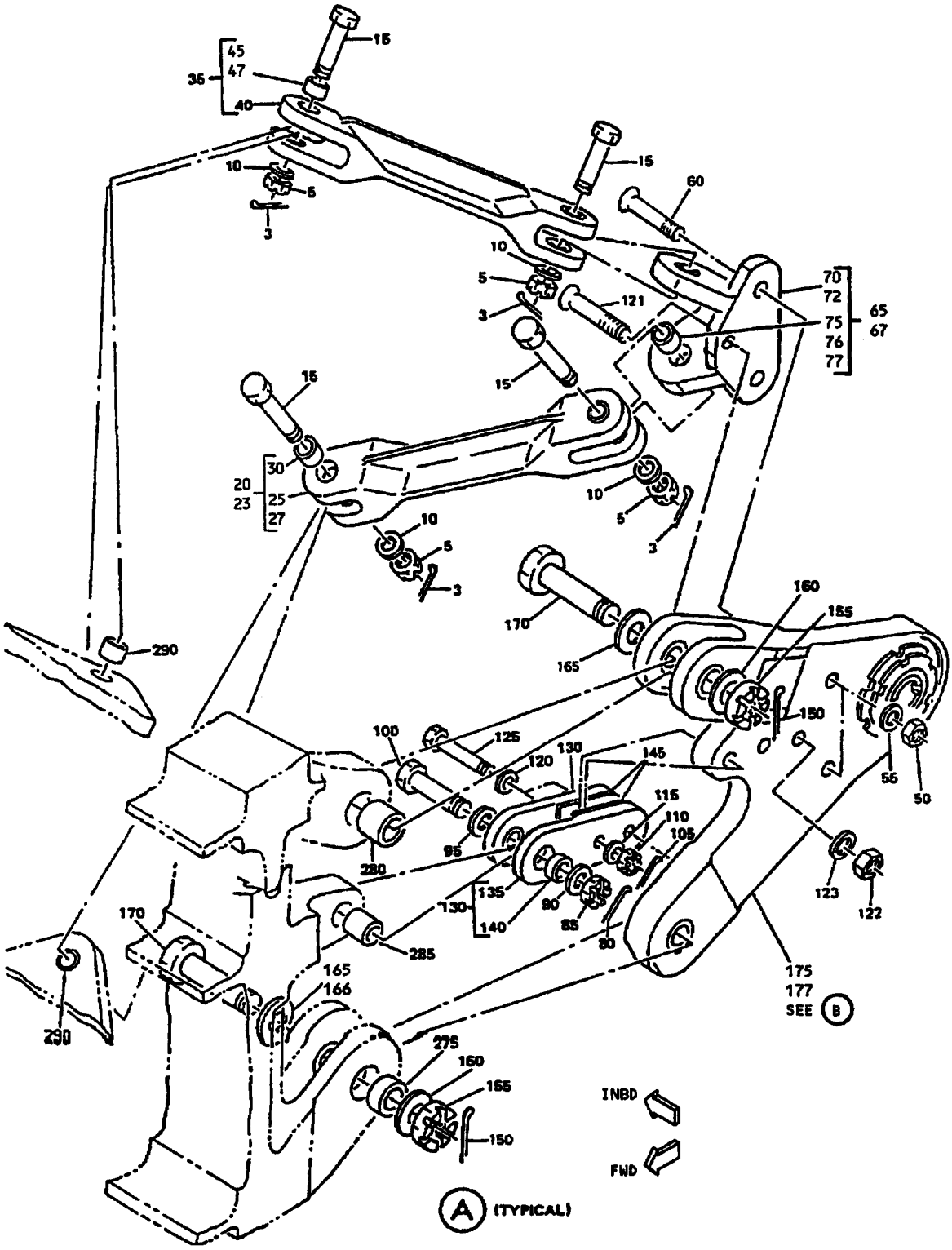
A. Horizontal Stabilizer and Fin Bushing Replacement Tool Kit -- F80231

B. Horizontal Stabilizer, Hinge Bearing - Spanner Wrench -- F80253

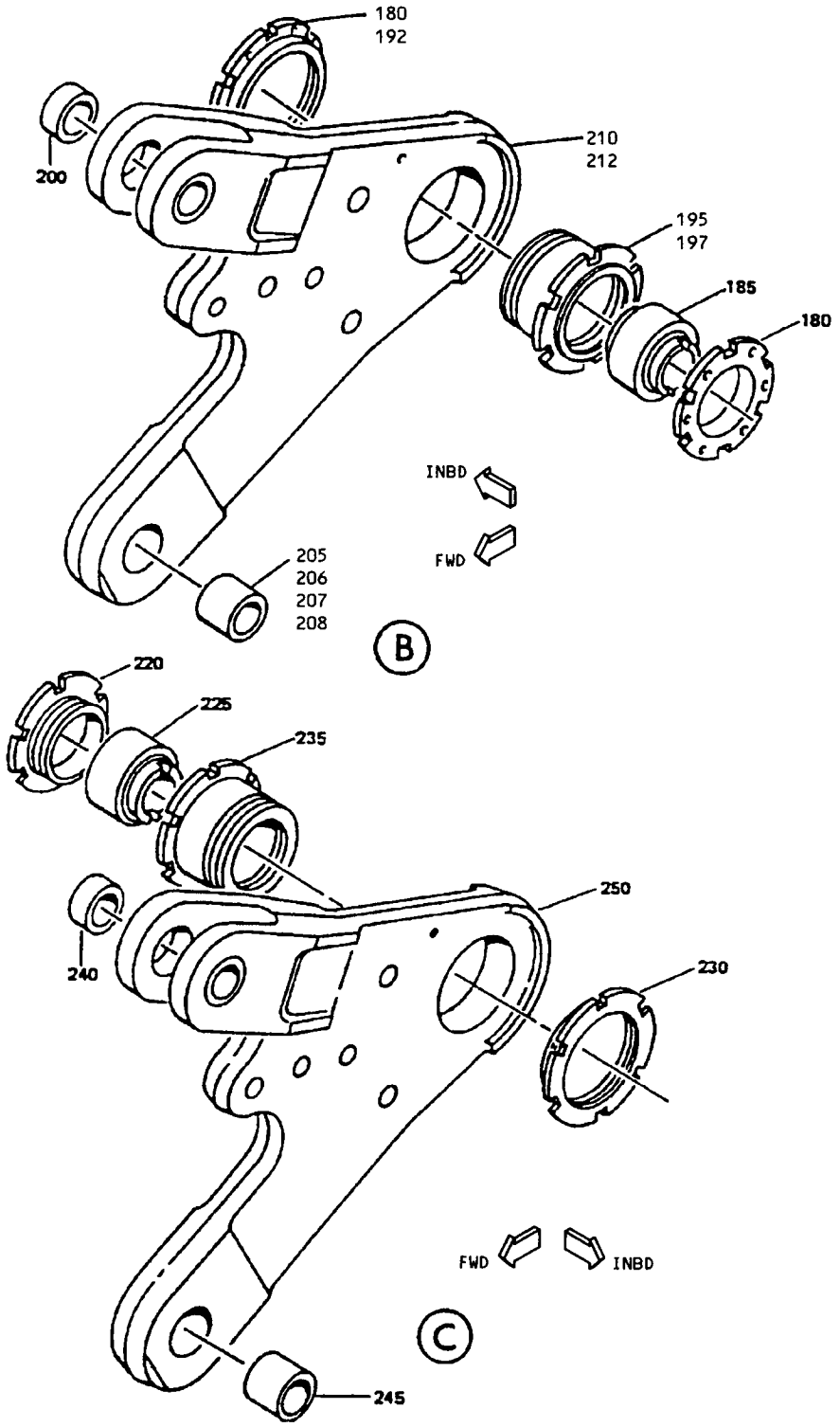
8. ILLUSTRATED PARTS LIST



Horizontal Tail Center Section Assembly
Figure 3 (Sheet 1)

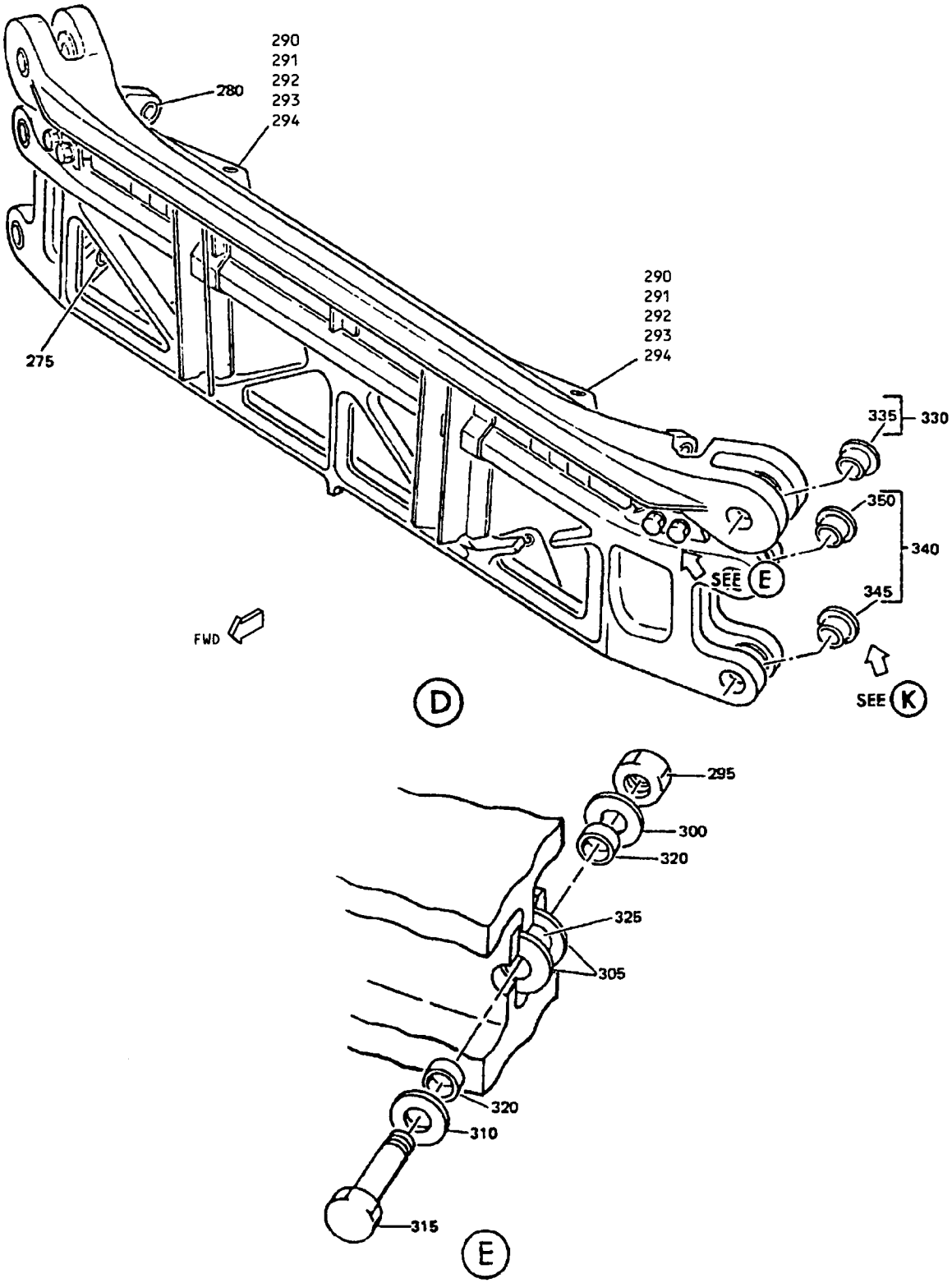


Horizontal Tail Center Section Assembly
Figure 3 (Sheet 2)

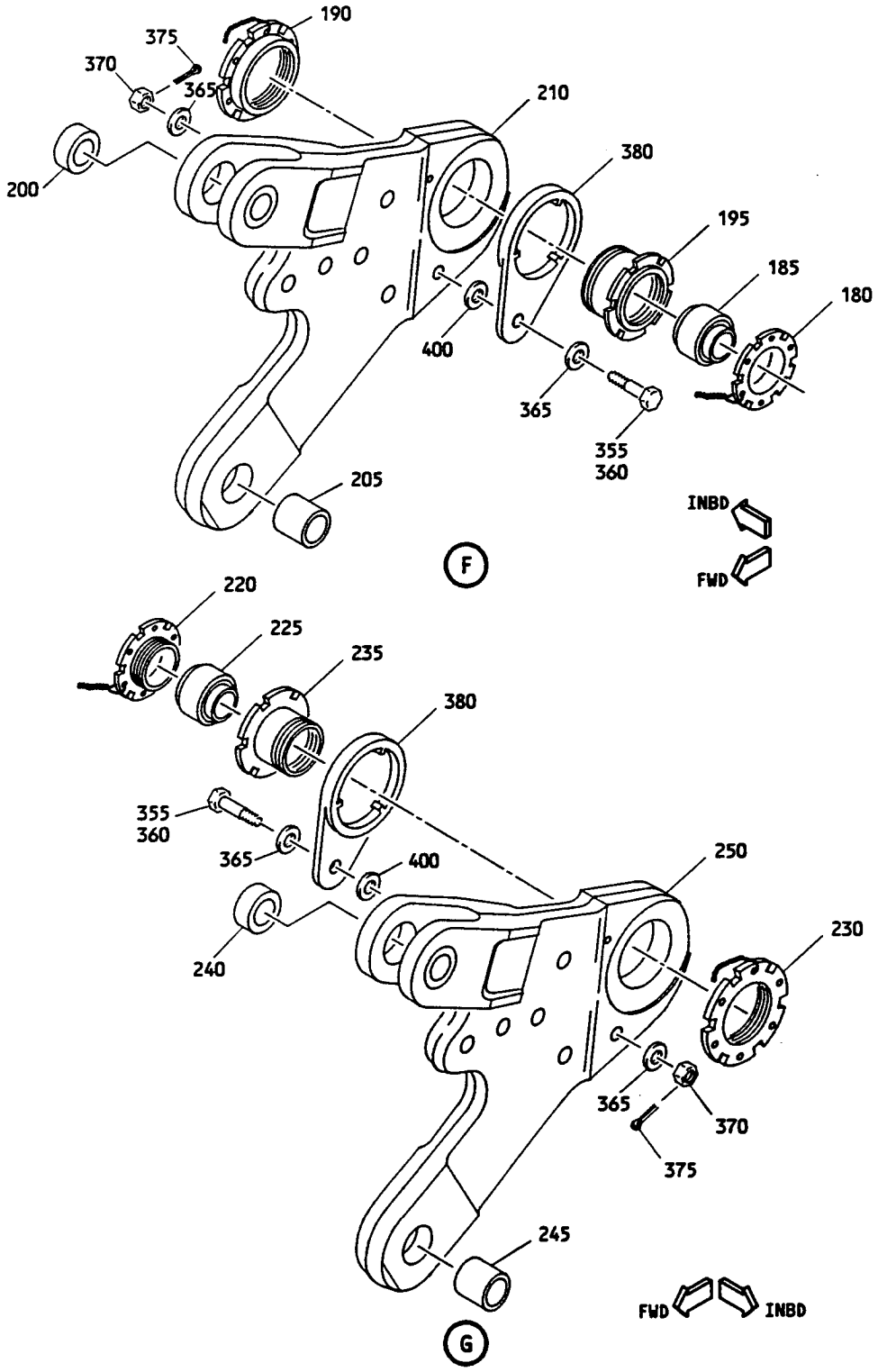


PRE SB 55-1045R1

Horizontal Tail Center Section Assembly
Figure 3 (Sheet 3)

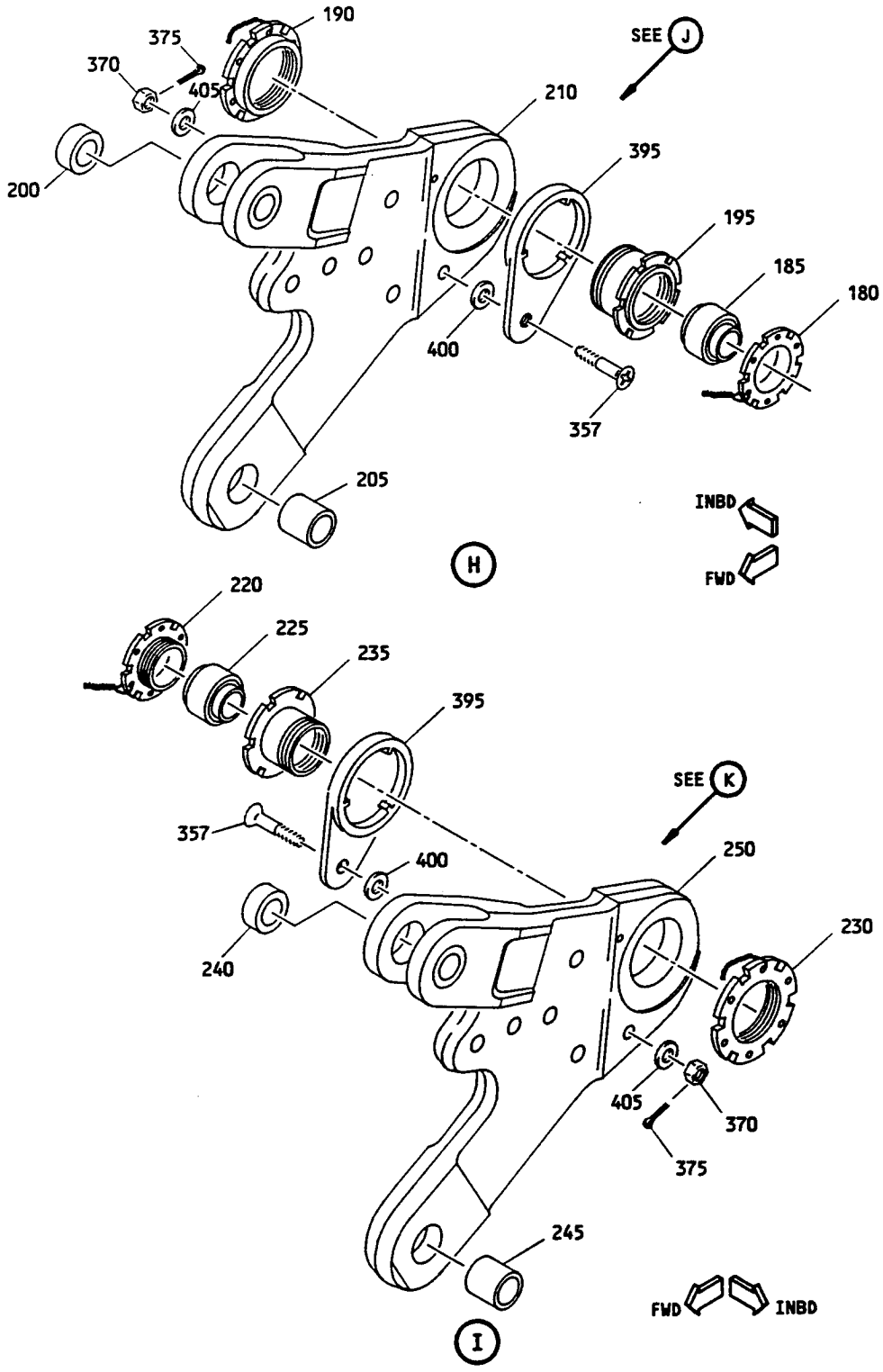


Horizontal Tail Center Section Assembly
Figure 3 (Sheet 4)



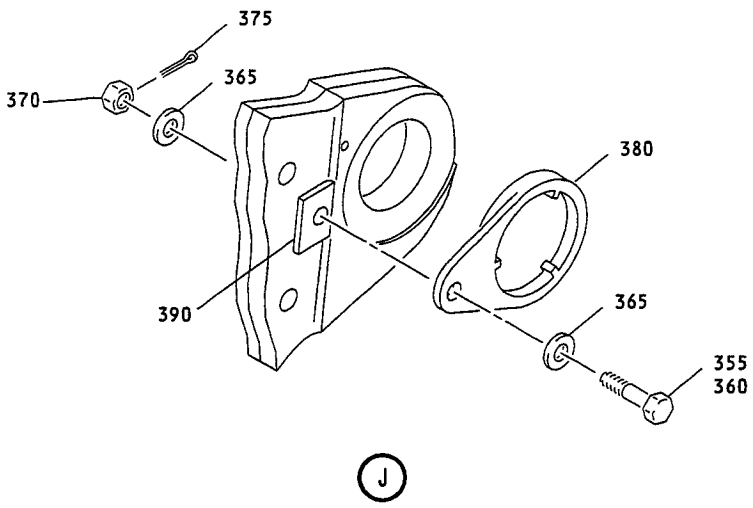
POST SB 55-1045

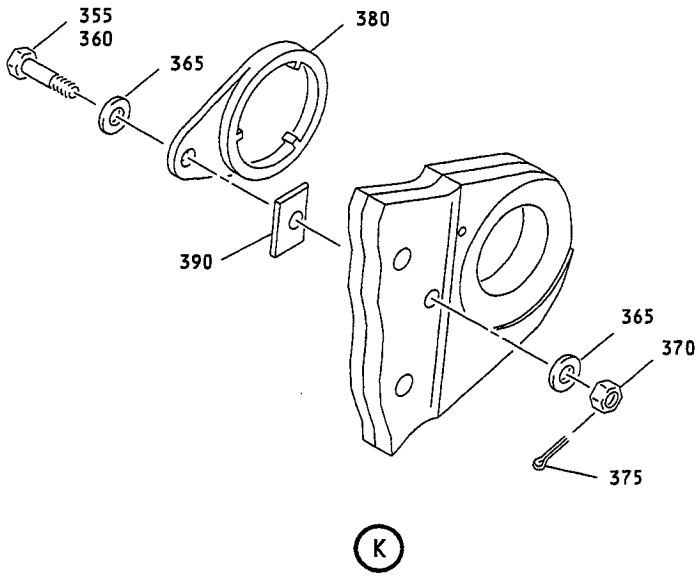
Horizontal Tail Center Section Assembly
Figure 3 (Sheet 5)



POST SB 55-1045 R1

Horizontal Tail Center Section Assembly
Figure 3 (Sheet 6)

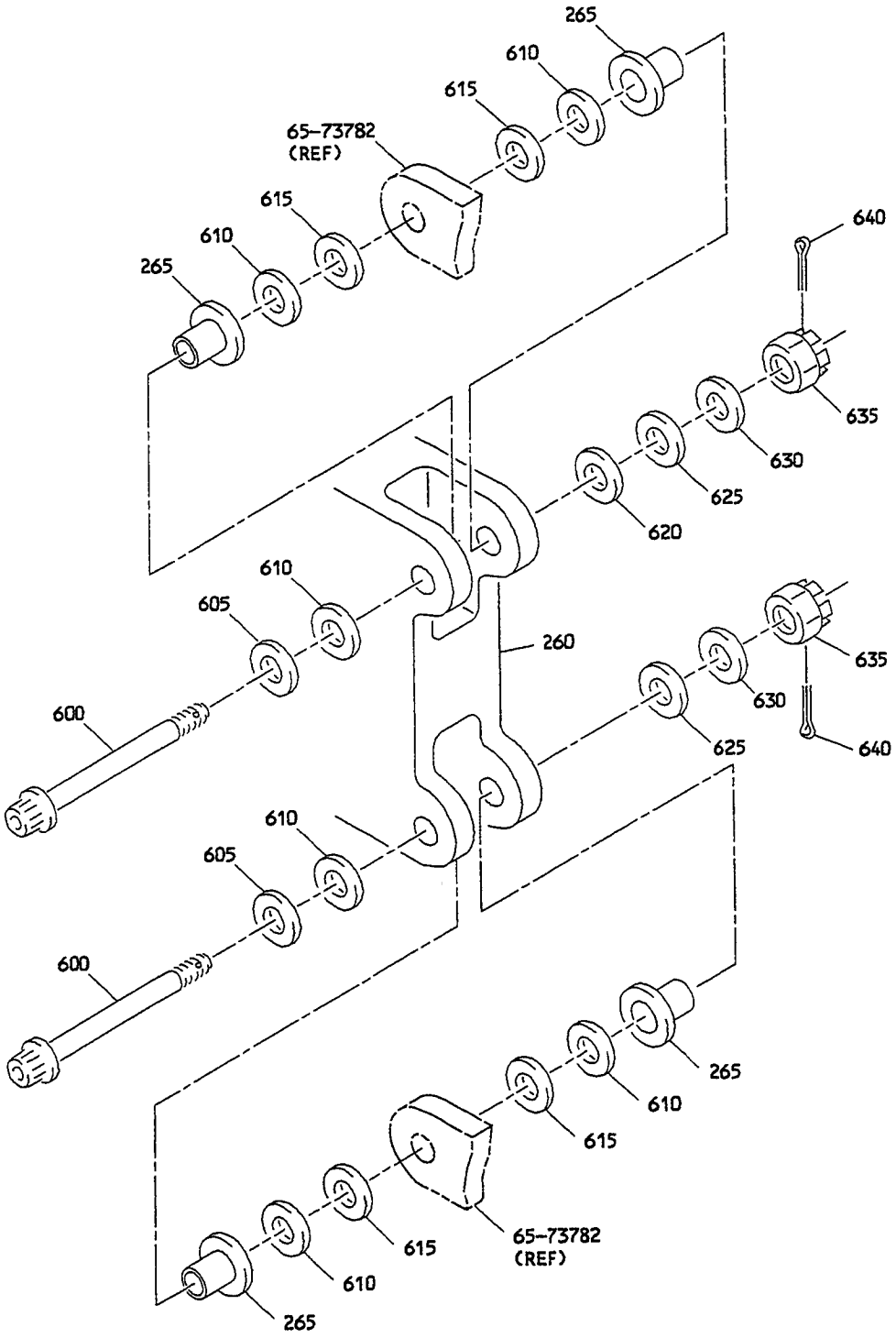




POST SB 55-1045 R1

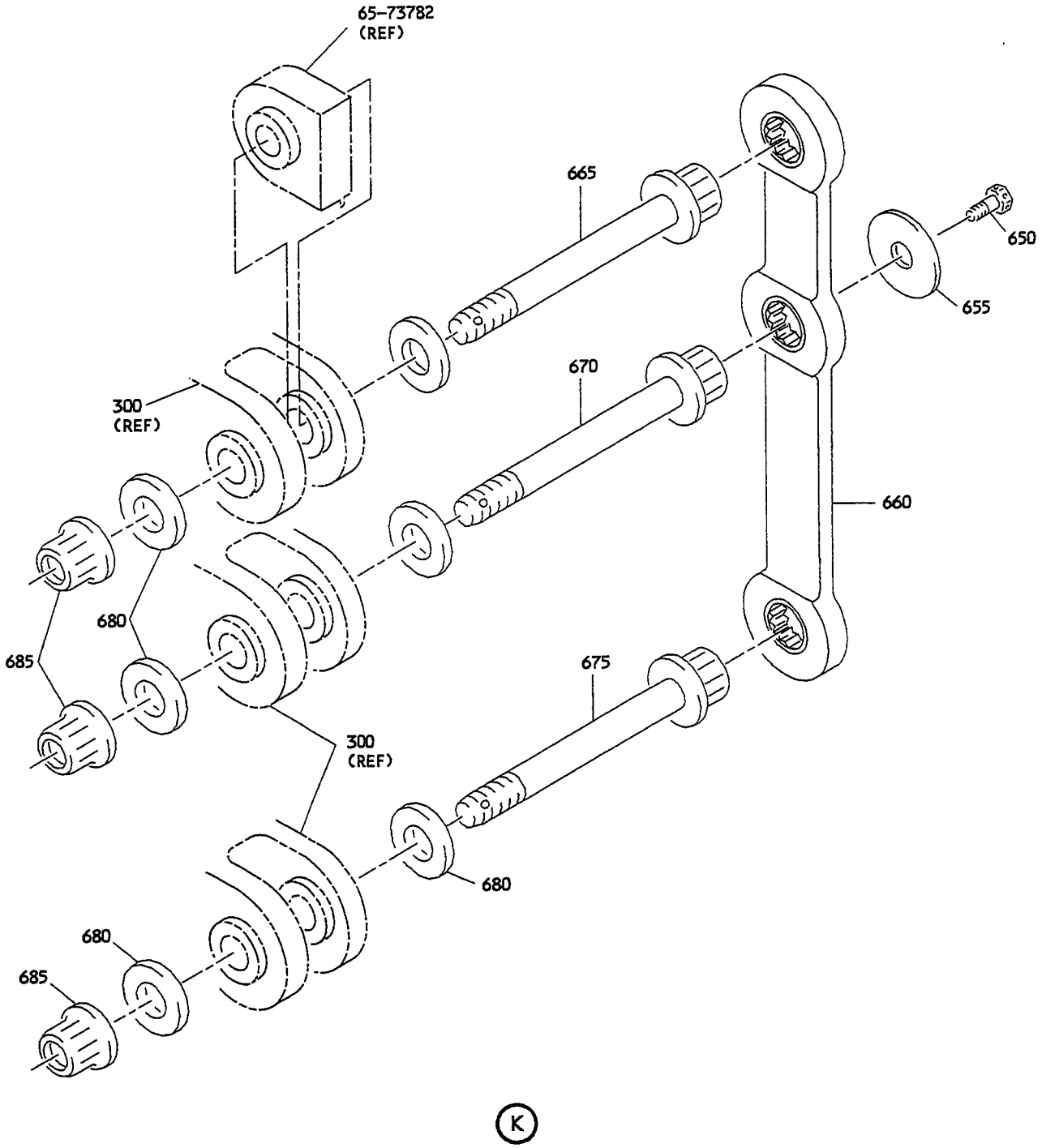
Horizontal Tail Center Section Assembly
Figure 3 (Sheet 7)

A41631



(J)

Horizontal Tail Center Section Assembly
Figure 3 (Sheet 8)



Horizontal Tail Center Section Assembly
Figure 3 (Sheet 9)

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-					
1	65-73781-2		HORIZONTAL TAIL CENTER SECTION ASSY (PRE SB 55-1028)	A	RF
1	65-73781-501		HORIZONTAL TAIL CENTER SECTION ASSY (PRE SB 55-1028)	B	RF
1	65-73781-2		HORIZONTAL TAIL CENTER SECTION ASSY *[4]	C	RF
1	65-73781-501		HORIZONTAL TAIL CENTER SECTION ASSY *[4] (POST SB 55-1028)	D	RF
1	65-73781-7		HORIZONTAL TAIL CENTER SECTION ASSY	E	RF
3	MS24665-287		. PIN COTTER		8
5	AN320-7		. NUT		8
10	AN960-716		. WASHER		8
15	69-39495-502		. BOLT		8
20	65-46846-1		. FITTING ASSY, THRUST BRACE	A	2
20	65-46846-501		. FITTING ASSY, THRUST BRACE	B	2
23	65C25154-1		. FITTING ASSY, THRUST BRACE (OPT TO 65C25154-11)	E	2
23	65C25154-11		. FITTING ASSY, THRUST BRACE (OPT TO 65C25154-1, -3, -13)	E	2
23	65C25154-13		. FITTING ASSY, THRUST BRACE (OPT TO 65C25154-11)	E	2
23	65C25154-2		. FITTING ASSY, THRUST BRACE (OPT TO 65C25154-4)	E	2
23	65C25154-3		. FITTING ASSY, THRUST BRACE (OPT TO 65C25154-11)	E	2
23	65C25154-4		. FITTING ASSY, THRUST BRACE (OPT TO 65C25154-2)	E	2
25	65-46846-2		. . FITTING	A	1
25	65-46846-503		. . FITTING	B	1
27	65C25154-5		. . FITTING (USED ON 65C25154-1)		1
27	65C25154-10		. . FITTING (USED ON 65C25154-11)		1
27	65C25154-12		. . FITTING (USED ON 65C25154-13)		1
27	65C25154-6		. . FITTING (USED ON 65C25154-2)		1
27	65C254154-7		. . FITTING (USED ON 65C25154-3)		1
27	65C254154-8		. . FITTING (USED ON 65C25154-4)		1
30	69-38967-6		. . BUSHING		4
35	65-46846-4		. FITTING ASSY, THRUST BRACE	A	2
35	65-46846-502		. FITTING ASSY, THRUST BRACE	B	2
40	65-46846-5		. . FITTING	A	1
40	65-46846-504		. . FITTING	B	1
45	69-38967-6		. . BUSHING		4
47	69-38967-19		. . BUSHING	E	4
50	BACN10B7L		. NUT		4
55	AN960-716		. WASHER		4

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-					
60	NAS587-20		. BOLT		4
65	65-49942-1		. FITTING ASSY, THRUST BRACE ATTACH (REPLD BY 69-56059-1)	A	2
65	69-56059-1		. FITTING ASSY, THRUST BRACE ATTACH		2
67	65C25158-1		. FITTING ASSY, THRUST BRACE ATTACH (OPT TO 65C25158-2 OR -5)	E	2
67	65C25158-2		. FITTING ASSY, THRUST BRACE ATTACH (OPT TO 65C25158-1 OR -5)	E	2
67	65C25158-5		. FITTING ASSY, THRUST BRACE ATTACH (OPT TO 65C25158-1 OR -2)	E	2
70	65-49942-2		. . FITTING (USED ON 65-49942-1)		1
70	69-56059-2		. . FITTING (USED ON 69-56059-1)		1
72	65C25158-3		. . FITTING (USED ON 65C25158-1)		1
72	65C25158-4		. . FITTING (USED ON 65C25158-2)		1
72	65C25158-6		. . FITTING (USED ON 65C25158-5)		1
75	69-38967-5		. . BUSHING		2
76	69-38967-20		. . BUSHING (USED ON 65C25158-1 AND -2)		2
77	69-38967-52		. . BUSHING (USED ON 65C25158-5)		2
80	MS24665-357		. PIN, COTTER		2
85	AN320-9		. NUT		2
90	MS20002-9		. WASHER		2
95	MS20002C9		. WASHER		2
100	69-41301-501		. BOLT		2
105	MS24665-287		. PIN, COTTER		2
110	AN320-6		. NUT		2
115	AN960D616L		. WASHER		2
120	AN960PD616		. WASHER		2
121	NAS586-20		. BOLT		2
122	BACN10B-L6L		. NUT		2
123	AN960-616		. WASHER		2
125	NAS1106-25D		. BOLT		2
130	69-37276-1		. LINK ASSY, FAIL SAFE		4
135	69-37276-2		. . LINK		1
140	69-38967-8		. . BUSHING		1
145	65-73781-3		. SHIM		AR
150	MS24665-359		. PIN, COTTER		4
155	AN320-12		. NUT		4
160	MS20002-12		. WASHER		4
165	MS20002C12		. WASHER		4
166	65-73781-502		. WASHER	E	2
170	69-41301-1		. BOLT		4

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-175	65-46845-1		. HOUSING ASSY, HINGE (REPLD BY 65-46845-505) *[2]	A	1
175	65-46845-505		. HOUSING ASSY, HINGE (REPLD BY 65-46845-507) *[2]	A	1
175	65-46845-507		. HOUSING ASSY, HINGE (REPLD BY 65-46845-509) *[2]	A	1
175	65-46845-509		. HOUSING ASSY, HINGE *[2]	A	1
175	65-46845-513		. HOUSING ASSY, HINGE *[2]	B	1
175	65-46845-11		. HOUSING ASSY, HINGE *[2]	B	1
177	65C25170-5		. HOUSING ASSY, HINGE	E	1
177	65C25170-6		. HOUSING ASSY, HINGE	E	1
177	65C25170-9		. HOUSING ASSY, HINGE	E	1
177	65C25170-10		. HOUSING ASSY, HINGE	E	1
177	65C25170-11		. HOUSING ASSY, HINGE	E	1
177	65C25170-12		. HOUSING ASSY, HINGE	E	1
177	65C25170-501		. HOUSING ASSY, HINGE	E	1
177	65C25170-502		. HOUSING ASSY, HINGE	E	1
180	69-37992-1		. . NUT (USED ON 65-46845-1, -505, -507)		1
180	69-37992-501		. . NUT (USED ON 65-46845-11, -509, -513)		1
185	76407		. . BEARING, VO9455 (BOEING 10-60545-39) (USED ON 65-46845-1)		1
185	NHSB16-20		. . BEARING, V15860 (BOEING 10-60545-39) (USED ON 65-46845-1)		1
185	ABYT16-102		. . BEARING, V50294 (BOEING 10-60545-39) (USED ON 65-46845-1)		1
185	HSPR16-43BAC		. . BEARING, V73134 (BOEING 10-60545-39) (USED ON 65-46845-1)		1
185	KSBY16N1		. . BEARING, V97613 (BOEING 10-60545-39 (USED ON 65-46845-1)		1
185	176240		. . BEARING, VO9455 (BOEING 10-60545-54) (USED ON 65-46845-11, -505, -507, -509, -513)		1
185	NHB16-201		. . BEARING, V15860 (BOEING 10-60545-54) (USED ON 65-46845-11, -505, -507, -509-513)		1
185	ATB16-102		. . BEARING, V50294 (BOEING 10-60545-54) (USED ON 65-46845-11, -505, -507, -509, -513)		1
185	NR16BAC		. . BEARING, V73134 (BOEING 10-60545-54) (USED ON 65-46845-1, -505, -507, -509, -513)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-185	TFA16N		. . BEARING, V77896 (BOEING 10-60545-54) (USED ON 65-46845-11, -505, -507, -509, -513)		
185	BLFN16-113		. . BEARING, V81376 (BOEING 10-60545-54) (USED ON 65-46845-11, -505, -507, -509, -513)		1
185	KSBN16-25		. . BEARING, V97613 (BOEING 10-60545-54) (USED ON 65-46845-11, -505, -507, -509, -513)		1
185	10-60545-93A		. . BEARING (USED ON 65C25170-5, -6, -9, -10, -501, -502)		1
190	69-37453-1		. . NUT		1
192	69-73076-1		. . NUT (USED ON 65C25170-5, -6, -9, -10, -501, -502)		1
195	69-37452-1		. . SLEEVE		1
197	69-73086-1		. . LOCK PLATE (USED ON 65C25170-5, -6, -9, -10, -501, -502)		2
200	69-38967-1		. . BUSHING		2
205	69-38967-2		. . BUSHING		1
206	69-38967-21		. . BUSHING (USED ON 65C25170-5, -6, -501, -502)		1
206	69-38967-504		. . BUSHING (USED ON 65C25170-5, -6, -501, -502)		1
207	69-38967-26		. . BUSHING (USED ON 65C25170-9, -10)		1
207	69-38967-27		. . BUSHING (USED ON 65C25170-9, -10)		1
208	69-38967-28		. . BUSHING (USED ON 65C25170-11, -12)		1
208	69-38697-29		. . BUSHING (USED ON 65C25170-11, -12)		1
208	69-38697-30		. . BUSHING (USED ON 65C25170-11, -12)		1
210	65-46845-503		. . BONDED ASSY *[2]	A	1
210	65-46845-515		. . BONDED ASSY *[2]	B	1
210	65-46845-10		. . BONDED ASSY (USED ON 65-46845-11) *[2]	B	1
212	65C25170-2		. . FITTING ASSY (USED ON 65C25170-5, -6)		1
212	65C25170-503		. . FITTING ASSY (USED ON 65C25170-9, -10, -501, -502)		1
212	65C25170-13		. . FITTING ASSY (USED ON 65C25170-11, -12)		1
215	65-46845-2		. HOUSING ASSY, HINGE (REPLD BY 65-46845-506) *[2]	A	1
215	65-46845-506		. HOUSING ASSY, HINGE (REPLD BY 65-46845-508) *[2]	A	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-215	65-46845-508		. HOUSING ASSY, HINGE (REPLD BY 65-46845-510) *[2]	A	1
215	65-46845-510		. HOUSING ASSY, HINGE *[2]	A	1
215	65-46845-514		. HOUSING ASSY HINGE *[2]	B	1
215	65-46845-12		. HOUSING ASSY, HINGE *[2]	B	1
220	69-37992-1		. . NUT (USED ON 65-46845-2, -506, -508)		1
220	69-37992-501		. . NUT (USED ON 65-46845-12, -510, -514)		1
225	76407		. . BEARING, V09455 (BOEING 10-60545-39) (USED ON 65-46845-2)		1
225	NHSB16-20		. . BEARING, V15860 (BOEING 10-60545-39) (USED ON 65-46845-2)		1
225	ABYT16-102		. . BEARING, V50294 (BOEING 10-60545-39) (USED ON 65-46845-2)		1
225	HSPR16-43BAC		. . BEARING, V73134 (BOEING 10-60545-39) (USED ON 65-46845-2)		1
225	KSBY16N1		. . BEARING, V97613 (BOEING 10-60545-39) (USED ON 65-46845-2)		1
225	176240		. . BEARING, VO9455 (BOEING 10-60545-54) (USED ON 65-46845-12, -506, -508, -510, -514)		1
225	NHB16-201		. . BEARING, V15860 (BOEING 10-60545-54 (USED ON 65-46845-12, -506, -508, -510, 514)		1
225	ATB16-102		. . BEARING, V50294 (BOEING 10-60545-54) (USED ON 65-46845-12, -506, -508, -510, -514)		1
225	NR16BAC		. . BEARING, V73134 (BOEING 10-60545-54) (USED ON 65-46845-12, -506, -508, -510, -514)		1
225	TFA16N		. . BEARING, V77896 (BOEING 10-60545-54) (USED ON 65-46845-12, -506, -508, -510, -514)		1
225	BLFN16-113		. . BEARING, V81376 (BOEING 10-60545-54) (USED ON 65-46845-12, -506, -508, -510, -514)		1
225	KSBN16-25		. . BEARING, V97613 (BOEING 10-60545-54) (USED ON 65-46845-12, -506, -508, -510, -514)		
230	69-37453-1		. . NUT		1
235	69-37452-1		. . SLEEVE		1
240	69-38967-1		. . BUSHING		2
245	69-38967-2		. . BUSHING		1
250	65-46845-503		. . BONDED ASSY *[2]	A	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-250	65-46845-515		. . BONDED ASSY *[2]	B	1
250	65-46845-10		. . BONDED ASSY (USED ON 65-6845-12) *[2]	B	1
255	65-47596-502		. SPAR ASSY, FRONT (REPLD BY 65-7596-504) *[1]	A	1
255	65-47596-504		. SPAR ASSY FRONT (REPLD BY 65-47596-2) *[1]	B	1
255	65-47596-2		. SPAR ASSY, FRONT *[1]	B	1
255	65-47596-6		. SPAR ASSY, FRONT *[1]	E	1
255	65-47596-7		. SPAR ASSY, FRONT B	B	1
260	65-47596-503		. . FITTING, SPAR (USED ON 65-47596-2)		1
260	65-47596-501		. . FITTING, SPAR (USED ON 65-47596-502)		1
260	65-47596-503		. . FITTING, SPAR (USED ON 65-47596-504)		1
265	69-72039-23		. . BUSHING (POST SB 55-1028)	CD	
265	69-38967-501		. . BUSHING (PRE SB 55-1028)		8
270	65-47595-1		. SPAR ASSY, REAR *[1]	A	1
270	65-47595-502		. SPAR ASSY, REAR (REPLD BY 65-47595-3) *[1]	B	1
270	65-47595-3		. SPAR ASSY, REAR *[1]	B	1
270	65-47595-9		. SPAR ASSY, REAR *[1]	B	1
270	65-47595-5		. SPAR ASSY, REAR *[1]	E	1
275	69-38967-1		. . BUSHING		4
280	69-38967-2		. . BUSHING		2
285	69-38967-7		. . BUSHING		2
290	69-38967-5		. . BUSHING		4
291	69-38967-20		. . BUSHING	E	4
292	69-38967-23		. . BUSHING	E	4
293	69-38967-25		. . BUSHING	E	2
294	69-38967-505		. . BUSHING	E	4
295	69-38967-501		. . BUSHING	E	8
295	NAS679A6		. . NUT		4
300	MS20002-6		. . WASHER		4
305	BACW10P266TF		. . WASHER		8
310	MS20002C8		. . WASHER		4
315	69-39495-501		. . BOLT, SHOULDER		4
320	BACB28U8B34		. . BUSHING		8
325	BACB28U8B49		. . BUSHING		4
330	65-49925-501		. . FITTING ASSY, UPPER (USED ON 65-47595-1)(REPLD BY 65-47595-503) *[1] (PRE SB 55-1034R2, PRE SB 55A1031R3)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-330	65-49925-503		. . FITTING ASSY, UPPER (USED ON 65-47595-1)(REPLS 65-49925-501) *[1] (PRE SB 55-1034R2, PRE SB 55A1031R3)		1
330	65-49925-505		. . FITTING ASSY, UPPER (USED ON 65-47595-502) *[1] (PRE SB 55-1034R2, PRE SB 55A1031R3)		1
330	65-49925-3		. . FITTING ASSY, UPPER (USED ON 65-47595-3) *[1] (PRE SB 55-1034R2, PRE SB 55A1031R3)		1
330	65-49925-8		. . FITTING, UPPER (USED ON 65-47595-9) *[1] (PRE SB 55-1034R2)		1
330	65-49925-6		. . FITTING ASSY, UPPER (USED ON ITEM 270)(POST SB 55-1034R2, POST SB 55A1031R3)		1
330	65-49925-507		. . FITTING ASSY, UPPER	E	1
330	65-49925-9		. . FITTING ASSY, UPPER	E	1
335	69-72039-22		. . BUSHING (POST SB 55-1028)	CD	
335	69-38967-4		. . . BUSHING, SHOULDER (USED ON 65-49925-501, -503)		4
335	69-38967-502		. . . BUSHING, FLANGED (USED ON 65-49925-3, -505) (PRE SB 55-1028)		4
340	65-49927-501		. . FITTING ASSY, LOWER (USED ON 65-47595-1, -502) (PRE SB 55-1056) *[1]		1
340	65-49927-1		. . FITTING ASSY, LOWER (USED ON 65-47595-3) (PRE SB 55-1056) *[1]		1
340	65-49927-4		. . FITTING, LOWER (USED ON 65-47595-9) *[1]		1
340	65-49927-3		. . FITTING, LOWER	E	1
340	65-49927-5		. . FITTING, LOWER	E	1
340	65-47595-23		. . FITTING ASSY, LOWER (POST SB 55-1056) *[1]		1
345	69-72039-20		. . BUSHING (POST SB 55-1028)	CD	
345	69-38967-11		. . . BUSHING, SHOULDER (PRE SB 55-1028)		4
350	69-72039-21		. . BUSHING (POST SB 55-1028)	CD	
350	69-72039-24		. . BUSHING (POST SB 55-1028)	CD	
350	69-38967-4		. . . BUSHING, SHOULDER (PRE SB 55-1028)		4
355	BACB30NF4D15		. BOLT (POST SB 55-1045)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-					
357	BACB30LH4D15		. BOLT (POST SB 55-1045 R1)		1
360	BACB30NF4D20		. BOLT (POST SB 55-1045 R1)		1
365	AN960D416L		. WASHER (POST SB 55-1045 R1)		2
370	BACN10JD104		. NUT (POST SB 55-1045 R1)		1
375	MS24665-155		. COTTER PIN (POST SB 55-1045 R1)		1
380	69-78384-1		. PLATE, LOCKING (POST SB 55-1045 R1)		1
390	65C80357-5		. FILLER, RADIUS (POST SB 55-1045 R1)		1
390	65C80357-6		. PLATE, LOCKING (POST SB 55-1045 R1)		1
400	AN970D416L		. WASHER (POST SB 55-1045 R1)		AR
405	AN970D416L		. WASHER (POST SB 55-1045 R1)		1
			INSTALLATION PARTS		
600	66-24117-1		BOLT (LIMITED)(REPLD BY 69-73697-2)		2
-600	69-73697-2		BOLT (LIMITED)(REPLS 66-24117-1)		2
605	69-41369-1		WASHER (LIMITED) (PRE SB 55-1058)		4
610	69-41379-2		SHIM (LIMITED)		6
615	69-41379-1		SHIM (LIMITED)		4
610	69-41379-2		SHIM *[3](LIMITED)		1
625	BACW10P224AM		WASHER (LIMITED) (PRE SB 55-1058)		4
630	BACW20AKP12		WASHER (LIMITED) (PRE SB 55-1058)		4
635	AN320-12		NUT (LIMITED)		2
640	MS24665-357		PIN - COTTER (LIMITED)		2
650	69-41396-1		BOLT (LIMITED)	AB	1
655	69-53032-1		WASHER - ANTIRATTLE (LIMITED)	AB	1
655	69-73715-501		WASHER (LIMITED)	A	1
660	65-54858-1		LOCK - ANTIROTATION (LIMITED)	A	1
-660	65-54858-501		LOCK - ANTIROTATION (LIMITED)	A	1
-660	65-54858-502		LOCK - ANTIROTATION (LIMITED)	B	1
-665	69-73071-4		BOLT (LIMITED) (PRE SB 55-1058)	B	1
-665	69-73071-10		BOLT (LIMITED) (POST SB 55-1058)	B	1
665	69-37966-4		BOLT (LIMITED)	A	1
-665	69-70251-7		BOLT (LIMITED) (OPT TO 69-37966-4)		1
-665	69-37966-502		BOLT (LIMITED) (SPARES PARTS)	AB	1
-665	69-70251-2		BOLT (LIMITED) (PREF SPARES)	AB	1
-665	69-37966-503		BOLT (LIMITED)	B	1
-665	69-70251-8		BOLT (LIMITED) (OPT TO 69-37966-503)	B	1
-665	69-70251-3		BOLT (LIMITED) (PREF SPARES)	B	1
-670	69-73071-5		BOLT (LIMITED) (PRE SB 55-1058)	B	1
-670	69-73071-11		BOLT (LIMITED) (POST SB 55-1058)	B	1
670	69-37966-4		BOLT (LIMITED)	AB	1
-670	69-70251-7		BOLT (LIMITED) (OPT TO 69-37966-4)	AB	1
-670	69-37966-502		BOLT (LIMITED) (SPARES PARTS)	AB	1
-670	69-70251-2		BOLT (LIMITED) (PREF SPARES)	AB	1
-675	69-73071-6		BOLT (LIMITED) (PRE SB 55-1058)	B	1
-675	69-73071-4		BOLT (LIMITED) (POST SB 55-1058)	B	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
3-					
675	69-37966-1		BOLT (LIMITED)	AB	1
-675	69-70251-6		BOLT (LIMITED)(OPT TO 69-37966-1)	AB	1
-675	69-37966-501		BOLT (LIMITED)(SPARES PARTS)	AB	2
-675	69-70251-1		BOLT (LIMITED)(PREF SPARES)	AB	1
-680	BACW10BN20SC		WASHER (LIMITED)	B	3
-680	69-73081-1		WASHER (LIMITED)	B	3
680	69-41370-1		WASHER (LIMITED) (PRE SB 55-1028)	AB	6
-680	69-41370-2		WASHER (LIMITED)(OPT TO 69-41370-1) (POST SB 55-1028)		6
-685	NAS1805-12		NUT (LIMITED)	B	3
685	BACN10B512		NUT (LIMITED)	AB	3
-685	BACN10GW20		NUT (LIMITED)	AB	3
-685	BACN10GW20A		NUT (LIMITED)(OPT TO BACN10GW20)	AB	3
-690	69-73077-2		NUT RETAINER (LIMITED)	B	3

*[1] ONE OR MORE COMPONENTS OF THIS ASSEMBLY ARE PERMANENTLY INSTALLED STRUCTURE AND ARE NOT IDENTIFIED IN THIS PARTS LIST.

*[2] SB 737-55-1045 R1 (REWORK) NO EQUIVALENT BOEING PART NUMBER REPLACEMENT.

*[3] OPTIONAL LOCATION. USE AS REQUIRED.

*[4] THIS ASSEMBLY HAS BEEN MODIFIED BY SERVICE BULLETIN 55-1028, NO EQUIVALENT BOEING PART NUMBER EXISTS.

VENDORS

V09455	LEAR SIEGLER, INC., TRANSPORT DYNAMICS DIV., 3131 SEGERSTROM AVE., P.O. BOX 1953, SANTA ANA, CALIFORNIA 92702
V15860	NEW HAMPSHIRE BALL BEARINGS, INC., ASTRO DIV., 155 LEXINGTON AVE., LACONIA, NEW HAMPSHIRE 03246
V50294	NMB CORP., 9730 INDEPENDENCE AVE., CHATSWORTH, CALIFORNIA 91311
V73134	HEIM UNIVERSAL CORP., INCOM INTERNATIONAL INC., 60 ROUND HILL RD., FAIRFIELD, CONNECTICUT 06430
V77896	REXNORD, INC., BEARING DIV., 2400 CURTIS ST., DOWNERS GROVE, ILLINOIS 60515
V81376	SOUTHWEST PRODUCTS CO., 2240 BUENA VISTA, IRWINDALE, CALIFORNIA 91706
V97613	SARGENT INDUSTRIES, KAHR BEARING DIV., 3010 N. SAN FERNANDO BLVD., BURBANK, CALIFORNIA 91503