TO: ALL HOLDERS OF MAIN CARGO DOOR ASSEMBLY OVERHAUL MANUAL, 52-36-63

REVISION NO. 7, DATED DEC 1/96

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
Updated drilling angles for holes in torque tube 65-62229-1 (104, Fig. 1103)					X								

MAIN CARGO DOOR ASSEMBLY

52-36-63

BOEING P/N 65-54916-2, -501

AIRLINE P/N

THE FOLLOWING DIRECTIVES APPLY TO THIS SUBJECT:

BOEING SERVICE BULLETIN	BOEING TEMPORARY REVISION	OTHER DIRECTIVES	DATE DIRECTIVE INCORPORATED INTO TEXT
52-1033		PRR 31900	Dec 10/71
53-1017			Dec 25/72
53-1017 R1			Dec 25/72
		PRR 32106-1	Jun 25/73
		PRR 32121-7	Jun 25/73
		PRR 32139	Jun 25/73
52-1047		PRR 32301	Sep 25/73
		PRR 32515	Jul 5/76
		PRR 32515-1	Jul 5/76
		PRR 32515-2	Jul 5/76
		PRR 32566	Jul 5/76
52-1060			Jan 5/77
		PRR 32915	Jul 5/79
52A-1038 R3		PRR 34938-R	Mar 5/92

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
	52-36-63		*	417	Dec 1/96		1106	Mar 5/92
	T-1	Mar 5/92		418	Nov 15/68		1106A	Mar 5/92
	T-2	BLANK		419	Jul 5/76		1106B	BLANK
*	LEP-1	Dec 1/96		420	BLANK		1107	Mar 5/92
*	LEP-2	Dec 1/96		501	Dec 5/86		1108	Nov 15/68
	T/C-1	Jun 25/73		502	Jul 5/76		1109	Nov 15/68
	T/C-2	BLANK		503	Jan 5/78		1110	Dec 10/71
	1	Jun 25/73		504	Mar 10/70		1111	Jul 5/76
	2	Nov 15/68		505	Dec 10/71		1112	Jul 5/76
	3	Nov 15/68		506	Jul 5/76		1113	Jun 25/73
	4	BLANK		507	Dec 10/71		1114	Mar 5/92
	101	Sep 25/74		508	Dec 10/71		1115	Mar 5/92
	102	Nov 15/68		509	Jun 25/73		1116	Mar 5/92
	103	Dec 10/71		510	Jun 25/73		1117	Mar 5/92
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	105	Dec 10/71		510B	BLANK		1119	Mar 5/92
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	107	Jul 5/76		512	Mar 10/70		1120A	Mar 5/92
	108	Jul 5/76		513	Jul 5/76		1120B	BLANK
	201	Jul 5/76		514	Nov 15/68		1121	Nov 15/68
	202	Mar 10/70		515	Nov 15/68		1122	Nov 15/68
	301	Jul 5/76		516	BLANK		1123	Nov 15/68
	302	Jul 5/79		601	Nov 15/68		1124	Jul 5/76
	303	Jul 5/79		602	Nov 15/68		1125	Mar 25/74
	304	BLANK		603	Nov 15/68		1126	Jul 5/79
	401	Nov 15/68		604	BLANK		1127	Nov 15/68
	402	Mar 5/92		701	Nov 15/68		1128	Nov 15/68
	403	Nov 15/68		702	Nov 15/68		1129	Nov 15/68
	404	Jul 5/76		703	Nov 15/68		1130	Mar 10/70
	404A	Jul 5/79		704	Jul 5/76		1131	Nov 15/68
	404B	BLANK		705	Nov 15/68		1132	Jul 5/76
	405	Nov 15/68		706	BLANK		1133	Sep 25/73
	406	Mar 5/92		801	Nov 15/68		1134	Sep 25/73
	407	Nov 15/68		802	Nov 15/68		1135	Sep 25/73
	408	Jul 5/76		803	Nov 15/68		1136	Sep 25/73
	409	Mar 10/70		804	BLANK		1137	Sep 25/73
	410	Jun 25/73		901	Nov 15/68		1138	Mar 25/74
	410A	Jun 25/73		902	BLANK		1139	Mar 25/74
	410B	BLANK		1001	Sep 25/74		1140	Mar 25/74
	411	Nov 15/68		1002	BLANK		1140A	Jan 5/77
	412	Nov 15/68		1101	Nov 15/68		1140B	BLANK
	413	Jul 5/76		1102	Dec 5/86		1141	Jul 5/76
	414	Jul 5/79		1103	Nov 15/68		1142	Jul 5/76
	415	Jul 5/79		1104	Mar 5/92		1143	Dec 5/86
	416	Jul 5/79		1105	Mar 5/92		1144	Jul 5/79

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1144A	Jul 5/76				
1144B	BLANK				
1145	Mar 5/92				
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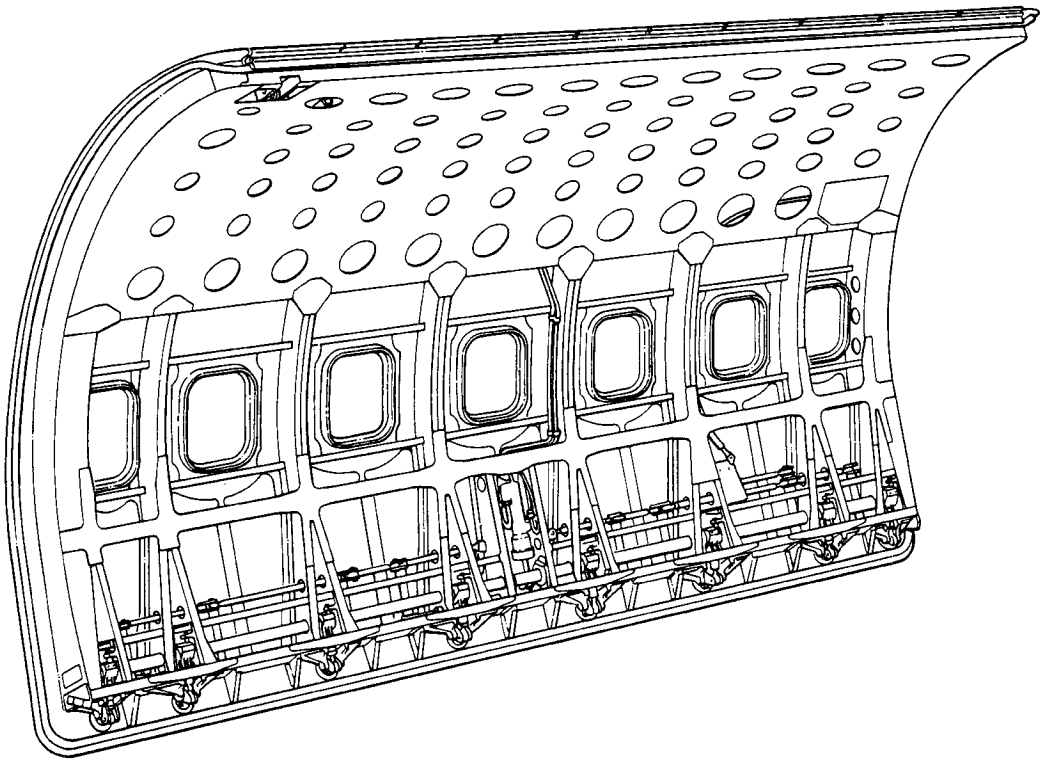
MAIN CARGO DOOR ASSEMBLY



Main Cargo Door Assembly
Figure 1

DESCRIPTION AND OPERATION

1. Description

A. The main cargo door assembly is located on the upper left side of the forward fuselage and is hydraulically opened and closed.

B. The door is an aluminum structure consisting of the upper and lower door beams, door frames, and stringers. Ten piano type hinges are bolted to the upper beam. Seven window assemblies are installed just below the horizontal centerline. A manual locking handle is installed in the forward portion of the door. A latch actuator and the door latching mechanism is installed along the lower portion of the door. Eight plastic viewing panels and lockpin access panels are located along the lower outside edge of the door.

C. Cabin pressure is sealed in and water is sealed out by a continuous, bulb type, pressure seal around the door periphery. A diaphragm seal along the top edge prevents water leakage when the door is open. The door is secured shut by eight hydraulically operated latch hooks.

D. The door hydraulic system is supplied by two lines from hydraulic system B which enter the door near the top center. These lines supply the latch actuator. The latch system includes a torque tube which extends the full length of the door. The torque tube is equipped with eight bellcranks and eight link assemblies. The link assemblies attach to latch fittings which are held in open or closed position by a compression spring.

2. Operation

A. Each latch fitting is held positively in the locked position by a lockpin, which blocks torque tube rotation. The lockpins are moved to the unlocked position by the manual lock handle when it is pulled outward from the door. The manual lock handle incorporates a trigger fitting which acts inward to release a catch. A flexible cable, bellcranks, ten push rod assemblies, and eight vertical tube assemblies transmit motion of the manual lock handle. A bellcrank on each of the eight tube assemblies actuates a lockpin. The aft vertical tube assembly is equipped with a cam which actuates a microswitch. The microswitch makes contact when the lockpins are positioned to release the torque tube. A control switch, external to the door, controls hydraulic operation of the door during normal operation on the airplane. An external motor driven hydraulic valve applies pressure directly to the latch actuator and, through a flow limiter, to the lift actuator. When opening the door, the latch actuator operates to break the pressure seal and push the door slightly ajar through action of a cam surface on the latch hooks. The lift actuator, external to the door assembly, then raises the door to the open position. During the door closing sequence, hydraulic pressure is applied to the latch actuator but the latches cannot function until the latch hooks strike the latch pins. This action causes the actuator bellcrank to move back over center. The latch hooks then close and latch the door. The manual lockhandle is then pushed to its flush position, the microswitch removes electrical power from the hydraulic control valve and the lockpins return to their locked position.

3. Leading Particulars

Width -- 142 inches (approximately)
Height -- 85 inches (approximately)
Thickness -- 4.5 inches (approximately)
Weight -- 782 pounds (approximately)

DISASSEMBLY

NOTE: Disassembly is divided generally into four separate operations: door structure (Fig. 1101), hydraulics (Fig. 1102), mechanism and switch (Fig. 1103), and handle (Fig. 1104).

1. Disassembly of Door Structure (Fig. 1101)

CAUTION: IF CARGO DOOR IS RECEIVED WITH PASSENGER WINDOW PANELS INSTALLED, PLACE PROTECTIVE COVERING OVER INNER AND OUTER SURFACES OF PANELS. OUTER SKIN SHOULD BE PROTECTED AT ALL TIMES DURING OVERHAUL.

NOTE: To facilitate reassembly, make sure each part removed is identified by part number.

A. Attach cargo door to a suitable handling fixture.

NOTE: Deleted.

B. Remove bolts (2) from access doors (3) and separate access doors from door structure.

NOTE: Do not remove rivets (4 and 5) and nutplates (6 thru 9) from door structure unless replacement is necessary.

C. Remove screws (11), washers (12), and access door (13) from door structure.

NOTE: Do not remove rivets (14) and nutplates (15, 16, and 17) unless replacement is necessary.

D. Remove rods (19) and separate weather seal (20) from applicable seal retainers (24, 25, 26, or 80).

NOTE: Seven rods (19) are used to attach weather seal (20) to airplane structure and may not be with door assembly.

E. Remove pressure seal (21) from applicable seal retainer (28 or 80) by applying pressure in either direction from centerline of seal.

CAUTION: CARE SHOULD BE TAKEN IN REMOVING SEAL (21) TO AVOID DAMAGE TO SEAL. DO NOT USE TOOLS HAVING SHARP POINTS OR EDGES.

F. On applicable doors, remove rivets (23) only if repair or replacement of weather seal retainers (24, 25, or 26) is necessary.

G. On applicable doors, remove rivets (27) only if repair or replacement of pressure seal retainer (28) is necessary.

H. Do not remove rivets (29) unless repair or replacement of pressure seal retainers (30 through 35) is necessary.

J. Remove nuts (38), washers (39), bolts (40, 41, 44, 45, and 46) and hinge fairing plates (47 and 48).

NOTE: Removal of hinge fairing plates (47 and 48) is required prior to removal of cargo door from airplane and therefore plates may not be with door assembly.

Do not remove nutplates (42 and 43) from door structure unless replacement is necessary.

Do not remove items (49 through 53, 56 through 64, and 71 through 78) unless repair or replacement of supports (55, 70, or 79) or retainer (80) is necessary.

Do not remove nut (81), washer (82), and bolt (83) unless removal of filler (84) is necessary.

Do not remove items (85 through 90, 93 through 99, and 102 through 106) unless repair or replacement of hinges (92, 101, and 107 through 114) is necessary.

K. Remove nuts (116), screws (117 and 120), blocks (118), clamps (119 and 122), washer (121), and tube (123).

L. Remove blanket assemblies (125 through 136) from door structure.

NOTE: Blanket assemblies may be removed through 6 inch diameter holes in inner skin.

Nuts (138), washers (139), bolts (140), and doublers (141 and 142) will be removed during removal of mechanism installation (155).

M. If replacement of bushings (150 and 151) is required, remove bolts (143 and 144), collars (145), and bracket assemblies (146 and 147).

NOTE: Do not remove rivets (148) and nutplate (149) from brackets (152) unless replacement is necessary.

N. Remove hydraulic installation (153) per paragraph 2.

P. Remove lock switch installation (154) per paragraph 3.

Q. Remove mechanism installation (155) per paragraph 3.

R. Remove handle installation (156) per paragraph 4.

S. Remove bushings (158) and lubrication fitting (159) from actuator fitting (160) only if replacement is necessary.

T. Remove rivets (164) and centering cam liners (165) from cams (166) only if replacement is necessary.

U. Remove bushings (167, 168, and 171) and fittings (169 and 170) from latch support fittings (172 through 183) only if repair or replacement is necessary.

V. Remove nuts (184 and 185), washers (186 and 187), bolts (188 through 191), bushings (192 and 193), and fillers (194 and 195).

W. Remove rivets (196), retainers (197), and doublers (198) from door structure only if replacement of observation windows (199) is required.

X. On applicable assemblies, remove nuts (199A), washers (199B), bolts (199C and 199D), filler (199E) and stop assembly (199F).

NOTE: Do not remove parts (199G through 199F) from stop assembly structure (199K) unless replacement is necessary. The stop assembly structure (199K) is riveted and should not be disassembled.

Y. Remove frame installation (200) components as follows:

NOTE: Do not remove bushings (201 and 202) unless replacement is necessary.

(1) Remove bolts (203), washers (204), and support assemblies (205 and 206) from door structure.

NOTE: Do not remove rivets (207) and nutplates (208) from supports (209) unless replacement is necessary.

Z. Remove nameplate (210) from door structure only if replacement is necessary.

2. Disassembly of Hydraulic System (See figure 1102.)

WARNING: PAINFUL EYE IRRITATION RESULTING FROM CONTACT WITH SPECIFICATION BMS 3-11 HYDRAULIC FLUID MAY BE RELIEVED BY FLUSHING SEVERAL TIMES WITH WATER AND APPLYING AN ANESTHETIC EYE SOLUTION.

SKIN IRRITATION CAUSED BY CONTACT WITH HYDRAULIC FLUID MAY BE PREVENTED BY WASHING THOROUGHLY WITH SOAP AND WATER AND APPLYING A LANOLIN OR PETROLATUM TYPE LOTION.

CAUTION: IMMEDIATELY WIPE UP ANY SPILLED SPECIFICATION BMS 3-11 HYDRAULIC FLUID. SOME SURFACES AND SOME FINISHES WILL BE DAMAGED BY PROLONGED CONTACT WITH FLUID. FOR FURTHER INFORMATION, REFER TO SUBJECT 29-00-01, FIRE RESISTANT HYDRAULIC FLUID.

NOTE: Provide container to catch hydraulic fluid spilled when tubing or hose connections are loosened.

Keep all open ports capped with suitable plastic caps.

All item numbers pertain to figure 1102 unless otherwise indicated.

A. Remove hose assemblies (2) and (3).

B. Remove latch actuator installation (4) as follows:

(1) Remove tube assemblies (5 and 6).

(2) Remove cotter pins (7), nuts (8), washers (9), bolts (10 and 11), latch actuator assembly (12), spring (13), and fluid absorber (14).

(a) Overhaul latch actuator assembly (12) per Subject 52-30-61.

C. Remove nuts (15), screws (16), spacers (17 and 18), and clamps (19).

D. Remove nuts (20), washers (21), and tube assembles (22 and 23).

3. Disassembly of Mechanism and Switch Installations (See figure 1103.)

A. Remove switch (1) as follows:

(1) Remove roller guide lockring and roller guide.

(2) Remove hexnut, internal tooth lockwasher, and keying washer from microswitch and remove microswitch from support bracket.

NOTE: Refer to manufacturer's instructions for overhaul of switch (1).

Do not remove marker (2) unless replacement is necessary.

B. Remove nuts (3), washers (4), bolts (5), and pushrod assemblies (6 through 10 and 17).

CAUTION: AVOID DAMAGE TO LININGS OF SELF-LUBRICATED SURFACES ON ROD END BEARINGS (11, 14, AND 18).

C. Disassemble pushrod assemblies (6 through 10) as follows:

(1) Loosen jamnut (12) and remove rod end bearing (11) and nut (12).

NOTE: Do not remove rivets (13), rod end bearing (14), and pushrod sleeve (15) from rod (16) unless replacement is necessary.

D. Disassemble pushrod assembly (17) as follows:

(1) Loosen jamnuts (19) and remove rod end bearings (18) from sleeve (20).

(2) Remove jamnuts (19) from rod end bearings (18).

E. Remove nuts, washers, and bolts (138 through 140, figure 1101) and nuts (21), washers (22), bolts (23 through 25), doublers (141 and 142, figure 1101), shims (61), and tube assemblies (26 through 33).

CAUTION: AVOID DAMAGE TO LININGS OF SELF-LUBRICATED JOURNAL BUSHINGS (53, FIGURE 1103, AND 192 AND 193, FIGURE 1101).

F. Disassemble tube assemblies (26 through 33) as follows:

(1) Remove nuts (34), washers (35), bolts (36), ring (56), if applicable, and bellcrank assemblies (37 through 40).

NOTE: Do not remove bushings (41 and 43) from bellcrank (45), or bushings (41 through 44) from bellcranks (46 through 48), or bushings (50 and 51) from bellcrank fitting (52) unless replacement is necessary.

(2) Remove self-lubricated journal bushing (53).

(3) If tube assemblies (26 through 33) (P/N 65-65722-1 through -7 and -501) are applicable, remove bushing (54).

NOTE: Do not remove bushing (55) unless replacement is necessary.

(4) Remove lower bellcrank assembly (57) and tube (60).

NOTE: Do not remove bushing (58) from bellcrank (59) unless replacement is necessary.

G. Remove ring (62) and cam (63).

H. Remove manual lockpins (65), links (66 and 67), bushings (68), and rivets (64) as a unit and remove bushings (69).

CAUTION: PROTECT DRY FILM LUBRICATED SURFACES OF LOCKPINS (65) AND BUSHINGS (68 AND 69) FROM DIRT AND MECHANICAL DAMAGE.

NOTE: Do not disassemble items (64 thru 68) unless replacement is necessary.

J. Using clamp to hold spring cartridge piston (74), cylinder (75), and spring (76), remove nuts (70), washers (71), and screws (72 and 73). Gradually release clamp and remove piston (74), cylinder (75), spring (76), and bushings (77 and 78).

WARNING: SUDDEN RELEASE OF SPRING (76) FROM COMPRESSED STATE COULD RESULT IN INJURY.

K. Remove cotter pins (79), nuts (80), bolts (81), rod end bearing (82), and jamnut (83).

CAUTION: AVOID DAMAGE TO LININGS ON SELF-LUBRICATED SURFACE OF ROD END BEARINGS (82).

L. Remove nuts (84), washers (85 and 86 or 85A and 85B), bolts (87), bushings (88), washers (89), and fitting assemblies (90 thru 94).

NOTE: Do not remove bushings (95 thru 97) and lubrication fittings (98) from latch hook fitting assemblies (90 thru 94) unless replacement is necessary.

M. Remove nuts (100), washers (101), bolts (102 and 103), and latch system torque tube (104).

N. Remove nuts (105), washers (106), bolts (107 and 108), washer (109), and bellcrank and bearing housing assemblies (110).

P. Disassemble bellcrank and housing assemblies (110) as follows:

(1) Remove cotter pin (111), nut (112), washer (113), bolt (114), and rod end bearing (115).

(2) Remove bellcrank assembly (116) from self-lubricated spherical bearing (120).

CAUTION: AVOID DAMAGE TO LININGS ON SELF-LUBRICATED ROD END BEARINGS (115) AND SPHERICAL BEARING (120).

NOTE: Do not remove bushings (117 and 118) or angle (121A), if installed, from bellcrank fitting (119) unless replacement is necessary.

Do not remove bearing (120) from housing (121) unless repair or replacement is necessary.

Q. Remove nuts (122), washers (123), bolts (124), shims (125), and bellcrank and bearing housing assembly (126) and remove actuator bellcrank assembly (129) and washers (134) from bellcrank and bearing housing assembly (126).

CAUTION: AVOID DAMAGE TO LININGS OF SELF-LUBRICATED SPHERICAL BEARINGS (127).

NOTE: Do not remove bearing (127) from bearing housing (128) unless repair or replacement is necessary.

Do not remove bushings (130 thru 132) from bellcrank (133) unless replacement is necessary.

R. Remove lockwire from nuts (135, 135A and 135B) and remove washers (136) and stop pins (137).

S. Remove one nut (138), washers (139 and 140), and one bolt (141).

T. Remove nuts (142), washers (143 and 144), spacers (145), bolts (146), screws (148 and 150), and clamps (149).

NOTE: Do not remove rivets (151) and spacer nutplate (152) unless replacement is necessary.

U. Remove three nuts (147), one bolt (141), bolts (154 and 155), washers (153), and push-pull lock control assembly (156).

NOTE: Do not remove washers (157) except for adjustment purposes.

V. Remove nuts (158 and 159), washers (160 and 161), bolts (162 and 163), shims (167), bushing housing assemblies (164), and bellcrank assembly (168).

CAUTION: AVOID DAMAGE TO LININGS OF SELF-LUBRICATED BUSHINGS (166).

NOTE: Do not remove bushing (166) from housing (165) unless replacement is necessary.

Do not remove bushings (169 thru 173) from bellcrank (174) unless replacement is necessary.

W. Remove bolts (175), bushings (176), washers (177), and link assemblies (178 or 183).

CAUTION: AVOID DAMAGE TO LININGS OF SELF-LUBRICATED BUSHINGS (179 and 184).

NOTE: Do not remove bushings (180 and 181) or (185 and 186) from fittings (182 or 187) unless replacement is necessary.

4. Disassembly of Manual Lock Handle Installation (Fig. 1104)

A. Remove spring (1).

B. Remove nut (2), bolt (3), washers (4), nut (5), washer (6), bolt (7), washers (8), bushing (9), cylinder assembly (10), piston (13), and compression spring (14).

WARNING: COMPRESSION FORCE ON SPRING (14) MAY BE AS MUCH AS 180 POUNDS. PREVENT POSSIBLE INJURY BY USING ADJUSTABLE CLAMP OR EQUIVALENT TO HOLD SPRING COMPRESSED DURING REMOVAL OF BOLTS.

NOTE: Do not remove bearing (11) from spring cylinder (12) unless replacement is necessary.

C. Remove cotter pin (15), nut (16), washer (17), shaft assembly (23 or 24), washers (18, 19, 21, and 22), and manual lock handle (20, 60 or 65) as applicable.

(1) If shaft assembly (24) is installed, remove nut (25), washer (26), bolt (27), and bellcrank assembly (28).

NOTE: Do not remove bushings (29 and 30) from bellcrank (31) unless replacement is necessary.

Do not remove bushings (32 and 33) from shaft (36 or 37) unless replacement is necessary.

Do not remove bushings (34 and 35) from shaft (36) unless replacement is necessary.

D. Remove bearings (38 and 40) and seals (39 and 41).

E. Remove nuts (42), washers (43), bolts (44), hook (45), and shim (46).

F. Remove lockwire and rollpin (47), trigger crank assembly (48), seal (41), washers (18 and 19), and handle trigger fitting assembly (49 or 70).

(1) Remove nut (50), washers (51), bolt (52), sleeve (53), bushing (54), and teflon washers (55) from handle trigger fitting (56).

NOTE: Do not remove pressure box fitting assembly (57) from door unless repair or replacement makes it necessary.

Do not remove bushings (58) from pressure box (59) unless replacement is necessary.

CLEANING

1. General

   A. Wash all metal parts removed from door assembly except bearings and teflon-lined bushings with solvent, Specification P-D-680, or equivalent.

   B. Clean door structure as necessary using cloth dampened in solvent, Specification P-D-680, or equivalent.

      NOTE: Remove any solvent trapped in crevices, cracks, or other confined areas using dry, compressed air.

      CAUTION: EXERCISE CARE TO PREVENT SOLVENT CONTACT WITH LINED SELF-LUBRICATED BUSHINGS (192 AND 193, FIG. 1101; 11, 14, 18, 53, 82, 115, 120, 127, 166, 179 AND 184, FIG. 1103) AND TEFLON WASHERS (55, FIG. 1104).

   C. Use stiff-bristle brush to remove stubborn accumulation of foreign matter.

   D. Drain and dry all parts with lint-free cloth or dry, compressed air.

   E. For further information, refer to 20-30-03, General Cleaning Procedures.

2. Bearings

   A. Clean all bearings in accordance with 20-30-01.

3. Nylon Parts

   A. Wash all nylon parts in a mild soap and water solution. Rinse with clean water and dry with clean, dry, compressed air.

4. Teflon Parts

   A. Clean teflon and teflon-lined parts in accordance with 20-30-01.

5. Door Seals

   A. Wipe seals (20 and 21, Fig. 1101) with a mild soap and water solution. Rinse with clean water and dry with clean, dry, compressed air.

6. Insulation Blankets

   A. Wipe insulation blanket assemblies (125 through 136, figure 1101) with a clean cloth dampened in a mild soap and water solution. Immediately wipe again with a clean cloth dampened with clean water. Dry with clean, lint-free cloth or clean, dry, compressed air.

7. Hydraulic Tubing

   A. Refer to "General Cleaning Procedures," Subject 20-30-03, for cleaning of all hydraulic tube assemblies.

8. Areas To Be Sealed

   A. Remove large particles using clean bristle brush or cloth wet with BMS 11-7 cleaner. The use of excess cleaner should be avoided.

   B. Cleaning should be accomplished with BMS 11-7 cleaner immediately prior to sealant application. All cleaner should be wiped off while wet with a clean, lint-free cloth.

   C. Remove all solvent with clean, dry, compressed air. Make final cleaning using cloth dampened with cleaner and immediately wipe dry.

      CAUTION: IF CARGO DOOR IS RECEIVED WITH PASSENGER WINDOW PANELS INSTALLED, CARE SHOULD BE TAKEN TO AVOID CONTACTING PANES WITH BMS 11-7 CLEANER.

      NOTE: It is acceptable if some primer is removed during cleaning. Sealant may be applied directly to exposed metal and remaining exposed area touched up with primer as necessary.

9. Hydraulic Fluid Absorber

   A. Wash absorber (14, figure 1102) in solvent, Specification P-D-680, or equivalent to remove hydraulic fluid contamination. Gently squeeze out excess solvent and allow to air dry.

INSPECTION/CHECK

1. Visually examine all metal parts for cracks, burrs, and corrosion, using strong light and 10-power magnification.

2. Check all painted and plated surfaces for blistering, flaking, and continuity of plating surface.

3. Examine all threaded parts for cross-threading or stripping.

4. Check weather and pressure seals (20 and 21, Fig. 1101) for cuts, punctures, or other damage and general deterioration.

5. Check hinges (92 and 101, figure 1101) and hinge halves (107 thru 114, Fig. 1101) for cracked or broken loops and elongated hinge pin holes.

6. Examine blanket assemblies (125 thru 136, Fig. 1101) for cover punctures, hydraulic fluid contamination, or other damage.

7. Check bushings (150, 151, 158, 167, 168, 171, 201, and 202, Fig. 1101; 41 thru 44, 50, 51, 54, 55, 58, 68, 69, 77, 78, 88, 95, 96, 97, 117, 118, 130, 131, 132, 169 thru 173, 176, 180, 181, 185 and 186, Fig. 1103; and 9, 29, 30, 32 thru 35, 54, and 58, Fig. 1104) for cracks, corrosion, surface scratches, or other damage.

8. Examine liner (165, Fig. 1101) for scoring, gouging, or indentations of metal and security of attachment.

9. Check fittings (169 and 170, Fig. 1101) for condition and security of attachment.

10. Check lined self-lubricated bushings/bearings (192 and 193, Fig. 1101; 11, 14, 18, 53, 82, 115, 120, 127, 166, 179 and 184, Fig. 1103) and teflon washers (55, Fig. 1104) for scratches, cuts, nicks, grooves, dents, or general deterioration.

11. Check observation windows (195E, 195F and 199, Fig. 1101) for clearness.

12. Check nameplate (210, Fig. 1101) for legibility and security of attachment.

13. Check springs (13, Fig. 1102; 76, Fig. 1103; and 1 and 14, Fig. 1104) for compliance with values provided in Fig. 301.

14. Examine all hydraulic tubing and hose assemblies for kinks, dents, cracks, gouges, corrosion, or other defects or damage which could cause failure. Check tube and hose end fittings for defects which could cause leakage.

15. Check Metal-Cal (2, Fig. 1103) for legibility and security of attachment.

16. Check bearings (11, 14, 18, 82, and 115, Fig. 1103; and 11, 38, and 40, Fig. 1104) for corrosion, roughness, binding, radial or axial play, if applicable, and freedom of rotation.

17. Examine dry film lubricant on items (65, 68, and 69, Fig. 1103) for cracks, blisters, galling, and continuous coating of lubricant (Ref 20-50-08).

    NOTE: Dry film lubricant on new parts procured from stock is dull in appearance. Parts with dry lubricant coating burnished may be continued in service as long as the coating is smooth and unbroken.

18. Check molded nylon parts (74 and 75, Fig. 1103; and 13, 20, 45 (69-41480-1), and 65 Fig. 1104) for cracks, nicks, gouges, or other damage.

19. Examine bellcranks (119 and 133, Fig. 1103) for condition and wear at point of contact with adjustment bolt (141) or setscrew (137).

20. Check bolthead (141, Fig. 1103) and setscrew (137) for damage.

21. Examine door structure for damage and security of all parts not removed during disassembly.

22. If questionable areas are evident under visual examination, perform magnetic particle examination or penetrant check as applicable of items shown on Fig. 302.

Item Number, Figure Number	Approximate Free Length (Inches)	Test Length (Inches)	Allowable Load Limits (Pounds)
76, 1103	7.00	5.00 4.00	60.1 to 73.3 90.0 to 110.0
1, 1104	2.75	3.66 to 4.48	14.66
14, 1104	2.56	2.43 1.75	24.7 to 28.7 150.0 to 182.0

Spring Check Data
Figure 301

Penetrant Check (Fig. - Item)	Magnetic Particle Examination (Fig. - Item)
1101-47	1101-92
1101-48	1101-101
1101-160	1101-107
1101-166	1101-108
1101-172	1101-109
1101-173	1101-110
1101-174	1101-111
1101-175	1101-112
1101-176	1101-113
1101-177	1101-114
1101-178	1101-169
1101-179	1101-170
1101-180	1103-15
1101-181	1103-20
1101-182	1103-66
1101-183	1103-67
1101-209	1103-76
1103-16	1103-104
1103-45	1103-121
1103-46	1103-128
1103-47	1104-14
1103-48	1104-31
1103-59	1104-36
1103-60	1104-37
1103-63	
1103-66	
1103-67	
1103-99	
1103-119	
1103-133	
1103-165	
1103-174	
1103-182	
1104-12	
1104-45 (69-71047-1)	
1104-56	
1104-59	

REPAIR

1. Repair

   A. Remove minor scratches, nicks, and corrosion by polishing lightly with 220 grit or finer abrasive cloth. Refinish as required for protection against corrosion.

   B. Repair minor defects in threaded areas with thread chaser or small triangular file.

   C. If replacement bolt (81, figure 1103) is not available, rework BACB30LJ8U24 bolt per figure 401.

   D. If attachment holes in bellcrank assembly (116, figure 1103) and corresponding holes in torque tube (104, figure 1103) are worn beyond service wear limits shown on figure 601, ream holes to 0.2646 to 0.2656 inch diameter and install new oversize bolt, BACB30NF4-35X.

   E. If attachment holes in bellcrank assembly (129, figure 1103) and corresponding holes in torque tube (104, figure 1103) are worn beyond service wear limits shown on figure 601, ream holes to 0.263 to 0.265 inch diameter and install new oversize bolt, BACB30NF4-31X.

2. Refinish (See figure 402.)

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

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

      (1) Structure (See figure 1101.)

         (a) Access Doors (3) -- Apply SRF-14.01 all over.

         (b) Access Door (13), Seal Retainers (24, 25, 26, 28, 30 through 35, and 80), Shims (36), Fillers (54, 65, 84, 194, and 195), Supports (55, 70, 79, and 209), Tube (123), Brackets (152), and Fitting (160) -- Apply SRF-2.30 all over.

         (c) Plates (47 and 48) -- Apply F-2.20 (optional F-2.201 plus SRF-12.205 plus SRF-12.64) all over.

(d) Shims (91 and 100) -- Apply F-12.415 all over after delaminating.

(e) Hinges (92 and 101) -- Cadmium plate (F-15.06) all over and apply two coats of BMS 10-11, Type 1 primer (F-20.03) on indicated surface per Fig. 402.

(f) Hinge halves (107 thru 114) -- Apply primer (F-20.03) followed by one coat of BMS 10-11, Type 2 enamel, color 707 gray gloss per (F-21.02). No paint in hinge pin holes except overspray permitted. No finish allowed on spot weld faying surface.

(g) Bushings (158) -- Apply F-4.201 to indicated surface per Fig. 402 except single plating thickness 0.0002 to 0.0004 inch.

(h) Liners (165) -- Apply SRF-1.285 all over except apply primer to concave surface only. Material is 17-7PH steel per Specification MIL-S-25043 annealed, surface condition 2D, heat treated from 180 to 200 ksi.

(i) Cams (166), fittings (172 thru 183), retainers (197), and doublers (198) -- Apply SRF-2.30 plus SRF-12.64 all over.

(j) Fittings (169 and 170) -- Apply F-8.07 all over. Material is AISI 17-4PH per Specification AMS 5344 or AMS 5643, heat treated from 180 to 200 ksi.

(k) Filler (199E) and bellcrank stop assembly structure (199K) -- Apply F-2.30 all over.

(2) Mechanism (Fig. 1103)

(a) Rods (16) -- Apply SRF-2.901 all over.

(b) Sleeves (15 and 20) -- Apply F-1.202 all over followed by SRF-12.205 on exterior surface and SRF-12.206 on internal surface except threads. Material is 4340 steel bar per MIL-S-5000 annealed, or normal hex bar heat treated from 180 to 200 ksi.

(c) Bellcranks (45 thru 49) -- Apply SRF-2.30 all over, except in holes for bushings and surfaces shown on Fig. 402 (applicable to P/N 65-67788-6 thru -10 only).

(d) Bellcrank fitting (52) -- Apply SRF-2.30 all over, except in holes for bushings.

(e) Bushings (54 and 55) -- Apply F-1.202 except surface shown on Fig. 402. Material is 17-4PH bar per AMS 5643 heat treated from 180 to 200 ksi.

(f) Bellcrank (59) -- Apply SRF-2.30 all over except in holes for bushings and on surface indicated per figure 402 (P/N 65-67787-1 only).

(g) Lock Tube (60) -- Apply SRF-2.30 all over except surfaces indicated on figure 402.

(h) Actuator Cam (63) -- Apply F-2.26 all over.

(j) Lock Pin (65) -- Apply dry lubricant per BMS 3-8, Class A, Method 3 all over. Material is AISI 17-7PH steel heat treated from 180 to 200 ksi.

(k) Manual Lock Link (66 and 67) -- Apply F-8.07 all over. Material is CRES 17-7PH per MIL-S-25043 heat treated from 180 to 200 ksi.

(l) Bushings (68 and 69) -- Dry lubricate per BMS 3-8, Class A, on external surface (overspray allowed).

(m) Compression Spring (76) -- Apply SRF-1.92 all over.

(n) Bolt (81) -- Passivate per QQ-P-35.

(p) Bushing (88) -- Apply F-1.842 to minimum single plating thickness of 0.002 inch on external surfaces per figure 402. Material is 17-4PH per AMS 5643 heat treated from 180 to 220 ksi.

(q) Washer (89) -- Apply F-8.07 all over.

(r) Latch Hook Fitting (99) -- Apply F-8.07 all over followed by F-12.205 and F-12.64 per figure 402. Material is CRES 17-4PH per AMS 5643 heat treated from 180 to 200 ksi.

(s) Torque Tube (104) -- Apply SRF-1.285 to exterior surface and SRF-12.206 to interior surface.

(t) Bellcrank (119) -- Apply SRF-2.30 all over except no primer in bushing holes or on surface which mates with bearing (120).

(u) Housing (121) -- Apply SRF-1.285 all over except no primer on surface seating bearing per figure 402. Material is steel plate 4340 per AMS 6359 for P/N 69-41479-1 and 4340 steel forging per MIL-S-5000, Class III, for P/N 65-67793-1, heat treated from 180 to 220 ksi.

(v) Angle (121A) -- Apply two coats of BMS 10-11, type 1 primer (SRF-12.206) all over. Material: 17-7PH CRES, 180-200 ksi.

(w) Housing (128) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, type 1 primer (SRF-2.30) all over except omit primer on bearing bore. Material: Alum alloy.

(x) Bellcrank (133) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, type 1 primer (SRF-2.30) all over except omit primer on surfaces indicated in Fig. 402. Material: Alum alloy.

(y) Stop pin (137, 66-12687-4) -- Cadmium plate (F-1.1923) all over. Material: 4140 or 4340 steel, 160-180 ksi.

(z) Thrust washer (134) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, type 1 primer (SRF-2.30) all over. Material: Alum alloy.

(aa) Housing (165) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, type 1 primer (SRF-2.30) all over except omit primer in bushing hole. Material: Alum alloy.

(ab) Shims (61 and 67) -- Alodize (F-2.21) all over. Material: Alum alloy.

(ac) Bellcrank (174) and fittings (182 and 187) -- Alodize or chromic acid anodize and apply one coat of BMS 10-11, type 1 primer (SRF-2.30) all over except omit primer on surfaces mating with bushings. Material: Alum alloy.

(3) Manual Lock Handle Assembly (Fig. 1104)

(a) Cylinder (12) -- Hard anodize (F-2.204) except flash hard anodize surface mating with bearing. If new bearing is installed, brush alidize (F-2.940) swaged area. Material: Alum alloy.

(b) Spring (14) -- Cadmium plate and apply one coat of BMS 10-11, type 1 primer (SRF-1.92) all over.

(c) Shaft (36) -- Passivate (F-8.07) all over. Material: 15-5PH CRES, 180-200 ksi.

(d) Shaft (37) -- Passivate (F-8.07) all over. Material: 17-4PH CRES, 180-200 ksi.

(e) Hook (45) (69-71047-1) -- Anodize and apply one coat of primer BMS 10-11, type 1 (F-18.04) all over. Follow with one coat of white enamel, BMS 10-11, type 2 (SRF-12.64) all over. Material: Aluminum alloy.

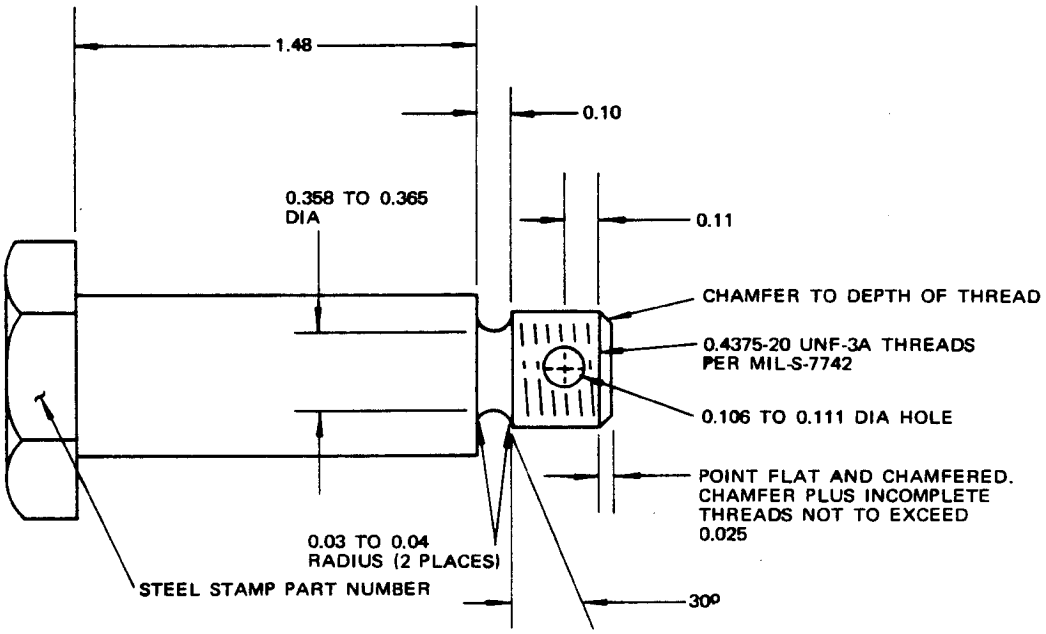
(f) Fitting (56) -- Sulfuric acid anodize (F-2.201) all over following application of buff satin finish per Fig. 402. Material: Alum alloy.

(g) Crank assembly (48) -- Passivate (F-8.07) all over. Material: 17-4PH CRES, 180-200 ksi.

(h) Sleeve (53) -- Cadmium plate (F-1.191) all over except omit plating on ID. Hold OD to 0.2480-0.2495 inch after plating. Material: 17-4PH CRES, 160-200 ksi.

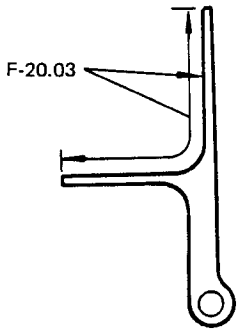
(i) Handle (66) and fitting (67) -- Chemical treat and apply one coat of BMS 10-11, type 1 primer (F-18.05) all over except omit primer on splines of fitting.

(j) Handle assembly (65) -- Apply one coat of white enamel, BMS 10-11 type 2 (SRF-12.64) all over except on splines.

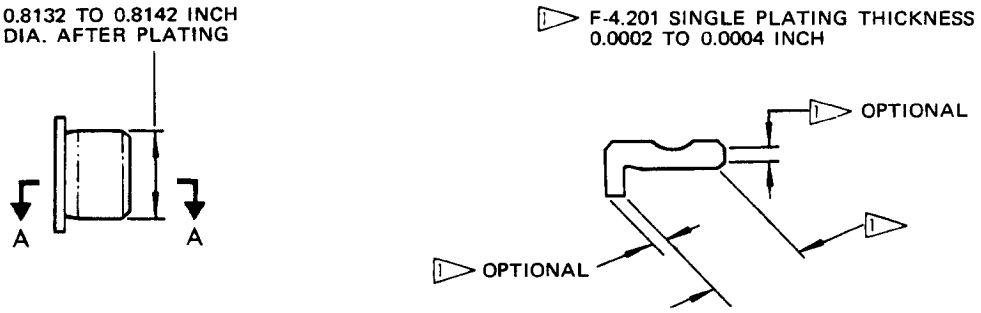


NOTE: DIMENSIONS IN INCHES

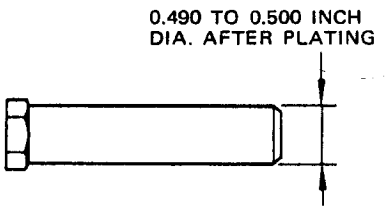
BOLT (81, FIGURE 1103)



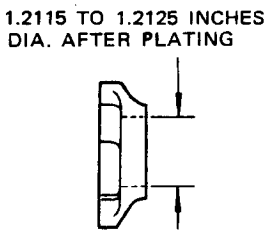
HINGE (92 AND 101, FIGURE 1101)



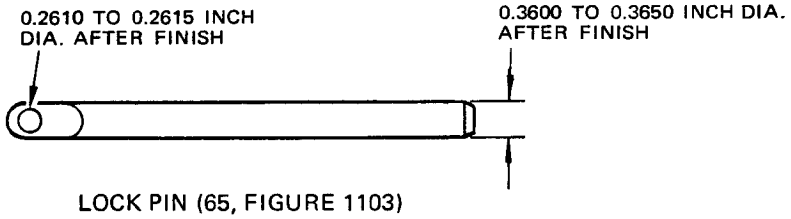
BUSHING (158, FIGURE 1101)



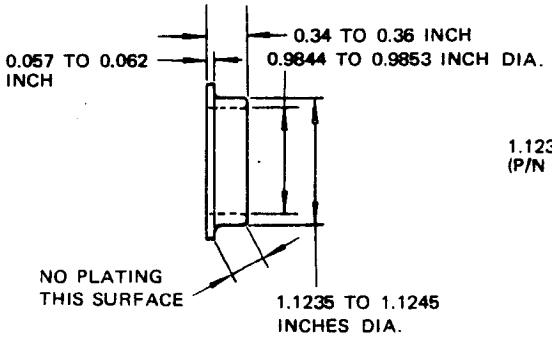
SLEEVE (15, FIGURE 1103)



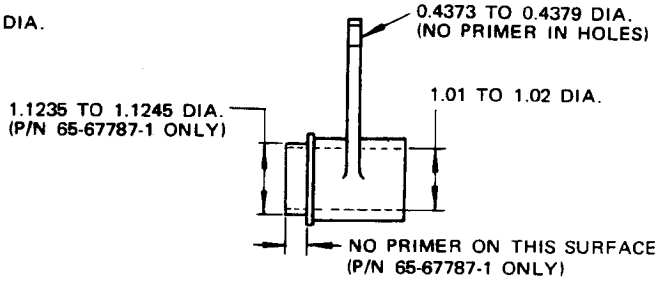
CAM (63, FIGURE 1103)



LOCK PIN (65, FIGURE 1103)

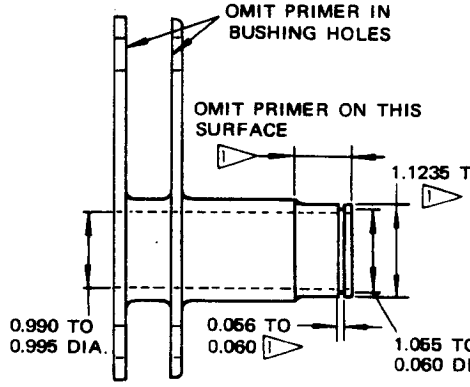


BUSHING (54 AND 55, FIGURE 1103)



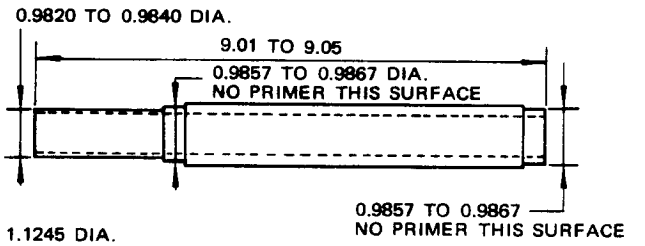
NOTE: DIMENSIONS IN INCHES AFTER PLATING

BELLCRANK (59, FIGURE 1103)



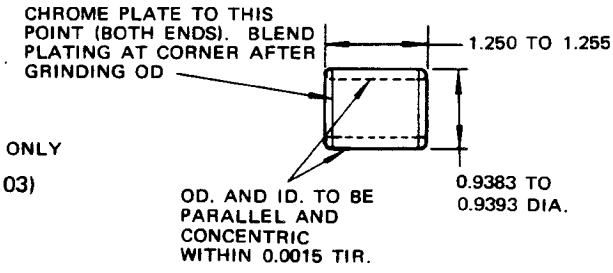
NOTE: DIMENSIONS IN INCHES AFTER PLATING
1 APPLICABLE TO P/N 65-67788-6 THROUGH -10 ONLY

BELLCRANK (45 THROUGH 49, FIGURE 1103)



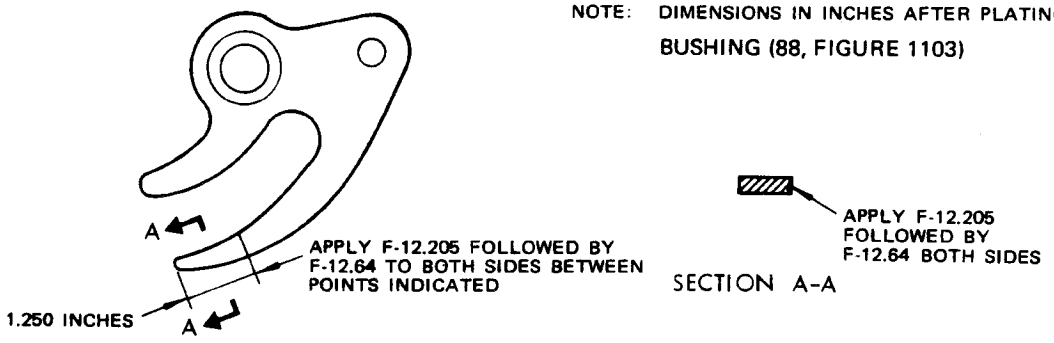
NOTE: DIMENSIONS IN INCHES AFTER PLATING

MANUAL LOCK TUBE (60, FIGURE 1103)

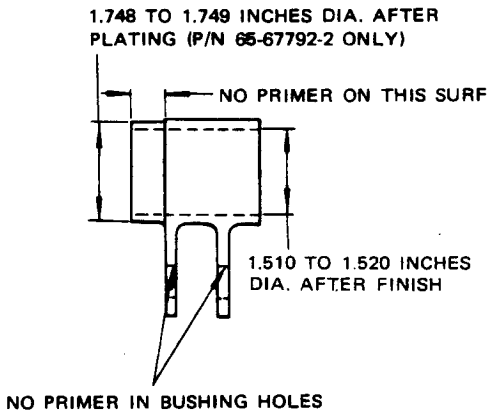


NOTE: DIMENSIONS IN INCHES AFTER PLATING

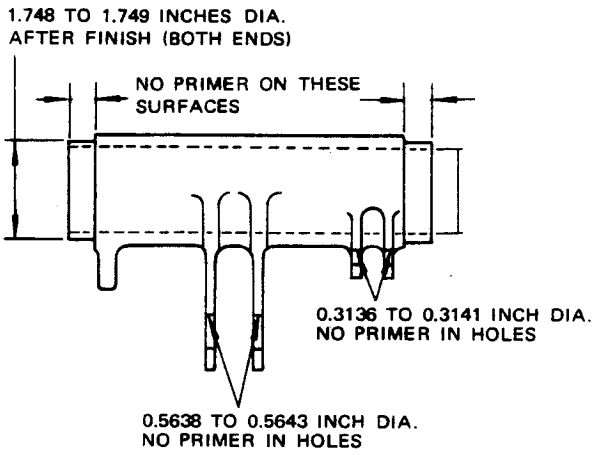
BUSHING (88, FIGURE 1103)



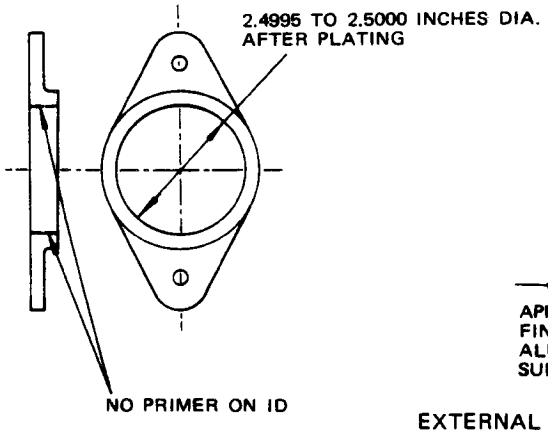
LATCH HOOK FITTING (99, FIGURE 1103)



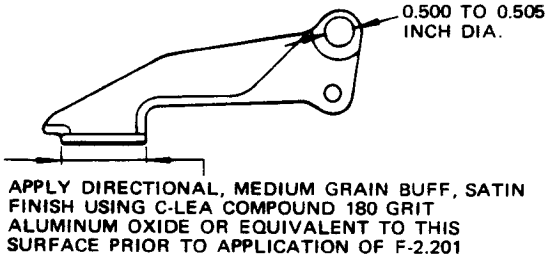
BELLCRANK (119, FIGURE 1103)



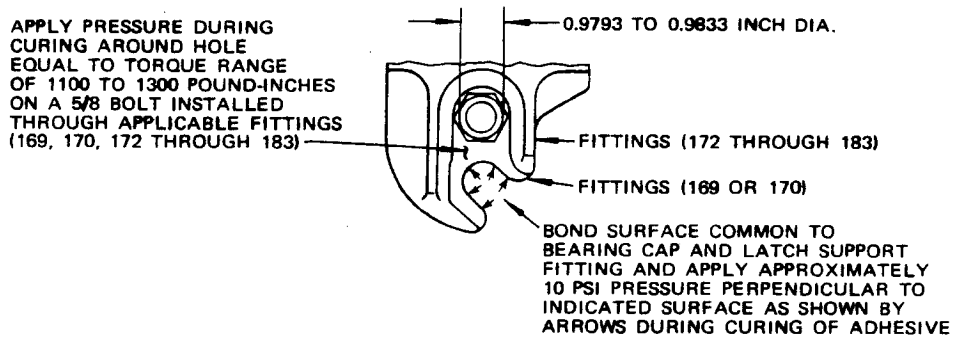
BELLCRANK (133, FIGURE 1103)

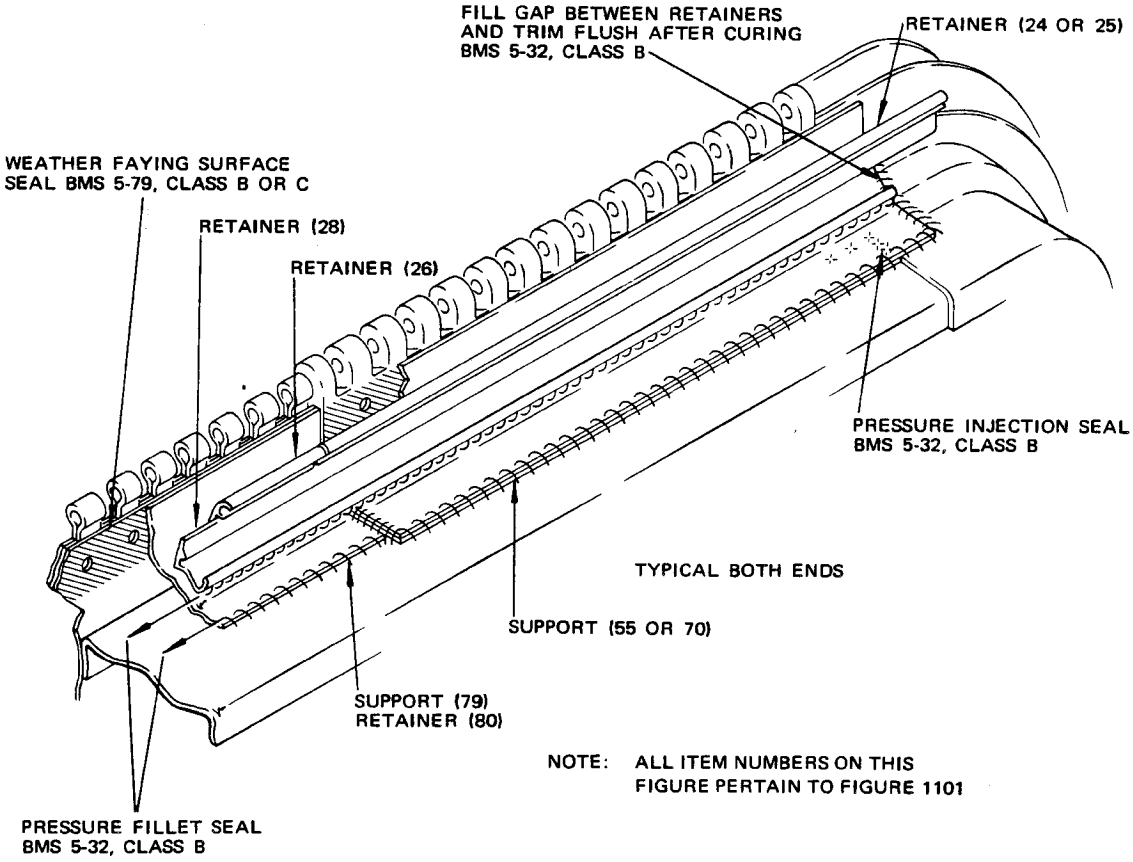


HOUSING (121, FIGURE 1103)



EXTERNAL HANDLE TRIGGER FITTING (56, FIGURE 1104)





NOTE: ALL ITEM NUMBERS ON THIS FIGURE PERTAIN TO FIGURE 1101

3. Replacement

NOTE: Install all non-aluminum protruding head fasteners through exterior aluminum surfaces by applying a fillet seal of BMS 5-95, class A or B sealant around head of fastener and around nut or collar.

Install all non-aluminum countersunk permanent fasteners through exterior aluminum surfaces by applying BMS 5-95, class B or C sealant to fastener and countersink area. Optional: Apply wet BMS 10-11, type 1 primer to countersunk area of hole and while primer is still wet, install fastener.

Install all non-aluminum countersunk removable fasteners through exterior aluminum surfaces by applying BMS 10-11, type 1 primer (dry) to hole surface.

A. Replace all parts found unserviceable or damaged beyond simple repair.

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

C. If replacement of weather seal retainer (24, 25, or 26, Fig. 1101) is required, remove attaching rivets (23) and separate retainer (24, 25, or 26) from pressure seal retainer (28). Clean and refinish area as necessary for protection against corrosion per 20-30-03, General Cleaning Procedures, and install new retainer using rivets (23).

CAUTION: EXTREME CARE SHOULD BE TAKEN WHEN REMOVING RETAINERS (24, 25, AND 26) TO AVOID DAMAGE TO PRESSURE SEAL RETAINER (28).

D. If replacement of pressure seal retainer (28, Fig. 1101) is required, proceed as follows:

(1) Remove rivets (23) and separate weather seal retainers (24, 25, and 26) from pressure seal retainer (28).

CAUTION: USE EXTREME CARE DURING REMOVAL OF WEATHER SEAL RETAINERS (24, 25, AND 26) TO AVOID ENLARGEMENT OF ATTACHMENT HOLES.

(2) Remove rivets (27) and separate pressure seal retainer (28) from supports (55, 70, and 79).

(3) Remove fillers (54 and 65) and supports (55, 70, and 79) from door structure by removing items (49 thru 53, 56 thru 64, and 71 thru 78).

(4) Clean and refinish weather seal retainers (24, 25, and 26) per 20-30-03, as necessary and attach to new pressure seal retainer (28) using rivets (23).

(5). Clean and refinish fillers (54 and 65) and supports (55, 70, and 79) per 20-30-03, as necessary for protection against corrosion. Attach pressure seal retainer (28) to supports (55, 70, and 79) using rivets (27). Clean area to be sealed per CLEANING, paragraph 8. See Fig. 403 for sealing details.

(6) Clean and refinish door structure per 20-30-03, as necessary prior to attachment of fillers (54 and 65) and supports (55, 70, and 79).

(7) Attach fillers (54 and 65) and supports (55, 70, and 79) to door structure using nuts (49, 56, 57, and 71), washers (50, 58, 59, and 72), bolts (51, 52, 53, 60 thru 64, 73, and 75 thru 78), and collars (74). Clean area to be sealed per CLEANING, paragraph 8. See Fig. 403 for sealing details.

E. If replacement of pressure seal retainers (30 through 35, figure 1101) is required, remove necessary rivets (29) and separate damaged retainer from door structure. Clean and refinish area as necessary for protection against corrosion. Clean area to be sealed per CLEANING, paragraph 8, and apply pressure faying surface seal, BMS 5-79, Class B or C between retainer and door structure. Install new retainer (30 through 35) using rivets (29). Fill gaps between retainers and between retainers and corner fittings with sealant and trim flush after curing.

CAUTION: USE EXTREME CARE DURING DRILLING OF RIVETS (29) TO PREVENT ENLARGEMENT OF ATTACHMENT HOLES IN DOOR STRUCTURE.

NOTE: Retainers (34 and 35) may be deflected by twisting about longitudinal axis to attain installation position.

F. If replacement of supports (55, 70, or 79, figure 1101) is necessary, proceed as follows:

(1) Remove rivets (27) and separate pressure seal retainer (28) from supports (55, 70, and 79).

NOTE: Do not remove weather seal retainers (24, 25, and 26) from pressure seal retainer (28).

CAUTION: USE EXTREME CARE WHEN DRILLING RIVETS (27) TO PREVENT ENLARGEMENT OF ATTACHMENT HOLES IN RETAINER (28).

(2) Remove fillers (54 and 65) and supports (55, 70, and 79) from door structure by removing items (49 through 53, 56 through 64, and 71 through 78).

(3) Clean and refinish retainer (28), fillers (54 and 65), and door structure as necessary for protection against corrosion.

(4) Attach pressure seal retainer (28) to new supports (55, 70, and 79) using rivets (27).

(5) Attach fillers (54 and 65) and supports (55, 70, and 79) to door structure using nuts (49, 56, 57, and 71), washers (50, 58, 59, and 72), bolts (51, 52, 53, 60 through 64, 73, and 75 through 78), and collars (74). Clean area to be sealed per CLEANING, paragraph 8. See figure 403 for sealing details.

G. If replacement of retainer (80, figure 1101) is necessary, proceed as follows:

(1) Remove rivets (27) securing retainer (80) to supports (55 and 70).

CAUTION: USE EXTREME CARE DURING DRILLING OF RIVETS (27) TO PREVENT ENLARGEMENT OF ATTACHMENT HOLES IN SUPPORTS (44 AND 56).

(2) Remove collars (74), nuts (71), washers (72), and bolts (73 and 75 through 78). Separate retainer (80) from door structure.

(3) Remove nuts (49, 56, and 57), washers (50, 58, and 59), and bolts (51, 52, 53, 60 through 64) and separate supports (55 and 70) from door structure.

(4) Clean and refinish supports (55 and 70) and door structure as necessary for protection against corrosion.

(5) Attach new retainer (80) to supports (55 and 70) using rivets (27).

(6) Clean area to be sealed per CLEANING, paragraph 8 and apply weather faying surface sealant, BMS 5-79, Class B or C prior to installation of supports (55 and 70) and retainer (80). See figure 403 for sealing details.

(7) Attach supports (55 and 70) and new retainer (80) to door structure using nuts (49, 56, 57, and 71), washers (50, 58, 59, and 72), bolts (51, 52, 53, 60 through 64, 73, and 75 through 78), and collars (74). Clean area to be sealed per CLEANING, paragraph 8 and apply pressure fillet and injection sealant, BMS 5-32, Class B. Fill gaps between supports (55 and 70) and retainer (80) and corner fittings with sealant and trim flush after curing. See figure 403 for sealing details.

H. If replacement of hinge (92 or 101, figure 1101) is necessary, proceed as follows:

(1) Remove items (49 through 65 and 70 through 80) as necessary for access and removal of nuts (85 and 93), washers (86 and 94), and bolts (89, 90, 98, and 99). Separate damaged hinge from door structure.

(2) Clean and refinish filler (54 or 65), support (55 or 70), applicable support (79) or retainer (80), and door structure as necessary for protection against corrosion.

(3) Attach new hinge (92 or 101) to door structure using applicable nuts (85 and 93), washers (86 and 94), and bolts (87, 88, 95, 96, and 97).

(4) Insert shim (91 or 100) under hinge (92 or 101) respectively and install applicable nuts (85 and 93), washers (86 and 94), and bolts (89, 90, 98, and 99)

NOTE: If new shim (91 or 100) is necessary, remove 0.003-inch laminations as required to fill gap between hinge and door structure. Maximum allowable gap before fastener installation is 0.010 inch. Apply BMS 10-11, type 1 primer after delaminating.

(5) Secure support (55 or 70) and applicable support (79) or retainer (80) to door structure using nuts (49, 56, 57, and 71), washers (50, 58, 59, and 72), bolts (51, 52, 53, 60 through 64, 73, and 75 through 78), and collars (74). Clean area to be sealed per CLEANING, paragraph 8 and apply pressure fillet and injection sealant, BMS 5-32, Class B. Fill gaps between supports (55 or 70) and retainer (80), corner fittings with sealant, and trim flush after curing. See figure 403 for sealing details.

J. If replacement of hinge halves (107 through 114, figure 1101) is required, proceed as follows:

(1) Remove nuts (71 and 102), washers (72 and 103), and applicable bolts (73, 104, 105, and 106) and separate damaged hinge half (107 through 114) from door structure.

(2) Position new hinge half on door structure and align with installed hinge halves by installing 0.2437-inch diameter hinge pin.

NOTE: Hinge pin may be made from No. 3 steel wire per US steel wire gage.

(3) With hinge pin installed and hinge half held securely in place, mark hole locations for drilling, using existing door structure holes as guide.

(4) Remove hinge half from door structure and drill 0.190 to 0.194-inch diameter hole at each marked location. Countersink all holes 100 degrees.

(5) Clean and refinish as necessary per CLEANING and REFINISH and attach to door structure using applicable bolts (73, 104, 105, and 106), washers (72 and 103), and nuts (71 and 102).

K. If replacement of lubrication fitting (159, Fig. 1101 and 98, Fig. 1103) is necessary, remove old fitting and tap or press new fitting in place.

CAUTION: HOLE SHOULD BE FREE OF DIRT OR METALLIC PARTICLES PRIOR TO INSTALLATION OF REPLACEMENT FITTING.

L. If necessary, remove and replace bushings (150, 151, 158, 167, 168, and 171, Fig. 1101; 41 thru 44, 50, 51, 55, 58, 95, 96, 97, 117, 118, 130, 131, 132, 166, 169 thru 173, 180 and 181, Fig. 1103; and 29, 30, 32 thru 35 and 58, Fig. 1104) per 20-50-03.

NOTE: Deleted

M. If necessary, replace centering cam liners (165, Fig. 1101) using rivets (164) and standard replacement procedures.

N. If replacement of fittings (169 or 170, Fig. 1101) is necessary, proceed as follows:

(1) Remove damaged bearing cap fitting (169 or 170) from applicable latch support fitting (172 thru 183). Remove sealant from fitting using plastic scraper and complete cleaning per 20-30-03. Refinish affected area as necessary.

(2) Attach new bearing cap fitting (169 or 170) to latch support fitting (172 thru 183) by clamping or other suitable means. Mark hole drilling location using right angle drill or centerpunch and Carr Lane Manufacturing Company 3/4-inch drill bushing, S-48-16-3281 or equivalent.

NOTE: Bearing cap fitting (169 or 170) must be seated firmly and securely held in place when marking drill hole location to ensure proper fit for bonding.

(3) Remove bearing cap fitting and drill bushing from latch support fitting. Drill pilot hole through bearing cap fitting and ream to between 0.9793- and 0.9833-inch diameter.

NOTE: Do not attempt drilling and reaming of bearing cap fitting (169 or 170) after installation to prevent breaking of bond.

(4) Attach replacement bearing cap fitting (169 or 170) to applicable latch fitting (172 thru 183) with type 44 adhesive per 20-50-12. See Fig. 403 for areas requiring pressure during curing of adhesive.

P. If replacement of observation windows (199, 195E or 195F, Fig. 1101) is necessary, remove rivets (196, 195H or 195J), retainers (197, 195A or 195B), and doublers (198, 195C or 195D). Clean area per CLEANING, par. 8. Apply pressure prepack seal around windows (199, 195E or 195F) just prior to installation using sealant BMS 5-79, Class B. Install windows using doublers (198, 195C or 195D), retainers (197, 195A or 195B), and rivets (196, 195H or 195J) as applicable.

CAUTION: REMOVE RIVETS WITH CARE TO AVOID ENLARGEMENT OF ATTACHMENT HOLES IN RETAINERS, DOUBLERS, AND DOOR STRUCTURE.

Q. If marker (2, Fig. 1103) is replaced, install new marker per 20-50-05.

R. If rod end bearing (14, Fig. 1103) is replaced, apply one coat of BMS 10-11, Type 1 primer to faying surface of rod end bearing and install wet on rod (16) with two rivets (13).

CAUTION: AVOID DAMAGE TO LINING OF SELF-LUBRICATED ROD END BEARING (14).

STARTING TORQUE OF BEARING (14) MUST BE LESS THAN 5 POUND-INCHES.

S. If pushrod sleeve (15, Fig. 1103) is replaced, apply Specification MIL-C-11796 corrosion-preventive compound to faying surface and install on rod with two rivets (13).

T. If manual lockpin (65, Fig. 1103) or manual locklinks (66 or 67) are replaced, remove rivet (64), replace defective item, and reassemble manual lock links, lockpin, and bushing (68) with new rivet (64).

CAUTION: PROTECT DRY FILM LUBRICATED SURFACES OF MANUAL LOCKPIN (65) AND BUSHING (68).

U. If self-lubricated spherical bearing (120 or 127, Fig. 1103) is replaced.

(1) Cut away swaged flange from outer race of spherical bearing (120 or 127) with proper ST927 removal tool and press bearing from bearing housing (121 or 128). Cement new bearing (120 or 127) per 20-50-03. Roller swage within 30 minutes after cementing.

CAUTION: AVOID DAMAGE TO LININGS ON SELF-LUBRICATED BEARINGS (120 OR 127).

(2) Measure preload torque of bearing (127). Torque is not to exceed 16 inch pounds.

(a) If torque exceeds 16 inch pound, proceed as follows:

1) Run-in bearing at 100 RPM maximum for 6 seconds with inner race misaligned to bring inner race flush with outer race all around periphery of inner race. Bearing temperature must remain comfortable to touch.

2) Repeat step (2) not more than three times.

3) If torque exceeds 16 inch pounds repeat step (1).

V. Install new manual lock tube (60), if necessary, as follows (Fig. 1103 and 404):

(1) The following steps apply to 69-53077-1 and 69-53077-501:

(a) Install manual lock tube bushing (55) per 20-50-03.

(b) Install journal bushing (53) on manual lock bushing (55).

CAUTION: AVOID DAMAGE TO LINING OF SELF-LUBRICATED JOURNAL BUSHING (55).

(c) Install bellcrank assembly (37 thru 40), 65-65723-1 thru -5, on manual lock tube (60), 69-53077-1 or -501, flush with end of tube within 0.02 inch. Drill holes in tube (60) to match holes in bellcrank assembly and secure with two bolts (36), washers (35), and nuts (34).

(d) Install lower bellcrank assembly (57), 69-53065-1 and 69-53970-1, and install bushing (54) per 20-50-03 and Fig. 404.

(e) Rotate bellcrank assembly (57), 69-53065-1, to angular relationship shown in Fig. 404 and, with bellcrank assembly (57) against bushing (54), drill holes to match bellcrank assembly (57) and secure with bolts (36), washers (35), and nuts (34).

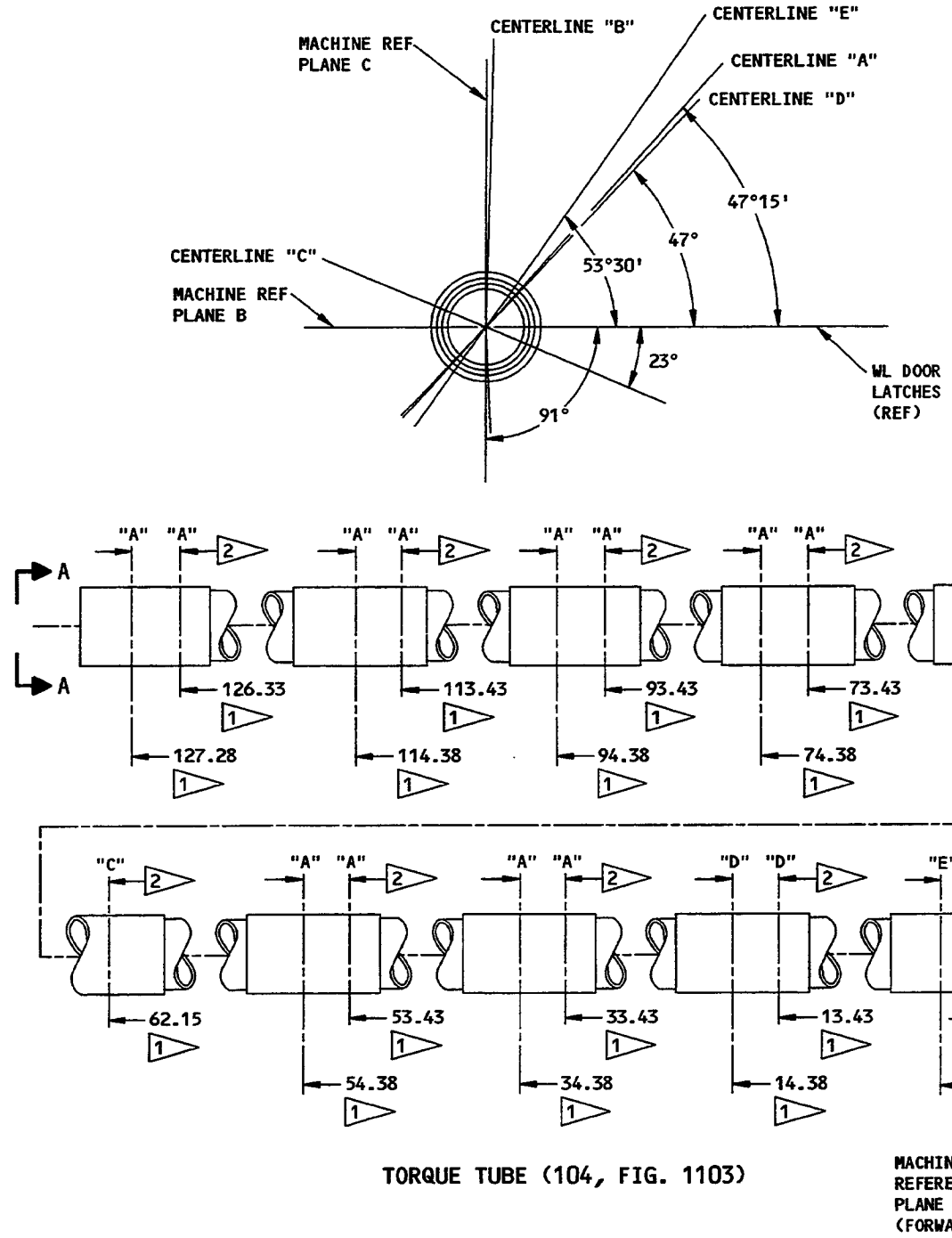
(f) Push bellcrank assembly (57), 69-53970-1, on shaft and clock as indicated on Fig. 404. Drill holes to match holes in bellcrank assembly (57) and secure with two bolts (36), two washers (35), and two nuts (34).

(2) The following steps apply to 69-53077-503 and 69-53077-504:

(a) Secure journal bushing (53) on bellcrank assembly (37, 38, 39, or 40) with ring (56).

CAUTION: AVOID DAMAGE TO LINING OF SELF-LUBRICATED JOURNAL BUSHING (53).

(b) Install items assembled in step (a) on manual lock tube (60) flush with end within 0.02 inch. Drill holes in lock tube to match holes in applicable bellcrank assembly and secure with two bolts (36), applicable washers (35), and two nuts (34).



TORQUE TUBE (104, FIG. 1103)

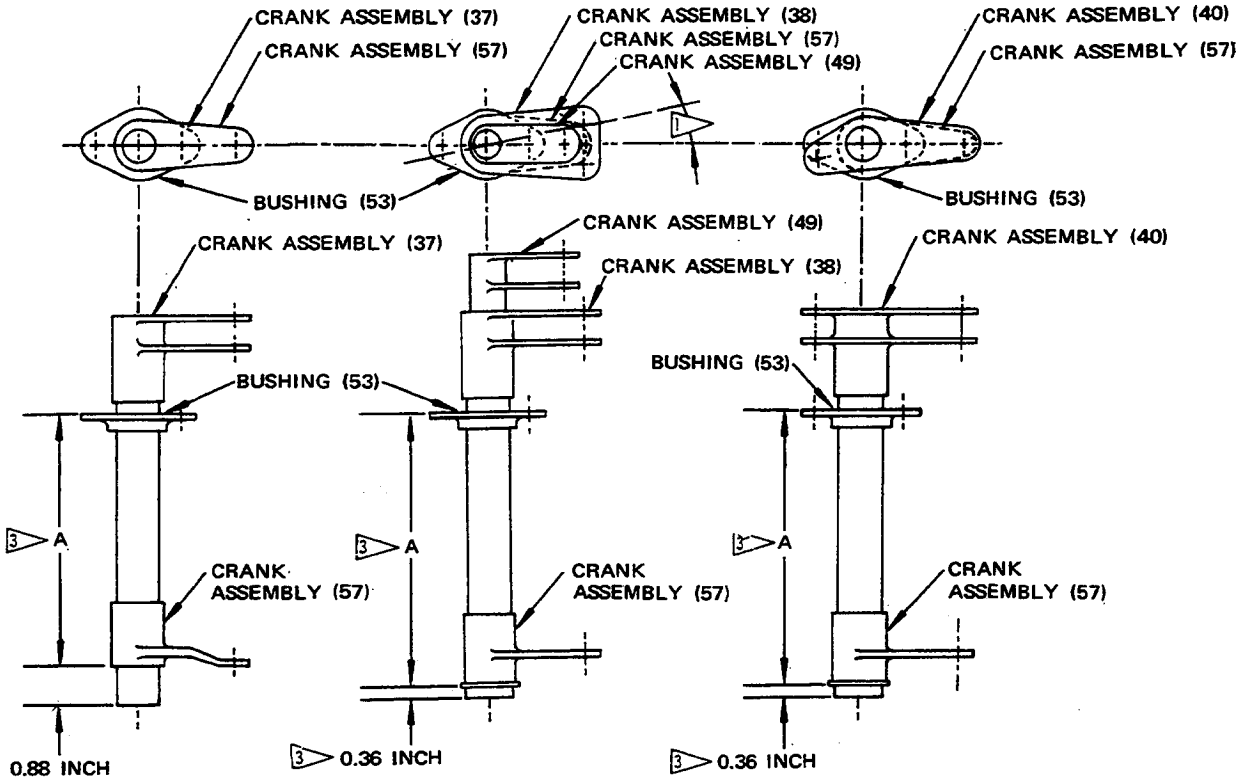
1 DISTANCE TO REFERENCE PLANE "A"

2 THROUGH HOLE LOCATION CENTERLINE FOR 1/4 INCH IN DIA BOLT

ALL DIMENSIONS ARE IN INCHES UNLESS INDICATED OTHERWISE

Drilling Details
Figure 404 (Sheet 1)

G14151



DIMENSIONS IN INCHES

PART NUMBER	INDEX NUMBER	DIMENSION A
65-65722-1	1103-26	6.45
65-65722-2	27	6.45
65-65722-3	28	6.45
65-65722-4	29	6.39
65-65722-5	30	6.39
65-65722-6	31	6.39
65-65722-7	32	6.45
65-65722-501	33	5.93

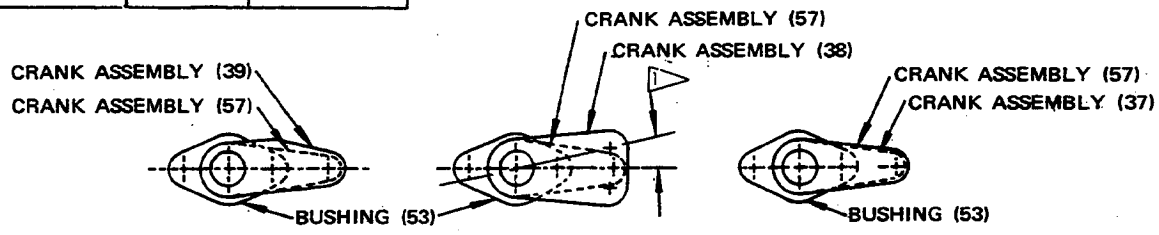
NOTE: ALL ITEM NUMBERS APPLY TO FIGURE 1103

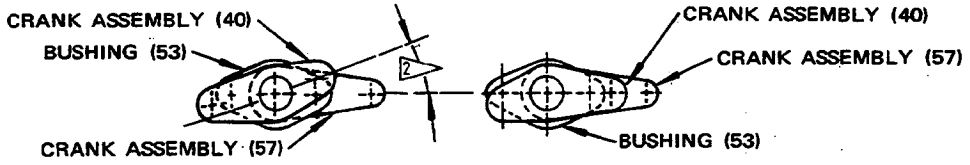
1 10 1/4° TO 12 1/4°

2 19 3/4° to 21 3/4°

3 APPLICABLE TO PART NUMBERS 65-65722-1 THROUGH -7 AND -501 ONLY

4 TYPICAL EXCEPT AS NOTED





Drilling Details
Figure 404 (Sheet 2)

(c) Install lower bellcrank assembly (57), P/N 65-67787-1 or 69-53970-1, on manual lock tube (60), holding dimension A shown on Fig. 404.

(d) Clock bellcrank assemblies (37, 38, 39, or 40, and 57) to angular relationship indicated on Fig. 404. Drill tube to match holes in lower bellcrank assembly (57) and secure with two bolts (36), applicable washers (35), and two nuts (34).

W. Install new torque tube (104, Fig. 1103), if necessary, by drilling holes per Fig. 404.

NOTE: Holes in torque tube (104) must match holes in bellcranks (119 and 133).

X. If necessary to replace angle (121A, Fig. 1103), bond angle to bellcrank (119) with BMS 5-95 adhesive per 20-50-12, type 44.

Y. Replace bearing (11, Fig. 1104), if necessary, and roller swage new bearing per 20-50-03.

Z. Replace seals (39 and 41, Fig. 1104) at each overhaul.

AA. Some door assemblies are provided with protection against corrosion of the cold bonded door structure at skin lap joints and intercostals by factory-applied sealant or by incorporation of SB 53-1017 and 53-1017, Revision 1. If sealant has been removed or damaged, replace as follows:

(1) Reapply sealant at skin lap joints and intercostals as required per 53-30-4, 737 Structural Repair Manual, D6-15565. Additional protection against corrosion may be obtained by application of BMS 3-23, corrosion inhibiting compound followed by sealing as follows.

(a) Clean area to be sealed and apply BMS 3-23 as required at skin lap joints and intercostals per 51-10-2, 737 Structural Repair Manual, D6-15565.

(b) After BMS 3-23 solvents have evaporated, remove any visible film of BMS 3-23 by wiping with a 1:1 mixture of methyl ethyl ketone and toluene.

NOTE: BMS 3-23 film may be removed after solvents have evaporated without significant loss of protection.

(c) Reapply sealant at skin lap joints and intercostals as required per 53-30-4, 737 Structural Repair Manual, D6-15565.

ASSEMBLY

NOTE: Assembly is divided generally into four separate operations: handle (Fig. 1104), mechanism and switch (Fig. 1103), hydraulics (Fig. 1102), and door structure (Fig. 1101).

1. Assembly of Manual Lock Handle Installation (Fig. 1104)

   A. Assemble handle trigger fitting assembly (49 or 70) by installing teflon washers (55), bushing (54), sleeve (53), bolt (52), washers (51), and nut (50) on fitting (56).

   B. Install one seal (41) in pressure box (59) next to lower bushing (58).

      NOTE: Install seal (41) with pressure side next to crank assembly (48).

   C. Apply light coat of Specification MIL-G-23827 grease to interior surface of bushings (58). Install outer trigger crank assembly (48) and handle trigger fitting assembly (49 or 70) using one washer (19) on each side of trigger fitting and washers (18), if and as required, to center trigger fitting in opening within 0.016 inch.

   D. Install roll pin (47) and secure with lockwire (MS20995NC32) per 20-50-02.

   E. Install seals (39 and 41) with pressure side next to bearings (38 and 40) and install bearings per 20-50-03.

   F. Install manual lock shaft assembly (23 or 24), manual lock handle (20, 60 or 65), washers (19 and 22) and, using washers (18 and 21) if and as required, center manual lock handle in opening within 0.016 inch.

   G. Install washer (17), nut (16), and tighten nut finger-tight. Loosen nut up to 1/4 turn and install cotter pin (15).

   H. Install spring piston (13) with bushing (9), washers (8), bolt (7), washer (6), and nut (5).

   J. Clamp spring piston (13) and spring (14) to cylinder assembly (10) and attach to shorter crank on craft assembly (23 or 24) with bolt (3), washers (4), and nut (2).

      WARNING: AVOID INJURY DUE TO ACCIDENTAL RECOIL OF SPRING (14).

   K. If applicable, attach bellcrank assembly (28) to shaft (37) with bolt (27), washer (26), and nut (25).

L. Install spring (1) between attach points on pressure box (59) and outer trigger crank assembly (48).

WARNING: AVOID INJURY DUE TO ACCIDENTAL RECOIL OF SPRING (1).

M. Coat all faying surfaces of hook (45), shim (46), and handle (20) with a light coat of Specification MIL-G-23827 grease and install hook and shim on handle (20) with bolts (44), washers (43), and nuts (42).

NOTE: If new shim (46) is installed, drill 0.190- to 0.194-inch diameter holes to match holes in hook (45), being careful not to damage existing holes. Remove laminations from shim as necessary to adjust manual lock handle (20) flush with outer contour of door assembly.

2. Assembly of Mechanism and Microswitch Installations (Fig. 1103)

NOTE: All item numbers pertain to Fig. 1103 unless otherwise indicated.

Tighten all nuts and bolts per 20-50-01, unless stated otherwise. Install safetying devices per 20-50-02.

A. Install bolts (175), bushings (176), washers (177), and link assemblies (178 and 183).

CAUTION: AVOID DAMAGE TO LININGS OF SELF-LUBRICATED BUSHING (179 and 184).

B. Install housing assemblies (164) on bellcrank assembly (168). Remove shim (167) laminations as required for 0.01-inch maximum gap between housings (165) and support brackets. Apply BMS 10-11, Type 1 primer to all surfaces of shims (167 or 167A) and secure shims (167 or 167A) and housings (165) to support brackets with bolts (162 and 163), washers (160 and 161), and nuts (158 and 159) (Fig. 501).

CAUTION: AVOID DAMAGE TO LININGS OF SELF-LUBRICATED BUSHINGS (166).

NOTE: Centerline of bellcrank assembly (168) should be between 1.09 and 1.11 inches from inboard surface of outboard support bracket.

If new shims (167 or 167A) are used, drill 0.190- to 0.194-inch diameter holes to match holes in housing (165).

C. Install push-pull lock control assembly (156) using bolts (155) to attach flange of control fitting at mechanism end, and bolts (146), washers (143), and two nuts (142) to attach flange at handle end.

NOTE: Use washers (157), if and as required, to cause push-pull lock control assembly cable to bottom out at full open position.

D. Attach rod end bearing of push-pull lock control assembly (156) to longer crank arm of manual lock bellcrank assembly (168) with one bolt (154), one washer (153), and one nut (147).

E. Attach rod end bearing at handle end of push-pull lock control assembly (156) to belcrank on shaft assembly (23 or 24, Fig. 1104) with one bolt (141), one washer (153), and one nut (147).

F. Install clamps (149) with screws (150 and 148), spacers (145), washers (144), and three nuts (142).

G. Install stop pins (137), washers (136), and nuts (135, 135A and 135B). Do not tighten nuts until stop position of latch hook fitting assemblies (90 thru 94) is determined. On assemblies with 1/4-inch stop pins, install as many nuts (135B) as possible without interfering with mechanism operation.

H. Install bellcrank and bearing housing assembly (126), shims (125), bolts (124), washers (123), and nuts (122).

NOTE: If new shim (125) is installed, dril 0.250- to 0.254-inch diameter hole for bolt (124).

Shim equally at all four bolt (124) locations a maximum of 0.062 inch. Remove 0.003-inch laminations to provide end play between thrust washers (134) and bearing (127) of from 0.01 to 0.03 inch before fastener installation.

After delamination of shims (125), apply one coat of BMS 10-11, Type 1 primer.

J. Install rod end bearing (115) on bellcrank (119) with bolt (114), washer (113), nut (112), and cotter pin (111).

K. Install bellcrank and bearing housing assembly (110), washers (109), bolts (107 and 108), washers (106), and nuts (105).

NOTE: Use washers (109), if and as required, between bearing housing (121) and latch support fitting.

L. Push torque tube (104) through bellcranks (119 and 133) and secure with bolts (102 and 103), washers (101), and nuts (100). Torque nuts to 25-35 pound-inches.

M. Install latch hook fitting assemblies (90 thru 94), washers (89), bushing (88), bolts (87), washers (85 and 86 or 85A and 85B), and nut (84).

NOTE: Use washers (89), if and as required, to provide 0.005-inch maximum gap before installing bolt (87). Using two washers (85) under head of bolt (87), two washers (85) under nut (84), and washers (86) as required to supplement washers (85), tighten to standard values (Fig. 501).

Install washers (85B) flush to 0.01 inch above bearing cap (169 and 170). Use a maximum of two washers (85A) under head of bolt (87). Install washers (89) as required to maintain 1.385 to 1.375 inch clearance between bearing caps (169 and 170) after torque is applied. When applying torque from head of bolt (87), tighten to within a torque range of 81 to 90 pound-feet. When applying torque to nut (84), tighten to within a torque range of 75 to 90 pound-feet. (See figure 501.)

Lubricate at fitting (98) with grease, Specification MIL-G-23827 or equivalent.

N. Thread jamnut (83) onto rod end bearing (82) and thread rod end bearing (82) into rod end bearing (115) until opening allowed for latch pin (figure 501) is between 1.000 and 1.024 inches (bellcrank (119) in locked position) and tighten jamnut (83). Install bolt (81), nut (80), and cotter pin (79).

NOTE: Rod end bearings (82 and 115) must be kept in approximately same plane while jamnut (83) is being tightened.

P. Repeat paragraph N. at all latch hook fitting locations.

Q. Install cam (63) on bushing (193, figure 1101) and secure with ring (62).

CAUTION: AVOID DAMAGE TO LININGS OF SELF-LUBRICATED BUSHING (193).

NOTE: Install ring (62) with lugs 180 degrees opposite switch (1) mounting hole.

R. On applicable tube assemblies (26 through 33), install rings (56).

S. Install bellcrank assemblies (37 through 40 and 57), bolts (36), washers (35), and nuts (34).

T. On applicable tube assemblies (26 through 33), install bushings (54) per Subject 20-50-03.

U. Install self-lubricated journal bushings, fillers, bolts, washers, and nuts (items 184 through 195, figure 1101); push tube assemblies (26 through 33) through cutouts in intercostal installation (137, figure 1101) and into self-lubricated journal bushings (192 and 193, figure 1101).

CAUTION: AVOID DAMAGE TO LININGS OF SELF-LUBRICATED BUSHINGS (53, FIGURE 1103) AND (192 AND 193, FIGURE 1101).

V. Insert doublers (141 and 142, figure 1101) between self-lubricated journal bushings (53) and lower side of intercostal and attach doublers to intercostal with bolts, washers, and nuts (138 through 140, figure 1101).

W. Complete installation of tube assemblies (26 through 33) by attaching self-lubricated journal bushings (53) to doublers (141 and 142, figure 1101) with bolts (23 and 24), washers (22), and nuts (21). Remove 0.003-inch laminations from shim (61) as necessary for maximum gap of 0.01 inch between doubler and bushing (53) before fastener installations. If new shim is installed, drill to match holes in bushing (53).

X. Install manual lockpins (65), rivets (64), and links (66 and 67) as an assembled group using bolts (25), eight washers (22), and eight nuts (21).

CAUTION: AVOID DAMAGE TO DRY LUBRICATED SURFACE OF LOCKPINS (65).

Y. Assemble manual lock pushrod assemblies (17) as follows:

(1) Coat threads of rod end bearings (18) and of sleeve (20) with Specification MIL-C-11796 corrosion-preventive compound, install one nut (19) on each rod end bearing (18), thread rod end bearings into sleeve until centers of rod end bearings are 1.18 inches from ends of sleeve, and tighten nuts (19) keeping rod end bearings (18) in same plane.

CAUTION: IF NEW ROD END BEARING (11 OR 14) IS INSTALLED, STARTING TORQUE OF BEARINGS MUST NOT EXCEED 5 POUND-INCHES TO ASSURE PROPER FREEDOM OF ROTATION.

Z. Assemble pushrod assemblies (6 through 10) as follows:

(1) Coat threads of rod end bearings (11) and sleeves (15) with Specification MIL-C-11796 corrosion-preventive compound, thread one nut (12) on each rod end bearing (11) and install rod end in sleeve (15) so distance between centers of rod end bearings is as follows:

ROD ASSEMBLY P/N	DISTANCE BETWEEN ROD END BEARING CENTERS
65-65724-16	10.24 INCHES
65-65724-17	10.64 INCHES
65-65724-18	12.12 INCHES
65-65724-19	12.60 INCHES
65-65724-20	19.62 INCHES

NOTE: Rod end bearings (11 and 14) should be in same plane before tightening jamnut (12).

Values given are nominal values and subject to further adjustment.

AA. Install pushrod assemblies (6 through 10 and 17), bolts (5), washers (4), nuts (3), one bolt (154), one washer (153), and one nut (147).

NOTE: Interconnect short crank arms at upper end of tube assemblies (30 and 31) with one pushrod assembly (17).

AB. On applicable assemblies, install bellcrank stop assembly (199F) on door lower beam with fillers (199E), washers (199B), bolts (199C and 199D) and nuts (199A).

AC. Adjust manual lock system as follows:

(1) Open manual lock handle assembly (20, Fig. 1104). Add or subtract washers (157) as required to cause lock control assembly (156) to bottom out at handle open position.

(2) Apply an aft preload of 20 ±5 pounds to pushrod assembly (9) and adjust each pushrod assembly in the following sequence: 7, 10, 17, and 6 (forward positions); 6, 17, and 10 (aft positions) and 19 (both positions) to obtain 0.10 to 0.15 inch dimension with applicable lockpin (65) and latch support fitting (Fig. 501).

(3) Close manual lock handle assembly (20, Fig. 1104) and apply a forward preload of 20 ±5 pounds to pushrod assembly (9) and check for minimum lockpin (65) engagement of 0.30 inch in latch support fitting as shown in Fig. 501.

(4) On assemblies with bellcrank stop assembly (199F) installed, adjust gap between stop bolt (199J) and arm on bellcrank (59) to 0.01 ±0.01 inch by adding or removing washers (199H or 199I) between bolthead and stop assembly structure (199K). Center head of bolt (199J) on arm of bellcrank (59) by sliding bolt in slotted hole.

(5) Remove preload.

AD. Install switch (1) as follows:

(1) Install switch in support bracket with one hexnut next to switch.

(2) Install keying washer, internal tooth lockwasher, and other hexnut.

(3) Install roller guide by tightening and then back off to clock roller to desired position; install roller guide lockring.

(4) Adjust switch, using hexnuts, so that switch roller makes contact with switch actuating cam when lockpin (65) is fully retracted (door unlocked).

AE. Install bolt (141), one nut (138), washer (140), and washers (139) as required to allow crank arm attach point on bellcrank assembly (129) to travel 0.02 to 0.07 inch past line through center of torque tube (104) and upper attach point of latch actuator assembly (12, Fig. 1102) (Fig. 501).

AF. Install spring cartridge cylinder (75) to its upper attach point with screw (73), bushing (77), one washer (71), and one nut (70).

AG. Install compression spring (76) on cartridge cylinder (75) and insert cartridge piston (74) through spring into cylinder and clamp with spring sufficiently compressed to permit installation of screw (72), bushing (78), one washer (71), and one nut (70).

WARNING: EXERCISE CARE WHILE CLAMPING AND ATTACHING SPRING CARTRIDGE TO PREVENT INJURY FROM SUDDEN RELEASE OF SPRING.

AH. With latch hook fittings (99) in the latched position and with lockpins (65) extended to the locked position, adjust setscrews (137) to make contact with bellcrank (119) when crank arm on bellcrank clears lockpin (65) 0.02 to 0.08 inch. (See figure 501.) Install lockwire, MS20995NC32, per Subject 20-50-02, Installation of Safetying Devices.

CAUTION: AVOID DAMAGE TO DRY LUBRICATED SURFACE OF LOCKPINS (65).

3. Assembly of Hydraulic Installation (See figure 1102.)

WARNING: PROTECT EYES AND SKIN FROM SPECIFICATION BMS 3-11 HYDRAULIC FLUID. PAINFUL EYE IRRITATION CAUSED BY CONTACT WITH HYDRAULIC FLUID MAY BE RELIEVED BY FLUSHING EYE SEVERAL TIMES WITH WATER AND APPLYING AN ANESTHETIC EYE SOLUTION. IF SKIN COMES IN CONTACT WITH HYDRAULIC FLUID, WASH THOROUGHLY WITH SOAP AND WATER AND APPLY A PETROLATUM OR LANOLIN TYPE LOTION.

CAUTION: CAP ALL OPEN PORTS OF TUBING ASSEMBLIES, HOSES, AND LATCH ACTUATOR ASSEMBLY TO KEEP CONTAMINANTS OUT OF HYDRAULIC SYSTEM. CONTAMINANTS MAY CAUSE MALFUNCTION OF HYDRAULIC SYSTEM. FOR FURTHER INFORMATION ON SPECIFICATION BMS 3-11 HYDRAULIC FLUID, REFER TO SUBJECT 29-00-01, FIRE RESISTANT HYDRAULIC FLUID.

NOTE: Tighten all tube assembly and hose assembly nuts to within a torque range of 125 to 140 pound-inches.

A. Install support assemblies (205 and 206, figure 1101) with bolts and washers (203 and 204, figure 1101) leaving bolts untightened.

B. Install tube assemblies (22 and 23), washers (21), nuts (20), clamps (19), spacers (17 and 18), screws (16), and nuts (15).

CAUTION: DO NOT FORCE TUBE ASSEMBLIES TO CLAMPING POSITION OR FAILURE OF TUBING, CONNECTIONS, OR CLAMP MAY RESULT.

NOTE: Lubricate threads with BMS 3-11 hydraulic fluid or with Hi-Lo MS No. 1 (Allube Corporation, Glendale, California) or equivalent general purpose grease for use with BMS 3-11 hydraulic fluid only.

Install tube assemblies (22 and 23) with one washer (21) next to hex portion of special bulkhead end fitting on each end of tube assembly. Secure end fitting to its support with one washer (21) and one nut (20). Tighten finger-tight.

Refer to Subject 20-50-01 for proper torque values for clamp screws.

Hold hex portion of fitting with wrench while tightening nuts (20) to within a torque range of 50 to 65 pound-inches.

C. Install latch actuator assembly (12), bolts (10 and 11), washers (9), nuts (8), and cotter pins (7).

NOTE: Apply light coat of MIL-G-23827 grease to shanks of bolts (10 and 11) prior to installation.

Tighten nuts (8) to within a torque range of from 270 to 300 pound-inches and install cotter pins (7) per Subject 20-50-02. If cotter pin cannot be installed within specified torque range, use new nut.

D. Package retainer spring (13) and fluid absorber (14) in a protective bag and attach near latch actuator assembly (12) for installation after door is installed on airplane and all functional tests completed.

CAUTION: SPRING (13) MAY BE DAMAGED IF EXTENDED TO GREATER LENGTH THAN 3.34 INCHES.

E. Install tube assemblies (5 and 6).

F. Attach hose assembly (2) to tube assembly (23) and hose assembly (3) to tube assembly (22).

CAUTION: CAP OPEN PORTS OF HOSE ASSEMBLIES (2 AND 3) TO PREVENT ENTRY OF FOREIGN MATERIALS. DIRT OR CONTAMINANTS OF ANY KIND MAY INTERFERE WITH PROPER OPERATION OF LATCHING SYSTEM.

NOTE: Apply Specification BMS 3-11 hydraulic fluid or Hi-Lo MS No. 1 (Allube Corporation, Glendale, California) or equivalent general purpose grease for use with BMS 3-11 hydraulic fluid to threads of all hydraulic fittings.

4. Assembly of Cargo Door Structure (Fig. 1101)

NOTE: Install all non-aluminum protruding head fasteners through exterior aluminum surfaces by applying a fillet seal of BMS 5-95, class A or B sealant around head of fastener and around nut or collar.

Install all non-aluminum countersunk permanent fasteners through exterior aluminum surfaces by applying BMS 5-95, class B or C sealant to fastener and countersink area. Optional: Apply wet BMS 10-11, type 1 primer to countersunk area of hole and while primer is still wet, install fastener.

Install all non-aluminum countersunk removable fasteners through exterior aluminum surfaces by applying BMS 10-11, type 1 primer (dry) to hole surface.

Support assemblies (205 and 206) were installed during assembly of hydraulic installation (153).

Fillers (194 and 195), bushings (192 and 193), bolts (188 thru 191 and 140), washers (186, 187, and 139), nuts (184, 185, and 138), and doublers (141 and 142) were installed during assembly of mechanism installation (155).

A. Install blanket assemblies (125 thru 136) making sure each blanket assembly is installed in correct location.

CAUTION: CARE MUST BE TAKEN DURING INSTALLATION OF BLANKET ASSEMBLIES TO AVOID DAMAGE TO BLANKET COVERING.

NOTE: Blanket assemblies require no fasteners or adhesive and may be installed through 6-inch diameter holes in inner skin.

B. Attach tube (123) to door structure using nuts (116), screws (117 and 120), support blocks (118), clamps (119 and 122), and washers (121).

C. Install hinge fairing plates (47 and 48) as follows:

NOTE: Hinge fairing plates (47 and 48) may not be with door assembly as their removal is required prior to removal of door assembly from airplane.

(1) Apply primer, BMS 10-11, type 1, on countersink area of bolt holes in plates (47 and 48) and allow primer to dry.

(2) Position hinge fairing plates (47 and 48) on door structure, install bolts (41, 44, 45 and 46) in dry primed holes and install washers (39) and nuts (38).

D. Install pressure seal (21) as follows: (See Fig. 502)

(1) Place seal over door making sure that stamp marking UPPER AFT CASTING INDEX on seal is located at upper aft corner of door.

NOTE: Installation of seal in proper sequence per figure 502 is most important.

(2) Starting at top of door, approximately 10 inches forward of upper aft corner (position 1), use the following installation procedure:

(a) Place inboard attachment flange of seal into inboard groove of seal retainer. Using a blunt chisel-shaped piece of phenolic or similar material and rubber mallet, tap outboard attachment flange of seal into outboard groove of seal retainer for a distance of approximately 3 or 4 inches.

CAUTION: TOOL USED TO TAP SEAL INTO PLACE MUST BE BLUNT, WITHOUT POINTS OR SHARP CORNERS, TO AVOID DAMAGE TO SEAL.

(3) Repeat paragraph (2)(a) procedure at position 2.

(4) Install seal at position 3 per following procedure:

(a) Making sure that inboard attachment flange of seal is engaged in inboard groove of seal retainer, tap outboard attachment flange of seal into outboard groove of seal retainer using tool described in paragraph (2)(a).

(5) Repeat paragraph (2)(a) procedure at positions 4 and 5 and procedure (4)(a) procedure at position 6.

(6) Complete installation of seal along top of door (position 7) per paragraph (4)(a).

(7) Proceed in similar manner at positions 8 through 14 maintaining proper sequence.

(8) Install seal along sides of door (positions 15) per paragraph (4)(a).

CAUTION: ELIMINATE ALL WRINKLES AS SEAL IS WORKED INTO FLANGE OF SEAL RETAINERS GIVING PARTICULAR ATTENTION TO CORNER AREAS.

E. Attach weather seal (20) to applicable seal retainer (24, 25, 26, or 80) as follows:

(1) Press stitched loop of seal (20) into groove of seal retainer.

NOTE: Existing 1/8-inch slots in seal should align with cutouts in seal retainer.

(2) Beginning at forward end of door, insert nylon rods (19) through 1/8-inch slots in seal to secure seal to seal retainer. (See Fig. 503 for orientation of rods.)

NOTE: Rods (19) may be installed with liquid soap lubricant, Turco 1526, Turco Products Inc., Division of Purex Corporation, Ltd., 24600 South Main Street, Wilmington, California 90746, or equivalent.

If new weather seal is required, perform step (1) above and cut a 1/8-inch slot in the stitched loop at edge of each retainer cutout. Install rods per step (2) above.

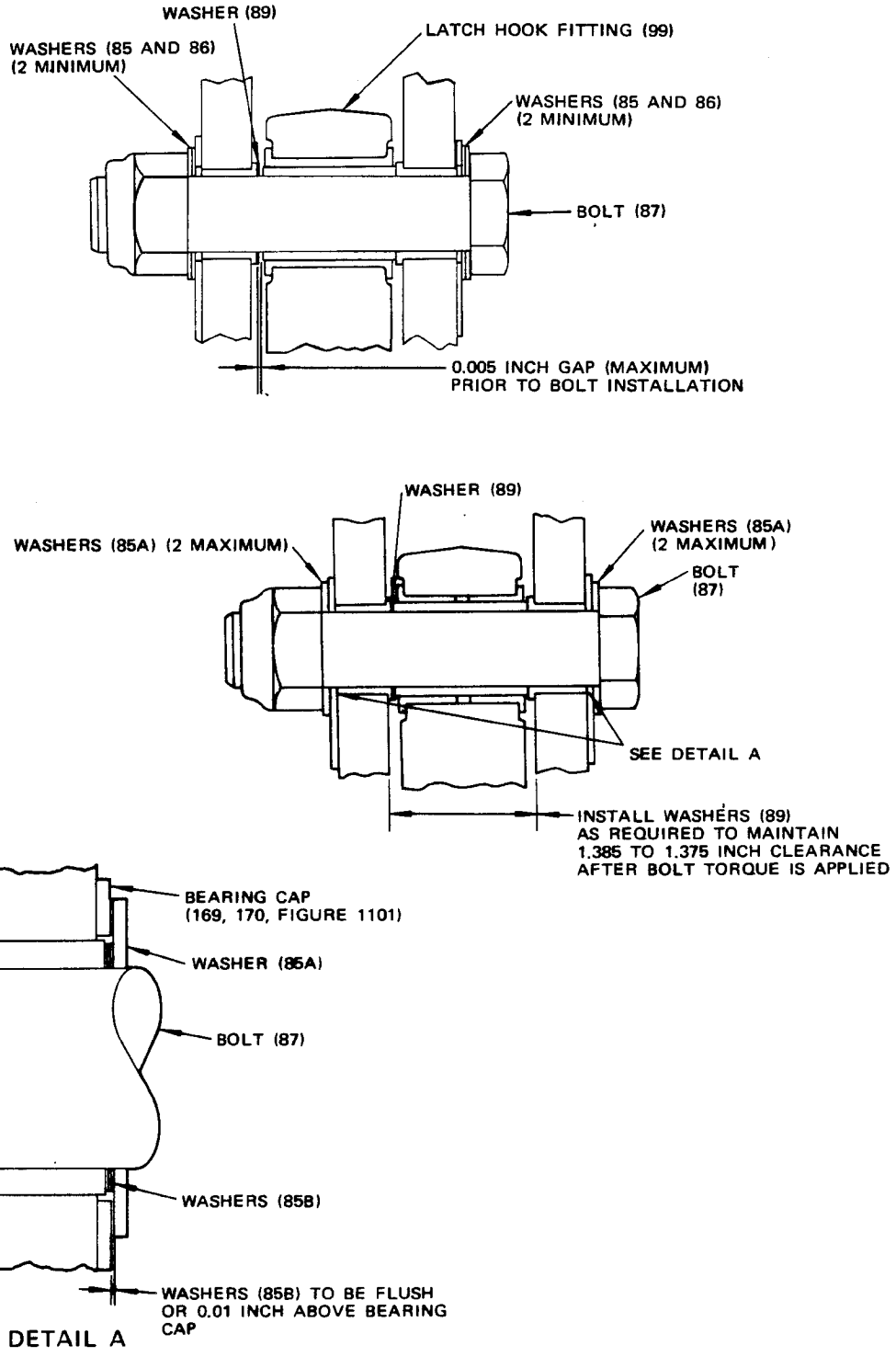
F. Install access door (13) using washers (12) and screws (11).

G. Install access door (3) as follows:

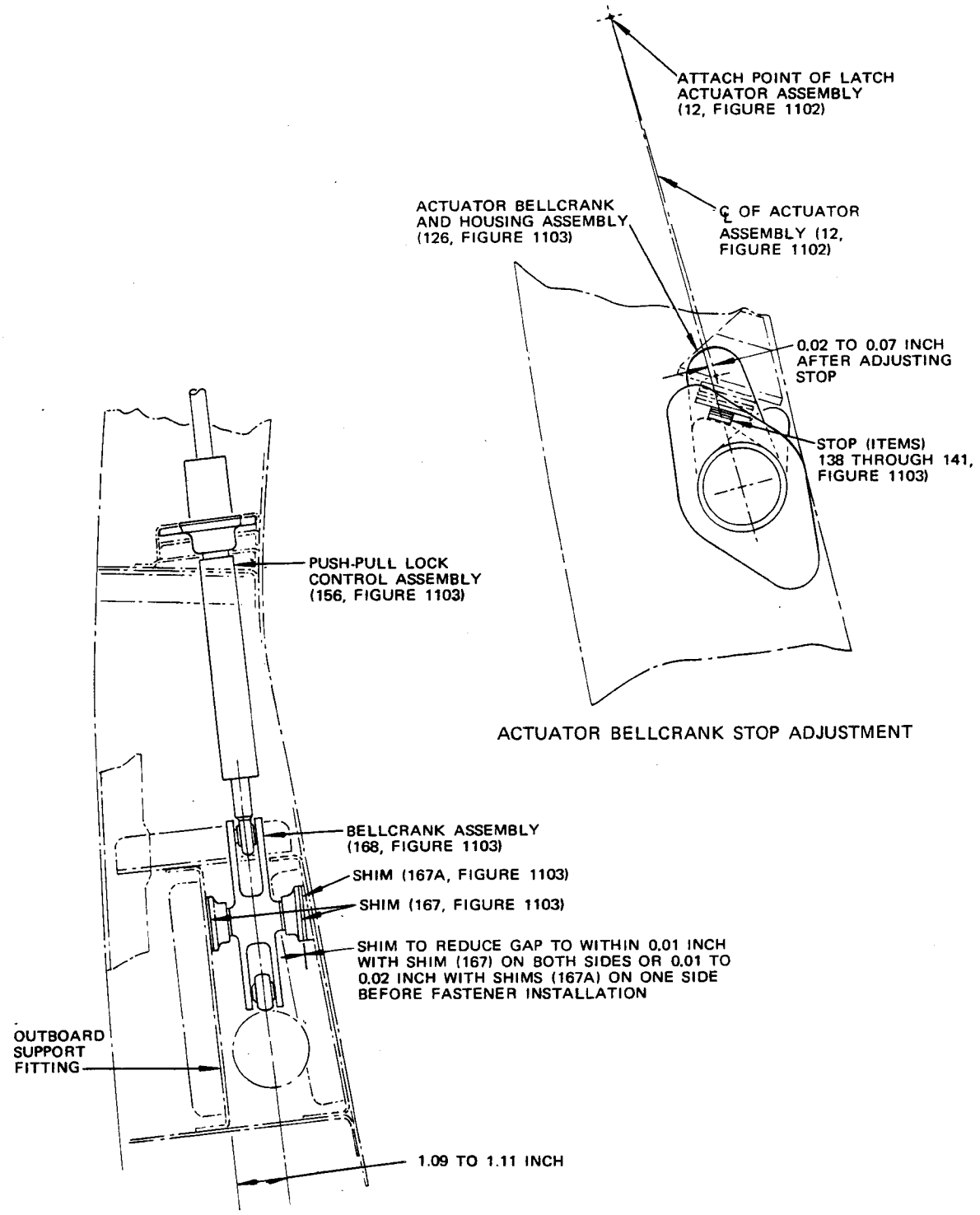
(1) Apply primer, BMS 10-11, type 1, on countersink area of bolt holes in access doors (3) and allow primer to dry.

(2) Apply a faying surface seal of sealant, BMS 5-79, class B or C between access doors (3) and door structure.

(3) Position access doors (3) in openings and install bolts (2) in dry primed holes. Remove any excess extruded sealant using nonmetallic scraper, lint-free cloth, and cleaning solvent.

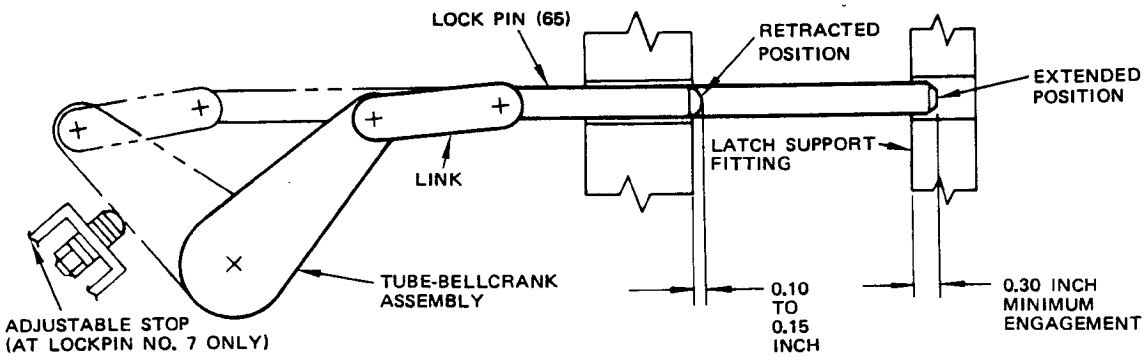


LATCH HOOK FITTING ASSEMBLIES (90 THRU 94, FIGURE 1103)

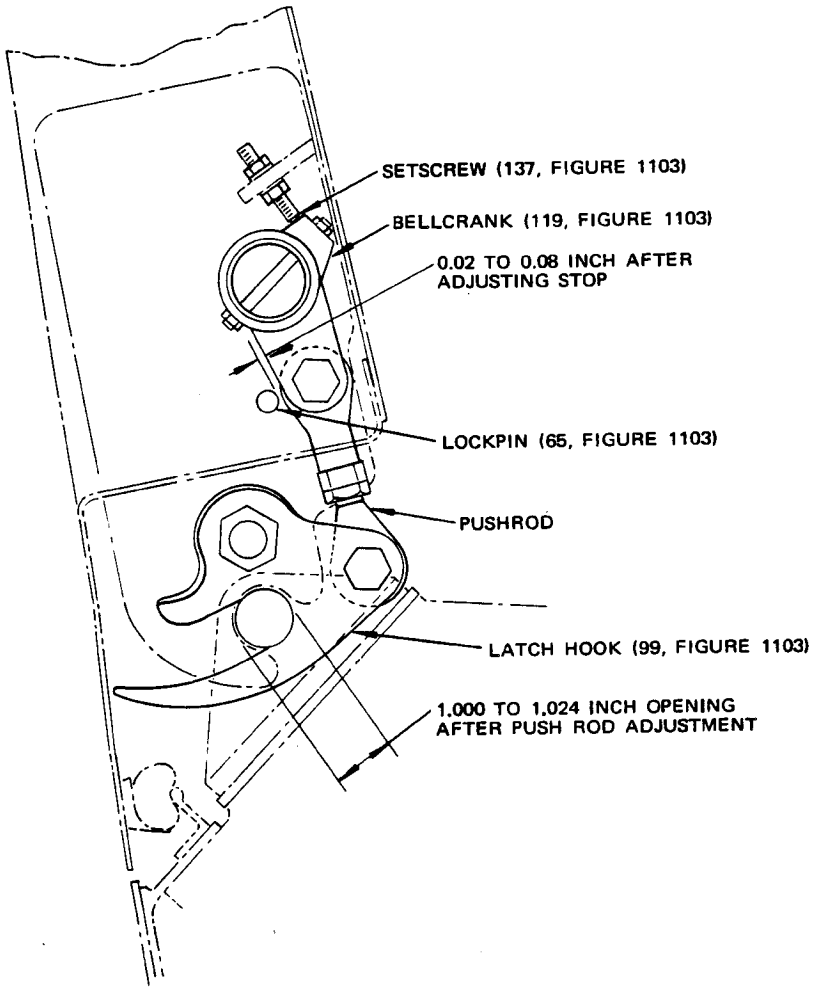


ACTUATOR BELLCRANK STOP ADJUSTMENT

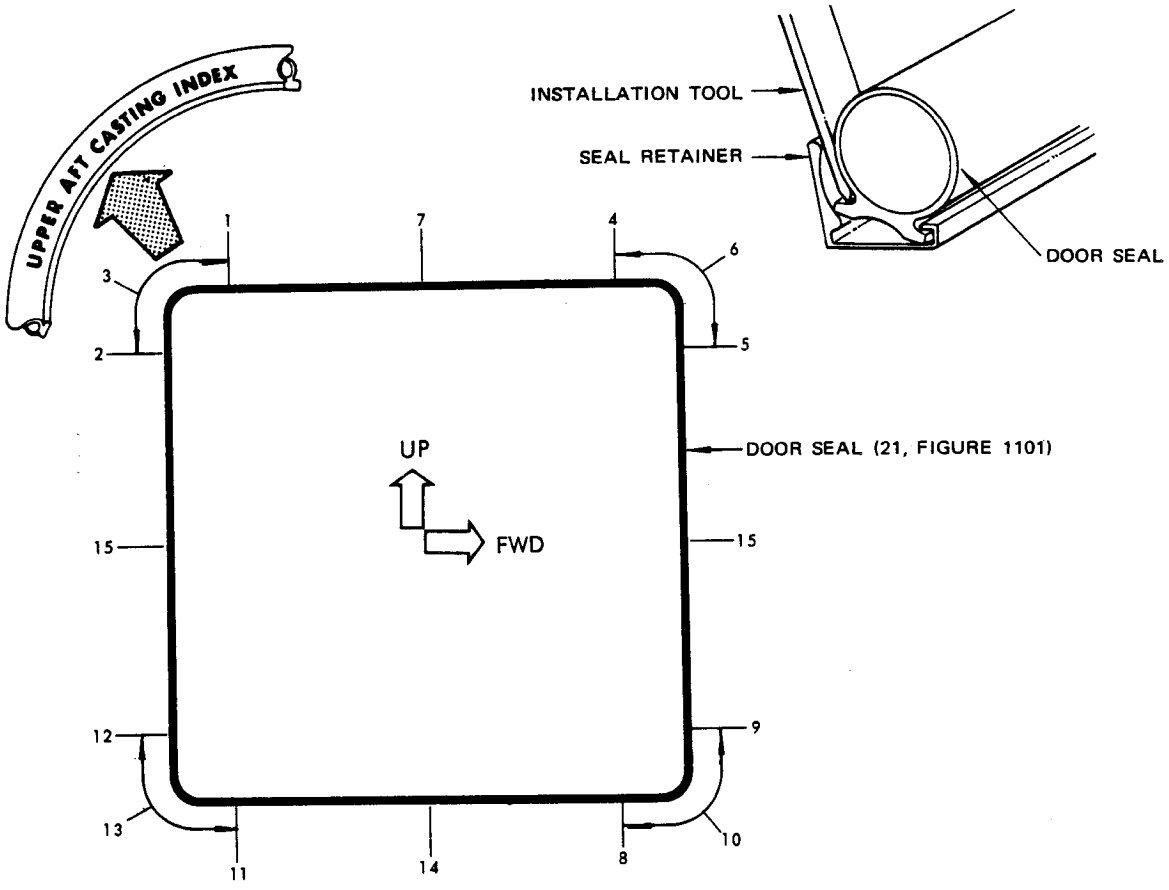
BELLCRANK ASSEMBLY (168, FIGURE 1103)



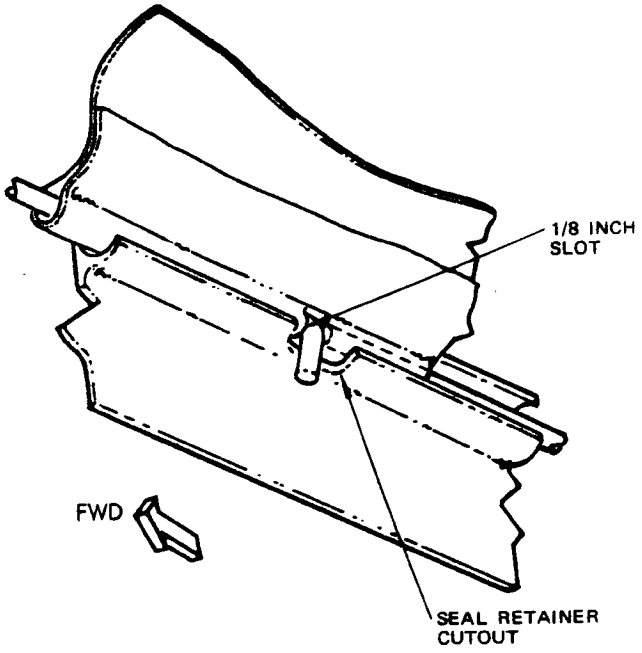
MANUAL LOCK SYSTEM ADJUSTMENT



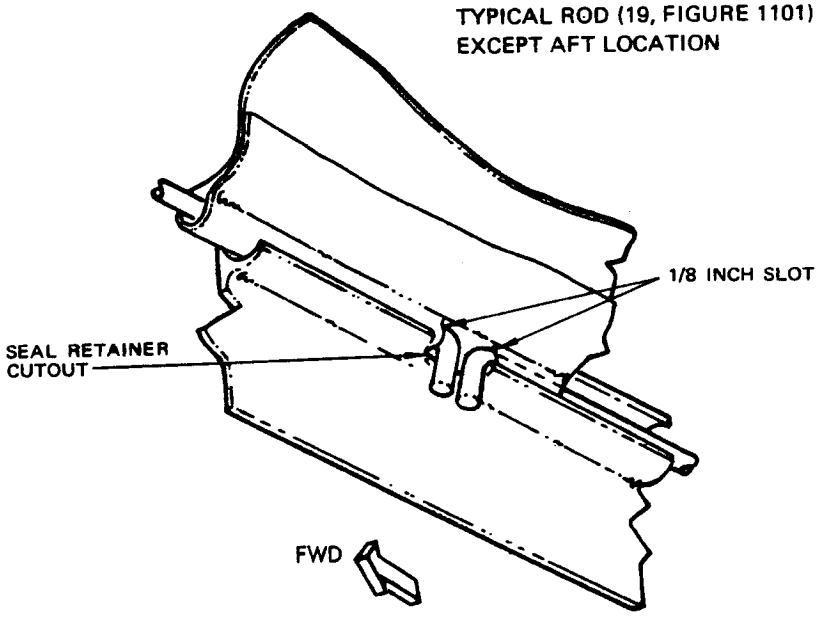
LATCH HOOK, BELLCRANK, AND BEARING HOUSING ASSEMBLY (99 AND 110, FIGURE 1103)



Door Seal Replacement Details
Figure 502



TYPICAL ROD (19, FIGURE 1101) INSTALLATION –
EXCEPT AFT LOCATION

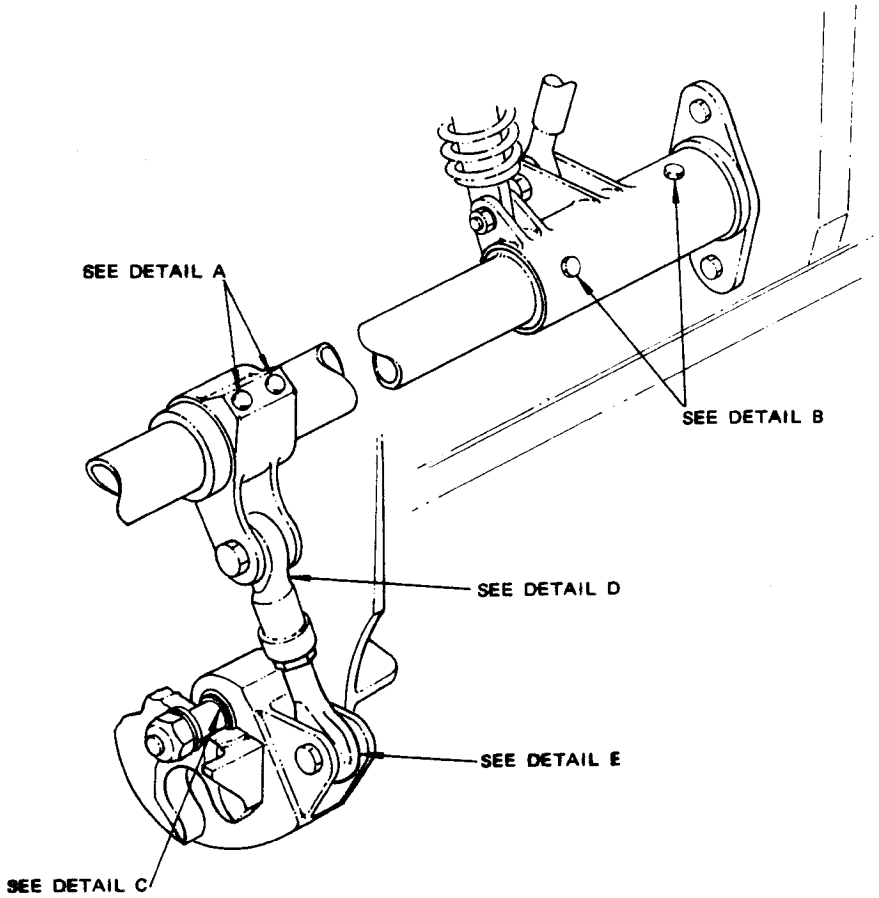


ROD (19, FIGURE 1101) INSTALLATION
AFT LOCATION ONLY

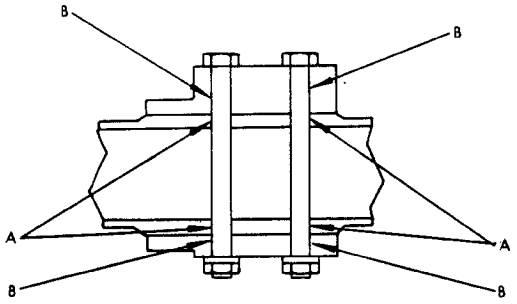
FITS AND CLEARANCES

1. Figure 601 lists original design dimensions and service wear limits for certain close tolerance parts of the assembly. The original design dimensions are to be used as a guide for rework of parts which fail to meet the wear tolerance requirements. Unless otherwise specified in the rework procedure, a part should be returned to the design dimensions whenever rework is accomplished.

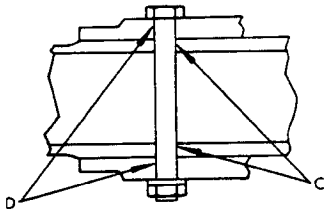
2. Clearances are given to aid assembly of the component. The value given in the "Maximum Allowable Clearance" column is the maximum permitted to ensure proper functioning until the next overhaul cycle of the component. If assembled parts fail to meet these requirements, one or more of the parts must 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 whenever newly reworked parts are assembled, the design clearances should be used as the guiding assembly criteria.



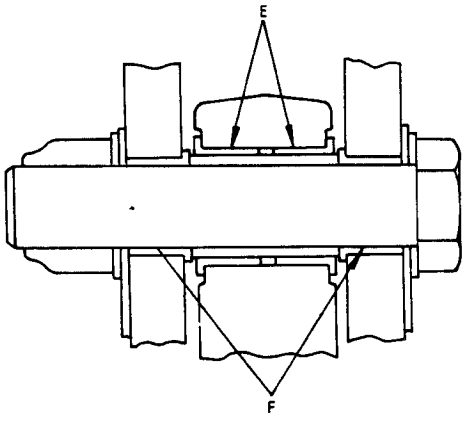
(DETAILS A, C, D, AND E TYPICAL 8 LOCATIONS)



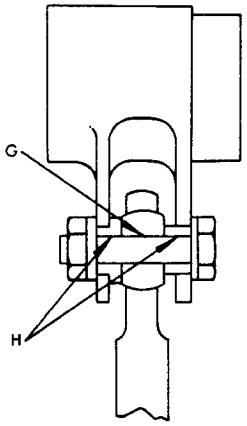
DETAIL A



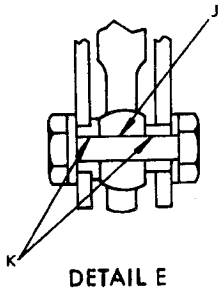
DETAIL B



DETAIL C



DETAIL D



DETAIL E

Ref. Letter Fig.601	Mating Index No. Fig.1103		Original Design Limits: Dimensions (inches) Min.	Original Design Limits: Dimensions (inches) Max.	Original Design Limits: Assembly Clearance (inch) Min.	Original Design Limits: Assembly Clearance (inch) Max.	Service Wear Limits: Dimension Limits (inches) Min.	Service Wear Limits: Dimension Limits (inches) Max.	Maximum Allowable Clearance (inch)
A	ID OD	104 103	0.2495 0.2485	0.2505 0.2495	0.0000	0.0020	[1] 0.2465	0.2545 [1]	0.0080
B	ID OD	116 103	0.2495 0.2485	0.2505 0.2495	0.0000	0.0020	[1] 0.2465	0.2545 [1]	0.0080
C	ID OD	104 102	0.2470 0.2485	0.2500 0.2495	0.0025 [2]	0.0015	[1] 0.2465	0.2545 [1]	0.0080
D	ID OD	129 102	0.2470 0.2485	0.2500 0.2495	0.0025 [2]	0.0015	[1] 0.2465	0.2545 [1]	0.0080
E	ID OD	95 88	0.9406 0.9383	0.9426 0.9393	0.0013	0.0043	0.9370	0.9470	0.0100
F	ID OD	*171 87	0.7500 0.7485	0.7515 0.7490	0.0010	0.0030	0.7460	0.7560	0.0100
G	ID OD	115 114	0.4995 0.4985	0.5000 0.4995	0.0000	0.0015	0.4940	0.5040	0.0100
H	ID OD	117 114	0.5000 0.4985	0.5015 0.4995	0.0005	0.0030	0.4940	0.5040	0.0100
H	ID OD	118 114	0.5000 0.4985	0.5015 0.4995	0.0005	0.0030	0.4940	0.5040	0.0100
J	ID OD	82 81	0.4995 0.4990	0.5000 0.4995	0.0000	0.0010	0.4940	0.5040	0.0100
K	ID OD	96 81	0.5000 0.4990	0.5015 0.4995	0.0005	0.0025	0.4940	0.5040	0.0010
K	ID OD	97 81	0.5000 0.4990	0.5015 0.4995	0.0005	0.0025	0.4940	0.5040	0.0010

* Figure 1101

[1] denotes rework permitted. If part is worn beyond wear limits, refer to REPAIR for rework instructions

[2] interference

TESTING

1. Test Equipment

   A. Variable volume, Specification BMS 3-11 hydraulic fluid test bench capable of delivering 0.25 (minimum) gpm at 1500 psi, equipped with filtration of 5 microns nominal and 15 microns absolute and capable of pressures up to 4000 psi (optional to use hand pump with equivalent filtration).

   B. Flow limiter (0.25 gpm at 3000 psi) (Boeing 10-3204-10) or equivalent restrictor.

   C. Hydraulic pressure gage capable of registering 0 to 4000 psi.

   D. Manually operated two-position, four-way control valve.

   E. Electrical source and test lamp to check continuity through microswitch.

   F. Hydraulic hoses, tubing, and fittings necessary to connect test equipment to cargo door. (See figure 701.)

   G. Sufficient quantity of BMS 3-11 hydraulic fluid to fill, flush, bleed, and operate system.

2. Preparation for Test

   A. For convenience, support door in upright position and ensure that latch hooks along bottom of door are free to rotate.

      CAUTION: CARE MUST BE EXERCISED TO AVOID SCRATCHING OR DEFORMING SKINS OR DAMAGING MECHANISM COMPONENTS.

   B. Connect test equipment as shown in figure 701.

   C. Check that all tubing is properly aligned and fittings tightened.

   D. Check that all mechanical parts are clear and free to operate.

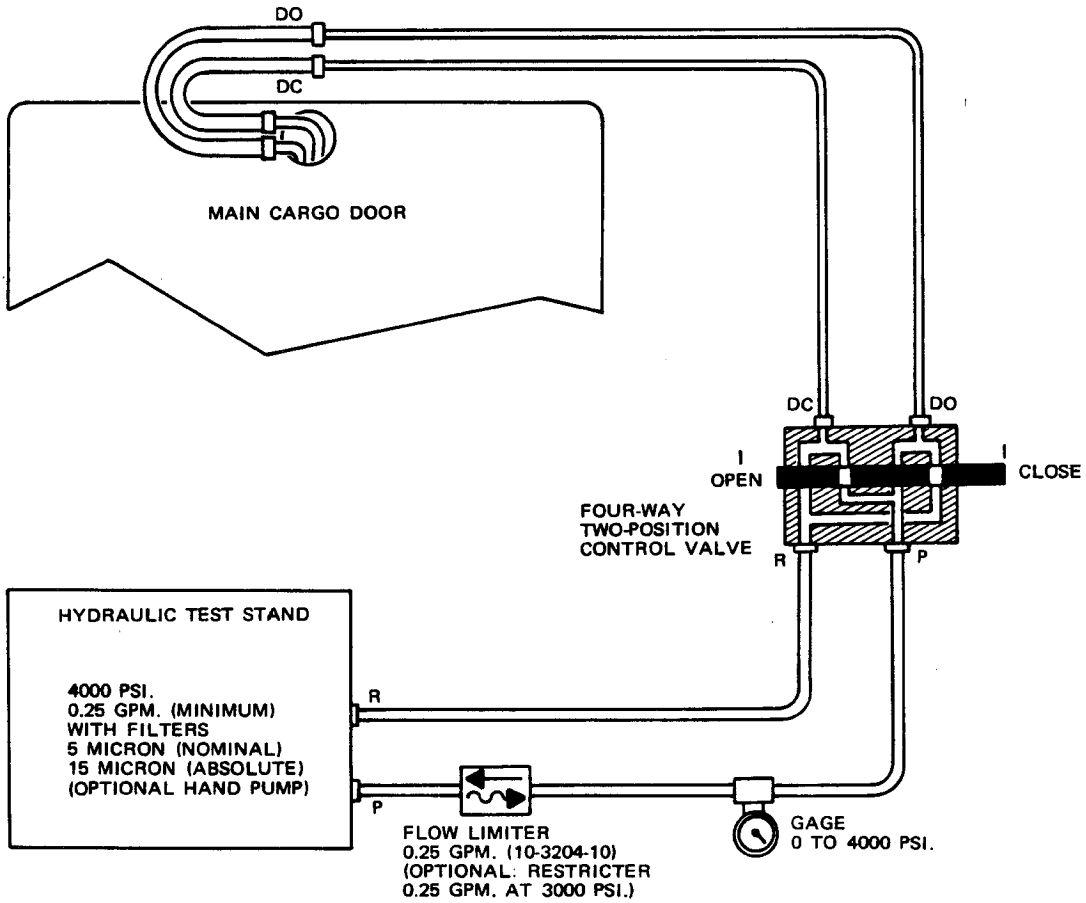
   E. Flush hydraulic system as follows:

      (1) Bypass latch actuator assembly by connecting hose assembly between lower fittings on tube assemblies (5 and 6, figure 1102).

(2) Connect test stand or hand pump to hose assemblies (2 and 3, figure 1102) at top of door and, with no flow limiter in circuit, circulate fluid as rapidly as possible through filtering system to remove dirt, burrs, or other foreign materials. Continue for 5 minutes or more.

WARNING: PAINFUL EYE IRRITATION RESULTING FROM CONTACT WITH BMS 3-11 HYDRAULIC FLUID MAY BE RELIEVED BY FLUSHING EYE SEVERAL TIMES WITH WATER AND APPLYING AN ANESTHETIC EYE SOLUTION. SKIN IRRITATION CAUSED BY CONTACT WITH HYDRAULIC FLUID MAY BE PREVENTED BY WASHING THOROUGHLY WITH SOAP AND WATER AND APPLYING A LANOLIN OR PETROLATUM TYPE LOTION.

CAUTION: PROVIDE CONTAINER TO CATCH ESCAPING HYDRAULIC FLUID. IMMEDIATELY WIPE UP ANY SPILLED FLUID. SOME SURFACES WILL BE DAMAGED BY PROLONGED CONTACT WITH SPECIFICATION BMS 3-11 HYDRAULIC FLUID. FOR FURTHER INFORMATION, REFER TO SUBJECT 29-00-01.



Hydraulic Test Connections
Figure 701

(3) Disconnect test stand and install 0.25 gpm flow limiter in pressure line.

(4) Remove bypass hose from tube assemblies (5 and 6, figure 1102).

(5) Connect tube assemblies (5 and 6, figure 1102) to latch actuator assembly (12, figure 1102) with actuator shaft in extended position.

CAUTION: PROVIDE CONTAINER TO CATCH ANY SPECIFICATION BMS 3-11 HYDRAULIC FLUID WHICH MAY ESCAPE WHEN CAPS ARE REMOVED FROM LATCH ACTUATOR ASSEMBLY (12) PORTS AND ACTUATOR SHAFT IS EXTENDED.

IF SPILLAGE OCCURS, WIPE UP IMMEDIATELY. MANY FINISHES AND MATERIALS ARE DAMAGED BY PROLONGED CONTACT WITH HYDRAULIC FLUID.

(6) Reconnect test stand.

F. Fill and bleed hydraulic system as follows:

(1) With latch hook fittings (99, figure 1103) in latched position, hydraulic pressure at 1500 psi, and control valve in OPEN position (figure 701), allow latch actuator shaft to travel about one-third stroke.

(2) Place control valve in CLOSE position and extend actuator shaft fully. Loosen hose fittings at top of door and bleed air from lines.

(3) Repeat steps (1) and (2) for two-thirds stroke and full stroke.

NOTE: It will be necessary to trip latching mechanism before extending fully retracted shaft. This may be accomplished by striking latch actuator bellcrank arm (133, figure 1103) or latch fitting (99, figure 1103) from inboard side with rubber mallet, rotating bellcrank arm over center with hydraulic pressure applied to extend port. (See figure 501.)

(4) Repeat above steps as necessary to complete bleeding operation.

3. Test Procedure

A. Press knuckles against trigger fitting (56, figure 1104) and push trigger fitting inboard to permit grasping manual lock handle (20, figure 1104). Pull handle outward until compression spring forces handle to its maximum travel.

(1) Force required to pull handle outward should not exceed 35 pounds.

(2) Ends of lockpins (65, Fig. 1103) should be retracted to dimension shown in Fig. 501, with aft preload of 20 ±5 pounds is applied to system.

(3) Continuity should exist through switch (1, Fig. 1103) circuits. (Refer to ASSEMBLY for switch adjustment procedures.)

B. With latch hook fittings (99, Fig. 1103) in closed position, move control valve to OPEN position. All eight hook fittings should open.

C. Increase pressure to between 3400 and 3500 psi and hold for 5 minutes. There should be no external leakage.

D. Adjust pressure to 1500 psi and place control valve in CLOSE position. Latch hook fittings should not move.

E. With pressure at 1500 psi, mechanically trip latch hook fittings (99, Fig. 1103) to rotate actuator bellcrank past its center position. The latch hook fittings should move to locked position.

F. Increase hydraulic pressure to between 3400 and 3500 psi and hold for 5 minutes. There should be no external leakage.

G. Close manual lock handle (20, Fig. 1104).

(1) Lockpins (65, Fig. 1103) should extend to block further motion of latching mechanism bellcrank assemblies (116, Fig. 1103).

TEST PHASE	LIMIT
Door Open Cycle Manual lock handle (20, figure 1104) extended	Force required not over 35 pounds
	All lock pins retract flush to 0.10 inch recessed in bushing (168, figure 1101)
Switch (1, figure 1103) continuity	Continuity through all circuits
Latch hook fittings (99, figure 1103) in locked position, hydraulic pressure 1500 psi, and control valve OPEN position	Latch hook fittings rotate to open position
Hydraulic pressure between 3400 and 3500 psi	No external leakage
Door Close Cycle Hydraulic pressure 1500 psi; control valve to CLOSE	No movement of latch hook fittings (99, figure 1103)
Trip latching system	Latch hook fittings (99, figure 1103) move to locked position
Pressure between 3400 and 3500 psi	No external leakage
Manual lock handle (20, figure 1104) in locked position	Lock pins (65, figure 1103) block rotation of bellcranks (119, figure 1103)
Continuity through switch (1, figure 1103) circuits	No continuity between applicable switch contacts

TROUBLE SHOOTING

1. Trouble during test after overhaul.

A. Door Open Cycle

	Trouble	Possible Cause	Correction
(1)	Lock pins (65, figure 1103) do not fully retract	Manual lock handle (20, figure 1104) not in full open position	Check spring (14, figure 1104) per figure 301. Replace defective spring
		Incorrect assembly of mechanism installation	Check per figure 1103
		Incorrect assembly of handle installation	Check per figure 1104
		Excess friction in manual lock system	Check, adjust, or replace defective parts
		Manual lock system out of adjustment	Check all adjustments (Refer to ASSEMBLY.)
(2)	Continuity does not exist between applicable switch (1, figure 1103) contacts with lock handle open	Incorrect adjustment of switch position	Check, adjust per ASSEMBLY
		Defective switch	Check, replace switch
(3)	Latch actuator assembly (12, figure 1102) fails to retract	Defective latch actuator assembly	Check, replace defective actuator assembly
		Insufficient hydraulic pressure	Check, increase hydraulic pressure to 1500 psi
		Lock pins (65, figure 1103) in locked position	Check, open manual lock handle (20, figure 1104)

	Trouble	Possible Cause	Correction
(4)	Latch hook fittings (99, figure 1103) fail to rotate to open position	Defective latch actuator assembly (12, figure 1102)	Check, repair defective latch actuator assembly
		Lock pins (65, figure 1103) not fully retracted	Refer to 1.A.(1)
(5)	Latch hook fittings (99, figure 1103) fail to attain full open position	Incorrect adjustment of rod end bearings (82, figure 1103)	Check, adjust per ASSEMBLY
		Defective spring (76, figure 1103)	Check spring per figure 301. Replace defective spring
(6)	Hydraulic pressure leakage	Loose connections	Tighten fittings per ASSEMBLY
B.	Door Close Cycle		
(1)	Latch hook fittings (99, figure 1103) close when control valve is positioned CLOSE	Defective spring (76, figure 1103)	Check spring per figure 301. Replace defective spring
		Incorrect adjustment of bolt (141, figure 1103)	Check, adjust per ASSEMBLY
(2)	Excessive force required to trip latch fittings (99, figure 1103)	Incorrect adjustment of bolt (141, figure 1103)	Check, adjust per ASSEMBLY

	Trouble	Possible Cause	Correction
(3)	Latch hook fittings fail to attain full closed position	Incorrect adjustment of rod end bearings (82, figure 1103)	Check, adjust per ASSEMBLY
		Defective spring (76, figure 1103)	Check spring per figure 301. Replace defective spring
(4)	Lock pins (65, figure 1103) fail to fully extend	Bent lock pin	Check, replace defective pin
		Defective bushings (168, figure 1101)	Check, replace defective bushing
		Incorrect adjustment of set screws (137, figure 1103)	Check, adjust per ASSEMBLY
		Manual lock handle (20, figure 1104) not fully closed	Check springs (1 and 14, figure 1104) per figure 301. Replace defective spring
		Manual lock system out of adjustment	Check all adjustments per ASSEMBLY
(5)	Continuity exists between applicable switch (1, figure 1103) contacts with lock handle closed	Incorrect adjustment of switch position	Check, adjust per ASSEMBLY
		Defective switch	Check, replace defective switch

STORAGE INSTRUCTIONS

1. Place protective cover over surface of door skin and window panels.

2. Plug or cap cold air duct to prevent contamination during storage. With door hydraulic system filled with hydraulic fluid, BMS 3-11, and all open ports plugged or capped with hydraulic fluid-resistant closures to prevent contamination or leakage during storage, wrap entire door in vapor barrier paper and tape securely.

3. Provide suitable surrounding structure to protect door from handling damage.

4. Tag or mark assembly with overhaul date and cure date of rubber or rubber-like parts.

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

SPECIAL TOOLS, FIXTURES AND EQUIPMENT

1. Handling Fixture -- A fixture capable of handling the structure during disassembly, assembly, and testing.

   NOTE: Deleted.

2. Bearing Removal Tool -- ST927

3. Sling -- SYME65-54916 or F70250-3

   NOTE: This sling is not necessary for overhaul but may be used for handling the door.

   For additional tools required for test, refer to TESTING.

ILLUSTRATED PARTS LIST

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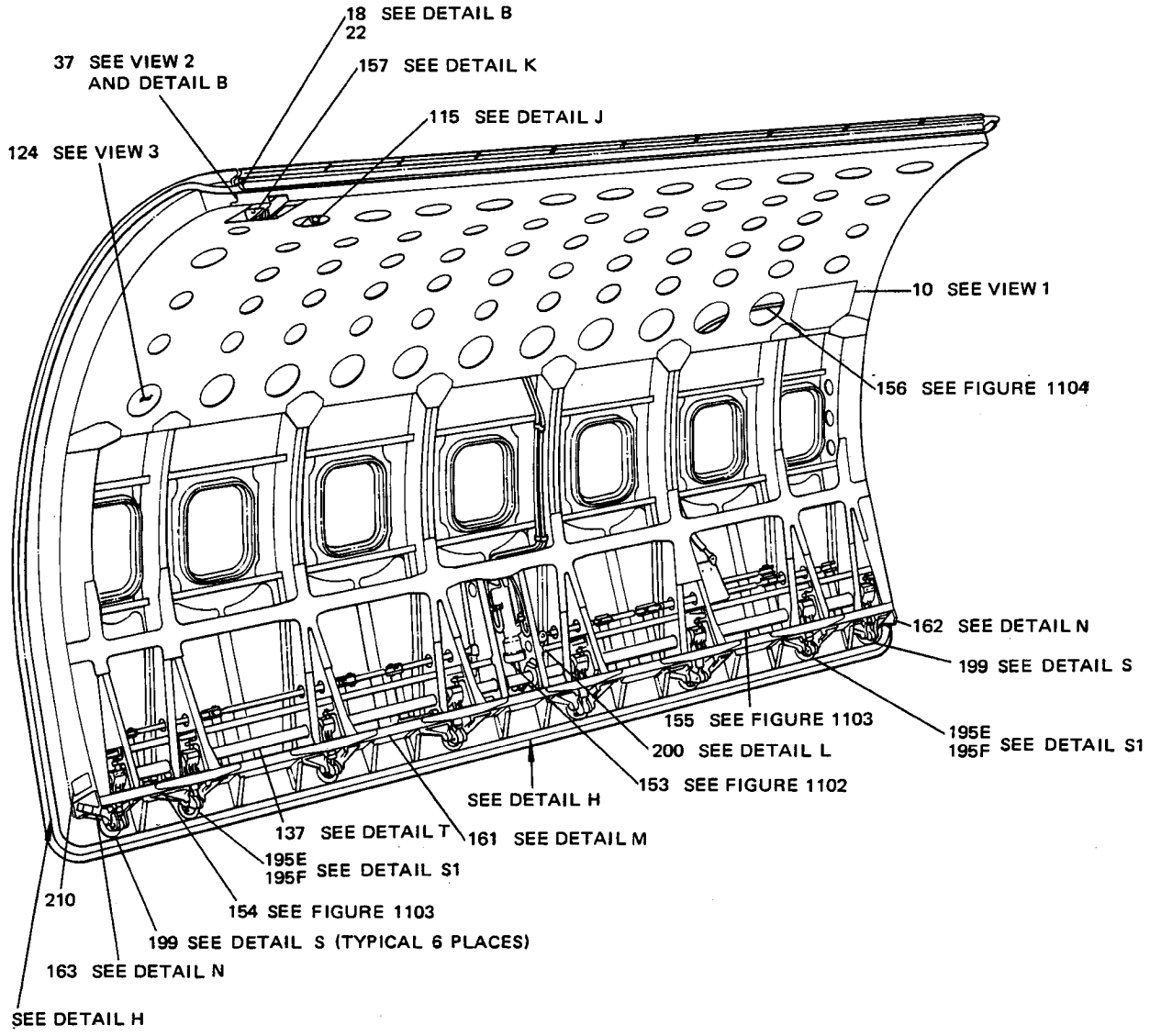
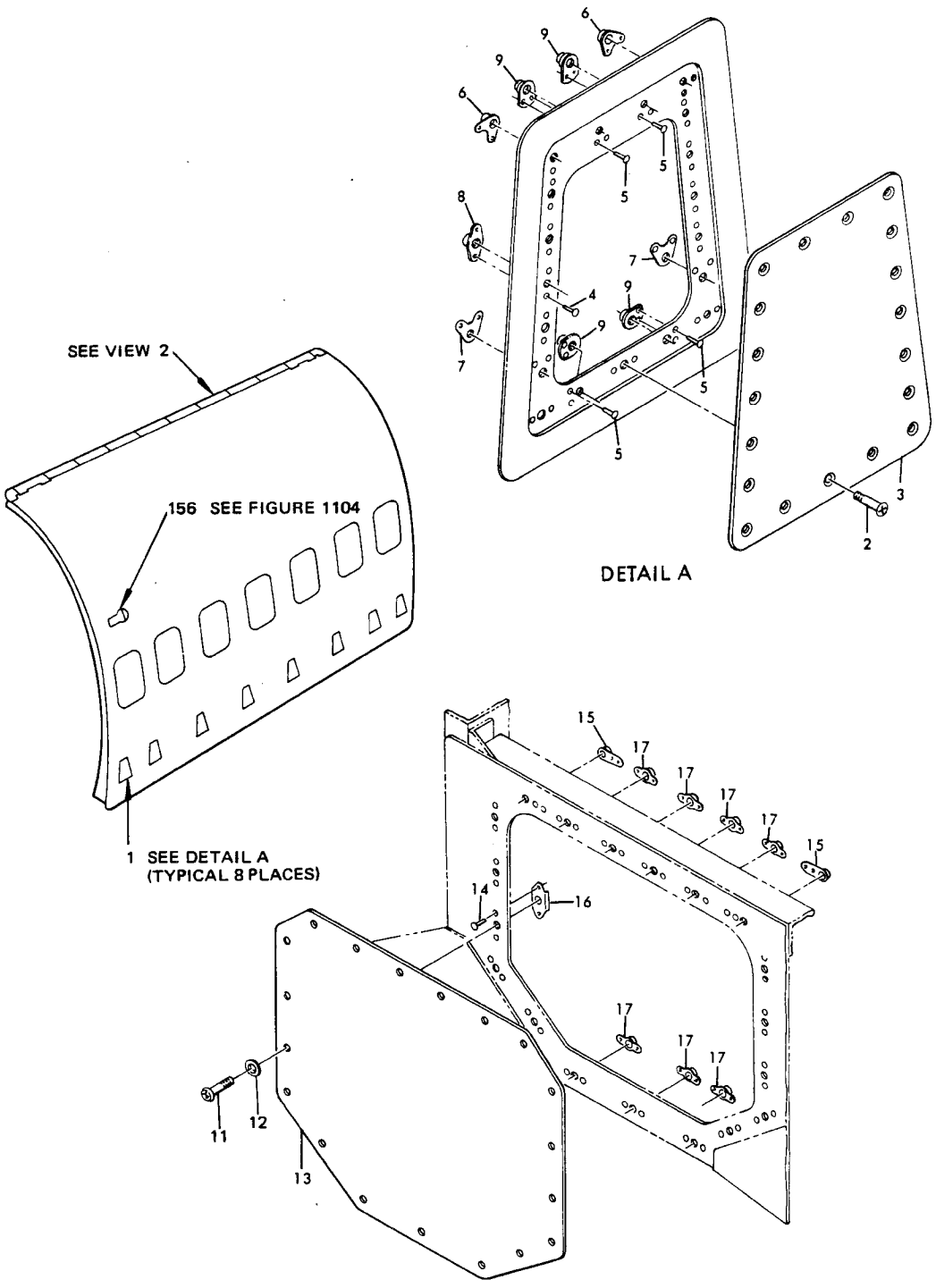
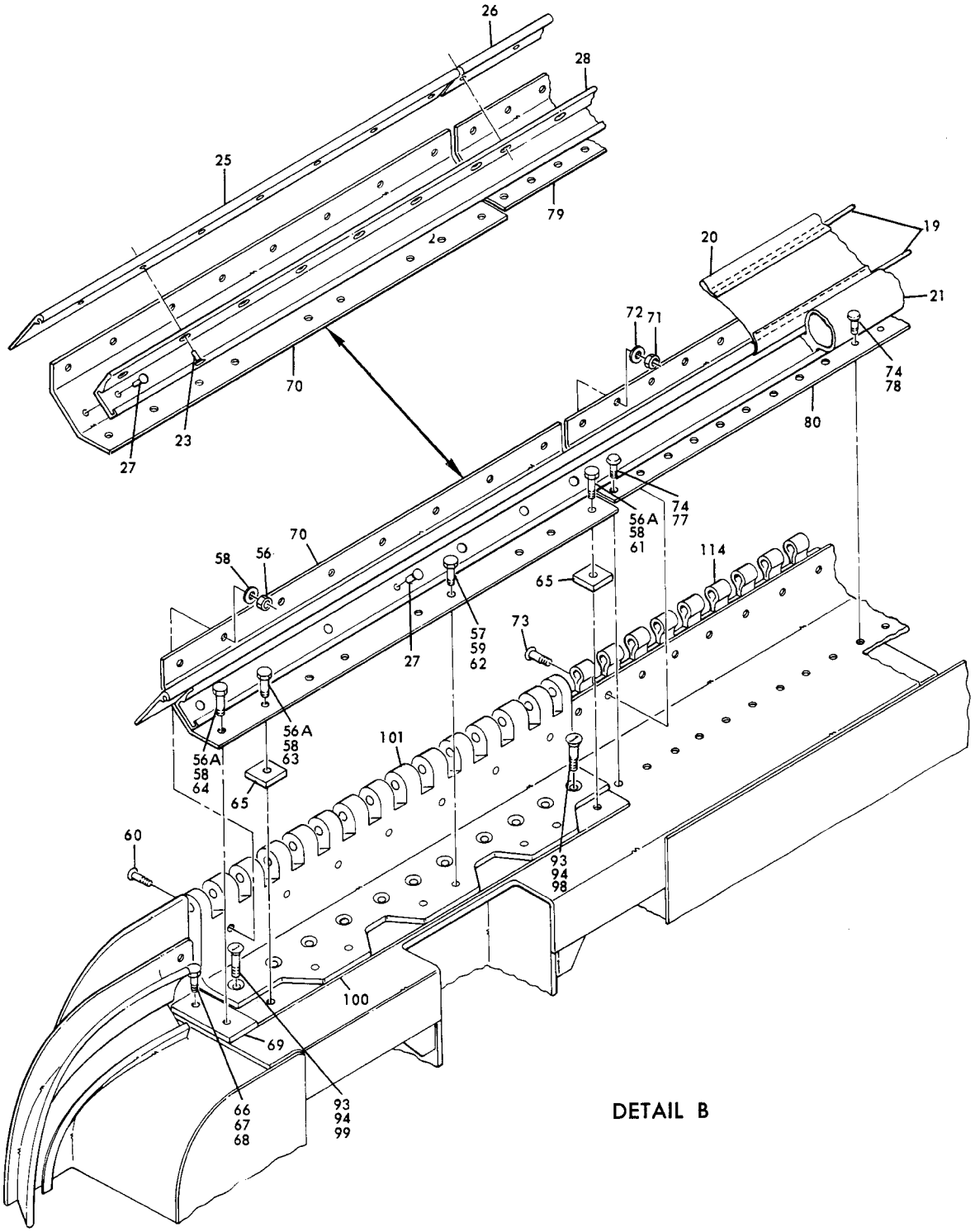


Main Cargo Door Assembly
Figure 1101 (Sheet 1)


SEE VIEW 2
156 SEE FIGURE 1104
1 SEE DETAIL A
(TYPICAL 8 PLACES)
DETAIL A
VIEW 1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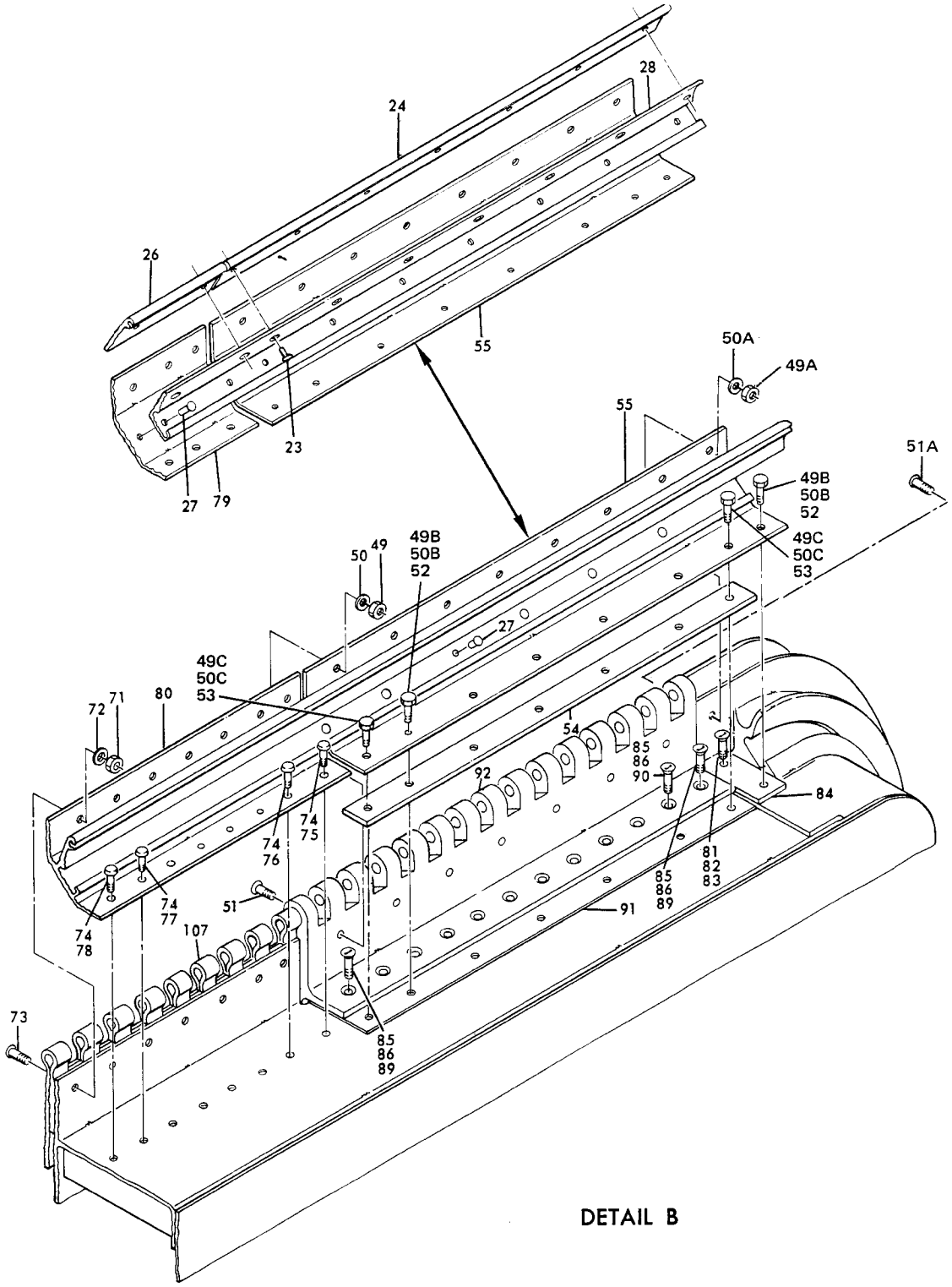
DETAIL B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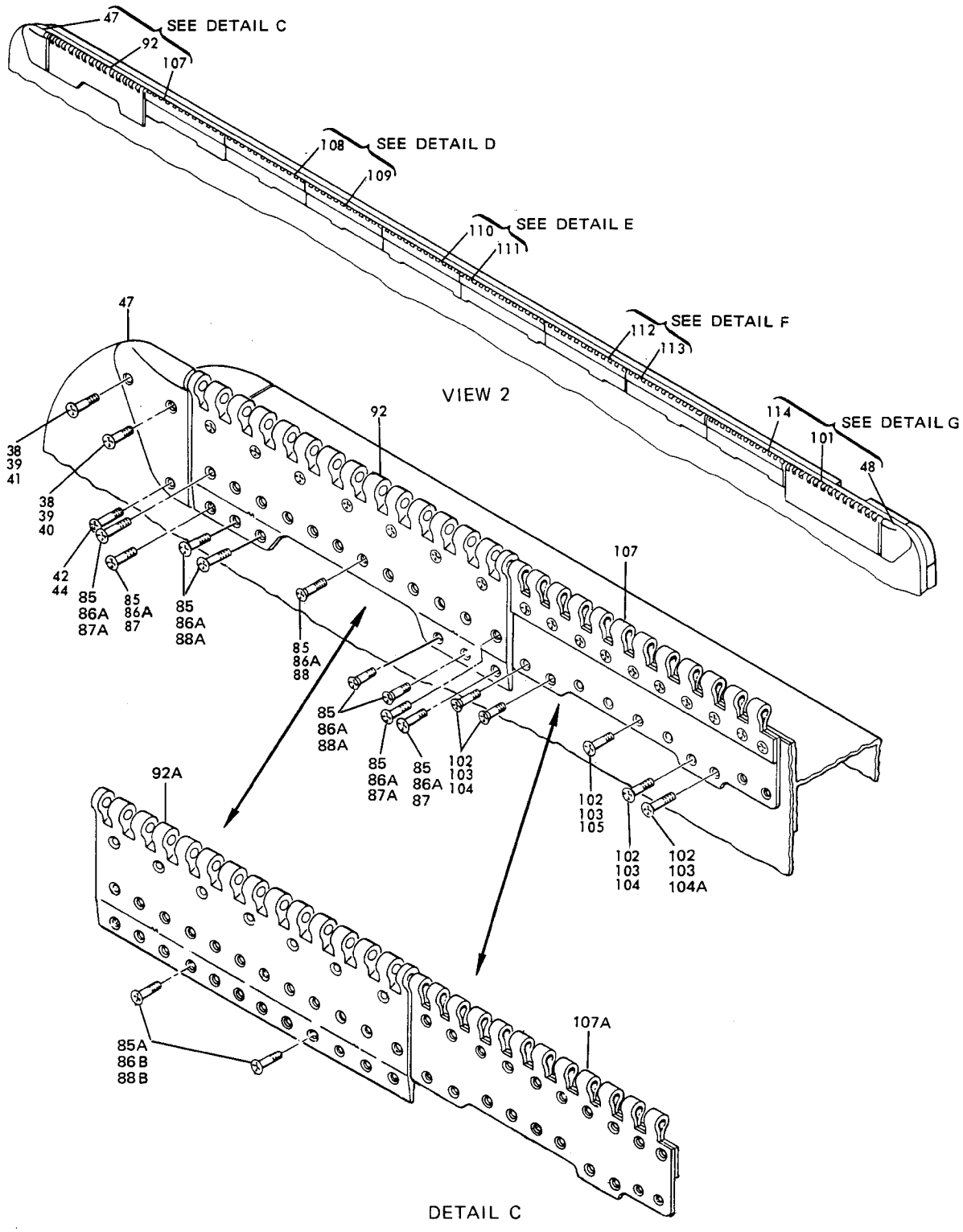
DETAIL B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SEE DETAIL C
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SEE DETAIL E
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SEE DETAIL F
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104A
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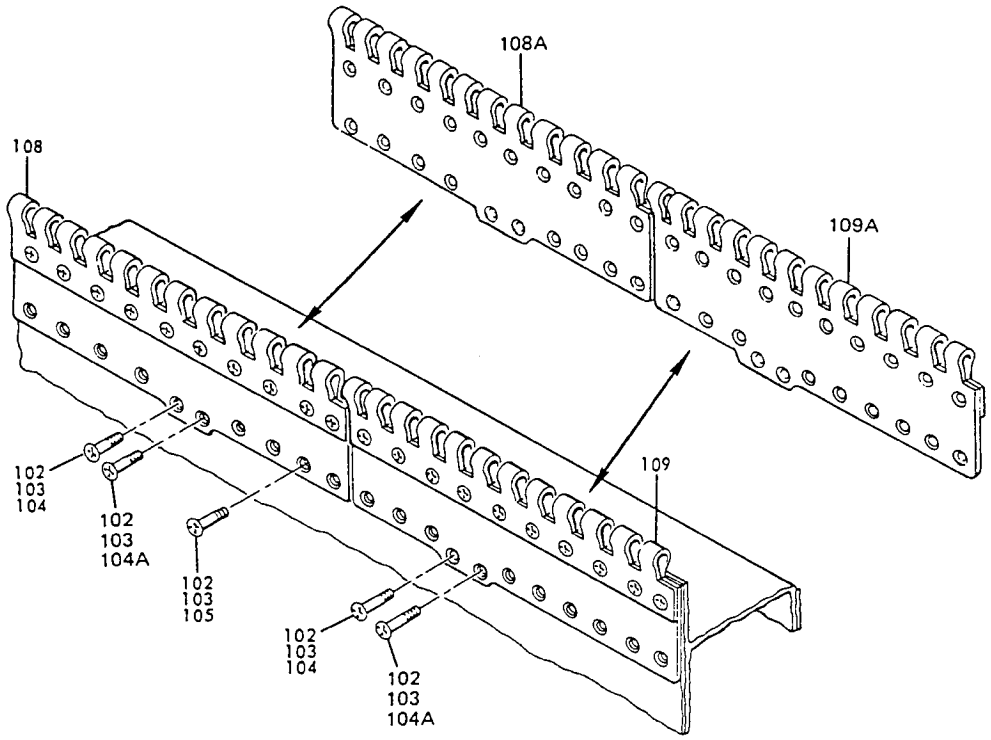
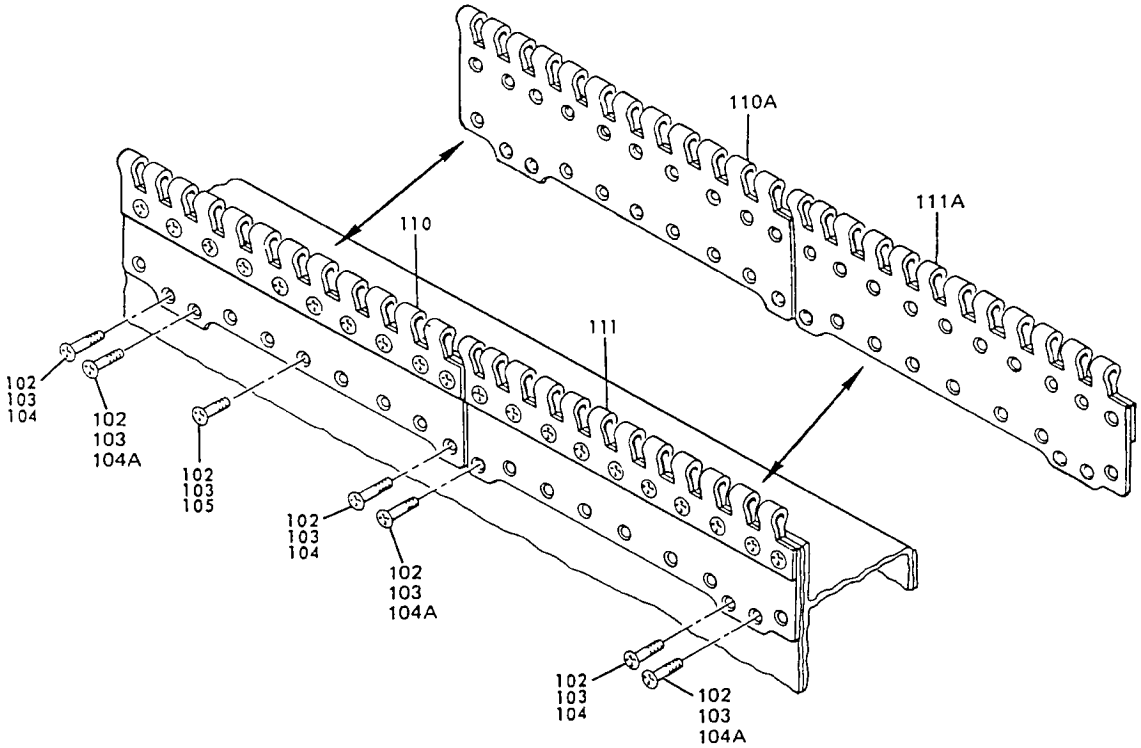
107A
DETAIL C

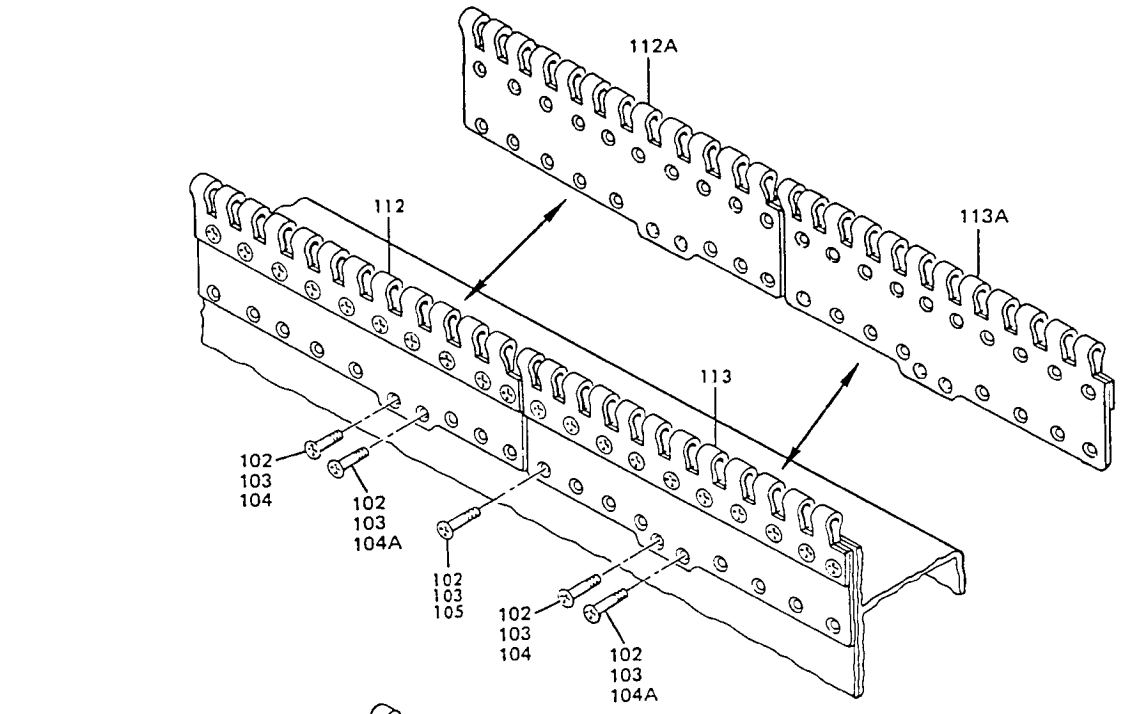


DETAIL D

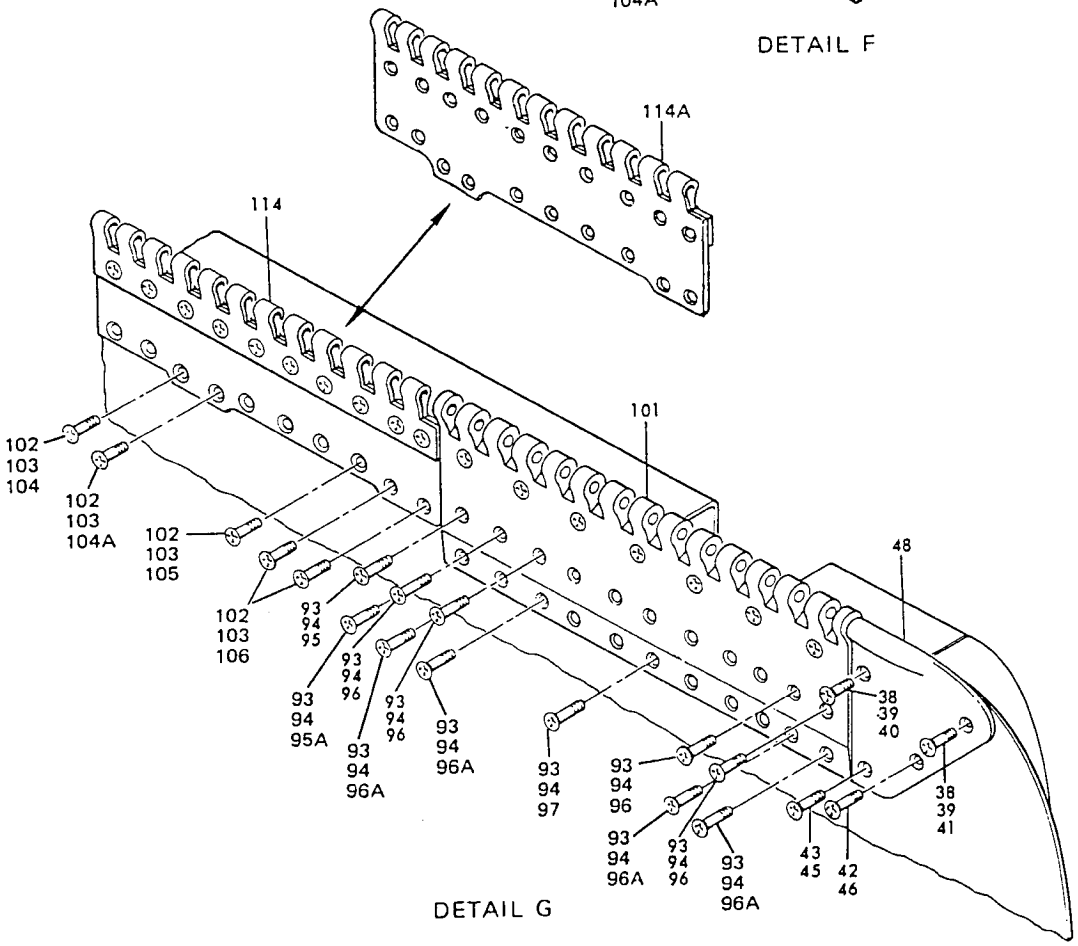


DETAIL E

Main Cargo Door Assembly
Figure 1101 (Sheet 5A)

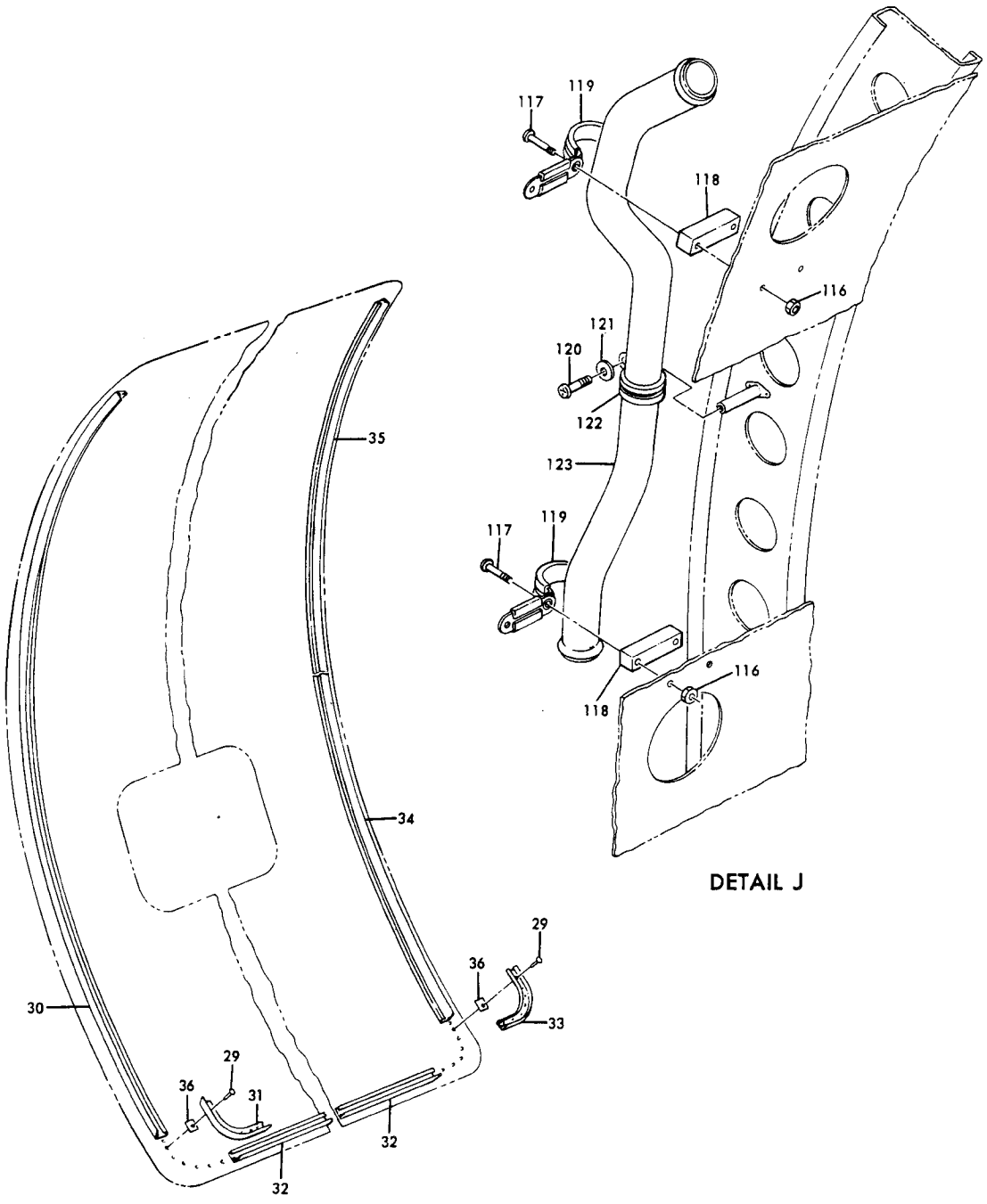


DETAIL F



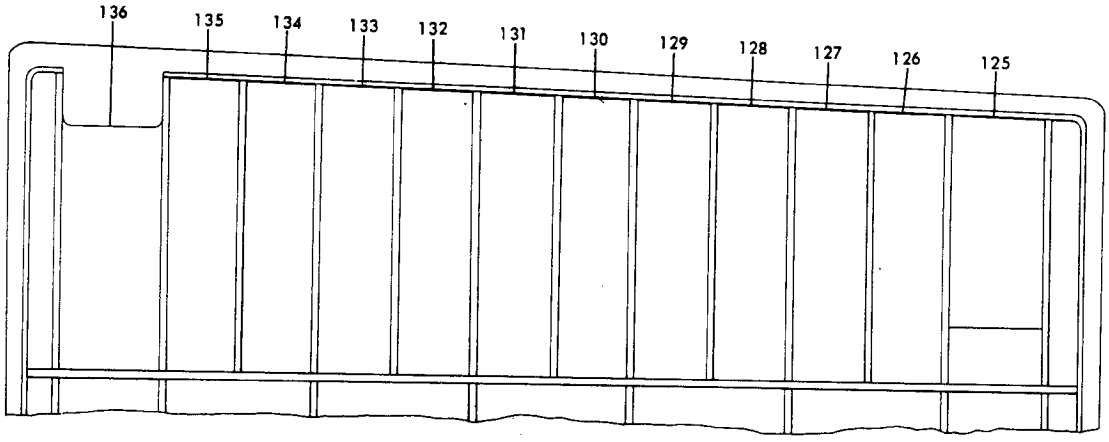
DETAIL G

Main Cargo Door Assembly
Figure 1101 (Sheet 6)

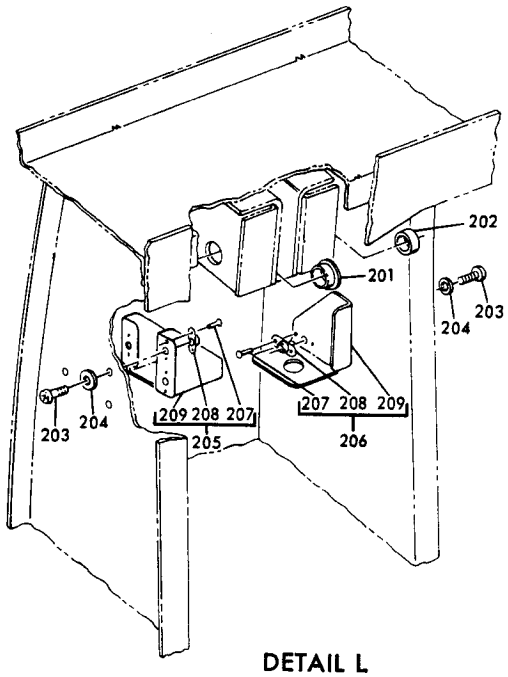


DETAIL J

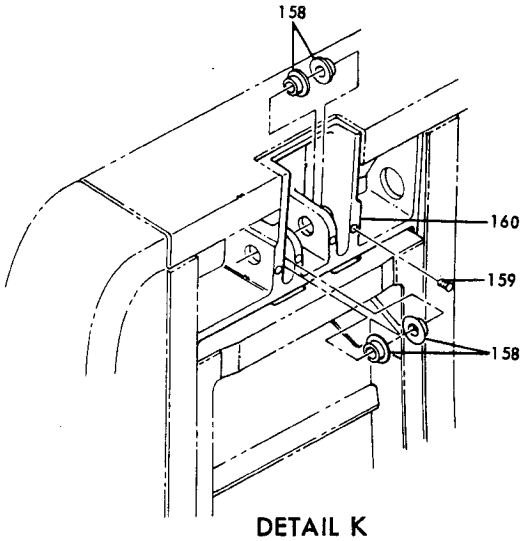
DETAIL H



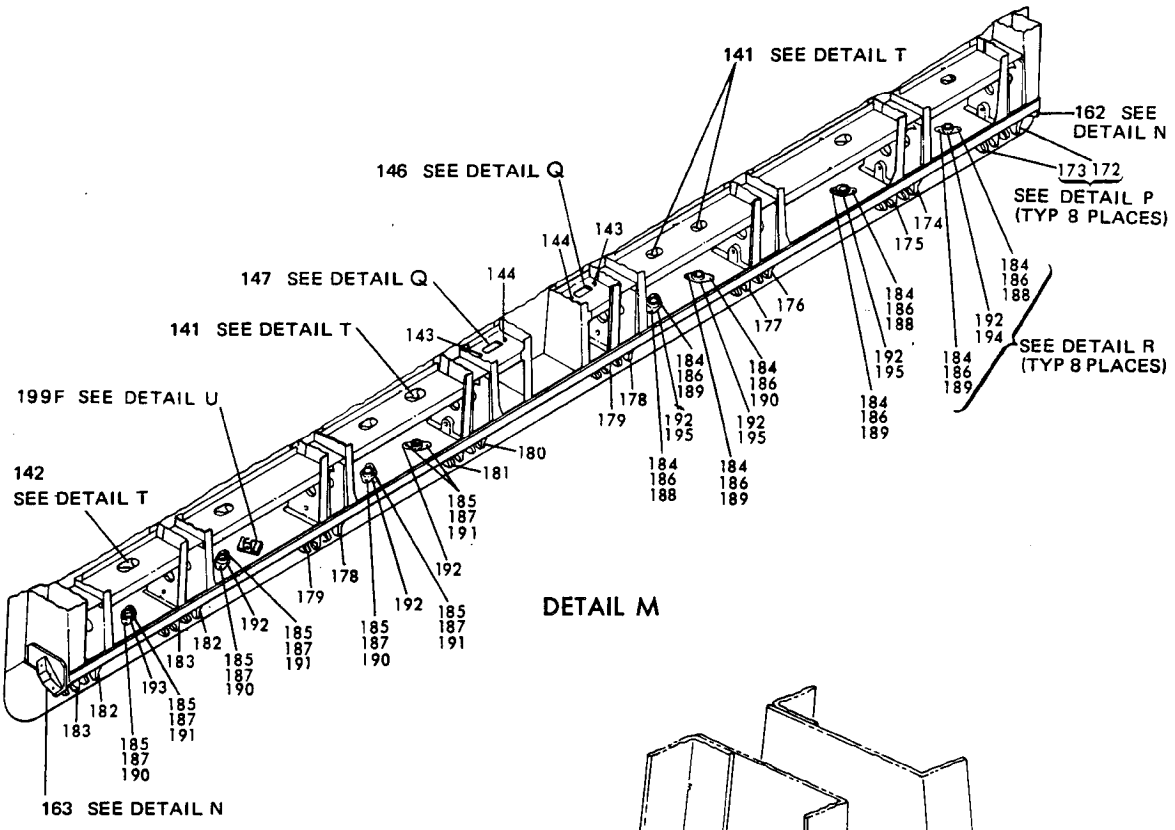
VIEW 3



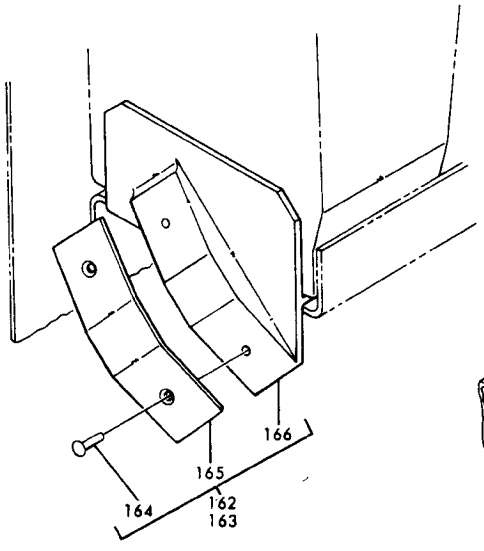
DETAIL L



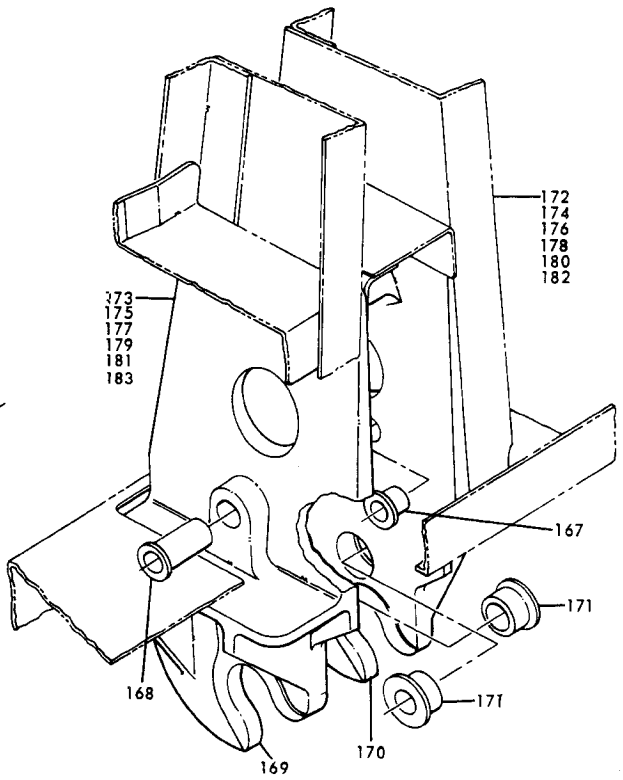
DETAIL K



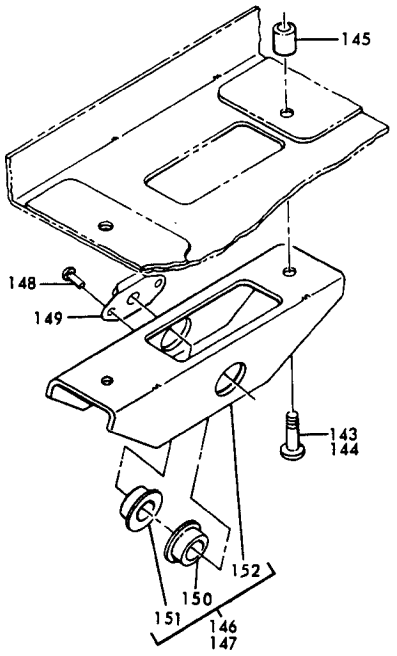
DETAIL M



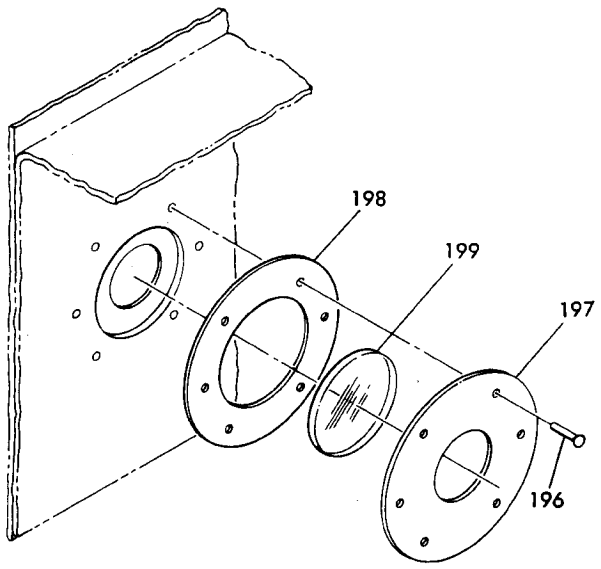
DETAIL N



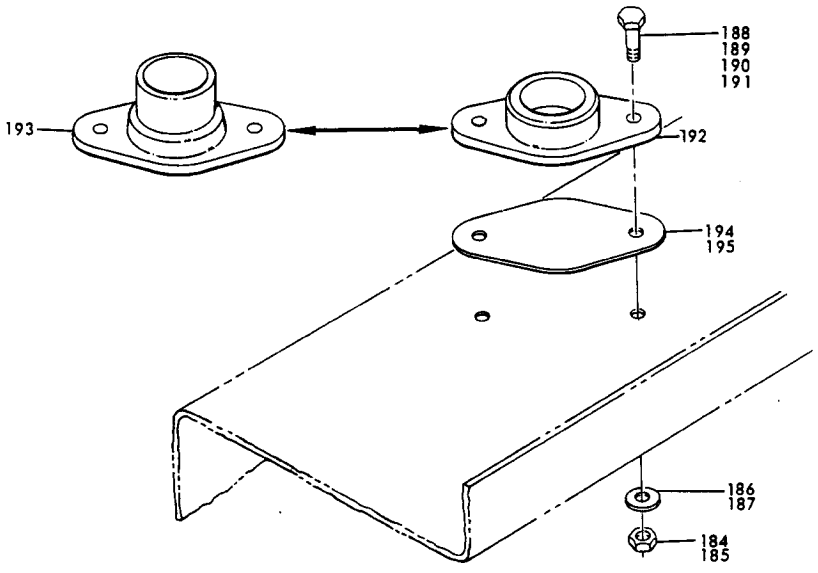
DETAIL P



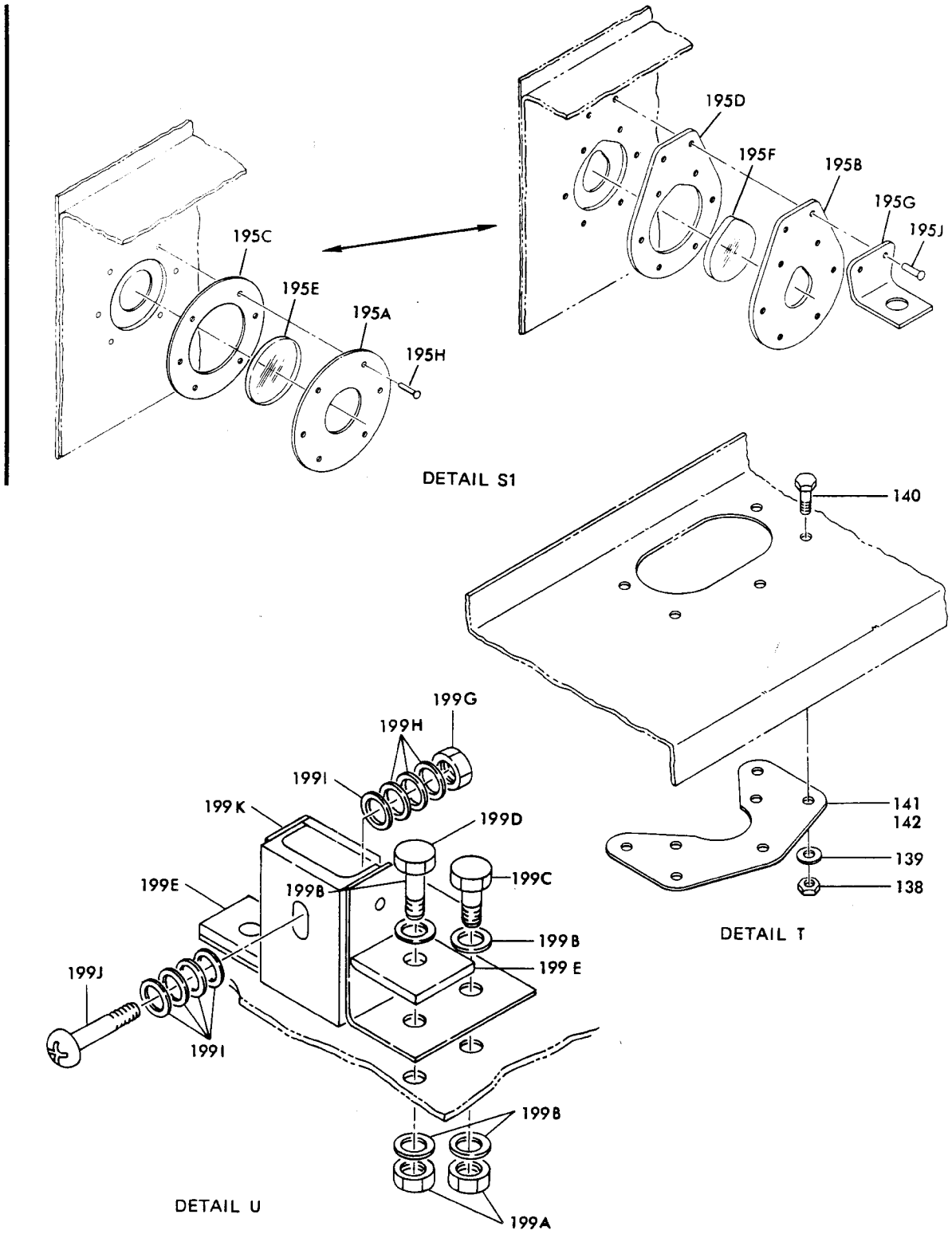
DETAIL Q



DETAIL S



DETAIL R (TYPICAL)



Main Cargo Door Assembly
Figure 1101 (Sheet 11)

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101					
	65-54916-2		MAIN CARGO DOOR ASSY	A	Ref
	65-54916-501		MAIN CARGO DOOR ASSY	B	Ref
1	65-54937-1		. ACCESS DOOR INSTL		1
2	BACB30LH3-3		. . BOLT		152
3	65-54937-3		. . DOOR, Access		8
4	MS20426D3		. . RIVET		240
5	MS20426D4		. . RIVET		64
6	NAS685A3		. . NUTPLATE		16
7	NAS698A3		. . NUTPLATE		16
8	BACN10JZ3A2		. . NUTPLATE		88
9	BACN10JZ3B2		. . NUTPLATE		32
10	65-54937-2		. ACCESS DOOR INSTL		1
11	NAS623-3-4		. . SCREW		19
12	AN960D10L		. . WASHER		19
13	69-53078-1		. . DOOR, Access		1
14	MS20426D3		. . RIVET		38
15	NAS682A3		. . NUTPLATE		2
16	BACN10EK5A32		. . NUTPLATE		10
17	NAS680A3		. . NUTPLATE		7
18	65-54942-3		. SEAL INSTL		1
19	65-54942-27		. . ROD, Seal retainer nylon		14
20	65-62265-1		. . SEAL, Weather		1
21	5926-4		. . SEAL, Pressure, V03200 (Boeing 10-60912-4)		1
22	65-54942-2		. SEAL REATAINER INSTL		1
23	MS20426D4		. . RIVET *[2]		AR
24	65-54942-502		. . RETAINER, Weather seal (fwd)*[2]		1
25	65-54942-503		. . RETAINER, Weather seal (aft)*[2]		1
26	65-54942-23		. . RETAINER, Weather seal (center) *[2]		1
27	MS20470D5		. . RIVET		AR
28	65-54942-15		. . RETAINER, Pressure seal		1
29	BACR15CE5D		. . RIVET		AR
30	65-54942-16		. . RETAINER, Pressure seal		1
31	65-54942-21		. . RETAINER, Pressure seal		1
32	65-54942-19		. . RETAINER, Pressure seal		1
33	65-54942-20		. . RETAINER, Pressure seal		1
34	65-54942-18		. . RETAINER, Pressure seal		1
35	65-54942-17		. . RETAINER, Pressure seal		1
36	90-9195-170		. . SHIM, Tapered		2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
37	65-54933-1		. BEAM INSTL, UPPER		1
38	NAS679A3W		. . NUT		4
39	AN960PD10		. . WASHER		4
40	BACB30LL3-8		DELETED		
40	BACB30LL3-7		. . BOLT		2
41	BACB30LL3-6		. . BOLT		2
42	BACB10ENTB3		. . NUTPLATE		2
43	BACB10ENTB4		. . NUTPLATE		2
44	BACB30LL3-7		. . BOLT		1
45	BACB30LL4-8		. . BOLT		1
46	BACB30LL3-8		. . BOLT		1
47	65-62133-1		. . PLATE, FWD HINGE FAINING		1
48	65-62132-1		. . PLATE, AFT HINGE FAIRING		1
49	NAS679A3W		. . NUT (PRE SB 52A-1038R3)		7
49	BACN10JC3		. . NUT (POST SB 52A-1038R3)		7
49A	NAS679A3W		. . NUT		1
49B	NAS679A3W		. . NUT (PRE SB 52A-1038R3)		6
49B	NAS8704-3		. . NUT (POST SB 52A-1038R3)		6
49C	NAS679A3W		. . NUT (PRE SB 52A-1038R3)		2
49C	NAS1804-3		. . NUT (POST SB 52A-1038R3)		2
50	AN960PD10		. . WASHER (PRE SB 52A-1038R3)		7
50	BACW10BN32AP		. . WASHER (POST SB 52A-1038R3)		7
50A	AN960PD10		. . WASHER		1
50B	AN960PD10		. . WASHER (PRE SB 52A-1038R3)		6
50B	BACN10BN32AP		. . WASHER (POST SB 52A-1038R3)		6
50C	AN960PD10		. . WASHER (PRE SB 52A-1038R3)		2
50C	BACW10BN32AP		. . WASHER (POST SB 52A-1038R3)		2
51	BACB30LL3-8		DELETED		
51	BACB30LL3-7		. . BOLT (PRE SB 52A-1038R3)		7
51	NAS8703-10Y		. . BOLT (POST SB 52A-1038R3)		7
51A	BACB30LL3-7		. . BOLT		1
52	NAS1103-8		. . BOLT (PRE SB 52A-1038R3)		6
52	NAS6603-10Y		. . BOLT (POST SB 52A-1038R3)		6
53	NAS1103-9		. . BOLT (PRE SB 52A-1038R3)		2
53	NAS6603-12Y		. . BOLT (POST SB 52A-1038R3)		2
54	65-54933-7		. . FILLER		1
55	69-41476-1		. . SUPPORT, SEAL RETAINER (FWD)		1
56	NAS679A3W		. . NUT (PRE SB 52A-1038R3)		7
56	BACN10JC3		. . NUT (POST SB 52A-1038R3)		7
56A	NAS679A3W		. . NUT (PRE SB 52A-1038R3)		3
56A	NAS1804-3		. . NUT (POST SB 52A-1038R3)		3
57	NAS679A4W		. . NUT (PRE SB 52A-1038R3)		6
57	NAS1804-4		. . NUT (POST SB 52A-1038R3)		6
58	AN960PD10		. . WASHER (PRE SB 52A-1038R3)		10
58	BACW10BN32AP		. . WASHER (POST SB 52A-1038R3)		10

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
59	AN960PD416		. . WASHER (PRE SB 52A-1038R3)		6
59	BACW10BN42AP		. . WASHER (POST SB 52A-1038R3)		6
60	BACB30LL3-8		. . BOLT (PRE SB 52A-1038R3)		7
60	NAS8703-10Y		. . BOLT (POST SB 52A-1038R3)		7
61	NAS1103-8		. . BOLT (PRE SB 52A-1038R3)		1
61	NAS6603-9Y		. . BOLT (POST SB 52A-1038R3)		1
62	BACB30NE4-11		. . BOLT (PRE SB 52A-1038R3)		6
62	NAS6604-12Y		. . BOLT (POST SB 52A-1038R3)		6
63	NAS1103-4		. . BOLT (PRE SB 52A-1038R3)		1
63	NAS6603-11Y		. . BOLT (POST SB 52A-1038R3)		1
64	NAS1103-6		. . BOLT (PRE SB 52A-1038R3)		1
64	NAS6603-6Y		. . BOLT (POST SB 52A-1038R3)		1
65	65-54933-19		. . FILLER (AFT END ONLY)		2
66	NAS679A3W		. . NUT (PRE SB 52A-1038R3)		1
66	BACN10JC3		. . NUT (POST SB 52A-1038R3)		1
67	AN960PD10		. . WASHER (PRE SB 52A-1038R3)		1
67	BACW10BN32AP		. . WASHER (POST SB 52A-1038R3)		1
68	BACB30EL3-5		. . BOLT (PRE SB 52A-1038R3)		1
68	NAS8703-5Y		. . BOLT (POST SB 52A-1038R3)		1
69	BACS40R12D19		. . SHIM		1
70	69-41476-2		. . SUPPORT, SEAL RETAINER (AFT)		1
71	NAS679A3W		. . NUT (PRE SB 52A-1038R3)		80
71	BACN10JC3		. . NUT (POST SB 52A-1038R3)		80
72	AN960PD10		. . WASHER (PRE SB 52A-1038R3)		80
72	BACW10BN32AP		. . WASHER (POST SB 52A-1038R3)		80
73	BACB30LL3-8		DELETED		
73	BACB30LL3-7		. . BOLT (PRE SB 52A-1038R3)		80
73	BACB30LL3-7Y		. . BOLT (POST SB 52A-1038R3)		80
74	NAS1080D		. . COLLAR		97
75	BACB30GP6-5		. . BOLT		1
76	BACB30GP6-4		. . BOLT		1
77	BACB30GP6-2		. . BOLT		86
78	BACB30GP6-3		. . BOLT		9
79	65-54933-4		. . SUPPORT, SEAL RETAINER *[2]		1
80	69-53977-1		. . RETAINER, PRESSURE-WEATHER SEAL *[2]		1
81	NAS679A3W		. . NUT (PRE SB 52A-1038R3)		1
81	BACN10JC3		. . NUT (POST SB 52A-1038R3)		1
82	AN960PD10		. . WASHER (PRE SB 52A-1038R3)		1
82	BACN10BN32AP		. . WASHER (POST SB 52A-1038R3)		1
83	BACB30EL3-8		. . BOLT (PRE SB 52A-1038R3)		1
83	NAS8703-10Y		. . BOLT (POST SB 52A-1038R3)		1
84	BACS40R12D19		. . FILLER		1
85	NAS679A4W		. . NUT (PRE SB 52A-1038R3)		30
85	BACN10JC4		. . NUT (POST SB 52A-1038R3)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
85A	BACN10JC4		. . NUT (POST SB 52A-1038R3)		1
86	AN960PD416		. . WASHER (PRE SB 52A-1038R3)		12
86	BACW10BN42AP		. . WASHER (POST SB 52A-1038R3)		12
86A	AN960PD416		. . WASHER (PRE SB 52A-1038R3)		18
86A	BACW10BN41AP		. . WASHER (POST SB 52A-1038R3)		18
86B	AN960JD416		. . WASHER (POST SB 52A-1038R3)		6
87	BACB30LL4-8		. . BOLT (PRE SB 52A-1038R3)		2
87	NAS8704-9X		. . BOLT (POST SB 52A-1038R3)		2
87A	BACB30LL4-8		. . BOLT (PRE SB 52A-1038R3)		2
87A	NAS8704-10X		. . BOLT (POST SB 52A-1038R3)		2
88	BACB30LL4-7		. . BOLT (PRE SB 52A-1038R3)		10
88	NAS8704-9X		. . BOLT (POST SB 52A-1038R3)		10
88A	BACB30LL4-7		. . BOLT (PRE SB 52A-1038R3)		4
88A	NAS8704-8X		. . BOLT (POST SB 52A-1038R3)		4
88B	NAS8704-8		. . BOLT (POST SB 52A-1038R3)		6
89	BACB30EL4-9		. . BOLT (PRE SB 52A-1038R3)		2
89	NAS8704-11Y		. . BOLT (POST SB 52A-1038R3)		2
90	BACB30EL4-7		. . BOLT (PRE SB 52A-1038R3)		10
90	NAS8704-9Y		. . BOLT (POST SB 52A-1038R3)		10
91	BACS40R20C-143F		. . SHIM		1
92	65-62145-1		. . HINGE (PRE SB 52A-1038R3)		1
92	65-62145-2		. . HINGE (POST SB 52A-1038R3)		1
93	NAS679A5		. . NUT (PRE SB 52A-1038R3)		33
93	BACN10JC5		. . NUT (POST SB 52A-1038R3)		33
94	AN960PD516		. . WASHER (PRE SB 52A-1038R3)		33
94	BACW10BN51AP		. . WASHER (POST SB 52A-1038R3)		33
95	BACB30LL5-8		. . BOLT (PRE SB 52A-1038R3)		1
95	NAS8705-10X		. . BOLT (POST SB 52A-1038R3)		1
95A	BACB30LL5-8		. . BOLT (PRE SB 52A-1038R3)		1
95A	NAS8705-9X		. . BOLT (POST SB 52A-1038R3)		1
96	BACB30LL5-9		. . BOLT, LOCK (PRE SB 52A-1038R3)		4
96	NAS8705-12X		. . BOLT, LOCK (POST SB 52A-1038R3)		4
96A	BACB30LL5-9		. . BOLT, LOCK (PRE SB 52A-1038R3)		4
96A	NAS8705-11X		. . BOLT, LOCK (POST SB 52A-1038R3)		4
97	BACB30LL5-7		. . BOLT, LOCK (PRE SB 52A-1038R3)		12
97	NAS8705-9X		. . BOLT, LOCK (POST SB 52A-1038R3)		12
98	BACB30EL5-7		. . BOLT (PRE SB 52A-1038R3)		1
98	NAS8705-9X		. . BOLT (POST SB 52A-1038R3)		1
99	BACB30EL5-11		. . BOLT (PRE SB 52A-1038R3)		10
99	NAS8705-11X		. . BOLT (POST SB 52A-1038R3)		10
100	BACS40R18C-143F		. . SHIM		1
101	65-62144-1		. . HINGE (PRE SB 52A-1038R3)		1
101	65-62144-2		. . HINGE (POST SB 52A-1038R3)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
102	NAS679A3W		. . NUT (PRE SB 52A-1038R3)		81
102	BACN10JC3		. . NUT (POST SB 52A-1038R3)		81
103	AN960PD10		. . WASHER (PRE SB 52A-1038R3)		81
103	BACW10BN32AP		. . WASHER (POST SB 52A-1038R3)		81
104	BACB30LL3-5		. . BOLT, LOCK (PRE SB 52A-1038R3)		11
104	BACB30LL3-7Y		. . BOLT, LOCK (POST SB 52A-1038R3)		11
104A	BACB30LL3-5		. . BOLT, LOCK (PRE SB 52A-1038R3)		9
104A	BACB30LL3-6Y		. . BOLT, LOCK (POST SB 52A-1038R3)		9
105	BACB30LL3-4		. . BOLT, LOCK (PRE SB 52A-1038R3)		59
105	BACB30LL3-6Y		. . BOLT, LOCK (POST SB 52A-1038R3)		59
106	BACB30LL3-7		. . BOLT, LOCK (PRE SB 52A-1038R3)		2
106	BACB30LL3-8Y		. . BOLT, LOCK (POST SB 52A-1038R3)		2
107	65-62247-1		. . HINGE HALF, INTERMEDIATE (PRE SB 52A-1038R3)		1
107	65-86005-1		. . HINGE HALF (POST SB 52A-1038R3)		1
108	65-62247-2		. . HINGE HALF, INTERMEDIATE (PRE SB 52A-1038R3)		1
108	65-86005-2		. . HINGE HALF (POST SB 52A-1038R3)		1
109	65-62247-3		. . HINGE HALF, INTERMEDIATE (PRE SB 52A-1038R3)		1
109	65-86005-3		. . HINGE HALF (POST SB 52A-1038R3)		1
110	65-62247-4		. . HINGE HALF, INTERMEDIATE (PRE SB 52A-1038R3)		1
110	65-86005-4		. . HINGE HALF (POST SB 52A-1038R3)		1
111	65-62247-5		. . HINGE HALF, INTERMEDIATE (PRE SB 52A-1038R3)		1
111	65-86005-5		. . HINGE HALF (POST SB 52A-1038R3)		1
112	65-62247-6		. . HINGE HALF, INTERMEDIATE (PRE SB 52A-1038R3)		1
112	65-86005-6		. . HINGE HALF (POST SB 52A-1038R3)		1
113	65-62247-7		. . HINGE HALF, INTERMEDIATE (PRE SB 52A-1038R3)		1
113	65-86005-7		. . HINGE HALF (POST SB 52A-1038R3)		1
114	65-62247-8		. . HINGE HALF, INTERMEDIATE (PRE SB 52A-1038R3)		1
114	65-86005-8		. . HINGE HALF (POST SB 52A-1038R3)		1
115	65-67988-1		. DUCT INSTL, COLD AIR *[2]		1
116	NAS679A3W		. . NUT		4
117	NAS603-13P		. . SCREW		4
118	65-45318-5		. . BLOCK, DUCT SUPORTt		2
119	BACC10CC16		. . CLAMP		2
120	NAS603-32P		. . SCREW		1
121	AN960PD10L		. . WASHER		1
122	MS21919DG16		. . CLAMP		1
123	65-67988-2		. . TUBE		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
124	65-65333-1		. INSULATION INSTL		1
125	65-65333-3		. . BLANKET ASSY		1
126	65-65333-4		. . BLANKET ASSY		1
127	65-65333-5		. . BLANKET ASSY		1
128	65-65333-6		. . BLANKET ASSY		1
129	65-65333-7		. . BLANKET ASSY		1
130	65-65333-8		. . BLANKET ASSY		1
131	65-65333-9		. . BLANKET ASSY		1
132	65-65333-10		. . BLANKET ASSY		1
133	65-65333-11		. . BLANKET ASSY		1
134	65-65333-12		. . BLANKET ASSY		1
135	65-65333-13		. . BLANKET ASSY		1
136	65-65333-14		. . BLANKET ASSY		1
137	65-62256-1		. INTERCOSTAL INSTL		1
138	NAS679A3W		. . NUT		40
139	AN960D10		. . WASHER		40
140	BACB30NF3-3		. . BOLT (USED WITH 65-62256-12)		15
140	BACB30NF3-2		. . BOLT (USED WITH 65-62256-13)		25
141	65-62256-12		. . DOUBLER		3
142	65-62256-13		. . DOUBLER		5
143	BACB30DX8-4		. . BOLT		2
144	BACB30DX8-3		. . BOLT		2
145	NAS1080-8		. . COLLAR		4
146	69-53901-1		. . BRACKET ASSY, MANUAL LOCK		1
147	69-53901-2		. . BRACKET ASSY, MANUAL LOCK		1
148	MS20426D3		. . . RIVET		2
149	NAS1068A4		. . . NUTPLATE		1
150	BACB28X4B24		. . . BUSHING		1
151	BACB28X4B13		. . . BUSHING		1
152	69-53901-3		. . . BRACKET (USED ON 69-53901-1)		1
152	69-53901-4		. . . BRACKET (USED ON 69-53901-2)		1
153	65-65716-1		. HYDRAULIC INSTL (FIG. 1102)		1
154	65-65728-1		. SWITCH INSTL (FIG. 1103)		1
155	65-54940-1		. MECHANISM INSTL (FIG. 1103)		1
156	65-62147-1		. HANDLE INSTL, MANUAL LOCK (FIG. 1104)		1
157	65-54941-1		. FITTING INSTL, ACTUATOR SUPPORT		1
158	69-41489-1		. . BUSHING		4
159	NAS516-1		. . FITTING, LUBRICATION		4
160	65-62146-1		. . FITTING		1
160	65-62146-2		. . FITTING (OPT TO 65-62146-2)		1
161	65-54932-1		. BEAM INSTL, LOWER		1
162	65-54955-1		. . CAM ASSY, FWD CENTERING		
163	65-54947-1		. . CAM ASSY, AFT CENTERING		1
164	BACR15CE6B		. . . RIVET		2

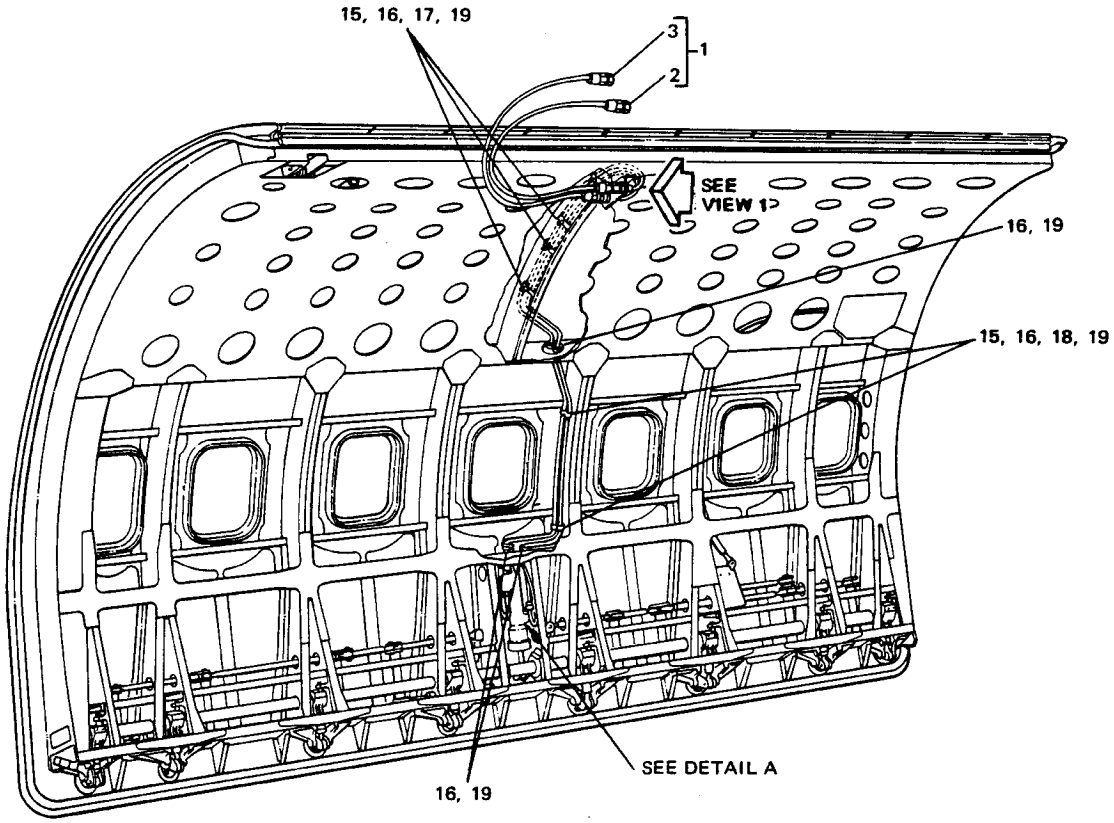
FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
165	69-41484-1		. . . LINER		1
166	65-54955-2		. . . CAM (USED ON 65-54955-1)		1
166	65-54947-2		. . . CAM (USED ON 65-54947-1)		1
167	BACB28X6B70		. . BUSHING, FLANGED		8
168	BACB28X6BL18		. . BUSHING, FLANGED		8
169	65-62228-1		. . FITTING, BEARING CAP		8
170	65-62228-2		. . FITTING, BEARING CAP		8
171	BACB28X12C53		. . BUSHING		16
172	65-62230-6		. . FITTING, LATCH SUPPORT		1
172	65-62230-502		. . FITTING, LATCH SUPPORT (OPT)		1
172	65-62230-4		. . FITTING, LATCH SUPPORT (OPT)		1
172	65-62230-2		. . FITTING, LATCH SUPPORT (OPT)		1
173	65-62230-501		. . FITTING, LATCH SUPPORT		1
173	65-62230-1		. . FITTING, LATCH SUPPORT (OPT)		1
174	65-62231-6		. . FITTING, LATCH SUPPORT		1
174	65-62231-502		. . FITTING, LATCH SUPPORT (OPT)		1
174	65-62231-4		. . FITTING, LATCH SUPPORT (OPT)		1
174	65-62231-2		. . FITTING, LATCH SUPPORT (OPT)		1
175	65-62231-501		. . FITTING, LATCH SUPPORT		1
175	65-62231-1		. . FITTING, LATCH SUPPORT (OPT)		1
176	65-62232-16		. . FITTING, LATCH SUPPORT		1
176	65-62232-502		. . FITTING, LATCH SUPPORT (OPT)		1
176	65-62232-8		. . FITTING, LATCH SUPPORT (OPT)		1
176	65-62232-2		. . FITTING, LATCH SUPPORT (OPT)		1
177	65-62232-501		. . FITTING, LATCH SUPPORT		1
177	65-62232-1		. . FITTING, LATCH SUPPORT (OPT)		1
178	65-62232-18		. . FITTING, LATCH SUPPORT		1
178	65-62232-504		. . FITTING, LATCH SUPPORT (OPT)		2
178	65-62232-10		. . FITTING, LATCH SUPPORT (OPT)		1
178	65-62232-4		. . FITTING, LATCH SUPPORT (OPT)		2
179	65-62232-503		. . FITTING, LATCH SUPPORT		
179	65-62232-3		. . FITTING, LATCH SUPPORT (OPT)		2
180	65-62232-22		. . FITTING, LATCH SUPPORT		1
180	65-62232-508		. . FITTING, LATCH SUPPORT (OPT)		1
180	65-62232-14		. . FITTING, LATCH SUPPORT (OPT)		1
180	65-62232-510		. . FITTING, LATCH SUPPORT (OPT)		1
181	65-62232-507		. . FITTING, LATCH SUPPORT		1
181	65-62232-509		. . FITTING, LATCH SUPPORT (OPT)		1
182	65-62232-20		. . FITTING, LATCH SUPPORT		2
182	65-62232-506		. . FITTING, LATCH SUPPORT (OPT)		2
182	65-62232-12		. . FITTING, LATCH SUPPORT (OPT)		2
182	65-62232-6		. . FITTING, LATCH SUPPORT (OPT)		2
183	65-62232-505		. . FITTING, LATCH SUPPORT		2
183	65-62232-5		. . FITTING, LATCH SUPPORT (OPT)		2
184	BACN10FD35		. . NUT		8

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
185	NAS679A3W		. . NUT		8
186	BACW10AN3		. . WASHER		8
187	AN960-10L		. . WASHER		8
188	BACB30NF3-6		. . BOLT		3
189	BACB30NF3-7		. . BOLT		4
190	BACB30NF3-5		. . BOLT		4
191	BACB30NF3-4		. . BOLT		5
192	78874		. . BUSHING, SELF-LUBRICATED, V09455 (BOEING 10-60516-265)		7
192	FBJ36TF1		. . BUSHING, SELF-LUBRICATED, V21335 (BOEING 10-60516-265)		7
192	DBAF18-034		. . BUSHING, SELF-LUBRICATED, V81376 (BOEING 10-60516-265)		7
193	78890		. . BUSHING, SELF-LUBRICATED, V09455 (BOEING 10-60516-268)		1
193	YTS745		. . BUSHING, SELF-LUBRICATED, V77896 (BOEING 10-60516-268)		1
193	DBAF16-137		. . BUSHING, SELF-LUBRICATED, V81376 (BOEING 10-60516-268)		1
193	KJN16-46		. . BUSHING, SELF-LUBRICATED, V97613 (BOEING 10-60516-268)		1
194	69-53069-1		. . FILLER, MANUAL LOCK		1
195	69-53069-2		. . FILLER, MANUAL LOCK		3
195A	69-53057-1		. . RETAINER, OBSERVATION WINDOW (REMOVED BY SB 52-1060)		2
195B	69-53057-5		. . RETAINER, OBSERVATION WINDOW (SB 52-1060)		2
195C	69-53057-2		. . DOUBLER, OBSERVATION WINDOW (REMOVED BY SB 52-1060)		2
195D	69-53057-6		. . DOUBLER, OBSERVATION WINDOW (SB 52-1060)		2
195E	69-53056-1		. . WINDOW, OBSERVATION (REMOVED BY SB 52-1060)		2
195F	69-53056-2		. . WINDOW, OBSERVATION (SB 52-1060)		2
195G	69-68138-3		. . BRACKET (SB 52-1060)		2
195H	BACR15CE5D		. . RIVET (REMOVED BY SB 52-1060)		12
195J	BACR15CE5D		. . RIVET (SB 52-1060)		16
196	BACR15CE5D		. . RIVET		36
197	69-53057-1		. . RETAINER, OBSERVATION WINDOW		6
198	69-53057-2		. . DOUBLER, OBSERVATION WINDOW		8
199	69-53056-1		. . WINDOW, OBSERVATION		8
199A	BACN10JC3		. . NUT (SB 52-1033)		4
199B	AN960PD10L		. . WASHER (SB 2-033)		8
199C	BACB30NE3-3		. . BOLT (SB 52-1033)		2
199D	BACB30NE3-5		. . BOLT (SB 52-1033)		2

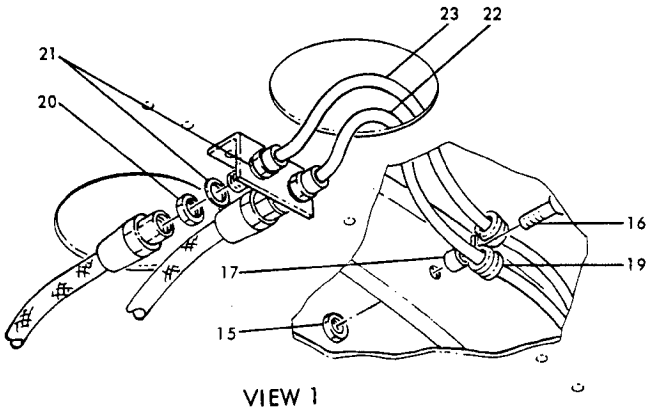
FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1101-					
199E	69-59269-5		. . FILLER (SB 52-1033)		2
199F	69-59269-1		. . STOP ASSY, BELLCRANK (SB 52-1033)		1
199G	BACN10JC3		. . . NUT		1
199H	AN960PD10L		. . . WASHER		3
199I	AN960PD10		. . . WASHER		5
199J	NAS623-3-8		. . . BOLT		1
199K	*[1]		. . . STRUCTURE		1
200	65-62254-1		. FRAME INSTL, LATCH ACTUATOR SUPPORT		1
201	BACB28X7B11		. . BUSHING, FLANGED		1
202	BACB28Y7B20		. . BUSHING, PLAIN		1
203	NAS623-3-3		. . BOLT		6
204	AN960D10		. . WASHER		6
205	69-53081-1		. . SUPPORT ASSY, LATCH ACTUATOR TUBE		1
206	69-53081-2		. . SUPPORT ASSY, LATCH ACTUATOR TUBE		1
207	MS20426D3		. . . RIVET		6
208	NAS1068A3		. . . NUTPLATE		3
209	69-53081-3		. . . SUPPORT (USED ON 69-53081-1)		1
209	69-53081-4		. SUPPORT (USED ON 69-53081-2)		1
210	MS27253-1		. NAMEPLATE		1

*[1] NO BOEING PART NUMBER ASSIGNED
*[2] LIMITED USAGE

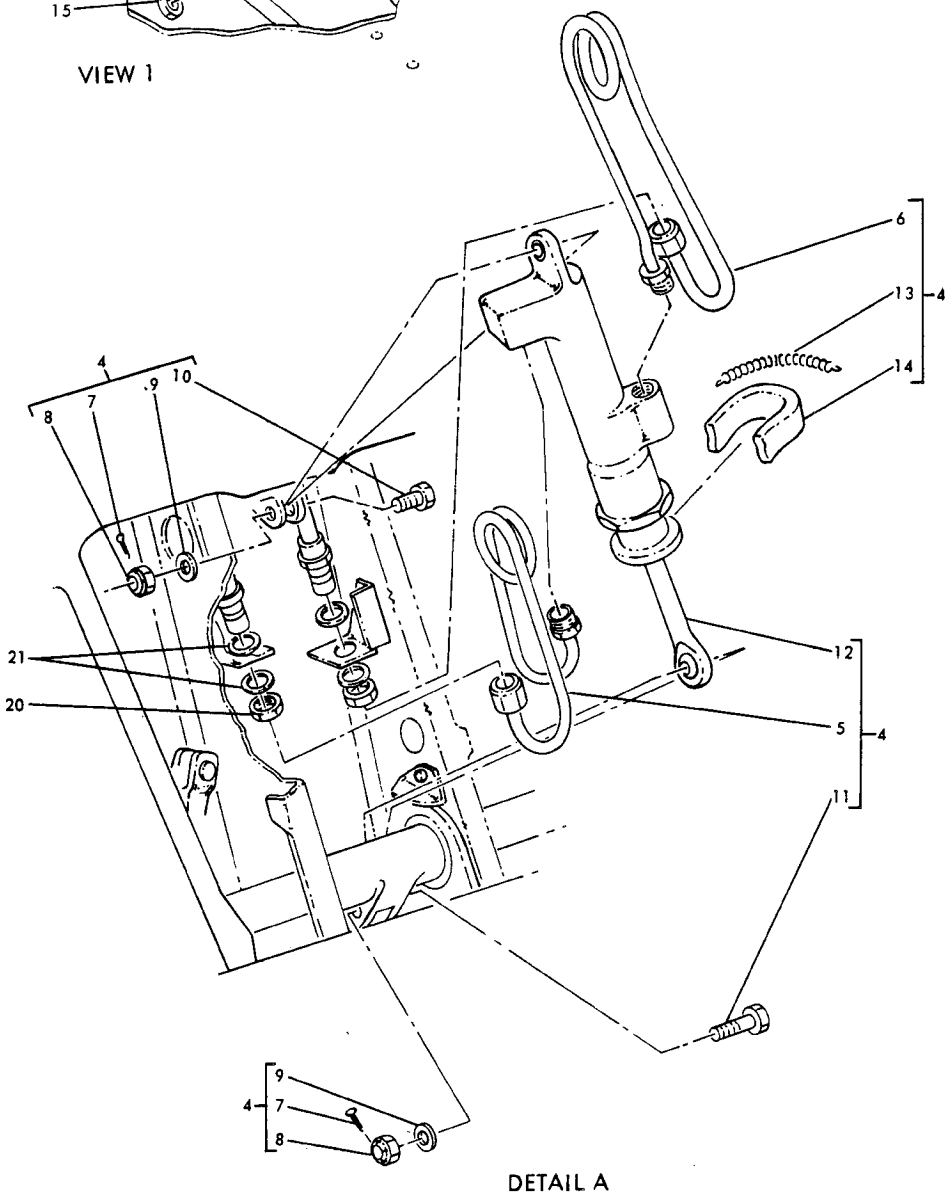
3. Exploded View



Main Cargo Door Hydraulic Installation
Figure 1102 (Sheet 1)



VIEW 1

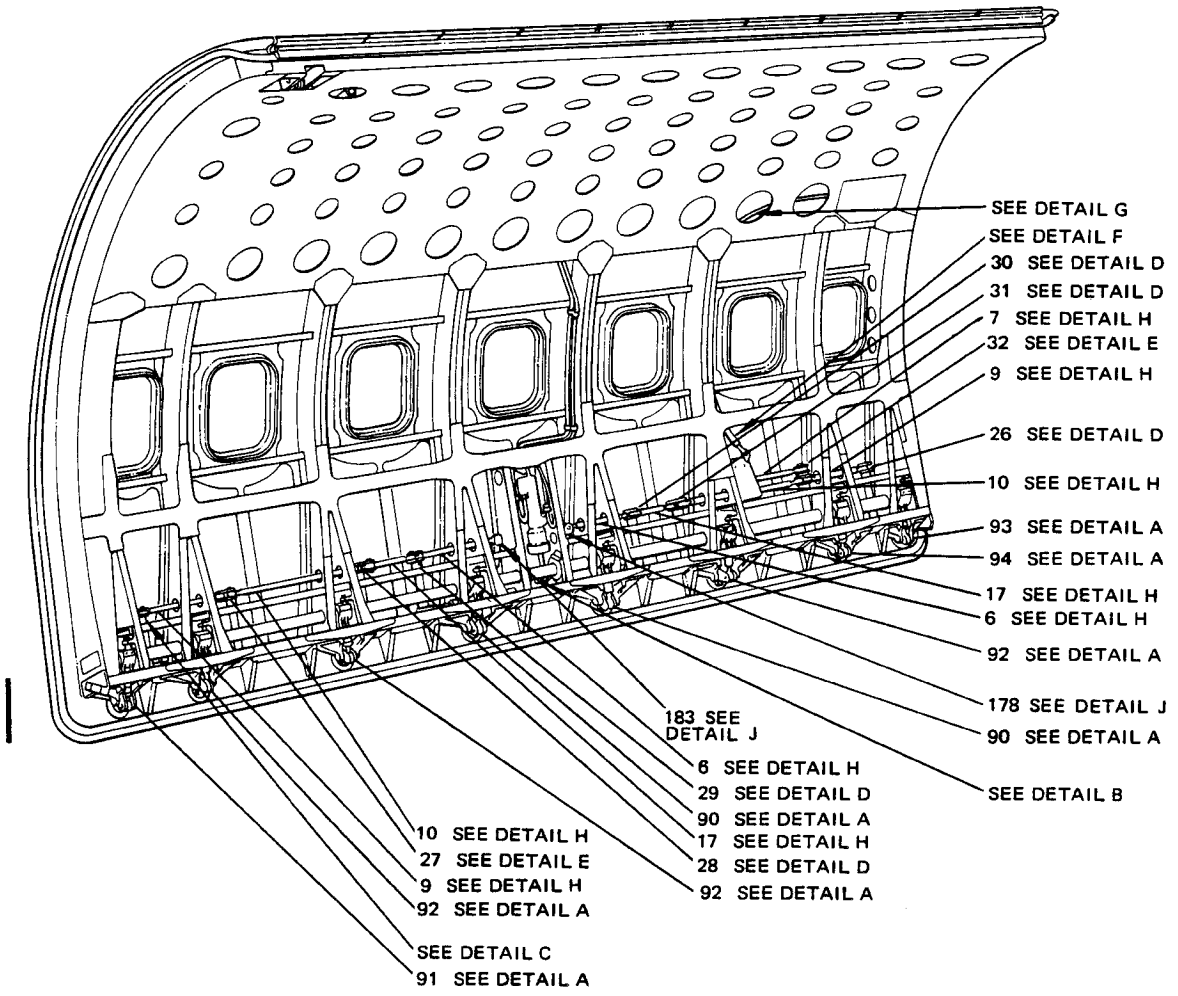


DETAIL A

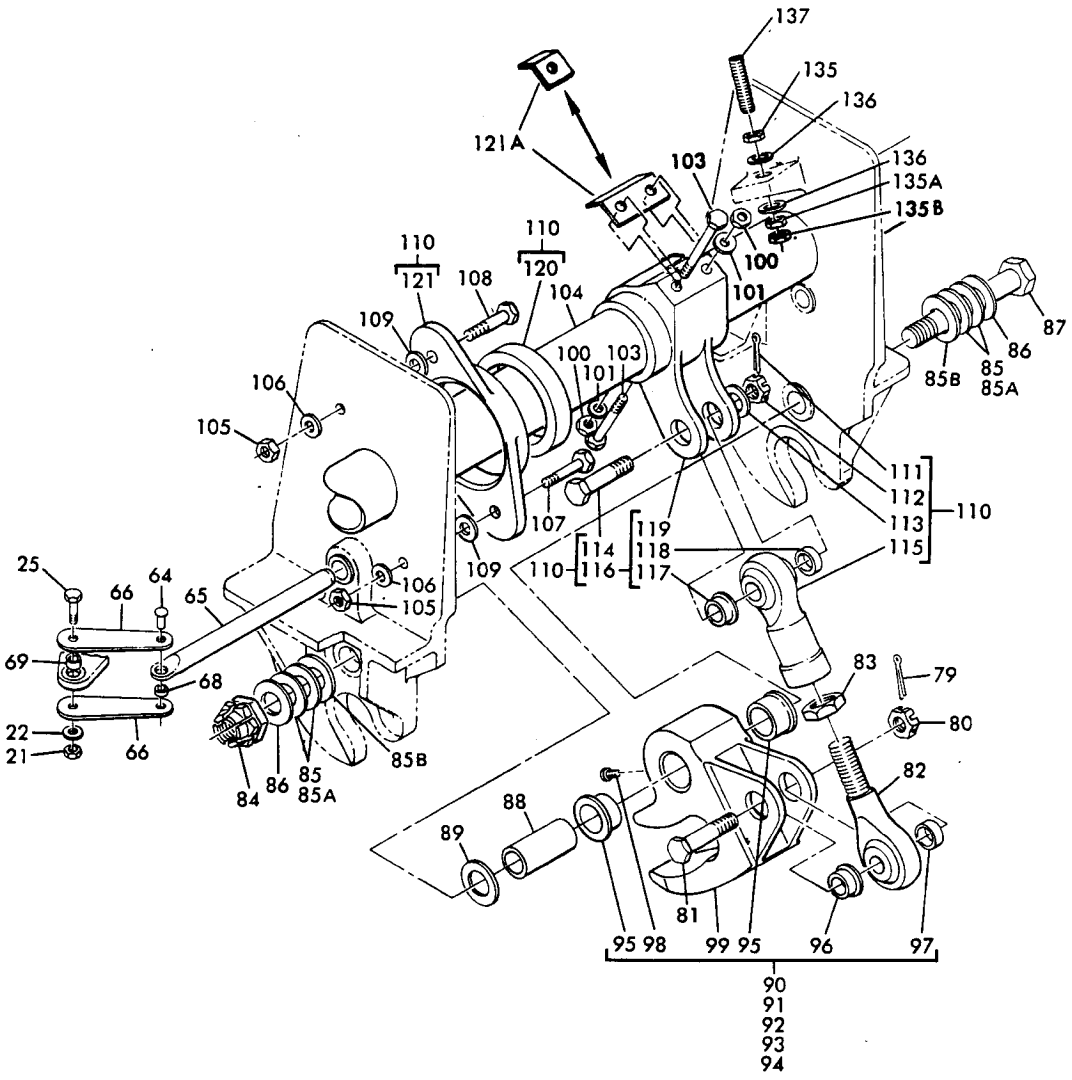
Main Cargo Door Hydraulic Installation
Figure 1102 (Sheet 2)

4. Group Assembly Parts List

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1102	65-65716-1		MAIN CARGO DOOR HYDRAULIC INSTALLATION (See figure 1101)		
1	65-62279-1		. HOSE INSTALLATION, Latch actuator .		1
2	BACH6A0460AA		. . HOSE ASSEMBLY		1
3	BACH6A0500AA		. . HOSE ASSEMBLY		1
4	65-62280-1		. ACTUATOR INSTALLATION, Latch. . . .		1
5	65-65703-1		. . TUBE ASSEMBLY		1
6	65-65703-501		. . TUBE ASSEMBLY		1
7	MS24665-287		. . COTTER PIN.		2
8	AN320-7		. . NUT		2
9	AN960D716		. . WASHER.		2
10	BACB30NF7D14		. . BOLT.		1
11	BACB30NF7D15		. . BOLT.		1
12	65-62238-1		. . ACTUATOR ASSEMBLY, Latch. . . .		1
13	MS24586C43		. . SPRING.		1
14	69-53022-1		. . ABSORBER, Fluid		1
15	NAS679A3W		. NUT		6
16	BACS12CB3		. SCREW		9
17	NAS42DD6-16		. SPACER.		4
18	NAS42DD6-48		. SPACER.		2
19	BACC10DK4		. CLAMP		16
20	AN924-4D		. NUT		4
21	AN960D716		. WASHER.		8
22	65-65716-501		. TUBE ASSEMBLY		1
23	65-65716-502		. TUBE ASSEMBLY		1

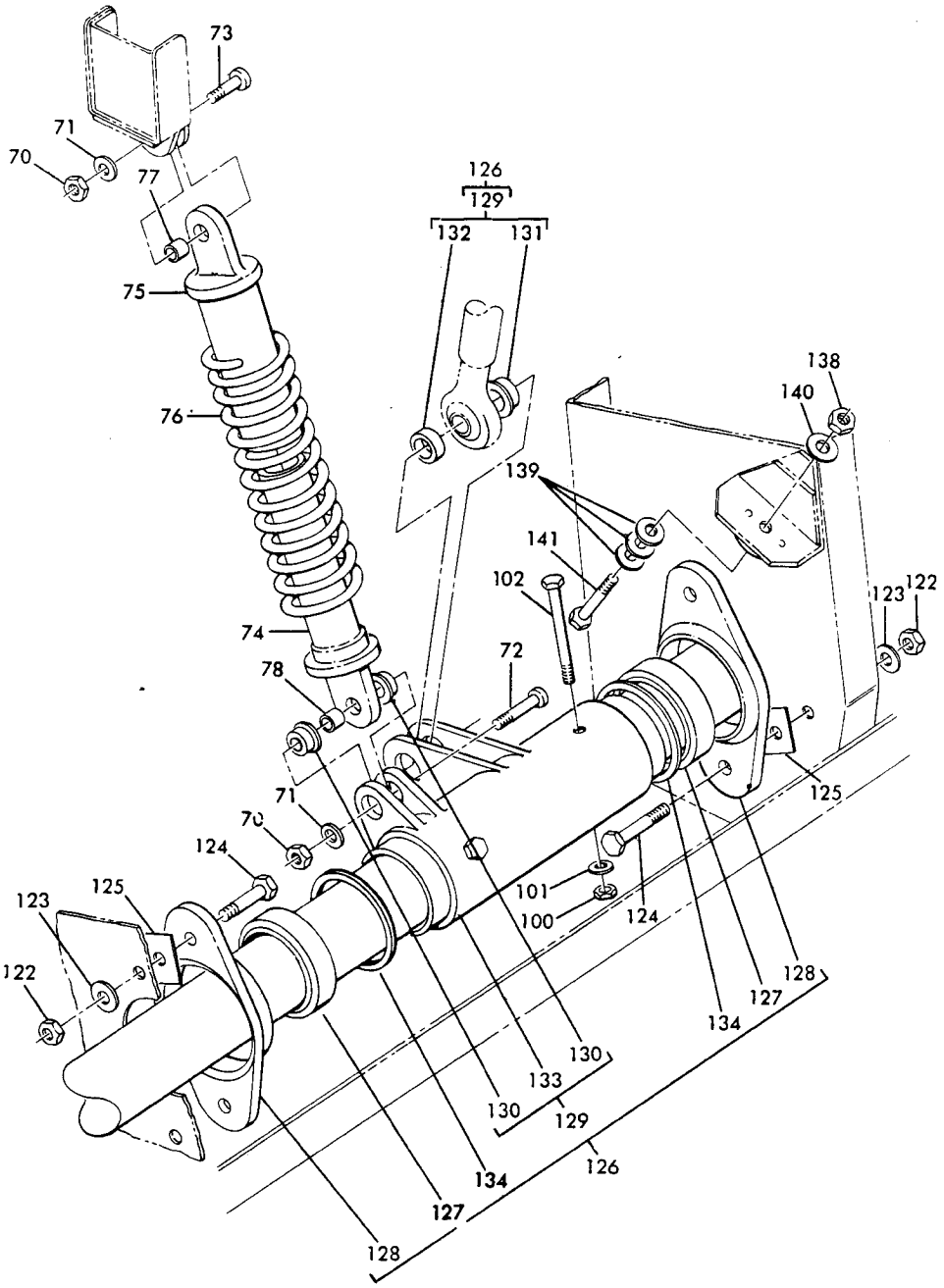


Main Cargo Door Mechanism and Switch Installations
Figure 1103 (Sheet 1)



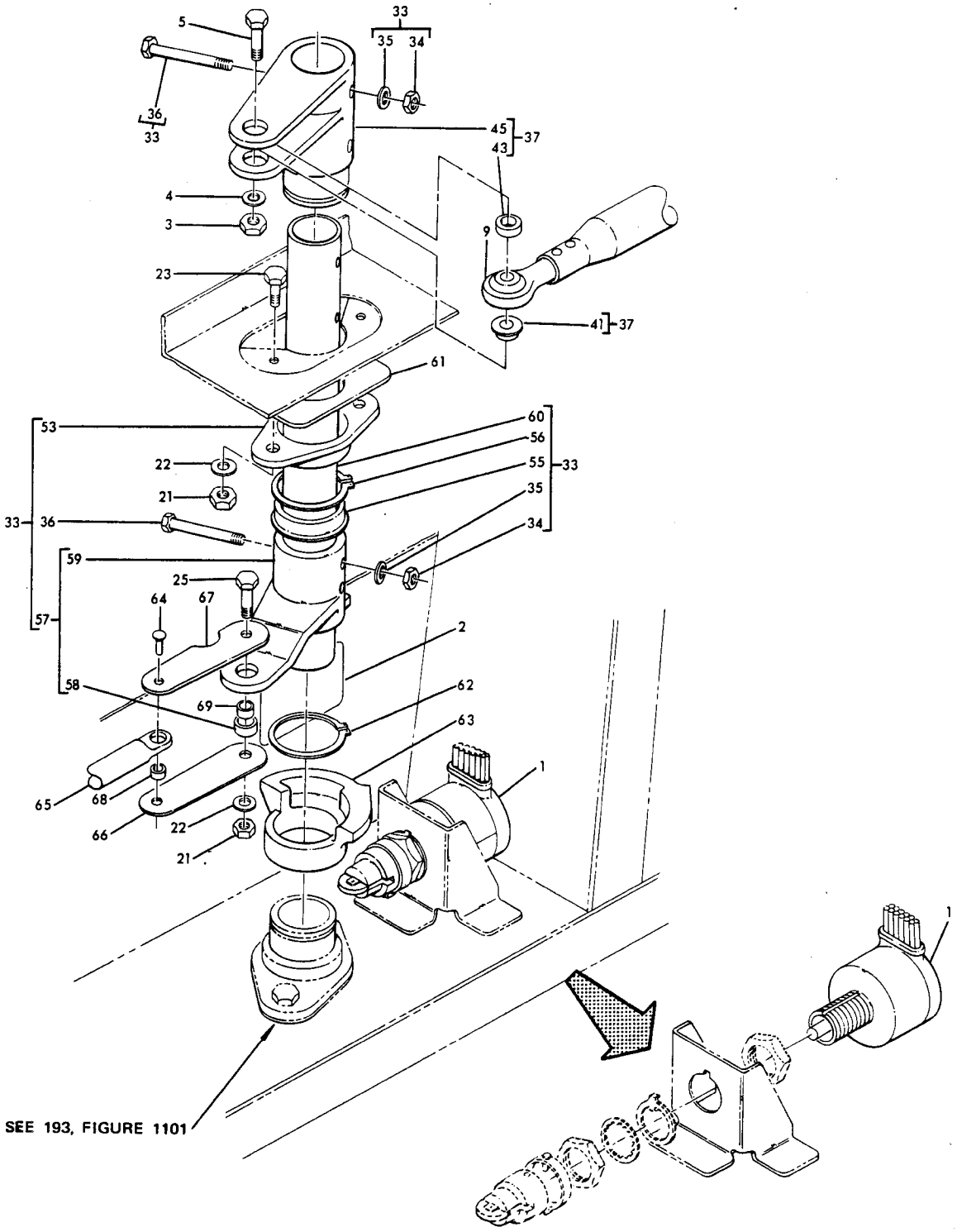
DETAIL A

Main Cargo Door Mechanism and Switch Installations
Figure 1103 (Sheet 2)



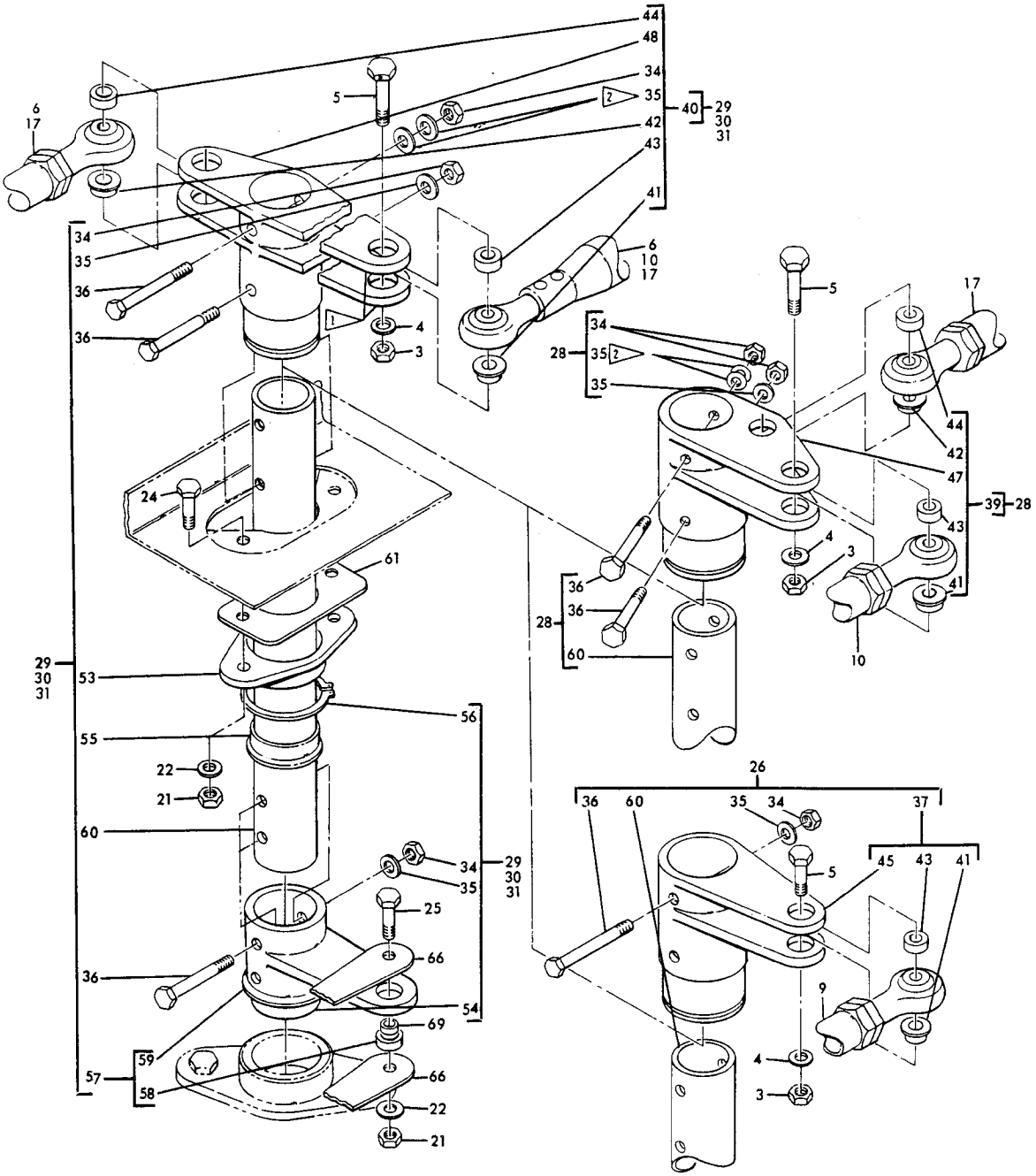
DETAIL B

Main Cargo Door Mechanism and Switch Installation
Figure 1103 (Sheet 3)



DETAIL C

Main Cargo Door Mechanism and Switch Installation
Figure 1103 (Sheet 4)

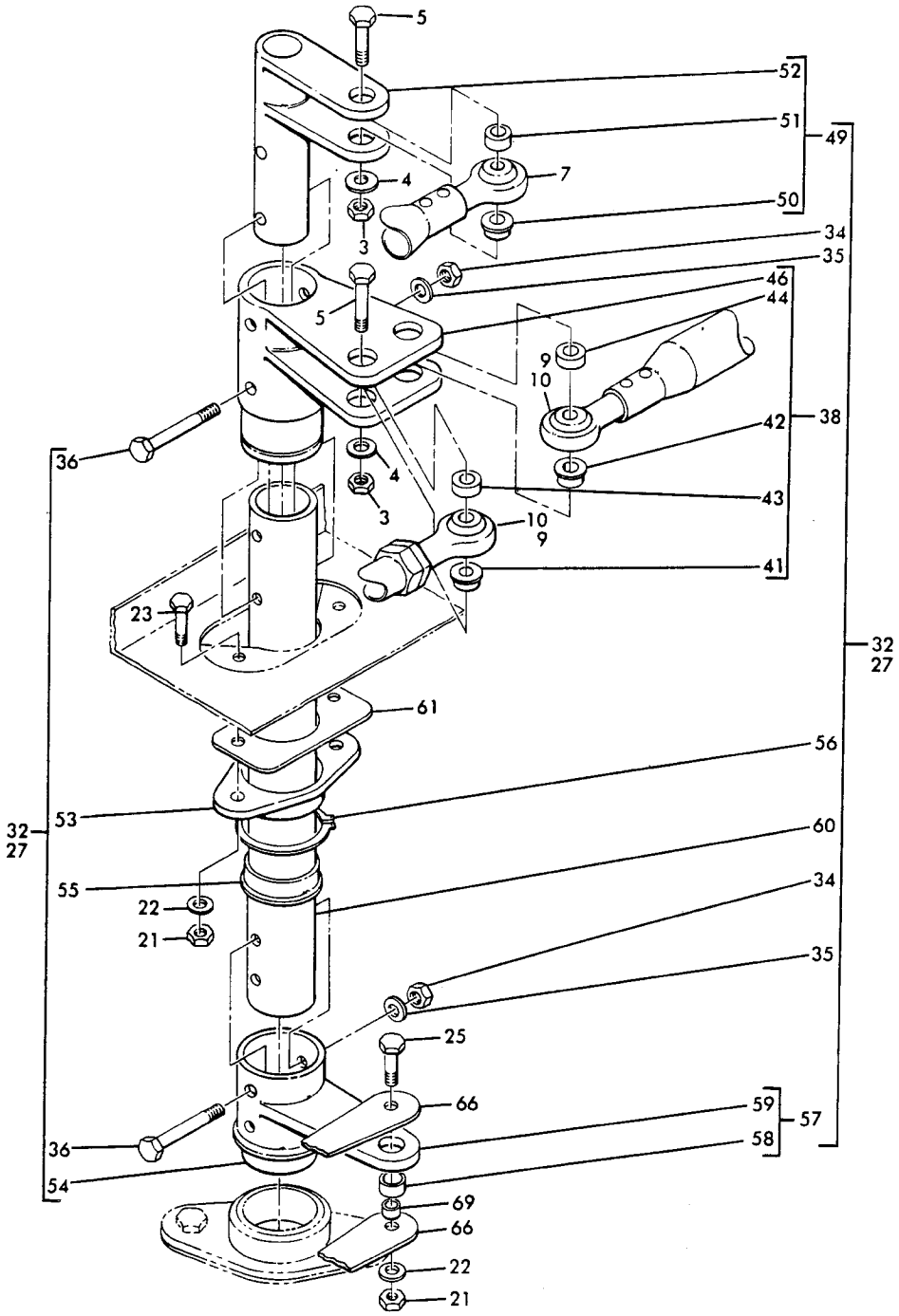


1 APPROXIMATE POSITION OF LONGER CRANK ARM WHEN USED WITH TUBE ASSEMBLY (29 AND 31) AND SHORTER CRANK ARM WHEN USED WITH TUBE ASSEMBLY (30)

2 AN960C10

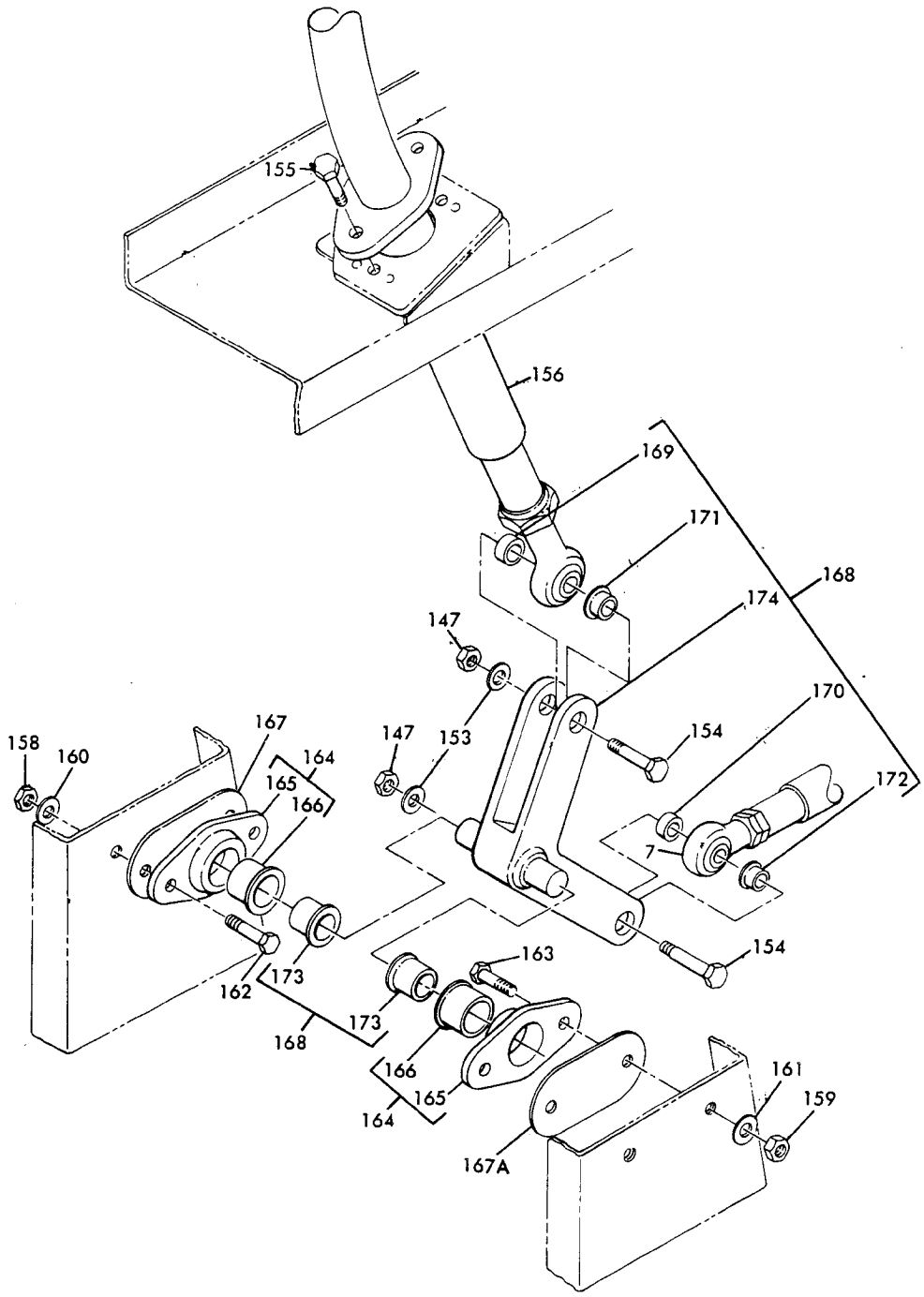
DETAIL D

Main Cargo Door Mechanism and Switch Installations
Figure 1103 (Sheet 5)



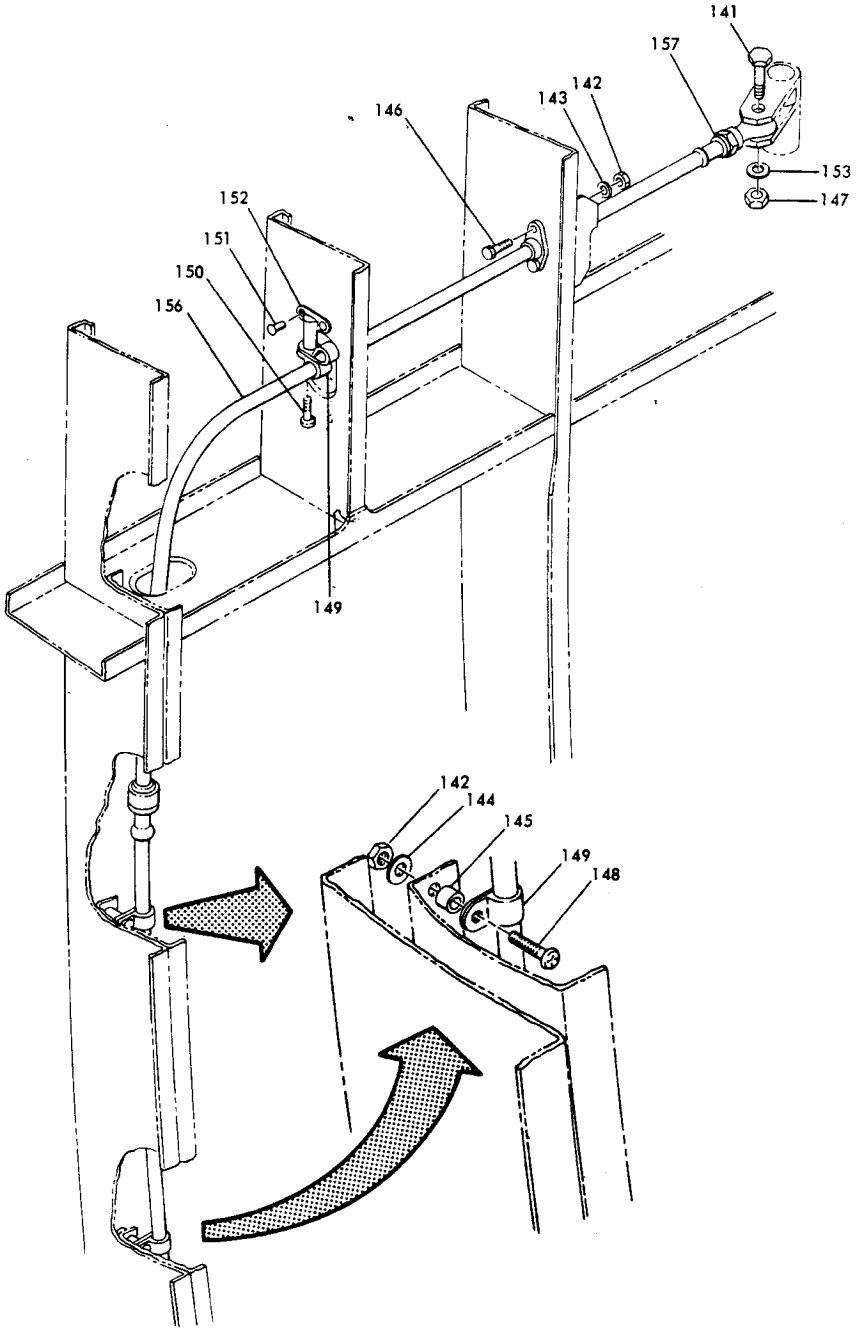
DETAIL E

Main Cargo Door Mechanism and Switch Installations
Figure 1103 (Sheet 6)



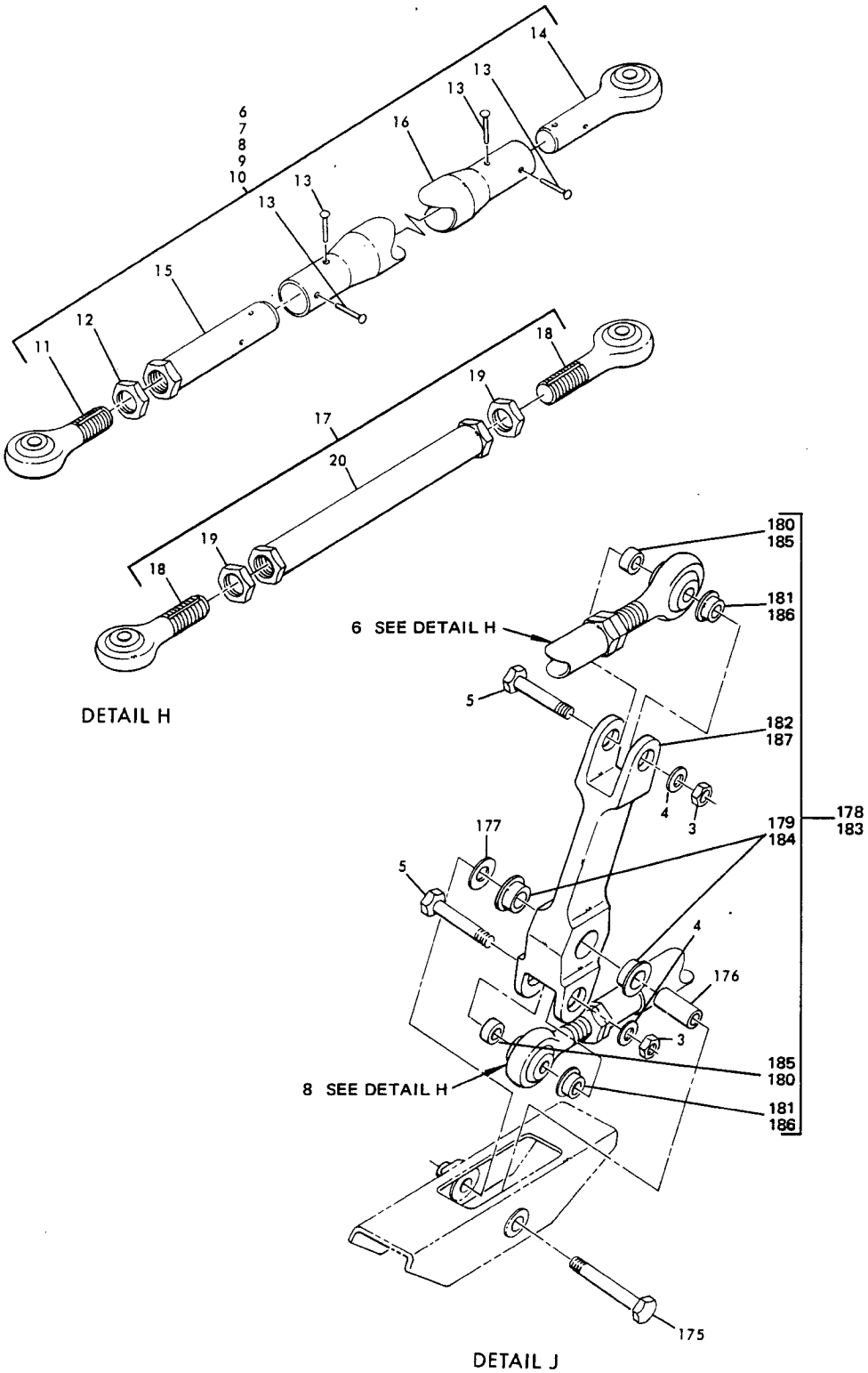
DETAIL F

Main Cargo Door Mechanism and Switch Installations
Figure 1103 (Sheet 7)



DETAIL G

Main Cargo Door Mechanism and Switch Installations
Figure 1103 (Sheet 8)



Main Cargo Door Mechanism and Switch Installations
Figure 1103 (Sheet 9)

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103			MAIN CARGO DOOR MECHANISM AND SWITCH INSTL		Ref
	65-65728-1		. SWITCH INSTL, Main cargo door locked		Ref
1	25EN55-6		. . SWITCH, Lock, V91929		1
2	BAC27DEL111		. . MARKER, Foil		1
	65-54940-1		. MECHANISM INSTL, Main cargo door		Ref
3	NAS679A3W		. . NUT		19
4	AN960C416L		. . WASHER		19
5	BACB30NF4-14		. . BOLT		19
6	65-65724-16		. . ROD ASSY		2
7	65-65724-17		. . ROD ASSY		1
8	65-65724-18		. . ROD ASSY		1
9	65-65724-19		. . ROD ASSY		2
10	65-65724-20		. . ROD ASSY		2
11	177131		. . . BEARING, V09455 (Boeing 10-60779-174)		1
11	REMS8ATC10-5		. . . BEARING, V21335 (Boeing 10-60779-174)		1
11	YTM124M		. . . BEARING, V77896 (Boeing 10-60779-174)		1
11	DREM4-279		. . . BEARING, V81376 (Boeing 10-60779-174)		1
12	AN316-5R		. . . NUT		1
13	MS20470D5		. . . RIVET (used on 65-65724-16, -17, -19, and -20)		4
13	MS20470D6		. . . RIVET (used on 65-65724-18)		4
14	177270		. . . BEARING, V09455 (Boeing 10-60779-181)		1
14	DREM4-368		. . . BEARING, V81376 (Boeing 10-60779-181)		1
15	69-53068-1		. . . SLEEVE		1
16	65-65724-11		. . . ROD (used on 65-65724-16)		1
16	65-65724-12		. . . ROD (used on 65-65724-17)		1
16	65-65724-13		. . . ROD (used on 65-65724-18)		1
16	65-65724-14		. . . ROD (used on 65-65724-19)		1
16	65-65724-15		. . . ROD (used on 65-65724-20)		1
17	65-65724-21		. . ROD ASSY		2
18	177131		. . . BEARING, V09455 (Boeing 10-60779-174)		2
18	REMS8ATC10-5		. . . BEARING, V21335 (Boeing 10-60779-174)		2

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103					
18	YTM124M		. . . BEARING, V77896 (Boeing 10-60779-174)		2
18	DREM4-279		. . . BEARING, V81376 (Boeing 10-60779-174)		2
19	AN316-5R		. . . NUT		2
20	69-53068-2		. . . SLEEVE		1
21	NAS679A3W		. . NUT		24
22	AN960C10L		. . WASHER		24
23	BACB30NF3-4		. . BOLT		10
24	BACB30NF3-5		. . BOLT		6
25	BACB30NF3-6		. . BOLT		8
26	65-65722-509		. . TUBE ASSY		1
26	65-65722-1		. . TUBE ASSY (optional)		1
27	65-65722-510		. . TUBE ASSY		1
27	65-65722-2		. . TUBE ASSY (optional)		1
28	65-65722-511		. . TUBE ASSY		1
28	65-65722-3		. . TUBE ASSY (optional)		1
29	65-65722-512		. . TUBE ASSY		1
29	65-65722-4		. . TUBE ASSY (optional)		1
30	65-65722-513		. . TUBE ASSY		1
30	65-65722-5		. . TUBE ASSY (optional)		1
31	65-65722-514		. . TUBE ASSY		1
31	65-65722-6		. . TUBE ASSY (optional)		1
32	65-65722-515		. . TUBE ASSY		1
32	65-65722-7		. . TUBE ASSY (optional)		1
33	65-65722-516		. . TUBE ASSY		1
33	65-65722-501		. . TUBE ASSY (optional)		1
34	NAS679A3W		. . . NUT		4
35	AN960C10L		. . . WASHER		AR
35	AN960C10		. . . WASHER (used on 65-65722-511, -512, -513, and -514)		2
36	BACB30NF3-20		. . . BOLT		4
37	65-67788-1		. . . BELLCRANK ASSY (used on 65-65722-509 and -516)		1
37	65-65723-1		. . . BELLCRANK ASSY (used on 65-65722-1 and -501)		1
38	65-67788-2		. . . BELLCRANK ASSY (used on 65-65722-510 and -515)		1
38	65-65723-2		. . . BELLCRANK ASSY (used on 65-65722-2 and -7)		1
39	65-67788-3		. . . BELLCRANK ASSY (used on 65-65722-511)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103					
39	65-65723-3		. . . BELLCRANK ASSY (used on 65-65722-3)		1
40	65-67788-4		. . . BELLCRANK ASSY (used on 65-65722-512 and -513)		1
40	65-65723-4		. . . BELLCRANK ASSY (used on 65-65722-4 and -5)		1
40	65-67788-5		. . . BELLCRANK ASSY (used on 65-65722-514)		1
40	65-65723-5		. . . BELLCRANK ASSY (used on 65-65722-6)		1
41	BACB28X4B11		. . . . BUSHING, Flanged		1
42	BACB28X4B11		. . . . BUSHING, Flanged (used on 65-67788-2, -3, -4, -5 65-65723-2, -3, -4, and -5)		1
43	BACB28Y4B20		. . . . BUSHING, Plain (used on 65-67788-2, -3, -4, -5, 65-65723-2, -3, -4, and -5)		1
45	65-67788-6		. . . . BELLCRANK (used on 65-67788-1)		1
45	65-65723-6		. . . . BELLCRANK (used on 65-65723-1)		1
46	65-67788-7		. . . . BELLCRANK (used on 65-67788-2)		1
46	65-65723-7		. . . . BELLCRANK (used on 65-65723-2)		1
47	65-67788-8		. . . . BELLCRANK (used on 65-67788-3)		1
47	65-65723-8		. . . . BELLCRANK (used on 65-65723-3)		1
48	65-67788-9		. . . . BELLCRANK (used on 65-67788-4)		1
48	65-65723-9		. . . . BELLCRANK (used on 65-65723-4)		1
48	65-67788-10		. . . . BELLCRANK (used on 65-67788-5)		1
48	65-65723-10		. . . . BELLCRANK (used on 65-65723-5)		1
49	69-53064-1		. . . BELLCRANK ASSY (used on 65-65-722-7 and -515)		1
50	BACB28X4B11		. . . . BUSHING, Flanged		1
51	BACB28Y4B20		. . . . BUSHING, Plain		1
52	69-53064-2		. . . . FITTING, Bellcrank		1
53	78874		. . . BUSHING, V09455 (Boeing 10-60516-265)		1
53	FBJ36TF1		. . . BUSHING, V21335 (Boeing 10-60516-265)		1
53	DBAF18-034		. . . BUSHING, V81376 (Boeing 10-60516-265)		1
54	69-53074-1		. . . BUSHING (used on 65-65722-1,-2, -3,-4,-5,-6, and -7)		1
55	69-53074-1		. . . BUSHING (used on 65-65722-1,-2, -3,-4,-5,-6,-7, and -501)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103					
56	MS16624-4112		. . . RING, Retaining (used on 65-65722-509,-510,-511,-512,-513,-514,-515, and -516)		1
57	65-67787-1		. . . BELLCRANK ASSY, Lower (used on 65-65722-509,-510,-511,-512,-513,-514, and -515)		1
57	69-53065-1		. . . BELLCRANK ASSY, Lower (used on 65-65722-1,-2,-3,-4,-5,-6, and -7)		1
57	69-53970-1		. . . BELLCRANK ASSY, Lower (used on 65-65722-501 and -516)		1
58	BACB28U5B15		. . . . BUSHING, Plain		1
59	65-67787-2		. . . . BELLCRANK (used on 65-67787-1)		1
59	69-53065-2		. . . . BELLCRANK (used on 69-53065-1)		1
59	69-53970-2		. . . . BELLCRANK (used on 69-53970-1)		1
60	69-53077-503		. . . TUBE, Manual lock (used on 65-65722-509,-510,-511,-512,-513,-514, and -515)		1
60	69-53077-1		. . . TUBE, Manual lock (used on 65-65722-1,-2,-3,-4,-5,-6 and -7)		1
60	69-53077-504		. . . TUBE (used on 65-65722-516)		1
60	69-53077-501		. . . TUBE (used on 65-65722-501)		1
61	69-53069-4		. . SHIM (used with 65-65722-1,-2,-3,-4,-5,-6,-7, and -501)		8
61	69-53069-501		. . SHIM (used with 65-65722-509,-510,-511,-512,-513,-514,-515, and -516)		8
62	MS16624-1118		. . RING		1
63	69-53969-1		. . CAM, Switch actuator		1
64	NAS508M5-8		. . RIVET		8
65	69-53075-1		. . PIN, Manual lock		8
66	69-53076-1		. . LINK, Manual lock		15
67	69-53076-501		. . LINK, Manual lock		1
68	69-53092-1		. . BUSHING (made from NAS1057W1-020)		8
69	69-53092-2		. . BUSHING (made from BACB28Y3C20)		8
70	NAS679A3W		. . NUT		2
71	AN960D10L		. . WASHER		2
72	NAS623-3-12		. . SCREW		1
73	NAS623-3-8		. . SCREW		1
74	69-41481-1		. . PISTON, Spring cartridge		1
75	69-41482-1		. . CYLINDER, Spring cartridge		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103					
76	69-41483-1		. . SPRING, Compression		1
77	BACB28Y3B30		. . BUSHING		1
78	BACB28Y3B27		. . BUSHING		1
79	MS24665-304		. . COTTER PIN		8
80	MS17826-7		. . NUT		8
81	69-41498-1		. . BOLT, Latch hook link (made from BACB30LJ8U24)		8
82	01-727-0500		. . BEARING, Rod end, V09455 (Boeing 10-60779-106)		1
82	REM16ATC16		. . BEARING, Rod end, V21335 (Boeing 10-60779-106)		1
82	YTM111		. . BEARING, Rod end, V77896 (Boeing 10-60779-106)		1
82	DREM8-014		. . BEARING, Rod end, V81376 (Boeing 10-60779-106)		1
83	AN316-8R		. . NUT		8
84	NAS1021A12		. . NUT		8
85	AN960-1216L		. . WASHER *[1]		32
85A	MS20002-12		. WASHER *[1]		32
85B	69-56056-2		. WASHER *[1]		16
85B	69-56056-501		. WASHER *[1]		16
86	AN960-1216L		. . WASHER *[1]		AR
87	BACB30LM12U42		. . BOLT (preferred) *[1]		8
87	BACB30LM12U40		. . BOLT (optional) *[1]		8
88	69-41488-1		. . BUSHING		8
89	69-56056-1		. . WASHER, Adjustment *[1]		AR
89	69-56056-2		. . WASHER, Adjustment *[1]		AR
90	65-62136-1		. . FITTING ASSY, Latch hook		2
91	65-62136-3		. . FITTING ASSY, Latch hook		1
92	65-62136-5		. . FITTING ASSY, Latch hook		3
93	65-62136-501		. . FITTING ASSY, Latch hook		1
94	65-62136-9		. . FITTING ASSY, Latch hook		1
95	BACB28W14B53		. . . BUSHING, Flanged		2
96	BACB28X8C15		. . . BUSHING, Flanged		1
97	BACB28Y8C24		. . . BUSHING, Plain		1
98	NAS516-1		. . . FITTING, Lubrication		1
99	65-62136-2		. . . FITTING (used on 65-62136-1)		1
99	65-62136-4		. . . FITTING (used on 65-62136-3)		1
99	65-62136-6		. . . FITTING (used on 65-62136-5)		1
99	65-62136-502		. . . FITTING (used on 65-62136-501)		1
99	65-62136-10		. . . FITTING (used on 65-63136-9)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103					
100	NAS679A4W		. . NUT		18
101	AN960-416L		. . WASHER		18
102	BACB30NF4-31		. . BOLT		2
103	BACB30NF4-35		. . BOLT *[2]		16
103	BACB30NF4-36		. . BOLT *[3]		16
104	65-62229-1		. . TORQUE TUBE		1
105	BACN10FD55		. . NUT		16
106	BACW10AN5		. . WASHER		16
107	BACB30LU5-17		. . BOLT		8
108	BACB30NF5-11		. . BOLT		8
109	AN960D516L		. . WASHER		AR
110	65-62248-3		. . BELLCRANK AND BEARING HOUSING ASSY (REPLS 65-62248-502)(OPT 65-62248-2)(SB 52-1047)		8
110	65-62248-2		. . BELLCRANK AND BEARING HOUSING ASSY (REPLS 65-62248-1)(OPT 65-62248-3)(SB 52-1047)		8
110	65-62248-502		. . BELLCRANK AND BEARING HOUSING ASSY (REPLD BY 65-62248-3)(OPT 65-62248-1)		8
110	65-62248-1		. . BELLCRANK AND BEARING HOUSING ASSY (REPLD BY 65-62248-2)(OPT 65-62248-502)		8
111	MS24665-285		. . . COTTER PIN		1
112	MS17826-8		. . . NUT		1
113	AN960-816		. . . WASHER		1
114	NAS1108-19D		. . . BOLT		1
115	DREF8-173		. . . BEARING, Rod end, V81376 (Boeing 10-60779-219)		1
115	177258		. . . BEARING, Rod end, V09455 (Boeing 10-60779-219)		1
116	65-67792-4		. . . BELLCRANK ASSY (used on 65-62248-3)(SB 52-1047)		1
116	65-67792-1		. . . BELLCRANK ASSY (used on 65-62248-502)		1
116	65-62137-3		. . . BELLCRANK ASSY (used on 65-62248-2)(SB 52-1047)		1
116	65-62137-1		. . . BELLCRANK ASSY (used on 65-62248-1)		1
117	BACB28X8C19		. . . . BUSHING, Flanged		1
118	BACB28Y8C30		. . . . BUSHING, Plain		1
119	65-67792-5		. . . . BELLCRANK (used on 65-67792-4)		1
119	65-67792-2		. . . . BELLCRANK (used on 65-67792-1)		1
119	65-62137-4		. . . . BELLCRANK (used on 65-62137-3)		1
119	65-62137-2		. . . . BELLCRANK (used on 65-67137-1)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103					
120	76580		. . . BEARING, Self-lubricated Spherical, V09455 (Boeing 10-60545-72)		1
121	65-67793-1		. . . HOUSING, Bearing (used on 65-62248-3 and -502)		1
121	69-41479-1		. . . HOUSING, Bearing (used on 65-62248-1 and -2)		1
121A	69-65357-1		. . ANGLE *[3] (SB 52-1047)		8
121A	*[6]		. . ANGLE (ALTERED FROM P/N 69-65357-1 BY SB 52-1047)		8
122	NAS679A4W		. . NUT		4
123	AN960-416		. . WASHER		4
124	BACB30NF4-5		. . BOLT		4
125	BACS40R12C12F		. . SHIM, Laminated		AR
126	65-62249-501		. . BELLCRANK AND BEARING HOUSING ASSY, Actuator (preferred)		1
126	65-62249-1		. . BELLCRANK AND BEARING HOUSING ASSY, Actuator (optional)		1
127	76580		. . . BEARING, Self-lubricated Spherical, V09455 (Boeing 10-60545-72)		2
128	69-41479-2		. . . HOUSING		2
129	65-67794-1		. . . BELLCRANK ASSY (used on 65-62249-501)		1
129	65-62138-1		. . . BELLCRANK ASSY (used on 65-62249-1)		1
130	BACB28X3B15		. . . . BUSHING, Flanged		2
131	BACB28X7B15		. . . . BUSHING, Flanged		1
132	BACB28Y7B24		. . . . BUSHING, Plain		1
133	65-67794-2		. . . . BELLCRANK (used on 65-67794-1)		1
133	65-62138-2		. . . . BELLCRANK (used on 65-62138-1)		1
134	69-41490-1		. . . WASHER, Thrust		2
135	NAS509-4		. . NUT *[4]		8
135	NAS509-6		. . NUT *[5]		8
135A	NAS509-4		. . NUT *[4]		8
135A	NAS509-6		. . NUT *[5]		8
135B	NAS509-4		. . NUT *[4](ADDED BY SB 52-1097)		AR
136	AN960-416		. . WASHER *[4]		16
136	AN960-616		. . WASHER **[5]		16
137	MS18066-77		. . SETSCREW *[4]		8
137	66-12687-4		. . PIN, Stop *[5]		8
137	MS18065-77		. . SETSCREW *[4] (REPLS MS18066-77 PER SB 52-1047)		8
138	NAS679A4W		. . NUT		1
139	AN960-416		. . WASHER		AR
139	AN960-416L		. . WASHER		AR

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103					
140	AN960-416		. . WASHER		1
141	BACB30NF4-12		. . BOLT		2
142	NAS679A3W		. . NUT		5
143	AN960C10L		. . WASHER		2
144	AN960D10L		. . WASHER		3
145	NAS43DD3-16		. . SPACER		2
146	BACB30NF3-8		. . BOLT		2
147	NAS679A4W		. . NUT		3
148	BACS12CB3-12		. . SCREW		2
149	BACC10DK7		. . CLAMP		3
150	NAS603-34P		. . SCREW		1
151	MS20470D3		. . RIVET		2
152	BACN10DZ3-120		. . SPACER NUTPLATE		1
153	AN960C416L		. . WASHER		3
154	BACB30NF4-16		. . BOLT		2
155	BACB30NF3-7		. . BOLT		2
156	CHR30201		. . LOCK CONTROL ASSY, Push pull, V81376 (Boeing 10-61494-1)		1
157	MS20002-5		. . WASHER		AR
158	NAS679A3W		. . NUT		2
159	BACN10FD35		. . NUT		2
160	AN960C10L		. . WASHER		2
161	BACW10AN3		. . WASHER		2
162	BACB30NF3-4		. . BOLT		2
163	BACB30NF3-6		. . BOLT *[1]		2
163	BACB30NF3-8		. . BOLT *[1]		2
164	69-53070-1		. . HOUSING ASSY		2
165	69-53070-2		. . . HOUSING		1
166	FBJW16TF22-9		. . . BUSHING, V21335 (Boeing 10-60516-228)		1
166	KJN8-35		. . . BUSHING, V97613 (Boeing 10-60516-228)		1
166	YTS583		. . . BUSHING, V77896 (Boeing 10-60516-228)		1
166	DBAF8-139		. . . BUSHING, V81376 (Boeing 10-60516-228)		1
166	90530		. . . BUSHING, V09455 (Boeing 10-60516-228)		1
167	69-53069-3		. . SHIM, Laminated		1
167A	69-53069-3		. . SHIM, Laminated *[1]		1
167A	69-53068-3		. . SHIM, Laminated *[1]		3
168	69-53066-1		. . BELLCRANK ASSY		1
169	BACB28Y4B30		. . . BUSHING, Plain		1
170	BACB28Y4B27		. . . BUSHING, Plain		1
171	BACB28X4B20		. . . BUSHING, Flanged		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1103					
172	BACB28X4B17		. . . BUSHING, FLANGED		1
173	BACB28X6C36		. . . BUSHING, FLANGED		2
174	69-53066-2		. . . BELLCRANK		1
175	BACB30NF4-22		. . BOLT		1
176	BACB28Y4C81		. . BUSHING, PLAIN		1
177	AN960C416		. . WASHER		1
178	65-67789-1		. . LINK ASSY (PREF)		2
178	69-53067-1		. . LINK ASSY (OPT)		2
179	DBAF6-172		. . . BUSHING, V81376 (BOEING 10-60516-218)		2
179	90510		. . . BUSHING, V09455 (BOEING 10-60516-218)		2
179	FBJ12TF16-5		. . . BUSHING, V21335 (BOEING 10-60516-218)		2
179	KJN6-26		. . . BUSHING, V97613 (BOEING 10-60516-218)		2
179	YTS511		. . . BUSHING, V77896 (BOEING 10-60516-218)		2
180	BACB28Y4B24		. . . BUSHING, PLAIN		2
181	BACB28X4B14		. . . BUSHING, FLANGED		2
182	65-67789-2		. . . FITTING (USED ON 65-67789-1)		1
182	69-53067-2		. . . FITTING (USED ON 69-53067-1)		1
183	69-53067-3		. . LINK ASSY (REPLS 65-67789-1 AND 69-53067-1)(SB 52-1060)		1
183	65-67789-1		. . LINK ASSY (REPLD BY 69-53067-3) (PREF TO 69-53067-1)(SB 52-1060)		1
183	69-53067-1		. . LINK ASSY (REPLD BY 69-53067-3) (OPT TO 65-67789-1)(SB 52-1060)		1
184	DBAF6-172		. . . BUSHING, V81376 (BOEING 10-60516-218)		2
184	90510		. . . BUSHING, V09455 (BOEING 10-60516-218)		2
184	FBJ12TF16-5		. . . BUSHING, V21335 (BOEING 10-60516-218)		2
184	KJN6-26		. . . BUSHING, V97613 (BOEING 10-60516-218)		2
184	YTS511		. . . BUSHING, V77896 (BOEING 10-60516-218)		2
185	BACB28Y4B24		. . . BUSHING, PLAIN		2
186	BACB28X4B14		. . . BUSHING, FLANGED		2
187	69-53067-4		. . . FITTING (USED ON 69-53067-3)		1
187	65-67789-2		. . . FITTING (USED ON 65-67789-1)		1
187	69-53067-2		. . . FITTING (USED ON 69-53067-1)		1

*[1] Limited usage

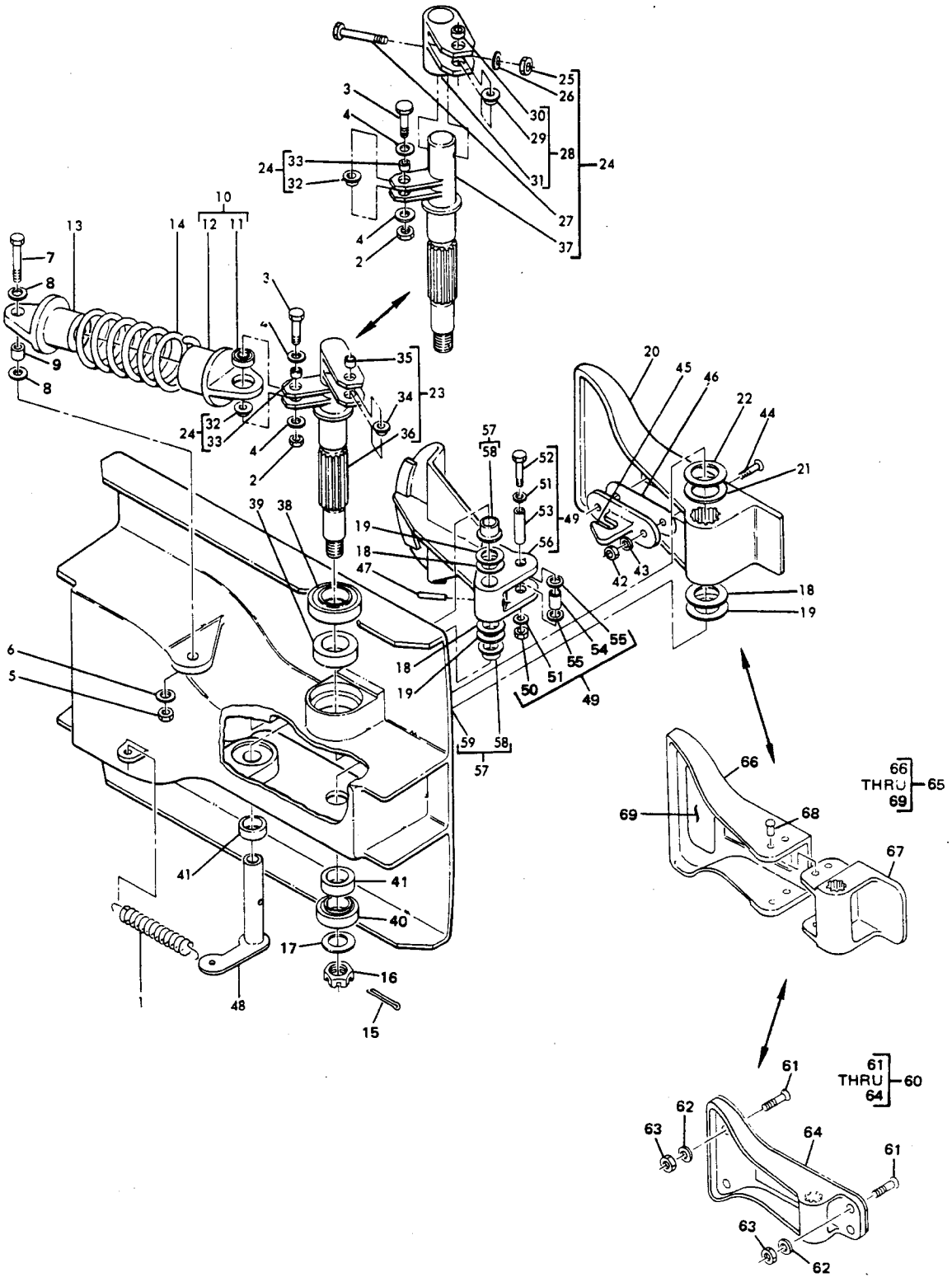
*[2] Used with bellcrank and bearing housing assembly P/N 65-62248-1, -502

*[3] Used with bellcrank and bearing housing assembly P/N 65-62248-2, -3

*[4] Used with latch support fitting P/N 65-62230-2, -502, 65-62231-2, -502, 65-62232-2, -4, -6, -502, -504, -506, -508, -510

*[5] Used with latch support fitting P/N 65-62230-4, -6, 65-62231-4, -6, 65-62232-8, -10, -12, -14, -16, -18, -20, -22

*[6] No Boeing Part Number Assigned



Main Cargo Door Manual Lock Handle Installation
Figure 1104

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1104					
	65-62147-1		MAIN CARGO DOOR MANUAL LOCK HANDLE INSTALLATION (FIG. 1101)		
1	MS24586C149		. SPRING		1
2	NAS679C4W		. NUT		1
3	BACB30NE4-9		. BOLT		1
4	AN960C416L		. WASHER		2
5	NAS679A4W		. NUT		1
6	AN960-416L		. WASHER		1
7	BACB30NE4-13		. BOLT		1
8	BACW10P70S		. WASHER		2
9	BACB28Y4B43		. BUSHING, PLAIN		1
10	69-47385-1		. CYLINDER ASSEMBLY, HANDLE POSITIONING SPRING		1
11	BACB10A322		. . BEARING		1
12	69-47385-2		. . CYLINDER		1
13	69-47385-1		. PISTON, HANDLE POSITIONING SPRING		1
14	69-47603-1		. SPRING, HANDLE POSITIONING		1
15	MS24665-304		. COTTER PIN		1
16	AN320C7		. NUT		1
17	AN960C716		. WASHER		1
18	AN960D816L		. WASHER		AR
19	NAS549BL816		. WASHER		3
20	65-62142-1		. HANDLE, MANUAL LOCK (REPLD BY 69-62009-1)		1
21	AN960D1016L		. WASHER		AR
22	NAS549BL1016		. WASHER		1
23	65-67791-1		. SHAFT ASSY (PREF)		1
24	65-62225-501		. SHAFT ASSY (OPT)		1
25	NAS679C4W		. . NUT (USED ON 65-62225-501)		1
26	AN960C416L		. . WASHER (USED ON 65-62225-501)		1
27	BACB30LJ4-13		. . BOLT (USED ON 65-62225-501)		1
28	69-53071-1		. . BELLCRANK ASSY (USED ON (65-62225-501)		1
29	BACB28X4B8		. . . BUSHING, FLANGED		1
30	BACB28Y4B20		. . . BUSHING, PLAIN		1
31	69-53071-2		. . . BELLCRANK		1
32	BACB28X4B8		. . BUSHING, FLANGED		1
33	BACB28Y4B20		. . BUSHING, PLAIN		1
34	BACB28X4B8		. . BUSHING, FLANGED (USED ON 65-67791-1)		1
35	BACB28Y4B20		. . BUSHING, PLAIN (USED ON 65-67791-1)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1104-					
36	65-67791-2		. . SHAFT (USED ON 65-67791-1)		1
37	65-62225-502		. . SHAFT (USED ON 65-62225-501)		1
38	BACB10A684		. BEARING		1
39	27700-0088		. SEAL, SHAFT (PREF), V73680		1
39	26196-0088		. SEAL, SHAFT (OPT TO 27700-0088), V73680		1
40	BACB10A544		. BEARING		1
41	27700-6071		. SEAL, SHAFT (PREF), V73680		2
41	26196-6071		. SEAL, SHAFT (OPT TO 27700-6071), V73680		2
42	NAS679A3W		. NUT		2
43	AN960PD10L		. WASHER		2
44	BACB30LH3-7		. BOLT		2
45	69-41480-1		. HOOK, LATCH (REPLD BY 69-71047-1)		1
45	69-71047-1		. HOOK, LATCH (REPLS 69-41480-1)		1
46	BACS40R08E26F		. SHIM, LAMINATED		AR
47	MS16562-37		. ROLL PIN		1
48	65-59920-501		. CRANK ASSY, OUTER TRIGGER		1
49	65-59919-1		. FITTING ASSY, EXTERNAL HANDLE TRIGGER (REPLD BY 69-62011-1)		1
50	NAS679A3W		. . NUT		1
51	AN960C10L		. . WASHER		2
52	NAS1103-16		. . BOLT		1
53	69-47407-3		. . SLEEVE		1
54	BACB28Y4C35		. . BUSHING		1
55	BACW10P271TF		. . WASHER, TEFLON		2
56	65-59919-2		. . FITTING, EXTERNAL HANDLE TRIGGER		1
57	65-62234-1		. FITTING ASSY, PRESSURE BOX		1
58	BACB28X8B25		. . BUSHING, FLANGED		2
59	65-62234-2		. . BOX, PRESSURE		1
60	69-62009-1		. HANDLE ASSY, MANUAL LOCK (REPLS 65-62142-1)(REPLD BY 65C14986-1)		1
61	BACB30LH2-3		. . BOLT		4
62	AN960PD8L		. . WASHER		4
63	BACN10JC08		. . NUT		4
64	65-62142-1		. . HANDLE		1
65	65C14986-1		. HANDLE ASSY, MANUAL LOCK (REPLS 69-62009-1)		1
66	65C14986-2		. . HANDLE		1
67	65C14986-3		. . FITTING, SPLINE		1
68	MS20426D6		. . RIVET *[1]		4
69	BAC27DBY-146		. . MARKER		1
70	69-62011-1		. FITTING ASSY, EXTERNAL HANDLE TRIGGER (REPLS 65-59919-1)		1

FIG. & ITEM NO.	PART NO.	AIRLINE PART NUMBER	NOMENCLATURE 1 2 3 4 5 6 7	USE CODE	QTY PER ASSY
1104					
-71	69-62011-2		. . SINK (BONDED)		1
-72	BACR15CE4B		. . RIVET		2
73	65-59919-1		. . FITTING ASSY, EXTERNAL HANDLE TRIGGER (ITEM 49)		1

- ITEM NOT ILLUSTRATED

*[1] RIVETS ARE SHEAR JOINT. NO SUBSTITUTION IS ALLOWED.

VENDORS

V09455	BFM TRANSPORT DYNAMICS CORPORATION, P.O. BOX 1953, 3131 WEST SEGERSTROM STREET, SANTA ANA, CALIFORNIA 92702-1953
V11960	HASKON CORPORATIONS, 336 WEIR STREET, P.O. BOX 1091, TAUNTON, MASSACHUSETTS 02780
V21335	TORRINGTON CO., FAFNIR BEARING DIVISION, 59 FIELD STREET, TORRINGTON, CONNECTICUT 06790-4942
V73680	GARLOCK, INC., MECHANICAL PACKING DIVISION, SUB. OF COLT IND., 1666 DIVISION STREET, PALMYRA, NEW YORK 14522-9343
V77896	REXNORD, INC., BEARING OPERATION, 2400 CURTIS STREET, DOWNERS GROVE, ILLINOIS 60515-4005
V81376	SOUTHWEST PRODUCTS CO., 2240 BUENA VISTA STREET, IRVINDALE, CALIFORNIA 91706
V91929	HONEYWELL, INC., MICROSWITCH DIVISION, 11 WEST SPRING STREET, FREEPORT, ILLINOIS 61032
V97613	SARGENT INDUSTRIES, KAHR BEARING DIVISION, 3010 N. SAN FERNANDO ROAD, BURBANK, CALIFORNIA 91504-2524

Part No.	Fig. and Index No.	Qty per Assy
AN316-5R	1103-12	1
AN316-5R	1103-19	2
AN316-8R	1103-83	8
AN320-7	1102-8	2
AN320C7	1104-16	1
AN924-4D	1102-20	4
AN960-10L	1101-187	8
AN960-1216L	1103-85	32
AN960-1216L	1103-86	AR
AN960-416	1103-123	4
AN960-416	1103-136	16
AN960-416	1103-139	AR
AN960-416	1103-140	1
AN960-416L	1103-101	18
AN960-416L	1103-139	AR
AN960-416L	1104-6	1
AN960-616	1103-136	16
AN960-816	1103-113	1
AN960C10	1103-35	2
AN960C10L	1103-35	AR
AN960C10L	1103-22	24
AN960C10L	1103-143	2
AN960C10L	1103-160	2
AN960C10L	1104-51	2
AN960C416	1103-177	1
AN960C416L	1103-4	19
AN960C416L	1103-153	3
AN960C416L	1104-4	2
AN960C416L	1104-26	1
AN960C716	1104-17	1
AN960D10	1101-204	6
AN960D10	1101-139	40
AN960D1016L	1104-21	AR
AN960D10L	1103-71	2
AN960D10L	1101-12	19
AN960D10L	1103-144	3
AN960D516L	1103-109	AR
AN960D716	1102-9	2
AN960D716	1102-21	8
AN960D816L	1104-18	AR
AN960JD416	1101-86B	6
AN960PD10	1101-199I	5
AN960PD10	1101-39	4
AN960PD10	1101-50	7
AN960PD10	1101-50B	6
AN960PD10	1101-50C	2
AN960PD10	1101-58	10
AN960PD10	1101-67	1
AN960PD10	1101-72	80
AN960PD10	1101-82	1
AN960PD10	1101-103	81
AN960PD10	1101-50A	1
AN960PD10L	1101-199B	8
AN960PD10L	1101-199H	3
AN960PD10L	1101-121	1
AN960PD10L	1104-43	2
AN960PD416	1101-59	6
AN960PD416	1101-86	12
AN960PD416	1101-86A	18
AN960PD516	1101-94	33
AN960PD8L	1104-62	4
BAC27DBY-146	1104-69	1
BAC27DEL111	1103-2	1
BACB10A322	1104-11	1
BACB10A544	1104-40	1
BACB10A684	1104-38	1
BACB10ENTB3	1101-42	2
BACB10ENTB4	1101-43	2
BACB28U5B15	1103-58	1
BACB28W14B53	1103-95	2
BACB28X12C53	1101-171	16
BACB28X3B15	1103-130	2
BACB28X4B11	1103-41	1
BACB28X4B11	1103-42	1
BACB28X4B11	1103-50	1
BACB28X4B13	1101-151	1
BACB28X4B14	1103-181	2
BACB28X4B14	1103-186	2
BACB28X4B17	1103-172	1
BACB28X4B20	1103-171	1
BACB28X4B24	1101-150	1
BACB28X4B8	1104-29	1
BACB28X4B8	1104-32	1
BACB28X4B8	1104-34	1
BACB28X6B70	1101-167	8
BACB28X6BL18	1101-168	8
BACB28X6C36	1103-173	2
BACB28X7B11	1101-201	1
BACB28X7B15	1103-131	1
BACB28X8B25	1104-58	2
BACB28X8C15	1103-96	1
BACB28X8C19	1103-117	1
BACB28Y3B27	1103-78	1

Part No.	Fig. and Index No.	Qty per Assy
BACB28Y3B30	1103-77	1
BACB28Y4B20	1104-30	1
BACB28Y4B20	1104-33	1
BACB28Y4B20	1104-35	1
BACB28Y4B20	1103-43	1
BACB28Y4B20	1103-51	1
BACB28Y4B24	1103-180	2
BACB28Y4B24	1103-185	2
BACB28Y4B27	1103-170	1
BACB28Y4B30	1103-169	1
BACB28Y4B43	1104-9	1
BACB28Y4C35	1104-54	1
BACB28Y4C81	1103-176	1
BACB28Y7B20	1101-202	1
BACB28Y7B24	1103-132	1
BACB28Y8C24	1103-97	1
BACB28Y8C30	1103-118	1
BACB30DX8-3	1101-144	2
BACB30DX8-4	1101-143	2
BACB30E14-7	1101-90	10
BACB30E14-9	1101-89	2
BACB30EL3-5	1101-68	1
BACB30EL3-8	1101-83	1
BACB30EL5-11	1101-99	10
BACB30EL5-7	1101-98	1
BACB30GP6-2	1101-77	86
BACB30GP6-3	1101-78	9
BACB30GP6-4	1101-76	1
BACB30GP6-5	1101-75	1
BACB30LH2-3	1104-61	4
BACB30LH3-3	1101-2	152
BACB30LH3-7	1104-44	2
BACB30LJ4-13	1104-27	1
BACB30LL3-4	1101-105	59
BACB30LL3-5	1101-104A	9
BACB30LL3-5	1101-104	11
BACB30LL3-6	1101-41	2
BACB30LL3-6Y	1101-104A	9
BACB30LL3-6Y	1101-105	59
BACB30LL3-7	1101-40	2
BACB30LL3-7	1101-44	1
BACB30LL3-7	1101-51	7
BACB30LL3-7	1101-51A	1
BACB30LL3-7	1101-73	80
BACB30LL3-7	1101-106	2
BACB30LL3-7Y	1101-73	80
BACB30LL3-7Y	1101-104	11

Part No.	Fig. and Index No.	Qty per Assy
BACB30LL3-8	1101-40	
BACB30LL3-8	1101-46	1
BACB30LL3-8	1101-51	
BACB30LL3-8	1101-60	7
BACB30LL3-8	1101-73	
BACB30LL3-8Y	1101-106	2
BACB30LL4-7	1101-88	10
BACB30LL4-7	1101-88A	4
BACB30LL4-8	1101-45	1
BACB30LL4-8	1101-87	2
BACB30LL4-8	1101-87A	2
BACB30LL5-7	1101-97	12
BACB30LL5-8	1101-95	1
BACB30LL5-8	1101-95A	1
BACB30LL5-9	1101-96	4
BACB30LL5-9	1101-96A	4
BACB30LM12U40	1103-87	8
BACB30LM12U42	1103-87	8
BACB30LU5-17	1103-107	8
BACB30NE3-3	1101-199C	2
BACB30NE3-5	1101-199D	2
BACB30NE4-11	1101-62	6
BACB30NE4-13	1104-7	1
BACB30NE4-9	1104-3	1
BACB30NF3-2	1101-140	25
BACB30NF3-20	1103-36	4
BACB30NF3-3	1101-140	15
BACB30NF3-4	1103-162	2
BACB30NF3-4	1101-191	5
BACB30NF3-4	1103-23	10
BACB30NF3-5	1101-190	4
BACB30NF3-5	1103-24	6
BACB30NF3-6	1103-163	2
BACB30NF3-6	1101-188	3
BACB30NF3-6	1103-25	8
BACB30NF3-7	1103-155	2
BACB30NF3-7	1101-189	4
BACB30NF3-8	1103-146	2
BACB30NF3-8	1103-163	2
BACB30NF4-12	1103-141	2
BACB30NF4-14	1103-5	19
BACB30NF4-16	1103-154	2
BACB30NF4-22	1103-175	1
BACB30NF4-31	1103-102	2
BACB30NF4-35	1103-103	16
BACB30NF4-36	1103-103	16
BACB30NF4-5	1103-124	4

Part No.	Fig. and Index No.	Qty per Assy
BACB30NF5-11	1103-108	8
BACB30NF7D14	1102-10	1
BACB30NF7D15	1102-11	1
BACC10CC16	1101-119	2
BACC10DK4	1102-19	16
BACC10DK7	1103-149	3
BACH6A0460AA	1102-2	1
BACH6A0500AA	1102-3	1
BACN10BN32AP	1101-50B	6
BACN10BN32AP	1101-82	1
BACN10DZ3-120	1103-152	1
BACN10EK5A32	1101-16	10
BACN10FD35	1103-159	2
BACN10FD35	1101-184	8
BACN10FD55	1103-105	16
BACN10JC08	1104-63	4
BACN10JC3	1101-49	7
BACN10JC3	1101-56	7
BACN10JC3	1101-66	1
BACN10JC3	1101-71	80
BACN10JC3	1101-81	1
BACN10JC3	1101-102	81
BACN10JC3	1101-199A	4
BACN10JC3	1101-199G	1
BACN10JC4	1101-85	1
BACN10JC4	1101-85A	1
BACN10JC5	1101-93	33
BACN10JZ3A2	1101-8	88
BACN10JZ3B2	1101-9	32
BACR15CE4B	1104-72	2
BACR15CE5D	1101-196	36
BACR15CE5D	1101-29	AR
BACR15CE5D	1101-195H	12
BACR15CE5D	1101-195J	16
BACR15CE6B	1101-164	2
BACS12CB3	1102-16	9
BACS12CB3-12	1103-148	2
BACS40R08E26F	1104-46	AR
BACS40R12C12F	1103-125	AR
BACS40R12D19	1101-69	1
BACS40R12D19	1101-84	1
BACS40R18C-143F	1101-100	1
BACS40R20C-143F	1101-91	1
BACW10AN3	1101-186	8
BACW10AN3	1103-161	2
BACW10AN5	1103-106	16
BACW10BN32AP	1101-50	7
BACW10BN32AP	1101-50C	2
BACW10BN32AP	1101-58	10
BACW10BN32AP	1101-67	1
BACW10BN32AP	1101-72	80
BACW10BN32AP	1101-103	81
BACW10BN41AP	1101-86A	18
BACW10BN42AP	1101-59	6
BACW10BN42AP	1101-86	12
BACW10BN51AP	1101-94	33
BACW10P271TF	1104-55	2
BACW10P70S	1104-8	2
CHR30201	1103-156	1
DBAF16-137	1101-193	1
DBAF18-034	1101-192	7
DBAF18-034	1103-53	1
DBAF6-172	1103-179	2
DBAF6-172	1103-184	2
DBAF8-139	1103-166	1
DREM4-279	1103-11	1
DREM4-279	1103-18	2
DREM4-368	1103-14	1
DREM8-014	1103-82	1
DRF8-173	1103-115	1
FBJ12TF16-5	1103-179	2
FBJ12TF16-5	1103-184	2
FBJ36TF1	1101-192	7
FBJ36TF1	1103-53	1
FBJW16TF22-9	1103-166	1
KJN16-46	1101-193	1
KJN6-26	1103-179	2
KJN6-26	1103-184	2
KJN8-35	1103-166	1
MS16562-37	1104-47	1
MS16624-1118	1103-62	1
MS16624-4112	1103-56	1
MS17826-7	1103-80	8
MS17826-8	1103-112	1
MS18065-77	1103-137	8
MS18066-77	1103-137	8
MS20002-12	1103-85A	32
MS20002-5	1103-157	AR
MS20426D3	1101-4	240

Part No.	Fig. and Index No.	Qty per Assy
MS20426D3	1101-14	38
MS20426D3	1101-148	2
MS20426D3	1101-207	6
MS20426D4	1101-5	64
MS20426D4	1101-23	AR
MS20426D6	1104-68	4
MS20470D3	1103-151	2
MS20470D5	1101-27	AR
MS20470D5	1103-13	4
MS20470D6	1103-13	4
MS21919DG16	1101-122	1
MS24586C149	1104-1	1
MS24586C43	1102-13	1
MS24665-285	1103-111	1
MS24665-287	1102-7	2
MS24665-304	1103-79	8
MS24665-304	1104-15	1
MS27253-1	1101-210	1
NAS1021A12	1103-84	8
NAS1068A3	1101-208	3
NAS1068A4	1101-149	1
NAS1080-8	1101-145	4
NAS1080D	1101-74	97
NAS1103-16	1104-52	1
NAS1103-4	1101-63	1
NAS1103-6	1101-64	1
NAS1103-8	1101-52	6
NAS1103-8	1101-61	1
NAS1103-9	1101-53	2
NAS1108-19D	1103-114	1
NAS1804-3	1101-49C	2
NAS1804-3	1101-56A	3
NAS1804-4	1101-57	6
NAS42DD6-16	1102-17	4
NAS42DD6-48	1102-18	2
NAS43DD3-16	1103-145	2
NAS508M5-8	1103-64	8
NAS509-4	1103-135	8
NAS509-4	1103-135A	8
NAS509-4	1103-135B	AR
NAS509-6	1103-135	8
NAS509-6	1103-135A	8
NAS516-1	1101-159	4
NAS516-1	1103-98	1
NAS549BL1016	1104-22	1
NAS549BL816	1104-19	3

Part No.	Fig. and Index No.	Qty per Assy
NAS603-13P	1101-117	4
NAS603-32P	1101-120	1
NAS603-34P	1103-150	1
NAS623-3-12	1103-72	1
NAS623-3-3	1101-203	6
NAS623-3-4	1101-11	19
NAS623-3-8	1101-199J	1
NAS623-3-8	1103-73	1
NAS6603-10Y	1101-52	6
NAS6603-11Y	1101-63	1
NAS6603-12Y	1101-53	2
NAS6603-6Y	1101-64	1
NAS6603-9Y	1101-61	1
NAS6604-12Y	1101-62	6
NAS679A3W	1101-38	4
NAS679A3W	1101-49	7
NAS679A3W	1101-49A	1
NAS679A3W	1101-49B	6
NAS679A3W	1101-49C	2
NAS679A3W	1101-56	7
NAS679A3W	1101-56A	3
NAS679A3W	1101-66	1
NAS679A3W	1101-71	80
NAS679A3W	1101-81	1
NAS679A3W	1101-102	81
NAS679A3W	1101-116	4
NAS679A3W	1101-138	40
NAS679A3W	1101-185	8
NAS679A3W	1102-15	6
NAS679A3W	1103-3	19
NAS679A3W	1103-21	24
NAS679A3W	1103-34	4
NAS679A3W	1103-70	2
NAS679A3W	1103-142	5
NAS679A3W	1103-158	2
NAS679A3W	1104-42	2
NAS679A3W	1104-50	1
NAS679A4W	1101-57	6
NAS679A4W	1101-85	30
NAS679A4W	1103-100	18
NAS679A4W	1103-122	4
NAS679A4W	1103-138	1
NAS679A4W	1103-147	3
NAS679A4W	1104-5	1
NAS679A5	1101-93	33
NAS679C4W	1104-2	1
NAS679C4W	1104-25	1

Part No.	Fig. and Index No.	Qty per Assy
NAS680A3	1101-17	7
NAS682A3	1101-15	2
NAS685A3	1101-6	16
NAS698A3	1101-7	16
NAS8703-10Y	1101-51	7
NAS8703-10Y	1101-60	7
NAS8703-10Y	1101-83	1
NAS8703-5Y	1101-68	1
NAS8704-10X	1101-87A	2
NAS8704-11Y	1101-89	2
NAS8704-3	1101-49B	6
NAS8704-8	1101-88B	6
NAS8704-8X	1101-88A	4
NAS8704-9X	1101-87	2
NAS8704-9X	1101-88	10
NAS8704-9Y	1101-90	10
NAS8705-10X	1101-95	1
NAS8705-11X	1101-96A	4
NAS8705-11X	1101-99	10
NAS8705-12X	1101-96	4
NAS8705-9X	1101-95A	1
NAS8705-9X	1101-97	12
NAS8705-9X	1101-98	1
REM16ATC16	1103-82	1
REMS8ATC10-5	1103-11	1
REMS8ATC10-5	1103-18	2
YTM111	1103-82	1
YTM124M	1103-11	1
YTM124M	1103-18	2
YTS511	1103-179	2
YTS511	1103-184	2
YTS583	1103-166	1
YTS745	1101-193	1
*[1]	1101-199K	1
*[6]	1103-121A	8
01-727-0500	1103-82	1
177131	1103-11	1
177131	1103-18	2
177258	1103-115	1
177270	1103-14	1

Part No.	Fig. and Index No.	Qty per Assy
25EN55-6	1103-1	1
26196-0088	1104-39	1
26196-6071	1104-41	2
27700-0088	1104-39	1
27700-6071	1104-41	2
5926-4	1101-21	1
65-45318-5	1101-118	2
65-54916-2	1101	RF
65-54916-501	1101	RF
65-54932-1	1101-161	1
65-54933-1	1101-37	1
65-54933-19	1101-65	2
65-54933-4	1101-79	1
65-54933-7	1101-54	1
65-54937-1	1101-1	1
65-54937-2	1101-10	1
65-54937-3	1101-3	8
65-54940-1	1101-155	1
65-54940-19	1103	RF
65-54941-1	1101-157	1
65-54942-15	1101-28	1
65-54942-16	1101-30	1
65-54942-17	1101-35	1
65-54942-18	1101-34	1
65-54942-19	1101-32	1
65-54942-2	1101-22	1
65-54942-20	1101-33	1
65-54942-21	1101-31	1
65-54942-23	1101-26	1
65-54942-27	1101-19	14
65-54942-3	1101-18	1
65-54942-502	1101-24	1
65-54942-503	1101-25	1
65-54947-1	1101-163	1
65-54947-2	1101-166	1
65-54955-1	1101-162	
65-54955-2	1101-166	1
65-59919-1	1104-49	1
65-59919-1	1104-73	1
65-59919-2	1104-56	1
65-59920-501	1104-48	1
65-62132-1	1101-48	1
65-62133-1	1101-47	1
65-62136-1	1103-90	2
65-62136-10	1103-99	1

Part No.	Fig. and Index No.	Qty per Assy
65-62136-2	1103-99	1
65-62136-3	1103-91	1
65-62136-4	1103-99	1
65-62136-5	1103-92	3
65-62136-501	1103-93	1
65-62136-502	1103-99	1
65-62136-6	1103-99	1
65-62136-9	1103-94	1
65-62137-1	1103-116	1
65-62137-2	1103-119	1
65-62137-3	1103-116	1
65-62137-4	1103-119	1
65-62138-1	1103-129	1
65-62138-2	1103-133	1
65-62142-1	1104-20	1
65-62142-1	1104-64	1
65-62144-1	1101-101	1
65-62144-2	1101-101	1
65-62145-1	1101-92	1
65-62145-2	1101-92	1
65-62146-1	1101-160	1
65-62146-2	1101-160	1
65-62147-1	1104	
65-62147-1	1101-156	1
65-62225-501	1104-24	1
65-62225-502	1104-37	1
65-62228-1	1101-169	8
65-62228-2	1101-170	8
65-62229-1	1103-104	1
65-62230-1	1101-173	1
65-62230-2	1101-172	1
65-62230-4	1101-172	1
65-62230-501	1101-173	1
65-62230-502	1101-172	1
65-62230-6	1101-172	1
65-62231-1	1101-175	1
65-62231-2	1101-174	1
65-62231-4	1101-174	1
65-62231-501	1101-175	1
65-62231-502	1101-174	1
65-62231-6	1101-174	1
65-62232-1	1101-177	1
65-62232-10	1101-178	1
65-62232-12	1101-182	2
65-62232-14	1101-180	1
65-62232-16	1101-176	1
65-62232-18	1101-178	1

Part No.	Fig. and Index No.	Qty per Assy
65-62232-2	1101-176	1
65-62232-20	1101-182	2
65-62232-22	1101-180	1
65-62232-3	1101-179	2
65-62232-4	1101-178	2
65-62232-5	1101-183	2
65-62232-501	1101-177	1
65-62232-502	1101-176	1
65-62232-503	1101-179	
65-62232-504	1101-178	2
65-62232-505	1101-183	2
65-62232-506	1101-182	2
65-62232-507	1101-181	1
65-62232-508	1101-180	1
65-62232-509	1101-181	1
65-62232-510	1101-180	1
65-62232-6	1101-182	2
65-62232-8	1101-176	1
65-62234-1	1104-57	1
65-62234-2	1104-59	1
65-62238-1	1102-12	1
65-62247-1	1101-107	1
65-62247-2	1101-108	1
65-62247-3	1101-109	1
65-62247-4	1101-110	1
65-62247-5	1101-111	1
65-62247-6	1101-112	1
65-62247-7	1101-113	1
65-62247-8	1101-114	1
65-62248-1	1103-110	8
65-62248-2	1103-110	8
65-62248-3	1103-110	8
65-62248-502	1103-110	8
65-62249-1	1103-126	1
65-62249-501	1103-126	1
65-62254-1	1101-200	1
65-62256-1	1101-137	1
65-62256-12	1101-141	3
65-62256-13	1101-142	5
65-62265-1	1101-20	1
65-62279-1	1102-1	1
65-62280-1	1102-4	1
65-65333-1	1101-124	1
65-65333-10	1101-132	1
65-65333-11	1101-133	1
65-65333-12	1101-134	1
65-65333-13	1101-135	1

Part No.	Fig. and Index No.	Qty per Assy
65-65333-14	1101-136	1
65-65333-3	1101-125	1
65-65333-4	1101-126	1
65-65333-5	1101-127	1
65-65333-6	1101-128	1
65-65333-7	1101-129	1
65-65333-8	1101-130	1
65-65333-9	1101-131	1
65-65703-1	1102-5	1
65-65703-501	1102-6	1
65-65716-1	1102	
65-65716-1	1101-153	1
65-65716-501	1102-22	1
65-65716-502	1102-23	1
65-65722-1	1103-26	1
65-65722-2	1103-27	1
65-65722-3	1103-28	1
65-65722-4	1103-29	1
65-65722-5	1103-30	1
65-65722-501	1103-33	1
65-65722-509	1103-26	1
65-65722-510	1103-27	1
65-65722-511	1103-28	1
65-65722-512	1103-29	1
65-65722-513	1103-30	1
65-65722-514	1103-31	1
65-65722-515	1103-32	1
65-65722-516	1103-33	1
65-65722-6	1103-31	1
65-65722-7	1103-32	1
65-65723-1	1103-37	1
65-65723-10	1103-48	1
65-65723-2	1103-38	1
65-65723-3	1103-39	1
65-65723-4	1103-40	1
65-65723-5	1103-40	1
65-65723-6	1103-45	1
65-65723-7	1103-46	1
65-65723-8	1103-47	1
65-65723-9	1103-48	1
65-65724-11	1103-16	1
65-65724-12	1103-16	1
65-65724-13	1103-16	1
65-65724-14	1103-16	1
65-65724-15	1103-16	1
65-65724-16	1103-6	2
65-65724-17	1103-7	1

Part No.	Fig. and Index No.	Qty per Assy
65-65724-18	1103-8	1
65-65724-19	1103-9	2
65-65724-20	1103-10	2
65-65724-21	1103-17	2
65-65728-1	1103	RF
65-65728-1	1101-154	1
65-67787-1	1103-57	1
65-67787-2	1103-59	1
65-67788-1	1103-37	1
65-67788-10	1103-48	1
65-67788-2	1103-38	1
65-67788-3	1103-39	1
65-67788-4	1103-40	1
65-67788-5	1103-40	1
65-67788-6	1103-45	1
65-67788-7	1103-46	1
65-67788-8	1103-47	1
65-67788-9	1103-48	1
65-67789-1	1103-178	2
65-67789-1	1103-183	1
65-67789-2	1103-182	1
65-67789-2	1103-187	1
65-67791-1	1104-23	1
65-67791-2	1104-36	1
65-67792-1	1103-116	1
65-67792-2	1103-119	1
65-67792-4	1103-116	1
65-67792-5	1103-119	1
65-67793-1	1103-121	1
65-67794-1	1103-129	1
65-67794-2	1103-133	1
65-67988-1	1101-115	1
65-67988-2	1101-123	1
65-86005-1	1101-107	1
65-86005-2	1101-108	1
65-86005-3	1101-109	1
65-86005-4	1101-110	1
65-86005-5	1101-111	1
65-86005-6	1101-112	1
65-86005-7	1101-113	1
65-86005-8	1101-114	1
65C14986-1	1104-65	1
65C14986-2	1104-66	1
65C14986-3	1104-67	1
66-12687-4	1103-137	8
69-41476-1	1101-55	1
69-41476-2	1101-70	1

Part No.	Fig. and Index No.	Qty per Assy
69-41479-1	1103-121	1
69-41479-2	1103-128	2
69-41480-1	1104-45	1
69-41481-1	1103-74	1
69-41482-1	1103-75	1
69-41483-1	1103-76	1
69-41484-1	1101-165	1
69-41488-1	1103-88	8
69-41489-1	1101-158	4
69-41490-1	1103-134	2
69-41498-1	1103-81	8
69-47385-1	1104-10	1
69-47385-1	1104-13	1
69-47385-2	1104-12	1
69-47407-3	1104-53	1
69-47603-1	1104-14	1
69-53022-1	1102-14	1
69-53056-1	1101-195E	2
69-53056-1	1101-199	8
69-53056-2	1101-195F	2
69-53057-1	1101-195A	2
69-53057-1	1101-197	6
69-53057-2	1101-195C	2
69-53057-2	1101-198	8
69-53057-5	1101-195B	2
69-53057-6	1101-195D	2
69-53064-1	1103-49	1
69-53064-2	1103-52	1
69-53065-1	1103-57	1
69-53065-2	1103-59	1
69-53066-1	1103-168	1
69-53066-2	1103-174	1
69-53067-1	1103-178	2
69-53067-1	1103-183	1
69-53067-2	1103-182	1
69-53067-2	1103-187	1
69-53067-3	1103-183	1
69-53067-4	1103-187	1
69-53068-1	1103-15	1
69-53068-2	1103-20	1
69-53068-3	1103-167A	3
69-53069-1	1101-194	1
69-53069-2	1101-195	3
69-53069-3	1103-167	1
69-53069-3	1103-167A	1
69-53069-4	1103-61	8
69-53069-501	1103-61	8

Part No.	Fig. and Index No.	Qty per Assy
69-53070-1	1103-164	2
69-53070-2	1103-165	1
69-53071-1	1104-28	1
69-53071-2	1104-31	1
69-53074-1	1103-54	1
69-53074-1	1103-55	1
69-53075-1	1103-65	8
69-53076-1	1103-66	15
69-53076-501	1103-67	1
69-53077-1	1103-60	1
69-53077-501	1103-60	1
69-53077-503	1103-60	1
69-53077-504	1103-60	1
69-53078-1	1101-13	1
69-53081-1	1101-205	1
69-53081-2	1101-206	1
69-53081-3	1101-209	1
69-53081-4	1101-209	1
69-53092-1	1103-68	8
69-53092-2	1103-69	8
69-53901-1	1101-146	1
69-53901-2	1101-147	1
69-53901-3	1101-152	1
69-53901-4	1101-152	1
69-53969-1	1103-63	1
69-53970-1	1103-57	1
69-53970-2	1103-59	1
69-53977-1	1101-80	1
69-56056-1	1103-89	AR
69-56056-2	1103-85B	16
69-56056-2	1103-89	AR
69-56056-501	1103-85B	16
69-59269-1	1101-199F	1
69-59269-5	1101-199E	2
69-62009-1	1104-60	1
69-62011-1	1104-70	1
69-62011-2	1104-71	1
69-65357-1	1103-121A	8
69-68138-3	1101-195G	2
69-71047-1	1104-45	1
76580	1103-120	1
76580	1103-127	2
78874	1101-192	7
78874	1103-53	1
78890	1101-193	1

Part No.	Fig. and Index No.	Qty per Assy
90-9195-170	1101-36	2
90510	1103-179	2
90510	1103-184	2
90530	1103-166	1

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