TO: ALL HOLDERS OF RATIO CHANGER ASSEMBLY OVERHAUL MANUAL, 27-67-11

REVISION NO. 25, DATED NOV 1/08

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
Add replacement instructions for fillers (21, 26)					X								

RATIO CHANGER ASSEMBLY

27-67-11

BOEING P/N 65-46370-3 thru -21, -23, -24, -26, -27, -28

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
		PRR 30294	Nov 15/67
		PRR 30386	Nov 15/67
		PRR 30533	Nov 15/67
		PRR 30533-2	Nov 15/67
		PRR 30618	Nov 15/67
		PRR 30042-7	Mar 10/70
27-1017		PRR 31045	Mar 10/70
		PRR 31171	Mar 10/70
		PRR 31254	Mar 10/70
		PRR 31706	Mar 10/70
		PRR 32039	Dec 25/72
		PRR 32121-10	Dec 25/72
		PRR 32983	Jul 5/80
		PRR 35005-72	Jun 1/95
		PRR 38156	Jul 1/00
		PRR 38274	Jul 1/03
		PRR 38398	Jul 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
	27-67-11		1103	Nov 1/07		
	T-1	Nov 1/07	1104	Nov 15/67		
	T-2	BLANK	1105	Jan 5/78		
*	LEP-1	Nov 1/08	1106	Jul 1/08		
	LEP-2	BLANK	1106A	Nov 1/07		
	T/C-1	Dec 5/89	1106B	Jul 1/08		
	T/C-2	BLANK	1107	Nov 1/07		
	1	Mar 5/84	1108	Nov 1/07		
	2	Mar 5/84	1109	Nov 1/07		
	101	Jul 1/03	1110	Jul 1/08		
	102	Nov 1/07	1111	Jul 1/08		
	103	Jul 1/08	1112	Nov 1/07		
	104	BLANK	1112A	Nov 1/07		
	201	Dec 5/89	1112B	Nov 1/07		
	202	BLANK	1112C	Nov 1/07		
	301	Jul 1/03	1112D	Nov 1/07		
	302	Mar 10/70	1112E	Jul 1/08		
	401	Jun 1/95	1112F	BLANK		
	402	Mar 5/87	1113	Nov 1/07		
	402A	Nov 1/07	1114	Nov 1/07		
	402B	BLANK	1114A	Nov 1/07		
	403	Nov 1/07	1114B	BLANK		
*	404	Nov 1/08	1115	Nov 1/07		
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*	406	BLANK	1117	Nov 1/07		
	501	Nov 1/07	1118	Nov 1/07		
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	503	Nov 1/07	1120	Jul 1/08		
	504	Nov 1/00				
	505	Jul 1/03				
	506	Jul 1/08				
	601	Jun 10/71				
	602	Nov 1/07				
	602A	Jul 1/03				
	602B	BLANK				
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	604	Jun 10/71				
	605	Nov 1/07				
	606	Jul 1/03				
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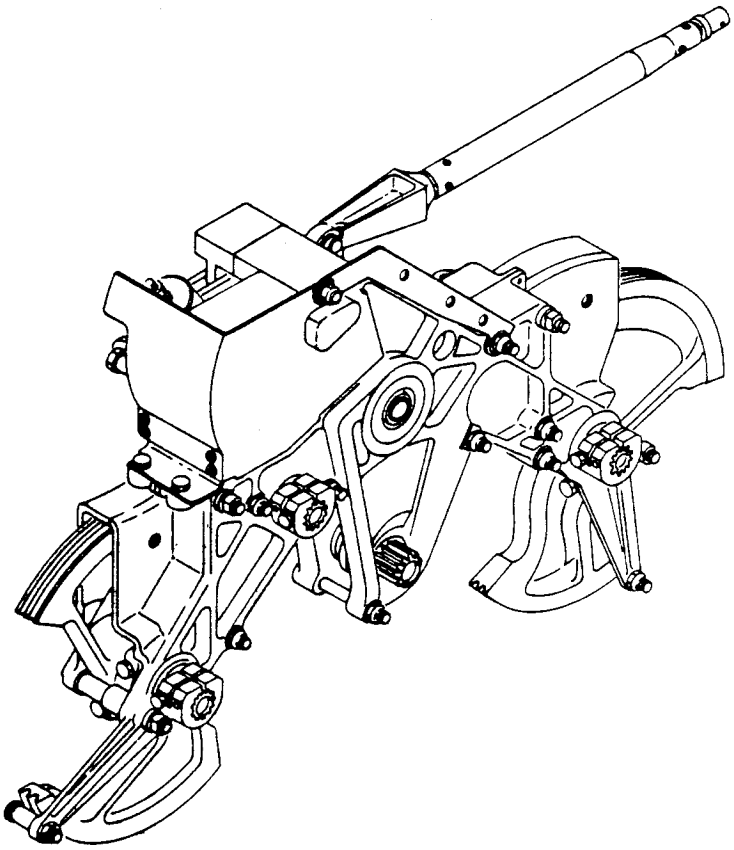
*[1] Use applicable procedures per 20-44-02 of the Standard Overhaul Practices Manual, D6-51702.

RATIO CHANGER ASSEMBLY



Ratio Changer Assembly
Figure 1

DESCRIPTION AND OPERATION

1. Description

A. The ratio changer assembly is a mechanical device which receives aileron and speed brake control inputs and transfers them to the spoiler mixer. For a given magnitude of input from the aileron system, the ratio changer varies the output to the mixer depending on speed brake lever setting. The mixer combines aileron and speed brake inputs to initiate spoiler action.

B. The assembly consists of forward and aft frames which house the aileron system input rod, speed brake input quadrants, a mechanical linkage system, connecting shafts to the spoiler mixer, and spoiler output quadrants. On some assemblies the speed brake input quadrants are integrated with a no-back clutch assembly to prevent movement of the speed brake system without inputs from the flight deck.

2. Operation

A. The aileron system input rod is connected to a bellcrank which is slotted to receive two rollers. The bellcrank is connected by means of these rollers to a lever and a link. The lever is connected to a crank on the output shaft to the mixer. The link is attached to a fork lever which is connected to the speed brake quadrant by a two-part link.

B. Rotation of the speed brake quadrant to raise the spoilers causes the rollers to move toward the bellcrank pivot. This reduces the magnitude of the lateral control input to the spoiler control system when speed brakes are used. The amount of reduction depends on the speed brake setting.

3. Leading Particulars (Approximate)

Length -- 26 inches
Height -- 16 inches
Width -- 6 inches
Weight -- 20 pounds

DISASSEMBLY

1. Procedure (Fig. 1101)

   A. Remove bolts (1, 5), washers (2, 3, 6), nut (4) and cover assembly (7).

      NOTE: Do not disassemble cover assembly (7). Repair as a unit.

   B. Remove bolts (11), washers (12), nuts (13), and spacers (14).

   C. Remove bolts (16), washers (17), nuts (18), bracket assemblies (19 and 24), and strap assembly (97).

      NOTE: Do not remove bearings (22) and sleeve (23) unless repair or replacement is necessary. Do not remove bonded fillers (21, 26) from brackets (20, 25).

   D. Remove bolts (27), washers (28), nuts (29), bracket (30), and on assemblies 65-46370-5 and -6, remove shield assembly (189).

   E. Remove collars (31), bushings (32), and lockbolts (33).

   F. Remove bolt (34), spacer (35), washer (36), and nut (37).

   G. Remove bolts (38, 38A, 42), spacers (15, 39, 43), washers (40, 44), nuts (41, 45), and on assemblies 65-46370-5 and -6, remove shield assembly (190).

   H. On assemblies 65-46370-3 thru -12, remove bolts (88), washers (89), nuts (90), speed brake quadrants (87), and spacer (91).

   I. Remove bolts (51, 55), washers (52, 56), nuts (53, 57), and output couplings (50, 54).

   J. Remove bolts (46, 46A, 46B), washers (47, 47A, 48), bushing (47B), and nuts (49).

   K. Remove aft frame assembly (172). On assemblies 65-46370-13 and -14 only, remove parts (127 thru 129) attaching input lever assembly (130) to output shaft of no-back assembly (191), then remove no-back assembly. Carefully lift all mechanism assemblies from forward frame assembly (179).

      NOTE: Do not remove bolt (187), inserts (174, 181, 182) or bearings (175 through 178, and 183 through 186) from frames (173, 180) unless repair or replacement is necessary. Refer to manufacturer's instructions for servicing of no-back assembly.

L. Disassemble bolts (61, 66, 73, 78), washers (62, 67, 74, 79), nuts (63, 68, 75, 80), quadrant shafts (58, 70), washers (69, 81), spacers (59, 64, 71, 76), lower quadrants (60, 72), and upper quadrants (65, 77).

M. Remove cotter pin (85), bolt (82), washer (83), nut (84), and lever (86).

N. Remove lever shaft bolt assembly (93), bushing (96), washer (99), bearings (98), nut (100), cotter pin (101), output lever assembly (102) and input lever assembly (105).

NOTE: Do not remove bearings (104, 107) from levers (103, 106) or fitting (95) from bolt (94) unless repair or replacement is necessary.

O. Remove lockbolt (108) and collar (109) to remove input rod assembly (110) from input lever assembly (105).

NOTE: Do not remove rivets (114, 114A), clevis (113), or plug (112) from tube (111) unless repair or replacement is necessary.

P. Remove bolt (115), washer (116), nut (117), cotter pin (118), and link assembly (119).

NOTE: Do not remove bearings (121) from link (120) unless repair or replacement is necessary.

Q. Remove bolt (122), washer (123), bearing (124), nut (125), cotter pin (126), and speed brake input lever assembly (130).

NOTE: Do not remove bearings (132) from lever (131) unless repair or replacement is necessary.

R. On assys 65-46370-3 thru -12, remove bolt (127), washer (128), nut (129), and spacers (133). Pull shaft (92) out of lever assembly (130).

S. Remove collars (134), lever shaft bushings (135), lockbolts (136), and fork lever (143). Remove bearing (137) from link (142). On assemblies 65-46370-24, -26, -27 and -28 remove solid link (138E).

T. Remove bolts (152, 156), washers (153, 157), nuts (154, 158), cotter pins (155, 159), and lower scissor link (160).

U. Remove bolts (167, 168), washer (169), spacer (170), collars (171), link assembly (139), link (142), and spacer (188). Remove bushings (163) from trunnion (161).

NOTE: Link assembly (139) and link (142) are a matched set and should be kept together after disassembly. Do not remove bearing (141) from link (140) unless repair or replacement is necessary.

V. Remove pins (166), washers (164), and nuts (165) from link assembly (139) and link (142).

W. On assemblies 65-46370-3 thru -21.

(1) Remove nut (144) then tighten nut (145) until spring load is removed from cover (148). Cut lockwire and remove cover (148).

(2) Slowly loosen nut (145) until all spring load is released, then remove nut (145), washers (146), retainers (149), optional laminated shim (149A), and springs (150, 151) from rod (147). 65-46370-21 may have optional configuration using five washers (146) and shim (146A), see IPL Fig. 1101, Detail F.

NOTE: Record thickness of laminated shim (149A) for use in assembly.

X. On assembly 65-46370-23, remove nuts (144, 145), washers (146), spacers (150A, 150B) and optional laminated shim (149A) from rod (147).

NOTE: Record thickness of laminated shim (149A) for use in assembly.

CLEANING

1. General

CAUTION: VAPOR DEGREASING OF TITANIUM PARTS IS RESTRICTED. REFER TO 20-30-03 FOR CLEANING OF TITANIUM AND TITANIUM ALLOY PARTS.

A. Clean all parts except bearings using standard industry practices per 20-30-03.

B. Clean and relubricate bearings using standard industry practices per 20-30-01.

INSPECTION/CHECK

1. Visual Check (See Fig. 1101.)

   A. Examine all metal parts for cracks, burrs, and corrosion, using strong light and a minimum 10-power magnification.

   B. Examine internal and external threads for cross-threading or stripping.

   C. Check all plated and painted surfaces for blistering or flaking.

   D. Check bearings for roughness, binding, and excessive radial or axial play.

   E. Examine bearing (22) and bushing (162) for cuts, nicks, grooves, and dents.

2. Special Check (See Fig. 1101.)

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

      (1) Magnetic particle check -- brackets (20, 25, 30), couplings (50, P/N 65-51681-1; 54, P/N 65-51681-2, -4), spacers (59, 71, P/N 69-40325-1), levers (86, P/N 65-52299-2, -4; 106), shafts (58, P/N 69-38907-1, -2; 70, P/N 69-38907-2, -4; 92, P/N 65- 53599-1, -4), bolt (94), rod (147), retainer (149), springs (150 and 151) , and pin (166).

      (2) Fluorescent dye penetrant check -- couplings (50, P/N 65-51681-3; 54, P/N 65-51681-5), shafts (58, P/N 69-38907-5; 70, P/N 69-38907-6; 92, P/N 65-53599-7), spacers (59, 71, P/N 69-40325-2; 133, P/N 69-40324-4; 188), quadrants (60, 65, 72, 77, 87), levers (86, P/N 65-52299-3; 103, 131, 143), clevis (113), links (120, 140, 142, 160), solid link (138E), cover (148), spacer (150A), trunnion (161), and frames (173, 180).

B. Check springs (150 and 151) in accordance with figure 301.

NOTE: Springs shall not wobble when rolled on a flat surface. No permanent set shall result from test load.

Index No. Fig. 1101	Free Length (inches)	Test Length (inches)	Check Load (pounds)
150	1.72	1.60 1.37	65 to 85 208 to 228
151	2.03	1.60 1.37	65 to 85 105 to 125

Spring Check Data
Figure 301

REPAIR

1. Repair (Fig. 1101)

   A. Repair minor defects using standard industry practices.

   B. If following parts are worn beyond limits shown in Fig. 601 rework as follows:

      (1) Frames (173 and 180)

         (a) Machine hole as required, within maximum dimension shown in Fig. 401.

         (b) Install applicable aluminum alloy bushing (0.040-inch minimum wall thickness), (7075-T6, 7075-T73, 2024-T3 or 2024-T4) per 20-50-03, with bushing interference shown in Fig. 401.

Ref Letter Fig. 601	Maximum Hole Diameter (inches)	Bushing Interference (inches)	
		Minimum	Maximum
A, J	0.8693	0.0005	0.0010
B, K	1.4943	0.0010	0.0030
C, L	1.6210	0.0010	0.0030
D, M	1.4335	0.0010	0.0030

Rework of Frames
Figure 401

(2) Trunnion (161)

(a) Machine holes through trunnion as required, within 0.3800 inch maximum diameter.

(b) Make two oversize bushings per Fig. 401A to replace bushings (163).

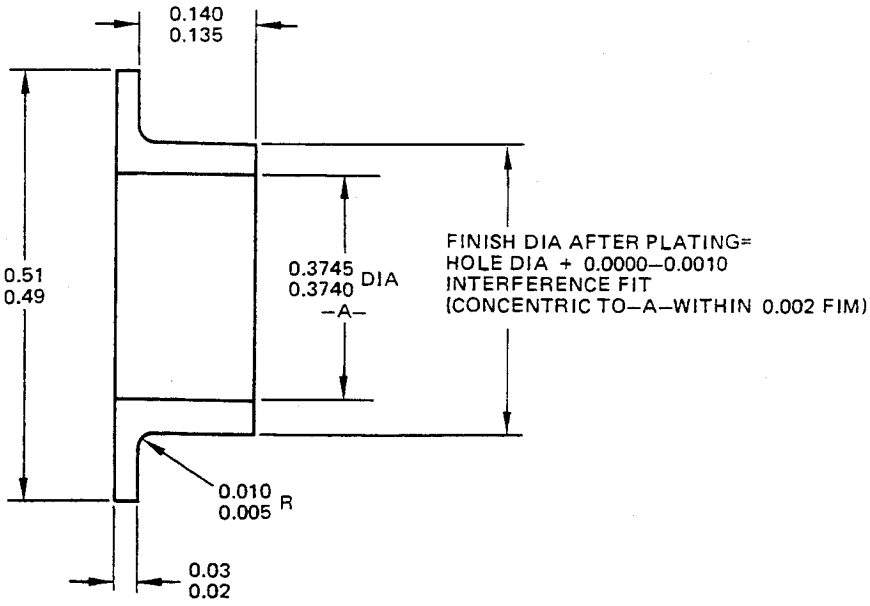
(c) Install replacement bushings per 20-50-03.

(3) Lower scissor link (160).

(a) Machine ID to 0.3300 inch maximum.

(b) Install applicable steel bushing with 0.0010-0.0030 inch bushing interference.

(c) Ream bushing to 0.250-0.251 -inch diameter.



CADMIUM PLATE (F-4.201) EXCEPT ON ID

MATERIAL: AL-BRONZE OR AL-NI-BRONZE

BREAK SHARP EDGES

ALL DIMENSIONS ARE IN INCHES

Oversize Bushing Details
Figure 401A

2. Refinish (Fig. 1101)

NOTE: Refer to SOPM 20-30-02 for stripping of protective finishes and to SOPM 20-41-01 for decoding of F and SRF finish symbols and their BAC equivalents.

A. If painted or plated surfaces are worn or chipped, refinish listed items as indicated in following steps:

(1) Cover assembly (7, P/N 65-51683-1) -- Manually apply colored film (F-2.940) to metal parts only, then apply one coat primer, BMS 10-11, Type 1 (SRF-12.205) all over.

(2) Cover assembly (7, P/N 69-59043-1, -4, -7) -- Alodize or chromic acid anodize and apply BMS 10-11, Type 1 primer (SRF-2.30) all over, plus BMS 10-60, white enamel (SRF-14.9812) on 69-59043-4, -7.

(3) Bolt (11), nut (13), bushings (32, 96, and 135), guard (38A), spacers (59, 69-40325-1; 71, 69-40325-1; 133, 69-40324-2), and washers (69 and 81) -- Cadmium plate (F-1.1926) all over.

(4) Spacers (14 and 15) -- Chromic acid anodize and apply one coat primer, BMS 10-11, Type 1 (SRF-2.19) all over.

(5) Bracket assemblies (19, 69-38901-1, -4) and (24, 69-40318-1) -- Apply one coat primer, BMS 10-11, Type 1 (F-20.02) all over except on bearings.

(6) Bracket assemblies (24, 69-40318-4) -- Apply no finish (F-25.01).

(7) Bracket (20, 69-38901-2) -- Cadmium-titanium plate and apply post-plate treatment (F-15.01) all over per SOPM 20-42-02. Material is 4340 bar, heat-treated to 180-200 ksi.

(8) Bracket (25, 69-40318-2) -- Cadmium-titanium alloy plate (F-1.308) all over per SOPM 20-42-02. Material is 4340 bar, heat-treated to 180-200 ksi.

(9) Bracket (25, 69-10318-5) -- Cadmium-titanium plate and apply post-plate treatment (F-15.01) and apply one coat primer, BMS 10-11, Type 1 (SRF-20.02) all over except in holes, per SOPM 20-42-02. Material is 4340 bar, heat-treated to 180-200 ksi.

(10) Lever (86, 65-52299-2 and -4), and Bolt (94) -- Cadmium-titanium alloy plate (F-1.181) all over per SOPM 20-42-02. Material is 4340 bar, heat-treated to 180-200 ksi.

(11) Filler (21) -- Chromic acid anodize (F-17.04) all over.

(12) Filler (26, 69-40318-3) -- Chromic acid anodize (F-2.20) all over.

(13) Filler (26, 69-40318-6) -- Chromic acid anodize or Boric acid - sulphuric acid anodize (F-17.31) all over, then apply one coat of BMS 10-11, Type 1 primer (F-20.02) all over.

(14) Bracket (30) -- Cadmium-titanium alloy plate (F-1.181) all over and apply teflon-filled coating (SRF-14.9624) per Fig. 402. Material is 4340 bar, heat-treated to 180-200 ksi.

(15) Couplings (50, P/N 65-51681-1, 54, P/N 65-51681-2, -4) -- Cadmium-titanium alloy plate (F-1.181) all over and apply one coat primer, BMS 10-11, Type 1 (SRF-12.205) except on splines.

(16) Shafts (58, P/N 69-38907-1, -3; 70, P/N 69-38907-2, -4) -- Cadmium plate (F-1.1926) per Fig. 402. Material is CRES 17-4PH per AMS 5643, heat-treated to 180-200 ksi.

(17) Spacers (59, P/N 69-40325-2; 64; 71, P/N 69-40325-2; 76; 133, P/N 69-40324-4) -- Chromic acid anodize (F-2.20) all over.

(18) Quadrants (60, 65, 72, 77, 87) -- Chromic acid anodize and apply one coat primer, BMS 10-11, Type 1 (SRF-2.19) plus BMS 10-60 white enamel (SRF-14.9812) all over except no primer or paint on inside diameter of shaft holes.

(19) Shafts (92, P/N 65-53599-1, -4), rod (147), retainer (149), and pins (166) -- Cadmium plate (F-1.1926) all over. Material is 4340 bar, heat-treated to 180-200 ksi.

(20) Strap (97A) -- Alodize or chromic acid anodize and apply one coat primer, BMS 10-11, Type 1 (SRF-2.30) and BMS 10-60 white enamel (SRF-14.9812) all over.

(21) Levers (103, 131, 143, P/N 65-75324-1, -3), clevis (113), and links (120, 140, 142, 160) -- Alodize or chromic acid anodize and apply one coat primer, BMS 10-11, Type 1 (SRF-2.30) all over except no primer in bearing holes.

(22) Lever (106) -- Apply one coat primer, BMS 10-11, Type 1 (SRF-12.205) per Fig. 402. Material is 17-4PH per AMS 5643, heat-treated to 180-200 ksi.

(23) Tube (111), lever (143, P/N 65-51679-1, 2, -3), and cover (148) -- Chromic acid anodize and apply one coat primer, BMS 10-11, Type 1 (SRF-2.19) all over except no primer in bearing holes.

(24) Plug (112) -- Chromic acid anodize and apply one coat primer, BMS 10-11, Type 1 (SRF-2.19) all over except no primer on threads and on entire length of 0.625-inch diameter surface.

(25) Springs (150, 151) -- Cadmium plate and apply two coats primer, color Y (SRF-1.92) all over.

(26) Spacer (150A) -- Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Plus, apply BMS 10-11, Type 1 primer (F-20.03) except do not apply primer in the thru hole in center of spacer. Optional to the above -- chemical treat and apply BMS 10-11, Type 1 primer (F-18.06), except do not apply primer in the thru hole in the center of spacer.

(27) Trunnion (161) -- Alodize or chromic acid anodize and apply one coat primer, BMS 10-11, Type 1 (SRF-2.30) all over per Fig. 402.

(28) Bushing (163) -- Cadmium plate (F-4.201) except on inside diameter.

(29) Frames (173 and 180) -- Sulfuric acid anodize (F-2.201) plus apply one coat primer, BMS 10-11, Type 1 (SRF-12.205) and BMS 10-60 white enamel (SRF-14.9812) all over except no paint or primer in bearing holes.

(30) Spacer (188) -- Alodize or chromic acid anodize and apply one coat primer, BMS 10-11, Type 1 (SRF-2.30) all over except no primer in 0.165 and 0.3105-inch diameter holes.

(31) Solid link (138E) -- Boric acid-sulfuric acid anodize or chromic acid anodize (F-17.31). Apply two coats of primer, BMS 10-11, Type 1 (F-20.03) all over except no primer in bearing holes.

3. Replacement

A. Replace all parts damaged beyond simple repair.

B. Replace all lockwire and cotter pins at each overhaul.

C. If bearings require replacement, press out bearing and install new bearing per SOPM 20-50-03. Install bearings (22, 104, 107, 121, 132, 141, 175, 176, 177, 178, 183, 184, 185, and 186) with wet BMS 10-11, Type 1 primer.

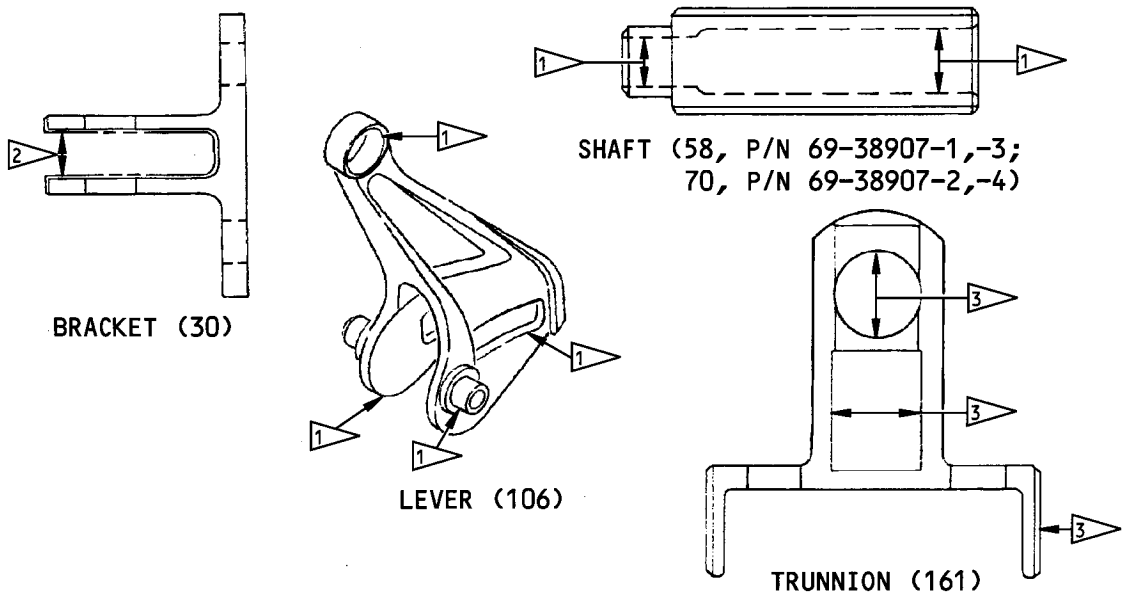
D. If bushing (163) is worn beyond limits stated in Fig. 601 replace with applicable oversize bushing.

E. If fillers (21, 26) are separated from brackets (20, 25), install filler (21, 26) into bracket (20, 25) per SOPM 20-50-12, Type 38.

4. Materials

A. Primer -- BMS 10-11, Type 1

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



1 NO FINISH ON THESE SURFACES

2 APPLY SRF-14.9624 ON THESE SURFACES

3 NO PRIMER ON THESE SURFACES

Refinish Diagram
Figure 402

1653314

ASSEMBLY

1. General

   A. Insert bearings (124, 137, 142A) with corrosion preventive compound, MIL-C-11796 applied to outer race contact surfaces. Install pins (166) with corrosion preventive compound applied to all contact surfaces.

   B. Apply grease, MIL-G-23827, to all mating splines prior to assembly. Apply grease to all contact surfaces of parts specified in assembly instructions below.

   C. Any combination of light and regular washers may be used to align slots in castellated nuts with holes in bolts, to permit installation of cotter pins.

   D. On assemblies 65-46370-24, -26, -27, -28, install bearing (138F) with sealant BMS 5-95 and roller swage housing over bearing per SOPM 20-50-03.

2. Assemble Ratio Changer (Fig. 1101)

   A. Attach pins (166) to link assembly (139) and link (142), using washers (165) and nuts (164).

   B. Place bushings (163) in trunnion (161). Insert trunnion into spacer (188) and attach link assembly (139) and link (142) with bolts (167, 168), washer (169), spacer (170), and collars (171).

   C. Insert teflon bushing (162) and bungee rod (147) into trunnion (161). Insert bearing (142A) into link (142). Connect lower scissor link (160) to upper scissor assembly (138) and bungee rod, with bolts (152, 156), washers (153, 157), and nuts (154, 158). Tighten nuts to 12-15 lb-in. and install cotter pins (155, 159).

   D. Assemble bungee assembly for assemblies 65-46370-3 thru -21 (Fig. 501)

      (1) Place retainers (149), springs (150, 151), washers (146), and nut (145) on bungee rod (147). On assembly 65-46370-21 use five washers (146) and shim (146A) when using optional cover (148, P/N 69-49784-2). Tighten nut (145) until distance "A" between upper surface of upper retainer and lower face of trunnion (161) is approximately 1.70 in. Check spring preload and adjust nut (145) as necessary to obtain spring preload of 260-285 lb for 65-46370-3 thru -20 or 360-385 lb for 65-46370-21.

      (2) Screw cover (148) to finger-tight contact with upper retainer (149). Loosen nut (145) and rotate cover minimum amount to align a slot with lockwire hole in trunnion (161). Check that spring load is still 260-285 lb. Install lockwire and seal. Check that seal clears all components through total travel.

      (3) Tighten nut (145) finger-tight against upper retainer (149) and install nut (144). Hold nut (145) while tightening nut (144) to 14-20 lb-in.

(4) Check that there is no free play between cover (148) and nut (145), or equivalently, that there is no relative movement between upper scissors link assembly (138) and lower scissors link (160). Adjust nuts (144, 145), as necessary, per step (3) above to eliminate movement.

E. Assemble bungee assembly 65-46370-23 (Fig. 1101).

(1) Place spacers (150A, 150B), washers (146), nuts (144, 145) on bungee rods (147).

(2) Screw cover (148) to finger-tight contact with spacer (150B). Rotate cover minimum amount to align a slot with lockwire hole in trunnion (161). Install lockwire and seal. Check that seal clears all components through total travel.

(3) Tighten nut (145) finger-tight against spacer (150A) and install nut (144). Hold nut (145) while tightening nut (144) to 14-20 lb-in.

(4) Check that there is no free play between cover (148) and nut (145), or equivalently, that there is no relative movement between upper scissors link assembly (138) and lower scissors link (160). Adjust nuts (144, 145), as necessary per step (3) above to eliminate movement.

F. On assemblies 65-46370-3 thru -21, -23, insert bearing (137) into upper scissor link assembly (138). On assemblies 65-46370-24, -26, -27, -28, insert bearing (138F) into solid link assembly (138). Install bushings (135) in fork lever (143) with grease, then attach fork lever to link assembly with lockbolts (136) and collars (134).

G. Insert bearing (124) in lever (130). Apply grease to wear surfaces of lever. Attach lever to lower scissor link (160) on assemblies 65-46370-3 thru -21, -23 or solid link (138E) on assemblies 65-46370-24, -26, -27, -28, with bolt (122), washers (123), and nut (125). Tighten nut to 12-15 lb-in. and install cotter pin (126).

H. Connect link assembly (119) to fork lever (143) with bolt (115), washer (116), and nut (117). Tighten nut to 12-15 lb-in. and install cotter pin (118).

I. Assemble rod assembly (110) by installing clevis (113) onto tube (111) with wet BMS 10-11 (F-20.06).

J. Apply grease to wear surfaces of lever (105) and attach rod assembly (110) to lever with lockbolt (108) and collar (109).

K. Apply grease to bushing (96) and bolt (93) or bolt assembly (93). Insert bushing into output lever (102). Attach output lever and lever (105) to link (119) with bolt or bolt assembly (93), bearings (98), washer (99), and nut (100). Tighten nut to 12-15 lb-in. and install cotter pin (101). Bend ends of cotter pin back around nut and push into slots in nut. Fill lubrication fitting in bolt assembly (93) with grease and remove excess.

L. Apply grease to wear surfaces of lever (86). Connect lever to lever (102) with bolt (82), washer (83), and nut (84). Tighten nut to 50-70 lb-in. and install cotter pin (85).

M. Install bolt (187), if replaced, into frame (180) and insert (181).

N. On assemblies 65-46370-3 thru -12, -15, install linkage as follows:

(1) Apply grease to shaft (92) and insert shaft into input lever assembly (130). Align center groove in shaft with bolt (127), washer (128), and nut (129). Tighten nut to 50-70 lb-in.

(2) Apply grease to spacers (91, 133) and quadrants (87). Position spacer (91) and quadrants on shaft (92). Install bolts (88), washers (89), and nuts (90). Tighten nuts to 50-70 lb-in.

(3) Insert one spacer (133) into bearing (183) in forward frame assembly (179). Install assembled parts into frame by inserting shaft (92) into spacer (133), lug on lever (105) into bearing (185), and lug on lever (86) into bearing (184).

O. On assemblies 65-46370-13 and -14, -16 thru -19, -20, -21, -23, -24, -26, -27, -28, install linkage as follows:

(1) Apply grease MIL-PRF-23827 to spacers (133) and splined shaft of no-back assembly (191). Insert one spacer into bearing (183) in forward frame assembly (179), then insert no-back assembly shaft from opposite side of frame.

(2) Install assembled linkages into frame by positioning input lever assembly (130) on no-back shaft and inserting lug on lever (105) into bearing (185) and lug on lever (86) into bearing (184).

(3) Install bolt (127), washer (128), and nut (129) to secure input lever to no-back shaft. Tighten nut to 50-70 lb-in.

P. Apply grease to contact surfaces of quadrants (60, 65, 72, 77), shafts (58, 70), spacers (64, 76). Position quadrants (65, 77) on shafts (58, 70). Install spacers (64, 76) and position quadrants (60, 72) on quadrant shafts. Install bolts (61, 66, 73, 78), washers (62, 67, 74, 79), and nuts (63, 68, 75, 80). Tighten nuts to 50-70 lb-in.

Q. Install washers (69, 81) on quadrant shafts (58, 70) and insert shafts into bearings (185) in forward frame (179).

R. Place spacers (14, 15) in position. Apply grease to spacers (59, 71) and install on quadrant shafts. Install remaining spacer (133) on shaft (92) or no-back assembly (191). Install aft frame (172).

S. Install spacer (43) on bolt (42) and insert bolt through forward frame (179), spacer (15), aft frame (172), and shield (190). Install washer (44), and nut (45) and tighten nut to 50-70 lb-in.

T. Install bolts (46, 46A, 46B), washers (47, 47A, 48), bushing (47B), and nuts (49). Install bolts (38, 38A), spacers (39), washers (40), and nuts (41). Install bolt (34), spacer (35), washer (36), and nut (37). Tighten nuts (37, 41, 49) to 50-70 lb-in.

U. Attach bracket (30) to forward frame (179) and shield (189) to aft frame (172) with bolts (27), washers (28), and nuts (29). Attach bracket (19) to forward frame (179) and shield (190) to aft frame (172) with bolt (16), washer (17), and nut (18).

V. Attach bracket (24) to forward frame (179) and strap (97) to aft frame (172) with bolt (16), washer (17), and nut (18). Install bolt (11) through remaining holes in brackets (19, 24) and install washers (12), as required, and nuts (13). Install bolts (11) through forward frame (179), spacers (14), and aft frame (172) and install washers (12) and nuts (13). Tighten nuts (18, 29) to 50-70 lb-in. Tighten nuts (13) to 40-50 lb-in.

W. Apply grease to bushings (32). Insert bushings into fork lever (143). Connect fork lever to frames (172, 179) with lockbolts (33), and collars (31).

X. Check assembly rig position (Fig. 501).

(1) Adjust bolt (187) to obtain 37 degrees 45 minutes to 38 degrees rotation of lever (130).

(2) Insert 5/16-in. dia rig pin through speedbrake quadrant (87), or no-back (191) quadrant and frame assemblies (172, 179).

(3) Rotate input lever (105) to align centerline of missing spline tooth on lever (86) within one degree of line connecting centers of rotation of the two levers (105, 86). Hold levers in position.

(4) Remove rig pin and rotate speedbrake or no-back quadrant clockwise (as viewed from aft frame) until rollers (98) are at or very near the ends of slots (away from pivot) in input lever (105).

(5) With rollers held in position, check that rig pin can be inserted through quadrant and frames and removed freely, without binding.

(6) If rig pin cannot be inserted and removed freely, for assemblies 65-46370-3 thru -21, adjust scissor spring assembly as follows:

(a) Measure dimension "B" from top of bungee rod (147) to upper surface of cover (148).

(b) Remove cover (148) and measure distance "A" (Ref step D.(1)).

(c) Remove nuts (144, 145), washers (146), retainers (149), and springs (150, 151). Install laminated shim (149A) in trunnion (161) then install lower retainer (149).

(d) With shim tightly sandwiched between lower retainer and trunnion, and with retainer firmly seated on shoulder of bungee rod (147), adjust shim thickness until rig pin holes are aligned.

(e) Reassemble bungee assembly parts (144 through 151) per par. D except increase dimension "A" by shim thickness. Check that dimension "B" is unchanged and that spring preload is still 260-285 lb.

(7) If rig pin cannot be inserted and removed freely, for assembly 65-46370-23, adjust as follows:

(a) Remove cover (148), nuts (144, 145), washers (146) and spacers (150A, 150B). Install laminated shim (149A) in trunnion (161). Adjust shim thickness until rig pin holes align.

(b) Reassemble bungee assembly parts (144 thru 150B).

Y. Fasten cover (7) and upper end of strap (97) to frames (172, 179) with bolt (1), washers (2, 3), and nut (4). Install bolts (5) and washers (6). Tighten nut (4) to 50-70 lb-in.

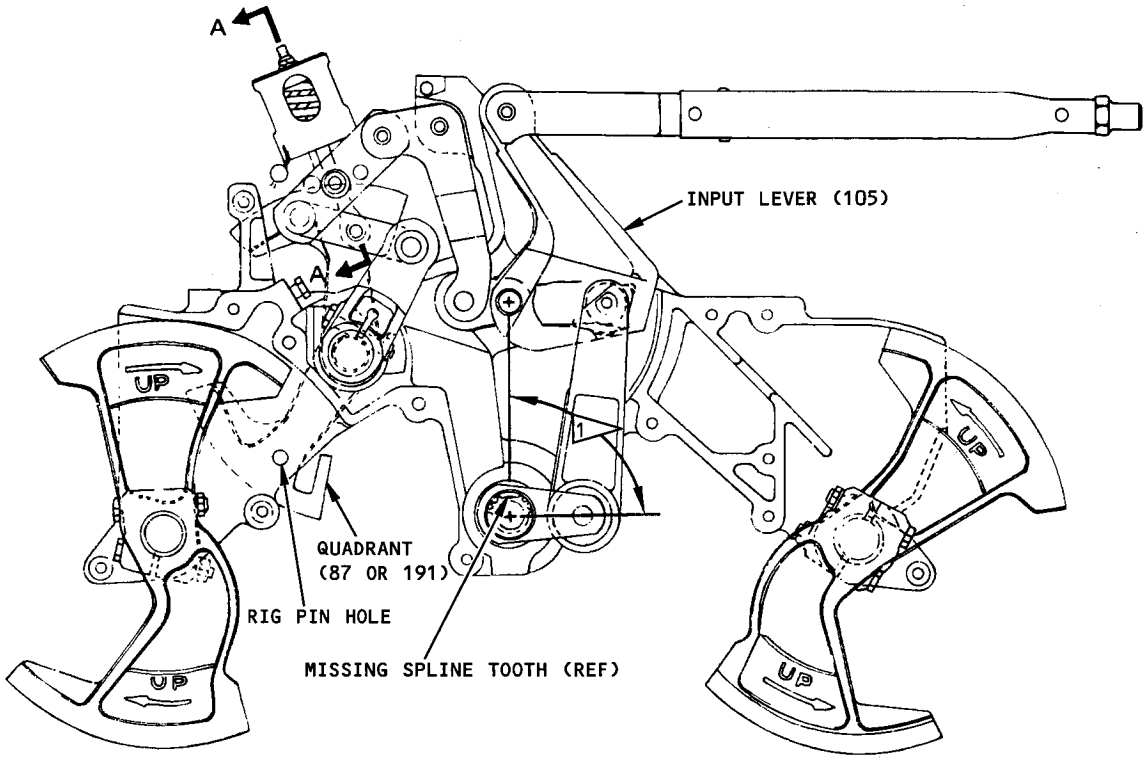
Z. Attach coupling (50) to shaft (92) or no-back assembly (191) with bolt (51), washer (52), and nut (53). Attach couplings (54) to quadrant shafts (58, 70) with bolts (55), washers (56), and nuts (57). Tighten nuts (53, 57) to 50-70 lb-in.

3. Materials

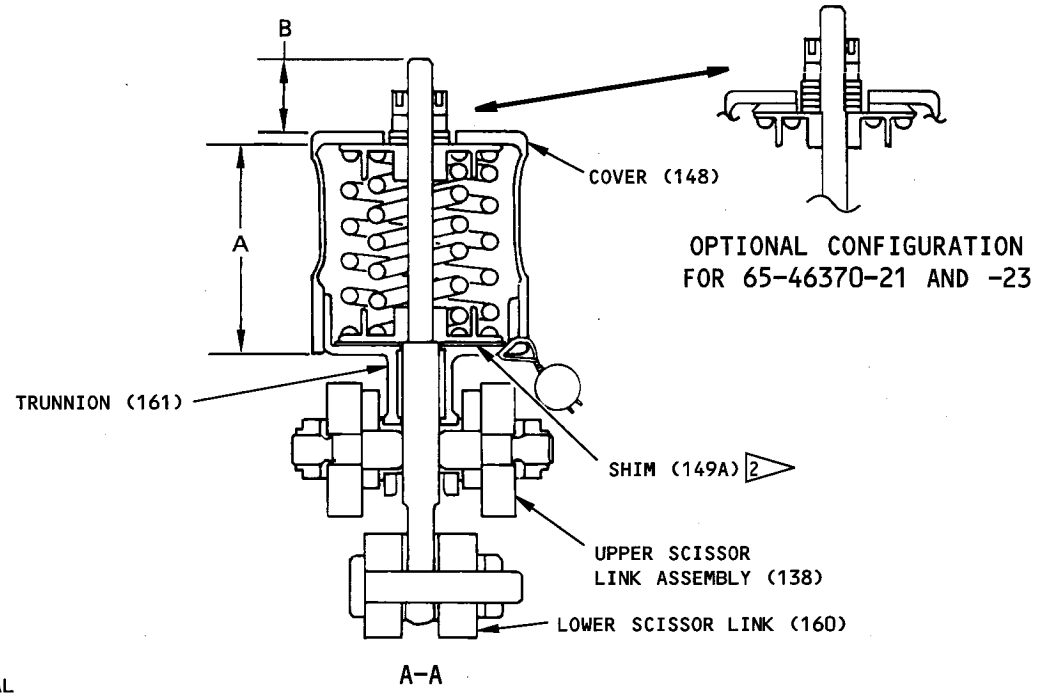
A. Corrosion Preventive Compound -- MIL-C-11796, class 3 (SOPM 20-60-03)

B. Grease -- BMS 3-33 or MIL-G-23827 (SOPM 20-60-03)

C. Primer -- BMS 10-11, Type 1, Grade A (SOPM 20-41-02)



1 93° 38' WHEN MISSING TOOTH IS ALIGNED (REF)



2 OPTIONAL

FOR 65-46370-3 THRU -21 AND -23

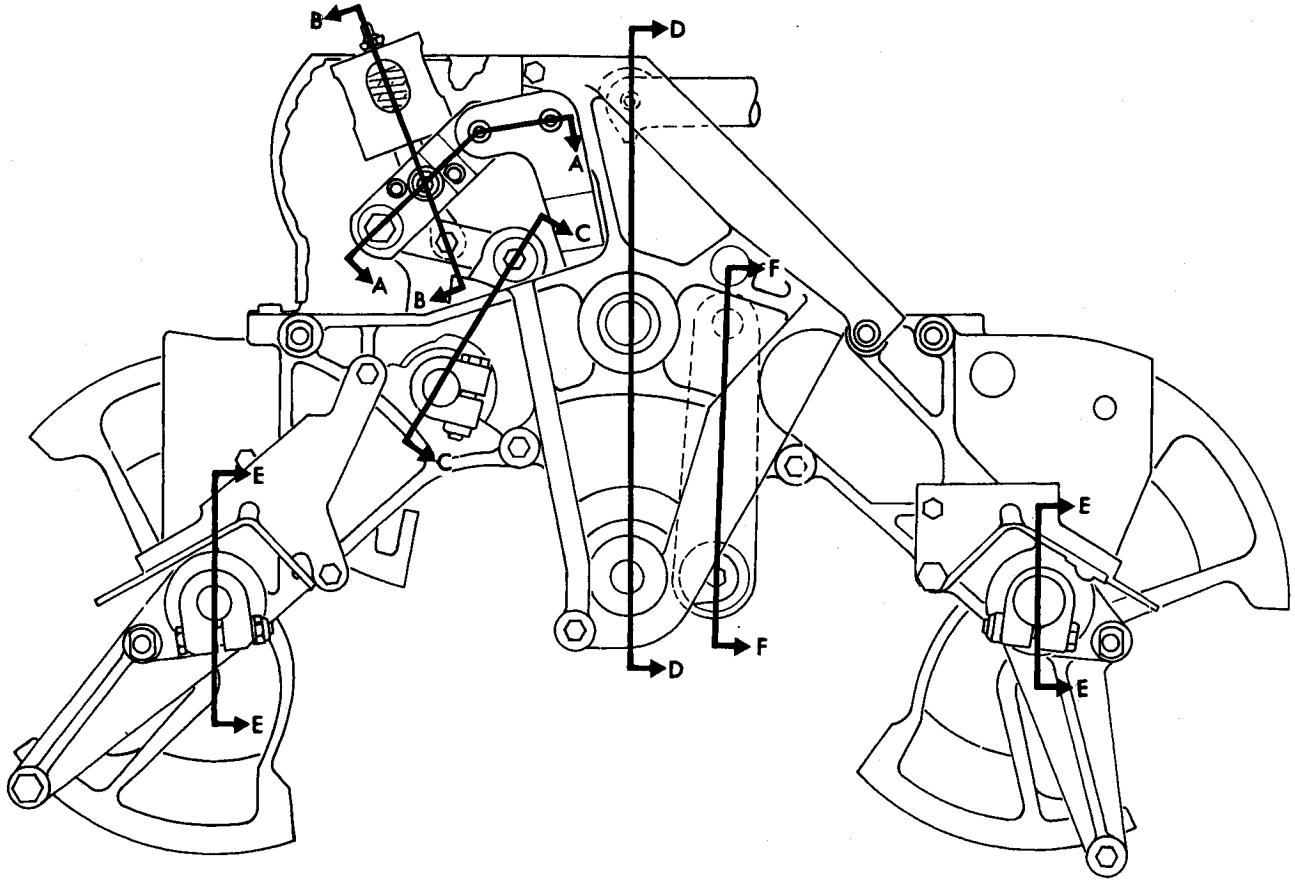
Assembly Rigging Details
Figure 501

L32235

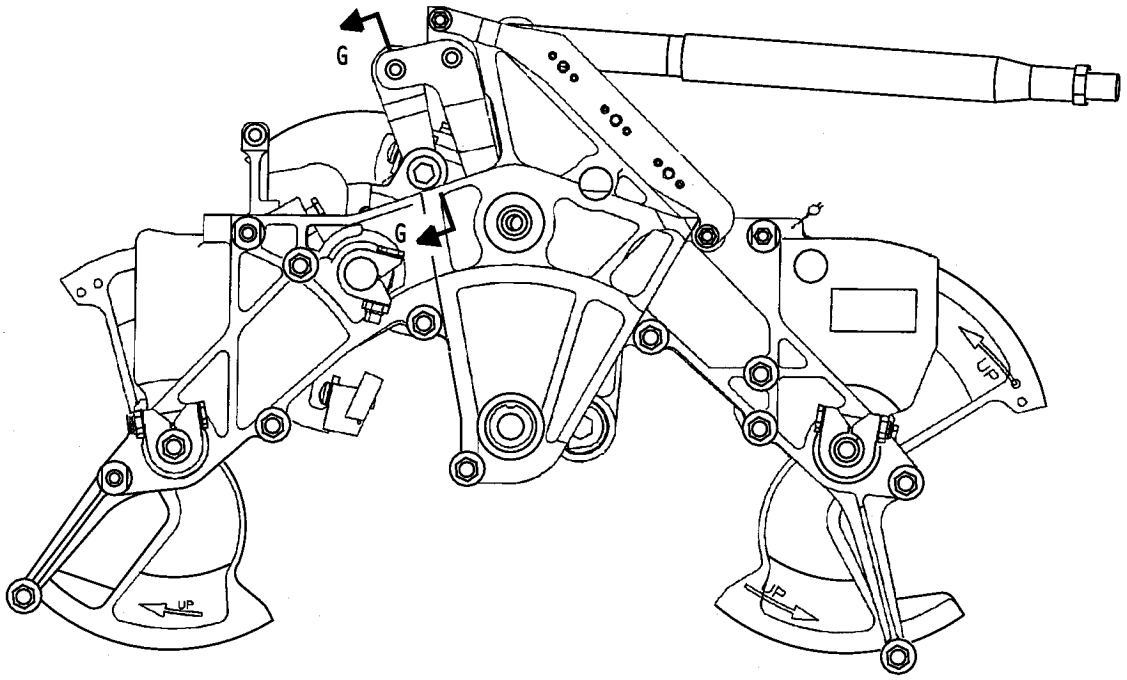
FITS AND CLEARANCES

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.



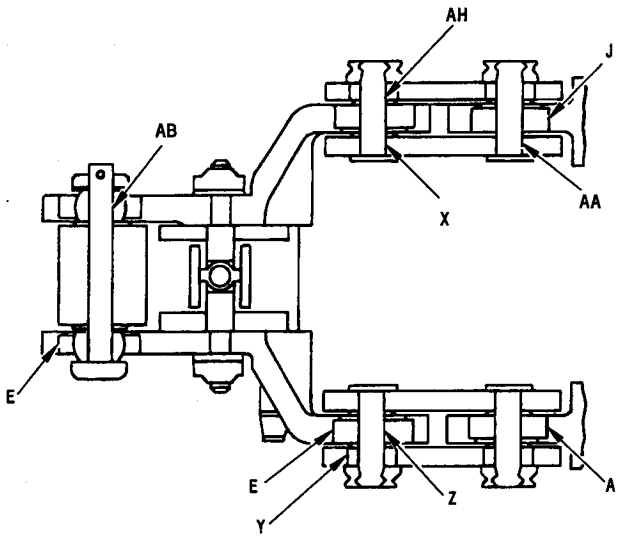
Fits and Clearances
Figure 601 (Sheet 1)



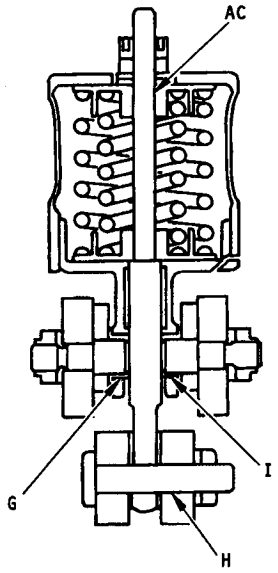
ASSEMBLIES 65-46370-24,-26,-27,-28

Fits and Clearances
Figure 601 (Sheet 1A)

W08322

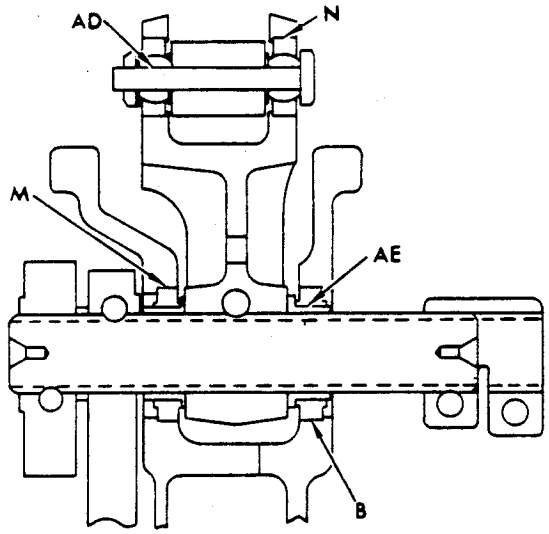


SECTION A-A

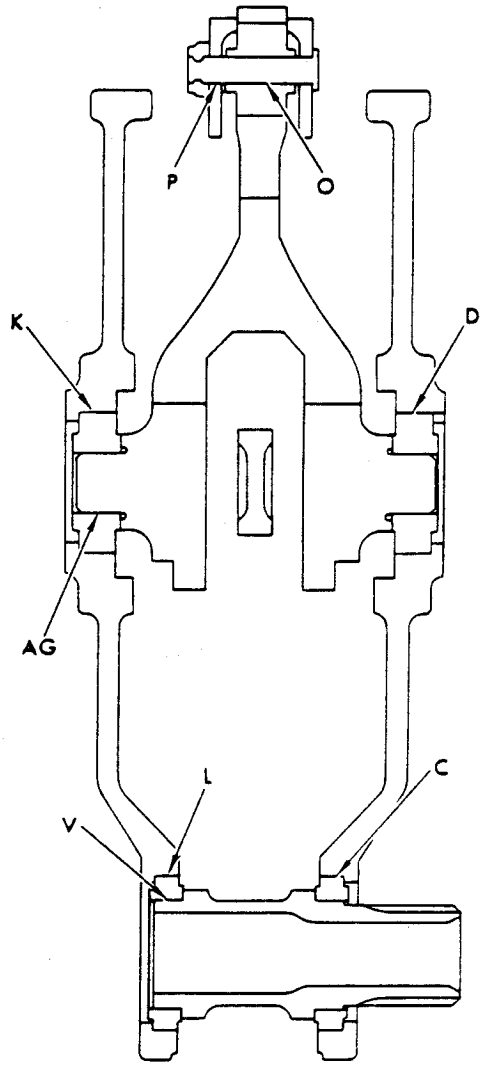


SECTION B-B

Fits and Clearances
Figure 601 (Sheet 2)



SECTION C-C



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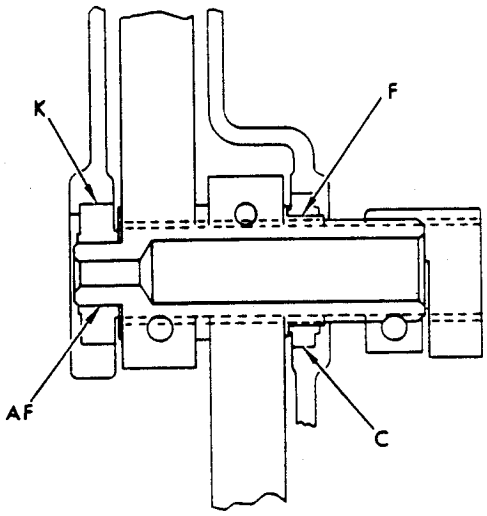
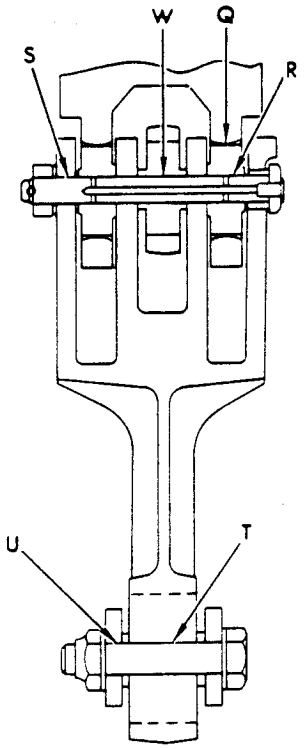
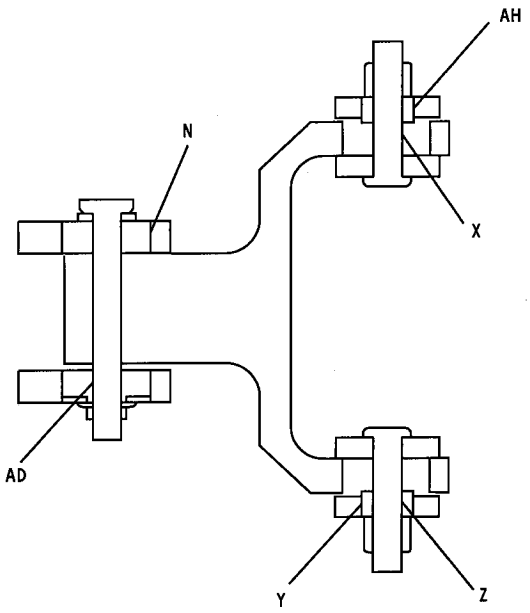


SECTION E-E



SECTION F-F



SECTION G-G
ASSEMBLIES 65-46370-24,-26,-27,-28

Fits and Clearances
Figure 601 (Sheet 4A)

W10759

Ref Letter Fig. 601	Mating Item No. Fig. 1101	Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
A	ID 173 OD 178	0.7488 0.7495	0.7493 0.7500	0.0012	0.0002	0.7495	0.7525	0.0030
B	ID 173 OD 177	1.3736 1.3745	1.3743 1.3750	*[1] 0.0014	*[1] 0.0002	1.3745	1.3785	0.0040
C	ID 173 OD 176	1.500 1.4990	1.5010 1.5000	0.0000	0.0020	1.4990	1.5030	0.0040
D	ID 173 OD 175	1.3125 1.3115	1.3135 1.3125	0.0000	0.0020	1.3115	1.3155	0.0040
E	ID 140 (65-46368-5) OD 141	0.7500 0.7495	0.7508 0.7500	0.0000	0.0013	0.7495	0.7525	0.0030
F	ID 176 OD 59,71	1.0618 1.0628	1.0632 1.0631	*[1] 0.0013	*[1] 0.0004	1.0622	1.0632	0.0010
G	ID 161 OD 163	0.3735 0.3740	0.3740 0.3745	*[1] 0.0010	0.0000	0.3735	0.3750	0.0015
H	ID 160 OD 152	0.2500 0.2485	0.2510 0.2495	0.0005	0.0025	0.2481	0.2540	0.0059
I	ID 163 OD 166	0.3115 0.3100	0.3125 0.3110	0.0005	0.0025	0.3090	0.3140	0.0050
J	ID 180 OD 186	0.7488 0.7495	0.7493 0.7500	*[1] 0.0012	*[1] 0.0002	0.7495	0.7495	0.0000

Fits and Clearances
Figure 601 (Sheet 5)

Ref Letter Fig. 601	Mating Item No. Fig. 1101	Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
K	ID 180	1.3736	1.3743	*[1] 0.0014	*[1] 0.0002		1.3745	0.0000
	OD 185	1.3745	1.3750			1.3745		
L	ID 180	1.5000	1.5010	0.0000	0.0020		1.5030	0.0040
	OD 184	1.4999	1.5000			1.4990		
M	ID 180	1.3125	1.3135	0.0000	0.0020		1.3155	0.0040
	OD 183	1.3115	1.3125			1.3115		
N	ID 131	0.7500	0.7508	0.0000	0.0013		0.7525	0.0030
	OD 132	0.7495	0.7500			0.7495		
O	ID 107	0.2495	0.2500	0.0000	0.0015		0.2500	0.0019
	OD 108	0.2485	0.2495			0.2481		
P	ID 113	0.2495	0.2505	0.0000	0.0025		0.2515	0.0035
	OD 108	0.2480	0.2495			0.2480		
Q	ID 106	0.8770	0.8790	0.0020	0.0050		0.8840	0.010
	OD 98	0.8740	0.8750			0.8740		
R	ID 98	0.2493	0.2500	*[1] 0.0002	0.0015		0.2500	0.0015
	OD 94	0.2485	0.2495			0.2485		
S	ID 103	0.2495	0.2505	0.0000	0.0020		0.2540	0.0059
	OD 94	0.2485	0.2495			0.2481		
T	ID 104	0.3120	0.3125	0.0000	0.0015		0.3125	0.0019
	OD 82	0.3110	0.3120			0.3106		

Fits and Clearances
Figure 601 (Sheet 6)

Ref Letter Fig. 601	Mating Item No. Fig. 1101	Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
U	ID 86	0.3120	0.3130	0.0000	0.0020		0.3165	0.0059
	OD 82	0.3110	0.3120			0.3106		
V	ID 184	1.0625	1.0632	0.0003	0.0014		1.0632	0.0018
	OD 86	1.0618	1.0622			1.0614		
W	ID 121	0.2495	0.2500	0.0000	0.0015		0.2500	0.0019
	OD 94	0.2485	0.2495			0.2481		
X	ID 143	0.2495	0.2505	0.0000	0.0020		0.2540	0.0059
	OD 136	0.2485	0.2495			0.2481		
Y	ID 143	0.4370	0.4380	0.0000	0.0020		0.439	0.0040
	OD 135	0.4360	0.4370			0.435		
Z	ID 141, 138F	0.2495	0.2500	0.0000	0.0020		0.2500	0.0020
	OD 136	0.2480	0.2495			0.2480		
AA	ID 143	0.2495	0.2505	0.0000	0.0025		0.2540	0.0060
	OD 33	0.2480	0.2495			0.2480		
AB	ID 141	0.2495	0.2500	0.0000	0.0015		0.2500	0.0019
	OD 156	0.2485	0.2495			0.2481		
AC	ID 149	0.1900	0.1910	0.0010	0.0025		0.1920	0.0040
	OD 147	0.1885	0.1890			0.1880		
AD	ID 132	0.2495	0.2500	0.0000	0.0015		0.2500	0.0019
	OD 122	0.2485	0.2495			0.2481		

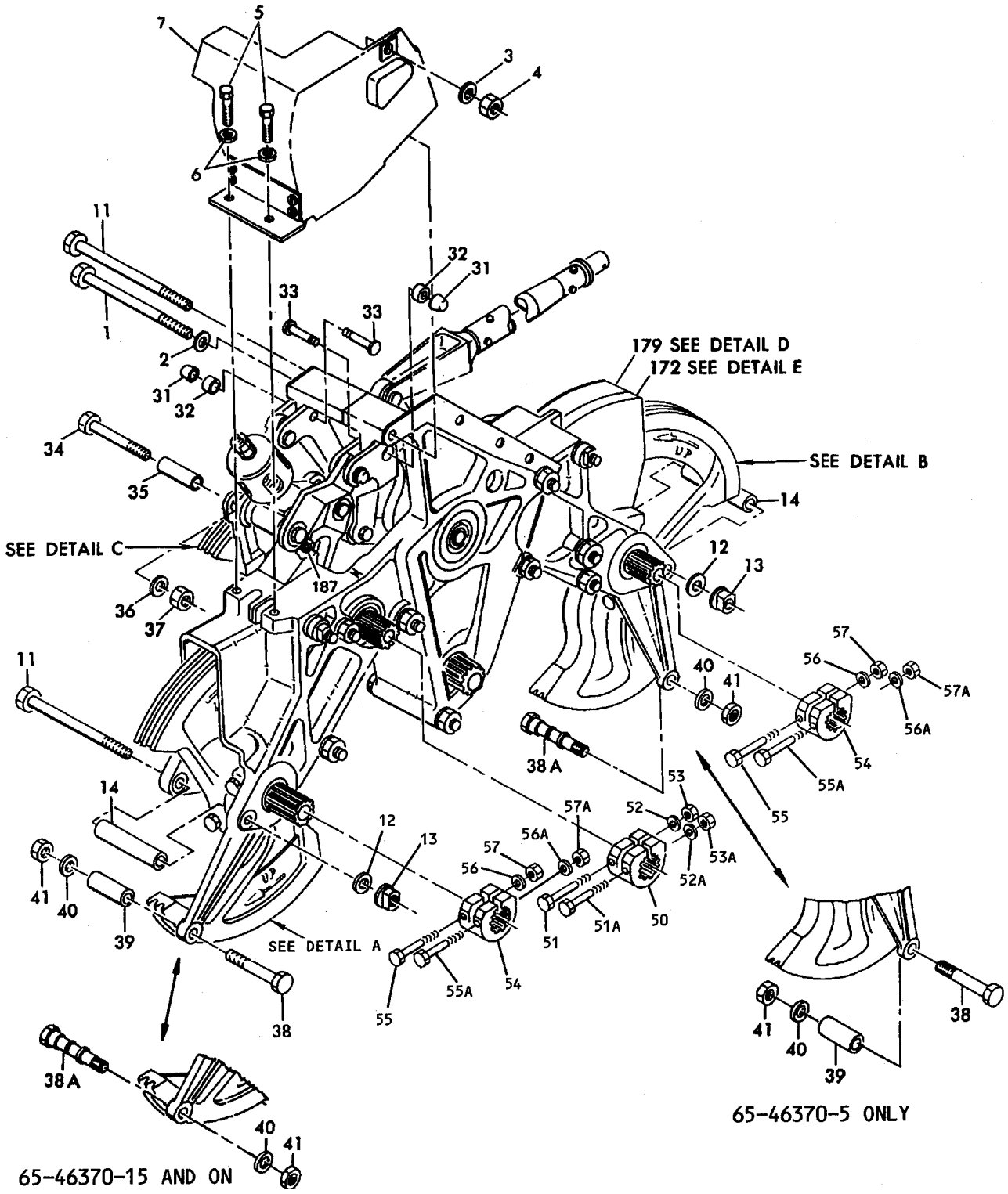
Fits and Clearances
Figure 601 (Sheet 7)

Ref Letter Fig. 601	Mating Item No. Fig. 1101	Design Dimensions				Service Wear Limits		
		Dimensions (inches)		Assembly Clearance (inch)		Dimension Limits (inch)		Maximum Allowable Clearance (inch)
		Min	Max	Min	Max	Min	Max	
AE	ID 176	0.8743	0.8757	*[1] 0.0013	0.0004		0.8757	0.0010
	OD 133	0.8753	0.8756			0.8747		
AF	ID 177,185	0.6245	0.6250	*[1] 0.0008	0.0000		0.6250	0.0010
	OD 58,70	0.6250	0.6253			0.6240		
AG	ID 185	0.6245	0.6250	0.0000	0.0010		0.6250	0.0050
	OD 106	0.6240	0.6245			0.6200		
AH	ID 135	0.2500	0.2505	0.0005	0.0025		0.2540	0.0060
	OD 136	0.2480	0.2495			0.2480		

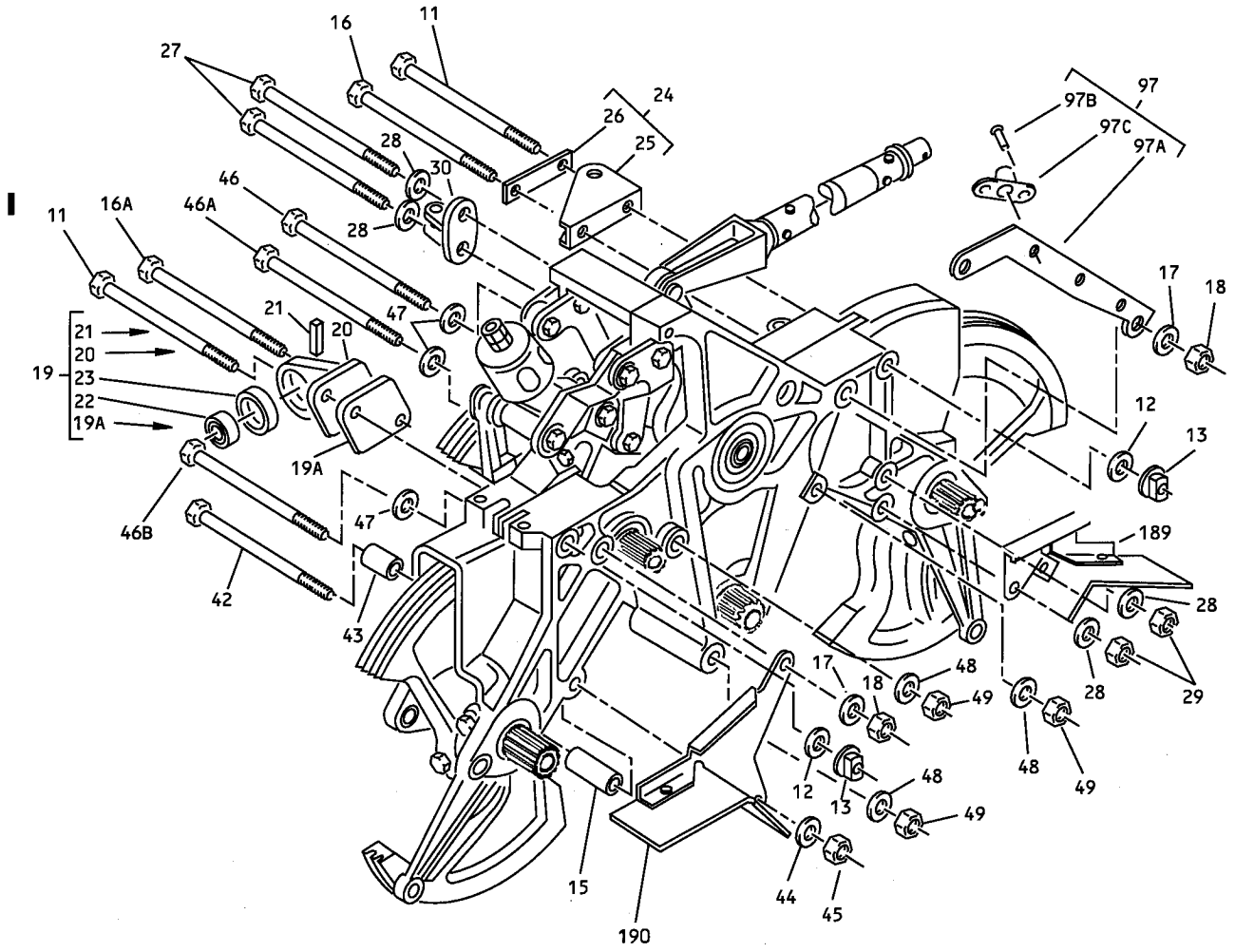
*[1] Interference fit

Fits and Clearances
Figure 601 (Sheet 8)

ILLUSTRATED PARTS LIST

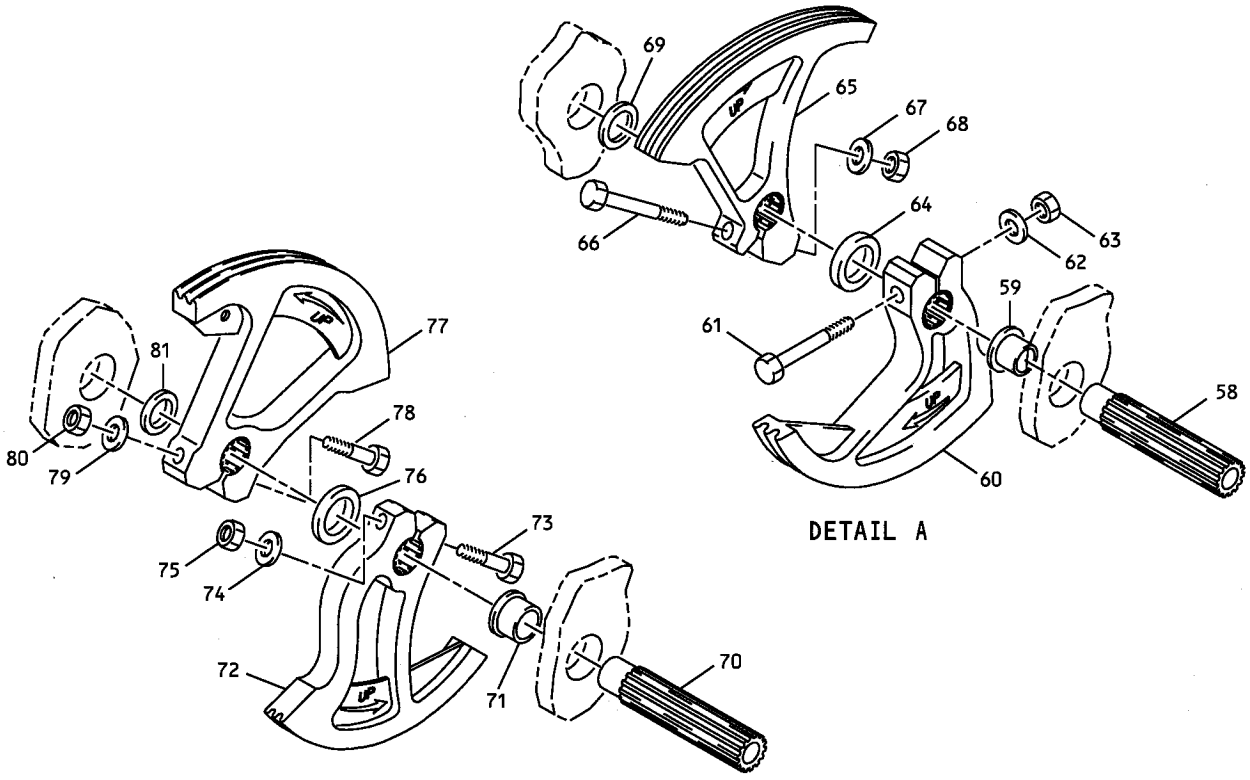


Ratio Changer Assembly
Figure 1101 (Sheet 1)



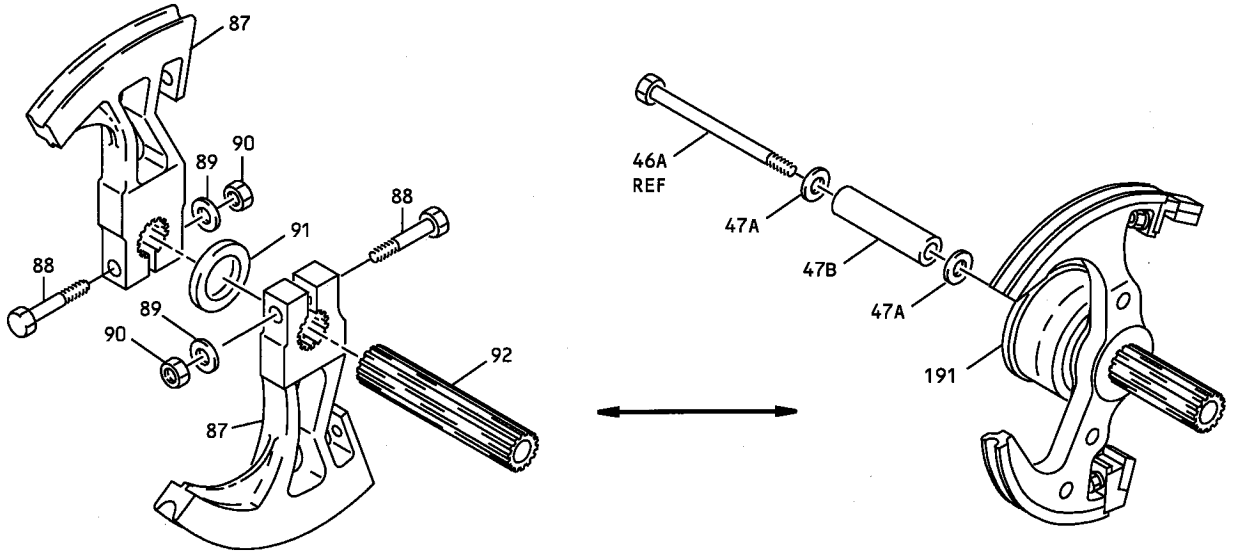
Ratio Changer Assembly
Figure 1101 (Sheet 2)

W07508



DETAIL A

DETAIL B



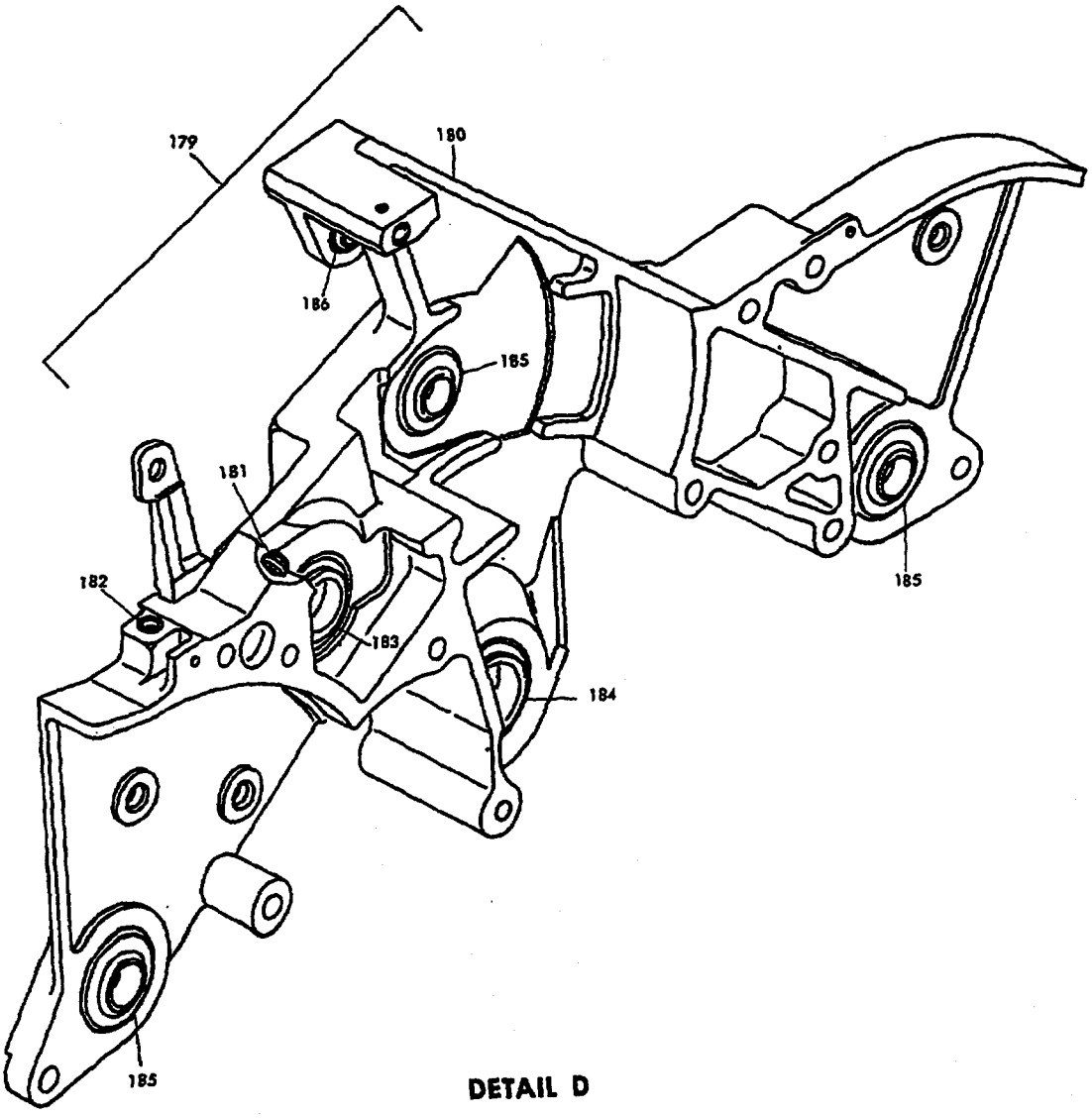
65-46370-3 THRU -12,-15

65-46370-13,-14,-16,-17,-18,
-19,-20,-21,-23,-24,
-26,-27,-28

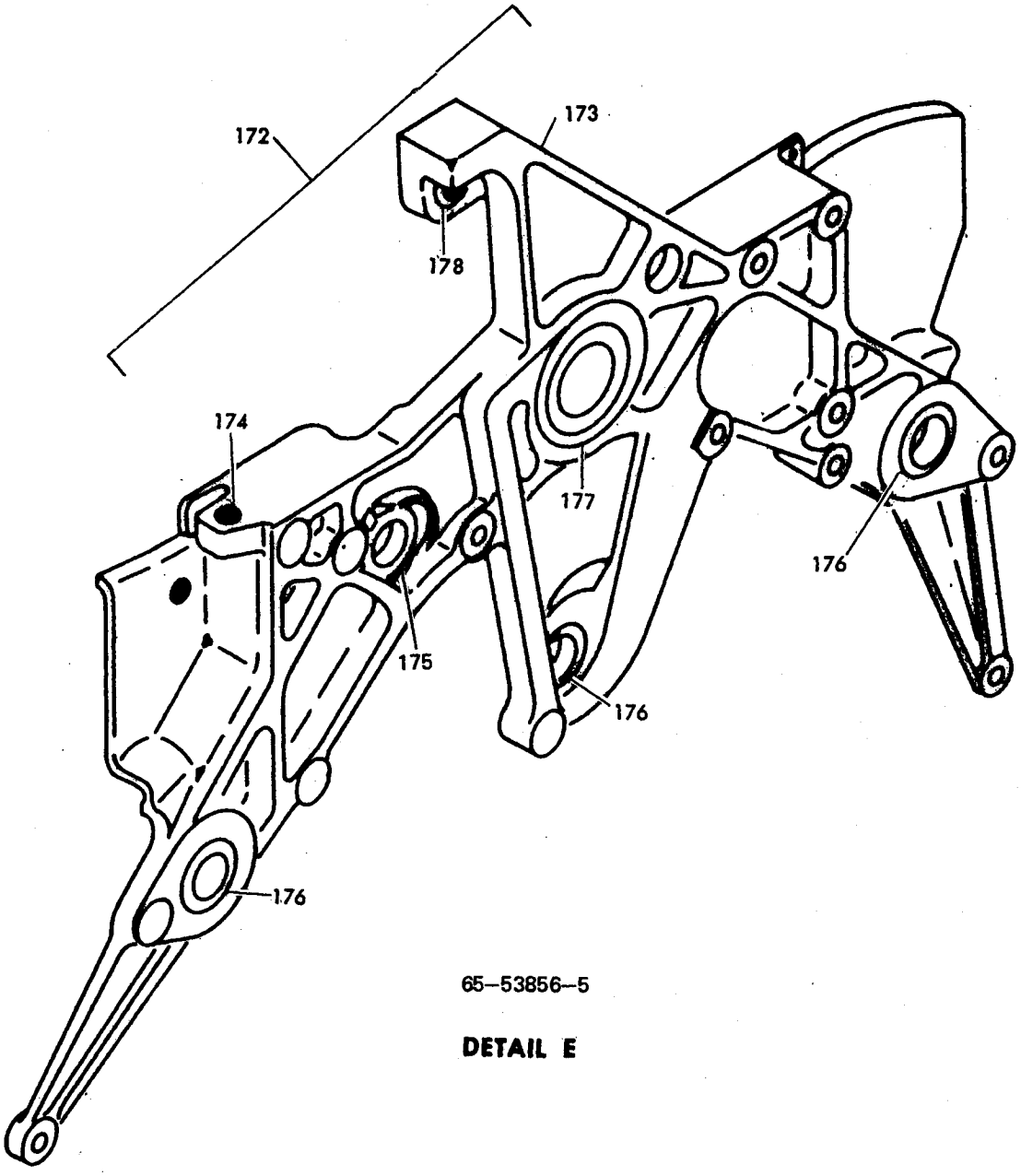
DETAIL C

Ratio Changer Assembly
Figure 1101 (Sheet 3)

803898

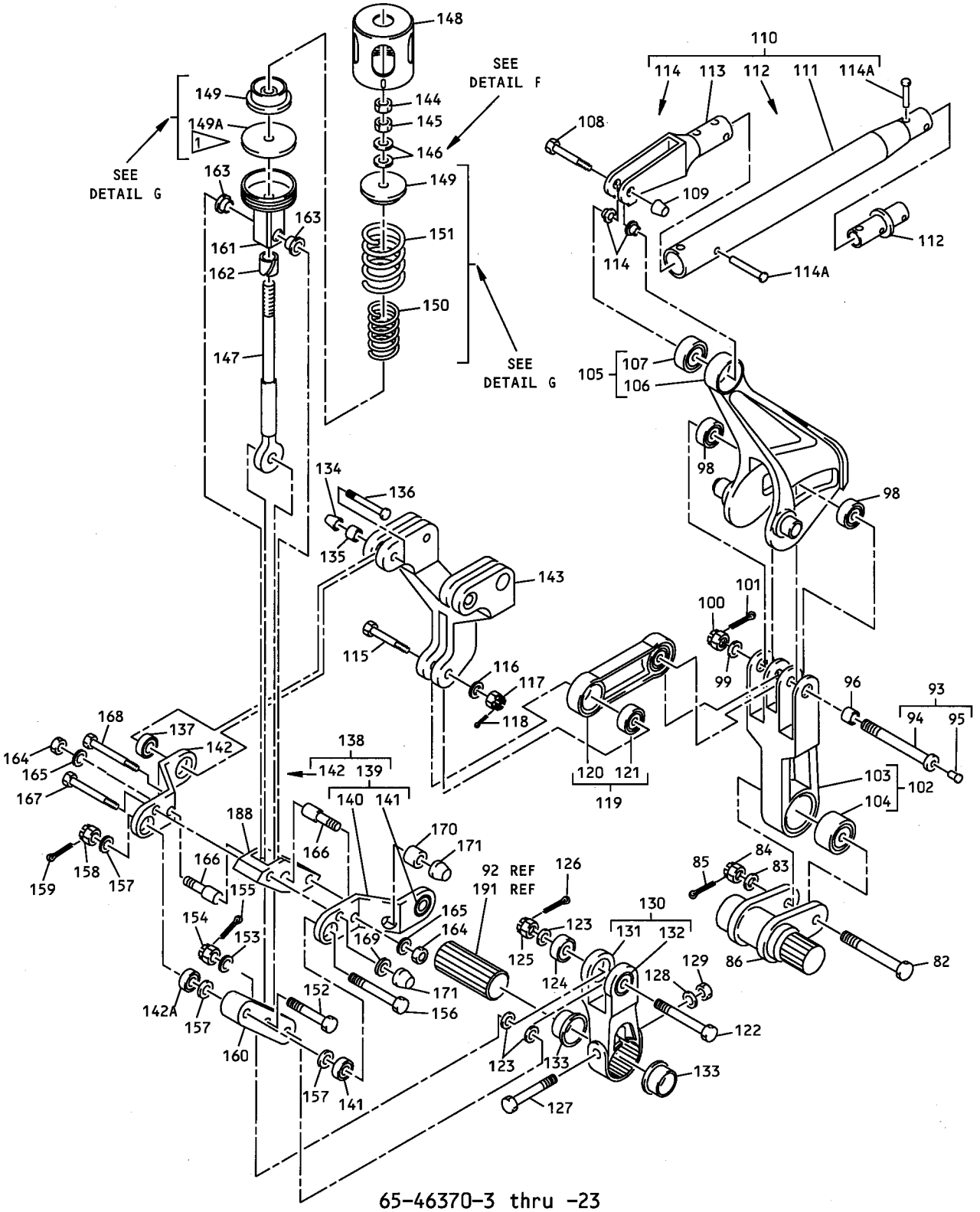


DETAIL D



65-53856-5

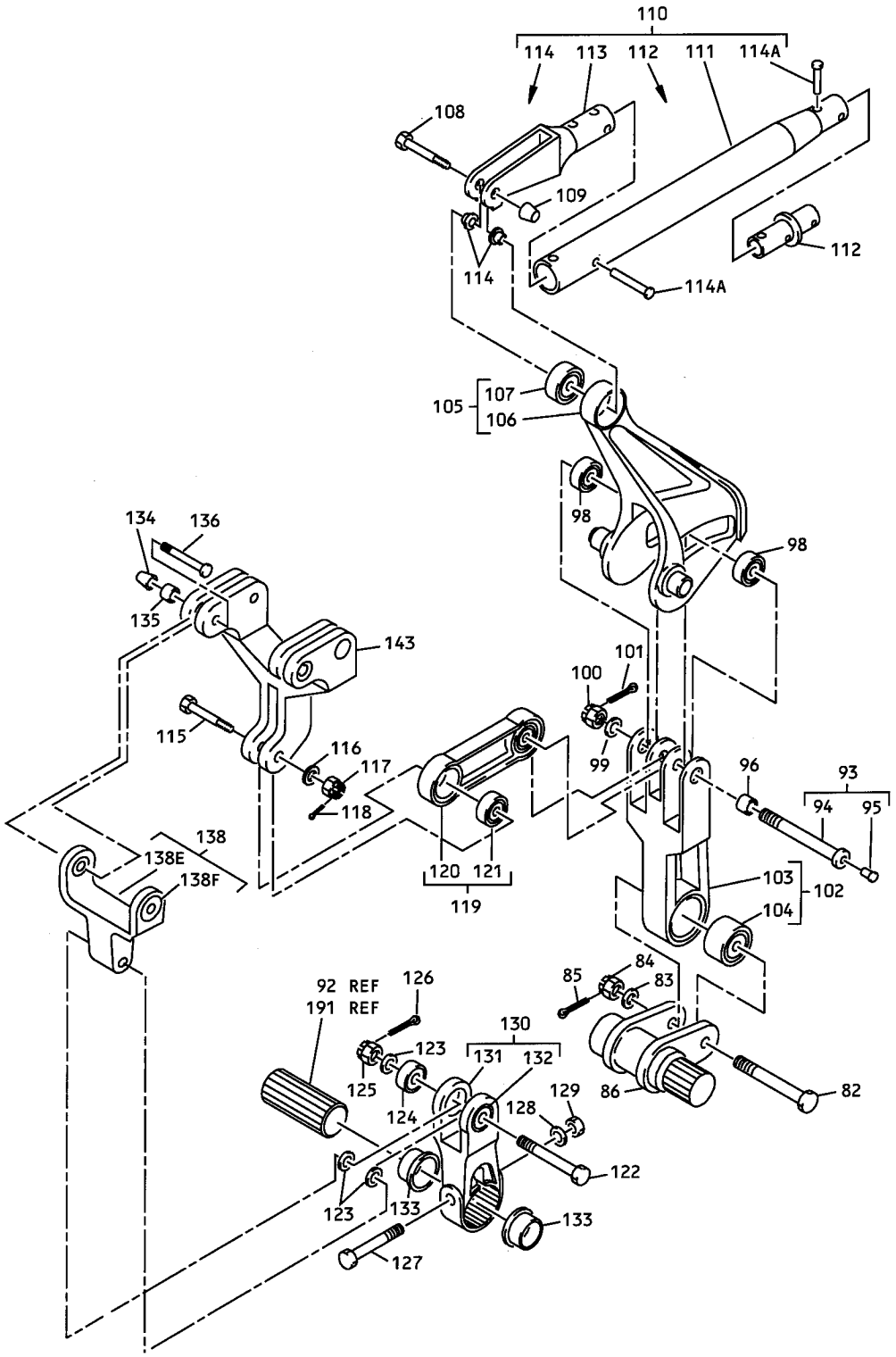
DETAIL E



65-46370-3 thru -23

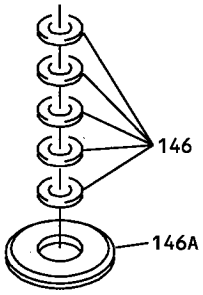
Ratio Changer Assembly
Figure 1101 (Sheet 6)

803829

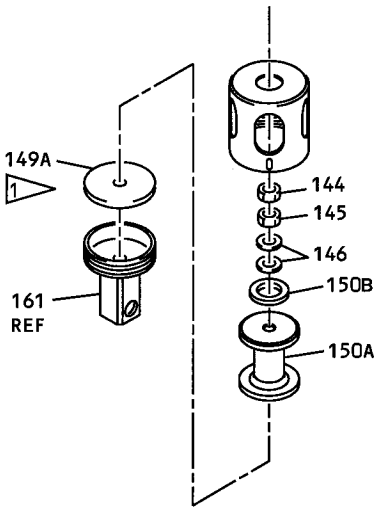


65-46370-24,-26,-27,-28
Ratio Changer Assembly
Figure 1101 (Sheet 6A)

WD6576



OPTIONAL FOR 65-46370-21
DETAIL F



FOR 65-46370-23 ONLY
DETAIL G

1 OPTIONAL

Ratio Changer Assembly
Figure 1101 (Sheet 7)

L32634

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
	65-46370-3		RATIO CHANGER ASSY	A	RF
	65-46370-4		RATIO CHANGER ASSY	B	RF
	65-46370-5		RATIO CHANGER ASSY	C	RF
	65-46370-6		RATIO CHANGER ASSY (SB 27-1017)	D	RF
	65-46370-7		RATIO CHANGER ASSY	E	RF
	65-46370-8		RATIO CHANGER ASSY	F	RF
	65-46370-9		RATIO CHANGER ASSY	G	RF
	65-46370-10		RATIO CHANGER ASSY	H	RF
	65-46370-11		RATIO CHANGER ASSY	I	RF
	65-46370-12		RATIO CHANGER ASSY	J	RF
	65-46370-13		RATIO CHANGER ASSY	K	RF
	65-46370-14		RATIO CHANGER ASSY	L	RF
	65-46370-15		RATIO CHANGER ASSY	M	RF
	65-46370-16		RATIO CHANGER ASSY	N	RF
	65-46370-17		RATIO CHANGER ASSY	O	RF
	65-46370-18		RATIO CHANGER ASSY	P	RF
	65-46370-19		RATIO CHANGER ASSY	Q	RF
	65-46370-20		RATIO CHANGER ASSY	R	RF
	65-46370-21		RATIO CHANGER ASSY	S	RF
	65-46370-23		RATIO CHANGER ASSY	T	RF
	65-46370-24		RATIO CHANGER ASSY	U	RF
	65-46370-26		RATIO CHANGER ASSY	V	RF
	65-46370-27		RATIO CHANGER ASSY	W	RF
	65-46370-28		RATIO CHANGER ASSY	X	RF
1	NAS1104-59		. BOLT (REPLS NAS1104-58)	A-JM	1
1	BACB30NF4-58		. BOLT	KLN-W	1
1	BACB30LJ4-58		. BOLT	X	1
2	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
2	NAS1149F0432P		. WASHER (REPLS AN960-416L)		1
3	AN960-416		. WASHER (REPLD BY NAS1149F0463P)		1
3	NAS1149F0463P		. WASHER (REPLS AN960-416)	A-U	1
3	NAS1149F0432P		. WASHER	VWX	1
4	NAS679A4W		. NUT (REPLD BY BACN10JC4)		1
4	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)		1
4	BACN10JC4CD		. NUT (REPLS BACN10JC4)		1
5	NAS1104-1		. BOLT	A-JM	2
5	BACB30NF4-1		. BOLT	KLN-U	2
6	AN960-416		. WASHER (REPLD BY NAS1149F0463P)		2
6	NAS1149F0463P		. WASHER (REPLS AN960-416)		2
7	69-59043-1		. COVER ASSY	A-F	1
7	69-59043-4		. COVER ASSY	GH	1
7	65-51683-1		. COVER ASSY (OPT TO 69-59043-1,-4)	A-H	1
7	69-59043-7		. COVER ASSY	I-U	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
11	69-43212-1		. BOLT	A-T	4
11	251A1754-1		. BOLT	UVWX	4
11	69-43212-2		. BOLT (OPT TO 251A1754-1)	U	4
12	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		AR
12	NAS1149F0432P		. WASHER (REPLS AN906-416L)		AR
13	69-38903-1		. NUT		4
14	66-24922-1		. SPACER		2
15	66-24922-2		. SPACER		1
16	NAS1104-44		. BOLT	A-JM	1
16	BACB30NF4-44		. BOLT	KLN-W	1
16	BACB30LJ4-44		. BOLT	X	1
16A	NAS1104-44		. BOLT	A-JM	1
16A	BACB30NF4-44		. BOLT	KLN-T	1
16A	BACB30NF4-46		. BOLT	U-W	1
16A	BACB30LJ4-46		. BOLT	X	1
17	AN960-416		. WASHER (REPLD BY NAS1149F0463P)		2
17	NAS1149F0463P		. WASHER (REPLS AN960-416)		2
18	NAS679A4W		. NUT (REPLD BY BACN10JC4)		2
18	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)		2
18	BACN10JC4CD		. NUT (REPLS BACN10JC4)		2
19	69-38901-1		. BRACKET ASSY, MOUNTING	A-O	1
19	69-38901-4		. BRACKET ASSY, MOUNTING	P-X	1
19A	251A1753-1		. SHIM, CLIP	UVWX	1
20	69-38901-2		. . BRACKET		1
21	69-38901-3		. . FILLER	A-O	1
21	69-38901-5		. . FILLER	P-X	1
22	MS21233-6		. . BEARING (REPLS BACB10M8)		1
22	MS14104-6		. . BEARING (RPLS MS21233-6)		1
23	69-38919-12		. . SLEEVE		1
24	69-40318-1		. BRACKET ASSY, MOUNTING	A-W	1
24	69-40318-4		. BRACKET ASSY, MOUNTING	X	1
25	69-40318-2		. . BRACKET	A-W	1
25	69-40318-5		. . BRACKET	X	1
26	69-40318-3		. . FILLER	A-W	1
26	69-40318-6		. . FILLER	X	1
27	NAS1104-44		. BOLT	A-JM	2
27	BACB30NF4-44		. BOLT	KLN-W	2
27	BACB30LJ4-44		. BOLT	X	2
28	AN960-416		. WASHER (REPLD BY NAS1149F0463P)		4
28	NAS1149F0463P		. WASHER (REPLS AN960-416)	A-T	4
28	NAS1149F0432P		. WASHER	UVWX	3

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
29	NAS679A4W		. NUT (REPLD BY BACN10JC4)		2
29	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)		2
29	BACN10JC4CD		. NUT (REPLS BACN10JC4)		2
30	69-42512-1		. BRACKET		1
31	BACC30K8		. COLLAR	A-U	2
31	BACC30BK8		. COLLAR	VWX	2
32	66-24917-2		. BUSHING, LEVER SHAFT		2
33	BACB30GW8-12		. LOCKBOLT	A-QU RST	2
33	BACB30FM8-12		DELETED		
33	BACB30VN8K12		. BOLT, PROTRUDING HD	VWX	2
34	NAS1104-19		. BOLT	CD	1
34	NAS1104-22		. BOLT (REPLS NAS1104-19)	ABE-JM	1
34	BACB30NF4-22		. BOLT	KLN-T	1
34	BACB30NF4-19		. BOLT	UVW	1
34	BACB30LJ4-19		. BOLT	X	1
35	NAS43DD4-75		. SPACER	A-Q	1
35	NAS43DD4-75FC		. SPACER	RST	1
35	NAS43DD4-70FC		. SPACER	UVWX	1
36	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
36	NAS1149F0432P		. WASHER (REPLS AN906-416L)		1
37	NAS679A4W		. NUT (REPLD BY BACN10JC4)		1
37	BACN10JC4		. NUT (REPLS NAS679A4W)(REPLD BY BACN10JC4CD)		1
37	BACN10JC4CD		. NUT (REPLS BACN10JC4)		1
38	NAS1104-18		. BOLT	ABD-J	1
38	NAS1104-18		. BOLT	C	2
38	BACB30NF4-19		. BOLT	KL	1
38A	69-57936-1		. GUARD (SB 27-1017)	ABD-L	1
38A	69-57936-1		. GUARD	M-X	2
39	NAS43DD4-60		. SPACER	C	2
39	NAS43DD4-60		. SPACER	ABD-L	1
39	NAS43DD4-50		DELETED		
40	AN960-416L		. WASHER		2
40	NAS1149F0432P		. WASHER (REPLS AN906-416L)		2
41	NAS679A4W		. NUT (REPLD BY BACN10JC4)		2
41	BACN10JC4		. NUT (REPLS NAS679A4W)(REPLD BY BACN10JC4CD)		2
41	BACN10JC4CD		. NUT (REPLS BACN10JC4)		2
42	NAS1104-48		. BOLT (REPLS NAS1104-47)	A-JM	1
42	BACB30NF4-47		. BOLT	KLN-T	1
42	BACB30NF4-49		. BOLT	UVW	1
42	BACB30LJ4-49		. BOLT	X	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
43	NAS43DD4-31		. SPACER	A-Q	1
43	NAS43DD4-31FC		. SPACER	RW	1
44	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
44	NAS1149F0432P		. WASHER (REPLS AN906-416L)	A-T	1
44	NAS1149F0463P		. WASHER	UVWX	1
45	NAS679A4W		. NUT (REPLD BY BACN10JC4)		
45	BACN10JC4		. NUT (REPLS NAS679A4W)(REPLD BY BACN10JC4CD)1		
45	BACN10JC4CD		. NUT (REPLS BACN10JC4)		1
46	NAS1104-56		. BOLT	A-JM	1
46	BACB30NF4-56		. BOLT	KLN-W	1
46	BACB30LJ4-56		. BOLT	X	1
46A	NAS1104-40		. BOLT	ABE-JM	1
46A	NAS1104-56		. BOLT	CD	1
46A	BACB30NF4-65		. BOLT	KLN-T	1
46A	BACB30NF4-67		. BOLT	UVW	1
46A	BACB30LJ4-67		. BOLT	X	1
46B	NAS1104-44		. BOLT	ABE-JM	1
46B	NAS1104-56		. BOLT	CD	1
46B	BACB30NF4-44		. BOLT	KLN-W	1
46B	BACB30LJ4-44		. BOLT	X	1
47	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)	CD	3
47	NAS1149F0432P		. WASHER (REPLS AN906-416L)	CDRST	3
47	NAS1149F0463P		. WASHER	UVWX	3
47A	AN960-416		. WASHER (REPLD BY NAS1149F0463P)	KLN-Q	2
47A	NAS1149F0463P		. WASHER (REPLS AN960-416)	R-X	2
47B	BACB28Y4E-150		. BUSHING	KLN-X	1
48	AN960-416		. WASHER (REPLD BY NAS1149F0463P)		3
48	NAS1149F0463P		. WASHER (REPLS AN960-416)		3
49	NAS679A4W		. NUT (REPLD BY BACN10JC4)		3
49	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)		3
49	BACN10JC4CD		. NUT (REPLS BACN10JC4)		3
50	65-51681-1		. COUPLING, OUTPUT	AC-F	1
50	65-51681-3		. COUPLING, OUTPUT	BG-X	1
51	NAS1104-17		. BOLT	A-JM	1
51	BACB30NF4-17		. BOLT	KLN-QR ST	1
51	BACB30NF4-19		. BOLT	UVW	1
51	BACB30LJ4-19		. BOLT	X	1
51A	BACB30NF4-17		. BOLT	RST	1
51A	BACB30NF4-19		. BOLT	UVW	1
51A	BACB30LJ4-19		. BOLT	X	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
52	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
52	NAS1149F0432P		. WASHER (REPLS AN960-416L)	A-X	1
52A	NAS1149F0432P		. WASHER	RST-X	1
53	NAS679A4W		. NUT (REPLD BY BAC10JC4)		1
53	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)		1
53	NAS1149F0432P		DELETED		
53	BACN10JC4CD		. NUT (REPLS BACN10JC4)	A-X	1
53A	BACN10JC4CD		. NUT	RST-X	1
54	65-51681-4		. COUPLING, OUTPUT	AEF	2
54	65-51681-5		. COUPLING, OUTPUT	BG-X	2
54	65-51681-2		. COUPLING, OUTPUT	CD	2
55	NAS1104-19		. BOLT	A-JM	2
55	BACB30NF4-18		. BOLT	RST	2
55	BACB30NF4-19		. BOLT	KLN-Q U-W	2
55	BACB30LJ4-19		. BOLT	X	2
55A	BACB30NF4-19		. BOLT	RST-W	2
55A	BACB30LJ4-19		. BOLT	X	2
56	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		2
56	NAS1149F0432P		. WASHER (REPLS AN906-416L)	A-X	2
56A	NAS1149F0432P		. WASHER	RST-X	2
57	NAS679A4W		. NUT (REPLD BY BACN10JC4)		2
57	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)		2
57	BACN10JC4CD		. NUT (REPLS BACN10JC4)	A-X	2
57A	BACN10JC4CD		. NUT	RST-X	2
58	69-38907-3		. SHAFT, QUADRANT	AEF	1
58	69-38907-5		. SHAFT, QUADRANT	BG-X	1
58	69-38907-1		. SHAFT, QUADRANT	CD	1
59	69-40325-2		. SPACER	ABE-X	1
59	69-40325-1		. SPACER	CD	1
60	65-46362-1		. QUADRANT, LOWER	A-F	1
60	65-46362-4		. QUADRANT, LOWER	G-X	1
61	NAS1104-26		. BOLT	A-JM	1
61	BACB30NF4-26		. BOLT	KLN-W	1
61	BACB30LJ4-26		. BOLT	X	1
62	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
62	NAS1149F0432P		. WASHER (REPLS AN906-416L)	A-X	1
63	NAS679A4W		. NUT (REPLD BY BACN10JC4)		1
63	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)		1
63	BACN10JC4CD		. NUT (REPLS BACN10JC4)	A-X	1
64	69-41877-1		. SPACER		2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
65	65-46363-1		. QUADRANT, UPPER	A-F	1
65	65-46363-5		. QUADRANT, UPPER	G-X	1
66	NAS1104-26		. BOLT	A-JM	1
66	BACB30NF4-26		. BOLT	KLN-W	1
66	BACB30LJ4-26		. BOLT	X	1
67	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
67	NAS1149F0432P		. WASHER (REPLS AN906-416L)		1
68	NAS679A4W		. NUT (REPLD BY BACN10JC4)	A-T	1
68	BACN10JC4		. NUT (REPLS NAS679A4W)(REPLD BY BACN10JC4CD)	A-T	1
68	BACN10JC4CD		. NUT (REPLS BACN10JC4)	A-T	1
68	BACN10JC4CD		. NUT	UVWX	1
69	69-41876-1		. WASHER		2
70	69-38907-4		. SHAFT, QUADRANT	AEF	1
70	69-38907-6		. SHAFT, QUADRANT	BG-X	1
70	69-38907-2		. SHAFT, QUADRANT	CD	1
71	69-40325-2		. SPACER	ABE-X	1
71	69-40325-1		. SPACER	CD	1
72	65-46362-2		. QUADRANT, LOWER	A-F	1
72	65-46362-5		. QUADRANT, LOWER	G-X	1
73	NAS1104-26		. BOLT	A-JM	1
73	BACB30NF4-26		. BOLT	KLN-W	1
73	BACB30LJ4-26		. BOLT	X	1
74	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
74	NAS1149F0432P		. WASHER (REPLS AN906-416L)		1
75	NAS679A4W		. NUT (REPLD BY BACN10JC4)	A-T	1
75	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)	A-T	1
75	BACN10JC4CD		. NUT (REPLS BACN10JC4)	A-T	1
75	BACN10JC4CD		. NUT	UVWX	1
76	69-41877-1		. SPACER		1
77	65-46363-2		. QUADRANT, UPPER	A-F	1
77	65-46363-6		. QUADRANT, UPPER	G-X	1
78	NAS1104-26		. BOLT	A-JM	1
78	BACB30NF4-26		. BOLT	KLN-W	1
78	BACB30LJ4-26		. BOLT	X	1
79	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
79	NAS1149F0432P		. WASHER (REPLS AN906-416L)		1
80	NAS679A4W		. NUT (REPLD BY BACN10JC4)	A-T	2
80	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)	A-T	2
80	BACN10JC4CD		. NUT (REPLS BACN10JC4)	A-T	1
80	BACN10JC4CD		. NUT	UVWX	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
81	69-41876-1		. WASHER		1
82	NAS1105-18D		. BOLT	A-JM	1
82	BACB30NF5D18		. BOLT	KLN-W	1
82	BACB30LJ5D18		. BOLT	X	1
83	AN960-516		. WASHER (REPLD BY NAS1149C0563B)		1
83	NAS1149C0563B		. WASHER (REPLS AN960-516)		1
84	MS17826-5		. NUT (OPT TO BACN11N105CD)	A-T	1
84	BACN11N105CD		. NUT (PREF)	A-T	1
84	BACN11N105CD		. NUT	U-X	1
85	MS24665-134		. PIN, COTTER	A-U	1
85	BACP18BC02C06P		. PIN, COTTER (REPLS MS24665-134)	A-U	1
85	BACP18BC02C06P		. PIN, COTTER	VWX	1
86	65-52299-2		. LEVER	AEF	1
86	65-52299-3		. LEVER	BG-X	1
86	65-52299-4		. LEVER	CD	1
87	65-51686-3		. QUADRANT, SPEED BRAKE	A	2
87	65-51686-4		. QUADRANT, SPEED BRAKE	BEF	2
87	65-51686-1		. QUADRANT, SPEED BRAKE	CD	2
87	65-51686-5		. QUADRANT, SPEED BRAKE	G-JM	2
88	NAS1104-18		. BOLT	A-JM	2
89	AN960-416L		. WASHER	A-JM	2
90	NAS679A4W		. NUT (REPLD BY BACN10JC4)	A-JM	2
90	BACN10JC4		. NUT (REPLS NAS679A4W)	A-JM	2
91	NAS43DD12-8		. SPACER	A-JM	1
92	65-53599-4		. SHAFT, SPLINED	AEF	1
92	65-53599-7		. SHAFT, SPLINED	BG-JM	1
92	65-53599-1		. SHAFT, SPLINED	CD	1
93	NAS1104-34D		. BOLT	BEG-JM	1
93	BACB30NF4D34		. BOLT	KLN-T	1
93	NAS1104-33D		. BOLT (OPT TO BACB30NF4D33)	VW	1
93	BACB30NF4D33		. BOLT (PREF)	UVW	1
93	66-24916-1		. BOLT ASSY, LEVER SHAFT	ACDF	1
93	BACB30LJ4D33		. BOLT	X	1
94	66-24916-2		. . BOLT		1
95	NAS516-1		. . FITTING, LUBRICATION		1
96	66-24917-1		. BUSHING, LEVER SHAFT		1
97	65-67908-9		. STRAP ASSY	A-F	1
97	65-67908-13		. STRAP ASSY	G-U	1
97	65-67908-15		. COVER AND SHIELD ASSY	VWX	1
97A	65-67908-10		. . STRAP (USED ON 65-67908-9)		1
97A	65-67908-14		. . STRAP (USED ON 65-67908-13)		1
97A	65-67908-16		. . COVER AND SHIELD (USED ON 65-67908-15)	VWX	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
97B	MS20426D3N		. . RIVET	A-U	6
97B	BACR15DR3AC2		. . RIVET	VWX	6
97C	BACN10JR3FR		. . NUTPLATE	A-U	3
97C	BACN10JR3CFD		. . NUTPLATE	VWX	3
98	BACB10BN04		. BEARING (REPLS BACB10B131)	ACDF	2
98	BACB10ET04		. BEARING (RPLS BACB10BN04)	ACDF	2
98	BACB10BN04P		. BEARING (REPLS BACB10B256R)	BEG-Q	2
98	BACB10ET04		. BEARING (RPLS BACB10BN04P)	BEG-Q	2
98	BACB10ET04		. BEARING (REPLS BACB10B25R)	RST	2
98	BACB10ET04J		. BEARING	U	2
98	BACB10ET04		. BEARING	VW	2
98	BACB10HH04		. BEARING	X	2
99	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
99	NAS1149F0432P		. WASHER (REPLS AN960-416L)	A-X	1
100	MS17826-4		. NUT	A-T	1
100	BACN11N4CD		. NUT	U	1
100	BACN11N104CD		. NUT	VWX	1
101	MS24665-134		. PIN, COTTER		1
101	BACP18BC02C06P		. PIN, COTTER (RPLS MS246650134)		1
102	65-46365-5		. LEVER ASSY, OUTPUT	ABE-X	1
102	65-46365-7		. LEVER ASSY, OUTPUT	CD	1
103	65-46365-6		. . LEVER (USED ON 65-46365-5)		1
103	65-46365-8		. . LEVER (USED ON 65-46365-7)		1
104	BACB10C161H		. . BEARING		1
105	65-46364-4		. LEVER ASSY	A	1
105	65-46364-6		. LEVER ASSY	CD	1
105	65-46364-8		. LEVER ASSY	BE-X	1
105	65-46364-4		. LEVER ASSY (OPT)	EF	1
106	65-46364-5		. . LEVER (USED ON 65-46364-4)		1
106	65-46364-7		. . LEVER (USED ON 65-46364-6)		1
106	65-46364-9		. . LEVER (USED ON 65-46364-8)		1
107	BACB10C160H		. . BEARING		1
108	BACB30GW8-15		. LOCKBOLT	A-QU RST	1
108	BACB30FM8-15		DELETED		
108	BACB30VN8K15		. LOCKBOLT	VWX	1
109	BACC30K8		. COLLAR		1
110	69-40326-3		. ROD ASSY, INPUT	ABE-P	1
110	69-40326-1		. ROD ASSY, INPUT	CD	1
110	69-40326-4		. ROD ASSY, INPUT	QRST-X	1
111	69-40326-2		. . TUBE		1
112	60-2271-2		. . PLUG		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
113	69-40314-2		. . CLEVIS (USED ON 69-40326-3)		1
113	69-40314-1		. . CLEVIS (USED ON 69-40326-1)		1
113	69-40314-3		. . CLEVIS (USED ON 69-40326-4)		1
114	STYLE NO. 1115-6		. . RIVET, CAPLET, V18359 (USED ON 69-40326-1,-3)		2
114	BACR15BB4B3		. . RIVET (USED ON 69-40326-4)		2
114A	MS20470D5		. . RIVET		4
115	NAS1104-14D		. BOLT	A-JM	1
115	BACB30NF4D14		. BOLT	KLN-W	1
115	BACB30LJ4D14		. BOLT	X	1
116	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
116	NAS1149F0432P		. WASHER (REPLS AN906-416L)	A-X	1
117	MS17826-4		. NUT	A-T	1
117	BACN11N4CD		. NUT	U	1
117	BACN11N104CD		. NUT	VWX	1
118	MS24665-134		. PIN, COTTER		1
118	BACP18BC02C06P		. PIN, COTTER (RPLS MS24665-134)		1
119	65-50857-4		. LINK ASSY	ABEFG	1
119	65-50857-1		. LINK ASSY	CD	1
119	65-50857-6		. LINK ASSY	H-X	1
120	65-50857-5		. . LINK (USED ON 65-50857-4)		1
120	65-50857-2		. . LINK (USED ON 65-50857-1)		1
120	65-50857-7		. . LINK (USED ON 65-50857-6)		1
121	BACB10AC04		. . BEARING (REPLS KSP4AE9346)		2
122	NAS1104-24D		. BOLT	A-JM	1
122	BACB30NF4D24		. BOLT	KLN-W	1
122	BACB30LJ4D24		. BOLT	X	1
123	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		3
123	NAS1149F0432P		. WASHER (REPLS AN906-416L)	A-X	3
124	KP4AE9894		. BEARING, V21335	A-T	1
124	BACB10AC04A		. BEARING (OPT)	A-T	1
124	BACB10A313		. BEARING (OPT)	A-T	1
124	BACB10AC4AJ		. BEARING	U	1
124	BACB10FP04J		. BEARING (OPT)	U	1
124	BACB10AC04A		. BEARING	VW	1
124	BACB10FP04AJ		. BEARING	X	1
125	MS17826-4		. NUT	A-T	1
125	BACN11N4CD		. NUT	U	1
125	BACN11N104CD		. NUT	VWX	1
126	MS24665-134		. PIN, COTTER	A-U	1
126	BACP18BC02C06P		. PIN, COTTER (RPLS MS24665-134)	A-U	1
126	BACP18BC02C06P		. PIN, COTTER	VWX	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
127	NAS1104-20		. BOLT	A-JM	1
127	BACB30NF4-20		. BOLT	KLN-Q	1
127	BACB30NF4-17		. BOLT	RS-W	1
128	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)		1
128	NAS1149F0432P		. WASHER (REPLS AN906-416L)	A-X	1
129	NAS679A4W		. NUT (REPLD BY BACN10JC4)		1
129	BACN10JC4		. NUT (REPLS NAS679A4W) (REPLD BY BACN10JC4CD)		1
129	BACN10JC4CD		. NUT (REPLS BACN10JC4)	A-X	1
130	65-46366-4		. LEVER ASSY, INPUT, SPEED BRAKE	ABE-X	1
130	65-46366-6		. LEVER ASSY, INPUT, SPEED BRAKE	CD	1
130	65-46366-6		. LEVER ASSY (OPT)	E	1
131	65-46366-5		. . LEVER (USED ON 65-46366-4)		1
131	65-46366-7		. . LEVER (USED ON 65-46366-6)		1
132	KP4AE9894		. . BEARING, V21335		1
132	BACB10AC04A		. . BEARING (OPT)		1
132	BACB10A313		. . BEARING (OPT)		1
133	69-40324-4		. SPACER, OUTPUT SHAFT	ABE-X	2
133	69-40324-2		. SPACER, OUTPUT SHAFT	CD	2
134	BACC30K8		. COLLAR		2
135	66-24917-2		. BUSHING, LEVER SHAFT		2
136	BACB30GW8-12		. LOCKBOLT	A-QU RST	2
136	BACB30FM8-12		DELETED		
136	BACB30VN8K12		. LOCKBOLT	VWX	1
137	KP4AE9894		. BEARING, V21335	A-T	1
137	BACB10AC04A		. BEARING (OPT)	A-T	1
137	BACB10A313		. BEARING (OPT)	A-T	1
138	65-75325-1		. LINK ASSY, UPPER SCISSOR	A-T	1
138	65-46368-3		. LINK ASSY, UPPER SCISSOR (OPT)	A-T	1
138	251A1752-1		. LINK ASSY, SOLID	UV	1
138	251A1752-2		. LINK ASSY, SOLID	WX	1
138E	NO NUMBER		. . LINK (USED ON 251A1752-1)		1
138E	251A1752-3		. . LINK (USED ON 251A1752-2)		1
138F	BACB10AC04A		. . BEARING (OPT TO BACB10AC04AJ)	U	2
138F	BACB10AC04AJ		. . BEARING (PREF)	UVWX	2
139	65-75325-2		. . LINK ASSY (USED ON 65-75325-1)		1
139	65-46368-4		. . LINK ASSY (USED ON 65-46368-3)		1
140	65-75325-3		. . . LINK (USED ON 65-75325-2)		1
140	65-46368-5		. . . LINK (USED ON 65-46368-4)		1
141	KP4AE9894		. . . BEARING, V21335		2
141	BACB10AC04A		. . . BEARING (OPT)		2
141	BACB10A313		. . . BEARING (OPT)		2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
142	65-75325-4		. . LINK (USED ON 65-75325-1)		1
142	65-46368-6		. . LINK (USED ON 65-46368-3)		1
142A	KP4AE9894		. BEARING, V21335		1
142A	BACB10AC04A		. BEARING (OPT)	A-T	1
142A	BACB10A313		. BEARING (OPT)		1
143	65-75324-1		. LEVER, FORK	A-I	1
143	65-75324-3		. LEVER, FORK	J-X	1
143	65-51679-1		. LEVER, FORK (OPT)	A-G	1
143	65-51679-2		. LEVER, FORK (OPT)	HI	1
143	65-51679-3		. LEVER, FORK (OPT)	J-X	1
144	NAS679A3W		. NUT (REPLD BY BACN10JC3)	A-Q	1
144	BACN10JC3		. NUT (REPLS NAS679A3W)	A-Q	1
144	BACN10JC3CD		. NUT	RST	
145	AN315C3R		. NUT	A-T	1
146	AN960-10		. WASHER	A-Q	2
146	NAS1149F0363P		. WASHER	R	2
146	NAS1149F0363P		. WASHER (USED WITH 69-49784-3)	S	2
146	NAS1149F0363P		. WASHER (USED WITH 69-49784-2)	S	5
146	NAS1149F0363P		. WASHER	T	AR
146A	251A1714-1		. SHIM (USED WITH 69-49784-2)	S	1
147	69-40328-2		. ROD, BUNGEE	A-D	1
147	69-40328-3		. ROD, BUNGEE	E-RST	1
147	69-40328-2		. ROD, BUNGEE (OPT)	EF	1
148	69-49784-2		. COVER (REPLS 69-49784-1)	A-RT	1
148	69-49784-3		. COVER	S	1
148	69-49784-2		. COVER (OPT)	S	1
149	69-49786-1		. RETAINER	A-S	2
149A	69-60778-1		. SHIM	ABE-T	AR
150	69-49783-1		. SPRING	A-S	1
150A	251A1751-1		. SPACER	T	1
150B	BACS40U8L3		. SPACER	T	1
151	69-50390-1		. SPRING	A-S	1
152	NAS1104-14D		. BOLT	A-JM	1
152	BACB30NF4D14		. BOLT	KLN-T	1
153	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)	A-T	1
153	NAS1149F0432P		. WASHER (REPLS AN906-416L)	A-T	1
154	MS17826-4		. NUT	A-T	1
155	MS24665-134		. PIN, COTTER	A-U	1
155	BACP18BC02C06P		. PIN, COTTER (RPLS MS24665-134	A-U	1
156	NAS1104-24D		. BOLT	A-JM	1
156	BACB30NF4D24		. BOLT	KLN-T	1
157	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)	A-T	3
157	NAS1149F0432P		. WASHER (REPLS AN906-416L)	A-T	3

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
158	MS17826-4		. NUT	A-T	1
159	MS24665-134		. PIN, COTTER	A-U	1
159	BACP18BC02C06P		. PIN, COTTER (RPLS MS24665-134)	A-U	1
160	65-46367-2		. LINK, LOWER SCISSOR	ABE-T	1
160	65-46367-1		. LINK, LOWER SCISSOR	CD	1
161	69-50380-1		. TRUNNION	A-T	1
162	69-50371-1		. BUSHING	A-T	1
163	69-50372-1		. BUSHING	A-T	2
164	NAS679A4W		. NUT (REPLD BY BACN10JC4)	A-K	2
164	BACN10JC4		. NUT (REPLS NAS679A4W)(REPLD BY BACN10JC4CD)	A-K	2
164	BACN10JC4CD		. NUT (REPLS BACN10JC4)	A-T	2
165	AN960-416L		. WASHER (REPLD BY NAS1149F0432P)	A-Q	2
165	NAS1149F0432P		. WASHER (REPLS AN906-416L)	A-Q	2
165	BACW10P62S		. WASHER	RST	2
166	69-49785-1		. PIN	A-T	2
167	BACB30FM5-25		. BOLT	A-T	1
167	NAS1122-25		. BOLT (OPT)	A-T	1
168	BACB30FM5-37		. BOLT (USE WITH BACC30M5)	A-T	1
168	NAS1122-38		. BOLT (OPT) (USE WITH BACN10YR08CD)	A-T	1
169	AN960-8L		. WASHER (REPLD BY NAS1149FN816P)	A-T	1
169	NAS1149FN816P		. WASHER (REPLS AN960-8L)	A-T	1
170	NAS42HT521		. SPACER	A-T	1
171	BACC30M5		. COLLAR (USE WITH BACC30FM5-37)	A-Q	2
171	BACN10YR5CD		DELETED		
171	BACN10YR08CD		. NUT	RST	2
172	65-53856-3		. FRAME ASSY, AFT	ABEF	1
172	65-53856-1		. FRAME ASSY, AFT	CD	1
172	65-53856-5		. FRAME ASSY, AFT	G-U	1
172	65-53856-7		. FRAME ASSY, AFT	VWX	1
173	65-53856-4		. . FRAME (USED ON 65-53856-3)		1
173	65-53856-2		. . FRAME (USED ON 65-53856-1)		1
173	65-53856-6		. . FRAME (USED ON 65-53856-5)		1
173	65-53856-8		. . FRAME (USED ON 65-53856-7)		1
174	MS21209F4-20		. . INSERT	A-U	1
174	MS21209F4-20P		. . INSERT	VWX	1
175	B540DDE9607		. . BEARING, V21335 (OPT TO BACB10AS14)	A-U	1
175	BACB10AS14		. . BEARING (PREF)	A-U	1
175	BACB10AS14		. . BEARING	VWX	1
176	B541DDE9607		. . BEARING, V21335 (OPT TO BACB10AS17)	A-U	3
176	BACB10AS17		. . BEARING (PREF)	A-U	3
176	BACB10AS17		. . BEARING	VWX	3

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
177	BACB10A684		. . BEARING (REPLD BY BACB10BX10)	A-U	1
177	BACB10BX10		. . BEARING (REPLS BACB10A684)	A-U	1
177	BACB10BX10		. . BEARING	VWX	1
178	KP4AE9894		. . BEARING, V21335(OPT TO BACB10A04A, BACB10A313)	A-U	1
178	BACB10AC04A		. . BEARING (PREF)	A-U	1
178	BACB10AC04A		. . BEARING	VWX	1
178	BACB10A313		. . BEARING (OPT TO BACB10AC04A, KPAE9894)	A-U	1
179	65-53854-3		. FRAME ASSY, FORWARD	ABEF	1
179	65-53854-1		. FRAME ASSY, FORWARD	CD	1
179	65-53854-5		. FRAME ASSY, FORWARD	G-JM	1
179	65-53854-7		. FRAME ASSY, FORWARD	KLN-U	1
179	65-53854-9		. FRAME ASSY, FORWARD	VWX	1
180	65-53854-4		. . FRAME (USED ON 65-53854-3)		1
180	65-53854-2		. . FRAME (USED ON 65-53854-1)		1
180	65-53854-6		. . FRAME (USED ON 65-53854-5)		1
180	65-53854-8		. . FRAME (USED ON 65-53854-7)		1
180	65-53854-10		. . FRAME (USED ON 65-53854-9)		1
181	MS21209F4-15		. . INSERT	A-U	1
181	MS21209F4-15P		. . INSERT	VWX	1
182	MS21209F4-20		. . INSERT	A-U	1
182	MS21209F4-20P		. . INSERT	VWX	1
183	B540DDE9607		. . BEARING, V21335 (OPT TO BACB10AS14)		1
183	BACB10AS14		. . BEARING (PREF)	A-U	1
183	BACB10AS14		. . BEARING	VWX	1
184	B541DDE9607		. . BEARING, V21335 (OPT TO BACB10AS17)	A-U	1
184	BACB10AS17		. . BEARING (PREF)	A-U	1
184	BACB10AS17		. . BEARING	VWX	3
185	BACB10A684		. . BEARING (REPLD BY BACB10BX10)	A-U	3
185	BACB10BX10		. . BEARING (REPLS BACB10A684)	A-U	3
185	BACB10BX10		. . BEARING	VWX	1
186	KP4AE9894		. . BEARING, V21335 (OPT TO BACB10A313, BACB10AC04A)	A-U	1
186	BACB10AC04A		. . BEARING (PREF)	A-U	1
186	BACB10A313		. . BEARING (OPT TO BACB10AC04A, KP4AE9894)	A-U	1
186	BACB10AC04A		. . BEARING	VWX	1
187	BACB30KZ4-15		. BOLT		1
187	NAS564-15		. BOLT (OPT)	U	1
187	BACB30KZ4-15		. BOLT (OPT)	U	1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
188	65-75323-1		. SPACER	A-T	1
188	69-50383-1		. SPACER (OPT)	A-T	1
189	65-67908-4		. SHIELD ASSY	CD	1
190	65-67908-6		. SHIELD ASSY	CD	1
190	65-67908-13		DELETED		
191	10-62024-1		. NO-BACK ASSY (OPT TO 10-62024-4)	KN	1
191	10-62024-2		. NO-BACK ASSY (OPT TO 10-62024-4)	L	1
191	10-62024-3		. NO-BACK ASSY (OPT TO 10-62024-4)	OPQ	1
191	10-62024-4		. NO-BACK ASSY	RSTU	1
191	10-62024-4		. NO-BACK ASSY (OPT TO 10-62024-1, -2,-3)	KLNOPQ	1
191	A3091A000		. NO-BACK ASSY (PREF)	RSTU	1
191	A3091A000		. NO-BACK ASSY	VWX	1

VENDORS

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

Part No.	Fig. and Index No.	Qty. per Assy.
A3091A000	1101-191	1
A3091A000	191	1
AN315C3R	145	1
AN960-10	146	2
AN960-416	17	2
AN960-416	28	4
AN960-416	3	1
AN960-416	47A	2
AN960-416	48	3
AN960-416	6	2
AN960-416L	116	1
AN960-416L	12	AR
AN960-416L	123	3
AN960-416L	128	1
AN960-416L	153	1
AN960-416L	157	3
AN960-416L	165	2
AN960-416L	2	1
AN960-416L	36	1
AN960-416L	40	2
AN960-416L	44	1
AN960-416L	47	3
AN960-416L	52	1
AN960-416L	56	2
AN960-416L	62	1
AN960-416L	67	1
AN960-416L	74	1
AN960-416L	79	1
AN960-416L	89	2
AN960-416L	99	1
AN960-516	83	1
AN960-8L	169	1
B540DDE9607	175	1
B540DDE9607	183	1
B541DDE9607	176	3
B541DDE9607	184	1
BACB10A313	124	1
BACB10A313	132	1
BACB10A313	137	1
BACB10A313	141	2
BACB10A313	142A	1
BACB10A313	178	1
BACB10A313	186	1
BACB10A684	177	1
BACB10A684	185	3
BACB10AC04	121	2
BACB10AC04A	124	1

Part No.	Fig. and Index No.	Qty. per Assy.
BACB10AC04A	124A	1
BACB10AC04A	132	1
BACB10AC04A	137	1
BACB10AC04A	138F	2
BACB10AC04A	141	2
BACB10AC04A	178	1
BACB10AC04A	178	1
BACB10AC04A	186	1
BACB10AC04A	186	1
BACB10AC04AJ	138F	2
BACB10AC4AJ	124A	1
BACB10AC40A	142A	1
BACB10AS14	175	1
BACB10AS14	175	1
BACB10AS14	183	1
BACB10AS14	183	1
BACB10AS17	176	3
BACB10AS17	176	3
BACB10AS17	184	1
BACB10AS17	184	3
BACB10BN04	98	2
BACB10BN04P	98	2
BACB10BX10	177	1
BACB10BX10	177	1
BACB10BX10	185	1
BACB10BX10	185	3
BACB10C160H	107	1
BACB10C161H	104	1
BACB10ET04	98	2
BACB10ET04	98	2
BACB10ET04	98	2
BACB10ET04	98	2
BACB10ET04J	98	2
BACB10FP04AJ	124A	1
BACB10FP04J	124A	1
BACB10HH04	98	2
BACB28Y4E-150	47B	1
BACB30FM5-25	167	1
BACB30FM5-37	168	1
BACB30FM8-12	136	2
BACB30FM8-12	33	2
BACB30FM8-15	108	1
BACB30GW8-12	136	2
BACB30GW8-12	33	2
BACB30GW8-15	108	1
BACB30KZ4-15	187	1
BACB30LJ4-19	34	1

Part No.	Fig. and Index No.	Qty. per Assy.
BACB30LJ4-19	1101-51	1
BACB30LJ4-19	51A	1
BACB30LJ4-19	55	2
BACB30LJ4-19	55A	2
BACB30LJ4-26	61	1
BACB30LJ4-26	66	1
BACB30LJ4-26	73	1
BACB30LJ4-26	78	1
BACB30LJ4-44	16	1
BACB30LJ4-44	27	1
BACB30LJ4-44	46B	1
BACB30LJ4-46	16A	1
BACB30LJ4-49	17	1
BACB30LJ4-56	46	1
BACB30LJ4-58	1	1
BACB30LJ4-67	46A	1
BACB30LJ4D14	115	1
BACB30LJ4D24	122	1
BACB30LJ4D33	93	1
BACB30LJ5D18	82	1
BACB30NF4-1	5	2
BACB30NF4-17	127	1
BACB30NF4-17	51	1
BACB30NF4-17	51A	1
BACB30NF4-18	55	2
BACB30NF4-19	38	1
BACB30NF4-19	51	1
BACB30NF4-19	51A	1
BACB30NF4-19	55	2
BACB30NF4-19	55A	2
BACB30NF4-20	127	1
BACB30NF4-22	34	1
BACB30NF4-22	34	1
BACB30NF4-26	61	1
BACB30NF4-26	66	1
BACB30NF4-26	73	1
BACB30NF4-26	78	1
BACB30NF4-44	16	1
BACB30NF4-44	16A	1
BACB30NF4-44	27	2
BACB30NF4-44	46B	1
BACB30NF4-46	16A	1
BACB30NF4-47	42	1
BACB30NF4-49	42	1
BACB30NF4-56	46	1
BACB30NF4-58	1	1
BACB30NF4-65	46A	1

Part No.	Fig. and Index No.	Qty. per Assy.
BACB30NF4-67	46A	1
BACB30NF4D14	115	1
BACB30NF4D14	152	1
BACB30NF4D24	122	1
BACB30NF4D24	156	1
BACB30NF4D33	93	1
BACB30NF4D34	93	1
BACB30NF5D18	82	1
BACB30VN8K12	136	1
BACB30VN8K12	33	2
BACB30VN8K15	108	1
BACC30BK8	31	2
BACC30K8	109	1
BACC30K8	134	2
BACC30K8	31	2
BACC30M5	171	2
BACN10JC3	144	1
BACN10JC3CD	144	
BACN10JC4	129	1
BACN10JC4	164	2
BACN10JC4	18	2
BACN10JC4	29	2
BACN10JC4	37	1
BACN10JC4	4	1
BACN10JC4	41	2
BACN10JC4	45	
BACN10JC4	49	3
BACN10JC4	53	1
BACN10JC4	57	2
BACN10JC4	63	1
BACN10JC4	68	1
BACN10JC4	75	1
BACN10JC4	80	2
BACN10JC4	90	2
BACN10JC4CD	129	1
BACN10JC4CD	164	2
BACN10JC4CD	18	2
BACN10JC4CD	29	2
BACN10JC4CD	37	1
BACN10JC4CD	4	1
BACN10JC4CD	41	2
BACN10JC4CD	45	1
BACN10JC4CD	49	3
BACN10JC4CD	53	1
BACN10JC4CD	53A	1
BACN10JC4CD	57	2
BACN10JC4CD	57A	2

Part No.	Fig. and Index No.	Qty. per Assy.
BACN10JC4CD	1101-63	1
BACN10JC4CD	68	1
BACN10JC4CD	68	1
BACN10JC4CD	75	1
BACN10JC4CD	75	1
BACN10JC4CD	80	1
BACN10JC4CD	80	1
BACN10JR3CFD	97C	3
BACN10JR3FR	97C	3
BACN10YR5CD	171	2
BACN11N104CD	100	1
BACN11N104CD	117	1
BACN11N104CD	125	1
BACN11N105CD	84	1
BACN11N4CD	100	1
BACN11N4CD	117	1
BACN11N4CD	125	1
BACP18BC02C0 6P	118	1
BACP18BC02C0 6P	101	1
BACP18BC02C06P	126	1
BACP18BC02C06P	155	1
BACP18BC02C06P	159	1
BACP18BC02C06P	85	1
BACR15BB4B3	114	2
BACR15DR3AC2	97B	6
BACS40U8L3	150B	1
BACW10P62S	165	2
KP4AE9894	124	1
KP4AE9894	132	1
KP4AE9894	137	1
KP4AE9894	141	2
KP4AE9894	142A	1
KP4AE9894	178	1
KP4AE9894	186	1
MS14104-6	22	1
MS17826-4	100	1
MS17826-4	117	1
MS17826-4	125	1
MS17826-4	154	1
MS17826-4	158	1
MS17826-5	84	1
MS20426D3N	97B	6
MS20470D5	114A	4
MS21209F4-15	181	1
MS21209F4-15P	181	1
MS21209F4-20	174	1
MS21209F4-20	182	1

Part No.	Fig. and Index No.	Qty. per Assy.
MS21209F4-20P	174	1
MS21209F4-20P	182	1
MS21233-6	22	1
MS24665-134	101	1
MS24665-134	118	1
MS24665-134	126	1
MS24665-134	155	1
MS24665-134	159	1
MS24665-134	85	1
NAS1104-1	5	2
NAS1104-14D	115	1
NAS1104-14D	152	1
NAS1104-17	51	1
NAS1104-18	38	1
NAS1104-18	38	2
NAS1104-18	88	2
NAS1104-19	34	1
NAS1104-19	55	2
NAS1104-20	127	1
NAS1104-22	34	1
NAS1104-24D	122	1
NAS1104-24D	156	1
NAS1104-26	61	1
NAS1104-26	66	1
NAS1104-26	73	1
NAS1104-26	78	1
NAS1104-33D	93	1
NAS1104-34D	93	1
NAS1104-40	46A	1
NAS1104-44	16	1
NAS1104-44	16A	1
NAS1104-44	27	2
NAS1104-44	46B	1
NAS1104-48	42	1
NAS1104-56	46	1
NAS1104-56	46A	1
NAS1104-56	46B	1
NAS1104-59	1	1
NAS1105-18D	82	1
NAS1122-25	167	1
NAS1122-38	168	1
NAS1149C0563B	83	1
NAS1149F0363P	146	2
NAS1149F0363P	146	2
NAS1149F0363P	146	5
NAS1149F0363P	146	AR
NAS1149F0423P	3	1

Part No.	Fig. and Index No.	Qty. per Assy.
NAS1149F0432P	1101-116	1
NAS1149F0432P	12	AR
NAS1149F0432P	123	3
NAS1149F0432P	128	1
NAS1149F0432P	153	1
NAS1149F0432P	157	3
NAS1149F0432P	165	2
NAS1149F0432P	2	1
NAS1149F0432P	28	3
NAS1149F0432P	36	1
NAS1149F0432P	40	2
NAS1149F0432P	44	1
NAS1149F0432P	47	3
NAS1149F0432P	52	1
NAS1149F0432P	52A	1
NAS1149F0432P	53	
NAS1149F0432P	56	2
NAS1149F0432P	56A	2
NAS1149F0432P	62	1
NAS1149F0432P	67	1
NAS1149F0432P	74	1
NAS1149F0432P	79	1
NAS1149F0432P	99	1
NAS1149F0463P	17	2
NAS1149F0463P	28	4
NAS1149F0463P	3	1
NAS1149F0463P	44	1
NAS1149F0463P	47	3
NAS1149F0463P	47A	2
NAS1149F0463P	48	3
NAS1149F0463P	6	2
NAS1149FN816P	169	1
NAS42HT521	170	1
NAS43DD12-8	91	1
NAS43DD4-31	43	1
NAS43DD4-31FC	43	1
NAS43DD4-50	39	
NAS43DD4-60	39	1
NAS43DD4-60	39	2
NAS43DD4-70FC	35	1
NAS43DD4-75	35	1
NAS43DD4-75FC	35	2
NAS516-1	95	1
NAS564-15	187	1
NAS679A3W	144	1
NAS679A4W	129	1
NAS679A4W	164	2

Part No.	Fig. and Index No.	Qty. per Assy.
NAS679A4W	18	2
NAS679A4W	29	2
NAS679A4W	37	1
NAS679A4W	4	1
NAS679A4W	41	2
NAS679A4W	45	
NAS679A4W	49	3
NAS679A4W	53	1
NAS679A4W	57	2
NAS679A4W	63	1
NAS679A4W	68	1
NAS679A4W	75	1
NAS679A4W	80	2
NAS679A4W	90	2
NO NUMBER	138E	1
STYLE NO. 1115-6	114	2
10-62024-1	191	1
10-62024-2	191	1
10-62024-3	191	1
10-62024-4	191	1
10-62024-4	191	1
251A1714-1	146A	1
251A1751-1	150A	1
251A1752-1	138	1
251A1752-2	138	1
251A1752-3	138E	1
251A1753-1	19A	1
251A1754-1	11	4
60-2271-2	112	1
65-46362-1	60	1
65-46362-2	72	1
65-46362-4	60	1
65-46362-5	72	1
65-46363-1	65	1
65-46363-2	77	1
65-46363-5	65	1
65-46363-6	77	1
65-46364-4	105	1
65-46364-4	105	1
65-46364-5	106	1
65-46364-6	105	1
65-46364-7	106	1
65-46364-8	105	1
65-46364-9	106	1
65-46365-5	102	1
65-46365-6	103	1
65-46365-7	102	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-46365-8	1101-103	1
65-46366-4	130	1
65-46366-5	131	1
65-46366-6	130	1
65-46366-6	130	1
65-46366-7	131	1
65-46367-1	160	1
65-46367-2	160	1
65-46368-3	138	1
65-46368-4	139	1
65-46368-5	140	1
65-46368-6	142	1
65-46370-10		RF
65-46370-11		RF
65-46370-12		RF
65-46370-13		RF
65-46370-14		RF
65-46370-15		RF
65-46370-16		RF
65-46370-17		RF
65-46370-18		RF
65-46370-19		RF
65-46370-20		RF
65-46370-21		RF
65-46370-23		RF
65-46370-24		RF
65-46370-26		RF
65-46370-27		RF
65-46370-3		RF
65-46370-4		RF
65-46370-5		RF
65-46370-6		RF
65-46370-7		RF
65-46370-8		RF
65-46370-9		RF
65-50857-1	119	1
65-50857-2	120	1
65-50857-4	119	1
65-50857-5	120	1
65-50857-6	119	1
65-50857-7	120	1
65-51679-1	143	1
65-51679-2	143	1
65-51679-3	143	1
65-51681-1	50	1
65-51681-2	54	2
65-51681-3	50	1

Part No.	Fig. and Index No.	Qty. per Assy.
65-51681-4	54	2
65-51681-5	54	2
65-51683-1	7	1
65-51686-1	87	2
65-51686-3	87	2
65-51686-4	87	2
65-51686-5	87	2
65-52299-2	86	1
65-52299-3	86	1
65-52299-4	86	1
65-53599-1	92	1
65-53599-4	92	1
65-53599-7	92	1
65-53854-1	179	1
65-53854-10	180	1
65-53854-2	180	1
65-53854-3	179	1
65-53854-4	180	1
65-53854-5	179	1
65-53854-6	180	1
65-53854-7	179	1
65-53854-8	180	1
65-53854-9	179	1
65-53856-1	172	1
65-53856-2	173	1
65-53856-3	172	1
65-53856-4	173	1
65-53856-5	172	1
65-53856-6	173	1
65-53856-7	172	1
65-53856-8	173	1
65-67908-10	97A	1
65-67908-13	190	
65-67908-13	97	1
65-67908-14	97A	1
65-67908-15	97	1
65-67908-16	97A	1
65-67908-4	189	1
65-67908-6	190	1
65-67908-9	97	1
65-75323-1	188	1
65-75324-1	143	1
65-75324-3	143	1
65-75325-1	138	1
65-75325-2	139	1
65-75325-3	140	1
65-75325-4	142	1

Part No.	Fig. and Index No.	Qty. per Assy.
66-24916-1	1101-93	1
66-24916-2	94	1
66-24917-1	96	1
66-24917-2	135	2
66-24917-2	32	2
66-24922-1	14	2
66-24922-2	15	1
69-38901-1	19	1
69-38901-2	20	1
69-38901-3	21	1
69-38901-4	19	1
69-38901-5	21	1
69-38903-1	13	4
69-38907-1	58	1
69-38907-2	70	1
69-38907-3	58	1
69-38907-4	70	1
69-38907-5	58	1
69-38907-6	70	1
69-38919-12	23	1
69-40314-1	113	1
69-40314-2	113	1
69-40314-3	113	1
69-40318-1	24	1
69-40318-2	25	1
69-40318-3	26	1
69-40318-4	24	1
69-40318-5	25	1
69-40318-6	26	1
69-40324-2	133	2
69-40324-4	133	2
69-40325-1	59	1
69-40325-1	71	1
69-40325-2	59	1
69-40325-2	71	1
69-40326-1	110	1
69-40326-2	111	1
69-40326-3	110	1
69-40326-4	110	1
69-40328-2	147	1
69-40328-2	147	1
69-40328-3	147	1
69-41876-1	69	2
69-41876-1	81	1
69-41877-1	64	2
69-41877-1	76	1
69-42512-1	30	1

Part No.	Fig. and Index No.	Qty. per Assy.
69-43212-1	11	4
69-43212-2	11	4
69-49783-1	150	1
69-49784-2	148	1
69-49784-2	148	1
69-49784-3	148	1
69-49785-1	166	2
69-49786-1	149	2
69-50371-1	162	1
69-50372-1	163	2
69-50380-1	161	1
69-50383-1	188	1
69-50390-1	151	1
69-57936-1	38A	1
69-57936-1	38A	2
69-59043-1	7	1
69-59043-4	7	1
69-59043-7	7	1
69-60778-1	149A	AR